City of Fayetteville, Arkansas

113 West Mountain Street
Fayetteville, AR 72701
(479) 575-8323

City Council Tentative Agenda

Tuesday, March 25, 2025

4:30 PM

City Hall Room 219

City Council Members

Council Member Robert B. Stafford Ward 1
Council Member Dr. D'Andre Jones Ward 1
Council Member Sarah Moore Ward 2
Council Member Mike Wiederkehr Ward 2
Council Member Scott Berna Ward 3
Council Member Sarah Bunch Ward 3
Council Member Teresa Turk Ward 4
Council Member Min. Monique Jones Ward 4

Mayor Molly Rawn
City Attorney Kit Williams
City Clerk Treasurer Kara Paxton

MEETING INFORMATION:

1. **WEBINAR ID: 867 7963 7672**
   PUBLIC REGISTRATION LINK:HTTPS://US06WEB.ZOOM.US/WEBINAR/REGISTER/WN_8ZR7CZRSTMMUBQQ5N38WVG

   AGENDAITEMCOMMENT@FAYETTEVILLE-AR.GOV

CALL TO ORDER

ROLL CALL

PLEDGE OF ALLEGIANCE

MAYOR' S ANNOUNCEMENTS, PROCLAMATIONS AND RECOGNITIONS

CITY COUNCIL MEETING PRESENTATIONS, REPORTS AND DISCUSSION ITEMS

1. **SALES TAX & MONTHLY FINANCIAL REPORT - INTERIM CHIEF FINANCIAL OFFICER**

A. CONSENT

A.1. APPROVAL OF THE MARCH 18, 2025 CITY COUNCIL MEETING MINUTES

A.2. NATURAL STATE STREAMS (SERVICE AGREEMENT):

A RESOLUTION TO WAIVE COMPETITIVE BIDDING AND APPROVE A ONE-YEAR MAINTENANCE CONTRACT WITH NATURAL STATE STREAMS, LLC IN THE AMOUNT OF $55,000.00 TO AID IN THE ESTABLISHMENT OF NATIVE VEGETATION AND PERFORM MINOR ADJUSTMENTS WITHIN THE STREAM (2025-234)

A.3. YVONNE RICHARDSON COMMUNITY CENTER (CHANGE ORDER #1):

A RESOLUTION TO APPROVE CHANGE ORDER NO. 1 TO THE CONTRACT WITH MOSER CONSTRUCTION, LLC IN THE AMOUNT OF $677,954.55 FOR THE CONSTRUCTION OF BUDDY HAYES PARK AND EXISTING BUILDING RENOVATIONS, TO APPROVE A PROJECT CONTINGENCY IN THE AMOUNT OF $34,394.00, AND TO APPROVE A BUDGET ADJUSTMENT (2025-263)

A.4. FRIENDS OF YRCC (ANNUAL PROGRAM DONATION):

A RESOLUTION TO APPROVE A BUDGET ADJUSTMENT IN THE AMOUNT OF $33,160.00 REPRESENTING DONATION REVENUE FROM FRIENDS OF YRCC TO FUND THE 2025 PROGRAMS OFFERED AT THE YVONNE

RICHARDSON COMMUNITY CENTER (2025-365)

A.5. SSI OF NORTHWEST ARKANSAS (SERVICE AGREEMENT):

A RESOLUTION TO AWARD BID 25-24 AND APPROVE A CONTRACT WITH STRUCTURAL SYSTEMS, INC. OF NORTHWEST ARKANSAS D/B/A SSI OF NORTHWEST ARKANSAS IN THE AMOUNT OF $902,670.13 FOR PHASE 1 CONSTRUCTION IMPROVEMENTS TO BRYCE DAVIS COMMUNITY PARK, TO APPROVE A PROJECT CONTINGENCY IN THE AMOUNT OF $90,267.00, AND TO APPROVE A BUDGET ADJUSTMENT (2025-368)

A.6. SPECIALIZED REAL ESTATE GROUP, INC. (COST SHARE AGREEMENT):

A RESOLUTION TO APPROVE A COST SHARE AGREEMENT WITH SPECIALIZED REAL ESTATE GROUP, INC. IN AN AMOUNT NOT TO EXCEED $64,000.00 FOR PARK IMPROVEMENTS NEAR THE SOUTHYARD DEVELOPMENT, AND TO APPROVE A BUDGET ADJUSTMENT (2025-306)

A.7. HENARD UTILITY PRODUCTS, INC. (PURCHASE AGREEMENT):

A RESOLUTION TO APPROVE THE PURCHASE OF 1,300 BADGER CELLULAR WATER METERS IN THE AMOUNT OF $642,250.00 FROM HENARD UTILITY PRODUCTS, INC. PLUS ANY APPLICABLE TAXES AND FREIGHT CHARGES, AND TO APPROVE A BUDGET ADJUSTMENT (2025-374)

A.8. UTILITY SERVICE CO., INC. (CONSTRUCTION CONTRACT):

A RESOLUTION TO AWARD BID 25-23 AND AUTHORIZE A CONTRACT WITH USC, INC. IN THE AMOUNT OF $734,900.00 FOR PAINTING AND REHABILITATION OF THE ONE MILLION GALLON BAXTER GROUND WATER STORAGE TANK, AND TO APPROVE A PROJECT CONTINGENCY IN THE AMOUNT OF $73,490.00 (2025-375)

A.9. CITY OF ELKINS SEWER SERVICE AGREEMENT (AMENDMENT NO. 1):

A RESOLUTION TO APPROVE AMENDMENT NO. 1 TO THE 15 YEAR CONTRACT FOR SANITARY SEWER SERVICE BETWEEN THE CITIES OF ELKINS AND FAYETTEVILLE (2025-376)

A.10. PROJECT SAFE NEIGHBORHOODS (GRANT AWARD):

A RESOLUTION TO AUTHORIZE ACCEPTANCE OF A PROJECT SAFE NEIGHBORHOOD GRANT AWARD IN THE AMOUNT OF $30,121.00 FOR THE FAYETTEVILLE POLICE DEPARTMENT, AND TO APPROVE A BUDGET ADJUSTMENT (2025-307)

B. UNFINISHED BUSINESS

B.1. DISCLOSURE OF RENTAL FEES AND COSTS (ORDINANCE):

AN ORDINANCE TO ENACT § 120.03 DISCLOSURE OF RENTAL FEES AND COSTS FOR LEASED RESIDENTIAL PROPERTIES IN THE CITY OF FAYETTEVILLE (2025-231)

AT THE MARCH 4, 2025 CITY COUNCIL MEETING THIS ORDINANCE WAS LEFT ON THE FIRST READING

AT THE MARCH 18, 2025 CITY COUNCIL MEETING THIS ORDINANCE WAS LEFT ON THE SECOND READING

C. NEW BUSINESS

C.1. REPEAL ORDINANCE 6315/6329 & APPROVE 3.5% FEE ASSESSMENT (ORDINANCE):

AN ORDINANCE TO REPEAL ORDINANCE 6315 AND ORDINANCE 6329 AND APPROVE THE ASSESSMENT OF A 3.5% FEE FOR CERTAIN CREDIT CARD AND DEBIT CARD TRANSACTIONS (2025-379)

C.2. STORMWATER UTILITY (PERSONNEL AND EQUIPMENT PLAN):

A RESOLUTION TO APPROVE THE ADDITION OF NINE FULL TIME EQUIVALENT POSITIONS TO SUPPORT THE NEW STORMWATER UTILITY, TO ESTABLISH A NEW STORMWATER MANAGEMENT ENTERPRISE FUND, TO AUTHORIZE A LOAN FROM THE GENERAL FUND TO PROVIDE TEMPORARY FUNDING FOR THE STORMWATER UTILITY, AND TO APPROVE A BUDGET ADJUSTMENT (2025-196)

C.3. REZONING-2025-0005: (1791 N. GARLAND AVE/JMAX PROPERTIES LLC, 365):

AN ORDINANCE TO REZONE THE PROPERTY DESCRIBED IN REZONING PETITION RZN 2024-05 FOR APPROXIMATELY 0.40 ACRES LOCATED AT 1791 NORTH GARLAND AVENUE IN WARD 2 FROM RSF-4, RESIDENTIAL SINGLE-FAMILY, FOUR UNITS PER ACRE TO RI-U, RESIDENTIAL INTERMEDIATE-URBAN (2025-363)

C.4. REZONING-2025-0004: (809 W. KELLEY ST./ PARK AVENUE,366):

AN ORDINANCE TO REZONE THE PROPERTY DESCRIBED IN REZONING PETITION RZN 2024-04 FOR APPROXIMATELY 0.26 ACRES LOCATED AT 809 WEST KELLEY STREET STREET IN WARD 2 FROM RSF-4, RESIDENTIAL SINGLE-FAMILY, FOUR UNITS PER ACRE TO RI-U, RESIDENTIAL INTERMEDIATE-URBAN (2025-364)

C.5. APPEAL: CONDITIONAL USE PERMIT-2024-0054: (611 N. OLIVER AVE,/JD RIGGINS FAMILY HOLDINGS, 443):

A RESOLUTION TO GRANT THE APPEAL OF COUNCIL MEMBERS SARAH BUNCH, D'ANDRE JONES, AND MIKE WIEDERKEHR AND DENY CONDITIONAL USE PERMIT CUP 2024-054 FOR A TYPE 2 SHORT-TERM RENTAL AT 611 NORTH OLIVER AVENUE (2025-362)

PROPOSED AGENDA ADDITIONS

D. CITY COUNCIL AGENDA SESSION PRESENTATIONS

D.1. ILLINIOIS RIVER WATERSHED PARTNERSHIP - MORGAN KEELING

E. CITY COUNCIL TOUR

F. ANNOUNCEMENTS

G. ADJOURNMENT

CITY OF FAYETTEVILLE ARKANSAS

CITY COUNCIL MEMO
2025-234

MEETING OF MARCH 25, 2025

TO: Mayor Rawn and City Council

THRU: Chris Brown, Public Works Director

FROM: Alan Pugh, Staff Engineer

SUBJECT: **NATURAL STATE STREAMS (SERVICE AGREEMENT):**

RECOMMENDATION:
Staff recommends waiving competitive bidding and approval of a one-year maintenance contract with Natural State Streams, LLC in the amount of $55,000 to aid in the establishment of native vegetation and perform minor adjustments within the stream.

BACKGROUND:
For several years staff have received concerns from landowners around the tributary that runs through Rocky Branch Park. Specifically, these concerns are related to the loss of fencing and property damage associated with continued stream bank erosion. The bank erosion is also contributing to sediment loads that ultimately drain to the Illinois River and on to the Arkansas River. As a response to these concerns of bank erosion and sediment/pollutant loading, staff completed a Capital Improvement Project budgetary request for 2024 that was ultimately approved by Council. An agreement to partner with the Illinois River Watershed Partnership (IRWP) was also approved by Council and IRWP and the City contributed funding to the restoration project which was recently completed.

DISCUSSION:
As with any natural stream restoration, ongoing maintenance is critical to the success of the project. The construction and maintenance of native stream restoration involves specialized construction methods and few companies in the area are qualified in these techniques. As with stream restorations completed by the City in the past, staff is recommending that the same company that performed the construction also performs the ongoing maintenance. This is inherently more efficient as they are intimately familiar with all aspects of the restoration and can effectively perform any adjustments necessary to the structures that they constructed in the stream.

This project consists of a one-year maintenance agreement with Natural State Streams, who constructed the project through an agreement with IRWP and in partnershp with the City. This would include items listed in the attached agreement that will ensure the establishment of the native vegetation and include minor adjustments to the structures as necessary. The cost appears to be reasonable when compared to what the City has paid in the past for the first year of maintenance on similar restorations. These maintenance periods generally extend to the first 3–5 years of the project and typically become less intense over that time.

BUDGET/STAFF IMPACT:
The Stormwater Quality Management/Nutrient Reduction project has been designated in part to fund projects

that improve stormwater quality in the City of Fayetteville and would be proposed as the source for a portion of the funds ($45,000). The remainder ($10,000) would come from the Parks Maintenance funding due to the fact the area is designated as a park.

ATTACHMENTS: SRF (#3) , Natural State Streams Rocky Branch Maintenance (#4)

113 West Mountain Street
Fayetteville, AR 72701
(479) 575-8323

File #: 2025-234

NATURAL STATE STREAMS (SERVICE AGREEMENT):

A RESOLUTION TO WAIVE COMPETITIVE BIDDING AND APPROVE A ONE-YEAR MAINTENANCE CONTRACT WITH NATURAL STATE STREAMS, LLC IN THE AMOUNT OF $55,000.00 TO AID IN THE ESTABLISHMENT OF NATIVE VEGETATION AND PERFORM MINOR ADJUSTMENTS WITHIN THE STREAM

WHEREAS, for several years staff have received concerns from landowners around the tributary that runs through Rocky Branch Park, specifically related to the loss of fencing and property damage associated with continued stream bank erosion and the bank erosion is also contributing to sediment loads that ultimately drain to the Illinois River and on to the Arkansas River; and

WHEREAS, the City Council approved funding for a restoration project with the Illinois River Watershed Partnership, which was recently completed, and ongoing maintenance is critical to the success of the project;

WHEREAS, as with stream restorations completed by the City in the past, staff recommends entering into a maintenance contract with the same company that constructed the restoration project because it is inherently more efficient as it is intimately familiar with all aspects of the restoration and can effectively perform any adjustments necessary to the structures that it constructed in the stream.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby determines an exceptional situation exists in which competitive bidding is deemed not feasible or practical and therefore waives the requirements of formal competitive bidding and authorizes Mayor Rawn to sign a one-year maintenance contract with Natural State Streams, LLC in the amount of $55,000.00 to aid in the establishment of native vegetation and perform minor adjustments within the stream to ensure the continued success of the completed stream restoration.

City of Fayetteville Staff Review Form

2025-234

Item ID

4/1/2025

City Council Meeting Date - Agenda Item Only

N/A for Non-Agenda Item

Chris Brown	3/4/2025	ENGINEERING (621)
Submitted By	**Submitted Date**	**Division / Department**

Action Recommendation:

A RESOLUTION TO WAIVE COMPETITIVE BIDDING AND APPROVE A ONE-YEAR MAINTENANCE CONTRACT WITH NATURAL STATE STREAMS, LLC IN THE AMOUNT OF $55,000.00 TO AID IN THE ESTABLISHMENT OF NATIVE VEGETATION AND PERFORM MINOR ADJUSTMENTS WITHIN THE STREAM

Budget Impact:

4470.621.8810-5817.00 4470.521.8520-5806.00	Sales Tax Capital Improvement
Account Number	Fund
02097.1 15012.1	Stormwater Quality Management; Natural Res Mgmt - Forestry and Habitat Impr
Project Number	Project Title

Budgeted Item?	Yes	Total Amended Budget	$	358,069.00
		Expenses (Actual+Encum)	$	2,763.99
		Available Budget	**$**	**355,305.01**
Does item have a direct cost?	Yes	Item Cost	$	55,000.00
Is a Budget Adjustment attached?	No	Budget Adjustment	$	-
		Remaining Budget	**$**	**300,305.01**

V20221130

Purchase Order Number:

Previous Ordinance or Resolution # 166-24

Change Order Number:

Approval Date:

Original Contract Number:

Comments:

2025 ROCKY BRANCH MAINTENANCE AGREEMENT

STATE OF ARKANSAS

COUNTY OF WASHINGTON

This Maintenance Agreement between the City of Fayetteville, Arkansas ("Fayetteville") and Natural State Streams, LLC ("NSS") is entered into for the purpose of maintaining a recently completed restoration project on a Tributary to Flynn Creek referred to as Rocky Branch. The subject stream is within a designated park area located with Brookbury Subdivision. For several years City staff have received concerns from landowners around the tributary related to the loss of fencing and property damage associated with continued stream bank erosion. The bank erosion contributed to sediment loads that ultimately drain to the Illinois River and on to the Arkansas River. As a response to these concerns of bank erosion and sediment/pollutant loading, the Fayetteville City Council allocated funding and approved an agreement, pursuant to Resolution 166-24, with the Illinois River Watershed Partnership (IRWP) to complete a restoration of the stream. IRWP engaged NSS to design and construct the restoration work which was completed in December 2024.

Section I - Project Description

This project consists of maintenance of the recently completed restoration project of Rocky Branch which was originally funded in part by the City of Fayetteville and in part by IRWP. The project consisted of the restoration of approximately 700 linear feet of stream located upstream of N Brookbury Crossing. The stream channel was restored, and the banks were armored with stone, toe wood, and native plantings. Ongoing maintenance of these features, native plants, and control of invasive plants is needed to ensure a successful project. In general, maintenance should occur for 5 years, between 2025-2029, until the project can be self-sufficient. The maintenance for the 2025 Calendar Year is described further below.

Section II - Project Timeframe

NSS will perform the work outlined in the Scope of Services from April 1, 2025 to December 31, 2025.

Section III - Scope of Services

1. Perform routine inspections at least once a month to assess the condition of the restoration project.
2. Monitor potential issues such as:
    a. Dead or dying plant material that falls below the required survival threshold.
    b. Encroaching invasive vegetation.
    c. Malfunctioning or displaced structures/Erosion control material.
    d. Erosion or sedimentation concerns.
3. Perform Maintenance Activities

   a. Remove encroaching invasive vegetation through cutting, herbicide application, and other necessary removal techniques.
   b. Patch or repair any minor issues in structures or erosion control materials.
   c. Water struggling plants during severe drought (if deemed necessary).
4. Submit inspection and maintenance reports quarterly
5. Submit recommendations for major repairs
   a. If significant structural issues or failures are identified, Natural State Streams will submit an official recommendation for proper repair.
   b. If funding under this agreement is insufficient for major repair work, the parties may negotiate a supplemental agreement or modification.

Section IV - Fees and Payments

NSS will perform the above-referenced Scope of Services for an amount not to exceed $55,000 for this agreement. Payments will be made monthly and requests for payment shall include an itemized breakdown of personnel working on the project and time spent on the project by each person. Receipts for any materials purchased in the performance of the work described in Section III for which NSS is requesting reimbursement shall be attached to requests for payment.

Funding under this agreement is intended to cover labor and material costs associated with minor and routine maintenance of the site. Repair of damage to the project resulting from large infrequent flood events or from other significant structural issues or failures is generally not covered under this agreement and may be addressed through supplemental written agreements or modifications
executed by the City and NSS.

Section V – Conditions

IT IS MUTUALLY AGREED AND UNDERSTOOD BY ALL PARTIES THAT:

1. FREEDOM OF INFORMATION ACT (FOIA). This contract and documents prepared while performing city contractual work are subject to the Arkansas Freedom of Information Act. If a Freedom of Information Act request is presented to the CITY OF FAYETTEVILLE, NSS will do everything possible to provide the documents in a prompt and timely manner as prescribed in the Arkansas Freedom of Information Act (A.C.A. §25-19-101 et. seq.) Only legally authorized photocopying costs pursuant to the FOIA may be assessed for this compliance. Any information furnished to NSS under this instrument is subject to the Freedom of Information Act.

2. MODIFICATION. Changes, modifications, or amendments in scope, price or fees to this agreement shall not be allowed without a prior formal contract amendment approved by the City in advance of the change in scope, cost or fees.

3. COMMENCEMENT/EXPIRATION DATE. The agreement is shall be effective from the date of the last signature until December 31, 2025.

4. NONDISCRIMINATION. Neither party will discriminate against any person because of age, race, color, religion, sex, national origin, or disability.

5. LICENSING. NSS shall, at all times during the term of this agreement, maintain a valid Arkansas contractor's license with classifications for Grading & Drainage, and Excavation.

Section VI - Agreement in Effect

Except as amended specifically herein, this agreement shall remain in full force as originally approved.

IN WITNESS WHEREOF, the parties hereto have caused this AGREEMENT to be duly executed as of the date and year first herein written.

FOR THE CITY OF FAYETTEVILLE

By: _____
Mayor Molly A. Rawn

Attest: _____
Kara Paxton, City Clerk

Date: _____

FOR NATURAL STATE STREAMS, LLC

By: _____
Josh Duzan
Owner

Witness: Henry Duzan

Date: 2.28.2025

CITY OF FAYETTEVILLE ARKANSAS

CITY COUNCIL MEMO
2025-263

MEETING OF MARCH 25, 2025

TO: Mayor Rawn and City Council

THRU: Steven Dotson, Interim Chief Financial Officer

FROM: Waylon Abernathy, Bond Projects & Construction Dir

SUBJECT: **YVONNE RICHARDSON COMMUNITY CENTER (CHANGE ORDER #1):**

RECOMMENDATION:
Staff recommends approval of Change Order #1 to Bid 24-23 Construction of the Yavone Richardson Community Center Expansion project with Moser Construction LLC., in the amount of $677,954.55 for the construction of Buddy Hayes Park, existing building renovations and approve a project contingency in the amount of $34,394.00 and approval of a budget adjustment.

BACKGROUND:
April 9, 2019 — Fayetteville voters approve more than $226 million in sales tax bonds for park improvement projects and other city projects. The YRCC and Park Initial Program and Budget was for $1,000,000 for a 2280 square - foot addition which included a teaching kitchen, multi -purpose room, storage, misc. renovations and park improvements.
September 3, 2019 — City Council approves issuance of 2019 Series bonds
October 6, 2020 — City Council approves architecture contract with Miller Boskus Lack for programming and schematic design
January 2021 — City works with Miller Boskus Lack on the process for additional public input; a steering committee of YRCC users, partners, and collaborators is created to aid the process.
June 8 and July 22, 2021 — City hosts public input meetings at the YRCC
September - December 2021 — City conducts online and in -person public surveys
February 2022 — City hosts three public meetings and listening sessions showcasing the design concept created by Miller Boskus Lack.
July 5, 2022 — City Council authorizes an application for a matching Walton Family Foundation grant to help fund construction
July 19, 2022 — City Council approves issuance of 2022 Series bonds
August 16, 2022 — City Council accepts Walton Family Foundation Grant of up to $1. 4 million for the YRCC expansion
August 16, 2022 — City Council approves an amended architectural services contract with Miller Boskus Lack for the entire Phase 1 project scope.
April 2, 2024---City Council approves resolution 105-24 for the Construction Contract with Moser Construction LLC.

DISCUSSION:
Buddy Hayes Park was initially included in the overall scope of this project. The park drawings were not fully developed at the time of the YRCC expansion project bids, but there were schedule and cost benefits in getting the building expansion underway. Therefore, the park improvements were deferred.

This change order for the park improvements includes an ADA-accessible stage with boulder seating, stream restoration with stream access, landscape, trees, lighting, and new sidewalk, curbs and gutters along Mill Avenue.
Also included are upgrades to the existing offices, and re-painting of the lower roof.

BUDGET/STAFF IMPACT:

GL Acct	Project	Amount
4705.860.7545-5806.00	46050.7545	$658,939.55
4470.520.8520-5806.00	21005.7545	$19,015.00
TOTAL		$677,954.55

ATTACHMENTS: SRF (#3) , BA (#4), Buddy Hayes - Revised 3.12.2025 (#5), Buddy Hayes Park - Pricing Package (#6)

113 West Mountain Street
Fayetteville, AR 72701
(479) 575-8323

File #: 2025-263

YVONNE RICHARDSON COMMUNITY CENTER (CHANGE ORDER #1):

A RESOLUTION TO APPROVE CHANGE ORDER NO. 1 TO THE CONTRACT WITH MOSER CONSTRUCTION, LLC IN THE AMOUNT OF $677,954.55 FOR THE CONSTRUCTION OF BUDDY HAYES PARK AND EXISTING BUILDING RENOVATIONS, TO APPROVE A PROJECT CONTINGENCY IN THE AMOUNT OF $34,394.00, AND TO APPROVE A BUDGET ADJUSTMENT

WHEREAS, on April 2, 2024, the City Council approved Resolution 105-24 and authorized a contract with Moser Construction LLC for construction of the Yvonne Richardson Community Center expansion; and

WHEREAS, Buddy Hayes Park was initially included in the overall scope of the project, but park drawings were not fully developed at the time of the YRCC expansion project bids and the park improvements were deferred; and

WHEREAS, this change order includes an ADA-accessible stage with boulder seating, stream restoration with stream access, landscape, trees, lighting, new sidewalk, curbs and gutters along Mill Avenue, upgrades to the existing offices, and re-painting of the lower roof.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby authorizes Mayor Rawn to sign Change Order No. 1 to the contract with Moser Construction, LLC in the amount of $677,954.55 for the construction of Buddy Hayes Park and existing building renovations, and further approves a project contingency in the amount of $34,394.00. A copy of Change Order No. 1 is attached to this Resolution and made a part hereof.

Section 2: That the City Council of the City of Fayetteville, Arkansas hereby approves a budget adjustment, a copy of which is attached to this Resolution.

City of Fayetteville Staff Review Form

2025-263

Item ID

4/1/2025

City Council Meeting Date - Agenda Item Only
N/A for Non-Agenda Item

Wade Abenathy	3/12/2025	FACILITIES MANAGEMENT (140)
Submitted By	**Submitted Date**	**Division / Department**

Action Recommendation:

Approval of Change Order #1 to Bid 24-23 YRCC Expansion Project with Moser Construction LLC. In the amount of $677,954.55 for Buddy Hayes Park Improvements, existing building renovations, and approval of a project contingency in the amount of $34,394.00, and approval of a budget adjustment.

Budget Impact:

4705.860.7545-5806.00 4470.520.8520-5806.00	Parks Projects (2019/2022/2024 Bonds) Sales Tax
Account Number	Fund
46050.7545 21005.7545	Parks Bond Projects - Buddy Hayes Park Impr Trail Pavilion/Neighborhood Park Impr
Project Number	Project Title

Budgeted Item?	Yes	Total Amended Budget	$	13,071,119.00
		Expenses (Actual+Encum)	$	2,243,191.95
		Available Budget	$	**10,827,927.05**
Does item have a direct cost?	Yes	Item Cost	$	712,348.55
Is a Budget Adjustment attached?	Yes	Budget Adjustment	$	-
		Remaining Budget	$	**10,115,578.50**

V20221130

Purchase Order Number: 2024-524

Previous Ordinance or Resolution # 105-24

Change Order Number: #1

Approval Date: 4/2/2024

Original Contract Number: 2024-27

Comments: Item cost includes contingency

City of Fayetteville, Arkansas - Budget Adjustment (Agenda)

Budget Year	Division /Org2	Adjustment Number
2025	FACILITIES MANAGEMENT (140)	
	Requestor: Wade Abernathy	

BUDGET ADJUSTMENT DESCRIPTION / JUSTIFICATION:

Approval of Change Order #1 to Bid 24-23 YRCC Expansion Project with Moser Construction LLC. In the amount of $677,954.55 for Buddy Hayes Park Improvements, approval of a project contingency in the amount of $34,394.00, and approval of a budget adjustment.

COUNCIL DATE: 3/18/2025

ITEM ID#: **2025-263**

Holly Black
3/12/2025 3:41 PM

Budget Division Date

TYPE: **D - (City Council)**

JOURNAL #:

GLDATE:

RESOLUTION/ORDINANCE

CHKD/POSTED: /

v.2025211

TOTAL	-	-				
	Increase / (Decrease)		Project.Sub#			
Account Number	Expense	Revenue	Project	Sub.Detl	AT	Account Name
4705.860.7545-5806.00	658,940	-	46050	7545	EX	Improvements - Park
4705.860.7545-5911.99	34,394	-	46050	7545	EX	Contingency - Capital Project
4705.860.7999-5899.00	(693,334)	-	46050	7999	EX	Unallocated - Budget
4470.520.8520-5806.00	19,015	-	21005	7545	EX	Improvements - Park
4470.520.8520-5806.00	(19,015)	-	21005	1	EX	Improvements - Park
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MOSER CONSTRUCTION
moserconstruction.net

March 12, 2025

CITY OF FAYETTEVILLE, ARKANSAS
113 WEST MOUNTAIN ST.
FAYETTEVILLE, AR 72701

RE: BUDDY HAYES PARK

Thank you for the opportunity to provide a quote on this project. Please see below for the breakdown of costs associated with this project. If you have any questions or concerns, please feel free to contact me at any time.

General Conditions:	$49,508.00 **3 MONTHS
Labor Burdon:	$7,140.00
Fee:	$56,468.55
Bond:	$10,589.00
Dirt/Demo:	$72,290.00
Relocation of Power Pole Allowance:	$0.00*** BY SWEPCO
Fiber Box Adjustment Allowance:	$2,500.00
Site Asphalt:	$15,500.00
Site Landscaping:	$65,000.00 landscaping allowance including retaining wall
Site Boulder Steps/Seating ALLOWANCE	$48,000.00** NOT INCLUDING CREEKSIDE ENTRANCE STONE
Creekside Restoration:	$193,403.00
SWPPP/Monitoring:	$2,500.00
Surveying:	$5,000.00
Testing (Soils and Concrete):	$0.00 **By City of Fayetteville.
Concrete:	$81,971.00
Electrical Allowance:	$15,000.00
Delta of Crosswalk Scope:	$7,500.00
ASI #5.3	$39,385.00
Paint YRCC Existing Low Roof	$6,200.00
Total:	**$677,954.55**

Noah Sanders
Project Manager

501-847-4777 501-847-4772 4411 Millbrook Drive | Bryant, Arkansas 72022

BUILDING TRUST.

YVONNE RICHARDSON COMMUNITY CENTER ADDITION

240 E. ROCK STREET FAYETTEVILLE, AR 72701

PHASE II: BUDDY HAYES PARK IMPROVEMENTS

PRICING PACKAGE

FEBRUARY 27, 2025

MBL ARCHITECTURE

CITY OF FAYETTEVILLE ARKANSAS

YRCC Yvonne Richardson COMMUNITY CENTER

PROJECT INFORMATION

PROJECT NAME: YVONNE RICHARDSON COMMUNITY CENTER ADDITION + BUDDY HAYES PARK IMPROVEMENTS

PROJECT LOCATION: 240 E. Rock Street, Fayetteville AR 72701

ARCHITECT'S JOB NUMBER: 200012

CONSTRUCTION TYPE: N/A

OCCUPANCY CLASSIFICATION: N/A

OCCUPANT LOAD: N/A

DESIGN ROOF LIVE LOADS: N/A

DESIGN ROOF DEAD LOADS: N/A

DESIGN SNOW LOAD: N/A

DESIGN WIND LOAD: N/A

AUTOMATIC SPRINKLER SYSTEM: N/A

PROJECT LOCATION

DRAWING INDEX

CIVIL			
C0.00 BHP	TITLE, VICINITY MAP AND SHEET INDEX	25	CIVIL
C0.01 BHP	DEMOLITION PLAN	25	CIVIL
C1.00 BHP	OVERALL SITE PLAN	25	CIVIL
C1.01 BHP	SITE PLAN	25	CIVIL
C2.00 BHP	GRADING PLAN & PROFILES	25	CIVIL
C2.01 BHP	CROSS SECTIONS	25	CIVIL
C4.00 BHP	EROSION CONTROL PLAN PHASE I	25	CIVIL
C4.01 BHP	EROSION CONTROL PLAN PHASE II	25	CIVIL
C4.10 BHP	EROSION CONTROL DETAILS I	25	CIVIL
C5.00 BHP	DETAILS SHEET I	25	CIVIL
LANDSCAPE			
L0.0 BHP	CONTEXT + GSP	25	LANDSCAPE
L0.1 BHP	EXISTING SITE	25	LANDSCAPE
L0.2 BHP	TREE PRESERVATION PLAN	25	LANDSCAPE
L1.0 BHP	SITE PLAN	25	LANDSCAPE
L1.1 BHP	PLANTING PLAN	25	LANDSCAPE
L1.2 BHP	LAYOUT PLAN	25	LANDSCAPE
L1.3 BHP	GRADING PLAN	25	LANDSCAPE
L2.0 BHP	LANDSCAPE DETAILS	25	LANDSCAPE
L2.1 BHP	LANDSCAPE + SITE DETAILS	25	LANDSCAPE
L2.2 BHP	TREE PRESERVATION DETAILS	25	LANDSCAPE
L2.3 BHP	CITY STANDARD DETAILS	25	LANDSCAPE
L2.4 BHP	SITE DETAILS	25	LANDSCAPE
L2.5 BHP	SITE DETAILS	25	LANDSCAPE
L2.6 BHP	STAGE DETAILS	25	LANDSCAPE
L2.7 BHP	ROCK STREET CROSSING	25	LANDSCAPE

MILLER BOSKUS LACK ARCHITECTS, PA REGISTERED ARCHITECT No. C-185 ARKANSAS

"I HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY ME, OR UNDER MY SUPERVISION. I FURTHER CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THESE PLANS AND SPECIFICATIONS ARE AS REQUIRED BY LAW AND IN COMPLIANCE WITH THE ARKANSAS FIRE PREVENTION CODE FOR THE STATE OF ARKANSAS."

NOT FOR CONSTRUTION

SIGNED: _____

ARCHITECT

MBL ARCHITECTS
2397 N. Green Acres Dr.
Fayetteville, AR 72703
P: 479.443.7121

Contact: Ashley Mauldin, AIA

LANDSCAPE ARCHITECT

FLINTLOCK, CO. LTD.
528 N. College Ave, Ste. #3
Fayetteville, AR 72701
P: 479.305.4807

Contact: Allison Thurmond Quinlan, AIA RLA

STRUCTURAL ENGINEER

TATUM-SMITH-WELCHER ENGINEERS, INC.
3100 S. Market Street, Ste. 202
Rogers, AR 72758
P: 479.621.6128

Contact: Richard Welcher, P.E.

MEPFP ENGINEER

ENGINEERING ELEMENTS
2458 E. Joyce Blvd., Ste. 1
Fayetteville, AR 72703
P: 479.695.1333

Contact: Ron McClane

CIVIL ENGINEER

OLSSON
302 E. Millsap Road
Fayetteville, AR 72703
P: 479.443.3404

Contact: Matt Loos, P.E.

FAYETTEVILLE, ARKANSAS
RALPH "BUDDY" HAYES PARK ADDITION
ISSUED FOR BID

235 E. ROCK STREET FAYETTEVILLE, AR 72701

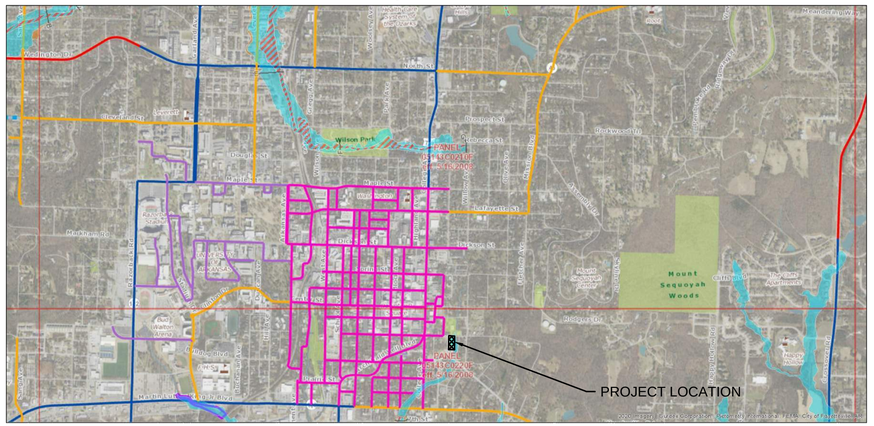
LOTS 1 TO 3 BLOCK 1
LOCATED EAST OF MILL AVENUE AND SOUTH OF E. ROCK STREET IN FAYETTEVILLE, ARKANSAS.

LEGEND

CTL	SURVEY CONTROL POINT	TB	TRAFFIC SIGNAL BOX
	SURVEY BENCHMARK	TM	TRAFFIC SIGNAL MANHOLE
TBM	SURVEY TEMPORARY BEMCHMARK		TRAFFIC SIGNAL POLE W/ ARM
GM	GAS METER		TRAFFIC SIGNAL POLE
GAR	GAS RISER	TC	TRAFFIC SIGNAL CONTROL BOX
	GAS MANHOLE	TS	TRAFFIC SIGNAL PEDESTAL
GR	GAS REGULATOR	E	ELECTRIC MANHOLE
TVP	TELEVISION PEDESTAL	EM	ELECTRIC METER
F	FIBER BOX	ER	ELECTRIC RISER
F	FIBER PEDESTAL	E	ELECTRIC BOX
	CABLE BOX		ELECTRIC CABINET
CV	CABLE VAULT	J	ELECTRIC JUNCTION BOX
TP	TELEPHONE PEDESTAL	SPH	SPRINKLER HEAD
D	STORM MANHOLE	SCV	SPRINKLER CONTROL VALVE
	STORM GRATE		WATER METER PIT
S	SANITARY MANHOLE		FIRE HYDRANT
YL	YARD LIGHT	WM	WATER METER
LTP	LIGHT POLE	WV	WATER VALVE
	POWER POLE	FP	FLAG POLE
LPPP	POWER POLE W/ LIGHT		SIGN
	GUY WIRE		BOLLARD
BU	STUMP		WOOD POST
	BUSH		STEEL POST
	EVERGREEN TREE	COL	COLUMN
	DECIDUOUS TREE		BORE HOLE

P	PROPERTY LINE
ROW	RIGHT-OF-WAY LINE
	CENTER LINE
1370	EXISTING CONTOUR
1371	EXISTING CONTOUR
SS	EXISTING SANITARY LINE
SD	EXISTING STORM LINE
GAS	EXISTING GAS LINE
W	EXISTING WATER LINE
FO	EXISTING UNDERGROUND FIBER OPTIC
P-OH	EXISTING OVERHEAD ELECTRIC
X	EXISTING WOVEN WIRE FENCE
	EXISTING STEEL FENCE OR CHAIN LINK FENCE
	EXISTING WOOD FENCE
	EXISTING TREE LINE

Fayetteville, AR



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Flood Hazard Zones
- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- City Approved Map Revision

Existing Street
- Freeway/Expressway
- Regional Link - High Activity
- Regional Link
- Neighborhood Link

Planned Street
- Institutional Master Plan
- Urban Center
- Neighborhood Link
- Regional Link
- Residential Link

FIRM Panels
Cross-Sections

Flood Hazard Boundaries
- Other Boundaries
- Limit Lines
- SFHA / Flood Zone Boundary

1:18,056
0 0.2 0.4 0.8 mi
0 0.35 0.7 1.4 km

The data contained herein was compiled from various sources for the sole use and benefit of the City of Fayetteville Geographic Information System and the public agencies it serves. Any use of this data by any party for any purpose is at the sole risk of such party. Such party agrees by its use of this data to hold and does hereby agree to indemnify the City of Fayetteville and hold the City of Fayetteville harmless from any claim, loss, damage, or liability arising out of or in connection with such party's use of this data. Any defense asserted by user or by another arising from the use of this data. The City of Fayetteville makes no warranty, representation or guaranty as to the content, accuracy, timeliness, or completeness of any of the data provided herein and shall be contained is made that functionality will both under-tolerances on.

N

0' 1056' 2112'
SCALE IN FEET

VICINITY MAP

BENCHMARKS

BM #1 FOUND REBAR W. CAP "PS1642" ON SOUTH SIDE OF EAST ROCK STREET, EAST OF THE STREAM
ELEV. = 1313.15'
N: 635730.538
E: 675231.949

Arkansas 811 Know what's below. Call before you dig.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE BASED ON THE BEST INFORMATION AVAILABLE AND MAY NOT REFLECT ALL EXISTING UTILITIES IN THE PROJECT AREA. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE UTILITY COMPANIES FOR LOCATING EXISTING UTILITIES PRIOR TO CONSTRUCTION AND FOR PROTECTION OF SERVICES DURING CONSTRUCTION.

DESIGN CONTACTS

OWNER
CITY OF FAYETTEVILLE
113 WEST MOUNTAIN ST.
FAYETTEVILLE, AR 72701
CONTACT: WADE ABERNATHY, DIRECTOR OF BOND PROJECTS AND FACILITIES
PHONE: 479.575.8361

CIVIL ENGINEER
OLSSON
3537 N. STEELE BLVD, SUITE 310
FAYETTEVILLE, AR 72703
CONTACT: MATT LOOS
PHONE: 501.733.2240
EMAIL: MLOOS@OLSSON.COM

SURVEYOR
OLSSON
CONTACT: KEITH SIKES, PLS, CFedS
PHONE: 479-527-0495
EMAIL: KSIKES@OLSSON.COM

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LANDSCAPE ARCHITECT
FLINTLOCK, CO. LTD.
CONTACT:ALLISON THURMOND QUINLAN, AIA RLA
PHONE: 479.305.4807

UTILITY CONTACTS

CITY OF FAYETTEVILLE WATER AND SEWER DEPARTMENT
113 WEST MOUNTAIN ST.
FAYETTEVILLE, AR 72701
CONTACT: COREY GRANDERSON
PHONE: 479-444-3452

BLACK HILLS ENERGY
655 MILLSAP RD.
FAYETTEVILLE, AR 72703
CONTACT: SCOTT STOKES
PHONE: 479-435-0229

RITTER
5078 W NORTHGATE RD SUITE 220
ROGERS, AR 72758
CONTACT: BRIAN PARRISH, SR OSP ENGINEER
PHONE: 870-919-5115
EMAIL: BRIAN.PARRISH@RITTERCOMMUNICATIONS.COM

SOUTHWESTERN ELECTRIC POWER COMPANY
101 W. TOWNSHIP ST.
FAYETTEVILLE, AR 72703
CONTACT: CHRISTIAN DICKEY
PHONE: 479-973-2306

Sheet List Table	
Sheet Number	Sheet Title
C0.00	TITLE, VICINITY MAP AND SHEET INDEX
C0.01	DEMOLITION PLAN
C1.00	OVERALL SITE PLAN
C1.01	SITE PLAN
C2.00	GRADING PLAN AND PROFILES
C2.01	CROSS SECTIONS
C4.00	EROSION CONTROL PLAN PHASE I
C4.01	EROSION CONTROL PLAN PHASE II
C4.10	EROSION CONTROL DETAILS I
C5.00	DETAILS SHEET 1

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CERTIFICATE OF AUTHORIZATION — Olsson Inc. No.1010 — ARKANSAS ENGINEER

NOT FOR CONSTRUCTION

MBL ARCHITECTURE
2397 N. Green Acres Rd.
Fayetteville, AR 72703
Ph: 479.443.7121

MBL

City of Fayetteville, AR
Ralph "Buddy" Hayes Park Addition
235 E. Rock Street
Fayetteville, AR 72701

REVISIONS

REVISION NO.	DESCRIPTION	DATE

MBL JOB NO.
200012
ISSUE DATE
02-19-2025

SHEET CONTENTS
TITLE, VICINITY MAP AND SHEET INDEX

SHEET
C0.00

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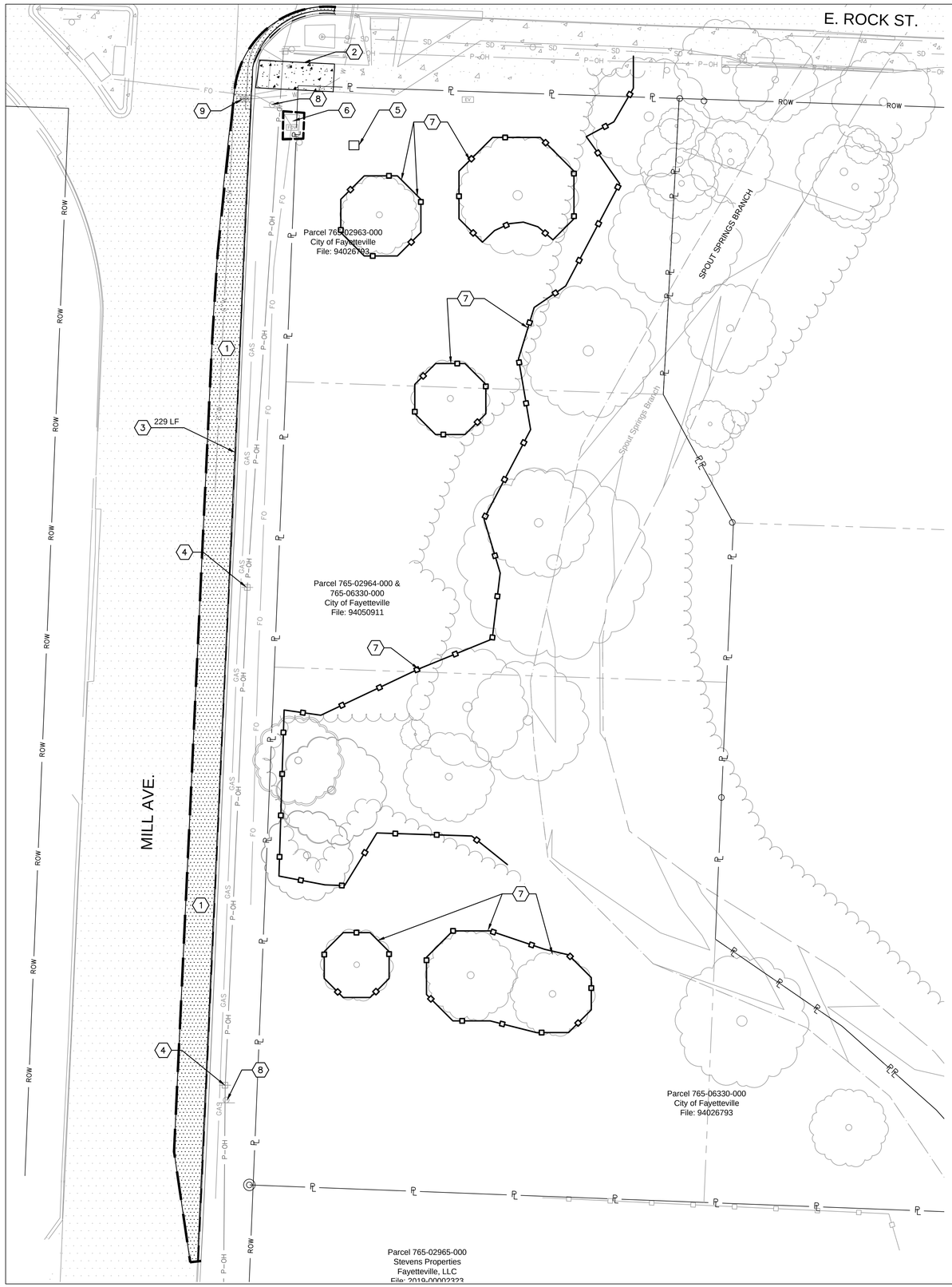
DWG: F:\2022\06001-06500\022-06146\40-design\AutoCAD\final plans\Sheets\Buddy Hoye's Park\C_TTL02_02206146.dwg USER: bpoyne2
DATE: Feb 19, 2025 5:25pm XREFS: C_TBLK02_02206146



DEMOLITION NOTES:

1. ALL REMOVED MATERIAL SHALL BE DISPOSED OF OFF-SITE AT CONTRACTOR'S EXPENSE TO AN APPROVED DUMP SITE UNLESS OTHERWISE NOTED.

2. SAWCUT OF EXISTING PAVEMENT SHALL BE TO NEAREST JOINT LINE.

3. CRUSHED STONE FILL CAN BE STOCKPILED AND REUSED, IF IT HAS PROPER GRADATION CHARACTERISTICS AS DETERMINED BY GEOTECHNICAL ENGINEER DURING CONSTRUCTION.

4. UPON REMOVAL OF SURFACE MATERIALS, THE EXPOSED SUBGRADE SHOULD BE CAREFULLY OBSERVED BY A GEOTECHNICAL ENGINEER.

5. ANY SOFT OR UNSTABLE AREAS WHICH ARE DETECTED AT THE EXPOSED GRADE OR DURING THE EXCAVATION FOR THE FOOTINGS SHOULD BE UNDERCUT AND REPLACED WITH LOAD BEARING FILL. REFER TO GEOTECHNICAL REPORT.

6. CONTRACTOR TO PROVIDE TRAFFIC CONTROL ROUTING AD PLANS FOR THE CONSTRUCTION INCLUDED IN THESE PLANS. CONTRACTOR SHALL OBTAIN THE NECESSARY PERMITS FOR THE STREET CLOSURES AND COORDINATE THESE CLOSURES WITH THE CITY AS REQUIRED.

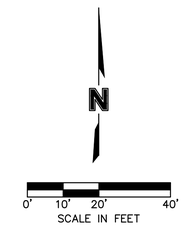
LEGEND

- CONTRACTOR SHALL SAWCUT & REMOVE EXISTING ASPHALT PAVEMENT AS NECESSARY TO PROVIDE A SMOOTH EDGE BETWEEN NEW & EXISTING CURB, SIDEWALK OR PAVEMENT. EXTENTS OF REMOVAL SHALL ACCOMMODATE NEW CONSTRUCTION SHOWN ON THESE PLANS. SIDEWALK & CONCRETE PAVEMENT REMOVAL SHALL BE TO THE NEAREST JOINT.
- EXISTING CONCRETE CURB AND GUTTER TO BE REMOVED
- TREES TO BE PRESERVED. INSTALL INITIAL TREE PRESERVATION FENCING PRIOR TO DEMOLITION ACTIVITIES. REFER TO DETAIL THIS SHEET
- EXISTING UTILITY STRUCTURE/LINE TO REMAIN. CONTRACTOR SHALL TAKE EXTRA PRECAUTION TO NOT DAMAGE EXISTING UTILITY STRUCTURE/LINE.

ROW	RIGHT-OF-WAY LINE
PL	PROPERTY LINE
SD	EXIST. STORM LINE
W	EXIST. WATER LINE
SS	EXIST. SANITARY SEWER LINE
GAS	EXIST. GAS LINE
P-OH	EXIST. OVERHEAD POWER LINE
FO	EXIST. FIBER OPTIC LINE
	EXIST. CONTOUR
	BENCHMARK
	EXIST. LIGHT POLE
	EXIST. TRANSFORMER
WM	EXIST. WATER METER
	EXIST. GRATE INLET
	EXIST. POWER POLE
	EXIST. POWER POLE W/ LIGHT
	EXIST. STEEL POST
WV	EXIST. WATER VALVE
	EX. FIRE HYDRANT
	EX. WATER METER
	EX. COMMUNICATION BOX
	EX. TRANSFORMER
	EX. ELECTRICAL BOX
	EX. SIGN
D	EX. STORM SEWER MANHOLE
G	EX. GAS METER
S	EX. SANITARY SEWER MANHOLE
	EX. DECIDUOUS TREE
	EX. EVERGREEN TREE

KEYNOTES:

1. REMOVE ASPHALT PAVEMENT
2. REMOVE SIDEWALK
3. REMOVE CURB & GUTTER
4. RELOCATE EXISTING POWER POLE. CONTRACTOR TO COORDINATE WITH SWEPCO AND ALL OTHER UTILITY PROVIDERS ON THESE POLES FOR RELOCATION.
5. PROTECT EXISTING MONUMENT IN PLACE. IF MONUMENT MUST BE MOVED/ALTERED CONTRACTOR TO REMOVE, PRESERVE, AND RELOCATE AS DIRECTED BY THE CITY OF FAYETTEVILLE.
6. MODIFY RITTER VAULT LID TO MATCH PROPOSED GRADING. SEE SHEET C2.00. CONTRACTOR TO COORDINATE WITH RITTER.
7. PROTECT EXISTING TREE IN PLACE, (SEE DETAIL SHEET C4.10)
8. RELOCATE SIGN. SEE SHEET C1.01 FOR PROPOSED LOCATION
9. REMOVE EXISTING VALVE BOX AND ABANDON EXISTING VALVE IN PLACE.



NOT FOR CONSTRUCTION

MBL ARCHITECTURE
2397 N. Green Acres Rd.
Fayetteville, AR 72703
Ph: 479.443.7121

City of Fayetteville, AR

Ralph "Buddy" Hayes Park Addition

235 E. Rock Street
Fayetteville, AR 72701

REVISIONS

REVISION NO:	DESCRIPTION	DATE

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200012

ISSUE DATE
02-19-2025

SHEET CONTENTS
DEMOLITION PLAN

SHEET
C0.01

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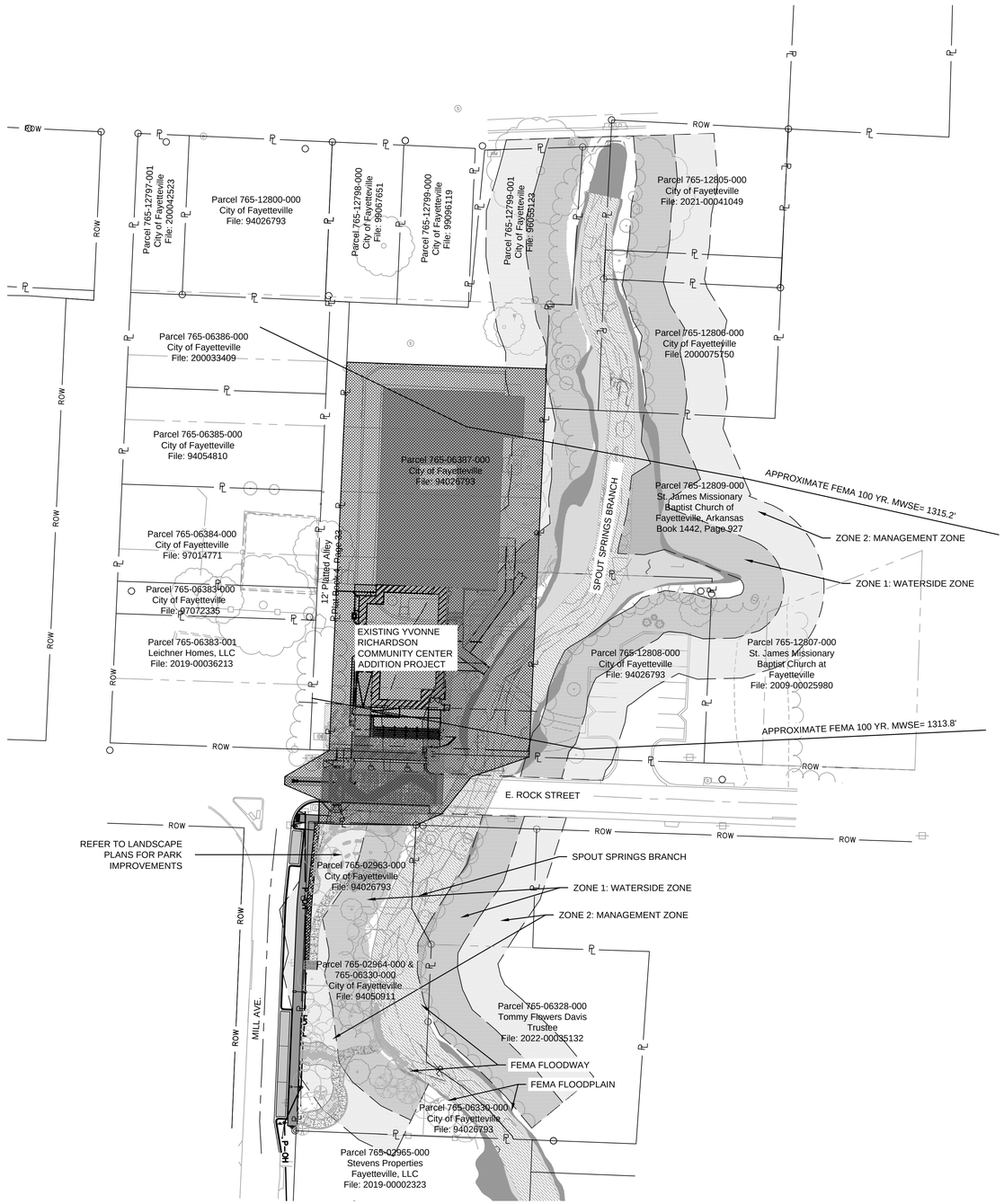
DWG: F:\2022\06001-06500\022-06146\40-design\AutoCAD\final plans\Sheets\Buddy Hoye's Park\C_DEM02_02206146.dwg USER: bpayne2
DATE: Feb 19, 2025 5:26pm XREFS: C_TBLK02_02206146 V_XTOP002_02206146 C_FLHZ_02206146 C_PBASE_02206146 V_XBNDY_02206146



PAVEMENT MARKING NOTES:

1. DO NOT APPLY PAVEMENT MARKING PAINT UNTIL LAYOUT, COLORS AND PLACEMENT HAVE BEEN VERIFIED WITH THE ARCHITECT.

2. ALLOW CONCRETE PAVING TO AGE FOR 28 DAYS BEFORE MARKING.

3. ALL PAVEMENT SURFACES SHALL BE CLEANED/CLEARED OF ANY DEBRIS OR CURING COMPOUNDS IN ACCORDANCE WITH MANUFACTURES REQUIREMENTS PRIOR TO ANY MARKING APPLICATIONS.

4. DETAILS NOT SHOWN SHALL BE IN CONFORMITY WITH THE STATE STANDARDS FOR TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AND SIMILAR REQUIREMENTS ESTABLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.

5. ALL PARKING LOT STRIPING SHALL BE SINGLE LINE 4" WIDE AS PER THE SITE PLANS.

6. PAINT FOR MARKING PAVEMENT SHALL CONFORM TO FEDERAL HIGHWAY MARKING STANDARDS. USE SHERWIN WILLIAMS PROFESSIONAL FAST DRY ACRYLIC LATEX TRAFFIC MARKING PAINT OR EQUAL, USE WHITE, BLUE OR YELLOW, WHERE APPROPRIATE, UNLESS OTHERWISE DIRECTED, USE THE FOLLOWING:
A. BLACKTOP OR BITUMINOUS ASPHALT PAVING: USE WHITE COLOR.
B. PORTLAND CEMENT CONCRETE PAVING: USE WHITE COLOR.
C. ADA ACCESSIBLE PARKING AND ENTRYWAYS: USE BLUE COLOR.
D. PROVIDE PAINTED CURBS AT FIRE LANE DESIGNATIONS PER FIRE MARSHAL REQUIREMENTS.

7. APPLY ALL MARKINGS USING APPROVED MECHANICAL EQUIPMENT (WITH PROVISIONS FOR CONSTANT AGITATION OF PAINT), CAPABLE OF APPLYING THE MARKING WIDTHS AS SHOWN. PROVIDE A MINIMUM WET FILM THICKNESS OF 15 MILS. USE PNEUMATIC SPRAY GUNS FOR HAND APPLICATION OF PAINT. ALL PAINTING EQUIPMENT AND OPERATIONS SHALL BE UNDER THE CONTROL OF EXPERIENCED TECHNICIANS THOROUGHLY FAMILIAR WITH EQUIPMENT AND MATERIALS AND MARKING LAYOUTS.

8. DETAIL PAVEMENT MARKINGS SHALL BE THAT MARKING, EXCLUSIVE OF ACTUAL TRAFFIC LANE MARKING, AT EXIT AND ENTRANCE ISLANDS AND TURNOUTS, ON CURBS, AT CROSSWALKS, AT PARKING BAYS AND AT SUCH OTHER LOCATIONS AS SHOWN. ADA ACCESSIBLE PARKING SPACES SHALL BE MARKED BY THE INTERNATIONAL ACCESSIBLE SYMBOL AT INDICATED PARKING SPACES. USE A SUITABLE TEMPLATE THAT WILL PROVIDE A PAVEMENT MARKING WITH TRUE, SHARP EDGES AND ENDS.

LEGEND

- RIGHT–OF–WAY LINE
- PROPERTY LINE
- LOT LINE
- UTILITY EASEMENT
- FIRE LANE STRIPING
- CENTER LINE
- TREE PRESERVATION FENCING
- EXIST. TRANSFORMER
- EXIST. WATER METER
- EXIST. POWER POLE W/ LIGHT
- EXIST. WATER VALVE
- EX. FIRE HYDRANT
- EX. WATER METER
- EX. COMMUNICATION BOX
- EX. TRANSFORMER
- EX. ELECTRICAL BOX
- EX. LIGHT POLE
- EX. POWER POLE
- EX. SIGN
- EX. STORM SEWER MANHOLE
- EX. GAS METER
- EX. SANITARY SEWER MANHOLE
- EX. DECIDUOUS TREE
- EX. EVERGREEN TREE

GENERAL NOTES:

1. CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE PLANS (APPROVED BY CITY OF FAYETTEVILLE, AR) AND ONE (1) COPY OF THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS & SPECIFICATIONS AT THE SITE AT ALL TIMES.

2. ALL REFERENCES CONTAINED WITHIN THESE PLANS TO THE OWNER'S ENGINEER ARE HEREBY REFERENCED OLSSON, INC.

3. THE EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NOT INCLUDE ALL LINES PRESENT. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALL 811 OR 1-800-482-8998, AND COORDINATE FIELD LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING GRADING ACTIVITIES. !!STOP!! CALL BEFORE YOU DIG!!

4. UTILITIES AS SHOWN WERE OBTAINED FROM INFORMATION INDICATED ON THE SURVEY OR BY FIELD OBSERVATION. CONTRACTOR SHALL FIELD VERIFY ALL HORIZONTAL AND VERTICAL LINES AND GRADES OF EXISTING UTILITIES PRIOR TO THE CONSTRUCTION OF IMPROVEMENTS. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY UPON DISCOVERY OF A DISCREPANCY BETWEEN THE CONTRACT DRAWINGS AND ACTUAL FIELD CONDITIONS.

5. CONTRACTOR SHALL NOT CHANGE OR DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE OWNER AND ENGINEER.

6. CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL PERMITS AND PAY ALL FEES AS REQUIRED BY THE CONSTRUCTION COVERED IN THESE PLANS.

7. ALL WORK AND MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE.

8. ANY ESTIMATES OF QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR AND SUBCONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING ALL QUANTITIES. CONTRACTOR SHALL PROVIDE ALL WORK AND MATERIALS TO COMPLETE CONSTRUCTION AS SHOWN ON PLANS.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF THE RIGHT-OF-WAY AND FOR DAMAGED IMPROVEMENTS SUCH AS CURBS, SIDEWALKS, STREET LIGHT AND TRAFFIC SIGNAL JUNCTION BOXES, TRAFFIC SIGNAL LOOP LEAD INS, SIGNAL POLES, ETC. DAMAGED IMPROVEMENTS SHALL BE REPAIRED IN CONFORMANCE WITH THE LATEST CITY STANDARDS AND TO THE CITY'S SATISFACTION.

10. CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE ANY EXISTING STREET, CURB AND GUTTER, SIDEWALK, DRIVEWAYS OR STRUCTURE UNLESS SHOWN TO BE REMOVED.

11. ALL WORK WITHIN ROAD RIGHT-OF-WAY SHALL CONFORM TO THE CITY OF FAYETTEVILLE, AR REQUIREMENTS, UNLESS OTHERWISE NOTED.

12. ALL TRAFFIC CONTROL SHALL BE IN CONFORMANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)

13. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL PROPERTY CORNERS. ANY PROPERTY CORNER DISTURBED OR DAMAGED BY GRADING ACTIVITIES SHALL BE RESET BY A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF ARKANSAS, AT THE CONTRACTORS EXPENSE.

14. CONTRACTOR AND SUBCONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING ALL EARTHWORK QUANTITIES. CONTRACTOR SHALL PROVIDE ALL WORK AND MATERIALS AS SHOWN TO COMPLETE CONSTRUCTION SHOWN ON PLANS.

15. THE CONTOUR LINES, SPOT ELEVATIONS AND BUILDING FLOOR ELEVATIONS SHOWN ARE TO FINISH GRADE FOR TOP OF PAVEMENT, SIDEWALKS, CURBS AND FLOOR SLABS, ETC. REFER TO TYPICAL SECTIONS FOR PAVING, SLAB AND AGGREGATE BASE THICKNESS TO DEDUCT FOR GRADING LINE ELEVATIONS.

16. CONTRACTOR SHALL FINISH GRADE SLOPES AS SHOWN NO STEEPER THAN 1 FOOT VERTICAL IN 3 FEET HORIZONTAL.

17. THE CONTRACTOR SHALL GRADE LANDSCAPED AREAS AT A MIN. OF 1% TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND SIDEWALKS WHEN FINISH LANDSCAPE MATERIALS ARE IN PLACE, UNLESS SPECIFIED OTHERWISE.

18. ALL BACKFILL SHALL BE TAMPED. BACKFILL WITHIN THE RIGHT-OF-WAY SHALL BE COMPACTED TO 95% MAX. DENSITY AS PER ASTM-D698 (STANDARD PROCTOR COMPACTION)

19. THE CONTRACTOR IS RESPONSIBLE FOR ATTENDING TO AND CORRECTING UNSUITABLE SOIL CONDITIONS RELATED TO PLOW ZONES, WET SOILS AND OTHER CONDITIONS. THE UNSUITABLE CONDITIONS MUST BE CORRECTED PER THE GEOTECHNICAL ENGINEER'S REPORT, WHERE REQUIRED, TO MEET PROJECT NEEDS.

20. ALL EXTERIOR CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI AND BE AIR ENTRAINED. FLY ASH IS NOT A SUITABLE REPLACEMENT FOR PORTLAND CEMENT.

21. CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE PUBLIC STREETS IN THE VICINITY OF THE JOB SITE CLEAN AND FREE OF ROCKS, SOIL/MUD AND DEBRIS DURING ALL PHASES OF CONSTRUCTION.

22. CONTRACTOR SHALL CLEAN OUT ALL EXISTING AND PROPOSED INLETS, PIPES AND MANHOLES OF DEBRIS AND SEDIMENTATION AT COMPLETION OF SITEWORK. THIS WORK SHALL BE DONE TO THE SATISFACTION OF THE OWNER AND THE CITY OF FAYETTEVILLE, AR.

23. CONTRACTOR SHALL RETAIN FLOATABLE WIND BLOWN MATERIALS ON SITE BY STORING ALL TRASH AND BUILDING MATERIAL WASTE IN ENCLOSURES UNTIL PROPER DISPOSAL AT AN OFF-SITE FACILITY. CONTRACTOR TO CHECK ADJACENT AREAS DAILY AND PICK UP CONSTRUCTION WASTE MATERIALS AND DEBRIS THAT HAVE BLOWN OR WASHED OFF-SITE.

24. CONTRACTOR IS RESPONSIBLE FOR PROVIDING BERMS, SILT FENCES, OR OTHER MEANS TO PREVENT ERODED MATERIALS FROM REACHING THE PUBLIC RIGHT-OF-WAY AND ADJACENT PROPERTIES. IN THE EVENT THE PREVENTION MEASURES ARE NOT EFFECTIVE, THE CONTRACTOR SHALL REMOVE ANY DEBRIS, SILT, OR MUD AND RESTORE THE RIGHT-OF-WAY TO ORIGINAL OR BETTER CONDITION.

25. CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DOWNSTREAM EROSION AND SILTATION DURING ALL PHASES OF CONSTRUCTION. EROSION CONTROL PROCEDURES SHALL BE IN PLACE PRIOR TO BEGINNING GRADING ACTIVITIES.

26. CONSTRUCTION ACCESS TO THE SITE SHALL BE LIMITED TO THE APPROVED TEMPORARY CONSTRUCTION ENTRANCE(S) AS SHOWN ON SHEET C4.00.

27. TEMPORARY CONSTRUCTION ENTRANCE SHALL HAVE SHOT ROCK FOR ITS SURFACE.

28. EROSION CONTROL DEVICES SHALL BE MAINTAINED DURING THE WHOLE CONSTRUCTION PERIOD BY THE CONTRACTOR.

29. CONTRACTOR SHALL PROTECT ANY STORM INLETS FROM SEDIMENT THAT TAKE STORM WATER FROM THE AREA OF CONSTRUCTION.

30. ALL DISTURBED AREAS SHALL BE STABILIZED IN ACCORDANCE WITH THE APPROVED EROSION CONTROL PLAN.

BENCHMARKS

BM #1 FOUND REBAR W. CAP "PS1642" ON SOUTH SIDE OF EAST ROCK STREET, EAST OF THE STREAM
ELEV. = 1313.15'
N: 635730.538
E: 675231.949

N

0' 20' 40' 80'
SCALE IN FEET

NOT FOR CONSTRUCTION

MBL ARCHITECTURE
2397 N. Green Acres Rd.
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Ph: 479.443.7121

City of Fayetteville, AR

Ralph "Buddy" Hayes Park Addition

235 E. Rock Street
Fayetteville, AR 72701

REVISIONS

REVISION NO.	DESCRIPTION	DATE

MBL JOB NO.
200012

ISSUE DATE
02-19-2025

SHEET CONTENTS
OVERALL SITE PLAN

SHEET
C1.00

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KEYNOTES:

1. INSTALL 4" CONCRETE SIDEWALK
2. INSTALL HEAVY DUTY ASPHALT PAVEMENT (SEE DETAIL SHEET C5.00)
3. CONSTRUCT STANDARD CURB & GUTTER
4. CONSTRUCT 1' CONCRETE BANDING. (SEE DETAIL SHEET C5.00)
5. PROPOSED BEAM ROCK RETAINING WALL. MINIMUM 2" ABOVE SIDEWALK ELEVATION AND MAXIMUM 2.5' FROM SIDEWALK GRADE TO THE BOTTOM OF THE WALL. COORDINATE WITH CITY, LANDSCAPE ARCHITECT, AND DETAIL SHEET C5.00 FOR DETAILS
6. WALKWAY PER LANDSCAPE PLANS. SEE LANDSCAPE PLANS FOR DETAILS.
7. TRUNCATED DOMES
8. CONSTRUCT CONCRETE FLARE
9. PROPOSED RELOCATED SIGN
10. PROPOSED STREET LIGHT ATTACHED TO POWER POLE TO BE PROVIDED BY SWEPCO.
11. PROPOSED ROADWAY CENTERLINE STRIPING PER MUTCD AND CITY STANDARDS
12. TREE PRESERVATION FENCING
13. REMOVE EXISTING VALVE BOX AND ABANDON EXISTING VALVE IN PLACE
14. PROPOSED PARKING STRIPE
15. APPROXIMATE LOCATION OF SWEPCO POWER POLE WITH GUYING. COORDINATE WITH SWEPCO FOR FINAL LOCATION AND DETAILS.
16. MODIFY RITTER VAULT LID TO MATCH PROPOSED GRADING. SEE SHEET C2.00. CONTRACTOR TO COORDINATE WITH RITTER.
17. INSTALL END OF SIDEWALK SIGNAGE
18. COMPOSITE DECKING. SEE LANDSCAPE PLAN FOR DETAIL.

LEGEND

- RIGHT-OF-WAY LINE
- PROPERTY LINE
- LOT LINE
- UTILITY EASEMENT
- FIRE LANE STRIPING
- CENTER LINE
- TREE PRESERVATION FENCING
- EXIST. TRANSFORMER
- EXIST. WATER METER
- EXIST. POWER POLE W/ LIGHT
- EXIST. WATER VALVE
- EX. FIRE HYDRANT
- EX. WATER METER
- EX. COMMUNICATION BOX
- EX. TRANSFORMER
- EX. ELECTRICAL BOX
- EX. LIGHT POLE
- EX. POWER POLE
- EX. SIGN
- EX. STORM SEWER MANHOLE
- EX. GAS METER
- EX. SANITARY SEWER MANHOLE
- EX. DECIDUOUS TREE
- EX. EVERGREEN TREE

N

0' 5' 10' 20'
SCALE IN FEET

NOT FOR CONSTRUCTION

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SHEET CONTENTS
SITE PLAN

SHEET
C1.01

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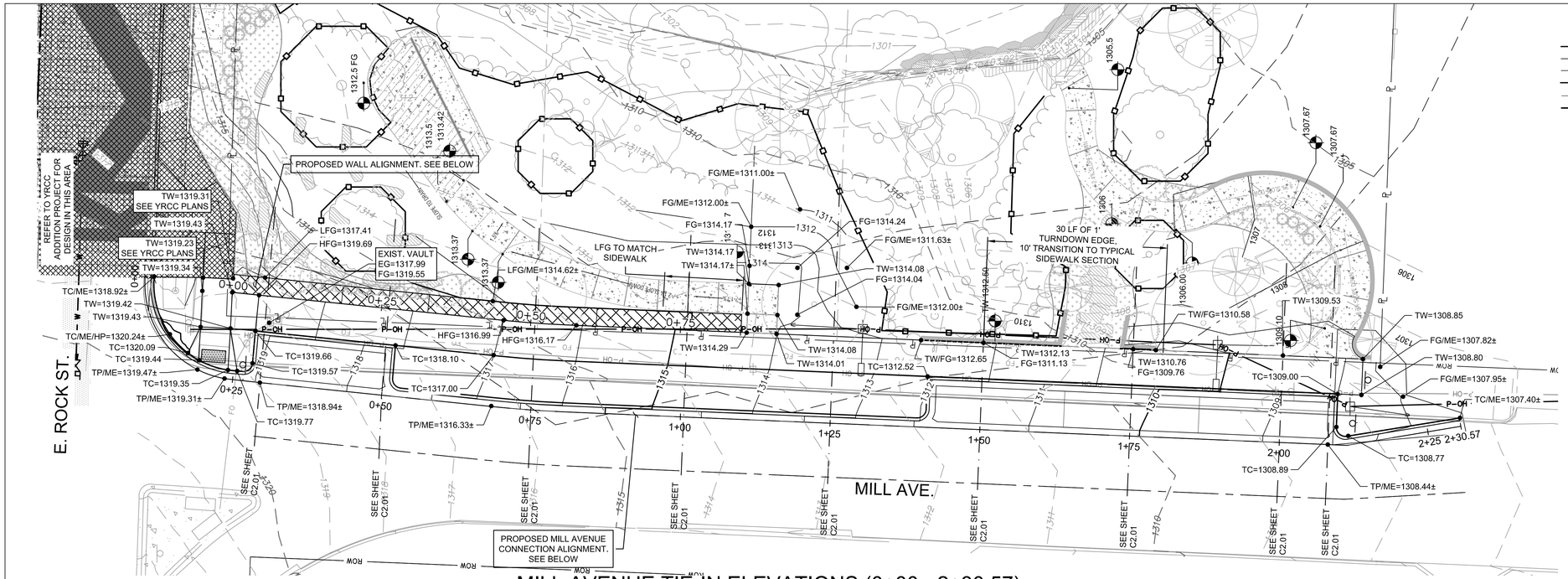

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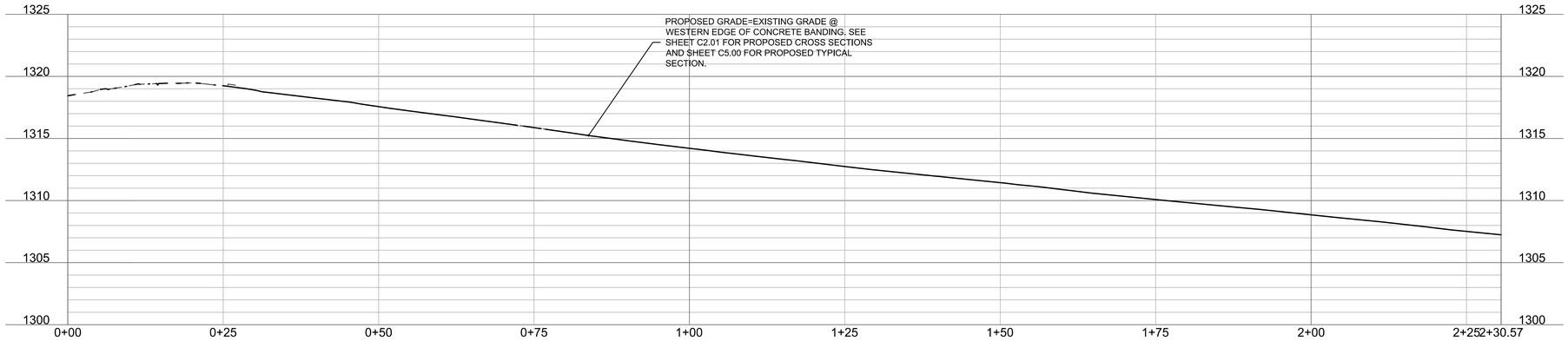

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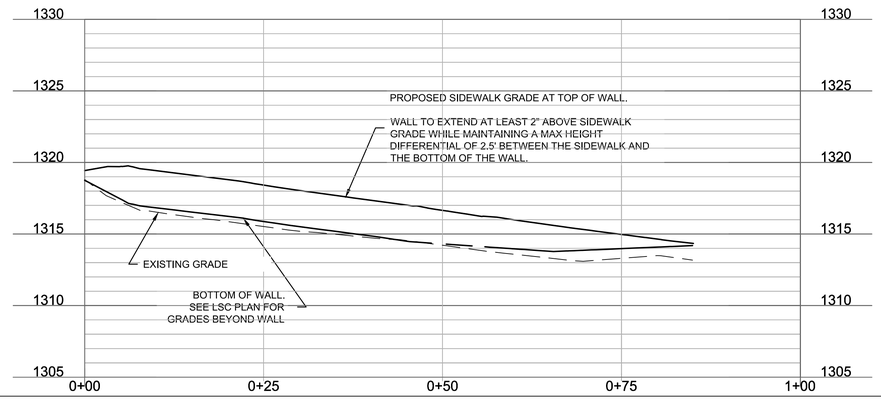

LEGEND

- ROW — RIGHT-OF-WAY LINE
- PL — PROPERTY LINE
- 899 — EXIST. CONTOUR
- 899 — FINISH GRADE CONTOUR
- UTILITY EASEMENT
- TREE PRESERVATION FENCING

- ME=1300.00 MATCH EXISTING
- TP=1300.00 TOP OF PAVEMENT
- TC=1300.00 TOP OF CURB
- TW=1300.00 TOP OF SIDEWALK
- FG=1300.00 FINISH GRADE
- HFG=1300.00 TOP OF WALL FINISH GRADE
- LFG=1300.00 BOTTOM OF WALL FINISH GRADE

GRADING NOTES:

1. CONTRACTOR TO VERIFY THE ROADWAY WIDTH AND THE MATCH EXISTING ELEVATION SHOTS AND SHOULD COORDINATE WITH THE ENGINEER OF RECORD IF THE ON-SITE INFORMATION DIFFERS.

GRADING NOTES:

1. ALL ELEVATIONS ARE TO NORTH AMERICAN VERTICAL DATUM (N.A.V.D. 1988).

2. STRIPPINGS ARE TO BE STOCKPILED ON-SITE AS DIRECTED BY THE ENGINEER. FOLLOWING THE COMPLETION OF THE GRADING, THIS TOPSOIL SHALL BE USED AS FILL MATERIAL ON ALL LANDSCAPED AREAS. IF STOCKPILE IS INACTIVE FOR MORE THAN 14 DAYS, STABILIZE OR PROTECT THE PERIMETER AS SHOWN ON SHEET C4.00.

3. ALL HERBACEOUS VEGETATION SHALL BE REMOVED FROM WITHIN THE LIMITS OF THE GRADING AND REDISTRIBUTED WITH THE TOPSOIL AS OUTLINED IN NOTE #2.

4. CONTRACTOR SHALL USE CAUTION AROUND ANY EXISTING UTILITIES LOCATED ONSITE. THEY SHALL BE RESPONSIBLE FOR THE REPAIRS OF SUCH STRUCTURES WHEN BROKEN OR OTHERWISE DAMAGED BY THE NEW CONSTRUCTION.

5. THE PROPOSED CONTOURS REPRESENT TOP OF SLAB IN PAVEMENT AREAS AND FINISHED GRADE IN ALL OTHER AREAS. QUANTITIES DO NOT TAKE INTO ACCOUNT CORE-OUT OR ANY OVER-EXCAVATION.

6. CONTRACTOR SHALL ADDRESS ANY GRADING RECOMMENDATIONS IDENTIFIED IN THE GEOTECHNICAL INVESTIGATION. PRIOR TO MOVING OFF THE JOB THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO DO A FINAL WALK-THROUGH OF THE CONSTRUCTION SITE.

7. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES, PIPES AND STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS AND TO THE BEST OF OUR KNOWLEDGE CONSTITUTES ALL KNOWN FACILITIES. HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES OR STRUCTURES LOCATED AT THE WORK SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT AN UNDERGROUND LOCATE SERVICE IN ADVANCE OF ANY EXCAVATION FOR THE MARK-OUT OF THE LOCATION OF UTILITIES AND NOTIFICATION OF COMMENCEMENT OF WORK.

8. BEFORE EXCAVATING FOR THIS CONTRACT, THE CONTRACTOR SHALL FIELD VERIFY LOCATION OF UNDERGROUND UTILITIES. CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES.

9. CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SEDIMENT CONTROL BARRIERS FOR A PERIOD OF 1 YEAR OR UNTIL THEY ARE RELEASED FROM THIS RESPONSIBILITY BY THE ENGINEER, WHICHEVER PERIOD IS SHORTER.

10. ALL ITEMS REMOVED SHALL BE DISPOSED OFF SITE BY THE CONTRACTOR AS PER CITY OF FAYETTEVILLE REQUIREMENTS.

11. IN ALL LOCATIONS WHERE NEW PAVEMENT ABUTS EXISTING, SAW CUT EXISTING PAVEMENT AS NECESSARY TO PROVIDE A SMOOTH TRANSITION AT THE JOINT. MATCH EXISTING GRADES AT THE JOINT IN ALL LOCATIONS.

12. CONTRACTOR SHALL FINISH GRADE SLOPES AS SHOWN NO STEEPER THAN 1 FOOT VERTICAL IN 3 FEET HORIZONTAL.

13. IN ALL LOCATIONS WHERE NEW PAVEMENT ABUTS EXISTING, SAW CUT EXISTING PAVEMENT AS NECESSARY TO PROVIDE A SMOOTH TRANSITION AT THE JOINT. MATCH EXISTING GRADES AT THE JOINT IN ALL LOCATIONS.

BENCHMARKS

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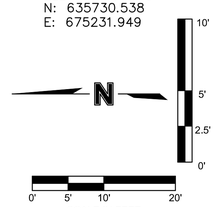

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City of Fayetteville, AR

Ralph "Buddy" Hayes Park Addition

235 E. Rock Street
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REVISIONS

REVISION NO.	DESCRIPTION	DATE

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SHEET CONTENTS
GRADING PLAN AND PROFILES

SHEET
C2.00

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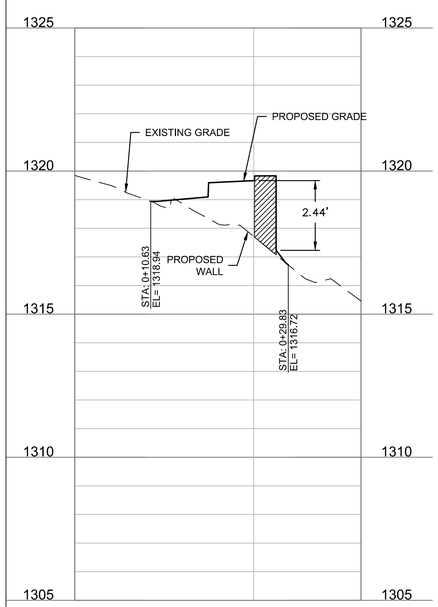

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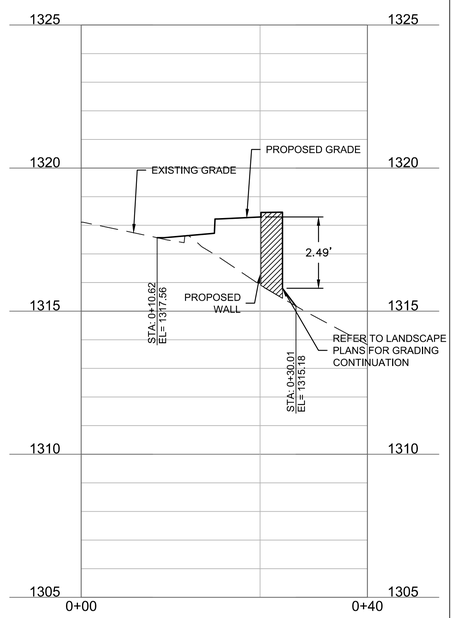

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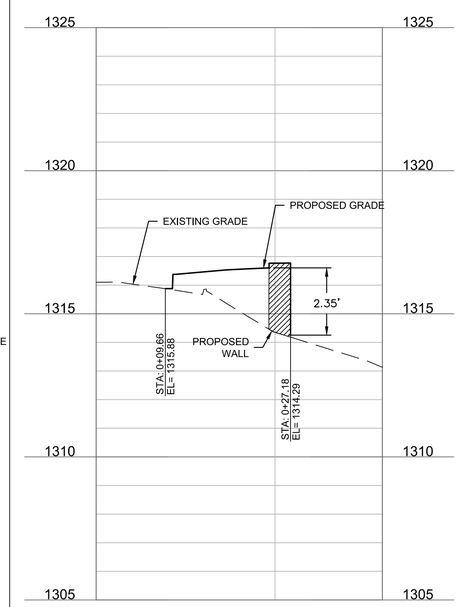

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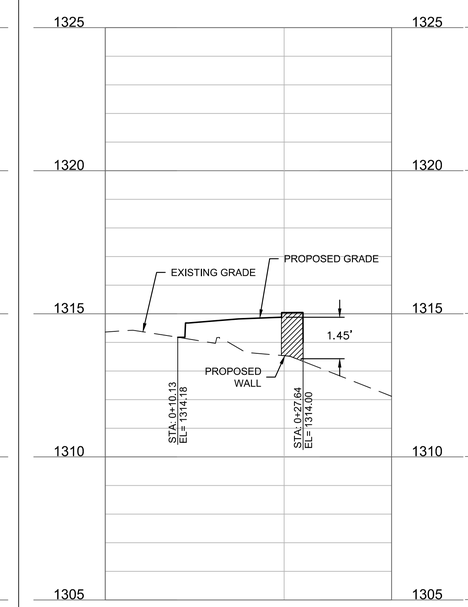

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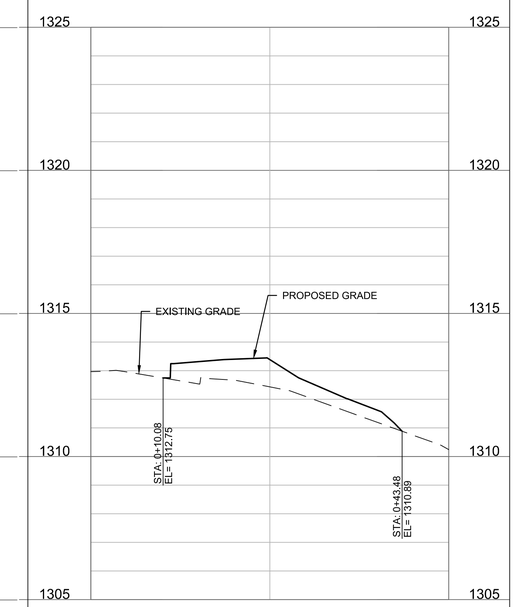

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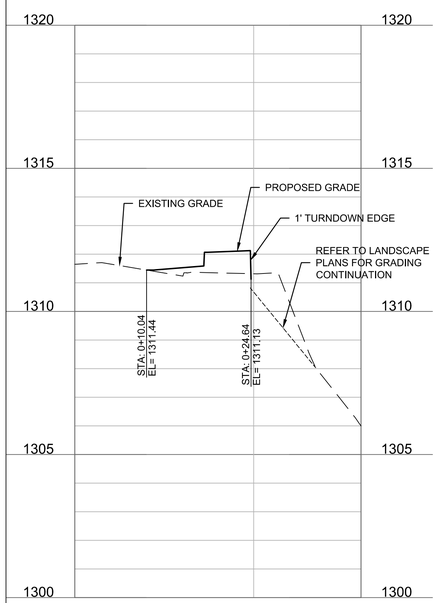

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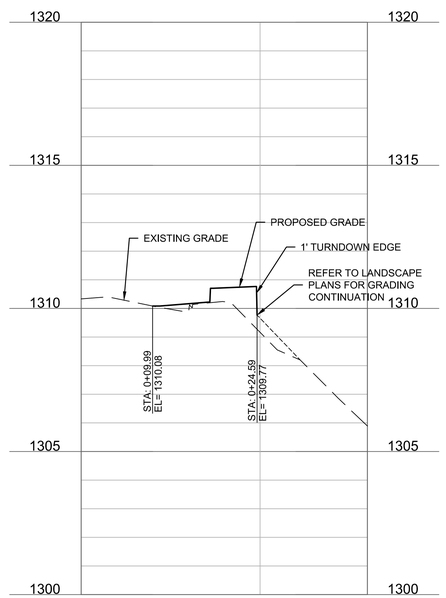

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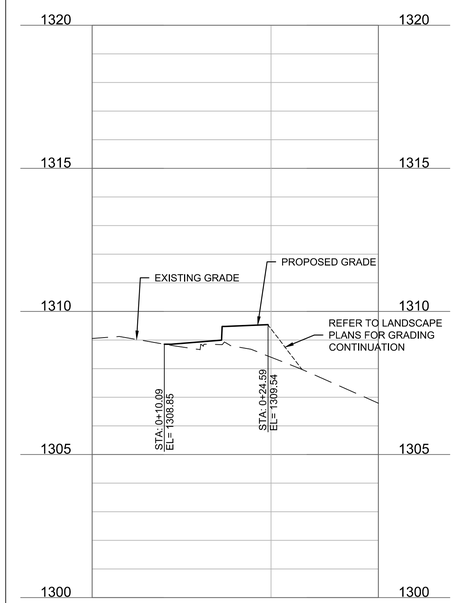

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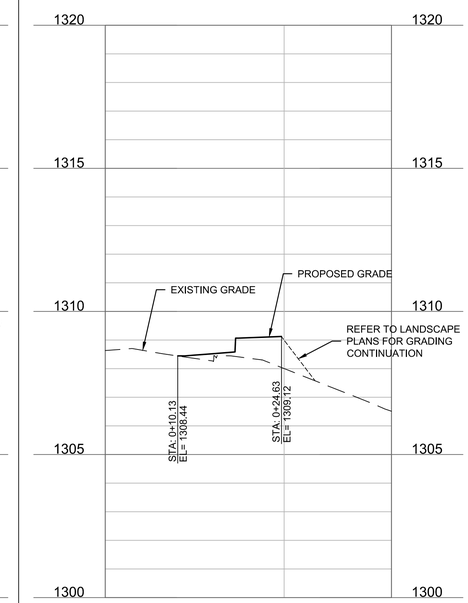

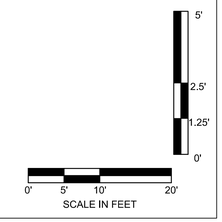

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REVISIONS

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C2.01

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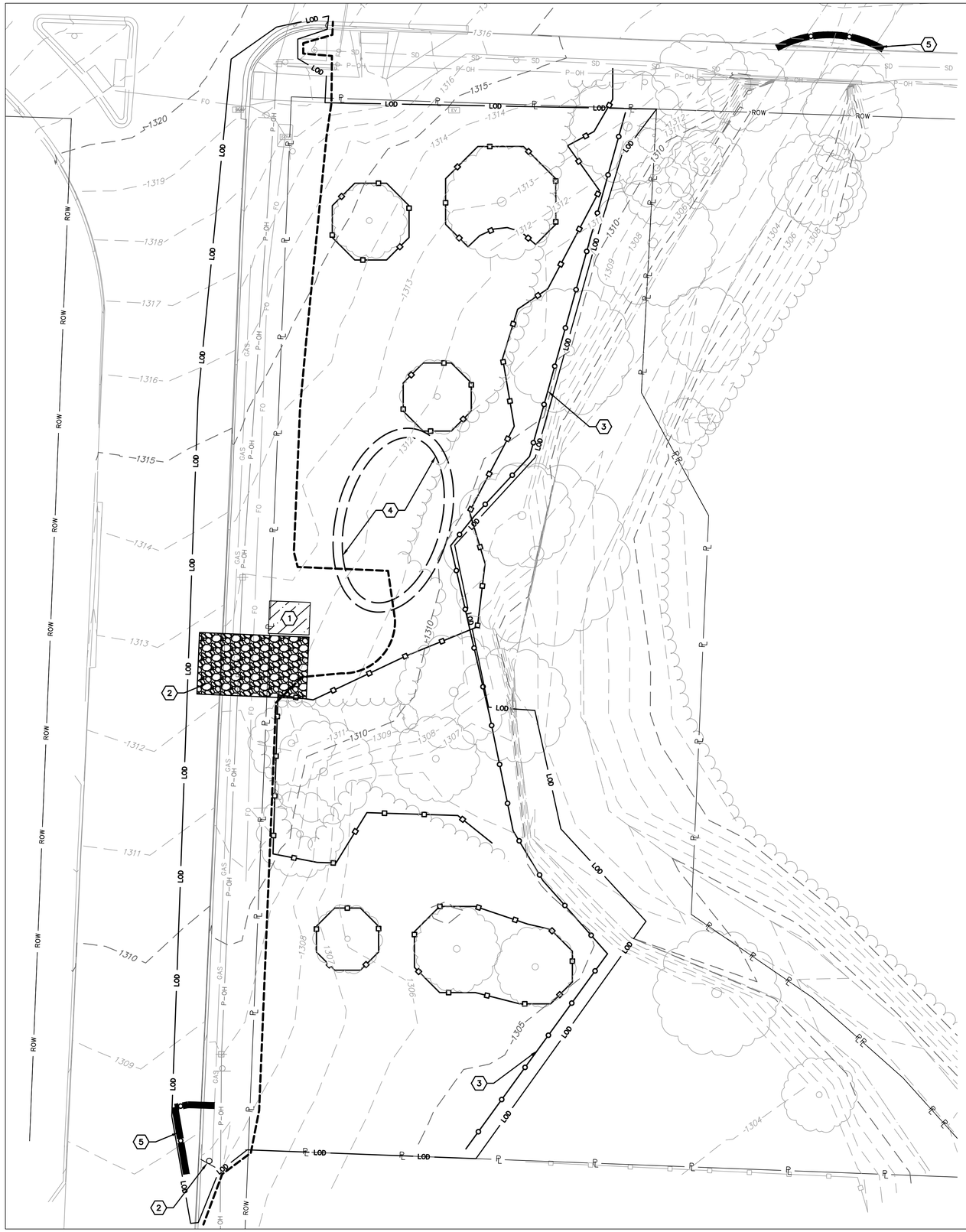

KEYNOTES:

1. APPROX. LOCATION OF CONC. WASHOUT
2. INSTALL CONSTRUCTION ENTRANCE/EXIT
3. INSTALL SILT FENCE OR APPROVED EQUAL
4. APPROX. STOCK PILE LOCATION
5. INSTALL INLET PROTECTION
6. APPROX. LOCATION OF SWPPP SIGNAGE TO BE ADJACENT TO YRCC SIGNAGE. REF. YRCC PLANSET.

LEGEND:

- INSTALL GRAVEL CONSTRUCTION ENTRANCE/EXIT
- INSTALL CONCRETE WASHOUT
- INSTALL INLET PROTECTION
- APPROX. STOCKPILE LOCATION
- ROW — RIGHT-OF-WAY LINE
- PL — PROPERTY LINE
- UTILITY EASEMENT
- 899 — EXIST. CONTOUR
- 899 — FINISH GRADE CONTOUR
- LOD — LIMITS OF DISTURBANCE
- INSTALL SILT FENCE OR APPROVED EQUAL
- PROPOSED TREE PRESERVATION FENCING
- EDGE OF CIVIL GRADING. REF. LSC PLANS FOR PARK GRADES.

EROSION CONTROL NOTES:

1. PROVIDE EROSION CONTROL MEASURES TO PREVENT SOIL EROSION AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS.

2. LIMITS OF EROSION AND SEDIMENT CONTROL STRUCTURES SHOWN ARE SCHEMATIC. NECESSARY EROSION AND SEDIMENT CONTROL MEASURES DEPEND HEAVILY ON CONTRACTOR SCHEDULING AS WELL AS MEANS AND METHODS. ANY ADDITIONAL TYPE OR QUANTITY OF STRUCTURES NOT SHOWN THAT ARE NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE SITE ARE THE CONTRACTOR'S RESPONSIBILITY.

3. CONSTRUCT EROSION CONTROL IMPROVEMENTS PRIOR TO BEGINNING OF ANY OTHER WORK.

4. FREQUENTLY INSPECT AND REPAIR OR REPLACE EROSION AND SEDIMENT CONTROL MEASURES PROMPTLY AS NEEDED.

5. DISPOSE OF SEDIMENT TRAPPED BY THESE PRACTICES IN AN APPROVED SITE IN A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.

6. REMOVE ACCUMULATED SILT WHEN IT REACHES A DEPTH OF 6 INCHES AND DISPOSE OF IN AN APPROVED SPOIL SITE OR AS ABOVE.

7. DO NOT ALLOW SILT FENCES TO OBSTRUCT SIDEWALKS, BUILDING ENTRANCES OR DRIVEWAYS.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION & SEDIMENT CONTROL MEASURES AND PRACTICES THROUGHOUT THE PROJECT. ANY AND ALL FINES ASSOCIATED WITH EROSION CONTROL VIOLATIONS WILL BE THE CONTRACTOR'S RESPONSIBILITY.

9. EROSION CONTROL IS THE CONTRACTOR'S RESPONSIBILITY. THIS PLAN SHOULD BE USED AS A GUIDE AND REPRESENTS THE MINIMUM EROSION CONTROL DEVICES REQUIRED.

10. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION & SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.

11. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL EROSION & SEDIMENT CONTROL DEVICES AFTER EACH RAINFALL EVENT.

12. THE CONTRACTOR SHALL PROVIDE ANY FURTHER EROSION CONTROL MEASURES IN ADDITION TO THOSE LISTED TO ENSURE THAT SILT WILL NOT LEAVE THE PROJECT CONFINES.

13. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION & SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED WITH A HEALTHY STAND OF PERMANENT VEGETATION.

14. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AT COMPLETION OF CONSTRUCTION.

15. THE CONTRACTOR SHALL ENSURE THAT ALL DRAINAGE STRUCTURES, FLUMES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.

16. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY STABILIZATION AS REQUIRED.

17. THE CONTRACTOR SHALL PROVIDE A TEMPORARY CONSTRUCTION ENTRANCE FOR VEHICULAR TRAFFIC AT LOCATION SHOWN.

18. ALL EROSION CONTROL DEVICES SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND DESIGN CRITERIA OF THE ENGINEERING DIVISION, DEPARTMENT OF PUBLIC WORKS, CITY OF FAYETTEVILLE, ARKANSAS.

19. REFERENCE DETAILS ON SHEET C4.02 FOR TYPICAL EROSION CONTROL DEVICE INSTALLATION.

20. THE CONTRACTOR WILL BE REQUIRED TO CLEAN THE STREETS OF DEPOSITED MUD AS FREQUENTLY AS NEEDED AS DETERMINED BY THE ENGINEER IN ORDER TO KEEP THEM USABLE AND TO CONTROL DUST.

21. SEE TEMPORARY VEGETATION REQUIREMENT NOTES ON THIS SHEET FOR EXPOSED SOIL WHERE NO ACTIVITY WILL OCCUR FOR MORE THAN 14 DAYS.

22. CONTRACTOR IS RESPONSIBLE FOR PHASED INSTALLATION OF EROSION CONTROL BMP'S IN ORDER TO PREVENT SEDIMENT FROM BREACHING THE LIMITS OF DISTURBANCE.

23. MAINTAIN CLEAN STREETS ADJACENT TO THIS PROJECT.

LAND DISTURBANCE:

TOTAL AREA DISTURBED: ±0.30 AC (12,900 SF)

N

0' 5' 10' 20'
SCALE IN FEET

NOT FOR CONSTRUCTION

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MBL

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SHEET CONTENTS
EROSION CONTROL PLAN PHASE I

SHEET
C4.00

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DWG: F:\2022\06001-06500\022-06146\40-design\AutoCAD\final plans\Sheets\Buddy Hoye's Park\C_ERC02_02206146.dwg USER: bpayne2
DATE: Feb 19, 2025 5:29pm XREFS: V_XTOPO02_02206146 C_TBLK02_02206146 C_PBASE_02206146 V_XBND Y_02206146 XREF_250218 - Buddy Hoyes Landscape Site Base

KEYNOTES:

1. APPROX. LOCATION OF CONC. WASHOUT
2. INSTALL CONSTRUCTION ENTRANCE/EXIT
3. INSTALL SILT FENCE OR APPROVED EQUAL
4. APPROX. STOCK PILE LOCATION
5. INSTALL INLET PROTECTION
6. APPROX. LOCATION OF SWPPP SIGNAGE TO BE ADJACENT TO YRCC SIGNAGE. REF. YRCC PLANSET.

LEGEND:

- INSTALL GRAVEL CONSTRUCTION ENTRANCE/EXIT
- INSTALL CONCRETE WASHOUT
- INSTALL INLET PROTECTION
- APPROX. STOCKPILE LOCATION
- ROW — RIGHT-OF-WAY LINE
- PL — PROPERTY LINE
- UTILITY EASEMENT
- 899 — EXIST. CONTOUR
- **899** — FINISH GRADE CONTOUR
- LOD — LIMITS OF DISTURBANCE
- INSTALL SILT FENCE OR APPROVED EQUAL
- PROPOSED TREE PRESERVATION FENCING
- EDGE OF CIVIL GRADING. REF. LSC PLANS FOR PARK GRADES.

EROSION CONTROL NOTES:

1. PROVIDE EROSION CONTROL MEASURES TO PREVENT SOIL EROSION AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS.

2. LIMITS OF EROSION AND SEDIMENT CONTROL STRUCTURES SHOWN ARE SCHEMATIC. NECESSARY EROSION AND SEDIMENT CONTROL MEASURES DEPEND HEAVILY ON CONTRACTOR SCHEDULING AS WELL AS MEANS AND METHODS. ANY ADDITIONAL TYPE OR QUANTITY OF STRUCTURES NOT SHOWN THAT ARE NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE SITE ARE THE CONTRACTOR'S RESPONSIBILITY.

3. CONSTRUCT EROSION CONTROL IMPROVEMENTS PRIOR TO BEGINNING OF ANY OTHER WORK.

4. FREQUENTLY INSPECT AND REPAIR OR REPLACE EROSION AND SEDIMENT CONTROL MEASURES PROMPTLY AS NEEDED.

5. DISPOSE OF SEDIMENT TRAPPED BY THESE PRACTICES IN AN APPROVED SITE IN A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.

6. REMOVE ACCUMULATED SILT WHEN IT REACHES A DEPTH OF 6 INCHES AND DISPOSE OF IN AN APPROVED SPOIL SITE OR AS ABOVE.

7. DO NOT ALLOW SILT FENCES TO OBSTRUCT SIDEWALKS, BUILDING ENTRANCES OR DRIVEWAYS.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION & SEDIMENT CONTROL MEASURES AND PRACTICES THROUGHOUT THE PROJECT. ANY AND ALL FINES ASSOCIATED WITH EROSION CONTROL VIOLATIONS WILL BE THE CONTRACTOR'S RESPONSIBILITY.

9. EROSION CONTROL IS THE CONTRACTOR'S RESPONSIBILITY. THIS PLAN SHOULD BE USED AS A GUIDE AND REPRESENTS THE MINIMUM EROSION CONTROL DEVICES REQUIRED.

10. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION & SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.

11. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL EROSION & SEDIMENT CONTROL DEVICES AFTER EACH RAINFALL EVENT.

12. THE CONTRACTOR SHALL PROVIDE ANY FURTHER EROSION CONTROL MEASURES IN ADDITION TO THOSE LISTED TO ENSURE THAT SILT WILL NOT LEAVE THE PROJECT CONFINES.

13. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION & SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED WITH A HEALTHY STAND OF PERMANENT VEGETATION.

14. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AT COMPLETION OF CONSTRUCTION.

15. THE CONTRACTOR SHALL ENSURE THAT ALL DRAINAGE STRUCTURES, FLUMES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.

16. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY STABILIZATION AS REQUIRED.

17. THE CONTRACTOR SHALL PROVIDE A TEMPORARY CONSTRUCTION ENTRANCE FOR VEHICULAR TRAFFIC AT LOCATION SHOWN.

18. ALL EROSION CONTROL DEVICES SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND DESIGN CRITERIA OF THE ENGINEERING DIVISION, DEPARTMENT OF PUBLIC WORKS, CITY OF FAYETTEVILLE, ARKANSAS.

19. REFERENCE DETAILS ON SHEET C4.10 FOR TYPICAL EROSION CONTROL DEVICE INSTALLATION.

20. THE CONTRACTOR WILL BE REQUIRED TO CLEAN THE STREETS OF DEPOSITED MUD AS FREQUENTLY AS NEEDED AS DETERMINED BY THE ENGINEER IN ORDER TO KEEP THEM USABLE AND TO CONTROL DUST.

21. SEE TEMPORARY VEGETATION REQUIREMENT NOTES ON THIS SHEET FOR EXPOSED SOIL WHERE NO ACTIVITY WILL OCCUR FOR MORE THAN 14 DAYS.

22. CONTRACTOR IS RESPONSIBLE FOR PHASED INSTALLATION OF EROSION CONTROL BMP'S IN ORDER TO PREVENT SEDIMENT FROM BREACHING THE LIMITS OF DISTURBANCE.

23. MAINTAIN CLEAN STREETS ADJACENT TO THIS PROJECT.

LAND DISTURBANCE:

TOTAL AREA DISTURBED: ±0.30 AC (12,900 SF)

N

0' 5' 10' 20'
SCALE IN FEET

NOT FOR CONSTRUCTION

MBL ARCHITECTURE
2397 N. Green Acres Rd.
Fayetteville, AR 72703
Ph: 479.443.7121

MBL

City of Fayetteville, AR

Ralph "Buddy" Hayes Park Addition

235 E. Rock Street
Fayetteville, AR 72701

REVISIONS

REVISION NO.	DESCRIPTION	DATE

MBL JOB NO.
200012

ISSUE DATE
02-19-2025

SHEET CONTENTS
EROSION CONTROL PLAN PHASE II

SHEET
C4.01

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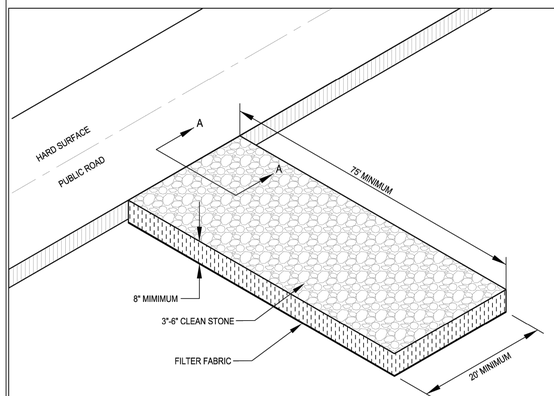
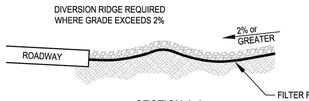
DWG: F:\2022\06001-06500\022-06146\40-Design\AutoCAD\Final Plans\Sheets\Buddy Hoye's Park\C_ERC02_02206146.dwg USER: bpayne2
DATE: Feb 19, 2025 6:13pm XREFS: V_XTOPO02_02206146 C_TBLK02_02206146 C_PBASE_02206146 V_XBNDY_02206146 XREF_250218 - Buddy Hayes Landscape Site Base bpayne2





SECTION A-A

NOTES:

1. REPLACE CONTAMINATED STONE AS REQUIRED TO PREVENT TRACKING OF SEDIMENT OR MUD ON PUBLIC STREETS.
2. CLEAN STREETS DAILY WITH BROOM (NO POWER BROOM) AND SHOVEL. THE USE OF WATER IS PROHIBITED.
3. ALL VEHICLES MUST USE CONSTRUCTION EXIT.
4. IF WHEEL WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

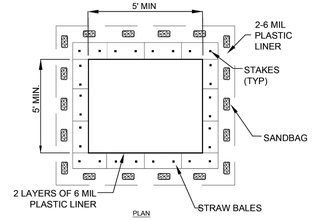
CITY OF FAYETTEVILLE ARKANSAS | ENGINEERING DIVISION | 113 W. MOUNTAIN STREET | PHONE: (479) 575-8206 | FAX NO. (479) 575-8202

TITLE: **EROSION CONTROL DETAILS** | DESCRIPTION: **CONSTRUCTION EXIT (N.T.S.)** | DRAWN BY: MCB | CHECKED BY: MCB | FILE: EC1-Construction Exit.dwg

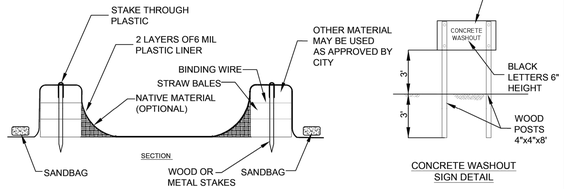
DATE: Dec 5, 2012 | REVISED 4-7-2020 | SHEET: **EC1**

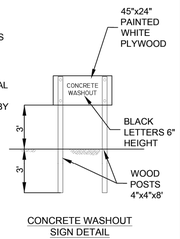
NOTES:

1. NO WASHING OUT OF CONCRETE TRUCKS OR WASHING OF SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS IS ALLOWED.
2. EXCESS CONCRETE IS NOT ALLOWED TO BE DUMPED ON-SITE, EXCEPT IN DESIGNATED TEMPORARY CONCRETE WASHOUT PIT AREAS.
3. ON-SITE TEMPORARY CONCRETE WASHOUT AREAS SHALL BE LOCATED AT LEAST 50 FEET FROM STORM DRAINS, OPEN DITCHES, OR WATER BODIES.
4. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
5. WASHOUT FACILITIES SHALL BE CLEANED OUT OR REPLACED ONCE THE WASHOUT IS 75% FULL.
6. PLASTIC LINING MATERIAL SHALL BE MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHALL BE FREE OF HOLES, TEARS, OR OTHER DEFECTS.
7. WHEN WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR WORK, THE HARDENED CONCRETE SHALL BE REMOVED AND DISPOSED OF OFFSITE. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES WILL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY (*i.e.* PERMITTED FACILITY OR RECYCLED).



PLAN



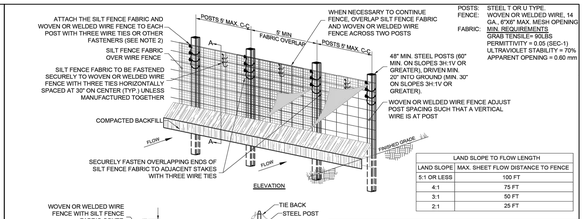


CONCRETE WASHOUT SIGN DETAIL

CITY OF FAYETTEVILLE ARKANSAS | ENGINEERING DIVISION | 113 W. MOUNTAIN STREET | PHONE: (479) 575-8206 | FAX NO. (479) 575-8202

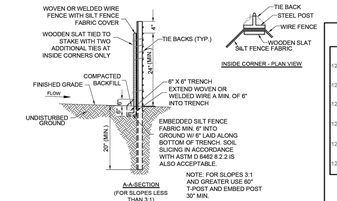
TITLE: **EROSION CONTROL DETAILS** | DESCRIPTION: **TEMPORARY STRAW BALE CONCRETE WASHOUT (N.T.S.)** | DRAWN BY: MCB | CHECKED BY: MCB | FILE: EC2- Straw Bale Concrete Washout.dwg

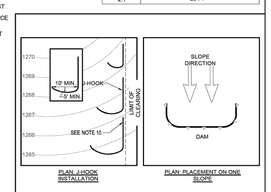
DATE: May 24, 2011 | REVISED 8-1-2016, 4-7-2020 | SHEET: **EC2**

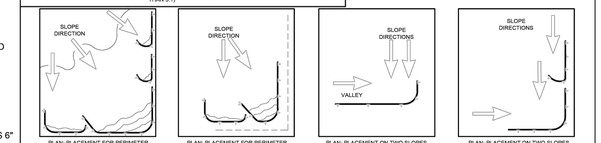


POSTS: STEEL T OR U TYPE
FENCE: WOVEN OR WELDED WIRE, 14 GA., 6"X6" MAX. MESH OPENING
FABRIC: MIN. REQUIREMENTS GRAB TENSILE= 90LBS PERMITTIVITY = 0.05 (SEC-1) ULTRAVIOLET STABILITY = 70% APPARENT OPENING = 0.60 mm

LAND SLOPE TO FLOW LENGTH	
LAND SLOPE	MAX. SHEET FLOW DISTANCE TO FENCE
5:1 OR LESS	100 FT
4:1	75 FT
3:1	50 FT
2:1	25 FT







INSTALLATION NOTES:
1. MATERIALS AND INSTALLATION SHALL COMPLY WITH ASTM D 6462 LATEST EDITION.
2. INSTALL SILT FENCE AT A FAIRLY LEVEL GRADE ALONG THE CONTOUR WITH THE ENDS CURVED UPHILL TO PROVIDE SUFFICIENT UPSTREAM STORAGE VOLUME FOR THE ANTICIPATED RUNOFF.
3. ATTACH THE GEOTEXTILE OR FABRIC TO THE WOVEN OR WELDED WIRE FENCE WITH THREE WIRE TIES OR OTHER FASTENERS (HORIZONTALLY SPACED EVERY 30"), ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART. AT EACH POST, ATTACH THE GEOTEXTILE OR FABRIC AND THE WOVEN OR WELDED WIRE FENCE TO THE POST AS PREVIOUSLY STATED. IN ADDITION, EACH TIE PLACED ON A POST SHOULD BE POSITIONED TO HANG ON A POST NIPPLE WHEN TIGHTENED TO PREVENT SAGGING.
4. WHEN TWO SECTIONS OF SILT FENCE FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED A MINIMUM OF 60" ACROSS TWO POSTS, AS SHOWN.
5. ALL SILT FENCE SHALL INCLUDE WIRE SUPPORT.
6. WRAP APPROXIMATELY 8" OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
7. COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC WITH THE FRONT WHEEL OF THE TRACTOR, SKID STEER, OR ROLLER EXERTING AT LEAST 60 POUNDS PER SQ. INCH. COMPACT THE UPSTREAM SIDE FIRST. COMPACT EACH SIDE TWICE FOR A TOTAL OF FOUR TRIPS.
8. ADD POST CAPS AS NEEDED BASED ON SITE CONDITIONS AND APPLICABLE AGENCY REQUIREMENTS.

J-HOOK NOTES:
9. J-HOOKS SHALL BE USED WHENEVER THE SILT FENCE LINE IS INSTALLED AT AN ANGLE OF 30 DEGREES OR GREATER FROM PARALLEL TO CONTOURS.
10. START DOWN-GRADIENT SILT FENCE LINE AS CLOSE AS POSSIBLE TO UP-GRADIENT J-HOOK.

MAINTENANCE NOTES:
11. SILT FENCES SHALL BE INSPECTED ALONG ITS ENTIRETY AND MUST BE CLEANED WHEN SEDIMENT HAS ACCUMULATED TO ONE-THIRD THE HEIGHT OF THE SILT FENCE. MAINTENANCE CLEANOUT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING ONE-THIRD THE HEIGHT OF THE SILT FENCE.
12. SPECIAL ATTENTION SHOULD BE PAID TO ENSURE THAT NO UNDERMINING OF SILT FENCE HAS OCCURRED AND THAT NO BYPASS IS OCCURRING AT JOINING SECTIONS.
13. IF EXCESS SEDIMENT IS ACCUMULATING IN ANY SECTION OF SILT FENCE, THE CONTRACTOR SHOULD IMPLEMENT ADDITIONAL UPSTREAM STABILIZATION MEASURES OR ADDITIONAL BMPS (PENDING CITY APPROVAL) TO PREVENT EXCESSIVE BUILDUP ON SILT FENCE.
14. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED.

CITY OF FAYETTEVILLE ARKANSAS | ENGINEERING DIVISION | 113 W. MOUNTAIN STREET | PHONE: (479) 575-8206 | FAX NO. (479) 575-8202

TITLE: **EROSION CONTROL DETAILS** | DESCRIPTION: **SILT FENCE WITH WIRE BACKING NOTES & REQUIREMENTS** | DRAWN BY: MCB | CHECKED BY: JEV | FILE: EC4-Silt Fence with Wire Backing.dwg

DATE: August 1, 2016 | REVISED 4-7-2020 | SHEET: **EC4**

TOPSOIL REQUIREMENTS:

TEMPORARY SEEDING -
LOOSEN COMPACTED SOILS TO A DEPTH OF 4 INCHES. IF RAINFALL CAUSES THE SURFACE TO BECOME SEALED OR CRUSTED, LOOSEN IT JUST PRIOR TO SEEDING. SLOPES STEEPER THAN 33 PERCENT (3:1) GRADE SHOULD BE GROOVED OR FURROWED ON THE CONTOUR BEFORE SEEDING. A GOOD SEEDBED IS WELL PULVERIZED, LOOSE, AND UNIFORM.

LIME REQUIREMENTS:

TEMPORARY SEEDING -
LIME SHOULD BE APPLIED ACCORDING TO SOIL TEST RECOMMENDATIONS. IF THE PH OF THE SOIL IS UNKNOWN, LIME SHALL BE INCORPORATED INTO THE TOP 4 INCHES OF SOIL AT THE RATE OF 1500 POUNDS EFFECTIVE NEUTRALIZING MATERIAL (ENM) PER ACRE. SOILS WITH A PH OF SIX OR HIGHER NEED NOT BE LIMED.

FERTILIZER REQUIREMENTS:

TEMPORARY SEEDING -
FERTILIZER SHOULD BE APPLIED BASED ON SOIL TESTS. WHEN THESE ARE NOT POSSIBLE, A 10-10-10 GRADE FERTILIZER SHALL BE INCORPORATED INTO THE TOP 4 INCHES OF SOIL AT THE RATE OF 200 POUNDS PER ACRE.

SEED REQUIREMENTS:

TEMPORARY SEEDING - SEED MIX SHALL CONSIST OF ANY COMBINATION OF TALL FESCUE, ANNUAL RYEGRASS, SUDAN, MILLET, WHEAT, OR OATS. SEED MIXTURE SHALL BE APPLIED AT A RATE OF 200 POUNDS PER ACRE.

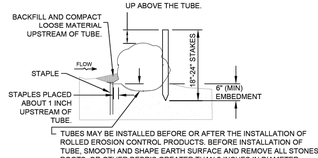
DORMANT SEASON SEEDING - SEED MIX SHALL CONSIST OF 80 PERCENT (80%) TALL FESCUE, TEN PERCENT (10%) ANNUAL RYEGRASS, AND TEN PERCENT (10%) SPRING OATS. SEED MIXTURE SHALL BE APPLIED AT A RATE OF 600 POUNDS PER ACRE.

MULCH REQUIREMENTS:

TEMPORARY SEEDING -
WHERE SLOPES ARE LESS THAN 25 PERCENT (4:1) GRADE, CEREAL GRAIN MULCH IS REQUIRED AT THE RATE OF 100 POUNDS PER 1,000 SQUARE FEET (4,500 LBS/ACRE). CEREAL GRAIN MULCH SHALL MEET THE REQUIREMENTS OF SECTION 620 OF THE ARKANSAS STATE SPECIFICATIONS FOR HIGHWAY CONSTRUCTION FOR TYPE 1 MULCH. WHERE SLOPES ARE 25 PERCENT (4:1) OR GREATER GRADE, TYPE 3 MULCH ("HYDROMULCH") MEETING THE REQUIREMENTS OF SECTION 802 OF THE STATE SPECIFICATIONS SHALL BE USED. TYPE 3 MULCH SHALL BE APPLIED AT A MINIMUM RATE OF 2,000 LBS/ACRE.

DATES FOR SEEDING:

TEMPORARY SEEDING - CAN OCCUR DURING ANY SEASON, HOWEVER WINTER IS THE LEAST TOLERANT. DORMANT SEASON SEEDING - DECEMBER 15 TO FEBRUARY 29

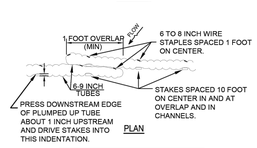


TUBES MAY BE INSTALLED BEFORE OR AFTER THE INSTALLATION OF ROLLED EROSION CONTROL PRODUCTS. BEFORE INSTALLATION OF TUBE, SMOOTH AND SHAPE EARTH SURFACE AND REMOVE ALL STONES, ROOTS, OR OTHER DEBRIS GREATER THAN 2 INCHES IN DIAMETER.

SEDIMENT LOGS SHALL HAVE A MIN. WEIGHT PER LINEAR FOOT OF 4.5 LBS AND SHALL EXCLUDE **STRAW** OR **SAND** MEDIA.

IF INSTALLING TUBE ACROSS A DITCH, THEN EXCAVATE A PLACEMENT TRENCH ABOUT 3 INCHES DEEP.

SECTION



PLAN

GENERAL GUIDELINES FOR SPACING OF TUBE TRENCHES FOR SLOPE INSTALLATIONS	
SLOPE GRADIENT	TUBE INTERVAL
1H:1V	15 FEET
2H:1V	25 FEET
3H:1V	35 FEET
4H:1V	50 FEET

GENERAL GUIDELINES FOR SPACING OF TUBE TRENCHES FOR CHANNEL INSTALLATIONS	
SLOPE	TUBE INTERVAL
2%	25 FEET

EXAMPLES OF ACCEPTABLE COMMERCIALLY AVAILABLE SEDIMENT LOGS ARE:

1. SILT SOCK
2. BIG RED
3. EROSION EEL

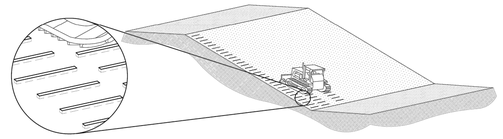
SEDIMENT LOG MAINTENANCE AND INSTALLATION NOTES:

1. SEDIMENT LOGS SHALL BE INSPECTED ALONG ITS ENTIRETY AND MUST BE CLEANED WHEN SEDIMENT HAS ACCUMULATED TO ONE-THIRD THE HEIGHT OF THE SEDIMENT LOG. MAINTENANCE CLEANOUT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING ONE-THIRD THE HEIGHT OF THE SEDIMENT LOG.
2. SPECIAL ATTENTION SHOULD BE PAID TO ENSURE THAT NO UNDERMINING OF SEDIMENT LOG HAS OCCURRED AND THAT NO BYPASS IS OCCURRING AT JOINING SECTIONS.
3. IF EXCESS SEDIMENT IS ACCUMULATING IN ANY SECTION OF A SEDIMENT LOG, THE CONTRACTOR SHOULD IMPLEMENT ADDITIONAL UPSTREAM STABILIZATION MEASURES OR ADDITIONAL BMPS TO PREVENT EXCESSIVE BUILDUP ON SEDIMENT LOG.
4. SEDIMENT LOG SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED (RUN OVER OR FLATTENED).

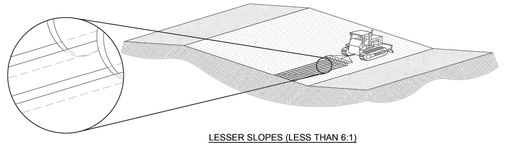
CITY OF FAYETTEVILLE ARKANSAS | ENGINEERING DIVISION | 113 W. MOUNTAIN STREET | PHONE: (479) 575-8206 | FAX NO. (479) 575-8202

TITLE: **EROSION CONTROL DETAILS** | DESCRIPTION: **SEDIMENT LOG DETAIL (N.T.S.)** | DRAWN BY: MCB | CHECKED BY: JEV | FILE: EC5-Sediment Log Detail.dwg

DATE: August 1, 2016 | REVISED 4-7-2020 | SHEET: **EC5**



STEEP SLOPES (6:1 OR GREATER)



LESSER SLOPES (LESS THAN 6:1)

PURPOSE:

SURFACE ROUGHENING OR SCARIFICATION IS A TECHNIQUE USED FOR CREATING UNEVENNESS ON BARE SOIL TO REDUCE SLOPE EROSION AND THE FORMATION OF RILLS. THE PRIMARY FUNCTIONS OF SURFACE ROUGHENING ARE TO:

- REDUCE EROSION POTENTIAL BY DECREASING RUNOFF VELOCITIES
- TRAP SEDIMENT
- INCREASE INFILTRATION OF WATER INTO THE SOIL
- AID IN THE ESTABLISHMENT OF VEGETATIVE COVER VIA MOISTURE STORAGE

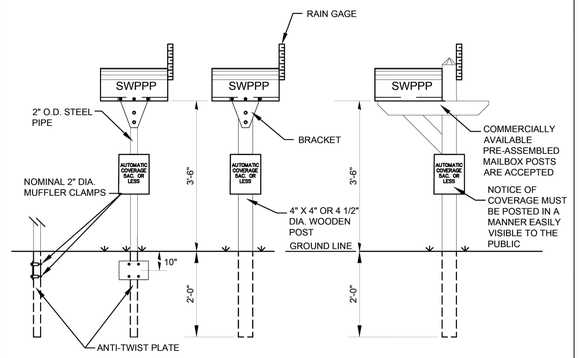
NOTES:

1. PROVIDE A ROUGH SOIL SURFACE WITH HORIZONTAL DEPRESSIONS.
2. CAN BE COMPLETED WITH A TILLER OR OTHER EQUIPMENT WITH SIMILAR EFFICIENCY.
3. DURING MASS GRADING, MAINTAIN SLOPES IN A ROUGHENED CONDITION WITHOUT FINE GRADING.
4. SURFACE ROUGHENING SHOULD BE PERFORMED AFTER FINE GRADING.
5. ROUGHENING CANNOT BE USED IF SANDY OR ROCKY SOIL IS PRESENT.
6. FILL SLOPES CAN BE CONSTRUCTED WITH A ROUGHENED SURFACE.
7. CUT SLOPES THAT HAVE BEEN SMOOTH GRADED SHALL BE ROUGHENED AS A SUBSEQUENT OPERATION.
8. SIDE SLOPES OF SPOIL STOCKPILES CAN BE CONSTRUCTED WITH A ROUGHENED SURFACE.
9. A FARMING DISC SHALL NOT BE USED FOR SURFACE ROUGHENING.

CITY OF FAYETTEVILLE ARKANSAS | ENGINEERING DIVISION | 113 W. MOUNTAIN STREET | PHONE: (479) 575-8206 | FAX NO. (479) 575-8202

TITLE: **EROSION CONTROL DETAILS** | DESCRIPTION: **SOIL ROUGHENING (N.T.S.)** | DRAWN BY: MCB | CHECKED BY: JEV | FILE: EC14-Soil Roughener.dwg

DATE: Aug. 15, 2012 | REVISED 8-1-2016, 4-7-2020 | SHEET: **EC14**



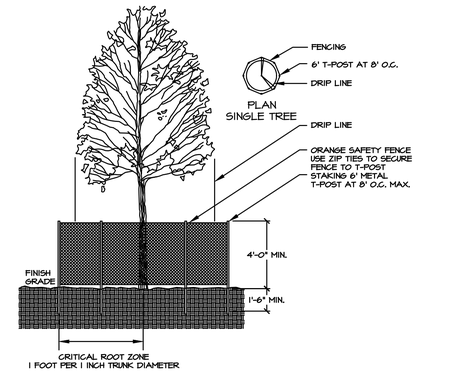
NOTES:

1. THE SWPPP INFORMATION MAILBOX MUST BE LOCATED IN A PROMINENT, PUBLICLY ACCESSIBLE LOCATION NEAR THE MAIN ENTRANCE OF THE SITE, SUCH THAT THE DOCUMENTATION CAN BE READ WITHOUT ACCESSING THE JOBSITE, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A TRAFFIC SAFETY HAZARD.
2. ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE-OF-TERMINATION (NOT) IS FILED FOR THE PERMIT.
3. ALL PAGES OF NOTICES OF INTENT AND PERMIT AUTHORIZATIONS MUST BE INCLUDED. THE CONTRACTOR MAY UTILIZE ACCESSIBLE WATERPROOF FOLDERS TO STORE THESE DOCUMENTS.
4. MAILBOX SHALL BE LOCATED OUTSIDE OF THE PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY.
5. CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY OF THE SWPPP INFORMATION MAILBOX.

CITY OF FAYETTEVILLE ARKANSAS | ENGINEERING DIVISION | 113 W. MOUNTAIN STREET | PHONE: (479) 575-8206 | FAX NO. (479) 575-8202

TITLE: **EROSION CONTROL DETAILS** | DESCRIPTION: **SWPPP INFORMATION MAILBOX (SMALL SITE) (N.T.S.)** | DRAWN BY: MCB | CHECKED BY: JEV | FILE: EC15-SWPPP Information Mailbox (Small Site).dwg

DATE: August 1, 2016 | REVISED 4-7-2020 | SHEET: **EC15**



TREE PRESERVATION FENCING DETAIL
NOT TO SCALE

CITY OF FAYETTEVILLE STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION

1. ALL TREES AND NATURAL AREAS SHOWN ON THIS PLAN TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING.
2. PROTECTIVE FENCES SHALL BE ERECTED ACCORDING TO CITY OF FAYETTEVILLE STANDARDS FOR TREE PROTECTION.
3. PROTECTIVE FENCES SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE PREPARATION WORK AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT.
4. EROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILD-UP WITHIN TREE DRIPLINES.
5. PROTECTIVE FENCES SHALL SURROUND THE TREES OR GROUP OF TREES AND WILL BE LOCATED AT THE DRIPLINE, FOR NATURAL AREAS, PROTECTIVE FENCES SHALL FOLLOW THE LIMIT ON CONSTRUCTION IN ORDER TO PREVENT THE FOLLOWING:
   A. SOIL COMPACTION IN THE ROOT ZONE OF AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT.
   B. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN 6") ROOT TRENCHING NOT VIEWED BY CITY ARBORISTS.
   C. WOUNDS TO EXPOSED ROOTS, TRUNK OR LIMBS BY MECHANICAL EQUIPMENT.
   D. OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CONCRETE TRUCK CLEANING AND FIRES.
6. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIPLINES MAY BE PERMITTED IN THE FOLLOWING CASES:
   A. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT.
   B. WHERE PERMEABLE PAVING IS TO BE INSTALLED WITHIN A TREE'S DRIPLINE, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA (PRIOR TO SITE GRADING SO THIS AREA IS GRADED SEPARATELY PRIOR TO PAVING INSTALLATION TO MINIMIZE ROOT DAMAGE)
   C. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE TO ALLOW 6 TO 10 FEET OF WORK SPACE.
   D. WHERE THERE ARE SEVERE SPACE CONSTRAINTS DUE TO TRACT SIZE OR OTHER SPECIAL REQUIREMENTS.
7. WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN 4 FEET TO A TRUNK, PROTECT THE TRUNK WITH STRAPPED ON PLANKING TO HEIGHT OF 8 FEET (OR LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.
8. TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
9. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOPSOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN 2 DAYS, COVER WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
10. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.
11. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN 4 INCHES SHALL BE PERMITTED WITHIN THE DRIPLINE OF TREES. NO SOIL IS PERMITTED ON THE ROOT FLARE OF ANY TREE.
12. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND EQUIPMENT SHALL TAKE PLACE BEFORE CONSTRUCTION BEGINS.
13. ALL FINISHED PRUNING MUST BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE AMERICAN NATIONAL STANDARD ANSI-A300 PRUNING, 2008 OR LATER). A CITY CERTIFIED TREE PRUNER MUST BE RETAINED TO MAKE ALL PRUNING CUTS. A LIST OF CERTIFIED TREE PRUNERS IS AVAILABLE FROM THE URBAN FORESTER.
14. DEVIATIONS FROM THE ABOVE NOTES MAY BE CONSIDERED ORDINANCE VIOLATIONS IF THERE IS SUBSTANTIAL NON-COMPLIANCE OR IF A TREE SUSTAINS DAMAGE AS A RESULT.

NOT FOR CONSTRUCTION

MBL ARCHITECTURE
2397 N. Green Acres Rd.
Fayetteville, AR 72703
Ph: 479.443.7121

City of Fayetteville, AR

Ralph "Buddy" Hayes Park Addition

235 E. Rock Street
Fayetteville, AR 72701

REVISIONS

REVISION NO:	DESCRIPTION	DATE

MBL JOB NO.
200012

ISSUE DATE
02-19-2025

SHEET CONTENTS
EROSION CONTROL DETAILS I

SHEET
C4.10

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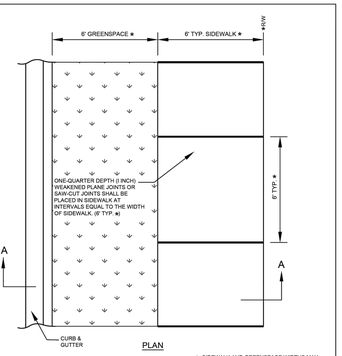
DWG: F:\2022\06001-06500\022-06146\40-design\AutoCAD\final plans\Buddy Hoye's Park\C_ERC02_02206146.dwg USER: bpayne2
DATE: Feb 19, 2025 5:29pm XREFS: V_XTOP002_02206146 C_TBLK02_02206146 C_PBASE_02206146 V_XBNDY_02206146

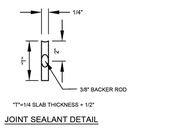
SIDEWALK CONSTRUCTION NOTES:

1. SIDEWALK SHALL HAVE TOOLED OR SAW-CUT TRANSVERSE JOINTS AT INTERVALS EQUAL TO THE WIDTH OF SIDEWALK (5' TYP.). THESE WEAKENED PLANE (CONTRACTION) JOINTS SHALL BE CONSTRUCTED TO 1/4 DEPTH OF THE SIDEWALK THICKNESS AND SHALL BE 1/8" TO 3/8" WIDE.
2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI.
3. CONCRETE SHALL HAVE A MINIMUM CEMENT CONTENT OF 6.5 BAGS per Cu. Yd. WITH 5-12% ± 1-12% AIR ENTRAINMENT.
4. EXPANSION JOINT MATERIAL SHALL BE PREFORMED ASPHALT IMPREGNATED FIBERBOARD CONFORMING TO AASHTO M-213. EXPANSION JOINT MATERIAL SHALL BE LEFT 1/2" LOWER THAN GRADE OR TRIMMED 1/2" LOWER, AND FILLED WITH SILICONE SEALER TO FINISHED GRADE.
5. ALL COLD JOINTS AND SAW-CUT JOINTS SHALL BE FILLED TO FINISHED GRADE WITH JOINT SEALANT.
6. CONCRETE CURING COMPOUND SHALL BE SEALTIGHT 1600-WHITE MANUFACTURED BY W.R. MEADOWS, OR AN APPROVED EQUAL.
7. CONCRETE JOINT SEALANT SHALL BE SONNEBORN "SONOLASTIC SL0" OR AND APPROVED EQUAL. CLOSED CELL BACKER ROD SHALL BE USED IN DEEP JOINTS, AS NEEDED, ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.
8. ALL SIDEWALKS SHALL HAVE ONE-HALF INCH ROLLED EDGES AND A BROOMED FINISH.
9. SEE STANDARD DRIVEWAY DETAILS FOR SIDEWALK CONSTRUCTION THROUGH DRIVEWAYS.
10. WHERE LONGITUDINAL (RUNNING) SLOPE OF SIDEWALK EXCEEDS 5%, SIDEWALK SHALL MATCH THE SLOPE OF THE ADJACENT ROADWAY.
11. LANDING REQUIRED WHEN SIDEWALK CHANGES DIRECTION DUE TO AN OBJECT (E.G. TELEPHONE/LIGHT POLE, MANHOLE, ETC.)
12. ALL SIDEWALKS REQUIRE INSPECTION BEFORE AND AFTER CONCRETE PLACEMENT. CONTACT THE ENGINEERING DIVISION (575-8206) TO SCHEDULE AN INSPECTION.
13. MINIMUM EFFECTIVE WIDTH FOR SIDEWALK IS 5 FEET. SEE UNIFIED CODE SECTION 171.14 FOR GUIDANCE.

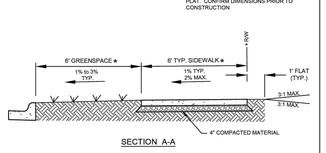


PLAN

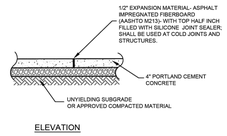
* SIDEWALK AND GREENSPACE WIDTHS MAY VARY BASED ON CURRENT MASTER STREET PLAN OR APPROVED SUBDIVISION PLAT. CONFIRM DIMENSIONS PRIOR TO CONSTRUCTION



JOINT SEALER DETAIL



SECTION A-A



ELEVATION

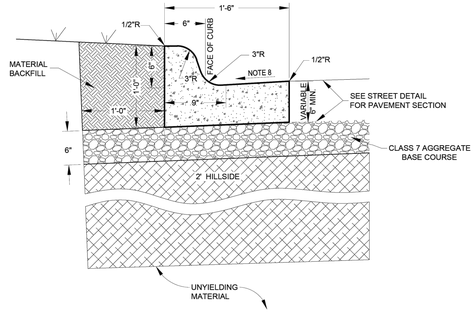
CITY OF FAYETTEVILLE ARKANSAS | ENGINEERING DIVISION, 113 W. MOUNTAIN STREET, PHONE: (479) 575-8206, FAX NO: (479) 575-8202

TITLE: ***SIDEWALK DETAILS***

DESCRIPTION: **SIDEWALK WITH GREENSPACE**

DATE: May 31, 2020 REVISED: MAY 20, 2021; February 28, 2022

SHEET: **SW1**



CURB & GUTTER NOTES:

1. CONTRACTION JOINTS SHALL BE 1/8" TO 3/8" X 1 1/2" AT 15 FT. INTERVALS. ALL CONTRACTION JOINTS AND COLD JOINTS SHALL BE FILLED WITH JOINT SEALANT TO FINISHED GRADE.
2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI.
3. EXPANSION MATERIAL SHALL BE REQUIRED AT AT ALL STATIONARY STRUCTURES AND ENDS OF CURB RETURNS. THE EXANSION MATERIAL SHALL BE 1/2" ASPHALT IMPREGNATED FIBERBOARD CONFORMING TO AASHTO M-213. EXPANSION JOINT MATERIAL SHALL BE LEFT 1/2" LOWER THAN GRADE OR TRIMMED 1/2" LOWER THAN GRADE.
4. EXPANSION JOINTS SHALL BE FILLED WITH JOINT SEALANT SHAPED TO THE CROSS SECTION OF THE CURB AND CONSTRUCTED AT RIGHT ANGLES WITH THE CURB LINE.
5. FINISH SHALL BE MEDIUM BROOM FINISH.
6. CONCRETE CURING COMPOUND SHALL BE SEALTIGHT 1600-WHITE MANUFACTURED BY W.R. MEADOWS, OR AN APPROVED EQUAL.
7. CONCRETE JOINT SEALANT SHALL BE SONNEBORN "SONOLASTIC SL0" OR AND APPROVED EQUAL. CLOSED CELL BACKER ROD SHALL BE USED IN DEEP JOINTS, AS NEEDED, ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.
8. GUTTER SHALL MATCH THE CROSS SLOPE OF THE ROAD WITHIN ± 0.5%. GUTTER DRAINING THE OPPOSITE DIRECTION AS THE ROAD WILL NOT BE ACCEPTED.

CITY OF FAYETTEVILLE ARKANSAS | ENGINEERING DIVISION, 113 W. MOUNTAIN STREET, PHONE: (479) 575-8206, FAX NO: (479) 575-8202

TITLE: ***STREET DETAILS***

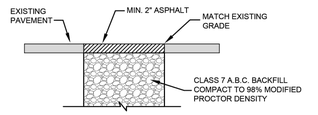
DESCRIPTION: **TYPE "A" CURB & GUTTER**

DATE: Oct. 17, 2021

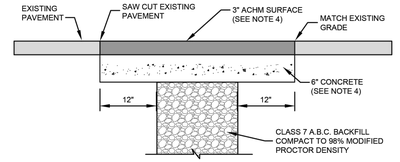
SHEET: **ST2**

NOTES:

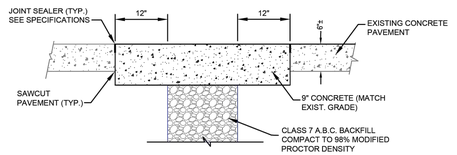
1. CONCRETE SHALL HAVE A MINIMUM OF 6 BAGS OF CEMENT PER CU. YD., 4-7% AE AND DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI @ 28 DAYS.
2. PERMANENT REPAIRS TO BE USED ONLY WHERE ADJACENT PAVEMENT IS TO REMAIN. USE TEMPORARY PATCH IN AREAS WHERE ADJACENT PAVEMENT IS TO BE REMOVED OR RECONSTRUCTED.
3. ASPHALT FOR TEMPORARY REPAIRS MAY BE HOT MIX OR COLD MIX.
4. COLORED CONCRETE, WHEN ASPHALT IS NOT AVAILABLE, SHALL BE AN INTEGRAL COLOR MIX . SOLOMON DRY PIGMENT - 908 CARBON BLACK "ASPHALT" (1 - 25 LB. BAG PER 3 YARDS), OR APPROVED EQUAL. TOTAL THICKNESS OF PAVEMENT SHALL BE 9 INCHES.



TEMPORARY PAVEMENT REPAIR



ASPHALT PAVEMENT REPAIR



CONCRETE PAVEMENT REPAIR

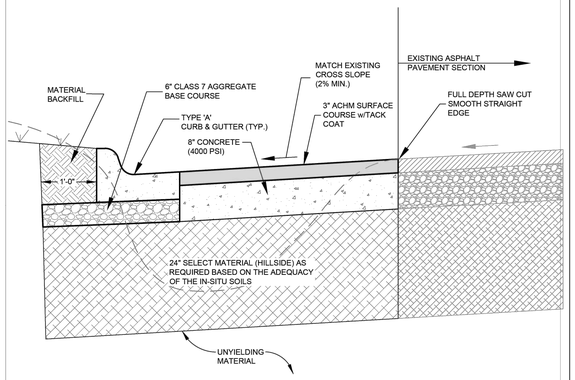
CITY OF FAYETTEVILLE ARKANSAS | ENGINEERING DIVISION, 113 W. MOUNTAIN STREET, PHONE: (479) 575-8206, FAX NO: (479) 575-8202

TITLE: ***STREET DETAILS***

DESCRIPTION: **PAVEMENT REPAIR**

DATE: Aug. 17, 2022

SHEET: **ST8**



NOTES

1. THIS DETAIL IS TO BE USED WHEN THE WIDTH OF WIDENING **DOES NOT ALLOW** STEEL WHEEL ROLLER TO COMPACT AGGREGATE BASE COURSE BETWEEN NEW GUTTER AND EXISTING PAVEMENT.
2. THE ENGINEER OF RECORD SHALL PERFORM "PART TIME" INSPECTION FOR THE DRAINAGE INSTALLATION AND STREET CONSTRUCTION. THE PUBLIC WORKS INSPECTOR MUST BE PRESENT FOR TESTING. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING TESTING.
3. MINIMUM DENSITY FOR ASPHALT SHALL BE 92% OF THE MAXIMUM THEORETICAL DENSITY.
4. SUBGRADE MUST BE PLACED ON UNYIELDING MATERIAL - ADDITIONAL UNDERCUT MAY BE REQUIRED.
5. ALL IN-SITU SOILS FOR SUBGRADE SHALL HAVE A LIQUID LIMIT LESS THAN 40, A PLASTICITY INDEX LESS THAN 15, AND A CBR GREATER THAN 8. INADEQUATE SOILS SHALL BE UNDERCUT 2 FEET AND REPLACED WITH "HILLSIDE MATERIAL" (SOILS WITH CBR OF 8 OR GREATER, AND AS CLASSIFIED AS GM OR GC SOILS) - GEOTECHNICAL TESTING REQUIRED TO DETERMINE SOIL ACCEPTANCE.
6. SUBGRADE (HILLSIDE) SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR. PROCTOR CURVE DATA SHALL BE SUPPLIED TO THE CITY ON ALL MATERIAL BY THE ENGINEER OF RECORD. WITHOUT THE COPY OF THE SITE SPECIFIC PROCTOR CURVE, MOISTURE CONTENT MUST BE WITHIN 2% OF OPTIMUM WHEN TESTED.
7. BASE COURSE (CLASS 7 AGGREGATE BASE) SHALL BE COMPACTED TO 98% OF MODIFIED PROCTOR ON LOCAL AND RESIDENTIAL STREETS. COLLECTOR AND ABOVE SHALL BE COMPACTED TO 100% MODIFIED PROCTOR.
8. CURING COMPOUND IS REQUIRED FOR ALL CONCRETE IN RIGHT OF WAY OR EASEMENTS. ANY COLOR EXCEPT CLEAR. FOLLOW STANDARD ENGINEERING PRACTICE FOR PLACEMENT IN HOT, WINDY, AND COLD WEATHER.
9. CURB MUST BE CAULKED BEFORE BACKFILLED AND STREET PAVED. ACCEPTABLE SUPPLIERS ARE OMNI SEAL 50, PECORA 864 AND 865, DOW CORNING 888, OR PRE-APPROVED EQUAL.

CITY OF FAYETTEVILLE ARKANSAS | ENGINEERING DIVISION, 113 W. MOUNTAIN STREET, PHONE: (479) 575-8206, FAX NO: (479) 575-8202

TITLE: ***STREET DETAILS***

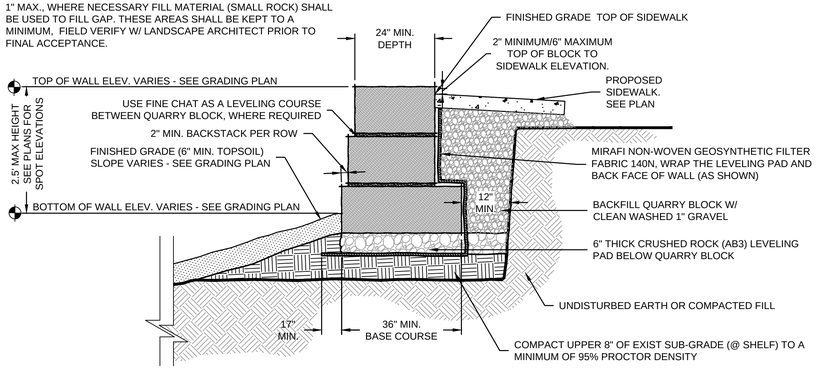
DESCRIPTION: **ASPHALT STREET WIDENING SECTION OPTION 1**

DATE: OCT. 5, 2021

SHEET: **ST5**

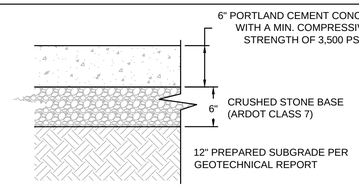
NOTE:

1. PROPOSED DRY-STACK RETAINING WALL. SUBMIT WALL SPECIFICATION FOR OWNER APPROVAL OF TYPE, SIZE, & COLOR.
2. WALL GAP BETWEEN VERTICAL JOINTS SHALL BE NO MORE THAN 1" MAX., WHERE NECESSARY FILL MATERIAL (SMALL ROCK) SHALL BE USED TO FILL GAP. THESE AREAS SHALL BE KEPT TO A MINIMUM, FIELD VERIFY W/ LANDSCAPE ARCHITECT PRIOR TO FINAL ACCEPTANCE.



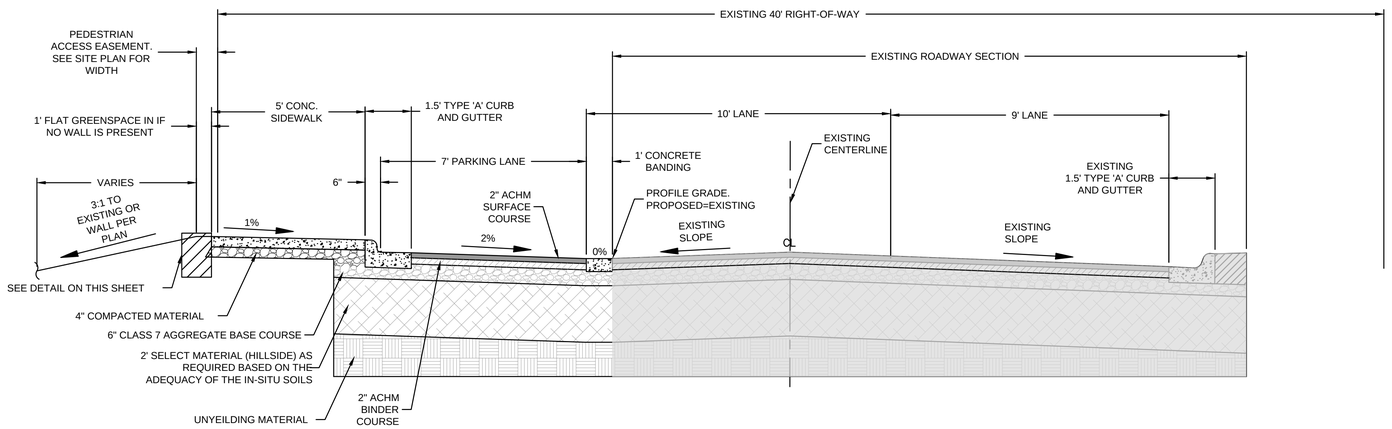
DRY-STACK STONE WALL DETAIL

NOT TO SCALE



LIGHT DUTY CONCRETE BANDING PAVING DETAIL

NOT TO SCALE



TYPICAL SECTION
ON-STREET PARALLEL PARKING

NOT FOR CONSTRUCTION

MBL ARCHITECTURE
2397 N. Green Acres Rd.
Fayetteville, AR 72703
Ph: 479.443.7121

City of Fayetteville, AR

Ralph "Buddy" Hayes Park Addition

235 E. Rock Street
Fayetteville, AR 72701

REVISIONS

REVISION NO.	DESCRIPTION	DATE

MBL JOB NO.

200012

ISSUE DATE

02-19-2025

SHEET CONTENTS

DETAILS SHEET 1

SHEET

C5.00

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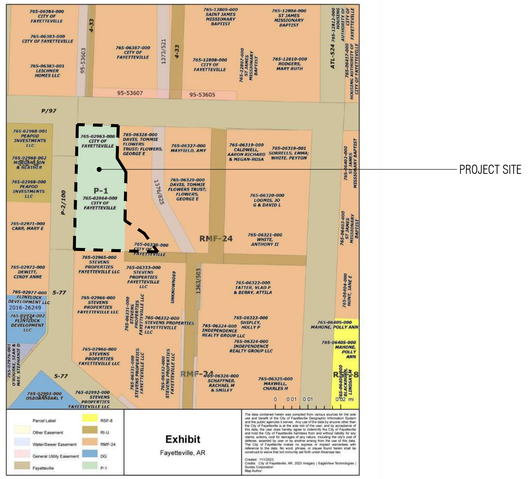
DWG: F:\2022\06001-06500\022-06146\40-design\AutoCAD\final plans\Sheets\Buddy Hoye's Park\C_DET02_02206146.dwg USER: bpoyne2
DATE: Feb 19, 2025 5:30pm XREFS: C_TBLK02_02206146

VICINITY MAP

ADJACENT ZONING + PROPERTY OWNERS



ZONE

RMF-24: RESIDENTIAL MULTIFAMILY - 24 UNITS PER ACRE
P-1: INSTITUTIONAL
ENDURING GREEN NETWORK (PORTIONS)

MINIMUM TREE PRESERVATION PERCENTAGE REQUIREMENT
(PER LANDSCAPE MANUAL APPENDIX PAGE 17):
RMF-24: 20%
P-1: 25%

MAY HAVE ADDITIONAL STREAMSIDE PROTECTION ZONE
BECAUSE OF STEEP BANKS (PER CITY GIS)

LEGEND

- PROPERTY LINE
- EXISTING MSPRW
- BTZ
- SEWER
- WATER
- MAJOR CONTOUR
- MINOR CONTOUR

NOTES

1. CODES/DOCUMENTS REFERENCED:
-TREE PRESERVATION & LANDSCAPE MANUAL, 2016
-UNIFIED DEVELOPMENT CODE, CHAPTER 167
2. PRUNING SHALL BE PERFORMED BY OR UNDER THE SUPERVISION OF A CERTIFIED ARBORIST
3. DO NOT PRUNE OFF-SITE
4. NO TREE PRESERVATION REQUIRED, UNDER 6,000 SF NEW IMPERVIOUS AREA

LEVEL ONE DEVELOPMENT UNDER 1,200 SF NEW IMPERVIOUS AREA

TREE PRESERVATION CALCULATIONS NOT REQUIRED UNDER 1,200 SF NEW IMPERVIOUS AREA

GSP:

Table 1. Proposed Development Thresholds

Development Threshold	City-wide Standard	Grading and Drainage / Stormwater Documentation	Water Quality, Flood, and Tree Mitigation Measures
Level 1	< or = 1,200 sf of IA	• Exempt from Grading and Drainage provisions except for those still associated with the Building Permit process such as HHOD.	• Exempt
Level 2	1,201 - 6,000 sf of IA	• Completed Green Stormwater Practice (GSP) Worksheet, demonstrating Runoff Reduction via Better Site Design. • GSP Operation & Maintenance (O & M) Agreement to ensure the long-term functionality of these practices.	• 2 or more measures from Step 1 of Table 2 that Reduce Runoff via Better Site Design • 1 or more Green Stormwater Practice (GSP) measures from Step 2 of Table 2 as required to treat 100% of the developed portion of the site
Level 3	6,001 – 10,000 sf of IA	• Same as Level 2.	• Same as Level 2 • As needed GSP measures from Step 3 to further reduce runoff • Abbreviated Tree Preservation Plan

Levels 2 and 3 are required to select two of these measures to implement while designing the site:

Table 2. Water Quality, Flood, and Tree Mitigation Measures by Step

Mitigation Steps	Mitigation Measures
Step 1	**Reduce Runoff via Better Site Design**
	Conservation of Natural Features and Resources (if they exist on the property): • Preserve Riparian Buffers (i.e. no variances). • Avoid Developing in Floodplains and on Steep Slopes (greater than 15%)
	Tree Preservation: • Preserve Natural Areas with at least one significant tree. The removal, relocation, destruction or abuse in any manner of a significant tree(s) to be preserved is prohibited. • Protection of Street Trees. Tree removal, relocation, destruction or abuse in any manner of a street tree(s) to be preserved is prohibited.
	Lower Impact Site Design Techniques: • Reduce Limits of Clearing and Grading to preserve at least 10% of the open space of the site
	Reduction of Impervious Cover: • Use multi-story buildings to reduce building footprints • Create Parking Lot Stormwater "Islands" • Use pervious surfaces for parking, sidewalks and trails, where feasible.
	Utilization of Natural Features for Stormwater Management: • Use soil restoration practices to improve native soils and reduce over compaction • Use native plants and naturalistic landscapes (yards that do not have to be mowed and are planted with perennials, etc) and rain gardens.

NOT APPLICABLE

Levels 2 and 3 are required to select at least one of these measures sized appropriately by the GSP worksheet that will be provided by the City:

Step 2	Reduce Runoff via Green Stormwater Practices (GSPs)
GSP-02	Urban Bioretention
GSP-03	Permeable Pavement
GSP-04	Infiltration Trench
GSP-12	Green Roof

NOT APPLICABLE

MBL ARCHITECTURE
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Fayetteville, AR 72703
Ph: 479.443.7121

City of Fayetteville, AR

Yvonne Richardson Community Center Addition

240 E. Rock Street
Fayetteville, AR 72701

REVISIONS

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2	04-02-24	Rev #2
3	05-03-24	Rev #3
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5	02-19-25	Rev #5

MBL JOB NO.
200012

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SHEET CONTENTS
CONTEXT + GSP

SHEET
L0.0

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1 EXISTING SITE - BUDDY HAYES PARK
SCALE 3/32"=1'-0"

ALLISON THUMMING HANLAN NO. 9012 REGISTERED LANDSCAPE ARCHITECT ARKANSAS

MBL ARCHITECTURE
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EXISTING SITE

SHEET
L0.1

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TREE PRESERVATION CALCULATIONS
NOT REQUIRED UNDER 1,200 SF NEW IMPERVIOUS AREA

NOTES

1. CODES/DOCUMENTS REFERENCED:
-TREE PRESERVATION & LANDSCAPE MANUAL, 2016
-UNIFIED DEVELOPMENT CODE, CHAPTER 167
2. PRUNING SHALL BE PERFORMED BY OR UNDER THE SUPERVISION OF A CERTIFIED ARBORIST
3. DO NOT PRUNE OFF-SITE

1 TREE PRESERVATION PLAN - BUDDY HAYES PARK
SCALE 3/32"=1'-0"

MBL ARCHITECTURE
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TREE PRESERVATION PLAN

SHEET
L0.2

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5

IMPERVIOUS AREA TABLE: BUDDY HAYES PARK

AS APPROVED PER CUP-2023-0141, DEC 11 2023

APPROVED				PROPOSED			
	Streamside	Waterside	Total		Streamside	Waterside	Total
Area of Encroachment	SF	SF	SF	Area of Encroachment	SF	SF	SF
Stage	14	178	192	Stage	34	288	322
Stage seating	563.94	13	576.94	Civil	666		666
South path to stream	193	59	252	South path	193	120	313
Stream amphitheater		551.51	551.51	North path	310		310
Street sidewalk	574		574	Boulders north	131	7	138
				Boulder south	87	231	318
Approved total by DD SFs	1344.94	801.51	2146.45	Total	1421	646	2067
Approved total by variance exhibit			**2130.42**	**Total with pervious Stage**	**1387**	**358**	**1745**
				Total less impervious area than approved			**385.42**
				Total within property bounds			**1079**

1 SITE PLAN - BUDDY HAYES PARK
SCALE 3/32"=1'-0"

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Jan. 17, 2024

SHEET CONTENTS
SITE PLAN

SHEET
L1.0

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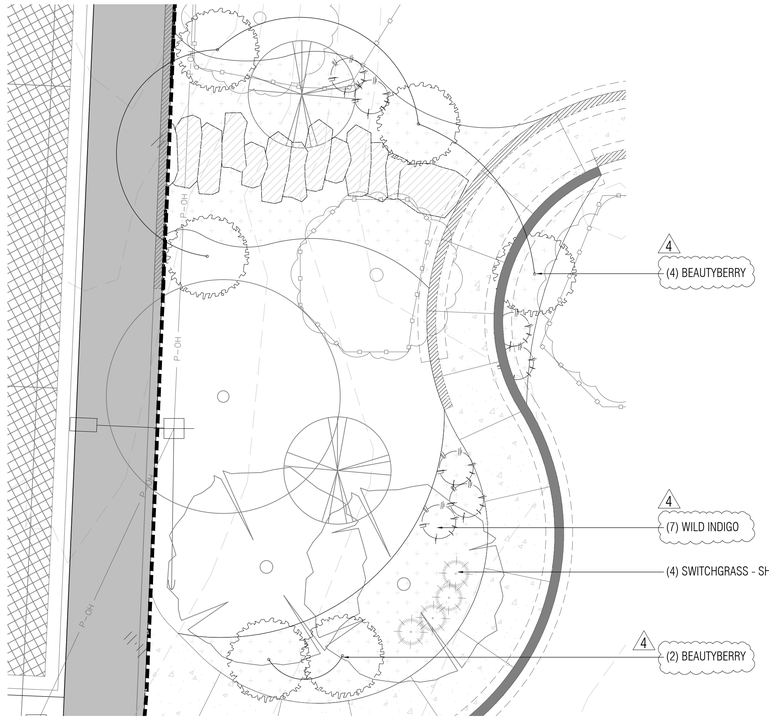
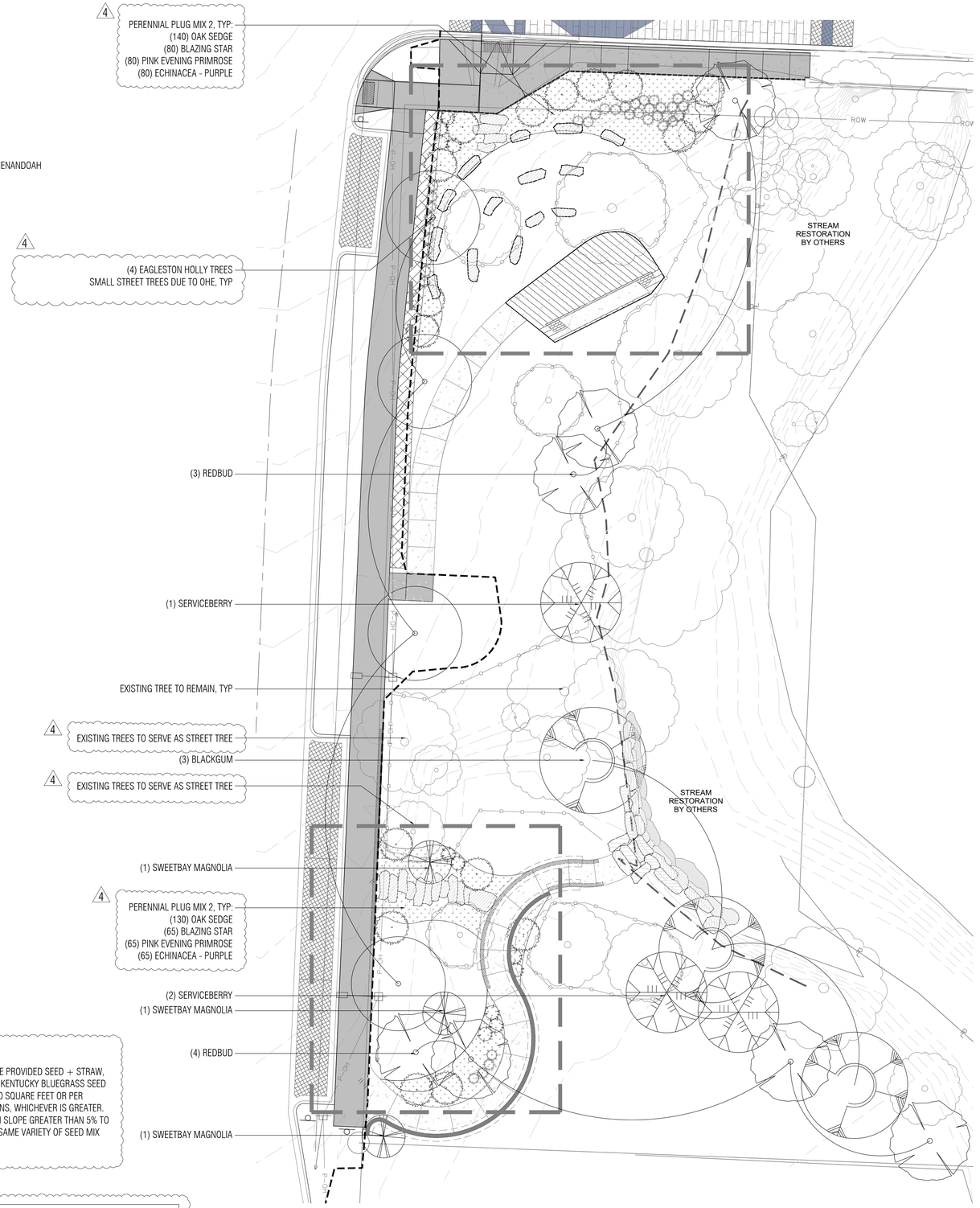
2 DETAIL PLANTING PLAN - NORTH
SCALE 3/16"=1'-0"



3 DETAIL PLANTING PLAN - SOUTH
SCALE 3/16"=1'-0"

4
PLANTING NOTES
1. ALL DISTURBED AREAS TO BE PROVIDED SEED + STRAW, TALL FESCUE (MIN. 80%) + KENTUCKY BLUEGRASS SEED MIX, AT 5 POUNDS PER 1,000 SQUARE FEET OR PER PRODUCT RECOMMENDATIONS, WHICHEVER IS GREATER.
2. ALL DISTURBED AREAS WITH SLOPE GREATER THAN 5% TO BE PROVIDED WITH SOD OF SAME VARIETY OF SEED MIX NOTED ABOVE.

4
LEGEND
PERENNIAL PLUG + SHRUBS - IRRIGATED



1 PLANTING PLAN - BUDDY HAYES PARK
SCALE 3/32"=1'-0"

0' 10' 20' 40'

NORTH

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PLANTING PLAN

SHEET
L1.1

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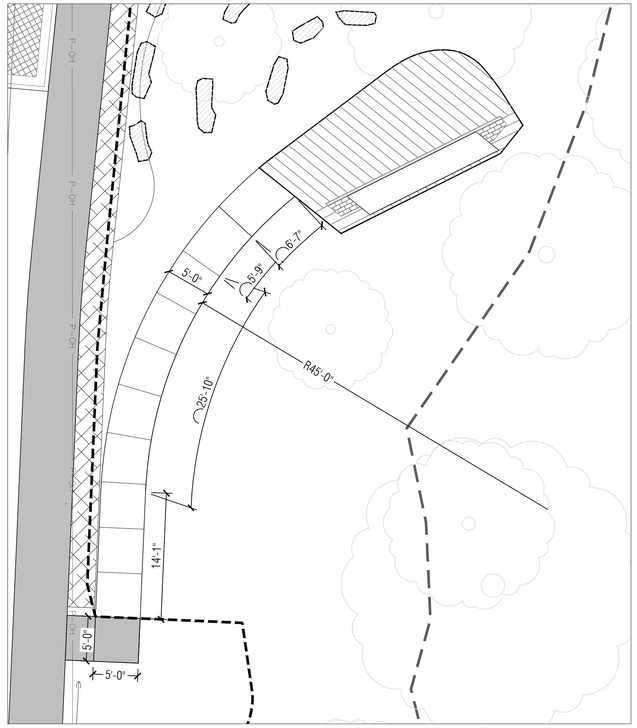
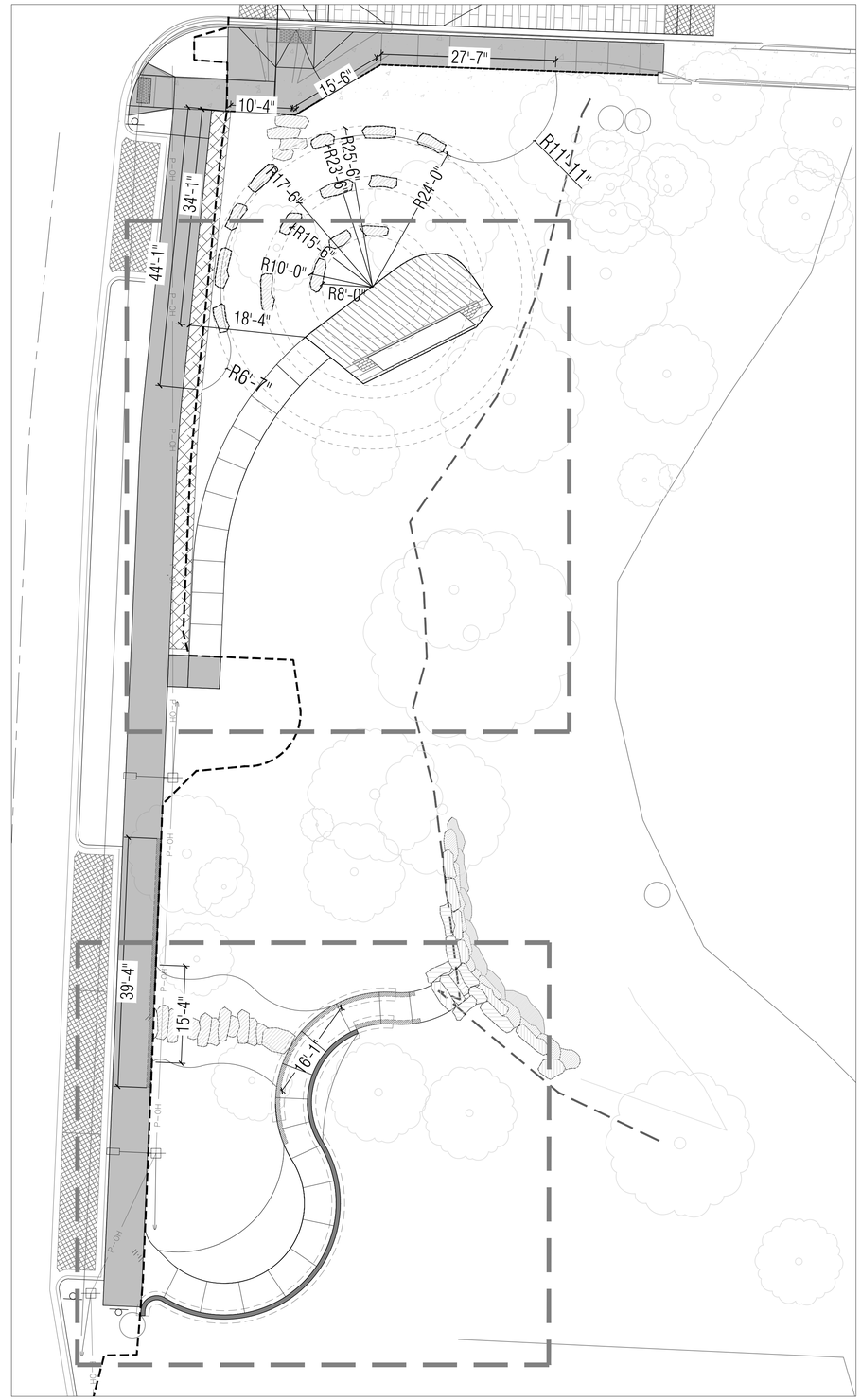
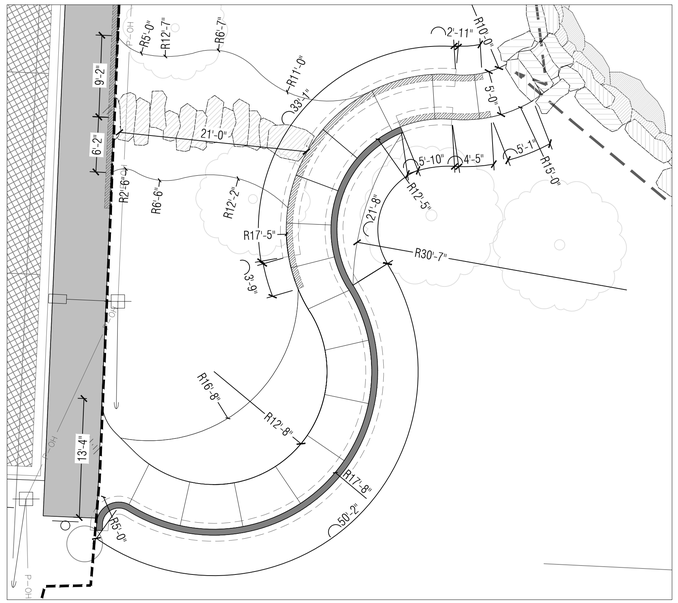


2 DETAIL LAYOUT PLAN - NORTH
SCALE 1/8"=1'-0"



1 LAYOUT PLAN
SCALE 3/32"=1'-0"



3 DETAIL LAYOUT PLAN - SOUTH
SCALE 1/8"=1'-0"

0' 10' 20' 40'

NORTH

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2397 N. Green Acres Rd.
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SHEET CONTENTS
LAYOUT PLAN

SHEET
L1.2

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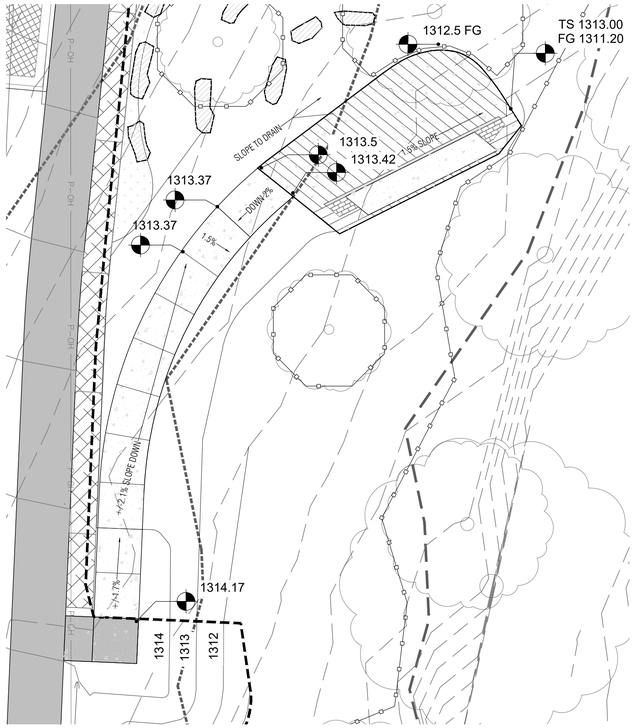
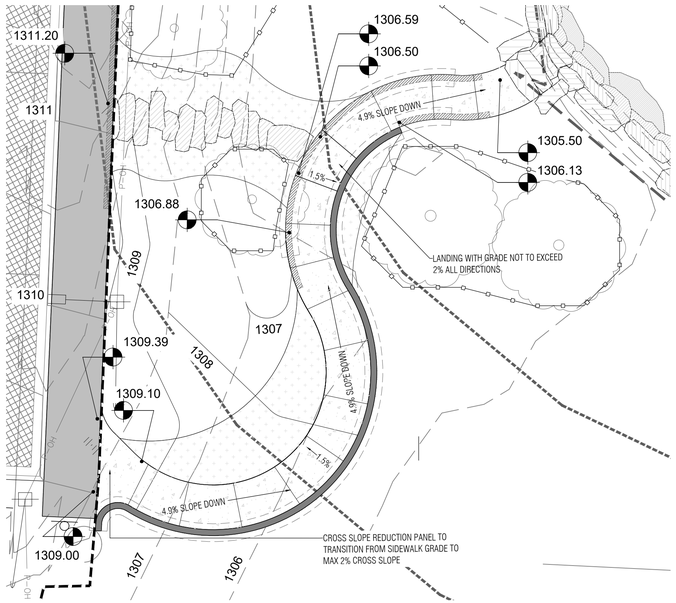
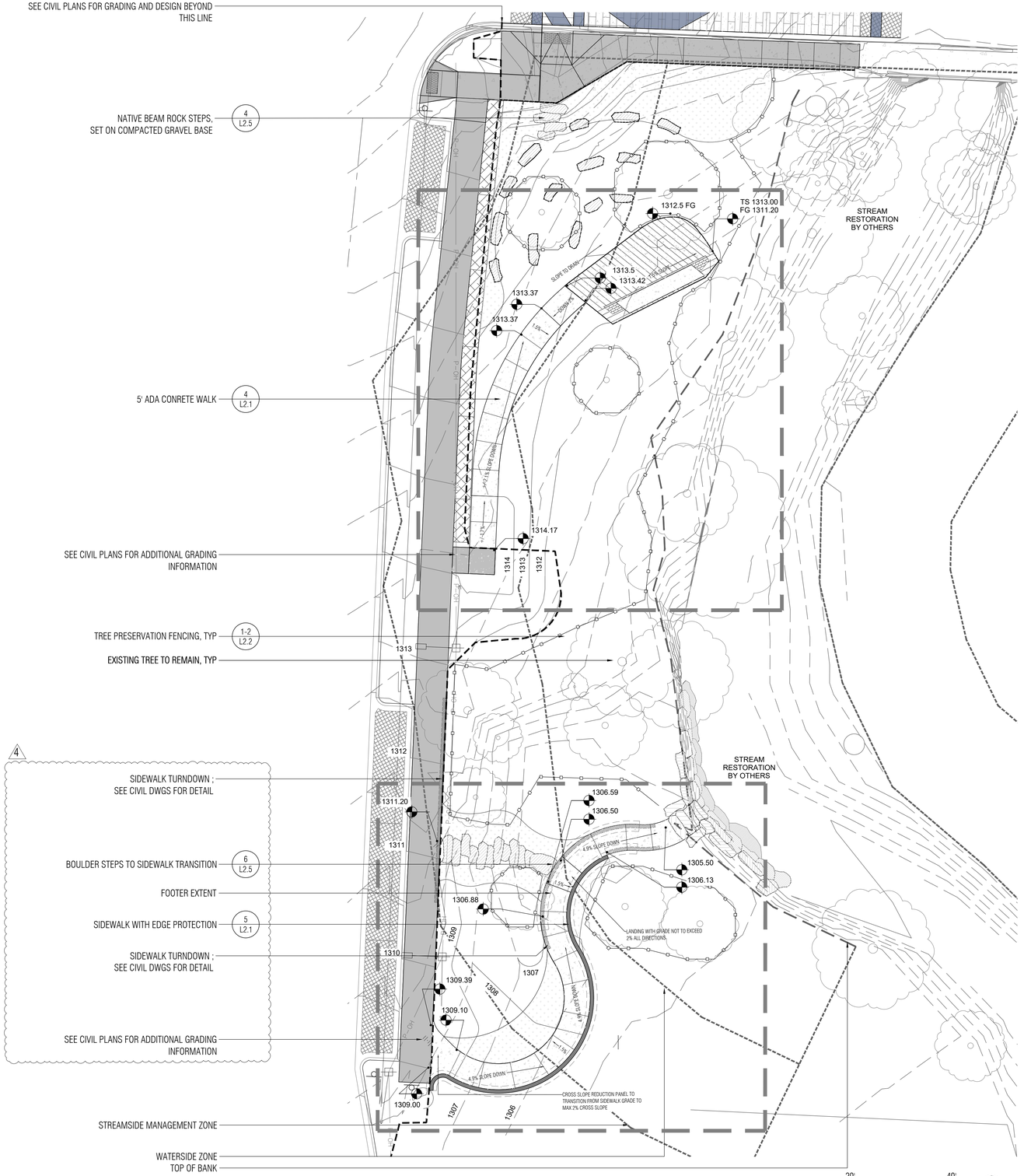


2 DETAIL GRADING PLAN - NORTH
SCALE 1/8"=1'-0"



3 DETAIL GRADING PLAN - SOUTH
SCALE 1/8"=1'-0"



1 GRADING PLAN - BUDDY HAYES PARK
SCALE 3/32"=1'-0"

ARKANSAS LANDSCAPE ARCHITECT
ALLISON THUMMING HANLAN
NO. 9012

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SHEET CONTENTS
GRADING PLAN

SHEET
L1.3

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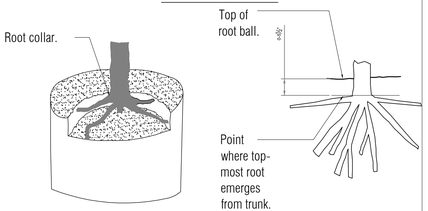
SOIL PREPARATION

1. Soil preparation of a landscape design is a critical factor in creating a healthy and long-lasting landscape. Remove existing topsoil and stockpile on site. Topsoil to be incorporated back into the soil at a later date. Contractor to conduct a soil evaluation to determine the soil's composition,compaction rate, nutrient qualities, organic content, PH levels, and water holding capabilities. The ideal particle soil mix is approximately 45% sand, 40% silt, 10% clay and 5% organic material with a PH level near seven.
2. Prior to the installation of the landscape and irrigation system, contractor to prepare soil to ensure a proper environment for plant root development.
3. Contractor to de-compact soils in planting areas by roto-tilling, disking or ripping to a depth of 6 - 8" minimum and preferably a depth of 12" - 18". De-compaction of small planter areas, such as those in parking lot areas, may require the removal of the compacted soil to a depth of 18" or more and then re-installed loosely with required amendments. Always remove debris over 2" in size from the soil.
4. When performing soil de-compaction, multiple passes across the area will be required and, when possible, should be at varying angles to ensure adequate coverage. When using disc or ripping equipment, it is required that the final passes over the area be made with a roto-tiller to break up any large clumps to make final grading easier.
5. After initial soil de-compaction procedures are performed, soil amendments should be added. The addition of soil amendments is determined from soil tests conducted prior to work commencing. Soil amendment may include inorganic material such as sand, silt or clay, which help improve soil texture. Organic material such as compost, manure, and peat moss may also be used and help improve soil structure. Other amendments such as fertilizer improve nutrient content and sulfur adjusts the soil PH level. Sulfur shall be incorporated at the rate of one pound of sulfur per 100 square feet.
6. All amendments should be mixed thoroughly with existing soil and an additional soil test will be taken to ensure proper soil conditions prior to planting.
7. During the remainder of the landscape installation, various areas of the site may be re-compacted the soil. This compaction is typically limited to the upper 4"-6" f the soil. Prior to the installation of plant material in these areas, the compaction shall be reduced to 80% or less using previously described methods

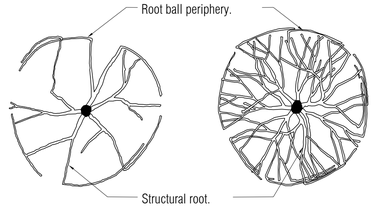
LANDSCAPE PLANTING NOTES

1. Refer to utility and grading and drainage plans for utility location and drainage information. Refer to Civil Engineer's grading plans for grading information. If actual site conditions vary from what is shown on the plans or if there are discrepancies between the plans, contact the Landscape designer for direction as to how to proceed.
2. Verify locations of pertinent site improvements installed under other sections. If any part of this plan cannot be followed due to site conditions, contact Landscape Architect for instructions prior to commencing work.
3. Exact locations of plant materials to be approved by the Landscape designer in the field prior to installation.
4. Landscape designer reserves the right to adjust plants to exact location in field.
5. Verify plant counts and square footages: Quantities are provided as Owner information only. If quantities on plant list differ from graphic indications, then graphics shall prevail.
6. Contact the local underground utility services for utility location and identification.
7. Perform excavation in the vicinity of underground utilities with care and if necessary, by hand. The Contractor bears full responsibility for this work and disruption or damage to utilities shall be repaired immediately at no expense to the Owner.
8. Trees shall bear same relation to finished grade as it bore to existing.
9. Trees to be planted a minimum of 4 feet from face of building, or pavement, except as approved by Landscape designer.
10. Provide matching forms and sizes for plant materials within each species and size designated on the drawings.
11. Prune newly planted trees only as directed by Landscape designer.
12. Align and equally space in all directions trees and shrubs so designated per these notes and drawings.
13. Finish grades of planter areas shall be 2 inches below adjacent paving or top of wall unless otherwise noted.
14. Provide specified edging as divider between planting beds.
15. Remove entire wire cage from rootball. Cut and remove burlap from top 1/3 of ball.
16. Landscape designer to review plant materials at source or by photographs prior to digging or shipping of plant materials

ACCEPTABLE

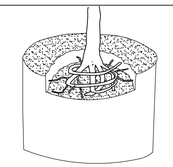


The point where top-most root(s) emerges from the trunk (root collar) should be within the top 2" of substrate. The root collar and the root ball interior should be free of defects including circling, kinked, ascending, and stem girdling roots. Structural roots shall reach the periphery near the top of the root ball.

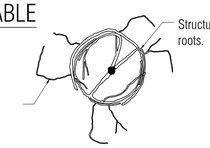


Roots radiate from trunk and reach side of root ball without deflecting down or around.

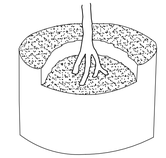
REJECTABLE



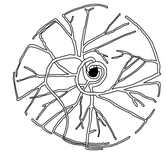
Structural roots circle interior of root ball. No structural roots are horizontal and reach the root ball periphery near the top of the root ball.



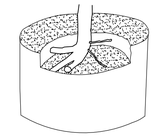
Only absorbing roots reach the periphery near the top of the root ball. Structural roots mostly wrap or are deflected on the root ball interior.



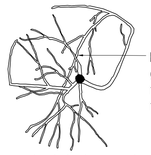
Structural roots descend into root ball interior. No structural roots are horizontal and reach the root ball periphery near the top of the root ball.



Structural roots circle and do not radiate from the trunk.



Structural roots primarily grow to one side.

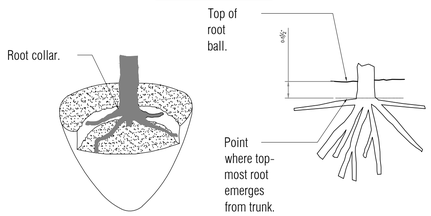


Structural roots missing from one side, and/or grow tangent to trunk.

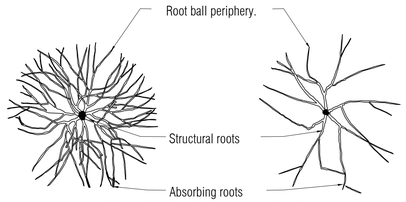
Notes:
1- Observations of roots shall occur prior to acceptance. Roots and substrate may be removed during the observation process; substrate/soil shall be replaced after observation has been completed.
2- Small roots (¼" or less) that grow around, up, or down the root ball periphery are considered a normal condition in container production and are acceptable however they should be eliminated at the time of planting. Roots on the periphery can be removed at the time of planting. (See root ball shaving container detail).
3- See specifications for observation process and requirements.

1 / L-2.0 ACCEPTABLE TREE ROOT BALL - CONTAINER GROWN
SCALE: NTS

ACCEPTABLE

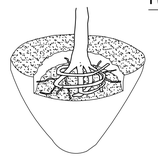


The point where top-most root(s) emerges from the trunk (root collar) should be within the top 2" of substrate. The root collar and the root ball interior should be free of defects including circling, kinked, ascending, and stem girdling roots. Structural roots shall reach the periphery near the top of the root ball.

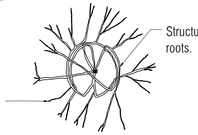


Roots radiate from trunk and reach side of root ball without defecting down or around.

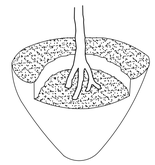
REJECTABLE



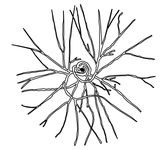
Structural roots circle interior of root ball. No structural roots are horizontal and reach the root ball periphery near the top of the root ball.



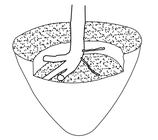
Only absorbing roots reach the periphery near the top of the root ball. Structural roots mostly wrap or are deflected on the root ball interior.



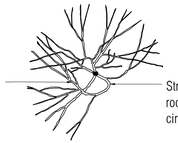
Structural roots descend into root ball interior. No structural roots are horizontal and reach the root ball periphery near the top of the root ball.



Structural roots circle and do not radiate from the trunk.



Structural roots primarily grow to one side.

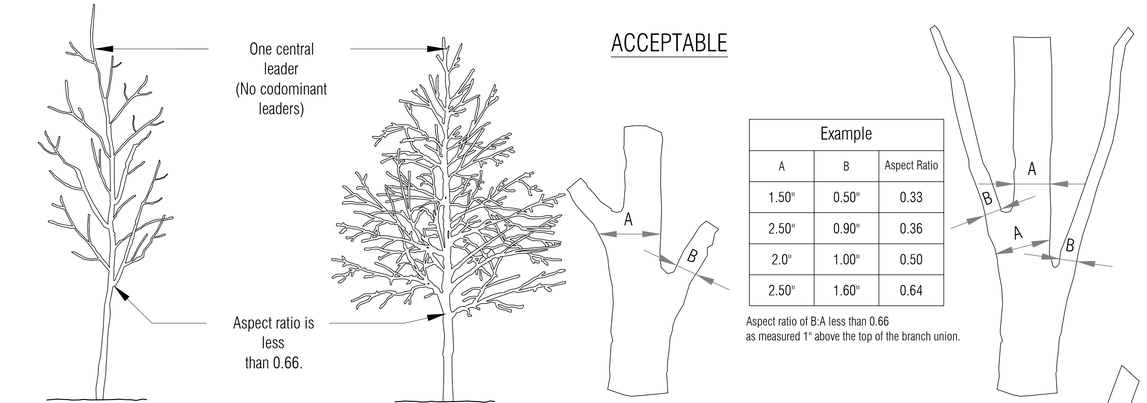


Structural roots missing from one side, and/or grow tangent to trunk.

Notes:
1- Observations of roots shall occur prior to acceptance. Roots and soil may be removed during the observation process; substrate/soil shall be replaced after the observations have been completed.
2- See specifications for observation process and requirements.

2 / L-2.0 ACCEPTABLE STREET TREE ROOT BALL - FIELD GROWN
SCALE: NTS

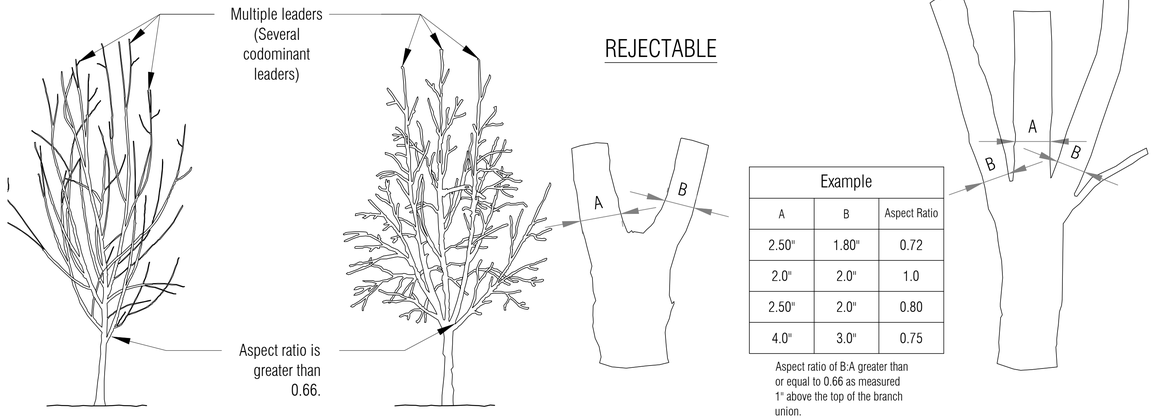
ACCEPTABLE



Example		
A	B	Aspect Ratio
1.50"	0.50"	0.33
2.50"	0.90"	0.36
2.0"	1.00"	0.50
2.50"	1.60"	0.64

Aspect ratio of B:A less than 0.66 as measured 1" above the top of the branch union.

REJECTABLE



Example		
A	B	Aspect Ratio
2.50"	1.80"	0.72
2.0"	2.0"	1.0
2.50"	2.0"	0.80
4.0"	3.0"	0.75

Aspect ratio of B:A greater than or equal to 0.66 as measured 1" above the top of the branch union.

Notes:
1- Aspect ratio shall be less than 0.66 on all branch unions. Aspect ratio is the diameter of branch (B) divided by the diameter of the trunk (A) as measured 1" above the top of the branch union.

2- Any tree not meeting the crown observations detail may be rejected.

3 / L-2.0 ACCEPTABLE STREET TREE CROWN
SCALE: NTS

ARKANSAS LANDSCAPE ARCHITECT ALLISON THLEMMONS HANNAN NO. 9032

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MBL

City of Fayetteville, AR

Yvonne Richardson Community Center Addition

240 E. Rock Street
Fayetteville, AR 72701

REVISIONS

1	02-14-24	Rev #1
2	04-02-24	Rev #2
3	05-03-24	Rev #3
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MBL JOB NO.
200012

CONSTRUCTION DOCUMENTS
Jan. 17, 2024

SHEET CONTENTS
LANDSCAPE DETAILS

SHEET
L2.0

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LANDSCAPE NOTES

1. CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL UTILITIES PRIOR TO STARTING ANY WORK. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ARKANSAS ONE-CALL TO CONFIRM ALL UTILITIES.
2. ALL PLANTS MUST BE HEALTHY, VIGOROUS AND FREE OF PESTS AND DISEASE.
3. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
4. ALL PLANTS MUST BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED ON THE PLANT LIST.
5. ALL REQUIRED TREES SHALL BE 2" MINIMUM CALIPER WITH A SINGLE DOMINATE CENTRAL LEADER. MULTI-LEADERED TREES WILL NOT BE ACCEPTABLE WITHOUT PRIOR APPROVAL FROM URBAN FORESTRY.
6. ALL TREES MUST BE STRAIGHT TRUNKED AND FULL HEADED, UNLESS SPECIFIED OTHERWISE, AND MUST MEET ALL REQUIREMENTS SPECIFIED ON PLANS.
7. ALL TREES AND SHRUBS SHALL BE INSTALLED PER STANDARD CITY OF FAYETTEVILLE PLANTING DETAILS.
8. ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER CONSTRUCTION.
9. ALL PLANTING AREAS MUST BE COMPLETELY MULCHED WITH A 4" LAYER OF ORGANIC HARDWOOD MULCH. MULCH SHALL NOT BE PLACED IMMEDIATELY ADJACENT TO TREE TRUNKS, BUT SHALL BE KEPT AT LEAST 3" FROM ROOT COLLAR AT THE SOIL LINE.
10. ALL PROPOSED PLANTING AREAS COVERED BY GRASS SHALL HAVE THE SOD COMPLETELY REMOVED BEFORE PLANTING BEGINS.
11. ALL PLANTING BEDS SHALL BE CONTAINED BY EDGING MATERIAL OTHER THAN VEGETATION.
12. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE LANDSCAPE CONSTRUCTION AT NO COST TO THE OWNER.
13. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
14. THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING MATERIAL (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) IN ALL PLANTING AREAS AND LAWN AREAS UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE OWNER.
15. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR BEGINNING ON THE DATE OF TOTAL ACCEPTANCE. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE GUARANTEE PERIOD.
16. ANY PLANT MATERIAL WHICH DIES, TURNS BROWN, OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
17. NOTIFY LANDSCAPE ARCHITECT OR DESIGNATED REPRESENTATIVE OF ANY LAYOUT DISCREPANCIES PRIOR TO ANY PLANTING. LOCATE ALL UTILITIES AND SITE LIGHTING CONDUITS BEFORE CONSTRUCTION BEGINS.
18. ALL DISTURBED AREAS SHALL BE SEEDED WITH A GRASS SEED MIX CONSISTING OF 70% TURF TYPE FESCUE, 20% PERENNIAL RYE, AND 10% BERMUDA GRASS AT 5 POUNDS PER 1,000 FEET, UNLESS OTHERWISE SPECIFIED ON PLANTING PLAN.
19. CONTRACTOR SHALL PROVIDE DRIP IRRIGATION SYSTEM TO ALL PLANT MATERIALS. CONTRACTOR IS TO SUBMIT SHOP DRAWINGS OF IRRIGATION SYSTEM DESIGN FOR LANDSCAPE ARCHITECT REVIEW AND APPROVAL PRIOR TO INSTALLATION OF SYSTEM.
20. MAINTENANCE: THE CURRENT OWNER OF THE PROPERTY SHALL BE RESPONSIBLE FOR THE ONGOING MAINTENANCE OF REQUIRED LANDSCAPING.
21. LIVING MATERIAL, SUCH AS LAWN, GRASS OR HERBACEOUS GROUNDCOVERS LIKE JUNIPER OR LIRIOPE, ETC., SHALL COVER MINIMUM OF EIGHTY PERCENT OF THE PLANTING ISLANDS. ONE HUNDRED PERCENT OF LIVING MATERIALS IS STRONGLY ENCOURAGED.
22. REPLACEMENT LANDSCAPING: REQUIRED LANDSCAPING THAT DIES OR IS DAMAGED SHALL BE REMOVED AND REPLACED BY THE CURRENT OWNER OF THE PROPERTY. THE OWNER SHALL HAVE 60 DAYS FROM THE RECEIPT OF WRITTEN NOTICE ISSUED BY THE CITY TO REMOVE AND REPLACE ANY REQUIRED LANDSCAPING THAT DIES OR IS DAMAGED.
23. THREE (3) YEAR MAINTENANCE SURETY SHALL BE DEPOSITED FOR EACH REQUIRED STREET AND MITIGATION TREE.
24. ANY STRUCTURAL SOIL REQUIRED MUST BE INDICATED ON PLAN, HAVE CERTIFIED DOCUMENTATION, AND BE INSPECTED BY URBAN FORESTER AT TIME OF INSTALLATION.
25. MAINTAIN 5' MIN HORIZONTAL SEPARATION BETWEEN TREE PLANTINGS AND UTILITY LINES.
26. ALL PLANTING DETAILS ARE ACCORDING TO THE CITY OF FAYETTEVILLE LANDSCAPE MANUAL.
27. TREES SHALL NOT BE TOPPED AT ANY TIME AND PROPER TREE PRUNING TECHNIQUES AS ESTABLISHED BY THE LATEST EDITION OF ANSI A300 "STANDARDS FOR TREE CARE" SHALL BE UTILIZED FOR MAINTENANCE PURPOSES.
28. HEALTHY TREES SHALL NOT BE REMOVED AT ANY TIME AND PROPER TREE PRUNING TECHNIQUES AS ESTABLISHED BY THE LATEST EDITION OF THE ANSI A300 "STANDARDS FOR TREE CARE" SHALL BE UTILIZED FOR MAINTENANCE PURPOSES.

4

PLANT SCHEDULE - TREES

COMMON NAME	SCIENTIFIC NAME	SIZE	QTY	REMARKS
Blackgum	*Nyssa sylvatica*	2-3" CAL	3	Strong Central Leader
Holly - Eagleston	*Ilex x Attenuata*	2-3" CAL	4	Strong Central Leader
Magnolia - Sweetbay	*Magnolia virginiana*	2-3" CAL	3	Strong Central Leader
Redbud	*Cercis canadensis*	5'-6' HT	7	Strong Central Leader
Serviceberry	*Amelanchier x grandiflora 'Autumn Brilliance'*	8-10' TALL	3	Multi-Stem

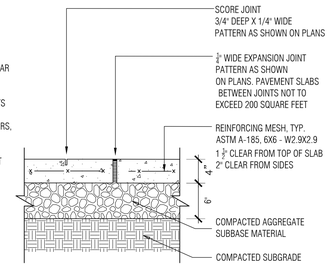
PLANT SCHEDULE - SHRUBS

COMMON NAME	SCIENTIFIC NAME	SIZE	QTY	REMARKS
Beautyberry	*Callicarpa americana*	3 GAL	17	

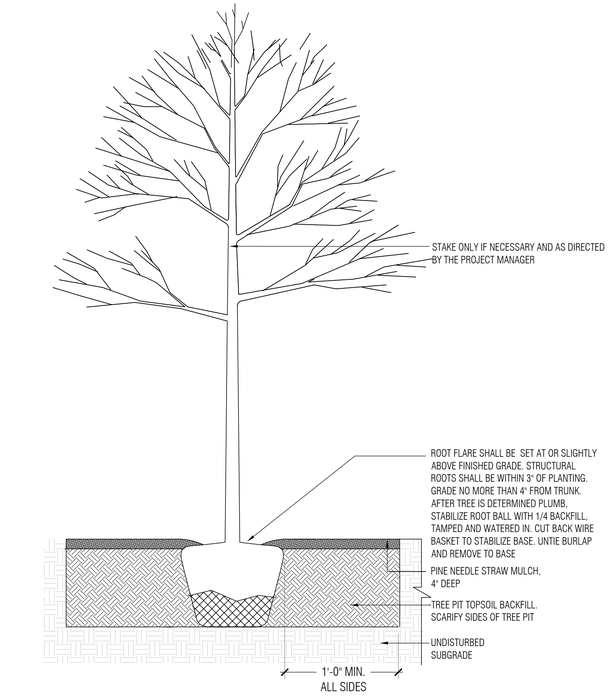
PLANT SCHEDULE - GRASSES, PERENNIALS & GROUNDCOVERS

COMMON NAME	SCIENTIFIC NAME	SIZE	QTY	REMARKS
Blazing Star	*Liatris spicata*	PLUG	145	12" O.C.
Echinacea - Purple	*Echinacea purpurea*	PLUG	145	12" O.C.
Evening Primrose - Pink	*Oenothera speciosa*	PLUG	145	12" O.C.
Sedge - Oak	*Carex albicans*	PLUG	270	12" O.C.
Switchgrass - Shenandoah	*Panicum amarum 'Shenandoah'*	PLUG	37	12" O.C.
Wild Indigo	*Baptisia tinctoria*	PLUG	11	12" O.C.

NOTES:
1. SIDEWALK SHALL BE DESIGNED FOR A LIVE LOAD OF ONE HUNDRED POUNDS PER SQUARE FOOT.
2. PROVIDE SOFT BRISTLE BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.
3. PROVIDE EXPANSION JOINTS WHERE PAVEMENT ABUTS WALLS, CURBS, RAMPS, STAIRS, PAVEMENTS.
4. CROSS SLOPE TO DRAIN AT MAX 2%

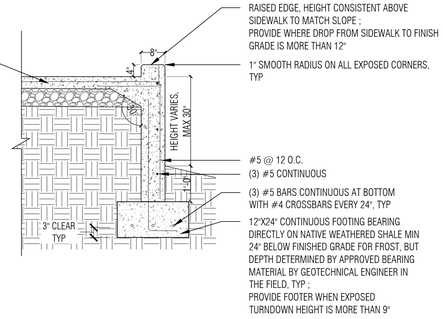


4 / L2.1 CONCRETE WALK
SCALE: 1" = 1'-0"

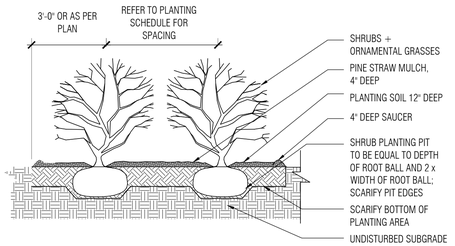


1 / L-2.1 TREE PLANTING DETAIL
SCALE: NTS

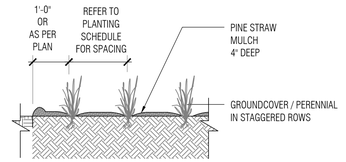
CONCRETE WALK 7 / L2.1



4 / 5 / L2.1 SIDEWALK WITH EDGE PROTECTION
SCALE: 1/2" = 1'-0"



2 / L-2.1 SHRUB + ORNAMENTAL GRASS PLANTING DETAIL
SCALE: NTS



3 / L-2.1 GROUNDCOVER PLANTING
SCALE: NTS

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Yvonne Richardson Community Center Addition
240 E. Rock Street
Fayetteville, AR 72701

REVISIONS

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2	04-02-24	Rev #2
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MBL JOB NO.
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LANDSCAPE + SITE DETAILS

SHEET
L2.1

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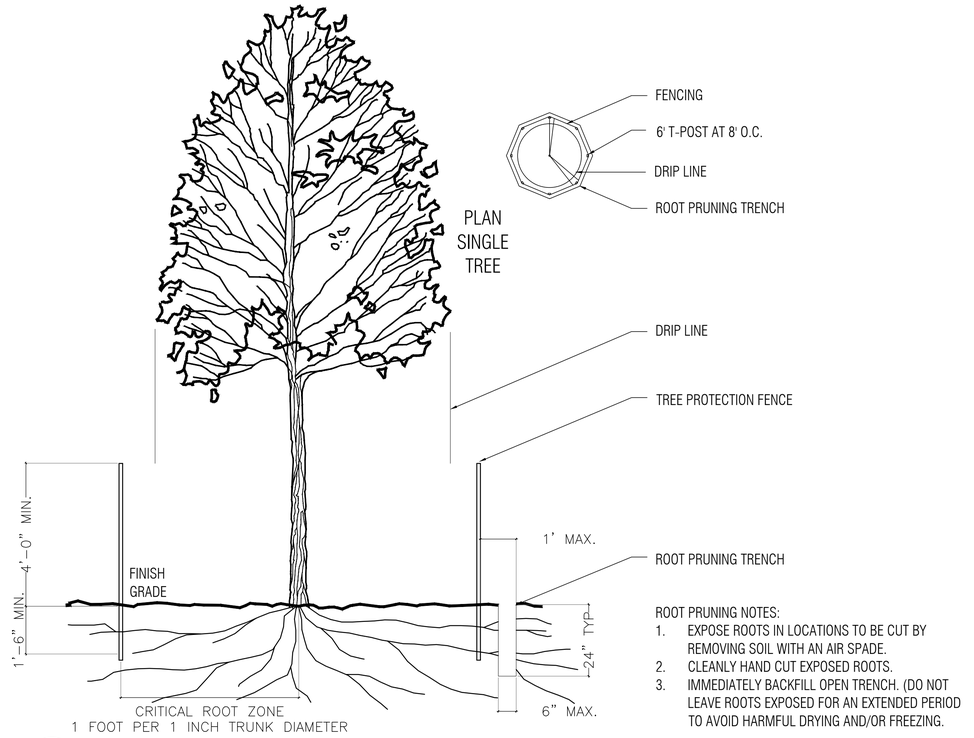
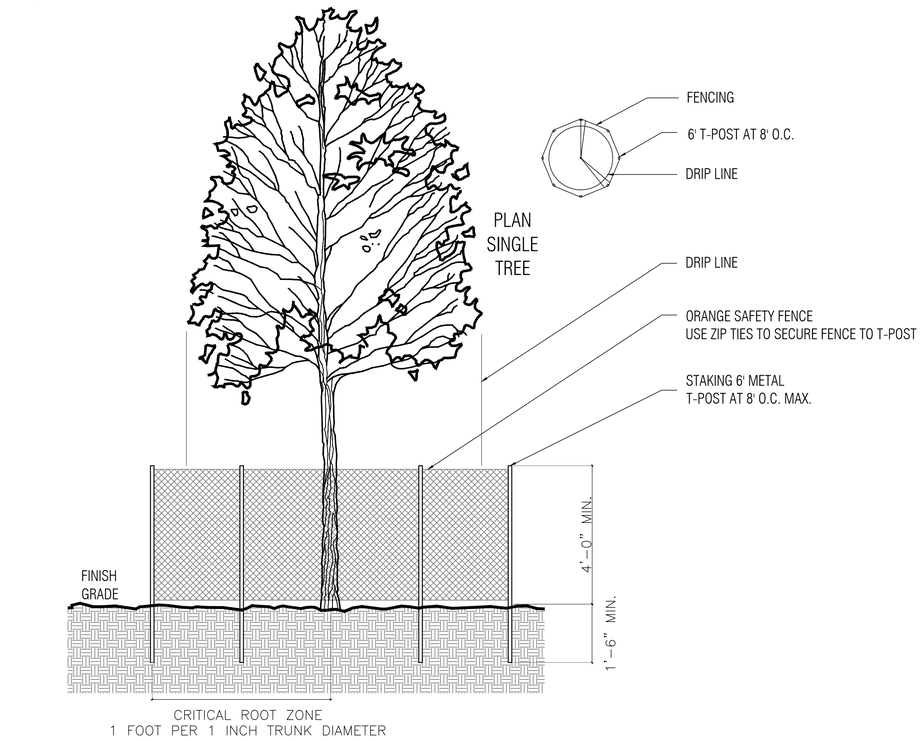


1 L-2.2 ROOT PRUNING DETAIL
SCALE: 1/2" = 1'-0"

ROOT PRUNING NOTES:
1. EXPOSE ROOTS IN LOCATIONS TO BE CUT BY REMOVING SOIL WITH AN AIR SPADE.
2. CLEANLY HAND CUT EXPOSED ROOTS.
3. IMMEDIATELY BACKFILL OPEN TRENCH. (DO NOT LEAVE ROOTS EXPOSED FOR AN EXTENDED PERIOD TO AVOID HARMFUL DRYING AND/OR FREEZING.



2 L-2.2 TREE PRESERVATION FENCE DETAIL
SCALE: 1/2" = 1'-0"

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Fayetteville, AR 72703
Ph: 479.443.7121

City of Fayetteville, AR
Yvonne Richardson Community Center Addition
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Jan. 17, 2024

SHEET CONTENTS
TREE PRESERVATION DETAILS

SHEET
L2.2

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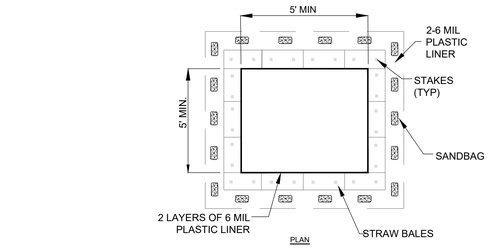
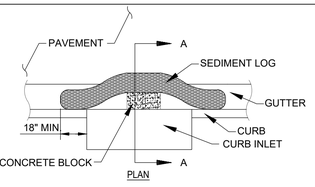
NOTES:

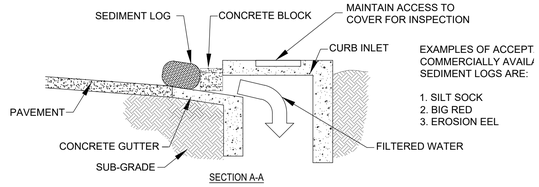
1. NO WASHING OUT OF CONCRETE TRUCKS OR WASHING OF SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS IS ALLOWED.
2. EXCESS CONCRETE IS NOT ALLOWED TO BE DUMPED ON-SITE, EXCEPT IN DESIGNATED TEMPORARY CONCRETE WASHOUT PIT AREAS.
3. ON-SITE TEMPORARY CONCRETE WASHOUT AREAS SHALL BE LOCATED AT LEAST 50 FEET FROM STORM DRAINS, OPEN DITCHES, OR WATER BODIES.
4. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
5. WASHOUT FACILITIES SHALL BE CLEANED OUT OR REPLACED ONCE THE WASHOUT IS 75% FULL.
6. PLASTIC LINING MATERIAL SHALL BE MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHALL BE FREE OF HOLES, TEARS, OR OTHER DEFECTS.
7. WHEN WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR WORK, THE HARDENED CONCRETE SHALL BE REMOVED AND DISPOSED OF OFFSITE. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES WILL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY (*i.e.* PERMITTED FACILITY OR RECYCLED).



5 L-2.3 STRAW BALE CONCRETE WASHOUT
SCALE: NTS



SEDIMENT LOGS SHALL HAVE A MIN. WEIGHT PER LINEAR FOOT OF 4.5 LBS AND SHALL EXCLUDE **STRAW** OR **SAND** MEDIA.



EXAMPLES OF ACCEPTABLE COMMERCIALLY AVAILABLE SEDIMENT LOGS ARE:

1. SILT SOCK
2. BIG RED
3. EROSION EEL

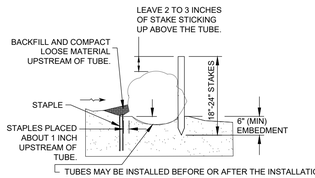
NOTES:

1. PLACE DEVICES AROUND PERIMETER OF GRATE/AREA INLET, WITH ENDS OF ADJACENT SEDIMENT LOGS OVERLAPPING 12" MIN.
2. PLACEMENT OF DEVICES SHALL EXTEND 12" MIN BEYOND THE LIMITS OF THE CURB INLET STRUCTURE ON BOTH SIDES.
3. IF ROAD OR PARKING AREA IS OPEN TO PUBLIC, VERIFY SUITABILITY OF BMP WITH CITY OF FAYETTEVILLE ENGINEERING DIVISION.

MAINTENANCE NOTES:

4. INLET PROTECTION DEVICES MUST BE INSPECTED FOR SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN OR UPGRADIENT OF THE INLET.
7. ANY SEDIMENT ACCUMULATED IN OR ADJACENT TO A STORM DRAIN INLET MUST BE REMOVED AS SOON AS PRACTICABLE BUT NOT LATER THAN 3 DAYS AFTER DISCOVERY.
8. INLET PROTECTION DEVICES SHALL BE INSPECTED FOR UNINTENDED BYPASS OR IMPROPER FLOW-RATES THAT MAY CAUSE DOWNSTREAM FLOODING.
9. CONTACT THE PUBLIC WORKS INSPECTOR AND/OR ENGINEER FOR ALTERNATE INLET PROTECTION IF THE DESIGNED PROTECTION MAY IMPACT DOWNSTREAM BMPS, ADJACENT SLOPES, ETC., DUE TO PONDING ISSUES. ENSURE THAT NO UNDERMINING OF INLET PROTECTION DEVICES HAS OCCURRED.
10. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.

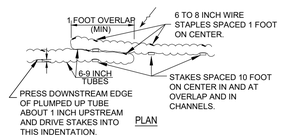
3 L-2.3 SEDIMENT LOG CURB INLET PROTECTION
SCALE: NTS



SEDIMENT LOGS SHALL HAVE A MIN. WEIGHT PER LINEAR FOOT OF 4.5 LBS AND SHALL EXCLUDE **STRAW** OR **SAND** MEDIA.

IF INSTALLING TUBE ACROSS A DITCH, THEN EXCAVATE A PLACEMENT TRENCH ABOUT 3 INCHES DEEP.

SECTION



GENERAL GUIDELINES FOR SPACING OF TUBE TRENCHES FOR SLOPE INSTALLATIONS	
SLOPE GRADIENT	TUBE INTERVAL
1H:1V	15 FEET
2H:1V	25 FEET
3H:1V	35 FEET
4H:1V	50 FEET

GENERAL GUIDELINES FOR SPACING OF TUBE TRENCHES FOR CHANNEL INSTALLATIONS	
SLOPE	TUBE INTERVAL
2%	25 FEET

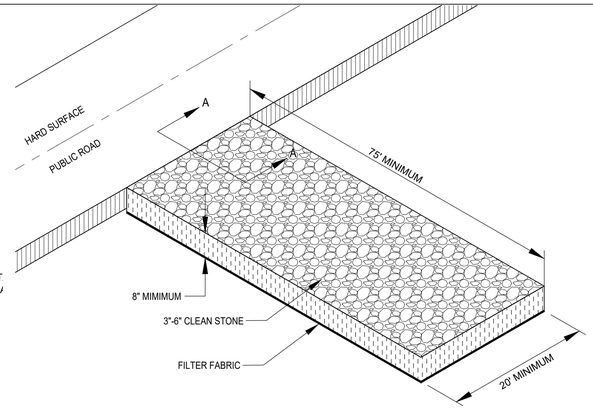
EXAMPLES OF ACCEPTABLE COMMERCIALLY AVAILABLE SEDIMENT LOGS ARE:

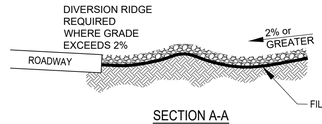
1. SILT SOCK
2. BIG RED
3. EROSION EEL

SEDIMENT LOG MAINTENANCE AND INSTALLATION NOTES:

1. SEDIMENT LOGS SHALL BE INSPECTED ALONG ITS ENTIRETY AND MUST BE CLEANED WHEN SEDIMENT HAS ACCUMULATED TO ONE-THIRD THE HEIGHT OF THE SEDIMENT LOG. MAINTENANCE CLEANOUT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING ONE-THIRD THE HEIGHT OF THE SEDIMENT LOG.
2. SPECIAL ATTENTION SHOULD BE PAID TO ENSURE THAT NO UNDERMINING OF SEDIMENT LOG HAS OCCURRED AND THAT NO BYPASS IS OCCURRING AT JOINING SECTIONS.
3. IF EXCESS SEDIMENT IS ACCUMULATING IN ANY SECTION OF A SEDIMENT LOG, THE CONTRACTOR SHOULD IMPLEMENT ADDITIONAL UPSTREAM STABILIZATION MEASURES OR ADDITIONAL BMPS TO PREVENT EXCESSIVE BUILDUP ON SEDIMENT LOG.
4. SEDIMENT LOG SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED (RUN OVER OR FLATTENED).

4 L-2.3 SEDIMENT LOG DETAIL
SCALE: NTS



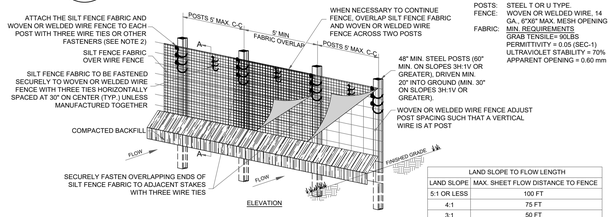


SECTION A-A

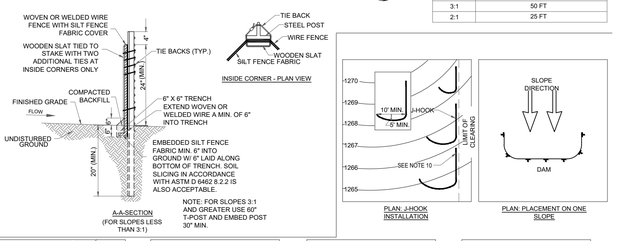
NOTES:

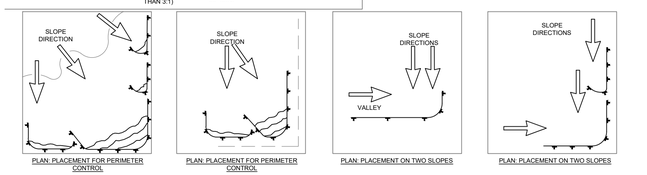
1. REPLACE CONTAMINATED STONE AS REQUIRED TO PREVENT TRACKING OF SEDIMENT OR MUD ON PUBLIC STREETS.
2. CLEAN STREETS DAILY WITH BROOM (NO POWER BROOM) AND SHOVEL. THE USE OF WATER IS PROHIBITED.
3. ALL VEHICLES MUST USE CONSTRUCTION EXIT.
4. IF WHEEL WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

1 L-2.3 CONSTRUCTION EXIT
SCALE: NTS



LAND SLOPE TO FLOW LENGTH	
LAND SLOPE	MAX. SHEET FLOW DISTANCE TO FENCE
5:1 OR LESS	100 FT
4:1	75 FT
3:1	50 FT
2:1	25 FT





INSTALLATION NOTES:
1. MATERIALS AND INSTALLATION SHALL COMPLY WITH ASTM D 6462 LATEST EDITION.
2. INSTALL SILT FENCE AT A FAIRLY LEVEL GRADE ALONG THE CONTOUR WITH THE ENDS CURVED UPHILL TO PROVIDE SUFFICIENT UPSTREAM STORAGE VOLUME FOR THE ANTICIPATED RUNOFF.
3. ATTACH THE GEOTEXTILE OR FABRIC TO THE WOVEN OR WELDED WIRE FENCE WITH THREE WIRE TIES OR OTHER FASTENERS (HORIZONTALLY SPACED EVERY 30"), ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART. AT EACH POST, ATTACH THE GEOTEXTILE OR FABRIC AND THE WOVEN OR WELDED WIRE FENCE TO THE POST AS PREVIOUSLY STATED. IN ADDITION, EACH TIE PLACED ON A POST SHOULD BE POSITIONED TO HANG ON A POST NIPPLE WHEN TIGHTENED TO PREVENT SAGGING.
4. WHEN TWO SECTIONS OF SILT FENCE FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED A MINIMUM OF 60" ACROSS TWO POSTS, AS SHOWN.
5. ALL SILT FENCE SHALL INCLUDE WIRE SUPPORT.
6. WRAP APPROXIMATELY 6" OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
7. COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC WITH THE FRONT WHEEL OF THE TRACTOR, SKID STEER, OR ROLLER EXERTING AT LEAST 60 POUNDS PER SQ. INCH. COMPACT THE UPSTREAM SIDE FIRST, COMPACT EACH SIDE TWICE FOR A TOTAL OF FOUR TRIPS.
8. ADD POST CAPS AS NEEDED BASED ON SITE CONDITIONS AND APPLICABLE AGENCY REQUIREMENTS.

J-HOOK NOTES:
9. J-HOOKS SHALL BE USED WHENEVER THE SILT FENCE LINE IS INSTALLED AT AN ANGLE OF 30 DEGREES OR GREATER FROM PARALLEL TO CONTOURS.
10. START DOWN-GRADIENT SILT FENCE LINE AS CLOSE AS POSSIBLE TO UP-GRADIENT J-HOOK.

MAINTENANCE NOTES:
11. SILT FENCES SHALL BE INSPECTED ALONG ITS ENTIRETY AND MUST BE CLEANED WHEN SEDIMENT HAS ACCUMULATED TO ONE-THIRD THE HEIGHT OF THE SILT FENCE. MAINTENANCE CLEANOUT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING ONE-THIRD THE HEIGHT OF THE SILT FENCE.
12. SPECIAL ATTENTION SHOULD BE PAID TO ENSURE THAT NO UNDERMINING OF SILT FENCE HAS OCCURRED AND THAT NO BYPASS IS OCCURRING AT JOINING SECTIONS.
13. IF EXCESS SEDIMENT IS ACCUMULATING IN ANY SECTION OF SILT FENCE, THE CONTRACTOR SHOULD IMPLEMENT ADDITIONAL UPSTREAM STABILIZATION MEASURES OR ADDITIONAL BMPS (PENDING CITY APPROVAL) TO PREVENT EXCESSIVE BUILDUP ON SILT FENCE.
14. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED.

2 L-2.3 SILT FENCE WITH WIRE BACKING
SCALE: NTS

ARKANSAS LANDSCAPE ARCHITECT ALLISON TALBOMMO GANNAN NO. 9012

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2397 N. Green Acres Rd.
Fayetteville, AR 72703
Ph: 479.443.7121

City of Fayetteville, AR

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MBL JOB NO.
200012

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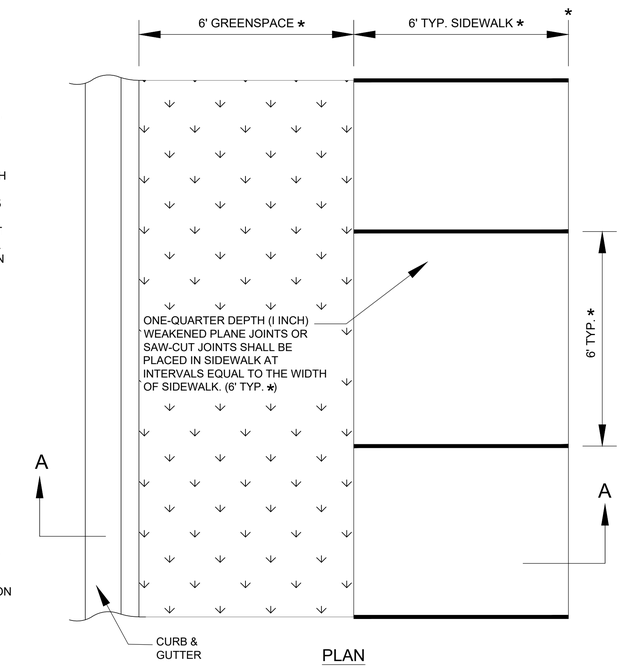
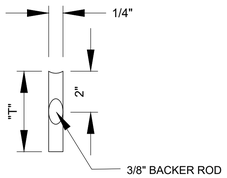
SIDEWALK CONSTRUCTION NOTES:

1. SIDEWALK SHALL HAVE TOOLED OR SAW-CUT TRANSVERSE JOINTS AT INTERVALS EQUAL TO THE WIDTH OF SIDEWALK (5' TYP.). THESE WEAKENED PLANE (CONTRACTION) JOINTS SHALL BE CONSTRUCTED TO 1/4 DEPTH OF THE SIDEWALK THICKNESS AND SHALL BE 1/8" TO 3/8" WIDE.
2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI.
3. CONCRETE SHALL HAVE A MINIMUM CEMENT CONTENT OF 6.5 BAGS per Cu. Yd. WITH 5-1/2% ± 1-1/2% AIR ENTRAINMENT.
4. EXPANSION JOINT MATERIAL SHALL BE PREFORMED ASPHALT IMPREGNATED FIBERBOARD CONFORMING TO AASHTO M-213. EXPANSION JOINT MATERIAL SHALL BE LEFT 1/2" LOWER THAN GRADE OR TRIMMED 1/2" LOWER, AND FILLED WITH SILICONE SEALER TO FINISHED GRADE.
5. ALL COLD JOINTS AND SAW-CUT JOINTS SHALL BE FILLED TO FINISHED GRADE WITH JOINT SEALANT.
6. CONCRETE CURING COMPOUND SHALL BE SEALTIGHT 1600-WHITE MANUFACTURED BY W.R. MEADOWS, OR AN APPROVED EQUAL.
7. CONCRETE JOINT SEALANT SHALL BE SONNEBORN "SONOLASTIC SLI" OR AND APPROVED EQUAL. CLOSED CELL BACKER ROD SHALL BE USED IN DEEP JOINTS, AS NEEDED, ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.
8. ALL SIDEWALKS SHALL HAVE ONE-HALF INCH ROLLED EDGES AND A BROOMED FINISH.
9. SEE STANDARD DRIVEWAY DETAILS FOR SIDEWALK CONSTRUCTION THROUGH DRIVEWAYS.
10. WHERE LONGITUDINAL (RUNNING) SLOPE OF SIDEWALK EXCEEDS 5.0%, THE SIDEWALK SHALL MATCH THE SLOPE OF THE ADJACENT ROADWAY.
11. LANDING REQUIRED WHEN SIDEWALK CHANGES DIRECTION DUE TO AN OBJECT (E.G. TELEPHONE/LIGHT POLE, MANHOLE, ETC.)
12. ALL SIDEWALKS REQUIRE INSPECTION BEFORE AND AFTER CONCRETE PLACEMENT. CONTACT THE ENGINEERING DIVISION (575-8206) TO SCHEDULE AN INSPECTION.
13. MINIMUM EFFECTIVE WIDTH FOR SIDEWALK IS 5 FEET. SEE UNIFIED CODE SECTION 171.14 FOR GUIDANCE.



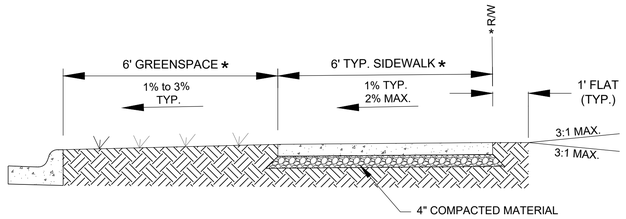
PLAN

* SIDEWALK AND GREENSPACE WIDTHS MAY VARY BASED ON CURRENT MASTER STREET PLAN OR APPROVED SUBDIVISION PLAT. CONFIRM DIMENSIONS PRIOR TO CONSTRUCTION

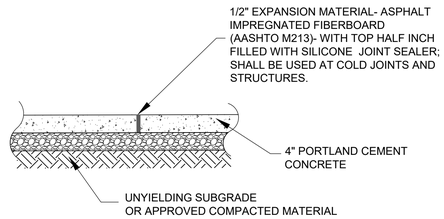


"T"=1/4 SLAB THICKNESS + 1/2"

JOINT SEALANT DETAIL



SECTION A-A



ELEVATION

1 / L2.4 SIDEWALK WITH GREENSPACE

SCALE: NTS

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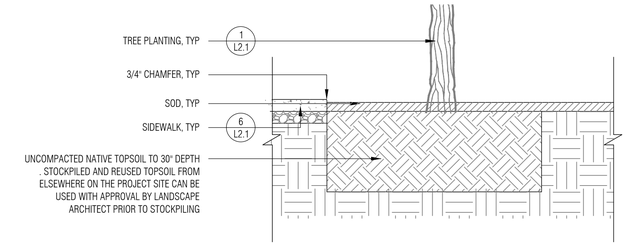
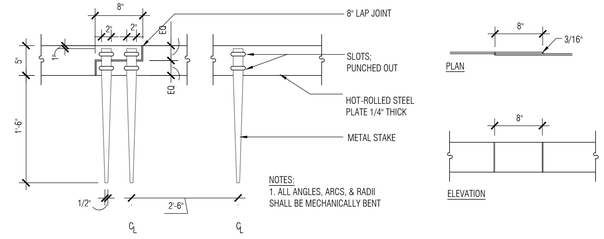
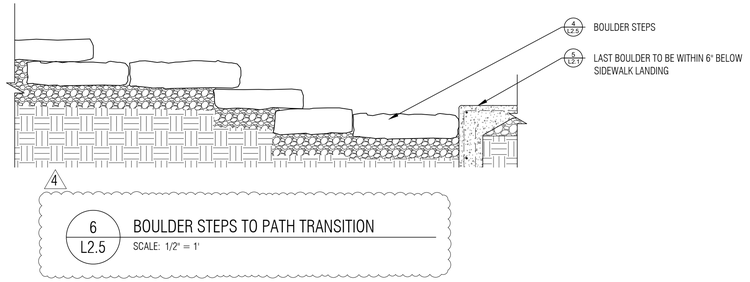


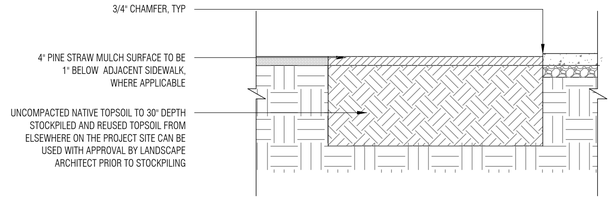
5 L2.5 TREE LAWN, TYP
SCALE 1/2" = 1'



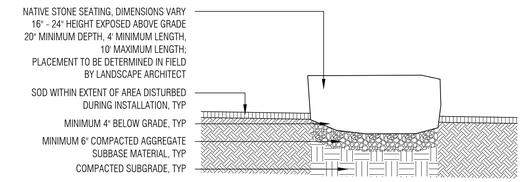
1 L2.5 STEEL EDGING
SCALE: 1" = 1'-0"



6 L2.5 BOULDER STEPS TO PATH TRANSITION
SCALE: 1/2" = 1'



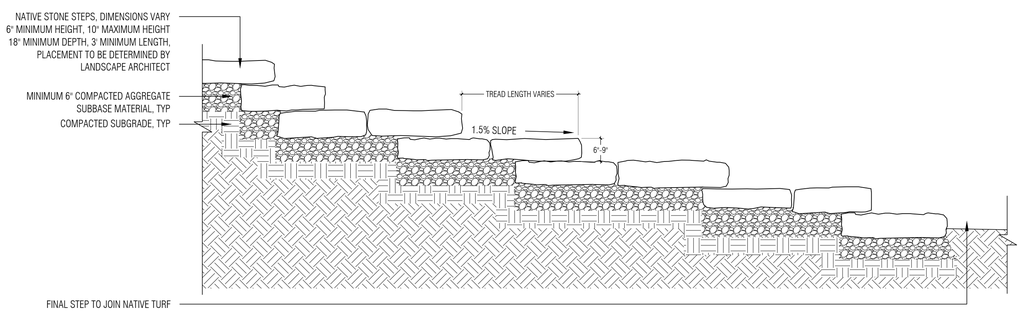
2 L2.5 PLANTING BED, TYP
SCALE 1/2" = 1'



3 L2.5 BOULDER SEATING
SCALE: 1/2" = 1'

BOULDER SPECIFICATIONS + PLACEMENT NOTES

1. PLACEMENT OF NATIVE FIELDSTONE STEPS + BOULDERS IS INTENDED TO CREATE A SCRAMBLE THAT PROTECTS AGAINST EROSION WHILE CREATING OPPORTUNITIES FOR CLIMBABLE PARK ACCESS (AT USERS' OWN RISK).
2. THE PLACEMENT OF INDIVIDUAL STONES WILL NECESSARILY DEPEND ON THE SIZE + SHAPES AVAILABLE. THE MASON HAS FLEXIBILITY TO ADAPT TO USABLE MATERIAL. DRAWINGS HERE SHOW DESIGN INTENTION.
3. PRE-CONSTRUCTION COORDINATION BETWEEN CONCRETE CONTRACTOR, MASON, AND LANDSCAPE ARCHITECT IS ESSENTIAL.
4. ALL STONES SHALL BE FIXED IN PLACE.
5. ALL NATIVE STONE TO BE SOURCED FROM SAME OR SIMILAR LOCAL SOURCES. FIELDSTONE VENEER, BEAM ROCK, AND LANDSCAPE BOULDERS TO BE FROM FLAGSTONE HEIGHTS, PRAIRIE GROVE, OR APPROVED ALTERNATE. STONE SHOULD RESEMBLE WEATHERED FIELDSTONE, DISPLAYING A RANGE OF COLORS FROM BROWNS TO WARM GRAYS AND WITH SURFACE TEXTURE AND VARIATION. REPRESENTATIVE SAMPLES FOR EACH STONE TYPE LISTED BELOW SHALL BE SUBMITTED TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO CONFIRMING STONE ORDER.
6. LANDSCAPE BOULDERS: STONE SHALL BE HARD, DURABLE LANDSCAPE BOULDERS, IRREGULAR IN SHAPE, RESISTANT TO WEATHERING AND TO WATER ACTION, FREE FROM OVERBURDEN, SPOIL, SHALE, AND ORGANIC MATERIAL. NEITHER BREADTH NOR THICKNESS OF ANY SINGLE STONE SHALL BE LESS THAN ONE-THIRD ITS LENGTH. RECTANGULAR, ANGULAR STONE, SHALE, AND STONE WITH SHALE SEAMS ARE NOT ACCEPTABLE.
7. LANDSCAPE BOULDER SIZING VARIETY MINIMUMS:
   - 7.1. 20% MUST BE A MINIMUM OF 3' LONG x 2' DEEP AND TALL
   - 7.2. 20% MUST BE A MINIMUM OF 4' LONG x 2' DEEP AND TALL
   - 7.3. 20% MUST BE A MINIMUM OF 5' LONG x 2' DEEP AND TALL
   - 7.4. 20% MUST BE A MINIMUM OF 6' LONG x 2' DEEP AND TALL
   - 7.5. 20% MUST BE A MINIMUM OF 7' LONG x 2' DEEP AND TALL
8. LANDSCAPE ARCHITECT TO APPROVE VARIETY, QUALITY, AND SELECTION PRIOR TO BOULDER ACCEPTANCE.



4 L2.5 BOULDER STEPS
SCALE: 1/2" = 1'

ARKANSAS REGISTERED LANDSCAPE ARCHITECT
ALLISON THLAMMITO GANNAN
NO. 9012

MBL ARCHITECTURE
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Fayetteville, AR 72703
Ph: 479.443.7121

MBL

City of Fayetteville, AR
Yvonne Richardson Community Center Addition
240 E. Rock Street
Fayetteville, AR 72701

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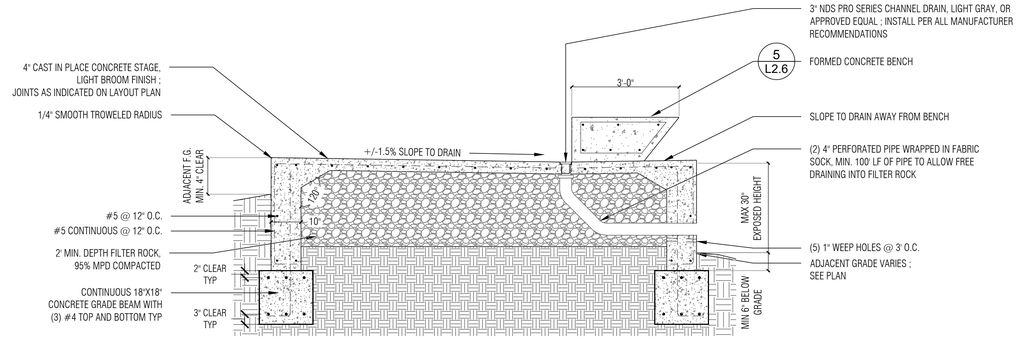
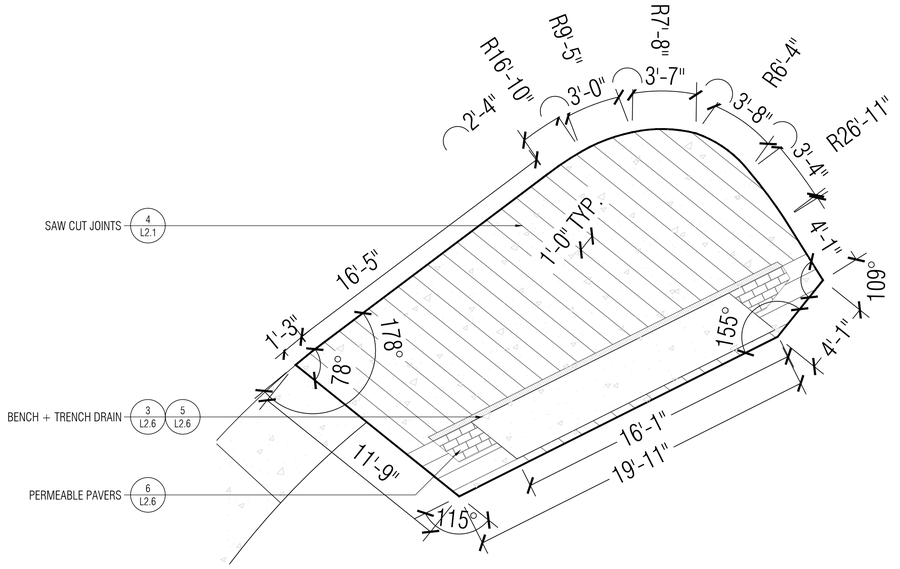
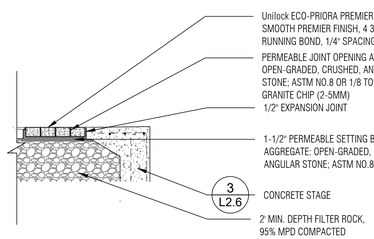


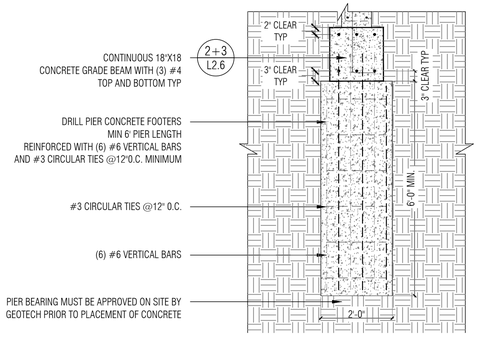
3 L2.6 STAGE SECTION
SCALE: 1/2" = 1'-0"



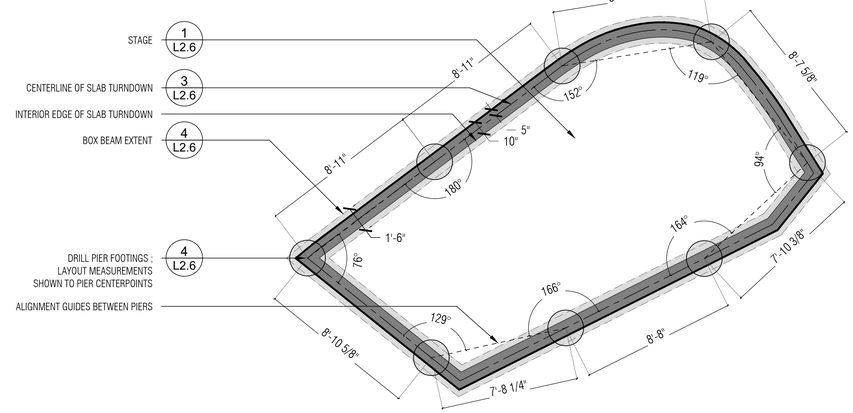
1 L2.6 STAGE DIMENSIONS + SCORING
SCALE 1/2" = 1'



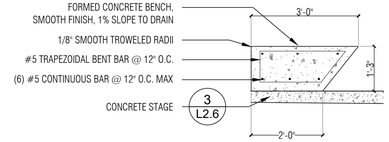
6 L2.6 PERMEABLE PAVERS
SCALE: 1/2" = 1'-0"



4 L2.6 DRILL PIERS
SCALE: 1/2" = 1'



2 L2.6 PIER FOOTER LAYOUT
SCALE: 1/4" = 1'



5 L2.6 CONCRETE BENCH
SCALE: 1/2" = 1'-0"

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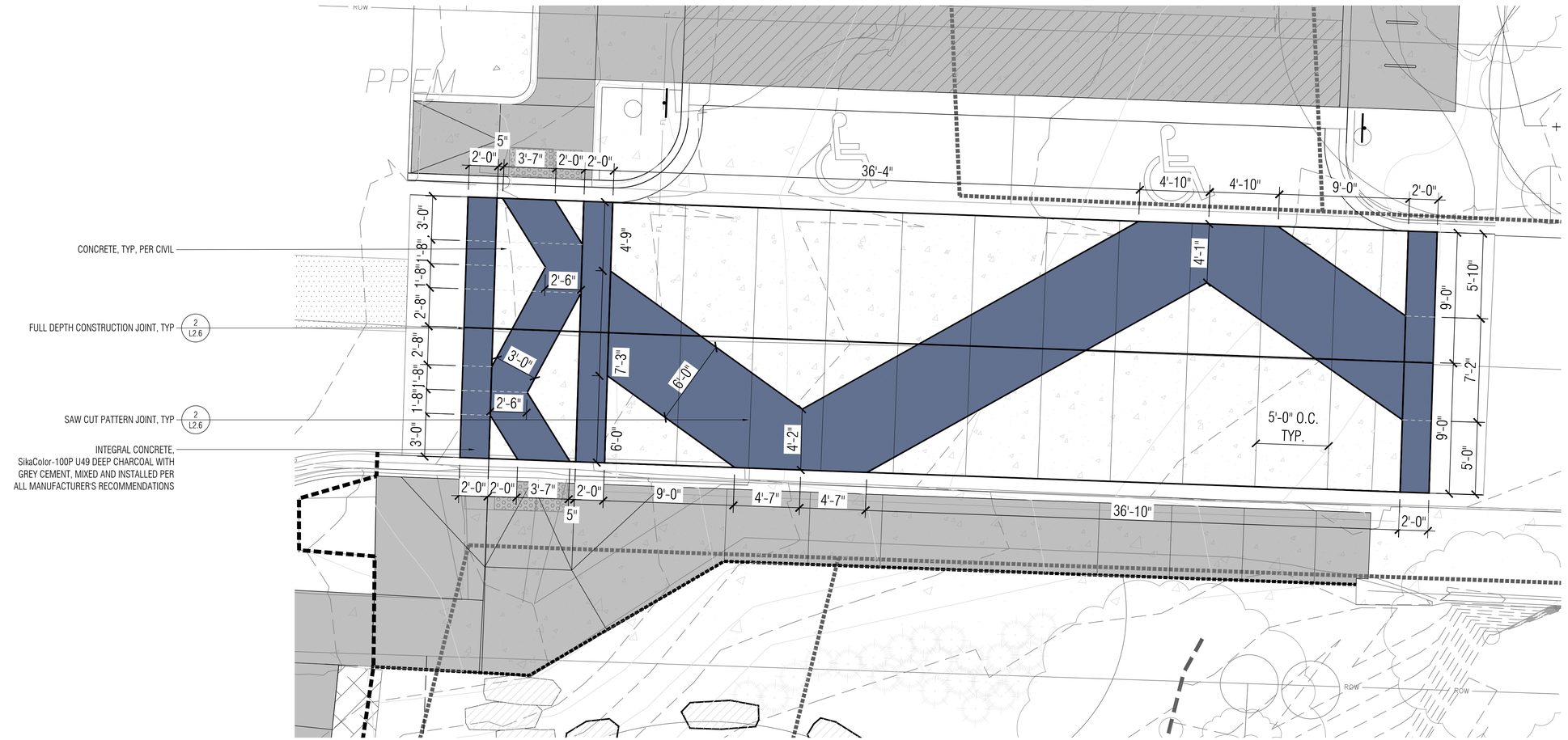
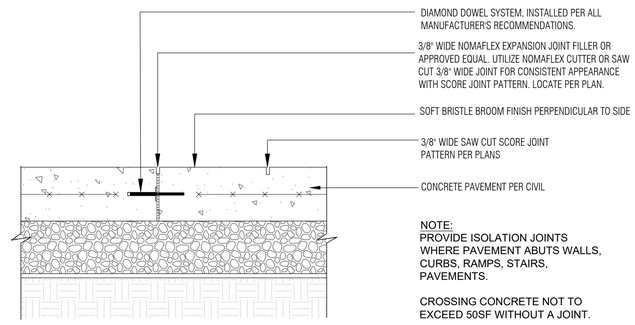


1 L2.6 ROCK STREET CROSSING DETAIL

SCALE 1/2" = 1'

NORTH



2 L2.6 CONCRETE JOINT PATTERN

NTS

ARKANSAS REGISTERED LANDSCAPE ARCHITECT
ALLISON THUMMEL ISANIAN NO. 9012

MBL ARCHITECTURE
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Ph: 479.443.7121

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ROCK ST CROSSING

SHEET

L2.7

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CITY OF FAYETTEVILLE ARKANSAS

CITY COUNCIL MEMO
2025-365

MEETING OF MARCH 25, 2025

TO: Mayor Rawn and City Council

THRU: Keith Macedo, Interim Chief of Staff
Alison Jumper, Director of Parks, Natural Resources and Cultural Affairs
Lee Farmer, Recreation Superintendent
Tiffany Hoover, Assistant Recreation Superintendent

FROM: Joshua Lainfiesta, YRCC Director

SUBJECT: **FRIENDS OF YRCC (ANNUAL PROGRAM DONATION):**

RECOMMENDATION:
A resolution to approve a budget adjustment in the amount of $33,160 recognizing and allocating donation revenue from the Friends of YRCC to be used for the 2025 programs offered by the Yvonne Richardson Community Center.

BACKGROUND:
Friends of YRCC is a non-profit focused on supporting the mission of the YRCC by raising funds for programming costs, which in turn, allows the YRCC to offer low cost and no cost opportunities to the disadvantaged youth and families that it historically serves. This donation will cover expenses for youth and teens to participate in summer camp, afterschool programming, holiday break programs, and Kid Crops gardening. It also supports annual events such as Friendsgiving and Holiday Bingo.

DISCUSSION:
Friends of YRCC continues to offer funding support to YRCC programs, as well as community outreach, allowing for participation to take place despite financial barriers that exist among families of the Fayetteville community. Each semester, YRCC serves nearly 45 individuals K-6th in the YRCC Afterschool program. Additionally, YRCC serves 80 individuals K-8th each week for eight weeks in the Summer Fun 4 Kids/Teens program.

BUDGET/STAFF IMPACT:
$33,160 for 2025 programs offered by the YRCC will be added to the 2025 budget.

ATTACHMENTS: SRF (#3) , BA (#4)

113 West Mountain Street
Fayetteville, AR 72701
(479) 575-8323

File #: 2025-365

FRIENDS OF YRCC (ANNUAL PROGRAM DONATION):

A RESOLUTION TO APPROVE A BUDGET ADJUSTMENT IN THE AMOUNT OF $33,160.00 REPRESENTING DONATION REVENUE FROM FRIENDS OF YRCC TO FUND THE 2025 PROGRAMS OFFERED AT THE YVONNE RICHARDSON COMMUNITY CENTER

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby approves a budget adjustment, a copy of which is attached to this Resolution, in the amount of $33,160.00 recognizing donation revenue from Friends of YRCC to fund the 2025 programs offered at the Yvonne Richardson Community Center.

Section 2: That the City Council of the City of Fayetteville, Arkansas hereby expresses its sincere appreciation to Friends of YRCC for the donation.

City of Fayetteville Staff Review Form

2025-365

Item ID

4/1/2025

City Council Meeting Date - Agenda Item Only
N/A for Non-Agenda Item

Josh Lainfiesta	3/11/2025	PARKS & RECREATION (520)
Submitted By	**Submitted Date**	**Division / Department**

Action Recommendation:

A resolution to approve a budget adjustment in the amount of $33,160 recognizing and allocating donation revenue from the Friends of YRCC to be used for the 2025 programs offered by the Yvonne Richardson Community Center.

Budget Impact:

1010.520.5280-5342.00	General
Account Number	Fund
33051.1001	Parks & Recreation Donations
Project Number	Project Title

Budgeted Item?	Yes	Total Amended Budget	$	67,844.00
		Expenses (Actual+Encum)	$	391.48
		Available Budget	$	67,452.52
Does item have a direct cost?	No	Item Cost	$	-
Is a Budget Adjustment attached?	Yes	Budget Adjustment	$	33,160.00
		Remaining Budget	$	100,612.52

V20221130

Purchase Order Number: _____ **Previous Ordinance or Resolution #** _____

Change Order Number: _____ **Approval Date:** _____

Original Contract Number: _____

Comments:

City of Fayetteville, Arkansas - Budget Adjustment (Agenda)

Budget Year	Division /Org2	Adjustment Number
2025	PARKS & RECREATION (520)	
	Requestor: Alan Bearden	

BUDGET ADJUSTMENT DESCRIPTION / JUSTIFICATION:

Budget adjustment requesting to recognize and allocate donation revenue received from Friends of YRCC (FOYRCC) through Southeast Fayetteville Community Center. These funds are to be used for the 2025 YRCC program activities offered by the Yvonne Richardson Community Center.

COUNCIL DATE: 4/1/2025

ITEM ID#: **2025-365**

Holly Black
3/12/2025 12:42 PM

Budget Division Date

TYPE: **D - (City Council)**

JOURNAL #:

GLDATE:

RESOLUTION/ORDINANCE

CHKD/POSTED: /

v.2025311

TOTAL	33,160	33,160				
	Increase / (Decrease)		Project.Sub#			
Account Number	Expense	Revenue	Project	Sub.Detl	AT	Account Name
1010.520.5280-5342.00	33,160	-	33051	1001	EX	Promotionals - Activities
1010.520.5280-4809.00	-	33,160	33051	1001	RE	Donations
	-	-				
	-	-				
	-	-				
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CITY OF FAYETTEVILLE ARKANSAS

CITY COUNCIL MEMO
2025-368

MEETING OF MARCH 25, 2025

TO: Mayor Rawn and City Council

THRU: Ted Jack, Park Planning Superintendent
Alison Jumper, Director of Parks, Natural Resources and Cultural Affairs
Keith Macedo, Interim Chief of Staff

FROM: Zach Foster, Park Planner II

SUBJECT: **SSI OF NORTHWEST ARKANSAS (SERVICE AGREEMENT):**

RECOMMENDATION:
Approval of a contract with SSI of Northwest Arkansas for Phase 1 Construction Improvements to Bryce Davis Community Park for a total Contract cost of $902,670.13 (Bid 25-24 plus a $90,267.00 project contingency and approval of a supporting budget adjustments.

BACKGROUND:
In 2023 a public master planning process was conducted to update the Master Plan for Bryce Davis Community Park. In 2024, McClelland Consulting Engineers was selected through RFQ 24-01, Selection #6 to perform design services to develop the construction and bid documents and to oversee construction administration for Phase 1 Improvements.

DISCUSSION:
Phase one Improvements address high-priority needs identified by park users during the master planning process. The project focuses on enhancing shade, accessibility, and infrastructure throughout the park. Key upgrades include installing trail lighting to improve visibility and safety, adding a dog wash station, pavilions, and fence realignment to enhance the existing dog park, adding additional swings and a pavilion to the playground, and other park amenities.

BUDGET/STAFF IMPACT:
Funds are available in the 2022 bond fund.

ATTACHMENTS: SRF (#3) , BA (#4), Bid 25-24 Contract (#5), Bid 25-24, Appendix A - Bid Tab - Final (#6), Bid 25-24, Appendix B - City Issued Bidv2 (#7), Bid 25-24, Appendix C - SSI's Bid Submittal (#8)

113 West Mountain Street
Fayetteville, AR 72701
(479) 575-8323

File #: 2025-368

SSI OF NORTHWEST ARKANSAS (SERVICE AGREEMENT):

A RESOLUTION TO AWARD BID 25-24 AND APPROVE A CONTRACT WITH STRUCTURAL SYSTEMS, INC. OF NORTHWEST ARKANSAS D/B/A SSI OF NORTHWEST ARKANSAS IN THE AMOUNT OF $902,670.13 FOR PHASE 1 CONSTRUCTION IMPROVEMENTS TO BRYCE DAVIS COMMUNITY PARK, TO APPROVE A PROJECT CONTINGENCY IN THE AMOUNT OF $90,267.00, AND TO APPROVE A BUDGET ADJUSTMENT

WHEREAS, in 2023, a public planning process was conducted to update the Master Plan for Bryce Davis Community Park; and

WHEREAS, on April 2, 2024, City Council approved Resolution 113-24, and awarded RFQ 24-01 to McClelland Consulting Engineers to develop the construction and bid documents and to oversee construction administration for Phase 1 Improvements; and

WHEREAS, Phase 1 Improvements address high-priority needs identified by park users during the master planning process, which include installing trail lighting to improve visibility and safety; adding a dog wash station, swings, and pavilions; and realigning fences to enhance the existing dog park.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby awards Bid 25-24 and authorizes Mayor Rawn to sign a contract with Structural Systems, Inc. of Northwest Arkansas d/b/a SSI of Northwest Arkansas in the amount of $902,670.13 for Phase 1 Construction Improvements to Bryce Davis Community Park, and further approves a project contingency in the amount of $90,267.00.

Section 2: That the City Council of the City of Fayetteville, Arkansas hereby approves a budget adjustment, a copy of which is attached to this Resolution.

City of Fayetteville Staff Review Form

2025-368

Item ID

4/1/2025

City Council Meeting Date - Agenda Item Only
N/A for Non-Agenda Item

Zach Foster	3/12/2025	PARKS & RECREATION (520)
Submitted By	**Submitted Date**	**Division / Department**

Action Recommendation:

Approval of a contract with SSI of Northwest Arkansas for Phase 1 Construction Improvements to Bryce Davis Community Park for a total Contract cost of $902,670.13 (Bid 25-24) plus a $90,267.00 project contingency and approval of related budget adjustments.

Budget Impact:

4705.860.7580-5806.00 2250.520.9255-5911.99	Parks Projects 2022 Bonds Parks Development
Account Number	Fund
46050.7580 02013.802	Park Projects, Bryce Davis Neighborhood Park Dev., Bryce Davis Expan.
Project Number	Project Title

Budgeted Item?	Yes	Total Amended Budget	$	14,342,461.00
		Expenses (Actual+Encum)	$	2,243,191.95
		Available Budget	$	**12,099,269.05**
Does item have a direct cost?	Yes	Item Cost	$	902,671.00
Is a Budget Adjustment attached?	Yes	Budget Adjustment	$	902,671.00
		Remaining Budget	$	**12,099,269.05**

V20221130

Purchase Order Number: _____ **Previous Ordinance or Resolution #** _____

Change Order Number: _____ **Approval Date:** _____

Original Contract Number: _____

Comments: Bid 25-24

City of Fayetteville, Arkansas - Budget Adjustment (Agenda)

Budget Year	Division /Org2	Adjustment Number
2025	PARKS & RECREATION (520)	
	Requestor: Alan Bearden	

BUDGET ADJUSTMENT DESCRIPTION / JUSTIFICATION:

Budget adjustment to transfer required funds to enter a contract with SSI of Northwest Arkansas for Phase 1 Construction Improvements to Bryce Davis Community Park for a total contract cost of $902,670.13 (Bid # 25-24), plus a project contingency of $90,267.00.

COUNCIL DATE: 4/1/2025

ITEM ID#: **2025-368**

Kevin Springer
3/12/2025 5:04 PM

Budget Division Date

TYPE: **D - (City Council)**

JOURNAL #:

GLDATE:

RESOLUTION/ORDINANCE

CHKD/POSTED: /

v.2025311

	Increase / (Decrease)		Project.Sub#			
Account Number	Expense	Revenue	Project	Sub.Detl	AT	Account Name
TOTAL	-	-				
2250.520.9255-5806.00	(90,267)	-	02013	802	EX	Improvements - Park
2250.520.9255-5911.99	90,267	-	02013	802	EX	Contingency - Capital Project
4705.860.7999-5899.00	(902,671)	-	46050	7999	EX	Unallocated - Budget
4705.860.7580-5806.00	902,671	-	46050	7580	EX	Improvements - Park
	-	-				
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THIS AGREEMENT is made this _____ day of _____, 2025, by and between City of Fayetteville, Arkansas, acting by and through its Mayor (hereinafter called CITY OF FAYETTEVILLE or CITY) and **SSI Incorporated of Northwest Arkansas** (Vendor or SSI).

CITY OF FAYETTEVILLE from time to time requires professional construction services in connection with construction projects. Therefore, CITY OF FAYETTEVILLE and **SSI**, in consideration of their mutual covenants, agree as follows:

Work performed by **SSI** shall be performed under valid, active, current license with the Arkansas Contractor's Licensing Board. **SSI** shall follow all federal, state, and local laws at all times.

1. **Contracted parties and relationship:**
    a. This agreement shall be binding between all parties. Fees shall be provided as identified in appendices.
        i. **SSI's** Tax identification number (TIN) ending in 9338
        ii. **SSI's** Arkansas Contractor License No. 0001310425
        iii. **SSI's** Secretary of State Filing No. 100049422
    b. Parties agree to act on the basis of mutual trust, good faith, and fair dealing, and perform in a fiscally responsible and timely manner. Parties shall each endeavor to promote harmony and cooperation among all Project participants.

2. **Entire Agreement and Exhibits:** This Agreement sets forth the entire agreement and understanding between the parties on the subject matter of this Agreement. Neither party shall be bound by any conditions, definitions, representations or warranties with respect to the subject matter of this Agreement other than those as expressly provided herein.
    a. Appendices included under this agreement include the following:
        i. **Appendix A**: Bid Tabulation
        ii. **Appendix B**: Bid package identified as **Bid 25-24, Construction – Bryce Davis Park Improvements, Phase 1** with the specifications and conditions typed thereon inclusive of all bidding documents, plans and drawings, and issued addenda.
        iii. **Appendix C**: **SSI's** bid submittal
        iv. **Appendix D**: **SSI's** Certificate of Insurance
        v. **Appendix E**: **SSI's** 100% Performance and Payment Bonds
            1. **Appendix D and E** shall be submitted to the City within the timeframe identified in the bid documents or 10 (ten) calendar days.
    b. This agreement may be modified only by a duly executed written instrument signed by the CITY and **SSI.**
    c. ORDER OF PRECEDENCE: In case of any inconsistency, conflict, or ambiguity among the Contract Documents, the documents shall govern in the following order: (a) Change Orders and written amendments to this Agreement which are executed by all parties; (b) the Agreement; (c) **SSI's** Proposal (d) City's published bid and associated Addenda.

3. **Notices:** Any notice required under this Agreement shall be in writing, address to the appropriate party at the following addresses:

    a. City of Fayetteville: Attention: Mayor Molly Rawn, 113 W. Mountain, Fayetteville, AR 72701

    b. Vendor: SSI Incorporated of Northwest Arkansas, 400 Jean Mary Ave., Springdale, AR 72762

4. General Provisions:

    a. ETHICS: All parties shall perform with integrity. Each shall avoid conflicts of interest and promptly disclose to any other part any conflicts that may arise. All parties warrant that it has not and shall not pay or receive any contingent fees or gratuities to or from any other party, including agents, officer's employers, Subcontractors, Sub subcontractors, Suppliers, Volunteers, Elected Officials, or Others to secure preferential treatment.

    b. Workmanship: The Work shall be executed in accordance with the Contract Documents in a workmanlike manner. All materials used in the Work shall be furnished in sufficient quantities to facilitate the proper and expeditious execution of the Work and shall be new except as otherwise provided in the Contract Documents.

    c. MATERIALS FURNISHED BY OWNER OR OTHERS: If the Work includes installation of materials or equipment furnished by City or Others, it shall be the responsibility of the vendor to examine the items so provided and thereupon handle, store, and install the items, unless otherwise provided in the Contract Documents, with such skill and care as to provide a satisfactory and proper installation. Loss or damage due to acts or omissions of the vendor shall be the responsibility of vendor and may be deducted from any amounts due or to become due. Any defects discovered in such materials or equipment shall be reported at once to the City and the City's contracted third-party Design Professional. Following receipt of written notice from vendor of defects, City and Design Professional shall promptly inform the City what action, if any, vendor shall take with regard to the defects.

    d. WORKSITE VISIT: Vendor acknowledges that it has visited, or has had the opportunity to visit, the Worksite to visually inspect the general and local conditions which could affect the Work.

    e. Vendor shall perform all duties and responsibilities necessary to coordinate the various parts of the Work and to prepare its Work for the work of City or Others.

        i. Cutting, patching, or altering the work of City or Others shall be done with the prior written approval of City and Design Professional. Such approval shall not be unreasonably withheld.

    f. COMPLIANCE WITH LAWS: Vendor shall comply with all the Law at its own cost. Vendor shall be liable to City for all loss, cost, or expense attributable to any acts or omissions by Vendor its employees, subcontractors, suppliers, and agents for failure to comply with Laws, including fines, penalties, or corrective measures.

    g. COST OF CORRECTING DAMAGED OR DESTROYED WORK: With regard to damage or loss attributable to the acts or omissions of City or Others and not to Vendor, City may either (a) promptly remedy the damage or loss and assume affected warranty responsibilities, (b) accept the damage or loss, or (c) issue a Change Order to remedy the damage or loss. If Vendor incurs costs or is delayed due to such loss or damage, Vendor may seek an equitable adjustment in the Cost of the Work, Date of Substantial Completion or Date of Final Completion. Any equitable adjustment shall be approved by all parties.

    h. Taxes and Permits: Vendor shall give public authorities all notices required by law and shall obtain and pay for all necessary permits, licenses, and renewals pertaining to the Work. Vendor shall provide to City copies of all notices, permits, licenses, and renewals required under this Agreement.

        i. Vendor shall pay applicable taxes and permit fees associated with the entire project.

i. DISCOUNTS: All discounts for prompt payment shall accrue to City. All trade discounts, rebates, and refunds, and all returns from sale of surplus materials and equipment, shall be credited to the Cost of the Work, or directly to the City after final payment.

j. City may occupy or use completed or partially completed portions of the Work when (a) the portion of the Work is designated in a Certificate of Substantial Completion, (b) appropriate insurer(s) consent to the occupancy or use, and (c) public authorities authorize the occupancy or use. Vendor shall not unreasonably withhold consent to partial occupancy or use.

k. EXTENT OF AGREEMENT: Except as expressly provided, this Agreement is for the exclusive benefit of all Parties, and not the benefit of any third party. This Agreement represents the entire and integrated agreement between the Parties, and supersedes all prior negotiations, representations, or agreements, either written or oral. This Agreement and each and every provision is for the exclusive benefit of all Parties and not for the benefit of any third party.

l. ASSIGNMENT: Except as to the assignment of proceeds, no Party shall assign their interest in this Agreement without the written consent of the other Party. The terms and conditions of this Agreement shall be binding upon all Parties, their partners, successors, assigns, and legal representatives. No Party shall assign the Agreement without written consent of the other.

m. Where figures are given, they shall be preferred to scaled dimensions.

n. The drawings and specifications are complementary. If Work is shown only on one but not on the other, Vendor shall perform the Work as though fully described on both. Vendor shall seek clarification from the City or the City's third-party Design Professional for any discrepancies.

o. In case of conflicts between the drawings and specifications, the specifications shall govern unless otherwise stated in the bidding documents. In any case of omissions or errors in figures, drawings, or specifications, Vendor shall immediately submit the matter to City and Design Professional for clarification. The City's clarifications are final and binding, which may include third-party Design Professional content.

p. DEBARMENT AND SUSPENSION: By execution of this agreement, Vendor certifies that to the best of its knowledge and belief that the Vendor and its principals:

    i. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

    ii. Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

    iii. Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and

    iv. (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

    v. Vendor understands that a false statement on certification regarding debarment and suspension may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in a fine. I further certify that I will obtain a similar certification for each subcontract awarded in excess of $50,000.

vi. Certifications for subcontracts or sub subcontracts executed under this agreement shall include all language in this section.

5. Definitions:

a. Unless otherwise specifically defined in this Agreement, any terms that have well-known technical or trade meanings shall be interpreted in accordance with their well-known meanings.

b. "Business Day" means all Days, except weekends and official federal or state holidays where the Project is located.

c. A "Change Order" is a written order signed by all Parties after execution of this Agreement, indicating changes in the scope of the Work, and Date of Substantial Completion or Date of Final Completion.

d. "Contract Time" is the period between the Date of Notice to Proceed and the total time authorized to achieve Final Completion.

e. "Cost of the Work" means the total costs and discounts charged to the City.

f. The "Vendor" is the person or entity identified in this contract and includes Vendor's Representative.

g. "Day" means a calendar day unless otherwise specified.

h. "Defective Work" is any portion of the Work that that does not conform with the requirements of the Contract Documents.

i. "Design Professional" means the licensed architect retained by the City and its subconsultants, to perform design services for the Project.

j. "Final Completion" occurs on the date when Vendor's obligations under this Agreement are complete and accepted by City and final payment becomes due and payable. This date shall be confirmed by a Certificate of Final Completion signed by all Parties.

k. "Hazardous Material" is any substance or material identified now or in the future as hazardous under the Law, or any other substance or material that may be considered hazardous or otherwise subject to statutory or regulatory requirement governing handling, disposal, or cleanup.

l. "Interim Directive" is a written order containing change to the Work directed by and in consultation with City and Design Professional after execution of this Agreement and before Substantial Completion. Interim Directives shall be consolidated and formalized in a change order to be signed by all parties.

m. "Law" means federal, state, or local laws, ordinances, codes, rules, and regulations applicable to the Work with which Vendor must comply that are enacted as of the Agreement date.

n. "Others" means City's other: (a) contractors/constructors, (b) suppliers, (c) subcontractors, sub subcontractors, or suppliers of (a) and (b); and others employed directly or indirectly by (a), (b), or (c) or any by any of them or for whose acts any of them may be liable.

o. "Overhead" means (a) payroll costs, burden, and other compensation of Vendor's employees in Vendor's principal and branch offices for work associated with this project.

p. "Owner" is the City of Fayetteville, Arkansas (City).

q. The "Owner's Program" is an initial description of Owner's objectives, including budgetary and time criteria, space requirements and relationships, flexibility and expandability requirements, special equipment and systems, site requirements, and any requirements for phased occupancy.

r. The "Parties" are collectively City and Vendor.

s. The "Project," is the building, facility, or other improvements for which Vendor is to perform Work under this Agreement. It may also include construction by Owner or Others.

t. The "Schedule of the Work" is the document prepared by Vendor that specifies the dates on which Vendor plans to begin and complete various parts of the Work, including dates on which information and approvals are required from City.

u. "Subcontractor" is a person or entity retained by Vendor as an independent contractor to provide the labor, materials, equipment, or services necessary to complete a specific portion of the Work. The term Subcontractor does not include Design Professional or Others.

v. "Substantial Completion" of the Work, or of a designated portion, occurs on the date when the Work is sufficiently complete in accordance with the Contract Documents so that City may occupy or utilize the Work, or a designated portion, for the use for which it is intended, without unapproved disruption. This date shall be confirmed by a certificate of Substantial Completion signed by all Parties.

w. A "Sub subcontractor" is a person or entity who has an agreement with a Subcontractor or another sub subcontractor or Supplier to perform a portion of the Subcontractor's Work or supply material or equipment.

x. A "Supplier" is a person or entity retained by Vendor to provide material or equipment for the Work.

y. "Terrorism" means a violent act, or an act that is dangerous to human life, property, or infrastructure, that is committed by an individual or individuals and that appears to be part of an effort to coerce a civilian population or to influence the policy or affect the conduct of any government by coercion. Terrorism includes, but is not limited to, any act certified by the United States government as an act of terrorism pursuant to the Terrorism Risk Insurance Act, as amended.

z. "Work" means the construction services necessary or incidental to fulfill Vendor's obligations for the Project in accordance with and reasonably inferable from the Contract Documents. The Work may refer to the whole Project or only a part of the Project if work is also being performed by Owner or Others.

aa. "Worksite" means the area of the Project where the Work is to be performed.

bb. "Bi-monthly basis" means every fourteen to sixteen calendar days.

6. Contract Document Review and Administration

a. Before commencing the Work, Vendor shall examine and compare the drawings and specifications with information furnished by the City and Design Professional that are considered Contract Documents, relevant field measurements made by Vendor, and any visible conditions at the Worksite affecting the Work.

b. Should Vendor discover any errors, omissions, or inconsistencies in the Contract Documents, Vendor shall promptly report them to the City and Design Professional. Following receipt of written notice from Vendor of defects, City shall promptly inform Vendor what action, if any, Vendor shall take with regard to the defect.

c. Nothing in this section shall relieve Vendor of responsibility for its own errors, inconsistencies, or omissions.

d. COST REPORTING: Vendor shall maintain complete, accurate, and current records that comply with generally accepted accounting principles and calculate the proper financial management under this Agreement. Vendor shall maintain a complete set of all books and records prepared or used by Vendor with respect to the Project. City shall be afforded access to all of Vendor's records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to this Agreement. Vendor shall preserve all such records for a period of three years after the final payment or longer where required by Law.

7. Warranty

a. Vendor warrants all materials and equipment furnished under the Construction Phase of this Agreement will be new unless otherwise specified, of good quality, in conformance with the Contract Documents, and free from defective workmanship and materials. At City or Design Professional request, Vendor shall furnish satisfactory evidence of the quality and type of materials and equipment furnished. Vendor further warrants all Work shall be free from material defects not intrinsic in the design or materials required in the Contract Documents. Vendor's warranty does **not include** remedies for defects or damages caused by normal wear and tear during normal usage beyond the warranty period, use for a purpose for which the Project was not intended, improper or insufficient maintenance, modifications performed by the City or others, or abuse. Vendor's warranty shall commence on the Date of Final Completion of the Project.

b. To the extent products, equipment, systems, or materials incorporated in the Work are specified and purchased by the City, they shall be covered exclusively by the warranty of the manufacturer. There are no warranties which extend beyond the description on the face of any such warranty. For such incorporated items, ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING THE WARRANTY OF MERCHANTABILITY AND THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED.

c. Vendor shall obtain from its Subcontractors and Suppliers any special or extended warranties required by the Contract Documents. Vendor's liability for such warranties shall be limited to the one-year correction period, as further defined in this Agreement. After that period Vendor shall provide full and comprehensive assistance to the City in enforcing the obligations of Subcontractors or Suppliers for such extended warranties.

d. Correction of Work:

i. If before Substantial Completion or within two-years after the date of Final Completion of the Work any Defective Work is found, City shall promptly notify Vendor in writing. Unless City provides written acceptance of the condition, Vendor shall promptly correct the Defective Work at its own cost and time and bear the expense of additional services required for correction of any Defective Work for which it is responsible. If within the two-year correction period City discovers and does not promptly notify Vendor or give Vendor an opportunity to test or correct Defective Work as reasonably requested by Vendor, City waives Vendor's obligation to correct that Defective Work as well as City's right to claim a breach of the warranty with respect to that Defective Work.

ii. If Vendor fails to correct Defective Work within a reasonable time after receipt of written notice from City before final payment, City may correct it in accordance with Owner's right to carry out the Work. In such case, an appropriate Change Order shall be issued deducting the cost of correcting the Defective Work from payments then or thereafter due Vendor. If payments then or thereafter due Vendor are not sufficient to cover such amounts, Vendor shall pay the difference to City.

iii. Vendor's obligations and liability, if any, with respect to any Defective Work discovered after the two-year correction period shall be determined by the Law. If, after the two-year correction period but before the applicable limitation period has expired, City discovers any Work which City considers Defective Work, City shall, unless the Defective Work requires emergency correction, promptly notify Vendor and allow Vendor an opportunity to correct the Work if Vendor elects to do so. If Vendor elects to correct the Work, it shall provide written notice of such intent within fourteen (14) Days of its receipt of notice from City and shall complete the correction of Work within a mutually agreed timeframe. If Vendor does not elect to correct the Work, City may have

the Work corrected by itself or Others, and, if City intends to seek recovery of those costs from Vendor, City shall promptly provide Vendor with an accounting of the actual correction costs.

iv. If Vendor's correction or removal of Defective Work causes damage to or destroys other completed or partially completed work or existing building, Vendor shall be responsible for the cost of correcting the destroyed or damaged property.

v. The two-year period for correction of Defective Work does not constitute a limitation period with respect to the enforcement of Vendor's other obligations under the Contract Documents.

vi. Before final payment, at City option and with Vendor's agreement, City may elect to accept Defective Work rather than require its removal and correction. In such cases the contract shall be equitably adjusted for any diminution in the value, as determined by City, of the Project caused by such Defective Work via formal written change order.

8. Safety of Persons and Property

a. SAFETY PROGRAMS: Vendor holds overall responsibility for safety programs. However, such obligation does not relieve Subcontractors of their safety responsibilities and to comply with the Law. Vendor shall prevent against injury, loss, or damage to persons or property by taking reasonable steps to protect: (a) its employees and other persons at the Worksite; (b) materials and equipment stored at onsite or offsite locations for use in performing the Work; and (c) property located at the Worksite and adjacent to work areas, whether or not the property is part of the Worksite.

b. VENDOR'S SAFETY REPRESENTATIVE: Vendor shall designate an individual at the Worksite in its employ as its safety representative. Unless otherwise identified by Vendor in writing to City, Vendor’s project superintendent shall serve as its safety representative. Vendor shall report promptly in writing all recordable accidents and injuries occurring at the Worksite. When Vendor is required to file an accident report with a public authority, Vendor shall furnish a copy of the report to City.

c. Vendor shall provide City with copies of all notices required of Vendor by the Law. Vendor's safety program shall comply with the requirements of governmental and quasi-governmental authorities having jurisdiction.

i. Damage or loss not insured under property insurance that may arise from the Work, to the extent caused by negligent or intentionally wrongful acts or omissions of Vendor, or anyone for whose acts Vendor may be liable, shall be promptly remedied by Vendor.

d. If City deems any part of the Work or Worksite unsafe, City, without assuming responsibility for Vendor's safety program, may require Vendor to stop performance of the Work, take corrective measures satisfactory to City. If Vendor does not adopt corrective measures, City may perform them and deduct their cost from the GMP. Vendor agrees to make no claim for damages, or an increase in the GMP, or for a change in the Dates of Substantial or Final Completion based on Vendor's compliance with City’s reasonable request.

9. Subcontracts:

a. BINDING OF SUBCONTRACTORS AND SUPPLIERS: Vendor agrees to bind every Subcontractor and Supplier and require every Subcontractor to so bind its subcontractors and significant supplier, to the Contract Documents as they apply to the Subcontractor's or Supplier's applicable provisions to that portion of the Work.

b. Vendor agrees not to subcontract Vendor at risk related services without prior written consent from the City.

10. Fees, Expenses, and Payments:

a. **SSI,** at its own cost and expense, shall furnish all labor, materials, supplies, machinery, equipment, tools, supervision, bonds, insurance, tax permits, and all other accessories and services necessary to complete items bid per **Bid 25-24** as stated in **SSI's** bid response, and in accordance with specifications attached hereto and made a part hereof under **Bid 25-24**, all included herein as if spelled out word for word.

b. This turn-key project providing labor and materials shall be provided to the City for a not to exceed fee of **$902,670.13** US Dollars.

c. The City of Fayetteville shall pay **SSI** for completion of the project based on a percentage of work completed. At no point shall payment exceed the percentage of work completed, as determined by the City.

d. Payments will be made after approval and acceptance of work and submission of invoice Payments will be made approximately 30 days after approval of invoice. The City of Fayetteville reserves the right to request receipts for materials purchased for the City of Fayetteville from suppliers, subcontractors, or other sources. The City of Fayetteville does not agree to any interest or penalty for "untimely" payments.

e. The City reserves the right to withhold five percent (5%) retainage from all payments until project is completed in full.

f. Not to exceed pricing shall include but not be limited to:

i. Labor wages directly employed by Vendor in performing of the Work.

ii. Salaries of Vendor's employees when stationed at the field office, in whatever capacity employed, employees engaged on the road expediting the production or transportation of material and equipment, and employees from the principal or branch office as mutually agreed by the Parties in writing.

iii. Cost of all employee benefits and taxes, including but not limited to, workers' compensation, unemployment compensation, social security, health, welfare, retirement, and other fringe benefits as required by law, labor agreements, or paid under Vendor's standard personnel policy, insofar as such costs are paid to employees of Vendor who are included in the Cost of the Work.

iv. Transportation, travel, hotel, and moving expenses of Vendor's personnel incurred in connection with the Work.

v. Cost of all materials, supplies, and equipment incorporated in the Work, including costs of inspection and testing if not provided by City, transportation, storage, and handling.

vi. Payments made by Vendor to Subcontractors for work performed under this Agreement.

vii. Cost, including transportation and maintenance of all materials, supplies, equipment, temporary facilities, and hand tools not owned by the workers that are used or consumed in the performance of the Work, less salvage value or residual value; and cost less salvage value on such items used, but not consumed that remain the property of Vendor.

viii. Rental charges of all necessary machinery and equipment, exclusive of hand tools owned by workers, used at the Worksite, whether rented from Vendor or others, including installation, repair, and replacement, dismantling, removal, maintenance, transportation, and delivery costs at competitive market rates.

ix. Cost of the premiums for all insurance and surety, performance or payment bonds which Vendor is required to procure or deems necessary and approved by City.

x. Sales, use, gross receipts, or other taxes, tariffs, or duties related to the Work for which Vendor is liable.

xi. Permits, taxes, fees, licenses, tests, royalties.

xii. Losses, expenses, or damages to the extent not compensated by insurance or otherwise, and the cost of corrective work during the Construction Phase and for the warranty period.

xiii. Costs associated with establishing, equipping, operating, maintaining, mobilizing and demobilizing the field office and site.

xiv. Water, power, and fuel costs necessary for the Work.

xv. Cost of removal of all nonhazardous substances, debris, and waste materials.

xvi. Costs incurred due to an emergency affecting the safety of persons or property.

xvii. Costs directly incurred in the performance of the Work or in connection with the Project, and not included in Vendor's Fee, which are reasonably inferable from the Contract Documents.

g. STORED MATERIALS AND EQUIPMENT: Unless otherwise provided in the contract documents, applications for payment may include materials and equipment not yet incorporated into the Work but delivered to and suitably stored onsite or offsite including applicable insurance, storage, and costs incurred transporting the materials to an offsite storage facility. Approval of payment applications for stored materials and equipment stored offsite shall be conditioned on a submission by Vendor of bills of sale and proof of required insurance, or such other documentation satisfactory to City to establish the proper valuation of the stored materials and equipment, City's title to such materials and equipment, and to otherwise protect City's interests therein, including transportation to the Worksite. Materials and equipment stored offsite shall be in a bonded and insured secure facility.

h. FINAL PAYMENT: Upon satisfactory completion of the work performed under this Agreement, as a condition before final payment under this Agreement, or as a termination settlement under this Agreement, **SSI** shall execute and deliver to CITY OF FAYETTEVILLE a release of all claims against CITY OF FAYETTEVILLE arising under or by virtue of this Agreement, except claims which are specifically exempted by **SSI** to be set forth therein.

i. Unless otherwise provided in this Agreement or by State law or otherwise expressly agreed to by the parties to this Agreement, final payment under this Agreement or settlement upon termination of this Agreement shall not constitute a waiver of CITY OF FAYETTEVILLE's claims against **SSI** or sureties under this Agreement.

11. **Project Bonding - Performance and payment bonding:** After execution of this contract by all parties, **SSI** shall provide 100% **separate** performance and payment bonds (inclusive of any approved contingency) from a bonding company, licensed to do business in the state of Arkansas. Bonds shall be provided within ten (10) calendar days after this contract has been executed by all parties.

    a. All bonds shall be listed with the U.S. Treasury Department listing of approved surety's (T-List) and shall be rated A+ minimum by A. M. Best.

12. **Time:**

    a. SUBSTANTIAL and FINAL COMPLETION: Date of Substantial Completion and the Date of Final Completion shall be established in the contract documents as a hard not-to-exceed date. If such dates are not established upon the execution of this Agreement, a Date of Substantial Completion and Date of Final Completion of the Work shall be established via Change Order.

b. Time is of the essence with regard to the obligations of the Contract Documents.

c. Unless instructed by City in writing, Vendor shall not knowingly commence the Work before the effective date of Vendor's required insurance and bonds and formal written and signed Purchase Order issued by the City of Fayetteville Purchasing Division.

d. Schedule of Work: Before submitting its first application for payment, Vendor shall submit to City and, if directed, Design Professional a Schedule of the Work showing the dates on which Vendor plans to begin and complete various parts of the Work, including dates on which information and approvals are required from City. Except as otherwise directed by City, Vendor shall comply with the approved Schedule of the Work or Vendor.

    i. City may determine the sequence in which the Work shall be performed, provided it does not unreasonably interfere with the approved project schedule. City may require Vendor to make reasonable changes in the sequence at any time during the performance of the Work in order to facilitate the performance of work by City or Others. If Vendor consequently incurs costs or is delayed, the Dates of Substantial or Final Completion, or both, Vendor may seek equitable adjustment.

e. NOTICE OF DELAY CLAIMS: If Vendor requests an equitable extension of the Contract Time or an equitable adjustment contract as a result of a delay described, Vendor shall give City written notice of the claim. If Vendor causes delay in the completion of the Work, City shall be entitled to recover its additional costs.

13. Substantial Completion:

a. The Work shall be Substantially Completed within 150 calendar days after the date when the Contract Times commence to run as provided in the GENERAL CONDITIONS.

b. Vendor shall notify City and, if directed, Design Professional when it considers Substantial Completion of the Work or a designated portion to have been achieved. City, with the assistance of its Design Professional, shall promptly conduct an inspection to determine whether the Work or designated portion can be occupied or used for its intended use by City without excessive interference in completing any remaining unfinished Work. If City determines the Work or designated portion has not reached Substantial Completion, City, with the assistance of its Design Professional, shall promptly compile a list of items to be completed or corrected so City may occupy or use the Work or designated portion for its intended use. Vendor shall promptly and accurately complete all items on the list.

c. When Substantial Completion of the Work or a designated portion is achieved, Vendor shall prepare a Certificate of Substantial Completion establishing the date of Substantial Completion and the respective responsibilities of each Party for interim items such as security, maintenance, utilities, insurance, and damage to the Work, and fixing the time for completion of all items on the list accompanying the Certificate. The Certificate of Substantial Completion shall be submitted by Vendor to City and, if directed, to Design Professional for written acceptance of responsibilities assigned in the Certificate of Substantial Completion.

d. Unless otherwise provided in the Certificate of Substantial Completion, warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or a designated portion.

e. Upon City's written acceptance of the Certificate of Substantial Completion, City shall pay to Vendor the remaining retainage held by City for the Work described in the Certificate of Substantial Completion less a sum equal to one hundred and fifty percent (150%) of the estimated cost of completing or correcting remaining items on that part of the Work, as agreed to by the Parties as necessary to achieve Final

Completion, including all close outs. Uncompleted items shall be completed by Vendor in a mutually agreed upon timeframe.

14. Final Completion:

a. The Work shall be completed and ready for final payment in accordance with the GENERAL CONDITIONS within 180 calendar days after the date when the Contract Times commence to run.

b. Upon notification from Vendor that the Work is complete and ready for final inspection and acceptance, City, with the assistance of its Design Professional shall promptly conduct an inspection to determine if the Work has been completed and is acceptable under the Contract Documents.

c. When the Work is complete, Vendor shall prepare for City's written acceptance a final application for payment stating that to the best of Vendor's knowledge, and based on City's inspections, the Work has reached Final Completion in accordance with the Contract Documents.

d. Final payment shall be made to Vendor within thirty (30) Days after Vendor has submitted an application for final payment, pending the application has been approved by the City, including submissions required, and a Certificate of Final Completion has been executed by all Parties.

e. Final payment shall be due on Vendor's submission of the following to the City:

   i. an affidavit declaring any indebtedness connected with the Work, to have been paid, satisfied, or to be paid with the proceeds of final payment, so as not to encumber City property;

   ii. as-built drawings, manuals, copies of warranties, and all other close-out documents required by the Contract Documents;

   iii. release of any liens, conditioned on final payment being received;

   iv. consent of any surety; and

   v. any outstanding known and unreported accidents or injuries experienced by Vendor or its Subcontractors at the Worksite.

f. If, after Substantial Completion of the Work, the Final Completion of a portion of the Work is materially delayed through no fault of Vendor. If approved by City, they shall pay the balance due for any portion of the Work fully completed and accepted. If the remaining contract balance for Work not fully completed and accepted is less than the retained amount before payment, Vendor shall submit to City and, if directed, Design Professional the written consent of any surety to payment of the balance due for portions of the Work that are fully completed and accepted. Such payment shall not constitute a waiver of claims, but otherwise shall be governed by this section.

g. ACCEPTANCE OF FINAL PAYMENT: Unless Vendor provides written identification of unsettled claims with an application for final payment, its acceptance of final payment constitutes a waiver of such claims.

h. SSI shall ensure that the City of Fayetteville receives lien waivers from all material suppliers, subcontractors and sub-subcontractors and **before** work begins on the project. The contractor shall give written notice to the material suppliers, subcontractors and sub-subcontractors providing work on the project that states the following:

   i. *'According to Arkansas law, it is understood that no liens can be filed against public property if valid and enforceable payment and performance bond is in place. Regarding this Project and Agreement, the valid and enforceable bonds are with (____name of surety____).'*

   ii. SSI shall have each subcontractor, sub-subcontractor and material supplier execute a written receipt evidencing acknowledgment of this statement prior to commencement of the work of the subcontractor or material supplier.

15. **Liquidated Damages:** CONTRACTOR accepts the provisions as to liquidated damages in the event of failure to complete the Work within the total completion time. Liquidated damages in the sum of **$200.00 USD** for each consecutive calendar day thereafter will be assessed.

16. **Notices**: Any notice required to be given under this Agreement to either party to the other shall be sufficient if addressed and mailed, certified mail, postage paid, delivery, fax or e-mail (receipt confirmed), or overnight courier.

17. **Jurisdiction**: Legal jurisdiction to resolve any disputes shall be Arkansas with Arkansas law applying to the case.

18. **Venue**: Venue for all legal disputes shall be Washington County, Arkansas.

19. **Freedom of Information Act:** City of Fayetteville contracts and documents prepared while performing contractual work are subject to the Arkansas Freedom of Information Act. If a Freedom of Information Act request is presented to the City of Fayetteville, the VENDOR shall do everything possible to provide the documents in a prompt and timely manner as prescribed in the Arkansas Freedom of Information Act (A.C.A. 25-19-101 et. Seq.). Only legally authorized photo coping costs pursuant to the FOIA may be assessed for this compliance.

20. **Changes in Scope or Price:** Changes, modifications, or amendments in scope, price or fees to this contract shall not be allowed without a prior formal contract amendment approved by the Mayor and the City Council **in advance** of the change in scope, cost or fees.

21. **Insurance:**

    a. Before starting the Work and as a condition precedent to payment, Vendor shall procure and maintain in force Workers' Compensation Insurance, Employers' Liability Insurance, Business Automobile Liability Insurance, and Commercial General Liability Insurance ("CGL"). The CGL policy shall include coverage for liability arising from premises, operations, independent contractors, products-completed operations, personal injury and advertising injury, contractual liability, pollution coverage, and broad form property damage. Vendor shall maintain completed operations liability insurance for one year after Substantial Completion, or as required by the Contract Documents, whichever is longer.

    b. Employers' Liability, Business Automobile Liability, and CGL coverages required may be provided by a single policy for the full limits required or by a combination of underlying policies with the balance provided by excess or umbrella liability policies.

    c. Vendor shall maintain in effect all insurance coverage required with insurance companies lawfully authorized to do business in the jurisdiction in which the Project is located. If Vendor fails to obtain or maintain any insurance coverage required under this Agreement, City may purchase such coverage and charge the expense to Vendor or terminate this Agreement.

    d. To the extent commercially available to Vendor from its current insurance company, insurance policies required shall contain a provision that the insurance company or its designee shall give City written notice transmitted in paper and electronic format: (a) 30 Days before coverage is nonrenewed by the insurance company and (b) within 10 Business Days after cancelation of coverage by the insurance company. Before commencing the Work and upon renewal or replacement of the insurance policies, Vendor shall furnish City with certificates of insurance until one year after Substantial Completion or longer if required by the Contract Documents. In addition, if any insurance policy required is not to be immediately replaced without lapse in coverage when it expires, exhausts its limits, or is to be cancelled, Vendor shall give City prompt written notice upon actual or constructive knowledge of such condition.

    e. Certificates of Insurance shall list the City as Additional Insured Parties.

f. PROPERTY INSURANCE:

i. At no time shall any policy be covered by self-insurance or in a self-insured format. All policies shall be covered by an approved commercial insurance professional properly licensed to do business in Arkansas.

ii. Unless otherwise directed in writing by City, before starting the Work, SSI shall obtain and maintain a Builder's Risk Policy upon the entire Project for the full cost of replacement at the time of loss, including existing structures. This insurance shall also (a) name Vendor, Subcontractors, Sub subcontractors, and Design Professional as named insureds; (b) be written in such form to cover all risks of physical loss except those specifically excluded by the policy; and (c) insure at least against and not exclude:

1. the perils of fire, lightning, explosion, windstorm, hail, smoke, aircraft (except aircraft, including helicopter, operated by or on behalf of Vendor) and vehicles, riot and civil commotion, theft, vandalism, malicious mischief, debris removal, flood, earthquake, earth movement, water damage, wind damage, testing if applicable, collapse, however caused;

2. damage resulting from defective design, workmanship, or material;

3. coverage extension for damage to existing buildings, plant, or other structures at the Worksite, when the Project is contained within or attached to such existing buildings, plant or structures. Coverage shall be to the extent loss or damage arises out of Constructor's activities or operations at the Project.

4. equipment breakdown, including mechanical breakdown, electrical injury to electrical devices, explosion of steam equipment, and damage to steam equipment caused by a condition within the equipment;

5. testing coverage for running newly installed machinery and equipment at or beyond the specified limits of their capacity to determine whether they are fit for their intended use; and

6. physical loss resulting from Terrorism.

iii. The Party that is the primary cause of a Builder's Risk Policy claim shall be responsible for any deductible amounts or coinsurance payments. If no Party is the primary cause of a claim, then the Party obtaining and maintaining the Builder's Risk Policy shall be responsible for the deductible amounts or coinsurance payments. This policy shall provide for a waiver of subrogation. This insurance shall remain in effect until final payment has been made or until no person or entity other than City has an insurable interest in the property to be covered by this insurance, whichever is sooner. Partial occupancy or use of the Work shall not commence until City has secured the consent of the insurance company or companies providing the coverage required in this subsection. Before commencing the Work, City shall provide a copy of the property policy or policies obtained.

iv. If City elects to purchase the property insurance required by this Agreement, including all of the coverages and deductibles for the same durations specified, City shall give written notice to Vendor before the Work is commenced and provide a copy of the property policy or policies obtained in compliance with this agreement. City may then provide insurance to protect its interests and the interests of the Constructor, Subcontractors, Suppliers, and Subsubcontractors. The cost of this insurance shall be paid by City in a Change Order. If City gives written notice of its intent to purchase property insurance required by this Agreement and fails to purchase or maintain such insurance, City shall be responsible for costs reasonably attributed to such failure.

v. The Parties each waive all rights against each other and their respective employees, agents, contractors, subcontractors, suppliers, sub subcontractors, and design professionals for damages caused by risks covered by the property insurance, except such rights as they may have to the proceeds of the insurance.

1. To the extent of the limits of Vendor's Commercial General Liability Insurance, Vendor shall indemnify and hold harmless City against any and all liability, claims, demands, damages, losses, and expenses, including attorneys' fees, in connection with or arising out of any damage or alleged damage to any of City's existing adjacent property, including personal property, that may arise from the performance of the Work, to the extent caused by the negligent or intentionally wrongful acts or omissions of Vendor, Subcontractor, Supplier, Sub subcontractor, or anyone employed directly or indirectly by any of them or by anyone for whose acts any of them may be liable.

g. RISK OF LOSS: Except to the extent a loss is covered by applicable insurance, risk of loss from damage to the Work shall be upon the Party obtaining and maintaining the Builder's Risk until the Date of Final Completion.

h. ADDITIONAL GENERAL LIABILITY COVERAGE: City shall require Vendor to purchase and maintain additional liability coverage. Vendor shall provide:

i. Additional Insured. City shall be named as an additional insured on Vendor's Commercial General Liability (CGL) specified, for on-going operations and completed operations, excess/umbrella liability, commercial automobile liability, and any required pollution liability, but only with respect to liability for bodily injury, property damage, or personal and advertising injury to the extent caused by the negligent acts or omissions of Vendor, or those acting on Vendor's behalf, in the performance of Vendor's work for Owner at the Worksite. The insurance of the Vendor and its Subcontractors (both primary and excess) shall be primary to any insurance available to the Additional Insureds. Any insurance available to the Additional Insureds shall be excess and non-contributory.

ii. OCP. Vendor shall provide an Owners' and Contractors' Protective Liability Insurance ("OCP") policy with limits equal to the limits on CGL specified, or limits as otherwise required by Owner.

i. Any documented additional cost in the form of a surcharge associated with procuring the additional liability coverage in accordance with this subsection shall be paid by VENDOR. Before commencing the Work, Vendor shall provide either a copy of the OCP policy, or a certificate and endorsement evidencing that City has been named as an additional insured, as applicable.

i. ROYALTIES, PATENTS, AND COPYRIGHTS: Vendor shall pay all royalties and license fees which may be due on the inclusion of any patented or copyrighted materials, methods, or systems selected by Vendor and incorporated in the Work. Vendor shall defend, indemnify, and hold City harmless from all suits or claims for infringement of any patent rights or copyrights arising out of such selection.

j. PROFESSIONAL LIABILITY INSURANCE: To the extent Vendor is required to procure design services, Vendor shall require its design professionals to obtain a commercial professional liability insurance for claims arising from the negligent performance of professional services under this Agreement, with a company reasonably satisfactory to City, including coverage for all professional liability caused by any consultants to Vendor's design professional, written for not less than one million US dollars ($1,000,000) per claim and in the aggregate. Vendor's design professional shall pay the deductible. The Professional Liability Insurance shall contain a retroactive date providing prior acts coverage sufficient to cover all Services performed by the Constructor's design professional for this Project. Coverage shall be continued in effect for the entire warranty period.

22. **Professional Responsibility:** SSI will exercise reasonable skill, care, and diligence in the performance of services and will carry out its responsibilities in accordance with customarily accepted professional practices. CITY OF FAYETTEVILLE will promptly report to SSI any defects or suspected defects in services of which CITY OF FAYETTEVILLE becomes aware, so SSI can take measures to minimize the consequences of such a defect. CITY OF FAYETTEVILLE retains all remedies to recover for its damages caused by any negligence of SSI.

23. Responsibility of the City of Fayetteville

    a. CITY OF FAYETTEVILLE shall, within a reasonable time, so as not to delay the services of SSI:

        i. Provide full information as to the requirements for the Project.

        ii. Assist SSI by placing at SSI's disposal all available information pertinent to the assignment including previous reports and any other data relative thereto.

        iii. Assist SSI in obtaining access to property reasonably necessary for SSI to perform its services.

        iv. Examine all studies, reports, sketches, cost opinions, proposals, and other documents presented by SSI and render in writing decisions pertaining thereto.

        v. Review all documents and provide written comments to SSI in a timely manner.

        vi. The City of Fayetteville Park Planning Superintendent is the project representative with respect to the services to be performed under this Agreement. The Park Planning Superintendent Representative shall have complete authority to transmit instructions, receive information, interpret and define policies and decisions with respect to materials, equipment, elements and systems to be used in the Project, and other matters pertinent to the services covered by this Agreement.

24. **Cost Opinions and Projections:** Cost opinions and projections prepared by the SSI relating to construction costs and schedules, operation and maintenance costs, equipment characteristics and performance, cost estimating, and operating results are based on SSI experience, qualifications, and judgment as a SSI professional.

25. **Period of Service:** This Agreement will become effective upon the first written notice by CITY OF FAYETTEVILLE authorizing services hereunder.

    a. The provisions of this Agreement have been agreed to in anticipation of the orderly progress of the Project through completion of the services stated in the Agreement. SSI shall proceed with providing the authorized services immediately upon receipt of written authorization from CITY OF FAYETTEVILLE. Said authorization shall include the scope of the services authorized and the time in which the services are to be completed.

26. Termination:

    a. This Agreement may be terminated in whole or in part in writing by either party in the event of substantial failure by the other party to fulfill its obligations under this Agreement through no fault of the terminating party, provided that no termination may be effected unless the other party is given:

        i. Not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate,

        ii. An opportunity for consultation with the terminating party prior to termination.

    b. This Agreement may be terminated in whole or in part in writing by CITY OF FAYETTEVILLE for its convenience, provided that SSI is given:

        i. Not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate,

ii. An opportunity for consultation with the terminating party prior to termination.

c. If termination for default is affected by CITY OF FAYETTEVILLE, an equitable adjustment in the price provided for in this Agreement shall be made, but

i. No amount shall be allowed for anticipated profit on unperformed services or other work,

ii. Any payment due to **SSI** at the time of termination may be adjusted to cover any additional costs to CITY OF FAYETTEVILLE because of **SSI's** default.

d. If termination for default is affected by **SSI**, or if termination for convenience is affected by CITY OF FAYETTEVILLE, the equitable adjustment shall include a reasonable profit for services or other work performed. The equitable adjustment for any termination shall provide for payment to **SSI** for services rendered and expenses incurred prior to the termination, in addition to termination settlement costs reasonably incurred by **SSI** relating to commitments which had become firm prior to the termination.

e. Upon receipt of a termination action under Paragraphs above, **SSI** shall:

i. Promptly discontinue all affected work (unless the notice directs otherwise),

ii. Deliver or otherwise make available to CITY OF FAYETTEVILLE all data, drawings, specifications, reports, estimates, summaries and such other information and materials as may have been accumulated by **SSI** in performing this Agreement, whether completed or in process.

f. Upon termination under sections above CITY OF FAYETTEVILLE may take over the work and may award another party an agreement to complete the work under this Agreement.

g. If, after termination for failure of **SSI** to fulfill contractual obligations, it is determined that **SSI** had not failed to fulfill contractual obligations, the termination shall be deemed to have been for the convenience of CITY OF FAYETTEVILLE. In such event, adjustments of the agreement price shall be made as provided in this agreement.

27. Delays

a. In the event the services of **SSI** are suspended or delayed by CITY OF FAYETTEVILLE, or by other events beyond **SSI's** reasonable control, **SSI** shall be entitled to additional compensation and time for reasonable documented costs incurred by **SSI** in temporarily closing down or delaying the Project.

b. In the event the services are suspended or delayed by **SSI**, CITY shall be entitled to compensation and time for reasonable costs incurred in temporarily closing down or delaying the Project.

28. Rights and Benefits: **SSI's** services shall be performed solely for the benefit of CITY OF FAYETTEVILLE and not for the benefit of any other persons or entities.

29. Dispute Resolution

a. Scope of Paragraph: The procedures of this Paragraph shall apply to any and all disputes between CITY OF FAYETTEVILLE and **SSI** which arise from, or in any way are related to, this Agreement, including, but not limited to the interpretation of this Agreement, the enforcement of its terms, any acts, errors, or omissions of CITY OF FAYETTEVILLE or **SSI** in the performance of this Agreement, and disputes concerning payment.

b. Exhaustion of Remedies Required: No action may be filed unless the parties first negotiate. If timely Notice is given as described in this agreement, but an action is initiated prior to exhaustion of these procedures, such action shall be stayed, upon application by either party to a court of proper jurisdiction, until the procedures in this agreement have been complied with.

c. Notice of Dispute

i. For disputes arising prior to the making of final payment promptly after the occurrence of any incident, action, or failure to act upon which a claim is based, the party seeking relief shall serve the other party with a written Notice.

ii. For disputes arising within one year after the making of final payment, CITY OF FAYETTEVILLE shall give **SSI** written Notice at the address listed in this agreement within thirty (30) calendar days after occurrence of any incident, accident, or first observance of defect or damage. In both instances, the Notice shall specify the nature and amount of relief sought, the reason relief should be granted, and the appropriate portions of this Agreement that authorize the relief requested.

iii. Negotiation: Within seven (7) calendar days of receipt of the Notice, the Project Managers for CITY OF FAYETTEVILLE and **SSI** shall confer in an effort to resolve the dispute. If the dispute cannot be resolved at that level, then, upon written request of either side, the matter shall be referred to the President of **SSI**, and the Mayor of CITY OF FAYETTEVILLE or his or her designee. These officers shall meet at the Project Site or such other location as is agreed upon within 30 calendar days of the written request to resolve the dispute.

30. **Sufficient Funds**: The CITY represents to have sufficient funds or the means of obtaining funds to remit payment to **SSI** for services rendered by **SSI**. All parties agree if funding should become insufficient to complete the project, VENDOR shall be notified in a timely manner.

31. **Indemnification:** The CITY requires the **SSI** to indemnify, defend and hold harmless the CITY OF FAYETTEVILLE for any loss caused by negligence and from and against any and all loss where loss is caused or incurred or alleged to be caused or incurred in whole or in part as a result of the negligence or other actionable fault of the **SSI**, or their employees, agents, Subcontractors, sub consultant and Suppliers of the **SSI**.

32. **Publications:** Recognizing the importance of professional services on the part of **SSI's** employees and the importance of **SSI's** public relations, **SSI** may prepare publications, such as technical papers, articles for periodicals, promotional materials, and press releases, in electronic or other format, pertaining to **SSI's** services for the Project. Such publications will be provided to CITY OF FAYETTEVILLE in draft form for CITY OF FAYETTEVILLE's advance review. CITY OF FAYETTEVILLE shall review such drafts promptly and provide CITY OF FAYETTEVILLE's comments to **SSI**, CITY OF FAYETTEVILLE may require deletion of proprietary data or confidential information from such publications, but otherwise CITY OF FAYETTEVILLE will not unreasonably withhold approval. Approved materials may be used in a variety of situations and do not require additional review or approval for each use. The cost of **SSI's** activities pertaining to any such publication shall be for **SSI's** account.

33. **Ownership of Documents:**

a. All documents provided by CITY OF FAYETTEVILLE including original drawings, CAD drawings, estimates, field notes, and project data are and remain the property of CITY OF FAYETTEVILLE. **SSI** may retain reproduced copies of drawings and copies of other documents.

b. Engineering and architectural documents, computer models, drawings, specifications and other hard copy or electronic media prepared by **SSI** as part of the Services shall become the property of CITY OF FAYETTEVILLE when **SSI** has been compensated for all Services rendered, provided, however, that Vendor shall have the unrestricted right to their use. **SSI** shall, however, retain its rights in its standard drawings details, specifications, databases, computer software, and other proprietary property. Rights to intellectual property developed, utilized, or modified in the performance of the Services shall remain the property of **SSI**.

c. Any files delivered in electronic medium may not work on systems and software different than those with which they were originally produced. **SSI** makes no warranty as to the compatibility of these files with any other system or software. Because of the potential degradation of electronic medium over time, in the event of a conflict between the sealed original drawings/hard copies and the electronic files, the sealed drawings/hard copies will govern.

34. Additional Responsibilities of SSI:

a. Review, approval, or acceptance of design drawings, specifications, reports and other services furnished hereunder by CITY shall not in any way relieve **SSI** of responsibility for the technical adequacy of the work. Review, approval or acceptance of, or payment for any of the services by CITY shall not be construed as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement.

b. **SSI** shall be and shall remain liable, in accordance with applicable law, for all damages to CITY OF FAYETTEVILLE caused by **SSI's** negligent performance, except beyond the **SSI's** normal standard of care, of any of the services furnished under this Agreement, and except for errors, omissions or other deficiencies to the extent attributable to CITY OF FAYETTEVILLE or CITY OF FAYETTEVILLE-furnished data.

c. **SSI's** obligations under this clause are in addition to Vendor's other express or implied assurances under this Agreement or State law and in no way diminish any other rights that CITY OF FAYETTEVILLE may have against **SSI** for faulty materials, equipment, or work.

35. Audit and Access to Records:

a. **SSI** shall maintain books, records, documents and other evidence directly pertinent to performance on work under this Agreement in accordance with generally accepted accounting principles and practices consistently applied in effect on the date of execution of this Agreement.

b. **SSI** shall also maintain the financial information and data used by **SSI** in the preparation of support of the cost submission required for any negotiated agreement or change order and send to CITY OF FAYETTEVILLE a copy of the cost summary submitted. CITY OF FAYETTEVILLE, the State or any of their authorized representatives shall have access to all such books, records, documents and other evidence for the purpose of inspection, audit and copying during normal business hours. **SSI** will provide proper facilities for such access and inspection.

c. Records shall be maintained and made available during performance on assisted work under this Agreement and until three years from the date of final payment for the project. In addition, those records which relate to any controversy arising out of such performance, or to costs or items to which an audit exception has been taken, shall be maintained and made available until three years after the date of resolution of such appeal, litigation, claim or exception.

d. This right of access clause (with respect to financial records) applies to:

   i. Negotiated prime agreements

   ii. Negotiated change orders or agreement amendments affecting the price of any formally advertised, competitively awarded, fixed price agreement

   iii. Agreements or purchase orders under any agreement other than a formally advertised, competitively awarded, fixed price agreement. However, this right of access does not apply to a prime agreement, lower tier sub agreement or purchase order awarded after effective price competition, except:

      1. With respect to record pertaining directly to sub agreement performance, excluding any financial records of **SSI**;

2. If there is any indication that fraud, collusion, gross abuse or corrupt practices may be involved;

3. If the sub agreement is terminated for default or for convenience.

36. **Covenant Against Contingent Fees: SSI** warrants that no person or selling agency has been employed or retained to solicit or secure this Agreement upon an agreement of understanding for a commission, percentage, brokerage or continent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by **SSI** for the purpose of securing business. For breach or violation of this warranty, CITY OF FAYETTEVILLE shall have the right to annul this Agreement without liability or at its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

37. **Gratuities:**

a. If CITY OF FAYETTEVILLE finds after a notice and hearing that **SSI** or any of **SSI** agents or representatives, offered or gave gratuities (in the form of entertainment, gifts or otherwise) to any official, employee or agent of CITY OF FAYETTEVILLE or related third party contractor associated with this project, in an attempt to secure an agreement or favorable treatment in awarding, amending or making any determinations related to the performance of this Agreement, CITY OF FAYETTEVILLE may, by written notice to **SSI** terminate this Agreement. CITY OF FAYETTEVILLE may also pursue other rights and remedies that the law or this Agreement provides. However, the existence of the facts on which CITY OF FAYETTEVILLE bases such finding shall be in issue and may be reviewed in proceedings under the Remedies clause of this Agreement.

b. The CITY may pursue the same remedies against **SSI** as it could pursue in the event of a breach of the Agreement by **SSI**. As a penalty, in addition to any other damages to which it may be entitled by law, CITY OF FAYETTEVILLE may pursue exemplary damages in an amount, as determined by CITY, which shall be not less than three nor more than ten times the costs **SSI** incurs in providing any such gratuities to any such officer or employee.

IN WITNESS WHEREOF, **CITY OF FAYETTEVILLE, ARKANSAS** by and through its Mayor, and **SSI INCORPORATED OF NORTHWEST ARKANSAS,** by its authorized officer have made and executed this Agreement as of the day and year first above written.

CITY OF FAYETTEVILLE, ARKANSAS

By:_____
Molly Rawn, Mayor

ATTEST:

By:_____
Kara Paxton, City Clerk - Treasurer

Date Signed: _____

SSI INCORPORATED OF NORTHWEST ARKANSAS

By:_____
Trent Harina, President

Date Signed: _____

CITY OF FAYETTEVILLE ARKANSAS

BID TABULATION

Bid 25-24, Construction - Bryce Davis Park Improvements, Phase 1

DEADLINE: Wednesday, February 26, 2025 at 3:00 PM

Certification of Funds: $850,000.00 *($1,062,500.00 total allowed)*

				SSI of Northwest Arkansas		EWI, Inc.		Milestone Construction Company, LLC		Byrne & Jones Construction		Goodwin & Goodwin, Inc.	
			Total	$902,670.13		$1,010,207.69		$1,030,604.28		$1,607,311.41		$1,641,735.00	
			Using Deduct	$781,390.09		$838,742.69		$826,546.65		$1,411,356.84		$1,463,235.00	
Line #	Description	QTY	UOM	Unit	Extended	Unit	Extended	Unit	Extended	Unit	Extended	Unit	Extended
1	Mobilization (Shall not exceed 5% of Total Bid. Do NOT include bonds & insurance or trench & excavation safety in this total)	1	LS	$44,592.17	$44,592.17	$15,700.00	$15,700.00	$10,554.00	$10,554.00	$76,875.00	$76,875.00	$68,400.00	$68,400.00
2	Trench & Excavation Safety	1	LS	$250.00	$250.00	$500.00	$500.00	$5.00	$5.00	$500.00	$500.00	$5,000.00	$5,000.00
3	Insurance and Bonding	1	LS	$19,807.92	$19,807.92	$28,380.00	$28,380.00	$9,377.00	$9,377.00	$16,078.52	$16,078.52	$136,000.00	$136,000.00
4	Miscellaneous (up to 5% of Total Bid)	1	LS	$40,000.00	$40,000.00	$25,000.00	$25,000.00	$6,412.00	$6,412.00	$78,453.00	$78,453.00	$68,400.00	$68,400.00
5	R&D existing concrete (Misc)	313	SY	$10.00	$3,130.00	$49.85	$15,603.05	$21.51	$6,732.63	$24.00	$7,512.00	$35.00	$10,955.00
6	R&D existing basketball court striping	850	LF	$7.50	$6,375.00	$5.90	$5,015.00	$3.20	$2,720.00	$5.50	$4,675.00	$10.00	$8,500.00
7	R&D existing wooden wetland pavilion	1	LS	$4,200.00	$4,200.00	$4,805.00	$4,805.00	$4,569.00	$4,569.00	$19,500.00	$19,500.00	$15,000.00	$15,000.00
8	R&D sections of existing dog park split rail/chain link fence, with concrete mow strip	295	LF	$5.00	$1,475.00	$6.25	$1,843.75	$5.21	$1,536.95	$45.00	$13,275.00	$35.00	$10,325.00
9	R&D existing split rail/chain link fence	120	LF	$5.00	$600.00	$5.50	$660.00	$4.80	$576.00	$46.50	$5,580.00	$10.00	$1,200.00
10	R&D existing split rail fence (along Dartmouth)	405	LF	$5.00	$2,025.00	$5.50	$2,227.50	$3.71	$1,502.55	$15.00	$6,075.00	$15.00	$6,075.00
11	R&D existing attenuated impact surface	1	LS	$15,000.00	$15,000.00	$5,816.00	$5,816.00	$3,200.00	$3,200.00	$4,000.00	$4,000.00	$4,500.00	$4,500.00
12	16x20 Pavilion	1	EA	$46,000.00	$46,000.00	$39,535.00	$39,535.00	$37,005.00	$37,005.00	$51,248.56	$51,248.56	$48,000.00	$48,000.00
13	12x12 Pavilion (Installation Only) (Owner providing partial materials)	2	EA	$9,000.00	$18,000.00	$9,200.00	$18,400.00	$7,040.00	$14,080.00	$11,196.32	$22,392.64	$15,000.00	$30,000.00
14	Split rail/chain link fence, with concrete mow strip (Dog Park Separation)	310	LF	$35.00	$10,850.00	$35.55	$11,020.50	$37.24	$11,544.40	$150.00	$46,500.00	$65.00	$20,150.00
15	Split rail/chain link fence	120	LF	$30.00	$3,600.00	$45.70	$5,484.00	$37.15	$4,458.00	$55.00	$6,600.00	$45.00	$5,400.00
16	Split rail wooden fence (Owner providing partial materials) (Along Dartmouth)	470	LF	$40.00	$18,800.00	$43.33	$20,365.10	$61.20	$28,764.00	$48.00	$22,560.00	$65.00	$30,550.00
17	Standard duty concrete	1243	SY	$100.00	$124,300.00	$74.00	$91,982.00	$92.16	$114,554.88	$166.12	$206,487.16	$225.00	$279,675.00
18	Concrete doweling	1	LS	$1,000.00	$1,000.00	$956.00	$956.00	$1,096.00	$1,096.00	$4,050.00	$4,050.00	$7,500.00	$7,500.00
20	Concrete seating walls	2	EA	$2,500.00	$5,000.00	$797.00	$1,594.00	$764.16	$1,528.32	$4,567.00	$9,134.00	$6,000.00	$12,000.00
21	Concrete footers for wetland pavilion	18	EA	$600.00	$10,800.00	$387.00	$6,966.00	$303.36	$5,460.48	$1,160.59	$20,890.62	$1,200.00	$21,600.00
22	Swing Set (LSI), Large	1	EA	$25,000.00	$25,000.00	$24,485.00	$24,485.00	$26,233.00	$26,233.00	$32,063.17	$32,063.17	$31,000.00	$31,000.00
23	Swing Set (LSI), Small	1	EA	$10,000.00	$10,000.00	$6,218.00	$6,218.00	$4,834.00	$4,834.00	$5,759.32	$5,759.32	$8,500.00	$8,500.00
24	Gravel- #57 cleaned stone	55	CY	$70.00	$3,850.00	$95.00	$5,225.00	$89.66	$4,931.30	$100.00	$5,500.00	$85.00	$4,675.00
25	Filter fabric	2	EA	$500.00	$1,000.00	$850.00	$1,700.00	$1,824.00	$3,648.00	$1,467.81	$2,935.62	$1,000.00	$2,000.00
26	Attenuated impact surface	1910	SF	$12.00	$22,920.00	$17.50	$33,425.00	$20.89	$39,899.90	$18.00	$34,380.00	$8.00	$15,280.00
27	Benches (Installation Only) (Owner providing partial materials)	11	EA	$1,500.00	$16,500.00	$425.00	$4,675.00	$441.60	$4,857.60	$471.06	$5,181.66	$800.00	$8,800.00
28	Playground Shade Sails	1	LS	$135,000.00	$135,000.00	$135,900.00	$135,900.00	$140,062.00	$140,062.00	$179,613.00	$179,613.00	$159,000.00	$159,000.00
30	Picnic Tables	4	EA	$7,748.75	$30,995.00	$6,520.00	$26,080.00	$7,065.60	$28,262.40	$7,537.03	$30,148.12	$7,000.00	$28,000.00
31	Striping along Dartmouth Ave. (4", yellow reflective paint)	407	LF	$10.00	$4,070.00	$13.97	$5,685.79	$9.75	$3,968.25	$5.50	$2,238.50	$10.00	$4,070.00
32	Basketball Court Striping (2", white paint)	850	LF	$6.00	$5,100.00	$15.87	$13,489.50	$4.99	$4,241.50	$12.24	$10,404.00	$15.00	$12,750.00
33	Dog Wash (fixture)	1	EA	$5,500.00	$5,500.00	$3,849.00	$3,849.00	$8,928.00	$8,928.00	$7,500.00	$7,500.00	$7,000.00	$7,000.00
34	Install water pipe (1-1/2")	188	LF	$10.00	$1,880.00	$55.85	$10,499.80	$25.60	$4,812.80	$110.00	$20,680.00	$45.00	$8,460.00
35	Water connection to 1-1/2" water line	1	EA	$3,500.00	$3,500.00	$2,500.00	$2,500.00	$2,304.00	$2,304.00	$2,730.80	$2,730.80	$4,500.00	$4,500.00
36	Decorative fire hydrant - relocate	1	EA	$1,200.00	$1,200.00	$7,850.00	$7,850.00	$4,288.00	$4,288.00	$4,574.11	$4,574.11	$1,000.00	$1,000.00
37	6" perforated drain pipe	1334	LF	$15.00	$20,010.00	$32.00	$42,688.00	$60.29	$80,426.86	$64.31	$85,789.54	$75.00	$100,050.00
38	Grate inlet	5	EA	$400.00	$2,000.00	$5,500.00	$27,500.00	$1,932.80	$9,664.00	$2,100.00	$10,500.00	$2,000.00	$10,000.00
39	6" PVC drain pipe	1081	LF	$20.00	$21,620.00	$26.00	$28,106.00	$44.29	$47,877.49	$48.00	$51,888.00	$65.00	$70,265.00
40	Flared-End Section	6	EA	$420.00	$2,520.00	$225.00	$1,350.00	$140.80	$844.80	$175.00	$1,050.00	$450.00	$2,700.00
41	Cleanouts	5	EA	$200.00	$1,000.00	$185.00	$925.00	$934.40	$4,672.00	$1,000.00	$5,000.00	$400.00	$2,000.00
42	Construct Wetland Pavilion (Owner providing partial materials)	1	LS	$16,900.00	$16,900.00	$14,425.00	$14,425.00	$35,444.00	$35,444.00	$167,541.00	$167,541.00	$60,000.00	$60,000.00
43	Excavation (Cut)	71	CY	$30.00	$2,130.00	$22.00	$1,562.00	$74.62	$5,298.02	$83.00	$5,893.00	$125.00	$8,875.00
44	Select Fill (Fill)	252	CY	$35.00	$8,820.00	$25.00	$6,300.00	$64.96	$16,369.92	$72.00	$18,144.00	$45.00	$11,340.00
45	Erosion Control	1	LS	$8,000.00	$8,000.00	$20,250.00	$20,250.00	$22,330.00	$22,330.00	$24,000.00	$24,000.00	$30,000.00	$30,000.00
46	Tree Protection	1100	LS	$10.00	$11,000.00	$3.20	$3,520.00	$4.80	$5,280.00	$6.50	$7,150.00	$15.00	$16,500.00
47	Seeding all disturbed areas	4490	SY	$5.00	$22,450.00	$16.85	$75,656.50	$2.56	$11,494.40	$7.85	$35,246.50	$8.00	$35,920.00
48	Turf Grass (Xerigrass or approved equal)	1740	SF	$13.00	$22,620.00	$18.98	$33,025.20	$22.93	$39,898.20	$19.00	$33,060.00	$18.00	$31,320.00
49	Trail Lighting (Owner providing partial materials)	21	EA	$5,775.24	$121,280.04	$8,165.00	$171,465.00	$9,717.03	$204,057.63	$9,331.17	$195,954.57	$8,500.00	$178,500.00
	DEDUCTIVE ALTERNATE 1				$121,280.04		* $171,465.00		$204,057.63		$195,954.57		$178,500.00

* NOTICE: Bid award is contingent upon supplier meeting minimum specifications and formal authorization by City Officials.

Amanda Bellfess 2/27/25

Amanda Bellfess, Procurement Director

K Fitch 2/27/25

Kenny Fitch, Sr. Procurement Agent

City of Fayetteville, Arkansas
Purchasing Division – Room 306
113 W. Mountain
Fayetteville, AR 72701
Phone: 479.575.8258
TDD (Telecommunication Device for the Deaf): 479.521.1316

INVITATION TO BID

Bid 25-24, Construction – Bryce Davis Park Improvements, Phase 1

DEADLINE: Tuesday, February 18, 2025 before 2:00 PM, Local Time
PRE-BID MEETING: Thursday, January 30, 2025 at 10:00 AM on-site at Bryce Davis Park, 1595 Dartmouth Ave., Fayetteville, AR 72704
PROCUREMENT DIRECTOR: Amanda Beilfuss, abeilfuss@fayetteville-ar.gov
DATE OF ISSUE & ADVERTISEMENT: 01/19/2025 & 01/26/2025

No late bids shall be accepted. Bids shall be submitted in one of the following methods: (1) through the City's third-party electronic bidding platform or (2) delivering in person via sealed envelope to the City of Fayetteville Purchasing Division. Submitting through the City's electronic bidding platform is strongly encouraged. All bids shall be submitted in accordance with the attached City of Fayetteville specifications and bid documents attached hereto. Each bidder is required to fill in every blank and shall supply all information requested; failure to do so may be used as basis of rejection.

NOTICE TO ALL BIDDERS:

All interested parties can obtain files for this project by going to http://fayetteville-ar.gov/bids. Bid documents shall be distributed electronically from the City of Fayetteville Purchasing Division only.

BID PACKAGE INCLUDES THE FOLLOWING FILES WHICH SHALL BE LISTED UNDER "ATTACHMENTS":

FILE #01: PROJECT MANUAL – **342 Total Pages**
FILE #02: PLANS – **61 Plan Sheets**

*Additional files added as addendums are issued. Addendums will be uploaded and posted to the City's electronic bidding platform.

***PLAN HOLDER LISTINGS: A listing of vendors who have received documents can be found in the City's electronic bidding platform under the project section tab titled 'Plan Holders'.**

Bidder shall assume all responsibility for receiving updates and any addenda issued to this project by monitoring http://fayetteville-ar.gov/bids. Failure to acknowledge addenda issued as instructed could result in bid rejection.

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CITY OF FAYETTEVILLE ARKANSAS

Project Check List

This checklist is for the Bidder's use in preparing & submitting a bid. It is not intended to include all details necessary to prepare a bid and shall not be used as a substitute for the requirements of the bid documents. Use of this checklist does not relieve the Bidder from the responsibility of meeting all requirements of the Specifications concerning the preparation of an acceptable bid. Bidders are welcome to use this form as a coversheet for a sealed envelope; however, using this form itself is NOT a requirement.

☐ **5% Bid Bond of the amount bid accompanied by required documentation (Power of Attorney, etc.)**

- In lieu of a bid bond, the bidder may submit a cashier's check from a bank located in the State of Arkansas for at least five percent (5%) of the amount bid (inclusive of any deductive alternates). Cashier's checks shall be made payable to the City of Fayetteville, AR and received prior to the bid deadline by making an in-person delivery appointment with the City Purchasing Division.

☐ All addenda shall be signed, acknowledged, and submitted on the appropriate forms (submitting the actual addendums or marking acknowledgement on other bid pages).

☐ All pages provided with signature lines shall be appropriately signed, dated accordingly, and included with submitted bid documents

☐ All bids shall be received before the stated deadline utilizing the City's electronic bidding platform or submitting a physical sealed bid to the City Purchasing Division. Submitting a bid electronically is strongly encouraged. A public bid opening will be conducted shortly after the deadline at City Hall and livestreamed at https://www.youtube.com/user/cityoffayettevillear. Late or misdirected bids shall not be accepted. The City of Fayetteville shall not be responsible for lost or misdirected bids, or failure of bidder's technical equipment. If submitting a physical bid, all bid documents shall be delivered in a sealed envelope to the address stated in the advertisement or updated deadline issued via Addenda. All bids should be delivered with the name of the bidder (contractor) on the sealed envelope as well as the bidders Arkansas Contractor's License Number.

☐ Additional Information Required:

- AR Secretary of State Filing #: _____ OR submit electronically.
- Arkansas Contractor License #: _____ OR submit electronically.
- SAM Unique Entity Identifier #: _____ OR submit electronically.
- Pursuant Arkansas Code Annotated §25-1-503, the Contractor agrees and certifies that they do not currently boycott Israel and will not boycott Israel during any time in which they are entering into, or while in contract, with any public entity as defined in §25-1-503. If at any time during contract the contractor decides to boycott Israel, the contractor must notify the contracted public entity in writing.
  - Submit electronically or circle applicable answer: YES *or* NO
- Pursuant Arkansas Code Annotated §25-1-1002, the Contractor agrees and certifies that they do not currently boycott Energy, Fossil Fuel, Firearms, and Ammunition Industries during any time in which they are entering into, or while in contract, with any public entity as defined in §25-1-1002. If at any time during the contract the contractor decides to boycott Energy, Fossil Fuel, Firearms, and/or Ammunition Industries, the contractor must notify the contracted public entity in writing.
  - Submit electronically or circle applicable answer: YES *or* NO

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City of Fayetteville, Arkansas
INVITATION TO BID
Bid 25-24, Construction – Bryce Davis Park Improvements, Phase 1

The City of The City of Fayetteville is accepting sealed bids from properly licensed Contractors for the expansion of Bryce Davis Park in Fayetteville. This includes, but is not limited to, installation of new playground equipment, sidewalks, pavilions, dog wash, and other associated items. Questions regarding this bid should be addressed to Amanda Beilfuss, Procurement Director at abeilfuss@fayetteville-ar.gov.

A non-mandatory Pre-Bid meeting will be held **Thursday, January 30, 2025 at 10:00 AM,** on-site at Bryce Davis Park located at 1595 N. Dartmouth Ave., Fayetteville, AR 72704. Information regarding the pre-bid meeting is available on the project page on the City's electronic bidding platform. All interested parties are encouraged to attend.

Bidding documents, plans, plan holders, and addenda shall be obtained at the City of Fayetteville Purchasing Division's electronic bidding platform at www.fayetteville-ar.gov/bids. All bids shall be received by **Tuesday, February 18, 2025 before 2:00 PM, local time** utilizing the electronic bidding software or by submitting a sealed bid to the City of Fayetteville Purchasing Division. All bids shall be received prior to the bid deadline. Late or misdirected bids shall not be accepted. Submitting a bid electronically is strongly encouraged. A public bid opening will be conducted shortly after the deadline at City Hall and livestreamed at https://www.youtube.com/user/cityoffayettevillear. The City of Fayetteville shall not be responsible for lost or misdirected bids, or failure of bidder's technical equipment.

Each bid exceeding $50,000 shall be accompanied by a cashier's check from a bank doing business in the State of Arkansas or a corporate bid bond for five (5) percent of the amount bid. In the event a bidder opts to submit a cashier's check for a bid bond, the actual physical cashier's check shall be delivered to the City prior to the deadline. A one hundred percent (100%) performance bond and separate payment bond is required with the contract awarded. A State of Arkansas Contractor's License is required and registration with the Arkansas Secretary of State shall be valid and current at the time of Contract award.

Pursuant to Arkansas Code Annotated §22-9-203 The City of Fayetteville encourages all *qualified* small, minority and women business enterprises to bid on and receive contracts for goods, services, and construction. Also, City of Fayetteville encourages all general contractors to subcontract portions of their contract to *qualified* small, minority and women business enterprises.

The City of Fayetteville reserves the right to waive irregularities, reject bids, and postpone the award of any Contract for a period which shall not exceed beyond ninety (90) days from the bid opening date.

City of Fayetteville
By: Amanda Beilfuss
Procurement Director
P: 479.575.8220 Email: abeilfuss@fayetteville-ar.gov
TDD (Telecommunications Device for the Deaf): (479) 521-1316
Date of advertisement: 01.19.25 & 01.26.25
This publication was paid for by the Purchasing Division of the City of Fayetteville, Arkansas.
Amount paid: $458.44

CITY OF FAYETTEVILLE ARKANSAS

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SECTION 01
INSTRUCTIONS TO BIDDERS

PART ONE - DEFINED TERMS

1.1. Terms used in these Instructions to Bidders which are defined in the General Conditions have the meanings assigned to them in the General Conditions. Certain additional terms used in these Instructions to Bidders have the meanings indicated below which are applicable to both the singular and plural thereof.

1.2 Bidder – One who submits a Bid directly to City of Fayetteville as distinct from a sub-bidder, who submits a bid to a Bidder.

1.3 Issuing Office – The office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered.

1.4 Successful Bidder – The lowest, responsible, and responsive Bidder to whom the City of Fayetteville (on the basis of the City of Fayetteville's evaluation as hereinafter provided) makes an award.

1.5 Local Time – Local time is defined as the time in Fayetteville, Arkansas on the due date of the deadline. Bids shall be received before the deadline time as shown by the atomic clock located in the Purchasing Division Office.

1.6 Substitution – Item(s) of material, equipment, or substrate that differs in application method, material, warranty, and/or performance as outlined in the specifications. Substitution requests shall be submitted to the Purchasing Division by bid question deadline. Substitution requests will be addressed via addendum.

1.7 Equivalent (or Equal) – Item(s) of material, equipment, or substrate that meets the application method, material, and performance but may differ in manufacturer and/or warranty from what is specified. Item(s) meeting these criteria shall be considered equal at time of bid.

a. Named manufacturers within the specifications shall be used as a basis of design in regard to establishing a minimum performance standard.

PART TWO - COPIES OF BIDDING DOCUMENTS

2.1 Complete sets of the Bidding Documents in the number and for the deposit sum, if any, stated in the Advertisement for Bids may be obtained from the Issuing Office.

2.2 Complete sets of Bidding Documents must be used in preparing Bids. Neither City of Fayetteville nor Project Manager assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.3 City of Fayetteville and Project Manager in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining Bids for the Work and do not confer a license or grant for any other use.

PART THREE - EXAMINATION OF SITE AND CONTRACT DOCUMENTS

3.1 Bidders are advised that the Drawings and Specifications shall constitute all the information which the City of Fayetteville shall furnish. No other information given or sounding made by the City of Fayetteville or any official thereof, prior to the execution of said contract, shall ever become a part of, or change the contract, drawings, specifications, and estimates, or be binding on City of Fayetteville.

a. Prior to submitting any Bid, Bidders are required to: read carefully the Specifications, contract, and Bonds; examine carefully all Drawings; visit the site of the Work to carefully examine local conditions; inform themselves by their independent research and sounding of the difficulties to be encountered, and all attending circumstances affecting the cost of doing the work, and the time specified for its completion; and obtain all information required to make an intelligent bid.

3.2 Bidders shall rely exclusively upon their surveys, estimates, investigations, and other things which are necessary for full and complete information upon which the bid may be made and for which a contract is to be awarded. The Bid Form, providing for unit and lump sum prices bid by the Contractor, contains a statement that all bids are made with the full knowledge of the difficulties and conditions that may be encountered, the kind, quality and quantity of the plans, work to be done, excavation, and materials required and with full knowledge of the drawings, profiles, specifications, and estimates and all provisions of the contract and Bonds.

3.3 Bidders shall promptly notify the Purchasing Division of all conflicts, errors, ambiguities, or discrepancies which Bidder has discovered in or between the Contract Documents and such other related documents.

3.4 Information and data shown or indicated in the Contract Documents with respect to existing underground facilities at or contiguous to the site is based upon information and data furnished to City of Fayetteville and Project Manager by City of Fayetteville's of such underground facilities or others, and City of Fayetteville and Project Manager do not assume responsibility for the accuracy or completeness thereof unless it is expressly provided otherwise in the Supplementary Conditions.

3.5 On request, City of Fayetteville will provide each Bidder access to the site to conduct such examinations, investigations, explorations, tests, and studies as each Bidder deems necessary for submission of a Bid. Bidder must fill all holes and clean up and restore the site to its former conditions upon completion of such explorations, investigations, tests, and studies.

3.6 Reference is made to the General Requirements for the identification of the general nature of work that is to be performed at the site by City of Fayetteville or others (such as utilities and other prime contractors) that relates to the work for which a Bid is to be submitted. On request, and as available, City of Fayetteville will provide to each Bidder, for examination, access to or copies of Contract Documents (other than portions thereof related to price) for such work.

3.7 The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 3, that without exception the Bid is premised upon performing and furnishing the Work required by the Contract Documents and applying the specific means, methods, techniques, sequences, or procedures of construction (if any) that may be shown or indicated

or expressly required by the Contract Documents, that Bidder has given Project Manager written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in the Contract Documents and that the written resolutions thereof by Project Manager are acceptable to Bidder, and that the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.

3.8 Mobilization shall not exceed 5% of bid total. This price shall NOT include bonds and insurance and trench and excavation safety, if applicable.

3.9 Any dumpsters needed for this project shall be procured from Fayetteville Recycling & Trash. No third party dumpsters shall be used.

3.10 Open burning and blasting are not allowed on City projects.

3.11 Contractor is responsible for obtaining all applicable permits; however, fees for City-issued permits shall be waived.

PART FOUR - AVAILABILITY OF LANDS FOR WORK AND WORK BY OTHERS

4.1 The lands upon which the Work is to be performed, rights-of-way and easements for access thereto and other lands designated for use by Contractor in performing the Work are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by Contractor. Easements for permanent structures or permanent changes in existing facilities are to be obtained and paid for by City of Fayetteville unless otherwise provided in the Contract Documents.

PART FIVE - INTERPRETATION OF CONTRACT DOCUMENTS AND ADDENDA

5.1 If any person contemplating submitting a bid for construction of the Work is in doubt as to the true meaning of any part of the proposed Contract Documents or finds discrepancies in or omissions from any part of the proposed Contract Documents, he should submit a written request for interpretation thereof to the Project Manager not later than seven days before the date set for bid opening. The person submitting the request shall be responsible for its prompt delivery.

5.2 Interpretation or correction of proposed Contract Documents will be made only by Addendum through the City's online bidding portal. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect. City of Fayetteville will not be responsible for any other explanations or interpretations of the proposed Contract Documents.

5.3 Addenda may also be issued to modify the Bidding Documents as deemed advisable by City of Fayetteville or Project Manager.

5.4 Bidder assumes all responsibility for checking the City's online bidding portal at www.fayetteville-ar.gov/bids for updates and addenda issued to this project.

PART SIX - APPROXIMATE ESTIMATE OF QUANTITIES

6.1 Estimated quantities are approximate only and shall be the basis for receiving unit price bids for each item but shall not be considered by Bidders as actual quantities that may be required for the completion of the proposed work. However, such quantities, at the unit and lump sum prices bid for each item, shall determine the amount of each bid for comparison of Bids and aid in determining the low and responsive Bidder for the purpose of awarding the contract, and will be used as basis for fixing the amount of the required Bonds.

PART SEVEN - UNIT PRICES

7.1 Bidders must state a price for each item of work named in the Bid. Unit and Lump Sum prices shall include amounts sufficient for the furnishing of all labor, materials, tools, equipment, and apparatus of every description to construct, erect, and finish completely all the work as called for in the Specifications or indicated on the Drawings.

7.2 Prices bid shall bear a fair relationship to the cost of the work to be done. Bids which appear unbalanced and are deemed not to be in the best interest of City of Fayetteville may be rejected at the discretion of City of Fayetteville.

7.3 By submission of a Bid, Bidder represents that Bidder has considered the entire Project and the Work required and has reviewed the Drawings and Specifications to verify the full scope of the Work.

PART EIGHT - BID FORM

8.1 Bids are due as indicated in the Advertisement for Bids.

8.2 Bids which are incomplete, unbalanced, conditional, or obscure or which contain additions not called for, erasures, alterations, or irregularities of any kind or which do not comply with these Instructions to Bidders may be rejected as informal or non-responsive at the option of City of Fayetteville. However, City of Fayetteville reserves the right to waive technicalities as to changes, alterations, or revisions and to make the award in the best interest of City of Fayetteville.

8.3 Acceptance of alternate bids is at the City of Fayetteville's discretion, as best services the City of Fayetteville's interest. Each deductive alternate is provided for on the Bid Form (if applicable). The price of the Bid for each alternate will be the amount to be deducted from the price of the Total Base Bid if the City of Fayetteville selects any of the alternates. The unit price amount for each alternate shall be the same as the unit price amount listed in the Bid.

8.4 No Bidder shall divulge the information in the Bid to any person whomsoever, except those having a partnership or other financial interest with him in the Bid, until after the bids have been opened.

8.5 All bids shall include all costs including but not limited to sales tax, use tax, permits, insurance, etc. The contractor on this project is defined by the Arkansas Revenue Laws as the user and is responsible for the appropriate taxes. There are NO provisions in this bid for a contractor to avoid taxes. The City of Fayetteville is not a tax-exempt entity.

PART NINE - SIGNATURE ON BIDS

9.1 If the Bid is made by an individual, the firm name must be given, and the Bid Form signed by the individual or a duly authorized agent. If the Bid is made by a partnership, the firm name and the names of each member must be given, and the Bid signed by a member of the partnership, or a person duly authorized. If the Bid is made by a company or corporation, the company or corporate name must be given, and the Bid signed by an officer or agent duly authorized. The corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation must be shown below the signature.

9.2 All names must be typed or printed in black ink below the signature.

9.3 The address and telephone number for communications regarding the Bid must be shown.

9.4 Powers of attorney, properly certified, for agents and others to sign Bids must be in writing and filed with City of Fayetteville.

9.5 The Bid shall also contain a signed acknowledgment of receipt of all Addenda.

9.6 A State of Arkansas Contractor's License is required and registration with the Arkansas Secretary of State shall be valid and current at the time of Contract award.

9.7 Vendor shall not be debarred from doing business with any government entity.

PART TEN - BID BOND

10.1 A five percent (5%) bid security, in the form of a bid bond, or cashier's check from a bank located in the State of Arkansas, as stated in the Advertisement for Bids, shall accompany each bid. Bid bonds for the difference in price between low bidder and second low bidder shall not be acceptable. The Successful Bidder's security will be retained until City of Fayetteville receives a signed Agreement and required Bonds and Certificates of Insurance. If the Successful Bidder fails to execute and deliver the Agreement and furnish the required contract security within fifteen days after the Notice of Selection, City of Fayetteville may annul the Notice of Selection and the Bid security of that Bidder will be forfeited.

10.2 The City of Fayetteville reserves the right to retain the security of the three low bidders until the Successful Bidder enters into the Contract or until sixty (60) days after bid opening, whichever is sooner. Cash equivalent security of the second and third low bidder may be exchanged for an equivalent bid bond after bid tabulations are complete or thirty (30) days after bid opening, whichever is sooner. If any Bidder refuses to enter into an Agreement, City of Fayetteville may retain Bidder's bid security as liquidated damages but not as a penalty.

PART ELEVEN - PERFORMANCE BOND AND PAYMENT BOND

11.1 NOTICE TO PROCEED, BONDS AND ORDERING PROCEDURES

a. After contract award, the Contractor will provide the City with separate 100% performance and payment bonds, as required in the contract.

b. Upon the City receiving and accepting the 100% Performance and Payment Bonds, the City will issue a Purchase Order along with a Notice of Award (NOA).

c. The Notice of Award shall serve as permission for the Contractor to order any materials needed to complete the project, specifically those with a long lead time.

d. The City will coordinate with the Contractor on the timing of the Notice to Proceed being issued, which shall take into consideration the expected delivery of items with a long lead time.

e. Calendar days for substantial and final completion shall not start until the day following the issuance of a Notice to Proceed.

f. The City will make progress payments for materials delivered on site, after verification of delivered materials by City.

11.3 If Required -- Contractor shall include provisions in the bonds which will guarantee the faithful performance of the prevailing hourly wage clause as required by the Arkansas Prevailing Wage Law, Arkansas Code Annotated § 22-9-308(d).

11.4 Contractor shall pay all expenses in connection with the obtaining of said Bonds. The Bonds shall be conditioned that Contractor shall faithfully perform the contract and shall pay all indebtedness for labor and materials furnished or performed in the construction of such alterations and additions as prescribed in this contract.

11.5 The surety company issuing the Bonds must be a solvent company on the "Surety Companies Annual List" issued by the U.S. Department of the Treasury, and the Bonds are not to be issued in an amount greater than the underwriting limitations for the surety company as set out therein.

11.6 In Arkansas, prevailing law requires that performance and payment Bonds on public works contracts shall be executed by a resident local agent who is licensed by the Insurance Commissioner to represent the surety company executing said Bonds and filing with such Bonds his Power of Attorney as his authority. The mere countersigning of the Bonds will not be sufficient.

11.7 The date of the Bonds, and of the Power of Attorney, must not be prior to the date of the contract. At least two originals of the Bonds shall be furnished, each with Power of Attorney attached. The performance and payment bond shall be furnished to the City of Fayetteville accompanied by a receipt stamped by the Washington County Circuit Clerk's Office. Before any work is performed under this contract, the bond shall be filed with the clerk of the circuit court of Washington County, Arkansas and accepted by the City of Fayetteville Project Manager.

11.8 Bonds are to be approved by City of Fayetteville. If any Bonds contracted for become unsatisfactory or unacceptable to City of Fayetteville after the acceptance and approval thereof, Contractor, upon being notified to that effect, shall promptly execute and furnish acceptable Bonds in the amounts herein specified. Upon presentation of acceptable Bonds, the unsatisfactory Bonds may be canceled at the discretion of Contractor.

PART TWELVE – INSURANCE REQUIREMENTS

12.1 The successful bidder shall provide a Certificate of Insurance in accordance with the following guidelines, prior to commencement of any work: $2,000,000 Commercial Liability, Statutory Worker's Compensation, and General Automotive, if applicable. **SUCH CERTIFICATE SHALL LIST THE CITY OF FAYETTEVILLE AS AN ADDITIONAL INSURED. LISTING THE CITY OF FAYETTEVILLE AS A CERTIFICATE HOLDER ONLY IS NOT AN ACCEPTABLE SUBSTITUTE. CERTIFICATE OF INSURANCE MUST INCLUDE THE ENDORSEMENT SHOWING THE CITY OF FAYETTEVILLE LISTED AS AN ADDITIONAL INSURED.** Insurance shall remain valid, when applicable, throughout project completion.

12.2 This bid is considered a public improvement bid. Public improvement bids shall submit certificates of insurance within 10 days of notice of notice to proceed, after City Council approval. Certificates of insurance are to be addressed to the City of Fayetteville, showing that the contractor carries the following insurance which shall be maintained throughout the term of the bid. Any work sublet; the contractor shall require the subcontractor similarly to provide the same insurance coverage. In case any employee engaged in work on the project is not protected under Workers' Compensation, the Contractor shall provide, and shall cause each subcontractor to provide, adequate employer's liability insurance for the protection of such of his employees as are not otherwise protected.

PART THIRTEEN - CONTRACT TIME

13.1 Bidder agrees that the Work shall be substantially completed within **120** consecutive calendar days from the date established in the written notice to proceed. Total completion (completed and ready for final payment) shall be **150** consecutive calendar days from the date established in the written notice to proceed. The bidder agrees to pay liquidated damages for each consecutive calendar day thereafter the total completion time.

13.2 Except in connection with the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all Work at the Site shall be performed during regular working hours, and Contractor will not permit overtime work or the performance of Work on Saturday, Sunday, or any legal holiday without City of Fayetteville's written consent.

PART FOURTEEN - LIQUIDATED DAMAGES

14.1 Bidder accepts the provisions as to liquidated damages in the event of failure to complete the Work within the total completion time. Liquidated damages in the sum of **$200.00** for each consecutive day thereafter will be assessed.

PART FIFTEEN – SUBCONTRACTORS, SUPPLIERS, AND OTHERS

15.1 Contractor shall not assign or sublet all or any part of this contract without the prior written approval of City of Fayetteville nor shall Contractor allow such subcontractor to commence work until approval of workman's compensation insurance and public liability insurance as may be required. Approval of each subcontract by City of Fayetteville will in no manner release Contractor from any obligations as set out in the Drawings, Specifications, contract, and Bonds.

PART SIXTEEN - SUBSTITUTE AND "OR EQUAL" ITEMS

16.1 Any reference to a particular brand or manufacture is in an effort to establish an acceptable level of quality for this purchase and are used as a basis of design in regard to establishing a minimum performance standard. Brands or manufacturers that are included in a bid that are of at least equal quality, size, and specification as to what has been specified, will be acceptable for consideration. All requests for approved substitutions shall be submitted by e-mail. Such request to obtain an acceptable substitution shall be made in writing to Amanda Beilfuss, Sr. Purchasing Agent, at abeilfuss@fayetteville-ar.gov. The Sr. Purchasing Agent will forward any such requests to the responsible City Department for review. Approval of all submittals will be made only by Addendum issued by the City of Fayetteville Purchasing Division.

PART SEVENTEEN - QUALIFICATIONS AND RESPONSIBILITY OF BIDDERS

17.1 To demonstrate qualifications to perform the Work, each Bidder must be prepared to submit within five days after bid opening, upon City of Fayetteville's or Project Manager's request, detailed written evidence such as financial data, present commitments, and other such data as may be called for. Each Bid must contain evidence of Bidder's qualification to do business in the State of Arkansas.

17.2 CERTIFICATION OF FUNDS:

Notice: bidders are required to provide pricing for all line items. Failure to provide deductive alternate pricing can result in bid rejection. The City intends to award this contract to the lowest qualified responsive responsible bidder based on the lump sum bid as long as such bid falls within the amount of funds certified for the project, plus 25%.

a. In the event no bid falls within the amount of funds certified for the project, plus 25%, the City will utilize the deductive alternates in order until bids can be compared within the amount certified, plus 25%. In the event all deductive alternates are subtracted and no bid falls within the amount certified, plus 25%, all bids will be rejected.

b. The City shall have the authority to negotiate an award with the apparent responsive responsible low bidder but only if the low bid is within twenty-five present (25%) of the certification of funds.

17.3 DEDUCTIVE ALTERNATES:

This bid includes one (1) deductive alternate(s). Bidders shall submit fair, marketable representation for bid pricing for all deductive alternates. Failure to submit fair, marketable representation pricing for deductive alternates can result in rejection of bid at the discretion of the City. If deductive alternates are utilized, they shall be taken in order.

a. DEDUCTIVE ALTERNATE No. 1

- Item No. 47, Trail Lighting will be removed for Deductive Alternate No. 1 bid.

PART EIGHTEEN - DISQUALIFICATIONS OF BIDDERS

18.1 Any one or more of the following may be considered as sufficient for the disqualification of bidders and the rejection of Bids.

18.2 More than one Bid Form for the same work from an individual, firm, partnership, or corporation under the same or different names.

18.3 Evidence of collusion among bidders. Participants in such collusion may receive no recognition as bidders for any future work.

18.4 Unbalanced Bid Forms in which the prices for some items are out of proportion to the prices for other items, or changes written in, or amendments by letter, or failure to submit a unit price for each item of work for which a bid price is required by the Bid Form, or failure to include all required contract documents.

18.5 Lack of competency as revealed by the financial statement, experience, plant, and equipment statements submitted. Lack of responsibility as shown by past work judged from the standpoint of workmanship and progress.

18.6 Uncompleted work which, in the judgment of City of Fayetteville, might hinder or prevent the prompt completion of additional work if awarded.

18.7 Being in arrears on existing contracts, in litigation with City of Fayetteville, or having defaulted on a previous contract.

PART NINETEEN - OPENING OF BIDS

19.1 Bids will be opened and read aloud publicly at the place where Bids are to be submitted in a room to be designated by City of Fayetteville the day of the bid opening. A bid tabulation of the amounts of the base Bids and major alternates (if any) will be made available to Bidders after the opening of Bids.

PART TWENTY - EVALUATION OF BIDS

20.1 After the bids are opened and read, the quantities will be extended and totaled in accordance with the bid prices of the accepted Bids. This review of the Bids will confirm the low bidder.

20.2 In evaluating Bids, City of Fayetteville will consider the qualifications of Bidders, whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data as may be requested in the Bid Form or prior to the Notice of Selection.

20.3 City of Fayetteville may consider the qualifications and experience of Subcontractors, Suppliers, and other persons and organizations proposed for those portions of the Work as to which the identity of Subcontractors, Suppliers, and other persons and organizations must be submitted as provided in the Supplementary Conditions. City of Fayetteville also may consider the operating costs, maintenance requirements, performance data, and guarantees of major items of materials and equipment proposed for incorporation in the Work when such data is required to be submitted prior to the Notice of Selection.

PART TWENTY-ONE - RIGHT TO REJECT BIDS

21.1 City of Fayetteville reserves the right to reject any and all Bids, to waive technicalities, and to advertise for new bids. All Bids are subject to this reservation. City of Fayetteville reserves to itself the right to decide which shall be deemed the lowest responsive and responsible Bid. Due consideration will be given to the reputation, financial ability, experience and equipment of the Bidder.

21.2 City of Fayetteville also reserves the right to waive informalities not involving price, time or changes in the Work and to negotiate contract terms with the Successful Bidder.

PART TWENTY-TWO - AWARDING OF CONTRACT

22.1 City of Fayetteville reserves the right to withhold the awarding of a contract a reasonable period of time from the date of opening bids, not to exceed sixty (60) days except with the consent of the Successful Bidder. The awarding of a contract upon a successful Bid shall give the Bidder no right to action or claim against City of Fayetteville upon the contract until the contract is reduced to writing and signed by the contracting parties. The letting of a contract shall not be complete until the contract is executed, and the necessary Bonds approved.

PART TWENTY-THREE - RETAINAGE

23.1 The City of Fayetteville shall make progress payments within three (3) weeks after Architect/Engineer's Certification of Payment. All such payments will be measured by the schedule of values established as provided in the General Requirements.

a. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below, but, in each case, less the aggregate of payments previously made and less such amounts as Engineer/Architect shall determine, or The City of Fayetteville may withhold, in accordance with the General Requirements.

b. Retainage will be with-held from each pay request in the amount of 5%. After Substantial Completion has been issued by the Architect, Payments can be made for 100% less the value of remaining punch list items as identified by the Architect on the Certificate of Substantial Completion.

c. 100% of Equipment and Materials not incorporated in the Work but delivered, suitably stored, and accompanied by documentation satisfactory to The City of Fayetteville as provided in the General Requirements.

PART TWENTY-FOUR - SIGNING OF AGREEMENT

24.1 When City of Fayetteville gives a Notice of Selection to the Successful Bidder, it will be accompanied by the number of unsigned counterparts of the Agreement as indicated in the Supplementary Conditions, with all other written Contract Documents attached. Within five (5) days thereafter, the Contractor shall execute the contract and return to the City to submit to City Council for approval. Within 21 days, the City of Fayetteville shall return the fully executed contract to Contractor. Contractor will have five (5) days to provide the Performance and Payment Bonds for the project.

PART TWENTY-FIVE - MATERIALS GUARANTY

25.1 Before any contract is awarded Bidder may be required to furnish a complete statement of the origin, composition, or manufacture of any or all materials proposed to be used in the construction of the Work, together with samples, which may be subjected to tests provided for in the Specifications to determine their quality and fitness for the Work.

PART TWENTY-SIX - FAMILIARITY WITH LAWS

26.1 Bidder is presumed to be familiar with all federal, state, and city laws, ordinances, and regulations which in any manner affect those engaged or employed in the Work, or the materials or equipment used, or that in any way affect the Work and shall in all respects comply with said laws, ordinances, and regulations. No claim of misunderstanding or ignorance on the part of Contractor will in any way serve to modify the provisions of the contract. No representations shall be binding unless embodied in the contract.

PART TWENTY-SEVEN - INDEMNIFICATION

27.1 To the extent of the limits of the Contractor's Commercial General Liability Insurance, the Contractor shall indemnify and hold harmless the City of Fayetteville against any and all liability, claims, demands, damages, losses, and expenses, including attorneys' fees, in connection with or arising out of any damage or alleged damage to any of the City's existing adjacent property, including personal property, that may arise from the performance of the Work, to the extent caused by the negligent or intentionally wrongful acts or omissions of the Contractor, Subcontractor, Supplier, Sub subcontractor, or anyone employed directly or indirectly by any of them or by anyone for whose acts any of them may be liable.

PART TWENTY-EIGHT - MISCELLANEOUS

28-1 (NOT USED)

END OF SECTION 01 – INSTRUCTIONS TO BIDDERS

SECTION 02
BID FORM

Bid Number: 25-24, Construction – Bryce Davis Park Improvements, Phase 1

BID TO:

Owner: The City of Fayetteville, Arkansas
113 West Mountain Street
Fayetteville, Arkansas 72701

BID FROM:

Bidder: _____

_____

_____

_____

ARTICLE 1 - INTENT

1.01 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an agreement with Owner in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Bid price and within the Bid time indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.

ARTICLE 2 - TERMS AND CONDITIONS

2.01 Bidder accepts all terms and conditions of the Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid Security. This Bid will remain subject to acceptance for 90 days after the day of Bid opening. Bidder will sign and deliver the required number of counterparts of the Agreement with the Bonds and other documents required by the Bidding Requirements within 15 days after the date of Owner's Notice of Award.

ARTICLE 3 - BIDDER'S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents, as more fully set forth in the Agreement, that:

A. Bidder has examined and carefully studied the Bid Documents, and the following Addenda, receipt of all which is hereby acknowledged:

Number	Date
_____	_____
_____	_____
_____	_____
_____	_____

B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, performance, and furnishing of the Work.

C. Bidder is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, performance, and furnishing of the Work.

D. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to Work for which this Bid is submitted as indicated in the Contract Documents.

E. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the Site, reports, and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.

F. Bidder has given Purchasing Division written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Contract Documents, and the written resolution thereof by Purchasing Division is acceptable to Bidder.

G. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.

H. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; Bidder has not directly or indirectly induced or

solicited any other Bidder to submit a false or sham bid; Bidder has not solicited or induced any person, firm, or a corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for himself any advantage over any other Bidder or over Owner.

I. Upon receipt of written notice of acceptance of this bid, bidder will execute the formal contract attached within 10 days and deliver a Surety Bond or Bonds as required by the General Conditions.

J. The bid security attached in the sum of $_____ is to become the property of the Owner in the event the contract and bond are not executed within the time set forth above, as liquidated damages for the delay and additional expense to the Owner caused thereby.

ARTICLE 5 - CONTRACT TIMES

5.01 Bidder agrees that the Work will be substantially completed and completed and ready for final payment 120 consecutive calendar days from the date established in a written notice to proceed. Total completion shall be 150 consecutive calendar days from the date established in a written notice to proceed. The bidder agrees to pay liquidated damages for each consecutive calendar day thereafter the total completion time.

5.02 Bidder accepts the provisions as to liquidated damages in the event of failure to complete the Work within the total completion time. Liquidated damages in the sum of $200.00 for each consecutive calendar day thereafter will be assessed.

ARTICLE 6 – TERMINOLOGY

6.01 The terms used in this Bid which are defined in the GENERAL CONDITIONS or Instructions to Bidders will have the meanings assigned to them.

SUBMITTED on _____, 20_____.

Arkansas State Contractor License No. _____

If Bidder is:

An Individual

Name (type or printed): _____

By: _____(SEAL)

(Individual's Signature)

Doing business as: _____

Business address: _____

_____

Phone No.: _____ FAX No.: _____

Tax ID No.: _____ UEI No.: _____

A Partnership

Partnership Name: _____(SEAL)

By: _____

(Signature of general partner – attach evidence of authority to sign)

Name (type or printed): _____

Business address: _____

_____

Phone No.: _____ FAX No.: _____

Tax ID No.: _____ UEI No.: _____

A Corporation

Corporation Name: _____(SEAL)

State of Incorporation: _____

Type (General Business, Professional, Service, Limited Liability): _____

_____

By: _____
(Signature – attach evidence of authority to sign)

Name (type or printed): _____

Title: _____

(CORPORATE SEAL)

Attest: _____
(Signature of Corporate Secretary)

Business address: _____

_____

Phone No.: _____ FAX No.: _____

Tax ID No.: _____ UEI No.: _____

END OF SECTION 02 – BID FORM

CITY OF FAYETTEVILLE, ARKANSAS:

BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1

SECTION 03 – LIST OF SUBCONTRACTORS

In compliance with the Instructions to Bidders and other Contract Documents, the undersigned submits the following names of Subcontractors to be used in performing the Work for:

BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1

Bidder certifies that all Subcontractors listed are eligible to perform the Work.

Subcontractor's Work	Subcontractor's Name and Address	Expected Percentage or Value
Clearing/Demolition	_____	_____
	_____	_____
Mechanical	_____	_____
	_____	_____
Plumbing	_____	_____
	_____	_____
Electrical	_____	_____
	_____	_____
Roofing/Sheet Metal	_____	_____
	_____	_____
Other (designate)	_____	_____
	_____	_____

NOTE: This form must be submitted in accordance with the Instructions to Bidders.

_____

Bidder's Signature

CITY OF FAYETTEVILLE, ARKANSAS:

BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1

Section 04
CONTRACTOR REFERENCES

The following information is required from all Bidders so all bids may be reviewed and properly evaluated:

COMPANY NAME: _____

NUMBER OF YEARS IN BUSINESS: _____HOW LONG IN PRESENT LOCATION: _____

TOTAL NUMBER OF CURRENT EMPLOYEES: _____ FULL TIME _____ PART TIME

NUMBER OF EMPLOYEES PLANNED FOR THIS CONTRACT: _____ FULL TIME _____ PART TIME

PLEASE LIST FOUR (4) REFERENCES THAT YOU HAVE PREVIOUSLY PERFORMED SIMILAR CONTRACT SERVICES FOR WITHIN THE PAST FIVE (5) YEARS (All fields must be completed):

1. _____
COMPANY NAME

_____
CITY, STATE, ZIP

_____
CONTACT PERSON

_____
TELEPHONE

_____
DATE COMPLETED

_____
E-MAIL ADDRESS

2. _____
COMPANY NAME

_____
CITY, STATE, ZIP

_____
CONTACT PERSON

_____
TELEPHONE

_____
DATE COMPLETED

_____
E-MAIL ADDRESS

3. _____
COMPANY NAME

_____
CITY, STATE, ZIP

_____
CONTACT PERSON

_____
TELEPHONE

_____
DATE COMPLETED

_____
E-MAIL ADDRESS

4. _____
COMPANY NAME

_____
CITY, STATE, ZIP

_____
CONTACT PERSON

_____
TELEPHONE

_____
DATE COMPLETED

_____
E-MAIL ADDRESS

CITY OF FAYETTEVILLE, ARKANSAS:

BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1

SECTION 05
BID BOND

KNOW ALL MEN BY THESE PRESENTS: that we

_____

_____

_____

as Principal, hereinafter called the Principal, and

_____

_____

_____

a corporation duly organized under the laws of the State of _____ as Surety, hereinafter called Surety, are held and firmly bound unto

City of Fayetteville, Arkansas
113 West Mountain Street
Fayetteville, Arkansas 72701

as Obligee, hereinafter called Owner, in the sum of _____
_____ Dollars ($_____), for the payment of which sum, well and truly to be made, Principal and said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has submitted a Bid for:

BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1

NOW, THEREFORE, if the Owner shall accept the Bid of Principal and the Principal shall enter into a Contract with the Owner in accordance with the terms of such Bid, and give such Bond or Bonds as may be specified in the Bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of Principal to enter such Contract and give such Bond or Bonds, if the Principal shall pay to the Owner the difference not to exceed the penalty hereof between the amount specified in said Bid and such larger amount for which the Owner may in good faith contract with another party to perform the Work covered by said Bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

CITY OF FAYETTEVILLE, ARKANSAS:

BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1

Signed and sealed this _____ day of _____ 20_____.

PRINCIPAL (CORPORATE SEAL)

_____

By _____

_____

SURETY

_____

By _____

_____

ATTORNEY-IN-FACT (CORPORATE SEAL)

_____

_____

(This Bond shall be accompanied with
Attorney-in-Fact's authority from Surety)

END OF SECTION 05

CITY OF FAYETTEVILLE, ARKANSAS:

BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1

SECTION 06
PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

_____

_____

_____

as Principal, hereinafter called Contractor, and

_____

_____

_____

as Surety, hereinafter called Surety, are held and firmly bound unto

City of Fayetteville, Arkansas

113 West Mountain Street

Fayetteville, Arkansas 72701

as Obligee, hereinafter called Owner, in the amount of **$**_____, for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Contractor has by written Agreement dated _____, 20_____, entered into a contract with Owner for **BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1** which contract is by reference made a part hereof and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Contractor shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the Owner. Whenever Contractor shall be, and declared by Owner to be in default under the Contract, the Owner having performed Owner's obligations, thereunder, the Surety may promptly remedy the default, or shall promptly:

A. Complete the Contract in accordance with its terms and conditions, or

B. Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, or, if the Owner elects, upon determination

by the Owner and the Surety jointly of the lowest responsible bidder, arrange for a contract between such bidder and Owner, and make available as Work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the Contract Price," as used in this paragraph, shall mean the total amount payable by Owner to Contractor under the Contract and any amendments thereto, less the amount properly paid by Owner to Contractor.

Any suit under this Bond must be instituted before the expiration of two years from the date on which final payment under the Contract falls due.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Owner named herein or the heirs, executors, administrators, or successors of the Owner.

Signed and sealed this _____ day of _____ 20_____.

CONTRACTOR (CORPORATE SEAL)

_____

By _____

_____

SURETY

_____

By _____

_____

ATTORNEY-IN-FACT

_____

_____

(This Bond shall be accompanied with Attorney-in-Fact's authority from Surety)

COUNTERSIGNED: Resident Agent

State of Arkansas

_____

By _____

_____

(CORPORATE SEAL)

Approved as to Form:

_____

_____

Attorney for _____

CITY OF FAYETTEVILLE, ARKANSAS:

BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1

SECTION 07
LABOR AND MATERIAL PAYMENT BOND

This Bond is issued simultaneously with the Performance Bond in favor of Owner conditioned on the full and faithful performance of the Contract.

KNOW ALL MEN BY THESE PRESENTS: that

_____

_____

_____

as Principal, hereinafter called Contractor, and

_____

_____

_____

as Surety, hereinafter called Surety, are held and firmly bound unto

City of Fayetteville, Arkansas

113 West Mountain Street

Fayetteville, Arkansas 72701

as Obligee, hereinafter called Owner, for the use and benefit of claimants as hereinbelow defined, in the amount of **$_____**, for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Contractor has by written Agreement dated _____, 20_____, entered into a contract with Owner for **BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1** which contract is by reference made a part hereof and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Contractor shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

A. A claimant is defined as one having a direct contract with the Contractor or with a Subcontractor of the Contractor for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental of equipment directly applicable to the Contract.

B. The above-named Contractor and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of 90 days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this Bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any costs or expenses of any such suit.

C. No suit or action shall be commenced hereunder by any claimant:

1. Unless claimant other than one having a direct contract with Principal, shall have given written notice to any two of the following: the Contractor, the Owner, or the Surety within 90 days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to Contractor, Owner or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid Project is located, save that such service need not be made by a public officer.

2. After the expiration of one year following the date on which Contractor ceased Work on the Contract, it being understood, however, that if any limitation embodied in this Bond is prohibited by any Law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such Law.

3. Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the Project, or any part thereof, is situated, or in the United States District Court for the district in which the Project, or any part thereof, is situated, and not elsewhere.

D. The amount of this Bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this Bond.

CITY OF FAYETTEVILLE, ARKANSAS:

BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1

Signed and sealed this _____ day of _____ 20_____.

CONTRACTOR

(CORPORATE SEAL)

_____

By _____

_____

SURETY

COUNTERSIGNED: Resident Agent

State of Arkansas

_____

_____

By _____

By _____

_____

_____

ATTORNEY-IN-FACT

(CORPORATE SEAL)

_____

_____

(This Bond shall be accompanied with
Attorney-in-Fact's authority from Surety)

Approved as to Form:

_____

_____

Attorney for _____

SECTION 01 00 00 – BASIC REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY OF WORK

A. Section Includes:

1.2 Description of Project
1.3 Site Investigation
1.4 Existing Utilities
1.5 Payment Schedule
1.6 Application for Payment
1.7 Change Order Procedures
1.8 Cutting and Patching
1.9 Conferences
1.10 Progress Meetings
1.11 Submittal Procedures
1.12 Construction Progress Schedule
1.13 Prosecution of the Work
1.14 Shop Drawings
1.15 Product Data
1.16 Manufacturers' Instructions and Certifications
1.17 Quality Assurance
1.18 References
1.19 Manufacturer's Field Services
1.20 Testing Laboratory Services
1.21 Temporary Electric Power and Lighting
1.22 Temporary Water
1.23 Sanitary Facilities
1.24 Water for Testing
1.25 Temporary Telephone Service
1.26 Temporary Water Control
1.27 Temporary Access Roads and Parking
1.28 Temporary Heating and Ventilating
1.29 Protection of Finished Work
1.30 Progress Cleaning
1.31 Field Offices
1.32 Removal of Utilities, Facilities, and Controls
1.33 Products
1.34 Transportation, Handling, Storage, and Protection
1.35 Substitutions
1.36 System Demonstration
1.37 Contract Closeout Procedures
1.38 Final Cleaning and Inspection
1.39 Final Submittals
1.40 Project Record Documents (“As-Builts”)
1.41 Operation and Maintenance Data
1.42 Guarantees, Bonds, Affidavits, and Warranties
1.43 Spare Parts and Maintenance Materials

1.2 DESCRIPTION OF PROJECT

A. Wherever in these Documents the word “Engineer” appears, it shall be understood to mean McClelland Consulting Engineers, Inc., (MCE) acting either directly or indirectly as authorized agents of the Owner. In these Documents where the word "Owner" appears, it shall be understood to mean the Fayetteville, Arkansas.

B. General Contract for the expansion of the Bryce Davis park to include new playground equipment, sidewalks, pavilions, dog wash, and other associated items.

1.3 SITE INVESTIGATION

A. Information obtained by the Owner regarding site conditions; topography; existing construction of site facilities; and subsurface investigations, including test boring logs are available for examination at the office of the Engineer.

1.4 EXISTING UTILITIES

A. Approximate locations of major utilities and structures are shown on the Drawings, there may be some discrepancies and omissions in the locations and size of utilities and structures shown.

B. Notify all utilities affected by the construction operation at least 48 hours in advance of beginning work, and contact Arkansas One-Call at 1-800-482-8998.

1.5 PAYMENT SCHEDULE

A. Payment shall be made based on the payment schedule submitted by the Contractor in accordance with the Bid Form and the Engineers observation of work completed to date.

B. Payment for pipe shall be made at 85 percent (85%) of the unit bid price upon pipe installation, backfilling, and rough grading. Payment shall be increased five percent (5%) upon completion of testing and disinfection. Payment will be increased 10 percent (10%) of the unit price bid upon completion and acceptance of final clean-up by the Owner and Engineer and in accordance with the General Conditions.

1.6 APPLICATION FOR PAYMENT

A. Submit three (3) copies of each application on EJCDC Form C-620, Application for Payment or other format approved by Engineer.

B. For payment of stored materials, the Contractor shall submit a copy of supplier/vendor’s invoice for the materials with job name, delivery date, invoice number, and invoice amount on invoice attached with the Application for Payment. Stored materials shall be on site and stored in accordance with Contract Documents prior to making Application for Payment.

C. Contractor shall submit copies of paid invoices and proof of payment in the form of a lien release from the supplier/vendor for stored materials that the Owner has paid for previously with Application for Payment. Contractor’s subsequent Applications for Payment will not be approved without copies of paid invoices and lien releases.

D. Contractor shall submit lien release for all previous progress payments for materials, labor, and equipment that has been billed to the Owner in the present pay request. Lien release shall be submitted to the Engineer with next Application for Payment. Application for Payment submitted without lien release from previous Application for Payment will not be approved for payment until Engineer has received lien release. Submit lien release on the form found at the end of this Section.

E. Utilize Payment Schedule or Unit Prices for listing items in Application for Payment.

F. Pay Periods: Calendar Month

1.7 CHANGE ORDER PROCEDURES

A. Submit on EJCDC Form C-941.

1.8 CUTTING AND PATCHING

A. Employ a skilled and experienced installer to perform cutting and patching new Work; restore Work with new products.

B. Submit written request in advance of cutting or altering existing structures or utilities.

C. Fit work tight to adjacent elements and maintain integrity of existing work.

1.9 CONFERENCES

A. Engineer will schedule a preconstruction conference after Notice of Award for all affected parties.

B. Where required in individual specification Section, convene a pre-installation conference at project site prior to commencing Work of the Section.

1.10 PROGRESS MEETINGS

A. Schedule and administer meetings at the site throughout progress of the Work at minimum monthly intervals.

B. Preside at meetings, record minutes, and distribute typed copies within two (2) days to those affected by decisions made.

1.11 SUBMITTAL PROCEDURES

A. The Contractor shall submit a sufficient number of copies to allow the Engineer to retain four (4) copies (two (2) for himself; two (2) for the Owner) for review. Submittals shall include shop drawings, electrical diagrams, and catalog cuts for fabricated items and manufactured items (including mechanical and electrical equipment) required for construction.

B. Submittal form to identify Project, Contractor, subcontractor or supplier, and pertinent Contract Document reference.

C. Apply Contractor's stamp, signed or initialed, certifying that review, verification of products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents.

D. Identify variations from Contract Documents and product or system limitations which may be detrimental to successful performance of completed Work.

E. Revise and resubmit as required; identify all changes made since previous submittal.

1.12 CONSTRUCTION PROGRESS SCHEDULE

A. Submit initial Construction Progress Schedule in duplicate within 10 days after date of Contract. Engineer shall review Construction Progress Schedule and approve. Once approved by Engineer this Construction Progress Schedule shall become the “Approved Construction Progress Schedule” by which the Contractor shall plan, organize, direct, coordinate, and execute the Work, and the basis of evaluating progress of the Work.

B. "Approved Construction Progress Schedule" shall be a horizontal bar chart with separate lines for each major section of Work or operation, identifying first work day of each week.

C. Submit updated Construction Progress Schedule with each Application for Payment, identifying changes since previous updated Construction Progress Schedule. Indicate estimate percentage of completion for each item of Work at each submission.

D. Should updated Construction Progress Schedule show the Contractor to be 10% or more behind schedule, Contractor shall immediately devise a plan for recovery of lost time and submit to the Engineer for approval within 1 week. Once approved by the Engineer, the Contractor shall immediately put "Recovery Construction Progress Schedule" into action.

E. During period covered by "Recovery Construction Progress Schedule" plan, Contractor's progress will be monitored against the "Approved Construction Progress Schedule." If Contractor does not recover from delay as detailed in his "Recovery Construction Progress Schedule," the Engineer shall advise the Owner to exercise its options as described in the General Conditions.

F. Contractor shall bear all cost and expenses related to recovery from the Contractor's delays, including costs, expenses, and lost revenue by the Owner.

1.13 PROSECUTION OF THE WORK

A. It is expressly understood and agreed that the time of beginning, rate of progress, and time of completion of the Work are the essence of this Contract. The Work shall be prosecuted at such time, and in or on such part or parts of the Project as may be required, to complete the Project as contemplated in the Contract Documents and the approved construction schedule.

B. Regular Work hours shall be from 7:00 a.m. to 6:00 p.m. Monday through Friday. No Work requiring the presence of the Engineer's representative will be performed outside of regular Work hours. If, however, the Contractor works additional hours (other than specified herein), the Contractor shall pay the Owner for additional engineering services as outlined below.

C. The cost of additional engineering services shall be borne by the Contractor and will be based upon actual hours worked (labor cost x 3 x 1.5) plus out-of-pocket expenses such as lodging, mileage, materials, etc. Contractor will not permit overtime work or the performance of Work on Saturday, Sunday, or any legal holiday without City of Fayetteville's written consent.

1.14 SHOP DRAWINGS

A. Submit number of copies which the Contractor requires, plus four (4) copies which will be retained by the Engineer.

B. Include as a minimum dimensions, size, location of connections to other work, weight of equipment, and supporting calculations.

1.15 PRODUCT DATA

A. Submit number of copies which the Contractor requires, plus four copies which will be retained by the Engineer.

B. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturer's standard data to provide information unique to this Project.

1.16 MANUFACTURERS' INSTRUCTIONS AND CERTIFICATIONS

A. Submit as noted in individual specification Sections.

1.17 QUALITY ASSURANCE

A. Maintain quality control over suppliers, manufacturers, products, services, site conditions, and workmanship to produce work of specified quality.

B. Comply fully with manufacturer's instructions.

C. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

1.18 REFERENCES

A. Conform to reference standard by date of issue current as of date of Contract.

B. Should specified reference standard conflict with Contract Documents, request clarification from Engineer before proceeding.

1.19 MANUFACTURERS' FIELD SERVICES

A. Representative shall submit written report to Engineer listing observations and recommendations.

1.20 TESTING LABORATORY SERVICES

A. Owner will approve the Contractor’s selection of a testing laboratory to perform inspections, tests, and other services required by individual Specification Sections.

B. All costs for laboratory testing of earthwork and concrete shall be paid for by the Contractor.

C. Services will be performed in accordance with requirements of governing authorities and with specified standards.

D. Contractor shall cooperate with Testing Laboratory personnel; furnish tools, samples of materials, design mix, equipment, storage, and assistance as requested.
   1. Notify Engineer/Testing Laboratory 48 hours prior to expected time for operations requiring testing services.
   2. Furnish and deliver samples/cylinders to lab for testing.
   3. Pay for testing.

1.21 TEMPORARY ELECTRIC POWER AND LIGHTING

A. Provide and pay for power services required from source.

B. Provide power outlets for construction operations, branch wiring, distribution boxes, and flexible power cords as required.

1.22 TEMPORARY WATER

A. Provide water, as needed, for own use.

B. Provide an adequate supply of potable drinking water for use by employees and Engineer's employees.

1.23 SANITARY FACILITIES – NOT USED

1.24 WATER FOR TESTING - NOT USED

1.25 TEMPORARY TELEPHONE SERVICE – NOT USED

1.26 TEMPORARY WATER CONTROL

A. Maintain excavations and trenches free of water. Provide and operate pumping equipment of a capacity to control water flow.

B. Provide dewatering system and pumping to maintain excavations dry and free of water inflow on a 24 hours basis.

C. Provide piping to handle pumping outflow to discharge in a manner to avoid erosion or deposit of silt.

1.27 TEMPORARY ACCESS ROADS AND PARKING

A. Construct and maintain temporary construction access roads, parking areas, and detours as are required to execute the Work.

1.28 TEMPORARY HEATING AND VENTILATING – NOT USED

1.29 PROTECTION OF FINISHED WORK

A. Protect installed work and provide special protection where specified in individual specification Sections.

1.30 PROGRESS CLEANING

A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.

1.31 FIELD OFFICES – NOT USED

1.32 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

A. Remove temporary erosion control construction, above grade or buried utilities, equipment, facilities, and materials, prior to Substantial Completion inspection.

B. Remove and repair damage caused by installation or use of temporary work.

1.33 PRODUCTS

A. Products: New material, machinery, components, equipment, and systems forming Work, but does not include machinery or equipment used for preparation, fabrication, or erection of Work.

B. Use interchangeable components of the same manufacture for similar components.

1.34 TRANSPORTATION, HANDLING, STORAGE, AND PROTECTION

A. Transport, handle, store and protect Products in accordance with manufacturer's instructions.

1.35 SUBSTITUTIONS

A. Possible substitutions (“or approved equal”/ “or equal”) shall be submitted no later than ten (10) days prior to bid date for Engineer to review and consider requests from Contractor or Bidder for substitutions as equal. The Bidder may include substitutions not specified only if written

approval is received from the Engineer prior to bidding. Otherwise, substitutions will be not be allowed.

B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.

1.36 SYSTEMS DEMONSTRATION

A. Prior to final inspection, demonstrate operation of each system to Engineer and Owner.

B. Instruct Owner's personnel in operation, adjustment, and maintenance of equipment and systems, using the operation and maintenance data as the basis of instruction.

1.37 CONTRACT CLOSEOUT PROCEDURES

A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and Work is complete in accordance with Contract Documents and ready for Engineers inspection.

B. Submit final Application for Payment identifying total adjusted Contract Price, previous payments, and amount remaining due after Engineer has given written approval of Project Record Documents.

1.38 FINAL CLEANING AND INSPECTION

A. Execute final cleaning prior to final inspection.

B. Clean interior and exterior surfaces exposed to view.

C. Clean debris, waste and surplus supplies, rubbish, and construction facilities from site.

D. After final cleaning and upon written notice from the Contractor that the Work is completed, the Engineer will make a preliminary inspection with the Owner and Contractor present. Upon completion of this preliminary inspection, the Engineer will notify the Contractor, in writing, of any particulars in which this inspection reveals that the Work is defective or incomplete.

E. Upon receiving written notice from the Engineer, the Contractor shall immediately undertake the work required to remedy defects and complete the Work to the satisfaction of the Owner.

F. When the Contractor has corrected or completed the items as listed in the Engineer's written notice, he shall inform the Engineer, in writing, that the required Work has been completed. Upon receipt of this notice, the Engineer, in the presence of the Owner and Contractor, shall make his final inspection of the Project.

G. Should the Engineer find all Work satisfactory at the time of his inspection, the Contractor will be allowed to make application for final payment in accordance with the provisions of the General Conditions. Should the Engineer still find deficiencies in the Work, the Engineer will inform the Contractor of the deficiencies and will deny the Contractor's request for final payment until the Contractor has satisfactorily completed the required Work.

H. Water courses, gutters, and ditches shall be opened and left in a condition satisfactory to the Engineer.

1.39 FINAL SUBMITTALS

A. No contract will be finalized until all of the following have been submitted:
   1. Final Shop Drawings.
   2. Record Drawings.

3. Operations and Maintenance Manuals.
4. Manufacturers' Certificates of Proper Installation.

1.40 PROJECT RECORD DOCUMENTS (“AS-BUILTS”)

A. Maintain on Project site, one set of Contract Documents, Shop Drawings, and Product Submittals to be utilized for Record Documents.

B. Keep Record Documents and samples available for inspection by Engineer.

C. Maintain Record Documents in a clean, dry, and legible condition. **Do not use Record Documents for construction purposes**. If Contractor submits Record Documents that are in poor condition and is unacceptable by the Engineer, Contractor shall re-purchase a new set of Project Drawings and Project Manual and re-recording information on new purchased set and resubmit to Engineer.

D. Specification, Record Documents, and Shop Drawings: Legibly mark each item to record actual construction or product installed.

E. Record information in red ink on a set of blue line opaque Drawings, and in a copy of a Project Manual.

F. Record information concurrently with construction progress.

G. Contract Drawings and Shop Drawings: Legibly mark each item to record actual construction, including:
   1. Measured depths of elements of structures in relation to datum.
   2. Measured horizontal and vertical locations of underground utilities, valves, fittings, and other appurtenances incorporated in the Project, referenced to permanent surface improvements (three (3) each).
   3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of construction.
   4. Field changes of dimension and detail.
   5. Changes made by Modifications by either Field Orders or Change Orders.
   6. Details not on original Contract Drawings or referenced in Project Manual, but are part of the Project.

H. Specifications: Legibly mark each item to record actual construction, including:
   1. Manufacturer, trade name, and catalog number of each product actually installed, particularly optional items and substitute items.
   2. Changes made by Addenda, Field Orders, Change Orders, or other Modifications.

I. Other Documents: Maintain manufacturer's certifications, inspection certifications, field test records, and other required documentation required by individual Specifications Sections.

J. Transmit with cover letter in duplicate, listing:
   1. Date.
   2. Project title and number.
   3. Contractor's name, address, and telephone number.
   4. Number and title of each Record Document.
   5. Signature of Contractor or authorized representative.

K. Final Application for Payment shall not be approved until Project Record Documents (“As-Builts”) are reviewed and approved by Engineer.

1.41 OPERATION AND MAINTENANCE DATA

A. Submit 2 sets prior to final inspection, bound in 8-1/2 x 11-inch text pages with durable plastic covers.

B. Prepare binder cover with printed title “OPERATION AND MAINTENANCE MANUAL” and title of project.

C. Internally subdivide the binder contents with permanent page dividers, logically organized, with tabs clearly printed under reinforced laminated plastic tabs.

D. Contents:
1. Directory listing names, addresses, and telephone numbers of Engineer, Contractor, Subcontractors, and major equipment suppliers.
2. Operation and maintenance instructions, arranged by system.
3. Certificates.
4. Shop drawings.
5. Product data.
6. Warranties.

1.42 GUARANTEES, BONDS, AFFIDAVITS, AND WARRANTIES

A. Provide duplicate notarized copies.

B. Execute and assemble documents from Subcontractors, suppliers, and manufacturers.

C. No contract will be finalized until all guarantees, performance tests, bonds, certificates, licenses, affidavits, and warranties required for Work or equipment as specified are satisfactorily filed with the Engineer.

D. Submit prior to final Application for Payment.

1.43 SPARE PARTS AND MAINTENANCE MATERIALS

A. Provide products, spare parts, maintenance, and extra materials in quantities specified in individual specification Sections.

B. Deliver to project site and place in locations as directed; obtain receipt prior to final payment.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 01 00 00

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SECTION 01 11 00 – SUMMARY OF WORK

PART 1 - GENERAL

1.1 SUMMARY

A. This Section describes the project in general, and provides an overview of the work to be performed. Detailed requirements and extent of work is stated in the applicable Specification Sections and is shown on the Drawings. The Contractor shall, except as otherwise specifically stated herein or in any applicable parts of the Contract Documents, provide and pay for all labor, materials, equipment, tools, construction equipment, and other facilities and services necessary for proper execution, and completion of his work. It is important that the construction is completed within the time allowances provided in the Contract.

1.2 REASONABLY IMPLIED PARTS OF THE WORK SHALL BE DONE THOUGH ABSENT FROM SPECIFICATIONS

A. Any part of the work which is not mentioned in the Specifications but is shown on the Drawings, or any part not shown on the Drawings but described in the Specifications, or any part not shown on the Drawings nor described in the Specifications, but which is necessary or normally required as a part of such work, or is necessary or required to make each installation satisfactorily and legally operable, shall be performed by the Contractor as incidental work without extra cost to the Owner, as if fully described in the Specifications and shown on the Drawings, and the expense thereof shall be included in the applicable unit prices or lump sum bid items for the work.

1.3 DESCRIPTION OF THE PROJECT

A. Work covered by these Contract Documents in general covers the construction of the following facilities:
   1. Playground improvements including new sidewalks, fence, benches and tables, a pavilion, basketball court restriping, new swing sets and playground shade sails.
   2. Trail and trail lighting improvements.
   3. Removal and replacement of wetland pavilion.
   4. Dog Park improvements including benches, pavilions, new sidewalks, dog wash station and associated water service line extension, and fence realignment.
   5. Miscellaneous drainage improvements.
   6. Completion of related work items as indicated on the Drawings and/or required by the Detailed Specifications.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.1 CONTRACTOR'S RESPONSIBILITIES

A. The Contractor shall execute all work, including, but not limited to, provide labor and materials for site, structural, piping, equipment, and finishes.

END OF SECTION 01 11 00

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SECTION 01 22 13 – MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 SUMMARY

A. Submit request for partial payment at the prices indicated in the Bid.
   1. Prices bid shall include the work not specifically set forth as an individual payment item. These items are considered to be a subsidiary obligation of the Contractor and the cost for these items shall be included in the bid prices.
   2. Payments shall be based on the actual quantity of work completed per Contract Documents and measured per this Section.
   3. Payment shall be made for Materials on Hand.
      a. Materials must be properly stored on site.
      b. Payment may be made for the invoice amount less the specified retainage.
      c. Invoices must be provided at the time they are included on the Materials on Hand tabulation.
      d. Documentation of payment for Materials on Hand must be provided for these items with the next payment request. Payment will be adjusted to the amount actually paid if this differs from the invoice amount. If this documentation is not provided the item must be removed from the Materials on Hand list and payment will be withheld.
      e. Payment for Materials on Hand is provided for the convenience of the Contractor and does not constitute acceptance of the product.
   4. The work covered by Progress Payments shall become the property of the Owner at the time of payment.

B. SECTION INCLUDES
   1. Summary,
   2. Schedule of Values,
   3. Application for Payment,
   4. Unit prices.

1.2 SCHEDULE OF VALUES

A. Submit a detailed schedule of values for the lump sum work to be performed on the project.
   1. Submit schedule at the pre-construction conference.
   2. Line items in the Bid proposal are to be used as line items in the schedule.
   3. Payment will be made on the quantity of work completed per Contract Documents during the payment period as measured per this Section.
      a. Payment amount shall be the work quantity measured multiplied by the unit prices for that line item in the Bid.
      b. Payment on a unit price basis will not be made for work outside finished dimensions shown in the Contract Documents.
      c. Partial payments will be made for lump sum items in the Bid.
   4. Lump sum line items in the Bid are to be divided to allow easy determination of the percentage of the item that has been completed.
      a. Items, with the exception of equipment packages, are not to exceed $50,000.00.
      b. Separate product costs and installation costs. Product costs include cost for product, delivery and unloading costs, royalties and patent fees, taxes and other costs paid directly to the supplier or vendor. Installation costs include the cost for the supervision, labor and equipment for field fabrication, erection, installation, startup, initial operation and Contractor's overhead and profit.
      c. Lump sum items may be divided into an estimated number of units.

d. Include a directly proportional amount of Contractor's overhead and profit for each line item.

5. Divide principal subcontracts into an adequate number of line items to allow determination of the percentage of work completed for each item.
   a. These line items may be used to establish the value of work to be added or deleted from the project.
   b. Correlate line items with other administrative schedules and forms:
      1) Progress schedule,
      2) List of subcontractors,
      3) Schedule of allowances,
      4) Schedule of alternatives,
      5) List of products and principal suppliers,
      6) Schedule of submittals.
6. Costs for mobilization are listed as separate pay items in each Bid Schedule and shall be actual cost for:
   a. Transportation and setup of equipment.
   b. Transportation and/or erection of all field offices, sheds, and storage facilities.
   c. Salaries for preparation of submittals required before the first payment request.
   d. Salaries for field personnel assigned to the project related to the mobilization of the Project.
   e. Mobilization shall not exceed 5% of the total bid, minus bonds & insurance and trench excavation safety.
   f. Cost for mobilization may be submitted only for work completed.
      1) The sum of values listed in the schedule shall equal the total contract amount.

1.3 APPLICATION FOR PAYMENT

A. Application for payment shall be in accordance with the General Conditions and Special Conditions.

B. Payment for pipe shall be made at 85% of the unit bid price upon pipe installation, backfilling, and rough grading. Payment shall be increased 5% of the unit bid price upon completion of applicable testing requirements. Payment shall be increased 10% of the unit bid price upon completion and acceptance of final clean-up by the Owner and Engineer in accordance with the General Conditions.

1.4 UNIT PRICES

A. Authority: Measurement methods are delineated in this Section, and may also be delineated in individual Specification Sections.

B. Measurement methods delineated in individual Specification Sections complement criteria of this Section. In event of conflict, requirements of individual Specification Section govern.

C. Take measurements and compute quantities. Engineer will verify measurements and quantities.

D. Unit Quantities: Quantities and measurements indicated on Bid Form are for Contract purposes only. Quantities and measurements supplied or placed in the Work shall determine payment.
   1. When actual Work requires more or fewer quantities than those quantities indicated, provide required quantities at contracted unit sum/prices.
   2. When actual Work requires 25% or greater change in quantity than those quantities indicated, Owner or Contractor may claim a Contract Price adjustment.

E. Payment Includes: Full compensation for required labor, products, tools, equipment, plant and facilities, transportation, services, and incidentals; erection, application, or installation of item

of the Work; overhead and profit.

F. Final payment for Work governed by unit prices will be made on basis of actual measurements and quantities accepted by Engineer multiplied by unit sum/price for Work incorporated in or made necessary by the Work.

G. Measurement of Quantities:
   1. All work completed under the contract will be measured by the Engineer, or his/her authorized representatives, using United States Customary Units of Measure.
   2. The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice.
   3. Measurement by Volume: Measured by cubic dimension using mean length, width, and height or thickness.
   4. Measurement by Area: Measured by square dimension using mean length and width or radius.
   5. Linear Measurement: Measured by linear dimension, at item centerline or mean chord.
   6. Stipulated Sum/Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as completed item or unit of the Work.

H. SCOPE OF PAYMENT
   1. Payment for the work described in this Section will be included as part of the unit price or lump sum bid amounts stated in the Bid Form.
   2. The Amount for Work listed in the Bid, whether lump sum or unit price, shall include all costs specified on the Bid Form, including all miscellaneous amounts (demobilization, as built record drawings, and any items not covered elsewhere) to complete the project in accordance with the Contract Documents.
   3. The quantities listed in these documents are approximate, for information only, and should be verified by each bidder prior to bidding
   4. Payments for lump sum items shall be made in proportion to the amount of Work accomplished, as determined by the Engineer, as of the period ending date of each Application for Payment.
   5. Payment for unit price items shall be made as the work progresses. Said payments will be based upon the work performed and materials complete in place in accordance with the contract, plans, and specifications, approved by the Engineer, as of the period ending date of each Application for Payment.
   6. It is understood and agreed that the Contractor shall not be entitled to partial payment based on quantities of work in excess of those provided in the proposal or covered by approved change orders or supplemental agreements, except when such excess quantities have been determined by the Engineer to be a part of the final quantity for the item of work in question.
   7. No partial payments shall bind the Owner to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment.
   8. The Contractor has sole responsibility for providing materials, equipment and work which meet the specifications. In the event inspection or testing reveals that materials/equipment furnished or work performed by the Contractor does not meet the specifications, payment for said materials/equipment/work will be withheld until compliance with the specifications is demonstrated by the Contractor.

I. BID ITEMS (Must encompass all costs, resources, and incidentals to manage, construct, and all items to completion)
   1. Item No. 1 – Mobilization
      a. Unit of Measure: Lump Sum
      b. This item shall compensate the Contractor for materials, labor, tools, and equipment necessary to fully mobilize to the project site to begin work. Mobilization shall not exceed 5% of the total bid, minus bonds & insurance, and trench excavation safety in accordance with the Drawings and Specifications.
      c. Payment
         1) First Estimate — 25% of Mobilization
         2) 10% Total Contract Price Completed — 50% of Mobilization
         3) 25% Total Contract Price Completed — 100% of Mobilization
      d. Total Contract Price Completed shall be actual construction completed and does not include materials stored.
   2. Item No. 2 – Bonds and Insurance
      a. Unit of Measure: Lump Sum
      b. This item shall compensate the Contractor for materials, labor, tools, and equipment to provide and maintain required bonds and insurance throughout the duration of the project. Contractor shall provide cost for required bonds and insurance for the base bid in accordance with the Drawings and Specifications.
      c. Payment
         1) First Estimate — 100% of Bonds and Insurance
   3. Item No. 3 – Miscellaneous (Traffic Control, Demobilization, As-Built Record Drawings, and Any Items not Covered Elsewhere to Complete the Project per the Drawings and Specifications).
      a. Unit of Measure: Lump Sum
      b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals for miscellaneous items, in accordance with the Drawings and Specifications. This item shall include traffic control, demobilization, as-built record drawings, and any items not covered elsewhere to complete the project, in accordance with the Drawings and Specifications. Total dollar amount for this item shall not exceed 5% of the total dollar amount of the base bid in accordance with the Drawings and Specifications.
      c. Payment shall be made on Percentage of Total Contract Price Completed and shall be actual construction completed and does not include materials stored.
   4. Item No. 4 – R&D of Existing Concrete
      a. Unit of Measure: Square Yards
      b. This item shall compensate the Contractor for materials, labor, tools, and equipment to remove existing concrete and dispose off-site, in accordance with the Drawings and Specifications.
      c. Payment shall be 100% of the unit bid price upon removal and disposal of the existing concrete.
   5. Item No. 5 – R&D of Existing Basketball Court Striping
      a. Unit of Measure: Linear Feet
      b. This item shall compensate the Contractor for materials, labor, tools, and equipment to remove existing basketball court striping, and dispose off-site, in accordance with the Drawings and Specifications.
      c. Payment shall be 100% of the unit bid price upon removal and disposal of the existing basketball court striping.

6. Item No. 6 – R&D Existing Wooden Wetland Pavilion
   a. Unit of Measure: Lump Sum
   b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals for remove existing wooden wetland pavilion and dispose off-site, in accordance with the Drawings and Specifications.
   c. Payment shall be 100% of the unit bid price upon removal and disposal of the existing wooden wetland pavilion.
7. Item No. 7 – R&D of Existing Dog Park Split Rail/Chain Link Fence, with Concrete Mow Strip
   a. Unit of Measure: Linear Feet
   b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals for remove existing dog park split rail/chain link fence with concrete mow strip and dispose off-site, in accordance with the Drawings and Specifications.
   c. Payment shall be 100% of the unit bid price upon removal and disposal of the existing dog park split rail/chain link fence with concrete mow strip.
8. Item No. 8 – R&D of Existing Dog Park Split Rail/Chain Link Fence
   a. Unit of Measure: Linear Feet
   b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals for remove existing split rail/chain link fence and dispose off-site, in accordance with the Drawings and Specifications.
   c. Payment shall be 100% of the unit bid price upon removal and disposal of the existing split rail/chain link fence.
9. Item No. 9 – R&D of Existing Split Rail Fence
   a. Unit of Measure: Linear Feet
   b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals for remove existing split rail fence and dispose off-site, in accordance with the Drawings and Specifications.
   c. Payment shall be 100% of the unit bid price upon removal and disposal of the existing split rail fence.
10. Item No. 10 – R&D Existing Attenuated Impact Surface
    a. Unit of Measure: Lump Sum
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals for remove attenuated impact surface and dispose off-site, in accordance with the Drawings and Specifications.
    c. Payment shall be 100% of the unit bid price upon removal and disposal of the existing attenuated impact surface.
11. Item No. 11 – 16'X20' Pavilion
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for materials, labor, tools, and equipment to provide and install the 16'X20' Pavilion for a complete installation in accordance with the Drawings and Specifications.
    c. Payment shall be 100% of the unit bid price after installation of the Pavilion.
12. Item No. 12 – 12'X12' Pavilion (City of Fayetteville will provide pavilion materials)
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for materials, labor, tools, and equipment to provided and install the 12'X12' Pavilion for a complete installation in accordance with the Drawings and Specifications.
    c. Payment shall be 100% of the unit bid price after installation of the Pavilion.
13. Item No. 13 – Split Rail/Chain Link Fence, with Concrete Mow Strip
    a. Unit of Measure: Linear Feet
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to install fence including concrete mow strip at locations in accordance with the Drawings and Specifications.

c. Fence materials shall be in accordance with the Drawings and Specifications.
d. Payment shall be 100% of the unit bid price after installation of the fence including concrete mow strip.

14. Item No. 14 – Split Rail/Chain Link Fence
    a. Unit of Measure: Linear Feet
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to install fence at locations in accordance with the Drawings and Specifications.
    c. Fence materials shall be in accordance with the Drawings and Specifications.
    d. Payment shall be 100% of the unit bid price after installation of the fence.
15. Item No. 15 – Split Rail Wooden Fence (City of Fayetteville will provide partial materials)
    a. Unit of Measure: Linear Feet
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to provide and install wooden fence at locations in accordance with the Drawings and Specifications.
    c. Fence materials shall match existing fence materials.
    d. Payment shall be 100% of the unit bid price after replacement of the wooden fence.
16. Item 16. - Install Standard Duty Concrete Pavement
    a. Unit of Measure: Square Yard
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to construct a concrete pavement section, in accordance with the Drawings and Specifications.
    c. All saw cutting, barricades, signage, warning lights, forming, expansion joints, rebar, doweling, concrete, and cleanup.
    d. All pavement markings shall be restored to new conditions per the requirements of the governmental agency having jurisdiction.
    e. Maximum dimensions used in determining quantities shall be as shown in the Contract Documents. Any concrete installation over the maximum dimensions or repair to existing concrete curb and gutter not called out for replacement, shall be at the Contractor's expense.
    f. Payment shall be 100% of the unit bid price after construction of the concrete pavement
17. Item No. 17 – Concrete Doweling
    a. Unit of Measure: Lump Sum
    b. This item shall compensate the Contractor for materials, labor, tools, and equipment for installation of concrete doweling in accordance with the Drawings and Specifications. This item shall consist of furnishing and placing concrete doweling of the type and material specified, in accordance with these specifications and to the dimensions and at the locations shown on the plans or as directed.
    c. Payment shall be 100% of the lump sum price upon completion of the bid items in the base bid in accordance with the Drawings and Specifications.
18. Item No. 18 – Water Pipe Sleeve
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to install water pipe sleeve, in accordance with the Drawings and Specifications. Payment shall include any necessary boring or fittings necessary for the work.
    c. Payment shall be 100% of the unit bid price after installation of the water pipe sleeve.
19. Item No. 19 – Cast-in-Place Seating Walls
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for providing and installing concrete seating walls, in accordance with the Drawings and Specifications. Payment shall include formwork, curing, and protection during the curing period, and any ancillary items necessary for the Work

c. Payment shall be 100% of the unit bid price upon installation of cast-in-place seating walls.

20. Item No. 20 – Concrete Footer for Wetland Pavilion -
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to install concrete footers for wetland pavilion, in accordance with the Drawings and Specifications. Payment shall include any necessary specialty excavation equipment, dewatering equipment, or cofferdams necessary for the work.
    c. Related item(s): Construct Wetland Pavilion
    d. Payment shall be 100% of the unit bid price after installation of the concrete footer.
21. Item No. 21 – Swing Set Large
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to provide and install the swing set (large) in accordance with the Drawings and Specifications.
    c. Payment shall be 100% of the unit bid price after installation of the swing set.
22. Item No. 22 - Swing Set Small
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to provide and install the swing set (small) in accordance with the Drawings and Specifications.
    c. Payment shall be 100% of the unit bid price after installation of the swing set.
23. Item No. 23 – Gravel - #57 Cleaned Stone
    a. Unit of Measure: Cubic Yards
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to provide and install gravel in accordance with the Drawings and Specifications.
    c. Related item(s): Attenuated Impact Surface, Filter Fabric
    d. Payment shall be 100% of the unit bid price after installation of the gravel.
24. Item No. 24 – Filter Fabric
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to provide and install geotextile in accordance with the Drawings and Specifications.
    c. Related item(s): Attenuated Impact Surface, Gravel - #57 Cleaned Stone.
    d. Payment shall be 100% of the unit bid price after installation of the gravel.
25. Item No. 25 – Attenuated Impact Surface
    a. Unit of Measure: Square Feet
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to provide and install attenuated impact surface in accordance with the Drawings and Specifications. Payment shall include compacted finish stone, play pad, sand infill, artificial turf, vertical concrete curb, staples, screws, pressure treated board or composite board, concrete reinforcement, and additional items necessary for the work.
    c. Related item(s): Gravel - #57 Cleaned Stone, Filter Fabric
    d. Payment shall be 100% of the unit bid price after installation of the attenuated impact surface.
26. Item No. 26 – Benches (City of Fayetteville will provide partial materials)
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to provided and install the benches in accordance with the Drawings and Specifications.
    c. Payment shall be 100% of the unit bid price after installation of the benches.

27. Item No. 27 – Playground Shade Sail (Large)
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to provide and install the playground shade sail (large) in accordance with the Drawings and Specifications.
    c. Payment shall be 100% of the unit bid price after installation of the playground shade sail.
28. Item No. 28 – Playground Shade Sail (Small)
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to provide and install the playground shade sail (small) in accordance with the Drawings and Specifications.
    c. Payment shall be 100% of the unit bid price after installation of the playground shade sail.
29. Item No. 29 – Picnic Tables
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to provide and install the picnic tables in accordance with the Drawings and Specifications.
    c. Payment shall be 100% of the unit bid price after installation of the picnic tables.
30. Item No. 30 – Striping along Dartmouth Ave. (4" Yellow Reflective Paint)
    a. Unit of Measure: Linear Feet
    b. This item shall compensate the Contractor for material, labor, tools, and equipment required for the complete installation of yellow striping paint of the width indicated in accordance with the Drawings and Specifications and all materials, labor, tools, equipment, and incidentals necessary to fully complete the work.
    c. Payment shall be 100% of the unit bid price upon completion of the actual installed striping lengths.
31. Item No. 31 – Basketball Court Striping (2", White Paint)
    a. Unit of Measure: Linear Feet
    b. This item shall compensate the Contractor for material, labor, tools, and equipment required for the complete installation of white striping paint of the width indicated in accordance with the Drawings and Specifications and all materials, labor, tools, equipment, and incidentals necessary to fully complete the work.
    c. Payment shall be 100% of the unit bid price upon completion of the actual installed striping lengths.
32. Item No. 32 – Dog Wash (Fixture) 505 Rinse Station
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to provide and install the Dog Wash 505 Rinse Station in accordance with the Drawings and Specifications.
    c. Payment shall be 100% of the unit bid price after installation of the dog wash station.
33. Item No. 33 – Install Water Pipe (1-1/2")
    a. Unit of Measure: Linear Feet
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, trenching & backfill, shoring, dewatering, and incidentals to install pipe in accordance with the Drawings and Specifications. This item shall include 1-1/2-inch pipe, fittings, and all related appurtenances in accordance with the Drawings and Specifications.
    c. Payment shall be 100% of the unit bid price upon pipe installation.

34. Item No. 34 – Water Connection to 1-1/2" Water Line
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, dewatering, and incidentals to install the pipe in accordance with the Drawings and Specifications. This item shall include 1-1/2-inch pipe, fittings, and all related appurtenances in accordance with the Drawings and Specifications.
    c. Payment shall be 100% of the unit bid price upon pipe installation.
35. Item No. 35 – Decorative Fire Hydrant
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for material, labor, tools, form work and equipment required for the complete installation of decorative fire hydrant assembly, including all appurtenance, and testing in accordance with the Drawings and Specifications.
    c. Payment shall be 100% of the unit bid price upon installation of decorative fire hydrant.
36. Item No. 36 – 6" Perforated Drain Pipe
    a. Unit of Measure: Linear Feet
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to provide and install perforated drain pipe in accordance with the Drawings and Specifications. Payment shall include non-woven filter fabric, perforated pipe, open graded washed rock, topsoil with sand mix, trenching, excavation, and additional items necessary for the work.
    c. Payment shall be 100% of the unit bid price after installation of the perforated drain pipe.
37. Item No. 37 – Grate Inlet
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to provide and install grate inlet in accordance with the Drawings and Specifications. Payment shall include associated drain basin, grate frame, grate, bedding, fittings, trenching, exaction, and additional items necessary for the work.
    c. Payment shall be 100% of the unit bid price after installation of the grate inlet.
38. Item No. 38 - 6" PVC Drain Pipe
    a. Unit of Measure: Linear Feet
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to provide and install drain pipe in accordance with the Drawings and Specifications. Payment shall include pipe, bedding, backfill, trenching, excavation, and additional items necessary for the work.
    c. Payment shall be 100% of the unit bid price after installation of the drain pipe.
39. Item No. 39 – Flared End Section (FES) Concrete Headwall
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to provide and install flared end section and concrete headwall in accordance with the Drawings and Specifications. Payment shall include concrete, concrete reinforcement, fittings, framing, bedding, trenching, backfill, excavation, and additional items necessary for the work.
    c. Payment shall be 100% of the unit bid price after installation of the flared end section and concrete headwall.
40. Item No. 40 – Cleanout
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, trenching & backfill, shoring, dewatering, and incidentals to provide and install a cleanout.
    c. Payment shall be 100% of the unit bid price upon cleanout installation.

41. Item 41 – Construct Wetland Pavilion (City of Fayetteville will provide partial materials)
    a. Unit of Measure: Lump Sum
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to construct wetland pavilion in accordance with the Drawings and Specifications. Payment shall include beams, joists, decking, bolts, nuts, washers, screws, toe rails, post anchors, stringer anchors, hand rails, and additional items necessary for the work.
    c. Related item(s): Concrete Footer for Wetland Pavilion
    d. Payment shall be 100% of the unit bid price upon completion of wetland pavilion.
42. Item No. 42 – Excavation (Cut)
    a. Unit of Measure: Cubic Yard
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals necessary for excavation of area in accordance with the Drawings and Specifications.
    c. Payment shall be 100% of the unit bid price after excavation has been quantified.
43. Item No. 43 – Select Fill (Fill)
    a. Unit of Measure: Cubic Yard
    b. This item shall compensate the Contractor for providing and installing select backfill material, in accordance with the Drawings and Specifications.
    c. Payment shall be 100% of the unit bid price after installation of the select fill.
44. Item No. 44 – Erosion Control
    a. Unit of Measure: Lump Sum
    b. This item shall compensate the Contractor for materials, labor, tools, and equipment to provide compliance with all erosion control measures for the bid items in the base bid in accordance with the Drawings and Specifications.
    c. Bid items include, but not limited to USACE 404 Permit, ADEQ Construction Stormwater Permit, ADEQ Short Term Activity Authorization Permit, and local floodplain development permits.
    d. Payment shall be made on Percentage of Total Contract Price Completed and shall be actual construction completed and does not include materials stored.
45. Item No. 45 – Tree Protection
    a. Unit of Measure: Linear Feet
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to install tree protection in accordance with the Drawings and Specifications. Payment shall include posts, ties, fencing, and additional items necessary for the work.
    c. Payment shall be 100% of the unit bid price after installation of tree protection.
46. Item No. 46 – Seeding all Disturbed Areas
    a. Unit of Measure: Square Yard
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to install topsoil, seed, fertilizer, water, and site cleaning in accordance with the Drawings and Specifications.
    c. Seeding shall be equal to the plant cover removed both in type and quantity.
    d. Seeding shall be measured and paid by the square yard for each square yard of seeding installed as directed by the Engineer. Any additional seeding shall be at the Contractor's expense.
    e. Payment shall be 100% of the unit bid price after seeding installation.

47. Item No. 47 – Trail Lighting (City of Fayetteville will provide partial materials)
    a. Unit of Measure: Each
    b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to provide and install trail lighting in accordance with the Drawings and Specifications. Payment shall include light poles, light fixtures, light pole bases, ground rods, gravel base associated with trail lighting, conduit, anchor bolts, vertical and horizontal light pole base reinforcement, forms, excavation, pavement repair, utility coordination, and additional items necessary for the work.
    c. Payment shall be 25% unit bid price for the installation of underground electrical infrastructure, 25% unit bid price for installation of light pole bases and pull boxes, and 50% unit bid price for the remainder of work.

J. DEDUCTIVE ALTERNATE BID NO. 1
    1. Item No. 47 – Trail Lighting (City of Fayetteville will provide partial materials)
        a. Unit of Measure: Each
        b. This item shall compensate the Contractor for materials, labor, tools, equipment, and incidentals to provide and install trail lighting in accordance with the Drawings and Specifications. Payment shall include light poles, light fixtures, light pole bases, ground rods, gravel base associated with trail lighting, conduit, anchor bolts, vertical and horizontal light pole base reinforcement, forms, excavation, pavement repair, utility coordination, and additional items necessary for the work.
        c. Payment shall be 25% unit bid price for the installation of underground electrical infrastructure, 25% unit bid price for installation of light pole bases and pull boxes, and 50% unit bid price for the remainder of work.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION 01 22 13

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SECTION 01 31 10 – SCHEDULE AND SEQUENCE OF OPERATIONS

PART 1 - GENERAL

1.1 CONSTRUCTION SCHEDULE GENERAL PROVISIONS

A. No work shall be done between 6:00 P.M. and 7:00 A.M. nor on Saturdays, Sundays, or legal holidays without the written permission of the Engineer. However, emergency work during these hours may be done without prior permission.

1.2 RELATED SECTIONS

A. Section 00 72 00 – GENERAL CONDITIONS

B. Section 00 73 00 – SUPPLEMENTARY CONDITIONS

C. Section 01 31 19.13 – PRECONSTRUCTION CONFERENCES

1.3 SEQUENCE OF CONSTRUCTION

A. The Contractor shall prepare and submit a diagram or chart indicating his specific sequence of construction and the scheduled duration of each activity.

1.4 OVERALL SCHEDULE

A. Immediately after opening bids, the low bidder will prepare a detailed schedule showing the sequence of work items to be accomplished.

B. Schedule to be comprised of construction operations covering Work in connection with this Contract and shown in sufficient detail and with a minimum of work activities.
   1. Final total number of activities is subject to approval of Engineer.
   2. Work Activity: Activity for which manpower is required and must be performed before the Project is considered complete.

C. The Overall Schedule shall indicate the sequence of work and the time of starting and completion of each part. It shall include, but not be limited to, the following items, as they pertain to the respective contractors:
   1. Shop drawing receipt from Contractor, submitted to the Engineer, review, and return to Contractor.
   2. Material and equipment order, manufacture, delivery, installation, and check-out.
   3. Performance tests and supervisory service activities.
   4. Piping installation.
   5. Pipe testing.
   6. Final cleaning.
   7. Allowance for inclement weather.

PART 2 - PRODUCTS

2.1 SUMMARY

A. The work shall be started within 10 days of the Notice to Proceed from the Owner, and the work shall be executed with such progress as may be required to prevent any undue delay to the general completion of the project.

B. The work shall be executed at such times and in or on such parts of the project, and with such forces, materials, and equipment to assure completion of the work in the time established by the Contract execution.

2.2 OVERTIME NOTICE

A. See Section 00 72 00, GENERAL CONDITIONS and SECTION 00 73 00, SUPPLEMENTARY CONDITIONS.

2.3 PRECONSTRUCTION AND PROJECT COORDINATION MEETINGS

A. A Preconstruction Conference and Project Coordination Meetings shall be held per the requirements of Section 01 31 19.13, PRECONSTRUCTION CONFERENCES of these Specifications.

2.4 PAYMENT

A. No separate payment shall be made for work under this Section.

PART 3 - EXECUTION - NOT USED

END OF SECTION 01 31 10

SECTION 01 31 19.13 – PRECONSTRUCTION CONFERENCE

PART 1 - GENERAL

1.1 SUMMARY

A. Contractor participation in preconstruction conference.

1.2 PRECONSTRUCTION CONFERENCE

A. Engineer will schedule conference as soon as practicable after receipt of approved bonds and proof of insurance.

B. Attendance:
1. Owner,
2. Engineer,
3. Contractor,
4. Major Subcontractors.

C. Agenda:
1. Distribution of Contract Documents.
2. Submittal of list of subcontractors, list of products, schedule of values, and progress schedule.
3. Designation of responsible personnel.
4. Procedures and processing of field decisions, submittals, substitutions, applications for payments, bid requests, change orders, and Contract closeout procedures.
5. Scheduling.
6. Responsibilities of Engineer.
7. Responsibilities of Owner.
8. Responsibilities of Contractor.
9. General Discussion of Contract.
10. Staking of Work.
11. Construction Observation.
12. Labor Requirements.
13. Rights-of-Way and Easements.
14. Other items as required by funding agencies.
15. Use of premises by Owner and Contractor.
16. Owner's requirements.
17. Construction facilities and controls provided by Owner.
18. Temporary utilities provided by Owner.
19. Security and housekeeping procedures.
20. Schedules.
21. Procedures for testing.
22. Procedures for maintaining record documents.
23. Requirements for startup of equipment.
24. Inspection and acceptance of equipment put into service during construction period.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 01 31 19.13

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SECTION 01 33 00 – SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUBMITTALS

A. This Section outlines in general the items that the Contractor must prepare or assemble for submittal during the progress of the work. Costs for the work under this Section shall be included in the appropriate items of the Contractor's bid prices. There is no attempt herein to state in detail all of the procedures and requirements for each submittal. The Contractor's attention is directed to the individual Specification Sections in these Contract Documents which may contain additional and special submittal requirements. The Owner reserves the right to direct and modify the procedures and requirements for submittals as necessary to accomplish the specific purpose of each submittal. Should the Contractor be in doubt as to the procedure, purpose, or extent of any submittal, he should direct his inquiry to the Engineer.

1.2 ADMINISTRATIVE SUBMITTALS

A. The Contractor shall provide all of the submittals required by Section 00 72 00, GENERAL CONDITIONS, Section 00 73 00, SUPPLEMENTARY CONDITIONS, and as may be specifically required in other parts of these Documents.

B. The Contractor is reminded of his obligation as required by law to make required submittals promptly to the applicable Federal, state, or local agency. Failure to comply with this requirement may result in the withholding or progress payments and make the Contractor liable for other prescribed action and sanctions.

PART 2 - TECHNICAL SUBMITTALS

2.1 GENERAL

A. Requirements in this Section are in addition to any specific requirements for submittals specified in other Divisions and Sections of these Contract Documents.

B. Submitted data shall be fully sufficient in detail for determination of compliance with the Contract Documents.

C. Review, acceptance, or approval of substitutions, schedules, shop drawings, lists of materials, and procedures submitted or requested by the Contractor shall not add to the Contract amount, and all additional costs which may result therefrom shall be solely the obligation of the Contractor.

D. The Owner is not precluded, by virtue of review, acceptance, or approval, from obtaining a credit for construction savings resulting from allowed concessions in the work or materials therefore.

E. It shall not be the responsibility of the Owner to provide engineering or other services to protect the Contractor from additional costs accruing from such approvals.

F. No equipment or material for which listings, drawings, or descriptive material is required shall be fabricated, purchased, or installed until the Engineer has on hand copies of such approved lists and the appropriately stamped final shop drawings.

G. Submittals will be acted upon by the Engineer as promptly as possible, and returned to the Contractor not later than the time allowed for review in SHOP DRAWING SUBMITTAL PROCEDURE. Delays caused by the need for resubmittals shall not constitute reason for an extension of Contract time.

2.2 SHOP DRAWING SUBMITTAL PROCEDURE

A. See Section 00 72 00, GENERAL CONDITIONS and Section 00 73 00, SUPPLEMENTAL CONDITIONS.

2.3 TRANSMITTAL OF CONTRACTOR'S SUBMITTAL FORM

A. Each shop drawing submittal shall be accomplished by a Transmittal of Contractor's Submittal form. The form shall be completely filled in with all applicable information; failure to do so shall result in immediate rejection of the submitted items.

2.4 SHOP DRAWING REQUIREMENTS

A. Shop drawings referred to herein shall include shop drawings and other submittals for both shop and field-fabricated items. The Contractor shall submit, as applicable, the following for all prefabricated or manufactured structural, mechanical, electrical, plumbing, process systems, and equipment:
   1. GENERAL
      a. Shop drawings or equipment drawings, including dimensions, size, and location of connections to other work, and weight of equipment.
      b. Catalog information and cuts.
      c. Installation or placing drawings for equipment, drives, and bases.
      d. Supporting calculations for equipment and associated supports, or hangers required or specified to be designed by equipment manufacturers.
      e. Complete manufacturer's specifications, including materials description and paint system.
      f. Performance data.
      g. Suggested spare parts list with current price information.
      h. List of special tools required for checking, testing, parts replacement, and maintenance. (Special tools are those which have been specially designed or adapted for use on parts of the equipment, and which are not customarily and routinely carried by maintenance mechanics.)
      i. List of special tools furnished with the equipment.

2.5 LIST OF MATERIALS AND SUPPLIES REQUIRED FOR THE EQUIPMENT PRIOR TO, AND DURING START-UP.

A. List of materials and supplied furnished with the equipment.

B. Samples of finish colors for selection.

C. Special handling instructions.

D. Requirements for storage and protection prior to installation.

E. Requirements for routine maintenance required prior to start-up.

2.6 SUBMITTALS REQUIRED FOR FOREIGN-MANUFACTURED ITEMS

A. In addition to the submittal requirements stated above, suppliers of foreign-manufactured items shall submit the names and addresses of companies within the United States that maintain technical service representatives and complete inventory of spare parts and accessories for each foreign-made item proposed for incorporation into the work. Failure to prove the foregoing capabilities shall be just cause for rejection of the foreign-manufactured items.

2.7 RECORD DRAWINGS

A. The Engineer will prepare a set of Record Drawings for the project which will include the changes made in materials, equipment, locations, and dimensions of the work. Two (2) weeks prior to Final Inspection, the Contractor shall submit to the Engineer a current listing and description including marked-up prints of each change incorporated into the work since the preceding submittal.

2.8 SUBMITTAL OF INTERFACE INFORMATION (CONNECTION AND CORRELATION WITH OTHER WORK)

A. Where called for on the Specifications, and as determined necessary by the Engineer to provide proper correlation with other equipment, complete interface information shall be submitted. This interface information shall be accurate, and contain all information necessary to allow the completion of detail design and construction of the interfacing or connecting work. The Contractor shall include in his negotiation for subcontract work, such agreements as may be necessary to ensure the accuracy of subcontractor's interface submittal information. In the event additional costs are incurred due to subsequent changes to information given in said interface information, such additional costs shall be borne by the Contractor.

2.9 SAMPLES AND TEST SPECIMENS

A. Where required in the Specifications, test specimens or samples of materials, appliances, and fittings to be used or offered for use in connection with the Work shall be submitted to the Engineer at the Contractor's expense, with information as to their sources, with all cartage charges prepaid, and in such quantities and sizes as may be required for proper examination and tests to establish the quality or equality thereof, as applicable.

B. All samples and test specimens shall be submitted in ample time to enable the Engineer to make any tests or examinations necessary without delay to the work. The Contractor will be held responsible for any loss of time due to his neglect or failure to deliver the required samples to the Engineer, as specified.

C. The Contractor shall submit additional samples as required by the Engineer to ensure equality with the original approved sample and/or for determination of Specification compliance.

D. Laboratory tests and examinations that the Owner elects to make at its own laboratory will be made at no cost to the Contractor, except that, if a sample of any material or equipment proposed for use by the Contractor fails to meet the Specifications, the cost of testing subsequent samples shall be borne by the Contractor.

E. All tests required by the Specifications to be performed by an independent laboratory shall be made by an approved laboratory. Certified test results of all specified tests shall be submitted in duplicate to the Engineer. The samples furnished and the cost for the laboratory services shall be at the expense of the Contractor and included in the prices bid for the associated work.

2.10 CERTIFICATES OF COMPLIANCE

A. Certificate of Compliance shall be furnished for materials specified to a recognized standard or code prior to the use of any such materials in the work. The Engineer may permit the use of certain materials or assemblies prior to sampling and testing if accompanied by a certificate of Compliance. The certificate shall be signed by the manufacturer of the material or the manufacturer of assembled materials and shall state that the materials involved comply in all respects with the requirements of the Specifications. A Certificate of Compliance shall be furnished with each lot of material delivered to the work and the lot so certified shall be clearly identified in the certificate.

B. All materials used on the basis of a Certificate of Compliance may be sampled and tested at any time. The fact that material is used on the basis of a Certificate of Compliance shall not relieve the Contractor of responsibility for incorporating material in the work which conforms to the requirements of the Contract Documents and any such material not conforming to such requirements will be subject to rejection whether in place or not.

C. The Engineer reserves the right to refuse permission for use as material on the basis of a Certificate of Compliance.

D. The form of the Certificate of Compliance and its disposition shall be as directed by the Engineer.

E. Where Certification of Compliance is required in the Technical Specifications, the Contractor shall obtain from the supplier/manufacturer a certification stating that the particular piece of equipment or system will satisfy all requirements stated in the related Specification Section(s).

2.11 PAYMENT

A. Payment for the work in this Section will be included as part of the unit price bid amounts stated in the proposal.

PART 3 - EXECUTION - NOT USED

END OF SECTION 01 33 00

SECTION 01 41 00 – ENVIRONMENTAL COMPLIANCE

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes:
   1. Environmental compliance.

1.2 DEFINITIONS

A. Best Management Practices (BMP): Schedules of activities, prohibition of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of water of the State. Includes treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. Can be structural including rip-rap check dams and sedimentation basins, or non-structural including material storage practices.

B. Operator: For the purposes of environmental compliance, the Operator shall be the General Contractor. The Contractor shall be in responsible charge of the limits of construction for the entire duration of construction.

C. Owner: Washington, Arkansas.

D. Final Stabilization: Native perennial vegetative cover with a density of 80% of the native background vegetation cover for the area is established for all non-impervious areas.

1.3 PERMITS

A. ADEQ General Stormwater Permit
   1. Not required. Follow good BMPs.
   2. Small Site – Automatic Coverage up to 5 Acres
   3. No fee
      a. Contractor shall post Notice of Coverage (NOC).
      b. Contractor shall prepare and follow Stormwater Pollution Prevention Plan (SWPPP).
      c. Contractor shall post Inspection Form.
      d. Documents can be found at https://www.adeq.state.ar.us/water/permits/npdes/stormwater/

B. USACE Nationwide Permit
   1. 2021 Nationwide Permits, as applicable.

C. USACE 404 Permit (wetlands)
   1. Contractor shall maintain daily compliance with all 404 permit requirements.

D. FEMA Floodplain
   1. Portions of the project site **ARE** located within the Federal Emergency Management Agency (FEMA) regulatory Flood Way or 1% Annual Flood Hazard Chance areas. All construction storage, staging, laydown, sediment basins, and other permanent and semi-permanent installations utilized to support the construction activities shall be located and protected to minimize damage and impacts from flood waters. As practicable, the Contractor shall store materials and equipment at a location outside of the FEMA 100-year floodplain boundary.
   2. Protect the site and all construction from impact from flood waters.

E. STAA Permit
   1. AE&E DEQ Short Term Activity Authorization (STAA) Permit: Contractor shall maintain daily compliance with all stormwater permit requirements.

F. Cultural Resources
   1. The projects sites are located in a region of the Unites States and Arkansas where cultural or historic sites may occur at or nearby the proposed locations for this project. If cultural or historic sites are encountered as a part of the construction work on this project, work shall immediately stop and written notice shall be provided to the Engineer identifying the conditions encountered.
   2. Cultural and historic remains, artifacts, and sites shall be protected if encountered by this project.
   3. Owner shall provide onsite observation by an Environmental Professional in areas where cultural or historic sites or artifacts may occur. Contractor shall coordinate construction with recommendations from the Environmental Professional.

G. Environmentally Sensitive Areas
   1. The projects sites are located in a region of the United States and Arkansas where karst geology has created sub-surface voids that may be encountered on any project. There **ARE NOT** known sub-surface voids at or nearby the proposed locations for this project. If sub-surface voids are encountered as a part of the construction work on this project, work shall immediately stop and written notice shall be provided to the Engineer identifying and the conditions encountered.

H. Endangered Species
   1. The projects sites **ARE** located in a region of the Unites States and Arkansas where endangered species or endangered species habitat may occur at or nearby the proposed locations for the work. If endangered species or endangered species habitat is encountered as a part of the construction work on this project, work shall immediately stop and written notice shall be provided to the Engineer identifying the conditions encountered.
      a. Endangered species shall be protected if encountered by this project.
      b. The project area is within the USFWS Northern Long Eared Bat, Indiana Bat, Gray Bat and Ozark Big-eared Bat Consultation Area.
         1.2.A.1.1.1 Tree removal shall not occur between April 1 and October 31.
                     No burning shall be allowed on City Projects.
      c. Contractor shall comply with all project requirements of USFWS, USACE, AE&E DEQ, ANRC, and EPA.
      d. Additional requirements, to comply with all applicable local, state, and federal regulations will be required for the mitigation of endangered species or endangered species habitat encountered during work on this project.

1.4 PROJECT ENVIRONMENTAL COMPLIANCE

A. Contractor shall maintain project environmental compliance as set forth in these Specifications and as required by all applicable Local, State and Federal regulations.

B. Project Environmental Permits
   1. AE&E DEQ General Construction Stormwater Permit – ARR150000
   2. AE&E DEQ STAA Permit No.
   3. USACOE 404 Permit No.

1.5 PROJECT ENVIRONMENTAL REQUIREMENTS

A. Contractor shall field verify locations of existing utilities.

B. The Contractor shall protect Water of the State and Waters of the US from contamination by sediment or pollutants from this project.
   1. The SWPPP and Sediment Control Plan Drawing represent a minimum starting point for mitigation of potential erosion caused by the proposed construction activities. The Contractor shall modify, revise, add or remove additional BMP's as necessary to maintain compliance with water quality standards and the AE&E DEQ stormwater discharge permit.
   2. Contractor shall select, install, implement, and maintain BMP's at the construction site that minimize or eliminate pollutants in stormwater discharges, as necessary to maintain compliance with all applicable water quality standard.
   3. All structural BMP's shall be constructed in accordance with the Drawings, Specifications and the Springdale, Arkansas Drainage Criteria Manual.

C. The Contractor shall not contaminate the air quality of the project site by smoke or other air borne pollutants from this project.
   1. No burning shall be permitted as a part of this project.
   2. Aerosols shall comply with all applicable local, state, and federal regulations.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.1 SUMMARY

A. Follow all requirements of permits listed above.

END OF SECTION 01 41 01

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SECTION 01 45 00 – QUALITY CONTROL

PART 1 - GENERAL

1.1 SUMMARY

A. General Quality Control

B. Workmanship

C. Manufacturer's Instruction

D. Manufacturer's Certificate

E. Mockups

F. Manufacturers' Field Services

G. Testing Laboratory Services

1.2 RELATED SECTIONS - NOT USED

1.3 QUALITY CONTROL, GENERAL

A. Maintain quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.

1.4 WORKMANSHIP

A. Comply with industry standards except when more restrictive tolerances or specified requirements indicate more rigid standards or more precise workmanship.

B. Perform work by persons qualified to produce workmanship of specified quality.

C. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, and racking.

1.5 MANUFACTURERS' INSTRUCTIONS

A. Comply with instructions in full detail, including each step, in sequence. Should instructions conflict with Contract Documents, request clarification from Engineer before proceeding.

1.6 MANUFACTURERS' CERTIFICATES

A. When required by individual Specifications Section, submit manufacturer's certificate, in duplicate, that products meet or exceed specified requirements.

1.7 MOCKUPS - NOT USED

1.8 MANUFACTURERS' FIELD SERVICES

A. When specified in respective Specification Sections, require supplier or manufacturer to provide qualified personnel to observe field conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment as applicable, and to make appropriate recommendations.

B. Representative shall submit written report to Engineer listing observations and recommendations.

1.9 TESTING LABORATORY SERVICES

A. Contractor will employ a Testing Laboratory to perform inspections, tests, and other services required by individual Specification Sections.

B. Contractor shall pay for initial laboratory testing of earthwork, base, asphalt, and concrete. If, however, initial test fails, retesting must be paid for by the Contractor.

C. Services will be performed in accordance with requirements of governing authorities and with specified standards.

D. Reports will be submitted to Engineer, Owner and Contractor giving observations and results of tests, indicating compliance or non-compliance with specified standards and with Contract Documents.

E. Contractor shall cooperate with Testing Laboratory personnel; furnish tools, samples of materials, design mix, equipment, storage, and assistance as requested.
   1. Notify Engineer/Testing Laboratory 24 hours prior to expected time for operations requiring testing services.
   2. Make arrangements with Testing Laboratory and pay for additional samples and tests for Contractor's convenience.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 01 45 00

SECTION 01 50 00 - TEMPORARY CONSTRUCTION FACILITIES AND UTILITIES

PART 1 - GENERAL

1.1 LAYOUT OF TEMPORARY FACILITIES

A. The Contractor shall make his own arrangements for storage of materials and equipment in locations on and off the construction site. Security of the construction work, materials, and equipment is the sole responsibility of the Contractor.

1.2 STORAGE BUILDINGS

A. The Contractor shall erect or provide as approved, temporary storage buildings of the various sizes as required for the protection of mechanical and electrical equipment and materials as recommended by manufacturers of such equipment and materials. The buildings shall be provided with such environmental control systems that meet recommendations of manufacturers of all equipment and materials stored in the buildings. The buildings shall be of sufficient size and so arranged or partitioned to provide security for their contents and provide ready access for inspection and inventory. At or near the completion of the work, and as directed by the Engineer, the temporary storage buildings shall be dismantled, removed from the site, and remain the property of the Contractor.

B. Combustible materials (paints, solvents, fuels, etc.) shall be stored in a well-ventilated building removed from other buildings.

1.3 STORAGE YARDS

A. The Contractor shall construct temporary storage yards for the storage of materials that are not subject to damage by weather conditions. Materials such as pipe, reinforcing and structural steel, shall be stored on pallets or racks, off the ground, and stored in a manner to allow ready access for inspection and inventory. Temporary gravel surfacing of the storage yards shall meet with the approval of the Engineer and Owner. Storage areas shall be restored to their initial condition once they are no longer needed.

1.4 CONTRACTOR'S WORK AREA

A. The Contractor shall limit his operations and storage of equipment materials to the areas authorized by individual property owners and approved by the Engineer and Owner.

B. The Contractor shall maintain the area during construction in a manner that will not obstruct operations of any existing roads. He shall proceed with his work in an orderly manner, maintaining the construction site free of debris and unnecessary equipment or materials.

1.5 TEMPORARY ACCESS ROADS AND PARKING

A. The Contractor shall construct temporary construction access roads, parking areas, and detours as are required to execute the work. The roads shall meet with the approval of the Engineer, and be maintained in good condition until no longer needed; at which time the temporary roads shall be removed and the area left in a condition satisfactory to the property owner and Engineer.

1.6 TEMPORARY WATER CONTROL

A. Rough grade site to prevent standing water and to direct surface drainage away from excavations, trenches, adjoining properties, and public rights-of-way.

B. Maintain excavations and trenches free of water. Provide and operate pumping equipment of a capacity to control water flow.

C. Provide piping to handle pumping outflow to discharge in a manner to avoid erosion or deposit of silt.

D. Remove equipment and installation when no longer needed.

PART 2 - UTILITIES

2.1 CODES AND SAFETY

A. The Contractor shall be responsible for obtaining inspections and paying for permits required for the installation of all temporary utilities. Also, the Contractor shall be solely responsible for the safe use/operation of all temporary utilities.

2.2 SANITARY FACILITIES

A. The Contractor shall provide and maintain sanitary facilities for his employees and his subcontractors' employees that will comply with the regulations of the local and State health departments and as directed by the Engineer.

2.3 TEMPORARY WATER

A. The Owner will provide a place of temporary connection for water near the site if the Contractor desires and if it can be determined that the Contractor's usage will not interfere with the Owner's normal requirements. The Contractor shall provide all temporary piping required to bring the water to the point of use and remove it when no longer needed. The Contractor shall make a conscientious effort to conserve water in his uses.

B. The Contractor will provide required pumps, pressure tanks, etc. if necessary to boost pressure at his points of usage execution

2.4 WATER FOR TESTING

A. The Owner shall provide the necessary water required for testing equipment and water lines prior to acceptance of the work, unless otherwise specifically stated in the Specifications for the equipment, system, or facility.

B. In the event that the water lines leak, requiring refilling and retesting, the Contractor shall pay for the water required for second and subsequent filling and testing. Payment will be made in accordance with the City's water rates.

2.5 PROTECTION OF THE FINISHED CONSTRUCTION

A. The Contractor shall assume the responsibility for the protection of all finished construction and shall repair and restore any and all damage to finished work to its original or better state.

2.6 REMOVAL OF TEMPORARY FACILITIES AND UTILITIES

A. At such time or times any temporary construction facilities and utilities are no longer required for the work, the Contractor shall notify the Engineer of his intent and schedule for removal of the temporary facilities and utilities, and obtain the Engineer's approval before removing the same. As approved, the Contractor shall remove the temporary facilities and utilities from the site as his property and leave the site in such condition as specified, as directed by the Engineer, and/or as shown on the Drawings.

B. In unfinished areas, the condition of the site shall be left in a condition that will restore original drainage, evenly graded, seeded as necessary, and left with an appearance equal to, or better than, original.

2.7 PAYMENT

A. Payment for the work under this Section will be included as part of the unit price bid amounts stated in the Proposal.

PART 3 - EXECUTION - NOT USED

END OF SECTION 01 50 00

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SECTION 01 55 26 – TRAFFIC CONTROL

PART 1 - GENERAL

1.1 SUMMARY

A. This item shall include the erection of signs and barricades, and the maintenance of, or non-interference with traffic in accordance with MUTCD and accepted practices or as directed by the Engineer.

PART 2 - PROCEDURES

2.1 CITY NOTIFICATION

A. The Contractor is to notify the Fire Chief and Police Chief 24-hours before any city street is cut or barricaded.

B. After a street closure and barricade plan has been approved by traffic control, the Contractor must notify the city 1 hour prior to the closing of the street. This notification shall not apply where only one lane of traffic is blocked or where there is an emergency situation. In emergencies such notice shall be given to Emergency Services as soon as reasonably possible.

C. Upon receiving notification, the City shall, in its discretion, notify the Police Department, Fire Department, and Emergency Medical Services of the times that the street is expected to be closed.

2.2 FLAGMAN

A. If, in the opinion of the City, traffic congestion warrants, the Contractor may be required to hire a Flagman to direct traffic and to maintain traffic control. The Contractor will be required to pay all costs for such traffic control as may be required.

2.3 DRIVEWAYS

A. Maintenance of driveways shall be as approved by the Engineer. It shall be the Contractor's responsibility to maintain adequate access to private and commercial property at all times, except as approved by the Engineer. During the construction of driveways or at any time that the property Owner cannot use his driveway, the Contractor shall notify the property owner when the driveway will be closed and the approximate length of time that it will be closed.

B. The intent of this section of the Specifications is to cause as little inconvenience as possible to private property owners.

PART 3 - EXECUTION - NOT USED

END OF SECTION 01 55 26

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SECTION 01 57 23 –STORM WATER POLLUTION PREVENTION

PART 1 - GENERAL

1.1 SUMMARY OF WORK

A. Work shall consist of temporary and permanent storm water pollution prevention measures through the use of berms, sediment basins, sediment dams, fiberglass roving, filter fabric, silt fences, brush barriers, baled straw erosion checks, temporary flexible pipe slope drains and temporary seeding.

B. Temporary storm water pollution prevention measures shall be performed promptly when problem conditions exist or when storm water pollution problems are anticipated in certain areas to minimize soil erosion and siltation. Temporary measures shall be properly maintained until permanent control measures are functioning properly.

C. The Contractor shall comply with all Federal, State, and local laws and regulations concerning controlling pollution of the environment. Contractor shall take all necessary precautions to prevent pollution of streams, lakes, ponds and reservoirs with fuel, oils, bitumens, chemicals, soil sedimentation or other harmful materials, and to prevent pollution of the atmosphere from particulate gaseous matter.

1.2 RELATED SECTIONS

A. Section 31 10 00 – SITE CLEARING

B. Section 31 00 00 – EARTHWORK

C. Section 31 23 16 – TRENCH EXCAVATION, BACKFILL, AND COMPACTING

D. Section 31 25 00 – EROSION PREVENTION

E. Section 32 91 19 – LANDSCAPING GRADING

1.3 PROJECT SCHEDULE

A. At the Preconstruction Conference, or prior to the start of applicable construction, the Contractor shall submit their schedule for the accomplishment of temporary and permanent storm water pollution control work as applicable for clearing and grubbing, trenching and backfill to the Owner and Engineer. The location of the project, nature of the soil, topographic features and proximity to watercourses shall be considered when imposing such limitations.

PART 2 - MATERIALS

2.1 SEED AND FERTILIZER

A. Refer to Section 32 92 19, LANDSCAPING GRADING.

2.2 STRAW BALES

A. Straw shall be the threshed plant residue of oats, wheat, barley, rye, or rice from which the grain has been removed.

2.3 FENCE OR WIRE FABRIC

A. The fence fabric shall be a commercial grade of woven wire fence fabric. The wire fabric shall be a welded wire fabric.

2.4 FILTER FABRIC OR SILT FENCING

A. Nonwoven polypropylene or polyester fabric.

B. Manufacturer: Typar 3401, Trevira S1115, or equal.

2.5 ACCESSORIES

A. Wood or steel stakes. If using steel stakes (rebar), stakes shall have safety caps meeting OSHA requirements.

B. Rectangular hay bales shall be secured with twine or nylon rope.

C. Filter fabric shall be supported by steel or wooden posts and backed with a woven wire fabric for support.

PART 3 - EXECUTION

3.1 PERMITTING

A. A Storm Water Pollution Prevention Plan is not required since the area to be disturbed is less than one (1) acre.

END OF SECTION 01 57 23

SECTION 01 60 00 – PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

A. Products

B. Transportation and Handling

C. Storage and Protection

D. Product Options

E. Products List

F. Substitutions

G. Systems Demonstration

1.2 RELATED SECTIONS

A. Section 01 11 00 – SUMMARY OF WORK

B. Section 01 45 00 – QUALITY CONTROL: Submittal of manufacturers' certificates

1.3 PRODUCTS

A. Products include material, equipment, and systems.

B. Comply with Specifications and referenced standards as minimum requirements.

C. Components required to be supplied in quantity within a Specification Section shall be the same, and shall be interchangeable.

D. Do not use materials and equipment removed from existing structure.

1.4 TRANSPORTATION AND HANDLING

A. Transport products by methods to avoid product damage; deliver in undamaged condition in manufacturer's unopened containers or packaging, dry.

B. Provide equipment and personnel to handle products by methods to prevent soiling or damage.

C. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

1.5 STORAGE AND PROTECTION

A. Store products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight enclosures; maintain within temperature and humidity ranges required by manufacturer's instructions.

B. For exterior storage of fabricated products, place on sloped supports above ground. Cover products subject to deterioration with impervious sheet covering; provide ventilation to avoid condensation.

C. Store loose granular materials on solid surfaces in a well-drained area; prevent mixing with foreign matter.

D. Arrange storage to provide access for inspection. Periodically inspect to assure products are undamaged, and are maintained under required conditions.

1.6 PRODUCT OPTIONS - NOT USED

1.7 PRODUCTS LIST - NOT USED

1.8 SUBSTITUTIONS

A. Document each request for substitution with complete data substantiating compliance of proposed substitution with Contract Documents.

B. Request constitutes a representation that Contractor:
   1. Has investigated proposed product and determined that it meets or exceeds, in all respects, specified product.
   2. Will provide the same warranty for substitution as for specified product.
   3. Will coordinate installation and make other changes which may be required for Work to be complete in all respects.
   4. Waives claims for additional costs which may subsequently become apparent.

C. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals without separate written request, or when acceptance will require substantial revision of Contract Documents, or when said substitution will not result in significant cost savings to the Owner, or result in some material advantage being gained by the Owner.

D. Engineer will determine acceptability of proposed substitution, and will notify Contractor of acceptance or rejection in writing within a reasonable time following the opening of Bids.

E. Only one request for substitution will be considered for each product. When substitution is not accepted, provide specified product.

1.9 SYSTEMS DEMONSTRATION

A. Prior to final inspection, demonstrate operation of each system to Engineer and Owner.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 01 60 00

SECTION 01 70 00 – CONTRACT CLOSEOUT

PART 1 - GENERAL

1.1 SUMMARY

A. This Section outlines the procedure to be followed in closing out all contracts.

1.2 SUBSTANTIAL COMPLETION

A. The substantial completion date for the Contract shall be established as stated in the Notice to Proceed.

1.3 FINAL INSPECTION

A. After final cleaning and upon written notice from the Contractor that the work is completed, the Engineer will make a preliminary inspection with the Owner and Contractor present. Upon completion of this preliminary inspection, the Engineer will notify the Contractor, in writing, of any particulars in which this inspection reveals that the work is defective or incomplete.

B. Upon receiving written notice from the Engineer, the Contractor shall immediately undertake the work required to remedy defects and complete the work to the satisfaction of the Owner.

C. When the Contractor has corrected or completed the items as listed in the Engineer's written notice, he shall inform the Engineer, in writing, that the required work has been completed. Upon receipt of this notice, the Engineer, in the presence of the Owner and Contractor, shall make his final inspection of the project.

D. Should the Engineer find all work satisfactory at the time of his inspection, the Contractor will be allowed to make application for final payment in accordance with the provisions of the General Conditions. Should the Engineer still find deficiencies in the work, the Engineer will inform the Contractor of the deficiencies and will deny the Contractor's request for final payment until such time as the Contractor has satisfactorily completed the required work.

E. All water courses, gutters, and ditches shall be opened and left in a condition satisfactory to the Engineer.

1.4 FINAL SUBMITTALS

A. No contract will be finalized until all the following have been submitted.
   1. Final shop drawings,
   2. Record drawings,
   3. Interface information.

B. No contract will be finalized until all submittals have been submitted.

1.5 GUARANTEES, BONDS, AND AFFIDAVITS

A. No contract will be finalized until all guarantees, performance tests, bonds, certificates, licenses, and affidavits required for work or equipment as specified are satisfactorily filed with the Owner.

1.6 ACCESSORY ITEMS

A. All Contractors furnishing and/or installing equipment on this project shall provide to the Owner, upon acceptance of the equipment, all special accessories required to place each item of equipment in full operation. These special accessory items include, but are not limited to, adequate oil and grease as required for the first lubrication of the equipment, light bulbs, fuses, valve keys, handwheels, and other expendable items as required for initial startup and operation of all equipment.

1.7 RELEASE OF LIENS OR CLAIMS

A. No contract will be finalized until satisfactory evidence of release of liens has been submitted to the Owner as required by the General Conditions.

1.8 FINAL PAYMENT

A. Final payment will be made to the Contractor in accordance with the General Conditions.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 01 70 00

SECTION 01 74 00 – CLEAN-UP

PART 1 - GENERAL

1.1 SCOPE

A. This Section covers the work necessary for cleaning during construction and final cleaning on completion of the work.

B. At all times maintain areas covered by the Contract and public and private properties free from accumulations of waste, debris, and rubbish caused by construction operations.

C. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws. Do not burn or bury rubbish and waste materials on project site. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains. Do no dispose of wastes into streams or waterways.

D. Use only cleaning materials recommended by manufacturer of surface to be cleaned.

E. Use cleaning materials only on surfaces recommended by cleaning material manufacturers.

1.2 CLEANING DURING CONSTRUCTION

A. During execution of work, clean site, and all properties (public and private) and dispose of waste materials, debris, and rubbish to assure that buildings, grounds, and properties are maintained free from accumulations of waste materials and rubbish.

B. Wet down dry materials and rubbish to lay dust and prevent blowing dust.

C. Provide approved containers for collection and disposal of waste materials, debris, and rubbish.

D. Remove grease, dust, dirt, stains, labels, and other foreign materials from exposed and semi-exposed surfaces.

E. Repair, patch, and touch up marred surfaces to specified finish to match adjacent surfaces.

F. Broom clean paved surfaces, rake clean other surfaces or grounds.

G. Handle materials in a controlled manner with as few handlings as possible; do not drop or throw materials from heights.

H. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not fall on wet, newly painted surfaces.

1.3 FINAL CLEANING

A. At the completion of work on all contracts and immediately prior to final inspection, cleaning of the entire project will be accomplished.

B. Employ experienced workers, or professional cleaners, for final cleaning.

C. Repair, patch, and touch up marred surfaces to specified finish, to match adjacent surfaces.

D. Remove from the Owner's property all temporary structures and all materials, equipment, and appurtenances not required as a part of, or appurtenant to, the completed work. See Section 01 50 00, TEMPORARY CONSTRUCTION FACILITIES AND UTILITIES.

1.4 PAYMENT

A. Payment for the work in this Section will be included as part of the unit price bid amounts stated in the Proposal.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 01 74 00

SECTION 01 75 60 – TESTING, TRAINING, AND START-UP

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: Requirements for equipment and system testing and facility start up, including the following:
   1. Start-Up Plan,
   2. Performance Testing,
   3. General Start-Up and Testing Procedures,
   4. Functional Testing,
   5. Operational Testing,
   6. Certificate of Proper Installation,
   7. Services of manufacturer's representatives,
   8. Training of OWNER's personnel,
   9. Final testing requirements for the complete facility.

B. Related sections:
   1. Division 26 – ELECTRICAL

1.2 GENERAL TESTING, TRAINING, AND START-UP REQUIREMENTS

A. Contract Requirements: Testing, training, and start-up are requisite to the satisfactory completion of the Contract.

B. Complete testing, training, and start-up within the Contract Times.

C. Allow realistic durations in the Progress Schedule for testing, training, and start-up activities.

D. Furnish labor, power, chemicals, tools, equipment, instruments, and services required for and incidental to completing functional testing, performance testing, and operational testing.

E. Provide competent, experienced technical representatives of equipment manufacturers for assembly, installation and testing guidance, and operator training.

1.3 START-UP PLAN

A. Submit start-up plan for each piece of equipment and each system not less than 3 weeks prior to planned initial start-up of equipment or system.

B. Provide detailed sub-network of Progress Schedule with the following activities identified:
   1. Manufacturer's services,
   2. Installation certifications,
   3. Operator training,
   4. Submission of Operation and Maintenance Manual,
   5. Functional testing,
   6. Performance testing,
   7. Operational testing.

C. Provide testing plan with test logs for each item of equipment and each system when specified. Include testing of alarms, control circuits, capacities, speeds, flows, pressures, vibrations, sound levels, and other parameters.

D. Provide summary of shutdown requirements for existing systems which are necessary to complete start-up of new equipment and systems.

E. Revise and update start-up plan based upon review comments, actual progress, or to accommodate changes in the sequence of activities.

1.4 PERFORMANCE TESTING

A. Test equipment for proper performance at point of manufacture or assembly when specified.

B. When Source Quality Control Testing is Specified:
   1. Demonstrate equipment meets specified performance requirements.
   2. Provide certified copies of test results.
   3. Do not ship equipment until certified copies have received written acceptance from ENGINEER. Written acceptance does not constitute final acceptance.
   4. Perform testing as specified in the equipment specification sections.

C. Include costs associated with witnessing performance tests in the bid price. Include costs for one (1) OWNER's representative for travel, lodging, transportation to and from lodging, and $50 (50 Dollars) for meal allowance per person per day.

1.5 GENERAL START-UP AND TESTING PROCEDURES

A. Mechanical Systems: As specified in the individual equipment specification sections:
   1. Remove rust preventatives and oils applied to protect equipment during construction.
   2. Flush lubrication systems and dispose of flushing oils. Recharge lubrication system with lubricant recommended by manufacturer.
   3. Flush fuel system and provide fuel for testing and start-up.
   4. Install and adjust packing, mechanical seals, O-rings, and other seals. Replace defective seals.
   5. Remove temporary supports, bracing, or other foreign objects installed to prevent damage during shipment, storage, and erection.
   6. Check rotating machinery for correct direction of rotation and for freedom of moving parts before connecting driver.
   7. Perform cold alignment and hot alignment to manufacturer's tolerances.
   8. Adjust V-belt tension and variable pitch sheaves.
   9. Inspect hand and motorized valves for proper adjustment. Tighten packing glands to insure no leakage, but permit valve stems to rotate without galling. Verify valve seats are positioned for proper flow direction.
   10. Tighten leaking flanges or replace flange gasket. Inspect screwed joints for leakage.
   11. Install gratings, safety chains, handrails, shaft guards, and sidewalks prior to operational testing.

B. Electrical Systems: As specified in Division 26 and the individual equipment specification sections:
   1. Perform insulation resistance tests on wiring except 120-volt lighting, wiring, and control wiring inside electrical panels.
   2. Perform continuity tests on grounding systems.
   3. Test and set switchgear and circuit breaker relays for proper operation.
   4. Perform direct current high potential tests on all cables that will operate at more than 2,000 volts. Obtain services of independent testing lab to perform tests.
   5. Check motors for actual full load amperage draw. Compare to nameplate value.

C. Instrumentation Systems: As specified in Division 26 and the individual equipment specification sections:
   1. Bench or field calibrate instruments and make required adjustments and control point settings.
   2. Leak test pneumatic controls and instrument air piping.

3. Energize transmitting and control signal systems, verify proper operation, ranges, and settings.

1.6 FUNCTIONAL TESTING

A. Perform checkout and performance testing as specified in the individual equipment specification sections.

B. Functionally test mechanical and electrical equipment, and instrumentation and controls systems for proper operation after general start-up and testing tasks have been completed.

C. Demonstrate proper rotation, alignment, speed, flow, pressure, vibration, sound level, adjustments, and calibration. Perform initial checks in the presence of and with the assistance of the manufacturer's representative.

D. Demonstrate proper operation of each instrument loop function including alarms, local and remote controls, instrumentation, and other equipment functions. Generate signals with test equipment to simulate operating conditions in each control mode.

E. Conduct continuous 8-hour test under full load conditions. Replace parts which operate improperly.

1.7 OPERATIONAL TESTING

A. After completion of operator training, conduct operational test of the entire facility. Demonstrate satisfactory operation of equipment and systems in actual operation.

B. Conduct operational test for continuous 7-day period.

C. OWNER will provide operations personnel, power, fuel, and other consumables for duration of each specified test.

D. Immediately correct defects in material, workmanship, or equipment which became evident during operational test.

E. Repeat operational test when malfunctions or deficiencies cause shutdown or partial operation of the facility or results in performance that is less than specified.

1.8 CERTIFICATE OF PROPER INSTALLATION

A. At completion of Functional Testing, furnish written report prepared and signed by manufacturer's authorized representative, certifying equipment:
   1. Has been properly installed, adjusted, aligned, and lubricated.
   2. Is free of any stresses imposed by connecting piping or anchor bolts.
   3. Is suitable for satisfactory full-time operation under full load conditions.
   4. Operates within the allowable limits for vibration.
   5. Controls, protective devices, instrumentation, and control panels furnished as part of the equipment package are properly installed, calibrated, and functioning.
   6. Control logic for start-up, shutdown, sequencing, interlocks, and emergency shutdown have been tested and are properly functioning.

B. Furnish written report prepared and signed by the electrical and/or instrumentation subcontractor certifying:
   1. Motor control logic that resides in motor control centers, control panels, and circuit boards furnished by the electrical and/or instrumentation subcontractor has been calibrated and tested and is properly operating.

2. Control logic for equipment start-up, shutdown, sequencing, interlocks, and emergency shutdown has been tested and is properly operating.
3. Co-sign the reports along with the manufacturer's representative and subcontractors.

1.9 TRAINING OF OWNER'S PERSONNEL

A. Provide operations and maintenance training for items of mechanical, electrical and instrumentation equipment. Utilize manufacturer's representatives to conduct training sessions.

B. Coordinate training sessions to prevent overlapping sessions. Arrange sessions so that individual operators and maintenance technicians do not attend more than 2 sessions per week.

C. Provide Operation and Maintenance Manual for specific pieces of equipment or systems 1 month prior to training session for that piece of equipment or system.

D. Satisfactorily complete functional testing before beginning operator training.

E. Training Sessions: Provide training sessions for equipment as specified in the individual equipment specification sections.

F. The CONTRACTOR shall videotape all training sessions and provide a copy for the OWNER.

G. The CONTRACTOR shall designate and provide one or more persons to be responsible for coordinating and expediting his/her training duties. The person or persons so designated shall be present at all training coordination meetings with the OWNER.

H. The CONTRACTOR's coordinator shall coordinate the training periods with OWNER personnel and manufacturer's representatives, and shall submit a training schedule for each piece of equipment or system for which training is to be provided. Such training schedule shall be submitted not less than 21 calendar days prior to the time that the associated training is to be provided and shall be based on the current plan of operation.

1.10 RECORD KEEPING

A. Maintain and submit following records generated during start-up and testing phase of Project:
1. Daily logs of equipment testing identifying all tests conducted and outcome.
2. Logs of time spent by manufacturer's representatives performing services on the job site.
3. Equipment lubrication records.
4. Electrical phase, voltage, and amperage measurements.
5. Insulation resistance measurements.
6. Data sheets of control loop testing including testing and calibration of instrumentation devices and setpoints.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 01 75 60

SECTION 01 78 39 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

A. Maintenance of Record Documents and Samples.

B. Submittal of Record Documents and Samples.

1.2 RELATED SECTIONS

A. Section 00 72 00 - GENERAL CONDITIONS: Documents at the site.

B. Section 01 70 00 - CONTRACT CLOSEOUT: Closeout procedures.

C. Individual Specifications Sections: Manufacturer's certificates and certificates of inspection.

1.3 MAINTENANCE OF DOCUMENTS AND SAMPLES

A. In addition to requirements in General Conditions, maintain at the site one record copy of:
   1. Contract Drawings,
   2. Specifications,
   3. Addenda,
   4. Change Orders and other modifications to the Contract,
   5. Reviewed shop drawings, product data, and samples,
   6. Field test records,
   7. Inspection certificates,
   8. Manufacturer's certificates.

B. Store Record Documents in Field Office apart from documents used for construction. Provide files, racks, and secure storage for Record Documents.

C. Label and file Record Documents in accordance with Section number listing in Table of Contents of this Project Manual. Label each document “PROJECT RECORD” in neat, large, printed letters.

D. Maintain Record Documents in a clean, dry, and legible condition. Do not use Record Documents for construction purposes.

E. Keep Record Documents and samples available for inspection by Engineer.

1.4 RECORDING

A. Record information on a set of blue line opaque drawings, and in a copy of a Project Manual.

B. Provide felt tip marking pens, maintaining separate colors for each major system, for recording information.

C. Record information concurrently with construction progress. Do not conceal any work until required information is recorded.

D. Contract Drawings and Shop Drawings: Legibly mark each item to record actual construction, including:
   1. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
   2. Field changes of dimension and detail.
   3. Changes made by Modifications.

4. Detail not on original Contract Drawings.

E. Specifications: Legibly mark each item to record actual construction, including:
   1. Manufacturer, trade name, and catalog number of each product, actually installed, particularly optional items and substitute items.
   2. Changes made by Addenda and Modifications.

F. Other Documents: Maintain manufacturer's certifications, inspection certifications, field test records, etc., required by individual Specifications sections.

1.5 SUBMITTALS

A. At Contract closeout, deliver Record Documents and samples under provisions of Section 01 70 00, CONTRACT CLOSEOUT.

B. Transmit with cover letter in duplicate, listing:
   1. Date,
   2. Project title and number,
   3. Contractor's name, address, and telephone number,
   4. Number and title of each Record Document,
   5. Signature of Contractor or authorized representative.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 01 78 39

SECTION 02 41 00 - DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Portions of buildings and other areas, equipment and materials selective demolition, and partial demolition work are as shown on Drawings and specified herein.
   2. Equipment and materials to be removed for construction and reinstalled for reuse or continued operation are as shown on the drawings and specified herein.

B. Related Sections:
   1. Section 31 23 33 – TRENCHING AND BACKFILLING

1.2 SUBMITTALS

A. Shop Drawings: Plans showing all equipment and materials to be removed and reinstalled for reuse on continued operation including interim storage plans for each item.

B. Quality Control Submittals:
   1. Schedule of demolition, as part of and consistent with the progress schedule.
   2. Methods of demolition and equipment proposed to demolish each structure.
   3. Copies of any authorizations and permits required to perform Work.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.1 PREPARATION

A. Utilities:
   1. Notify Owner and appropriate utilities 72 hours prior to turning off affected services before starting demolition or alterations.
   2. Remove utility lines exposed by demolition excavation.
   3. Remove electric, sanitary, and storm drainage adjacent to buildings to be demolished.
   4. Excavate utility lines serving buildings to be demolished and provide a permanent leak-proof closure for water and gas lines.
   5. Plug sewer lines at locations shown or at limits of excavation if not shown with min. 2,000 psi compressive strength concrete plug to prevent groundwater infiltrating sewer systems. Length of plug shall be 5 feet minimum.

B. Removal and Storage of Equipment for Reuse:
   1. Do not remove equipment and materials without approval of Engineer.
   2. Properly store and maintain equipment and materials in same condition as when removed.
   3. Engineer will determine condition of equipment and materials prior to removal.

3.2 DEMOLITION

A. Drawings define minimum portion of equipment to be removed and structures to be modified. Unless otherwise shown, rough cuts or breaks may be made exceeding limits of demolition shown.

B. Provide all demolition, removal, temporary storage, and reinstallation of existing equipment as required for implementation of the work.

C. Core drill floor slabs, catch basins, and other concrete improvements to remain in place below ground, or break holes at structure's lowest point to allow water to freely migrate through.

D. Remove piping from areas to be backfilled. Pipe, valves, and fittings adjacent to those to be removed may also be removed as salvage.

E. Remove all materials associated with existing equipment that is to be removed or relocated.

F. Cut off concealed or embedded conduit, boxes, or other materials a minimum of 3/4 inch below final finished surface.

G. Cut off drilled piers a minimum of 6 inches below bottom of new foundations.

H. All debris from demolished structures shall be completely removed from the site and disposed of in accordance with all local, state, federal laws, and regulations. No structures to demolished shall be buried onsite.

3.3 DISPOSAL

A. Dispose of debris and other non-salvaged materials offsite in licensed landfills in compliance with all federal, state, and local rules and regulations.

3.4 BACKFILLING

A. Demolished Areas: Backfill to existing ground level, elevations shown, or foundation level of new construction.

B. Backfill Material and Compaction:
   1. For fill in and around structures conform to Section 31 23 33, TRENCHING AND BACKFILLING. Top 6 inches of backfill to grade shall be select fill conforming to Section 31 23 33, TRENCHING AND BACKFILLING and shall be compacted to 90% standard proctor density.
   2. Do not use demolition debris as backfill material.

3.5 SALVAGE

A. Equipment and materials not reused or reinstalled, including all metals and piping within the limits of demolition, unless otherwise specified, shall be removed, and disposed of by the Contractor.

END OF SECTION 02 41 00

SECTION 03 11 00 – CONCRETE FORMWORK

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Concrete formwork.

B. Related sections:
   1. Section 03 30 00 – CAST-IN-PLACE CONCRETE
   2. Section 03 60 00 – GROUT

1.2 REFERENCES

A. American Concrete Institute (ACI), 38800 Country Club Drive, Farmington Hills, Michigan 48331 (latest revision).
   1. ACI SPEC-117 - Standard Specifications for Tolerances for Concrete Construction and Materials
   2. ACI CODE-318 - Building Code Requirements for Reinforced Concrete
   3. ACI PRC-347 - Guide to Formwork for Concrete

B. American Institute of Steel Construction (AISC), 130 East Randolph, Suite 2000, Chicago, IL 60601 (latest revision).
   1. Code of Standard Practice for Steel Buildings and Bridges

1.3 DESIGN REQUIREMENTS

A. Design, erect, shore, brace, and maintain formwork in accordance with ACI 301, ACI 347, and ACI 318 to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads. Provide concrete finishes specified in Section 03 30 00, CAST-IN-PLACE CONCRETE.
   1. Formwork shop drawings shall be prepared by or under the supervision of a Qualified Professional Engineer licensed in the state of the work.

B. When high range water reducer (superplasticizer) is used in concrete mix, forms shall be designed for full hydrostatic pressure per ACI 347.

C. Make joints in forms watertight.

D. Limit panel deflection to 1/360th of each component span to achieve tolerances specified.

1.4 SUBMITTALS

A. Shop Drawings:
   1. Form Ties-Tapered Through-Bolts: Proposed method of sealing form tie hole; coordinate with details shown.
   2. All formwork erection, shoring and removal are the responsibility of the Contractor and/or the qualified professional engineer the contractor used for the formwork drawings.
   3. Indicate proposed schedule and sequence of stripping formwork, shoring removal, and installing and removing re-shoring.
   4. Manufacturer’s Data for the Following Product: Form release agent.
   5. Formwork drawings shall be signed and sealed by the Professional Engineer licensed in the state of the work and responsible for their preparation.

B. Samples: One each as follows:
   1. Form ties.

1.5 QUALIFICATIONS

A. Formwork Designer: Formwork, falsework, and shoring design shall be by a Qualified Professional Engineer licensed in the state of the work.

PART 2 - PRODUCTS

2.1 FORM MATERIALS

A. Wall Forms and Underside of Slabs:
   1. Materials: Plywood, hard plastic finished plywood, overlaid waterproof particle board, or steel in “new and undamaged” condition, of sufficient strength and surface smoothness to produce specified finish.
   2. Circular Structures:
      a. Conform forms to circular shape of structure.
      b. Straight panels may be substituted for circular forms provided panels do not exceed 2' in horizontal width and angular deflection is no greater than 3-1/2° per joint.

B. Painted Surface Forms: High density overlay plywood for flat concrete surfaces to be painted.

C. All Other Forms: Materials as specified for wall forms.

D. Form Release Agent:
   1. Material: Release agent shall not bond with, stain, or adversely affect concrete surfaces, and shall not impair subsequent treatments of concrete surfaces when applied to forms. A “ready to use” water based material formulated to reduce or eliminate surface imperfections, containing no mineral oil or organic solvents. Environmentally safe, meeting local, state, and federal regulations and can be used in potable water facilities.
   2. Manufacturers and Products:
      a. Master Builders, Inc.;MasterFinish RL 211.
      b. Cresset Chemical Company; Crete-Lease 20-VOC.
      c. US Mix Products Company; US SPEC Slickote.

E. Rustication Grooves and Beveled Edge Corner Strips: Nonabsorbent material, compatible with form surface, fully sealed on all sides prohibiting loss of paste or water between the two surfaces.

F. Form Ties:
   1. Material: Steel
   2. Spreader Inserts:
      a. Conical or spherical type.
      b. Design to maintain positive contact with forming material.
      c. Furnish units that will leave no metal closer than 1" to concrete surface when forms, inserts, and tie ends are removed.
   3. Wire ties not permitted.
   4. Flat bar ties for panel forms furnish plastic or rubber inserts with minimum 1" depth and sufficient dimensions to permit patching of tie hole.
   5. Water Stop Ties: For water-holding structures, basements, pipe galleries, and accessible spaces below finish grade, furnish one of the following:
      a. Integral steel water stop 0.103" thick and 0.625" in diameter tightly and continuously welded to tie.
      b. Neoprene water stop 3/16" thick and 15/16" diameter whose center hole is 1/2-diameter of tie, or molded plastic water stop of comparable size.
      c. Orient water stop perpendicular to tie and symmetrical about center of tie.

d. Design ties to prevent rotation or disturbance of center portion of tie during removal of ends and to prevent water leaking along tie.

6. Through-Bolts: Tapered minimum 1" diameter at smallest end.
7. Elastic Vinyl Plug:
   a. Design and size of plug to allow insertion with tool to enable plug to elongate and return to original length, and diameter upon removal forming watertight seal.
   b. Manufacturer and Product: Dayton/Richmond Co., Miamisburg, OH; A58 Sure Plug.
   c. Recess plug 1" minimum and grout over hole. See Section 03 60 00, GROUT.

PART 3 - EXECUTION

3.1 FORM SURFACE PREPARATION

A. Thoroughly clean form surfaces that will be in contact with concrete or that have been in contact with previously cast concrete, dirt, and other surface contaminants prior to coating surface.

B. Exposed Wood Forms in Contact with Concrete: Apply form release agent as recommended by the manufacturer.

C. Steel Forms: Apply form release agent to steel forms as soon as they are cleaned to prevent discoloration of concrete from rust.

3.2 ERECTION

A. General: Unless specified otherwise, follow applicable recommendations of ACI 347.
   1. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.
   2. Limit concrete surface irregularities, designated by ACI 347 as abrupt or gradual, as follows:

B. Beveled Edges (Chamfer):
   1. Form 3/4" bevels (chamfers) at all exposed concrete edges, unless otherwise shown.
   2. Where beveled edges on existing adjacent structures are other than 3/4", obtain Engineer's approval of size prior to placement of beveled edge.

C. Wall Forms:
   1. Do not reuse forms with damaged surfaces.
   2. Locate form ties and joints in an uninterrupted uniform pattern.
   3. Inspect form surfaces prior to installation to assure conformance with specified tolerances.

D. Forms for Curbs and Sidewalks:
   1. Provide standard steel or wood forms.
   2. Set forms to true lines and grades, and securely stake in position.

E. Form Tolerances: Provide forms in accordance with ACI 117, 347 and 318 and the following tolerances for finishes specified:
   1. Wall Tolerances:
      a. Straight Vertical or Horizontal Wall Surface: Flat planes within tolerance specified.
   2. Thickness: Maximum -1/4" or +1/2" from dimension shown.
   3. Form Offset: Between adjacent pieces of form work, facing material shall not exceed 1/8" where exposed to public view and 1/4" maximum for all other conditions.

3.3 ADDITIONAL REQUIREMENTS

A. Construct forms tight enough to prevent loss of concrete mortar.

B. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical.
   1. Install keyways, reglets, recesses and the like for easy removal.
   2. Do not use rust-stained steel form-facing material.
   3. Use only form or form-tying methods which do not cause spalling of the concrete upon form stripping or tie removal.

C. Set edge forms, bulkheads and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.

D. Form openings, chases, offsets, sinkages, keyways, reglets, blocking, screeds and bulkheads required in the Work.
   1. Determine sizes and locations from trades providing such items.
   2. Openings shall be of sufficient size to permit final alignment of pipes or other items without deflection or offsets of any kind. Allow space for packing where items pass through the wall to ensure watertightness. Provide openings with continuous keyways and waterstops. Provide a slight flare to facilitate grouting and the escape of entrained air during grouting. Provide formed openings with reinforcement as indicated in the typical structural details. Reinforcing shall be at least 2 inches clear from the opening surfaces and encased items.

E. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt and other debris just before placing concrete.

F. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.

G. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions before placing reinforcement.

H. Embedded Items.
   1. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions and directions furnished with items to be embedded.
      a. Install anchor bolts/rods, accurately located, to elevations required and complying with tolerances in Section 7.5 of AISC's "Code of Standard Practice for Steel Buildings and Bridges."
      b. Install reglets to receive waterproofing and to receive through-wall flashings in outer face of concrete frame at exterior walls, where flashing is shown at lintels, shelf angles and other conditions.
      c. Check special castings, channels or other metal parts that are to be embedded in the concrete prior to and again after placing the concrete.
      d. Check nailing blocks, plugs and strips necessary for the attachment of trim, finish and similar work prior to placing the concrete.

I. Pipes and wall spools cast in concrete.
   1. Install wall spools, wall flanges, and wall anchors before placing concrete. Do not weld, tie or otherwise connect the wall spools or anchors to the reinforcing steel.
   2. Support pipe and fabricated fittings to be encased in concrete-on-concrete piers or pedestals. Carry concrete supports to firm foundations so that no settlement will occur during construction.

3. Pipes or spools located below operating water level shall have waterstop ring collars and shall be cast in place. Do not block out such piping and grout after the concrete section is cast. Pipes fitted with thrust rings shall be cast in place.

J. Removing and reusing forms.
   1. General: Do not remove forms from concrete which has been placed with outside temperature below 50°F without first determining and verifying with Engineer if the concrete has properly set without regard for time. Do not apply loading on green concrete. Immediately after forms are removed, the surface of the concrete shall be carefully examined and any irregularities in the surface shall be repaired and finished as specified.
      a. Leave formwork for beam soffits, joists, structural slabs, beams, girders, and other structural elements that support weight of concrete in place until concrete has achieved 100% its 28-day design compressive strength and a minimum of 7 days.
      b. Formwork for sides of beams, walls, columns and similar parts of the Work that does not support weight of concrete may be removed after cumulatively curing at not less than 50°F (10 deg C) for 48 hours after placing concrete, if concrete is hard enough to not be damaged by form-removal operations and curing and protection operations are maintained.
      c. Leave bracing for walls until the top or roof slab concrete reaches 100% of its 28-day design compressive strength and a minimum of 7 days.
      d. Remove forms only if shores have been arranged to permit removal of forms without loosening or disturbing shores.
   2. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated or otherwise damaged form-facing material will not be acceptable for exposed surfaces. Apply new form-release agent.
   3. When forms are reused, clean surfaces, remove fins and laitance, and tighten to close joints. Align and secure joints to avoid offsets. Do not use patched forms for exposed concrete surfaces unless approved in writing by the Engineer.

K. Aluminum surfaces in contact with concrete.
   1. Aluminum surfaces in contact with concrete or grout or dissimilar metals shall be protected with a Mylar isolator, bituminous paint or other material approved by Engineer.

L. Shores and reshores.
   1. Comply with ACI 318 and ACI 301 for design, installation and removal of shoring and reshoring.
      a. Do not remove shoring or reshoring until measurement of slab tolerances is complete.
   2. In multistory construction, extend shoring or reshoring over a sufficient number of stories to distribute loads in such a manner that no floor or member will be excessively loaded or will induce tensile stress in concrete members without sufficient steel reinforcement.
   3. For multi-storied structures, the shoring and reshoring diagrams and procedures shall be signed and sealed by a Registered Professional Engineer in the state where the construction is being undertaken. These diagrams and procedures shall take into account the effect of the loads on the uncured concrete and the construction load on each floor.
   4. Plan sequence of removal of shores and reshore to avoid damage to concrete. Locate and provide adequate reshoring to support construction without excessive stress or deflection.

END OF SECTION 03 11 00

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SECTION 03 15 00 – CONCRETE ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

A. Provide expansion, construction, and contraction joints as specified.

B. Related sections:
   1. Section 01 33 00 – SUBMITTAL PROCEDURES
   2. Section 03 30 00 – CAST-IN-PLACE CONCRETE

1.2 REFERENCE STANDARDS

A. American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428 (latest revision):
   1. ASTM A36 – Standard Specification for Carbon Structural Steel
   2. ASTM D226 – Standard Specification for Asphalt-Saturated Organic Felt used in Roofing and Waterproofing
   3. ASTM D994 – Standard Specification for Preformed Expansion Joint Filler for Concrete (Bituminous Type)
   4. ASTM D1751 – Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types)
   5. ASTM D6690 – Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements

B. Corps of Engineers, (U.S. Department of the Army) 441 G St. NW, Washington, DC 20314
   1. CRD-C-572 – Corps of Engineers Specifications for Polyvinylchloride Waterstops

1.3 SUBMITTALS

A. Submit product data sheet for all concrete accessories in accordance with Section 01 33 00, SUBMITTAL PROCEDURES.

PART 2 - PRODUCTS

2.1 WATERSTOPS

A. Center bulb type extruded from an elastomeric plastic compound, the basic resin of virgin polyvinyl chloride (PVC).

B. Size as recommended by manufacturer for each application or as shown on Drawing. Generally, 6 inches for walls with a 12 inches thickness and 9 inches for walls thicker than 12 inches.

C. Specific gravity approximately 1.37 and the shore durometer Type A hardness, approximately 80.

D. Meet the performance requirements of the Corps of Engineers Specification CRD-C-572.

E. Constant thickness from the edge of the bulb to the outside edge.

F. Have a number of parallel ribs or protrusions on each side of the center of the strip.

G. Corrugated type or tapered waterstops are not acceptable.

H. The minimum weight per foot for waterstop shall be 0.75 pound for 3/16-inch by 6-inch, 1.35 pounds for 3/8-inch by 6-inch, and 2.05 pounds for 3/8-inch by 9-inch.

I. Manufacturers:
1. Greenstreak PVC Waterstop, by Sika Corporation.
a. Style 732 for the 6-inch by 3/8-inch,
b. Style 735 for the 9-inch by 3/8-inch,
c. Or approved equal.

2.2 BOND BREAKER TAPE FOR EXPANSION JOINTS

A. Where indicated, adhesive-backed glazed butyl or polyethylene tape that will satisfactorily adhere to the premolded joint material or concrete surface.

B. Same width as joint.

2.3 PREMOLDED JOINT FILLER - BITUMINOUS TYPE

A. Bituminous type conforming to ASTM D994 or D1751, unless otherwise shown or specified.

B. Use around pipe penetrations through existing walls.

C. Manufacturers:
1. Synko Flex Products Inc.; Synko Flex Preformed Plastic Adhesive Waterstop.
2. Cetco Minerals Technologies.; Waterstop RX.

2.4 BOND BREAKER

A. Bond breaker, except where a tape is specifically called for, shall be either bond breaker tape as specified or a bond prevention material, nonstaining type, as specified in Section 03 30 00, CAST-IN-PLACE CONCRETE.

2.5 CORK EXPANSION JOINT FILLER

A. Manufacturer: W.R. Meadows Deck-O-Seal 125, or equal.

B. Seal joints with a pourable two-component cold-applied compound to depth as indicated on Drawings

2.6 POURABLE JOINT FILLERS - RUBBER ASPHALT FILLER

A. Hot-applied type, conforming to ASTM D6690. Use primer recommended by the manufacturer.

2.7 COAL-TAR TAPE

A. Manufacturers:
1. Protecto Wrap 200-35, by Protecto Wrap Co., Denver, CO.
2. Tapecoat CT, by Tapecoat Company, Inc., Evanston, IL.
3. Or approved equal.

2.8 STEEL EXPANSION JOINT DOWELS

A. Smooth steel conforming to ASTM A36. Coating on bars shall be an approved fusion bonded epoxy coating.

PART 3 - EXECUTION

3.1 INSTALLATION OF WATERSTOPS – GENERAL

A. Join waterstops at intersections so that a continuous seal is provided.

B. Center waterstop on joint.

C. Hold waterstop positively in correct position.

D. If waterstop is damaged, repair in acceptable manner.

E. Vibrate concrete to obtain impervious concrete in the vicinity of joints.

F. In horizontal joints, fill areas below waterstop completely with concrete; make visual inspection of entire waterstop area during concrete placement.

3.2 WATERSTOPS IN CONSTRUCTION JOINTS

A. Horizontal Waterstops:
   1. Place and securely tie to reinforcement steel or formwork prior to placing concrete.
   2. Puddle each side to level concrete and assure that waterstop is properly embedded.
   3. Where stops are spliced, lap at least 12 inches and secure together.
   4. After concrete has set to the point where the surface can be cut with a broom or a stream of water, cut off the surface to a rough finish with laitance removed and the concrete left clean.

B. Vertical Waterstop: Place and secure in forms prior to placing concrete.

3.3 PVC WATERSTOP

A. Install in accordance with details shown and manufacturer's instructions.

B. Allow at least 10 minutes before pulling or straining the new splice.

C. Finished splices shall provide a cross section that is dense and free of porosity with tensile strength of not less than 80% of unspliced materials.

3.4 SPLICES AND JOINTS

A. Prior to use of the waterstop material in the field, submit a sample of a fabricated cross constructed of each size or shape of material to be used for approval.

B. Fabricate samples so that the material and workmanship represent the fittings provided under this Section.

C. Make field splices and joints in accordance with waterstop manufacturer's instructions using a thermostatically controlled heating iron.

3.5 JOINT PREPARATION – GENERAL

A. Accurately locate and construct joints to produce straight joints.

B. Vertical or horizontal, except where walls intersect sloping floors.

C. Do not commence concrete placement until after joint preparation has been inspected and approved by the Engineer.

3.6 CONSTRUCTION JOINTS

A. Prior to placing abutting concrete, clean contact surface by sandblasting or other approved means to remove laitance and expose the aggregate.

B. Remove concrete from exposed portion of reinforcing steel.

C. Do not damage the waterstop, if one is present, during the cleaning process.

D. Grout for horizontal construction joints shall be as specified in Section 03 30 00, CAST-IN-PLACE CONCRETE.

E. Roughen surface of hardened concrete by one of the following methods:
   1. Sandblast foundation and reinforcing dowels after concrete has fully cured to remove laitance and spillage and to expose sound aggregate.
   2. Water blast the foundation and reinforcing dowels after concrete has partially cured to remove laitance and spillage and to expose sound aggregate.
   3. Green cut fresh concrete with high pressure water and hand tools to remove laitance and spillage from the foundation and reinforcing dowels, and to expose sound aggregate.

3.7 LOCATION

A. Locate joints as shown on the Drawings or approved by the Engineer.

3.8 TIME BETWEEN CONCRETE PLACEMENTS

A. At least 2 hours shall elapse after depositing concrete in long or high columns or heavy walls before depositing in beams, girders, or slabs supported thereon.

B. For short columns and low height walls, 10 feet or less, wait at least 45 minutes prior to depositing concrete in beams, girders, brackets, column capitals, or slabs supported thereon.

C. Beams, girders, brackets, column capitals, and haunches shall be considered as part of the floor or roof system and shall be placed monolithically therewith.

D. Where cold joints will result and this joint will be below the finished water surface, provide and install a waterstop in the joint.

3.9 EXPANSION JOINTS - GENERAL

A. Provide premolded joint filler of sufficient width to completely fill the joint space.

B. If a waterstop is in the joint, accurately cut premolded joint filler to butt tightly against the waterstop and the side forms.

C. At locations where joint sealant is to be applied, precut premolded joint filler the required depth.

D. Form cavities for joint sealant with either precut, premolded joint filler or smooth, accurately-shaped material that can be removed.

E. Thoroughly vibrated concrete along the joint form to produce a dense, smooth surface.

F. Repair surface irregularities along the joint sealant cavity due to improper concrete consolidation or faulty form removal with an approved compound compatible with the joint sealant in a manner that is satisfactory to the sealant manufacturer.

3.10 INSTALLATION OF BITUMINOUS TYPE OR CLOSED CELL FOAM TYPE PREMOLDED JOINT FILLER

A. Drive nails approximately 12 inches on-center through the filler to provide anchors into the concrete when it is placed.

B. Place premolded joint filler in the forms in the proper position before concrete is poured.

C. Install premolded joint filler in walks (to provide expansion and contraction joints at not more than 20-foot intervals), at changes in direction at intersections, and at each side of driveway entrances.

3.11 POURABLE JOINT FILLER - GENERAL

A. Install pourable joint fillers in accordance with the manufacturer's instructions.

B. Thoroughly clean joints by sandblasting concrete surfaces of each side of joint from plastic waterstop to top of joint, dry the joint, and remove dust and foreign material; prime before pouring the filler.

C. Avoid damaging waterstop by sandblasting operations.

D. Primer compatible with filler material.

3.12 RUBBER ASPHALT JOINT FILLER

A. Heat rubber asphalt filler material in a double-walled boiler and place in the joint by means of a nozzle.

B. Prevent spillage outside of the joint.

C. Begin pouring joint filler at the bottom of the horizontal joint and proceed upwards in a manner that will preclude the possibility of trapping air in the joint.

D. Use masking tape at each side of joint to assist in cleaning all spillage.

3.13 CONTROL JOINTS IN FLOOR SLABS

A. Form tongue-and-groove construction joints with keyway in bulkhead forms.

B. Key horizontal joints the full length of the member.

C. Key width shall occupy the interior one-third section, and depth of the key shall be 2 inches.

3.14 STEEL EXPANSION JOINT DOWELS

A. Install parallel to wall or slab face and in true horizontal position by securing tightly in forms with rigid ties.

B. Orient dowels to permit joint movement.

END OF SECTION 03 15 00

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SECTION 03 15 16 - EXPANSION, CONSTRUCTION, AND CONTRACTION JOINTS

PART 1 - GENERAL

1.1 SUMMARY

A. Provide expansion, construction, and contraction joints as specified.

1.2 RELATED SECTIONS

A. Section 03 30 00 – CAST-IN-PLACE CONCRETE

1.3 REFERENCES

A. American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103.
   1. ASTM A36 - Specification for Structural Steel
   2. ASTM D226 - Specification for Asphalt-Saturated Organic Felt used in Roofing and Waterproofing
   3. ASTM D994 - Specification for Preformed Expansion Joint Filler for Concrete (Bituminous Type)
   4. ASTM D1190 - Specification for Concrete joint Sealer, Hot-Poured Elastic Type
   5. ASTM D1751 - Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types)

B. Corp of Engineers, (U.S. Department of the Army) Pulaski Building, 20 Massachusetts Avenue, North West, Washington, D.C. 20314.
   1. CRD-C-572 - Polyvinylchloride Waterstops

C. Federal Specifications: SS-S-210A; Sealing Compound for Expansion Joints

PART 2 - PRODUCTS

2.1 WATERSTOPS

A. Center bulb type extruded from an elastomeric plastic compound, the basic resin of virgin polyvinyl chloride (PVC).

B. Size as recommended by manufacturer for each application or as shown on Drawing. Generally, 6 inches for walls with a 12 inches thickness and 9 inches for walls thicker than 12 inches.

C. Specific gravity approximately 1.37 and the shore durometer Type A hardness, approximately 80.

D. Meet the performance requirements of the Corps of Engineers' Specification.

E. CRD-C-572.

F. Constant thickness from the edge of the bulb to the outside edge.

G. Have a number of parallel ribs or protrusions on each side of the center of the strip.

H. Corrugated type or tapered waterstops are not acceptable.

I. The minimum weight per foot for waterstop shall be 0.75 pound for 3/16-inch by 6-inch, 1.35 pounds for 3/8-inch by 6-inch, and 2.05 pounds for 3/8-inch by 9-inch.

J. Manufacturers:
   1. Southern Metal and Plastic Products, Inc.
      a. Type 11RCB for 4-inch by 3/16-inch.
      b. Type 17RCB for 6-inch by 3/8-inch.
      c. Type 18RCB for 9-inch by 3/8-inch.
   2. Vinylex Corporation.
      a. Catalog No. RB6-38H for the 6-inch by 3/8-inch.
      b. Catalog No. RB9-38H for the 9-inch by 3/8-inch.
   3. Greenstreak Plastic Products.
      a. Style 732 for the 6-inch by 3/8-inch.
      b. Style 735 for the 9-inch by 3/8-inch.
   4. Or approved equal.

2.2 BOND BREAKER TAPE FOR EXPANSION JOINTS

A. Where indicated, adhesive-backed glazed butyl or polyethylene tape that will satisfactorily adhere to the premolded joint material or concrete surface.

B. Same width as joint.

2.3 PREMOLDED JOINT FILLER - BITUMINOUS TYPE

A. Bituminous type conforming to ASTM D994 or D1751, unless otherwise shown or specified.

B. Use around pipe penetrations through existing walls.

C. Manufacturers:
   1. Synko Flex Products Inc.; Synko Flex Preformed Plastic Adhesive Waterstop.
   2. American Colloid Co.; Waterstop RX.

2.4 BOND BREAKER

A. Bond breaker, except where a tape is specifically called for, shall be either bond breaker tape as specified or a bond prevention material, nonstaining type, as specified in Section 03 30 00, CAST-IN-PLACE CONCRETE.

2.5 CORK EXPANSION JOINT FILLER

A. Manufacturer: W.R. Meadows Sealtight, or equal.

B. Seal joints with a pourable two-component cold-applied compound to depth as indicated on Drawings.

2.6 POURABLE JOINT FILLERS - RUBBER ASPHALT FILLER

A. Hot-pour type, conforming to ASTM D1190. Use primer recommended by the manufacturer.

2.7 COAL-TAR TAPE

A. Manufacturers:
   1. Protecto Wrap 200, by Protecto Wrap Co., Denver, CO.
   2. Tapecoat CT, by Tapecoat Company, Inc., Evanston, IL.
   3. Or equal.

2.8 STEEL EXPANSION JOINT DOWELS

A. Smooth steel conforming to ASTM A36. Coating on bars with an approved fusion bonded coating.

PART 3 - EXECUTION

3.1 INSTALLATION OF WATERSTOPS - GENERAL

A. Join waterstops at intersections so continuous seal is provided.

B. Center waterstop on joint.

C. Hold waterstop positively in correct position.

D. If waterstop is damaged, repair in acceptable manner.

E. Vibrate concrete to obtain impervious concrete in the vicinity of joints.

F. In horizontal joints, fill areas below waterstop completely with concrete; make visual inspection of entire waterstop area during concrete placement.

3.2 WATERSTOPS IN CONSTRUCTION JOINTS

A. Horizontal Waterstops:
   1. Place immediately after the pour is completed and before concrete has begun to set.
   2. Puddle each side to level concrete and assure that waterstop is properly embedded.
   3. Where stops are spliced, lap at least 12 inches and secure together.
   4. After concrete has set to the point where the surface can be cut with a broom or a stream of water, cut off the surface to a rough finish with laitance removed and the concrete left clean.

B. Vertical Waterstop: Place and secure in forms prior to placing concrete.

3.3 PLASTIC WATERSTOP

A. Install in accordance with details shown and manufacturer's instructions.

B. Allow at least 10 minutes before pulling or straining the new splice.

C. Finished splices shall provide a cross section that is dense and free of porosity with tensile strength of not less than 80% of unspliced materials.

3.4 SPLICES AND JOINTS

A. Prior to use of the waterstop material in the field, submit a sample of a fabricated cross constructed of each size or shape of material to be used for approval.

B. Fabricate samples so that the material and workmanship represent the fittings provided under this Section.

C. Make field splices and joints in accordance with waterstop manufacturer's instructions using a thermostatically controlled heating iron.

3.5 JOINT PREPARATION - GENERAL

A. Accurately locate and construct joints to produce straight joints.

B. Vertical or horizontal, except where walls intersect sloping floors.

C. Do not commence concrete pour until after joint preparation has been inspected and approved by Engineer.

3.6 CONSTRUCTION JOINTS

A. Prior to placing abutting concrete, clean contact surface by sandblasting or other approved means to remove laitance and expose the aggregate.

B. Remove concrete from exposed portion of reinforcing steel.

C. Do not damage the waterstop, if one is present, during the cleaning process.

D. Grout for horizontal construction joints shall be as specified in Section 03 30 00, CAST-IN-PLACE CONCRETE.

E. Roughen surface of hardened concrete by one of the following methods:
   1. Sandblast foundation and reinforcing dowels after concrete has fully cured to remove laitance and spillage and to expose sound aggregate.
   2. Water blast the foundation and reinforcing dowels after concrete has partially cured to remove laitance and spillage and to expose sound aggregate.
   3. Green cut fresh concrete with high pressure water and hand tools to remove laitance and spillage from the foundation and reinforcing dowels, and to expose sound aggregate.

3.7 LOCATION

A. Joints as shown on the Drawings or approved by Engineer.

3.8 TIME BETWEEN POURS

A. At least 2 hours shall elapse after depositing concrete in long or high columns or heavy walls before depositing in beams, girders, or slabs supported thereon.

B. For short columns and low height walls, 10 feet or less, wait at least 45 minutes prior to depositing concrete in beams, girders, brackets, column capitals, or slabs supported thereon.

C. Beams, girders, brackets, column capitals, and haunches shall be considered as part of the floor or roof system and shall be placed monolithically therewith.

D. Where cold joints will result and this joint will be below the finished water surface, provide and install a waterstop in the joint.

3.9 EXPANSION JOINTS - GENERAL

A. Provide premolded joint filler of sufficient width to completely fill the joint space.

B. If a waterstop is in the joint, accurately cut premolded joint filler to butt tightly against the waterstop and the side forms.

C. At locations where joint sealant is to be applied, precut premolded joint filler the required depth.

D. Form cavities for joint sealant with either precut, premolded joint filler or smooth, accurately-shaped material that can be removed.

E. Thoroughly vibrated concrete along the joint form to produce a dense, smooth surface.

F. Repair surface irregularities along the joint sealant cavity due to improper concrete consolidation or faulty form removal with an approved compound compatible with the joint sealant in a manner that is satisfactory to the sealant manufacturer.

3.10 INSTALLATION OF BITUMINOUS TYPE OR CLOSED CELL FOAM TYPE PREMOLDED JOINT FILLER

A. Drive nails at about 1-foot on centers through the filler to provide anchors into the concrete when it is placed.

B. Place premolded joint filler in the forms in the proper position before concrete is poured.

C. Install premolded joint filler in walks (to provide expansion and contraction joints at not more than 20-foot intervals), at changes in direction at intersections, and at each side of driveway entrances.

3.11 POURABLE JOINT FILLER - GENERAL

A. Install pourable joint fillers in accordance with the manufacturer's instructions.

B. Thoroughly clean joints by sandblasting concrete surfaces of each side of joint from plastic waterstop to top of joint, dry the joint, and remove dust and foreign material; prime before pouring the filler.

C. Avoid damaging waterstop by sandblasting operations.

D. Primer compatible with filler material.

3.12 RUBBER ASPHALT JOINT FILLER

A. Heat rubber asphalt filler material in a double-walled boiler and place in the joint by means of a nozzle.

B. Prevent spillage outside of the joint.

C. Begin pouring joint filler at the bottom of the horizontal joint and proceed upwards in a manner that will preclude the possibility of trapping air in the joint.

D. Use masking tape at each side of joint to assist in cleaning all spillage.

3.13 CONTROL JOINTS IN FLOOR SLABS

A. Form tongue-and-groove construction joints with keyway in bulkhead forms.

B. Key horizontal joints the full length of the member.

C. Key width shall occupy the interior one-third section, and depth of the key shall be 2 inches.

3.14 STEEL EXPANSION JOINT DOWELS

A. Install parallel to wall or slab face and in true horizontal position by securing tightly in forms with rigid ties.

B. Orient dowels to permit joint movement.

END OF SECTION 03 15 16

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SECTION 03 20 00 – CONCRETE REINFORCING

PART 1 - GENERAL

1.1 SUMMARY

A. Provide reinforcing steel or welded wire fabric, as specified.

B. Conform to "Placing Reinforcing Bars", An Extensive Field Reference for the Proper Placement of Steel Reinforcing Bars, Joint Effort of CRSI-WCRSI, prepared under the direction of the CRSI Committee on Engineering Practice.

C. Notify Engineer when reinforcing steel is ready for inspection and allow sufficient time for this inspection prior to placing concrete.

D. Related sections:
   1. Section 01 33 00 – SUBMITTAL PROCEDURES
   2. Section 03 30 00 – CAST-IN-PLACE CONCRETE

1.2 REFERENCE STANDARDS

A. American Concrete Institute (ACI), 38800 Country Club Drive, Farmington Hills, Michigan 48331 (latest revision).
   1. ACI CODE-318 Building Code Requirements for Structural Concrete and Commentary
   2. ACI PRC-315 Guide to Presenting Reinforcing Steel Design Details

B. American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428, (latest revision).
   1. ASTM A615 – Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
   2. ASTM A1064 – Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete

1.3 SUBMITTALS

A. Refer to Section 01 33 00, SUBMITTAL PROCEDURES, for submittal procedures.
   1. Bending lists,
   2. Placing drawings,
   3. Shop drawings.

B. Shop Drawings:
   1. Bars for footings, including dowels, shall not be fabricated and shipped without prior review of Shop Drawings by the Engineer.
   2. Shop and Placing Drawings shall include reinforcing placing plans and details indicating size, location, arrangement, placing sequence, etc., and shall conform to ACI PRC-315.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Deliver Reinforcing Steel:
   1. Deliver with suitable hauling and handling equipment.
   2. Tag for easy identification.
   3. Store to prevent contact with the ground.

B. Unloading, storing, and handling of bars shall conform to CRSI publication “Placing Reinforcing Bars”.

PART 2 - PRODUCTS

2.1 DEFORMED REINFORCING BARS

A. Deformed carbon-steel bars shall conform to ASTM A615, Grade 60.

2.2 WELDED WIRE FABRIC

A. Welded wire fabric shall conform to ASTM A1064.

2.3 ACCESSORIES:

A. Tie wire: 16-gage, black, soft-annealed wire.

B. Bar supports: proper type for intended use.

C. Bar supports in beams, columns, walls, and slabs exposed to view after stripping: Small rectangular concrete blocks of same color and strength of concrete that is being placed around them.

D. Concrete supports: for reinforcing concrete placed on grade.

E. Conform to requirements of CRSI publication “Placing Reinforcing Bars”.

PART 3 - EXECUTION

3.1 CONCRETE REINFORCEMENT

A. Clean metal reinforcement of loose mill scale, oil, earth and other contaminants.

B. Straightening and rebending reinforcing steel:
   1. Do not straighten or rebend concrete reinforcement.
   2. Where construction access through reinforcing is a problem, bundle or space bars instead of bending.
   3. Submit details and obtain Engineer's review prior to placing.

C. Protection, spacing, and positioning of reinforcing steel: Conform to the current edition of ACI CODE-318, reviewed placing drawings and design drawings.

D. Location Tolerance: Conform to the current edition of CRSI publication “Placing Reinforcing Bars” and to the Details and Notes on the Drawings.

E. Splicing:
   1. Conform to Drawings and current edition of ACI CODE-318.
   2. Stagger splices in adjacent bars.

F. Tying deformed reinforcing bars: Conform to current edition of CRSI publication “Placing Reinforcing Bars” and to details and notes on Drawings. Reinforcement steel shall be tied a minimum of every third intersection (33%).

G. Field Bending:
   1. Field bending of reinforcing steel bars is not permitted when rebending will later be required to straighten bars.
   2. Consult with Engineer prior to pouring if there is a need to work out a solution to prevent field bending.

3.2 REINFORCEMENT AROUND OPENINGS

A. Place an equivalent area of steel around pipe or opening and extend on each side sufficiently to develop bond in each bar.

B. See Drawings for bar extension length each side of opening.

C. Where welded wire fabric is used, provide extra reinforcement using fabric or deformed bars.

3.3 WELDING REINFORCEMENT

A. Welding shall not be permitted unless Contractor submits detailed Shop Drawings, qualifications, and radiographic nondestructive testing procedures for review by Engineer.
   1. Obtain results of this review prior to proceeding.
   2. Basis for submittals: Structural Welding Code, Reinforcing Steel, AWS D1.4, published by American Welding Society, and applicable portions of ACI CODE-318, current edition.
   3. Test 10% of welds using radiographic, nondestructive testing procedures in accordance to the above referenced codes.

3.4 PLACING WELDED WIRE FABRIC

A. Conform to ACI 318, latest edition, and to the current Manual of Standard Practice for Welded Wire Reinforcement, by the Wire Reinforcement Institute regarding placement, bends, laps, and other requirements.

B. Placing:
   1. Extend fabric to within 2 inches of edges of slab.
   2. Lap splices at least 1-1/2 courses of fabric and a minimum of 6 inches.
   3. Tie laps and splices securely at ends and at least every 24 inches with 16-gage black annealed steel wire.
   4. Place welded wire fabric at the proper distance above bottom of slab.

END OF SECTION 03 20 00

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SECTION 03 30 00 – CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

A. Furnish all labor, materials, equipment, and incidentals for cast-in-place concrete required to complete the Work as indicated on the Drawings and as specified herein.

B. Related sections:
1. Division 01 – GENERAL REQUIREMENTS
2. Section 03 10 00 – CONCRETE FORMING AND ACCESSORIES
3. Section 03 20 00 – CONCRETE REINFORCING
4. Section 03 39 00 – CONCRETE CURING

1.2 REFERENCE STANDARDS

A. American Concrete Institute (ACI), 38800 Country Club Drive, Farmington Hills, Michigan 48331 (latest revision).
1. ACI SPEC-117 – Specification for Tolerances for Concrete Construction and Materials
2. ACI PRC-211.1 – Selecting Proportions for Normal-Density and High-Density Concrete - Guide
3. ACI SPEC-301 – Specifications for Concrete Construction
4. ACI PRC-304 – Guide for Measuring, Mixing, Transporting, and Placing Concrete
5. ACI PRC-304.2 – Guide to Placing Concrete by Pumping Methods
6. ACI PRC-304.4 – Placing Concrete with Belt Conveyors
7. ACI PRC-305 – Guide to Hot Weather Concreting
8. ACI PRC-306 – Guide to Cold Weather Concreting
9. ACI PRC-308 – Guide to External Curing of Concrete
10. ACI PRC-309 – Guide for Consolidation of Concrete
11. ACI CODE-318 Building Code Requirements for Structural Concrete and Commentary
12. ACI PRC-347 – Guide to Formwork for Concrete
13. ACI CODE-350 – Code Requirements for Environmental Engineering Concrete Structures and Commentary

B. American Society of Testing for Materials (ASTM), 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428, (latest revision).
1. ASTM C31 – Standard Practice for Making and Curing Concrete Test Specimens in the Field
2. ASTM C33 – Standard Specification for Concrete Aggregates
3. ASTM C39 – Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
4. ASTM C94 – Standard Specification for Ready-Mixed Concrete
5. ASTM C143 – Standard Test Method for Slump of Hydraulic-Cement Concrete
6. ASTM C150 – Standard Specification for Portland Cement
7. ASTM C171 – Standard Specification for Sheet Materials for Curing Concrete
8. ASTM C173 – Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method
9. ASTM C231 – Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
10. ASTM C260 – Standard Specification for Air-Entraining Admixtures for Concrete
11. ASTM C309 – Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete
12. ASTM C494 – Standard Specification for Chemical Admixtures for Concrete

13. ASTM C618 – Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete
14. ASTM C685 – Standard Specification for Concrete Made by Volumetric Batching and Continuous Mixing
15. ASTM C881 – Standard Specification for Epoxy-Resin-Base Bonding Systems for Concrete
16. ASTM C1064 – Standard Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete
17. ASTM C1602 – Standard Specification for Mixing Water Used in the Production of Hydraulic-Cement Concrete
18. ASTM E329 – Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection

1.3 SUBMITTALS

A. See Section 01 33 00, SUBMITTAL PROCEDURES, for submittal procedures. Submit on the following:
   1. All chemical admixtures, including certifications. Chloride ion content must be included,
   2. Concrete mix design,
   3. Certification for aggregate quality,
   4. Mill tests and chemical analysis for cement and fly ash,
   5. Method of adding admixtures,
   6. Materials and methods for curing ,
   7. Indicate the name of the independent testing agency to perform the services required in ACI SPEC-301, Section 167,
   8. Laboratory tests on concrete.

1.4 QUALITY ASSURANCE

A. Reinforced concrete shall comply with the requirements of ACI SPEC-301, ACI CODE-318, and ACI CODE-350.

B. The recommendations of ACI PRC-305 shall be followed during hot weather concreting. The recommendations of ACI PRC-306 shall be followed during cold weather concreting.

C. Inspection: Engineer shall have access and rights to inspect batch plants, cement mills, and facilities of suppliers, manufacturers, and subcontractors providing products specified.

D. Batch Plant:
   1. Certification: Current certification that weighing scales have been tested and are within tolerances as set forth in National Institute of Standards and Technology Handbook No. 44.
   2. Equipment: Semi-automatic or fully automatic.

E. Obtain materials from the same source throughout the Work.

F. A concrete pre-placement conference shall be held prior to the placement of structural concrete. Representatives from the Contractor, Engineer, independent testing laboratory, concrete ready-mix supplier, and concrete pumping subcontractor shall be in attendance.

PART 2 - PRODUCTS

2.1 CEMENT

A. Cement shall be Portland Type I or Type IL complying with the requirements of ASTM C150. One brand of cement shall be used throughout the project. Cement brand shall be subject to review and approval by the Engineer.

2.2 WATER

A. Potable water for cement shall be clean and free from oil, acid, alkali, organic matter, or other deleterious substances. Water shall meet the requirements of ASTM C1602.

2.3 FLY ASH

A. Fly ash shall comply with the requirements of ASTM C618, Type C.

2.4 CONCRETE AGGREGATES

A. General:
1. Natural aggregates, well graded, free from deleterious coatings and organic materials conforming to ASTM C33.
2. Import non-reactive aggregates if local aggregates are reactive. (Appendix XI-ASTM C33).
3. Wash aggregates uniformly before use.
4. Other aggregate gradations may be approved by Engineer.

B. Fine Aggregates:
1. Clean, sharp, natural sand conforming to ASTM C33.
2. Less than 2% passing the No. 200 sieve.

C. Coarse Aggregates:
1. Natural gravel, crushed gravel, crushed stone, or combination of these materials.
2. Less than 15% float or elongated particles (long dimension >5 times short dimension).
3. Less than 0.5% passing the No. 200 sieve.

D. Grading Requirements for Coarse Aggregates:

Sieve Size or Size in Inches	1-1/2" Aggregate	1" Aggregate	3/4" Aggregate
1-1/2"	95 - 100	---	---
1"	---	90 - 100	---
3/4"	35 - 70	40 - 85	90 - 100
1/2"	---	10 - 40	20 - 55
3/8"	10 - 30	0 - 15	0 - 15
No. 4	0 - 5	0 -5	0 -5

E. Grading Requirements for Fine Aggregates:

Sieve Size	Minimum	Maximum
3/8"	100	---
No. 4	95	100
No. 8	80	100
No. 16	50	85
No. 30	25	60
No. 50	10	30
No. 100	2	10

2.5 CONCRETE AIR-ENTRAINING ADMIXTURES

A. Air entraining admixtures shall comply with ASTM C260. Admixture shall be certified to be compatible with other required concrete admixtures. Air entraining admixtures shall not contain calcium chlorides

B. Acceptable manufacturers:
   1. Daravair by GCP Applied Technologies.
   2. MasterAir AE by Master Builders Solutions.
   3. Eucon AEA by Euclid Chemical Co.
   4. SikaAir by Sika Corporation.
   5. Or approved equal.

C. Air entrainment shall be provided for concrete exposed to freezing and thawing or required to be watertight.

2.6 WATER REDUCING ADMIXTURES

A. Water-Reducing Admixture: Conforming to ASTM C494, Type A:
   1. Mira or Zyla by GCP Applied Technologies.
   2. Eucon WRor MR by Euclid Chemical Company.
   3. MasterPozzolith or MasterPolyheed by Master Builders Solutions.
   4. Plastocrete by Sika Corporation.
   5. Or approved equal.

B. Water-Reducing Retarding Admixture: Conforming to ASTM C494, Type D:
   1. Recover, by GCP Applied Technologies.
   2. Eucon Retarder-75 by Euclid Chemical Company.
   3. MasterSet Delvo by Master Builders Solutions.
   4. Plastiment by Sika Corporation.
   5. Or approved equal.

C. High-Range Water-Reducing Admixture (Superplasticizer): Conforming to ASTM C494, Type F or G:
   1. Adva by GCP Applied Technologies.
   2. Eucom 37 by Euclid Chemical Company.
   3. Rheobuild 1000 by Master Builders Solutions.
   4. Sikament by Sika Corporation.
   5. Or approved equal.

D. Non-Corrosive Non-Chloride Accelerator Admixture: Conforming to ASTM C494 Type C or E:
   1. Daraset by GCP Applied Technologies.
   2. Accelguard 80 by Euclid Chemical Company.
   3. MasterSet AC by Master Builders Solutions.
   4. SikaSet by Sika Corporation.
   5. Or approved equal.
   6. Manufacturer must have long-term non-corrosive test data from an independent testing laboratory (of at least 1 year's duration) using an acceptable accelerated corrosion test method using electrical potential measures.

E. Prohibited Admixtures: Calcium chloride, thiocyanates or admixtures containing more than 0.05% chloride ions.

F. Certification: Submit written conformance to the requirements and chloride ion content of the admixture to Engineer prior to mix design review.

2.7 CURING AND SEALING COMPOUND

A. Curing and sealing compound shall be liquid type membrane-forming and shall comply with the requirements of ASTM C309, Type 1-D. Liquid curing compound shall be water based.

2.8 SHEET CURING MATERIAL

A. Sheet curing material shall comply with ASTM C171 and shall be one of the following types: curing paper which can be regular or white, polyethylene film which can be clear or white opaque, or white burlap-polyethylene sheet.

2.9 VAPOR RETARDER

A. Vapor retarder shall be Stego 10 mil Class A vapor retarder, or approved equal.

2.10 CONCRETE MIX DESIGN

A. Submit mix design on each class of concrete for review; include standard deviation analysis or trial mixture test data.

B. Proportion mix design in accordance with ACI CODE-318-19, Section 26.4, “Concrete Materials and Mixture Requirements”.

C. If trial batches are used:
1. Prepare mix design by independent testing laboratory.
2. Achieve an average compressive strength 1,200 PSI higher than the specified strength, or 1,400 PSI for specified concrete strengths over 5,000 PSI.
3. Certified copies of laboratory trial mix reports and cylinder tests shall be submitted to the Engineer by the testing laboratory for approval.

D. Do not place concrete prior to receipt of Engineer's written approval of mixes and cylinder test results.

E. Fly ash may be substituted for cement to a maximum of 20% of the total cementitious material by weight.

F. Design mix and perform tests to meet the requirements as specified.

Concrete Class	Minimum 28-Day Compressive Strength (psi)	Maximum Water Cement Ratio	Air Content (Percent)	Slump Range (in.)
Class A	3,000	0.54	4 – 7	1 - 4
Class C	4,000	0.44	4 – 7	1 - 4

G. Minimum Cement Content (based on aggregate size):

517 lb/cy	1-1/2-inch
540 lb/cy	1-inch
564 lb/cy	3/4-inch

H. Combined Aggregate Gradings:
1. Aggregates for concrete shall be combined in proportions that will provide a mixture within the grading limits in accordance with this Section, unless otherwise approved in writing by Engineer.
2. Maximum aggregate size depends on rebar clearances.
3. Recommended Admixture Usage:

Location or Condition	Recommended Admixture	Additional Requirements
Air-entrained concrete	Air-entraining admixture	Non-toxic; non-corrosive
Pumped concrete	High-range, water reducing (Superplasticizer)	Initial slump: 2 - 4 inch Slump with Superplasticizer: 9 inch maximum
Concrete with a water-cement ratio below 0.50	High-range, water-reducing admixture (Superplasticizer).	Initial slump: 2-4 inch Slump with Superplasticizer: 9 inch maximum

4. Admixtures:
   a. Concrete shall contain the specified water-reducing admixture or the specified high-range water-reducing admixture (superplasticizer).
   b. Concrete required to be air-entrained shall contain an approved air entraining admixture.
   c. Pumped concrete, concrete for industrial slabs, architectural concrete, concrete required to be watertight, or concrete with a water/cement ratio below 0.50 shall contain the specified high-range water-reducing admixture (superplasticizer).

PART 3 - EXECUTION

3.1 MEASUREMENT OF MATERIALS AND MIXING

A. Conform to ACI PRC-304 current edition; ASTM C94; specified requirements for mix deign, testing, and quality control; and to other requirements of these Specifications.

3.2 RETEMPERING

A. Retempering of concrete or mortar in which the cement has partially hydrated will not be permitted. Redosage with the specified high-range water-reducing admixture (superplasticizer) may be done with the prior approval of the Engineer regarding dosage and time periods.

3.3 PLACING CONCRETE - GENERAL

A. All concrete shall be placed in the presence of the Engineer.

B. Allow other trades reasonable time to complete portions of work which must be completed before concrete is placed.

C. Notify Engineer at least 1 full working day in advance before starting to place concrete to permit inspection of forms, reinforcing, sleeves, conduits, boxes, inserts, or other work required to be installed in concrete.

D. Review curing methods with Engineer and verify curing materials and equipment are at Project site prior to the concrete placement.

E. Concrete placement shall conform to requirements and recommendations of ACI PRC-304 and ACI CODE-318, except as modified in these Specifications.

F. Place concrete as soon as possible after leaving mixer in horizontal layers not over 24 inches deep. Deposit concrete continuously so as to avoid cold joints. Concrete shall be deposited as close as possible to its final location without segregation or loss of ingredients, and without splashing forms or reinforcement steel above.

G. Vertical Free Fall Drop to Final Placement:
   1. Concrete shall not be dropped freely where reinforcing steel will cause segregation. Concrete free fall shall not exceed 15 feet for concrete containing high-range water-reducing admixture (superplasticizer), and shall not exceed 5 feet for other concrete.

H. Do not use concrete pump truck pipes, tremies, finishing tools, etc., constructed of aluminum.

I. Before depositing concrete:
   1. Remove debris from space to be occupied by concrete.
   2. Dampen:
      a. Gravel fill beneath slabs on ground.
      b. Sand where vapor barrier is specified.
      c. Wood forms.
   3. Verify reinforcement is secured in position.

3.4 ADDITION OF WATER AT PROJECT SITE

A. Do not add water to concrete at Project site if slump is within specified range.

B. With the Engineer's approval, add water to concrete arriving at Project site with a slump less than the specified range, provided it can be demonstrated that the specified water-cement ratio will not be exceeded.

3.5 CONVEYING

A. Concrete shall be conveyed from the mixer to the place of final deposit by methods which will prevent the separation or loss of materials.

B. Conveying equipment shall be capable of providing a supply of concrete at the site of placement without interruptions sufficient to permit loss of plasticity between successive increments.

3.6 CONSOLIDATION AND VISUAL OBSERVATION

A. Concrete shall be consolidated with internal vibrators having a frequency of at least 8,000 vibrations per minute, with amplitude required to consolidate concrete in the section being placed.

B. At least 1 standby vibrator in operable condition shall be at the placement site prior to and during placing concrete.

C. Consolidation equipment and methods shall conform to ACI PRC-309 Guide for Consolidation of Concrete.

D. Vibrator operator is required to see the concrete being consolidated to ensure good quality workmanship; or Contractor shall have a person actually observe the vibration of the concrete and will advise the vibrator operator of changes needed to assure complete consolidation.

E. Vibrators shall not be used to transport concrete in forms.

3.7 HOT WEATHER CONCRETING

A. Follow the recommendations in ACI PRC-305 Guide to Hot Weather Concreting.

B. Do not place concrete at times when temperature is forecast to exceed 100 degrees F. within 12 hours after the concrete is placed.

C. Verify preparations are complete before ordering concrete so that concrete may be placed upon arrival.

D. Fog spray forms, reinforcing steel, and subgrade immediately prior to placing concrete.

E. Minimize size of concrete placements and thickness of layers of concrete.

F. Make every effort to maintain concrete temperature:
   1. Below 95 degrees F. at time of placement, cool the ingredients before mixing by use of chilled water.
   2. Uniform:
      a. Minimize the time of placement.
      b. Begin each operation in concrete finishing promptly when the concrete is ready for it.

G. Place concrete promptly upon arrival at Project and vibrate immediately after placement.

H. Do not add water to retemper.

I. Consider placing concrete in late afternoon as opposed to early morning.

J. Provide windbreaks, shading, and fog spraying on days when temperature is forecast to exceed 90 degrees F.

K. Protect and cure exposed surfaces by one of the following:
   1. Continuous water curing.
   2. Moisture-cover curing.

3.8 COLD WEATHER CONCRETING

A. Preparation:
   1. Follow recommendations in ACI PRC-306 Guide to Cold Weather Concreting.
   2. Additives for the sole purpose of providing freeze protection shall not be used.
   3. Arrangements for covering, insulating, housing, or steam heating newly-placed concrete shall be made in advance of placement and shall be adequate to maintain temperature and moisture conditions recommended.
   4. Temperatures of concrete mix shall be as shown for various stages of mixing and placing of concrete mix:

	Section Size, Minimum Dimension			
	< 12 Inches	12 - 36 Inches	36 - 72 Inches	> 72 Inches
Air Temperature	Minimum concrete temperature as mixed for indicated weather:			
Above 30° F	60° F	55° F	50° F	45° F
0° F to 30° F	65° F	60° F	55° F	50° F
Below 0° F	70° F	65° F	60° F	55° F
	Maximum allowable gradual temperature drop in first 24 hours after end of protection:			
	50° F	40° F	30° F	20° F

B. Placement:
   1. Surfaces to be in contact with concrete shall be free of snow, ice, and frost and shall be above 35 degrees F.
   2. Do not place concrete on frozen subgrade.
   3. Placement of insulating material, tarpaulins, or other movable coverings shall follow closely the placing of concrete so that only a few feet of concrete are exposed to outside air at any time.

C. Curing and Protection:
   1. Keep concrete continuously moist and maintain concrete temperature at a minimum of 50 degrees F. for 7 days; temperature shall be uniform throughout concrete. If high early strength concrete is used, this temperature requirement may be reduced to 3 days.
   2. It is recommended to leave forms in place for the entire period of protection; use insulated blankets or other approved method on slab surfaces.
   3. Limit rapid temperature changes at end of protection period to avoid thermal cracking.

3.9 BONDING TO CONCRETE SURFACES

A. New Concrete Surfaces:
   1. New concrete is defined as less than 60 days old.
   2. Roughen surface to hardened concrete.
   3. Thoroughly clean and saturate with water.
   4. Immediately place concrete.
   5. Horizontal surfaces:
      a. Cover surface with 2 inches of grout.
      b. Limit first lift on top of grout to 12 inches.
      c. Thoroughly vibrate to mix and consolidate grout and concrete.

B. Old Concrete Surfaces:
   1. Use bonding agent.
   2. Prepare surface in strict accordance with manufacturers printed instructions and recommendations for specific and application for this Project.
   3. Follow manufacturers recommendations.

3.10 EVALUATION AND ACCEPTANCE OF CONCRETE

A. Conform to ACI CODE-318 Building Code Requirements for Structural Concrete and Commentary requirements for reinforced concrete, Section 26.12, “Concrete Evaluation and Acceptance”, and to the following specifications:

B. Field Testing Responsibilities:
   1. Contractor:
      a. Collect, label, and handle test specimens at Project site in accordance with ASTM C31.
      b. Provide adequate facilities for safe storage, curing, and protection for first 24 hours and for additional time as may be required before transporting to test lab by lab representative.
      c. Pay for testing.

C. Number of Test Cylinders:
   1. Set of Cylinders: 5
      a. One 7-day and three 28-day compressive strength samples in addition to 1 spare cylinder
   2. Sample Frequency:
      a. 1 set/class of concrete/50 cubic yards.
      b. 1 set/class of concrete/day.

c. Whichever is greater.

3. Cylinders shall be tested in accordance with ASTM C39.

D. Laboratory shall test 1 cylinder at 7 days, and 3 cylinders at 28-days. The test results should be the average strength of the 3 cylinders. If 1 cylinder shows obvious evidence of improper sampling, molding, or testing, it may be discarded and the strengths of the other 2 cylinders averaged. Should the average 28-day compressive strength be less than the design strength of the sampled concrete, a 56-day compressive strength test shall be conducted using the spare cylinder.

E. Slump Tests shall be made in the field in accordance with ASTM C143. Slump tests shall be performed off the back of the truck. Any water or plasticizer added after the initial slump test will require retesting.

F. Air Content tests shall be performed in accordance with either ASTM C231 or ASTM C173.

G. Temperature tests shall be performed in accordance with ASTM C1064.

3.11 PATCHING – GENERAL

A. Prior to starting patching work, except as specified, obtain Engineer's approval of proposed patching techniques and mixes.

3.12 REPAIR OF DEFECTIVE AREAS

A. Definition: Concrete in place that does not conform to specified design strength, shapes, alignments, and elevations as shown on Drawings or contains surface defects.

B. Evaluation and acceptance of concrete shall conform to ACI CODE-318.

C. With prior approval of the Engineer, as to method and procedure, repair defective areas in conformance with ACI SPEC-301, Chapter 5, except that the specified bonding compound shall be used.

D. The specified patching mortar may be used in lieu of the above-mentioned method when color match of adjacent concrete is not required. Prior approval of the Engineer is required.

E. Defective Areas:
1. Concrete not conforming to the specified concrete strength shall be considered defective.
2. Cut out and replace with fresh concrete of same type and class as original concrete.
3. Finish repaired areas to blend into adjacent concrete.

F. Surface Repairs:
1. Remove and replace concrete having defective surfaces if defects cannot be repaired to satisfaction of Owner.
2. Honey-combed areas and rock pockets:
   a. Repair immediately after removal of forms.
   b. Prepare no-slump concrete mortar and test so that, when dry, patching mortar will match surrounding color and strength.
   c. Cut out to solid concrete or minimum of 1-inch depth.
   d. Make edges for cuts perpendicular to the concrete surface.
   e. Thoroughly clean and dampen with water.
   f. Apply bonding compound.
   g. Compact no-slump concrete into patch, and finish to blend with adjacent finished concrete.
   h. Cure in same manner as adjacent concrete.

3. High Areas:
   a. Grind after concrete has cured at least 14 days or achieved the design strength based on laboratory testing.
4. Low Areas:
   a. Repair during or immediately after completion of surface finishing operations.
   b. Cut out low areas and replace with fresh concrete of same type and class as original concrete.
   c. Finish repaired areas to blend into adjacent concrete.
5. Make structural repairs with prior approval of Engineer, as to method and procedure, using the specified epoxy adhesive or epoxy mortar. Where epoxy injection procedures must be used, use an approved low viscosity epoxy made by the manufacturers previously specified.
6. Level floors for subsequent finishes by use of specified underlayment material.
7. Where required, level exposed floors by use of the specified self-leveling repair topping.
8. Repair methods not specified above may be used, subject to approval of Engineer.

3.13 BLOCKOUTS AT PIPES OR OTHER PENETRATIONS

A. Submit proposed blockouts for review in accordance with Section 01 33 00, SUBMITTAL PROCEDURES.

3.14 CURING OF CONCRETE

A. Refer to Section 03 39 00, CONCRETE CURING, for curing procedures.

END OF SECTION 03 30 00

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SECTION 03 35 00 – CONCRETE FINISHING

PART 1 - GENERAL

1.1 SUMMARY

A. Furnish all labor, materials, equipment, and incidentals required to finish horizontal and vertical concrete surfaces as indicated on the Drawings and as specified herein.

B. Related sections:
   1. Section 01 33 00 – SUBMITTAL PROCEDURES
   2. Section 03 11 00 – CONCRETE FORMING
   3. Section 03 30 00 – CAST-IN-PLACE CONCRETE
   4. Section 03 39 00 – CONCRETE CURING

1.2 REFERENCE STANDARDS

A. All standards below shall be latest version, unless otherwise specified.

B. American Concrete Institute (ACI), 38800 Country Club Drive, Farmington Hills, Michigan 48331 (latest revision).
   1. ACI SPEC-117 – Specification for Tolerances for Concrete Construction and Materials
   2. ACI SPEC-301 – Specifications for Structural Concrete
   3. ACI PRC-302.1 – Guide to Concrete Floor and Slab Construction
   4. ACI PRC-308 – Guide to External Curing of Concrete
   5. ACI SPEC 503.4 – Standard Specifications for Repairing Concrete with Epoxy Mortars

C. American Society of Testing for Materials (ASTM), 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428, (latest revision).
   1. ASTM C33 – Standard Specification for Concrete Aggregates
   2. ASTM C150 – Standard Specification for Portland Cement
   3. ASTM C171 – Standard Specification for Sheet Materials for Curing Concrete
   4. ASTM C309 – Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete
   5. ASTM C881 – Standard Specification for Epoxy-Resin-Base Bonding Systems for Concrete
   6. ASTM D2103 – Standard Specification for Polyethylene Film and Sheeting
   7. ASTM E1155 – Standard Test Method for Determining Floor Flatness and FL Floor Levelness Numbers

1.3 SUBMITTALS

A. Refer to Section 01 33 00, SUBMITTAL PROCEDURES, for submittal procedures. Submit product data sheets on all proposed grout, bonding agents, sealers, and method of repairing concrete defects.

1.4 QUALITY ASSURANCE

A. Finishes of formed concrete surfaces, slabs, and flatwork shall conform to the applicable requirements of ACI SPEC-117 and ACI SPEC-301.

B. Concrete specified to receive an applied finish or materials shall have a surface finish that is required for the proper application of the specified manufacturer's products. If an alternative product is approved for use, coordinate any required changes in the concrete finish necessary to accommodate the alternative products.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver curing materials in manufacturer's original, unopened containers. Materials shall be stored in accordance with the manufacturer's storage requirements.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Sheet materials for curing concrete shall be white burlap polyethylene sheeting with a minimum weight of 10 ounces per linear yard. Sheeting shall be 40 inches in width, and shall conform to ASTM C171. Polyethylene film shall be securely bonded to the burlap so that there is no separation.

B. Polyethylene film shall conform to ASTM D2103 with a minimum thickness of 6 mils. Film may be clear or white opaque in color.

C. Liquid membrane-forming curing compound for curing concrete shall conform to ASTM C309, Type 1-D, and shall include a fugitive dye. Curing compound shall be water-based.

D. Water shall be potable and non-detrimental to the concrete.

PART 3 - EXECUTION

3.1 GENERAL

A. Perform work in accordance with this Specification and in accordance with the applicable ACI standards. In the event of a conflict with this Specification and the ACI, the more stringent requirement shall control.

B. All materials shall be applied in accordance with the manufacturer's printed instructions.

C. Immediately after concrete placement, the concrete shall be protected from premature drying and excessively hot or cold temperatures. The temperature of the concrete shall be maintained relatively constant with minimal moisture loss in accordance with ACI PRC-308. Refer to Section 03 30 00, CAST-IN-PLACE CONCRETE for minimum and maximum concrete temperatures.

D. Concrete curing shall continue for a minimum of 7 days following the concrete placement.

E. Confirm curing compound compatibility with the required finishes such as hardeners, paint, stain, tile, or other specified work.

F. Limit rapid temperature changes at the end of the protection period to limit thermal cracking.

G. Finished concrete surfaces shall be protected from direct sunlight.

3.2 FINISHING FORMED SURFACES

A. Rough-formed finish: As-cast concrete texture imparted by form-facing material with tie holes and defects repaired and patched. Remove fins and other projections that exceed the specified limits on formed surface irregularities. Rough formed finish shall apply to concrete surfaces not exposed to public view.

B. Smooth-formed finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defects. Remove fins and other projections that exceed specified limits on formed-surface irregularities. Smooth formed finish shall apply to concrete surfaces exposed to public view, to

receive a rubbed finish, or to be covered with a coating or covering material applied directly to concrete.

C. Rubbed finish: Apply the following to smooth-formed finished as-cast concrete where indicated:
   1. Smooth-rubbed finish: Not later than 1 day after form removal, moisten concrete surfaces and rub with carborundum brick or another abrasive until producing a uniform color and texture. Do not apply cement grout other than that created by the rubbing process.
   2. Grout-cleaned finish: Wet concrete surfaces and apply grout of one part Portland cement to 1-1/2 parts fine sand with a 1:1 mixture of bonding admixture and water. Add white Portland cement in amounts determined by trial patches so color of dry grout will match adjacent surfaces. Scrub grout into voids and remove excess grout. When grout whitens, rub surface with clean burlap and keep surface damp by fog spray for at least 36 hours.
   3. Cork-float finish: Wet concrete surfaces and apply a stiff grout. Mix one part Portland cement and one part fine sand with a 1:1 mixture of bonding agent and water. Add white Portland cement in amounts determined by trial patches so color of dry grout will match adjacent surfaces. Compress grout into voids by grinding surface. In a swirling motion, finish surface with a cork float.

D. Related unformed surfaces: At tops of walls, horizontal offsets and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces unless otherwise indicated.

3.3 FINISHING FLOORS AND SLABS

A. Comply with the requirements of ACI PRC-302.1 for screeding, re-straightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.

B. Float finish: Consolidate surface with power-driven floats or by hand floating if area is small or inaccessible to power driven floats. Restraighten, cut down high spots and fill low spots. Repeat float passes and re-straightening until surface is left with a uniform, smooth, granular texture.
   1. Apply float finish to those concrete surfaces specified to receive a trowel finish.
   2. After screeding, consolidating, and leveling concrete slabs, do not work surface until ready for floating. Begin floating when surface water has disappeared, or when concrete has stiffened sufficiently to permit operation of power-driven floats, or both. Consolidate surface with power-driven floats, or by hand-floating if area is small or inaccessible to power units. Finish surfaces to tolerances of F(f) 18 (floor flatness) and F(l) 15 (floor levelness) measured according to ASTM E1155. Cut down high spots and fill low spots. Uniformly slope surfaces to drains. Immediately after leveling, refloat surface to uniform, smooth, granular texture

C. Trowel finish: After applying float finish, apply first troweling and consolidate concrete by hand or power-driven trowel. Continue troweling passes and restraighten until surface is free of trowel marks and uniform in texture and appearance. Grind smooth any surface defects that would telegraph through applied coating or floor coverings.
   1. Apply a trowel finish to surfaces exposed to view or to be covered with resilient flooring, carpet, ceramic or quarry tile set over a cleavage membrane, paint or another thin film finish coating system.
   2. Finish and measure surface so gap at any point between concrete surface and an unleveled, free standing 10-foot-long straightedge resting on two high spots and placed anywhere on the surface does not exceed 1/8-inch.

3. After floating, begin first trowel finish operation using a power-driven trowel. Begin final troweling when surface produces a ringing sound as trowel is moved over surface. Consolidate concrete surface by final hand-troweling operation, free of trowel marks, uniform in texture and appearance, and finish surfaces to tolerances of F(f) 20 (floor flatness) and F(l) 17 (floor levelness) measured according to ASTM E 1155. Grind smooth surface defects which would telegraph through applied floor covering.

D. Broom finish: Apply a broom finish to exterior concrete platforms, steps, ramps and elsewhere as indicated.
   1. Immediately after float finishing, slightly roughen trafficked surface by brooming with fiber-bristle broom parallel to slope. Coordinate required final finish with the Engineer before application.

E. Tool exposed top edges of slabs with a round edging tool.

F. Set and finish all slabs at elevation indicated or at elevation required for reception of applied finishes or materials scheduled.

G. Pitch floor to floor drains where indicated at a gradual slope of ±1/8"-1/4"/ft. Start slope a minimum distance of 4 feet away from drain.

3.4 FLOOR HARDENER

A. In rooms with exposed concrete floors not to be polished and left exposed, apply floor hardener per the manufacturer's application instructions. Protect floors as required during construction from mud stains, paint, oil, gypsum board tape and bedding materials, or any other item that can stain the finished slab appearance. If objectionable stains exist and cannot be removed, the general contractor will either provide an epoxy type painted floor finish or other materials acceptable to the Architect.

3.5 PROTECTION

A. Concrete shall be protected from damage during the curing period. All finished concrete surfaces shall be protected from damage by construction equipment, materials, or methods, by application of curing procedures, and by rain or running water. Self-supporting structures shall not be loaded in such a way as to overstress the concrete.

END OF SECTION 03 35 00

SECTION 03 39 00 – CONCRETE CURING

PART 1 - GENERAL

1.1 SUMMARY

A. Furnish all labor, materials, equipment, and incidentals for the initial and final curing of horizontal and vertical concrete surfaces as indicated on the Drawings and as specified herein.

B. Related sections:
   1. Section 01 33 00 – SUBMITTAL PROCEDURES
   2. Section 03 30 00 – CAST-IN-PLACE CONCRETE

1.2 REFERENCE STANDARDS

A. American Concrete Institute (ACI), 38800 Country Club Drive, Farmington Hills, Michigan 48331 (latest revision).
   1. ACI PRC-302.1 - Guide to Concrete Floor and Slab Construction
   2. ACI SPEC-305.1 - Specification for Hot Weather Concreting
   3. ACI SPEC-306.1 - Specification for Cold Weather Concreting
   4. ACI PRC-308 - Guide to External Curing of Concrete

B. American Society of Testing for Materials (ASTM), 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428, (latest revision).
   1. ASTM C171 - Standard Specification for Sheet Materials for Curing Concrete
   2. ASTM C309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete
   3. ASTM D2103 - Standard Specification for Polyethylene Film and Sheeting

1.3 SUBMITTALS

A. Refer to Section 01 33 00, SUBMITTAL PROCEDURES , for submittal procedures. Submit product data sheets on all proposed curing compounds and moisture retaining sheet.

1.4 QUALITY ASSURANCE

A. Perform work in accordance with ACI PRC-302.1 and ACI PRC-308. The recommendations of ACI SPEC-305.1 shall be followed during hot weather concreting. The recommendations of ACI SPEC-306.1 shall be followed during cold weather concreting.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver curing materials in manufacturer’s original, unopened containers. Curing materials shall be stored in accordance with the manufacturer’s storage requirements.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Sheet materials for curing concrete shall be white burlap polyethylene sheeting with a minimum weight of 10 ounces per linear yard. Sheeting shall be 40 inches in width, and shall conform to ASTM C171. Polyethylene film shall be securely bonded to the burlap so that there is no separation.

B. Polyethylene film shall conform to ASTM D2103 with a minimum thickness of 6 mils. Film may be clear or white opaque in color.

C. Liquid membrane-forming curing compound for curing concrete shall conform to ASTM C309, Type 1-D, and shall include a fugitive dye. Curing compound shall be water-based.

D. Water shall be potable and non-detrimental to the concrete.

PART 3 - EXECUTION

3.1 GENERAL

A. Perform work in accordance with this Specification and in accordance with the applicable ACI standards. In the event of a conflict with this Specification and the ACI, the more stringent requirement shall control.

B. All materials shall be applied in accordance with the manufacturer's printed instructions.

C. Immediately after concrete placement, the concrete shall be protected from premature drying and excessively hot or cold temperatures. The temperature of the concrete shall be maintained relatively constant with minimal moisture loss in accordance with ACI PRC-308. Refer to Specification Section 03 30 00, CAST-IN-PLACE CONCRETE for minimum and maximum concrete temperatures.

D. Concrete curing shall continue for a minimum of 7 days following the concrete placement.

E. Confirm curing compound compatibility with the required finishes such as hardeners, paint, stain, tile, or other specified work.

F. Limit rapid temperature changes at the end of the protection period to limit thermal cracking.

G. Finished concrete surfaces shall be protected from direct sunlight.

3.2 CURING METHODS

A. Perform curing of concrete by curing compound, moisture curing, moisture-retaining cover curing, or a combination of the previously listed methods.

B. Moisture Curing – Provide moisture curing by one of the following methods:
   1. Keep concrete surface continuously wet by covering with water;
      a. Use water not more than 20 degrees F. cooler than the concrete.
      b. Do not allow the concrete to become alternately wet and dry.
   2. Use continuous fog spray;
   3. Cover the concrete surface with a moisture retaining cover as specified in Part 2.1.A of this Specification. Cover shall be placed to provide complete coverage of the concrete surfaces and edges with a minimum 4-inch overlap of adjacent retaining covers. Seal covers using waterproof tape or adhesive. Repair any holes or tears in the moisture retaining cover using cover material and waterproof tape.

C. Liquid Membrane-Forming Compound
   1. Apply membrane-forming curing compound to slab within 1-hour of final finishing operations or within 1-hour of form removal. Apply uniformly in continuous operation by spay or roller in accordance with the manufacturer's installation instructions.
   2. Spray applied coatings shall be applied in 2 coats, with the second coat applied at right angles (90°) to the first coat.
   3. Remove curing compound following the curing period if required by the finish material manufacturer.

3.3 COLD WEATHER CONCRETING

A. Use moisture-cover curing or liquid membrane-forming compound as approved.

B. Protect concrete from temperature changes in accordance with ACI PRC-306.1 Specification for Cold Weather Concreting.

3.4 HOT WEATHER CONCRETING

A. Use water curing or moisture-cover curing as approved.

B. Protect concrete in accordance with ACI PRC-305.1 Specification for Hot Weather Concreting.

3.5 PROTECTION

A. Concrete shall be protected from damage during the curing period. All finished concrete surfaces shall be protected from damage by construction equipment, materials, or methods, by application of curing procedures, and by rain or running water. Self-supporting structures shall not be loaded in such a way as to overstress the concrete.

END OF SECTION 03 39 00

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SECTION 03 60 00 – GROUT

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Non-shrink grout.
   2. Topping grout.
   3. Concrete Fill.
   4. Cement grout for pipe invert fill.
   5. Construction joint mortar.

B. Related Sections:
   1. Section 03 11 00 – CONCRETE FORMWORK
   2. Section 03 30 00 – CAST-IN-PLACE CONCRETE

1.2 REFERENCES

A. The following is a list of standards which may be referenced in this section:
   1. ASTM International (ASTM):
      a. C33 - Standard Specification for Concrete Aggregates.
      b. C94 - Standard Specification for Ready-Mixed Concrete.
      c. C150 - Standard Specification for Portland Cement.
      d. C230 - Standard Specification for Flow Table for Use in Tests of Hydraulic Cement.
      e. C531 - Standard Test Method for Linear Shrinkage and Coefficient of Thermal Expansion of Chemical-Resistant Mortars, Grouts, Monolithic Surfacings, and Polymer Concretes.
      f. C618 - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete.
      g. C939 - Standard Test Method for Flow of Grout for Preplaced-Aggregate Concrete (Flow Cone Method).
      h. C1107 - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Non-shrink).
      i. C1116 - Standard Specification for Fiber-Reinforced Concrete.
      j. C1181 - Standard Test Methods for Compressive Creep of Chemical-Resistant Polymer Machinery Grouts.
      k. E329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection.
      l. E548 - Standard Guide for General Criteria Used for Evaluating Laboratory Competence.

1.3 SUBMITTALS

A. Product data for each type of product indicated.

B. Certified test results verifying compliance with compressive strength, shrinkage and expansion requirements and manufacturer’s literature containing instructions and recommendations on the mixing, handling, placement and appropriate uses for each type of non-shrink and epoxy grout.

C. Fine aggregate gradation.

D. One copy of each 30 consecutive strength test results and mix design used from a record of past performance, or one copy of laboratory trial mix and design and results, and one copy of the mix design proposed for each cementitious mixture and use under this contract.

E. Qualification for testing agency.

F. Material test reports: For the following from a qualified testing agency, indicating compliance with requirements:
   1. Aggregates, include service record data indicating absence of deleterious expansion of concrete due to alkali aggregate reactivity.
   2. Non-shrink grout.
   3. Epoxy grout.

G. Material certificates: For each of the following, signed by manufacturers:
   1. Cementitious materials.
   2. Non-shrink grout.
   3. Epoxy grout.

H. Field quality-control tests and observation reports.

I. Ready mix concrete (Cement Grout)
   1. Provide delivery tickets for ready-mix concrete (cement grout) or weigh master's certificate per ASTM C94, include weights of cement and each size aggregate and amount of water added at the plant and a record of placements. Record the amount of water added at the job site on the delivery ticket. Water added at the plant shall account for the moisture in aggregate. If water is added at the job site, then the total water content shall not exceed the water content of the approved design mix.
   2. Keep records showing time and place of each placement of concrete, joint mortar bed material or cement grout, together with transit delivery slips certifying the contents of the placement. Furnish records to Engineer.

J. Joint Mortar Bed: Provide material analysis and certification for each placement.

K. Shop Drawings:
   1. Product data of grouts.
   2. Curing method for grout.
   3. Mix design of cement-sand grout mixture for pipe invert/structure fill.
   4. Mix design of Joint Mortar Bed.

L. Information Submittals:
   1. Manufacturer's written instructions for mixing of grout.
   2. Manufacturer's Certificate of Compliance: Grout free from chlorides and other corrosion-causing chemicals.
   3. Manufacturer's Certificate of Proper Installation.
   4. Statements of Qualification: Non-shrink grout manufacturer's representative.
   5. Test Reports: Test report for 24-hour evaluation of non-shrink grout.

1.4 QUALIFICATIONS

A. Manufacturer's qualifications for cement grout and joint mortar bed: A firm experienced in manufacturing ready-mixed concrete products and a firm that complies with ASTM C94 requirements for production facilities and equipment.

B. Testing Agency Qualifications: An independent agency, acceptable to authorities having jurisdiction, qualified according to ASTM C1077 and ASTM E329 for testing indicated, as documented according to ASTM E548.

1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-01 or an equivalent certification program.
2. Personnel performing laboratory tests shall be ACI-certified Concrete Strength Testing Technician and Concrete Laboratory Testing Technician – Grade I, Testing Agency laboratory supervisor shall be an ACI-certified Concrete Laboratory Testing Technician – Grade II.

C. Source limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from one source and obtain admixtures through one source from a single manufacturer.

D. Non-shrink Grout Manufacturer's Representative: Authorized and trained representative of grout manufacturer, with minimum of 1 year experience that has resulted in successful installation of grouts similar to those for this Project.

1.5 GUARANTEE

A. Manufacturer's guarantee shall not contain disclaimer on the product data sheet, grout bag, or container limiting responsibility to only the purchase price of products and materials furnished.

PART 2 - PRODUCTS

2.1 CONCRETE MATERIALS

A. Cementitious Material: Use the following cementitious materials, of the same type, brand and source throughout project:
1. Portland Cement: ASTM C 150, Type IL or II or combination of Type I with fly ash.
2. Fly Ash: ASTM C 618.

B. Fine aggregates: ASTM C 33, Class 4S or better, graded. Provide aggregates from a single source with documented service record data of at least 10 years satisfactory service in similar applications and service conditions using similar aggregates and cementitious materials. Aggregates shall be free of materials with deleterious reactivity to alkali in cement. Aggregates for cement grout and/or mortar bed shall be provided from the same source as aggregate for the cast-in-place concrete.

C. Water: ASTM C 94 and potable.

2.2 ADMIXTURES

A. Comply with Section 03 30 00, CAST-IN-PLACE CONCRETE.

2.3 NON-SHRINK GROUT SCHEDULE

A. Furnish non-shrink grout for applications in grout category in the following schedule:

	Temperature Range	Max. Placing Time	
Application	40 to 100 °F	20 min	Greater than 20 min
Filling tie hole	I	I	I
Machine bases 25 hp or less	II	II	II
Through-bolt openings	II	II	II
Patching Concrete Walls	II	II	II
Machine bases 26 hp and up	III	III	III
Base plates and/or soleplates with vibration, thermal movement, etc.	III	III	III
Other applications not listed	II	II	II

2.4 NON-SHRINK GROUT

A. Category I:
   1. Nonmetallic and non-gas-liberating.
   2. Prepackaged natural aggregate grout requiring only the addition of water.
   3. Test in accordance with ASTM C1107:
      a. Flowable consistency 140%, 5 drops in 30 seconds, in accordance with ASTM C230.
      b. Flowable for 15 minutes.
   4. Grout shall not bleed at maximum allowed water.
   5. Minimum strength of flowable grout, 3,000 psi at 3 days, 5,000 psi at 7 days, and 7,000 psi at 28 days.
   6. Manufacturers and Products:
      a. Sika USA, Lyndhurst, NJ, SikaGrout 212.
      b. Darragh Company, Little Rock, AR, Red Diamond NS Grout.
      c. Chemrex, Inc., Shakopee, MN; Set Grout.
      d. Euclid Chemical Co., Cleveland, OH; NS Grout.
      e. Dayton Superior Corp., Miamisburg, OH; 1107 Advantage Grout.
      f. US MIX Products, Denver, CO; US Spec Multi-Purpose Grout.
      g. L & M Construction Chemicals, Inc., Omaha, NE, Duragrout.
      h. Master Builders.

B. Category II:
   1. Nonmetallic, non gas-liberating.
   2. Prepackaged natural aggregate grout requiring only the addition of water.
   3. Aggregate shall show no segregation or settlement at fluid consistency - at specified times or temperatures.
   4. Test in accordance with COE CRD-C 621 and ASTM C 1107, Grade B:
      a. Fluid consistency 20 to 30 seconds in accordance with COE CRD-C 611.
      b. Temperatures of 40, 80, and 100 °F.
   5. One hour after mixing, pass fluid grout through flow cone with continuous flow.
   6. Minimum strength of fluid grout, 3,500 psi at 1 day, 4,500 psi at 3 days, and 7,500 psi at 28 days.
   7. Maintain fluid consistency when mixed in 1-to-9-yard loads in ready- mix truck.
   8. Manufacturers and Products:
      a. Sika USA, Lyndhurst, NJ, SikaGrout 328
      b. Chemrex, Inc., Shakopee, MN; Master Flow 928.
      c. Five Star Products Inc., Fairfield, CT; Five Star 100.
      d. Euclid Chemical Co., Cleveland, OH; Hi Flow Grout.
      e. Dayton Superior Corp., Miamisburg, OH; Sure Grip High Performance Grout.
      f. L & M Construction Chemicals, Inc., Omaha, NE, Crystex.
      g. Master Builders.

C. Category III
   1. Metallic and non-gas-liberating flowable fluid.
   2. Prepackaged aggregate grout requiring only the addition of water.
   3. Aggregate shall show no segregation or settlement at fluid consistency at specified times or temperatures.
   4. Test in accordance with CRD-C 621 and ASTM C 1107, Grade B:
      a. Fluid consistency 20 to 30 seconds in accordance with CRD-C 611.
      b. Temperatures of 40 and 100 °F.
   5. One hour after mixing, pass fluid grout through flow cone with continuous flow.
   6. Minimum strength of grout, 4,000 psi at 1 day, 5,000 psi at 3 days, and 9,000 psi at 28 days.

7. Maintain fluid consistency when mixed in 1 to 9 yard loads in ready-mix truck.
8. Manufacturers and Products:
   a. Chemrex, Inc., Shakopee, MN; EMBECO 885.
   b. Sika USA, Lyndhurst, NJ, MasterFlow 885.
   c. Euclid Chemical Co., Cleveland, OH; Hi-Flow Metallic Grout.

2.5 TOPPING GROUT AND CONCRETE/GROUT FILL

A. Where fill is thicker than 3 inches, structural concrete Section 03 30 00, CAST-IN-PLACE CONCRETE, may be used when accepted by the Engineer.

B. Grout for topping of slabs and concrete/grout fill for built-up surfaces of tank, channel and basin bottoms shall be composed of cement, fine aggregate, coarse aggregate, water and admixtures proportioned and be mixed as indicated. Bonding Agent shall be used to enhance adhesion to basin concrete. Materials and procedures indicated for normal concrete in Section 03 30 00, CAST-IN-PLACE CONCRETE, shall apply unless indicated otherwise.

C. Topping grout and concrete/grout fill shall contain a minimum of 564 pounds of cement per cubic yard with a maximum water cement ratio of 0.45.

D. Aggregate shall be graded as follows:

U.S. STANDARD SIEVE SIZE	PERCENT BY WEIGHT PASSING
1/2 inch	100
3/8 inch	90-100
No. 4	20-55
No. 8	5-30
No. 16	0-10
No. 30	0

E. Final mix design shall be as determined by trial mix design as indicated in Section 03 30 00, CAST-IN-PLACE CONCRETE except that drying shrinkage tests are not required.

F. Topping grout and concrete grout/fill shall contain air-entraining agent per Section 03 30 00, CAST-IN-PLACE CONCRETE.

G. Strength: Minimum compressive strength of topping grout and concrete/grout fill at 28 days shall be 4,000 psi.

H. Topping grout used in clarifiers shall contain fiber reinforcing. Fiber shall be 100% virgin polypropylene fibrillated fibers specifically manufactured in a blended gradation for use as concrete secondary reinforcement. Fibers shall be added at a rate of 1.5 pounds per cubic yard of concrete. Fibers shall conform to ASTM C 1116 – Fiber Reinforced Concrete and Shotcrete. Type III.

2.6 NON-SHRINK EPOXY GROUT

A. Manufacturers: One of the following or equal:
   1. Five Star Products, Inc., Fairfield, CT, Five Star Epoxy Grout.
   2. BASF Construction Chemicals, Shakopee, MN, MasterFlow 648.
   3. L&M Construction Chemicals, Inc., EPOGROUT.

B. Non-shrink epoxy grout shall be a 100% solid, premeasured, prepackaged system containing a 2-component thermosetting epoxy resin and inert aggregate.

C. Maintain a flowable consistency for at least 45 minutes at 70 degrees Fahrenheit.

D. Shrinkage or expansion (less than 0.0006 inches/inch) when tested in accordance with ASTM C 531.

E. Minimum compressive strength: 10,000 pounds per square inch at 24 hours and 14,000 pounds per square inch at 7 days when tested in accordance with ASTM C 579, Method B.

F. Compressive creep: Not exceed 0.0027 inches/inch when tested under a 400 pounds per square inch constant load at 140 degrees Fahrenheit in accordance with ASTM C 1181.

G. Coefficient of thermal expansion: Not exceed 0.000018 inches per inch per degree Fahrenheit when tested in accordance with ASTM C 531, Method B.

2.7 CEMENT-GROUT (CEMENT-SAND GROUT) MIXTURE FOR PIPE INVERT/STRUCTURE FILL

A. Prepare design mixture proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301. Submit proposed mixture design to Engineer for review. Comply with Section 03 30 00, CAST-IN-PLACE CONCRETE and as follows:
   1. Use a qualified independent testing agency for preparing and reporting proposed mixture designs based upon laboratory trial mixtures.

B. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than Portland cement in concrete and cement grout as follows:
   1. Fly Ash: 15% maximum unless approved in writing by the Engineer.

C. Admixtures: All materials other than Portland cement, water and aggregates that are added to the concrete or cement grout, shall be subject to the approval of the Engineer. If so approved, use admixtures according to manufacturer's written instructions.
   1. Use water reducing, high-range water-reducing or plasticizing admixture in concrete, as required, for placement and workability.
   2. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
   3. Use water-reducing admixture in pumped concrete, concrete for heavy-use slabs, concrete required to be watertight, and concrete with a water-cementitious materials ratio below 0.50.

D. Minimum compressive strength: 2,000 psi at 28 days.

E. Air content: ASTM C 94, 5%, plus or minus 1.0% at point of delivery.

F. Aggregate shall be sand, three parts sand to one-part cementitious material by volume. The sand gradation shall be such that 100% shall pass the No. 16 sieve and not more than 30% shall be retained on a No. 30 sieve.

G. Water – cementitious material ratio. The Contractor shall submit a proposed mix design to the Engineer for review. The amount of water shall be the minimum amount of water necessary to make a workable mixture.

H. Slump: Maximum of 4 inches.

2.8 JOINT MORTAR BED

A. Joint Mortar Bed: Mortar placed on horizontal construction joints shall be a mixture of cement, sand and water in the same proportions used in the approved 4,500 psi cast-in-place concrete mix design and/but with the coarse aggregate omitted.

PART 3 - EXECUTION

3.1 NON-SHRINK GROUT

A. General: Mix, place, and cure non-shrink grout in accordance with grout Manufacturer's representative's training instructions.

B. Form Tie or Through-Bolt Holes: Provide non-shrink grout, Category I and II, fill space with dry pack dense grout hammered in with steel tool and hammer. Through-bolt holes; coordinate dry pack dense grout application with vinyl plug in Section 03 11 00, CONCRETE FORMWORK, and bonding agent in Section 03 30 00, CAST-IN-PLACE CONCRETE.

C. Grouting Machinery Foundations:
1. Block out original concrete or finish off at distance shown below bottom of machinery base with grout. Prepare concrete surface by sandblasting, chipping, or by mechanical means to remove any soft material.
2. Set machinery in position and wedge to elevation with steel wedges, or use cast-in leveling bolts.
3. Form with watertight forms at least 2 inches higher than bottom of plate.
4. Fill space between bottom of machinery base and original concrete in accordance with Manufacturer's representative's training instructions.

3.2 CEMENT GROUT

A. Place cement grout topping over concrete slabs where indicated on the drawings. Place in accordance with the procedures of this section and the manufacturers or suppliers of equipment recommendations. The finish surface of the grout topping shall be similar to a steel trowel finish and which will facilitate the proper operation of the mechanical equipment. The finish of the structural slab below the cement grout topping shall be a heavy broom finish.

B. Where cement grout is to be placed without mechanical equipment, the fresh surface of the cement grout shall be a smooth trowel finish. Placement procedure of cement grout at areas with mechanical equipment includes:
1. Notify Project Representative or Engineer a minimum of 48 hours in advance of placement.
2. Make a trial cement grout batch of not less than 1/2 cubic yard to allow time for adjustment in mix design if required.
3. Clean the exposed structural slab by sandblasting and washing clean.
4. Thoroughly broom a neat cement paste containing an epoxy binder into the concrete slab surface immediately ahead of placing the cement grout topping.
5. Where applicable, install level and trial operate mechanical screed equipment over the floor slab to provide a minimum thickness of 2 inches +/- 1/4-inch. In areas where the distance between the mechanical screed and the structural slab is less than the above clearances, grind surface as directed by Engineer to provide such clearance. The mechanical screed shall operate at a speed acceptable to the cement grout topping placement procedures. Screeding procedures shall account for the effects of differential temperatures on the mechanical screed equipment.
6. Place cement grout topping in a continuous operation. If grouting operations are interrupted, clean the edge of the previously placed topping by water jetting and add a coat of cement paste to provide a bond to the fresh topping.
7. Temporarily equip the mechanical screed mechanism on at least two arms with a 2-inch by 10-inch continuous wood plate with light gauge metal angles and surface plates or channels. The bottom of the screed plates or steel plates shall be adjustable and set to elevations which allow the proper operation of equipment and as recommended by the equipment manufacturer or supplier.

8. Screed the topping immediately after consolidation with vibrators or tampers and provide a steel trowel finish.
9. Cure cement grout topping with water and cover with PVC sheeting to prevent damage from foot traffic for 7 days. When/If the cement grout topping is found not to be acceptable, remove and replace. Cement grout topping not acceptable shall include, but is not limited to, poor bonding with the concrete slab, low strength, excessive cracking and unevenness in finish or elevation.

3.3 JOINT MORTAR BED

A. Joint Mortar Bed: Immediately prior to placement of fresh concrete at horizontal joints, or as indicated, place joint mortar bed to cover horizontal joint and protect water stop as applicable. Spread uniformly and work into all irregularities of the surface. The water cement ratio of the joint mortar bed shall not exceed that of the concrete being placed and the consistency of the mortar shall be suitable for placing and working. The fresh concrete shall then be immediately placed in a time and manner so that the joint mortar bed and the fresh concrete mix to form a homogenous concrete meeting all requirements.

3.4 EPOXY GROUT

A. Epoxy Grout: Used to embed all anchor bolts and reinforcing steel set in grout, specific machinery base plates as indicated and at other locations where indicated.

B. Execution shall follow manufacturer’s recommendations.

3.5 FIELD QUALITY CONTROL

A. Evaluation and Acceptance of Non-shrink Grout:
   1. Consistency: As specified in Article NON-SHRINK GROUT. Grout with consistencies outside range requirements shall be rejected.
   2. Segregation: As specified in Article NON-SHRINK GROUT. Grout when aggregate separates shall be rejected.

3.6 MANUFACTURER’S SERVICES

A. General: Coordinate demonstrations, training sessions, and applicable site visits with grout manufacturer’s representative.

END OF SECTION 03 60 00

SECTION 04 20 00 - UNIT MASONRY

PART 1 - GENERAL

1.1 REQUIREMENTS

A. Unit Masonry Standard: Comply with ACI 530.1/ASCE 6 “Specifications for Masonry Structures,” except as otherwise indicated.
   1. Revise ACI 530.1/ASCE 6 to exclude Sections 1.4 and 1.7; Parts 2.1.2, 3.1.2, and 4.1.2; and Articles 1.5.1.2, and 1.5.1.3.

B. Fire Performance Characteristics: Where indicated, provide materials and construction identical to those of assemblies whose fire resistance has been determined per ASTM E 119 by a testing and inspecting organization, by equivalent concrete masonry thickness, or by another means, as acceptable to authorities having jurisdiction.

C. Wall Sleeves: General Contractor shall furnish and masonry contractor shall install all sleeves in masonry wall construction for mechanical, electrical, and plumbing penetrations. Coordinate with applicable mechanical, electrical, and plumbing drawings and specification sections for specific requirements concerning sleeving.

1.2 SUBMITTALS

A. Submittals: In addition to product data for each different masonry unit, accessory, and manufactured product indicated, submit the following:
   1. Material certificates for each different masonry product required.
   2. Material test reports from a qualified independent testing laboratory for mortar, grout mixes, and masonry units.

PART 2 - PRODUCTS

2.1 PRODUCTS

A. Concrete Masonry Units: Comply with requirements indicated below applicable to each form of concrete masonry unit required:
   1. Provide special shapes where indicated and as follows:
      a. For lintels, corners, jambs, sash, control joints, headers, bonding, and other special conditions.
      b. Square-edged units for outside corners, except where indicated as bullnose.
   2. Size: Manufactured to specified dimension of 3/8-inch less than nominal widths by nominal heights by nominal lengths indicated on Drawings.
   3. Provide Type II, non-moisture controlled units.
   4. Surface Texture: Smooth on exposed surfaces of interior walls and Spit Face on all exterior exposed surfaces (to match existing buildings).
   5. Color: Gray
   6. Hollow Load-Bearing Concrete Masonry Units: ASTM C 90, Grade N and as follows:
      a. Net Area Compressive Strength: 2000 psi minimum,
      b. Weight Classification: Normal weight,
      c. Size and Style: 8 x 8x 16 Regular in locations as shown on the Drawings,
      d. Fire Rating: provide UL rated 1-hour and 2-Hour block for installation in locations as shown on the Drawings. Submit manufacturer product data showing block meets required fire ratings.

7. Mortar Joints: Provide 3/8-inch wide joints. At all exposed faces of regular concrete block and Architectural Concrete Block, tool all joints concave. Vertical joints of center score and triple score Architectural Concrete Block shall be tooled concave. Joints on unexposed sides of all block shall be struck flush.

B. Mortar and Grout Materials: As follows:
   1. Portland Cement: ASTM C 150, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce required mortar color.
   2. Masonry Cement: ASTM C 91, Type S
   3. Hydrated Lime: ASTM C 207, Type S
   4. Aggregate for Mortar: ASTM C 144, except for joints less than 1/4-inch use aggregate graded with 100% passing the No. 16 sieve.
      a. White Mortar Aggregates: Natural white sand or ground white stone.
   5. Aggregate for Grout: ASTM C 404
   6. Water: Clean and potable

2.2 ACCESSORIES

A. Reinforcing Steel: As follows:
   1. Steel Reinforcing Bars: Billet steel complying with ASTM A 615
   2. Deformed Reinforcing Wire: ASTM 496
   3. Plain Welded Wire Fabric: ASTM A 185
   4. Deformed Welded Wire Fabric: ASTM A 497

B. Joint Reinforcement: Form joint reinforcing from the following:
   1. Mill-galvanized carbon steel wire, coating class as required by referenced unit masonry standard for application indicated.
   2. Description: Welded-wire units prefabricated with deformed continuous side rods and plain cross rods into straight lengths of not less than 10 feet, with prefabricated corner and tee units, and complying with requirements indicated below:
      a. Wire Diameter for Side Rods: 0.1875-inch (3/16-inch).
      b. Wire Diameter for Cross Rods: 0.1483-inch (9 gage).
      c. For single-wythe masonry, provide type as follows with single pair of side rods:
         1) Ladder design. Hohmann & Barnard “Lox-All” with #220 Ladder Mesh or approved equal.

C. Ties and Anchors, General: Comply with requirements for metal and size of referenced unit masonry standard and the following:
   1. Galvanized Carbon Steel Wire: ASTM A 82, coating class as required by referenced unit masonry standard for application indicated, wire diameter as indicated.
   2. All masonry ties shall be hot-dip galvanized.

D. All anchors shall meet criteria for seismic design category C.

E. Rigid Anchors: Provide straps of form, thickness, and length as required.

F. Miscellaneous Anchors: As follows:
   1. Anchor Bolts: Steel bolts complying with A 307, Grade A; with ASTM A 563 hex nuts and, where indicated, flat washers; hot-dip galvanized to comply with ASTM A 153, Class C; of diameter, length, and configuration indicated.

G. Embedded Flashing Materials: As follows:
   1. Vinyl Sheet Flashing: Flexible sheet flashings formulated from virgin polyvinyl chloride with plasticizers and other modifiers to remain flexible and waterproof in concealed masonry applications, black in color, 30 mils minimum thickness: “Nervastral” as manufactured by Nevastral, Inc., Greenwich, CT (203) 622-6030, or approved equal.

H. Miscellaneous Masonry Accessories: As follows:
   1. Preformed Control Joint Gaskets: Material as indicated below, designed to fit standard sash block and to maintain lateral stability in masonry wall; size and configuration as indicated.
      a. Styrene-Butadiene Rubber Compound: ASTM D 2000, Designation 2AA-805.
      b. Polyvinyl Chloride: ASTM D 2287, General Purpose Grade, Type PVC-65406.

   2. Bond Breaker Strips: Asphalt-saturated organic roofing felt complying with ASTM D 226, Type I (No. 15 asphalt felt).

I. Masonry Cleaners: As follows:
   1. Job-Mixed Detergent Solution: Solution of trisodium phosphate (1/2-cup dry measure) and laundry detergent (1/2-cup dry measure) dissolved in 1 gallon of water.
   2. Proprietary Acidic Cleaner: General-purpose cleaner designed for removing new construction stains from new masonry surfaces without discoloring or damaging masonry surfaces and color-pigmented mortar joints; approved for intended use by manufacturer of masonry units being cleaned.

J. Mortar and Grout Mixes: Do not add admixtures unless otherwise indicated. Do not use calcium chloride in mortar or grout.
   1. Mortar for Unit Masonry: ASTM C 270, Property Specification for job-mixed mortar and ASTM C 1142 for ready-mixed mortar, of types indicated below:
   2. Limit cementitious materials in mortar to portland cement-lime.
   3. For masonry below grade and in contact with earth, reinforced unit masonry, and where indicated, use Type S.
   4. For exterior, above-grade loadbearing and nonloadbearing walls and parapet walls, for interior loadbearing walls, for interior nonloadbearing partitions, and for other applications where another type is not indicated, use Type N.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Comply with referenced unit masonry standard and other requirements indicated applicable to each type of installation included in Project.

B. Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint widths and for accurately locating openings, movement-type joints, returns, and offsets. Avoid the use of less-than-half-size units at corners, jambs, and where possible at other locations.

C. Lay up walls to comply with specified construction tolerances, with courses accurately spaced and coordinated with other construction. Tool all exposed joints concave.

D. Bond Pattern for Exposed Masonry: Lay exposed masonry in running bond pattern; do not use units with less than nominal 4-inch horizontal face dimensions at corners or jambs.

E. Built-In Work: As construction progresses, build in items specified under this and other Sections of the Specifications. Fill in solidly with masonry around built-in items.
   1. Fill space between hollow metal frames and masonry solidly with mortar, unless otherwise indicated.

F. Keep cavities/air spaces clean of mortar droppings and other materials during construction. Strike joints facing cavities/air spaces flush. Install mortar deflection material at all through-wall flashings.

G. Install embedded flashing and weep holes in masonry at shelf angles, lintels, ledges, other obstructions to the downward flow of water in the wall, and where indicated.

H. Remove and replace loose, chipped, broken, stained, or otherwise damaged masonry units.

I. Pointing: During the tooling of joints, enlarge any voids or holes, except weep holes, and completely fill with mortar.

J. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry by first removing large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels before proceeding as follows:
   1. Test cleaning methods on sample wall panel; leave 1/2 panel un-cleaned for comparison purposes.
   2. Protect adjacent non masonry surfaces from contact with cleaner.
   3. Wet wall surfaces with water prior to application of cleaners; remove cleaners promptly by rinsing thoroughly with clear water.
   4. Clean brick by means of bucket and brush hand-cleaning method described in BIA “Technical Note No. 20 Revised” using masonry cleaner indicated under products.

K. Apply the RTV Silicone Rubber Water Repellent and Graffiti Protectant as indicated on the Manufacturer’s Application Instructions. Application shall be completed in accordance with the recommendations of the manufacturer and shall be cured as required.

END OF SECTION 04 20 00

SECTION 05 12 00 - STRUCTURAL STEEL

PART 1 - GENERAL

1.1 DESCRIPTION

A. Work Included: Furnish and erect specified steel framing, column bases, lintels and related structural steel shapes and accessories.

1.2 RELATED SECTIONS

A. Section 05 20 00 - METAL JOISTS

B. Section 05 30 00 - METAL DECKING

C. Section 05 50 00 - MISCELLANEOUS METAL

1.3 QUALITY ASSURANCE

A. Codes and Standards: In addition to complying with pertinent codes and regulations, comply with:
   1. AISC “Specification for the Design, Fabrication, and Erection of Structural Steel for Buildings”, Latest Edition.
   2. AISC “Code of Standard Practice”, Latest Edition.
   3. AISC “Specification for Structural Steel Buildings - Allowable Stress Design and Plastic Design”, Latest Edition.
   4. AISC “Load and Resistance Factor Design Specification for Structural Steel Buildings”, Latest Edition.
   5. “Code for Welding in Building Construction” of the American Welding Society.
   6. “Specifications for Architecturally Exposed Structural Steel” of the American Institute of Steel Construction.
   7. Steel Structures Painting Council (SSPC): Painting Manual, Vol. 1, Good Painting Practice. Painting Manual, Vol. 2, Systems and Specifications.
   8. Conform to ASTM A 6, “Specification for General Requirements Rolled Steel Plants, Shapes, Sheet Piling and Bars for Structural Use”.

B. Conflicting Requirements: In event of conflict between pertinent codes and regulations and requirements of referenced standards or these specifications, provisions or more stringent govern.

1.4 SHOP DRAWINGS

A. Furnish Shop Drawings, for review by Architect, on structural steel showing necessary fabrication details, fittings, fastenings, anchorage, and erection details. In addition to provision of the General Conditions, prepare structural steel Shop Drawings by or under the supervision of a registered professional engineer. Do not use reproductions, in any form, of the Contract Drawings for Shop Drawings. Furnish 2 prints and 1 sepia reproducible of Shop Drawings submitted to Architect for review. Submit related shop drawings together; partial submittals will not be accepted. Furnish mill certificates on foreign steel proposed for use and not produced within the continental USA. Include with mill certificates certified copies of mill test reports giving names and locations of mills and shops, and chemical analysis and physical properties of steel required for this project.

B. All drawings and calculations shall bear the stamp of a structural engineer licensed in the state of Arkansas.

PART 2 - PRODUCTS

2.1 STRUCTURAL STEEL

A. Steel Shapes and Plants: Provide structural steel shapes and plates, not otherwise indicated on Structural Drawings using high-strength steel, 36,000 psi min. Yield point, conforming to ASTM Designation A 36. Furnish structural steel for this Project manufactured within continental limits of the United States of America unless mill certificates are submitted to and approved by Structural Engineer.

B. Pipe Columns: Meet ASTM A501, Fy=36 ksi.

C. Rectangular Tubing: Meet ASTM A 500 Grade B or have equal yield, ultimate, and weldability properties.

2.2 BOLTS AND NUTS

A. High Strength Bolts:
   1. Meet ASTM A 325 for high strength bolts.
   2. Use high strength friction bolts for bolted connections unless otherwise indicated on the Drawings.
   3. Make bolt holes 1/16-inch larger than nominal bolt diameter.
   4. Exclude threads form shear plane of bolts.

B. Machine Bolts and Anchor Bolts: Meet ASTM A 307.

2.3 PAINT

A. For surface preparation, shop painting and touch-up painting of structural steel shapes, conform to the “Steel Structures Painting Manual”, Volumes 1 and 2, of the Steel Structures Painting Council. DO NOT PRIME OR PAINT STRUCTURAL STEEL THAT IS TO RECEIVE SPRAY FIREPROOFING.

B. Shop Paint: Lead free, alkyd primer; Tnemec 10-99 Series, Southern Coatings Enviro-Guard 1-2900, or approved equal meeting performance requirements of TT-P-86, Type I, and passing ASTM B 117 after 500 hours with no blistering, cracking, softening, delamination or rust creepage at scribe and rusting at edges.

2.4 OTHER MATERIALS

A. For materials, not specifically described but required for complete and proper installation of structural steel, use new material, free from rust, first quality of their respective kinds, and subject to approval of Architect.

PART 3 - EXECUTION

3.1 MEASUREMENT AND DIMENSIONS

A. Contractor to verify measurements and dimensions at job site. Bring any conflict between actual measurements and dimensions shown on the Drawings and any existing condition which will prevent fabrication and erection of steel work as detailed to attention of Architect as soon as they are discovered. Contractor responsible for errors of Shop Drawings, fabrication, correct fitting, and alignment of the structural members. Shop or field splices in standard structural rolled shapes not acceptable unless shown on Contract Drawings.

3.2 WORKMANSHIP

A. Fabricate and erect to comply with the “Specifications for the Design Fabrication, and Erection of Structural Steel for Buildings” and the “Code of Standard Practice” as adopted by the American Institute of Steel Construction.

3.3 WELDING

A. Shop and field welders continuously employed as welders are acceptable on basis of satisfactory reports dated not more than 2 years prior to award of this Contract. All others must have been requalified in past 6 months complying with AWS D 1.0, Appendix.

3.4 LINTELS

A. Furnish and place structural steel lintels required for openings unless concrete lintels or reinforced concrete block lintels are shown on Drawings. Build structural members size marked on Drawings or if not shown as determined by the Structural Engineer. Weld members together with exterior weld being a continuous bead to prevent water from running between the members. Bear on walls 8 inches at each end for openings up to 6'-0" wide and 10 inches for wider openings where not otherwise shown.

3.5 HIGH-STRENGTH BOLTING

A. Comply with the “Specification of Structural Joints” approved by the Research Council on Riveted and Bolted Structural Joints of the Engineering Foundation using calibrated-wrench tightening or turn-of-nut tightening methods. By either method, use of a calibrating device to check tools and equipment and to provide means of reliable inspection. When turn-of-nut method tightening is used to provide bolt tension complying to ASTM A 325, match-mark outer face of nut with the protruding bolt point before final tightening for visual means of noting actual nut rotation. Above marks may be made by wrench operator with crayon or daub of paint, after bolts have been brought to “snug tight” condition.

3.6 INSPECTION

A. Owner will pay for cost of inspection of welded fabrication and erection of steel using an independent inspecting agency selected by Architect. Representatives inspecting agency shall have access at any and all times to areas on Project site where steel work is being performed for close visual inspection of the Work. Correct as directed welded and high strength bolted connections found to be unsatisfactory by the inspecting service, at Contractor’s expense and to satisfaction of the inspecting agency. Two principal methods for making nondestructive tests on weldments by the inspection laboratory service are radiographic and magnetic particle testing. At discretion of the inspection service, ultrasonic testing may be substituted for either magnetic particle or radiographic testing.

3.7 ERECTION

A. Use Specifications for the Design, Fabrication, and Erection of Structural Steel for Buildings of AISC except as otherwise specified.

B. Sequence: Contractor responsible for erection method and sequence.

C. Progress: As erection progresses, secure the work to take care of dead loads, wind, and erection stresses. Where structural steel is being erected, completely connect the in-place work in the tier below.

D. Alignment: After erection, accurately align and adjust the various members forming parts of a completed frame and structure before being made secure.

E. Tolerances: AISC Code of Standard Practice apply except as otherwise specified.

F. Erection Shims: Sufficient shims may be installed to maintain structure within tolerances. Maximum shim thickness at any one joint no greater than 1/2-inch.

G. Field Assembly: Provide even bearing at field erected column splices and related compression joints which depend upon contact bearing upon completion with respect to the centroid of the contact area. Provide at least 65% of the entire contact area in full bearing and the separation of any remaining portion not to exceed 0.02 inches, except locally at toes of flanges where a 50% greater separation is permissible; otherwise perform corrective measures.

H. Anchors: Locate and install anchor bolts and anchors, preset by templates, into connecting work. Provide bearing plates under ends of primary structural members resting on masonry and set in full beds of non-shrink grout.

I. Base plates: Support and align column base plates on steel leveling devices. After support members have been plumbed and properly positioned and anchor nuts tightened, pack solidly entire bearing area under plate with non-shrink grout specified in “Concrete” Division of these Specifications. Leave leveling devices in place and cut off flush with edge of column base plates.

END OF SECTION 05 12 00

SECTION 05 20 00 - METAL JOISTS

PART 1 - GENERAL

1.1 DESCRIPTION

A. Work Included: Furnish, erect, and brace open web steel joints specified.

1.2 RELATED SECTIONS

A. Section 05 12 00 - STRUCTURAL STEEL

B. Section 05 30 00 - METAL DECKING

C. Section 05 50 00 - MISCELLANEOUS METAL

1.3 QUALITY ASSURANCE

A. Comply to following specifications and code, with modifications specified:
   1. American Institute of Steel Construction and the Steel Joist Institute Standard Specifications for Open Web Steel Joists.
   2. American Welding Society D1.0 Code for Welding in Building Construction.

B. Joist designation requirements denotes joist depth, series, and chord size.

C. Perform steel joist design and manufacture by an SJI member to comply with AISC-SJI Standard Specifications for Open Web Steel Joists for the series required.

1.4 SHOP DRAWINGS

A. Furnish Shop Drawings, for review by Architect showing necessary fabrication details, fittings, fastenings, anchorage, and erection details. In addition to provisions of the General Conditions, prepare Shop Drawings by or under the supervision of a registered professional engineer. Do not use reproductions, in any form, of the Contract Drawings for Shop Drawings. Furnish 2 prints and 1 sepia reproducible of Shop Drawings submitted to Architect for review. Submit related shop drawings together; partial submittals will not be accepted. Furnish mill certificates on foreign steel proposed for use and not produced within the continental USA. Include with mill certificates certified copies of mill test reports giving names and locations of mills and shops, and chemical analysis and physical properties of steel required for this project.

B. All drawings and calculations shall bear the stamp of a structural engineer licensed in the state of Arkansas.

PART 2 - PRODUCTS

2.1 OPEN-WEB STEEL JOISTS

A. Conform to the “Standard Specifications and Load Tables” of the Steel Joist Institute. Fabricate by member of the Steel Joist Institute.

2.2 OTHER MATERIALS

A. Provide materials, not specifically described but required for complete and proper installation of steel joists, of new, free from rust, first quality material of their respective kinds, subject to approval of Architect.

PART 3 - EXECUTION

3.1 SHOP COAT

A. Paint joists and accessories with protective paint shop coat using type standard with manufacturer and conforming to requirements of the Steel Joist Institute. Paint joists and accessories exposed to view with shop coat using type that will not bleed through or affect the finish coat. Apply shop coat by dip, brush or spray method and thoroughly work into joints. Where practicable, do not paint surfaces subject to erection welding. If painted, remove paint to expose clean steel for minimum distance of 2 inches on either side of surface to be welded. Included in this requirement are steel surfaces to which joists are attached by welding. After erection, wire brush field connections and touch up welded, corroded, or abraded areas with same paint as shop coats. DO NOT PRIME OR PAINT METAL JOISTS THAT ARE TO RECEIVE SPRAY FIREPROOFING.

B. Shop Paint: Lead free, alkyd primer; Tnemec 10-99 Series, Southern Coatings Enviro-Guard 1-2900, or approved equal meeting performance requirements of TT-P-86, Type I, and passing ASTM B 117 after 500 hours with no blistering, cracking, softening, delamination or rust creepage at scribe and resting at edges.

3.2 ERECTION

A. Fasten joists in place and install bridging prior to receiving any construction loads. Join steel to steel connections by welding. Where joists bear on masonry use connections set into the masonry. Provide joists extensions where required for attachment of ceiling system.

B. Erection Welding: Comply with AWS D 1.0, Code for Welding in Building Construction.

C. Accessories: Furnish special fitting for openings, overhangs and ceiling extenders where required and not otherwise detailed or specified.

END OF SECTION 05 20 00

SECTION 05 50 00 - MISCELLANEOUS METALS

PART 1 - GENERAL

1.1 SUMMARY

A. Provide fabricated metalwork and castings.

B. Miscellaneous metalwork required to secure the various parts together and provide a complete installation, shall be included under this Section.

C. Insofar as practical, products provided shall be factory assembled.

1.2 RELATED SECTIONS

A. Section 09 90 00 – PAINTING AND PROTECTIVE COATINGS

1.3 REFERENCES

A. American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, Pennsylvania.
   1. ASTM A36 - Standard Specification for Carbon Structural Steel
   2. ASTM A48 - Standard Specification for Gray Iron Castings
   3. ASTM A153 - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
   4. ASTM A193 - Standard Specification for Alloy-Steel and Stainless-Steel Bolting for High Temperature or High-Pressure Service and Other Special Purpose Applications
   5. ASTM A240 - Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications
   6. ASTM A307 - Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60,000 PSI Tensile Strength
   7. ASTM A449 - Standard Specification for Hex Cap Screws, Bolts and Studs, Steel, Heat Treated, 120/105/90 ksi Minimum Tensile Strength, General Use
   8. ASTM A653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
   9. ASTM A992 - Standard Specification for Structural Steel Shapes
   10. ASTM B241 - Standard Specification for Aluminum and Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube
   11. ASTM F3125 - Standard Specification for High Strength Structural Bolts and Assemblies, Steel and Alloy Steel, Heat Treated, Inch Dimensions 120 ksi and 150 ksi Minimum Tensile Strength, and Metric Dimensions 830 MPa and 1040 MPa Minimum Tensile Strength

B. American Welding Society, 8669 NW 36 Street #130, Miami, Florida 33166-6672
   1. AWS D1.1 - Structural Welding Code - Steel

C. Steel Joist Institute, 140 W. Evans Street Suite 203, Florence, South Carolina 29501.
   1. SJI 100 - Standard Specifications for K-Series, LH-Series, and DLH-Series Open Web Steel Joists, and for Joist Girders
   2. SJI 200 - Standard Specifications for CJ-Series Composite Steel Joists

1.4 SUBMITTALS

A. Submit the following in accordance with Section 01 00 00, BASIC REQUIREMENTS:
   1. Shop Drawings, including calculations where required.
   2. Test pieces and samples.
   3. Certificates, test reports, and other required data.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Parts and assemblies that are of necessity shipped unassembled, shall be packaged, and clearly tagged in a manner that will protect the materials from damage, and facilitate the identification and final assembly in the field.

PART 2 - PRODUCTS

2.1 GENERAL

A. Unless otherwise indicated, materials shall conform to latest issue of the following ASTM Specifications:
   1. Structural Wide Flange Shapes: ASTM A992
   2. Steel Channels and Angles: ASTM A36
   3. Steel Plates: ASTM A36
   4. Stainless Steel:
      a. Exterior and Submerged: ASTM A240, Type 316
      b. Industrial Uses: ASTM A240, Type 316
      c. Interior and Architectural: ASTM A240, Type 304
      d. Bolts: ASTM A193, Type 316
   5. Aluminum Structural Shapes and Plates: Alloy 6061-T6; conform to referenced specifications and ASTM sections found in the Aluminum Association current Construction Manual Series.
   6. Connection Bolts for Steel Members: ASTM AF3125
   7. Galvanized Bolts: ASTM A307, ASTM A153
   8. Connection Bolts for Wood Members: ASTM A307
   9. Connection Bolts for Aluminum: ASTM A449; or use appropriate stainless steel
   10. Cast Iron: ASTM A48, Class 30

2.2 ANCHOR BOLTS

A. Steel Anchor Bolts (Non-submerged Use):
   1. 1/2-inch minimum diameter with hex nuts, or as shown.
   2. Bolts and nuts: galvanized steel.

B. Coated Steel Anchor Bolts (Submerged Use):
   1. Submerged use is defined as any connection to concrete from a point 1'-6" above the maximum water surface in a water-holding basin and any connection below that point.
   2. ASTM A240, Type 316 stainless steel.
   3. 1/2-inch minimum diameter with hex nuts, or size as shown.
   4. Coat as specified in Section 09 90 00, PAINTING AND PROTECTIVE COATINGS, using Fusion Bonded Coating, System No. 29.
   5. Coating of anchor bolt threads is not required.
   6. Where threads are covered with a fusion bonded coating, provide nut of proper size to fit, and provide a connection of equal strength to the embedded bolt.

C. Machine Anchor Bolts:
   1. For equipment with motors 3 HP or greater, fabricate as shown or as required.
   2. Size of fastening stud and anchor bolts as required by equipment manufacturer.
   3. Stainless steel.

2.3 ANCHORING SYSTEMS FOR CONCRETE

A. Wedge Anchors:
   1. Manufacturer:
      a. Wedge-All, by Simpson Strong-Tie, Pleasanton, CA.
      b. Kwik Bolt 3, stud type, manufactured by Hilti, Inc., Stamford, CT.
      c. Power-Stud+ SD2, manufactured by DeWalt, Towson, MD.
      d. Or approved equal.
   2. For use 1'-6" above peak water surface in water holding structure.
   3. Stainless steel.
   4. Sizes shown on Drawings.
   5. Provide ICC (International Code Council) or other similar building code organization recommendations regarding safe allowable design loads.
   6. Expansion Anchors:
      a. Expansion anchors shall not be used except in dry areas where future corrosion is not anticipated.
      b. In wet or damp areas, use wedge anchors or adhesive anchors in submerged conditions.
      c. Expansion anchors shall not be used to anchor column base plates.

B. Self-Drilling Anchors:
   1. Snap-off type or flush type.
   2. For use with hot-dipped galvanized bolts.

C. Nondrilling Anchors:
   1. Manufacturer:
      a. DIAB, Simpson Strong-Tie, Pleasanton, CA.
      b. Hilti HDI+/HDI Drop-In anchors, Hilti, Inc., Stamford, CT.
      c. Or approved equal.
   2. Flush type.
   3. For use with bolt or stud type with projecting threaded stud.
   4. Provide ICC or other similar code organizations' recommendations regarding safe allowable design loads.

D. Adhesive Anchors:
   1. Use for anchoring metal components at or below a point 1'-6" above the peak (maximum) water surface elevations in water holding structures.
   2. Set-3G with 316 stainless steel stud, nuts, and washers, as manufactured by Simpson Strong-Tie, Pleasanton, CA.
   3. HIT-HY 200 V3 Heavy-duty adhesive anchor with 316 stainless steel anchor rod assembly as manufactured by Hilti, Inc. Stamford, CT.
   4. Or approved equal.

2.4 OPEN WEB STEEL JOISTS

A. Open web, parallel chord, load-carrying member suitable for the direct support of the building roof deck.

B. Provide open web steel joists of the series noted on the Drawings.

C. Designed, handled, and erected in accordance with the SJI Standard Specification.

D. Joist Designation: As shown on the Drawings.

E. Finish: Shop painted.

F. Manufacturer:
   1. Nucor Corporation, Vulcraft Division.
   2. Or approved equal.

2.5 STEEL ROOF DECK

A. Manufacturer:
   1. Nucor Corporation, Vulcraft Division, Inc.
   2. Or approved equal.

B. Steel roof deck profile shall be as shown on the Drawings.

C. Conform to ASTM A446, Grade A, B, C, D, E, or F having a minimum yield strength of 33,000 psi. Maximum working stress not to exceed 20,000 pounds per square inch.

D. Gage: As shown on the Drawings.

E. Finish: Galvanized conforming to ASTM A653, field painted.

2.6 HANDRAILS

A. Double rails as shown on Drawings.

B. Top rail to be 42 inches above walking surface (walkway or wall).

C. Schedule 40 1-1/2-inch diameter aluminum pipe (1.90 inches O.D.), ASTM B241, seamless.

D. Connections: Mechanical, splice sleeves, etc., 6063 or 6061 alloy.

2.7 STRUCTURAL STEEL SUPPORTS

A. Provide structural steel supports of sizes and weights shown on Drawings.

B. Weld connections unless otherwise shown on Drawings.

2.8 MACHINE BOLTS, INSERTS, AND FASTENERS

A. Machine bolts, inserts, and fasteners permanently embedded in concrete shall be Type 316 stainless steel.

B. Machine bolts, inserts, and fasteners not permanently embedded in concrete, but located outdoors in wet well floors, walls, and ceilings; chemical handling areas; equipment rooms subject to drainage, leakage, and washdown; and in galleries and trenches, shall be Type 316 stainless steel.

C. Machine bolts, inserts, and fasteners not permanently embedded in concrete, but located indoors where washdown, leakage, and drainage are not likely to occur (e.g., in personnel buildings excluding laboratories, on motor floors, in electrical equipment rooms, and in control rooms), may be galvanized steel, ASTM A153.

2.9 LOOSE LINTELS AND ANGLE FRAMING

A. Provide steel lintels and framing required for support of masonry and other construction that is not attached to structural steel framing.

B. Galvanize after fabrication.

2.10 LIFTING LUGS

A. Provide equipment or each field-disassembleable part over 100 pounds in weight proper lifting lugs for easy handling.

PART 3 - EXECUTION

3.1 GENERAL

A. Workmanship and finish of metalwork shall be highest grade and equal to the best practice of modern shops for respective work.

B. Exposed surfaces shall have smooth finish and sharp, well-defined lines.

C. Provide necessary rabbets, lugs, and brackets so that work can be assembled in a neat, substantial manner.

D. Conceal fastenings where practical.

E. Drill metalwork and countersink holes as required for attaching hardware or other materials.

F. Fabricate materials as specified.

G. Weld connections, except where bolting is directed.

H. Items requiring special fabrication methods are specified.

I. Fabrication of other items shall be of equal quality.

J. Methods of fabrication not otherwise specified or shown on Drawings shall be adequate for the stresses.

K. Grind exposed edges of welds smooth on walkways, guardrails, handrails, stairways, channel door frames, steel column bases, and where indicated on Drawings.

L. Sharp edges shall be rounded to a 1/8-inch minimum radius; burrs, jagged edges, and surface defects shall be ground smooth.

M. Prepare welds and adjacent areas such that there is:
   1. No undercutting or reverse ridges on weld bead.
   2. No weld spatter on or adjacent to weld or any other area to be painted.
   3. No sharp peaks or ridges along weld bead.

N. Grind flush embedded pieces of electrode or wire with adjacent surface of weld bead.

3.2 ALUMINUM

A. Fabricate aluminum as shown on Drawings and in accordance with Aluminum Association Standards and manufacturer's recommendations as approved.

B. Do not remove mill markings from concealed surfaces.

C. Exposed surfaces not otherwise coated shall have the inked or painted identification marks removed after material has been inspected and approved by Engineer.

D. Grind smooth sheared edges exposed in the finished work.

E. Weld aluminum Gas Metal Arc (MIG) or Gas Tungsten Arc (TIG) processes in accordance with manufacturer's recommendations as approved, and in accordance with recommendations of American Welding Society contained in the Welding Handbook, as last revised.

F. Grind smooth exposed aluminum welds.

3.3 WELDING

A. The technique of welding employed, appearance, quality of welds made, and methods of correcting defective work shall conform to codes for Arc and Gas Welding in Building Construction of AWS and AISC.

B. Surfaces to be welded shall be free from loose scale, rust, grease, paint, and other foreign material, except that mill scale which will withstand vigorous wire brushing may remain.

C. A light film of linseed oil may likewise be disregarded.

D. No welding shall be done when the temperature of the base metal is lower than zero degrees F.

E. Finished members shall be true to line and free from twists.

F. Welding operators shall be qualified in accordance with requirements of current AWS Standard Qualification Procedure D1.1, Chapter 5, and welders of structural and reinforcing steel shall be certified for all positions of welding in accordance with such procedure. Qualification tests shall be run by a recognized testing laboratory at Contractor's expense.

G. Welding operators shall be subject to examination for requalification using equipment, materials, and electrodes employed in execution of Contract work. Requalification, if ordered by Engineer, shall be done at expense of Contractor.

3.4 INSTALLATION OF FABRICATED METALWORK

A. Perform erection work by skilled workmen.

B. Completed installations shall, in all cases, be rigid, substantial, and neat in appearance.

C. Install commercially manufactured products in accordance with manufacturer's recommendations as approved.

3.5 OPEN WEB STEEL JOISTS

A. Erect in accordance with SJI Standard Specifications for open web steel joist and manufacturer's recommendations.

3.6 STEEL ROOF DECK

A. Erect in accordance with manufacturer's specifications and erection layout.

3.7 ANCHOR BOLTS

A. Accurately locate anchor bolts and hold in place with templates at time concrete is poured.

3.8 EXPANSION ANCHORS OR WEDGE ANCHORS

A. Installation shall not start until concrete or masonry receiving anchors has attained its design strength.

B. Anchor shall not be installed closer than 6 times its diameter to either an edge of concrete or masonry, or to another anchor, unless specifically detailed otherwise on Drawings.

3.9 ELECTROLYTIC PROTECTION

A. Where aluminum is in contact with dissimilar metals, or to be embedded in masonry or concrete, protect surfaces in accordance with System No. 27 of Section 09 90 00, PAINTING AND PROTECTIVE COATINGS.

B. Allow paint to dry before installation of material.

C. Protect painted surfaces during installation; should coating become marred, prepare, and touch up surface per paint manufacturer's instructions.

D. Where titanium equipment is in contact with concrete or dissimilar metals, provide full-face neoprene insulation gasket, 3/32-inch minimum thickness and 70 durometer hardness.

3.10 PAINTING

A. Thoroughly clean ferrous metal items not galvanized and give shop coat of metal primer.

B. Preparation of surfaces and application of primer shall be in accordance with Section 09 90 00, PAINTING AND PROTECTIVE COATINGS, utilizing appropriate painting system.

END OF SECTION 05 50 00

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SECTION 06 10 00 ROUGH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

A. Provide rough carpentry.

1.2 RELATED SECTIONS

A. Section 03 30 00 - CAST-IN-PLACE CONCRETE

1.3 REFERENCES

A. American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103.
   1. ASTM A307 - Specifications for Carbon Steel Externally Treated Standard Fasteners.
   2. ASTM A446 - Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Structural (Physical) Quality.
   3. ASTM A525 - Specification for General Requirements for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.

B. American National Standards Institute, 1430 Broadway, New York, New York 10018.
   1. ANSI A199.1 - Construction and Industrial Plywood.

C. American Wood Preservers Association, P.O. Box 849, Stevensville, Maryland 21666.

D. American Wood Preservers Bureau, P.O. Box 6085, Arlington, Virginia 22206.

PART 2 - PRODUCTS

2.1 QUALITY ASSURANCE

A. Lumber grading rules and wood species shall be in conformance with U.S. Product Standard PS 20 and the National Forest Products Association. The wood members shall conform to the requirements above and provide design values equal to those published in the "Design Values for Wood Construction", a supplement to the 1977 edition of National Design Specification for Wood Construction, published by the National Forests Products Association.

B. Plywood grading rules shall be in conformance with latest edition of U.S. Product Standard PS 1/ANSI A199.1 or American Plywood Association Standards.

C. Joints and connections of wood trusses shall conform to the Uniform Building Code Standard 25-17.

2.2 GRADE MARKS

A. Each piece of lumber shall be stamped or branded with the grade as determined by an approved grading association indicating conformance with U.S. Product Standard PS 20.

B. Each panel of plywood shall be identified with the appropriate grade trademark of the American Plywood Association.

C. Moisture content shall not exceed 19%, unless otherwise specified.

D. Preservative and pressure treated material shall conform to American Wood Preservers Association Standards (AWPA) and bear the American Wood Preservers Bureau (AWPB) quality mark designation.

2.3 DELIVERY, STORING, AND HANDLING

A. Immediately upon delivery to job site, place materials in area protected from weather.

B. While unloading, protect surfaces and corners of sheet material.

C. Store materials a minimum of 6 inches (150 mm) above ground on framework or blocking and cover with protective waterproof covering; provide for adequate air circulation or ventilation.

D. Do not store seasoned materials in wet or damp portions of building.

2.4 LUMBER

A. Dimensions given are nominal. Surface 4 sides (S4S), unless specified otherwise.

B. Unless otherwise noted, lumber shall be as follows:

Use	Minimum Grade
General framing, plates, blocking, braces, studs, furring and nailers	Standard and Better or Stud Grade
Structural light framing, 2” - 4” thick, 2” - 4” wide	Douglas Fir Larch No. 2 or Southern Pine No. 2
Structural joists and planks, 2” - 4”, 5” and wider and headers	Douglas Fir Larch No. 2 or Southern Pine No. 2
Beams, stringers, posts, timbers	Douglas Fir Larch No. 1

C. Roof Trusses:
1. Supplied by a manufacturer whose design standards meet or exceed the requirements of the National Design Specification for Wood Construction and the Design Specification for Metal Plate Connected Wood Trusses published by the NFPA and Truss Plate Institute, respectively.
2. Common Howe, type of the pitch and span shown on Drawings.
3. Load ratings specified on Drawings.
4. Chord sizes no less than 2 inches by 4 inches (nominal).
5. Connectors:
   a. Meet or exceed code requirements for ASTM A446 Grade A Structural Steel.
   b. Minimum thickness of 0.036 inches.
   c. Hot-dipped galvanized.
6. Truss design certified by an Arkansas registered professional engineer.

D. Exterior Gable panels, soffits under eaves, and vertical skirting around mechanical bar screen:
1. 3/8-inch thick rough-textured western red cedar plywood.
2. Appearance grade on one side.

E. Roof Decking: 1/2-inch-thick C-D plywood, exterior grade.

2.5 ROUGH CARPENTRY HARDWARE

A. Nails: Steel common nails in accordance with the Fastening Schedule of the Standard Building Code. Use hot-dipped zinc-coated nails wherever exposed.

B. Bolts and Screws: Conforming to ASTM A 307, sizes as indicated on Drawings, galvanized where exposed.

C. Framing Anchors: Simpson, Teco, Bowman, or approved equal galvanized 8-gauge steel, complete with nails.

D. Ply Clips: Extruded 6063-T6 aluminum alloy.

E. Bar or Strap Anchors: ASTM A 525, Zinc-coated steel, 18-gauge minimum.

PART 3 - EXECUTION

3.1 GENERAL

A. Plan work in advance and perform in proper sequence to facilitate prompt and continuous progress of the Work.

B. Lay out, cut, fit, and install rough carpentry items. Anchor sufficiently to ensure rigidity and permanence and as noted on Drawings.

C. Install items accurate to dimension, true to line, level, and square unless indicated otherwise on Drawings. Provide for installation and support of other work.

D. Verify that surfaces to receive rough carpentry materials are prepared to exact grades and dimensions.

3.2 SILLS AND PLATES

A. Set level and flush with outside face of foundation or as shown on Drawings. Anchor as noted on Drawings.

3.3 TRUSSES

A. Install trusses at spacing as shown on Structural Drawings.

B. Support ends of bottom chord with a minimum of 4 inches of bearing on the bearing wall.

C. Fasten to wall with approved framing anchor in manufacturer's recommended manner.

D. Bridge between bottom chords of trusses with 2-inch by 4-inch (minimum) dimensional lumber at intervals not greater than 8 feet.

E. Lap bridging pieces over 2 trusses as a minimum.

3.4 RAFTER FRAMING

A. Install with crown edge up.

B. Support ends of each member minimum 1-1/2 inches of bearing on wood or metal.

C. Lap members framing from opposite sides of beams, girders, or partitions, minimum 4 inches, or tie opposing members together by toenailing or metal connectors.

3.5 NOTCHES

A. Do not notch in middle third of rafters. Notches in top or bottom of rafters, maximum of 1/6 depth of member. Notched ends, maximum of 1/3 depth of member.

3.6 BORED HOLES

A. Maximum 1/3 depth of member, 2 inches minimum distance to top or bottom of joists.

3.7 BRIDGING

A. Nominal depth-to-thickness ratio of joists exceeding 4, install bridging at 8-foot intervals.

3.8 METAL CROSS BRIDGING

A. Install nailable type with two 8d nails in each ends, leaving a space between members minimum of 1/8-inch.

3.9 PRESERVATIVE TREATED WOOD PRODUCTS

A. Provide preservative treated wood (CCA) for framing, blocking, furring, nailing strips built into exterior masonry walls and wood in contact with concrete as indicated on Drawings.

B. Redry and clean lumber, after treatment, to maximum moisture content of 19%, stamped DRY.

C. Apply 2 brush coats of same preservative used in original treatment to sawed or cut surfaces of treated lumber.

END OF SECTION 06 10 00

SECTION 07 92 00 – JOINT SEALANTS

PART 1 - GENERAL

1.1 SUMMARY

A. Provide sealants for repairs to or construction of buildings and structures.

1.2 ENVIRONMENTAL CONDITIONS

A. The ambient temperature shall be between 40 degrees F. and 90 degrees F. (4 degrees C. and 32 degrees C.) when sealant is applied.

1.3 RELATED SECTIONS - NOT USED

1.4 REFERENCES

A. American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, Pennsylvania.
   1. ASTM D1751 – Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Type).
   2. ASTM C920 – Standard Specification for Elastomeric Joint Sealants.

1.5 PRODUCT HANDLING

A. Deliver sealants to the job site in sealed containers, each bearing manufacturer's name, and product designation.

PART 2 - PRODUCTS

2.1 GENERAL

A. The use of a manufacturer's name and model or catalog number is for the purpose of establishing the standard of quality and general configuration desired only. Products of other manufacturers will be considered in accordance with the General Conditions.

B. Sealants shall be self-leveling (S/L) for horizontal and sloping joints with a maximum slope of one (1) percent. Non-sag sealants (N/S) shall be used for steeper sloped joints, vertical joints, and overhead joints.

2.2 SEALANTS - VERTICAL JOINTS IN CAST-IN-PLACE CONCRETE, SUBMERGED AND NONSUBMERGED, AND CONCRETE MASONRY

A. One-part polyurethane sealant conforming to ASTM C920, Type II, Class A, N/S; Sika Sikaflex-IA; Dow Corning Dowsil 888; or approved equal. Color shall be manufacturer's standard limestone gray.

2.3 HORIZONTAL JOINTS IN CAST-IN-PLACE CONCRETE, SUBMERGED, AND NONSUBMERGED

A. One-part polyurethane sealant conforming to ASTM C920 Type S, Grade P, S/L; Sika Sikaflex-1c SL; Dow Corning Dowsil 890 SL; or approved equal. Color shall be manufacturer's standard limestone gray.

2.4 SPECIAL APPLICATIONS

A. One-part polyurethane sealant conforming to Federal Specification TT-S-00230, Type II, Class A, N/S; Sika SikaflexIA; Dow Corning Dowsil 888; or approved equal. Color shall be manufacturer's standard limestone gray. Typical locations: Sealant bed for aluminum thresholds.

2.5 METAL DOOR FRAMES, WINDOWS, AND LOUVER FRAMES

A. One-part acrylic polymeric sealant conforming to Federal Specification TT-S-00230, N/S; Tremco Mono 555; or approved equal. Color for both sides of framing shall be bronze for exterior applications; interior metal door frames, both sides, shall be white or match the color of door frame.

2.6 HIGH TEMPERATURE PIPING (250 DEGREES F. MAXIMUM)

A. One-part silicone sealant conforming to Federal Specification TT-S-1543, Class A, N/S; Pecora 864; Dow Corning 790; or equal. Color shall be bronze.

2.7 MILLWORK APPLICATIONS

A. One-part acrylic latex polymer, paintable, N/S; as manufactured by Pecora; Tremco; or equal. Color shall be white.

2.8 BACKER MATERIAL

A. Use closed-cell polyethylene foam rod conforming to ASTM D1751 and compatible with sealant used. Size as shown or as recommended by manufacturers for all joints greater than 3/16-inch wide.

2.9 BOND BREAKER

A. As recommended by sealant manufacturer.

2.10 PRIMER

A. As recommended by sealant manufacturer.

PART 3 - EXECUTION

3.1 PREPARATION

A. Surfaces to be sealed shall be clean, dry, sound, and free of dust, loose mortar, and other foreign materials.

B. Mask adjacent surfaces where necessary to maintain neat edge.

C. Starting of work will be construed as acceptance of subsurfaces.

3.2 INSTALLATION

A. Apply materials following manufacturer's recommendation and instructions.

B. Fill sealant joint completely from back to top, without voids.

C. Tool sealant joints slightly concave after sealant is installed. When tooling white or light color sealant, a water wet tool shall be used.

3.3 CLEANING

A. Surfaces next to the sealed joints shall be cleaned of smears or other soiling resulting from the sealing application.

B. At no additional cost to Owner, replace or repair to Owner's satisfaction damaged surfaces resulting from sealing or cleaning.

END OF SECTION 07 92 00

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SECTION 09 90 00 – PAINTING AND PROTECTIVE COATINGS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes: Exposed, buried, and submerged metal, exposed PVC and CPVC, exposed FRP, and aluminum and dissimilar metals, to be protective painted, whether specifically mentioned or not, except as specified otherwise. Prime coat structural steel surfaces. Exterior concrete surfaces will not be protective painted unless specifically indicated. Interior concrete surfaces will be protective painted as specified herein.

1.2 REFERENCES

A. The following is a list of standards which may be referenced in this section:
   1. ASTM International (ASTM):
      a. D 16 - Standard Terminology for Paint, Related Coatings, Materials, and Applications.
      b. D 4541 - Standard Test Method for Pull-off Strength of Coatings Using Portable Adhesion Testers.
   2. NACE International (NACE):
      a. SP0178 - Design, Fabrication, and Surface Finish Practices for Tanks and Vessels to Be Lined for Immersion Service.
      b. SP0188-06 - Discontinuity (Holiday) Testing of Protective Coatings.
   3. National Association of Pipe Fabricators (NAPF):
      a. 500-03 - Surface Preparation Standard for Ductile Iron Pipe and Fittings Receiving Special External Coatings and/or Special Internal Linings.
   4. NSF International (NSF):
      a. 61 - Drinking Water System Components - Health Effects.
   5. Society for Protective Coatings (SSPC):
      a. QP1 – Standard Procedure for Evaluating Qualifications of Painting Contractors.
      b. QP2 – Standard Procedure for Evaluating the Qualifications of Painting Contractors to Remove Hazardous Paint.
      c. SP COM – Surface Preparation Commentary for Steel and Concrete Substrates.
      d. SP-1 – Solvent Cleaning.
      e. SP-2 – Hand Tool Cleaning.
      f. SP-3 – Power Tool Cleaning.
      g. SP-5 – White Metal Blast Cleaning.
      h. SP-6 – Commercial Blast Cleaning.
      i. SP-7 – Brush-Off Blast Cleaning.
      j. SP 8 – Pickling.
      k. SP-10 – Near-White Blast Cleaning.
      l. SP 11-T – Power Tool Cleaning to Bare Metal.
      m. SP 13 – Surface Preparation of Concrete.
      n. Guide No. 3, PA – Guide to Safety in Painting Applications.
   6. U.S. Environment Protection Agency (EPA):
      a. Method 24 – Surface Coatings.

1.3 DEFINITIONS

A. Terms used in this section:
1. Submerged metal: Steel or iron surfaces below tops of channel or structure walls which will contain water even when above expected water level.
2. Submerged concrete and masonry surfaces: Surfaces which are or will be underwater.
3. In structures which normally contain water.
4. Below tops of walls of water containing structures.
5. Exposed surface: Any metal or concrete surface, indoors or outdoors that is exposed to view.
6. Dry film thickness (DFT): Thickness of fully cured coating, measured in mils.
7. Volatile organic compound (VOC): Content of air polluting hydrocarbons in uncured coating product measured in units of grams per liter or pounds per gallon, as determined by EPA Method 24.
8. Ferrous: Cast iron, ductile iron, wrought iron, and all steel alloys except stainless steel.
9. Where SSPC surface preparation standards are specified or implied for ductile iron pipe or fittings, the equivalent NAPF surface preparation standard shall be substituted for the SSPC standard.
10. Coverage: Total minimum dry film thickness in mils, or square feet per gallon.
11. FRP: Fiberglass Reinforced Plastic.
12. HCl: Hydrochloric Acid.
13. MDFT: Minimum Dry Film Thickness.
14. MDFTPC: Minimum Dry Film Thickness per Coat.
15. Mil: Thousandth of an inch.
16. Military Specification-Paint.
17. PSDS: Paint System Data Sheet.
18. SFPG: Square Feet per Gallon.
19. SFPGPC: Square Feet per Gallon per Coat.
20. SP: Surface Preparation.

1.4 PERFORMANCE REQUIREMENTS

A. Coating materials shall be especially adapted for use in water and/or wastewater treatment plants.

B. Coating materials used in contact with potable water supply systems shall be certified to NSF 61.

1.5 SUBMITTALS

A. Shop Drawings:
1. Schedule of proposed coating materials.
2. Schedule of surfaces to be coated with each coating material.

B. Product Data: Include description of physical properties of coatings including solids content and ingredient analysis, VOC content, temperature resistance, typical exposures and limitations, and manufacturer's standard color chips:
1. Data Sheets:
a. For each paint system, furnish a Paint System Data Sheet (PSDS), the Manufacturer’s Technical Data Sheets, and paint colors available (where applicable) for each product used in the paint system. The PSDS form is appended to the end of this section.
b. Submit required information on a system-by-system basis.
c. Furnish copies of paint system submittals to the coating applicator.
d. Indiscriminate submittal of Manufacturer’s literature only is not acceptable.

2. Regulatory requirements: Submit data concerning the following:
   a. Volatile organic compound limitations.
   b. Coatings containing lead compounds and PCBs.
   c. Abrasives and abrasive blast cleaning techniques, and disposal.
   d. NSF certification of coatings for use in potable water supply systems.

C. Samples: Include 8-inch square drawdowns or brush-outs of topcoat finish when requested. Identify each sample as to finish, formula, color name and number and sheen name and gloss units.

D. Certificates: Submit in accordance with requirements for Product Data.

E. Manufacturer's instructions for each System: Include the following:
1. Special requirements for transportation and storage.
2. Mixing instructions.
3. Shelf life.
4. Pot life of material.
5. Precautions for applications free of defects.
6. Surface preparation.
7. Method of application.
8. Recommended number of coats.
9. Recommended dry film thickness (DFT) of each coat.
10. Recommended total dry film thickness (DFT).
11. Drying time of each coat, including prime coat.
12. Required prime coat.
13. Compatible and non-compatible prime coats.
14. Recommended thinners, when recommended.
15. Limits of ambient conditions during and after application.
16. Time allowed between coats (minimum and maximum).
17. Required protection from sun, wind, and other conditions.
18. Touch-up requirements and limitations.
19. Minimum adhesion of each system submitted in accordance with ASTM D 4541.

F. Manufacturer's Representative’s Field Reports.
1. Reports on visits to project site to view and approve surface preparation of structures to be coated.
2. Reports on visits to project site to observe and approve coating application procedures.
3. Reports on visits to coating plants to observe and approve surface preparation and coating application on items that are “shop coated”.

1.6 QUALITY ASSURANCE

A. Quality Assurance Submittals:
1. Quality Assurance plan.
2. Qualifications of coating applicator including List of Similar Projects and List of References substantiating experience.
3. Factory Applied Coatings: Manufacturer’s certification stating factory applied coating system meets or exceeds requirements specified.
4. If the Manufacturer of finish coating differs from that of shop primer, provide both Manufacturers’ written confirmation that materials are compatible.
5. Manufacturer’s written instructions and special details for applying each type of paint.
6. Manufacturers’ Certification of Proper Installation.

B. Certifications: All paints and coatings to be used on this project comply with current federal, state, and local VOC regulations

C. Applicator qualifications:
   1. Minimum of 5 years' experience applying specified type or types of coatings under conditions similar to those of the Work:
   2. Provide qualifications of applicator and references listing 5 similar projects completed in the past 2 years.
   3. Manufacturer approved applicator when manufacturer has approved applicator program.
   4. Approved and licensed by polymorphic polyester resin manufacturer to apply polymorphic polyester resin coating system.
   5. Approved and licensed by elastomeric polyurethane (100% solids) manufacturer to apply 100% solids elastomeric polyurethane system.
   6. Applicator of off-site application of coal tar epoxy shall have successfully applied coal tar epoxy on similar surfaces in material, size, and complexity as on the Project.

D. Regulatory requirements: Comply with governing agencies regulations by using coatings that do not exceed permissible volatile organic compound limits and do not contain lead:
   1. Do not use coal tar epoxy in contact with drinking water or exposed to ultraviolet radiation.
   2. Perform surface preparation and painting in accordance with recommendations of the following:
   3. Paint Manufacturer's instructions.
   4. SSPC-PA Guide No. 3, Guide to Safety in Paint Applications.
   5. Federal, state, and local agencies having jurisdiction.

E. Samples:
   1. Reference Panel:
      a. Prior to start of surface preparation, furnish a 4" by 4" steel panel for each grade of sandblast specified herein, prepared to specified requirements.
      b. Provide panel representative of the steel used; prevent deterioration of surface quality.
      c. Upon approval of Engineer, panel to be reference source for inspection.
      d. Unless otherwise specified, before painting work is started, prepare minimum 8" by 10" samples with type of paint and application specified on similar substrate to which paint is to be applied.
      e. Furnish additional samples as required until colors, finishes, and textures are approved.
      f. Approved samples to be the quality standard for final finishes.
      g. Field samples:
      h. Prepare and coat a minimum 100 square-foot area between corners or limits such as control or construction joints of each system.
      i. Approved field sample may be part of Work.
      j. Obtain approval before painting other surfaces.

F. Compatibility of coatings: Use products by same manufacturer for prime coats, intermediate coats, and finish coats on same surface, unless specified otherwise.

G. Services of coating manufacturer's representative:
   1. Arrange for coating manufacturer's representative to attend pre-installation conferences. Make periodic visits to the project site to provide consultation and inspection services during surface preparation and application of coatings, and to make visits to coating plants to observe and approve surface preparation procedures and coating application of items to be "shop primed and coated".

1.7 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Remove unspecified and unapproved paints from Project site immediately.

B. Deliver new unopened containers with labels identifying the manufacturer's name, brand name, product type, batch number, date of manufacturer, expiration date or shelf life, color, and mixing and reducing instructions.
   1. Do not deliver materials aged more than 12 months from manufacturing date.

C. Store coatings in well-ventilated facility that provides protection from the sun, weather, and fire hazards. Maintain ambient storage temperature between 45- and 90-degrees Fahrenheit, unless otherwise recommended by the manufacturer.

D. Take precautions to prevent fire and spontaneous combustion.

E. Shipping:
   1. Where pre-coated items are to be shipped to the site, protect coating from damage. Batten coated items to prevent abrasion.
   2. Use nonmetallic or padded slings and straps in handling.

1.8 PROJECT CONDITIONS

A. Surface moisture contents: Do not coat surfaces that exceed manufacturer specified moisture contents, or when not specified by the manufacturer, the following moisture contents:
   1. Plaster and gypsum wallboard: 12%
   2. Masonry, concrete, and concrete block: 12%
   3. Interior located wood: 15%
   4. Concrete floors: 7%

B. Do not apply coatings:
   1. Under dusty conditions or adverse environmental conditions, unless tenting, covers, or other such protection is provided for structures to be coated.
   2. When light on surfaces measures less than 15-foot-candles.
   3. When ambient or surface temperature is less than 55 degrees Fahrenheit unless manufacturer allows a lower temperature.
   4. When relative humidity is higher than 85%.
   5. When surface temperature is less than 5 degrees Fahrenheit above dew point.
   6. When surface temperature exceeds the manufacturer's recommendation.
   7. When ambient temperature exceeds 90 degrees Fahrenheit, unless manufacturer allows a higher temperature.
   8. Apply clear finishes at minimum 65 degrees Fahrenheit.

C. Provide fans, heating devices, dehumidifiers, or other means recommended by coating manufacturer to prevent formation of condensate or dew on surface of substrate, coating between coats and within curing time following application of last coat.

D. Provide adequate continuous ventilation and sufficient heating facilities to maintain minimum 55 degrees Fahrenheit for 24 hours before, during and 48 hours after application of finishes.

E. Dehumidification and heating for coating of digester interiors, wet wells, and high humidity enclosed spaces:
   1. Provide dehumidification and heating of interior spaces in which surface preparation, coating application, or curing is in progress according to the following schedule:
      a. October 1 to April 30: Provide continuous dehumidification and heating as required to maintain the tanks within environmental ranges as specified in this Section and as

recommended by the coating material manufacturer. For the purposes of this Section, “continuous” is defined as 24 hours per day and 7 days per week.

b. May 1 to September 30: Provide temporary dehumidification and heating as may be required to maintain the tanks within the specified environmental ranges in the event of adverse weather or other temporary condition. At CONTRACTOR’s option and at his sole expense, CONTRACTOR may suspend work until such time as acceptable environmental conditions are restored, in lieu of temporary dehumidification and heating. Repair or replace any coating or surface preparation damaged by suspension of work, at CONTRACTOR’s sole expense.

2. Equipment requirements:
   a. Capacity: Provide dehumidification, heating, and air circulation equipment with minimum capacity to perform the following:
      1) Maintain the dew point of the air in the tanks at a temperature at least 5 degrees Fahrenheit less than the temperature of the coldest part of the structure where work is underway.
      2) Reduce dew point temperature of the air in the tanks by at least 10 degrees Fahrenheit in 20 minutes.
      3) Maintain air temperature in the tanks at 60 degrees minimum.
   b. Systems:
      1) Internal combustion engine generators: May be used; CONTRACTOR shall obtain all required permits and provide air pollution and noise control devices on equipment as required by permitting agencies.
      2) Dehumidification: Provide desiccant or refrigeration drying. Desiccant types shall have a rotary desiccant wheel capable of continuous operation. No Liquid, granular, or loose lithium chloride drying systems will be allowed.
      3) Heating: Electric, indirect combustion, or steam coil methods may be used. Direct fired combustion heaters will not be allowed during abrasive blasting, coating application, or coating cure time.
3. Design and submittals:
   a. CONTRACTOR shall prepare dehumidification and heating plan for this project, including all equipment and operating procedures.
   b. Suppliers of services and equipment shall have not less than 3 years’ experience in similar applications.
   c. Supplier: The following or equal:
      1) Cargocaire Corporation (Munters) or equal.
   d. Submit dehumidification and heating plan for ENGINEER’s review.
4. Monitoring and performance:
   a. Measure and record relative humidity and temperature of air, and structure temperature twice daily (beginning and end of work shifts) to verify that proper humidity and temperature levels are achieved inside the work area after the dehumidification equipment is installed and operational. Test results shall be made available to the ENGINEER upon request.
   b. Interior space of the working area and tank(s) shall be sealed and a slight positive pressure maintained as recommended by the supplier of the dehumidification equipment.
   c. The filtration system used to remove dust from the air shall be designed so that it does not interfere with the dehumidification equipment’s ability to control the dew point and relative humidity inside the reservoir.
      1) The air from the tank, working area, or dust filtration equipment shall not be recirculated through the dehumidifier during coating application or when solvent vapors are present.

1.9 SPECIAL GUARANTEE

A. Contractor shall provide a minimum 1-year warranty on all products and installation. As available, furnish Manufacturer's extended guarantee or warranty, with OWNER named as beneficiary.
   1. Contractor's warranty shall provide for correction, or if not deemed correctable shall include full removal and replacement of system at the Contractor's expense.

B. Contractor and paint Manufacturer shall jointly and severally furnish guarantee.

1.10 SPARE MATERIALS

A. Extra materials: Include minimum 1 gallon of each type and color of coating applied:
   1. When manufacturer packages material in gallon cans, deliver unopened labeled cans as comes from factory.

B. When manufacturer does not package material in gallon cans, deliver material in new gallon containers, properly sealed, and identified with typed labels indicating brand, type, and color.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. One of the following or equal:
   1. Tnemec: Tnemec Co., Kansas City, MO.
   2. SW: Sherwin-Williams, Cleveland, OH.
   3. ZRC: ZRC Worldwide, Marshfield, MA.

2.2 PREPARATION AND PRETREATMENT MATERIALS

A. Surface cleaner and degreaser:
   1. Compatible with coating materials.

2.3 COATING MATERIALS

A. System No.1 – Submerged Metal – Potable Water:

1.	Primer:	Tnemec Series 21 Epoxyline;	SW SherPlate 600
2.	Intermediate:	N/A	
3.	Top Coat:	Tnemec Series 21 Epoxyline;	SW SherPlate 600

B. System No. 2 – Submerged Metal – Non-Potable Water

1.	Primer:	Tnemec Series N69/L69 Epoxoline II;	SW Tank Clad HS
2.	Intermediate:	Tnemec Series N69/L69 Epoxoline II;	SW Tank Clad HS
3.	Top Coat:	Tnemec Series N69/L69 Epoxoline II;	SW Tank Clad HS

C. System No. 3 – Exposed Metal – Highly Corrosive

1.	Primer:	Tnemec Series N69/L69 Epoxoline II;	SW Macropoxy 646 FC
2.	Intermediate:	Tnemec Series N69/L69 Epoxoline II;	SW Macropoxy 646 FC
3.	Top Coat:	Tnemec Series 1095 Endura-Shield;	SW Macropoxy 646 FC

D. System No. 4 – Exposed Metal – Mildly Corrosive

1.	Primer:	Tnemec Series N69/L69 Epoxoline II;	SW Macropoxy 646 FC
2.	Intermediate:	N/A	
3.	Top Coat:	Tnemec Series 1095 Endura-Shield;	SW Macropoxy 646 FC

E. System No. 5 – Buried Metal – General
   1. Primer: N/A
   2. Intermediate: N/A
   3. Top Coat: 46H-413 Tneme-Tar; SW Targuard HS Coal Tar Epoxy

F. System No. 6 – High Temperature (150º - 275º)
   1. Primer: Tnemec Series N69/L69 Epoxoline II; SW Macropoxy 646 FC
   2. Intermediate: N/A
   3. Top Coat: Tnemec Series 1095 Endura-Shield; SW Acrolon 218 HS S/G

G. System No. 9 – Field Coating Fusion Bonded Epoxy
   1. Primer: Tnemec Series N69/L69 Epoxoline II; SW Macropoxy 646 FC
   2. Intermediate: N/A
   3. Top Coat: Tnemec Series 1095 Endura-Shield; SW Acrolon 218 HS S/G

H. System No. 10 – Galvanized Metal, Copper, and Non-Ferrous Metal Alloy
   1. Primer: Per Manufacturer
   2. Intermediate: Tnemec Series 115 Uni-Bond DF; SW ProIndustrial Multi-Surface Acrylic
   3. Top Coat: Tnemec Series 115 Uni-Bond DF; SW ProIndustrial Multi-Surface Acrylic

I. System No. 11 – Galvanized Metal Repair
   1. Primer: Tnemec Series 90-97 Tneme-Zinc; ZRC Cold Galvanizing Compound SW Corothane I Galvapac 1K;
   2. Intermediate: N/A
   3. Top Coat: N/A

J. System No. 12 – Skid-Resistant Aluminum and FRP
   1. Primer: Tnemec Series N69/L69 Epoxoline II w/211-212 Course Glass Beads; SW Macropoxy 646 FC
   2. Intermediate: N/A
   3. Top Coat: Tnemec Series N69/L69 Epoxoline II w/211-212 Course Glass Beads; SW Resugrip 175

K. System No. 13 – Sliding Metal
   1. Primer: PTFE Lubricant
   2. Intermediate: N/A
   3. Top Coat: N/A

L. System No. 14 – Exposed PVC
   1. Primer: Tnemec Series 1029 Enduratone; SW SherCryl HPA S/G
   2. Intermediate: N/A
   3. Top Coat: Tnemec Series 1029 Enduratone; SW SherCryl HPA S/G

M. System No. 15 – Aluminum and Dissimilar Metal Insulation
   1. Primer: N/A
   2. Intermediate: N/A
   3. Top Coat: Tnemec Series 46H-413 Tneme-Tar; SW Targuard HS Coal Tar Epoxy

N. System No. 16 – Existing Concrete/CMU Repair
   1. Filler: Tnemec Series 1254 Epoxoblock WB; SW Kem Cati-Coat HS Epoxy Blockfiller;

		N/A for previously painted	
2.	Primer:	Tnemec Series N69/L69 Epoxoline II; Series 1029 for previously painted;	SW Macropoxy 646 FC; SW SherCryl HPA S/G for previously painted
3.	Top Coat:	Tnemec Series N69/L69 Epoxoline II; Series 1029 for previously painted;	SW Macropoxy 646 FC SW SherCryl HPA S/G for previously painted

O. System No. 17 – New Concrete/CMU Exterior

1.	Primer:	Tnemec Series 156 Enviro-Crete;	SW Loxon XP
2.	Intermediate:	N/A	
3.	Top Coat:	Tnemec Series 156 Enviro-Crete;	SW Loxon XP

P. System No. 18 – Concrete/CMU – Interior or Immersion Mildly Corrosive

1.	Filler:	Tnemec Series 1254 Epoxoblock WB;	SW Kem Cati-Coat HS Epoxy Blockfiller
2.	Primer:	Tnemec Series N69/L69 Epoxoline II;	SW Macropoxy 646 FC
3.	Top Coat:	Tnemec Series N69/L69 Epoxoline II;	SW Macropoxy 646 FC

Q. System No. 20 – Skid-Resistant Concrete - Interior

1.	Primer:	Tnemec Series 201 Epoxoprime;	SW Resuflor MPE
2.	Intermediate:	Tnemec Series 281 Tneme-Glaze;	SW Resuflor MPE
3.	Top Coat:	Tnemec Series 248 Everthane w/211-212 Course Glass Beads;	SW Resutile HTS 100

R. System No. 21 – Skid-Resistant Concrete – Exterior

1.	Primer:	Tnemec Series 151 Elasto-Grip;	SW Resudeck FLP/E
2.	Intermediate:	Tnemec Series 154 TnemeGuard;	SW Resudeck FHS w/16-30 mesh silica sand
3.	Top Coat:	Tnemec Series 248 Everthane w/211-212 Course Glass Beads;	SW Resudeck FLA

S. System No. 22 – Chemical-Resistant Wall - Concrete

1.	Primer:	Tnemec Series 1254 Epoxoblock WB;	SW Kem Cati-Coat HS Epoxy Blockfiller
2.	Intermediate:	Tnemec Series 280 Tneme-Glaze;	SW Resuflor MPE
3.	Top Coat:	Tnemec Series 290 CRU;	SW Polylon HP

T. System No. 23 – Plastic and Exposed FRP

1.	Primer:	Tnemec Series N69/L69 Epoxoline II;	SW Macropoxy 646 FC
2.	Intermediate:	N/A	
3.	Top Coat:	Tnemec Series N69/L69 Epoxoline II;	SW Macropoxy 646 FC

U. System No. 24 – Interior Metal Surfaces

1.	Primer:	Tnemec Series 10V Tnemec Primer;	SW Steel Spec 2103
2.	Intermediate:	Tnemec Series 1029 Enduratone;	SW SherCryl HPA S/G
3.	Top Coat:	Tnemec Series 1029 Enduratone;	SW SherCryl HPA S/G

V. System No. 25 – Interior Concrete Floors

1.	Primer:	Tnemec Series 201 Epoxoprime;	SW Resuflor MPE
2.	Intermediate:	Tnemec Series 281 Tneme-Glaze;	SW Resuflor MPE
3.	Top Coat:	Tnemec Series 248 Everthane;	SW Resutile HTS 100

W. System No. 26 – Interior Concrete Walls, Ceilings, and Roof Slabs

1.	Primer:	Tnemec Series 180 Tneme-Crete;	SW Loxon Acrylic Masonry Primer
2.	Intermediate:	Tnemec Series 1029 Enduratone;	SW SherCryl HPA S/G
3.	Top Coat:	Tnemec Series 1029 Enduratone;	SW SherCryl HPA S/G

X. System No. 27 – Interior Wood to Receive Paint

1.	Primer:	Tnemec Series 10V Tnemec Primer;	SW Multi-Purpose Oil-Based Primer
2.	Intermediate:	Tnemec Series 1029 Enduratone;	SW SherCryl HPA S/G
3.	Top Coat:	Tnemec Series 1029 Enduratone;	SW SherCryl HPA S/G

Y. System No. 28 – Drywall and Gypsum

1.	Primer:	Tnemec Series 51 PVA Sealer;	SW ProMar 200 Zero VOC Primer
2.	Intermediate:	Tnemec Series 1029 Enduratone;	SW SherCryl HPA S/G
3.	Top Coat:	Tnemec Series 1029 Enduratone;	SW SherCryl HPA S/G

Z. System No. 29 – Masonry Sealer

1.	Primer:	Tnemec Series 660 PAP 200;	SW Not Required
2.	Intermediate:	N/A	
3.	Top Coat:	Tnemec Series 660 PAP 200;	SW Cemlack Vertiseal

AA. System No. 30 – Concrete Sealer

1.	Primer:	Tnemec Series 287 Enviro-Pox;	SW Armorseal 8100
2.	Intermediate:	N/A	
3.	Top Coat:	Tnemec Series 287 Enviro-Pox;	SW Armorseal 8100

2.4 MIXES

A. Mix in accordance with manufacturer's instructions.

PART 3 - EXECUTION

3.1 GENERAL PROTECTION

A. Protect adjacent surfaces from coatings and damage. Repair damage resulting from inadequate or unsuitable protection.

B. Protect adjacent surfaces not to be coated from spatter and droppings with drop cloths and other coverings:
   1. Mask off surfaces of items not to be coated or remove items from area.

C. Furnish sufficient drop cloths, shields, and protective equipment to prevent spray or droppings from fouling surfaces not being coated and in particular, surfaces within storage and preparation area.

D. Place cotton waste, cloths, and material which may constitute fire hazard in closed metal containers and remove daily from site.

E. Remove electrical plates, surface hardware, fittings, and fastenings, prior to application of coating operations. Carefully store, clean, and replace on completion of coating in each area. Do not use solvent or degreasers to clean hardware that may remove permanent lacquer finish.

F. Protect following surfaces from abrasive blasting by masking, or other means:
   1. Threaded portions of valve and gate stems, grease fittings, and identification plates.
   2. Machined surfaces for sliding contact.
   3. Surfaces to be assembled against gaskets.
   4. Surfaces of shafting on which sprockets are to fit.
   5. Surfaces of shafting on which bearings are to fit.
   6. Machined surfaces of bronze trim, including those slide gates.
   7. Cadmium-plated items, except cadmium-plated, zinc-plated, or sherardized fasteners used in assembly of equipment requiring abrasive blasting.
   8. Galvanized items, unless scheduled to be coated.

G. Protect installed equipment, mechanical drives, and adjacent coated equipment from abrasive blasting to prevent damage caused by entering sand or dust.

3.2 PREPARATION

A. General:
   1. Inspect and provide substrate surfaces prepared in accordance with the Contract Documents and the most stringent recommendations of the Paint Manufacturer whose product is to be applied. The more stringent requirements shall apply. If any surface is found to be unsuitable to produce a proper finish, do not apply material until the surfaces are made satisfactory. Application of paint to any surface shall be deemed to be acceptance of that surface and full responsibility shall be borne by the CONTRACTOR.

B. Shop Abrasive Blasting:
   1. Notify the ENGINEER at least 7 days prior to the start of shop-blast cleaning to allow for inspection of the Work during surface preparation and shop application of paints.
   2. Structural steel and similar items, as approved by the ENGINEER, may be shop prepared and primed. Centrifugal wheel blast cleaning is an acceptable alternative to shop-blast cleaning.

C. Field Abrasive Blasting:
   1. Perform blasting for items and equipment where specified and as required to restore damaged surfaces previously shop-blasted or field-blasted and primed or coated.

D. Metal Surface Preparation:
   1. Where shown on the Drawings, in accordance with the SSPC specification.
   2. The words solvent cleaning, hand tool cleaning, wire brushing, and blast cleaning, or similar words of equal intent in the Contract Documents or in the Paint Manufacturer's specification, refer to the applicable SSPC specification.
   3. Where OSHA 29 CFR 1910, OSHA 29 CFR 1926, EPA 40 CFR 261, EPA AP-42, or SSPC PA 10 regulations preclude standard abrasive blast cleaning, wet or vacu-blast methods may be required. The Paint Manufacturer's recommendations for wet-blast additives and first coat application shall apply.
   4. Hand tool clean areas that cannot be cleaned by power tool cleaning.
   5. Round or chamfer sharp edges and grind smooth burrs, jagged edges, and surface defects.
   6. Welds and adjacent areas:
      a. Prepare such that there is the following:
         1) No undercutting or reverse ridges on weld bead.
         2) No weld spatter on or adjacent to weld or any area to be painted.

3) No sharp peaks or ridges along weld bead.

b. Grind embedded pieces of electrode or wire flush with the adjacent surface of weld bead.

7. Pre-blast cleaning requirements:
   a. Remove oil, grease, welding fluxes, and other surface contaminants prior to blast cleaning.
   b. Cleaning methods: Steam, open flame, hot water, or cold water with appropriate detergent additives followed with clean water rinsing. Water jetting in accordance with SSPC/NACE SP WJ-1/NACE WJ-1.
   c. Clean small isolated areas as above or solvent clean with suitable solvent and a clean cloth.
8. Blast cleaning requirements:
   a. Type of equipment and speed of travel: Design to obtain a specified degree of cleanliness; minimum surface preparation is as specified herein and takes precedence over the Paint Manufacturer's recommendations.
   b. Select the type and size of abrasive to produce a surface profile that meets the Paint Manufacturer's recommendations for the particular primer to be used.
   c. Use only dry blast cleaning methods.
   d. Do not reuse abrasive, except for designed recyclable systems.
   e. Meet applicable federal, state, and local air pollution and environmental control regulations for blast cleaning, confined space entry (if required), and disposition of spent aggregate and debris.
9. Post-blast cleaning and other cleaning requirements:
   a. Clean surfaces of dust and residual particles from cleaning operations by dry air blast cleaning (no oil or water vapor) or other method prior to painting. Vacuum clean enclosed areas and other areas where dust settling is a problem and wipe with a tack cloth.
   b. Paint surfaces the same day they are blasted. Re-blast surfaces that have begun to rust prior to painting.

E. Concrete Surface Preparation:
1. Do not begin until 30 days after concrete has been placed.
2. In accordance with SSPC/NACE SP 13/NACE No.6 and ASTM D 4258.
3. Remove grease, oil, dirt, salts or other chemicals, loose materials, or other foreign matter by solvent, detergent, or other suitable cleaning methods.
4. Verify that the required acid-alkali balance has been achieved.
5. Brush-off blast concrete surface to remove loose concrete and laitance and provide a tooth for binding. Upon approval by the ENGINEER, the surface may be cleaned by the acid etching method. Approval is subject to producing a desired profile equivalent to No. 80 grit flint sandpaper. Acid etching of vertical or overhead surfaces shall not be allowed.
6. Secure the Paint Manufacturer's recommendations for additional preparation, if required, for excessive bug holes exposed after blasting.
7. Concrete wall surface preparation:
   a. Patch tie holes.
   b. Sack-rub with grout to fill voids.
8. Unless otherwise required for proper adhesion, ensure surfaces are dry prior to painting.

F. Plastic Surface Preparation:
1. Hand sand plastic surfaces to be coated with medium grit sandpaper to provide tooth for the coating system.
2. Large areas may be power sanded or brush-off blasted, provided sufficient controls are employed so the surface is roughened without removing excess material.

3. FRP equipment with an integral-colored gel coat does not require painting, provided the color is as selected.

G. Masonry Surface Preparation:
   1. Complete and cure masonry construction for 14 days or more before starting surface preparation Work.
   2. Remove oil, grease, dirt, salts or other chemicals, loose materials, or other foreign matter by solvent, detergent washing, or other suitable cleaning methods.
   3. Clean masonry surfaces of mortar and grout spillage and other surface deposits using one of the following:
      a. Nonmetallic fiber brushes and commercial muriatic acid followed by rinsing with clean water.
      b. Brush-off blasting.
      c. Water blasting.
   4. Do not damage masonry mortar joints or adjacent surfaces.
   5. Leave surfaces clean and dry prior to painting, unless otherwise required for proper adhesion.
   6. Masonry surfaces to be painted: Uniform texture and free of surface imperfections that would impair the intended finished appearance.
   7. Masonry surfaces to be clear coated: Free of discolorations and uniform in texture after cleaning.

H. Wood Surface Preparation:
   1. Replace damaged wood surfaces or repair in a manner acceptable to the ENGINEER prior to the start of surface preparation.
   2. Solvent clean (mineral spirits) knots and other resinous areas and coat with shellac or other knot sealer prior to painting. Remove pitch by scraping and wipe clean with mineral spirits or turpentine prior to applying knot sealer.
   3. Round sharp edges by light sanding prior to priming.
   4. Filler:
      a. Synthetic-based wood putty approved by the Paint Manufacturer for the paint system.
      b. For natural finishes, the color of wood putty shall match the color of finished wood.
      c. Fill holes, cracks, and other surface irregularities flush with the surrounding surface and sand smooth.
      d. Apply putty before or after the prime coat depending on compatibility and the Putty Manufacturer's recommendations.
      e. Use cellulose type putty for stained wood surfaces.
   5. Ensure surfaces are clean and dry prior to painting.

I. Gypsum Board Surface Preparation:
   1. Allow joint treatment to thoroughly dry. Lightly sand joint treatments and topping compounds to produce a uniform, smooth surface. Wipe or brush free of sanding dust. Prime exposed metal corner beads and other accessories with galvanized metal primer.
   2. Fill minor defects with filler compound. Spot prime defects after repair.

J. Surface Preparation for Existing Painted Surfaces to be Repainted:
   1. Detergent wash and freshwater rinse.
   2. Clean loose, abraded, or damaged coatings to substrate by hand or power tool in accordance with SSPC SP 2 or SSPC SP 3.
   3. Feather surrounding intact coating.
   4. Apply one spot coat of the specified primer to bare areas, overlapping the prepared existing coating.
   5. Apply one full finish coat of the specified primer to the entire surface.

6. If an aged, plural-component material is to be top coated, contact the Paint Manufacturer for additional surface preparation requirements.
7. Application of cosmetic coat:
   a. Verify that existing coatings have oxidized sufficiently to prevent lifting or peeling when overcoated with the paints specified.
   b. Check compatibility by application to a small area prior to starting painting.
   c. If lifting or other problems occur, request disposition from the ENGINEER.
8. Perform blasting as required to restore damaged surfaces. Materials, equipment, and procedures shall meet the requirements of the SSPC.

K. Non-Ferrous Metal Preparation for Coating: The non-ferrous surface shall be coated within 2 days if it is stored in an environmentally controlled space to avoid coating over the zinc oxide and zinc hydroxide layer that forms. After 2 days, the surface shall be sweep blasted and the coating applied within one hour of the blasting. The blasting shall be performed in accordance with ASTM D 6386 and SSPC SP 16, including:
1. Reduced blast pressure, 40 psi or less.
2. Reduced blasting dwell time.
3. Increased distance of blast nozzle from the surface, 18 inches to 24 inches.
4. Reduced blast angle, 30 degrees to 60 degrees rather than 90 degrees.
5. A softer blast media: Aluminum/magnesium silicate, corncobs, walnut shells, corundum, limestone, or mineral sands with a Mohr's hardness level 5 or less.
6. No resurfacing with sanders or grinders.
7. If the item is stored outside after galvanizing, the surface preparation shall be performed as weathering has begun.
8. A minimum surface profile of 0.75-mil on the bare metal surface is required.
9. Intact coatings are required to be roughened to the degree specified for the coating to be used.

L. Provide the ENGINEER a minimum of 7 days advance notice to the start of field surface preparation Work and coating application Work.

M. Schedule an inspection of cleaned surfaces and all coats prior to successive coat in advance with the ENGINEER.

N. Factory-Finished Items:
1. Schedule an inspection with the ENGINEER before repairing damage to factory-finished items delivered to the site.
2. Repair abraded or otherwise damaged areas on factory-finished items as recommended by the Paint Manufacturer. Carefully blend repaired areas into the original finish. If required to match colors, provide a full finish coat in the field.

O. Colors:
1. Submit to ENGINEER all proposed colors.
2. Color code non-submerged metal piping; paint fittings and valves the same color as the pipe.
3. New work: Color coding in accordance with the industry standard piping color codes.
4. Repair work: Match existing color.
5. Proprietary identification of colors is for identification only; the selected Manufacturer may supply matches.
6. Equipment colors:
   a. Equipment includes the machinery or vessel itself and the structural supports and fasteners and attached electrical conduits.
   b. Paint equipment and piping one color as selected.

c. Paint non-submerged portions of equipment the same color as the piping it serves, except as itemized below:
   1) Dangerous parts of equipment and machinery: OSHA orange
   2) Fire protection equipment and apparatus: OSHA red
   3) Radiation hazards: OSHA purple
   4) Physical hazards in normal operating area and energy lockout devices including, but not limited to, electrical disconnects for equipment and equipment isolation valves in air and liquid lines under pressure: OSHA yellow

3.3 CLEANING

A. Brush-off Blast Cleaning:
   1. The equipment, procedure, and degree of cleaning in accordance with SSPC/NACE SP 7/NACE No. 4 or SSPC SP 16.
   2. Abrasive: Wet or dry blasting sand, grit, or nutshell.
   3. Select various surface preparation parameters, such as size and hardness of abrasive, nozzle size, air pressure, and nozzle distance from surface such that the surface is cleaned without pitting, chipping, or other damage.
   4. Verify parameter selection by blast cleaning a trial area that will not be exposed to view.
   5. The ENGINEER will approve the trial blast cleaned area and, if acceptable, use the area as a representative sample of surface preparation.
   6. Repair or replace surface damaged by blast cleaning.

B. Acid Etching:
   1. After pre-cleaning, spread the following solution by brush or plastic sprinkling can: One-part commercial muriatic acid reduced by 2 parts water by volume. Adding acid to water in these proportions gives an approximate 10% solution of HCl.
   2. Application:
      a. Rate: 2 gallons/100 sf.
      b. Work acid solution into the surface by hard-bristled brushes or brooms until complete wetting and coverage is obtained.
      c. Acid will react vigorously for a few minutes during which time brushing shall be continued.
      d. After bubbling subsides, in approximately 10 minutes, hose down the remaining slurry with high-pressure clean water.
      e. Rinse immediately to avoid the formation of salts on the surface that are difficult to remove.
      f. Thoroughly rinse to remove any residual acid surface condition that may impair adhesion.
   3. Ensure surface is completely dry before the application of paint.
   4. Apply acid etching to obtain a grit sandpaper surface profile. If the surface is not achieved, repeat the treatment.

C. Solvent Cleaning:
   1. In accordance with SSPC SP 1.
   2. Consists of the removal of foreign matter such as oil, grease, soil, drawing and cutting compounds, and any other surface contaminants by using solvents, emulsions, cleaning compounds, steam cleaning, or similar materials and methods that involve a solvent or cleaning action.

D. Power Tool Cleaning: In accordance with SSPC SP 11.

E. Place cloths and waste that might constitute a fire hazard in closed metal containers or destroy at the end of each day.

F. Upon the Substantial Completion date, remove staging, scaffolding, and containers from the site or destroy in a legal manner.

G. Remove paint spots, oil, or stains upon adjacent surfaces and floors and leave the entire job clean.

3.4 MECHANICAL AND ELECTRICAL EQUIPMENT PREPARATION

A. Identify equipment, ducting, piping, and conduit.

B. Remove grilles, covers, and access panels for mechanical and electrical system from location and coat separately.

C. Prepare and finish coat-primed equipment with color selected by the ENGINEER.

D. Prepare and prime and coat insulated and bare pipes, conduits, boxes, insulated and bare ducts, hangers, brackets, collars, and supports, except where items are covered with prefinished coating.

E. Replace identification markings on mechanical or electrical equipment when coated over or spattered.

F. Prepare and coat interior surfaces of air ducts, convector and baseboard heating cabinets that are visible through grilles and louvers with one coat of flat black paint, to limit of sight line.

G. Prepare and coat dampers exposed immediately behind louvers, grilles, convector, and baseboard cabinets to match face panels.

H. Prepare and coat exposed conduit and electrical equipment occurring in finished areas with color and texture to match adjacent surfaces.

I. Prepare and coat both sides and edges of plywood backboards for electrical equipment before installing backboards and mounting equipment on them.

J. Color code equipment, piping, conduit, and exposed ductwork and apply color banding and identification, such as flow arrows, naming and numbering, in accordance with Contract Documents.

3.5 QUALITY CONTROL

A. Testing:
   1. Surface preparation testing:
      a. Measure prepared surface profile using magnetic type gauge or replica tape in accordance with NACE SP0287.
      b. Verify surface is free of debris and particulate prior to coating application using clear tape.
   2. Thickness testing:
      a. Measure coating thickness specified in mils with magnetic type, DFT gauge, in accordance with SSPC PA 2.
      b. Check each coat for correct DFT.
      c. Wait a minimum of 8 hours after the application of coating before testing.
   3. Continuity testing:
      a. Holiday detect coatings 20-mils thick or less, except zinc primer and galvanizing, with low-voltage wet sponge electrical holiday detector in accordance with NACE SP0188.
      b. After repaired and recoated areas have dried sufficiently, retest each repaired area.
      c. Final tests may also be conducted by the ENGINEER.

B. Inspection: Leave staging and lighting in place until the ENGINEER has inspected the surface or coating. Replace staging removed prior to approval by the ENGINEER. Provide additional staging and lighting as requested by the ENGINEER.

C. Unsatisfactory Application:
   1. If an item has an improper finish color or insufficient film thickness, clean the surface and topcoat with specified paint material to obtain the specified color and coverage. Obtain specific surface preparation information from the Paint Manufacturer.
   2. Evidence of runs, bridges, shiners, laps, or other imperfections is cause for rejection.
   3. Repair defects in accordance with the written recommendations of the Paint Manufacturer.

D. Damaged Coatings, Pinholes, and Holidays:
   1. Feather edges and repair in accordance with the recommendations of the Paint Manufacturer.
   2. Hand or power sand visible areas of chipped, peeled, or abraded paint, and feather the edges. Follow with primer and finish coat. Depending on the extent of repair and appearance, a finish sanding and topcoat may be required.
   3. Apply finish coats, including touch up and damage-repair coats, in a manner that will present a uniform texture and color-matched appearance.

E. Manufacturer's Services:
   1. The Paint Manufacturer's Representative shall be present at the site:
      a. On the first day of the application of any coating system.
      b. A minimum of two additional site inspection visits, to provide the Manufacturer's certificate of proper installation.
      c. As required to resolve field problems attributable to or associated with the Manufacturer's product.
      d. To verify full cure of coating prior to coated surfaces being placed into immersion service.

3.6 GENERAL APPLICATION REQUIREMENTS

A. Apply coatings in accordance with manufacturer's instructions.

B. Coat metal unless specified otherwise:
   1. Aboveground piping to be coated shall be empty of contents during application of coatings.

C. Verify metal surface preparation immediately before applying coating in accordance with SSPC SP COM.

D. Allow surfaces to dry, except where coating manufacturer requires surface wetting before coating.

E. Wash coat and prime sherardized, aluminum, copper, and bronze surfaces, or prime with manufacturer's recommended special primer.

F. Prime shop primed metal surfaces. Spot prime exposed metal of shop primed surfaces before applying primer over entire surface.

G. Multiple coats:
   1. Apply minimum number of specified coats.
   2. Apply additional coats when necessary to achieve specified thicknesses.
   3. Apply coats to thicknesses specified, especially at edges and corners.
   4. When multiple coats of same material are specified, tint prime coat and intermediate coats with suitable pigment to distinguish each coat.

5. Lightly sand and dust surfaces to receive high gloss finishes, unless instructed otherwise by coating manufacturer.
6. Dust coatings between coats.

H. Coat surfaces without drops, overspray, dry spray, runs, ridges, waves, holidays, laps, or brush marks.

I. Remove spatter and droppings after completion of coating.

J. Apply coating by brush, roller, trowel, or spray, unless particular method of application is required by coating manufacturer's instructions or these Specifications.

K. Plural component application: Drums shall be premixed each day. All gauges shall be working order prior to the start of application. Ratio checks shall be completed prior to each application. A spray sample shall be sprayed on plastic sheeting to insure set time is complete prior to each application. Hardness testing shall be performed after each application.

L. Spray application:
1. Stripe coat edges, welds, nuts, bolts, difficult to reach areas by brush before beginning spray application, as necessary, to ensure specified coating thickness along edges.
2. When using spray application, apply coating to thickness not greater than that recommended in coating manufacturer's instructions for spray application.
3. Use airless spray method, unless air spray method is required by coating manufacturer's instruction or these Specifications.
4. Conduct spray coating under controlled conditions. Protect adjacent construction and property from coating mist, fumes, or overspray.

M. Drying and recoating:
1. Provide fans, heating devices, or other means recommended by coating manufacturer to prevent formation of condensate or dew on surface of substrate, coating between coats and within curing time following application of last coat.
2. For submerged service the CONTRACTOR shall provide a letter to the ENGINEER that the lining system is fully cured and ready to be placed into service.
3. Limit drying time to that required by these Specifications or coating manufacturer's instructions.
4. Do not allow excessive drying time or exposure which may impair bond between coats.
5. Recoat epoxies within time limits recommended by coating manufacturer.
6. When time limits are exceeded, abrasive blast clean and de-gloss clean prior to applying another coat.
7. When limitation on time between abrasive blasting and coating cannot be met before attachment of components to surfaces which cannot be abrasive blasted, coat components before attachment.
8. Ensure primer and intermediate coats of coating are unscarred and completely integral at time of application of each succeeding coat.
9. Touch up suction spots between coats and apply additional coats where required to produce finished surface of solid, even color, free of defects.
10. Leave no holidays.
11. Sand and feather in to a smooth transition and recoat and recoat scratched, contaminated, or otherwise damaged coating surfaces so damages are invisible to naked eye.

N. Concrete:
   1. Apply first coat (primer) only when surface temperature of concrete is decreasing in order to eliminate effects of off-gassing on coating.

3.7 PROTECTIVE COATINGS SYSTEMS

A. System No. 1: Submerged Metal – Potable Water

Surface Prep.	Paint Material	Min. Coats, Cover
Abrasive Blast, or Centrifugal Wheel Blast (SP 10)	Primer – Epoxy (Self Priming)	1 coat, 6 MDFT
	Intermediate - N/A	
	Top Coat – High Solids Epoxy	1 coat, 6 MDFT

B. System No. 2: Submerged Metal - Non-Potable Water

Surface Prep.	Paint Material	Min. Coats, Cover
Abrasive Blast (SP 10)	Primer – Per Manufacturer's Recommendations	1 coat, 5 MDFT
	Intermediate - Polyamidomine Epoxy	1 coat, 6 MDFT
	Top Coat – Polyamidoamine Epoxy	1 coat, 6 MDFT

C. System No. 3: Exposed Metal - Highly Corrosive

Surface Prep.	Paint Material	Min. Coats, Cover
Abrasive Blast (SP 10)	Primer – Per Manufacturer's Recommendations	1 coat, 2.5 MDFT
	Intermediate – High Solids Epoxy	1 coat, 4 MDFT
	Top Coat – Aliphatic Polyurethane	1 coat, 3 MDFT

D. System No. 4: Exposed Metal – Mildly Corrosive

Surface Prep.	Paint Material	Min. Coats, Cover
Abrasive Blast (SP 6)	Primer – Per Manufacturer's Recommendations	1 coat, 2.5 MDFT
	Intermediate - N/A	
	Top Coat – Aliphatic Polyurethane	1 coat, 3 MDFT

E. System No. 5: Buried Metal – General

Surface Prep.	Paint Material	Min. Coats, Cover
Abrasive Blast or Centrifugal Wheel Blast (SP 6)	Coal-Tar Epoxy -OR- Tape Coat System	AWWA C210 AWWA C214

F. System No. 6: High Temperature (150º - 275º)

Surface Prep.	Paint Material	Min. Coats, Cover
Abrasive Blast (SP 10)	Primer – Per Manufacturer's Recommendations	1 coat, 4 MDFT
	Intermediate - N/A	
	Top Coat – High Temperature Coating 150º - 275º	1 coat, 3 MDFT

G. System No. 9: Field Coating Fusion Bonded Epoxy

Surface Prep.	Paint Material	Min. Coats, Cover
Abrade fusion epoxy to dull	Primer – High Solids Epoxy	1 coat, 2.5 MDFT
	Intermediate - N/A	
	Top Coat - Aliphatic Polyurethane	1 coat, 2.5 MDFT

H. System No. 10: Galvanized Metal, Copper and Non-Ferrous Metal Alloy

Surface Prep.	Paint Material	Min. Coats, Cover
Solvent Clean (SP 1), followed by Hand Tool (SP 2) or Power Tool (SP 3)	Primer - Wash Primer or Coating Manufacturer's Recommendation.	
	Intermediate - N/A	1 coat, 3 MDFT
	Top Coat -	1 coat, 3 MDFT

I. System No. 11: Galvanized Metal Repair

Surface Prep.	Paint Material	Min. Coats, Cover
Solvent Clean (SP 1), followed by Power Tool (SP 11)	Touch-Up Primer – Organic Zinc Rich	1 coat, 3 MDFT

J. System No. 12: Skid-Resistant Aluminum and FRP

Surface Prep.	Paint Material	Min. Coats, Cover
Brush-off Blast (SP 7) or Plastic Surface Preparation	Primer - High Solids Epoxy (aggregated)	1 coat, 10 MDFT
	Intermediate - N/A	
	Top Coat - High Solids Epoxy (aggregated)	1 coat, 10 MDFT

K. System No. 13: Sliding Metal

Surface Prep.	Paint Material	Min. Coats, Cover
Solvent Clean (SP 1), followed by Hand Tool (SP 2), Power Tool (SP 3), or Brush-off Blast (SP 7)	PTFE coating	1 coat, spray

L. System No. 14: Exposed PVC

Surface Prep.	Paint Material	Min. Coats, Cover
Plastic Surface Preparation to abrade substrate	Primer – Per Manufacturer's Recommendations	1 coat, 2 MDFT
	Intermediate - N/A	
	Waterborne HDP Acrylic Polymer	1 coat, 3 MDFT

M. System No. 15: Aluminum and Dissimilar Metal Insulation

Surface Prep.	Paint Material	Min. Coats, Cover
SP 1 and SP2 Hand-Tool Clean	Primer - N/A	
	Intermediate - N/A	
	Top Coat - Coal-Tar Epoxy Substitute	1 coat, 18 MDFT

N. System No. 16: Existing Concrete/CMU Repair

1. Previously unpainted

Surface Prep.	Paint Material	Min. Coats, Cover
Clean & Dry. Spot prime area prior to full coat.	Filler – Per Manufacturer's Recommendations	1 coat, 100 sqft/gal
	Primer – Per Manufacturer's Recommendations	1 coat, 5 MDFT
	Top Coat – High Solids Epoxy	1 coat, 5 MDFT

2. Previously painted

Surface Prep.	Paint Material	Min. Coats, Cover
Clean & Dry, if previously painted, remove all loose existing coating and feather edge of tight, adhered coating. Spot prime area prior to full coat.	Primer – High Solids Epoxy	1 coat, 5 MDFT
	Intermediate – N/A	
	Top Coat – High Solids Epoxy	1 coat, 5 MDFT

O. System No. 17: New Concrete/CMU Exterior

Surface Prep.	Paint Material	Min. Coats, Cover
Clean & Dry, 14-day cure	Primer– Modified Acrylate	1 coat, 6 MDFT
	Intermediate – N/A	
	Top Coat – Modified Acrylate	1 coat, 6 MDFT

P. System No. 18: Concrete/CMU – Interior or Immersion Mildly Corrosive

Surface Prep.	Paint Material	Min. Coats, Cover
SP 13	Filler – Per Manufacturer	
	Primer – High Solids Epoxy	1 coat, 5 MDFT
	Top Coat – High Solids Epoxy	1 coat, 5 MDFT

Q. System No. 20: Skid-Resistant Concrete – Interior

Surface Prep.	Paint Material	Min. Coats, Cover
SSPC-SP13 ICRI CSP3-5	Primer - High Solids Epoxy	1 coat, 7 MDFT
	Intermediate - HS Epoxy	1 coat, 7 MDFT
	Top Coat - Aliphatic Moisture Cured Urethane	1 coat, 2.5 MDFT

R. System No. 21: Skid-Resistant Concrete – Exterior

Surface Prep.	Paint Material	Min. Coats, Cover
Clean and Dry with 28-day cure	Primer - WB Modified Epoxy	1 coat, 1 MDFT
	Intermediate - Mastic WB Acrylic	1 coat, 12 MDFT
	Finish - Aliphatic Moisture Cured Urethane	1 coat, 2.5 MDFT

S. System No. 22: Chemical-Resistant Wall – Concrete

Surface Prep.	Paint Material	Min. Coats, Cover
Clean and dry with 28-day cure SSPC-SP13 level protrusions & spatter by grinding.	Primer/Filler - Inorganic WB Epoxy	1 coat, 100 sqft/gal
	Intermediate - HS Epoxy	1 coat, 6 MDFT
	Finish - Aliphatic Polyester Urethane	1 coat, 2.5 MDFT

T. System No. 23: Plastic and Exposed FRP

Surface Prep.	Paint Material	Min. Coats, Cover
Abrade to dull substrate, Clean & Dry	Primer - HS Epoxy	1 coat, 3 MDFT
	Intermediate - N/A	
	Finish - HS Epoxy	1 coat, 3 MDFT

U. System No. 24: Interior Metal Surfaces

Surface Prep.	Paint Material	Min. Coats, Cover
SSPC-SP2 Hand Tool, SP3 Power Tool Cleaning	Primer - Modified Alkyd	1 coat, 2.5 MDFT
	Intermediate - Waterborne HDP Acrylic Polymer	1 coat, 2.5 MDFT
	Finish - WB HDP Acrylic Polymer	1 coat, 2.5 MDFT

V. System No. 25: Interior Concrete Floors

Surface Prep.	Paint Material	Min. Coats, Cover
SSPC-SP13 ICRI CSP 3 to 5	Primer - HS Epoxy	1 coat, 7 MDFT
	Intermediate - HS Epoxy	1 coat, 8 MDFT
	Finish - Aliphatic Moisture Cured Urethane	1 coat, 2.5 MDFT

W. System No. 26: Interior Concrete Walls, Ceilings, and Roof Slabs

Surface Prep.	Paint Material	Min. Coats, Cover
Clean & Dry, 7 Day Cure	Primer - Acrylic Emulsion	1 coat, 5 MDFT
	Intermediate - WB HDP Acrylic Polymer	1 coat, 2.5 MDFT
	Finish - WB HDP Acrylic Polymer	1 coat, 2.5 MDFT

X. System No. 27: Interior Wood to Receive Paint

Surface Prep.	Paint Material	Min. Coats, Cover
Clean & Dry	Primer - Modified Alkyd	1 coat, 2.5 MDFT
	Intermediate - WB HDP Acrylic	1 coat, 2.5 MDFT
	Top Coat - WB HDP Acrylic	1 coat, 2.5 MDFT

Y. System No. 28: Drywall and Gypsum

Surface Prep.	Paint Material	Min. Coats, Cover
In accordance with Drywall or Gypsum Surface Preparation	Primer - Vinyl Acrylic Sealer	1 coat, 1 MDFT
	Intermediate - WB HDP Acrylic (Semi-Gloss)	1 coat, 2.5 MDFT
	Top Coate - WB HDP Acrylic (Semi-Gloss)	1 coat, 2.5 MDFT

Z. System No. 29: Masonry Sealer

Surface Prep.	Paint Material	Min. Coats, Cover
Clean & Dry	Primer - N/A	
	Intermediate - Modified Siloxane w/Diffused Quartz Carbide	1 coat, 250 sqft/gal
	Top Coat - Modified Siloxane w/Diffused Quartz Carbide	1 coat, 300 sqft/gal

AA. System No. 30: Concrete Sealer

Surface Prep.	Paint Material	Min. Coats, Cover
Acid Etch, Clean and Dry	Primer - WB Epoxy Amine Adduct	1 coat, 3 MDFT
	Intermediate – N/A	
	Top Coat - WB Epoxy Amine Adduct	1 coat, 3 MDFT

BB. System No. 19 Concrete/CMU – Immersion Highly Corrosive
1. See Specification Section 33 01 30.82, EPOXY LINING FOR CONCRETE STRUCTURES.

3.8 SCHEDULE OF ITEMS NOT REQUIRING COATING

A. Unless specified otherwise, the following items do not require coating:
1. Items that have received final coat at factory and not listed to receive coating in field.
2. Aluminum, brass, bronze, copper, plastic (except PVC pipe), rubber, stainless steel, chrome, Everdur, or lead.
3. Buried or encased piping or conduit.
4. Exterior concrete.

5. Galvanized steel wall framing, galvanized electrical conduits, galvanized pipe trays, galvanized cable trays, and other galvanized items:
   a. Areas on galvanized items or parts where galvanizing has been damaged during handling or construction shall be repaired as follows:
      1) Clean damaged areas by SSPC SP-1, SP-2, SP-3, or SP-7 as required.
      2) Apply 2 coats of a Galvanizing Zinc Compound in strict accordance with manufacturer's instructions.
6. Grease fittings.
7. Fiberglass ducting or tanks in concealed locations.
8. Steel to be encased in concrete or masonry.

3.9 SCHEDULE OF SURFACES TO BE COATED IN THE FIELD

A. In general, apply coatings to steel, iron, galvanized surfaces, and wood surfaces unless specified or otherwise indicated on the Drawings. Coat concrete surfaces and anodized aluminum only when specified or indicated on the Drawings.

B. Following schedule is incomplete. Coat unlisted surfaces with same coating system as similar listed surfaces. Verify questionable surfaces with Engineer.

C. Metal:
   1. System 1 – Submerged Metal – General
   2. System 2 – Submerged Metal – Domestic Sewage
   3. System 3 – Exposed Metal – Highly Corrosive
   4. System 4 – Exposed Metal – Mildly Corrosive
   5. System 5 – Buried Metal – General

D. Buried, below-grade portions of steel items, except buried stainless steel or ductile iron.
   1. System 10 – Galvanized Metal, Copper, and Non-Ferrous Metal Alloy
   2. System 11 – Galvanized Metal Repair
   3. System 12 – Skid-Resistant Aluminum and FRP
   4. System 13 – Sliding Metal
   5. System 15 – Aluminum and Dissimilar Metal Insulation

E. Other Materials
   1. System 14 – Exposed PVC

F. Concrete:
   1. Gravity Sewer Manholes: System 19 – Concrete/CMU Immersion Highly Corrosive
   2. Lift Station Wet Well: System 19 – Concrete/CMU Immersion Highly Corrosive
   3. Bollards: System 17 – New Concrete/CMU Exterior
   4. CMU: System 18 – Concrete/CMU Interior or Immersion Mildly Corrosive

G. Interior Walls:
   1. System 28 – Drywall and Gypsum

END OF SECTION 09 90 00

DIVISION 10 73 00 PROTECTIVE COVER

PART 1 - GENERAL

1.1 DESCRIPTION OF PRODUCT

A. RAM 16x20 (HIP Roof RAM) with over MR.

B. ROOF SLOPE: 4:12.

C. Minimum Clearance Height (MCH): 7.5 in ft. Minimum clearance height under the structure indicates the lowest height of a member from finish grade for clearance under the structure. This is generally the clearance under roof eave or frame, whichever is lower.

1.2 REFERENCES

A. REFERENCE STANDARDS
1. AISC - American Institute of Steel Construction Manual of Steel Construction.
2. ASTM - American Society for Testing and Materials.
3. AWS - American Welding Society.
4. LEED - Leadership in Energy and Environmental Design.
5. OSHA – Occupational Safety and Health Administration Steel Erection Standard 29 CFR 1926 Subpart R-Steel Erection.
6. PCI - Powder Coating Institute.
7. SSPC – The Society for Protective Coatings.
8. Architecturally Exposed Structural Steel (AESS) - as defined by AISC.

1.3 SUBMITTALS

A. PRODUCT DESIGN REQUIREMENTS
1. The building shall meet the following design requirements as shown on the drawings:
   a. Building Code: See drawings
   b. Ground Snow Load (Pg): See drawings
   c. Basic Wind Speed (V): See drawings
   d. Seismic Design: See drawings

B. FOUNDATION DESIGN
1. The shelter shall be set on foundations designed by engineer.
2. Foundation materials shall be provided by contractor.
3. If soil data are not provided, foundations will be designed to the minimum values identified in the governing building code.

C. ANCHOR BOLTS
1. Anchor bolts shall be provided by manufacturer.
2. Hooked anchors are not permitted par AISC requirements.

D. LEED SUBMITTALS
1. LEED MR Credit 4.0: Material and Resources, Recycled Content.

1.4 QUALITY ASSURANCE

A. MANUFACTURER QUALIFICATIONS
1. Minimum of 10 years in the shelter construction industry.
2. All welders AWS Certified.
3. Controlled finishing system to include shot blast, pretreatment, primer, and top coat.

B. MANUFACTURER'S CERTIFICATIONS
   1. AISC Certified Building Fabricator, (American Institute of Steel Construction) Certified Building Fabricator is an AISC Quality Management Systems (QMS) Certification which sets the quality standard for the structural steel industry.
   2. PCI 4000 S Certified, Certification thru Powder Coating Institute for original equipment manufacturers (OEMs) to evaluate process on entire finish system to add powder coat over steel.

C. INSTALLER QUALIFICATIONS
   1. Installer shall be classified as a Certified Installer as defined and certified by the shelter manufacturer.

1.5 FIELD OR SITE CONDITIONS

A. Foundations shall be at the same elevation unless specifically noted otherwise on the drawings.

1.6 MANUFACTURER WARRANTY

A. Shelter must have a 10-year limited warranty on steel frame members.

B. Shelter must have a 10-year limited warranty on paint system.

C. Pass through warranty of Metal Roof manufacturer shall be provided upon request.

PART 2 - PRODUCTS

2.1 SHELTER SYSTEM AND MATERIALS

A. MANUFACTURERS
   1. Poligon, a Product of PorterCorp, 4240 N 136th Ave., Holland, MI 49424 or Approved Equal.
   2. The product shall be designed, produced, and finished at a facility operated and directly supervised by the supplier who has a minimum of 10 years in the business of making pre-manufactured shelters.
   3. Manufacturer must be an AISC Certified Building Fabricator.

B. SUBSTITUTION LIMITATIONS
   1. Substitutions for cause: Will only be considered when circumstances, outside of the contractor's control, will create a substantial delay in the completion of the project. Approval of substitution requests is at the discretion of the Owner and/or Engineer. Engineer will only consider contractor's request for substitution when the following conditions are satisfied:
      a. Requested substitution meets or exceeds requirements as per the Contract Documents and will produce indicated results.
      b. Requested substitution provides equal design characteristics that specified product provides.
      c. Substitution request is fully documented and properly submitted.
   2. If those conditions are not satisfied, engineer may return requests without action, except to record noncompliance with these requirements. It is required that the contractor provide the following:
      a. Documentation that the proposed substitution complies with all requirements as stated or shown in the contract documents and/or drawings.
      b. Proof of meeting or exceeding specified warranty and/or certifications. Example: Fabricator Qualifications, such as AISC or PCI 4000.

c. Detailed comparison of significant qualities of proposed substitutions with those of the specified product. Include annotated copy of applicable Specification Section. Product data, including drawings and descriptions of products and fabrication.
d. Documentation of any deviations from the specified material/product.
e. Engineer may request additional information and documentation prior to rendering a decision.
f. If substitution approval happens during bidding, Engineer will approve substitution requests by issuing an Addendum. Substitutions not approved by addendum are rejected.

2.2 PRODUCT REQUIREMENTS AND MATERIALS

A. GENERAL
1. The pre-engineered package shall be pre-cut unless otherwise noted and pre-fabricated which will include all parts necessary to field construct the shelter. The shelter shall be shipped knocked down to minimize shipping expenses. Field labor will be kept to a minimum by pre-manufactured parts. Onsite welding is not necessary.

B. REINFORCED CONCRETE
1. Concrete shall have minimum 28-day compressive strength of 3,000 psi and slump of 4" (+/- 1"), unless otherwise noted on the drawings.
2. Reinforcing shall be ASTM A615, grade 60.

C. STEEL COLUMNS
1. Hollow structural steel tube minimum ASTM A500 grade B with a minimum wall thickness of 3/16".
2. Unless columns are direct buried, columns shall be anchored directly to concrete foundation with a minimum of four anchor rods to meet OSHA requirement 1926.755(a)(1).

D. STRUCTURAL FRAMING
1. Hollow Structural Steel tube minimum ASTM500 grade B. "I" beams, tapered columns, or open channels shall not be accepted for primary beams.
2. Frame will have a STANDARD POLI-5000 finish.
3. Color chosen from manufacturer's standard color chart; textured colors not available.

E. COMPRESSION MEMBERS
1. Compression rings of structural channel or welded plate minimum ASTM A36 or compression tubes or structural steel tube minimum ASTM A500 grade B shall only be used.

F. CONNECTION REQUIREMENTS
1. Anchor bolts shall be ASTM F1554 (Grade 36) unless otherwise noted.
2. Structural fasteners shall be zinc plated ASTM A325 high strength bolts and A563 high strength nuts.
3. Structural fasteners shall be hidden within framing members wherever possible.
4. Structural fasteners shall be manufactured in the U.S.
5. No field welding shall be required to construct the shelter.
6. All welds shall be free of burrs and inconsistencies.
7. Exposed fasteners shall be powder coated by manufacturer prior to shipment to match frame or roof colors as applicable.
8. Manufacturer shall provide extra structural and roofing fasteners.

2.3 ROOFING MATERIALS

A. PRIMARY ROOF DECK: "R" PANEL METAL ROOFING (MR)

1. Roofing shall be 24-gauge ribbed galvalume steel sheets, with ribs 1 3/16”high and 12” on center.
2. Roof surface shall be painted with Kynar 500 to the manufacturer’s standard color. Ceiling surface shall be a “wash coat” primer.
3. Roof panels shall be factory precut to size and angled to provide ease of one-step installation.
4. Metal roofing trim shall match the color of the roof and shall be factory made of 26-gauge Kynar 500 painted steel.
5. Trim shall include panel ridge caps, hip caps, eave trim, splice channels, rake trim, roof peak cap, and corner trim as applicable for model selected.
6. Trim may need to be cut to length and notched. Installation drawings shall have detailed information on how to cut and affix roof trim.
7. Ridge, hip, and valley caps shall be pre-formed with a single central bend to match the roof pitch and shall be hemmed on the sides.
8. Roof peak cap shall be pre-manufactured.
9. Manufacturer shall supply painted screws and butyl tape.

2.4 FINISHES

A. STANDARD POLI-5000 FINISH
1. Steel shall be cleaned, pretreated, and finished at a facility owned and directly supervised by the manufacturer.
2. Steel shall be shot blasted to SSPC-SP10 near-white blast cleaning. SSPC-SP2 hand tool cleaning will not be an acceptable alternative.
3. Parts shall be pretreated in a (3) stage iron phosphate or equal washer.
4. Epoxy primer powder coat shall be applied to parts for superior corrosion protection.
5. Top coat of Super Durable TGIC powder coat shall be applied over the epoxy primer.
6. Finish shall not have any VOC emissions.
7. Sample production parts shall have been tested and meet the following criteria:
   a. Salt spray resistance per ASTM B 117/ ASTM D 1654 to 10,000 hours with no creep from scribe line and rating of 10.
   b. Humidity resistance per ASTM D2247-02 to 5,000 hours with no loss of adhesion or blistering.
   c. Color/UV resistance per ASTM G154-04 to 2,000 hours exposure, alternate cycles with results of no chalking, 75% color retention, color variation maximum 3.0 E variation CIE formula (before and after 2,000 hours exposure).
8. The manufacturer shall be PCI 4000 S Certified.
9. Exposed fasteners for frame and ornamentation shall be powder coated to match structure.

PART 3 - EXECUTION

3.1 INSTALLERS STORAGE AND HANDLING

A. Protect building products after arrival at destination from weather, sunlight, and damage.

B. Installer shall store product elevated to allow air circulation and to not introduce mold, fungi decay or insects to the product.

C. Product must be handled with protective straps or padded forks if lifting with mechanical equipment. Use of chain or cable to lift product into place will not be accepted and may void manufacturer’s warranty.

3.2 ERECTION

A. INSTALLATION

1. The shelter shall be erected by a Certified Installer who has a demonstrated ability to construct the shelter in the manner recommended by the shelter manufacturer.

B. GENERAL CONTRACTOR
1. Interface with other work is to be coordinated by the contractor.

C. TOLERANCES
1. Tolerances on steel structural members are set according to AISC construction practices, abided in the factory, and cannot be increased. No field slotting or opening of holes will be allowed. It is therefore essential that contractors conform to the tolerances specified on the installation drawings for anchor bolt or column layout details.

D. OSHA COMPLIANCE
1. OSHA Compliance to Steel Erection Standard 29CRF 1926 Subpart R-Steel Erection.

3.3 REPAIR

A. Do not attempt any field changes without first contacting Client or Engineer.

END OF SECTION 10 75 00

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SECTION 31 00 00 - EARTHWORK

PART 1 - GENERAL

1.1 SUMMARY

A. Perform earthwork.

B. Meet requirements for excavation safety, or to facilitate construction due to wet conditions.

C. Perform excavation regardless of type, nature, or condition of materials encountered.

D. Contractor shall make his own estimate of the type and extent of the various materials to be excavated in order to accomplish the work.

E. There will be no extra compensation for dewatering.

1.2 REFERENCES

A. All standards shall be latest version, unless otherwise specified.

B. Arkansas Department of Transportation, Standard Specifications for Highway Construction, latest edition.
   1. ARDOT Section 303 - Aggregate Base Course.

C. American Society for Testing and Materials, 1916 Race St. Philadelphia, PA 19103.
   1. ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5 lb (2.49-kg) Rammer and 12-in. (304.8-mm) Drop.
   2. ASTM D1556 - Test Method for Density of Soil in Place by the Sand-Cone Method.
   3. ASTM D1557 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 10 lb (4.54-kg) Rammer and 18-in. (457-mm) Drop.
   4. ASTM D2216 - Method for Laboratory Determination of Water (Moisture) Content of Soil, Rock, and Soil-Aggregate Mixtures.
   5. ASTM D2922 - Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
   6. ASTM D3017 - Test Method for Moisture Content of Soil and Soil-Aggregate in Place of Nuclear Methods (Shallow Depth).

D. Occupational Safety and Health Administration (OSHA) - Standard for Excavation and Trenches Safety System, 29 CFR 1926, Subpart P: Excavations.

1.3 DEFINITIONS

A. Relative Compaction:
   1. The ratio, in percent, of the as-compacted field dry density to the laboratory maximum dry density as determined by the Standard Proctor Test, ASTM D698, or as determined by the Modified Proctor Test, ASTM D1557, as applicable.
   2. Corrections for oversize material may be applied to either the as-compacted field dry density or the maximum dry density, as determined by the Engineer.

B. Optimum Moisture Content:
   1. Moisture content of the material for which the maximum dry density is obtained as determined by ASTM D698 or D1557.
   2. Field moisture contents shall be determined on the basis of the fraction passing the 3/4-inch sieve.

C. Completed Course: A course or layer that is ready for the next layer or the next phase of construction.

1.4 SUBMITTALS

A. Submit in accordance with the Front End Documents.

B. Provide the following:
1. Samples of imported material,
2. Samples of onsite material to be used as fill,
3. Certification that imported materials conform to the Specification requirements along with copies of the test results from a qualified commercial testing laboratory,
4. Proctor curves on fill material as prepared by approved laboratory.

PART 2 - EXECUTION

2.1 FILL

A. Free from roots, organic matter, trash, and debris with maximum particle size of 1-1/2 inches.

B. It is intended that structural backfill material be obtained from on site to the maximum extent possible.

2.2 IMPORTED GRANULAR FILL

A. Provide granular fill beneath structures as noted on Drawings.

B. Imported granular fill to consist of a natural or artificial mixture of gravel and soil mortar, uniformly well graded from coarse to fine.

C. Conform to the ARDOT Section 303 classifications for Class 7 as designated on the Drawings.

2.3 TOPSOIL

A. Selected topsoil at the site, properly stored and protected, free from roots, sticks, hard clay, and stones which will not pass through a 2-inch square opening.

B. Provide imported topsoil of equal quality if required to accomplish the work.

2.4 COMPACTION EQUIPMENT

A. Provide compaction equipment of suitable type and adequate to obtain the densities specified.

B. Operate compaction equipment in strict accordance with the manufacturer's instructions and recommendations.

Hand-operated equipment shall be capable of achieving the specified densities.

2.5 MOISTURE CONTROL EQUIPMENT:

A. Provide equipment for applying water of a type and quality adequate for the work; it shall not leak; and be equipped with a distributor bar or other approved device to assure uniform application.

B. Provide equipment for mixing and drying out material consisting of blades, discs, or other approved equipment.

2.6 WATER REMOVAL EQUIPMENT

A. Provide and operate equipment adequate to keep excavation and trenches free of water.

2.7 IMPORTED MATERIAL ACCEPTANCE

A. Import only if insufficient material is available on-site.

B. Locate and arrange use of a site near the construction area for obtaining borrow material.

C. Additional tests required at the borrow area:
   1. Standard Proctor,
   2. Remolded permeability,
   3. Atterberg limits.

D. Upon completion of removal of borrow material, grade the site to drain, place topsoil on disturbed areas, and establish grass.

E. Cost for testing and imported material shall be the responsibility of the Contractor.

2.8 SELECTED MATERIAL ACCEPTANCE

A. Provide samples for testing representative of the actual material to be installed in the work. Take samples from each 2,000 cubic yards of material stockpiled. Depending on the uniformity of the material, Engineer may request more frequent samples.

B. Forward test results to the Engineer at least 10 days before the material is required for use. If tests indicate that the material does not meet Specification requirements, the material shall not be installed in the work.

C. Material which is placed in the work but does not conform to the Specification requirements shall be removed and replaced at the Contractor's sole expense

PART 3 - EXECUTION

3.1 STRIPPING TOPSOIL

A. Remove existing grass and overburden before excavating topsoil.

B. Prior to beginning excavation or fill, strip the topsoil to a depth of at least 6 inches or to a depth sufficient to remove organic material and stockpile for future use.

C. In general, remove topsoil where structures are to be built, trenches dug, and roads, parking lots, walks, and similar improvements constructed within the areas presently covered with topsoil.

D. Store topsoil clear of the construction area.

   Take reasonable care to prevent the topsoil from becoming mixed with subsoil or eroding.

3.2 STRUCTURAL EXCAVATION

A. Contractor shall be solely responsible for trench and excavation safety systems in accordance with ACT 291 of 1993 and OSHA requirements.

B. Identify required lines, levels, and grades.

C. Identify known underground utilities. Contractor will be responsible for locating utilities.

D. The method of excavation is optional; however, no equipment shall be operated in a manner that will endanger existing structures and their integrity.

E. Use excavation support system such as sheet piling where ever necessary.

F. Allow for forms, working space, granular base, and finish topsoil where shown on Drawings or required.

G. Do not carry excavation for footings and slabs deeper than the elevation shown on Drawings after allowing for base material. Excavation of material to depths below the grades indicated, unless so directed by the Engineer or Owner's representative, will be deemed unauthorized excavation.

H. After required excavation, proof-roll site with minimum 20,000 lb. pneumatic-tired roller, loaded tri-axle dump truck, or similar equipment. Remove soft and organic-containing soil, miscellaneous debris, and roots. Fill and compact areas.
   1. Provide for observation of each paving area by geotechnical engineer to assess adequacy of bearing stratum. If observation indicated excessively soft and/or organic-containing soils, undercut, fill, and compact areas and/or extend footing as directed by geotechnical engineer.
   2. Unit prices, as set forth in bid form, will apply if undercutting is required. Quantities must be substantiated by geotechnical engineer. Quote cubic yard price for completed work including undercutting, fill, compaction, and concrete. Prices quoted include full compensation for labor, materials, tools, equipment, and other necessary items for complete installation.

3.3 DEWATERING EXCAVATION

A. Remove water during periods when concrete is being deposited, pipe is being laid, and placing of backfill unless water settling is required, and at other times as required for efficient and safe execution of the work.

B. Accomplish removal of groundwater in a manner that will preserve the strength of the foundation soils, will not cause instability of the excavation slopes, and will not result in damage to existing structures.

C. Where necessary to these purposes, lower the water level in advance of excavation, utilizing wells, well points, or similar methods.

D. Maintain the water level in the gravel stratum as measured in piezometers, a minimum of 3 feet below the prevailing excavation level or as needed to prevent bottom heave of the excavation.

E. Open pumping, sumps, and ditches: If these result in boils, loss of fines, softening of the ground or instability of slopes, areas shall not be accepted.

F. Install wells and well points with suitable screens and filters so that continuous pumping of fines does not occur.

G. Operate well points continuously to prevent boils and loss of consolidation.

H. Arrange discharge to facilitate collection of samples by Engineer.

I. Avoid settlement or damage to adjacent property.

J. Dispose of water in a manner that will not damage adjacent property, as approved.

3.4 GRANULAR FILL MATERIAL UNDER FACILITIES

A. Place fill granular material as specified in this Section within the influence area beneath slabs, walks, structures, roads, and parking areas, and as shown on the Drawings.

B. Do not exceed loose lifts of 6 inches.

C. Compact each lift to not less than 95% Modified Proctor Density.

D. Place and compact a 6-inch layer of granular fill to at least 95% Modified Proctor density immediately beneath spread footings, slabs on grade, or other concrete structures.

E. Moisten material as required to aid compaction (± 2% optimum moisture).

F. Place material in horizontal lifts and in a manner to avoid segregation.

G. Correct and repair subsequent damage to slabs, piping, concrete structures, facilities, or other structures caused by settlement of fill material.

3.5 BACKFILL AND STRUCTURES

A. Remove form materials and trash from excavation before placing backfill.

B. Do not operate earth-moving equipment within 5 feet of walls of concrete structures for the purpose of depositing or compacting backfill material.

C. Compact backfill adjacent to concrete walls with hand-operated tampers or similar equipment that will not damage the structure.

D. Backfill water-holding basins only after satisfactory leakage tests have been conducted.

E. Place earth fill in areas not designated to be structural fill or granular fill.

F. Deposit material in maximum 6-inch loose lifts, and compact each lift to not less than 95% Modified Proctor.

3.6 FILL NOT BENEATH STRUCTURES OR FACILITIES

A. Place earth fill to the lines and grades shown.

B. Place fill material in maximum 6-inch loose lifts and compact each lift to not less than 95% Modified Proctor.

C. Make proper allowance for topsoil where required.

3.7 MOISTURE CONTROL

A. During compacting operations, maintain optimum practicable moisture content required for compaction purposes in each lift of fill.

B. Maintain moisture content uniform throughout the lift.

C. Add water to the material at the site of excavation. Supplement, if required, by sprinkling the fill.

D. At the time of compaction, maintain the water content of the material at optimum moisture content, plus or minus 2% points, except as otherwise specified for embankments.

E. Do not attempt to compact fill material that contains excessive moisture.

F. Aerate material by blading, discing, harrowing, or other methods, to hasten the drying process.

3.8 FIELD DENSITY TESTS

A. Test Methods: ASTM D2922, D1556, D2216, and D3017.

B. Cooperate with testing work by leveling small test areas designated by the Engineer.

C. Backfill test areas.

D. Field density test shall be performed for every 3,000 cubic yards of fill material placed.

E. Engineer may order testing of lift of fill at any time, location, or elevation.

3.9 SITE GRADING

A. Perform earthwork to lines and grades as shown on Drawings with proper allowance for topsoil where specified or shown on Drawings.

B. Shape, trim, and finish slopes to conform with the lines, grades, and cross sections shown.

C. Slopes shall be free of loose exposed roots and stones exceeding 3-inch diameter.

D. Round tops of banks to circular curbs, in general, not less than a 6-foot radius.

E. Neatly and smoothly trim rounded surfaces; over-excavating and backfilling to the proper grade are not acceptable.

F. Finished site grading shall be reviewed by the Engineer.

3.10 DISPOSAL OF EXCESS EXCAVATION

A. Dispose of excess excavated materials, not required or suitable for use as backfill or fill, outside of the area of work.

B. Compact excess material as specified for fill, dress the completed disposal area to slopes no greater than 4:1 (horizontal:vertical), and slope to drain.

3.11 SETTLEMENT

A. Settlement in backfill, fill, or in structures built over the backfill or fill, that may occur within the 1-year guarantee period in the General Conditions shall be considered to be caused by improper compaction methods.

B. Restore structures damaged by settlement to original condition

END OF SECTION 31 00 00

SECTION 31 05 19.13 – GEOTEXTILES FOR EARTHWORK

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Nonwoven geotextile material.

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13 – MEASUREMENT AND PAYMENT.

1.3 REFERENCE STANDARDS

A. All standards below shall be latest version, unless otherwise specified.

B. American Association of State Highway and Transportation Officials:

C. AASHTO M288 - Standard Specification for Geotextile Specification for Highway

D. ASTM International:
   1. ASTM D4355 - Standard Test Method for Deterioration of Geotextiles by Exposure to Light, Moisture and Heat in a Xenon Arc Type Apparatus.
   2. ASTM D4491 - Standard Test Methods for Water Permeability of Geotextiles by Permittivity.
   3. ASTM D4533 - Standard Test Method for Trapezoid Tearing Strength of Geotextiles.
   4. ASTM D4632 - Standard Test Method for Grab Breaking Load and Elongation of Geotextiles.
   5. ASTM D4751 - Standard Test Method for Determining Apparent Opening Size of a Geotextile.
   6. ASTM D4833 - Standard Test Method for Index Puncture Resistance of Geomembranes and Related Products.
   7. ASTM D4873 - Standard Guide for Identification, Storage, and Handling of Geosynthetic Rolls and Samples.
   8. ASTM D4884 - Standard Test Method for Strength of Sewn or Bonded Seams of Geotextiles.
   9. ASTM D4886 - Standard Test Method for Abrasion Resistance of Geotextiles (Sand Paper/Sliding Block Method).
   10. ASTM D6524 - Standard Test Method for Measuring the Resiliency of Turf Reinforcement Mats (TRMs).
   11. ASTM D6525 - Standard Test Method for Measuring Nominal Thickness of Rolled Erosion Control Products.
   12. ASTM D6566 - Standard Test Method for Measuring Mass per Unit Area of Turf Reinforcement Mats.
   13. ASTM D6567 - Standard Test Method for Measuring the Light Penetration of a Turf Reinforcement Mat (TRM).
   14. ASTM D6575 - Standard Test Method for Determining Stiffness of Geosynthetics Used as Turf Reinforcement Mats (TRMs).
   15. ASTM D6818 - Standard Test Method for Ultimate Tensile Properties of Rolled Erosion Control Products.

1.4 SUBMITTALS

A. Submit in accordance with the Front End Documents.

B. Provide the following:
   1. Product Data: Submit manufacturer information including tensile strength, elongation, thickness, UV resistance, and other material specifications.
   2. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
   3. Manufacturer Instructions: Submit detailed instructions on installation requirements, including storage and handling procedures.

PART 2 - PRODUCTS

2.1 NONWOVEN GEOTEXTILE MATERIALS

A. The non-woven geotextile fabric shall be a 16-ounce fabric, or equal. The fabric shall be of non-woven needle punched construction and consist of long-chain polymeric filaments or fibers composed of polypropylene, polyethylene, or polyamide. The filaments and fibers shall be oriented whereby they retain their relative positions with each other and allow the passage of water as specified.

B. The fabric shall be mildew, insect and rodent resistant and shall be inert to chemicals commonly found in soil. The non-woven fabric shall conform to the physical property requirements below:

Physical Property	Test Method	Test Results
Weight	ASTM D 5261	16 oz/sy
Grab Tensile Strength	ASTM D 4632	380 lbs
Grab Elongation	ASTM D 4632	50%
Trapezoidal Tear	ASTM D 4533	140 lbs
CBR Puncture	ASTM D 6241	1,025 lbs
Permittivity	ASTM D 4491	0.7 sec^{-1}
Water Flow Rate	ASTM D 4491	50 gal/min/sf
Apparent Opening Size (AOS)	ASTM D 4751	100 US Std. Sieve
Ultraviolet Resistance, % Strength Retention	ASTM D 4355	70% @ 500 hrs

C. The non-woven geotextile fabric shall be furnished in a protective wrapping which shall protect the fabric from ultraviolet radiation and from abrasion due to shipping and handling.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Excavate aggregate materials from on-site locations indicated on the Drawings or as designated by Engineer as specified in Section 31 23 16, EXCAVATION.

3.2 INSTALLATION

A. Fabric Exposure Following Placement - Exposure of the geotextile filter fabric to the elements, particularly the sun, between lay down and cover shall be a maximum of 7 days.

B. The non-woven geotextile fabric shall be placed in the manner and at the locations shown on the Drawings or as directed by the Engineer. The surface to receive the fabric shall be prepared to a smooth condition free of obstructions, depressions, and debris. The fabric shall be placed loosely, not in a stretched condition.

C. The Contractor shall anchor the geotextile fabric at outer edges of riprap courses by embedding the fabric down, across, and up a 1-foot deep by 1 feet wide trench. The fabric shall be centered on the pipe. The anchoring trench shall be backfilled with rock material approved by Engineer. There will be no separate payment for Geotextile Fabric; it shall be subsidiary to other items.

   Where necessary, the fabric shall be placed so as to provide a minimum 24-inch overlap. The fabric shall be placed transverse to the direction of the flow with the upstream panel overlapping the downstream panel. All installations shall be subject to approval by Engineer.

D. Repairing Damaged Geotextiles:
   1. Repair torn or damaged geotextile by placing patch of same type of geotextile over damaged area a minimum of 12 inches beyond edge of damaged area and fasten as recommended by geotextile manufacturer.
   2. Remove and replace geotextile rolls which cannot be repaired.

E. Fill and Cover:
   1. Place fill to prevent tensile stress or wrinkles in geotextile.
   2. Place fill from bottom of side-slopes upward.
   3. Do not drop fill from height greater than 3 feet.

END OF SECTION 31 05 19.13

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SECTION 31 10 00 – SITE CLEARING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Excavation, grading, cutting and removal of trees, shrubs and underbrush, and the removal of any debris existing above natural ground surface and within the cleared area necessary for the construction of the improvements.

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13, MEASUREMENT AND PAYMENT.

1.3 DEFINITIONS

A. Interfering or Objectionable Material: Trash, rubbish, and junk; vegetation and other organic matter, whether alive, dead, or decaying; topsoil.

B. Clearing: Removal of interfering or objectionable material lying on or protruding above ground surface.

C. Grubbing: Removal of vegetation and other organic matter including stumps, buried logs, and roots greater than 2 inches caliper to a depth of 12 inches below subgrade.

D. Scalping: Removal of sod without removing more than upper 3 inches of topsoil.

E. Stripping: Removal of topsoil remaining after applicable scalping is completed.

F. Project Limits: Areas, as shown or specified, within which Work is to be performed.

1.4 SUBMITTALS

A. Submit in accordance with the Front End Documents.

B. Provide the following:
   1. Product Data: Submit data for herbicide. Indicate compliance with applicable codes for environmental protection.
   2. Shop Drawings: Drawings clearly showing clearing, grubbing, and stripping limits.

1.5 SCHEDULING AND SEQUENCING

A. Prepare site only after adequate erosion and sediment controls are in place. Limit areas exposed uncontrolled to erosion.

PART 2 - PRODUCTS

2.1 HERBICIDE

A. Herbicides to be used only at the direction of the Engineer and Owner. Contractor will submit data for proposed herbicide prior to any application.

PART 3 - EXECUTION

3.1 GENERAL

A. Clear, grub, and strip areas actually needed for waste disposal, borrow, or site improvements within limits shown or specified.

B. Do not injure or deface vegetation that is not designated for removal.

3.2 LIMITS

A. As follows, but not to extend beyond Project limits.
   1. Excavation, including trenches:
      a. 5 feet beyond top of cut slopes or shored walls.
      b. Not to exceed the limits of the permanent easement.
   2. Fill:
      a. Clearing and Grubbing: 5 feet beyond toe of permanent fill.
      b. Stripping and Scalping: 2 feet beyond toe of permanent fill.
   3. Structures: 15 feet outside of new structures.
   4. Roadways: Clearing, grubbing, scalping, and stripping 15 feet from centerline.
   5. Other Areas: As shown.

B. Remove rubbish, trash, and junk from entire area within Project limits.

3.3 EXAMINATION

A. It shall be the responsibility of the Contractor to examine the site carefully and make their own calculations as to costs to be incurred by reason of the requirements of this Section.

B. Verify existing plant life designated to remain is tagged or identified.

C. Identify waste area and/or salvage area for placing removed materials.

3.4 PREPARATION

A. Call Arkansas One Call at 811 or 1-800-482-8998 not less than 48 hours before performing Work.
   1. Request underground utilities to be located and marked within and surrounding construction areas.

B. The Contractor shall not remove or disturb any vegetation except that required for the execution of the work.

C. If access roads are required and not indicated on the plans, then the Contractor will be required to submit a plan for construction of access roads for review and approval by the Engineer.

3.5 CLEARING

A. Clear areas within limits shown or specified.

B. Fell trees so that they fall away from facilities and vegetation not designated for removal.

C. Cut stumps not designated for grubbing to within 6 inches of ground surface.

D. Cut off shrubs, brush, weeds, and grasses to within 2 inches of ground surface.

3.6 GRUBBING

A. Grub areas within limits shown or specified.

3.7 SCALPING

A. Do not remove sod until after clearing and grubbing is completed and resulting debris is removed.

B. Scalp areas within limits shown or specified.

3.8 STRIPPING

A. Do not remove topsoil until after scalping is completed.

B. Strip areas within limits to minimum depths shown or specified. Do not remove subsoil with topsoil.

C. Stockpile strippings, meeting requirements for topsoil, separately from other excavated material.

3.9 DISPOSAL

A. Trees, shrubs, underbrush, and debris removed will be disposed of by the Contractor in a manner approved by the Owner.

B. Clearing and Grubbing Debris:
   1. Dispose of debris.
   2. Burning of debris will not be allowed.
   3. Woody debris may be chipped. Chips may be sold to Contractor's benefit or used for landscaping as mulch or uniformly mixed with topsoil, provided that resulting mix will be fertile and not support combustion. Maximum dimensions of chipped material used shall be 1/4-inch by 2-inch. Dispose of chips that are unsaleable or unsuitable for landscaping or other uses with unchipped debris.
   4. Limit disposal of clearing and grubbing debris to locations that are approved by federal, state, and local authorities, and that will not be visible from Project.

C. Scalpings: As specified for clearing and grubbing debris.

D. Strippings:
   1. Dispose of strippings that are unsuitable for topsoil or that exceed quantity required for topsoil
   2. Stockpile topsoil in sufficient quantity to meet Project needs. Dispose of excess strippings as specified for clearing and grubbing.

END OF SECTION 31 10 00

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SECTION 31 11 00 – CLEARING AND GRUBBING

PART 1 - GENERAL

1.1 DESCRIPTION

A. Work shall consist of cutting, removing from the ground, and properly disposing of trees, stumps, hedge, brush, roots, logs, weeds, rubbish, sod refuse dumps, sawdust piles, lumbering slash, and other materials within the designated area.

B. The work shall also include selective clearing, preserving existing vegetation, scalping, and the preservation of objects designated to remain.

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13, MEASUREMENT AND PAYMENT.

1.3 DEFINITIONS

A. Objectionable Material: Trash, rubbish, and junk; vegetation and other organic matter, whether alive, dead, or decaying.

B. Clearing - The removal of all trees, brush, and other objectionable growth, and the removal and disposal of logs, rubbish piles, refuse dumps, sawdust piles, lumbering slash, and other objectionable matter from the surface of the ground in the areas shown on the plans or as designated by the Engineer.

C. Grubbing - The grubbing and removal of all stumps, objectionable material and roots greater than 2 inches caliper to a depth of 12 inches below subgrade.

D. Selective Clearing - The trimming of selected trees and shrubs, the removal from the ground and disposal of logs, root pods, brush, refuse dumps, and other undesirable debris, and the cutting, removal, and disposal of all undergrowth, stumps, and standing trees, except those trees and shrubs designated to be preserved. The selective clearing areas will be shown on the plans.

E. Scalping - Areas not classified as clearing and grubbing and that are within construction limits shall be scalped, if appropriate. Scalping shall include the removal and disposal of material such as saplings less than 4 inches in diameter measured 12 inches above the ground, logs, brush, roots, grass, residue of agricultural crops, refuse dumps, and decayed matter.

F. Clearing and Grubbing Trees - The cutting, grubbing and removal of individual, isolated trees, and stumps greater than 4 inches diameter measured 12 inches above the ground as shown on the plans or designated by the Engineer to be removed.

PART 2 - MATERIALS

2.1 GENERAL

A. Provide materials suitable and in adequate quantity required to accomplish the work of this Section.

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

A. The project site shall be cleared as defined above, except those objects designated to remain shall be carefully protected from abuse, marring, or damage during construction operations.

B. Trees shall be felled and removed in such a manner as to avoid injury to other trees or objects designated to remain. In case of injury to bark, limbs, or roots of vegetation designed to remain, the Contractor shall repair such damage by corrective pruning or other appropriate methods. Trees or other debris falling outside the construction area shall be removed and disposed of according to these specifications.

C. Holes remaining after removal of trees, stumps, etc. shall be backfilled with material approved by the Engineer and compacted as directed except in areas to be excavated. The Contractor shall complete the operation by blading, bulldozing, or other approved methods so that the site shall be free of holes, ditches, or other abrupt changes in elevations that resulted from the clearing and grubbing operations.

3.2 CLEARING AND GRUBBING

A. The site shall be cleared of stumps, brush, logs, rubbish, trees, and shrubs, with the exception of such trees, shrubs, and areas designed on the plans or by the Engineer for preservation. Grubbing will not be required in areas that will have a fill height of 3 feet or more above disturbed stumps cut within 6 inches of the natural ground. Sound stumps may be left outside the construction limits when they are severed flush with or below the natural ground, or the slope line in areas to be rounded at the top of the back slopes.

B. Merchantable timber in the clearing area shall become the property of Contractor, unless otherwise provided.

C. When perishable material is burned, it shall be under the constant care of a competent watcher. Burning shall be accomplished at such times and in such manner that the surrounding vegetation, adjacent property, or anything designated to remain on the site will not be jeopardized. Upon notice from the Engineer that meteorological conditions render burning undesirable, the Contractor shall cease all burning until notified by the Engineer that meteorological conditions are suitable for a resumption of burning operations.

D. When specified, burning will not be permitted unless the material to be burned is placed in an incineration pit and an acceptable forced are combustion device is used that will minimize the emission of smoke, fly ash, and other pollutants. This device shall be constructed so that the forced are is directed over the fire by plenums or ducts. The use of open fans or mulch blowers will not be permitted.

E. The Contractor shall comply with all Federal, State, County, and City laws, regulations, or ordinances applicable to the disposal of clearing and grubbing material. Materials and debris that cannot be burned shall be removed from the project site and disposed of at locations off the project, outside the limits of view from any public road, street, park, or other public facility. The Contractor shall make all necessary arrangements with the property owner for obtaining suitable disposal locations.

F. Disposal operations and final cleanup of the site, including seeding and stabilization, shall comply with these specification requirements. When requested by the Engineer, the Contractor shall furnish copies of all agreements with property owners.

3.3 SELECTIVE CLEARING

A. This work shall be performed in such a manner as to leave the designated areas in a park-like condition and susceptible to economical mowing. Disposal of all material shall comply with the methods set out in the Clearing and Grubbing requirements.

B. Stumps, trees, and shrubs, except those designated to be preserved, shall be severed flush with or below the ground.

Movement and operation of equipment shall be such that roots, branches, and trunks of trees and shrubs selected for retention will not be scarred, broken, or otherwise damaged to the extent that the life of the plant is endangered.

3.4 SCALPING

A. The Contractor shall scalp areas where excavation or embankment is to be made, except that mowed sod need not be removed where the embankment to be constructed is more than 3 feet in height.

B. All suitable material resulting from the scalping operation shall be placed on finished slopes, adjacent to the area from which it is obtained, after excavation or embankment operations are complete.

3.5 DISPOSAL

A. Trees, shrubs, underbrush, and debris removed will be disposed of by the Contractor in a manner approved by the Owner.

B. Clearing and Grubbing Debris:
   1. Dispose of debris.
   2. Burning of debris will not be allowed.
   3. Woody debris may be chipped. Chips may be sold to Contractor's benefit or used for landscaping as mulch or uniformly mixed with topsoil, provided that resulting mix will be fertile and not support combustion. Maximum dimensions of chipped material used shall be 1/4-inch by 2-inch. Dispose of chips that are unsaleable or unsuitable for landscaping or other uses with unchipped debris.
   4. Limit disposal of clearing and grubbing debris to locations that are approved by federal, state, and local authorities, and that will not be visible from Project.

END OF SECTION 31 11 00

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SECTION 31 22 13 – ROUGH GRADING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
1. Removal and storage of topsoil.
2. Rough grading the site for site structures, building pads, and drive and parking isles.
3. Finish grading for planting.

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13, MEASUREMENT AND PAYMENT.

1.3 REFERENCE STANDARDS

A. All standards below shall be latest version, unless otherwise specified.

B. American Association of State Highway and Transportation Officials:
1. AASHTO T180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.

C. ASTM International:
1. ASTM C136 - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
2. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3).
3. ASTM D1556 - Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method.
4. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3).
5. ASTM D2167 - Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
6. ASTM D2419 - Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregate.
7. ASTM D2434 - Standard Test Method for Permeability of Granular Soils (Constant Head).
8. ASTM D2922 - Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
9. ASTM D3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).

1.4 SUBMITTALS

A. Submit in accordance with the Front End Documents.

B. Provide the following:
1. Samples: If requested by Owner or Engineer, submit, in air-tight containers, a 10 lb. sample of each type of fill to the testing laboratory.
2. Materials Source: Submit name of imported materials suppliers.
3. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Topsoil: Shall be soil suitable for sustaining grass and vegetation and shall not have any particles larger than 3/4-inch in diameter and shall be free of any trash, debris, or deleterious material.

B. Other Fill Materials: See Section 31 23 23.13, FILL AND BACKFILL.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify survey bench mark and intended elevations for the Work are as indicated on Drawings.

3.2 PREPARATION

A. Call Arkansas One Call at 811 or 1-800-482-8998 not less than 48 hours before performing Work.
   1. Request underground utilities to be located and marked within and surrounding construction areas.

B. Identify required lines, levels, contours, and datum.

C. Stake and flag locations of known utilities.

D. Locate, identify, and protect utilities that remain from damage.

E. Notify utility company to remove and relocate utilities.

F. Protect utilities indicated to remain from damage.

G. Protect plant life, lawns and other features remaining as portion of final landscaping.

H. Protect bench marks, survey control point, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.

3.3 ROUGH GRADING

A. Remove topsoil from areas to be further excavated, re-landscaped, or re-graded without mixing with foreign materials.

B. Do not remove topsoil when wet.

C. Remove subsoil from areas to be further excavated, re-landscaped, or re-graded.

D. Do not remove wet subsoil, unless it is subsequently processed to obtain optimum moisture content.

E. When excavating through roots, perform work by hand and cut roots with sharp axe.

F. Stability: Replace damaged or displaced subsoil to same requirements as for specified fill.

3.4 SOIL REMOVAL

A. Stockpile excavated topsoil on site.

B. Stockpile excavated subsoil on site.

C. Stockpiles: Use areas designated on site; pile depth not to exceed 8 feet; protect from erosion.

3.5 TOLERANCES

A. Top Surface of Subgrade: Plus or minus 1/10-foot from required elevation.

B. Top Surface of Finish Grade: Plus or minus 1/2-inch.

3.6 TESTING

A. See Section 31 23 23.13, FILL AND BACKFILL for compaction density testing.

3.7 CLEANING AND PROTECTION

A. Protect above – and below – grade utilities that remain.

B. Protect plants, lawns, rock outcroppings, and other features to remain as a portion of final landscaping.

C. Protect bench marks, survey control points, existing structures, fences, sidewalks, paving and curbs from grading equipment and vehicular traffic.

D. Remove unused stockpiled topsoil and subsoil. Grade stockpile area to prevent standing water.

E. Leave site clean and raked, ready to receive landscaping.

END OF SECTION 31 22 13

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SECTION 31 23 13 – SUBGRADE PREPARATION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Work and testing required for preparing subgrade.

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13, MEASUREMENT AND PAYMENT.

1.3 REFERENCE STANDARDS

A. All standards below shall be latest version, unless otherwise specified.

B. ASTM International:
   1. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3)
   2. ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3)

1.4 GEOTECHNICAL REPORT

A. Where a geotechnical report has been prepared for the project, follow all recommendations and procedures.

1.5 DEFINITIONS

A. Prepared Ground Surface: Ground surface after completion of clearing and grubbing, scalping of sod, stripping of topsoil, excavation to grade, and scarification and compaction of subgrade.

B. Subgrade: Layer of existing soil after completion of clearing, grubbing, scalping of topsoil prior to placement of fill, roadway structure or base for floor slab.

1.6 ENVIRONMENTAL REQUIREMENTS

A. Prepare subgrade when unfrozen and free of ice and snow.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.1 GENERAL

A. Keep subgrade free of water, debris, and foreign matter during compaction or proof-rolling.

B. Bring subgrade to proper grade and cross-section and uniformly compact surface.

C. Do not use sections of prepared ground surface as haul roads. Protect prepared from traffic.

D. Maintain prepared ground surface in finished condition until next course is placed.

3.2 MOISTURE CONDITIONING

A. Dry Subgrade: Add water, then mix to make moisture content uniform throughout.

B. Wet Subgrade: Aerate material by blading, discing, harrowing, or other methods, to hasten drying process.

3.3 SUBGRADE PREPARATION FOR STRUCTURES

A. The excavation for all structures and facilities shall be in dewatered, firm, undisturbed earth. Excavation shall extend down to the levels required to construct the facilities.

B. Once all low areas are filled in, the exposed subgrade is to be scarified to a depth of 8 inches and have its moisture content adjusted and be recompacted to the limits listed below.
   1. For soils having a plasticity index (PI) of 15 or less, recompact to a minimum of 95% of maximum density as defined by ASTM D698 at a moisture content within ± 3% of the optimum moisture content.
   2. For soils having a PI between 16 and 25, recompact to a minimum of 95% of maximum density as defined by ASTM D698 at a moisture content ranging from -1% to 5% of the optimum moisture content.
   3. For soils having a PI greater than 25, recompact to between 95% and 100% of maximum density as defined by ASTM D698 at a moisture content ranging from 1% to 6% above the optimum moisture content.

C. After an acceptable subbase has been prepared, it is to be covered by a 3-inch concrete mud slab within 24 hours of establishing the acceptable subbase. If rain occurs prior to the mud slab being placed, the subbase shall be dried to the moisture contents listed above and recompacted as required.

D. The mud slab is to be constructed of minimum f'c = 3000 psi concrete. The mud slab is to be sloped at a minimum grade of 1% to one or more collection points where rainwater runoff is to be collected and pumped out of the excavation.

E. Any disturbance of the accepted subbase prior to the installation of the mud slab must be remediated by removing the disturbed area and filling with select fill as described in this section.

3.4 TESTING

A. Test roll subgrade as specified in the latest edition, including supplements of the Arkansas Department of Transportation Standard Specifications for Highway Construction, latest edition, to detect soft or loose subgrade or unsuitable material, as determined by Engineer.

3.5 CORRECTION

A. Soft or Loose Subgrade:
   1. Adjust moisture content and recompact, or
   2. Over excavate as specified in Section 31 23 16, EXCAVATION, and replace with suitable material from the excavation, as specified in Section 31 23 23.13, FILL AND BACKFILL.

END OF SECTION 31 22 13

SECTION 31 23 16 – EXCAVATION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Work and materials associated with excavation.

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13, MEASUREMENT AND PAYMENT.

1.3 SUBMITTALS

A. Submit in accordance with the Front End Documents.

B. Provide the following:
   1. Excavation Plan, Detailing:
      a. Methods and sequencing of excavation,
      b. Proposed locations of stockpiled excavated material,
      c. Proposed and spoil disposal sites,
      d. Numbers, types, and sizes of equipment proposed to perform excavations.

1.4 QUALITY ASSURANCE

A. Provide adequate survey control to avoid unauthorized over-excavation.

1.5 WEATHER LIMITATIONS

A. Material excavated when frozen or when air temperature is less than 32 degrees F shall not be used as fill or backfill until material completely thaws.

B. Material excavated during inclement weather shall not be used as fill or backfill until after material drains and dries sufficiently for proper compaction.

1.6 SAFETY

A. The Contractor shall protect excavation in accordance with OSHA Excavation Standard, 29 CFR 1926, Subpart P to protect the labor, the work, or adjacent property. Trench protection shall be maintained in place until the backfill has proceeded to a point where it can be safely removed.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.1 GENERAL

A. Excavate to lines, grades, and dimensions shown and as necessary to accomplish Work. Excavate to within tolerance of plus or minus 0.1-foot except where dimensions or grades are shown or specified as maximum or minimum. Allow for forms, working space, granular base, topsoil, and similar items, wherever applicable. Trim to neat lines where concrete is to be deposited against earth.

B. Do not over excavate without written authorization of Engineer.

3.2 ROCK REMOVAL

A. As specified in Section 31 23 16.26, ROCK REMOVAL.

3.3 STOCKPILING EXCAVATED MATERIAL

A. Stockpile excavated material that is suitable for use as fill or backfill until material is needed.

B. Post signs indicating proposed use of material stockpiled. Post signs that are readable from all directions of approach to each stockpile. Signs should be clearly worded and readable by equipment operators from their normal seated position.

C. Confine stockpiles to within easements, rights-of-way, and approved work areas. Do not obstruct roads or streets.

D. Do not stockpile excavated material adjacent to trenches and other excavations unless excavation side slopes and excavation support systems are designed, constructed, and maintained for stockpile loads.

E. Do not stockpile excavated materials near or over existing facilities, adjacent property, or completed Work.

3.4 DISPOSAL OF SPOIL

A. Dispose of excavated materials, which are unsuitable or exceed quantity needed for fill or backfill,

B. Dispose of debris resulting from removal of underground facilities as specified in Section 02 41 00, DEMOLITION, for demolition debris.

C. Dispose of debris resulting from removal of organic matter, trash, refuse, and junk as specified in Section 31 11 00, CLEARING AND GRUBBING, for clearing and grubbing debris.

END OF SECTION 31 23 16

SECTION 31 23 16.13 – TRENCHING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Trenching for utilities.

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13, MEASUREMENT AND PAYMENT.

1.3 DEFINITIONS

A. Subgrade Elevations: 4 inches below finish grade elevations indicated on drawings, unless otherwise indicated.

B. Finish Grade Elevations: 4 inches above subgrade elevations indicated on drawings, unless otherwise indicated.

1.4 QUALITY ASSURANCE

A. Verify that survey bench marks and intended elevations for the work are as indicated.

PART 2 - PRODUCTS

2.1 FILL MATERIALS

A. As specified in Section 31 23 23.13, FILL AND BACKFILL.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Identify required lines, levels, contours, and datum locations.

B. Locate, identify, and protect utilities that remain and protect from damage.

C. Notify utility company to remove and relocate utilities.

D. See Section 31 22 13, ROUGH GRADING, for additional requirements.

3.2 PREPARATION

A. Water Control: Conform to Section 31 23 19, DEWATERING.

3.3 TRENCHING

A. Notify Owner's Representative of unexpected subsurface conditions and discontinue affected Work in areas until notified to resume work.

B. All trenching shall be carried accurately to the line and grade shown on the Drawings and as established by the Engineer.

C. The Contractor shall protect trench excavation in accordance with OSHA Excavation Standard, 29 CFR 1926, Subpart P to protect the labor, the work, or adjacent property. Trench protection shall be maintained in place until the backfill has proceeded to a point where it can be safely removed.

D. Do not interfere with 45 degree bearing splay of foundations.

E. Cut trenches wide enough to allow inspection of installed utilities.

F. Hand trim excavations. Remove loose matter.

G. Remove excavated material that is unsuitable for re-use from site.

H. Remove excess excavated material from site. Disposal of excess material shall only be allowed on private property with written permission of the owner of the property. A copy of the written permission must be forwarded to the Engineer along with any permits as may be required by the governing authority, city or county.

I. During excavation, where pipe is to be replaced, it shall be removed and disposed of offsite at a suitable landfill.

J. Trench excavation shall be kept within the maximum width limits as shown on the Drawings. The specified maximum trench width from the bottom of the trench to 24 inches above the outside top of the pipe shall not be exceeded unless specifically authorized by the Engineer.

K. Do not advance trench excavation more than 300 feet ahead of the completed pipe work and backfill.

3.4 ROCK REMOVAL

A. Refer to Section 31 23 16.26, ROCK REMOVAL.

3.5 OVER EXCAVATION

A. Over excavate soft areas of subgrade below the required subgrade only under the conditions as listed below.
   1. Unauthorized Over-excavation: Either trench stabilization material or granular pipe bedding material, as specified in Section 31 23 23.16, TRENCH BACKFILL at the Contractors expense.
   2. Authorized Over-excavation: Trench stabilization material, as specified in Section 31 23 23.16, TRENCH BACKFILL.

B. After over excavating, provide and install stabilization material tamped into place in a maximum of 8-inch lifts up to an elevation sufficient to prepare the subgrade for the particular bedding class required.

3.6 PREPARATION FOR UTILITY PLACEMENT

A. Until ready to backfill, maintain excavations and prevent loose soil from falling into excavation.

3.7 CLEAN-UP

A. Leave unused materials in a neat compact stockpile.

B. Remove unused stockpiled material, leave area in a clean and neat condition. Grade stockpile areas to prevent standing surface water.

C. Leave borrow areas in a clean and neat condition. Grade to prevent standing surface water.

END OF SECTION 31 23 16.13

SECTION 31 23 16.26 – ROCK REMOVAL

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Removing identified and discovered rock during excavation.
   2. Expansive tools to assist rock removal.

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13 – MEASUREMENT AND PAYMENT

1.3 DEFINITIONS

A. Rock excavation is defined as igneous, metamorphic, or sedimentary rock that cannot be removed by a Caterpillar D-8 Dozer with single tooth ripper (mass grading), a Caterpillar 330B tracked excavator equipped with rock teeth (utility trenches) or equipment of similar power and capability.

1.4 SCHEDULING

A. Schedule Work to avoid disruption to occupied buildings and businesses nearby.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Mechanical Disintegration Compound: Grout mix of materials that expand on curing.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify site conditions and note subsurface irregularities affecting Work of this section.

3.2 PREPARATION

A. Identify required lines, levels, contours, and datum.

3.3 ROCK REMOVAL BY MECHANICAL METHODS

A. Excavate and remove rock by mechanical method.
   1. Drill holes and use expansive tools, wedges and/or mechanical disintegration compound to fracture rock.
   2. Breakers, referred to as “hoe rams” or “hammers” may be used.

B. Cut and/or break away rock at bottom of excavation to form level bearing surface.

C. Remove shaled layers to provide sound and unshattered base for footings, foundations or utility trenches.

D. In utility trenches, excavate to 6 inches below invert elevation of pipe and 24 inches wider than pipe diameter.

E. Remove excavated materials from site.

F. Correct unauthorized rock removal as directed by Engineer.

3.4 EXPLOSIVES

A. Not permitted.

3.5 FIELD QUALITY CONTROL

A. Request visual inspection of foundation bearing surfaces by Engineer before installing subsequent work.

END OF SECTION 31 23 16.26

SECTION 31 23 19 – DEWATERING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Requirements for temporary dewatering systems to be employed during construction to keep excavations and trenches free of water to facilitate construction activities. Dewatering systems shall be provided where necessary to complete the construction safely and efficiently.

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13 – MEASUREMENT AND PAYMENT.

1.3 SUBMITTALS

A. Submit in accordance with the Front End Documents.

B. Provide the following:
   1. WATER CONTROL PLAN
      a. Descriptions of proposed groundwater and surface water control facilities including, but not limited to, equipment; pump size; pump rates; methods; standby equipment and power supply, pollution control facilities, discharge locations to be utilized, and provisions for immediate temporary water supply as required by this section.
      b. Drawings showing locations, dimensions, and relationships of elements of dewatering system.
   2. If system is modified during installation or operation revise or amend and resubmit Water Control Plan.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.1 GENERAL

A. Remove and control surface and subsurface water during periods when necessary to properly accomplish Work.

3.2 SURFACE WATER CONTROL

A. Water removed from open pits and/or trenches shall have silt removed prior to leaving the immediate site of construction. Silt shall be removed by natural vegetation, a straw bale trench dewatering inlet device, settling pond, filter bag, a rock/geotextile fabric sediment trap/basin, or other appropriate sediment control measure. Water filtered through a basin shall not violate any water quality standard and shall have efficient sediment/silt removal prior to discharging to a waterbody.

B. Remove surface runoff controls when no longer needed.

3.3 DEWATERING SYSTEMS - STRUCTURES

A. Provide, operate, and maintain dewatering systems of sufficient size and capacity to permit excavation and subsequent construction in dry conditions and to lower and maintain groundwater level a minimum of 2 feet below the lowest point of excavation. Continuously maintain excavations free of water, regardless of source, and until backfilled to final grade.

B. Design and Operate Dewatering Systems:
   1. To prevent loss of ground as water is removed.
   2. To avoid inducing settlement or damage to existing facilities, completed Work, or adjacent property.
   3. To relieve artesian pressures and resultant uplift of excavation bottom.
   4. Prevent softening, loosening or otherwise disturbing the excavation subgrade.

C. Provide sufficient redundancy in each system to keep excavation free of water in event of component failure.

D. Provide supplemental ditches and sumps only as necessary to collect water from local seeps.

3.4 DEWATERING SYSTEMS - TRENCHING

A. Provide, operate, and maintain dewatering systems of sufficient size and capacity to permit excavation and subsequent construction in dry condition.

B. Continuously maintain excavations free of water, regardless of source, and until backfilled to final grade.

C. **Groundwater shall not be visible above the trench foundation before placing the bedding.** The foundation is the in-situ material beneath the pipe.
   1. If visible water is observed, pipe installation shall be stopped until the water has been removed to provide a sufficiently dry condition.

D. Design and Operate Dewatering Systems:
   1. To prevent loss of ground as water is removed.
   2. To avoid inducing settlement or damage to existing facilities, completed Work, or adjacent property.
   3. To relieve artesian pressures and resultant uplift of excavation bottom.
   4. Prevent softening, loosening or otherwise disturbing the excavation subgrade.

E. Provide sufficient redundancy in each system to keep excavation free of water in event of component failure.

F. Provide supplemental ditches and sumps only as necessary to collect water from local seeps.

3.5 DISPOSAL OF WATER

A. Obtain discharge permit for water disposal from authorities having jurisdiction.

B. Treat water collected by dewatering operations, as required by regulatory agencies, prior to discharge.

C. Discharge water as required by the SWPPP or discharge permit and in a manner that will not cause erosion or flooding, or otherwise damage existing facilities, completed Work, or adjacent property.

D. The discharge of ground water into treatment facilities will not be permitted unless specifically authorized by the Owner. Remove solids from treatment facilities and perform other maintenance of treatment facilities as necessary to maintain their efficiency, if Owner allows groundwater discharge into facilities.

3.6 PROTECTION OF PROPERTY

A. Make assessment of potential for dewatering induced settlement. Provide and operate devices or systems, including but not limited to reinjection wells, infiltration trenches and cutoff walls, necessary to prevent damage to existing facilities, completed Work, and adjacent property.

B. Securely support existing facilities, completed Work, and adjacent property vulnerable to settlement due to dewatering operations. Support shall include, but not be limited to, sheeting bracing, underpinning, or compaction grouting.

3.7 REMEDIATION OF GROUNDWATER AFTER DEPLETION

A. If dewatering reduces quantity or quality of water produced by existing wells, temporarily supply water to affected well owners from other sources. Furnish water of a quality and quantity equal to or exceeding the quality and quantity available to the well owner prior to beginning Work or as satisfactory to each well owner.

3.8 SYSTEM REMOVAL

A. Remove dewatering system from Project site on completion of dewatering in conformance with regulatory requirements. Plug or fill well holes with grout, flowable fill, or cellular concrete fill. Cut off and cap wells a minimum of 5 feet below overlying construction.

END OF SECTION 31 23 19

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SECTION 31 23 23.13 – FILL AND BACKFILL

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes: Work and materials required for fill and backfill for all excavations other than trench type excavations.

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13, MEASUREMENT AND PAYMENT

1.3 REFERENCES

A. All standards below shall be latest version, unless otherwise specified.

B. American Society for Testing and Materials (ASTM):
1. ASTM C117 - Standard Test Method for Materials Finer Than 75-µm (No. 200) Sieve in Mineral Aggregates by Washing.
2. ASTM C136 - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
3. ASTM D75 - Standard Practice for Sampling Aggregates.
4. ASTM D698 - Standard Test Methods for Laboratory Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft^3).
5. ASTM D1556 - Standard Test Method for Density of Soil in Place by the Sand Cone Method.
6. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft^3)
7. ASTM D6938 - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).
8. ASTM D4253 - Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table.
9. ASTM D4254 - Standard Test Methods for Minimum Index Density and Unit Weight of Soils and Calculation of Relative Density.

C. Arkansas Department of Transportation
1. Arkansas Department of Transportation Standard Specifications for Highway Construction, latest edition.

1.4 DEFINITIONS

A. Relative Compaction:
1. Ratio, in percent, of as-compacted field dry density to laboratory maximum dry density as determined in accordance with ASTM D1557.
2. Apply corrections for oversize material to either as-compacted field dry density or maximum dry density, as determined by Engineer.

B. Optimum Moisture Content:
1. Determined in accordance with ASTM D1557 specified to maximum dry density for relative compaction.
2. Determine field moisture content on basis of fraction passing 3/4-inch sieve.

C. Relative Density: Calculated in accordance with ASTM D4254 based on maximum index density determined in accordance with ASTM D4253 and minimum index density determined in accordance with ASTM D4254.

D. Prepared Ground Surface: Ground surface after completion of required demolition, clearing and grubbing, scalping of sod, stripping of topsoil, excavation to grade, and preparation.

E. Completed Course: A course or layer that is ready for next layer or next phase of Work.

F. Lift: Loose (uncompacted) layer of material.

G. Geosynthetics: Geotextiles, geogrids, or geomembranes.

H. Well-Graded:
1. A mixture of particle sizes with no specific concentration or lack thereof of one or more sizes.
2. Does not define numerical value that must be placed on coefficient of uniformity, coefficient of curvature, or other specific grain size distribution parameters.
3. Used to define material type that, when compacted, produces a strong and relatively incompressible soil mass free from detrimental voids.

I. Influence Area: Area within planes sloped downward and outward at 60-degree angle from horizontal measured from:
1. 1-foot outside outermost edge at base of foundations or slabs.
2. 1-foot outside outermost edge at surface of roadways or shoulder.
3. 0.5-foot outside exterior at spring line of pipes or culverts.

J. Borrow Material: Material from required excavations or from designated borrow areas on or near site.

K. Selected Backfill Material/Earthfill: Materials available onsite that Engineer determines to be suitable for specific use.

L. Imported Material: Materials obtained from sources suitable for specified use.

M. Structural Fill: Fill materials as required under structures, pavements, and other facilities.

N. Embankment Material: Fill materials required to raise existing grade in areas other than under structures.

O. Standard Specifications: When referenced in this section, shall mean the latest edition of the Arkansas Department of Transportation Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges**.**

PART 2 - PRODUCTS

2.1 SOURCE QUALITY CONTROL

A. Gradation Tests: It will be the Contractor’s responsibility to conduct testing as necessary to locate acceptable sources of imported material.

2.2 EARTHFILL

A. Excavated material from required excavations, free from rocks larger than 3 inches, from roots and other organic matter, ashes, cinders, trash, debris, and other deleterious materials.

B. Earthfill shall not be used beneath any slab-on-grade or equipment pad. Use granular fill, as defined below.

2.3 GRANULAR FILL

A. Class 7 material conforming to the Arkansas Department of Transportation Standard Specifications for Highway Construction, latest edition.

2.4 GRANULAR DRAINAGE

A. ASTM D448/C33 Gradation No. 67.

2.5 SELECT FILL

A. Imported soils, locally available reddish-brown silty or clayey chert gravel meeting Unified Soils Classification as a GC or GM material and having a Plasticity Index of 35 or less, a Liquid Limit of 55 or less, a minimum of 30% retained on the 3/4-inch sieve and a maximum of 35% passing the No. 200 sieve. Any material, included on-site material, to be used as select fill shall be reviewed and approved by the Engineer.

2.6 FLOWABLE FILL

A. As specified in Section 31 23 23.33, FLOWABLE FILL.

2.7 WATER FOR MOISTURE CONDITIONING

A. Free of hazardous or toxic contaminates, or contaminants deleterious to proper compaction.

2.8 BASE COURSE ROCK

A. As specified in Section 32 11 00, BASE COURSE.

2.9 FOUNDATION STABILIZATION ROCK

A. Crushed rock or pit run rock.

B. Uniformly graded from coarse to fine.

C. Free from excessive dirt and other organic material.

D. Maximum 2-1/2 inches particle size.

PART 3 - EXECUTION

3.1 GENERAL

A. Keep placement surfaces free of water, debris, and foreign material during placement and compaction of fill and backfill materials.

B. Place and spread fill and backfill materials in horizontal lifts of uniform thickness, in a manner that avoids segregation, and compact each lift to specified densities prior to placing succeeding lifts. Slope lifts only where necessary to conform to final grades or as necessary to keep placement surfaces drained of water.

C. During filling and backfilling, keep level of fill and backfill around each structure and buried tank even.

D. Do not place fill or backfill, if fill or backfill material is frozen, or if surface upon which fill or backfill is to be placed is frozen.

E. If pipe, conduit, duct bank, or cable is to be laid within fill or backfill:
   1. Fill or backfill to an elevation 2 feet above top of item to be laid.
   2. Excavate trench for installation of item.
   3. Install bedding, if applicable, as specified in Section 31 23 23.16, TRENCH BACKFILL.
   4. Install item.
   5. Backfill embedment pipe zone and remaining trench, as specified in Section 31 23 23.16, TRENCH BACKFILL, before resuming filling or backfilling specified in this section.

F. Tolerances:
   1. Final Lines and Grades: Within a tolerance of 0.1-foot unless dimensions or grades are shown or specified otherwise.
   2. Grade to establish and maintain slopes and drainage as shown. Reverse slopes are not permitted.

G. Settlement: Correct and repair any subsequent damage to structures, pavements, curbs, slabs, piping, and other facilities, caused by settlement of fill or backfill material.

H. Fill and backfill materials shall be conditioned to a water content that is within 2% points (plus or minus) of the optimum required for compaction as determined by ASTM D1557.

3.2 BACKFILL UNDER AND AROUND STRUCTURES

A. Under Facilities: Within influence area beneath structures, slabs, pavements, curbs, piping, conduits, duct banks, and other facilities, backfill with granular fill, unless otherwise shown. Place granular fill in lifts of 6-inch maximum thickness and compact each lift to minimum of 98% of its maximum dry density as determined by ASTM D1557 (modified proctor).

B. Subsurface Drainage: Backfill with granular drainage material, where shown on drawings. Place granular drain material in lifts of 6-inch maximum thickness and compact each lift to minimum of 90% of its maximum dry density as determined by ASTM D1557 (modified proctor).

C. Other Areas: Backfill with earthfill to lines and grades shown, with proper allowance for topsoil thickness where shown. Place in lifts of 6-inch maximum thickness and compact each lift to minimum of 95% of its maximum dry density as determined by ASTM D1557 (modified proctor).

3.3 FILL

A. Outside Influence Areas Beneath Structures, Tanks, Pavements, Curbs, Slabs, and Other Facilities: Unless otherwise shown, place earthfill as follows:
   1. Allow for 4-inch thickness of topsoil where required.
   2. Maximum 8-inch-thick lifts.
   3. Place and compact fill across full width of embankment.
   4. Compact to minimum of 98% of its maximum dry density as determined by ASTM D1557 (modified proctor).
   5. Dress completed embankment with allowance for topsoil, crest surfacing, and slope protection, where applicable.

3.4 SITE TESTING

A. Gradation:
   1. One sample from each 400 tons of finished product or more often as determined by Engineer, if variation in gradation is occurring, or if material appears to depart from Specifications.
   2. If test results indicate material does not meet Specification requirements, terminate material placement until corrective measures are taken.
   3. Remove material placed in Work that does not meet Specification requirements.

B. In-Place Density Tests: In accordance with ASTM D1556, or ASTM D6938. During placement of materials, test as follows:
   1. 1 test per every other lift per 200 lineal feet of roadway or trench.
   2. A minimum of 2 tests on granular fill beneath structures.
   3. A minimum of 2 test per 300 cubic yards during backfilling of walls.

C. Testing shall be the Contractor's responsibility and conducted by persons experienced in such work.

3.5 GRANULAR BASE, SUBBASE, AND SURFACING

A. Place and Compact as specified in Section 32 11 00, BASE COURSE.

3.6 REPLACING OVER EXCAVATED MATERIAL,

A. Replace excavation carried below grade lines shown or established by Engineer as follows:
   1. Beneath Footings: Concrete of strength equal to that of respective footing.
   2. Beneath Fill or Backfill: Same material as specified for overlying fill or backfill.
   3. Beneath Slabs-On-Grade: Granular fill.
   4. Trenches:
      a. Unauthorized Over-excavation: Either trench stabilization material or granular pipe bedding material, as specified in Section 31 23 23.16, TRENCH BACKFILL.
      b. Authorized Over-excavation: Trench stabilization material, as specified in Section 31 23 23.16, TRENCH BACKFILL.
   5. Permanent Cut Slopes (Where Overlying Area is Not to Receive Fill or Backfill):
      a. Flat to Moderate Steep Slopes (3:1, Horizontal Run: Vertical Rise or Flatter): Earthfill.
      b. Steep Slopes (Steeper than 3:1):
      c. Correct over-excavation by transitioning between areas and designed slope adjoining areas, provided such cutting does not extend offsite or outside easements and right-of-ways, or adversely impacts existing facilities, adjacent property, or completed Work.
      d. Backfilling over excavated areas is prohibited unless, in opinion, backfill will remain stable, and over excavated material is replaced as compacted earthfill.

END OF SECTION 31 23 23.13

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SECTION 31 23 23.16 – TRENCH BACKFILL

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes: Bedding, backfill, and other related materials required to install a buried pipe or conduit.

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13, MEASUREMENT AND PAYMENT

1.3 REFERENCES

A. All standards below shall be latest version, unless otherwise specified.

B. American National Standards Institute (ANSI): 253.1 Safety Color Code.

C. American Public Works Association (APWA): Uniform Color Code for Temporary Marking of Underground Utility Locations.

D. American Society for Testing and Materials (ASTM):
1. ASTM D448 - Standard Classification for Sizes of Aggregate for Road and Bridge Construction.
2. ASTM C94 - Specification for Ready-Mixed Concrete.
3. ASTM C117 - Standard Test Method for Materials Finer than 75 micrometer (No. 200) Sieve in Mineral Aggregates by Washing.
4. ASTM C136 - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
5. ASTM C150 - Standard Specification for Portland Cement.
6. ASTM C618 - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete.
7. ASTM D422 - Standard Test Method for Particle-Size Analysis of Soils.
8. ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil using Standard Effort (12,400 ft-lbf/cubic ft).
9. ASTM D1140 - Standard Test Methods for Amount of Material in Soils Finer than the No. 200 (75 micrometer) Sieve.
10. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil using Modified Effort (56,000 ft-lbf).
11. ASTM D3776 - Standard Test Methods for Mass per Unit Area (Weight) of Fabric.
12. ASTM D3786 - Standard Test Method for Bursting Strength of Textile Fabrics: Diaphragm Bursting Strength Tester Method.
13. ASTM D4253 - Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table.
14. ASTM D4254 - Standard Test Methods for Minimum Index Density and Unit Weight of Soils and Calculation of Relative Density.
15. ASTM D4318 - Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
16. ASTM D4533 - Standard Test Method for Trapezoid Tearing Strength of Geotextiles.
17. ASTM D4832 - Standard Test Method for Preparation and Testing of Controlled Low Strength Material (CLSM) Test Cylinders.
18. ASTM D4991 - Standard Test Method for Leakage Testing of Empty Rigid Containers by Vacuum Method.
19. ASTM D5034 - Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test).

1.4 DEFINITIONS

A. Foundation: In-situ material at the bottom of the trench (undisturbed).

B. Prepared Trench Bottom: Graded trench bottom after stabilization and installation of bedding material.

C. Bedding: Granular material upon which manhole bases, structures, pipes, conduits, cables, or duct banks are placed.

D. Embedment: Material placed to support the load on the pipe

E. Backfill: Material used to refill the trench after the pipe and the embedment has been placed.

F. Imported Material: Material obtained by the Contractor from source(s) offsite.

G. Lift: Loose (uncompacted) layer of material.

H. Embedment Pipe Zone: Zone that includes full trench width and extends from prepared trench bottom to an upper limit a minimum of 6 inches above top outside surface of pipe, conduit, cable or duct bank.

I. Pipe Zone: Zone that includes the pipe width plus 12 inches and extends from prepared trench bottom to the finished surface.

J. Relative Compaction: The ratio, in percent, of the as-compacted field dry density to the laboratory maximum dry density as determined by ASTM D1557. Corrections for oversize material may be applied to either the as-compacted field dry density or the maximum dry density, as determined by the Engineer.

K. Relative Density: As defined by ASTM D4253 and ASTM D4254.

L. Selected Backfill Material: Material available that the Engineer determines to be suitable for a specific use.

M. Well-Graded: A mixture of particle sizes that has no specific concentration or lack thereof of one or more sizes producing a material type that, when compacted, produces a strong and relatively incompressible soil mass free from detrimental voids. Well-Graded does not define any numerical value that must be placed on the coefficient of uniformity, coefficient of curvature, or other specific grain size distribution parameters.

PART 2 - PRODUCTS

2.1 TRACER WIRE

A. As specified in Section 33 05 97, IDENTIFICATION AND SIGNAGE FOR UTILITIES.

2.2 MARKING TAPE

A. As specified in Section 33 05 97, IDENTIFICATION AND SIGNAGE FOR UTILITIES.

2.3 TRENCH STABILIZATION MATERIAL

A. Clean, hard, durable 3-inch minus crushed rock gravel, or pit run, free from clay balls, other organic materials, or debris.

B. Uniformly graded from coarse to fine, less than 8% by weight passing the 1/4-inch sieve.

2.4 BEDDING MATERIAL AND EMBEDMENT PIPE ZONE MATERIAL

A. Clean or gravelly sand (Class I).
   1. Material shall meet the grading requirements listed in Table 1 – Grading Requirements for Fine Aggregate in ASTM C33, latest edition.
   2. Sand, clean or clean to silty, less than 3% passing the No. 200 sieve.
   3. Individual Particles: Free of sharp edges.
   4. The fraction that passes No. 40 sieve shall be non-plastic as determined in accordance with ASTM D4318.

B. Clean gravel or crushed rock (Class III).
   1. Material shall meet the grading requirements listed in Table 3 – Grading Requirements for Coarse Aggregates in ASTM C 33, latest edition.
   2. Maximum aggregate size shall be 3/4-inch.
   3. Gradation 67, commonly referred to as ASTM #67 (maximum 3/4" concrete aggregate)
   4. Gradation 7, commonly referred to as ASTM #7 (1/2" aggregate).

2.5 SELECT BACKFILL MATERIAL

A. Imported soils, locally available reddish-brown silty or clayey chert gravel meeting Unified Soils Classification as a GC or GM material and having a Plasticity Index of 35 or less, a Liquid Limit of 55 or less, a minimum of 30% retained on the 3/4-inch sieve and a maximum of 35% passing the No. 200 sieve.

B. Select on-site material may be excavated material from required excavations, free from rocks larger than 3 inches, free from roots and other organic matter, ashes, cinders, trash, debris, and other deleterious materials.

C. Any material, included on-site material, to be used as select fill shall be reviewed and approved by the Engineer.

2.6 BACKFILL MATERIAL

A. Excavated material from required excavations, free from rocks larger than 12 inches, free from roots and other organic matter, ashes, cinders, trash, debris, and other deleterious materials.

2.7 CONTROLLED LOW STRENGTH FILL

A. As specified in Section 31 23 23.33, FLOWABLE FILL.

2.8 CONCRETE BACKFILL

A. Provide as specified in Section 03 30 00, CAST-IN-PLACE CONCRETE.

2.9 TOPSOIL

A. Topsoil removed and stockpiled from onsite excavation shall be reasonably free from subsoil, clay, lumps, brush, objectionable weeds and/or other litter and shall be free from roots and toxic substances or other material or substances that might be harmful to plant growth or be a hindrance to grading, planting and maintenance operations.

B. Imported topsoil shall be reasonably free from subsoil, clay, lumps, brush, objectionable weeds and/or other litter and shall be free from roots and toxic substances or other material or substances that might be harmful to plant growth or be a hindrance to grading, planting and maintenance operations.

2.10 SOURCE QUALITY CONTROL

A. Perform gradation analysis in accordance with ASTM C136 for:
   1. Earthfill backfill, including specified class(es).
   2. Trench stabilization material.
   3. Bedding and pipe zone material.

PART 3 - EXECUTION

3.1 TRENCH PREPARATION

A. Water Control: Conform to Section 31 23 19, DEWATERING.
   1. Promptly remove and dispose of water entering trench as necessary to grade trench bottom and to compact backfill and install manholes, pipe, conduit, direct-buried cable, or duct bank. Do not place concrete, lay pipe, conduit, direct-buried cable, or duct bank in water.
   2. Remove water in a manner that minimizes soil erosion from trench sides and bottom.
   3. Provide continuous water control until trench backfill is complete.

B. Remove foreign material and backfill contaminated with foreign material that falls into trench.

3.2 TRENCH BOTTOM

A. Prepare trench bottom as specified in Section 31 23 23.16, TRENCHING.

3.3 BEDDING

A. Furnish bedding material as specified in Paragraph 2.4 - BEDDING MATERIAL AND EMBEDMENT PIPE ZONE MATERIAL.

3.4 EMBEDMENT PIPE ZONE

A. Furnish embedment pipe zone material as specified in Paragraph 2.4 - BEDDING MATERIAL AND EMBEDMENT PIPE ZONE MATERIAL.

B. Upper limit of pipe zone shall not be less than following:
   1. Pipe: 6 inches above top of pipe, unless shown otherwise.
   2. Conduit: 3 inches above top of conduit, unless shown otherwise.
   3. Direct-Buried Cable: 3 inches above top of cable, unless shown otherwise.
   4. Duct Bank: 3 inches above top of duct bank, unless shown otherwise.

3.5 BACKFILL ABOVE EMBEDMENT PIPE ZONE

A. General:
   1. Process excavated material to meet specified gradation requirements.
   2. Maximum particle size within 18 inches of the outside of a pipe, 6 inches.
   3. Maximum particle size within the remaining pipe zone, 18 inches.
   4. Adjust moisture content as necessary to obtain specified compaction.
   5. Do not allow backfill to free fall into the trench or allow heavy, sharp pieces of material to be placed as backfill until after at least 2 feet of backfill has been provided over the top of pipe.
   6. Do not use power driven impact type compactors for compaction until at least 4 feet of backfill is placed over top of pipe.
   7. Backfill to grade with proper allowances for topsoil, crushed rock surfacing, and pavement thicknesses, wherever applicable.

8. Backfill around structures with same class backfill as specified for adjacent trench unless otherwise shown or specified.

B. Select Backfill:
   1. Place in lifts not exceeding 8-inch thickness.
   2. Mechanically compact each lift to a minimum of 95% Standard Proctor Density prior to placing succeeding lifts.

C. Backfill: Backfill trench above the pipe zone with excavated backfill in lifts not exceeding 8 inches. Compact each lift to a minimum of 95% Standard Proctor Density prior to placing succeeding lifts.

D. Granular Backfill: Backfill trench above the pipe zone with granular backfill in lifts not exceeding 8 inches. Compact each lift to a minimum of 95% Modified Proctor Density prior to placing succeeding lifts.

E. Concrete Backfill:
   1. Place above bedding.
   2. Minimum Concrete Thickness: 6 inches on top and sides of pipe.
   3. Do not allow dirt or foreign material to become mixed with concrete during placement.
   4. Allow sufficient time for concrete to reach initial set before additional backfill material is placed in trench.
   5. Prevent flotation of pipe.
   6. Begin and end concrete backfill within 4 inches of a pipe joint on each end.
   7. Do not encase pipe joints except within the limits of the concrete backfill.

F. Controlled Low Strength Fill:
   1. Discharge from truck mounted drum type mixer into trench.
   2. Place in lifts as necessary to prevent uplift (flotation) of new and existing facilities.

3.6 REPLACEMENT OF TOPSOIL

A. Replace topsoil in top 4 inches of backfilled trench.

B. Maintain the finished grade of topsoil even with adjacent area and grade as necessary to restore drainage.

3.7 MAINTENANCE OF TRENCH BACKFILL

A. After each section of trench is backfilled, maintain the surface of the backfilled trench even with the adjacent ground surface until final surface restoration is completed.

B. Gravel Surfacing Rock: Add gravel surfacing rock where applicable and as necessary to keep the surface of the backfilled trench even with the adjacent ground surface, and grade and compact as necessary to keep the surface of backfilled trenches smooth, free from ruts and potholes, and suitable for normal traffic flow.

C. Topsoil: Add topsoil where applicable and as necessary to maintain the surface of the backfilled trench level with the adjacent ground surface.

D. Asphalt Pavement: Replace settled areas with cold mix asphalt as needed until final asphalt pavement is placed.

E. Concrete Pavement: Replace settled areas with cold mix asphalt as needed until final concrete pavement is placed.

F. Other Areas: Add excavated material where applicable and keep the surface of the backfilled trench level with the adjacent ground surface.

3.8 SETTLEMENT OF BACKFILL

A. Settlement of trench backfill, or of fill or facilities constructed over trench backfill, will be considered a result of defective compaction of trench backfill.

END OF SECTION 31 23 23.16

SECTION 31 23 33 – TRENCHING AND BACKFILLING

PART 1 - GENERAL

1.1 SUMMARY

A. Work of this Section also includes:
   1. Replacing topsoil that contains regenerative material.
   2. Disposal of trees, stumps, brush, roots, limbs, and other waste materials from clearing operations.
   3. Imported topsoil.
   4. Crush rock backfill required by over-excavation.
   5. Imported pipe zone material.
   6. Trench settlement repair, including replacing roadway surfacing, sidewalk, or other structures.
   7. Replacing damaged culverts.

B. Trench excavation is classified as common excavation and includes removal of material of whatever types encountered including rock to depths shown or as directed by Engineer.

C. Pipe zone includes full width of excavated trench from bottom of pipe to a point 6 inches above top outside surface of pipe barrel.

D. Conform to federal, state, and local codes governing safe loading of trenches with excavated material.

E. The right is reserved to modify the use, location, and quantities of the various types of backfill during construction as Engineer considers to be in the best interest of Owner.

F. There shall be no extra compensation for dewatering and rock excavation.

G. Pipe shall be installed according to the latest version of AWWA C605.

1.2 REFERENCES

A. Arkansas Department of Transportation, P.O. Box 2261, Little Rock, Arkansas 72203, latest edition.
   1. ARDOT 303 - Aggregate Base Course.

B. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959.
   1. ASTM D448 - Classifications for Standard Sizes of Aggregate and Bridge Construction.
   2. ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5-lb. (2.49-kg.) Rammer and 12-inch (304.8-mm) Drop.
   3. ASTM D1557 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 10-lb. (4.54-kg.) Rammer and 18-inch (457-mm) Drop.
   4. ASTM D2487 - Standard Classification of Soils for Engineering Purposes.
   5. ASTM D2922 - Test Methods for Density of Soils and Soil-Aggregates in Place by Nuclear Method.

C. Occupational Safety and Health Administration (OSHA) Standard for Excavation and Trenches Safety System, 29 CFR 1926, Subpart P: Excavations.

D. The Contractor shall be solely responsible for trench and excavation safety systems in accordance with Act 291 of 1993.

PART 2 - PRODUCTS

2.1 FOUNDATION STABILIZATION

A. Crushed gravel or crushed rock, free from dirt, clay balls, or organic material, well graded from coarse to fine, containing sufficient finer material for proper compaction, and meeting ASTM D448 Size No. 67 (Concrete Aggregate).

2.2 PIPE ZONE MATERIAL

A. Select material shall consist of fine loose earth or sand free from clods or rocks larger than 3/4-inch in dimension and of proper moisture content for maximum consolidation.

B. Crushed granular material conforming to ASTM D448, Size No. 67.

C. Washed stone bedding size 1/4-inch to 3/4-inch.

2.3 COMMON FILL MATERIALS

A. Material shall not contain pieces larger than 3 inches, and shall be free of roots, debris, or organic matter.

2.4 SELECT FILL MATERIALS

A. Class 7, Class 3, and Class 4 as established by Section 303 of Arkansas Department of Transportation Standard Specifications for Highway Construction.

B. ASTM Soil Classification GC as set forth in ASTM Designation D2487-92. On site material may be used, provided it is in accordance with ASTM D2487-92.

2.5 BEDDING MATERIAL

A. Pea gravel, sand, or other locally available bedding material, as approved.

2.6 TRENCH BACKFILL

A. Granular Backfill:
   1. Natural or artificial mixture of gravel and soil mortar uniformly well graded from coarse to fine.
   2. ARDOT Section 303 Class 3, Class 4, or Class 7 as specified in this Section.

2.7 PVC WATER AND SEWER PIPE TRENCH

A. See Drawings for trench details.

2.8 COMPACTION EQUIPMENT

A. Suitable type and adequate to obtain the amount of compaction specified.

B. Operate in strict accordance with manufacturer's instructions and recommendations and maintain in such condition so that it will deliver manufacturer's rated compactive effort.

2.9 IMPORTED TOPSOIL

A. Suitable sandy loam from an approved source.

B. Must possess friability and a high degree of fertility.

C. Free of clods, roots, gravel, and other inert material.

D. Free of quackgrass, horsetail, and other noxious vegetation and seed.

PART 3 - EXECUTION

3.1 PREPARATION

A. Where clearing or partial clearing of right-of-way is necessary, complete prior to start of trenching.

B. Cut trees and brush as near to surface of ground as practicable, remove stumps, and pile for disposal.

C. Do not permit excavated materials to cover brush or trees prior to disposal.

3.2 PREVENT TRENCH WATER AND ANIMALS FROM ENTERING PIPE

A. When pipe laying is not in progress, including noon hours, open ends of pipe shall be closed; and no trench water, animals, or foreign material shall be permitted to enter the pipe.

3.3 DISPOSAL OF CLEARED MATERIAL

A. Dispose of material in such a manner to meet requirements of state, county, and local regulations regarding health, safety, and public welfare.

B. Dispose of nonflammable and flammable material off the construction site in an approved location.

C. Do not leave material on the Project site, shove onto abutting private properties, or bury in embankments or trenches.

3.4 REMOVAL OF OBSTRUCTIONS

A. Remove obstructions within trench area or adjacent thereto such as tree roots, stumps, abandoned piling, logs, and debris.

B. Engineer may, if requested, make changes in the trench alignment to avoid major obstructions, if such alignment changes can be made within the easement or right-of-way without adversely affecting the intended function of the facility.

C. Dispose of obstructions in accordance with this Section.

3.5 REMOVAL AND REPLACEMENT OF TOPSOIL

A. Where trenches cross lawns, garden areas, pasturelands, cultivated fields, or other areas on which reasonable topsoil conditions exist, remove topsoil for a depth of 6 inches for full width of trench to be excavated.

B. Use equipment capable of removing a uniform depth of material.

C. Stockpile removed topsoil at regular intervals, and do not mix with other excavated material.

D. Locate stockpiles so that material of one ownership is not transported and stockpiled on property of another ownership.

E. Minimum finished depth of topsoil over trenches: 5 inches.

F. Imported topsoil may be substituted for stockpiling and replacing topsoil.

G. Maintain finished grade of topsoil level with area adjacent to trench until final acceptance by Engineer.

H. Repair damage to adjacent topsoil caused by work operations.
   1. Remove rock, gravel, clay, and other foreign materials from the surface.
   2. Regrade.
   3. Add topsoil as required.

3.6 TRENCH WIDTH

A. Minimum width of unsheeted trenches where pipe is to be laid shall be 18 inches greater than the outside diameter of the pipe, or as approved.

B. Maximum width at top of trench will not be limited, except where excess width of excavation would cause damage to adjacent structures or property or cause undue stresses on the pipe.

C. Confine trench widths to dedicated rights-of-way or construction easements, unless special written agreements have been made with affected property owner.

3.7 EXCAVATION

A. Excavate trench to lines and grades shown or as established by Engineer with proper allowance for pipe thickness and for pipe base or special bedding when required.

B. If trench is excavated below required grade, correct with foundation stabilization material.

C. Place material over full width of trench in compacted layers not exceeding 6 inches deep to established grade with allowance for pipe base or special bedding

3.8 PREPARATION OF TRENCH - LINE AND GRADE

A. Do not deviate more than 1/2-inch from line or 1/2-inch from grade. Measure for grade at the pipe invert, not at the top of the pipe, because of permissible variation in pipe wall thickness.

B. Grade the bottom of the trench by hand to the line and grade where the pipe is to be laid, with proper allowance for pipe thickness and for pipe base when specified or indicated.

C. Remove hard spots that would prevent a uniform thickness of bedding.

D. Check the grade with a straightedge and correct irregularities found.

E. The trench bottom shall form a continuous and uniform bearing and support for the pipe at every point between bell holes, except that the grade may be disturbed for the removal of lifting tackle.

3.9 SHORING, SHEETING, AND BRACING OF TRENCHES

A. Sheet and brace trench when necessary to prevent caving during excavation in unstable material or to protect adjacent structures, property, workers, and the public.

B. Increase trench widths accordingly by the thickness of the sheeting.

C. Maintain sheeting in place until pipe has been placed and backfilled at pipe zone.

D. Remove shoring and sheeting as backfilling is done in a manner that will not damage pipe or permit voids in backfill.

E. Conform to safety requirements of federal, state, or local public agency having jurisdiction for sheeting, shoring, and bracing of trenches; the most stringent of these requirements shall apply.

3.10 LOCATION OF EXCAVATED MATERIALS

A. Place excavated material only within construction easement, right-of-way, or approved working area.

B. Do not obstruct private or public traveled roadways or streets.

3.11 REMOVAL OF WATER

A. Provide and maintain ample means and devices to promptly remove and dispose of water entering trench during time trench is being prepared for pipe laying, during laying of pipe, and until backfill at pipe zone is completed.
   1. These provisions apply during the noon hour as well as overnight.
   2. Provide necessary means and devices, as approved, to positively prevent under water from entering the construction area of another contractor.

B. Dispose of water in a manner to prevent damage to adjacent property.

C. Drainage of trench water through the pipeline under construction is prohibited.

3.12 FOUNDATION STABILIZATION

A. When existing material in bottom of trench is unsuitable for supporting pipe, excavate unsuitable material.

B. Backfill trench to subgrade of pipe base with foundation stabilization material specified.

C. Place foundation stabilization material over the full width of trench and compact in layers not exceeding 6 inches deep to required grade by making passes with a vibratory compactor (or equivalent).

D. Material shall be considered unsuitable when it contains more than 5% organic material by volumetric sampling or when it will not support a reading of 1.5 on a hand penetrometer.

3.13 ROCK IN PIPE TRENCH

A. Where rock is encountered in bottom of trench, support pipe on bedding material.

B. Minimum Bedding Thickness: Minimum of 4 inches or 1/8 of the outside diameter of pipe, whichever is greater.

C. Extend bedding up pipe sides 1/6 of outside diameter of the pipe, minimum.

D. Backfill over pipe according to pipe zone type.

3.14 PIPE ZONE BACKFILL

A. Depth of the pipe zone above pipe barrel varies with pipe material.

B. Particular attention must be given to area of pipe zone from flow line to centerline of pipe to ensure firm support is obtained to prevent lateral movement of pipe during final backfilling of pipe zone.

C. Backfill area of pipe zone from bottom of pipe to horizontal centerline of pipe by hand-placing material around pipe in 4-inch layers.

D. Achieve continuous support beneath pipe haunches by “walking in” and slicing with shovel.

E. Backfill area of pipe zone from horizontal centerline to top of pipe zone with pipe zone material as determined by class of backfill.

F. In lieu of selected material for pipe zone in upper portion of pipe zone, imported pipe zone material approved by Engineer for trench backfill may be substituted.

G. If the Engineer determines that the existing material is insufficient or unsuitable at trench side for selected material for pipe zone in upper portion of pipe zone, provide suitable material from other trench excavation along pipeline or imported pipe zone material.

3.15 TRENCH BACKFILL ABOVE PIPE ZONE

A. When backfill is placed mechanically, push backfill material onto slope of backfill previously placed and allow to slide down into trench.

B. Do not push backfill into trench in such a way as to permit free fall of material until at least 2 feet of cover is provided over top of pipe.

C. Under no circumstances allow sharp, heavy pieces of material to drop directly onto pipe or tamped material around pipe.

D. Do not use backfill material of consolidated masses larger than 1/2 cubic foot.

3.16 EXCESS EXCAVATED MATERIAL

A. Dispose of excess excavated material off project site in an approved area.

3.17 DRAINAGE CULVERTS

A. Replace drainage culverts which are removed on near right angles to pipe centerline.

B. If pipe cannot be reused or is damaged during removal, dispose of it, and provide new pipe.

C. Protect culverts from damage or restore to equivalent condition.

D. Replace culverts to existing lines and grades.

E. Do not replace culverts until proposed pipeline is installed and backfill of trench has been completed to subgrade of culvert.

3.18 PIPE COVER

A. Place select material from excavation over pipe to provide minimum coverage, as shown on Drawings or as directed by Engineer.

3.19 DRAINAGE DITCH RESTORATION

A. Undercrossings of minor drainage ditches not covered in another Specification Section shall be backfilled so that upper 1 foot of material in ditch between ditch banks is clay.

B. Compact material for full ditch width by 6 passes of vibratory compactor (or equivalent).

C. Where indicated on Drawings, provide concrete arch, and/or riprap on ditch banks.

3.20 SETTLEMENT

A. Correct settlement noted in backfill, fill, or in structures built over backfill or fill within warranty period.

3.21 IMPORTED TOPSOIL

A. Should regenerative material be present in soil, remove both surface and root which appears in within 1 year following acceptance of Project in a manner satisfactory to Owner.

END OF SECTION 31 22 13

SECTION 31 25 00 – EROSION AND SEDIMENTATION CONTROL

PART 1 - GENERAL

1.1 SUMMARY OF WORK

A. Install slope protection and erosion and sediment control where erosion prevention is required Text

PART 2 - PRODUCTS

2.1 RIPRAP

A. Hard and durable quarry stone with less than 35% wear when tested for resistance to abrasion in conformance with ASTM C535.

B. Bulk density shall not be less than 160 pounds per dry cubic foot.

C. The least dimension of any one piece shall not be less than 1/3 the greatest dimension. Smaller pieces will be allowed only to fill in the voids in the larger stone.

D. Unless otherwise specified, at least 60% of the material furnished shall weigh not less than 75 pounds each, with no dimension less than 4 inches and at least one dimension not less than 12 inches.

E. Riprap shall be placed to a minimum depth of 12 inches.

2.2 FILTER FABRIC

A. Nonwoven polypropylene or polyester fabric.

B. Manufacturer: Typar 3601, Mirafi Inc. 160N, or equal.

2.3 OVERLAND CONSTRUCTION

A. Sediment Barriers:
   1. In areas where natural vegetation is not present or where sufficient to attain the needed removal of silt, installation of sediment barriers shall be required.
   2. Use straw bale filters or silt fences. Install across or at the foot of slope or at outlet of a diversionary structure.
   3. Straw Bale Filter: Tightly bound straw bales embedded at least 4 inches into soil and each bale shall be held in place by 2 stakes driven at least 1-1/2 feet into ground. Bales shall tightly abut adjacent bales. Strings shall not be in contact with the ground.
   4. Silt Fence: Fence post spaced no more than 10 feet apart and driven a minimum of 2 feet into ground. Above-ground height of fence posts shall be no less than 2 feet. Fasten metal mesh fence with 6 inch or smaller openings to fence posts to reinforce the silt fence fabric. Mesh fence shall stand a least 2 feet above ground and buried at least 4 inches below ground. Silt fence fabric that is reinforced may be used without a wire mesh support in low flow areas. In streams and in areas where high flow may be encountered, silt fence shall have a wire mesh to support the fabric.
   5. Use temporary silt fences at base of road crossings to assist disturbed and undisturbed natural vegetation adjacent to pipeline right-of-way. Silt fencing can be either reinforced with wire mesh fencing in areas of potentially high flow surface run-off or where slope is steep enough to warrant a reinforced silt fence. On gentle slopes, reinforced with wire mesh and may be supplemented with hay or straw bales as a primary barrier to aid in collecting silt and potential sedimentation from entering ditch lines and waterways.

B. Diversion Ditches:
   1. Diversion ditches shall act as a barrier to runoff water. Storm water flow shall be interrupted and diverted off the right-of-way.
   2. Construct with earth-filled sacks or mounded compacted earth-filled sacks or mounded compacted earth and rock.
   3. On long slopes, use a series of ditches.
   4. Spacing depends on the severity of the slope. Maximum spacing for diversion ditches are given in Table 1. Distances may be shortened as situations dictate but should not be lengthened.
   5. Drainage area above diversion ditches shall be stabilized to prevent excessive silt from entering and collecting in the diversion channel.
   6. Runoff water shall be filtered at the outlet end of the ditch by a bale filter or silt fence.
   7. Use ditch checks in conjunction with diversion ditches and filter structures to prevent surface runoff from circumventing a diversion ditch by flowing down the trench.
   8. Spacing is related to the severity of right-of-way slopes. Maximum spacing for ditch checks given in Table 1.

TABLE 1
Spacing of Diversion Ditches and Ditch Checks

Slope	Spacing
5 to 15%	150 Feet
15 to 30%	100 Feet
30 & or Greater	50 Feet

C. Ditch Checks:
   1. Earth-filled sacks (or suitable alternative, synthetic foam).
   2. Use ditch checks to form a catch basin for run-off in trench to prevent soil from being washed out of the trench.
   3. Use in conjunction with diversion ditches and filter structures. Ditch checks shall prevent surface run-off from by-passing a diversion ditch by flowing down the trench. The use of ditch checks is site-specific, and may not be required.
   4. Spacing related to the severity of right-of-way slopes. Guideline spacing for ditch checks are identical to the spacing requirements for diversion ditch.

D. Nonvegetative Soil Stabilization:
   1. Utilize temporary nonvegetative soil stabilization to provide protection against excessive soil erosion over a short-term period (less than 1 year).
   2. Nonvegetative methods shall be required in areas that experience high water flows and high runoff velocities (disturbed slopes steeper than 2:1).
   3. Methods employed include mulching, chemical soil stabilizers (binders), brush and slash, netting and matting, and store coverage.
   4. Mulch shall consist of straw, hay, or salt hay applied at an appropriate rate 70-115 pounds per 1000 square feet (1.5 to 2.5 tons/acre). Mulch anchoring shall be implemented promptly where applicable and achieved by one of the following methods:
      a. Peg and twine.
      b. Mulch netting.
      c. Erosion control.
      d. Fabric.
      e. Jute matting.
      f. Mulch anchoring tool.

E. Temporary Seeding and Revegetation:
   1. Soil that is stockpiled for more than 30 days or disturbed areas where there will be no construction for 12 months shall be stabilized to prevent erosion.
   2. If natural vegetation does not occur, area shall be temporarily seeded.
   3. Temporary revegetation of pipeline shall occur when new lines are established during the spring and summer period.
   4. New lines established in the fall and winter period shall require permanent revegetation.
   5. If required to temporary revegetate an area during the fall or winter period, a mixture of Austrian winter pea, rye, oats, and wheat shall be used.
   6. Provide a combination of milo, millets, and the Arkansas mix for temporary revegetation to control erosion. The use of a broadcast seeder after the last frost through July is acceptable.
   7. Alternative to Temporary Seeding: Mulching using the methods and rates give in this Section.

F. Stabilized Construction Entrance:
   1. Install at access points to construction site.
   2. Construct with large stone over geotextile fabric.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Riprap:
   1. Machine place riprap over filter fabric a minimum of 12 inches thick to limits shown on Drawings.
   2. Install riprap at locations where water is released from drainage system, to prevent scour.
   3. Place stone riprap on compacted subgrade.

B. Install sediment barriers, diversion ditches, and ditch checks in accordance with this Section and Drawings.

C. Trench Dewatering:
   1. Use ditch checks to control the collection of storm water in trenches. Water shall be allowed to sit in trench until silt settles out.
   2. If water must be removed immediately, water shall be filtered. Filtration shall be performed by natural vegetation, bale filters or silt filters.
   3. Use of a settling basin to allow silt to filter out shall be used when no other options are available. Refer to Drawings for use of settling basin.

END OF SECTION 31 25 00

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SECTION 31 32 00 – SOIL EROSION STABILIZATION

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes: Work and materials required to minimize erosion and comply with Storm Water Pollution Prevention Plan.

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13, MEASUREMENT AND PAYMENT.

1.3 DEFINITIONS

A. Soil Erosion Stabilization:
   1. Ground surfaces exposed during the wet weather conditions:
   2. Areas which will not be subjected to heavy wear by ongoing construction traffic.
   3. Temporary and long-term stabilization of new or disturbed ditches, swales, detention ponds, or disturbed ground with intermittence construction traffic.

B. Permanent Stabilization:
   1. Permanently stabilize exposed soil surfaces at finished grades.
   2. Permanent stabilization methods include, but are not limited to, seeding (permanent), mulching, and landscaping.
   3. Immediately perform permanent stabilization at each completed excavation and areas except for areas that are scheduled to be re-disturbed.
   4. Incorporate all permanent erosion control features into the project at the earliest practical time.

C. Buffer Zone: Undisturbed area or strip of natural vegetation or an established suitable planting adjacent to a disturbed area that reduces erosion and runoff.

1.4 SUBMITTALS

A. Submit in accordance with the Front End Documents.

B. Provide the following:
   1. Product Data for the following items:
      a. Erosion control rock,
      b. Fertilizer,
      c. Seed,
      d. Mulch,
      e. Erosion control rock,
      f. Soil tackifier,
      g. Reinforced plastic covering,
      h. Silt fence,
      i. Straw bales,
      j. Posts for straw bales,
      k. Dust controller,
      l. Wire mesh.

1.5 SEQUENCING AND SCHEDULING

A. Install erosion and sediment control devices before starting earth disturbance activities and as drainage facilities get constructed.

B. Complete Soil Preparation: Seeding, fertilizing, mulching and matting on disturbed areas that will require stabilization either because the area has reached final grade (permanent landscaping) or because the area will remain unworked for over 14 days (temporary seeding) during the wet season.

C. Notify Engineer at least 3 days in advance of:
   1. Materials delivery,
   2. Start of stabilization activity.

D. Seeding: Perform between March 15 and October 15.

1.6 MAINTENANCE

A. Operations:
   1. Seeded Areas: Perform during maintenance period to include:
      a. Watering: Keep seeded surface moist.
      b. Washouts: Repair by filling with topsoil, fertilizing, seeding, and mulching.
      c. Mulch: Replace wherever and whenever washed or blown away.
      d. Reseed unsatisfactory areas or portions thereof immediately at the end of the maintenance period if a satisfactory stand has not been produced.
      e. Reseed during next planting season if scheduled end of maintenance period falls after September 15.
      f. Reseed entire area if satisfactory stand does not develop by July 1 of the following year.
      g. Mowing: Mow to 2 inches after grass height reaches 3 inches, and mow to maintain grass height from exceeding 3 1/2 inches.
   2. Inspect, repair, and replace as necessary all erosion control measures during the time period from start of construction to completion of construction.
   3. Inspect a minimum of at least once every 7 days or after a 1/2-inch storm event in a 24-hour period.
   4. Furnish and install a rain gauge at the project site to monitor rainfall. At no time shall more than 1-foot depth of sediment be allowed to accumulate in any erosion control device.

B. Sediment Removal:
   1. Remove sediment from erosion control devices and work into the grading plan at least once a week as required to maintain proper operation of devices. The cleaning operation shall not dispose of sediment offsite.
   2. Sediment shall be removed and the controls upgraded or repaired as needed as soon as practicable, but not later than 2 days after the surrounding exposed ground has dried sufficiently to prevent further damage from equipment needed for repair operations.
   3. In the event of continuous rainfall over a 24-hour period, or other circumstances that preclude equipment operation in the area, hand carry and install additional sediment controls as approved by the Engineer.

PART 2 - PRODUCTS

2.1 SILT FENCE

A. Support Posts: As recommended by manufacturer of geotextile.

B. Fasteners: Heavy-duty wire staples at least 1-inch long, tie wires, or hog rings, as recommended by manufacturer of geotextile.

C. Filter Fabric: Polyester, polypropylene, or nylon filaments, woven into a uniform pattern, distinct and measurable openings.

1. Filaments: Resistant to damage from exposure to ultraviolet rays and heat.
2. Material Edges: Finish so that, filaments retain their relative positions under stress.

D. In accordance with requirements of Table No. 1:

Table No. 1 – Filter Fabric

Physical Property	Required Value	Test Method
Weight, pz/sq yd, min.	4	ASTM D3776
Equivalent Opening Size, max.	50-70	U.S. Standard Sieve
Grab Tensile Strength, lb, min. ARV	160	ASTM D4632
Elongation, % max.	25	ASTM D1682
Mullen Burst Strength, psi, min. ARV	200	ASTM D3786
Ultraviolet Radiation Resistance, % Strength Retention	70	ASTM D4355
Flow Rate, gpm/sf, min. ARV	30 to 50	ASTM D4491

E. Manufacturers:
1. Polyfelt, Evergreen, AL.
2. Dupont Co., Wilmington, DE.
3. Mirafi, Inc., Charlotte, NC.
4. Or equal.

2.2 STRAW BALES

A. Machine baled clean salt hay or straw of oats, wheat, barley, or rye, free from seed of noxious weeds, using standard baling wire or string.

2.3 POSTS FOR STRAW BALES

A. 2-inch by 2-inch untreated wood, No. 5 reinforcing bars, or commercially manufactured steel pickets.

2.4 WATTLES

A. Wattles are sediment and stormwater velocity control devices that are composed of tubes of straw, rice straw, or coconut husk encased in ultraviolet (UV) degradable plastic netting or 100% biodegradable burlap material.

2.5 SEED

A. The seed shall comply with the current rules and regulations of the Arkansas State Plant Board and the germination test shall be valid on the date the seed is used. It shall have a minimum of 98% pure seed and 85% germination by weight, and shall contain no more than 1% weed seeds.

B. A combined total of 50 noxious weed seeds shall be the maximum amount allowed per pound of seed with the following exceptions: Johnson grass seed, wild onion seed, wild garlic seed, field bindweed seed, nut grass seed, sickle pod seed, sesbania seed, indigo seed, morning-glory seed, cocklebur seed, balloon vine, crotalaria spp., serrated tussock, and tropical soda apple will not be allowed in any amount.

C. Seed shall be furnished in sealed, standard containers.

D. Seed that has become wet, moldy, or otherwise damaged in transit or in storage will not be acceptable.

E. Seed shall be supplied in accordance with the following tables:

Pre-Warm Season Seed Mix (March 15 – May 31)

Plant Species	Growth Season/Life Cycle	Seeding Rate
Spring Rye (*Secale cereale)*	cool season annual	15 lbs/ac
Perennial Ryegrass (*Lolium perenne)*	cool season perennial	15 lbs/ac
Crimson Clover *(Trifolium incarnatum)**	cool season annual	20 lbs/ac
White Clover (*Trifolium repens)**	cool season perennial	20 lbs/ac
Korean (Kobe) lespedeza (*Kummerowia stipulacea)***	warm season annual	10 lbs/ac
Bahiagrass (*Paspalum notatum)*	warm season perennial	30 lbs/ac
Hulled Bermuda (*Cynodon dactylon)*	warm season perennial	30 lbs/ac
Weeping love grass *(Eragrostis curvula)*	warm season perennial	30 lbs/ac

*All legume seed must be properly inoculated with appropriate inoculant.

**DO NOT apply sericea lespedeza.

Warm Season Seed Mix (June 1 – August 31)

Plant Species	Growth Season/Life Cycle	Seeding Rate
Sudan grass *(Sorghum bicolor)*	warm season annual	20 lbs/ac
Alyce clover *(Alysicarpus ovalifolius)*	warm season annual	20 lbs/ac
Brown-Top Millet *(Panicum ramosum)*	warm season annual	20 lbs/ac
Buffalo grass (*Bouteloua dactyloides)*	warm season perennial	25 lbs/ac
Weeping love grass (*Eragrostis curvula)*	warm season perennial	25 lbs/ac
Bahiagrass (*Paspalum notatum)*	warm season perennial	25 lbs/ac
Hulled Bermuda (*Cynodon dactylon)*	warm season perennial	25 lbs/ac

Late Season Seed Mix (September 1 – October 15)

Plant Species	Growth Season/Life Cycle	Seeding Rate
Oats *(Avena sativa)*	cool season annual	30 lbs/ac
Winter Rye (*Secale cereale)*	cool season annual	30 lbs/ac
Winter Wheat (*Triticum aestivum*)	cool season annual	30 lbs/ac
White clover (*Trifolium repens)**	cool season perennial	15 lbs/ac
Perennial Ryegrass *(Lolium perenne)*	cool season perennial	25 lbs/ac
Virginia wildrye (*Elymus virginicus)*	cool season perennial	25 lbs/ac
Unhulled Bermuda	warm season perennial	50 lbs/ac

*All legume seed must be properly inoculated with appropriate inoculant.

**DO NOT apply sericea lespedeza.

2.6 HYDROSEEDING

A. The Contractor shall submit on hydroseeding mixture of water, seed, fertilizer, and mulch. The submittal shall include type of material, concentration/ratio, mixing, and application of the products.

2.7 FERTILIZER

A. Commercial, uniform in composition, free-flowing, suitable for application with equipment designed for that purpose.

B. Fertilizers and/or lime shall be applied at appropriate agronomic rate. Representative soil test(s) shall be conducted in accordance with industry standards to determine pH, nitrogen (N), phosphorous (P), and potassium (K) content prior to seeding application. Contractor shall submit soil test results and recommended fertilizer and lime application rates to Engineer at least two weeks prior to commencement of lime and/or fertilizer applications.

C. Fertilizer bags shall state the source or category from which the nitrogen is derived. Nitrogen fertilizers have two categories: Water Soluble Nitrogen (i.e., all nitrogen is immediately available) and Slowly Available Nitrogen (i.e., nitrogen is available over an extended period of time).

D. Contractor shall use a fertilizer that has no less than 50% Slowly Available Nitrogen (SAN) that has a delayed release of available nitrogen, thereby reducing both the potential of excess nutrients in runoff and the leaching potential of excess nutrients into groundwater.

E. Lime shall be agricultural grade ground limestone or equivalent as approved by Engineer.

2.8 MULCH

A. Wood Cellulose Fiber Mulch:
   1. Specially processed wood fiber containing no growth or germination inhibiting factors.
   2. Dyed a suitable color to facilitate inspection of material placement.
   3. Manufactured such that after addition and agitation in slurry tanks with water, the material fibers will become uniformly suspended to form a homogenous slurry.
   4. When hydraulically sprayed on ground, material will allow absorption and percolation of moisture.

B. Straw:
   1. Clean salt hay or threshed straw of oats, wheat, barley, or rye, free from seed of noxious weeds. Suitable for spreading with mulch blower equipment.
   2. Average Stalk Length: 6 inches.
   3. Seasoned before baling or loading.

2.9 EROSION CONTROL MATTING

A. Excelsior mat or straw blanket; staples as recommended by matting manufacturer.

2.10 REINFORCED PLASTIC COVERING

A. Co-extruded, copolymer laminate reinforced with a nonwoven grid of high strength nylon cord submersed in a permanently flexible adhesive media allowing for equal tear resistance in all directions.

B. Black in color and ultraviolet stabilized.

C. Physical Requirement (Minimum Average Roll Values):
   1. Tear Strength: 130 pounds
   2. Elongation: 620 percent
   3. Minimum Thickness: 6 mil.

2.11 DUST CONTROLLER

A. Nontoxic materials that do not have an adverse effect on soil structure or establishment and growth of vegetation.

PART 3 - EXECUTION

3.1 GENERAL

A. Erosion control measures are required during all construction and site disturbance activity and shall remain until permanent site ground covers are in place.

B. The implementation of the erosion control plan and the construction maintenance, replacement and upgrading the erosion control devices are the responsibility of the Contractor until all construction is completed and landscaping established and approved. During the construction period, the erosion control devices shall be upgraded for unexpected storm events and to ensure that sediment and sediment laden water do not leave the site.

C. Maintain existing buffer zones adjacent to project limits. Keep all construction equipment, debris and soils out of the natural buffer zone.

3.2 GRAVEL CONSTRUCTION ENTRANCES

A. Provide a graveled construction access at each access point between the site and any public or private road or other paved surface.

B. Place subgrade geotextile, as specified, on the ground prior to erosion control rock placement.

C. Place erosion control rock over the geotextile to a minimum thickness of 8 inches.

D. Minimum dimensions for construction entrances are 50-foot in length by 16-foot width.

E. Contractor shall provide a minimum of 4 inches of erosion control rock for each entrance 3 times during the project at times directed by the Engineer to maintain proper function. More frequent applications of rock may be required, and if so, shall be considered as incidental work.

3.3 SOIL PREPARATION

A. Before start of hydroseeding, and after surface has been shaped and graded, and lightly compacted to uniform grade, scarify soil surface to minimum depth of 1-inch.

3.4 FERTILIZER

A. Apply evenly over area in accordance with manufacturer's instructions. Mix into top 1-inch of soil.

B. Fertilizers and/or lime shall be applied at appropriate agronomic rate. Representative soil test(s) shall be conducted in accordance with industry standards to determine pH, nitrogen (N), phosphorous (P), and potassium (K) content prior to seeding application. Contractor shall submit soil test results and recommended fertilizer and lime application rates to Engineer at least 2 weeks prior to commencement of lime and/or fertilizer applications.

C. Application Rate: Per soil test results.

D. Use of approved hydraulic equipment to sow seed and distribute fertilizer at the same time will be acceptable.

3.5 SEEDING

A. Broadcast sowing may be accomplished by hand seeders or by approved power equipment. Either method shall result in uniform distribution and no work shall be performed during high winds. The area seeded shall be lightly firmed with a cultipacker immediately after broadcasting.

B. When seed is drilled in rows, the rows shall be horizontal (parallel to contour lines). Fertilizer and seed shall not be drilled together and shall not be mixed.

3.6 HYDROSEEDING

A. Prepare 1-inch depth seed bed; obtain Engineer's acceptance prior to proceeding.

B. Apply by hydroseeding method on moist soil, but only after free surface water has drained away. Prevent drift and displacement of mixture into other areas.

C. Hydroseeding method shall have slurry with proper consistency to adhere to earthen slopes without lumping or running. Mixing time of materials shall not exceed 45 minutes from the time the seeds come into contact with water in the mixer to complete discharge of the slurry onto the slopes; otherwise, the batch shall be recharged with seed.

D. Slurry mixture of water, seed, fertilizer, and mulch shall be applied using equipment containing a tank having a built-in continuous agitation and a discharge system that will allow application of the slurry to the slopes at a continuous and uniform rate. If recirculation agitation is present, the recirculation shall be limited to no more than 50 gallons per minute.

E. The nozzle shall produce a spray that does not concentrate the slurry nor erode the soil. Slurry shall be applied at appropriate rate specific to the product specifications and site slopes. Mulch used within hydroseeding slurry shall consist of a Bonded Fiber Matrix (BFM) material.

F. Contractor shall use caution to avoid over spraying hydroseeding slurry onto any hardscape areas, including fences, walls, concrete, or asphalt surfaces. Removal of slurry from such non-target surfaces shall be done at Contractor's expense.

3.7 WATERING

A. Contractor shall apply water in an amount such that, in conjunction with any rainfall, the seeded and mulched areas will receive an amount equivalent to a minimum of 1-inch of water each week beginning the week after seeding and continuing for a minimum of 4 weeks. 1-inch of water is equivalent to 27,000 gallons per acre. Contractor will adjust the amount of water required each week to deduct any rainfall received during the 7-calendar day period prior to the weekly watering.

3.8 MULCHING

A. Apply uniformly on disturbed areas that will remain undisturbed for 7 days or more, as requested by Engineer, and on all seeded areas.

B. Application: Sufficiently loose to permit penetration of sunlight and air circulation, and sufficiently dense to shade ground, reduce evaporation rate, and prevent or materially reduce erosion of underlying soil.
   1. Straw: Apply by hand or mechanical means to minimum depth of 2 inches.
   2. Wood Cellulose Fiber: 1,000 to 1,500 pounds per acre.

3.9 EROSION CONTROL MATTING

A. Place on seeded slopes 4H:1V and steeper.

B. Apply seed and fertilizer prior to matting.

C. At top of slope, entrench material in a 6-inch by 6-inch trench and staple at 1-foot intervals. At the bottom of the slope, extend the mat 2 feet beyond the toe of slope, turn material under 4 inches and staple at 1-foot intervals.

D. Mats shall be stapled in place as they are installed down the slope face. The mat shall have direct contact with the soil surface.

E. Overlap:
   1. Lengthwise: 1-foot minimum
   2. Crosswise: 6 inches minimum

3.10 REINFORCED PLASTIC COVERING

A. Place on areas where hydroseeding and erosion control matting have not controlled erosion and over all temporary stockpiles.

B. Install in single thickness, strips parallel to direction of drainage. Anchor plastic in 6-inch by 6-inch trench backfilled with compacted native material.

C. Maintain tightly in place by using sand bags on ropes with a maximum 10-foot grid spacing in all directions.

D. Tape or weight down full length, overlap seams at least 12 inches.

E. Remove at final acceptance unless notified otherwise by Engineer.

3.11 SILT FENCE

A. Install prior to starting earth disturbing activities upslope of fence.

B. One-piece filter fabric or continuously sewn to make one-piece filter fabric for full height of the fence, including portion buried in the toe trench.

C. When joints are necessary, splice filter fabric together only at a support post, with a minimum 6-inch overlap, and securely fasten both ends to support post.

D. Filter fabric shall not extend more than 24 inches above the ground surface. Securely fasten to upslope side of each support post using ties. Filter fabric shall not be stapled to existing trees.

E. Fasten wire mesh material support fence securely to upslope side of post fasteners. Extend wire into the trench a minimum of 4 inches, and not more than 36 inches above the ground surface.

F. Take precaution not to puncture filter fabric during installation. Repair or replace damaged area.

G. Remove silt fence after upslope area has been permanently stabilized. Immediately dress sediment deposits remaining after the silt fence has been removed to conform to existing grade. Prepare and seed graded area.

3.12 TEMPORARY SOIL STOCKPILES

A. Cover with reinforced plastic covering, as directed in Article REINFORCED PLASTIC COVERING.

B. Protect perimeter of stockpile from erosion with ditches.

3.13 STRAW BALES

A. Embed minimum of 4 inches in flat-bottomed trench. Place across swales or ditches to reduce velocities of concentrated flows. Space bales a minimum of 100-foot spacing.

B. Place with ends tightly abutting or overlapped. Corner abutment is not acceptable.

C. Install so that bale bindings are oriented around the sides and not over the top and bottom of the bale.

D. Use 2 posts for each bale. Drive posts through the bale until top of post is flush with top of bale.

E. Wedge loose straws in any gaps between bales.

3.14 DUST CONTROL

A. Apply appropriate dust control measures on a continuous basis until permanent stabilization measures are in place.

B. Apply on construction routes and other disturbed areas subject to surface dust movement and where off-site damage may occur if dust is not controlled.

C. Avoid creating erosion when using water as a dust controller.

3.15 CLEAN-UP

A. Sediment trapped in erosion control devices shall be regraded into the slopes on the site. Do not flush sediment-laden water into the drainage system.

B. After site restoration is complete and when approved by the Engineer, all temporary erosion control measures shall be completely removed. Immediately shape and permanently stabilize areas affected by the removal process.

C. Silt fence, straw bales, reinforced plastic covering, and any other erosion control devices shall be disposed off site to locations that are approved by federal, state, and local authorities.

END OF SECTION 31 32 00

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SECTION 31 63 29 – DRILLED CONCRETE PIERS AND SHAFTS

PART 1 - GENERAL

1.1 SUMMARY

A. The Contractor shall provide all items, articles, materials, or operations listed, mentioned, or scheduled on the drawings, and/or outlined herein, including all labor, materials, equipment, and incidentals necessary for the satisfactory completion of work associated with the drilled pier foundation. Drilled piers may be belled or straight shaft only, as indicated on the plans.

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13 – MEASUREMENT AND PAYMENT.

1.3 REFERENCE STANDARDS

A. All standards below shall be latest version, unless otherwise specified.
   1. American Society for Testing and Materials (ASTM)
   2. Occupational Safety and Health Act (OSHA)
   3. Specification for the Construction of Drilled Piers - American Concrete Institute Publication (ACI 336.1)

1.4 SUBMITTALS

A. Submit in accordance with the Front-End Documents.

B. Provide the following:
   1. Contractor shall submit product data for each type of product indicated.
   2. Submit the concrete mix design for each concrete mixture.
   3. Submit shop drawings indicating the concrete reinforcement steel detailing, fabricating, bending, supporting, and placing.

1.5 QUALITY ASSURANCE

A. Drilled pier installer shall be an experienced installer with a minimum of 5-years' experience in the installation of reinforced concrete drilled shaft piers.

B. A pre-installation conference shall be held at the project site. The pre-installation conference shall minimally review the following items:
   1. Review the project geotechnical report.
   2. Discuss existing utilities and subsurface conditions.
   3. Review coordination with temporary controls and protections.
   4. Review testing and inspection requirements.
   5. Discuss concrete placement method.
   6. Discuss installation of reinforcing steel.
   7. Discuss dewatering, installation of casing, and cleaning of shafts.

1.6 INSPECTION AND REPORTS

A. Contractor shall retain the services of a testing laboratory to monitor the drilled pier drilling operation. Inspection reports prepared by the testing laboratory shall include top and bottom elevations of the drilled pier, certification that shaft and bell sizes are as shown on the contract drawings and verification of required bearing capacity at bottom bell. Positioning of piers and deviations from specified tolerances should also be noted. The report shall be submitted directly to the Engineer. The testing laboratory shall indicate acceptance of each drilled pier.

B. Refer to Section 01 00 00 – BASIC REQUIREMENTS for additional testing laboratory services as related to this section of the work.

1.7 JOB CONDITIONS

A. Site Information: Data on indicated subsurface conditions are not intended as representations or warranties of continuity of such conditions. It is expressly understood that the Owner will not be responsible for interpretations or conclusions drawn therefrom by Contractor. Data are made available for convenience of the Contractor and are not guaranteed to represent conditions that may be encountered.

B. Additional test borings and other exploratory operations may be made by Contractor at no additional cost to Owner.

C. Existing Utilities: Locate existing underground utilities by careful hand excavation before starting drilled pier excavation operations. If utilities are to remain in place, provide protection from damage during drilled pier operations.

D. Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, consult Engineer immediately. Cooperate with the Owner, and public or private utility companies in keeping their respective service and facilities in operation. Repair damaged utilities to satisfaction of utility owner at no additional cost to the Owner.

E. Do not interrupt existing utilities serving facilities occupied and used by Owner or others, except when permitted in writing by the Engineer, and then only after acceptable temporary utility services have been provided.

F. A qualified surveyor shall be used to perform surveys, layouts, and measurements for the drilled piers. Prior to excavating, lay out each drilled pier to lines and levels required. Record actual measurements or each drilled pier's location, shaft diameter, top and bottom of pier elevations, deviations from specified tolerances, and other specified data. Coordinate with Owner's testing and inspecting agency to provide data required for reports.

PART 2 - PRODUCTS

2.1 CONCRETE AND RELATED MATERIALS

A. Concrete and related materials are specified in Division 03.

B. Steel casing shall meet the requirements of ACI 336.1

PART 3 - EXECUTION

3.1 DRILLED PIER EXCAVATION

A. General:
1. Excavate holes for drilled piers to required bearing strata or elevation as shown on the Drawings. Excavate holes for closely spaced drilled piers, and those occurring in fragile or sand strata, only after adjacent holes are filled with concrete and allowed to set.
2. Drilled pier dimensions shown are minimums. The design of drilled piers is based on assumed strata bearing capacity. If satisfactory material is not encountered at the specified elevation or depth, the bottom of any drilled hole may be lowered, with written approval of the Engineer. Revisions will be paid for in accordance with contract conditions relative to changes in work.
3. When the bottom of the excavation is a sloping rock surface, excavate to a level plane or a step with a maximum height less than one-quarter the width or diameter of the bearing area.

4. Install casing as required as excavation proceeds so that earth walls are maintained without spilling into shaft and as required for safety of personnel and completion of the pier.
5. After completion of the drilled shaft excavation and prior to the placement of the reinforcing steel cage and concrete, all slough and other loose material shall be machine-cleaned from the shaft. A flight auger or other equipment approved by the Engineer shall be used for cleaning dry excavations where slurry or groundwater is not present. Where slurry or groundwater is present, the excavation shall be cleaned with an air lift, bucket auger, or similar type of equipment, as approved by the Engineer.

B. Construction Tolerances:
   1. Locate centerline of drilled piers within the following tolerances:
      a. Maximum permissible variation of location not more than 1/24th of shaft diameter or 3 inches, whichever is less.
      b. Shafts out of plumb, not more than 1.5% of length or exceeding 12.4% of shaft diameter or 15 inches, whichever is less.
      c. Concrete cut-off elevation, plus 1-inch to minus 3 inches.
   2. If above tolerances are exceeded, provide corrective construction to compensate for excessive eccentricity. Submit proposed corrective construction methods to Engineer for review before proceeding.

C. Obstructions:
   1. If unforeseen obstructions are encountered which cannot be removed by standard drilled pier excavation methods, and if such obstructions are not indicated by available subsurfaces data, removal of such obstructions will be paid for in accordance with terms of contract relative to changes in work.
   2. Remove such obstructions by safe methods recognized in the construction industry.

D. Dewatering:
   1. Provide and maintain pumping equipment to dewater shafts. No more than 3-inches of standing water is permitted in the shaft prior to concrete placement. If excessive water is encountered and drilling operations must be halted, consult with Engineer prior to using alternate methods of construction.
   2. Conduct water to general site run-off ditches and disposal areas with discharge lines. Provide ditching as required to conduct water to site drainage facilities.

E. Inspection:
   1. Each drilled pier must be inspected and tested before placing concrete.
      a. Provide facilities as required to assist inspection and testing excavations, and cooperate with inspecting and testing personnel to expedite work.
      b. Contact Engineer and testing facility at least 48 hours prior to beginning drilling operations as a preliminary notification that inspections and tests will be required within the next few days. Provide an approximate schedule of drilling operations for planning purposes.
      c. Notify Engineer and testing facility again at least 6 hours prior to time excavations will be ready for inspection and tests.

F. Depth of Bearing Strata:
   1. If indicated depth of shaft excavation is reached without developing required strata bearing capacity, immediately suspend excavation operations and inform Engineer. Engineer will determine procedure to be followed in each instance.
   2. Where changes in indicated depth or dimensions are required, or additional soil borings are required, proceed with such work when directed in writing by the Engineer.

G. Over-excavation:
   1. No payment will be made for additional shaft length, when drilled pier shafts are excavated to a greater depth than required or authorized by the Engineer due to over-drilling by Contractor. Complete drilled pier and fill extra depth with concrete, if other conditions are satisfactory. Over-excavated shaft will be measured and paid for to original design or authorized depth.

H. Excavated Materials:
   1. Deposit and spread excavated material on site at locations as directed or as shown on the Drawings.

3.2 CONCRETE PLACEMENT

A. General:
   1. Fill drilled piers with concrete immediately after inspection and approval by testing laboratory. Use protective sheets (cut out to receive concrete) over excavation openings, extending at least 12 inches beyond edge.
   2. Place concrete continuously and in a smooth flow without segregation. Provide mechanical vibration for consolidation of at least top 25-feet of each shaft.
   3. Place concrete by means of a bottom discharge bucket, flexible drop chute, elephant trunk hopper, or tremie. Use chutes or tremies for placing concrete where a drop of more than 15-feet is required, or pump concrete into place.
   4. Place concrete in-the-dry. If water occurs, dewatering techniques should be implemented to maintain a water level of 6 inches or less during concrete placement. If it is impractical to dewater drilled pier excavation, and reasonable attempts to seal off or lower water flow have failed, allow water level to attain its normal level and place concrete by tremie (hose) or pump method. Control placement operations to ensure that tremie is not broken during continuous placing from bottom to top. Additionally, the tremie should maintain adequate depth beneath the top of the concrete during the placement as not to place directly into the standing water. Other methods of depositing concrete underwater may be used, if acceptable to the Engineer.
   5. Maintain a sufficient head of concrete to prevent reduction in diameter of drilled pier shaft by earth pressure and to prevent extraneous material from mixing with fresh concrete. Coordinate withdrawal of temporary casings with concrete placement operations to maintain a head of concrete approximately 5-feet above casing bottom.
   6. Stop concrete placement at cut-off elevation shown, screed level, and apply a scoured, rough finish. Where cut-off elevation is above ground elevation, form top section above grade and extend shaft to required elevation.

B. Cold Weather Concreting:
   1. Protect concrete work from physical damage or reduced strength which could be caused by frost, freezing actions, or low temperatures, in accordance with ACI 306 and as herein specified.
   2. When air temperature has fallen to, or is expected to fall below 40°F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50°F, and not more than 80°F at point of placement.
   3. Do not use frozen materials, or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
   4. Do not use calcium chloride, salt, or other mineral containing anti-freeze agents or chemical accelerators, unless otherwise directed by the Engineer.

C. Hot Weather Concreting:
   1. When hot weather conditions exist that would impair the quality and strength of concrete, place concrete in compliance with ACI 305, and as herein specified.

2. Cool ingredients before mixing to maintain concrete temperature at time of placement below 95°F. Mixing water may be chilled, or chopped ice may be used to control concrete temperature provided water equivalent of ice is calculated to total amount of mixing water.
3. Place concrete immediately upon delivery. Keep exposed concrete surfaces and formed shaft extensions moist by fog sprays, wet burlap, or other effective means.

3.3 FIELD QUALITY CONTROL

A. Testing shall be the same as required in Section 03 30 00 - CAST-IN-PLACE CONCRETE.

B. Report test results in writing to Engineer on the same day tests are made. Include in reports project identification name and number, date of concrete placement, name of Contractor, name of concrete supplier and truck number, name of concrete testing service, concrete type, location of drilled pier, design compressive strength at 28 days, concrete mix proportions and materials; compressive breaking strength and type of break for both 7-day tests and 28-day tests.

C. Additional Concrete Tests: Testing service may take core samples of in-place concrete when test results are such that there is reasonable doubt specified concrete strengths have not been attained.

D. Complete continuous coring of drilled piers may be required, at Contractor's expense, where time for removal of temporary casings exceed specified limits, or where observations or placement operations indicate cause for suspicion of quality of concrete, presence of voids, segregation, or other possible defects.

E. Inspection and Tests for Drilled Piers: The soil testing laboratory shall perform and report specified tests, and additional tests which may be required. Conduct tests and provide reports as soon as possible to not delay concreting operations for acceptable excavations.

F. Bottom elevations and bearing capacities and lengths of drilled piers as shown on Drawings are estimated from available soil data. Actual elevations, drilled pier lengths, and bearing capacities will be determined by soil testing facilities from conditions found in excavations. Final evaluations and acceptance of data will be determined by the Engineer.

G. Conduct tests as follows: Tests shall be conducted as required by the testing laboratory to certify that required bearing pressure is obtained at the bottom of each drilled pier.

END OF SECTION 31 63 29

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SECTION 32 05 13 – SOILS FOR EXTERIOR IMPROVEMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Subsoil materials.
   2. Topsoil materials.

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13, MEASUREMENT AND PAYMENT.

1.3 REFERENCE STANDARDS

A. All standards below shall be latest version, unless otherwise specified.

B. American Association of State Highway and Transportation Officials:

C. AASHTO T180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.

D. ASTM International:
   1. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3).
   2. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3. (2,700 kN-m/m3).
   3. ASTM D2487 - Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).

PART 2 - PRODUCTS

2.1 SUBSOIL MATERIALS

A. Subsoil:
   1. Excavated and re-used material, local borrow, or select backfill as specified in Section 31 23 23.13, FILL AND BACKFILL.
   2. Graded.
      a. Free of lumps larger than 3 inches, rocks larger than 2 inches, and debris.

2.2 TOPSOIL MATERIALS

A. Topsoil shall be reasonably free from subsoil, clay, lumps, brush, objectionable weeds and/or other litter and shall be free from roots and toxic substances or other material or substances that might be harmful to plant growth or be a hindrance to grading, planting and maintenance operations.

2.3 TESTING

A. Testing and Analysis of Subsoil Material: If requested by the Engineer, perform in accordance with ASTM D2922 Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).

B. Testing and Analysis of Topsoil Material: If requested by the Engineer, analyze to determine percentage of nitrogen, phosphorus, potash, soluble salt, organic matter, and pH.

C. When tests indicate materials do not meet specified requirements, change material and retest.

D. Furnish materials of each type from same source throughout the Work.

PART 3 - EXECUTION

3.1 EXCAVATION

A. Excavate subsoil and topsoil from areas designated. Strip topsoil to full depth of topsoil in designated areas.

B. Stockpile excavated material meeting requirements for subsoil materials and topsoil materials.

C. Remove excess excavated materials, subsoil and topsoil not intended for reuse, from site.

D. Remove excavated materials not meeting requirements for subsoil materials and topsoil materials from site.

3.2 STOCKPILING

A. Stockpile materials on site at locations indicated on the drawings and designated by the Engineer.

B. Stockpile in sufficient quantities to meet Project schedule and requirements.

C. Separate differing materials with dividers or stockpile apart to prevent mixing.

D. Stockpile topsoil 8 feet high maximum.

E. Prevent intermixing of soil types or contamination.

F. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.

Stockpile unsuitable or hazardous materials on impervious material and cover to prevent erosion and leaching, until disposed of.

3.3 STOCKPILE CLEANUP

A. Remove stockpile, leave area in clean and neat condition. Grade site surface to prevent free standing surface water.

END OF SECTION 32 05 13

SECTION 31 22 13 – AGGREGATES FOR EXTERIOR IMPROVEMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. Provide aggregates as required.

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13 – MEASUREMENT AND PAYMENT.

1.3 REFERENCE STANDARDS

A. All standards below shall be latest version, unless otherwise specified.

B. American Association of State Highway and Transportation Officials:
   1. AASHTO M147 - Standard Specification for Materials for Aggregate and Soil-Aggregate Subbase, Base and Surface Courses.
   2. AASHTO T180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.

C. ASTM International:
   1. ASTM C136 - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
   2. ASTM D448 - Standard Classification for Sizes of Aggregate for Road and Bridge Construction
   3. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3).
   4. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3).
   5. ASTM D2487 - Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).
   6. ASTM D4318 - Standard Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.

PART 2 - PRODUCTS

2.1 AGGREGATE MATERIALS

A. Aggregate material for select backfill across streets, roads, driveways, and for placement of “gravel” or aggregate surfaced areas, shall be Class 7 Aggregate Base Course (ABC) material conforming to the Arkansas Department of Transportation Standard Specifications for Highway Construction, latest edition.

2.2 SOURCE QUALITY CONTROL

A. Section 01 45 00, QUALITY CONTROL: Testing and inspection services.

B. Aggregate Material - Testing and Analysis: Perform in accordance with AASHTO T180.

C. When tests indicate materials do not meet specified requirements, change material and retest.

PART 3 - EXECUTION

3.1 EXCAVATION

A. Excavate aggregate materials from on-site locations indicated as specified in Section 31 23 16, EXCAVATION.

B. Stockpile excavated material meeting requirements for aggregate materials.

C. Remove excess excavated materials and aggregate materials not intended for reuse, from site.

D. Remove excavated materials not meeting requirements for aggregate materials from site.

3.2 STOCKPILING

A. Stockpile materials on site at locations indicated on the drawings and designated by the Engineer.

B. Stockpile in sufficient quantities to meet Project schedule and requirements.

C. Separate different aggregate materials with dividers or stockpile individually to prevent mixing.

D. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.

E. Stockpile unsuitable or hazardous materials on impervious material and cover to prevent erosion and leaching, until disposed of.

3.3 STOCKPILE CLEANUP

A. Remove stockpile, leave area in clean and neat condition. Grade site surface to prevent free standing surface water.

END OF SECTION 32 05 16

SECTION 32 11 00 – BASE COURSE

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Work and materials required to install base course.

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13, MEASUREMENT AND PAYMENT.

1.3 REFERENCE STANDARDS

A. All standards below shall be latest version, unless otherwise specified.

B. American Association of State Highway and Transportation Officials (AASHTO):
   1. T 89 - Standard Method for Determining the Liquid Limit of Soils.
   2. T 90 - Determining the Plastic Limit and Plasticity Index of Soils.
   3. T 96/ASTM C131 - Standard Method for Resistance to Degradation of Small Size Course Aggregate by Abrasion and Impact in the Los Angeles Machine.
   4. T 99 - Standard Methods of Test for the Moisture-Density Relations of Soils Using a 5.5 pound (2.5 kg) Rammer and a 12-inch (305 mm) Drop.
   5. T 180 - Standard Methods of Test for the Moisture-Density Relations of Soils Using a 10-pound (4.54 kg) Rammer and an 18-inch (457 mm) Drop.
   6. T 191 - Standard Method of Test for Density of Soil In-Place by the Sand-Cone Method.
   7. T 238 - Standard Method of Test for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).

1.4 DEFINITIONS

A. Completed Course: Compacted, unyielding, free from irregularities, with smooth, tight, even surface, true to grade, line, and cross-section.

B. Completed Lift: Compacted with uniform surface reasonably true to cross- section.

C. Standard Specifications: Arkansas Department of Transportation Standard Specifications for Highway Construction, latest edition.

PART 2 - PRODUCTS

2.1 BASE COURSE ROCK

A. Aggregate material for base course rock shall be Class 7 Aggregate Base Course (ABC) material conforming to the Arkansas Department of Transportation Standard Specifications for Highway Construction, latest edition.

2.2 TESTING

A. Contractor: tests necessary to locate acceptable source of materials meeting specified requirements.

B. Final approval of aggregate material will be based on materials' test results on installed materials.

C. Should separation of course from fine materials occur during processing or stockpiling, immediately change methods of handling materials to correct uniformity in grading.

PART 3 - EXECUTION

3.1 PREPARATION

A. As specified in Section 31 23 13, SUBGRADE PREPARATION.

B. Obtain Engineer's acceptance of subgrade before placement of base course rock.

C. Do not place base materials in snow or on soft, muddy, or frozen subgrade.

3.2 EQUIPMENT

A. Compaction Equipment: Adequate in design and number to provide compaction and obtain the specified density for each layer.

3.3 HAULING AND SPREADING

A. Hauling Materials:
   1. Do not haul over surfacing in process of construction.
   2. Loads: Of uniform capacity.
   3. Measure capacity of truck to determine vehicle load and quantity.
   4. Maintain consistent gradation of material delivered; loads of widely varying gradations will be cause for rejection.

B. Spreading Materials:
   1. Distribute material to provide required density, depth, grade and dimensions with allowance for subsequent lifts.
   2. Produce even distribution of material upon roadway without segregation.
   3. Should segregation of coarse from fine materials occur during placing, immediately change methods of handling materials to correct uniformity in grading.

3.4 CONSTRUCTION OF COURSES

A. General: Complete each lift in advance of laying succeeding lift to provide required results and adequate inspection.

B. Base Course:
   1. Maximum Completed Lift Thickness: 6 inches
   2. Completed Course Total Thickness: As shown
   3. Spread lift on preceding course to required cross-section.
   4. Lightly blade and roll surface until thoroughly compacted.
   5. Add keystone to achieve compaction and as required when aggregate does not compact readily due to lack of fines or natural cementing properties, as follows:
      a. Use base 1/4-minus crushed aggregate material as keystone.
      b. Spread evenly on top of crushed base course, using spreader boxes or chip spreaders.
      c. Roll surface until keystone is worked into interstices of crushed base course without excessive displacement.
      d. Continue operation until course has become thoroughly keyed, compacted, and will not creep or move under roller.
   6. Blade or broom surface to maintain true line, grade, and cross-section.

3.5 ROLLING AND COMPACTION

A. Blade or otherwise work existing surface as necessary to achieve a smooth and thoroughly compacted surface.

B. Commence compaction of each layer of base after spreading operations and continue until density of 100% of maximum density has been achieved as determined by AASHTO T 99.

C. Commence rolling at outer edges of surfacing and continue toward center; do not roll center of road first.

D. Apply water as needed to obtain densities.

E. Place and compact each lift to required density before succeeding lift is placed.

F. Bind up preceding course before placing leveling course. Remove floating or loose stone from surface.

G. Blade or otherwise work surfacing as necessary to maintain grade and cross- section at all times, and to keep surface smooth and thoroughly compacted.

H. Surface Defects: Remedy surface defects by loosening and rerolling entire area, including surrounding surface, until thoroughly compacted.
   1. Finished Surface: True to grade and crown before proceeding with surfacing.

3.6 SURFACE TOLERANCES

A. Finished Surface of Base Course: Within plus or minus 0.04-foot of grade shown at any individual point.

B. Overall Average: Within plus or minus 0.01-foot from crown and grade specified.

3.7 TESTING

A. In-Place Density Tests:
   1. Construct base course so areas shall be ready for testing.
   2. Allow reasonable length of time for testing laboratory to perform tests and obtain results during normal working hours.
   3. Show proof that areas meet specified requirements before identifying density test locations.
   4. Perform a minimum of 2 tests on completed course per 200 cubic yards of material placed in accordance with T 191, or T 238 at locations acceptable to Engineer.

3.8 CLEANUP

A. Remove excess material; clean stockpile areas of aggregate.

END OF SECTION 32 11 00

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SECTION 32 11 23 – AGGREGATE BASE COURSE

PART 1 - GENERAL

1.1 SUMMARY

A. This item shall consist of a foundation course for surface course, for other base courses, or for pavements.

B. It shall be constructed on the prepared subgrade, subbase, or other completed base course according to these specifications and in substantial conformity with the lines, grades, compacted thickness, and typical cross section shown on the plans.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Aggregate Base Course shall be either gravel and/or crushed stone so proportioned as to meet the requirements for a class of aggregate specified in the following table:

Sieve, mm	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8
				PERCENT PASSING				
75 (3")	100	100	100					
50 (2")	95-100	95-100	95-100					
37.5 (1-1/2")				85-100	100	100	100	
25.0 (1")								100
19.0 (3/4")	60-100	60-100	60-100	60-100	60-100	50-90	50-90	65-100
9.5 (3/8")	40-8-	40-80	40-80	40-80	40-80			
4.75 (#4)	30-60	30-60	20-60	30-60	30-60	25-55	25-55	25-55
2.0 (#10)	20-50	20-50	20-45	20-45	20-45			
0.425 (#40)	10-35	10-35	10-35	10-35	10-35	10-30	10-30	10-30
0.075 (#200)	3-15	3-15	3-12	3-12	3-12	3-10	3-10	3-10
MAX. PLASTICITY INDEX (MINUS								
0.425 MATL.)	13	10	6	6	6	6	6	6
(#40) MINIMUM PERCENT CRUSHED (RETAINED ON 4.75 mm [#4] SIEVE					15			
MINIMUM PERCENT CRUSHER-RUN MATERIAL						90	90	90

B. Class 7 and 8 shall be any mechanically crushed natural rock or stone of igneous, sedimentary, and/or metamorphic origin produced from a solid geological formation by quarrying method

C. The Contractor shall have the option of using any higher numbered class Aggregate Base Course than that specified, provided that payment will be for the class specified.

D. Material furnished for Aggregate Base Course, Class 3 through Class 8, shall have a percent of wear by the Los Angeles Test not greater than 45 as determined by AASHTO T 96.

E. When it is necessary to blend two or more materials, each material shall be proportioned separately through mechanical feeders to ensure uniform production. Premixing or blending to avoid separate feedings will not be permitted. Production of material by blending materials on the roadway to obtain a mixture that will comply with the requirements specified herein will not be permitted.

F. For the purpose of this specification, shale and slate are not considered to be gravel or stone. The material furnished shall not obtain more than 5percent by weight of shale, slate, and other objectionable, deleterious, or injurious matter.

G. For Class 1 and 2 materials, the fraction passing the 0.075 mm (#200) sieve shall not be greater than three-fourths of the fraction passing the 0.425 (#40) sieve. For Classes 3 through 8, the fraction passing the 0.075 mm (#200) sieve shall not be greater than two-thirds of the fraction passing the 0.425 mm (#40) sieve. For Classes 3 through 8 the fraction passing the 0.425 mm (#40) sieve shall have a liquid limit not greater than 25.

H. To ensure that gravel is uniformly graded, the difference between the percent passing the various sieves shall be as follows for Classes 3, 4 and 5:

Sieve		Percent
19.0 mm - 9.5 mm	(3/4" - 3/8")	5 min.
9.5 mm - 4.75 mm	(3/8" - #4)	5 min.
4.75 mm - 2.00 mm	(#4 - #10)	5 min.
2.0 mm - 0.425 mm	(#10 - #40)	4 min.

I. When the material contains aggregate larger than that specified above for the class called for in the Contract, the oversize aggregate shall be removed by screening or by screening and crushing. The removal of large size aggregate by hand methods will not be permitted.

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

A. The base course material shall be placed on a completed and approved subgrade or existing base that has been bladed to substantially conform to the grade and cross section shown on the plans.

B. The subgrade shall be prepared as specified in Section 31 00 00, EARTHWORK and shall be free from an excess or deficiency of moisture at the time of placing base course material.
   1. The subgrade shall also comply, where applicable, with the requirements of other items that may be contained in the Contract that provide for the construction, reconstruction, or shaping of the subgrade or the reconstruction of the existing base course.

C. Base course material shall not be placed on a frozen subgrade or subbase.

D. The aggregate shall be placed on the subgrade or other base course material and spread uniformly to such depth and lines that when compacted it will have the thickness, width, and cross section shown on the Drawings.

E. If the required compacted depth of the base course exceeds 150 mm (6 inches), the base shall be constructed in two or more layers of approximate equal thickness. The maximum compacted thickness of any one layer shall not exceed 150 mm (6 inches) except when vibrating or other approved types of special compacting equipment are used, the compacted depth of a single layer of base course may be increased to 200 mm (8 inches) upon approval of the Engineer.

F. The material shall be spread the same day that it is hauled. Spreading shall be performed in such a manner that no segregation of course and fine particles nor nests or hard areas caused by dumping the aggregate on the subgrade will exist. Care shall be taken to prevent mixing of subgrade or unspecified material with the base course material during the blading and spreading operation.

G. Aggregate shall not be dumped or mixed on an existing or newly constructed ACHM course or PCC Pavement that will not be overlaid under the same Contract nor on any open graded base course. Mechanical spreading equipment shall be used, if necessary, to place the base course on the subgrade.

H. If sufficient working space is not available to allow proper aeration or addition of water to the base, the base material shall be mixed by any satisfactory method before placement.

I. Each course shall be thoroughly mixed for the full depth of the course and shall be compacted by any satisfactory method that will produce the density thereinafter specified.
   1. The aggregate shall be maintained substantially at optimum moisture during the mixing, spreading, and compacting operations, water being added or the material aerated as may be necessary.
   2. The specified grade and cross section shall be maintained by blading throughout the compaction operation.
   3. The material in each course shall be compacted to a density, as determined by AASHTO T 238, Method B, of not less than 98% of the maximum laboratory density determined in the laboratory by AASHTO T 180, Method D.
   4. The aggregate shall be compacted across the full width of application.

J. The compacted base course shall be tested for depth and any deficiencies corrected by scarifying, placing additional material, mixing, reshaping, and recompacting to the specified density, as directed.

K. Where neither prime coat nor surfacing is provided in the same Contract with the base course, the material in the base course shall be uniformly compacted, stable, and free of segregated areas.

L. The Contractor shall maintain the base course in a satisfactory condition until accepted.

3.2 QUALITY CONTROL

A. To assure that the material used meets the requirements of the specifications, certain tests for quality control and acceptance will be performed as specified herein. The properties for which quality control and acceptance testing will be performed are gradation, density, moisture content, plasticity index, and thickness as specified in each Section.

B. The maximum laboratory density shall be determined as follows:

% Retained - 4.75 mm (#4) Sieve	Test Method
10 Max.	AASHTO T 99, Method A
11 - 30	AASHTO T 99, Method C
31 Min.	AASHTO T 180, Method D

Note: In lieu of AASHTO T224, correction for coarse particles retained on the 3/4" (19.0 mm) sieve shall be determined by replacing with an equal mass of material passing the 3/4" (19.0 mm) sieve and retained on the #4 (4.75 mm) sieve.

C. The in-place density shall be determined by using AASHTO T 310, Direct Transmission. The moisture content shall be determined by AASHTO T 310 or ARDOT Test Method 347 or 348. A new maximum laboratory density and optimum moisture will be determined whenever the Engineer deems necessary or upon evidence provided by the Contractor.

D. Tests for gradation, liquid limit, and plasticity index shall be performed by AASHTO T 11, T 27, T 89, and T 90.

E. The Contractor shall furnish all personnel, equipment, and facilities necessary to perform the required sampling and testing.

F. The Contractor shall provide the Engineer with the opportunity to observe all quality control sampling and testing.

G. All quality control sampling and testing shall be performed by or under the direct supervision of a technician acceptable to the Owner and in accordance with ARDOT's Manual of Field Sampling and Testing Procedures. Test reports shall be signed and copies made available to the Engineer if requested.

H. If the results of any test shows that the required minimum density has not been obtained, corrective action shall be taken, followed by a re-test at the same location. The original and re-test reports shall be cross referenced. All corrective actions shall be performed by the Contractor at no cost to the Owner.

3.3 ACCEPTANCE

A. Acceptance testing for thickness (when specified on the Drawings), gradation, plasticity index, density, and moisture content will be based on lots. The size of standard lots will be 100 cubic yards. Partial lots, of any size, may be established by the Engineer at any time.

B. Test methods for acceptance shall be the same as specified for quality control testing.

C. The item of work being tested shall not be considered complete or accepted until passing test reports are submitted to the Engineer.

D. The Contractor shall take one test for all properties in each lot or partial lot at a location randomly selected by the Engineer.

E. In addition to the required acceptance tests, the Engineer may require the Contractor to test any location that, by visual observation, appears to be defective.

F. The Contractor's acceptance sampling and testing procedures and results will be subject to independent assurance sampling and testing conducted by the Owner. The Contractor shall be required to make changes to the equipment and/or procedures if the such tests are unable to verify the Contractor's test results.

G. All acceptance testing performed by the Contractor is subject to observation by the Engineer. All test reports shall be signed and submitted to the Engineer the next business day after the tests are performed.

H. If a lot or a partial lot fails to meet the specifications, the Contractor shall remove and replace that lot or partial lot with acceptable material at no cost to the Owner. Tests will be performed on the replacement material as required for the original material. Acceptance of the replacement material will be the same as for the original material.

I. Payment for the quantity in the original lot will be withheld or recovered, and released after the removal and replacement has been acceptably performed.

END OF SECTION 32 11 23

SECTION 32 13 13 – CONCRETE PAVING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Concrete sidewalks, driveways, roads, curbs and gutters and aprons.

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13, MEASUREMENT AND PAYMENT.

1.3 REFERENCES

A. All standards below shall be latest version, unless otherwise specified.

B. Standard Specifications: Arkansas Department of Transportation Standard Specifications for Highway Construction, latest edition.

C. American Concrete Institute (ACI):
   1. ACI 211.1 – Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete
   2. ACI 301 – Specifications for Structural Concrete for Buildings
   3. ACI 304R – Guide for Measuring, Mixing, Transporting, and Placing Concrete; American Concrete Institute International; 2000.
   4. ACI 305R – Hot Weather Concreting
   5. ACI 306R – Cold Weather Concreting

D. American Society for Testing and Materials (ASTM):
   1. ASTM A185 – Standard Specification for Steel Welded Wire Reinforcement, Plain, for Concrete
   2. ASTM A615 – Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
   3. ASTM C33 – Standard Specification for Concrete Aggregates
   4. ASTM C39 – Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
   5. ASTM C94 – Standard Specification for Ready Mixed Concrete
   6. ASTM C150 – Standard Specification for Portland Cement
   7. ASTM C260 – Standard Specification for Air-Entraining Admixtures for Concrete
   8. ASTM C309 – Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete
   9. ASTM C494 – Standard Specification for Chemical Admixtures for Concrete
   10. ASTM C685 – Standard Specification for Concrete Made by Volumetric Batching and Continuous Mixing
   11. ASTM D1751 – Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Non-extruding and Resilient Bituminous Types)
   12. ASTM D1752 – Standard Specification for Preformed Sponge Rubber Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction

1.4 SUBMITTALS

A. Submit in accordance with the Front End Documents.

B. Provide the following:
   1. Product Data: Provide data on joint filler, admixtures, and curing compound.

2. Design Data: Indicate pavement thickness, designed concrete strength, reinforcement, and typical details.

1.5 QUALITY ASSURANCE

A. Perform work in accordance with ACI 301.

B. Follow recommendations of ACI 305R when concreting during hot weather.

C. Follow recommendations of ACI 306R when concreting during cold weather.

PART 2 - PRODUCTS

2.1 FORM MATERIALS

A. Form Materials: conform to ACI 301.

B. Joint Filler: Preformed; non-extruding bituminous type (ASTM D1751) or sponge rubber or cork (ASTM D1752).
1. Thickness: 1/2-inch

2.2 JOINT SEALANT

A. Sealant for joints shall be self-leveling silicone (non-acid curing).

2.3 BACKER ROD

A. Backer rod shall be a non-moisture absorbing, closed-cell, expanded polyethylene foam rod. The rod shall be compatible with the sealant and no bond or reaction shall occur between the rod and the sealant.

2.4 REINFORCEMENT

A. Reinforcing Steel: ASTM A615 / A615M Grade 60 (420); deformed billet steel bars; unfinished finish.

B. Steel Welded Wire Reinforcement: Plain type, ASTM A185; in flat sheets; unfinished.

C. Dowels: ASTM A615 Grade 60 (420); deformed carbon steel bars; unfinished finish.

2.5 CONCRETE MATERIALS

A. Concrete Materials: As specified in Section 03 30 00, CAST-IN-PLACE CONCRETE.

2.6 ACCESSORIES

A. Curing Compound: ASTM C309, Type 1-D or Type 2.

2.7 CONCRETE MIX DESIGN

Prepare concrete mix design as specified in Section 03 30 00, CAST-IN-PLACE CONCRETE.

2.8 MIXING

A. On Project Site: Mix in drum type batch mixer, complying with ASTM C685. Mix each batch not less than 1-1/2 minutes and not more than 5 minutes.

B. Transit Mixers: Comply with ASTM C94 / C94M.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify compacted subgrade is acceptable and ready to support paving and imposed loads.

B. Verify gradients and elevations of base are correct.

3.2 TRENCH REPAIRS

A. Trench repairs shall conform to the Drawing Details and be what is termed a “T-patch,” which includes a minimum bench (or key) of 12 inches beyond the edges of the excavation and bear on undisturbed subgrade.

3.3 SUBGRADE

A. Prepare subgrade as specified in Section 31 23 13, SUBGRADE PREPARATION.

3.4 BASECOURSE

A. Prepare base course as specified in Section 32 11 00, BASE COURSE.

B. Moisten base to minimize absorption of water from fresh concrete.

3.5 FORMING

A. Place and secure forms to correct location, dimension, profile, and gradient.

B. Assemble formwork to permit easy stripping and dismantling without damaging concrete.

C. Place joint filler vertical in position, in straight lines. Secure to formwork during concrete placement.

3.6 REINFORCEMENT

A. Place reinforcement as indicated.

B. Place dowels to achieve pavement and curb alignment as detailed.

3.7 PLACING CONCRETE

A. Place concrete in accordance with ACI 304R.

B. Ensure reinforcement, inserts, embedded parts and formed joints are not disturbed during concrete placement.

C. Place concrete continuously over the full depth and full width of the panel and between predetermined construction joints. Do not break or interrupt successive pours such that cold joints occur.

D. Apply surface retarder to all exposed surfaces in accordance with manufacturer’s instructions.

3.8 JOINTS

A. Place contraction joints at even intervals not to exceed 15 feet spacing and isolations joints at the end of each placement, but not to exceed 150 feet.

B. Place contraction and isolation joints and edge of new concrete to align with existing joints beyond.

C. Evenly space joint patterns not dimensioned on plans. Align joints with corners of masonry where shown on plans.

D. Place joint filler between new sidewalks and building or adjacent saw cut paving.

3.9 FINISHING

A. Roadway: Drag finish in accordance with ARDOT standards, or as approved by Engineer.

B. Driveway, Sidewalk and Ramp Paving: Light broom, texture perpendicular to pavement direction.

C. Place curing compound on exposed concrete surfaces immediately after finishing. Apply in accordance with manufacturer's instructions.

3.10 TOLERANCES

A. Maximum Variation of Surface Flatness: 1/4-inch in 10 feet.

B. Maximum Variation from True Position: 1/4-inch.

3.11 EVALUATION AND ACCEPTANCE

A. An independent testing agency shall perform field quality control tests.
   1. Provide free access to concrete operations at project site and cooperate with appointed firm.
   2. Submit proposed mix design of each class of concrete to inspection and testing firm for review prior to commencement of concrete operations.
   3. Tests of concrete and concrete materials may be performed at any time to ensure conformance with specified requirements.

B. Testing shall be performed in accordance with Section 03 30 00, CAST-IN-PLACE CONCRETE.
   1. Take one additional test cylinder during cold weather concreting, cured on job site under same conditions as concrete it represents.

C. Maintain records of placed concrete items. Record date, location of pour, quantity, air temperature, and test samples taken.

3.12 PROTECTION

A. Immediately after placement, protect pavement from premature drying, excessive hot or cold temperatures and mechanical injury.

B. Do not permit pedestrian traffic over pavement until 75% design strength of concrete has been achieved.

END OF SECTION 32 13 13

SECTION 32 16 23 – CONCRETE CURBS AND SIDEWALKS

PART 1 - GENERAL

1.1 SUMMARY

A. Construction of concrete curbs and sidewalks.

1.2 RELATED SECTIONS

A. Section 31 23 33.16 – TRENCH BACKFILL

1.3 REFERENCES

A. American Concrete Institute, 22400 W. Seven Mile Road, Detroit, Michigan 48219.
   1. ACI 304R - Guide for Measuring, Mixing, Transporting, and Placing Concrete.

B. American Society for Testing and Materials, 1961 Race Street, Philadelphia, Pennsylvania 19103.
   1. ASTM C94 - Specification for Ready-Mixed Concrete.
   2. ASTM C309 - Specification for Liquid Membrane-Forming Compounds for Curing Concrete.
   3. ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5-lb (2.49-kg) Rammer and 12-in (304.8-mm) Drop.
   4. ASTM D994 - Specification for Preformed Expansion Joint Filler for Concrete (Bituminous Type).

1.4 SUBMITTALS

A. Submit complete information regarding concrete mix to Engineer for review in accordance with the requirements of ASTM C94, Alternate 2.

PART 2 - PRODUCTS

2.1 CURB FORMS

A. 2-inch dressed dimension lumber or metal of equal strength, free from defects that would impair appearance or structural quality of completed curb.

B. Metal forms: Subject to approval of Engineer.

C. Short-Radius Forms: 1-inch dressed lumber, plywood, or metal.

D. Curb Face: No horizontal joints in form material closer than 7 inches from top of curb.

E. Stakes and Bracing Materials: Provide as required to hold forms securely in place.

2.2 SIDEWALK FORMS

A. 2-inch dressed lumber, straight and free from defects, or standard metal forms.

B. Short-Radius Forms: 1-inch dressed lumber or plywood.

C. Stakes and Bracing Materials: Provide as required to hold forms securely in place.

2.3 CRUSHED ROCK BASE

A. Clean gravel or crushed rock conforming to requirements for granular fill as specified in Section 31 23 33.16, TRENCH BACKFILL.

2.4 EXPANSION JOINT FILLER

A. 1/2-inch-thick preformed asphalt-impregnated expansion joint material conforming to ASTM D994.

2.5 CONCRETE

A. Ready mixed conforming to ASTM C94, Alternate 2.

B. Compressive Strength: 3,000 psi at 28 days.

C. Maximum Size of Aggregate: 1 1/2-inch.

D. Slump: 2 to 4 inches.

2.6 CURING COMPOUND

A. Liquid membrane-forming, clear or translucent, suitable for spray application.

B. Conform to ASTM C309, Type 1.

2.7 ACCEPTANCE OF MATERIALS

A. All materials shall be subject to inspection for suitability, as the Engineer may elect, prior to or during incorporation into the work.

PART 3 - EXECUTION

3.1 EXCAVATION AND BACKFILL

A. Excavate and backfill in accordance with Section 31 23 33.16, TRENCH BACKFILL.

3.2 PREPARATION OF SUBGRADE

A. Bring the areas on which curbs and sidewalks are to be constructed to required grade on undisturbed ground and compact by sprinkling and rolling or mechanical tamping.

B. As depressions occur, refill with suitable material and recompact until the surface is at the proper grade.

C. Compact subgrade on fill to 95% of maximum density at optimum moisture content as determined by ASTM D698.

3.3 SETTING FORMS

A. Construct forms to the shape, lines, grades, and dimensions called for on the Drawings.

B. Stake wood or metal forms securely in place, true to line and grade.

C. Brace forms to prevent change of shape or movement in any direction resulting from the weight of the concrete during placement.

D. Construct short-radius curved forms to exact radius.

E. Tops of forms shall not depart from grade line more than 1/8 inch when checked with a 10-foot straightedge.

F. Alignment of straight sections shall not vary more than 1/8-inch in 10 feet.

3.4 CURB CONSTRUCTION

A. Construct curbs to line and grade shown or established by the Engineer, and conform to the details shown.

B. Place, process, finish, and cure concrete in conformance with this Section and the applicable requirements of ACI 614. Wherever requirements differ, the more stringent shall govern.

C. Placement of Preformed Asphalt-Impregnated Expansion Joints (1/2-inch thick):

D. Beginning and end of curved portions of the curb.

E. Connections to existing curbs.

F. At drainage structures.

G. Contraction Joints: All contraction joints shall be formed by sawing unless otherwise specified, and filled with a commercially available silicone product approved by the Engineer.
   1. Contraction joints shall be constructed at 15-foot intervals.
   2. Contraction joints shall be 1/8-inch to 3/8-inch in width and 1 1/2-inch in depth.
   3. Contraction joints shall be constructed at right angles to the centerline and perpendicular to the surface of the curb and gutter.
   4. When curb and gutter is constructed adjacent to, or on rigid pavement, the same joint layout for pavement shall be used, where practicable.

H. As soon as concrete has set sufficiently to support its own weight, remove the front form, and finish all exposed surfaces.
   1. Finish top of curb with a steel trowel.
   2. Finish edges with a steel edging tool.
   3. Rub formed faces with burlap sack or similar device to produce a uniformly textured surface, free from form marks, honeycomb, and other defects.

I. Fill contraction joints with a commercially available silicone product approved by the Engineer.

J. Curing:
   1. Upon completion of finishing, apply approved curing compound to exposed surfaces of curb.
   2. Curing shall continue for a minimum of 5 days.

K. Backfilling Curb: Upon completion of curing period, but not before 7 days has elapsed since pouring the concrete, backfill the curb as specified in Section 31 23 33.13, TRENCH BACKFILL.

L. Adjusting:
   1. Finished curb shall present a uniform appearance for both grade and alignment.

M. Remove curb sections showing abrupt changes in alignment or grade or which are more than 1/4-inch away from location as staked or which are defective for any reason.

N. Construct new curb at Contractor's expense.

3.5 SIDEWALK CONSTRUCTION

A. Thickness of sidewalks shall be as shown on the Drawings.

B. Place, process, finish, and cure concrete in conformance with this Section and the applicable requirements of ACI 614. Where the requirements differ, the more stringent shall govern.

C. Placement of Preformed Asphalt Expansion Joints (1/2-inch thick):
   1. Where sidewalk ends.
   2. Around posts, poles, or other objects protruding through the sidewalk.
   3. Drainage structures.
   4. Adjacent to curb and gutter.

D. Transverse Joints:
   1. Joints shall be cut with a 1/4-inch joint at intervals not greater than the width of the walk being constructed, or as directed.

E. Finish:
   1. Broom surface with fine hair broom at right angles to length of walk and tool at all edges, joints, and markings.
   2. Edges shall be rounded in a 1/4-inch radius, including edges at joints.

F. Curing:
   1. Upon completion of finishing, apply an approved curing compound to exposed surfaces.
   2. Protection sidewalk from damage for period of 7 days.

END OF SECTION 32 16 23

SECTION 32 107 23 – THERMOPLASTIC PAVEMENT MARKING

PART 1 - GENERAL

1.1 SUMMARY

A. Furnish and place thermoplastic pavement markings, including words, arrows and emblems of the color and type specified, and remove pavement markings, all according to these specifications and in conformity with the dimensions and at the locations shown on the plans or as specified.

B. Markings are to be placed under existing traffic conditions.

C. The work shall comply with the Manual on Uniform Traffic Control Devices except as modified by these specifications.

1.2 REFERENCES

A. Arkansas State Highway and Transportation Department (AHTD) Standard Specifications for Highway Construction, latest edition.

B. Manual on Uniform Traffic Control Devices, latest edition.

C. AASHTO M 249, M 247

PART 2 - PRODUCTS

2.1 MATERIALS

A. The material used shall be a product especially compounded for traffic markings. Each container shall be clearly and adequately marked to indicate the color, weight, batch or lot number, and type of material.

B. White thermoplastic material, after drying, shall be pure white and free from dirt or tint, and shall comply with the Federal Highway Administration's standard white. The white color is to have a minimum reading of 75% relative to magnesium oxide when tested according to AHTD Test Method

C. Other colored thermoplastic material shall comply in color with the Federal Highway Administration's standard for that color. The material shall not change appreciably in its color and brightness characteristics after prolonged exposure to sunlight.

D. The material, when placed as a stripe, shall not be slippery when wet and it shall not lift from the pavement in freezing weather.

E. In its plastic state, the material shall not give off fumes that are toxic or otherwise injurious to persons on property. The material shall not break down or deteriorate if held at the plastic temperature for a period of 4 hours nor by reason of 4 re-heatings to the plastic temperature.

F. The material shall not deteriorate by contact with sodium chloride, calcium chloride, or other chemical formations on the roadway or streets, or because of the oil contact on pavement materials, or from oil droppings from traffic.

2.2 TEMPERATURE-VISCOSITY CHARACTERISTICS

A. The temperature-viscosity characteristics of the thermoplastic material shall remain consistent through 4 re-heatings and shall be the same from batch to batch. There shall be no obvious change in the color of the material as a result of up to 4 re-heatings or from batch to batch.

2.3 PIGMENTED BINDER

A. The pigmented binder shall be well dispersed and free from all skins, foreign objects, or other ingredients that will cause bleeding, staining, or discoloration. The pigment shall be evenly dispersed throughout the material. After application and proper drying time, material shall show no appreciable deformation nor discoloration under local traffic conditions and in air or road temperatures ranging from -18 degrees C (0EF) to 71 degrees C (160EF). The material shall not smear or spread under normal traffic conditions at temperatures below 71 degrees C (160EF).

B. The material shall not soften at 82 degrees C (180EF) when tested by ASTM E 28.

2.4 DRYING TIME

A. “Drying Time” shall be defined as the minimum elapsed time after application when the stripe shall have and retain the characteristics required in the preceding paragraphs. In addition, drying time shall be established by the minimum elapsed time after application when traffic will leave no impression or imprint on the applied marking. The drying time shall not exceed a characteristic straight-line curve, the limits of which are 2 minutes at 10 degrees C (50 F) and 15 minutes at 32 degrees C (90 F), measured at a maximum relative humidity of 70%.

B. The stripe shall maintain its original dimension and placement. The exposed surface shall be free of tack. Cold ductility of the material shall be such as to permit normal movement with the road surface without chipping or cracking.

C. The marking shall have a uniform cross section. The density and character of the material shall be uniform throughout its thickness and shall be completely reflectorized both internally and externally.

2.5 REFLECTORIZED BEADS

A. During manufacture, reflectorized beads shall be mixed into the material to the extent of not less than 40% nor more than 50% by weight of the material. The glass beads used in the intermix formulation and for the drop-on application shall meet AASHTO M 247 with a Type I gradation. The beads for intermix shall be uncoated. The drop-on beads shall be suitably treated to resist moisture and retain free flow properties.

2.6 MOISTURE RESISTANCE

A. Moisture resistance will be tested by AHTD Test Method. Beads shall not be specially treated to enhance flotation. The beads shall be automatically applied at a minimum uniform rate of 39 kg (8 pounds) of glass beads to every 100 sq m (100 square feet) of surface.

PART 3 - EXECUTION

3.1 GENERAL

A. The thermoplastic compound shall be screed or ribbon extruded to the pavement surface unless a specific application method is specified.

3.2 EQUIPMENT

A. The equipment used to apply the thermoplastic compound onto the pavement shall be suitably equipped for heating and controlling the flow of the material. The equipment shall be constructed to provide continuous mixing and agitation of the material. The conveying parts of the equipment, between the main material reservoir and applicator, shall be so constructed as to prevent accumulation and clogging. The equipment shall be constructed so that all mixing and conveying parts, up to and including the applicator, maintain the material at the plastic temperature. The thermoplastic material shall be dispensed at a temperature recommended by the manufacturer. The applicator shall include a cutoff device remotely controlled to provide clean, square stripe ends and to provide a method for applying skip lines.

B. The thermoplastic reservoir shall be insulated and equipped with an automatic thermostatic control to maintain the proper temperature of the material.

C. The thermoplastic machine shall comply with the requirements of the National Board of Fire Underwriters.

D. Beads applied to the surface of the completed stripe shall be applied by an automatic bead dispenser attached to the pavement marking equipment in such a manner that the beads are immediately dispensed upon the completed line. The bead dispenser shall be equipped with an automatic cutoff control, synchronized with the cutoff of the pavement marking equipment.

3.3 SURFACE PREPARATION

A. On pavements where no pavement markings exist or where the existing pavement markings are paint or thermoplastic and do not conflict with proposed pavement markings, blasting with water or sand or a combination thereof will be required to remove any curing compound, oxidized paint or thermoplastic, or dirt to ensure a good bond. This blasting is considered surface preparation.

B. Conflicting pavement markings that exist shall be removed by blasting with water and/or sand or by grinding. This blasting or grinding is considered pavement marking removal.

3.4 APPLICATION

A. Thermoplastic markings shall not be applied to the pavement when the pavement surface temperature is less than 10 degrees C (50 F) or when the pavement surface shows evidence of moisture.

B. The thickness of all thermoplastic markings above the roadway surface shall be 2.3 mm (90 mils) (a minimum of 446 kg/km [1584 pounds per mile] of 100 mm [4 inch] line). The thickness of the plastic will be measured by a device supplied by the Contractor during the course of the project capable of measuring the thickness of the plastic as installed on the pavement.

C. The minimum thickness, as required above, will be measured in the center of the line when gauged by the equipment described above. The minimum thickness 12 mm (1/2-inch) from the edges shall not be less than 75% of the thickness required in the center. Maximum thickness of markings is 5 mm (3/16-inch).

D. On concrete pavements, paint pavement markings according to Section 718 of the 2014 AHTD Standard Specifications for Highway Construction, shall be applied as a primer for the thermoplastic markings, except where thermoplastic markings are to be applied over existing thermoplastic markings. A primer other than paint may be used when recommended by the thermoplastic manufacturer.

E. A primer is not required for asphalt pavements, but paint pavement markings complying with Section 718 of the 2014 AHTD Standard Specifications for Highway Construction, may be used by the Contractor as a primer at no cost to the Owner.

F. Spotting of the center line and lane line locations, if required, shall be the responsibility of the Contractor. Establishment of no passing zone, if required, will be done by the Arkansas Highway and Transportation Department, and will be completed at such time as the Contractor begins work. Edge lines shall not be broken for driveways. The trace of the thermoplastic line shall be uniform.

G. The finished lines shall have well defined edges, shall be uniform in thickness, and shall be straight and true. No stripe shall be less than the specified width. Any corrections of variations in width or alignment of the stripes shall not be made abruptly. Lines that cannot be correct to meet these requirements shall be removed at the Contractor's expense.

H. Line removal as specified on the plans shall be performed in such a manner that no conflicting pavement marking will be left in place. Removal of the pavement marking by a means that will gouge the surface will not be permitted.

END OF SECTION 32 17 23

SECTION 32 31 13 – FENCE AND GATES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Work and materials required to install fence and gates.
   2. Fence and gates shall be of the 3-rail type.

1.2 MEASUREMENT AND PAYMENT

1.3 As specified in Section 01 22 13, MEASUREMENT AND PAYMENT

1.4 REFERENCE STANDARDS

A. All standards below shall be latest version, unless otherwise specified.

B. American Society for Testing and Materials (ASTM):
   1. ASTM A1018 - Standard Specification for Steel, Sheet and Strip, Heavy-Thickness Coils, Hot-Rolled, Carbon, Commercial, Drawing, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength.
   2. ASTM B6 - Standard Specification for Zinc.
   3. ASTM C94 - Standard Specification for Ready-Mixed Concrete.
   4. ASTM C143 - Standard Test Method for Slump of Hydraulic-Cement Concrete.
   5. ASTM C387 - Standard Specifications for Packaged, Dry, Combined Materials for Concrete and High Strength Mortar.
   6. ASTM F626 - Standard Specification for Fence Fittings.
   7. ASTM F900 - Standard Specification for Industrial and Commercial Swing Gates.
   8. ASTM F1083 - Standard Specification for Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures.
   9. ASTM F1184 - Standard Specifications for Industrial and Commercial Horizontal Slide Gates.

1.5 DEFINITIONS

A. Terms as defined in ASTM.

1.6 SUBMITTALS

A. Submit in accordance with the Front End Documents.

B. Provide the following:
   1. Shop Drawings:
      a. Detailed information and specifications for materials, finishes, and dimensions.
      b. Where specified, card access system serial communication interface card code message format.
   2. Quality Control Submittals:
      a. Manufacturers recommended installation instructions.
      b. Evidence of Supplier and installer qualifications.

PART 2 - PRODUCTS

2.1 GENERAL

A. Match style, finish, and color of each fence component with that of other fence components.

B. Where existing fence has been removed or damaged, replace with new materials matching existing components.

2.2 WOOD

A. Rails:
   1. Pressure treated wood in steel rails to anchor pickets to

2.3 HARDWARE

A. Specifically designed for the application.
   1. Pressure Treated Wood
   2. Cedar
   3. Metal
   4. All other: Minimum zinc-coated (galvanized)

2.4 CONCRETE

A. Provide as specified in Section 03 30 00, CAST-IN-PLACE CONCRETE.

PART 3 - EXECUTION

3.1 GENERAL

A. Install fences and gates in accordance with ASTM F567, except as modified in this section, and in accordance with fence manufacturer's recommendations, as approved by Engineer. Erect fencing in straight lines between angle points.

B. Provide all necessary hardware for a complete fence and gate installation.

C. Installation shall follow the recommendation provided with the submitted Shop Drawings.

D. When replacing existing fence that has been removed or damaged, replace with new materials matching existing components.

3.2 PREPARATION

A. Establish locations of fence lines, gates, and terminal posts.

3.3 POST SETTING

A. Driven posts are not acceptable.

B. Post Hole Depth:
   1. Minimum 3 feet below finished grade.
   2. 2 inches deeper than post embedment depth below finish grade.

C. Backfill post holes with concrete to 2 inches above finished grade.

D. Before concrete sets, crown and finish top of concrete to readily shed water.

3.4 RAILS

A. Install 3-rail system in accordance with the Drawings and submitted Shop Drawings.

END OF SECTION 32 31 13

SECTION 32 92 13 – SITE RESTORATION

PART 1 - GENERAL

1.1 SUMMARY

A. Perform restoration work in areas designated on Drawings and areas disturbed during construction including but not necessarily limited to preparation of subsoil, placing topsoil, fertilizing, sodding, seeding, mulching, maintenance, and seed protection on slopes. Restoration required shall include covering all topsoil from stock pile not paved or covered with improvements and to eliminate erosion after all finish grading has been completed.

B. Work areas shall be kept clean and neat as practicable. Lawns, gardens, and vehicle and pedestrian crossings shall have excess quantities of supplies, excavated material, man-made debris, and organic matter removed from the area immediately following construction.

C. All property improvements shall be restored in kind or as nearly as practicable as determined by Engineer.

D. Section Includes:
   1. Restoration of areas disturbed during construction including excavation area plus any area in project vicinity disturbed by Contractor's, subcontractors', suppliers', and utility owner operations.

E. Related Sections:

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13, MEASUREMENT AND PAYMENT.

1.3 DEFINITIONS

A. Weeds: Vegetative species other than specified species to be established in given area.

1.4 REGULATORY REQUIREMENTS

A. Comply with regulatory agencies for fertilizer and herbicide composition.

1.5 QUALITY ASSURANCE

A. Provide seed mixture in containers showing percentage of seed mix, germination percentage, inert matter percentage, weed percentage, year of production, net weight, date of packaging, and location of packaging.

1.6 TESTS

A. If requested by the Engineer: Submit minimum 10 oz sample of topsoil proposed. Forward sample to approved testing laboratory in sealed containers to prevent contamination.

B. Analyze to ascertain percentage of nitrogen, phosphorus, potash, soluble salt content organic matter content, and PH value.

C. Testing is not required if recent tests are available for topsoil to be used. Submit these test results to the testing laboratory for approval. Indicate, by test results, information necessary to determine suitability.

PART 2 - PRODUCTS

2.1 SEED

A. Contractor shall apply seed mixture appropriate for the season and disturbed area.

B. Contractor shall apply a mixture of various annuals and perennials to provide overlapping times of seasonal peak vegetative cover. Seeding shall only be done just prior to the vegetation's peak season for best results. Seeding shall be used when there is sufficient time in the season to ensure adequate vegetation establishment and erosion control.

C. To optimize soil stabilization, Contractor shall utilize a nurse crop of quick growing annuals within a mix of perennials appropriate for the season. The nurse crop germinates and grows rapidly, holding the soil until the slower-growing perennial seedlings become established. Permanent vegetation shall not be considered established until a ground cover of perennial vegetation is achieved that is uniform and mature enough to survive and be of sufficient density to preclude erosion.

D. Contractor shall conduct seeding activities to achieve stabilization that are generally congruent with the following schedule:

E. Dormant Cold Season Temporary Stabilization (November 1 – February 28)
   1. Seeding at this time of the year typically does not produce successful results, as cold temperatures inhibit seed germination. Contractor shall be responsible for achieving temporary stabilization via mulching, erosion control blankets, matting, compost, and/or other appropriate structural/nonstructural methods for temporary stabilization until seasonal weather conditions become more conducive to establishment of permanent perennial vegetative cover. Fertilizers shall be added at this time in preparation for seeding. Contractor shall be responsible for achieving temporary stabilization at all areas that are unstable and subject to erosion.

F. Contractor shall apply seeding, as follows:

Pre-Warm Season Seed Mix (March 15 – May 31)

Plant Species	Growth Season/Life Cycle	Seeding Rate
Spring Rye (*Secale cereale)*	cool season annual	15 lbs/ac
Perennial Ryegrass (*Lolium perenne)*	cool season perennial	15 lbs/ac
Crimson Clover *(Trifolium incarnatum)**	cool season annual	20 lbs/ac
White Clover (*Trifolium repens)**	cool season perennial	20 lbs/ac
Korean (Kobe) lespedeza (*Kummerowia stipulacea)***	warm season annual	10 lbs/ac
Bahiagrass (*Paspalum notatum)*	warm season perennial	30 lbs/ac
Hulled Bermuda (*Cynodon dactylon)*	warm season perennial	30 lbs/ac
Weeping love grass *(Eragrostis curvula)*	warm season perennial	30 lbs/ac

*All legume seed must be properly inoculated with appropriate inoculant.

**DO NOT apply sericea lespedeza.

Warm Season Seed Mix (June 1 – August 31)

Plant Species	Growth Season/Life Cycle	Seeding Rate
Sudan grass *(Sorghum bicolor)*	warm season annual	20 lbs/ac
Alyce clover *(Alysicarpus ovalifolius)*	warm season annual	20 lbs/ac
Brown-Top Millet *(Panicum ramosum)*	warm season annual	20 lbs/ac
Buffalo grass (*Bouteloua dactyloides)*	warm season perennial	25 lbs/ac
Weeping love grass (*Eragrostis curvula)*	warm season perennial	25 lbs/ac
Bahiagrass (*Paspalum notatum)*	warm season perennial	25 lbs/ac
Hulled Bermuda (*Cynodon dactylon)*	warm season perennial	25 lbs/ac

Late Season Seed Mix (September 1 – October 15)

Plant Species	Growth Season/Life Cycle	Seeding Rate
Oats *(Avena sativa)*	cool season annual	30 lbs/ac
Winter Rye (*Secale cereale)*	cool season annual	30 lbs/ac
Winter Wheat (*Triticum aestivum*)	cool season annual	30 lbs/ac
White clover (*Trifolium repens)**	cool season perennial	15 lbs/ac
Perennial Ryegrass *(Lolium perenne)*	cool season perennial	25 lbs/ac
Virginia wildrye (*Elymus virginicus)*	cool season perennial	25 lbs/ac
Unhulled Bermuda	warm season perennial	50 lbs/ac

*All legume seed must be properly inoculated with appropriate inoculant.

**DO NOT apply sericea lespedeza.

G. Contractor shall submit all labels/tags from seed bags and seed purchase invoices to the Engineer.

H. For residential lawn repair, Contractor shall match existing grass.

2.2 SOIL MATERIALS

A. Topsoil shall be reasonably free from subsoil, clay, lumps, brush, objectionable weeds and/or other litter and shall be free from roots and toxic substances or other material or substances that might be harmful to plant growth or be a hindrance to grading, planting and maintenance operations.

2.3 SOLID SOD

A. Solid sod shall be cut from well-established viable Bermuda, Zoysia or St. Augustine grass. Sod type shall match that established in the disturbed areas.

2.4 MULCH

A. Shall be vegetative mulch consisting of cereal straw from stalks of oats, rye, wheat or barley. Straw shall be free of prohibited weed seeds as stated in State Seed Law and shall be relatively free of all other noxious and undesirable seeds. Straw shall be clean and bright, relatively free of foreign material and be dry enough to be spread properly.

2.5 AGRICULTURAL LIMESTONE

A. Shall be agricultural limestone with not less than 90% passing the No. 4 sieve and containing not less than 40% calcium carbonate equivalent. Lime shall be applied at the rate recommended by soil test.

2.6 FERTILIZER

A. Shall be a standard commercial product which when applied at the proper rate will supply the equivalent quantity of total nitrogen, available phosphoric acid and soluble potash specified. Fertilizer shall be delivered to the site in bags or other suitable containers, each fully labeled, conforming to applicable state fertilizer laws, and bearing the name, trade name or trademark, and warranty of the producer.

2.7 ACCESSORIES

A. Mulching shall be used in conjunction with both temporary and permanent seeding practices to enhance their success by providing erosion protection prior to the onset of vegetative growth. Straw mulching shall be of oat, wheat, or rice straw mulch. Hay mulch shall be prairie grass, Bermuda grass, or other hay as approved. Mulch shall be dry and reasonably free from Johnson grass or other noxious weeds and shall not be excessively brittle or in an advanced state of decomposition. All material will be inspected and approved prior to use.

B. Mulching shall be spread in a uniform continuous blanket, at a rate of 1 to 3 tons per acre (air dried weight) or to a uniform 2-inch depth. Mulch shall be spread by hand or by an approved blower type mulch spreader. Care shall be taken to remove all wire and/or twine from baled hay/straw when the control structures are removed from the site. Mulch shall be anchored in the soil to a depth of two to three inches to form a soil-binding mulch to prevent loss or bunching or held in place with a tackifier

C. Weed Killer will be as recommended by grass manufacturer and only at the direction of the Owner and the Engineer.

PART 3 - EXECUTION

3.1 GENERAL

A. Contractor shall begin temporary stabilization of all work areas no later than 14 days after disturbance. A maximum of 1,000 linear feet of disturbance along the project alignment will be allowed prior to initiating stabilization efforts.

B. The application of fertilizer, seed and mulch, or solid sod (if specified) shall follow each other in successive sequence as closely as possible.

C. Final stabilization requires that the seeding shall only be accomplished between April 1st and September 31st.

D. Seeding outside the specified seeding periods shall not be considered final stabilization.

E. Work areas that require final stabilization outside of accepted seeding periods shall be stabilized with solid sod, unless otherwise approved by the Engineer. All solid sod applied between October 1st and March 31st shall include an 18-month warranty from date of installation.

3.2 PREPARATION

A. Beginning of work constitutes acceptance of existing site conditions.

B. Protect landscaping and other features remaining as final Work.

C. Protect existing structures, fences, sidewalks, utilities, paving, and curbs.

D. Establish locations of fence lines, gates, and terminal posts.

3.3 PREPARATION OF SUBSOIL

A. Prepare subsoil to eliminate uneven areas and low spots. Maintain consistent slopes and gradual grade changes per grading plan if applicable.

B. Remove foreign materials, weeds, and undesirable plants and their roots. Remove contaminated subsoil.

C. Scarify subsoil to depth of 3 inches where topsoil is to be placed. Repeat cultivation in areas where equipment, used for hauling and spreading topsoil, has compacted subsoil.

3.4 PLACING TOPSOIL

A. Spread topsoil to a minimum depth of 4 inches over area to be seeded or sodded. Grade to eliminate rough, low, or soft areas, and to ensure positive drainage.

B. Rake until smooth and remove all rocks, inorganic materials, and any other debris. All clumps of dirt larger than 2 inches diameter shall be removed.

C. Roll the entire prepared surface with a hand roller weighing not more than 100 pounds per linear foot of width. Finished ground shall be level, firm, and sufficient to prevent sinkage pockets when irrigation is applied.

3.5 FERTILIZING

A. Fertilizers shall be applied at appropriate agronomic rate. If necessary to achieve final stabilization, fertilizer shall be applied at a minimum rate of 250 pounds per acre (0.0057 pounds per square foot) in advance of seeding or sodding operations. The fertilizer shall consist of 13-13-13 (nitrogen, phosphorus, and potassium content). The fertilizer distributor box shall be equipped with baffle plates to prevent downward movement of fertilizer when operating on a slope. The fertilizer shall be raked in and thoroughly mixed with the soil to a depth of approximately 2 inches prior to the application of seed or solid sod.

3.6 RESTORATION BY SEEDING

A. Broadcast sowing of seed may be accomplished by hand seeders or by approved power equipment. Either method shall result in uniform distribution and no work shall be performed during high winds. The area seeded shall be lightly firmed with a cultipacker immediately after broadcast.

B. The Contractor shall water and maintain seeded areas from time of completion until final acceptance of the project.

C. The Contractor shall be responsible for repeated seeding, if necessary, throughout the warranty period.

3.7 SEED PROTECTION ON SLOPES

A. Cover seeds slopes where grade is 3:1 or greater with jute matting. Roll matting down over slopes without stretching or pulling.

B. Lay matting smoothly on soil surface, bury top end of each section in a narrow 6-inch deep excavated trench. Provide 4 inches of overlap at adjacent rolls. Backfill trench and rake smooth; level with adjacent soil.

C. Secure outside edges and overlaps at with stakes 36 inches on center.

D. Lightly dress slopes with slopes with topsoil to ensure close contact between matting and soil.

E. In ditches, unroll matting in direction of water flow. Overlap ends and edges a minimum of 6 inches with upstream section on top.

3.8 MULCHING

A. Immediately after seeding, the Contractor shall apply vegetative mulch at an approximate rate of 2 tons per acre to all seeded areas. Mulch shall be applied by mechanical mulch spreaders equipped to eject by means of a constant air stream-controlled quantities of the vegetative mulch.

B. All mulch shall be distributed evenly over the areas to be mulched within 24 hours after seeding operation.

C. Following mulching operation, suitable precautions shall be taken to prohibit traffic over mulched areas. Displaced mulch shall be replaced immediately, including the underlying seed bed, if damaged as well.

3.9 RESTORATION BY SODDING

A. In this section, “Solid Sod” is interchangeable with the word “sod”.

B. Sodding shall be completed between April 1st and September 31st. If sodding cannot be performed during this period the Contractor shall include an 18-month warranty from date of installation.

C. Install sod within 7 days following placement of top soil.

D. Top soil shall be lightly watered immediately prior to laying sod. The first row of sod shall be placed in a straight line with subsequent rows being parallel to each other with staggered lateral joints. Exercise care to ensure that sod is not stretched, overlapped, and that all joints are butted tightly to prevent voids.

E. Once sod is placed, roll sections with a minimum of 4 passes with a hand roller weighing no more than 100 pounds per linear foot of width.

F. Water sod immediately after transplanting to prevent excessive drying during the progress of the Work. Once rolling is complete, water the sod sufficient to allow the soil beneath the sod is thoroughly wet. The Contractor shall be responsible for watering the sod during the installation process as well watering the sod daily.

3.10 WATERING

A. Prior to placement of seed, areas shall be sprinkled with water sufficiently to make them moist, but not muddy. The initial application of water may be omitted if the area is sufficient moist from rainfall.

B. Immediately following the application of the mulch cover for seeding, water shall be applied in sufficient quantity to thoroughly moisten the soil to the depth of pulverization and then as necessary to germinate the seed and maintain growth.

C. Prior to placement of sod, areas shall be sprinkled with water sufficiently to make them moist, but not muddy. The initial application of water may be omitted if the area is sufficient moist from rainfall.

D. Immediately following the placing and tamping of sod, the covered area shall be wetted thoroughly. Subsequent applications of water shall be as required.

3.11 CLEANING

A. During Work keep premises neat and orderly including organization of storage areas. Trash, including debris resulting from removing weeds or rocks from planting areas, lawn preparation, preparing beds, or planting plants shall be removed from site daily as Work progresses. Keep all gutter, sidewalks, driveways street pavement, yard or other areas shall be cleaned of all debris, topsoil or other objectionable matter. All such cleanup operations shall be completed before restored areas are measured for payment.

3.12 MAINTENANCE

A. The Contractor shall maintain all seeded areas until the grass is properly established (not less than 90 days) until satisfactory development. Maintenance shall be continued until final acceptance of the work.

B. Maintenance shall begin in conjunction with planting operation and continue until final acceptance.

C. All paved areas shall be cleaned as planting proceeds. All areas shall be kept free of excess materials and debris.

D. Planted areas shall be watered as needed to ensure survival and growth of plant material.

E. Erosion in planting areas shall be repaired on a weekly basis by top-dressing and smoothing approved topsoil and seeding.

F. Apply weed killer when weed development is evident, during calm weather when air temperature is above 50 degrees F.

G. Replant damaged grass areas demonstrating root growth failure, deterioration, bare or thin spots, and eroded areas.

H. Maintenance shall also include all temporary fences, barriers and warnings signs, where signs, where deemed necessary. It is to be recognized that there may be occupancy of the building during the installation of lawn plant material. It is also recognized that there may be a certain amount of tenant-inflicted damage. The Contractor shall be held responsible for all such tenant damage to lawns (areas planted by Contractor) until the time of final acceptance.

3.13 FINAL ACCEPTANCE

A. At the end of the establishment period, the Owner's Representative will inspect all work for Final Acceptance upon written request of the Contractor. The request shall be received at least 10 calendar days before the anticipated date for final inspection.

B. Upon completion and re-inspection for all repairs or renewals necessary in the judgment of the Owner's Representative at that time, the work of this Section and shall be considered complete

and the Contractor shall be relieved of the responsibility for care and maintenance of the accepted lawn.

C. Work shall be considered complete and eligible for acceptance only after fulfillment of the following requirements and any applicable requirements as stated elsewhere in the Specifications.
   1. All materials have been installed and maintained and protection accomplished according to the Specifications.
   2. All seeded areas shall have no bare spots or cover that is unacceptable totaling more than 3% of the individual lawn area.
   3. All grass must be vigorous and weeds shall not exist in sufficient number to damage appearance.
   4. All tools, surplus materials, equipment, debris, etc. shall be removed and the site left in a neat and acceptable condition.
   5. All seeded areas have been mowed one time at a 3-inch height by contractor.
   6. All sodded areas have been determined to be firmly rooted by Engineer.

D. The lawn and grass operations shall not be considered complete until a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 80% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures.

3.14 RESTORATION

A. Restore pavement, grassed areas and structures damaged during execution of work of this Section.

END OF SECTION 32 92 13

SECTION 32 92 19 - SEEDING

PART 1 - GENERAL

1.1 SUMMARY

A. Provide finish grading and grass establishment.

B. The intention of this Specification is that the Contractor establish turf on pipelines and areas damaged as a result of construction.

C. Where lawns are disturbed due to construction, restore lawns using same grass type as found in lawn prior to construction.

PART 2 - MATERIALS

2.1 TOPSOIL

A. Existing topsoil shall be reused where practical.

B. Imported Topsoil:
   1. Furnished at sole expense of Contractor.
   2. Friable loam free from subsoil, roots, grass, excessive amounts of weeds, stone, and foreign matter; acidity range (pH) of 5.5 to 7.5; and containing a minimum of 4% and a maximum of 50% organic matter.

2.2 SEED

A. Certified, blue tag, clean, delivered in original, unopened packages and bearing an analysis of the contents, guaranteed 95% pure and to have a minimum germination rate of 85%, within 1 year of test.

2.3 SEED MIX

A. Mix for areas: Common Bermuda Grass. Follow the recommendations of the local Agricultural Extension Agent for requirements on coverage, fertilization, and seasons.

PART 3 - EXECUTION

3.1 PROJECT SCHEDULE

A. Project Schedule shall show an anticipated time for grading and seeding to take place, so that seasonal consideration can be given attention.

3.2 SITE GRADING

A. Shape, trim, and finish slopes to conform with lines, grades, and cross sections shown.

B. Make slopes free of loose exposed roots and stones exceeding 3-inch diameter.

C. Ensure that site drains properly and there are no areas where water may pond.

D. Finished site grading will be reviewed by Engineer.

3.3 GRADING OF TOPSOIL

A. Shape the topsoil over the area to the desired shape and contour.

B. Apply commercial fertilizer at the Agricultural Extension Agent's recommended rate, distributing it uniformly with a mechanical spreader.

3.4 FINISH GRADING

A. Thoroughly mix the topsoil and fertilizer.

B. Rake the area to a uniform grade so that areas drain in the same manner as at the start of the Project.

C. Lightly compact before planting grass.

D. Remove trash and stones exceeding 2 inches in diameter from area to a depth of 2 inches prior to preparation and planting grass.

3.5 TIME OF SEEDING

A. Conduct seeding under favorable weather conditions during seasons which are normal for work as determined by accepted practice in locality of Project.

3.6 MECHANICAL SEEDING

A. Sow grassed areas evenly with a mechanical spreader at rate of 100 pounds per acre, minimum, or as otherwise recommended by the Agricultural Extension Agent. Roll with cultipacker to cover seed, and water with fine spray. Method of seeding may be varied at discretion of Contractor on his own responsibility to establish a smooth, uniformly grassed area.

3.7 HYDROSEEDING

A. Seed may be applied by hydroseeding method. Seeding shall be done within 10 days following soil preparation. Hydroseed areas at rate of 100 pounds seed and 500 pounds ammonium phosphate per acre, minimum, or as otherwise recommended by the Agricultural Extension Agent.

B. Proceed with seeding operation on moist soil, but only after free surface water has drained away.

C. Exercise care to prevent drift and displacement of mixture into other areas.

3.8 WINTER PROTECTIVE SEEDING

A. Winter barley or annual rye grass applied at a rate of 120 pounds/acre shall be used after September 15 or as recommended by the Agricultural Extension Agent.

B. Areas receiving temporary winter protective seeding shall be re-seeded when weather conditions become favorable.

3.9 MAINTENANCE

A. Begin maintenance immediately after each portion of grass is planted and continue until a reasonable stand of grass has been obtained. Water to keep surface soil moist. Repair washed out areas by filling with topsoil, fertilizing, and seeding.

3.10 GUARANTEE

A. If, at the end of a 180-day period, a satisfactory stand of grass has not been produced, the Contractor shall renovate and reseed the grass or unsatisfactory portions thereof immediately, or, if after the usual planting season, during the next planting season. If a satisfactory stand of grass develops by July 1 of the following year, it will be accepted. If it is not accepted, a complete replanting will be required during the planting season.

B. A satisfactory stand is defined as grass or section of grass that has:
   1. No bare spots larger than 1 square foot.
   2. Not more than 10% of total area with bare spots larger than 1 square foot.
   3. Not more than 15% of total area with bare spots larger than 6 inches square.

END OF SECTION 32 92 19

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SECTION 32 92 20 - TEMPORARY SEEDING AND MULCHING

PART 1 - GENERAL

1.1 SUMMARY

A. The work under this item shall be accomplished as soon as practicable after clearing and grubbing in an area has been completed in order to deter erosion of the site.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Nonvegetative Soil Stabilization:
   1. Utilize temporary nonvegetative soil stabilization to provide protection against excessive soil erosion over a short-term period (less than 1 year).
   2. Nonvegetative methods shall be required in areas that experience high water flows and high runoff velocities (disturbed slopes steeper than 2:1).
   3. Methods employed include mulching, chemical soil stabilizers (binders), brush and slash, and netting and matting.
   4. Mulch shall consist of straw, hay, or salt hay applied at an appropriate rate 70-115 pounds per 1000 square feet (1.5 to 2.5 tons/acre). Mulch anchoring shall be implemented promptly where applicable and achieved by one of the following methods:
      a. Peg and twine,
      b. Mulch netting,
      c. Erosion control,
      d. Jute matting, as indicated on Drawings,
      e. Mulch anchoring tool.

B. Temporary Seeding and Revegetation:
   1. Soil that is stockpiled for more than 30 days or disturbed areas where there will be no construction for 12 months shall be stabilized to prevent erosion.
   2. If natural vegetation does not occur, area shall be temporarily seeded.
   3. Temporary revegetation shall occur during the spring and summer period.
   4. If required to temporary revegetate an area during the fall or winter period, a mixture of Austrian winter pea, rye, oats, and wheat shall be used.
   5. Provide a combination of milo, millets, and the Arkansas mix for temporary revegetation to control erosion. The use of a broadcast seeder after the last frost through July is acceptable.
   6. Alternative to Temporary Seeding: Mulching using the methods and rates give in this Section.

C. Seed:
   1. Certified, blue tag, clean, delivered in original, unopened packages and bearing an analysis of the contents, guaranteed 95 percent pure and to have a minimum germination rate of 85%, within 1 year of test.

2.2 SEED MIX

A. Mix for areas: Common Bermuda Grass. Follow the recommendations of the local Agricultural Extension Agent for requirements on coverage, fertilization, and seasons.

PART 3 - EXECUTION

3.1 PROJECT SCHEDULE

A. Project Schedule will dictate when seeding needs to take place.

3.2 SITE GRADING

A. Shape, trim, and finish slopes to conform with lines, grades, and cross sections shown.

B. Make slopes free of loose exposed roots and stones exceeding 3-inch diameter.

C. Ensure that site drains properly and there are no areas where water may pond.

D. Grading will be reviewed by Engineer.

3.3 GRADING OF TOPSOIL

A. Shape the topsoil over the area to the desired shape and contour.

B. Apply commercial fertilizer at the Agricultural Extension Agent's recommended rate, distributing it uniformly with a mechanical spreader.

3.4 FINISH GRADING

A. Thoroughly mix the topsoil and fertilizer.

B. Rake the area to a uniform grade so that areas drain in the same manner as at the start of the Project.

C. Lightly compact before planting grass.

D. Remove trash and stones exceeding 2 inches in diameter from area to a depth of 2 inches prior to preparation and planting grass.

3.5 TIME OF SEEDING

A. Conduct seeding under favorable weather conditions during seasons which are normal for work as determined by accepted practice in locality of Project.

3.6 MECHANICAL SEEDING

A. Sow grassed areas evenly with a mechanical spreader at rate of 100 pounds per acre, minimum, or as otherwise recommended by the Agricultural Extension Agent. Roll with cultipacker to cover seed, and water with fine spray. Method of seeding may be varied at discretion of Contractor on his own responsibility to establish a smooth, uniformly grassed area.

3.7 HYDROSEEDING

A. Seed may be applied by hydroseeding method. Seeding shall be done within 10 days following soil preparation. Hydroseed areas at rate of 100 pounds seed and 500 pounds ammonium phosphate per acre, minimum, or as otherwise recommended by the Agricultural Extension Agent.

B. Proceed with seeding operation on moist soil, but only after free surface water has drained away.

C. Exercise care to prevent drift and displacement of mixture into other areas.

3.8 WINTER PROTECTIVE SEEDING

A. Winter barley or annual rye grass applied at a rate of 120 pounds/acre shall be used after September 15 or as recommended by the Agricultural Extension Agent.

B. Areas receiving temporary winter protective seeding shall be re-seeded when weather conditions become favorable.

3.9 MULCH COVER

A. Mulch cover shall be applied at the rate of 4000 pounds per acre immediately after seeding and shall be spread uniformly over the entire area by approved power mulching equipment. When approved by the Engineer, the Contractor may use hand methods to apply mulch cover too small or inaccessible areas. If the Contractor so elects, an approved mulching machine may be used whereby the application of mulch cover and tackifier may be combined into one operation. If this method is used, no change in application rates will be allowed.

B. In its final position, the anchored mulch shall be loose enough to allow air to circulate, but compact enough to partially shade the ground and reduce the impact of rainfall on the surface of the soil.

3.10 MULCH ANCHORING

A. Immediately following or during the application of the mulch cover on seeded areas, the mulch shall be anchored by one of the following methods:
   1. Tracking or Roller Method - The mulch shall be effectively pressed into the soil using steel cleated track or cleated roller equipment. The anchoring shall be performed so that the grooves formed are perpendicular to the flow of water down backslopes and foreslopes. The equipment and method used shall produce acceptable results.
   2. Asphalt Tackifier - Asphalt shall be applied at the rate of approximately 0.05 gallon per square yard. Application shall be made using a pressure distributor to ensure constant and uniform distribution. The use of asphalt may be reduced or eliminated by the Engineer at selected locations.

3.11 MAINTENANCE

A. Begin maintenance immediately after each portion of grass is planted and continue until a reasonable stand of grass has been obtained.

B. The Contractor shall apply water in an amount such that, in conjunction with any rainfall, the seeded and mulched areas will receive an amount equivalent to a minimum of 1-inch of water each week beginning the week after seeding and continuing for a minimum of 3 weeks.

C. Actual work and materials required due to the Contractor's negligence in maintaining completed work or failure to water grass as directed shall be accomplished at no cost to the Owner. If payments are withheld and subsequently a stand of grass satisfactory to the Engineer develops, payments will be released.

END OF SECTION

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SECTION 02924 - SODDING

PART 1 - GENERAL

1.1 SUMMARY

A. Provide slab sod, fertilizer, and water to establish and maintain grass. Owner shall provide access to water at no cost.

B. Planting Period: As recommended by sod producer for time of year, subject to Landscape Architect's approval.

1.2 REFERENCES

A. Federal Specifications.
   1. FS O-F-241 - Fertilizers, Mixed, Commercial.

1.3 DEFINITIONS

A. Weeds: Includes Dandelion, Jimsonweed, Quackgrass, Horsetail, Morning Glory, Rush Grass, Mustard, Lambsquarter, Chickweed, Cress, Crabgrass, Canadian Thistle, Nutgrass, Poison Oak, Blackberry, Tansy Ragwort, Johnson Grass, Poison Ivy, Nut Sedge, Nimble Will, Bindweed, Bent Grass, Wild Garlic, Perrenial Sorrel, and Brome Grass.

1.4 REGULATORY REQUIREMENTS

A. Comply with regulatory agencies for herbicide composition.

1.5 QUALITY CONTROL

A. Grass that has been cut more than 48 hours before placing shall not be used.

B. Sod shall not be loaded in bulk on vehicles and dumped in bulk on planting site.

C. Soil Analysis: For each un-amended soil type, furnish soil analysis and a written report by a qualified soil-testing laboratory approved by the Landscape Architect prior to setting Sod. Cooperative Extension Service is an acceptable soil testing lab.
   1. The soil-testing laboratory shall oversee soil sampling.
   2. Report suitability of tested soil for turf growth.
      a. State recommendations for nitrogen, phosphorus, and potash nutrients and soil amendments to be added to produce satisfactory planting soil suitable for healthy, viable plants.
      b. Report presence of problem salts, minerals, or heavy metals; if present, provide additional recommendations for corrective action.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver to site, store, and protect products at site.

B. Sod:
   1. Cut sod with approved sod cutters to minimum depth of 2-1/2 inches in satisfactory and uniform widths and convenient lengths for handling.
   2. Place cut sod flat, grass side up, on boards and haul to site with soil intact.
   3. Sod shall not hang over the edges of the boards.

C. Fertilizer: Deliver in waterproof bags showing weight, chemical analysis, and name of manufacturer.

PART 2 - MATERIALS

2.1 TOPSOIL

A. Existing topsoil shall be reused where practical.

B. Imported Topsoil:

C. Furnished at sole expense of Contractor.

D. Friable loam free from subsoil, roots, grass, excessive amounts of weeds, stone, and foreign matter; acidity range (pH) of 5.5 to 7.5; and containing a minimum of 4% and a maximum of 50% organic matter.

2.2 SLAB SODDING

A. Type: Common Bermuda or as indicated on Landscape plans.

B. Certified nursery grade cultivated grass sod, 95% weed free.

C. Sod shall be live, fresh, and uninjured at time of placing.

2.3 FERTILIZER

A. FS O-F-241, Type and Grade as recommended for grass, with 50% of the elements derived from organic sources; of proportion necessary to eliminate any deficiencies of topsoil to the proportions of nitrogen, phosphoric acid, and soluble potash as recommended by County Extension Agent and/or seed manufacturer, subject to Engineer's approval.

2.4 WATER

A. Clean, fresh, and free of substances or matter which could inhibit vigorous growth of grass.

2.5 HERBICIDES

A. As recommended by sod producer and as approved by Landscape Architect.

PART 3 - EXECUTION

3.1 PREPARATION

A. Fine grade to eliminate uneven areas and low spots. Allow for thickness of topsoil and sod.

B. Spread topsoil to minimum 4-inch depth and rake smooth.

3.2 FERTILIZING

A. Apply approximately 90% over entire area to receive slab sodding.

B. Apply remaining 10% over sod after placing and rolling.

3.3 SODDING

A. Upon delivery to site transfer sod from boards to soil surface.

B. Place slabs closely, leaving a minimum amount of space between slabs.

C. Use appropriate tools to pull together slabs that do not fit closely.

D. Do not handle sod by hand except when filling small cracks or at locations where it would be impractical to use boards.

3.4 ROLLING

A. Roll slab sod as soon after planting as practicable with plain rollers or cultipackers.

B. Tamp sod with approved hand methods where rolling is impractical.

3.5 MAINTENANCE

A. Water to prevent grass and soil from drying out.

B. Control growth of weeds.

C. Apply herbicides in accordance with manufacturer's instructions.

D. Remedy damage resulting from improper use of herbicides.

E. Immediately re-sod areas which show bare spots.

F. Protect sodded areas with warning signs during maintenance period.

END OF SECTION 32 92 23

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SECTION 33 14 13 – WATER PIPE AND FITTINGS

PART 1 - GENERAL

1.1 SUMMARY

A. This section includes the minimum requirements for installing water utility piping which includes the furnishing, installing, laying, jointing, fittings, air release valves, valves, and appurtenances required for a complete system as shown on the Drawings and specified herein. The Work shall also include such connections, reconnections, relocations, temporary connections, abandonments, and all other provisions in regard to existing water utility piping operations and modifications required to perform the Work.

B. Section Includes:
1. Water Pipe,
2. Fittings,
3. MJ Retainer Glands,
4. Couplings and Adaptors,
5. Tapping Sleeves,
6. Bedding and cover materials.
7. Accessories.

1.2 MEASUREMENT AND PAYMENT

A. As specified in Section 01 22 13, MEASUREMENT AND PAYMENT.

1.3 REFERENCE STANDARDS

A. All standards below shall be latest version, unless otherwise specified.

B. American Water Works Association:
1. AWWA C110 - Ductile-Iron and Gray-Iron Fittings.
2. AWWA C153 - Ductile-Iron Compact Fittings
3. AWWA C111 - Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.
4. AWWA C151 - Ductile-Iron Pipe, Centrifugally Cast.
5. AWWA C900 - Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 In. Through 60 In., for Water Transmission and Distribution.

C. ASTM International:
1. ASTM F714 - Standard Specification for Polyethylene (PE) Pipe (SDR-PR) Based on Outside Diameter.
2. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3).
3. ASTM D1785 - Standard Specification for Polyvinyl Chloride (PVC) Plastic Pipe, Schedules 40, 80, and 120.
4. ASTM D2241 - Standard Specification for Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series).
5. ASTM D2466 - Standard Specification for Polyvinyl Chloride (PVC) Plastic Pipe Fittings, Schedule 40.
6. ASTM D2467 - Standard Specification for Polyvinyl Chloride (PVC) Plastic Pipe Fittings, Schedule 80.
7. ASTM D6938 - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).

1.4 LEAD-FREE BRASS

A. All brass shall be manufactured in accordance with the Safe Drinking Water Act as amended to be LEAD-FREE brass (< 0.25% Pb).

1.5 INSTALLATION GUIDE FOR MANUFACTURER SUPPLIED PIPE MATERIALS

A. The Contractor shall be responsible for following the installation guide for the pipeline material provided.

B. The more stringent requirement between these Specifications and the manufacturer's installation guide shall govern.

C. At a minimum, all buried iron pipe and fittings shall be double poly wrapped with low density Polywrap. Where indicated on the Drawings or on the Bid Form, V-Bio Enhanced Polywrap shall be used as the first layer touching the pipe or fittings.

PART 2 - PRODUCTS

2.1 DUCTILE IRON PIPE:

A. Bell and spigot ductile iron pipe shall comply with AWWA C150 and AWWA C151.

B. Ductile iron pipe shall be manufactured in the U.S.A. and each piece shall be subjected to a hydrostatic pressure test of at least 500 psi at the point of manufacture.

C. The class or nominal thickness, new weight without lining, and casting period shall be clearly marked on each length of pipe. Additionally, the manufacturer's mark, country where cast, year in which the pipe was produced, and the letters "DI" or "Ductile" shall be cast or stamped on each length of pipe.

D. Pipe shall have an exterior bituminous coating applied by airless spray method.

E. Pipe shall have a double thickness cement lining.

F. Pipe shall be rated for a minimum working pressure of 200 psi or specified project requirements, whichever is greater, plus a 2 to 1 (2:1) factor of safety, using a Type II laying condition and a depth of cover of 4 feet.
   1. Pipe diameters 4-inch through 12-inch shall be Class 350, minimum.
   2. Pipe diameters 14-inch through 20-inch shall be Class 250, minimum.
   3. Pipe diameters 24 inches and larger shall be Class 200, minimum.

G. Push-On Joints:
   1. Comply with AWWA/ANSI C111/A21.11.
   2. Furnish complete with all accessories required.

H. Restrained Joints:
   1. Restrained joints shall be restrained using grip gaskets or locking rings.
   2. All restraints shall comply with applicable AWWA standards.
   3. Manufacturers:
      a. American, Fast-Grip Restrained Gaskets, Lok-Ring Restrained Rings,
      b. U.S. Pipe, Field-Lok Restrained Gaskets, TR Flex Gripper Restrained Rings,
      c. McWane, Sure Stop Restrained Gaskets, Super Lok Restrained Rings,
      d. or approved equal.

2.2 POLYETHYLENE ENCASEMENT

A. Low Density Polywrap
   1. Polyethylene encasement shall be in conformance to ANSI/AWWA C105, latest revision. The virgin linear low-density polyethylene film shall have a minimum normal thickness of .008 inches (8 mils), and shall be provided in either flat tube or sheet form.
   2. The color shall be black or blue with nominal 2% carbon black UV inhibitor and printed per the AWWA C105 standard.
   3. Tape for field taping of polywrapped pipe, fittings, etc. or field repair of missing polyethylene encasement material shall be Trumbull, Polyken #900, Scotchrap #50 or equal, at least 2 inches wide, and installed as per AWWA C105. Duct Tape is not permitted.

B. V-Bio Enhanced Polywrap
   1. V-Bio enhanced polyethylene encasement for use with ductile iron pipe systems shall consist of 3 layers of co-extruded linear low-density polyethylene (LLDPE), fused into a single thickness of not less than 8 mils.
   2. The inside surface of the polyethylene wrap to be in contact with the pipe exterior shall be infused with a blend of antimicrobial compound to mitigate microbiologically influenced corrosion and a volatile corrosion inhibitor to control galvanic corrosion.
   3. Tape for field taping of polywrapped pipe, fittings, etc. or field repair of missing polyethylene encasement material shall be Trumbull, Polyken #900, Scotchrap #50 or equal, at least 2 inches wide, and installed as per AWWA C105 . Duct Tape is not permitted.

2.3 PVC PIPE (4" AND LARGER):

A. Comply with AWWA C900.

B. PVC pipe shall be minimum DR 18 (unless otherwise noted on plans), minimum, and have a pressure rating of no less than 200 psi.

C. PVC pipe shall be blue in color.

D. Push-On Joints:
   1. Comply with ASTM D3139 and ASTM F477.
   2. Seals: PVC flexible elastomeric.
   3. Solvent-cement couplings are not permitted.

E. Restrained Joints:
   1. Where required, joints shall be restrained using restrained joint PVC piping system or epoxy coated bell restraint harnesses complying with all applicable AWWA specifications and specified herein.
   2. Manufacturers:
      a. Westlake: C900/RJIB Restrained Joint Integral Bell for DR 14 and DR 18 pipe;
      b. or approved equal.

2.4 HIGH DENSITY POLYETHYLENE PIPE (HDPE) 4" AND LARGER:

A. Comply with AWWA C906, PE 4710.

B. HDPE pipe shall DR 9 or DR 11 as indicated on the Drawings.

C. HDPE pipe shall have a pressure rating of not less than 200 psi.

D. Pipe Outside Diameter: Ductile Iron Pipe Sizes (DIPS).

E. HDPE pipe shall include blue striping.

F. Joints: Butt fusion.

G. Pipe shall be marked as follows:
1. Trademark or trade name,
2. Nominal pipe size,
3. Standard material code: PE 4710,
4. Dimension Ratio: DR 9 or DR 11,
5. AWWA pressure class,
6. AWWA standard designation number: ANSI/AWWA C906,
7. Manufacturer's production-record code.

2.5 HIGH DENSITY POLYETHYLENE PIPE (HDPE) 3" AND SMALLER:

A. Comply with AWWA C901, PE 4710.

B. HDPE pipe shall DR 9.

C. HDPE pipe shall have a pressure rating of not less than 200 psi.

D. Pipe Outside Diameter: Iron Pipe Sizes (IPS).

E. HDPE pipe shall include blue striping.

F. Joints: Butt fusion.

G. Pipe shall be marked as follows:
1. Trademark or trade name,
2. Nominal pipe size,
3. Standard material code: PE 4710,
4. Dimension Ratio: DR 9,
5. AWWA pressure class,
6. AWWA standard designation number: AWWA C901,
7. Manufacturer's production-record code.

2.6 INTERNAL PIPE STIFFENER FOR POLYETHYLENE MAIN PIPE

A. Internal pipe stiffeners for HDPE shall be solid tubular 304 stainless steel, dimpled, and flanged to retain placement within PE tubing. Internal pipe stiffeners shall be used on all HDPE connections. The internal pipe stiffener shall be specifically sized (diameter and length) for the HDPE and fitting that is being used with.

2.7 FUSIBLE PVC PIPE (THERMAL BUTT-FUSION JOINT):

A. Fusible polyvinyl chloride pipe shall conform to AWWA C900, ASTM D2241 or ASTM D1785 for standard dimensions, as applicable. Testing shall be in accordance with the referenced AWWA standards for all pipe types.

B. Fusible polyvinyl chloride pipe shall be extruded with plain ends. The ends shall be square to the pipe and free of any bevel or chamfer. There shall be no bell or gasket of any kind incorporated into the pipe.

C. Fusible polyvinyl chloride pipe shall be manufactured in a standard 40' nominal length, or custom lengths as specified.

D. Fusible polyvinyl chloride pipe shall be blue in color for water use.

E. Pipe shall be marked as follows:
   1. Nominal pipe size,
   2. PVC,
   3. Dimension Ratio, Standard Dimension Ratio, or Schedule,
   4. AWWA pressure class, or standard pressure rating for non-AWWA pipe, as applicable,
   5. AWWA standard designation number, or pipe type for non-AWWA pipe, as applicable,
   6. Extrusion production-record code,
   7. Trademark or trade name,
   8. Cell Classification 12454 and/or PVC material code 1120 may also be included.

F. Pipe shall be homogeneous throughout and be free of visible cracks, holes, foreign material, blisters, or other visible deleterious faults.

G. Fusible PVC pipe shall be minimum DR-18 and have a pressure rating of no less than 200 psi.

2.8 FITTINGS: MECHANICAL JOINT DUCTILE IRON, COMPLYING WITH AWWA C153 OR AWWA C110.

A. Material: Ductile iron with a pressure rating that meets or exceeds the specified pressure rating of connected pipe.

B. Coating: Fittings shall be fusion-bonded epoxy coated inside and outside in accordance with ANSI/AWWA C116/A21.16.

2.9 MECHANICAL JOINT RETAINER GLANDS:

A. Restraint devices for mechanical joint fittings and appurtenances for nominal pipe sizes 3-inch through 48-inch shall consist of multiple gripping wedges incorporated into a follower gland meeting the applicable requirements of ANSI/AWWA C110/A21.10.

B. Mechanical joint retainer glands shall be made from ductile iron and shall be designed for a working pressure of at least 350-psi for 3-inch through 16-inch ductile iron pipe, at least 305 psi for 3-inch through 12-inch PVC, and at least 250 psi for 18-inch through 48-inch ductile iron pipe.

C. Glands shall be manufactured of ductile iron conforming to ASTM A 536-80.

D. Restraining devices shall be of ductile iron, heat treated to a minimum hardness of 370 BHN.

E. Retainer glands shall have an approved coating system for corrosion resistance equivalent to MEGA-BOND®,

F. Manufacturers:
   1. Retainer glands shall be manufactured by EBAA Iron, Inc., or Star Pipe Products (USA only).
      a. Retainer glands for pipe sizes 3-inch through 12-inch shall be manufactured by EBAA Iron, Inc., or Star Pipe Products (USA only).
      b. Retainer glands for pipe sizes greater than 12 inches shall be manufactured by EBAA Iron, Inc., or Star Pipe Products (USA only).

2.10 COUPLINGS AND ADAPTORS

A. When all-thread attachments are required, eye-bolt style attachments are not permitted. Romac “Ductile Lug” style attachments or approved equal shall be used. All-threads shall be made of 316 stainless steel.

B. Restrained Flange Adaptors:
   1. Restrained flange adapters shall be used in lieu of threaded, or welded, flanged spool pieces. Flange adapters shall be made of ductile iron conforming to ASTM A536 and have flange bolt circles that are compatible with ANSI/AWWA C110/A21.10.
   2. All restrained flange adaptors shall be epoxy coated.
   3. Restraint for the flange adapter shall consist of a plurality of individual actuated gripping wedges to maximize restraint capability. Torque limiting actuating screws shall be used to insure proper initial set of gripping wedges.
   4. The flange adapter shall be capable of deflection during assembly, or permit lengths of pipe to be field cut, to allow a minimum of 0.6" gap between the end of the pipe and the mating flange without affecting the integrity of the seal.
   5. For PVC pipe, the flange adapter will have a pressure rating equal to the pipe.
   6. For ductile iron pipe, the flange adapter shall have a safety factor of 2:1 minimum.
   7. Manufacturers:
      a. 2100 Megaflange, EBBA Iron, Inc.,
      b. or approved equal.

C. Restrained Couplings:
   1. Joint restraint to prevent axial separation shall be incorporated into the design of the sleeve or coupling used to connect 2 plain ends of same or dissimilar materials, such as Ductile Iron pipe, steel pipe, PVC pipe (C900 or ASTM D2241) and or High-Density Polyethylene (HDPE) pipe. Internal pipe wall stiffeners must be used when restraining HDPE.
   2. The restraint mechanism shall incorporate a plurality of individually actuating gripping surfaces to maximize restraint capability, and have torque limiting twist off nuts to insure proper actuating of the restraint devices.
   3. The coupling sleeve internal surfaces (wetted parts) shall be lined with a minimum of 15 mils of fusion bonded epoxy conforming to the applicable requirements of ANSI/AWWA C213. The coating shall meet ANSI/NSF-61. Exterior surfaces shall be coated with a minimum of 6 mils of fusion bonded epoxy conforming to the applicable requirements of ANSI/AWWA C116/A21.16. Ductile Iron components shall meet or exceed the requirements of ASTM A536, and shall be tested in accordance with said standard. Sealing gaskets shall be constructed of SBR and Certified to requirements of ANSI/NSF 61.
   4. The restrained joining system shall meet the applicable requirements of AWWA C219, ANSI/AWWA C111/A21.11, and ASTM D2000.
   5. Manufacturers:
      a. Series 3800, EBBA Iron, Inc.,
      b. or approved equal.

D. Bell Restraints
   1. Bell restraints for AWWA C900 PVC sizes 4-inch through 12-inch shall be Series 1900 Restraint Harness, as manufactured by EBAA Iron, Inc., or approved equal. Devices shall have an approved coating system for corrosion resistance equivalent to MEGA-BOND®.
   2. Bell restraints for AWWA C900 PVC sizes 14-inch through 54-inch shall be Series 2800 Restraint Harness, as manufactured by EBAA Iron, Inc., or approved equal. Devices shall have an approved coating system for corrosion resistance equivalent to MEGA-BOND®.
   3. Bell restraints for Ductile Iron Pipe sizes 4-inch through 54-inch shall be Series 1700 Restraint Harness, as manufactured by EBAA Iron, Inc., or approved equal. Devices shall have an approved coating system for corrosion resistance equivalent to MEGA-BOND®.
   4. Equivalent manufacturers:
      a. Star Pipe Products (USA only).
      b. No substitutions permitted.

E. Foster Adapters
   1. Compact MJ restraints shall be Foster Adapter by Infact Corporation. Coating shall be fusion bonded epoxy.

F. Swivel Adapters and Hydrant Tees
   1. Swivel adapters and hydrant tees shall be designed for a working pressure of at least 250 psi and to fit standard mechanical joint fittings (AWWA C111). One end of the swivel adapter and the branch of the hydrant tee shall be provided with a gland that may be rotated 360 degrees on the fitting. Lengths of swivel adapters shall be as specified.

2.11 TAPPING SLEEVE – UP TO 12-INCH OUTLET

A. Stainless Steel Tapping Sleeves:
   1. Tapping sleeve shall be all Type 304 stainless steel, per ASTM A-240.
   2. All welds and metal surfaces shall be chemically passivated to meet ASTM A-380.
   3. Sleeves to be 2-piece or 3-piece construction with flanged outlet.
   4. Bolts and nuts shall be 304 stainless steel.
   5. Saddle shall be rated for minimum 250 psi.
   6. Manufacturers:
      a. Ford, FAST,
      b. Ford, FTSS,
      c. or approved equal.

2.12 TAPPING SLEEVE –14-INCH TO 24-INCH OUTLET

A. Mechanical Joint Tapping Sleeve:
   1. Ductile iron body with 3/4" NPT test plug
   2. Saddle shall be rated for minimum 200 psi.
   3. Manufacturers:
      a. Mueller, H-615,
      b. or approved equal.

2.13 BOLTS AND NUTS

A. All bolts and nuts for valves, fittings, and restraints shall be 316 stainless-steel unless otherwise indicated. Anti-seize lubricant shall be used when assembling all stainless-steel hardware to reduce galling.

2.14 ACCESSORIES

A. As specified in SECTION 33 05 97, IDENTIFICATION AND SIGNAGE FOR UTILITIES.
   1. Marking Tape,
   2. Tracer Wire,
   3. Pipe Markers.

PART 3 - EXECUTION

3.1 PREPARATION

A. Pipe Cutting and Repair:
   1. Cut pipe ends square, ream pipe and tube ends to full pipe diameter, and remove burrs.
   2. Use only equipment specifically designed for pipe cutting; use of chisels or hand saws is not permitted.
   3. Grind edges smooth with beveled end for push-on connections.
   4. Remove all traces of oil, grease, asphalt, dust, dirt, etc.

5. The Contractor shall repair damaged coating and lining immediately, using the repair compound recommended by the manufacturer.
6. The cost of repair to cut pipe ends or damaged linings shall be incidental to construction and the Contractor shall absorb the cost thereof in the unit price specified for related items.

B. Remove scale and dirt on inside and outside before assembly.

C. Prepare pipe connections to equipment with flanges or unions.

3.2 INSTALLATION

A. Trenching:
1. Trenching shall be in accordance with Section 31 23 16.13, TRENCHING.
2. Where rock excavation is required refer to Section 31 23 16.26, ROCK REMOVAL.
3. Protect trench excavation in accordance with OSHA Excavation Standard, 29 CFR 1926, Subpart P.

B. Bedding:
1. The foundation is the in-situ material beneath the pipe. If the foundation is unsuitable, it must be removed to a minimum depth of 6 inches replaced with appropriate material.
2. Bedding shall consist of 6 inches of Class III pipe bedding material (Section 31 23 23.16, TRENCH BACKFILL) graded to the pipe gradient shown on the Drawings.
3. Contractor shall ensure that settlement of the uncompacted bedding material does not deviate from the gradient shown on the Drawings.
4. Following final grading, bell holes shall be dug into the bedding at the ends of the pipe to allow proper installation of the pipe.
5. Where so indicated on the Drawings or where directed by the Engineer, the pipe shall be supported by compacted granular fill or concrete cradle or encasement according to the applicable detail shown on the Drawings.
    a. Pipe bedded in compacted granular backfill shall not be supported on blocking, wedges, bricks, or anything except the bedding material.
    b. Where concrete cradle or encasement is required, the pipe shall be supported on solid concrete blocks or pre-cast concrete saddles which shall become part of the completed cradle or encasement.

C. Horizontal Directional Drill and Jack and Bore Installations shall be in accordance with Specification Section 33 05 07.23, UTILITY BORING AND JACKING and Section 33 05 07.13, UTILITY HORIZONTAL DIRECTIONAL DRILLING.

D. Piping:
1. Contractor shall follow the pipe manufacturer’s installation guideline and/or instructions.
2. Ductile-Iron Piping and Fittings: Comply with AWWA C600.
3. PVC Pipe Piping and Fittings: Comply with AWWA C605.
4. Handle and assemble pipe according to pipe and gasket manufacturer instructions and as indicated on Drawings.
5. All buried metallic Ductile Iron Pipe, Ductile Iron Fittings, Steel Rods, Bolts, Lugs, Brackets, etc. shall be wrapped with 2 layers of polyethylene encasement after assembly and before backfilling. Comply with AWWA C105.
6. Water Utility Piping shall be installed to the line and grade as shown on the Drawings.
7. Minimum depth of installation shall be 3 feet, unless otherwise shown on the Drawings, measured from the top of the pipe to the finished grade or centerline of roadway directly above the pipe.
8. Minimum depth of installation at air release valve locations shall be 4 feet, unless otherwise shown on the Drawings.

9. Route pipe in straight line, unless noted on the plans, and re-lay pipe that is out of alignment or grade.
10. Flanged Joints: Do not use in underground installations except within structures.
11. High Points: Install pipe with no high points other than shown on the Drawings. Every effort shall be made to avoid creation of low or high points in the water main other than those shown on the Drawings.
12. If approved by the Engineer, minor changes in alignment may be permitted to avoid underground facilities.
13. If unforeseen field conditions arise that necessitate high points, install air-release valves as specified or as directed by the Engineer.
14. The spigot end of the pipe shall abut the base of the socket of the adjacent pipe in such a manner that there will be no gaps along the perimeter of the mating halves.
15. Do not lay pipe in wet or frozen trench.
16. The Contractor shall take all necessary precautions to prevent flotation of the pipe from flooding of the trench.
17. The pipe shall not be driven down to grade by striking it with a shovel handle, timber, rammer, or other unyielding object.
18. Immediately before joining the pipe, the mating ends shall be thoroughly cleaned of all dirt, debris, and foreign material.
19. Prevent mud, sand, or other foreign material from entering pipe during placement.
20. At all times when pipe laying is not actually in progress, the open ends of the pipe shall be closed by temporary watertight plugs or by other approved means. If water is in the trench when work is resumed, the plug shall not be removed until all danger of water entering the pipe has passed.
21. Allow for expansion and contraction without stressing pipe or joints.
22. Close pipe openings with watertight plugs during Work stoppages.
23. Any defective pipe that may have been installed shall be removed and replaced with sound pipe at no additional cost to the Owner.
24. Lay pipe to alignment and slope gradients as indicated on Drawings.
25. Begin at downstream end of system and progress upstream.
26. Pipe Tracer Wire, Marking Tape, Marking Posts: As specified in Section 33 05 97, IDENTIFICATION AND SIGNAGE FOR UTILITIES.

E. Embedment Pipe Zone:
1. After the pipe has been placed on the uncompacted layer of bedding material, embedment material shall be placed simultaneously in lifts on both side of the pipe.
   a. Pipes 10 Inches and Smaller Diameter: First lift less than or equal to 1/2 pipe-diameter.
   b. Pipes Over 10 Inches Diameter: Maximum 6-inch lifts.
2. Thoroughly tamp each lift, including area under haunches, with handheld tamping bars supplemented by “walking in” and slicing material under haunches with a shovel to ensure that voids are completely filled before placing each succeeding lift.
3. After the full depth of the pipe zone material has been placed as specified, compact the material by a minimum of 3 passes with a vibratory plate compactor only over the area between the sides of the pipe and the trench walls.
4. Do not use power-driven impact compactors to compact pipe zone material.

F. Backfill Above Pipe Zone:
1. Process excavated material to meet specified gradation requirements.
2. Adjust moisture content as necessary to obtain specified compaction.
3. Do not allow backfill to free fall into the trench or allow heavy, sharp pieces of material to be placed as backfill until after at least 2 feet of backfill has been provided over the top of pipe.

4. Do not use power driven impact type compactors for compaction until at least 4 feet of backfill is placed over top of pipe.
5. Backfill to grade with proper allowances for topsoil, crushed rock surfacing, and pavement thicknesses, wherever applicable.

G. Tapping Sleeves and Valves: As indicated on Drawings and according to manufacturer instructions.

H. Polyethylene Encasement:
1. All buried metallic Ductile Iron Pipe, Ductile Iron Fittings, Steel Rods, Bolts, Lugs, Brackets, etc. shall be wrapped with 2 layers of polyethylene encasement after assembly and before backfilling. Comply with AWWA C105.
2. Terminate encasement 3 to 6 inches above ground where pipe is exposed.

I. Cleaning and Flushing:
1. As the Work progresses, the interior of the piping shall be cleaned of all dirt, jointing material, and superfluous materials of every description.
2. Prior to the pressure and leakage tests, all piping shall be thoroughly cleaned of all dirt, dust, oil, grease, and other foreign matter. This work shall be done with care to avoid damage to any inside coating.

J. All lines shall be thoroughly flushed with clean water to clear the lines of all foreign matter as specified in Section 33 01 012, FLUSHING, TESTING, AND DISINFECTION OF WATER UTILITIES.

K. Abandoning Water Mains:
1. Water Mains Abandoned in Place: The Contractor shall cut the water main as required to make connections or install plugs. That portion of the pipe to be abandoned and left in place shall be plugged at locations where the pipe was cut or punctured. Plugging shall be accomplished by installing MJ caps or grouting the end or punctured area to the satisfaction of the Engineer.
2. Water Mains Abandoned in Place with Grout Fill: The Contractor shall cut the water main as required, install plugs, and fill the pipe with grout as shown on the Drawings.

3.3 PIPE SUPPORT AND THRUST RESTRAINT

A. The Contractor shall furnish and install all supports necessary to hold the piping and appurtenances in a firm, substantial manner at the lines and grades indicated on the Drawings or specified.

B. Where buried piping contains fittings, which raise or lower the centerline of the pipe, suitable socket clamps, tie rods, or other approved restraining devices shall be used to prevent movement of the fittings. The restraining devices shall be wrapped with 2 layers of polyethylene encasement after assembly.

C. All bends, tees, and other fittings in pipelines, and sleeve-coupled pipelines buried in the ground shall be backed with Class A concrete placed against undisturbed earth where firm support can be obtained or by the use of restrained joints. If the soil does not provide firm support, then suitable clamps, and accessories or restrained joints shall be provided to brace the fitting properly. Such items shall be wrapped with 2 layers of polyethylene encasement after assembly.

D. Thrust blocks and joint restraints shall be provided as shown on the Drawings.

E. Backfill over concrete thrust blocks or anchor collars shall not be placed before the concrete has attained initial set, minimum 24 hours.

3.4 CONNECTION TO EXISTING WATER MAINS

A. Connections to existing water mains shall be performed as shown on the Drawings or as directed by the Engineer.

B. Connection of new water mains to existing shall be performed in the normal accepted method for connecting mains and shall be done without unduly disrupting service. All connections are subject to the approval of the Engineer as to method, time, and location.

C. Where existing lines are connected to proposed lines, the Contractor shall take appropriate action to ensure that the existing lines do not interfere with the pressure testing portions of the work. Failure to do so will not relieve the Contractor of the responsibility of properly pressure testing the entire system installed. The Contractor shall bear full responsibility for the action or inaction on this matter and shall not claim damages, injuries, or additional compensation for said action or inaction.

D. At least 48 hours prior to excavating for the actual connection operation, the Contractor shall excavate and expose the main to be cut at the proposed location and shall advise the Owner and Engineer, so that the exposed area may be inspected by the Owner and Engineer to verify that no conditions are present that would hamper the connection operation.

3.5 PAVEMENT CROSSINGS

A. Bases, Sidewalk, Curb, and Driveway Repairs – The Contractor shall replace any and all bases, sidewalks, curbs and gutter, and driveways with materials and workmanship sufficient to give an equal and similar surface to the disturbed areas as existed before construction.

3.6 TESTING

A. Testing:
   1. All testing shall be performed in the presence of the Engineer or a designated representative thereof.
   2. All parts of the Work including, but not being limited to, pipe, fittings, joints, valves, and any other appurtenances shall be subjected to testing as described herein. To achieve this, all methods of testing shall be approved by the Engineer
   3. Except as otherwise directed, all pipelines shall be tested. Pipelines installed in excavation or bedded in concrete shall be tested prior to the backfilling of the excavation or placing of the concrete and exposed piping shall be tested prior to field painting.
   4. All piping to operate under liquid pressure shall be tested in sections of approved length. For these tests the Contractor shall furnish clean water, suitable temporary testing plugs or caps, and other necessary equipment and all labor required, without additional compensation. The Contractor shall furnish suitable pressure gauges, pumps, and measuring tank.
   5. The Contractor shall be responsible for the cost of all water used for testing and flushing. The Contractor shall make suitable arrangements with the Owner for the monitoring of water consumption and locations to which water may be made available.
   6. Pressure test piping system as specified in Section 33 01 12, FLUSHING, TESTING, AND DISINFECTION OF WATER UTILITIES.

B. Compaction Testing:
   1. See Section 31 23 23.13, FILL AND BACKFILL for compaction testing requirements.
   2. If tests indicate Work does not meet specified requirements, remove Work, replace, and retest.

END OF SECTION 33 31 23

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SECTION 33 14 13 – WATER SERVICE PIPE AND ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

A. This section includes the minimum requirements for installing water service piping which includes the furnishing, installing, laying, jointing, fittings, valves, and appurtenances required for a complete system as shown on the Drawings and specified herein. The Work shall also include such connections, reconnections, relocations, temporary connections, abandonments, and all other provisions in regard to existing water service piping operations and modifications required to perform the Work.

B. Section Includes:
1. Water Service Pipe,
2. Fittings,
3. Meter Boxes and Lids,
4. Couplings and Adaptors,
5. Tapping Saddles,
6. Bedding and cover materials,
7. Accessories.

1.2 MEASUREMENT AND PAYMENT

A. As specified in SECTION 01 22 13 – MEASUREMENT AND PAYMENT.

1.3 REFERENCE STANDARDS

A. All standards below shall be latest version, unless otherwise specified.

B. American Water Works Association:
1. AWWA C800 – Underground Service Line Valves and Fittings
2. AWWA C901 – Polyethylene (PE) Pressure Pipe and Tubing, 1/2 In. Through 3 In. for Water Service
3. AWWA C904 – Cross-Linked Polyethylene (PEX) Pressure Pipe, 1/2 In. Through 3 In. for Water Service

C. ASTM International:
1. ASTM F714 - Standard Specification for Polyethylene (PE) Pipe (SDR-PR) Based on Outside Diameter.
2. ASTM F876 – Standard Specification for Crosslinked Polyethylene (PEX) Tubing
3. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3).
4. ASTM D6938 - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).

1.4 LEAD-FREE BRASS

A. All brass shall be manufactured in accordance with the Safe Drinking Water Act as amended to be LEAD-FREE brass (< 0.25% Pb).

1.5 LEAD-FREE PIPES, FITTINGS, FIXTURES, SOLDER AND FLUX

A. Comply with the Safe Drinking Water Act (SWDA) latest edition and as amended.

1.6 INSTALLATION GUIDE FOR MANUFACTURER SUPPLIED MATERIALS

A. The Contractor shall be responsible for following the installation guide for the material provided.

B. The more stringent requirement between these Specifications and the manufacturer's installation guide shall govern.

1.7 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum 5 years of documented experience.

B. Installer: Company specializing in performing Work of this Section with minimum 5 years of documented experience.

PART 2 - PRODUCTS

2.1 SERVICE SADDLE

A. Service saddles for 1" and 2" NPT service taps shall be sized for use on C900 PVC.

B. Service saddles shall be Romac 101NS.

2.2 POLYETHYLENE (PE) PRESSURE PIPE AND TUBING

A. PE pipe 1-inch through 2-inch in size shall be manufactured in accordance with AWWA C901, and shall be SDR 9. Color shall be blue. The pipe shall have a standard designation code of PE4710.

B. Crosslinked Polyethylene Pressure Tubing (PEX) shall conform to AWWA C904 with a minimum pressure class rating of 200 psi and a SDR rating of 9. Color shall be blue.

C. Marking on pipe and tubing shall include the following and shall be applied at intervals of not more than 5-foot.
   1. Nominal size and diameter base (e.g., CTS).
   2. SIDR, SDR, or minimum wall thickness.
   3. The manufacturer's name or trademark.
   4. The material designation code (e.g., PE 4710, PEX 1006)
   5. AWWA pressure rating (e.g., PC 200)
   6. The AWWA designation number for this standard (e.g., AWWA C901, AWWA C904).
   7. The manufacturer's production (lot) code that includes information such as resin source, manufacturing location, extrusion outlet (line), and manufacturing date.
   8. If not included in the manufacturer's production code, the manufacturing date, including day, month, and year in a recognized standard format. The date format should be readily recognized as a date.
   9. The seal or mark of the testing agency that certifies the material.

2.3 INTERNAL PIPE STIFFENER FOR POLYETHYLENE SERVICE PIPE

A. Inserts for PE tubing shall be acetal plastic insert stiffeners designed for use with OD controlled PE ASTM D2737 SDR 9 and PEX Tubing ASTM F876 SDR 9.

B. The stiffener shall have a flanged end designed for proper installation and function and shall be specifically sized (diameter and length) for the PE and PEX tubing that is being used with.

2.4 COATED COPPER SERVICE PIPE

A. Coated Copper Pipe 1" – 2":
   1. Coated copper pipe shall be Type “K”, soft tempered, seamless, annealed, copper pipe suitable for use for underground water service installation, in accordance with ASTM B88, and with an approved polyethylene coating system (minimum 25 mil). Coated copper pipe shall meet or exceed NSF-61 requirements.
   2. Damage to the polyethylene coating for the coated copper pipe must be repaired with Polyken Tape Coating or Denso paste and tape, or as recommended by the coated copper pipe manufacturer’s engineer.

B. Connections to ductile iron pipe (DIP) main lines including fittings for coated copper pipe to DIP main lines shall be double poly wrapped (polyethylene encasement) a minimum of 3 feet beyond the DIP main pipe onto the coated copper service line.

C. Copper shall be joined using ProPress fittings by Viega and feature green dot Smart Connect markings.

D. Coated copper pipe under roadways shall be encased in SDR 9 polyethylene, ASTM D2241 SDR 13.5 pipe sleeve, or C900 PVC.

2.5 CORPORATION STOP

A. Inlet: AWWA taper thread

B. Outlet: CTS compression connection

C. Manufacturers:
   1. Mueller B25008N,
   2. Ford FB1000-4-Q-NL.

2.6 BALL VALVES

A. Ball valves shall be Made in USA with “tee-head” style operating nut.

B. Manufacturers:
   1. James Jones E1900,
   2. Ford B11-777-NL.

2.7 BOLTS AND NUTS

A. All bolts and nuts for valves, fittings, and restraints shall be 316 stainless-steel unless otherwise indicated. Anti-seize lubricant shall be used when assembling all stainless-steel hardware to reduce galling.

2.8 ACCESSORIES

A. As specified in Section 33 05 97, IDENTIFICATION AND SIGNAGE FOR UTILITIES.
   1. Marking Tape,
   2. Tracer Wire,
   3. Pipe Markers.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Contractor shall contact Arkansas One Call 811 for location of existing utilities at 811 or 1-800-482-8998 minimum of 48 hours prior beginning Work.

B. The Contractor shall field verify vertical and horizontal locations of all underground facilities in advance of construction to verify that no conflicts exist with the proposed pipe alignment and depth.

C. Should a conflict be discovered, the Contractor shall contact the Engineer immediately and provide all pertinent information for preparation of a remedial design.

D. Verify that excavation base is ready to receive Work.

E. Verify that excavations, dimensions, and elevations are as indicated on the Drawings.

3.2 PREPARATION

A. Preconstruction Site Photos:
1. Take photographs and/ or video along centerline of proposed pipe trench; minimum 1 photograph for each 50 feet of pipe trench.
2. Show mailboxes, curbing, lawns, driveways, signs, culverts, and other existing Site features.
3. Include Project description, date taken, and sequential number on back of each photograph.

B. Pipe Cutting and Repair:
1. Cut pipe ends square, ream pipe and tube ends to full pipe diameter, and remove burrs.
2. Use only equipment specifically designed for pipe cutting; use of chisels or hand saws is not permitted.
3. Grind edges smooth with beveled end for push-on connections.
4. Remove all traces of oil, grease, asphalt, dust, dirt, etc.
5. The Contractor shall repair damaged coating and lining immediately, using the repair compound recommended by the manufacturer.
6. The cost of repair to cut pipe ends or damaged linings shall be incidental to construction and the Contractor shall absorb the cost thereof in the unit price specified for related items.

C. Remove scale and dirt on inside and outside before assembly.

D. Prepare pipe connections to equipment with flanges or unions.

3.3 INSTALLATION

A. Trenching:
1. Trenching shall be in accordance with Section 31 23 16.13, TRENCHING.
2. Where rock excavation is required refer to Section 32 23 16.26, ROCK REMOVAL.
3. Protect trench excavation in accordance with OSHA Excavation Standard, 29 CFR 1926, Subpart P.

B. Bedding:
1. The foundation is the in-situ material beneath the pipe. If the foundation is unsuitable, it must be removed to a minimum depth of 6 inches replaced with appropriate material.
2. Bedding shall consist of ASTM D448/C33 Gradation No. 67 pipe bedding material, minimum 4 inches around the pipe.
3. Contractor shall ensure that settlement of the uncompacted bedding material does not deviate from the gradient shown on the Drawings.

C. Horizontal Directional Drill and Jack and Bore Installations shall be in accordance with Specification Section 33 05 07.23, UTILITY BORING AND JACKING and Section 33 05 07.13, UTILITY HORIZONTAL DIRECTIONAL DRILLING.

D. Piping:
   1. Contractor shall follow the pipe manufacturer's installation guideline and/or instructions.
   2. Handle and assemble pipe according to pipe manufacturer instructions and as indicated on Drawings.
   3. Water Service Pipe shall be installed to the line and grade as shown on the Drawings.
   4. Minimum depth of installation shall be 3 feet, unless otherwise shown on the Drawings, measured from the top of the pipe to the finished grade or centerline of roadway directly above the pipe.
   5. Do not lay pipe in wet or frozen trench.
   6. Immediately before joining the pipe, the mating ends shall be thoroughly cleaned of all dirt, debris, and foreign material.
   7. Prevent mud, sand, or other foreign material from entering pipe during placement.
   8. Any defective pipe that may have been installed shall be removed and replaced with sound pipe at no additional cost to the Owner.
   9. Lay pipe to alignment and slope gradients as indicated on Drawings.
   10. Pipe Tracer Wire, Marking Tape, Marking Posts: As specified in Section 33 05 97, IDENTIFICATION AND SIGNAGE FOR UTILITIES.

E. Embedment Pipe Zone:
   1. After the pipe has been placed on the uncompacted layer of bedding material, embedment material shall be placed simultaneously in lifts on both side of the pipe.
      a. Pipes 10 Inches and Smaller Diameter: First lift less than or equal to 1/2 pipe-diameter.
   2. Thoroughly tamp each lift, including area under haunches, with handheld tamping bars supplemented by "walking in" and slicing material under haunches with a shovel to ensure that voids are completely filled before placing each succeeding lift.
   3. After the full depth of the pipe zone material has been placed as specified, compact the material by a minimum of three passes with a vibratory plate compactor only over the area between the sides of the pipe and the trench walls.
   4. Do not use power-driven impact compactors to compact pipe zone material.

F. Backfill Above Pipe Zone:
   1. Process excavated material to meet specified gradation requirements.
   2. Adjust moisture content as necessary to obtain specified compaction.
   3. Do not allow backfill to free fall into the trench or allow heavy, sharp pieces of material to be placed as backfill until after at least 2 feet of backfill has been provided over the top of pipe.
   4. Do not use power driven impact type compactors for compaction until at least 4 feet of backfill is placed over top of pipe.
   5. Backfill to grade with proper allowances for topsoil, crushed rock surfacing, and pavement thicknesses, wherever applicable.

G. Polyethylene Encasement:
   1. All buried metallic Ductile Iron Pipe, Ductile Iron Fittings, Steel Rods, Bolts, Lugs, Brackets, etc. shall be wrapped with two layers of polyethylene encasement after assembly and before backfilling. Comply with AWWA C105.
   2. Terminate encasement 3 to 6 inches above ground where pipe is exposed.

H. Cleaning and Flushing:
   1. As the Work progresses, the interior of the piping shall be cleaned of all dirt, jointing material, and superfluous materials of every description.
   2. Prior to the pressure and leakage tests, all piping shall be thoroughly cleaned of all dirt, dust, oil, grease, and other foreign matter. This work shall be done with care to avoid damage to any inside coating.

3. All lines shall be thoroughly flushed with clean water to clear the lines of all foreign matter.

3.4 CONNECTION TO EXISTING WATER MAINS

A. Connections to existing water mains shall be performed in the normal accepted method for connecting service taps and shall be performed as shown on the Drawings or as directed by the Engineer.

B. Connections to new water mains shall be performed in the normal accepted method for connecting service taps and shall be done without unduly disrupting service. All connections are subject to the approval of the Engineer as to method, time, and location.

3.5 PAVEMENT CROSSINGS

A. Bases, Sidewalk, Curb, and Driveway Repairs – The Contractor shall replace any and all bases, sidewalks, curbs and gutter, and driveways with materials and workmanship sufficient to give an equal and similar surface to the disturbed areas as existed before construction.

3.6 TESTING

A. Testing:
   1. All testing shall be performed in the presence of the Engineer or a designated representative thereof.
   2. All parts of the Work including, but not being limited to, pipe, fittings, joints, valves, and any other appurtenances shall be subjected to testing as described herein. To achieve this, all methods of testing shall be approved by the Engineer
   3. Except as otherwise directed, all pipelines shall be tested. Pipelines installed in excavation or bedded in concrete shall be tested prior to the backfilling of the excavation or placing of the concrete and exposed piping shall be tested prior to field painting.
   4. All piping to operate under liquid pressure shall be tested in sections of approved length. For these tests the Contractor shall furnish clean water, suitable temporary testing plugs or caps, and other necessary equipment and all labor required, without additional compensation. The Contractor shall furnish suitable pressure gauges, pumps, and measuring tank.
   5. The Contractor shall be responsible for the cost of all water used for testing and flushing. The Contractor shall make suitable arrangements with the Owner for the monitoring of water consumption and locations to which water may be made available.
   6. Pressure test piping system as specified in Section 33 01 12, FLUSHING, TESTING, AND DISINFECTION OF WATER UTILITIES.

B. Compaction Testing:
   1. See Section 31 23 23.13, FILL AND BACKFILL for compaction testing requirements.
   2. If tests indicate Work does not meet specified requirements, remove Work, replace, and retest.

3.7 PROTECTION

A. Protect pipe and aggregate cover from damage or displacement until backfilling operation is in progress.

END OF SECTION 33 31 23

SECTION 33 42 00 – STORM UTILITY DRAINAGE PIPING

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Pipe and Culverts.

B. Pipe Joint Material.

C. Inlets and Junction Boxes.

D. Foundation Drain Pipe.

1.2 REFERENCES

A. American Association of State Highway and Transportation Officials, 444 North Capitol Street, N.W., Suite 249, Washington, DC 20001.
   1. AASHTO M36 - Corrugated Steel Pipe, Metallic Coated, for Sewers and Drains.
   2. AASHTO M176 - Porous Concrete Pipe.
   3. AASHTO M218 - Sheet Steel, Zinc-Coated (Galvanized) for Corrugated Steel Pipe.
   4. AASHTO M245 - Polymer Precoated Corrugated Steel Pipe.
   5. AASHTO M246 - Steel Sheet, Polymer Precoated for Corrugated Steel Pipe.

B. American Concrete Institute, P. O. Box 9094, Farmington Hills, MI 48333-9094, 38800 Country Club Drive, Farmington Hills, MI 48331 Phone 248/484-3700, Fax 248/848-3701
   1. ACI 301 - Specification for Structural Concrete for Buildings.

C. ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA Phone: (610) 832-9585 Fax: (610) 832-9555.
   1. ASTM C14 - Specification for Concrete Sewer, Storm Drain, and Culvert Pipe.
   2. ASTM C76 - Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe.
   3. ASTM C412 - Specification for Concrete Drain Tile.
   4. ASTM C443 - Specification for Joints for Circular Concrete Sewer and Culvert Pipe, Using Rubber Gaskets.
   5. ASTM C412 - Specification for Concrete Drain Tile.
   6. ASTM C443 - Specification for Joints for Circular Concrete Sewer and Culvert Pipe, Using Rubber Gaskets.
   7. ASTM C444 - Specification for Preformed Concrete Pipe.
   8. ASTM C478 - Specification for Precast Reinforced and Nonreinforced Masonry.
   9. ASTM C700 - Specification for Vitrified Clay Pipe, Extra Strength, Standard Strength, and Perforated.
   10. ASTM D1785 - PVC Plastic Pipe, Schedules 40, 80, and 120.
   11. ASTM D3034 - Specification for Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings.

PART 2 - PRODUCTS

2.1 PIPE AND CULVERTS

A. Reinforced Concrete Pipe:
   1. Class III or as shown on Drawings.
   2. Conform to ASTM C76.
   3. Joints shall conform to ASTM C990.

2.2 PIPE JOINT MATERIAL

A. Band Couplers:
   1. Manufacturers:
      a. LUV band, with 2 annular corrugations, by Caldwell Culvert; or equal.
      b. Smooth Cor band, with 2 annular corrugations by Caldwell Culvert; or equal.
   2. Minimum gage in accordance with AASHTO M36.
   3. Gaskets: Ramneck.

B. Reinforcing End Collars:
   1. 12-gage.
   2. 6 inches wide.
   3. Annular corrugations same as pipe.

2.3 COATINGS FOR PIPE AND CULVERTS

A. Polymer:
   1. AASHTO M218, M245, and M246.
   2. Thickness: 10 mils, both sides.
   3. Equal to Dow Chemical Trenchcoat protective film as furnished by Caldwell Culvert Company, North Little Rock, Arkansas.

2.4 MATERIALS FOR CAST-IN-PLACE CONCRETE

A. Design mix to attain minimum 4,000 psi compressive strength at 28 days.

2.5 PRE-CAST CONCRETE STRUCTURES

A. Conform to local standards.

B. Conform to ASTM C478.

2.6 FOUNDATION DRAIN PIPE

A. Open-joint Pipe: Extra-quality or heavy-duty extra quality concrete drain tile conforming to ASTM C412, or extra-strength vitrified clay pipe conforming to ASTM C700.

B. Perforated Pipe: Type 1 or Type 2 perforated concrete pipe conforming to ASTM C444 and applicable requirements of ASTM C14, Class 2 or Class 3, or extras-strength, perforated, vitrified clay pipe conforming to ASTM D1785, or perforated SDR Standard PVC pipe conforming to ASTM D3034. Do not use bituminized fiber pipe or PE plastic pipe for perforated drain piping.

C. Porous Wall Pipe: Standard-strength "Poroswall" concrete pipe by the Walker Poroswall Pipe Co., or equal. Straight, free from cracks and defects, meeting AASHTO Designation M176-631, Class II, and having infiltration rate of not less than 1 gallon per minute per inch of internal diameter per foot of pipe. Provide wye, tee, and related fittings required.

2.7 METAL GRATES, COVERS, AND FRAMES (CAST IRON GRATES, COVERS, AND FRAMES SUBJECT TO VEHICLE TRAFFIC)

A. All frame, covers, grates, and other castings shall be heavy-duty cast iron and shall be non-rocking, machine surfaces bearing surfaces.

B. Furnish frames with anchors for attachment to concrete work.

C. Furnish covers with pry holes or flush type drop handles and non-slip surfaces.

D. Cast iron castings to be size and type shown on Drawings.

PART 3 - EXECUTION

3.1 INSTALLATION OF PIPE AND CULVERTS

A. Lay sections on properly compacted granular bedding (4-inch minimum) to lines and grades shown on Drawings.

B. Backfill with approved imported granular materials as specified in Division 31.

C. Band Couplers:
   1. Install band couplers in accordance with manufacturer's recommendations and AASHTO guidelines.
   2. Use Ram Neck gasket material in end corrugation of each pipe end.

D. Reinforcing End Collars:
   1. Install reinforcing end collar where pipe terminates without protective end treatment, such as headwall, inlet box, or grouted riprap.

E. Storm drains shall have a minimum cover of 24 inches.

F. Pipes (storm, sanitary, water) that cross each other with less than 1-1/2-foot clearance must have a concrete encased intersection.

3.2 INSTALLATION OF INLETS AND JUNCTION BOXES

A. Conform to city standard construction details.

B. Construct concrete drainage structures with exposed concrete surfaces rubbed to smooth finish and with metal frames for grates and covers securely anchored in place.

C. Structures may be cast-in-place or pre-cast.

D. Frame castings to be securely held in place to proper line and grade to make an integral part of the complete structure.

E. Construct catch basin, weirs, headwalls, and similar structures of reinforced concrete unless otherwise indicated; pre-cast concrete units as approved.
   1. Provide concrete foundations for manholes and other structures.
   2. Concrete structures shall be reinforced.
   3. All concrete construction shall receive a smooth finish in accordance with ACI 301 on all surfaces exposed to exterior or interior of structure; rough formed for all unexposed construction.
   4. Moist cure concrete for a minimum of seven days after placing.

F. Where manholes occur in pavement, set tops of frames and covers flush with finish surface. Elsewhere, set tops 3 inches above finish surface, unless otherwise indicated.

G. Backfill at structures and compact in accordance with Division 31.

3.3 INSTALLATION OF FOUNDATION DRAINS

A. Open-joint:
   1. Lay with joints opened 1/10-inch and with top half of joints covered with strips of roofing felt.
   2. Grade pipe lines to drain.
   3. Place drainage fill in accordance with Division 31.

B. Laying Pipe:
   1. Carefully prepare bedding so pipe after installation will be true to line and grade.
   2. Surface grade drainage fill material beneath pipe to provide uniform and continuous support beneath pipe at all points. Densify fill material beneath pipe.
   3. After each pipe has been brought to grade, aligned, and placed in final position, deposit and densify sufficient bedding material under pipe haunches and on each side of pipe to hold pipe in proper position during subsequent pipe jointing, bedding, and backfilling operations. Deposit bedding material uniformly and simultaneously on each side of pipe to prevent lateral displacement.

END OF SECTION 33 42 00

MCE
APPENDIX

Contractor is responsible for adherence to all applicable Federal and State Laws and Regulations including, but not limited to, the following and any applicable amendments:

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Ark Act 291 of 1993
Trench and Excavation Safety Systems
https://www.ecfr.gov/current/title-29/subtitle-B/chapter-XVII/part-1926/subpart-P

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Arkansas State Licensing Law for Commercial Contractors
website: www.arkansas.gov/clb

CITY OF FAYETTEVILLE, ARKANSAS:
BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1

Materials Provided By Owner

Bid Item No. 12: 12'x12' Pavilion

- Owner will provide materials for (2) 12'x12' pavilions.
  - RCP Shelters Model # LW-G1212-03
- Materials are stored at 1455 S Happy Hollow Rd, Fayetteville, AR 72701 and will be delivered to site by Owner.
- Contractor is responsible for installation and construction.
- Contractor is responsible for providing any additional materials needed to complete project.

Bid Item No. 15: Split Rail Wooden Fence

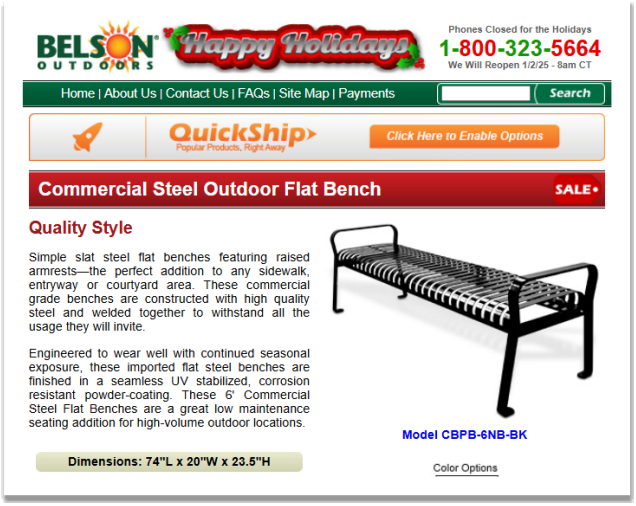
- Owner will provide the following materials:
  - (400) 3/8" Galvanized Lag
    - Fastenal Part # 22199
  - (400) 3/8" Galvanized Washer
    - Fastenal Part # 33182
- Materials are stored at 100 E Rock St, Ste 250, Fayetteville, AR 72701 and will be delivered to site by Owner.
- Contractor is responsible for providing any additional materials needed to complete project.

CITY OF FAYETTEVILLE, ARKANSAS:

BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1

Bid Item No. 26: Benches

- Owner will provide the following materials:
  - (5) Benches without back
    - Belson Outdoor Model # CBPB-6NB-BK
  - (6) Benches with straight back
    - Belson Outdoors Model # CBPB-6SB-BK
- Materials are stored at 1455 S Happy Hollow Rd, Fayetteville, AR 72701 and will be delivered to site by Owner.
- Contractor is responsible for installation and construction.
- Contractor is responsible for providing any additional materials needed to complete project.



Bid Item No. 41: Construct Wetland Pavilion

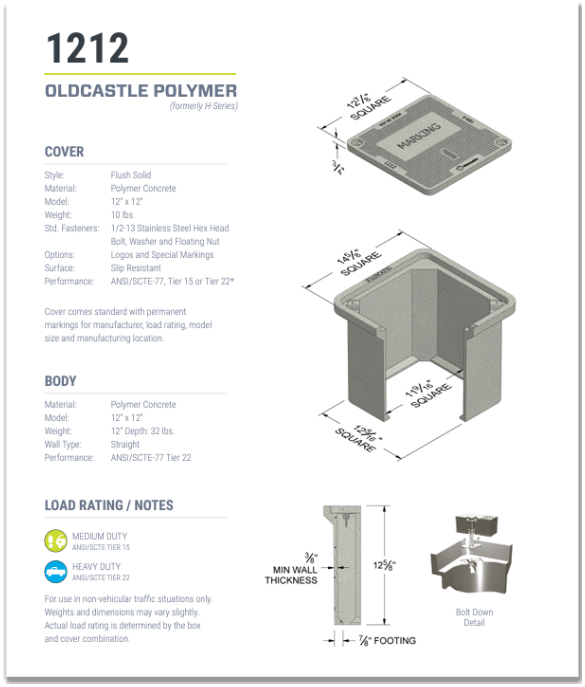
- Owner will provide the following materials:
  - (1,700) #9x3” Exterior Wood Screw
    - Fastenal Part # 0184884
- Materials are stored at 100 E Rock St, Ste 250, Fayetteville, AR 72701 and will be delivered to site by Owner.
- Contractor is responsible for providing any additional materials needed to complete project.

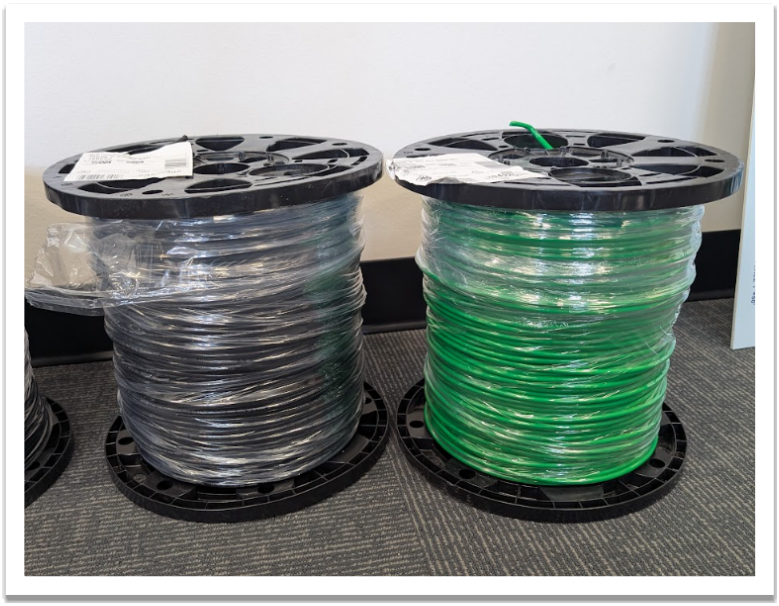
CITY OF FAYETTEVILLE, ARKANSAS:

BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1

Deductive Alternate No. 1: Trail Lighting

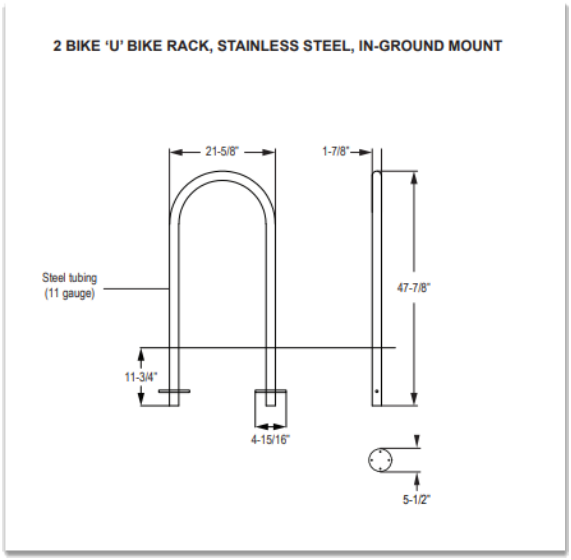
- Owner will provide the following materials:
  - (22) Precast Concrete 12”x12” Pull Box
    - Oldcastle Polymer 1212
  - (2) 1,000’ spool green wiring
    - Southwire Stock # 20492506
  - (3) 1,000’ spool of black wiring
    - Southwire Stock # 20488306
- Pull Box Materials are stored at 1455 S Happy Hollow Rd, Fayetteville, AR 72701
- Wiring is stored at 100 E Rock St, Ste 250, Fayetteville, AR 72701 and will be delivered to site by Owner.
- Contractor is responsible for relocating materials to job site, installation, and construction.
- Contractor is responsible for providing any additional materials needed to complete project.





Additional Items Provided by Owner:

- (2) Bike Racks, “U” Shaped
  - Belson Model # CBBR-2URI-SS
- Materials are stored at 1455 S Happy Hollow Rd, Fayetteville, AR 72701 and will be delivered to site by Owner.
- Contractor is responsible for providing any additional materials needed to complete project.



BRYCE DAVIS PARK IMPROVEMENTS PHASE 1

1595 N DARTMOUTH AVE FAYETTEVILLE, AR

100% CONSTRUCTION DRAWINGS

GENERAL NOTES

INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS AND EXISTING FIELD CONDITIONS WHEN POSSIBLE. THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES BY HAND DIGGING TEST PITS AT ALL UTILITY CROSSINGS IN ADVANCE OF TRENCHING WITH ANY MECHANICAL DEVICE. ANY CLEARANCES LESS THAN SPECIFIED ON THESE PLANS OR 18" (WHICHEVER IS LESS), CONTRACTOR SHALL CONTACT McCLELLAND CONSULTING ENGINEERS, INC. @ (479) 443-2377 PRIOR TO ANY FURTHER CONSTRUCTION.

CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATION OR REMOVAL OF EXISTING UNDERGROUND UTILITIES SHOWN AT NO ADDITIONAL COST TO THE OWNER.

ALL UTILITIES, INCLUDING STORM SEWER, SHOWN WITHIN PUBLIC EASEMENTS OR RIGHT OF WAYS SHALL BE CONSTRUCTED TO THE GOVERNING AGENCY'S SPECIFICATIONS. ALL OTHER UTILITIES SHALL BE CONSTRUCTED TO THE CLIENT'S OR THE GOVERNING AGENCY'S SPECIFICATIONS, WHICHEVER IS MORE STRINGENT. IF THERE IS A QUESTION AS TO WHICH SPECIFICATIONS SHOULD APPLY, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD.

FURTHERMORE IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THE EROSION CONTROL MEASURES AS SHOWN ON THESE PLANS. CONTRACTOR SHALL KEEP THESE MAINTAINED THROUGHOUT ALL PHASES OF CONSTRUCTION. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR IMPLEMENTING THE SWPPP BEFORE, DURING, AND AFTER RAIN FALL EVENTS.

ALL PHASES OF CONSTRUCTION SHALL MEET OR EXCEED THE OWNER / DEVELOPER SITE WORK SPECIFICATIONS.

SEE ARCHITECTURAL PLANS FOR THE EXACT DIMENSIONS AND LOCATIONS OF ANY RAMPS, VESTIBULE, PORCHES, SLOPED PAVING, BUILDING UTILITY ENTRANCE LOCATIONS, TRUCK DOCKS, OR WELLS AND PRECISE BUILDING DIMENSIONS.

CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION PROCEDURES. NO DEBRIS SHALL BE BURIED OR BURNED ON SITE. DISPOSAL SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.

THE BOUNDARY / TOPOGRAPHIC SURVEY HAS BEEN PROVIDED BY THE FOLLOWING COMPANY:

McCLELLAND CONSULTING ENGINEERS, INC.
1580 E. STEARNS STREET
FAYETTEVILLE, AR 72703
OFFICE: (479) 443-2377
FAX: (479) 443-9241

McCLELLAND CONSULTING ENGINEERS, INC. AND ITS ASSOCIATES WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN ERRORS OR OMISSIONS RESULTING FROM SURVEY INACCURACIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL EXISTING FEATURES AS SHOWN ON THE SURVEY AND NOTIFY THE SURVEYOR AND THE ENGINEER OF RECORD OF ANY INACCURACIES FOUND ON THE SURVEY PRIOR TO BEGINNING CONSTRUCTION.

THE GENERAL CONTRACTOR SHALL BE HELD SOLELY RESPONSIBLE FOR AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT.

THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING ALL PHASES OF CONSTRUCTION OF THIS SITE. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO CONSTRUCTION WORKING HOURS.

WARRANTY / DISCLAIMER

THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR DESIGN FUNCTION AND USE INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER THE ENGINEER NOR HIS PERSONNEL CAN OR DO WARRANT THESE DESIGNS OR PLANS AS CONSTRUCTED EXCEPT IN THE SPECIFIC CASES WHERE THE ENGINEER INSPECTS AND CONTROLS THE PHYSICAL CONSTRUCTION AT THE SITE.

WETLAND NOTE

THERE ARE KNOWN WETLAND AREAS THAT EXIST WITHIN THE PROPERTY BOUNDARIES OF THIS SITE AS NOTED PER THE US FISH & WILDLIFE WETLAND MAPPER.

FLOOD CERTIFICATION

PORTIONS OF PROPERTY ARE LOCATED WITHIN FLOOD ZONE "AE" AS DETERMINED BY THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP FOR WASHINGTON COUNTY, AR.

FIRM PANEL: #05143C0204G
EFFECTIVE DATE: 1/25/2024

CONSTRUCTION TYPE

TYPE = IIB

BUILDING CODE

2021 AR BUILDING CODE
2021 AR FIRE PREVENTION CODE
2021 AR MECHANICAL CODE
2018 AR PLUMBING CODE
2018 AR FUEL GAS CODE
2020 NATIONAL ELECTRIC CODE
2021 ANSI

CONTACTS

PLANNING
CITY OF FAYETTEVILLE
125 W. MOUNTAIN STREET,
FAYETTEVILLE, AR 72701
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NATURAL GAS
BLACK HILLS ENERGY
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FAYETTEVILLE, AR 72701
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EMAIL: samantha.lewis@blackhillscorp.com

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AT&T
1133 E. HAROLD STREET,
FAYETTEVILLE, AR 72703
JEFF HAMILTON
PHONE: (479) 442-3107

ELECTRIC
AEP / SWEPCO
101 W. TOWNSHIP ROAD,
FAYETTEVILLE, AR 72703
JIM SARGENT
PHONE: (479) 973-2334

INTERNET
COX COMMUNICATIONS
4901 S. 48TH STREET,
SPRINGDALE, AR 72762
JAMES SCHOONOVER
PHONE: (479) 879-6363

SOLID WASTE
CITY OF FAYETTEVILLE
113 W. MOUNTAIN STREET,
FAYETTEVILLE, AR 72701
PHONE: (479) 444-3499

FIRE DEPARTMENT
CITY OF FAYETTEVILLE
303 W. CENTER STREET,
FAYETTEVILLE, AR 72701
BRIAN SLOAT, FIRE MARSHAL
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OWNER/ DEVELOPER
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FAYETTEVILLE, AR 72701
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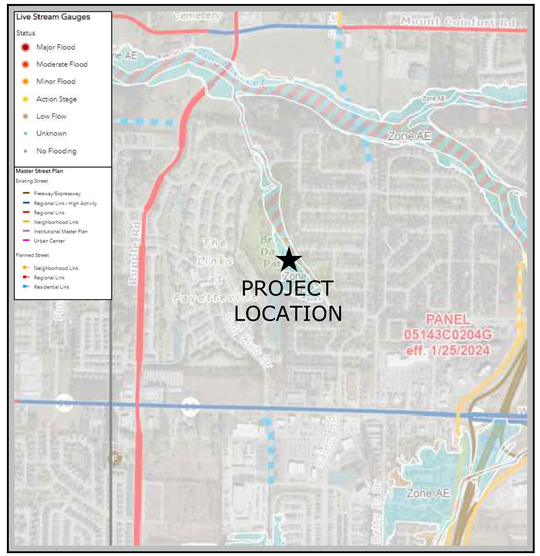
NATHAN CROUCH, PROJECT MANAGER
PHONE: (479) 443-2377
EMAIL: ncrouch@mce.us.com



VICINITY MAP

January 17, 2025
MCE PROJECT NUMBER 24-2121

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1580 E STEARNS ST
FAYETTEVILLE, ARKANSAS 72703
(479) 443-2377

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REVISIONS		
REV	DATE	DESCRIPTION

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C1.0 OVERALL DEMOLITION PLAN
C1.1 DEMOLITION PLAN WEST
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CERTIFICATE OF AUTH. McCLELLAND CONSULTING ENGINEERS No. 24 ARKANSAS ENGINEER

REGISTERED LANDSCAPE ARCHITECT CHRISTOPHER M. BAKUNAS License Number 985 STATE OF ARKANSAS

01/17/2025
ORIGINAL SIGNATURE ON FILE

BRYCE DAVIS PARK IMPROVEMENTS PHASE 1 FAYETTEVILLE, AR MCE #24-2121 1/17/2025 100%

W:\2024\24-2121 - Fayetteville, Ar- Bryce Davis Park, Phase 1 Improvements\design Drawings\242121 - CS.dwg, PRINTED ON: January 17, 2025 @ 10:41 AM

LEGEND

- PROPERTY LINE
- EASEMENT LINE
- R/W — RIGHT-OF-WAY LINE
- GRAVEL LINE
- SS — SANITARY SEWER LINE
- W — WATER LINE
- GAS — GAS LINE
- UGT — UNDERGROUND TELEPHONE
- UFO — UNDERGROUND FIBER
- UGTV — UNDERGROUND TELEVISION
- UGE — UNDERGROUND ELECTRIC
- OHE — OVERHEAD ELECTRIC
- X — FENCE
- ROAD CENTERLINE
- DITCH FLOWLINE
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- WATER FAUCET
- SANITARY SEWER MH
- CLEAN-OUT
- DRAINAGE MH
- POWER POLE
- GUY WIRE WITH ANCHOR
- GAS METER
- GAS RISER
- STREET LIGHT POLE
- TELEPHONE PEDESTAL
- CABLE TV PEDESTAL
- CABLE VAULT
- ELECTRIC VAULT
- FIBER VAULT
- GAS VAULT
- TELEPHONE VAULT
- WATER VAULT
- SIGN (AS NOTED)
- POST (AS NOTED)
- BENCHMARK
- FOUND IRON PIN (AS NOTED)
- CONTROL POINT
- RR SPIKE
- BUSH
- DECIDUOUS TREE
- CONIFEROUS TREE

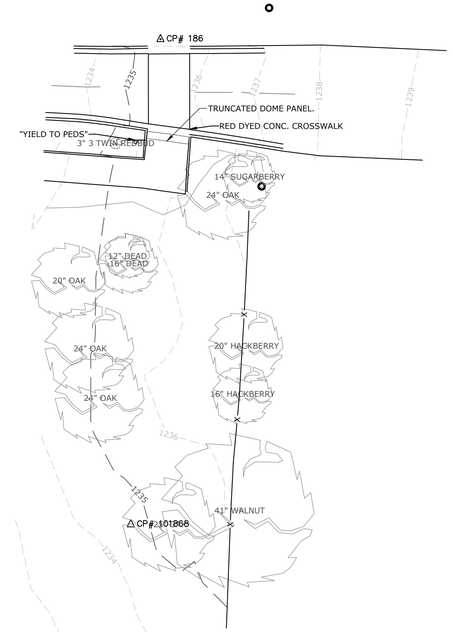
20 10 0 20 40

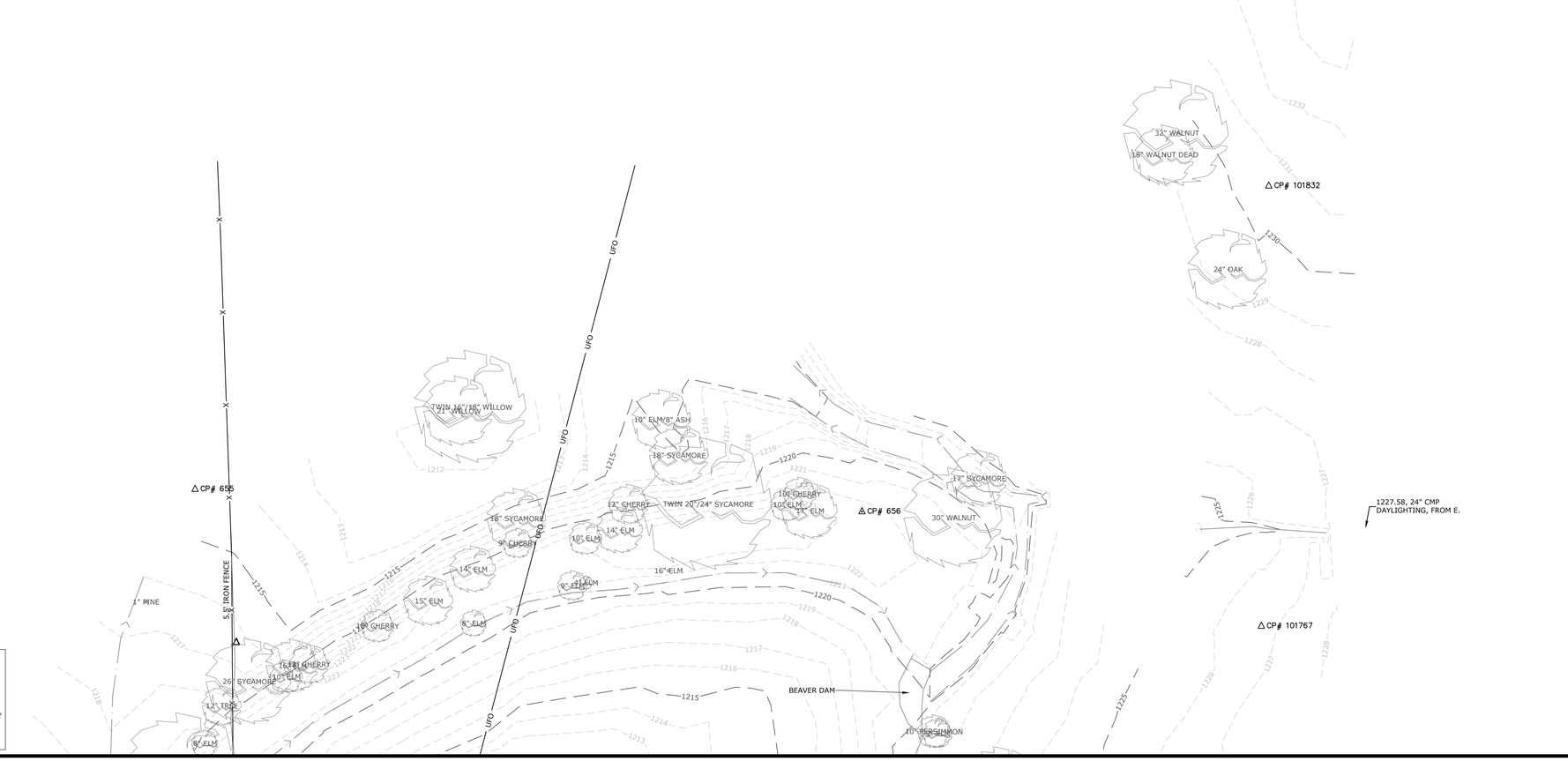
SCALE 1" = 20'

Point Table				
Point #	Northing	Easting	Elevation	Raw Description
655	645635.286	658861.2970	1214.66	SNAIL
656	645628.193	659072.6658	1221.89	TRA
660	646373.905	658732.3422	1205.78	TRA
661	645909.160	658490.7883	1243.66	TRA
662	646352.772	659430.5589	1242.85	TRA
663	645606.418	659397.7723	1233.00	TRA
664	645983.087	659358.9953	1239.21	TRA
665	645161.732	659388.7689	1249.30	TRA
666	644910.460	659251.4510	1230.92	TRA
667	643957.260	659199.0870	1240.31	GPS
668	643913.689	660263.7044	1246.38	GPS
1601	644154.138	659781.6581	1238.97	TRA USE
1602	644668.755	659287.4922	1230.82	TRA USE
100267	644829.953	659101.6530	1225.77	TRA GPS
100303	644517.871	659669.1160	1240.68	TBM
101067	644126.323	659632.8980	1237.20	SNAIL
101068	644126.321	659632.8990	1237.20	SNAIL
101069	644128.340	659652.0620	1237.03	SNAIL
101644	645189.486	659178.3280	1229.63	SNAIL
101645	645272.888	659165.9650	1229.08	SNAIL

Point Table				
Point #	Northing	Easting	Elevation	Raw Description
16	645486.270	658854.0340	1223.77	TRA
120	644937.037	659159.3200	1223.76	TRA
121	644990.220	659193.1010	1228.58	TRA
180	645228.303	658732.7680	1235.62	TRA GPS
181	644829.935	659101.6750	1225.78	TRA GPS
182	644138.502	659751.0740	1238.40	TRA GPS
183	645278.235	659167.6740	1229.31	TRA GPS
184	645956.356	659377.9410	1239.19	TRA GPS
185	644472.329	659736.7840	1241.21	TRA
186	645992.179	659228.0840	1235.54	TRA GPS
195	644491.518	659103.1840	1233.72	TRA
196	644700.096	658749.1380	1238.42	TRA
600	644490.789	659566.3735	1236.99	TRA GPS
603	644763.623	659065.6874	1227.89	TRA GPS
604	645390.690	658763.9120	1226.42	TRA GPS
605	644949.105	658620.8024	1243.95	TRA GPS
650	644496.365	659412.0519	1231.98	TRA
651	644845.890	659314.4627	1234.81	SNAIL
652	644762.204	659035.1755	1228.88	TRA
653	645055.906	659034.1488	1224.58	TRA

Point Table				
Point #	Northing	Easting	Elevation	Raw Description
101683	645385.906	659189.2880	1230.24	SNAIL
101712	645440.581	659126.6260	1225.55	SNAIL
101734	645506.020	659132.0050	1224.96	SNAIL
101767	645591.875	659199.2460	1226.74	SNAIL
101832	645731.434	659201.5980	1230.58	SNAIL
101868	645856.533	659219.7910	1234.60	SNAIL
9999603	644763.626	659065.7190	1227.84	TRA GPS
9999604	645390.694	658763.9110	1226.55	TRA GPS
9999663	645606.455	659397.7450	1233.00	TRA
9999664	645983.163	659358.8590	1239.23	TRA
99991601	644154.135	659781.6270	1238.82	TRA USE





IMPORTANT NOTE:
DESCRIPTION AND SIZE OF ALL ABOVEGROUND AND UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN DETERMINED WITH DUE CARE AND DILIGENCE, USING CURRENT TECHNIQUES, EQUIPMENT AND PROPER ACCURACY CONTROL PROCEDURES. HOWEVER, INFORMATION SHOWN HEREON IS NOT WARRANTED TO BE CORRECT IN EVERY DETAIL BECAUSE OF INACCURACIES IN OR LACK OF EXISTING DATA OR MAPS AND THE INABILITY TO VERIFY IN THE FIELD. PERSONS USING INFORMATION CONTAINED HEREON ARE HEREBY CAUTIONED ACCORDINGLY.

UTILITY LOCATE
240626-0830

UTILITIES NOTIFIED
OZARKSGO
AT&T ARKANSAS
SWEPCO FAYETTEVILLE
CITY OF FAYETTEVILLE
COX COMMUNICATIONS
BLACK HILLS CORPORATION
OZARKS ELECTRIC COOPERATIVE

McCLELLAND CONSULTING ENGINEERS, INC.
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McCLELLAND CONSULTING ENGINEERS, INC.
No. 24
ARKANSAS ENGINEER

BRYCE DAVIS PARK IMPROVEMENTS

N DARTMOUTH AVE
FAYETTEVILLE, AR

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REVISIONS		
REV	DATE	DESCRIPTION

TOPOGRAPHIC SURVEY

PROJ. MANAGER: PW	DRAWN BY: JJM
DATE: 07/2024	REVISION:
SCALE: AS NOTED	PROJ. NUMBER: 242121

TS-1

W:\2024\24-2121 - FAYETTEVILLE, AR- BRYCE DAVIS PARK, PHASE 1 IMPROVEMENTS\SURVEY\TOPOGRAPHIC\DRAFTING\SA242121.DWG

20 10 0 20 40

SCALE 1" = 20'

△CP# 656
△CP# 16
△CP# 9999604
△CP# 180
△CP# 101767
△CP# 101734
△CP# 101712
△CP# 101683
△CP# 183
△CP# 101645

F.F. 1221.04
F.F. 1221.70
F.F. 1221.63

1227.58, 24" CMP DAYLIGHTING, FROM E.

BEAVER DAM

PERIMITER OF UNMOWED AREA

WATER LEVEL IN POND .

MOW LINE

MOW LINE, EDGE OF BRUSH AND SMALL TREES

TRACED FROM PROVIDED IMAGES FROM AT&T. NOT FIELD LOCATED.

SMALL ISLAND COVERED IN VEGETATION

POOL ELEVATION

21" STUMP CARVED INTO A CHAIR

30" STUMP CARVED INTO A CHAIR

14" STUMP CARVED INTO A CHAIR

24" STUMP

WOODEN TABLE ON STEEL FRAME

SMALL CHARCOAL GRILL

5.5' IRON FENCE

24" HDPE

UFO

1" PINE
2" PINE
8" ELM
38" ELM
26" SYCAMORE
12" TREE
16" ELM
10" ELM
10" CHERRY
15" ELM
14" ELM
9" ELM
8" CHERRY
18" SYCAMORE
12" CHERRY
TWIN 20"/24" SYCAMORE
16" CHERRY
10" ELM
17" ELM
17" SYCAMORE
30" WALNUT
40" PERSIMMON
24" OAK
24" OAK
12" CEDAR
12" PERSIMMON
39" OAK
16" HICKORY
36" OAK
8" OAK
18" OAK
22" OAK
14" ELM
24" OAK
30" OAK
22" OAK
16" OAK
13" HICKORY
18" OAK
24" CHERRY
12" ELM
16" SYCAMORE
30" OAK
18" OAK
22" OAK

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REVISIONS

REV	DATE	DESCRIPTION

TOPOGRAPHIC SURVEY

PROJ. MANAGER	DRAWN BY:
PW	JJM
DATE:	REVISION:
07/2024	
SCALE:	PROJ. NUMBER:
AS NOTED	242121

TS-2

W:\2024\24-2121 - FAYETTEVILLE, AR- BRYCE DAVIS PARK, PHASE 1 IMPROVEMENTS\SURVEY\TOPOGRAPHIC\DRAFTING\SA242121.DWG

20 10 0 20 40

SCALE 1" = 20'

MOW LINE

TRACED FROM PROVIDED IMAGES FROM AT&T. NOT FIELD LOCATED.

MOW LINE, EDGE OF BRUSH AND SMALL TREES

UFO

21" STUMP CARVED INTO A CHAIR

30" STUMP CARVED INTO A CHAIR

POOL ELEVATION F.F. 1221.63

SMALL ISLAND COVERED IN VEGETATION

14" STUMP CARVED INTO A CHAIR

24" STUMP

WOODEN TABLE ON STEEL FRAME

SMALL CHARCOAL GRILL

ELEVATION OF CONC. 1233.67

CIRCLES ARE 24" DIAMETER CONC PIERS

F.F. 1236.07 TOP OF PIER

PAVILION SUPPORTS

PET WASTE BAG BOX

CONJOINED TRUNKS 30" AT BASE

CONJOINED TRUNKS 46" BASE

BIRDHOUSE ON POST

PARK BENCH

10" BUR OAK

TWIN TRUNKS CONJOINED AT BASE

TRACED FROM PROVIDED IMAGES FROM AT&T. NOT FIELD LOCATED.

W. EDGE NATURAL AREA, NOT MOWED

SILT AREA

1232.64, 18" HDPE

CP# 180

CP# 605

CP# 653

CP# 183

CP# 101645

CP# 101644

CP# 121

CP# 120

13" HICKORY
18" OAK
24" CHERRY
12" ELM
16" SYCAMORE
30" OAK
18" OAK
22" OAK
16" OAK
18" CHERRY
TWIN 18" OAK
15" HICKORY
12" HICKORY
8" CEDAR
24" OAK
18" OAK
32" ELM
28" OAK
37" OAK
30" OAK
24" OAK
21" OAK
17" OAK
12" OAK
13" HICKORY
18" OAK
14" ELM
20" OAK
24" OAK
17" OAK
20" OAK
18" OAK
18" ELM
16" SYCAMORE
16" LOCUST
20" OAK
20" OAK
18" HICKORY
30" OAK
24" OAK
19" OAK
32" ELM
21" HICKORY
26" OAK
20" HICKORY
21" OAK
26" OAK
28" OAK
26" OAK
8" MAPLE

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REVISIONS	DESCRIPTION	DATE
REV		

TOPOGRAPHIC SURVEY

PROJ. MANAGER	DRAWN BY:
PW	JM
DATE:	REVISION:
07/2024	
SCALE:	PROJ. NUMBER:
AS NOTED	242121

TS-3

W:\2024\24-2121 - FAYETTEVILLE, AR - BRYCE DAVIS PARK, PHASE 1 IMPROVEMENTS\SURVEY\TOPOGRAPHIC\DRAFTING\SA242121.DWG

CP# 605
ELEC. CABINET BCE
DOG WASTE BAG BOX.
17" PINE
12" & MAPLE
TRACED FROM PROVIDED IMAGES FROM AT&T. NOT FIELD LOCATED.
SETTLED DITCHLINE, SUSPECTED BCE ROUTE. BCE NOT MARKED.
15" OAK
13" MAPLE
13" PINE
BENCH
7" OAK
UFO
UGE
1232.64, 18" HDPE
30" OAK
18" HICKORY
20" OAK
24" OAK
28" OAK
26" OAK
19" OAK
20" HICKORY
21" OAK
26" OAK
28" OAK
TRACED FROM PROVIDED IMAGES FROM AT&T. NOT FIELD LOCATED.
W. EDGE NATURAL AREA, NOT MOWED
32" ELM
21" HICKORY
CP# 120
42" OAK
TRUNK BASE
CP# 100267
31" MAPLE
17" PINE
PARK BENCH
CP# 652
CP# 9999603
UGTV
CONCRETE TRAIL
10" MAPLE
14" ASH
12" PINE
STONE COLUMN WITH WOODEN ARCH SIGN. "IAMS PARK"
INOPERABLE DECORATIVE FH
BENCH
6' DIA TREE ISLAND WITH IRON FEN.
6' DIA TREE ISLAND SURROUNDED WITH IRON FEN.
4" MAPLE
BENCH
DRINKING FOUNTAIN.
6, 24" DIA PIERS SUPPORTING PAVILION
5" MAPLE
CP# 196
14" SQ. "TELECOMMUNICATIONS"
LP ON 24" DIA. CONC. BASE
3 RAIL WOODEN FEN WITH CLF FABRIC.
6' DIA EMPTY TREE PLANTER CIRCLE.
ELEC METER AND CONTROL BOX ON STEEL STAND.
BENCH
BENCH.
OPEN SIDED PAVILION WITH TABLES.
OUTLINE ROOF OF PAVILION
ELEC. TRANSFORMER ON PAD.
N EDGE 18" WIDE CONC. STRIP UNDER FEN. OFFSET LINE TO S.
LP ON 24" DIA CONC BASE.
BENCH.
INOPERABLE DECORATIVE FH
INOPERABLE DECORATIVE FH
1" ASH
3 RAIL WOODEN FEN WITH CLF FABRIC.
6" PINE
9" PINE
9" WILLOW OAK
IRON FEN WITH CLF FABRIC.
14" MULBERRY
9" PINE
16" PINE
OLD MULBERRY STUMP GROWING THRU. FEN
15" WILLOW OAK
18" WILLOW OAK
17" WILLOW OAK
WOODEN BENCH.
16" WILLOW OAK
WOODEN STEP AGILITY FEATURE.
BOULDER WITH PLAQUEIN MEMORY OF J.W. TEDFORD
7" PINE
LP ON 24" DIA CONC. BASE.
WOODEN BENCH
LP ON 24" DIA CONC. BASE.
3 RAIL WOODEN FEN WITH CLF FABRIC.
DOG HURDLE.
WOODEN BENCH.
TRACED FROM PROVIDED IMAGES FROM AT&T. NOT FIELD LOCATED.
5" MAPLE
POOR COND.
14" WILLOW OAK
7" MAPLE
POOR CONDITION
6" MAPLE
3 RAIL WOOD WITH CLF FABRIC.
PLASTIC PULLBOX
TWIN 6"
6" & ASH TWIN
BARBED W
20 10 0 20 40
SCALE 1" = 20'

W:\2024\24-2121 - FAYETTEVILLE, AR- BRYCE DAVIS PARK, PHASE 1 IMPROVEMENTS\SURVEY\TOPOGRAPHIC\DRAFTING\SA242121.DWG

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CERTIFICATE OF AUTHORIZATION
McCLELLAND CONSULTING ENGINEERS, INC.
No. 24
ARKANSAS ENGINEER

BRYCE DAVIS PARK IMPROVEMENTS

N DARTMOUTH AVE
FAYETTEVILLE, AR

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REV	DATE	DESCRIPTION

REVISIONS

TOPOGRAPHIC SURVEY

PROJ. MANAGER	DRAWN BY:
PW	JJM
DATE: 07/2024	REVISION:
SCALE: AS NOTED	PROJ. NUMBER: 242121

TS-4

TWIN TRUNKS CONJOINED AT BASE
18" OAK
14" ELM
20" OAK
24" OAK
CP# 121
12" OAK
20" OAK
18" OAK
18" ELM
12" SYCAMORE
16" LOCUST
CP# 120
20" OAK
28" OAK
30" OAK
18" HICKORY
20" OAK
24" OAK
19" OAK
TRACED FROM PROVIDED IMAGES FROM AT&T. NOT FIELD LOCATED.
W. EDGE NATURAL AREA, NOT MOWED
32" ELM
21" HICKORY
20" HICKORY
26" OAK
21" OAK
26" OAK
26" OAK
28" OAK
64, 18" HDPE
TRACED FROM PROVIDED IMAGES FROM AT&T. NOT FIELD LOCATED.
CP# 666
N RIM ELEV. 1230.13
1226.73, 4" IRON IN NE
1223.86, 8" PVC IN SSE
1223.75, 8" PVC IN E
1223.53, 12" TRUSS OUT N
8" MAPLE
CP# 651
CP# 100267
12" OAK
TRUNK BASE
11" MAPLE
14" PINE
10" CHERRY
TWIN 12" BOIS D'ARC
13" CHERRY
14" SYCAMORE
12" SYCAMORE
PARK BENCH
W. EDGE THICK TREES
14" BOIS D'ARC
CP# 652
CP# 9999603
CONCRETE TRAIL
2 RAIL WOOD FENCE
1228.55, 18" CMP
90% CLOGGED
RIM ELEV. 1232.37
1228.93, FLOOR OF BOX
1228.93, 18" CMP OUT W
N RIM ELEV. 1230.72
1225.26, 8" PVC IN E
1224.61, 8" PVC IN S
1224.59, 8" PVC OUT N
2 RAIL WOOD FENCE
N RIM ELEV. 1232.34
1224.8, 8" PVC IN S
1224.78, 8" PVC OUT N
7" BOLLARD
BENCH
6' DIA TREE ISLAND SURROUNDED WITH IRON FEN.
14" SQ. "TELECOMMUNICATIONS"
4" MAPLE
6, 24" DIA PIERS SUPPORTING PAVILION
5" MAPLE
LP ON 24" DIA. CONC. BASE
3 RAIL WOODEN FEN WITH CLF FABRIC.
BENCH.
OPEN SIDED PAVILION WITH TABLES.
OUTLINE ROOF OF PAVILION
INOPERABLE DECORATIVE FH
1" ASH
INOPERABLE DECORATIVE FH
WOODEN BENCH
DOG HURDLE.
WOODEN BENCH.
TRACED FROM PROVIDED IMAGES FROM AT&T. NOT FIELD LOCATED.
LP ON 24" DIA CONC. BASE.
3 RAIL WOODEN FEN WITH CLF FABRIC.
5" MAPLE
POOR COND.
14" WILLOW OAK
3 RAIL WOOD WITH CLF FABRIC.
PLASTIC PULLBOX
5 STRAND BARBED WIRE FENCE
TWIN 6"
6" 6 ASH TWIN
8" ASH
16" ASH
10" ASH
15" ASH
30" HDPE
30" HDPE
36" HDPE
36" HDPE
12" BALD CYPRESS
2 RAIL WOOD FENCE
CP# 1602
CLUSTER OF EQUAL 3" HACKBERRY
8" ASH
8" ASH
GROUP OF BOULDERS
5 BOULDERS
BARBED WIRE FENCE
CONCRETE TRAIL
ASPHALT TRAIL
TWIN 8"/4" CEDAR
2 RAIL WOOD FENCE
14" MAPLE
PICN
ON S

20 10 0 20 40
SCALE 1" = 20'

McCLELLAND CONSULTING ENGINEERS, INC.
DESIGNED TO SERVE
1580 E. STEARNS ST.
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AS NOTED	242121

TS-5

W:\2024\24-2121 - FAYETTEVILLE, AR- BRYCE DAVIS PARK, PHASE 1 IMPROVEMENTS\SURVEY\TOPOGRAPHIC\DRAFTING\SA242121.DWG

TRUNK BASE
14" MAPLE
14" PINE
PARK BENCH
CP# 652
CP# 9999603
UGTV
CONCRETE TRAIL
TWIN 12" BOIS D'ARC
14" CHERRY
14" SYCAMORE
12" SYCAMORE
W. EDGE THICK TREES
14" BOIS D'ARC
2 RAIL WOOD FENCE
1228.55, 18" CMP
90% CLOGGED
RIM ELEV. 1232.37
1228.93, FLOOR OF BOX
1228.93, 18" CMP OUT W
N RIM ELEV. 1230.72
1225.26, 8" PVC IN E
1224.61, 8" PVC IN S
1224.59, 8" PVC OUT N
2 RAIL WOOD FENCE
N RIM ELEV. 1232.34
1224.8, 8" PVC IN S
1224.78, 8" PVC OUT N
7" BOLLARD
12" BALD CYPRESS
36" HDPE
SS
10" MAPLE
14" ASH
12" PINE
STONE COLUMN WITH WOODEN ARCH SIGN. "IAMS PARK"
INOPERABLE DECORATIVE FH
BENCH
6' DIA TREE ISLAND WITH IRON FEN.
4" MAPLE
6' DIA TREE ISLAND SURROUNDED WITH IRON FEN.
14" SQ. "TELECOMMUNICATIONS"
CP# 196
DRINKING FOUNTAIN.
6, 24" DIA PIERS SUPPORTING PAVILION
5" MAPLE
6' DIA EMPTY TREE PLANTER CIRCLE.
LP ON 24" DIA. CONC. BASE
3 RAIL WOODEN FEN WITH CLF FABRIC.
ELEC METER AND CONTROL BOX ON STEEL STAND.
BENCH.
OPEN SIDED PAVILION WITH TABLES.
OUTLINE ROOF OF PAVILION
UGE
TRANSFORMER ON PAD.
ONC. STRIP
LINE TO S.
LP ON 24" DIA CONC BASE.
BENCH.
INOPERABLE DECORATIVE FH
3 RAIL WOOD WITH CLF FABRIC.
PLASTIC PULLBOX
TWIN 6"
6" 6 ASH TWIN
5 STRAND BARBED WIRE FENCE
PARK BENCH
16" ASH
15" ASH
10" ASH
CP# 1602
30" HDPE
8" ASH
8" ASH
8" ASH
GROUP OF BOULDERS
BARBED WIRE FENCE
CLUSTER OF FOUR 3" HACKBERRY
5 BOULDERS
CONCRETE TRAIL
ASPHALT TRAIL
1" ASH
INOPERABLE DECORATIVE FH
9" PINE
9" WILLOW OAK
WOODEN BENCH
DOG HURDLE.
WOODEN BENCH.
TRACED FROM PROVIDED IMAGES FROM AT&T. NOT FIELD LOCATED.
UFO
10" PINE
15" WILLOW OAK
TUMP
FEN
LP ON 24" DIA CONC. BASE.
5" MAPLE
POOR COND.
14" WILLOW OAK
3 RAIL WOODEN FEN WITH CLF FABRIC.
OW OAK
17" WILLOW OAK
WOODEN BENCH.
7" MAPLE
POOR CONDITION
6" MAPLE
16" WILLOW OAK
WOODEN STEP AGILITY FEATURE.
BOULDER WITH PLAQUEIN MEMORY OF J.W. TEDFORD
7" PINE
8" PINE
6" PINE
LP ON 24" DIA CONC. BASE.
TIRE TUBE AGILITY FEATURE.
9" PINE
8" PINE
6" PINE
WOODEN STEPS AGILITY FEATURE.
HOOP AGILITY FEATURE.
32" MAPLE
9" PINE
DOG HURDLE.
13" WILLOW OAK
IRON FENCE WITH CLF FABRIC ATTACHED.
8" PINE
9" PINE
17" MAPLE
CP# 195
N RIM ELEV. 123
1226.09, 8" PVC IN
1225.89, 8" PVC OUT
IRON FENCE.
IRON FENCE WITH CLF FABRIC.

20 10 0 20 40
SCALE 1" = 20'

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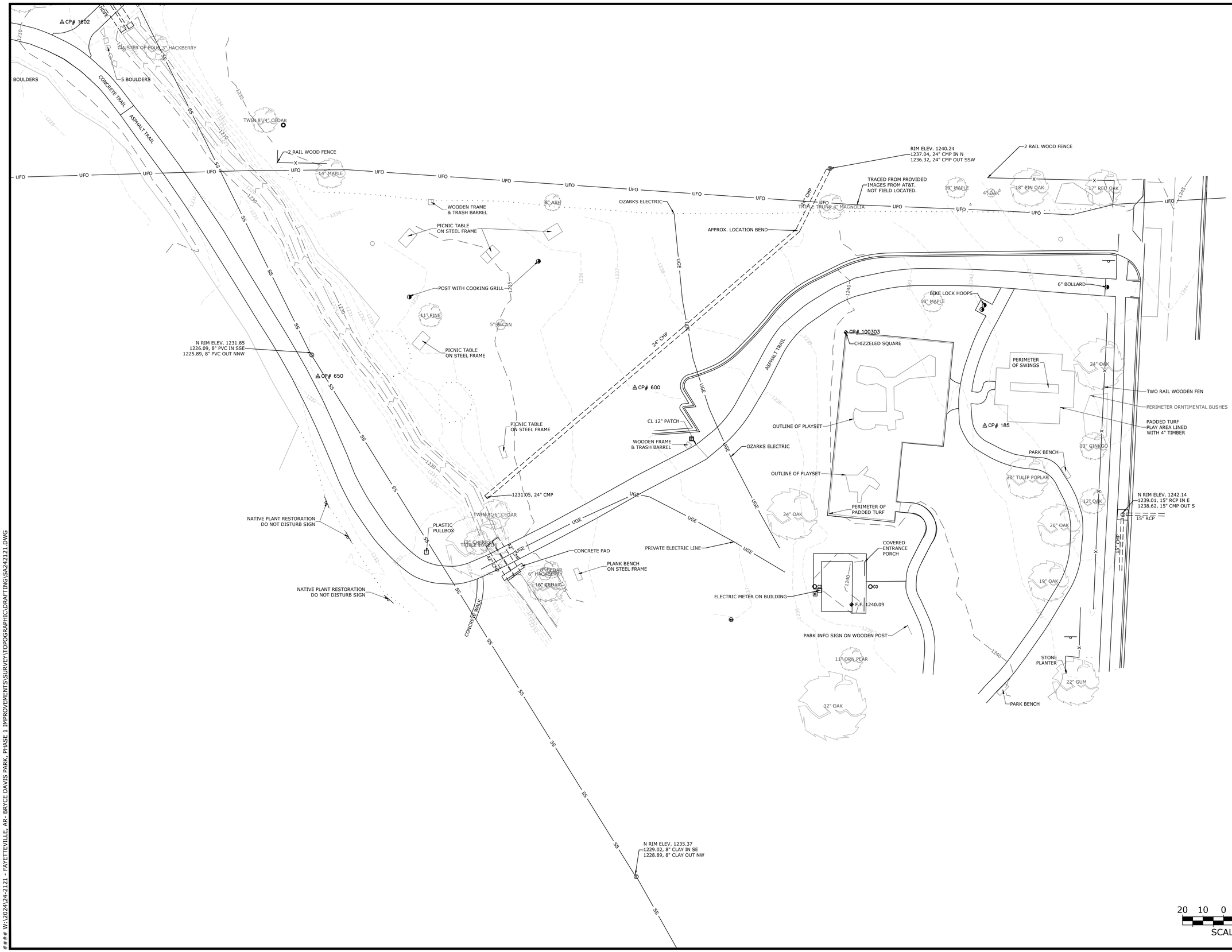
TS-6



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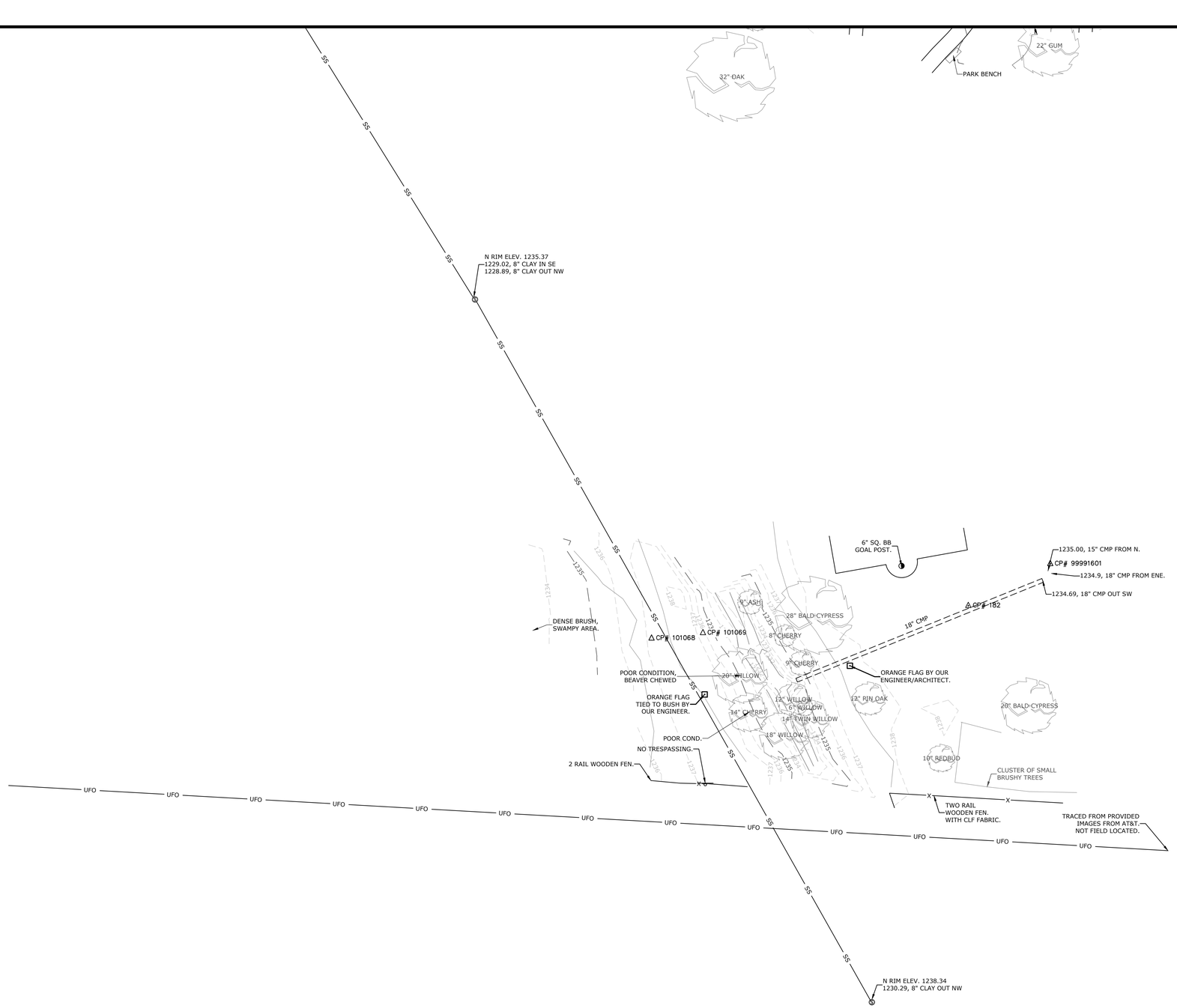

20 10 0 20 40

SCALE 1" = 20'

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CITY OF FAYETTEVILLE STANDARD NOTES

1. THE REVIEW BY THE ENGINEERING DIVISION WAS FOR GENERAL COMPLIANCE AND DOES NOT WARRANT YOUR DESIGN AND DOES NOT RELIEVE THE OWNER FROM ANY ITEMS DISCOVERED DURING CONSTRUCTION OR FURTHER REVIEW, WHICH ARE DEEMED NECESSARY TO COMPLY WITH CITY ORDINANCES AND CRITERIA. THE APPROVAL OF THE ENGINEERING ITEMS ON THE PLANS FOR WATER, SEWER, DRAINAGE, AND GRADING IS NOT A GUARANTEE OF APPROVAL OF THIS PROJECT BY OTHER CITY DIVISIONS.

2. ANY DAMAGE TO THE EXISTING PUBLIC STREET OR OTHER PUBLIC INFRASTRUCTURE DUE TO CONSTRUCTION SHALL BE REPAIRED/REPLACED AT THE OWNER/DEVELOPERS EXPENSE.

3. ALL MATERIAL DELIVERIES, CONSTRUCTION STAGING, AND WORKER PARKING MUST OCCUR ON YOUR SITE AND OUTSIDE THE PUBLIC STREETS DURING ALL PHASES OF THE PROJECT.

4. ALL PUBLIC SIDEWALKS AND RAMPS MUST MEET ADA GUIDELINES. **ANY EXISTING SIDEWALKS THAT DO NOT CONFORM TO ADA GUIDELINES MUST BE REMOVED AND REPLACED TO CORRECT THE ISSUE.** COORDINATE WITH THE ENGINEERING DEPARTMENT FOR INSPECTION OF EXISTING SIDEWALKS TO DETERMINE ADA COMPLIANCE.

5. PRIOR TO ANY CLEARING TO INSTALL EROSION CONTROL STRUCTURES, TREE PRESERVATION FENCING MUST BE INSTALLED BY THE CONTRACTOR AND INSPECTED BY THE URBAN FORESTER (444-3469)

6. WATER AND SEWER IMPACT FEES WILL APPLY FOR THE ADDITIONAL IMPACT TO THE SYSTEM. THE FEES WILL BE BASED ON THE PROPOSED METER SIZE AND WILL BE CHARGED AT THE TIME OF METER SET.

7. FIRE LINE MONTHLY FEES WILL BE APPLIED BASED ON THE SIZE OF THE RISER PENETRATING THE SLAB. SEE CHAPTER 51.136 OF THE UNIFIED DEVELOPMENT CODE FOR TABLE OF FEES ASSOCIATED WITH PIPE DIAMETER.

8. THE ENGINEER OF RECORD SHALL PROVIDE "FULL TIME" INSPECTION FOR UTILITIES AND "PART TIME" INSPECTION FOR THE STORM DRAINAGE AND ROADWAY CONSTRUCTION FOR THIS PROJECT. THE ENGINEER OF RECORD SHALL ALSO REVIEW AND APPROVE MATERIAL SUBMITTALS (APPROVED SUBMITTALS SHALL BE SUBMITTED TO THE CITY FOR CONCURRENCE BEFORE PRECONSTRUCTION MEETING AND BEFORE MATERIAL IS ORDERED) - DAILY INSPECTION REPORTS SHOULD BE SUBMITTED WEEKLY TO THE CITY OF FAYETTEVILLE'S PUBLIC WORKS INSPECTOR (PWI).

9. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE CITY OF FAYETTEVILLE'S REQUIREMENTS. IN THE CASE OF CONFLICTS, THE CITY'S CRITERIA SHALL GOVERN.

10. THE PUBLIC WORKS INSPECTOR SHALL BE NOTIFIED NO LESS THAN 48 HOURS PRIOR TO THE INSTALLATION OF PUBLIC UTILITIES, INFRASTRUCTURE, ROADWAY, ETC. TESTING SHALL BE COORDINATED WITH THE PWI BY THE ENGINEER OF RECORD.

11. CONTACT BRENT RUTHERFORD (ADA ADMINISTRATOR 575-8291) AND REQUEST AN INSPECTION PRIOR TO:

    A. POURING ANY SIDEWALK, TRAIL, OR DRIVEWAY IN THE RIGHT-OF-WAY OR PUBLIC EASEMENTS.

    B. PLACING ANY PAVEMENT FOR ADA ACCESSIBLE PARKING/LOADING AREAS.

    C. POURING ANY SIDEWALK THAT IS A CONNECTION FROM ADA ACCESSIBLE PARKING AREAS TO THE STRUCTURE.

12. CONTRACTOR SHALL BE CONFINED TO THE LIMITS OF CONSTRUCTION SHOWN ON THIS GRADING PERMIT APPLICATION. ADJACENT PROPERTY SHALL NOT BE USED WITHOUT MODIFYING THE GRADING AND EROSION CONTROL PLAN THROUGH THE ENGINEER OF RECORD AND OBTAINING WRITTEN APPROVAL FROM THE CITY ENGINEERING DIVISION.

CITY OF FAYETTEVILLE STANDARD REQUIREMENTS

1. COMMERCIAL STRUCTURES THAT MAY REQUIRE A FIRE SPRINKLER SYSTEM MUST OBTAIN A FIRE FLOW STUDY SUBMITTED AND APPROVED BY THE FIRE DEPARTMENT PRIOR TO APPROVAL OF THE PROJECT.

2. PRIOR TO ENGINEERING APPROVAL OF THE **BUILDING PERMIT**, EITHER THE REQUIRED PUBLIC IMPROVEMENTS MUST BE INSTALLED AND ACCEPTED, OR PERFORMANCE BONDS IN THE AMOUNT OF 150% OF THE CONSTRUCTION COST FOR ALL PUBLIC IMPROVEMENTS MUST BE SUBMITTED, ACCOMPANIED BY A UNIT PRICE ESTIMATE APPROVED BY THE ENGINEERING DIVISION AND ALL EASEMENTS MUST BE DEDICATED AND OR VACATED.

3. A GRADING AND DRAINAGE PERMIT WILL NOT BE ISSUED UNTIL:

    A. A COPY OF THE SWPPP IS PROVIDED TO THE CITY. THE SWPPP WILL BECOME PART OF THE GRADING AND DRAINAGE PERMIT. (IN PDF FORMAT)

    B. THE PERIMETER EROSION CONTROLS, CONSTRUCTION EXIT, AND SWPPP/GRADING PERMIT BOX HAVE BEEN INSPECTED AND APPROVED BY THE ENGINEERING DIVISION. (APPLICANT IS RESPONSIBLE FOR CONTACTING AND SCHEDULING THE EROSION CONTROL INSPECTION BY CALLING THE ASSIGNED PWI)

    C. THE ENGINEER OF RECORD SHALL REVIEW AND APPROVE MATERIAL SUBMITTALS (APPROVED SUBMITTALS SHALL BE SUBMITTED TO THE CITY FOR CONCURRENCE BEFORE PRECONSTRUCTION CONFERENCE AND MATERIAL IS ORDERED)

    D. A PRECONSTRUCTION CONFERENCE HAS TAKEN PLACE.

    E. CONTACT DOUGLAS SHARP OF THE CITY OF FAYETTEVILLE METER OPERATIONS DIVISION (575-8384) PRIOR TO THE PRECONSTRUCTION MEETING TO DISCUSS THE DOMESTIC AND/OR IRRIGATION WATER SERVICE DEMAND TO VERIFY SIZE OF METER PROPOSED.

    F. PROVIDE ONE BOUND SET OF WATER & SEWER SPECIFICATIONS INCLUDING DETAILS FOR EACH THE INSPECTOR AND THE CONTRACTOR'S USE TO BE STAMPED BY ENGINEERING AT THE PRE-CONSTRUCTION CONFERENCE.

    G. ALL CONTRACTORS/SUBS INSTALLING PUBLIC INFRASTRUCTURE (INCLUDING FIRELINE) MUST BE PRESENT ALONG WITH THE INSPECTOR FROM ENGINEER OF RECORD.

    H. IF THE SUPERINTENDENT ON SITE CHANGES AFTER THE CITY OF FAYETTEVILLE PRE-CONSTRUCTION MEETING, AN ADDITIONAL PRE-CONSTRUCTION MEETING WILL BE REQUIRED WITH THE NEW SUPERINTENDENT.

4. A COPY OF THE APPROVAL LETTER FROM THE ARKANSAS DEPARTMENT OF HEALTH SHOULD BE OBTAINED AND FORWARDED TO THE ENGINEERING DIVISION.

5. PRIOR TO **PROJECT ACCEPTANCE** (CERTIFICATE OF OCCUPANCY, OR TEMPORARY CERTIFICATE OF OCCUPANCY) THE FOLLOWING ITEMS MUST BE PERFORMED OR PROVIDED TO THE SATISFACTION OF THE ENGINEERING DEPARTMENT:

    A. THE WORK SHOWN ON THE CIVIL SITE PACKAGE MUST BE COMPLETE AND THE ITEMS ON THE FINAL PUNCH LIST COMPLETED.

    B. VEGETATION MUST BE ESTABLISHED IN ACCORDANCE WITH SECTION 169.06 OF THE UDC AND PERIMETER CONTROLS REMOVED.

    C. ONE (1) SET OF AS-BUILT DRAWINGS OF THE COMPLETE PROJECT (EXCLUDING DETAILS) AS A HARD COPY, DIGITAL FILE .DWG, AND PDF FORMAT;

        1. PROFESSIONAL SURVEYOR SHALL PROVIDE STAMP DRAWINGS SPECIFICALLY IDENTIFYING THE LIMITS OF AS-BUILT SURVEY PERFORMED.

        2. PUBLIC INFRASTRUCTURE AND SERVICES SHALL BE SURVEYED AFTER INSTALLATION IN RELATION TO EASEMENTS, PROPERTY LINES, AND RIGHTS-OF-WAY.

            A. MORE THAN 2 FT DEVIATION OF DESIGN ALIGNMENT OF SHALL REQUIRE NEW EASEMENT DEDICATION OR ADJUSTMENT OF THE UTILITY/STORM DRAIN.

        3. ADEQUATE VERIFICATION SURVEY TO CONFIRM ACCURACY OF DRAINAGE REPORT.

            A. UNIT PRICE CONSTRUCTION COSTS FOR REVIEW AND APPROVAL AND A SINGLE 2 YEAR MAINTENANCE BONDS IN THE AMOUNT OF 25% OF THE PUBLIC IMPROVEMENTS

    B. CERTIFICATION THAT THE STREETS, SIDEWALK, STORM SEWER, WATER, FIRE LINE, AND SEWER LINES, ETC., WERE INSTALLED PER APPROVED PLANS AND CITY OF FAYETTEVILLE REQUIREMENTS;

        1. PROVIDE ALL INSPECTION REPORTS; APPROVED SUBMITTALS; DATA FORMS FROM UTILITY SPECIFICATIONS

    A. SURVEYOR'S CERTIFICATION OF COMPLIANCE FOR MONUMENTS AND PROPERTY PINS.

THE CONTRACTOR IS RESPONSIBLE TO CONTACT EACH DISCIPLINE BELOW AND REQUEST A CERTIFICATE OF OCCUPANCY INSPECTION AND APPROVAL AT LEAST A WEEK IN ADVANCE:

BUILDING SAFETY	DENNIS SANDERS	575-8229	dsanders@fayetteville-ar.gov
ENGINEERING	MELISSA BOYD	575-8206	mboyd@fayetteville-ar.gov
FIRE	BRIAN SLOAT	575-8365	fire@fayetteville-ar.gov
BACKFLOW PREVENTION	RANDY BOLINGER	575-8382	rbolinger@fayetteville-ar.gov
METER OPERATIONS	JAYCE BRANSON	684-4723	jbranson@fayetteville-ar.gov
PLANNING	JESSIE MASTERS	575-8267	jmasters@fayetteville-ar.gov
PLANNING	GRETCHEN HARRISON	575-8263	gharrison@fayetteville-ar.gov
SIDEWALK	ENGINEERING	575-8206	engineering@fayetteville-ar.gov
RECYCLING AND TRASH	DREW COOK	575-8398	acook@fayetteville-ar.gov
TREE & LANDSCAPE	WILLA THOMASON	444-3486	wthomason@fayetteville-ar.gov

GENERAL NOTES:

1. *THE CITY OF FAYETTEVILLE SHALL PROVIDE AN AUTOCAD DRAWING FOR USE BY THE CONTRACTOR TO ESTABLISH HIS/HER CONSTRUCTION STAKING. MINOR ADJUSTMENTS IN THE FIELD ARE TO BE EXPECTED AND CONSIDERED AS PART OF THE BASE BID.*
2. *CAUTION: UNDERGROUND UTILITIES EXIST WITHIN AND ADJACENT TO THE LIMITS OF CONSTRUCTION. AN ATTEMPT HAS BEEN MADE TO LOCATE THESE UTILITIES ON THE PLANS; HOWEVER, ALL EXISTING UTILITIES MAY NOT BE SHOWN AND THE ACTUAL LOCATIONS OF THE UTILITIES MAY VARY FROM THE LOCATIONS SHOWN. SOME UTILITIES MAY HAVE BEEN RELOCATED SINCE THE TIME OF DESIGN AND THE CONTRACTOR'S NOTICE TO PROCEED. PRIOR TO BEGINNING ANY TYPE OF EXCAVATION, THE CONTRACTOR SHALL CONTACT THE UTILITIES INVOLVED AND MAKE ARRANGEMENTS FOR THE LOCATION OF THE UTILITIES ON THE GROUND. THE CONTRACTOR SHALL MAINTAIN THE UTILITY LOCATION MARKINGS UNTIL THEY ARE NO LONGER NECESSARY. ARKANSAS STATE LAW, THE UNDERGROUND FACILITIES DAMAGE PREVENTION ACT, REQUIRES TWO WORKING DAYS IN ADVANCE NOTIFICATION THROUGH THE ARKANSAS ONE-CALL SYSTEM CENTER BEFORE EXCAVATING USING MECHANIZED EQUIPMENT OR EXPLOSIVES (EXCEPT IN THE CASE OF EMERGENCY). THE ONE-CALL SYSTEM PHONE NUMBER IS 1-800-482-8998. THE CONTRACTOR IS ADVISED THAT THERE IS A SEVERE PENALTY FOR NOT MAKING THE CALL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND RESTORING ANY DAMAGED UTILITIES TO REMAIN. CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS OF ALL UTILITIES, WATER LINES AND SANITARY SEWER LINES WITHIN PROPOSED CONSTRUCTION LIMITS*
3. *ALL PROPERTY CORNERS (IRON PINS) OR OTHER MONUMENTS LOCATED WITHIN PROPOSED CONSTRUCTION SHALL BE PROTECTED.*
4. *ALL TREES OUTSIDE THE CONSTRUCTION LIMITS SHALL BE PROTECTED AND SAVED. DO NOT PARK OR STORE EQUIPMENT AND MATERIALS UNDER THE DRIP LINE OF TREES TO REMAIN. DO NOT PUSH PILES OF DEBRIS OR SOIL AGAINST TREES TO REMAIN.*
5. *DO NOT EXCEED CLEARING AND GRUBBING LIMITS OF CONSTRUCTION INDICATED ON THE PLANS. KEEP HEAVY EQUIPMENT OUT OF NON CONSTRUCTION AREAS.*
6. *THE CONTRACTOR SHALL BE REQUIRED TO FOLLOW ADA REQUIREMENTS FOR SLOPES FOR ALL SURFACES. MINOR ADJUSTMENTS TO THE LAYOUT MAY BE NEEDED TO ACHIEVE THIS AND ARE TO BE CONSIDERED AS PART OF THE BASE BID.*
7. *CONTRACTOR SHALL CONDUCT WORK WITH THE KNOWLEDGE THAT PARK USERS WILL NEED TO WALK BY THIS SITE AND ALSO TO ACCESS THE PARKING, TRAILS, AND RESTROOM FACILITY. MAINTAIN THE SITE IN A SAFE AND APPROPRIATE MANNER FOR THE PUBLIC INCLUDING CHILDREN.*
8. *THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY DRAINAGE AS REQUIRED.*
9. *THE CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS. PLAYGROUND EQUIPMENT TO BE REMOVED SHALL BE DEMOLISHED AND NOT REUSED. METAL MAY BE RECYCLED.*
10. *THE CONTRACTOR SHALL CONTROL EROSION ON THE SITE. GRASS SHALL BE MAINTAINED AND MOWED AS NEEDED UNTIL THE PROJECT IS COMPETED AND ACCEPTED. THE SITE SHALL BE GRADED TO MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION. WATER SHALL NOT BE ALLOWED TO POND.*
11. *CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION AT THE SITE.*
12. *ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY, COUNTY, STATE, AND FEDERAL REGULATIONS AND CODES AS WELL AS OSHA STANDARDS.*
13. *THE CONTRACTOR SHALL NOT BEGIN WORK , EXCEPT FOR INSTALLING TREE PROTECTION FENCING AND STORMWATER POLLUTION CONTROLS, UNTIL THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN IMPLEMENTED, AND THE SWPPP, EROSION CONTROL PLAN, AND SIGNED AUTOMATIC NOTICE OF COVERAGE IS POSTED ON SITE.*
14. *SITE CONTRACTOR IS RESPONSIBLE FOR INSTALLING, MONITORING, AND MAINTAINING ALL SEDIMENT AND EROSION CONTROL BMPS. THE SITE IS NEXT TO A TRIBUTARY CREEK TO HAMESTRING CREEK AND PARTICULAR CARE IS NEEDED TO PREVENT SPILLS AND SEDIMENTS FROM ENTERING THE CREEK.*
15. *EROSION CONTROL DEVICES SHALL BE INSTALLED AS THE PROJECT PROGRESSES TO COVER AREAS THAT ARE DISTURBED.*
16. *THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP AS A MINIMUM. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.*
17. *ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.*
18. *MUCH OF THE CONCRETE FORMWORK INCORPORATES CURVES. CONTRACTOR SHALL INSURE THAT ALL FORMWORK AND THE RESULTING CONCRETE EDGES ARE SMOOTH AND FREE OF WOBBLES OR DEVIATIONS.*
19. *THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS TO ENSURE THAT THE NEW WORK SHALL FIT INTO THE EXISTING SITE IN THE MANNER INTENDED AND AS SHOWN ON THE DRAWINGS. SHOULD THERE BE ANY CONDITIONS EXISTING THAT ARE CONTRARY TO THOSE SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE OWNERS REPRESENTATIVE PRIOR TO PERFORMING ANY WORK IN THE ARES INVOLVING DIFFERENCES. NOTIFICATION SHALL BE IN THE FORM OF DRAWING OR SKETCH INDICATING FIELD MEASUREMENT AND NOTES RELATED TO THE AREA. MINOR MODIFICATIONS FOR THE FIELD CONDITIONS IS TO BE EXPECTED AND PART OF THE BASE BID.*
20. *ANY FOREIGN ITEMS FOUND DURING CONSTRUCTION IS THE PROPERTY OF THE CITY. THIS INCLUDES, BUT IS NOT LIMITED TO PRECIOUS METALS, COINS, PAPER CURRENCY, ARTIFACTS, AND ANTIQUES.*
21. *ALL GRADED AREAS THAT WILL BE TURF SHALL BE FINE GRADED TO PROVIDE POSITIVE DRAINAGE WITH NO STANDING WATER.*
22. *ALL FILL AND CUT SLOPES SHALL BE 4:1 OR FLATTER UNLESS OTHERWISE NOTED ON PLANS.*
23. *THE CONTRACTOR SHALL MAINTAIN THE SITE IN A NEAT AND ORDERLY CONDITIONS AT ALL TIMES. DAILY AND MORE OFTEN IF NECESSARY INSPECT AND PICK UP ALL SCRAP, WASTE, AND TRASH GENERATED BY THE CONTRACTOR'S WORK AND WORK FORCE.*
24. *UPON COMPLETION OF THE PROJECT THE CONTRACTOR SHALL CLEAN THE PAVED AREAS AND EQUIPMENT. IF POWER WASHING IS NEEDED UTILIZE FILTERING MATERIAL TO PREVENT DIRT FROM ENTERING PLAYGROUND SURFACING. INSURE THAT SEDIMENT LADEN WATERS DO NOT ENTER THE CREEK.*
25. *THE CONTRACTOR SHALL PROVIDE SUCH BRACING, SHEETING AND SHORING, BLASTING PROTECTION WARNING LIGHTS, AND BARRICADES, FENCING, AND SAFETY SIGNAGE AS MAY BE NECESSARY FOR PROTECTION OF LIFE AND PROPERTY FOR EMPLOYEES AND THE GENERAL PUBLIC. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY STATUTES AND RULES REQUIRING CERTAIN PROTECTIVE PERSONAL APPAREL SUCH AS HARD HATS, EAR PLUGS, EYE SHIELDS, PROTECTIVE SHOES, SAFETY SIGNAGE, ETC. THE CITY AND ENGINEER AND LANDSCAPE ARCHITECT ASSUME NO RESPONSIBILITY OR LIABILITY FOR ACTIONS TAKEN BY THE CONTRACTOR AND THE CONTRACTORS WORK FORCE WHICH ENDANGER LIFE AND PROPERTY.*
26. *INFORMATION IN THE DRAWINGS TAKE PRECEDENCE OVER INFORMATION IN THE WRITTEN SPECIFICATIONS IF THERE ARE DISCREPANCIES. CONTRACTOR TO BRING DISCREPANCIES TO THE ATTENTION OF THE ENGINEER/LANDSCAPE ARCHITECT.*
27. *ALL ITEMS TO BE INSTALLED PER MANUFACTURER RECOMMENDATIONS UNLESS OTHERWISE NOTED.*

CONSTRUCTION NOTES:

1. CONCRETE FOR SIDEWALK AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI.
2. FULL DEPTH DOWELED EXPANSION JOINTS SHALL BE REQUIRED AT END OF EACH DAYS POUR.
3. EXPANSION JOINT MATERIAL SHALL BE PREFORMED ASPHALT IMPREGNATED FIBERBOARD CONFORMING TO AASHTO M-213. EXPANSION JOINT MATERIAL SHALL BE LEFT ½" LOWER THAN GRADE OR TRIMMED ½" LOWER, AND FILLED WITH AN APPROVED JOINT SEALER TO FINISHED GRADE.
4. CONCRETE PATHS SHALL HAVE SAW-CUT CONTROL JOINTS EVENLY AND CONSISTENTLY SPACED AS SHOWN ON THE DRAWINGS. THESE WEAKENED PLANE (CONTROL) JOINTS SHALL BE 1" DEEP AND SHALL BE ⅛" TO ¾" WIDE.
5. ALL JOINTS SHALL BE FILLED TO FINISHED GRADE WITH APPROVED JOINT SEALANT.
6. CONCRETE SURFACES SHALL BE CONSISTENT IN SLOPE WITH NO BIRD BATHS.
7. WHERE TRAIL PARALLELS OR ABUTS CURB OR OTHER EXISTING CONCRETE WORK, DOWEL TO EXISTING WORK AND INSTALL EXPANSION JOINT.
8. NOTIFY CITY PROJECT MANAGER IF THE SUBGRADE IS NOT STABLE. CONTRACTOR MAY BE INSTRUCTED TO UNDERCUT & BACKFILL WITH ENGINEER SELECT FILL (HILLSIDE) OR B-STONE FOR WET AREAS. COMPACT HILLSIDE TO 95% STD. PROCTOR.
9. USE PROPER TRAFFIC CONTROL WHILE WORKING NEAR SERVICE DRIVE.
10. PREVENT VANDALISM TO NEW POURS. PREVENT VEHICLES FROM ACCESSING SURFACE UNTIL THE CONCRETE HAS CURED SUFFICIENTLY. USE PLASTER IF CONCRETE IS PUMPED.
11. SIDEWALK SHALL MEET ALL ADA REGULATIONS. RUNNING SLOPE SHALL BE LESS THAN 5% AND CROSS SLOPE SHALL BE 2% MAXIMUM.
12. SIDEWALK LAYOUT IS APPROXIMATE. FIELD VERIFY ALL SLOPES TO MEET ADA REGULATIONS.
13. CONTRACTOR SHALL OBTAIN GRADING PERMIT FROM CITY. CITY WILL WAIVE FEES FOR GRADING PERMIT.
14. ALIGNMENT OF WALKS WILL BE ADJUSTED SLIGHTLY IN FIELD TO REDUCE IMPACTS TO TREES. FINAL WALK ALIGNMENT TO BE APPROVED BY CITY PROJECT MANAGER
15. ELEVATIONS SHOWN FOR WALKS, RAMPS, AND OTHER SITE FEATURES SHOW INTENT AND LIKELY WILL NEED TO BE ALTERED BASED ON FINAL LAYOUT.

EROSION CONTROL NOTES

1. THESE PLAN SHEETS REPRESENT THE MINIMAL EROSION AND SEDIMENT CONTROL FEATURES. THE CONTRACTOR IS RESPONSIBLE FOR MODIFYING THE PLAN TO MINIMIZE SOIL LOSS FROM THE CONSTRUCTION SITE AND AS DIRECTED BY THE CITY ENGINEER AT NO ADDITIONAL COST.

2. REFER TO SECTION 509 OF THE SPECIFICATIONS FOR ADDITIONAL EROSION AND SEDIMENT CONTROL REQUIREMENTS.

3. AREAS OF CONCENTRATED FLOW WILL REQUIRE ADDITIONAL STABILIZATION MEASURES.

4. PERMANENT EROSION CONTROL - THE CONTRACTOR SHALL INCORPORATE PERMANENT EROSION CONTROL FEATURES AT THE EARLIEST PRACTICAL TIME AND BEFORE CONSTRUCTION ACTIVITIES.TEMPORARY EROSION CONTROL MEASURES WILL BE USED TO CORRECT CONDITIONS THAT DEVELOP DURING CONSTRUCTION AS NEEDED PRIOR TO INSTALLATION OF PERMANENT EROSION CONTROL FEATURES.

5. DEBRIS, MUD AND SOIL SHALL NOT BE ALLOWED ON PUBLIC STREETS, BUT IF ANY DEBRIS, MUD, OR SOIL FROM CONSTRUCTION SITES REACHES THE PUBLIC STREET, IT SHALL BE IMMEDIATELY REMOVED VIA SWEEPING OR OTHER METHODS OF PHYSICAL REMOVAL. DEBRIS, MUD, OR SOIL IN THE STREET MAY NOT BE WASHED OFF THE STREET OR WASHED INTO THE STORM DRAINAGE SYSTEM. STORM DRAINAGE SYSTEMS DOWNSTREAM OF THE SITE SHOULD BE PROTECTED FROM DEBRIS, MUD, OR SOIL IN THE EVENT THAT DEBRIS, MUD OR SOIL REACHES THE DRAINAGE SYSTEM.

6. CONCRETE WASH OUTS ARE REQUIRED AT LOCATIONS ESTABLISHED BY THE CONTRACTOR OR DIRECTED BY ENGINEER-REMOVE AND REPLACE AS NEEDED. CONTRACTOR SHALL USE CONCRETE WASHOUT BAGS FOR POURED CONCRETE WASTE.

7. MONTHLY - ALL DISTURBED AREAS SHALL BE HYDROMULCHED/HYDROSEEDED ON A REGULAR SCHEDULE TO MINIMIZE SEDIMENT LOSS.

8. SEE SOD DETAILS/PLAN. NOTE SOD SHOULD BE INSTALLED AS SOON AS POSSIBLE.

9. CAUTION: UNDERGROUND UTILITIES EXIST WITHIN AND ADJACENT TO THE LIMITS OF CONSTRUCTION. An Attempt has been made to locate these utilities on the plans; however all existing utilities may not be shown on the plans. UTILITIES MAY VARY FROM THE LOCATIONS SHOWN. Prior to beginning work, the Contractor shall contact the utilities and make arrangements for the location of the utilities on the ground. THE ONE-CALL SYSTEM PHONE NUMBER IS 1-800-482-8998.

10. If the gas line is not deep enough for installation of concrete features, the city will have the gas line lowered.

PLAYGROUND GENERAL NOTES:

1. *CONTRACTOR SHALL CONDUCT WORK KNOWING THIS IS A PUBLIC SPACE AND PARK USERS WILL FREQUENT THE AREA. USE CAUTION TAPE, SIGNAGE, AND OTHER MEANS TO WARN PEOPLE OF AND PREVENT PUBLIC ACCESS TO ANY HAZARDS AND CONSTRUCTION AREAS. MAINTAIN ACCESS TO ALL ROADS, TRAILS, AND SIDEWALKS.*
2. *THIS PROJECT CONTAINS A PLAYGROUND. MAINTAIN THE SITE IN A SAFE AND APPROPRIATE MANNER FOR THE PUBLIC INCLUDING CHILDREN.*
3. *THE CONTRACTOR OR SUB CONTRACTOR SHALL BE EXPERIENCED IN DESIGN AND CONSTRUCTION OF PLAYGROUNDS. WORK SHALL BE IN CONFORMANCE WITH AT A MINIMUM THE LATEST EDITIONS OF ASTM F1487 STANDARD CONSUMER SAFETY PERFORMANCE SPECIFICATION FOR PLAYGROUND EQUIPMENT FOR PUBLIC USE, ASTM F2223 STANDARD GUIDE FOR ASTM STANDARDS ON PLAYGROUND SURFACING, ASTM 12092 STANDARD SPECIFICATION FOR IMPACT ATTENUATION OF SURFACING MATERIALS WITHIN THE USE ZONE OF PLAYGROUND EQUIPMENT, F1951, F2479, F2373 AND THE CPSC PLAYGROUND SAFETY HANDBOOK. A MEMBER OF THE CONTRACTORS TEAM SHALL BE A CERTIFIED PLAYGROUND SAFETY INSPECTOR (CPSI) TO ASSIST WITH INSURING THE PLAYGROUND IS INSTALLED AND CONSTRUCTED TO INDUSTRY STANDARDS AS OUTLINED IN THE ASTM AND CPSC DOCUMENTS AND OTHER RELEVANT INDUSTRY STANDARDS.*
4. *PLAYGROUND SAFETY SURFACING SHALL BE TESTED AS OUTLINED IN ASTM F1292 AFTER INSTALLATION TO INSURE COMPLIANCE WITH THE SPECIFICATIONS.*
5. *ALL PLAYGROUND EQUIPMENT SHALL BE CERTIFIED BY THE INTERNATIONAL PLAYGROUND EQUIPMENT MANUFACTURES ASSOCIATION (IPEMA).*
6. *DURING PLAYGROUND WORK THE CONTRACTOR SHALL HAVE ON SITE A QUALIFIED SUPERINTENDENT CERTIFIED FOR PLAYGROUND INSTALLATION.*
7. *THE CONTRACTOR IS RESPONSIBLE FOR INSURING PLAYGROUND EQUIPMENT ACCEPTED AS AN ALTERNATE OR EQUAL FITS WITHIN THE DESIGN OF THE PLAYGROUND AREA. COSTS TO ADAPT, IF ALLOWED, SUCH AS INCREASED FALL SPACES SURFACES, WILL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COSTS TO THE OWNER.*
8. *LIMITED INFORMATION IS PROVIDED ON PLAYGROUND EQUIPMENT INSTALLATION IN THESE DOCUMENTS. CONTRACTOR IS TO OBTAIN AND FOLLOW MANUFACTURES INSTALLATION INSTRUCTIONS.*

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License Number 985
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01/17/2025
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REVISIONS

REV	DATE	DESCRIPTION

CITY OF FAYETTEVILLE GENERAL NOTES

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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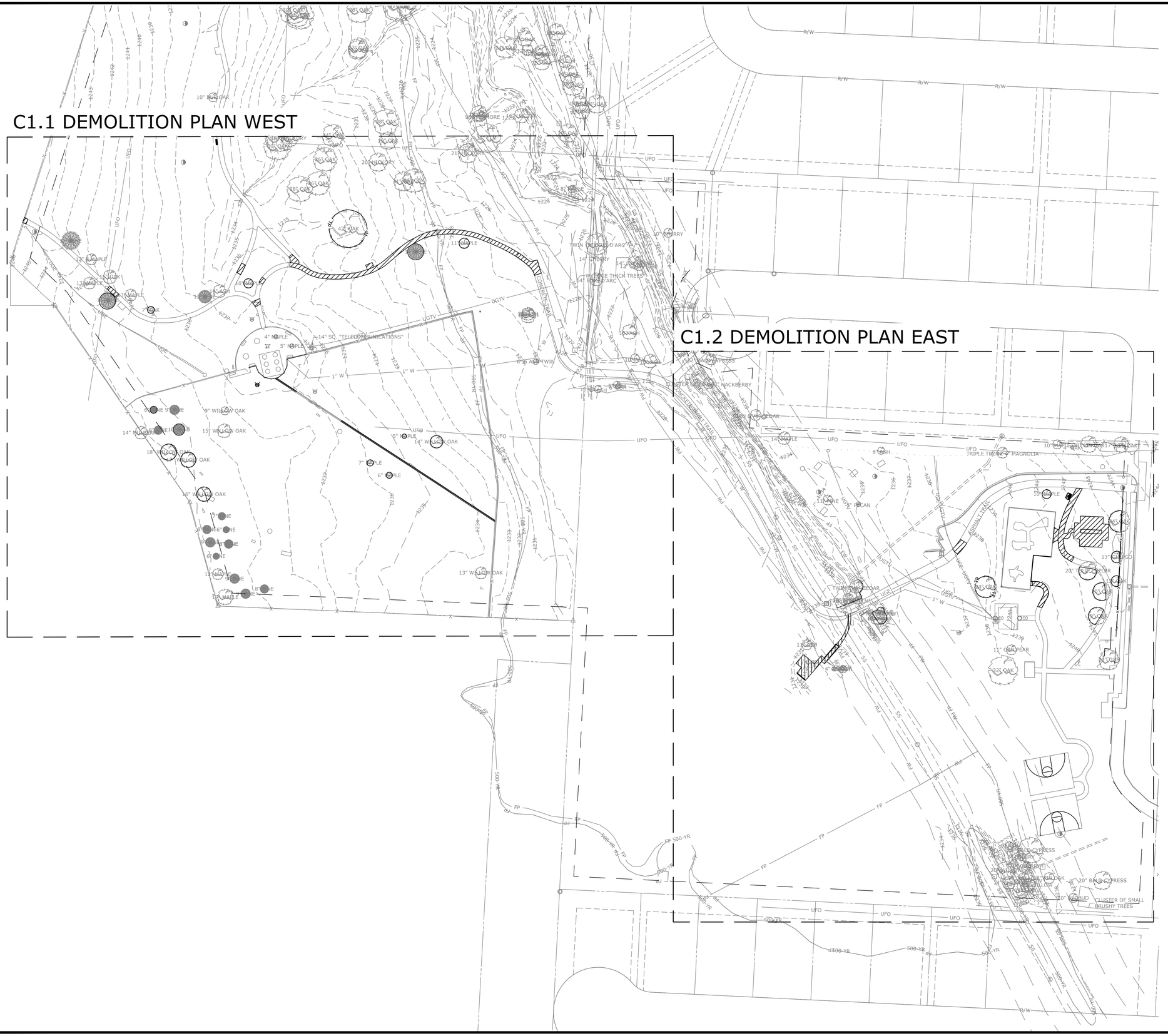

EXISTING LEGEND

PROPERTY LINE	POWER POLE
R/W RIGHT OF WAY	GUY WIRE w/ ANCHOR
SS SANITARY SEWER LINE	GAS METER
W WATER LINE	GAS RISER
GAS GAS LINE	STREET LIGHT POLE
UGT UNDERGROUND TELEPHONE	TELEPHONE PEDESTAL
UGE UNDERGROUND ELECTRIC	CABLE TV PEDESTAL
UGTV UNDERGROUND TELEVISION	CABLE VAULT
UFO UNDERGROUND FIBER	ELECTRIC VAULT
OHE OVERHEAD ELECTRIC	FIBER VAULT
FENCE	GAS VAULT
ROAD CENTERLINE	TELEPHONE VAULT
DITCH FLOWLINE	WATER VAULT
EASEMENT LINE	SIGN (AS NOTED)
GRAVEL LINE	POST (AS NOTED)
FW FLOOD WAY	BENCHMARK
FP FLOOD PLAIN	FOUND IRON PIN (AS NOTED)
FIRE HYDRANT	CONTROL POINT
WATER METER	RR SPIKE
WATER VALVE	BUSH
WATER FAUCET	DECIDUOUS TREE
SANITARY SEWER MH	CONIFEROUS TREE
CLEAN-OUT	
DRAINAGE MH	

GENERAL DEMOLITION NOTES

1. ONLY DEMOLISH AND REMOVE ITEMS SPECIFICALLY NOTED.
2. THE CONTRACTOR IS REQUIRED TO NOTIFY THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS PRIOR TO EXCAVATING IN ORDER THAT UNDERGROUND UTILITIES IN THE AREA CAN BE LOCATED.
3. THIS PLAN SHOULD BE USED IN CONJUNCTION WITH THE TOPOGRAPHICAL SURVEY FOR REFERENCE. THE LOCATION OF KNOWN SUBSURFACE STRUCTURES, PIPES, POWER, GAS, PHONE, ETC. ARE SHOWN ON THE PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING INFORMATION AND SATISFYING HIMSELF TO AS TO THE LOCATION OF THE AFOREMENTIONED ITEMS, SHOWN AND NOT SHOWN. ALL REPAIRS OR RELOCATIONS NECESSARY SHALL BE MADE AS REQUIRED BY THE OWNER OF THE UTILITY OR STRUCTURE. THE COST OF SUCH REPAIRS OR RELOCATIONS NECESSARY SHALL BE BORNE BY THE CONTRACTOR.
4. CONTRACTOR SHALL DISPOSE OF ALL MATERIALS RESULTING FROM DEMOLITION IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS THAT GOVERN SUCH OPERATIONS.
5. ALL ABANDONED SERVICE LINES SHALL BE DISCONNECTED AND CAPPED PER UTILITY COMPANIES REQUIREMENTS. COORDINATE ALL DISCONNECTIONS WITH UTILITY COMPANIES.
6. CONTRACTOR IS TO BRING TO THE ATTENTION OF THE CIVIL ENGINEER ANY AREA OF DEMOLITION IN QUESTION BEFORE PROCEEDING WITH WORK.
7. CONTRACTOR TO REVIEW AND COORDINATE DEMOLITION LIMITS WITH PROPOSED CONSTRUCTION PLANS.
8. EXISTING CLEAN TOPSOIL TO BE STOCKPILED FOR FUTURE USE ON THIS SITE AND IS TO BE COORDINATED BY THE GENERAL CONTRACTOR.
9. ALL EXISTING WATER, GAS AND / OR ELECTRICAL METERS AS NOTED TO BE REMOVED WITHIN THE PROJECT AREA ARE TO BE RETURNED TO THE APPROPRIATE AUTHORITY.
10. NO DEMOLITION OR CONSTRUCTION DEBRIS IS TO BE BURNED OR BURIED ON SITE.
11. NO EXISTING TREES ARE BEING REMOVED OR AFFECTED BY THE PROJECT

PROPOSED LEGEND

	LIMITS OF PAVEMENT AND / OR STRUCTURE DEMOLITION
TP	TREE PROTECTION FENCE

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CHRISTOPHER M. BAKUNAS
License Number 9185
STATE OF ARKANSAS
01/17/2025
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REVISIONS		
REV	DATE	DESCRIPTION

OVERALL DEMOLITION PLAN

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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PLAN SCALE

30 0 15 30 60

(IN FEET)
1 inch = 30ft.

EXISTING LEGEND

- PROPERTY LINE
- R/W — RIGHT OF WAY
- SS — SANITARY SEWER LINE
- W — WATER LINE
- GAS — GAS LINE
- UGT — UNDERGROUND TELEPHONE
- UGE — UNDERGROUND ELECTRIC
- UGTV — UNDERGROUND TELEVISION
- UFO — UNDERGROUND FIBER
- OHE — OVERHEAD ELECTRIC
- FENCE
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- DITCH FLOWLINE
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- FW — FLOOD WAY
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- POWER POLE
- GUY WIRE w/ ANCHOR
- GAS METER
- GAS RISER
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- TELEPHONE PEDESTAL
- CABLE TV PEDESTAL
- CABLE VAULT
- ELECTRIC VAULT
- FIBER VAULT
- GAS VAULT
- TELEPHONE VAULT
- WATER VAULT
- SIGN (AS NOTED)
- POST (AS NOTED)
- BENCHMARK
- FOUND IRON PIN (AS NOTED)
- CONTROL POINT
- RR SPIKE
- BUSH
- DECIDUOUS TREE
- CONIFEROUS TREE

PROPOSED LEGEND

- LIMITS OF PAVEMENT AND / OR STRUCTURE DEMOLITION
- TP — TREE PROTECTION FENCE

DEMOLITION KEYNOTES

100 EXISTING TO BE REMOVED AND / OR DEMOLISHED
102 EXISTING TO REMAIN
103 EXISTING TO BE RELOCATED
104 LIMITS OF SAWCUT AND PAVEMENT REMOVAL

DEMOLITION DETAILS

29F TREE PROTECTION FENCE

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DEMOLITION PLAN WEST

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DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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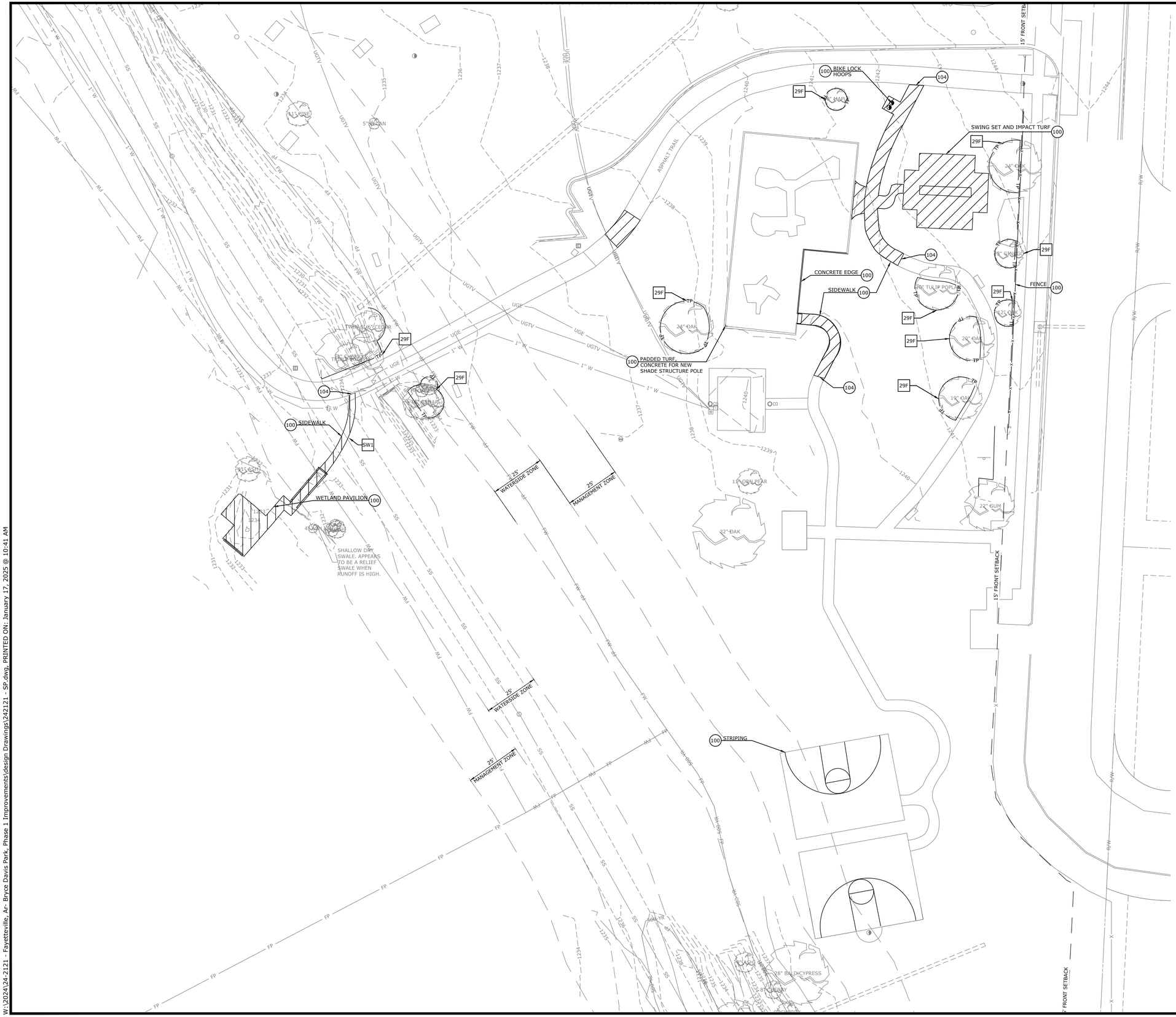

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DEMOLITION PLAN EAST

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C2.1 SITE PLAN NORTH

C2.2 SITE PLAN WEST

C2.3 SITE PLAN EAST

PLEASE REFER TO SHEET ES1. NO DEVELOPMENT IN THIS AREA OUTSIDE OF TRAIL LIGHTING.

PLAN SCALE

50 0 25 50 100

(IN FEET)
1 inch = 50ft.

EXISTING LEGEND

PROPERTY LINE		POWER POLE	
R/W	RIGHT OF WAY	GUY WIRE w/ ANCHOR	
SS	SANITARY SEWER LINE	GAS METER	
W	WATER LINE	GAS RISER	
GAS	GAS LINE	STREET LIGHT POLE	
UGT	UNDERGROUND TELEPHONE	TELEPHONE PEDESTAL	
UGE	UNDERGROUND ELECTRIC	CABLE TV PEDESTAL	
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WATER VALVE		BUSH	
WATER FAUCET		DECIDUOUS TREE	
SANITARY SEWER MH		CONIFEROUS TREE	
CLEAN-OUT			
DRAINAGE MH			

PROPOSED LEGEND

FENCE	
TP	TREE PROTECTION FENCE
	CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	SOFT SURFACE TRAIL
	FLARED END SECTION
	LIGHT POLE

GENERAL SITE NOTES

1. CONTRACTOR SHALL RETAIN A FULL SET OF LATEST APPROVED CONSTRUCTION PLANS ON SITE DURING CONSTRUCTION ACTIVITIES.
2. CONSTRUCTION METHODS AND MATERIALS NOT SPECIFIED IN THESE PLANS ARE TO MEET OR EXCEED THE SITE WORK SPECIFICATIONS PROVIDED BY McCLELLAND CONSULTING ENGINEERS, INC. OR AS SPECIFIED BY THE OWNER'S RESIDENT REPRESENTATIVE.
3. ALL CONSTRUCTION WORK AND UTILITY WORK OUTSIDE OF PROPERTY BOUNDARIES SHALL BE PERFORMED IN COOPERATION WITH AND IN ACCORDANCE WITH REGULATIONS OF THE AUTHORITIES CONCERNED.
4. PUBLIC CONVENIENCE AND SAFETY: THE CONTRACTOR SHALL CONDUCT THE WORK IN A MANNER THAT WILL INSURE, AS FAR AS PRACTICABLE, THE LEAST OBSTRUCTION TO TRAFFIC AND SHALL PROVIDE FOR THE CONVENIENCE AND SAFETY OF THE GENERAL PUBLIC AND RESIDENTS ALONG AND ADJACENT TO HIGHWAYS IN THE CONSTRUCTION AREA IN AN ADEQUATE AND SATISFACTORY MANNER IN ACCORDANCE WITH THE ARKANSAS DOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
5. GENERAL CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL UTILITY COMPANIES INVOLVED IN PROJECT AND PAY ALL REQUIRED FEES AND COSTS.
6. FOR SITE UTILITIES, SEE UTILITY PLAN(S).
7. ALL WORK TO BE DONE IN STRICT ACCORDANCE WITH THE OWNER'S STANDARD SITE SPECIFICATIONS.
8. CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION LAYOUT AND STAKING (UNLESS APPROVED OTHERWISE BY THE ENGINEER OF RECORD).

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OVERALL SITE PLAN

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DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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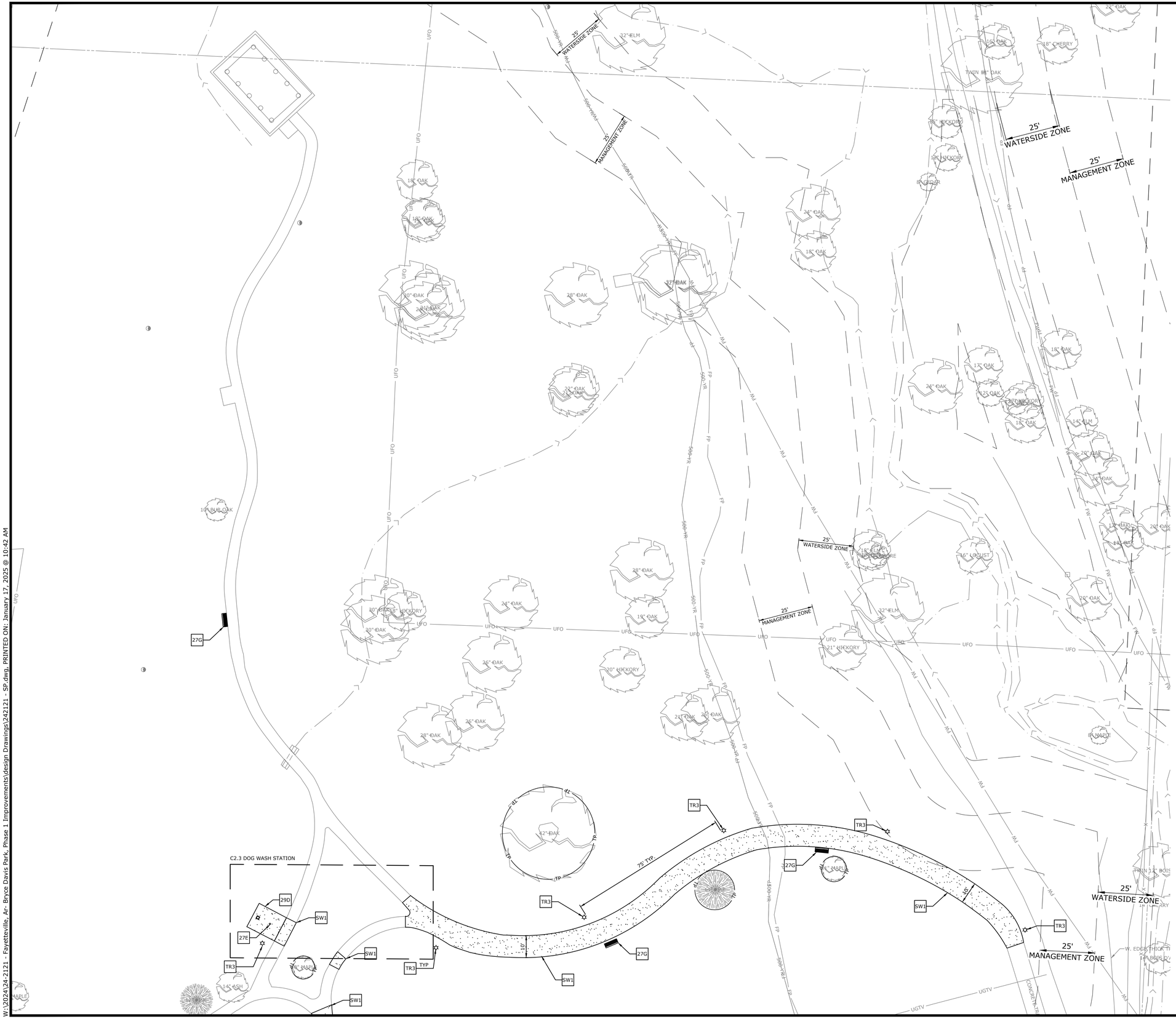

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- RR SPIKE
- BUSH
- DECIDUOUS TREE
- CONIFEROUS TREE

PROPOSED LEGEND

- FENCE
- TP — TREE PROTECTION FENCE
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK
- SOFT SURFACE TRAIL
- FLARED END SECTION
- LIGHT POLE

SITE KEYNOTES

208 4" WIDE PAINTED WHITE PARKING STRIPES
209 4" WIDE PAINTED WHITE STRIPES 24" O.C. @ 45 DEGREES
221 POINT OF RELOCATION
226 EXISTING RESTROOM
227 EXISTING PAVILION
232 EXISTING PLAY STRUCTURES
233 RESTRIPE EX BASKETBALL COURTS, 4" WHITE
234 RESTRIPE EX PARALLEL PARKING

SITE DETAILS

10A TREE PROTECTION FENCE
20F VERTICAL CONCRETE CURB
21H CONCRETE PAVEMENT DOWEL & JOINTING
23C PARALLEL PARKING SPACE STRIPING
25J BIKE RACK
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27K LSI TODDLER SWING SET, OR EQUAL
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29F TREE PROTECTION FENCE
TR3 CITY OF FAYETTEVILLE TRAIL LIGHTING DETAIL CROSS SECTION
SW1 CITY OF FAYETTEVILLE SIDEWALK WITH GREENSPACE

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REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER M. BAKUNAS
License Number 9185
STATE OF ARKANSAS
01/17/2025
ORIGINAL SIGNATURE ON FILE

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BRYCE DAVIS PARK IMPROVEMENTS PHASE 1

1595 N DARTMOUTH AVE
FAYETTEVILLE, AR

811 Know what's below. Call before you dig.

REVISIONS

REV	DATE	DESCRIPTION

SITE PLAN NORTH

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
1/17/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

C2.1

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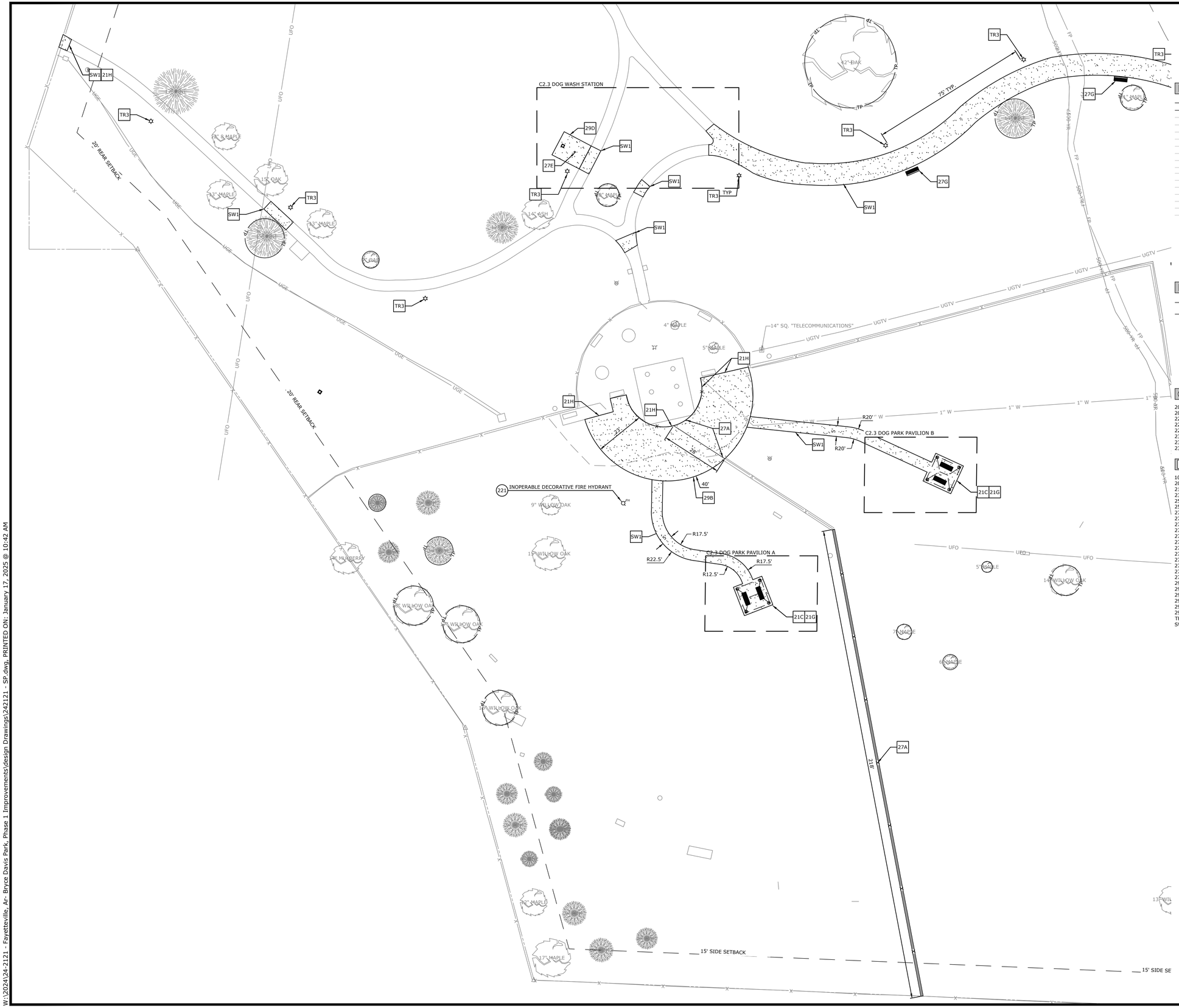

PLAN SCALE

20 0 10 20 40

(IN FEET)
1 inch = 20ft.

EXISTING LEGEND

- PROPERTY LINE
- RIGHT OF WAY
- SANITARY SEWER LINE
- WATER LINE
- GAS LINE
- UNDERGROUND TELEPHONE
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEVISION
- UNDERGROUND FIBER
- OVERHEAD ELECTRIC
- FENCE
- ROAD CENTERLINE
- DITCH FLOWLINE
- EASEMENT LINE
- GRAVEL LINE
- FLOOD WAY
- FLOOD PLAIN
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- WATER FAUCET
- SANITARY SEWER MH
- CLEAN-OUT
- DRAINAGE MH
- POWER POLE
- GUY WIRE w/ ANCHOR
- GAS METER
- GAS RISER
- STREET LIGHT POLE
- TELEPHONE PEDESTAL
- CABLE TV PEDESTAL
- CABLE VAULT
- ELECTRIC VAULT
- FIBER VAULT
- GAS VAULT
- TELEPHONE VAULT
- WATER VAULT
- SIGN (AS NOTED)
- POST (AS NOTED)
- BENCHMARK
- FOUND IRON PIN (AS NOTED)
- CONTROL POINT
- RR SPIKE
- BUSH
- DECIDUOUS TREE
- CONIFEROUS TREE

PROPOSED LEGEND

- FENCE
- TREE PROTECTION FENCE
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK
- SOFT SURFACE TRAIL
- FLARED END SECTION
- LIGHT POLE

SITE KEYNOTES

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TR3 CITY OF FAYETTEVILLE TRAIL LIGHTING DETAIL CROSS SECTION
SW1 CITY OF FAYETTEVILLE SIDEWALK WITH GREENSPACE

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BRYCE DAVIS PARK IMPROVEMENTS PHASE 1

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FAYETTEVILLE, AR

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REV	DATE	DESCRIPTION
		REVISIONS

SITE PLAN WEST

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C2.2

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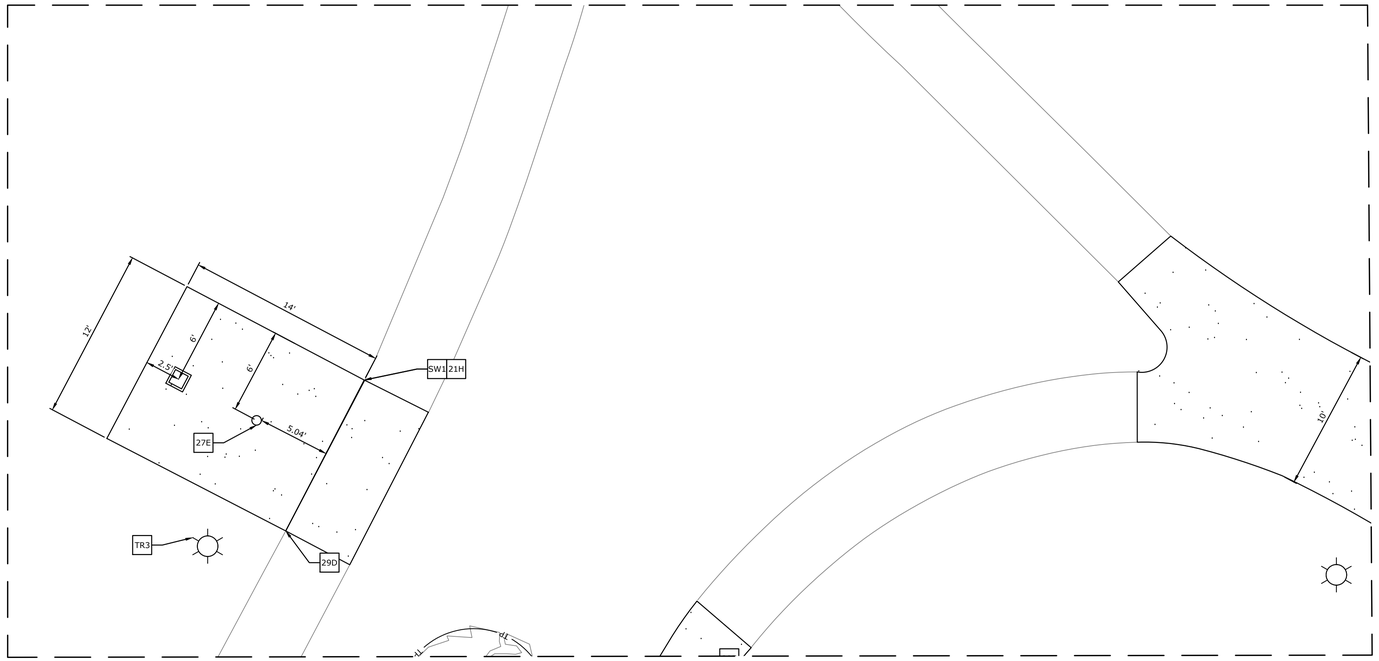
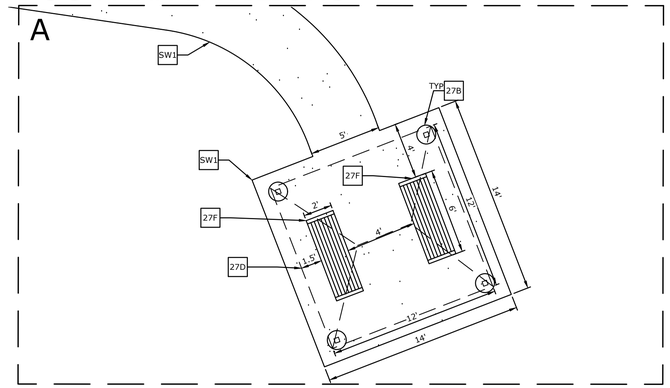
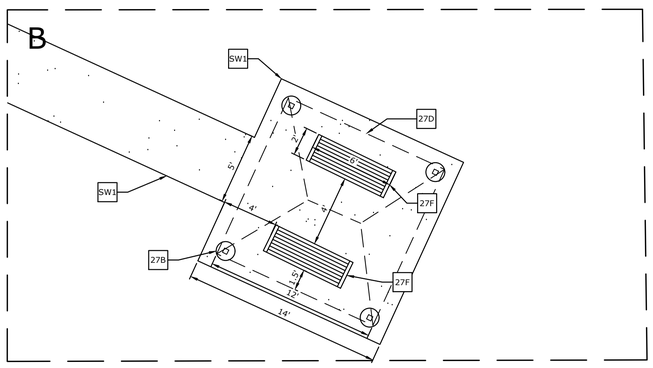
DOG WASH STATION



DOG PARK PAVILIONS





PLAN SCALE

5 0 2.5 5 10

(IN FEET)
1 inch = 5ft.

EXISTING LEGEND

PROPERTY LINE	POWER POLE
R/W RIGHT OF WAY	GUY WIRE w/ ANCHOR
SS SANITARY SEWER LINE	GAS METER
W WATER LINE	GAS RISER
GAS GAS LINE	STREET LIGHT POLE
UGT UNDERGROUND TELEPHONE	TELEPHONE PEDESTAL
UGE UNDERGROUND ELECTRIC	CABLE TV PEDESTAL
UGTV UNDERGROUND TELEVISION	CABLE VAULT
UFO UNDERGROUND FIBER	ELECTRIC VAULT
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WATER VALVE	BUSH
WATER FAUCET	DECIDUOUS TREE
SANITARY SEWER MH	CONIFEROUS TREE
CLEAN-OUT	
DRAINAGE MH	

PROPOSED LEGEND

FENCE	
TP TREE PROTECTION FENCE	
CONCRETE PAVEMENT	
CONCRETE SIDEWALK	
SOFT SURFACE TRAIL	
FLARED END SECTION	
LIGHT POLE	

SITE KEYNOTES

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IMPROVEMENTS PHASE 1
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FAYETTEVILLE, AR

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REVISIONS

REV	DATE	DESCRIPTION

SITE PLAN
WEST EXHIBITS

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C2.3

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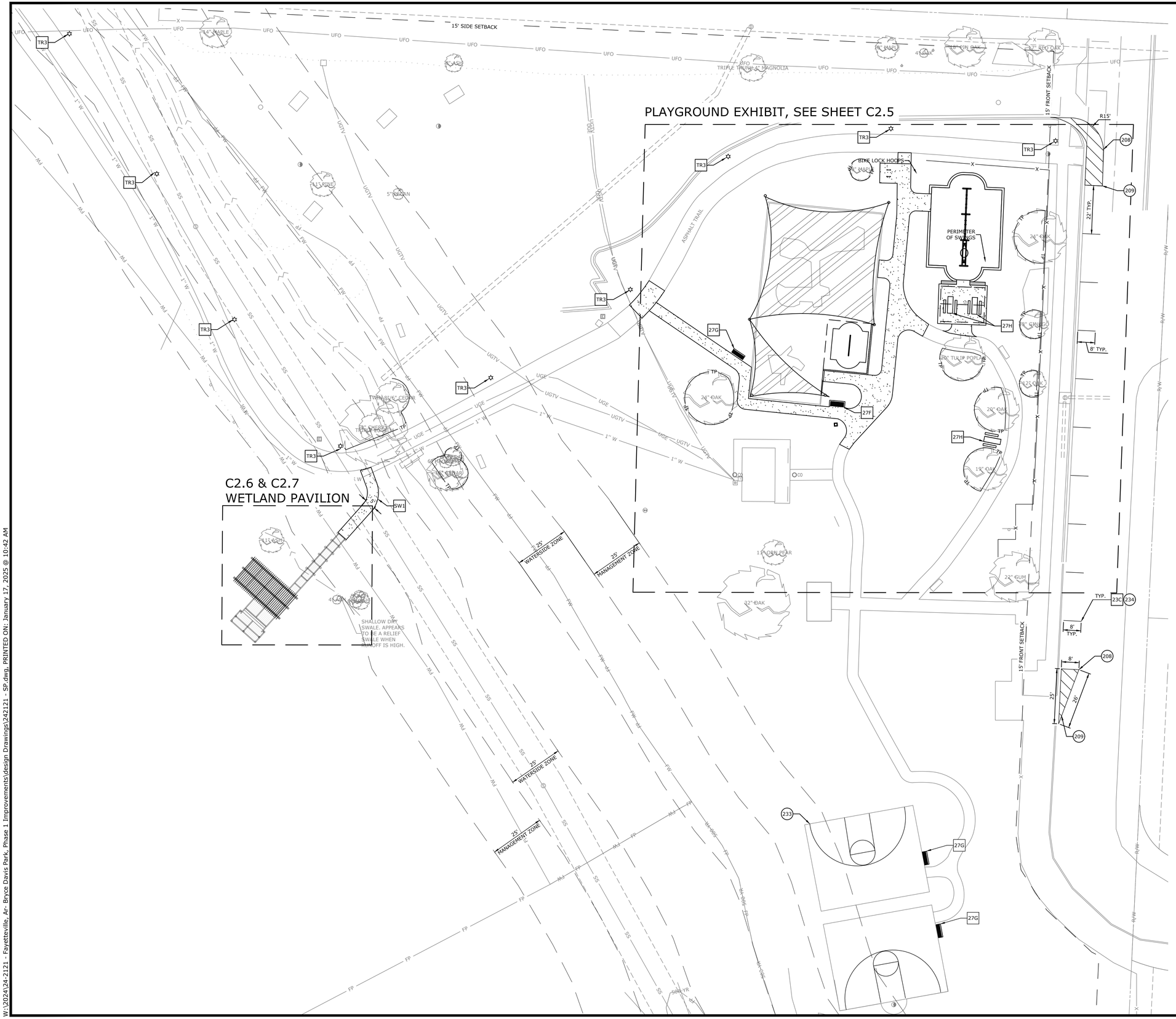

PLAN SCALE

20 0 10 20 40

(IN FEET)
1 inch = 20ft.

EXISTING LEGEND

PROPERTY LINE	POWER POLE
R/W RIGHT OF WAY	GUY WIRE w/ ANCHOR
SS SANITARY SEWER LINE	GAS METER
W WATER LINE	GAS RISER
GAS GAS LINE	STREET LIGHT POLE
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SANITARY SEWER MH	CONIFEROUS TREE
CLEAN-OUT	
DRAINAGE MH	

PROPOSED LEGEND

X FENCE X	
TP TREE PROTECTION FENCE	
CONCRETE PAVEMENT	
CONCRETE SIDEWALK	
SOFT SURFACE TRAIL	
FLARED END SECTION	
LIGHT POLE	

SITE KEYNOTES

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SITE DETAILS

10A TREE PROTECTION FENCE
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21H CONCRETE PAVEMENT DOWEL & JOINTING
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FAYETTEVILLE, AR

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REVISIONS		
REV	DATE	DESCRIPTION

SITE PLAN EAST

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C2.4

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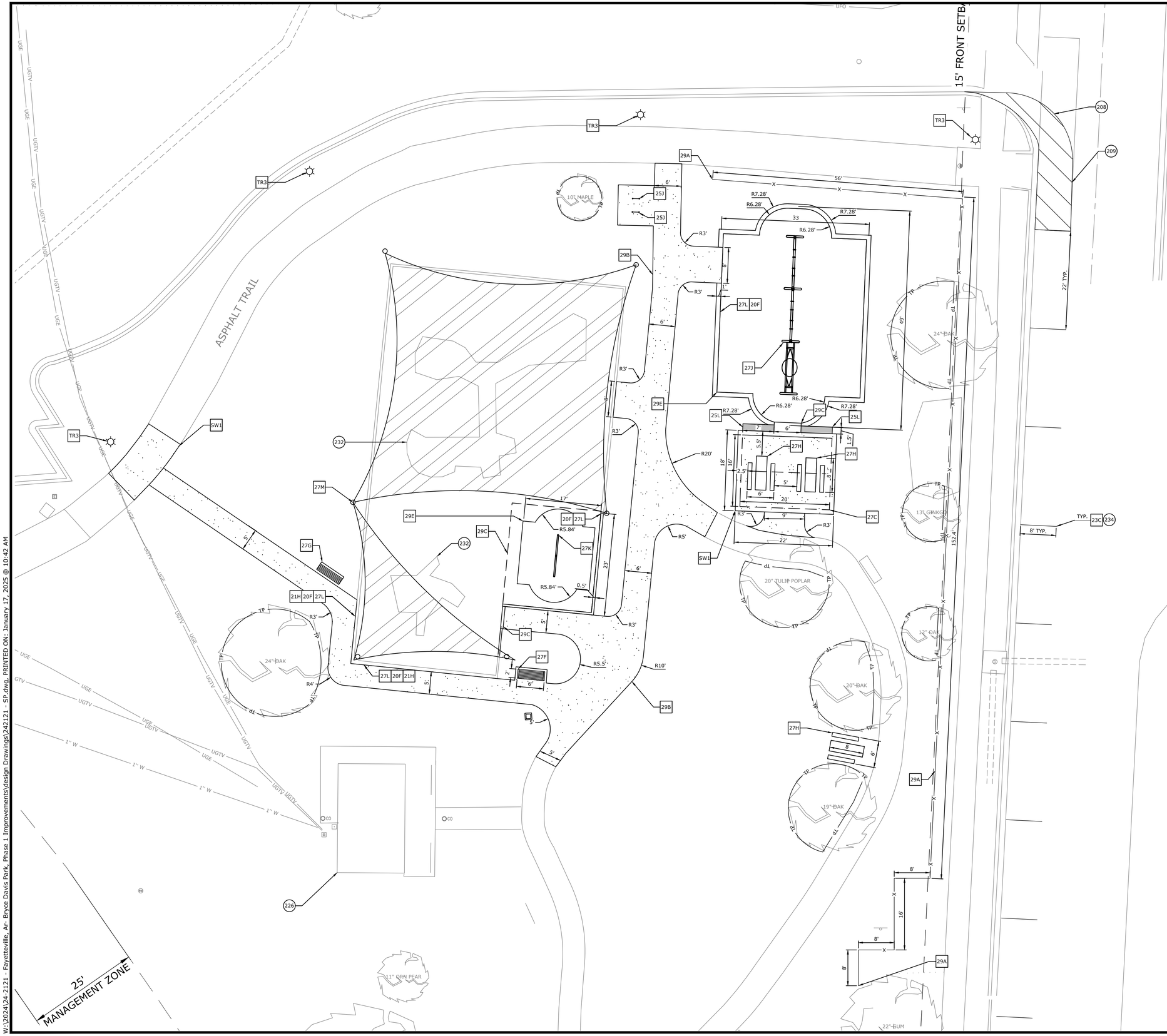

PLAN SCALE

10 0 5 10 20

(IN FEET)

1 inch = 10ft.

EXISTING LEGEND

PROPERTY LINE	POWER POLE
R/W — RIGHT OF WAY	GUY WIRE w/ ANCHOR
SS — SANITARY SEWER LINE	GAS METER
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GAS — GAS LINE	STREET LIGHT POLE
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REV	DATE	DESCRIPTION
		REVISIONS

SITE PLAN EAST EXHIBIT

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C2.5

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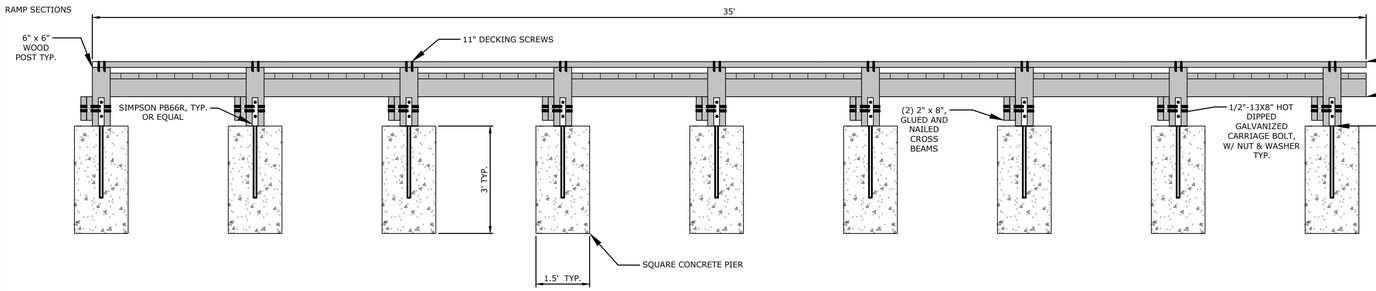
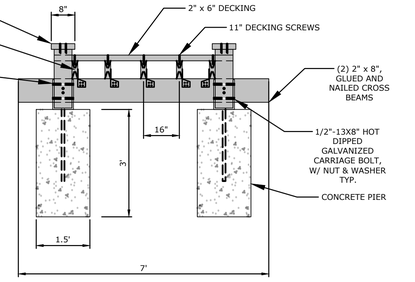
RAMP SECTIONS





PLAN SCALE

(IN FEET)
1 inch = 2ft.

PAVILION IS TO BE DEMOLISHED AND RECONSTRUCTED EXACTLY AS IT IS, IN PLACE, WITH THE ADDITIONS OF THE REALIGNED RAMP AND THE LOWER SECTION.

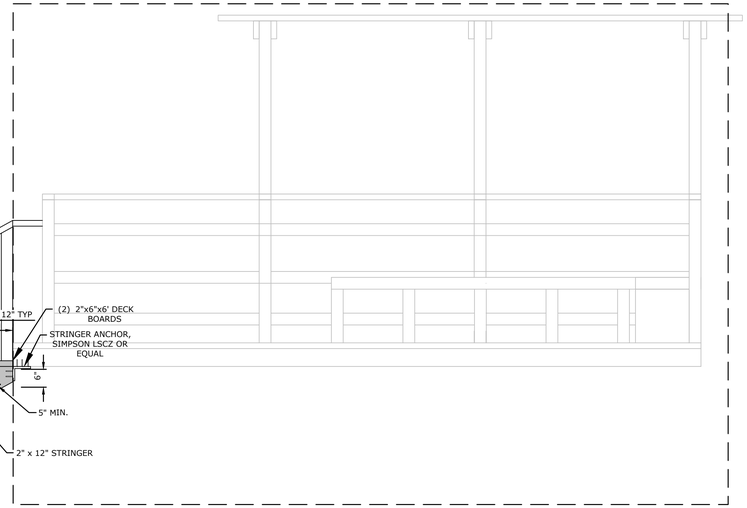
ALL EXISTING FOOTERS TO BE USED AS SUPPORT FOR PROPOSED PAVILION EXCEPT THOSE UNDER RAMP, ADD ADDITIONAL FOOTERS AS NEEDED.

ALL WOOD IS TO BE PRESSURE TREATED SOUTHERN YELLOW PINE, NO.2 GRADE.

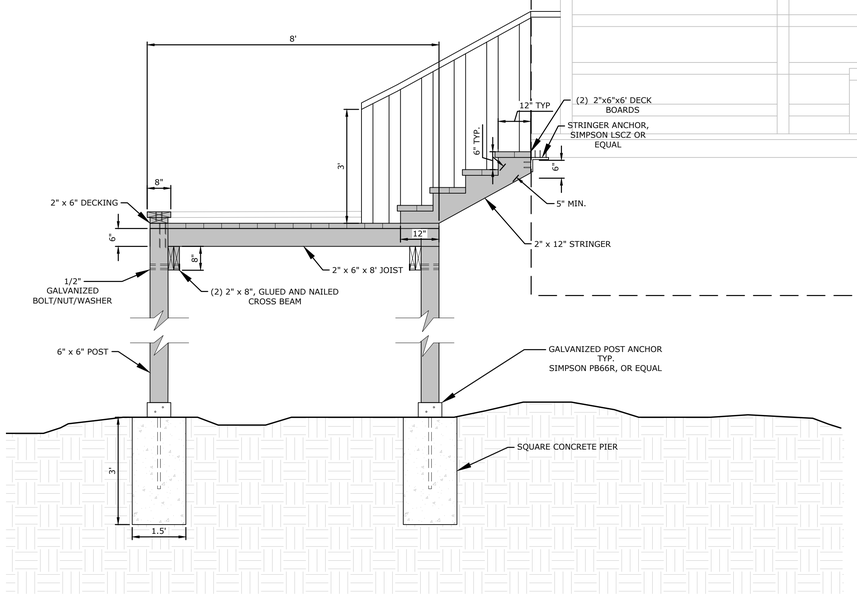
RAMP NOT TO EXCEED 5% RUNNING SLOPE AND 0% CROSS SLOPE.

RAMP NOT TO EXCEED 30" IN HEIGHT WHILE IN SANITARY SEWER EASEMENT.

EXISTING CONDITIONS



PAVILION EXTENSION SECTION



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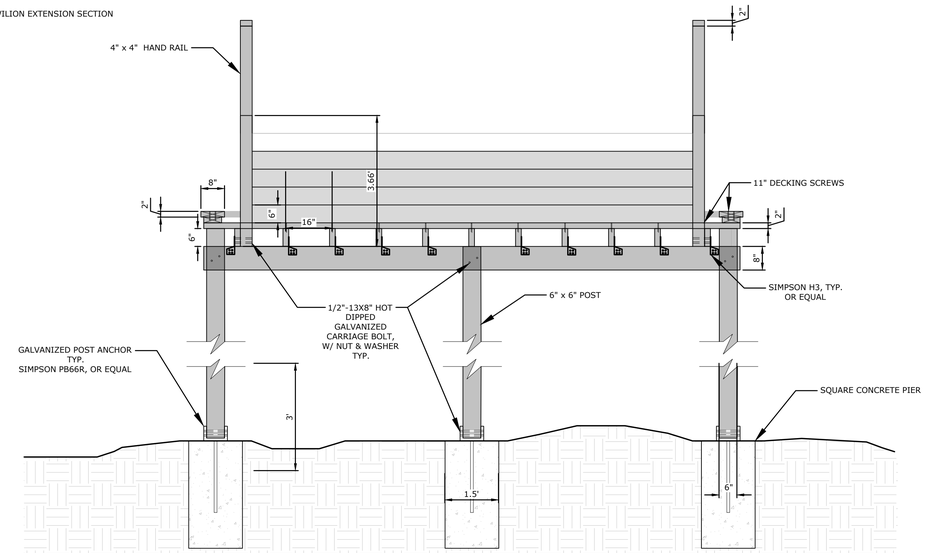
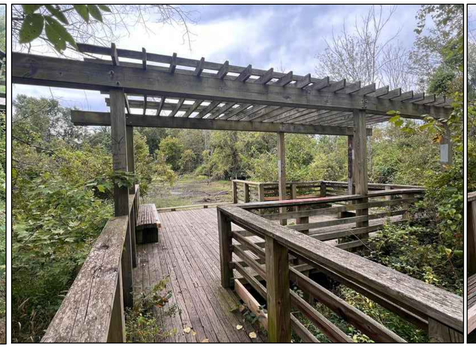


EXISTING CONDITIONS



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(479) 443-2377
HTTP://WWW.MCE.US.COM

REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER M. BAKUNAS
License Number 985
STATE OF ARKANSAS
01/17/2025
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IMPROVEMENTS PHASE 1
1595 N DARTMOUTH AVE
FAYETTEVILLE, AR

811 Know what's below. Call before you dig.

REVISIONS	DESCRIPTION	DATE
REV		

WOODEN PAVILION FRAMING PLAN SHEET 1

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
1/17/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

C2.6

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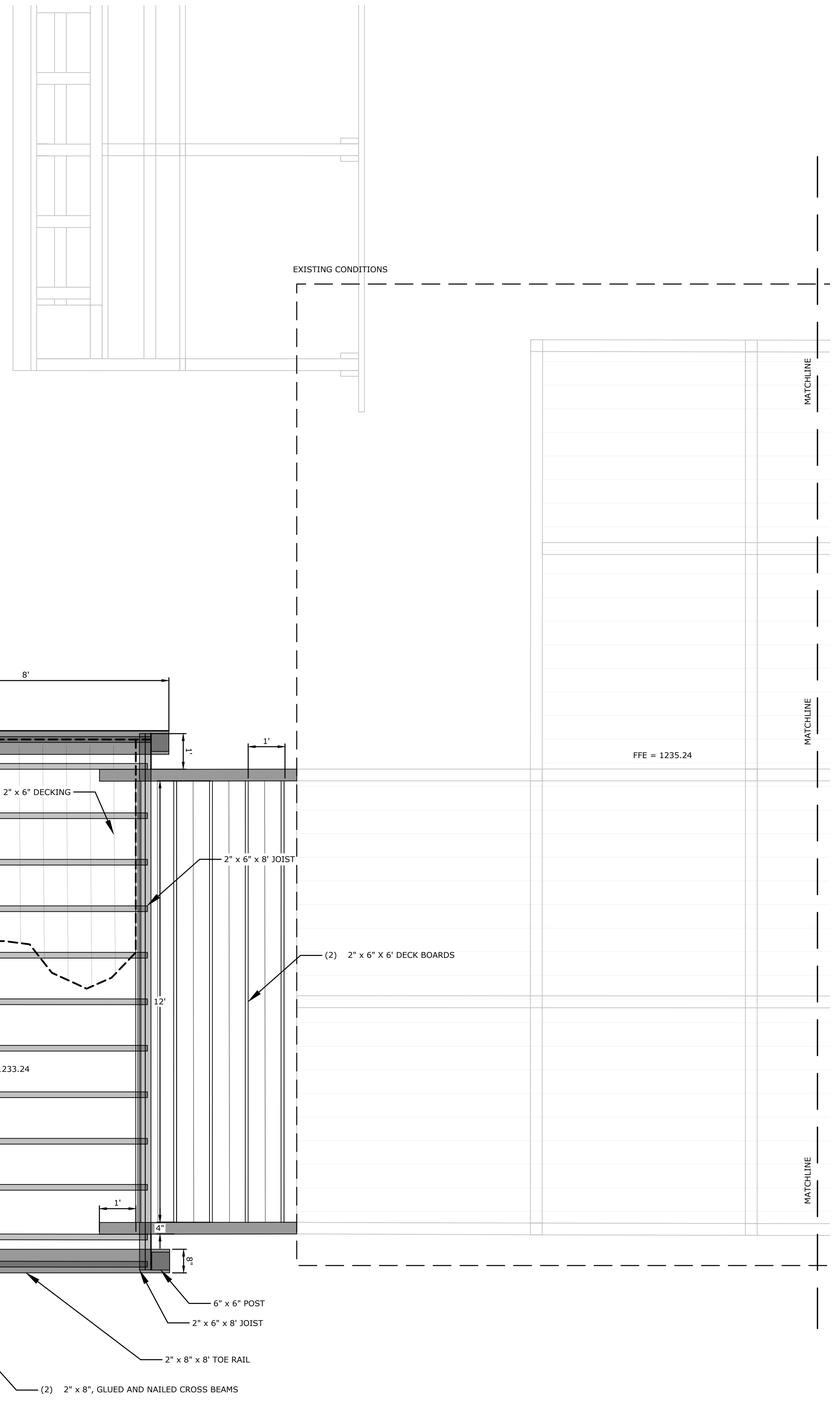

PLAN SCALE

2 0 1 2 4

(IN FEET)
1 inch = 2ft.

PAVILION IS TO BE DEMOLISHED AND RECONSTRUCTED EXACTLY AS IT IS, IN PLACE, WITH THE ADDITIONS OF THE REALIGNED RAMP AND THE LOWER SECTION.

ALL EXISTING FOOTERS TO BE USED AS SUPPORT FOR PROPOSED PAVILION EXCEPT THOSE UNDER RAMP, ADD ADDITIONAL FOOTERS AS NEEDED.

ALL WOOD IS TO BE PRESSURE TREATED AND GRADED #2 OR BETTER.

RAMP NOT TO EXCEED 5% RUNNING SLOPE AND 0% CROSS SLOPE.

RAMP NOT TO EXCEED 30" IN HEIGHT WHILE IN SANITARY SEWER EASEMENT.

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FAYETTEVILLE, AR

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REVISIONS

REV	DATE	DESCRIPTION

WOODEN PAVILION FRAMING PLAN SHEET 2

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
1/17/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

C2.7

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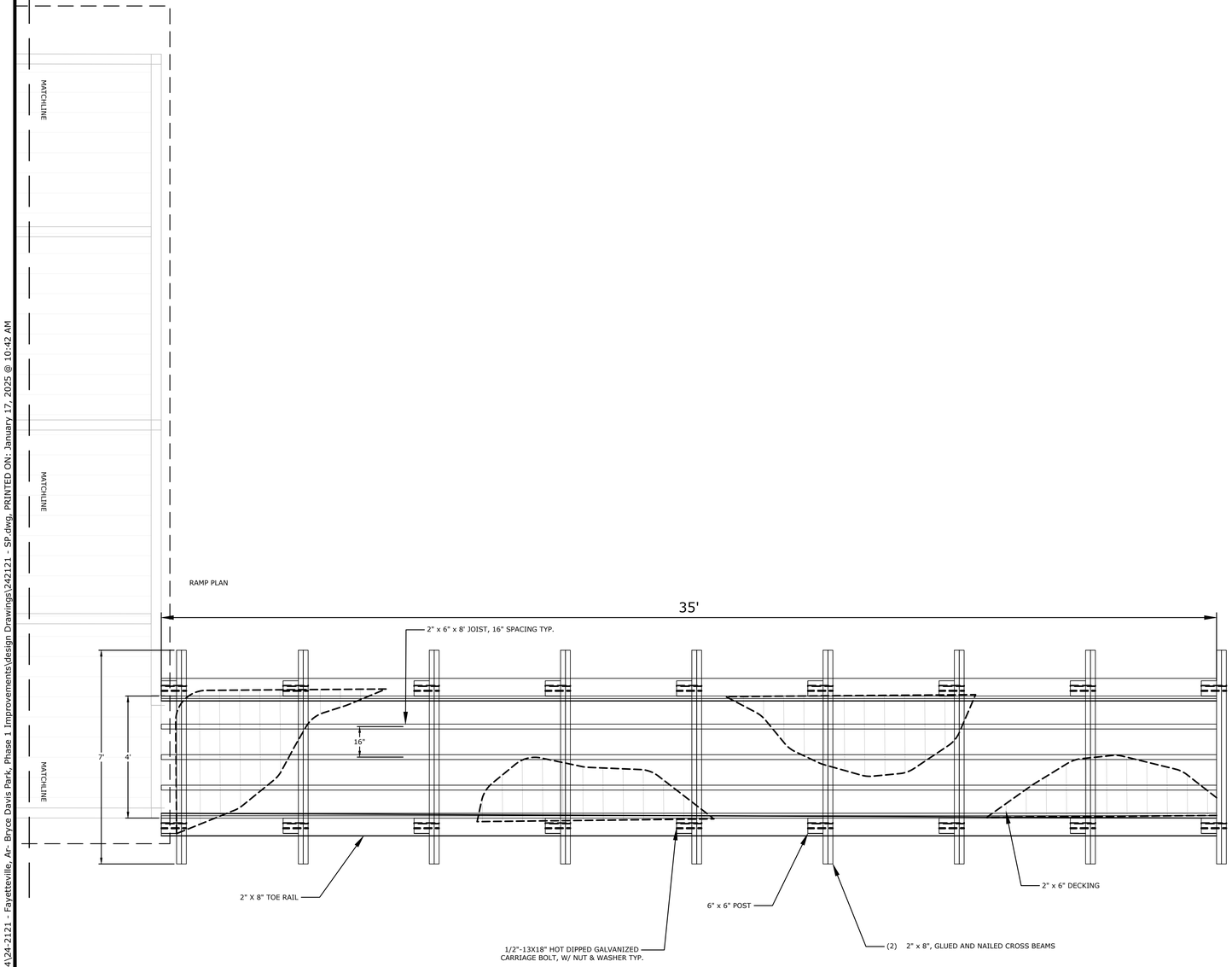

PLAN SCALE

-2 0 1 2 4

(IN FEET)
1 inch = 2ft.

PAVILION IS TO BE DEMOLISHED AND RECONSTRUCTED EXACTLY AS IT IS, IN PLACE, WITH THE ADDITIONS OF THE REALIGNED RAMP AND THE LOWER SECTION.

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RAMP NOT TO EXCEED 30" IN HEIGHT WHILE IN SANITARY SEWER EASEMENT.

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REVISIONS

REV	DATE	DESCRIPTION

WOODEN PAVILION FRAMING PLAN SHEET 3

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
1/17/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

C2.8

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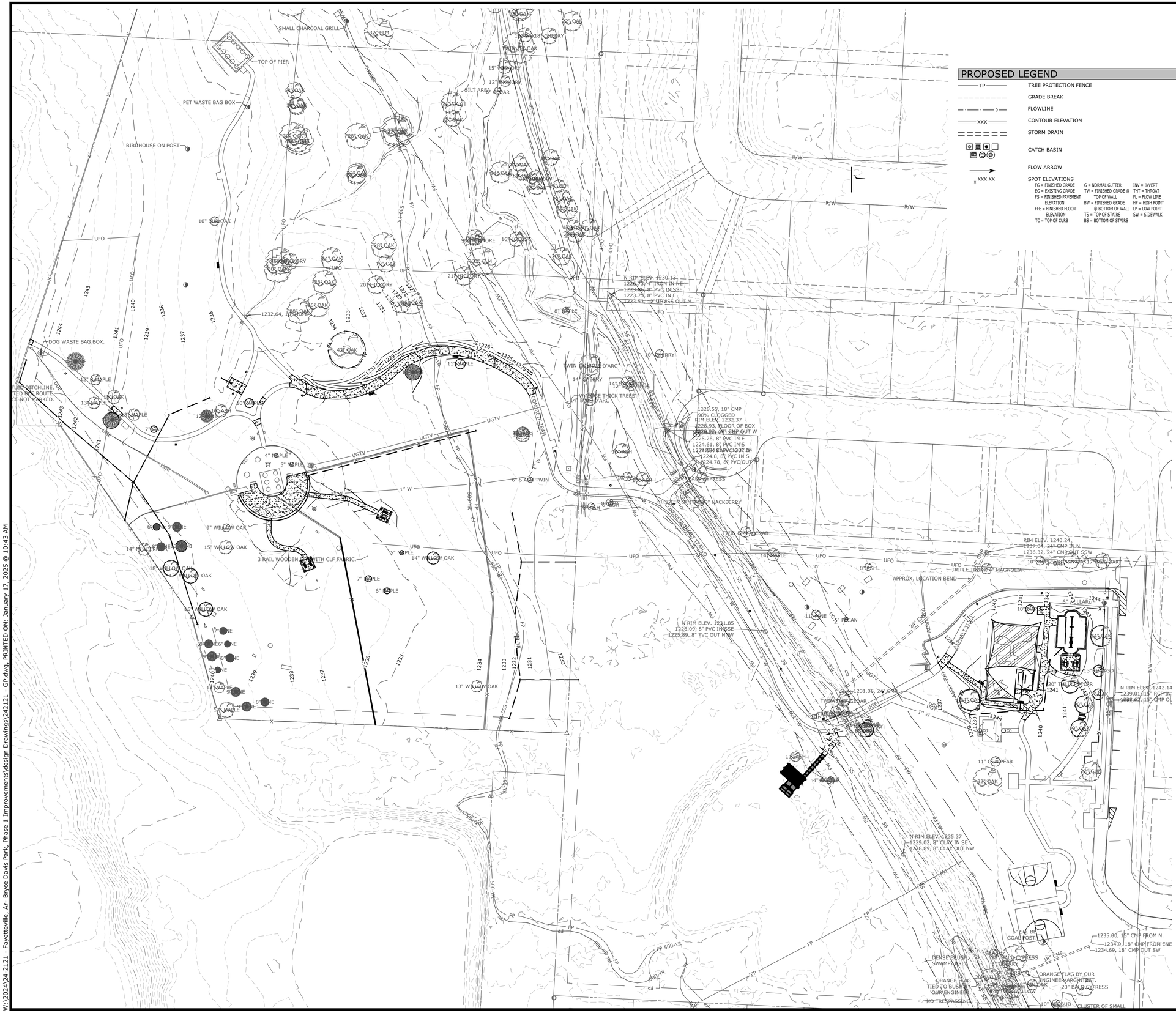
SMALL CHARCOAL GRILL
TOP OF PIER
PET WASTE BAG BOX
BIRDHOUSE ON POST
DOG WASTE BAG BOX.
TILED DITCHLINE, TED BUS ROUTE CE NOT MARKED.
SILT AREA
TWIN RED OAK
TWIN BLACK CHERRY
TWIN BLACK CHERRY
TWIN BLACK CHERRY

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REVISIONS

REV	DATE	DESCRIPTION

GRADING PLAN NORTH

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
1/17/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

C3.1

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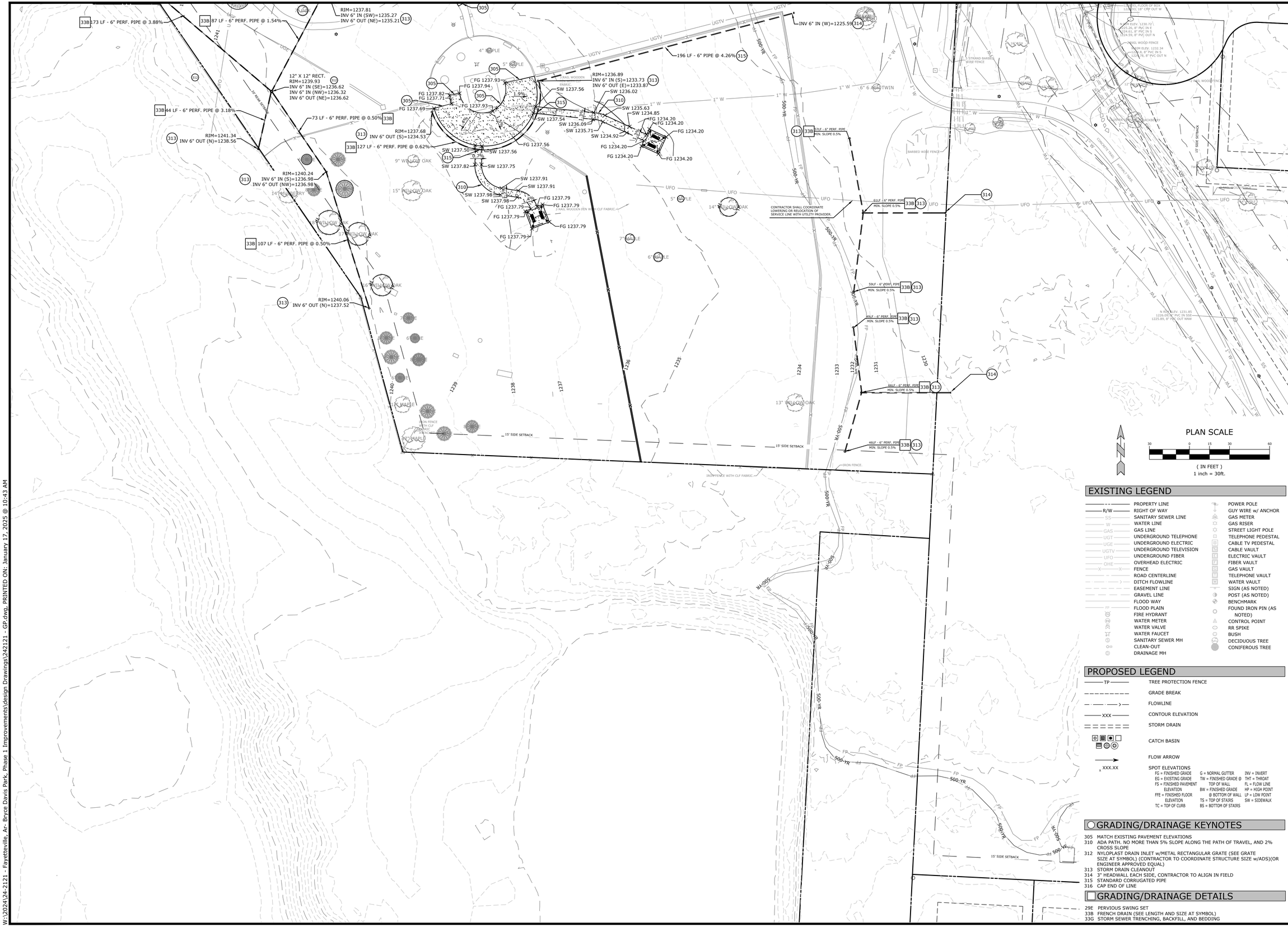

PLAN SCALE

30 0 15 30 60

(IN FEET)
1 inch = 30ft.

EXISTING LEGEND

- PROPERTY LINE
- R/W — RIGHT OF WAY
- SS — SANITARY SEWER LINE
- W — WATER LINE
- GAS — GAS LINE
- UGT — UNDERGROUND TELEPHONE
- UGE — UNDERGROUND ELECTRIC
- UGTV — UNDERGROUND TELEVISION
- UFO — UNDERGROUND FIBER
- OHE — OVERHEAD ELECTRIC
- X — X — FENCE
- ROAD CENTERLINE
- DITCH FLOWLINE
- EASEMENT LINE
- GRAVEL LINE
- FLOOD WAY
- FP — FLOOD PLAIN
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- WATER FAUCET
- SANITARY SEWER MH
- CLEAN-OUT
- DRAINAGE MH
- POWER POLE
- GUY WIRE w/ ANCHOR
- GAS METER
- GAS RISER
- STREET LIGHT POLE
- TELEPHONE PEDESTAL
- CABLE TV PEDESTAL
- CABLE VAULT
- ELECTRIC VAULT
- FIBER VAULT
- GAS VAULT
- TELEPHONE VAULT
- WATER VAULT
- SIGN (AS NOTED)
- POST (AS NOTED)
- BENCHMARK
- FOUND IRON PIN (AS NOTED)
- CONTROL POINT
- RR SPIKE
- BUSH
- DECIDUOUS TREE
- CONIFEROUS TREE

PROPOSED LEGEND

- TP — TREE PROTECTION FENCE
- GRADE BREAK
- FLOWLINE
- XXX — CONTOUR ELEVATION
- STORM DRAIN
- CATCH BASIN
- FLOW ARROW
- XXX.XX — SPOT ELEVATIONS

FG = FINISHED GRADE
EG = EXISTING GRADE
FS = FINISHED PAVEMENT ELEVATION
FFE = FINISHED FLOOR ELEVATION
TC = TOP OF CURB
G = NORMAL GUTTER
TW = FINISHED GRADE @ TOP OF WALL
BW = FINISHED GRADE @ BOTTOM OF WALL
TS = TOP OF STAIRS
BS = BOTTOM OF STAIRS
INV = INVERT
THT = THROAT
FL = FLOW LINE
HP = HIGH POINT
LP = LOW POINT
SW = SIDEWALK

GRADING/DRAINAGE KEYNOTES

305 MATCH EXISTING PAVEMENT ELEVATIONS
310 ADA PATH. NO MORE THAN 5% SLOPE ALONG THE PATH OF TRAVEL, AND 2% CROSS SLOPE
312 NYLOPLAST DRAIN INLET w/METAL RECTANGULAR GRATE (SEE GRATE SIZE AT SYMBOL) (CONTRACTOR TO COORDINATE STRUCTURE SIZE w/ADS)(OR ENGINEER APPROVED EQUAL)
313 STORM DRAIN CLEANOUT
314 3" HEADWALL EACH SIDE, CONTRACTOR TO ALIGN IN FIELD
315 STANDARD CORRUGATED PIPE
316 CAP END OF LINE

GRADING/DRAINAGE DETAILS

29E PERVIOUS SWING SET
33B FRENCH DRAIN (SEE LENGTH AND SIZE AT SYMBOL)
33G STORM SEWER TRENCHING, BACKFILL, AND BEDDING

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STATE OF ARKANSAS
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REVISIONS	DESCRIPTION	DATE
REV		

GRADING PLAN WEST

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
1/17/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

C3.2

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PLAYGROUND GRADING EXHIBIT, SEE SHEET C3.4

PLAN SCALE

30 0 15 30 60

(IN FEET)
1 inch = 30ft.

EXISTING LEGEND

- PROPERTY LINE
- R/W — RIGHT OF WAY
- SS — SANITARY SEWER LINE
- W — WATER LINE
- GAS — GAS LINE
- UGT — UNDERGROUND TELEPHONE
- UGE — UNDERGROUND ELECTRIC
- UGTV — UNDERGROUND TELEVISION
- UFO — UNDERGROUND FIBER
- OHE — OVERHEAD ELECTRIC
- X — X — FENCE
- ROAD CENTERLINE
- DITCH FLOWLINE
- EASEMENT LINE
- GRAVEL LINE
- FLOOD WAY
- FP — FLOOD PLAIN
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- WATER FAUCET
- SANITARY SEWER MH
- CLEAN-OUT
- DRAINAGE MH
- POWER POLE
- GUY WIRE w/ ANCHOR
- GAS METER
- GAS RISER
- STREET LIGHT POLE
- TELEPHONE PEDESTAL
- CABLE TV PEDESTAL
- CABLE VAULT
- ELECTRIC VAULT
- FIBER VAULT
- GAS VAULT
- TELEPHONE VAULT
- WATER VAULT
- SIGN (AS NOTED)
- POST (AS NOTED)
- BENCHMARK
- FOUND IRON PIN (AS NOTED)
- CONTROL POINT
- RR SPIKE
- BUSH
- DECIDUOUS TREE
- CONIFEROUS TREE

PROPOSED LEGEND

- TP — TREE PROTECTION FENCE
- GRADE BREAK
- FLOWLINE
- XXX — CONTOUR ELEVATION
- STORM DRAIN
- CATCH BASIN
- FLOW ARROW
- XXX.XX — SPOT ELEVATIONS

FG = FINISHED GRADE	G = NORMAL GUTTER	INV = INVERT
EG = EXISTING GRADE	TW = FINISHED GRADE @ TOP OF WALL	THT = THROAT
FS = FINISHED PAVEMENT ELEVATION	BW = FINISHED GRADE @ BOTTOM OF WALL	FL = FLOW LINE
FFE = FINISHED FLOOR ELEVATION	TS = TOP OF STAIRS	HP = HIGH POINT
TC = TOP OF CURB	BS = BOTTOM OF STAIRS	LP = LOW POINT
		SW = SIDEWALK

GRADING/DRAINAGE KEYNOTES

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316 CAP END OF LINE

GRADING/DRAINAGE DETAILS

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33B FRENCH DRAIN (SEE LENGTH AND SIZE AT SYMBOL)
33G STORM SEWER TRENCHING, BACKFILL, AND BEDDING

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REVISIONS

REV	DATE	DESCRIPTION

GRADING PLAN EAST

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C3.3

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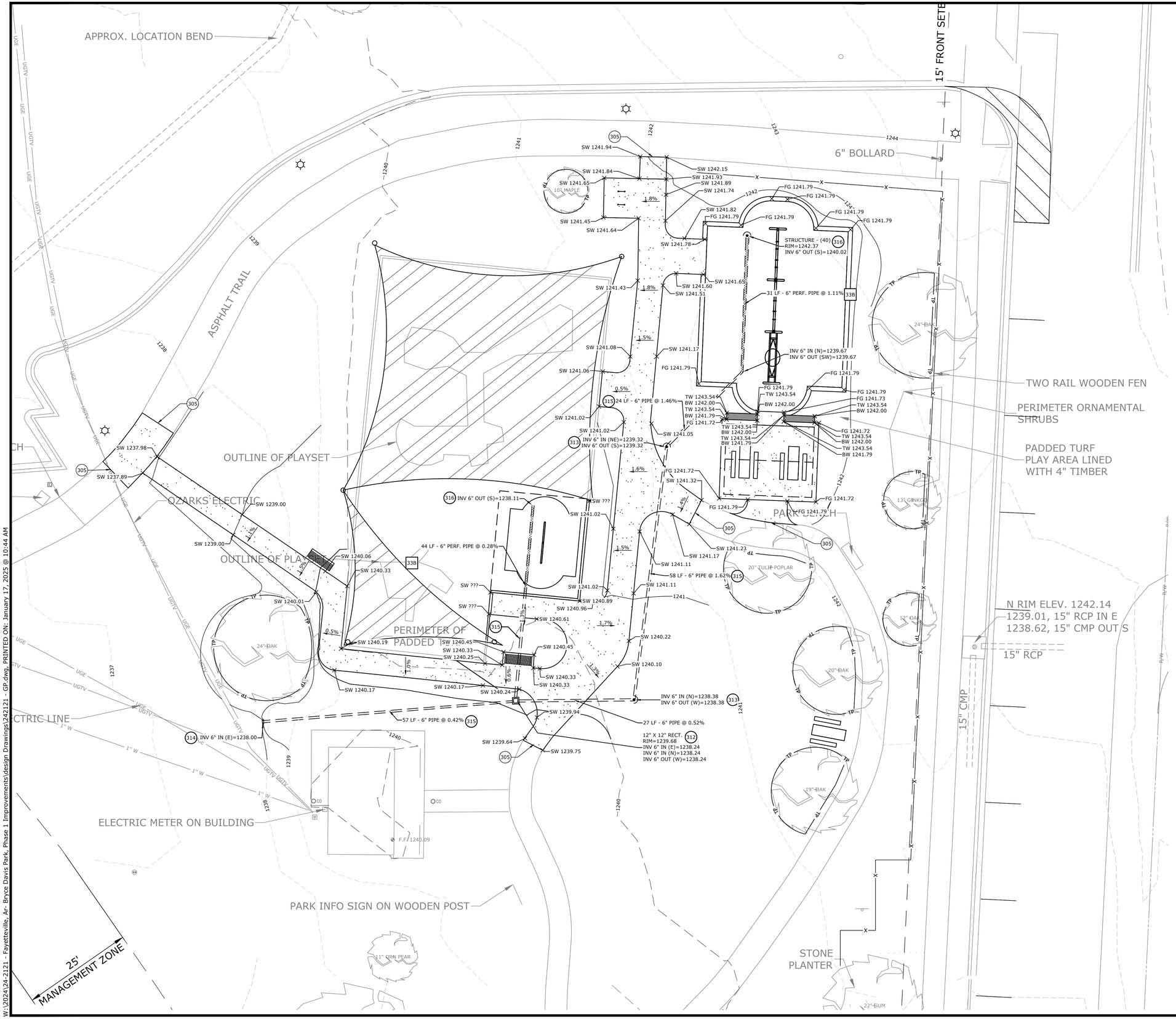

PLAN SCALE

10 0 5 10 20

(IN FEET)
1 inch = 10ft.

EXISTING LEGEND

- PROPERTY LINE
- R/W — RIGHT OF WAY
- SS — SANITARY SEWER LINE
- W — WATER LINE
- GAS — GAS LINE
- UGT — UNDERGROUND TELEPHONE
- UGE — UNDERGROUND ELECTRIC
- UGTV — UNDERGROUND TELEVISION
- UFO — UNDERGROUND FIBER
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- GRAVEL LINE
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- FP — FLOOD PLAIN
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- WATER FAUCET
- SANITARY SEWER MH
- CLEAN-OUT
- DRAINAGE MH
- POWER POLE
- GUY WIRE w/ ANCHOR
- GAS METER
- GAS RISER
- STREET LIGHT POLE
- TELEPHONE PEDESTAL
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- POST (AS NOTED)
- BENCHMARK
- FOUND IRON PIN (AS NOTED)
- CONTROL POINT
- RR SPIKE
- BUSH
- DECIDUOUS TREE
- CONIFEROUS TREE

PROPOSED LEGEND

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- CATCH BASIN
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GRADING/DRAINAGE KEYNOTES

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315 STANDARD CORRUGATED PIPE
316 CAP END OF LINE

GRADING/DRAINAGE DETAILS

29E PERVIOUS SWING SET
33B FRENCH DRAIN (SEE LENGTH AND SIZE AT SYMBOL)
33G STORM SEWER TRENCHING, BACKFILL, AND BEDDING

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License Number 0185
STATE OF ARKANSAS

01/17/2025

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FAYETTEVILLE, AR

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REVISIONS

REV	DATE	DESCRIPTION

GRADING PLAN EAST EXHIBIT

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C3.4

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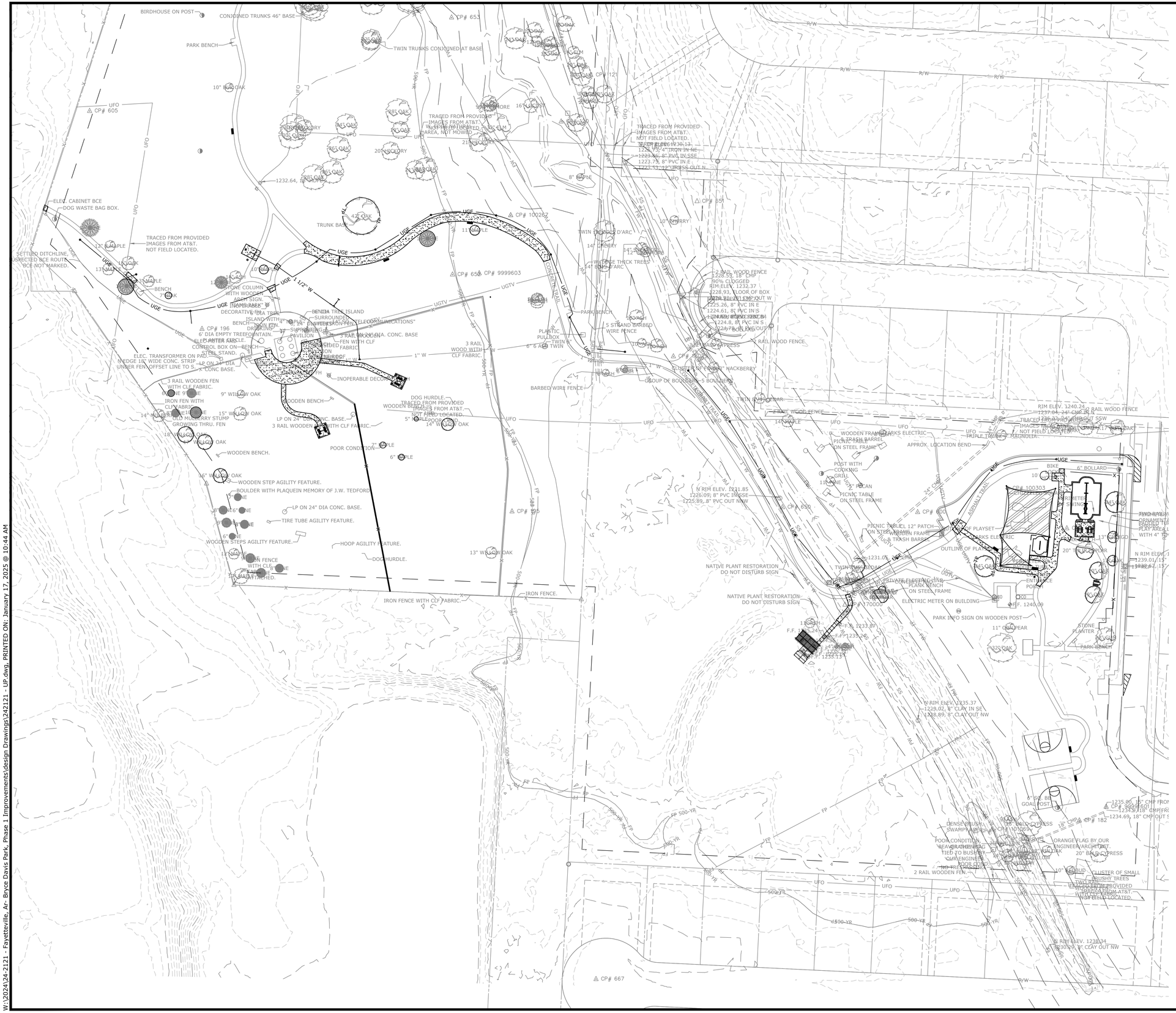

PLAN SCALE

(IN FEET)
1 inch = 50ft.

EXISTING LEGEND

PROPERTY LINE	POWER POLE
RIGHT OF WAY	GUY WIRE w/ ANCHOR
SANITARY SEWER LINE	GAS METER
WATER LINE	GAS RISER
GAS LINE	STREET LIGHT POLE
UNDERGROUND TELEPHONE	TELEPHONE PEDESTAL
UNDERGROUND ELECTRIC	CABLE TV PEDESTAL
UNDERGROUND TELEVISION	CABLE VAULT
UNDERGROUND FIBER	ELECTRIC VAULT
OVERHEAD ELECTRIC	FIBER VAULT
FENCE	GAS VAULT
ROAD CENTERLINE	TELEPHONE VAULT
DITCH FLOWLINE	WATER VAULT
EASEMENT LINE	SIGN (AS NOTED)
GRAVEL LINE	POST (AS NOTED)
FLOOD WAY	BENCHMARK
FLOOD PLAIN	FOUND IRON PIN (AS NOTED)
FIRE HYDRANT	CONTROL POINT
WATER METER	RR SPIKE
WATER VALVE	BUSH
WATER FAUCET	DECIDUOUS TREE
SANITARY SEWER MH	CONIFEROUS TREE
CLEAN-OUT	
DRAINAGE MH	

PROPOSED LEGEND

STORM DRAIN	
X"W	WATER LINE
X"SS	SANITARY SEWER LINE
	CLEAN-OUT
	LIGHT POLE
TP	TREE PROTECTION FENCE

GENERAL UTILITY NOTES

1. ALL DOMESTIC WATER SERVICE LINES AFTER THE METER TO BUILDINGS SHALL BE POLYETHYLENE PIPE, UNLESS OTHERWISE SPECIFIED ON THE PLANS. SIZE AS NOTED ON THE PLANS AND TO MAINTAIN 36" OF COVER (MINIMUM). ALL DOMESTIC SANITARY SEWER SERVICE LINES SHALL BE PVC (SDR-26), OR OTHERWISE SPECIFIED ON THE PLANS. SIZE AS NOTED ON THE PLANS AND TO MAINTAIN 36" OF COVER (MINIMUM).
2. EXISTING UTILITIES SHOWN ON PLANS HAVE BEEN SHOWN IN THEIR APPROXIMATE LOCATIONS PER AVAILABLE INFORMATION.
3. CONSTRUCTION SHALL NOT START ON ANY PUBLIC UTILITY SYSTEM UNTIL WRITTEN APPROVAL HAS BEEN RECEIVED FROM THE APPROPRIATE UTILITY AUTHORITIES AND THE OWNER, AND THE CONTRACTOR HAS BEEN NOTIFIED BY McCLELLAND CONSULTING ENGINEERS, INC.
4. CONTRACTOR SHALL NOT OPEN, TURN OFF, INTERFERE WITH, OR ATTACH ANY PIPE OR HOSE TO OR TAP ANY WATER MAIN UNLESS DULY AUTHORIZED TO DO SO BY THE CITY. ANY ADVERSE CONSEQUENCES OF ANY SCHEDULED OR UNSCHEDULED DISRUPTIONS OF SERVICE TO THE PUBLIC ARE TO BE THE LIABILITY OF THE CONTRACTOR. McCLELLAND CONSULTING ENGINEERS, INC. AND THE OWNER ARE TO BE HELD HARMLESS.
5. ALL TRENCHING, BACKFILLING AND PIPE LAYING IS TO MEET ALL OSHA REQUIREMENTS.
6. THE LOCATION, DESCRIPTION AND SIZE OF ALL ABOVE-GROUND AND UNDER-GROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN DETERMINED WITH DUE CARE AND DILIGENCE, USING CURRENT TECHNIQUES, EQUIPMENT AND PROPER ACCURACY CONTROL PROCEDURES. HOWEVER, INFORMATION SHOWN HEREON IS NOT WARRANTED TO BE CORRECT IN EVERY DETAIL BECAUSE OF INACCURACIES IN OR LACK OF EXISTING DATA OR MAPS AND THE INABILITY TO VERIFY IN THE FIELD. PERSONS USING INFORMATION CONTAINED HEREON ARE HEREBY CAUTIONED ACCORDINGLY.
7. REFER TO LIGHTING PLANS (SHEET ES1) FOR SITE LIGHTING ELECTRICAL PLANS.
8. ALL WATER & SEWER DESIGNS ARE SUBJECT TO THE CITY'S LATEST DESIGN CRITERIA (CITY WATER & SEWER SPECIFICATIONS, REVISION NUMBER/DATE, ISSUE DATE). REVIEW FOR PLAT APPROVAL IS NOT APPROVAL OF PUBLIC IMPROVEMENTS, AND ALL PROPOSED IMPROVEMENTS ARE SUBJECT TO FURTHER REVIEW AT THE TIME CONSTRUCTION PLANS ARE SUBMITTED.
9. ANY DAMAGE TO THE EXISTING PUBLIC STREET DUE TO CONSTRUCTION SHALL BE REPAIRED / REPLACED AT THE OWNER'S / DEVELOPER'S EXPENSE.
10. WATER AND SEWER IMPACT FEES WILL APPLY FOR THE ADDITIONAL IMPACT TO THE SYSTEM (IF APPLICABLE). THE FEES WILL BE BASED ON THE PROPOSED METER SIZE AND WILL BE CHARGED AT THE TIME OF METER SET (IF APPLICABLE).
11. ALL UTILITY SERVICE LINES TO BE CONNECTED TO NEW MAINS OR RELOCATED AS NEEDED FOR INSTALLATION OF STORM SEWER SYSTEM.
12. ALL CONDUITS PLACED BY CONTRACTOR MUST HAVE 24" OF COVER AT FINAL GRADE AND MARKED WITH POSTS TO IDENTIFY THE ENDS OF CONDUITS. THERE MUST BE A MINIMUM SEPARATION OF 12" BETWEEN ELECTRICAL CONDUITS AND CONDUITS FOR OTHER UTILITIES.
13. SERVICE TAPS ON UTILITY MAINS (PROPOSED AND / OR EXISTING) SHALL BE MADE BY THE CITY, AND FEES PAID BY CONTRACTOR.
14. ALL UNDERGROUND LINES SHALL BE INSPECTED BY THE ENGINEER, OR HIS REPRESENTATIVE, PRIOR TO BACK FILLING.
15. ALL WATER LINE DIMENSIONS SHOWN ARE TO CENTER OF PIPE OR FITTING; ALL SEWER LINE DIMENSIONS ARE SHOWN TO CENTER OF MANHOLE OR CENTER OF PIPE.
16. TESTING OF WATER AND SEWER LINES SHALL BE AT THE CONTRACTOR'S EXPENSE.
17. TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE EITHER FLUSH WITH FINISHED GRADES IN PAVED AREAS, OR 4" ABOVE FINISHED GRADES IN UNPAVED AREAS.
TOPS OF PROPOSED MANHOLES SHALL BE FLUSH WITH FINISHED GRADES IN PAVED AREAS, OR 4" ABOVE FINISHED GRADES IN UNPAVED AREAS.
18. ALL UTILITIES UNDER PAVED AREAS SHALL RECEIVE CLASS 7 BASE BACKFILL FULL DEPTH.
19. MAINTAIN MINIMUM HORIZONTAL SEPARATION OF 10' BETWEEN WATER AND SEWER MAINS AND 5' BETWEEN OTHER UNDERGROUND UTILITIES SUCH AS STORM SEWER, ELECTRICAL, GAS, DOMESTIC WATER / SEWER SERVICE LINES, AND CONDUITS.
20. COORDINATION OF ALL CONDUIT PLACEMENT SHALL BE MADE WITH UTILITY PROVIDERS.
21. PROPOSED UTILITIES THAT ARE TO BE BURIED IN THE SAME TRENCH SHALL BE COORDINATED WITH, AND APPROVED BY, THE INVOLVED UTILITIES PRIOR TO INSTALLATION.
22. CONTRACTOR SHALL FIELD VERIFY DEPTH AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION OF PROPOSED UTILITIES.
23. ALL PROPOSED UTILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH GOVERNING AGENCY.
24. CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION LAYOUT AND STAKING (UNLESS APPROVED OTHERWISE BY THE ENGINEER OF RECORD).

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STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 20757
01/17/2025
ORIGINAL SIGNATURE ON FILE

BRYCE DAVIS PARK IMPROVEMENTS PHASE 1

1595 N DARTMOUTH AVE
FAYETTEVILLE, AR

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REVISIONS

REV	DATE	DESCRIPTION

OVERALL UTILITY PLAN

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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PLAN SCALE

30 0 15 30 60

(IN FEET)
1 inch = 30ft.

EXISTING LEGEND

- PROPERTY LINE
- R/W — RIGHT OF WAY
- SS — SANITARY SEWER LINE
- W — WATER LINE
- GAS — GAS LINE
- UGT — UNDERGROUND TELEPHONE
- UGE — UNDERGROUND ELECTRIC
- UGTV — UNDERGROUND TELEVISION
- UFO — UNDERGROUND FIBER
- OHE — OVERHEAD ELECTRIC
- FENCE
- ROAD CENTERLINE
- DITCH FLOWLINE
- EASEMENT LINE
- GRAVEL LINE
- FLOOD WAY
- FP — FLOOD PLAIN
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- WATER FAUCET
- SANITARY SEWER MH
- CLEAN-OUT
- DRAINAGE MH
- POWER POLE
- GUY WIRE w/ ANCHOR
- GAS METER
- GAS RISER
- STREET LIGHT POLE
- TELEPHONE PEDESTAL
- CABLE TV PEDESTAL
- CABLE VAULT
- ELECTRIC VAULT
- FIBER VAULT
- GAS VAULT
- TELEPHONE VAULT
- WATER VAULT
- SIGN (AS NOTED)
- POST (AS NOTED)
- BENCHMARK
- FOUND IRON PIN (AS NOTED)
- CONTROL POINT
- RR SPIKE
- BUSH
- DECIDUOUS TREE
- CONIFEROUS TREE

PROPOSED LEGEND

- STORM DRAIN
- X"W — WATER LINE
- X"SS — SANITARY SEWER LINE
- CLEAN-OUT
- LIGHT POLE
- TP — TREE PROTECTION FENCE
- UGE — UNDERGROUND ELECTRIC UTILITY

UTILITY KEYNOTES

315 NYLOPLAST DRAIN INLET X/ FLAT GRATE (SEE FLAT GRATE SIZE AT SYMBOL) (CONTRACTOR TO COORDINATE STRUCTURE SIZE WITH ADS) (OR ENGINEER APPROVED EQUAL)
400 POINT OF CONNECTION - WATER SERVICE
402 DOMESTIC WATER SERVICE BUILDING ENTRY (SEE ARCH. / MEP PLANS)
408 TAPPING SADDLE (SEE SIZE AT SYMBOL)
410 GATE VALVE WITH ADJUSTABLE VALVE BOX (SEE SIZE AT SYMBOL)
411 REDUCER (SEE SIZE AT SYMBOL)
412 SOLID SLEEVE (SEE SIZE AT SYMBOL)
449 1" X 1" TEE
453 BORE UNDERNEATH
454 CAP WATER LINE
455 4" PVC SLEEVE, 3' BELOW GRADE, STAMP 3" TALL 'S' ON PAVEMENT AT EDGE, EITHER SIDE OF SIDEWALK.

UTILITY DETAILS

TR3 TRAIL LIGHTING , VISIONAIR ODN-1-L-T2-48LC-5-4K-UNV-UAM-BK-C5/H3, OR EQUAL

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STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
JOSEPH R. LEMASTER
No. 20757
01/17/2025
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REVISIONS

REV	DATE	DESCRIPTION

UTILITY PLAN WEST

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
1/17/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

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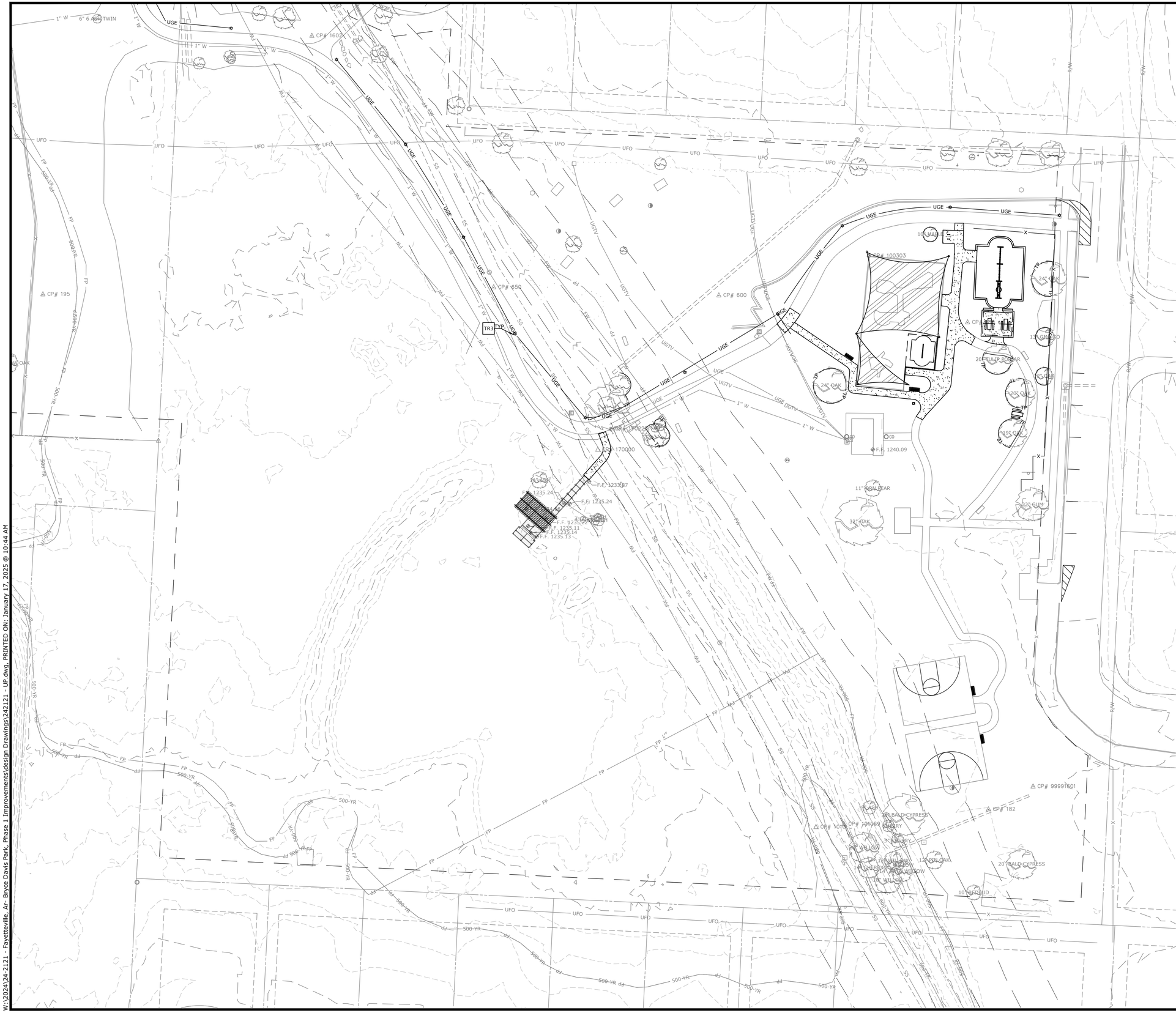

PLAN SCALE

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(IN FEET)
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EXISTING LEGEND

PROPERTY LINE	POWER POLE
R/W — RIGHT OF WAY	GUY WIRE w/ ANCHOR
SS — SANITARY SEWER LINE	GAS METER
W — WATER LINE	GAS RISER
GAS — GAS LINE	STREET LIGHT POLE
UGT — UNDERGROUND TELEPHONE	TELEPHONE PEDESTAL
UGE — UNDERGROUND ELECTRIC	CABLE TV PEDESTAL
UGTV — UNDERGROUND TELEVISION	CABLE VAULT
UFO — UNDERGROUND FIBER	ELECTRIC VAULT
OHE — OVERHEAD ELECTRIC	FIBER VAULT
FENCE	GAS VAULT
ROAD CENTERLINE	TELEPHONE VAULT
DITCH FLOWLINE	WATER VAULT
EASEMENT LINE	SIGN (AS NOTED)
GRAVEL LINE	POST (AS NOTED)
FLOOD WAY	BENCHMARK
FP — FLOOD PLAIN	FOUND IRON PIN (AS NOTED)
FIRE HYDRANT	CONTROL POINT
WATER METER	RR SPIKE
WATER VALVE	BUSH
WATER FAUCET	DECIDUOUS TREE
SANITARY SEWER MH	CONIFEROUS TREE
CLEAN-OUT	
DRAINAGE MH	

PROPOSED LEGEND

STORM DRAIN	
X"W — WATER LINE	
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UTILITY KEYNOTES

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Know what's below. Call before you dig.

REV	DATE	DESCRIPTION

REVISIONS

UTILITY PLAN EAST

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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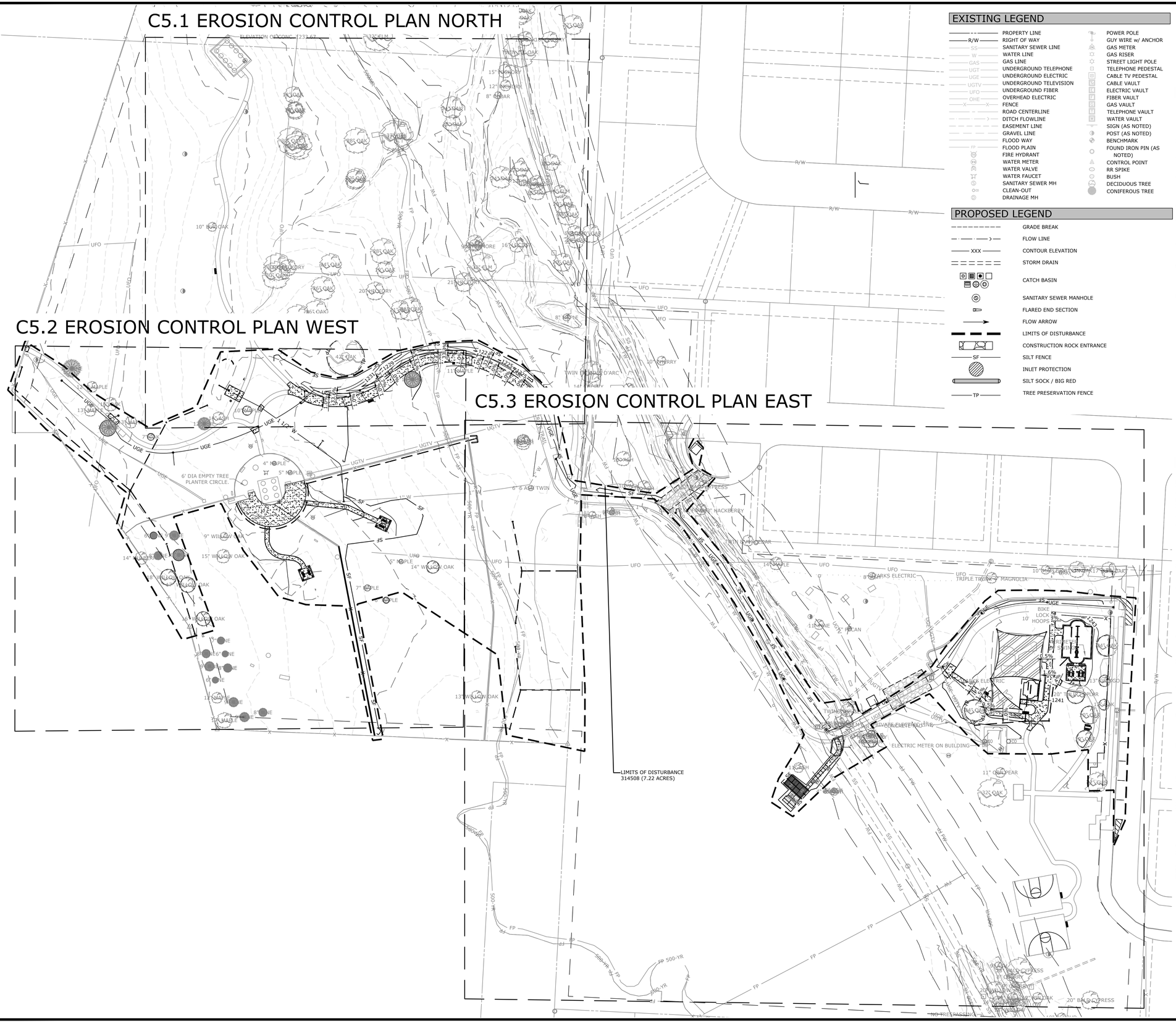
C5.1 EROSION CONTROL PLAN NORTH

C5.2 EROSION CONTROL PLAN WEST

C5.3 EROSION CONTROL PLAN EAST



EXISTING LEGEND

- PROPERTY LINE
- RIGHT OF WAY
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- WATER LINE
- GAS LINE
- UNDERGROUND TELEPHONE
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEVISION
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- FIBER VAULT
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- TELEPHONE VAULT
- WATER VAULT
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- POST (AS NOTED)
- BENCHMARK
- FOUND IRON PIN (AS NOTED)
- CONTROL POINT
- RR SPIKE
- BUSH
- DECIDUOUS TREE
- CONIFEROUS TREE

PROPOSED LEGEND

- GRADE BREAK
- FLOW LINE
- CONTOUR ELEVATION (XXX)
- STORM DRAIN
- CATCH BASIN
- SANITARY SEWER MANHOLE
- FLARED END SECTION
- FLOW ARROW
- LIMITS OF DISTURBANCE
- CONSTRUCTION ROCK ENTRANCE
- SILT FENCE (SF)
- INLET PROTECTION
- SILT SOCK / BIG RED
- TREE PRESERVATION FENCE (TP)

PLAN SCALE

50 0 25 50 100

(IN FEET)
1 inch = 50ft.

GENERAL EROSION CONTROL NOTES

1. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AND CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DIRECTED BY PERMITTING AGENCY AND OWNER OR AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
2. PERMIT FOR ANY CONSTRUCTION ACTIVITY MUST BE MAINTAINED ON SITE AT ALL TIMES.
3. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
4. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
5. ALL WASH WATER SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
6. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
7. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
8. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
9. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED FOR AT LEAST 14 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
10. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
11. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
12. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
13. CONTRACTOR SHALL DESIGNATE / IDENTIFY AREAS INSIDE THE LIMITS OF DISTURBANCE, FOR WASTE DISPOSAL AND DELIVERY AND MATERIAL STORAGE.
14. ALL BMP's SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED BY A MINIMUM OF 80% GRASS COVERAGE.
15. ALL DEWATERING ACTIVITIES SHALL CONFORM TO ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS. DISCHARGED WATER MUST BE PROPERLY TREATED BEFORE RELEASING FROM THE SITE.

BMP MAINTENANCE

THE CONTRACTOR SHALL IMPLEMENT ALL MEASURES SHOWN ON THE EROSION CONTROL PLAN AND IN THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TO THE FULLEST EXTENT PRACTICAL. THE CONTRACTOR SHALL HAVE CHECKED ALL SEDIMENT AND EROSION CONTROL MEASURES BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS OR EVERY FOURTEEN (14) DAYS AND WITHIN 24 HOURS OF THE END OF A RAINFALL EVENT EXCEEDING 0.25". ALL SITE BMPS SHALL BE MAINTAINED IN A FULLY FUNCTIONAL CONDITION UNTIL FINAL STABILIZATION OF THE SITE HAS OCCURRED. ALL SITE BMPS SHALL BE REPAIRED AND / OR CLEANED IN ACCORDANCE WITH THE FOLLOWING:

1. THE CONTRACTOR SHALL MAINTAIN THE CONSTRUCTION ENTRANCE(S) IN A SUCH A CONDITION THAT WILL PREVENT MUD BEING TRACKED INTO ANY PUBLIC RIGHT OF WAY(S). THIS MAY REQUIRE PERIODIC TOP DRESSING OF ALL CONSTRUCTION ENTRANCE(S) AS NECESSARY.
2. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION. THIS MAY REQUIRE PERIODIC TOP DRESSING OF ALL PARKING AND STORAGE AREA(S) AS NECESSARY.
3. CONTRACTOR SHALL REPAIR ALL SILT FENCING TO THEIR ORIGINAL CONDITION IF DAMAGED; SEDIMENT SHALL BE REMOVED FROM ALONG THE FENCE WHEN SEDIMENT REACHES NO MORE THAN ONE-HALF THE HEIGHT OF THE SILT FENCE.
4. INLET BMPS SHALL BE REPAIRED AND/OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING. CONTRACTOR SHALL REPLACE IF THEY SHOW SIGNS OF DETERIORATION.
5. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. CONTRACTOR SHALL FERTILIZE AND RESEED THOSE AREAS AS NECESSARY.
6. IF THE GRAVEL FOUND IN ANY SEDIMENT FILTER(S) BECOME CLOGGED WITH SEDIMENT, CONTRACTOR SHALL PULL THE GRAVEL AWAY, CLEAN THE GRAVEL, AND REPLACE IN THE SEDIMENT FILTER(S).
7. OUTFALL STRUCTURES IN SEDIMENT BASINS SHALL BE KEPT IN OPERATIONAL CONDITIONS AT ALL TIMES AND DURING ALL PHASES OF CONSTRUCTION. ANY SEDIMENT FOUND IN THE BASIN SHALL NOT EXCEED THE DEPTH OF THE CLEAN-OUT LEVEL (SITE SPECIFIC).
8. THE EMBANKMENT OF THE SEDIMENT BASIN(S) AND/OR TEMPORARY SEDIMENT TRAPS AND THEIR OUTFALL STRUCTURES SHALL BE CHECKED REGULARLY TO ENSURE THEY ARE STRUCTURALLY SOUND AND HAS NOT BEEN DAMAGED DUE TO EROSION OR CONSTRUCTION (SITE SPECIFIC).
9. ALL SEDIMENT FOUND IN THE TEMPORARY SEDIMENT TRAP SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS REACHED NO MORE THAN ONE-HALF THE DEPTH OF THE TEMPORARY SEDIMENT TRAP (SITE SPECIFIC).

SEQUENCE OF CONSTRUCTION

1. INSTALL PERIMETER EROSION CONTROL MEASURES AND TEMPORARY CONSTRUCTION ENTRANCES/CONCRETE WASHOUT.
2. EXCAVATION AND EMBANKMENT TO FORM THE PAVEMENT OR GRADED AREAS.
3. INSTALL STORM SEWER (ADJUST EXISTING SEDIMENT BARRIERS AS NECESSARY TO MAINTAIN SEDIMENT CONTROL).
4. INSTALL UNDERGROUND UTILITIES (ADJUST EXISTING SEDIMENT BARRIERS AS NECESSARY TO MAINTAIN SEDIMENT CONTROL); ADDITIONAL SEDIMENT BARRIERS SHALL BE UTILIZED AS REQUIRED TO BOUND THE DOWN SLOPE SIDE OF UTILITY CONSTRUCTION AND SOIL STOCKPILES.
5. INSTALL BUILDING.
6. FINAL GRADING (SEDIMENT BARRIERS SHALL BE MAINTAINED DOWN SLOPE FROM DISTURBED SOIL DURING THIS OPERATION).
7. INSTALL PAVING.
8. COMPLETION OF ONSITE STABILIZATION.
9. REMOVE PERIMETER EROSION CONTROL MEASURES.

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REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER M. BAKUNAS
License Number 9185
STATE OF ARKANSAS
01/17/2025
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FAYETTEVILLE, AR

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REV	DATE	DESCRIPTION
		REVISIONS

OVERALL EROSION CONTROL PLAN

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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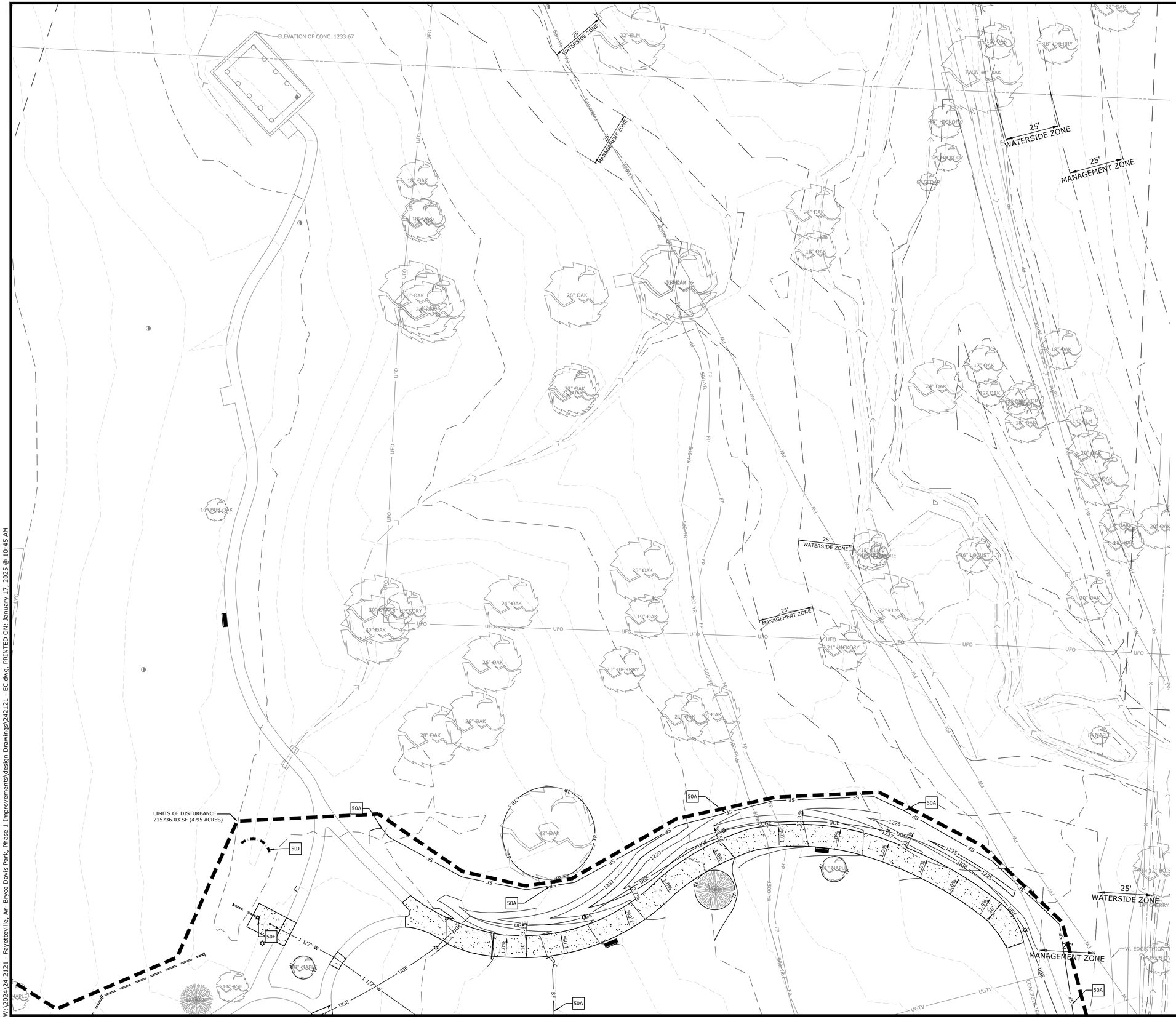

PLAN SCALE

20 0 10 20 40

(IN FEET)
1 inch = 20ft.

EXISTING LEGEND

- PROPERTY LINE
- R/W — RIGHT OF WAY
- SS — SANITARY SEWER LINE
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- POST (AS NOTED)
- BENCHMARK
- FOUND IRON PIN (AS NOTED)
- CONTROL POINT
- RR SPIKE
- BUSH
- DECIDUOUS TREE
- CONIFEROUS TREE

PROPOSED LEGEND

- GRADE BREAK
- FLOW LINE
- XXX — CONTOUR ELEVATION
- STORM DRAIN
- CATCH BASIN
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- FLARED END SECTION
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- LIMITS OF DISTURBANCE
- CONSTRUCTION ROCK ENTRANCE
- SF — SILT FENCE
- INLET PROTECTION
- SILT SOCK / BIG RED
- TP — TREE PRESERVATION FENCE

EROSION CONTROL DETAILS

50A SILT FENCE
50B SILT SOCK
50D TEMPORARY GRATE INLET, JUNCTION BOX, & OPEN LID SEDIMENT FILTER
50F TEMPORARY GRATE INLET SEDIMENT FILTER IN PAVEMENT
50J TEMPORARY ROCK CHECK DAM
50N TEMPORARY CONCRETE WASHOUT
50P TEMPORARY STABILIZED CONSTRUCTION ENTRANCE

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REV	DATE	DESCRIPTION

REVISIONS

EROSION CONTROL PLAN NORTH

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
1/17/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

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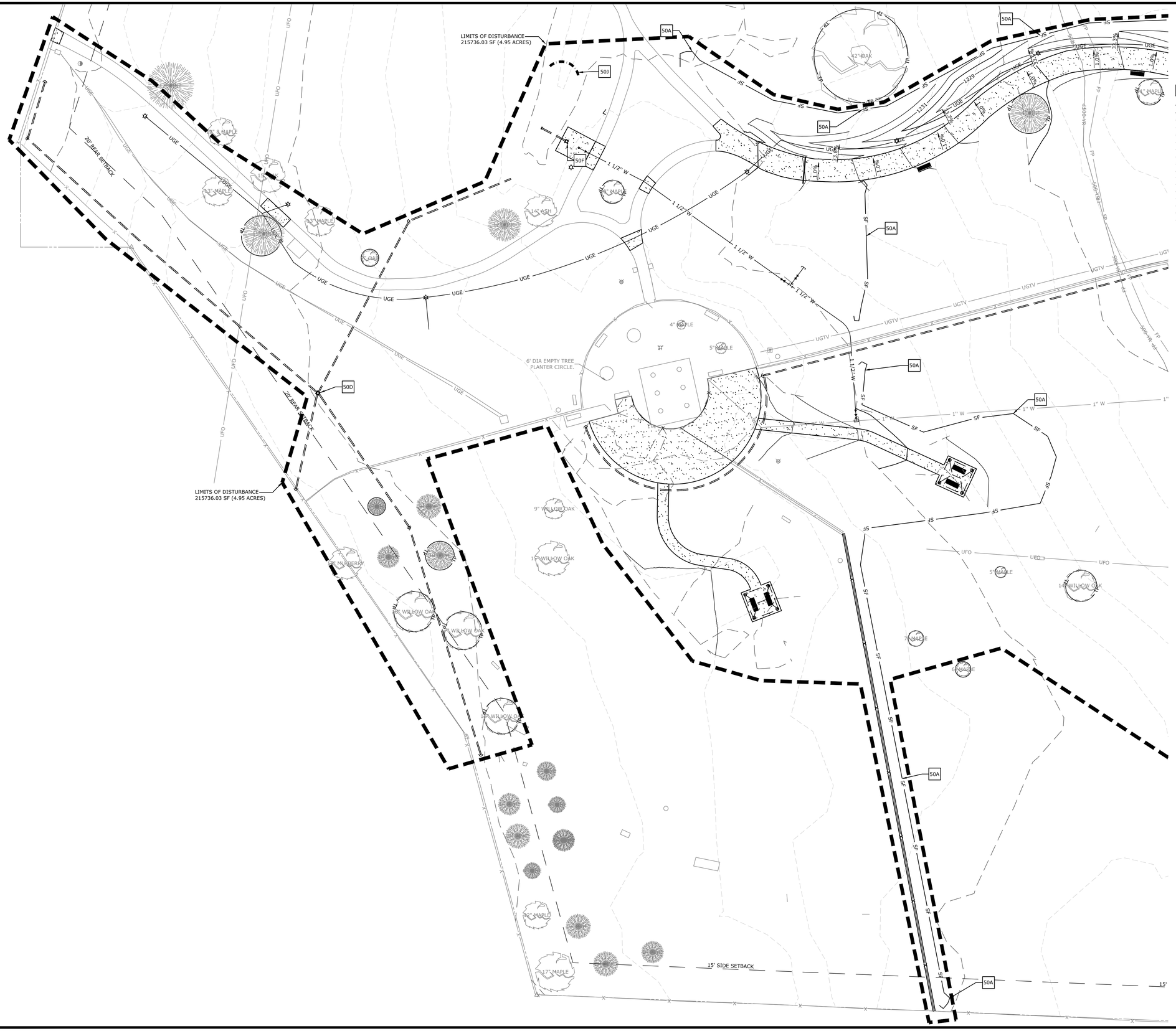

PLAN SCALE

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(IN FEET)
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- SF SILT FENCE
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- SILT SOCK / BIG RED
- TP TREE PRESERVATION FENCE

EROSION CONTROL DETAILS

50A SILT FENCE
50B SILT SOCK
50D TEMPORARY GRATE INLET, JUNCTION BOX, & OPEN LID SEDIMENT FILTER
50F TEMPORARY GRATE INLET SEDIMENT FILTER IN PAVEMENT
50J TEMPORARY ROCK CHECK DAM
50N TEMPORARY CONCRETE WASHOUT
50P TEMPORARY STABILIZED CONSTRUCTION ENTRANCE

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(479) 443-2377
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REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER M. BAKUNAS
License Number 0185
STATE OF ARKANSAS
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1595 N DARTMOUTH AVE
FAYETTEVILLE, AR

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REVISIONS

REV	DATE	DESCRIPTION

EROSION CONTROL PLAN WEST

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C5.2

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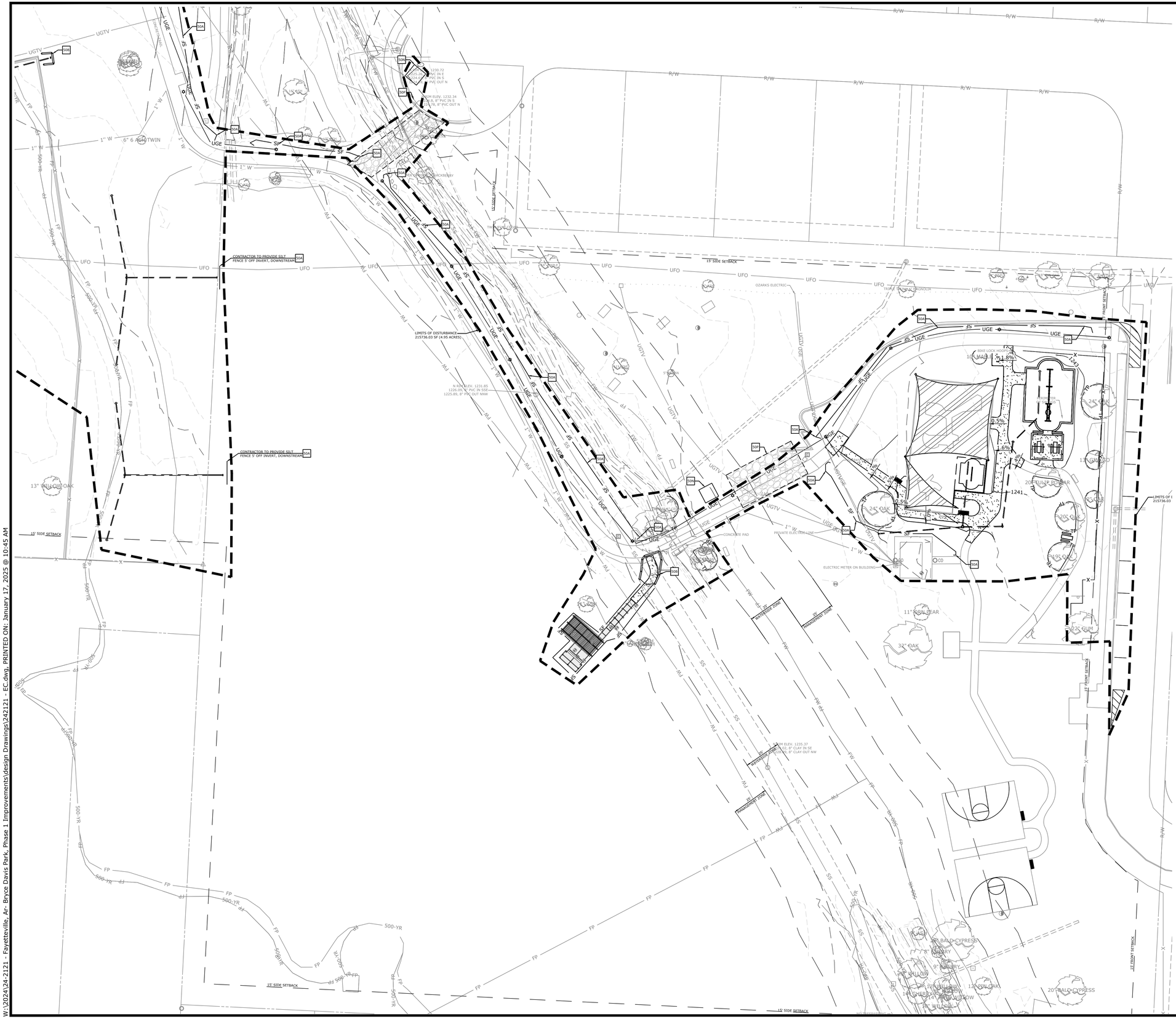

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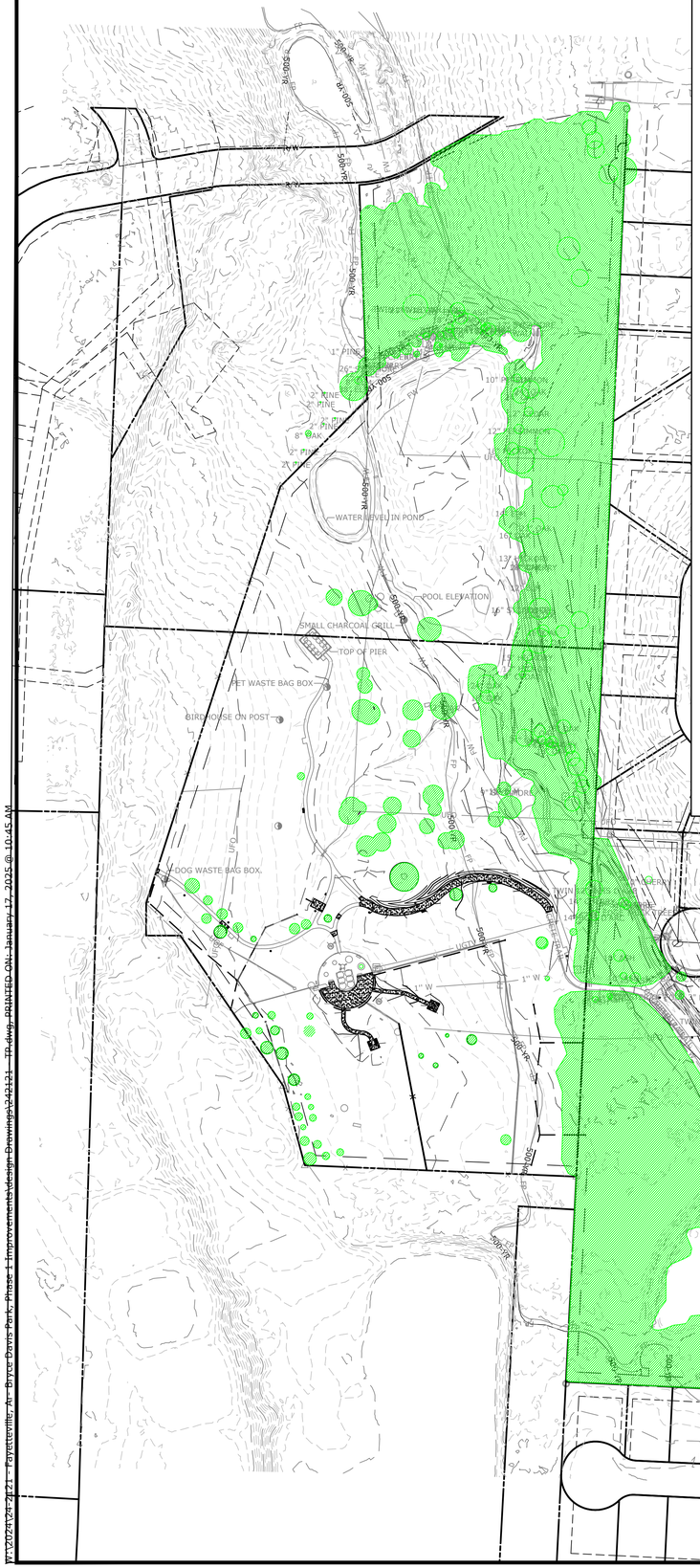

PLAN SCALE

100 0 50 100 200

(IN FEET)
1 inch = 100ft.

EXISTING LEGEND

PROPERTY LINE	POWER POLE
R/W RIGHT OF WAY	GUY WIRE w/ ANCHOR
SS SANITARY SEWER LINE	GAS METER
W WATER LINE	GAS RISER
GAS GAS LINE	STREET LIGHT POLE
UGT UNDERGROUND TELEPHONE	TELEPHONE PEDESTAL
UGE UNDERGROUND ELECTRIC	CABLE TV PEDESTAL
UGTV UNDERGROUND TELEVISION	CABLE VAULT
UFO UNDERGROUND FIBER	ELECTRIC VAULT
OHE OVERHEAD ELECTRIC	FIBER VAULT
FENCE	GAS VAULT
ROAD CENTERLINE	TELEPHONE VAULT
DITCH FLOWLINE	WATER VAULT
EASEMENT LINE	SIGN (AS NOTED)
GRAVEL LINE	POST (AS NOTED)
FLOOD WAY	BENCHMARK
FP FLOOD PLAIN	FOUND IRON PIN (AS NOTED)
FIRE HYDRANT	CONTROL POINT
WATER METER	RR SPIKE
WATER VALVE	BUSH
WATER FAUCET	DECIDUOUS TREE
SANITARY SEWER MH	CONIFEROUS TREE
CLEAN-OUT	
DRAINAGE MH	

PROPOSED LEGEND

FENCE	
CONCRETE PAVEMENT	
CONCRETE SIDEWALK	
EXISTING TREE CANOPY	

GENERAL TREE PRESERVATION NOTES

1. NO TREES ARE TO BE REMOVED.
2. TREE PRESERVATION FENCING IS SHOW FOR TREES NEAR CONSTRUCTION.
3. EXISTING TREE SPECIES AND CALIPER ARE SHOWN ON SURVEY.

Tree Preservation Calculations Square Feet

	Square Feet	Percent of site
Total Site Area *Minus Right of Way and Easements	1,139,094	100%
*Zoning Designation * Select Below with drop down arrow*		
P-1, Institutional	284,774	25%
*HHOD * Select Below with Drop Down Arrow*		
No	0	0%
Total Canopy for Minimum Preservation Requirements	514,937	25.0%
Existing Tree Canopy * Minus Right of Way and Easements	514,937	45.2%
Tree Canopy Preserved	514,937	45.2%
Tree Canopy Removed *On Site	0	0.0%
Tree Canopy Removed *Off Site	0	
Tree Canopy Removed Total	0	0.0%
Removed Below Minimum	**0**	
Mitigation Requirements	**0**	

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License Number 985
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FAYETTEVILLE, AR

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REVISIONS

REV	DATE	DESCRIPTION

OVERALL TREE PRESERVATION PLAN

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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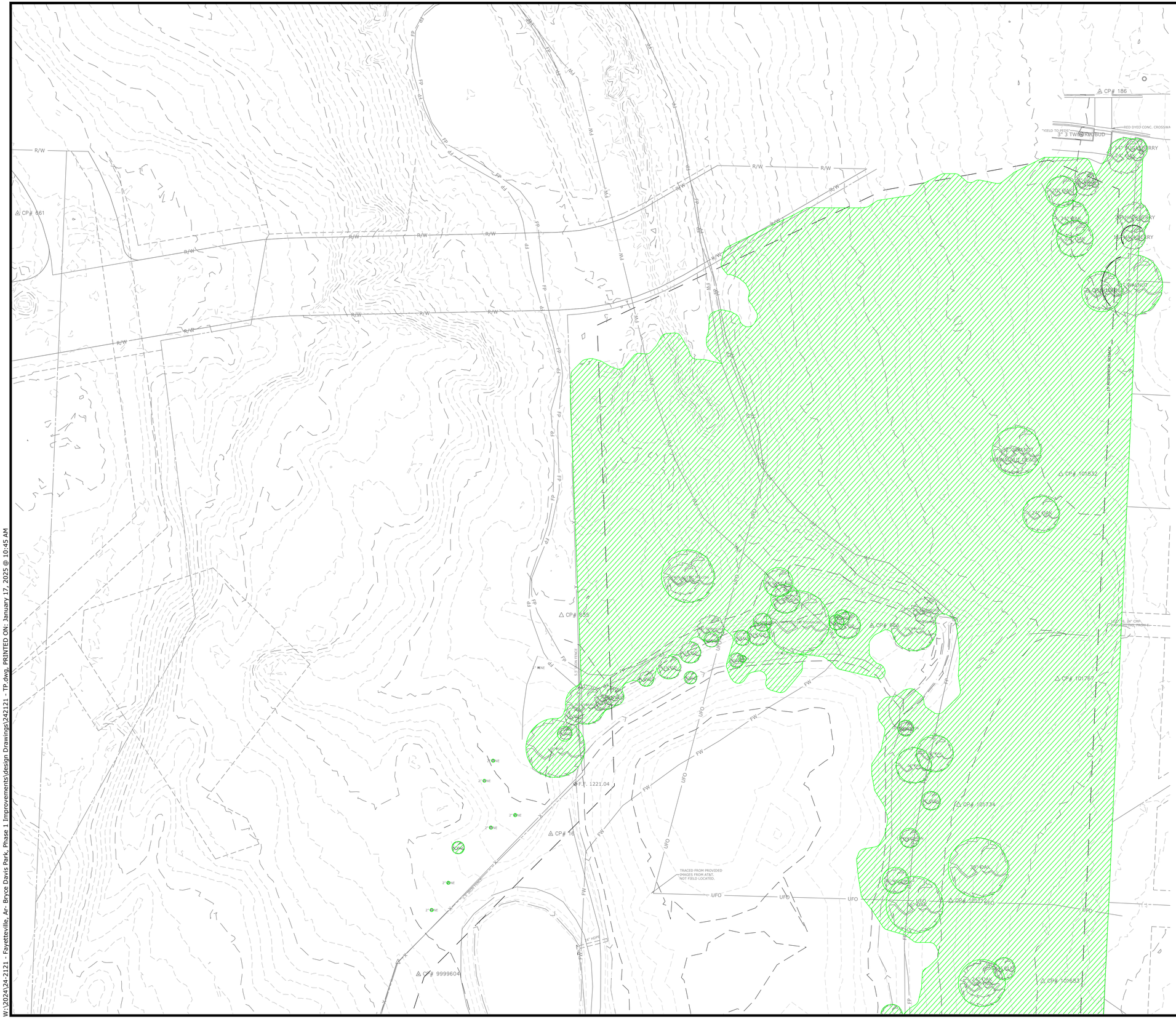

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REVISIONS

REV	DATE	DESCRIPTION

TREE PRESERVATION PLAN NORTH

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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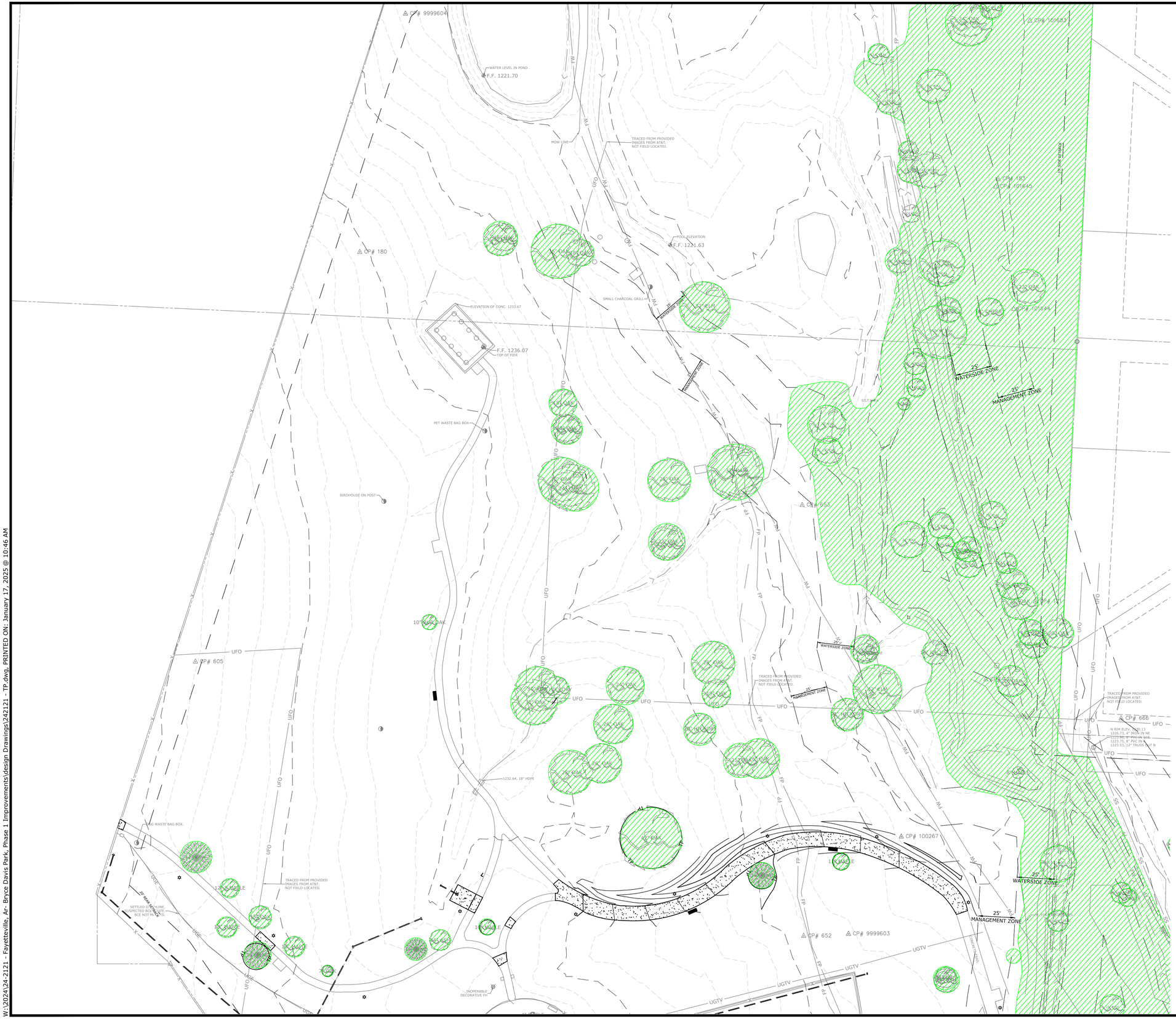

PLAN SCALE

30 0 15 30 60

(IN FEET)
1 inch = 30ft.

EXISTING LEGEND

- PROPERTY LINE
- R/W — RIGHT OF WAY
- SS — SANITARY SEWER LINE
- W — WATER LINE
- GAS — GAS LINE
- UGT — UNDERGROUND TELEPHONE
- UGE — UNDERGROUND ELECTRIC
- UGTV — UNDERGROUND TELEVISION
- UFO — UNDERGROUND FIBER
- OHE — OVERHEAD ELECTRIC
- X — X — FENCE
- ROAD CENTERLINE
- DITCH FLOWLINE
- EASEMENT LINE
- GRAVEL LINE
- FLOOD WAY
- FP — FLOOD PLAIN
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- WATER FAUCET
- SANITARY SEWER MH
- CLEAN-OUT
- DRAINAGE MH
- POWER POLE
- GUY WIRE w/ ANCHOR
- GAS METER
- GAS RISER
- STREET LIGHT POLE
- TELEPHONE PEDESTAL
- CABLE TV PEDESTAL
- CABLE VAULT
- ELECTRIC VAULT
- FIBER VAULT
- GAS VAULT
- TELEPHONE VAULT
- WATER VAULT
- SIGN (AS NOTED)
- POST (AS NOTED)
- BENCHMARK
- FOUND IRON PIN (AS NOTED)
- CONTROL POINT
- RR SPIKE
- BUSH
- DECIDUOUS TREE
- CONIFEROUS TREE

PROPOSED LEGEND

- TP — TREE PROTECTION FENCE
- GRADE BREAK
- FLOWLINE
- XXX — CONTOUR ELEVATION
- STORM DRAIN
- CATCH BASIN
- EXISTING TREE CANOPY

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REV	DATE	DESCRIPTION

TREE PRESERVATION PLAN SOUTH

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DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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EXISTING LEGEND

PROPERTY LINE		POWER POLE	
R/W	RIGHT OF WAY	GUY WIRE w/ ANCHOR	
SS	SANITARY SEWER LINE	GAS METER	
W	WATER LINE	GAS RISER	
GAS	GAS LINE	STREET LIGHT POLE	
UGT	UNDERGROUND TELEPHONE	TELEPHONE PEDESTAL	
UGE	UNDERGROUND ELECTRIC	CABLE TV PEDESTAL	
UGTV	UNDERGROUND TELEVISION	CABLE VAULT	
UFO	UNDERGROUND FIBER	ELECTRIC VAULT	
OHE	OVERHEAD ELECTRIC	FIBER VAULT	
FENCE		GAS VAULT	
ROAD CENTERLINE		TELEPHONE VAULT	
DITCH FLOWLINE		WATER VAULT	
EASEMENT LINE		SIGN (AS NOTED)	
GRAVEL LINE		POST (AS NOTED)	
FLOOD WAY		BENCHMARK	
FP	FLOOD PLAIN	FOUND IRON PIN (AS NOTED)	
FIRE HYDRANT		CONTROL POINT	
WM	WATER METER	RR SPIKE	
WATER VALVE		BUSH	
WATER FAUCET		DECIDUOUS TREE	
SS	SANITARY SEWER MH	CONIFEROUS TREE	
CLEAN-OUT			
DRAINAGE MH			

PROPOSED LEGEND

TP	TREE PROTECTION FENCE
	GRADE BREAK
	FLOWLINE
XXX	CONTOUR ELEVATION
	STORM DRAIN
	CATCH BASIN
	EXISTING TREE CANOPY

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REVISIONS	DESCRIPTION	DATE
REV		

TREE PRESERVATION PLAN WEST

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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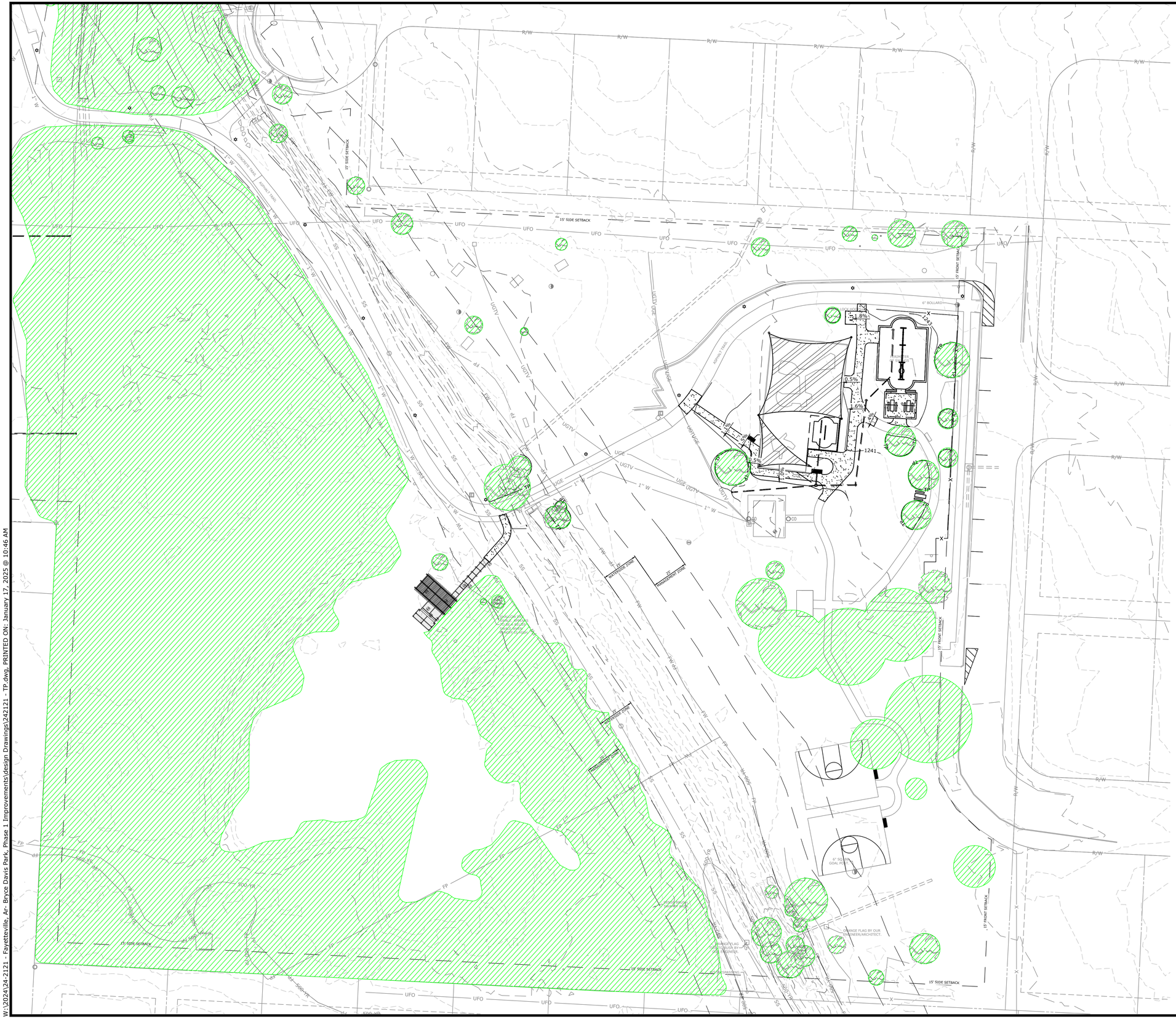

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REVISIONS

REV	DATE	DESCRIPTION

TREE PRESERVATION PLAN EAST

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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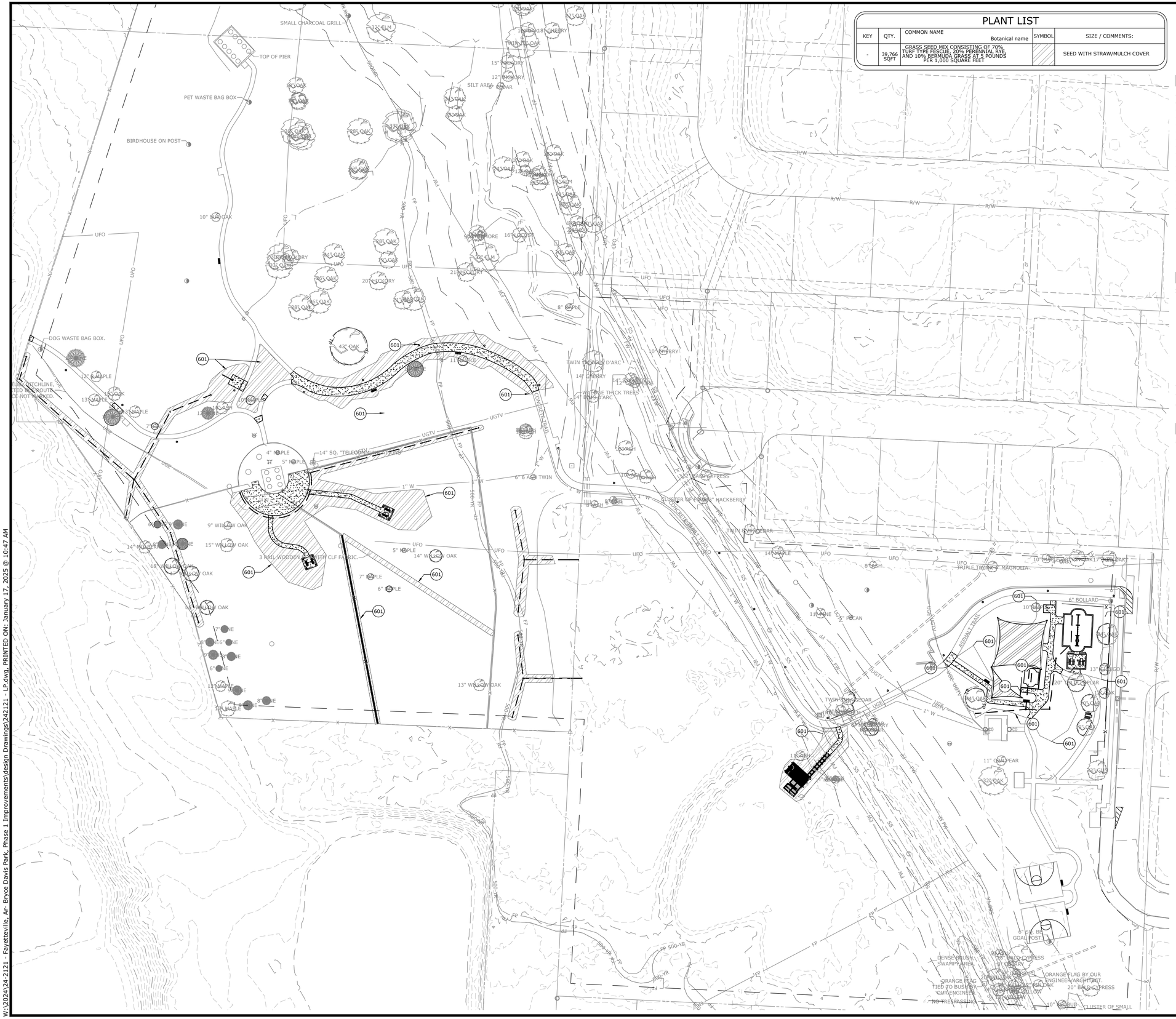

PLANT LIST

KEY	QTY.	COMMON NAME / Botanical name	SYMBOL	SIZE / COMMENTS:
-	39,766 SQFT	GRASS SEED MIX CONSISTING OF 70% TURF TYPE FESCUE, 20% PERENNIAL RYE, AND 10% BERMUDA GRASS AT 5 POUNDS PER 1,000 SQUARE FEET		SEED WITH STRAW/MULCH COVER

PLAN SCALE

50 0 25 50 100

(IN FEET)
1 inch = 50ft.

EXISTING LEGEND

- PROPERTY LINE
- R/W — RIGHT OF WAY
- SS — SANITARY SEWER LINE
- W — WATER LINE
- GAS — GAS LINE
- UGT — UNDERGROUND TELEPHONE
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- UGTV — UNDERGROUND TELEVISION
- UFO — UNDERGROUND FIBER
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- DITCH FLOWLINE
- EASEMENT LINE
- GRAVEL LINE
- FLOOD WAY
- FP — FLOOD PLAIN
- FIRE HYDRANT
- WM — WATER METER
- WV — WATER VALVE
- WF — WATER FAUCET
- SS — SANITARY SEWER MH
- CO — CLEAN-OUT
- DRAINAGE MH
- POWER POLE
- GUY WIRE w/ ANCHOR
- GAS METER
- GAS RISER
- STREET LIGHT POLE
- TELEPHONE PEDESTAL
- CABLE TV PEDESTAL
- V — CABLE VAULT
- E — ELECTRIC VAULT
- F — FIBER VAULT
- G — GAS VAULT
- T — TELEPHONE VAULT
- W — WATER VAULT
- SIGN (AS NOTED)
- POST (AS NOTED)
- BENCHMARK
- FOUND IRON PIN (AS NOTED)
- CONTROL POINT
- RR SPIKE
- BUSH
- DECIDUOUS TREE
- CONIFEROUS TREE

PROPOSED LEGEND

- STORM DRAIN
- CATCH BASIN
- FH — FIRE HYDRANT
- CLEAN-OUT
- LIGHT POLE
- SEED (SEE PLANTING LIST)
- UGE — UNDERGROUND ELECTRIC LINE
- X"W — WATER LINE
- TP — TREE PROTECTION FENCE

LANDSCAPE KEYNOTES

601 SEEDED AREA

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REVISIONS	REV	DATE	DESCRIPTION

OVERALL LANDSCAPE PLAN

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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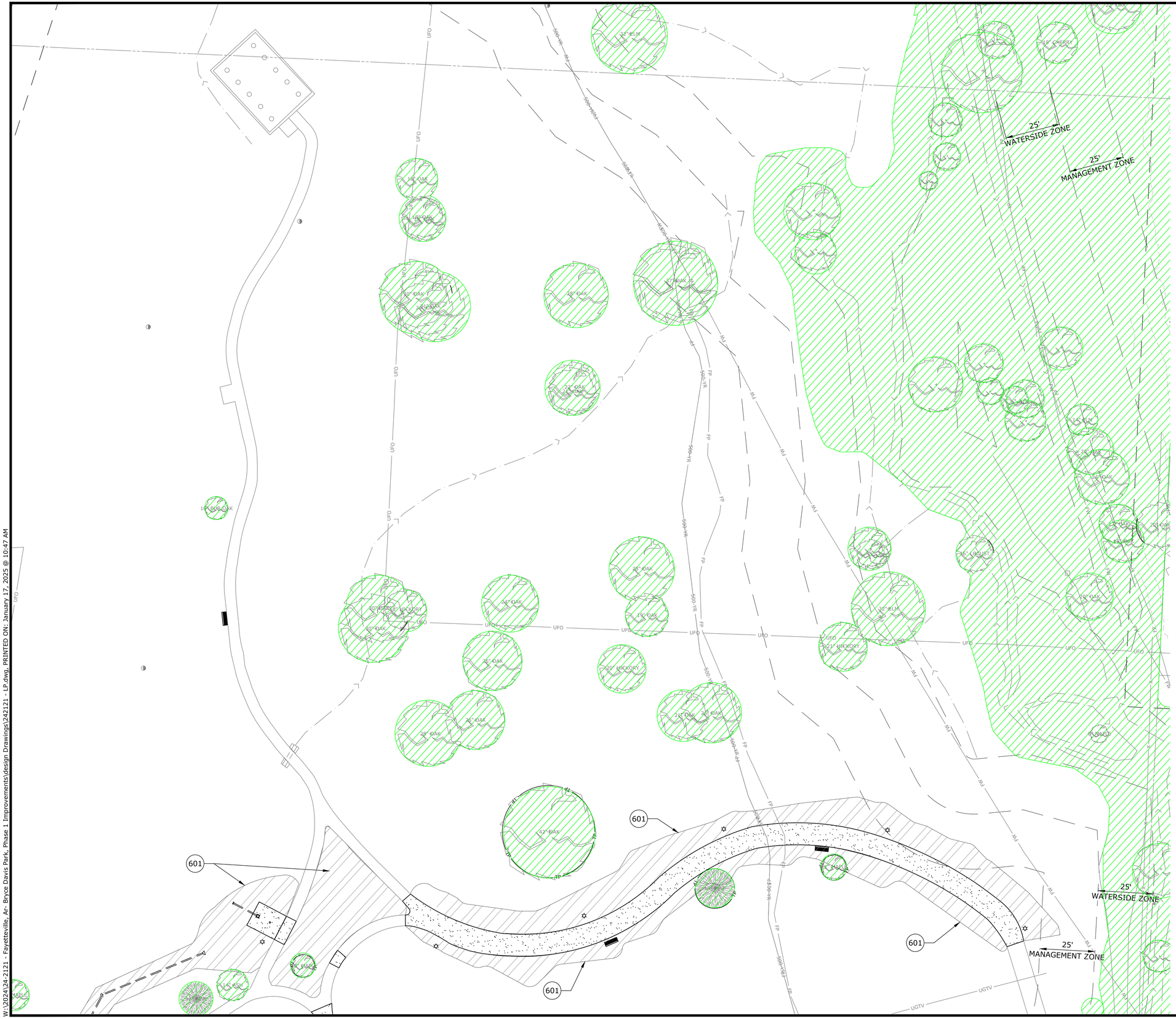

PLAN SCALE

0 10 20 40

(IN FEET)

EXISTING LEGEND

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- STORM DRAIN
- CATCH BASIN
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- LIGHT POLE
- SEED (SEE PLANTING LIST)
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LANDSCAPE KEYNOTES

601 SEEDED AREA

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01/17/2025
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FAYETTEVILLE, AR

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REV	DATE	DESCRIPTION

REVISIONS

LANDSCAPE PLAN NORTH

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
1/17/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

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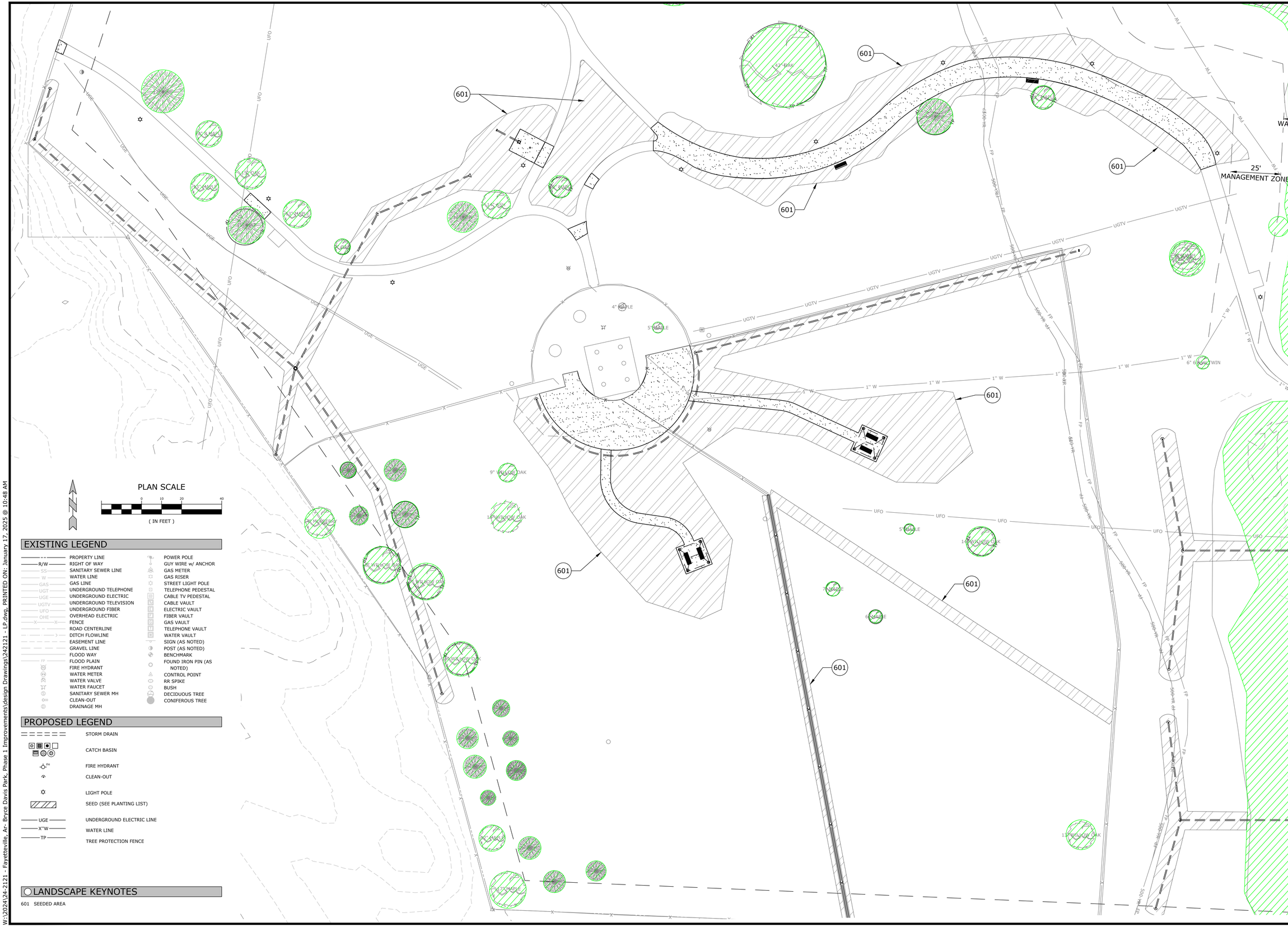

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- SS — SANITARY SEWER LINE
- W — WATER LINE
- GAS — GAS LINE
- UGT — UNDERGROUND TELEPHONE
- UGE — UNDERGROUND ELECTRIC
- UGTV — UNDERGROUND TELEVISION
- UFO — UNDERGROUND FIBER
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- ROAD CENTERLINE
- DITCH FLOWLINE
- EASEMENT LINE
- GRAVEL LINE
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- FP — FLOOD PLAIN
- FIRE HYDRANT
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- GAS VAULT
- TELEPHONE VAULT
- WATER VAULT
- SIGN (AS NOTED)
- POST (AS NOTED)
- BENCHMARK
- FOUND IRON PIN (AS NOTED)
- CONTROL POINT
- RR SPIKE
- BUSH
- DECIDUOUS TREE
- CONIFEROUS TREE

PROPOSED LEGEND

- STORM DRAIN
- CATCH BASIN
- FH — FIRE HYDRANT
- CLEAN-OUT
- LIGHT POLE
- SEED (SEE PLANTING LIST)
- UGE — UNDERGROUND ELECTRIC LINE
- X"W — WATER LINE
- TP — TREE PROTECTION FENCE

LANDSCAPE KEYNOTES

601 SEEDED AREA

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FAYETTEVILLE, AR

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REV	DATE	DESCRIPTION

REVISIONS

LANDSCAPE PLAN WEST

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
1/17/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

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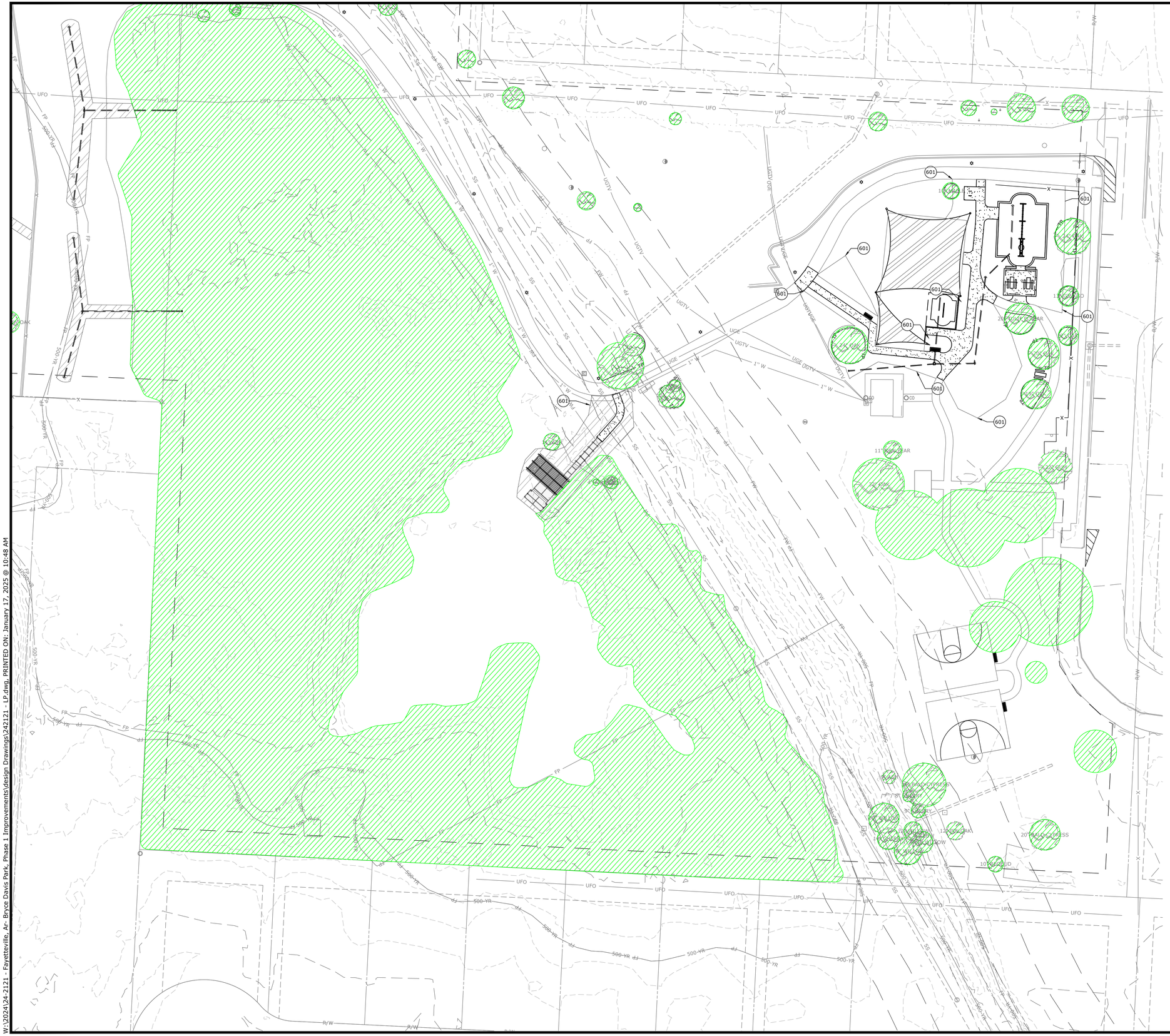

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REVISIONS

REV	DATE	DESCRIPTION

LANDSCAPE PLAN EAST

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
1/17/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

C6.8

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CITY OF FAYETTEVILLE LANDSCAPE NOTES

ALL TREES AND NATURAL AREAS SHOWN ON THIS PLAN TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING.

1. PROTECTIVE FENCES SHALL BE ERECTED ACCORDING TO CITY OF FAYETTEVILLE STANDARDS FOR TREE PROTECTION.
2. PROTECTIVE FENCES SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE PREPARATION WORK AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT.
3. EROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED INA MANNER WHICH DOES NOT RESULT IN SOIL BUILD-UP WITHIN TREE DRIPLINES.
4. PROTECTIVE FENCES SHALL SURROUND THE TREES OR GROUP OF TREES AND WILL BE LOCATED AT THE DRIPLINE FOR NATURAL AREAS, PROTECTIVE FENCES SHALL FOLLOW THE LIMIT ON CONSTRUCTION IN ORDER TO PREVENT THE FOLLOWING:
   A. SOIL COMPACTION IN THE ROOT ZONE OF AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT.
   B. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN 6") ROOT TRENCHING NOT VIEWED BY CITY ARBORISTS.
   C. WOULDS TO EXPOSED ROOTS, TRUNK OR LIMBS BY MECHANICAL EQUIPMENT.
   D. OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CONCRETE TRUCK CLEANING AND FIRES.
6. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIPLINES MAY BE PERMITTED IN THE FOLLOWING CASES:
   A. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT.
   B. WHERE PERMEABLE PAING IS TO BE INSTALLED WITHIN A TREE'S DRIPLINE, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA (PRIOR TO SITE GRADING SO THIS AREA IS GRADED SEPARATELY PRIOR TO PAVING INSTALLATION TO MINIMIZE ROOT DAMAGE).
   C. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE TO ALLOW 6 TO 10 FEET OF WORK SPACE.
   D. WHERE THERE ARE SEVERE SPACE CONSTRAINTS DUE TO TRACT SIZE OR OTHER SPECIAL REQUIREMENTS.
7. WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN 4 FEET TO A TRUNK, PROTECT THE TRUNK WITH STRAPPED ON PLANKING TO HEIGHT OF 8 FEET (OR LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.
8. TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT REES TO BE PRESERVED.
9. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOPSOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN 2 DAYS, COVER WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
10. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.
11. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN 4 INCHES SHALL BE PERMITTED WITHIN THE DRIPLINE OF TREES. NO SOIL IS PERMITTING ON THE ROOT FLARE OF ANY TREE.
12. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND EQUIPMENT SHALL TAKE PLACE BEFORE CONSTRUCTION BEGINS.
13. ALL FINISHED PRUNING MUST BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE AMERICAN NATIONAL STANDARD, ANSI-A300 PRUNING, 2008 OR LATER). A CITY CERTIFIED TREE PRUNER MUST BE RETAINED TO MAKE A PRUNING CUTS. A LIST OF CERTIFIED TREE PRUNERS IS AVAILABLE FROM THE URBAN FORESTER.
14. DEVIATIONS FROM THE ABOVE NOTES MAY BE CONSIDERED ORDINANCE VIOLATIONS IF THERE IS SUBSTANTIAL NON-COMPLIANCE OR IF A TREE SUSTAINS DAMAGE AS A RESULT.

GENERAL TREE PRESERVATION NOTES

1. NO TREES ARE TO BE REMOVED.
2. TREE PRESERVATION FENCING IS SHOW FOR TREES NEAR CONSTRUCTION.
3. EXISTING TREE SPECIES AND CALIPER ARE SHOWN ON SURVEY.

GENERAL SOLID SOD NOTES

1. ADJUST FINE GRADE TO ACHIEVE POSITIVE DRAINAGE AWAY FROM BUILDINGS. PROVIDE UNIFORM ROUNDING AT TOP AND BOTTOM OF SLOPES AND OTHER BREAKS IN GRADE. CORRECT ANY IRREGULARITIES AND / OR AREAS WHERE WATER MAY STAND.
2. ALL LAWN AREAS TO RECEIVE SOLID SOD SHALL BE LEFT IN A MAXIMUM OF 1 1/2" BELOW FINAL FINISH GRADE. CONTRACTOR TO COORDINATE OPERATIONS WITH ON-SITE CONSTRUCTION MANAGER.
3. CONTRACTOR TO COORDINATE WITH ON-SITE CONSTRUCTION MANAGER FOR AVAILABILITY OF EXISTING TOPSOIL.
4. IMPORTED TOPSOIL SHALL BE NATURAL, FRIABLE SOIL FROM THE REGION KNOWN AS BOTTOM LAND SOIL; FREE FROM LUMPS, CLAY TOXIC SUBSTANCES, ROOTS, DEBRIS, VEGETATION, STONES; CONTAINING NO SALT AND BE BLACK TO BROWN IN COLOR.
5. ALL LAWN AREAS TO BE FINE GRADED, SETTLED, AND FINISH GRADE APPROVED BY THE OWNER'S REPRESENTATIVE OR LANDSCAPE ARCHITECT PRIOR TO SOD INSTALLATION.
6. ALL ROCKS 3/4" DIAMETER AND LARGER, DIRT CLODS, STICKS, CONCRETE SPOILS, CONSTRUCTION WASTE, ETC. SHALL BE REMOVED PRIOR TO PLACING TOPSOIL AND ANY LAWN INSTALLATION.
7. PLANT SOD BY HAND TO COVER INDICATED AREA COMPLETELY. INSURE EDGES OF SOD ARE TOUCHING. TOP DRESS JOINTS BY HAND WITH TOPSOIL TO FILL VOIDS.
8. ROLL GRASS AREAS TO ACHIEVE A SMOOTH, EVEN SURFACE FREE FROM UNNATURAL UNDULATIONS.
9. FERTILIZE ALL SOD AT THE TIME OF PLANTING WITH A TIME RELEASE FERTILIZER PER BRAND'S SPECIFIED APPLICATION RATES.
10. WATER SOD THOROUGHLY AS SOD OPERATION PROGRESSES.
11. IF SOD IS INSTALLED ON SLOPES OF 3:1 OR GREATER, SOD SHALL BE STAKED TO AVOID SLIPPING OR SLIDING APART. STAKING OR STAPLES SHALL BE INSTALLED FLUSH AS TO NOT CREATE A MAINTENANCE ISSUE WITH CARE EQUIPMENT.
12. CONTRACTOR SHALL MAINTAIN ALL LAWN AREAS UNTIL FINAL ACCEPTANCE. THIS SHALL INCLUDE, BUT NOT LIMITED TO: MOWING, WATERING, WEEDING, CULTIVATING, CLEANING AND REPLACING DEAD OR BARE AREAS TO KEEP PLANTS IN VIGOROUS, HEALTHY CONDITIONS.
13. CONTRACTOR SHALL GUARANTEE ESTABLISHMENT OF AN ACCEPTABLE TURF AREA AND SHALL PROVIDE REPLACEMENT FROM LOCAL SUPPLY IF NECESSARY.
14. IF INSTALLATION OCCURS BETWEEN SEPTEMBER 1ST AND MARCH 1ST, ALL SOD AREAS TO BE OVER-SEEDED WITH ANNUAL RYE GRASS SEED AT 5LBS / 1000 SF.

GENERAL PLANTING NOTES

1. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING ALL PLANTED AREAS. ALL DELETERIOUS MATERIALS SUCH AS ROCK, TRASH, CONSTRUCTION DEBRIS, AGGREGATE BASE MATERIAL, ASPHALT, ETC. SHALL BE REMOVED PRIOR TO ANY FILL OPERATIONS. FILL ALL PLANTING AREAS WITH CLEAN EARTHEN FILL. SOIL SHALL BE FREE OF HEAVY, STIFF CLAY AND ANY DELETERIOUS MATERIAL OVER ONE INCH IN SIZE. THE TOP SIX INCHES OF FILL MATERIAL STRIPPED FROM SITE MAY BE UTILIZED FOR PLANTER OR TOPSOIL FILL IF PRIOR APPROVAL HAS BEEN OBTAINED FROM THE OWNER'S REPRESENTATIVE AND / OR LANDSCAPE ARCHITECT.
2. FINISH GRADE OF LANDSCAPE AREAS MUST BE GRADED TO EITHER 1 1/2" BELOW ADJACENT PAVEMENT SURFACES TO ALLOW FOR TURF OR 3" BELOW ADJACENT PAVEMENT SURFACES TO ALLOW FOR MULCH.
3. LOCATE SHRUBS A DISTANCE OF HALF OF THEIR AVERAGE MATURE SPREAD AWAY FROM WALKS, STRUCTURES, CONCRETE PADS, ETC. CONTRACTOR TO LOCATE GROUND COVER PLANTINGS A MINIMUM OF 2' FROM WALKS, STRUCTURES, CONCRETE PADS, ETC.
4. ALL LAWN AREAS NOT OTHERWISE BORDERED BY WALKS, OR OTHER STRUCTURES, SHALL HAVE MANUFACTURED EDGING AS REQUIRED.
5. TREES PLANTED ADJACENT TO PUBLIC ROADS AND PEDESTRIAN SIDEWALKS SHALL BE PRUNED SUFFICIENTLY TO AVOID VISUAL BLOCKS TO INTERSECTING VEHICULAR ACCESS OR INTERFERENCE WITH PEDESTRIAN WALKWAYS. TREES WITH A 4" OR LARGER CALIPER SHALL BE PRUNED UP TO 6'-0" ABOVE PAVEMENTS.
6. TOPSOIL DEPTH SHALL BE AS FOLLOWS :
   PLANTER BEDS - 12" MINIMUM
   GRASS / SOD AREAS - 4" MINIMUM (AFTER COMPACTION)
7. BACKFILL ALL TREES AND SHRUBS NOT IN PLANTING BEDS WITH A MIXTURE OF 3 PARTS NATIVE SOIL AND 1 PART ORGANIC COMPOST.
8. THE LANDSCAPE CONTRACTOR SHALL WATER TEST ALL PLANTING HOLES PRIOR TO PLANTING. IF HOLES DO NOT DRAIN PROPERLY, EXCAVATE FURTHER UNTIL IMPERMEABLE LAYER IS BREACHED. EXCAVATED PLANT PITS SHALL HAVE POSITIVE DRAINAGE. PLANT PITS (WHEN FULLY FLOODED WITH WATER) SHALL DRAIN WITHIN 1 HOUR OF FILLING. ENSURE THAT ALL PLANT PITS HAVE POSITIVE DRAINAGE.
9. ALL PLANTING BEDS SHALL BE TREATED WITH A PRE-EMERGENT HERBICIDE. PRE-EMERGENT HERBICIDE SHALL BE APPLIED PER MANUFACTURE'S RECOMMENDATIONS AND SHALL OCCUR AFTER TOPSOIL PLACEMENT, BUT PRIOR TO INSTALLATION OF PLANT MATERIALS AND MULCH.
10. FERTILIZE ALL PLANTS AT THE TIME OF PLANTING WITH A TIME RELEASE FERTILIZER PER BRAND'S SPECIFIED APPLICATION RATES.
11. ALL HERBACEOUS PLANTING BED SOILS SHALL BE AMENDED WITH 2" OF ORGANIC COMPOST TILLED IN TO A MINIMUM DEPTH OF 6".
12. ALL TREES AND SHRUBS SHALL BE PLANTED IN SUCH A MANNER AS TO ENSURE THEIR SURVIVAL.
13. ANY ROPE OR WIRE BINDING THE BALL SHALL BE CUT PRIOR TO PREVENT GIRDLING OF THE TREE. REMOVE WIRE, TWINE, AND BURLAP FROM THE TOP HALF OF ALL B&B PLANT MATERIAL.
14. IF A NON-BIODEGRADABLE MATERIAL IS USED AROUND THE BALL, IT SHALL BE COMPLETELY REMOVED PRIOR TO BACKFILLING.
15. PRIOR TO INSTALLATION, THE ROOTS OF CONTAINER GROWN STOCK SHALL BE SEPARATED OR SPLIT TO ENSURE PROPER ROOT DEVELOPMENT.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING TO MAINTAIN HEALTHY PLANT CONDITIONS.
17. ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, DEAD, OR REJECTED (PRIOR TO SUBSTANTIAL COMPLETION) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE MEETING ALL PLANT LIST SPECIFICATIONS. TREES & SHRUBS AHALL BE PLANTED AS SOON AS POSSIBLE AFTER DELIVERY.
18. ALL TREES MUST BE STRAIGHT-TRUNKED, FULL-HEADED, AND MEET ALL REQUIREMENTS SPECIFIED.
19. NO SUBSTITUTIONS OR ALTERNATIVES WILL BE ALLOWED FOR GROUND SURFACE MATERIALS UNLESS APPROVED IN WRITING BY THE OWNER'S REPRESENTATIVE AND / OR LANDSCAPE ARCHITECT.
20. MAINTAIN 5' MINIMUM HORIZONTAL SEPARATION BETWEEN TREE PLANTINGS AND ALL UTILITIES UNLESS OTHERWISE SPECIFIED.
21. MULCH (HARDWOOD, ROCK, OR OTHER SPECIFIED MATERIAL) SHALL BE PLACED IN ALL PLANT BEDS AND AROUND ALL TREES. SINGLE TREES OR SHRUBS SHALL HAVE MULCHING TO THE OUTSIDE EDGE OF THE MANUFACTURED EDGING OR LANDSCAPE ISLAND.
22. THE FOLLOWING PLANTING SEASONS ARE RECOMMENDED:
    EVERGREEN SHRUBBERY: SPRING, SUMMER, FALL
    DECIDUOUS SHRUBBERY & TREES: FALL
    EVERGREEN TREES: SPRING, SUMMER, FALL

PLANT GUARANTEE, REPLACEMENT, & MAINTENANCE

A. GUARANTEE:
   ACCEPTANCE OF GRADING AND SEEDING SHALL BE BY LANDSCAPE ARCHITECT AND / OR OWNER. THE CONTRACTOR SHALL ASSUME MAINTENANCE RESPONSIBILITIES UNTIL FINAL ACCEPTANCE. MAINTENANCE SHALL INCLUDE, BUT NOT LIMITED TO: : WATERING, WEEDING, RE-SEEDING, AND OTHER OPERATIONS NECESSARY TO KEEP ALL LAWN AREAS IN A THRIVING CONDITION. UPON FINAL ACCEPTANCE, OWNER SHALL ASSUME ALL MAINTENANCE RESPONSIBILITIES. AFTER LAWN AREAS HAVE GERMINATED, AREAS WHICH FAIL TO SHOW A UNIFORM STAND OF GRASS FOR ANY REASON WHATSOEVER SHALL BE RE-SEEDED REPEATEDLY UNTIL ALL AREAS ARE COVERED WITH A SATISFACTORY STAND OF GRASS. MINIMUM ACCEPTANCE OF SEEDED LAWN AREAS MAY INCLUDE SCATTERED BARE SPOTS, NONE OF WHICH ARE LARGER THAN 1 SQUARE FOOT, AND WHEN COMBINED DO NOT EXCEED 2% OF TOTAL SEEDED LAWN AREA.

B. REPLACEMENT:
   ANY PLANT UNDER THIS SPEC WHICH IS DEAD, MISSING, UNHEALTHY, OR OTHERWISE NOT ACCEPTABLE AND NOT IN SATISFACTORY GROWING CONDITION AT SUBSTANTIAL COMPLETION, SHALL BE REMOVED FROM SITE AND REPLACED WITH SUITABLE, ACCEPTABLE PLANT AS SPECIFIED, WITHIN FIVE (5) DAYS.

   THE CONTRACTOR SHALL PROVIDE EITHER A GUARANTEE, MAINTENANCE CONTRACT, OR BOND OF ALL PLANT MATERIAL FOR A PERIOD OF TIME SPECIFIED BY THE LOCAL JURISDICTION OR ONE (1) YEAR (WHICHEVER IS GREATER). GUARANTEE, MAINTENANCE CONTRACT, OR BOND SHALL BEGIN ON THE DATE OF FINAL ACCEPTANCE. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE SPECIFIED TIME PERIOD.

GENERAL HERBICIDES NOTES

1. APPLICATION OF HERBICIDES SHALL BE IN COMPLIANCE WITH STATE PESTICIDES REGULATIONS. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO CONSULT WITH THE REGULATORY AGENCIES FOR LOCAL HERBICIDES APPLICATION REQUIREMENTS.
2. IF THERE IS A DISCREPANCY BETWEEN STATE REGULATIONS AND ADDITIONAL REQUIREMENTS BELOW, MOST STRINGENT SHALL RULE
3. NO AERIAL APPLICATION OF HERBICIDES IS PERMITTED ON SITE.
4. CARCINOGENS AND EPA TOXIC CATEGORY I AND II ARE PROHIBITED TO USE ON SITE.

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REVISIONS		
REV	DATE	DESCRIPTION

LANDSCAPE PLAN NOTES & DETAILS

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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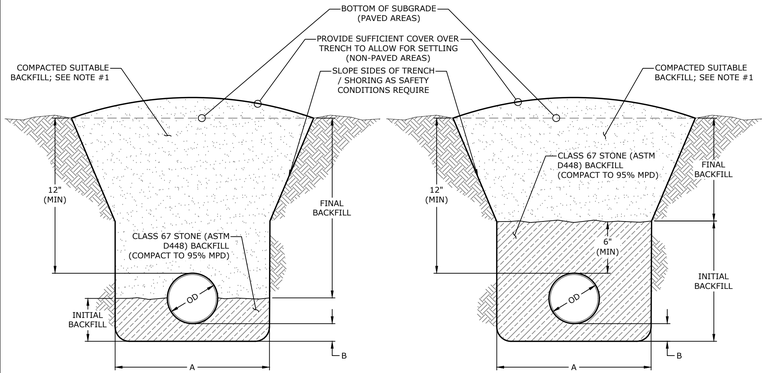
NOTES:
1. FOR AREAS WHERE PIPE IS LOCATED UNDER NON-PAVED AREAS, BACKFILL SHALL BE COMPACTED SUITABLE NATIVE MATERIAL (DO NOT INCORPORATE FROZEN MATERIAL OR SOFT, MUCK, OR HIGHLY COMPRESSIBLE MATERIALS INTO FILL). FOR AREAS WHERE PIPE IS LOCATED UNDER PAVED AREAS, BACKFILL SHALL BE SELECT FILL COMPACTED PER THE GEOTECHNICAL REPORT PROJECT NO. [PROJECT #] PREPARED BY [GEOTECH COMPANY NAME] DATED [REPORT DATE].

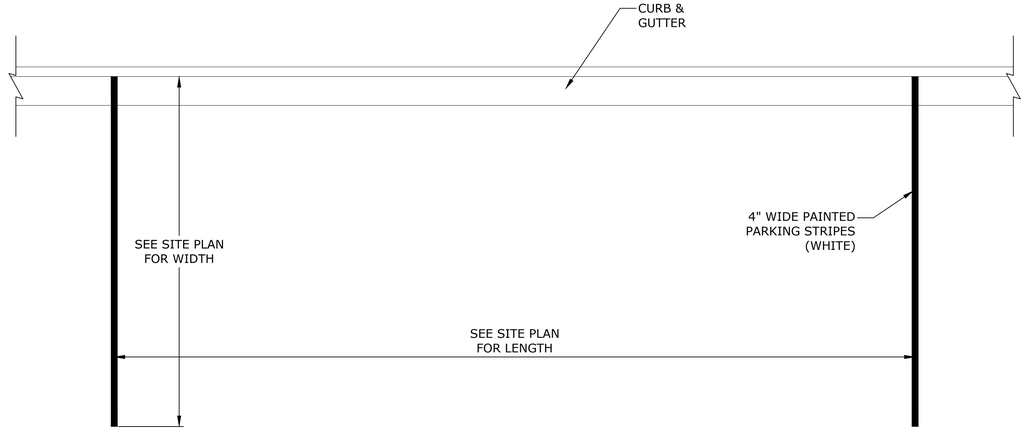


RIGID PIPE

NON-RIGID PIPE

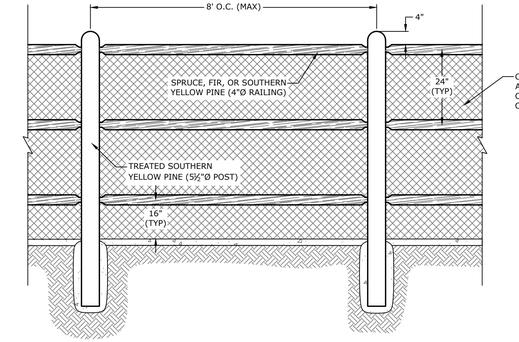
TRENCHING, BACKFILL, & BEDDING TABLE	
'A'	OD + 24" (MIN) OD + 36" (MAX)
'B'	.10 x OD (6" MIN)

33G STORM SEWER TRENCHING, BACKFILL, & BEDDING
NTS

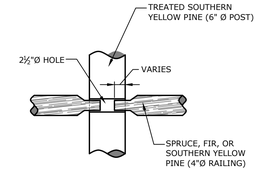


NOTES:
1. REFER TO SITE PLAN FOR SPECIFIC LAYOUT OF STRIPING.
2. ALL STRIPING MEASUREMENTS ARE TO CENTER OF STRIPE.

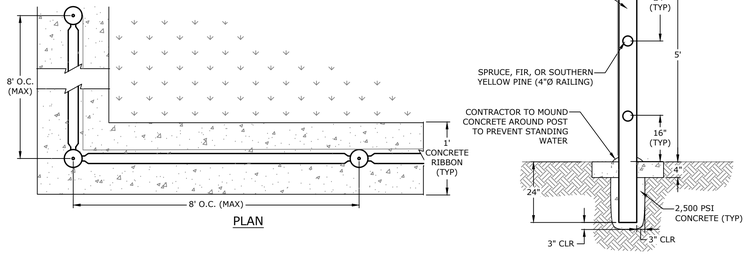
23C PARALLEL PARKING SPACE STRIPING
NTS



ELEVATION



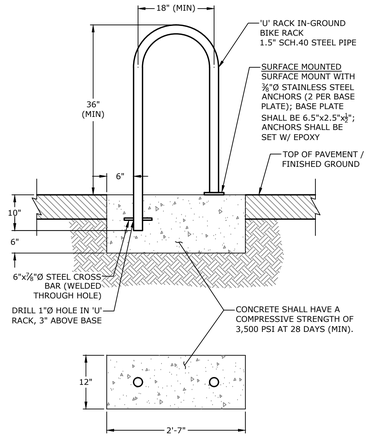
TYPICAL RAIL TO POST CONNECTION



PLAN

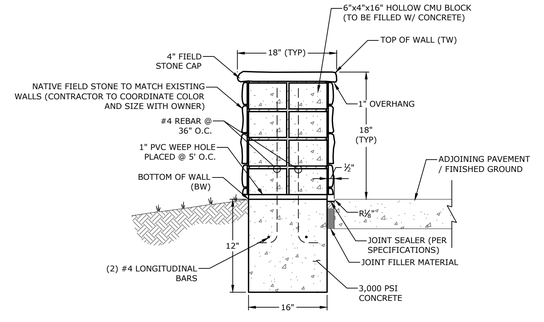
SECTION A-A

27A ROUND RAIL WOOD AND CHAIN LINK FENCE WITH CONCRETE RIBBON
NTS



25J BIKE RACK
NTS

PROVIDED BY OWNER



25L CMU BRICK SEATING WALL
NTS

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REVISIONS	DESCRIPTION	DATE	REV

DETAIL SHEET I

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
1/17/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

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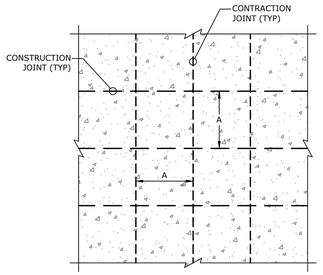
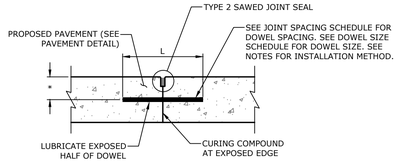
NOTES:
1. DOWELS SHALL BE FULLY SHOP PAINTED WITH ONE COAT OF CORROSION INHIBITING PRIMER CONFORMING TO FEDERAL SPEC. TT-P-664D.
2. DOWELS SHALL BE SOLID SMOOTH STEEL BARS.
3. PRIOR TO INSTALLATION IN CONTRACTION JOINTS, DOWELS SHALL BE LIGHTLY GREASED WITH A THIN COAT OF HIGH MELTING POINT GREASE (OR APPROVED EQUAL) AS INDICATED. IN THE CONSTRUCTION JOINTS, ONLY THE FREE END SHALL BE GREASED, AND ONLY AFTER INSERTION AND GROUTING INTO PLACE.
4. ALL CONSTRUCTION JOINT DOWELS SHALL BE GANG-DRILLED AND EPOXY GROUTED. INSERTION EQUIPMENT WILL NOT BE ALLOWED.
5. DRILLING METHOD FOR DOWELS SHALL BE CAPABLE OF MAINTAINING DRILL HOLES PARALLEL TO THE CONCRETE SURFACE AND NORMAL TO THE JOINT LINES. DRILL HOLES SHALL BE ACCURATELY LAID OUT SO THAT THE MAXIMUM HORIZONTAL DEVIATION DOES NOT EXCEED 1". DRILL HOLE DIAMETER TO BE OF SUFFICIENT SIZE TO ACCEPT THE TYPE AND SIZE OF DOWEL REQUIRED.
6. AFTER DRILLING IS COMPLETE AND PRIOR TO THE INSTALLATION OF THE DOWELS, THE HOLES SHALL BE THOROUGHLY CLEANED TO REMOVE DRILLING DUST, CONCRETE CHIPS, AND / OR ANY OTHER MATERIAL DETRIMENTAL TO DEVELOPING BOND.
7. EPOXY GROUT SHALL BE INJECTED UNIFORMLY INTO THE DOWEL HOLE (CONTRACTOR SHALL NOT DIP AND INSERT DOWEL) AND SUFFICIENT MATERIAL SHALL BE PLACED IN THE HOLE SO THAT A SLIGHT AMOUNT WILL BE FORCED OUT FROM AROUND THE DOWEL WHEN THE DOWEL IS INSERTED AND TAPPED TO THE CORRECT POSITION (SMALL WEDGES MAY BE USED TO SUPPORT THE DOWEL IN CORRECT ALIGNMENT UNTIL THE MATERIAL HARDENS). THE TOLERANCE FOR DOWEL ALIGNMENT IN EITHER THE HORIZONTAL OR VERTICAL PLANE IS ½" PER 1' OF DOWEL BAR.
8. ALL LONGITUDINAL AND TRANSVERSE CONTRACTION JOINT TIE BARS AND DOWELS SHALL BE INSTALLED USING AN ENGINEER-APPROVED WELDED BASKET ASSEMBLY ANCHORED TO THE BASE WITH A MINIMUM OF 4 GALVANIZED STRAPS AND NAILS (PER ASSEMBLY); POSITION ANCHOR STRAPS ON ALTERNATING SIDES OF THE BASKET ASSEMBLY.
9. A TRANSVERSE CONSTRUCTION JOINT SHALL BE INSTALLED AT A PLANNED JOINT WHEN PAVING OPERATIONS ARE INTERRUPTED FOR MORE THAN 30 MINUTES. IF THE INTERRUPTION OCCURS BETWEEN PLANNED JOINTS, THE FRESH CONCRETE SHALL BE REMOVED BACK TO THE PREVIOUSLY INSTALLED JOINT. UNLESS OTHERWISE APPROVED, NO JOINTS WILL BE ALLOWED BETWEEN THE JOINTS SHOWN ON THE JOINTING PLAN.
10. EDGES OF CONCRETE SLABS SHALL BE COVERED WITH AN APPROVED CURING MATERIAL AT THE SAME TIME AS THE SURFACE IS CURING. AT FORMED LOCATIONS, SLAB SIDES SHALL BE CURED WHEN FORMS ARE REMOVED.
11. IN THICKENED EDGE AREAS WHERE DOWELS OR REINFORCING STEEL IS REQUIRED, PROVIDE ADDITIONAL SUPPORT (AS APPROVED BY THE ENGINEER) TO MAINTAIN THE SAME DEPTH FROM THE SURFACE AS FOR TYPICAL 6" CONCRETE PAVEMENT.
12. CONCRETE IN REINFORCED PANELS SHALL BE PLACED IN ONE COURSE. ALL WELDED WIRE FABRIC (WWF) SHALL BE INSTALLED USING ENGINEER APPROVED HI-CHAIRS ANCHORED TO THE CRUSHED AGGREGATE BASE COURSE (3' ON CENTER MAX). THE WWF SHALL RETAIN ITS SPECIFIED POSITION DURING CONCRETE PLACEMENT. WWF VIBRATED DOWN FROM THE TOP AFTER CONCRETE IS PLACED WILL NOT BE ALLOWED.
13. SEALANT RESERVOIR SHAPE FACTOR ('W & 'D'), SHALL BE PER THE MANUFACTURER'S RECOMMENDATIONS.
14. ALL JOINT SEALANT RESERVOIRS SHOWN ON THIS SHEET SHALL BE VERIFIED BY THE SEALANT MANUFACTURER PRIOR TO CONSTRUCTION (REFER TO SECTION P-605 OF THE SPECIFICATIONS FOR FURTHER INFORMATION).
15. THE PRE-FORMED JOINT SEAL IN CONTRACTION JOINTS SHALL BE INSTALLED IN ONE CONTINUOUS PIECE ACROSS THE PAVEMENT. THE CONSTRUCTION JOINT SEALANT SHALL BE INTERRUPTED AT EVERY TRANSVERSE JOINT.
16. ALL WORK AND MATERIALS REQUIRED FOR JOINTS IS INCIDENTAL TO PAVEMENT PAY ITEMS.
17. THE CONTRACTOR HAS THE OPTION TO POUR A MONOLITHIC SLAB IN WHICH ALL JOINTS WILL BE CONTRACTION JOINTS.



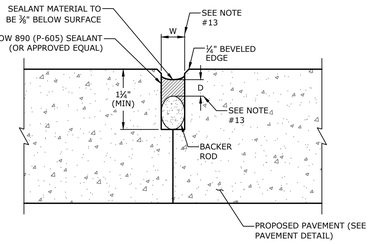
TYPICAL JOINT SPACING



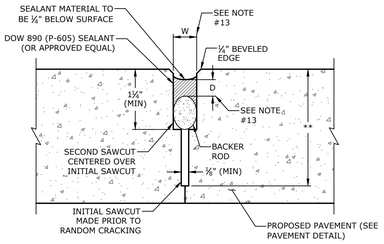
DOWELED CONSTRUCTION JOINT

JOINT SPACING SCHEDULE	
PAVEMENT THICKNESS 'D'	'A'
≤ 3.5"	8'-6"
4" - 4.5"	10'
5" - 5.5"	12'-6"
6" OR GREATER	15'

DOWEL SIZE SCHEDULE*			
PAVEMENT THICKNESS 'D'	SIZE OF DOWEL 'Ø'	DOWEL EMBEDMENT	DOWEL LENGTH 'L'
≤ 5"	⅝"ø	5"	12"
6" - 8"	¾"ø	6"	14"
9"	⅞"ø	7"	16"
*DOWELS TO BE SPACED AT 18" O.C. (UNLESS OTHERWISE NOTED) IF NO REBAR IS USED			



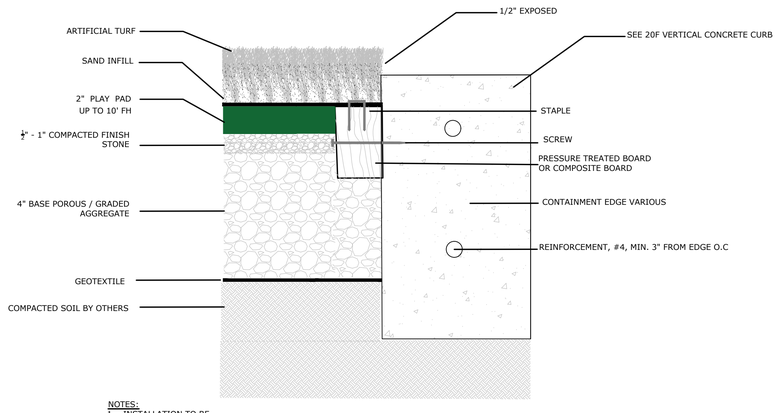
SAWED CONSTRUCTION JOINT SEAL - TYPE 2



SAWED CONSTRUCTION JOINT SEAL - TYPE 3

21H CONCRETE PAVEMENT DOWEL & JOINTING
NTS

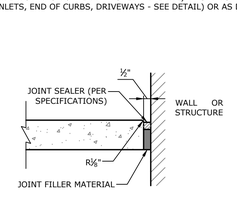
* - 0.5 x PAVEMENT THICKNESS (½"±)
** - ⅓ PAVEMENT THICKNESS (¼"±)



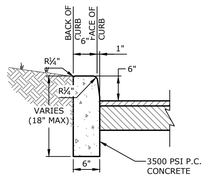
NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DRAWING NOT TO SCALE.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.

27L IMPACT TURF EXPANSION EDGING
NTS

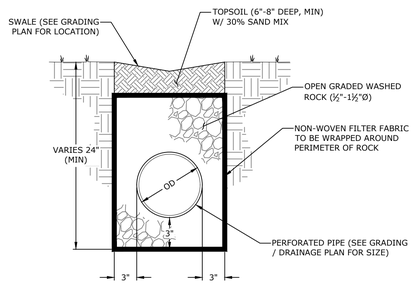
NOTES:
1. CONCRETE FOR CURB AND GUTTER TO HAVE A COMPRESSIVE STRENGTH OF 3,500 PSI AT 28 DAYS (MIN).
2. ALL CURB AND GUTTER SHALL HAVE A BROOMED FINISH UNLESS OTHERWISE SPECIFIED.
3. SAW CUT JOINTS AT 15' O.C. SEAL WITH ONE PART COLD APPLIED SILICONE JOINT SEALER OR OTHER APPROVED SEALANT. ALL JOINTS TO BE SEALED PRIOR TO FINAL ASPHALT PLACEMENT.
4. PROVIDE 1/2" PREFORMED ISOLATION JOINT MATERIAL (ASPHALT IMPREGNATED FIBERBOARD OR OTHER APPROVED MATERIAL) AT STATIONARY STRUCTURES, (DROP INLETS, END OF CURBS, DRIVEWAYS - SEE DETAIL) OR AS DIRECTED BY ENGINEER.



ISOLATION JOINT

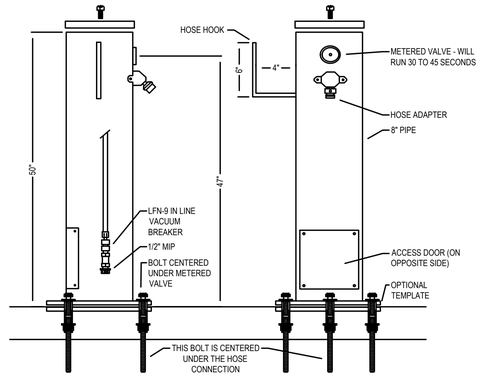


20F VERTICAL CONCRETE CURB
NTS



33B FRENCH DRAIN
NTS

MDF FOUNTAINS,
MOST DEPENDABLE FOUNTAINS, INC.
5705 COMMANDER DR. P.O. BOX 587
ARLINGTON, TN 38002-0587
PHONE: (901) 867-0039
www.mostdependable.com



NOTES:
1. OPTIONAL STAINLESS STEEL SURFACE CARRIER RECOMMENDED ON SURFACE MOUNT INSTALLATIONS.
2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
3. DO NOT SCALE DRAWING.
4. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
5. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
6. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 3354-10.35.

27E MODEL 505 SM RINSE STATION (OR APPROVED EQUAL)
SHOWN W/ OPTIONAL 8" SS SURFACE CARRIER

3354-10.35

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REVISION DATE 10/29/2020
CADdetails.com

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DESIGNED TO SERVE
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FAYETTEVILLE, ARKANSAS 72703
(479) 443-2377
HTTP://WWW.MCE.US.COM

REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER M. BAKUNAS
License Number 985
STATE OF ARKANSAS
01/17/2025
ORIGINAL SIGNATURE ON FILE

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IMPROVEMENTS PHASE 1
1595 N DARTMOUTH AVE
FAYETTEVILLE, AR

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REVISIONS		
REV	DATE	DESCRIPTION

DETAIL SHEET II

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C7.1

W:\2024\24-2121 - Fayetteville, Ar- Bryce Davis Park, Phase 1 Improvements\design Drawings\242121 - CS.dwg, PRINTED ON: January 17, 2025 @ 10:48 AM

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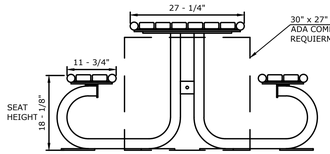
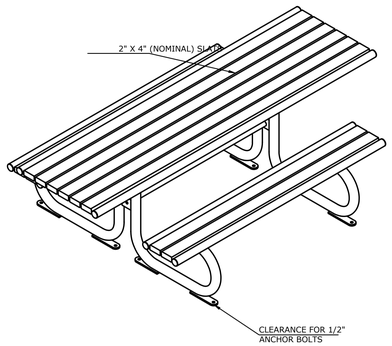
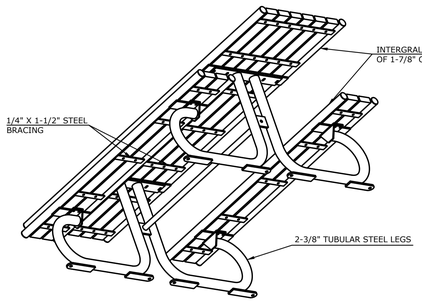
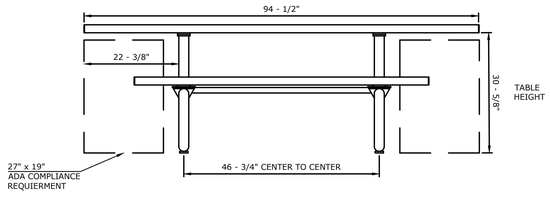
TEL (301) 855-8300 - FAX (410) 257-7579
WEB SITE: HTTP://WWW.VICTORSTANLEY.COM

* ALL DIMENSIONS ARE IN INCHES *





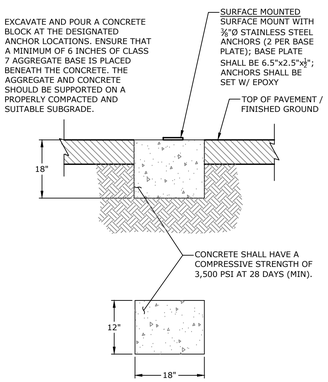




AVAILABLE OPTIONS:
POWDER COATING
10 STANDARD COLORS, 2 OPTIONAL METALLIC COLORS,
CUSTOM COLORS (INCLUDING THE RAL RANGE)
SLAT TYPES
WOODS: PHILLIPINE MAHOGANY AND IPE
SEE THE GREENSITES SERIES™ TABLES FOR
ADDITIONAL SLAT OPTIONS

MOUNTING
STANDARD FREE STANDING
AVAILABLE WITH SURFACE MOUNT TABS
AVAILABLE WITH ADA COMPLIANT LEG POSITIONING (AS SHOWN)
(ADA COMPLIANT TABLE/BENCH CONFIGURATION: 8' TABLE WITH 6' BENCHES)
LENGTHS
STANDARD 6'
STANDARD 8'

NOTES:
1. DRAWINGS NOT TO SCALE. DO NOT SCALE DRAWINGS.
2. ALL FABRICATED METAL COMPONENTS ARE STEEL SHOTBLASTED, ETCHED, PHOSPHATIZED, PREHEATED, AND ELECTROSTATICALLY POWDER-COATED WITH T.G.I.C. POLYESTER POWDER COATINGS. PRODUCTS ARE FULLY CLEANED AND PRETREATED, PREHEATED AND COATED WHILE HOT TO FILL CREVICES AND BUILD COATING FILM. COATED PARTS ARE THEN FULLY CURED TO COATING MANUFACTURER'S SPECIFICATIONS. THE THICKNESS OF THE RESULTING FINISH AVERAGES 8-10 MILS (200-250 MICRONS).
3. IT IS NOT RECOMMENDED TO LOCATE ANCHOR BOLTS UNTIL TABLE IS IN PLACE. THIS VICTOR STANLEY, INC. PRODUCT MUST BE PERMANENTLY AFFIXED TO THE GROUND. CONSULT YOUR LOCAL CODES FOR REGULATIONS.
4. ANCHOR BOLTS NOT PROVIDED BY VICTOR STANLEY, INC.
5. FOR HIGH SALT ABUSIVE CLIMATES, HOT-DIP GALVANIZING BEFORE POWDER COATING IS AVAILABLE. HOT-DIP GALVANIZING IS PERFORMED FOR VICTOR STANLEY, INC. BY AN
EXPERIENCED QUALIFIED FIRM TO WHICH PRODUCTS ARE SHIPPED FOR GALVANIZING. HOT-DIP GALVANIZING INCLUDES AN AGGRESSIVE PRE-TREATMENT AND IMMERSION IN A TANK
OF CHARGED LIQUID ZINC AT OR AROUND 860°F (460°C). THE RESULTING SURFACE IS RESISTANT TO RUST BUT HAS SOME UNEVENNESS RESULTING FROM THE BONDING OF THE ZINC
TO THE STEEL SURFACE. AS A RESULT, THE POWDER-COATING SURFACE FINISH OVER THAT GALVANIZED SURFACE MAY EXHIBIT BUMPS, UNEVENNESS, AND MAY NOT BE
AS SMOOTH AS THE STANDARD FINISH; THIS UNEVEN AND INCONSISTENT FINISH IS NORMAL FOR GALVANIZING. CONTACT MANUFACTURER FOR DETAILS.
6. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE. CONTACT MANUFACTURER FOR DETAILS.
7. THIS PRODUCT IS SHIPPED PARTIALLY UNASSEMBLED.



27H VICTOR STANLEY
F-565 WOOD SLAT
TABLE
NTS

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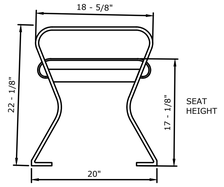

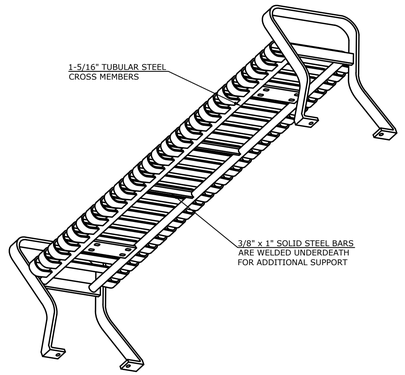

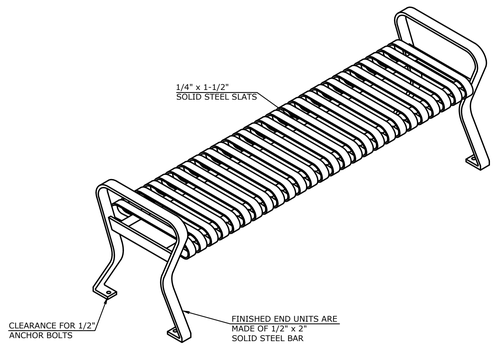

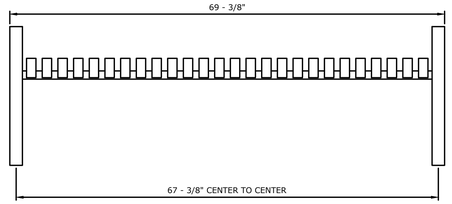

AVAILABLE OPTIONS:
POWDER COATING
10 STANDARD COLORS, 2 OPTIONAL METALLIC COLORS,
CUSTOM COLORS (INCLUDING THE RAL RANGE)
INTERMEDIATE & CENTER ARMRESTS
4', 6', & 8' AVAILABLE WITH OPTIONAL ARMRESTS
FULL CENTER LEG WITH ARMREST (FOR 8' LENGTH)

LENGTHS
STANDARD 4'
STANDARD 6' (AS SHOWN)
STANDARD 8' W/ CENTER LEG

NOTES:
1. DRAWINGS NOT TO SCALE. DO NOT SCALE DRAWINGS.
2. ALL FABRICATED METAL COMPONENTS ARE STEEL SHOTBLASTED, ETCHED, PHOSPHATIZED, PREHEATED, AND ELECTROSTATICALLY POWDER-COATED WITH T.G.I.C. POLYESTER POWDER
COATINGS. PRODUCTS ARE FULLY CLEANED AND PRETREATED, PREHEATED AND COATED WHILE HOT TO FILL CREVICES AND BUILD COATING FILM. COATED PARTS ARE THEN FULLY
CURED TO COATING MANUFACTURER'S SPECIFICATIONS. THE THICKNESS OF THE RESULTING FINISH AVERAGES 8-10 MILS (200-250 MICRONS).
3. IT IS NOT RECOMMENDED TO LOCATE ANCHOR BOLTS UNTIL BENCH IS IN PLACE. THIS VICTOR STANLEY, INC. PRODUCT MUST BE PERMANENTLY AFFIXED TO THE GROUND.
CONSULT YOUR LOCAL CODES FOR REGULATIONS.
4. ANCHOR BOLTS NOT PROVIDED BY VICTOR STANLEY, INC.
5. FOR HIGH SALT ABUSIVE CLIMATES, HOT-DIP GALVANIZING BEFORE POWDER COATING IS AVAILABLE. HOT-DIP GALVANIZING IS PERFORMED FOR VICTOR STANLEY, INC. BY AN
EXPERIENCED QUALIFIED FIRM TO WHICH PRODUCTS ARE SHIPPED FOR GALVANIZING. HOT-DIP GALVANIZING INCLUDES AN AGGRESSIVE PRE-TREATMENT AND IMMERSION IN A TANK
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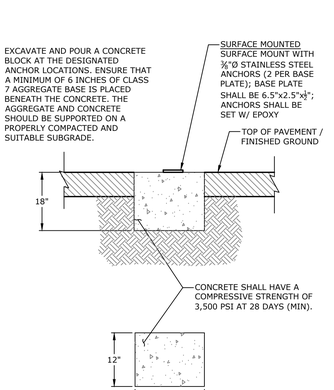
6. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE. CONTACT MANUFACTURER FOR DETAILS.
7. THIS PRODUCT IS SHIPPED FULLY ASSEMBLED.



27F VICTOR STANLEY
RB-12 ALL STEEL
BACKLESS BENCH
PROVIDED BY OWNER
NTS

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1580 E STEARNS ST
FAYETTEVILLE, ARKANSAS 72703
(479) 443-2377
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REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER M. BAKUNAS
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01/17/2025
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IMPROVEMENTS PHASE 1
1595 N DARTMOUTH AVE
FAYETTEVILLE, AR

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REVISIONS	DESCRIPTION	DATE	REV

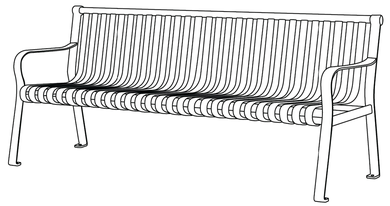
DETAIL SHEET
III

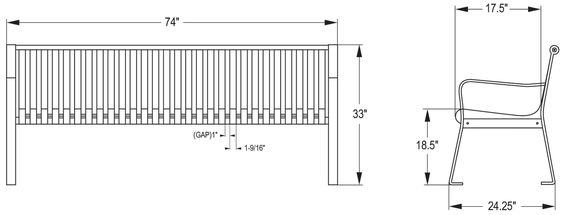
DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
1/17/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

C7.2

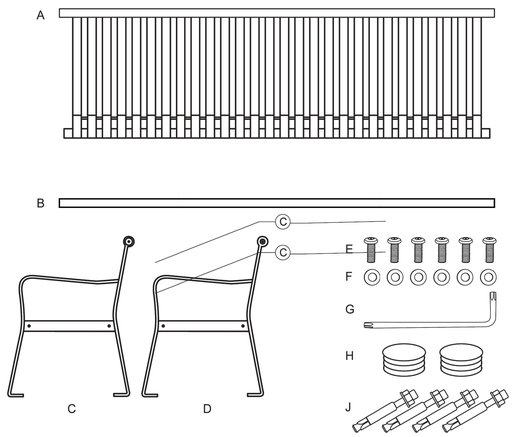
W:\2024\24-2121 - Fayetteville, Ar- Bryce Davis Park, Phase 1 Improvements\design Drawings\242121 - CS.dwg, PRINTED ON: January 17, 2025 @ 10:49 AM

STEEL OUTDOOR BENCH WITH STRAIGHT BACK



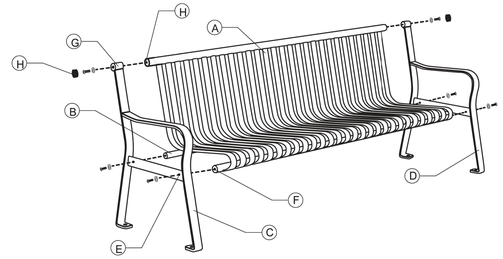


STEEL OUTDOOR BENCH WITH STRAIGHT BACK



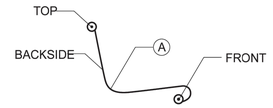
BEFORE ASSEMBLY, PLEASE MAKE SURE ALL COMPONENTS ARE INCLUDED

- A ☐ (1) SEAT ASSEMBLY
- B ☐ (1) SUPPORT BAR
- C ☐ (1) RIGHT END FRAME
- D ☐ (1) LEFT END FRAME
- E ☐ (6) STAINLESS STEEL TORX BOLTS
- F ☐ (6) STAINLESS STEEL WASHERS
- G ☐ (1) SECURITY TORX WRENCH
- H ☐ (2) END FRAME SOCKET CAPS
- J ☐ (4) M8x80 EXPAND ANCHOR BOLTS



Make sure to assemble the bench on a soft mat to prevent scratching of the product's surface.

DURING ASSEMBLY, DO NOT TIGHTEN BOLTS COMPLETELY.



Step 1: Start by positioning the seat assembly (A) on its backside for ease of assembly.

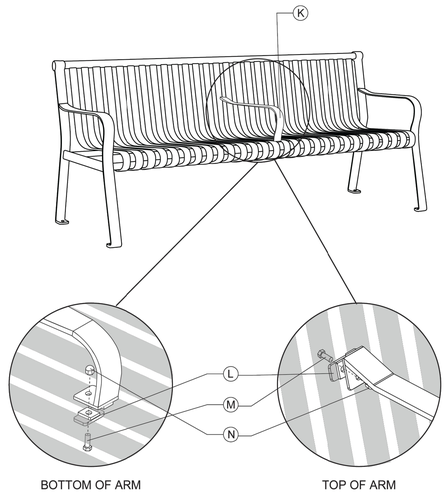
Step 2: Raise up the front of the seat assembly (A) to align with the bolt hole at the front of the end frame (C) and attach the end frame to the seat using one torx bolt (E) and washer (F), do not tighten bolt completely. Slide the upper sleeve of the end frame (C) over the backrest extension at the top of the seat assembly (A). Insert one torx bolt (E) with washer (F) into the pre-tapped hole at the top of the end frame to hold securely, but do not tighten.

Step 3: Repeat Step 2 on other side of the bench using end frame (D), but do not tighten bolts completely yet.

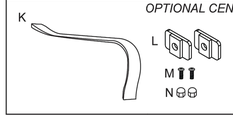
Step 4: Place the support bar (B) under the seat assembly between the end frames, and align it with the pre-drilled holes in the back of each end frame. Screw in remaining bolts enough to hold securely, but do not tighten.

Step 5: Position the bench upright and carefully adjust the components to make sure that the bench is square and level. Finally, tighten the bolts to a snug fit.

Step 6: Optional end frame socket caps (H) are included to insert into end frame sockets.



OPTIONAL CENTER ARM ASSEMBLY



- K ☐ (1) CENTER ARM
- L ☐ (2) CENTER ARM BACKPLATES
- M ☐ (2) STAINLESS STEEL HEX BOLTS
- N ☐ (2) STAINLESS STEEL NUTS

Optional Center Arm Installation

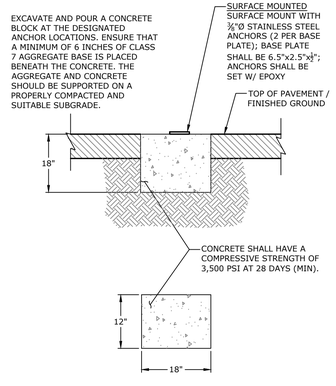
Step 1
Place Optional Armrest(K) on the center of the seat lining up bolt holes with gaps in the seat.

Step 2
Line up Arm Backplate(L) in gap with Top of Center Arm(K).

Step 3
Insert Hex Bolt(M) through bolt holes from back to front. Secure with Nut(N) and tighten.

Step 4
Line up Arm Backplate(L) in gap with Bottom of Center Arm(K).

Step 5
Insert Hex Bolt(M) through bolt holes from bottom to top. Secure with Nut(N) and tighten.



27G BELSON CBPB-6SB-BK STEEL OUTDOOR BENCH WITH STRAIGHT BACK PROVIDED BY OWNER

NTS

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DESIGNED TO SERVE
1580 E STEARNS ST
FAYETTEVILLE, ARKANSAS 72703
(479) 443-2377
HTTP://WWW.MCE.US.COM

REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER M. BAKUNAS
License Number 985
STATE OF ARKANSAS
01/17/2025
ORIGINAL SIGNATURE ON FILE

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BRYCE DAVIS PARK
IMPROVEMENTS PHASE 1
1595 N DARTMOUTH AVE
FAYETTEVILLE, AR

811 Know what's below. Call before you dig.

REVISIONS		
REV	DATE	DESCRIPTION

DETAIL SHEET IV

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C7.3

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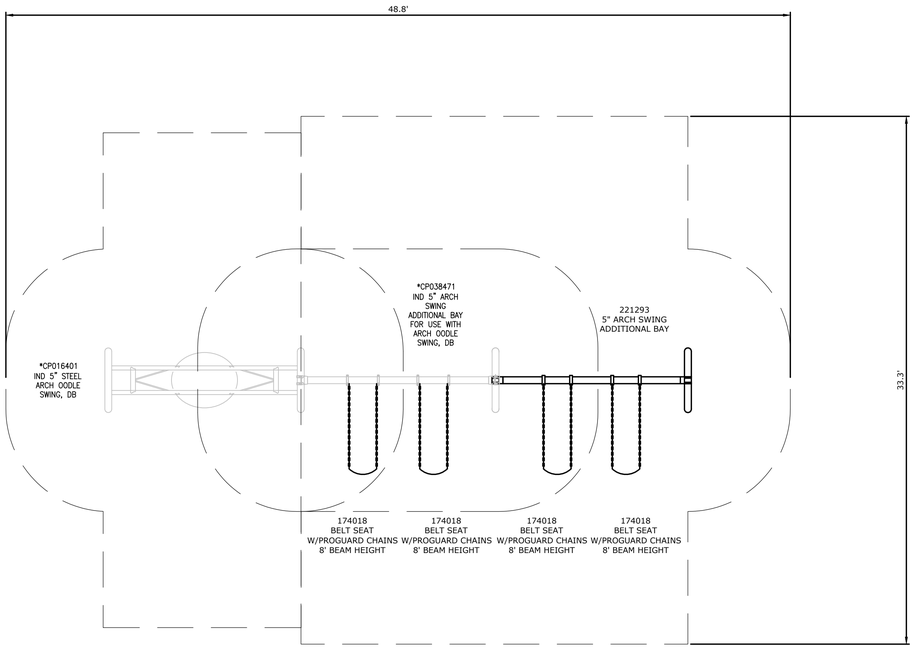
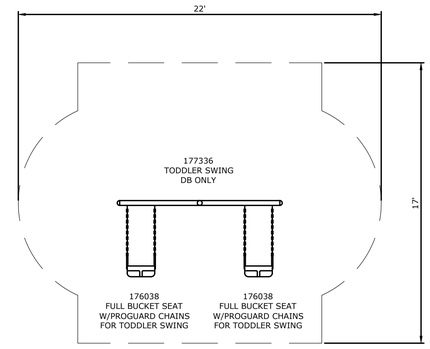


Freestanding Play
(5-12 years)

Max. Fall Height: 96 inches

TOTAL ELEVATED PLAY COMPONENTS	0	
TOTAL ELEVATED COMPONENTS ACCESSIBLE BY RAMP	0	REQUIRED 0
TOTAL ELEVATED COMPONENTS ACCESSIBLE BY TRANSFER	0	REQUIRED 0
TOTAL ACCESSIBLE GROUND LEVEL COMPONENTS SHOWN	6	REQUIRED 0
TOTAL DIFFERENT TYPES OF GROUND LEVEL COMPONENTS	1	REQUIRED 1

27J LSI, 3 BAY, 8' ARCH SWING SET WITH OODLE SWING, OR APPROVED EQUAL



Freestanding Play
(2-5 years)

Max. Fall Height: 75 inches

TOTAL ELEVATED PLAY COMPONENTS	0	
TOTAL ELEVATED COMPONENTS ACCESSIBLE BY RAMP	0	REQUIRED 0
TOTAL ELEVATED COMPONENTS ACCESSIBLE BY TRANSFER	0	REQUIRED 0
TOTAL ACCESSIBLE GROUND LEVEL COMPONENTS SHOWN	2	REQUIRED 0
TOTAL DIFFERENT TYPES OF GROUND LEVEL COMPONENTS	1	REQUIRED 1

27K LSI, TODDLER SWING OR APPROVED EQUAL

The play components identified on this plan are IPEMA certified. (Unless model number is preceded with *) The use and layout of these components conform to the requirements of ASTM F1487. To verify product certification, visit www.ipema.org

THIS PLAY AREA & PLAY EQUIPMENT IS DESIGNED FOR AGES 5-12 / 2-5 YEARS UNLESS OTHERWISE NOTED ON PLAN.

IT IS THE MANUFACTURER'S OPINION THAT THIS PLAY AREA DOES CONFORM TO THE A.D.A. ACCESSIBILITY STANDARDS, ASSUMING AN ACCESSIBLE PROTECTIVE SURFACING IS PROVIDED, AS INDICATED, OR WITHIN THE ENTIRE USE ZONE.

THIS CONCEPTUAL PLAN WAS BASED ON INFORMATION AVAILABLE TO US. PRIOR TO CONSTRUCTION, DETAILED SITE INFORMATION INCLUDING SIDE DIMENSIONS, TOPOGRAPHY, EXISTING UTILITIES, SOIL CONDITIONS, AND DRAINAGE SOLUTIONS SHOULD BE OBTAINED, EVALUATED, & UTILIZED IN THE FINAL DESIGN. PLEASE VERIFY ALL DIMENSIONS OF PLAY AREA, SIZE, ORIENTATION, AND LOCATION OF ALL EXISTING UTILITIES, EQUIPMENT, AND SITE FURNISHINGS PRIOR TO ORDERING, SLIDES SHOULD NOT FACE THE HOT AFTERNOON SUN.

CHOOSE A PROTECTIVE SURFACING MATERIAL THAT HA A CRITICAL HEIGHT VALUE TO MEET THE MAXIMUM FALL HEIGHT FOR THE EQUIPMENT (REF. ASTM F1487 STANDARD CONSUMER SAFETY PERFORMANCE SPECIFICATION FOR PLAYGROUND EQUIPMENT FOR PUBLIC USE, SECTION 8 CURRENT REVISION). THE SUBSURFACE MUST BE WELL DRAINED. IF THE SOIL DOES NOT DRAIN NATURALLY IT MUST BE TILED OR SLOPED ¼" TO ½" PER FOOT TO A STORM SEWER OR A "FRENCH DRAIN".

CONTRACTOR TO DESIGN DELEGATE CONCRETE FOOTERS FOR SWINGSETS

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REVISIONS		
REV	DATE	DESCRIPTION

DETAIL SHEET V

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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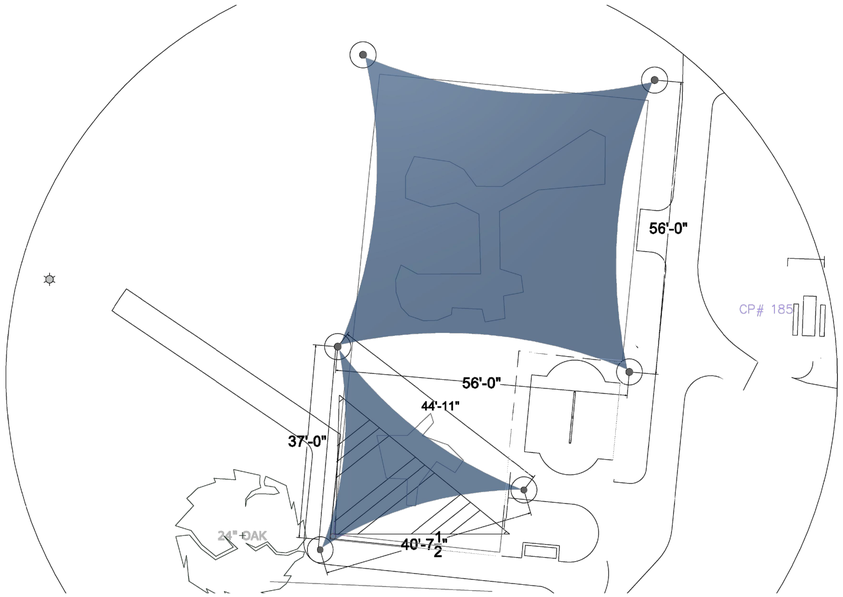

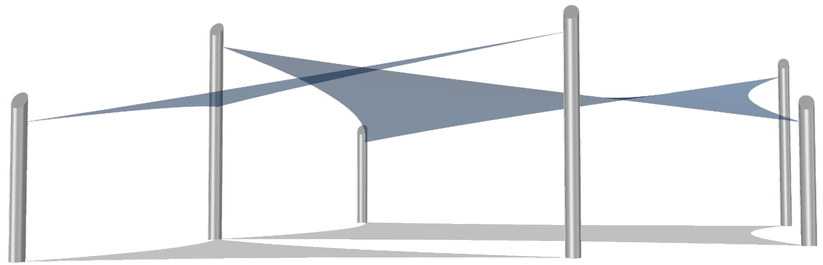

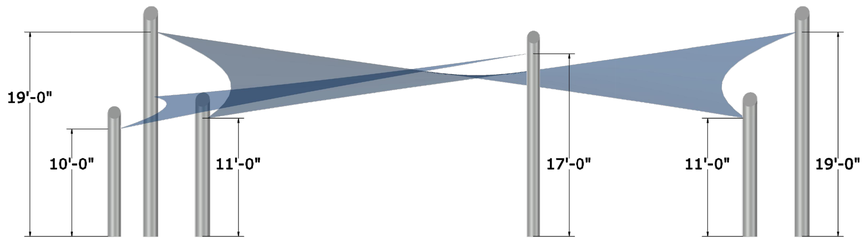

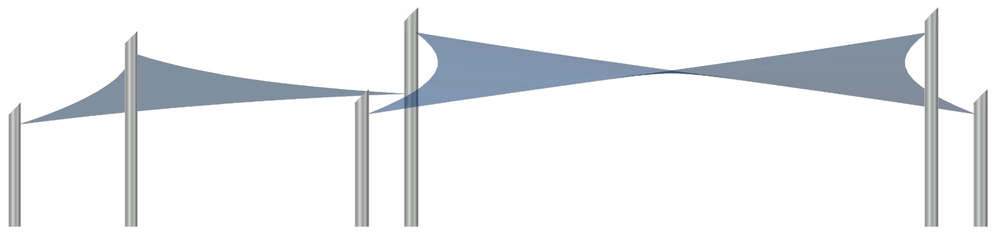

WIND LOAD: 105 MPH	STEEL COLOR: Metallic Silver	FOUNDATION TYPE:Drilled Pier	TEMPLATES:QTY (6)
SNOW LOAD: 5 PSF	FABRIC COLOR: Blue	BURY TYPE: Recessed Base Plate	WET SEALS:No
BUILDING CODE: IBC 2018	RAPID RELEASE: No	SURFACING: 0"	ELECTRONIC SEALS: No

27M SKYWAYS SHADE SAILS, METALLIC SILVER POLES, BLUE SHADE

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REV	DATE	DESCRIPTION
		REVISIONS

DETAIL SHEET VI

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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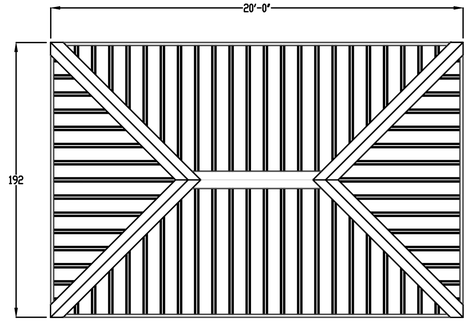
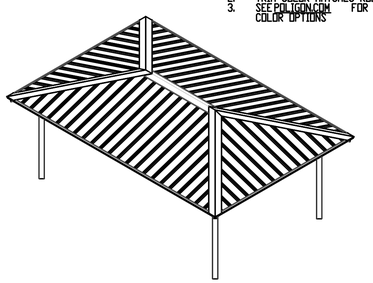
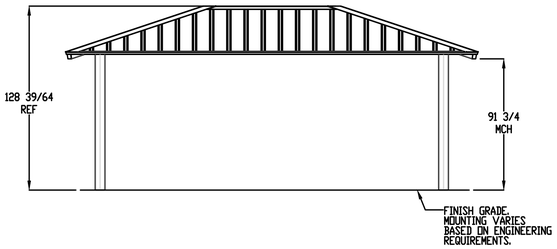
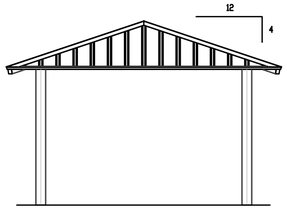


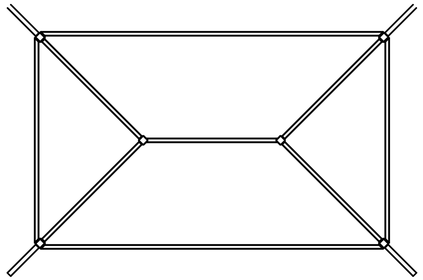


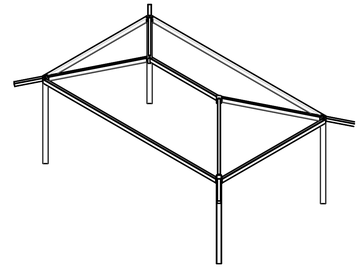
GENERAL ROOF NOTES:

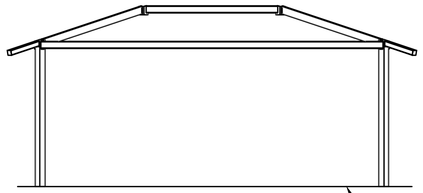
1. METAL ROOFING:
   - 24 GAUGE
   - GALVALUME COATED
   - KYNAR 500 PAINTED
2. TRIM COLOR MATCHES ROOF
3. SEE POLIGON.COM FOR COLOR OPTIONS

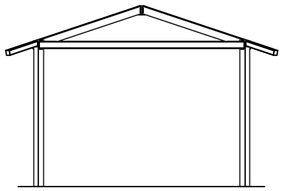












BASEPLATE NOTES:

1. POLIGON ENGINEERING WILL DETERMINE REQUIRED BASEPLATE DESIGN AFTER ENGINEERING PACKAGE IS ORDERED.
2. CUSTOMER MAY SUGGEST PREFERRED BASEPLATE DESIGN.

PROJECT:

LOCATION:

BUILDING TYPE: RAM 16X20

ROOF TYPE: MULTI-RIB

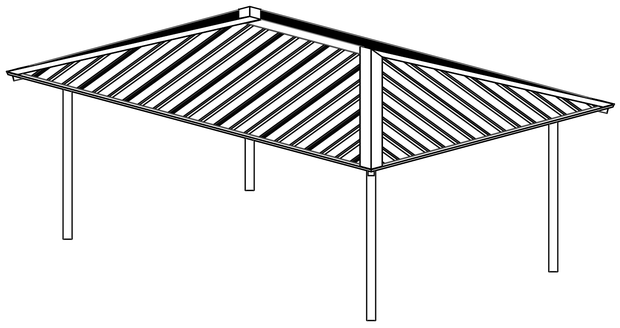
BUILDING NUMBER:

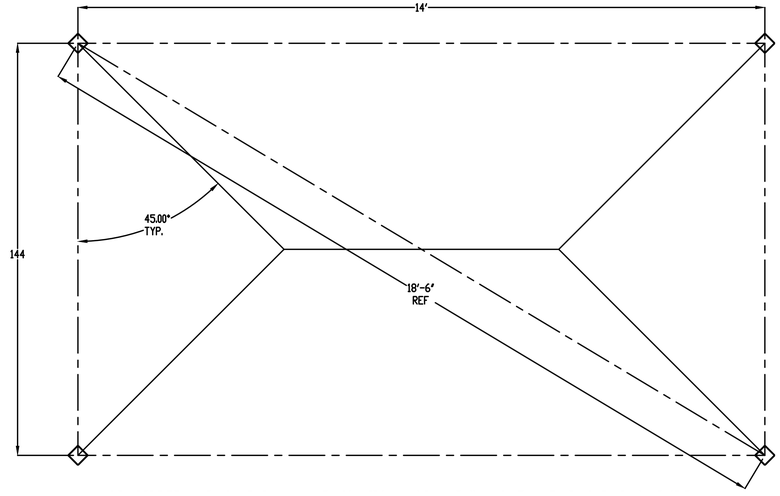
ORDER NUMBER:

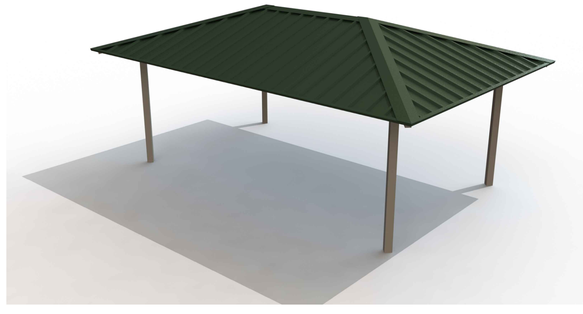
QUOTE NUMBER:

DRAWING LIST:

SHEET NUMBER	DRAWING DESCRIPTION
CS	COVER SHEET
1	ARCHITECTURAL ELEVATIONS
2	STRUCTURAL FRAMING PLAN
3	COLUMN LAYOUT







CERTIFICATES:
ADAMS-BOONE COUNTY CERTIFICATE OF COMPETENCY NO. 21-081913
PCI (POWDER COATING INSTITUTE) 4000 CERTIFIED

FABRICATOR APPROVALS:
CITY OF PHOENIX, AZ APPROVED FABRICATOR 8038-2018
CITY OF LOS ANGELES, CA APPROVED FABRICATOR #7801596
CITY OF RIVERSIDE, CA APPROVED FABRICATOR RSF_000642
CITY OF HOUSTON, TX APPROVED FABRICATOR 8470
CLARK COUNTY, NV APPROVED FABRICATOR 8264
STATE OF UTAH APPROVED FABRICATOR 10308-14
AISC APPROVED FABRICATOR C-00018751

MATERIALS:

DESCRIPTION	ASTM DESIGNATION
TUBE STEEL	A500 (GRADE B)
SCHEDULE PIPE	A53 (GRADE B)
BAR PIPE	A36
LIGHT GAGE COLD FORMED	A1003 (GRADE SD)
STRUCTURAL STEEL PLATE	A36
ROOF PANELS (STEEL)	A653

GENERAL NOTES:
UNLESS NOTED OTHERWISE, THIS STRUCTURE WAS DESIGNED TO ONLY SUPPORT WHAT IS SHOWN ON THESE DRAWINGS. THE MANUFACTURER MUST BE CONTACTED IF ANYTHING ELSE IS TO BE ATTACHED TO THIS STRUCTURE (WALLS, COLUMN WRAPS, RAILINGS, ETC.) SO THE DESIGN OF THIS STRUCTURE CAN BE REVIEWED AND POSSIBLY REVISED.

UNLESS NOTED OTHERWISE, THIS STRUCTURE WAS DESIGNED ASSUMING A 20' SEPARATION BETWEEN ANY ADJACENT STRUCTURE WITH AN EAVE HEIGHT EQUAL TO OR GREATER THAN THE EAVE HEIGHT OF THIS STRUCTURE. IF THAT SEPARATION DOES NOT EXIST, THE MANUFACTURER MUST BE CONTACTED SO THE DESIGN OF THIS STRUCTURE CAN BE REVIEWED AND POSSIBLY REVISED.

STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFICATION MANUAL.

ALL WELDING IS PERFORMED BY AMERICAN WELDING SOCIETY (AWS) CERTIFIED WELDERS AND CONFORMS TO THE LATEST EDITION OF AWS D1.1 OR D1.3 AS REQUIRED.

PARTS SHOWN MAY BE UPGRADED DUE TO STANDARDIZED FABRICATION. REFER TO THE SHIPPING BILL OF MATERIALS FOR POSSIBLE SUBSTITUTIONS.

FOR PROPER FIELD INSTALLATION OF THE BUILDING IT IS RECOMMENDED THAT THE PRIMARY FRAME INSTALLER AND THE ROOF INSTALLER HAVE A MINIMUM FIVE (5) YEARS DOCUMENTED EXPERIENCE INSTALLING THIS TYPE OF PRODUCT.

FOR PROPER FIELD INSTALLATION OF THE BUILDING IT IS RECOMMENDED THAT ELECTRIC WIRING, IF REQUIRED, BE RUN THROUGH THE STRUCTURAL MEMBERS BEFORE THE BUILDING IS ERECTED.

STOP!!
NOT FOR CONSTRUCTION

USE FOR PRELIMINARY PLANNING AND ESTIMATING ONLY

27C

POLYGON PAVILION, RAM 16X20,
ROOF: EVERGREEN, STRUCTURE:
SURREY BEIGE

NTS

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REVISIONS

DETAIL SHEET
VII

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
1/17/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

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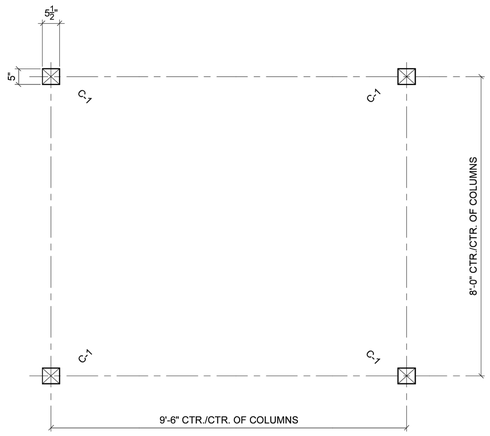
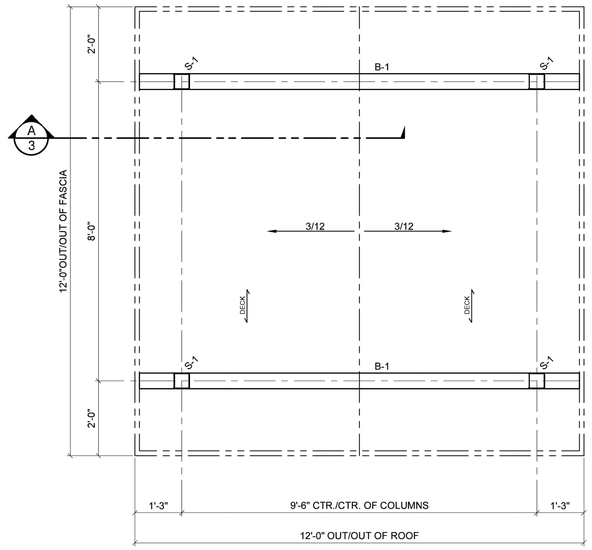


COLUMN LAYOUT PLAN

SCALE: 1/2" = 1'-0"



ROOF FRAMING PLAN

SCALE: 1/2" = 1'-0"

CONTRACT NOTE:
Reference accepted proposal and/or executed contract for identification of items furnished. Any item not specifically included shall be provided by owner, installer or others. Some items are specifically noted as N.I.C. (not in contract).

LAMINATED WOOD SPECIFICATIONS:
SPECIES ---------- SOUTHERN PINE
LAMINATION THICKNESS --------- 1" NOMINAL @ B-1 & 2" NOMINAL @ C-1
STRESS COMBINATION ---------- SEE MEMBER DETAILS
ADHESIVE ---------- RESORCINOL
APPEARANCE GRADE ---------- ARCHITECTURAL
FINISH ---------- Seal & Stain
PROTECTION ---------- INDIVIDUAL WRAP
PRESERVATIVE TREATMENT - CCA 0.6 PCF (MIN) RETENTION @ COLUMNS, TREATED PRIOR TO GLUING
HARDWARE ---------- PER DETAILS & LIST

SOLID TIMBER SPECIFICATIONS
2 x 4 Nailer ---------- #1 SYP, S4S, KD, Seal & Stain
2 x 6 Fascia ---------- #1 AYC, S4S, KD, Seal & Stain
2 x 8 Roof Deck ----- #1 SYP, T&G, S/L, CM, EV1S, KD, Seal & Stain
Deck fumished in specified lengths (S/L), not precision end trimmed (PET), field cutting required.

ROOF UNDERLAYMENT SPECIFICATIONS:
TWO LAYERS OF SYNTHETIC UNDERLAYMENT.
SYNTHETIC UNDERLAYMENT TO CONFORM TO ASTM D226 TYPE II OR ASTM D4869 TYPE IV.
ATTACH UNDERLAYMENT PER MANUFACTURER'S RECOMMENDATIONS
OR BUILDING CODE REQUIREMENTS, WHICHEVER IS MORE STRINGENT.

WOOD SHOP NOTES:
1. Materials, Manufacture and Quality Control of glulam shall be in conformance with, "American National Standard for Wood Products-Structural Glued Laminated Timber ANSI A190.1-2017".
2. Members shall be marked (in an unseen location) with an AITC or APA/EWS Quality Mark and, in addition, an AITC or APA/EWS Certificate of Conformance shall be provided to indicate conformance with "ANSI A190.1-2017".

STEEL & HARDWARE SHOP NOTES:
1. All steel plate to be ASTM A572 Grade 50.
2. All fabricated steel to be powder coated; color selected by owner.
3. Nails to be hot-dipped galvanized (HDG). Shop to verify hole tolerances and tolerances of threaded parts for compatibility of the galvanized parts only.

ERECTION NOTES:
All steel and wood members must be properly braced until the complete structural system has been constructed. Correction of minor misfits and a reasonable amount of reaming or alignment with drift pins will be considered a legitimate expense of erection.

In the event of error, defect in materials, and/or workmanship of shop work which prevents proper assembling and fitting up of parts by the moderate use of drift pins, or reaming, immediately report to the seller and obtain seller's approval of the method of correction.

Predrill wood for screws and nails if necessary to avoid splitting.

NOTE: This building has been designed as a free standing, open structure. If walls are to be added, or if the building is to adjoin another structure, or if other modifications are to be made, the structure must be re-engineered prior to these modifications (by others).

DESIGN CRITERIA:
2021 AR Fire Prevention Code w/ 2021 IBC
Type of Construction: Type V-B
Occupancy Classification: Assembly A-3
Building Risk Category II
Mean Roof Height = 9'-0"
Building Area = 144 ft^2
Building Volume = 1,300 ft^3
No. of Occupants = 10 (15 ft^2 per person)

ROOF DL

Metal Roofing	0.9 psf
Underlayment	0.1 psf
2" Nom. T&G Deck	4.4 psf
Misc.	1.6 psf
	Total = 7.0 psf + weight of framing

FLOOR LL
L = 100 psf

ROOF LL
L_r = 20 psf

ROOF SL
P_g = 10 psf (Ground Snow)
$P_f = 0.7*P_g*C_e*C_t*I_S$
C_e = 1.0, C_t = 1.2, I_S = 1.0
P_f = 8.4 psf $P_s = P_f*C_s$
3:12 pitch: C_s = 1.0, P_s = 8.4 psf + unbalanced
P_m = 10.0 psf

WIND LOAD
V_{ult} = 115 mph, V_{asd} = 89 mph
Exposure 'C', Open Building w/ GC_{pi} = 0
Component & Cladding Ultimate Wind Pressures:
Pressure = 35.3 psf, Suction = -35.6 psf

SEISMIC
I_E = 1.0
S_S = 0.158, S_1 = 0.090
Site Class D (Assumed)
S_{DS} = 0.168, S_{D1} = 0.144
Seismic Design Category C
Equivalent Lateral Force Procedure
Cantilevered Column Systems - Timber frames
R = 1.5, C_S = 0.112, ρ = 1.0, V = 170#

UNLOADING, HANDLING, & STORAGE OF GLU-LAM & DECKING

LAMINATED MEMBERS ARE WRAPPED FOR PROTECTION IN TRANSIT. THE ERECTOR IS RESPONSIBLE FOR PROTECTION OF MATERIALS AT ALL TIMES AFTER ARRIVAL AT DESTINATION. IF STORED TEMPORARILY, MEMBERS SHOULD BE PLACED ON BLOCKS & LEVELED, WELL OFF OF THE GROUND & SEPARATED WITH WOOD STRIPS SO THAT AIR CAN CIRCULATE AROUND EACH MEMBER. COVER THE TOP & SIDES WITH MOISTURE RESISTANT PAPER OR OPAQUE PLASTIC. USE NON-MARRING SLINGS WHEN HANDLING. ROOF COVERING SHOULD BE APPLIED SOON AFTER ERECTION. PROTECTIVE WRAPPING SHOULD REMAIN ON THE MEMBERS UNTIL DECK HAS BEEN INSTALLED & ROOFING APPLIED. HOWEVER, IF THE PAPER HAS BEEN TORN OR PARTIALLY REMOVED DURING STORAGE OR ERECTION, IT SHOULD BE REPLACED OR ENTIRELY REMOVED TO PREVENT DISCOLORATION OF LAM MEMBERS BY SUNLIGHT.

LAMINATED MEMBERS RECEIVE ONE FACTORY APPLIED COAT OF CLEAR WOOD SEALER. (FACTORY STAIN IS OPTIONAL AT EXTRA COST). IF THEY SHOULD BECOME WET DURING SHIPMENT OR INSTALLATION, OR IF THEY ARE CLEANED IN ANY WAY, THESE LAMINATED MEMBERS SHOULD BE UNIFORMLY RESEALED BEFORE ADDITIONAL STAINING OR FINISHING IS DONE IN THE FIELD.

DECKING WILL BE DELIVERED IN BANDED BUNDLES, WEIGHING APPROXIMATELY ONE TON. BUNDLES SHOULD REMAIN BANDED UNTIL DECK IS TO BE INSTALLED. A FORKLIFT OR SMALL CRANE WILL BE REQUIRED FOR UNLOADING. BE SURE TO USE NON-MARRING SLINGS.

IT IS THE ERECTORS RESPONSIBILITY TO TALLY THE DECKING UPON ARRIVAL. NOTIFY "MANUFACTURER" AT ONCE OF ANY SHORTAGES.

METAL ROOFING NOTES:

CLEAR PROTECTIVE FILM MUST BE REMOVED FROM ALL METAL PRIOR TO INSTALLATION.

METAL ROOFING SHOULD BE STORED INDOORS OR WHEN STORED OUTSIDE IT SHOULD BE STORED UP ON BLOCKS WITH FINISHED FACE UP AND SLOPED TO DRAIN.

DURING INSTALLATION, ALL METAL SHAVINGS MUST BE REMOVED IMMEDIATELY TO AVOID RUSTING OF PANELS.

27D RCP PAVILION, TS-SQ12-04, EVERGREEN
ROOF, ENCLOSURE BEIGE POWDER
PROVIDED BY OWNER
NTS

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License Number 0185
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REVISIONS

REV	DATE	DESCRIPTION

DETAIL SHEET
VIII

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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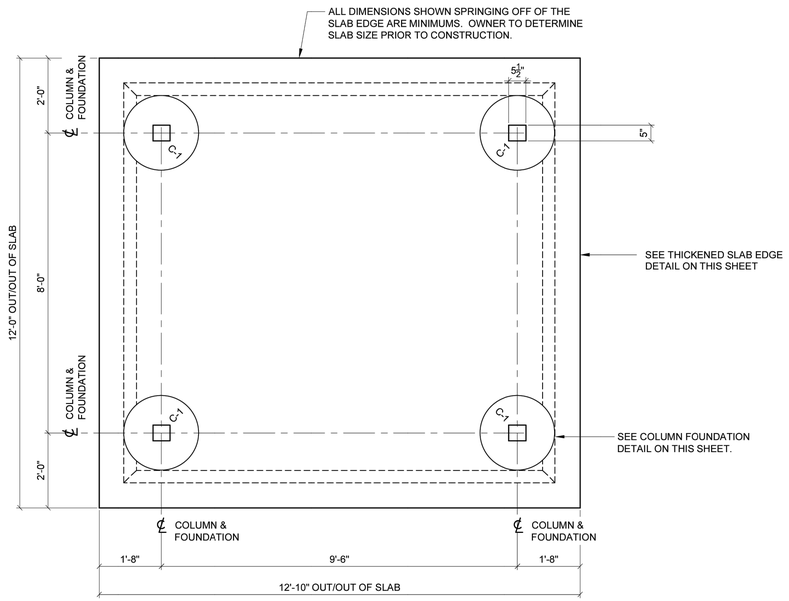
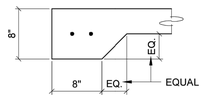


FOUNDATION PLAN

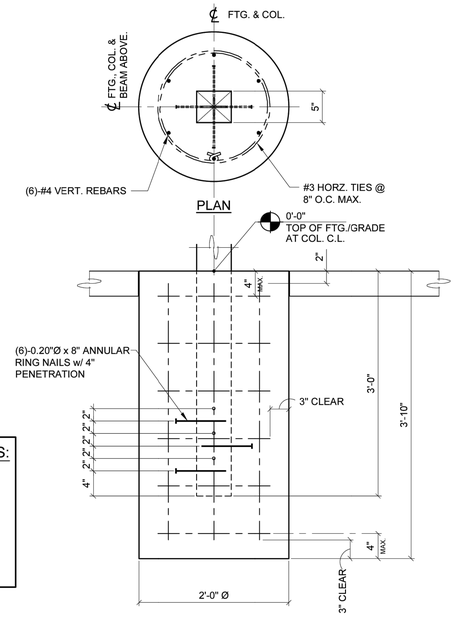
SCALE: 1/2" = 1'-0"



THICKENED SLAB EDGE DETAIL

COLUMN BASE REACTIONS:

- $V_{DL + 3/4(Lr+0.6*WL)}$ = 1,200#
- $V_{0.6*DL + 0.6*WL\ UPLIFT}$ = -210#
- $H_{DL + 0.6*WL}$ = 330#
- $M_{O.T.\ DL+ 0.6*WL}$ = 2,170#-FT



COLUMN FOUNDATION DETAIL

27D RCP PAVILION, TS-SQ12-04, EVERGREEN ROOF, ENCLOSURE BEIGE POWDER PROVIDED BY OWNER

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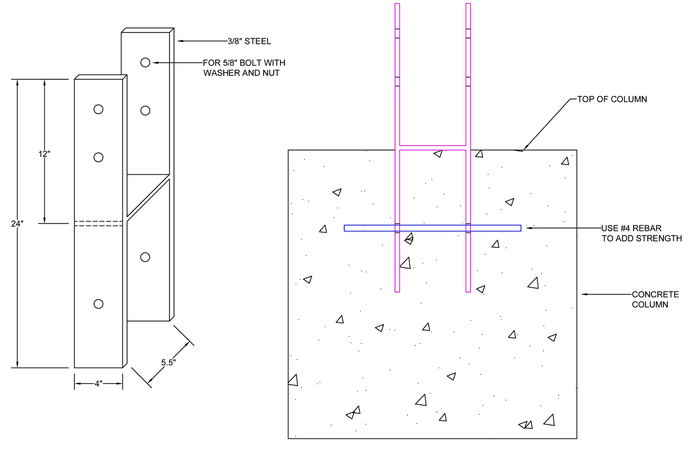

27B CONCRETE POST FOR DOG PARK 12X12 PAVILION LIFT

NTS

CONCRETE NOTES:

1. Remove all organic material and topsoil from slab area. Verify suitability of subgrade. Footings are to bear on undisturbed, natural soil or engineered fill. Both are to be compacted to 95% Proctor density.
2. Prepare slab with min. 8" compacted sand, gravel, or crushed rock.
3. Concrete slab to be 4" thick. Reinforce slab with 6x6-w1.4xw1.4 welded wire fabric at mid-depth. Lap splices 8". Alt.: Fiber mesh admixture (min. 1.5#/c.y., fibrillated polypropylene).
4. Edge of slab to be thickened to min. 8" deep x 8" wide reinforced with 2-#4 continuous rebars. Lap splices min. 24".
5. In locations subject to frost, install isolation joint, max. 1/8" wide, around column piers using diamond or circular layout. Wire mesh shall be interrupted at isolation joints.
6. Install crack control joints (3/16" wide x 1" deep) at 8' to 12' o.c.
7. Concrete slabs in open areas are to be sloped for drainage from center to edge and away from columns. Surface is to be lightly broomed or have a wood troweled finish.
8. Concrete slab, foundation, re-bar & wire mesh are N.I.C.
9. All concrete reinforcing steel to be grade 60, deformed bars.
10. F'_c of concrete to be 3000 psi @ 28 days for foundation. F'_c of concrete to be 3500 psi @ 28 days for slab, air-entrained.
11. All concrete work to be in accordance w/ latest ACI code.
12. Assumed allowable soil bearing pressures: 1500 psf vertical bearing, 100 pcf passive lateral bearing. It is the Owner's responsibility to verify that the allowable soil bearing values at the site meet or exceed these assumed values. If the actual values are lower than the assumed values, the foundations must be redesigned (N.I.C.).
13. Reinforcement shall be securely held in place while placing concrete. If required, additional bars, stirrups or chairs shall be provided to furnish support for bars.

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REVISIONS	DESCRIPTION	DATE	REV

DETAIL SHEET IX

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JRL	JRL
DATE:	REVISION:
1/17/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

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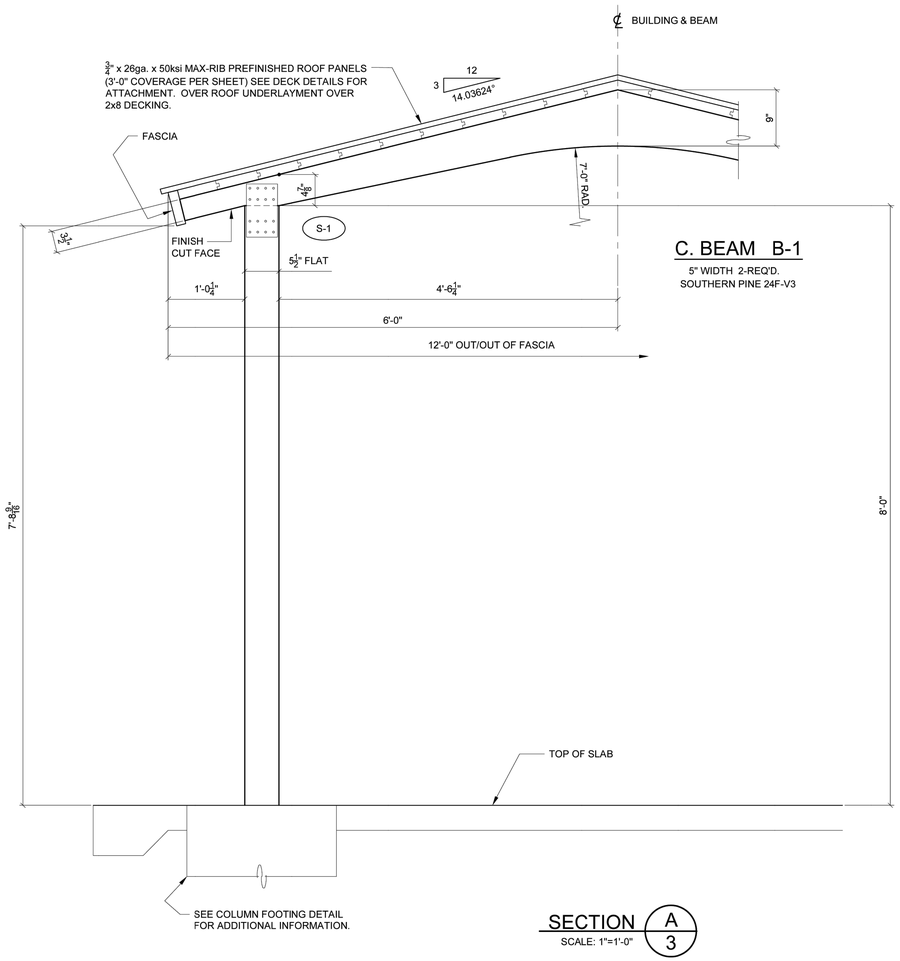
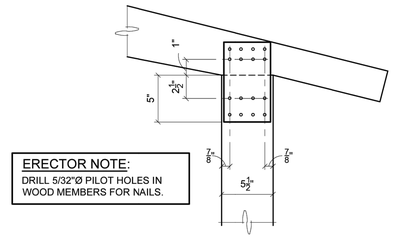


C. BEAM B-1

5" WIDTH 2-REQ'D.
SOUTHERN PINE 24F-V3

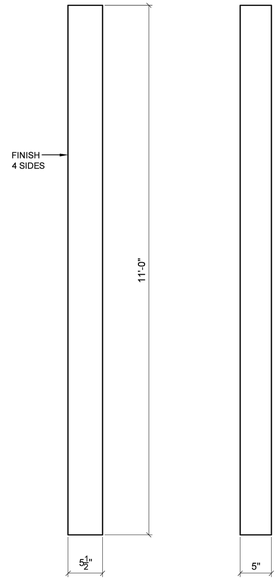
SECTION A/3
SCALE: 1"=1'-0"



ERECTOR NOTE:
DRILL 5/32"Ø PILOT HOLES IN WOOD MEMBERS FOR NAILS.

CONN S-1 4-req'd.

2 - MK-1 PLATE (SP000005x08A00.2500)
32 - 4 GA. x 2 1/2" ANNULAR RING NAIL, STAINLESS STEEL



COL. C-1 5" x 5-1/2" (TREATED)
4-REQ'D. - COMB 50(1:10)

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DETAIL SHEET X

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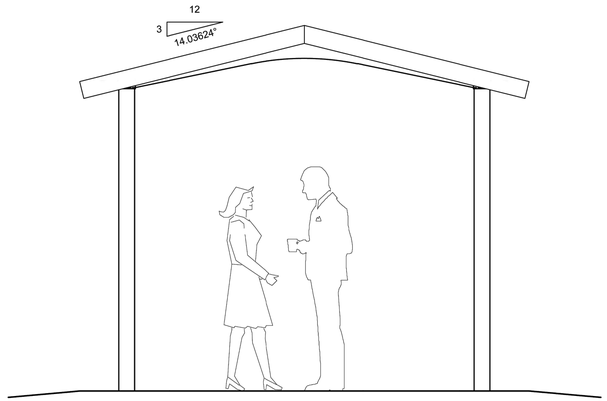
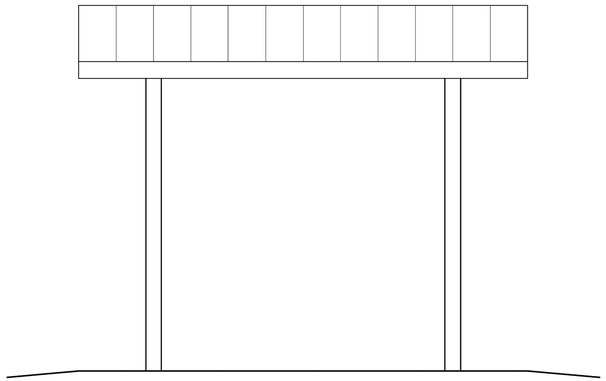


END ELEVATION

SCALE: 1/2" = 1'-0"

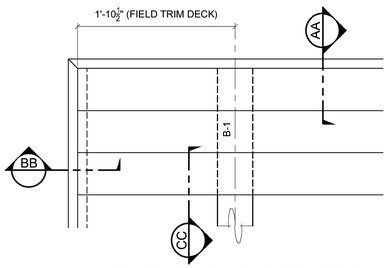


SIDE ELEVATION

SCALE: 1/2" = 1'-0"

TYPICAL DECK LAY-UP

1. START LAYING DECK AT EAVE W/ TONGUES UP.
2. DRIVE COURSES TIGHT W/ BLOCKING.
3. TOE NAIL & FACE NAIL AT EACH SUPPORT (BEAMS) USING 16d COMMON NAILS.
4. SNAP CHALK LINE AT BUILDING RAKE & CUT DECKING STRAIGHT AND SQUARE.
5. DECKING IS FURNISHED IN SPECIFIED LENGTHS, 12'



DECK PLAN AT CORNERS

FASCIA NOTES:

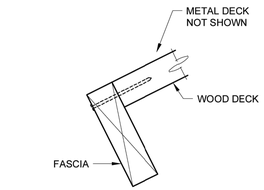
1. ALL FASCIA CORNERS AND SPLICES ARE TO BE MITERED.
2. SEE DETAILS A & B FOR SPLICE DETAILS.
3. ATTACH FASCIA WITH 10d HDG CASING NAILS:
   a. TO 2x4 NAILER - 24" O.C.
   b. TO BEAM ENDS - 3 NAILS PER FASCIA
   c. TO ENDS OF ROOF DECKING - 1 NAIL PER DECK BOARD
   d. AT CORNERS - 2 NAILS EACH DIRECTION
   e. OTHER LOCATIONS - 24" O.C. TO ROOF DECKING

2 x 4 NAILER

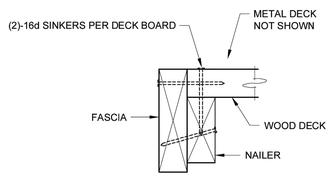
A. MITER ALL SPLICES
B. NAIL SPLICES TOGETHER WITH (2) 10d HDG CASING NAILS, DRIVE NAILS AT AN ANGLE TO AVOID PUNCHING THRU FASCIA.

FASCIA LAY-UP

AT EAVE 14'.
AT RAKE 8'.



SECTION AA



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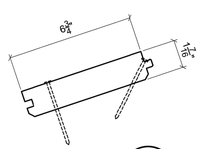
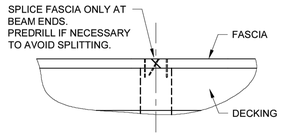
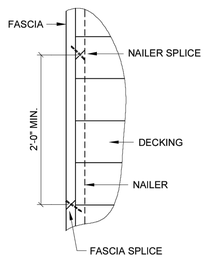


SECTION CC



DETAIL A



DETAIL B

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REVISIONS		
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DETAIL SHEET XI

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DATE:	REVISION:
1/17/2025	100%
SCALE:	JOB NUMBER:
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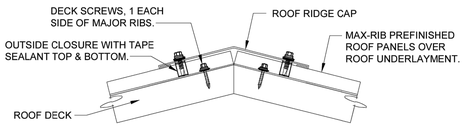
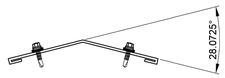


DECK DETAIL @ RIDGE

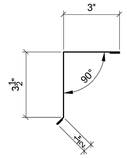


9" RIDGE CAP

14 LN. FT. REQUIRED

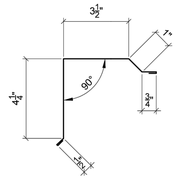
INSTALLATION:
FASTEN RIDGE CAP TO EACH ROOFING PANEL AT HIGH RIB. (1) LAP SCREW PER RIB, PER SIDE.

THE ACTUAL ROOF PITCH MAY VARY FROM THESE GENERAL DETAILS.



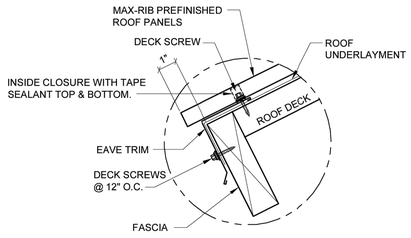
EAVE TRIM

28 LN. FT. REQUIRED



RAKE TRIM

32 LN. FT. REQUIRED



EAVE DETAIL

METAL ROOFING NOTES:

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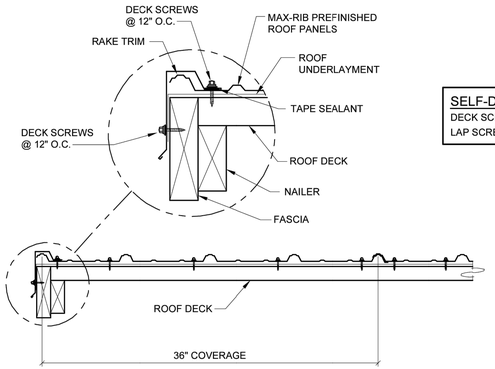
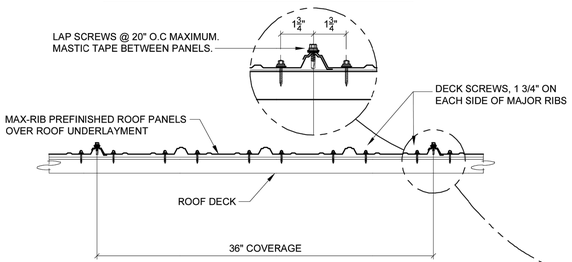


SECTION THRU ROOFING PANEL @ RAKE

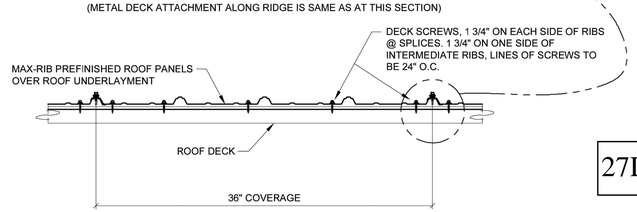
SELF-DRILLING SCREW SPECIFICATIONS:

DECK SCREW = 9-15x1 WOODGRIP HWH SHARP POINT
LAP SCREW = 1/4-14x7/8 IMPAX LAP, 5/16" HEX HEAD



SECTION THRU ROOFING PANEL @ EAVE

(METAL DECK ATTACHMENT ALONG RIDGE IS SAME AS AT THIS SECTION)



SECTION THRU ROOFING PANEL @ INTERIOR

TRUE PLAN AT ROOF PLANE 2-REQ'D

SCALE: 1/2" = 1'-0"

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DETAIL SHEET XII

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DATE:	REVISION:
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SCALE:	JOB NUMBER:
AS NOTED	24-2121

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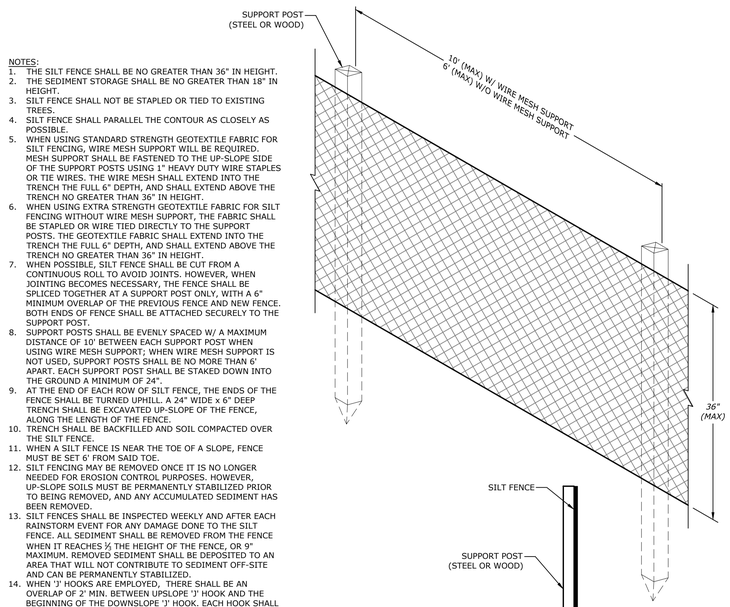
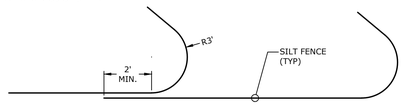
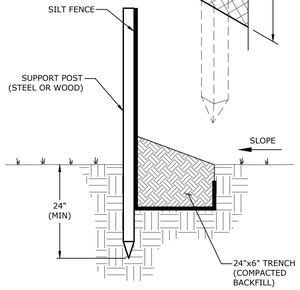


NOTES:
1. THE SILT FENCE SHALL BE NO GREATER THAN 36" IN HEIGHT.
2. THE SEDIMENT STORAGE SHALL BE NO GREATER THAN 18" IN HEIGHT.
3. SILT FENCE SHALL NOT BE STAPLED OR TIED TO EXISTING TREES.
4. SILT FENCE SHALL PARALLEL THE CONTOUR AS CLOSELY AS POSSIBLE.
5. WHEN USING STANDARD STRENGTH GEOTEXTILE FABRIC FOR SILT FENCING, WIRE MESH SUPPORT WILL BE REQUIRED. MESH SUPPORT SHALL BE FASTENED TO THE UP-SLOPE SIDE OF THE SUPPORT POSTS USING 1" HEAVY DUTY WIRE STAPLES OR TIE WIRES. THE WIRE MESH SHALL EXTEND INTO THE TRENCH THE FULL 6" DEPTH, AND SHALL EXTEND ABOVE THE TRENCH NO GREATER THAN 36" IN HEIGHT.
6. WHEN USING EXTRA STRENGTH GEOTEXTILE FABRIC FOR SILT FENCING WITHOUT WIRE MESH SUPPORT, THE FABRIC SHALL BE STAPLED OR WIRE TIED DIRECTLY TO THE SUPPORT POSTS. THE GEOTEXTILE FABRIC SHALL EXTEND INTO THE TRENCH THE FULL 6" DEPTH, AND SHALL EXTEND ABOVE THE TRENCH NO GREATER THAN 36" IN HEIGHT.
7. WHEN POSSIBLE, SILT FENCE SHALL BE CUT FROM A CONTINUOUS ROLL TO AVOID JOINTS. HOWEVER, WHEN JOINTING BECOMES NECESSARY, THE FENCE SHALL BE SPLICED TOGETHER AT A SUPPORT POST ONLY, WITH A 6" MINIMUM OVERLAP OF THE PREVIOUS FENCE AND NEW FENCE. BOTH ENDS OF FENCE SHALL BE ATTACHED SECURELY TO THE SUPPORT POST.
8. SUPPORT POSTS SHALL BE EVENLY SPACED W/ A MAXIMUM DISTANCE OF 10' BETWEEN EACH SUPPORT POST WHEN USING WIRE MESH SUPPORT; WHEN WIRE MESH SUPPORT IS NOT USED, SUPPORT POSTS SHALL BE NO MORE THAN 6' APART. EACH SUPPORT POST SHALL BE STAKED DOWN INTO THE GROUND A MINIMUM OF 24".
9. AT THE END OF EACH ROW OF SILT FENCE, THE ENDS OF THE FENCE SHALL BE TURNED UPHILL. A 24" WIDE x 6" DEEP TRENCH SHALL BE EXCAVATED UP-SLOPE OF THE FENCE, ALONG THE LENGTH OF THE FENCE.
10. TRENCH SHALL BE BACKFILLED AND SOIL COMPACTED OVER THE SILT FENCE.
11. WHEN A SILT FENCE IS NEAR THE TOE OF A SLOPE, FENCE MUST BE SET 6' FROM SAID TOE.
12. SILT FENCING MAY BE REMOVED ONCE IT IS NO LONGER NEEDED FOR EROSION CONTROL PURPOSES. HOWEVER, UP-SLOPE SOILS MUST BE PERMANENTLY STABILIZED PRIOR TO BEING REMOVED, AND ANY ACCUMULATED SEDIMENT HAS BEEN REMOVED.
13. SILT FENCES SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINSTORM EVENT FOR ANY DAMAGE DONE TO THE SILT FENCE. ALL SEDIMENT SHALL BE REMOVED FROM THE FENCE WHEN IT REACHES ½ THE HEIGHT OF THE FENCE, OR 9" MAXIMUM. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
14. WHEN 'J' HOOKS ARE EMPLOYED, THERE SHALL BE AN OVERLAP OF 2' MIN. BETWEEN UPSLOPE 'J' HOOK AND THE BEGINNING OF THE DOWNSLOPE 'J' HOOK. EACH HOOK SHALL HAVE A RADIUS OF 3' MIN.



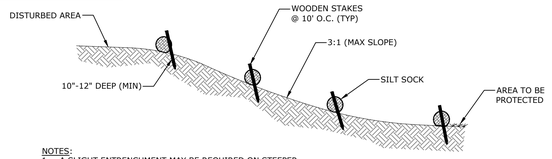
J-HOOKS



ELEVATION

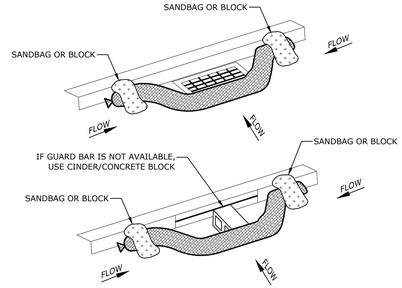
50A SILT FENCE
NTS

SLOPE INTERRUPTION

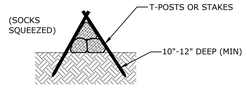


NOTES:
1. A SLIGHT ENTRENCHMENT MAY BE REQUIRED ON STEEPER SLOPES TO ENSURE INTIMATE GROUND CONTACT.
2. REMOVE SEDIMENT FROM THE UPSLOPE SIDE OF THE SILT SOCK WHEN ACCUMULATION HAS REACHED ½ OF EFFECTIVE HEIGHT OF THE SILT SOCK.
3. LOOSE FILTER MEDIA MAY BE BACKFILLED ON THE UPSLOPE SIDE OF THE FILTER SOCK TO ENHANCE PERFORMANCE.
4. HARDWOOD STAKES (2"x2"x24" NOMINAL) ARE SUGGESTED.

INLET PROTECTION

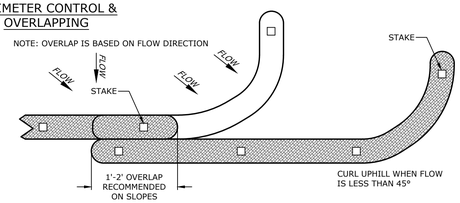


PYRAMID INSTALLATION STAKING

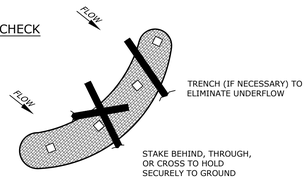


A PYRAMID OF SMALLER DIAMETER SILT SOCKS WILL INCREASE THE EFFECTIVE HEIGHT OF THE DEVICE WHEN LARGER DIAMETER SOCKS ARE NOT READILY AVAILABLE OR EASY TO INSTALL

PERIMETER CONTROL & OVERLAPPING

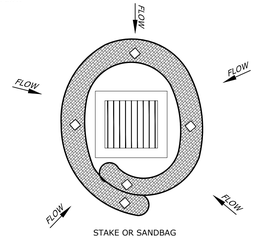


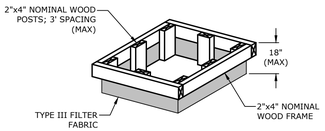
DITCH CHECK



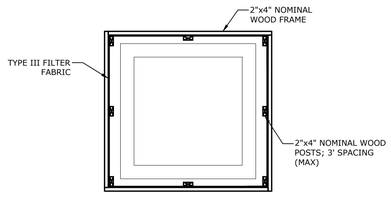
INSTALL SILT SOCK PERPENDICULAR TO FLOW WITH ENDS CURLED SLIGHTLY UPSTREAM TO PREVENT HIGH WATER FROM GOING AROUND THE ENDS. SLOW AND SPREAD WATER TO REDUCE CHANNELING AND EROSION

50B SILT SOCK
NTS

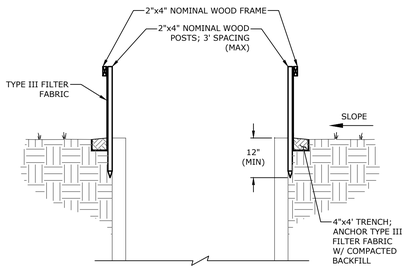




ISOMETRIC VIEW



PLAN



SECTION A

50D TEMPORARY GRATE INLET, JUNCTION BOX, & OPEN LID SEDIMENT FILTER
NTS

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(479) 443-2377
HTTP://WWW.MCE.US.COM

REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER M. BAKUNAS
License Number 985
STATE OF ARKANSAS
01/17/2025
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IMPROVEMENTS PHASE 1
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REVISIONS

REV	DATE	DESCRIPTION

DETAIL SHEET
XIII

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
1/17/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

C7.12

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NOTES:
1. 8"x8"x16" CONCRETE BLOCKS SHALL BE PLACED IN A SINGLE ROW AROUND THE PERIMETER OF INLET ON THEIR SIDES ABUTTING EACH OTHER.
2. HEIGHT OF THE BARRIER WILL VARY. STACK BLOCKS ON TOP OF EACH OTHER SO THAT THE MINIMUM HEIGHT IS 16" AND MAXIMUM HEIGHT IS 24"
3. PLACE TYPE III FILTER FABRIC W/ WIRE MESH SUPPORT OVER VERTICAL FACE OF BLOCKS.

PLAN

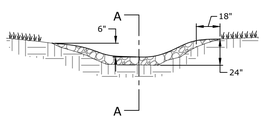
SECTION A

50F TEMPORARY GRATE INLET SEDIMENT FILTER IN PAVEMENT

NTS

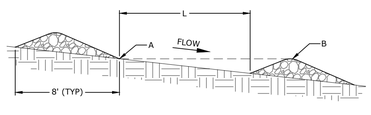
NOTES:
1. CHECK DAM(S) SHALL BE CONSTRUCTED W/ ROCK SIZES BETWEEN 3" AND 15". THE SPILLWAY SHALL BE 6" (MIN) LOWER THAN ABUTMENT.
2. MAXIMUM SPACING BETWEEN DAM(S) SHALL BE SUCH THAT THE TOE OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM DAM.
3. EXTEND THE ABUTMENTS 18" INTO THE CHANNEL BANKS.

MAINTENANCE & INSPECTIONS:
1. REMOVE ALL SEDIMENT FROM BEHIND ANY CHECK DAM(S) WHEN IT REACHES ½ THE HEIGHT OF DAM(S), OR AS NEEDED. ALL REMOVED SEDIMENT SHALL BE LOCATED TO AN AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT RUNOFF TO ANY OFFSITE AREA AND CAN BE PERMANENTLY STABILIZED.
2. ALL CHECK DAM(S) SHALL BE INSPECTED PERIODICALLY FOR DAMAGE AFTER ALL SIGNIFICANT STORM EVENTS (>1" IN 24 HRS) AND DURING WINTER MONTHS. REPAIRS SHALL BE MADE PROMPTLY TO BRING CHECK DAM(S) BACK TO A FUNCTIONAL STATE. ANY EROSION AROUND AND / OR UNDER THE DAM(S) SHALL BE REPAIRED IMMEDIATELY.
3. CONTRACTOR TO REMOVE ALL CHECK DAM(S) WHEN SITE STABILIZATION IS COMPLETE.



UPSTREAM VIEW

NOTES:
1. 'L' IS THE DISTANCE WHERE THE ELEVATION OF POINTS 'A' AND 'B' ARE THE SAME.



SECTION A

50J TEMPORARY ROCK CHECK DAM

NTS

PLAN

NOTES:
1. NO WASHING OUT OF CONCRETE TRUCKS OR WASHING OF SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS IS ALLOWED.
2. EXCESS CONCRETE IS NOT ALLOWED TO BE DUMPED ON-SITE, EXCEPT IN DESIGNATED TEMPORARY CONCRETE WASHOUT PIT AREAS.
3. ON-SITE TEMPORARY CONCRETE WASHOUT AREAS WILL BE LOCATED AT LEAST 50 FEET FROM STORM DRAINS, OPEN DITCHES, OR WATER BODIES AS DETERMINED IN THE FIELD.
4. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
5. TEMPORARY CONCRETE WASHOUT FACILITIES WILL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
6. WASHOUT FACILITIES WILL BE CLEANED OUT ONCE THE WASHOUT IS 75% FULL.
7. PLASTIC LINING MATERIAL WILL BE MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND WILL BE FREE OF HOLES, TEARS, OR OTHER DEFECTS.
8. WHEN WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR WORK, THE HARDENED CONCRETE WILL BE REMOVED AND DISPOSED OF. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES WILL BE REMOVED FROM THE SITE AND DISPOSED OF.

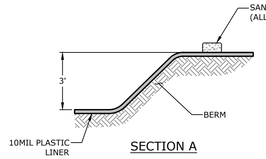
50N TEMPORARY CONCRETE WASHOUT

NTS

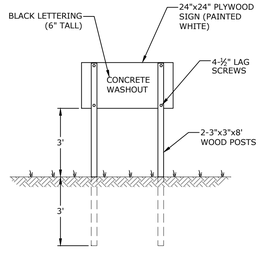
NOTES:
1. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO EXITING ONTO PUBLIC RIGHT-OF-WAYS.
2. CONSTRUCTION ENTRANCE(S) SHALL BE MAINTAINED TO WHERE TRACKING OF SEDIMENT IS PREVENTED FROM ENTERING INTO PUBLIC RIGHT-OF-WAYS. THIS SHALL INCLUDE, BUT IS NOT LIMITED TO: ADDITIONAL TOP DRESSING OR REPAIR AND / OR CLEANING OUT OF ANY SEDIMENT TRAPPING MEASURES.
3. IF WASHING IS REQUIRED, THIS MEASURE SHALL BE DONE IN A CLOSED STONE STABILIZED AREA WHICH DRAINS INTO A SEDIMENT TRAP / BASIN.

MAINTENANCE & INSPECTIONS:
1. CONTRACTOR IS TO MAINTAIN THE GRAVEL ENTRANCE(S) IN SUCH CONDITION AS TO PREVENT MUD OR SEDIMENT FROM ENTERING PUBLIC RIGHT-OF-WAYS.
2. CONTRACTOR TO REPLACE GRAVEL WHEN VOIDS BETWEEN GRAVEL IS NO LONGER VISIBLE.
3. AFTER EACH SIGNIFICANT STORM EVENT (>1" / 24HRS), CONTRACTOR TO INSPECT ALL STRUCTURES USED TO TRAP SEDIMENT AND REMOVE SEDIMENT AS NECESSARY. ANY OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED INTO PUBLIC RIGHT-OF-WAYS SHALL BE REMOVED IMMEDIATELY.
4. ALL SEDIMENT LOCATED ON PAVED ROADWAYS MUST BE REMOVED WITHIN 24 HOURS.

TEMPORARY CONSTRUCTION ENTRANCE SPECIFICATIONS:
1. PAD THICKNESS SHALL NOT BE LESS THAN 12". NON-WOVEN FILTER FABRIC SHALL BE USED TO IMPROVE STABILITY OF THE PAD IN AREAS OF SEEPAGE OR FOUND TO BE IN A HIGH WATER TABLE AREA.
2. AGGREGATE SIZE WITHIN THE PAD SHALL BE 3"-6" STONE, SMOOTHED.
3. LENGTH OF THE ENTRANCE(S) SHALL BE AS NECESSARY, BUT NO LESS THAN 50' LONG.
4. WIDTH OF THE ENTRANCE(S) SHALL BE THE FULL WIDTH OF INGRESS / EGRESS, BUT NO LESS THAN 12' WIDE.
5. CONSTRUCTION ENTRANCE(S) SHALL BE LOCATED TO MINIMIZE SEDIMENT LEAVING THE SITE AND PROVIDE UTILITY BY ALL CONSTRUCTION VEHICLES. CONTRACTOR IS TO AVOID PLACING CONSTRUCTION ENTRANCE(S) AT STEEP GRADES AND / OR CURVES IN THE EXISTING ROAD.
6. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, STRAW BALES, OR OTHER APPROVED METHODS.
7. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY. PROVIDE DRAINAGE TO CARRY WATER TO A SEDIMENT TRAP OR OTHER SUITABLE OUTLET.



SECTION A



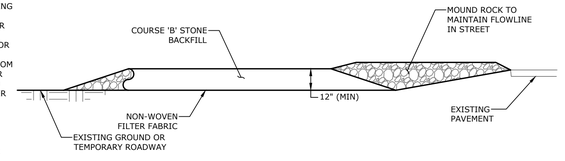
SIGN DETAIL

50P TEMPORARY STABILIZED CONSTRUCTION ENTRANCE

NTS

SECTION A

PLAN



SECTION A

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STATE OF ARKANSAS

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REVISIONS	DESCRIPTION	DATE
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DETAIL SHEET XIV

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JRL	JRL
DATE:	REVISION:
1/17/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

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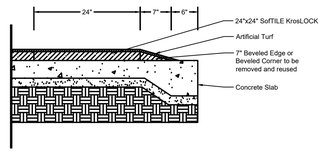
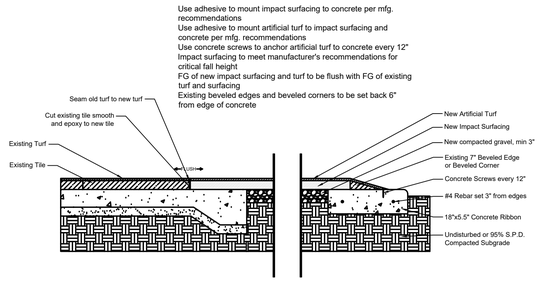
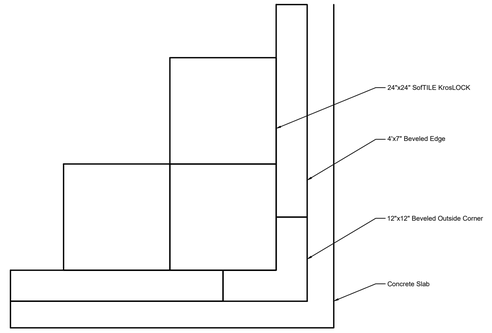
ITEMS PROVIDED BY OWNER TO BE INSTALLED			
Page #	**Detail #**	**Item**	**Qty**
C7.0	25J	Bike Rack	2
C7.7	27D	12'x12' Pavilion	2
C7.2	27F	Bench Without Back	5
C7.3	27G	Bench With Back	5
C2.6-C2.7	N/A	#9-11x3" Decking Screw	1700
C8.0	29A	3/8"x4" Lag Screw	400
C8.0	29A	3/8" Washer	400





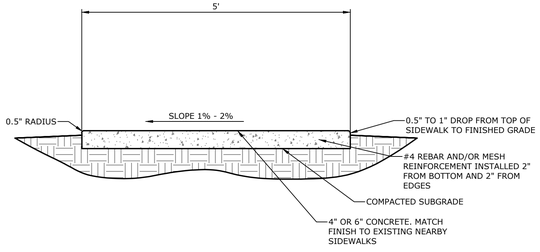
29C PLAYGROUND IMPACT TURF EXPANSION

NTS



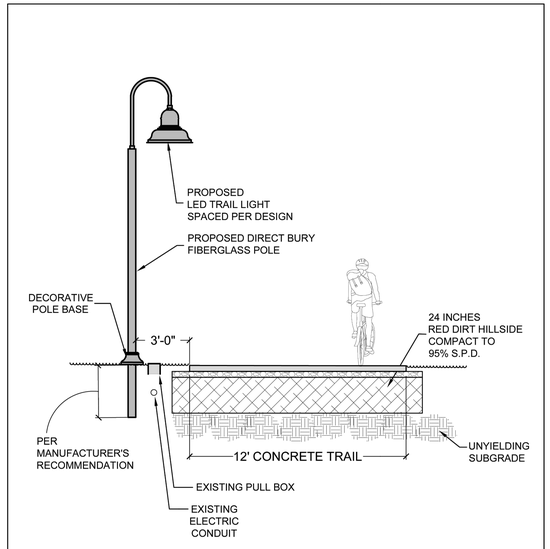
GENERAL NOTES

1. All work shall conform to the City of Fayetteville's current ordinances and standards for sidewalk and concrete pavement construction.
2. Concrete shall have a minimum compressive strength of 3,500 PSI.
3. Expansion joint material shall be required at 50 ft maximum spacing.
4. Expansion joint material shall be preformed asphalt impregnated fiberboard. Expansion joint material shall be left 1/2" lower and filled with silicone sealer to finished grade.
5. Sidewalk shall have tooled or saw-cut control joints at a maximum of 10 ft intervals. These weakened plane (control) joints shall be constructed to a 1/4"depth of the sidewalk thickness and shall be 1/8" to 3/8" wide.
6. All cold joints and saw-cut joints shall be filled to finished grade with joint sealant.
7. Where sidewalk parallels or abuts curb or other existing concrete work, dowel to this existing work.
8. Thickened edge is to run continuous on both sides of all concrete sidewalks.
9. Sidewalk shall have wire mesh reinforcement.



29B CONCRETE SIDEWALK

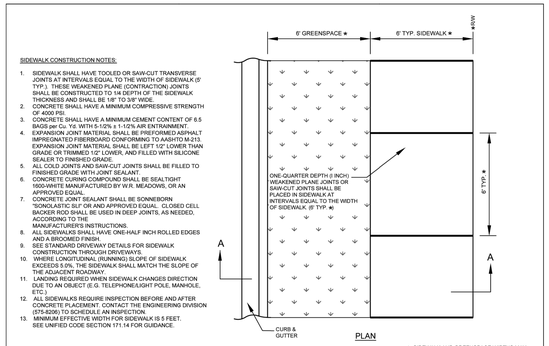
NTS



CITY OF FAYETTEVILLE ARKANSAS | ENGINEERING DIVISION, 113 W. MOUNTAIN STREET, PHONE (479) 575-8206, FAX NO. (479) 575-8202 | TITLE: *TRAIL DETAILS* | DESCRIPTION: TRAIL LIGHTING DETAIL CROSS SECTION | DATE: JAN. 05, 2023 | SHEET: TR3

SIDEWALK CONSTRUCTION NOTES:

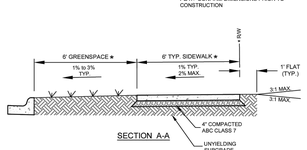
1. SIDEWALK SHALL HAVE TOOLED OR SAW-CUT TRANSVERSE JOINTS AT INTERVALS EQUAL TO THE WIDTH OF SIDEWALK (5' TYP.). THESE WEAKENED PLANE (CONTRACTION) JOINTS SHALL BE CONSTRUCTED TO 1/4 DEPTH OF THE SIDEWALK THICKNESS AND SHALL BE 1/8" TO 3/8" WIDE.
2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI.
3. CONCRETE SHALL HAVE A MINIMUM CEMENT CONTENT OF 6.5 BAGS per Cu. Yd. WITH 5-10% ± 1-1/2% AIR ENTRAINMENT.
4. EXPANSION JOINT MATERIAL SHALL BE PREFORMED ASPHALT IMPREGNATED FIBERBOARD CONFORMING TO AASHTO M-213. EXPANSION JOINT MATERIAL SHALL BE LEFT 1/2" LOWER THAN GRADE OR TRIMMED 1/2" LOWER, AND FILLED WITH SILICONE SEALER TO FINISHED GRADE.
5. ALL COLD JOINTS AND SAW-CUT JOINTS SHALL BE FILLED TO FINISHED GRADE WITH JOINT SEALANT.
6. CONCRETE CURING COMPOUND SHALL BE SEALTIGHT 1650-WHITE MANUFACTURED BY W.R. MEADOWS, OR AN APPROVED EQUAL.
7. CONCRETE JOINT SEALANT SHALL BE SONNEBORN "SONOLASTIC SL1" OR AND APPROVED EQUAL. CLOSED CELL BACKER ROD SHALL BE USED IN DEEP JOINTS, AS NEEDED, ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.
8. ALL SIDEWALKS SHALL HAVE ONE-HALF INCH ROLLED EDGES AND A BROOM FINISH.
9. SEE STANDARD DRIVEWAY DETAILS FOR SIDEWALK CONSTRUCTION THROUGH DRIVEWAYS.
10. WHERE LONGITUDINAL (RUNNING) SLOPE OF SIDEWALK EXCEEDS 5.0%, THE SIDEWALK SHALL MATCH THE SLOPE OF THE ADJACENT ROADWAY.
11. LANDING REQUIRED WHEN SIDEWALK CHANGES DIRECTION DUE TO AN OBJECT (E.G. TELEPHONE/LIGHT POLE, MANHOLE, ETC.).
12. ALL SIDEWALKS REQUIRE INSPECTION BEFORE AND AFTER CONCRETE PLACEMENT. CONTACT THE ENGINEERING DIVISION (575-8206) TO SCHEDULE AN INSPECTION.
13. MINIMUM EFFECTIVE WIDTH FOR SIDEWALK IS 5 FEET. SEE UNIFIED CODE SECTION 171.14 FOR GUIDANCE.



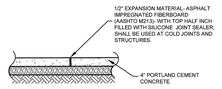
PLAN

★ SIDEWALK AND GREENSPACE WIDTHS MAY VARY BASED ON CURRENT MASTER STREET PLAN OR APPROVED SUBDIVISION PLAT. CONFIRM DIMENSIONS PRIOR TO CONSTRUCTION

JOINT SEALANT DETAIL



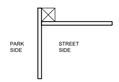
SECTION A-A



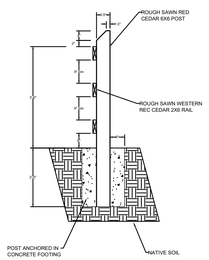
ELEVATION

CITY OF FAYETTEVILLE ARKANSAS | ENGINEERING DIVISION, 113 W. MOUNTAIN STREET, PHONE (479) 575-8206, FAX NO. (479) 575-8202 | TITLE: *SIDEWALK DETAILS* | DESCRIPTION: SIDEWALK WITH GREENSPACE | DATE: May 21, 2020 REVISED MAY 20, 2021 February 29, 2022 April 20, 2023 ------ ------ | SHEET: SW1

PLAN VIEW- INSIDE CORNER OF FENCE

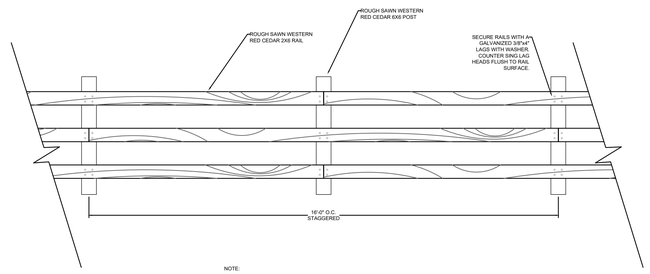


PLAN VIEW- OUTSIDE CORNER OF FENCE



29A CEDAR RAIL FENCE

NTS



NOTE:

1. RAILING TO FACE STREET SIDE
2. IF TEMPORARY HARDWARE IS REQUIRED TO ACHIEVE FINAL INSTALLATION, FINISHING NAILS SHALL BE USED AND OVERALL AESTHETIC AND QUALITY SHALL NOT BE REDUCED DUE TO TEMPORARY HARDWARE
3. OWNER TO PROVIDE THE FOLLOWING:
   - 3.1. (400) 3/8"x4" LAGS
   - 3.2. (400) WASHERS
   - 3.3. (16) 6"x6"x12' POSTS
   - 3.4. (42) 2"x6"x16' RAILS
   - 3.5. (6) 2"x6"x10' RAILS
4. CONTRACTOR TO PROVIDE ANY ADDITIONAL MATERIALS

McCLELLAND CONSULTING ENGINEERS, INC.
DESIGNED TO SERVE
1580 E STEARNS ST
FAYETTEVILLE, ARKANSAS 72703
(479) 443-2377
HTTP://WWW.MCE.US.COM

REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER M. BAKUNAS
License Number 0185
STATE OF ARKANSAS
01/17/2025
ORIGINAL SIGNATURE ON FILE

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1595 N DARTMOUTH AVE
FAYETTEVILLE, AR

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REVISIONS		
REV	DATE	DESCRIPTION

CITY DETAIL SHEET I

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C8.0

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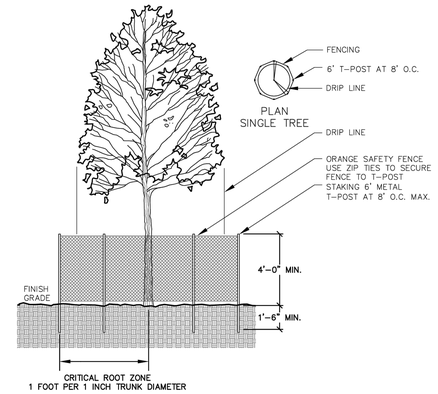
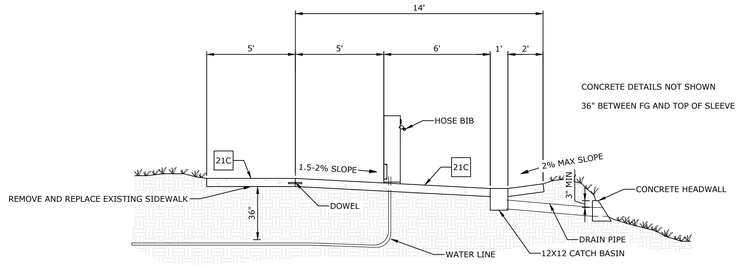


TREE PRESERVATION FENCING DETAIL
NOT TO SCALE

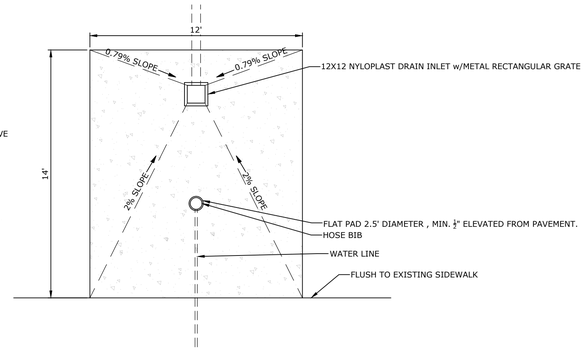
29F TREE PRESERVATION FENCING DETAIL
NTS

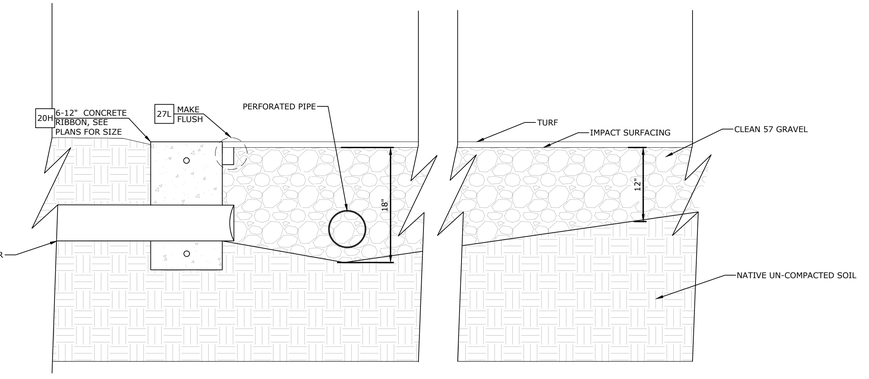
CITY OF FAYETTEVILLE STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION

1. ALL TREES AND NATURAL AREAS SHOWN ON THIS PLAN TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING.
2. PROTECTIVE FENCES SHALL BE ERECTED ACCORDING TO CITY OF FAYETTEVILLE STANDARDS FOR TREE PROTECTION.
3. PROTECTIVE FENCES SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE PREPARATION WORK AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT.
4. EROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILD-UP WITHIN TREE DRIPLINES.
5. PROTECTIVE FENCES SHALL SURROUND THE TREES OR GROUP OF TREES AND WILL BE LOCATED AT THE DRIPLINE, FOR NATURAL AREAS, PROTECTIVE FENCES SHALL FOLLOW THE LIMIT ON CONSTRUCTION IN ORDER TO PREVENT THE FOLLOWING:
   A. SOIL COMPACTION IN THE ROOT ZONE OF AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT.
   B. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN 6") ROOT TRENCHING NOT VIEWED BY CITY ARBORISTS.
   C. WOUNDS TO EXPOSED ROOTS, TRUNK OR LIMBS BY MECHANICAL EQUIPMENT.
   D. OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CONCRETE TRUCK CLEANING AND FIRES.
6. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIPLINES MAY BE PERMITTED IN THE FOLLOWING CASES:
   A. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT.
   B. WHERE PERMEABLE PAVING IS TO BE INSTALLED WITHIN A TREE'S DRIPLINE, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA (PRIOR TO SITE GRADING SO THIS AREA IS GRADED SEPARATELY PRIOR TO PAVING INSTALLATION TO MINIMIZE ROOT DAMAGE).
   C. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE TO ALLOW 6 TO 10 FEET OF WORK SPACE.
   D. WHERE THERE ARE SEVERE SPACE CONSTRAINTS DUE TO TRACT SIZE OR OTHER SPECIAL REQUIREMENTS.
7. WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN 4 FEET TO A TRUNK, PROTECT THE TRUNK WITH STRAPPED ON PLANKING TO HEIGHT OF 8 FEET (OR LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.
8. TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
9. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOPSOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN 2 DAYS, COVER WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
10. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.
11. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN 4 INCHES SHALL BE PERMITTED WITHIN THE DRIPLINE OF TREES. NO SOIL IS PERMITTED ON THE ROOT FLARE OF ANY TREE.
12. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND EQUIPMENT SHALL TAKE PLACE BEFORE CONSTRUCTION BEGINS.
13. ALL FINISHED PRUNING MUST BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE AMERICAN NATIONAL STANDARD, ANSI-A300 PRUNING, 2008 OR LATER). A CITY CERTIFIED TREE PRUNER MUST BE RETAINED TO MAKE ALL PRUNING CUTS. A LIST OF CERTIFIED TREE PRUNERS IS AVAILABLE FROM THE URBAN FORESTER.
14. DEVIATIONS FROM THE ABOVE NOTES MAY BE CONSIDERED ORDINANCE VIOLATIONS IF THERE IS SUBSTANTIAL NON-COMPLIANCE OR IF A TREE SUSTAINS DAMAGE AS A RESULT.
15. NO TREES ARE BEING REMOVED.
16. EXISTING TREE SPECIES AND SIZES ARE SHOW ON THE SURVEY.



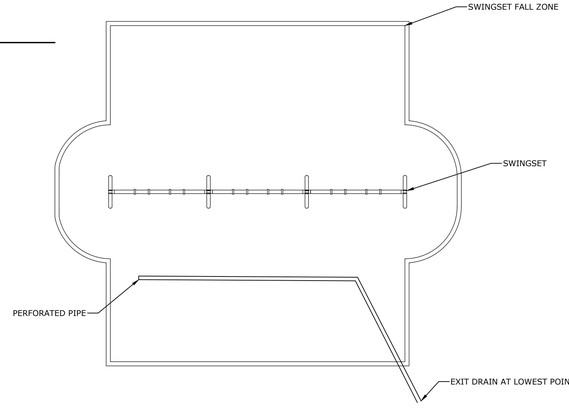
29D DOG WASH STATION
NTS





29E PERVIOUS SWINGSET
NTS

TURF TO BE MOUNTED
FLUSH WITH CONCRETE
EXIT PIPE TO BE AT
LOWEST POINT



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REVISIONS	DESCRIPTION	DATE
REV		

CITY DETAIL SHEET II

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 1/17/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C8.1

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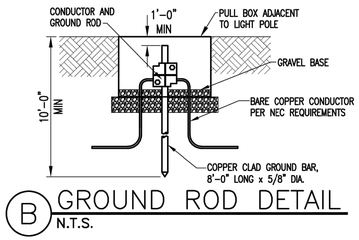


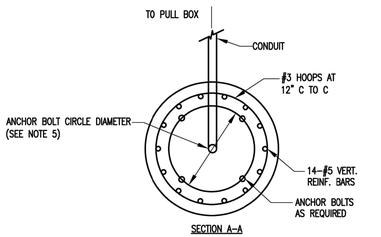
B GROUND ROD DETAIL
N.T.S.

LIGHTING NOTES

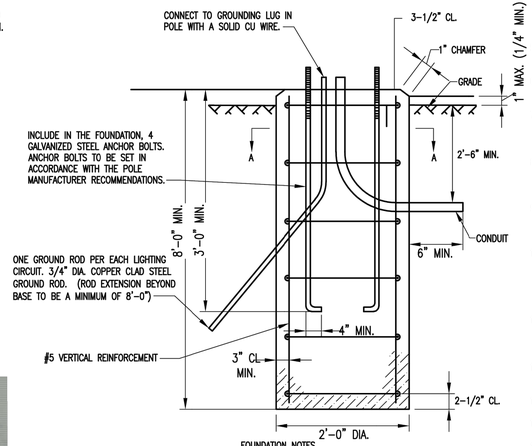
1. FOR LUMINAIRE ORIENTATION AND X-Y COORDINATES OF POLES, SEE LUMINAIRE SCHDULE.
2. UNLESS OTHERWISE INDICATED, PULL BOX 12x12 SHALL BE INSTALLED WITHIN 5' OF POLE FOUNDATION.
3. INSTALL 2#10 XHHW-2, 1#10 E.G.C. FROM PULL BOX TO POLE LIGHTS.
4. INSTALL CONDUIT BELL END FITTINGS ON NON-METALLIC CONDUIT ENDS. THE COST OF FITTINGS SHALL BE CONSIDERED SUBSIDIARY TO THE PAY ITEM, "NON-METALLIC CONDUIT (2")".
5. THE DEGREE OF TILT ON LUMINAIRES SHALL BE ZERO.
6. ALL SPLICES SHALL BE WATERTIGHT AND UL-LISTED FOR CONTINUOUS USE IN SUBMERSIBLE INSTALLATIONS.
7. USE MINIMUM 1/4" PULL ROPE OR 12 LBS. PULL TAPE WHEN PULLING CONDUCTORS.
8. E.G.C. SHALL BE EXOTHERMICALLY BONDED TO GROUND ROD.
9. CONDUCT A MINIMUM 14-DAY BURN TEST FOR THE COMPLETE LIGHTING SYSTEM. REPLACE BURNED OUT AND NOTICEABLY DIM LUMINAIRES; MALFUNCTIONING EQUIPMENT SHALL BE CORRECTED, AND RETESTED THE SYSTEM. OTHERWISE REMOVE AND REPLACE WITH NEW EQUIPMENT.
10. SEE STANDARD DRAWING SD-6 FOR PULL BOX CONSTRUCTION.

RECEPTACLE SCHEDULE

SYMBOL	MODEL NUMBER	DESCRIPTION
MP	--	PROVIDED BY THE LIGHT POLE MANUFACTURER.



SECTION A-A



FOUNDATION NOTES

1. CONCRETE FOR LIGHT POLE STRUCTURE FOUNDATION SHALL HAVE A MINIMUM OF 4000 PSI. ALL REINFORCEMENT SHALL BE DEFORMED STEEL BARS AND CONFORM TO ASTM M31 OR M53, GRADE 60.
2. CONTRACTOR SHALL PROVIDE PRE-CAST OR CAST-IN-PLACE FOUNDATIONS.
3. PROVIDE WATERTIGHT CAPS FOR ANY UNUSED CONDUITS.
4. THE CONTRACTOR SHALL COORDINATE WITH THE LIGHTING FIXTURE, FOUNDATION, AND POLE MANUFACTURERS TO ENSURE PROPER FIT OF ALL COMPONENTS.
5. DIMENSIONS AND SIZE OF ANCHOR BOLTS, INCLUDING BOLT CIRCLE, TO BE VERIFIED BY LIGHT POLE MANUFACTURER.
6. CONTRACTOR TO COORDINATE THE APPROPRIATE DIMENSION TO ASSURE THE MINIMUM CONDUIT DEPTH IS 2'-9" WHEN LEADING PULLBOX.

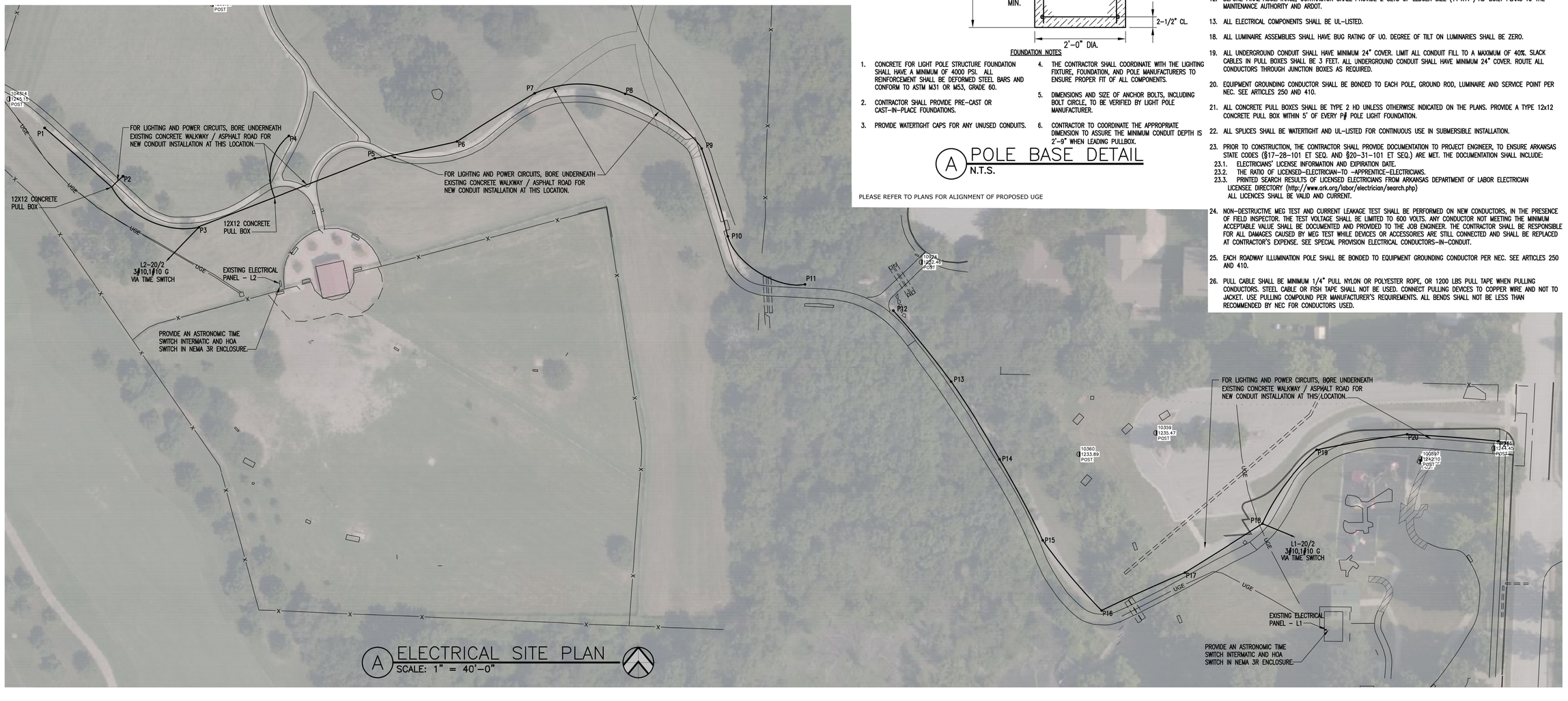
A POLE BASE DETAIL
N.T.S.

PLEASE REFER TO PLANS FOR ALIGNMENT OF PROPOSED UGE

GENERAL NOTES

1. ELECTRICAL DRAWINGS (POWER AND LIGHTING) ARE DIAGRAMMATIC AND SCHEMATIC IN NATURE. USE JUDGMENT AND CARE TO INSTALL ELECTRICAL WORK TO FUNCTION PROPERLY AND FIT WITHIN CONSTRUCTION AND FINISHES. ALL CONDUCTORS, CONDUIT, AND MATERIALS NOT SPECIFICALLY SHOWN OR SPECIFIED, WHICH ARE REQUIRED FOR A COMPLETE OPERATING DEVICE OR SYSTEM ARE REQUIRED TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
2. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NFPA 70, CURRENT EDITION), LIFE SAFETY CODE (NFPA 101M CURRENT EDITION), UNDERGROUND FACILITIES DAMAGE PREVENTION ACT (§ 17-28-101 ET SEQ.), AND LOCAL ELECTRICAL CODE. IN ADDITION, ALL PARTS OF THIS INSTALLATION SHALL BE IN ACCORDANCE WITH THE ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.
3. THE CONTRACTOR SHALL NOT ENGAGE IN EXCAVATION OR DEMOLITION ACTIVITIES WITHOUT HAVING FIRST NOTIFIED THE ARKANSAS ONE CALL CENTER IN ACCORDANCE WITH UNDERGROUND FACILITIES DAMAGE PREVENTION ACT. NOT ALL UTILITY COMPANIES ARE MEMBERS OF THE ARKANSAS ONE CALL SYSTEM. THE CONTRACTOR IS ADVISED TO CONTACT ALL NON-MEMBER UTILITIES AS WELL AS THE ONE CALL CENTER.
4. UNDERGROUND UTILITIES EXIST WITHIN AND ADJACENT TO THE LIMITS OF CONSTRUCTION. SOME UTILITIES MAY HAVE BEEN RELOCATED SINCE THE TIME OF DESIGN AND THE CONTRACTOR'S NOTICE TO PROCEED. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES INVOLVED AND VERIFY THE LOCATION OF UNDERGROUND UTILITIES. THE CONTRACTOR SHALL MAINTAIN THE UTILITY LOCATION MARKINGS UNTIL IT IS NO LONGER NECESSARY.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS OF REPAIR OR REPLACEMENT OF EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
6. ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAYBE THE PROPERTY OF THE UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.
7. CONDUIT INSTALLED UNDER ROADWAY OR WALKWAY SURFACES SHALL BE INSTALLED BY A PUSHING OR BORING METHOD AS DIRECTED BY ENGINEER. PVC OR HDPE CONDUIT SHALL BE USED. PVC CONDUIT SHALL BE MARKED "DIR. BORING" OR "DIRECTIONAL BORING" AS PER NEC.
8. PULL BOX LIDS SHALL CLOSE FLUSH WITH OUT PINCHING ANY CONDUCTORS. CONDUIT LENGTHS IN PULL BOXES SHALL BE SET ACCORDINGLY. ANY CONDUCTORS THAT HAVE BEEN DAMAGED BY PINCHING SHALL BE COMPLETELY REPLACED AT CONTRACTOR'S EXPENSE.
9. ELECTRICAL CONTRACTOR SHALL VERIFY LOCATION OF ALL ROUGH-INS AT THE PROJECT SITE. DO NOT SCALE DRAWINGS FOR EXACT LOCATION OF DEVICES. FIELD VERIFY FINAL MOUNTING LOCATIONS AS REQUIRED BY PROJECT CONDITIONS PRIOR TO ROUGH-IN.
10. ALL DEVICES TO BE INSTALLED BY THIS TRADE SHALL BE COORDINATED WITH ALL TRADES. DURING CONSTRUCTION TO AVOID CONFLICT AND TO PROVIDE A QUALITY PROJECT. IF YOU NOTICE ANY DISCREPANCY BETWEEN THIS WORK AND A SEPARATE TRADE, NOTIFY THE ENGINEER IMMEDIATELY FOR DIRECTION. ANY COORDINATION WORK THAT OCCURS WITHOUT APPROVAL FROM THE ENGINEER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL MOUNTING LOCATIONS SHALL BE CONFIRMED WITH OWNER AT EACH SITE.
11. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL SERVICE AND METERING REQUIREMENTS WITH THE UTILITY POWER COMPANY (CONDUITS, GROUNDING, CONCRETE PADS, TRENCHING, ETC.). PAY ALL SERVICE FEES AS NECESSARY. ARRANGE TO PROVIDE TEMPORARY CONSTRUCTION SERVICE AS NECESSARY.
12. BEFORE FINAL ACCEPTANCE, CONTRACTOR SHALL PROVIDE 2 SETS OF LEDGER SIZE (11"X17") AS-BUILT PLANS TO THE MAINTENANCE AUTHORITY AND ARDOT.
13. ALL ELECTRICAL COMPONENTS SHALL BE UL-LISTED.
18. ALL LUMINAIRE ASSEMBLIES SHALL HAVE BUG RATING OF U0. DEGREE OF TILT ON LUMINARIES SHALL BE ZERO.
19. ALL UNDERGROUND CONDUIT SHALL HAVE MINIMUM 24" COVER. LIMIT ALL CONDUIT FILL TO A MAXIMUM OF 40%. SLACK CABLES IN PULL BOXES SHALL BE 3 FEET. ALL UNDERGROUND CONDUIT SHALL HAVE MINIMUM 24" COVER. ROUTE ALL CONDUCTORS THROUGH JUNCTION BOXES AS REQUIRED.
20. EQUIPMENT GROUNDING CONDUCTOR SHALL BE BONDED TO EACH POLE, GROUND ROD, LUMINAIRE AND SERVICE POINT PER NEC. SEE ARTICLES 250 AND 410.
21. ALL CONCRETE PULL BOXES SHALL BE TYPE 2 HD UNLESS OTHERWISE INDICATED ON THE PLANS. PROVIDE A TYPE 12x12 CONCRETE PULL BOX WITHIN 5' OF EVERY P# POLE LIGHT FOUNDATION.
22. ALL SPLICES SHALL BE WATERTIGHT AND UL-LISTED FOR CONTINUOUS USE IN SUBMERSIBLE INSTALLATION.
23. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE DOCUMENTATION TO PROJECT ENGINEER, TO ENSURE ARKANSAS STATE CODES (§17-28-101 ET SEQ. AND §20-31-101 ET SEQ.) ARE MET. THE DOCUMENTATION SHALL INCLUDE:
   - 23.1. ELECTRICIANS' LICENSE INFORMATION AND EXPIRATION DATE.
   - 23.2. THE RATIO OF LICENSED-ELECTRICIAN-TO -APPRENTICE-ELECTRICIANS.
   - 23.3. PRINTED SEARCH RESULTS OF LICENSED ELECTRICIANS FROM ARKANSAS DEPARTMENT OF LABOR ELECTRICIAN LICENSEE DIRECTORY (http://www.ark.org/labor/electrician/search.php)

   ALL LICENCES SHALL BE VALID AND CURRENT.
24. NON-DESTRUCTIVE MEG TEST AND CURRENT LEAKAGE TEST SHALL BE PERFORMED ON NEW CONDUCTORS, IN THE PRESENCE OF FIELD INSPECTOR. THE TEST VOLTAGE SHALL BE LIMITED TO 600 VOLTS. ANY CONDUCTOR NOT MEETING THE MINIMUM ACCEPTABLE VALUE SHALL BE DOCUMENTED AND PROVIDED TO THE JOB ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES CAUSED BY MEG TEST WHILE DEVICES OR ACCESSORIES ARE STILL CONNECTED AND SHALL BE REPLACED AT CONTRACTOR'S EXPENSE. SEE SPECIAL PROVISION ELECTRICAL CONDUCTORS-IN-CONDUIT.
25. EACH ROADWAY ILLUMINATION POLE SHALL BE BONDED TO EQUIPMENT GROUNDING CONDUCTOR PER NEC. SEE ARTICLES 250 AND 410.
26. PULL CABLE SHALL BE MINIMUM 1/4" PULL NYLON OR POLYESTER ROPE, OR 1200 LBS PULL TAPE WHEN PULLING CONDUCTORS. STEEL CABLE OR FISH TAPE SHALL NOT BE USED. CONNECT PULLING DEVICES TO COPPER WIRE AND NOT TO JACKET. USE PULLING COMPOUND PER MANUFACTURER'S REQUIREMENTS. ALL BENDS SHALL NOT BE LESS THAN RECOMMENDED BY NEC FOR CONDUCTORS USED.



A ELECTRICAL SITE PLAN
SCALE: 1" = 40'-0"

STATE OF ARKANSAS
Shane R. Lanning
REGISTERED PROFESSIONAL ENGINEER
No. 10054
10/14/24

CERTIFICATE OF AUTH.
ENGINEERING ELEMENTS, PLLC
No. 1227
ARKANSAS-ENGINEER

PROJECT NO: 24-051
COMPLETE: 100%

Engineering Elements, PLLC
2458 East Joyce Boulevard, Suite 1
Fayetteville, AR 72703
Phone: 479-695-1333, Fax: 479-251-7982

BRYCE DAVIS PARK IMPROVEMENTS PHASE 1

1595 N DARTMOUTH AVE
FAYETTEVILLE, ARKANSAS

Engineering Elements
2458 East Joyce Boulevard, Suite 1
Fayetteville, AR 72703
Phone: 479-695-1333
Fax: 479-251-7982

MECHANICAL
ELECTRICAL
FIRE PROTECTION
DESIGN CONSULTANTS

ELECTRICAL PLAN

REVISIONS:
1
2
3

PROJECT: 24-2121

DATE: 10-14-2024

ES1

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Bid 25-24, Addendum 1

Date: Friday, February 7, 2025

To: All Prospective Vendors

From: Amanda Beilfuss – 479.575.8220 – abeilfuss@fayetteville-ar.gov

RE: Bid 25-24, Construction – Bryce Davis Park Improvements, Phase 1

This addendum is hereby made a part of the contract documents to the same extent as though it were originally included therein. Interested parties should indicate their receipt of same in the appropriate blank of the Bid. ***BIDDERS SHALL ACKNOWLEDGE THIS ADDENDUM ON THE DESIGNATED LOCATION ON THE BID FORM.***

1. A non-mandatory Pre-Bid meeting was held on Thursday, January 30, 2025 at 10:00 AM on-site at Bryce Davis Park. The sign-in sheet of attendees is attached to this addendum for disclosure to all interested parties (see Attachment A).
    a. Attendees:
        i. City of Fayetteville:
            1. Amanda Beilfuss, Procurement Director
            2. Morgan Brake, Customer Service Rep. - Procurement
            3. Ted Jack,
            4. Melissa Evans, Park Planner
            5. Nathan Crouch, McClelland
            6. Chris Bakonas, McClelland
        ii. Vendors:
            1. ACS Playground Adventures
            2. DMAC Construction
            3. EWI Constructors
            4. Heaven Sent Properties
            5. Hutchinson Construction
            6. Milestone Construction
            7. Modern Fence
            8. Natural State Treehouses
            9. QikTurf
            10. Royal Ridge Construction
            11. Thomas Fence

2. Bid Deadline – Due to the strict deadlines the City of Fayetteville has to follow, there will NOT be a bid extension issued at this time.

3. An Arkansas Contractor's License with the "Building" classification is required at bid deadline.

Telecommunications Device for the Deaf TDD (479) 521-1316 113 West Mountain - Fayetteville, AR 72701

4. Plan Sheets – The following Plan sheets have been revised. Revised sheets are attached to this addendum (see Attachment B):

   a. C0.1 – General Notes
      i. Updated note 9 of City of Fayetteville General Note

   b. C1.0 – Overall Demolition Plan
      i. Added notes 12 and 13.
      ii. Added small concrete slab and bench, near the dog park electrical panel, to the Demo plan.
      iii. Added 1 sidewalk panel to the Demo plan to accommodate the French drain PVC drain pipe crossing.
      iv. Added the entire length of dog park separation fence (wooden rail fence with chain link and concrete mow strip) to the Demo plan.
      v. Extended the length of split rail fence (adjacent to N. Dartmouth Ave., extending farther to the south) to be removed, on the Demo plan.
      vi. Added section of sidewalk west of the playground to Demo, for the connection to the new section of sidewalk from the playground.
      vii. Add Demo callout for the southern section of fence along Dartmouth Ave.

   c. C1.1 – Demolition Plan West
      i. Added small concrete slab and bench, near the dog park electrical panel, to the Demo plan.
      ii. Added 1 sidewalk panel to the Demo plan to accommodate the French drain PVC drain pipe crossing.
      iii. Added the entire length of dog park separation fence (wooden rail fence with chain link and concrete mow strip) to the Demo plan.

   d. C1.2 – Demolition Plan East
      i. Extended the length of split rail fence (adjacent to N. Dartmouth Ave., extending farther to the south) to be removed, on the Demo plan.
      ii. Added note and delineation buffer concerning City maintenance staff trimming vegetation as necessary around wetland pavilion addition.
      iii. Added section of sidewalk west of the playground to Demo, for the connection to the new section of sidewalk from the playground.
      iv. Add Demo callout for the southern section of fence along Dartmouth Ave.

   e. C2.0 – Overall Site Plan
      i. Added note 9, General Site Notes.
      ii. Replace concrete sidewalk panel south of the dog wash.
      iii. Removed the concrete pad with bench from the survey underlay, at the west side of the dog park concrete slab.
      iv. Added length to the southern end of the split rail fence, to be reconstructed.
      v. Call out the fence and dimension the length to be reconstructed.
      vi. Added description for turf areas.
      vii. Added artificial turf hatch to both swing set pads.
      viii. Updated Keynote 235 for Artificial Turf
      ix. Updated proposed legend (Keynote 235, and Detail 29C)

   f. C2.1 – Site Plan North
      i. Replace concrete sidewalk panel south of the dog wash.

g. C2.2 – Site Plan West
    i. Added sidewalk panel to be replaced for the drainage pipe under the sidewalk, south of the sidewalk south of the dog wash.
    ii. Since we are Demolishing the existing concrete pad with bench, just inside the dog park gate, opposite side of the fence from the electrical panel, the area to reconstruct the semi-circular concrete pad increased. And that pad is removed from the survey underlay shown on the site plan.

h. C2.4 – Site Plan East
    i. Added length to the southern end of the split rail fence, to be reconstructed.
    ii. Call out the fence and dimension the length to be reconstructed.
    iii. Added description for turf areas.

i. C2.5 – Site Plan East Exhibit
    i. Added artificial turf hatch to both swing set pads.
    ii. Updated Keynote 235 for Artificial Turf
    iii. Updated proposed legend (Keynote 235, and Detail 29C)

j. C2.6 – Wooden Pavilion Framing Plan Sheet I
    i. Updated Decking screw callouts to be more specific.

k. C3.0 – Overall Grading Plan
    i. Re-aligned the PVC drain pipes and Perforated PVC drain pipes
    ii. Relocated the drain junction box.
    iii. Removed remaining labels from the previous French drain alignment.
    iv. Removed Rev Clouds around the exhibits.
    v. Added two additional French drains.
    vi. Added pipe material, invert, and slope info.
    vii. Updated Keynote 315 in the legend, calling the corrugated pipe “drain tile”.
    viii. Added Note 25 to General Grading/Drainage Notes, concerning maximum surface elevation.

l. C3.1 – Grading Plan North
    i. Re-aligned the PVC drain pipes and Perforated PVC drain pipes
    ii. Relocated the drain junction box.
    iii. Removed remaining labels from the previous French drain alignment.
    iv. Revised pipe type.
    v. Revised display order of labels.

m. C3.2 – Grading Plan West
    i. Removed Rev Clouds around the exhibits.
    ii. Added two additional French drains.
    iii. Added pipe length, material, invert, and slope info.
    iv. Updated Keynote 315 in the legend, calling the corrugated pipe “drain tile”.

n. C3.3 – Grading Plan East
    i. Added note and delineation buffer concerning maximum surface elevation for the wetland pavilion addition.

o. C4.0 – Overall Utility Plan
    i. Added existing UGE linework within the dog park area.

ii. Added a note that says, “approximate location of underground electric”.

p. C4.1 – Utility Plan West
   i. Added existing UGE linework within the dog park area.
   ii. Added a note that says, “approximate location of underground electric”.

q. C6.5 – Overall Landscape Plan
   i. Added Keynote 601 for grass seeded areas, in multiple locations.
   ii. Added additional hatching for grass seeded areas, in multiple locations.

r. C6.6 – Landscape Plan North
   i. Added additional area to be seeded.

s. C6.7 – Landscape Plan West
   i. Added additional area to be seeded.

t. C6.8 – Landscape Plan East
   i. Added additional areas to be seeded with grass seed.

u. C7.0 – Detail Sheet I
   i. Revised several aspects of Detail 25L, including wall dimensions, added a ledge beneath the veneer, note that the mortar is to match existing stone walls, and the width of the footer.

v. C7.1 – Detail Sheet II
   i. Updated detail 27L name.
   ii. Replaced Parking Curb detail 20L with a Concrete Ribbon Curb detail 20H.

w. C7.6 – Detail Sheet VII
   i. Updated pavilion entry height to 9’3”.

x. C7.8 – Detail Sheet IX
   i. Removed the Expansion Joint from detail 27B.

y. C7.9 – Detail Sheet X
   i. Updated pavilion entry height to 9’3”.

z. C8.0 – City Detail Sheet I
   i. Revised a misspelling on detail 29A.
   ii. Updated “Items to be provided by owner” table.
   iii. Revised the wording on the leader that states “Install Existing Beveled Edges and Corners”, for clarity.
   iv. Realigned leaders and labels on detail 29C so other linework doesn’t run through the labels.
   v. Revised the wording on the note “Remove (12) beveled edges, remove (1) beveled inner corner, remove (1) beveled outer corner” for clarity.

aa. C8.1 – City Detail Sheet II
   i. Updated Concrete General Notes and removed note from detail 29D.

bb. ES1 – Electrical Lighting Plan
   i. Added note describing pull box installation instructions.
   ii. Got the sheet re-stamped by the Engineer.

5. Project Manual – The following revisions have been made to the Project Manual:
    a. Instruction to Bidders – Length of construction revised from 150 final completion days to 180 (see Attachment X).
    b. Bid Form – Length of construction revised from 150 final completion days to 180 (see Attachment X).

6. Bid Line Items – The following Bid Line Items have been revised:
    a. Line Item #1 – Added clarification
    b. Line Item #7 – Change in quantity
    c. Line Item #8 – Change in quantity
    d. Line Item #9 – Change in quantity and location specified
    e. Line Item #13 - Change in quantity and location specified
    f. Line Item #14 – Change in quantity
    g. Line Item #15 - Change in quantity and location specified
    h. Line Item #18 – Deleted (water pipe sleeve)
    i. Line Item #27 – Changed to read as "Playground Shade Sails"
    j. Line Item #28 – Deleted (Playground shade sail [small])
    k. Line Item #35 – Specified this is for relocation of existing hydrant
    l. Line Item #37 – Change in quantity
    m. Line Item #38 – Change in quantity
    n. Added additional line item (now #3) for trench & excavation safety
    o. Added additional line item (now #48) for Turf Grass

7. Substitution Requests – The following are APPROVED substitution requests. Any requests submitted but not listed are either still under review or have not been approved as a substitution.
    a. Coverworx Steelworx Hip Shelter – Accepted (see Attachment C)
    b. Cedar Forest Pavilion (see Attachment D)
    c. Skyways Shade Sails (see Attachment E)
    d. Playcraft Swings (see Attachment F)

8. Questions – The following questions have been received and answered by the responsible department:
    a. Question: Regarding playground equipment, what information do you need to approve an equal manufacturer?
        i. *Answer: All substitutions and/or approved equals shall meet ALL requirements as specified in Bid Drawings and specifications. Information contrary to those requirements in a substitution or equal shall not override the requirements set forth in the drawings and/or specifications. The following MINIMUM criteria shall be submitted with approved equal requests (if applicable):*
            1. *Manufacture and Model Number*
            2. *Complete size measurements of equipment/product with dimensioned plan view;*

CAD drawings required for shade structures and swing sets.

3. *Detailed Photos showing multiple sides*
4. *Fall Zone Requirement in feet and inches*
5. *Warranty Information*
6. *Accessibility Features*
7. *Safety features (braking device, etc.)*
8. *Material & Material Finish*

b. Question: Does the City already have all the pavilions?

   i. *Answer: No, the City only has the two (2) 12' X 12' pavilions.*

c. Question: Can the City provide clarification on what areas are needing irrigated?

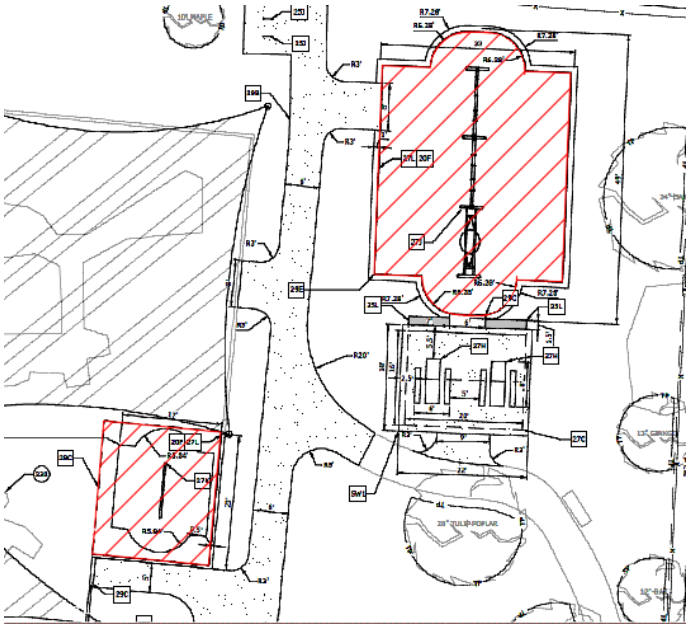
   i. *Answer: There is no irrigation required with this project.*

d. Question: Regarding Item 47; what size of conduit shall be installed underground?

   i. *Answer: Grey PVC 1.5" conduit*

e. Question: Regarding the Playground turf expansion, there's no quantities or measurements. Is the Contractor just turfing the new playground areas or turfing all playground areas?

   i. *Answer: The Contractor is to only install turf in the new playground areas. Turf shall match the color and texture of the existing playground. Quantities are as follow: Three-Bay Swing Set - 1,300 sqft. and Playground Expansion – 450 sqft.*



f. Question: Can the City please provide the part number and information for the trail lighting?

   i. *Answer: The following is the part number and information for the trail lighting:*

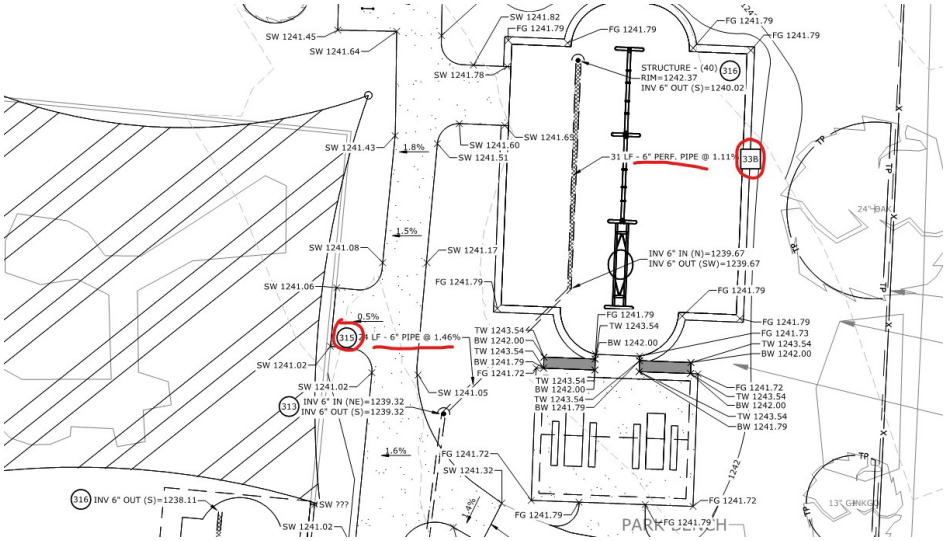
1. *Fixture - Visionaire Lighting Model# ODN-1-L-T2-48LC-5-4K-UNV-UAM-BK-C5/H3*
2. *Arm - Visionaire Lighting Model# VA-100-M-S1-4-BK*
3. *Pole and Base - Alliance Composities, Inc Model# D3TS15F00NCA0254/BAS-0012-JAX-Direct bury 12 ft. exposed, 16 in. black decorative base, 4" O.D. Tenon*

g. Question: Regarding the turf portion of the project, if we seam into the existing tile, we believe the seams of the tile will be seen through the turf. Is the detail right that's being requested what we do? Also, the new turf will wander and contract where the old turf is done doing so and this could lead to visible seam lines and uneven looking turf. Will also make warranty claims and future repairs more costly because the turfs will be at different phases in their use cycle.

   i. *Answer: The entire existing playground will get turf instead of seaming new turf to old turn. Drawings have been revised to reflect this change and are attached to this Addendum. This will help clarify the playground expansion area. The Contractor may use their preferred impact surfacing for the expansion area provided it meets all safety and manufacturers' recommendations and that there is a flush transition between the existing and proposed surfaces.*

h. Question: Regarding Bid Line Item #38 – 6" PVC drain; can you please confirm the location of this?

   i. *Answer: There are two (2) types of pip with the French Drains. There is a perforated (French Drain) pipe, shown on the plans as 33B and there is regular 6" PVC pipe that is not perforated, shown on the Plan Sheet as 315.*



i. Question: Regarding the design of the fabric shade as it relates to Line Item on the bid; the bid has line items for 2 shades, large and small; however, the skyways design and layout is actually 1 shade structure because they share a column. There's no way to price out these shades separately with this design, and if we add a column to have two different shades the smaller triangle won't fit the way the plans are showing and we will have to alter the layout a little bit. , does the city want the structure quoted per the drawings, or do we need to offer two different shade structures? This will also cost a little more due to the extra support column.

i. *Answer: The Line Item for the shade structure has been revised down to one (1) line item instead of two (2).*

j. Question: Regarding Item 47; What size of electrical conductor shall be installed between pull boxes? Sheet ES1 calls for #10 from pull boxes to poles but does not mention the size to run from pull box to pull box.

i. *Answer: Install #8 wire between pull boxes. See Project Manual's Appendix for exact wire already purchased by City. Contractor will be responsible for purchasing additional wire, if needed.*

k. Question: What route does the City want the Contractor to use to bring concrete trucks onto site? The concrete trucks will cause damage to the existing grass and concrete.

i. Answer: Contractor will need to coordinate this with the City of Fayetteville.

9. Addendum Attachments:

a. Attachment A: Pre-Bid Meeting Sign-In Sheet
b. Attachment B: Revised Plan Sheets
c. Attachment C: Coverworx Steelworx Hip Shelter
d. Attachment D: Cedar Forest Pavilion
e. Attachment E: Skyways Shade Sails
f. Attachment F: Playcraft Swings

Attachment A

CITY OF FAYETTEVILLE ARKANSAS

City of Fayetteville, Arkansas

Attendance Sheet

BID/RFP/RFQ #: 25-24

Description: Construction - Bryce Davis Park Improvements, phase I

Function (circle one) : Bid Opening, Selection Committee Meeting, Pre-Bid, Interview

Date: 01 / 30 / 2025 Time: 10:00 AM

City staff e-mail includes "@fayetteville-ar.gov"

	Name	Company	Title	Phone	Email
1	Amanda Beilfuss	CoF	Proc. Director	575-8220	Abeilfuss@
2	TED JACK	"	PARK PLAN. SUPT		tJack@f...
3	CHRIS BAKONAS	MCE	PRINCIPAL	402-320-2139	cbakonas@mce.us.com
4	Melissa Evans	CoF Parks	Park Planner	479-973-4841	mevans@fayetteville-ar.gov
5	Nathan Crouch	MCE	Project Coord.	479 966 3036	ncrouch@mce.us.com
6	Lance Norsworthy	Milestone	Manager	479 225 6781	LNorsworthy@mstonecc.com
7	Erin Metcalf	Milestone	PM	479-957-3195	emetcalf@mstonecc.com
8	Rob Green	ACS	Est	479-305-5050	Rob@ACSLAR.com
9	Marc Rodriguez	Hearn Seat Properties	CEO	479-422-6985	MRodriguez@smithcoinc.com
10	Bill Caplinger	Hutchinson Constr. Serv.	Superintendent	479-502-1469	Hutch@Hutchinsoncc.com
11	David McElrath	DMAL Construction	Owner	479-481-4395	davidmcelrath@dmaconst.com
12					
13	Steven Banks	FWI Constructors	Sup	479-747-3398	Sbanks@FWIConstructors
14	Jason Payton	Royal Ridge Const.	Owner	(479) 461-7741	jpayton@royalridge.com
15	Josh Hart	Natural State Treehouses	owner	479 387 0701	josh@naturalstatetreehouses.com
16	Matt Bilby	Modern Fence	Estimator	479 [illegible]	Matt@ModernFenceSupply.com
17	Robert Briano	Thomas Fence	Commercial Mgr.	479 858 8001	Robert@ThomasFenceAR.com
18	Anthony Fry	QIKTURF	President	479 263 6788	fry@qikturf.com
19	Morgan Brake	CoF	Purch. Asst.	479-575-8256	Mbrake
20					

** All Bid Openings are also streamed live on the City of Fayetteville's YouTube Channel.

CITY OF FAYETTEVILLE STANDARD NOTES

1. THE REVIEW BY THE ENGINEERING DIVISION WAS FOR GENERAL COMPLIANCE AND DOES NOT WARRANT YOUR DESIGN AND DOES NOT RELIEVE THE OWNER FROM ANY ITEMS DISCOVERED DURING CONSTRUCTION OR FURTHER REVIEW, WHICH ARE DEEMED NECESSARY TO COMPLY WITH CITY ORDINANCES AND CRITERIA. THE APPROVAL OF THE ENGINEERING ITEMS ON THE PLANS FOR WATER, SEWER, DRAINAGE, AND GRADING IS NOT A GUARANTEE OF APPROVAL OF THIS PROJECT BY OTHER CITY DIVISIONS.

2. ANY DAMAGE TO THE EXISTING PUBLIC STREET OR OTHER PUBLIC INFRASTRUCTURE DUE TO CONSTRUCTION SHALL BE REPAIRED/REPLACED AT THE OWNER/DEVELOPERS EXPENSE.

3. ALL MATERIAL DELIVERIES, CONSTRUCTION STAGING, AND WORKER PARKING MUST OCCUR ON YOUR SITE AND OUTSIDE THE PUBLIC STREETS DURING ALL PHASES OF THE PROJECT.

4. ALL PUBLIC SIDEWALKS AND RAMPS MUST MEET ADA GUIDELINES. **ANY EXISTING SIDEWALKS THAT DO NOT CONFORM TO ADA GUIDELINES MUST BE REMOVED AND REPLACED TO CORRECT THE ISSUE.** COORDINATE WITH THE ENGINEERING DEPARTMENT FOR INSPECTION OF EXISTING SIDEWALKS TO DETERMINE ADA COMPLIANCE.

5. PRIOR TO ANY CLEARING TO INSTALL EROSION CONTROL STRUCTURES, TREE PRESERVATION FENCING MUST BE INSTALLED BY THE CONTRACTOR AND INSPECTED BY THE URBAN FORESTER (444-3469)

6. WATER AND SEWER IMPACT FEES WILL APPLY FOR THE ADDITIONAL IMPACT TO THE SYSTEM. THE FEES WILL BE BASED ON THE PROPOSED METER SIZE AND WILL BE CHARGED AT THE TIME OF METER SET.

7. FIRE LINE MONTHLY FEES WILL BE APPLIED BASED ON THE SIZE OF THE RISER PENETRATING THE SLAB. SEE CHAPTER 51.136 OF THE UNIFIED DEVELOPMENT CODE FOR TABLE OF FEES ASSOCIATED WITH PIPE DIAMETER.

8. THE ENGINEER OF RECORD SHALL PROVIDE "FULL TIME" INSPECTION FOR UTILITIES AND "PART TIME" INSPECTION FOR THE STORM DRAINAGE AND ROADWAY CONSTRUCTION FOR THIS PROJECT. THE ENGINEER OF RECORD SHALL ALSO REVIEW AND APPROVE MATERIAL SUBMITTALS (APPROVED SUBMITTALS SHALL BE SUBMITTED TO THE CITY FOR CONCURRENCE BEFORE PRECONSTRUCTION MEETING AND BEFORE MATERIAL IS ORDERED) - DAILY INSPECTION REPORTS SHOULD BE SUBMITTED WEEKLY TO THE CITY OF FAYETTEVILLE'S PUBLIC WORKS INSPECTOR (PWI).

1

9. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE APPROVED PLANS. IF SPECIFIC INFORMATION IS NOT PROVIDED, REFER TO THE MANUFACTURE'S SPECIFICATIONS FOR PRODUCT DETAILS AND THE APPLICABLE CITY SPECIFICATIONS FOR NON-PRODUCT SPECIFIC CONSTRUCTION REQUIREMENTS.

10. THE PUBLIC WORKS INSPECTOR SHALL BE NOTIFIED NO LESS THAN 48 HOURS PRIOR TO THE INSTALLATION OF PUBLIC UTILITIES, INFRASTRUCTURE, ROADWAY, ETC. TESTING SHALL BE COORDINATED WITH THE PWI BY THE ENGINEER OF RECORD.

11. CONTACT BRENT RUTHERFORD (ADA ADMINISTRATOR 575-8291) AND REQUEST AN INSPECTION PRIOR TO:

    A. POURING ANY SIDEWALK, TRAIL, OR DRIVEWAY IN THE RIGHT-OF-WAY OR PUBLIC EASEMENTS.

    B. PLACING ANY PAVEMENT FOR ADA ACCESSIBLE PARKING/LOADING AREAS.

    C. POURING ANY SIDEWALK THAT IS A CONNECTION FROM ADA ACCESSIBLE PARKING AREAS TO THE STRUCTURE.

12. CONTRACTOR SHALL BE CONFINED TO THE LIMITS OF CONSTRUCTION SHOWN ON THIS GRADING PERMIT APPLICATION. ADJACENT PROPERTY SHALL NOT BE USED WITHOUT MODIFYING THE GRADING AND EROSION CONTROL PLAN THROUGH THE ENGINEER OF RECORD AND OBTAINING WRITTEN APPROVAL FROM THE CITY ENGINEERING DIVISION.

CITY OF FAYETTEVILLE STANDARD REQUIREMENTS

1. COMMERCIAL STRUCTURES THAT MAY REQUIRE A FIRE SPRINKLER SYSTEM MUST OBTAIN A FIRE FLOW STUDY SUBMITTED AND APPROVED BY THE FIRE DEPARTMENT PRIOR TO APPROVAL OF THE PROJECT.

2. PRIOR TO ENGINEERING APPROVAL OF THE **BUILDING PERMIT**, EITHER THE REQUIRED PUBLIC IMPROVEMENTS MUST BE INSTALLED AND ACCEPTED, OR PERFORMANCE BONDS IN THE AMOUNT OF 150% OF THE CONSTRUCTION COST FOR ALL PUBLIC IMPROVEMENTS MUST BE SUBMITTED, ACCOMPANIED BY A UNIT PRICE ESTIMATE APPROVED BY THE ENGINEERING DIVISION AND ALL EASEMENTS MUST BE DEDICATED AND OR VACATED.

3. A GRADING AND DRAINAGE PERMIT WILL NOT BE ISSUED UNTIL:

    A. A COPY OF THE SWPPP IS PROVIDED TO THE CITY. THE SWPPP WILL BECOME PART OF THE GRADING AND DRAINAGE PERMIT. (IN PDF FORMAT)

    B. THE PERIMETER EROSION CONTROLS, CONSTRUCTION EXIT, AND SWPPP/GRADING PERMIT BOX HAVE BEEN INSPECTED AND APPROVED BY THE ENGINEERING DIVISION. (APPLICANT IS RESPONSIBLE FOR CONTACTING AND SCHEDULING THE EROSION CONTROL INSPECTION BY CALLING THE ASSIGNED PWI**)**

    C. THE ENGINEER OF RECORD SHALL REVIEW AND APPROVE MATERIAL SUBMITTALS (APPROVED SUBMITTALS SHALL BE SUBMITTED TO THE CITY FOR CONCURRENCE BEFORE PRECONSTRUCTION CONFERENCE AND MATERIAL IS ORDERED)

    D. A PRECONSTRUCTION CONFERENCE HAS TAKEN PLACE.

    E. CONTACT DOUGLAS SHARP OF THE CITY OF FAYETTEVILLE METER OPERATIONS DIVISION (575-8384) PRIOR TO THE PRECONSTRUCTION MEETING TO DISCUSS THE DOMESTIC AND/OR IRRIGATION WATER SERVICE DEMAND TO VERIFY SIZE OF METER PROPOSED.

    F. PROVIDE ONE BOUND SET OF WATER & SEWER SPECIFICATIONS INCLUDING DETAILS FOR EACH THE INSPECTOR AND THE CONTRACTOR'S USE TO BE STAMPED BY ENGINEERING AT THE PRE-CONSTRUCTION CONFERENCE.

    G. ALL CONTRACTORS/SUBS INSTALLING PUBLIC INFRASTRUCTURE (INCLUDING FIRELINE) MUST BE PRESENT ALONG WITH THE INSPECTOR FROM ENGINEER OF RECORD.

    H. IF THE SUPERINTENDENT ON SITE CHANGES AFTER THE CITY OF FAYETTEVILLE PRE-CONSTRUCTION MEETING, AN ADDITIONAL PRE-CONSTRUCTION MEETING WILL BE REQUIRED WITH THE NEW SUPERINTENDENT.

4. A COPY OF THE APPROVAL LETTER FROM THE ARKANSAS DEPARTMENT OF HEALTH SHOULD BE OBTAINED AND FORWARDED TO THE ENGINEERING DIVISION.

5. PRIOR TO **PROJECT ACCEPTANCE** (CERTIFICATE OF OCCUPANCY, OR TEMPORARY CERTIFICATE OF OCCUPANCY) THE FOLLOWING ITEMS MUST BE PERFORMED OR PROVIDED TO THE SATISFACTION OF THE ENGINEERING DEPARTMENT:

    A. THE WORK SHOWN ON THE CIVIL SITE PACKAGE MUST BE COMPLETE AND THE ITEMS ON THE FINAL PUNCH LIST COMPLETED.

    B. VEGETATION MUST BE ESTABLISHED IN ACCORDANCE WITH SECTION 169.06 OF THE UDC AND PERIMETER CONTROLS REMOVED.

    C. ONE (1) SET OF AS-BUILT DRAWINGS OF THE COMPLETE PROJECT (EXCLUDING DETAILS) AS A HARD COPY, DIGITAL FILE .DWG, AND PDF FORMAT;

        1. PROFESSIONAL SURVEYOR SHALL PROVIDE STAMP DRAWINGS SPECIFICALLY IDENTIFYING THE LIMITS OF AS-BUILT SURVEY PERFORMED.

        2. PUBLIC INFRASTRUCTURE AND SERVICES SHALL BE SURVEYED AFTER INSTALLATION IN RELATION TO EASEMENTS, PROPERTY LINES, AND RIGHTS-OF-WAY.

            A. MORE THAN 2 FT DEVIATION OF DESIGN ALIGNMENT OF SHALL REQUIRE NEW EASEMENT DEDICATION OR ADJUSTMENT OF THE UTILITY/STORM DRAIN.

        3. ADEQUATE VERIFICATION SURVEY TO CONFIRM ACCURACY OF DRAINAGE REPORT.

            A. UNIT PRICE CONSTRUCTION COSTS FOR REVIEW AND APPROVAL AND A SINGLE 2 YEAR MAINTENANCE BONDS IN THE AMOUNT OF 25% OF THE PUBLIC IMPROVEMENTS

    B. CERTIFICATION THAT THE STREETS, SIDEWALK, STORM SEWER, WATER, FIRE LINE, AND SEWER LINES, ETC., WERE INSTALLED PER APPROVED PLANS AND CITY OF FAYETTEVILLE REQUIREMENTS;

        1. PROVIDE ALL INSPECTION REPORTS; APPROVED SUBMITTALS; DATA FORMS FROM UTILITY SPECIFICATIONS

6. A SURVEYOR'S CERTIFICATION OF COMPLIANCE FOR MONUMENTS AND PROPERTY PINS.

THE CONTRACTOR IS RESPONSIBLE TO CONTACT EACH DISCIPLINE BELOW AND REQUEST A CERTIFICATE OF OCCUPANCY INSPECTION AND APPROVAL AT LEAST A WEEK IN ADVANCE.:

BUILDING SAFETY	DENNIS SANDERS	575-8229	dsanders@fayetteville-ar.gov
ENGINEERING	MELISSA BOYD	575-8206	mboyd@fayetteville-ar.gov
FIRE	BRIAN SLOAT	575-8365	fire@fayetteville-ar.gov
BACKFLOW PREVENTION	RANDY BOLINGER	575-8382	rbolinger@fayetteville-ar.gov
METER OPERATIONS	JAYCE BRANSON	684-4723	jbranson@fayetteville-ar.gov
PLANNING	JESSIE MASTERS	575-8267	jmasters@fayetteville-ar.gov
PLANNING	GRETCHEN HARRISON	575-8263	gharrison@fayetteville-ar.gov
SIDEWALK	ENGINEERING	575-8206	engineering@fayetteville-ar.gov
RECYCLING AND TRASH	DREW COOK	575-8398	acook@fayetteville-ar.gov
TREE & LANDSCAPE	WILLA THOMASON	444-3486	wthomason@fayetteville-ar.gov

GENERAL NOTES:

1. *THE CITY OF FAYETTEVILLE SHALL PROVIDE AN AUTOCAD DRAWING FOR USE BY THE CONTRACTOR TO ESTABLISH HIS/HER CONSTRUCTION STAKING. MINOR ADJUSTMENTS IN THE FIELD ARE TO BE EXPECTED AND CONSIDERED AS PART OF THE BASE BID.*
2. *CAUTION: UNDERGROUND UTILITIES EXIST WITHIN AND ADJACENT TO THE LIMITS OF CONSTRUCTION. AN ATTEMPT HAS BEEN MADE TO LOCATE THESE UTILITIES ON THE PLANS; HOWEVER, ALL EXISTING UTILITIES MAY NOT BE SHOWN AND THE ACTUAL LOCATIONS OF THE UTILITIES MAY VARY FROM THE LOCATIONS SHOWN. SOME UTILITIES MAY HAVE BEEN RELOCATED SINCE THE TIME OF DESIGN AND THE CONTRACTOR'S NOTICE TO PROCEED. PRIOR TO BEGINNING ANY TYPE OF EXCAVATION, THE CONTRACTOR SHALL CONTACT THE UTILITIES INVOLVED AND MAKE ARRANGEMENTS FOR THE LOCATION OF THE UTILITIES ON THE GROUND. THE CONTRACTOR SHALL MAINTAIN THE UTILITY LOCATION MARKINGS UNTIL THEY ARE NO LONGER NECESSARY. ARKANSAS STATE LAW, THE UNDERGROUND FACILITIES DAMAGE PREVENTION ACT, REQUIRES TWO WORKING DAYS IN ADVANCE NOTIFICATION THROUGH THE ARKANSAS ONE-CALL SYSTEM CENTER BEFORE EXCAVATING USING MECHANIZED EQUIPMENT OR EXPLOSIVES (EXCEPT IN THE CASE OF EMERGENCY). THE ONE-CALL SYSTEM PHONE NUMBER IS 1-800-482-8998. THE CONTRACTOR IS ADVISED THAT THERE IS A SEVERE PENALTY FOR NOT MAKING THE CALL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND RESTORING ANY DAMAGED UTILITIES TO REMAIN. CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS OF ALL UTILITIES, WATER LINES AND SANITARY SEWER LINES WITHIN PROPOSED CONSTRUCTION LIMITS*
3. *ALL PROPERTY CORNERS (IRON PINS) OR OTHER MONUMENTS LOCATED WITHIN PROPOSED CONSTRUCTION SHALL BE PROTECTED.*
4. *ALL TREES OUTSIDE THE CONSTRUCTION LIMITS SHALL BE PROTECTED AND SAVED. DO NOT PARK OR STORE EQUIPMENT AND MATERIALS UNDER THE DRIP LINE OF TREES TO REMAIN. DO NOT PUSH PILES OF DEBRIS OR SOIL AGAINST TREES TO REMAIN.*
5. *DO NOT EXCEED CLEARING AND GRUBBING LIMITS OF CONSTRUCTION INDICATED ON THE PLANS. KEEP HEAVY EQUIPMENT OUT OF NON CONSTRUCTION AREAS.*
6. *THE CONTRACTOR SHALL BE REQUIRED TO FOLLOW ADA REQUIREMENTS FOR SLOPES FOR ALL SURFACES. MINOR ADJUSTMENTS TO THE LAYOUT MAY BE NEEDED TO ACHIEVE THIS AND ARE TO BE CONSIDERED AS PART OF THE BASE BID.*
7. *CONTRACTOR SHALL CONDUCT WORK WITH THE KNOWLEDGE THAT PARK USERS WILL NEED TO WALK BY THIS SITE AND ALSO TO ACCESS THE PARKING, TRAILS, AND RESTROOM FACILITY. MAINTAIN THE SITE IN A SAFE AND APPROPRIATE MANNER FOR THE PUBLIC INCLUDING CHILDREN.*
8. *THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY DRAINAGE AS REQUIRED.*
9. *THE CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS. PLAYGROUND EQUIPMENT TO BE REMOVED SHALL BE DEMOLISHED AND NOT REUSED. METAL MAY BE RECYCLED.*
10. *THE CONTRACTOR SHALL CONTROL EROSION ON THE SITE. GRASS SHALL BE MAINTAINED AND MOWED AS NEEDED UNTIL THE PROJECT IS COMPETED AND ACCEPTED. THE SITE SHALL BE GRADED TO MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION. WATER SHALL NOT BE ALLOWED TO POND.*
11. *CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION AT THE SITE.*
12. *ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY, COUNTY, STATE, AND FEDERAL REGULATIONS AND CODES AS WELL AS OSHA STANDARDS.*
13. *THE CONTRACTOR SHALL NOT BEGIN WORK , EXCEPT FOR INSTALLING TREE PROTECTION FENCING AND STORMWATER POLLUTION CONTROLS, UNTIL THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN IMPLEMENTED, AND THE SWPPP, EROSION CONTROL PLAN, AND SIGNED AUTOMATIC NOTICE OF COVERAGE IS POSTED ON SITE.*
14. *SITE CONTRACTOR IS RESPONSIBLE FOR INSTALLING, MONITORING, AND MAINTAINING ALL SEDIMENT AND EROSION CONTROL BMPS. THE SITE IS NEXT TO A TRIBUTARY CREEK TO HAMESTRING CREEK AND PARTICULAR CARE IS NEEDED TO PREVENT SPILLS AND SEDIMENTS FROM ENTERING THE CREEK.*
15. *EROSION CONTROL DEVICES SHALL BE INSTALLED AS THE PROJECT PROGRESSES TO COVER AREAS THAT ARE DISTURBED.*
16. *THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP AS A MINIMUM. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.*
17. *ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.*
18. *MUCH OF THE CONCRETE FORMWORK INCORPORATES CURVES. CONTRACTOR SHALL INSURE THAT ALL FORMWORK AND THE RESULTING CONCRETE EDGES ARE SMOOTH AND FREE OF WOBBLES OR DEVIATIONS.*
19. *THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS TO ENSURE THAT THE NEW WORK SHALL FIT INTO THE EXISTING SITE IN THE MANNER INTENDED AND AS SHOWN ON THE DRAWINGS. SHOULD THERE BE ANY CONDITIONS EXISTING THAT ARE CONTRARY TO THOSE SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE OWNERS REPRESENTATIVE PRIOR TO PERFORMING ANY WORK IN THE ARES INVOLVING DIFFERENCES. NOTIFICATION SHALL BE IN THE FORM OF DRAWING OR SKETCH INDICATING FIELD MEASUREMENT AND NOTES RELATED TO THE AREA. MINOR MODIFICATIONS FOR THE FIELD CONDITIONS IS TO BE EXPECTED AND PART OF THE BASE BID.*
20. *ANY FOREIGN ITEMS FOUND DURING CONSTRUCTION IS THE PROPERTY OF THE CITY. THIS INCLUDES, BUT IS NOT LIMITED TO PRECIOUS METALS, COINS, PAPER CURRENCY, ARTIFACTS, AND ANTIQUES.*
21. *ALL GRADED AREAS THAT WILL BE TURF SHALL BE FINE GRADED TO PROVIDE POSITIVE DRAINAGE WITH NO STANDING WATER.*
22. *ALL FILL AND CUT SLOPES SHALL BE 4:1 OR FLATTER UNLESS OTHERWISE NOTED ON PLANS.*
23. *THE CONTRACTOR SHALL MAINTAIN THE SITE IN A NEAT AND ORDERLY CONDITIONS AT ALL TIMES. DAILY AND MORE OFTEN IF NECESSARY INSPECT AND PICK UP ALL SCRAP, WASTE, AND TRASH GENERATED BY THE CONTRACTOR'S WORK AND WORK FORCE.*
24. *UPON COMPLETION OF THE PROJECT THE CONTRACTOR SHALL CLEAN THE PAVED AREAS AND EQUIPMENT. IF POWER WASHING IS NEEDED UTILIZE FILTERING MATERIAL TO PREVENT DIRT FROM ENTERING PLAYGROUND SURFACING. INSURE THAT SEDIMENT LADEN WATERS DO NOT ENTER THE CREEK.*
25. *THE CONTRACTOR SHALL PROVIDE SUCH BRACING, SHEETING AND SHORING, BLASTING PROTECTION WARNING LIGHTS, AND BARRICADES, FENCING, AND SAFETY SIGNAGE AS MAY BE NECESSARY FOR PROTECTION OF LIFE AND PROPERTY FOR EMPLOYEES AND THE GENERAL PUBLIC. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY STATUTES AND RULES REQUIRING CERTAIN PROTECTIVE PERSONAL APPAREL SUCH AS HARD HATS, EAR PLUGS, EYE SHIELDS, PROTECTIVE SHOES, SAFETY SIGNAGE, ETC. THE CITY AND ENGINEER AND LANDSCAPE ARCHITECT ASSUME NO RESPONSIBILITY OR LIABILITY FOR ACTIONS TAKEN BY THE CONTRACTOR AND THE CONTRACTORS WORK FORCE WHICH ENDANGER LIFE AND PROPERTY.*
26. *INFORMATION IN THE DRAWINGS TAKE PRECEDENCE OVER INFORMATION IN THE WRITTEN SPECIFICATIONS IF THERE ARE DISCREPANCIES. CONTRACTOR TO BRING DISCREPANCIES TO THE ATTENTION OF THE ENGINEER/LANDSCAPE ARCHITECT.*
27. *ALL ITEMS TO BE INSTALLED PER MANUFACTURER RECOMMENDATIONS UNLESS OTHERWISE NOTED.*

CONSTRUCTION NOTES:

1. CONCRETE FOR SIDEWALK AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI.
2. FULL DEPTH DOWELED EXPANSION JOINTS SHALL BE REQUIRED AT END OF EACH DAYS POUR.
3. EXPANSION JOINT MATERIAL SHALL BE PREFORMED ASPHALT IMPREGNATED FIBERBOARD CONFORMING TO AASHTO M-213. EXPANSION JOINT MATERIAL SHALL BE LEFT ½" LOWER THAN GRADE OR TRIMMED ½" LOWER, AND FILLED WITH AN APPROVED JOINT SEALER TO FINISHED GRADE.
4. CONCRETE PATHS SHALL HAVE SAW-CUT CONTROL JOINTS EVENLY AND CONSISTENTLY SPACED AS SHOWN ON THE DRAWINGS. THESE WEAKENED PLANE (CONTROL) JOINTS SHALL BE 1" DEEP AND SHALL BE ¼" TO ½" WIDE.
5. ALL JOINTS SHALL BE FILLED TO FINISHED GRADE WITH APPROVED JOINT SEALANT.
6. CONCRETE SURFACES SHALL BE CONSISTENT IN SLOPE WITH NO BIRD BATHS.
7. WHERE TRAIL PARALLELS OR ABUTS CURB OR OTHER EXISTING CONCRETE WORK, DOWEL TO EXISTING WORK AND INSTALL EXPANSION JOINT.
8. NOTIFY CITY PROJECT MANAGER IF THE SUBGRADE IS NOT STABLE. CONTRACTOR MAY BE INSTRUCTED TO UNDERCUT & BACKFILL WITH ENGINEER SELECT FILL (HILLSIDE) OR B-STONE FOR WET AREAS. COMPACT HILLSIDE TO 95% STD. PROCTOR.
9. USE PROPER TRAFFIC CONTROL WHILE WORKING NEAR SERVICE DRIVE.
10. PREVENT VANDALISM TO NEW POURS. PREVENT VEHICLES FROM ACCESSING SURFACE UNTIL THE CONCRETE HAS CURED SUFFICIENTLY. USE PLASTER IF CONCRETE IS PUMPED.
11. SIDEWALK SHALL MEET ALL ADA REGULATIONS. RUNNING SLOPE SHALL BE LESS THAN 5% AND CROSS SLOPE SHALL BE 2% MAXIMUM.
12. SIDEWALK LAYOUT IS APPROXIMATE. FIELD VERIFY ALL SLOPES TO MEET ADA REGULATIONS.
13. CONTRACTOR SHALL OBTAIN GRADING PERMIT FROM CITY. CITY WILL WAIVE FEES FOR GRADING PERMIT.
14. ALIGNMENT OF WALKS WILL BE ADJUSTED SLIGHTLY IN FIELD TO REDUCE IMPACTS TO TREES. FINAL WALK ALIGNMENT TO BE APPROVED BY CITY PROJECT MANAGER
15. ELEVATIONS SHOWN FOR WALKS, RAMPS, AND OTHER SITE FEATURES SHOW INTENT AND LIKELY WILL NEED TO BE ALTERED BASED ON FINAL LAYOUT.

EROSION CONTROL NOTES

1. THESE PLAN SHEETS REPRESENT THE MINIMAL EROSION AND SEDIMENT CONTROL FEATURES. THE CONTRACTOR IS RESPONSIBLE FOR MODIFYING THE PLAN TO MINIMIZE SOIL LOSS FROM THE CONSTRUCTION SITE AND AS DIRECTED BY THE CITY ENGINEER AT NO ADDITIONAL COST.

2. REFER TO SECTION 509 OF THE SPECIFICATIONS FOR ADDITIONAL EROSION AND SEDIMENT CONTROL REQUIREMENTS.

3. AREAS OF CONCENTRATED FLOW WILL REQUIRE ADDITIONAL STABILIZATION MEASURES.

4. PERMANENT EROSION CONTROL - THE CONTRACTOR SHALL INCORPORATE PERMANENT EROSION CONTROL FEATURES AT THE EARLIEST PRACTICAL TIME AND BEFORE CONSTRUCTION ACTIVITIES.TEMPORARY EROSION CONTROL MEASURES WILL BE USED TO CORRECT CONDITIONS THAT DEVELOP DURING CONSTRUCTION AS NEEDED PRIOR TO INSTALLATION OF PERMANENT EROSION CONTROL FEATURES.

5. DEBRIS, MUD AND SOIL SHALL NOT BE ALLOWED ON PUBLIC STREETS, BUT IF ANY DEBRIS, MUD, OR SOIL FROM CONSTRUCTION SITES REACHES THE PUBLIC STREET, IT SHALL BE IMMEDIATELY REMOVED VIA SWEEPING OR OTHER METHODS OF PHYSICAL REMOVAL. DEBRIS, MUD, OR SOIL IN THE STREET MAY NOT BE WASHED OFF THE STREET OR WASHED INTO THE STORM DRAINAGE SYSTEM. STORM DRAINAGE SYSTEMS DOWNSTREAM OF THE SITE SHOULD BE PROTECTED FROM DEBRIS, MUD, OR SOIL IN THE EVENT THAT DEBRIS, MUD OR SOIL REACHES THE DRAINAGE SYSTEM.

6. CONCRETE WASH OUTS ARE REQUIRED AT LOCATIONS ESTABLISHED BY THE CONTRACTOR OR DIRECTED BY ENGINEER-REMOVE AND REPLACE AS NEEDED. CONTRACTOR SHALL USE CONCRETE WASHOUT BAGS FOR POURED CONCRETE WASTE.

7. MONTHLY - ALL DISTURBED AREAS SHALL BE HYDROMULCHED/HYDROSEEDED ON A REGULAR SCHEDULE TO MINIMIZE SEDIMENT LOSS.

8. SEE SOD DETAILS/PLAN. NOTE SOD SHOULD BE INSTALLED AS SOON AS POSSIBLE.

9. CAUTION: UNDERGROUND UTILITIES EXIST WITHIN AND ADJACENT TO THE LIMITS OF CONSTRUCTION. An Attempt has been made to locate these utilities on the plans; however all existing utilities may not be shown on the plans. UTILITIES MAY VARY FROM THE LOCATIONS SHOWN. Prior to beginning work, the Contractor shall contact the utilities and make arrangements for the location of the utilities on the ground. THE ONE-CALL SYSTEM PHONE NUMBER IS 1-800-482-8998.

10. If the gas line is not deep enough for installation of concrete features, the city will have the gas line lowered.

PLAYGROUND GENERAL NOTES:

1. *CONTRACTOR SHALL CONDUCT WORK KNOWING THIS IS A PUBLIC SPACE AND PARK USERS WILL FREQUENT THE AREA. USE CAUTION TAPE, SIGNAGE, AND OTHER MEANS TO WARN PEOPLE OF AND PREVENT PUBLIC ACCESS TO ANY HAZARDS AND CONSTRUCTION AREAS. MAINTAIN ACCESS TO ALL ROADS, TRAILS, AND SIDEWALKS.*
2. *THIS PROJECT CONTAINS A PLAYGROUND. MAINTAIN THE SITE IN A SAFE AND APPROPRIATE MANNER FOR THE PUBLIC INCLUDING CHILDREN.*
3. *THE CONTRACTOR OR SUB CONTRACTOR SHALL BE EXPERIENCED IN DESIGN AND CONSTRUCTION OF PLAYGROUNDS. WORK SHALL BE IN CONFORMANCE WITH AT A MINIMUM THE LATEST EDITIONS OF ASTM F1487 STANDARD CONSUMER SAFETY PERFORMANCE SPECIFICATION FOR PLAYGROUND EQUIPMENT FOR PUBLIC USE, ASTM F2223 STANDARD GUIDE FOR ASTM STANDARDS ON PLAYGROUND SURFACING, ASTM 12092 STANDARD SPECIFICATION FOR IMPACT ATTENUATION OF SURFACING MATERIALS WITHIN THE USE ZONE OF PLAYGROUND EQUIPMENT, F1951, F2479, F2373 AND THE CPSC PLAYGROUND SAFETY HANDBOOK. A MEMBER OF THE CONTRACTORS TEAM SHALL BE A CERTIFIED PLAYGROUND SAFETY INSPECTOR (CPSI) TO ASSIST WITH INSURING THE PLAYGROUND IS INSTALLED AND CONSTRUCTED TO INDUSTRY STANDARDS AS OUTLINED IN THE ASTM AND CPSC DOCUMENTS AND OTHER RELEVANT INDUSTRY STANDARDS.*
4. *PLAYGROUND SAFETY SURFACING SHALL BE TESTED AS OUTLINED IN ASTM F1292 AFTER INSTALLATION TO INSURE COMPLIANCE WITH THE SPECIFICATIONS.*
5. *ALL PLAYGROUND EQUIPMENT SHALL BE CERTIFIED BY THE INTERNATIONAL PLAYGROUND EQUIPMENT MANUFACTURES ASSOCIATION (IPEMA).*
6. *DURING PLAYGROUND WORK THE CONTRACTOR SHALL HAVE ON SITE A QUALIFIED SUPERINTENDENT CERTIFIED FOR PLAYGROUND INSTALLATION.*
7. *THE CONTRACTOR IS RESPONSIBLE FOR INSURING PLAYGROUND EQUIPMENT ACCEPTED AS AN ALTERNATE OR EQUAL FITS WITHIN THE DESIGN OF THE PLAYGROUND AREA. COSTS TO ADAPT, IF ALLOWED, SUCH AS INCREASED FALL SPACES SURFACES, WILL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COSTS TO THE OWNER.*
8. *LIMITED INFORMATION IS PROVIDED ON PLAYGROUND EQUIPMENT INSTALLATION IN THESE DOCUMENTS. CONTRACTOR IS TO OBTAIN AND FOLLOW MANUFACTURES INSTALLATION INSTRUCTIONS.*

Attachment B

McCLELLAND CONSULTING ENGINEERS, INC.
DESIGNED TO SERVE
1580 E STEARNS ST
FAYETTEVILLE, ARKANSAS 72703
(479) 443-2377
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REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER M. BAKUNAS
License Number 985
STATE OF ARKANSAS
02/05/2025
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IMPROVEMENTS PHASE 1
1595 N DARTMOUTH AVE
FAYETTEVILLE, AR

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REVISIONS

REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

CITY OF FAYETTEVILLE GENERAL NOTES

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 2/5/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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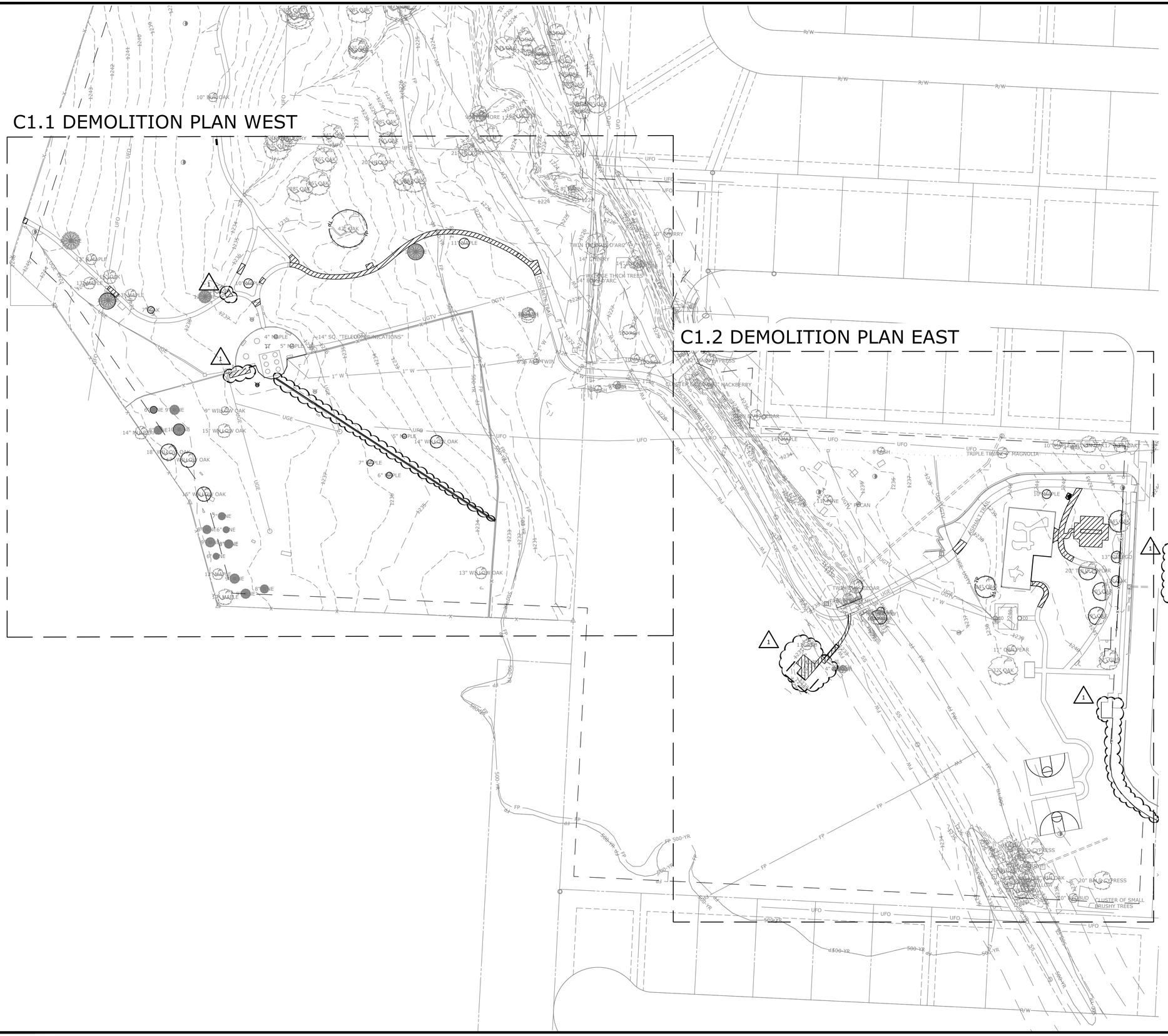

EXISTING LEGEND

PROPERTY LINE	POWER POLE
R/W RIGHT OF WAY	GUY WIRE w/ ANCHOR
SS SANITARY SEWER LINE	GAS METER
W WATER LINE	GAS RISER
GAS GAS LINE	STREET LIGHT POLE
UGT UNDERGROUND TELEPHONE	TELEPHONE PEDESTAL
UGE UNDERGROUND ELECTRIC	CABLE TV PEDESTAL
UGTV UNDERGROUND TELEVISION	CABLE VAULT
UFO UNDERGROUND FIBER	ELECTRIC VAULT
OHE OVERHEAD ELECTRIC	FIBER VAULT
FENCE	GAS VAULT
ROAD CENTERLINE	TELEPHONE VAULT
DITCH FLOWLINE	WATER VAULT
EASEMENT LINE	SIGN (AS NOTED)
GRAVEL LINE	POST (AS NOTED)
FW FLOOD WAY	BENCHMARK
FP FLOOD PLAIN	FOUND IRON PIN (AS NOTED)
FIRE HYDRANT	CONTROL POINT
WATER METER	RR SPIKE
WATER VALVE	BUSH
WATER FAUCET	DECIDUOUS TREE
SANITARY SEWER MH	CONIFEROUS TREE
CLEAN-OUT	
DRAINAGE MH	

GENERAL DEMOLITION NOTES

1. ONLY DEMOLISH AND REMOVE ITEMS SPECIFICALLY NOTED.
2. THE CONTRACTOR IS REQUIRED TO NOTIFY THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS PRIOR TO EXCAVATING IN ORDER THAT UNDERGROUND UTILITIES IN THE AREA CAN BE LOCATED.
3. THIS PLAN SHOULD BE USED IN CONJUNCTION WITH THE TOPOGRAPHICAL SURVEY FOR REFERENCE. THE LOCATION OF KNOWN SUBSURFACE STRUCTURES, PIPES, POWER, GAS, PHONE, ETC. ARE SHOWN ON THE PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING INFORMATION AND SATISFYING HIMSELF TO AS TO THE LOCATION OF THE AFOREMENTIONED ITEMS, SHOWN AND NOT SHOWN. ALL REPAIRS OR RELOCATIONS NECESSARY SHALL BE MADE AS REQUIRED BY THE OWNER OF THE UTILITY OR STRUCTURE. THE COST OF SUCH REPAIRS OR RELOCATIONS NECESSARY SHALL BE BORNE BY THE CONTRACTOR.
4. CONTRACTOR SHALL DISPOSE OF ALL MATERIALS RESULTING FROM DEMOLITION IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS THAT GOVERN SUCH OPERATIONS.
5. ALL ABANDONED SERVICE LINES SHALL BE DISCONNECTED AND CAPPED PER UTILITY COMPANIES REQUIREMENTS. COORDINATE ALL DISCONNECTIONS WITH UTILITY COMPANIES.
6. CONTRACTOR IS TO BRING TO THE ATTENTION OF THE CIVIL ENGINEER ANY AREA OF DEMOLITION IN QUESTION BEFORE PROCEEDING WITH WORK.
7. CONTRACTOR TO REVIEW AND COORDINATE DEMOLITION LIMITS WITH PROPOSED CONSTRUCTION PLANS.
8. EXISTING CLEAN TOPSOIL TO BE STOCKPILED FOR FUTURE USE ON THIS SITE AND IS TO BE COORDINATED BY THE GENERAL CONTRACTOR.
9. ALL EXISTING WATER, GAS AND / OR ELECTRICAL METERS AS NOTED TO BE REMOVED WITHIN THE PROJECT AREA ARE TO BE RETURNED TO THE APPROPRIATE AUTHORITY.
10. NO DEMOLITION OR CONSTRUCTION DEBRIS IS TO BE BURNED OR BURIED ON SITE.
11. NO EXISTING TREES ARE BEING REMOVED OR AFFECTED BY THE PROJECT.
12. CITY MAINTENANCE STAFF SHALL TRIM BRUSH AS NECESSARY AROUND WETLAND PAVILION AND ADDITION.
13. THE CONTRACTOR SHALL DETERMINE ALL ACCESS ROUTES THROUGH THE PARK AND SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE, INCLUDING BUT NOT LIMITED TO: BROKEN CONCRETE, PAVEMENT, RUTS, AND DISTURBED VEGETATION. ALL REPAIRS SHALL MATCH EXISTING CONDITIONS UNLESS OTHERWISE SPECIFIED.

PROPOSED LEGEND

LIMITS OF PAVEMENT AND / OR STRUCTURE DEMOLITION

TP TREE PROTECTION FENCE

McCLELLAND CONSULTING ENGINEERS, INC.
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REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

REVISIONS

OVERALL DEMOLITION PLAN

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 2/5/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

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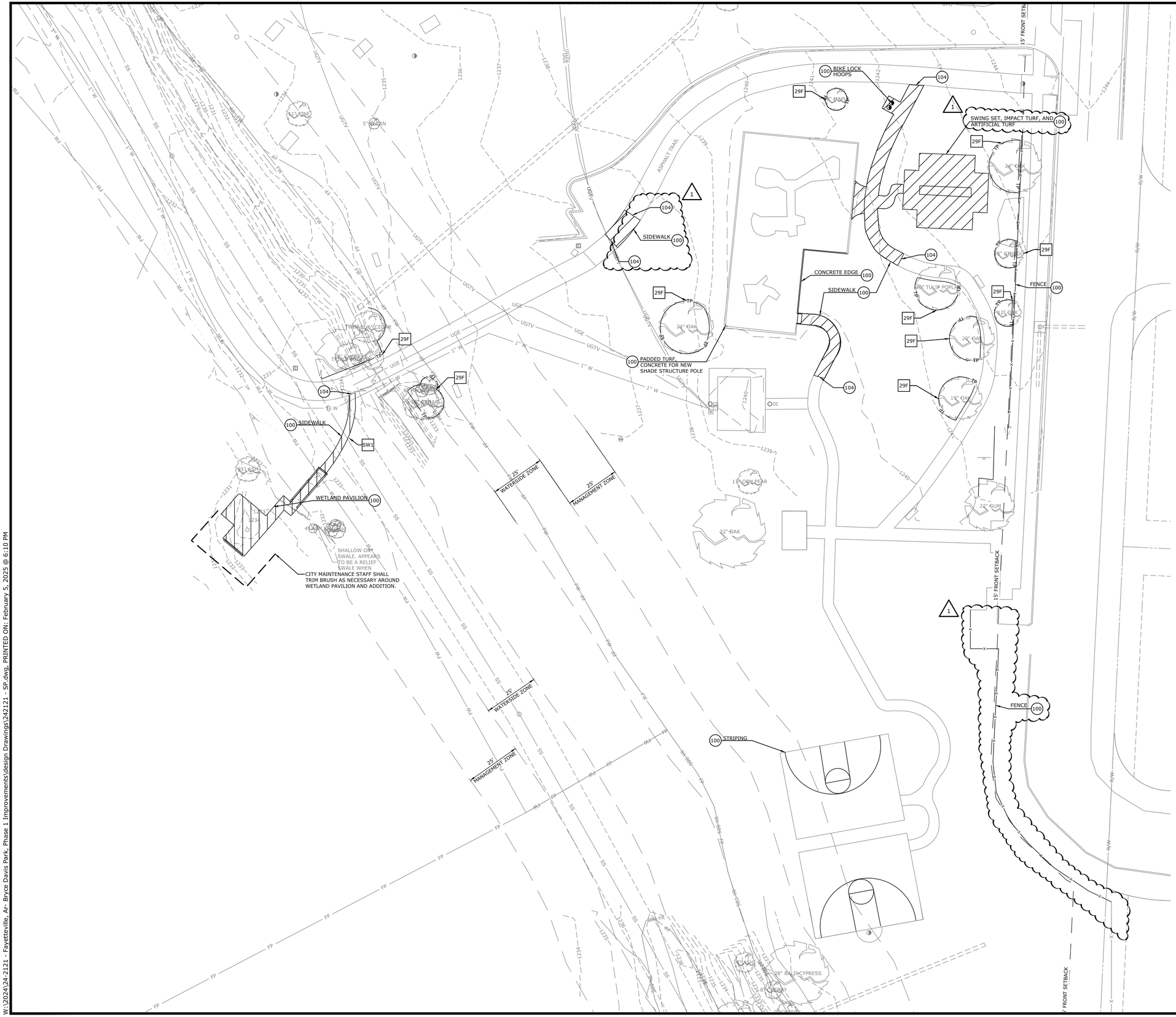

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C2.1 SITE PLAN NORTH

C2.2 SITE PLAN WEST

C2.3 SITE PLAN EAST

PLEASE REFER TO SHEET ES1. NO DEVELOPMENT IN THIS AREA OUTSIDE OF TRAIL LIGHTING.

PLAN SCALE

50 0 25 50 100

(IN FEET)
1 inch = 50ft.

EXISTING LEGEND

- PROPERTY LINE
- R/W — RIGHT OF WAY
- SS — SANITARY SEWER LINE
- W — WATER LINE
- GAS — GAS LINE
- UGT — UNDERGROUND TELEPHONE
- UGE — UNDERGROUND ELECTRIC
- UGTV — UNDERGROUND TELEVISION
- UFO — UNDERGROUND FIBER
- OHE — OVERHEAD ELECTRIC
- X — X — FENCE
- ROAD CENTERLINE
- DITCH FLOWLINE
- EASEMENT LINE
- GRAVEL LINE
- FW — FLOOD WAY
- FP — FLOOD PLAIN
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- WATER FAUCET
- SANITARY SEWER MH
- CLEAN-OUT
- DRAINAGE MH
- POWER POLE
- GUY WIRE w/ ANCHOR
- GAS METER
- GAS RISER
- STREET LIGHT POLE
- TELEPHONE PEDESTAL
- CABLE TV PEDESTAL
- CABLE VAULT
- ELECTRIC VAULT
- FIBER VAULT
- GAS VAULT
- TELEPHONE VAULT
- WATER VAULT
- SIGN (AS NOTED)
- POST (AS NOTED)
- BENCHMARK
- FOUND IRON PIN (AS NOTED)
- CONTROL POINT
- RR SPIKE
- BUSH
- DECIDUOUS TREE
- CONIFEROUS TREE

PROPOSED LEGEND

- X — X — FENCE
- TP — TREE PROTECTION FENCE
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK
- ARTIFICIAL TURF
- LIGHT POLE

GENERAL SITE NOTES

1. CONTRACTOR SHALL RETAIN A FULL SET OF LATEST APPROVED CONSTRUCTION PLANS ON SITE DURING CONSTRUCTION ACTIVITIES.
2. CONSTRUCTION METHODS AND MATERIALS NOT SPECIFIED IN THESE PLANS ARE TO MEET OR EXCEED THE SITE WORK SPECIFICATIONS PROVIDED BY McCLELLAND CONSULTING ENGINEERS, INC. OR AS SPECIFIED BY THE OWNER'S RESIDENT REPRESENTATIVE.
3. ALL CONSTRUCTION WORK AND UTILITY WORK OUTSIDE OF PROPERTY BOUNDARIES SHALL BE PERFORMED IN COOPERATION WITH AND IN ACCORDANCE WITH REGULATIONS OF THE AUTHORITIES CONCERNED.
4. PUBLIC CONVENIENCE AND SAFETY: THE CONTRACTOR SHALL CONDUCT THE WORK IN A MANNER THAT WILL INSURE, AS FAR AS PRACTICABLE, THE LEAST OBSTRUCTION TO TRAFFIC AND SHALL PROVIDE FOR THE CONVENIENCE AND SAFETY OF THE GENERAL PUBLIC AND RESIDENTS ALONG AND ADJACENT TO HIGHWAYS IN THE CONSTRUCTION AREA IN AN ADEQUATE AND SATISFACTORY MANNER IN ACCORDANCE WITH THE ARKANSAS DOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
5. GENERAL CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL UTILITY COMPANIES INVOLVED IN PROJECT AND PAY ALL REQUIRED FEES AND COSTS.
6. FOR SITE UTILITIES, SEE UTILITY PLAN(S).
7. ALL WORK TO BE DONE IN STRICT ACCORDANCE WITH THE OWNER'S STANDARD SITE SPECIFICATIONS.
8. CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION LAYOUT AND STAKING (UNLESS APPROVED OTHERWISE BY THE ENGINEER OF RECORD).
9. THE CONTRACTOR SHALL DETERMINE ALL ACCESS ROUTES THROUGH THE PARK AND SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE, INCLUDING BUT NOT LIMITED TO: BROKEN CONCRETE, PAVEMENT, RUTS, AND DISTURBED VEGETATION. ALL REPAIRS SHALL MATCH EXISTING CONDITIONS UNLESS OTHERWISE SPECIFIED.

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OVERALL SITE PLAN

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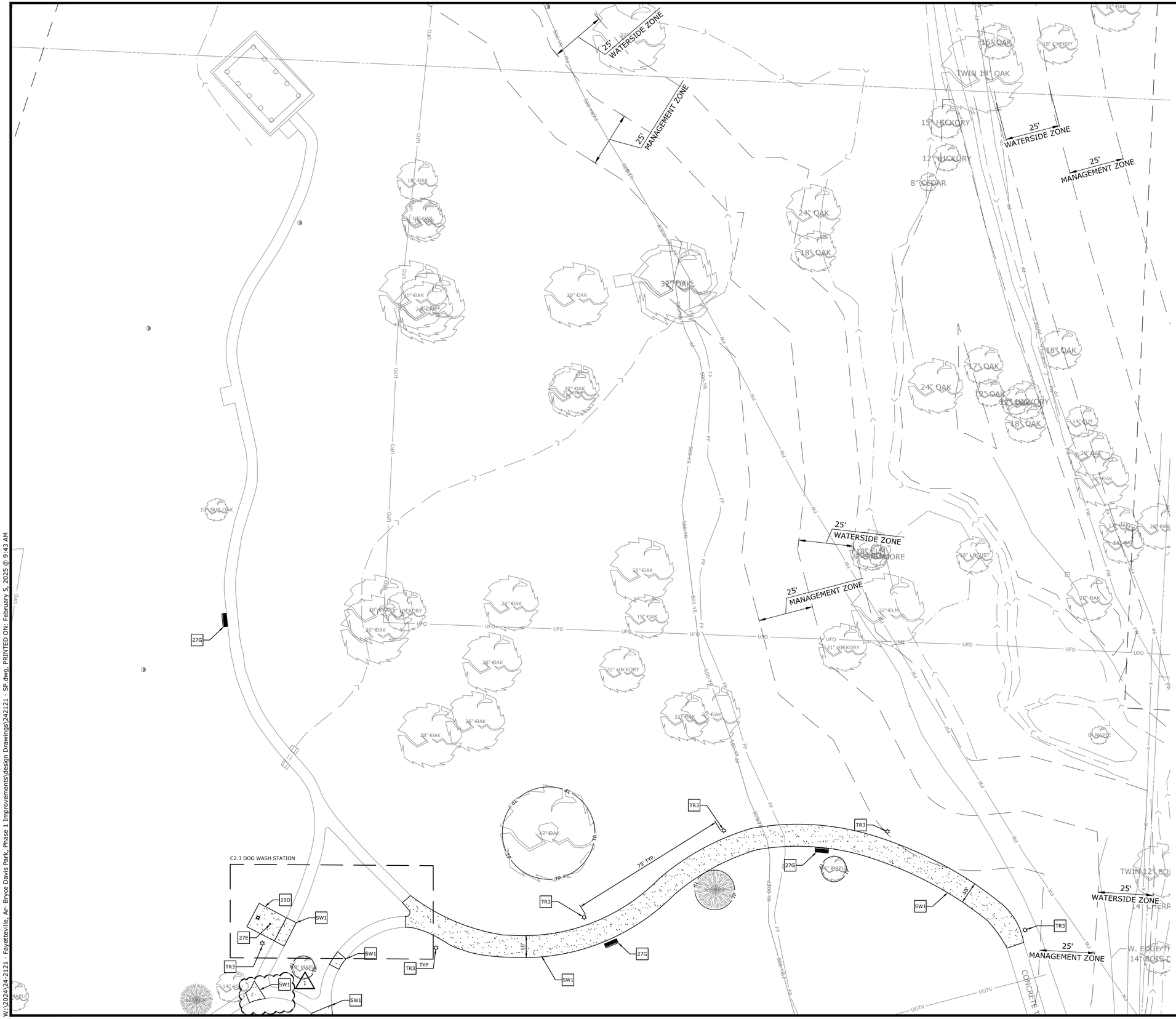

EXISTING LEGEND

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WATER FAUCET	DECIDUOUS TREE
SANITARY SEWER MH	CONIFEROUS TREE
CLEAN-OUT	
DRAINAGE MH	

PROPOSED LEGEND

FENCE	
TP TREE PROTECTION FENCE	
CONCRETE PAVEMENT	
CONCRETE SIDEWALK	
ARTIFICIAL TURF	
LIGHT POLE	

SITE KEYNOTES

208 4" WIDE PAINTED WHITE PARKING STRIPES
209 4" WIDE PAINTED WHITE STRIPES 24" O.C. @ 45 DEGREES
221 POINT OF RELOCATION
226 EXISTING RESTROOM
227 EXISTING PAVILION
232 EXISTING PLAY STRUCTURES
233 RESTRIPE EX BASKETBALL COURTS, 4" WHITE
234 RESTRIPE EX PARALLEL PARKING
235 REPLACE WITH NEW ARTIFICIAL TURF

SITE DETAILS

10A TREE PROTECTION FENCE
20F VERTICAL CONCRETE CURB
21H CONCRETE PAVEMENT DOWEL & JOINTING
23C PARALLEL PARKING SPACE STRIPING
25J BIKE RACK
25L CMU BRICK SEATING WALL
27A ROUND RAIL WOOD AND CHAIN LINK FENCE
27B CONCRETE POST FOR 12X12 PAVILION LIFT
27C POLYGON PAVILION, RAM 16X20, OR EQUAL
27D RCP PAVILION, TS-SQ12-04, OR EQUAL
27E MDF 505 RINSE STATION, OR EQUAL
27F VICTOR STANLEY RB-12 BACKLESS BENCH, OR EQUAL
27G BELSON CBPB-6SB-BK BENCH WITH STRAIGHT BACK, OR EQUAL
27H VICTOR STANLEY F-565 WOOD SLAT TABLE, OR EQUAL
27J LSI, 3 BAY, 8' ARCH SWING SET, OR EQUAL
27K LSI TODDLER SWING SET, OR EQUAL
27L TURF EXPANSION EDGING
27M SKYWAYS SHADE SAILS, OR EQUAL
29A CEDAR RAIL FENCE
29B CONCRETE SIDEWALK
29C PLAYGROUND IMPACT TURF EXPANSION
29D DOG WASH STATION
29E PERVIOUS SWINGSET BASE
29F TREE PROTECTION FENCE
TR3 CITY OF FAYETTEVILLE TRAIL LIGHTING DETAIL CROSS SECTION
SW1 CITY OF FAYETTEVILLE SIDEWALK WITH GREENSPACE

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FAYETTEVILLE, ARKANSAS 72703
(479) 443-2377
HTTP://WWW.MCE.US.COM

REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER M. BAKUNAS
License Number 985
STATE OF ARKANSAS
02/05/2025

ORIGINAL SIGNATURE ON FILE

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BRYCE DAVIS PARK IMPROVEMENTS PHASE 1

1595 N DARTMOUTH AVE
FAYETTEVILLE, AR

811 Know what's below. Call before you dig.

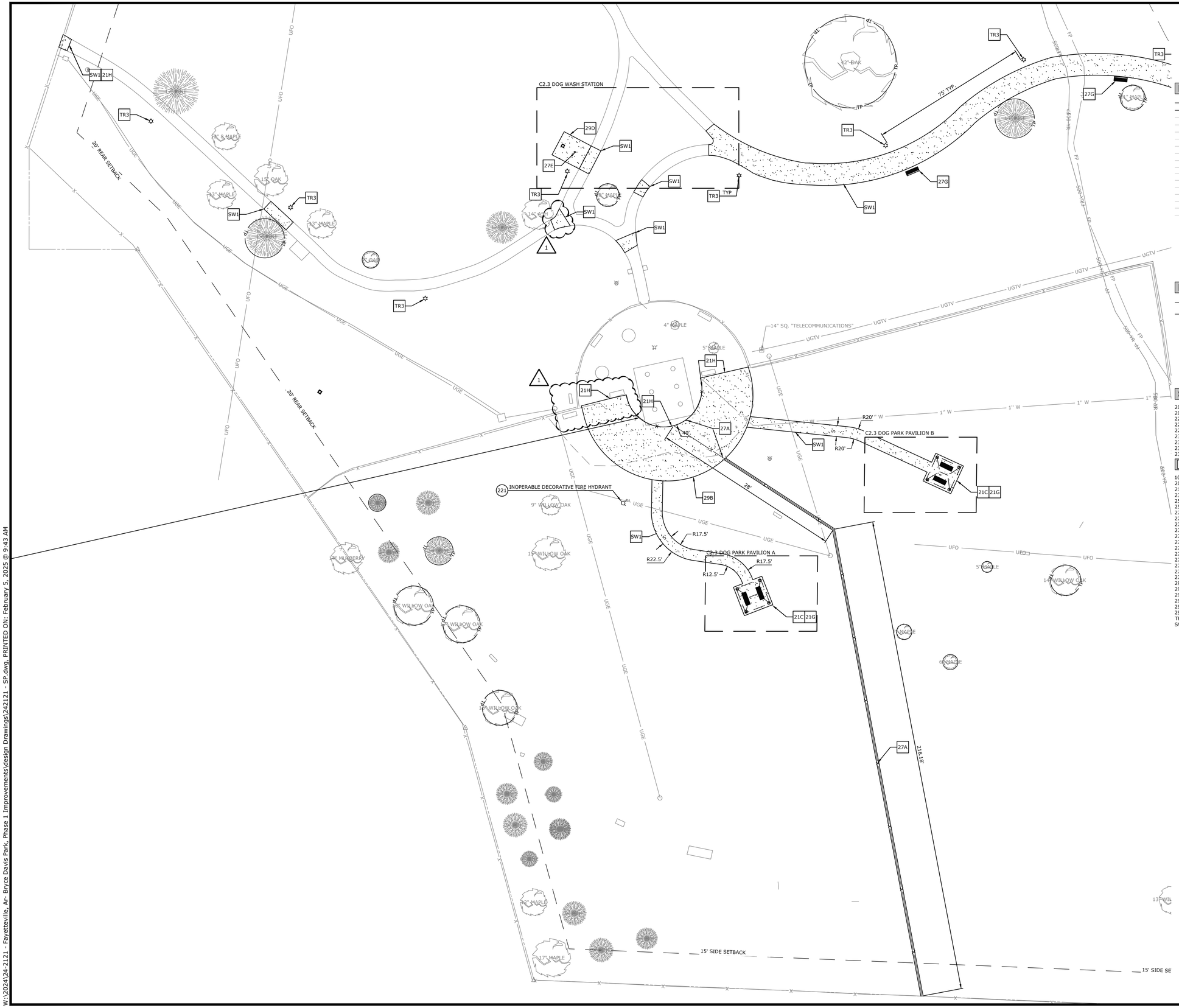
REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

SITE PLAN NORTH

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 2/5/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C2.1

W:\2024\24-2121 - Fayetteville, Ar- Bryce Davis Park, Phase 1 Improvements\design Drawings\242121 - SP.dwg, PRINTED ON: February 5, 2025 @ 9:43 AM



PLAN SCALE

20 0 10 20 40

(IN FEET)
1 inch = 20ft.

EXISTING LEGEND

- PROPERTY LINE
- RIGHT OF WAY
- SANITARY SEWER LINE
- WATER LINE
- GAS LINE
- UNDERGROUND TELEPHONE
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEVISION
- UNDERGROUND FIBER
- OVERHEAD ELECTRIC
- FENCE
- ROAD CENTERLINE
- DITCH FLOWLINE
- EASEMENT LINE
- GRAVEL LINE
- FLOOD WAY
- FLOOD PLAIN
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- WATER FAUCET
- SANITARY SEWER MH
- CLEAN-OUT
- DRAINAGE MH
- POWER POLE
- GUY WIRE w/ ANCHOR
- GAS METER
- GAS RISER
- STREET LIGHT POLE
- TELEPHONE PEDESTAL
- CABLE TV PEDESTAL
- CABLE VAULT
- ELECTRIC VAULT
- FIBER VAULT
- GAS VAULT
- TELEPHONE VAULT
- WATER VAULT
- SIGN (AS NOTED)
- POST (AS NOTED)
- BENCHMARK
- FOUND IRON PIN (AS NOTED)
- CONTROL POINT
- RR SPIKE
- BUSH
- DECIDUOUS TREE
- CONIFEROUS TREE

PROPOSED LEGEND

- FENCE
- TREE PROTECTION FENCE
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK
- ARTIFICIAL TURF
- LIGHT POLE

SITE KEYNOTES

208 4" WIDE PAINTED WHITE PARKING STRIPES
209 4" WIDE PAINTED WHITE STRIPES 24" O.C. @ 45 DEGREES
221 POINT OF RELOCATION
226 EXISTING RESTROOM
227 EXISTING PAVILION
232 EXISTING PLAY STRUCTURES
233 RESTRIPE EX BASKETBALL COURTS, 4" WHITE
234 RESTRIPE EX PARALLEL PARKING
235 REPLACE WITH NEW ARTIFICIAL TURF

SITE DETAILS

10A TREE PROTECTION FENCE
20F VERTICAL CONCRETE CURB
21H CONCRETE PAVEMENT DOWEL & JOINTING
23C PARALLEL PARKING SPACE STRIPING
25J BIKE RACK
25L CMU BRICK SEATING WALL
27A ROUND RAIL WOOD AND CHAIN LINK FENCE
27B CONCRETE POST FOR 12X12 PAVILION LIFT
27C POLYGON PAVILION, RAM 16X20, OR EQUAL
27D RCP PAVILION, TS-SQ12-04, OR EQUAL
27E MDF 505 RINSE STATION, OR EQUAL
27F VICTOR STANLEY RB-12 BACKLESS BENCH, OR EQUAL
27G BELSON CBPB-6SB-BK BENCH WITH STRAIGHT BACK, OR EQUAL
27H VICTOR STANLEY F-565 WOOD SLAT TABLE, OR EQUAL
27J LSI, 3 BAY, 8' ARCH SWING SET, OR EQUAL
27K LSI TODDLER SWING SET, OR EQUAL
27L TURF EXPANSION EDGING
27M SKYWAYS SHADE SAILS, OR EQUAL
29A CEDAR RAIL FENCE
29B CONCRETE SIDEWALK
29C PLAYGROUND IMPACT TURF EXPANSION
29D DOG WASH STATION
29E PERVIOUS SWINGSET BASE
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TR3 CITY OF FAYETTEVILLE TRAIL LIGHTING DETAIL CROSS SECTION
SW1 CITY OF FAYETTEVILLE SIDEWALK WITH GREENSPACE

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License Number 0185
STATE OF ARKANSAS
02/05/2025
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FAYETTEVILLE, AR

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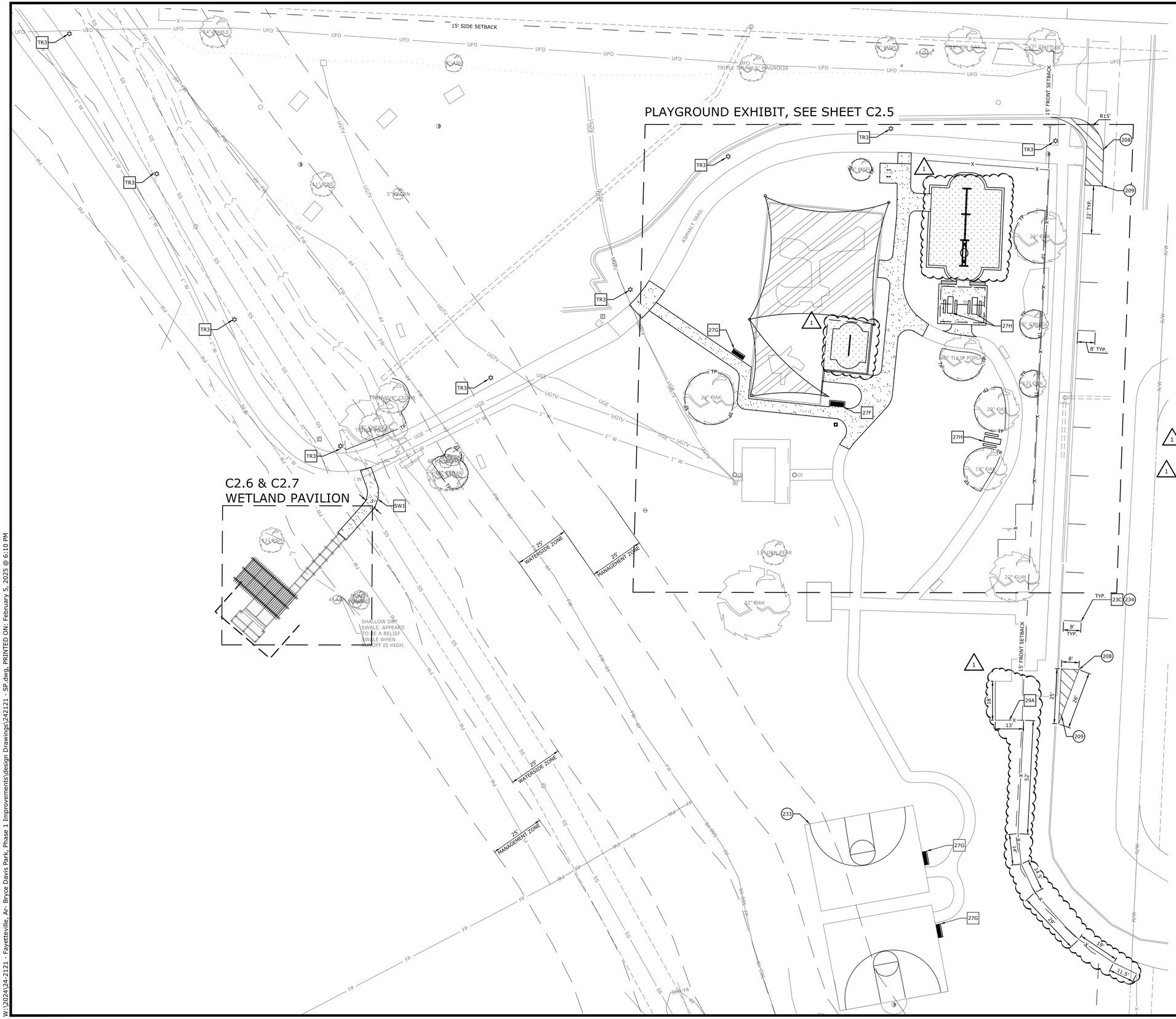
REVISIONS		
REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

SITE PLAN WEST

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 2/5/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C2.2

W:\2024\24-2121 - Fayetteville, Ar- Bryce Davis Park, Phase 1 Improvements\design Drawings\242121 - SP.dwg, PRINTED ON: February 5, 2025 @ 9:43 AM



PLAN SCALE

20 0 10 20 40

(IN FEET)
1 inch = 20ft.

EXISTING LEGEND

PROPERTY LINE	POWER POLE
R/W — RIGHT OF WAY	GUY WIRE w/ ANCHOR
SS — SANITARY SEWER LINE	GAS METER
W — WATER LINE	GAS RISER
GAS — GAS LINE	STREET LIGHT POLE
UGT — UNDERGROUND TELEPHONE	TELEPHONE PEDESTAL
UGE — UNDERGROUND ELECTRIC	CABLE TV PEDESTAL
UGTV — UNDERGROUND TELEVISION	CABLE VAULT
UFO — UNDERGROUND FIBER	ELECTRIC VAULT
OHE — OVERHEAD ELECTRIC	FIBER VAULT
X — X — FENCE	GAS VAULT
ROAD CENTERLINE	TELEPHONE VAULT
DITCH FLOWLINE	WATER VAULT
EASEMENT LINE	SIGN (AS NOTED)
GRAVEL LINE	POST (AS NOTED)
FW — FLOOD WAY	BENCHMARK
FP — FLOOD PLAIN	FOUND IRON PIN (AS NOTED)
FIRE HYDRANT	CONTROL POINT
WATER METER	RR SPIKE
WATER VALVE	BUSH
WATER FAUCET	DECIDUOUS TREE
SANITARY SEWER MH	CONIFEROUS TREE
CLEAN-OUT	
DRAINAGE MH	

PROPOSED LEGEND

X — X	FENCE
TP	TREE PROTECTION FENCE
	CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	ARTIFICIAL TURF
	LIGHT POLE

SITE KEYNOTES

208 4" WIDE PAINTED WHITE PARKING STRIPES
209 4" WIDE PAINTED WHITE STRIPES 24" O.C. @ 45 DEGREES
221 POINT OF RELOCATION
226 EXISTING RESTROOM
227 EXISTING PAVILION
232 EXISTING PLAY STRUCTURES
233 RESTRIPE EX BASKETBALL COURTS, 4" WHITE
234 RESTRIPE EX PARALLEL PARKING
235 ARTIFICIAL TURF

SITE DETAILS

1AA TREE PROTECTION FENCE
20H CONCRETE RIBBON CURB
21H CONCRETE PAVEMENT DOWEL & JOINTING
23C PARALLEL PARKING SPACE STRIPING
25J BIKE RACK
25L CMU BRICK SEATING WALL
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02/06/2025
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FAYETTEVILLE, AR

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REVISIONS		
REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

SITE PLAN EAST

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 2/5/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C2.4

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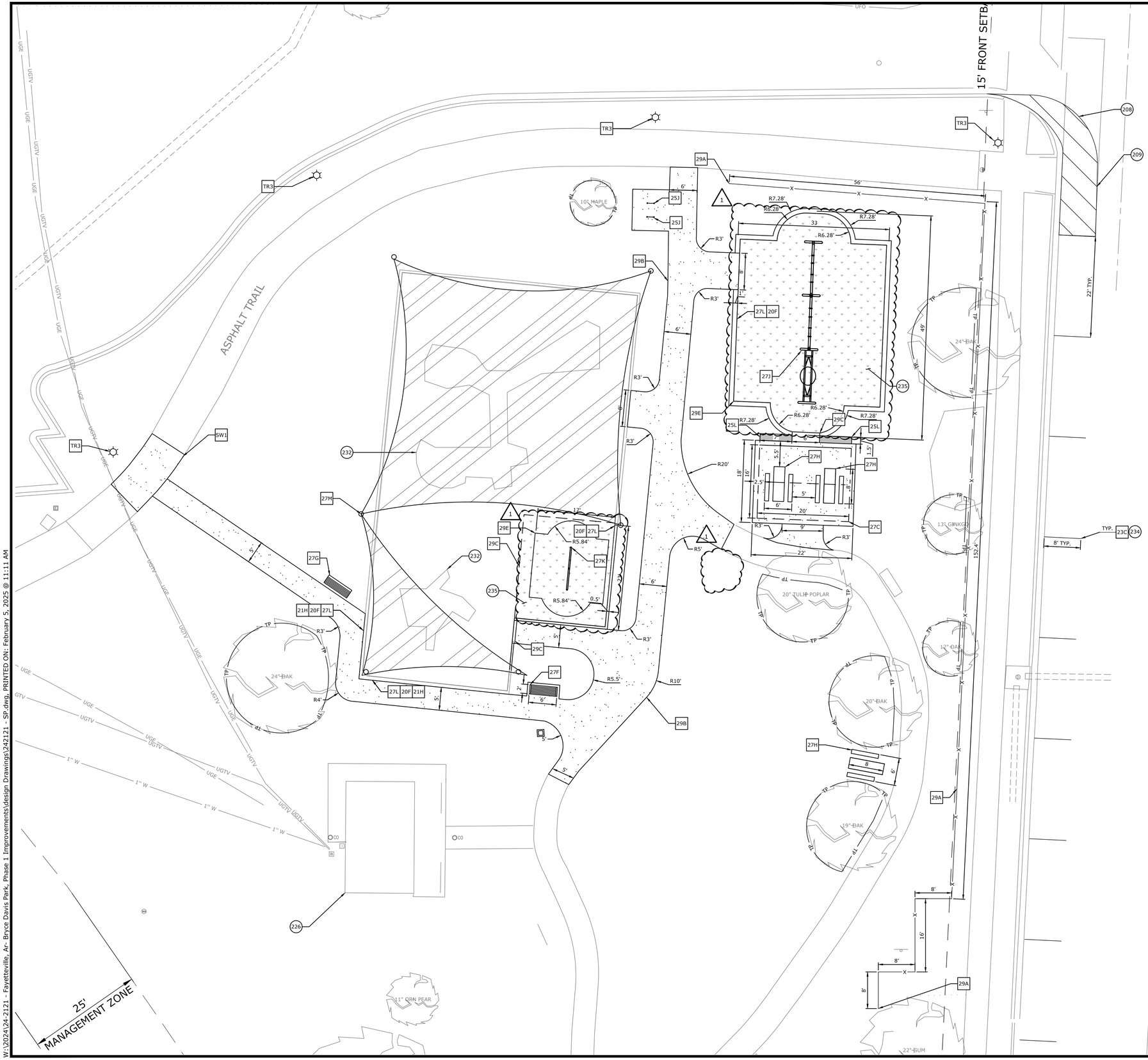

PLAN SCALE

10 0 5 10 20

(IN FEET)
1 inch = 10ft.

EXISTING LEGEND

PROPERTY LINE	POWER POLE
R/W RIGHT OF WAY	GUY WIRE w/ ANCHOR
SS SANITARY SEWER LINE	GAS METER
W WATER LINE	GAS RISER
GAS GAS LINE	STREET LIGHT POLE
UGT UNDERGROUND TELEPHONE	TELEPHONE PEDESTAL
UGE UNDERGROUND ELECTRIC	CABLE TV PEDESTAL
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FLOOD WAY	BENCHMARK
FP FLOOD PLAIN	FOUND IRON PIN (AS NOTED)
FIRE HYDRANT	CONTROL POINT
WATER METER	RR SPIKE
WATER VALVE	BUSH
WATER FAUCET	DECIDUOUS TREE
SANITARY SEWER MH	CONIFEROUS TREE
CLEAN-OUT	
DRAINAGE MH	

PROPOSED LEGEND

X X	FENCE
TP	TREE PROTECTION FENCE
	CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	ARTIFICIAL TURF
	LIGHT POLE

SITE KEYNOTES

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SITE DETAILS

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21H CONCRETE PAVEMENT DOWEL & JOINTING
23C PARALLEL PARKING SPACE STRIPING
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License Number 9185
STATE OF ARKANSAS
02/05/2025
ORIGINAL SIGNATURE ON FILE

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FAYETTEVILLE, AR

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REVISIONS

REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

SITE PLAN EAST EXHIBIT

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 2/5/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C2.5

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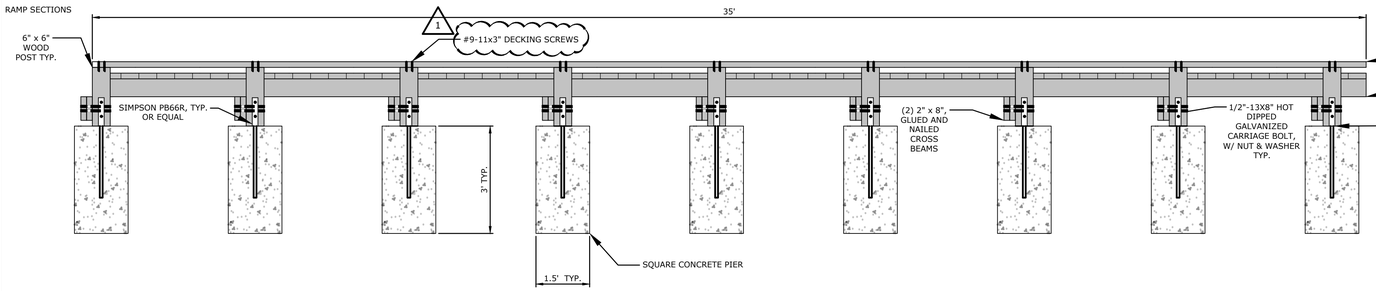
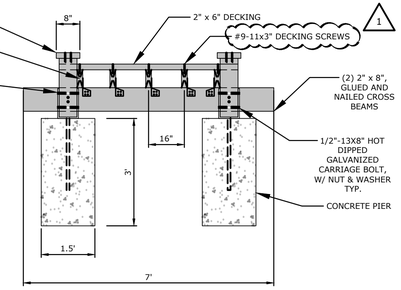
RAMP SECTIONS





PLAN SCALE

(IN FEET)
1 inch = 2ft.

PAVILION IS TO BE DEMOLISHED AND RECONSTRUCTED EXACTLY AS IT IS, IN PLACE, WITH THE ADDITIONS OF THE REALIGNED RAMP AND THE LOWER SECTION.

ALL EXISTING FOOTERS TO BE USED AS SUPPORT FOR PROPOSED PAVILION EXCEPT THOSE UNDER RAMP, ADD ADDITIONAL FOOTERS AS NEEDED.

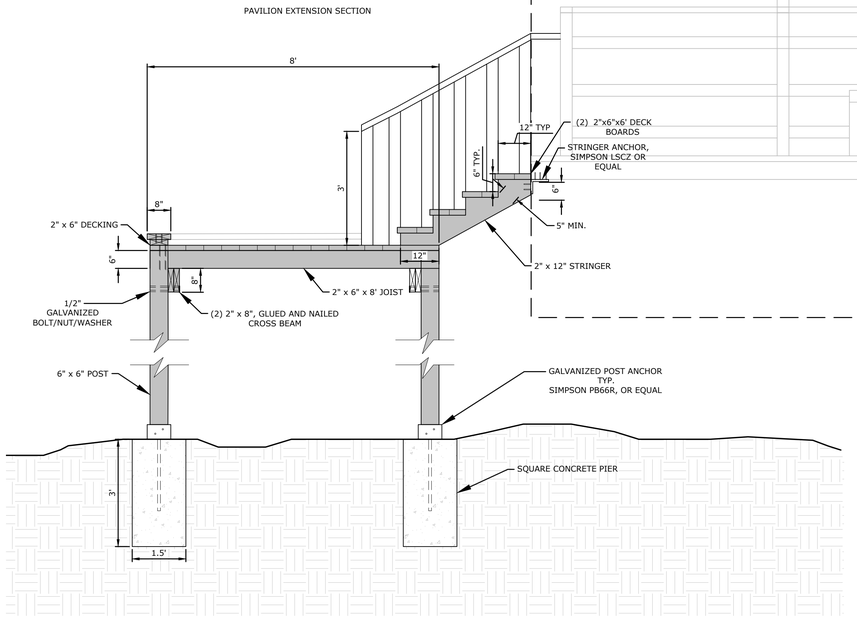
ALL WOOD IS TO BE PRESSURE TREATED SOUTHERN YELLOW PINE, NO.2 GRADE.

RAMP NOT TO EXCEED 5% RUNNING SLOPE AND 0% CROSS SLOPE.

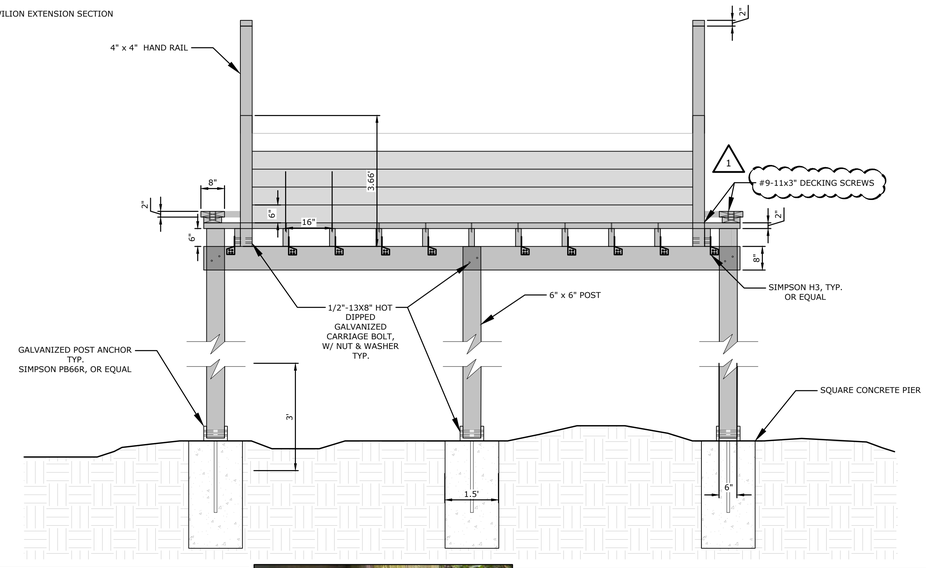
RAMP NOT TO EXCEED 30" IN HEIGHT WHILE IN SANITARY SEWER EASEMENT.

EXISTING CONDITIONS

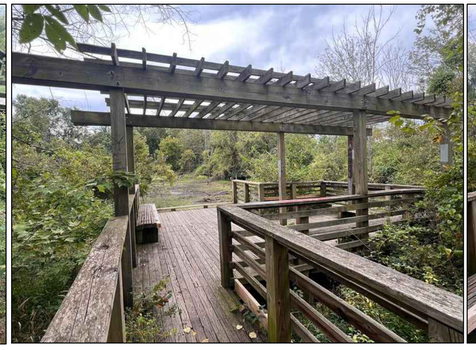
PAVILION EXTENSION SECTION



PAVILION EXTENSION SECTION



EXISTING CONDITIONS



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STATE OF ARKANSAS

02/05/2025

ORIGINAL SIGNATURE ON FILE

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IMPROVEMENTS PHASE 1
1595 N DARTMOUTH AVE
FAYETTEVILLE, AR

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REVISIONS

REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

WOODEN PAVILION FRAMING PLAN SHEET 1

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
2/5/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

C2.6

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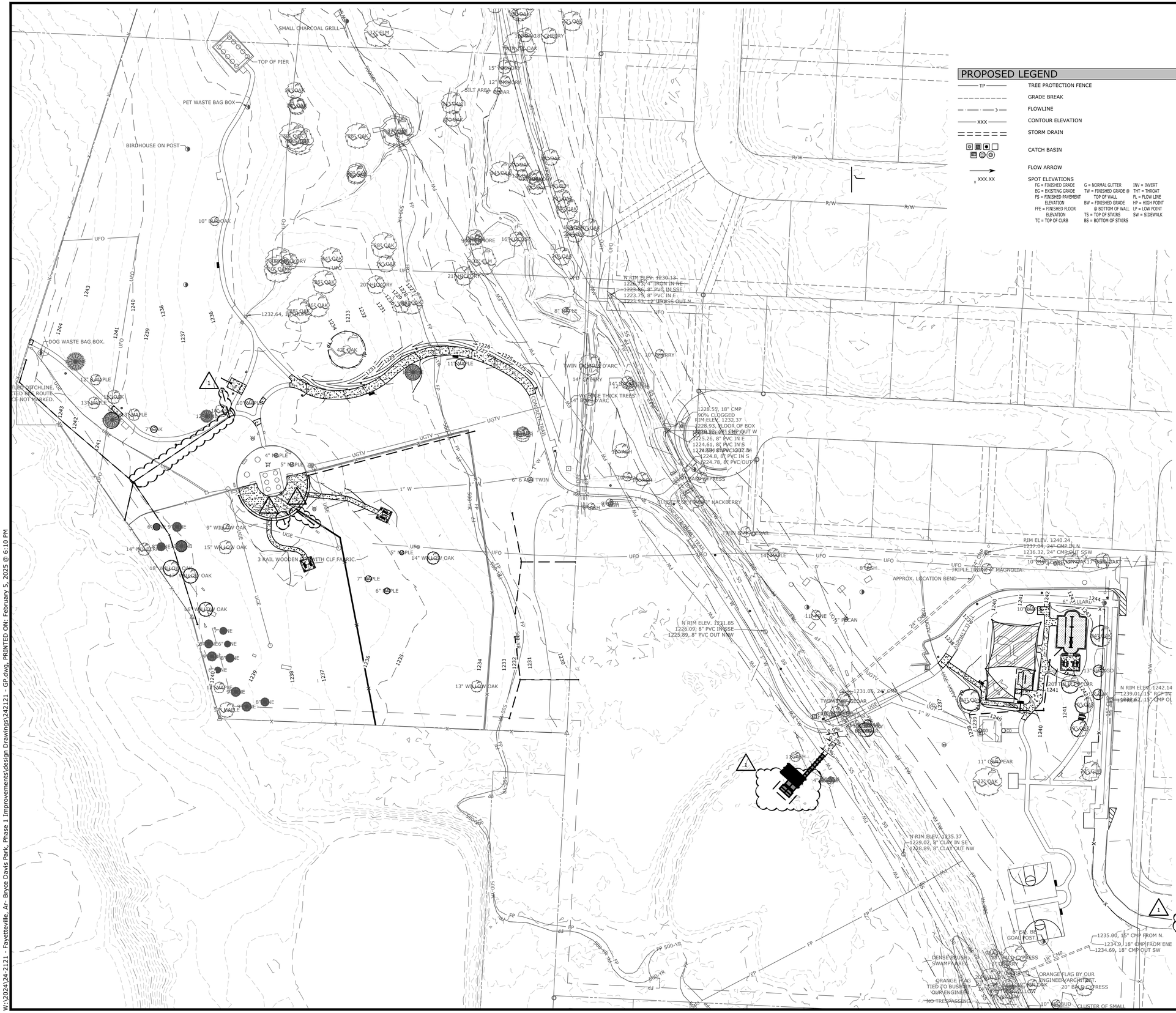
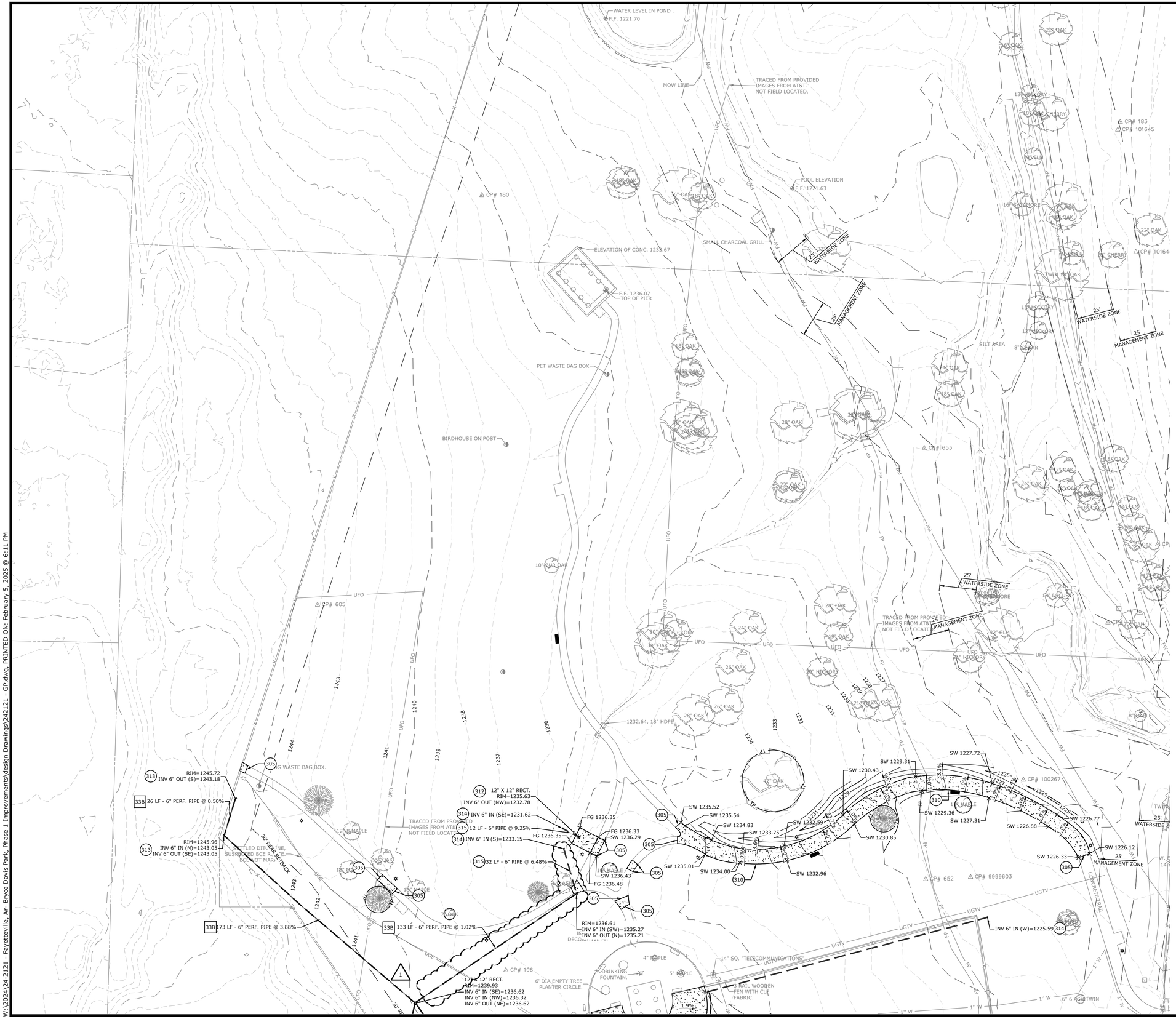

PLAN SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50ft.
PROPOSED LEGEND
TP TREE PROTECTION FENCE
GRADE BREAK
FLOWLINE
XXX CONTOUR ELEVATION
STORM DRAIN
CATCH BASIN
FLOW ARROW
XXX.XX
SPOT ELEVATIONS
FG = FINISHED GRADE
EG = EXISTING GRADE
FS = FINISHED PAVEMENT ELEVATION
FFE = FINISHED FLOOR ELEVATION
TC = TOP OF CURB
G = NORMAL GUTTER
TW = FINISHED GRADE @ TOP OF WALL
BW = FINISHED GRADE @ BOTTOM OF WALL
TS = TOP OF STAIRS
BS = BOTTOM OF STAIRS
INV = INVERT
THT = THROAT
FL = FLOW LINE
HP = HIGH POINT
LP = LOW POINT
SW = SIDEWALK
EXISTING LEGEND
PROPERTY LINE
R/W RIGHT OF WAY
SANITARY SEWER LINE
WATER LINE
GAS LINE
UGT UNDERGROUND TELEPHONE
UGE UNDERGROUND ELECTRIC
UGTV UNDERGROUND TELEVISION
UFO UNDERGROUND FIBER
OHE OVERHEAD ELECTRIC
FENCE
ROAD CENTERLINE
DITCH FLOWLINE
EASEMENT LINE
GRAVEL LINE
FLOOD WAY
FP FLOOD PLAIN
FIRE HYDRANT
WATER METER
WATER VALVE
WATER FAUCET
SANITARY SEWER MH
CLEAN-OUT
DRAINAGE MH
POWER POLE
GUY WIRE w/ ANCHOR
GAS METER
GAS RISER
STREET LIGHT POLE
TELEPHONE PEDESTAL
CABLE TV PEDESTAL
CABLE VAULT
ELECTRIC VAULT
FIBER VAULT
GAS VAULT
TELEPHONE VAULT
WATER VAULT
SIGN (AS NOTED)
POST (AS NOTED)
BENCHMARK
FOUND IRON PIN (AS NOTED)
CONTROL POINT
RR SPIKE
BUSH
DECIDUOUS TREE
CONIFEROUS TREE
SMALL CHARCOAL GRILL
TOP OF PIER
PET WASTE BAG BOX
BIRDHOUSE ON POST
DOG WASTE BAG BOX.
3 RAIL WOODEN FENCE WITH CLF FABRIC
TILED DITCHLINE, ROUTE NOT MARKED.
N RIM ELEV. 1230.13
1228.79, 4" IRON IN NE
1223.86, 8" PVC IN SSE
1223.75, 8" PVC IN E
1223.53, 12" UROSS OUT N
1228.59, 18" CMP
90% CLOGGED
RIM ELEV. 1232.37
1228.93, FLOOR OF BOX
1228.82, 15" CMP OUT W
1225.26, 8" PVC IN E
1224.61, 8" PVC IN S
1224.59, 8" PVC OUT W
1224.8, 8" PVC IN S
1224.78, 8" PVC OUT
RIM ELEV. 1240.24
1237.04, 24" CMP IN N
1236.32, 24" CMP OUT SSW
N RIM ELEV. 1211.85
1226.09, 8" PVC IN SSE
1225.89, 8" PVC OUT NNW
N RIM ELEV. 1235.37
1228.02, 8" CLAY IN SE
1228.89, 8" CLAY OUT NW
1235.00, 15" CMP FROM N.
1234.9, 18" CMP FROM ENE
1234.69, 18" CMP OUT SW
N RIM ELEV. 1242.14
1239.01, 15" RCP IN
1238.67, 15" CMP OUT
1231.05, 24" CMP
APPROX. LOCATION BEND
ORANGE FLAG TIED TO BUSHEY OUR ENGINEER
NO TRESPASSING
ORANGE FLAG BY OUR ENGINEER/ARCHITECT
DENSE BRUSH, SWAMP AREA
CLUSTER OF SMALL
FP 500-YR
SILT AREA
SWALE
TRAIL
6' BB GOAL POST
TRIPLE TRUNK MAGNOLIA
TWIN BLACK CHERRY
TWIN CRAPE MYRTLE
TWIN CRAPE MYRTLE
TWIN CRAPE MYRTLE



PLAN SCALE

30 0 15 30 60

(IN FEET)
1 inch = 30ft.

EXISTING LEGEND

- PROPERTY LINE
- R/W — RIGHT OF WAY
- SS — SANITARY SEWER LINE
- W — WATER LINE
- GAS — GAS LINE
- UGT — UNDERGROUND TELEPHONE
- UGE — UNDERGROUND ELECTRIC
- UGTV — UNDERGROUND TELEVISION
- UFO — UNDERGROUND FIBER
- OHE — OVERHEAD ELECTRIC
- X — X — FENCE
- ROAD CENTERLINE
- DITCH FLOWLINE
- EASEMENT LINE
- GRAVEL LINE
- FLOOD WAY
- FP — FLOOD PLAIN
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- WATER FAUCET
- SANITARY SEWER MH
- CLEAN-OUT
- DRAINAGE MH
- POWER POLE
- GUY WIRE w/ ANCHOR
- GAS METER
- GAS RISER
- STREET LIGHT POLE
- TELEPHONE PEDESTAL
- CABLE TV PEDESTAL
- CABLE VAULT
- ELECTRIC VAULT
- FIBER VAULT
- GAS VAULT
- TELEPHONE VAULT
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- SIGN (AS NOTED)
- POST (AS NOTED)
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- CONTROL POINT
- RR SPIKE
- BUSH
- DECIDUOUS TREE
- CONIFEROUS TREE

PROPOSED LEGEND

- TP — TREE PROTECTION FENCE
- GRADE BREAK
- FLOWLINE
- XXX — CONTOUR ELEVATION
- STORM DRAIN
- CATCH BASIN
- FLOW ARROW
- XXX.XX — SPOT ELEVATIONS

FG = FINISHED GRADE
EG = EXISTING GRADE
FS = FINISHED PAVEMENT ELEVATION
FFE = FINISHED FLOOR ELEVATION
TC = TOP OF CURB
G = NORMAL GUTTER
TW = FINISHED GRADE @ TOP OF WALL
BW = FINISHED GRADE @ BOTTOM OF WALL
TS = TOP OF STAIRS
BS = BOTTOM OF STAIRS
INV = INVERT
THT = THROAT
FL = FLOW LINE
HP = HIGH POINT
LP = LOW POINT
SW = SIDEWALK

GRADING/DRAINAGE KEYNOTES

305 MATCH EXISTING PAVEMENT ELEVATIONS
310 ADA PATH. NO MORE THAN 5% SLOPE ALONG THE PATH OF TRAVEL, AND 2% CROSS SLOPE
312 NYLOPLAST DRAIN INLET w/METAL RECTANGULAR GRATE (SEE GRATE SIZE AT SYMBOL) (CONTRACTOR TO COORDINATE STRUCTURE SIZE w/ADS)(OR ENGINEER APPROVED EQUAL)
313 STORM DRAIN CLEANOUT
314 3" HEADWALL EACH SIDE, CONTRACTOR TO ALIGN IN FIELD
315 DRAIN TILE
316 CAP END OF LINE

GRADING/DRAINAGE DETAILS

29E PERVIOUS SWING SET
33B FRENCH DRAIN (SEE LENGTH AND SIZE AT SYMBOL)
33G STORM SEWER TRENCHING, BACKFILL, AND BEDDING

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REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER M. BAKUNAS
License Number 0185
STATE OF ARKANSAS
02/06/2025

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1595 N DARTMOUTH AVE
FAYETTEVILLE, AR

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REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

GRADING PLAN NORTH

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 2/5/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C3.1

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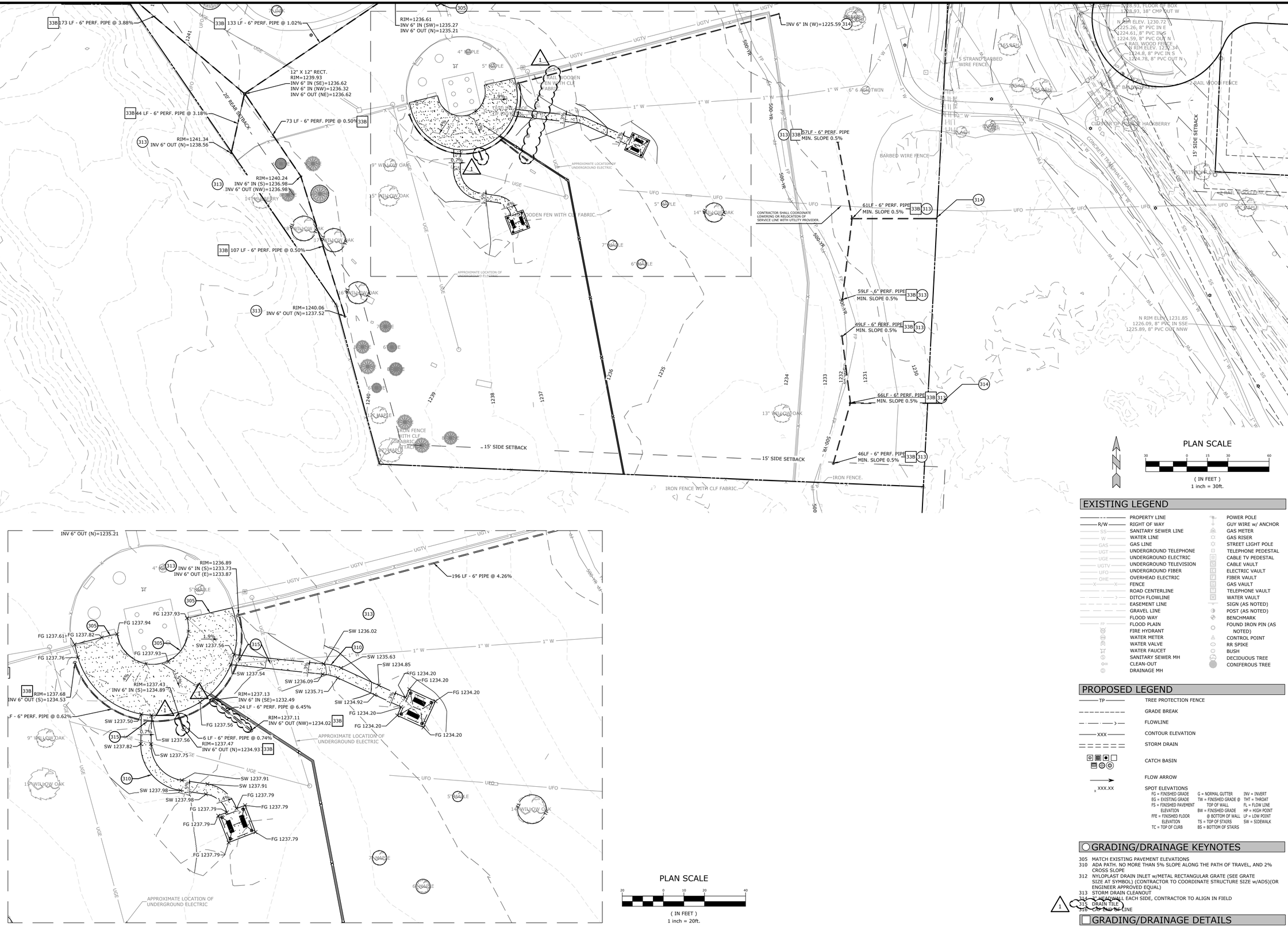

EXISTING LEGEND

PROPERTY LINE	POWER POLE
R/W RIGHT OF WAY	GUY WIRE w/ ANCHOR
SS SANITARY SEWER LINE	GAS METER
W WATER LINE	GAS RISER
GAS GAS LINE	STREET LIGHT POLE
UGT UNDERGROUND TELEPHONE	TELEPHONE PEDESTAL
UGE UNDERGROUND ELECTRIC	CABLE TV PEDESTAL
UGTV UNDERGROUND TELEVISION	CABLE VAULT
UFO UNDERGROUND FIBER	ELECTRIC VAULT
OHE OVERHEAD ELECTRIC	FIBER VAULT
FENCE	GAS VAULT
ROAD CENTERLINE	TELEPHONE VAULT
DITCH FLOWLINE	WATER VAULT
EASEMENT LINE	SIGN (AS NOTED)
GRAVEL LINE	POST (AS NOTED)
FLOOD WAY	BENCHMARK
FP FLOOD PLAIN	FOUND IRON PIN (AS NOTED)
FIRE HYDRANT	CONTROL POINT
WATER METER	RR SPIKE
WATER VALVE	BUSH
WATER FAUCET	DECIDUOUS TREE
SANITARY SEWER MH	CONIFEROUS TREE
CLEAN-OUT	
DRAINAGE MH	

PROPOSED LEGEND

TP	TREE PROTECTION FENCE
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	FLOWLINE
XXX	CONTOUR ELEVATION
	STORM DRAIN
	CATCH BASIN
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XXX.XX	SPOT ELEVATIONS

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REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

REVISIONS

GRADING PLAN WEST

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 2/5/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C3.2

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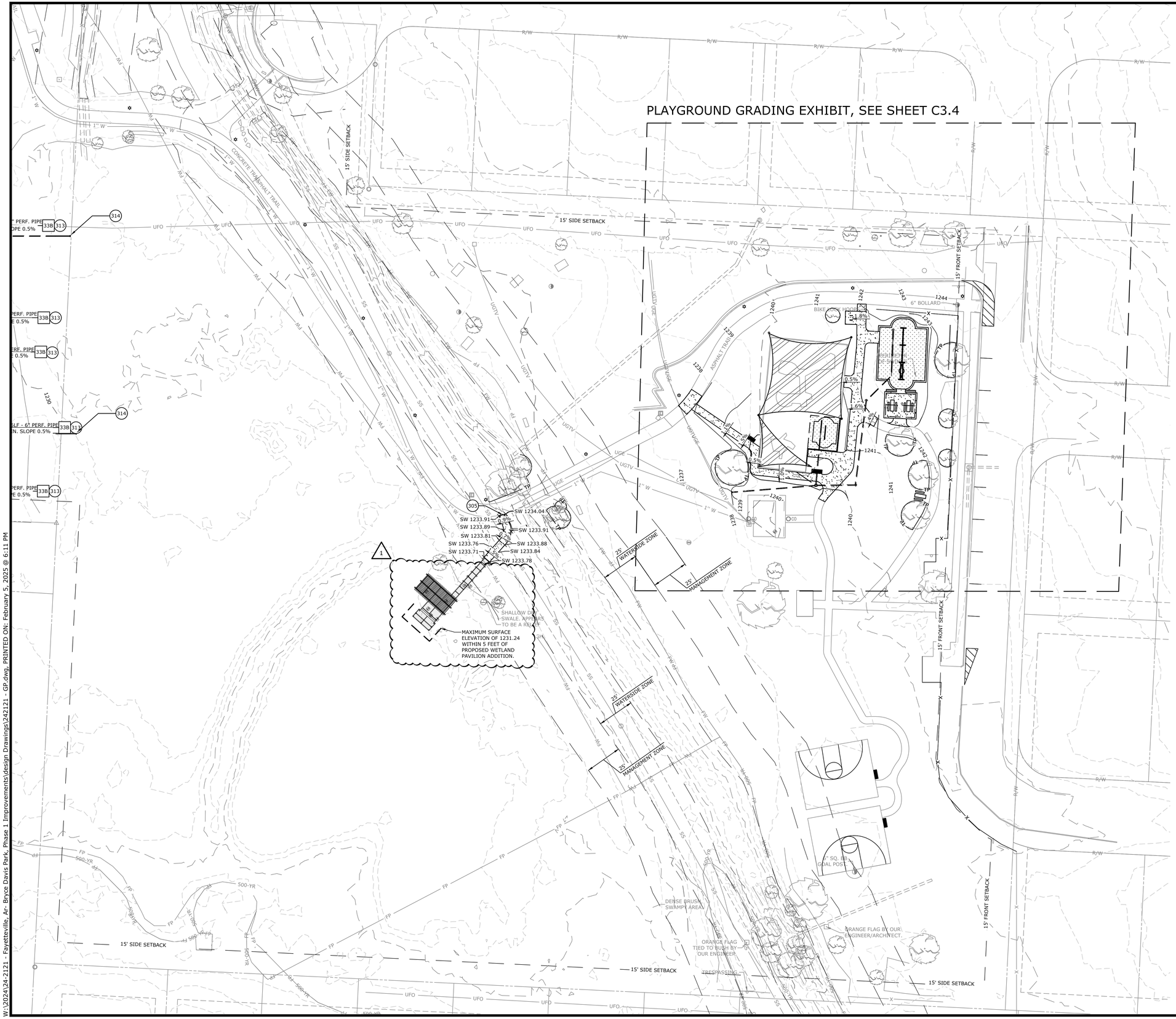

PLAN SCALE

30 0 15 30 60

(IN FEET)
1 inch = 30ft.

EXISTING LEGEND

- PROPERTY LINE
- RIGHT OF WAY
- SANITARY SEWER LINE
- WATER LINE
- GAS LINE
- UNDERGROUND TELEPHONE
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEVISION
- UNDERGROUND FIBER
- OVERHEAD ELECTRIC
- FENCE
- ROAD CENTERLINE
- DITCH FLOWLINE
- EASEMENT LINE
- GRAVEL LINE
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- FLOOD PLAIN
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- WATER FAUCET
- SANITARY SEWER MH
- CLEAN-OUT
- DRAINAGE MH
- POWER POLE
- GUY WIRE w/ ANCHOR
- GAS METER
- GAS RISER
- STREET LIGHT POLE
- TELEPHONE PEDESTAL
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- ELECTRIC VAULT
- FIBER VAULT
- GAS VAULT
- TELEPHONE VAULT
- WATER VAULT
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- POST (AS NOTED)
- BENCHMARK
- FOUND IRON PIN (AS NOTED)
- CONTROL POINT
- RR SPIKE
- BUSH
- DECIDUOUS TREE
- CONIFEROUS TREE

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GRADING/DRAINAGE DETAILS

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REVISIONS

REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

GRADING PLAN EAST

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
2/5/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

C3.3

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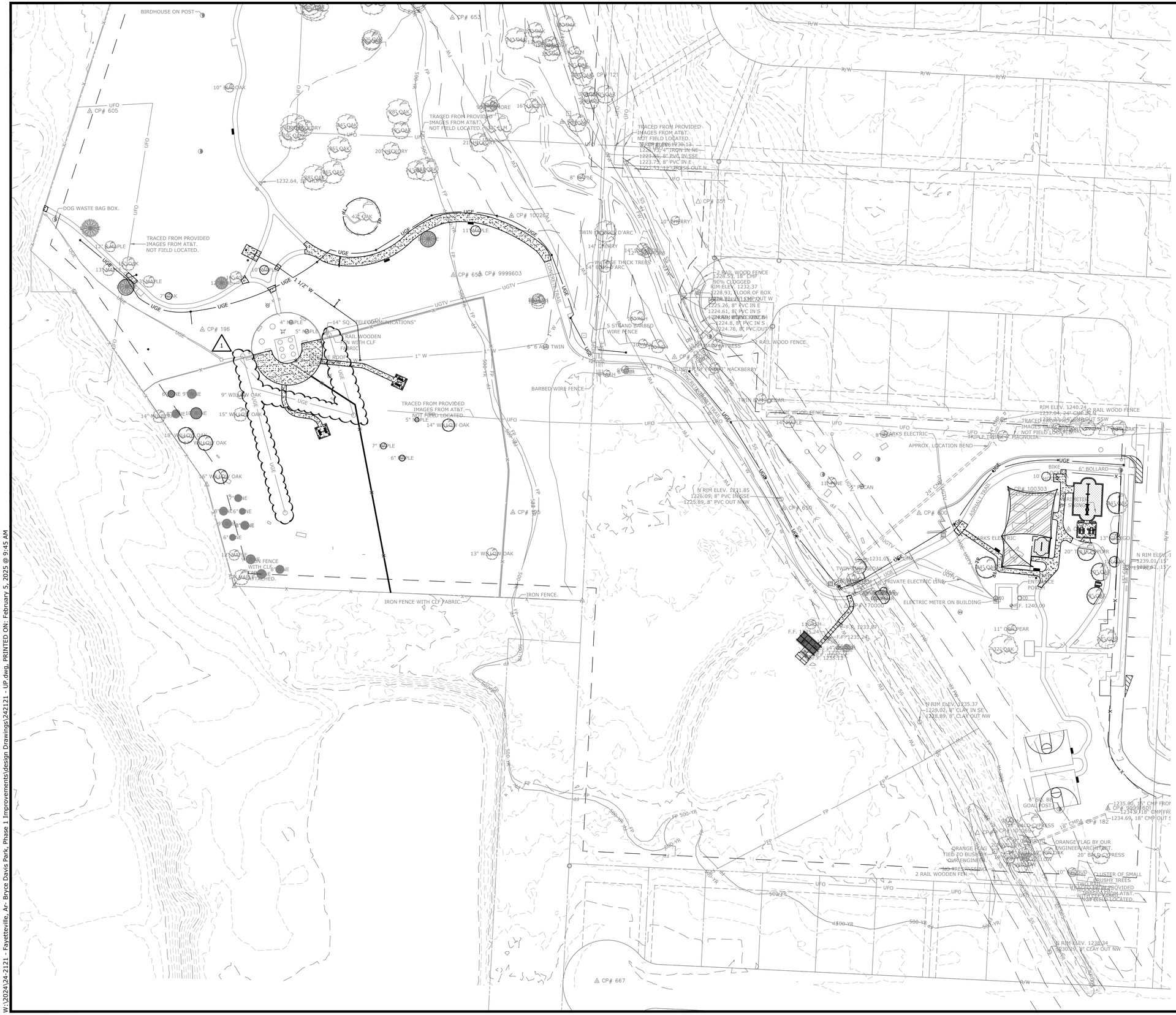
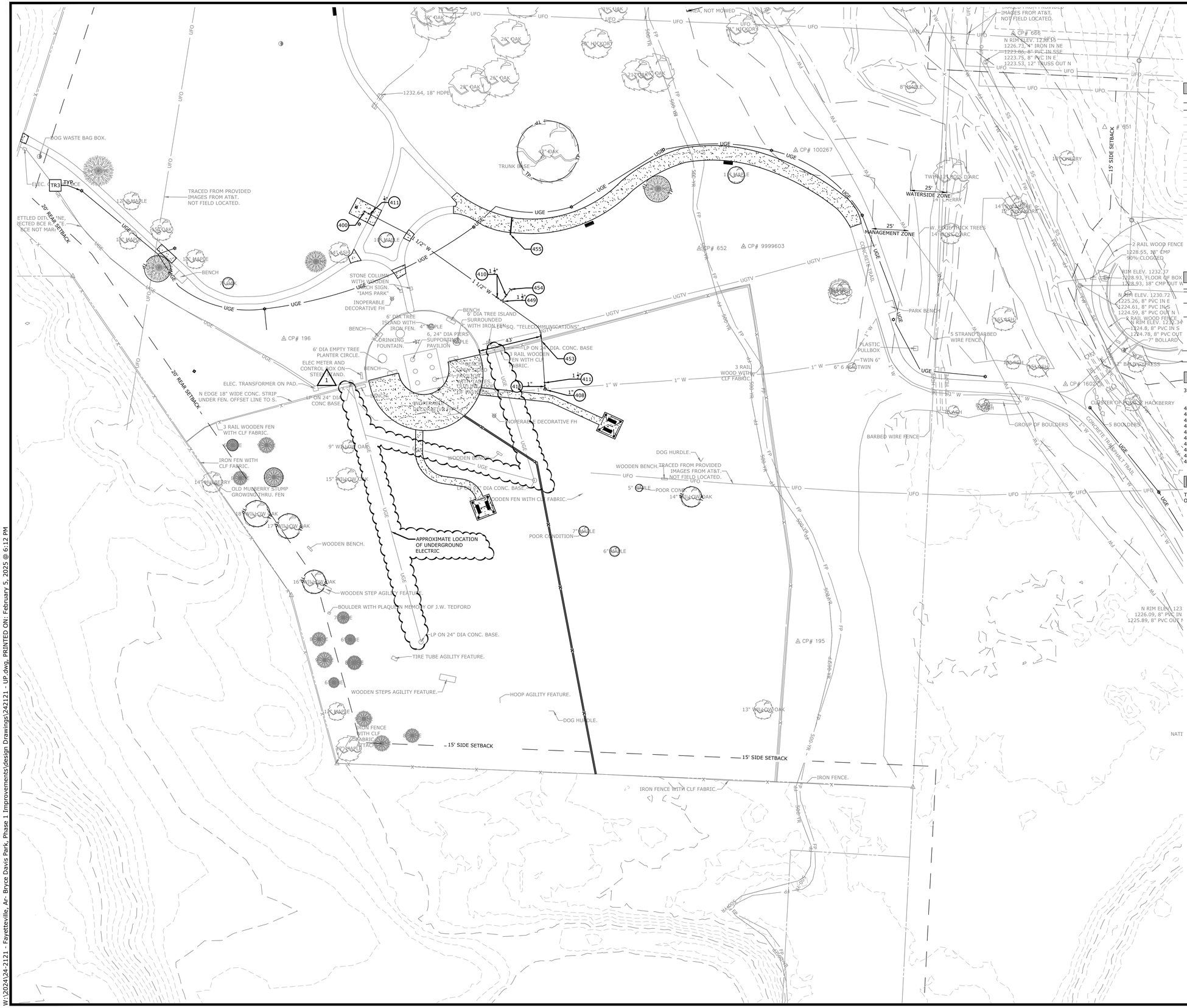

BIRDHOUSE ON POST
DOG WASTE BAG BOX.
TRACED FROM PROVIDED IMAGES FROM AT&T. NOT FIELD LOCATED



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STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 20757
02/06/2025
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REVISIONS		
REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

UTILITY PLAN WEST

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 2/5/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C4.1

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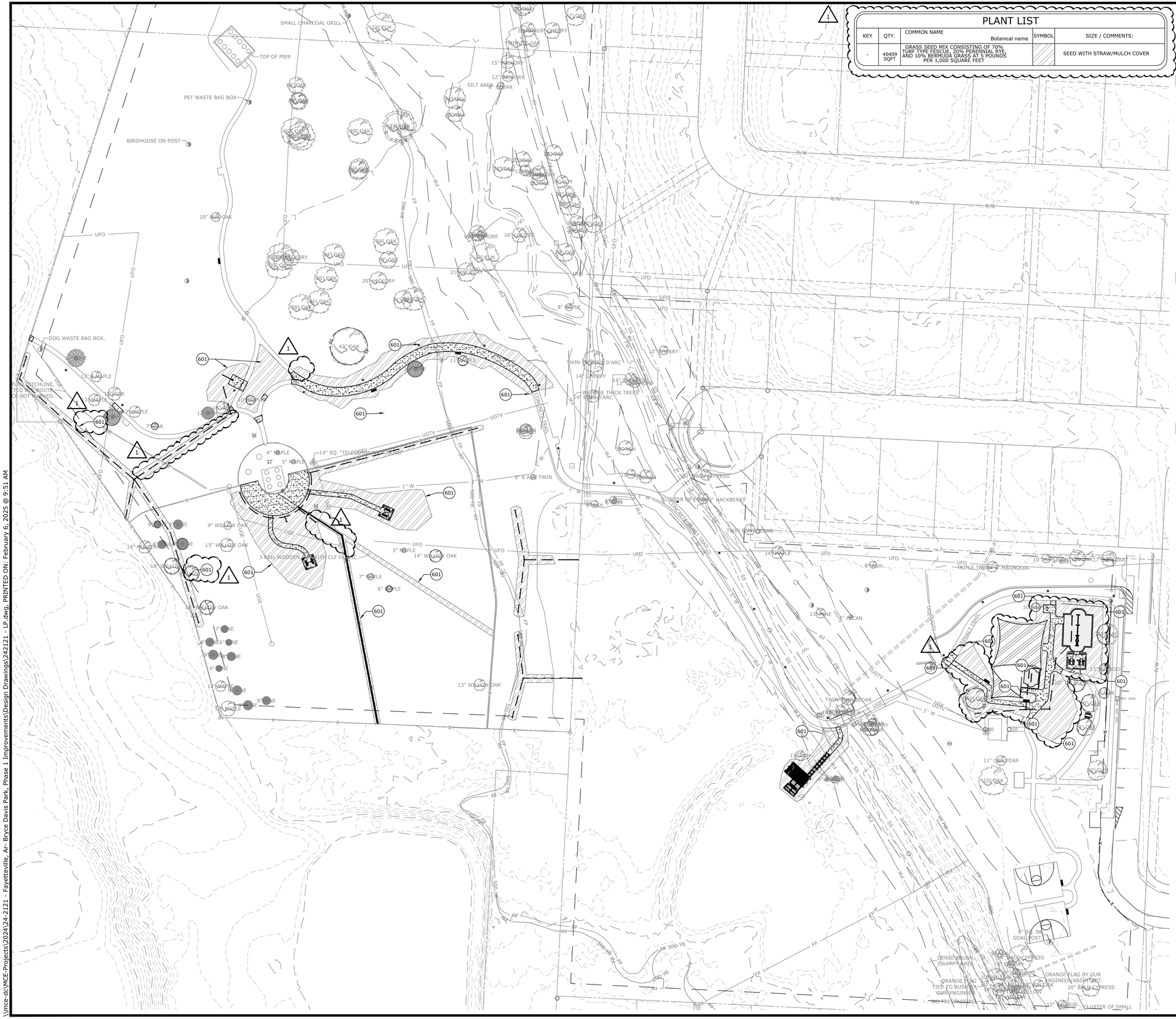
SMALL CHARCOAL GRILL
TOP OF PIER
PET WASTE BAG BOX
BIRDHOUSE ON POST
DOG WASTE BAG BOX.
SILT AREA
UFO
FP
FW
SS
UGE
UGTV
601
1
4
5
6
7
8
9
10
11
12
13
14
15
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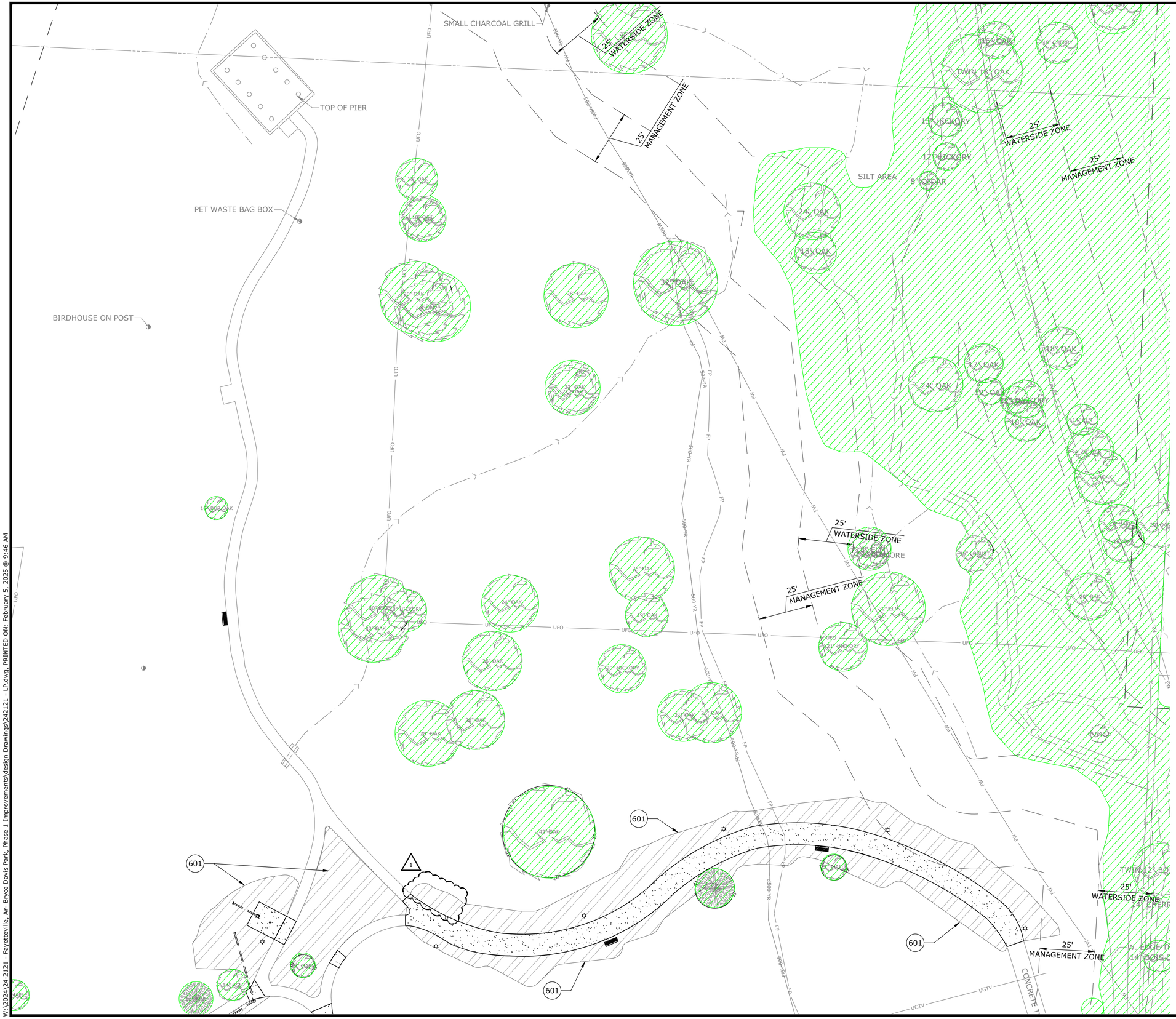

PLAN SCALE

0 10 20 40

(IN FEET)

EXISTING LEGEND

PROPERTY LINE	POWER POLE
R/W — RIGHT OF WAY	GUY WIRE w/ ANCHOR
SS — SANITARY SEWER LINE	GAS METER
W — WATER LINE	GAS RISER
GAS — GAS LINE	STREET LIGHT POLE
UGT — UNDERGROUND TELEPHONE	TELEPHONE PEDESTAL
UGE — UNDERGROUND ELECTRIC	CABLE TV PEDESTAL
UGTV — UNDERGROUND TELEVISION	CABLE VAULT
UFO — UNDERGROUND FIBER	ELECTRIC VAULT
OHE — OVERHEAD ELECTRIC	FIBER VAULT
X — X — FENCE	GAS VAULT
ROAD CENTERLINE	TELEPHONE VAULT
DITCH FLOWLINE	WATER VAULT
EASEMENT LINE	SIGN (AS NOTED)
GRAVEL LINE	POST (AS NOTED)
FLOOD WAY	BENCHMARK
FP — FLOOD PLAIN	FOUND IRON PIN (AS NOTED)
FIRE HYDRANT	CONTROL POINT
WATER METER	RR SPIKE
WATER VALVE	BUSH
WATER FAUCET	DECIDUOUS TREE
SANITARY SEWER MH	CONIFEROUS TREE
CLEAN-OUT	
DRAINAGE MH	

PROPOSED LEGEND

	STORM DRAIN
	CATCH BASIN
FH	FIRE HYDRANT
	CLEAN-OUT
	LIGHT POLE
	SEED (SEE PLANTING LIST)
UGE	UNDERGROUND ELECTRIC LINE
X"W	WATER LINE
TP	TREE PROTECTION FENCE

LANDSCAPE KEYNOTES

601 SEEDED AREA

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REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER M. BASUINO
License Number 985
STATE OF ARKANSAS

02/05/2025

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REVISIONS		
REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

LANDSCAPE PLAN NORTH

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 2/5/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C6.6

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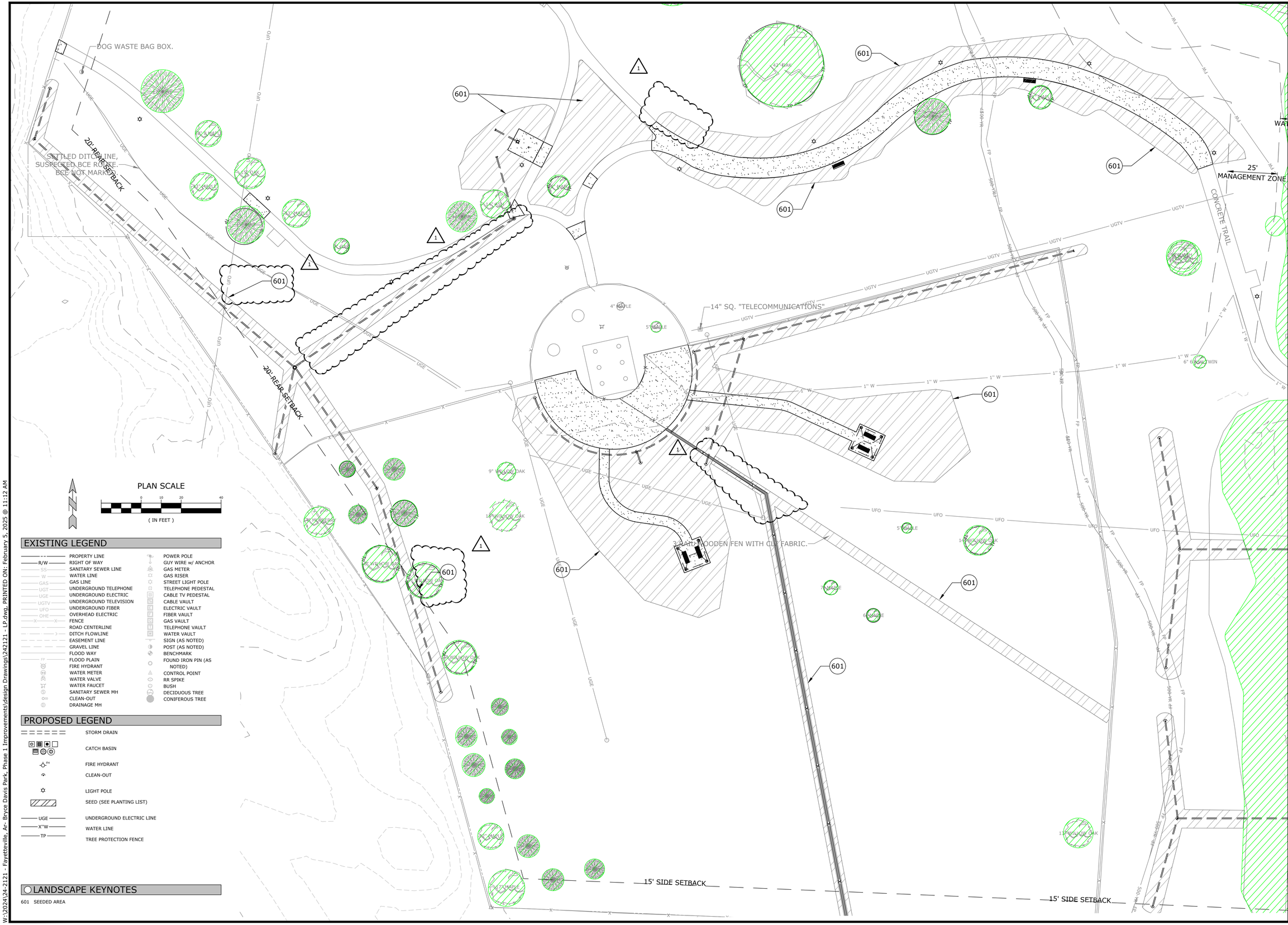
SIDEWALK PANEL
SIDEWALK
20' REAR SETBACK
15' SIDE SETBACK
25' WATERSIDE ZONE
25' MANAGEMENT ZONE
CONC. PAD AND BENCH
FENCE AND MOW STRIP
BENCH
DECORATIVE FIRE HYDRANT
14" SQ. "TELECOMMUNICATIONS"
CONCRETE PAD
CONCRETE/ASPHALT TRAIL
W. EASTERN REDBUD TREES
W. EASTERN DOGWOOD TREES
W. EASTERN REDBUD
W. EASTERN DOGWOOD



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- FLOOD WAY
- FP — FLOOD PLAIN
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LANDSCAPE KEYNOTES

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REVISIONS

REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

LANDSCAPE PLAN WEST

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
2/5/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

C6.7

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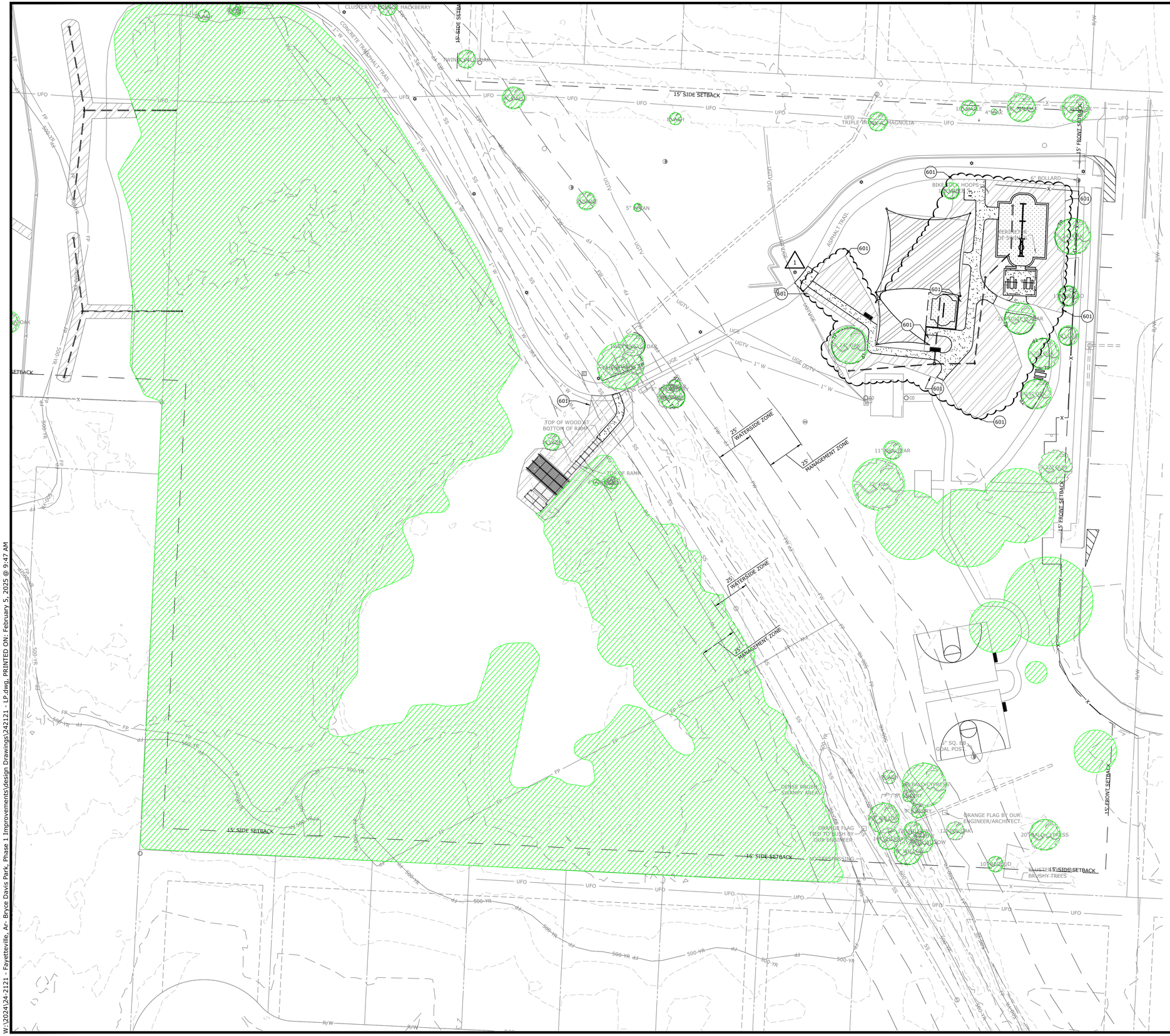

PLAN SCALE

(IN FEET)
1 inch = 30ft.

EXISTING LEGEND

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REV	DATE	DESCRIPTION
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REVISIONS

LANDSCAPE PLAN EAST

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 2/5/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C6.8

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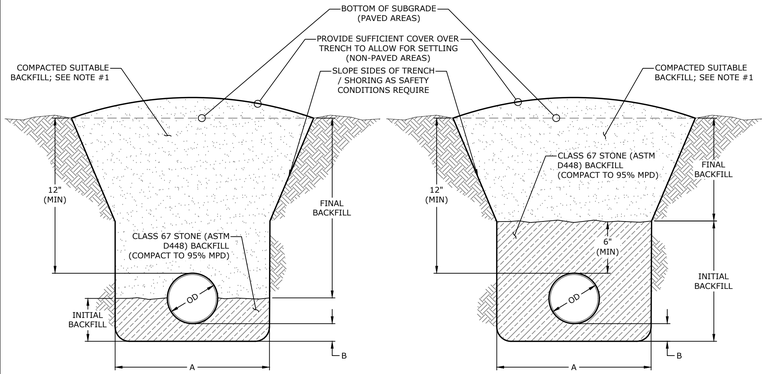
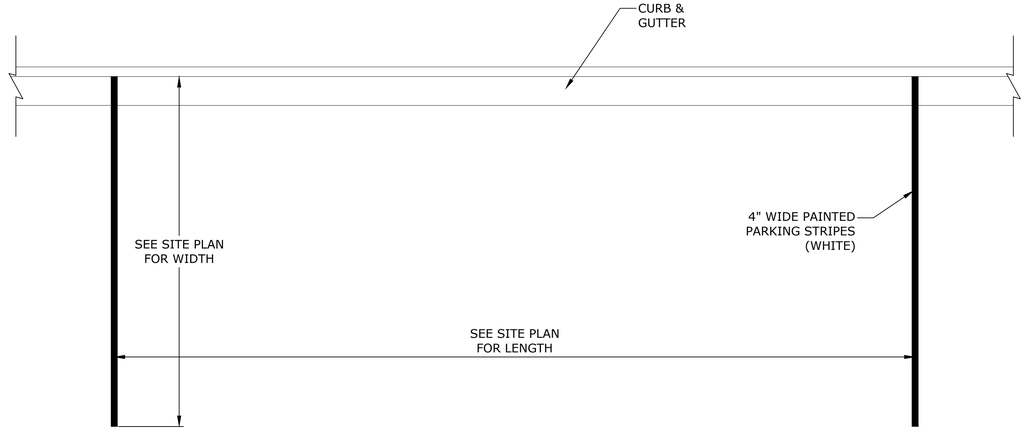
NOTES:
1. FOR AREAS WHERE PIPE IS LOCATED UNDER NON-PAVED AREAS, BACKFILL SHALL BE COMPACTED SUITABLE NATIVE MATERIAL (DO NOT INCORPORATE FROZEN MATERIAL OR SOFT, MUCK, OR HIGHLY COMPRESSIBLE MATERIALS INTO FILL). FOR AREAS WHERE PIPE IS LOCATED UNDER PAVED AREAS, BACKFILL SHALL BE SELECT FILL COMPACTED PER THE GEOTECHNICAL REPORT PROJECT NO. [PROJECT #] PREPARED BY [GEOTECH COMPANY NAME] DATED [REPORT DATE].



RIGID PIPE NON-RIGID PIPE

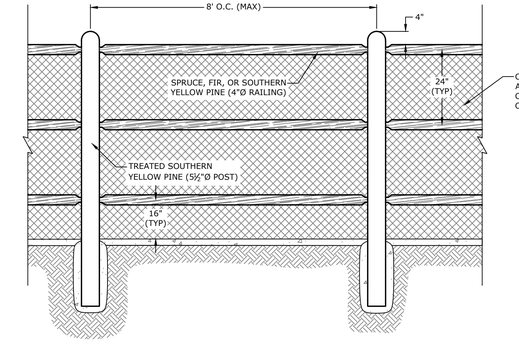
TRENCHING, BACKFILL, & BEDDING TABLE	
'A'	OD + 24" (MIN) OD + 36" (MAX)
'B'	.10 x OD (6" MIN)

33G STORM SEWER TRENCHING, BACKFILL, & BEDDING
NTS

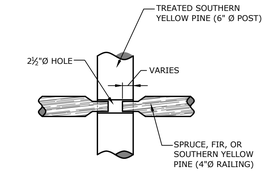


NOTES:
1. REFER TO SITE PLAN FOR SPECIFIC LAYOUT OF STRIPING.
2. ALL STRIPING MEASUREMENTS ARE TO CENTER OF STRIPE.

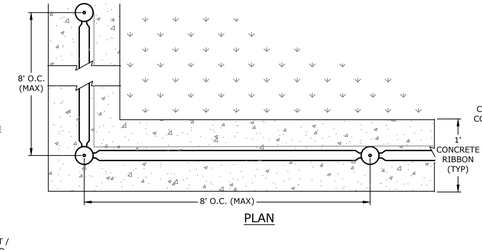
23C PARALLEL PARKING SPACE STRIPING
NTS



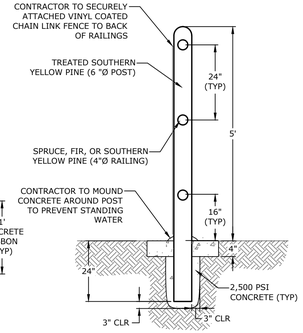
ELEVATION



TYPICAL RAIL TO POST CONNECTION

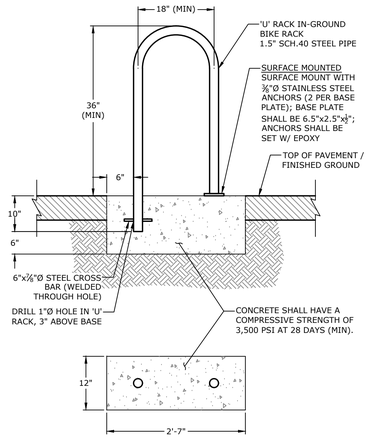


PLAN



SECTION A-A

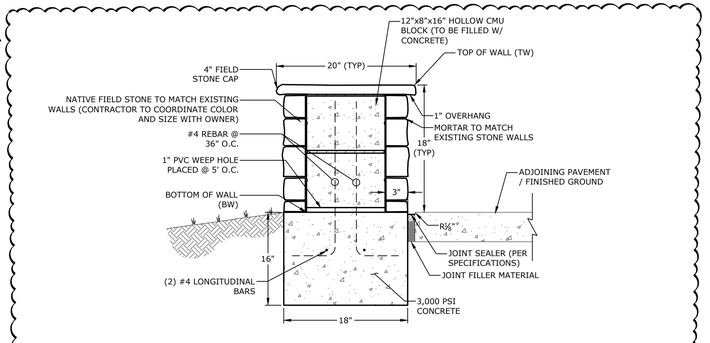
27A ROUND RAIL WOOD AND CHAIN LINK FENCE WITH CONCRETE RIBBON
NTS



25J BIKE RACK
NTS

PROVIDED BY OWNER

1



25L CMU BRICK SEATING WALL
NTS

McCLELLAND CONSULTING ENGINEERS, INC.
DESIGNED TO SERVE
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FAYETTEVILLE, ARKANSAS 72703
(479) 443-2377
HTTP://WWW.MCE.US.COM

REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER M. BAKUNAS
License Number 0185
STATE OF ARKANSAS
02/06/2025
ORIGINAL SIGNATURE ON FILE

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1595 N DARTMOUTH AVE
FAYETTEVILLE, AR

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REVISIONS		
REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

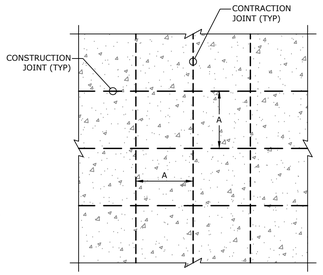
DETAIL SHEET I

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
2/5/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

C7.0

W:\2024\24-2121 - Fayetteville, Ar- Bryce Davis Park, Phase 1 Improvements\design Drawings\242121 - CS.dwg, PRINTED ON: February 5, 2025 @ 6:12 PM

NOTES:
1. DOWELS SHALL BE FULLY SHOP PAINTED WITH ONE COAT OF CORROSION INHIBITING PRIMER CONFORMING TO FEDERAL SPEC. TT-P-664D.
2. DOWELS SHALL BE SOLID SMOOTH STEEL BARS.
3. PRIOR TO INSTALLATION IN CONTRACTION JOINTS, DOWELS SHALL BE LIGHTLY GREASED WITH A THIN COAT OF HIGH MELTING POINT GREASE (OR APPROVED EQUAL) AS INDICATED. IN THE CONSTRUCTION JOINTS, ONLY THE FREE END SHALL BE GREASED, AND ONLY AFTER INSERTION AND GROUTING INTO PLACE.
4. ALL CONSTRUCTION JOINT DOWELS SHALL BE GANG-DRILLED AND EPOXY GROUTED. INSERTION EQUIPMENT WILL NOT BE ALLOWED.
5. DRILLING METHOD FOR DOWELS SHALL BE CAPABLE OF MAINTAINING DRILL HOLES PARALLEL TO THE CONCRETE SURFACE AND NORMAL TO THE JOINT LINES. DRILL HOLES SHALL BE ACCURATELY LAID OUT SO THAT THE MAXIMUM HORIZONTAL DEVIATION DOES NOT EXCEED 1". DRILL HOLE DIAMETER TO BE OF SUFFICIENT SIZE TO ACCEPT THE TYPE AND SIZE OF DOWEL REQUIRED.
6. AFTER DRILLING IS COMPLETE AND PRIOR TO THE INSTALLATION OF THE DOWELS, THE HOLES SHALL BE THOROUGHLY CLEANED TO REMOVE DRILLING DUST, CONCRETE CHIPS, AND / OR ANY OTHER MATERIAL DETRIMENTAL TO DEVELOPING BOND.
7. EPOXY GROUT SHALL BE INJECTED UNIFORMLY INTO THE DOWEL HOLE (CONTRACTOR SHALL NOT DIP AND INSERT DOWEL) AND SUFFICIENT MATERIAL SHALL BE PLACED IN THE HOLE SO THAT A SLIGHT AMOUNT WILL BE FORCED OUT FROM AROUND THE DOWEL WHEN THE DOWEL IS INSERTED AND TAPPED TO THE CORRECT POSITION (SMALL WEDGES MAY BE USED TO SUPPORT THE DOWEL IN CORRECT ALIGNMENT UNTIL THE MATERIAL HARDENS). THE TOLERANCE FOR DOWEL ALIGNMENT IN EITHER THE HORIZONTAL OR VERTICAL PLANE IS ¼" PER 1' OF DOWEL BAR.
8. ALL LONGITUDINAL AND TRANSVERSE CONTRACTION JOINT TIE BARS AND DOWELS SHALL BE INSTALLED USING AN ENGINEER-APPROVED WELDED BASKET ASSEMBLY ANCHORED TO THE BASE WITH A MINIMUM OF 4 GALVANIZED STRAPS AND NAILS (PER ASSEMBLY); POSITION ANCHOR STRAPS ON ALTERNATING SIDES OF THE BASKET ASSEMBLY.
9. A TRANSVERSE CONSTRUCTION JOINT SHALL BE INSTALLED AT A PLANNED JOINT WHEN PAVING OPERATIONS ARE INTERRUPTED FOR MORE THAN 30 MINUTES. IF THE INTERRUPTION OCCURS BETWEEN PLANNED JOINTS, THE FRESH CONCRETE SHALL BE REMOVED BACK TO THE PREVIOUSLY INSTALLED JOINT. UNLESS OTHERWISE APPROVED, NO JOINTS WILL BE ALLOWED BETWEEN THE JOINTS SHOWN ON THE JOINTING PLAN.
10. EDGES OF CONCRETE SLABS SHALL BE COVERED WITH AN APPROVED CURING MATERIAL AT THE SAME TIME AS THE SURFACE IS CURING. AT FORMED LOCATIONS, SLAB SIDES SHALL BE CURED WHEN FORMS ARE REMOVED.
11. IN THICKENED EDGE AREAS WHERE DOWELS OR REINFORCING STEEL IS REQUIRED, PROVIDE ADDITIONAL SUPPORT (AS APPROVED BY THE ENGINEER) TO MAINTAIN THE SAME DEPTH FROM THE SURFACE AS FOR TYPICAL 6" CONCRETE PAVEMENT.
12. CONCRETE IN REINFORCED PANELS SHALL BE PLACED IN ONE COURSE. ALL WELDED WIRE FABRIC (WWF) SHALL BE INSTALLED USING ENGINEER APPROVED HI-CHAIRS ANCHORED TO THE CRUSHED AGGREGATE BASE COURSE (3' ON CENTER MAX). THE WWF SHALL RETAIN ITS SPECIFIED POSITION DURING CONCRETE PLACEMENT. WWF VIBRATED DOWN FROM THE TOP AFTER CONCRETE IS PLACED WILL NOT BE ALLOWED.
13. SEALANT RESERVOIR SHAPE FACTOR ('W & 'D'), SHALL BE PER THE MANUFACTURER'S RECOMMENDATIONS.
14. ALL JOINT SEALANT RESERVOIRS SHOWN ON THIS SHEET SHALL BE VERIFIED BY THE SEALANT MANUFACTURER PRIOR TO CONSTRUCTION (REFER TO SECTION P-605 OF THE SPECIFICATIONS FOR FURTHER INFORMATION).
15. THE PRE-FORMED JOINT SEAL IN CONTRACTION JOINTS SHALL BE INSTALLED IN ONE CONTINUOUS PIECE ACROSS THE PAVEMENT. THE CONSTRUCTION JOINT SEALANT SHALL BE INTERRUPTED AT EVERY TRANSVERSE JOINT.
16. ALL WORK AND MATERIALS REQUIRED FOR JOINTS IS INCIDENTAL TO PAVEMENT PAY ITEMS.
17. THE CONTRACTOR HAS THE OPTION TO POUR A MONOLITHIC SLAB IN WHICH ALL JOINTS WILL BE CONTRACTION JOINTS.

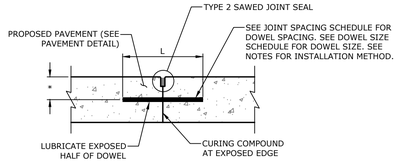


TYPICAL JOINT SPACING

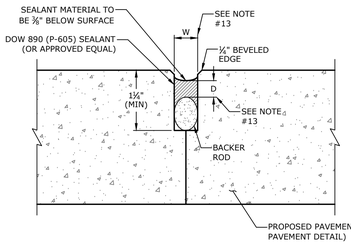
JOINT SPACING SCHEDULE	
PAVEMENT THICKNESS 'D'	'A'
≤ 3.5"	8'-6"
4" - 4.5"	10'
5" - 5.5"	12'-6"
6" OR GREATER	15'

DOWEL SIZE SCHEDULE*			
PAVEMENT THICKNESS 'D'	SIZE OF DOWEL 'Ø'	DOWEL EMBEDMENT	DOWEL LENGTH 'L'
≤ 5"	¾"ø	5"	12"
6" - 8"	⅞"ø	6"	14"
9"	1"ø	7"	16"

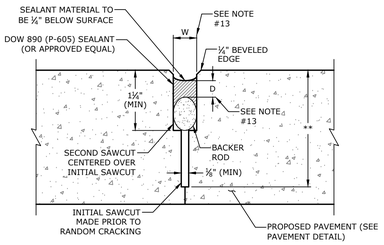
*DOWELS TO BE SPACED AT 18" O.C. (UNLESS OTHERWISE NOTED) IF NO REBAR IS USED



DOWELED CONSTRUCTION JOINT



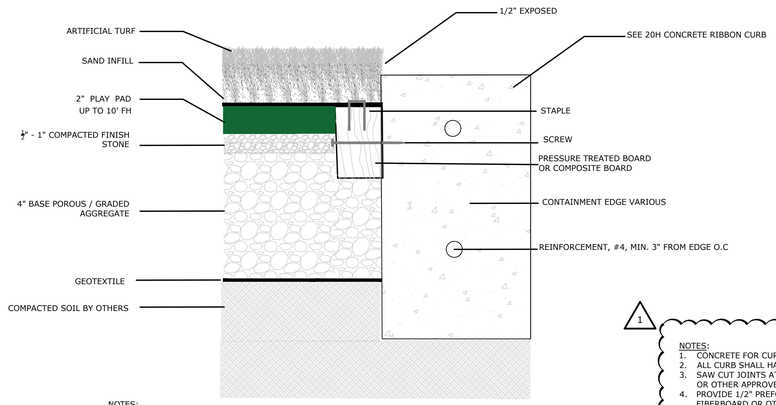
SAWED CONSTRUCTION JOINT SEAL - TYPE 2



SAWED CONSTRUCTION JOINT SEAL - TYPE 3

21H CONCRETE PAVEMENT DOWEL & JOINTING
NTS

* - 0.5 x PAVEMENT THICKNESS (½"±)
** - ½ PAVEMENT THICKNESS (¼"±)



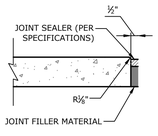
NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DRAWING NOT TO SCALE.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.

1

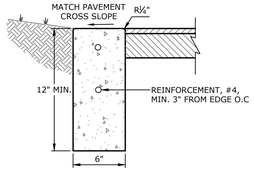
27L TURF EXPANSION EDGING
NTS

1

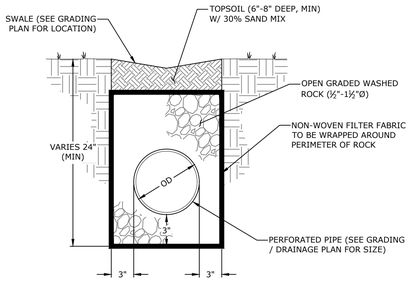
NOTES:
1. CONCRETE FOR CURB TO HAVE A COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS (MIN).
2. ALL CURB SHALL HAVE A BROOMED FINISH UNLESS OTHERWISE SPECIFIED.
3. SAW CUT JOINTS AT 15' O.C. SEAL WITH ONE PART COLD APPLIED SILICONE JOINT SEALER OR OTHER APPROVED SEALANT. ALL JOINTS TO BE SEALED.
4. PROVIDE 1/2" PREFORMED ISOLATION JOINT MATERIAL (ASPHALT IMPREGNATED FIBERBOARD OR OTHER APPROVED MATERIAL) AT STATIONARY STRUCTURES, (DROP INLETS, END OF CURBS, DRIVEWAYS - SEE DETAIL) OR AS DIRECTED BY ENGINEER.



ISOLATION JOINT



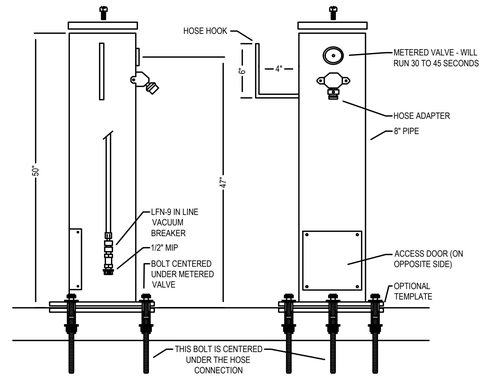
20H CONCRETE RIBBON CURB
NTS



33B FRENCH DRAIN
NTS

MDF FOUNTAINS,

MOST DEPENDABLE FOUNTAINS, INC.
5705 COMMANDER DR. P.O. BOX 587
ARLINGTON, TN 38002-0587
PHONE: (901) 867-0039
www.mostdependable.com



NOTES:
1. OPTIONAL STAINLESS STEEL SURFACE CARRIER RECOMMENDED ON SURFACE MOUNT INSTALLATIONS.
2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
3. DO NOT SCALE DRAWING.
4. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
5. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
6. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 3354-10.35.

27E MODEL 505 SM RINSE STATION (OR APPROVED EQUAL)
SHOWN W/ OPTIONAL 8" SS SURFACE CARRIER

3354-10.35

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REVISION DATE 10/29/2020
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License Number 0985
STATE OF ARKANSAS
02/06/2025
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811 Know what's below. Call before you dig.

REVISIONS		
REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

DETAIL SHEET II

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 2/5/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C7.1

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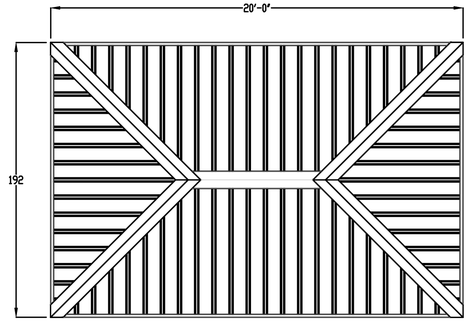
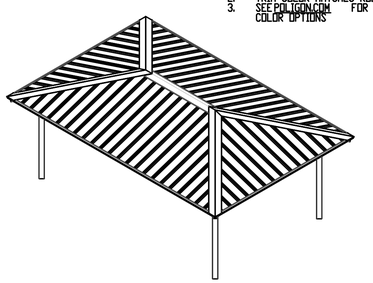
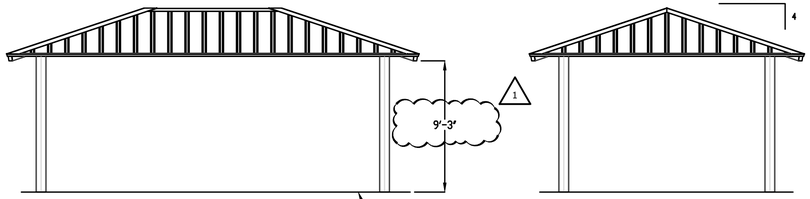
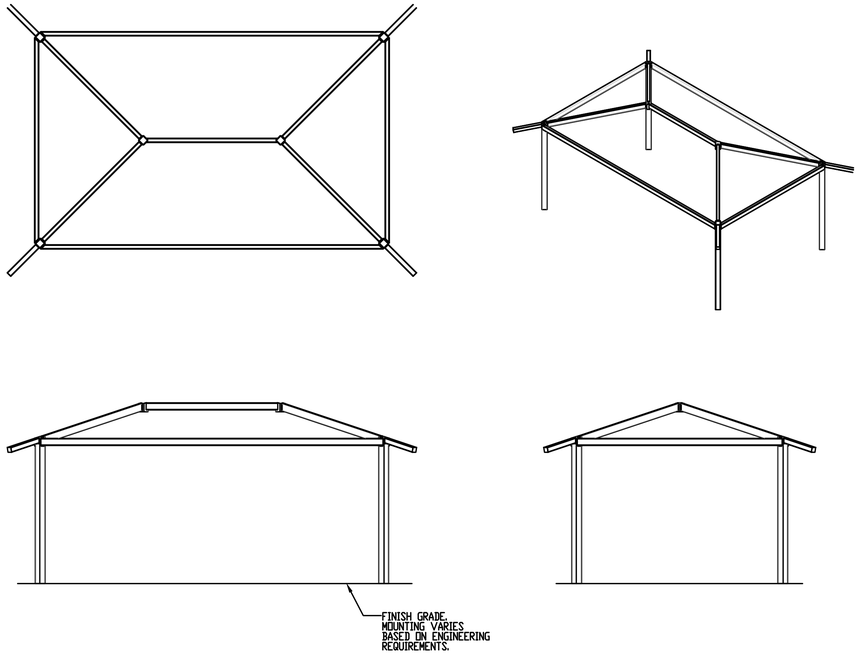




GENERAL ROOF NOTES:

1. METAL ROOFING:
   - 24 GAUGE
   - GALVALUME COATED
   - KYNAR 500 PAINTED
2. TRIM COLOR MATCHES ROOF
3. SEE POLIGON.COM FOR COLOR OPTIONS





BASEPLATE NOTES:

1. POLIGON ENGINEERING WILL DETERMINE REQUIRED BASEPLATE DESIGN AFTER ENGINEERING PACKAGE IS ORDERED.
2. CUSTOMER MAY SUGGEST PREFERRED BASEPLATE DESIGN.

PROJECT:

LOCATION:

BUILDING TYPE: RAM 16X20

ROOF TYPE: MULTI-RIB

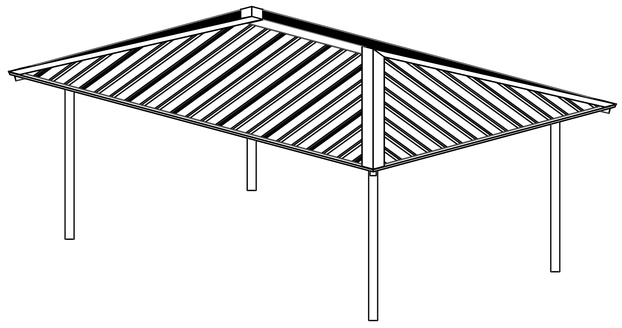
BUILDING NUMBER:

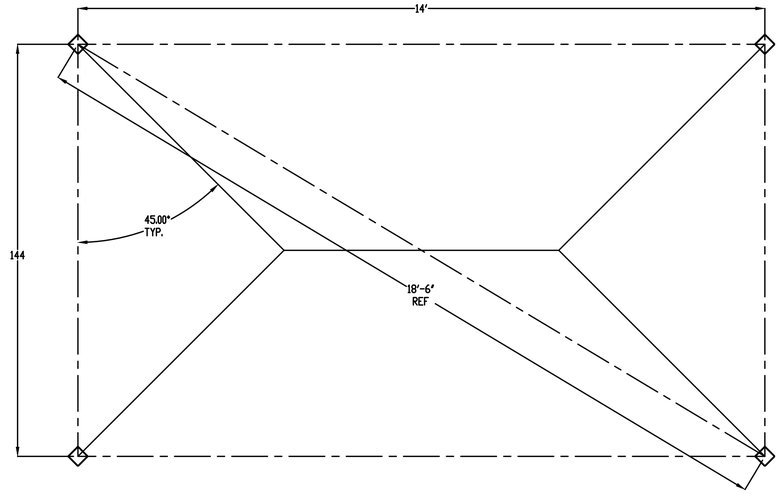
ORDER NUMBER:

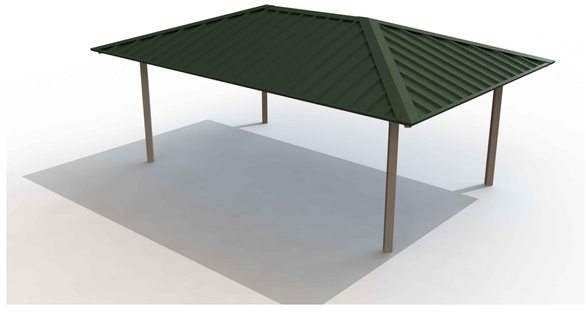
QUOTE NUMBER:

DRAWING LIST:

SHEET NUMBER	DRAWING DESCRIPTION
CS	COVER SHEET
1	ARCHITECTURAL ELEVATIONS
2	STRUCTURAL FRAMING PLAN
3	COLUMN LAYOUT







STOP!!
NOT FOR CONSTRUCTION

USE FOR PRELIMINARY PLANNING AND ESTIMATING ONLY

CERTIFICATES:
ADAMS COUNTY CERTIFICATE OF COMPETENCY NO. 21-001913
PCI (PCI/IDER COATING INSTITUTE) 4000 CERTIFIED

FABRICATOR APPROVALS:
CITY OF PHOENIX, AZ APPROVED FABRICATOR RC80-2010
CITY OF LOS ANGELES, CA APPROVED FABRICATOR #7801596
CITY OF RIVERSIDE, CA APPROVED FABRICATOR RSF_000642
CITY OF HOUSTON, TX APPROVED FABRICATOR 8470
CLARK COUNTY, NV APPROVED FABRICATOR 8264
STATE OF UTAH APPROVED FABRICATOR 10308-14
AISC APPROVED FABRICATOR C-00018751

MATERIALS:

DESCRIPTION	ASTM DESIGNATION
TUBE STEEL	A500 (GRADE B)
SCHEDULE PIPE	A53 (GRADE B)
BAR PIPE	A529
LIGHT GAGE COLD FORMED	A1003 (GRADE 50)
STRUCTURAL STEEL PLATE	A36
ROOF PANELS (STEEL)	A653

GENERAL NOTES:
UNLESS NOTED OTHERWISE, THIS STRUCTURE WAS DESIGNED TO ONLY SUPPORT WHAT IS SHOWN ON THESE DRAWINGS. THE MANUFACTURER MUST BE CONTACTED IF ANYTHING ELSE IS TO BE ATTACHED TO THIS STRUCTURE (WALLS, COLUMN WRAPS, RAILINGS, ETC.) SO THE DESIGN OF THIS STRUCTURE CAN BE REVIEWED AND POSSIBLY REVISED.

UNLESS NOTED OTHERWISE, THIS STRUCTURE WAS DESIGNED ASSUMING A 25' SEPARATION BETWEEN ANY ADJACENT STRUCTURE WITH AN EAVE HEIGHT EQUAL TO OR GREATER THAN THE EAVE HEIGHT OF THIS STRUCTURE. IF THAT SEPARATION DOES NOT EXIST, THE MANUFACTURER MUST BE CONTACTED SO THE DESIGN OF THIS STRUCTURE CAN BE REVIEWED AND POSSIBLY REVISED.

STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFICATION MANUAL.

ALL WELDING IS PERFORMED BY AMERICAN WELDING SOCIETY (AWS) CERTIFIED WELDERS AND CONFORMS TO THE LATEST EDITION OF AWS D1.1 OR D1.3 AS REQUIRED.

PARTS SHOWN MAY BE UPGRADED DUE TO STANDARDIZED FABRICATION. REFER TO THE SHIPPING BILL OF MATERIALS FOR POSSIBLE SUBSTITUTIONS.

FOR PROPER FIELD INSTALLATION OF THE BUILDING IT IS RECOMMENDED THAT THE PRIMARY FRAME INSTALLER AND THE ROOF INSTALLER HAVE A MINIMUM FIVE (5) YEARS DOCUMENTED EXPERIENCE INSTALLING THIS TYPE OF PRODUCT.

FOR PROPER FIELD INSTALLATION OF THE BUILDING IT IS RECOMMENDED THAT ELECTRIC WIRING, IF REQUIRED, BE RUN THROUGH THE STRUCTURAL MEMBERS BEFORE THE BUILDING IS ERECTED.

27C

POLYGON PAVILION, RAM 16X20,
ROOF: EVERGREEN, STRUCTURE:
SURREY BEIGE

NTS

McCLELLAND CONSULTING ENGINEERS, INC.
DESIGNED TO SERVE
1580 E STEARNS ST
FAYETTEVILLE, ARKANSAS 72703
(479) 443-2377
HTTP://WWW.MCE.US.COM

REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER M. BAKUNAS
License Number 0185
STATE OF ARKANSAS
02/06/2025

ORIGINAL SIGNATURE ON FILE

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IMPROVEMENTS PHASE 1
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FAYETTEVILLE, AR

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REVISIONS

REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

DETAIL SHEET
VII

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
2/5/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

C7.6

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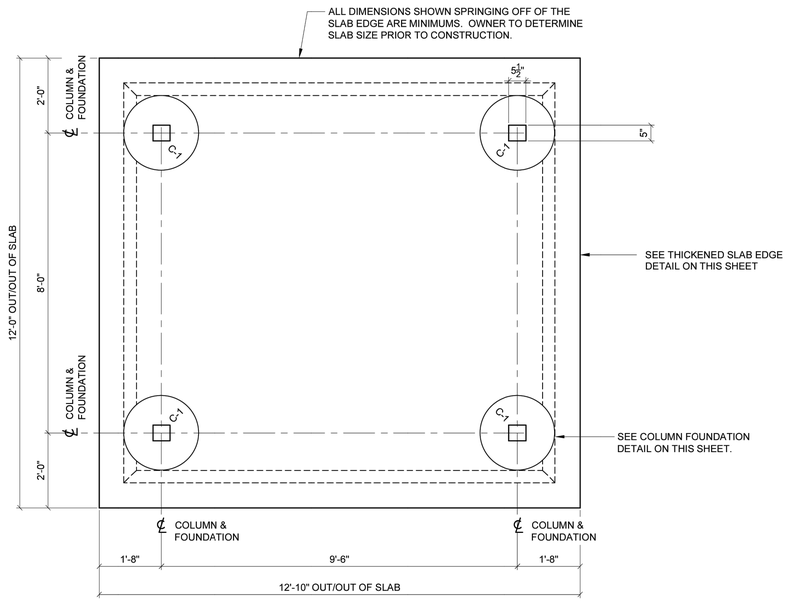
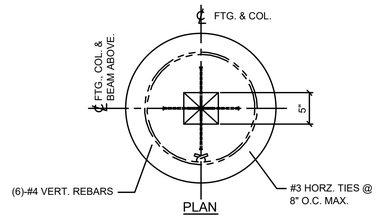


FOUNDATION PLAN

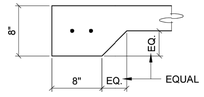
SCALE: 1/2" = 1'-0"



PLAN

CONCRETE NOTES:

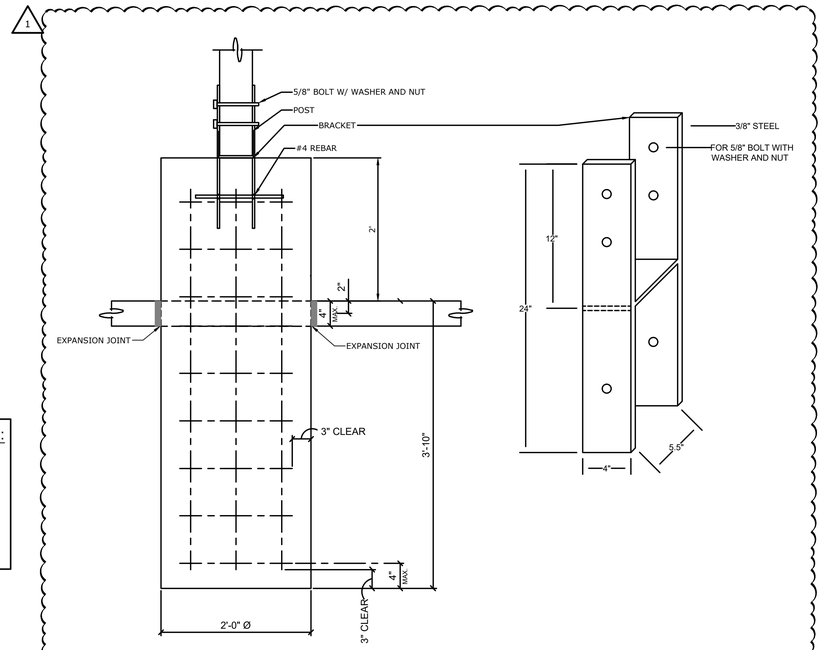
1. Remove all organic material and topsoil from slab area. Verify suitability of subgrade. Footings are to bear on undisturbed, natural soil or engineered fill. Both are to be compacted to 95% Proctor density.
2. Prepare slab with min. 8" compacted sand, gravel, or crushed rock.
3. Concrete slab to be 4" thick. Reinforce slab with 6x6-w1.4xw1.4 welded wire fabric at mid-depth. Lap splices 8". Alt.: Fiber mesh admixture (min. 1.5#/c.y., fibrillated polypropylene).
4. Edge of slab to be thickened to min. 8" deep x 8" wide reinforced with 2-#4 continuous rebars. Lap splices min. 24".
5. In locations subject to frost, install isolation joint, max. 1/8" wide, around column piers using diamond or circular layout. Wire mesh shall be interrupted at isolation joints.
6. Install crack control joints (3/16" wide x 1" deep) at 8' to 12' o.c.
7. Concrete slabs in open areas are to be sloped for drainage from center to edge and away from columns. Surface is to be lightly broomed or have a wood troweled finish.
8. Concrete slab, foundation, re-bar & wire mesh are N.I.C.
9. All concrete reinforcing steel to be grade 60, deformed bars.
10. F'c of concrete to be 3000 psi @ 28 days for foundation. F'c of concrete to be 3500 psi @ 28 days for slab, air-entrained.
11. All concrete work to be in accordance w/ latest ACI code.
12. Assumed allowable soil bearing pressures: 1500 psf vertical bearing, 100 pcf passive lateral bearing. It is the Owner's responsibility to verify that the allowable soil bearing values at the site meet or exceed these assumed values. If the actual values are lower than the assumed values, the foundations must be redesigned (N.I.C.).
13. Reinforcement shall be securely held in place while placing concrete. If required, additional bars, stirrups or chairs shall be provided to furnish support for bars.



THICKENED SLAB EDGE DETAIL

COLUMN BASE REACTIONS:

- $V_{DL + 3/4(Lr+0.6*WL)}$ = 1,200#
- $V_{0.6*DL + 0.6*WL\ UPLIFT}$ = -210#
- $H_{DL + 0.6*WL}$ = 330#
- $M_{O.T.\ DL+ 0.6*WL}$ = 2,170#-FT



COLUMN FOUNDATION DETAIL

27B CONCRETE POST FOR DOG PARK 12X12 PAVILION LIFT

NTS

27D RCP PAVILION, TS-SQ12-04, EVERGREEN ROOF, ENCLOSURE BEIGE POWDER PROVIDED BY OWNER

NTS

McCLELLAND CONSULTING ENGINEERS, INC.
DESIGNED TO SERVE
1580 E STEARNS ST
FAYETTEVILLE, ARKANSAS 72703
(479) 443-2377
HTTP://WWW.MCE.US.COM

REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER M. BAKUNAS
License Number 0985
STATE OF ARKANSAS

02/06/2025

ORIGINAL SIGNATURE ON FILE

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BRYCE DAVIS PARK
IMPROVEMENTS PHASE 1
1595 N DARTMOUTH AVE
FAYETTEVILLE, AR

811 Know what's below. Call before you dig.

REVISIONS		
REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

DETAIL SHEET IX

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 2/5/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C7.8

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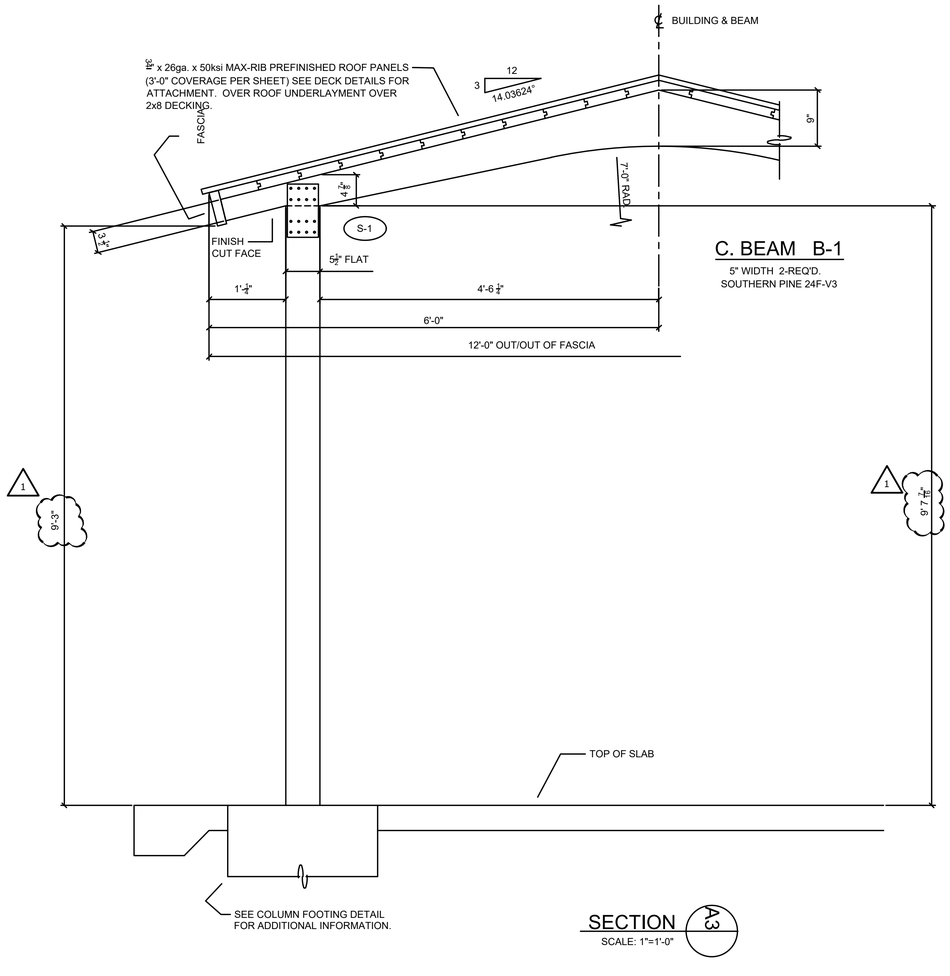
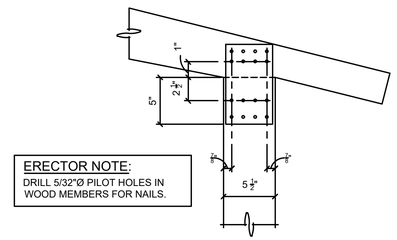


C. BEAM B-1

5" WIDTH 2-REQ'D.
SOUTHERN PINE 24F-V3

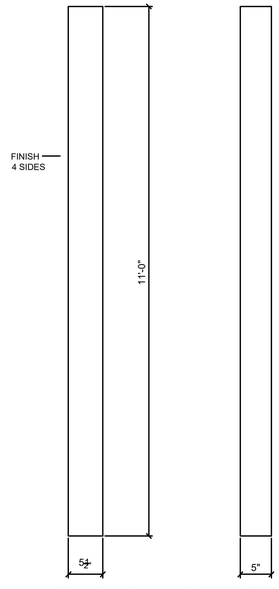
SECTION A3
SCALE: 1"=1'-0"



ERECTOR NOTE:
DRILL 5/32"Ø PILOT HOLES IN WOOD MEMBERS FOR NAILS.

CONN S-1 4-req'd.

2 - MK-1 PLATE (SP000005x08A00.2500)
32 - 4 GA. x 2 1/2" ANNULAR RING NAIL, STAINLESS STEEL



COL. C-1 5" x 5-1/2" (TREATED) 4-REQ'D. - COMB 50(1:10)

27D RCP PAVILION, TS-SQ12-04, EVERGREEN ROOF, ENCLOSURE BEIGE POWDER PROVIDED BY OWNER
NTS

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REVISIONS		
REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

DETAIL SHEET X

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 2/5/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C7.9

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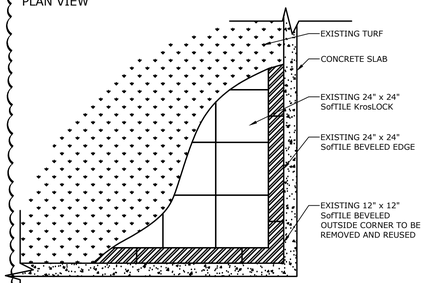
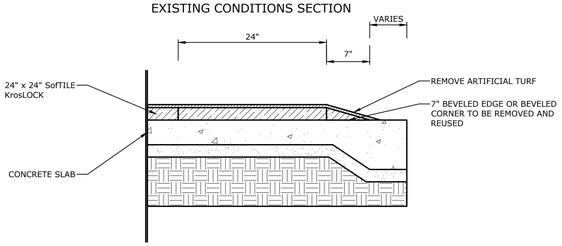
1

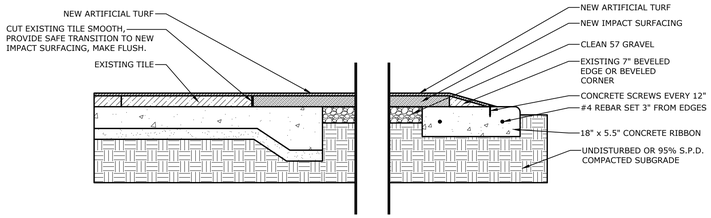
PLAYGROUND EXISTING CONDITIONS
PLAN VIEW



EXISTING CONDITIONS SECTION



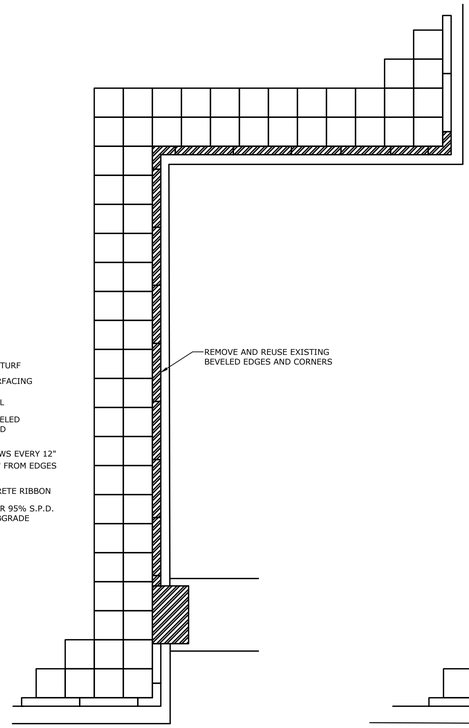
PROPOSED CONDITIONS SECTION



- Use concrete screws to anchor artificial turf to concrete every 12"
- New impact surfacing to meet manufacturer's recommendations for critical fall height
- FFE of new impact surfacing and turf to be flush with FFE of existing impact surfacing
- Install 7" beveled edges and beveled corners 6" from edge of concrete

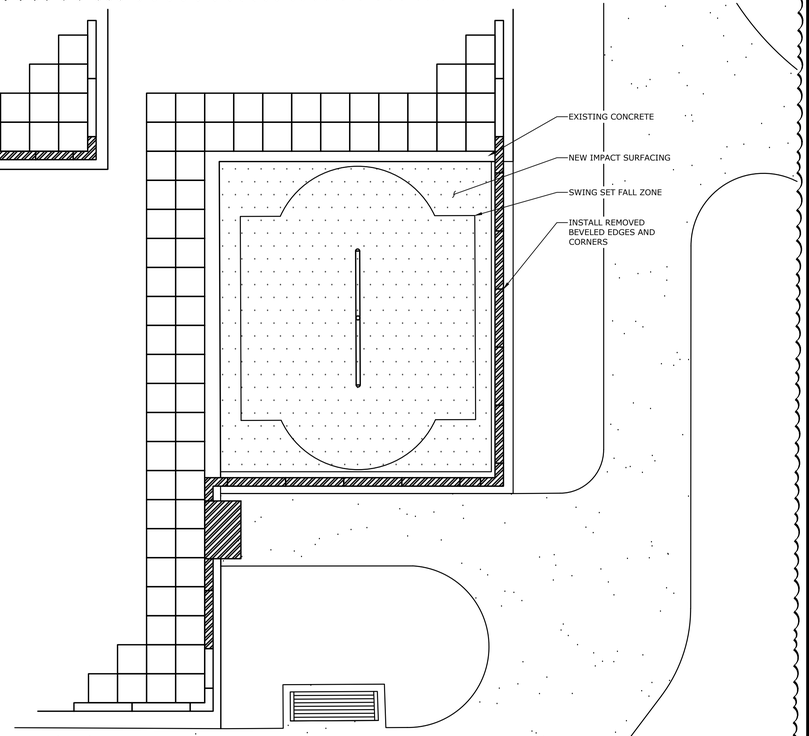
1

ITEMS PROVIDED BY OWNER TO BE INSTALLED			
Page #	**Detail #**	**Item**	**Qty**
C7.0	25J	BIKE RACK	2
C7.7	27D	12'x12' PAVILION	2
C7.2	27F	BENCH WITHOUT BACK	5
C7.3	27G	BENCH WITH BACK	6
C2.6-C2.7	N/A	#9-11x3" DECKING SCREW	1700
C8.0	29A	3/8"x4" LAG SCREW	400
C8.0	29A	3/8" WASHER	400
ES1	N/A	PRECAST CONCRETE 12"X12" PULL BOX	22
ES1	N/A	1000' SPOOL #8 GREEN WIRING	2
ES1	N/A	1000' SPOOL #8 BLACK WIRING	2



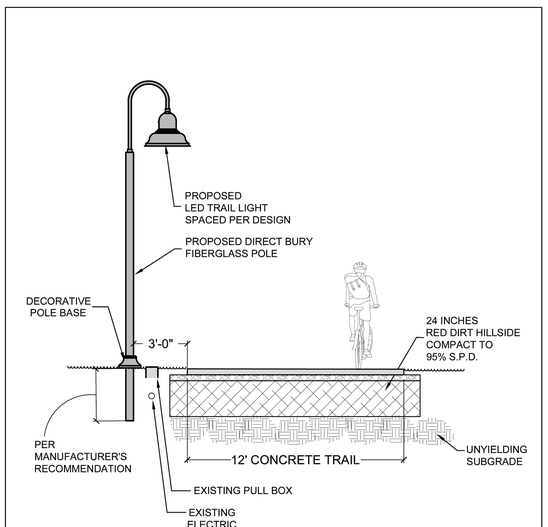
PLAYGROUND EXISTING CONDITIONS UNDERNEATH TURF PLAN VIEW

Remove (12) beveled edge sections
Remove (1) beveled inner corner section
Remove (1) beveled outer corner section



29C PLAYGROUND IMPACT SURFACE AND TURF EXPANSION
NTS

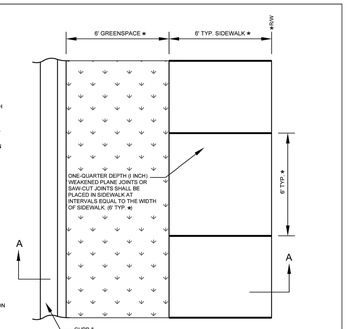
PLAYGROUND PROPOSED CONDITIONS UNDERNEATH TURF PLAN VIEW



CITY OF FAYETTEVILLE ARKANSAS	ENGINEERING DIVISION 113 W. MOUNTAIN STREET PHONE (479) 575-8206 FAX NO. (479) 575-8202	TITLE: *TRAIL DETAILS* DESCRIPTION: **TRAIL LIGHTING DETAIL CROSS SECTION**	DATE: JAN. 05, 2023 SHEET: **TR3**

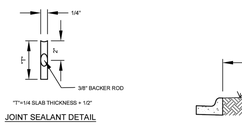
SIDEWALK CONSTRUCTION NOTES:

1. SIDEWALK SHALL HAVE TOOLED OR SAW-CUT TRANSVERSE JOINTS AT INTERVALS EQUAL TO THE WIDTH OF SIDEWALK (5' TYP.). THESE WEAKENED PLANE (CONTRACTION) JOINTS SHALL BE CONSTRUCTED TO 1/4 DEPTH OF THE SIDEWALK THICKNESS AND SHALL BE 1/8" TO 3/8" WIDE.
2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI.
3. CONCRETE SHALL HAVE A MINIMUM CEMENT CONTENT OF 6.5 BAGS per Cu. Yd. WITH 5-12% ± 1-1/2% AIR ENTRAINMENT.
4. EXPANSION JOINT MATERIAL SHALL BE PREFORMED ASPHALT IMPREGNATED FIBERBOARD CONFORMING TO AASHTO M-213. EXPANSION JOINT MATERIAL SHALL BE LEFT 1/2" LOWER THAN GRADE OR TRIMMED 1/2" LOWER, AND FILLED WITH SILICONE SEALER TO FINISHED GRADE.
5. ALL SAW-CUT AND TOOLED CUT JOINTS SHALL BE FILLED TO FINISHED GRADE WITH JOINT SEALANT.
6. CONCRETE CURING COMPOUND SHALL BE SEALTIGHT 1600 WHITE MANUFACTURED BY W.R. MEADOWS, OR AN APPROVED EQUAL.
7. CONCRETE JOINT SEALANT SHALL BE SONNEBORN "SONOLASTIC SL1" OR AND APPROVED EQUAL. CLOSED CELL BACKER ROD SHALL BE USED IN DEEP JOINTS, AS NEEDED, ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.
8. ALL SIDEWALKS SHALL HAVE ONE-HALF INCH ROLLED EDGES AND A BROOMED FINISH.
9. SEE STANDARD DRIVEWAY DETAILS FOR SIDEWALK CONSTRUCTION THROUGH DRIVEWAYS.
10. WHERE LONGITUDINAL (RUNNING) SLOPE OF SIDEWALK EXCEEDS 5.0%, THE SIDEWALK SHALL MATCH THE SLOPE OF THE ADJACENT ROADWAY.
11. LANDING REQUIRED WHEN SIDEWALK CHANGES DIRECTION DUE TO AN OBJECT (E.G. TELEPHONE/LIGHT POLE, MANHOLE, ETC.).
12. ALL SIDEWALKS REQUIRE INSPECTION BEFORE AND AFTER CONCRETE PLACEMENT. CONTACT THE ENGINEERING DIVISION (575-8206) TO SCHEDULE AN INSPECTION.
13. MINIMUM EFFECTIVE WIDTH FOR SIDEWALK IS 5 FEET. SEE UNIFIED CODE SECTION 171.14 FOR GUIDANCE.

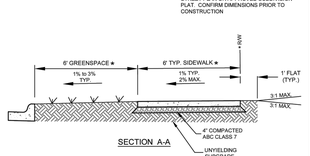


PLAN

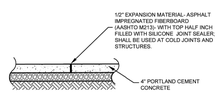
★ SIDEWALK AND GREENSPACE WIDTHS MAY VARY BASED ON CURRENT MASTER STREET PLAN OR APPROVED SUBDIVISION PLAT. CONFIRM DIMENSIONS PRIOR TO CONSTRUCTION



JOINT SEALANT DETAIL



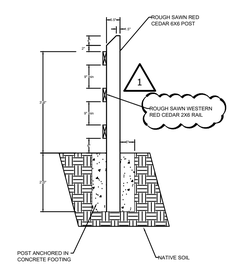
SECTION A-A

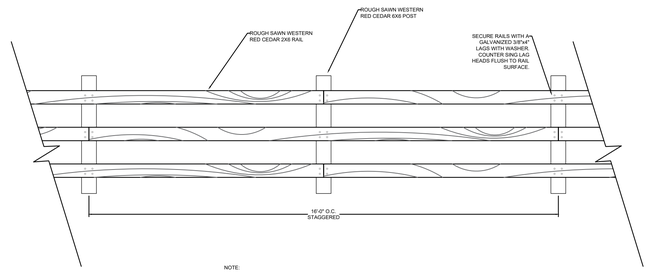


ELEVATION

CITY OF FAYETTEVILLE ARKANSAS	ENGINEERING DIVISION 113 W. MOUNTAIN STREET PHONE (479) 575-8206 FAX NO. (479) 575-8202	TITLE: *SIDEWALK DETAILS* DESCRIPTION: **SIDEWALK WITH GREENSPACE**	DATE: Mar. 31, 2020 REVISED: Apr. 30, 2021 February 28, 2022 April 30, 2023 ------ ------	SHEET: **SW1**

29A CEDAR RAIL FENCE
NTS





NOTE:

1. RAILING TO FACE STREET SIDE.
2. IF TEMPORARY HARDWARE IS REQUIRED TO ACHIEVE FINAL INSTALLATION, FINISHING NAILS SHALL BE USED AND OVERALL AESTHETIC AND QUALITY SHALL NOT BE REDUCED DUE TO TEMPORARY HARDWARE
3. OWNER TO PROVIDE THE FOLLOWING:
   - 3.1. (400) 3/8"x4" LAGS
   - 3.2. (400) WASHERS
   - 3.3. (16) 6"x6"x12' POSTS
   - 3.4. (42) 2"x6"x16' RAILS
   - 3.5. (6) 2"x6"x10' RAILS
4. CONTRACTOR TO PROVIDE ANY ADDITIONAL MATERIALS

MCLELLAND CONSULTING ENGINEERS, INC.
DESIGNED TO SERVE
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FAYETTEVILLE, ARKANSAS 72703
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REVISIONS			
REV	DATE	DESCRIPTION	
1	02/05/2025	ADDENDUM 1	

CITY DETAIL SHEET I

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
2/5/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

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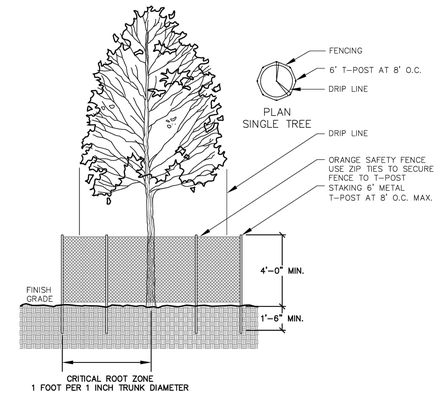


TREE PRESERVATION FENCING DETAIL

NOT TO SCALE

29F TREE PRESERVATION FENCING DETAIL

NTS

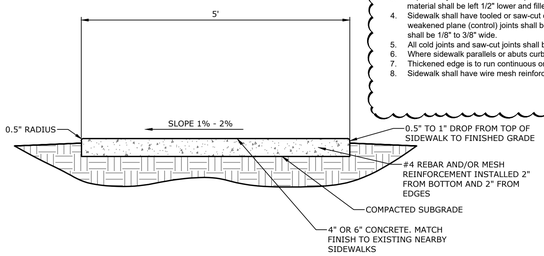
CITY OF FAYETTEVILLE STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION

1. ALL TREES AND NATURAL AREAS SHOWN ON THIS PLAN TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING.
2. PROTECTIVE FENCES SHALL BE ERECTED ACCORDING TO CITY OF FAYETTEVILLE STANDARDS FOR TREE PROTECTION.
3. PROTECTIVE FENCES SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE PREPARATION WORK AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT.
4. EROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILD-UP WITHIN TREE DRIPLINES.
5. PROTECTIVE FENCES SHALL SURROUND THE TREES OR GROUP OF TREES AND WILL BE LOCATED AT THE DRIPLINE. FOR NATURAL AREAS, PROTECTIVE FENCES SHALL FOLLOW THE LIMIT ON CONSTRUCTION IN ORDER TO PREVENT THE FOLLOWING:
   A. SOIL COMPACTION IN THE ROOT ZONE OF AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT.
   B. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN 6") ROOT TRENCHING NOT VIEWED BY CITY ARBORISTS.
   C. WOUNDS TO EXPOSED ROOTS, TRUNK OR LIMBS BY MECHANICAL EQUIPMENT.
   D. OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CONCRETE TRUCK CLEANING AND FIRES.
6. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIPLINES MAY BE PERMITTED IN THE FOLLOWING CASES:
   A. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT.
   B. WHERE PERMEABLE PAVING IS TO BE INSTALLED WITHIN A TREE'S DRIPLINE, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA (PRIOR TO SITE GRADING SO THIS AREA IS GRADED SEPARATELY PRIOR TO PAVING INSTALLATION TO MINIMIZE ROOT DAMAGE).
   C. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE TO ALLOW 6 TO 10 FEET OF WORK SPACE.
   D. WHERE THERE ARE SEVERE SPACE CONSTRAINTS DUE TO TRACT SIZE OR OTHER SPECIAL REQUIREMENTS.
7. WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN 4 FEET TO A TRUNK, PROTECT THE TRUNK WITH STRAPPED ON PLANKING TO HEIGHT OF 8 FEET (OR LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.
8. TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
9. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOPSOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN 2 DAYS, COVER WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
10. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.
11. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN 4 INCHES SHALL BE PERMITTED WITHIN THE DRIPLINE OF TREES. NO SOIL IS PERMITTED ON THE ROOT FLARE OF ANY TREE.
12. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND EQUIPMENT SHALL TAKE PLACE BEFORE CONSTRUCTION BEGINS.
13. ALL FINISHED PRUNING MUST BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE AMERICAN NATIONAL STANDARD, ANSI-A300 PRUNING, 2008 OR LATER). A CITY CERTIFIED TREE PRUNER MUST BE RETAINED TO MAKE ALL PRUNING CUTS. A LIST OF CERTIFIED TREE PRUNERS IS AVAILABLE FROM THE URBAN FORESTER.
14. DEVIATIONS FROM THE ABOVE NOTES MAY BE CONSIDERED ORDINANCE VIOLATIONS IF THERE IS SUBSTANTIAL NON-COMPLIANCE OR IF A TREE SUSTAINS DAMAGE AS A RESULT.
15. NO TREES ARE BEING REMOVED.
16. EXISTING TREE SPECIES AND SIZES ARE SHOW ON THE SURVEY.

1

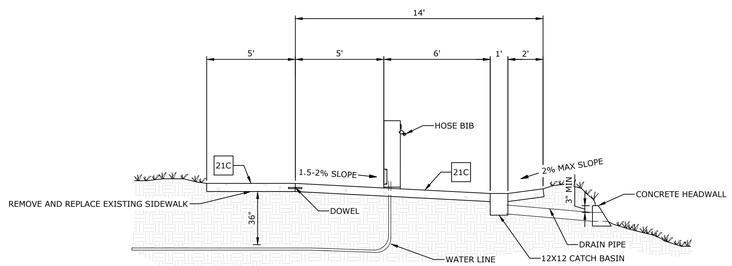
GENERAL NOTES

1. Concrete shall have a minimum compressive strength of 3,000 PSI.
2. Expansion joint material shall be required at 50 ft maximum spacing.
3. Expansion joint material shall be preformed asphalt impregnated fiberboard. Expansion joint material shall be left 1/2" lower and filled with silicone sealer to finished grade.
4. Sidewalk shall have tooled or saw-cut control joints at a maximum of 10 ft intervals. These weakened plane (control) joints shall be constructed to a 1/4 depth of the sidewalk thickness and shall be 1/8" to 3/8" wide.
5. All cold joints and saw-cut joints shall be filled to finished grade with joint sealant.
6. Where sidewalk parallels or abuts curb or other existing concrete work, dowel to this existing work.
7. Thickened edge is to run continuous on both sides of all concrete sidewalks.
8. Sidewalk shall have wire mesh reinforcement.



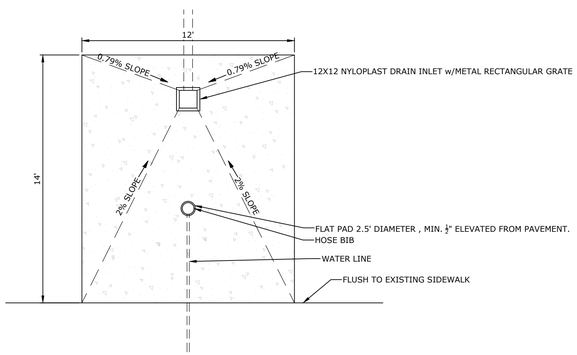
29B CONCRETE SIDEWALK

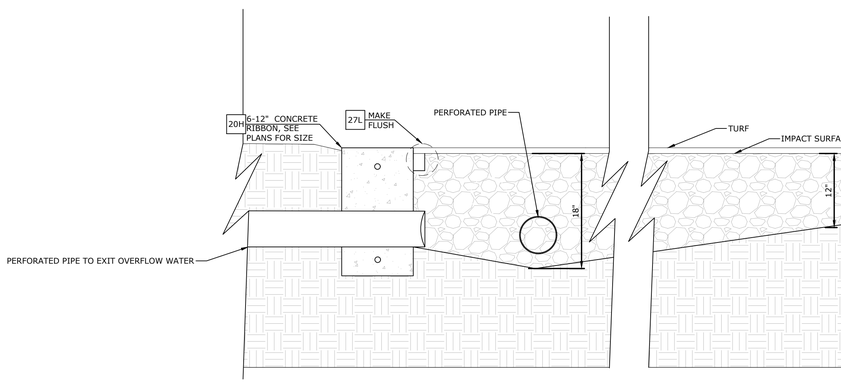
NTS



29D DOG WASH STATION

NTS

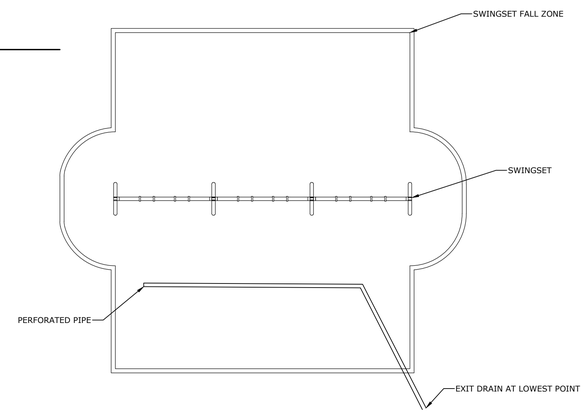




29E PERVIOUS SWINGSET

NTS

TURF TO BE MOUNTED FLUSH WITH CONCRETE EXIT PIPE TO BE AT LOWEST POINT



McCLELLAND CONSULTING ENGINEERS, INC.
DESIGNED TO SERVE
1580 E STEARNS ST
FAYETTEVILLE, ARKANSAS 72703
(479) 443-2377
HTTP://WWW.MCE.US.COM

REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER M. BAKUNAS
License Number 0185
STATE OF ARKANSAS
02/06/2025

ORIGINAL SIGNATURE ON FILE

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BRYCE DAVIS PARK
IMPROVEMENTS PHASE 1
1595 N DARTMOUTH AVE
FAYETTEVILLE, AR

811 Know what's below. Call before you dig.

REVISIONS

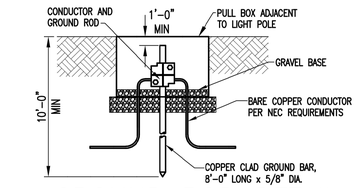
REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

CITY DETAIL SHEET II

DESIGNED BY:	DRAWN BY:
JRL	JRL
DATE:	REVISION:
2/5/2025	100%
SCALE:	JOB NUMBER:
AS NOTED	24-2121

C8.1

W:\2024\24-2121 - Fayetteville, Ar- Bryce Davis Park, Phase 1 Improvements\design Drawings\242121 - CS.dwg, PRINTED ON: February 5, 2025 @ 6:12 PM



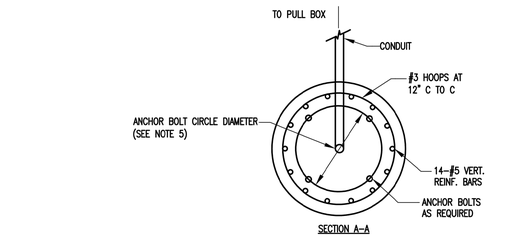
B GROUND ROD DETAIL
N.T.S.

LIGHTING NOTES

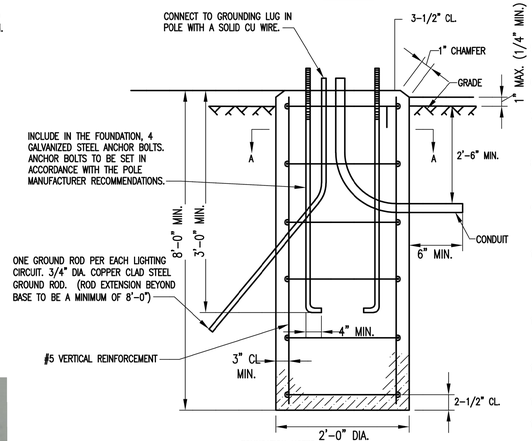
1. FOR LUMINAIRE ORIENTATION AND X-Y COORDINATES OF POLES, SEE LUMINAIRE SCHDULE.
2. UNLESS OTHERWISE INDICATED, PULL BOX 12x12 SHALL BE INSTALLED WITHIN 5' OF POLE FOUNDATION.
3. INSTALL 2#10 XHHW-2, 1#10 E.G.C. FROM PULL BOX TO POLE LIGHTS.
4. INSTALL CONDUIT BELL END FITTINGS ON NON-METALLIC CONDUIT ENDS. THE COST OF FITTINGS SHALL BE CONSIDERED SUBSIDIARY TO THE PAY ITEM, "NON-METALLIC CONDUIT (2")".
5. THE DEGREE OF TILT ON LUMINAIRES SHALL BE ZERO.
6. ALL SPLICES SHALL BE WATERTIGHT AND UL-LISTED FOR CONTINUOUS USE IN SUBMERSIBLE INSTALLATIONS.
7. USE MINIMUM 1/4" PULL ROPE OR 12 LBS. PULL TAPE WHEN PULLING CONDUCTORS.
8. E.G.C. SHALL BE EXOTHERMICALLY BONDED TO GROUND ROD.
9. CONDUCT A MINIMUM 14-DAY BURN TEST FOR THE COMPLETE LIGHTING SYSTEM. REPLACE BURNED OUT AND NOTICEABLY DIM LUMINAIRES; MALFUNCTIONING EQUIPMENT SHALL BE CORRECTED, AND RETESTED THE SYSTEM. OTHERWISE REMOVE AND REPLACE WITH NEW EQUIPMENT.
10. SEE STANDARD DRAWING SD-6 FOR PULL BOX CONSTRUCTION.

RECEPTACLE SCHEDULE

SYMBOL	MODEL NUMBER	DESCRIPTION
MP	--	PROVIDED BY THE LIGHT POLE MANUFACTURER.



SECTION A-A



FOUNDATION NOTES

1. CONCRETE FOR LIGHT POLE STRUCTURE FOUNDATION SHALL HAVE A MINIMUM OF 4000 PSI. ALL REINFORCEMENT SHALL BE DEFORMED STEEL BARS AND CONFORM TO ASTM M31 OR M53, GRADE 60.
2. CONTRACTOR SHALL PROVIDE PRE-CAST OR CAST-IN-PLACE FOUNDATIONS.
3. PROVIDE WATERTIGHT CAPS FOR ANY UNUSED CONDUITS.
4. THE CONTRACTOR SHALL COORDINATE WITH THE LIGHTING FIXTURE, FOUNDATION, AND POLE MANUFACTURERS TO ENSURE PROPER FIT OF ALL COMPONENTS.
5. DIMENSIONS AND SIZE OF ANCHOR BOLTS, INCLUDING BOLT CIRCLE, TO BE VERIFIED BY LIGHT POLE MANUFACTURER.
6. CONTRACTOR TO COORDINATE THE APPROPRIATE DIMENSION TO ASSURE THE MINIMUM CONDUIT DEPTH IS 2'-9" WHEN LEADING PULLBOX.

A POLE BASE DETAIL
N.T.S.

1 THHN 8 STR CU SIMPULL TO BE INSTALLED WITH 1-1/2" GRAY PVC CONDUIT BETWEEN PULL BOXES. REFER TO PLANS FOR ALIGNMENT OF PROPOSED UGE.

GENERAL NOTES

1. ELECTRICAL DRAWINGS (POWER AND LIGHTING) ARE DIAGRAMMATIC AND SCHEMATIC IN NATURE. USE JUDGMENT AND CARE TO INSTALL ELECTRICAL WORK TO FUNCTION PROPERLY AND FIT WITHIN CONSTRUCTION AND FINISHES. ALL CONDUCTORS, CONDUIT, AND MATERIALS NOT SPECIFICALLY SHOWN OR SPECIFIED, WHICH ARE REQUIRED FOR A COMPLETE OPERATING DEVICE OR SYSTEM ARE REQUIRED TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
2. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NFPA 70, CURRENT EDITION), LIFE SAFETY CODE (NFPA 101M CURRENT EDITION), UNDERGROUND FACILITIES DAMAGE PREVENTION ACT (§ 17-28-101 ET SEQ.), AND LOCAL ELECTRICAL CODE. IN ADDITION, ALL PARTS OF THIS INSTALLATION SHALL BE IN ACCORDANCE WITH THE ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.
3. THE CONTRACTOR SHALL NOT ENGAGE IN EXCAVATION OR DEMOLITION ACTIVITIES WITHOUT HAVING FIRST NOTIFIED THE ARKANSAS ONE CALL CENTER IN ACCORDANCE WITH UNDERGROUND FACILITIES DAMAGE PREVENTION ACT. NOT ALL UTILITY COMPANIES ARE MEMBERS OF THE ARKANSAS ONE CALL SYSTEM. THE CONTRACTOR IS ADVISED TO CONTACT ALL NON-MEMBER UTILITIES AS WELL AS THE ONE CALL CENTER.
4. UNDERGROUND UTILITIES EXIST WITHIN AND ADJACENT TO THE LIMITS OF CONSTRUCTION. SOME UTILITIES MAY HAVE BEEN RELOCATED SINCE THE TIME OF DESIGN AND THE CONTRACTOR'S NOTICE TO PROCEED. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES INVOLVED AND VERIFY THE LOCATION OF UNDERGROUND UTILITIES. THE CONTRACTOR SHALL MAINTAIN THE UTILITY LOCATION MARKINGS UNTIL IT IS NO LONGER NECESSARY.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS OF REPAIR OR REPLACEMENT OF EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
6. ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAYBE THE PROPERTY OF THE UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.
7. CONDUIT INSTALLED UNDER ROADWAY OR WALKWAY SURFACES SHALL BE INSTALLED BY A PUSHING OR BORING METHOD AS DIRECTED BY ENGINEER. PVC OR HDPE CONDUIT SHALL BE USED. PVC CONDUIT SHALL BE MARKED "DIR. BORING" OR "DIRECTIONAL BORING" AS PER NEC.
8. PULL BOX LIDS SHALL CLOSE FLUSH WITH OUT PINCHING ANY CONDUCTORS. CONDUIT LENGTHS IN PULL BOXES SHALL BE SET ACCORDINGLY. ANY CONDUCTORS THAT HAVE BEEN DAMAGED BY PINCHING SHALL BE COMPLETELY REPLACED AT CONTRACTOR'S EXPENSE.
9. ELECTRICAL CONTRACTOR SHALL VERIFY LOCATION OF ALL ROUGH-INS AT THE PROJECT SITE. DO NOT SCALE DRAWINGS FOR EXACT LOCATION OF DEVICES. FIELD VERIFY FINAL MOUNTING LOCATIONS AS REQUIRED BY PROJECT CONDITIONS PRIOR TO ROUGH-IN.
10. ALL DEVICES TO BE INSTALLED BY THIS TRADE SHALL BE COORDINATED WITH ALL TRADES. DURING CONSTRUCTION TO AVOID CONFLICT AND TO PROVIDE A QUALITY PROJECT. IF YOU NOTICE ANY DISCREPANCY BETWEEN THIS WORK AND A SEPARATE TRADE, NOTIFY THE ENGINEER IMMEDIATELY FOR DIRECTION. ANY COORDINATION WORK THAT OCCURS WITHOUT APPROVAL FROM THE ENGINEER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL MOUNTING LOCATIONS SHALL BE CONFIRMED WITH OWNER AT EACH SITE.
11. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL SERVICE AND METERING REQUIREMENTS WITH THE UTILITY POWER COMPANY (CONDUITS, GROUNDING, CONCRETE PADS, TRENCHING, ETC.). PAY ALL SERVICE FEES AS NECESSARY. ARRANGE TO PROVIDE TEMPORARY CONSTRUCTION SERVICE AS NECESSARY.
12. BEFORE FINAL ACCEPTANCE, CONTRACTOR SHALL PROVIDE 2 SETS OF LEDGER SIZE (11"X17") AS-BUILT PLANS TO THE MAINTENANCE AUTHORITY AND ARDOT.
13. ALL ELECTRICAL COMPONENTS SHALL BE UL-LISTED.
18. ALL LUMINAIRE ASSEMBLIES SHALL HAVE BUG RATING OF U0. DEGREE OF TILT ON LUMINARIES SHALL BE ZERO.
19. ALL UNDERGROUND CONDUIT SHALL HAVE MINIMUM 24" COVER. LIMIT ALL CONDUIT FILL TO A MAXIMUM OF 40%. SLACK CABLES IN PULL BOXES SHALL BE 3 FEET. ALL UNDERGROUND CONDUIT SHALL HAVE MINIMUM 24" COVER. ROUTE ALL CONDUCTORS THROUGH JUNCTION BOXES AS REQUIRED.
20. EQUIPMENT GROUNDING CONDUCTOR SHALL BE BONDED TO EACH POLE, GROUND ROD, LUMINAIRE AND SERVICE POINT PER NEC. SEE ARTICLES 250 AND 410.
21. ALL CONCRETE PULL BOXES SHALL BE TYPE 2 HD UNLESS OTHERWISE INDICATED ON THE PLANS. PROVIDE A TYPE 12x12 CONCRETE PULL BOX WITHIN 5' OF EVERY P# POLE LIGHT FOUNDATION.
22. ALL SPLICES SHALL BE WATERTIGHT AND UL-LISTED FOR CONTINUOUS USE IN SUBMERSIBLE INSTALLATION.
23. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE DOCUMENTATION TO PROJECT ENGINEER, TO ENSURE ARKANSAS STATE CODES (§17-28-101 ET SEQ. AND §20-31-101 ET SEQ.) ARE MET. THE DOCUMENTATION SHALL INCLUDE:
    23.1. ELECTRICIANS' LICENSE INFORMATION AND EXPIRATION DATE.
    23.2. THE RATIO OF LICENSED-ELECTRICIAN-TO -APPRENTICE-ELECTRICIANS.
    23.3. PRINTED SEARCH RESULTS OF LICENSED ELECTRICIANS FROM ARKANSAS DEPARTMENT OF LABOR ELECTRICIAN LICENSEE DIRECTORY (http://www.ark.org/labor/electrician/search.php)
    ALL LICENCES SHALL BE VALID AND CURRENT.
24. NON-DESTRUCTIVE MEG TEST AND CURRENT LEAKAGE TEST SHALL BE PERFORMED ON NEW CONDUCTORS, IN THE PRESENCE OF FIELD INSPECTOR. THE TEST VOLTAGE SHALL BE LIMITED TO 600 VOLTS. ANY CONDUCTOR NOT MEETING THE MINIMUM ACCEPTABLE VALUE SHALL BE DOCUMENTED AND PROVIDED TO THE JOB ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES CAUSED BY MEG TEST WHILE DEVICES OR ACCESSORIES ARE STILL CONNECTED AND SHALL BE REPLACED AT CONTRACTOR'S EXPENSE. SEE SPECIAL PROVISION ELECTRICAL CONDUCTORS-IN-CONDUIT.
25. EACH ROADWAY ILLUMINATION POLE SHALL BE BONDED TO EQUIPMENT GROUNDING CONDUCTOR PER NEC. SEE ARTICLES 250 AND 410.
26. PULL CABLE SHALL BE MINIMUM 1/4" PULL NYLON OR POLYESTER ROPE, OR 1200 LBS PULL TAPE WHEN PULLING CONDUCTORS. STEEL CABLE OR FISH TAPE SHALL NOT BE USED. CONNECT PULLING DEVICES TO COPPER WIRE AND NOT TO JACKET. USE PULLING COMPOUND PER MANUFACTURER'S REQUIREMENTS. ALL BENDS SHALL NOT BE LESS THAN RECOMMENDED BY NEC FOR CONDUCTORS USED.

A ELECTRICAL SITE PLAN
SCALE: 1" = 40'-0"

STATE OF ARKANSAS
SHANE R. LAWRENCE
REGISTERED PROFESSIONAL ENGINEER
No. 10054
2/5/25

CERTIFICATE OF AUTH.
ENGINEERING ELEMENTS, PLLC
No. 1227
ARKANSAS-ENGINEER

PROJECT NO: 24-051
COMPLETE: 100%

Engineering Elements, PLLC
2458 East Joyce Boulevard, Suite 1
Fayetteville, AR 72703
Phone: 479-695-1333, Fax: 479-251-7982

BRYCE DAVIS PARK IMPROVEMENTS PHASE 1

1595 N DARTMOUTH AVE
FAYETTEVILLE, ARKANSAS

Engineering Elements
2458 East Joyce Boulevard, Suite 1
Fayetteville, AR 72703
Phone: 479-695-1333
Fax: 479-251-7982

MECHANICAL
ELECTRICAL
FIRE PROTECTION
DESIGN CONSULTANTS

ELECTRICAL PLAN

REVISIONS:
1 02/05/2025 ADDENDUM 1
2
3

PROJECT: 24-2121

DATE: 2-5-2025

ES1

Model: Steelworx Hip Shelter, 16' x 20'
Model # HP-1620-SW-10E

Manufacturing Mission: To provide all prefabricated components and installation instructions for a 16' wide (measured from eave to eave) by 20' long free standing bolt together, tubular steel constructed shelter kit.

Design Criteria: Structure shall be designed to meet site specific snow and wind load design criteria using most current applicable building codes. All structural members are ASTM A-500 U.S. grade B steel. Welded connection plates shall be ASTM A-36 hot rolled steel. All fabrication performed to latest AISC standards by AWS Certified welders. All framing connections are done using A325 grade bolts within concealed access openings from above and will later be concealed by the roofing. All roof framing shall be flush against the roof decking to eliminate the possibility of bird nesting.

Tubular Steel Columns and Beams: Standard column dimension shall be 5" x 5" x 3/16" tubular steel welded to 5/8" base plates for surface mounting. Main support beams are 7" x 5" x 3/16" and purlins are 6" x 4" x 1/8" and 5" x 3" x 1/8". Steel sizes are preliminary and may change due to ongoing review and final engineering.

.

Roofing: 24 Ga. pre-cut steel Multi-Rib panels with Kynar 500 finish in a variety of colors with white underside. Standard roof slope is a 4/12 pitch with a eave height of 10'-0". Attached to structural framing with exposed self tapping screws painted to match roof color. Matching 24 Ga. trim included.

Frame Finish: All steel framework will receive a corrosion protective TGIC Polyester powder coat, electro-statically applied and cured at 400°F. A large selection of standard colors are available.

Foundation: All columns need to be anchored to concrete footings (footing design provided separately). Columns can be surface mounted to footings with anchor bolts at or below finish slab elevation or they can be embedded directly into the footing without base plates upon request. Anchor bolts and bracing templates are included. Optional base plate covers are available at an additional cost.

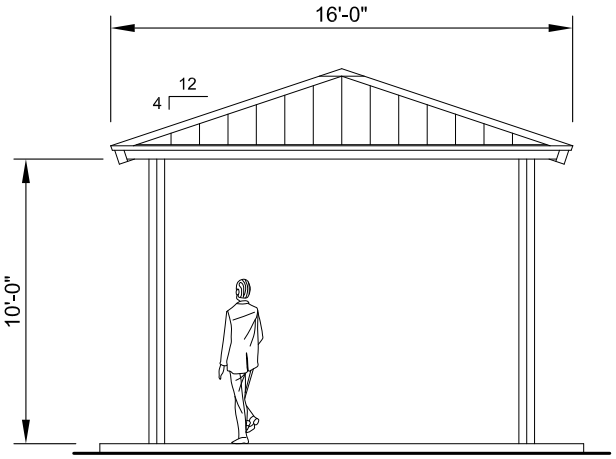
Hardware: All structural hardware and roofing fasteners shall be provided.

Warranty: 10 years against manufacturer defects.

Not Included: Concrete work of any kind, unloading of product and installation.

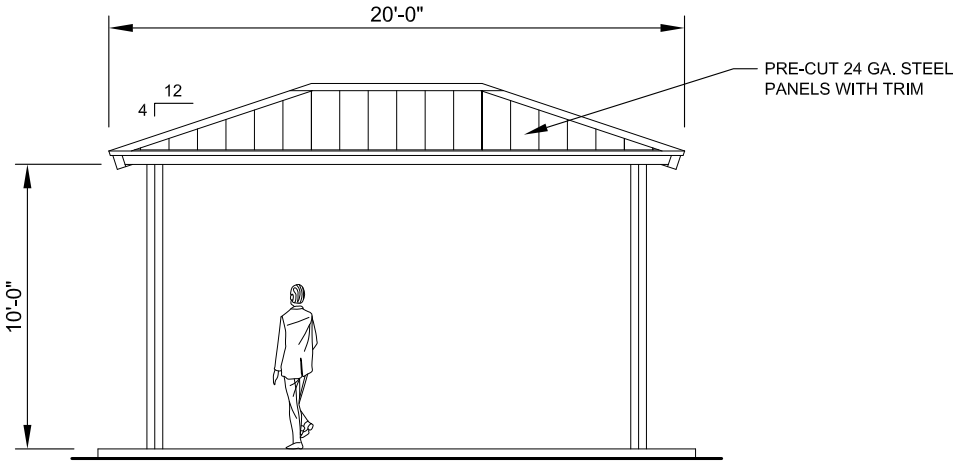
Additional Options: Refer to catalog or www.coverworx.com for available options and upgrades.

11800 East 9 Mile Road
Warren, MI 48089
Office: (586) 486-1088
Fax: (586) 754-9130
Toll Free: (800) 657-6118
Email: info@coverworx.net
www.CoverWorx.com



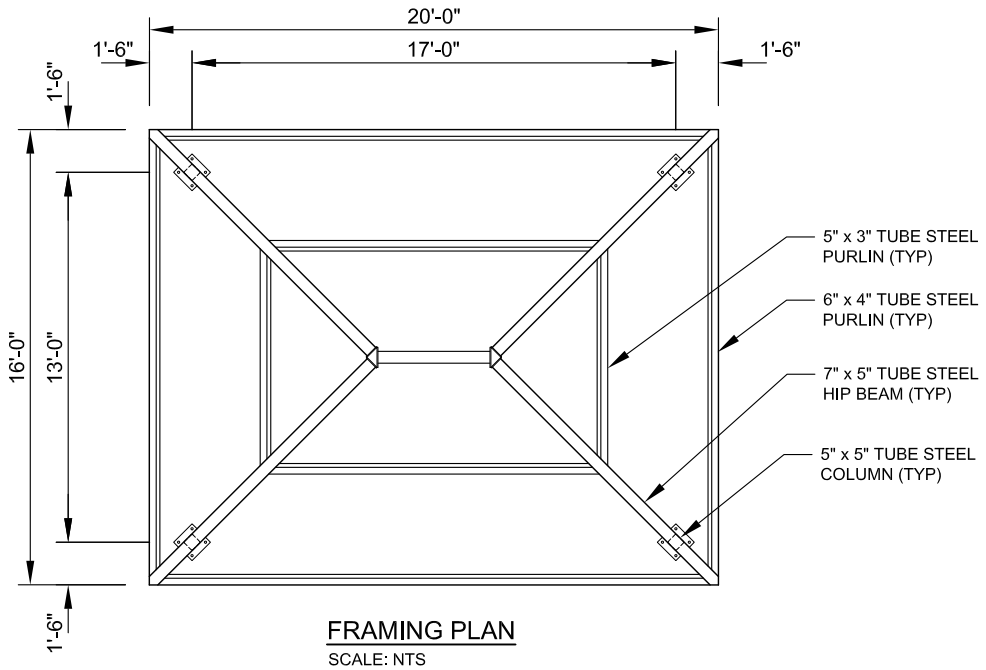
SIDE ELEVATION

SCALE: NTS



FRONT ELEVATION

SCALE: NTS



FRAMING PLAN

SCALE: NTS

COVERWORX
Recreational Architecture
A Division of Ross & Barr Inc.

11800 East 9 Mile Road
Warren, MI 48089
Office: (586) 486-1088
Fax: (586) 754-9130
Toll Free: (800) 657-6118
Email: info@coverworx.net
www.CoverWorx.com

Steelworx Hip Shelter - 16' x 20'

Model: HP-1620-SW-10E

DESIGN SPECIFICATIONS

STEEL SHELTER SPECIFICATIONS

Structure as furnished by:

Cedar Forest Products
P.O. Box 145, West Olive, MI 49460, USA
800.552.9495

DIVISION 107300

SPECIALTIES MANUFACTURERS OF PROTECTIVE COVERS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. **[Building type][size]** with [secondary roof] over [primary roof].

BUILDING STRUCTURE AS FURNISHED BY CEDAR FOREST PRODUCTS COMPANY,P.O. BOX 145, WEST OLIVE, MICHIGAN, 49460, USA, 800-552-9495.

1.2 REFERENCES

A. REFERENCE STANDARDS:
1. AISC - American Institute of Steel Construction Manual of Steel Construction.
2. ASTM - American Society for Testing and Materials.
3. AWS - American Welding Society.
4. LEED - Leadership in Energy and Environmental Design.
5. OSHA – Occupational Safety and Health Administration Steel Erection Standard 29 CFR 1926 Subpart R-Steel Erection.
6. PCI - Powder Coating Institute.
7. SSPC - Steel Structures Painting Council.

1.3 SUBMITTALS

A. GENERAL SUBMITTAL:
Submit [_____] sets of submittal drawings and [_____] sets of calc books, both signed and sealed by a Professional Engineer licensed in the State of [_____].

B. PRODUCT DESIGN LOADS:
The building shall be designed to meet the governing building code with the following design loads:
1. Building Code: [_____]
2. Ground Snow Load (Pg): [_____] pounds per square foot.
3. Basic Wind Speed (V): [_____] miles per hour.
4. Seismic Design: as required for site specific conditions.

C. SUBMITTAL REQUIREMENTS:
Calculations and Submittal drawings shall include, at a minimum:
1. Calculations:
   a. References to building codes and design manuals used for calculations.
   b. Identification of lateral force resisting system.
   c. Formulas used for determining snow, wind, and seismic loads to specific project location.
   d. Three dimensional modeling input, model geometry, and analysis results.
   e. Member design results and controlling load combinations.
   f. Connection design for structural bolts, welds, plate thicknesses, and anchorage to the foundation.
   g. Foundation designs must include the required combinations of gravity and lateral loads.

2. Submittal Drawings:
    a. Anchor bolt layout.
    b. Foundation design.
    c. Three dimensional views of frame.
    d. Member sizes and locations.
    e. Structural connection details, including bolt sizes and plate thicknesses.
    f. Roof trim and connection details.

D. FOUNDATION DESIGN:
1. The shelter shall be set on foundations designed by manufacturer.
2. Foundation materials shall be provided by contractor.
3. Owner shall provide manufacturer with complete information about the site including soil bearing capacity and lateral load capacity.
4. If soil data are not provided, foundations will be designed to the minimum values identified in the governing building code.

E. ANCHOR BOLTS:
Anchor bolts shall be provided by manufacturer.

1.4 QUALITY ASSURANCE

A. FABRICATOR QUALIFICATIONS:
1. Minimum of 10 years in the shelter construction industry.
2. Full time on-staff Quality Assurance Manager.
3. All welders AWS Certified.
4. Annual audit of Quality System by Third Party Agency.
5. Annual audit of powder coat finish system by Third Party Agency (PCI).

B. FABRICATOR CERTIFICATIONS:
1. City of Houston, TX Approved Steel Fabricator.
2. San Bernardino County, CA Approved Steel Fabricator.
3. Clark County, NV Approved Steel Fabricator.

1.5 STORAGE AND HANDLING

A. STORAGE AND HANDLING REQUIREMENTS:
1. Installer shall store product in a dry place or covered if out in the weather and keep product out of direct sun.
2. Installer shall store product elevated from soils to allow air circulation and to not introduce mold, fungi decay or insects to the product.
3. Product must be handled with protective straps or padded forks if lifting with mechanical equipment. Use of chain or cable to lift product into place will not be accepted.

1.6 FIELD OR SITE CONDITIONS

A. Foundations shall be at the same elevation unless specifically noted otherwise on the drawings.

1.7 MANUFACTURER WARRANTY

A. Shelter must have a 10-year limited warranty on steel frame members
B. Shelter must have a 10-year limited warranty on paint system.
C. Pass through warranty of metal roof manufacturer to be provided upon request.

PART 2 - PRODUCTS

2.1 SHELTER SYSTEM AND MATERIALS

A. MANUFACTURERS:

1. Acceptable Manufacturer: Cedar Forest Products, P.O. Box 145., West Olive, MI 49460; 800-552-9495; E-mail: info@cedarforestproducts.com; www.cedarforestproducts.com. Receive pricing from [First Name] [Last Name] at [Phone].

B. SUBSTITUTION LIMITATIONS:
   1. Substitutions must be approved a minimum of ten (10) days before bid. All approved manufacturers shall be notified in writing before the bid date and shall not be allowed to bid without written notification.
   2. Alternate suppliers must meet the qualifications and provide proof of certifications listed under section 1.4 QUALITY ASSURANCE.
   3. Alternate suppliers must provide an equivalent paint system to Cedar Forest Products listed under Section 2.1 D. 8. FINISHES.

C. DESCRIPTION OF PRODUCT:
   1. MODEL NUMBER: **[MODEL ID]**.
   2. DESCRIPTION AND SIZE: [Shelter Name] [Shelter Size].
   3. ROOF SLOPE: [Roof Slope].
   4. EAVE HEIGHT: [in feet] Clearance height from finish grade to the underside of the perimeter beam.
   5. ADDITIONAL OPTIONS: (If any, describe what has been added beyond standard).

D. PRODUCT REQUIREMENTS AND MATERIALS:
   1. GENERAL: The pre-engineered package shall be pre-cut unless otherwise noted and pre-fabricated which will include all parts necessary to field construct the shelter. The shelter shall be shipped knocked to minimize shipping expenses. Field labor will be kept to a minimum by pre-manufactured parts. Onsite welding is not necessary.
   2. REINFORCED CONCRETE:
      a. Concrete shall have minimum 28-day compressive strength of 3,000 psi and slump of 4" (+/- 1"), unless otherwise noted on the drawings.
      b. Reinforcing shall be ASTM A615, grade 60.
   3. STEEL COLUMNS:
      a. Hollow structural steel tube minimum ASTM A500 grade B with a minimum wall thickness of 1/8".
      b. Unless columns are direct buried columns shall be anchored directly to concrete foundation with a minimum of four anchor rods to meet OSHA requirement 1926.755(a)(1).
   4. STRUCTURAL FRAMING:
      Hollow Structural Steel tube minimum ASTM500 grade B. "I" beams, tapered columns, or open channels shall not be accepted for primary beams.
   5. COMPRESSION MEMBERS:
      Compression rings of welded plate minimum ASTM A36 or compression tubes or structural steel tube minimum ASTM A500 grade B shall only be used.
   6. CONNECTIONS:
      Connection Requirements:
      a. Anchor bolts shall be ASTM F1554 (Grade 36) unless otherwise noted.
      b. Structural fasteners shall be zinc plated ASTM A325 high strength bolts and high strength nuts.
      c. All structural fasteners shall be hidden within framing members.
      d. No field welding shall be required to construct the shelter.
      e. All welds shall be free of burrs and inconsistencies.
      f. All exposed fasteners shall be painted by manufacturer prior to shipment to match frame or roof colors as applicable.
      g. Manufacturer shall provide extra structural and roofing fasteners.

   7. ROOFING MATERIALS:

*****OPTIONAL ROOF DECK UNDERLAYMENT***** (Delete if not applicable)

      a. ROOF DECK UNDERLAYMENT OF TONGUE AND GROOVE (T&G):
         1) T&G shall be of 2x6 tongue and groove, southern yellow pine, kiln dried #1 grade or better, edge V'd bottom side.
         2) Manufacturer shall supply 30 pound felt and drip edge if both primary and secondary roofs are being supplied by the manufacturer.

3) Contractor shall cut T&G down to required lengths and shall seal underside of boards per architect's or owner's recommendations using coating supplier's instructions.

**********OR**********

a. ROOF DECK UNDERLAYMENT BY OTHERS

**********CHOOSE A PRIMARY ROOF**********

b. ROOF SYSTEM OF ASPHALT SHINGLES:
   1) Asphalt shingles shall be ASTM D3018 Type 1 and ASTM D3462 with a 25-year limited warranty.
   2) Color chosen from manufacturer's standard color chart: **[ColorName]**.

A roof deck underlayment is required for this option. (******Note to specifier, always delete******

**********OR**********

b. ROOF SYSTEM OF "Multi-Rib" PANEL METAL ROOFING:
   1) Roofing shall be 24 gauge ribbed galvalume steel sheets, with ribs 1 3/16" high and 12" on center.
   2) Roof surface shall be painted with Kynar 500 to the manufacturer's standard color: **[ColorName]**. Ceiling surface shall be a "wash coat" primer.
   3) Roof panels shall be factory precut to size and angled to provide ease of one-step installation.
   4) Metal roofing trim shall match the color of the roof and shall be factory made of 24 gauge Kynar 500 painted steel.
   5) Trim shall include panel ridge caps, hip caps, eave trim, rake trim, roof peak cap, and corner trim as applicable for model selected. Trim may need to be cut to length and notched. Reference drawings for additional information.
   6) Ridge, hip, and valley caps shall be pre-formed with a single central bend to match the roof pitch and shall be hemmed on the sides.
   7) Roof peak cap shall be pre-manufactured.
   8) Manufacturer must supply painted screws with metal and neoprene washers.

**********OR**********

b. ROOF SYSTEM OF STANDING SEAM METAL ROOFING:
   1) Standing seam metal roofing to be 24-gauge galvalume 16" wide with ribs 1-3/4" high.
   2. Roof surface shall be painted with Kynar 500 to the manufacturer's standard color: **[ColorName]**. Ceiling surface shall be a "wash coat" primer.
   3. Roof panels shall be factory precut to size and angled to provide ease of one-step installation.
   4. Metal roofing trim shall match the color of the roof and shall be factory made of 24 gauge Kynar 500 painted steel.
   5. Trim shall include panel ridge caps, hip caps, eave trim, rake trim, roof peak cap, and corner trim as applicable for model selected. Trim may need to be cut to length and notched. Reference drawings for additional information.
   6) Ridge, hip, and valley caps shall be pre-formed with a single central bend to match the roof pitch and shall be hemmed on the sides.
   7) Roof peak cap shall be pre-manufactured.
   8) Manufacturer must supply painted screws with metal and neoprene washers.

**********OR**********

b. SECONDARY ROOF SYSTEM BY OTHERS

8. FINISHES:

***** CHOOSE ALL THE FINISHES BEING USED WITH THE SHELTER*****

a. STANDARD POWDER COAT FINISH:
   1) Steel shall be cleaned, pretreated, and finished at a facility directly supervised by the manufacturer.
   2) Steel shall be shot blasted to SSPC-SP10 near-white blast cleaning. SSPC-SP2 hand tool cleaning will not be an acceptable alternative.
   3) Parts shall be pretreated in a 3 stage iron phosphate or equal washer.
   4) Epoxy primer powder coat to be applied to parts for superior corrosion protection.
   5) Top coat of Super Durable TGIC powder coat shall be applied over the epoxy primer.
   6) Finish shall not have any VOC emissions.
   7) Sample production parts shall have been tested and meet the following criteria:

a) Salt spray resistance per ASTM B 117/ ASTM D 1654 to 5,000 hours with no creep from scribe line and rating of 10.
b) Humidity resistance per ASTM D2247-02 to 3,000 hours with no loss of adhesion or blistering.
c) Color/UV resistance per ASTM G154-04 to 2,000 hours exposure, alternate cycles with results of no chalking, 75% color retention, color variation maximum 3.0 E variation CIE formula (before and after 2,000 hours exposure).

8) The manufacturer shall be PCI 4000 S Certified

**********AND / OR**********

a. PRIME COAT FINISH:
1) Steel shall be cleaned, pre-treated, and finished at a facility directly supervised by the manufacturer.
2) Steel shall be shot blasted to SSPC- SP10 near-white blasting. SSPC-SP2 hand tool cleaning will not be an acceptable alternative.
3) Frame shall be prime coated with an off gray Super Durable TGIC powder coat.
4) Primer shall not have any VOC emissions.
5) Red oxide primer will not be an acceptable alternative.

**********AND / OR**********

a. HOT DIP GALVANIZED FINISH:
1) Steel members, fabrications and assemblies shall be galvanized after by the hot dip process in accordance with ASTM A123. The composition of metal in the galvanizing bath shall be no less than 98% zinc.
2) The galvanized coating shall be continuous, adherent, free from any detrimental defect.

**********AND / OR**********

a. E-COAT BASE COAT FINISH:
1) Entire building under Super Durable Polyester TGIC powder coat shall have an E-Coat Base Coat.
2) Steel shall be shot blasted to SSPC-SP10 near-white blast cleaning prior to adding E-Coat. SSPC-SP2 hand tool cleaning will not be an acceptable alternative.
3) Top powder coat of Super Durable TGIC powder coat shall be applied.

PART 3 - EXECUTION

3.1 INSTALLERS

A. Protect building products after arrival at destination from weather, sunlight, and damage.

B. Building products shall be placed on blocks well off the ground and separated with wood strips so that air can circulate around each member.

C. Cover top and bottom with moisture-resistant paper.

D. Non-marring slings and/or padded forks shall be used when handling.

E. Installers are to use proper building practices recognized by OSHA and to have minimum 5 years experience in installing shelters of similar construction. These trades include but are not limited to: masonry work, steel construction, sheet metal work, carpentry, electrical and paint finishing.

F. Examination of final work is done by verifying that the erection of the structure was done in conformance to the installation instructions provided by Cedar Forest Products and local building codes.

3.2 ERECTION

A. FOUNDATIONS:
The shelter shall be placed on Cedar Forest Products designed foundations with materials by others. Design approved by the Engineer of Record identified in Section 1.3 D. FOUNDATION DESIGN.

B. INSTALLATION:
Install all components according to manufacturer's installation instructions and these specifications.

C. GENERAL CONTRACTOR:
Interface with other work is to be coordinated by the customer or the customer's agent. Certain designs have electrical or other plumbing requirements that are not supplied by Cedar Forest Products.

D. TOLERANCES:
Tolerances on steel structural members are set according to AISC construction practices, abided in the factory, and cannot be increased. No field slotting or opening of holes will be allowed. It is therefore essential that contractors conform to the tolerances specified on the installation drawings for anchor bolt or column layout details.

E. OSHA COMPLIANCE:
OSHA Compliance to Steel Erection Standard 29CRF 1926 Subpart R-Steel Erection.

3.3 REPAIR

A. Do not attempt any field repairs without first contacting Cedar Forest Products.

3.4 FIELD OR SITE QUALITY CONTROL

A. Field or Site Tests and Inspections are not required by Cedar Forest Products but may be required by the customer or by the local building inspector.

END OF SECTION

SCALE: NTS

Model #: RHS1620-10EH

Design Criteria: Structure shall be designed to meet site specific snow and wind load design criteria using most current applicable building codes. All structural members are ASTM A-500 U.S. grade B steel. Welded connection plates shall be ASTM A-36 hot rolled steel. All fabrication performed to latest AISC standards by AWS Certified welders. All framing connections are done using A325 grade bolts within concealed access openings from above and will later be concealed by the roofing. All roof framing shall be flush against the roof decking to eliminate the possibility of bird nesting.

Tubular Steel Columns and Beams: Standard column dimension shall be 5" x 5" x 3/16" tubular steel welded to 5/8" base plates for surface mounting. Main support beams are 7" x 5" x 3/16" and purlins are 6" x 4" x 1/8" and 5" x 3" x 1/8". Steel sizes are preliminary and may change due to ongoing review and final engineering.

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Roofing: 24 Ga. pre-cut steel Multi-Rib panels with Kynar 500 finish in a variety of colors with white underside. Standard roof slope is a 4/12 pitch with a eave height of 10'-0". Attached to structural framing with exposed self tapping screws painted to match roof color. Matching 24 Ga. trim included.

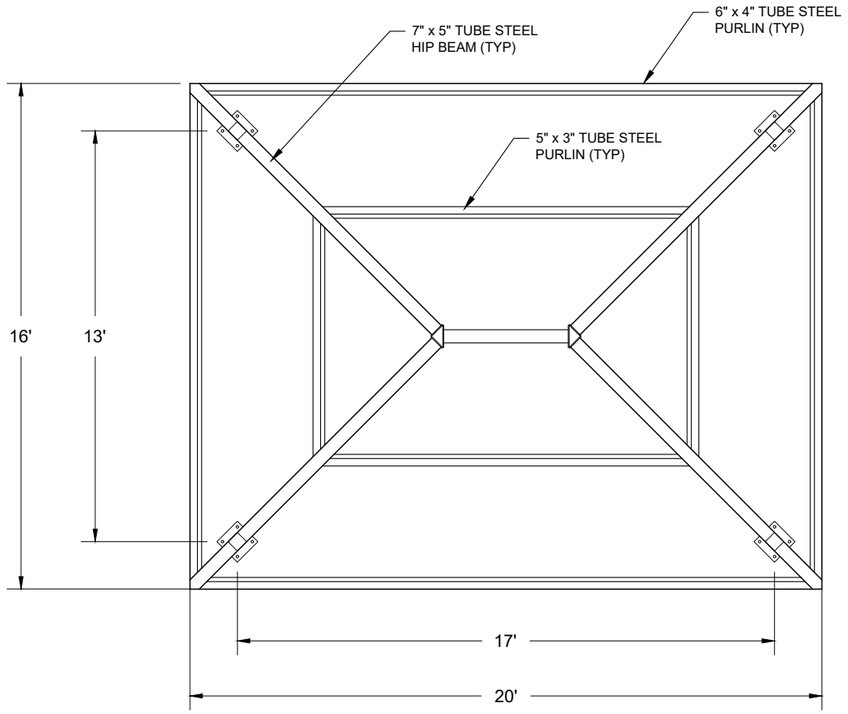
Frame Finish: All steel framework will receive a corrosion protective TGIC Polyester powder coat, electro-statically applied and cured at 400°F. A large selection of standard colors are available.

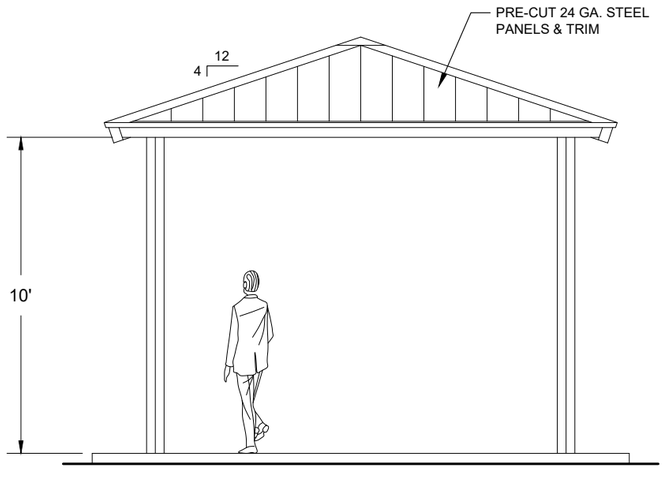
Foundation: All columns need to be anchored to concrete footings (footing design provided separately). Columns can be surface mounted to footings with anchor bolts at or below finish slab elevation or they can be embedded directly into the footing without base plates upon request. Anchor bolts and bracing templates are included. Optional base plate covers are available at an additional cost.

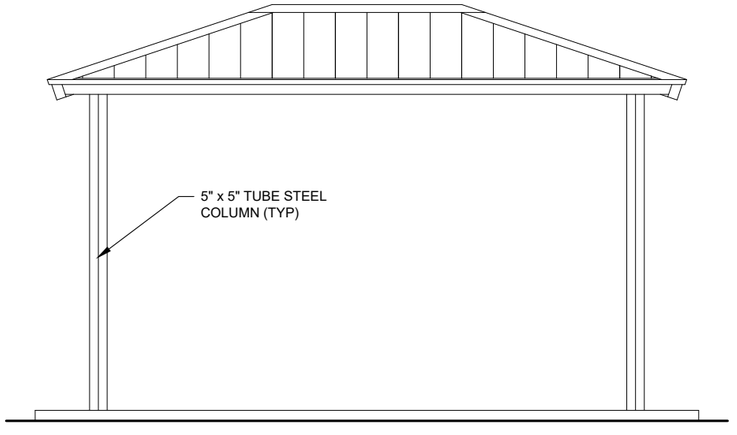
Hardware: All structural hardware and roofing fasteners shall be provided.

Warranty: 10 years against manufacturer defects.

Not Included: Concrete work of any kind, unloading of product and installation.







CFP
CEDAR FOREST PRODUCTS
P.O. BOX 145
WEST OLIVE, MI 49460
800-552-9495
WWW. CEDARFORESTPRODUCTS.COM

PRELIMINARY
NOT FOR CONSTRUCTION

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MODEL NUMBER:	RHS1620-10EH	SHOWN WITH STANDARD OPTIONS
DESCRIPTION:	16x20 Rect Hip Shelter	
Possible Options:	☐ 29ga METAL ROOF ☐ STANDING SEAM ROOF ☐ CEDAR SHINGLES	☐ METAL BASE SHOES ☐ STEEL COLUMNS ☐ CUSTOM ROOF PITCH
		☐ LIGHTNING PROTECTION ☐ 2 TIER ROOF ☐ CUPOLA

REVISION DATES	DRAWN BY:	DATE:
REV:	JES	1-28-25
REV:		
REV:		
REV:		

SHEET: 1 OF 1

SECTION 133123

PRE-ENGINEERED FABRIC TENSION STRUCTURES

PART 1 GENERAL

1.1 Summary

The shade structure manufacturer shall be responsible for the design, engineering, fabrication and supply of the work specified herein.

1.2 Submittals

A. Provide proof of installed reference sites with structures for similar scope of a project and installation that are engineered to the latest IBC specifications. Include in reference; list of structure dimensions with install dates and project locations.
B. Provide fabric samples to demonstrate fabric color range and paint color selections.
C. Provide wet sealed structural engineering drawings and calculations as deferred submittal for approval by Construction Manager

1.3 Project Conditions

Field Measurements: Verify layout information for shade structures shown on the drawings in relation to the property survey and existing structures including all utilities and easements. Verify locations by field measurements prior to construction.

1.4 Warranty

A. The manufacturer shall provide a 10-year non-prorated warranty on the shade fabric and Teflon stitching against cracks, tears, material breakdown or significant fading as a direct result of ultraviolet exposure with the exception of Red, which carries a 3-year limited warranty. Shade fabrics over 40' in length carry a limited 5-year non-prorated warranty.
B. The manufacturer shall provide a 20-year non-prorated warranty against failure due to rust- through corrosion on steel frames.
C. The manufacturer shall provide a 1-year warranty on all moving parts, surface coat finish, or any other product or part not covered by the above warranties.

PART 2 PRODUCTS

2.1 Related Documents

Pre-Engineered Package: the proposed structure(s) by manufacturer or approved equal shall be modular and prefabricated, and include the structural steel frame, fabric roof, steel cables, all fasteners, and detailed installation instructions of structure(s) including foundations. The proposed structure(s) also need to include engineering drawings and calculations.

A. Acceptable Manufacturer: Modern Shade LLC,
4213 Felter Lane, Austin, TX. 78744
Toll Free: 1.877.385.3444
Main: 512.385.4100
Fax: 512.385.4103
Email: sales@modernshadellc.com
Local Rep: Play By Design, Inc.; 2929 E. 56th Pl., Tulsa, OK. 74105
Julie Heil: 918-550-1829; julie@performancedesignquality.com

B. The shade structure shall conform to the current adopted version of the International Building Code including local agency amendments and additions to the code.

C. All shade structures shall be engineered and designed to meet a minimum.
   - 90 mph nominal wind load (or 115 mph ultimate wind speed) with fabric attached
   - 150 mph nominal wind load without fabric (steel frame only)
   - 5 psf snow load

2.2 Materials Framing

A. Utilized per manufacturer's specifications and sealed engineering drawings
B. Rolled steel plates, shapes, and bars shall be structural quality carbon steel complying with ASTM A-36, except where engineer drawings specify otherwise.
C. Structural steel tubular products shall be cold-formed structural quality carbon steel complying with ASTM A-500, Grade B except where engineer drawings specify otherwise.
D. Galvanized tubing material shall be corrosion resistant using patented Flo-Coat TM with polymer coating applied to seal and protect.
E. Reinforcement steel as required or designed per detailed specifications excepted by Structural Engineer.
F. All structural steel shall be fabricated and erected in accordance by and as recommended by the AISC Manual of Steel Construction.

2.3 Powder Coat Finish

A. All Structural Steel shall be blasted and treated with de-greaser to remove any unwanted substances.
B. Pre-heated to remove any welding gas impurities and moisture.
C. All Structural Steel (galvanized and non-galvanized) including welds to be primed with Zinc rich primer.
D. Powder coated in the approved color by electro-statically applying and backing at 400 degrees Fahrenheit to a minimum thickness between 4.0 – 6.0 mil for a consistent glossy finish.
E. TGIC polyester powder shall meet or exceed ASTM standards for adhesion, hardness, impact, flexibility, over bake resistance, and sea spray resistance.

2.4 Hot-Dip Galvanized Finish

A. All HDG work shall be carried out according to this procedure and the following references: ASTM A123, ASTM B6, ASTM A780, ASTM A142/A143M, ASTM A153/A153M, ASTM A384/A384M, ASTM A385/A385M
B. Fabricated steel shall be dipped in a Sodium Hydroxide bath to remove organic contaminants, heated (approx 160F) at approximately 10-14% concentration. Water immersion rinse to remove loose particles, oils, and residual caustic solution.
C. Hydrochloric acid immersion cleaning to remove rust and mill scales. Water immersion rinse to remove residual acid solution.
D. Material to air dry after flux treatment prior to entering the kettle
E. Material dipped in Zinc bath at approximately 840Fcontaining Special High Grade Zinc meeting ASTM B6 spec to prevent corrosion. Surface is skimmed prior to material being slowly immersed into bath, temperature equalizes for proper reaction, material slowly removed at an incline for draining purposes. Dipping time varies depending on material type and size. Zinc coating weight varies depending on material type, size, and steel chemistry meeting minimum requirement of ASTM A123 specification.
F. Material is hand cleaned removing drips, projections, and other impurities per requirements of ASTM A123 specification.
G. Coating thickness inspection taken with calibrated millage gauge per ASTM A123 specification requirement.
H. Areas subject to renovation shall be repaired per the ASTM A780 specification. If an area is repairable per the spec, the steel surface is prepped with power tools sanding away oxidized areas to bare metal. ZRC Galvilite Galvanizing Repair Compound (paint containing zinc dust) is then brushed on to the bare metal.

2.5 Shade Fabric and Thread

A. High-density polyethylene woven architectural fabric, 85% - 98.8% Ultraviolet Resistant.
B. ALL fabric seams shall be sewn with minimum 2000 Denier PTFE thread utilizing the lock

stich sewing method. PTFE Thread will not lose any significant strength due to UV or chemical exposure. Chain stitching of any kind shall not be used.

C. Water runoff: Runoff Roof Angle 75% - 14 degrees
D. Provides an average of 85% or greater shade covered area.
E. Temperature stability at a maximum +176degrees/-13degrees minimum.
F. Utilized in accordance to manufacturer's shade cloth specifications product data, installation instructions use limitations and recommendations for the entire structure, including both published data and specified data prepared for this project.
G. Approved Fire Rating as a result of the ASTM E-84 (Class A). Also available upon request substitute fabric with extra fire retardant to pass California Fire Marshall and NFPA 701 Test Method 1 & 2.
H. Fabric shall be lead free.
I. Fabric cable pockets are double folded to provide extra reinforcement.
J. Fabric corners shall be reinforced with minimum 3" internal seat belt webbing that connects each cable pocket opening in semi-arc pattern with cross section of webbing connecting to corner attachment. Standard and Super Structure Hips shall have a stainless-steel plate sewn into internal webbing pockets at each corner to prevent fabric from ripping out.

2.6 Welding

A. All welds performed by AWS certified welder.
B. Welding performed in accordance with the latest edition of the American Welding Society Structural Welding Code AWS D1.1
C. Steel shall be welded as to develop the maximum strength at connections.
D. According to selection, Engineer drawings shall specify particular sizes and types of welds.
E. Welds shall be visually inspected for soundness, smooth, even contour and freedom from undercutting and arc strikes. Minimum fillet welds 3/16" on small upper frames and 1/4" everywhere else. Welds shall be continuous.
F. Standard practice welding performed using 71A75 Duel Shielded Flux Core .045 wire.

2.7 Foundations

A. The foundation design shall be based on previous knowledge of soil conditions in the vicinity or existing surfaces and building codes and structural load requirements in accordance with American Concrete Institute, ACI 318-05.
B. Existing foundation conditions shall be examined and surveyed to assure support for the structure.

2.8 Concrete Piers

A. Concrete work shall be performed when outdoor temperatures are above 32 degrees Fahrenheit and conditions are relatively dry.
B. Utilizing a minimum concrete strength of 2500 psi high strength Ready Mix concrete with an approximate finished weight of 145 Lbs. per Cu. Ft.
C. Reinforcing steel shall be detailed, fabricated, and placed in accordance with the latest ACI Detailing Manual and Manual of Standard Practice.
D. Concrete shall be formed as to direct drainage from the site to prevent corrosion or rust in embedded post.

2.9 Base Plate and Anchors

A. Steel plates shall be continually welded at the base of the post and bolted to the foundations.
B. All steel plates shall be carbon steel connections shall conform to ASTM A-325.
C. All anchor bolts and threaded rod shall be ASTM F-1554 unless otherwise specified by the engineer of record.
D. Installation, design, and structural specifications shall be in accordance with ASTM Structural Specifications for Bolted Connections.
E. Anchoring methods shall be in conjunction with all related selections of this specification.

2.10 Fasteners Bolted Connections

A. All nuts, bolts, anchor bolts, lock washers, cable locks, and threaded rods shall be medium carbon steel, stainless steel, or galvanized corrosion resistant: size and type to suit applications and meet requirements.
B. Carbon steel connections shall conform to ASTM A-325 steel.
C. Bolted connections shall be in conjunction with all related selections of this specification.
D. All bolted connections shall be installed in accordance with Structural Specifications for Bolted Connections utilizing ASTM A-325 or ASTM A-490 Bolts.

2.11 Steel Aircraft Cables and Tensioning

A. Standard min. 1/4" galvanized steel aircraft cable shall be utilized with a minimum tensile strength of 7,000 lbs. on standard structures and min. 3/8" galvanized steel cable with a minimum tensile strength of 14,400 lbs. on super structure sizes unless otherwise specified by the engineer of record.
B. **MaxTension™**, our proprietary pulley system, is designed to keep the top fabric tight and firm.
C. Smaller Structures under 30 ft. will have a single cable pass through the **MaxTension™** pulley system at each corner in order to achieve required tension.

D. Structures over 30 ft. require an independent cable on each side of the structure that passes through the **MaxTension™** pulley system in order to achieve required tension.
E. Sail Structures require an independent cable on each side of the fabric membrane sail which terminate into a delta. Cables must arrive from the factory with only one end terminated and the opposite "live" end open for required tensioning adjustments in the field. Unlike single point tension systems, our multi-point tension system allows each side to achieve maximum tension specific to the length of each span. Deltas shall be sewn into each attachment point using 3" minimum internal seat belt webbing for added strength. Fabric corners sandwiched between steel connector plates and squeezed together with bolts are not acceptable. Deltas attach to shackles and turnbuckles in order to achieve required tension and for easy removal and reattachment of the fabric. Turnbuckles may not be required on small sails.

PART 3 EXECUTION

3.1 Preparation

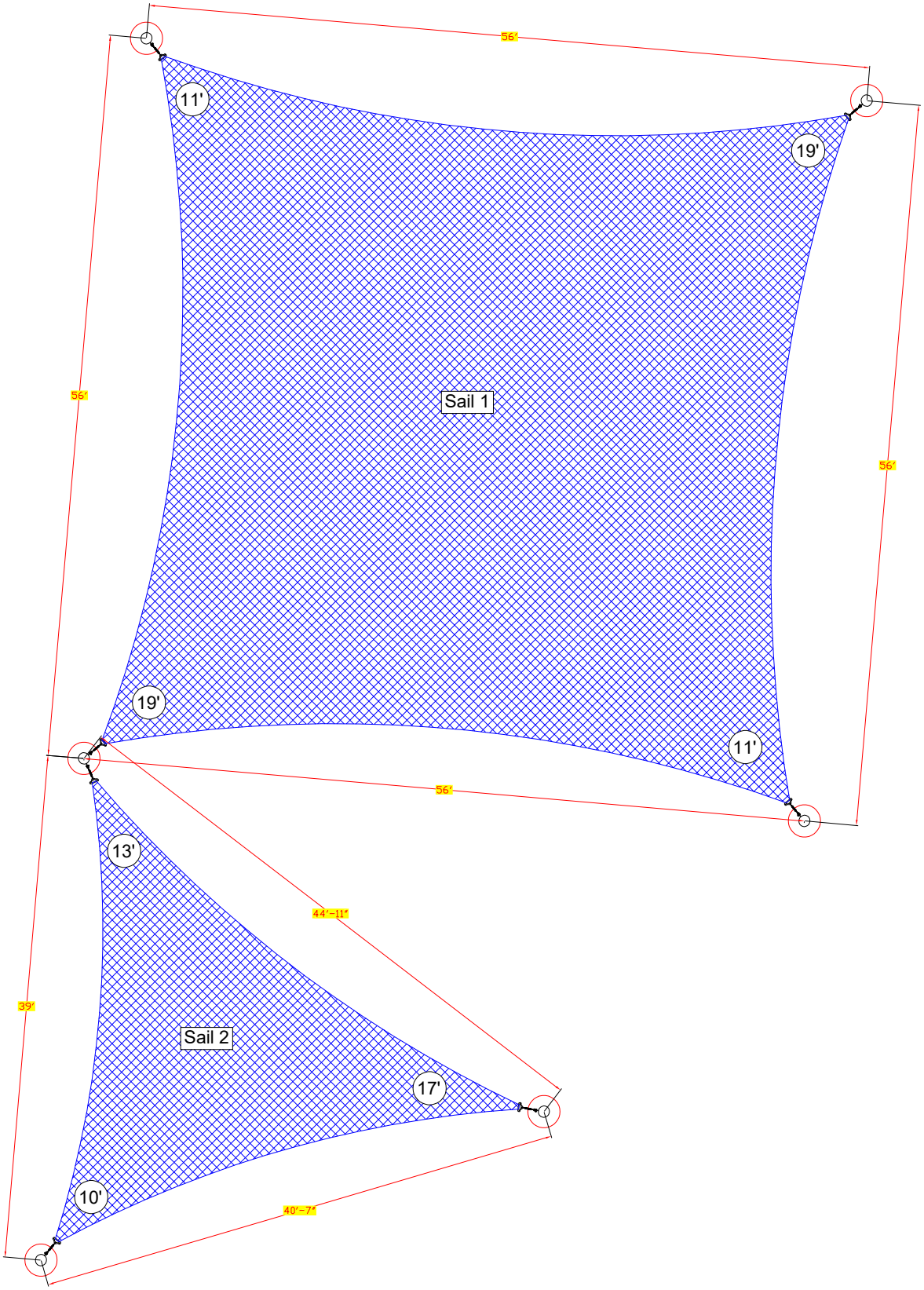
A. Prepare surfaces according to the manufacturers' guidelines.
B. Locate piers according to the plans provided by manufacturer.

3.2 Installation

A. Install in accordance with manufacturer's guidelines.
B. Place on prepared concrete foundations or footings as specified.
C. Anchor securely in place.
D. Must apply silicone to all slip fit connections to avoid rust.

3.3 Protection

A. Protect installed products until project is completed.
B. Touch-up, repair or replace any products that might have been damaged during installation before substantial completion.



IMPORTANT

The footing sizes provided by Modern Shade LLC are estimated only and may change after actual engineering is performed on footings due to local conditions and codes.

Modern Shade LLC is not responsible if actual engineered footings differ from the estimates provided or if any additional costs for footing installation are incurred by customer.

**** PRELIMINARY - NOT FOR CONSTRUCTION ****

**** DIMENSIONS BASED ON PDF OVERLAY ****

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550114
PROJECT

A0
SHEET

Bryce Davis Park
Fayetteville, AR

Modern Shade

Revision	Description	Date	Drawn
6			
5			
4			
3			
2			
1			
0	For Approval	01/23/25	HB

Attachment F

2024 COMMERCIAL PLAYGROUND EQUIPMENT SPECIFICATIONS

PLAYCRAFT® SYSTEMS

A PLAYCORE Company

123 North Valley Drive - Grants Pass, OR 97526
Tel: **1-541-955-9199** Fax: **1-541-955-6130**

2024 COMMERCIAL PLAYGROUND EQUIPMENT SPECIFICATIONS

Playcraft Systems' commitment to craftmanship and commitment extends throughout all product offerings. Utilizing superior materials and industry leading manufacturing techniques, our Round 5, Round 3.5, Revolution, and Freestanding Events are tested and validated to be in conformance with ASTM F1487 and CSA Z614-14 Standards.

GENERAL SPECIFICATIONS (Playground Equipment)

Hardware/Fasteners all metal hardware shall be stainless steel, zinc plated, or galvanized as required to resist rust and corrosion. Pinned tamper resistant hardware with thread lock patch shall be used for all principal connections. Hardware Caps shall be a UV-Stabilized, polypropylene based plastic consisting of two parts, a base and crown. Specified hardware is attached through the base to post support and finished with a crown to form a smooth tamper-resistant attachment point. All hardware shall be shipped in individual component-specific hardware packages.

Rotationally Molded Polyethylene shall be manufactured from hot compounded linear low-density polyethylene resins. Hot compounded polyethylene resins include UV inhibitors and anti-static additives providing superior performance, durability, fade resistance (tested to a long term UV16 rating), and a more uniform, colorfast appearance and thickness. All rotationally molded, low-density polyethylene plastic components shall be available in a variety of colors and have an average wall thickness of .250". All components shall comply with ASTM D 638-02 (minimum 2500 PSI tensile strength), ASTM D-790 (Flex Modulus Test), ASTM D-648 (Heat Distortion Temperature Test), ARM-STD (Low Temperature Impact Test).

High Density Polyethylene - (HDPE) Sheet Stock Parts All HDPE components shall be manufactured from 1", 3/4", and 1/2" thick, high-density, hot extruded polyethylene sheet plastic specially formulated for optimum UV stability and color retention. Components shall be cut or machined to size with routed design elements and available in a variety of solid or dual-colors. All HDPE components shall comply with ASTM D1505 (density of .955 g/cc), ASTM D638 (tensile strength of 4000 PSI), D790 (Flex Modulus Test), and D648 (Heat Distortion Temperature Test).

Powder Coating all steel, aluminum, and die cast components shall be thoroughly prepared prior to receiving final powder coat finish. Preparation includes quality inspection of every component and connection, grinding and hand filing of each weld to remove excess material and spatter, cleansing in a multi-step process which includes a hot phosphatizing bath and rinse followed by a non-chrome seal for added corrosion resistance. Components shall be preheated and fully dried prior to receiving a 3-5 mil thick electrostatically applied epoxy primer coating (covering entire component - not just welds) for superior powder adhesion and corrosion resistance. An 8-11 mil thick architectural grade Super Durable polyester TGIC powder shall be electrostatically applied and baked achieving a thickness of 11-16 mils. All polyester powder coatings shall comply with ASTM standards: D-522 (Flexibility Mandrel Test), D-2794 (Impact Resistance Test), B-117 (Salt Spray Weatherability Test), D-3363 (Pencil Hardness Test), D-2454 (Overbake Resistance Test), D-3359B (Adhesion Crosshatching Test). Powder coatings are available in a variety of colors.

PlayTuff™ Coating shall be applied to specific metal components with a 120-160 mil thickness. Prior to PlayTuff™ coating, components shall be thoroughly prepared and cleaned in a multi-stage phosphatizing wash, followed by a uniform application of Playcraft formulated primer. Upon preheating to a minimum of 350 degrees, components shall be dipped in a UV stabilized Polyvinyl Chloride liquid followed by a 400 degree salt cured bath. All Play-Tuff™ Coated Parts shall comply with ASTM D-624 (Tear Strength Test), ASTM D-412 (Tensile Strength Test). PlayTuff™ Coatings shall provide a slip resistant surface and are available a variety of colors.

Tubular Steel and Metal Components shall be heavy-gauge and pre-galvanized including internal corrosion protection. Tube shall be formed and/or fabricated into required components and finished as specified. All tubular steel components shall comply with ASTM standards: A-500/A-513 (Steel Tubing). Prior to receiving Powder Coating or PlayTuff™ Coating, all metal components shall be zinc plated, cadmium plated, or galvanized to resist rust and corrosion.

Steel Walls shall be fabricated using 1.029" O.D. 14 gauge tube steel welded vertically on 4" centers between vertical 1.315" O.D. 12 gauge tube steel balusters and horizontal 1.315" O.D. 12 gauge tube steel rails, top & bottom. Brackets may be welded to the ends of each rail and between the verticals to provide attachment points. Walls shall be finished with a multi-stage baked-on powder coat finish.

Vertical Deck Fillers shall be designed to eliminate the crawl space between decks at different elevations. All deck in-fills shall be made from 12 gauge sheet steel and powder coated after fabrication.

Punched Steel Surfaces steel decks, bridges, ramps, and steps shall be constructed using heavy duty, single piece 12-gauge low carbon sheet steel which shall be formed and fabricated into required designs. Below surface supporting gussets shall be fabricated utilizing 12 gauge sheet steel to insure structural integrity. All punched steel standing surfaces and steps shall receive slip-resistant PlayTuff™ coating with a thickness of 120-160 mils and a uniform 5/16" diameter hole pattern. Deck faces shall have up to 6 attachment slots to accommodate face mounting components. There shall be no unsupported area larger than 1.5 square feet on all deck surfaces. All sheet steel shall conform to ASTM A1011-02.

Post Caps shall be precision die-cast from high strength A-369.1 aluminum alloy and powder coated as specified. Post caps to include Playcraft Systems' exclusive self-sealing design with an overlapping lip (Factory installed and secured in place)

King Collars™ shall be precision die-cast from high strength A-369.1 aluminum alloy and powder coated as specified. King Collars™ to include Playcraft Systems' exclusive dove tail design and face to face connection eliminating string entanglements and extra hardware. King Collars™ shall exhibit a tensile strength of 47,000 PSI and a yield strength of 28,000 PSI.

Climbing Grips shall be precision die-cast from high strength A-369.1 aluminum alloy and coated in a functionalized polyethylene copolymer thermoplastic coating. All thermoplastic coatings shall comply with ASTM standards: ASTM B 2794 (Impact Resistance Test), B-117 (Salt Spray Weatherability Test), ASTM D-638 (Tensile Strength Test). A-369.1 aluminum alloy shall exhibit a tensile strength of 47,000 PSI and a yield strength of 28,000 PSI.

Chain Swings, Chain Nets, Chain Walks and Suspension Bridges shall be 4/0 and/or 5/0 galvanized steel. Chains shall be coated in PlayTuff™ coating coated as required.

Steel-reinforced ropes shall be manufactured with tightly woven, polyester-wrapped, six-stranded galvanized steel cable. Ropes are extremely durable, vandal and abrasion resistant, color stable, and available in a variety of colors.

ROUND-5 PLAY SYSTEM - GENERAL SPECIFICATIONS:

Aluminum Post Mechanical Properties:	
Yield Strength (min):	35,000 PSI
Tensile Strength (min):	38,000 PSI
% Elongation in 2 Inches:	10
Modulus of Elasticity:	10 x 10^6 PSI

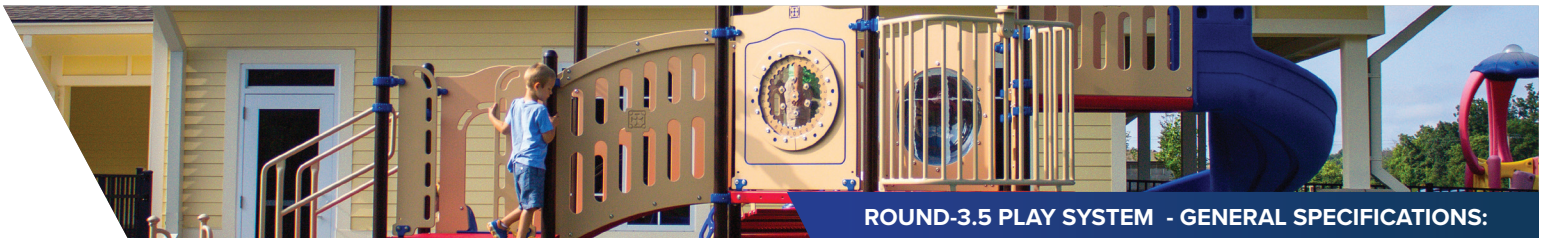
Round-5 Aluminum Posts shall be constructed of 5" O.D. round 6061-T6 aluminum tubing with a .125" wall thickness. Each post shall be thoroughly prepared prior to receiving final powder coat finish. All post shall include a self-sealing post cap. Post bases shall include a footing pin for securing posts in cement and shall include a minimum loose fill resilient surfacing sticker to be field installed as required. All aluminum posts shall exhibit the following mechanical properties: Tensile Strength of 38,000 PSI (minimum), Yield Strength of 35,000 PSI (minimum). All posts shall be available in a variety of colors.

Steel Post Mechanical Properties:	
Yield Strength (min):	50,000 PSI
Tensile Strength (min):	55,000 PSI
% Elongation in 2 Inches:	25
Modulus of Elasticity:	30 x 10^6 PSI

Round-5 Steel Posts shall be constructed of 5" O.D. round 11-gauge steel tubing and shall receive a galvanized Flo-Coat inside and out after rolling. Each post shall be thoroughly prepared prior to receiving final powder coat finish. All posts shall include a self-sealing post cap. Post bases shall include a footing pin for securing posts in cement and shall include a minimum loose fill resilient surfacing sticker to be field installed as required. All steel posts shall exhibit the following mechanical properties: Tensile Strength of 55,000 PSI (minimum), Yield Strength of 50,000 PSI (minimum). All posts shall be available in a variety of colors.

Round-5 Attachment Fittings (King Collars™ and Sockets) shall be two-part and precision die-cast from high strength 369.1 aluminum alloy with an ultimate tensile strength of 47,000 PSI and a yield strength of 28,000 PSI. Separate sockets when combined with collars form a unique and versatile method of component-to-post attachment, allowing multiple component attachment points for a cleaner, more balanced design. King Collars™ and Sockets shall be powder coated and available in a variety of colors.

Round-5 Play System Footing Requirements shall vary depending on deck heights, components, and events attached to the structure. Most Round-5 components and posts are available for surface or in-ground mounting.



ROUND-3.5 PLAY SYSTEM - GENERAL SPECIFICATIONS:

Aluminum Post Mechanical Properties:	
Yield Strength (min):	35,000 PSI
Tensile Strength (min):	38,000 PSI
% Elongation in 2 Inches:	10
Modulus of Elasticity:	10 x 10^6 PSI

Round-3.5 Aluminum Posts shall be constructed of 3-1/2" O.D. round 6061-T6 aluminum tubing with a .125" wall thickness. Each post shall be thoroughly prepared prior to receiving final powder coat finish. All post shall include a self-sealing post cap. Post bases shall include a footing pin for securing posts in cement and shall include a minimum loose fill resilient surfacing sticker to be field installed as required. All aluminum posts shall exhibit the following mechanical properties: Tensile Strength of 38,000 PSI (minimum), Yield Strength of 35,000 PSI (minimum). All posts shall be available in a variety of colors.

Steel Post Mechanical Properties:	
Yield Strength (min):	50,000 PSI
Tensile Strength (min):	55,000 PSI
% Elongation in 2 Inches:	25
Modulus of Elasticity:	30 x 10^6 PSI

Round-3.5 Steel Posts shall be constructed of 3-1/2" O.D. round 11-gauge steel tubing and shall receive a galvanized Flo-Coat inside and out after rolling. Each post shall be thoroughly prepared prior to receiving final powder coat finish. All posts shall include a self-sealing post cap. Post bases shall include a footing pin for securing posts in cement and shall include a minimum loose fill resilient surfacing sticker to be field installed as required. All steel posts shall exhibit the following mechanical properties: Tensile Strength of 55,000 PSI (minimum), Yield Strength of 50,000 PSI (minimum). All posts shall be available in a variety of colors.

Round-3.5 Attachment Fittings (King Collars™ and Sockets) shall be two-part and precision die-cast from high strength 369.1 aluminum alloy with an ultimate tensile strength of 47,000 PSI and a yield strength of 28,000 PSI. Separate sockets when combined with collars form a unique and versatile method of component-to-post attachment, allowing multiple component attachment points for a cleaner, more balanced design. King Collars™ and Sockets shall be powder coated and available in a variety of colors.

Round-3.5 Play System Footing Requirements shall vary depending on deck heights, components, and events attached to the structure. Most Round-3.5 components and posts are available for surface or in-ground mounting.

REVOLUTION SYSTEM - GENERAL SPECIFICATIONS:

Revolution Direct-Bolt Double-Wall Post System (Patent Pending). shall be constructed utilizing (4) primary components: Double-wall mounting sleeves, Core post, Top cap, and Bottom cap. Each mounting sleeve shall be precision die-cast from a high-strength A369.1 aluminum alloy specially formulated to withstand corrosion in harsh climates/environments. Die Cast Sleeves shall be 5” diameter and individually finished with a smooth machined surface. All mounting sleeves shall include factory drilled and threaded component attachment holes. Nylon Plugs shall be included for attachment holes not utilized during play structure assembly. Core post shall be constructed of 3-1/2" O.D. 11-gauge galvanized steel tubing exhibiting the following mechanical properties: Tensile Strength of 55,000 PSI and Yield Strength of 50,000 PSI. Top cap shall be precision die-cast from a high-strength A-369.1 aluminum alloy specially formulated to withstand corrosion in harsh climates/environments with a powder coated as specified. Post caps to include Playcraft Systems’ exclusive self-sealing design with an overlapping lip and are factory installed and secured in place with a self-sealing rivet. Post caps are available in a variety of colors. Bottom Cap shall be precision die-cast from a high-strength A-369.1 aluminum alloy specially formulated to withstand corrosion in harsh climates/environments with a powder coated as specified and factory installed.

Steel Post Mechanical Properties:	
Yield Strength (min):	50,000 PSI
Tensile Strength (min):	55,000 PSI
% Elongation in 2 Inches:	25
Modulus of Elasticity:	30 x 10^6 PSI

Tubular Steel and Metal Components shall be heavy-gauge and pre-galvanized including internal corrosion protection. Tube shall be formed and/or fabricated into required components and finished as specified. All tubular steel components shall comply with ASTM standards: A-500/A-513 (Steel Tubing). Prior to receiving Powder Coating or PlayTuff™ Coating, all metal components shall be zinc plated, cadmium plated, or galvanized to resist rust and corrosion.

Revolution Play System Footing Requirements shall vary depending on post heights, components, and events attached to the structure. Most Revolution components and posts are available for surface or in-ground mounting.

Bryce Davis Park

TOP VIEW

ADA ACCESSIBILITY GUIDELINES - ADAAG CONFORMANCE

ELEVATED	ACCESSIBLE	RAMP ACCESSIBLE	GROUND	TYPES
0	0/0	0/0	5/0	1/0

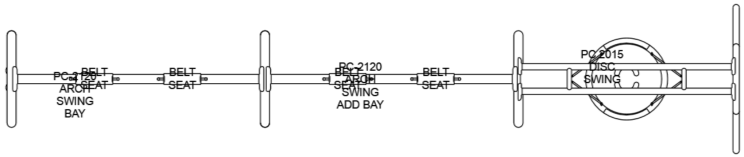
CHILD CAPACITY 8 **MAX FALL HEIGHT** 96

FOR KIDS AGES 5-12

GENERAL NOTES

This conceptual plan is based on information provided prior to construction. Detailed site information, including the following, should be obtained, evaluated, and utilized in the final project design. Exact site dimensions, topography, existing utilities, soil conditions and drainage solutions.

WARNING: Accessible safety surfacing material is required beneath and around this equipment that has a critical height value (Fall Height) appropriate for the highest accessible part of this equipment. Refer to the CPSC'S Handbook For Public Playground Safety, Section 4: Surfacing.



STRUCTURE # swings
PROJECT # 1
DATE 1/23/2025

The PlayWell Group, Inc.

MIN. USE ZONE 46' x 30' (13.884m x 9.144m)

PLAYCRAFT SYSTEMS
A PLAYCORE Company

Bryce Davis Park

TOP VIEW

ADA ACCESSIBILITY GUIDELINES - ADAAG CONFORMANCE

ELEVATED	ACCESSIBLE	RAMP ACCESSIBLE	GROUND	TYPES
0	0/0	0/0	2/0	1/0

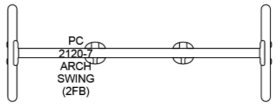
CHILD CAPACITY 2 **MAX FALL HEIGHT** 84

FOR KIDS
AGES
2-5

GENERAL NOTES

This conceptual plan is based on information provided prior to construction. Detailed site information, including the following, should be obtained, evaluated, and utilized in the final project design. Exact site dimensions, topography, existing utilities, soil conditions and drainage solutions.

WARNING: Accessible safety surfacing material is required beneath and around this equipment that has a critical height value (Fall Height) appropriate for the highest accessible part of this equipment. Refer to the CPSC'S Handbook For Public Playground Safety, Section 4: Surfacing.



STRUCTURE # swings _E3981
PROJECT # 1
DATE 1/23/2025

The PlayWell Group, Inc.

MIN. USE ZONE 25' x 18' (7.366m x 5.486m)

PLAYCRAFT SYSTEMS
A PLAYCORE Company

Bryce Davis Park

TOP VIEW (Footings)

ADA ACCESSIBILITY GUIDELINES - ADAAG CONFORMANCE

ELEVATED	ACCESSIBLE	RAMP ACCESSIBLE	GROUND	TYPES
0	0/0	0/0	5/0	1/0

CHILD CAPACITY 8 **MAX FALL HEIGHT** 96

FOR KIDS AGES 5-12

MOUNT LOCATIONS TABLE			
#	TYPE	SIZE/DEPTH	LOCATIONS
A	PostFooting	W:18" x L:18" x D:30"	8

MOUNT ORDINATE TABLE			
#	X	Y	DIAG
1	0'-0"	0'-0"	0'-0"
2	0'-0"	-4'-0"	4'-0"
3	11'-7"	0'-0"	11'-7"
4	11'-7"	-4'-0"	12'-3"
5	23'-2"	0'-0"	23'-2"
6	23'-2"	-4'-0"	23'-6"
7	33'-1"	1'-3"	33'-2"
8	33'-1"	-5'-3"	33'-6"

STRUCTURE # swings
PROJECT # 1
DATE 1/23/2025

The PlayWell Group, Inc.

MIN. USE ZONE 46' x 30' (13.884m x 9.144m)

PLAYCRAFT SYSTEMS
A PLAYCORE Company

Bryce Davis Park

TOP VIEW (Footings)

ADA ACCESSIBILITY GUIDELINES - ADAAG CONFORMANCE

ELEVATED	ACCESSIBLE	RAMP ACCESSIBLE	GROUND	TYPES
0	0/0	0/0	2/0	1/0

CHILD CAPACITY 2 **MAX FALL HEIGHT** 84

FOR KIDS AGES 2-5

MOUNT LOCATIONS TABLE			
#	TYPE	SIZE/DEPTH	LOCATIONS
A	PostFooting	W:18" x L:18" x D:30"	4

MOUNT ORDINATE TABLE			
#	X	Y	DIAG
1	0'-0"	0'-0"	0'-0"
2	0'-0"	-4'-0"	4'-0"
3	11'-7"	0'-0"	11'-7"
4	11'-7"	-4'-0"	12'-3"

STRUCTURE # swings _E3981
PROJECT # 1
DATE 1/23/2025

The PlayWell Group, Inc.

MIN. USE ZONE 25' x 18' (7.366m x 5.486m)

PLAYCRAFT SYSTEMS
A PLAYCORE Company

Bryce Davis Park
SITE PLAN

ADA ACCESSIBILITY GUIDELINES - ADAAG CONFORMANCE

ELEVATED	ACCESSIBLE	RAMP ACCESSIBLE	GROUND	TYPES
0	0/0	0/0	7/0	2/0

Mixed Types

FOR KIDS AGES [Mixed]

GENERAL NOTES

This Preliminary Site Plan is based on measurements that were provided in the initial planning phase. All dimensions must be verified prior to the submission of a purchase order. Playcraft Systems will not be held responsible for any discrepancies between actual dimensions and dimensions submitted in the planning phase.

The Minimum Use Zone for a play structure is based on the product design at the time of proposal. Components and structure designs may be subject to change which may affect dimensions. Therefore, before preparing the site, we strongly recommend obtaining final drawings from the factory (available after the order is placed and included in the Assembly Manual).

WARNING: Accessible safety surfacing material is required beneath and around this equipment that has a critical height value (Fall Height) appropriate for the highest accessible part of this equipment. Refer to the CPSC'S Handbook For Public Playground Safety, Section 4: Surfacing.

PROJECT # 1
DATE 1/23/2025

The PlayWell Group, Inc.

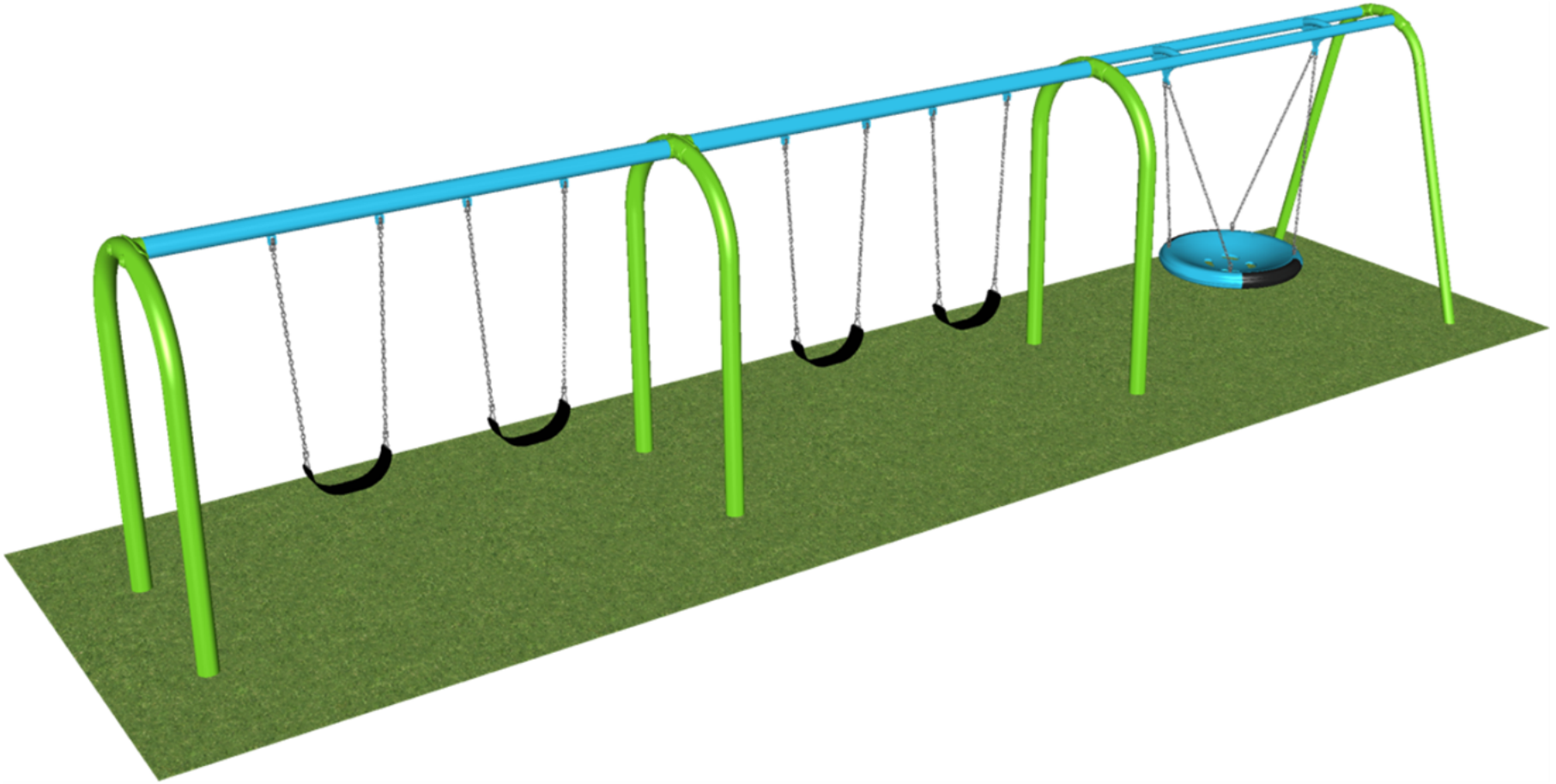
MIN. USE ZONE 82' x 25' (24.943m x 7.417m)

PLAYCRAFT SYSTEMS
A PLAYCORE Company

Bryce Davis Park

SW VIEW

FOR KIDS
AGES
5-12



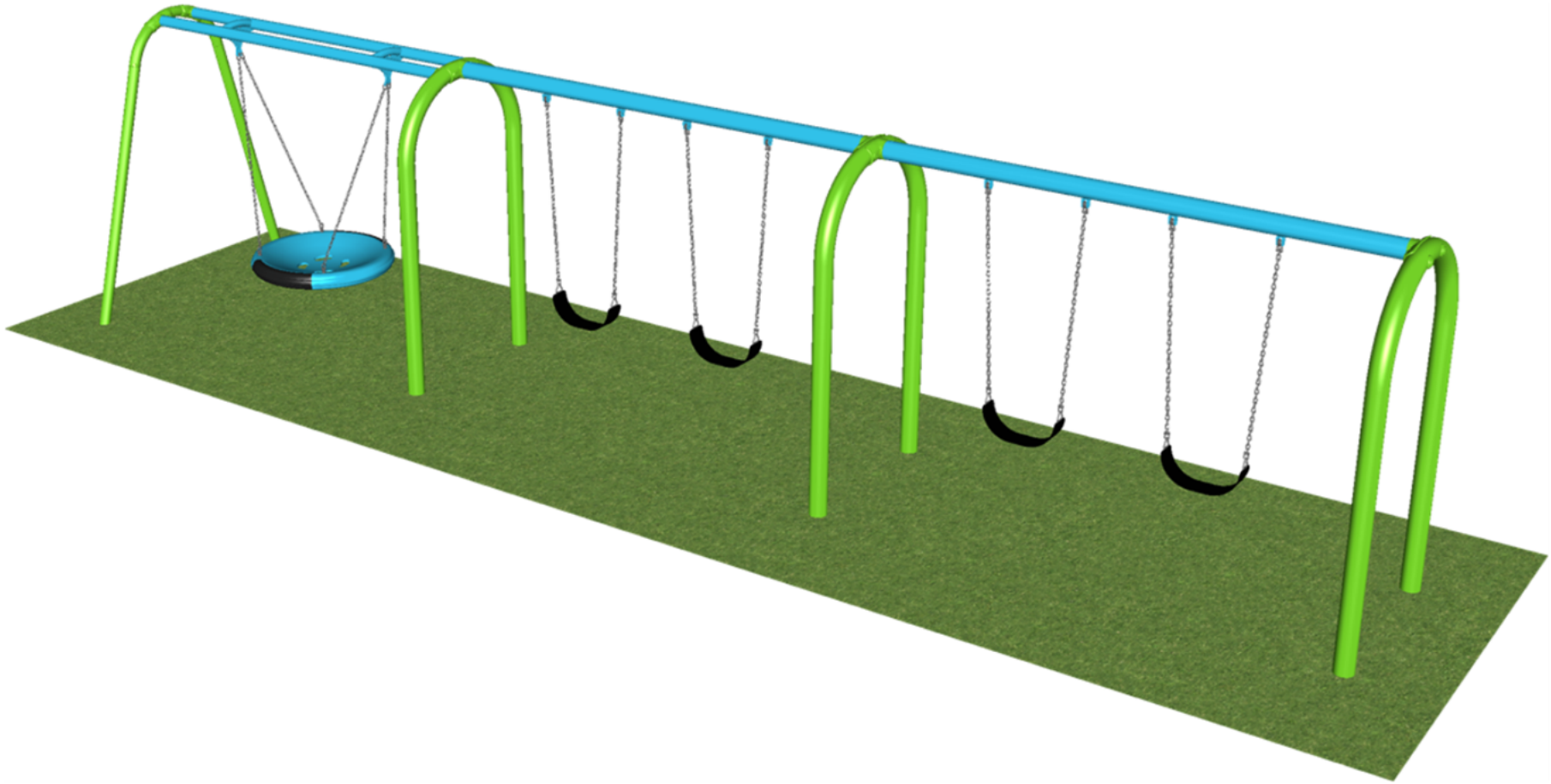
STRUCTURE # swings
PROJECT # 1
DATE 1/23/2025

PLAYCRAFT SYSTEMS
A PLAYCORE Company

Bryce Davis Park

NW VIEW

FOR KIDS
AGES
5-12

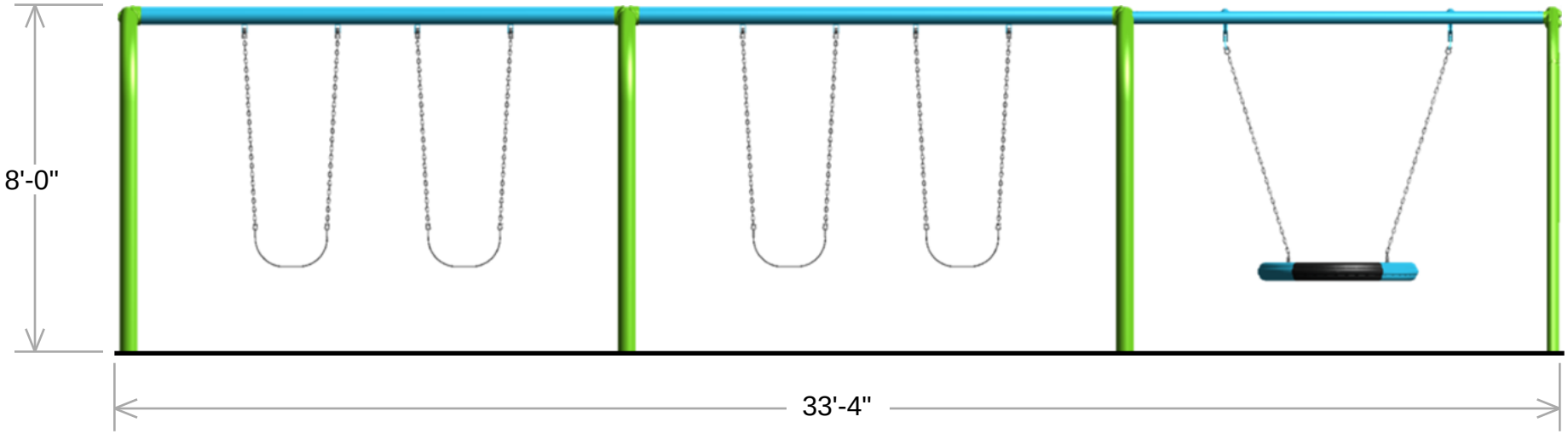


STRUCTURE # swings
PROJECT # 1
DATE 1/23/2025

PLAYCRAFT® SYSTEMS
A PLAYCORE Company

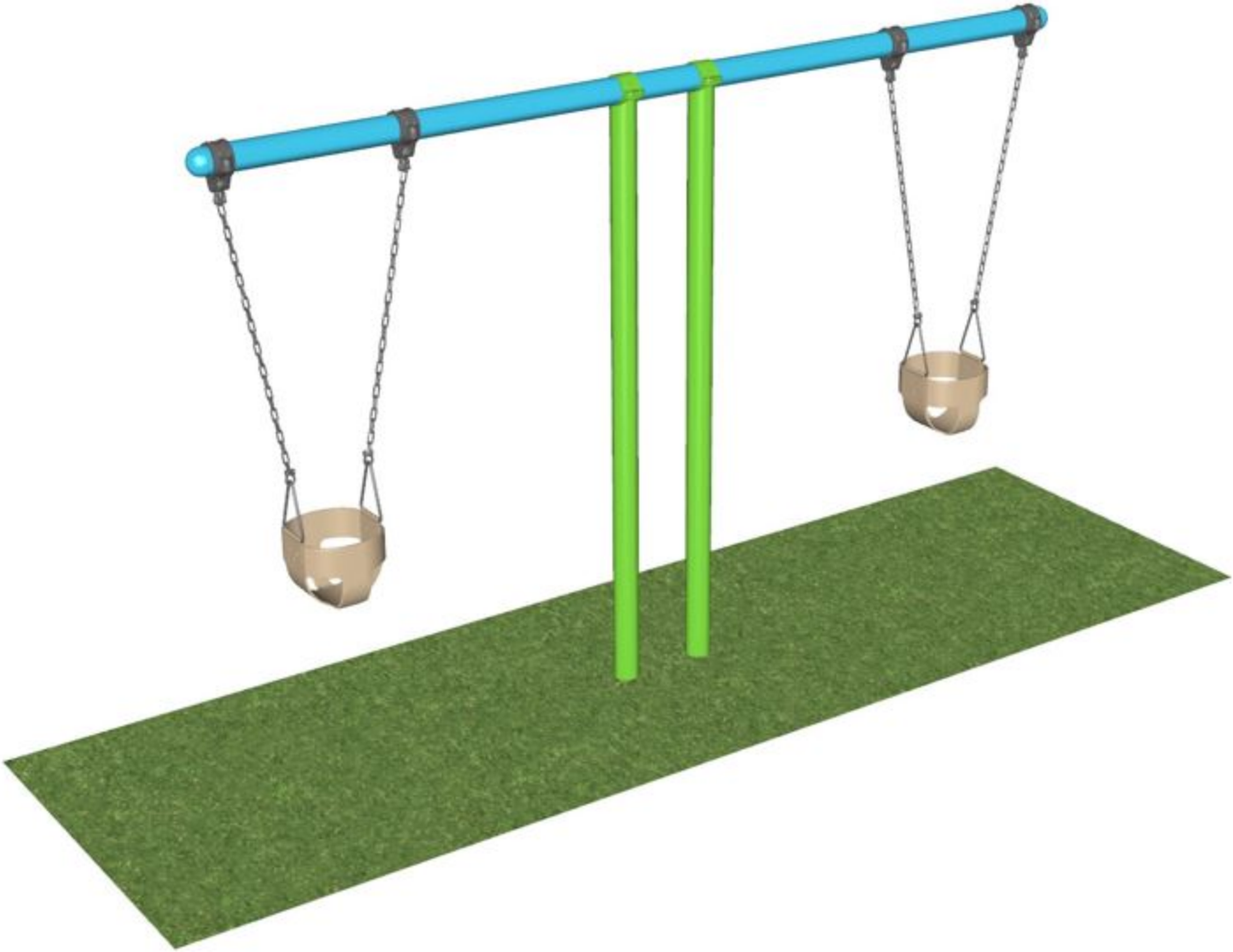
Bryce Davis Park
FRONT ELEVATION

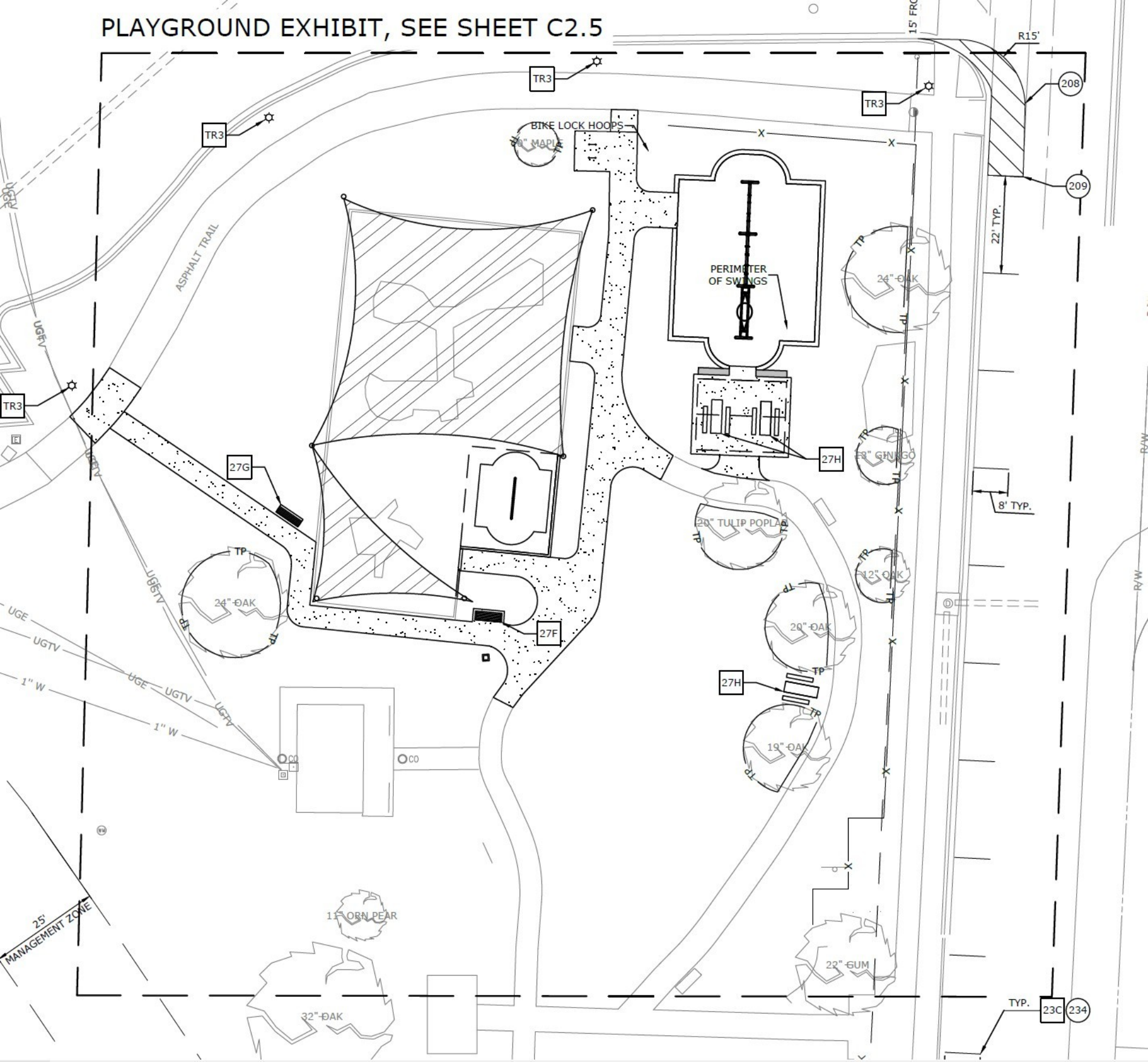
FOR KIDS
AGES
5-12



STRUCTURE # swings
PROJECT # 1
DATE 1/23/2025

PLAYCRAFT SYSTEMS
A PLAYCORE Company




PLAYGROUND EXHIBIT, SEE SHEET C2.5
TR3
TR3
TR3
TR3
BIKE LOCK HOOPS
30" MAPLE
ASPHALT TRAIL
PERIMETER OF SWINGS
24" OAK
27H
28" GINKGO
20" TULIP POPLAR
12" OAK
20" OAK
19" OAK
27G
27F
24" OAK
UGE
UGTV
1" W
CO
CO
11" ORN PEAR
32" OAK
22" GUM
25' MANAGEMENT ZONE
15' FRO
R15'
208
209
22' TYP.
8' TYP.
TYP.
23C
234
R/W
R/W

Bid 25-24, Addendum 2

Date: Thursday, February 13, 2025

To: All Prospective Vendors

From: Amanda Beilfuss – 479.575.8220 – abeilfuss@fayetteville-ar.gov

RE: Bid 25-24, Construction – Bryce Davis Park Improvements, Phase 1

This addendum is hereby made a part of the contract documents to the same extent as though it were originally included therein. Interested parties should indicate their receipt of same in the appropriate blank of the Bid. ***BIDDERS SHALL ACKNOWLEDGE THIS ADDENDUM ON THE DESIGNATED LOCATION ON THE BID FORM.***

1. Questions – The following questions have been received and answered by the responsible department:

    a. Question: Regarding Item 47; Should the pull boxes include concrete aprons?

        i. *Concrete aprons are not required for pull boxes.*

    b. Question: Regarding Item 47; The pole info provided in Addendum #1 specifies a direct burial pole but the "Pole Base Detail" on Sheet ES1 shows a concrete footing with anchor bolts. Can you provide clarification?

        i. *Answer: The "Pole Base Detail" on Sheet ES1 shall be disregarded. The correct pole base detail is attached (see Attachment A).*

    c. Question: Regarding Item 47; Sheet ES1 includes a "Receptacle Schedule". Do the poles include receptacles?

        i. *Answer: No, the light poles do not include receptacles. The "Receptacle Schedule" on Sheet ES1 shall be disregarded.*

    d. Question: Regarding Item 47; Can the existing electrical panels accommodate the new lighting circuits? Can pictures of the existing panels be provided?

        i. *Answer: Yes, there is room. It is a 200-amp panel (See Attachment B).*

2. Substitution Requests – The following are APPROVED substitution requests. Any requests submitted but not listed are either still under review or have not been approved as a substitution.

    a. Scenic Shelter Pavilion – Accepted (see Attachment C)
    b. RCP Shelter Pavilion – Accepted (see Attachment D)

Telecommunications Device for the Deaf TDD (479) 521-1316 113 West Mountain - Fayetteville, AR 72701

3. Addendum Attachments:

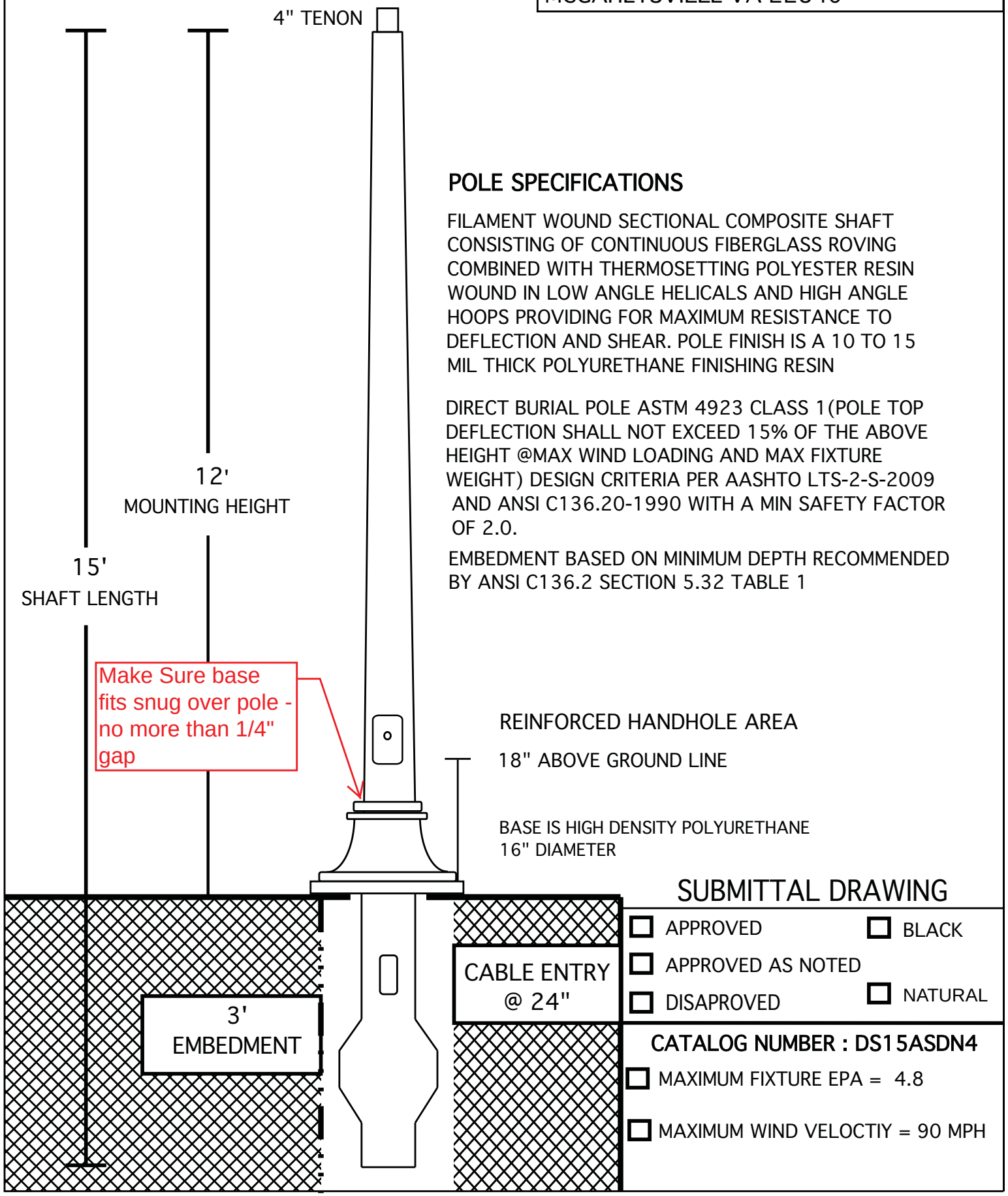
   a. Attachment A: Pole Base Detail
   b. Attachment B: Electrical Panel Detail
   c. Attachment C: Scenic Shelter Pavilion
   d. Attachment D: RCP Shelter Pavilion

Telecommunications Device for the Deaf TDD (479) 521-1316 113 West Mountain - Fayetteville, AR 72701

Attachment A

STANDARD DUTY POLE

ALLIANCE COMPOSITES INC.
PO BOX 24
MCGAHEYSVILLE VA 22840



POLE SPECIFICATIONS

FILAMENT WOUND SECTIONAL COMPOSITE SHAFT CONSISTING OF CONTINUOUS FIBERGLASS ROVING COMBINED WITH THERMOSETTING POLYESTER RESIN WOUND IN LOW ANGLE HELICALS AND HIGH ANGLE HOOPS PROVIDING FOR MAXIMUM RESISTANCE TO DEFLECTION AND SHEAR. POLE FINISH IS A 10 TO 15 MIL THICK POLYURETHANE FINISHING RESIN

DIRECT BURIAL POLE ASTM 4923 CLASS 1(POLE TOP DEFLECTION SHALL NOT EXCEED 15% OF THE ABOVE HEIGHT @MAX WIND LOADING AND MAX FIXTURE WEIGHT) DESIGN CRITERIA PER AASHTO LTS-2-S-2009 AND ANSI C136.20-1990 WITH A MIN SAFETY FACTOR OF 2.0.

EMBEDMENT BASED ON MINIMUM DEPTH RECOMMENDED BY ANSI C136.2 SECTION 5.32 TABLE 1

SUBMITTAL DRAWING

- ☐ APPROVED
- ☐ APPROVED AS NOTED
- ☐ DISAPROVED
- ☐ BLACK
- ☐ NATURAL

CATALOG NUMBER : DS15ASDN4

- ☐ MAXIMUM FIXTURE EPA = 4.8
- ☐ MAXIMUM WIND VELOCTIY = 90 MPH

Attachment B

DIVISION 107300

SPECIALTIES MANUFACTURERS OF PROTECTIVE COVERS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. **[Building type][size]** with [secondary roof] over [primary roof].

BUILDING STRUCTURE AS FURNISHED

1.2 REFERENCES

A. REFERENCE STANDARDS:
1. AISC - American Institute of Steel Construction Manual of Steel Construction.
2. ASTM - American Society for Testing and Materials.
3. AWS - American Welding Society.
4. LEED - Leadership in Energy and Environmental Design.
5. OSHA – Occupational Safety and Health Administration Steel Erection Standard 29 CFR 1926 Subpart R-Steel Erection.
6. PCI - Powder Coating Institute.
7. SSPC - Steel Structures Painting Council.

1.3 SUBMITTALS

A. GENERAL SUBMITTAL:
Submit [_____] sets of submittal drawings and [_____] sets of calc books, both signed and sealed by a Professional Engineer licensed in the State of [_____].

B. PRODUCT DESIGN LOADS:
The building shall be designed to meet the governing building code with the following design loads:
1. Building Code: [_____]
2. Ground Snow Load (Pg): [_____] pounds per square foot.
3. Basic Wind Speed (V): [_____] miles per hour.
4. Seismic Design: as required for site specific conditions.

C. SUBMITTAL REQUIREMENTS:
Calculations and Submittal drawings shall include, at a minimum:
1. Calculations:
   a. References to building codes and design manuals used for calculations.
   b. Identification of lateral force resisting system.
   c. Formulas used for determining snow, wind, and seismic loads to specific project location.
   d. Three dimensional modeling input, model geometry, and analysis results.
   e. Member design results and controlling load combinations.
   f. Connection design for structural bolts, welds, plate thicknesses, and anchorage to the foundation.
   g. Foundation designs must include the required combinations of gravity and lateral loads.
2. Submittal Drawings:
   a. Anchor bolt layout.
   b. Foundation design.
   c. Three dimensional views of frame.
   d. Member sizes and locations.
   e. Structural connection details, including bolt sizes and plate thicknesses.
   f. Roof trim and connection details.

D. FOUNDATION DESIGN:
1. The shelter shall be set on foundations designed by manufacturer.
2. Foundation materials shall be provided by contractor.
3. Owner shall provide manufacturer with complete information about the site including soil bearing capacity and lateral load capacity.

4. If soil data are not provided, foundations will be designed to the minimum values identified in the governing building code.

E. ANCHOR BOLTS:
Anchor bolts shall be provided by manufacturer.

1.4 QUALITY ASSURANCE

A. FABRICATOR QUALIFICATIONS:
1. Minimum of 10 years in the shelter construction industry.
2. Full time on-staff Quality Assurance Manager.
3. All welders AWS Certified.
4. Annual audit of Quality System by Third Party Agency.
5. Annual audit of powder coat finish system by Third Party Agency (PCI).

B. FABRICATOR CERTIFICATIONS:
1. City of Houston, TX Approved Steel Fabricator.
2. San Bernardino County, CA Approved Steel Fabricator.
3. Clark County, NV Approved Steel Fabricator.

1.5 STORAGE AND HANDLING

A. STORAGE AND HANDLING REQUIREMENTS:
1. Installer shall store product in a dry place or covered if out in the weather and keep product out of direct sun.
2. Installer shall store product elevated from soils to allow air circulation and to not introduce mold, fungi decay or insects to the product.
3. Product must be handled with protective straps or padded forks if lifting with mechanical equipment. Use of chain or cable to lift product into place will not be accepted.

1.6 FIELD OR SITE CONDITIONS

A. Foundations shall be at the same elevation unless specifically noted otherwise on the drawings.

1.7 MANUFACTURER WARRANTY

A. Shelter must have a 10-year limited warranty on steel frame members
B. Shelter must have a 10-year limited warranty on paint system.
C. Pass through warranty of metal roof manufacturer to be provided upon request.

PART 2 - PRODUCTS

2.1 SHELTER SYSTEM AND MATERIALS

A. MANUFACTURERS:
1. Acceptable Manufacturer: Cedar Forest Products, Scenic Shelters

B. SUBSTITUTION LIMITATIONS:
1. Substitutions must be approved a minimum of ten (10) days before bid. All approved manufacturers shall be notified in writing before the bid date and shall not be allowed to bid without written notification.
2. Alternate suppliers must meet the qualifications and provide proof of certifications listed under section 1.4 QUALITY ASSURANCE.
3. Alternate suppliers must provide an equivalent paint system to Cedar Forest Products listed under Section 2.1 D. 8. FINISHES.

C. DESCRIPTION OF PRODUCT:
1. MODEL NUMBER: **[MODEL ID]**.
2. DESCRIPTION AND SIZE: [Shelter Name] [Shelter Size].
3. ROOF SLOPE: [Roof Slope].

4. EAVE HEIGHT: [in feet] Clearance height from finish grade to the underside of the perimeter beam.
5. ADDITIONAL OPTIONS: (If any, describe what has been added beyond standard).

D. PRODUCT REQUIREMENTS AND MATERIALS:
1. GENERAL: The pre-engineered package shall be pre-cut unless otherwise noted and pre-fabricated which will include all parts necessary to field construct the shelter. The shelter shall be shipped knocked to minimize shipping expenses. Field labor will be kept to a minimum by pre-manufactured parts. Onsite welding is not necessary.
2. REINFORCED CONCRETE:
   a. Concrete shall have minimum 28-day compressive strength of 3,000 psi and slump of 4" (+/- 1"), unless otherwise noted on the drawings.
   b. Reinforcing shall be ASTM A615, grade 60.
3. STEEL COLUMNS:
   a. Hollow structural steel tube minimum ASTM A500 grade B with a minimum wall thickness of 1/8".
   b. Unless columns are direct buried columns shall be anchored directly to concrete foundation with a minimum of four anchor rods to meet OSHA requirement 1926.755(a)(1).
4. STRUCTURAL FRAMING:
   Hollow Structural Steel tube minimum ASTM500 grade B. "I" beams, tapered columns, or open channels shall not be accepted for primary beams.
5. COMPRESSION MEMBERS:
   Compression rings of welded plate minimum ASTM A36 or compression tubes or structural steel tube minimum ASTM A500 grade B shall only be used.
6. CONNECTIONS:
   Connection Requirements:
   a. Anchor bolts shall be ASTM F1554 (Grade 36) unless otherwise noted.
   b. Structural fasteners shall be zinc plated ASTM A325 high strength bolts and high strength nuts.
   c. All structural fasteners shall be hidden within framing members.
   d. No field welding shall be required to construct the shelter.
   e. All welds shall be free of burrs and inconsistencies.
   f. All exposed fasteners shall be painted by manufacturer prior to shipment to match frame or roof colors as applicable.
   g. Manufacturer shall provide extra structural and roofing fasteners.

7. ROOFING MATERIALS:

*****OPTIONAL ROOF DECK UNDERLAYMENT***** (Delete if not applicable)

   a. ROOF DECK UNDERLAYMENT OF TONGUE AND GROOVE (T&G):
      1) T&G shall be of 2x6 tongue and groove, southern yellow pine, kiln dried #1 grade or better, edge V'd bottom side.
      2) Manufacturer shall supply 30 pound felt and drip edge if both primary and secondary roofs are being supplied by the manufacturer.
      3) Contractor shall cut T&G down to required lengths and shall seal underside of boards per architect's or owner's recommendations using coating supplier's instructions.

**********OR**********

   a. ROOF DECK UNDERLAYMENT BY OTHERS

**********CHOOSE A PRIMARY ROOF**********

   b. ROOF SYSTEM OF ASPHALT SHINGLES:
      1) Asphalt shingles shall be ASTM D3018 Type 1 and ASTM D3462 with a 25-year limited warranty.
      2) Color chosen from manufacturer's standard color chart: **[ColorName]**.

A roof deck underlayment is required for this option. (******Note to specifier, always delete******

**********OR**********

   b. ROOF SYSTEM OF "Multi-Rib" PANEL METAL ROOFING:
      1) Roofing shall be 24 gauge ribbed galvalume steel sheets, with ribs 1 3/16" high and 12" on center.
      2) Roof surface shall be painted with Kynar 500 to the manufacturer's standard color: **[ColorName]**. Ceiling surface shall be a "wash coat" primer.
      3) Roof panels shall be factory precut to size and angled to provide ease of one-step installation.

4) Metal roofing trim shall match the color of the roof and shall be factory made of 24 gauge Kynar 500 painted steel.
5) Trim shall include panel ridge caps, hip caps, eave trim, rake trim, roof peak cap, and corner trim as applicable for model selected. Trim may need to be cut to length and notched. Reference drawings for additional information.
6) Ridge, hip, and valley caps shall be pre-formed with a single central bend to match the roof pitch and shall be hemmed on the sides.
7) Roof peak cap shall be pre-manufactured.
8) Manufacturer must supply painted screws with metal and neoprene washers.

**********OR**********

b. ROOF SYSTEM OF STANDING SEAM METAL ROOFING:
1) Standing seam metal roofing to be 24-gauge galvalume 16" wide with ribs 1-3/4" high.
2. Roof surface shall be painted with Kynar 500 to the manufacturer's standard color: **[ColorName]**. Ceiling surface shall be a "wash coat" primer.
3. Roof panels shall be factory precut to size and angled to provide ease of one-step installation.
4. Metal roofing trim shall match the color of the roof and shall be factory made of 24 gauge Kynar 500 painted steel.
5. Trim shall include panel ridge caps, hip caps, eave trim, rake trim, roof peak cap, and corner trim as applicable for model selected. Trim may need to be cut to length and notched. Reference drawings for additional information.
6) Ridge, hip, and valley caps shall be pre-formed with a single central bend to match the roof pitch and shall be hemmed on the sides.
7) Roof peak cap shall be pre-manufactured.
8) Manufacturer must supply painted screws with metal and neoprene washers.

**********OR**********

b. SECONDARY ROOF SYSTEM BY OTHERS

8. FINISHES:

***** CHOOSE ALL THE FINISHES BEING USED WITH THE SHELTER*****

a. STANDARD POWDER COAT FINISH:
1) Steel shall be cleaned, pretreated, and finished at a facility directly supervised by the manufacturer.
2) Steel shall be shot blasted to SSPC-SP10 near-white blast cleaning. SSPC-SP2 hand tool cleaning will not be an acceptable alternative.
3) Parts shall be pretreated in a 3 stage iron phosphate or equal washer.
4) Epoxy primer powder coat to be applied to parts for superior corrosion protection.
5) Top coat of Super Durable TGIC powder coat shall be applied over the epoxy primer.
6) Finish shall not have any VOC emissions.
7) Sample production parts shall have been tested and meet the following criteria:
a) Salt spray resistance per ASTM B 117/ ASTM D 1654 to 5,000 hours with no creep from scribe line and rating of 10.
b) Humidity resistance per ASTM D2247-02 to 3,000 hours with no loss of adhesion or blistering.
c) Color/UV resistance per ASTM G154-04 to 2,000 hours exposure, alternate cycles with results of no chalking, 75% color retention, color variation maximum 3.0 E variation CIE formula (before and after 2,000 hours exposure).
8) The manufacturer shall be PCI 4000 S Certified

**********AND / OR**********

a. PRIME COAT FINISH:
1) Steel shall be cleaned, pre-treated, and finished at a facility directly supervised by the manufacturer.
2) Steel shall be shot blasted to SSPC- SP10 near-white blasting. SSPC-SP2 hand tool cleaning will not be an acceptable alternative.
3) Frame shall be prime coated with an off gray Super Durable TGIC powder coat.
4) Primer shall not have any VOC emissions.
5) Red oxide primer will not be an acceptable alternative.

**********AND / OR**********

a. HOT DIP GALVANIZED FINISH:

1) Steel members, fabrications and assemblies shall be galvanized after by the hot dip process in accordance with ASTM A123. The composition of metal in the galvanizing bath shall be no less than 98% zinc.
2) The galvanized coating shall be continuous, adherent, free from any detrimental defect.

**********AND / OR**********

a. E-COAT BASE COAT FINISH:
   1) Entire building under Super Durable Polyester TGIC powder coat shall have an E-Coat Base Coat.
   2) Steel shall be shot blasted to SSPC-SP10 near-white blast cleaning prior to adding E-Coat. SSPC-SP2 hand tool cleaning will not be an acceptable alternative.
   3) Top powder coat of Super Durable TGIC powder coat shall be applied.

PART 3 - EXECUTION

3.1 INSTALLERS

A. Protect building products after arrival at destination from weather, sunlight, and damage.

B. Building products shall be placed on blocks well off the ground and separated with wood strips so that air can circulate around each member.

C. Cover top and bottom with moisture-resistant paper.

D. Non-marring slings and/or padded forks shall be used when handling.

E. Installers are to use proper building practices recognized by OSHA and to have minimum 5 years experience in installing shelters of similar construction. These trades include but are not limited to: masonry work, steel construction, sheet metal work, carpentry, electrical and paint finishing.

F. Examination of final work is done by verifying that the erection of the structure was done in conformance to the installation instructions provided by Cedar Forest Products and local building codes.

3.2 ERECTION

A. FOUNDATIONS:
The shelter shall be placed on designed foundations with materials by others. Design approved by the Engineer of Record identified in Section 1.3 D. FOUNDATION DESIGN.

B. INSTALLATION:
Install all components according to manufacturer's installation instructions and these specifications.

C. GENERAL CONTRACTOR:
Interface with other work is to be coordinated by the customer or the customer's agent. Certain designs have electrical or other plumbing requirements that are not supplied by Cedar Forest Products.

D. TOLERANCES:
Tolerances on steel structural members are set according to AISC construction practices, abided in the factory, and cannot be increased. No field slotting or opening of holes will be allowed. It is therefore essential that contractors conform to the tolerances specified on the installation drawings for anchor bolt or column layout details.

E. OSHA COMPLIANCE:
OSHA Compliance to Steel Erection Standard 29CRF 1926 Subpart R-Steel Erection.

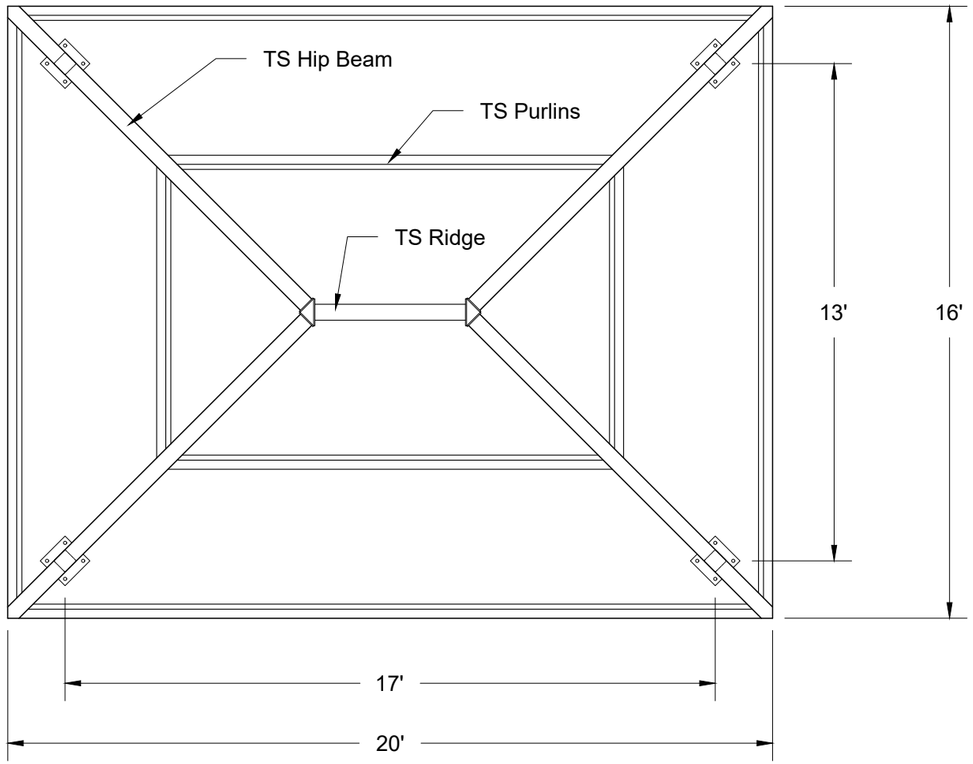
3.3 REPAIR

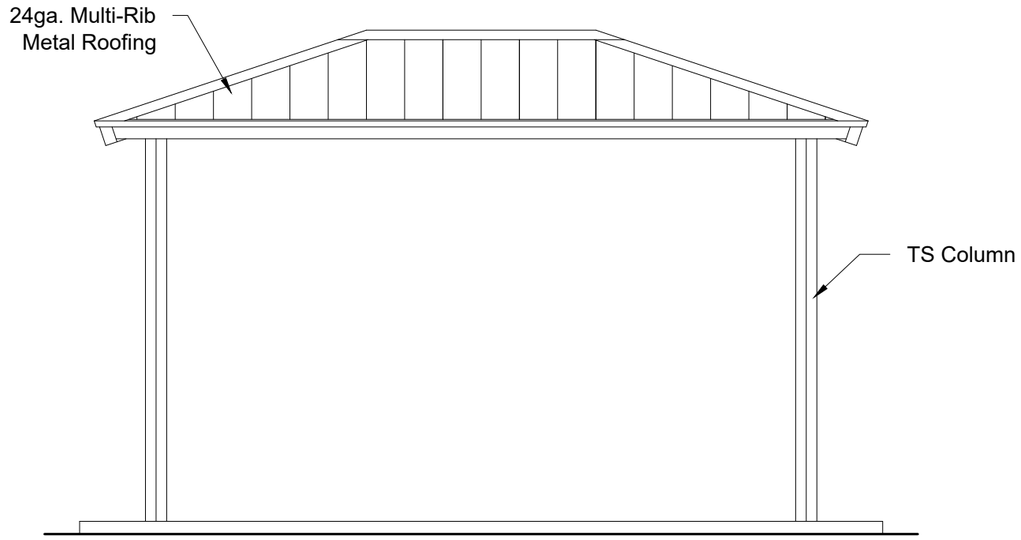
A. Do not attempt any field repairs without first contacting Cedar Forest Products.

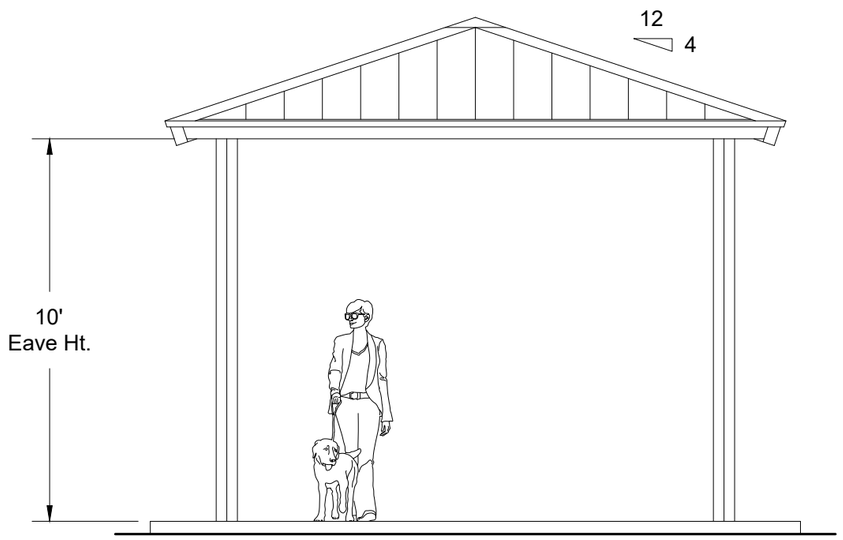
3.4 FIELD OR SITE QUALITY CONTROL

A. Field or Site Tests and Inspections are not required by Cedar Forest Products but may be required by the customer or by the local building inspector.

END OF SECTION







Scenic SHELTERS

PH: 855-544-8439 www.ScenicShelters.com
ADDRESS: 17330 Beachview Drive, West Olive, MI 49460

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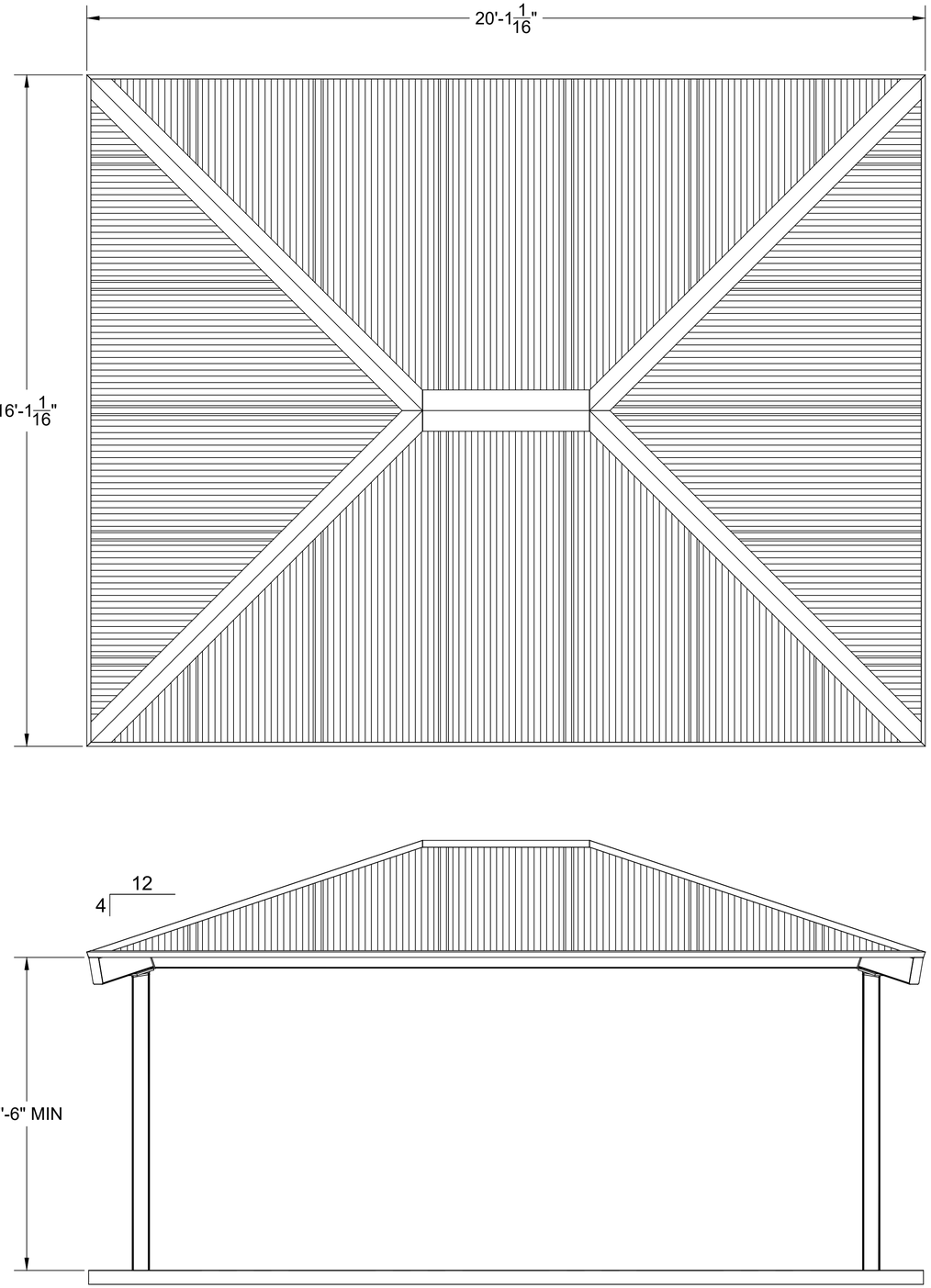
NOTES:
TS = Tubular Steel

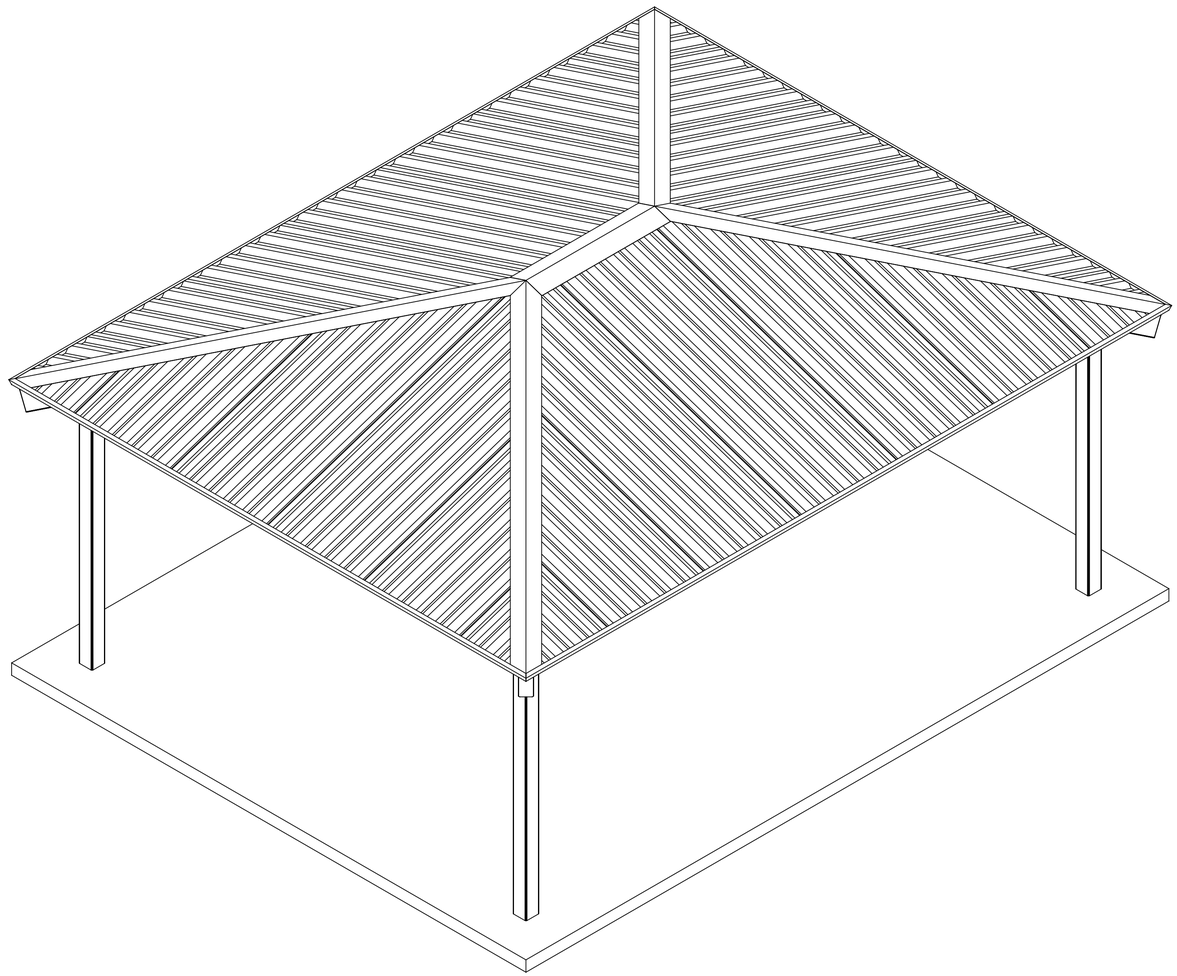
CONCEPT DRAWING - NOT FOR CONSTRUCTION

MOD#: SHP1620-10EH	MODEL: 16x20 Steel Hip Shelter	
BY: JASON	DRAWING SCALE: NTS	PAGE: 1 OF 1
ORG. DATE: 2-7-2025	REV. DATE: -	REV: -

PRELIMINARY DRAWING – NOT FOR CONSTRUCTION

Attachment D





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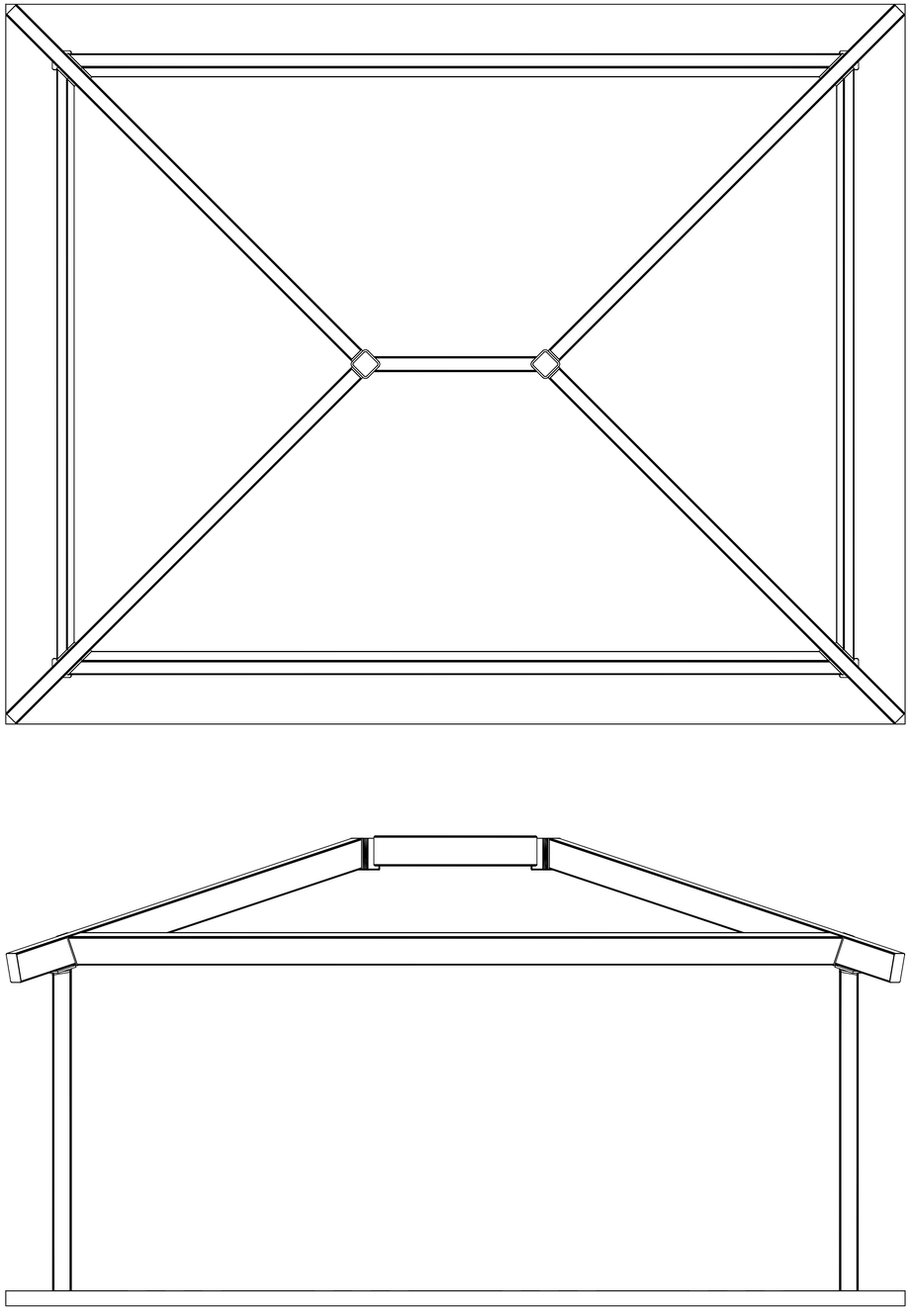
TS–H1620–04
NAME
LOCATION

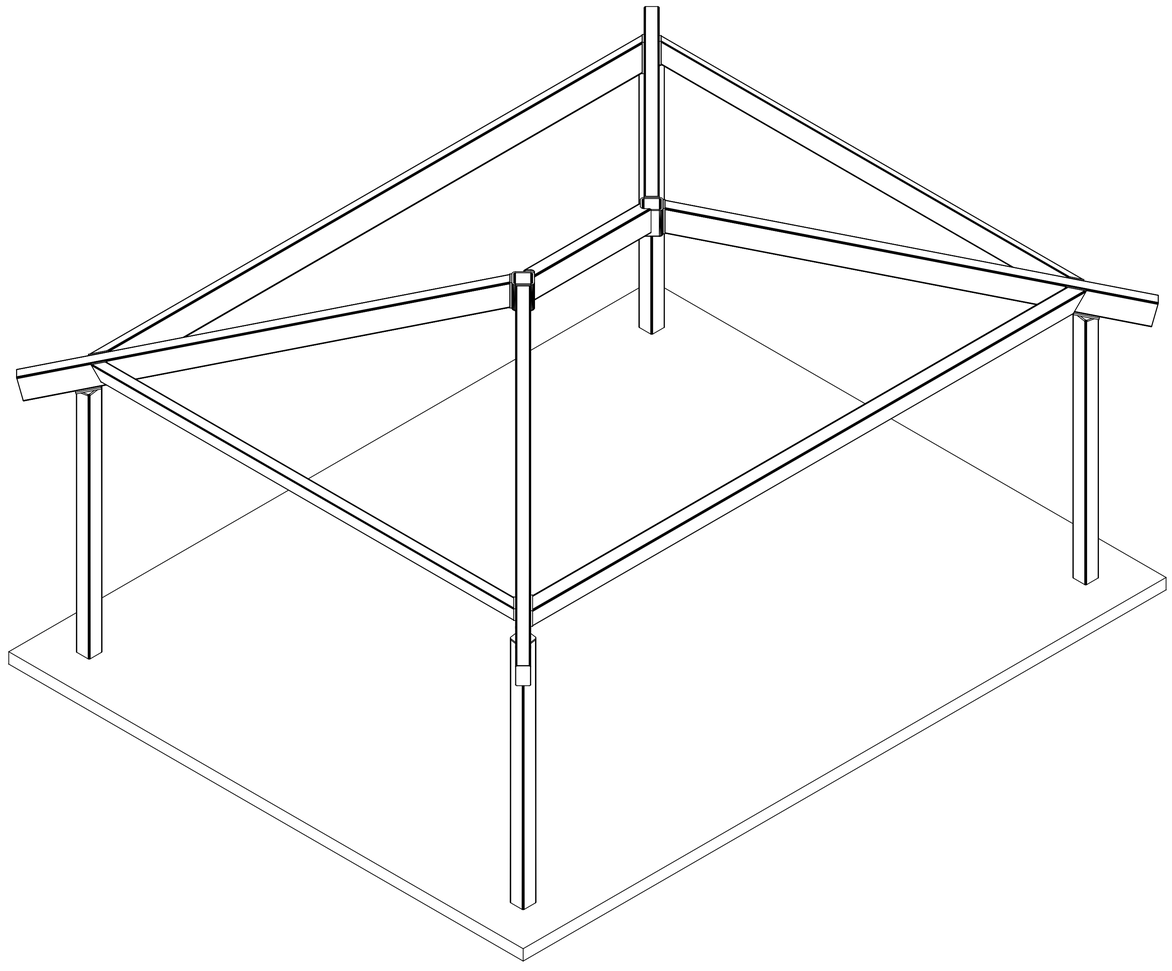
NUMBER OF PURLINS MAY VARY DEPENDING UPON DESIGN LOADS.
SIZES AND SPACING OF PURLINS TO BE DETERMINED DURING FINAL DESIGN.

RCP SHELTERS, INC.
2100 SE RAYS WAY STUART, FL 34994 PO BOX 25 STUART, FL 34995-0025
■SHELTERS ■PAVILIONS ■CONCESSIONS ■KIOSKS ■FABRIC SHADE
■RESTROOMS ■BANDSHELLS ■MINI–SHELTERS ■DUGOUTS ■FABRIC SAIL
Phone 800–525–0207 Fax 772–288–0207
www.rcpshelters.com Email info@rcpshelters.com

PROJ. NO.:	
DRAWN:	
CHK'D:	
REV 1:	
REV 2:	
REV 3:	
REV 4:	
REV 5:	
CAD NO.:	
EEC JOB NO.:	
SHEET NO.:	1 OF 4

PRELIMINARY DRAWING – NOT FOR CONSTRUCTION





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REV 5:

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SHEET NO.:

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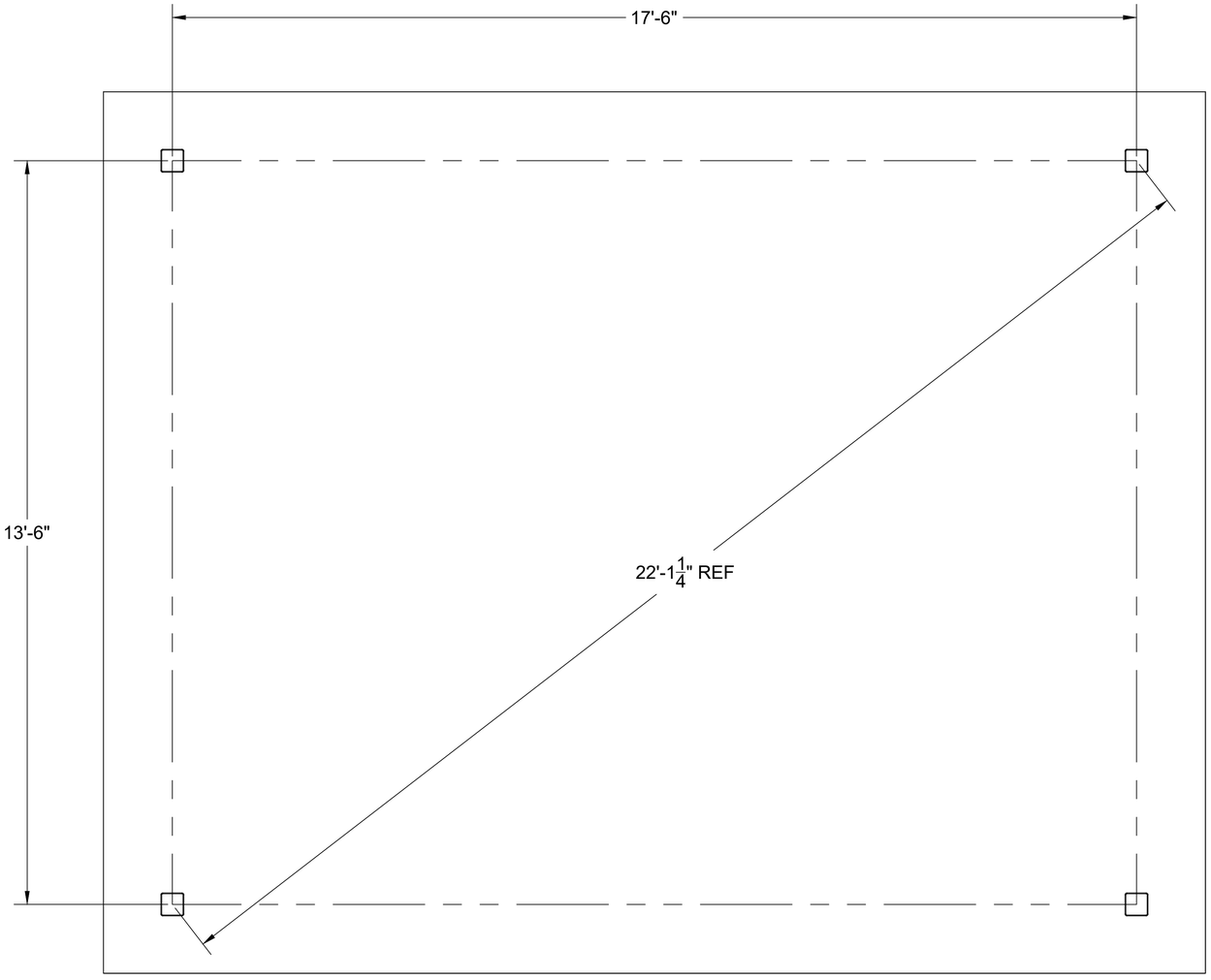

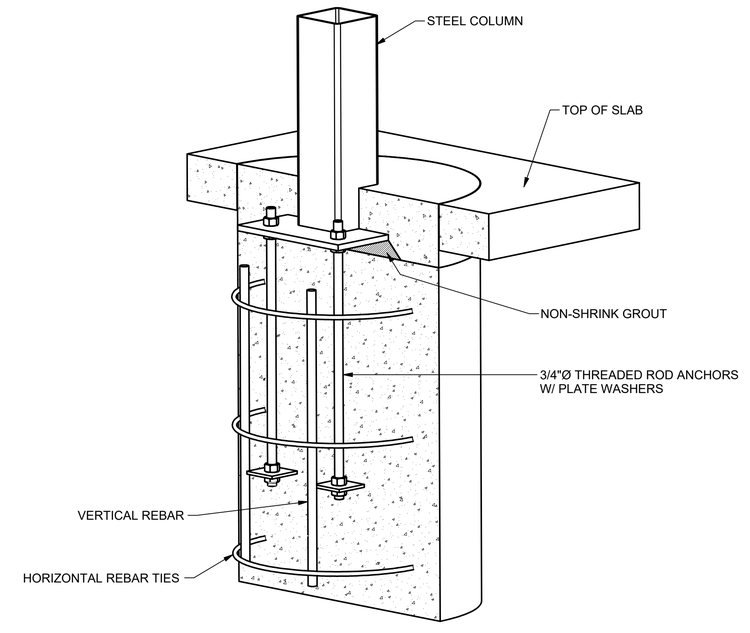

STEEL COLUMN PIER DETAIL

TYPICAL PIER DIAMETER IS BETWEEN 2'-0" AND 3'-0"±
TYPICAL PIER DEPTH IS BETWEEN 3'-6" AND 5'-6"±

ACTUAL DESIGN WILL VARY DUE TO BUILDING CODE REQUIREMENTS AND MAY BE SUBSTANTIALLY LARGER.

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TS–H1620–04
NAME
LOCATION

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3 OF 4

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TS–H1620–04

NAME

LOCATION

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REV 5:	
CAD NO.:	
EEC JOB NO.:	
SHEET NO.:	4 OF 4

Bid 25-24, Addendum 3

CITY OF FAYETTEVILLE ARKANSAS

Date: Friday, February 14, 2025

To: All Prospective Vendors

From: Amanda Beilfuss – 479.575.8220 – abeilfuss@fayetteville-ar.gov

RE: Bid 25-24, Construction – Bryce Davis Park Improvements, Phase 1

This addendum is hereby made a part of the contract documents to the same extent as though it were originally included therein. Interested parties should indicate their receipt of same in the appropriate blank of the Bid. ***BIDDERS SHALL ACKNOWLEDGE THIS ADDENDUM ON THE DESIGNATED LOCATION ON THE BID FORM.***

1. Questions – The following question has been received and answered by the responsible department:

    a. Question: Can you please clarify if the existing playground area is to get new turf? The demolition is not showing this work.

        i. The new turf is only to be installed in the constructed areas, as shown in plans.

Telecommunications Device for the Deaf TDD (479) 521-1316 113 West Mountain - Fayetteville, AR 72701

Bid 25-24, Addendum 4

CITY OF FAYETTEVILLE ARKANSAS

Date: Tuesday, February 18, 2025

To: All Prospective Vendors

From: Amanda Beilfuss – 479.575.8220 – abeilfuss@fayetteville-ar.gov

RE: Bid 25-24, Construction – Bryce Davis Park Improvements, Phase 1

This addendum is hereby made a part of the contract documents to the same extent as though it were originally included therein. Interested parties should indicate their receipt of same in the appropriate blank of the Bid. ***BIDDERS SHALL ACKNOWLEDGE THIS ADDENDUM ON THE DESIGNATED LOCATION ON THE BID FORM.***

1. BID DEADLINE HAS BEEN EXTENDED. All Bids are due by Wednesday, February 26th, 2025 no later than 3:00 PM.

Telecommunications Device for the Deaf TDD (479) 521-1316 113 West Mountain - Fayetteville, AR 72701

Bid 25-24, Addendum 5

Date: Thursday, February 20, 2025

To: All Prospective Vendors

From: Amanda Beilfuss – 479.575.8220 – abeilfuss@fayetteville-ar.gov

RE: Bid 25-24, Construction – Bryce Davis Park Improvements, Phase 1

This addendum is hereby made a part of the contract documents to the same extent as though it were originally included therein. Interested parties should indicate their receipt of same in the appropriate blank of the Bid. ***BIDDERS SHALL ACKNOWLEDGE THIS ADDENDUM ON THE DESIGNATED LOCATION ON THE BID FORM.***

1. Plan Sheets – The following Plan sheets have been revised. Revised sheets are attached to this addendum (see Attachment A):
    a. C6.5 – Overall Landscape Plan
        i. Updated quantity for seeded areas.

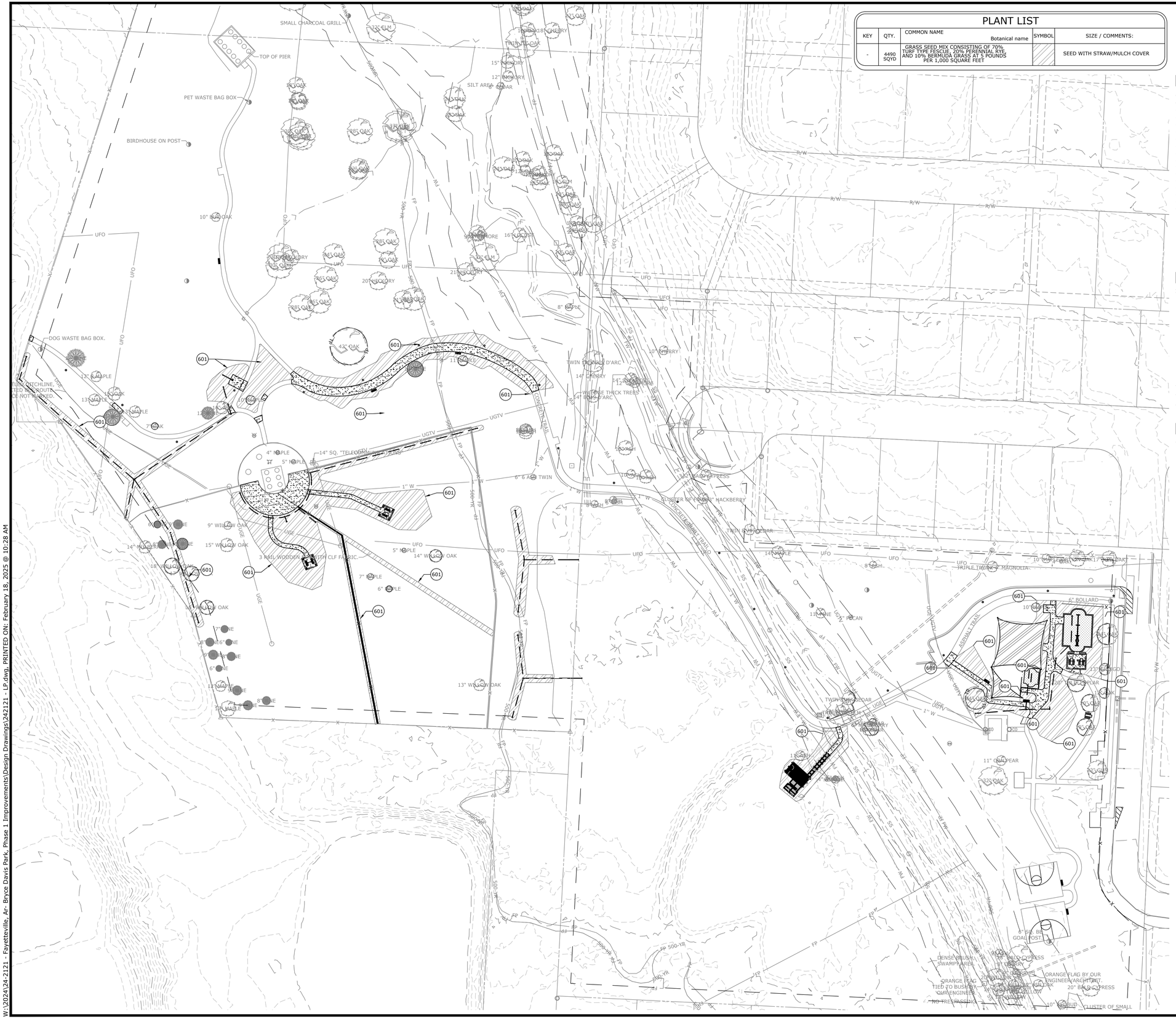
2. Bid Line Items – The following Bid Line Items have been revised:
    a. Line Item #47 – Change in quantity

3. Questions – The following questions have been received and answered by the responsible department:
    a. Question: Line #47 states 890 SY of seed, but my plan takeoff from pages C6.6 - C6.8 is giving me 6,437 SY of Seed. Can you provide some clarification?
        i. Answer: We recalculated the seeded areas and have revised the Landscape Plan to reflect the updated quantity.

4. Addendum Attachments:
    a. Attachment A: Revised Plan Sheet

Telecommunications Device for the Deaf TDD (479) 521-1316 113 West Mountain - Fayetteville, AR 72701

Attachment A



PLANT LIST

KEY	QTY.	COMMON NAME Botanical name	SYMBOL	SIZE / COMMENTS:
-	4490 SQYD	GRASS SEED MIX CONSISTING OF 70% TURF TYPE FESCUE, 20% PERENNIAL RYE, AND 10% BERMUDA GRASS AT 5 POUNDS PER 1,000 SQUARE FEET		SEED WITH STRAW/MULCH COVER

PLAN SCALE

50 0 25 50 100

(IN FEET)
1 inch = 50ft.

EXISTING LEGEND

- PROPERTY LINE
- RIGHT OF WAY
- SANITARY SEWER LINE
- WATER LINE
- GAS LINE
- UNDERGROUND TELEPHONE
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEVISION
- UNDERGROUND FIBER
- OVERHEAD ELECTRIC
- FENCE
- ROAD CENTERLINE
- DITCH FLOWLINE
- EASEMENT LINE
- GRAVEL LINE
- FLOOD WAY
- FLOOD PLAIN
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- WATER FAUCET
- SANITARY SEWER MH
- CLEAN-OUT
- DRAINAGE MH
- POWER POLE
- GUY WIRE w/ ANCHOR
- GAS METER
- GAS RISER
- STREET LIGHT POLE
- TELEPHONE PEDESTAL
- CABLE TV PEDESTAL
- CABLE VAULT
- ELECTRIC VAULT
- FIBER VAULT
- GAS VAULT
- TELEPHONE VAULT
- WATER VAULT
- SIGN (AS NOTED)
- POST (AS NOTED)
- BENCHMARK
- FOUND IRON PIN (AS NOTED)
- CONTROL POINT
- RR SPIKE
- BUSH
- DECIDUOUS TREE
- CONIFEROUS TREE

PROPOSED LEGEND

- STORM DRAIN
- CATCH BASIN
- FIRE HYDRANT
- CLEAN-OUT
- LIGHT POLE
- SEED (SEE PLANTING LIST)
- UNDERGROUND ELECTRIC LINE
- WATER LINE
- TREE PROTECTION FENCE

LANDSCAPE KEYNOTES

601 SEEDED AREA

McCLELLAND CONSULTING ENGINEERS, INC.
DESIGNED TO SERVE
1580 E STEARNS ST
FAYETTEVILLE, ARKANSAS 72703
(479) 443-2377
HTTP://WWW.MCE.US.COM

PRELIMINARY
NOT FOR
CONSTRUCTION

ORIGINAL SIGNATURE ON FILE

©2024

BRYCE DAVIS PARK IMPROVEMENTS PHASE 1

1595 N DARTMOUTH AVE
FAYETTEVILLE, AR

811 Know what's below. Call before you dig.

REVISIONS		
REV	DATE	DESCRIPTION
1	02/05/2025	ADDENDUM 1

OVERALL LANDSCAPE PLAN

DESIGNED BY: JRL	DRAWN BY: JRL
DATE: 2/18/2025	REVISION: 100%
SCALE: AS NOTED	JOB NUMBER: 24-2121

C6.5

W:\2024\24-2121 - Fayetteville, Ar- Bryce Davis Park, Phase 1 Improvements\Design Drawings\242121 - LP.dwg, PRINTED ON: February 18, 2025 @ 10:28 AM

Bid 25-24, Addendum 6

Date: Tuesday, February 25, 2025

To: All Prospective Vendors

From: Amanda Beilfuss – 479.575.8220 – abeilfuss@fayetteville-ar.gov

RE: Bid 25-24, Construction – Bryce Davis Park Improvements, Phase 1

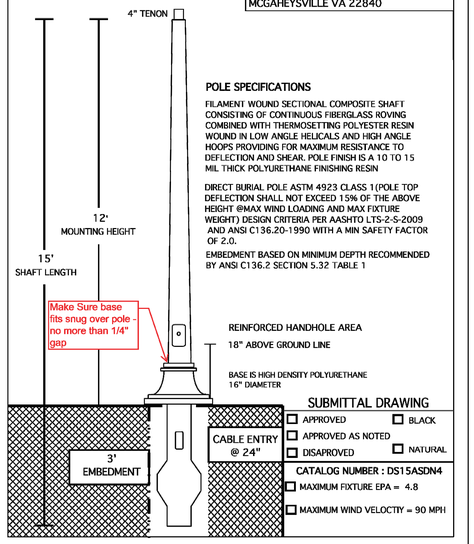
This addendum is hereby made a part of the contract documents to the same extent as though it were originally included therein. Interested parties should indicate their receipt of same in the appropriate blank of the Bid. ***BIDDERS SHALL ACKNOWLEDGE THIS ADDENDUM ON THE DESIGNATED LOCATION ON THE BID FORM.***

1. Plan Sheets – The following Plan sheets have been revised. Revised sheets are attached to this addendum:
    a. ES1 – Electrical Plan
        i. Light Pole Detail has been added.

Telecommunications Device for the Deaf TDD (479) 521-1316 113 West Mountain - Fayetteville, AR 72701

STANDARD DUTY POLE

ALLIANCE COMPOSITES INC.
PO BOX 24
MCGAHEYSVILLE VA 22840



POLE SPECIFICATIONS

FILAMENT WOUND SECTIONAL COMPOSITE SHAFT CONSISTING OF CONTINUOUS FIBERGLASS ROVING COMBINED WITH THERMOSETTING POLYESTER RESIN WOUND IN LOW ANGLE HELICALS AND HIGH ANGLE HOOPS PROVIDING FOR MAXIMUM RESISTANCE TO DEFLECTION AND SHEAR. POLE FINISH IS A 10 TO 15 MIL THICK POLYURETHANE FINISHING RESIN

DIRECT BURIAL POLE ASTM 4923 CLASS 1(POLE TOP DEFLECTION SHALL NOT EXCEED 15% OF THE ABOVE HEIGHT @MAX WIND LOADING AND MAX FIXTURE WEIGHT) DESIGN CRITERIA PER AASHTO LTS-2-S-2009 AND ANSI C136.20-1990 WITH A MIN SAFETY FACTOR OF 2.0.

EMBEDMENT BASED ON MINIMUM DEPTH RECOMMENDED BY ANSI C136.2 SECTION 5.32 TABLE 1

REINFORCED HANDHOLE AREA
18" ABOVE GROUND LINE

BASE IS HIGH DENSITY POLYURETHANE
16" DIAMETER

SUBMITTAL DRAWING

- ☐ APPROVED
- ☐ APPROVED AS NOTED
- ☐ DISAPROVED
- ☐ BLACK
- ☐ NATURAL

CATALOG NUMBER : DS15ASDN4

- ☐ MAXIMUM FIXTURE EPA = 4.8
- ☐ MAXIMUM WIND VELOCITY = 90 MPH

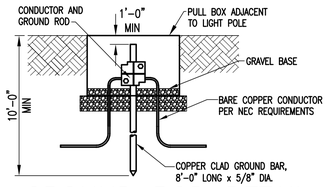
D LIGHT POLE DETAIL
N.T.S.

LIGHTING NOTES

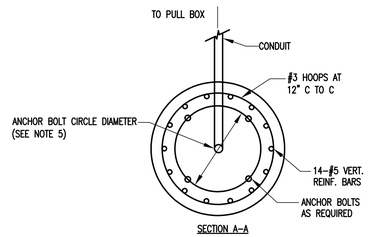
1. FOR LUMINAIRE ORIENTATION AND X-Y COORDINATES OF POLES, SEE LUMINAIRE SCHDULE.
2. UNLESS OTHERWISE INDICATED, PULL BOX 12x12 SHALL BE INSTALLED WITHIN 5' OF POLE FOUNDATION.
3. INSTALL 2#10 XHHW-2, 1#10 E.G.C. FROM PULL BOX TO POLE LIGHTS.
4. INSTALL CONDUIT BELL END FITTINGS ON NON-METALLIC CONDUIT ENDS. THE COST OF FITTINGS SHALL BE CONSIDERED SUBSIDIARY TO THE PAY ITEM, "NON-METALLIC CONDUIT (2")".
5. THE DEGREE OF TILT ON LUMINAIRES SHALL BE ZERO.
6. ALL SPLICES SHALL BE WATERTIGHT AND UL-LISTED FOR CONTINUOUS USE IN SUBMERSIBLE INSTALLATIONS.
7. USE MINIMUM 1/4" PULL ROPE OR 12 LBS. PULL TAPE WHEN PULLING CONDUCTORS.
8. E.G.C. SHALL BE EXOTHERMICALLY BONDED TO GROUND ROD.
9. CONDUCT A MINIMUM 14-DAY BURN TEST FOR THE COMPLETE LIGHTING SYSTEM. REPLACE BURNED OUT AND NOTICEABLY DIM LUMINAIRES; MALFUNCTIONING EQUIPMENT SHALL BE CORRECTED, AND RETESTED THE SYSTEM. OTHERWISE REMOVE AND REPLACE WITH NEW EQUIPMENT.
10. SEE STANDARD DRAWING SD-6 FOR PULL BOX CONSTRUCTION.

RECEPTACLE SCHEDULE

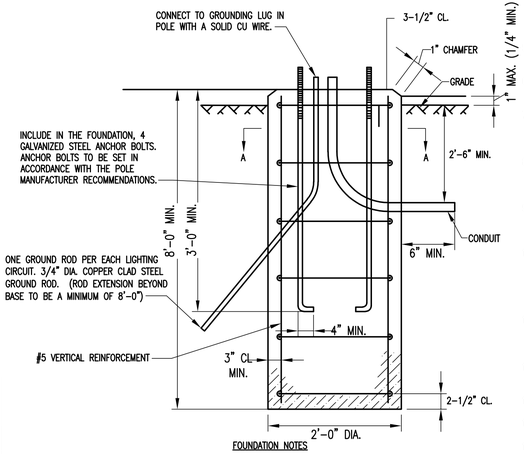
SYMBOL	MODEL NUMBER	DESCRIPTION
MP	--	PROVIDED BY THE LIGHT POLE MANUFACTURER.



C GROUND ROD DETAIL
N.T.S.



SECTION A-A



FOUNDATION NOTES

1. CONCRETE FOR LIGHT POLE STRUCTURE FOUNDATION SHALL HAVE A MINIMUM OF 4000 PSI. ALL REINFORCEMENT SHALL BE DEFORMED STEEL BARS AND CONFORM TO ASTM M31 OR M53, GRADE 60.
2. CONTRACTOR SHALL PROVIDE PRE-CAST OR CAST-IN-PLACE FOUNDATIONS.
3. PROVIDE WATERTIGHT CAPS FOR ANY UNUSED CONDUITS.
4. THE CONTRACTOR SHALL COORDINATE WITH THE LIGHTING FIXTURE, FOUNDATION, AND POLE MANUFACTURERS TO ENSURE PROPER FIT OF ALL COMPONENTS.
5. DIMENSIONS AND SIZE OF ANCHOR BOLTS, INCLUDING BOLT CIRCLE, TO BE VERIFIED BY LIGHT POLE MANUFACTURER.
6. CONTRACTOR TO COORDINATE THE APPROPRIATE DIMENSION TO ASSURE THE MINIMUM CONDUIT DEPTH IS 2'-9" WHEN LEADING PULLBOX.

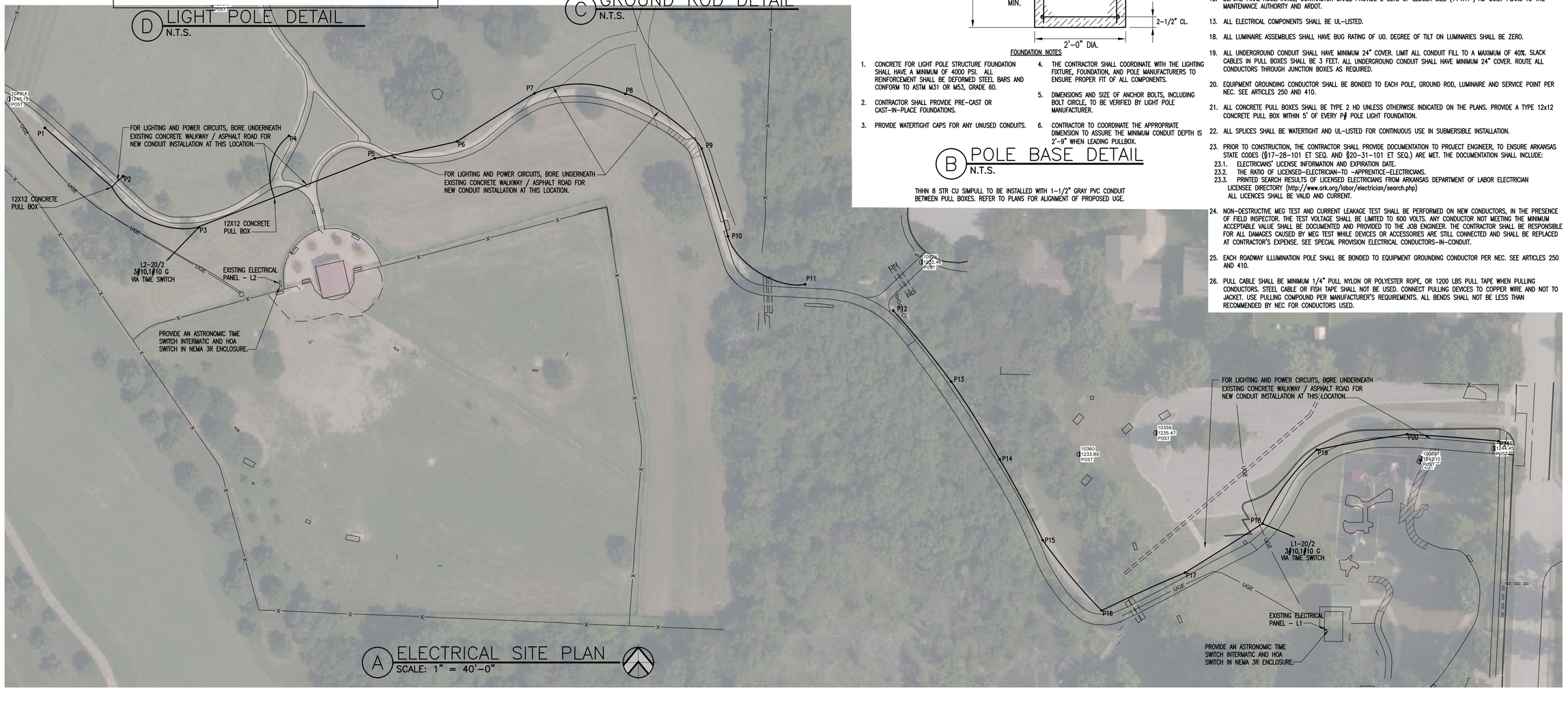
B POLE BASE DETAIL
N.T.S.

THHN 8 STR CU SIMPULL TO BE INSTALLED WITH 1-1/2" GRAY PVC CONDUIT BETWEEN PULL BOXES. REFER TO PLANS FOR ALIGNMENT OF PROPOSED UGE.

GENERAL NOTES

1. ELECTRICAL DRAWINGS (POWER AND LIGHTING) ARE DIAGRAMMATIC AND SCHEMATIC IN NATURE. USE JUDGMENT AND CARE TO INSTALL ELECTRICAL WORK TO FUNCTION PROPERLY AND FIT WITHIN CONSTRUCTION AND FINISHES. ALL CONDUCTORS, CONDUIT, AND MATERIALS NOT SPECIFICALLY SHOWN OR SPECIFIED, WHICH ARE REQUIRED FOR A COMPLETE OPERATING DEVICE OR SYSTEM ARE REQUIRED TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
2. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NFPA 70, CURRENT EDITION), LIFE SAFETY CODE (NFPA 101M CURRENT EDITION), UNDERGROUND FACILITIES DAMAGE PREVENTION ACT (§ 17-28-101 ET SEQ.), AND LOCAL ELECTRICAL CODE. IN ADDITION, ALL PARTS OF THIS INSTALLATION SHALL BE IN ACCORDANCE WITH THE ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.
3. THE CONTRACTOR SHALL NOT ENGAGE IN EXCAVATION OR DEMOLITION ACTIVITIES WITHOUT HAVING FIRST NOTIFIED THE ARKANSAS ONE CALL CENTER IN ACCORDANCE WITH UNDERGROUND FACILITIES DAMAGE PREVENTION ACT. NOT ALL UTILITY COMPANIES ARE MEMBERS OF THE ARKANSAS ONE CALL SYSTEM. THE CONTRACTOR IS ADVISED TO CONTACT ALL NON-MEMBER UTILITIES AS WELL AS THE ONE CALL CENTER.
4. UNDERGROUND UTILITIES EXIST WITHIN AND ADJACENT TO THE LIMITS OF CONSTRUCTION. SOME UTILITIES MAY HAVE BEEN RELOCATED SINCE THE TIME OF DESIGN AND THE CONTRACTOR'S NOTICE TO PROCEED. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES INVOLVED AND VERIFY THE LOCATION OF UNDERGROUND UTILITIES. THE CONTRACTOR SHALL MAINTAIN THE UTILITY LOCATION MARKINGS UNTIL IT IS NO LONGER NECESSARY.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS OF REPAIR OR REPLACEMENT OF EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
6. ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAYBE THE PROPERTY OF THE UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.
7. CONDUIT INSTALLED UNDER ROADWAY OR WALKWAY SURFACES SHALL BE INSTALLED BY A PUSHING OR BORING METHOD AS DIRECTED BY ENGINEER. PVC OR HDPE CONDUIT SHALL BE USED. PVC CONDUIT SHALL BE MARKED "DIR. BORING" OR "DIRECTIONAL BORING" AS PER NEC.
8. PULL BOX LIDS SHALL CLOSE FLUSH WITH OUT PINCHING ANY CONDUCTORS. CONDUIT LENGTHS IN PULL BOXES SHALL BE SET ACCORDINGLY. ANY CONDUCTORS THAT HAVE BEEN DAMAGED BY PINCHING SHALL BE COMPLETELY REPLACED AT CONTRACTOR'S EXPENSE.
9. ELECTRICAL CONTRACTOR SHALL VERIFY LOCATION OF ALL ROUGH-INS AT THE PROJECT SITE. DO NOT SCALE DRAWINGS FOR EXACT LOCATION OF DEVICES. FIELD VERIFY FINAL MOUNTING LOCATIONS AS REQUIRED BY PROJECT CONDITIONS PRIOR TO ROUGH-IN.
10. ALL DEVICES TO BE INSTALLED BY THIS TRADE SHALL BE COORDINATED WITH ALL TRADES. DURING CONSTRUCTION TO AVOID CONFLICT AND TO PROVIDE A QUALITY PROJECT. IF YOU NOTICE ANY DISCREPANCY BETWEEN THIS WORK AND A SEPARATE TRADE, NOTIFY THE ENGINEER IMMEDIATELY FOR DIRECTION. ANY COORDINATION WORK THAT OCCURS WITHOUT APPROVAL FROM THE ENGINEER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL MOUNTING LOCATIONS SHALL BE CONFIRMED WITH OWNER AT EACH SITE.
11. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL SERVICE AND METERING REQUIREMENTS WITH THE UTILITY POWER COMPANY (CONDUITS, GROUNDING, CONCRETE PADS, TRENCHING, ETC.). PAY ALL SERVICE FEES AS NECESSARY. ARRANGE TO PROVIDE TEMPORARY CONSTRUCTION SERVICE AS NECESSARY.
12. BEFORE FINAL ACCEPTANCE, CONTRACTOR SHALL PROVIDE 2 SETS OF LEDGER SIZE (11"X17") AS-BUILT PLANS TO THE MAINTENANCE AUTHORITY AND ARDOT.
13. ALL ELECTRICAL COMPONENTS SHALL BE UL-LISTED.
18. ALL LUMINAIRE ASSEMBLIES SHALL HAVE BUG RATING OF U0. DEGREE OF TILT ON LUMINARIES SHALL BE ZERO.
19. ALL UNDERGROUND CONDUIT SHALL HAVE MINIMUM 24" COVER. LIMIT ALL CONDUIT FILL TO A MAXIMUM OF 40%. SLACK CABLES IN PULL BOXES SHALL BE 3 FEET. ALL UNDERGROUND CONDUIT SHALL HAVE MINIMUM 24" COVER. ROUTE ALL CONDUCTORS THROUGH JUNCTION BOXES AS REQUIRED.
20. EQUIPMENT GROUNDING CONDUCTOR SHALL BE BONDED TO EACH POLE, GROUND ROD, LUMINAIRE AND SERVICE POINT PER NEC. SEE ARTICLES 250 AND 410.
21. ALL CONCRETE PULL BOXES SHALL BE TYPE 2 HD UNLESS OTHERWISE INDICATED ON THE PLANS. PROVIDE A TYPE 12x12 CONCRETE PULL BOX WITHIN 5' OF EVERY P# POLE LIGHT FOUNDATION.
22. ALL SPLICES SHALL BE WATERTIGHT AND UL-LISTED FOR CONTINUOUS USE IN SUBMERSIBLE INSTALLATION.
23. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE DOCUMENTATION TO PROJECT ENGINEER, TO ENSURE ARKANSAS STATE CODES (§17-28-101 ET SEQ. AND §20-31-101 ET SEQ.) ARE MET. THE DOCUMENTATION SHALL INCLUDE:
    - 23.1. ELECTRICIANS' LICENSE INFORMATION AND EXPIRATION DATE.
    - 23.2. THE RATIO OF LICENSED-ELECTRICIAN-TO -APPRENTICE-ELECTRICIANS.
    - 23.3. PRINTED SEARCH RESULTS OF LICENSED ELECTRICIANS FROM ARKANSAS DEPARTMENT OF LABOR ELECTRICIAN LICENSEE DIRECTORY (http://www.ark.org/labor/electrician/search.php)

    ALL LICENCES SHALL BE VALID AND CURRENT.
24. NON-DESTRUCTIVE MEG TEST AND CURRENT LEAKAGE TEST SHALL BE PERFORMED ON NEW CONDUCTORS, IN THE PRESENCE OF FIELD INSPECTOR. THE TEST VOLTAGE SHALL BE LIMITED TO 600 VOLTS. ANY CONDUCTOR NOT MEETING THE MINIMUM ACCEPTABLE VALUE SHALL BE DOCUMENTED AND PROVIDED TO THE JOB ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES CAUSED BY MEG TEST WHILE DEVICES OR ACCESSORIES ARE STILL CONNECTED AND SHALL BE REPLACED AT CONTRACTOR'S EXPENSE. SEE SPECIAL PROVISION ELECTRICAL CONDUCTORS-IN-CONDUIT.
25. EACH ROADWAY ILLUMINATION POLE SHALL BE BONDED TO EQUIPMENT GROUNDING CONDUCTOR PER NEC. SEE ARTICLES 250 AND 410.
26. PULL CABLE SHALL BE MINIMUM 1/4" PULL NYLON OR POLYESTER ROPE, OR 1200 LBS PULL TAPE WHEN PULLING CONDUCTORS. STEEL CABLE OR FISH TAPE SHALL NOT BE USED. CONNECT PULLING DEVICES TO COPPER WIRE AND NOT TO JACKET. USE PULLING COMPOUND PER MANUFACTURER'S REQUIREMENTS. ALL BENDS SHALL NOT BE LESS THAN RECOMMENDED BY NEC FOR CONDUCTORS USED.



A ELECTRICAL SITE PLAN
SCALE: 1" = 40'-0"

STATE OF ARKANSAS
SHANE R. LAWRENCE
REGISTERED PROFESSIONAL ENGINEER
No. 10054
2/5/25

CERTIFICATE OF AUTH.
ENGINEERING ELEMENTS, PLLC
No. 1227
ARKANSAS-ENGINEER

PROJECT NO: 24-051
COMPLETE: 100%

Engineering Elements, PLLC
2458 East Joyce Boulevard, Suite 1
Fayetteville, AR 72703
Phone: 479-695-1333, Fax: 479-251-7982

BRYCE DAVIS PARK IMPROVEMENTS PHASE 1

1595 N DARTMOUTH AVE
FAYETTEVILLE, ARKANSAS

Engineering Elements
2458 East Joyce Boulevard, Suite 1
Fayetteville, AR 72703
Phone: 479-695-1333
Fax: 479-251-7982

MECHANICAL
ELECTRICAL
FIRE PROTECTION
DESIGN CONSULTANTS

ELECTRICAL PLAN

REVISIONS:
1
2
3

PROJECT: 24-2121

DATE: 2-5-2025

ES1

Bid 25-24 Addendum 6
SSI of Northwest Arkansas
Supplier Response

Event Information

Number: Bid 25-24 Addendum 6
Title: Construction - Bryce Davis Park Improvements, Phase 1
Type: Invitation to Bid
Issue Date: 1/19/2025
Deadline: 2/26/2025 03:00 PM (CT)
Notes: The City of The City of Fayetteville is accepting sealed bids from properly licensed Contractors for the expansion of Bryce Davis Park in Fayetteville. This includes, but is not limited to, installation of new playground equipment, sidewalks, pavilions, dog wash, and other associated items. Questions regarding this bid should be addressed to Amanda Beilfuss, Procurement Director, at abeilfuss@fayetteville-ar.gov.

Contact Information

Contact: Amanda Beilfuss - Procurement Director
Address: Purchasing
City Hall
Room 306
113 W. Mountain St.
Fayetteville, AR 72701
Email: abeilfuss@fayetteville-ar.gov

SSI of Northwest Arkansas Information

Contact: Johnathan Parker
Address: 400 Jean Mary Ave
Springdale, AR 72762
Phone: (479) 361-5857
Email: jparker@ssiofnwa.com
Web Address: ssiofnwa.com

By submitting your response, you certify that you are authorized to represent and bind your company.

Johnathan Parker
Signature

jparker@ssiofnwa.com
Email

Submitted at 2/26/2025 02:07:40 PM (CT)

Requested Attachments

Signature Forms for Bid 25-24 — EXECUTED Signatures.pdf

Please attach your completed forms. These documents can be found in FILE #01 - Project Manual in the Attachments tab. Please be sure to include ALL required information stated in the Project Manual.

Bid Bond for Bid 25-24 — EXECUTED Bid Bond.pdf

Please attach a signed and completed copy of your bid bond. Bid bonds in the form of a cashier's check shall be delivered to City Hall, Purchasing Division before bid deadline and have a copy of the cashier's check uploaded with submittal.

Bid Attributes

1	**Arkansas Secretary of State Filing Number:** 100049422
2	**Arkansas Contractor License Number:** *The "Building" classification is required for this project.* 0001310425
3	**Check Yes or No:** Pursuant Arkansas Code Annotated §25-1-503, the Contractor agrees and certifies that they do not currently boycott Israel and will not boycott Israel during any time in which they are entering into, or while in contract, with any public entity as defined in §25-1-503. If at any time during contract the contractor decides to boycott Israel, the contractor must notify the contracted public entity in writing. ☑ Yes, I agree ☐ No, I don't agree

4	**Check Yes or No:** Pursuant Arkansas Code Annotated §25-1-1002, the Contractor agrees and certifies that they do not currently boycott Energy, Fossil Fuel, Firearms, and Ammunition Industries during any time in which they are entering into, or while in contract, with any public entity as defined in §25-1-1002. If at any time during the contract the contractor decides to boycott Energy, Fossil Fuel, Firearms, and/or Ammunition Industries, the contractor must notify the contracted public entity in writing. ☑ Yes, I agree ☐ No, I don't agree
5	**Addendum Acknowledgement:** By selecting "I agree", you acknowledge that you have read and understand any addendums that have been issued for this bid. ☑ I agree

Bid Lines

1	Mobilization (Shall not exceed 5% of Total Bid. Do NOT include bonds & insurance or trench & excavation safety in this total)	Quantity: 1	UOM: LS	Price: $44,592.17	Total:	$44,592.17
2	Trench & Excavation Safety	Quantity: 1	UOM: LS	Price: $250.00	Total:	$250.00
3	Insurance and Bonding	Quantity: 1	UOM: LS	Price: $19,807.92	Total:	$19,807.92
4	Miscellaneous (up to 5% of Total Bid)	Quantity: 1	UOM: LS	Price: $40,000.00	Total:	$40,000.00
5	R&D existing concrete (Misc)	Quantity: 313	UOM: SY	Price: $10.00	Total:	$3,130.00
6	R&D existing basketball court striping	Quantity: 850	UOM: LF	Price: $7.50	Total:	$6,375.00
7	R&D existing wooden wetland pavilion	Quantity: 1	UOM: LS	Price: $4,200.00	Total:	$4,200.00
8	R&D sections of existing dog park split rail/chain link fence, with concrete mow strip	Quantity: 295	UOM: LF	Price: $5.00	Total:	$1,475.00
9	R&D existing split rail/chain link fence	Quantity: 120	UOM: LF	Price: $5.00	Total:	$600.00
10	R&D existing split rail fence (along Dartmouth)	Quantity: 405	UOM: LF	Price: $5.00	Total:	$2,025.00

11	R&D existing attenuated impact surface	Quantity: 1	UOM: LS	Price:	$15,000.00	Total: $15,000.00
12	16x20 Pavilion	Quantity: 1	UOM: EA	Price:	$46,000.00	Total: $46,000.00
13	12x12 Pavilion (Installation Only) (Owner providing partial materials)	Quantity: 2	UOM: EA	Price:	$9,000.00	Total: $18,000.00
14	Split rail/chain link fence, with concrete mow strip (Dog Park Separation)	Quantity: 310	UOM: LF	Price:	$35.00	Total: $10,850.00
15	Split rail/chain link fence	Quantity: 120	UOM: LF	Price:	$30.00	Total: $3,600.00
16	Split rail wooden fence (Owner providing partial materials) (Along Dartmouth)	Quantity: 470	UOM: LF	Price:	$40.00	Total: $18,800.00
17	Standard duty concrete	Quantity: 1243	UOM: SY	Price:	$100.00	Total: $124,300.00
18	Concrete doweling	Quantity: 1	UOM: LS	Price:	$1,000.00	Total: $1,000.00
19	***Line deleted as part of an Addendum***					
20	Concrete seating walls	Quantity: 2	UOM: EA	Price:	$2,500.00	Total: $5,000.00
21	Concrete footers for wetland pavilion	Quantity: 18	UOM: EA	Price:	$600.00	Total: $10,800.00
22	Swing Set (LSI), Large	Quantity: 1	UOM: EA	Price:	$25,000.00	Total: $25,000.00
23	Swing Set (LSI), Small	Quantity: 1	UOM: EA	Price:	$10,000.00	Total: $10,000.00
24	Gravel- #57 cleaned stone	Quantity: 55	UOM: CY	Price:	$70.00	Total: $3,850.00
25	Filter fabric	Quantity: 2	UOM: EA	Price:	$500.00	Total: $1,000.00
26	Attenuated impact surface	Quantity: 1910	UOM: SF	Price:	$12.00	Total: $22,920.00

27	Benches (Installation Only) (Owner providing partial materials)					
	Quantity: 11	UOM: EA		Price: $1,500.00	Total:	$16,500.00
28	Playground Shade Sails					
	Quantity: 1	UOM: LS		Price: $135,000.00	Total:	$135,000.00
29	***Line deleted as part of an Addendum***					
30	Picnic Tables					
	Quantity: 4	UOM: EA		Price: $7,748.75	Total:	$30,995.00
31	Striping along Dartmouth Ave. (4", yellow reflective paint)					
	Quantity: 407	UOM: LF		Price: $10.00	Total:	$4,070.00
32	Basketball Court Striping (2", white paint)					
	Quantity: 850	UOM: LF		Price: $6.00	Total:	$5,100.00
33	Dog Wash (fixture)					
	Quantity: 1	UOM: EA		Price: $5,500.00	Total:	$5,500.00
34	Install water pipe (1-1/2")					
	Quantity: 188	UOM: LF		Price: $10.00	Total:	$1,880.00
35	Water connection to 1-1/2" water line					
	Quantity: 1	UOM: EA		Price: $3,500.00	Total:	$3,500.00
36	Decorative fire hydrant - relocate					
	Quantity: 1	UOM: EA		Price: $1,200.00	Total:	$1,200.00
37	6" perforated drain pipe					
	Quantity: 1334	UOM: LF		Price: $15.00	Total:	$20,010.00
38	Grate inlet					
	Quantity: 5	UOM: EA		Price: $400.00	Total:	$2,000.00
39	6" PVC drain pipe					
	Quantity: 1081	UOM: LF		Price: $20.00	Total:	$21,620.00
40	Flared-End Section					
	Quantity: 6	UOM: EA		Price: $420.00	Total:	$2,520.00
41	Cleanouts					
	Quantity: 5	UOM: EA		Price: $200.00	Total:	$1,000.00
42	Construct Wetland Pavilion (Owner providing partial materials)					
	Quantity: 1	UOM: LS		Price: $16,900.00	Total:	$16,900.00

43	Excavation (Cut)					
	Quantity: 71	UOM: CY		Price: $30.00	Total:	$2,130.00
44	Select Fill (Fill)					
	Quantity: 252	UOM: CY		Price: $35.00	Total:	$8,820.00
45	Erosion Control					
	Quantity: 1	UOM: LS		Price: $8,000.00	Total:	$8,000.00
46	Tree Protection					
	Quantity: 1100	UOM: LS		Price: $10.00	Total:	$11,000.00
47	Seeding all disturbed areas					
	Quantity: 4490	UOM: SY		Price: $5.00	Total:	$22,450.00
48	Turf Grass (Xerigrass or approved equal)					
	Quantity: 1740	UOM: SF		Price: $13.00	Total:	$22,620.00
49	Trail Lighting (Owner providing partial materials)					
	Quantity: 21	UOM: EA		Price: $5,775.24	Total:	$121,280.04
50	**DEDUCTIVE ALTERNATE 1 -** Deduct Line Item #49 - Trail Lighting (Owner providing partial materials) *(Line excluded from response total)*					
	Quantity: 21	UOM: EA		Price: $5,775.24	Total:	$121,280.04
	Item Notes: *This line item will not be included in Bid total.*					

Response Total: $902,670.13

CITY OF FAYETTEVILLE, ARKANSAS:

BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1

SECTION 05
BID BOND

KNOW ALL MEN BY THESE PRESENTS: that we

SSI Incorporated of Northwest Arkansas

400 Jean Mary Avenue

Springdale, AR 72762

as Principal, hereinafter called the Principal, and

Travelers Casualty and Surety Company of America

One Tower Square

Hartford, CT 06183

a corporation duly organized under the laws of the State of Connecticut as Surety, hereinafter called Surety, are held and firmly bound unto

City of Fayetteville, Arkansas
113 West Mountain Street
Fayetteville, Arkansas 72701

as Obligee, hereinafter called Owner, in the sum of Five Percent of the Total Amount Bid Dollars ($ 5%), for the payment of which sum, well and truly to be made, Principal and said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has submitted a Bid for:

BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1

NOW, THEREFORE, if the Owner shall accept the Bid of Principal and the Principal shall enter into a Contract with the Owner in accordance with the terms of such Bid, and give such Bond or Bonds as may be specified in the Bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of Principal to enter such Contract and give such Bond or Bonds, if the Principal shall pay to the Owner the difference not to exceed the penalty hereof between the amount specified in said Bid and such larger amount for which the Owner may in good faith contract with another party to perform the Work covered by said Bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

CITY OF FAYETTEVILLE, ARKANSAS:

BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1

Signed and sealed this 18th day of February 2025.

PRINCIPAL (CORPORATE SEAL)

SSI Incorporated of Northwest Arkansas

By _____

TRENT HANNA, PRESIDENT

SURETY

Travelers Casualty and Surety Company of America

By _____

Mary Ann Justice, Attorney-In-Fact

ATTORNEY-IN-FACT (CORPORATE SEAL)

(This Bond shall be accompanied with Attorney-in-Fact's authority from Surety)

END OF SECTION 05

TRAVELERS

Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **Mary Ann Justice** of **FORT SMITH**, **Arkansas**, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **21st** day of **April, 2021**.

State of Connecticut

City of Hartford ss.

By: _____
Robert L. Raney, Senior Vice President

On this the **21st** day of **April, 2021**, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June, 2026**

_____
Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this **18th** day of **February**, **2025**

_____
Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.

SECTION 02
BID FORM

Bid Number: 25-24, Construction – Bryce Davis Park Improvements, Phase 1

BID TO:

Owner: The City of Fayetteville, Arkansas
113 West Mountain Street
Fayetteville, Arkansas 72701

BID FROM:

Bidder: SSI INCORPORATED OF NORTHWEST ARKANSAS
400 JEAN MARY AVENUE
SPRINGDALE, AR 72762

ARTICLE 1 - INTENT

1.01 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an agreement with Owner in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Bid price and within the Bid time indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.

ARTICLE 2 - TERMS AND CONDITIONS

2.01 Bidder accepts all terms and conditions of the Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid Security. This Bid will remain subject to acceptance for 90 days after the day of Bid opening. Bidder will sign and deliver the required number of counterparts of the Agreement with the Bonds and other documents required by the Bidding Requirements within 15 days after the date of Owner's Notice of Award.

ARTICLE 3 - BIDDER'S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents, as more fully set forth in the Agreement, that:

A. Bidder has examined and carefully studied the Bid Documents, and the following Addenda, receipt of all which is hereby acknowledged:

Number	Date
1	2/7/25
2	2/13/25
3	2/14/25
4	2/18/25
5	2/20/25
6	2/25/25

B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, performance, and furnishing of the Work.

C. Bidder is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, performance, and furnishing of the Work.

D. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to Work for which this Bid is submitted as indicated in the Contract Documents.

E. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the Site, reports, and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.

F. Bidder has given Purchasing Division written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Contract Documents, and the written resolution thereof by Purchasing Division is acceptable to Bidder.

G. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.

H. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; Bidder has not directly or indirectly induced or

solicited any other Bidder to submit a false or sham bid; Bidder has not solicited or induced any person, firm, or a corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for himself any advantage over any other Bidder or over Owner.

I. Upon receipt of written notice of acceptance of this bid, bidder will execute the formal contract attached within 10 days and deliver a Surety Bond or Bonds as required by the General Conditions.

J. The bid security attached in the sum of $ 45133.51 is to become the property of the Owner in the event the contract and bond are not executed within the time set forth above, as liquidated damages for the delay and additional expense to the Owner caused thereby.

ARTICLE 5 - CONTRACT TIMES

5.01 Bidder agrees that the Work will be substantially completed and completed and ready for final payment 120 consecutive calendar days from the date established in a written notice to proceed. Total completion shall be 150 consecutive calendar days from the date established in a written notice to proceed. The bidder agrees to pay liquidated damages for each consecutive calendar day thereafter the total completion time.

5.02 Bidder accepts the provisions as to liquidated damages in the event of failure to complete the Work within the total completion time. Liquidated damages in the sum of $200.00 for each consecutive calendar day thereafter will be assessed.

ARTICLE 6 – TERMINOLOGY

6.01 The terms used in this Bid which are defined in the GENERAL CONDITIONS or Instructions to Bidders will have the meanings assigned to them.

SUBMITTED on FEBRUARY 26, 20 25.

Arkansas State Contractor License No. 0001310425

If Bidder is:

An Individual

Name (type or printed): _____

By: _____(SEAL)

(Individual's Signature)

Doing business as: _____

Business address: _____

_____

Phone No.: _____ FAX No.: _____

Tax ID No.: _____ UEI No.: _____

A Partnership

Partnership Name: _____(SEAL)

By: _____

(Signature of general partner – attach evidence of authority to sign)

Name (type or printed): _____

Business address: _____

_____

Phone No.: _____ FAX No.: _____

Tax ID No.: _____ UEI No.: _____

A Corporation

Corporation Name: SSI INCORPORATED OF NW ARK. (SEAL)

State of Incorporation: ARKANSAS

Type (General Business, Professional, Service, Limited Liability): CORPORATION (SUBCHAPTER S)

By: _____
(Signature – attach evidence of authority to sign)

Name (type or printed): TRENT HANNA

Title: PRESIDENT

(CORPORATE SEAL)

Attest: _____
(Signature of Corporate Secretary)

Business address: 400 JEAN MARY AVE.
SPRINGDALE, AR 72762

Phone No.: (479) 361-5867 FAX No.: _____

Tax ID No.: 71-0599338 UEI No.: MWEBSYBBIJD5

END OF SECTION 02 – BID FORM

CITY OF FAYETTEVILLE, ARKANSAS:

BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1

SECTION 03 – LIST OF SUBCONTRACTORS

In compliance with the Instructions to Bidders and other Contract Documents, the undersigned submits the following names of Subcontractors to be used in performing the Work for:

BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1

Bidder certifies that all Subcontractors listed are eligible to perform the Work.

Subcontractor's Work	Subcontractor's Name and Address	Expected Percentage or Value
Clearing/Demolition	SSI OF NORTHWEST AR	7%
	400 JEAN MARY AVE. SPRINGDALE, AR	
Mechanical	N/A	
Plumbing	SWX CONSTRUCTION	2%
	1860 E PUMP STATION RD. FAYETTEVILLE, AR 72701	
Electrical	KING ELECTRICAL	16%
	96 LILLIE LANE FAYETTEVILLE, AR 72701	
Roofing/Sheet Metal	N/A	
Other (designate) PLAYGROUND	PLAY BY DESIGN	30%
	2929 E 56TH PL. TULSA, OK 74105	

NOTE: This form must be submitted in accordance with the Instructions to Bidders.

Bidder's Signature

CITY OF FAYETTEVILLE, ARKANSAS:

BID 25-24, CONSTRUCTION – BRYCE DAVIS PARK IMPROVEMENTS, PHASE 1

Section 04

CONTRACTOR REFERENCES

The following information is required from all Bidders so all bids may be reviewed and properly evaluated:

COMPANY NAME: SSI INCORPORATED OF NW ARKANSAS

NUMBER OF YEARS IN BUSINESS: 41 HOW LONG IN PRESENT LOCATION: 41

TOTAL NUMBER OF CURRENT EMPLOYEES: 12 FULL TIME — PART TIME

NUMBER OF EMPLOYEES PLANNED FOR THIS CONTRACT: 2 FULL TIME 1 PART TIME

PLEASE LIST FOUR (4) REFERENCES THAT YOU HAVE PREVIOUSLY PERFORMED SIMILAR CONTRACT SERVICES FOR WITHIN THE PAST FIVE (5) YEARS (All fields must be completed):

1. CITY OF CAVE SPRINGS
COMPANY NAME

CAVE SPRINGS AR
CITY, STATE, ZIP

RANDALL NORVELL
CONTACT PERSON

(479) 248-1040
TELEPHONE

12/2024
DATE COMPLETED

RANDALL.NORVELL@CAVESPRINGSAR.GOV
E-MAIL ADDRESS

2. COLLIERS INTERNATIONAL
COMPANY NAME

ROGERS, AR 72756
CITY, STATE, ZIP

MEGAN MURDOCK
CONTACT PERSON

(479) 636-9000
TELEPHONE

2/2025
DATE COMPLETED

MEGAN.MURDOCK@COLLIERS.COM
E-MAIL ADDRESS

3. CLEMENTS ARCHITECTURE
COMPANY NAME

LITTLE ROCK, AR 72112
CITY, STATE, ZIP

GARY CLEMENTS
CONTACT PERSON

(501) 375-3380
TELEPHONE

12/2024
DATE COMPLETED

GARY@CLEMENTSARCHITECTS.COM
E-MAIL ADDRESS

4. CITY OF TONTITOWN
COMPANY NAME

TONTITOWN, AR 72770
CITY, STATE, ZIP

ANGELA RUSSELL
CONTACT PERSON

(479) 361-2700
TELEPHONE

01/2024
DATE COMPLETED

MAYOR@TONTITOWNAR.GOV
E-MAIL ADDRESS

CITY OF FAYETTEVILLE ARKANSAS

CITY COUNCIL MEMO
2025-306

MEETING OF MARCH 25, 2025

TO: Mayor Rawn and City Council

THRU: Ted Jack, Park Planning Superintendent
Alison Jumper, Director of Parks, Natural Resources and Cultural Affairs
Keith Macedo, Interim Chief of Staff

FROM: Zach Foster, Park Planner II

SUBJECT: **SPECIALIZED REAL ESTATE GROUP, INC. (COST SHARE AGREEMENT):**

RECOMMENDATION:
Approval to enter into a cost share agreement with Specialized Real Estate Group, Inc. Owner, LLC, to improve a trail side park for a total city cost not to exceed $64,000.00 and approval of supporting budget adjustment to recognize Park Land Dedication funds in the Southwest Quadrant.

BACKGROUND:
In 2019, Specialized approached Parks staff with plans to construct a multi-family development and commercial space on the SW intersection of Martin Luther King Jr. Blvd and S. School Ave. The development is located near valuable outdoor recreation resources. At the project's western border is Tanglewood Branch Creek and the intersection of two major paved trails, the Razorback Greenway and Tsa-La-Gi Trail.

Parks Board recommended approval of Specialized's request of parkland dedication and fees in-lieu, totaling 1.24 acres and $150,416 respectively. This was based on 220 units, which was later reduced to 128 units. Parks received 1.28ac and $61,144.14 in fees for the Southwest Quadrant.

This agreement includes Specialized providing design documents, construction administration, and all additional funds beyond the $64,000 provided by the city for park construction. The total cost of construction is estimated to be $310,000.Specialized involved Parks Planning and Parks Maintenance Staff in the park design process. Comments and suggestions from Staff were incorporated into the park's final design.

This agreement also includes Specialized providing maintenance for the park for 10 years before conversion to city responsibility.

DISCUSSION:
Park Land Dedication funds not to exceed $64,000.00 have been identified for the project. Cash payments will be made to Specialized commensurate with the percentage of constructed work completed.

BUDGET/STAFF IMPACT:
Funds are available in the SW Quadrant Parkland Dedication Fund. Staff time will be used to provide due diligence as needed.

ATTACHMENTS: SRF (#3) , BA (#4), Cost Share Contract and Exhibits (#5), Park Construction Documents 100% (#6), Park Lighting (#7)

113 West Mountain Street
Fayetteville, AR 72701
(479) 575-8323

File #: 2025-306

SPECIALIZED REAL ESTATE GROUP, INC. (COST SHARE AGREEMENT):

A RESOLUTION TO APPROVE A COST SHARE AGREEMENT WITH SPECIALIZED REAL ESTATE GROUP, INC. IN AN AMOUNT NOT TO EXCEED $64,000.00 FOR PARK IMPROVEMENTS NEAR THE SOUTHYARD DEVELOPMENT, AND TO APPROVE A BUDGET ADJUSTMENT

WHEREAS, in 2019, Specialized Real Estate Group approached Parks staff with plans to construct a multi-family development and commercial space southwest of Martin Luther King Jr. Boulevard and South School Avenue near valuable outdoor recreation resources; and

WHEREAS, the Parks Board recommended approval of the developer's request for a combination of parkland dedication and fees in-lieu, totaling 1.24 acres and $150,416.00 respectively, based on 220 multi-family units; and

WHEREAS, after the project scope was reduced to 128 units, the City received 1.28 acres and $61,144.14 in fees for the Southwest Quadrant; and

WHEREAS, in the cost share agreement, Specialized Real Estate Group, Inc. has agreed to provide design documents, construction administration services, all additional funds beyond the $64,000.00 provided by the city, and maintenance for the park for 10 years.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby authorizes Mayor Rawn to sign a cost share agreement with Specialized Real Estate Group, Inc., with the City's portion of the cost not to exceed $64,000.00, for improvements to the park adjacent to the Southyard Development.

Section 2: That the City Council of the City of Fayetteville, Arkansas hereby approves a budget adjustment, a copy of which is attached to this Resolution, to recognize Park Land Dedication funds from the Southwest Quadrant.

City of Fayetteville Staff Review Form

2025-306

Item ID

4/1/2025

City Council Meeting Date - Agenda Item Only
N/A for Non-Agenda Item

Zach Foster	3/3/2025	PARKS & RECREATION (520)
Submitted By	**Submitted Date**	**Division / Department**

Action Recommendation:

Approval to enter into a contractual cost share agreement with Specialized Real Estate Group, Inc. Owner, LLC, to improve a trail side park for a total city cost not to exceed $64,000.00 and approval of supporting budget adjustments to recognize Park Land Dedication funds in the Southwest Quadrant.

Budget Impact:

2250.520.9256-5806.00	Park Development
Account Number	Fund
02013.2501	South Yard Park
Project Number	Project Title

Budgeted Item?	No	Total Amended Budget	$	-
		Expenses (Actual+Encum)	$	-
		Available Budget	$	-
Does item have a direct cost?	Yes	Item Cost	$	64,000.00
Is a Budget Adjustment attached?	Yes	Budget Adjustment	$	64,000.00
		Remaining Budget	$	-

V20221130

Purchase Order Number: _____ **Previous Ordinance or Resolution #** _____

Change Order Number: _____ **Approval Date:** _____

Original Contract Number: _____

Comments:

City of Fayetteville, Arkansas - Budget Adjustment (Agenda)

Budget Year	Division /Org2	Adjustment Number
2025	PARKS & RECREATION (520)	
	Requestor: Alan Bearden	

BUDGET ADJUSTMENT DESCRIPTION / JUSTIFICATION:

Budget adjustment to recognize Park Land Dedication (PLD) funds from the Southwest quadrant for required funds to be used to enter a cost-share agreement/contract with Specialized Real Estate Group, Inc. to construct a park (South Yard Park) near the intersection of West Martin Luther King, Jr. Boulevard and South School Avenue.

COUNCIL DATE: 4/1/2025

ITEM ID#: **2025-306**

Kevin Springer
3/3/2025 4:30 PM

Budget Division Date

TYPE: **D - (City Council)**

JOURNAL #:

GLDATE:

RESOLUTION/ORDINANCE

CHKD/POSTED: /

v.2025211

TOTAL	64,000	64,000				
	Increase / (Decrease)		Project.Sub#			
Account Number	Expense	Revenue	Project	Sub.Detl	AT	Account Name
2250.520.9256-4419.02	-	64,000	02013	2501	RE	Greenspace Fees - SW
2250.520.9256-5806.00	64,000	-	02013	2501	EX	Improvements - Park
	-	-				
	-	-				
	-	-				
	-	-				
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Docusign Envelope ID: 1C3BE557-EDE5-4E3C-9768-84C150F407C5

CONTRACTUAL AGREEMENT FOR COST SHARE OF PARK DEVELOPMENT

This Agreement, made and entered into on this _____ day of _____, 2025, by and between the City of Fayetteville, Arkansas ("City") and Specialized Real Estate Group, Inc. ("Specialized") witnesseth:

WHEREAS, a mixed use project consisting of multi-family housing and commercial spaces is being constructed on land owned by Tanglewood Owner, LLC, Tanglewood Owner II, LLC, and Tanglewood Owner III, LLC (the "Owner Entities") near south west corner of the intersection of West Martin Luther King, Jr. Boulevard and South School Avenue; and

WHEREAS, Specialized is primarily responsible for development management related to the Owner Entities and the Owner Entities are affiliates of Specialized; and

WHEREAS, Specialized or one or more of the Owner Entities have previous dedicated parkland to the City of Fayetteville and agreed to pay for a portion of the costs to develop the parkland and the City has also agreed to provide additional funding for the park development; and.

WHEREAS, the parties wish to memorialize their respective obligations with respect to the development of this parkland (park).

WHEREAS, Specialized has estimated that the total cost of developing the park will exceed $200,000.00 based on the 100% Construction Documents set, and that the City shall contribute up to $64,000.00 for development of the park as shown in the attached design documents (Exhibit A) and made a part hereof.

1. **Term.** The development of the parkland is anticipated to be completed by the end of June or July 2025.

2. **The Project.** The project includes construction of a new park that meets recreational, environmental, and sustainable goals and all relevant codes, laws, and ordinances. Specialized, or its contractors, will construct the park based on the design documents (Exhibit A) and maintain the park for ten years after certificate of occupancy is issued for the Project.

3. **City of Fayetteville's Rights and Responsibilities.**

   A. The City shall provide the amount of $64,000.00 in cash for the Project. Payments will be made commensurate with the percentage of constructed work completed for the park.

   B. The City shall remit payment to Specialized up to the amount set forth in Section 3.A within thirty (30) days of receipt of valid invoices.

Docusign Envelope ID: 1C3BE557-EDE5-4E3C-9768-84C150F407C5

C. The City shall work with Specialized on any modifications of the Project if needed and the city shall approve any change orders during construction of the park. Any major revisions to the park design shall be approved by the city.

D. The City, through its Purchasing Division, will be available for consultation by Specialized to ensure City policies, as applicable, are followed correctly.

4. **Specialized's Rights and Responsibilities.**

A. Specialized shall pay (or cause the Owner Entities to pay) the costs to develop the Park. (with up to $64,000.00 in reimbursement by the City for its portion of the Project). Specialized shall submit invoices to the city indicating percent completion of the park.

B. Provide the necessary and normal project management, inspection, and testing as necessary for the complete and acceptable construction of the park. Specialized shall ensure compliance with the City's Unified Development Code (including, specifically, the Streamside Protection Ordinance), other City ordinances, and any applicable state and federal laws. Specialized is responsible for ensuring the park is constructed meeting applicable codes.

C. To begin construction of the project Specialized shall issue a notice to proceed to its contractor or contractors. Specialized agrees that Specialized will use commercially reasonable efforts to substantially complete the Project within 6 months after the notice to proceed has been issued.

D. Specialized shall maintain the Project for a period of ten (10) years from the date a Certificate of Occupancy is issued for the. Specialized may include a reasonable estimate of ongoing maintenance costs as part of its contribution for the Project. Specialized shall not substantially alter the Project without written approval from the City. Substantial alterations shall include any activities unrelated to the general maintenance of the project including, but not limited to, grading, installation or removal of permanent fixtures, installation or removal of signage, and alteration of the stream or streambank. Specialized shall at a minimum maintain the park to Level Three maintenance as defined by park standards, as attached hereto as Exhibit B.

E. Specialized agrees that it will require all of its contractors to indemnify, defend, and hold harmless the City from and against any and all loss where loss is caused or incurred or alleged to be caused or incurred in whole or in part as a result of the negligence or other actionable fault of the Contractors, or their employees, agents, Subcontractors, and Suppliers.

F. Specialized agrees that it will build the park to meet or exceed typical park standards so that a long lasting, reasonably maintainable park will be constructed.

Docusign Envelope ID: 1C3BE557-EDE5-4E3C-9768-84C150F407C5

A primary function of the park is to serve as an exciting stop on the Razorback Greenway offering places for people to sit and enjoy the small greenspace with food opportunities close by.

G. Specialized may add low voltage lighting to the park powered from the existing trail lights. The city will pay for the electrical use and Specialized shall maintain the lights.

5. **Railroad Trestle**. The city will not accept the Railroad Trestle in its current state. The parties may determine that improvements to the railroad trestle are warranted. The City may, but is not required, to accept the railroad trestle as additional parkland dedication or donation. Any provisions related to the railroad trestle shall be addressed in a written change order or contract amendment.

6. **Contract Amendments.** Changes, modifications or amendments to the scope, price or fees dictated by this Contract shall not be allowed without a prior formal Contract amendment approved by the City and by the authorized agent of Specialized in advance of the change.

7. **Contractor.** It is further understood that the contract for construction of these improvements is between Specialized (or the Owner Entities) and their Contractor and that the City has no contractual obligation with either the Contractor or any agent of Specialized. The City's only obligation shall be to participate in a contractual agreement with a not-to-exceed amount of $64,000.00 for the construction of the park.

Docusign Envelope ID: 1C3BE557-EDE5-4E3C-9768-84C150F407C5

IN WITNESS WHEREOF, the parties hereto have caused their signatures to be set by their authorized representative effective the date set forth below.

CITY OF FAYETTEVILLE, ARKANSAS

_____
Molly Rawn, Mayor

Date: _____

ATTEST:

_____
Kara Paxton, City Clerk-Treasurer

SPECIALIZED REAL ESTATE GROUP, INC.

DocuSigned by:
Jeremy Hudson
85501D0A4AF2428...
_____
Jeremy Hudson, President

Date: _____

Exhibit A - South Yard Park - Project Cost Estimate 17-Feb-25

Pricing Reflects Bids from the EDG 100% CD Set

		Quantity		Unit Cost		Total
1	**General Requirement - Misc.**					$16,000.00
	Survey/Layout					
	Tressle Closure - Fencing Only					
	Straw Waddle					
	4' Orange Tree Protection Fencing					
	Cut Down & Remove Tree					
	Scalp & Remove Topsoil - 18" Depth Max					
2	**Concrete**					$82,536.00
	Piers - 12" x 3'-0"					
	Cheek Walls					
	Ribbon Curb					
	Sidewalk					
	Construction Entrance w/6" Clean Stone					
	Concrete Washout					
	Concrete Pier - Pole Fixture					
3	**Electrical**					$22,900.00
	Pole Fixture					
	Recessed Fixture					
	Install/Conduit					
4	**Decks, Boardwalk, & Railing**					$46,758.75
	Wood Deck A					
	Boardwalk & Wood Deck B					
	Built in Benches					
	Wire Mesh w/Wood Frame Rail					
5	**Landscape**					$50,323.00
	Trees - 3.5" Caliper - River Birch - Single Trunk					
	Trees - 3" Caliper Fruitless Gum					
	1 gallon - Fox Sedge					
	2" Plugs - Blue Wood Sedge					
	2" Plugs - Northern Sea Oats					
	2" Plugs - White Wood Aster					
	Bermuda Sod					
	Crushed Limestone 1/4" Minus w/Fines					
	Planting Mix					
	Hardwood Mulch					
	Boulder Installation					
6	**Irrigation** **dependant on water supply*					$8,000.00
7	**Signage/Wayfinding - Placeholder**					$6,000.00
8	**Site Furniture/Bike Racks - Placeholder**					$12,000.00
				Sub-Total		**$244,518**
	Soft Cost/Design					$10,500
	Project Management	0.100	%	$244,518	%	$24,452
	10% Contingency	0.100	%	$244,518	%	$24,452
						$303,921

Exhibit B-

Level 3 Maintenance Standards

Fayetteville Park and Recreation System Master Plan (2023)

Level 3 - *Consistent, moderate care maintenance for regularly attended but lower use areas of high use parks. Maintenance should ensure a safe, attractive, and functional site and accommodate this steady and medium levels of visitors. Maintenance is typically performed once to twice per week.*

Park areas in this category include: lower but still actively used areas of regional and Community Parks, and high use areas of the most popular neighborhood parks such as Gordon Long west of creek.

• INSPECTIONS Quality inspections done every other month.

• TURF CARE Mowed at least once every seven working days in growing season. Little effort is used to keep a weed free turf.

• LITTER CONTROL Trash cans emptied minimum three days per week.

• RESTROOMS Open minimum 12 hours per day, seven days per week. Cleaned minimum of once every other day.

• PLAYGROUNDS Inspected for safety routinely based on usage. Loose surfaces groomed monthly, solid surfaces cleaned once per week.

• FACILITIES Kept tidy and clear of debris and are cleaned prior to and after reservations.

• SURFACES Cleaned regularly. Repaired, repainted, or replaced when appearances have noticeably deteriorated.

• FURNISHINGS Kept clean and functional. Tolerance of wear and tear that does not impede use and safety.

• IRRIGATION Frequency of use follows rainfall, temperature, etc. Inspected once per month during growing season. In times of drought these are medium priority areas.

• LANDSCAPE PLANTINGS Minimal care. Floral plantings are limited in size and complexity. Minimal care (water, fertilizing, pruning, weeding, etc.) is done once every three weeks in growing season.

• REPAIRS performed whenever safety, function, or appearance is in question.

NOTE FOR COST SHARE AGREEMENT BETWEEN SPECIALIEZED AND CITY:

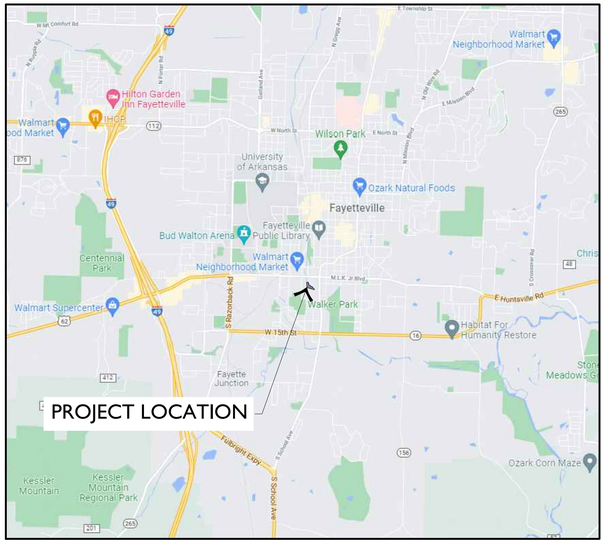
Maintenance on “SURFACES” category includes the inspection and removal of any mold, mildew, or other agents that generate a slipping hazard on wooden boardwalks and decking.

SOUTH YARD PARK

417 MARTIN LUTHER KING JR. BLVD,FAYETTEVILLE, AR 72712
(PPL #-XX-XXXX)

100% CONSTRUCTION DOCUMENTS

JANUARY 31, 2025



VICINITY MAP
NOT TO SCALE

NORTH

AERIAL MAP
NOT TO SCALE

NORTH

SHEET INDEX		SUPPLEMENTAL SHEETS	
C0.00	COVER SHEET	SHEET 1 OF 5	ALTA SURVEY
C0.01	GENERAL NOTES & LEGENDS	SHEET 2 OF 5	ALTA SURVEY
C0.10	TREE PROTECTION & EROSION CONTROL PLAN	SHEET 3 OF 5	ALTA SURVEY
C0.11	TREE PROTECTION & EROSION CONTROL DETAILS	SHEET 4 OF 5	ALTA SURVEY
C1.00	SITE PLAN	SHEET 5 OF 5	ALTA SURVEY
C1.01	SITE LAYOUT PLAN		
C2.00	GRADING & DRAINAGE PLAN		
C3.00	SITE DETAILS		
C3.01	SITE DETAILS		
L1.00	LANDSCAPE PLAN		
L1.10	LANDSCAPE NOTES & DETAILS		

LEGAL DESCRIPTION

Part of the Southwest Quarter (SW1/4) of the Southeast Quarter (SE1/4) of Section 16 and a part of the Northwest Quarter (NW1/4) of the Northeast (NE1/4) of Section 21, Township 16 North, Range 30 West, Washington County, Arkansas (including part of Blocks 14, 15, 16, 20, 21 and 23, in Ferguson Addition to the City of Fayetteville, as per plat of said Subdivision on file in the office of the Circuit Clerk and Ex-Officio Recorder of Washington County, Arkansas and part of the former Arkansas and Missouri Railroad right-of-way and part of the former P & GE Railroad right-of-way), being more particularly described as follows:
Beginning at the SW corner of said SW/4 of the SE/4 of Section 16 as calculated from a survey by Gene Buescher, RLS #1181 for Southern Farms Coop, recorded as document No. 99-10704I;
THENCE North 02°53'31" East 11.38 feet to the northerly right-of-way line of the said former Arkansas and Missouri Railroad as calculated from Arkansas Department of Transportation Right-of-Way Plans for Arkansas Highway 180 (Martin Luther King Avenue), Sheet No. 4, Job No. 4705 sec.3;
THENCE along said northerly right-of-way line, along a curve to the left, with an arc length of 72.58 feet, having a radius of 402.47 feet, through a central angle of 10°19'57" and having a chord bearing and distance of North 77°51'19" East, 72.48 feet;
THENCE North 02°29'33" East 187.24 feet;
THENCE North 87°07'29" West 57.03 feet;
THENCE North 00°44'05" East 63.27 feet to a 2" aluminum ARDOT monument found on the southerly right-of-way line of said Arkansas Highway 180;
THENCE along said southerly right-of-way line the following 6 calls:
1.South 72°29'02" East 27.42 feet;
2.North 75°12'17" East 46.71 feet;
3.South 85°42'06" East 295.00 feet;
4.North 04°17'54" East 5.00 feet;
5.South 85°42'06" East 30.33 feet to a P.I. point;
6.South 86°31'11" East 191.51 feet to a 2" aluminum ARDOT monument found;
THENCE South 04°03'13" West 81.05 feet;
THENCE North 85°50'41" West 32.00 feet;
THENCE South 04°22'07" West 174.81 feet to the centerline of Vacated Seventh Street, from which a 3/8" rebar bears South 04°22'07" West 25.01 feet;
THENCE along said centerline South 87°14'03" East 144.12 feet to the existing westerly right-of-way line of U.S. Highway 71 Business (South School Avenue);
THENCE along said westerly line, South 02°20'12" West 284.82 feet;
THENCE continuing along the said westerly line the following 6 calls:
1.North 87°17'34" West 20.00 feet;
2.South 02°20'12" West 20.35 feet to a 1/2" rebar with cap, PS #1443 found;
3.North 89°23'15" East 6.77 feet to a 1/2" rebar with cap, PS #1443 found;
4.South 00°17'52" East 26.36 feet to a 1/2" rebar with cap, PS #1443 found;
5.North 88°57'17" West 7.89 feet to a 1/2" rebar with cap, PS #1443 found;
6.South 01°56'38" West 22.47 feet to a MAG Nail found;
THENCE leaving said westerly right-of-way line, North 89°26'23" West 259.40 feet to a 1/2" rebar with cap, PS #281 found;
THENCE South 89°35'28" West 5.46 feet to a 5/8" rebar found;
THENCE North 70°58'47" West 417.65 feet to the easterly line of Tract No. 8 as described in property described in a Warranty Deed recorded as Document 2002028098;
THENCE with said easterly line, North 02°11'30" East 108.65 feet to the southerly right-of-way line of an abandoned railroad;
THENCE along said southerly line, South 82°03'55" West 20.01 feet to the west line of the Northwest Quarter (NW1/4) of said Section 21;
THENCE along said west line, North 02°53'31" East 118.63 feet to the POINT OF BEGINNING, containing 358,380 square feet or 8.23 acres, more or less.

FLOOD NOTE:

Based upon review of NFIP FIRM, Washington County, Arkansas, and Incorporated Areas, Map Number 05143C0220F, Map Revised: May 16, 2008, and by graphic plotting only, the subject property lies within Zone X, Areas determined to be outside the 0.2% annual chance floodplain. Surveyor, Landscape Architect, and Civil Engineer assume no liability for the correctness of the map cited.

WETLAND NOTE:

It has been determined that no wetlands exist on site per US Fish and Wildlife Wetland Mapper (Data last modified December 1, 2021)

PROJECT NOTES

1. The City of Fayetteville Street Standards, Drainage Criteria Manual, Subdivision Ordinance, Water and Sewer Utility Specifications, and State Code shall govern these plans. If there are discrepancies in the plans or information contained within, City of Fayetteville Ordinances, Standards, and Specifications shall rule, unless, approved in writing by the City Engineer.

2. To schedule an inspection or test with the City of Fayetteville Engineering Department, inspections must be called in (479.575.8206) by the Engineer of record 24 hours in advance before 10am for an inspection the following day.

3. The Engineer of record must certify the site and the project must pass a development final site inspection before requesting a building final inspection.

4. The Engineer of record shall coordinate and schedule a Pre-Pave PreCon with the Engineering Department and Contractor before the paving of any public street or public alley.

OWNER:
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113 W MOUNTAIN ST
FAYETTEVILLE, AR 72701

LANDSCAPE :
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SURVEYOR:
MORRISON SHIPLEY
BRAD FERGUSON
2407 SE COTTONWOOD ST
BENTONVILLE, AR 72712
479.273.2209

SITE SUMMARY

ZONING:
I-1 / MSC
USE:
PUBLIC PARK
AREA:
1.24 AC

CITY AND UTILITY CONTACTS:

ENGINEERING:
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LICENSED LANDSCAPE ARCHITECT
TANNER L. WEEKS
Expires 1.31.25
STATE OF ARKANSAS

811 Know what's below. Call before you dig.

SOUTH YARD PARK
Fayetteville, Arkansas

EDG PROJECT NO. 21-070
DATE 2025.01.31

REVISIONS

Mark	Date	Description

PHASE 100% CONSTRUCTION DOCUMENTS
TITLE Cover Sheet
SHEET NO. C0.00

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GENERAL NOTES:

1. EXISTING SURVEY DATA WAS OBTAINED FROM A TOPOGRAPHIC & BOUNDARY SURVEY PERFORMED BY MORRISON SHIPLEY AND DATED APRIL 29,2019.
2. SURVEY DATA IS BASED UPON NAD 83, STATE STATE PLANE, ARKANSAS NORTH FEET COORDINATE SYSTEM.
3. ELEVATIONS ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM.
4. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY, COUNTY, STATE, AND FEDERAL REGULATIONS AND CODES AS WELL AS OSHA STANDARDS. SITE CONTRACTOR SHALL MEET OR EXCEED ALL LOCAL, STATE, AND FEDERAL EROSION CONTROL MEASURES
5. THE APPROXIMATE LOCATION OF KNOWN UTILITIES & SUBSURFACE STRUCTURES AS SHOWN HEREON ARE BASED ON ABOVE-GROUND VISIBLE STRUCTURES & RECORD DRAWINGS PROVIDED. LOCATIONS OF UNDERGROUND UTILITIES/STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREON. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF THESE & ALL OTHER SUBSURFACE AND/OR LATENT FACILITIES PRIOR TO BEGINNING WORK. ALL REPAIRS OR RELOCATIONS NECESSARY SHALL BE MADE AS REQUIRED BY THE OWNER OF THE UTILITY OR STRUCTURE & THE COST OF SUCH REPAIRS NECESSARY SHALL BE BORNE BY THE CONTRACTOR.
6. ALL WORK PERFORMED WITHIN THE RIGHT-OF-WAY SHALL BE COORDINATED WITH THE CITY OF FAYETTEVILLE ENGINEERING DEPARTMENT AND TRAFFIC DEPARTMENT.
7. ALL STREETS, DRIVES, WALKS, DRAINAGE STRUCTURES, FENCES, ETC. THAT ARE DISTURBED SHALL BE RESTORED TO THEIR ORIGINAL OR BETTER CONDITION USING LIKE MATERIALS. COST OF SUCH REPAIRS SHALL BE BORNE BY THE CONTRACTOR UNLESS PROVISION FOR PAYMENT IS MADE IN THE PROPOSAL.
8. THE CONTRACTOR IS REQUIRED TO NOTIFY THE ONE CALL CENTER AT 1-800-482-8998 48 HOURS PRIOR TO DIGGING IN ORDER THAT UNDERGROUND UTILITIES IN THE AREA CAN BE LOCATED.
9. THE CONTRACTOR SHALL NOT BEGIN WORK UNTIL THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN IMPLEMENTED, AND THE SWPPP, EROSION CONTROL PLAN, AND SIGNED AUTOMATIC NOTICE OF COVERAGE IS POSTED ON SITE..
10. CONTRACTOR IS RESPONSIBLE FOR ALL FIELD TESTING AS DESCRIBED IN THE SPECIFICATIONS (INCLUDING BUT NOT LIMITED TO COMPACTION DENSITY TESTING, ETC.), AND SHALL PROVIDE RESULTS TO ENGINEER, AND MAINTAIN RECORDS AND RESULTS OF ALL TESTS PERFORMED DURING CONSTRUCTION. TESTING BY THE CONTRACTOR SHALL BE INCLUDED IN THE BID.
11. EXISTING FACILITIES AND FEATURES ARE SHOWN LIGHT-LINED AND/OR SCREENED. NEW FACILITIES AND FEATURES ARE SHOWN SOLID AND HEAVY-LINED.
12. SLOPES AND GRADES SHOWN ARE IN UNITS OF FT/FT UNLESS OTHERWISE NOTED.
13. ALL PAVEMENT AND CURB MEASUREMENTS ARE TAKEN FROM FACE OF CURB OR EDGE OF PAVEMENT.
14. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

DEMOLITION NOTES:

1. DEMOLITION SHALL NOT BEGIN UNTIL THE APPROPRIATE EROSION CONTROL MEASURES AND REQUIRED TREE PRESERVATION FENCING HAVE BEEN INSTALLED.
2. CONTRACTOR SHALL SHALL FOLLOW ALL FEDERAL, STATE, AND LOCAL CODES FOR DEMOLITION AND DISPOSAL OF ALL MATERIALS.
3. CONTRACTOR SHALL ENSURE THAT ADJACENT PROPERTY IS NOT DAMAGED.
4. CONTRACTOR SHALL COORDINATE WILL ALL UTILITY COMPANIES REGARDING RELOCATION, REMOVAL, AND/OR DISCONNECTION.
5. CONTRACTOR SHALL PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC.
6. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY UNDERGROUND TANKS ARE FOUND ON SITE.
7. ALL TREES (EXCEPT THOSE SHOWN TO BE PROTECTED) AND VEGETATION WITHIN THE CLEARING AND GRADING LIMITS SHALL BE CLEARED AND GRUBBED INCLUDING TREE ROOT SYSTEMS. ALL DEBRIS IS TO BE REMOVED FROM THE SITE.
8. STRIP TOPSOIL AND STOCKPILE IN THE DESIGNATED AREA FOR FUTURE USE.
9. LARGE ROCKS AND BOULDERS SHALL BE REMOVED AND DISPOSED FROM THE SITE.

STREET CONSTRUCTION (GRADING) AND EARTHWORK NOTES:

1. THE ENGINEER SHALL BE NOTIFIED 24 HOURS PRIOR TO PLACEMENT OF ANY FILL MATERIAL, INSTALLATION OF STORM DRAINAGE PIPE, DRAINAGE STRUCTURES, CURB AND GUTTER, OR PLACEMENT OF CRUSHED STONE OR ASPHALT.
2. CONTRACTOR SHALL REVIEW THE GEOTECHNICAL REPORT PERFORM EARTHWORK IN ACCORDANCE WITH THE RECOMMENDATIONS IN SAID REPORT.
3. THE CONTRACTOR SHALL NOTIFY THE GEOTECHNICAL ENGINEER TO INSPECT THE SUBGRADE PRIOR TO PLACING FILL.
4. FILL AND BACKFILL SHALL BE PLACED IN HORIZONTAL, NOMINAL 6- TO 8-IN THICK LOOSE LIFTS. EACH LIFT SHALL BE TESTED AND APPROVED PRIOR TO PLACING SUBSEQUENT LIFTS.
5. THE SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS AND SECTION 212 OF THE ARKASAS STATE HIGHWAY DEPARTMENTS STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. PRIOR TO PLACING THE CRUSHED STONE BASE COURSE THE SUBGRADE SHALL BE PROOF ROLLED, AND MUST BE VERIFIED TO CONFORM TO THE GRADES AND SLOPES SHOWN ON THE DRAWINGS.
6. ALL MUD SOIL, AND LOOSE GRAVEL SHALL BE REMOVED FROM THE CRUSHED STONE BASE AND CONCRETE CURB PRIOR TO PLACEMENT OF ASPHALT.
7. THE CONTRACTOR SHALL PROVIDE APPROPRIATE ADVANCED WARNING DEVICES, BARRICADES, BARRELS, AND OTHER MEASURES AS NEEDED TO PROPERLY CONTROL AND ADVISE TRAFFIC OF CONSTRUCTION EQUIPMENT.
8. THE CONTRACTOR SHALL REPAIR ANY DAMAGE THE CONSTRUCTION ACTIVITY OR HAULING OF MATERIAL MAY HAVE ON THE EXISTING STREETS AND/OR ACCESS ROADS.
9. COORDINATE WORK WITH OWNER TO MINIMIZE THE EFFECTS OF CONSTRUCTION ON DAILY OPERATIONS OF THE FACILITY.
10. COORDINATE ALL DEMOLITION WORK WITH OWNER. VERIFY OWNER DOES NOT WISH TO RETAIN MATERIAL BEFORE IT IS REMOVED AND DISPOSED.
11. ALL CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE DESIGNATED AREAS SHOWN ON THE PLANS. ALL AREAS OUTSIDE OF THOSE LIMITS SHALL BE PROTECTED AND MAINTAINED.
13. GRADING SHALL BE LIMITED TO THE EXTENT OF THE PROPOSED CONTOURS AND SPOT GRADES SHOWN ON THE PLANS.
14. ALL CUT AND/OR FILL SLOPES SHALL BE A MAXIMUM 3H:1V SLOPE OR FLATTER UNLESS OTHERWISE NOTED.
15. ALL STORM DRAINAGE PIPE CONNECTIONS TO STRUCTURES SHALL BE GROUTED TO PROVIDE A WATERTIGHT CONNECTION AT THE STRUCTURE.
16. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES INSTALLED IN PAVED AND TRAFFIC AREAS SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADING AND INSTALLED IN ACCORDANCE TO MANUFACTURER'S RECOMMENDATIONS FOR H20 LOADING.
17. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH THE PAVEMENT AND SHALL HAVE TRAFFIC BEARING RINGS AND COVERS.
18. THE EARTHWORK FOR ALL BUILDING FOUNDATIONS AND SLABS SHALL BE IN ACCORDANCE WITH ARCHITECTURAL OR STRUCTURAL ENGINEERING PLANS AND SPECIFICATIONS.

GENERAL EROSION CONTROL NOTES:

1. SITE CONTRACTOR IS RESPONSIBLE FOR INSTALLING, MONITORING, AND MAINTAINING ALL EROSION & SEDIMENT CONTROL BMPS.
2. SITE CONTRACTOR IS RESPONSIBLE TO KEEP AND UPDATE ALL STORM EVENT LOG BOOKS.
3. THE CONTRACTOR SHALL IMPLEMENT AN EROSION CONTROL PLAN TO PREVENT MUD, SEDIMENT, AND CONSTRUCTION MATERIALS FROM BEING WASHED OR TRACKED OFF SITE ONTO ADJACENT PROPERTY. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE APPROVED ADEQ CONSTRUCTION STORMWATER PERMIT AND MAINTAIN THE STORMWATER POLLUTION PREVENTION PLAN AT ALL TIMES.
4. THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IS COMPRISED OF THIS DRAWING (SITE MAP), THE EROSION CONTROL DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN THE TEMPORARY EROSION CONTROL SECTION OF THE SPECIFICATIONS, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
5. EROSION CONTROL DEVICES SHALL BE INSTALLED AS THE PROJECT PROGRESSES AND AREAS ARE DISTURBED.
6. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
7. BEST MANAGEMENT PRACTICES AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, AND OR LOCAL MANUAL OF PRACTICE, AND THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECT BY THE PERMITTING AGENCY OR OWNER.
8. THIS EROSION CONTROL PLAN MAY BE REVISED BY ADDING OR DELETING EROSION CONTROL DEVICES AS DIRECTED BY THE ENGINEER.
9. THE LOCATIONS OF THESE EROSION CONTROL DEVICES MAY BE CHANGED IF SITE CONDITIONS WARRANT TO PREVENT EROSION.
10. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE AND EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
11. ALL INLETS ON AND ADJACENT TO THE SITE SHALL BE PROTECTED FROM SEDIMENT.
12. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN UP FUEL OR CHEMICAL SPILLS AND LEAKS.
13. PERFORM EQUIPMENT AND VEHICLE MAINTENANCE ONLY IN DESIGNATED AREAS. USE DRIP PANS UNDER EQUIPMENT.
14. INSPECT ALL EROSION CONTROL DEVICES WEEKLY AND FLOWING RAINFALL EVENTS OF 0.5 INCHES THROUGHOUT THE DURATION OF THIS PROJECT AND UNTIL PERMANENT VEGETATION IS ESTABLISHED.
15. ALL DISTURBED AREAS LEFT IDLE FOR A PERIOD OF 14 DAYS OR LONGER ARE TO RECEIVE TEMPORARY VEGETATION AND MULCHED.
16. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND/OR OTHER PETROLEUM-BASED, OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATION IS PROHIBITED.
17. SOLID WASTE (INCLUDING TRASH AND DEBRIS) MUST BE DISPOSED OF PROPERLY, AND HAZARDOUS MATERIALS (INCLUDING OIL, GASOLINE, AND PAINT) MUST BE PROPERLY STORED (WHICH INCLUDES SECONDARY CONTAINMENT). PROPERLY MANAGE PORTABLE SANITARY FACILITIES.
18. USE DRY CLEANUP METHODS TO COLLECT LITTER AND ABSORB ANY LIQUID WASTES PRIOR TO ANY PRESSURE WASHING. THESE INCLUDE USING ABSORBENTS (RAGS, SAND, ETC.), SWEEPING, AND SCRAPPING OFF DRIED DEBRIS.
19. RUBBISH, TRASH, GARBAGE, OR LITTER SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM BEING BLOWN OR WASHED OFF-SITE.
20. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCE/EXIT IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES EXIT ONTO THE PUBLIC ROADS. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF SITE..
21. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
22. ON-SITE AND OFF-SITE STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH ADEQ CONSTRUCTION STORMWATER PERMIT.
23. ALL MATERIALS MUST BE STORED OUT OF THE WAY OF VEHICULAR TRAFFIC.
24. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.
25. EROSION CONTROL FACILITIES REQUIRED BY THESE PLANS AND/OR THE FACILITY PERMIT ARE THE MINIMUM REQUIRED. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL FACILITIES AS NECESSARY.
26. REMOVE EROSION CONTROL DEVICES AFTER PERMANENT VEGETATION IS ESTABLISHED.

ADDITIONAL EROSION CONTROL NOTES:

INITIAL SITE PREPARATION:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCES/EXITS.
2. SITE CONTRACTOR SHALL SUBMIT TO ENGINEER FOR APPROVAL A SITE MAP SHOWING THE PROPOSED LOCATIONS OF THE FOLLOWING: TRAILER, PARKING, LAY DOWN, PORTAJ-POTTY, WHEEL WASH, CONCRETE WASH-OUT, MASON'S AREA, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., DENOTE THEM ON THE SITE MAPS IMMEDIATELY AND NOTE ANY CHANGES IN THE LOCATIONS AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROGRESS.
3. CONSTRUCT THE SILT FENCES ON THE SITE AS INDICATED ON THE PLANS.
4. CONSTRUCT THE SEDIMENTATION AND SEDIMENT TRAP BASINS.
5. CONTACT THE ENGINEER TO PERFORM INSPECTION OF THE BMPS. SITE CONTRACTOR SHALL SCHEDULE AND CONDUCT STORM WATER PRE-CONSTRUCTION MEETING WITH ENGINEER AND ALL GROUND DISTURBING SUB-CONTRACTORS BEFORE PROCEEDING WITH CONSTRUCTION.
6. CLEAR AND GRUB THE SITE WITHIN THE LIMITS OF WORK SHOWN ON THE PLANS.
7. CONTRACTOR SHALL BEGIN GRADING THE SITE AND BEGIN CONSTRUCTION.

DURING CONSTRUCTION:

1. TEMPORARILY SEED DISTURBED AREAS.
2. INSTALL INLET PROTECTION AROUND ALL NEWLY CONSTRUCTED STORM SEWER STRUCTURES.
3. AFTER PAVING, INSTALL INLET PROTECTION DEVICES.
4. AT THE COMPLETION OF GRADING INSTALL PERMANENT SEEDING AND PLANTINGS.
5. ONCE SITE IS STABILIZED, THE CONTRACTOR CAN REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES.
6. ON AN AS-NEEDED BASIS OR AS DIRECTED BY THE CITY OR OWNER, THE CONTRACTOR SHALL CONTROL DUST BY EXPOSING THE SOIL SURFACE TO MOISTURE PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST.

PROPOSED LEGEND

- TREE TO BE REMOVED & DISPOSED
- PROPOSED TREE PROTECTION FENCE
- PROPOSED CONSTRUCTION ENTRANCE
- PROPOSED CONCRETE WASHOUT
- LIMITS OF DISTURBANCE
- PROPOSED STRAW WATTLE
- PROPOSED SIDEWALK
- PROPOSED WOODEN DECK
- PROPOSED CRUSHED STONE
- PROPOSED INTERMEDIATE CONTOUR (1FT) — 000
- PROPOSED INDEX CONTOUR (5 FT) — 000
- PROPOSED SPOT GRADE — 500.XX
- PROPOSED ELECTRIC SERVICE — UGE — UGE

ABBREVIATIONS

BOC	BACK OF CURB
BC	BOTTOM OF CURB
BW	BOTTOM OF WALL
CL	CENTERLINE
DIA	DIAMETER
DWG	DRAWING
E	EASTING
ELEV	ELEVATION
EWOC	EACH WAY ON CENTER
EX	EXISTING
FFE	FINISH FLOOR ELEVATION
FG	FINISH GRADE
FL	FLOWLINE
FOC	FACE OF CURB
FT	FEET
HORZ	HORIZONTAL
ID	INSIDE DIAMETER
INV	INVERT
LB	POUNDS
LEN	LENGTH
LF	LINEAR FEET
MAX	MAXIMUM
MIN	MINIMUM
N	NORTHING
N.T.S.	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
PL	PROPERTY LINE
PVT	PAVEMENT
R	RADIUS
SCH	SCHEDULE
SS	STAINLESS STEEL
SQ	SQUARE
TC	TOP OF CURB
TW	TOP OF WALL
TYP	TYPICAL
VERT	VERTICAL

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LICENSED LANDSCAPE ARCHITECT — TANNER L. WEEKS — 1.31.25 — STATE OF ARKANSAS

811 Know what's below. Call before you dig.

SOUTH YARD PARK
Fayetteville, Arkansas

EDG PROJECT NO. 21-070
DATE 2025.01.31

REVISIONS

Mark	Date	Description

PHASE 100% CONSTRUCTION DOCUMENTS

TITLE General Notes & Legends

SHEET NO. C0.01

1 GENERAL NOTES & LEGENDS

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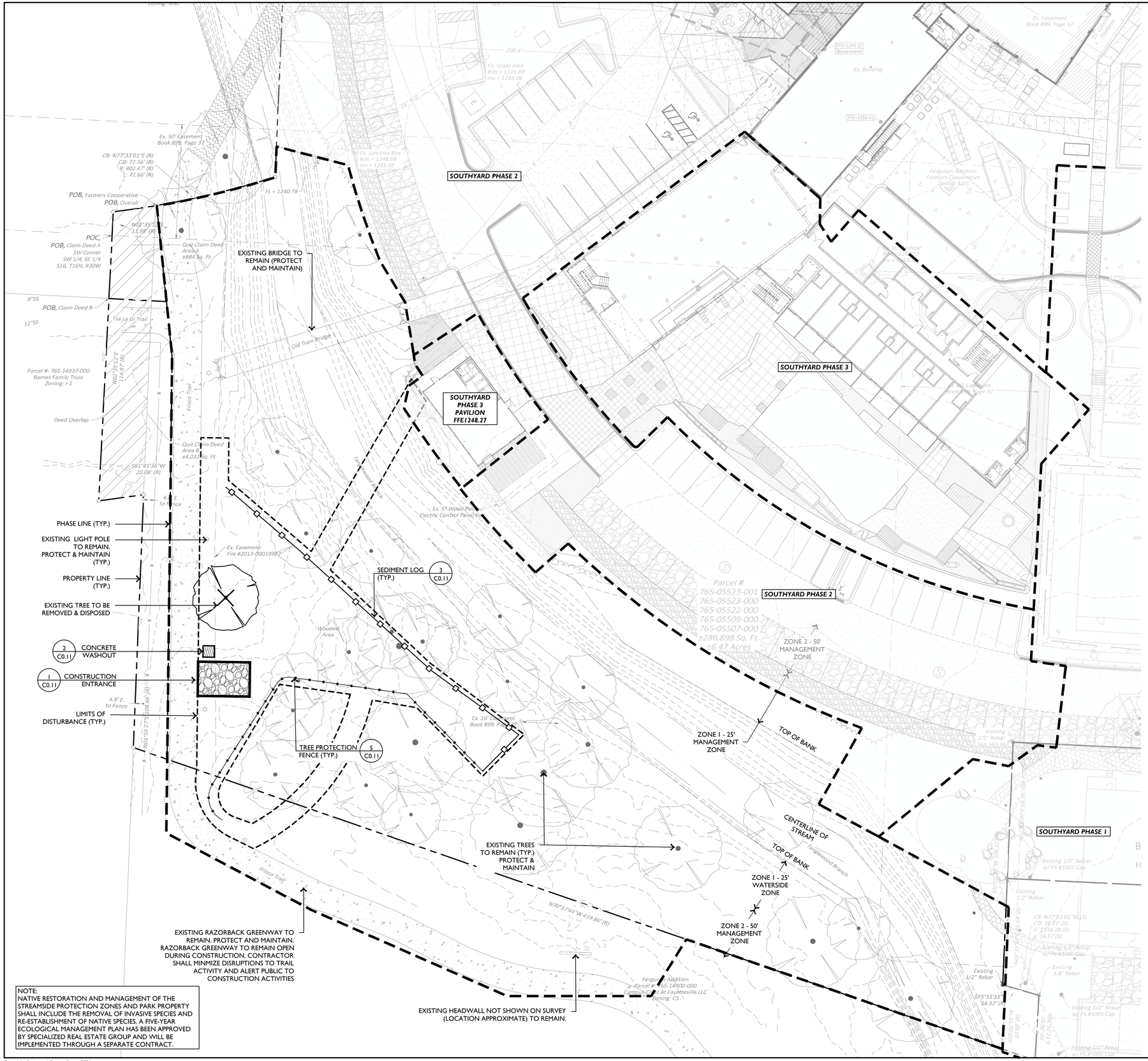

PROPOSED LEGEND

- TREE TO BE REMOVED & DISPOSED
- TREE PROTECTION FENCE
- CONSTRUCTION ENTRANCE
- CONCRETE WASHOUT
- LIMITS OF DISTURBANCE
- STRAW WATTLE
- PARK PHASE BOUNDARY

Mitigation Requirements			
Canopy Below Requirements Sq. Ft.	Preservation Priority Type	Forestation Base Density Acre	Number of 2" Caliper Trees to be Planted
350	High Priority	200	2
0	Low Priority	100	0

Tree Preservation Calculations		
	Square Feet	Percent of site
Total Site Area *Minus Right of Way and Easements	54,187	100%
*Zoning Designation * Select Below with drop down arrow*		
MSC, Main Street Center	5419	10%
*HHOD * Select Below with Drop Down Arrow*		
No	0	0%
Total Canopy for Minimum Preservation Requirements	5,419	
Existing Tree Canopy * Minus Right of Way and Easements	54,187	100.0%
Tree Canopy Preserved	51,171	94.4%
Tree Canopy Removed *On Site	3,016	5.6%
Tree Canopy Removed *Off Site	350	
Tree Canopy Removed Total	3,366	6.2%
Removed Below Minimum	0	
Mitigation Requirements	350	

NOTE:
NATIVE RESTORATION AND MANAGEMENT OF THE STREAMSIDE PROTECTION ZONES AND PARK PROPERTY SHALL INCLUDE THE REMOVAL OF INVASIVE SPECIES AND RE-ESTABLISHMENT OF NATIVE SPECIES. A FIVE-YEAR ECOLOGICAL MANAGEMENT PLAN HAS BEEN APPROVED BY SPECIALIZED REAL ESTATE GROUP AND WILL BE IMPLEMENTED THROUGH A SEPARATE CONTRACT.

(1) TREE PRESERVATION & EROSION CONTROL PLAN

SCALE: 1" = 20'-0"

NORTH

0' 20' 40' 80'

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LICENSED LANDSCAPE ARCHITECT
TANNER A. WEEKS
License #
1.31.25
STATE OF ARKANSAS

Know what's below. Call before you dig.

SOUTH YARD PARK
Fayetteville, Arkansas

EDG PROJECT NO. 21-070
DATE 2025.01.31

REVISIONS

Mark	Date	Description

PHASE 100% CONSTRUCTION DOCUMENTS

TITLE Tree Protection & Erosion Control Plan

SHEET NO. C0.10

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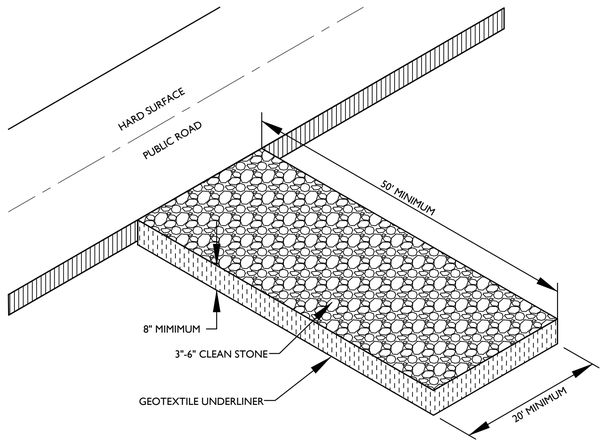
CITY OF FAYETTEVILLE STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION

1. ALL TREES SHOWN ON THIS PLAN TO BE RETAINED SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING.
2. PROTECTION FENCES SHALL BE ERECTED ACCORDING TO CITY OF FAYETTEVILLE STANDARDS FOR TREE PROTECTION.
3. PROTECTIVE FENCES SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE PREPARATION WORK AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT.
4. EROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILD-UP WITH TREE DRIPLINES.
5. PROTECTIVE FENCES SHALL SURROUND THE TREES OR GROUP OF TREES AND WILL BE LOCATED AT THE DRIPLINE. FOR NATURAL AREAS PROTECTIVE FENCES SHALL FOLLOW THE LIMITS OF CONSTRUCTION IN ORDER TO PREVENT THE FOLLOWING:
   - 5.A. SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT.
   - 5.B. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN 6") OR ROOT TRENCHING NOT VIEWED BY CITY ARBORISTS.
   - 5.C. WOUNDS TO EXPOSED ROOTS, TRUNK OR LIMBS BY MECHANICAL EQUIPMENT.
   - 5.D. OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CONCRETE TRUCK CLEANING, AND FIRES.
6. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIPLINES MAY BE PERMITTED IN THE FOLLOWING CASES:
   - 6.A. WHERE THERE IS TO BE AN APPROVED GRADE CHANG, IMPERMEABLE PAVING SURFACED, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT
   - 6.B. WHERE PERMEABLE PAVING IS TO BE INSTALLED WITHIN A TREE'S DRIPLINE, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA (PRIOR TO SITE GRADING SO THE AREA IS GRADED SEPARATELY PRIOR TO PAVING INSTALLATION TO MINIMIZE ROOT DAMAGE.
   - 6.C. WHERE TREES ARE CLOSE TO THE PROPOSED BUILDINGS, ERECT THE FENCE TO ALLOW 6 TO 10 FEET OF WORK SPACE.
   - 6.D. WHERE THERE ARE SEVERE SPACE CONSTRAINTS DUE TO TRACT SIZE OR OTHER SPECIAL REQUIREMENTS.
7. WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN 4 FEET TO A TRUNK, PROTECT THE TRUNK WITH STRAPPED ON PLANKING TO HEIGHT OF 8 FEET (OR LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.
8. TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
9. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOPSOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN 2 DAYS, COVER WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
10. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.
11. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN 4 INCHES SHALL BE PERMITTED WITHIN THE DRIPLINE OF TREES. NO SOIL IS PERMITTED ON THE ROOT FLARE OF ANY TREE.
12. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND EQUIPMENT SHALL TAKE PLACE BEFORE CONSTRUCTION BEGINS.
13. ALL FINISHED PRUNING MUST BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE AMERICAN NATIONAL STANDARD, ANSI-A300 PRUNING, 2008 OR LATER). A CITY CERTIFIED TREE PRUNER MUST BE RETAINED TO MAKE ALL PRUNING CUTS. A LIST OF CERTIFIED TREE PRUNERS IS AVAILABLE FROM THE URBAN FORESTER.
14. DEVIATIONS FROM THE ABOVE NOTES MAY BE CONSIDERED ORDINANCE VIOLATIONS IF THERE IS SUBSTANTIAL NON-COMPLIANCE OR IF A TREE SUSTAINS DAMAGES AS A RESULT.

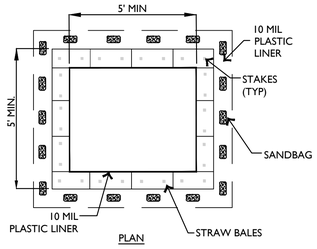


CONSTRUCTION EXIT NOTES

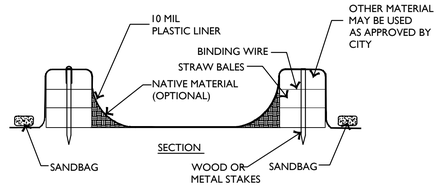
1. REPLACE CONTAMINATED STONE AS REQUIRED TO PREVENT TRACKING OF SEDIMENT OR MUD ON PUBLIC STREETS OR TRAILS.
2. CLEAN STREETS AND TRAILS DAILY WITH BROOM AND SHOVEL. THE USE OF WATER IS PROHIBITED.
3. ALL VEHICLES MUST USE CONSTRUCTION EXIT.

1 CONSTRUCTION ENTRANCE

SCALE: NTS



PLAN



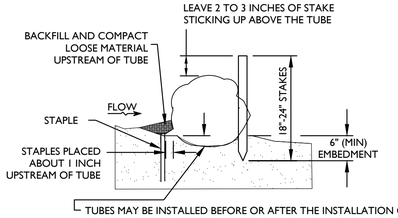
SECTION

WASHOUT NOTES

1. NO WASHING OUT OF CONCRETE TRUCKS OR WASHING OF SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS IS ALLOWED.
2. EXCESS CONCRETE IS NOT ALLOWED TO BE DUMPED ON-SITE, EXCEPT IN DESIGNATED TEMPORARY CONCRETE WASHOUT PIT AREAS.
3. ON-SITE TEMPORARY CONCRETE WASHOUT AREAS WILL BE LOCATED AT LEAST 50 FEET FROM STORM DRAINS, OPEN DITCHES, OR WATER BODIES AS DETERMINED IN THE FIELD.
4. TEMPORARY CONCRETE WASHOUT FACILITIES WILL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
5. WASHOUT FACILITIES WILL BE CLEANED OUT OR REPLACED ONCE THE WASHOUT IS 75% FULL.
6. PLASTIC LINING MATERIAL WILL BE MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND WILL BE FREE OF HOLES, TEARS, OR OTHER DEFECTS.
7. WHEN WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR WORK, THE HARDENED CONCRETE WILL BE REMOVED AND DISPOSED OF OFFSITE. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES WILL BE REMOVED FROM THE SITE AND DISPOSED OF.

2 CONCRETE WASHOUT

SCALE: NTS

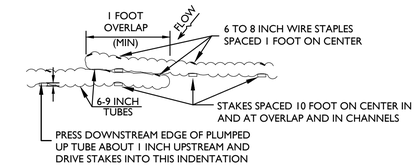


TUBES MAY BE INSTALLED BEFORE OR AFTER THE INSTALLATION OF ROLLED EROSION CONTROL PRODUCTS. BEFORE INSTALLATION OF TUBE, SMOOTH AND SHAPE EARTH SURFACE AND REMOVE ALL STONES, ROOTS, OR OTHER DEBRIS GREATER THAN 2 INCHES IN DIAMETER.

SEDIMENT LOGS SHALL HAVE A MIN. WEIGHT PER LINEAR FOOT OF 4.5 LBS AND SHALL EXCLUDE **STRAW** OR **SAND** MEDIA.

IF INSTALLING TUBE ACROSS A DITCH, THEN EXCAVATE A PLACEMENT TRENCH ABOUT 3 INCHES DEEP.

SECTION



PLAN

GENERAL GUIDELINES FOR SPACING OF TUBE TRENCHES FOR SLOPE INSTALLATIONS	
SLOPE GRADIENT	TUBE INTERVAL
1H:1V	15 FEET
2H:1V	25 FEET
3H:1V	35 FEET
4H:1V	50 FEET

GENERAL GUIDELINES FOR SPACING OF TUBE TRENCHES FOR CHANNEL INSTALLATIONS	
SLOPE	TUBE INTERVAL
2%	25 FEET

EXAMPLES OF ACCEPTABLE COMMERCIALLY AVAILABLE SEDIMENT LOGS ARE:

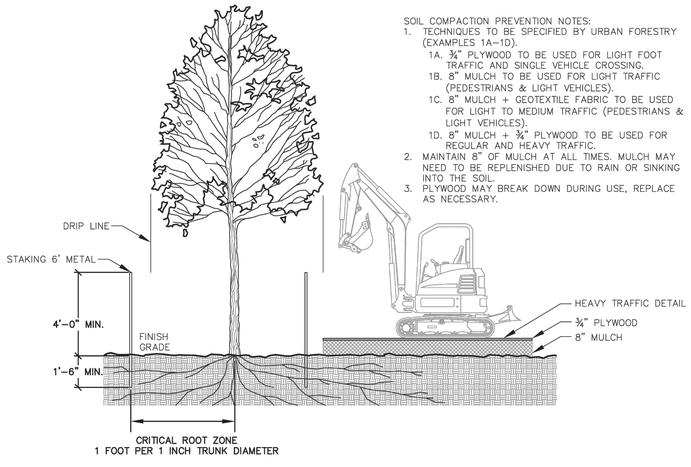
1. SILT SOCK
2. BIG RED
3. EROSION EEL

SEDIMENT LOG MAINTENANCE AND INSTALLATION NOTES:

1. SEDIMENT LOGS SHALL BE INSPECTED ALONG ITS ENTIRETY AND MUST BE CLEANED WHEN SEDIMENT HAS ACCUMULATED TO ONE-THIRD THE HEIGHT OF THE SEDIMENT LOG. MAINTENANCE CLEANOUT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING ONE-THIRD THE HEIGHT OF THE SEDIMENT LOG.
2. SPECIAL ATTENTION SHOULD BE PAID TO ENSURE THAT NO UNDERMINING OF SEDIMENT LOG HAS OCCURRED AND THAT NO BYPASS IS OCCURRING AT JOINING SECTIONS.
3. IF EXCESS SEDIMENT IS ACCUMULATING IN ANY SECTION OF A SEDIMENT LOG, THE CONTRACTOR SHOULD IMPLEMENT ADDITIONAL UPSTREAM STABILIZATION MEASURES OR ADDITIONAL BMPS TO PREVENT EXCESSIVE BUILDUP ON SEDIMENT LOG.
4. SEDIMENT LOG SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED (RUN OVER OR FLATTENED).

3 SEDIMENT LOG

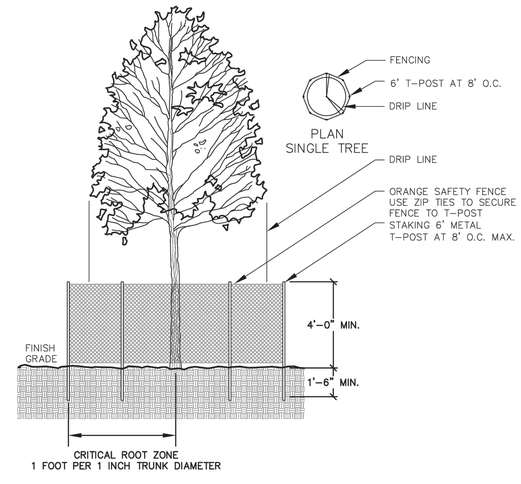
SCALE: NTS



SOIL COMPACTION PREVENTION NOTES:
1. TECHNIQUES TO BE SPECIFIED BY URBAN FORESTRY (EXAMPLES 1A–1D).
   - 1A. ¾" PLYWOOD TO BE USED FOR LIGHT FOOT TRAFFIC AND SINGLE VEHICLE CROSSING.
   - 1B. 8" MULCH TO BE USED FOR LIGHT TRAFFIC (PEDESTRIANS & LIGHT VEHICLES).
   - 1C. 8" MULCH + GEOTEXTILE FABRIC TO BE USED FOR LIGHT TO MEDIUM TRAFFIC (PEDESTRIANS & LIGHT VEHICLES).
   - 1D. 8" MULCH + ¾" PLYWOOD TO BE USED FOR REGULAR AND HEAVY TRAFFIC.
2. MAINTAIN 8" OF MULCH AT ALL TIMES. MULCH MAY NEED TO BE REPLENISHED DUE TO RAIN OR SINKING INTO THE SOIL.
3. PLYWOOD MAY BREAK DOWN DURING USE, REPLACE AS NECESSARY.

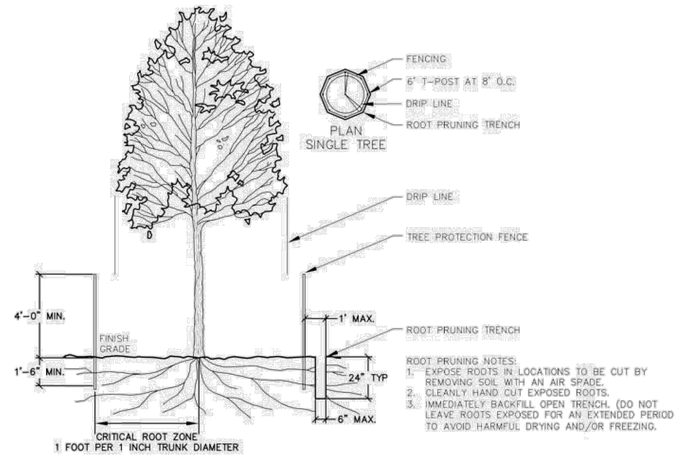
4 SOIL COMPACTION PREVENTION DETAIL

NOT TO SCALE



5 TREE PRESERVATION FENCING INSTALLATION DETAIL

NOT TO SCALE



ROOT PRUNING NOTES:
1. EXPOSE ROOTS IN LOCATIONS TO BE CUT BY REMOVING SOIL WITH AN AIR SPADE.
2. CLEANLY HAND CUT EXPOSED ROOTS.
3. IMMEDIATELY BACKFILL OPEN TRENCH. (DO NOT LEAVE ROOTS EXPOSED FOR AN EXTENDED PERIOD TO AVOID HARMFUL DRYING AND/OR FREEZING.

6 ROOT PRUNING DETAIL

NOT TO SCALE

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SOUTH YARD PARK

Fayetteville, Arkansas

EDG PROJECT NO. 21-070

DATE 2025.01.31

REVISIONS

Mark	Date	Description

PHASE 100% CONSTRUCTION DOCUMENTS

TITLE Tree Protection & Erosion Control Details

SHEET NO. C0.11

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LIGHTING SCHEDULE				
KEY	DESCRIPTION	MANUFACTURER	MODEL	FINISH / COLOR
L1	AREA LIGHT	LUMCA	I90-9008: RECESSED 3"X11" WIDE STEPLIGHT W/ CONCEALED LIGHT SOURCE, 170LM, 3000K	TBD
L2	STEP LIGHT	WE-EF	LIO-S-SM-A-05-01-18LED03 20W-(VOLTAGE)-L3-30KC80-SB-LV-SB/PM4-CF80-24-SB+AP04-12-WB24-2-SB-ANCHOR BOLTS CONTEMPORARY LANTERN AREA LIGHT WITH 24" ARM ON 12' POLE WITH TAPERED BASE. 2000LM,3000K	TBD

LIGHTING SCHEDULE NOTES:

1. REFER TO PLANS FOR LOCATION. INSTALL PER MANUFACTURER'S SPECIFICATIONS. FINAL LOCATION TO BE APPROVED BY LANDSCAPE ARCHITECT. SUBMIT CUTSHEET FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
2. REFER TO LIGHTING DESIGN BY SESCO FOR DETAILS AND FULL LIGHTING SCHEDULE.

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1.31.25
STATE OF ARKANSAS

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SOUTH YARD PARK
Fayetteville, Arkansas

EDG PROJECT NO.	21-070
DATE	2025.01.31

REVISIONS

Mark	Date	Description

PHASE	100% CONSTRUCTION DOCUMENTS
TITLE	SITE PLAN
SHEET NO.	C1.00

1 SITE PLAN

SCALE: 1" = 20'-0"

NORTH

0' 20' 40' 80'

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SOUTH YARD PARK
Fayetteville, Arkansas

SOUTHYARD PHASE 2
SOUTHYARD PHASE 3
SOUTHYARD PHASE 1
SOUTHYARD PHASE 3 PAVILION FFE|248.27

POB, Farmers Cooperative
POB, Overall
POC,
POB, Claim Deed A
SW Corner
SW 1/4, SE 1/4
S16, T16N, R30W
POB, Claim Deed B
Quit Claim Deed Area A ±884 Sq. Ft.
Quit Claim Deed Area B ±4,031 Sq. Ft.
Tsa La Gi Trail
Old Trail Bridge
Frisco Trail
Deed Overlap
Parcel #: 765-14937-000
Barnes Family Trust
Zoning: I-1
Ex. 50' Easement Book 899, Page 37
CB: N27°33'01"E (R)
CD: 72.56' (R)
R: 402.47' (R)
L: 72.66' (R)
FL = 1240.78
N02°35'00"E 11.98' (R)
N01°35'27"E 114.87' (R)
S81°45'36"W 20.08' (R)
N01°53'27"E 108.66' (R)
4.9' E. to Fence
4.8' E. to Fence
8"SS
12"SS
Ex. Grate Inlet Rim = 1245.89 Inv = 1243.09
Ex. Junction Box Rim = 1248.68 Inv = 1241.49
24" RCP
204.4'
Ex. Building
FFE=1269.12 Basement
FFE=1259.41
Ex. Easement Book 899, Page 37
Ferguson Addition Farmers Cooperative Zoning: MSC
Ex. 5" Wood Post Electric Control Panel box
Parcel #: 765-05523-001 765-05523-000 765-05522-000 765-05509-000 765-05507-000 ±286,838 Sq. Ft. ±6.47 Acres
ZONE 2 - 50' MANAGEMENT ZONE
ZONE 1 - 25' MANAGEMENT ZONE
TOP OF BANK
CENTERLINE OF STREAM
Tributary to Hillsdale Branch
ZONE 1 - 25' WATERSIDE ZONE
N70°37'44"W 419.86' (R)
Ferguson Addition
Parcel #: 765-14900-000
Campus Pad At Fayetteville LLC
Zoning: CS
Existing 1/2" Rebar w/ PS #1005 Cap
Existing 3/8" Rebar
Existing 1/2" Rebar
CB: N72°55'21"W (S)
CD: 16.57' (S)
R: 1146.28' (S)
L: 16.57' (S)
S73°33'33"
16.52' (S)
S01°05'59"W 16.52' (S)
Existing 1/A" Rebar w/ PS #1005 Cap
Existing 1/2" Rebar w/ PS #1005 Cap
Ex. Easement Book 899, Page 37
Ex. Easement Book 899, Page 37
Ex. Easement Book 899, Page 37

PROPOSED LEGEND

- 1311 — PROPOSED 1 FT. CONTOUR ELEVATION
- 1315 — PROPOSED 5 FT. CONTOUR ELEVATION
- XXXX.XX — SPOT ELEVATIONS

ABBREVIATIONS:
FG - FINISH GRADE
TS/BS - TOP OF STAIR / BOTTOM OF STAIR
TW/BW - TOP OF WALL / BOTTOM OF WALL

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SOUTHYARD PHASE 2

SOUTHYARD PHASE 3

SOUTHYARD PHASE 3 PAVILION FFE1248.27

SOUTHYARD PHASE 1

Parcel # 765-05523-001
765-05523-000
765-05522-000
765-05509-000
765-05507-000
286,033 Sq. Ft.
6.57 Acres

POB, Farmers Cooperative
POB, Overall
POC
POB, Claim Deed A
SW Corner
SW 1/4, SE 1/4
S16, T16N, R30W
POB, Claim Deed B
Parcel #: 765-14937-000
Barnes Family Trust
Zoning: I-1
Deed Overlap
Quit Claim Deed Area A ±884 Sq. Ft.
Quit Claim Deed Area B ±4,031 Sq. Ft.
Tsa La Gi Trail
Old Trail Bridge
Frisco Trail
Ex. 50' Easement Book 899, Page 37
Ex. Easement File #2013-0019987
Ex. Grate Inlet Rim = 1245.89 Inv = 1243.06
Ex. 5"Wood Power Electric Control Panel on
Ex. Building
Ex. Easement Book 899, Page 37
Ex. Easement Book 899, Page 37
Fergusons Addition Farmers Cooperative (Parcel #765-MISC)
Fergusons Addition a Parcel # 765-14900-000 Campus Court At Fayetteville LLC Zoning: CS
Existing 1/2" Rebar w/ PS #1005 Cap
Existing 1/2" Rebar
Existing 3/8" Rebar
Existing 1/2" Rebar
CB: N72°51'01"W (S) CD: 16.57' (S) R: 1146.28' (S) L: 16.57' (S)
S73°33'33"E 16.52' (S)
S05°05'59"W 20.50' (M)
N70°37'44"W 419.86' (R)
CB: N37°33'01"E (R) CD: 72.56' (R) R: 402.47' (R) L: 72.66' (R)
S81°45'36"W 20.08' (R)
N02°35'01"E 11.98' (R)
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FFE=1259.41
Zoning: NC
Zoning: I-1
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ZONE 2 - 50' MANAGEMENT ZONE
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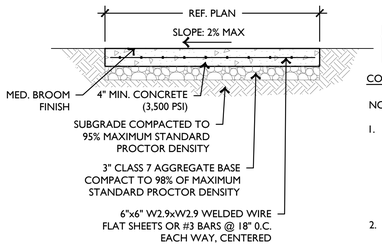
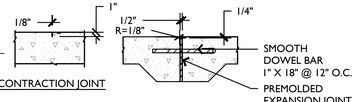
TOP OF BANK
ZONE 1 - 25' WATERSIDE ZONE
CENTERLINE OF STREAM
Tanyard Branch
Tanyard Branch
Tanyard Branch



TYPICAL SIDEWALK DETAIL



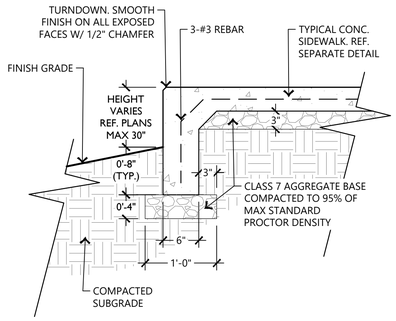
NOTES:

1. PROVIDE TRANSVERSE CONTRACTION JOINTS AT INTERVALS NOT EXCEEDING 5'-0" ON CENTER OR AS SHOWN ON PLAN. PROVIDE CENTERLINE CONTRACTION JOINTS IN SIDEWALKS WIDER THAN 8'-0". SPACING OF CENTERLINE CONTRACTION JOINTS SHALL NOT EXCEED 6'-0" OR AS SHOWN ON PLAN. REF. PLAN FOR JOINT LAYOUT.
2. PROVIDE EXPANSION JOINTS AT INTERVALS NOT EXCEEDING 40'-0" ON CENTER OR NEXT TO STRUCTURES OR DRIVES. REF. PLAN FOR JOINT LAYOUT.

SIDEWALK JOINT DETAIL

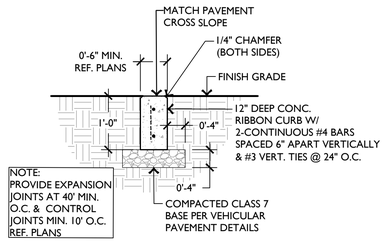
1 CONCRETE SIDEWALK & JOINT DETAILS

SCALE: N.T.S.



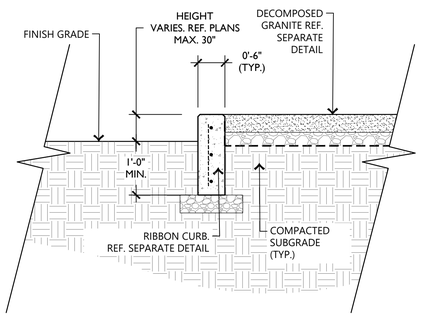
2 TURNDOWN SIDEWALK

SCALE: N.T.S.



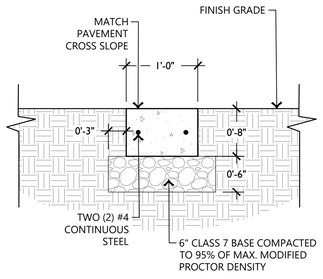
3 6" RIBBON CURB

SCALE: N.T.S.



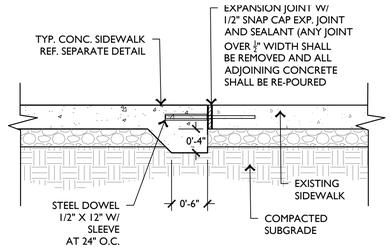
4 TURNDOWN RIBBON CURB / CONC. CHEEK WALL

SCALE: N.T.S.



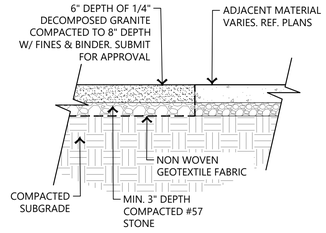
5 12" RIBBON CURB

SCALE: N.T.S.



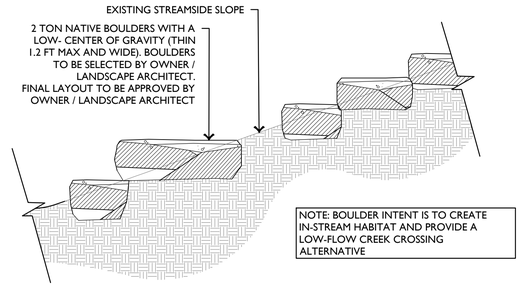
6 EXPANSION JOINT AT EXISTING SIDEWALK

SCALE: N.T.S.



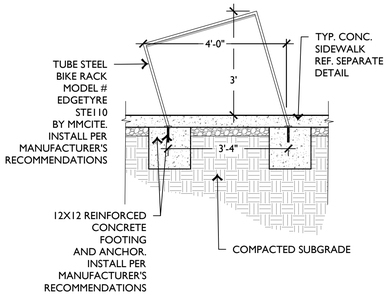
7 DECOMPOSED GRANITE

SCALE: N.T.S.



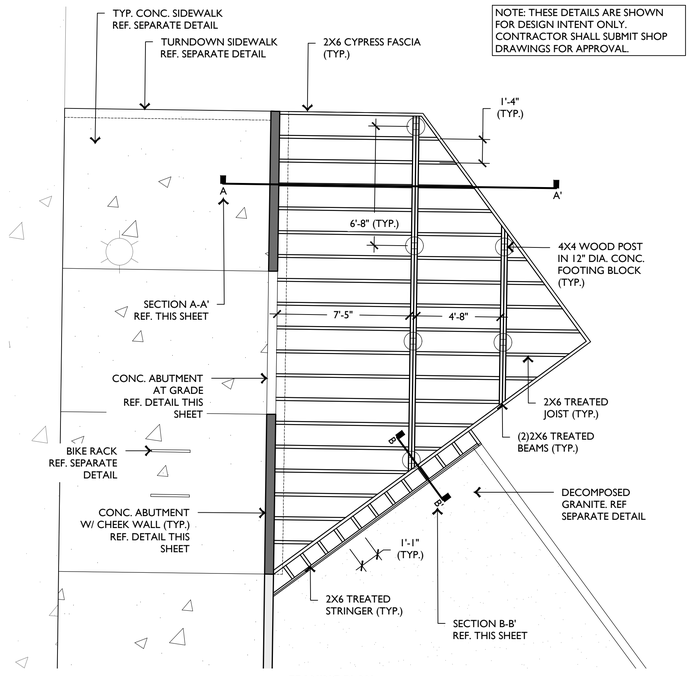
8 NATURAL STONE STEPS

SCALE: N.T.S.

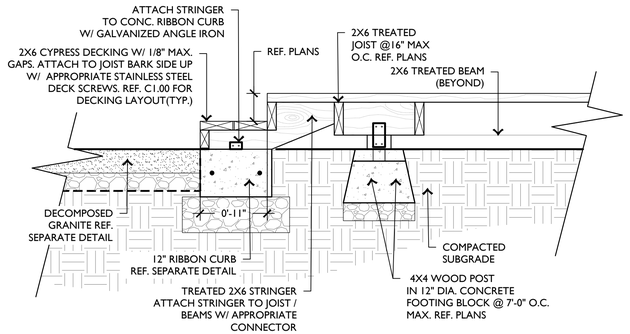


9 BIKE RACK

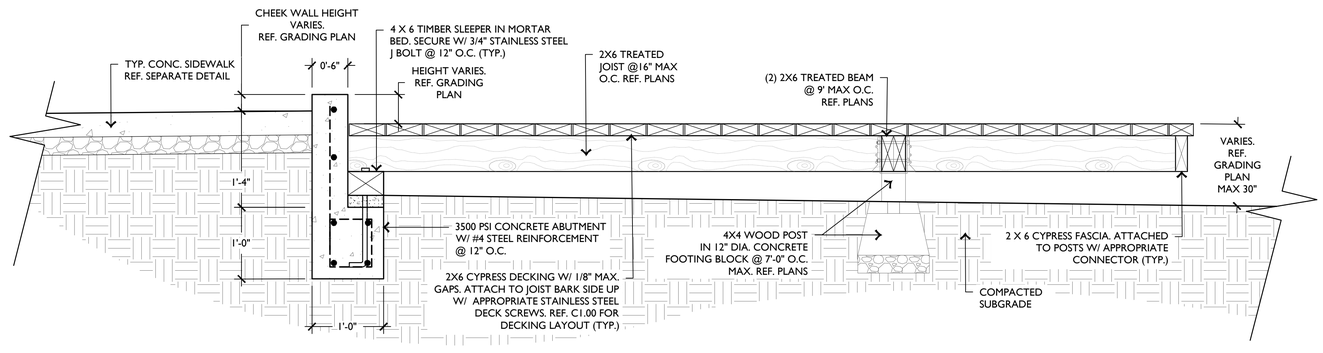
SCALE: N.T.S.



FRAMING PLAN



SECTION B-B'



SECTION A-A'

10 WOOD DECK A

SCALE: N.T.S.

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811 Know what's below. Call before you dig.

SOUTH YARD PARK

Fayetteville, Arkansas

EDG PROJECT NO. 21-070
DATE 2025.01.31

REVISIONS

Mark	Date	Description

PHASE 100% CONSTRUCTION DOCUMENTS

TITLE Site Details

SHEET NO. C3.00

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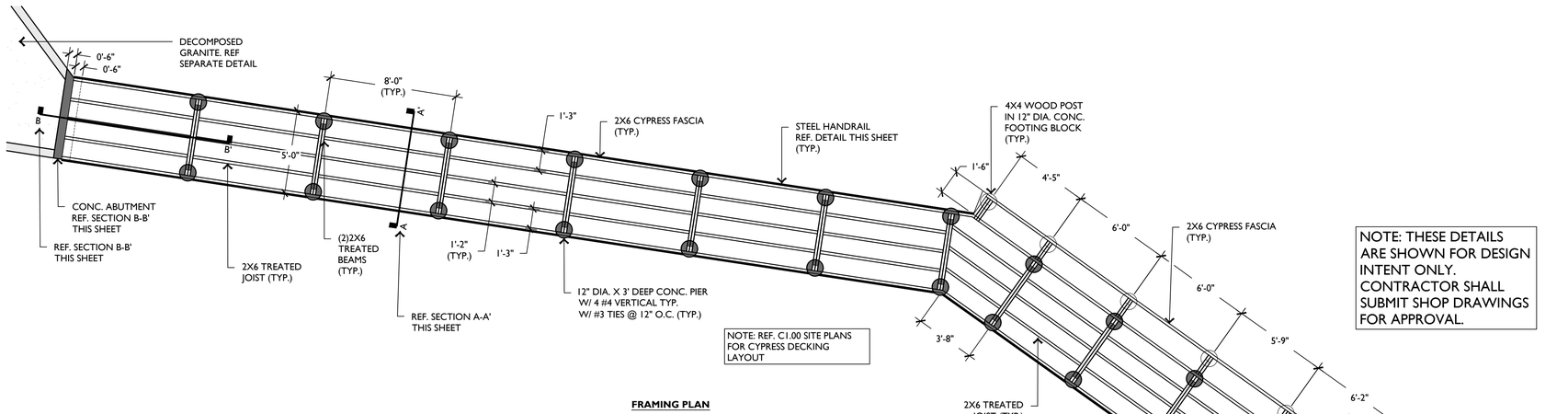
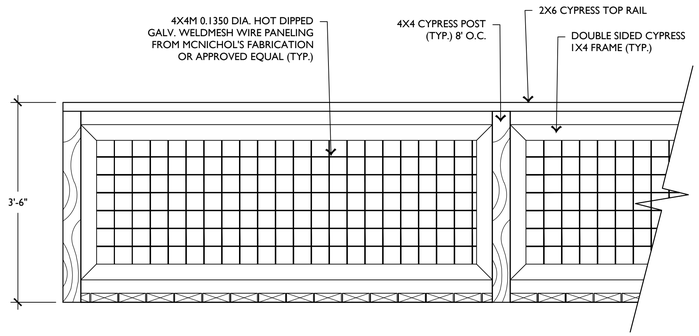


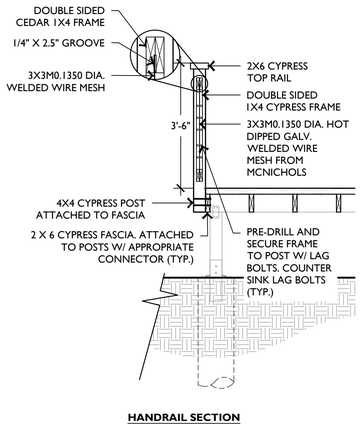
NOTE: REF. C1.00 SITE PLANS FOR CYPRESS DECKING LAYOUT

FRAMING PLAN

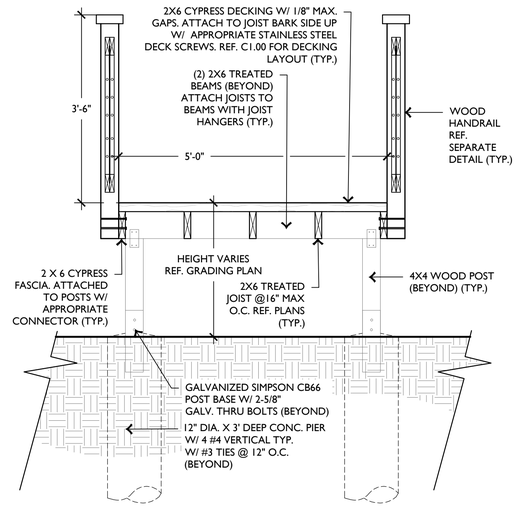
NOTE: THESE DETAILS ARE SHOWN FOR DESIGN INTENT ONLY. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL.



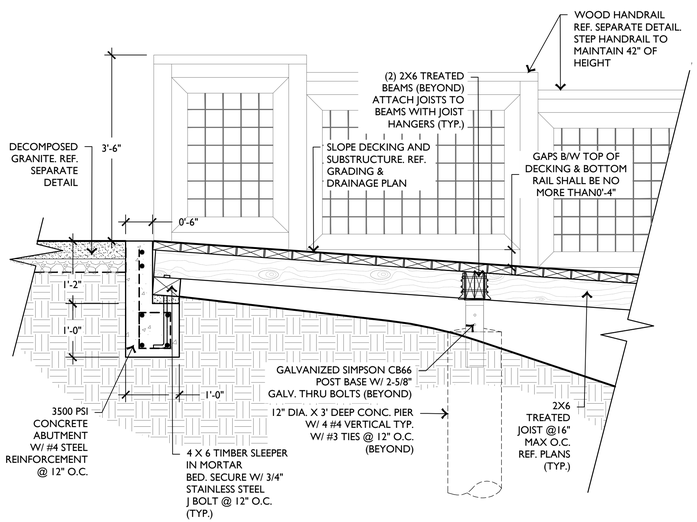
HANDRAIL ELEVATION



HANDRAIL SECTION



SECTION A-A'



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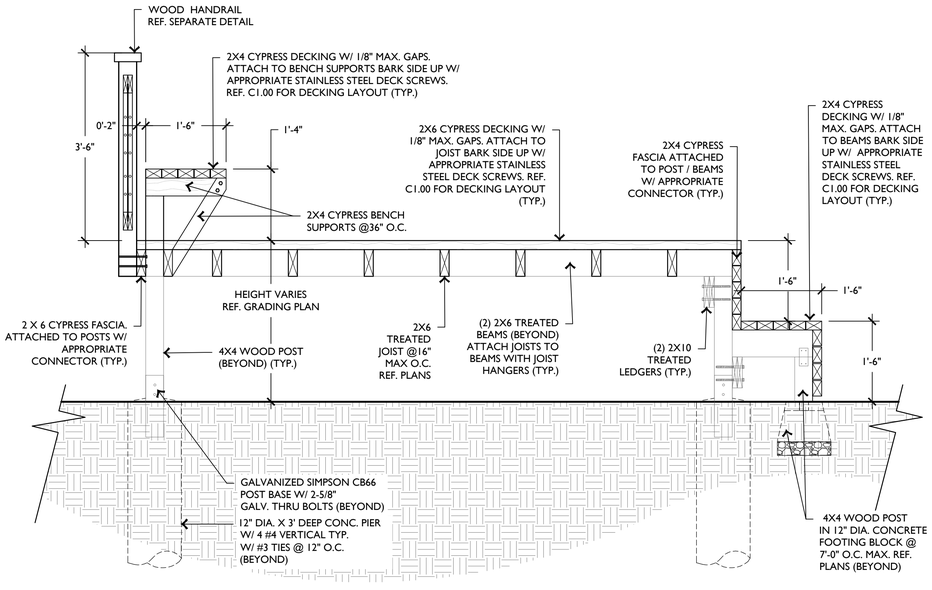
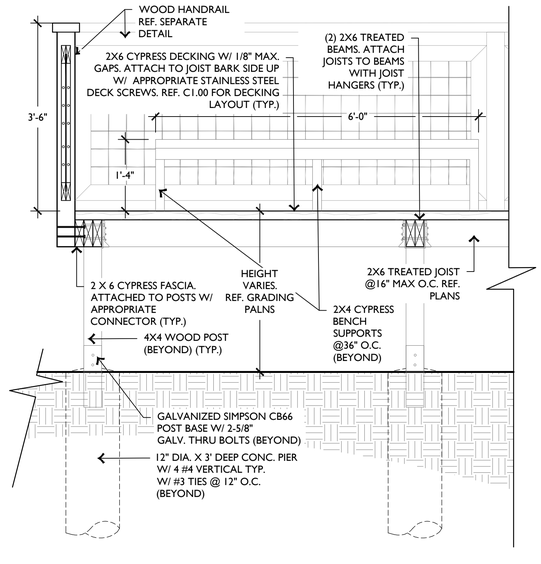


SECTION C-C'



SECTION D-D'

1 WOOD BOARDWALK & DECK B

SCALE: N.T.S.

SOUTH YARD PARK

Fayetteville, Arkansas

EDG PROJECT NO.	21-070
DATE	2025.01.31

REVISIONS

Mark	Date	Description

PHASE: 100% CONSTRUCTION DOCUMENTS

TITLE: Site Details

SHEET NO. C3.01

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Mitigation Requirements				
Canopy Below Requirements Sq. Ft.	Preservation Priority Type	Forestation Base Density Acre	Number of 2" Caliper Trees to be Planted	Number of Mitigation Trees Provided
350	High Priority	200	2	7
0	Low Priority	100	0	

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SOUTHYARD PHASE 2

SOUTHYARD PHASE 3

SOUTHYARD PHASE 3 PAVILION FFE1248.27

SOUTHYARD PHASE 1

Ex. 50' Easement Book 899, Page 37

CB: N27°33'01"E (R)
CD: 72.56' (R)
R: 402.47' (R)
L: 72.66' (R)

POB, Farmers Cooperative
POB, Overall
POC,
POB, Claim Deed A
SW Corner
SW 1/4, SE 1/4
S16, T16N, R30W
POB, Claim Deed B

N02°35'05"E 11.98' (R)

Quit Claim Deed Area A ±884 Sq. Ft.

FL = 1240.78

8"SS
12"SS

Tsa La Gi Trail

Old Trail Bridge

Parcel #: 765-14937-000
Barnes Family Trust
Zoning: I-1

N01°39'27"E 114.87' (R)

Deed Overlap

Frisco Trail

Quit Claim Deed Area B ±4,031 Sq. Ft.

S81°45'36"W 20.08' (R)

4.8' E. to Fence

PROPERTY LINE (TYP.)

Ex. Easement File #2013-00019087

3-FRUITLESS SWEET GUM 3" CAL

4.9' E. to Fence

N01°55'27"E 108.66' (R)

BERMUDA TIF 419 SOD (TYP.) CONTAINED BY RIBBON CURB AND CONCRETE SIDEWALK. MANAGEMENT CONTRACT BY OWNER SHALL IRRIGATE UNTIL ESTABLISHED

PARK PHASE BOUNDARY (TYP.)

267-NORTHERN SEA OATS 2" PLUGS 18" O.C.

308 - WHITE WOOD ASTER
640 - FOX SEDGE

836-BLUE WOOD SEDGE 2" PLUGS 18" O.C.

1,032-NORTHERN SEA OATS 2" PLUGS 18" O.C.

4-RIVER BIRCH - SINGLE TRUNK 3.5" CAL

NOTE: ALL DISTURBED AREAS TO RECEIVE CEREAL RYE GRAIN

LIMITS OF DISTURBANCE (TYP.)

ZONE 1 - 25' MANAGEMENT ZONE

TOP OF BANK

ZONE 1 - 25' WATERSIDE ZONE

ZONE 2 - 50' MANAGEMENT ZONE

CENTERLINE OF STREAM

Tanyard Branch

Ex. Grate Inlet Rim = 1245.89 Inv = 1243.09

204.4'

Ex. Building

FFE=1269.12 Basement

FFE=1259.41

Ex. Easement Book 899, Page 37

Ex. Gravel Parking

Ex. Asphalt Parking

Ex. Concrete Walk

Ex. Concrete Patio

Ex. Concrete Ramp

Ex. Concrete Steps

Ex. Concrete Retaining Wall

Ex. Concrete Curb

Ex. Concrete Sidewalk

Ex. Concrete Pavement

Ex. Concrete Pad

Ex. Concrete Planter

Ex. Concrete Bollard

Ex. Concrete Light Pole

Ex. Concrete Flagpole

Ex. Concrete Bench

Ex. Concrete Trash Can

Ex. Concrete Bike Rack

Ex. Concrete Drinking Fountain

Ex. Concrete Sign

Ex. Concrete Mailbox

Ex. Concrete Fire Hydrant

Ex. Concrete Water Valve

Ex. Concrete Gas Valve

Ex. Concrete Electric Box

Ex. Concrete Telephone Box

Ex. Concrete Cable Box

Ex. Concrete Utility Pole

Ex. Concrete Guy Wire

Ex. Concrete Overhead Utility Line

Ex. Concrete Underground Utility Line

Ex. Concrete Fiber Optic Line

Ex. Concrete Water Line

Ex. Concrete Sewer Line

Ex. Concrete Storm Drain Line

Ex. Concrete Gas Line

Ex. Concrete Electric Line

Ex. Concrete Telephone Line

Ex. Concrete Cable

CITY OF FAYETTEVILLE LANDSCAPE NOTES:

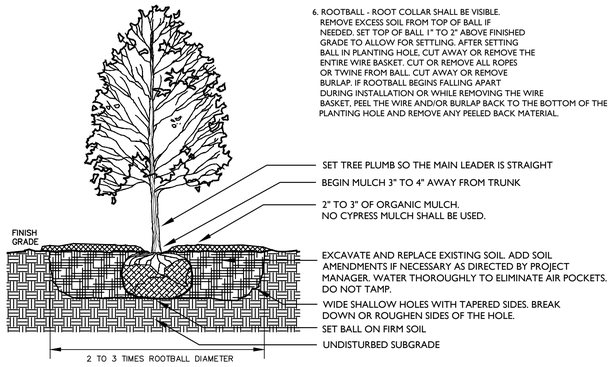
1. CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL UTILITIES PRIOR TO STARTING ANY WORK. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ARKANSAS ONE-CALL TO CONFIRM ALL UTILITIES.
2. ALL PLANTS MUST BE HEALTHY, VIGOROUS AND FREE OF PESTS AND DISEASE.
3. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
4. ALL PLANTS MUST BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED ON THE PLANT LIST.
5. ALL REQUIRED TREES SHALL BE 2" MINIMUM CALIPER, WITH A SINGLE DOMINATE CENTRAL LEADER. MULTI LEADERED TREES WILL NOT BE ACCEPTABLE WITHOUT PRIOR APPROVAL FROM URBAN FORESTRY.
6. ALL TREES MUST BE STRAIGHT TRUNKED AND FULL HEADED, UNLESS SPECIFIED OTHERWISE, AND MUST MEET ALL REQUIREMENTS SPECIFIED ON PLANS.
7. ALL TREES AND SHRUBS SHALL BE INSTALLED PER STANDARD CITY OF FAYETTEVILLE PLANTING DETAILS.
8. ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER CONSTRUCTION.
9. ALL PLANTING AREAS MUST BE COMPLETELY MULCHED WITH A 4" LAYER OF ORGANIC HARDWOOD MULCH. MULCH SHALL BE NOT BE PLACED IMMEDIATELY ADJACENT TO TREE TRUNKS, BUT SHALL BE KEPT AT LEAST 3" FROM ROOT COLLAR AT THE SOIL LINE.
10. ALL PROPOSED PLANTING AREAS COVERED BY GRASS SHALL HAVE THE SOD COMPLETELY REMOVED BEFORE PLANTING BEGINS.
11. ALL PLANTING BEDS SHALL BE CONTAINED BY EDGING MATERIAL OTHER THAN VEGETATION.
12. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE LANDSCAPE CONSTRUCTION AT NO COST TO THE OWNER.
13. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
14. THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING MATERIAL (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) IN ALL PLANTING AREAS AND LAWN AREAS UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE OWNER.
15. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR BEGINNING ON THE DATE OF TOTAL ACCEPTANCE. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE GUARANTEE PERIOD.
16. ANY PLANT MATERIAL WHICH DIES, TURNS BROWN, OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
17. NOTIFY LANDSCAPE ARCHITECT OR DESIGNATED REPRESENTATIVE OF ANY LAYOUT DISCREPANCIES PRIOR TO ANY PLANTING. LOCATE ALL UTILITIES AND SITE LIGHTING CONDUITS BEFORE CONSTRUCTION BEGINS.
18. ALL DISTURBED AREAS SHALL BE SEEDED WITH A GRASS SEED MIX CONSISTING OF 70% TURF TYPE FESCUE, 20% PERENNIAL RYE, AND 10% BERMUDA GRASS AT 5 POUNDS PER 1,000 SQUARE FEET.
19. ALL AREAS TO BE SEEDED SHALL RECEIVE 4" OF TOPSOIL AND BE GRADED PER THE GRADING PLAN.
20. IRRIGATION SHALL BE EITHER AN UNDERGROUND AUTOMATIC SYSTEM OR SHALL UTILIZE HOSE BIBS EVERY 100' AS REQUIRED BY FAYETTEVILLE LANDSCAPE ORDINANCE.
21. MAINTENANCE: THE CURRENT OWNER OF THE PROPERTY SHALL BE RESPONSIBLE FOR THE ONGOING MAINTENANCE OF REQUIRED LANDSCAPING.
22. REPLACEMENT LANDSCAPING: REQUIRED LANDSCAPING THAT DIES OR IS DAMAGED SHALL BE REMOVED AND REPLACED BY THE CURRENT OWNER OF THE PROPERTY. THE OWNER SHALL HAVE 60 DAYS FROM THE RECEIPT OF WRITTEN NOTICE ISSUED BY THE CITY TO REMOVE AND REPLACE ANY REQUIRED LANDSCAPING THAT DIES OR IS DAMAGED.
23. THREE (3) YEAR MAINTENANCE SURETY SHALL BE DEPOSITED FOR EACH REQUIRED STREET AND MITIGATION TREE.
24. ANY STRUCTURAL SOIL REQUIRED MUST BE INDICATED ON PLAN, HAVE CERTIFIED DOCUMENTATION, AND BE INSPECTED BY URBAN FORESTER AT TIME OF INSTALLATION.
25. MAINTAIN 5' MIN. HORIZONTAL SEPARATION BETWEEN TREE PLANTINGS AND UTILITY LINES.
26. ALL PLANTING DETAILS ARE ACCORDING TO FAYETTEVILLE LANDSCAPE MANUAL.

GENERAL LANDSCAPE NOTES:

1. PLANTED TRESS TO CONSIST OF: PREFERRED SPECIES FROM THE CITY OF FAYETTEVILLE'S LANDSCAPE MANUAL: POND CYPRESS, RIVER BIRCH, & FRUITLESS SWEETGUM
2. ALL TREES SHALL BE 2" CALIPER AND SHRUBS 3 GALLON AT TIME OF PLANTING
3. ALL LANDSCAPE BEDS SHALL BE EDGED
4. SOIL TO BE AMENDED AND SOD REMOVED WITHIN LANDSCAPE BEDS
5. STRUCTURAL SOIL MUST BE INDICATED ON PLANS AND INSPECTED BY URBAN FORESTER AT TIME OF INSTALLATION AND BEFORE THE PLACEMENT OF FINAL PAVING.
6. ORGANIC MULCH AROUND TREES AND WITHIN LANDSCAPE BEDS
7. ALL LANDSCAPE AREAS SHOULD RECEIVE 12" TOPSOIL [12" IS THE MINIMUM COMPACTED DEPTH], SOIL SHALL BE AMENDED TO ENHANCE FAVORABLE GROWING CONDITIONS. ALL EXISTING SOD/WEEDS SHALL BE REMOVED FROM LANDSCAPE BED AREAS.
8. ALL LANDSCAPE AREAS TO BE IRRIGATED WITH AUTOMATIC SPRINKLERS OR HOSE BIBS LOCATED 100' O.C
9. NO TRENCHING IRRIGATION LINES THROUGH PRESERVED TREES
10. WIRE BASKETS AND BURLAP TO BE REMOVED DURING TREE PLANTING PER CITY OF FAYETTEVILLE DETAIL.
11. LANDSCAPE ARCHITECT OF RECORD SHALL INSPECT SITE AND DIRECT CONTRACTOR TO MAKE CHANGES TO MEET APPROVED PLANS AND DETAILS PRIOR TO URBAN FORESTER CERTIFICATE OF OCCUPANCY INSPECTION. NO CHANGES TO THE APPROVED LANDSCAPE PLAN MAY BE MADE WITHOUT URBAN FORESTER APPROVAL.
12. PRIOR TO FINAL PLAT APPROVAL, ALL REQUIRED LANDSCAPING WILL REQUIRE A PERFORMANCE BOND AND A COMPLETED LANDSCAPE SURETY FORM. SUBMIT A LANDSCAPE ESTIMATE FROM REVIEW AT THE TIME OF CONSTRUCTION PLAN REVIEW
13. PRIOR TO CERTIFICATE OF OCCUPANCY, A 3-YEAR MAINTENANCE PLAN MUST BE SUBMITTED WITH A 3-YEAR SURETY [LETTER OF CREDIT, BOND OR CASH] AND COMPLETED LANDSCAPE SURETY FORM

IRRIGATION NOTE:

1. CONTRACTOR SHALL PROVIDE GATOR BAGS FOR EACH TREE. SUBMIT FOR APPROVAL.

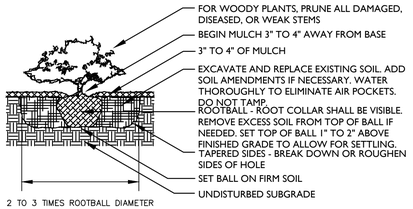


1 TREE PLANTING DETAIL

NOT TO SCALE

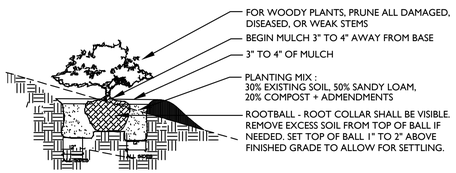
2 TREE PLANTING ON SLOPE DETAIL

NOT TO SCALE



3 SHRUB PLANTING DETAIL

NOT TO SCALE



4 SHRUB PLANTING ON SLOPE DETAIL

NOT TO SCALE

PLANT SCHEDULE

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	CALIPER	CONTAINER	SPACING	REMARKS
TREES							
+	4	BETULA NIGRA	RIVER BIRCH - SINGLE TRUNK	3.5" CAL	BALL & BURLAPPED	AS SHOWN	
+	3	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA'	FRUITLESS SWEET GUM	3" CAL	BALL & BURLAPPED	AS SHOWN	
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	CALIPER	CONTAINER	SPACING	REMARKS
SHRUB AREAS							
	836	CAREX FLACCOSPERMA	BLUE WOOD SEDGE	---	2" PLUGS	18" O.C.	FULL, MATCHED
	1,299	CHASMANTHIUM LATIFOLIUM	NORTHERN SEA OATS	---	2" PLUGS	18" O.C.	FULL, MATCHED
	1,641 SF	FOX SEDGE & WHITE WOODLAND ASTER MIX @ 24" O.C.					
	308	ASTER DIVARICATUS	WHITE WOOD ASTER	---	2" PLUGS	24" O.C.	FULL, MATCHED
	640	CAREX VULPINOIDEA	FOX SEDGE	---	1 GAL	24" O.C.	FULL, MATCHED
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	CALIPER	CONTAINER	SPACING	REMARKS
GROUND COVERS							
	701 SF	CYNODON DACTYLON '419 HYBRID'	BERMUDA GRASS		SOLID SEED, CERTIFIED WEED FREE		

MISCELLANEOUS	QTY	DESCRIPTION	REMARKS
	REF. PLAN	MULCH	3" DEPTH, NON-DYED, ALL PLANTING BEDS AND BENEATH TREE DRIPLINE UNLESS OTHERWISE NOTED ON PLANS. KEEP 6" CLEAR AROUND TRUNKS, TYP. REFERENCE SPECIFICATION
	REF. PLAN	PLANTING MIX	8" ALL BED, 40% SANDY LOAM TOPSOIL, 60% ORGANIC COMPOST. REFERENCE SPECIFICATION
	2,730 SF	CRUSHED LIMESTONE	1/4" MINUS W/ FINES, COMPACTED TO 4" DEPTH
– – – – – – –	REF. PLAN	RAW STEEL EDGING	1/4" X 6" SUBMIT CUTSHEET FOR APPROVAL

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1.31.25
STATE OF ARKANSAS

811 Know what's below. Call before you dig.

SOUTH YARD PARK
Fayetteville, Arkansas

EDG PROJECT NO. 21-070
DATE 2025.01.31

REVISIONS

Mark	Date	Description

PHASE 100% CONSTRUCTION DOCUMENTS

TITLE **Landscape Notes & Details**

SHEET NO. **L1.10**

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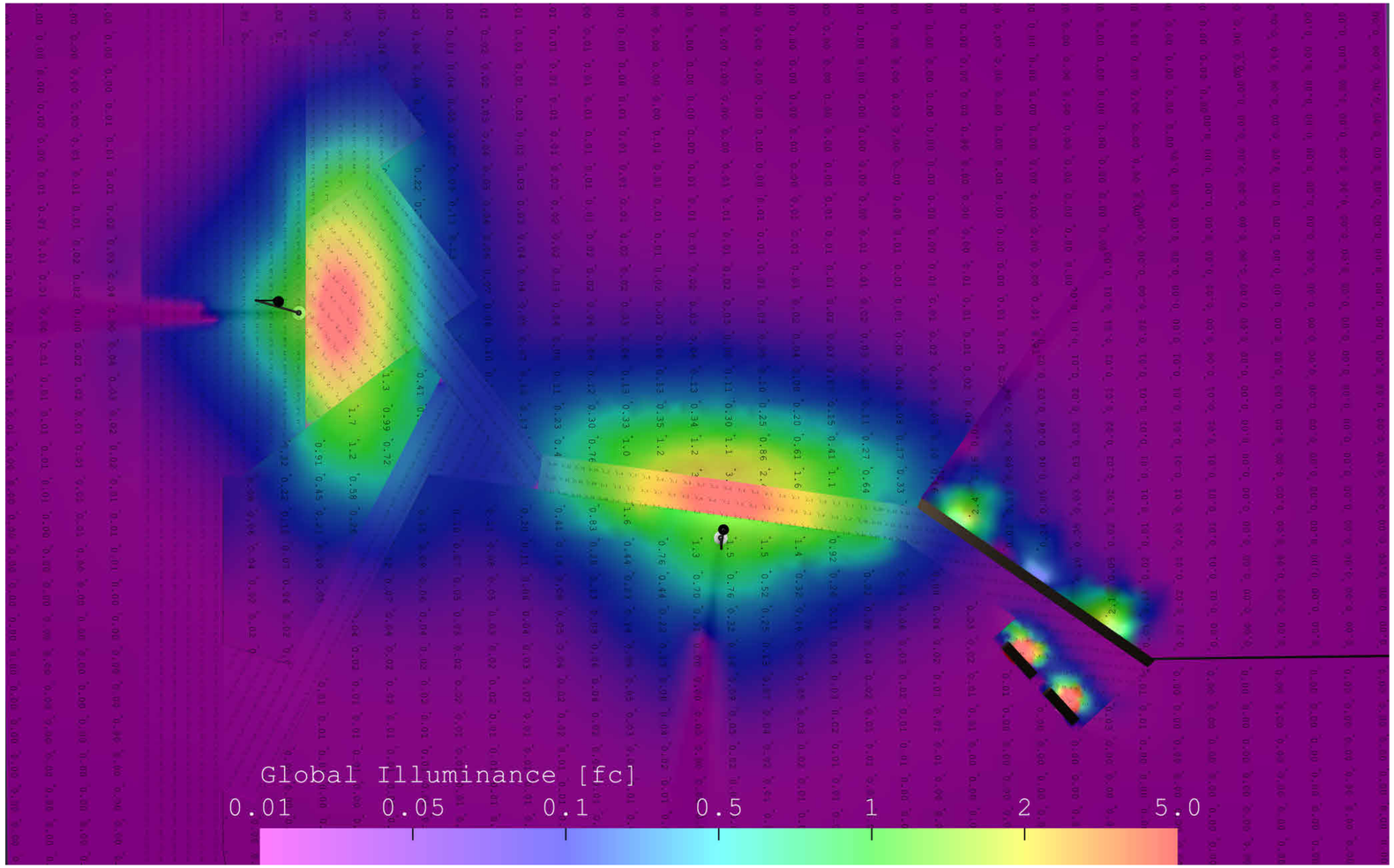
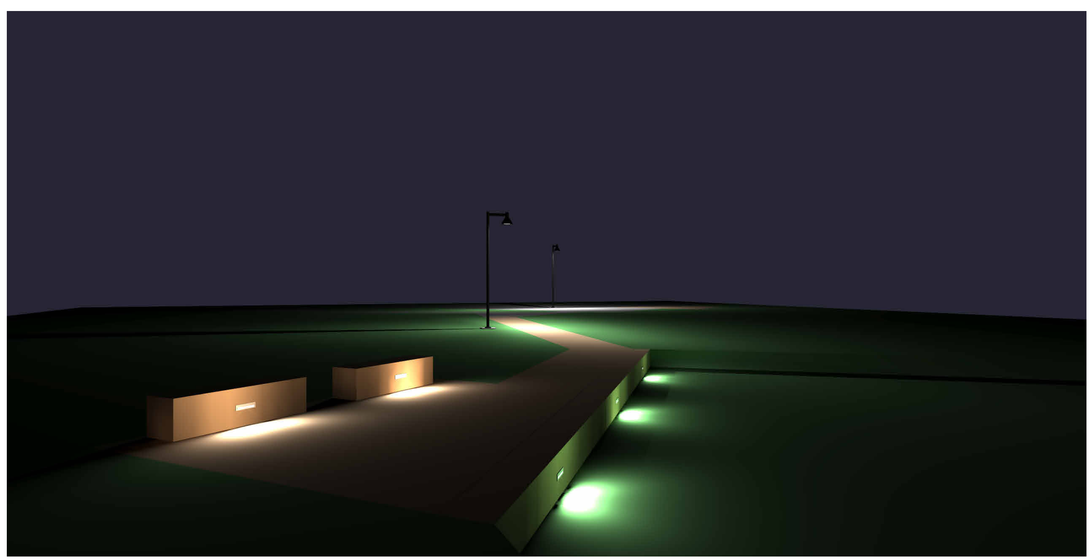


1 LIGHTING OVERVIEW
NOT TO SCALE



2 LIGHTING PERSPECTIVE
NOT TO SCALE

SOUTH YARD PARK

LIGHTING CALCULATION
OVERVIEW AND RENDERING

LDR1.00

FOR REFERENCE ONLY, NOT FOR CONSTRUCTION

SESCO LIGHTING

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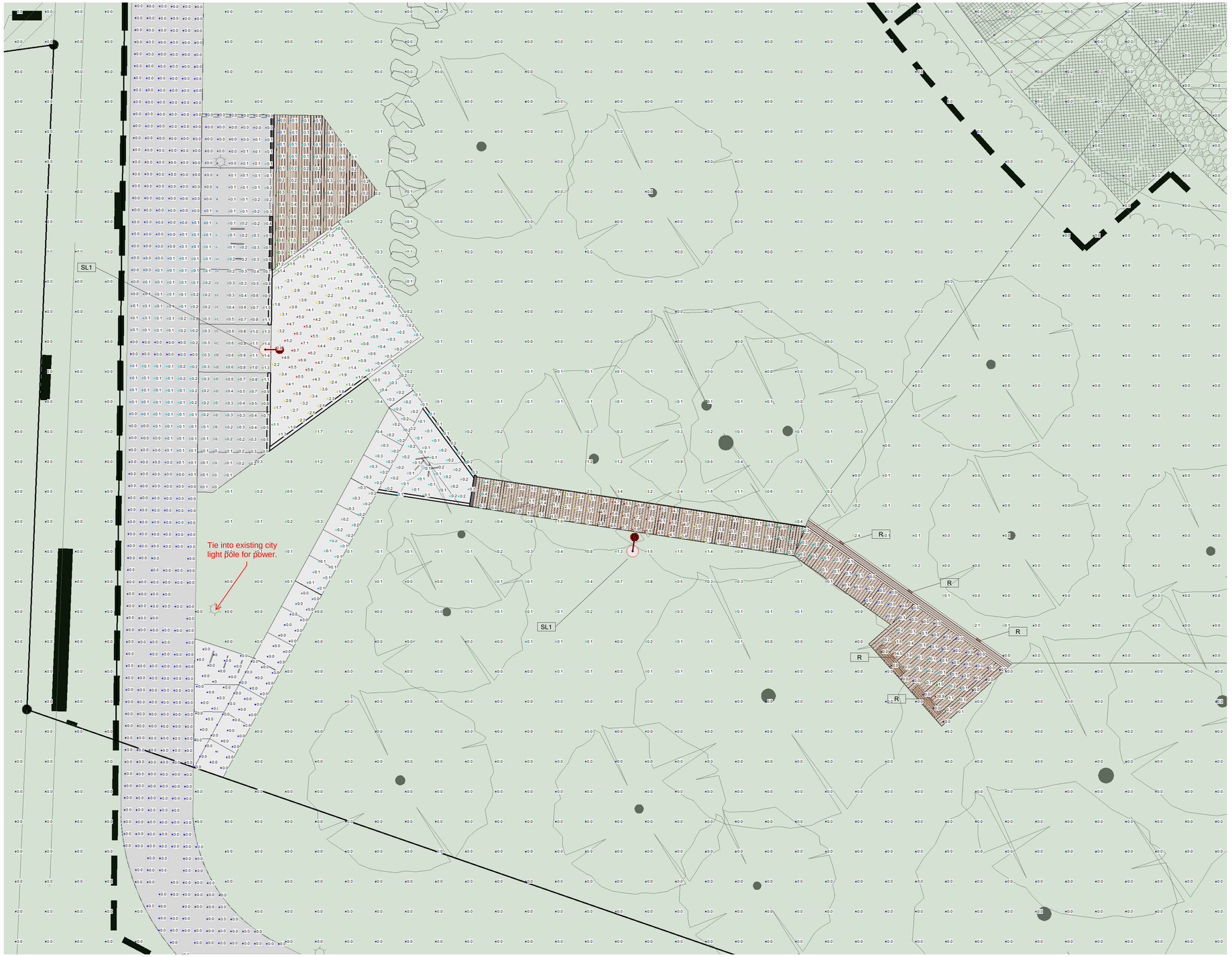

1 SITE LIGHTING DESIGN AND RESULTS
1/8" = 1'-0"

LIGHTING FIXTURE SCHEDULE

Type Mark	Manufacturer	Model	Description	Wattage	URL
R	WE-EF	190-9008	RECESSED 3" X 11" WIDE STEPLIGHT WITH CONCEALED LIGHT SOURCE, 170LM, 3000K	5 W	https://we-ef.com/us/products/family/sti134-led
SL1	LUMCA	LIO-S-SM-A-05-01-18LED03 20W-(VOLTAGE)-L3-30KC80-SB-LV-SB / PM4-CF80-24-SB + AP04-12-WB24-4-SB-ANCHOR BOLTS	CONTEMPORARY LANTERN AREA LIGHT WITH 24" ARM ON 12' POLE WITH TAPERED BASE, 2000LM, 3000K	20 W	https://www.lumca.com/wp-content/uploads/2022/07/TDS_LIO-S_EN_UL.pdf / https://www.lumca.com/wp-content/uploads/2018/01/TDS_AP04-AP04HD_EN.pdf

NOTE: FIXTURES USED IN CALCULATIONS CONTAIN TOTAL LIGHT LOSS FACTOR OF 1.0.

LIGHTING ANALYSIS

Calculation Points Name	Average	Maximum	Minimum	Avg/Min	Max/Min
WOOD DECK + GRANITE + SIDEWALK	0.37 fc	1.25 fc	0.05 fc	7.4	25.4
WOOD DECK + GRANITE + SIDEWALK	1.73 fc	7.06 fc	0.13 fc	13.6	55.7
WOOD DECK + GRANITE + SIDEWALK	1.91 fc	54.52 fc	0.00 fc	89582.8	2556555.0
SURROUNDING SITE - LOW	0.04 fc	2.43 fc	0.00 fc	1088.1	75286.7
SURROUNDING SITE	0.04 fc	3.44 fc	0.00 fc	1060.2	84168.2
GREENWAY + BIKE RACKS	0.07 fc	1.41 fc	0.00 fc	611.1	12642.4
ENTRY SIDEWALK	0.08 fc	0.33 fc	0.00 fc	41.3	167.5

SOUTH YARD PARK

LIGHTING DESIGN AND RESULTS

LDR1.01

FOR REFERENCE ONLY, NOT FOR CONSTRUCTION

SESCO LIGHTING

©2025

01.30.2025

CITY OF FAYETTEVILLE ARKANSAS

CITY COUNCIL MEMO
2025-374

MEETING OF MARCH 25, 2025

TO: Mayor Rawn and City Council

THRU: Keith Macedo, Interim Chief of Staff

FROM: Tim Nyander, Utilities Director

SUBJECT: **HENARD UTILITY PRODUCTS, INC. (PURCHASE AGREEMENT):**

RECOMMENDATION:
Staff recommends approval of the purchase of 1,300 Badger cellular water meters from Henard Utility Products, Inc. in the amount of $642,250.00 plus applicable taxes and freight charges, and approval of a budget adjustment.

BACKGROUND:
Over the past few years, the Utilities Department has been installing AMI meters, or “smart” meters in the City’s water distribution system. Smart meters can be read through the cloud and reduces truck rolls. Eventually, the customer will be able to monitor their individual water meter. Smart meters can also assist in leak detection and water loss reduction. On January 3, 2023, the City Council passed Ordinance 6634 which waived the requirement of formal competitive bidding for water meters and other equipment needed by the Utilities Department.

DISCUSSION:
Due to the increasing growth of the City, the Utilities Department are utilizing the biggest part of the current meter budget on new services. This leaves an extremely small inventory remaining to address the failing meters. This additional order will increase the number of smart meters available for installation in 2025. Freight is included within the quoted pricing and taxes are estimated at $62,619.38 for a total estimated cost of $704,869.38.

BUDGET/STAFF IMPACT:
Funds will be moved from the Water Tank Improvements account to the Water Meters account to cover the cost of this purchase. The budget adjustment in the amount of $800,000.00 will allow for other additional smart meter purchases in late 2025 if the need arises.

ATTACHMENTS: SRF (#3) , BA (#4), Quote from Henard Utility Products (#5)

113 West Mountain Street
Fayetteville, AR 72701
(479) 575-8323

File #: 2025-374

HENARD UTILITY PRODUCTS, INC. (PURCHASE AGREEMENT):

A RESOLUTION TO APPROVE THE PURCHASE OF 1,300 BADGER CELLULAR WATER METERS IN THE AMOUNT OF $642,250.00 FROM HENARD UTILITY PRODUCTS, INC. PLUS ANY APPLICABLE TAXES AND FREIGHT CHARGES, AND TO APPROVE A BUDGET ADJUSTMENT

WHEREAS, the Utilities Department has been installing AMI meters, or "smart" meters in the City's water distribution system over the past few years; and

WHEREAS, due to the increasing growth of the City, the Utilities Department is utilizing the biggest part of the current meter budget on new services, which leaves an extremely small inventory remaining to address failing meters; and

WHEREAS, the Utilities Department recommends purchasing 1,300 smart meters to increase the number of smart meters available for installation in 2025.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby authorizes the purchase of 1,300 Badger cellular water meters in the amount of $642,250.00 from Henard Utility Products, Inc. plus any applicable taxes and freight charges.

Section 2: That the City Council of the City of Fayetteville, Arkansas hereby approves a budget adjustment, a copy of which is attached to this Resolution, to allow for the purchase of additional smart meters in late 2025 if the need arises.

City of Fayetteville Staff Review Form

2025-374

Item ID

4/1/2025

City Council Meeting Date - Agenda Item Only
N/A for Non-Agenda Item

Tim Nyander	3/13/2025	WATER SEWER (720)
Submitted By	**Submitted Date**	**Division / Department**

Action Recommendation:

Staff recommends approval of the purchase of 1,300 Badger cellular water meters from Henard Utility Products, Inc. in the amount of $642,250.00 plus applicable taxes and freight charges, and approval of a budget adjustment.

Budget Impact:

5400.720.1840-5811.00	Water & Sewer
Account Number	Fund
02065.1	Water Meters
Project Number	Project Title

Budgeted Item?	Yes	Total Amended Budget	$	1,127,645.00
		Expenses (Actual+Encum)	$	731,633.13
		Available Budget	$	**396,011.87**
Does item have a direct cost?	Yes	Item Cost	$	704,869.38
Is a Budget Adjustment attached?	Yes	Budget Adjustment	$	800,000.00
		Remaining Budget	$	**491,142.49**

V20221130

Purchase Order Number: _____ **Previous Ordinance or Resolution #** _____

Change Order Number: _____ **Approval Date:** _____

Original Contract Number: _____

Comments: Freight is included within the quoted pricing and taxes are estimated at $62,619.38 for a total estimated cost of $704,869.38.

City of Fayetteville, Arkansas - Budget Adjustment (Agenda)

Budget Year	Division /Org2	Adjustment Number
2025	WATER SEWER (720)	
	Requestor: Cheryl Partain	

BUDGET ADJUSTMENT DESCRIPTION / JUSTIFICATION:

Staff recommends approval of the purchase of 1,300 Badger cellular water meters from Henard Utility Products, Inc. in the amount of $642,250.00 plus applicable taxes and freight charges, and approval of a budget adjustment to fund the cost of the needed meters. Budgeted funds from the Water Tank Improvements project are being moved to cover the cost of the meters.

COUNCIL DATE: 4/1/2025

ITEM ID#: **2025-374**

Kevin Springer
3/13/2025 4:29 PM

Budget Division Date

TYPE: **D - (City Council)**

JOURNAL #:

GLDATE:

RESOLUTION/ORDINANCE

CHKD/POSTED: /

v.2025311

TOTAL - -

Account Number	Increase / (Decrease) Expense	Revenue	Project.Sub# Project	Sub.Detl	AT	Account Name
5400.720.1840-5811.00	800,000	-	02065	1	EX	Water Meters
5400.720.5600-5808.00	(800,000)	-	14010	1	EX	Improvements - Water Line
	-	-				
	-	-				
	-	-				
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QUOTATION

FROM
HENARD UTILITY PRODUCTS, INC.
P.O. Box 9238
SEARCY, ARKANSAS 72145
PHONE (501)268-1987 FAX (501)268-7437
www.henardutility.com

TO Fayetteville Water and Sewer

Harlan Henson

Email: hhenson@fayetteville-ar.gov

INQUIRY NO: 31125-1

DATE 11 March 2025

TERMS 30 Days

DELIVERY TBD

PRICES ARE QUOTED F.O.B.

Shipping Point

WE ARE PLEASED TO QUOTE AS FOLLOWS:

QTY.	DESCRIPTION	PRICE EA.	AMOUNT
1,300	Badger Model M25 – 5/8x3/4 Low Lead Bronze Positive Displacement Meter – Plastic Bottom – HR-E 8 Dial Encoder – LTE-M Beacon Cellular Endpoint - US Gallons – Twist Tight Connector – Serial Numbers to be Embossed on Outside of the Lid.	$272.50	$354,250.00
2,000	Badger LTE-M Beacon Cellular Endpoint – Twist Tight Connector – 100-2810	$144.00	$288,000.00
	Subtotal		$642,250.00
	Tax @ 9.75%		$62,619.38
	TOTAL		**$704,869.38**
	*Note Price Valid thru 12/31/2025		

QUOTED BY: Alex Bunn **abunn@henardutility.com**

CITY OF FAYETTEVILLE ARKANSAS

CITY COUNCIL MEMO
2025-375

MEETING OF MARCH 25, 2025

TO: Mayor Rawn and City Council

THRU: Keith Macedo, Interim Chief of Staff

FROM: Tim Nyander, Utilities Director

SUBJECT: **UTILITY SERVICE CO., INC. (CONSTRUCTION CONTRACT):**

RECOMMENDATION:
Staff recommends awarding Bid 25-23 and approving a construction contract with Utility Service Co., Inc. in the amount of $734,900.00 for painting and rehabilitation of the 1-million-gallon Baxter Ground Water Storage Tank and approval of a project contingency in the amount of $73,490.00.

BACKGROUND:
On February 12, 2025 the City of Fayetteville accepted sealed competitive bids for this project. Utility Service Co., Inc. submitted the lowest bid. All bids are shown here:

Utility Services Co., Inc.	$734,900.00
Viking Painting, LLC	$765,892.00
Preferred Sandblasting and Painting	$779,260.00
Maguire Iron, Inc.	$795,000.00
Dixie Painting & Sandblasting	$833,500.00
Classic Protective Coatings, Inc.	$867,900.00

DISCUSSION:
This project will remove and replace the interior and exterior coatings on the 1-million-gallon Baxter Water Tank. While the coating systems are removed, upgrades to safety climbing systems will be made to align with modern standards. Tank mixing will be added to improve circulation by the use of an active mixer placed inside the tank.

BUDGET/STAFF IMPACT:
Funds are available in the Water Tank Improvements account within the Water & Sewer fund.

ATTACHMENTS: SRF (#3) , Agreement (#4), Bid 25-23, Bid Tab - Final (#5), Bid 25-23, Bid Submittal - Utility Service Co, Inc. - E (#6)

113 West Mountain Street
Fayetteville, AR 72701
(479) 575-8323

File #: 2025-375

UTILITY SERVICE CO., INC. (CONSTRUCTION CONTRACT):

A RESOLUTION TO AWARD BID 25-23 AND AUTHORIZE A CONTRACT WITH USC, INC. IN THE AMOUNT OF $734,900.00 FOR PAINTING AND REHABILITATION OF THE ONE MILLION GALLON BAXTER GROUND WATER STORAGE TANK, AND TO APPROVE A PROJECT CONTINGENCY IN THE AMOUNT OF $73,490.00

WHEREAS, on February 12, 2025, the City accepted sealed competitive bids for a project to remove and replace the interior and exterior coating on the one million gallon Baxter Water Tank; upgrade safety climbing systems to align with modern standards; and improve circulation by the use of an active mixer placed inside the tank.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby awards Bid 25-23 and authorizes Mayor Rawn to sign a contract with USC, Inc. in the amount of $734,900.00 for painting and rehabilitation of the one million gallon Baxter Ground Water Storage Tank, and further approves a project contingency in the amount of $73,490.00.

City of Fayetteville Staff Review Form

2025-375

Item ID

4/1/2025

City Council Meeting Date - Agenda Item Only
N/A for Non-Agenda Item

Tim Nyander	3/13/2025	WATER SEWER (720)
Submitted By	**Submitted Date**	**Division / Department**

Action Recommendation:

Staff recommends awarding Bid #25-23 and approving a construction contract with Utility Service Co., Inc. in the amount of $734,900.00 for painting and rehabilitation of the 1-million-gallon Baxter Ground Water Storage Tank and approval of a project contingency in the amount of $73,490.00.

Budget Impact:

5400.720.5600-5808.00	Water & Sewer
Account Number	Fund
14010.0	Water Tank Improvements
Project Number	Project Title

Budgeted Item?	Yes	Total Amended Budget	$	3,331,001.00
		Expenses (Actual+Encum)	$	147,154.96
		Available Budget	$	**3,183,846.04**
Does item have a direct cost?	Yes	Item Cost	$	808,390.00
Is a Budget Adjustment attached?	No	Budget Adjustment	$	-
		Remaining Budget	$	**2,375,456.04**

V20221130

Purchase Order Number: _____ **Previous Ordinance or Resolution #** _____

Change Order Number: _____ **Approval Date:** _____

Original Contract Number: _____

Comments:

SECTION 00 52 00 – AGREEMENT

AGREEMENT BETWEEN OWNER AND CONTRACTOR

Contract Name/Title: **BAXTER 1 MG GROUND WATER STORAGE TANK REHBILITATION**
Contract No.: 25-23, Construction

THIS AGREEMENT is dated as of the _____ day of _____ in the year 20 25 by and between The City of Fayetteville, Arkansas and Utility Service Co., Inc. (hereinafter called Contractor).

ARTICLE 1 - WORK

1.1 Contractor shall complete all Work as specified or indicated in the Contract Documents. The work under this Agreement includes, but is not limited to:

Painting of interior and exterior of the elevated water storage tank.

Installation of new active mixing system.

Safety, access, and structural improvements.

1.2 The Contractor agrees to perform the work described in the Contract Documents and comply with the terms therein for the amounts shown in the Bid Proposal. Refer to Section 00 41 43-Bid Form for quantities.

1.3 Any use of a third-party dumpster or roll off container shall be procured from the City of Fayetteville Recycling and Trash Collection Division. Use of a Non-City dumpster or roll off container is not allowed.

1.4 Contractor is responsible for obtaining all applicable permits. The fees for City of Fayetteville (only) issued permits shall be waived.

1.5 The Contract may include work in City of Fayetteville right-of-way, ARDOT (State) right-of-way, railroad right-of-way and in General or Utility Easements.

ARTICLE 2 - ENGINEER

2.1 The Contract Documents have been prepared by Olsson (Engineer) for the City of Fayetteville. The Engineer assumes all duties and responsibilities, and has the rights and authority assigned to Engineer in connection with completion of the Work in accordance with the Contract Documents.

ARTICLE 3 - CONTRACT TIME

3.1 TIME OF THE ESSENCE

A. All time limits for milestone, if any, Substantial Completion and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

3.2 DATES FOR COMPLETION AND FINAL PAYMENT

A. The Work shall be substantially completed within 120 calendar days after the date when the Contract Times commence to run as provided in the GENERAL CONDITIONS, and final completion and ready for final payment within 150 calendar days after the date when the Contract Times commence to run as provided in the GENERAL CONDITIONS.

3.3 LIQUIDATED DAMAGES

A. Owner and Contractor recognize that time is of the essence of this Agreement and that The City of Fayetteville will suffer financial loss if the Work is not completed within the time specified above, plus any extensions thereof allowed in accordance with the GENERAL CONDITIONS. The parties also recognize the delays, expense, and difficulties involved in proving the actual loss suffered by The City of Fayetteville if the Work is not Substantially Completed on time. Accordingly, instead of requiring any such proof, The City of Fayetteville and Contractor agree that as liquidated damages for delay (but not as a penalty) Contractor shall pay The City of Fayetteville Five Hundred Dollars ($500.00) for each calendar day that expires after the time specified above in Paragraph 3.2 for Substantial Completion until the Work is Substantially Complete. After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the time specified in Paragraph 3.2 for completion and readiness for final payment

or any proper extension thereof granted by The City of Fayetteville, Contractor shall pay The City of Fayetteville Five Hundred Dollars ($500.00) for each calendar day that expires after the time specified for completion and readiness for final payment.

ARTICLE 4 - CONTRACT PRICE

4.1 The CITY OF FAYETTEVILLE agrees to pay, and the CONTRACTOR agrees to accept, as full and final compensation for all work done under this agreement, the amount based on the unit prices bid in the Proposal (BID FORM) which is hereto attached, for the actual amount accomplished under each pay item, said payments to be made in lawful money of the United States at the time and in the manner set forth in the Specifications.

4.2 As provided in the Contract estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by ENGINEER as provided in the General Conditions. Unit prices have been computed as provided in the Contract Documents.

4.3 Changes, modifications, or amendments in scope, price or fees to this contract shall not be allowed without a prior formal contract amendment approved by the Mayor and the City Council in advance of the change in scope, cost or fees.

1. Further, there shall be no changes to the scope and/or contract documents without prior written approval of the Engineer of Record and the City's designated Professional Engineer.

ARTICLE 5 - PAYMENT PROCEDURES

5.1 SUBMITTAL AND PROCESSING OF PAYMENTS

A. Contractor shall submit Applications for Payment in accordance with the GENERAL CONDITIONS. Applications for Payment will be processed by Engineer as provided in the GENERAL CONDITIONS.

5.2 PROGRESS PAYMENTS, RETAINAGE

A. The City of Fayetteville shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment as recommended by Engineer, on or about the 15th day of each month during construction. All such payments will be measured by the schedule of values established in the GENERAL CONDITIONS (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Requirements.

1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below, but, in each case, less the aggregate of payments previously made and less such amounts as Engineer shall determine, or The City of Fayetteville may withhold, in accordance with the GENERAL CONDITIONS.

    a. 95% of Work Completed (with the balance being retainage). If Work has been 50% completed as determined by Engineer, and if the character and progress of the Work have been satisfactory to The City of Fayetteville and Engineer, The City of Fayetteville on recommendation of Engineer, may determine that as long as the character and progress of the Work subsequently remain satisfactory to them, there will be no additional retainage on account of Work subsequently completed, in which case the remaining progress payments prior to Substantial Completion will be an amount equal to 100% of the Work Completed less the aggregate of payments previously made; and

    b. 100% of Equipment and Materials not incorporated in the Work but delivered, suitably stored, and accompanied by documentation satisfactory to The City of Fayetteville as provided in the GENERAL CONDITIONS.

B. Upon final completion and acceptance of the Work in accordance with the GENERAL CONDITIONS, The City of Fayetteville shall pay the remainder of the Contract Price as recommended by Engineer and as provided in the GENERAL CONDITIONS.

ARTICLE 6 - CONTRACTOR'S REPRESENTATIONS

6.1 In order to induce The City of Fayetteville to enter into this Agreement, Contractor makes the following representations:

A. Contractor has examined and carefully studied the Contract Documents including the Addenda and other related data identified in the Bid Documents.

B. Contractor has visited the Site(s) and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, performance, and furnishing of the Work.

C. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, performance, and furnishing of the Work.

D. Contractor has carefully studied all:

1. Reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site; and

2. Reports and drawings of a Hazardous Environmental Condition, if any, at the Site. Contractor acknowledges that The City of Fayetteville and Engineer do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Contract Documents with respect to Underground Facilities at or contiguous to the Site.

E. Contractor has obtained and carefully studied (or assumes responsibility of having done so) all such additional supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site or otherwise which may affect cost, progress, performance, and furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto.

F. Contractor does not consider that any additional examinations, investigations, explorations, tests, studies, or data are necessary for the performing and furnishing of

the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.

G. Contractor is aware of the general nature of work to be performed by The City of Fayetteville and others at the Site that relates to the Work as indicated in the Contract Documents.

H. Contractor has correlated the information known to Contractor, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.

I. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents and the written resolution thereof by Engineer is acceptable to Contractor.

J. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

ARTICLE 7 - CONTRACT DOCUMENTS

7.1 CONTENTS

A. The Contract Documents which comprise the entire Agreement between The City of Fayetteville and Contractor concerning the Work consist of the following and may only be amended, modified, or supplemented as provided in this Agreement and in the GENERAL CONDITIONS:

1. This Agreement.
2. Exhibits to this Agreement (enumerated as follows):
    a. Notice to Proceed.
    b. Contractor's Bid.
    c. Documentation submitted by Contractor prior to Notice of Award.
3. Performance, Payment, and other Bonds.

a. The Performance and Payment Bond shall be one hundred percent (100%).

4. General Conditions.

5. Supplementary Conditions.

6. Specifications consisting of divisions and sections as listed in Table of Contents of Project Manual.

7. Drawings consisting of a cover sheet and sheets as listed in the Table of Contents thereof (Drawings), with each sheet bearing the following general title: Markham Hill Water Tank Rehabilitation.

8. Addenda numbers __1__ to __2__, inclusive.

9. The following which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto: All Written Amendments and other documents amending, modifying, or supplementing the Contract Documents pursuant to the GENERAL CONDITIONS.

ARTICLE 8 - MISCELLANEOUS

8.1 TERMS

A. Terms used in this Agreement which are defined in the GENERAL CONDITIONS shall have the meanings stated in the GENERAL CONDITIONS.

8.2 ASSIGNMENT OF CONTRACT

A. No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by Law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

8.3 SUCCESSORS AND ASSIGNS

A. The City of Fayetteville and Contractor each binds himself, his partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

8.4 SEVERABILITY

A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon The City of Fayetteville and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

8.5 FREEDOM OF INFORMATION ACT

A. City contracts and documents prepared while performing city contractual work are subject to the Arkansas Freedom of Information Act. If a Freedom of Information Act request is presented to the City of Fayetteville, the Contractor will do everything possible to provide the documents in a prompt and timely manner as prescribed in the Arkansas Freedom of Information Act (A.C.A. §25-19-101 et. seq.). Only legally authorized photocopying costs pursuant to the FOIA may be assessed for this compliance.

8.6 LIENS

A. No liens against this construction project are allowed. Arkansas law (A.C.A. §§18-44-501 through 508) prohibits the filing of any mechanics of materialmen's liens in relation to this public construction project. Arkansas law requires, and the Contractor promises to provide a bond in a sum equal to the amount of this contract. Any subcontractor or materials supplier may bring an action for non-payment or labor or material on the bond. The Contractor promises to notify every subcontractor and materials supplier for this project of this paragraph and obtain their written acknowledgement of such notice prior to commencement of the work of the subcontractor or materials supplier.

IN WITNESS WHEREOF, The City of Fayetteville and Contractor have signed this Agreement and copies have been provided to the Contractor and the City of Fayetteville. All portions of the Contract Documents have been signed, initialed, or identified by The City of Fayetteville and Contractor.

This Agreement will be effective on _____, 20 25 , which is the Effective Date of the Agreement.

CONTRACTOR:	CITY OF FAYETTEVILLE
By: David Pollard	By: _____
(Type or legibly print)	(Type or legibly print)
_____	_____
(Signature)	(Signature)
Title: Director of Bid Dept.	Title: Mayor

Contractor shall attach evidence of authority to sign.

If Contractor is a corporation, corporate entity or LLC, Contractor shall attach Corporate Resolution authorizing Contractor's signature and execution of Agreement.

Further if Contractor is a corporation, corporate entity or LLC, Contractor shall also attach a copy of the Contractor's Articles of Incorporation and a copy from the Arkansas State Secretary of State to document that the corporation, corporate entity or LLC is in current "Good Standing" with the State of Arkansas and such entity is permitted to perform work in the State of Arkansas.

(SEAL)

Attest _____
J. Shane Albritton, Secretary

Attest _____

Address for giving notices
535 Courtney Hodges Blvd.
Perry, GA 31069

Address for giving notices
113 W. Mountain St.
Fayetteville, AR 72701

License No. 0091660625

Agent for Service of process

_____
(Type or legibly print)

_____
(Signature)

Contractor shall attach evidence of authority of Agent for Service process to sign. If Contractor is a corporation, corporate entity or LLC, Contractor shall attach Corporate Resolution authorizing Agent for Service process authority to sign.

(If Contractor is a corporation, corporate entity or LLC, attach evidence of authority to sign.)

Approved as to Form:

By: _____

Attorney For: _____

END OF SECTION 00 52 00

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USG WATER
SOLUTIONS

SECRETARY'S CERTIFICATE
OF
UTILITY SERVICE CO., INC.

I, J. Shane Albritton, as Secretary of Utility Service Co., Inc., do hereby certify that the following Resolution was duly proposed, adopted, and resolved, during a meeting of the Board of Directors of Utility Service Co., Inc. on the 17th day of June, 2024:

> BE IT RESOLVED that David Pollard is hereby authorized and empowered by the Board of Directors as of June 17, 2024, to execute any and all contracts with a value of $1,000,000 or less on behalf of Utility Service Co., Inc.

So executed on the 17th day of June, 2024.

J. Shane Albritton

[Corporate Seal]

Utility Service Co., Inc. CORPORATE SEAL GEORGIA 2001

Sworn before me on this 17th day of June, 2024.

Notary Public

NOTARY PUBLIC GEORGIA
CRISTYL SMITH
Notary Public
State of Georgia
Peach County
My Comm. Expires Sep. 19, 2025

CITY OF
FAYETTEVILLE
ARKANSAS

BID TABULATION

Bid 25-23, Baxter 1 MG Ground Water Storage Tank Rehabilitation

DEADLINE: Wednesday, February 12, 2025 at 2:00 PM

				Utility Service Co, Inc.	Viking Painting, LLC	Preferred Sandblasting and Painting	Maguire Iron, Inc.	Dixie Painting & Sandblasting	Classic Protective Coatings, Inc
			TOTAL	$734,900.00	$765,892.00	$779,260.00	$795,000.00	$833,500.00	$867,900.00
Line #	Description	QTY	UOM	Unit	Unit	Unit	Unit	Unit	Unit
1	Existing Tank Rehabilitation	1	EA	**$690,200.00**	$744,570.00	$692,000.00	$770,000.00	$810,500.00	$802,900.00
2	Mobilization	1	EA	$33,100.00	**$8,800.00**	$18,500.00	$10,000.00	$10,000.00	$30,000.00
3	Bonds and Insurance	1	EA	$10,600.00	$11,322.00	$18,760.00	**$5,000.00**	$10,000.00	$10,000.00
4	Trench and Excavation Safety Systems	1	EA	**$1,000.00**	$1,200.00	$50,000.00	$10,000.00	$3,000.00	$25,000.00

Non-Responsive

K Fitch 2/14/25

Kenny Fitch, Sr Procurement Agent

Amanda B 2/14/25

Amanda Beilfuss, Procurement Director

Bid 25-23 Addendum 2
Utility Service Co, Inc.
Utility Service Co, Inc.
Supplier Response

Event Information

Number: Bid 25-23 Addendum 2
Title: Construction - Baxter 1 MG Ground Water Storage Tank Rehabilitation
Type: Invitation to Bid
Issue Date: 1/12/2025
Deadline: 2/12/2025 02:00 PM (CT)
Notes: The City of Fayetteville invites qualified vendors to bid on the rehabilitation to an existing 1 million-gallon water storage tank located at 456 E. Baxter Lane, Fayetteville, AR. The work includes painting of the interior and exterior of the tank; furnishing and installing a new active mixing system; constructing overflow modifications, access and safety improvements, structural improvements, miscellaneous site work, and modification to adjacent 5 million-gallon water storage tank ladder. Work shall include all items as set out in the drawings and specifications for a complete installation. All questions during the bidding process shall be addressed to Kenny Fitch, Sr Procurement Agent, by calling 479-575-8258, or emailing kfitch@fayetteville-ar.gov.

Contact Information

Contact: Kenny Fitch - Sr Procurement Agent
Address: Purchasing
City Hall
Room 306
113 W. Mountain St.
Fayetteville, AR 72701
Email: kfitch@fayetteville-ar.gov

Utility Service Co, Inc. Information

Contact: Jessica Odom
Address: 535 General Courtney Hodges Blvd
Perry, GA 31069-3207
Phone: (478) 987-0303
Email: bid@usgwater.com

By submitting your response, you certify that you are authorized to represent and bind your company.

Cristyl Smith
Signature

bid@usgwater.com
Email

Submitted at 2/12/2025 11:53:38 AM (CT)

Requested Attachments

Signature Forms for Bid 25-23

Utility Service Co., Inc. - Signature Forms.pdf

Please attach your completed forms. These documents can be found in FILE #01 - Project Manual in the Attachments tab. Please be sure to include ALL required information stated in the Project Manual, including any Bidder Qualification requirements.

Bid Bond for Bid 25-23

Utility Service Co., Inc. - Bid Bond.pdf

Please attach a signed and completed copy of your bid bond. Bid bonds in the form of a cashier's check shall be delivered to City Hall, Purchasing Division before bid deadline and have a copy of the cashier's check uploaded with submittal.

Bid Attributes

1	**Arkansas Secretary of State Filing Number:** 100159500
2	**Arkansas Contractor License Number:** 0091660625
3	**Check Yes or No:** Pursuant Arkansas Code Annotated §25-1-503, the Contractor agrees and certifies that they do not currently boycott Israel and will not boycott Israel during any time in which they are entering into, or while in contract, with any public entity as defined in §25-1-503. If at any time during contract the contractor decides to boycott Israel, the contractor must notify the contracted public entity in writing. ☑ Yes, I agree ☐ No, I don't agree

4	**Check Yes or No:** Pursuant Arkansas Code Annotated §25-1-1002, the Contractor agrees and certifies that they do not currently boycott Energy, Fossil Fuel, Firearms, and Ammunition Industries during any time in which they are entering into, or while in contract, with any public entity as defined in §25-1-1002. If at any time during the contract the contractor decides to boycott Energy, Fossil Fuel, Firearms, and/or Ammunition Industries, the contractor must notify the contracted public entity in writing. ☑ Yes, I agree ☐ No, I don't agree

5	**Addendum Acknowledgement:** By selecting "I agree", you acknowledge that you have read and understand any addendums that have been issued for this bid. ☑ I agree

Bid Lines

1	Existing Tank Rehabilitation						
	Quantity: 1	UOM: LS		Price:	$690,200.00	Total:	$690,200.00
2	Mobilization - Shall NOT Exceed 5% of Total Bid (not including bonds & insurance and trench safety)						
	Quantity: 1	UOM: LS		Price:	$33,100.00	Total:	$33,100.00
3	Bonds and Insurance						
	Quantity: 1	UOM: LS		Price:	$10,600.00	Total:	$10,600.00
4	Trench and Excavation Safety Systems, as required by Act 291 of the 1993 Arkansas General Assembly						
	Quantity: 1	UOM: LS		Price:	$1,000.00	Total:	$1,000.00

Response Total: $734,900.00

CITY OF FAYETTEVILLE ARKANSAS

Project Check List

This checklist is for the Bidder's use in preparing & submitting a bid. It is not intended to include all details necessary to prepare a bid and shall not be used as a substitute for the requirements of the bid documents. Use of this checklist does not relieve the Bidder from the responsibility of meeting all requirements of the Specifications concerning the preparation of an acceptable bid. Bidders are welcome to use this form as a coversheet for a sealed envelope; however, using this form itself is NOT a requirement.

X	**5% Bid Bond of the amount bid accompanied by required documentation (Power of Attorney, etc.)** o In lieu of a bid bond, the bidder may submit a cashier's check from a bank located in the State of Arkansas for at least five percent (5%) of the amount bid (inclusive of any deductive alternates). Cashier's checks shall be made payable to the City of Fayetteville, AR and received prior to the bid deadline by making an in-person delivery appointment with the City Purchasing Division.
X	All addenda shall be signed, acknowledged, and submitted on the appropriate forms (submitting the actual addendums or marking acknowledgement on other bid pages).
X	All line items shall be appropriately filled out and extended to reveal the line item price as well as the total bid price. Total base bid should be calculated in the provided space.
X	All pages provided with signature lines shall be appropriately signed, dated accordingly, and included with submitted bid documents
X	All bids shall be received before the stated deadline utilizing the City's electronic bidding platform or submitting a physical sealed bid to the City Purchasing Division. Submitting a bid electronically is strongly encouraged. A public bid opening will be conducted shortly after the deadline at City Hall and livestreamed at https://www.youtube.com/user/cityoffayettevillear. Late or misdirected bids shall not be accepted. The City of Fayetteville shall not be responsible for lost or misdirected bids, or failure of bidder's technical equipment. If submitting a physical bid, all bid documents shall be delivered in a sealed envelope to the address stated in the advertisement or updated deadline issued via Addenda. All bids should be delivered with the name of the bidder (contractor) on the sealed envelope as well as the bidders Arkansas Contractor's License Number.
X	Additional Information Required: • AR Secretary of State Filing #: 100159500 OR submit electronically. • Arkansas Contractor License #: 0091660625 OR submit electronically. • Pursuant Arkansas Code Annotated §25-1-503, the Contractor agrees and certifies that they do not currently boycott Israel and will not boycott Israel during any time in which they are entering into, or while in contract, with any public entity as defined in §25-1-503. If at any time during contract the contractor decides to boycott Israel, the contractor must notify the contracted public entity in writing. o Submit electronically or circle applicable answer: YES *or* NO • Pursuant Arkansas Code Annotated §25-1-1002, the Contractor agrees and certifies that they do not currently boycott Energy, Fossil Fuel, Firearms, and Ammunition Industries during any time in which they are entering into, or while in contract, with any public entity as defined in §25-1-1002. If at any time during the contract the contractor decides to boycott Energy, Fossil Fuel, Firearms, and/or Ammunition Industries, the contractor must notify the contracted public entity in writing. o Submit electronically or circle applicable answer: YES *or* NO

License No. 0091660625

ID #11631

State of Arkansas

Commercial Contractors Licensing Board

UTILITY SERVICE CO., INC., D/B/A USC, INC.
PO BOX 1350
PERRY, GA 31069

This is to Certify That UTILITY SERVICE CO., INC., D/B/A USC, INC.

is duly licensed under the provisions of Ark. Code Ann. § 17-25-101 et. seq. as amended and is entitled to practice Contracting in the State of Arkansas within the following classifications/specialties:

SPECIALTY

Above Ground Tanks
Microwave Systems, Towers, Satellite Dishes
Painting, Wallcovering
Sandblasting, Hydroblasting, Dry Ice Blasting
Special Coatings or Applications, Caulking, Waterproofing

This contractor has an unlimited suggested bid limit.

from June 28, 2024 **until** June 30, 2025 **when this Certificate expires.**

Witness our hands of the Board, dated at North Little Rock, Arkansas:

GREAT SEAL OF THE STATE OF ARKANSAS

CHAIRMAN

SECRETARY

June 28, 2024 - dsa

USG WATER
SOLUTIONS

SECRETARY'S CERTIFICATE
OF
UTILITY SERVICE CO., INC.

I, J. Shane Albritton, as Secretary of Utility Service Co., Inc., do hereby certify that the following Resolution was duly proposed, adopted, and resolved, during a meeting of the Board of Directors of Utility Service Co., Inc. on the 17th day of June, 2024:

> BE IT RESOLVED that David Pollard is hereby authorized and empowered by the Board of Directors as of June 17, 2024, to execute any and all contracts with a value of $1,000,000 or less on behalf of Utility Service Co., Inc.

So executed on the 17th day of June, 2024.

J. Shane Albritton

[Corporate Seal]

Utility Service Co., Inc. CORPORATE SEAL GEORGIA 2001

Sworn before me on this 17th day of June, 2024.

Notary Public

NOTARY PUBLIC GEORGIA
CRISTYL SMITH
Notary Public
State of Georgia
Peach County
My Comm. Expires Sep. 19, 2025

SECTION 00 41 43 - BID FORM

Contract Name: **BAXTER 1 MG GROUND WATER STORAGE TANK REHABILITATION**

Owner: FAYETTEVILLE WATER & SEWER, CITY OF FAYETTEVILLE, ARKANSAS

City of Fayetteville Bid Number: 25-23, Construction

OLSSON PROJECT NO. 024-02141

Dated: February 12 20 25

SECTION 00 11 53 – BIDDER'S QUALIFICATION STATEMENT

Contract Name: **BAXTER 1 MG GROUND WATER STORAGE TANK REHABILITATION**

City of Fayetteville Bid Number: 25-23, Construction

Date: 2/12/25

SUBMITTED TO:

The City of Fayetteville, Arkansas
113 West Mountain Street
Fayetteville, Arkansas 72701

SUBMITTED BY:

Company Utility Service Co., Inc.

Name David Pollard, Director of Bid Dept.

Address 535 Courtney Hodges Blvd., Perry, GA 31069

Principal Office 535 Courtney Hodges Blvd., Perry, GA 31069

Corporation, LLC, partnership, individual, joint venture, other Corporation

Arkansas State General Contractor's License Number 0091660625

(Type or legibly print)

For a Contractor to be considered as Qualified, the Contractor must satisfy all financial, insurance, and bonding requirements of the City of Fayetteville, and **must have had at least five (5) years of experience under the current Contractor name** in the installation of water and sewer facilities. The Contractor shall have executed work for municipalities operating water/sewer facilities or water/sewer contracted operations **with a minimum of three (3) projects exceeding five hundred thousand ($500,000) dollars for similar work as described in the Contract Documents.** Work for developers and commercial site work will not be considered as permissible work experience. Acceptable documentation of these projects must be submitted to the City of Fayetteville. In accordance with Arkansas Procurement Law, a Contractor may use the combined experience of its owners or senior executive staff to satisfy the requirements, or the combined experience of the key personnel that will be responsible for satisfying the experience requirement.

EXPERIENCE STATEMENT (MANDATORY)

1. Bidder has been engaged as a General Contractor in construction for 30+ years and has performed work of the nature and magnitude of this

Contract for 30+ years. Bidder has been in business under its present name for 30+ years.

2. Bidder now has the following bonded projects under contract: (On a separate sheet, list project name, owner, name of owner contact, engineer/architect, name of engineer/architect contact, amount of contract, surety, and estimated completion date.) ***Please see attached Reference Packet.***

3. Bidder has completed the following (list minimum of 3) contracts consisting of work similar to that proposed by this Contract: (On a separate sheet, list project name, owner, name of owner contact, engineer/architect, name of engineer/architect contact, amount of contract, surety, and date of completion and percentage of the cost of the Work performed with Bidder's own forces.)
Please see attached Reference Packet.

4. Has Bidder ever failed to complete any project? If so, state when, where, and why. ***No***

5. Bidder normally performs the following work with his own forces:

Painting, Welding, Sandblasting, and Repairs to Potable Water Tanks

6. Construction experience of key individuals in the organization is as follows (continued on attached sheets if needed):

Please see attached Resumes.

7. In the event the Contract is awarded to Bidder, the required surety Bonds will be furnished by the following surety company and name and address of agent:

Travelers Casualty & Surety Company of America

Agent: Marsh & McLennan Agency LLC

825 Maryville Centre Dr. Suite 200

St. Louis, MO 63017

8. Bidder's Workmen's Compensation Experience Modifier Factor is:
1.0.

FINANCIAL STATEMENT (IF REQUESTED)

A. If requested by the City of Fayetteville during the evaluation of bids the bidder shall provide to the City of Fayetteville the following additional information:

Bidder possesses adequate financial resources as indicated by the following:

1. Assets and Liabilities: Attach a financial statement, audited if available, including Bidder's latest balance sheet and income statements showing the following items:

   a. Current assets (cash, joint venture accounts, accounts receivable, notes receivable, accrued income, deposits, materials inventory, and prepaid expenses).

   b. Net fixed assets.

   c. Other assets.

   d. Current liabilities (accounts payable, notes payable, accrued expenses, provision for income taxes, advances, accrued salaries, and accrued payroll taxes).

   e. Other liabilities (capital, capital stock, authorized and outstanding shares par values, earned surplus, and retained earnings).

   f. Name of firm preparing financial statement and date thereof:

   If financial statement is not for identical organization named herein, explain relationship and financial responsibility of the organization furnished.

2. Current Judgments: The following judgements are outstanding against Bidder:

	Judgment Creditors	Where Docketed and Date	Amount
a.	N/A		$
b.			$

Bidder hereby represents and warrants that all statements set forth herein are true and correct.

Date: February 12, 2025

Name of Organization:

Utility Service Co., Inc.

By David Pollard

(Type or legibly print)

By _____

(Signature)

Title Director of Bid Dept.

(Type or legibly print)

If Bidder is a partnership, the partnership name shall be signed, followed by the signature of at least one of the partners. If Bidder is a corporation or LLC, the corporate name shall be signed, followed by the signature of a duly-authorized officer and with the corporate seal affixed.

Contractor shall attach evidence of authority of signature. If Contractor is a corporation, corporate entity or LLC, Contractor shall attach Corporate Resolution authorizing Contractor's signature and authority to sign.

END OF SECTION 00 11 53

ARTICLE 1 – BID RECIPIENT

1.1 This Bid is submitted to:

City of Fayetteville, AR
113 West Mountain Street
Fayetteville, Arkansas 72701

1.2 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the Contract Times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER'S ACKNOWLEDGEMENTS

2.1 Bidder accepts all of the terms and conditions of the Advertisement and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 90 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

2.2 The Successful Bidder will sign and submit the Contract Agreement and other documents required by the bidding requirements within 30 days after the date of Owner's Notice of Award.

ARTICLE 3 – BIDDER'S REPRESENTATIONS

3.1 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

Addendum No.	**Addendum, Date**
1	1/28/2025
2	2/6/2025

B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

D. Bidder has carefully studied all:

1. reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or

subsurface structures at or adjacent to the Site (except Underground Facilities) that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and

2. reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

E. Bidder acknowledges that Owner and Engineer do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Bidding Documents with respect to Underground Facilities at or contiguous to the site.

F. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.

G. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.

H. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.

I. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents and confirms that the written resolution thereof by Engineer is acceptable to Bidder.

J. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.

K. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 – BIDDER'S CERTIFICATION

4.1 Bidder certifies that:

A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;

B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;

C. Bidder is not debarred from doing business from any government entity.

D. Bidder has not solicited or induced any individual or entity to refrain from bidding; and

E. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.1.D:

1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;
2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the e execution of the Contract.

ARTICLE 5 – BASIS OF BID

5.1 Bidders are required to provide pricing for all line items, including deductive alternate items. Failure to provide deductive alternate pricing can result in bid rejections.

In the event no bid falls within the amount of funds certified for the project plus 25%, the City will utilize the deductive alternates in order to further evaluate bids until a bid received falls within the amount certified, plus 25%.

In the event all deductive alternates are subtracted from the total base bid and no bid falls within the amount certified, plus 25%, all bids shall be rejected and become confidential.

In no case shall the amount bid for the item of "mobilization" exceed 5% of the total contract amount for all items listed in the proposal or bid.

Bidder will complete the Work in accordance with the Contract Documents for the following price(s) (Bid Form on page 4):

REFER TO THE CITY'S ELECTRONIC BIDDING PLATFORM TO SUBMIT BID PRICING ELECTRONICALLY.

CONTACT THE CITY PURCHASING DIVISION TO SUBMIT A PHYSICAL SEALED BID (APPROINTMENT REQUIRED).

BID FORM

Baxter 1 MG Ground Water Storage Tank Rehabilitation
City of Fayetteville, Arkansas

Olsson Project No. 024-02141

Item No.	Estimated Quantity	Unit	Description of Item and Unit or Lump Sum Price Bid	Total Amount
1.	1	Lump Sum	Existing Tank Rehabilitation	
	Six Hundred Ninety Thousand Two Hundred Dollars		/L.S.	$ 690,200
	(Dollar Amount Written in Words)		(In Figures)	(Total in Figures)
2.	1	Lump Sum	Mobilization	
	Thirty Three Thousand One Hundred Dollars		/L.S.	$ 33,100
	(Dollar Amount Written in Words)		(In Figures)	(Total in Figures)
3.	1	Lump Sum	Bonds and Insurance	
	Ten Thousand Six Hundred Dollars		/L.S.	$ 10,600
	(Dollar Amount Written in Words)		(In Figures)	(Total in Figures)
4.	1	Lump Sum	Trench and Excavation Safety Systems, as required by Act 291 of the 1993 Arkansas General Assembly	
	One Thousand Dollars		/L.S.	$ 1,000
	(Dollar Amount Written in Words)		(In Figures)	(Total in Figures)
	TOTAL BID Seven Hundred Thirty Four Thousand Nine Hundred Dollars			$ 734,900
	(Dollar Amount Written in Words)			**(Total in Figures)**

5.2 Bidder acknowledges that:

A. Each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and

B. Estimated quantities are not guaranteed and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

C. The contract, if awarded will be based on the lowest responsive, responsible bid accepted by the City of Fayetteville, Arkansas.

D. Unit prices have been computed in accordance with paragraph 13.03 of the General Conditions.

E. Bidder acknowledges that quantities are not guaranteed, and final payment will be based on actual quantities determined as provided in the Contract Documents.

F. Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words, unless obviously incorrect, will govern.

G. The above unit and lump sum prices shall include all labor, materials, bailing, shoring, removal, overhead, profit, insurance, etc., to cover the finished work of the several kinds called for.

H. The Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding.

ARTICLE 6 – TIME OF COMPLETION

6.1 Bidder agrees that the Work will be substantially complete within 120 calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within 150 calendar days after the date when the Contract Times commence to run.

6.1 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

7.1 The following documents are submitted with and made a condition of this Bid:

A. Required Bid Security in the form of bid bond for Five Percent of Principal's Bid

_____ ($ 5%)
(Dollar Amount Written in Words) (Total in Figures)

B. Required Bid Bond (Section 00 43 13).

C. List of Proposed Subcontractors.

D. List of Proposed Suppliers.

E. List of Project References (see Section of Bidders Qualification Statement).

F. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such license within the time for acceptance of Bids.

G. Contractor's License No.: 0091660625

H. Required Bidder Qualification Statement with supporting data (see Section 00 21 13 Instructions to Bidders).

ARTICLE 8 – DEFINED TERMS

8.1 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

9.1 Communications concerning this Bid shall be addressed to the address of Bidder indicated below.

9.2 The Bidder has reviewed and agrees with all sections of the Plans, Specifications and Contract Documents, including all Addenda, and the Comprehensive Best Management Practices Plan included with the Bid Documents.

9.3 Bid pricing shall be submitted by accessing the City of Fayetteville's electronic bidding platform.

Submitted this 12th day of February, 2025.

Respectfully submitted,

Utility Service Co., Inc.
(Firm Name)

Utility Service Co., Inc. CORPORATE SEAL GEORGIA 2001

By _____
(Signature)

David Pollard
(Printed Name)

Attest: _____ Title Director of Bid Dept.
(Seal, if bid is by corporation.)
J. Shane Albritton, Secretary

Arkansas License No. 0091660625

535 Courtney Hodges Blvd.
Perry, GA 31069
(Business Address & Zip Code)

Tax ID No. 58-1920989

Address for giving notices:

535 Courtney Hodges Blvd., Perry, GA 31069

Telephone Number: 478-987-0303

Fax Number: None

Contact Name and e-mail address: David Pollard, Director of Bid Dept.

david.pollard@usgwater.com

INFORMATION REQUIRED OF BIDDER

LIST OF SUBCONTRACTORS:

The Bidder shall list below the name and the location of the place of business of each subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement, or a subcontractor licensed by the state who, under subcontract to the prime contractor, specially fabricated and installs a portion of the work or improvement according to detailed drawings contained in the Plans and Specifications, in an amount in excess of one-half of one percent of the prime contractor's total Bid. The Bidder shall also list below the portion of the work which will be done by each subcontractor under this Contract. Failure to comply with this requirement will render the Bid nonresponsive and may cause its rejection.

Work to be Performed	Subcontractor License Number	Percent of Total Contract	Subcontractor's Name & Address
1. Electrical	J-11231	8%	Brother's Electric Co. Inc 16649 Payne Road, Conroe, TX 77302
2. Steel Construction		14%	Ricky Peel 2000 Howard Rd, Waxahachie, TX 75165
3. Site Work	0405500325	13%	Steep Creek PO Box 1089, Greenbrier, AR 72058
4. *Please see attached Subcontractor Statement.*			
5.			
6.			
7.			

Note: Attach additional sheets if required.

Utility Service Co., Inc.

Subcontractor Statement

We have company crews and use some “dedicated” subcontractors. Determination will be made based on our schedule closer to start date. Crew info can be provided to the Engineer/Owner prior to mobilization for approval.

NAMED EQUIPMENT/MATERIAL SUPPLIER LIST:

The Bidder shall indicate below which Supplier the Bidder intends to use to furnish, under the Bid, each item of equipment or material listed on this form by writing in one of the named suppliers specified in the Technical Specifications for that equipment or material. (Proposed substitutes may be listed on the Proposed Substitute Equipment/Material Supplier List form but will only be considered after award of the Contract.) If no supplier is named in the Technical Specifications, the Bidder may list any supplier whose product meets all the requirements and technical criteria specified. The listing of more than one supplier for each equipment/material to be furnished with the words "and/or" will not be permitted. Failure to comply with this requirement will render the Bid nonresponsive and may cause its rejection.

EQUIPMENT / MATERIAL	SPEC SECTION	SUPPLIER
Coatings	09-96-00	Tnemec

END OF SECTION 00 41 43

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Utility Service Co., Inc.

(a wholly-owned subsidiary of USG Water Solutions, LLC)

Financial Statements

For the Year Ended December 31, 2023

with

Independent Accountants' Review Report

Michael Hall LLC
12600 DEERFIELD PARKWAY SUITE 100 • ALPHARETTA GEORGIA 30004

Michael Hall LLC
ASSURANCE • TAX • ADVISORY

Independent Accountants' Review Report

To the Board of Directors
Utility Service Co., Inc.

We have reviewed the accompanying financial statements of Utility Service Co., Inc. (a wholly-owned subsidiary of USG Water Solutions, LLC), which comprise the balance sheet as of December 31, 2023, and the related statements of income, stockholder's equity, and cash flows for the year then ended, and the related notes to the financial statements. A review includes primarily applying analytical procedures to management's financial data and making inquiries of company management. A review is substantially less in scope than an audit, the objective of which is the expression of an opinion regarding the financial statements as a whole. Accordingly, we do not express such an opinion.

Management's Responsibility for the Financial Statements
Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement whether due to fraud or error.

Accountants' Responsibility
Our responsibility is to conduct the review engagement in accordance with *Statements on Standards for Accounting and Review Services* promulgated by the Accounting and Review Services Committee of the AICPA. Those standards require us to perform procedures to obtain limited assurance as a basis for reporting whether we are aware of any material modifications that should be made to the financial statements for them to be in accordance with accounting principles generally accepted in the United States of America. We believe that the results of our procedures provide a reasonable basis for our conclusion.

We are required to be independent of Utility Service Co., Inc. and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements related to our reviews.

Accountants' Conclusion
Based on our review, we are not aware of any material modifications that should be made to the accompanying financial statements in order for them to be in accordance with accounting principles generally accepted in the United States of America.

Michael Hall LLC

Atlanta, Georgia
June 12, 2024

Utility Service Co., Inc.

(a wholly-owned subsidiary of USG Water Solutions, LLC)

Balance Sheet

December 31, 2023

Assets

CURRENT ASSETS	
Accounts receivable, net	$ 28,653,306
Contract receivables	38,079,611
Prepaids, inventory and other current assets	37,107,576
Total current assets	103,840,493
PROPERTY, PLANT AND EQUIPMENT, net	8,914,368
NONCURRENT ASSETS	
Contract receivables, net of current portion	33,351,181
Intangibles, net of accumulated amortization	5,041,667
Goodwill	5,274,890
Right of use assets, net	6,831,373
Deferred tax asset, net	18,002,944
Total noncurrent assets	68,502,055
TOTAL ASSETS	$ 181,256,916

Liabilities and Stockholder's Equity

CURRENT LIABILITIES	
Accounts payable and accrued expense	$ 19,337,947
Accrued income taxes	2,137,300
Current lease liabilities	2,419,081
Deferred revenue	30,542,399
Total current liabilities	54,436,727
NONCURRENT LIABILITIES	
Lease liabilities, net of current portion	5,519,261
Deferred revenue, net of current portion	40,949,407
Total liabilities	100,905,395
STOCKHOLDER'S EQUITY	
Common stock	1,000,000
Paid-in capital	70,957,083
Retained earnings	8,394,438
	80,351,521
TOTAL LIABILITIES AND STOCKHOLDER'S EQUITY	$ 181,256,916

See independent accountants' review report and notes to financial statements.

Utility Service Co., Inc.

(a wholly-owned subsidiary of USG Water Solutions, LLC)

Statement of Income

For the Year Ended December 31, 2023

Revenue	$ 140,885,272
Costs and expenses	
Operating expenses	107,167,861
Selling, general and administrative expenses	16,809,950
Other expenses	1,335,643
Depreciation and amortization	4,963,602
Total costs and expenses	130,277,056
Income from operations	10,608,216
Other Income (Expense)	
Interest income	6,338
Other, net	(7,692)
Interest expense	(3,806)
Total other income (expense)	(5,160)
Income before provision for income taxes	10,603,056
Provision for income tax	2,442,577
Net Income	$ 8,160,479

See independent accountants' review report and notes to financial statements.

Utility Service Co., Inc.
(a wholly-owned subsidiary of USG Water Solutions, LLC)

Statement of Stockholder's Equity

For the Year Ended December 31, 2023

	Common Stock	Paid-in Capital	Retained Earnings	TOTAL
Balance on January 1, 2023	$ 1,000,000	$ 144,040,974	$ 92,279,384	$ 237,320,358
Recapitalization adjustment	-	(73,083,891)	(92,045,425)	(165,129,316)
Net income for 2023	-	-	8,160,479	8,160,479
Balance on December 31, 2023	$ 1,000,000	$ 70,957,083	$ 8,394,438	$ 80,351,521

See independent accountants' review report and notes to financial statements.

Utility Service Co., Inc.
(a wholly-owned subsidiary of USG Water Solutions, LLC)

Statement of Cash Flows

For the Year Ended December 31, 2023

CASH FLOWS FROM OPERATING ACTIVITIES	
Received from customers	$ 157,296,432
Paid to vendors and employees	(119,368,014)
Paid for income taxes	(173,345)
Paid for interest	(3,806)
Received for interest	6,338
Net Cash From Operating Activities	37,757,605
CASH FLOWS FROM INVESTING ACTIVITIES	
Acquisition of property, plant and equipment	(1,584,084)
Net Cash From Investing Activities	(1,584,084)
CASH FLOWS FROM FINANCING ACTIVITIES	
Advances to Parent, net	(36,173,521)
Net Cash From Financing Activities	(36,173,521)
NET CHANGE IN CASH	-
Cash at beginning of year	-
Cash at end of year	$ -

A reconciliation of net income to net cash from operating activities is as follows:

Net income (loss)	$ 8,160,479
Depreciation and amortization	4,963,602
Changes in operating assets and liabilities:	
Accounts receivable	24,719
Contract receivables	16,386,441
Other assets	553,942
Accrued income taxes	2,269,232
Deferred revenue	9,812,780
Accounts payable and accrued expense	(4,363,799)
Lease liabilities	(49,791)
Net Cash From Operating Activities	$ 37,757,605

See independent accountants' review report and notes to financial statements.

RESUMES

USG WATER
SOLUTIONS

Darren D. Jackson

Service Center Manager (Proctor, AR)

Years of Experience

- 30 Years

Areas of Specialization

- Project Coordination
- Project Execution
- Project Management
- Safety Compliance
- Environmental Compliance
- Project Communication
- Leadership & Oversight

Professional Certifications

- National Association for Corrosion Engineers (NACE) Certified Coating Technician – CIP – 5084
- Society for Protective Coatings (SSPC) C3 Industrial Lead Abatement Certification

Professional Associations

- Association for Materials Protection & Performance (AMPP)
- NACE
- SSPC

Office Address

- 12748 US Highway 70, Proctor, AR 72376

USG WATER SOLUTIONS

Key Qualifications

Mr. Darren Jackson serves as a Service Center Manager (Proctor, AR) for USG Water Solutions. He is responsible for presenting, managing, and supervising the renovation and maintenance of water distribution system assets—as well as the oversight of all Arkansas service center operations provided both in-house and within the field. Mr. Jackson specializes in supporting both municipal and industrial water system clients with a sense of urgency to accomplish tasks in a timely manner and meet established deadlines—ultimately providing specialized services in a method that will produce the high-quality results expected from our many valued clients. His extensive experience qualifies him to conduct the work associated with the requested services.

Professional Experience

USG Water Solutions

Service Center Manager (Proctor, AR) **2012–Present**

- Complete oversight of the USG Service Center in Proctor, AR.
- Provide vision and leadership to all employees and sub-contractors throughout the life of the project
- Ensure compliance is met on all safety and environmental needs
- Communicate and coordinate between both the clients and the crews to provide a quality job—which is completed in both a timely and safe manner

Assistant Manager **2000–2012**

- Direct oversight and management on all washout and repair crews and projects
- Assisted in the daily operations at the Arkansas Service Center

Project Superintendent **1997–2000**

- Served as a field superintendent at the Arkansas Service Center specializing in larger projects that involved lead abatement, new technologies, and processes or time constraints

Salesman (State of Arkansas) **1996–1997**

- Served as a field superintendent at the Arkansas Service Center specializing in larger projects that involved lead abatement, new technologies, and processes or time constraints

Tank Grafix, Inc.

Owner **1994–1996**

- Responsible for the design and application of elaborate logos, graphics, and lettering on many tanks across the U.S.

Jackson Industrial Coatings, Inc.

General Laborer → Foreman → Superintendent **1990–1994**

- Industrial painting throughout the U.S. specializing in water tank renovations
- Apprenticeship Program (attained Master Journeyman status through PU local 775)

David Pollard

Director of Bid Department

Years of Experience

- 37 Years Total
- Six (6) Years in the Water and Wastewater Industry
- 11 Years in the Consulting Engineering Industry
- 20 Years in the Concrete Construction Industry

Education

- B.S., Civil Engineering Technology, Southern Polytechnic State University, 2013.

Areas of Specialization

- Project Financial Oversight
- Project Management
- Construction Quality Assurance
- Construction Quality Control
- Project Cost Estimating
- Project Coordination
- Safety Oversight

Professional Certifications

- Occupational Safety and Health Administration (OSHA) 10-Hour Training Certification
- First Aid / CPR Certification

Professional Associations

- OSHA

Professional Training

- Engineer-In-Training
  - State of Georgia, 2014.
- OSHA 10-Hour Training

Office Address

- 535 General Courtney Hodges Boulevard, Perry, GA 31069

USG WATER SOLUTIONS

Key Qualifications

Mr. David Pollard serves as the Director of the Bid Department for USG Water Solutions. He is responsible for managing a team of engineers, estimators, and bid coordinators to effectively develop and submit bids—while also managing municipal and government construction contracts throughout the continental United States. Mr. Pollard specializes in supporting municipal and industrial water distribution system clients with a sense of urgency to accomplish tasks in a timely manner and meet established deadlines—ultimately providing our specialized services in a method that will produce the high-quality results expected from our valued clients. Mr. Pollard's extensive experience qualifies him to conduct the work associated with the requested services.

Professional Experience

USG Water Solutions

Director of Bid Department **2024–Present**

- Personnel Management, Contract Management, and Project Management
- Project Financial Metrics Oversight and Evaluation

Project Engineer **2018–2024**

- Personnel Management, Contract Management, and Project Management
- Project Financial Metrics Oversight and Evaluation

Wood Group

Project Manager **2013–2018**

- Personnel Management, Contract Management, and Project Management
- Project Financial Metrics Oversight, Evaluation, and Quality Assurance
- Project Coordination, Cost Estimating, and Proposal Development

ATC Associates

Staff Engineer **2008–2013**

- Engineering Field Evaluations
- Construction Quality Assurance Inspection and Material Testing

Nova Engineering & Environmental

Engineering Technician **2007–2008**

- Construction Quality Assurance Inspection and Material Testing

Piedmont Services

Foreman **1987–2007**

- Construction Management, Project Coordination, and Project Takeoffs

Project Experience

Direct project experience in asset management and maintenance services for an abundance of clients within the industrial and municipal markets of the water and wastewater industry; some of these clients include:

- Mercedes Benz Stadium, Atlanta, GA – $1.5B
- Plant Vogtle Nuclear Reactor Units 3 & 4, Waynesboro, GA – $15B
- Atlanta Airport Maynard H. Jackson International Terminal, Atlanta, GA – $1.7B

Mark Pettys

163 S 2nd St
Cochran, GA 31014
Mark.Pettys@gmail.com

08/26/2024

EDUCATION

Brigham Young University, Provo UT

- BS, Mechanical Engineering, April 2011
- Minor, Mathematics
- Cumulative GPA: 3.43

WORK EXPERIENCE

Utility Service Company, Inc.
Project Engineer – Bid Department
Perry, GA (August 2024 – Current)

- Provide support to Bid Department by evaluating bid requirements, drafting expected project budgets, and coordinating project requirements with Service Centers for water tank rehabilitation projects.
- Analyze engineering specifications for upcoming projects to mitigate risk and support successful water tank rehabilitation projects.

Boeing Global Services
DEA Project Engineer
Warner Robins, GA (October 2021 – June 2024)

- Provide support to the C-17 Delegated Engineering Authority (DEA) Program Chief Engineer, DEA Lead Engineer and DEA Engineers across the program in the development, submittal, conduct and sustainment of the DEA program and our Program Execution Plan
- Provide direct engagement with C-17 DEA/Cognizant engineers across the program to ensure DEA certifications, development, and recurrent proficiency assessment requirements are understood and progressing to plan
- Develop, Support, and present at the yearly C-17 USAF/FMS DEA Airworthiness Assessment. Content includes DEA enabled engineering material (people, processes, products and performance) provided to assure compliance and retention of our DEA empowerment
- Provide direct engagement/support to C-17 DEA engineers across all sustainment environments to ensure DEA processes and procedures are understood and properly adhered to

Boeing Global Services
Product Review Engineer (Liaison Engineer)
Warner Robins, GA (February 2020 – October 2021)

- Disposition repairs and rework by evaluating deficiencies for structural and functional acceptance in support of Maintenance Depot activities for the E-8 J-STARS (February 2020-October 2021) within the USAF AutoTar system
- Improve specifications and process documents for the E-8 J-STARS production team by creating and modifying Technical Orders and other specifications
- Work closely with quality and manufacturing groups to provide root cause analysis and corrective action to eliminate reoccurring non-conformances to parts, products and processes
- Build strong relationships by coordinating with suppliers, peers and customers to develop and execute strategies to support continuous improvement and achieve performance objectives
- Acted as interim Team Lead when acting Team Lead was out of office

Boeing Commercial Airplanes
Product Review Engineer (Liaison Engineer)
Everett, WA; Salt Lake City, UT (May 2011 – February 2020)

- Disposition repairs and rework by evaluating non-conformances for structural and functional acceptance in support of Final Assembly (April 2011-October 2014), the Horizontal Stabilizer and Vertical Tail Fin of the Boeing 787 Dreamliner (October 2014-February 2020).
- Work closely with quality and manufacturing groups to provide root cause analysis and corrective action to eliminate reoccurring non-conformances to parts, products and processes.
- Build strong relationships by coordinating with suppliers, peers and customers to develop and execute strategies to support continuous improvement and achieve performance objectives.
- Implement the use of numerous analysis techniques to provide technical solutions to complex repairs.
- Acted as interim Team Lead when acting Team Lead was out of office or tending to other duties.

SKILLS

* Computer: C-17 DEA Program knowledge, CAD (Catia V5), ENOVIA, Previous Material Review Board (MRB) Authority (currently expired), Proficient in MS Office applications
* Technical: Flight Mechanics, Structural Analysis, Composite Materials, Structural Repair, Equivalent Strength, Cost Improvement Activities

VOLUNTEER WORK

* Scoutmaster: Taught a group of eight scouts the importance of respect, integrity and character while serving in our community.

* Eagle Scout Project: Led a group of 18 individuals to place reflective tape on fire-hydrants in our community to increase visibility during an emergency.

Robert Weaver

Director of Enviromental Health & Saftey (EH&S)

Years of Experience

- 15 Years Total
- 15 Years in the Water and Wastewater and Asset Maintenance Industry

Education

- B.S., Engineering, Southern Polytechnic University.

Areas of Specialization

- Safety Practices
- Qualifying Party for Holding General Contractor's License for 15 States
- Lead Removal Competency License

Professional Certifications

- National Association of Corrosion Engineers (NACE) Level III (3) Certified Coating Inspector (#17372)
- Society for Protective Coatings (SSPC) C-3 & C-5 Supervisor/ Competent Person for Deleading of Industrial Structures (#99461)

Professional Associations

- NACE
- SSPC

Office Address

- 535 General Courtney Hodges Blvd, Perry, GA 31069

USG WATER SOLUTIONS

Key Qualifications

Mr. Robert Weaver serves as the Director of Enviromental Health & Safety (EH&S) for USG Water Solutions. He is primarily responsible for all aspects and standard practices regarding EH&S. Mr. Weaver specializes in supporting both municipal and industrial water system clients with a sense of urgency to accomplish tasks in a timely manner and meet established deadlines—ultimately providing specialized services in a method that will produce the high-quality results expected from our many valued clients. His extensive experience qualifies him to conduct the work associated with the requested services.

Professional Experience

USG Water Solutions

Director of Enviromental Health & Safety **2014–Present**

- Responsible for all aspects and standard practices regarding EH&S
- Implements safety practices and procedures across the entire company

Director of Operations (South Region) **2012–2014**

- Responsible for the performance of the South Region Service Centers
- Managed South Region operations to provide quality water storage tank services
- Provided coaching/assistance to optimize operation efficiency/quality of service delivery
- Ensured South Region Service Centers administer yearly safety training and follow the
- proper safety protocols throughout all work states and processes
- Introduced and sustained operational efficiencies while managing operational costs
- Worked closely with many clients to verify that all project needs are met as a foundation for business growth

Engineering Technical Manager & Safety Director **1998–2012**

- Managed all maintenance programs—over 6,000 included analyzing annual inspection reports, quality, and safety for all of the paint renovations

Project Experience

Direct project experience in asset management and maintenance services for an abundance of clients within the industrial and municipal markets of the water and wastewater industry; some of these clients include:

- City of Atlanta, GA | Eight (8) Tank Renovation Package
- City of Raleigh, NC | Twenty-Two (22) Tanks on Maintenance Program

KARL NELSON

DIRECTOR OF QUALITY ASSURANCE / QUALITY CONTROL (QA/QC)

YEARS OF EXPERIENCE

- 25 Years Total
- 25 Years in Manufacturing
- 25 Years in Asset Maintenance

EDUCATION

- B.S., Business Administration, Mississippi College, 1990.

AREAS OF SPECIALIZATION

- Profit and Loss (P&L)
- Budget Management
- Project Management
- Safety
- Environmental Compliance
- Process Safety Management
- Reliability
- Continuous Improvement
- Planning
- Scheduling
- Customer Service
- Human Resources
- Purchasing
- Inventory Control
- Logistics
- Maintenance
- Quality Assurance
- Optimization
- Yield Improvement

PROFESSIONAL ASSOCIATIONS

- Member of the American Society for Quality (Audit Group Focus)

OFFICE ADDRESS

- 535 General Courtney Hodges Boulevard, Perry, GA 31069

USG WATER SOLUTIONS

KEY QUALIFICATIONS

Mr. Karl Nelson serves as a Director of Operations for USG Water Solutions. He is also responsible for the performance of the South Region Service Centers. Mr. Nelson specializes in supporting both municipal and industrial water system clients with a sense of urgency to accomplish tasks in a timely manner and meet established deadlines—ultimately providing specialized services in a method that will produce the high-quality results expected from our many valued clients. His extensive experience qualifies him to conduct the work associated with the requested services.

PROFESSIONAL EXPERIENCE

USG WATER SOLUTIONS

Director of Quality Assurance/ Quality Control (QA/QC) **2014–Present**

- Effectively manages USG operations to provide quality water distribution system services
- Responsible for the performance of multiple USG service centers
- Provides coaching/assistance to optimize operational efficiency/quality of service delivery
- Ensures service centers administer yearly safety training and follow the proper safety protocols throughout all work stages and processes
- Introduces and sustains operational efficiencies while managing operational costs
- Technically competent to effectively deliver new products and services

Service Center Manager (Perry, GA)

- Provided day-to-day leadership to improve safety, quality, cost, efficiency, and service excellence
- Managed the execution phase of bid projects with clients and third-party engineering firms

FAIRMOUNT MINERALS – ALPHA RESINS, LLC

Plant Manager

- Roles/Responsibilities… Provided day-to-day leadership to improve safety, quality, reliability, and manufacturing excellence
- Lead the $22M project to design and construct a new plant inside the existing facility
- Developed a quality management system that was based on an International Standards Organization (ISO) systems structure

PROJECT EXPERIENCE

Direct project experience in asset management and maintenance services for an abundance of clients within the industrial and municipal markets of the water and wastewater industry; some of these clients include:

- Clayton County | City of Morrow, GA: Project Manager
- Prince William County | CDP of Woodbridge, VA: Project Manager
- Town of Mount Jackson, VA: Project Manager

Bid 25-23, Addendum 1

Date: Tuesday, January 28, 2025

To: All Prospective Vendors

From: Kenny Fitch – 479.575.8258 – kfitch@fayetteville-ar.gov

RE: Bid 25-23, Construction – Baxter 1 MG Ground Water Storage Tank Rehabilitation

This addendum is hereby made a part of the contract documents to the same extent as though it were originally included therein. Interested parties should indicate their receipt of same in the appropriate blank of the Bid. ***BIDDERS SHALL ACKNOWLEDGE THIS ADDENDUM ON THE DESIGNATED LOCATION ON THE BID FORM.***

- QUESTIONS:
  - Who will be performing the on-site inspections?
    - Olsson will be conducting the inspections.
  - What is the accessibility of the site?
    - There is a wide paved road leading to the site with a grass/gravel area within the vicinity of the tank.
  - If the trimming of vegetation is required to access the site, who will be responsible for the trimming?
    - The City will coordinate with the contractor for the City to handle all trimming.
  - What are the lead readings?
    - Laboratory testing of the existing coating system showed that the coating contained 58,269 ppm of lead. Lead testing results are included at the end of the Project Specifications.
  - What is the standoff distance of the 5MG tank ladder?
    - Plans show the existing 5MG tank ladder to be 8” from the exterior of the tank to the centerline of the rungs. This distance should be field verified prior to fabrication of the ladder security enclosure.
  - When does the City of Fayetteville plan to issue the Notice to Proceed?
    - The Notice to Proceed is flexible and can be negotiated with the lowest bidder. The City intends to have this project completed in 2025.

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- Is a logo desired?
  - No, a logo will not need to be installed.

- Is temporary water or maintaining system pressure a requirement of the contractor?
  - No, temporary water or maintained water pressure is not a requirement.

- Is full containment required?
  - Containment requirements are detailed in Specification 09 96 00, Part 3.2. Please note, the tank's existing coating system contains lead-based paint. Lead testing results are located at the end of the Project Specifications.

- ATTACHMENTS:
  - Pre-Bid Meeting Attendees List

  - Olsson's Project Cost Estimation
    - This information was shared in error. To maintain a fair bidding process, this information is being shared with all interested bidders. The City of Fayetteville does not typically share our cost estimations or cost estimations prepared on the City's behalf.

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City of Fayetteville

Bid 25-23, Construction - Baxter 1 MG Ground Water Storage Tank Rehabilitation

Date: 01/22/2025 at 10:00 AM

Meeting ID	87103735392
Topic	Bid 25-23, Construction - Baxter 1 MG Ground Water Storage Tank Rehabilitation
Start Time	1/22/2025 9:54:15 AM
End Time	1/22/2025 10:33:45 AM
User Email	kfitch@fayetteville-ar.gov
Duration (Minutes)	40
Participants	9

Name (Original Name)	User Email	Total Duration (Minutes)	Guest
Amanda Beilfuss	abeilfuss@fayetteville-ar.gov	40	No
Kenny Fitch	kfitch@fayetteville-ar.gov	40	No
Corey Granderson	cgranderson@fayetteville-ar.gov	34	No
Andrew Stengel	astengel@olsson.com	39	No
Kevin Vann - Tank Pro		40	Yes
Brad		33	Yes
Robert Anderson		33	Yes
Ty's		30	Yes

Baxter 1MG Ground Water Storage Tank Rehabilitation OPCC

Client Name: City of Fayetteville, Arkansas
Project Name: Baxter 1MG Ground Water Storage Tank Rehabilitation
Project Number: 024-02141

Date
1/10/2025

ITEM No.	ITEM	UNIT	QUANTITY	UNIT COST	ESTIMATED COST
	Percentage Bid Items				
1	Insurance and Bonding @ 2%	LS	1	$ 10,930.00	$ 10,930
2	General Conditions @ 10%	LS	1	$ 54,650.00	$ 54,650
3	Mobilization @ 2%	LS	1	$ 10,930.00	$ 10,930
	Subtotal - Percentage Bid Items				**$ 76,510**
	Tank Interior and Exterior				
4	Surface Preparation and Painting	LS	1	$ 400,000.00	$ 400,000
	Subtotal - Tank Exterior and Interior				**$ 400,000**
	Access Updates and Rehabilitation				
5	Misc. Steel Repair	LS	1	$ 5,000	$ 5,000
6	Existing Vertical Ladder Demo	LS	1	$ 3,000	$ 3,000
7	Existing Vault Demolition	LS	1	$ 5,000	$ 5,000
8	New Tank Vent	LS	1	$ 3,000	$ 3,000
9	New Manways and Access Hatch	LS	1	$ 8,000	$ 8,000
10	New Splash Pad	LS	1	$ 2,000	$ 2,000
11	Ladder from Ground to Tank Platform with Fall Arrest	LS	1	$ 7,000	$ 7,000
12	New Stair Access Platform	LS	1	$ 25,000	$ 25,000
13	Guardrail at Top of Tank	LS	1	$ 33,000	$ 33,000
14	Tank Base Protection System	LS	1	$ 5,500	$ 5,500
	Subtotal - Access Updates and Rehabilitation				**$ 96,500**
	Piping Updates and Process Rehabilitation				
15	Existing Valves Removal	LS	1	$ 1,500	$ 1,500
16	New Hydrant and Gate Valve Assembly	LS	1	$ 4,900	$ 4,900
17	New Sampling Station	LS	1	$ 3,800	$ 3,800
18	New Tank Overflow Pipe	LS	1	$ 4,200	$ 4,200
19	GS-9 GridBee Active Mixer w/ SCADA, Complete in Place	EA	1	$ 30,000	$ 30,000
	Subtotal - Piping Updates and Process Rehabilitation				**$ 38,000**
	Site Civil				
20	Final stabiliation	LS	1	$ 2,000	$ 2,000
	Subtotal - Site Civil				**$ 2,000**
	Electrical				
21	Electrical	LS	1	$ 10,000	$ 10,000
	Subtotal - Electrical				**$ 10,000**
	Subtotal (Deduct % Items)				*$ 546,500*
	Subtotal				*$ 623,010*
	Construction Contingency @ 20%				*$ 124,602*
	TOTAL ESTIMATE OF PROBABLE CONSTRUCTION COST IN 2025 DOLLARS				**$ 747,612.00**

The Engineer, using his or her professional judgement, has developed this stated Opinion of Probable Construction Cost based upon the design status identified above. Development of this Opinion has included consideration of design input level; however, the circumstances under which the work is expected to be undertaken, the cost and availability of materials, labor and services, probable bidder response and the economic conditions at the time of bid solicitation are beyond the control of the Engineer and will impact actual bid costs. Should bidding be delayed, these costs should be reviewed and, if necessary, adjusted to a more applicable *Engineering News Record* Construction Cost Index.

Design Status (Check One)

	Conceptual Design
	Preliminary Design
X	Final Design

Bid 25-23, Addendum 2

Date: Thursday, February 06, 2025

To: All Prospective Vendors

From: Kenny Fitch – 479.575.8258 – kfitch@fayetteville-ar.gov

RE: Bid 25-23, Construction – Baxter 1 MG Ground Water Storage Tank Rehabilitation

This addendum is hereby made a part of the contract documents to the same extent as though it were originally included therein. Interested parties should indicate their receipt of same in the appropriate blank of the Bid. ***BIDDERS SHALL ACKNOWLEDGE THIS ADDENDUM ON THE DESIGNATED LOCATION ON THE BID FORM.***

- QUESTIONS:
  - Can you provide information on the interior of the tank as to when it was last blasted and painted? Should the interior of the tank be bid as if it contains lead?
    - Per the KLM Inspection Report included in the Project Specifications, the interior was originally coated in 1950. No additional information is known on the interior coating. Contractor should anticipate the interior coating to contain lead.

  - Will we have access to power and water at the water tank site for use while we are performing the project?
    - Photos showing the current electric meter and utility box are shown on Exhibit E1. If this can be utilized, Contractor can use the power source at no cost. There is an existing water hydrant located adjacent to the 5MG water storage tank, shown on the site plan on Exhibit C1. This hydrant can be utilized. The Contractor will need to purchase a construction meter. The price of a hydrant meter is $200 deposit with a $61.13 monthly charge (even if water is not used). Rate for water is $4.45 per 1,000 gallons.

  - If Saturday and Sunday work are requested, will we be allowed to work weekends? Has weekend work been approved in the past?
    - Section 6.02 of the General Conditions of the Project Specifications states that overtime work or weekend work will not be allowed without written consent. The Project should be bid assuming no weekend work. The Owner can negotiate working hours with the selected bidder and has approved weekend work in the past.

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- The inspection report states that there are no antennas or communication equipment on the tank. Can you confirm this?
    - There is no antenna or communication equipment on the tank. Photos of the tank roof are included in the KLM Inspection Report.

- Is this project a wage rate project? If so, can you provide a copy of the wage rates?
    - This is not a wage rate project.

- How soon after the bid opening do you anticipate that the project will be awarded?
    - The project should be awarded the first week of April.

- Can steel shot be used for abrasive on this project?
    - Surface preparation shall be in accordance with Project Specifications Section 09 96 00, Part 3.3.

- It appears there are power lines near the tank. Can you provide information on how far away they are from the tank? If the lines need to be deenergized or insulated, will the city take care of this?
    - Plans of record show power lines approximately 13' from the edge of the tank. This will need to be field verified. If needed, the contractor must coordinate with electrician or utility provider to deenergize or insulate the lines.

- Will seed and straw be acceptable site restoration after all blast media is removed and any ruts restored?
    - Seed and straw is an acceptable method of site restoration. However, final payment will not be issued before vegetation has been established to a level deemed acceptable by the Owner.

- The specifications mention coordinating SCADA integration with Jacobs Engineering. Any cost for us here or do we just let them know when the mixing system and electrical is completed?
    - Contractor will furnish and install the SCADA control panel shown in the Project documents. Contractor will contact and work with Jacobs Engineering to ensure SCADA is properly integrated with the City of Fayetteville's existing systems. Contractor should bid the job with the expected amount of hours needed to complete SCADA integration with Jacobs Engineering.

- Do you have any additional details about this existing vault (inside pics, depth, etc)?
  - See included photos showing the interior of the existing vault.

- ATTACHMENTS:
  - Photos of the vault's interior.

Telecommunications Device for the Deaf TDD (479) 521-1316 113 West Mountain - Fayetteville, AR 72701

USG WATER
SOLUTIONS

USCI

REFERENCE PACKET

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Company Profile

As the largest provider of tank asset maintenance programs for the potable water industry within the United States, **Utility Service Group Water Solutions, LLC (USG)** provides water and wastewater utility clients with specialized programs and valuable services in order to assist them with the suitable management of their critical assets. USG's goal is to provide the highest value of services possible to allow our many valued clients to invest both capital and operating funds for the maximum benefit of their critical water distribution system assets and to build a long-standing partnership—ultimately ensuring the successful maintenance of their critical water distribution system assets.

From a contractual standpoint—we are still currently operating under the legal entity of **Utility Service Co., Inc.** Utility Service Co., Inc. served as our company name before changing to Utility Service Group Water Solutions, LLC.

With major service centers strategically located across the United States to provide dependable and efficient response times to our valued clients, USG's local presence and highly qualified work crews deliver the high-quality results expected by our clients. Our team has extensive project experience and specialized knowledge of the characteristics and conditions associated with water distribution systems and infrastructure of the United States—ensuring that all water distribution system assets are both protected and maintained on an ongoing and consistent basis.

Our background and experience with all tank asset styles and sizes allow us to comfortably complete complex and large water storage tank renovation projects. USG protects more than 8,000 assets nationally with full-service maintenance and asset management programs. These maintenance programs are on-going and center on establishing long-term partnerships with our clients—ultimately utilizing a consultative philosophy-based approach to identifying and solving any issues that may arise.

Additionally, we have expanded both our capabilities and resources with the additional resources, advanced technologies, information systems, and strategic solutions that are necessary to address the current challenges facing water and wastewater utilities. Leveraging our extensive knowledge and experience, we are able to offer even greater innovative solutions to our clients. As part of our mission to address critical water resource and infrastructure challenges, we deliver innovative and advanced service solutions to minimize capital and operational expenses, improve water distribution system operations and performance, extend the useful life of our clients' critical water utility assets, and ultimately improve water quality.

Company Ownership History

USG's presence within the United States dates back to the founding of its predecessor company in 1963. Since then, we have grown into one of the largest and most technologically advanced water solution providers in the United States.

We were initially formed in 1991 and—in 2008—became a wholly-owned subsidiary of SUEZ North America Inc. In 2022, SUEZ North America Inc. became wholly-owned by Veolia North America. On December 31, 2022, Veolia signed an agreement with **Turnspire Capital Partners (Turnspire)** to

acquire USG—which closed in February of 2023. Turnspire is a private investment firm focused on acquiring high-quality business that have reached strategic, operational, and financial inflection points and ultimately stand to benefit from a hands-on, operationally focused approach.

USG and Turnspire both share a commitment to offer safe and sound solutions to our clients. Our multifaceted performance—combining the strengths of the organizations—is what will matter in the long run to successfully service our clients, meet all quality expectations, and establish a long-term partnership that will benefit our valued clients for many years to come. We are truly a world leader in smart, sustainable resource management, and we provide solutions that enable clients to optimize their critical resources and strengthen both environmental and economic performances in line with regulatory standards.

Financial Stability

With over 50 years of industry experience, USG has the financial strength and stability—as well as access to capital—that is required to successfully conduct the associated work. Also, we have never defaulted on a project—nor have we failed to complete a project.

We have successfully worked with thousands of municipal and industrial water and wastewater utility clients on critical infrastructure issues—providing cost-effective solutions to our clients in order solve countless water quality and compliance issues. We have the capability to adequately address the need for overdue maintenance investment and all infrastructure renovations. Our creative programs and innovative pricing structures have allowed our clients to tackle significant water and wastewater infrastructure problems—while also minimizing the financial burden for their communities, customers, and taxpayers.

Banking, Bonding & Company Personnel

USG—a **C-Corporation**—directly employs more than 470 professionals dedicated to managing and maintaining water storage tanks. Our collaborative teams include highly qualified experts with vast experience in asset management, project management, and technology development.

Bonding Company

Travelers Casualty & Surety Company of America
Bond & Financial Products
One Tower Square, Hartford, CT 06183

Bonding Agent

Marsh & McLennan
825 Maryville Centre Drive, Suite 200
St. Louis, MO 63017
Contact: Blake Messer; (314) 594-2700
Bonding Capacity: >$40,000,000

Banking

Wells Fargo
2975 Regent Blvd, Irving, TX 75063
Contact: Ashley Soutor; (612) 573-9516

Officers

John Flaugher – President/ CEO
Andrii Petruk – Treasurer
Shane Albritton – Secretary

Key Personnel

Jonathan Cato – Chief Operating Officer
David Forrester – Vice President Tank Services & Water Quality
Rob Weaver – Vice President Environmental Health & Safety and QA/QC
Apurv Aggarwal – Director Estimating & Bid Department

Employees

- Number of direct employees: 471
- Number of Professional Engineers on staff: Six (6)
- Number of Certified Welders on staff: 42
- Number of independent subcontractors: 96+ nationwide

Inspectors

- Number of NACE-Certified Inspectors on staff: 70+
- Number of SSPC-Certified Inspectors on staff: 48
- Average years of experience for an inspector: 15 years
- Inspectors are NACE-certified, in-house employees

Washout Crews

- Number of washout crews: 30+
- Average number of people on a washout crew: Three (3)
- Average years of experience for a washout crew member: Nine (9) years
- Washout crew members are in-house employees

Painting Crews

- Number of painting crews: 120+
- Average number of people on a painting crew: 4-5 (small jobs); 6-10 (large containment projects)
- Average years of experience for a painting crew member: Five (5) years
- Average years of experience for a foreman or subcontracting company owner: 15-20 years
- Painting crew members are both in-house employees and independent subcontractors

Repair & Service Crews

- Number of repair/service crews: 30+
- Average number of people on a repair/service crew: Minimum of three (3) at all times
- Average years of experience for a repair/service crew member: Ten (10) years
- Repair/service crew members are both in-house employees and independent subcontractors

Associated Equipment

On average, USG's specialized service centers perform more than 1,200 major water storage tank renovations on an annual basis—including approximately 100+ lead abatement projects. Both the scale and magnitude of certain water tank projects require significant resources, and the availability of vast equipment allows USG to complete any size project efficiently and with the high-quality results that are expected by our many valued clients.

Equipment	Quantity
40,000 CFM Dust Collection	Ten (10)
Titan Industrial Vacuum Systems	Eight (8)
T.E.P.E. Containment Systems	19
Decontamination Clean-Up Units	Seven (7)
22 tons Bulk Abrasives Transport Trailers	40+
Rail Cars for Bulk Abrasives Transport	Nine (9)
Road Tractors	15
Service Trucks	100+
Steel Grit Blast Units	Seven (7)
Robotic Blast Units	Five (5)

Service Centers

All tank maintenance services will be conducted by personnel that is trained and qualified to perform all maintenance, repairs, and painting services—in accordance with the project specifications.

USG has 11 service centers strategically located throughout the United States to serve clients on a timely basis. The locations of USG's service centers include: Arkansas, California, Florida, Georgia, Illinois, Indiana, Kansas, Massachusetts, North Carolina, Ohio, and Texas. Our service center crews manage and maintain over 8,000 water distribution system assets for over 6,000 industrial and municipal clients nationwide. Our experienced teams include: 120+ paint crews, 30+ field service crews, 40+ certified welders, and other qualified support teams.

Insurance Requirements

Both the magnitude and scope of a major renovation project—as well as the number of crews and staff—require a true necessity for considerable insurance resources. USG utilizes one (1) of the most reputable names in the insurance industry—**AON.** AON serves as the world's leading insurance broker and risk advisor.

The USG insurance coverage policy limits are as follows:

- **General Liability =** $2M per occurrence
- **General Aggregate =** $4M per occurrence
- **Auto Liability =** $2M each accident
- **Professional Liability =** $2M per claim
- **Pollution Liability =** $15M per claim
- **Workers' Compensation =** statutory limit
  - *Higher-level insurance policy limits can be provided upon request.*

Association for Materials Protection & Performance (AMPP)

The Association for Materials Protection and Performance (AMPP) is the world's leading organization focused on the protection of assets and performance of materials. The AMPP was created when the National Association of Corrosion Engineers (NACE) and Society for Protective Coatings (SSPC) united after more than 145 years of combined experience in corrosion control and protective coatings. The merger between NACE and SSPC was formed to create a unified voice for the corrosion control and protective coating industries. The AMPP combines the world's leading corrosion prevention and protective coatings organizations under one (1) umbrella. Today, the AMPP is active in more than 130 countries and has more than 40,000 members across the globe. The AMPP is headquartered within the United States—with offices in Houston, TX, and Pittsburgh, PA. Additional AMPP offices are located in China, Brazil, Malaysia, Saudi Arabia, and the United Kingdom—as well as a training center in Dubai.

USG has more NACE-Certified Inspectors than any other water, wastewater, or tank company in the United States.

Safety, Health, & Quality Assurance

Workplace safety is a top priority for us, and we are committed to protecting all of our employees, clients, and contractors from danger and harm. Safety metrics are one (1) of the main ways we measure our success as a company. We continue to enhance safety processes—as well as training processes—and we take action every single day to protect the lives and health of all USG employees, subcontractors, and clients—as well as the populations among which we work. We ultimately aim to be a leader in safety, health, and quality assurance, and we continuously deploy ambitious action plans to fulfil this goal.

The action plans deployed on our sites have enabled a continuous reduction of USG's accident frequency rate (AFR). Over the last ten (10) years, USG has experienced an exceptional reduction in regard to our AFR—as well as a significant decrease in the overall severity of accidents. We strive to continuously take action in regard to reducing this rate on a yearly basis.

USG shares this ambition for a strong health and safety culture with all of our suppliers, clients, and subcontractors—even beyond our own direct activities. Currently—as an active member of the Institute for an Industrial Safety Culture (ICSI)—USG participates in work-groups and helps to develop tools for other companies and public authorities that ultimately share the same ambition as USG to improve the health and safety culture across the entire organization.

To create an integrated health and safety culture and attain our ultimate goal of "zero (0) serious and fatal accidents", we have initiated—and continue to deploy—a health and safety policy that is based on four (4) areas, including:

1. Control of Major Risks
2. Committed Managers for a Proactive Health & Safety Culture
3. Develop a Fair/Participative Health & Safety Culture
4. Training to Develop Health & Safety Behavior

USG Safety & Health Program

The **USG Safety & Health Program** is a 300+ page printed document. It is a standard policy to protect USG employees, subcontractors, and clients with safe work practices. We manage all work in a safe, orderly, and effective manner. We also adhere to all OSHA confined space requirements. Any employee working inside a water storage tank—defined as a confined space by OSHA—is fully trained with these procedures and will abide by all applicable confined space regulations. We also adhere to all applicable OSHA confined space protocols and requirements

pertaining to the monitoring of internal atmospheres. Prior to a crew member entering a confined space, the internal atmosphere is thoroughly tested using a calibrated direct-reading instrument that tests for the oxygen content, flammable gasses and vapors, and potential toxic contaminants in the air—in that specific order. It is a standard USG policy that no hazardous atmosphere is permitted in a space if an employee is inside that space. The USG crews also follow continuous forced air ventilation procedures by constantly monitoring the internal atmosphere in any confined space throughout the course of work.

Safe Work Planning

We utilize a formal hazard identification and analysis system—including both safe work plans and safe work planning processes—that engages all employees in systematically identifying routine and non-routine health and safety hazards. This process evaluates and prioritizes the potential risks of each task and provides recommendations on the means, methods, sequences, and controls that are required to prevent any potential safety hazards. In order for this process to be effective, the direct participation and collaboration of all USG supervisors and employees is required.

Personal Protective Equipment

Prior to the commencement of any work, we conduct a Personal Protective Equipment (PPE) Hazard Assessment. The hazard assessment is performed for all routine tasks—as well as any expected non-routine tasks. It identifies any potential hazards associated with these tasks and the required selection of the proper PPE. The major categories of PPE that appear on this hazard assessment include the head, hands, feet, face, eyes, ears, and body—as well as respiratory.

The types of PPE that are available to our employees include a standard USG work uniform, a variety of different hard hats, safety glasses and goggles that include protective side shields on each side, face shields, gloves, safety footwear, full body harnesses, high-visibility vests, coveralls, personal flotation devices, and ventilation and hearing protection. USG employees are required to always wear their PPE and follow safety procedures when conducting any maintenance work or related services.

Environmental Health & Safety Training

We manage an environmental health and safety (EH&S) training program with a separate, distinct plan that addresses the methods USG will utilize to:

- Assess employee training needs
- Evaluate and decide upon the most effective training methods
- Schedule and host training
- Maintain training records

Training is mandatory for all field personnel, sales personnel, and management personnel. USG's formal, ongoing, and employee-specific EH&S training covers numerous topics on safety in regard to maintenance work and related services—including:

- Lockout/Tagout
- Hazard Communication
- Confined Spaces
- Electrical Safety
- Chemical Spill Response
- Defensive Driving

USG also utilizes a variety of other avenues to ensure that safety is constantly at the forefront of all employee practices, including:

1. **Daily Safe Work Planning Sessions:** Safe work planning takes place with Supervisors and includes discussions on both the task hazards and controls that are necessary to prevent injuries.
2. **Weekly Staff Tailgate Training:** We provide a 52-week Safety Tailgate Manual of pre-printed training materials that are used each week in our smaller departments and shift meetings.
3. **New Employee Orientation & Training**: This type of training is offered over the course of a new employee's first 90 days of employment with USG and prior to the new employee starting work.
4. **Injury Alerts & Shared Lessons Learned:** USG employees routinely receive injury alerts prompted by accidents or near-misses to immediately create an awareness amongst all personnel and avoid any future instances of accidents.

Additional Safety Training

We work in rather dangerous environments and recognize that safety is critical to both the success and well-being of USG employees. At USG, safety serves as the management team's top priority, and we have proven safety professionals that are dedicated to implementing our safety standards and practices.

- **Mr. Robert Weaver**— Vice President Environmental Health & Safety and QA/QC—has over 15 years of experience and oversees all environmental health, security, and safety operations.

When necessary, we engage **The Lovelace Group** for any project consulting or assistance in the annual implementation of our comprehensive safety training program. It is a standard policy to protect our employees and clients with safe work practices—while also managing all materials in a safe, effective, and orderly manner. Any employee that is climbing or working on a tank is required to attend our 40-hour annual training program.

Quality Assurance

All work, surface preparations, and coatings applied are completed in accordance with:

- Manufacturer's Recommendations
- Occupational Safety & Health Administration (OSHA) Regulations
- American Water Works Association (AWWA) D100 & D102 Specifications
- National Association of Corrosion Engineers (NACE) Standards
- Society for Protective Coatings (SSPC) Standards
- National Sanitation Foundation (NSF) Standard 61 Requirements
- American National Standards Institute (ANSI) Standard 61 Requirements

Work will be completed in adherence with applicable federal and state OSHA, AWWA, NACE, SSPC, NSF, and ANSI standards—as well as all State rules and regulations pertaining to potable water storage tanks.

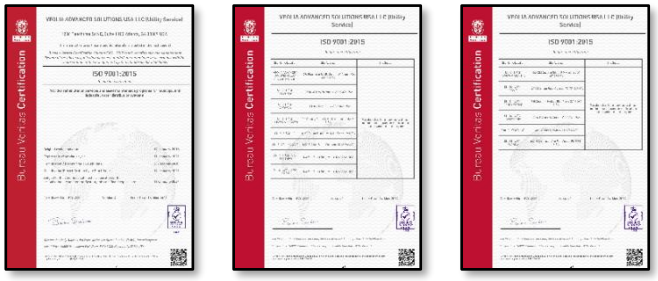
ISO 9001:2015 Certification

Additionally, we are very proud to announce that we were awarded the **ISO 9001:2015 Certification (Certificate No.: US014911)** from Bureau Veritas. The certificate affirms that USG's operation and quality management systems adhere to the requirements set forth by the International Organization for Standardization (ISO). The ISO 9001:2015 Certification also validates that we take a systematic approach to managing operational processes and activities in order to consistently satisfy our clients' quality expectations—as well as all contractual requirements for the rehabilitation and maintenance services that we provide.

Many organizations will get certified to this higher standard in order to demonstrate their ability to consistently provide products and services that meet client, statutory, and regulatory requirements. Implementing this type of Quality Management System (QMS) assists organizations in consistently meeting client requirements, enhancing client satisfaction, and meeting business objectives—while also addressing all risks and opportunities. The ISO 9001:2015 QMS standard is based on a variety of quality management principles, including: Client Focus, Leadership, the Engagement of People, Process Approach, Improvement, Evidence-based Decision Making, and Relationship Management.

This ISO 9001:2015 Certification is granted by accredited certification bodies—or registrars—that will audit an organization at planned intervals to confirm conformance to the ISO 9001:2015 standard. This international standard specifies a collection of necessary requirements for an ISO 9001:2015 Certified QMS—which are contained within seven (7) clauses, including:

1. Context of the Organization
2. Leadership
3. Planning
4. Support
5. Operation
6. Performance Evaluation
7. Improvement



Trade References

Utility Service Co., Inc. (USCI) works with the leading suppliers in the industry regularly. Below are our leading suppliers.

Tnemec Co., Inc.
Paint Supplier
Dean Drehoff
Atlanta, GA
770-242-9605

Sherwin Williams
Paint Supplier
Michael Usterbowski
Chicago, IL
847-757-1836

Reed Minerals, Inc.
Abrasive Supplier
David Dewitt
Memphis, TN
901-789-1573

Eagle Industries, Inc.
Containment Systems
Mark Coulon
New Orleans, LA
800-266-8246

Client References

Utility Service Co., Inc. (USCI) has completed over $800 million in water asset projects over the years. Our expertise in rehabilitation and maintenance extends the usable life of assets. Below are just a few of the bid projects we have completed over the years.

Tank Project References 2024

Greenville, NC
Project: Eastside Elevated Water Tank Rehabilitation
Engineer: Highfill Infrastructure Engineering
Description: 1,000,000 gallon FC HP; Exterior PW/2 coats; Interior PW/SP7/Spot SP10/2 coats; Containment; Repairs; Logo
Contract Amount: $449,000
Completed: September 2024

Gosport, IN
Project: Division III Waterworks Improvements: Painting of 150,000 Gallons Spheriodal Water Storage Tank # 8405494
Engineer: Curry & Associates, Inc- Lori Young- (317) 745- 6995
Description: 150,000-Gallon PED; Exterior SP6/ 3 Coats; Interior Wet SP10/ 3 Coats; Interior Dry Spot SP11/3 Spot Coats; Typical Repairs
Contract Amount: $191,400
Completed: July 2024

Fowler, IN
Project: Water Utility Improvements "Division A Water Tower Rehabilitation"
Engineer: Municipal-Civil Corporation- Ken Smith- (765) 427-4670
Description: 250,000- Gallon EST; Exterior SP6/ 3 Coats; Interior SP10/ 3 Coats; Typical repairs; Containment; Logos (2)
Contract Amount: 394,600
Completed: June 2024

Keiser, AR
Project: Water Storage Tank Rehabilitation
Engineer: Civil Engineering Associates, LLC. - Lance Powell- (870) 972-5316
Description: 75,000-Gallon EST; Exterior SP6/3 coats (Hydroflon); Interior touchup of the areas we damage; Containment; Repairs; Passive mixing system; Repairs on treatment building
Contract Amount: $102,382
Completed: June 2024

Handy Sanitary District, NC
Project: Hwy 49 & Bryon Street 500,000 Gallon Water Storage Tanks
Engineer: MBD Consulting Engineers – Charlie McGougan – (910) 915-8200
Description:
Bryon - 500,000-Gallon SP; Exterior PW/3 coats; Interior SP10/3 coats; Repairs
Hwy 49 - 500,000-Gallon GST; Exterior PW/3 coats; Interior SP10/3 coats; Repairs
Contract Amount: $457,800
Completed: June 2024

Village of Philadelphia, NY
Project: Contract No. 5 - Water Storage Tank Repainting
Engineer: BCA Architects & Engineers – Bob Boliver – (315) 782-8130
Description: 500,000-Gallon fluted column hydropillar; Exterior SP6/3 coats; Interior wet SP10/2 coats (100% solids); Interior dry bowl SP10/3 coats; Interior dry spot SP11/2 coats; Containment; Repairs; Logos; Mixing system
Contract Amount: $623,900
Completed: June 2024

Town of Fowler, IN
Project: Water Utility Improvements “Division A Water Tower Rehabilitation"
Engineer: Municipal-Civil Corporation- Ken Smith (765) 427-4670
Description: 250,000- Gallon EST; Exterior SP6/ 3 Coats; Interior SP10/ 3 Coats; Typical repairs; Containment; Logos (2)
Contract Amount: $410, 400
Completed: May 2024

City of Keiser, AR
Project: Water Storage Tank Rehabilitation
Engineer: Civil Engineering Associates, LLC. - Lance Powell (870) 972-5316
Description: 75,000-Gallon EST; Exterior SP6/3 coats; Interior touchup; Containment; Typical repairs; Passive mixing system; Repairs on treatment building
Contract Amount: $276,700
Completed: May 2024

City of Winnsboro, TX
Project: Elevated Storage Tank Rehabilitation
Engineer: KSA Engineers, Inc.- Brittney Smith (903) 236-7700
Description: 350,000-Gallon EST; No Exterior Work; Interior SP10/ 2 Coat (100% solids); Typical Repairs
Contract Amount: $134,200
Completed: April 2024

Greensboro, NC
Project: 2023 Fall Protection System Improvements and Winola Court Rehabilitation
Engineer: LJB, Inc- Ted Baker (336) 433-7308
Description:
Winola Court- 1,500,000 Composite Hydropillar; Exterior PW/ SP11/ 2 Coats; Interior Wet SP7/ Spot SP10/ 2 Coats; Interior Dry Spot SP3/ Spot 2 Coat; Major Repairs; Containment
Muirs Chapel Road- 500,000-Gallon EST; Touch up of coatings we damage on the exterior & interior; Safety Upgrades
Contract Amount: $848,400
Completed: April 2024

Veolia North America, ID
Project: Columbia WTP Clearwell Interior Painting Project
Engineer: Brandon Miller (208) 358 0090
Description: 1.5MG GST; No exterior work; Interior SP10/ 3 Coats; Minimal repairs
Contract Amount: $638,838
Completed: March 2024

Veolia North America, ID
Project: Barber Tank Interior Painting Project
Engineer: Brandon Miller (208) 358 0090
Description: 2MG GST; No exterior work; Interior SP10/ 3 Coats; Minimal repairs
Contract Amount: $495,921
Completed: March 2024

City of Thibodaux, LA
Project: North Canal Blvd/ MLK Water Tower Repainting
Engineer: Process and Controls Engineering - Dan Foglesong (985) 635-1410
Description:
500,000-Gallon PED; Exterior PW/Spot SP3/ 2 coats; Interior Wet SP10/ 3 coats; Interior Dry SP10/ 2 coats; Typical repairs
1.0MG EST; Exterior SP6/ 3 coats (Hydroflon); Interior SP10/ 3 coats; Containment; Typical repairs
Contract Amount: $956,707
Completed: January 2024

Tank Project References 2023

City of Rusk, TX
Project: Rehabilitation of Water Storage Tanks
Engineer: Schaumburg & Polk - Jeff Simmons/Cale Tucker
Description:
100,000-Gallon EST; Exterior SP6/3 coats (Hydroflon); Interior SP10/2 coats (Series 22); Containment; Repairs; Mixing System; Dehumidification; Logo
200,000-Gallon EST; Exterior SP6/3 coats (Hydroflon); Interior SP10/2 coats (Series 22); Containment; Repairs; Dehumidification; Logo
500,000-Gallon GST; Exterior SP6/3 coats (Hydroflon); Interior SP10/2 coats (Series 22); Containment; Repairs; Mixing System; Dehumidification
300,000-Gallon Concrete Clearwell; Interior PW only; Repairs
250,000-Gallon Bolted GST; Exterior PW/3 coats (Hydroflon); Interior SP10/2 coats (Series 264); Repairs including roof replacement; Mixing System; Dehumidification
Contract Amount: $1,791,600
Completed: December 2023

Western Virginia Water Authority, VA
Project: Grandin Court WST#3
Engineer: Scott Agner (540) 283-2931
Description: 1MG STP; Exterior SP6/ 3 Coats (Hydroflon); Interior SP10/ 3 Coats; Containment and typical repairs
Contract Amount: $316,200
Completed: November 2023

Town of Hounsfield, NY
Project: Water Storage Tank Repairs
Engineer: Barton & Loguidice – Chelsea Brouty (315) 701 9810
Description: 125,000-Gallon PED; Exterior PW/ 2 Coats; Interior SP10/ 2 Coats; Interior Dry PW/ Spot SP11/ 2 Coats; Typical repairs
Contract Amount: $274,000
Completed: October 2023

Paragould Light & Water Commission, AR
Project: Repair and Repainting of (2) Water Storage Tanks
Engineer: Paragould Water and Cable Engineering Department
Description:
Tank 1-1,000,000-Gallon GST- Exterior SP6/3 Coats (Hydroflon); Interior SP10/2 Coats; Typical repairs; Containment
Tank 2-250,000-Gallon EST- Exterior SP6/3 Coats (Hydroflon); Interior SP10/2 Coats; Typical repairs; Containment
Contract Amount: $741,200
Completed: September 2023

Greenville Utilities Commission, NC
Project: Southside Elevated Water Tank Rehabilitation
Engineer: Highfill Infrastructure Engineering - Jeremy Allen, PE (919) 481-4342
Description: 1.5MG Fluted HP; Exterior PW/2 coats; Interior Wet SP7/ spot SP10/ 2 coats; Interior Dry spot touch up; Containment; Typical repairs
Contract Amount: $489,080
Completed: September 2023

Marion Municipal Water Department, IA
Project: Well 4 GST Repair & Recoating
Engineer: Veenstra & Kimm - Dave Schechinger, P.E. (319) 466-1000
Description: 1MG GST; Exterior SP6/3 Coats (Hydroflon); Interior SP10/3 Coats; Typical repairs
Contract Amount: $338,100
Completed July 2023

City of Sumter, SC
Project: Lafayette Drive Elevated Tank Project
Engineer: Owner- Bert Beatson (803) 305-7219
Description: 500,000-Gallon EST: Exterior PW; Interior SP10/3 Coats; Repairs
Contract Amount: $117,400
Completed: June 2023

City of Manning, SC
Project: Elevated Water Storage Tank Improvements
Engineer: Hybrid Engineering, Inc.- Doug Clary (803) 407-0472
Description: 300,000-Gallon EST; Exterior SP6/3 Coats; Interior SP10/3 Coats; Containment; Repairs
Contract Amount: $562,600
Completed: May 2023

Sweetwater Utilities Board, TN
Project: East Tank Refurbishments
Engineer: W. K. Dickson & Company - Cain Reed (865) 270-3310
Description: 200,000-Gallon GST; Exterior SP10/3 coats (Hydroflon); Interior SP10/3 coats; Containment; Repairs
Contract Amount: $185,600
Completed: March 2023

Western Virginia Water Authority, VA
Project: Washington Heights Water Tank Rehab
Engineer: Scott Agner (540) 283-2931
Description: 500,000-Gallon EST; Exterior SP6/3 Coats; Interior SP10/3 Coats; Containment; Typical repairs
Contract Amount: $455,400
Completed: March 2023

Town of Cleveland, NC
Project: Roseman Tank Rehabilitation
Engineer: McGill Associates – Noah Green (828) 328-2024
Description: 200,000-Gallon EST; Exterior PW/ SP3/ 2 Coats; Interior SP10/ 3 Coats; Typical repairs
Contract Amount: $224,470
Completed: February 2023

City of Mount Vernon, GA
Project: Lothair Elevated Water Tank Rehabilitation
Engineer: Turnipseed Engineers - John McClellan (706) 863-8800
Description: 300,000-Gallon EST; Exterior PW/2 coats; Interior SP10/2 coats; Repairs; Logo
Contract Amount: $123,100
Completed: February 2023

North Garland County, AR
Project: Cleaning and Painting Water Storage Tank No. 7 & Modifications to Other Tanks
Engineer: Michael Bolin & Associates, Inc. – Michael Bolin (501) 776-2692
Description: 200,000-Gallon STP; Exterior PW/ SP3/2 Coats; Interior SP10/2 Coats (Series 141); Typical repairs and mixer
Contract Amount: $198,800
Completed: January 2023

Subiaco Abbey, AR
Project: Repaint Tin Hat Water Storage Tank
Engineer: Crafton Tull & Associates - Loy Claunch (479) 968-1885
Description: 50,000-Gallon open back lattice leg EST; Exterior PW/2 coats; Interior SP10/3 coats; Repairs; Logo; Mixing System
Contract Amount: $192,300
Completed: January 2023

TANK PROJECT REFERENCES 2022

City of Bismarck, ND
Project: 43rd Avenue Tank Rehabilitation
Engineer: Bartlett & West - Larry Kirschmann (888) 200-6464
Description: 1.0MG PED; Exterior SP6/3 coats (Hydroflon); Interior Wet SP10/3 coats (FC22); Interior Dry SP6/3 coats; Containment; Repairs; Cathodic Protection; Electrical; Logo
Contract Amount: $757,100
Completed: December 2022

City of Crawfordsville, AR
Project: Painting 100,000 Gallon Water Tank
Engineer: Bond Consulting Engineers East - Jerome Alford (870) 739-2228
Description: 100,000-Gallon EST; Exterior PW/2 coats; Interior SP10/2 coats (Series 141); Repairs; Mixing System
Contract Amount: $142,900
Completed: December 2022

City of Mount Vernon, GA
Project: Lothair Elevated Water Tank Rehabilitation
Engineer: Turnipseed Engineers - John McClellan (706) 863-8800
Description: 300,000-Gallon EST; Exterior PW/2 coats; Interior SP10/2 coats; Repairs; Logo
Contract Amount: $123,100
Completed: November 2022

Town of Boone, NC
Project: Gladys Water Tank Painting
Engineer: McGill Associates – Cyndi Sherwood (828) 252-0575
Description: 2.0MG GST; Exterior PW/ SP3/3 Coats (Hydroflon); Interior SP10/3 Coats; Typical repairs
Contract Amount: $396,600
Completed: November 2022

St Anthony Water Corporation, IN
Project: Rehabilitation and Repainting of the Dubois Co. 4-H Park Existing 200,000 Gallon EST
Engineer: Midwestern Engineers – Ed Peters (812) 295-2800
Description: 200,000-gallon EST; Exterior PW/3 coats; Interior SP10/2 coats; Repairs; Logos
Contract Amount: $135,200
Completed: October 2022

Veolia Water, NJ
Project: Bald Eagle Village Welded Standpipe
Engineer: Hannah Giacomin, PE (201) 250-5075
Description: 320,000-Gallon GST; Exterior SP6/3 Coats; Interior SP10/2 Coats (100% Solids); Containment and typical repairs
Contract Amount: $682,900
Completed: October 2022

City of Washington, KS
Project: Water System Improvements - Tower Painting
Engineer: BG Consultants - Brian Foster (785) 537-7448
Description: 250,000-Gallon PED; Exterior SP6/3 coats (Hydroflon); Interior Wet SP10/3 coats; Interior Dry Spot SP3/1 coat; Containment; Repairs; Logos
Contract Amount: $244,838
Completed: August 2022

Bull Swamp Rural Water Company, SC
Project: Repair and Repainting Bull Swamp Waters Ferry Tank
Engineer: AECOM - Nathan Ward (803) 254-4400
Description: 200,000-Gallon EST; Exterior PW/SP6/3 coats (Hydroflon); Interior PW/SP10/3 coats; Containment; Repairs
Contract Amount: $400,000
Completed: August 2022

Town of Lyme, NY
Project: Three Mile Bay Water Storage Tank Exterior Repainting
Engineer: BCA Architects & Engineers – McKenzie Lehman PE (315) 782-8130 x 273
Description: 125,000-Gallon PED; Exterior SP6/3 Coats; Touch up of interior areas damaged during project; Containment and minimal repairs
Contract Value: $241,500
Completed: August 2022

City of Raymondville, TX
Project: Rehabilitation of Three Potable Water Elevated Storage Tank
Engineer: Guzman & Munoz Engineering – Luther Medina (956) 565-4637 x 413
Description:
High School Tank - 200,000-Gallon EST; Exterior SP6/3 Coats; Interior SP10/2 Coats (100% Solids); Containment & typical repairs
Prison Tank - 150,000-Gallon EST; Exterior SP6/3 Coats; Interior SP10/2 Coats (100% Solids); Containment & typical repairs
Little League Tank - 200,000-Gallon PED; Exterior SP6/3 Coats; Interior Wet SP10/2 Coats (100% Solids); Interior Dry SP10/2 Coats (100% Solids); Containment & typical repairs
Contract Value: $1,169,720
Completed: August 2022

City of Pittsburg, KS
Project: North Tower Blast & Paint
Engineer: Olsson - Jerry Jesky, P.E. (417) 885-1746
Description: 750,000-Gallon EST; Exterior PW/2 Coats; Interior SP10/3 Coats; Typical repairs
Contract Amount: $303,000
Completed: August 2022

Fork Township Sanitary District, NC
Project: WTP EST Painting
Engineer: McDavid Associates, Inc. – David Gurley III, P.E. (919) 736-7630
Description: 500,000-Gallon EST; Interior Wet SP10/3 Coats; Exterior SP6/3 Coats (Hydroflon); Containment; Typical repairs
Contract Amount: $407,400
Completed: June 2022

City of Warrenton, MO
Project: Water Tank Painting
Owner: Brant Johnson (636) 456-3535
Description: 400,000-Gallon EST; Exterior SP6/3 Coats (Hydroflon); Interior SP10/3 Coats; Containment
Contract Amount: $367,700
Completed: June 2022

Fork Township Sanitary District, NC
Project: WTP Elevated Storage Tank Painting
Engineer: McDavid Associates, Inc. – David Gurley III, P.E. (919) 736-7630
Description: 500,000-Gallon EST; Exterior SP6/4 Coats (Hydroflon); Interior SP10/3 Coats; Containment and typical repairs
Contract Amount: $407,400
Completed: June 2022

City of Ambrose, GA
Project: Renovation of Elevated Water Tank
Engineer: Statewide Engineering, Inc. - Mark Dill (912) 384-7723
Description: 100,000-Gallon EST; Exterior SP6/3 Coats, Interior SP10/3 Coats; Containment; Typical repairs
Contracted Amount: $382,800
Completed: March 2022

City of Jersey Village, TX
Project: Rehabilitation of Elevated Storage Tanks
Engineer: Roel Garcia (713) 466-2158
Description:
Congo Lane Tank - 500,000-Gallon PED; Exterior touch up; Interior Wet SP10/3 Coats; Interior Dry Partial SP6/2 Coats; Typical repairs
Jersey Tower - 250,000-Gallon EST; Exterior touch up; Interior SP10/3 Coats; Typical repairs
Contracted Amount: $214,200
Completed: March 2022

City of Sumter, SC
Project: Alice Drive Elevated Tank Project
Owner: Bert Beatson (803) 305-7219
Description: 500,000-Gallon EST; Exterior PW Only; Interior Wet SP10/3 coats; Minimal repairs
Contracted Amount: $100,500
Completed: January 2022

Tank Project References 2021

Town of Summit, MS
Project: Thomas Street 250,000 Gallon Elevated Storage Tank Rehabilitation
Engineer: Dungan Engineering – Josh Davis (601) 823-7026
Description: 200,000-Gallon EST; Interior SP10/3 coats; Exterior SP6/3 coats; Containment; Typical Repairs
Contracted Amount: $298,200
Completed: December 2021

Cabot Waterworks, AR
Project: Tank Painting and Rehab 80,000 Gallon Standpipe & 500,000 Gallon Elevated Tank
Engineer: Tim Joyner (510) 843-4654
Description:
80,000-Gallon STP; Exterior SP6/3 coats; Interior SP10/3 coats; Containment; Repairs
500,000-Gallon EST; Exterior SP6/3 coats (Hydroflon); Interior SP10/3 coats; Containment; Repairs
Contract Amount: $509,600
Completed: December 2021

North Carolina Department of Public Safety
Project: Water Tank Restoration Hyde Correctional Institute
Engineer: S&ME – Scott Hancock (336) 553-1231
Description: 125,000-Gallon EST; Interior SP10/3 coats; Exterior PW/SP6/3 coats; Containment; Typical Repairs
Contract Amount: $294,639.22
Completed: November 2021

Town of Summit, MS
Project: Thomas Street 250,000 Gallon Elevated Storage Tank Rehabilitation
Engineer: Dungan Engineering – Josh Davis (601) 823-7026
Description: 200,000-Gallon EST; Interior SP10/3 coats; Exterior SP6/3 coats; Containment; Typical Repairs
Contracted Amount: $298,200
Completed: December 2021

Cabot Waterworks, AR
Project: Tank Painting and Rehab 80,000 Gallon Standpipe & 500,000 Gallon Elevated Tank
Engineer: Tim Joyner (510) 843-4654
Description:
80,000-Gallon STP; Exterior SP6/3 coats; Interior SP10/3 coats; Containment; Repairs
500,000-Gallon EST; Exterior SP6/3 coats (Hydroflon); Interior SP10/3 coats; Containment; Repairs
Contract Amount: $509,600
Completed: December 2021

North Carolina Department of Public Safety
Project: Water Tank Restoration Hyde Correctional Institute
Engineer: S&ME – Scott Hancock (336) 553-1231
Description: 125,000-Gallon EST; Interior SP10/3 coats; Exterior PW/SP6/3 coats; Containment; Typical Repairs
Contract Amount: $294,639.22
Completed: November 2021

City of Hallettsville, TX
Project: Rhodes 250,000 Gallon Elevated Tank Repaint Project
Engineer: TRC Engineers, Inc. – Sean Cook (512) 329-6080
Description: 250,000-Gallon EST; Interior Wet SP10/2 Coats; Exterior SP6/2 Coats; Typical repairs
Contract Amount: $97,800
Completed: October 2021

Dinwiddie County, VA
Project: 500,000 Gallon EST Racetrack Tank Rehabilitation
Engineer: Arcadis – Kris Edelman (804) 665-1076
Description: 500,000-Gallon EST, Exterior SP6/4 Coats (Hydroflon); Interior Wet SP10/3 Coats (Series N140), 2A Containment, Graphic Logo, Repairs
Contracted Amount: $451,200.00
Completed: September 2021

Macon Municipal, MO
Project: Repainting of the North 1MG Elevated Water Storage Tank
Engineer: Benton & Associates, Inc. – Joshua Stewart, P.E. (660) 665-3575
Description: 1.0MG EST, Interior Wet SP10/3 Coats, Interior Dry PW/2 Spot Coats, Repairs,
Contracted Amount: $395,100.00
Completed: August 2021

City of Caraway, AR
Project: Painting 150,000 Gallon Water Tank
Engineer: Bond Consulting Engineers East, Inc. – Jerome Alford (870) 739-2228
Description: 150,000-Gallon EST; Interior Wet SP10 /2 Coats; Exterior PW /2 Coats; Typical repairs
Contract Amount: $126,800
Completed: August 2021

Fork Township Sanitary District, NC
Project: Barnes School EST Painting
Engineer: McDavid Associates, Inc. – David Gurley III, P.E. (919) 736-7630
Description: 500,000-Gallon EST; Interior Wet SP10/3 Coats; Exterior SP6/3 Coats (Hydroflon); Containment and typical repairs
Contract Amount: $403,800
Completed: June 2021

Fork Township Sanitary District, NC
Project: New Hope and Barnes School EST Painting
Engineer: McDavid Associates, Inc. – David Gurley III, P.E. (919) 736-7630
Description: 200,000-Gallon EST; Interior Wet SP10/3 Coats; Exterior SP6/3 Coats (Hydroflon); Containment and typical repairs
Contract Amount: $323,000
Completed: June 2021

City of Rock Hill, SC
Project: Lesslie Elevated Water Tank Rehabilitation
Engineer: Wiedeman and Singleton, Inc. – Mark Scherger (803) 329-2944
Description: 1.0MG Composite Hydropillar; Interior Wet SP10/3 coats; Exterior Bowl PW/3 coats (Hydroflon); Exterior Concrete Pedestal PW Only; Repairs
Contract Amount: $351,800
Completed: June 2021

Georgia Public Safety Training Center, GA
Project: Campus Water Tower Renovation Project
Engineer: Jessica Sherman (478) 993-4662
Description:
100,000-Gallon EST; Interior Wet SP7/Spot SP10/2 coats; repairs; Cathodic Protection
500,000-Gallon EST; Interior Wet SP7/Spot SP10/2 coats; repairs; Cathodic Protection
Contract Amount: $243,300
Completed: June 2021

Chesterfield County, VA
Project: Physic Hill Tank Rehabilitation
Engineer: Whitman Requardt & Associates, LLP. – Christopher Briggs, P.E. (804) 272-8700
Description: 2.0MG Fluted Hydropillar; Interior Wet SP10/3 Coats; Interior Dry Partial SP10/3 Coats Exterior SP6/3 Coats (Hydroflon); Containment and typical repairs
Contract Amount: $1,329,703
Completed: June 2021

City of Eustis, FL
Project: Rehabilitation and Repainting of 3 Potable Water Storage Tanks
Engineer: Tracey Jeanes (352) 483-5475
Description:
100,000-Gallon GST; Exterior Overcoat/2 coats; Interior Wet SP10/3 coats; Typical repairs
250,000-Gallon Concrete GST; Interior SP6/3 coats; repairs
100,000-Gallon EST; Exterior Overcoat/2 coats; Interior Wet SP10/3 coats; Typical repairs
Contract Amount: $184,400
Completed: May 2021

Aqua North Carolina, Inc.
Project: Macon Road Tank Rehabilitation
Engineer: Mumford-Bjorkman Associates, Inc. – Mike Catts (302) 322-2000
Description: 300,000-Gallon EST; Interior SP10/2 Coats (100% solids); Exterior PW/SP11/2 Coats; Typical repairs
Contract Amount: $209,300
Completed: February 2021

Tank Project References 2020

City of Denmark, SC
Project: Elevated Storage Tank Rehabilitation
Engineer: Hussey Gay Bell – Gene Pierce, P.E. (803) 799-0444
Description:
100,000-Gallon EST; Interior Wet SP10/3 Coats; Exterior SP6/3 Coats; Containment; Typical repairs
250,000-Gallon EST; Interior Washout; Minor Repairs
Contract Amount: $254,800
Completed: December 2020

Union County, NC
Project: Stallings Existing Elevated Tank No. 2 Refurbishment
Engineer: W.K. Dickson – Jake Berkshire P.E. (704) 334-5348
Description: 500,000-Gallon Fluted Hydropillar; Interior Wet SP10/3 Coats; Exterior Overcoat/3 Coats (HydroFlon); Typical Repairs
Contract Amount: $322,300
Completed: December 2020

Village of Sebring, OH
Project: West Texas Avenue Tank Rehabilitation Project
Engineer: W.E. Quicksall and Associates, Inc. – Matt Miller (330) 339-6676
Description:
500,000-Gallon STP; Exterior SP10/3 coats (Hydroflon); Interior SP10/2 coats (100% solids); Containment; Repairs
1MG Concrete GST; Exterior SP13/3 coats; Interior SP13/2 coats; Repairs
Contract Amount: $829,600
Completed: December 2020

Dennis Water District, MA
Project: Cleaning and Painting 6MG Steel Water Storage Standpipe
Engineer: Resilient Civil Engineering - Kristen Berger (508) 726-2458
Description: 6.0MG STP; Exterior Overcoat/2 coats; Interior Floor SP10/2 coats & Touch-Up
Contract Amount: $598,100
Completed: December 2020

Red River County Water Supply, TX
Project: Avery Water Tower Rehabilitation
Engineer: Shawn Napier – (903) 732-6307
Description: 100,000-Gallon EST; Exterior Overcoat/2 coats; Interior Wet SP10/2 coats; Repairs
Contract Amount: $100,800
Completed: December 2020

Aqua North Carolina, Inc.
Project: Six Forks Tank Rehabilitation
Engineer: Mumford-Bjorkman Associates, Inc. – Mike Catts (302) 322-2000
Description: 250,000-Gallon EST; Interior SP10/2 Coats (100% solids); Exterior SP6/3 Coats; Containment; Typical repairs
Contract Amount: $415,700
Completed: October 2020

Town of Boone, NC
Project: Upper Junaluska Tank Painting
Engineer: McGill Associates – J. Meliski (828) 252-0575
Description: 200,000-Gallon GST; Interior SP10/3 Coats; Exterior PW/Overcoat; Typical repairs
Contract Amount: $146,300
Completed: October 2020

City of Crockett, TX
Project: East Side & Southwest Elevated Storage Tank Rehabilitation
Engineer: KSA – Jeremy Orr, P.E. (936) 637-6061
Description:
500,000-Gallon PED; Exterior SP6/3 coats; Interior wet SP10/2 coats; Interior dry SP10/2 coats; Containment; Typical repairs
500,000-Gallon PED; Exterior SP6/3 coats; Interior wet SP10/2 coats; Interior dry SP10/2 coats; Containment; Typical repairs
Contract Amount: $590,515
Completed: May 2020

Town of Boone, NC
Project: Gladys Water Tank Painting
Engineer: McGill Associates – J. Meliski (828) 252-0575
Description: 190,000-Gallon GST; Interior SP10/3 Coats; Exterior PW/Overcoat; Typical repairs
Contract Amount: $156,600
Completed: May 2020

City of Archdale, NC
Project: 750,000 Gallon Hydropillar Water Tank Rehabilitation
Engineer: S&ME – Timothy Greene 336-288-7180
Description: 750,000-Gallon Composite Hydropillar; Exterior PW/Overcoat; Interior Wet SP10/3 Coats; Interior Dry Spot touch up; Minimal repairs
Contract Amount: $171,400
Completed: April 2020

Darlington County Water & Sewer Authority, SC
Project: Sally Hill & Buck Reynolds Road Tank Improvements
Engineer: Davis & Brown – Glenn Kirven (843) 319-2476
Description:
Buck Reynolds 500,000-Gallon EST; Interior SP10/3 Coats; Exterior PW/Overcoat; Typical repairs
Sally Hill 200,000-Gallon EST; Interior SP10/3 Coats; Exterior PW/Overcoat; Typical repairs
Contract Amount: $349,000
Completed: January 2020

City of Woonsocket, RI
Rehabilitation of Mount St. Charles No.1, Mount St. Charles No. 5, Diamond Hill and Rhodes Ave. Steel Water Storage Tanks
Engineer: C&E Engineering Partners, Inc. - Tom Nicholson (401) 762-1711
Description:
440,000-Gallon STP; Exterior Touch-Up/Chemical Clean & Interior Touch-Up
750,000-Gallon Fluted Hydropillar; Exterior Touch-Up/Chemical Clean & Interior Touch-Up
750,000-Gallon EST; Exterior PW & Touch-Up/Chemical Clean & Interior Touch-Up
750,000-Gallon Fluted Hydropillar; Exterior PW/ Touch-Up/ Chemical Clean & Interior Touch-up
Contract Amount: $751,200
Completed: January 2020

CURRENT PROJECTS UNDER CONSTRUCTION

City of Spartanburg, SC
Project: Water Storage Tank Maintenance Improvements
Engineer: Wiedeman and Singleton, Inc.- Mark Scherger (803) 329-2944
Description:
Boiling Springs Elevated Tank- 300,000-Gallon EST; Exterior PW; Interior SP10/ 2 coats; Typical repairs
Boiling Springs Ground Tank- 3,000,000-Gallon GST; Exterior PW and roof SP11/ 3 Coats; Interior PW; Typical repairs
Cowpens Elevated Tank- 1,000,000-Gallon Composite HP; No exterior work; Interior compression ring & painters' rail SP10/ 2 coats; Minimal repairs
Granite St. Elevated Tank- 100,000-Gallon EST; No exterior work; Interior PW; Minimal repairs
Hwy 292 Elevated Tank- 500,000-Gallon EST; No exterior work; Interior PW; Minimal repairs
Hwy 9 Elevated Tank- 1,000,000-Gallon EST; No exterior work; Interior PW; Typical repairs
Landrum Ground Tank- 500,000-Gallon GST; Exterior roof SP11/ 3 Coats; Interior PW; Typical repairs
New Cut Road Tank- 400,000-Gallon EST; Exterior PW; Interior SP10/ 2 coats; Typical Repairs
Contract Amount: $497,900

Garden City Park Water District, NY
Project: Rehabilitation of the 1MG Denton Avenue Elevated Storage Tank
Engineer: H2M Architects – James Neri (6531) 756-8000
Description: 1MG EST; Exterior SP6/3 Coats; Interior SP10/2 Coats (100% solids); Containment and numerous typical repairs
Contract Amount: $3,885,625

Town of Gosport, IN
Project: Division III Waterworks Improvements: Painting of 150,000 Gallons Spheriodal Water Storage Tank # 8405494
Engineer: Curry & Associates, Inc- Lori Young (317)745-6995
Description: 150,000-Gallon PED; Exterior SP6/ 3 Coats; Interior Wet SP10/ 3 Coats Interior Dry Spot SP11/3 Spot Coats; Typical Repairs
Contract Amount:191,400

Salem Water Users Association, AR
Project: Congo Road Water Storage Tank Maintenance
Engineer: GarNat Engineering – Vernon Williams – (501)408-4650
Description: 500,000 gallon SP; Exterior PW/2 coats (Series 1074); Interior SP10/2 coats (Series 21); Repairs; Logos; Mixing system
Contract Amount: $175,600

Handy Sanitary District, NC
Project: Hwy 49 & Bryon Street 500,000 Gallon Water Storage Tanks
Engineer: MBD Consulting Engineers
Description:
Bryon - 500,000-Gallon SP; Exterior PW/3 coats; Interior SP10/3 coats; Repairs
Hwy 49 - 500,000-Gallon GST; Exterior PW/3 coats; Interior SP10/3 coats; Repairs
Contract Amount: $457,800

Village of Philadelphia, NY
Project: Contract No. 5 - Water Storage Tank Repainting
Engineer: BCA Architects & Engineers
Description: 500,000-Gallon fluted column hydropillar; Exterior SP6/3 coats; Interior wet SP10/2 coats (100% solids); Interior dry bowl SP10/3 coats; Interior dry spot SP11/2 coats; Containment; Repairs; Logos; Mixing system
Contract Amount: $623,900

Buzzards Bay Water District, MA
Project: Hydropillar Tank Rehabilitation and Overcoat
Engineer: Haley Ward - Myles Killar, PE (978) 648-6025
Description: 1MG Fluted Hydropillar; Exterior PW/ 2 Coats (Hydroflon); Interior wet & dry spot Touch up; Typical repairs
Contract Amount:

Sarasota Co., FL
Project: North Elevated Water Tower
Engineer: Owner - Valerie Craig (941) 861-0756
Description: 2MG Fluted Hydropillar; Interior SP7/ 1 Coat; Exterior & interior dry touch up; Typical repairs
Contract Amount: $230,600

SECTION 00 43 13 - BID BOND

KNOW ALL MEN BY THESE PRESENTS: that we

Utility Service Co., Inc
535 Courtney Hodges Blvd.
Perry, GA 31069

as Principal, hereinafter called the Principal, and

Travelers Casualty and Surety Company of America
One Tower Square
Hartford, CT 06183

a corporation duly organized under the laws of the State of Connecticut as Surety, hereinafter called Surety, are held and firmly bound unto

City of Fayetteville, Arkansas
113 West Mountain Street
Fayetteville, Arkansas 72701

as Obligee, hereinafter called Owner, in the sum of Five Percent of Amount Bid Dollars ($5% of Amount Bid), for the payment of which sum, well and truly to be made, Principal and said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents. WHEREAS, Principal has submitted a Bid for:

CONSTRUCTION – BAXTER 1 MG GROUND WATER STORAGE TANK REHABILITATION

NOW, THEREFORE, if the Owner shall accept the Bid of Principal and the Principal shall enter into a Contract with the Owner in accordance with the terms of such Bid, and give such Bond or Bonds as may be specified in the Bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of Principal to enter such Contract and give such Bond or Bonds, if the Principal shall pay to the Owner the difference not to exceed the penalty hereof between the amount specified in said Bid and such larger amount for which the Owner may in good faith contract with another party to perform the Work covered by said Bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this 12th day of February 2025.

PRINCIPAL

Utility Service Co., Inc.

By _____
(Signature)
David Pollard, Director of Bid Dept.
(Type or print)

SURETY

Travelers Casualty and Surety Company of America

By _____
(Signature)
Andrew P. Thome, Attorney-in-Fact
(Type or print)

ATTORNEY-IN-FACT

_____

By _____
(Signature)
J. Shane Albritton, Secretary
(Type or print)

This Bond shall be accompanied with
Attorney-in-Fact's authority from Surety

END OF SECTION 00 43 13

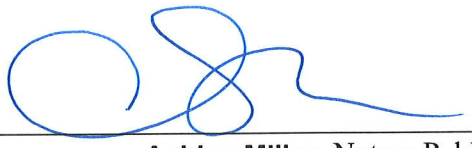
State of **Missouri**
County of **St. Louis**

On **2/12/2025**, before me, a Notary Public in and for said County and State, residing therein, duly commissioned and sworn, personally appeared **Andrew P. Thome** known to me to be Attorney-in-Fact of

Travelers Casualty and Surety Company of America

the corporation described in and that executed the within and foregoing instrument, and known to me to be the person who executed the said instrument in behalf of said corporation, and he duly acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year stated in this certificate above.



Ashley Miller, Notary Public

ASHLEY MILLER
Notary Public - Notary Seal
STATE OF MISSOURI
St. Louis County
My Commission Expires: Dec. 21, 2025
Commission # 13556557

My Commission Expires: _____

TRAVELERS

Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **ANDREW P THOME** of **CHESTERFIELD** , **Missouri** , their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **21st** day of **April, 2021**.

State of Connecticut

City of Hartford ss.

By: _____
Robert L. Raney, Senior Vice President

On this the **21st** day of **April, 2021**, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June, 2026**

_____
Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this day of , .

_____
Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.

USG WATER
SOLUTIONS

SECRETARY'S CERTIFICATE
OF
UTILITY SERVICE CO., INC.

I, J. Shane Albritton, as Secretary of Utility Service Co., Inc., do hereby certify that the following Resolution was duly proposed, adopted, and resolved, during a meeting of the Board of Directors of Utility Service Co., Inc. on the 17th day of June, 2024:

> BE IT RESOLVED that David Pollard is hereby authorized and empowered by the Board of Directors as of June 17, 2024, to execute any and all contracts with a value of $1,000,000 or less on behalf of Utility Service Co., Inc.

So executed on the 17th day of June, 2024.

J. Shane Albritton

[Corporate Seal]

Utility Service Co., Inc. CORPORATE SEAL GEORGIA 2001

Sworn before me on this 17th day of June, 2024.

Notary Public

NOTARY PUBLIC GEORGIA
CRISTYL SMITH
Notary Public
State of Georgia
Peach County
My Comm. Expires Sep. 19, 2025

CITY OF FAYETTEVILLE ARKANSAS

CITY COUNCIL MEMO
2025-376

MEETING OF MARCH 25, 2025

TO: Mayor Rawn and City Council

THRU: Keith Macedo, Interim Chief of Staff

FROM: Tim Nyander, Utilities Director

SUBJECT: **CITY OF ELKINS (AMENDMENT NO. 1):**

RECOMMENDATION:
Staff recommends approval of Amendment No. 1 to the fifteen-year agreement between the City of Fayetteville and the City of Elkins to treat Elkins' wastewater in Fayetteville's Wastewater Treatment Facility and discharge treated effluent under Fayetteville's National Pollution Discharge Elimination System (NPDES) permit.

BACKGROUND:
Fayetteville has treated Elkins' wastewater for over 40 years. The most recent renewal of this contract was in 2021 via Resolution 220-21. Elkins is now completing construction of a new, higher-capacity sewer pumping station that will be capable of sending more flow to Fayetteville than the current collection system can handle. Upgrades at Fayetteville's Mally Wagnon sewer pumping station located on Norman Murphy road will be necessary.

DISCUSSION:
Until such time that Fayetteville can upgrade Mally Wagon sewer lift station, Elkins has agreed to limit pumping flowrates to similar rates as the legacy lift station could pump, namely 660 gallons per minute peak flowrate. This amendment memorializes this restriction to allow Fayetteville to design and construct improvements at Mally Wagnon lift station.

BUDGET/STAFF IMPACT:
None.

ATTACHMENTS: SRF (#3) , Amendment No. 1 (#4), City of Elkins Amendment to Sewer Contract with Fayetteville (#5)

113 West Mountain Street
Fayetteville, AR 72701
(479) 575-8323

File #: 2025-376

CITY OF ELKINS (AMENDMENT NO. 1):

A RESOLUTION TO APPROVE AMENDMENT NO. 1 TO THE 15 YEAR CONTRACT FOR SANITARY SEWER SERVICE BETWEEN THE CITIES OF ELKINS AND FAYETTEVILLE

WHEREAS, Fayetteville has treated wastewater for the City of Elkins for over 40 years and the sewer service contract was extended on September 7, 2021 for another 15 years; and

WHEREAS, Elkins is now completing construction of a new, higher-capacity sewer pumping station that will be capable of sending more flow to Fayetteville than the current collection system can handle, making upgrades necessary at Fayetteville's Mally Wagnon sewer pumping station; and

WHEREAS, Elkins has agreed to limit pumping flowrates to similar rates as the legacy lift station until Fayetteville can upgrade the Mally Wagnon sewer lift station.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby authorizes Mayor Rawn to sign Amendment No. 1 to the contract for sanitary sewer service with the City of Elkins. A copy of Amendment No. 1 is attached to this Resolution and made a part hereof.

City of Fayetteville Staff Review Form

2025-376

Item ID

4/1/2025

City Council Meeting Date - Agenda Item Only
N/A for Non-Agenda Item

Tim Nyander	3/13/2025	WATER SEWER (720)
Submitted By	**Submitted Date**	**Division / Department**

Action Recommendation:

Staff recommends approval of Amendment No. 1 to the fifteen-year agreement between the City of Fayetteville and the City of Elkins to treat Elkins' wastewater in Fayetteville's Wastewater Treatment Facility and discharge treated effluent under Fayetteville's National Pollution Discharge Elimination System (NPDES) permit.

Budget Impact:

N/A	N/A
Account Number	Fund
N/A	N/A
Project Number	Project Title

Budgeted Item?	No	Total Amended Budget	$	-
		Expenses (Actual+Encum)	$	-
		Available Budget	$	-
Does item have a direct cost?	No	Item Cost	$	-
Is a Budget Adjustment attached?	No	Budget Adjustment	$	-
		Remaining Budget	$	-

V20221130

Purchase Order Number: _____ **Previous Ordinance or Resolution #** _____

Change Order Number: _____ **Approval Date:** _____

Original Contract Number: _____

Comments:

AMENDMENT TO CONTRACT FOR SANITARY SEWER SERVICE BETWEEN THE CITIES OF ELKINS, ARKANSAS AND FAYETTEVILLE, ARKANSAS

CONTRACT AMENDMENT NO. 1

This Contract Amendment No. 1 ("Amendment"), effective on the date last written below, shall amend the original contract (City of Fayetteville Resolution 220-21) between the City of Fayetteville, Arkansas, a municipal corporation, hereinafter referred to as ("Fayetteville") and the City of Elkins, Arkansas, a municipal corporation, hereinafter referred to as ("Elkins") dated September 7, 2021 referred to in the following paragraphs as the "Agreement."

This Amendment adds provisions for sanitary sewer service between Fayetteville and Elkins.

The Agreement is hereby modified to add the following:

WHEREAS, Elkins is upgrading wastewater collection facilities, including a new wastewater lift station, forcemain and gravity sewer. Elkins flows to Fayetteville shall not exceed 660 gallons per minute until capacity upgrades are implemented at Fayetteville's downstream Lift Station 19 located at 5716 E. Norman Murphy Road. Preliminary engineering has been completed for the upgrades to Lift Station 19 (larger pumps and associated electrical and backup power), and design is underway by Fayetteville's engineering consultant. The Elkins Lift Station will be programmed so that no more than one pump will run at one time and the pump speed will be set not to exceed 660 gallons per minute until downstream capacity at Lift Station 19 is upgraded. Construction is underway at the Elkins lift station to add temporary storage, initially at 100,000 gallons, for peak wet weather flows until downstram capacity at Lift Station 19 is upgraded. The temporary storage was required and was approved by the Arkansas Department of Health to allow continued growth in Elkins until Lift Station 19 is upgraded.

Terms and conditions of the Agreement not modified herein remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the Mayor and City Clerk of the City of Fayetteville, Arkansas by authority of Resolution adopted by the City Council of the City of Fayetteville and the Mayor and City Clerk of the City of Elkins, Arkansas by authority of Resolution adopted by the City Council of the City of Elkins, have hereunto set their hand and caused the corporation seal to be affixed and dated this ____day of _____, 2025.

CITY OF ELKINS, ARKANSAS

By: _____
Signature

Name: Troy Reed

Title: Mayor

Attest: _____
Teresa Graves, City Clerk

CITY OF FAYETTEVILLE, ARKANSAS

By: _____
Signature

Name: Molly Rawn

Title: Mayor

Attest: _____
Kara Paxton, City Clerk

Received From: Shea Fankhouser 03/21/2025 11:04AM

AMENDMENT TO CONTRACT FOR SANITARY SEWER SERVICE BETWEEN THE CITIES OF ELKINS, ARKANSAS AND FAYETTEVILLE, ARKANSAS

CONTRACT AMENDMENT NO. 1

This Contract Amendment No. 1 ("Amendment"), effective on the date last written below, shall amend the original contract (City of Fayetteville Resolution 220-21) between the City of Fayetteville, Arkansas, a municipal corporation, hereinafter referred to as ("Fayetteville") and the City of Elkins, Arkansas, a municipal corporation, hereinafter referred to as ("Elkins") dated September 7, 2021 referred to in the following paragraphs as the "Agreement."

This Amendment adds provisions for sanitary sewer service between Fayetteville and Elkins.

The Agreement is hereby modified to add the following:

WHEREAS, Elkins is upgrading wastewater collection facilities, including a new wastewater lift station, forcemain and gravity sewer. Elkins flows to Fayetteville shall not exceed 660 gallons per minute until capacity upgrades are implemented at Fayetteville's downstream Lift Station 19 located at 5716 E. Norman Murphy Road. Preliminary engineering has been completed for the upgrades to Lift Station 19 (larger pumps and associated electrical and backup power), and design is underway by Fayetteville's engineering consultant. The Elkins Lift Station will be programmed so that no more than one pump will run at one time and the pump speed will be set not to exceed 660 gallons per minute until downstream capacity at Lift Station 19 is upgraded. Construction is underway at the Elkins lift station to add temporary storage, initially at 100,000 gallons, for peak wet weather flows until downstram capacity at Lift Station 19 is upgraded. The temporary storage was required and was approved by the Arkansas Department of Health to allow continued growth in Elkins until Lift Station 19 is upgraded.

Terms and conditions of the Agreement not modified herein remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the Mayor and City Clerk of the City of Fayetteville, Arkansas by authority of Resolution adopted by the City Council of the City of Fayetteville and the Mayor and City Clerk of the City of Elkins, Arkansas by authority of Resolution adopted by the City Council of the City of Elkins, have hereunto set their hand and caused the corporation seal to be affixed and dated this 20th day of MARCH, 2025.

CITY OF ELKINS, ARKANSAS

By: _____
Signature

Name: Troy Reed

Title: Mayor

Attest: Teresa Graves
Teresa Graves, City Clerk

CITY OF FAYETTEVILLE, ARKANSAS

By: _____
Signature

Name: Molly Rawn

Title: Mayor

Attest: _____
Kara Paxton, City Clerk

CITY OF FAYETTEVILLE ARKANSAS

CITY COUNCIL MEMO
2025-307

MEETING OF MARCH 25, 2025

TO: Mayor Rawn and City Council

THRU:

FROM: Mike Reynolds, Police Chief

SUBJECT: **PROJECT SAFE NEIGHBORHOODS (GRANT AWARD):**

RECOMMENDATION:
Staff recommends acceptance of the non-matching Project Safe Neighborhoods (PSN) grant award and approval of a budget adjustment in the amount of $30,121.00.

BACKGROUND:
The Fayetteville Police Department (FPD) has been receiving grant funding and participating in the PSN program since 2019, with the Department of Finance & Administration, Office of Intergovernmental Services. The budget and application for this grant period were approved by staff on April 19, 2024. The FPD received notification on March 3, 2025, that grant funds had been awarded. The PSN grant is designed to create and foster safer neighborhoods through a sustained reduction of violent crime and works in partnership with the U.S. Attorney's Office for the Western District of Arkansas. The program's effectiveness relies on the collaboration of local, state, and federal law enforcement agencies working together with the communities they serve.

DISCUSSION:
The FPD proposes to utilize the grant award of $30,120.81 as follows: $25,795.00 for gun violence investigations and community response overtime, and $4,325.81 for the fringe benefits associated with the overtime allocations. The grant period for this award is from October 1, 2024 to September 30, 2025.

BUDGET/STAFF IMPACT:
The FPD proposes to utilize the grant award of $30,120.81 as follows: $25,795.00 for gun violence investigations and community response overtime, and $4,325.81 for the fringe benefits associated with the overtime allocations. The grant period for this award is from October 1, 2024 to September 30, 2025.

ATTACHMENTS: SRF (#3) , BA (#4), SRM (#5), PSN - Award (#6)

113 West Mountain Street
Fayetteville, AR 72701
(479) 575-8323

File #: 2025-307

PROJECT SAFE NEIGHBORHOODS (GRANT AWARD):

A RESOLUTION TO AUTHORIZE ACCEPTANCE OF A PROJECT SAFE NEIGHBORHOOD GRANT AWARD IN THE AMOUNT OF $30,121.00 FOR THE FAYETTEVILLE POLICE DEPARTMENT, AND TO APPROVE A BUDGET ADJUSTMENT

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby authorizes Mayor Rawn to accept the Fiscal Year 2025 Project Safe Neighborhood Grant award in the amount of $30,121.00 for the Fayetteville Police Department.

Section 2: That the City Council of the City of Fayetteville, Arkansas hereby approves a budget adjustment, a copy of which is attached to this Resolution.

City of Fayetteville Staff Review Form

2025-307

Item ID

4/1/2025

City Council Meeting Date - Agenda Item Only
N/A for Non-Agenda Item

Mike Reynolds	3/10/2025	POLICE (200)
Submitted By	**Submitted Date**	**Division / Department**

Action Recommendation:

Staff recommends acceptance of the non-matching Project Safe Neighborhoods (PSN) grant award for the Fayetteville Police Department and approval of a budget adjustment in the amount of $30,121.00.

Budget Impact:

1010.200.2920-various	General
Account Number	Fund
32210.2025	Police PSN 2025 Grant
Project Number	Project Title

Budgeted Item?	No	Total Amended Budget	$	-
		Expenses (Actual+Encum)	$	-
		Available Budget	$	-
Does item have a direct cost?	No	Item Cost	$	-
Is a Budget Adjustment attached?	Yes	Budget Adjustment	$	30,121.00
		Remaining Budget	$	30,121.00

V20221130

Purchase Order Number: _____ **Previous Ordinance or Resolution #** _____

Change Order Number: _____ **Approval Date:** _____

Original Contract Number: _____

Comments:

City of Fayetteville, Arkansas - Budget Adjustment (Agenda) *2 Errors*

Budget Year	Division /Org2	Adjustment Number
2025	POLICE (200)	
	Requestor: T Tannehill	

BUDGET ADJUSTMENT DESCRIPTION / JUSTIFICATION:

Establish a revenue and expense budget for tracking the FY2025 Police Project Safe Neighborhoods grant award in project accounting.

COUNCIL DATE: 4/1/2025

ITEM ID#: **2025-307**

Holly Black
3/10/2025 11:16 AM

Budget Division Date

TYPE: **D - (City Council)**

JOURNAL #:

GLDATE:

RESOLUTION/ORDINANCE

CHKD/POSTED: /

v.2025211

	Increase / (Decrease)		Project.Sub#			
Account Number	Expense	Revenue	Project	Sub.Detl	AT	Account Name
TOTAL	30,121	30,121				
1010.200.2920-4302.01	-	30,121	***32210***	***2025***	RE	State Grants - Operational
1010.200.2920-5120.00	30,121	-	***32210***	***2025***	EX	Personnel Other - Contra
	-	-				
	-	-				
	-	-				
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	-	-				

CITY OF
FAYETTEVILLE
ARKANSAS

CITY COUNCIL MEMO

MEETING OF APRIL 1, 2025

TO: Mayor and City Council

FROM: Mike Reynolds, Chief of Police

DATE: March 10, 2025

SUBJECT: **Project Safe Neighborhoods (PSN) Grant Award for the Fayetteville Police Department**

RECOMMENDATION:

Staff recommends acceptance of the non-matching Project Safe Neighborhoods (PSN) grant award and approval of a budget adjustment in the amount of $30,121.00.

BACKGROUND:

The Fayetteville Police Department (FPD) has been receiving grant funding and participating in the PSN program since 2019, with the Department of Finance & Administration, Office of Intergovernmental Services. The budget and application for this grant period were approved by staff on April 19, 2024. The FPD received notification on March 3, 2025, that grant funds had been awarded. The PSN grant is designed to create and foster safer neighborhoods through a sustained reduction of violent crime and works in partnership with the U.S. Attorney's Office for the Western District of Arkansas. The program's effectiveness relies on the collaboration of local, state, and federal law enforcement agencies working together with the communities they serve.

DISCUSSION:

The FPD proposes to utilize the grant award of $30,120.81 as follows: $25,795.00 for gun violence investigations and community response overtime, and $4,325.81 for the fringe benefits associated with the overtime allocations. The grant period for this award is from October 1, 2024 to September 30, 2025.

BUDGET/STAFF IMPACT:

There are no matching funds associated with this grant. A budget adjustment in the amount of $30,121 will be added to the 2025 operating budget. There is no impact on staffing.

Attachments:

Budget Adjustment
Project Safe Neighborhoods award documents

ARKANSAS DEPARTMENT OF FINANCE AND ADMINISTRATION

OFFICE OF INTERGOVERNMENTAL SERVICES
1515 West Seventh Street, Suite 404
P.O. Box 8031
Little Rock, Arkansas 72203-8031
Phone: (501) 682-1074
Fax: (501) 682-5206
https://www.dfa.arkansas.gov/intergovernmental-services

☐	JAG	☐	RSAT
X	PSN	☐	COAP/COSSAP

CATALOG OF DOMESTIC FEDERAL ASSISTANCE
CFDA Number: 16.609
Federal Award Number: 2020-GP-BX-0016

Federal Award Date: 10/01/2020

1. SUBGRANTEE NAME AND ADDRESS (Including Zip Code)
Molly Rawn, Mayor
Fayetteville Police Department
1800 N Stephen Carr Memorial Blvd
Fayetteville, AR 72704

2. FEDERAL IDENTIFICATION NUMBER/UEI:
71-6018462/ZGAZNS4HKFY3

3. MODIFICATION EFFECTIVE DATE:

4. MODIFICATION AMOUNT: $
FEDERAL AMOUNT: $
STATE AMOUNT: $
LOCAL MATCH: $

6. SUBGRANT NUMBER: **257331-20WL**

7. START DATE: October 1, 2024
END DATE: September 30, 2025

8. AWARD DATE: February 26, 2025

9. ACTION:
Initial X
Modification

10. AWARD AMOUNT: **$30,120.81**
FEDERAL AMOUNT: **$30,120.81**
STATE AMOUNT: **N/A**
LOCAL MATCH: **N/A**
No Indirect Rate Cost

5. PROJECT DESCRIPTION
PSN is a nationwide initiative that brings together federal, state, local, tribal, and territorial law enforcement officials, prosecutors, community-based partners, and other stakeholders to identify the most pressing violent crime problems in a community and develop comprehensive solutions to address them. PSN is coordinated by the U.S. Attorneys' Offices in the 94 federal judicial districts throughout the 50 states and U.S. Territories.

11. SPECIAL CONDITIONS (Check if applicable)
X THE ABOVE GRANT PROJECT IS APPROVED SUBJECT TO SUCH CONDITIONS OR LIMITATIONS ASSET FORTH IN IT'S APPLICATION AND ALL CERTIFICATIONS, ASSURANCES AND SPECIAL CONDITIONS PREVIOUSLY AGREED TO.

Statutory Authority:
34 U.S.C. §§60701-05

AGENCY APPROVAL		SUBGRANTEE APPROVAL	
12. TYPED NAME AND TITLE OF APPROVING IGS OFFICIAL Doris Smith, DFA Administrator Intergovernmental Services		15. TYPED NAME AND TITLE OF AUTHORIZED SUBGRANTEE OFFICIAL Molly Rawn, Mayor Fayetteville Police Department	
13. SIGNATURE OF APPROVING OFFICIAL	14. DATE:	16. SIGNATURE OF AUTHORIZED OFFICIAL	17. DATE:

APPROVED BUDGETS

AGENCY NAME:	SUBGRANT NO:		PROJECT PERIOD:			
Fayetteville Police Department	257331-20WL		October 1, 2024 - September 30, 2025			
	ORIGINAL_BUDGET			REVISION_1		
BUDGETED LINE ITEM	ORIGINAL BUDGET AMOUNT (PSN)		BUDGETED LINE ITEM	ORIGINAL BUDGET AMOUNT (PSN)		
SALARIES			SALARIES			
Overtime	25,795.00		Overtime			
MANDATED BENEFITS			MANDATED BENEFITS			
Medicare	374.02		Medicare			
EMPLOYER BENEFITS			EMPLOYER BENEFITS			
Retirement	3,951.79		Retirement			
TOTAL	$ 30,120.81	$ -	TOTAL	$ -	$ -	$ -

Category	PSN		Category	PSN
SALARIES	25,795.00		SALARIES	-
MANDATED BENEFITS	374.02		MANDATED BENEFITS	-
EMPLOYER BENEFITS	3,951.79		EMPLOYER BENEFITS	-
MAINTENANCE AND OPERATIONS	-		MAINTENANCE AND OPERATIONS	-
PROFESSIONAL SERVICES	-		PROFESSIONAL SERVICES	-
TRAVEL/ TRAINING	-		TRAVEL/ TRAINING	-
EQUIPMENT	-		EQUIPMENT	-
CAPITAL OUTLAY	-		CAPITAL OUTLAY	-
Total	$ 30,120.81		Total	$ -

Signature of Authorized Official/Date

Molly Rawn, Mayor

Signature of Fiscal Officer/Date

Wille Newman, Fiscal Officer

Category	PSN		TOTALS
SALARIES	(25,795.00)		$ (25,795.00)
MANDATED BENEFITS	(374.02)		$ (374.02)
EMPLOYER BENEFITS	(3,951.79)		$ (3,951.79)
MAINTENANCE AND OPERATIONS	-		$ -
PROFESSIONAL SERVICES	-		$ -
TRAVEL/ TRAINING	-		$ -
EQUIPMENT	-		$ -
CAPITAL OUTLAY	-		$ -
	$ (30,120.81)		$ (30,120.81)

STATE OF ARKANSAS
Department of Finance and Administration

Office of Intergovernmental Services
1515 West Seventh Street, Suite 400
Post Office Box 8031
Little Rock, Arkansas, 72203-8031
Phone: (501) 683-0927
Fax: (501) 682-5206
https://www.dfa.arkansas.gov/intergovernmental-services

Office of Intergovernmental Services
Bureau of Justice Assistance

Subgrant Organization:	Fayetteville Police Department	Subgrant No.	257331-20WL
Program Description:	**Project Safe Neighborhoods - Western District**		
Goals	**Objective**	**Completion Date**	**Measurement**
Goal 1: To mitigate gun violence within the targeted area.	Respond to calls and make arrests for crimes of violence involving firearms.	9/30/2025	Quarterly reporting of data related to gun violence.
Goal 2: To instill meaningful and proven anti-gang and anti-violence measures	Previously identified hotspots will be focused with the Community Oriented Policing (COP) Division's public service efforts.	9/30/2025	Quarterly reporting of data related to gang activity.
Goal 3: To increase federal prosecution rate of the most violent offenders and gang members in the community.	Continue to train patrol officers on evidence preservation and collection to improve and expand investigative efforts.	9/30/2025	Tracking of arrest/prosecution cases submitted quarterly.

AUTHORIZED OFFICIAL (AO) SIGNATURE
Molly Rawn, Mayor

DATE

BJA Bureau of Justice Assistance U.S. Department of Justice	**Project Safe Neighborhoods** **Western District**	**Federal Award:** 2020-GP-BX-0016 Award date: 10/01/2020

Special Award Conditions

1.

Applicability of Part 200 Uniform Requirements

The Uniform Administrative Requirements, Cost Principles, and Audit Requirements in 2 C.F.R. Part 200, as adopted and supplemented by DOJ in 2 C.F.R. Part 2800 (together, the "Part 200 Uniform Requirements") apply to this FY 2021 award from OJP.

The Part 200 Uniform Requirements were first adopted by DOJ on December 26, 2014. If this FY 2021 award supplements funds previously awarded by OJP under the same award number (e.g., funds awarded during or before December 2014), the Part 200 Uniform Requirements apply with respect to all funds under that award number (regardless of the award date, and regardless of whether derived from the initial award or a supplemental award) that are obligated on or after the acceptance date of this FY 2021 award.

For more information and resources on the Part 200 Uniform Requirements as they relate to OJP awards and subawards ("subgrants"), see the OJP website at https://ojp.gov/funding/Part200UniformRequirements.htm.

Record retention and access: Records pertinent to the award that the recipient (and any subrecipient ("subgrantee") at any tier) must retain -- typically for a period of 3 years from the date of submission of the final expenditure report (SF 425), unless a different retention period applies -- and to which the recipient (and any subrecipient ("subgrantee") at any tier) must provide access, include performance measurement information, in addition to the financial records, supporting documents, statistical records, and other pertinent records indicated at 2 C.F.R. 200.333.

In the event that an award-related question arises from documents or other materials prepared or distributed by OJP that may appear to conflict with, or differ in some way from, the provisions of the Part 200 Uniform Requirements, the recipient is to contact OJP promptly for clarification.

2.

Requirement to report actual or imminent breach of personally identifiable information (PII)

The recipient (and any "subrecipient" at any tier) must have written procedures in place to respond in the event of an actual or imminent "breach" (OMB M-17-12) if it (or a subrecipient) -- (1) creates, collects, uses, processes, stores, maintains, disseminates, discloses, or disposes of

"Personally Identifiable Information (PII)" (2 CFR 200.1) within the scope of an OJP grant-funded program or activity, or (2) uses or operates a "Federal information system" (OMB Circular A-130). The recipient's breach procedures must include a requirement to report actual or imminent breach of PII to an OJP Program Manager no later than 24 hours after an occurrence of an actual breach, or the detection of an imminent breach.

3.

Effect of failure to address audit issues

The recipient understands and agrees that the DOJ awarding agency (OJP or OVW, as appropriate) may withhold award funds, or may impose other related requirements, if (as determined by the DOJ awarding agency) the recipient does not satisfactorily and promptly address outstanding issues from audits required by the Part 200 Uniform Requirements (or by the terms of this award), or other outstanding issues that arise in connection with audits, investigations, or reviews of DOJ awards.

4.

Requirements of the award; remedies for non-compliance or for materially false statements

The conditions of this award are material requirements of the award. Compliance with any assurances or certifications submitted by or on behalf of the recipient that relate to conduct during the period of performance also is a material requirement of this award.

Limited Exceptions. In certain special circumstances, the U.S. Department of Justice ("DOJ") may determine that it will not enforce, or enforce only in part, one or more requirements otherwise applicable to the award. Any such exceptions regarding enforcement, including any such exceptions made during the period of performance, are (or will be during the period of performance) set out through the Office of Justice Programs ("OJP") webpage entitled "Legal Notices: Special circumstances as to particular award conditions" (www.ojp.gov/funding/Explore/LegalNotices-AwardReqts.htm) and incorporated by reference into the award.

By signing and accepting this award on behalf of the recipient, the authorized recipient official accepts all material requirements of the award, and specifically adopts, as if personally executed by the authorized recipient official, all assurances or certifications submitted by or on behalf of the recipient that relate to conduct during the period of performance.

Failure to comply with one or more award requirements -- whether a condition set out in full below, a condition incorporated by reference below, or an assurance or certification related to conduct during the award period -- may result in OJP taking appropriate action with respect to the recipient and the award. Among other things, the OJP may withhold award funds, disallow costs, or suspend or terminate the award. DOJ, including OJP, also may take other legal action as appropriate.

Any materially false, fictitious, or fraudulent statement to the federal government related to this award (or concealment or omission of a material fact) may be the subject of criminal prosecution

(including under 18 U.S.C. 1001 and/or 1621, and/or 34 U.S.C. 10271-10273), and also may lead to imposition of civil penalties and administrative remedies for false claims or otherwise (including under 31 U.S.C. 3729-3730 and 3801-3812).

Should any provision of a requirement of this award be held to be invalid or unenforceable by its terms, that provision shall first be applied with a limited construction so as to give it the maximum effect permitted by law. Should it be held, instead, that the provision is utterly invalid or -unenforceable, such provision shall be deemed severable from this award.

5.

Compliance with DOJ regulations pertaining to civil rights and nondiscrimination - 28 C.F.R. Part 38

The recipient, and any subrecipient ("subgrantee") at any tier, must comply with all applicable requirements of 28 C.F.R. Part 38 (as may be applicable from time to time), specifically including any applicable requirements regarding written notice to program beneficiaries and prospective program beneficiaries.

Currently, among other things, 28 C.F.R. Part 38 includes rules that prohibit specific forms of discrimination on the basis of religion, a religious belief, a refusal to hold a religious belief, or refusal to attend or participate in a religious practice. Part 38, currently, also sets out rules and requirements that pertain to recipient and subrecipient ("subgrantee") organizations that engage in or conduct explicitly religious activities, as well as rules and requirements that pertain to recipients and subrecipients that are faith-based or religious organizations.

The text of 28 C.F.R. Part 38 is available via the Electronic Code of Federal Regulations (currently accessible at https://www.ecfr.gov/cgi-bin/ECFR?page=browse), by browsing to Title 28-Judicial Administration, Chapter 1, Part 38, under e-CFR "current" data.

6.

Compliance with DOJ regulations pertaining to civil rights and nondiscrimination - 28 C.F.R. Part 42

The recipient, and any subrecipient ("subgrantee") at any tier, must comply with all applicable requirements of 28 C.F.R. Part 42, specifically including any applicable requirements in Subpart E of 28 C.F.R. Part 42 that relate to an equal employment opportunity program.

7.

Compliance with DOJ regulations pertaining to civil rights and nondiscrimination - 28 C.F.R. Part 54

The recipient, and any subrecipient ("subgrantee") at any tier, must comply with all applicable requirements of 28 C.F.R. Part 54, which relates to nondiscrimination on the basis of sex in certain "education programs."

8.

Compliance with 41 U.S.C. 4712 (including prohibitions on reprisal; notice to employees)

The recipient (and any subrecipient at any tier) must comply with, and is subject to, all applicable provisions of 41 U.S.C. 4712, including all applicable provisions that prohibit, under specified circumstances, discrimination against an employee as reprisal for the employee's disclosure of information related to gross mismanagement of a federal grant, a gross waste of federal funds, an abuse of authority relating to a federal grant, a substantial and specific danger to public health or safety, or a violation of law, rule, or regulation related to a federal grant.

The recipient also must inform its employees, in writing (and in the predominant native language of the workforce), of employee rights and remedies under 41 U.S.C. 4712.

Should a question arise as to the applicability of the provisions of 41 U.S.C. 4712 to this award, the recipient is to contact the DOJ awarding agency (OJP or OVW, as appropriate) for guidance.

9.

Compliance with applicable rules regarding approval, planning, and reporting of conferences, meetings, trainings, and other events

The recipient, and any subrecipient ("subgrantee") at any tier, must comply with all applicable laws, regulations, policies, and official DOJ guidance (including specific cost limits, prior approval and reporting requirements, where applicable) governing the use of federal funds for expenses related to conferences (as that term is defined by DOJ), including the provision of food and/or beverages at such conferences, and costs of attendance at such conferences.

Information on the pertinent DOJ definition of conferences and the rules applicable to this award appears in the DOJ Grants Financial Guide (currently, as section 3.10 of "Post-award Requirements" in the "DOJ Grants Financial Guide").

10.

Requirement for data on performance and effectiveness under the award

The recipient must collect and maintain data that measure the performance and effectiveness of work under this award. The data must be provided to OJP in the manner (including within the timeframes) specified by OJP in the program solicitation or other applicable written guidance. Data collection supports compliance with the Government Performance and Results Act (GPRA) and the GPRA Modernization Act of 2010, and other applicable laws.

11.

Determination of suitability to interact with participating minors

SCOPE. This condition applies to this award if it is indicated -- in the application for the award (as approved by DOJ)(or in the application for any subaward, at any tier), the DOJ funding announcement (solicitation), or an associated federal statute -- that a purpose of some or all of the activities to be carried out under the award (whether by the recipient, or a subrecipient at any tier) is to benefit a set of individuals under 18 years of age.

The recipient, and any subrecipient at any tier, must make determinations of suitability before certain individuals may interact with participating minors. This requirement applies regardless of an individual's employment status.

The details of this requirement are posted on the OJP web site at https://ojp.gov/funding/Explore/Interact-Minors.htm (Award condition: Determination of suitability required, in advance, for certain individuals who may interact with participating minors), and are incorporated by reference here.

12.

Compliance with DOJ Grants Financial Guide

References to the DOJ Grants Financial Guide are to the DOJ Grants Financial Guide as posted on the OJP website (currently, the "DOJ Grants Financial Guide" available at https://ojp.gov/financialguide/DOJ/index.htm), including any updated version that may be posted during the period of performance. The recipient agrees to comply with the DOJ Grants Financial Guide.

13.

Encouragement of policies to ban text messaging while driving

Pursuant to Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving," 74 Fed. Reg. 51225 (October 1, 2009), DOJ encourages recipients and subrecipients ("subgrantees") to adopt and enforce policies banning employees from text messaging while driving any vehicle during the course of performing work funded by this award, and to establish workplace safety policies and conduct education, awareness, and other outreach to decrease crashes caused by distracted drivers.

14.

Compliance with general appropriations-law restrictions on the use of federal funds (FY 2021)

The recipient, and any subrecipient ("subgrantee") at any tier, must comply with all applicable restrictions on the use of federal funds set out in federal appropriations statutes. Pertinent restrictions, including from various "general provisions" in the Consolidated Appropriations Act, 2021, are set out at https://ojp.gov/funding/Explore/FY21AppropriationsRestrictions.htm, and are incorporated by reference here.

Should a question arise as to whether a particular use of federal funds by a recipient (or a subrecipient) would or might fall within the scope of an appropriations-law restriction, the recipient is to contact OJP for guidance, and may not proceed without the express prior written approval of OJP.

15.

Potential imposition of additional requirements

The recipient agrees to comply with any additional requirements that may be imposed by the DOJ awarding agency (OJP or OVW, as appropriate) during the period of performance for this award, if the recipient is designated as "high-risk" for purposes of the DOJ high-risk grantee list.

16.

Employment eligibility verification for hiring under the award

1. **The recipient (and any subrecipient at any tier) must—**

A. Ensure that, as part of the hiring process for any position within the United States that is or will be funded (in whole or in part) with award funds, the recipient (or any subrecipient) properly verifies the employment eligibility of the individual who is being hired, consistent with the provisions of 8 U.S.C. 1324a(a)(1).

B. Notify all persons associated with the recipient (or any subrecipient) who are or will be involved in activities under this award of both—

(1) this award requirement for verification of employment eligibility, and

(2) the associated provisions in 8 U.S.C. 1324a(a)(1) that, generally speaking, make it unlawful, in the United States, to hire (or recruit for employment) certain aliens.

C. Provide training (to the extent necessary) to those persons required by this condition to be notified of the award requirement for employment eligibility verification and of the associated provisions of 8 U.S.C. 1324a(a)(1).

D. As part of the recordkeeping for the award (including pursuant to the Part 200 Uniform Requirements), maintain records of all employment eligibility verifications pertinent to compliance with this award condition in accordance with Form I-9 record retention requirements, as well as records of all pertinent notifications and trainings.

2. **Monitoring**

The recipient's monitoring responsibilities include monitoring of subrecipient compliance with this condition.

3. **Allowable costs**

To the extent that such costs are not reimbursed under any other federal program, award funds may be obligated for the reasonable, necessary, and allocable costs (if any) of actions designed to ensure compliance with this condition.

4. **Rules of construction**

A. Staff involved in the hiring process

For purposes of this condition, persons "who are or will be involved in activities under this award" specifically includes (without limitation) any and all recipient (or any subrecipient)

officials or other staff who are or will be involved in the hiring process with respect to a position that is or will be funded (in whole or in part) with award funds.

B. Employment eligibility confirmation with E-Verify

For purposes of satisfying the requirement of this condition regarding verification of employment eligibility, the recipient (or any subrecipient) may choose to participate in, and use, E-Verify (www.e-verify.gov), provided an appropriate person authorized to act on behalf of the recipient (or subrecipient) uses E-Verify (and follows the proper E-Verify procedures, including in the event of a "Tentative Nonconfirmation" or a "Final Nonconfirmation") to confirm employment eligibility for each hiring for a position in the United States that is or will be funded (in whole or in part) with award funds.

C. United States" specifically includes the District of Columbia, Puerto Rico, Guam, the Virgin Islands of the United States, and the Commonwealth of the Northern Mariana Islands.

D. Nothing in this condition shall be understood to authorize or require any recipient, any subrecipient at any tier, or any person or other entity, to violate any federal law, including any applicable civil rights or nondiscrimination law.

E. Nothing in this condition, including in paragraph 4.B., shall be understood to relieve any recipient, any subrecipient at any tier, or any person or other entity, of any obligation otherwise imposed by law, including 8 U.S.C. 1324a(a)(1).

Questions about E-Verify should be directed to DHS. For more information about E-Verify visit the E-Verify website (https://www.e-verify.gov/) or email E-Verify at E-Verify@dhs.gov. E-Verify employer agents can email E-Verify at E-VerifyEmployerAgent@dhs.gov.

Questions about the meaning or scope of this condition should be directed to OJP, before award acceptance.

17.

Restrictions and certifications regarding non-disclosure agreements and related matters

No recipient or subrecipient ("subgrantee") under this award, or entity that receives a procurement contract or subcontract with any funds under this award, may require any employee or contractor to sign an internal confidentiality agreement or statement that prohibits or otherwise restricts, or purports to prohibit or restrict, the reporting (in accordance with law) of waste, fraud, or abuse to an investigative or law enforcement representative of a federal department or agency authorized to receive such information.

The foregoing is not intended, and shall not be understood by the agency making this award, to contravene requirements applicable to Standard Form 312 (which relates to classified information), Form 4414 (which relates to sensitive compartmented information), or any other form issued by a federal department or agency governing the nondisclosure of classified information.

1. In accepting this award, the recipient—

a. represents that it neither requires nor has required internal confidentiality agreements or statements from employees or contractors that currently prohibit or otherwise currently restrict (or purport to prohibit or restrict) employees or contractors from reporting waste, fraud, or abuse as described above; and

b. certifies that, if it learns or is notified that it is or has been requiring its employees or contractors to execute agreements or statements that prohibit or otherwise restrict (or purport to prohibit or restrict), reporting of waste, fraud, or abuse as described above, it will immediately stop any further obligations of award funds, will provide prompt written notification to the federal agency making this award, and will resume (or permit resumption of) such obligations only if expressly authorized to do so by that agency.

2. If the recipient does or is authorized under this award to make subawards ("subgrants"), procurement contracts, or both--

a. it represents that—

(1) it has determined that no other entity that the recipient's application proposes may or will receive award funds (whether through a subaward ("subgrant"), procurement contract, or subcontract under a procurement contract) either requires or has required internal confidentiality agreements or statements from employees or contractors that currently prohibit or otherwise currently restrict (or purport to prohibit or restrict) employees or contractors from reporting waste, fraud, or abuse as described above; and

(2) it has made appropriate inquiry, or otherwise has an adequate factual basis, to support this representation; and

b. it certifies that, if it learns or is notified that any subrecipient, contractor, or subcontractor entity that receives funds under this award is or has been requiring its employees or contractors to execute agreements or statements that prohibit or otherwise restrict (or purport to prohibit or restrict), reporting of waste, fraud, or abuse as described above, it will immediately stop any further obligations of award funds to or by that entity, will provide prompt written notification to the federal agency making this award, and will resume (or permit resumption of) such obligations only if expressly authorized to do so by that agency.

18.

Reclassification of various statutory provisions to a new Title 34 of the United States Code

On September 1, 2017, various statutory provisions previously codified elsewhere in the U.S. Code were editorially reclassified (that is, moved and renumbered) to a new Title 34, entitled "Crime Control and Law Enforcement." The reclassification encompassed a number of statutory provisions pertinent to OJP awards (that is, OJP grants and cooperative agreements), including many provisions previously codified in Title 42 of the U.S. Code.

Effective as of September 1, 2017, any reference in this award document to a statutory provision that has been reclassified to the new Title 34 of the U.S. Code is to be read as a reference to that statutory provision as reclassified to Title 34. This rule of construction specifically includes

references set out in award conditions, references set out in material incorporated by reference through award conditions, and references set out in other award requirements.

19.

OJP Training Guiding Principles

Any training or training materials that the recipient -- or any subrecipient ("subgrantee") at any tier --develops or delivers with OJP award funds must adhere to the OJP Training Guiding Principles for Grantees and Subgrantees, available at https://ojp.gov/funding/Implement/TrainingPrinciplesForGrantees-Subgrantees.htm.

20.

All subawards ("subgrants") must have specific federal authorization

The recipient, and any subrecipient ("subgrantee") at any tier, must comply with all applicable requirements for authorization of any subaward. This condition applies to agreements that -- for purposes of federal grants administrative requirements -- OJP considers a "subaward" (and therefore does not consider a procurement "contract").

The details of the requirement for authorization of any subaward are posted on the OJP web site at https://ojp.gov/funding/Explore/SubawardAuthorization.htm (Award condition: All subawards ("subgrants") must have specific federal authorization), and are incorporated by reference here.

21.

Requirements related to System for Award Management and Universal Identifier Requirements

The recipient must comply with applicable requirements regarding the System for Award Management (SAM), currently accessible at https://www.sam.gov/. This includes applicable requirements regarding registration with SAM, as well as maintaining the currency of information in SAM.

The recipient also must comply with applicable restrictions on subawards ("subgrants") to first-tier subrecipients (first-tier "subgrantees"), including restrictions on subawards to entities that do not acquire and provide (to the recipient) the unique entity identifier required for SAM registration.

The details of the recipient's obligations related to SAM and to unique entity identifiers are posted on the OJP web site at https://ojp.gov/funding/Explore/SAM.htm (Award condition: System for Award Management (SAM) and Universal Identifier Requirements), and are incorporated by reference here.

This condition does not apply to an award to an individual who received the award as a natural person (i.e., unrelated to any business or non-profit organization that he or she may own or operate in his or her name).

22.

Restrictions on "lobbying"

In general, as a matter of federal law, federal funds awarded by OJP may not be used by the recipient, or any subrecipient ("subgrantee") at any tier, either directly or indirectly, to support or oppose the enactment, repeal, modification, or adoption of any law, regulation, or policy, at any level of government. See 18 U.S.C. 1913. (There may be exceptions if an applicable federal statute specifically authorizes certain activities that otherwise would be barred by law.)

Another federal law generally prohibits federal funds awarded by OJP from being used by the recipient, or any subrecipient at any tier, to pay any person to influence (or attempt to influence) a federal agency, a Member of Congress, or Congress (or an official or employee of any of them) with respect to the awarding of a federal grant or cooperative agreement, subgrant, contract, subcontract, or loan, or with respect to actions such as renewing, extending, or modifying any such award. See 31 U.S.C. 1352. Certain exceptions to this law apply, including an exception that applies to Indian tribes and tribal organizations.

Should any question arise as to whether a particular use of federal funds by a recipient (or subrecipient) would or might fall within the scope of these prohibitions, the recipient is to contact OJP for guidance, and may not proceed without the express prior written approval of OJP.

23.

Specific post-award approval required to use a noncompetitive approach in any procurement contract that would exceed $250,000

The recipient, and any subrecipient ("subgrantee") at any tier, must comply with all applicable requirements to obtain specific advance approval to use a noncompetitive approach in any procurement contract that would exceed the Simplified Acquisition Threshold (currently, $250,000). This condition applies to agreements that -- for purposes of federal grants administrative requirements -- OJP considers a procurement "contract" (and therefore does not consider a subaward).

The details of the requirement for advance approval to use a noncompetitive approach in a procurement contract under an OJP award are posted on the OJP web site at https://ojp.gov/funding/Explore/NoncompetitiveProcurement.htm (Award condition: Specific post-award approval required to use a noncompetitive approach in a procurement contract (if contract would exceed$250,000)), and are incorporated by reference here.

24.

Requirements pertaining to prohibited conduct related to trafficking in persons (including reporting requirements and OJP authority to terminate award)

The recipient, and any subrecipient ("subgrantee") at any tier, must comply with all applicable requirements (including requirements to report allegations) pertaining to prohibited conduct related to the trafficking of persons, whether on the part of recipients, subrecipients

("subgrantees"), or individuals defined (for purposes of this condition) as "employees" of the recipient or of any subrecipient.

The details of the recipient's obligations related to prohibited conduct related to trafficking in persons are posted on the OJP web site at https://ojp.gov/funding/Explore/ProhibitedConduct-Trafficking.htm (Award condition: Prohibited conduct by recipients and subrecipients related to trafficking in persons (including reporting requirements and OJP authority to terminate award)), and are incorporated by reference here.

25.

Requirement to report potentially duplicative funding

If the recipient currently has other active awards of federal funds, or if the recipient receives any other award of federal funds during the period of performance for this award, the recipient promptly must determine whether funds from any of those other federal awards have been, are being, or are to be used (in whole or in part) for one or more of the identical cost items for which funds are provided under this award. If so, the recipient must promptly notify the DOJ awarding agency (OJP or OVW, as appropriate) in writing of the potential duplication, and, if so requested by the DOJ awarding agency, must seek a budget-modification or change-of-project-scope Grant Award Modification (GAM) to eliminate any inappropriate duplication of funding.

26.

Reporting potential fraud, waste, and abuse, and similar misconduct

The recipient, and any subrecipients ("subgrantees") at any tier, must promptly refer to the DOJ Office of the Inspector General (OIG) any credible evidence that a principal, employee, agent, subrecipient, contractor, subcontractor, or other person has, in connection with funds under this award-- (1) submitted a claim that violates the False Claims Act; or (2) committed a criminal or civil violation of laws pertaining to fraud, conflict of interest, bribery, gratuity, or similar misconduct.

Potential fraud, waste, abuse, or misconduct involving or relating to funds under this award should be reported to the OIG by--(1) online submission accessible via the OIG webpage at https://oig.justice.gov/hotline/contact-grants.htm (select "Submit Report Online"); (2) mail directed to: U.S. Department of Justice, Office of the Inspector General, Investigations Division, ATTN: Grantee Reporting, 950 Pennsylvania Ave., NW, Washington, DC 20530; and/or (3) by facsimile directed to the DOJ OIG Investigations Division (Attn: Grantee Reporting) at (202) 616-9881 (fax).

Additional information is available from the DOJ OIG website at https://oig.justice.gov/hotline.

27.

The recipient agrees to submit to BJA for review and approval any curricula, training materials, proposed publications, reports, or any other written materials that will be published, including web-based materials and web site content, through funds from this grant at least thirty (30)

working days prior to the targeted dissemination date. Any written, visual, or audio publications, with the exception of press releases, whether published at the grantee's or government's expense, shall contain the following statements: "This project was supported by Grant No. <AWARD_NUMBER> awarded by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the Department of Justice's Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the Office for Victims of Crime, and the SMART Office. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice." The current edition of the DOJ Grants Financial Guide provides guidance on allowable printing and publication activities.

28.

The recipient agrees to cooperate with any assessments, national evaluation efforts, or information or data collection requests, including, but not limited to, the provision of any information required for the assessment or evaluation of any activities within this project.

29.

Verification and updating of recipient contact information

The recipient must verify its Grant Award Administrator, Financial Manager, and Authorized Representative contact information in JustGrants, including telephone number and e-mail address. If any information is incorrect or has changed, the award recipient's Entity Administrator must make changes to contact information through DIAMD. Instructions on how to update contact information in JustGrants can be found at https://justicegrants.usdoj.gov/training/training-entity-management.

30.

Recipient understands and agrees that it must submit quarterly performance metrics reports through BJA's Performance Measurement Tool (PMT) website (https://bjapmt.ojp.gov/). For more detailed information on reporting and other requirements, refer to BJA's website. Failure to submit required reports by established deadlines may result in the freezing of grant funds and High Risk designation.

31.

Required attendance at BJA-sponsored events

The recipient (and its subrecipients at any tier) must participate in BJA-sponsored training events, technical assistance events, or conferences held by BJA or its designees, upon BJA's request.

32.

The recipient agrees to comply with OJP grant monitoring guidelines, protocols, and procedures, and to cooperate with BJA and OCFO on all grant monitoring requests, including requests

related to desk reviews, enhanced programmatic desk reviews, and/or site visits. The recipient agrees to provide to BJA and OCFO all documentation necessary to complete monitoring tasks, including documentation related to any subawards made under this award. Further, the recipient agrees to abide by reasonable deadlines set by BJA and OCFO for providing the requested documents. Failure to cooperate with BJA's/OCFO's grant monitoring activities may result in sanctions affecting the recipient's DOJ awards, including, but not limited to: withholdings and/or other restrictions on the recipient's access to grant funds; referral to the Office of the Inspector General for audit review; designation of the recipient as a DOJ High Risk grantee; or termination of an award(s).

33.

The award recipient agrees to participate in a data collection process measuring program outputs and outcomes. The data elements for this process will be outlined by the Office of Justice Programs.

34.

The award recipient agrees to comply with the requirements of 28 CFR Part 46 and all other Department of Justice/Office of Justice Programs policies and procedures regarding the protection of human research subjects, including informed consent procedures and obtainment of Institutional Review Board (IRB) approval, if appropriate.

35.

Confidentiality of data

The recipient (and any subrecipient at any tier) must comply with all confidentiality requirements of 34 U.S.C. 10231 and 28 C.F.R. Part 22 that are applicable to collection, use, and revelation of data or information. The recipient further agrees, as a condition of award approval, to submit a Privacy Certificate that is in accord with requirements of 28 C.F.R. Part 22 and, in particular, 28 C.F.R. 22.23.

36.

Copyright; Data rights

The recipient acknowledges that OJP reserves a royalty-free, non-exclusive, and irrevocable license to reproduce, publish, or otherwise use, and authorize others to use (in whole or in part, including in connection with derivative works), for Federal purposes: (1) any work subject to copyright developed under an award or subaward (at any tier); and (2) any rights of copyright to which a recipient or subrecipient (at any tier) purchases ownership with Federal support.

The recipient acknowledges that OJP has the right to (1) obtain, reproduce, publish, or otherwise use the data first produced under any such award or subaward; and (2) authorize others to receive, reproduce, publish, or otherwise use such data for Federal purposes. "Data" includes data as defined in Federal Acquisition Regulation (FAR) provision 52.227-14 (Rights in Data - General).

It is the responsibility of the recipient (and of each subrecipient (at any tier), if applicable) to ensure that the provisions of this condition are included in any subaward (at any tier) under this award.

The recipient has the responsibility to obtain from subrecipients, contractors, and subcontractors (if any) all rights and data necessary to fulfill the recipient's obligations to the Government under this award. If a proposed subrecipient, contractor, or subcontractor refuses to accept terms affording the Government such rights, the recipient shall promptly bring such refusal to the attention of the OJP program manager for the award and not proceed with the agreement in question without further authorization from the OJP program office.

37.

Any Web site that is funded in whole or in part under this award must include the following statement on the home page, on all major entry pages (i.e., pages (exclusive of documents) whose primary purpose is to navigate the user to interior content), and on any pages from which a visitor may access or use a Web-based service, including any pages that provide results or outputs from the service: "This Web site is funded in whole or in part through a grant from the Bureau of Justice Assistance, Office of Justice Programs, U.S. Department of Justice. Neither the U.S. Department of Justice nor any of its components operate, control, are responsible for, or necessarily endorse, this Web site (including, without limitation, its content, technical infrastructure, and policies, and any services or tools provided)." The full text of the foregoing statement must be clearly visible on the home page. On other pages, the statement may be included through a link, entitled "Notice of Federal Funding and Federal Disclaimer," to the full text of the statement.

38.

Applicants must certify that Limited English Proficiency persons have meaningful access to the services under this program(s). National origin discrimination includes discrimination on the basis of limited English proficiency (LEP). To ensure compliance with Title VI and the Safe Streets Act, recipients are required to take reasonable steps to ensure that LEP persons have meaningful access to their programs. Meaningful access may entail providing language assistance services, including oral and written translation when necessary. The U.S. Department of Justice has issued guidance for grantees to help them comply with Title VI requirements. The guidance document can be accessed on the Internet at www.lep.gov.

39.

Justification of consultant rate

Approval of this award does not indicate approval of any consultant rate in excess of $650 per day. A detailed justification must be submitted to and approved by the OJP program office prior to obligation or expenditure of such funds.

40.

The recipient agrees to coordinate the project with the U.S. Attorney and Project Safe Neighborhoods Task Force for the district covered by the award. The recipient also is encouraged to coordinate with other community justice initiatives, and other ongoing, local gun prosecution and law enforcement strategies.

41.

The recipient agrees to ensure that 30 percent of PSN funding is used to support gang task forces in the United States regions experiencing a significant or increased presence of criminal or transnational organizations engaging in high levels of violent crime, firearms offenses, human trafficking, and drug trafficking.

42.

The recipient agrees to submit to DOJ for review and approval, any proposal or plan for Project Safe Neighborhoods media-related outreach. DOJ approval must be received prior to any obligation or expenditure of grant funds related to the development of media-related outreach projects.

43.

PSN Fiscal Agent Definition

References in this award document to "recipient" and "fiscal agent" both refer equally to the entity or organization receiving this award directly.

ARKANSAS DEPARTMENT OF FINANCE AND ADMINISTRATION
OFFICE OF INTERGOVERNMENTAL SERVICES

REQUEST TO DESIGNATE AN ACTING AUTHORIZED OFFICIAL

SUBGRANT ORGANIZATION	Fayetteville Police Department			
AUTHORIZED OFFICIAL (PRINT NAME)	Molly Rawn, Mayor			
SUBGRANT NUMBER	257331-20WL	**SUBGRANT PERIOD:**	**FROM** 10/1/2024	**TO** 9/30/2025

As the highest-ranking official of the above named organization's governing body, I hereby request the Office of Intergovernmental Services, to recognize the individual listed below as authorized to act on my behalf in matters regarding the above-referenced subgrant and project period.

I will ensure that I am kept appropriately apprised of project performance, expenditures and other areas of administrative responsibility through this individual. I understand and accept that my designation of authority will in no way release this organization from any liability.

This authority specifically allows my designee to execute budget documents and reimbursement requests, and to speak to IGS staff regarding matters related to the grant.

AUTHORIZED OFFICIAL SIGNATURE **DATE**

Molly Rawn, Mayor

- ☐ Board President
- ☐ County Judge
- ☒ Mayor
- ☐ Elected Prosecutor
- ☐ Other Authorized Official

PROPOSED ACTING AUTHORIZED OFFICIAL			
PRINT NAME/TITLE	Willie Newman, Support Services Manager		
TELEPHONE NUMBER	479-587-3581	**E-MAIL**	wnewman@fayetteville-ar.gov

Having read the above referenced subgrant and all attachments, I certify that I will perform on behalf of this organization's authorized official, I am prepared to oversee all matters related to the subgrant in accordance with all state and federal laws and regulations.

Willie Newman DATE 3/5/2025

ACTING AUTHORIZED OFFICIAL SIGNATURE

Willie Newman, Support Services Manager

CITY OF FAYETTEVILLE ARKANSAS

CITY COUNCIL MEMO
2025-231

MEETING OF MARCH 25, 2025

TO: Mayor Rawn and City Council

THRU:

FROM: Council Member Sarah Moore

SUBJECT: **TRUTH IN LEASING (ORDINANCE):**

RECOMMENDATION:
Council Member Moore is sponsoring the Truth in Leasing Ordinance that would require the disclosure of fees and costs associated with residential leases.

BACKGROUND:

DISCUSSION:

BUDGET/STAFF IMPACT:

ATTACHMENTS: Agenda Packet - Truth in Leasing Ordinance - Council Member Moore (#3), Disclosure of Costs (#4), Initial Ordinance Proposed (#5), City Attorney Memo - Proposed Amendment of Disclosure of Rental Fees and Costs (#6), FYAC - Disclosure of Rental Fees Letter of Support (#7)

113 West Mountain Street
Fayetteville, AR 72701
(479) 575-8323

File #: 2025-231

TRUTH IN LEASING (ORDINANCE):

AN ORDINANCE TO ENACT § 120.03 DISCLOSURE OF RENTAL FEES AND COSTS FOR LEASED RESIDENTIAL PROPERTIES IN THE CITY OF FAYETTEVILLE

WHEREAS, potential tenants often make housing decisions based on advertised rent prices but may not be fully aware of additional fees and costs that could significantly affect their ability to afford and maintain rental housing; and

WHEREAS, clear and accurate disclosure of all fees and costs associated with rental properties allows prospective tenants to make informed, well-considered decisions; and

WHEREAS, providing a clear breakdown of costs ensures that tenants are better equipped to budget effectively and maintain housing stability; and

WHEREAS, by requiring the disclosure of all rental fees and costs before a landlord requires any payment for a rental application review or background checks should prevent a prospective tenant from wasting money on an application fee in order to rent housing that the tenant cannot afford.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby enacts § 120.03 **Disclosure of Rental Fees and Costs** as follows:

"120.03 Disclosure of Residential Rental Fees and Costs

(A) *Required Disclosures*. Landlords or property owners of residential properties shall include a clear and comprehensive disclosure of all fees and costs that are likely be charged to the tenant by the landlord or property owner prior to any required payment for rental application review or background check or prior to furnishing the lease if the landlord has not earlier required payment for rental application review or background checks. This includes, but is not limited to:

1. Application and Background Check Fees: Fees landlords require to process rental applications or perform background checks, if any. Explanation whether rental application fee is for the housing unit or assessed against all adult tenants is required.
2. Rent: The base monthly rent amount.

3. Security Deposit: The amount required as a security deposit.
4. Maintenance Fees: Costs for regular monthly or periodic maintenance that may be charged to the tenant.
5. Utility Costs: Charges for utilities such as water, electricity, gas, internet, or trash collection the tenant pays to the landlord. This does not include costs associated with utilities in the name of the tenant.
6. Pet Fees: Any fees, costs, or deposits associated with keeping pets on the property.
7. Parking Fees: Charges for parking spaces or permits, if applicable.
8. Late Fees: The fees imposed for late rent payments including any grace periods, charges schedules, or escalating fee policies.
9. Administrative, Leasing, or Miscellaneous Fees: Any other fees imposed on a tenant related to the administration of the lease or for other purposes not listed above.

(B) *Clear and Prominent Disclosure of All Rental Costs are Required*.

1. All fees and costs must be disclosed clearly and in a manner that is easily accessible, visible, and understandable to potential tenants. Fees must be itemized and presented separately from the base rent amount and shall be accompanied by a description of the service(s) associated with each fee.
2. In online listings, this disclosure shall be presented on the same page as the listing details. Landlords and rental management companies shall not be responsible for electronic media outside of their control.
3. In print advertisements, this disclosure should be included in the body of the advertisement or in a clearly visible section.
4. If there is a leasing office onsite, this information shall be displayed along with any required business licenses or permits.
5. A copy of the list shall be attached to all paper rental applications.
6. In any lease agreement or contract, this disclosure shall be included in a separate section within the body of the contract or attached as an exhibit or appendix to the contract.

Section 2: That the City Council of the City of Fayetteville, Arkansas hereby determines that this ordinance will not go into effect until three months after its passage and approval to provide sufficient time for all effected landlords and rental management companies to be ready to comply with the disclosure requirements.

CivicClerk No.: 2025-231

AGENDA REQUEST FORM

FOR: Council Meeting of March 4, 2025

FROM: Council Member Sarah Moore

ORDINANCE OR RESOLUTION TITLE AND SUBJECT:

AN ORDINANCE TO ENACT § 120.03 **TRUTH IN LEASING; DISCLOSURE OF RENTAL FEES AND COSTS** FOR LEASED RESIDENTIAL PROPERTIES IN THE CITY OF FAYETTEVILLE

APPROVED FOR AGENDA:

Approved by email _____ 2/18/2025

Sarah Moore Date
City Council Member

Blake Pennington _____ 2/18/2025

Blake Pennington Date
Senior Assistant City Attorney
Approved as to form

AN ORDINANCE TO ENACT § 120.03 **TRUTH IN LEASING; DISCLOSURE OF RENTAL FEES AND COSTS** FOR LEASED RESIDENTIAL PROPERTIES IN THE CITY OF FAYETTEVILLE

WHEREAS, potential tenants often make housing decisions based on advertised rent prices but may not be fully aware of additional, often hidden, fees and costs that could significantly affect their ability to afford and maintain rental housing and can lead to confusion, financial hardship, and the potential for deceptive practices that harm Fayetteville residents; and

WHEREAS, clear and accurate disclosure of all fees and costs associated with rental properties allows prospective tenants to make informed, well-considered decisions and prevents vulnerable tenants, including low-income individuals and families, from being burdened by unexpected financial obligations; and

WHEREAS, providing a clear breakdown of costs ensures that tenants are better equipped to budget effectively and maintain housing stability, which can lead to lower tenant turnover rates; and

WHEREAS, by requiring the disclosure of all rental fees and costs in advertisements and listings, the city will support fair housing practices and enhance consumer protection for current and future tenants.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby enacts § 120.03 – **Truth in Leasing; Disclosure of Rental Fees and Costs** as follows:

"120.03 - Truth in Leasing; Disclosure of Residential Rental Fees and Costs

(A) *Required Disclosures*. Landlords or property owners of residential properties shall include a clear and comprehensive disclosure of all fees and costs that are or could be charged to the tenant by the landlord or property owner in any contract, advertisement or listing, whether physical or digital. This includes, but is not limited to:

(a) Rent: The base monthly rent amount.
(b) Security Deposit: The amount required as a security deposit.
(c) Application and Background Check Fees: Fees required to process rental applications or perform background checks.
(d) Maintenance Fees: Costs for maintenance or repairs that may be charged to the tenant.
(e) Utility Costs: Charges for utilities such as water, electricity, gas, internet, or trash collection the tenant pays to the landlord. This does not include costs associated with utilities in the name of the tenant.
(f) Pet Fees: Any fees, costs, or deposits associated with keeping pets on the property.
(g) Parking Fees: Charges for parking spaces or permits, if applicable.

(h) Late Fees: The fees imposed for late rent payments including any grace periods, charges schedules, or escalating fee policies.
(i) Administrative, Leasing, or Miscellaneous Fees: Any other fees imposed on a tenant related to the administration of the lease or for other purposes not listed above.

(B) *Clear and Prominent Disclosure Required*. All fees and costs must be disclosed clearly and in a manner that is easily accessible, visible, and understandable to potential tenants. Fees must be itemized and presented separately from the base rent amount and shall be accompanied by a description of the service(s) associated with each fee. In online listings, this disclosure shall be presented on the same page as the listing details, and in print advertisements, it should be included in the body of the advertisement or in a clearly visible section. If there is a leasing office onsite, this information shall be displayed along with any required business licenses or permits. A copy of the list shall be attached to all paper applications. In any lease agreement or contract, this disclosure shall be included in a separate section within the body of the contract or attached as an exhibit or appendix to the contract.

Received by City Council from Council Member Moore
before 03/04/2025 City Council Meeting Started

Disclosure of Rental Fees & Costs Ordinance

For Leased Residential Properties in the City of Fayetteville

March 4, 2025

The Concern Expressed in a Year of Fayetteville Community Housing Conversations

- Burdensome cost to renters each time that they had to move, often yearly given increasing rents. Working with limited means, trying to limit amount spent out to possible rentals. During discussions the following were identified:
    - Application and background check fees were charged at a number of properties adding up to $100s up to $1,000 out of pocket at each move.
    - Applicants applied to rentals not always knowing all of the ongoing costs and spending application & background fees and possibly admin fees before fully understanding monthly or any other possible costs which could mean they could not afford the rental ongoing
    - Unknown often what the criteria are to be considered and approved. This information may or not be able to inquired and received of this information prior to spending funds and attempting to rent the property.

What is out there now- Rental Listings

Fayetteville

MOVE IN TODAY | RESIDENTS

theVUE ON STADIUM DRIVE

FAQS APPLY

not guarantee a space.

Next, we will complete a background screening and send you the Housing Agreement to reserve your spot when mutually signed. The Administrative Fee, if already paid, will be refunded if a Housing Agreement is not approved.

DEPOSITS AND FEES

Application Fee (one-time)	$40
Administrative Fee (annual)	$200
Security Deposit (one-time)	~~$500~~ WAIVED

Ready to apply? Start your Application >

Rogers

select units

Utilities one pay 30%

Water, Sewer, Trash (with us)

Electric (Swepco)

Monthly Charges

Valet Trash- $36

Cable/Internet- $63

CAM (Common Area Maintenance) Fee-

1BR: $32

2BR: $35

3BR: $37

131 set fees

Waiver Renters Insurance- $14 $14

rs' insurance, a letter

apply here

com

One Bedroom/One Bath
785 sqft

Two Bedroom/One Bath
810 sqft ASAP

Three Bedroom/Two Bath
1183 sqft

Application Fee	$75.00 per applicant (18 years old and over) Non-refundable.
Admin Fee	$250.00 due with application. (Used as holding fee) Non-refundable
Security Deposit	$300.00 up to 1 months rent based on application.
Pet Fee	$300.00 fee per pet Max of two pets per unit. Non-refunda Breed & Weight restrictions apply.
Pet Rent	$32.00 monthly charge (per pet)
Lease Term	12 months. Depending on availability

*Rates and discounts are subject to change - Restrictions a

ire proof of income of a month worth of paystubs and if you choose to ge from a certified 100,000 Personal Liability Renter's Insur

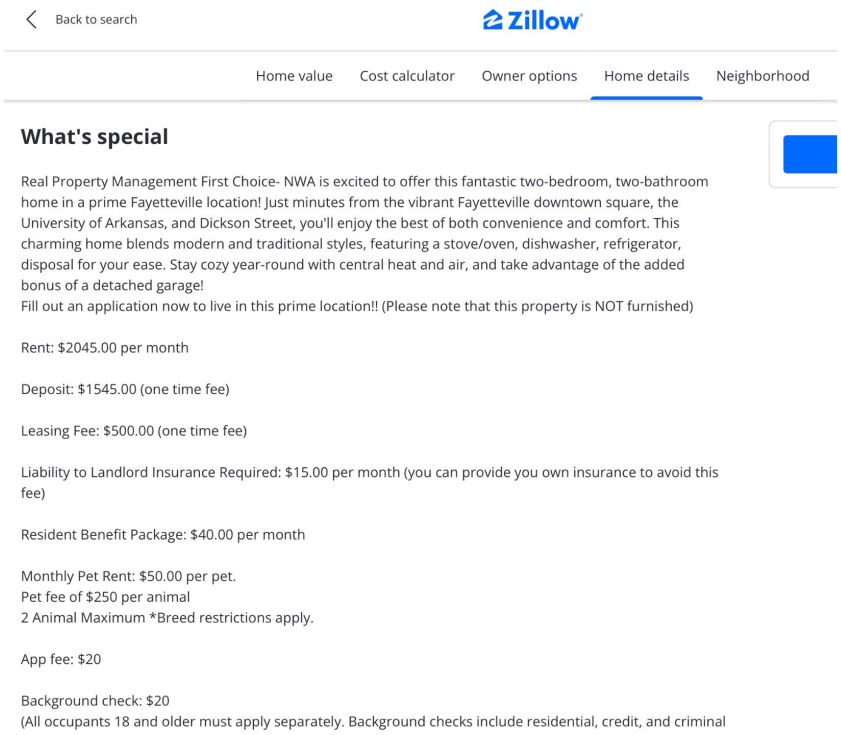
1603 W Walnut St • Rogers, AR 72756 • 47

• friscoonwalnut@amcllc.net | www.friscoapartme

*Online tool search results utilized by Fayetteville residents, Councilmember Moore, & City Attorney Office

CITY OF FAYETTEVILLE ARKANSAS

What is out there now- Rental Listings



Back to search

Zillow

Home value | Cost calculator | Owner options | Home details | Neighborhood

What's special

Real Property Management First Choice- NWA is excited to offer this fantastic two-bedroom, two-bathroom home in a prime Fayetteville location! Just minutes from the vibrant Fayetteville downtown square, the University of Arkansas, and Dickson Street, you'll enjoy the best of both convenience and comfort. This charming home blends modern and traditional styles, featuring a stove/oven, dishwasher, refrigerator, disposal for your ease. Stay cozy year-round with central heat and air, and take advantage of the added bonus of a detached garage!
Fill out an application now to live in this prime location!! (Please note that this property is NOT furnished)

Rent: $2045.00 per month

Deposit: $1545.00 (one time fee)

Leasing Fee: $500.00 (one time fee)

Liability to Landlord Insurance Required: $15.00 per month (you can provide you own insurance to avoid this fee)

Resident Benefit Package: $40.00 per month

Monthly Pet Rent: $50.00 per pet.
Pet fee of $250 per animal
2 Animal Maximum *Breed restrictions apply.

App fee: $20

Background check: $20
(All occupants 18 and older must apply separately. Background checks include residential, credit, and criminal history. Income requirement of 3 times the amount of rent. Application fees are non-refundable.)
(Each future occupant, 18 or older, must submit individual applications. Background checks include residential, credit, and criminal history. Income requirement is 3 times the amount of rent. Applications are available online via our website. Application fees are non-refundable. RPM does not accept payment in the form of cash or any online payment platform not directly linked to an RPM First Choice website and will never ask for payment via those platforms.)

ADDITIONAL INFO/FEES:
Resident Benefit Package: $40.00 fee includes utility concierge service, on-time rent payment credit reporting, late pay forgiveness, home buyers assistance, & more!

Insurance Requirement: Liability to Landlord Insurance in the amount of $100,000 is mandatory. You will be charged $15.00 per month. If you provide your own policy you will not be charged this fee.

Pet Screening: RPM First Choice uses a platform called Pet Screening to complete the screening and approval process for any pets that will be living on the property. Individuals without pets must complete the online affidavit, while pet/animal owners should gather current vaccination records, veterinarian information and snapshots of their pet/animal. You will find the link to complete your online profile in the application process. Household pets will be charged a fee of $50 for the first pet, $35 for the additional pet which will not only complete the screening process, but also create a digital passport for your animal for your personal use. (THIS IS NOT THE MONTHLY PET FEE - THESE FEES ARE STRICTLY FOR YOUR PETS SCREENING & APPROVAL PROCESS - CALL THE OFFICE FOR INITIAL AND MONTHLY PET FEES)

Hide

Fayetteville

*Online tool search results utilized by Fayetteville residents, Councilmember Moore, & City Attorney Office

CITY OF FAYETTEVILLE ARKANSAS

What is out there now- Rental Listings

Springdale

Wobbe Lane Apartments

(479) 717-2338

Before You Begin:

Please be prepared to pay the application fee as outlined in the property listing. In addition to this rental application, you will also be required to provide a copy of a valid form of identification and proof of income.

To complete this rental application, you must be prepared to provide 3 years of residential history as well as contact information for your rental references. You will also be asked to provide information on your monthly income, and please note that most properties require that applicant combined gross income is at least three (3) times the monthly rent amount.

Each resident over the age of 18 must submit a separate rental application.

Application Fee: $35.00

You are applying to rent:

580 E Randall Wobbe Ln
17-202
Springdale, AR 72764

PAYMENT OPTIONS

The Following Fees will be incurred for those meeting these specifications:

Primary Applicants/Renters - $400 Deposit, $30 Application Fee, $15 Online Payment Processing Fee

** *Only the $400 Deposit is refundable. Application and processing fees are non-refundable.*

Secondary Applicants/Renters - $30 Application Fee, $5 Online Payment Processing Fee

** *All Secondary Applicant/Renter fees are non-refundable.*

Guarantors - $30 Application Fee, $5 Online Payment Processing Fee

** *All Guarantor fees are non-refundable.*

Any refund of the $400 security deposit will be issued via check the first Friday after a 10 day business period and after the funds have cleared Engage Management's bank account.

Fayetteville

HILL PLACE

Apply Online

Create Account | Login

Create an Account to Begin

To start your application, create an account. We will be able to save your progress and enable you to come back anytime to check on the status of your application.

For any questions, please call (501) 404-9997.

Legal First Name *

Last Name *

Questions? *We're here for you.*

Leverett Garden Apartments

STEP 1 | 2 | 3 | 4

CREATE ACCOUNT

Create a new account. Already have an account? Sign in

First name*

Last name*

Email*

Phone*

How did you hear about us?

Please select an option below

Are you working with a leasing agent?

*Online tool search results utilized by Fayetteville residents, Councilmember Moore, & City Attorney Office

CITY OF FAYETTEVILLE ARKANSAS

What type of Fees or Costs are Being Seen

In Arkansas

- Utility fees
- Valet Trash
- Cable/Internet
- Maintenance Fee
- Waiver of Renters Insurance
- Admin Fee
- Leasing Fee
- Pet Fee
- Pet Rent
- Pet Screening
- Online Payment Processing Fee
- Guarantor Application Fee
- Resident Benefit Package

Nationally

- Identified through 2023 Federal Committee reviewing "junk fees", over 20 seen across country
- From NPR article (Dec 23 poll)
  - "I think Americans also feel they're not getting a fair price anymore. Everywhere they turn, they're being gouged, overcharged, companies are skimming, just adding a little extra. In some cases, companies are taking away, charging them the same price but offering them a little less product," Owens said.
  - Polling shows both Democrats and Republicans support tackling junk fees, and a December poll from the left-leaning Data for Progress found that 72% of Republicans surveyed support the Junk Fee Prevention Act, a bill that would limit excessive and unnecessary fees, including many that the Biden administration has tried to tackle, like concert and airline fees.

*Federal junk fees details from this source:
https://www.npr.org/2024/03/06/1235955054/biden-junk-fees-state-of-the-union

Goal of Disclosure of Rental Fees & Cost Ordinance

For Renters

- Reduce out of pocket costs when applying for possible rentals given the expression from Fayetteville community of overly burdensome nature of these fees. In discussion leading up to the CAP ordinance, there were many comments made to "just ask" the properties for these costs up front. This ordinance is aimed to give greater clarity of all in and total costs for a rental BEFORE a family places money towards an application/background check fee.

For Property Owners/Manager

- Create as easy a disclosure process as possible while giving consumers additional information with the overall goal that the relationship between both parties will be on stronger ground with full understanding of finances needed to be in positive standing at a rental long term.

What Ordinance Provides

“120.03 Disclosure of Residential Rental Fees and Costs

(A) *Required Disclosures*. Landlords or property owners of residential properties shall include a clear and comprehensive disclosure of all fees and costs that are likely be charged to the tenant by the landlord or property owner prior to any required payment for rental application review or background check or prior to furnishing the lease if the landlord has not earlier required payment for rental application review or background checks. This includes, but is not limited to:

1. Application and Background Check Fees: Fees landlords require to process rental applications or perform background checks, if any. Explanation whether rental application fee is for the housing unit or assessed against all adult tenants is required.
2. Rent: The base monthly rent amount.
3. Security Deposit: The amount required as a security deposit.
4. Maintenance Fees: Costs for regular monthly or periodic maintenance that may be charged to the tenant.
5. Utility Costs: Charges for utilities such as water, electricity, gas, internet, or trash collection the tenant pays to the landlord. This does not include costs associated with utilities in the name of the tenant.
6. Pet Fees: Any fees, costs, or deposits associated with keeping pets on the property.
7. Parking Fees: Charges for parking spaces or permits, if applicable.
8. Late Fees: The fees imposed for late rent payments including any grace periods, charges schedules, or escalating fee policies.
9. Administrative, Leasing, or Miscellaneous Fees: Any other fees imposed on a tenant related to the administration of the lease or for other purposes not listed above.

(A) *Clear and Prominent Disclosure of All Rental Costs are Required*.

1. All fees and costs must be disclosed clearly and in a manner that is easily accessible, visible, and understandable to potential tenants. Fees must be itemized and presented separately from the base rent amount and shall be accompanied by a description of the service(s) associated with each fee.
2. In online listings, this disclosure shall be presented on the same page as the listing details.
3. In print advertisements, this disclosure should be included in the body of the advertisement or in a clearly visible section.
4. If there is a leasing office onsite, this information shall be displayed along with any required business licenses or permits.
5. A copy of the list shall be attached to all paper rental applications.
6. In any lease agreement or contract, this disclosure shall be included in a separate section within the body of the contract or attached as an exhibit or appendix to the contract.

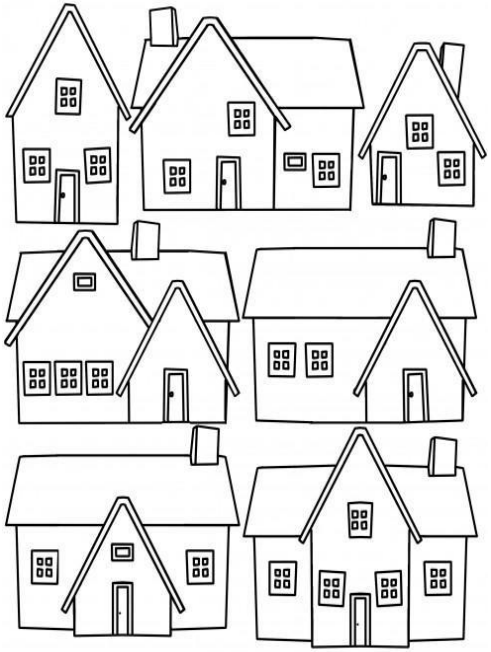
- Enforcement- Intent would be for the same mechanism as the CAP ordinance following penalty section 10.99 general penalty with other code enforcement

CITY OF FAYETTEVILLE ARKANSAS

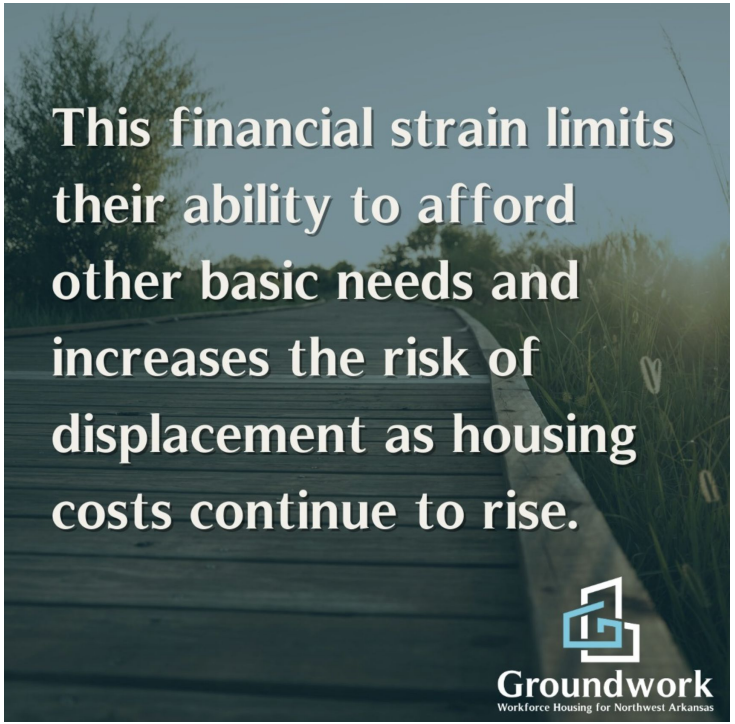
City of Fayetteville Strategic Goal Alignment

- **City Plan 2024**: We will create opportunities for attainable housing

- **Economic Vitality Plan:**
  - Community Development, Goal 2 Neighborhood Center Advancement Plan, Page 48
    - Reduce housing cost burdens for residents making under 120% of Fayetteville's Area Median Income (AMI)
  - Economic Mobility
    - Table 1 pg 12. 1a Support targeted policies and programs that build financial and social capital for Black, Latinx, and Asian residents;women, and low income individuals and families



CITY OF FAYETTEVILLE ARKANSAS



Questions?

CITY OF FAYETTEVILLE ARKANSAS

113 West Mountain Street
Fayetteville, AR 72701
(479) 575-8323

File #: 2025-231

TRUTH IN LEASING (ORDINANCE):

AN ORDINANCE TO ENACT § 120.03 TRUTH IN LEASING; DISCLOSURE OF RENTAL FEES AND COSTS FOR LEASED RESIDENTIAL PROPERTIES IN THE CITY OF FAYETTEVILLE

WHEREAS, potential tenants often make housing decisions based on advertised rent prices but may not be fully aware of additional, often hidden, fees and costs that could significantly affect their ability to afford and maintain rental housing and can lead to confusion, financial hardship, and the potential for deceptive practices that harm Fayetteville residents; and

WHEREAS, clear and accurate disclosure of all fees and costs associated with rental properties allows prospective tenants to make informed, well-considered decisions and prevents vulnerable tenants, including low-income individuals and families, from being burdened by unexpected financial obligations; and

WHEREAS, providing a clear breakdown of costs ensures that tenants are better equipped to budget effectively and maintain housing stability, which can lead to lower tenant turnover rates; and

WHEREAS, by requiring the disclosure of all rental fees and costs in advertisements and listings, the city will support fair housing practices and enhance consumer protection for current and future tenants.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby enacts § 120.03 – **Truth in Leasing; Disclosure of Rental Fees and Costs** as follows:

"120.03 - Truth in Leasing; Disclosure of Residential Rental Fees and Costs

(A) *Required Disclosures*. Landlords or property owners of residential properties shall include a clear and comprehensive disclosure of all fees and costs that are or could be charged to the tenant by the landlord or property owner in any contract, advertisement or listing, whether physical or digital. This includes, but is not limited to:

1. Rent: The base monthly rent amount.
2. Security Deposit: The amount required as a security deposit.
3. Application and Background Check Fees: Fees required to process rental applications or perform

background checks.

4. Maintenance Fees: Costs for maintenance or repairs that may be charged to the tenant.
5. Utility Costs: Charges for utilities such as water, electricity, gas, internet, or trash collection the tenant pays to the landlord. This does not include costs associated with utilities in the name of the tenant.
6. Pet Fees: Any fees, costs, or deposits associated with keeping pets on the property.
7. Parking Fees: Charges for parking spaces or permits, if applicable.
8. Late Fees: The fees imposed for late rent payments including any grace periods, charges schedules, or escalating fee policies.
9. Administrative, Leasing, or Miscellaneous Fees: Any other fees imposed on a tenant related to the administration of the lease or for other purposes not listed above.

(B) *Clear and Prominent Disclosure Required*. All fees and costs must be disclosed clearly and in a manner that is easily accessible, visible, and understandable to potential tenants. Fees must be itemized and presented separately from the base rent amount and shall be accompanied by a description of the service(s) associated with each fee. In online listings, this disclosure shall be presented on the same page as the listing details, and in print advertisements, it should be included in the body of the advertisement or in a clearly visible section. If there is a leasing office onsite, this information shall be displayed along with any required business licenses or permits. A copy of the list shall be attached to all paper applications. In any lease agreement or contract, this disclosure shall be included in a separate section within the body of the contract or attached as an exhibit or appendix to the contract."

Received from City Attorney Kit Williams on 03/11/2025 at 2:48p.m.

DEPARTMENTAL CORRESPONDENCE

OFFICE OF THE
CITY ATTORNEY

Kit Williams
City Attorney

Blake Pennington
Senior Assistant City Attorney

Hannah Hungate
Assistant City Attorney

Stacy Barnes
Paralegal

TO: **Mayor**
City Council
Kara Paxton, City Clerk Treasurer

CC: **Keith Macedo**, Chief of Staff

FROM: **Kit Williams**, City Attorney

DATE: **March 11, 2025**

RE: **Proposed Amendment of Disclosure of Rental Fees and Costs to require posting on landlord's or residential rental management company's web page all rental and recurring costs for a residential rental**

Council Member Berna has reported that some landlords or residential rental management companies have informed him that some large internet rental advertising companies may not allow all these potential rental costs/management fees on their web sites. However, some rental managers and landlords may have the ability to list all these costs on their own web site along with the other details of the possible residential rental. Therefore, Council Member Berna asked me to draft and amend to § 120.03 (B)(2) as follows:

"2. Landlords and rental management companies shall present all the detailed disclosures of potential fees and costs shown on (A) on their websites on the same page as the rental listing's other details. Landlords and rental management companies shall not be responsible for electronic media outside of their control."

I believe Council Member Berna may discuss this slight change of the Agenda Session.

Received From: Chanci Fondren 03/17/2025

Good evening Mayor and City Council, my name is Mia Alansari and I live in Ward 3 and I am the Environmental Action and Sustainability Chair for the Fayetteville Youth Advisory Council.

If you have lived in Fayetteville, you have seen rental and housing prices have increased substantially. As representatives of the youth, we represent the ages of those who will soon be entering the housing market, so we feel this issue pertains strongly to us.

We feel that the City Council agenda item Disclosure of Rental Fees and Costs would be very beneficial as these hidden fees could greatly impact us on our housing search while finding something affordable and accessible. Hidden fees plague the housing market and make it inaccessible for renters in our community. As we go into the working world and learn how to budget, hidden fees could completely derail our budget and disincentivize us to stay in the City of Fayetteville.

At the March 10, 2025 Fayetteville Youth Advisory Council meeting, our council voted to forward a recommendation of approval for this agenda item to you all.

Thank you on the behalf of the Fayetteville Youth Advisory Council for your time and have a good evening.

CITY OF FAYETTEVILLE ARKANSAS

CITY COUNCIL MEMO
2025-379

MEETING OF MARCH 25, 2025

TO: Mayor Rawn and City Council

THRU: Steven Dotson, Interim Chief Financial Officer

FROM: Keith Macedo, Interim Chief of Staff

SUBJECT: **REPEAL ORDINANCE 6315 AND 6329 & APPROVE 3.5% FEE ASSESSMENT (ORDINANCE):**

RECOMMENDATION:
Staff recommends approving the repeal of ordinance 6315 and ordinance 6329 and approve the assessment of a 3.5% fee for certain credit card and debit card transactions and approve a Tyler Technologies sales quote for the implementation of Tyler Payments for development services related transactions.

BACKGROUND:
City Council approved ordinance 6315 on May 19, 2020, and ordinance 6329 on July 7, 2020 which set the type of fees and the amount of fees for all credit card and debit card payments received by the city. The city currently absorbs all credit card related fees except for Development Services related transactions, which currently are assessed as a 2.95% fee for credit card payments and a $1.00 eCheck per transaction. The city recently implemented a new payment processor for all Tyler Technology related products called Tyler Payments which has resulted in proposed increase in pass-through credit card fees from 2.95% to 3.5% and eCheck from $1.00 to $1.95 per transaction.

DISCUSSION:
Tyler Technologies requires all customers to move to Tyler Payments in 2025 to support their new enterprise payments platform. City staff worked with Tyler Technologies staff for several months to negotiate the per transaction rate from an initial 3.95% to 3.5%. The city has been using Tyler Payments for other payment transactions since July 2024, but all of the current transactions or configured for the city to absorb the fees. This ordinance change and attached sales quote will allow the city to move all development services related fees, within the Enterprise, Permitting, and Licensing, and Tyler Cashiering software systems Tyler Payments

BUDGET/STAFF IMPACT:
There will be no additional budgetary cost or staff impact by approving these recommended changes

ATTACHMENTS: SRF (#3) , Tyler Payments - 07292025 (#4), ORD - Repeal 6315 and 6329 (#5)

113 West Mountain Street
Fayetteville, AR 72701
(479) 575-8323

File #: 2025-379

REPEAL ORDINANCE 6315 AND 6329 & APPROVE 3.5% FEE ASSESSMENT (ORDINANCE):

AN ORDINANCE TO REPEAL ORDINANCE 6315 AND ORDINANCE 6329 AND APPROVE THE ASSESSMENT OF A 3.5% FEE FOR CERTAIN CREDIT CARD AND DEBIT CARD TRANSACTIONS

WHEREAS, on May 19, 2020, the City Council passed Ordinance 6315 approving the assessment of a 2.95% fee for credit card and debit card transactions other than utility bill and parking fee payments; and

WHEREAS, following the passage of Ordinance 6315, City staff identified several additional invoice types that should be exempted because the transaction fees are effectively incorporated in the fee structure of the invoice being produced so Ordinance 6329 was passed on July 7, 2020 to amend Ordinance 6315 and recognize those additional all-inclusive fees; and

WHEREAS, Tyler Technologies LLC, the City's credit card processor has increased the fee for Development Services transactions, which are paid by customers, to 3.5% while all other transaction fees paid by the City will remain at 2.95%.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby repeals Ordinance 6315 and Ordinance 6329.

Section 2: That the City Council of the City of Fayetteville, Arkansas hereby determines, pursuant to Ark. Code Ann. § 14-59-119(b)(3) that the credit card or debit card transaction fee is included in the amount charged for utility bills (including recycling and trash collection charges that are included in monthly utility bills), paid parking fees, Airport invoices, Police invoices, Animal Control invoices, Parks and Recreation fees, and miscellaneous billings.

Section 3: That the City Council of the City of Fayetteville, Arkansas hereby approves the assessment of a 3.5% fee for credit card and debit card transactions other than payment of utility bills (including recycling and trash collection charges that are included in monthly utility bills), paid parking fees, Airport invoices, Police invoices, Animal Control invoices, Parks and Recreation fees, and miscellaneous billings.

Section 4: That the City Council of the City of Fayetteville, Arkansas hereby determines that the effective date for the new 3.5% transaction fee established in Section 3 shall be April 15, 2025.

City of Fayetteville Staff Review Form

2025-0379

Item ID

N/A

City Council Meeting Date - Agenda Item Only
N/A for Non-Agenda Item

Keith Macedo	3/14/2025	INFORMATION TECHNOLOGY (170)
Submitted By	**Submitted Date**	**Division / Department**

Action Recommendation:

Staff recommends approving the repeal of ordinance 6315 and ordinance 6329 and approve the assessment of a 3.5% fee for certain credit card and debit card transactions and approve a Tyler Technologies sales quote for the implementation of Tyler Payments for development services related transactions.

Budget Impact:

	General
Account Number	Fund
Project Number	Project Title

Budgeted Item?	No	Total Amended Budget	
		Expenses (Actual+Encum)	$ -
		Available Budget	$ -
Does item have a direct cost?	No	Item Cost	
Is a Budget Adjustment attached?	No	Budget Adjustment	$ -
		Remaining Budget	$ -

V20221130

Purchase Order Number:

Previous Ordinance or Resolution # 6315, 6329

Change Order Number:

Approval Date:

Original Contract Number:

Comments:

Quoted By: Miguel Aleman
Quote Expiration: 7/29/25
Quote Name:

Sales Quotation For:
Keith Macedo
City of Fayetteville
113 W Mountain St
Fayetteville AR 72701-6083
Phone: +1 (479) 587-3555

Payments

	Use Case	List Price	Service %	Min	Basis Points	Rate	Cap	POS	Online	IVR
Payments - Payer Card Cost - Service Fees										
Enterprise Permitting & Licensing										
Enterprise Permitting & Licensing Payments	Tax Remittance		3.50%	$ 2.50				X	X	
Enterprise Permitting & Licensing Payments	Code Enforcement		3.50%	$ 2.50				X	X	
Enterprise Permitting & Licensing Payments	Planning		3.50%	$ 2.50				X	X	
Enterprise Permitting & Licensing Payments	Licenses		3.50%	$ 2.50				X	X	
Enterprise Permitting & Licensing Payments	Permits		3.50%	$ 2.50				X	X	
Payer eCheck Cost		$ 1.95								

eCheck Rejects	$ 5.00
Credit Card Chargebacks	$ 15.00

Payer Card Cost	Per card transaction with Visa, MasterCard, Discover, and American Express.
Payer eCheck Cost	Per electronic check transaction.
eCheck Rejects	When an eCheck Transaction comes back as declined (e.g bounced check)
Credit Card Chargebacks	If a card payer disputes a transaction at the card issuing bank (e.g. stolen card)

Third-Party Hardware, Software and Services

Description	Qty	Unit Price	Unit Discount	Total Price	Unit Maint /SaaS	Unit Maint/SaaS Discount	Total Maint / SaaS
Third Party							
Payments PCI Service Fee (Per Device)	1	$ 0	$ 0	$ 0	$ 180	$ 0	$ 180
Hardware							
Payments Lane 7000 Terminal Purchase	1	$ 529	$ 0	$ 529	$ 0	$ 0	$ 0
TOTAL				**$ 529**			**$ 180**

Summary	**One Time Fees**	**Recurring Fees**
Total Services	$ 0	$ 0
Total Third-Party Hardware, Software, Services	$ 529	$ 180
Summary Total	**$ 529**	**$ 180**
Contract Total	**$ 709**	

Customer Approval: _____ Date: _____

Print Name: Mayor Molly Rawn P.O.#: _____

Client agrees that items in this sales quotation are, upon Client's signature or approval of same, hereby added to the existing agreement ("Agreement") between the parties and subject to its terms. Additionally, payment for said items, as applicable but subject to any listed assumptions herein, shall conform to the following terms:

- License fees for Tyler and third party software are invoiced upon the earlier of (i) delivery of the license key or (ii) when Tyler makes such software available for download by the Client;
- Fees for hardware are invoiced upon delivery;
- Fees for year one of hardware maintenance are invoiced upon delivery of the hardware;
- Annual Maintenance and Support fees, SaaS fees, Hosting fees, and Subscription fees are first payable when Tyler makes the software available for download by the Client (for Maintenance) or on the first day of the month following the date this quotation was signed (for SaaS, Hosting, and Subscription), and any such fees are prorated to align with the applicable term under the Agreement, with renewals invoiced annually thereafter in accord with the Agreement.
- Fees for services included in this sales quotation shall be invoiced as indicated below.
    - Implementation and other professional services fees shall be invoiced as delivered.
- Expenses associated with onsite services are invoiced as incurred.

Comments

SaaS Monthly Fees are rounded to the nearest dollar. The Annual Fee value represents the cost to the customer.

Fees for year one of hardware maintenance will be invoiced as of the first day of the calendar month following the date the hardware is delivered and may be prorated to end coterminous with the Annual Support Maintenance term. Subsequent annual hardware maintenance fees shall be invoiced together with the Annual Support Maintenance term in accordance with the terms of the Agreement.

Your use of Payments and any related items included on this order is subject to the terms found at: https://www.tylertech.com/terms/payment-card-processing-agreement. By signing this order or the agreement in which it is included, you agree you have read, understand, and agree to such terms. Please see attached Payments fee schedule.

ORDINANCE NO. _____

AN ORDINANCE TO REPEAL ORDINANCE 6315 AND ORDINANCE 6329 AND APPROVE THE ASSESSMENT OF A 3.5% FEE FOR CERTAIN CREDIT CARD AND DEBIT CARD TRANSACTIONS

WHEREAS, the City Council passed Ordinance 6315 on May 19, 2020, to approve the assessment of a 2.95% fee for credit card and debit card transactions other than utility bill and parking fee payments; and

WHEREAS, following the passage of Ordinance 6315, City staff identified several additional invoice types that should be exempted because the transaction fees are effectively incorporated in the fee structure of the invoice being produced so Ordinance 6329 was passed to amend Ordinance 6315 and recognize those additional all-inclusive fees; and

WHEREAS, Tyler Technologies LLC, the City's credit card processor has increased the fee for Development Services transactions, which are paid by customers, to 3.5% while all other transaction fees paid by the City will remain at 2.95%.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby repeals Ordinance 6315 and Ordinance 6329.

Section 2: That the City Council of the City of Fayetteville, Arkansas hereby determines, pursuant to Ark. Code Ann. § 14-59-119(b)(3) that the credit card or debit card transaction fee is included in the amount charged for utility bills (including recycling and trash collection charges that are included in monthly utility bills), paid parking fees, Airport invoices, Police invoices, Animal Control invoices, Parks and Recreation fees, and miscellaneous billings."

Section 3: That the City Council of the City of Fayetteville, Arkansas hereby approves the assessment of a 3.5% fee for credit card and debit card transactions other than payment of utility bills (including recycling and trash collection charges that are included in monthly utility bills), paid parking fees, Airport invoices, Police invoices, Animal Control invoices, Parks and Recreation fees, and miscellaneous billings."

Section 4: That the City Council of the City of Fayetteville, Arkansas hereby determines that the effective date for the new 3.5% transaction fee established in Section 3 shall be April 15, 2025.

PASSED and **APPROVED** this 1st day of April, 2025.

APPROVED:

By: _____
MOLLY RAWN, Mayor

ATTEST:

By: _____
KARA PAXTON, City Clerk/Treasurer

CITY OF FAYETTEVILLE ARKANSAS

CITY COUNCIL MEMO
2025-196

MEETING OF MARCH 25, 2025

TO: Mayor Rawn and City Council

THRU: Chris Brown, Public Works Director

FROM: Alan Pugh, Staff Engineer

SUBJECT: **STORMWATER UTILITY (PERSONNEL AND EQUIPMENT PLAN):**

RECOMMENDATION:
City staff recommends approval of a resolution creating 9 positions for the new stormwater utility and authorizing the purchase of necessary equipment, establishing a new Stormwater Management enterprise fund, authorizing a loan from the General Fund to provide temporary funding for the stormwater utility, and approving a budget adjustment.

Equipment and Staffing:
Approval to create 9.00 positions outlined within the approved stormwater utility, to purchase necessary equipment to support the approved positions and to approve a budget adjustment.

Establishing Fund:
Establishing a new enterprise fund (5450) titled "Stormwater Management" to account for the collection of revenues from stormwater fees and exclusively use those funds for managing and improving stormwater infrastructure.

Loan agreement:
The Mayor or Mayor's designee (Chief Financial Officer) is authorized to loan cash from the General Fund to the Stormwater Management Fund for monthly expenditures until stormwater revenues received are sufficient to provide necessary reimbursements.

Loan repayments from the Stormwater Management Fund to the General Fund should be made as soon as practicable.

The total loan liability amount due to the General Fund from the Stormwater Management Fund should be reduced to its lowest amount based on available cash by the end of each fiscal year.

BACKGROUND:
Like many cities throughout the state and nation, the City of Fayetteville experiences issues with management of its stormwater utility system. These issues stem from many sources including, but not limited to, compliance with the mandated Municipal Separate Stormwater System (MS4) requirements, aging infrastructure, maintenance of system capacity, personnel to perform systematic inspections and the lack of formal drainage systems in many older areas of the City. To address these concerns, the City has historically funded the stormwater program through the Sales Tax Capital Improvement Program (CIP) and the Street Fund for capital and operational/maintenance functions, respectively. However, there are many needs within the City

that require funding from these sources and, at least in recent years, the funding for stormwater has been inadequate to comprehensively address stormwater management within the City. To develop a comprehensive solution, additional funding is required for personnel and equipment as well as multiple capital projects, many of which will require more than $1 million dollars for each project. Given the current levels, it would take many years to address just one of those projects.

In June, 2018, the City Council recognized these needs and approved with a consultant contract for a feasibility study (Resolution 131-18) and amended that agreement on two occasions (Resolutions 209-19 and 250-19) to provide additional investigation and details. That study was completed in August of 2019 and updated in 2022 with more recent program costs, impervious area and associated fees. The Council also passed a resolution of intent to establish a stormwater utility in July of 2022 (Resolution 157-22).

Ultimately, the Council unanimously approved ordinance 6825 creating the stormwater utility on December 17, 2024, allowing staff to move forward with implementation of the program.

DISCUSSION:

The approved program includes several additional staff positions and the necessary equipment to support them. Specifically, the program will add a 5-member transportation drainage crew, a Senior Utility Billing Coordinator, a GIS Analyst, a Staff Engineer, and a Public Works Inspector. The budget for each position is outlined below. To assist with the implementation, the GIS Analyst and Senior Utility Billing Coordinator positions will be filled as soon as possible after approval, while the other positions will be added later in the year.

Position	Funding Source	# of Positions	Estimated Annual Salary/Benefits	2025 Salary/Benefits
GIS Analyst	General*	1.00	92,521	69,394
SR Utility Billing Coordinator	Water/Sewer*	1.00	79,982	59,989
Crew Leader	Stormwater	1.00	70,321	17,582
Staff Engineer	Stormwater	1.00	121,830	30,460
Stormwater Inspector	Stormwater	1.00	76,754	19,191
Maintenance Worker 4	Stormwater	2.00	127,780	31,950
Maintenance Worker 3	Stormwater	2.00	118,022	29,510
*Expense will be allocated to Stormwater.		**9.00**	**687,210**	**258,076**

Each of these positions will play a crucial role in implementing and managing the program, as well as completing the tasks outlined in the program. These tasks include inspecting the existing storm sewer system, replacing failing portions of the storm sewer system, maintaining the expanding stormwater infrastructure, aiding in the implementation of capital improvement projects, monitoring city-wide impervious areas, ensuring accurate billing, addressing appeals filed by sewer customers, and answering general questions about the program.

Since the work performed by these proposed positions must be related to Stormwater Management duties, the GIS Analyst (funded by the General Fund) and the Senior Utility Billing Coordinator (funded by the Water/Sewer Fund) will be paid from their respective sources and allocated to the Stormwater Fund as needed. It is anticipated that in 2025, their time spent on Stormwater duties will be 100%, and the ongoing allocation will be revised for 2026.

To support the successful operation and maintenance of the existing and future storm sewer system and complete the tasks set forth in the program, the purchase of the following equipment is necessary. This list, while not exhaustive, highlights the essential equipment needed to effectively implement the proposed program. Note that the cost of the equipment is approximate and subject to revision based on the order date and the exact cost breakdown at that time.

Equipment	2025 Cost
Camera Van	398,000
HV Dump Truck	250,000
F550 Crew Cab	100,200
T76 T4 Compact Track Loader + Attachments	99,300
E48 Excavator and Attachments	63,300
F150 Hybrid	51,000
MT100 Mini Track Loader	34,200
Tandem Axel Trailer	18,000
VAC Truck ($798,000 / On-Hold)	-
	1,014,000

This equipment will be ordered as soon as possible to ensure it is available for use, except for the VAC truck. Due to the significant investment required and the need to better understand its full usage, it is proposed that this service be outsourced at an hourly rate to local vendors. The effectiveness and cost-efficiency of the VAC truck will be evaluated at a later date, and a decision will be made whether to purchase the truck or continue outsourcing the service.

BUDGET/STAFF IMPACT:
Although the stormwater fee, which is expected to be implemented by August 2025, will ultimately fund these positions and equipment, some of these resources are needed sooner to facilitate the implementation process. Additionally, certain equipment must be ordered well in advance to ensure it is ready to support the staff once implementation begins. Therefore, the general fund will temporarily cover the costs for both the equipment and the positions until the stormwater fee is in effect. These expenses will be reimbursed by the utility fee once it is implemented.

ATTACHMENTS: SRF (#3) , BA (#4)

113 West Mountain Street
Fayetteville, AR 72701
(479) 575-8323

File #: 2025-196

STORMWATER UTILITY (PERSONNEL AND EQUIPMENT PLAN):

A RESOLUTION TO APPROVE THE ADDITION OF NINE FULL TIME EQUIVALENT POSITIONS TO SUPPORT THE NEW STORMWATER UTILITY, TO ESTABLISH A NEW STORMWATER MANAGEMENT ENTERPRISE FUND, TO AUTHORIZE A LOAN FROM THE GENERAL FUND TO PROVIDE TEMPORARY FUNDING FOR THE STORMWATER UTILITY, AND TO APPROVE A BUDGET ADJUSTMENT

WHEREAS, the City of Fayetteville has experienced issues with management of its stormwater utility system that stem from many sources including, but not limited to, compliance with the mandated Municipal Separate Stormwater System requirements, aging infrastructure, maintenance of system capacity, personnel to perform systematic inspections and the lack of formal drainage systems in many older areas of the City; and

WHEREAS, the City has historically funded the stormwater program through the Sales Tax Capital Improvement Program and the Street Fund for capital and operational/maintenance functions, respectively, and there are many needs within the City that require funding from these sources; and

WHEREAS, in recent years, the funding for stormwater has been inadequate to comprehensively address stormwater management within the City, and to develop a comprehensive solution, additional funding is required for personnel and equipment, as well as multiple capital projects, many of which will require more than $1 million for each project; and

WHEREAS, on June 5, 2018, the City Council passed Resolution 131-18 that approved a consultant contract for a feasibility study and then amended that agreement with Resolution 209-19 and again with Resolution 250-19 to provide additional investigation and details; and

WHEREAS, the study was completed in August of 2019 and updated in 2022 with more recent program costs, impervious area and associated fees; and

WHEREAS, on July 5, 2022, the City Council passed Resolution 157-22 that declared the intent to establish a stormwater utility; and

WHEREAS, on December 17, 2025, City Council approved Ordinance 6825 creating the stormwater utility.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby approves the addition of nine full time equivalent positions to support the new stormwater utility and further approves the purchase of necessary equipment to support the approved positions.

Section 2: That the City Council of the City of Fayetteville, Arkansas hereby approves the establishment of the "Stormwater Management Fund" to account for the collection of revenues from stormwater fees and exclusively use those funds for managing and improving stormwater infrastructure.

Section 3: That the City Council of the City of Fayetteville, Arkansas hereby authorizes the Mayor or the Mayor's designee to loan cash from the General Fund to the Stormwater Management Fund until the revenues from stormwater fees are available to provide necessary reimbursements.

Section 4: That the City Council of the City of Fayetteville, Arkansas further authorizes the Mayor or the Mayor's designee to repay the cash loaned to the Stormwater Management fund as soon as possible based on the collection of revenues from stormwater fees.

Section 5: That the City Council of the City of Fayetteville, Arkansas hereby approves a budget adjustment, a copy of which is attached to this Resolution.

City of Fayetteville Staff Review Form

2025-196

Item ID

4/1/2025

City Council Meeting Date - Agenda Item Only
N/A for Non-Agenda Item

Chris Brown	3/13/2025	ENGINEERING (621)
Submitted By	**Submitted Date**	**Division / Department**

Action Recommendation:

Request to create 9.00 FTE positions for the new stormwater utility and purchase necessary equipment, to establish a new Stormwater Management enterprise fund, to authorize a loan from the General Fund to provide temporary funding for the stormwater utility, and to approve a budget adjustment.

Budget Impact:

5450.740.xxxx-xxxx.xx	Stormwater Management
Account Number	Fund
Project Number	Project Title

Budgeted Item?	No	Total Amended Budget	$	-
		Expenses (Actual+Encum)	$	-
		Available Budget	$	-
Does item have a direct cost?	No	Item Cost	$	-
Is a Budget Adjustment attached?	Yes	Budget Adjustment	$	1,552,000.00
		Remaining Budget	$	1,552,000.00

V20221130

Purchase Order Number:

Previous Ordinance or Resolution # Ord 6825

Change Order Number:

Approval Date:

Original Contract Number:

Comments:

City of Fayetteville, Arkansas - Budget Adjustment (Agenda)

Budget Year	Division /Org2	Adjustment Number
2025	STORMWATER MANAGEMENT (740)	
	Requestor: Kevin Springer	

BUDGET ADJUSTMENT DESCRIPTION / JUSTIFICATION:

Request to create 9 positions for the new stormwater utility and purchase necessary equipment, to establish a new Stormwater Management enterprise fund, to authorize a loan from the General Fund to provide temporary funding for the stormwater utility, and to approve a budget adjustment.

COUNCIL DATE: 4/1/2025

ITEM ID#: **2025-196**

Kevin Springer
3/13/2025 12:40 PM

Budget Division Date

TYPE: **D - (City Council)**

JOURNAL #:

GLDATE:

RESOLUTION/ORDINANCE

CHKD/POSTED: /

v.2025211

TOTAL	2,566,000	2,566,000				
	Increase / (Decrease)		Project.Sub#			
Account Number	Expense	Revenue	Project	Sub.Detl	AT	Account Name
5450.740.5900-4434.00	-	412,300			RE	N/A
5450.740.5900-4434.01	-	161,100			RE	N/A
5450.740.5900-4434.03	-	379,500			RE	N/A
5450.740.5900-4434.04	-	23,100			RE	N/A
5450.740.5900-4999.99	-	576,000			RE	Use Fund Balance - Current
5450.740.5900-5100.00	36,999	-			EX	Salaries/Wages - FT, Regular
5450.740.5900-5105.00	2,295	-			EX	Payroll Taxes - FICA
5450.740.5900-5105.01	538	-			EX	Payroll Taxes - Medicare
5450.740.5900-5108.00	5,124	-			EX	Emp Insurance - Health
5450.740.5900-5108.01	123	-			EX	Emp Insurance - LTD
5450.740.5900-5108.02	4	-			EX	Emp Insurance - ADD
5450.740.5900-5108.03	128	-			EX	Emp Insurance - Life
5450.740.5900-5109.06	4,440	-			EX	Pension - Retirement Savings
5450.740.5900-5120.00	69,394		***41002***	***5450.1701***	EX	Personnel Other - Contra
5450.740.5900-5120.00	59,989		***41002***	***5450.7101***	EX	Personnel Other - Contra
5450.740.5900-5200.00	800	-			EX	Supplies - Office/Printing
5450.740.5900-5209.00	12,904	-			EX	Software
5450.740.5900-5210.00	30,572	-			EX	Minor Equipment
5450.740.5900-5302.00	350	-			EX	Uniforms/Personal - Equipment

	Increase / (Decrease)		Project.Sub#			
Account Number	Expense	Revenue	Project	Sub.Detl	AT	Account Name
5450.740.5900-5304.00	4,000	-			EX	Travel & Training
5450.740.5900-5309.02	6,336	-			EX	Lease - Software
5450.740.5900-5310.01	300	-			EX	Utilities - Telephone
5450.740.5930-5100.00	55,028	-			EX	Salaries/Wages - FT, Regular
5450.740.5930-5105.00	3,414	-			EX	Payroll Taxes - FICA
5450.740.5930-5105.01	799	-			EX	Payroll Taxes - Medicare
5450.740.5930-5108.00	12,810	-			EX	Emp Insurance - Health
5450.740.5930-5108.01	184	-			EX	Emp Insurance - LTD
5450.740.5930-5108.02	10	-			EX	Emp Insurance - ADD
5450.740.5930-5108.03	191	-			EX	Emp Insurance - Life
5450.740.5930-5109.06	6,606	-			EX	Pension - Retirement Savings
5450.740.5930-5210.00	500	-			EX	Minor Equipment
5450.740.5930-5302.00	5,500	-			EX	Uniforms/Personal - Equipment
5450.740.5930-5310.01	300	-			EX	Utilities - Telephone
5450.740.5930-5331.00	32,000	-			EX	Motorpool Charges - Maintenance
5450.740.5930-5331.01	159,000	-			EX	Motorpool Charges - Replacement
5450.740.5930-5331.02	24,200	-			EX	Motorpool Charges - Shop Overhead
5450.740.5930-5331.03	3,162	-			EX	Motorpool Charges - Shop OH Insurance
5450.740.5900-7602.70	1,014,000	-	***59700***	***5450***	EX	Transfers To Funds - Shop
	-	-				
9700.770.1920-6602.44	-	1,014,000	97000	5450.7400	RE	Transfer from Fund - Stormwater
9700.770.1920-5802.00	1,014,000	-	97000	5450.7400	EX	Vehicles & Equipment - base
	-	-				
1010.170.1720-5100.00	51,278	-	41002	5450.1701	EX	Salaries/Wages - FT, Regular
1010.170.1720-5105.00	3,180	-	41002	5450.1701	EX	Payroll Taxes - FICA
1010.170.1720-5105.01	744	-	41002	5450.1701	EX	Payroll Taxes - Medicare
1010.170.1720-5108.00	7,686	-	41002	5450.1701	EX	Emp Insurance - Health
1010.170.1720-5108.01	170	-	41002	5450.1701	EX	Emp Insurance - LTD
1010.170.1720-5108.02	5	-	41002	5450.1701	EX	Emp Insurance - ADD
1010.170.1720-5108.03	177	-	41002	5450.1701	EX	Emp Insurance - Life
1010.170.1720-5109.06	6,154	-	41002	5450.1701	EX	Pension - Retirement Savings
1010.170.1720-5120.00	(69,394)	-	41002	5450.1701	EX	Personnel Other - Contra
	-	-				
5400.710.1810-5100.00	43,462	-	41002	5450.7101	EX	Salaries/Wages - FT, Regular
5400.710.1810-5105.00	2,695	-	41002	5450.7101	EX	Payroll Taxes - FICA
5400.710.1810-5105.01	631	-	41002	5450.7101	EX	Payroll Taxes - Medicare
5400.710.1810-5108.00	7,686	-	41002	5450.7101	EX	Emp Insurance - Health
5400.710.1810-5108.01	144	-	41002	5450.7101	EX	Emp Insurance - LTD
5400.710.1810-5108.02	5	-	41002	5450.7101	EX	Emp Insurance - ADD
5400.710.1810-5108.03	150	-	41002	5450.7101	EX	Emp Insurance - Life
5400.710.1810-5109.06	5,216	-	41002	5450.7101	EX	Pension - Retirement Savings
5400.710.1810-5120.00	(59,989)	-	41002	5450.7101	EX	Personnel Other - Contra
	-	-				

CITY OF FAYETTEVILLE ARKANSAS

CITY COUNCIL MEMO
2025-363

MEETING OF MARCH 25, 2025

TO: Mayor Rawn and City Council

THRU: Keith Macedo, Interim Chief of Staff
Jonathan Curth, Development Services Director

FROM: Jessica Masters, Development Review Manager

SUBJECT: **REZONING-2025-0005: (1791 N. GARLAND AVE/JMAX PROPERTIES LLC, 365):**

RECOMMENDATION:
City Planning staff and the Planning Commission recommend approval of a request to rezone the subject property as described and shown in the attached Exhibits 'A' and 'B'.

BACKGROUND:
The subject property is in north-central Fayetteville along N. Garland Avenue, approximately 300 feet north of the intersection with W. Deane Street. Containing one parcel totaling 0.40 acres which is currently zoned RSF-4, Residential Single-Family – Four Units per Acre, County records indicate that the property is developed with a single-family home that was constructed around 1936. The property is not subject to any overlay districts.

Request: The request is to rezone the subject property from RSF-4, Residential Single-Family – Four Units per Acre to RI-U, Residential Intermediate, Urban.

Public Comment: Staff has received comment both in support of and in opposition to the subject rezoning. Those in support of the request found the request to be compatible with surrounding land uses, and the opportunity for infill development on larger lots. Those in opposition were concerned about drainage, scale of development, and lack of knowledge about specific development plans.

Land Use Compatibility: From a current land use standpoint, the request is not readily compatible with its immediate surroundings. The property is surrounded by single-family zoning and single-family dwellings, with a highly-regular lot configuration and setback pattern that currently meets that underlying zoning district. Most homes in the surrounding area are single-story, though the current zoning district allows for structures up to three stories. RSF-4 also requires a 15-foot front setback, while RI-U requires a 0- to 25-foot build-to-zone, which would potentially introduce a varying setback pattern from the immediate surroundings. The introduction of a build-to-zone in the area, however, begins to set a precedent toward a more walkable urban form along this stretch of N. Garland Avenue. From a use perspective, the uses permitted in the RI-U zoning district are typically compatible with single-family dwellings, including 2-, 3- and 4- family dwellings. The neighborhood and site in question are also directly located on N. Garland Avenue, which is a Regional Link Street, indicating that single-family uses may not be the highest and best use for the area in general.

Land Use Plan Analysis: Staff finds that the request is consistent with adopted land use policies, the Future Land Use Map designation, and goals of City Plan 2040. The area is designated as a Residential Neighborhood Area, which indicates an intent for a variety of housing types. The number of elements

associated with appropriate infill potential also suggests that strictly single-family zoning is not consistent with the area's overall potential and access to services and infrastructure. Increasing the available housing types would align with City Plan goal #6 of increasing additional opportunities for housing and would help align with the City's goal of making appropriate infill and revitalization the highest priority.

CITY PLAN 2040 INFILL MATRIX: City Plan 2040's Infill Matrix indicates a score of 6-7 for this site. The following elements of the matrix contribute to the score:

- Adequate Fire Response (Station 8, 2266 W. Deane St.)
- Near Sewer Main (N. Garland Avenue, 8" line)
- Near Water Main (N. Garland Avenue, 8" line)
- Near Grocery Store (Harps, N. Garland Avenue)
- Near City Park (Lewis Soccer Complex)
- Near Paved Trail (On-Street Bike Land, N. Garland Avenue)
- Near Razorback Bus Stop (Garland and Sycamore)

DISCUSSION:
At the Planning Commission meeting on March 10, 2025, the request was forwarded to the City Council with a 6-3-0 vote in favor of approval. Commissioners Gulley, Garlock, and Payne opposed the request, arguing that the RI-U zoning would not be compatible with the surrounding single-family homes. They also felt N. Garland Avenue should serve as a boundary between City Neighborhood and Residential Neighborhood. Those in favor of the request felt that the additional residential uses allowed by RI-U would blend well with the area and argued that single-family housing might not be the best option for N. Garland Avenue, given its walkability. One member of the public voiced opposition, raising concerns about reduced privacy and increased density affecting their adjacent property.

BUDGET/STAFF IMPACT:
N/A

ATTACHMENTS: SRF (#3) , Exhibit A (#4), Exhibit B (#5), Planning Commission Staff Report (#6)

113 West Mountain Street
Fayetteville, AR 72701
(479) 575-8323

File #: 2025-363

REZONING-2025-0005: (1791 N. GARLAND AVE/JMAX PROPERTIES LLC, 365):

AN ORDINANCE TO REZONE THE PROPERTY DESCRIBED IN REZONING PETITION RZN 2024-05 FOR APPROXIMATELY 0.40 ACRES LOCATED AT 1791 NORTH GARLAND AVENUE IN WARD 2 FROM RSF-4, RESIDENTIAL SINGLE-FAMILY, FOUR UNITS PER ACRE TO RI-U, RESIDENTIAL INTERMEDIATE-URBAN

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby changes the zone classification of the property shown on the map (Exhibit A) and the legal description (Exhibit B) both attached to the Planning Department's Agenda Memo from RSF-4, Residential Single-Family, Four Units per Acre, to RI-U, Residential Intermediate – Urban.

Section 2: That the City Council of the City of Fayetteville, Arkansas hereby amends the official zoning map of the City of Fayetteville to reflect the zoning change provided in Section 1.

City of Fayetteville Staff Review Form

2025-363

Item ID

4/1/2025

City Council Meeting Date - Agenda Item Only
N/A for Non-Agenda Item

Jonathan Curth	3/14/2025	DEVELOPMENT REVIEW (630)
Submitted By	**Submitted Date**	**Division / Department**

Action Recommendation:

RZN-2025-0005: Rezoning (1791 N. GARLAND AVE/JMAX PROPERTIES LLC, 365): Submitted by COMMUNITY BY DESIGN for property located at 1791 N. GARLAND AVE. in WARD 2. The property is zoned RSF-4, RESIDENTIAL SINGLE-FAMILY, FOUR UNITS PER ACRE and contains approximately 0.40 acres. The request is to rezone the property to RI-U, RESIDENTIAL INTERMEDIATE-URBAN.

Budget Impact:

Account Number	Fund
Project Number	Project Title

Budgeted Item?	No	Total Amended Budget	$	-
		Expenses (Actual+Encum)	$	-
		Available Budget	$	-
Does item have a direct cost?	No	Item Cost	$	-
Is a Budget Adjustment attached?	No	Budget Adjustment	$	-
		Remaining Budget	$	-

V20221130

Purchase Order Number:

Previous Ordinance or Resolution #

Change Order Number:

Approval Date:

Original Contract Number:

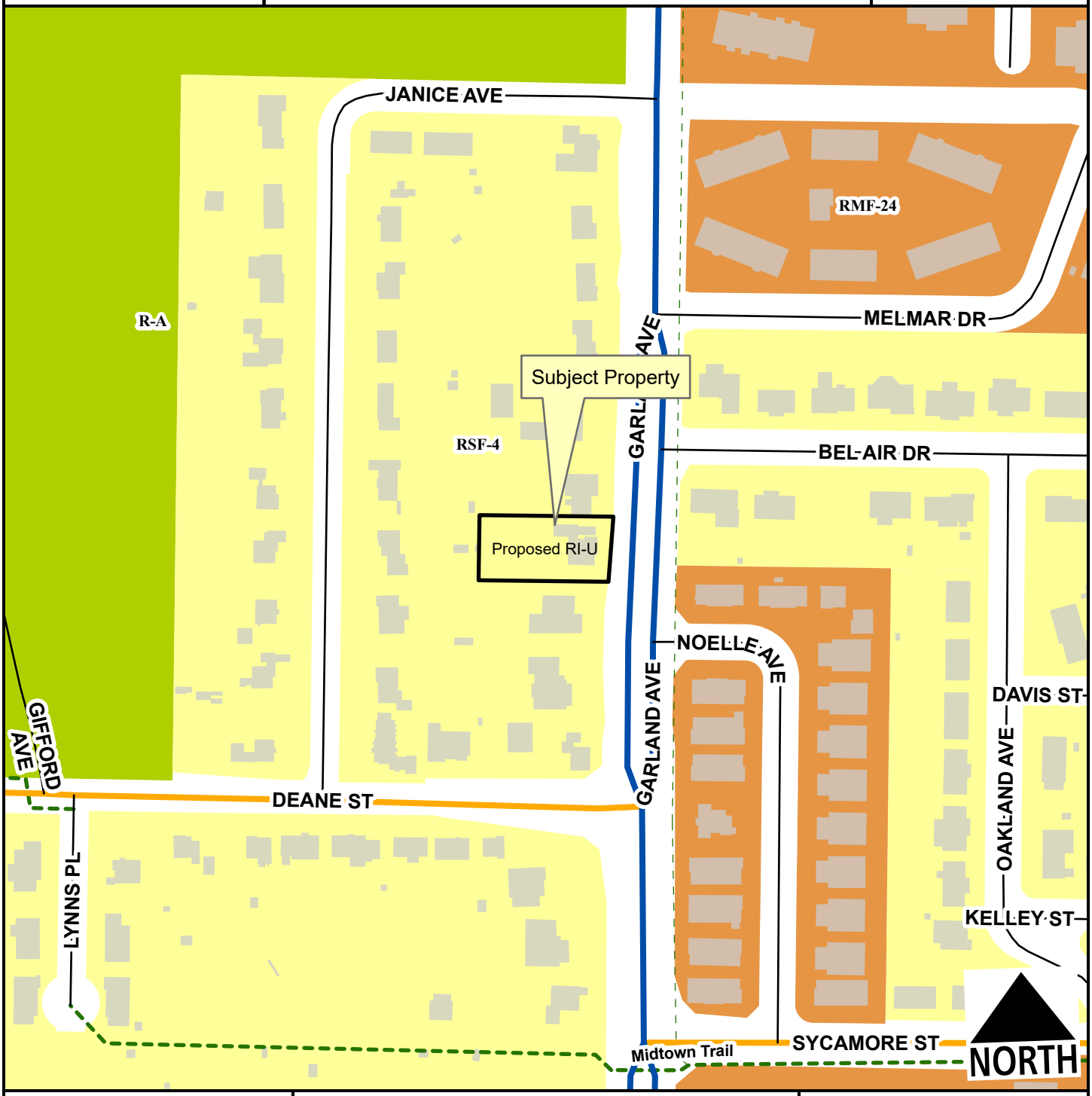
Comments:

RZN-2025-0005

Close Up View

1791 N. GARLAND AVE

EXHIBIT A



- Neighborhood Link
- Regional Link - High Activity
- Unclassified
- Residential Link
- Trail (Proposed)
- Planning Area
- Fayetteville City Limits

Feet

0 75 150 300 450 600

1:2,400

Zone	Current	Proposed
RI-U	0.0	0.4
RSF-4	0.4	0.0

Total 0.4 ac

EXHIBIT B

Lot 4 in Rudolph Subdivision to the City of Fayetteville, Arkansas, as per plat on file in the office of the Circuit Clerk and Ex-Officio Recorder of Washington County, Arkansas, said being a part of the SE-1/4 of the SE-1/4 of Section 5, Township 16 North, Range 30 West of the 5th Principal Meridian, Washington County, Arkansas. LESS AND EXCEPT a part of Lot 4 of Rudolph Subdivision to the City of Fayetteville, Washington County, Arkansas, described as follows: Commencing at a point being used as the Southwest corner of Lot 7 of Rudolph Subdivision to the City of Fayetteville, thence S87°10'55"E along the South line of said Lot 7 a distance of 211.72 feet to a point on the Westerly right-of-way line of State Highway 112 and established by AHTD Job 9248, thence S02°43'10"W along said right-of-way line a distance of 190.11 feet to a point on the North line of Lot 4 of Rudolph Subdivision to the City of Fayetteville to the POINT OF BEGINNING; thence continue S02°43'10"W along said right-of-way line a distance of 90.11 feet to a point on the South line of Lot 4 of Rudolph Subdivision to the City of Fayetteville; thence N87°07'18"W along said South line a distance of 30.48 feet to a point on the Westerly right-of-way line of State Highway 112 as established by AHTD Job 040489; thence N06°20'49"E along said right-of-way line a distance of 90.26 feet to a point on the North line of Lot 4 of Rudolph Subdivision to the City of Fayetteville; thence S87°09'08"E along said North line a distance of 24.77 feet to the point of beginning, and containing 0.06 acres or 2,489 square feet, more or less, as shown on AHTD plans referenced as Job 040489.

Subject to easements, right-of-ways, and protective covenants of record, if any.
Subject to all prior mineral reservations and oil and gas leases, if any.

CITY OF FAYETTEVILLE ARKANSAS

PLANNING COMMISSION MEMO

TO: Fayetteville Planning Commission

FROM: Jessie Masters, Development Review Manager

MEETING DATE: March 10, 2025 Updated with final results

SUBJECT: **RZN-2025-0005: Rezoning (1791 N. GARLAND AVE/JMAX PROPERTIES LLC, 365):** Submitted by COMMUNITY BY DESIGN for property located at 1791 N. GARLAND AVE. The property is zoned RSF-4, RESIDENTIAL SINGLE-FAMILY, FOUR UNITS PER ACRE and contains approximately 0.40 acres. The request is to rezone the property to RI-U, RESIDENTIAL INTERMEDIATE-URBAN.

RECOMMENDATION:
Staff recommends forwarding **RZN-2025-0005** to City Council with a recommendation of approval.

RECOMMENDED MOTION:
*"I move to forward **RZN-2025-0005** to City Council with a recommendation of approval."*

BACKGROUND:
The subject property is in north central Fayetteville along N. Garland Avenue, approximately 300 feet north of the intersection with W. Deane Street. Containing one parcel totaling 0.40 acres which is currently zoned RSF-4, Residential Single-Family – Four Units per Acre, County records indicate that the property is developed with a single-family home that was constructed around 1936. The property is not subject to any overlay districts. Surrounding land uses and zoning are depicted in *Table 1*.

Table 1:
Surrounding Land Uses and Zoning

Direction	Land Use	Zoning
North	Single-Family Residential	RSF-4, Residential Single-Family – Four Units per Acre
South	Single-Family Residential	RSF-4, Residential Single-Family – Four Units per Acre
East	Mixed-Density Residential	RSF-4, Residential Single-Family – Four Units per Acre; RMF-24, Residential Multi-Family, 24 Units per Acre
West	Single-Family Residential	RSF-4, Residential Single-Family – Four Units per Acre

Request: The request is to rezone the subject property from RSF-4, Residential Single-Family – Four Units per Acre to RI-U, Residential Intermediate, Urban.

Public Comment: Staff has received comment both in support of and in opposition to the subject rezoning. Those in support of the request found the request to be compatible with surrounding land uses, and the opportunity for infill development on larger lots. Those in opposition were concerned about drainage, scale of development, and lack of knowledge about specific development plans.

INFRASTRUCTURE AND ENVIRONMENTAL REVIEW:

Streets: The subject property has frontage to North Garland Avenue which is an improved Regional Link – High Activity with asphalt paving, curb and gutter and sidewalk. Any street improvements required in these areas would be determined at the time of development proposal. Any additional improvements or requirements for drainage will be determined at time of development.

Water: Public water is available to the subject property. There is an existing 6-inch watermain present along the east side of N. Garland Avenue.

Sewer: Sanitary Sewer is available to the subject property. There is an existing 8-inch sewer main present along the west side of N. Garland Avenue.

There are known wet weather sewer capacity issues identified in the City's 2021 Sewer Master Plan that appear in the system across the frontage of this property.

Drainage: The property is not within the Hillside-Hilltop Overlay District, a FEMA floodplain, or near a protected stream. It has hydric soils, which are a known indicator of wetlands. However, for an area to be classified as wetlands, it may also need other characteristics such as hydrophytes (plants that grow in water), and shallow water during parts of the year. Hydric soils can be found across many areas of Fayetteville, including valleys, floodplains, and open prairies. It's important to identify these natural resources during development, so when these soils are identified on a property, further environmental studies will be required at the time of development. Before permits will be issued for the property a statement/report from an environmental professional must be provided summarizing the existence of wetlands on the property. If this statement/report indicates that wetlands may be present on site, a USACE Determination of Jurisdictional Wetlands will be required.

Fire: Fire apparatus access and fire protection water supplies will be reviewed for compliance with the Arkansas Fire Prevention Code at the time of development. Station 8, located at 2266 W Deane St., protects this site. The property is located approximately 1.2 miles from the fire station with an anticipated drive time of approximately 3 minutes using existing streets. The anticipated response time would be approximately 5.2 minutes. Fire department response time is calculated based on the drive time plus 1 minute for dispatch and 1.2 minutes for turn-out time. Within the city limits, the Fayetteville Fire Department has a response time goal of 6 minutes for an engine and 8 minutes for a ladder truck.

Police: The Police Department did not comment on this request.

Tree Preservation:

The current zoning district of RSF-4, Residential Single-Family, 4 Units per Acre requires **25% minimum canopy preservation.** The proposed zoning district of RI-U, Residential Intermediate - Urban requires **15% minimum canopy preservation**.

CITY PLAN 2040 FUTURE LAND USE PLAN: The City Plan 2040 Future Land Use Plan designates the property within the proposed rezone as **Residential Neighborhood.**

Residential Neighborhood areas are primarily residential in nature and support a wide variety of housing types of appropriate scale and context. Residential Neighborhood encourages highly connected, compact blocks with gridded street patterns and reduced building setbacks. It also encourages traditional neighborhood development that incorporates low-intensity non-residential uses intended to serve the surrounding neighborhoods. This designation recognizes the existing conventional subdivision developments that may have large blocks with conventional setbacks and development patterns that respond to features of the natural environment.

CITY PLAN 2040 INFILL MATRIX: City Plan 2040's Infill Matrix indicates a score of **6-7** for this site with a weighted score of **8**. The following elements of the matrix contribute to the score:

- Adequate Fire Response (Station 8, 2266 W. Deane St.)
- Near Sewer Main (N. Garland Avenue, 8" line)
- Near Water Main (N. Garland Avenue, 8" line)
- Near Grocery Store (Harps, N. Garland Avenue)
- Near City Park (Lewis Soccer Complex)
- Near Paved Trail (On-Street Bike Land, N. Garland Avenue)
- Near Razorback Bus Stop (Garland and Sycamore)

FINDINGS OF THE STAFF

1. A determination of the degree to which the proposed zoning is consistent with land use planning objectives, principles, and policies and with land use and zoning plans.

Finding: ***Land Use Compatibility:*** **Land Use Compatibility: From a current land use standpoint, the request is not readily compatible with its immediate surroundings. The property is surrounded by single-family zoning and single-family dwellings, with a highly-regular lot configuration and setback pattern that currently meets that underlying zoning district. Most homes in the surrounding area are single-story, though the current zoning district allows for structures up to three stories. RSF-4 also requires a 15-foot front setback, while RI-U requires a 0- to 25-foot build-to-zone, which would potentially introduce a varying setback pattern from the immediate surroundings. The introduction of a build-to-zone in the area, however, begins to set a precedent toward a more walkable urban form along this stretch of N. Garland Avenue. From a use perspective, the uses permitted in the RI-U zoning district are typically compatible with single-family dwellings, including 2-, 3- and 4- family dwellings. The neighborhood and site in question are also directly located on N. Garland Avenue, which is a Regional Link Street, indicating that single-family uses may not be the highest and best use for the area in general.**

Land Use Plan Analysis: **Staff finds that the request is consistent with adopted land use policies, the Future Land Use Map designation, and goals of City Plan 2040. The area is designated as a Residential Neighborhood Area, which indicates an intent for a variety of housing types. The infill score also suggests that strictly single-family zoning does not necessarily make the most sense for the area overall. Increasing the available housing types**

would align with City Plan goal #6 of increasing additional opportunities for housing and would help align with the City's goal of making appropriate infill and revitalization the highest priority.

2. A determination of whether the proposed zoning is justified and/or needed at the time the rezoning is proposed.

Finding: **A rezone from RSF-4 to RI-U maintains the site's agreement with the "Residential Neighborhood" designation, which calls out for a wide variety of housing types of appropriate scale and context.**

3. A determination as to whether the proposed zoning would create or appreciably increase traffic danger and congestion.

Finding: **Rezoning the property from RSF-4 to RI-U would increase the allowable density on the site from 4 units per acre (1 unit on the 0.40 acre site) to a density that is instead limited by other development requirements, such as parking, landscaping, and access. Staff does not find that the ultimate added density would appreciably increase traffic danger or congestion. However, it is worth noting that N. Garland Avenue is a Regional Link Street, which typically requires a curb separation distance of 250 feet for 2-family dwellings and above; any development above a single-family dwelling would likely be in conflict with the City's access management standards, and variances may be necessary with any future development above single-family.**

4. A determination as to whether the proposed zoning would alter the population density and thereby undesirably increase the load on public services including schools, water, and sewer facilities.

Finding: **Rezoning the property from RSF-4 to RI-U would certainly increase the potential population at the site, but staff does not find that it would be to an undesirable degree; staff finds that given the City's growth and moderate infill score, this rezoning would be an incremental step in providing more options for housing. The Fayetteville Public School district did not comment on the request.**

5. If there are reasons why the proposed zoning should not be approved in view of considerations under b (1) through (4) above, a determination as to whether the proposed zoning is justified and/or necessitated by peculiar circumstances such as:

    a. It would be impractical to use the land for any of the uses permitted under its existing zoning classifications;

    b. There are extenuating circumstances which justify the rezoning even though there are reasons under b (1) through (4) above why the proposed zoning is not desirable.

Finding: **N/A**

RECOMMENDATION: Planning staff recommends forwarding RZN-2025-0005 to City Council with a recommendation of approval.

PLANNING COMMISSION ACTION: **Required** **YES**

Date: **March 10,2025** ❒ **Tabled** ☒ **Forwarded** ❒ **Denied**

Motion: Gulley

Second: Cabe

Vote: 6-3-0 (Commissioners Gulley, Garlock, Payne opposed)

BUDGET/STAFF IMPACT:
None

ATTACHMENTS:

- Unified Development Code
  - §161.07 District RSF-4, Residential Single-Family – Four (4) Units Per Acre
  - §161.12 District RI-U, Residential Intermediate - Urban
- Request Letter
- ~~Public Comment~~
- One Mile Map
- Close-Up Map
- Current Land Use Map
- Future Land Use Map

Final Public Comment (3.12.2025)

161.07 District RSF-4, Residential Single-Family - Four (4) Units Per Acre

(A) *Purpose.* The RSF-4 Residential District is designed to permit and encourage the development of low density detached dwellings in suitable environments, as well as to protect existing development of these types.

(B) *Uses.*

(1) *Permitted Uses*.

Unit 1	City-wide uses by right
Unit 8	Single-family dwellings
Unit 41	Accessory dwellings
Unit 46	Short-term rentals

(2) *Conditional Uses*.

Unit 2	City-wide uses by conditional use permit
Unit 3	Public protection and utility facilities
Unit 4	Cultural and recreational facilities
Unit 5	Government facilities
Unit 9	Two-family dwellings
Unit 12a	Limited business
Unit 24	Home occupations
Unit 36	Wireless communications facilities

Unit 44	Cluster Housing Development

(C) *Density.*

	Single-family dwellings	Two (2) family dwellings
Units per acre	4 or less	7 or less

(D) *Bulk and Area Regulations.*

	Single-family dwellings	Two (2) family dwellings
Lot minimum width	70 feet	80 feet
Lot area minimum	8,000 square feet	12,000 square feet
Land area per dwelling unit	8,000 square feet	6,000 square feet
Hillside Overlay District Lot minimum width	60 feet	70 feet
Hillside Overlay District Lot area minimum	8,000 square feet	12,000 square feet
Land area per dwelling unit	8,000 square feet	6,000 square feet

(E) *Setback Requirements.*

Front	Side	Rear
15 feet	5 feet	15 feet

(F) *Building Height Regulations*.

Building Height Maximum	3 stories

(G) *Building Area.* On any lot the area occupied by all buildings shall not exceed 40% of the total area of such lot. Accessory ground mounted solar energy systems shall not be considered buildings.

161.12 District RI-U, Residential Intermediate - Urban

(A) *Purpose.* The RI-U Residential District is designed to permit and encourage the development of detached and attached dwellings in suitable environments, to provide a range of housing types compatible in scale with single-family homes and to encourage a diversity of housing types to meet demand for walkable urban living.

(B) *Uses.*

(1) *Permitted Uses.*

Unit 1	City-wide uses by right
Unit 8	Single-family dwellings
Unit 9	Two (2) family dwellings
Unit 10	Three (3) and four (4) family dwellings
Unit 41	Accessory dwellings
Unit 44	Cluster housing development
Unit 46	Short-term rentals

(2) *Conditional Uses.*

Unit 2	City-wide uses by conditional use permit
Unit 3	Public protection and utility facilities
Unit 4	Cultural and recreational facilities

Unit 5	Government facilities
Unit 12a	Limited business
Unit 24	Home occupations
Unit 26	Multi-family dwellings
Unit 36	Wireless communications facilities

(C) *Density.* None.

(D) *Bulk and Area Regulations.*

	Dwelling (all types)
Lot width minimum	18 feet
Lot area minimum	None

(E) *Setback Requirements.*

Front	Side Other Uses	Side Single & Two (2) Family	Rear Other Uses	Rear, from centerline of an alley
A build-to zone that is located between the front property, line and a line 25 feet from the front property line.	None	5 feet	5 feet	12 feet

(F) *Building Height Regulations.*

Building height maximum	2 stories/3 stories*

* A building or a portion of a building that is located between 0 and 10 feet from the front property line or any master street plan right-of-way line shall have a maximum height of two (2) stories. Buildings or portions of the building set back greater than 10 feet from the master street plan right-of-way shall have a maximum height of three (3) stories.

(G) *Building Area.* The area occupied by all buildings shall not exceed 60% of the total lot area. Accessory ground mounted solar energy systems shall not be considered buildings.

(H) *Minimum Buildable Street Frontage.* 50% of the lot width.

(Ord. No. 5945, §5(Exh. A), 1-17-17; Ord. No. 6015, §1(Exh. A), 11-21-17; Ord. No. 6245, §2, 10-15-19; Ord. No. 6427, §§1(Exh. C), 2, 4-20-21)

Editor's note(s)—Ord. No. 6710, §1, adopted November 21, 2023, determines that Ordinance 6427 (Sunset Clause) and Ord. No. 6625 (extending Sunset Clause) be amended so that Ordinance 6427 and all amendments to Code Sections ordained or enacted by Ordinance 6427 shall automatically sunset, be repealed and become void on December 31, 2024, unless prior to that date the City Council amends this ordinance to repeal or further amend this sunset, repeal and termination section

WRITTEN DESCRIPTION OF 1791 N. GARLAND AVENUE RI-U REZONE REQUEST PER THE CITY OF FAYETTEVILLE REZONING APPLICATION

a. Current ownership information and any proposed or pending property sales.

The subject property is owned by Whitley Dunn and JMAX Properties LLC. There are no proposed or pending property sales.

b. Reason (need) for requesting the zoning change.

The reason for the zoning change request is to ensure that future development on the property is in accordance with City Plan 2040 goals. Specifically goal #1, to make appropriate infill and revitalization our highest priority and goals #2 and #3 to discourage suburban sprawl and make compact, complete, and connected development the standard. Goals #4 and #6, to grow a livable transportation network and create opportunities for attainable housing will also be accommodated better if the rezoning change is granted.

The property has approximately 90 linear feet of frontage along the west side of Garland Avenue. Future development on the property with the RI-U District will make possible a compatible transition from the City Neighborhood Area Future Land Use Designation located on the east side of Garland Avenue transitioning to the Residential Neighborhood Area Designation on the west side of Garland Avenue. The RI-U District is designed to provide a range of housing types compatible in scale with single-family homes and also to encourage a diversity of housing types to meet the demand for walkable urban living.

c. Statement of how the proposed rezoning will relate to surrounding properties in terms of land use, traffic, appearance, and signage.

The rules and regulations set forth in the RI-U District will make possible smaller-scaled development on the property that is compatible to existing multi-family development along the east side of Garland Avenue and also compatible with existing single-family development along the west side of Garland Avenue. With direct access to Garland Avenue and transit along the corridor, development of the property with the RI-U district will not negatively impact traffic.

Availability of water and sewer (state size of lines).

Public Water and Sewer is available and accessible along Garland Avenue. 8” sanitary sewer mains and 8” water mains exist on Garland Avenue.

d. The degree to which the proposed zoning is consistent with land use planning objectives, principles, and policies and with land use and zoning plans.

Given the properties close proximity to services located along the Garland Avenue Corridor, development of the property under the rules and regulations set forth in the RI-U District would be highly consistent with land use planning objectives, principles, and policies. The RI-U District will make possible development that is in accordance with City Neighborhood Areas while providing the flexibility needed to create an appropriate and compatible transition to the Residential Neighborhood Areas.

The property has an infill rating of 7-8. The higher infill rating coupled with close proximity to transit fits the RI-U districts intended purpose to provide a range of housing types compatible in scale with single-family homes. The rules and regulations set forth in the RI-U District also make possible a development form that will discourage suburban sprawl and make compact, complete, and connected development the standard. Those same rules and regulations will also make possible more preservation of land.

e. Whether the proposed zoning is justified and/or needed at the time of the request.

The proposed zoning is needed at this time in order to ensure that future development on the property is more in accordance with the principles of City Plan 2040.

f. Whether the proposed zoning will create or appreciably increase traffic danger and congestion.

The proposed zoning will not create or appreciably increase traffic danger or congestion. The Garland Avenue corridor can easily and safely accommodate any new traffic generated from development of the property.

g. Whether the proposed zoning will alter the population density and thereby undesirably increase the load on public services including schools, water, and sewer facilities.

With only 0.40 acres proposed for rezoning to the RI-U District, the proposed zoning will not alter the population density in a way that would significantly increase the load on public services.

h. Why it would be impractical to use the land for any of the uses permitted under its existing zoning classification.

The proposed zoning will encourage a development use and form that is more in accordance with City Plan 2040 and contribute to the environmental, economic, and social benefits that City Plan 2040 offers.

community.by.design
TOWN PLANNING.URBAN ENGINEERING

February 21, 2025
Via Email: jmasters@fayetteville-ar.gov

Ms. Jessica Masters
Zoning and Development Administrator
City of Fayetteville
125 West Mountain Street
Fayetteville, Arkansas 72701

RE: 1791 N. Garland Ave. – Rezone Request
Additional Information

Ms. Masters,

The intent of this letter is to provide additional information for the request to rezone Parcel 765-10529-000 from RSF-4 to RI-U. The parcel totals 0.38 acres and has 90 linear feet of street frontage along the west side of Garland Avenue located approximately 275' north of W. Deane Street. Currently on the property is a single-family house. The owner intends for the existing house to remain and to also build additional housing to the rear / west of the existing house.

RMF-24 multi-family zoning is predominate along the east side of Garland Avenue while RSF-4 single-family zoning is the predominate zoning along the west side of Garland Avenue, with Garland Avenue being the boundary on the Future Land Use map between City Neighborhood Area designation to the east and Residential Neighborhood Area to the west. Garland Avenue is a transit route with the nearest transit stop located 790' to the south of the subject property on N. Maxwell Drive, a 3-minute walk.

Garland Avenue is both a general land use / zoning boundary and a transit route making this corridor and the subject property a transitional area that is most appropriate for the RI-U zoning district. The stated purpose of RI-U zoning per City of Fayetteville Unified Development Code 161.12(A) is: "Purpose. The RI-U Residential District is designed to permit and encourage the development of detached and attached dwellings in suitable environments, to provide a range of housing types compatible in scale with single-family homes and to encourage a diversity of housing types to meet demand for walkable urban living."

The RI-U district would allow for smaller scaled missing middle housing types on this small lot that would be compatible with existing housing on both sides of Garland Avenue and would continue to not allow multi-family buildings in the same way that the RSF-4 district currently does. We have had success designing and building smaller scaled, more affordable, detached and attached missing middle housing types that look like single-family houses, and the RI-U zoning regulations have made this possible. Precedent images of some of the missing middle housing types we have designed and built with the zoning regulations of the RI-U district are attached to this letter.

We would like the opportunity to design and build something similar on the subject property as it would play a small part in meeting the goals as set forth in City Plan 2040.

Sincerely,

Brian Teague, Director of Design
Community By Design

100 West Center Street Suite 300
Fayetteville, AR 72701
479.790.6775

Apartment Houses - N. Washington Ave.

Two-Family House - W. Cleveland St.

Two-Family House - W. Cleveland St.

Cottage Court Houses - 11th Street

Carriage Houses - Rear Lane

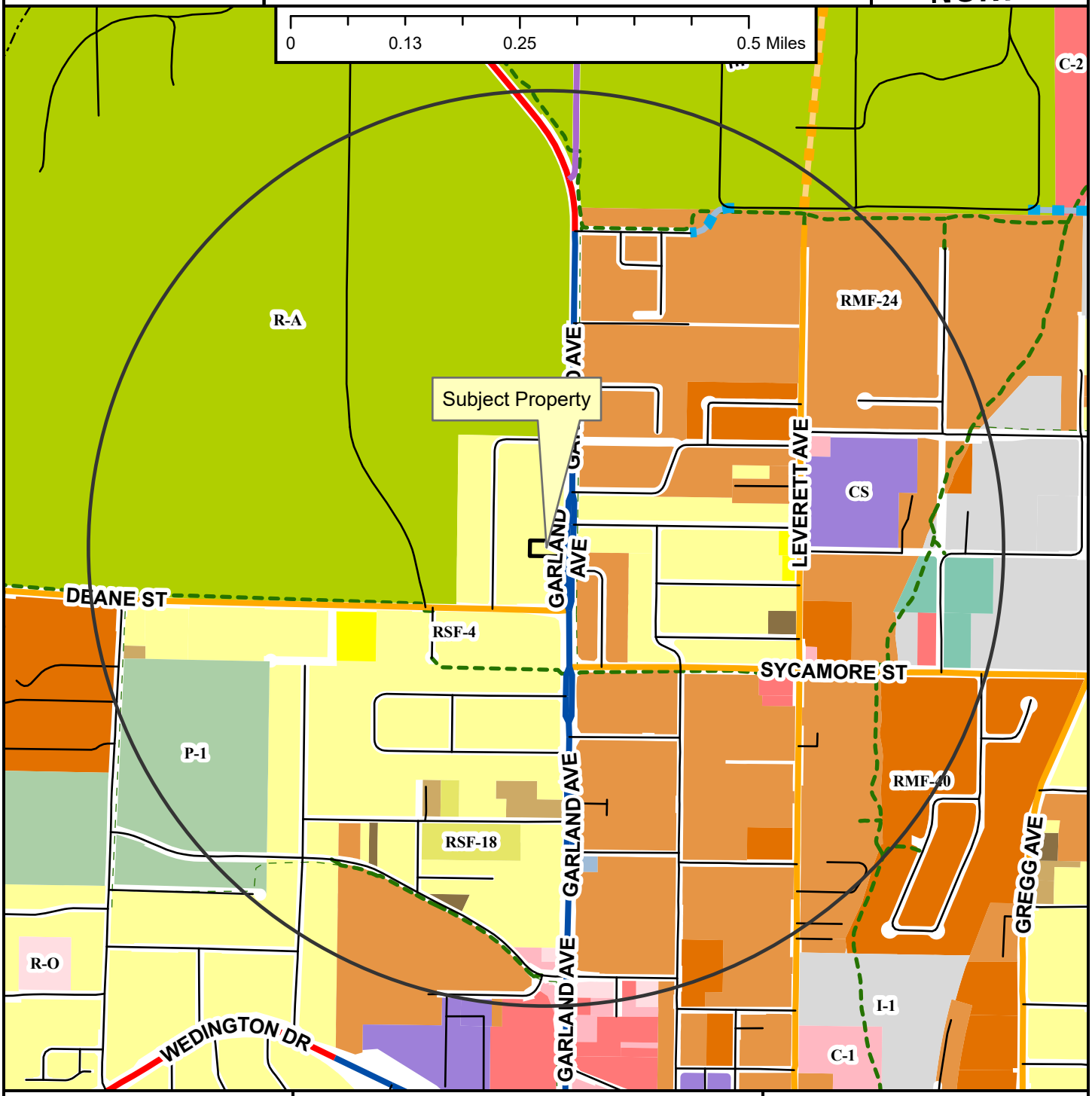
Cottage Court Houses - 11th Street

RZN-2025-0005

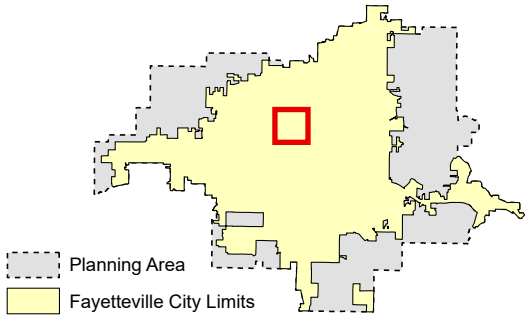
One Mile View

1791 N. GARLAND AVE

NORTH



Regional Link
Neighborhood Link
Institutional Master Plan
Regional Link - High Activity
Unclassified
Alley
Residential Link
Planned Neighborhood Link
Planned Residential Link
Shared-Use Paved Trail
Trail (Proposed)
Design Overlay District
Fayetteville City Limits
Planning Area



Zoning

RESIDENTIAL SINGLE-FAMILY
NS-G
RI-U
RI-12
NS-L
Residential-Agricultural
RSF-.5
RSF-1
RSF-2
RSF-4
RSF-7
RSF-8
RSF-18

RESIDENTIAL MULTI-FAMILY
RMF-6
RMF-12
RMF-18
RMF-24
RMF-40

INDUSTRIAL
I-1 Heavy Commercial and Light Industrial
I-2 General Industrial

EXTRACTION
E-1

COMMERCIAL
Residential-Office
C-1
C-2
C-3

FORM BASED DISTRICTS
Downtown Core
Urban Thoroughfare
Main Street Center
Downtown General
Community Services
Neighborhood Services
Neighborhood Conservation

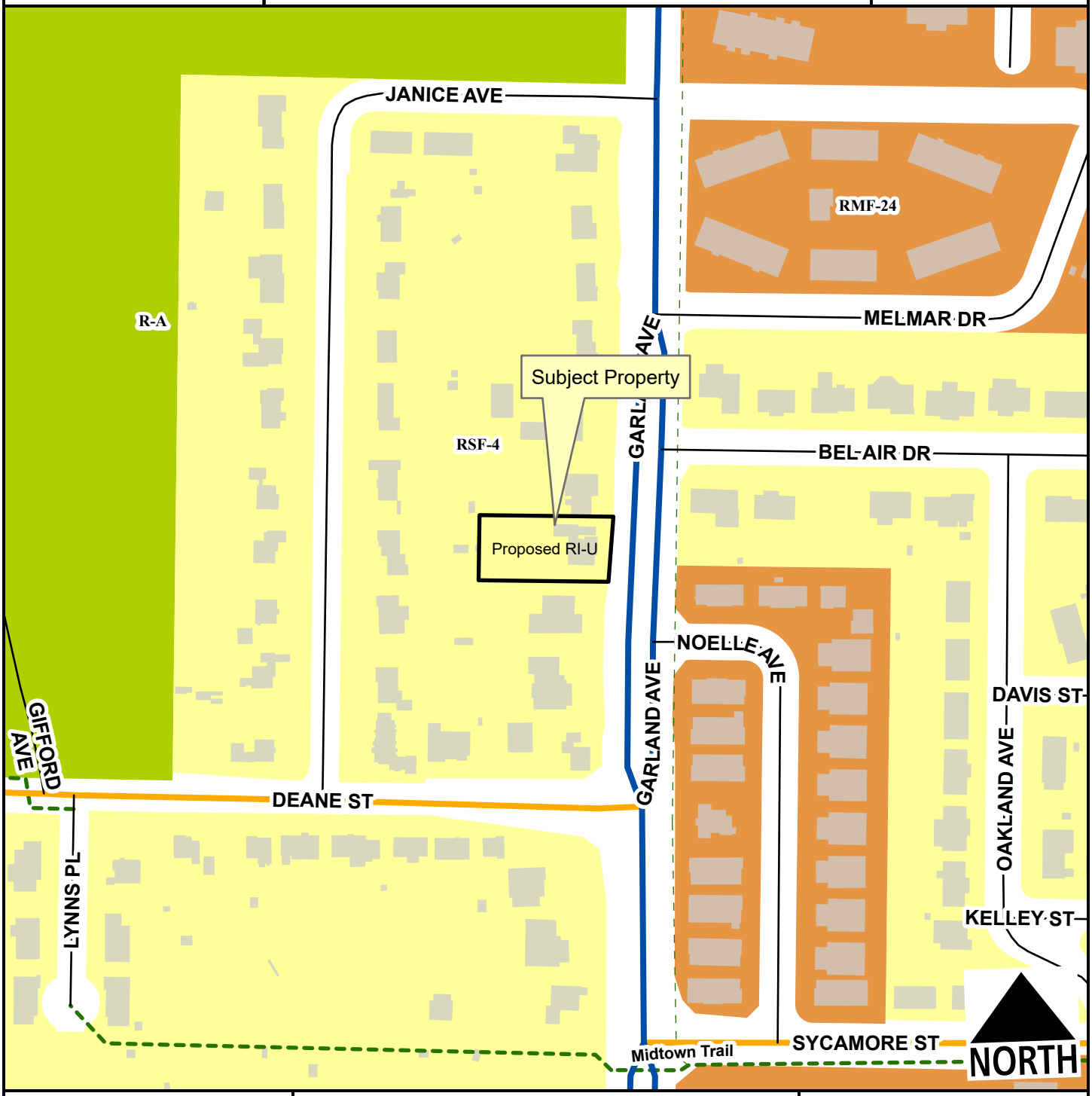
PLANNED ZONING DISTRICTS
Commercial, Industrial, Residential

INSTITUTIONAL
P-1

RZN-2025-0005

Close Up View

1791 N. GARLAND AVE



- Neighborhood Link
- Regional Link - High Activity
- Unclassified
- Residential Link
- Trail (Proposed)
- Planning Area
- Fayetteville City Limits

Feet

0 75 150 300 450 600

1:2,400

Zone	Current	Proposed
RI-U	0.0	0.4
RSF-4	0.4	0.0

Total 0.4 ac

RZN-2025-0005

Current Land Use

1791 N. GARLAND AVE

NORTH

- Neighborhood Link
- Regional Link - High Activity
- Unclassified
- Residential Link
- Trail (Proposed)
- Planning Area
- Fayetteville City Limits

Feet

0 112.5 225 450 675 900

1:3,600

FEMA Flood Hazard Data

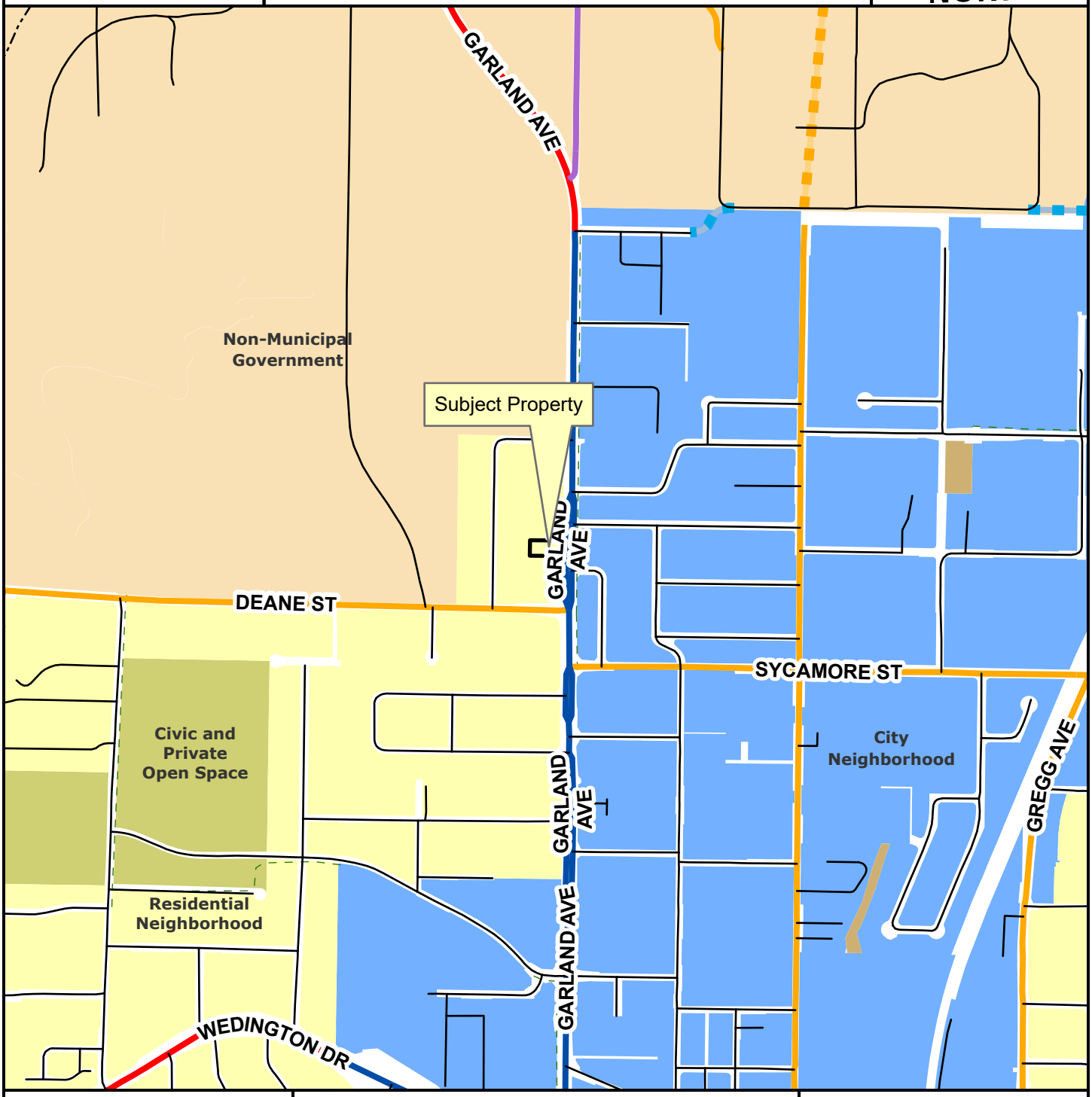
- 100-Year Floodplain
- Floodway

RZN-2025-0005

Future Land Use

1791 N. GARLAND AVE

NORTH



- Regional Link
- Neighborhood Link
- Institutional Master Plan
- Regional Link - High Activity
- Unclassified
- Alley
- Residential Link
- Planned Neighborhood Link
- Planned Residential Link
- Planning Area
- Fayetteville City Limits
- Trail (Proposed)
- Design Overlay District

Feet

0 305 610 1,220 1,830 2,440

1:10,000

- City Neighborhood
- Civic Institutional
- Civic and Private Open Space
- Industrial
- Natural
- Non-Municipal Government
- Residential Neighborhood
- Rural Residential
- Urban Center

Compiled Public Comment
RZN-2025-0005

From: Chris Mitchell <Chris.Mitchell@georgesinc.com>
Sent: Monday, March 10, 2025 11:25 AM
To: Masters, Jessica <jmasters@fayetteville-ar.gov>
Cc: Melissa Daniel <grade4ap@hotmail.com>
Subject: RE: [EXTERNAL] RE: RZN 2025-0005/1791 N. Garland Avenue

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Jessie – Will there be a public comment period during tonight's meeting? If so, I'd like to speak. If that's not an option, I do want to clarify and expound on my previous comments and make sure they are included for the Planning Commission:

- Garland Avenue appears to be a dividing line in the City's 2040 Plan, with the east side being designated a City Neighborhood and the west side (subject of this issue) being designated a Residential Neighborhood. This rezoning request ignores this boundary and attempts to "move the map" by arguing that proximity to the City Neighborhood should transform a Residential Neighborhood into City Neighborhood.
- The west side is already designated for an ADU, which accomplishes the city's goals of urban density, walkability, and affordable housing without doing something that is completely out of character with that portion of the west side of Garland. There is already one property that has built an ADU and it fits in perfectly with the character of the neighborhood, which is **entirely** residential. Rezoning to RI-U would alter the neighborhood and work against Goal #1 which states, in part, "Infill resulting in out-of-scale buildings with a different architectural style and impacts such as noise and privacy are **not appropriate**" (emphasis added). I can't see how adding several units (including the potential for three story buildings) next to my backyard can have anything but a negative impact on noise and privacy.
- The property owners state in their letter to Zoning & Development that this is a .38 acre lot and they intend to leave the currently existing home intact. The zoning regs as I understand them also only allow for development on 60% of the lot. Given the lot size and stated intent to leave the existing home, the moving party would need to demonstrate how 2-4 separate housing units could possibly fit into this area. That's without considering eradicating the existing tree canopy and whether there will be a need for a retention pond. As pointed out in my prior comments, this stretch of Garland already has horrible drainage, with standing water visible in the yards of most homes up to a week after a rainfall event. I can't see how eliminating tree canopy and adding hardscape would do anything other than negatively impact and already serious draining problem.
- Finally, when the city talks about long terms goals of density and walkability, I'd like to think my family of five was scoped into this definition. We made the very intentional decision last year to move from the suburbs to be close to the city center so we'd have easy access to the Greenway and could walk to area establishments like City Park, Leverett Lounge, and athletics and arts events at the University. Changing the characteristics of an existing neighborhood in a way that

alters our reasonable expectation of some degree of privacy and quiet will drive families like us away from the city center and back to the suburbs.

Thanks,

Chris

Chris D. Mitchell | VP of Legal, EHS, & Compliance | George's Inc.| P.O. Drawer G | Springdale AR 72765 | Office: (479) 927-7732 | Cell: (479) 200-4197 | www.georgesinc.com

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From: Chris Mitchell <Chris.Mitchell@georgesinc.com>
Sent: Tuesday, March 4, 2025 5:04 PM
To: Masters, Jessica <jmasters@fayetteville-ar.gov>
Cc: Melissa Daniel <grade4ap@hotmail.com>
Subject: RE: [EXTERNAL] RE: RZN 2025-0005/1791 N. Garland Avenue

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Thanks Jessie, appreciate the response. I understand the city's goal with this sort of rezoning – walkable communities, urban density, lower/middle-income housing, etc. I don't want to be a NIMBY, but I also have some serious concerns about potentially shoehorning a 4 unit apartment into a small backyard (I'm familiar w/ the dimensions, because it' the exact size of my backyard). I don't see how this is feasible without removing what little tree canopy exists on that piece of property and building on more that 60% of the lot, which I understand is impermissible under this zoning standard. Plus, there are serious draining issues along just about every piece of property on that side of Garland, so I'm interested in what impact it would have, if any, on an already terrible drainage issue. It is my understanding our area is already zoned for an RDU and this would seem to be a much more realistic use of the property and wouldn't change the character of the street, which is entirely residential (with one RDU) on that side of Garland.

My neighbor on the other side of my property is a developer and I'm meeting with him tonight to make sure I understand our rights in this process and when and where it's appropriate to engage with the city. So I may very well have some more formal comments I'll pass along to you to share with the Planning Commission and I intend to be at the meeting on Monday the 10th. I will also say that I've been engaging with Brian Teague on this issue and, to his credit, he has been responsive and helpful and has been so kind as to send me some examples of projects he's worked on in the city. My sticking point though, is that he can't tell me exactly what their plans are for the property. If I don't get some clarity around future plans I'm not sure I have any other choice that to protest the rezoning in whatever capacity I can for as long as I can. I'll be in touch later in the week if it makes sense to submit formal comments. Best,

Compiled Public Comment
RZN-2025-0005

Chris

Chris D. Mitchell | VP of Legal, EHS, & Compliance | George's Inc.| P.O. Drawer G | Springdale AR 72765 |
Office: (479) 927-7732 | Cell: (479) 200-4197 | www.georgesinc.com

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From: Masters, Jessica <jmasters@fayetteville-ar.gov>
Sent: Monday, March 3, 2025 9:36 AM
To: Chris Mitchell <Chris.Mitchell@georgesinc.com>
Cc: danielmel1978@gmail.com
Subject: [EXTERNAL] RE: RZN 2025-0005/1791 N. Garland Avenue

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Chris,

Thank you for the email and phone call. The snow days a couple weeks ago have put me pretty far behind, so I really appreciate the patience!

The applicant is requesting to rezone their property (listed above) to RI-U, Residential Intermediate - Urban. The zoning district they are requesting would allow for an up-to 4 unit apartment building by-right, a maximum of 3 stories, and any associated parking, tree preservation, and drainage requirements that would ultimately be required when they came through to pursue a development. The zoning district requirements can be found at that link.

The applicant's request letters can be found attached to this email. As you are likely aware, the item will be heard by the Fayetteville Planning Commission on Monday, March 10, beginning at 5:30 PM. Members of the public are invited to attend that meeting, either in-person in City Council chambers (113 W. Mountain Street) or virtually through zoom. Information about how to attend virtually can be found here. You may also submit any written comment to me, and I will make sure the Planning Commission receives it prior to the meeting.

I am happy to answer any additional questions you might have. Sincerely,

Jessie

Jessie Masters, AICP
Development Review Manager
Development Services
City of Fayetteville, Arkansas
(479) 575-8239
www.fayetteville-ar.gov
Website | Facebook | Twitter | Instagram | YouTube

From: Holly Hamilton <hamilton.holly.j@gmail.com>
Sent: Tuesday, March 4, 2025 12:40 PM
To: Masters, Jessica <jmasters@fayetteville-ar.gov>
Subject: Question: Adjacent Property Owner -- RZN 2025-005

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Adjacent Property Owner -- RZN 2025-005
Holly Hamilton
Owner 1806 N Janice Ave, Fayetteville AR

Hello Jessica, 2 quick questions concerning the Planning Meeting on March 10th

- Is it encouraged that neighbors attend?
- Will there be an opportunity to speak up in favor of the rezone?

I have received a letter concerning a possible rezone for the property at 1791 N Garland Ave. in Fayetteville. The property in question is behind my next-door neighbor's house and **I am in FULL SUPPORT of the rezone to RI-U**. I would welcome the same rezoning if it were directly behind my house, or extended to the west side of Garland Ave. and all of Janice Ave.

Having owned my home for 20 years, I have seen the area change dramatically and for the better. Gone are the days of drug deals and stabbings at the Sleezy Mart. Many of us who have been in the area for a while have little concern about increased density, traffic, or additional 3-story multifamily builds.

I welcome even more people to share in the community-building benefits that the location provides - Easy commute to the UofA and University Bus Route, quick access to 49, and access to our wonderful greenway trail system, not to mention the friendly neighbors.

The homes in our neighborhood all feature large lots and I expect that we continue to see small and/or local developers investing in the area. It is also my hope that our local government can continue to support these efforts as well as continue to support current homeowners through ADUs and other resources to increase the use of existing lots with low-impact housing.

Thank you for your time, Holly

Holly Hamilton
479-200-2854

Compiled Public Comment
RZN-2025-0005

From: Chris Mitchell <Chris.Mitchell@georgesinc.com>
Sent: Monday, February 24, 2025 9:46 AM
To: Masters, Jessica <jmasters@fayetteville-ar.gov>
Cc: danielmel1978@gmail.com
Subject: RZN 2025-0005/1791 N. Garland Avenue

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Ms. Masters,

I just left you a VM and was following up so you'd have email contact information also. My wife and I (cc'd on this) received notice via mail on Saturday about a rezoning request for the property next to our house. We're at 1777 N. Garland and have been at that location for a bit over a year. The strip of Garland where we reside is entirely residential, so we have concerns about the rezoning request and would like additional information so we can have an informed opinion as to next steps. If you could contact me at your convenience, it would be much appreciated. Best,

Chris

Chris D. Mitchell | VP of Legal, EHS, & Compliance | George's Inc.| P.O. Drawer G | Springdale AR 72765 | Office: (479) 927-7732 | Cell: (479) 200-4197 | www.georgesinc.com

CITY OF FAYETTEVILLE ARKANSAS

CITY COUNCIL MEMO
2025-364

MEETING OF MARCH 25, 2025

TO: Mayor Rawn and City Council

THRU: Keith Macedo, Interim Chief of Staff
Jonathan Curth, Development Services Director
Jessica Masters, Development Review Manager

FROM: Wesley Frank, Planner

SUBJECT: **REZONING-2025-0004: (809 W. KELLEY ST./ PARK AVENUE,366):**

RECOMMENDATION:
City Planning Staff and the Planning Commission recommend approval of a request to rezone the subject property as described and shown in the attached Exhibits 'A' and 'B'.

BACKGROUND:
The subject property is located at the northwest corner of the W. Sycamore Street and N. Leverett Avenue intersection. Additionally, the property also fronts on to Kelley Street to the north, from which it is addressed. The property contains 0.26 acres and is currently developed with a single-family dwelling, which Washington County records indicate was built in 1965.

Request: The request is to rezone the subject property from from RSF-4, Residential Single-Family – 4 Units per Acre, to RI-U, Residential Intermediate – Urban.

Public Comment: To date, staff has not received any public comment regarding this request.

Land Use Compatibility: Staff finds the proposed rezoning to be compatible with the surrounding area. While the subject property is situated on the edge of a single-family residential subdivision, the surrounding area has a variety of lot sizes and land uses. The lot within the subject property is relatively small, at about a ¼ acre, which suggests that any future development will be sized appropriately to the context. Additionally, given the building requirements and permitted uses associated with the RI-U zoning district, any future development will likely be compatible in scale with surrounding properties. In terms of land use, the subject property is located near single-family, multi-family, commercial, and industrial zoning districts. Rezoning to RI-U would permit, by right, the development of single-, two-, three-, and four-family dwellings, which appear to be compatible in use and incremental in density when compared to the surrounding area. The building height maximum for both RSF-4 and RI-U zoning districts is 3 stories, which means that rezoning would not permit the construction of buildings taller than what is currently allowed. However, the front and rear setback requirements, lot size, and lot width requirements would all be reduced. Where RSF-4 requires a 15-foot front and rear setback, RI-U would require a 25-foot build-to-zone and a 5-foot rear setback. Also, where RSF-4 requires a lot size of 8,000 square feet and a minimum width of 70 feet, RI-U would not have a minimum lot size requirement and would only require a minimum width of 18 feet. On the balance of findings, staff finds the requested RI-U zoning to be compatible with existing and potential land uses.

Land Use Plan Analysis: Staff finds that a rezoning to RI-U would be consistent with the City's adopted land use plans. City Plan 2040's Future Land Use Map designates the property as City Neighborhood. The property also has an infill rating of 8 and is located 0.29 of a mile west from a Tier 3 center at the intersection W. Sycamore Street and N. Gregg Avenue. The City Plan 2040 describes Tier 3 centers as being "characterized by one or two commercial and/or multi-family buildings located on a single intersection while others develop into a mixed-use core extending over multiple blocks and serving a broad mix of housing." Staff finds that this rezoning is in line with this designation and would allow for increased development in character with surrounding properties along with its proximity to two regional high activity link streets.

CITY PLAN 2040 INFILL MATRIX: City Plan 2040's Infill Matrix indicates a score of 8 for this site. The following elements of the matrix contribute to the score:

- Adequate Fire Response (Station 8, 2266 W. Deane Street)
- Near Sewer Main (15" located on W. Sycamore Street)
- Near Water Main (8" located on W. Sycamore Street)
- Near Grocery Store (Harps Food Store)
- Near City Park (Gregory Park)
- Near Paved Trail (Midtown Trail, Scull Creek Trail, and W. Sycamore Street bike lane)
- Near Razorback Bus Stop (Leverett & Sycamore, Ruby Creek)
- Appropriate Future Land Use (City Neighborhood Area)

DISCUSSION:
At the March 10, 2025, Planning Commission meeting, a motion to forward this item with a recommendation of approval passed with a unanimous vote of 9-0-0. Commissioners offered little comment on the item, finding the request compatible. No members of the public spoke at the meeting.

BUDGET/STAFF IMPACT:
N/A

ATTACHMENTS: SRF (#3) , Exhibit A (#4), Exhibit B (#5), Planning Commission Staff Report (#6)

113 West Mountain Street
Fayetteville, AR 72701
(479) 575-8323

File #: 2025-364

REZONING-2025-0004: (809 W. KELLEY ST./ PARK AVENUE,366):

AN ORDINANCE TO REZONE THE PROPERTY DESCRIBED IN REZONING PETITION RZN 2024-04 FOR APPROXIMATELY 0.26 ACRES LOCATED AT 809 WEST KELLEY STREET STREET IN WARD 2 FROM RSF-4, RESIDENTIAL SINGLE-FAMILY, FOUR UNITS PER ACRE TO RI-U, RESIDENTIAL INTERMEDIATE-URBAN

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby changes the zone classification of the property shown on the map (Exhibit A) and the legal description (Exhibit B) both attached to the Planning Department's Agenda Memo from RSF-4, Residential Single-Family, Four Units per Acre, to RI-U, Residential Intermediate – Urban.

Section 2: That the City Council of the City of Fayetteville, Arkansas hereby amends the official zoning map of the City of Fayetteville to reflect the zoning change provided in Section 1.

City of Fayetteville Staff Review Form

2025-364

Item ID

4/1/2025

City Council Meeting Date - Agenda Item Only
N/A for Non-Agenda Item

Jonathan Curth	3/14/2025	DEVELOPMENT REVIEW (630)
Submitted By	**Submitted Date**	**Division / Department**

Action Recommendation:

RZN-2025-0004: Rezone (809 W. KELLEY ST./PARK AVENUE, 366): Submitted by JEREMY KENNEDY for property located at 809 W. KELLEY ST in WARD 2. The property is zoned RSF-4, RESIDENTIAL SINGLE-FAMILY, FOUR UNITS PER ACRE and contains approximately 0.26 acres. The request is to rezone the property to RI-U, RESIDENTIAL INTERMEDIATE-URBAN.

Budget Impact:

Account Number	Fund
Project Number	Project Title

Budgeted Item?	No	Total Amended Budget	$	-
		Expenses (Actual+Encum)	$	-
		Available Budget	$	-
Does item have a direct cost?	No	Item Cost	$	-
Is a Budget Adjustment attached?	No	Budget Adjustment	$	-
		Remaining Budget	$	-

V20221130

Purchase Order Number:

Previous Ordinance or Resolution #

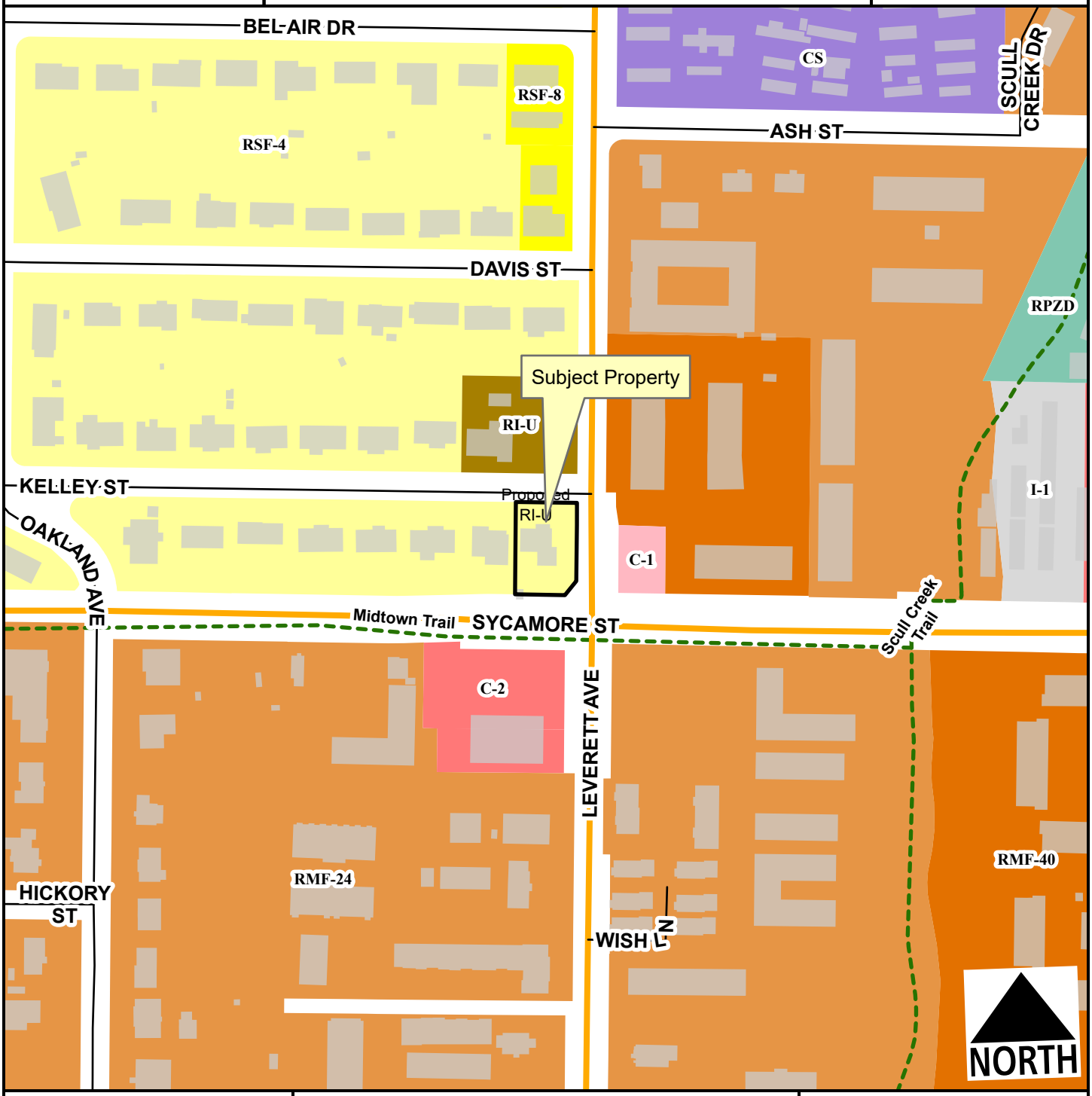
Change Order Number:

Approval Date:

Original Contract Number:

Comments:

RZN-2025-0004	809 W. KELLEY ST	RZN-2025-0004 EXHIBIT 'A'
Close Up View		



- Neighborhood Link
- Unclassified
- Residential Link
- Planning Area
- Fayetteville City Limits

Feet

0 75 150 300 450 600

1:2,400

Zone	Current	Proposed
RI-U	0.0	0.2
RSF-4	0.2	0.0

Total 0.2 ac

Legal Description

809 W Kelley Street

Fayetteville, AR 727703

Lot one (1) in Block (1) in Bel-Air Acres, a Replat of Lot Seventeen (17) Evins Farm, an Addition to the City of Fayetteville, as per plat of said Addition on file in the Office of the Circuit Clerk and Ex-Officio Recorder of Washington County, Arkansas. LESS AND EXCEPT: part of Lot Numbered One (1) in Block Numbered One (1) in Bel-Air Acres , a Re-plat of Lot Seventeen (17) Evins Farm, an Addition to the City of Fayetteville, as per plat of said Addition on file in the Office of the Circuit Clerk and Ex-Officio Recorder of Washington County, Arkansas, being more particularly described as follows: Beginning at the Southeast corner of said Lot 1 and thence running West along the South property line 20.00 feet; thence North 53 degrees 07 minutes 48 seconds East 25.00 to the East line of said Lot 1; thence along the East line South 15.00 feet to the point of beginning, containing 150 square feet, more or less.

Subject to easements, rights-of-way, and restrictions of record, if any.

CITY OF FAYETTEVILLE ARKANSAS

PLANNING COMMISSION MEMO

TO: Fayetteville Planning Commission

THRU: Jessie Masters, Development Review Manager

FROM: Wesley Frank, Planner

MEETING DATE: March 10, 2025 w/ updated meeting results

SUBJECT: **RZN-2025-0004: Rezone (809 W. KELLEY ST./PARK AVENUE, 366):** Submitted by JEREMY KENNEDY for property located at 809 W. KELLEY ST. The property is zoned RSF-4, RESIDENTIAL SINGLE-FAMILY, FOUR UNITS PER ACRE and contains approximately 0.26 acres. The request is to rezone the property to RI-U, RESIDENTIAL INTERMEDIATE-URBAN.

RECOMMENDATION:
Staff recommends forwarding RZN-2025-0004 to City Council with a recommendation of approval.

RECOMMENDED MOTION:
"I move to forward RZN-2025-0004 to City Council with a recommendation of approval."

BACKGROUND:
The subject property is located at the northwest corner of the W. Sycamore Street and N. Leverett Avenue intersection. The property contains 0.26 acres and is currently developed with a single-family dwelling, which Washington County records indicate was built in 1965. Surrounding land uses and zoning are depicted in *Table 1.*

Table 1
Surrounding Land Use and Zoning

Direction	Land Use	Zoning
North	Single-Family Residential	RI-U, Residential Intermediate - Urban
South	Commercial	C-2, Thoroughfare Commercial
East	Multi-Family Residential	RMF-40, Residential Multi-Family – 40 Units per Acre / C-1, Neighborhood Commercial
West	Single-Family Residential	RSF-4, Residential Single-Family – 4 Units per Acre

Request: The applicant is requesting to rezone the property from RSF-4, Residential Single-Family – 4 Units per Acre, to RI-U, Residential Intermediate – Urban. The applicant has stated that rezoning would allow for appropriate infill.

Public Comment: Staff has not received comment at this time.

INFRASTRUCTURE AND ENVIRONMENTAL REVIEW

Streets: The subject property has frontage to W. Sycamore Street, N. Leverett Avenue, and

W. Kelley. W. Sycamore Street is an improved Neighborhood Link with asphalt paving, curb and gutter along the north side. N. Leverett Avenue is a partially improved Neighborhood Link with asphalt paving, curb and gutter and sidewalk along the west side. W. Kelley Street is a Residential Link street with asphalt paving, curb and gutter and sidewalk. Any street improvements required in these areas would be determined at the time of development proposal. Any additional improvements or requirements for drainage will be determined at time of development.

Water: Public water is available to the subject property. There is an existing 8-inch water main along the beneath W. Sycamore Street. There is also an existing 6-inch water main along the eastern side of N. Leverett Avenue.

Sewer: Sanitary Sewer is available to the subject property. There are existing 15-inch sewer mains along both W. Sycamore Street and N. Leverett Avenue.

Fire: Fire apparatus access and fire protection water supplies will be reviewed for compliance with the Arkansas Fire Prevention Code at the time of development. Station 8, located at 2266 W. Deane St., protects this site. The property is located approximately 1.2 miles from the fire station with an anticipated drive time of approximately 3 minutes using existing streets. The anticipated response time would be approximately 5.2 minutes. The Fire Department response time is calculated based on the drive time plus 1 minute for dispatch and 1.2 minutes for turn-out time. Within the City Limits, the Fayetteville Fire Department has a response time goal of 6 minutes for an engine and 8 minutes for a ladder truck.

Police: The Police Department expressed no concerns with this request.

Drainage: Any additional improvements or requirements for drainage will be determined at the time of development. No portion of the property lies within the Hillside-Hilltop Overlay District, nor within a Streamside Protection Zone.

The property does not lie in the FEMA floodplain.

There are hydric soils present on the property. Hydric soils are a known indicator of wetlands. However, for an area to be classified as wetlands, it may also need other characteristics such as hydrophytes (plants that grow in water), and shallow water during parts of the year. Hydric soils can be found across many areas of Fayetteville, including valleys, floodplains, and open prairies. It's important to identify these natural resources during development, so when these soils are identified on a property, further environmental studies will be required at the time of development. Before permits will be issued for the property, a statement/report from an environmental professional must be provided summarizing the existence of wetlands on the property. If this statement/report indicates that wetlands may be present on site, a USACE determination of Jurisdictional Wetlands will be required at the time of development submittal.

Tree Preservation:

The proposed zoning district of RI-U, Residential Intermediate – Urban, requires **15% minimum canopy preservation.** The current zoning district of RSF-4, Residential Single-Family – 4 Units per Acre, requires **25% minimum canopy preservation.**

CITY PLAN 2040 FUTURE LAND USE PLAN: City Plan 2040 Future Land Use Plan designates the property within the proposed rezone as **City Neighborhood Area.**

City Neighborhood Areas are more densely developed than residential neighborhood areas and provide a mix of non-residential and residential uses. This designation supports the widest spectrum of uses and encourages density in all housing types, from single-family to multi-family. Non-residential and commercial uses are primarily located at street intersections and along major corridors. Ideally, commercial uses would have a residential component and vary in size, variety and intensity. The street network should have a high number of intersections creating a system of small blocks with a high level of connectivity between neighborhoods. Building setbacks and landscaping are urban in form with street trees typically being located within the sidewalk zone.

CITY PLAN 2040 INFILL MATRIX: City Plan 2040's Infill Matrix indicates a score of 8 for this site with a weighted score of 9.5. The following elements of the matrix contribute to the score:

- Adequate Fire Response (Station 8, 2266 W. Deane Street)
- Near Sewer Main (15" located on W. Sycamore Street)
- Near Water Main (8" located on W. Sycamore Street)
- Near Grocery Store (Harps Food Store)
- Near City Park (Gregory Park)
- Near Paved Trail (Midtown Trail, Scull Creek Trail, and W. Sycamore Street)
- Near Razorback Bus Stop (Leverett & Sycamore, Ruby Creek)
- Appropriate Future Land Use (City Neighborhood Area)

FINDINGS OF THE STAFF

1. A determination of the degree to which the proposed zoning is consistent with land use planning objectives, principles, and policies and with land use and zoning plans.

Finding: ***Land Use Compatibility:*** **While the subject property is situated on the edge of a single-family residential subdivision, the surrounding area has a variety of lot sizes and land uses. The lot within the subject property is relatively small, at about a ¼ acre, which suggests that any future development will be limited in size. Given the building requirements and permitted uses associated with the RI-U zoning district, any future development will likely be compatible in scale with surrounding properties. In terms of land use, the subject property is located near single-family, multi-family, commercial, and industrial zoning districts. Rezoning to RI-U would permit, by right, the development of single-, two-, three-, and four-family dwellings, which appear to be compatible in use and incremental in density when compared to the surrounding area. The building height maximum for both RSF-4 and RI-U zoning districts is 3 stories, which means that rezoning would not permit the construction of any taller buildings. However, the front and rear setback requirements, lot size, and lot width requirements would all be reduced. Where RSF-4 requires a 15-foot front and rear setback, RI-U would require a 25-foot build-to-zone and a 5-foot rear setback. Also, where RSF-4 requires a lot size of 8,000 square feet and a minimum width of 70 feet, RI-U would not have a minimum lot size requirement and would only require a minimum width of 18 feet.**

Land Use Plan Analysis: **Staff finds that a rezoning to RI-U would be consistent with the City's adopted land use plans. City Plan 2040's Future Land Use Map designates the property as City Neighborhood. The property also has a good infill score of 8 and is located 0.29 of a mile west from a Tier 3 center at the intersection W. Sycamore Street and N. Gregg Avenue. The City Plan 2040 describes Tier 3 centers as being "characterized by one or two commercial and/or multi-family buildings located on a single intersection while others develop into a mixed-use core extending over multiple blocks and serving a broad mix of housing." Staff finds that this rezoning is in line with this designation. Staff finds that a rezoning to RI-U would allow for increased development that would be in character with surrounding properties and its proximity to two regional high activity link streets.**

2. A determination of whether the proposed zoning is justified and/or needed at the time the rezoning is proposed.

Finding: **Rezoning this property from RSF-4, Residential Single-Family – 4 Units per Acre, to RI-U, Residential Intermediate – Urban, is justified given the city's stated goal of increased infill development as well as providing additional opportunities for attainable housing.**

3. A determination as to whether the proposed zoning would create or appreciably increase traffic danger and congestion.

Finding: **Rezoning the property from RSF-4 to RI-U has the potential to increase traffic in this area. However, given the size of the lot and the ability to access it via two Neighborhood Link and a Residential Link street, staff finds that the possibility of increased traffic danger and congestion is minimal.**

4. A determination as to whether the proposed zoning would alter the population density and thereby undesirably increase the load on public services including schools, water, and sewer facilities.

Finding: **Rezoning the subject property from RSF-4 to RI-U would have the potential to increase population density in this area in a way that would not undesirably increase the load on public services. Staff finds that the water and sewer infrastructure available to this site could support the impact that this zoning change would bring.**

5. If there are reasons why the proposed zoning should not be approved in view of considerations under b (1) through (4) above, a determination as to whether the proposed zoning is justified and/or necessitated by peculiar circumstances such as:

    a. It would be impractical to use the land for any of the uses permitted under its existing zoning classifications;

    b. There are extenuating circumstances which justify the rezoning even though there are reasons under b (1) through (4) above why the proposed zoning is not desirable.

Finding: **N/A**

RECOMMENDATION: Planning staff recommends approval of RZN-2025-0004.

PLANNING COMMISSION ACTION:	**Required**	**YES**	
Date: **March 10, 2025**	❒ **Tabled**	❒ **Forwarded**	❒ **Denied**
Motion: Payne		with a recommendation of approval	
Second: Castin			
Vote: 9-0-0			

BUDGET/STAFF IMPACT:
None

Attachments:

- Unified Development Code:
  - §161.07 RSF-4, Residential Single-Family – Four (4) Units per Acre
  - §161.12 District RI-U, Residential Intermediate - Urban
- Applicant Request Letter
- One Mile Map
- Close-up Map
- Current Land Use Map
- Future Land Use Map

161.07 District RSF-4, Residential Single-Family - Four (4) Units Per Acre

(A) *Purpose.* The RSF-4 Residential District is designed to permit and encourage the development of low density detached dwellings in suitable environments, as well as to protect existing development of these types.

(B) *Uses.*

(1) *Permitted Uses*.

Unit 1	City-wide uses by right
Unit 8	Single-family dwellings
Unit 41	Accessory dwellings
Unit 46	Short-term rentals

(2) *Conditional Uses*.

Unit 2	City-wide uses by conditional use permit
Unit 3	Public protection and utility facilities
Unit 4	Cultural and recreational facilities
Unit 5	Government facilities
Unit 9	Two-family dwellings
Unit 12a	Limited business
Unit 24	Home occupations
Unit 36	Wireless communications facilities
Unit 44	Cluster Housing Development

(C) *Density.*

	Single-family dwellings	Two (2) family dwellings
Units per acre	4 or less	7 or less

(D) *Bulk and Area Regulations.*

	Single-family dwellings	Two (2) family dwellings
Lot minimum width	70 feet	80 feet
Lot area minimum	8,000 square feet	12,000 square feet
Land area per dwelling unit	8,000 square feet	6,000 square feet
Hillside Overlay District Lot minimum width	60 feet	70 feet
Hillside Overlay District Lot area minimum	8,000 square feet	12,000 square feet
Land area per dwelling unit	8,000 square feet	6,000 square feet

(E) *Setback Requirements.*

Front	Side	Rear
15 feet	5 feet	15 feet

(F) *Building Height Regulations*.

Building Height Maximum	3 stories

(G) *Building Area.* On any lot the area occupied by all buildings shall not exceed 40% of the total area of such lot. Accessory ground mounted solar energy systems shall not be considered buildings.

(Code 1991, §160.031; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 4178, 8-31-99; Ord. No. 4858, 4-18-06; Ord. No. 5028, 6-19-07; Ord. No. 5128, 4-15-08; Ord. No. 5224, 3-3-09; Ord. No. 5312, 4-20-10; Ord. No. 5462, 12-6-11; Ord. No. 5921 , §1, 11-1-16; Ord. No. 5945 , §8, 1-17-17; Ord. No. 6015 , §1(Exh. A), 11-21-17; Ord. No. 6245 , §2, 10-15-19; Ord. No. 6427 , §§1(Exh. C), 2, 4-20-21)

Editor's note(s)—Ord. No. 6427 , § 2, adopted April 20, 2021, "determines that this ordinance and all amendments to Code sections ordained or enacted by this ordinance shall automatically sunset, be repealed, terminated, and become void twenty (20) months after the passage and approval of this ordinance, unless prior to that date, the City Council amends this ordinance to repeal this sunset, repeal and termination section."

161.12 District RI-U, Residential Intermediate - Urban

(A) *Purpose.* The RI-U Residential District is designed to permit and encourage the development of detached and attached dwellings in suitable environments, to provide a range of housing types compatible in scale with single-family homes and to encourage a diversity of housing types to meet demand for walkable urban living.

(B) *Uses.*

(1) *Permitted Uses.*

Unit 1	City-wide uses by right
Unit 8	Single-family dwellings
Unit 9	Two (2) family dwellings
Unit 10	Three (3) and four (4) family dwellings
Unit 41	Accessory dwellings
Unit 44	Cluster housing development

(2) *Conditional Uses.*

Unit 2	City-wide uses by conditional use permit
Unit 3	Public protection and utility facilities
Unit 4	Cultural and recreational facilities
Unit 5	Government facilities
Unit 12a	Limited business
Unit 24	Home occupations
Unit 26	Multi-family dwellings
Unit 36	Wireless communications facilities

(C) *Density.* None.

(D) *Bulk and Area Regulations.*

	Dwelling (all types)
Lot width minimum	18 feet
Lot area minimum	None

(E) *Setback Requirements.*

Front	Side Other Uses	Side Single & Two (2) Family	Rear Other Uses	Rear, from centerline of an alley
A build-to zone that is located between the front property, line and a line 25 feet from the front property line.	None	5 feet	5 feet	12 feet

(F) *Building Height Regulations.*

Building height maximum	2 stories/3 stories*

* A building or a portion of a building that is located between 0 and 10 feet from the front property line or any master street plan right-of-way line shall have a maximum height of two (2) stories. Buildings or portions of the building set back greater than 10 feet from the master street plan right-of-way shall have a maximum height of three (3) stories.

(G) *Building Area.* The area occupied by all buildings shall not exceed 60% of the total lot area. Accessory ground mounted solar energy systems shall not be considered buildings.

(H) *Minimum Buildable Street Frontage.* 50% of the lot width.

(Ord. No. 5945 , §5(Exh. A), 1-17-17; Ord. No. 6015 , §1(Exh. A), 11-21-17; Ord. No. 6245 , §2, 10-15-19)

City of Fayetteville Planning Department
125 W Mountain Street
Fayetteville, AR 72701
(479) 575-8267

Re: Rezoning Request 809 W Kelley Street

To whom it may concern:

Please accept this letter as my request for rezoning approval from District RSF-4, Residential Single-Family – Four (4) Units Per Acre to District RI-U, Residential Intermediate – Urban. This property is located in an area of the city with varied zoning districts and varied residential and commercial development forms. This includes C-1, C-2 and RI-U across the streets as well as various multifamily districts in the direct vicinity. Rezoning this property to RI-U will allow for an additional housing unit to be constructed in an area that already has much if not all the needed infrastructure. Thank you for your time in considering my request.

Sincerely,

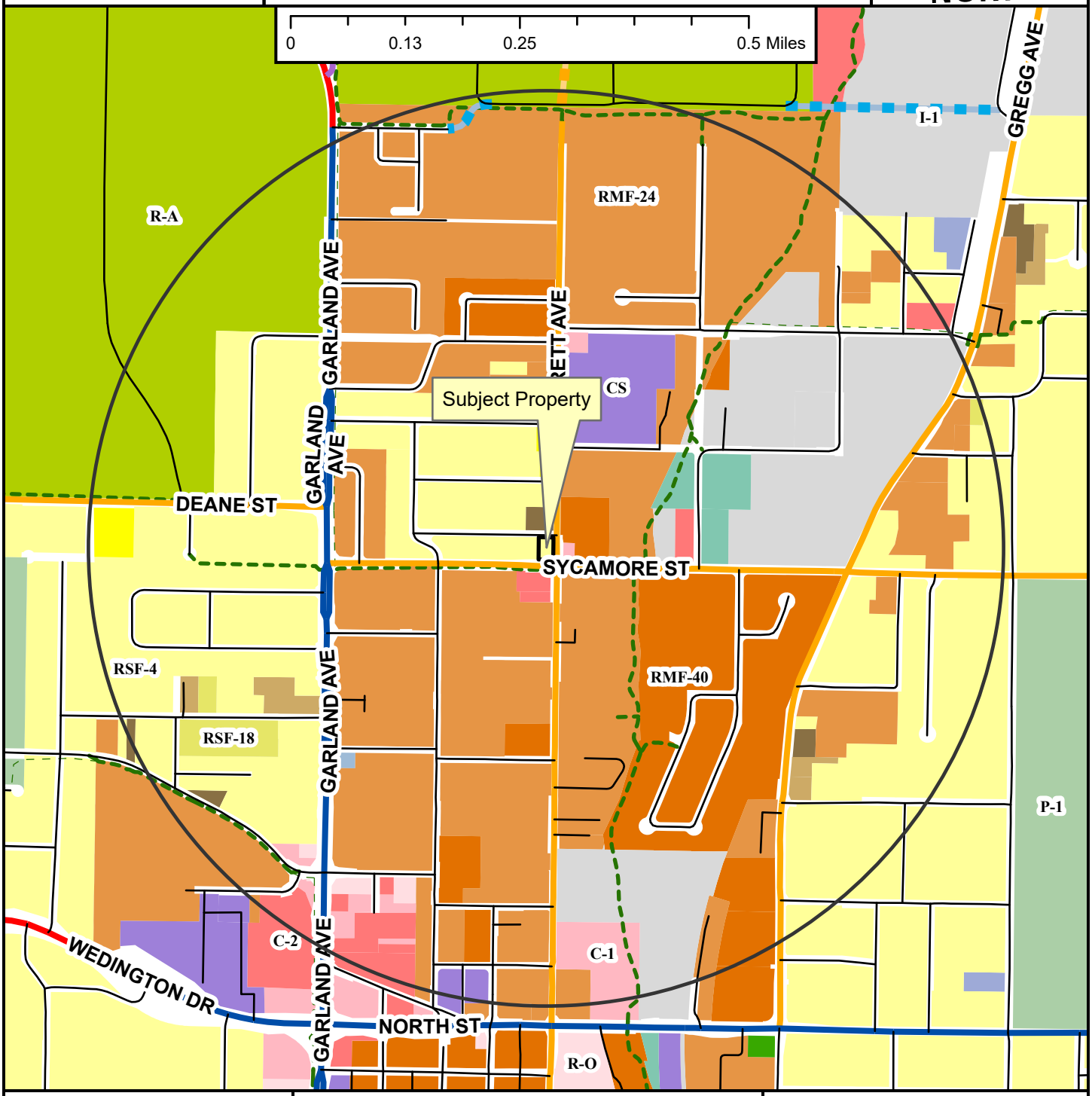
Jeremy Kennedy
Marquardt Speck House, LLC
479 841-4088

RZN-2025-0004

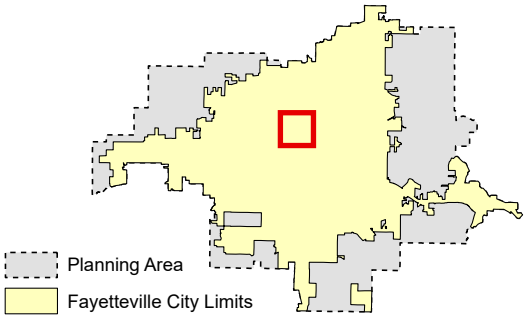
One Mile View

809 W. KELLEY ST

NORTH



- Regional Link
- Neighborhood Link
- Institutional Master Plan
- Regional Link - High Activity
- Unclassified
- Alley
- Residential Link
- Planned Neighborhood Link
- Planned Residential Link
- Shared-Use Paved Trail
- Trail (Proposed)
- Fayetteville City Limits
- Planning Area



Zoning

RESIDENTIAL SINGLE-FAMILY
- NS-G
- RI-U
- RI-12
- NS-L
- Residential-Agricultural
- RSF-.5
- RSF-1
- RSF-2
- RSF-4
- RSF-7
- RSF-8
- RSF-18

RESIDENTIAL MULTI-FAMILY
- RMF-6
- RMF-12
- RMF-18
- RMF-24
- RMF-40

INDUSTRIAL
- I-1 Heavy Commercial and Light Industrial
- I-2 General Industrial

EXTRACTION
- E-1

COMMERCIAL
- Residential-Office
- C-1
- C-2
- C-3

FORM BASED DISTRICTS
- Downtown Core
- Urban Thoroughfare
- Main Street Center
- Downtown General
- Community Services
- Neighborhood Services
- Neighborhood Conservation

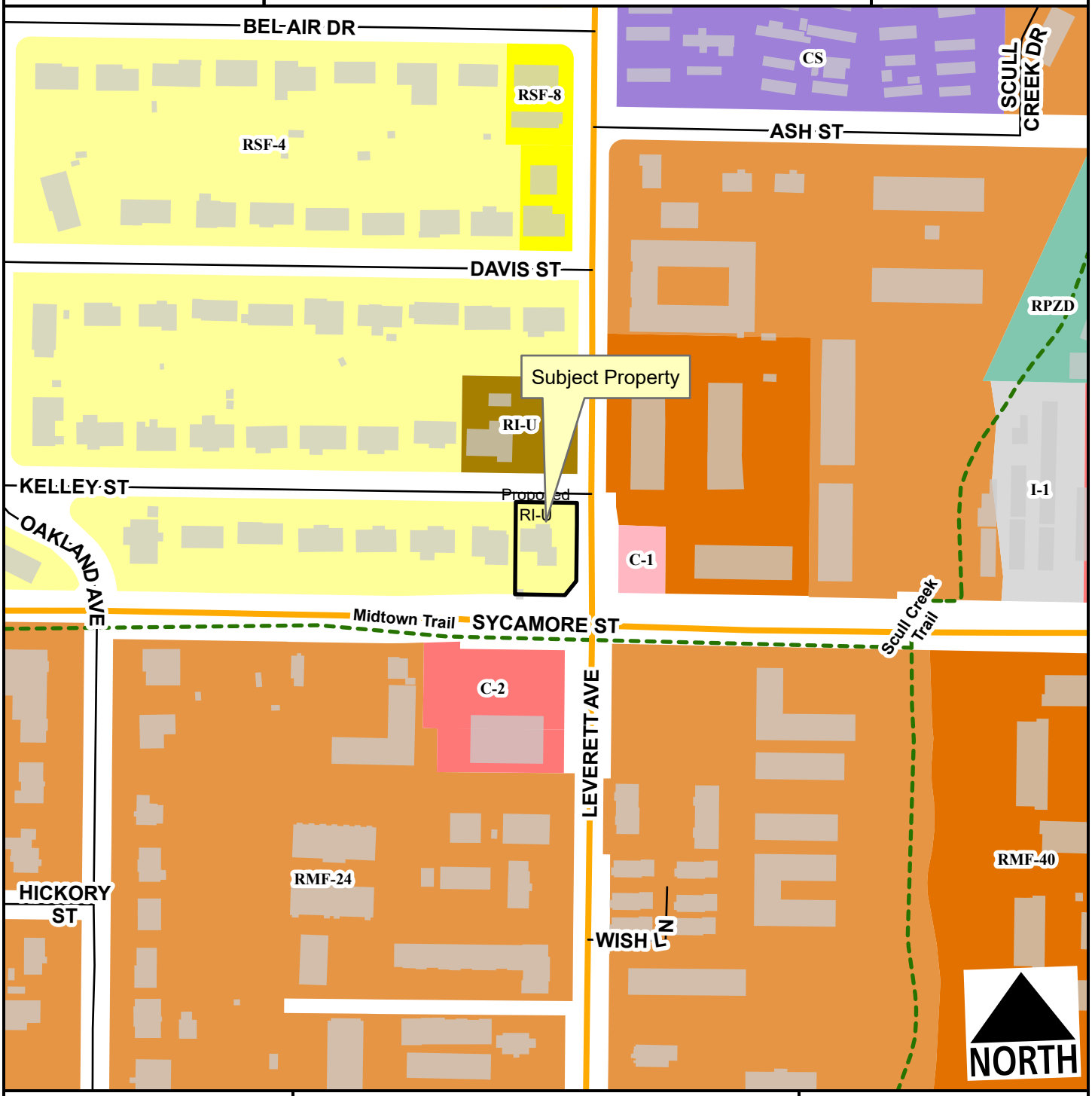
PLANNED ZONING DISTRICTS
- Commercial, Industrial, Residential

INSTITUTIONAL
- P-1

RZN-2025-0004

Close Up View

809 W. KELLEY ST



- Neighborhood Link
- Unclassified
- Residential Link
- Planning Area
- Fayetteville City Limits

Feet

0 75 150 300 450 600

1:2,400

Zone	Current	Proposed
RI-U	0.0	0.2
RSF-4	0.2	0.0

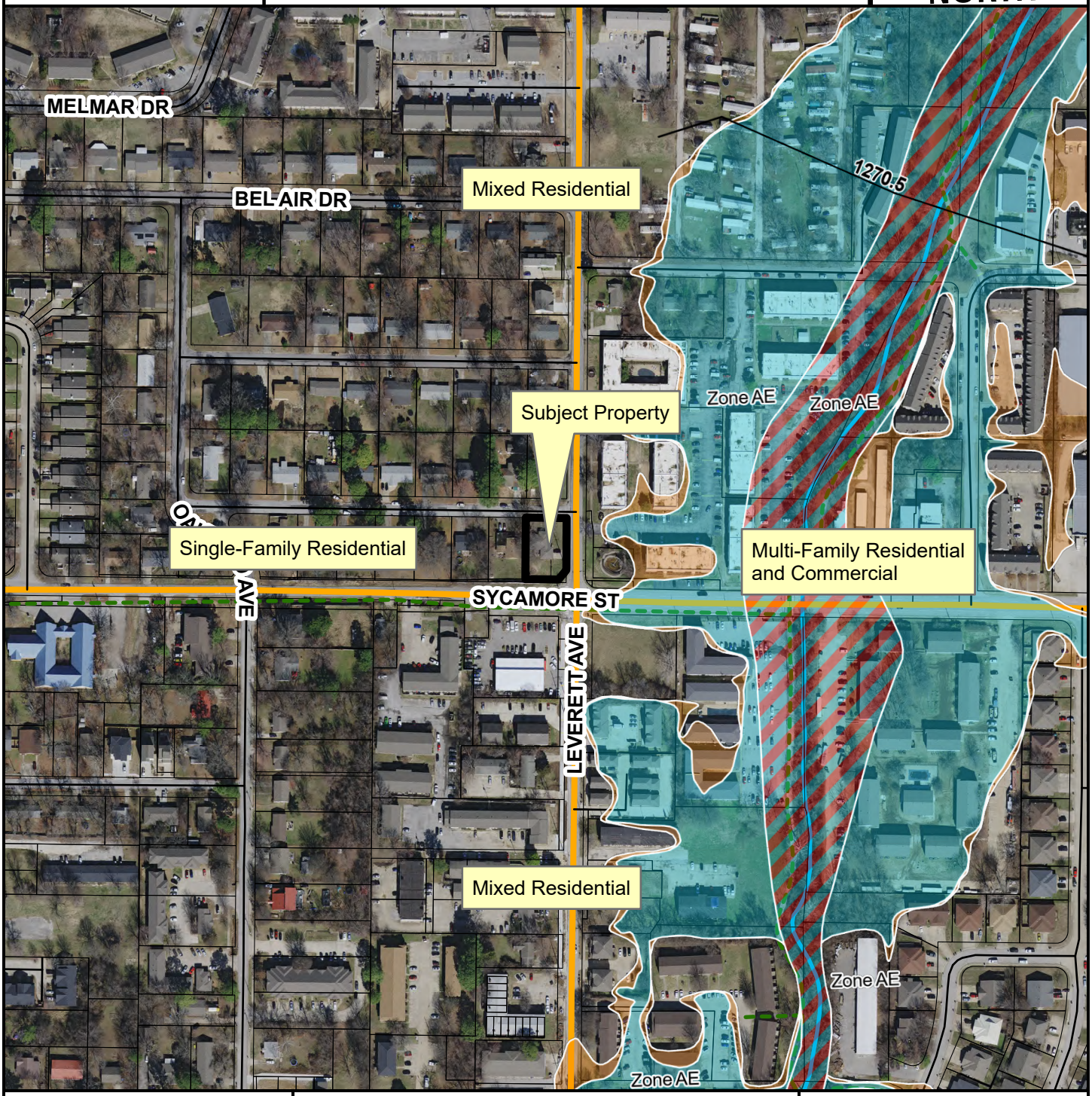
Total 0.2 ac

RZN-2025-0004

Current Land Use

809 W. KELLEY ST

NORTH



Neighborhood Link
Unclassified
Residential Link
Planning Area
Fayetteville City Limits

Feet
0 112.5 225 450 675 900

1:3,600

FEMA Flood Hazard Data

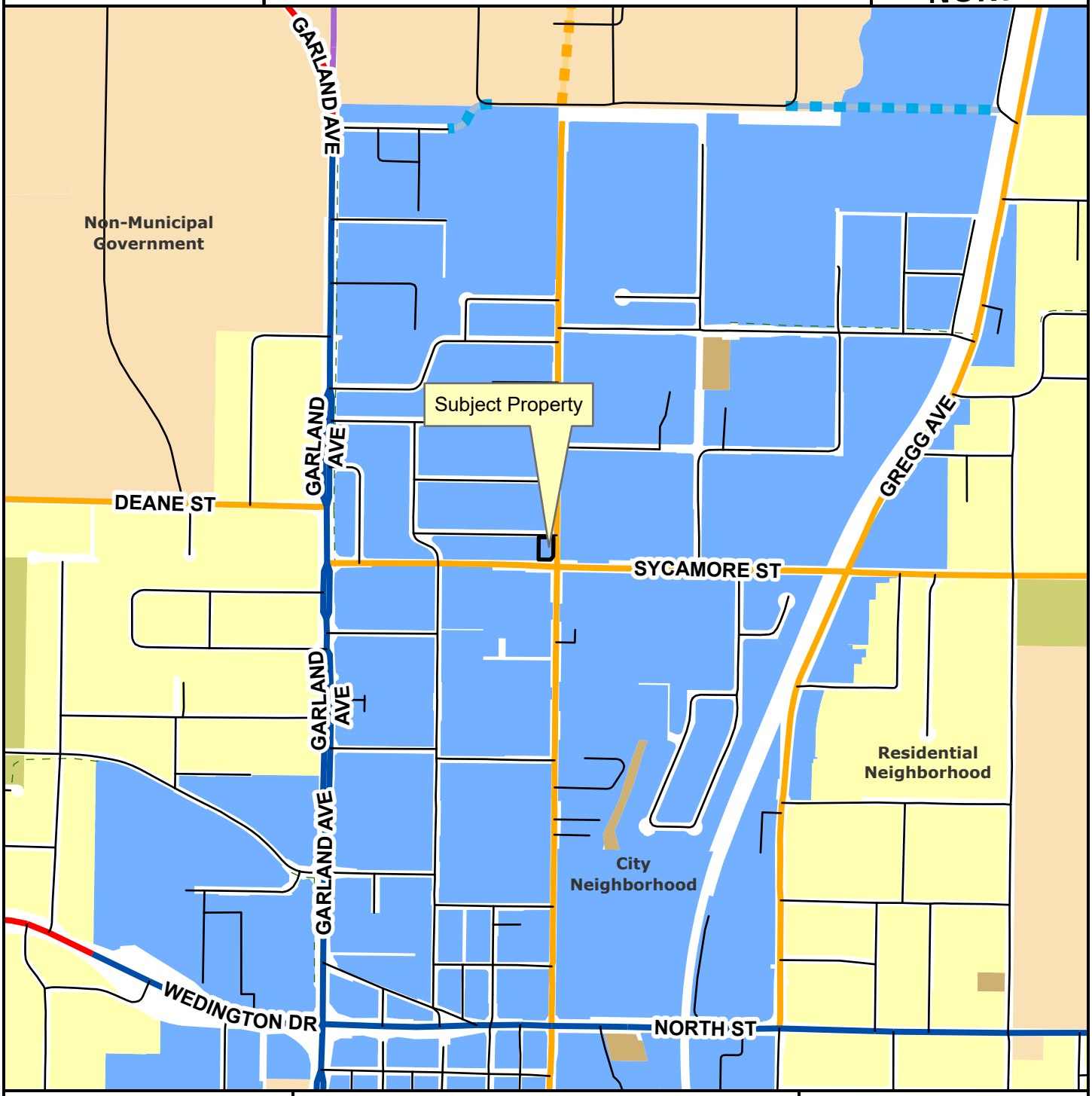
100-Year Floodplain
Floodway

RZN-2025-0004

Future Land Use

809 W. KELLEY ST

NORTH



- Regional Link
- Neighborhood Link
- Institutional Master Plan
- Regional Link - High Activity
- Unclassified
- Alley
- Residential Link
- Planned Neighborhood Link
- Planned Residential Link
- Planning Area
- Fayetteville City Limits
- Trail (Proposed)

Feet

0 305 610 1,220 1,830 2,440

1:10,000

- City Neighborhood
- Civic Institutional
- Civic and Private Open Space
- Industrial
- Natural
- Non-Municipal Government
- Residential Neighborhood
- Rural Residential
- Urban Center

CITY OF FAYETTEVILLE ARKANSAS

CITY COUNCIL MEMO
2025-362

MEETING OF MARCH 25, 2025

TO: Mayor Rawn and City Council

THRU: Keith Macedo, Interim Chief of Staff
Jonathan Curth, Development Services Director

FROM: Jessica Masters, Development Review Manager

SUBJECT: **APPEAL: CONDITIONAL USE PERMIT-2024-0054: (611 N. OLIVER AVE,/JD RIGGINS FAMILY HOLDINGS, 443):**

RECOMMENDATION:
City Planning staff and the Planning Commission recommend approval of a request for a conditional use permit for a Type 2 short-term rental.

BACKGROUND:
The subject property is in central Fayetteville approximately 500 feet west of the University of Arkansas at the northwest corner of N. Oliver Avenue and W. Cardwell Lane. The property is zoned RSF-4 and is not part of any zoning overlays, though is partially within the Hillside Hilltop Overlay District. It totals approximately 0.80 acres and has been developed with a 3,248 square foot, four-bedroom single-family structure built in 1901 per the Washington County Assessor. The property also contains a detached garage structure.

Request: The applicant requests conditional use permit approval to use the property as a Type 2 short-term rental, which are those not occupied by a permanent resident. Type 2 short-term rentals are subject to density limitations, including a citywide cap of 475 units, and restrictions on the number of units that may be used as a short-term rental in multi-family dwelling complexes. The appeal to this item's approval by the Planning Commission is being brought forth by Councilmembers Bunch, Jones, and Wiederkehr on behalf of the surrounding neighborhood.

Findings: Staff finds that granting the requested conditional use is unlikely to adversely affect the public interest given the applicable business license requirements, including a required building safety inspection, and applicable density caps on Type 2 short-term rentals. There is likely adequate parking infrastructure to support the use of the property as a short-term rental. Up to four vehicle spaces are available within the existing driveway. W. Cardwell Lane and N. Oliver Avenue do not currently have adequate width to support on-street parking, but the applicant's property is likely to absorb the parking necessary to serve this property as a short-term rental. No zoning or other code violations were found for this property, and the property is not within 1,000 feet of a K-12 school. Leverett Elementary School is located to the northeast of this property, but it is outside of the 1000-foot boundary line, so it is not to be considered by the Planning Commission from a compatibility standpoint. City business license records indicate six (6) other units within a quarter-mile radius of the property have an active Type 2 short-term rental business license. These properties are spread relatively evenly within this radius with no apparent clusters. Staff finds that the area could likely support an additional short-term rental.

DISCUSSION:
At the February 24, 2025 Planning Commission meeting, a motion to approve the applicant's request to operate a short-term rental passed with a vote of 5-1-0. While the density of short-term rentals in the area was a major concern to members of the public who spoke in opposition to the request, Planning Commissioners determined that the density of licensed short-term rentals was not excessive. Commissioners also noted that the historic structure had not been demolished for redevelopment, and the applicant's representative shared that the property had been renovated at considerable expense. The Commissioners proposed adding conditions to the CUP, including that it would transfer upon a change in ownership of the property, and that future repairs and maintenance must preserve the exterior appearance of the house. The question of the added conditions was divided, and ultimately Commissioners voted to approve that the CUP would be non-transferable unless to a member of the applicant's family (4-2-0), but denied a condition that the exterior must be substantially maintained to keep its existing appearance (2-4-0). Members of the public voiced opposition to the request, citing concerns about the lack of compatibility with the single-family residential neighborhood and the high number of short-term rentals in the area. A petition in opposition to the request from the neighborhood was also supplied.

BUDGET/STAFF IMPACT:
N/A

ATTACHMENTS: Neighborhood Appeal Letter (#3), City Councilmembers (Bunch, Jones, Wiederkehr) (#4), Exhibit A (#5), Planning Commission Staff Report (#6)

113 West Mountain Street
Fayetteville, AR 72701
(479) 575-8323

File #: 2025-362

APPEAL: CONDITIONAL USE PERMIT-2024-0054: (611 N. OLIVER AVE,/JD RIGGINS FAMILY HOLDINGS, 443):

A RESOLUTION TO GRANT THE APPEAL OF COUNCIL MEMBERS SARAH BUNCH, D'ANDRE JONES, AND MIKE WIEDERKEHR AND DENY CONDITIONAL USE PERMIT CUP 2024-054 FOR A TYPE 2 SHORT-TERM RENTAL AT 611 NORTH OLIVER AVENUE

WHEREAS, on February 24, 2025, the Planning Commission voted 5-1-0 to approve a conditional use permit for a Type 2 short-term rental at 611 North Oliver Avenue; and

WHEREAS, Council Members Sarah Bunch, D'Andre Jones, and Mike Wiederkehr have properly appealed the decision of the Planning Commission pursuant to §155.05(A)(3) of the *Unified Development Code*, based on incompatibility of the proposed short-term rental with the neighborhood, parking issues, and a high concentration of nearby licensed Type 2 short-term rentals.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby grants the appeal of Council Members Sarah Bunch, D'Andre Jones, and Mike Wiederkehr and denies Conditional Use Permit CUP 2024-054 for the reasons stated above.

To: City of Fayetteville, Arkansas—City Clerk and City Council Members

Fr: University Heights residents (pp.3-4)

Re: Appeal of CUP 2024-0054 – 611 N Oliver

Dt: 03/4/25

Cc: University Heights signators

Appendix 1 pp. 5-7 UDC Definitions & Fire/Safety Code
Appendix 2 p.8 Map of STR2 North Sunset & Oliver St/Gray Ave to West Halsell Road
Appendix 3 pp.9-11 *NWADG* "Fayetteville Adds Occupancy Requirement," by Joel Walsh

We the undersigned residents of University Heights neighborhood and tax-paying citizens of Fayetteville, AR are requesting an appeal of the Planning Commission's decision to grant a Conditional Use Permit (CUP 2024-0054) located at 611 N Oliver. We are appealing this decision based on the City of Fayetteville's Unified Development Code (UDC) and city ordinances as they relate to compatibility, safety, and protection of established neighborhoods. See Appendix 1 163.18 (H)

Our ask is that the council deny this Conditional Use Permit (CUP 2024-0054) based on:

1. Compatibility—If granted, this CUP would allow up to 10 unrelated occupants, in excess of the maximum occupancy of 3 unrelated occupants in RSF-4 zoning.
2. Unenforceable safety issues—This CUP allows up to 10 occupants but provides by RSF-zoning and this CUP only 4 vehicles to park on-site. Area streets prohibit on-street parking. Additional vehicles beyond the 4 vehicles, if parked on area roadways, would create safety issues that the city cannot enforce.
3. Destabilizing density and proliferation of Type 2 STRs—the approval according to the quarter-mile radius analysis used by the planning staff failed to consider the clustering and proliferation of proximal STR2 that are destabilizing this established neighborhood.

DETAILS OF OUR ASK/OUR APPEAL

The planning staff and commission granted the CUP based on:

- 4-bedroom home with STR2 capacity for up to 10 unrelated people
- Uncovered, outdoor parking for up to 4 vehicles with no additional provision for parking.
- Density of 6 STR2 within quarter mile radius measured from 426 Oliver to 817 Sunset Drive

Our appeal is based upon the following concerns:

1.Compatibility –the proposed use is non-compatible based on:
   a. According to the planning map, this is an RSF-4 neighborhood.
   b. Per ordinance, RSF-4 properties are restricted to occupancy by individuals, families, or a maximum of 3 unrelated individuals. See Appendix 1 p. 5, 151.01
   c. This property has 4 bedrooms with 2 people per room plus the two extra allowed according to STR2 rules.
   d. This would allow occupancy of up to 10 unrelated individuals per rental, an excessive and incompatible occupancy compared to University Heights area homes.
   e. *NWADG* article: City Council adds disclosure requirement for rental contracts to address problems encountered in neighborhoods with over-occupancy See Appendix 3 pp. 9-11

2. Unenforceable uses of the property and safety issues
   a. Private parties are prohibited with this CUP, however, a single rental for up to 10 unrelated individuals could be for the express purpose of a private party. No recourse for enforcement of the prohibition would be available.
   b. No covered parking structures are available on this property. Outdoor, on-site parking in this RSF-4 zoning and this CUP is restricted to 4 vehicles. See Appendix 1 p.6 Sec. 172.11 and STR Business License Requirements
   c. No parking is available on the streets surrounding the property, should any additional parking be required.
      i. This property is located on the corner of Cardwell Lane and Oliver Street, facing Cardwell. On-street parking is not allowed on either Cardwell or Oliver.
      ii. Cardwell Lane is 16 – 17 feet wide and does not meet the safety standard. Entry to the parking area as well as fire apparatus access begins off Cardwell.
         a. 503.2.1 Fire access not less than 20 feet
         b. 503.4 Fire apparatus must have an unobstructed path including parking cars.
         c. One car puts the whole neighborhood in danger – 163.02.c.3.c.b in case of fire or other catastrophes. See Appendix 1 p. 6
      iii. Oliver Street is 26 ft curb to curb, but City prohibits parking to ensure safety.
      iv. Restricted and prohibited parking relies on enforcement
         a. The City does not have the resources to enforce.
         b. Leaving enforcement to tenants is unrealistic.
         c. Enforcement by neighbors is undue burden.
         d. See Appendix 1 p. 6 Fire Safety/Access Codes

3. Density and proliferation of STR2 in our established neighborhood that undermines the stability of the neighborhood and area housing availability:
    a. The quarter-mile radius mapping tool used by the planning staff and commission determined a density of 6 licensed STR2: 3 STR2 at 426, 435, and 473 N Oliver, one at 665 N Gray, one at 1518 W West Cleveland, and one at 817 N Sunset Drive— 611 N Oliver making a 7th.
        i. **This quarter-mile radius did not account for the proximal STR2 within a four-block area in a two-block wide corridor**: 400 N Oliver, 1633 West Halsell (the continuation of N Oliver as it turns a corner), 1476 and 1478 Sunset Place (a cul-de-sac off of N Sunset Drive just north of 817 N Sunset), 935 and 1158 N Sunset, **for a total (with 611 N Oliver) of 12 STR2**. See Appendix 2 p.8 for map and list
        ii. Another STR2 application will be heard by the Planning Commission on March 10, 2025, for 1611 West Halsell (a very close neighbor to the permitted STR at 1633 W Halsell) If approved, it would make 13 in this same area.
    b. Both the density and proliferation of STR2 are contributing to the destabilization of this established neighborhood.
        i. This density and proliferation is at odds with the UDC Code of Fayetteville, Section 150.02, that would…provide for land uses that protect established neighborhoods. See Appendix 1 p.7
        ii. University Heights is being evaluated for nomination as a Historic District. This speaks to the character of this formerly rural area. Some of the descendants of people who lived here before modern development still make University Heights their family home.
        iii. Availability of housing for long-term renters or potential homeowners is increasingly unavailable in the University Heights neighborhood due to the proliferation of STR2 properties, contributing to the housing crisis in Fayetteville as declared by this council.
        iv. This recent restoration of this historic property, built in 1901, ensures that it continues to be a valuable asset to the long-term housing supply of Fayetteville.

Based on the many factors listed above, please do not approve the Conditional Use Permit for 611 N Oliver. Please deny CUP 2024-0054.

Sincerely,

Margaret Ann Holcomb

Juan C. Balda

Orville Hall, Susan Hall

Debbie Nelson

Randy Jackson (non-resident, property owner on Cardwell Lane)

Debbie McChristian, Les McChristian

Kurt Reed

Justin Eichmann, Susan Eichmann

Joe Neal, Gail Leftwich

Ethel Simpson

Lisa Orton

Tom Pears, Karen Pears

Roseanna Presley, Cotton Presley

Barbara Fraleigh

Barbara Taylor

Julia Kennefick

Dian Bacon

Trey Marley

Beverly Schaffer

Sue Hein (nonresident, UH property owner)

Appendix 1 UDC DEFINITIONS

163.18 – Type 2 Short-Term Rentals in Residential Zoning Districts

H) **Short-term rentals in residential zoning districts may be subject to denial or additional conditions based upon the Planning Commission's findings on the following factors**:

(1) Adequate parking infrastructure;

(2) Adequate adjoining or nearby streets for on-street parking;

(3) Frequency or concentration of nearby licensed Type 2 short-term rentals;

Single Family Districts limitation on unrelated persons

151.01 Definitions

For the purpose of Title XV, Unified Development Code, the following definitions shall apply to the divider sections, chapters, sections or subsections, unless the context clearly indicates or requires a different meaning.

Family (zoning). In R-A, Neighborhood Conservation and all single family districts including single family Planned Zoning Districts, a "family" is no more than three (3) persons unless all are related and occupy the dwelling as a single housekeeping unit. In all other zoning districts where residential uses are permitted, a "family" is no more than four (4) persons unless all are related and occupy the dwelling as a single housekeeping unit with the exception that the City Council may permit a definition of "family" as no more than five (5) persons unless all are related and occupy the dwelling as a single housekeeping unit in a specific Planned Zoning District with proper safeguards for the surrounding neighborhood such as applying the parking requirements of §172.11 (even though this is a multifamily PZD), requiring that each five (5) person unit must be placed within a freestanding structure of not more than two (2) stories and be buffered from other residential districts outside the Planned Zoning District. The City Council shall consider whether an applicant's PZD with one (1) or more five (5) unrelated person structures would cause unreasonable traffic into an adjoining residential neighborhood before approving any such PZD. Persons are "related" for purposes of this definition if they are related by blood, marriage, adoption, guardianship, or other duly-authorized custodial relationship. The definition of "family" does not include fraternities, sororities, clubs or institutional groups.

161.07 District RSF-4, Residential Single-Family – Four (4) Units Per Acre

(A) *Purpose.* The RSF-4 Residential District is designed to permit and encourage the development of low density detached dwellings in suitable environments, as well as to protect existing development of these types.

(B) *Uses.*

(1) *Permitted Uses*.

Unit 1	City-wide uses by right
Unit 8	Single-family dwellings
Unit 41	Accessory dwellings
Unit 46	Short-term rentals

172.11 – Driveway And Parking Standards For Four (4) Or Less Parking Spaces

© Maximum number of parking spaces permitted. Unless otherwise permitted herein, a maximum of four (4) motor vehicles may be parked outdoors on a property containing a single family home(s) at any time, including driveways and other designated off-street parking areas. Parking for all other permitted uses shall conform to the Parking Ratio Table contained within this chapter.

City of Fayetteville Short-Term Rental Business License Requirements

Parking: Parking is limited to the maximum number of vehicles as allowed by the underlying zoning district for the residential building on the property.

Special Events: Special events are not permitted in a short-term rental. Examples of special events include, but are not limited to weddings, receptions, anniversaries, private parties, fundraisers, and business seminars.

FIRE ACCESS/SAFETY

503.2.1 Dimensions

Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for *approved* security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

503.2.1 Dimensions

Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for *approved* security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

503.4 Obstruction of Fire Apparatus Access Roads

Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 shall be maintained at all times.

CHAPTER 150: - GENERAL PROVISIONS

150.02 - Purpose

(A)

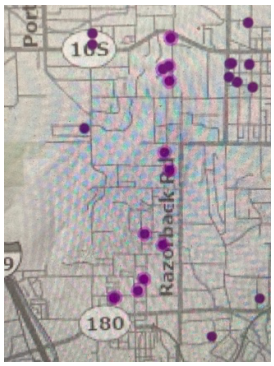
The UDC is adopted for the purpose of implementing the Comprehensive Land Use Plan and any other plans or policies adopted or amended by the City Council, in a manner that furthers the health, safety and general welfare of the people of the community and to provide uniform standards for the development of land and the installation of related improvements. The UDC sets forth the procedures, requirements, and minimum standards intended to promote an appropriate mix of land uses in an orderly manner; enhance aesthetic quality, moderate street congestion, secure safety from events such as fire, flood, erosion and landslides; prevent overcrowding of land; provide adequate light and air; and provide for circulation, recreation, and other public services and facilities. **The UDC provides for, but is not limited to, development of land uses which protect established neighborhoods**, and commercial and industrial districts; allows compatible infill of established areas; provides flexibility for mixing of uses to achieve traditional neighborhood developments; protects significant environmental resources; and makes a livable community. (emphasis added)

(B)

The primary purpose of the Unified Development Code remains to protect the peace, health, safety and general welfare of Fayetteville residents by reasonable regulations upon development enacted to promote purposes including, but not limited to, all statutorily approved purposes found in A.C.A. §14-56-403 Purpose of Plans.

Appendix 2 Map of STR2 North Sunset & Oliver St/Gray Ave to West Halsell Road

https://maps.fayetteville-ar.gov/portal/apps/experiencebuilder/experience/?id=8a92c5d8394245a38889c8fd4d1685ea



STR2	**Business License Name**	
4 block area bounded by N Sunset & Oliver/Gray to W Halsell		
1.1633 W Halsell	Kevin Sparks	
2. 1611 W Halsell	**Carrington & Voise LLC**	**App. Plan Commission 3/10/25**
3. 400 N Oliver	Your Rental Home LLC	
4. 426 Oliver	Hogtailgating Holdings LLC (1 of 2 w/ 435)	
5. 435 N Oliver	King Investments of Fayetteville LLC	
6. 473 N Oliver	WPS Weekend LLC (1 of 3 w/ 435 & 426)	
7. 611 N Oliver	**Riggins Family Holdings**	**SUBJECT OF APPEAL**
8. 665 N Gray Ave	The Gray	
9.1518 W Cleveland	DS Holdings LLC (1 of 2)	
10.817 N Sunset A	Shawn & Anita Schwartzman (2 of 2)	
11.1478 N Sunset Place	Sunset House 1 (1 of 2)	
12.1476 N Sunset Place	Sunset House 2 (2 of 2)	
13. 1158 N Sunset Dr	Nanna's Blessing LLC	

Appendix 3
https://www.nwaonline.com/news/2015/jan/04/fayetteville-adds-occupancy-requirement/

nwaonline.com
Fayetteville Adds Occupancy Requirement
Joel Walsh

FAYETTEVILLE -- Anyone who sells or rents out a house in Fayetteville will be required to disclose city occupancy rules to the buyer or renter of the property beginning July 1.
The City Council last month unanimously approved the disclosure requirement to make more people aware of a law limiting single-family residences to no more than three unrelated roommates.

At A Glance Occupancy Rules
City code limits single-family residences to no more than three unrelated roommates. In multifamily zoning districts, a maximum of four unrelated people can live together under one roof.

The City Council in April 2012 voted, 6-2, in favor of a change to city code allowing up to five unrelated roommates to live together in specific new developments approved as planned zoning districts. A maximum of four unrelated people are allowed to live together in an apartment. Exceptions exist for fraternities, sororities, clubs and institutional groups.

Over-occupancy has been a frequent gripe in recent years from residents in the University Heights, Waterman Woods, Sang Valley and Wilson Park neighborhoods near the University of Arkansas. Homeowners say they don't like the noise, trash, unkempt yards, overflow parking and late-night parties that can come with more than three college students living together under one roof.

Alan Long, Ward 4 alderman, who sponsored the disclosure requirement, said informing people about the occupancy rules won't eliminate problems, but renters and buyers won't be able to claim ignorance.

"People won't be able to say that they don't know about this law, and this will show that landlords and sellers have shared the information," Long said.

Buyers and tenants will be required to "acknowledge in writing" that they've been informed of the ordinance.

Long and City Attorney Kit Williams said language could be included as a sentence or two in residential leases or bills of sale.

Williams said, because of the six-month delay before the new requirement takes effect, city officials will have plenty of time to work with property owners to figure out the best way to include ordinance language in contracts. He said officials likely will use the city's business registry to reach out to landlords and real estate agents. All businesses and anyone who rents three or more residential properties are required to apply for a Fayetteville business license.
The disclosure requirement will be enforced like most city ordinances.

The Code Compliance Division will respond to complaints. If, in the course of an investigation, city officials determine no disclosure has been made, landlords or property owners could face fines of up to $500. That's the same penalty for failing to comply with the occupancy law.

According to Jeremy Pate, Development Services director, Code Compliance officers received 46 complaints last year related to over- occupancy as of Dec. 23. Another 84 complaints pertained to houses with too many cars parked outside.

City code prohibits more than four vehicles on a single-family property.
Pate said the city's three Code Compliance officers often use parking as a way to determine how many people are living under one roof. But, he added, it can be difficult to determine if excess cars belong to people living in a house or if they belong to frequent visitors. "It's very hard to discern if someone is actually living there," Pate said.

Don Marr, Mayor Lioneld Jordan's chief of staff, told aldermen last month that the occupancy rules are "probably one of the most challenging laws our Code Compliance Division deals with."

If officers are able to determine the same four or five vehicles are repeatedly parked outside a house, the city will mail violation letters informing property owners of occupancy laws and asking them to comply.

If city officials don't get a response, or if the situation doesn't change, cases are generally referred to the city prosecutor's office. The prosecutor has the power to subpoena lease agreements and bring in tenants and landlords for sworn testimony. Staff can also pull municipal utility accounts to see if more than three people are listed on a single water bill.

Pate said investigations in and of themselves often bring properties into compliance. Or, in some cases, city officials will wait until the end of a university semester to see if the problem resolves itself. He said, at most, one or two cases result in criminal charges each year.

Long said he hopes the disclosure requirement will lower the number of cases Code Compliance officers and the city prosecutor's office have to deal with each year.

"This hopefully will decrease the workload on the city," he said.
"What this attempts to do is solve the communication problem before it starts and start educating people on the front end instead of letting them be cited or found in violation or having code enforcement show up at their door before they even know about something," Long added.

Phillip McKnight, one of Long's neighbors in the Waterman Woods neighborhood, called the disclosure requirement "a good first step."
"A lot of people don't have any idea what the statutes are," McKnight said. "We've got to start somewhere."
NW News on 01/04/2015

Masters, Jessica

From: Williams, Kit
Sent: Tuesday, March 4, 2025 12:36 PM
To: CityClerk; Wiederkehr, Mike; Paxton, Kara; Shelton, Jackson
Cc: Bunch, Sarah; Pennington, Blake; Stafford, Bob; Jones, Monique; Moore, Sarah; Berna, Scott; Turk, Teresa; Jones, D'Andre; Macedo, Keith; Curth, Jonathan; Masters, Jessica
Subject: RE: Request Support to Appeal CUP STR2 611 N Oliver

City Council and City Clerk's Office,

We have reviewed the timely request of four Council Members who have appealed the Planning Commission's approval of this Conditional Use Permit to the City Council. This appeal meets all code requirements and should be placed upon the City Council's Agenda upon submission of the Planning Department's memo and other necessary information.

Kit Williams
Fayetteville City Attorney
479-575-8313

From: CityClerk <cityclerk@fayetteville-ar.gov>
Sent: Tuesday, March 4, 2025 12:18 PM
To: Wiederkehr, Mike <mike.wiederkehr@fayetteville-ar.gov>; Paxton, Kara <kapaxton@fayetteville-ar.gov>; Shelton, Jackson <jshelton@fayetteville-ar.gov>
Cc: Bunch, Sarah <sarah.bunch@fayetteville-ar.gov>; Margaret Holcomb <sunflowerwiks@gmail.com>; Williams, Kit <kwilliams@fayetteville-ar.gov>; Pennington, Blake <bpennington@fayetteville-ar.gov>; Stafford, Bob <bob.stafford@fayetteville-ar.gov>; Jones, Monique <monique.jones@fayetteville-ar.gov>; Moore, Sarah <sarah.moore@fayetteville-ar.gov>; Berna, Scott <scott.berna@fayetteville-ar.gov>; Turk, Teresa <teresa.turk@fayetteville-ar.gov>; Jones, D'Andre <dandre.jones@fayetteville-ar.gov>; Macedo, Keith <kmacedo@fayetteville-ar.gov>; D'Andre Jones <dre91732000@gmail.com>; Curth, Jonathan <jcurth@fayetteville-ar.gov>; Masters, Jessica <jmasters@fayetteville-ar.gov>
Subject: RE: Request Support to Appeal CUP STR2 611 N Oliver

Good afternoon,
Thank you for bringing this appeal to our attention!

The appeal has been properly archived in our files. We'll wait for the City Attorney to confirm the appeal meets the requirements to be brought forward to council.

I included Development Services Director Jonathan Curth and Development Review Manager Jessie Masters in this message, to make them aware of the appeal.

Thank you,

Jonathan Ramirez

From: Wiederkehr, Mike <mike.wiederkehr@fayetteville-ar.gov>
Sent: Tuesday, March 4, 2025 11:03 AM
To: CityClerk <cityclerk@fayetteville-ar.gov>; Paxton, Kara <kapaxton@fayetteville-ar.gov>; Shelton, Jackson

<jshelton@fayetteville-ar.gov>
Cc: Bunch, Sarah <sarah.bunch@fayetteville-ar.gov>; Margaret Holcomb <sunflowerwiks@gmail.com>; Williams, Kit <kwilliams@fayetteville-ar.gov>; Pennington, Blake <bpennington@fayetteville-ar.gov>; Stafford, Bob <bob.stafford@fayetteville-ar.gov>; Jones, Monique <monique.jones@fayetteville-ar.gov>; Moore, Sarah <sarah.moore@fayetteville-ar.gov>; Berna, Scott <scott.berna@fayetteville-ar.gov>; Turk, Teresa <teresa.turk@fayetteville-ar.gov>; Jones, D'Andre <dandre.jones@fayetteville-ar.gov>; Macedo, Keith <kmacedo@fayetteville-ar.gov>; D'Andre Jones <dre91732000@gmail.com>
Subject: Re: Request Support to Appeal CUP STR2 611 N Oliver

Dear City Clerk,

I will add my name to Council member Bunch and Jones, and will be the needed 3rd Council member for this appeal.

Sincerely,
Mike Wiederkehr

On Mar 4, 2025, at 10:43 AM, D'Andre Jones <dre91732000@gmail.com> wrote:

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I will support the appeal as well
Sent from my iPhone

On Mar 4, 2025, at 10:39 AM, Bunch, Sarah <sarah.bunch@fayetteville-ar.gov> wrote:

After speaking to Ms Holcomb I have agreed to support her appeal.

Sarah Bunch
Sent from my iPhone

On Mar 3, 2025, at 2:20 PM, Sun Flower <sunflowerwiks@gmail.com> wrote:

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Councilman Bunch:

To date, twenty-five University Heights neighbors have signed a letter documenting our request for an appeal of the decision by the Fayetteville Planning Commission on February 24, 2025 to grant a CUP

for a type 2 short term rental at 611 N Oliver to JD Riggins Family Holdings. (CUP 2024-0054). (See attachment below.)

Briefly, our ask is that the council deny this CUP 2024-0054 based on:

1. Compatibility—If granted, this CUP would allow up to 10 unrelated occupants, in excess of the maximum of 3 unrelated occupants in our neighborhood's RSF-4 zoning. Sec.151.01

2. Unenforceable safety issues—This CUP allows up to 10 occupants but provides by RSF-zoning and this CUP only 4 vehicles to park on-site. Area streets prohibit on-street parking. Additional vehicles beyond the 4 vehicles, if parked on area roadways, would create safety issues that the city cannot enforce. Sec.163.18.1 & 2 Sec.172.11,STR Business License Requirements,Sections. 503.2.1, 503.4, 163.02.c.3.c.b

3. Destabilizing density and proliferation of Type 2 STRs—the approval according to the quarter-mile radius analysis used by the planning staff failed to consider the clustering and proliferation of proximal STR2 (12 in a four-block area) that are destabilizing this established neighborhood. Sec. 163.18.3

We want the opportunity to bring this letter of appeal to the Council, and will need the support of 3 members to bring this appeal forward. Please let me know if you will support the appeal.

We will need to file this appeal within the week, and would appreciate your response soon. We are available by phone to answer any questions. We would also appreciate a meeting in person to address any concern that would prevent your support.

Thanks for your consideration.

Respectfully,

Margaret Holcomb
<sunflowerwiks@gmail.com>
548 N Gray Avenue
Fayetteville, AR 72701
(479)442-9853

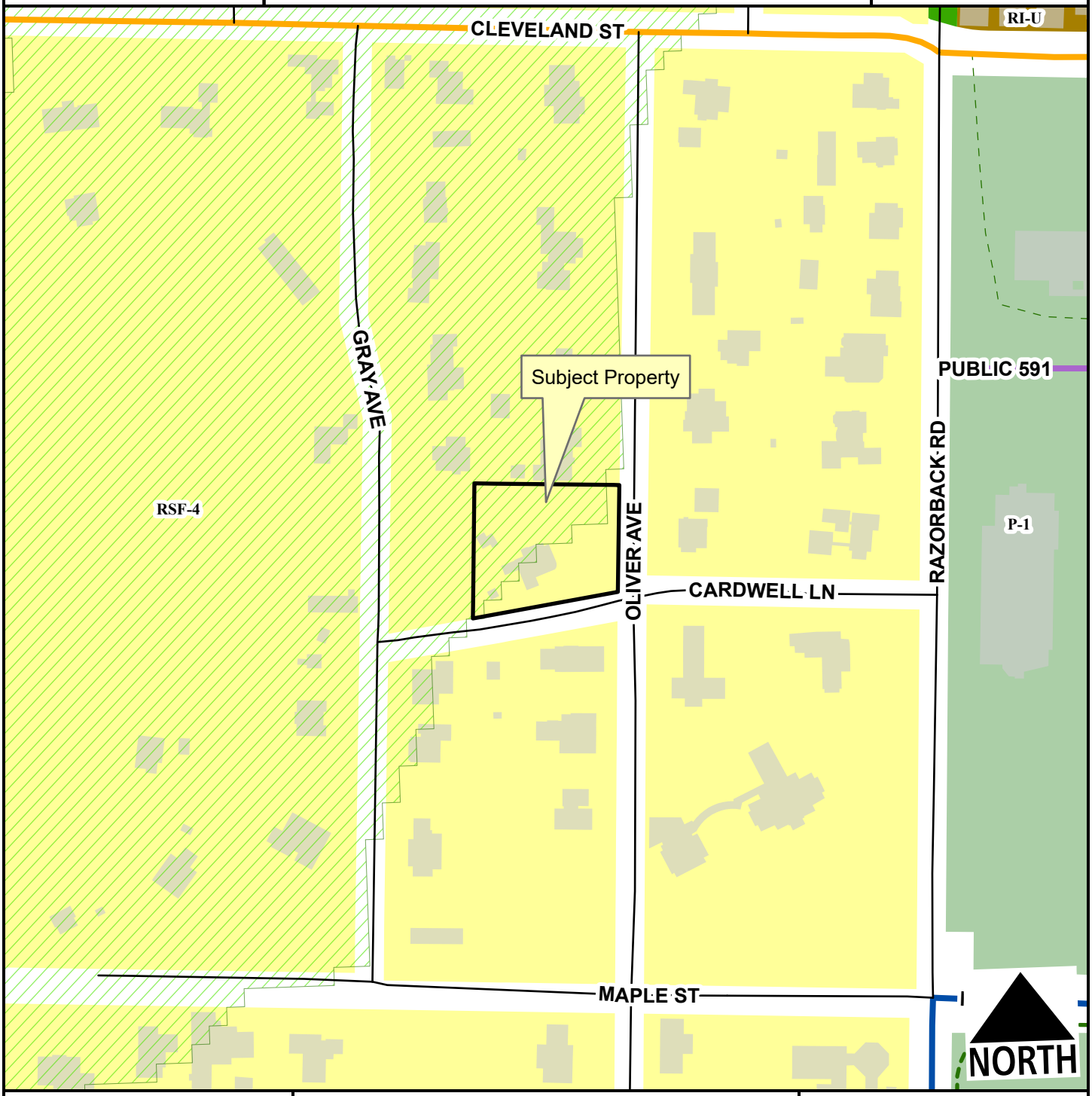
<25.3.10.Appeal Letter.pdf>

CUP-2024-0054

Close Up View

611 N. OLIVER RD

EXHIBIT A



- Neighborhood Link
- Institutional Master Plan
- Regional Link - High Activity
- Unclassified
- Residential Link
- Hillside-Hilltop Overlay District
- Planning Area
- Fayetteville City Limits
- Shared-Use Paved Trail
- Trail (Proposed)

Feet

0 75 150 300 450 600

1:2,400

- RSF-4
- RI-U
- Neighborhood Conservation
- P-1

CITY OF FAYETTEVILLE ARKANSAS

PLANNING COMMISSION MEMO

TO: Fayetteville Planning Commission

FROM: Jessie Masters, Development Review Manager

MEETING DATE: February 24, 2025 Updated with final results

SUBJECT: **CUP-2024-0054: Conditional Use Permit (611 N. OLIVER AVE,/JD RIGGINS FAMILY HOLDINGS, 443):** Submitted by RMP LLP for property located at 611 N. OLIVER RD. The property is zoned RSF-4, RESIDENTIAL SINGLE-FAMILY, FOUR UNITS PER ACRE and contains approximately 0.80 acres. The request is to use the property as a short-term rental.

RECOMMENDATION:
Staff recommends approval of **CUP-2024-0054** with conditions.

RECOMMENDED MOTION:
*"I move to approve **CUP-2024-0054**, determining:*

- *In favor of compatibility with adjacent properties, and*
- *In favor of all other conditions as recommended by staff."*

FEBRUARY 10, 2025 PLANNING COMMISSION MEETING:
The item was tabled at the previous meeting because the applicant's representative was unable to attend. Several members of the public opposed the request, citing concerns with emergency service access, concentration of short-term rentals in the area, and conflicts with the single-family nature of the neighborhood.

BACKGROUND:
The subject property is in central Fayetteville approximately 500 feet west of the University of Arkansas at the corner of N. Oliver Avenue and W. Cardwell Lane. The property is zoned RSF-4 and is not part of any zoning overlays. It totals approximately 0.80 acres and has been developed with a 3248 square foot, four-bedroom single-family structure built in 1901 per the Washington County Assessor. The property also contains a detached garage structure. On April 20, 2021, City Council adopted an ordinance to regulate short-term rentals operating within its limits. On December 20, 2022, the City Council amended the ordinance to enact new requirements for short-term rentals, and on July 6, 2023, City Council amended the Type 2 short-term rental density cap requirements from 2% city-wide, to 475 total. On March 19, 2024, the City Council amended the ordinance to add additional considerations for conditional use approval. This report reflects those new changes for consideration. Surrounding land use and zoning are depicted in *Table 1.*

Table 1
Surrounding Land Use and Zoning

Direction	Land Use	Zoning
North	Single-family Residential	RSF-4, Residential Single-family, 4 Units per Acre
South	Single-family Residential	RSF-4, Residential Single-family, 4 Units per Acre
East	Single-family Residential	RSF-4, Residential Single-family, 4 Units per Acre
West	Single-family Residential	RSF-4, Residential Single-family, 4 Units per Acre

City Plan 2040 Future Land Use Designation: **Residential Neighborhood.**

Proposal: The applicant requests conditional use permit approval to use the property as a Type 2 short-term rental, which are those not occupied by a permanent resident. Type 2 short-term rentals are subject to density limitations, including a citywide cap of 475 units, and restrictions on the number of units that may be used as a short-term rental in multi-family dwelling complexes.

Public Comment: Staff has received public comment opposing this request, citing the density of existing short-term rentals in the neighborhood, lack of compatibility with existing zoning, and parking issues.

RECOMMENDATION: Staff recommends approval of **CUP-2024-0054** with the following conditions;

Conditions of Approval:

1. **Planning Commission determination of compatibility.** *Staff finds the proposed short-term rental to be compatible with the neighborhood based on the findings in this report;*

2. Approval of the conditional use permit does not ensure approval of a business license application. The applicant must still be able to comply with all other applicable requirements in the development code.

3. Per §166.20, Expiration of Approved Plans and Permits, a business license must be obtained within 1 year of conditional use permit approval.

4. Per ordinance, the number of occupants is limited to a maximum of two people per bedroom, plus two, for the entire unit when the property is operated as a short-term rental.

5. Special events including, but not limited to, weddings, receptions, anniversaries, private parties, fundraisers and business seminars are prohibited from occurring in the short-term rental.

6. No recreational vehicle, trailer, other vehicle or structure not classified as a permanent residential dwelling may be used as a short-term rental.

7. All trash receptacles shall be screened from view of the right-of-way.

8. All outdoor lighting shall meet requirements as outlined in §176, Outdoor Lighting.

9. Any signage shall meet the requirements as outlined in §174, Signage.

10. Per Business Regulations §120.02(A), the owners of only short-term rentals shall be required to designate and register their landlord's representative into the Landlord's Representative Registry.

PLANNING COMMISSION ACTION: Required YES

Date: February 24, 2025 ❒ **Tabled** ❒ **Approved** ❒ **Denied**

Motion #1
Approve
Werner
2nd Payne
With two added conditions:
-1) that the STR license is not transferrable except within other members of the Riggins family,
-and 2) that the exterior of the property be substantially maintained in appearance.

Motion #2
Divide the question to consider added conditions separately
Brink
2nd Payne
6-0-0
PASSED

Vote on 1st condition:
4-2-0
(Commissioners Castin and Brink opposed)
PASSED

Vote on 2nd condition:
2-4-0
(Commissioners Castin, Madden, Brink, Payne opposed)
FAILED

Vote on Motion #1 with added condition:
5-1-0
(Commissioner Garlock opposed)
APPROVED

STAFF

§163.02. AUTHORITY; CONDITIONS; PROCEDURES.

B. Authority; Conditions. The Planning Commission shall:

1. Hear and decide only such special exemptions as it is specifically authorized to pass on by the terms of this chapter.

2. Decide such questions as are involved in determining whether a conditional use should be granted; and,

3. Grant a conditional use with such conditions and safeguards as are appropriate under this chapter; or

4. Deny a conditional use when not in harmony with the purpose and intent of this chapter.

C. Procedures. A conditional use shall not be granted by the Planning Commission unless and until:

1. A written application for a conditional use is submitted indicating the section of this chapter under which the conditional use is sought and stating the grounds on which it is requested.

Finding: The applicant has submitted a written application requesting a conditional use permit for a Type 2 short-term rental in the RSF-4 zoning district.

2. The applicant shall pay a filing fee as required under Chapter 159 to cover the cost of expenses incurred in connection with processing such application.

Finding: The applicant has paid the required filing fee.

3. The Planning Commission shall make the following written findings before a conditional use shall be issued:

(a.) That it is empowered under the section of this chapter described in the application to grant the conditional use; and

Finding: **The Planning Commission is empowered under Unified Development Code §118.01(E)(2) to grant the requested conditional use permit.**

(b.) That the granting of the conditional use will not adversely affect the public interest.

Finding: **Staff finds that granting the requested conditional use is unlikely to adversely affect the public interest given the applicable business license requirements, including a required building safety inspection, and applicable density caps on Type 2 short-term rentals.**

(c.) The Planning Commission shall certify:

(1.) Compliance with the specific rules governing individual conditional uses; and

Finding: **There are specific rules governing Short-Term Rentals, as follows:**

§163.18 - SHORT-TERM RENTALS

A. **Residential Zoning Districts.** Type 2 short-term rentals may be permitted as a conditional use in the following residential zoning districts: R-A, RSF-.5, RSF-1, RSF-2, RSF-4, RSF-7, RSF-8, RSF-18, RI-12, RI-U, RMF-6, RMF-12, RMF-18, RMF-24, RMF-40, NC. Short term rentals may be permitted by right or by conditional use in planned zoning districts subject to the zoning regulations enacted by the City Council for each district. Short-term rentals in non-residential zoning districts, mixed use zoning districts, or other zoning districts not listed above are not required to apply for a conditional use permit.

Finding: **The request is to operate a Type 2 Short-Term Rental, Use Unit 46, in RSF-4 zoning, which requires a conditional use permit.**

B. **Occupancy.** Maximum of two (2) people per bedroom, plus two (2), for the entire unit when operated as a short-term rental.

Finding: **Occupancy is limited as described in UDC §163.18(A)(3). Occupancy limitations are confirmed by the applicant during licensing. Per the application, the structure has four bedrooms, which would limit the guest count to ten.**

C. **Parking.** Parking is limited to the maximum number of vehicles as allowed by the underlying zoning district for the residential building on the property.

Finding: **Staff recommends parking is limited as described in UDC §163.18(A)(4). For single-family structures parking is required to be provided at a rate of two vehicle spaces per dwelling unit. According to the applicant the main dwelling unit has four bedrooms, with up to eight parking spaces available on-site. Ordinance limits the number of vehicles to be parked outside to no more than 4. Staff finds that the amount of available parking on-site is adequate and does not anticipate issues.**

D. Special events are not permitted in a short-term rental. Example of special events include, but are not limited to, weddings, receptions, anniversaries, private parties, fundraisers and business seminars.

Finding: **The application letter suggests the property will comply with the City's regulations for a short-term rental. As a condition of approval, staff recommends a prohibition on special events.**

E. Short-term rental units are allowed in any structure established as a permanent residential dwelling including an accessory dwelling unit. No recreational vehicle, trailer, other vehicle or structure not classified as a permanent residential dwelling may be used as a short-term rental.

Finding: **The application is for use of the property at 611 N. Oliver Avenue. Staff recommends a condition confirming that no recreational vehicle, trailer, other vehicle or structure not classified as a permanent residential dwelling may be used as a short-term rental.**

F. **Exceptions.** Exceptions to the short-term rental standards, except proposals that would exceed the city-wide density maximum, may be granted by the Planning Commission as a conditional use permit.

Finding: **Type 2 short-term rentals are subject to a citywide density cap at 475 business licenses. As of February 19, 2025, the City had issued 456 Type 2 short-term rental licenses with an additional 19 in review. Further, there are currently an additional 37 on the waitlist. Granting a CUP for this location would entitle the applicant to apply for a business license but does not guarantee its approval. No exceptions are being requested.**

G. Short-term rentals must comply with all applicable codes under City Code §118.01 and successfully obtain a business license prior to operation.

Finding: **This short-term rental would be subject to all codes in Business Regulations §118.01 that apply to Type 2 short-term rentals in residential zoning districts. Applicable business licensing requirements will be reviewed by staff and confirmed by the applicant at the time of licensing.**

H. Short-term rentals in residential zoning districts may be subject to denial or additional conditions based upon the Planning Commission's findings on the following factors:

1. Adequate parking infrastructure;

2. Adequate adjoining or nearby streets for on-street parking;

3. Frequency or concentration of nearby licensed Type 2 short-term rentals; and

4. Prior zoning or code violations; and

5. Proximity to public or private K-12 schools when the proposed property is within 1,000 feet of the school boundary line.

Finding: **Staff finds there is likely adequate parking infrastructure to support the use of the property as a short-term rental. Up to four vehicle spaces are available within the existing driveway. W. Cardwell Lane and N. Oliver Avenue do not currently have adequate width to support on-street parking, but staff finds that the applicant's property is likely to absorb the parking necessary to serve this property as a short-term rental. No zoning or other code violations were found for this property, and the property is not within 1,000 feet of a K-12 school. Leverett Elementary School is located to the northeast of this property, but it is outside of the 1000-foot boundary line, so it is not to be considered by the Planning Commission from a compatibility standpoint. City business license records indicate six (6) other units within a quarter-mile radius of the property have an active Type 2 short-term rental business license. These properties are spread relatively evenly within this radius with no apparent clusters. Staff finds that the area could likely support an additional short-term rental.**

§163.02. AUTHORITY; CONDITIONS; PROCEDURES. (continued)

(2.) That satisfactory provisions and arrangements have been made concerning the following, where applicable:

(a.) Ingress and egress to property and proposed structures thereon with particular reference to automotive and pedestrian safety and convenience, traffic flow and control and access in case of fire or catastrophe;

Finding: **An existing driveway is available to accommodate vehicular ingress and egress. The property has frontage along W. Cardwell Lane and N. Oliver Avenue. Based on the number of on-site parking spaces available, staff does not anticipate an adverse impact on the surrounding streets.**

(b.) Off-street parking and loading areas where required, with particular attention to ingress and egress, economic, noise, glare, or odor effects of the special exception on adjoining properties and properties generally in the district;

Finding: **A total of four off-street parking spaces are available in an existing driveway, which falls within the maximum permitted by ordinance. The applicant has indicated that up to 8 vehicles can park in the driveway, but this would not permitted per code, which allows a maximum of 4 vehicles to be parked outside.**

(c.) Refuse and service areas, with particular reference to ingress and egress, and off-street parking and loading,

Finding: **The applicant proposes typical residential trash cart service rather than dumpster service. Staff recommends storage of the containers should be screened from public view when not at the curb for residential pick-up.**

(d.) Utilities, with reference to locations, availability, and compatibility;

Finding: **Utilities are currently available to the site, and the use as a short-term rental is not anticipated to impact the provision of utilities.**

(e.) Screening and buffering with reference to type, dimensions, and character;

Finding: **Staff recommends that residential carts be screened so that they are not visible from the public right-of-way.**

(f.) Signs, if any, and proposed exterior lighting with reference to glare, traffic safety, economic effect, and compatibility and harmony with properties in the district;

Finding: **Any proposed signage will be subject to Unified Development Code section 174 – Signs, and all the regulations therein.**

(g.) Required yards and other open space; and

Finding: **Based on the applicant's submittal, the structure is meeting relevant setbacks.**

(h.) General compatibility with adjacent properties and other property in the district.

Finding: **Staff finds the use to be compatible with the surrounding properties. The property is surrounded by primarily residential uses and there are six other licensed Type 2 short-term rentals within a quarter mile radius. There appears to be adequate parking to accommodate the number of permitted guests and staff does not anticipate any adverse impacts with this request. Staff also recognizes that the neighborhood largely has concerns about additional short-term rentals operating in the area.**

(i.) General compatibility with the goals and intent of the city's adopted land-use, transportation, and other strategic plans.

Finding: **Staff finds the proposed use to be somewhat incompatible with the City's adopted land use, transportation, and other strategic plans since short-term rentals do not clearly support any of the goals identified in those plans. However, there are safeguards in place that limit how short-term rentals**

operate to ensure that the City can still meet those goals, including a citywide density cap of 475 units and restrictions on the number of units that may be used as a short-term rental in multi-family dwelling complexes.

BUDGET/STAFF IMPACT:
None

Attachments:

- Business Regulations
  - §118.01 Applicability
- Unified Development Code
  - §163.18 Type 2 Short-Term Rentals in Residential Zoning Districts
  - §161.07 District RSF-4, Residential Single-Family – Four (4) Units Per Acre
- Applicant Request Letter
- Site Plans
- Building Floor Plan
- Elevations
- Public Comment
- One Mile Map
- Close-Up Map
- Current Land Use Map
- STRs Within ¼ Mile Map

  Additional public comment

118.01 Applicability

(A) *General Businesses.*

(1) All businesses, institutions, corporations, LLCs, LLPs, partnerships, non-profit associations or corporations, sole proprietorships or other non-governmental entities with a physical address or which operates either a legally permitted home occupation or a short-term rental within the Fayetteville city limits shall be required to file for the City of Fayetteville Business Registry and License. A covered business or entity with multiple physical addresses in Fayetteville must obtain a separate business license for each such business address.

(2) In addition, any person or non-governmental entity who has or should have a sales tax permit and operates out of a physical address within Fayetteville shall be required to file for the City of Fayetteville Business Registry and License.

(3) In addition, any person or non-governmental entity who is engaged in any trade or occupation which requires federal or state licenses and who operates out of a physical address within Fayetteville shall be required to file for the City of Fayetteville Business Registry and License.

(B) *Religious Entities.* Churches and other religious institutions are exempt from this chapter unless they are performing functions like daycare that must be licensed by the state or that generate revenue upon which state sales or use taxes must be paid. The city business license shall not be required for the religious entity but only for those functions that require a state license or upon which state sales or use taxes must be paid.

(C) *Minors Exempt.* No individual under eighteen (18) years of age shall be required to register or obtain a business license. Minors are prohibited from leasing, advertising, managing or any other activity involved in STRs unless they are an emancipated minor.

(D) *Individual Landlords Renting Less Than Three (3) Dwelling Units Exempt.* An individual landlord, not operating as a corporation, LLC, LLP, or other business entity, who rents out less than three (3) dwelling units, and no commercial, industrial, or institutional unit, site or building shall be exempt from this chapter. However, a landlord that operates a short-term residential rental shall not be exempt and must apply for and obtain a business license for each individual short-term rental.

(E) *Short-Term Rentals.* A residential dwelling unit, portion of a dwelling unit, or bedroom within a residential dwelling unit, leased and/or rented to a guest(s), for a period of less than thirty (30) consecutive days.

(1) *Short-Term Rental, Type 1.* A short-term rental where the principal use of the property remains as a full-time residence. The occupants or owner rent their primary residence as a short-term rental. A copy of the Homestead Tax Credit or long-term lease agreement for the subject property is required to be classified as a Type 1 rental. The occupant or owner must occupy the residence for nine (9) months of the year. Accessory dwelling units (ADUs) as defined in Unified Development Code Chapter 151 shall be considered a Type 1 short-term rental.

(2) *Short-Term Rental, Type 2.* A short-term rental that is not occupied by a permanent resident. The owner lists this property full-time as a short-term rental and has no intention of having permanent residents living in the property. A conditional use permit is required for a Type 2 short-term rental in a residential zoning district prior to the city issuing a business license.

(3) *License Required.* No dwelling unit in the city shall be used as a short-term rental unless:

(a) The owner of the dwelling unit or operator of the short-term rental possess a valid and current business license for the dwelling unit, and fully complies with all legal requirements and duties imposed herein with respect to each and every short-term rental; and

(b) The owner has designated an agent, where said agent fully complies with all legal requirements and duties imposed herein with respect to every short-term rental. The owner may serve as their own agent.

(c) The owner of the dwelling unit or operator of the short-term rental provides proof of a valid and current homeowners insurance rider policy which fully covers each unit when operated as short-term rental unit.

(4) A separate business license shall be required for each dwelling unit used as a short-term rental.

(5) Any change in ownership requires a new or amended business license.

(6) If any required contact information changes for the associated business license, the person to whom the license was issued shall immediately notify the Development Services Department in writing.

(7) *License Application.* The application for a business license shall include at minimum, the following information from applicants:

(a) The property owner's information including legal name, mailing address, immediate contact phone number, and immediate contact E-mail address.

(b) Information for the dwelling unit subject to the application, inclusive of the physical street address assigned by the city.

(c) The type and total number of dwelling units located on the lot of record containing the dwelling unit subject to the application.

(d) If the owner is not their own agent, the owner designated agent's information including legal name, mailing address, immediate contact phone number and immediate contact E-mail address.

(e) Documentation of approval of a life safety and egress inspection by the City Building Safety Division for the dwelling unit subject to the application.

(f) Proof of application for remittance of hotel, motel and restaurant tax to the City of Fayetteville, and verification that all sales, use, and hotel, motel and restaurant taxes are current.

(g) Any additional data as deemed necessary or desirable for permit approval by the Development Services Director.

(8) *License Renewals.* Business licenses for short-term rentals shall be renewed in accordance with Chapter 118 of the Business Regulations (Business Registry and Licenses).

(9) *Legal Duties of License Holders.* An owner possessing a short-term rental license shall comply at all times with the following requirements:

(a) *Occupancy.* Short-term rentals shall be subject to, and may not exceed, the occupancy limits approved with the business license.

(b) *Advertisements.* A short-term rental shall not be advertised if it violates occupancy, density, safety, and any of the other provisions of the Fayetteville Code. No short-term rental unit shall be

advertised prior to having obtained a business license and the business license number shall be included in the advertisement listing.

(c) *Information and Posting.* Business licensees shall provide to guests and post conspicuously in the common area of the short-term rental unit the city phone number to report a safety complaint.

(10) *Owner or Agent Accessibility.* The property owner shall ensure that they or a designated agent are available at all times during guest occupancy, including nights and weekends, in order to facilitate compliance with this section. For the purposes of these regulations, "availability" means that the owner or agent is accessible by telephone, and, able to be physically present at the short-term rental within three (3) hours of being contacted.

(11) *Guest Records.* The owner shall maintain summary guest registration records, which shall contain the actual dates of occupancy, total number of guests per party per stay, and the rate(s) charged, but shall not contain any personally identifiable information about guests. Such records shall be maintained for three (3) years and shall be provided to the city upon request.

(12) *Health and Safety.* The owner shall ensure that each dwelling unit governed by this section complies with the applicable provisions of the Unified Development Code Chapter 173, Building Regulations.

(13) *Criminal Activity.* The owner shall timely report any known or reasonably suspected criminal activity by a guest to the Fayetteville Police Department within twelve (12) hours maximum.

(14) *Taxes and Fees.* Except for those instances in which a hosting platform bears the responsibility for collecting and remitting taxes and fees applicable to short-term rentals, the property owner shall timely remit in full Fayetteville Hotel, Motel and Restaurant tax and other applicable local, state, and federal taxes and city fees owed in connection with any short-term rental. The failure of a hosting platform to collect and remit taxes and fees shall not relieve an owner of the obligation to pay taxes and fees owed pursuant to this section.

(15) *Authorization to Occupy, Use, and Operate.* Authorization to operate a short-term rental may be granted by the Development Services Director through the issuance of a City of Fayetteville Business Registry and License (Business License).

(16) *Density For Type 2 Short-Term Rentals.* A city-wide density cap of four hundred seventy-five (475) dwelling units may be Type 2 rentals. A conditional use permit may not permit:

(a) More Type 2 short-term rentals than what is allowed by the city-wide density cap.

(b) More than 10% or a single unit whichever is greater; of total dwelling units as Type 2 rentals within a multi-family dwelling complex.

(c) Individual 2-, 3- and 4-family buildings that are owned by the same person or entity and are not a part of a multi-family complex shall have no more than one (1) Type 2 short-term rental unit per building complex.

(d) Where attached residential units are held separately through condominium association, horizontal property regime, fee simple, or similar ownership structure, no cap shall be applied to buildings with attached residential dwellings. Structures of attached residential dwellings where applicants seek more than 10% of total units for licensing as Type 2 rentals shall be evaluated by the Building Safety Director and/or Fire Marshal for adequate fire protection as defined by the adopted Arkansas Fire Prevention Code. Where inadequate fire protection is identified, improvements may be required prior to issuance of a business license.

(17) *Suspension and Revocation.* If the Development Services Director has reason to believe that any of the grounds specified in §118.03(A) of the Fayetteville Code exist, or that any rental unit was rented for less than one (1) full night, or to more than one (1) part of guests for the same period of time, or otherwise failed to comply with all terms and conditions of this section, the Development Services Director may suspend or revoke the short-term rental's business license pursuant to the procedures detailed in §118.03 and in §118.04 of the Fayetteville Code.

(18) Short-term rentals must comply with the Unified Development Code including the regulations contained in §163.18 and §164.26 and must successfully obtain a business license prior to operation.

(Ord. No. 5347, 9-7-10; Ord. No. 6427, §§1(Exh. A), 2, 4-20-21; Ord. No. 6505, §1(Exh. A), 11-16-21; Ord. No. 6521, §§1, 2, 1-18-22; Ord. No. 6537, §1(Exh. A), 2-15-22; Ord. No. 6630, §1(Exh. A), 12-20-22; Ord. No. 6672, §1, 7-6-23)

Editor's note(s)—Ord. No. 6710, §1, adopted November 21, 2023, determines that Ordinance 6427 (Sunset Clause) and Ord. No. 6625 (extending Sunset Clause) be amended so that Ordinance 6427 and all amendments to Code Sections ordained or enacted by Ordinance 6427 shall automatically sunset, be repealed and become

void on December 31, 2024, unless prior to that date the City Council amends this ordinance to repeal or further amend this sunset, repeal and termination section.

163.18 Type 2 Short-Term Rentals in Residential Zoning Districts

(A) *Residential Zoning Districts.* Type 2 short-term rentals may be permitted as a conditional use in the following residential zoning districts:

(1) R-A
(2) RSF-.5
(3) RSF-1
(4) RSF-2
(5) RSF-4
(6) RSF-7
(7) RSF-8
(8) RSF-18
(9) RI-12
(10) RI-U
(11) RMF-6
(12) RMF-12
(13) RMF-18
(14) RMF-24
(15) RMF-40
(16) NC

Short-term rentals may be permitted by right or by conditional use in planned zoning districts subject to the zoning regulations enacted by the City Council for each district.

Short-term rentals in non-residential zoning districts, mixed use zoning districts, or other zoning districts not listed above are not required to apply for a conditional use permit.

(B) *Occupancy.* Maximum of two (2) people per bedroom, plus two (2), for the entire unit when operated as a short-term rental.

(C) *Parking.* Parking is limited to the maximum number of vehicles as allowed by the underlying zoning district for the residential building on the property.

(D) Special events are not permitted in a short-term rental. Example of special events include, but are not limited to, weddings, receptions, anniversaries, private parties, fundraisers and business seminars.

(E) Short-term rental units are allowed in any structure established as a permanent residential dwelling including an accessory dwelling unit. No recreational vehicle, trailer, other vehicle or structure not classified as a permanent residential dwelling may be used as a short-term rental.

(F) *Exceptions.* Exceptions to the short-term rental standards, except proposals that would exceed the city-wide density maximum, may be granted by the Planning Commission as a conditional use permit.

(G) Short-term rentals must comply with all applicable codes under City Code §118.01 and successfully obtain a business license prior to operation.

(H) Short-term rentals in residential zoning districts may be subject to denial or additional conditions based upon the Planning Commission's findings on the following factors:

(1) Adequate parking infrastructure;
(2) Adequate adjoining or nearby streets for on-street parking;
(3) Frequency or concentration of nearby licensed Type 2 short-term rentals;
(4) Prior zoning or code violations; and
(5) Proximity to public or private K-12 schools when the proposed property is within 1,000 feet of the school boundary line.

(Ord. No. 6630, §5(Exh. B), 12-20-22; Ord. No. 6726, §1, 3-19-24)

Editor's note(s)—Ord. No. 6630, §5(Exh. B), adopted December 20-2022, repealed the former §163.18, and enacted a new §163.18 as set out herein. The former §163.18 pertained to similar subject matter and derived from Ord. No. 6427, §§1(Exh. E), 2, adopted April 20, 2021; Ord. No. 6505, §2(Exh. B), adopted November 16, 2021; Ord. No. 6537, §2(Exh. B), adopted February 15, 2022.

Editor's note(s)—Ord. No. 6710, §1, adopted November 21, 2023, determines that Ordinance 6427 (Sunset Clause) and Ord. No. 6625 (extending Sunset Clause) be amended so that Ordinance 6427 and all amendments to Code Sections ordained or enacted by Ordinance 6427 shall automatically sunset, be repealed and become void on December 31, 2024, unless prior to that date the City Council amends this ordinance to repeal or further amend this sunset, repeal and termination section.

161.07 District RSF-4, Residential Single-Family - Four (4) Units Per Acre

(A) *Purpose.* The RSF-4 Residential District is designed to permit and encourage the development of low density detached dwellings in suitable environments, as well as to protect existing development of these types.

(B) *Uses.*

(1) *Permitted Uses*.

Unit 1	City-wide uses by right
Unit 8	Single-family dwellings
Unit 41	Accessory dwellings
Unit 46	Short-term rentals

(2) *Conditional Uses*.

Unit 2	City-wide uses by conditional use permit
Unit 3	Public protection and utility facilities
Unit 4	Cultural and recreational facilities
Unit 5	Government facilities
Unit 9	Two-family dwellings
Unit 12a	Limited business
Unit 24	Home occupations
Unit 36	Wireless communications facilities
Unit 44	Cluster Housing Development

(C) *Density.*

	Single-family dwellings	Two (2) family dwellings
Units per acre	4 or less	7 or less

(D) *Bulk and Area Regulations.*

	Single-family dwellings	Two (2) family dwellings
Lot minimum width	70 feet	80 feet
Lot area minimum	8,000 square feet	12,000 square feet
Land area per dwelling unit	8,000 square feet	6,000 square feet
Hillside Overlay District Lot minimum width	60 feet	70 feet
Hillside Overlay District Lot area minimum	8,000 square feet	12,000 square feet
Land area per dwelling unit	8,000 square feet	6,000 square feet

(E) *Setback Requirements.*

Front	Side	Rear

15 feet	5 feet	15 feet

(F) *Building Height Regulations*.

Building Height Maximum	3 stories

(G) *Building Area.* On any lot the area occupied by all buildings shall not exceed 40% of the total area of such lot. Accessory ground mounted solar energy systems shall not be considered buildings.

(Code 1991, §160.031; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 4178, 8-31-99; Ord. No. 4858, 4-18-06; Ord. No. 5028, 6-19-07; Ord. No. 5128, 4-15-08; Ord. No. 5224, 3-3-09; Ord. No. 5312, 4-20-10; Ord. No. 5462, 12-6-11; Ord. No. 5921 , §1, 11-1-16; Ord. No. 5945 , §8, 1-17-17; Ord. No. 6015 , §1(Exh. A), 11-21-17; Ord. No. 6245 , §2, 10-15-19; Ord. No. 6427 , §§1(Exh. C), 2, 4-20-21)

Editor's note(s)—Ord. No. 6625 , §1 adopted December 6, 2022, "determines that Section 2 of Ordinance 6427 (Sunset Clause) be amended so that Ordinance 6427 and all amendments to Code Sections ordained or enacted by Ordinance 6427 shall automatically sunset, be repealed and become void on December 31, 2023, unless prior to that date the City Council amends this ordinance to repeal or further amend this sunset, repeal and termination section."

City of Fayetteville, Arkansas
Conditional Use Permit Application
611 N. Oliver Avenue

1. Payment in full has been made.
2. 611 N. Oliver Ave, Fayetteville, AR 72701 is the address of the property at issue. A legal description for the property is listed in the attached deed.
3. Owner is applying for a conditional use permit for a short term rental. The property will be used as a nightly rental. The property will not be used as a rental during football games.
    a. The unit is 3,200 square feet.
    b. The unit is 2 floors. On the 1st floor is the kitchen and living space, a half bathroom and 1 bedroom and the 2nd floor contains 3 bedrooms and 2 bathrooms. Pictures of the property showing elevations are attached.
    c. The property has 8+ parking spots located in the driveway. Pictures of the property showing parking area are attached.
    d. Not applicable.
    e. There are lights located at the front, side, and back doors of the units. The exterior porches also have lights. Lights with motion sensors illuminate the parking area and walkways.
    f. The property will be used for short stays of 1-8 guests so the noise level should be minimal. The unit will not be used for anything outside of its intended purposes, specifically for University of Arkansas football games.
    g. The unit has existing landscaping on both sides of the property that screens the house from neighboring properties. Pictures of the property showing landscaping are attached.
    h. Trash will be picked up by the City of Fayetteville.
    i. The unit will not add additional traffic to N. Oliver Ave. to the east, W. Cardwell Ln. to the south, or N. Gray Ave. to the west. The surrounding properties are residential units, as well.
    j. The use of the property as a residential rental is very common in this location because of its accessibility to surrounding areas and events.
4. A site plan is attached.
5. The floor plan drawn to scale showing walls, doors, windows, and identification of activity areas is attached.
6. A copy of the county parcel map from the Washington County Assessor's office website is attached at the end of this document. The pictures show the subject property and all parcels within 200 feet.

7. The consent of ownership form signed by Larry McCredy, as authorized agent for JD Riggins Family Holdings, LLC is attached as a separate document.

Image Attachments

3(b) Elevations of all exterior sides of the structure

3(c) Parking Description

The driveway begins on the south side of the property and winds around the west side of the house to a large parking area, allowing for 8+ vehicles to be parked, if needed.

3(g) Screening or buffering from adjacent properties

Type: REAL ESTATE
Kind: WARRANTY DEED
Recorded: 5/10/2022 12:08:24 PM
Fee Amt: $25.00 Page 1 of 3
Washington County, AR
Kyle Sylvester Circuit Clerk

File# 2022-00015780

WARRANTY DEED
(By Trustees)

KNOW ALL MEN BY THESE PRESENTS:

We, the undersigned, being the duly appointed, qualified and acting **Trustees of the Lane Riggins Trust u/a/d August 24, 2021**, hereinafter called "Grantor", pursuant to the power and authority granted therein as evidenced by the Certification of Trust dated August 24, 2021, filed herewith, and for Ten Dollars ($10.00) and other valuable consideration to us paid by **JD Riggins Family Holdings, LLC**, an Arkansas limited liability company, hereinafter called "Grantee", the receipt of which is hereby acknowledged, do hereby GRANT, BARGAIN, SELL and CONVEY unto the said Grantee, and unto Grantee's successors and assigns forever, the following-described lands situated in Washington County, Arkansas:

PART OF THE SW1/4 OF THE SE1/4 OF SECTION 8, T-16-N, R-30-W, FAYETTEVILLE, ARKANSAS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT AN EXISTING IRON PIPE ON THE WEST LINE OF OLIVER STREET WHICH IS S 00°27'11" E (REC. SOUTH) 626.00 FEET (REC. 625.00 FEET) AND EAST 888.60 (REC. 881.00 FEET) FROM THE NORTHWEST CORNER OF SAID 40 ACRE TRACT; THENCE S 00°55'35" E 136.49 FEET ALONG THE WEST LINE OF SAID OLIVER STREET TO AN EXISTING IRON REBAR AT THE NORTH LINE OF CARDWELL LANE; THENCE S 78°04'22" W 202. 77 FEET TO AN EXISTING IRON REBAR AT THE SOUTHEAST CORNER OF A LOT SOLD TO THEODORE F. GRAY; THENCE N 00°28'58" w 179.21 FEET WITH THE EAST LINE OF GRAY LOT TO A SET 1/2" IRON REBAR AT THE SOUTH LINE OF A TRACT SOLD TO HILLARD JACKSON; THENCE S 89°45'41" E 197.70 FEET WITH SAID LINE TO THE POINT OF BEGINNING, WASHINGTON COUNTY, ARKANSAS.

Subject to recorded instruments, covenants, rights of way, and easements, if any. Subject to all prior mineral reservations and oil and gas leases, if any.

[Legal description provided by Realty Title & Closing Services, LLC.]

TO HAVE AND TO HOLD the same unto the said Grantee, and unto Grantee's successors and assigns forever, with all tenements, appurtenances and hereditaments thereunto belonging.

AND Grantor hereby covenants with said Grantee, and Grantee's successors and assigns, that Grantor is lawfully seized of said lands, that Grantor has the right to sell and convey the same, that said lands are unencumbered, and that Grantor will forever warrant and defend the title to said lands against all lawful claims and demands whatsoever.

WITNESS our hands and seals as such Grantor this 5 day of May, 2022.

SEND TAX NOTICES TO:
JD Riggins Family Holdings, LLC
1204 E Joyce Blvd Suite 102
Fayetteville, AR 72703
(Address)

Lane Michael Riggins, Trustee of the Lane Riggins Trust u/a/d August 24, 2021

Jimmy Darin Riggins, Trustee of the Lane Riggins Trust u/a/d August 24, 2021

Please see the attached Real Estate Transfer Tax Stamps for proof of tax paid and certification that documentary stamps or documentary symbol in the legally correct amount have been placed on this instrument.

ACKNOWLEDGEMENT

STATE OF ARKANSAS)
) ss.
COUNTY OF Washington)

BE IT REMEMBERED, that on this day came before the undersigned, a Notary Public, duly commissioned, qualified and acting, within and for the said County and State, and appeared in person the within named **Lane Michael Riggins and Jimmy Darin Riggins,** to me personally known or satisfactorily proven, who stated that they were the **Trustees** of the **Lane Riggins Trust u/a/d August 24, 2021**, and were duly authorized in such capacities to execute the foregoing Warranty Deed by Trustee for and in the name and behalf of said Trust, and further stated and acknowledged that they had so signed, executed and delivered said instrument for the consideration, uses and purposes therein mentioned and set forth.

IN TESTIMONY WHEREOF, I have hereunto set my hand and official seal this 5 day of May, 2022.

My Commission Expires:
01/27/2027

Lesa Renee O'Kelley
Notary Public

OFFICIAL SEAL
LESA RENEE' O'KELLEY
Notary Public Arkansas
Washington County
Commission# 12700085
Commission Exp. 01/27/2027

Instrument prepared by:
Stephen J. Miller, Attorney – Harrington Miller Law Firm
4710 S. Thompson, Suite 102, Springdale, AR 72764
www.arkansaslaw.com | (479) 751-6464

I certify under penalty of false swearing that documentary stamps or a documentary symbol in the legally correct amount has been placed on this instrument. No Revenue Stamps Required
No Consideration Given.

AGENT: Sam Walker
Signature

Washington County, AR
I certify this instrument was filed on
5/10/2022 12:08:24 PM
and recorded in REAL ESTATE

File# 2022-00015780
Kyle Sylvester - Circuit Clerk

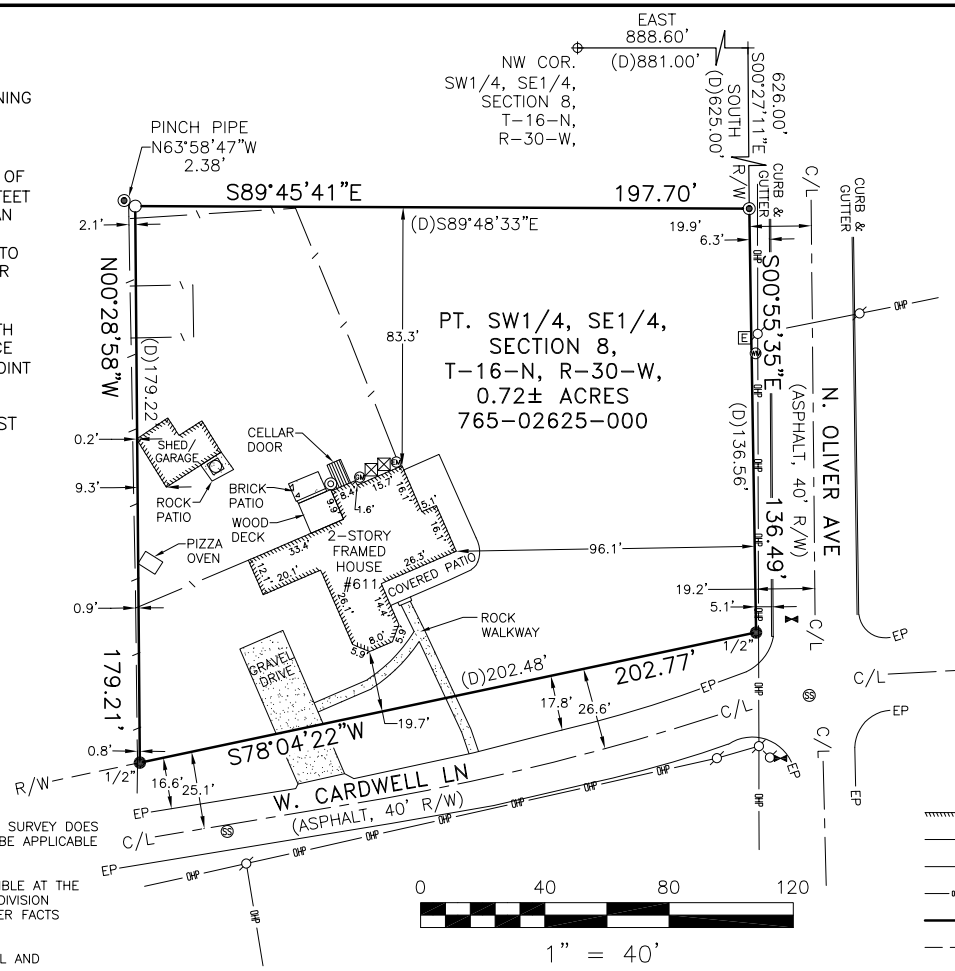
SURVEY DESCRIPTION

PART OF THE SW1/4 OF THE SE1/4 OF SECTION 8, T-16-N, R-30-W, FAYETTEVILLE, ARKANSAS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT AN EXISTING IRON PIPE ON THE WEST LINE OF OLIVER STREET WHICH IS S00°27'11"E (REC. SOUTH) 626.00 FEET (REC. 625.00 FEET) AND EAST 888.60 (REC. 881.00 FEET) FROM THE NORTHWEST CORNER OF SAID 40 ACRE TRACT; THENCE S00°55'35"E 136.49 FEET ALONG THE WEST LINE OF SAID OLIVER STREET TO AN EXISTING IRON REBAR AT THE NORTH LINE OF CARDWELL LANE; THENCE S78°04'22"W 202.77 FEET TO AN EXISTING IRON REBAR AT THE SOUTHEAST CORNER OF A LOT SOLD TO THEODORE F. GRAY; THENCE N00°28'58"W 179.21 FEET WITH THE EAST LINE OF GRAY LOT TO A SET 1/2" IRON REBAR AT THE SOUTH LINE OF A TRACT SOLD TO HILLARD JACKSON; THENCE S89°45'41"E 197.70 FEET WITH SAID LINE TO THE POINT OF BEGINNING, WASHINGTON COUNTY, ARKANSAS.

BUYER: DARIN & CHRISTINE RIGGINS REV. TRUST

SELLER: REBECCA NEWTH HARRISON TRUST

ADDRESS: 611 N. OLIVER ST,
FAYETTEVILLE, AR, 72701



LEGEND

- AC UNIT
- COMPUTED POINT
- ELECTRIC BOX
- ELECTRIC METER
- EXISTING IRON PIPE
- EXISTING IRON REBAR
- FIRE HYDRANT
- GAS METER
- POWER POLE
- RAILROAD SPIKE
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- SET 1/2" IRON REBAR
- WATER METER
- WATER VALVE
- WELL
- BUILDING LINE
- CENTERLINE ROAD
- CHAIN-LINKED FENCE
- OVERHEAD ELECTRIC LINE
- PROPERTY LINE
- RIGHT-OF-WAY LINE

PLAT NOTES:

EXCEPT AS SPECIFICALLY STATED OR SHOWN ON THIS PLAT, THIS SURVEY DOES NOT PURPORT TO REFLECT ANY OF THE FOLLOWING WHICH MAY BE APPLICABLE TO THE SUBJECT REAL ESTATE:

EASEMENTS, OTHER THAN POSSIBLE EASEMENTS WHICH WERE VISIBLE AT THE TIME OF MAKING OF THIS SURVEY; RESTRICTIVE COVENANTS; SUBDIVISION RESTRICTIONS OR OTHER LAND USE REGULATIONS; AND ANY OTHER FACTS WHICH AN ACCURATE TITLE SEARCH MAY DISCLOSE.

THIS SURVEY IS VALID ONLY IF THE DRAWING INCLUDED THE SEAL AND SIGNATURE OF THE SURVEYOR.

THIS SURVEY MEETS OR EXCEEDS THE CURRENT "ARKANSAS MINIMUM STANDARDS FOR PROPERTY BOUNDARY SURVEYS AND PLATS".

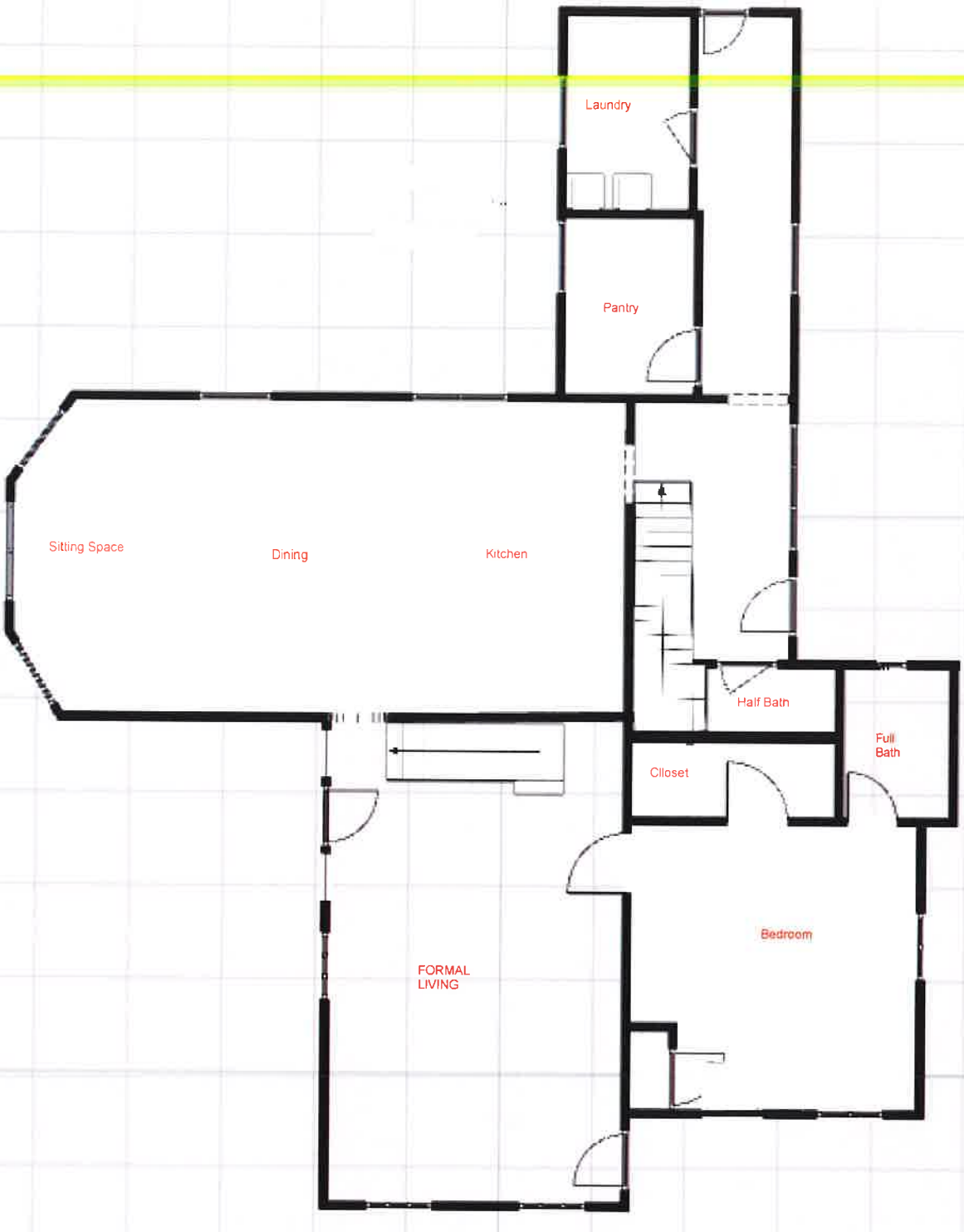
DECLARATION IS MADE TO THE ORIGINAL PURCHASER OF THE SURVEY. IT IS NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.

SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY.

Alan Reid & Associates
118 South College Avenue
Fayetteville, Arkansas 72701
(479) 444-8784

DATE: 06/03/2021	REVISED:	PROJECT NO. 21110
SCALE: 1"= 40'	DRAWN BY: DF	

LOT SURVEY



611 N Oliver Ave Fayetteville

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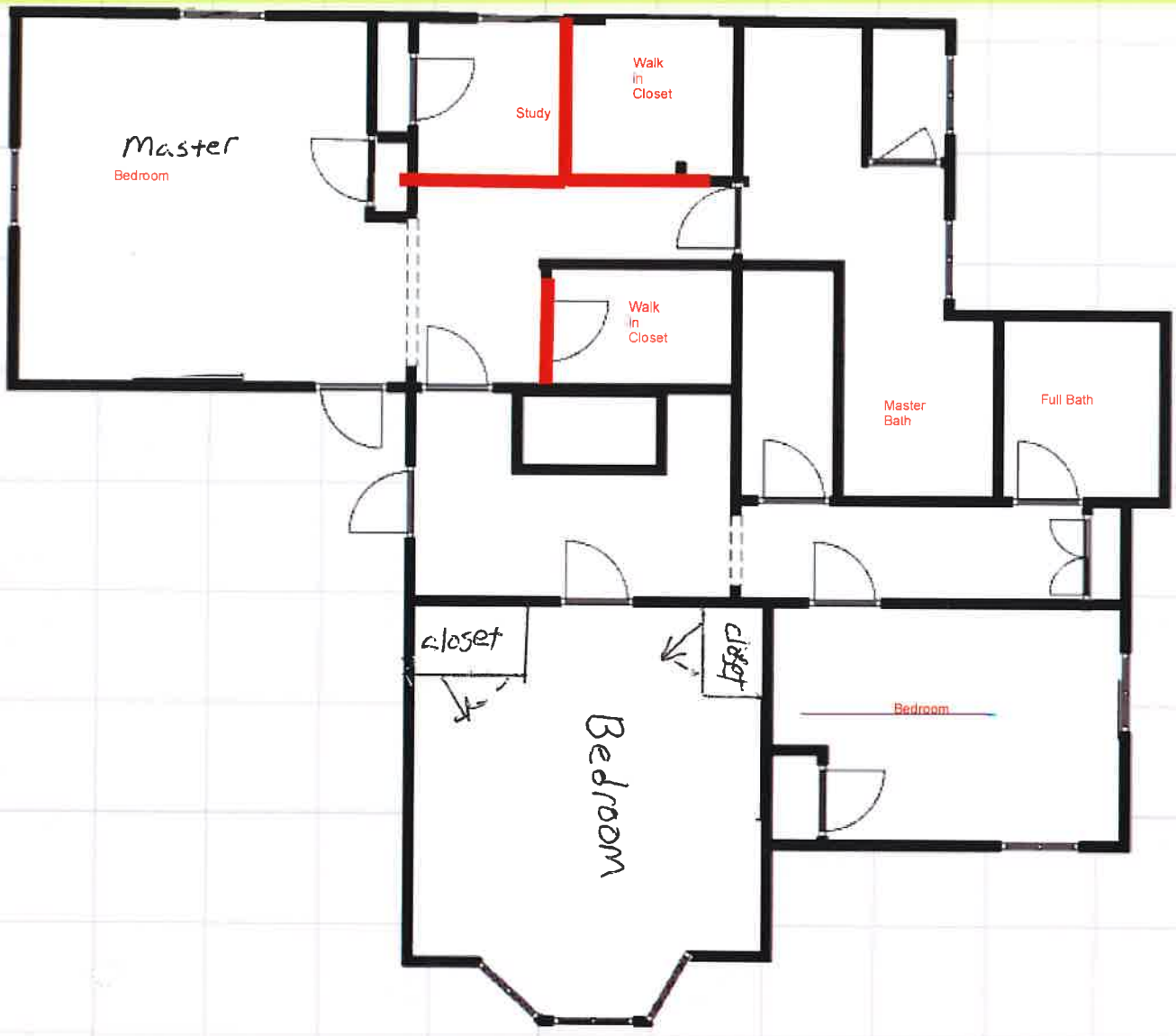
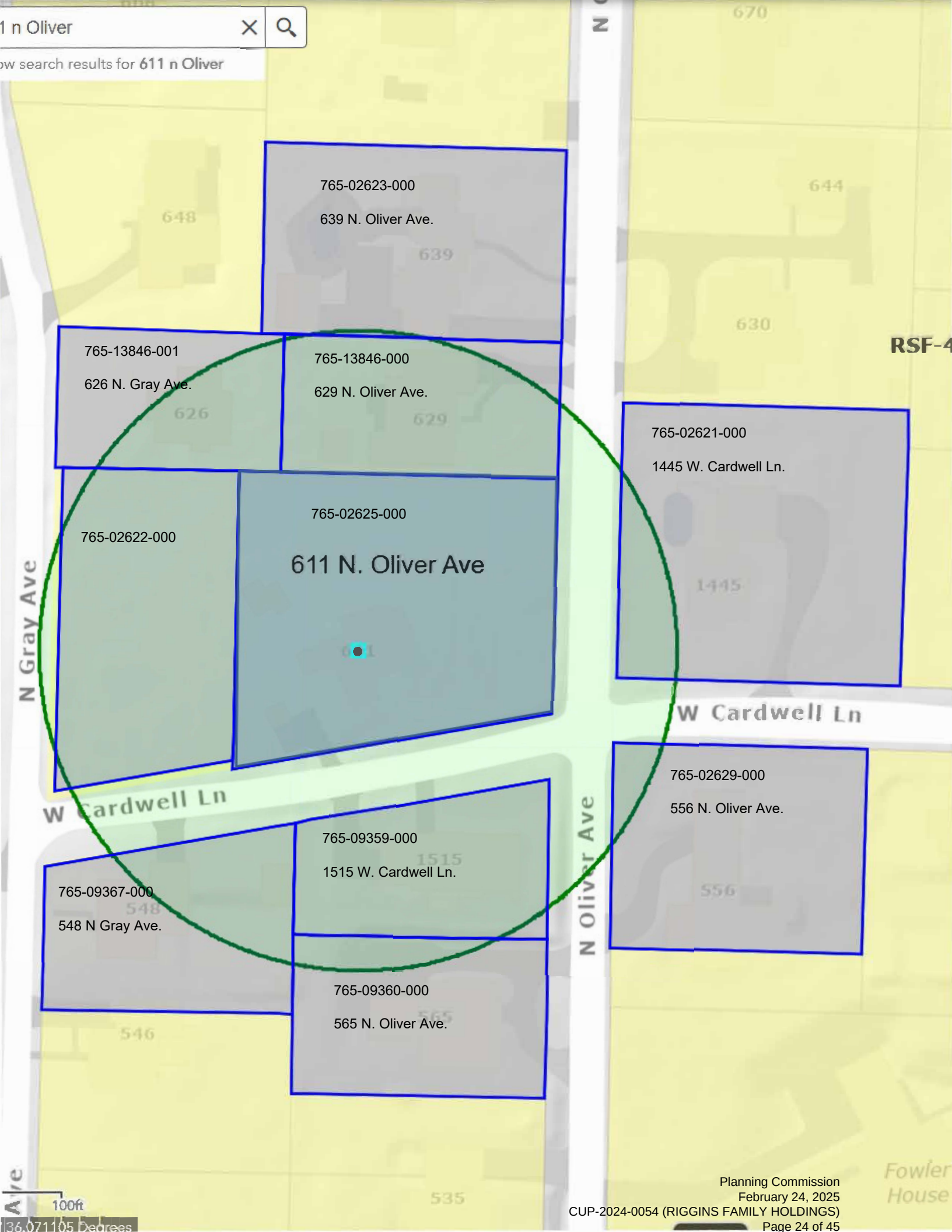


611 N oliver Fayetteville

2nd FLOOR


1 n Oliver
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765-13846-001
626 N. Gray Ave.
765-13846-000
629 N. Oliver Ave.
765-02621-000
1445 W. Cardwell Ln.
765-02622-000
765-02625-000
611 N. Oliver Ave
N Gray Ave
W Cardwell Ln
765-02629-000
556 N. Oliver Ave.
765-09359-000
1515 W. Cardwell Ln.
765-09367-000
548 N Gray Ave.
765-09360-000
565 N. Oliver Ave.
N Oliver Ave
RSF-4
100ft

December 18, 2024

To Whom It May Concern:

I am Darin Riggins. I am the Trustee of the JD Riggins Family Trust, which is the sole member of JD Riggins Family Holdings, LLC. JD Riggins Family Holdings, LLC owns property at 611 N. Oliver Avenue in Fayetteville and is applying for a Condition Use Permit for short term rental property for that residence. JD Riggins Family Holdings, LLC appoints and authorizes Larry McCredy as its agent authorized to act on its behalf for all matters related to the Conditional Use Permit application, including signing the Consent of Owner Form.

Thank you for you attention to this matter.

JD RIGGINS FAMILY HOLDINGS, LLC

By: JD RIGGINS FAMILY TRUST, its sole member

By: _____ Trustee

Darin Riggins, Trustee

Compiled Public Comment
CUP-2024-0054

From: Sun Flower <sunflowerwiks@gmail.com>
Sent: Thursday, January 23, 2025 4:06 PM
To: Planning Shared <planning@fayetteville-ar.gov>
Subject: 611 N. Oliver CUP-2024-0054.

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I reside at 548 N Gray Avenue, across Cardwell Lane, in the same block and one property away from 611 N. Oliver.

- Despite my proximity, I was not directly notified by the applicant, nor were other immediate neighbors regarding this application.

- However, I did observe the posted notice on the property concerning their application **CUP-2024-0054.**scheduled to be heard by the commission on **February 10, 2025.**

- **I am opposed** to the granting of this application for a short-term rental at this address.

- According to Teresa Turk, our Ward 4 City Councilman, **there are at least 7 short-term rentals within a quarter mile radius of this address.**

- **Such a concentration of short term rentals depletes a much needed housing stock for long term residents and drives up costs not only in our neighborhood, but in Fayetteville as a whole.**
- This lovely historic home, known as the “Oliver House” for the family who built it, has housed families since the very early 1900s, and should continue to do so.
- The current owner has done a lovely job restoring the home. It is ready for move-in when and if he wishes to sell, **ideally to a resident family** who will join area residents **who are attempting to preserve a tightly knit neighborhood that benefits from a nearby elementary school and public university, a neighborhood grocery and area restaurants and shopping.**

I urge you to deny this application.

Sincerely,
Margaret Ann Holcomb
548 N Gray Ave
Fayetteville, AR
<sunfllowerwiks@gmail.com>
From: Sun Flower <sunflowerwiks@gmail.com>
Sent: Sunday, January 26, 2025 7:46 PM

Compiled Public Comment
CUP-2024-0054

To: Planning Shared <planning@fayetteville-ar.gov>
Subject: 611 N. Oliver CUP-2024-0054 with correction

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I reside at 548 N Gray Avenue, across Cardwell Lane, in the same block and one property away from 611 N. Oliver.

- Despite my proximity, I was not directly notified by the applicant, nor were other immediate neighbors regarding this application.

Correction:*After I emailed this statement, I received a letter via postal from Larry McCredy, lawyer from RMP representing JD Riggins,*
owner of 611 N Oliver regarding the hearing on February 10 for the conditional use permit.

- However, I did observe the posted notice on the property concerning their application **CUP-2024-0054.**scheduled to be heard by the commission on **February 10, 2025**

- **I am opposed** to the granting of this application for a short-term rental at this address.

- According to Teresa Turk, our Ward 4 City Councilman, **there are at least 7 short-term rentals within a quarter mile radius of this address.**

- **Such a concentration of short term rentals depletes a much needed housing stock for long term residents and drives up costs not only in our neighborhood, but in Fayetteville as a whole.**
- This lovely historic home, known as the “Oliver House” for the family who built it, has housed families since the very early 1900s, and should continue to do so.
- The current owner has done a lovely job restoring the home. It is ready for move-in when and if he wishes to sell, **ideally to a resident family** who will join area residents **who are attempting to preserve a tightly knit but welcoming neighborhood that benefits from a nearby elementary school and public university, a neighborhood grocery and area restaurants and shopping.**

I urge you to deny this application.

Sincerely,
Margaret Ann Holcomb
548 N Gray Ave
Fayetteville, AR
<sunfllowerwiks@gmail.com>
-----Original Message-----
From: Kurt Reed <kkreed@swbell.net>

Compiled Public Comment
CUP-2024-0054

Sent: Monday, February 3, 2025 9:12 AM
To: Planning Shared <planning@fayetteville-ar.gov>
Subject: CUP-2024-0054

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

City of Fayetteville Planning Commission,

My name is Kurt Reed and I own the house at 672 N Gray Avenue. I would like to register my opposition of the application for STR at 611 N Oliver (CUP-2024-0054). There are currently two STRs within 6 houses of my primary residence at 672 N Gray. Approval of 611 N Oliver would make 3 STRs with 6 houses which is half the houses (50%) to the south of my house. Our councilwomen, Teresa Turk, indicated that there are currently 7 STRs in a quarter mile radius of 611 N Oliver. I am not sure the exact total number of houses within this radius, but a quick count via google maps seems to be between 80-100 which creates a current STR density of ~7%-8.8%. This seems to be a very high concentration as the city originally had a plan of only 2% STR density for the entire city and dropped it much much lower by capping the total number of STRs to 475 city wide.

I feel the City of Fayetteville and certainly the University of Arkansas is very well aware of the challenges students are experiencing finding lodging while attending the U of A. STRs do nothing to help students find lodging.

Thanks you for your time
and consideration.

Sincerely,
Kurt Reed
672 N Gray Avenue

Sent from my iPhone

From: Turk, Teresa <teresa.turk@fayetteville-ar.gov>
Sent: Tuesday, January 21, 2025 4:46 PM
To: Curth, Jonathan <jcurth@fayetteville-ar.gov>
Cc: Masters, Jessica <jmasters@fayetteville-ar.gov>
Subject: Re: CUP at 611 Oliver for STR

Hi Jonathan,
Thanks so much for your response and I didn't know we were below the 475 caps. Also thank you for explaining the process for STR approvals before the PC. For now, I think you have answered all my questions and I'll report back if there are any additional questions from the citizens.

See you at the CC meeting shortly,
Teresa

From: Curth, Jonathan <jcurth@fayetteville-ar.gov>
Sent: Tuesday, January 21, 2025 4:25 PM
To: Turk, Teresa <teresa.turk@fayetteville-ar.gov>
Cc: Masters, Jessica <jmasters@fayetteville-ar.gov>
Subject: RE: CUP at 611 Oliver for STR

Teresa,

Thanks for the questions and follow-up call; apologies for missing it. In an effort to get you a prompt response, I am replying briefly here, but can offer more later if it is helpful or needed.

First, the latest on short-term rental enforcement. To date, 158 non-compliant units have been confirmed, of which 93 have received water shut-off letters, removed their listing, or modified their listing to long-term rental. A few dozen more are in limbo due mail being returned, changes in ownership, changes in owner's address etc. Relatedly, I am working with the Administration to schedule an agenda session presentation on the topic so that Council may see and evaluate if the position was money well spent.

Back to the topic at-hand, we do indeed have a cap on housing units used as Type 2s short-term rentals (STRs), or, in layperson's terms, housing units used primarily for STR rather than long-term rental. That cap is 475 and we effectively reached it in December 2023. I write "effectively" since we have yet to have 475 active Type 2 licenses; there have consistently been one or more in some state of review, but we never allow more off the waitlist than we have available licenses. Put differently as an example, if we have issued 472 Type 2 STR licenses, we release three applications from the waitlist and await their approval or denial before moving more from the waitlist.

Beyond this, I answered your questions where possible below in **red**. Hopefully this clarifies what may be a misunderstanding about the timing staff and the Planning Commission reviews. STR applications on the waitlist are not receiving staff reviews and Planning Commission consideration until they reach the front of the waitlist. My concerns are certainly aligned with yours in terms of efficient use of staff time.

Finally, I included Jessie Masters, our lead planner and the reviewer for this specific request in case you have detailed questions that I am not the best-placed to answer .

Thanks again,

Jonathan Curth, AICP
Development Services Director
Development Services Department
City of Fayetteville, Arkansas
jcurth@fayetteville-ar.gov
479.575.8308

Website | Facebook | Twitter | Youtube

Compiled Public Comment
CUP-2024-0054

From: Turk, Teresa <teresa.turk@fayetteville-ar.gov>
Sent: Sunday, January 19, 2025 9:58 AM
To: Curth, Jonathan <jcurth@fayetteville-ar.gov>
Subject: CUP at 611 Oliver for STR

CUP-2024-0054 (611 N. OLIVER RD)

Good Morning Jonathan,
First could you please send me the latest STR enforcement update when you get a chance? Thank you in advance.

Second, the neighbors called to my attention the request for a STR at 611 N Oliver. I thought we were maxed out on STR-Type 2's correct? **In a sense, yes. Since late 2024, we have consistently had 475 Type 2 STR licenses issued or in review, but no more than 475.** Is this to allow these folks to be in line when a new permit becomes available? Yes, the waitlist is for a new license. Once you reach the front of the waitlist, you are directed to apply for a conditional use permit and initiate any other necessary steps (amend insurance for STR rider, make necessary life/safety upgrades, etc.) How many properties are ahead of this proposed STR? **Zero. While there are currently 37 applications on the waitlist, 611 N. Oliver came off the waitlist at the end of November and applied for their CUP in mid-December. This was largely a result of several STRs not renewing towards the end of the year, thereby opening up licenses for applicants on the waitlist.**

As you may recall we have a huge number of STR-2 on Oliver already. Using a combo of Google Earth and Development Services dashboard, I count 7 permitted and active STR-2s within ¼ mile radius of the proposed STR-2 on Oliver. Could you please confirm that my calculations are correct? **Planning will perform that analysis with their evaluation, but a cursory, informal review appears to include seven properties within ¼ mile of 611 N. Oliver.** Why are we bringing new STR's before the Planning Commission when we may not have any permits available? **It is a question of license availability, which is capped at 475. Ordinance prohibits issuing more conditional use permits than there are available licenses. As noted above, this property has come off the waitlist and regardless of any other variable, it is eligible for consideration.** Could we not implement a strategy where there are 5 properties in line on the wait list and not consider any more permits for a set period of time? **I am not sure what you are proposing. Only applications that have reached the front of the waitlist are considered. Some weeks or months this is one or two, whereas others, like the period after business license renewal, there were ten or so.** Is this something that Ordiance Review could review? **Possibly, but I may not be clear on what is being asked and if it is already being considered or implemented.** I'm just thinking about the Planning Commission and staff's time to review proposed STRs if we have a long waiting list and the neighbors who are upset and think this new STR may be starting business next month. **Staff and the Planning Commission only consider applications that have come off the waitlist. We are not evaluating the 37 that remain on the waitlist until licenses become available to them.**

Thanks in advance for the information and any thoughts you may have,
Teresa

Teresa Turk
City Council Member
Ward 4 Position 1
Fayetteville, AR 72701
ward4_pos1@fayetteville-ar.gov
206.713.2265

From: Sun Flower <sunflowerwiks@gmail.com>
Sent: Thursday, February 6, 2025 4:22 PM
To: Masters, Jessica <jmasters@fayetteville-ar.gov>
Subject: Pictures 611 N Oliver

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Jessica,

These pictures show the narrow street and access. I will have many more pictures to share later.

Photo 1The street access at the parking area, and the main vehicle entrance. The measurement of 16-17 feet and inches were at the corners of the area, and did not subtract width because of the gravel.

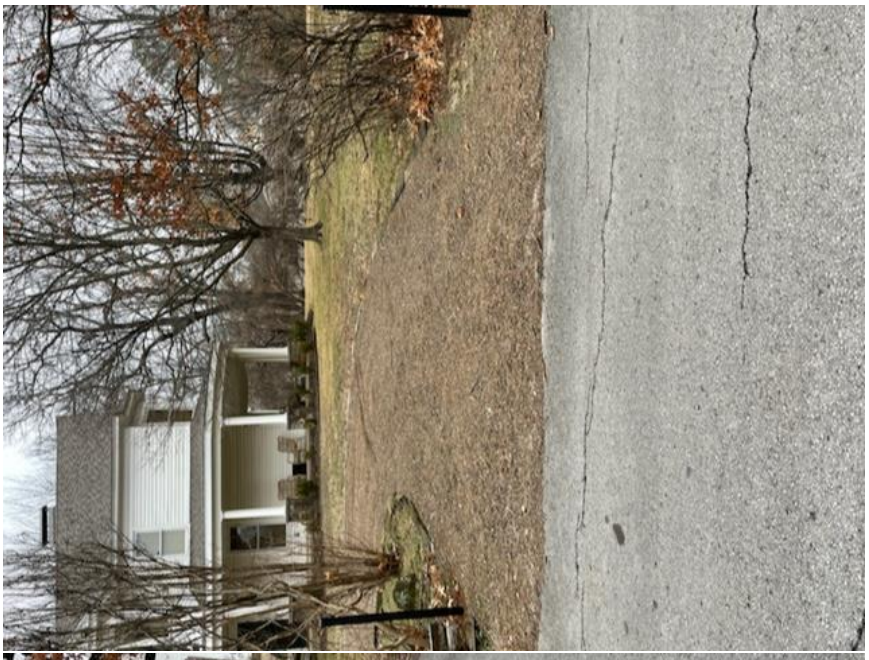
Photo 2 Front walk

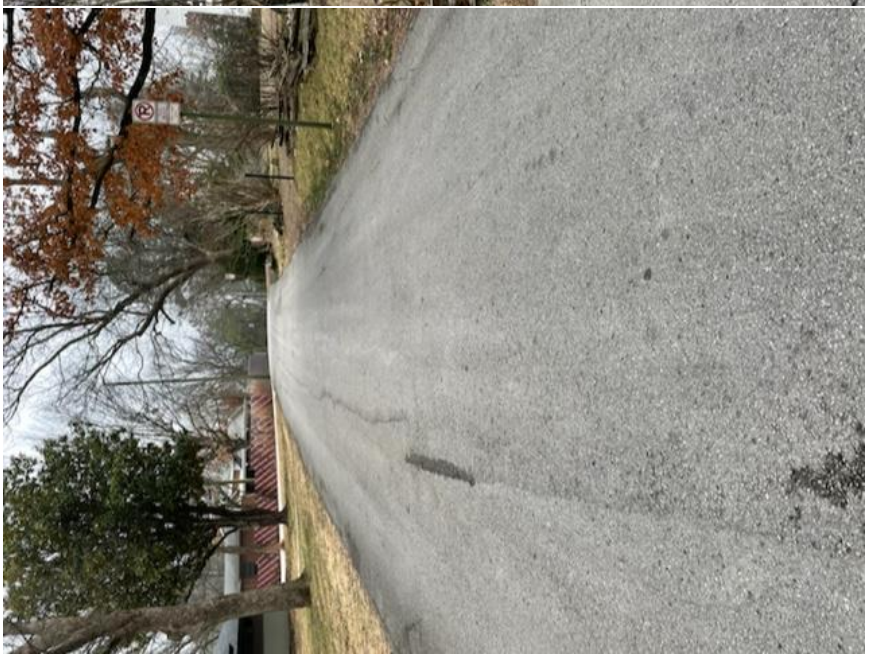
Photo 3 Circle drive 15 foot width of drive. Street width at that point around 16 feet.

Photo 4 is taken from the eastern end of Cardwell, facing west.

Historically, this was the cow path for the Oliver family's farm. The path turned the corner at Gray Ave headed north.
My parents and a few neighbors paid for the paving of this road in the late 1960s.

Margaret Holcomb





-----Original Message-----
From: Sun Flower <sunflowerwiks@gmail.com>
Sent: Thursday, February 6, 2025 4:12 PM
To: Masters, Jessica <jmasters@fayetteville-ar.gov>
Subject: Additional information 611 N Oliver STR application

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Jessica,

A few more tidbits, plus one correction to my previous email.

I misspoke, Oliver is 26 feet wide, not 21 feet. However, the city has posted no parking for the entire block because of the layout of the street, and poor visibility from either end. Cardwell also has no parking, as does the northern portion of Gray Avenue. The southern end had its no parking sign removed at some point, we are working to restore it.

One more concern that I believe needs to be addressed. With four bedrooms, the home can, according to STR rules, acommodate up to 8 people, though I have seen on some websites stating the rules that an additional two people could be included, for up to 10. If only 4 cars are allowed to park on the property, according to the conditions placed on the approval, assuming there would be more than four cars driven by the 8-10 people, where are they going to park? There is obviously no parking allowed in any of the surrounding streets, though on game days, for at least part of the day or evening, that rule is ignored. When would the game day allowances end, and the four car rule be applicable? Also, if other people "drop by" for a visit, when does that become a private party?

Thanks for helping to address these questions.

Margaret Holcomb

From: Sun Flower <sunflowerwiks@gmail.com>
Sent: Thursday, February 6, 2025 4:02 PM
To: Masters, Jessica <jmasters@fayetteville-ar.gov>
Subject: 611 N Oliver information

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Jessica,

Thank you for assisting our city with keeping our residences and neighborhoods safe.

I am a close neighbor to 611 N Oliver, and have accessed the analysis you have posted on the website concerning its application for a Type 2 STR.

At what point in the process is fire equipment access considered? Is conformity to those ordinances part of the criteria for the planning commission, or is that left to be part of the business license application?

I ask because in preparing for the meeting on Monday afternoon, I have become aware that this property may have deficiencies that would need to be considered at some point.

Cardwell Lane, the street that gives access to the driveway and parking for this property fails the ordinance requiring street width of 20 feet, for example. The half circle drive at the front door is only 15 feet wide, and the street at that point is only 16 and a few inches wide. At the drive provided for parking, the street is between 16 feet and 17 feet and few inches wide. Though the Oliver Street is 21 feet wide, there is no access to the property from that street. If fire equipment were to attempt to jump the curbing on Oliver to enter the property, old growth trees would still block access into the property.

What kind of egress is required for upstairs bedrooms in a Typer 2 STR? At present I am unaware of any means of exterior fire escapes.

I have also become aware that the incline on both Cleveland (coming east) to Gray to Cardwell, or Cleveland (coming east) to Oliver to Cardwell, or Maple (going north) to Oliver to Cardwell are much steeper that the 10% incline allowed for access for fire equipment. It is possible for equipment to come via the campus route, but might take much longer, depending on the origin of the call. And once they arrived at any corner of Cardwell, the narrow street would still deny access to the house, according to ordinance.

Also, is there a requirement for paving in the parking areas of a Type 2 STR? At present, there is pea size gravel on the circle drive and the parking area.

I have pictures I will send in another email. I will also bring these concerns to the hearing on Monday afternoon, assuming it may be helpful in your deliberations.

Thanks,
Margaret Holcomb
548 N Gray Ave
<sunflowerwiks@gmail.com>
(479)442-9853

From: Lisa Orton <lisa_m_orton@yahoo.com>
Sent: Friday, February 7, 2025 4:07 PM
To: Brink, Andrew <andrew.brink@fayetteville-ar.gov>; Payne, Brad <brad.payne@fayetteville-ar.gov>; Gulley, Fred <fred.gulley@fayetteville-ar.gov>; Garlock, Jimm <jimm.garlock@fayetteville-ar.gov>; Cabe, Matthew <matthew.cabe@fayetteville-ar.gov>; Madden, Mary <mary.madden@fayetteville-ar.gov>;

McGetrick, Mary <mary.mcgetrick@fayetteville-ar.gov>; Castin, Nick <nick.castin@fayetteville-ar.gov>; Werner, Nick <nick.werner@fayetteville-ar.gov>; Planning Shared <planning@fayetteville-ar.gov>
Cc: Lisa Orton <lisa_m_orton@yahoo.com>
Subject: Please vote against CUP-2024-0054 STR at 611 N. Oliver Rd

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Planning Commission,

Please vote against the Short Term Rental (STR) Type 2 request at 611 N. Oliver Rd.

I would be present at your meeting on February 10th to speak at the podium, but I am out-of-town at that time.

From my conversations with people in our University Heights neighborhood, we would like to stay a residential neighborhood. We do not want to become a STR Type 2 neighborhood, full of mini-hotels. Our historic neighborhood would lose its character. The density of STR Type 2s is already too high here. It is unfair that the burden of STR Type 2s be placed on a few residential neighborhoods in Fayetteville. Let's share character-removing, residential neighborhood-destroying problems throughout Fayetteville so that a few neighborhoods don't bare the burden. We love Fayetteville's residential neighborhoods because of our long-time neighbors, whether owning or long-term renting. Please do not increase the already existing problem in University Heights by approving yet another STR Type 2.

Thank you for your consideration.

Sincerely,
Lisa Orton
1663 West Halsell Rd
Fayetteville, Arkansas
Ward 4

From: Sun Flower <sunflowerwiks@gmail.com>
Sent: Monday, February 10, 2025 1:07 PM
To: Masters, Jessica <jmasters@fayetteville-ar.gov>
Subject: For Hearing Packet for CUP 611 N Oliver

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Jessica,

Please provide copies of the attached document for the commissioners for tonight's hearing of CUP 2024-0054, 611 N Oliver.

Compiled Public Comment
CUP-2024-0054

Thanks!
Margaret Holcomb

From: Lisa Orton <lisa_m_orton@yahoo.com>
Sent: Tuesday, February 18, 2025 3:53 PM
To: Brink, Andrew <andrew.brink@fayetteville-ar.gov>; Payne, Brad <brad.payne@fayetteville-ar.gov>; Gulley, Fred <fred.gulley@fayetteville-ar.gov>; Garlock, Jimm <jimm.garlock@fayetteville-ar.gov>; Cabe, Matthew <matthew.cabe@fayetteville-ar.gov>; Madden, Mary <mary.madden@fayetteville-ar.gov>; McGetrick, Mary <mary.mcgetrick@fayetteville-ar.gov>; Castin, Nick <nick.castin@fayetteville-ar.gov>; Werner, Nick <nick.werner@fayetteville-ar.gov>; Planning Shared <planning@fayetteville-ar.gov>
Cc: Lisa Orton <lisa_m_orton@yahoo.com>; University Heights Neighbors <university-heights-na@listserv.uark.edu>
Subject: Please oppose STR request at 611 N. Oliver Rd.

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Planning Commission,

Please vote against the Short Term Rental (STR) Type 2 request at 611 N. Oliver Rd.

Again, I would be present at your meeting on February 24 to speak at the podium, but I am often out-of-town on Monday evenings for meetings.

From talking to my immediate neighbors, I believe our University Heights neighborhood does not want to become a STR Type 2 neighborhood, full of mini-hotels. Our historic neighborhood would lose its character and quality of life. The density of STR Type 2s is already too high here. It is unfair that the burden of STR Type 2s be placed on a few residential neighborhoods in Fayetteville. Let's share "character-removing, residential neighborhood-destroying" problems throughout Fayetteville so that a few neighborhoods don't bare the burden. We love Fayetteville's residential neighborhoods because of our long-time neighbors and atmosphere, whether owning or long-term renting. Please do not increase the already existing problem in University Heights by approving yet another STR Type 2. With the problem of housing shortages in Fayetteville and elsewhere, we want to limit STRs so that homes in our neighborhood go to people who are looking for long-term housing. Not to wealthier people who already have a home elsewhere, but want to make money off a second home used as a STR at the expense of the locals living in that neighborhood. I personally don't believe that is kind, fair, or just.

Thank you for your consideration.

Sincerely,
Lisa Orton
1663 West Halsell Rd
Fayetteville, Arkansas
Ward 4

To: Planning Commission

I am writing this letter regarding the request by the JD Riggings Family Holdings, LLC, to get Conditional Use Permit so that they might use the home at 611 Oliver as a Short Term Rental. This property is in an established community relatively close to UA.

I feel very lucky to live in a neighborhood where neighbors know and watch out for one another; a somewhat unusual thing in this day and age, it seems. The majority of our neighbors own their homes.

Rental properties are fine when placed in the proper area of the city. However, when they begin to crawl into an established neighborhood, one that is NOT ZONED for rental property, it should not be allowed. Simple. Rental properties come with some unwanted realities, i.e. unknown people coming in and out constantly, often with little of no regard for the neighbors and neighborhood, and might even open the door for unlawful situations.

So, having a house with no one living in it can be dangerous to both the owner of the property and all of the the neighbors. We would be so thankful to see the Planning Committee uphold the zoning that the city has established. This zoning was established for a reason, one which seems to be thrown out the window when certain people decide it does not serve their needs. We own our homes, we take care of one another and would love to see those in charge uphold what has already been deemed concerning rentals and neighborhoods.

Thank you for your consideration of this matter. I certainly appreciate the work you do.

Gail Leftwich
668 N Gray Ave
479-595-1455

To: City of Fayetteville – Planning Commission
From: University Heights residents
Re: **CUP-2024-0054: Conditional Use Permit (611 N. OLIVER AVE,/JD RIGGINS FAMILY HOLDINGS, 443):** Submitted by RMP LLP for property located at 611 N. OLIVER RD. The property is zoned RSF-4, RESIDENTIAL SINGLE-FAMILY, FOUR UNITS PER ACRE and contains approximately 0.80 acres. The request is to use the property as a short- term rental.
Date: February 10, 2025
Cc: University Heights signators

We the undersigned residents of University Heights neighborhood and tax-paying citizens of Fayetteville, AR, are **requesting that the Planning Commission deny the Conditional Use Permit (CUP-2025 – 0054**) located at 611 N Oliver as a Type 2 Short Term Rental. **We believe that this dwelling as an STR, with its capacity to house up to 10 unrelated people at a time, would be an incompatible use, as it is well beyond the scope of residential dwellings in the immediate vicinity limited by ordinance to occupancy by individuals, families or 3 unrelated people. This use of 611 N Oliver would instead best be described as a commercial hotel requesting to be permitted and licensed within our RSF-4 neighborhood**.

We further request denial of this Conditional Use Permit (CUP 2025 – 0054) based upon:
I. Non-conforming fire access/safety conditions:

1. Entrance to this property is made from Cardwell Lane that is between 16 and 17 feet and inches wide, with a 20 ft width minimum requirement based on ordinance.
   503.2*.1 Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet, 6 inches.*
2. Two vehicular entrances are available to the dwelling, The half circle drive in front is inadequate for a fire entrance, as it only approximately 15 feet wide. Entrance to and the interior of the parking area has sufficient space as a fire vehicle entrance, but only if unoccupied by parked vehicles.

Gravel drive entrance on Cardwell Lane

Main entrance faces Cardwell Lane.

Gravel Parking area.

Gravel half circle drive entrance to front on Cardwell Lane

3. Oliver Street is 26 feet wide from curb to curb along this property line. There is no entrance to the property from Oliver. Mature trees scattered through a generous lawn that leads to the dwelling, would likely make access for fire personnel, even with long hoses, challenging at best.

II. Parking

4. If 8-10 people are allowed to occupy this 4-bedroom STR, and only 4 vehicles are allowed to park on-site as per ordinance, **there is nowhere for additional vehicles to park**. No parking is allowed on any of the?"|
   well Lane prohibit on-street parking because of narrow width.
   503.4 *Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 shall be maintained at all times.*

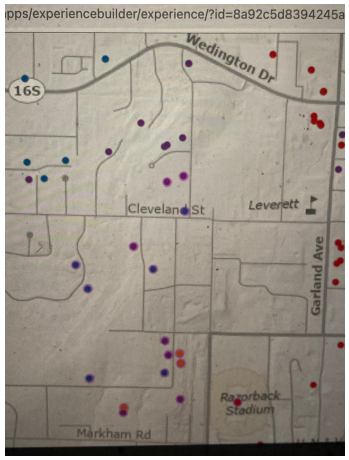
III. Enforcement of conditions

5. Enforcement of parking: Though the parking limit is being considered as part of the conditional use of this property, the question of enforcement of this condition remains. On a game day, parking limits are not enforced for on-site parking within this neighborhood. At what time of day or night does the parking requirement resume, if people other than registered guests are allowed to park cars on the property?
6. Enforcement of conditional use for events or private parties: Though events and private parties are prohibited as part of the conditions being considered for this property, the question of enforcement of these conditions remains. 10 people purposefully spending time together as registered guests could already be considered a private party. In addition, on a game day, for example, if other friends of the group "drop by to visit," when does the enforcement of the prohibition of a "private party" begin?

IV. Density

7. Density of short-term rentals within a ¼ mile radius:
   8 Type-2 short term rentals are already permitted and licensed within the ¼ mile radius:

1633 W Halsell Road
400 N Oliver
426 N Oliver
435 N Oliver
473 N Oliver
665 N Gray Ave
1518 W Cleveland
817 N Sunset Dr



Of those 8, 4 are on Oliver, 1 on Gray, with 1 on Cleveland, and comprise around 12% of the 50 homes that are within the three x two blocks area of N. Gray Ave between Cleveland and Maple, and N. Oliver from the intersection at Cleveland to the corner of W. Halsell**. If 611 N Oliver were permitted that would make 14% of the housing stock would be devoted to Type 2 STRs within this same area**. In addition, there is another Type 1 STRs at 456 Oliver. If that dwelling were also included, the density would increase to 16% of the housing stock devoted to STRs.

This density is contributing to the destabilization of this established neighborhood.

*This **12% - 14%** density of Type 2 STRs appears to contradict the UDC, Code of Fayetteville, 150.02, Pargraph A, where it state**s "...the purpose of the United Development Code provides for, but is not limited to, development of land uses which protect established neighborhoods..."*** Additionally, the City's original stated goal of density for Type 2 STRs city-wide was 2%.

Historic Neighborhood
University Heights is under evaluation for nomination as an Historic District. This speaks to the character of this formerly rural area, for many years lying outside the city limits. 611 N Oliver was the original farmhouse, built in 1901, and maintained by a member of the Oliver family into the 1970s. Cardwell Lane and the northern end of Gray Ave was the path for a cow herd maintained in the early part of the century by the Oliver family. Many of the homes in the vicinity of this home were primarily built upon lots subdivided from the Oliver farmstead. Neighbors in these homes include a diverse group of new residents as well as second generation owners whose families have lived in the neighborhood for 60 - 70 years or more. We would like for individuals and families to be able to find permanent homes within the neighborhood to take advantage of a nearby public school, shopping areas and restaurants, and other public facilities and amenities available at the nearby University of Arkansas.

Based on the factors above, please do not approve the Conditional Use Permit request for 611 N. Oliver as a Type 2 Short Term Rental CUP-2024 – 0054.

Sincerely,

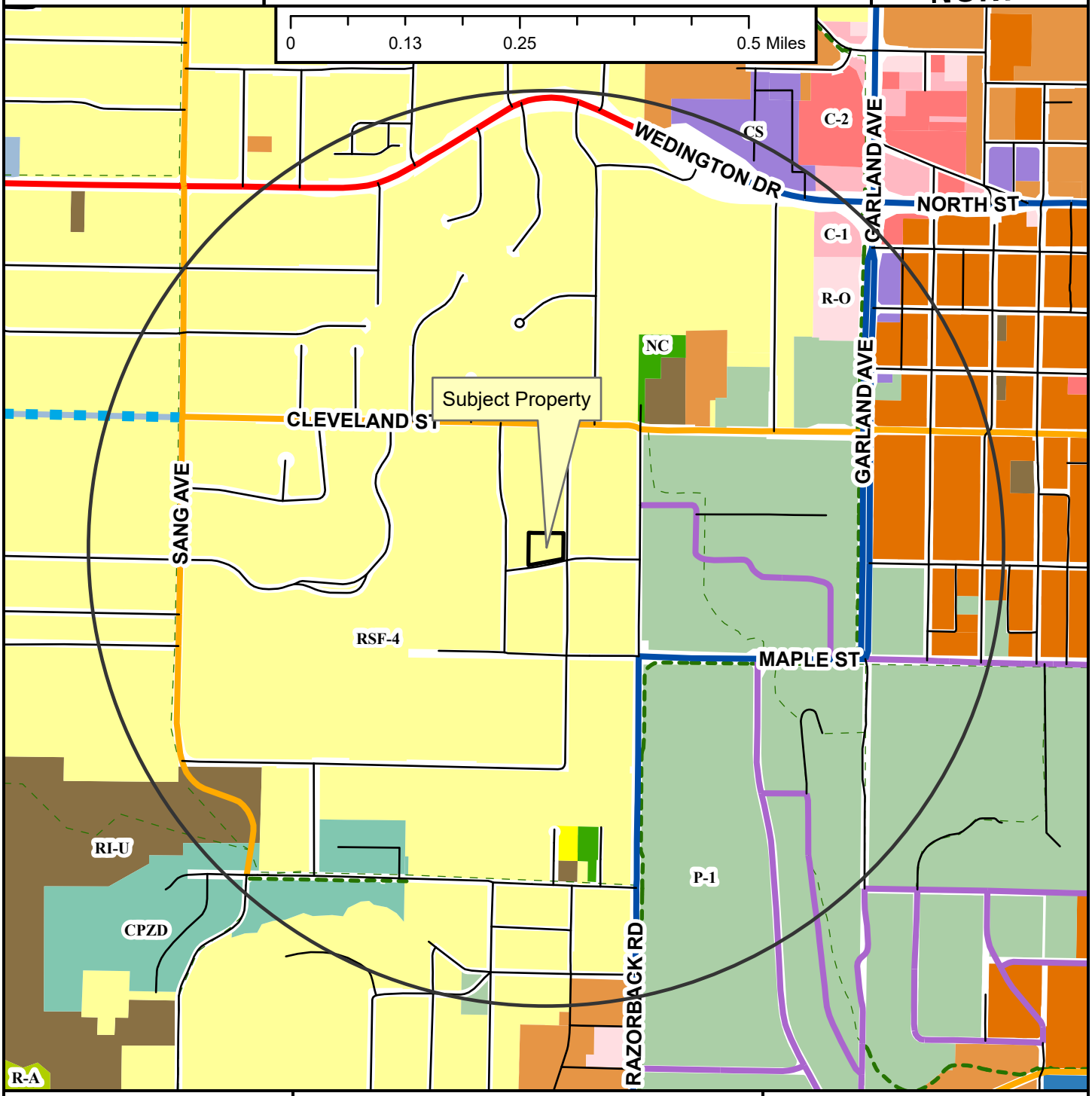
Margaret Ann Holcomb
Juan C. Balda
Kurt Reed
Debbie Nelson
Les McChristian
Debbie McChristian
Justin Eichmann
Sara Eichmann
Orville Hall
Susan Hall
Ethel Simpson
Lisa Orton
Tom Pears

CUP-2024-0054

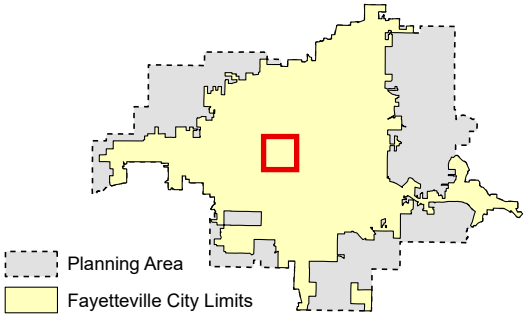
One Mile View

611 N. OLIVER RD

NORTH



- Regional Link
- Neighborhood Link
- Institutional Master Plan
- Regional Link - High Activity
- Unclassified
- Alley
- Residential Link
- Planned Residential Link
- Shared-Use Paved Trail
- Trail (Proposed)
- Fayetteville City Limits
- Planning Area



Zoning

RESIDENTIAL SINGLE-FAMILY
- NS-G
- RI-U
- RI-12
- NS-L
- Residential-Agricultural
- RSF-.5
- RSF-1
- RSF-2
- RSF-4
- RSF-7
- RSF-8
- RSF-18

RESIDENTIAL MULTI-FAMILY
- RMF-6
- RMF-12
- RMF-18
- RMF-24
- RMF-40

INDUSTRIAL
- I-1 Heavy Commercial and Light Industrial
- I-2 General Industrial

EXTRACTION
- E-1

COMMERCIAL
- Residential-Office
- C-1
- C-2
- C-3

FORM BASED DISTRICTS
- Downtown Core
- Urban Thoroughfare
- Main Street Center
- Downtown General
- Community Services
- Neighborhood Services
- Neighborhood Conservation

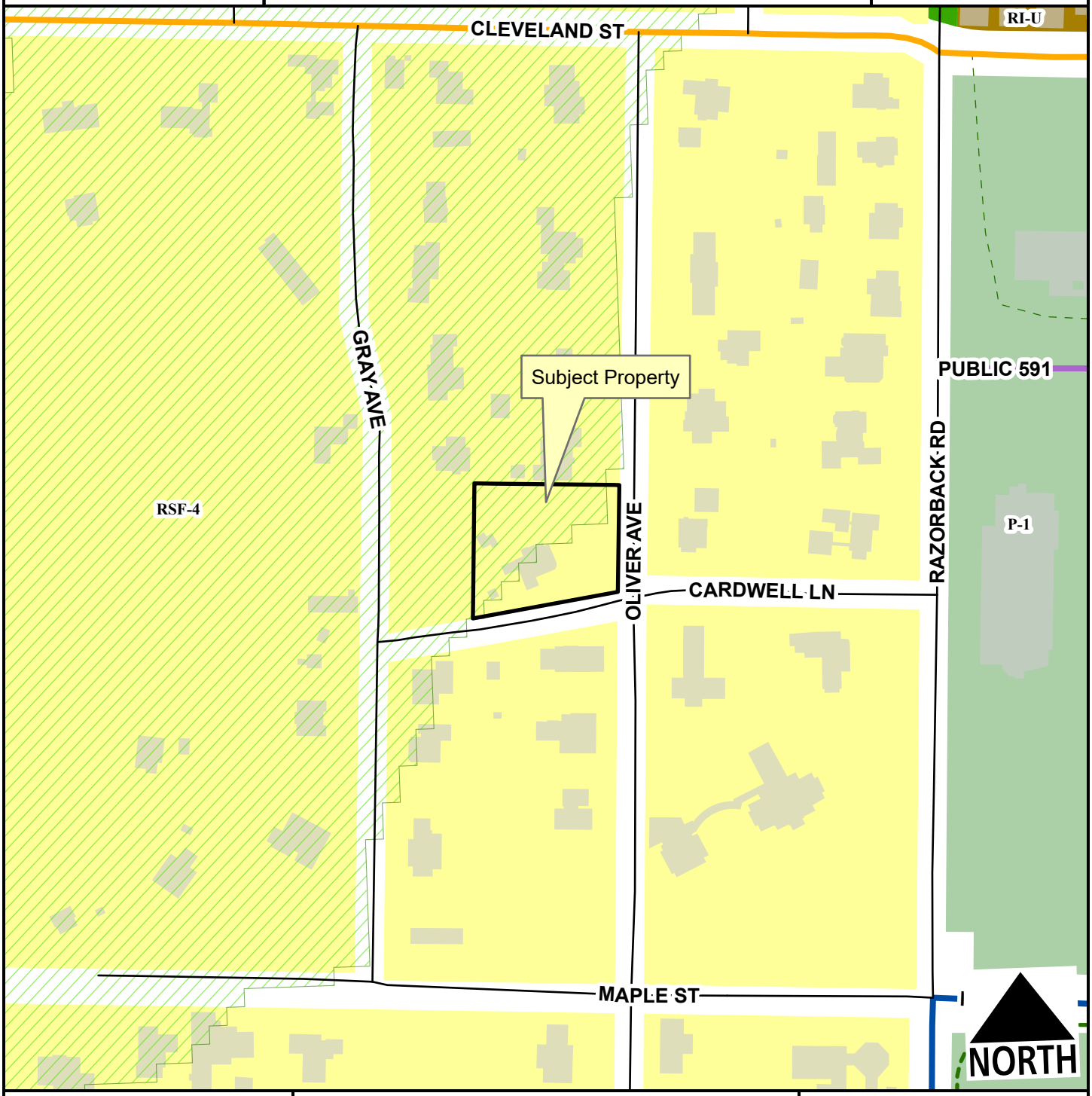
PLANNED ZONING DISTRICTS
- Commercial, Industrial, Residential

INSTITUTIONAL
- P-1

CUP-2024-0054

Close Up View

611 N. OLIVER RD



- Neighborhood Link
- Institutional Master Plan
- Regional Link - High Activity
- Unclassified
- Residential Link
- Hillside-Hilltop Overlay District
- Planning Area
- Fayetteville City Limits
- Shared-Use Paved Trail
- Trail (Proposed)

Feet

0 75 150 300 450 600

1:2,400

- RSF-4
- RI-U
- Neighborhood Conservation
- P-1

CUP-2024-0054

Current Land Use

611 N. OLIVER RD

NORTH

- Neighborhood Link
- Institutional Master Plan
- Regional Link - High Activity
- Unclassified
- Alley
- Residential Link
- Trail (Proposed)
- Planning Area
- Fayetteville City Limits

Feet

0 112.5 225 450 675 900

1:3,600

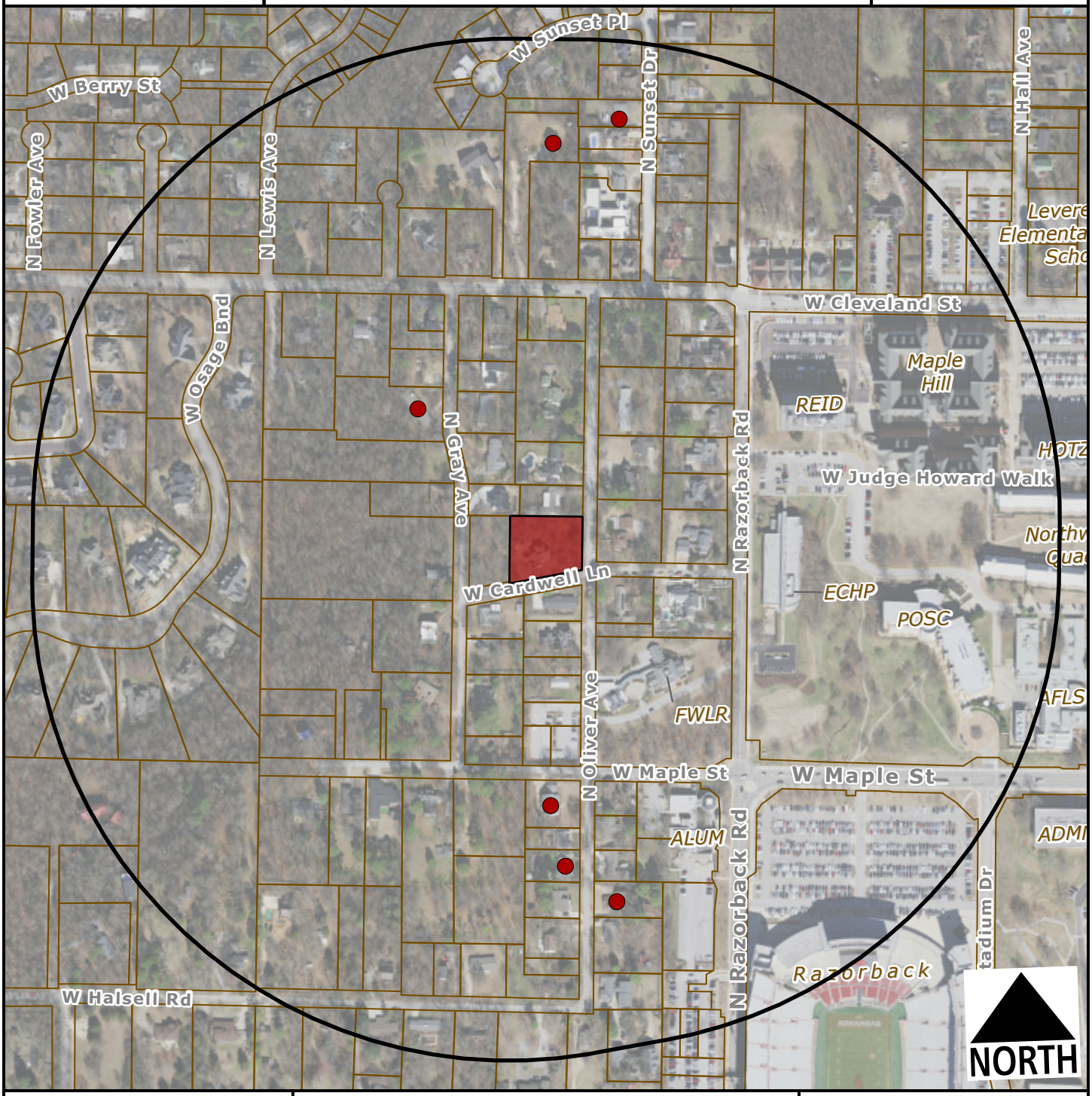
FEMA Flood Hazard Data

- 100-Year Floodplain
- Floodway

CUP-2024-0054

STRs Within 1/4 Mile

611 N. OLIVER RD



Subject Property

Short Term Rental, Type 2

Feet

0 200 400 800 1,200

1:4,800

Within 1/4 Mile

Type 2 STRs: 6

Occupiable Residential Addresses (Estimated Housing Units): 150

Compiled Public Comment
CUP-2024-0054

From: Sun Flower <sunflowerwiks@gmail.com>
Sent: Thursday, January 23, 2025 4:06 PM
To: Planning Shared <planning@fayetteville-ar.gov>
Subject: 611 N. Oliver CUP-2024-0054.

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I reside at 548 N Gray Avenue, across Cardwell Lane, in the same block and one property away from 611 N. Oliver.

- Despite my proximity, I was not directly notified by the applicant, nor were other immediate neighbors regarding this application.

- However, I did observe the posted notice on the property concerning their application **CUP-2024-0054.**scheduled to be heard by the commission on **February 10, 2025.**

- **I am opposed** to the granting of this application for a short-term rental at this address.

- According to Teresa Turk, our Ward 4 City Councilman, **there are at least 7 short-term rentals within a quarter mile radius of this address.**

- **Such a concentration of short term rentals depletes a much needed housing stock for long term residents and drives up costs not only in our neighborhood, but in Fayetteville as a whole.**
- This lovely historic home, known as the “Oliver House” for the family who built it, has housed families since the very early 1900s, and should continue to do so.
- The current owner has done a lovely job restoring the home. It is ready for move-in when and if he wishes to sell, **ideally to a resident family** who will join area residents **who are attempting to preserve a tightly knit neighborhood that benefits from a nearby elementary school and public university, a neighborhood grocery and area restaurants and shopping.**

I urge you to deny this application.

Sincerely,
Margaret Ann Holcomb
548 N Gray Ave
Fayetteville, AR
<sunfllowerwiks@gmail.com>
From: Sun Flower <sunflowerwiks@gmail.com>
Sent: Sunday, January 26, 2025 7:46 PM

Compiled Public Comment
CUP-2024-0054

To: Planning Shared <planning@fayetteville-ar.gov>
Subject: 611 N. Oliver CUP-2024-0054 with correction

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I reside at 548 N Gray Avenue, across Cardwell Lane, in the same block and one property away from 611 N. Oliver.

- Despite my proximity, I was not directly notified by the applicant, nor were other immediate neighbors regarding this application.

Correction:*After I emailed this statement, I received a letter via postal from Larry McCredy, lawyer from RMP representing JD Riggins,*
owner of 611 N Oliver regarding the hearing on February 10 for the conditional use permit.

- However, I did observe the posted notice on the property concerning their application **CUP-2024-0054.**scheduled to be heard by the commission on **February 10, 2025**

- **I am opposed** to the granting of this application for a short-term rental at this address.

- According to Teresa Turk, our Ward 4 City Councilman, **there are at least 7 short-term rentals within a quarter mile radius of this address.**

- **Such a concentration of short term rentals depletes a much needed housing stock for long term residents and drives up costs not only in our neighborhood, but in Fayetteville as a whole.**
- This lovely historic home, known as the “Oliver House” for the family who built it, has housed families since the very early 1900s, and should continue to do so.
- The current owner has done a lovely job restoring the home. It is ready for move-in when and if he wishes to sell, **ideally to a resident family** who will join area residents **who are attempting to preserve a tightly knit but welcoming neighborhood that benefits from a nearby elementary school and public university, a neighborhood grocery and area restaurants and shopping.**

I urge you to deny this application.

Sincerely,
Margaret Ann Holcomb
548 N Gray Ave
Fayetteville, AR
<sunfllowerwiks@gmail.com>
-----Original Message-----
From: Kurt Reed <kkreed@swbell.net>

Compiled Public Comment
CUP-2024-0054

Sent: Monday, February 3, 2025 9:12 AM
To: Planning Shared <planning@fayetteville-ar.gov>
Subject: CUP-2024-0054

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

City of Fayetteville Planning Commission,

My name is Kurt Reed and I own the house at 672 N Gray Avenue. I would like to register my opposition of the application for STR at 611 N Oliver (CUP-2024-0054). There are currently two STRs within 6 houses of my primary residence at 672 N Gray. Approval of 611 N Oliver would make 3 STRs with 6 houses which is half the houses (50%) to the south of my house. Our councilwomen, Teresa Turk, indicated that there are currently 7 STRs in a quarter mile radius of 611 N Oliver. I am not sure the exact total number of houses within this radius, but a quick count via google maps seems to be between 80-100 which creates a current STR density of ~7%-8.8%. This seems to be a very high concentration as the city originally had a plan of only 2% STR density for the entire city and dropped it much much lower by capping the total number of STRs to 475 city wide.

I feel the City of Fayetteville and certainly the University of Arkansas is very well aware of the challenges students are experiencing finding lodging while attending the U of A. STRs do nothing to help students find lodging.

Thanks you for your time
and consideration.

Sincerely,
Kurt Reed
672 N Gray Avenue

Sent from my iPhone

From: Turk, Teresa <teresa.turk@fayetteville-ar.gov>
Sent: Tuesday, January 21, 2025 4:46 PM
To: Curth, Jonathan <jcurth@fayetteville-ar.gov>
Cc: Masters, Jessica <jmasters@fayetteville-ar.gov>
Subject: Re: CUP at 611 Oliver for STR

Hi Jonathan,
Thanks so much for your response and I didn't know we were below the 475 caps. Also thank you for explaining the process for STR approvals before the PC. For now, I think you have answered all my questions and I'll report back if there are any additional questions from the citizens.

Compiled Public Comment
CUP-2024-0054

See you at the CC meeting shortly,
Teresa

From: Curth, Jonathan <jcurth@fayetteville-ar.gov>
Sent: Tuesday, January 21, 2025 4:25 PM
To: Turk, Teresa <teresa.turk@fayetteville-ar.gov>
Cc: Masters, Jessica <jmasters@fayetteville-ar.gov>
Subject: RE: CUP at 611 Oliver for STR

Teresa,

Thanks for the questions and follow-up call; apologies for missing it. In an effort to get you a prompt response, I am replying briefly here, but can offer more later if it is helpful or needed.

First, the latest on short-term rental enforcement. To date, 158 non-compliant units have been confirmed, of which 93 have received water shut-off letters, removed their listing, or modified their listing to long-term rental. A few dozen more are in limbo due mail being returned, changes in ownership, changes in owner's address etc. Relatedly, I am working with the Administration to schedule an agenda session presentation on the topic so that Council may see and evaluate if the position was money well spent.

Back to the topic at-hand, we do indeed have a cap on housing units used as Type 2s short-term rentals (STRs), or, in layperson's terms, housing units used primarily for STR rather than long-term rental. That cap is 475 and we effectively reached it in December 2023. I write "effectively" since we have yet to have 475 active Type 2 licenses; there have consistently been one or more in some state of review, but we never allow more off the waitlist than we have available licenses. Put differently as an example, if we have issued 472 Type 2 STR licenses, we release three applications from the waitlist and await their approval or denial before moving more from the waitlist.

Beyond this, I answered your questions where possible below in **red**. Hopefully this clarifies what may be a misunderstanding about the timing staff and the Planning Commission reviews. STR applications on the waitlist are not receiving staff reviews and Planning Commission consideration until they reach the front of the waitlist. My concerns are certainly aligned with yours in terms of efficient use of staff time.

Finally, I included Jessie Masters, our lead planner and the reviewer for this specific request in case you have detailed questions that I am not the best-placed to answer .

Thanks again,

Jonathan Curth, AICP
Development Services Director
Development Services Department
City of Fayetteville, Arkansas
jcurth@fayetteville-ar.gov
479.575.8308

Website | Facebook | Twitter | Youtube

Compiled Public Comment
CUP-2024-0054

From: Turk, Teresa <teresa.turk@fayetteville-ar.gov>
Sent: Sunday, January 19, 2025 9:58 AM
To: Curth, Jonathan <jcurth@fayetteville-ar.gov>
Subject: CUP at 611 Oliver for STR

CUP-2024-0054 (611 N. OLIVER RD)

Good Morning Jonathan,
First could you please send me the latest STR enforcement update when you get a chance? Thank you in advance.

Second, the neighbors called to my attention the request for a STR at 611 N Oliver. I thought we were maxed out on STR-Type 2's correct? **In a sense, yes. Since late 2024, we have consistently had 475 Type 2 STR licenses issued or in review, but no more than 475.** Is this to allow these folks to be in line when a new permit becomes available? Yes, the waitlist is for a new license. Once you reach the front of the waitlist, you are directed to apply for a conditional use permit and initiate any other necessary steps (amend insurance for STR rider, make necessary life/safety upgrades, etc.) How many properties are ahead of this proposed STR? **Zero. While there are currently 37 applications on the waitlist, 611 N. Oliver came off the waitlist at the end of November and applied for their CUP in mid-December. This was largely a result of several STRs not renewing towards the end of the year, thereby opening up licenses for applicants on the waitlist.**

As you may recall we have a huge number of STR-2 on Oliver already. Using a combo of Google Earth and Development Services dashboard, I count 7 permitted and active STR-2s within ¼ mile radius of the proposed STR-2 on Oliver. Could you please confirm that my calculations are correct? **Planning will perform that analysis with their evaluation, but a cursory, informal review appears to include seven properties within ¼ mile of 611 N. Oliver.** Why are we bringing new STR's before the Planning Commission when we may not have any permits available? **It is a question of license availability, which is capped at 475. Ordinance prohibits issuing more conditional use permits than there are available licenses. As noted above, this property has come off the waitlist and regardless of any other variable, it is eligible for consideration.** Could we not implement a strategy where there are 5 properties in line on the wait list and not consider any more permits for a set period of time? **I am not sure what you are proposing. Only applications that have reached the front of the waitlist are considered. Some weeks or months this is one or two, whereas others, like the period after business license renewal, there were ten or so.** Is this something that Ordiance Review could review? **Possibly, but I may not be clear on what is being asked and if it is already being considered or implemented.** I'm just thinking about the Planning Commission and staff's time to review proposed STRs if we have a long waiting list and the neighbors who are upset and think this new STR may be starting business next month. **Staff and the Planning Commission only consider applications that have come off the waitlist. We are not evaluating the 37 that remain on the waitlist until licenses become available to them.**

Compiled Public Comment
CUP-2024-0054

Thanks in advance for the information and any thoughts you may have,
Teresa

Teresa Turk
City Council Member
Ward 4 Position 1
Fayetteville, AR 72701
ward4_pos1@fayetteville-ar.gov
206.713.2265

From: Sun Flower <sunflowerwiks@gmail.com>
Sent: Thursday, February 6, 2025 4:22 PM
To: Masters, Jessica <jmasters@fayetteville-ar.gov>
Subject: Pictures 611 N Oliver

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Jessica,

These pictures show the narrow street and access. I will have many more pictures to share later.

Photo 1The street access at the parking area, and the main vehicle entrance. The measurement of 16-17 feet and inches were at the corners of the area, and did not subtract width because of the gravel.

Photo 2 Front walk

Photo 3 Circle drive 15 foot width of drive. Street width at that point around 16 feet.

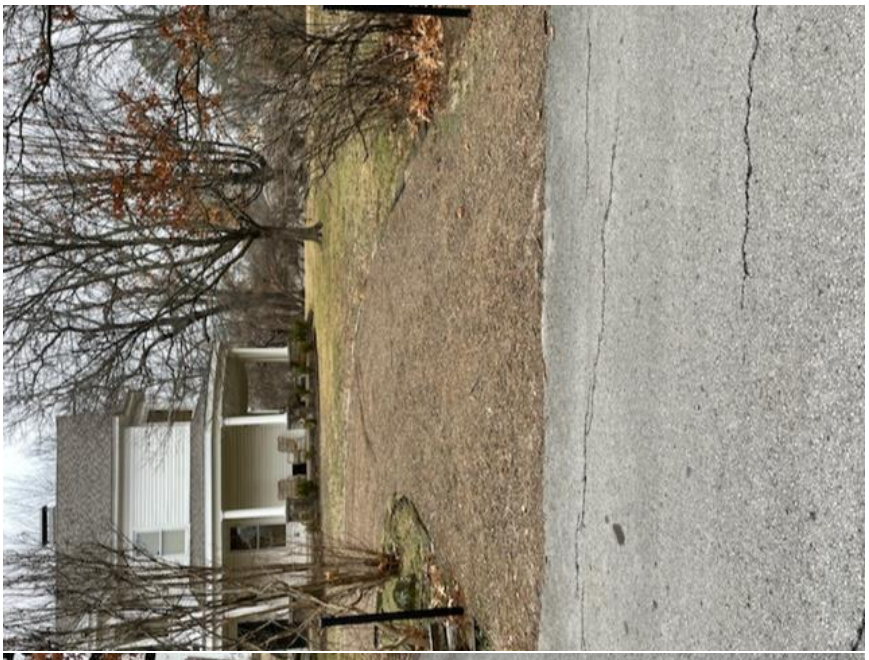
Photo 4 is taken from the eastern end of Cardwell, facing west.

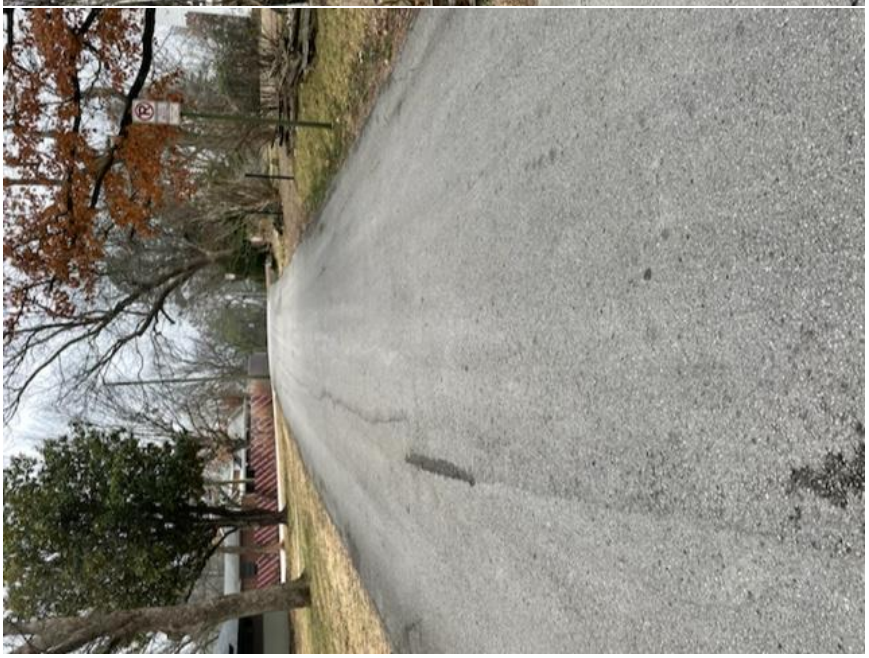
Historically, this was the cow path for the Oliver family's farm. The path turned the corner at Gray Ave headed north.
My parents and a few neighbors paid for the paving of this road in the late 1960s.

Margaret Holcomb

Compiled Public Comment
CUP-2024-0054

Compiled Public Comment
CUP-2024-0054





Compiled Public Comment
CUP-2024-0054

-----Original Message-----
From: Sun Flower <sunflowerwiks@gmail.com>
Sent: Thursday, February 6, 2025 4:12 PM
To: Masters, Jessica <jmasters@fayetteville-ar.gov>
Subject: Additional information 611 N Oliver STR application

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Jessica,

A few more tidbits, plus one correction to my previous email.

I misspoke, Oliver is 26 feet wide, not 21 feet. However, the city has posted no parking for the entire block because of the layout of the street, and poor visibility from either end. Cardwell also has no parking, as does the northern portion of Gray Avenue. The southern end had its no parking sign removed at some point, we are working to restore it.

One more concern that I believe needs to be addressed. With four bedrooms, the home can, according to STR rules, acommodate up to 8 people, though I have seen on some websites stating the rules that an additional two people could be included, for up to 10. If only 4 cars are allowed to park on the property, according to the conditions placed on the approval, assuming there would be more than four cars driven by the 8-10 people, where are they going to park? There is obviously no parking allowed in any of the surrounding streets, though on game days, for at least part of the day or evening, that rule is ignored. When would the game day allowances end, and the four car rule be applicable? Also, if other people "drop by" for a visit, when does that become a private party?

Thanks for helping to address these questions.

Margaret Holcomb

From: Sun Flower <sunflowerwiks@gmail.com>
Sent: Thursday, February 6, 2025 4:02 PM
To: Masters, Jessica <jmasters@fayetteville-ar.gov>
Subject: 611 N Oliver information

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Jessica,

Thank you for assisting our city with keeping our residences and neighborhoods safe.

I am a close neighbor to 611 N Oliver, and have accessed the analysis you have posted on the website concerning its application for a Type 2 STR.

Compiled Public Comment
CUP-2024-0054

At what point in the process is fire equipment access considered? Is conformity to those ordinances part of the criteria for the planning commission, or is that left to be part of the business license application?

I ask because in preparing for the meeting on Monday afternoon, I have become aware that this property may have deficiencies that would need to be considered at some point.

Cardwell Lane, the street that gives access to the driveway and parking for this property fails the ordinance requiring street width of 20 feet, for example. The half circle drive at the front door is only 15 feet wide, and the street at that point is only 16 and a few inches wide. At the drive provided for parking, the street is between 16 feet and 17 feet and few inches wide. Though the Oliver Street is 21 feet wide, there is no access to the property from that street. If fire equipment were to attempt to jump the curbing on Oliver to enter the property, old growth trees would still block access into the property.

What kind of egress is required for upstairs bedrooms in a Typer 2 STR? At present I am unaware of any means of exterior fire escapes.

I have also become aware that the incline on both Cleveland (coming east) to Gray to Cardwell, or Cleveland (coming east) to Oliver to Cardwell, or Maple (going north) to Oliver to Cardwell are much steeper that the 10% incline allowed for access for fire equipment. It is possible for equipment to come via the campus route, but might take much longer, depending on the origin of the call. And once they arrived at any corner of Cardwell, the narrow street would still deny access to the house, according to ordinance.

Also, is there a requirement for paving in the parking areas of a Type 2 STR? At present, there is pea size gravel on the circle drive and the parking area.

I have pictures I will send in another email. I will also bring these concerns to the hearing on Monday afternoon, assuming it may be helpful in your deliberations.

Thanks,
Margaret Holcomb
548 N Gray Ave
<sunflowerwiks@gmail.com>
(479)442-9853

From: Lisa Orton <lisa_m_orton@yahoo.com>
Sent: Friday, February 7, 2025 4:07 PM
To: Brink, Andrew <andrew.brink@fayetteville-ar.gov>; Payne, Brad <brad.payne@fayetteville-ar.gov>; Gulley, Fred <fred.gulley@fayetteville-ar.gov>; Garlock, Jimm <jimm.garlock@fayetteville-ar.gov>; Cabe, Matthew <matthew.cabe@fayetteville-ar.gov>; Madden, Mary <mary.madden@fayetteville-ar.gov>;

Compiled Public Comment
CUP-2024-0054

McGetrick, Mary <mary.mcgetrick@fayetteville-ar.gov>; Castin, Nick <nick.castin@fayetteville-ar.gov>; Werner, Nick <nick.werner@fayetteville-ar.gov>; Planning Shared <planning@fayetteville-ar.gov>
Cc: Lisa Orton <lisa_m_orton@yahoo.com>
Subject: Please vote against CUP-2024-0054 STR at 611 N. Oliver Rd

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Planning Commission,

Please vote against the Short Term Rental (STR) Type 2 request at 611 N. Oliver Rd.

I would be present at your meeting on February 10th to speak at the podium, but I am out-of-town at that time.

From my conversations with people in our University Heights neighborhood, we would like to stay a residential neighborhood. We do not want to become a STR Type 2 neighborhood, full of mini-hotels. Our historic neighborhood would lose its character. The density of STR Type 2s is already too high here. It is unfair that the burden of STR Type 2s be placed on a few residential neighborhoods in Fayetteville. Let's share character-removing, residential neighborhood-destroying problems throughout Fayetteville so that a few neighborhoods don't bare the burden. We love Fayetteville's residential neighborhoods because of our long-time neighbors, whether owning or long-term renting. Please do not increase the already existing problem in University Heights by approving yet another STR Type 2.

Thank you for your consideration.

Sincerely,
Lisa Orton
1663 West Halsell Rd
Fayetteville, Arkansas
Ward 4

From: Sun Flower <sunflowerwiks@gmail.com>
Sent: Monday, February 10, 2025 1:07 PM
To: Masters, Jessica <jmasters@fayetteville-ar.gov>
Subject: For Hearing Packet for CUP 611 N Oliver

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Jessica,

Please provide copies of the attached document for the commissioners for tonight’s hearing of CUP 2024-0054, 611 N Oliver.

Compiled Public Comment
CUP-2024-0054

Thanks!
Margaret Holcomb

From: Lisa Orton <lisa_m_orton@yahoo.com>
Sent: Tuesday, February 18, 2025 3:53 PM
To: Brink, Andrew <andrew.brink@fayetteville-ar.gov>; Payne, Brad <brad.payne@fayetteville-ar.gov>; Gulley, Fred <fred.gulley@fayetteville-ar.gov>; Garlock, Jimm <jimm.garlock@fayetteville-ar.gov>; Cabe, Matthew <matthew.cabe@fayetteville-ar.gov>; Madden, Mary <mary.madden@fayetteville-ar.gov>; McGetrick, Mary <mary.mcgetrick@fayetteville-ar.gov>; Castin, Nick <nick.castin@fayetteville-ar.gov>; Werner, Nick <nick.werner@fayetteville-ar.gov>; Planning Shared <planning@fayetteville-ar.gov>
Cc: Lisa Orton <lisa_m_orton@yahoo.com>; University Heights Neighbors <university-heights-na@listserv.uark.edu>
Subject: Please oppose STR request at 611 N. Oliver Rd.

CAUTION: This email originated from outside of the City of Fayetteville. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Planning Commission,

Please vote against the Short Term Rental (STR) Type 2 request at 611 N. Oliver Rd.

Again, I would be present at your meeting on February 24 to speak at the podium, but I am often out-of-town on Monday evenings for meetings.

From talking to my immediate neighbors, I believe our University Heights neighborhood does not want to become a STR Type 2 neighborhood, full of mini-hotels. Our historic neighborhood would lose its character and quality of life. The density of STR Type 2s is already too high here. It is unfair that the burden of STR Type 2s be placed on a few residential neighborhoods in Fayetteville. Let's share "character-removing, residential neighborhood-destroying" problems throughout Fayetteville so that a few neighborhoods don't bare the burden. We love Fayetteville's residential neighborhoods because of our long-time neighbors and atmosphere, whether owning or long-term renting. Please do not increase the already existing problem in University Heights by approving yet another STR Type 2. With the problem of housing shortages in Fayetteville and elsewhere, we want to limit STRs so that homes in our neighborhood go to people who are looking for long-term housing. Not to wealthier people who already have a home elsewhere, but want to make money off a second home used as a STR at the expense of the locals living in that neighborhood. I personally don't believe that is kind, fair, or just.

Thank you for your consideration.

Sincerely,
Lisa Orton
1663 West Halsell Rd
Fayetteville, Arkansas
Ward 4

To: Planning Commission

I am writing this letter regarding the request by the JD Riggings Family Holdings, LLC, to get Conditional Use Permit so that they might use the home at 611 Oliver as a Short Term Rental. This property is in an established community relatively close to UA.

I feel very lucky to live in a neighborhood where neighbors know and watch out for one another; a somewhat unusual thing in this day and age, it seems. The majority of our neighbors own their homes.

Rental properties are fine when placed in the proper area of the city. However, when they begin to crawl into an established neighborhood, one that is NOT ZONED for rental property, it should not be allowed. Simple. Rental properties come with some unwanted realities, i.e. unknown people coming in and out constantly, often with little of no regard for the neighbors and neighborhood, and might even open the door for unlawful situations.

So, having a house with no one living in it can be dangerous to both the owner of the property and all of the the neighbors. We would be so thankful to see the Planning Committee uphold the zoning that the city has established. This zoning was established for a reason, one which seems to be thrown out the window when certain people decide it does not serve their needs. We own our homes, we take care of one another and would love to see those in charge uphold what has already been deemed concerning rentals and neighborhoods.

Thank you for your consideration of this matter. I certainly appreciate the work you do.

Gail Leftwich
668 N Gray Ave
479-595-1455

To: City of Fayetteville – Planning Commission
From: University Heights residents
Re: **CUP-2024-0054: Conditional Use Permit (611 N. OLIVER AVE,/JD RIGGINS FAMILY HOLDINGS, 443):** Submitted by RMP LLP for property located at 611 N. OLIVER RD. The property is zoned RSF-4, RESIDENTIAL SINGLE-FAMILY, FOUR UNITS PER ACRE and contains approximately 0.80 acres. The request is to use the property as a short- term rental.
Date: February 10, 2025
Cc: University Heights signators

We the undersigned residents of University Heights neighborhood and tax-paying citizens of Fayetteville, AR, are **requesting that the Planning Commission deny the Conditional Use Permit (CUP-2025 – 0054**) located at 611 N Oliver as a Type 2 Short Term Rental. **We believe that this dwelling as an STR, with its capacity to house up to 10 unrelated people at a time, would be an incompatible use, as it is well beyond the scope of residential dwellings in the immediate vicinity limited by ordinance to occupancy by individuals, families or 3 unrelated people. This use of 611 N Oliver would instead best be described as a commercial hotel requesting to be permitted and licensed within our RSF-4 neighborhood**.

We further request denial of this Conditional Use Permit (CUP 2025 – 0054) based upon:
I. Non-conforming fire access/safety conditions:

1. Entrance to this property is made from Cardwell Lane that is between 16 and 17 feet and inches wide, with a 20 ft width minimum requirement based on ordinance.
   503.2*.1 Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet, 6 inches.*
2. Two vehicular entrances are available to the dwelling, The half circle drive in front is inadequate for a fire entrance, as it only approximately 15 feet wide. Entrance to and the interior of the parking area has sufficient space as a fire vehicle entrance, but only if unoccupied by parked vehicles.

Gravel drive entrance on Cardwell Lane

Main entrance faces Cardwell Lane.

Gravel Parking area.

Gravel half circle drive entrance to front on Cardwell Lane

3. Oliver Street is 26 feet wide from curb to curb along this property line. There is no entrance to the property from Oliver. Mature trees scattered through a generous lawn that leads to the dwelling, would likely make access for fire personnel, even with long hoses, challenging at best.

II. Parking

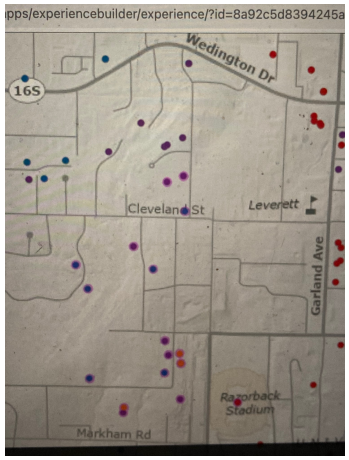
4. If 8-10 people are allowed to occupy this 4-bedroom STR, and only 4 vehicles are allowed to park on-site as per ordinance, **there is nowhere for additional vehicles to park**. No parking is allowed on any of the?"|
   well Lane prohibit on-street parking because of narrow width.
   503.4 *Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 shall be maintained at all times.*

III. Enforcement of conditions

5. Enforcement of parking: Though the parking limit is being considered as part of the conditional use of this property, the question of enforcement of this condition remains. On a game day, parking limits are not enforced for on-site parking within this neighborhood. At what time of day or night does the parking requirement resume, if people other than registered guests are allowed to park cars on the property?
6. Enforcement of conditional use for events or private parties: Though events and private parties are prohibited as part of the conditions being considered for this property, the question of enforcement of these conditions remains. 10 people purposefully spending time together as registered guests could already be considered a private party. In addition, on a game day, for example, if other friends of the group "drop by to visit," when does the enforcement of the prohibition of a "private party" begin?

IV. Density

7. Density of short-term rentals within a ¼ mile radius:
   8 Type-2 short term rentals are already permitted and licensed within the ¼ mile radius:
   1633 W Halsell Road
   400 N Oliver
   426 N Oliver
   435 N Oliver
   473 N Oliver
   665 N Gray Ave
   1518 W Cleveland
   817 N Sunset Dr



Of those 8, 4 are on Oliver, 1 on Gray, with 1 on Cleveland, and comprise around 12% of the 50 homes that are within the three x two blocks area of N. Gray Ave between Cleveland and Maple, and N. Oliver from the intersection at Cleveland to the corner of W. Halsell**. If 611 N Oliver were permitted that would make 14% of the housing stock would be devoted to Type 2 STRs within this same area**. In addition, there is another Type 1 STRs at 456 Oliver. If that dwelling were also included, the density would increase to 16% of the housing stock devoted to STRs.

This density is contributing to the destabilization of this established neighborhood.

*This **12% - 14%** density of Type 2 STRs appears to contradict the UDC, Code of Fayetteville, 150.02, Pargraph A, where it state**s "...the purpose of the United Development Code provides for, but is not limited to, development of land uses which protect established neighborhoods..."*** Additionally, the City's original stated goal of density for Type 2 STRs city-wide was 2%.

Historic Neighborhood
University Heights is under evaluation for nomination as an Historic District. This speaks to the character of this formerly rural area, for many years lying outside the city limits. 611 N Oliver was the original farmhouse, built in 1901, and maintained by a member of the Oliver family into the 1970s. Cardwell Lane and the northern end of Gray Ave was the path for a cow herd maintained in the early part of the century by the Oliver family. Many of the homes in the vicinity of this home were primarily built upon lots subdivided from the Oliver farmstead. Neighbors in these homes include a diverse group of new residents as well as second generation owners whose families have lived in the neighborhood for 60 - 70 years or more. We would like for individuals and families to be able to find permanent homes within the neighborhood to take advantage of a nearby public school, shopping areas and restaurants, and other public facilities and amenities available at the nearby University of Arkansas.

Based on the factors above, please do not approve the Conditional Use Permit request for 611 N. Oliver as a Type 2 Short Term Rental CUP-2024 – 0054.

Sincerely,

Margaret Ann Holcomb
Juan C. Balda
Kurt Reed
Debbie Nelson
Les McChristian
Debbie McChristian
Justin Eichmann
Sara Eichmann
Orville Hall
Susan Hall
Ethel Simpson
Lisa Orton
Tom Pears

To: City of Fayetteville – Planning Commission
From: 17 University Heights property owners
Re: **CUP-2024-0054: Conditional Use Permit (611 N. OLIVER AVE,/JD RIGGINS FAMILY HOLDINGS, 443):** Submitted by RMP LLP for property located at 611 N. OLIVER RD. The property is zoned RSF-4, RESIDENTIAL SINGLE-FAMILY, FOUR UNITS PER ACRE and contains approximately 0.80 acres. The request is to use the property as a short- term rental.
Date: February 24, 2025
Cc: 17 University Heights signators

We the 16 undersigned property owners of University Heights neighborhood and tax-paying citizens of Fayetteville, AR, are **requesting that the Planning Commission deny the Conditional Use Permit (CUP-2025 – 0054**) located at 611 N Oliver as a Type 2 Short Term Rental. **We believe that this dwelling as an STR, with its capacity to house up to 10 unrelated people at a time, would be an incompatible use, as it is well beyond the scope of other dwellings in the immediate vicinity that by ordinance limits occupants to individuals, families or 3 unrelated people. This use would instead best be described as a commercial hotel requesting to be permitted and licensed within our RSF-4 neighborhood**.

We further request denial of this Conditional Use Permit (CUP 2024 – 0054) based upon:
I. Non-conforming fire access/safety conditions:

1. Entrance to this property is made from Cardwell Lane that is between 16 and 17 feet and inches wide, with a 20 ft width minimum requirement based on ordinance.
   503.2*.1 Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet, 6 inches.*
2. Two vehicular entrances are available to the dwelling, The half circle drive in front is inadequate for a fire entrance, as it only approximately 15 feet wide. Entrance to and the interior of the parking area has sufficient space as a fire vehicle entrance, but only if unoccupied by parked vehicles.

Gravel drive entrance on Cardwell Lane

Main entrance faces Cardwell Lane.

Gravel Parking area.

Gravel half circle drive entrance to front on Cardwell Lane

3. Oliver Street is 26 feet wide from curb to curb along this property line. There is no entrance to the property from Oliver. Mature trees scattered through a generous lawn that leads to the dwelling, would likely make access for fire personnel, even with long hoses, challenging at best.

II. Parking

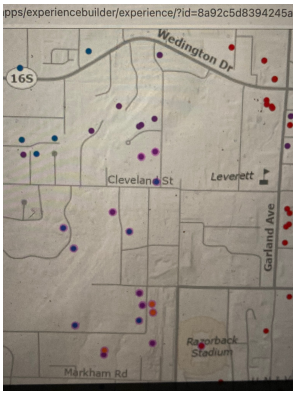
4. If 8-10 people are allowed to occupy this 4-bedroom short-term rental, and only 4 vehicles are allowed to park on-site as per ordinance, **there is nowhere for additional vehicles to safely park.** No parking is allowed on any of the streets surrounding the property. Oliver, though 26 feet wide, has been deemed by the City to be too narrow for parking, as a parked vehicle would narrow the street access below ordinance. Gray Ave, as well as Cardwell Lane prohibit on-street parking because of narrow width.
   503.4 *Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 shall be maintained at all times.*

III. Enforcement

5. Enforcement of parking: Though the parking limit is being considered as part of the conditional use of this property, the question of enforcement of this condition remains. On a game day, parking limits are not enforced for on-site parking within this neighborhood. At what time of day or night does the parking requirement resume, if people other than registered guests are allowed to park cars on the property?
6. Enforcement of conditional use for private parties: Though a prohibition of private parties is part of the conditions being considered for this property, the question of enforcement of this condition remains. <u>10 unrelated people purposefully spending time together as registered guests could already be considered a private party</u>. In addition, on a game day, for example, if other friends of the group "drop by to visit," when does the enforcement of the prohibition for no additional guests invited to a "private party" begin?

IV. Density

7. Density of short-term rentals in this neighborhood within quarter mile:
   Eight Type 2 short term rentals are already permitted and licensed within the ¼ mile radius:
   1.1633 W Halsell Road
   2.400 N Oliver
   3.426 Oliver
   4.435 N Oliver
   5.473 N Oliver
   6.665 N Gray Ave
   7.1518 W Cleveland
   8.817 N Sunset Dr



Of those 8, 4 are on Oliver, 1 is on Gray, and 1 is on Cleveland. The 8 STRs comprise 16% of the 50 homes that are within the 3 x 2 blocks area bordered by N. Gray Ave between Cleveland and Maple, and N. Oliver from the intersection at Cleveland to the corner of W. Halsell. **If 611 N. Oliver were permitted, that would make 18% of the housing stock would be devoted to Type 2 STRs within that same area.**

This density is contributing to the destabilization of our established neighborhood.

This 16 - 18% density of Type 2 STRs appears to contradict the UDC, Code of Fayetteville, 150.02, Pargraph A, where it states ***"...the purpose of the United Development Code provides for, but is not limited to, development of land uses which <u>protect</u> established neighborhoods..."***

Historic Neighborhood
University Heights is under evaluation for nomination as an Historic District. This speaks to the character of this formerly rural area, for many years lying outside the city limits. 611 N Oliver was the original farmhouse, was built in 1901 and maintained by a member of the Oliver family into the 1960s. Cardwell Lane and the northern end of Gray Ave was the path for a cow herd maintained in the early part of the century by the Oliver family. Many of the neighborhood homes were built upon lots subdivided from the Oliver family farmstead. Neighbors in these homes include a diverse group of new residents as well as second generation owners whose families have lived in the neighborhood for 60 - 70 years or more. We would like for individuals and families to be able to find long-term homes within the neighborhood to take advantage of a nearby public school, shopping areas and restaurants, and other public facilities and amenities available at the nearby University of Arkansas.

Based on the factors above, please do not approve the Conditional Use Permit request for 611 N Oliver as a Type 2 Short Term Rental CUP-2024-0054.

Sincerely,

1.Margaret Ann Holcomb
2.Juan C. Balda
3.Randy Jackson
4.Kurt Reed
5.Debbie Nelson
6.Les McChristian
7.Debbie McChristian
8.Justin Eichmann
9.Sara Eichmann
10.Orville Hall
11.Susan Hall
12.Joe Neal
13.Gail Leftwich
14.Ethel Simpson
15.Lisa Orton
16.Tom Pears
17.Karen Pears