ADDENDUM NO. 01

RE: McCOLLUM SIDEPATH PHASE 2, Bentonville, AR

FROM: CEI Engineering Associates
2600 NE 11th Street
Bentonville, AR 72712

TO: Prospective Bidders

This addendum forms a part of the Contract documents and modifies the Bidding Documents dated April 27, 2026. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum No. 01 consists of 66 page(s) and the following:

CHANGES TO SPECIFICATIONS:

1. 00 01 10 – TABLE OF CONTENTS:
    - Swap section 00 01 10 (BID) for section 00 01 10 (ADD-1)
2. 00 41 44 – UNIT PRICE BID FORM (C-410):
    - Swap section 00 41 44 (BID) for section 00 41 44 (ADD-1)
3. 00 50 50 – UNIT PRICE AGREEMENT BETWEEN OWNER AND CONTRACTOR (C-520):
    - Swap section 00 50 50 (BID) for section 00 50 50 (ADD-1)
4. 01 22 01 – MEASUREMENT AND PAYMENT:
    - Swap section 01 22 01 (BID) for section 01 22 01 (ADD-1)
5. 03 10 00 – CONCRETE FORMWORK:
    - Swap section 03 10 00 (BID) for section 03 10 00 (ADD-1)
6. 03 20 00 – CONCRETE REINFORCEMENT:
    - Swap section 03 20 00 (BID) for section 03 20 00 (ADD-1)
7. 32 11 23 – AGGREGATE BASE COURSE:
    - Swap section 32 11 23 (BID) for section 32 11 23 (ADD-1)
8. 32 31 29 – WOOD FENCE – 3 RAIL:
    - Swap section 32 31 29 (BID) for section 32 31 29 (ADD-1)
9. 33 02 00 – PIPE LAYING:
    - Swap section 33 02 00 (BID) for section 33 02 00 (ADD-1)
10. 33 41 00 – STORM SEWER SYSTEM:
    - Swap section 33 41 00 (BID) for section 33 41 00 (ADD-1)
11. 33 49 00 – STORM SEWER STRUCTURES:
    - Swap section 33 49 00 (BID) for section 33 49 00 (ADD-1)

CLARIFICATIONS: CEI has received the following list of questions. Below you will find the list of questions and CEI Engineering's responses (*italicized*).

1. Plans/specifications reference a segmental block retaining wall. Please confirm the wall type (segmental block vs. cast-in-place concrete) and provide dimensions and material details required for accurate pricing.
    a. *The plans specify a segmental block retaining wall (Detail 06A and Proposed Legend), include shown extents/elevations, and list approved wall systems, while requiring the contractor to provide the engineered design, reinforcement, drainage, and foundation details per the Segmental Retaining Wall General Notes.*

2. Line 37 on the line items has 2 flared end sections for 18" x 12" HERCP. I cannot find this on the plans. What station is the located at? There isn't a line item for payment of moving the utilities. Who is paying for this?
    a. *Line 37 has been removed from the project.*

3. There isn't a line item for payment of moving the utilities. Who is paying for this?
    a. *Site note (70U) requires the contractor to coordinate relocation of franchise utility services prior to construction; however, this work is considered incidental to the adjustment of utility items and is not paid for as a separate line item.*

4. Can you tell me what station the witness post is at please?
    a. *The witness post is located ~1+75.*

CHANGES TO PLANS/SCOPE OF WORK:

1. SHEET C1.3 – PLAN & PROFILE 3
    - Swap sheet C1.3 (REV-6) for sheet C1.3 (ADD-1)
    - Revised crosswalk striping

12. SHEET C1.4 – PLAN & PROFILE 4
    - Swap sheet C1.4 (REV-6) for sheet C1.4 (ADD-1)
    - Revised crosswalk striping

13. SHEET C1.5 – PLAN & PROFILE 5
    - Swap sheet C1.5 (REV-6) for sheet C1.5 (ADD-1)
    - Revised crosswalk striping

CHANGES TO BIDDING REQUIREMENTS:

1. N/A

End of Addendum No. 01

MCCOLLUM SIDEPATH PHASE II

CITY OF BENTONVILLE

CEI Project No. 33832.0

IFB-26-04

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STANDARD SPECIFICATIONS

SS-1	Use of Arkansas Department of Transportation Standard Specifications for Highway Construction
SS-2	Use of City of Bentonville Water Utilities Department Specifications, latest edition

SS-3	Use of City of Bentonville Minimum Standard Specifications for Streets, latest edition
SS-4	Use of City of Bentonville Electric Utilities Department Construction Specifications

End of Document 00 01 10

BID FORM FOR CONSTRUCTION CONTRACT

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 1—OWNER AND BIDDER

1.01 This Bid is submitted to: City of Bentonville, 305 SW A Street, Bentonville, AR 72712

1.02 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 times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2—ATTACHMENTS TO THIS BID

2.01 The following documents are submitted with and made a condition of this Bid:

A. Required Bid security;

B. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids;

C. Contractor's license number as evidence of Bidder's State Contractor's License or a covenant by Bidder to obtain said license within the time for acceptance of Bids;

D. Required Bidder Qualification Statement with supporting data; and

ARTICLE 3—BASIS OF BID—LUMP SUM BID AND UNIT PRICES

3.01 *Unit Price Bids*

A. Bidder will perform the following Work at the indicated unit prices:

Unit Price Work					
Item No.	**Description**	**Unit**	**Estimated Quantity**	**Unit Price**	**Extended Price**
1	Mobilization, Staking, Bonding, Traffic Control & Insurance	LS	1	$	$
2	Clearing & Grubbing	LS	1	$	$
3	Removal and Disposal of Concrete Pavement	SY	118	$	$
4	Removal and Disposal of Asphalt	SY	262	$	$
5	Removal and Disposal Curb and Gutter	LF	196	$	$
6	Removal and Disposal Corrugated Metal Pipe	LF	79	$	$
7	Removal and Disposal of 24" RCP	LF	59	$	$

Unit Price Work					
Item No.	**Description**	**Unit**	**Estimated Quantity**	**Unit Price**	**Extended Price**
8	Removal and Disposal of 24" FES	EA	4	$	$
9	Removal and Disposal of 18" RCP	LF	48	$	$
10	Removal and Disposal of 18" FES	EA	2	$	$
11	Relocate Stop Sign	EA	2	$	$
12	Relocate Witness Post	EA	1	$	$
13	General Cut	CY	1570	$	$
14	General Fill	CY	785	$	$
15	Add Undercut & Select Backfill (as directed by Geotech)	CY	2100	$	$
16	Erosion Control Maintenance	LS	1	$	$
17	Construction Entrance	EA	1	$	$
18	Concrete Washout	EA	1	$	$
19	Straw Wattle	LF	1664	$	$
20	SWP-CI 'Big Red'	LF	62	$	$
21	Silt Fence Inlet Protection	LF	36	$	$
22	C-600 Coir Erosion Control Matting	SY	2	$	$
23	Rock Check Dam	EA	1	$	$
24	Tree Preservation Fencing	LF	20	$	$
25	Asphalt Paving/Patching (includes base and subgrade prep)	SY	133	$	$
26	Concrete Driveway Paving	SY	198	$	$
27	Concrete Curb and Gutter (Type A 1'-6")	LF	125	$	$
28	Concrete Sidewalks (4")	SY	6	$	$
29	Concrete Trail (6")	SY	2036	$	$
30	4" Class 7 Base for Trail and Sidewalk	SY	2253	$	$
31	Detectable Warning Device	SF	346	$	$
32	3-Rail Wood Fence	LF	64	$	$
33	Segmental Block Retaining Wall	LF	45	$	$
34	Type E Junction Box (4'x4')	EA	1	$	$

Unit Price Work					
Item No.	**Description**	**Unit**	**Estimated Quantity**	**Unit Price**	**Extended Price**
35	Junction Box (4'x13'-2")	EA	1	$	$
36	4' Grate Inlet 2'x2' Frame	EA	2	$	$
37	24" Flared End Section	EA	1	$	$
38	36" Flared End Section	EA	1	$	$
39	14"x23" HERCP	LF	468	$	$
40	24" Reinforced Concrete Pipe, Class 4	LF	48	$	$
41	36" Reinforced Concrete Pipe, Class 4	LF	367	$	$
42	C-76 Mortar Joints	EA	2	$	$
43	Permanent Bermuda Grass Sod	SY	1258	$	$
44	Temporary Seeding	AC	0.79	$	$
45	Permanent Seeding	AC	0.79	$	$
46	4" Top Soil	SY	5066	$	$
47	Painted Pavement Marking – Yellow Dashed (4")	LF	1191	$	$
48	Painted Pavement Marking – Yellow Solid (4")	LF	576	$	$
49	Painted Pavement Marking – Reflective White (4")	LF	37	$	$
50	Thermoplastic Pavement Marking – White Stop Bar (12")	LF	39	$	$
51	Thermoplastic Pavement Marking – White Crosswalk (24")	LF	518	$	$
52	Thermoplastic Pavement Marking – Green Elephants Feet (24"x24")	SY	46	$	$
53	Traffic Flow Arrow Marking	EA	4	$	$
54	Signs	EA	1	$	$
55	Channel Post Sign Support (Type U-1)	EA	2	$	$
56	Water Meter Adjustment to Finished Grade	EA	2	$	$
57	Valve Box Adjustment to Finished Grade	EA	11	$	$
58	Relocate Franchise Utility Pertinence	EA	3	$	$
59	Relocated Fire Hydrant	EA	1	$	$

Unit Price Work					
Item No.	**Description**	**Unit**	**Estimated Quantity**	**Unit Price**	**Extended Price**
60	NFPA13 Fire Line 6800 Valve Box Cover Painted Red	EA	1	$	$
61	FDC Relocation	EA	1	$	$
62	PIV Relocation	EA	1	$	$
63	Owner's Allowance	LS	1	$100,000	$100,000
Total of all Extended Prices for Unit Price Work					$

B. Bidder acknowledges that:

1. 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

2. Estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.

3.02 *Total Bid Price (Lump Sum and Unit Prices)*

Total Bid Price (Total of all Lump Sum and Unit Price Bids)	$

ARTICLE 4—TIME OF COMPLETION

4.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

4.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 5—BIDDER'S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

5.01 *Bid Acceptance Period*

A. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

5.02 *Instructions to Bidders*

A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.

5.03 *Receipt of Addenda*

A. Bidder hereby acknowledges receipt of the following Addenda:

Addendum Number	Addendum Date

ARTICLE 6—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

6.01 *Bidder's Representations*

A. In submitting this Bid, Bidder represents the following:

1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.
2. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
3. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
4. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
5. 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 the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder's (Contractor's) safety precautions and programs.
6. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
7. 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.
8. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
9. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

10. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

6.02 *Bidder's Certifications*

A. The Bidder certifies the following:

1. 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.

2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.

3. Bidder has not solicited or induced any individual or entity to refrain from bidding.

4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:

a. 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.

b. 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.

c. 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.

d. 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 execution of the Contract.

BIDDER hereby submits this Bid as set forth above:

Bidder:

_____

(typed or printed name of organization)

By: _____

(individual's signature)

Name: _____

(typed or printed)

Title: _____

(typed or printed)

Date: _____

(typed or printed)

If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.

Attest: _____

(individual's signature)

Name: _____

(typed or printed)

Title: _____

(typed or printed)

Date: _____

(typed or printed)

Address for giving notices:

_____

_____

Bidder's Contact:

Name: _____

(typed or printed)

Title: _____

(typed or printed)

Phone: _____

Email: _____

Address:

_____

_____

_____

Bidder's Contractor License No.: (if applicable) _____

AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)

This Agreement is by and between City of Bentonville ("Owner") and _____ ("Contractor").

Terms used in this Agreement have the meanings stated in the General Conditions and the Supplementary Conditions.

Owner and Contractor hereby agree as follows:

ARTICLE 1—WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

The construction of approximately 2,010 linear feet of 10-footwide concrete trail in Bentonville, Arkansas. A significant portion of the trail lies on top of the existing drainage ditch and drainage structures will be required to be constructed, along with other improvements as specified in the project plans.

ARTICLE 2—THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows:

Sidepath and drainage improvements from Garden Trail & McCollum Drive extending East of Grace Point Church.

ARTICLE 3—ENGINEER

3.01 The Owner has retained CEI ("Engineer") to act as Owner's representative, assume all duties and responsibilities of Engineer, and have the rights and authority assigned to Engineer in the Contract.

3.02 The part of the Project that pertains to the Work has been designed by Engineer.

ARTICLE 4—CONTRACT TIMES

4.01 *Time is of the Essence*

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.03 *Contract Times: Days*

A. The Work will be substantially complete within 150 calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within 180 calendar days after the date when the Contract Times commence to run.

4.05 *Liquidated Damages*

A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the Contract Times, as duly modified. The parties also recognize the delays, expense, and difficulties involved in proving, in a legal or arbitration proceeding, the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):

1. *Substantial Completion:* Contractor shall pay Owner $1,000 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above for Substantial Completion, until the Work is substantially complete.

2. *Completion of Remaining Work:* After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner $1,000 for each day that expires after such time until the Work is completed and ready for final payment.

3. Liquidated damages for failing to timely attain Milestones, Substantial Completion, and final completion are not additive, and will not be imposed concurrently.

B. If Owner recovers liquidated damages for a delay in completion by Contractor, then such liquidated damages are Owner's sole and exclusive remedy for such delay, and Owner is precluded from recovering any other damages, whether actual, direct, excess, or consequential, for such delay, except for special damages (if any) specified in this Agreement.

ARTICLE 5—CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents, the amounts that follow, subject to adjustment under the Contract:

A. For all Unit Price Work, an amount equal to the sum of the extended prices (established for each separately identified item of Unit Price Work by multiplying the unit price times the actual quantity of that item).

Unit Price Work					
Item No.	**Description**	**Unit**	**Estimated Quantity**	**Unit Price**	**Extended Price**
1	Mobilization, Staking, Bonding, Traffic Control & Insurance	LS	1	$	$
2	Clearing & Grubbing	LS	1	$	$
3	Removal and Disposal of Concrete Pavement	SY	118	$	$
4	Removal and Disposal of Asphalt	SY	262	$	$
5	Removal and Disposal Curb and Gutter	LF	196	$	$

Unit Price Work					
Item No.	**Description**	**Unit**	**Estimated Quantity**	**Unit Price**	**Extended Price**
6	Removal and Disposal Corrugated Metal Pipe	LF	79	$	$
7	Removal and Disposal of 24" RCP	LF	59	$	$
8	Removal and Disposal of 24" FES	EA	4	$	$
9	Removal and Disposal of 18" RCP	LF	48	$	$
10	Removal and Disposal of 18" FES	EA	2	$	$
11	Relocate Stop Sign	EA	2	$	$
12	Relocate Witness Post	EA	1	$	$
13	General Cut	CY	1570	$	$
14	General Fill	CY	785	$	$
15	Add Undercut & Select Backfill (as directed by Geotech)	CY	2100	$	$
16	Erosion Control Maintenance	LS	1	$	$
17	Construction Entrance	EA	1	$	$
18	Concrete Washout	EA	1	$	$
19	Straw Wattle	LF	1664	$	$
20	SWP-CI 'Big Red'	LF	62	$	$
21	Silt Fence Inlet Protection	LF	36	$	$
22	C-600 Coir Erosion Control Matting	SY	2	$	$
23	Rock Check Dam	EA	1	$	$
24	Tree Preservation Fencing	LF	20	$	$
25	Asphalt Paving/Patching (includes base and subgrade prep)	SY	133	$	$
26	Concrete Driveway Paving	SY	198	$	$
27	Concrete Curb and Gutter (Type A 1'-6")	LF	125	$	$
28	Concrete Sidewalks (4")	SY	6	$	$
29	Concrete Trail (6")	SY	2036	$	$
30	4" Class 7 Base for Trail and Sidewalk	SY	2253	$	$
31	Detectable Warning Device	SF	346	$	$
32	3-Rail Wood Fence	LF	64	$	$

Unit Price Work					
Item No.	**Description**	**Unit**	**Estimated Quantity**	**Unit Price**	**Extended Price**
33	Segmental Block Retaining Wall	LF	45	$	$
34	Type E Junction Box (4'x4')	EA	1	$	$
35	Junction Box (4'x13'-2")	EA	1	$	$
36	4' Grate Inlet 2'x2' Frame	EA	2	$	$
37	24" Flared End Section	EA	1	$	$
38	36" Flared End Section	EA	1	$	$
39	14"x23" HERCP	LF	468	$	$
40	24" Reinforced Concrete Pipe, Class 4	LF	48	$	$
41	36" Reinforced Concrete Pipe, Class 4	LF	367	$	$
42	C-76 Mortar Joints	EA	2	$	$
43	Permanent Bermuda Grass Sod	SY	1258	$	$
44	Temporary Seeding	AC	0.79	$	$
45	Permanent Seeding	AC	0.79	$	$
46	4" Top Soil	SY	5066	$	$
47	Painted Pavement Marking – Yellow Dashed (4")	LF	1191	$	$
48	Painted Pavement Marking – Yellow Solid (4")	LF	576	$	$
49	Painted Pavement Marking – Reflective White (4")	LF	37	$	$
50	Thermoplastic Pavement Marking – White Stop Bar (12")	LF	39	$	$
51	Thermoplastic Pavement Marking – White Crosswalk (24")	LF	518	$	$
52	Thermoplastic Pavement Marking – Green Elephants Feet (24"x24")	SY	46	$	$
53	Traffic Flow Arrow Marking	EA	4	$	$
54	Signs	EA	1	$	$
55	Channel Post Sign Support (Type U-1)	EA	2	$	$
56	Water Meter Adjustment to Finished Grade	EA	2	$	$
57	Valve Box Adjustment to Finished Grade	EA	11	$	$

Unit Price Work					
Item No.	**Description**	**Unit**	**Estimated Quantity**	**Unit Price**	**Extended Price**
58	Relocate Franchise Utility Pertinence	EA	3	$	$
59	Relocated Fire Hydrant	EA	1	$	$
60	NFPA13 Fire Line 6800 Valve Box Cover Painted Red	EA	1	$	$
61	FDC Relocation	EA	1	$	$
62	PIV Relocation	EA	1	$	$
63	Owner's Allowance	LS	1	$100,000	$100,000
Total of all Extended Prices for Unit Price Work					$

B. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

ARTICLE 6—PAYMENT PROCEDURES

6.01 *Submittal and Processing of Payments*

A. A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 *Progress Payments; Retainage*

A. Owner shall make progress payments on the basis of Contractor's Applications for Payment on or about the 15th day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided 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 elsewhere in the Contract.

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 Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract.

a. **Ninety-five (95)** percent of the value of the Work completed (with the balance being retainage).

b. **Ninety-five (95)** percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).

B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to **one hundred(100)** percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less

two hundred (200) percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

6.03 *Final Payment*

A. Upon final completion and acceptance of the Work, Owner shall pay the remainder of the Contract Price in accordance with Paragraph 15.06 of the General Conditions.

6.04 *Consent of Surety*

A. Owner will not make final payment, or return or release retainage at Substantial Completion or any other time, unless Contractor submits written consent of the surety to such payment, return, or release.

ARTICLE 7—CONTRACT DOCUMENTS

7.01 *Contents*

A. The Contract Documents consist of all of the following:

1. This Agreement.
2. Bonds:
    a. Performance bond (together with power of attorney).
    b. Payment bond (together with power of attorney).
3. General Conditions.
4. Supplementary Conditions.
5. Specifications as listed in the table of contents of the project manual (copy of list attached).
6. Drawings (not attached but incorporated by reference) consisting of 34 sheets with each sheet bearing the following general title: Bentonville McCollum Rd. Sidepath Ph. 2 (S).
7. Addenda (numbers **1** to **1**, inclusive).
8. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
    a. Notice to Proceed.
    b. Work Change Directives.
    c. Change Orders.
    d. Field Orders.
    e. Warranty Bond, if any.

B. The Contract Documents listed in Paragraph 7.01.A are attached to this Agreement (except as expressly noted otherwise above).

C. There are no Contract Documents other than those listed above in this Article 7.

D. The Contract Documents may only be amended, modified, or supplemented as provided in the Contract.

ARTICLE 8—REPRESENTATIONS, CERTIFICATIONS, AND STIPULATIONS

8.01 *Contractor's Representations*

A. In order to induce Owner to enter into this Contract, Contractor makes the following representations:

1. Contractor has examined and carefully studied the Contract Documents, including Addenda.

2. Contractor is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.

3. Contractor has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.

4. Contractor has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.

5. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (c) Contractor's safety precautions and programs.

6. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.

7. Contractor 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 Contract Documents.

8. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.

9. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

10. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

8.02 *Contractor's Certifications*

A. A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 8.02:

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 or in the Contract execution;

2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract 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 execution of the Contract.

8.03 *Standard General Conditions*

B. A. Owner stipulates that if the General Conditions that are made a part of this Contract are EJCDC® C-700, Standard General Conditions for the Construction Contract (2018), published by the Engineers Joint Contract Documents Committee, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or "track changes" (redline/strikeout), or in the Supplementary Conditions.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on _____ (which is the Effective Date of the Contract).

Owner:	Contractor:
City of Bentonville	
(typed or printed name of organization)	*(typed or printed name of organization)*
By:	By:
(individual's signature)	*(individual's signature)*
Date:	Date:
(date signed)	*(date signed)*
Name: Stephanie Orman	Name:
(typed or printed)	*(typed or printed)*
Title: Mayor	Title:
(typed or printed)	*(typed or printed)*
	(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)
Attest:	Attest:
(individual's signature)	*(individual's signature)*
Title:	Title:
(typed or printed)	*(typed or printed)*
Address for giving notices:	Address for giving notices:
3200 SW Municipal Drive	
Bentonville, AR 72712	
Designated Representative:	Designated Representative:
Name:	Name:
(typed or printed)	*(typed or printed)*
Title:	Title:
(typed or printed)	*(typed or printed)*
Address:	Address:
Phone:	Phone:
Email:	Email:
(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)	License No.: *(where applicable)*
	State:

SECTION 33 49 00

STORM SEWER STRUCTURES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Cast-in-place concrete storm sewer structures with cast-iron lid and frame.

B. Preparation and installation of lid frame, covers, anchorage, and accessories.

1.02 RELATED SECTIONS

A. Section 31 23 02 – Excavation, Backfill, and Compaction for Utilities

B. Section 33 41 00 – Storm Sewer Systems

C. Local governing authority and code requirements

D. Construction Drawings

1.03 REFERENCE STANDARDS

A. ASTM International (ASTM) latest edition

A 48 Gray Iron Castings
C 923 Resilient Connectors Between Reinforced Concrete Manhole Structures and Pipes

1.04 SUBMITTALS

A. Shop Drawings: Indicate reference to Construction Drawings regarding structure locations, elevations, piping with sizes, locations, and elevations of structure penetrations.

B. Product Data: Provide data for lids, steps (if included in project), component construction, features, configuration, and dimensions.

PART 2 PRODUCTS

2.01 MATERIALS

A. Mortar and Grout: Mortar for finishing and sealing shall be Class "C". Honeycombing less than 2 inches deep shall be repaired using Class "D" mortar.

2.02 COMPONENTS

A. Lid and Frame: Lid and frame shall comply with ASTM A 48, Class 35B heavy duty cast iron construction, machined flat bearing surface, removable lid, closed or open as indicated on Construction Drawings with sealing gasket and manufactured by Neenah Foundry Company or approved equal.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify items specified by other Sections are properly sized and located.

B. Verify that items associated with structures are in proper location and ready for connection to other work and/or structure construction.

C. Verify that the excavation for structures are correct.

3.02 PREPARATION

A. Coordinate placement pipe connections to structure as indicated on Construction Drawings.

3.03 CONFIGURATION

A. Storm sewer structures shall be of the size and configuration indicated on the drawings. Rectangular or square structures are called for. Circular structures conforming to ARDOT type MO may be used in locations approved by Engineer.

B. Type MO Barrel Construction:
1. Concentric barrel with concentric cone top section.
2. Shape: Cylindrical
3. Clear Inside Dimensions: 48-inch diameter or as indicated on Construction Drawings.

C. Depth: As indicated on Construction Drawings.

D. Clear Lid Opening: 22-inch diameter minimum

E. Pipe Entry: Provide openings as indicated on Construction Drawings. Pipes shall enter along flat part of walls, not at corners of structure. For type MO structures, pipe shall be fully through wall, and then cut flush with inside of wall.

F. Main and Lateral Pipes: Neatly cut off main and lateral pipes flush with inside of structure where they enter structure walls. Point up irregularities and rough edges with non-shrinking grout.

G. Inverts: Shall not hole water. If required, use concrete and mortar or grout to eliminate non-draining areas. Finish surface with fine textured wood float.

H. Tops: Shall be slightly sloped to eliminate ponding. If required by site grading, tops shall be sloped toward street or parking lot.

3.04 CONSTRUCTION

A. Construct cast-in-place storm sewer structures of ready-mix concrete.

B. As much as possible, structure walls shall be constructed in one continuous pour.

C. For type MO structures, construct in one continuous pour, including base, barrel, and cone section. If depth of structure or site conditions require more than one pour, provide a roughened construction joint to assure wall integrity.

D. Forms shall provide wall thicknesses as indicated on the Drawings. Forms shall be set plumb and checked for plumbness before pouring.

E. Concrete shall be deposited in evenly distributed layers of about 18 inches. Consolidate each layer of concrete with a vibrator of sufficient size.

F. Lid shall be set in formwork and leveled or set to slope conforming to top of structure.

G. Remove forms only after concrete has obtained sufficient strength to support its own weight.

H. Patch any honeycombing inside and outside after forms are removed.

I. Backfill structure only after concrete has obtained sufficient strength to support the soil loads. Final grade area around structure so that run-off flows away from structure top.

END OF SECTION 33 49 00

SECTION 01 22 01

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Method of measurement and Progress Payment.

B. Defect assessment and non-payment for rejected work.

1.02 PAYMENT APPLICATION

A. Payment Includes: Full compensation for required labor, Products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit.

B. Final payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities accepted by Engineer multiplied by the unit price for Work which is incorporated in or made necessary by the Work.

1.03 SCHEDULE OF VALUES

A. The Schedule of Values will serve as the basis for all Contract Progress Payments.

1.04 UNIT PRICES

A. The Unit Price Contract Progress Payments will be based on the price and quantity of each unit of work completed.

1.05 DEFECT ASSESSMENT

A. Replace the Work, or portions of the Work, not conforming to specified requirements.

B. If, in the opinion of Engineer, it is not practical to remove and replace the Work, Engineer will direct that the defective Work will be repaired to the satisfaction of Engineer, and the unit price will be adjusted to a new price at the discretion of Engineer.

C. Authority of Engineer to assess the defect and identify payment adjustment is final.

1.08 NON-PAYMENT FOR REJECTED PRODUCTS

A. Payment will not be made for any of the following:
   1. Products wasted or disposed of in a manner that is not acceptable.
   2. Products determined as unacceptable before or after placement.
   3. Products not completely unloaded from the transporting vehicle.
   4. Products placed beyond the lines, levels or boundaries of the required Work.
   5. Products remaining on hand after completion of the Work.
   6. Loading, hauling and disposing of rejected Products.

1.07 INCIDENTAL ITEMS

A. Items indicated as incidental to a particular payment item are considered an integral part of that payment item and will not be measured or considered in determining payments.

B. Safety is considered as incidental to every payment item, except for excavation safety, which is a separate bid item.

C. Testing of installed work required by the specifications to be completed by Contractor is incidental to any item included in the unit or system being tested. Re-testing after corrective action to Work initially found to be defective is incidental to the item.

D. Mobilization, clean-up, project closeout, project record documents, and all costs not directly mentioned in this section are considered as incidental to the project.

E. Excess excavation is generally incidental to the payment item, except where Engineer has indicated during construction that an excavation be expanded due to subsurface conditions. Excess excavation undertaken by Contractor to stabilize the trench bottom or walls, where dewatering or shoring would be suitable to correct trench conditions, will not be considered an additional cost. Excess excavation includes backfilling with approved material to return the excavation to the lines and grades indicated on the drawings.

F. Notification – Whenever it is required that a notification be made, either to a public agency such as police or fire, or to a property owner to advise them of work to be done, the notification activities are incidental to the pay item involved. Failure to make required notifications may be a cause for additional withholding.

PART 2 SCHEDULE OF VALUES

2.01 SUMMARY

A. Contractor shall provide a detailed breakdown of the agreed Contract Amount or Unit Price item paid as a lump sum showing values allocated to each of the major parts of the work.

2.02 APPROVAL

A. Prior to the first application for payment, Contractor shall submit a proposed Schedule of Values to Engineer.

(1) Contractor shall meet with Engineer and determine additional data, if any, required to be submitted.
(2) Contractor shall secure Engineer's approval of the Schedule of Values prior to submitting the first application for payment.

B. Contractor shall assure mathematical accuracy of the sums.

C. When required by Engineer, Contractor shall provide copies of the subcontracts or other data acceptable to the Engineer, substantiating the sums described.

PART 3 MEASUREMENT AND PAYMENT FOR UNIT PRICES

3.01 SUMMARY

A. This section includes delineation of measurement criteria applicable to unit price work.

B. Measurement methods are delineated for each individual bid item under this section.

C. Engineer shall take all measurements and compute quantities accordingly.

D. Contractor shall assist Engineer by providing necessary equipment, workers, and survey personnel as required.

3.02 UNIT QUANTITIES SPECIFIED

A. Quantities and measurement indicated in the Bid Form are for bidding and contract purposes only. Quantities and measurements supplied or placed in the work and verified by Engineer shall determine payment.

B. If the actual work requires more or fewer quantities than those quantities indicated, Contractor shall provide the required quantities at the unit prices contracted.

3.03 MEASUREMENT OF QUANTITIES

A. Measurement by Weight: Items measured by weight will use U.S. Standard Handbook weights unless otherwise specified for an individual item.

B. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness with a survey chain, steel tape, or accurate electronic measurement equipment.

C. Measurement by Area: Measured by square dimension using mean length and width or radius, with a survey chain, steel tape, or accurate electronic measurement equipment.

D. Linear Measurement: Measured by linear dimension, at the item centerline or mean chord, with a survey chain, steel tape, or accurate electronic measurement equipment.

E. Stipulated Price Measurement: Items measured by weight, volume, area, or linear means or combination thereof, as appropriate, as a completed item or unit of the work.

3.04 PAYMENT SCHEDULE

A. Payment shall be made in conformance with the “Schedule of Values” submitted by Contractor in accordance with the Agreement and Engineer’s observation of the work completed to date.

B. Retainage withheld from progress payments due Contractor shall be in accordance with the Agreement.

3.05 APPLICATION FOR PAYMENT

A. Submit to Engineer three copies of each application for payment on EJCDC Form C-620 or other format previously approved by the Engineer that contains the

required information as specified in the City of Bentonville Bid Documents Section 2.

B. Pay periods shall be as designated in the Agreement unless otherwise agreed in writing between Owner and Contractor.

3.06 PAYMENT ITEMS

A. Mobilization, Staking, Bonding, Traffic Control & Insurance
   1. Description – Move Contractor's personnel and equipment to the site (including equipment required at project start and later in project); initiate project by executing Agreement; furnishing required Bonds and Insurance Certificates to Owner; Contractor's office/storage at the site according to Contractor's needs; and other administrative or management items; furnishing and installing any necessary traffic control devices; coordinating with city and engineer and to provide traffic control plan if required.
   2. Incidental Items – None.
   3. Related Items – None.
   4. Units and Measurement – Payment shall be as a lump sum.
   5. Partial Payment Provisions – Partial payment will be allowed.

B. Clearing and Grubbing
   1. Description – Clearing and grubbing trees, stumps, brush, and other vegetative matter.
   2. Incidental Items – Removal from the site and proper disposal of all plant material; filling stump holes; and all equipment, materials and labor required to complete the work.
   3. Related Items –Demolition is covered under other payment items.
   4. Units and Measurement – Payment for clearing and grubbing shall be lump sum.
   5. Partial Payment Provisions – Partial payment will be allowed.

C. Remove and Relocate Signs
   1. Description – Signs, relocated, of all types required at the locations indicated on the Drawings.
   2. Included Items – Standard Signs, Street Name Signs, Wayfinding Signs
   3. Incidental Items – Excavation of support hole, setting concrete in hole, backfilling hole, adjusting and aligning sign, and furnishing equipment, labor, and materials required to complete the work. If existing sign post is damaged to the point it cannot be reused, furnishing of a new sign is incidental.
   4. Related Items – None.
   5. Units and Measurement – Payment shall be at the unit price for each unit furnished and installed in its permanent location and accepted by Engineer.
   6. Partial Payment Provisions – None, except for units completed, and approved by Engineer.

D. Removal, Disposal, Salvage, Abandonment, & Replacement
   1. Description – Removal of curb and gutter, asphalt pavement, concrete pavement, asphalt driveway, concrete driveway, concrete walks, trees, fences, steel handrail, signs, utility poles, traffic signals and equipment, signs, street light fixtures, poles, fire hydrants, fire department connections, post indicator valves, water meters, drainage structures, irrigation structures, water lines, sanitary sewer manholes, storm sewer pipes, sanitary sewer lines, and other items indicated on the Drawings as required to allow for permanent improvements of this project. Relocation of fire hydrant, FDC, PIV, and other items indicated on the Drawings as required.
   2. Included Items – Removal of items, Salvaging of items, and Relocation of items.
   3. Incidental Items – Removal from site and proper disposal or salvage of items removed; backfilling resulting holes with select fill or granular materials; and all materials, equipment and labor necessary to complete the work. Relocate items as noted on the Construction Drawings. Salvage items as noted on the Construction Drawings. Any items salvaged must be returned to the City of Bentonville Street Department or Bentonville Water Utilities (BWU), whichever is the appropriate entity. If the item is to be re-used and is damaged in the process of relocation, the cost of replacement shall be incidental to the item. Coordination with franchise utilities for relocations or adjustments is considered incidental.
   4. Related Items – Removal of trees, brush and other plant materials is included in Clearing and Grubbing pay items. Removal of existing water meter boxes is paid.
   5. Units and Measurement – Payment shall be at the unit price for each type of item being demolished.
   6. Partial Payment Provisions – No partial payment will be made for this item, except for units completed, and approved by Engineer.

E. Remove and Replace Unsuitable Soil, Rock Excavation, Unclassified Excavation General Cut
   1. Description – This item shall consist of excavation and disposal of all material that is encountered within the limits of the work not being removed under some other item. The work shall be accomplished in reasonably close conformity with the lines, grades, thicknesses, and typical cross sections shown on the plans or established by the Engineer. Dispose of the material in an off-site location in accordance with applicable laws and regulations. Replace with engineered fill as specified and as indicated on the Drawings.
   2. Incidental Items – Labor and equipment necessary to complete the work.
   3. Related Items – Water line construction, Sewer line construction
   4. Units and Measurement – Payment shall be at the unit price per each cubic yard of excess material removed from the site, as measured in the truck. Partially loaded trucks will not be considered as full trucks. Truck tickets will not be required for this material; however, Contractor's records shall be made available to Engineer, and Engineer shall be notified before material is to be removed from the site. Separate payment will not be made for construction of engineered fill, nor will it be measured.

5. Partial Payment Provisions – None, except for units completed, and approved by Engineer.

F. Compacted Embankment General Fill
   1. Description – Construction of embankments, using on-site or imported materials, to the lines and grades and compaction requirements indicated on the Drawings and specified.
   2. Incidental Items – On-site hauling of excavated material, and equipment, labor, and materials necessary to complete the work.
   3. Related Items – Unsuitable Soil, Rock Excavation, Unclassified Excavation.
   4. Units and Measurement – Payment shall be at the unit price per each cubic yard of compacted embankment constructed, and accepted by Engineer. The total quantity of embankment on the Bid Form (total of on-site and imported) will be the total amount of embankment paid, unless Contractor has reason to believe that the total yards actually installed are significantly different than that shown, in which case documentation shall be provided. Measurement of imported material shall be by truck weight tickets, and converting to volume by a factor agreed to between Engineer and Contractor. Remaining embankment amount will be considered on-site material. If determined by Engineer, payment for completed units will be delayed until proof of construction testing is completed.
   5. Partial Payment Provisions – No partial payment will be made for this item, except for units completed, and approved by Engineer.

G. Undercut and Backfill
   1. Description – Construction of undercuts exported from the site and backfill, using select imported materials, to the lines and grades and compaction requirements indicated on the Drawings and specified.
   2. Incidental Items – Hauling of imported and exported material, and equipment, labor, and materials necessary to complete the work.
   3. Related Items – Unsuitable Soil, Rock Excavation, Unclassified Excavation.
   4. Units and Measurement – Payment shall be at the unit price per each cubic yard of undercut exported and select backfill imported to the site, and accepted by Engineer. The total quantity of undercut and backfill on the Bid Form (total of exported or imported) will be the total amount of paid, unless Contractor has reason to believe that the total yards actually installed are significantly different than that shown, in which case documentation shall be provided. Measurement of imported and exported material shall be by truck weight tickets, and converting to volume by a factor agreed to between Engineer and Contractor. Remaining undercut and backfill amount will be considered on-site material. If determined by Engineer, payment for completed units will be delayed until proof of construction testing is completed.
   5. Partial Payment Provisions – No partial payment will be made for this item, except for units completed, and approved by Engineer.

H. Concrete Curb and Gutter

1. Description – Construct concrete curb and gutter to the lines and grades and in accordance with the details indicated on the Drawings.
2. Included Items – Concrete curb and gutter (Type A)
3. Incidental Items – Subgrade fine grading and preparation; aggregate base course; and equipment, labor, and materials necessary to complete the work.
4. Related Items – Removal of existing curb and gutter is included in demolition.
5. Units and Measurement – Payment shall be at the unit price per linear foot of curb and gutter installed, and accepted by Engineer.
6. Partial Payment Provisions – None, except for units completed, and approved by Engineer.

I. Concrete Sidewalk and Concrete Trail
1. Description – Construct sidewalks and trails in the locations and to the lines, depths, and grades indicated on the Drawings and as required by site conditions.
2. Included Items – Concrete sidewalks and Concrete trails.
3. Incidental Items – Adjusting width as required by drainage structures and to match existing sidewalks or trails; fiber reinforcement; tool joints; saw joints; expansion joints with expansion joint material; and equipment, labor, and materials necessary to complete the work.
4. Related Items – Removal of existing sidewalks or trails is included in demolition.
5. Units and Measurement – Payment shall be at the unit price per square yard of sidewalk or trail constructed, and accepted by Engineer.
6. Partial Payment Provisions – None, except for units completed, and approved by Engineer.

J. Aggregate Base Course (Class 7) for Concrete Sidewalk and Concrete Trail
1. Description – Installation of Crushed Stone Base (Class 7) under Asphalt Concrete Hot Mix Pavement and Portland Cement Concrete Pavement to the lines, depth, and grades and in accordance with the details in locations as indicated on the Construction Drawings.
2. Incidental Items – Installation and compaction, labor and equipment necessary to complete the work.
3. Related Items – Concrete Sidewalk and Concrete Trail
4. Units and Measurement – Payment shall be at the unit price per square yard of material furnished and installed and accepted by Engineer. Truck tickets will be required for this material, showing weight of material and provided to Engineer.
5. Partial Payment Provisions – None, except for units completed, and approved by Engineer.

K. Detectable Warning Device
1. Description – Install detectable warning devices in the locations and to the lines and grades indicated on the Drawings and as required by site conditions.
2. Incidental Items – Adjusting as required by site conditions and to match adjacent sidewalk or pavement; tool joints; saw joints; expansion joints with expansion

joint material; and equipment, labor, and materials necessary to complete the work.
3. Related Items – Installation of Wheelchair ramps.
4. Units and Measurement – Payment shall be at the unit price per square foot of detectable warning device installed and accepted by Engineer.
5. Partial Payment Provisions – None, except for units completed, and approved by Engineer.

L. Erosion Control Maintenance
1. Description – Provide regular maintenance to all erosion control measures indicated on the Construction drawings.
2. Incidental Items – None.
3. Related Items – None.
4. Units and Measurement – Payment shall be as a lump sum.
5. Partial Payment Provisions – No partial payments will be made for this item, except as approved by Engineer.

M. Wattles
1. Description – Install wattles as temporary sediment control devices in locations as indicated on the Construction Drawings.
2. Incidental Items – Any preparation work required; installation of sediment control system, including anchoring at bottom and sides; trenching, backfilling; stakes; maintenance of system in good working conditions; removal of system once areas are stabilized; and equipment, martials, and labor required to complete the work.
3. Related Items – Erosion Control is a separate pay item.
4. Units and Measurement – Payment will be at the unit price per linear foot of wattle furnished and installed, and accepted by Engineer. No payment will be made for overlapping sections. Failure to maintain systems in good working conditions may result in payments already made being reduced.
5. Partial Payment Provisions – None, except for units completed, and approved by Engineer.

N. Big Red Inlet Protector/Inlet Protection
1. Description – Furnish and install Big Red Inlet Protector or approved equal in the locations and to the lines and grades indicated on the Drawings.
2. Incidental Items – Any preparation required; installation of the Big Red unit or approved equal per manufacturer's instructions; maintenance of Big Red or approved equal device in good working conditions; removal when no longer required; restoration of area; and equipment, materials, and labor necessary to complete the work.
3. Related Items – Erosion Control is a separate pay item
4. Units and Measurement – Payment shall be at the unit price per linear foot of Big Red or approved equal furnished and installed, and accepted by Engineer. 20 percent of the unit price will be withheld until item is removed and area restored

as necessary. Failure to maintain systems in good working conditions may result in payments already made being reduced.
5. Partial Payment Provisions – None, except for units completed, and approved by Engineer.

O. Coir (C-600) Erosion Control Fabric
1. Description – Install Coir (C-600) Erosion Control in locations as indicated on the Construction Drawings.
2. Incidental Items – Labor, materials and equipment necessary to complete the work.
3. Related Items – Erosion Control is a separate pay item.
4. Units and Measurement – Payment shall be at the unit price per square yard furnished and applied, and accepted by Engineer.
5. Partial Payment Provisions – None, except for units completed, and approved by Engineer.

P. Silt Fence Box Protection
1. Description – Install temporary silt fence box protection devices in the locations indicated on the Drawings.
2. Incidental Items – Any preparation required; installation of geotextile (if used); installation of stone & wood materials; installation of sediment control system, including anchoring at bottom and sides; trenching, backfilling; stakes; maintenance of inlet protection device in good working conditions; removal when no longer required; restoration of area; and equipment, materials, and labor necessary to complete the work.
3. Related Items – Erosion Control Maintenance is a separate pay item.
4. Units and Measurement – Payment will be at the unit price per linear foot of silt fence box protection furnished and installed, and accepted by Engineer. 20 percent of the unit price will be withheld until item is removed and area restored as necessary. Failure to maintain systems in good working conditions may result in payments already made being reduced.
5. Partial Payment Provisions – None, except for units completed, and approved by Engineer.

Q. Tree Protection
1. Description – Furnish and install tree protection as required in all areas indicated on the drawings.
2. Incidental Items – All equipment, materials, and labor required to complete the work.
3. Related Items – None.
4. Units and Measurement – Payment will be at the unit price per linear foot of tree preservation fencing furnished, installed and accepted by Engineer.
5. Partial Payment Provisions – None, except for units completed, and approved by Engineer.

R. Rock Check Dam
   1. Description – Furnish and install rock check dams in the sizes and at the locations indicated on the Drawings.
   2. Incidental Items – Excavation, grading, trenching, backfilling, and equipment, labor, and materials necessary to complete the work.
   3. Related Items – None.
   4. Units and Measurement – Payment shall be at the unit price for each rock check dam furnished and installed, and accepted by Engineer.
   5. Partial Payment Provisions – None, except for units completed, and approved by Engineer.

S. Seeding and Mulching
   1. Description – Provide seeding and mulching as restoration of all areas disturbed by Contractor's work, as specified. Temporary seeding and mulching is included.
   2. Incidental Items – Surface dressing, including rock removal, watering required to establish seeded material; and equipment, labor, and materials necessary to complete the work.
   3. Related Items – Sodding, Landscaping, and Erosion Control are separate pay items.
   4. Units and Measurement – Payment shall be at the unit price per acre of seeding and mulching completed, and accepted by Engineer.
   5. Partial Payment Provisions – 75 percent of the unit price shall be paid upon completion of initial seeding and mulching, with remainder held until all landscape is installed, established, growing and accepted by Engineer.

T. Sodding
   1. Description – Provide sodding for restoration of all areas as indicated on the Construction Drawings.
   2. Incidental Items – Surface dressing, including rock removal; and equipment, labor, and materials necessary to complete the work.
   3. Related Items – Mulching, Landscaping, and Erosion Control are separate pay items.
   4. Units and Measurement – Payment shall be at the unit price per square yard of sodding completed, and accepted by Engineer.
   5. Partial Payment Provisions – 75 percent of the unit price shall be paid upon completion of sodding, with remainder held until sod is established and growing and accepted by Engineer.

U. Top Soil
   1. Description – Furnish and apply top soil to the lines and grades indicated on the drawings and in accordance with the specifications.
   2. Incidental Items – Excavating, stockpiling, hauling, placing, grading, and all other labor, tools, and equipment to provide a layer of topsoil in accordance with the specifications.
   3. Related Items – Compacted embankment is a separate pay items.

4. Units and Measurement – Topsoil furnished and placed will be measured by the square yard based on the location. Measurement will be made to the permanent street right-of-way or permanent easement or to the toe or top of slopes as shown on the plans. Areas outside these limits disturbed by the Contractor shall be topsoiled and restored at no cost to the City.
5. Partial Payment Provisions – None, except for units completed, and approved by Engineer.

V. Concrete Washout
1. Description – Furnish and install concrete washout in areas accordance to the SWPPP.
2. Incidental Items – Excavation, grading, trenching, backfilling, and equipment, labor, and materials necessary to complete the work.
3. Related Items – None.
4. Units and Measurement – Payment shall be made at the unit price for each concrete washout furnished and installed.
5. Partial Payment Provisions – Partial payment will be made in accordance with the approved schedule of values.

W. Temporary Stone Construction Entrance
1. Description – Furnish and install stone construction entrance in areas accordance to the SWPPP.
2. Incidental Items – Excavation, grading, trenching, backfilling, and equipment, labor, and materials necessary to complete the work.
3. Related Items – None.
4. Units and Measurement – Payment shall be made at the unit price for each construction entrance furnished and installed.
5. Partial Payment Provisions – Partial payment will be made in accordance with the approved schedule of values.

X. Concrete Segmental Retaining Wall
1. Description – Construct concrete retaining walls in the locations and to the lines, depths, and grades indicated on the Drawings and as required by site conditions.
2. Incidental Items – Adjusting width as required by drainage structures and to match sidewalks or trails; rebar; aggregate base course under wall; tool joints; saw joints; expansion joints with expansion joint material; and equipment, labor, and materials necessary to complete the work.
3. Related Items – None.
4. Units and Measurement – Payment shall be at the unit price per linear foot of concrete retaining wall installed, and accepted by Engineer.
5. Partial Payment Provisions – None, except for units completed, and approved by Engineer.

Y. Pavement Marking, Construction and Permanent

1. Description – Construct construction pavement marking in the locations and as indicated on the drawings. Construct permanent pavement marking on finished pavement in the locations and according to the details indicated on the Drawings.
2. Incidental Items – Thermoplastic Marking, paint, reflective materials, alignment, measurements, surveying, equipment, materials, tools, and labor required to complete the work.
3. Related Items – None.
4. Units and Measurement – Payment will be at the unit price per linear foot of pavement marking installed and accepted by Engineer. Payment for painted pavement marking, green pavement markings, commercial red pavement markings, elephants feet, and traffic symbols will be at the unit price per square yard pavement marking installed and accepted by Engineer.
5. Partial Payment Provisions – Partial payment based on approved schedule of values and completed work accepted by Engineer.

Z. Reinforced Concrete Pipe

1. Description – Furnish and install reinforced concrete pipe for storm sewer as indicated on the Drawings.
2. Incidental Items – Trench excavation, joint materials, bedding material, compaction of bedding and backfill, and all equipment, labor, and materials necessary to complete the work; aggregate base course backfill installed in pipe trenches
3. Related Items – None.
4. Units and Measurement – Payment shall be at the unit price per linear foot furnished and installed, and accepted by Engineer. Measurement will be as defined in paragraph 1.6.D. Measurement will be to the inside face of drop inlets and junction boxes.
5. Partial Payment Provisions – Partial payment will be made for materials on site but not yet incorporated into the work, as approved by Engineer.

AA. Reinforced Concrete Pipe Extensions

1. Description – Furnish and install C-76 Mortar Joints for the extension of existing reinforced concrete pipe for storm sewer as indicated on the Drawings.
2. Incidental Items – All equipment, labor, and materials necessary to complete the work.
3. Related Items – None.
4. Units and Measurement – Payment shall be at the unit price per for each mortar joint furnished and installed, and accepted by Engineer.
5. Partial Payment Provisions – Partial payment will be made for materials on site but not yet incorporated into the work, as approved by Engineer.

BB. Flared End Section

1. Description – Furnish and install flared end sections in the sizes and at the locations indicated on the Drawings.

2. Incidental Items – Excavation, grading, trenching, backfilling, concrete wall at end of flared end section, and equipment, labor, and materials necessary to complete the work.
3. Related Items – Concrete pipe; corrugated plastic pipe, corrugated metal pipe.
4. Units and Measurement – Payment shall be at the unit price for each flared end section furnished and installed, and accepted by Engineer.
5. Partial Payment Provisions – Partial payment will be made for materials on site but not yet incorporated into the work, as approved by Engineer.

CC. Junction Boxes, Grate Inlets, Double Grate Inlets

1. Description – Junction boxes, grate inlets, and double grate inlets, complete with manhole cover and grate in locations as indicated on the Construction Drawings.
2. Incidental Items – Manhole steps (where required), excavation, backfill, trenching, and all equipment, labor, and materials necessary to complete the work.
3. Related Items – Pipe installation is paid for under separate pay items. Extensions to inlets are separate pay items. Gutter sections upstream and downstream of inlet will be paid for as part of the curb and gutter pay item.
4. Units and Measurement – Payment shall be at the unit price per each curb inlet, junction box, area inlet and grate inlet furnished and installed, and accepted by Engineer.
5. Partial Payment Provisions – None, except for units completed, and approved by Engineer.

DD. Fencing, New or Relocated

1. Description – Relocate existing fencing or furnish and install new fencing to the locations indicated on the Drawings.
2. Incidental Items – Removal of existing fence in a manner so as not to cause damage; stockpiling of existing fence parts; coordination with property owner; and re-installation of the fence in the new location. If any fence parts are damaged in removal or during storage, or if any are found to be in an existing condition that is unsuitable for re-installation, replacement of those parts is incidental.
3. Related Items – Fences that Contractor elects to removed temporarily during construction and then reconstruct them on the same location are not a pay item, and are considered incidental to the project as a whole or to the construction of the specific item for which they were removed.
4. Units and Measurement – Payment will be at the unit price per linear foot of fence relocated and re-installed or furnished and installed, and accepted by Engineer. Measurement shall be from outside to outside of end posts.
5. Partial Payment Provisions – Partial payment can be made for removal and for re-installation if shown on the approved Schedule of Values.

EE. Valve Box Cover

1. Description – Provide a new fire line 6800 valve box cover, painted red, in the location indicated on the Drawings.

2. Incidental Items – All materials, equipment and labor necessary to complete the work.
3. Related Items – None.
4. Units and Measurement – Payment will be at the unit price for each valve box cover approved by Engineer.
5. Partial Payment Provisions – Partial payment will be made for materials on site but not yet incorporated into the work, as approved by Engineer.

FF. Water Meter Adjustment

1. Description – Adjust existing water meter to match finished grade in the locations indicated on the Drawings.
2. Incidental Items – Excavation and backfill; adjustment of meter; and all materials, equipment and labor necessary to complete the work.
3. Related Items – Water service lines.
4. Units and Measurement – Payment will be at the unit price for each water meter adjusted, and approved by Engineer.

End of Document 01 22 01

Section 03 10 00

CONCRETE FORMWORK

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Formwork for cast-in place concrete, with shoring, bracing and anchorage.

B. Openings for other work.

C. Form Accessories.

D. Form stripping.

1.02 RELATED SECTIONS

A. Section 03 20 00 – Concrete Reinforcement.

1.03 REFERENCES

A. ACI 117 – Tolerances for Concrete Construction and Materials and Commentary

B. ACI 301 – Structural Concrete for Buildings.

C. ACI 318 – Building Code Requirements for Reinforced Concrete.

D. ACI 347 – Recommended Practice For Concrete Formwork.

E. PS 1 – construction and Industrial Plywood.

1.04 DESIGN REQUIREMENTS

A. Design, engineer and construct formwork, shoring, and bracing to conform to code requirements; resultant concrete to conform to required shape, line and dimension.

1.05 QUALITY ASSURANCE

A. Perform Work in accordance with ACI 347.

1.06 COORDINATION

A. Coordinate this Section with other Sections of work which require attachment of components to formwork.

PART 2 PRODUCTS

2.01 WOOD FORM MATERIALS

A. Form Materials: At the discretion of Contractor and as required to meet appearance requirements.

2.02 PREFABRICATED FORMS

A. Preformed Steel Forms: Minimum 16 gage matched, tight fitting, stiffened to support weight of concrete without deflection detrimental to tolerances and appearance of finished surfaces.

2.03 FORMWORK ACCESSORIES

A. Form Ties: Snap-off type, galvanized metal, fixed length, cone type, 1-inch back break dimension, free of defects that could leave holes larger than 1 inch in concrete surface.

B. Form Release Agent: Colorless mineral oil which will not stain concrete, or absorb moisture, or impair natural bonding or color characteristics of coating intended for use on concrete.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify lines, levels and centers before proceeding with formwork. Ensure that dimensions agree with drawings.

3.02 EARTH FORMS

A. Earth forms are not permitted.

3.03 ERECTION – FORMWORK

A. Erect formwork, shoring and bracing to achieve design requirements, in accordance with requirements of ACI 301.

B. Provide bracing to ensure stability of formwork. Shore or strengthen formwork subject to over stressing by construction loads.

C. Arrange and assemble formwork to facilitate dismantling and stripping and to permit removal of remaining principle shoring. Do not damage concrete during stripping.

D. Align joints and make watertight. Keep form joints to a minimum.

E. Obtain approval before framing openings in structural members which are not indicated on Drawings.

3.04 APPLICATION – FORM RELEASE AGENT

A. Apply form release agent on formwork in accordance with manufacturer's recommendations.

B. Apply prior to placement of reinforcing steel, anchoring devices, and embedded items.

C. Do not apply form release agent where concrete surfaces will receive applied coverings which are affected by agent. Soak inside surfaces of untreated forms with clean water. Keep surfaces coated prior to placement of concrete.

3.05 INSERTS, EMBEDDED PARTS, AND OPENINGS

A. Provide formed openings where required for items to be embedded in passing through concrete work.

B. Locate and set in place items which will be cast directly into concrete.

C. Coordinate with work of other sections in forming and placing openings, slots, reglets, recesses, sleeves, bolts, anchors, other inserts, and components of other work.

D. Install accessories in accordance with manufacturer's instructions, straight, level, and plumb. Ensure items are not disturbed during concrete placement.

E. Install waterstops continuous without displacing reinforcement, except as noted.

F. Provide temporary ports or openings in formwork where required to facilitate cleaning and inspection. Locate openings at bottom of forms to allow flushing water to drain.

G. Close temporary openings with tight fitting panels, flush with inside face of forms, and neatly fitted so joints will not be apparent in exposed concrete surfaces.

3.06 FORM CLEANING

A. Clean forms as erection proceeds, to remove foreign matter within forms.

B. Clean formed cavities of debris prior to placing concrete.

C. Flush with water or use compressed air to remove remaining foreign matter. Ensure that water and debris drain to exterior through clean-out ports.

D. During cold weather, remove ice and snow from within forms. Do not use de-icing salts. Do not use water to clean out forms, unless formwork and concrete construction proceed within heated enclosure. Use compressed air or other means to remove foreign matter.

3.07 FORMWORK TOLERANCES

A. Construct formwork to maintain tolerances required by ACI 301.

3.08 FIELD QUALITY CONTROL

A. Inspect erected formwork, shoring, and bracing to ensure that work is in accordance with formwork design, and that supports, fastenings, wedges, ties, and items are secure.

3.09 FORM REMOVAL

A. Do not remove forms or bracing until concrete has gained sufficient strength to carry its own weight and imposed loads.

B. Loosen forms carefully. Do not wedge pry bars, hammers, or tools against finish concrete surfaces that will be exposed to view.

C. Store removed forms in a manner that surfaces in contact with fresh concrete will not be damaged. Discard damaged forms.

3.10 SCHEDULES

A. Walls and elevated slabs: Site fabricated plywood or steel forms.

End of Section 03 10 00

Section 03 20 00

CONCRETE REINFORCEMENT

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Reinforcing steel bars and accessories for cast-in-place concrete.

1.02 RELATED SECTIONS

A. Section 03 10 00 – Concrete Formwork

1.03 REFERENCES

A. ACI 117 – Tolerances for Concrete Construction and Materials and Commentary

B. ACI 301 – Structural Concrete for Buildings.

C. ACI 318 – Building Code Requirements For Reinforced Concrete.

D. ACI SP-66 – American Concrete Institute – Detailing

E. ASTM A 184 – Standard Specification for Fabricated Deformed Steel Bar Mats for Concrete Reinforcement

F. ASTM A 615 – Deformed and Plain Billet Steel Bars for Concrete reinforcement.

G. CRSI – Concrete Reinforcing Steel Institute – Manual of Practice.

H. CRSI 63 – Recommended Practice For Placing Reinforcing Bars.

I. CRSI 65 – Recommended Practice For Placing Bar Supports, Specifications and Nomenclature.

1.04 SUBMITTALS

A. Shop Drawings: Indicate bar sizes, spacings, locations, and quantities of reinforcing steel, bending and cutting schedules, and supporting and spacing devices.

1.05 QUALITY ASSURANCE

A. Perform Work in accordance with CRSI 63, 65 and Manual of Practice.

B. Submit certified copies of mill test report of reinforcement materials analysis.

1.06 COORDINATION

A. Coordinate with placement of formwork, formed openings, and other work.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Store reinforcement and accessories off the ground on platforms, skids, or other supports.

PART 2 PRODUCTS

2.01 REINFORCEMENT

A. Reinforcing Steel: ASTM A615, 60 ksi yield grade; deformed billet steel bars, unfinished.

B. Welded Wire Reinforcement: ASTM A884, 60 ksi yield grade.

2.02 ACCESSORY MATERIALS

A. Tie Wire: Minimum 16 gage annealed type.

B. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for strength and support of reinforcement during concrete placement conditions.

C. Chairs, Bolsters, Bar Supports, Spacers Adjacent to Exposed Concrete Surfaces: Plastic coated steel type; size and shape as required.

2.03 FABRICATION

A. Fabricate concrete reinforcing in accordance with CRSI Manual of Practice.

PART 3 EXECUTION

3.01 REINFORCEMENT

A. Clean reinforcing bars of loose mill scale, oil, earth, and other contaminants.

B. Place reinforcement in accordance with applicable ACI standards. Support and secure reinforcement against displacement. Do no deviate from required position. Do not continue reinforcement through expansion joints; place as indicated through contraction or construction joints.

C. Do not displace or damage vapor barrier.

D. Accommodate placement of formed openings.

E. Straightening and re-bending reinforcing steel:
   1. Do not straighten or re-bend metal 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.

F. Protection, spacing, and positioning of reinforcing steel: Conform to the current edition of ACI 318. Follow placing drawings and construction Drawings. Conform bar spacing and cover to ACI 117.

G. Location tolerance: Conform to the current edition of CRSI 65 and to the details and notes on the Drawings.

H. Splicing:
   1. Conform to Drawings and current edition of ACI 318.
   2. Stagger splices in adjacent bars.

I. Tying deformed reinforcing bars: Conform to current edition of "Placing Reinforcing Bars" published by CRSI and to details and notes on drawings.

J. Field bending:
   1. Field bending of reinforcing steel bars is not permitted when re-bending will later be required to straighten bars.
   2. Consult with Engineer prior to any concrete pour if there is a need to work out a solution to prevent field bending.

3.02 WELDED-WIRE REINFORCEMENT

A. Place welded-wire reinforcement in slabs as indicated. Reinforcement placed in slabs on grade must be continuous between construction, and contraction joints.

B. Lap splices in such a way that the overlapped area equals the distance between the outermost crosswires plus 2 inches.

C. Wire or clip together reinforcement at laps at intervals not to exceed 4 feet.

3.03 DOWEL INSTALLATION

A. Install dowels in slabs on grade at locations indicated and at right angles to joint being doweled. Accurately positon and align dowels parallel to the finished concrete surface before concrete placement.

3.02 FIELD QUALITY CONTROL

A. Testing will be performed under provisions of Section 01 45 23.

End of Section 03 20 00

SECTION 32 11 23

AGGREGATE BASE COURSE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Construction of aggregate base for asphaltic concrete paving and Portland cement concrete paving.

1.02 RELATED SECTIONS

A. Section 31 00 10 – Site Preparation
B. Section 31 00 20 – Earthwork
C. Section 31 05 16 – Aggregate Materials
D. Section 31 23 03 – Excavation, Backfill, and Compaction for Pavement
E. Section 32 13 14 – Portland Cement Concrete Trail
F. Section 32 16 14 – Curbs and Sidewalks

1.03 REFERENCES

A. ASTM International (ASTM) latest edition
   D 698 Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft^3 (600 kN.m/m^3))
   D 1557 Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft^3 (2,700 Kn.m/m^3))
   D 2216 Laboratory Determination of Water (Moisture) Content of Soil, Rock, and Soil-Aggregate Mixtures
   D 2487 Classification of Soils for Engineering Purposes
   D 4318 Liquid Limit, Plastic Limit, and Plasticity Index of Soils
   D 6938 In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)

B. American Association of State Highway and Transportation Officials (AASHTO) latest edition
   T 88 Particle Size Analysis of Soils
   T 310 Density of Soil and Soil-Aggregate In-Place by Nuclear Methods

C. Arkansas 2014 Standard Specification for Highway Construction

1.04 QUALITY ASSURANCE

A. An independent testing laboratory, selected by Owner or Owner's Representative and paid by Owner, shall be retained to perform construction testing of in-place base course for compliance with requirements for thickness, compaction, density, and tolerances. Paving base course tolerances shall be verified by rod and level readings on not more than 50-ft centers and shall not be more than 0.05-feet above subgrade design elevation to allow for paving thicknesses as indicated on Construction Drawings. Contractor shall provide instruments and suitable benchmark.

B. Following tests shall be performed on each type of material used as base course material:

1. Moisture and Density Relationship: ASTM D 698 (or ASTM D 1557)
2. Mechanical Analysis: AASHTO T 88
3. Plasticity Index: ASTM D 4318
4. Base material thickness: Perform 1 test equally spaced for every 20,000 sq. ft of in-place base material.
5. Base material compaction: Perform 1 test equally spaced for each lift for each 20,000 sq. ft of in-place base material.
6. Test each source of base material for compliance with applicable state highway department specifications.

C. Field density tests for in-place materials shall be performed in accordance ASTM D 6938 (Direct Transmission).

D. The independent testing laboratory shall prepare reports that indicate test location, elevation data, and test results. Owner, Owner's Representative, and Contractor shall be provided with copies of reports within 96 hours of time test was performed. In event that test performed fails to meet Specifications; Owner or his designated representative and Contractor shall be notified immediately by the independent testing laboratory.

E. All costs related to retesting due to test failures shall be paid for by Contractor at no additional expense to Owner. Owner reserves right to employ an independent testing laboratory and to obtain a second opinion when deemed necessary. Contractor shall provide free access to site for testing activities.

PART 2 PRODUCTS

2.01 MATERIALS

A. Aggregate base course materials: conform to the requirements for paving base course of the Highway Department of the State where the project is located; or, if that is not appropriate, Class 7 Base as defined in Table 1 of Section 31 05 16.

B. Submit materials certificate to the independent testing laboratory which is signed by materials producer and Contractor, certifying that materials comply with, or exceed, requirements specified.

2.02 DELIVERY, STORAGE, AND HANDLING

A. Granular material shall be delivered in trucks from the source and directly placed in the location required for construction, with no intermediate storage or stockpiling required, as far as practical.

B. Delivery of materials to be paid for by weight or volume measured in haul trucks shall include a truck ticket delivered to Owner or Owner's Representative.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that the subgrade has been inspected, tested, and gradients and elevations are correct, dry, and properly prepared in accordance with Section 31 23 03.

3.02 AGGREGATE BASE COURSE CONSTRUCTION

A. Place base course material on completed and approved subgrade or existing base that has been bladed to substantially conform to the grade and cross sections indicated on the Drawings.

B. Subgrade shall be free from excess or deficiency of moisture at the time of placing base course material. There shall be no standing water on subgrade. Do not place base course material on frozen subgrade.

C. Perform base course construction in manner that will drain the surface properly and prevent runoff from adjacent areas from draining onto base course construction.

D. Place aggregate on 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 indicated on the Drawings. If the specified compacted depth of base course exceeds 6 inches, construct base in two or more layers of approximately equal thickness. The maximum compacted thickness of any one layer shall not exceed 6 inches.

E. Compact by any satisfactory method that will produce specified density. Maintain aggregate substantially at optimum moisture content during mixing, spreading,

and compacting operations. Add water or aerate to dry as necessary. Maintain specific grade and cross section by blading throughout compaction operation.

F. Unless indicated otherwise on the Drawings, compact material in each layer to a density of not less than 98 percent of maximum density at optimum moisture content in accordance with AASHTO T 180. Compact aggregate across full width of application.

G. Spread base course material the same day that it is hauled. Do not use any base course material that becomes contaminated with the underlying strata. Perform spreading in such a manner that no segregation of coarse and fine particles nor nests or hard areas caused by dumping aggregate on subgrade will exist. Take care to prevent mixing of subgrade with base course material in blading and spreading.

H. When base course is placed adjacent to an existing or newly constructed asphalt surface course, do not dump or mix aggregate on the pavement surface. Use mechanical spreading equipment, if necessary, to place base course on subgrade.

I. If sufficient working space is not available to allow proper aeration or addition of water to base course material, mix the base course material by any satisfactory method prior to placement.

J. Maintain base course in a satisfactory condition until accepted, and afterward until paving courses are constructed.

3.03 ACCEPTANCE

A. Acceptance will be based on meeting compaction requirements and having the finished surface to within 0.5 inches of plan grade and having the specified thickness.

B. Acceptance requires that the completed base course surface provide positive drainage according to the planned final pavement surface with exactly the correct thickness of asphalt. If it appears, in the judgment of the Owner’s Representative, that paving course(s) placed correctly will not drain because the base course elevations are not correct, additional work on the base course will be required

C. If enough time lapses between construction of the base course and construction of pavement courses such that the continued satisfactory condition of the base course is questionable, the Owner’s Representative may require that more work be done to the base course and that its acceptability be demonstrated again.

END OF SECTION 32 11 23

SECTION 32 31 29

WOOD FENCE – 3 RAIL

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Furnishing and erecting 3-rail wood fences.

1.02 REFERENCES

A. ASTM International (ASTM)
1. F 537, "Wood fences".

1.03 SUBMITTALS

A. Submit manufacturer's information about the fence and its components.

1.04 QUALITY ASSURANCE

A. Fencing materials shall be manufactured by a manufacturer regularly engaged in producing fencing materials complying with the specified standards.

B. Installation of fencing shall be accomplished with workers experienced in construction of the type of fencing specified.

PART 2 PRODUCTS

2.01 MATERIALS

A. Materials shall be new, and shall comply with ASTM F 537.

B. Wood posts and rails, shall be the length and diameter indicated in the details on the Drawings, and shall be seasoned, sound, and reasonably straight, rough-sawn cedar. All exposed wood shall be stained, color to be approved by Engineer.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine fencing materials after receipt at the site. Remove damaged materials.

3.02 ERECTION

A. Erect fence parallel to and at a distance from the right-of-way indicated on the Drawings. Fence grade shall generally follow finished ground contour, and shall present a uniform appearance. Minor grading along the fence line may be necessary to obtain the desired uniformity in fence grade. Fence alignment may be adjusted by Engineer or Owner in consultation with property owners.

B. Wooden posts to be set in concrete.

C. Set posts plumb.

D. Where new fence joins an existing fence, attach the two in a satisfactory manner, with end posts being set on the new fence.

3.03 FIELD QUALITY CONTROL

A. Completed fence will be checked by Engineer for: correct location and installation and stain.

3.04 ADJUSTING

A. Adjust fence as required to obtain a smooth installation without unsightly grade and alignment changes not required per the Drawings.

End of Section 32 31 29

SECTION 33 02 00

PIPE LAYING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Installation of storm sewer pipe, water pipe, and appurtenances.

1.02 RELATED WORK

A. 31 00 20 - Earthwork
B. 31 23 02 - Excavation, Backfill, and Compaction for Utilities
C. 33 41 00 - Storm Sewer System

1.03 REFERENCES

A. AASHTO
   1. T 99, "Standard Method of Test for the Moisture-Density Relations of Soils Using a 5.5-lb. Rammer and a 12-in. Drop".
   2. T 180, "Standard Method of Test for the Moisture-Density Relations of Soils Using a 10-lb. Rammer and an 18-in. Drop".

B. ARDOT Standard Specifications for Highway Construction
   1. Section 303, "Aggregate Base Course".

C. ASTM
   1. D 448, "Standard Classification for Sizes of Aggregate for Road and Bridge Construction".
   2. D 2922, "Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth),

D. AWWA
   1. C600, “Installation of Ductile-Iron Water Mains and Their Appurtenances.

1.04 QUALITY ASSURANCE

A. Provide skilled workers to ensure proper handling, jointing, and embedment of pipe.

B. Methods of Testing
   1. Moisture density relations of material shall be determined in the laboratory in accordance with AASHTO T 99 or T 180, as specified.
   2. Field density of backfill shall be determined in accordance with ASTM D 2922.

PART 2 MATERIALS

2.01 BEDDING MATERIALS

A. Bedding materials, used for bedding, haunching, and initial backfill in the locations indicated on the Drawings, shall conform to one of the following materials. Local practices, as defined in approved local specifications for water, wastewater, and drainage piping, shall govern over these requirements.
   1. Grit: a local designation for a crushed stone material, available from quarries in northwest Arkansas, may be used for water and drainage piping where groundwater is not encountered. Approximate gradation of grit is: 100 percent passing a 3/8th sieve, and 0 to 10 percent passing a No. 200 sieve.
   2. Natural pea gravel: may be used as an alternative bedding material for drainage piping, subject to approval of Engineer.
   3. Sand: well graded natural sand, free of gravel, angular pieces, organic matter, and other deleterious substances; may be used for drainage piping.
   4. Class 8 Base material per ARDOT, Section 303, Table 303-1; may be used for drainage piping.
   5. Materials meeting ASTM D 448 Size No 67; may be used for water and drainage piping.
   6. Concrete rock meeting the gradation requirements of ARDOT Section 802.02 Materials (c) Coarse Aggregate; may be used for drainage piping.

PART 3 EXECUTION

3.01 GENERAL

A. Examine pipe and appurtenances for compliance with specifications.

B. Reject pipe and appurtenances not in compliance with specifications.

C. Remove foreign matter from pipe and appurtenances before lowering into excavated area.

3.02 PIPE HANDLING

A. Pipe shall be off loaded at site as close to location of installation as possible, subject to constraints of traffic control and availability of land for construction. Pipe shall not be dropped from carrier deck. Stack pipe according to manufacturer's recommendations.

B. Lower pipe into trench after placement of bedding using slings and mechanical equipment. Workers shall be present in trench, in accordance with safety practices, to direct pipe into place.

3.03 PIPE BEDDING, HAUNCHING, AND INITIAL BACKFILLING

A. For PVC pipe and fittings, and corrugated metal pipe, place 6 inches minimum of bedding between excavated trench bottom or stabilized trench bottom and bottom of pipe or fitting as bedding. Provide depression in bedding for joints so that barrel of pipe or fitting rests on grit.

B. For ductile-iron pipe and appurtenances, place 6 inches minimum of granular material between excavated trench bottom or stabilized trench bottom and bottom of pipe or appurtenance as bedding. Provide depression in granular material for joints so that barrel of pipe or fitting rests on bedding.

C. Place bedding material in 6 inch maximum layers, compacted to 85 percent of maximum proctor density to spring line of pipe as haunching, and to top of pipe as initial select backfill, ensuring that material is placed against haunch area of pipe.

D. For reinforced concrete pipe and appurtenances, place 4 inches of granular material between the excavated trench bottom or stabilized trench bottom and bottom of pipe or appurtenance as bedding. Provide depression in bedding for joints so that barrel of pipe or appurtenance rests on bedding. No haunching is required for reinforced concrete pipe unless indicated otherwise on the Drawings. Initial backfill shall be job excavated select material.

3.04 JOINTING

A. Place pipe and appurtenances to planned line and elevation.
   1. Place drainage pipe from low end to high end with pipe bells facing upstream.
   2. Place potable water pipe with bells facing the direction of laying.

3. Cover open end of laid pipe whenever pipe laying is interrupted to prevent rodents and debris from entering pipe.

B. Prepare pipe before jointing operations in accordance with manufacturer's recommendations. Place gasket in location marked.

C. Shove pipe home into joint using mechanical equipment as recommended by manufacturer. Pipe barrel shall be inserted into joint to appropriate mark, if available on pipe.

3.05 BACKFILLING

A. Pipe Covering
   1. Place minimum 6 inches of granular material (the same material used for haunching) over top of PVC pipe and fittings.
   2. Place minimum 6 inch of granular material over top of iron pipe and fittings.
   3. Place job excavated select material from bedding of reinforced concrete pipe and compact to 90 percent of standard proctor density when groundwater is not encountered.
   4. When groundwater is encountered in storm sewer pipe construction, place concrete rock for a minimum of 18 inches above the underdrain pipe as initial backfill, and compact to 90 percent standard proctor density.

B. See Section 31 00 20 for remainder of backfill.

C. Existing Utility Crossings: Expose utilities located between two manholes 24 hours minimum before the downstream manhole is constructed. Wherever possible sewer will be adjusted to provide necessary clearance.

3.06 THRUST BLOCKING

A. Construct thrust blocking at all pressure pipe fittings, including bends and reducers, as indicated on the Drawings.

B. Construct thrust blocking between pipe and undisturbed earth. If trench conditions do not exist, either extend thrust blocking or backfill over excavation and dig new trench to obtain trench conditions.

End of Section 33 02 00

SECTION 33 41 00

STORM SEWER SYSTEM

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Storm water drainage piping.

1.02 RELATED SECTIONS

A. 01 45 01 - General Requirements for Quality Control
B. 31 00 11 - Excavation Safety
C. 31 80 00 - General Requirements for Site Restoration
D. 33 02 00 - Pipe Laying

1.03 REFERENCES

A. American Association of State Highway and Transportation Officials (AASHTO)

1. M 105 – Gray Iron Castings.
2. M 170 – Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe.
3. M 198 – Joints for Circular Concrete Sewer and Culvert Pipe Using Flexible Watertight Gaskets.
4. M 206 – Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
5. M 252 – Corrugated Polyethylene Drainage Pipe
6. M 273 – Pre-cast Reinforced Concrete Box sections for Culverts, Storm Drains, and Sewers with Less Than 2 ft of Cover Subject to Highway Loadings.
7. M 294 – Corrugated Polyethylene Pipe

B. American Society for Testing and Materials (ASTM)

1. C 443 Joints for Circular Concrete Sewer and Culvert Pipe, Using Rubber Gaskets.

C. Arkansas Department of Transportation

1. Arkansas 2014 Standard Specifications for Highway Construction, Sections 606, 609, and 611.

1.02 SUBMITTALS

A. Product Data: Provide data on culverts, box culverts, and joint material.

B. Submit a manufacturer's certificate that the product was manufactured, tested, and supplied in accordance with this specification.

1.03 QUALITY ASSURANCE

A. Materials furnished shall be manufactured by a manufacturer regularly engaged in providing storm water drainage culverts complying with the specified standards.

B. Materials shall be furnished from those sources listed on the ARDOT Qualified Products List.

C. Provide a certificate from the manufacturer of circular concrete pipe stating that the products supplied conform to the specified standard.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Culvert sections shall be received at site and immediately inspected for damage and defects. If grading work is essentially complete, distribute pipe in the approximate locations where it will be installed. If grading work is not complete, handle and store pipe in such a way to minimize damage.

PART 2 PRODUCTS

2.01 REINFORCED CONCRETE PIPE

A. Circular Reinforced Concrete Culverts: AASHTO M 170, Type 3, minimum wall thickness B, of the sizes indicated on the Drawings; either bell and spigot or tongue and groove pipe ends are acceptable.

B. Reinforced Concrete Arch Culverts: AASHTO M 206, class A-III, of the sizes indicated on the Drawings; either bell and spigot or tongue and groove pipe ends are acceptable.

C. Joint gaskets: Joint gaskets shall be bitumen type complying with AASHTO M 198, Type A or B, except that Type B shall have a specific gravity of 1.20 to 1.45. Joints shall be "Ram-Nek", ASTM C 990 or equal. When a primer is recommended by the manufacturer to be used with the gasket, primer shall be as specified by gasket manufacturer.

D. Flared End Sections: of the same material and strength as the pipe specified.

2.02 ACCESSORIES

A. Any required accessories shall be manufactured of same materials, to similar strength and dimensions as for adjoining pipe.

2.03 SOURCE QUALITY CONTROL

A. Manufacturing plant shall have a standing quality control program in place that performs the tests required by AASHTO M 170 or AASHTO M 294.

B. Factory testing of the specific units to be supplied for this project is not required, except as they may be tested as part of standing quality control policy. Engineer may require testing of specific units to be supplied for this project if there is evidence that the units supplied do not conform with the specified standards.

PART 3 EXECUTION

3.01 STORM SEWERS

A. Provide trenching, bedding, and backfilling for storm sewer piping and as described in Section 33 02 00.

B. Begin pipe laying at the downstream end, with bell ends or outside circumferential laps facing upstream. Correct, at no additional cost to Owner, pipe not in true alignment, required grade, or that shows settlement after laying.

C. Join pipe sections such that ends are fully entered and inner surfaces are reasonably flush and even. Where an insertion line is marked on the pipe, shove joint to the insertion mark, and no farther.

D. Surfaces of pipe upon or against which joint seal gaskets may bear shall be smooth, free of spalls, cracks, fractures, and imperfections that would adversely affect performance of the joint. Apply primer to pipe surfaces as recommended by gasket or pipe manufacturer.

E. When used, gaskets shall fit snugly into the annular space between the overlapping surfaces. Bitumen/butyl plastic gasket shall be pressed firmly to the to the surface of the pipe joint around the entire circumference of the joint; all protective covers removed; and the pipe forced into connection until gasket material fills the joint space.

F. Accomplish final joining of pipes by either pushing or pulling, by approved mechanical means, each joint of the pipe as it is laid. In cold weather, follow manufacturer's instructions concerning warming gasket material.

G. Cut pipe protruding through structure walls to be flush with inside face of structure walls.

3.02 DRAINAGE STRUCTURES

A. Construct drop inlets, junction boxes and drip inlet extensions with reinforced or non-reinforced concrete, as shown on the plans. Engineer may make slight adjustments in the plan locations of drop inlets and junction boxes as required by project conditions.

B. Concrete shall not be placed until Engineer has inspected the forms and the placement of reinforcing steel and rings or frames.

C. Round monolithic drop inlets may have the floors cast monolithically with the walls. All other concrete floors shall be placed at least 24 hours before beginning construction of the walls.

D. Walls shall be constructed to form a tight joint with the floor and around the inlet and outlet pipes. Pipes shall be cut flush with the inside surfaces of the walls.

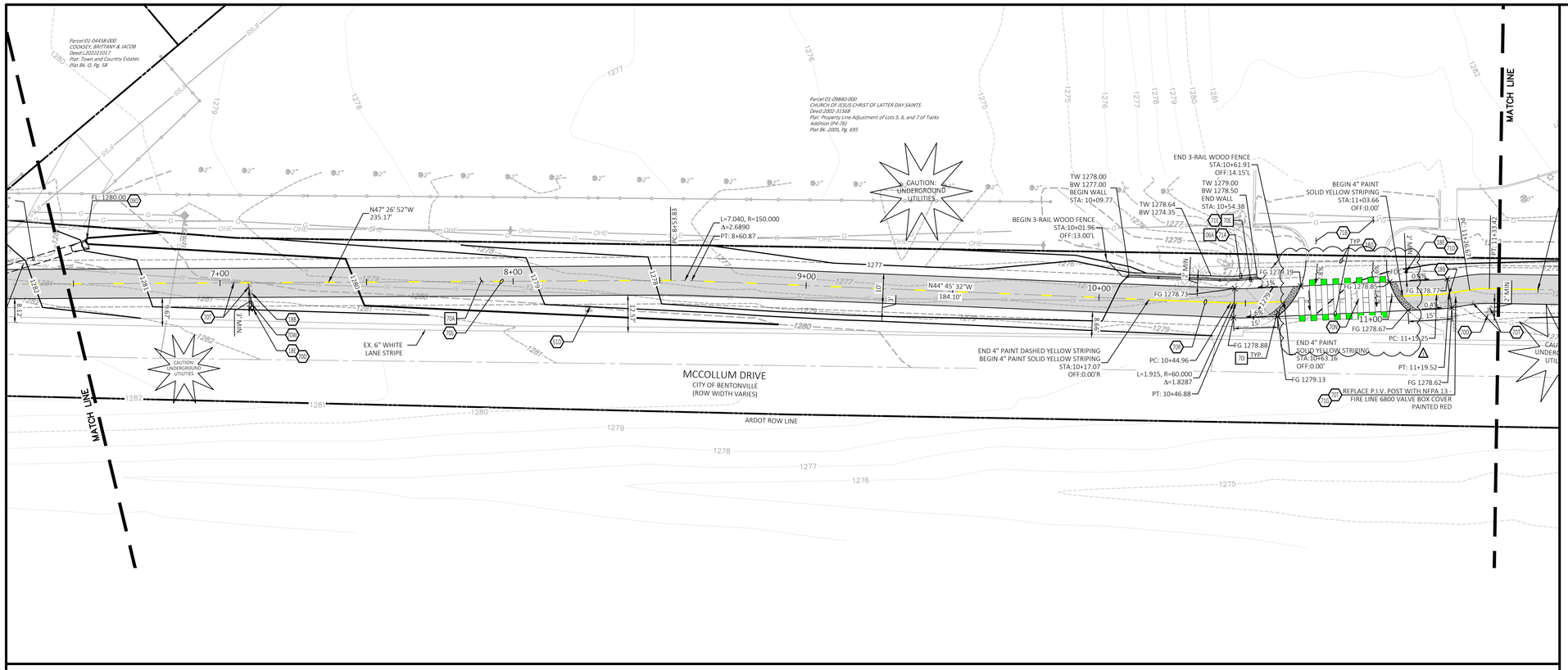
E. The faces of drop inlets and drop inlet extensions shall be placed as a part of the curb in order to preserve the proper alignment.

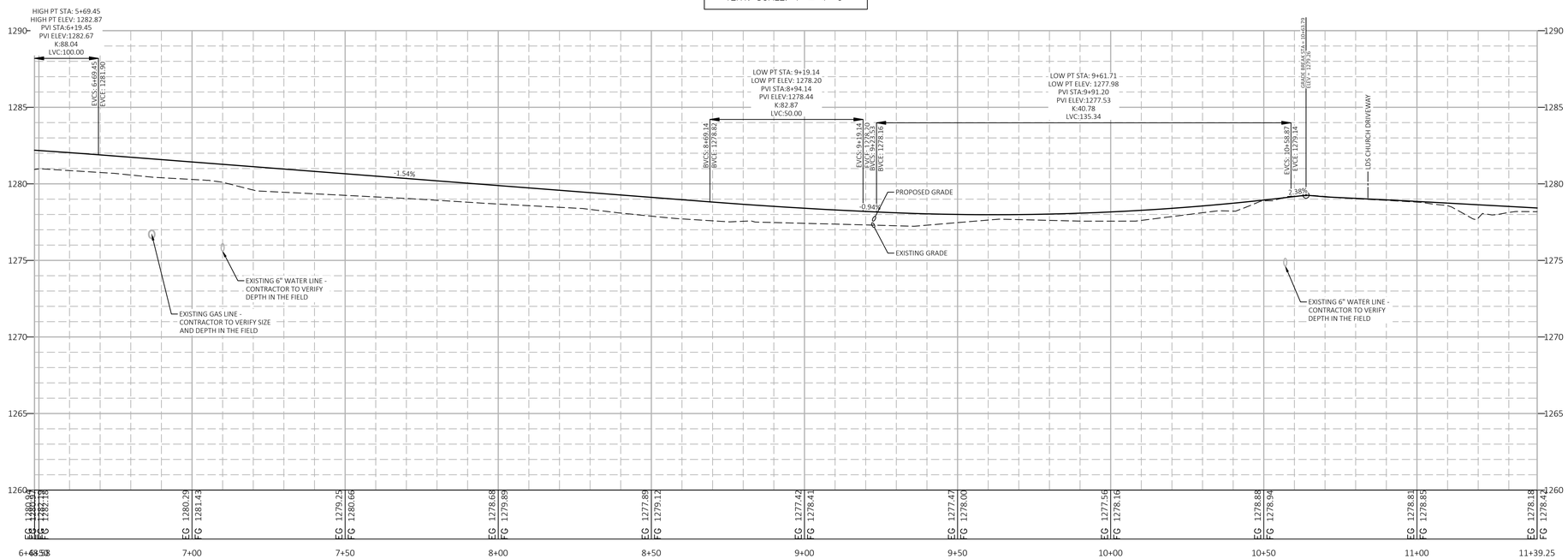
F. Metals rings or frames shall be set accurately to the finished elevations so that no subsequent adjustments will be necessary. Set rings or frames in a full mortar bed with firm bearing on the walls or securely fastened to the forms so that no movement will occur when concrete is placed.

G. Iron castings for rings and covers or grates and frames shall not be painted.

H. Backfilling around structures shall be in accordance with Section 31 23 01.

End of Section 33 41 00





Know what's **below.**
Call before you dig.

0 20' 30' 40'
SCALE IN FEET

EXISTING LEGEND

- Boundary Line
- Right-of-Way Line
- Gas Line
- Overhead Electric Line
- Sanitary Sewer Line
- Storm Drainage Pipe
- Water Line
- Tree Line
- Fence (Chainlink)
- Fence (Wire/Metal)
- Fence (Wood)
- Existing Major Contour
- Existing Minor Contour
- Clean out
- Sewer manhole
- Drainage manhole
- Grate inlet(square)
- Backflow preventer
- Fire department connector
- Fire hydrant
- Deciduous tree
- Light pole structure
- Water riser
- Water meter
- Water valve
- Gas meter
- Gas riser
- Electric meter
- Guy wire
- Light pole straight
- Light on utility pole
- Electrical riser
- Utility pole
- Telephone riser
- Telephone sign
- Telephone vault
- Fiber optic warning sign
- Fiber optic vault
- Riser cable tv
- Mailbox
- Sign

PROPOSED LEGEND

- PROPERTY LINE
- BLOCK RETAINING WALL
- 3' TRAIL SHOULDER
- XXXX PROPOSED MINOR CONTOUR
- XXXX PROPOSED MAJOR CONTOUR
- 3-RAIL FENCE
- RIGHT OF WAY LINE
- FLOW LINE
- STORM PIPE
- GRATE INLET
- JUNCTION BOX
- FLARED END SECTION
- CONCRETE TRAIL
- LIMITS OF SIDEWALKS AND CONCRETE APRONS
- POST INDICATOR VALVE
- FIRE HYDRANT
- ELECTRICAL RISER
- FIBER OPTIC VAULT
- FIRE DEPARTMENT CONNECTION FDC

SITE NOTES

09D FLARED END SECTION.
18B EXISTING TO BE RELOCATED.
18D MATCH EXISTING PAVEMENT ELEVATIONS.
18E POINT OF RELOCATION
51D PROTECT EXISTING STRUCTURES AND/OR PIPES DURING DEMOLITION AND CONSTRUCTION PHASES.
70D NOTE TO CONTRACTOR: ENSURE CENTER OF STEAMER CAP IS 18 TO 24 INCHES ABOVE FINAL GRADE.
70E EXISTING TO BE PROTECTED.
70N 24" X 10' THERMOPLASTIC WHITE @ 4' O.C. CROSSWALK WITH 24" X 24" CYCLEGRIP MMAX E-F BIKE LANE GREEN ELEPHANTS FEET.
70P CONTRACTOR TO REPLACE ASPHALT WITH FULL DEPTH RECONSTRUCTION TO MATCH EXISTING SECTION.
70R 4" PAINT SOLID YELLOW STRIPING. PER MUTCD REQUIREMENTS
70S 4" PAINT DASHED YELLOW STRIPING. PER MUTCD REQUIREMENTS.
70T ADJUST STRUCTURE TO MATCH FINISH GRADE.
70W 6" WATER LINE AWWA C-900 DR-14 PVC PRESSURE CLASS 305 WITH INTEGRALLY MOLDED BELL ENDS AND WATER FITTINGS TO BE CELDI M.J. PER BENTONVILLE WATER UTILITIES DEPARTMENT SPECIFICATIONS.
71A SEGMENTAL BLOCK RETAINING WALL, CONTRACTOR TO PROVIDE STRUCTURAL DESIGN.
71B CONTRACTOR TO COORDINATE PRIVATE DRIVE ENTRANCE CLOSURE SCHEDUIUNG AND DURATION WITH PROPERTY OWNERS AND CITY OF BENTONVILLE.
71D CONTRACTOR TO COORDINATE WITH PROPERTY OWNER AND FIRE DEPARTMENT PRIOR TO RELOCATION.
71E CONTRACTOR TO USE CAUTION TO AVOID STORM PIPES WITH FENCE POSTS.
71G CONTRACTOR TO PROVIDE T-WRENCH TO CHURCH OF JESUS CHRIST OF LATTER DAY SAINTS PER NFPA STANDARDS.

SITE DETAILS

06A SEGMENTAL RETAINING WALL
70A CONCRETE MULTI-USE TRAIL
70E 3-RAIL WOOD FENCE
70I DETECTABLE WARNING DEVICE

CEI ENGINEERING ASSOCIATES, INC.
2600 NE 11TH ST, SUITE 300
BENTONVILLE, AR 72712
PHONE: (479) 273-9472
FAX: (479) 273-0844

100% SET FOR BID

REVISION

NO.	DESCRIPTION	DATE
1	ADDENDUM 1	2026/05/18

BENTONVILLE MCCOLLUM RD. SIDEPATH PH. 2 (S)
JOB NO. 090770
F.A.P. NO. TAPU-9036(32)
BENTONVILLE, ARKANSAS

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 17418
JENNA J. STAMPS
05/22/2026

PROFESSIONAL OF RECORD	AJKS
PROJECT MANAGER	RYE
DESIGNER	PAT
CEI PROJECT NUMBER	33832
DATE	5/20/2026
REVISION	ADD-1

PLAN & PROFILE 3
SHEET TITLE

SHEET NUMBER
C1.3

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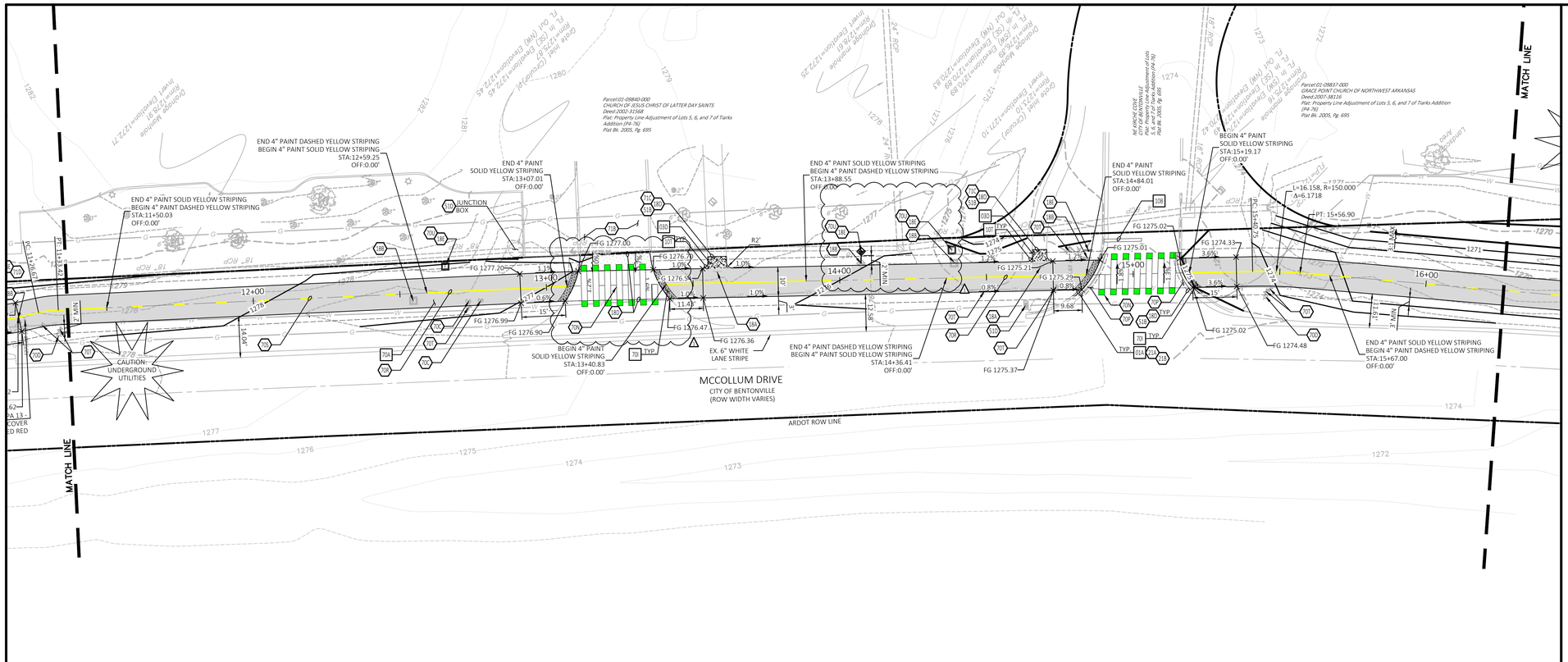

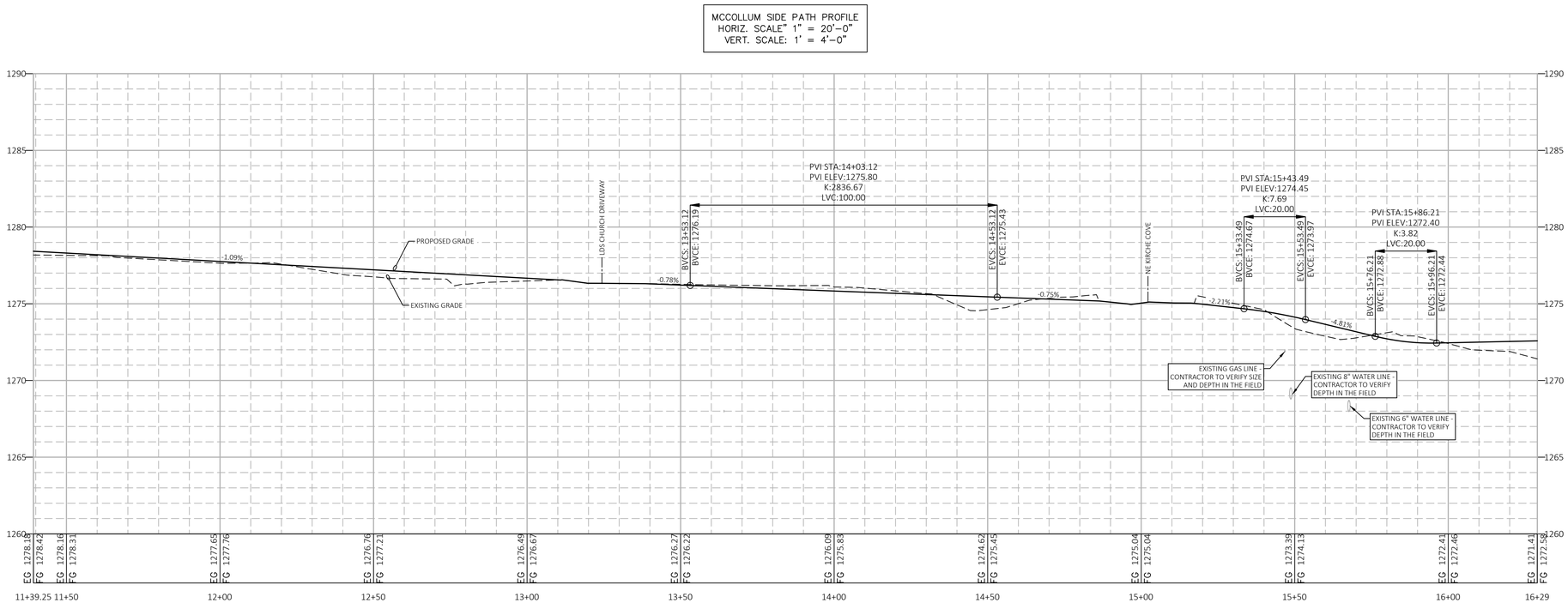

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SCALE IN FEET

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- Storm Drainage Pipe
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- Tree Line
- Fence (Chainlink)
- Fence (Wire/Metal)
- Fence (Wood)
- Existing Major Contour
- Existing Minor Contour
- Clean out
- Sewer manhole
- Drainage manhole
- Grate inlet(square)
- Backflow preventer
- Fire department connector
- Fire hydrant
- Deciduous tree
- Light pole structure
- Water riser
- Water meter
- Water valve
- Gas meter
- Gas riser
- Electric meter
- Guy wire
- Light pole straight
- Light on utility pole
- Electrical riser
- Utility pole
- Telephone riser
- Telephone sign
- Telephone vault
- Fiber optic warning sign
- Fiber optic vault
- Riser cable tv
- Mailbox
- Sign

PROPOSED LEGEND

- PROPERTY LINE
- BLOCK RETAINING WALL
- 3' TRAIL SHOULDER
- XXXX PROPOSED MINOR CONTOUR
- XXXX PROPOSED MAJOR CONTOUR
- 3-RAIL FENCE
- RIGHT OF WAY LINE
- FLOW LINE
- STORM PIPE
- GRATE INLET
- JUNCTION BOX
- FLARED END SECTION
- CONCRETE TRAIL
- LIMITS OF SIDEWALKS AND CONCRETE APRONS
- POST INDICATOR VALVE
- FIRE HYDRANT
- ELECTRICAL RISER
- FIBER OPTIC VAULT
- FIRE DEPARTMENT CONNECTION
- FDC

SITE NOTES

- 18A EXISTING TO BE REMOVED.
- 18B EXISTING TO BE RELOCATED.
- 18D MATCH EXISTING PAVEMENT ELEVATIONS.
- 18E POINT OF RELOCATION.
- 21A TAPER CURB TO MATCH EXISTING CURB.
- 21B TAPER CURB FROM 6 INCHES TO 0 INCHES OVER 2 FEET.
- 51B LIMITS OF SAWCUT AND PAVEMENT REMOVAL.
- 51D PROTECT EXISTING STRUCTURES AND/OR PIPES DURING DEMOLITION AND CONSTRUCTION PHASES.
- 70C ADJUST STRUCTURE TO MATCH FINISHED GRADE IF WITHIN THE BOUNDS OF PAVED SIDEPATH. OTHERWISE STRUCTURE TO BE SET AT 3" ABOVE FINISHED GRADE.
- 70D NOTE TO CONTRACTOR: ENSURE CENTER OF STEAMER CAP IS 18 TO 24 INCHES ABOVE FINAL GRADE.
- 70N 24" X 10' THERMOPLASTIC WHITE @ 4' O.C. CROSSWALK WITH 24" X 24" CYCLEGRIP MMAX E-F BIKE LANE GREEN ELEPHANTS FEET.
- 70P CONTRACTOR TO REPLACE ASPHALT WITH FULL DEPTH RECONSTRUCTION TO MATCH EXISTING SECTION.
- 70R 4" PAINT SOLID YELLOW STRIPING. PER MUTCD REQUIREMENTS
- 70S 4" PAINT DASHED YELLOW STRIPING. PER MUTCD REQUIREMENTS.
- 70T ADJUST STRUCTURE TO MATCH FINISH GRADE.
- 70U CONTRACTOR TO COORDINATE RELOCATION OF FRANCHISE UTILITY SERVICES PRIOR TO CONSTRUCTION.
- 71B CONTRACTOR TO COORDINATE PRIVATE DRIVE ENTRANCE CLOSURE SCHEDULING AND DURATION WITH PROPERTY OWNERS AND CITY OF BENTONVILLE.
- 71C CONTRACTOR TO REMOVE SIDEWALK UP TO NEAREST JOINT WITHIN CITY OF BENTONVILLE RIGHT OF WAY.

SITE DETAILS

- 01A TYPE A CONCRETE CURB AND GUTTER
- 03D CONCRETE SIDEWALK
- 10B STOP BAR
- 10T SIDEWALK RADII CONNECTION
- 23A GRATE INLET
- 70A CONCRETE MULTI-USE TRAIL
- 70I DETECTABLE WARNING DEVICE

CEI ENGINEERING ASSOCIATES, INC.
2600 NE 11TH ST, SUITE 300
BENTONVILLE, AR 72712
PHONE: (479) 273-9472
FAX: (479) 273-0844

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REVISION

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1	ADDENDUM 1	2026/05/18

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LICENSED PROFESSIONAL ENGINEER
No. 17418
ANNA J. STAMPS
05/22/2026

PROFESSIONAL OF RECORD	AJKS
PROJECT MANAGER	RYE
DESIGNER	PAT
CEI PROJECT NUMBER	33832
DATE	5/20/2026
REVISION	ADD-1

PLAN & PROFILE 4
SHEET TITLE

SHEET NUMBER
C1.4

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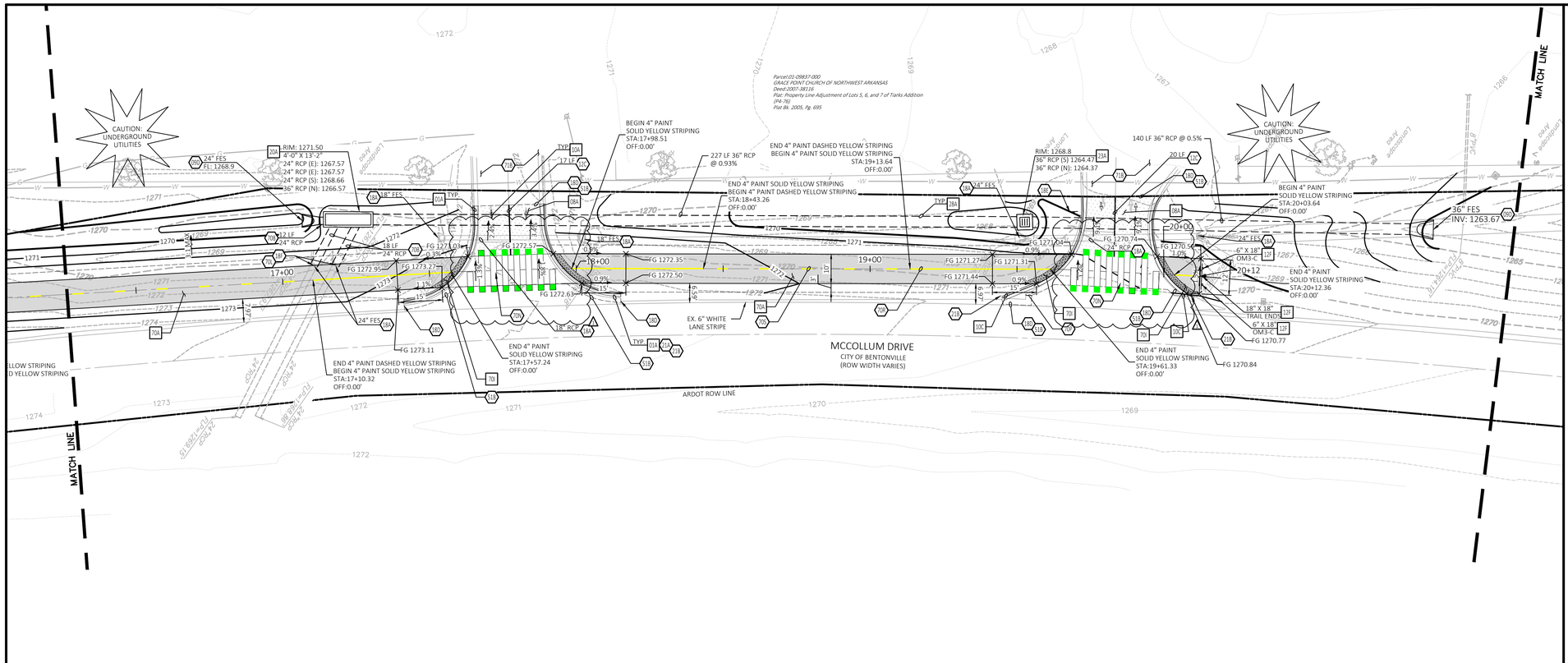

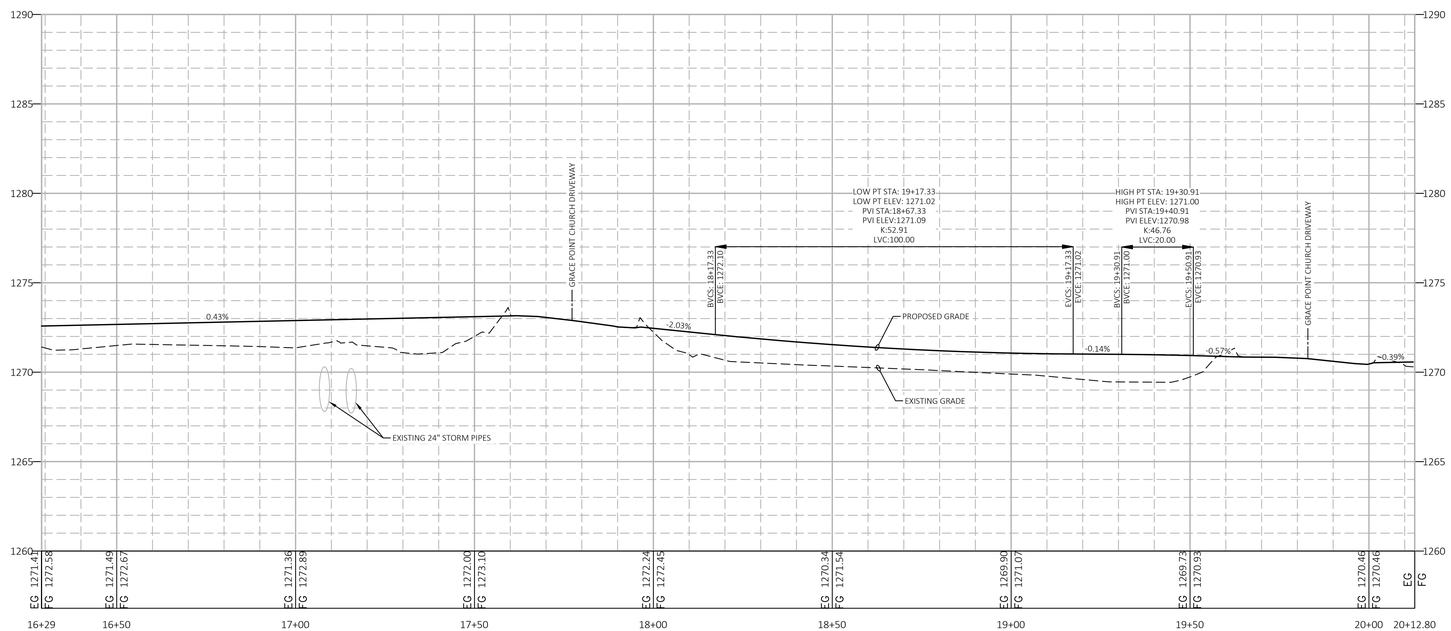

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- Electrical riser
- Utility pole
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- Telephone sign
- Telephone vault
- Fiber optic warning sign
- Fiber optic vault
- Riser cable tv
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- Sign

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- LIMITS OF SIDEWALKS AND CONCRETE APRONS
- POST INDICATOR VALVE
- FIRE HYDRANT
- ELECTRICAL RISER
- FIBER OPTIC VAULT
- FIRE DEPARTMENT CONNECTION
- FDC

SITE NOTES

09D FLARED END SECTION.
12C 4 INCH REFLECTIVE WHITE LANE STRIPES.
18A EXISTING TO BE REMOVED.
18D MATCH EXISTING PAVEMENT ELEVATIONS.
18E POINT OF RELOCATION.
18F CONNECT TO EXISTING STORM DRAIN PIPE.
19B EXISTING TO BE ABANDONED IN PLACE. ABANDONED PIPE MUST BE FILLED WITH A SUITABLE CLEAN MATERIAL (SUCH AS CLSM FLOWABLE FILL CONCRETE).
23F ADJUST MANHOLE RIM TO MATCH FINISH GRADE.
21A TAPER CURB TO MATCH EXISTING CURB
21B TAPER CURB FROM 6 INCHES TO 0 INCHES OVER 2 FEET.
51B LIMITS OF SAWCUT AND PAVEMENT REMOVAL.
51D PROTECT EXISTING STRUCTURES AND/OR PIPES DURING DEMOLITION AND CONSTRUCTION PHASES.
70B PIPE EXTENSION, PIPE SLOPE TO MATCH EXISTING
70D NOTE TO CONTRACTOR: ENSURE CENTER OF STEAMER CAP IS 18 TO 24 INCHES ABOVE FINAL GRADE.
70E EXISTING TO BE PROTECTED.
70K ALL EXISTING WATER/SEWER INFRASTRUCTURE TO BE RELOCATED BY CITY OF BENTONVILLE
70L CONNECT WITH C-76 MORTAR JOINT
70M RAISE FDC AND POST INDICATOR VALVE TO MATCH PROPOSED GRADES
70N 24" X 10' THERMOPLASTIC WHITE @ 4' O.C. CROSSWALK WITH 24" X 24" CYCLEGRIP MMAX E-F BIKE LANE GREEN ELEPHANTS FEET.
70P CONTRACTOR TO REPLACE ASPHALT WITH FULL DEPTH RECONSTRUCTION TO MATCH EXISTING SECTION.
70R 4" PAINT SOLID YELLOW STRIPING. PER MUTCD REQUIREMENTS.
70S 4" PAINT DASHED YELLOW STRIPING. PER MUTCD REQUIREMENTS.
70T ADJUST STRUCTURE TO MATCH FINISH GRADE.
71B CONTRACTOR TO COORDINATE PRIVATE DRIVE ENTRANCE CLOSURE SCHEDULING AND DURATION WITH PROPERTY OWNERS AND CITY OF BENTONVILLE.

SITE DETAILS

01A TYPE A CONCRETE CURB AND GUTTER
08A STANDARD DUTY ASPHALT PAVING
10A TRAFFIC FLOW ARROW
10C FIRE LANE MARKING
12F SIGN BASE
20A JUNCTION BOX
23A GRATE INLET
28A STORM SEWER TRENCH AND BEDDING
70A CONCRETE MULTI-USE TRAIL
70I DETECTABLE WARNING DEVICE

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05/22/2026

PROFESSIONAL OF RECORD	AJKS
PROJECT MANAGER	RYE
DESIGNER	PAT
CEI PROJECT NUMBER	33832
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REVISION	ADD-1

PLAN & PROFILE 5

SHEET TITLE

SHEET NUMBER

C1.5