



P.O. BOX 850 | COWETA, OKLAHOMA 74429 | PH. (918) 486-2189 | FAX (918) 486-5366 | www.cityofcoweta-ok.gov

AGENDA - REGULAR MEETING
COWETA CITY COUNCIL

COWETA CITY HALL, 310 S. BROADWAY
MONDAY, NOVEMBER 06, 2023 6:00 P.M.

MEETING PROCEDURE: Comments on all scheduled agenda items will be heard immediately following the presentation by staff or the petitioner. Please wait until you are recognized by the Mayor and keep your comments as brief as possible. Individuals addressing the City Council must identify themselves by name prior to making any comments. The City Council will consider, discuss, and may take action on, approve, adopt, amend, reject, deny, table, or not take action on any item listed on this agenda after comments from staff and the City Council have been heard.

I. CALL TO ORDER

II. PLEDGE OF ALLEGIANCE

III. ROLL CALL

NAOMI HOGUE_____

LOGAN BROWN_____

HAROLD CHANCE_____

CAROLINE MARTIN_____

RANDY WOODWARD_____

IV. GENERAL CITY COUNCIL COMMENTS

(During the General City Council Comments section of the agenda, the City Council shall make no decision or take any action except as to request the City Manager to schedule the matter for Council discussion at a later date.)

V. CONSENT

(All matters under the "Consent Calendar" are considered by the City Council to be routine and will be enacted by one motion. Any Councilmember may, however, remove an item from consent by request.)

1. 2024 COWETA MUNICIPAL COURT CALENDAR

APPROVAL OF THE 2024 COWETA MUNICIPAL COURT CALENDAR.

Documents:

[COURT CALENDAR 2024.DOCX](#)

2. 2024 HOLIDAY SCHEDULE

APPROVAL OF THE 2024 HOLIDAY SCHEDULE FOR THE CITY OF COWETA.

Documents:

3. 2024 MEETING SCHEDULE

APPROVAL OF THE 2024 REGULAR PUBLIC MEETING DATES SCHEDULE OF THE COWETA CITY COUNCIL, COWETA PLANNING COMMISSION, COWETA BOARD OF ADJUSTMENT, AND THE COWETA LIBRARY BOARD.

Documents:

[MEETING SCHEDULE 2024.DOCX](#)

4. MINUTES OF THE REGULAR MEETING

APPROVAL OF THE MINUTES OF THE COWETA CITY COUNCIL REGULAR MEETING HELD ON OCTOBER 2, 2023.

Documents:

[231002-COUNCIL MINUTES.DOCX](#)

5. MINUTES OF THE SPECIAL MEETING

APPROVAL OF THE MINUTES OF THE COWETA CITY COUNCIL SPECIAL MEETING HELD ON OCTOBER 6, 2023.

Documents:

[231006-COUNCIL MINUTES-SPECIAL MEETING.DOCX](#)

VI. CONSIDER ITEMS REMOVED FROM CONSENT

VII. ADMINISTRATION

1. EUFAULA BRIDGE BID AWARD

REVIEW AND DISCUSSION OF BIDS RECEIVED, AND POSSIBLE ACTION TO AWARD A BID FOR THE NORTH EUFAULA AVENUE BRIDGE PROJECT, INCLUDING THE BASE BID AND ALTERNATE BID NUMBER 1 FOR THE INSTALLATION OF A WATER LINE, SUBJECT TO THE EXECUTION OF A CONTRACT AND FURNISHING OF ALL REQUIRED BONDS AND INSURANCE CERTIFICATES.

Documents:

[COWETA EUFAULA AVE RCB BID RECOMMENDATION 231026.PDF](#)
[COWETA EUFAULA AVE RCB BID TAB 231026 - SIGNED.PDF](#)
[COWETA N EUFAULA AVE BRIDGE PLANS SPECS IFC.PDF](#)

2. CHANGE ORDER- VILLAGE SUBDIVISION WATER LINE IMPROVEMENTS

RATIFICATION OF THE ASSISTANT CITY MANAGER'S APPROVAL OF CHANGE ORDER NO. 2 IN FAVOR OF STRONGHAND, LLC RELATED TO THE VILLAGE SUBDIVISION WATER LINE IMPROVEMENTS PROJECT, INCREASING THE COST OF THAT PROJECT FROM \$561,498.90 TO \$574,205.41, AN INCREASE OF \$12,706.51.

Documents:

[231106-STAFF REPORT CHANGE ORDER 2 VILLAGE WATERLINE PROJECT .PDF](#)
[CHANGE ORDER 2.PDF](#)

3. VILLAGE SUBDIVISION WATERLINE PROGRESS PAYMENTS

AFFIRMATION OF THE ASSISTANT CITY MANAGER'S APPROVAL OF PROGRESS PAYMENT NO. 4 IN THE AMOUNT OF \$78,159.53 AND THE ASSISTANT CITY MANAGER'S APPROVAL OF FINAL PAYMENT NO. 5 IN THE AMOUNT OF \$134,031.49 FOR THE VILLAGE SUBDIVISION WATERLINE PROJECT TO STRONGHAND, LLC. (JULIE CASTEEN, ASSISTANT CITY MANAGER).

Documents:

[231106-STAFF REPORT VILLAGES WATERLINE PROJECT PAYMENTS.PDF](#)

[PAY APP NO. 4.PDF](#)

[PAY APP NO. 5 FINAL.PDF](#)

4. RESOLUTION 2023-37, CDBG WATERLINE GRANT PROJECT CLOSEOUT

DISCUSSION AND POSSIBLE ACTION ON THE ADOPTION OF RESOLUTION 2023-37, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COWETA, OKLAHOMA, ACCEPTING THE COMPLETED CDBG VILLAGE SUBDIVISION WATER LINE REPLACEMENT PROJECT (#18229 CDBG 21). (JULIE CASTEEN, ASSISTANT CITY MANAGER).

Documents:

[231106-STAFF REPORT VILLAGES WATERLINE ACCEPTANCE.PDF](#)

[231106 RESO 2023-37 18829 CDBG 21 PROJECT CLOSEOUT.PDF](#)

[18229 CDBG 21 VILLAGE WATERLINE MAINTENANCE BOND.PDF](#)

5. POLICE SERVICE DOG

DISCUSSION AND POSSIBLE APPROVAL TO PURCHASE A POLICE SERVICE DOG FROM SHALLOW CREEK KENNELS AT A COST NOT TO EXCEED \$16,000.

Documents:

[STAFF REPORT POLICE SERVICE DOG.DOCX](#)

[QUOTE SHALLOW CREEK KENNELS K-9.PDF](#)

[PO SHALLOW CREEK KENNELS FOR SERVICE DOG.PDF](#)

6. FIRE CHIEF VEHICLE PURCHASE (FORD F-150)

DISCUSSION AND POSSIBLE ACTION ON THE PURCHASE OF A 2024 FORD F-150 CREW CAB TRUCK FROM VANCE COUNTRY FORD IN THE AMOUNT OF \$47,652.60. PURCHASE HAS BEEN BUDGETED IN FY24 WHILE UTILIZING STATE CONTRACT SW035 PRICING. (BRIAN WOODWARD, INTERIM FIRE CHIEF)

Documents:

[10242023 F150 QUOTE.PDF](#)

[STAFF REPORT 2024 F-150.DOCX](#)

7. AUTHORIZE MAYOR TO EXECUTE ESCROW AGREEMENT

DISCUSSION AND POSSIBLE ACTION TO AUTHORIZE THE MAYOR TO EXECUTE A CERTAIN ESCROW AGREEMENT WITH RETAIL BUILDINGS, INC., AND FNB COWETA AS ESCROW AGENT, IN THE AMOUNT OF \$450,000.00 PERTAINING TO THE EUFAULA AVENUE BRIDGE DEVELOPMENT AGREEMENT WITH RETAIL BUILDINGS, INC DATED FEBRUARY 9, 2023.

8. CONTRACT FOR PROFESSIONAL PUBLIC RELATIONS COMMUNICATIONS SERVICES

DISCUSSION AND POSSIBLE ACTION TO APPROVE PROPOSED CONTRACT FOR PROFESSIONAL PUBLIC RELATIONS CONSULTATION SERVICES BETWEEN THE CITY OF COWETA AND CROSSROADS COMMUNICATIONS, LLC

Documents:

[PROFESSIONAL SERVICE AGREEMENT 110223_CROSSROADS_COWETA-JMS REVISIONS-11-3-23-CLEAN.PDF](#)

VIII. EXECUTIVE SESSION

(Pursuant to 25 O.S. Section 307 the City Council may enter into executive session for the purposes specifically provided in this section.)

1. EXECUTIVE SESSION

DISCUSSION AND APPROPRIATE ACTION RELATED TO A PROPOSED EXECUTIVE SESSION FOR THE PURPOSE OF DISCUSSING A PENDING CLAIM CONCERNING SEVERANCE CLAIMED BY ROGER KOLMAN, FORMER CITY MANAGER, FOLLOWING HIS RESIGNATION ON

SEPTEMBER 11, 2023, AND INCLUDING DISCUSSION RELATED TO A PROPOSED GENERAL RELEASE AND SEPARATION AGREEMENT BETWEEN ROGER KOLMAN AND THE CITY OF COWETA, THE COWETA PUBLIC WORKS AUTHORITY, AND THE COWETA INDUSTRIAL DEVELOPMENT AUTHORITY, PURSUANT TO 25 O.S. SECTION 307 (B)(4), UPON THE ADVICE OF THE CITY ATTORNEY THAT DISCLOSURE WILL SERIOUSLY IMPAIR THE ABILITY OF THE CITY COUNCIL TO PROCESS THE CLAIM IN THE PUBLIC INTEREST.

a. END EXECUTIVE SESSION

VOTE TO COME OUT OF EXECUTIVE SESSION.

b. DISCUSSION AND POSSIBLE ACTION

DISCUSSION AND POSSIBLE ACTION RELATED TO THE DISCUSSIONS HELD IN EXECUTIVE SESSION RELATED TO A PROPOSED GENERAL RELEASE AND SEPARATION AGREEMENT BETWEEN ROGER KOLMAN AND THE CITY OF COWETA, THE COWETA PUBLIC WORKS AUTHORITY AND THE COWETA INDUSTRIAL DEVELOPMENT AUTHORITY.

IX. NEW BUSINESS

(Business which was not foreseen prior to the posting of the agenda.)

X. ADJOURNMENT

IF YOU REQUIRE A SPECIAL ACCOMMODATION PURSUANT TO THE AMERICANS WITH DISABILITIES ACT, PLEASE NOTIFY CITY HALL BY 9:00 A.M. ON THE DATE OF THE MEETING.

COWETA MUNICIPAL COURT
2024 CALENDAR
Thursdays
2:30 p.m. Adults
3:30 p.m. Juveniles

January	4, 11, 18, 25
February	1, 8, 15, 22
March	7, 14, 21, 28
April	4, 11, 18, 25
May	2, 9, 16, 23
June	6, 20, 27
July	11, 18, 25
August	1, 8, 15, 22
September	5, 12, 19, 26
October	3, 10, 17, 24
November	7, 14, 28
December	5, 12, 19

**CITY OF COWETA/COWETA PUBLIC WORKS AUTHORITY
2024 HOLIDAY SCHEDULE**

January 1, 2024 (Monday)	New Year's Day
February 19, 2024 (Monday)	President's Day
March 29, 2024 (Friday)	Good Friday
May 27, 2024 (Monday)	Memorial Day
July 4, 2024 (Thursday)	Independence Day
September 2, 2024 (Monday)	Labor Day
November 11, 2024 (Monday)	Veteran's Day
November 21, 2024 (Thursday)	Thanksgiving Day
November 22, 2024 (Friday)	Day after Thanksgiving
December 24, 2025 (Tuesday)	Christmas Eve
December 25, 2024 (Wednesday)	Christmas Day

THERE WILL BE NO TRASH SERVICE ON THE ABOVE DATES

**COWETA CITY COUNCIL • COWETA PUBLIC WORKS AUTHORITY
COWETA INDUSTRIAL DEVELOPMENT AUTHORITY
COWETA CITY HALL • 310 S BROADWAY, COWETA, OK**

1st Monday of Each Month • 6:00 p.m.

January 08, 2024 (2 nd Monday)	May 06, 2024	September 9, 2024 (2 nd Monday)
February 05, 2024	June 03, 2024	October 7, 2024
March 04, 2024	July 1, 2024	November 04, 2024
April 01, 2024	August 5, 2024	December 02, 2024

**COWETA PLANNING COMMISSION
COWETA CITY HALL • 310 S BROADWAY, COWETA, OK**

3rd Monday of Each Month • 6:00 p.m.

January 15, 2024	May 20, 2024	September 16, 2024
February 20, 2024 (3 rd Tuesday)	June 17, 2024	October 21, 2024
March 18, 2024	July 15, 2024	November 18, 2024
April 15, 2024	August 19, 2024	December 16, 2024

**COWETA BOARD OF ADJUSTMENT
COWETA CITY HALL • 310 S BROADWAY COWETA, OK**

In accordance with 11 O.S. 44-102 and Chapter 21 Section 2120 of the Coweta Zoning Code, meetings of the Coweta Board of Adjustment shall be held at the call of the chairman and at such other times as the board of adjustment may determine.

**COWETA LIBRARY BOARD
COWETA PUBLIC LIBRARY • 120 E SYCAMORE, COWETA, OK
TUESDAY, 6:00 p.m.**

January 30, 2024	April 30, 2024	September 24, 2024
February 27, 2024	May 28, 2024	October 29, 2024
March 26, 2024	June 25, 2024	November 26, 2024

**MINUTES OF THE COWETA CITY COUNCIL REGULAR MEETING
OCTOBER 2, 2023, 6:00 P.M.**

The members of the Coweta City Council met in regular session on Monday, October 2, 2023, at 6:00 p.m. in the Coweta City Hall, 310 S Broadway, Coweta, Oklahoma.

COUNCILMEMBERS PRESENT: Naomi Hogue, Logan Brown, Harold Chance, Caroline Martin, Randy Woodward.

I. CALL TO ORDER

The meeting was called to order by Mayor Hogue.

II. Pledge of Allegiance given

III. ROLL CALL

Roll call taken. Councilmembers were present as shown above.

IV. GENERAL CITY COUNCIL COMMENTS

Councilmembers discussed the successful Fall Festival. Councilmembers also discussed the ceremonial commemoration of the Gilbert family's contribution to the city and the street sign that was dedicated earlier in the evening.

V. CONSENT

Motion by Harold Chance, second by Logan Brown to approve the consent calendar items:

1. Approval of the minutes of the regular meeting of the City Council held on September 11, 2023.
2. Approval of the minutes of the special meeting of the City Council held on September 18, 2023.

Aye: Harold Chance
Logan Brown
Naomi Hogue
Caroline Martin

Nay: Randy Woodward

VI. OLD BUSINESS

1. PUBLIC HEARING- CDBG PROJECT CLOSEOUT

Public Hearing in reference to receiving comments on the performance of the City of Coweta, Oklahoma, in regard to Community Development Block Grant (18829 CDBG 21) received by the City of Coweta to replace waterlines in the Village Subdivision of the City of Coweta.

**MINUTES OF THE COWETA CITY COUNCIL REGULAR MEETING
OCTOBER 2, 2023, 6:00 P.M.**

Motion by Naomi Hogue, second by Logan Brown to open the Public Hearing at 6:02 p.m.

Aye: Naomi Hogue
Logan Brown
Harold Chance
Caroline Martin
Randy Woodward

Roll call was taken. Councilmembers were present as shown above.

JT Darling, a representative of INCOG was present at the meeting. Public comments were received from Janna Dobbins, Donna Harley, and Kathy Grimes.

Motion by Naomi Hogue, second by Logan Brown to close the Public Hearing at 6:22 p.m.

Aye: Naomi Hogue
Logan Brown
Caroline Martin
Harold Chance
Randy Woodward

2. CDBG GRANT ADMINISTRATION CONTRACT PAYMENT

Affirmation of the Assistant City Manager's approval of a contract payment to INCOG in the amount of \$22,000.00 for administration services related to the Village Subdivision Waterline Project grant.

Motion by Harold Chance, second by Randy Woodward to affirm the Assistant City Manager's approval of payment to INCOG for administration services.

Aye: Harold Chance
Randy Woodward
Logan Brown
Caroline Martin
Randy Woodward

3. CHANGE ORDER- VILLAGE SUBDIVISION WATER LINE IMPROVEMENTS

Affirmation of the Assistant City Manager's approval of Change Order No. 2 in favor of Stronghand, LLC related to the Village Subdivision Waterline Improvements Project, increasing the cost of that project from \$561,498.90 to \$574,205.41, an increase of \$12, 706.51.

Motion by Harold Chance, second by Logan Brown, to table the item to a later date.

**MINUTES OF THE COWETA CITY COUNCIL REGULAR MEETING
OCTOBER 2, 2023, 6:00 P.M.**

Aye: Harold Chance
Logan Brown
Naomi Hogue
Caroline Martin
Randy Woodward

4. VILLAGE SUBDIVISION WATERLINE PROGRESS PAYMENTS

Affirmation of the Assistant City Manager's approval of progress payment No. 4 in the amount of \$78,159.53 and the Assistant City Manager's approval of final payment No. 5 in the amount of \$134,031.49 for the Village Subdivision Waterline Project to Stronghand, LLC.

Motion by Harold Chance, second by Logan Brown, to table the item until more information is received at a later date.

Aye: Harold Chance
Logan Brown
Naomi Hogue
Caroline Martin
Randy Woodward

5. RESOLUTION 2023-37, CDBG WATERLINE GRANT PROJECT CLOSEOUT

A discussion was held, and possible action requested on the adoption of Resolution 2023-37, a Resolution of the City Council of the City of Coweta, Oklahoma, accepting the completed CDBG Village Subdivision Waterline Replacement Project (#18229 CDBG 21).

Motion by Harold Chance, second by Logan Brown, to table the item until more information is received at a later date.

Aye: Harold Chance
Logan Brown
Naomi Hogue
Caroline Martin
Randy Woodward

6. RESOLUTION 2023-41 REGARDING BUDGET AMENDMENTS FY23-24

A discussion has held, and possible action requested on the adoption of Resolution 2023-41, a Resolution of the City Council of the City of Coweta, Oklahoma adopting

**MINUTES OF THE COWETA CITY COUNCIL REGULAR MEETING
OCTOBER 2, 2023, 6:00 P.M.**

amendments to the annual revenues and appropriations for the budget of the City of Coweta, Oklahoma, for fiscal year ending June 30, 2024.

Motion by Harold Chance, second by Randy Woodward, to adopt Resolution 2023-41, a Resolution of the City Council of the City of Coweta, Oklahoma adopting amendments to the annual revenues and appropriations for the budget of the City of Coweta, Oklahoma, for fiscal year ending June 30, 2024

Aye: Harold Chance
Randy Woodward
Namoi Hogue
Logan Brown
Caroline Martin

7. RESOLUTION 2023-39 ADOPTING BUDGET AMENDMENTS

A discussion was held, and possible action requested on the adoption of Resolution 2023-39, a Resolution of the City Council of the City of Coweta, Oklahoma adopting amendments to the annual appropriations for the budget of the City of Coweta for fiscal year ending June 30, 2024.

Motion by Harold Chance, second by Randy Woodward, to adopt Resolution 2023-39, a Resolution of the City Council of the City of Coweta, Oklahoma adopting amendments to the annual appropriations for the budget of the City of Coweta for fiscal year ending June 30, 2024.

Aye: Harold Chance
Randy Woodward
Naomi Hogue
Logan Brown
Caroline Martin

8. SECTION 125 CAFETERIA PLAN

A discussion was held, and possible action requested on the adoption of Resolution 2023-38, a Resolution of the City Council of the City of Coweta, Oklahoma, authorizing revisions to the Section 125 Plan for the City of Coweta.

Motion by Harold Chance, second by Randy Woodward to adopt Resolution 2023-38, a Resolution of the City Council of the City of Coweta, Oklahoma, authorizing revisions to the Section 125 Plan for the City of Coweta.

Aye: Harold Chance
Randy Woodward
Naomi Hogue

**MINUTES OF THE COWETA CITY COUNCIL REGULAR MEETING
OCTOBER 2, 2023, 6:00 P.M.**

Logan Brown
Caroline Martin

9. CITY ATTORNEY TO REPRESENT THE CITY OF COWETA IN CIVIL SUITS

A discussion was held, and appropriate action requested related to the authorization for the City Attorney to represent the City of Coweta in civil suits relating to abatement liens and to take any action authorized by the City Manager or Assistant City Manager in such cases.

Motion by Harold Chance, second by Logan Brown to authorize the City Attorney to represent the City of Coweta in civil suits relating to abatement liens and to take any action authorized by the City Manager or Assistant City Manager in such cases.

Aye: Harold Chance
Randy Woodward
Caroline Martin
Naomi Hogue
Logan Brown

VII. NEW BUSINESS

There was no new business.

VIII. ADJOURNMENT

Mayor Hogue adjourned the meeting at 6:29 p.m.

Naomi Hogue, Mayor

Marcy Kilgore, City Clerk

**MINUTES OF THE COWETA CITY COUNCIL SPECIAL MEETING
OCTOBER 6, 2023, 1:31 P.M.**

The members of the Coweta City Council met in special session on Friday, October 6, 2023, at 1:31 p.m. in the Coweta City Hall, 310 S Broadway, Coweta, Oklahoma.

COUNCILMEMBERS PRESENT: Naomi Hogue, Logan Brown, Harold Chance, Caroline Martin, Randy Woodward.

I. CALL TO ORDER

The meeting was called to order by Mayor Hogue.

II. Pledge of Allegiance given

III. ROLL CALL

Roll call taken. Councilmembers were present as shown above.

IV. OLD BUSINESS

1. KEITHLINE ENGINEERING-SECTION 165 PROJECT

Dan Keithline, Keithline Engineering led a discussion and requested possible action to be taken related to the authorization for Keithline Engineering Group, PLLC., to submit a Section 165(a) application for funding of CAP Section 1135 Project, Verdigris Oxbow Ecosystem improvements for the City of Coweta, Wagoner County, Oklahoma, and authorizing the Mayor to execute any necessary documents related to the application.

Motion by Randy Woodward, second by Harold Chance to approve the authorization for Keithline Engineering Group, PLLC., to submit a Section 165(a) application for funding of CAP Section 1135 Project, Verdigris Oxbow Ecosystem improvements for the City of Coweta, Wagoner County, Oklahoma, and authorizing the Mayor to execute any necessary documents related to the application. This item was heard after agenda item V.

Aye: Randy Woodward
Harold Chance
Naomi Hogue
Logan Brown
Caroline Martin

V. EXECUTIVE SESSION

(Pursuant to 25 O.S. Section 307 the City Council may enter into executive session for the purposes specifically provided in this section.)

1. DISCUSSION

Discussion and appropriate action related to a proposed executive session for the purpose of interviewing candidates for the temporary position of Interim City Manager, including

**MINUTES OF THE COWETA CITY COUNCIL SPECIAL MEETING
OCTOBER 6, 2023, 1:31 P.M.**

discussion of duties, compensation, payment of expenses, and other employment issues, pursuant to Section 25 O.S. Section 307(B)(1).

Motion by Naomi Hogue, second by Logan Brown to enter into Executive Session at 1:32 p.m.

Aye: Naomi Hogue
Logan Brown
Harold Chance
Caroline Martin
Randy Woodward

2. END EXECUTIVE SESSION

Vote to come out of Executive Session.

Motion by Logan Brown, second by Harold Chance to come out of Executive Session at 2:41 p.m.

Aye: Logan Brown
Harold Chance
Naomi Hogue
Caroline Martin
Randy Woodward

3. DISCUSSION AND POSSIBLE ACTION

Discussion and appropriate action related to discussions held in Executive Session related to the possible appointment of an interim City Manager, as a temporary position, establishing a salary, and providing for payment of expenses, and authorization for the Mayor to execute an employment agreement with the Interim City Manager, upon approval by the City Attorney.

Motion by Naomi Hogue, second by Logan Brown, to appoint Lisa Taylor as Interim City Manager, as a temporary position, at a salary of \$6,000.00 biweekly plus payment of reasonable expenses related to the position including lodging, and authorization for the Mayor to execute an employment agreement upon approval by the City Attorney not to exceed six months.

Aye: Naomi Hogue
Logan Brown
Harold Chance
Caroline Martin
Randy Woodward

**MINUTES OF THE COWETA CITY COUNCIL SPECIAL MEETING
OCTOBER 6, 2023, 1:31 P.M.**

VI. ADJOURNMENT

Mayor Hogue adjourned the meeting at 2:57 p.m.

Naomi Hogue, Mayor

Marcy Kilgore, City Clerk



October 27, 2023

Ms. Lisa Taylor
Interim City Manager
City of Coweta
PO Box 850
Coweta, OK 74429

Reference: Coweta N Eufaula Ave Bridge
Engineer's Recommendation for Award
Bid Number: COW-BR 22.001

Dear Ms. Taylor:

Pursuant to the bid opening held on October 26, 2023, attached please find the bid tabulation for the subject project. The bid consisted of four (4) responsive bidders. The bids were determined to be complete.

The apparent low bidder for the subject project is Envision Civil Contractors, LLC with the following base bid and alternate one amount:

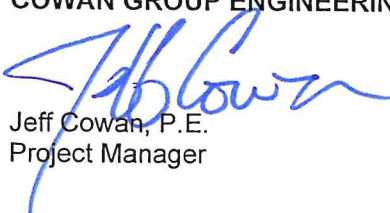
- Base Bid	\$284,642.10
- Add Alternate One - Waterline	\$ 94,870.40

Pursuant to the review of the bid package, bonds, and bid tabulation, the low bid is accurate and complete.

After careful review and consideration, Cowan Group Engineering recommends the City of Coweta award the subject contract to the low base bidder plus add alternate one, Envision Civil Contractors, LLC at the total bid price of \$379,512.50.

Should you have any questions, please contact the undersigned at 405.463.3369.
Sincerely,

COWAN GROUP ENGINEERING, LLC



Jeff Cowan, P.E.
Project Manager



COWAN GROUP ENGINEERING, LLC
7100 N. CLASSEN BLVD., SUITE 500
OKLAHOMA CITY, OK 73116
405.463.3369 O
405.463.3381 F

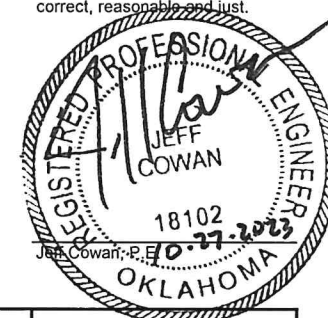
City of Coweta

Coweta N Eufaula Ave Bridge

BID NO. COW-BR 22.001

DATE October 26, 2023

I do solemnly swear that the below amount is correct, reasonable and just.



BASE BID

ITEM NUMBER		DESCRIPTION	QTY	UNIT	Envision Civil Contractors, LLC		Bright Lighting, Inc.		Cherokee Builders, Inc.		American Concrete Inc.	
BID: COW-BR 22.001												
ROADWAY												
1	201(A)	CLEARING AND GRUBBING	1	LSUM	\$ 5,630.00	\$ 5,630.00	\$ 6,060.11	\$ 6,060.11	\$ 35,527.00	\$ 35,527.00	\$ 43,000.00	\$ 43,000.00
2	202(A)	UNCLASSIFIED EXCAVATION	107	CY	\$ 28.05	\$ 3,001.35	\$ 169.91	\$ 18,180.37	\$ 562.00	\$ 60,134.00	\$ 70.09	\$ 7,499.63
3	205(A)	TYPE-A SALVAGED TOPSOIL	1	LSUM	\$ 1,840.75	\$ 1,840.75	\$ 6,060.11	\$ 6,060.11	\$ 39,294.00	\$ 39,294.00	\$ 5,000.00	\$ 5,000.00
4	221	TEMPORARY SILT FENCE	200	LF	\$ 6.75	\$ 1,350.00	\$ 2.10	\$ 420.00	\$ 12.00	\$ 2,400.00	\$ 8.00	\$ 1,600.00
5	221	TEMPORARY SILT DIKE	28	LF	\$ 46.50	\$ 1,302.00	\$ 17.24	\$ 482.72	\$ 125.00	\$ 3,500.00	\$ 35.71	\$ 999.88
6	230(A)	SOLID SLAB SODDING	84	SY	\$ 20.00	\$ 1,680.00	\$ 13.70	\$ 1,150.80	\$ 56.00	\$ 4,704.00	\$ 10.00	\$ 840.00
7	303(A)	AGGREGATE BASE TYPE A	66	CY	\$ 95.00	\$ 6,270.00	\$ 171.60	\$ 11,325.60	\$ 153.00	\$ 10,098.00	\$ 40.77	\$ 2,690.82
8	407(B)	TACK COAT	46	GAL	\$ 5.50	\$ 253.00	\$ 5.59	\$ 257.14	\$ 560.00	\$ 25,760.00	\$ 10.00	\$ 460.00
9	411(B)	SUPERPAVE, TYPE S3 (PG 64-22 OK)	85	TON	\$ 236.00	\$ 20,060.00	\$ 164.06	\$ 13,945.10	\$ 168.00	\$ 14,280.00	\$ 110.00	\$ 9,350.00
10	411(C)	SUPERPAVE, TYPE S4 (PG 64-22 OK)	43	TON	\$ 231.00	\$ 9,933.00	\$ 260.75	\$ 11,212.25	\$ 168.00	\$ 7,224.00	\$ 110.00	\$ 4,730.00
11	509(D)	CLASS C CONCRETE	7	CY	\$ 605.00	\$ 4,235.00	\$ 1,039.00	\$ 7,273.00	\$ 2,879.00	\$ 20,153.00	\$ 700.00	\$ 4,900.00
12	601(A)	TYPE 1 PLAIN RIPRAP	74	TON	\$ 69.00	\$ 5,106.00	\$ 165.32	\$ 12,233.68	\$ 127.00	\$ 9,398.00	\$ 100.00	\$ 7,400.00
13	609(B)	1'-8" COMB. CURB & GUTTER (6" BARRIER)	206	LF	\$ 21.50	\$ 4,429.00	\$ 65.36	\$ 13,464.16	\$ 37.00	\$ 7,622.00	\$ 30.00	\$ 6,180.00
14	615(A)	8" POLYVINYL CHLORIDE (PVC) PIPE	58	LF	\$ 198.25	\$ 11,498.50	\$ 124.85	\$ 7,241.30	\$ 222.00	\$ 12,876.00	\$ 712.41	\$ 41,319.78
15	616(I)	16" STEEL CASING	58	LF	\$ 328.50	\$ 19,053.00	\$ 304.73	\$ 17,674.34	\$ 461.00	\$ 26,738.00	\$ 261.21	\$ 15,150.18
16	619(A)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1	LSUM	\$ 7,487.25	\$ 7,487.25	\$ 6,090.15	\$ 6,090.15	\$ 26,876.00	\$ 26,876.00	\$ 15,000.00	\$ 15,000.00
17	619(B)	REMOVAL OF ASPHALT PAVEMENT	269	SY	\$ 12.50	\$ 3,362.50	\$ 45.06	\$ 12,121.14	\$ 19.00	\$ 5,111.00	\$ 27.00	\$ 7,263.00
18	619(C)	SAWING PAVEMENT	71	LF	\$ 23.25	\$ 1,650.75	\$ 20.11	\$ 1,427.81	\$ 10.00	\$ 710.00	\$ 9.00	\$ 639.00
19	629(E)	REMOVE AND RESET MAILBOX	2	EA	\$ 599.00	\$ 1,198.00	\$ 209.18	\$ 418.36	\$ 1,090.00	\$ 2,180.00	\$ 150.00	\$ 300.00
CONSTRUCTION												
20	220	(SP) SWPPP DOCUMENTATION AND MANAGEMENT	1	LSUM	\$ 2,548.00	\$ 2,548.00	\$ 1,016.24	\$ 1,016.24	\$ 2,800.00	\$ 2,800.00	\$ 74,000.00	\$ 74,000.00
21	641	MOBILIZATION	1	LSUM	\$ 18,251.25	\$ 18,251.25	\$ 36,624.12	\$ 36,624.12	\$ 19,298.00	\$ 19,298.00	\$ 80,000.00	\$ 80,000.00
22	880(J)	CONSTRUCTION TRAFFIC CONTROL	1	LSUM	\$ 5,423.00	\$ 5,423.00	\$ 5,400.00	\$ 5,400.00	\$ 7,839.00	\$ 7,839.00	\$ 4,800.00	\$ 4,800.00
BRIDGE												
23	501(A)	STRUCTURAL EXCAVATION UNCLASSIFIED	80	CY	\$ 39.25	\$ 3,140.00	\$ 151.50	\$ 12,120.00	\$ 133.98	\$ 10,718.40	\$ 312.50	\$ 25,000.00
24	501(G)	CLSM BACKFILL	126	CY	\$ 125.00	\$ 15,750.00	\$ 295.20	\$ 37,195.20	\$ 223.00	\$ 28,098.00	\$ 250.00	\$ 31,500.00
25	509(A)	CLASS AA CONCRETE	141	CY	\$ 683.25	\$ 96,338.25	\$ 1,332.44	\$ 187,874.04	\$ 799.00	\$ 112,659.00	\$ 2,304.96	\$ 324,999.36
26	511(A)	REINFORCING STEEL	21700	LB	\$ 0.82	\$ 17,794.00	\$ 4.93	\$ 106,981.00	\$ 2.00	\$ 43,400.00	\$ 4.50	\$ 97,650.00
27	516(A)	DRILLED SHAFTS 24" DIAMETER	75	LF	\$ 214.10	\$ 16,057.50	\$ 149.79	\$ 11,234.25	\$ 421.00	\$ 31,575.00	\$ 600.00	\$ 45,000.00
BASE BID TOTAL						\$ 284,642.10		\$ 545,482.99		\$ 570,972.40		\$ 857,271.65

ADD ALTERNATE NO. 1 WATER LINE

ITEM NUMBER	DESCRIPTION	QTY	UNIT	Envision Civil Contractors, LLC		Bright Lighting, Inc. dba BL Tower Construction		Cherokee Builders, Inc.		American Concrete Inc.	
1	6" WATERLINE (AWWA C-900 DR18)	580	LF	\$ 54.60	\$ 31,668.00	\$ -	\$ -	\$ 119.00	\$ 69,020.00	\$ 77.59	\$ 45,002.20
2	12" BORE AND STEEL CASING	69	LF	\$ 341.25	\$ 23,546.25	\$ -	\$ -	\$ 558.00	\$ 38,502.00	\$ 271.73	\$ 18,749.37
3	TRACER WIRE	580	LF	\$ 0.53	\$ 307.40	\$ -	\$ -	\$ 4.00	\$ 2,320.00	\$ 1.00	\$ 580.00
4	6" X 6" TAPPING SLEEVE	1	EA	\$ 1,260.00	\$ 1,260.00	\$ -	\$ -	\$ 3,584.00	\$ 3,584.00	\$ 1,000.00	\$ 1,000.00
5	6" TAPPING VALVE	1	EA	\$ 3,465.00	\$ 3,465.00	\$ -	\$ -	\$ 2,088.00	\$ 2,088.00	\$ 5,917.50	\$ 5,917.50
6	6" SOLID SLEEVE	1	EA	\$ 1,260.00	\$ 1,260.00	\$ -	\$ -	\$ 491.00	\$ 491.00	\$ 368.75	\$ 368.75
7	6" 90 DEG BEND	2	EA	\$ 630.00	\$ 1,260.00	\$ -	\$ -	\$ 833.00	\$ 1,666.00	\$ 386.00	\$ 772.00
8	6" GATE VALVE	2	EA	\$ 2,415.00	\$ 4,830.00	\$ -	\$ -	\$ 3,410.00	\$ 6,820.00	\$ 1,848.43	\$ 3,696.86
9	6" X 6" TEE	1	EA	\$ 735.00	\$ 735.00	\$ -	\$ -	\$ 525.00	\$ 525.00	\$ 421.75	\$ 421.75
10	6" PLUG	1	EA	\$ 420.00	\$ 420.00	\$ -	\$ -	\$ 354.00	\$ 354.00	\$ 125.00	\$ 125.00
11	6" X 3/4" SERVICE SADDLE	1	EA	\$ 945.00	\$ 945.00	\$ -	\$ -	\$ 354.00	\$ 354.00	\$ 239.06	\$ 239.06
12	CUSTOMER METER SHORT CONNECTION	1	EA	\$ 420.00	\$ 420.00	\$ -	\$ -	\$ 5,688.00	\$ 5,688.00	\$ 750.00	\$ 750.00
13	1" COMBINATION AIR/VACUUM VALVE W/ BOX	1	EA	\$ 4,200.00	\$ 4,200.00	\$ -	\$ -	\$ 1,724.00	\$ 1,724.00	\$ 683.25	\$ 683.25
14	FIRE HYDRANT W/ ALL APPURTENANCES	1	EA	\$ 7,875.00	\$ 7,875.00	\$ -	\$ -	\$ 5,500.00	\$ 5,500.00	\$ 6,637.50	\$ 6,637.50
15	CUT & PLUG EXISTING 2" WATERLINE (2" PLUG)	1	EA	\$ 1,155.00	\$ 1,155.00	\$ -	\$ -	\$ 3,310.00	\$ 3,310.00	\$ 775.00	\$ 775.00
16	ANCHOR	8	EA	\$ 682.50	\$ 5,460.00	\$ -	\$ -	\$ 1,450.00	\$ 11,600.00	\$ 312.50	\$ 2,500.00
17	SAND BACKFILL	65	TON	\$ 36.75	\$ 2,388.75	\$ -	\$ -	\$ 113.00	\$ 7,345.00	\$ 38.46	\$ 2,499.90
18	PRESSURE AND LEAKAGE TEST	1	LSUM	\$ 2,100.00	\$ 2,100.00	\$ -	\$ -	\$ 2,800.00	\$ 2,800.00	\$ 5,625.00	\$ 5,625.00
19	DISINFECTION	1	LSUM	\$ 1,575.00	\$ 1,575.00	\$ -	\$ -	\$ 2,800.00	\$ 2,800.00	\$ 3,125.00	\$ 3,125.00
ALTERNATE BID TOTAL				\$ 94,870.40		No Bid		\$ 166,491.00		\$ 99,468.14	

Low Bidder

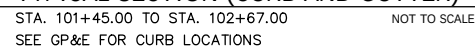
Calculation Error

N. EUFAULA AVENUE BRIDGE

CITY OF COWETA
WAGNER COUNTY, OKLAHOMA

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

- | | |
|------------------|------------|
| TITLE | |
| DESIGNED BY | MJD |
| DRAWN BY | MJD |
| REVIEWED BY | JDC |
| PROJECT NUMBER | 22-151 |
| DATE | 06/02/2023 |
| <u>REVISIONS</u> | |
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| | |
| | |
| SHEET NUMBER | |
| 1 | |



* VARIES, SEE PLANS FOR DETAILS



⑤ VARIES, SEE PLANS FOR DETAILS.

PAY QUANTITIES			
ROADWAY			
ITEM	DESCRIPTION	UNIT	QUANTITY
201(A)	CLEARING AND GRUBBING	LSUM	1
202(A)	UNCLASSIFIED EXCAVATION	(R-2)(1) CY	107
205(A)	TYPE-A SALVAGED TOPSOIL	(R-4)(R-6) LSUM	1
221	TEMPORARY SILT FENCE	(R-8) LF	200
221	TEMPORARY SILT DIKE	(R-8) LF	28
230(A)	SOLID SLAB SODDING	(R-6)(R-7) SY	84
303(A)	AGGREGATE BASE TYPE A	(7) CY	66
407(B)	TACK COAT	GAL	46
411(B)	SUPERPAVE, TYPE S3 (PG 64-22 OK)	(R-26) TON	85
411(C)	SUPERPAVE, TYPE S4 (PG 64-22 OK)	(R-26) TON	43
509(D)	CLASS C CONCRETE	CY	7
601(A)	TYPE 1 PLAIN RIPRAP	TON	74
609(B)	1'-8" COMB. CURB & GUTTER (6" BARRIER)	LF	206
615(A)	8" POLYVINYL CHLORIDE (PVC) PIPE	(6) LF	58
616(I)	16" STEEL CASING	LF	58
619(A)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	(R-39) LSUM	1
619(B)	REMOVAL OF ASPHALT PAVEMENT	(R-40)(R-41) SY	269
619(C)	SAWING PAVEMENT	LF	71
629(E)	REMOVE AND RESET MAILBOX	(2) EA	2

PAY QUANTITIES			
CONSTRUCTION			
ITEM	DESCRIPTION	UNIT	QUANTITY
220	(SP) SWPPP DOCUMENTATION AND MANAGEMENT	LSUM	1
641	MOBILIZATION	LSUM	1
880(J)	CONSTRUCTION TRAFFIC CONTROL	(3)(TC-1)(TC-25)(TC-84) LSUM	1

PAY QUANTITIES			
BRIDGE			
ITEM	DESCRIPTION	UNIT	QUANTITY
501(A)	STRUCTURAL EXCAVATION UNCLASSIFIED	(5) CY	80
501(G)	CLSM BACKFILL	CY	126
509(A)	CLASS AA CONCRETE	(5) CY	141
511(A)	REINFORCING STEEL	LB	21,700
516(A)	DRILLED SHAFTS 24" DIAMETER	(4) LF	75

GENERAL NOTES:

THIS PROJECT SHALL BE CONSTRUCTED WITH PROJECT AREA CLOSED, BUT ALLOW LOCAL ACCESS TO DRIVES/RESIDENTS. SEE STANDARD SPECIFICATIONS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.

FOR PROJECTS THAT INCLUDE WIDENING AND/OR RESURFACING, THE CONTRACTOR SHALL SCHEDULE OPERATIONS TO MINIMIZE POTENTIAL DROP-OFF HAZARDS AND SHALL SUBMIT A SEQUENCE OF CONSTRUCTION OPERATIONS TO THE RESIDENT ENGINEER FOR APPROVAL BEFORE OPERATIONS BEGIN. ANY PORTION OF THE CONSTRUCTION OPERATIONS, SUCH AS SUPERPAVE LAYING OPERATIONS, EXCAVATION FOR PAVEMENT WIDENING, OR EXTENSION OF ROADWAY STRUCTURES, SHALL BE LIMITED TO ONE SIDE AT A TIME, AND THE PROCEDURES OUTLINED IN THE PAVEMENT DROP-OFF TREATMENT STANDARD PDT-1-(LATEST REVISION) SHALL BE IMPLEMENTED. ONLY THAT AMOUNT OF OPEN TRENCH WILL BE ALLOWED THAT CAN BE SURFACED IN 1 (ONE) DAY'S TIME WITHOUT APPROVAL BY THE ENGINEER. LIGHTS, SIGNS AND BARRICADES SHALL BE MOVED AS WORK PROGRESSES.

ESTABLISHMENT AND RE-ESTABLISHMENT IF HORIZONTAL AND VERTICAL CONTROL, INCLUDING THE SETTING AND RE-SETTING OF BENCHMARKS AND THE STAKING AND RE-STAKING OF RIGHT-OF WAY AND EASEMENTS, WILL BE INCLUDED IN OTHER ITEMS OF WORK.

ALL TREES, BRUSH, AND OTHER DEBRIS THAT MIGHT INTERFERE WITH THE FLOW OF WATER SHALL BE CLEANED OUT TO THE RIGHT-OF-WAY LINE, AT EACH STRUCTURE AND BRIDGE, IN A MANNER APPROVED BY THE ENGINEER. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

ALL FLOWLINES THAT ARE TO BE FILLED SHALL BE THOROUGHLY TAMPED BEFORE CONSTRUCTION OR EXTENSION OF DRAINAGE STRUCTURES. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

IN ORDER TO ALLEVIATE DUST CONDITIONS DURING GRADING OPERATIONS AND BEFORE PAVEMENT WORK IS COMPLETED, THE CONTRACTOR SHALL SPRINKLE GRADING AT INTERVALS APPROVED BY THE ENGINEER. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

THE CONTRACTOR SHALL NOT WASTE ANY EXCESS EXCAVATION UNTIL ALL PLANNED EMBANKMENTS AND BACKFILLS ARE COMPLETED. EXCESS UNCLASSIFIED EXCAVATION MATERIAL DETERMINED BY THE ENGINEER TO BE SUITABLE FOR BACKFILL SHALL BE USED TO REDUCE ANY UNCLASSIFIED BORROW NEEDED. COST OF SECOND HANDLING SHALL BE INCLUDED IN OTHER ITEMS OF WORK. ANY REMAINING EXCESS EXCAVATION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

AREAS ON WHICH SALVAGED TOPSOIL IS TO BE REPLACED SHALL HAVE 18-46-0 FERTILIZER APPLIED, AT THE RATE OF 150 POUNDS PER ACRE, JUST PRIOR TO THE REPLACEMENT OF SALVAGED TOPSOIL.

PIPE UNDERDRAIN QUANTITIES ESTIMATED ONLY. LOCATION, IF AND WHERE REQUIRED, TO BE DETERMINED BY THE ENGINEER.

PRIOR TO FINAL ACCEPTANCE, ALL EXPOSED CURB SURFACES SHALL BE CLEANED OF ALL DISCOLORATION SUCH AS ASPHALT STAIN, TIRE MARKS, OR OTHER DISFIGUREMENT.

IN ACCORDANCE WITH THE OKLAHOMA UNDERGROUND FACILITIES DAMAGE PREVENTION ACT THE CONTRACTOR SHALL NOTIFY THE OKLAHOMA ONE-CALL SYSTEM, INC. 48 HOURS PRIOR TO BEGINNING EXCAVATION. OKLAHOMA ONE-CALL SYSTEM, INC. "CALL OKIE" 1-800-522-6543 OR 811.

TRAFFIC PAY QUANTITY NOTES

ALL REGULATORY SIGNS SHALL HAVE HIGH INTENSITY SHEETING. THE HIGH INTENSITY SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION) FOR TYPE III SHEETING.

ALL WARNING SIGNS SHALL HAVE FLUORESCENT YELLOW SHEETING. THE FLUORESCENT YELLOW SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION) REQUIREMENTS FOR TYPE VII SHEETING.

ALL GREEN AND BLUE SIGNS ON CONVENTIONAL HIGHWAYS SHALL HAVE HIGH INTENSITY SHEETING. THE HIGH INTENSITY SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION) FOR TYPE III SHEETING.

ALL PANEL AND OVERHEAD SIGNS SHALL HAVE TYPE III HIGH INTENSITY BACKGROUND WITH TYPE VII LEGENDS AND BORDERS. THE TYPE III BACKGROUND AND THE TYPE VIII LEGENDS AND BORDERS SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION).

THE MANUFACTURER SHALL FURNISH A TYPE 'A' CERTIFICATION IN ACCORDANCE WITH ODOT STANDARD SPECIFICATIONS, LATEST EDITION, and SUBSECTION 106.04. THE CERTIFICATION SHALL INCLUDE TEST RESULTS ON THE MATERIAL SUBMITTED FOR APPROVAL.

ALL BROKEN CONCRETE INCLUDING OLD SIGN FOOTINGS WITH STUBS, WASTE MATERIAL AND DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE LIMITS OF THE PROJECT AND DISPOSED OF IN AN AREA APPROVED BY THE ENGINEER. NO PAYMENT SHALL BE MADE FOR THE DISPOSAL OF THIS MATERIAL. ANY PIPE POST OR WIDE FLANGE POST ABOVE THE OLD SIGN FOOTINGS SHALL BE CUT AND HANDLED AS PROPERTY OF THE STATE AND SHALL BE NEATLY STACKED ON THE JOB SITE, AS DESIGNATED BY THE ENGINEER UNTIL SUCH TIME AS DIVISION PERSONNEL CAN REMOVE THE MATERIAL FROM THE JOB SITE.

THE STATIONS AND LOCATIONS OF THE SIGN PLACEMENT, AS SHOWN ON THE PLAN SHEETS, ARE APPROXIMATE. EXACT STATIONS AND LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR SO THAT THE SIGN IS INSTALLED IN ACCORDANCE WITH DEPARTMENT STANDARDS AND THE MUTCD IN ORDER TO PROVIDE OPTIMUM VISIBILITY TO THE ONCOMING/APPROACHING MOTORIST. IF A PROPOSED LOCATION CONFLICTS WITH OTHER SIGNS, UTILITIES OR OTHER ROADWAY FEATURES, THE ENGINEER SHALL BE NOTIFIED.

POST LENGTHS SHOWN ON SIGN SUMMARY ARE APPROXIMATE, EXACT LENGTH SHALL BE DETERMINED BY FIELD SURVEY BY THE CONTRACTOR.

AFTER REMOVAL OF ANY SIGN FOOTINGS, THE HOLES SHALL BE FILLED WITH SOIL AND TAMPED AND SHAPED IN A MANNER APPROVED BY THE ENGINEER.

FOR NEW OR EXISTING GROUND MOUNTED SIGNS, MAXIMUM STUB POST PROJECTION ABOVE FOOTING/GROUND LINE SHALL BE 1-3/4" + /- 1/4". MAXIMUM FOOTING PROJECTION ABOVE GROUND LINE SHALL BE NO MORE THAN 2". SHOULD ADDITIONAL SOIL BE REQUIRED, THE ENGINEER WILL DESIGNATE AN AREA TO OBTAIN ADDITIONAL SOIL. ALL ASSOCIATED COSTS SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

ROADWAY PAY QUANTITY NOTES

(R-2) ESTIMATED QUANTITY ONLY. TO BE USED IN A MANNER APPROVED BY THE ENGINEER, FOR MISCELLANEOUS GRADING.

(R-4) AN ESTIMATED QUANTITY OF 46 CY TOPSOIL TO BE RESERVED FOR REPLACEMENT OF APPROX. 6" ON COMPLETED FORESLOPES, DITCHES, AND BACKSLOPES. THIS QUANTITY IS INCLUDED IN THE EARTHWORK BALANCE. ANY ADDITIONAL EXCAVATION REQUIRED IN CUT SECTIONS TO ALLOW FOR PLACEMENT OF TOPSOIL TO FINAL GRADE SHALL BE INCLUDED IN THE PRICE BID.

(R-6) PRICE BID TO INCLUDE COST OF (10-20-10) FERTILIZER, ESTIMATED AT 200 POUNDS PER 1000 S.Y. OF SODDING.

(R-7) PRICE BID TO INCLUDE COST OF WATERING, ESTIMATED AT 40 GALLONS PER S.Y.

(R-8) PRICE BID TO INCLUDE COST OF ALL NECESSARY MAINTENANCE, MAINTAINING DEVICE IN PROPER UPRIGHT POSITION, REMOVAL OF DEVICE, AND REMOVAL OF SEDIMENT WHEN IT REACHES HALF THE HEIGHT OF THE DEVICE

(R-26) ESTIMATED AT 112 LBS. PER SQ. YD. PER 1" THICK.

(R-39) INCLUDES REMOVAL OF ALL EXISTING ROADWAY DRAINAGE STRUCTURES, HEADWALLS (UNLESS OTHERWISE SPECIFIED), INLETS, FENCES, AND OTHER STRUCTURES WITHIN THE RIGHT OF WAY.

(R-40) TO BECOME THE PROPERTY OF AND BE DISPOSED OF BY THE CONTRACTOR IN A MANNER APPROVED BY THE ENGINEER.

(R-41) MATERIALS REMOVED SHALL NOT BE MEASURED FOR PAYMENT UNDER SECTION 202.06 UNCLASSIFIED EXCAVATION.

(1) EXCESS EXCAVATION TO BECOME PROPERTY OF THE CONTRACTOR AND TO BE DISPOSED OF BY THE CONTRACTOR IN A MANNER APPROVED BY THE ENGINEER.

(2) PROVIDE TEMPORARY MAILBOXES DURING CONSTRUCTION.

(3) CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLAN TO CITY FOR ENGINEER APPROVAL AT LEAST 14 DAYS IN ADVANCE. PRICE BID INCLUDES THE MAINTENANCE OF ALL TRAFFIC CONTROL ITEMS, TEMPORARY ACCESS, AND ANY OTHER TEMPORARY ITEMS AS DESCRIBED IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

(4) QUANTITY IS ESTIMATED AT 25 LF PER PIER. FIELD VERIFY 2' INTO BEDROCK.

(5) QUANTITY INCLUDES ALL UNDERCUT WITHIN CREEK INCLUDING BASE STABILIZATION FOR CONCRETE FOOTING, BUT NOT LIMITED TO STONE, CONCRETE OR GEOGRID STABILIZATION. STABILIZATION MATERIAL SHALL BE APPROVED BY CITY ENGINEER PRIOR TO INSTALLATION OR CONSTRUCTION.

(6) QUANTITY INCLUDES REMOVAL OF EXISTING DRILLED SHAFTS, PIPE, AND APPURTENANCES. QUANTITY INCLUDES ALL BY-PASS PUMPING, BACKFILL MATERIALS, AND TESTING TO THE LATEST ODEQ SPECIFICATIONS.

(7) QUANTITY INCLUDES ADDITIONAL 5 CY TO BE USED FOR GRADING EXISTING DRIVEWAY

TRAFFIC PAY QUANTITY NOTES

(TC-1) THE CONTRACTOR SHALL FURNISH AND INSTALL SUCH LIGHTS, SIGNS, BARRICADES, AND PROVIDE FLAGGERS NECESSARY FOR THE CONTROL, SAFETY, AND MAINTENANCE OF TRAFFIC WHEN INSTALLING, RELOCATING OR DELIVERING PORTABLE LONGITUDINAL BARRIER.

(TC-25) ALL CONSTRUCTION TRAFFIC CONTROL WILL BE IMPLEMENTED ACCORDING TO CONSTRUCTION PLANS, AND INSTALLED IN A MANNER APPROVED BY THE ENGINEER, IN ACCORDANCE WITH CHAPTER VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (CURRENT EDITION), AND COMPLIANT WITH APPLICABLE O.D.O.T. STANDARD DRAWINGS. PRICE BID FOR THIS ITEM SHALL BE PAYMENT IN FULL FOR THE INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF ALL NECESSARY CONSTRUCTION TRAFFIC CONTROL DEVICES AND PAVEMENT MARKINGS REQUIRED FOR COMPLETION OF THE PROJECT. ALL SIGNS AND BARRICADES, WHICH ARE SHOWN WITH TYPE "A" LIGHTS IN THE STANDARD DRAWINGS SHALL HAVE THE CORRESPONDING LIGHT ATTACHED DURING NON-DAYLIGHT HOURS. (NOTE FOR CONSULTANT OR DESIGNER: THIS NOTE SHALL BE USED WHEN TRAFFIC CONTROL IS A LUMP SUM PAY ITEM.)

(TC-84) 120 CONSTRUCTION CALENDAR DAYS WERE USED TO COMPUTE THE SIGN DAY PAY THE AMOUNT OF CALENDAR DAYS USED TO COMPUTE THE SIGN DAY PAY ITEMS IS AN ESTIMATED QUANTITY ONLY, BASED ON THE CURRENT O.D.O.T. STANDARDS AND SUGGESTED CONSTRUCTION SEQUENCE FOR THIS PROJECT. THESE ESTIMATED SIGN DAY QUANTITIES MAY CHANGE AS THE PROJECT'S CONSTRUCTION TRAFFIC CONTROL IS MODIFIED DURING CONSTRUCTION.

UTILITY CONTACTS

UTILITY PROVIDER	CONTACT NAME	PHONE NUMBER
WATER	CITY OF COWETA	918-486-2189
SEWER	CITY OF COWETA	918-486-2189
ELECTRIC	PSO/AEP	888-218-3919
GAS	ONG	800-664-5463



COWMAN GROUP ENGINEERING
7100 N GLASSEN, SUITE 500
OKLAHOMA CITY, OK 73116
405-463-3369 O 405-463-3381 F
WWW.COWANGROUP.CO
CA# 6414 EXPIRES 6/30/2024

N. EUFAULA AVENUE BRIDGE

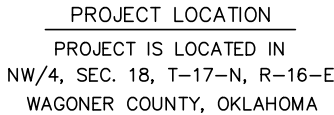
CITY OF COWETA

WAGNER COUNTY, OKLAHOMA

PAY QUANTITIES AND NOTES (1 OF 2)

DESIGNED BY	MJD
DRAWN BY	MJD
REVIEWED BY	JDC
PROJECT NUMBER	22-151
DATE	06/02/2023

REVISIONS
SHEET NUMBER
3



GENERAL CONSTRUCTION NOTES

1. ALL WORK NOT CLASSIFIED AS A CONTRACT "PAY ITEM", SHALL BE CONSIDERED INCIDENTAL AND THE COST THEREOF AND INCLUDED IN ITEMS CLASSIFIED FOR PAYMENT.
2. BEFORE ANY SIDEWALK OR DRIVE IS CUT, THE RESIDENT ON PROPERTY AFFECTED SHALL BE NOTIFIED BY THE CONTRACTOR. NO DRIVE OR SIDEWALK SHALL BE LEFT UNCOVERED OVERNIGHT.
3. THE CLEAN-UP OF RIGHT-OF-WAY SHALL NOT BE DELAYED UNTIL FINAL ESTIMATE. THE CLEAN-UP WORK ON SECTIONS OF COMPLETED LINE SHALL BE BROUGHT UP TO DATE AT LEAST EVERY 10 WORKING DAYS. IF CLEAN UP GETS BEHIND TIME, PRODUCTION SHALL BE SUSPENDED TO GIVE MORE MEN AND EQUIPMENT ATTENTION TO CLEAN UP UNTIL IT IS DONE. ALL RUBBISH AND DISCARDED MATERIALS SHALL BE REMOVED FROM THE SITE AND ADJACENT WILL NOT BE CONSIDERED AS HAVING BEEN DISPOSED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF ALL UTILITIES EITHER PUBLIC OR PRIVATE. THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE OWNER TO DETERMINE THEIR EXACT LOCATION BEFORE CONSTRUCTION BEGINS.
5. THE CONTRACTOR SHALL NOTIFY THE UTILITY OWNER AND ALL PARTIES AFFECTED BEFORE ANY WATER LINE IS TAKEN OUT OF SERVICE.
6. ALL CONCRETE SHALL HAVE 3000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
7. SHOP DRAWINGS FOR ALL PIPE MATERIALS INCLUDING VALVES, FITTINGS, PIPE, AND HYDRANTS USED ON THIS PROJECT SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE CONSTRUCTION BEGINS.
8. THE CONTRACTOR WILL BE ALLOWED TO SHIFT THE ALIGNMENT OF ANY LINE UP TO ONE AND A HALF (1.5) FEET BY DEFLECTION AT JOINTS WITH APPROVAL OF THE INSPECTOR, HOWEVER, ANY FITTINGS REQUIRED MUST BE APPROVED BY THE ENGINEER.
9. THE CONTRACTOR SHALL VERIFY THE DEPTH OF THE EXISTING UTILITIES AND/OR WATER LINES BEFORE STARTING TRENCH EXCAVATION TO ELIMINATE THE NEED FOR FITTINGS AND ADJUST THE GRADES IF NECESSARY.
10. ALL PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS. SAND BEDDING AND BACKFILL UNDER ROAD IS CLASSIFIED AS A PAY ITEM.
11. THE LOCATION OF OTHER UTILITIES AS SHOWN ON THESE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE OF ALL UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT. CALL 1-800-522-6543 48 HOURS PRIOR TO ANY EXCAVATION.
12. BACKFILL SHALL BE COMPACTED IN LIFTS NOT EXCEEDING 12" AND WILL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
13. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE STATE, FEDERAL AND LOCAL REGULATIONS.
14. TOPSOIL SHALL BE PLACED ON ALL DISTURBED AREAS NOT COVERED BY OTHER SURFACING. TOPSOIL SHALL BE AN EARTHEN MATERIAL SUITABLE TO RE-ESTABLISH THE NATIVE VEGETATION WITHIN THE LIMITS OF CONSTRUCTION USED ONLY AS DIRECTED BY THE ENGINEER.
15. BERMUDA SPRIGS SHALL BE PLACED ON ALL DISTURBED AREAS NOT COVERED BY OTHER MATERIAL ONLY AS DIRECTED BY THE ENGINEER.
16. ANY CONSTRUCTION PROCEDURES NOT COVERED IN PLANS AND SPECIFICATIONS, WILL BE EXECUTED IN ACCORDANCE WITH PROPER CONSTRUCTION TECHNIQUES AND SHALL BE APPROVED BY THE ENGINEER.
17. IF DITCHES SUBSIDE LATER, THE CONTRACTOR SHALL REFILL DITCHES AS SOON AS WEATHER PERMITS, AND SHALL NOT LET DITCHES WITH SUBSIDENCE EXIST DURING CONSTRUCTION OR THEREAFTER.
18. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE FINISHED TO A SMOOTH UNIFORM SURFACE PERMITTING DRAINAGE AND SLOPED IN SUCH CONDITION THAT ALL AREAS MAY BE MOWED WITH ROTARY TYPE MOWING EQUIPMENT.
19. THE CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION STAKING AS WELL AS AS-BUILT SURVEYS. THE CONTRACTOR SHALL USE A REGISTERED LAND SURVEYOR WHO IS IN THE FULL TIME SURVEYING BUSINESS.
20. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF COWETA AND OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY.
21. ALL WATER LINES TO BE CONSTRUCTED WITH A MINIMUM OF THIRTY (30) INCHES OF COVER; EXCEPT WHERE LOCATED UNDER STREETS, 30" OF COVER SHALL BE REQUIRED TO TOP OF SURFACING OR AS NOTED ON THE PLANS.
22. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FENCES DISTURBED DURING CONSTRUCTION.
23. ALL FITTINGS SHALL BE MECHANICAL JOINT SHORT BODIED DUCTILE IRON AND HAVE MEGALUG RESTRAINTS.
24. EXACT LOCATIONS OF PROPOSED AIR VACUUM VALVES, FITTINGS AND FIRE FIRE HYDRANTS ARE TO BE FIELD LOCATED BY THE ENGINEER.
25. WATER LINE CONSTRUCTION SHALL BE AWWA C-900 DR18.
26. PRESSURE AND LEAKAGE TESTS SHALL BE PERFORMED BY CONTRACTOR IN ACCORDANCE WITH OKLAHOMA STATE DEPARTMENT OF ENVIRONMENTAL QUALITY STANDARDS OAC 252:626-19-2(e) AND AWWA C-601.
27. DISINFECTION TESTS SHALL BE PERFORMED BY CONTRACTOR IN ACCORDANCE WITH OKLAHOMA STATE DEPARTMENT OF ENVIRONMENTAL QUALITY STANDARDS OAC 252:626-19-2(f) AND AWWA C-651.
28. THE CONTRACTOR SHALL VERIFY THE DEPTH OF THE EXISTING UTILITIES AND/OR SEWER LINES BEFORE STARTING TRENCH EXCAVATION TO ELIMINATE THE NEED FOR FITTINGS AND ADJUST THE GRADES IF NECESSARY.

ADD ALTERNATE NO. 1

SUMMARY OF QUANTITIES

[illegible]

* THE CONTRACTOR SHALL VERIFY ALL ESTIMATED QUANTITIES W/ ITEMS SHOWN IN THE PLAN SHEETS.



WDB ENGINEERING PLLC 6330 S.E. 54TH STREET OKC, OK 73135 PH: 405-741-7090	
CERTIFICATE OF AUTHORIZATION: #3987 EXP: 6-30-2023	
CITY OF COWETA 6 th W.L. EXT. ALONG N. EUFAULA AVE.	
DATE: 09-28-2022	APPROVED BY
	DRAWN BY MW
LOCATION MAP, PAY QUANTITIES & GENERAL NOTES	
WDB ENGINEERING P.L.L.C.	SHEET NUMBER 2



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N. EUFAULA AVENUE BRIDGE

CITY OF COWETA
WAGNER COUNTY, OKLAHOMA

**PAY QUANTITIES
AND NOTES (2 OF 2)**

DESIGNED BY	MJD
DRAWN BY	MJD
REVIEWED BY	JDC
PROJECT NUMBER	22-151
DATE	02/23/2023

REVISIONS

SHEET NUMBER

4



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GP&E

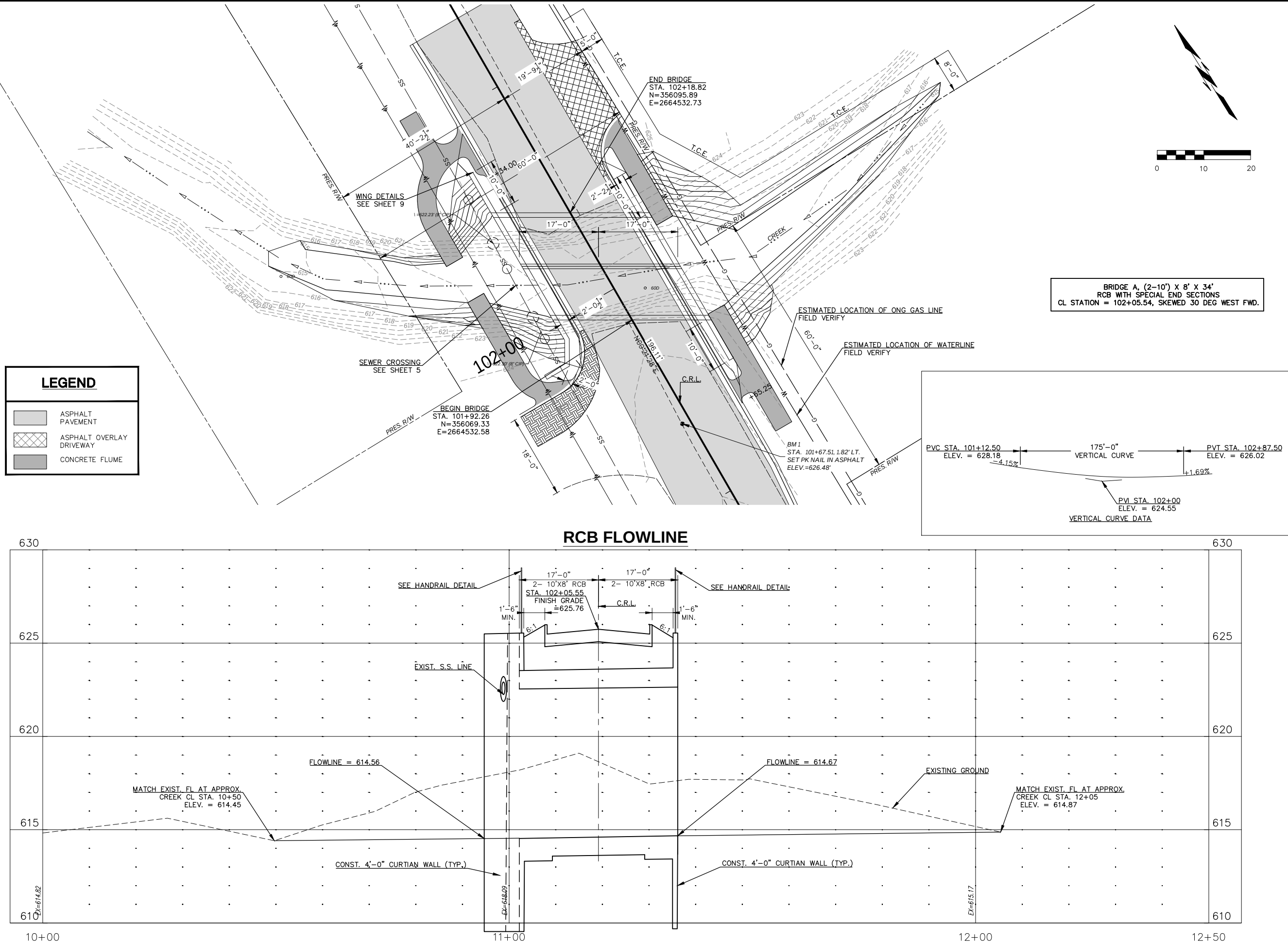
DESIGNED BY MJD
DRAWN BY MJD
REVIEWED BY JDC
PROJECT NUMBER 22-151
DATE 06/02/2023

REVISIONS
SHEET NUMBER

6

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Tuesday, September 12, 2023 4:37:25 PM





CITY OF COWETA
WAGNER COUNTY, OKLAHOMA

RCB DETAIL (1 OF 3)

DATE 06/02/2023

SHEET NUMBER

7

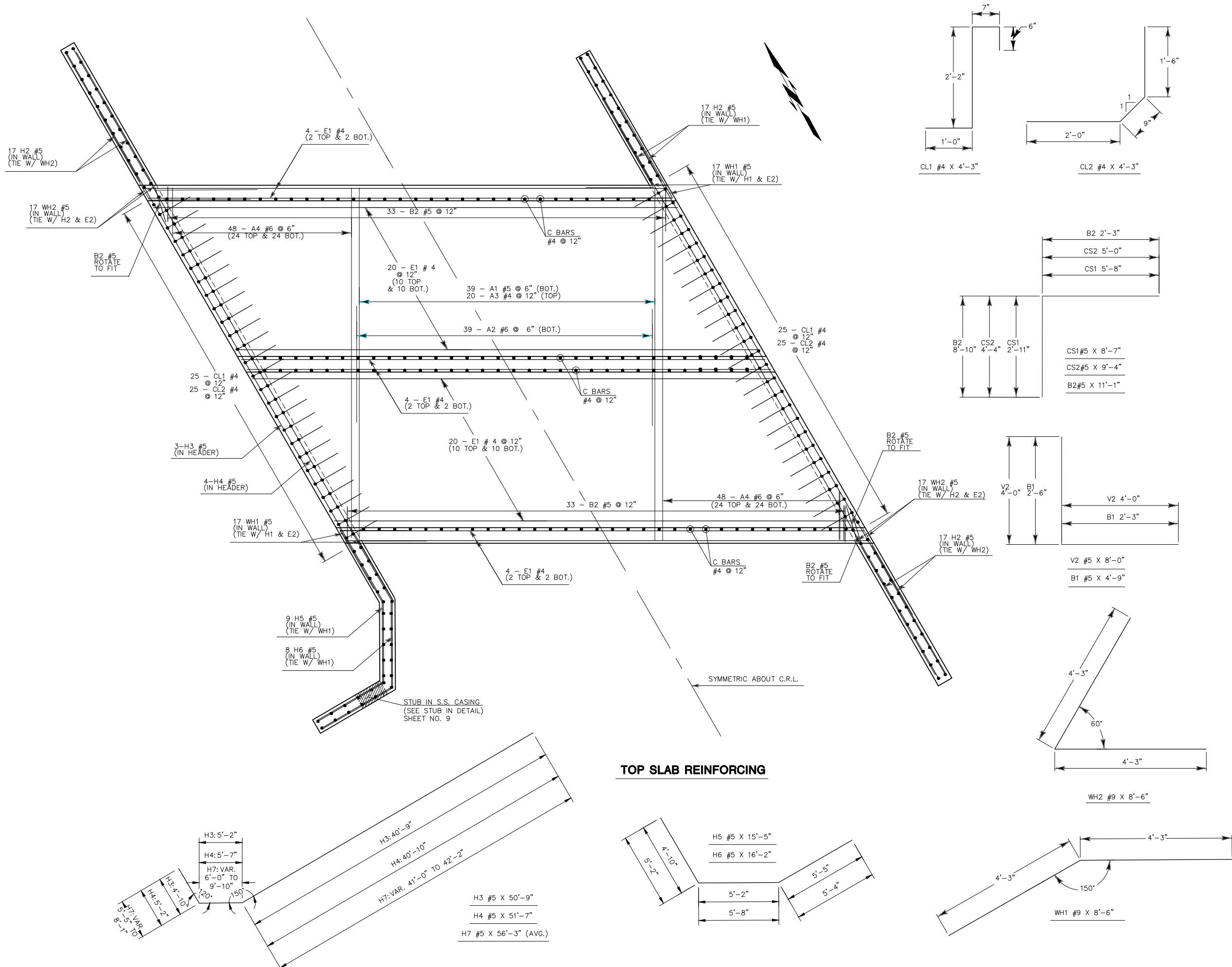


DESIGN:
AASHTO LRFD BRIDGE DESIGN SPECIFICATION, 9TH ED.
ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE

FREQ.	Q (CFS)
2	598
5	718
10	815
25	1055
50	1298
100	1499
OT =	Q76

ALL REINFORCING STEEL SHALL HAVE A MINIMUM OF 2" CLEAR COVER UNLESS OTHERWISE SHOWN.

Tuesday, September 12, 2023 4:37:41 PM



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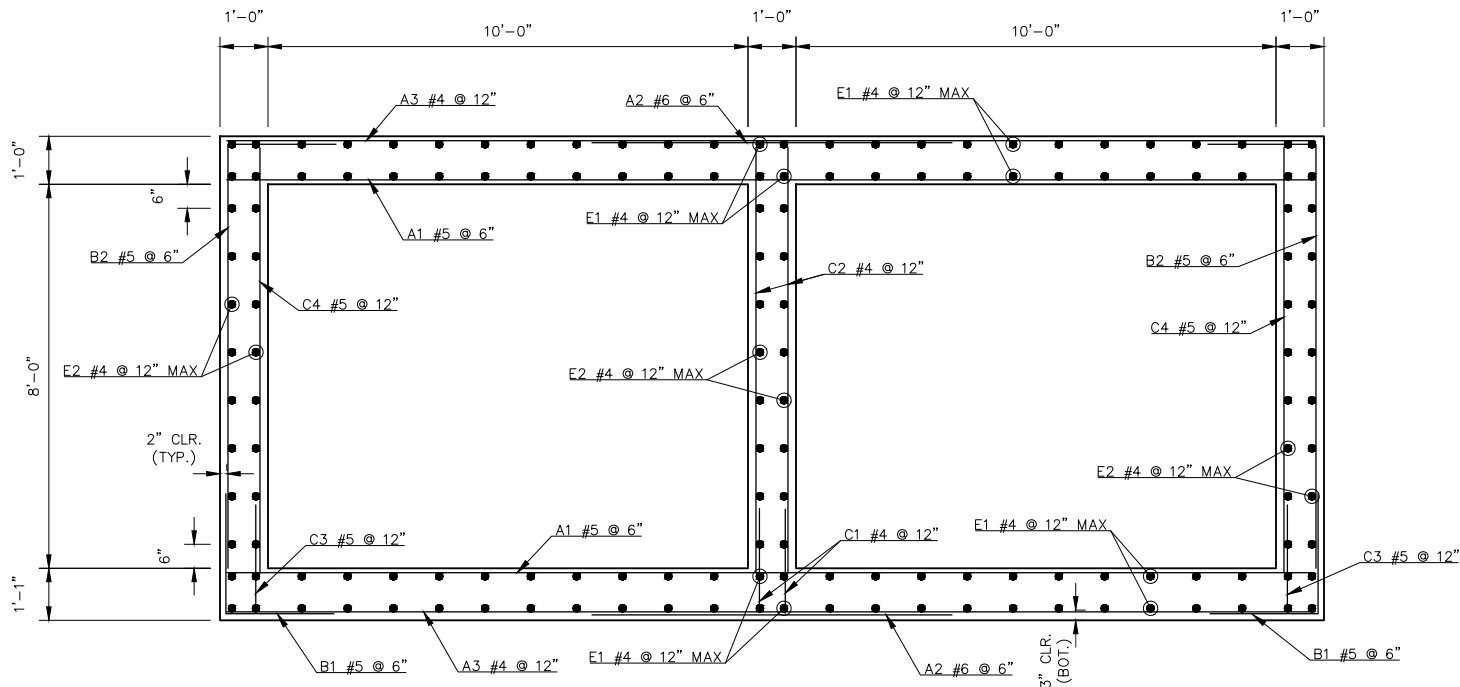
CITY OF COWETA
WAGNER COUNTY, OKLAHOMA

RCB DETAIL (2 OF 3)

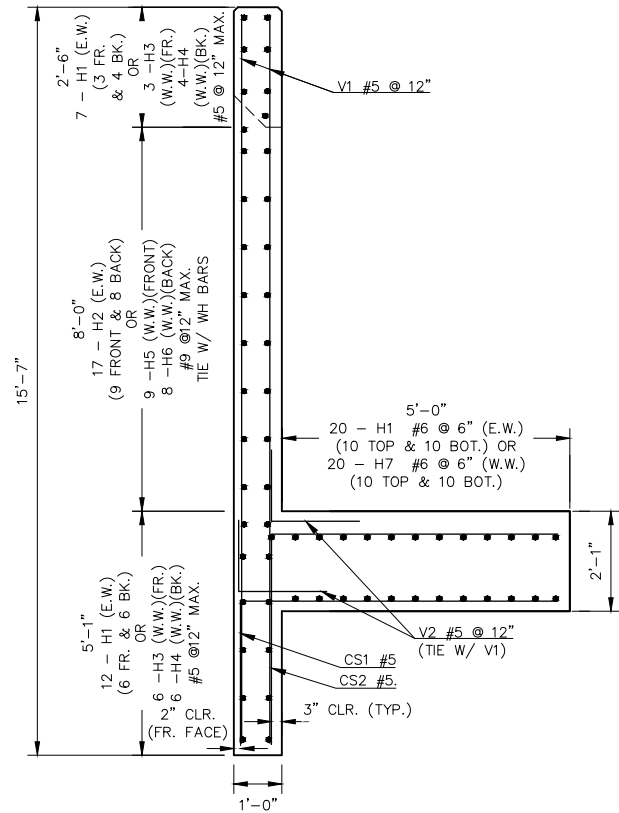
DESIGNED BY	MJD
DRAWN BY	MJD
REVIEWED BY	JDC
PROJECT NUMBER	22-151
DATE	06/02/2023

REVISIONS

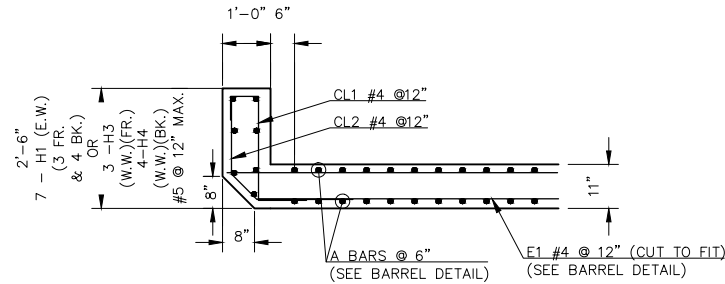
SHEET NUMBER
8



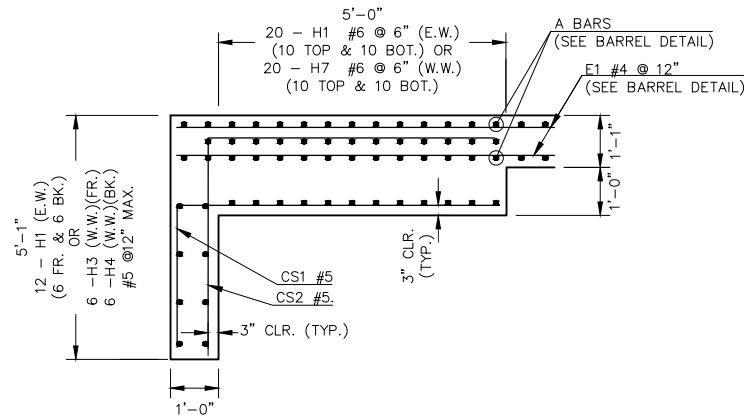
TYPICAL BARREL SECTION



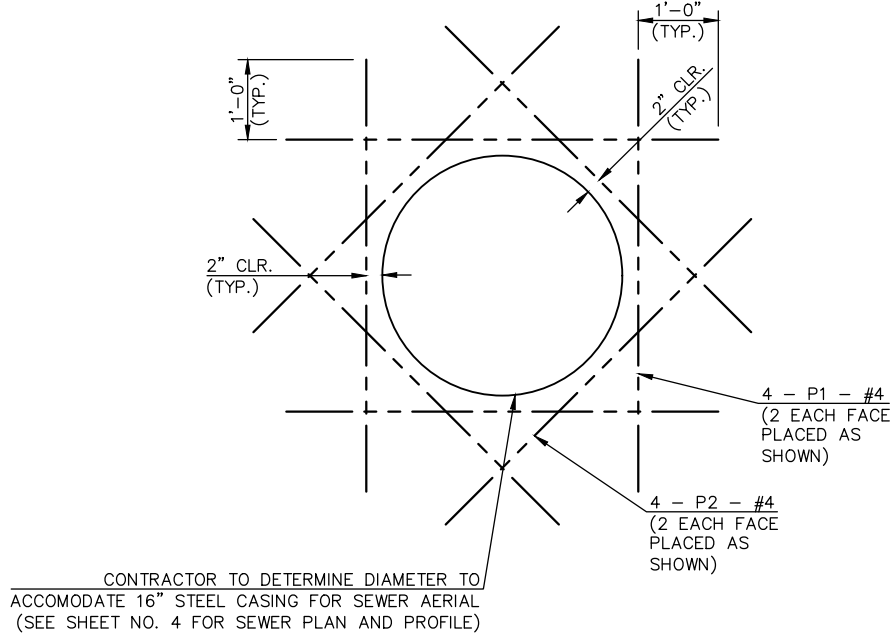
SECTION THRU WING



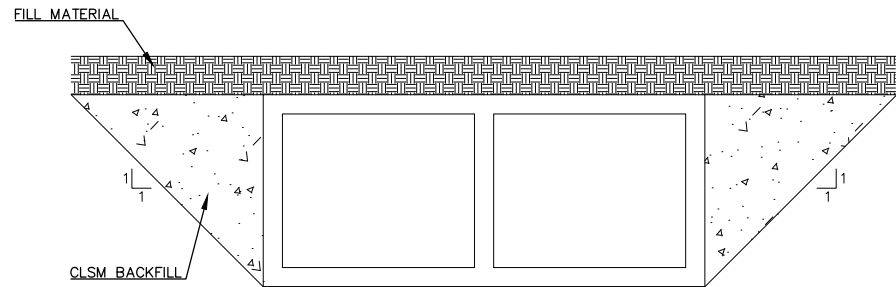
SECTION THRU HEADWALL AT MIDSPAN



SECTION THRU WING AT MIDSPAN



STUB IN DETAIL



CLSM BACKFILL DETAIL

WEST HEADWALL BAR LIST				
MARK	SIZE	NO.	FORM	LENGTH
CL1	#4	25	BNT	4'-3"
CL2	#4	25	BNT	4'-3"
CS1	#5	52	BNT	8'-7"
CS2	#5	52	BNT	9'-4"
H2	#5	17	STR	9'-6"
H3	#5	9	BNT	50'-9"
H4	#5	10	BNT	51'-7"
H5	#5	9	BNT	15'-5"
H6	#5	8	BNT	16'-2"
H7	#6	20	BNT	VARIES 52'-7" TO 60'-1"
V1	#5	40	STR	15'-2"
V2	#5	40	STR	6'-0"
WH1	#9	17	BNT	8'-6"
WH2	#9	17	BNT	8'-6"

BARREL BAR LIST				
MARK	SIZE	NO.	FORM	LENGTH
A1	#5	78	STR	22'-8"
A2	#6	78	STR	7'-6"
A3	#4	40	STR	22'-8"
A4	#6	192	STR	VARIES 3'-0" TO 22'-2"
B1	#5	68	BNT	4'-9"
B2	#5	68	BNT	11'-1"
C1	#4	34	STR	2'-2"
C2	#4	34	STR	8'-10"
C3	#4	34	STR	2'-2"
C4	#4	34	STR	8'-10"
E1	#4	104	STR	33'-8"
E2	#4	48	STR	33'-8"

EAST HEADWALL BAR LIST				
MARK	SIZE	NO.	FORM	LENGTH
CL1	#4	25	BNT	4'-3"
CL2	#4	25	BNT	4'-3"
CS1	#5	43	BNT	8'-7"
CS2	#5	43	BNT	9'-4"
H1	#5	39	STR	46'-0"
H2	#5	34	STR	9'-6"
V1	#5	40	STR	15'-2"
V2	#5	40	STR	6'-0"
WH1	#9	17	BNT	8'-6"
WH2	#9	17	BNT	8'-6"



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N. EUFAULA AVENUE BRIDGE

CITY OF COWETA
WAGNER COUNTY, OKLAHOMA

RCB DETAIL (3 OF 3)

DESIGNED BY	MJD
DRAWN BY	MJD
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PROJECT NUMBER	22-151
DATE	06/02/2023

REVISIONS	

SHEET NUMBER

ADD ALTERNATE NO. 1



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WATER PLAN
KEY MAP

DESIGNED BY	WDB
DRAWN BY	WDB
REVIEWED BY	WDB
PROJECT NUMBER	22-151
DATE	06/02/2023

REVISIONS

SHEET NUMBER	10
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ADD ALTERNATE NO. 1



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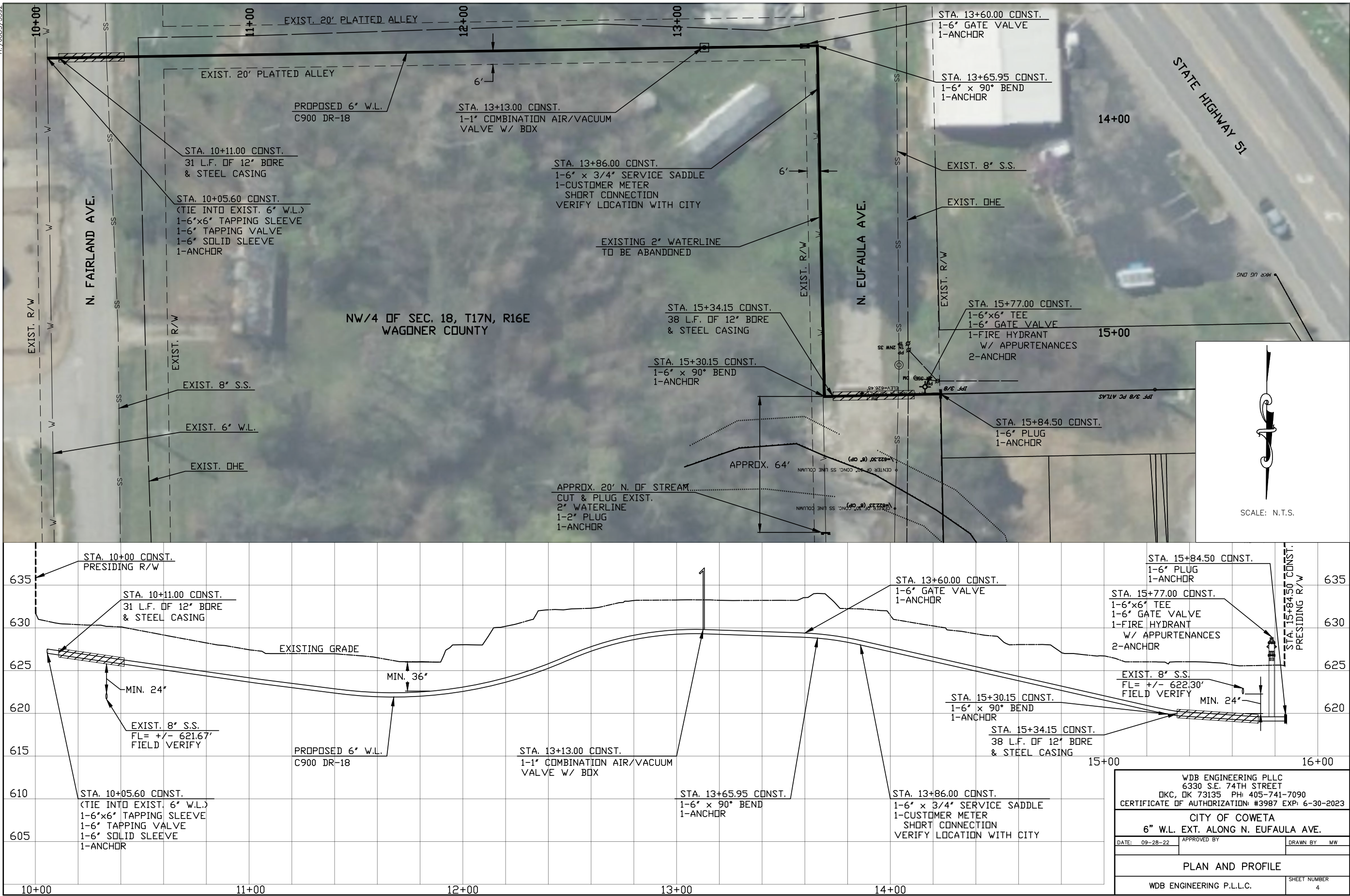
WATER PLAN
AND PROFILE

DESIGNED BY WDB
DRAWN BY WDB
REVIEWED BY WDB
PROJECT NUMBER 22-151
DATE 06/02/2023

REVISIONS

SHEET NUMBER

11



STORM WATER MANAGEMENT PLAN

SITE DESCRIPTION

PROJECT LIMITS: PROJECT LOCATED IN SECTION 18, T17N, R16E,, I.M. COWETA, OKLAHOMA.

PROJECT DESCRIPTION: RECONSTRUCT 100 LF OF N. EUFAULA AVENUE INCLUDING ROADWAY, BRIDGE, AND UTILITY IMPROVEMENTS.

SUGGESTED SEQUENCE OF EROSION CONTROL ACTIVITIES: PRIOR TO INITIALIZING SOIL DISTURBING ACTIVITIES, THE CONTRACTOR WILL STRIP, STOCKPILE, AND STABILIZE TOPSOIL. CLEAR AND GRUB ONLY IN AREAS NECESSARY, PRESERVING AS MUCH NATIVE VEGETATION AS POSSIBLE. INSTALL, MAINTAIN, AND/OR MOVE TEMPORARY SEDIMENT ITEMS AS PRACTICAL WITH CONSTRUCTION OPERATIONS. IF DIRECTED BY THE ENGINEER, PLACE SOLID SLAB SODDING, PLACE SALVAGED TOPSOIL AND DEVICES WHEN AN ACCEPTABLE VEGETATION COVER (AT LEAST 70%) HAS BEEN ATTAINED. AS SITE CONDITIONS WARRANT, THE CONTRACTOR MAY CHOOSE TO MODIFY THE TYPE OR ARRANGEMENT OF SPECIFIED PRACTICES TO IMPROVE THEIR EFFECTIVENESS AS APPROVED BY THE ENGINEER. THE CONTRACTOR WILL MAINTAIN A LOG OF THE DATES OF MAJOR SOIL DISTURBING ACTIVITIES AND ALSO THE DATES OF INSTALLATION OF EROSION CONTROL MEASURES.

SOIL TYPE: DENNIS–RADLEY COMPLEX

TOTAL AREA OF THE CONSTRUCTION SITE: 0.15 ACRES

ESTIMATED AREA TO BE DISTURBED: 0.15 ACRES

OFFSITE AREA TO BE DISTURBED: NONE (FOR CONTRACTOR USE)

TOTAL IMPERVIOUS AREA PRE–CONSTRUCTION: 0.06 ACRES

TOTAL IMPERVIOUS AREA POST–CONSTRUCTION: 0.06 ACRES

POST–CONSTRUCTION RUNOFF COEFFICIENT OF THE SITE: N/A

LATITUDE & LONGITUDE OF CENTER OF PROJECT: 35° 57' 18" N, 95° 38' 52" W

PROJECT WILL DISCHARGE TO:

NAME OF RECEIVING WATERS: COWETA CREEK TO ARKANSAS RIVER

SENSITIVE WATERS OR WATERSHEDS: YES NO X

303 (d) IMPAIRED WATERS: YES NO X

IF YES, LIST IMPAIRMENT:

LOCATED IN A TMDL: YES NO X

LAKE THUNDERBIRD TMDL: YES NO X

MS4 ENTITY YES NO X

IF YES, LOCATION:

NOTE: THIS SHEET SHOULD BE USED IN CONJUNCTION WITH A DRAINAGE MAP THAT ILLUSTRATES THE DRAINAGE PATTERNS/PATHWAYS AND RECEIVING WATERS FOR THIS PROJECT. THIS SHEET SHOULD ALSO BE USED WITH THE EROSION CONTROL SUMMARIES, PAY ITEMS, & NOTES.

EROSION AND SEDIMENT CONTROLS

SOIL STABILIZATION PRACTICES:

- TEMPORARY SEEDING
- X PERMANENT SODDING, SPRIGGING OR SEEDING
- VEGETATIVE MULCHING
- SOIL RETENTION BLANKET
- X PRESERVATION OF EXISTING VEGETATION
- HYDROMULCH/HYDROSEED

NOTE: TEMPORARY EROSION CONTROL METHODS MUST BE USED ON ALL DISTURBED AREAS WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR OVER 14 DAYS. METHODS USED WILL BE AS SHOWN ON PLANS, OR AS DIRECTED BY THE ENGINEER.

STRUCTURAL PRACTICES:

- STABILIZED CONSTRUCTION EXIT
- X TEMPORARY SILT FENCE
- X TEMPORARY SILT DIKES
- TEMPORARY FIBER LOG
- DIVERSION, INTERCEPTOR OR PERIMETER DIKES
- DIVERSION, INTERCEPTOR OR PERIMETER SWALES
- ROCK FILTER DAMS
- TEMPORARY SLOPE DRAIN
- PAVED DITCH W/ DITCH LINER PROTECTION
- TEMPORARY DIVERSION CHANNELS
- TEMPORARY SEDIMENT BASINS
- TEMPORARY SEDIMENT TRAPS
- TEMPORARY SEDIMENT FILTERS
- TEMPORARY SEDIMENT REMOVAL
- RIP RAP
- INLET PROTECTION
- TEMPORARY BRUSH SEDIMENT BARRIERS
- SANDBAG BERMS
- TEMPORARY STREAM CROSSINGS
- FLEXAMAT/ARTICULATED CONCRETE BLOCK
- COMPOST FILTER SOCKS
- EROSION CONTROL MATS AND BLANKETS

OFFSITE VEHICLE TRACKING:

- HAUL ROADS DAMPENED FOR DUST CONTROL
- X LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
- X EXCESS DIRT ON ROAD REMOVED DAILY

NOTES:

- CONTRACTOR TO REMOVE SEDIMENT WHEN TEMPORARY DEVICES ARE HALF FULL OR AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE FOLLOWING:

MAINTENANCE AND INSPECTION:

ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER FROM THE BEGINNING OF CONSTRUCTION UNTIL AN ACCEPTABLE VEGETATIVE COVER IS ESTABLISHED. INSPECTION BY THE CONTRACTOR AND ANY NECESSARY REPAIRS SHALL BE PERFORMED ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCH AS RECORDED BY A NON–FREEZING RAIN GAUGE TO BE LOCATED ON SITE. POTENTIALLY ERODIBLE AREAS, DRAINAGE WAYS, MATERIAL STORAGE, STRUCTURAL DEVICES, CONSTRUCTION ENTRANCES AND EXITS ALONG WITH EROSION AND SEDIMENT CONTROL LOCATIONS ARE EXAMPLES OF SITES THAT NEED TO BE INSPECTED.

WASTE MATERIALS:

PROPER MANAGEMENT AND DISPOSAL OF CONSTRUCTION WASTE MATERIAL IS REQUIRED BY THE CONTRACTOR. MATERIALS INCLUDE STOCKPILES, SURPLUS, DEBRIS AND ALL OTHER BY–PRODUCTS FROM THE CONSTRUCTION PROCESS. PRACTICES INCLUDE DISPOSAL, PROPER MATERIALS HANDLING, SPILL PREVENTION AND CLEANUP MEASURES. CONTROLS AND PRACTICES SHALL MEET THE REQUIREMENTS OF ALL FEDERAL, STATE AND LOCAL AGENCIES.

HAZARDOUS MATERIALS:

PROPER MANAGEMENT AND DISPOSAL OF HAZARDOUS WASTE MATERIALS IS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING MANUFACTURER’S RECOMMENDATIONS, STATE AND FEDERAL REGULATIONS TO ENSURE CORRECT HANDLING, DISPOSAL, SPILL PREVENTION AND CLEANUP MEASURES. EXAMPLES INCLUDE BUT ARE NOT LIMITED TO: PAINTS, ACIDS, CLEANING SOLVENTS, CHEMICAL ADDITIVES, CONCRETE CURING COMPOUNDS AND CONTAMINATED SOILS.

GENERAL NOTES:

A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED TO COMPLY WITH THE OKLAHOMA POLLUTION DISCHARGE ELIMINATION SYSTEM (OPDES) REGULATIONS. THIS PLAN IS INITIATED DURING THE DESIGN PHASE, CONFIRMED IN THE PRE–WORK MEETINGS AND AVAILABLE ON THE JOB SITE ALONG WITH COPIES OF THE NOTICE OF INTENT (NOI) FORM AND PERMIT CERTIFICATE THAT HAVE BEEN FILED WITH THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ). THE PLAN MUST BE KEPT CURRENT WITH UP–TO–DATE AMENDMENTS DURING THE PROGRESSION OF THE PROJECT. ALL CONTRACTOR OFF–SITE OPERATIONS ASSOCIATED WITH THE PROJECT MUST BE DOCUMENTED IN THE SWPPP, I.E., BORROW PITS, WORK ROADS, DISPOSAL SITES, ASPHALT/CONCRETE PLANTS, ETC., THE BASIC GOAL OF STORM WATER MANAGEMENT IS TO IMPROVE WATER QUALITY BY REDUCING POLLUTANTS IN STORM WATER DISCHARGES. RUNOFF FROM CONSTRUCTION SITES HAS A POTENTIAL FOR POLLUTION DUE TO EXPOSED SOILS AND THE PRESENCE OF HAZARDOUS MATERIALS USED IN THE CONSTRUCTION PROCESS. THE PREVENTION OF SOIL EROSION, CONTAINMENT OF HAZARDOUS MATERIALS AND/OR THE INTERCEPTION OF THESE POLLUTANTS BEFORE LEAVING THE CONSTRUCTION SITE ARE THE BEST PRACTICES FOR CONTROLLING STORM WATER POLLUTION.

THE FOLLOWING SECTIONS OF THE 2019 ODOT STANDARD SPECIFICATIONS SHOULD BE NOTED:

- 103.05 BONDING REQUIREMENTS
- 104.10 FINAL CLEANING UP
- 104.12 CONTRACTOR’S RESPONSIBILITY FOR WORK
- 104.13 ENVIRONMENTAL PROTECTION
- 106.08 STORAGE AND HANDLING OF MATERIAL
- 107.01 LAWS, RULES AND REGULATIONS TO BE OBSERVED
- 107.20 STORM WATER MANAGEMENT
- 220 MANAGEMENT OF EROSION, SEDIMENTATION AND STORM WATER POLLUTION PREVENTION
- 221 TEMPORARY SEDIMENT CONTROL

IN ADDITION:

”ODEQ GENERAL PERMIT (OKR10) FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES WITHIN THE STATE OF OKLAHOMA.” ODEQ, WATER QUALITY DIVISION, OCTOBER 18, 2022.

ADDITIONAL PERMITS REQUIRED FROM OKLAHOMA WATER RESOURCES BOARD AND/OR MUNICIPALITY FOR USE OF SURFACE, GROUND OR CITY WATER SOURCES FOR ACTIVITIES SUCH AS WATERING.



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WAGNER COUNTY, OKLAHOMA

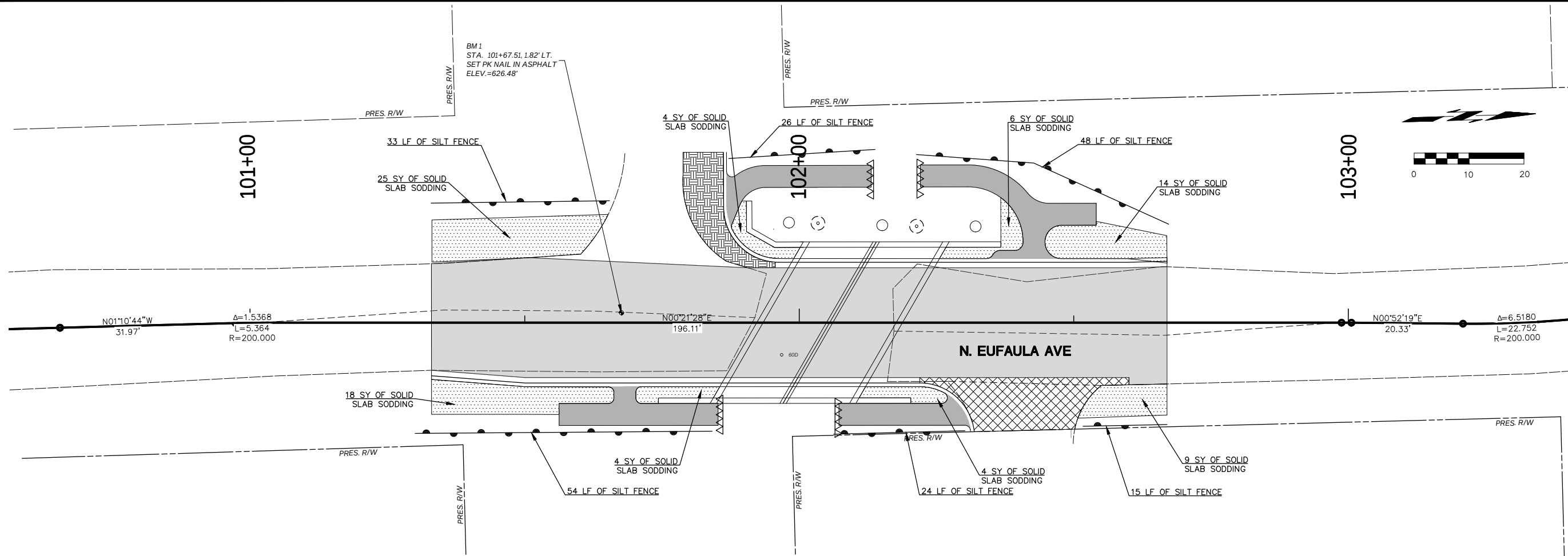
STORMWATER MANAGEMENT PLAN

DESIGNED BY	MJD
DRAWN BY	MJD
REVIEWED BY	JDC
PROJECT NUMBER	22-151
DATE	06/02/2023

REVISIONS

SHEET NUMBER	12
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Tuesday, September 12, 2023 4:38:24 PM



LEGEND



SILT FENCE



SILT DIKE



ASPHALT PAVEMENT



ASPHALT OVERLAY
DRIVEWAY



SOLID SLAB SODDING



CONCRETE FLUME



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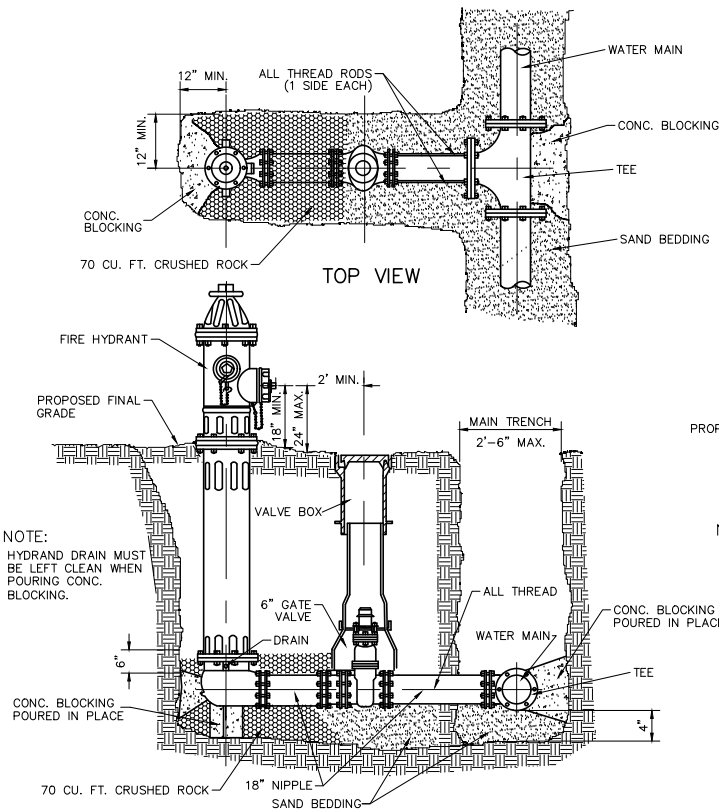
CITY OF COWETA
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EROSION CONTROL PLAN	
DESIGNED BY	MJD
DRAWN BY	MJD
REVIEWED BY	JDC
PROJECT NUMBER	22-151
DATE	06/02/2023
REVISIONS	
SHEET NUMBER	13

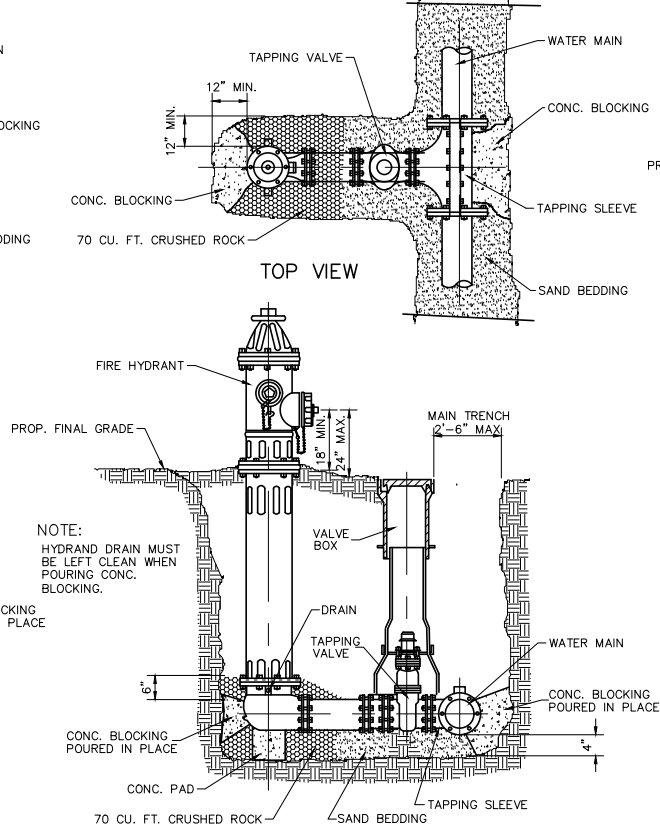
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PROGRAMS STD W-100

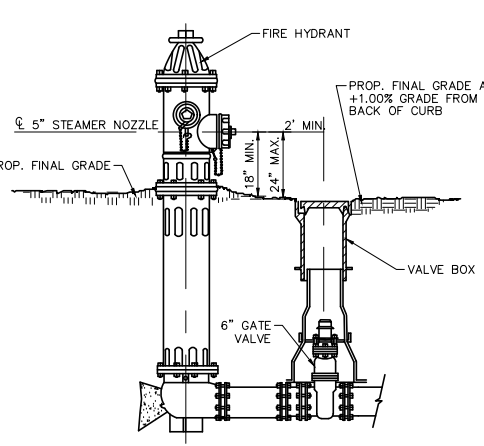
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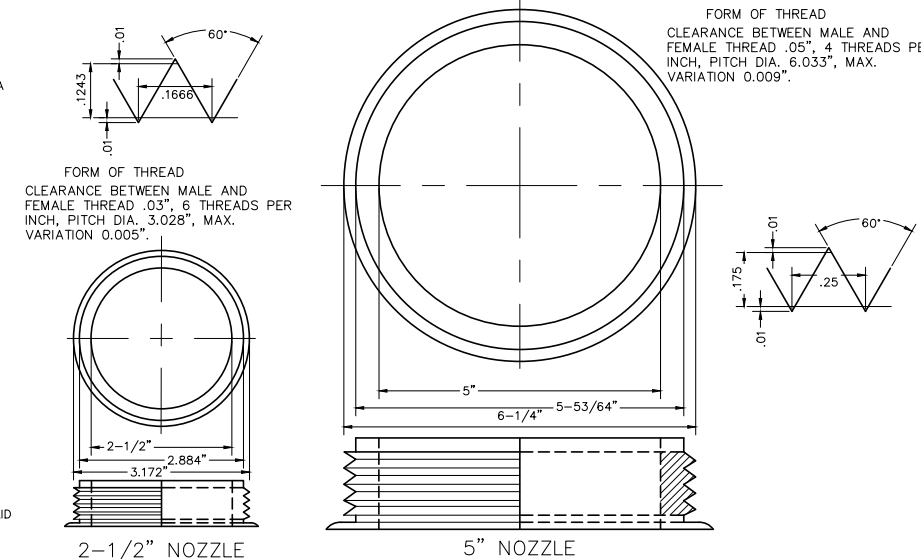
INSTALLATION OF FIRE HYDRANT ON NEW MAIN



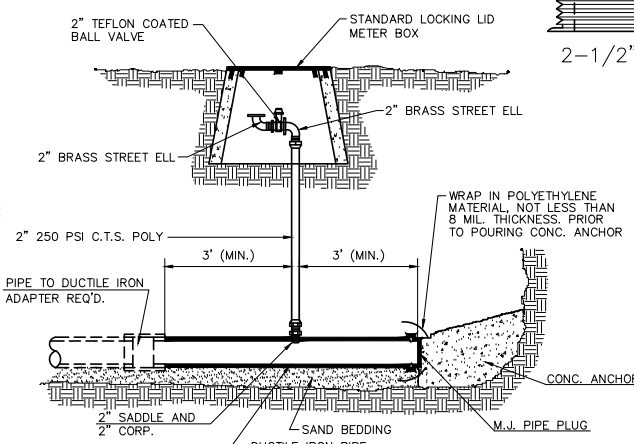
INSTALLATION OF FIRE HYDRANT ON EXISTING MAIN



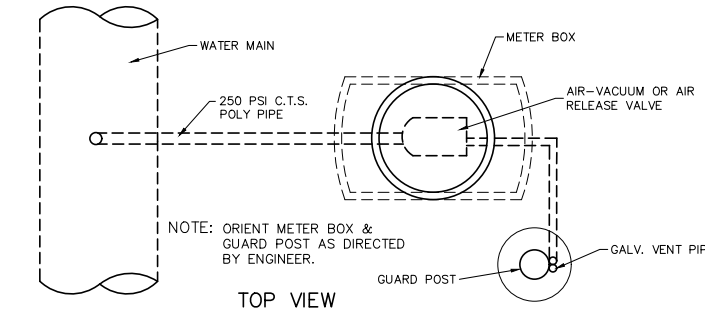
FIRE HYDRANT ELEVATION DETAIL



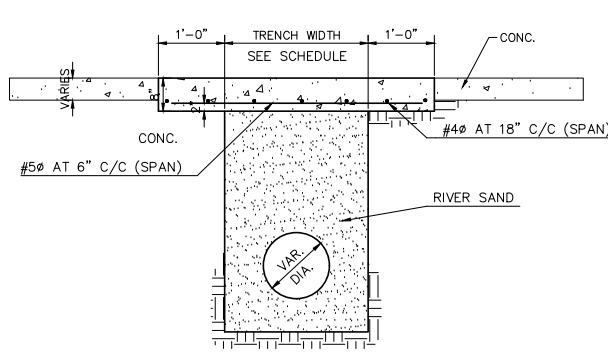
FIRE HYDRANT NOZZLE THREADS



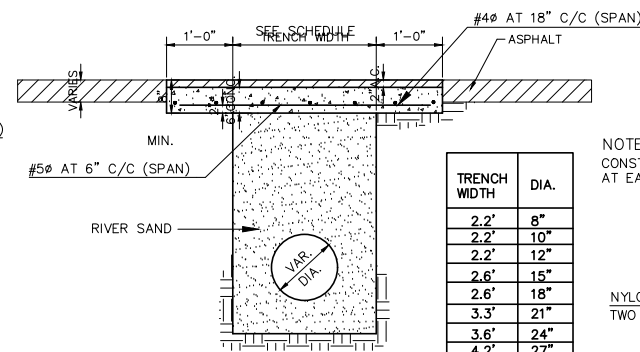
2" BLOW OFF



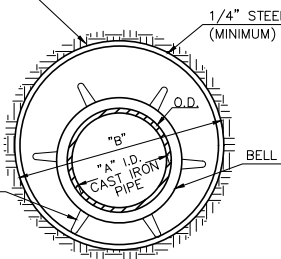
TOP VIEW



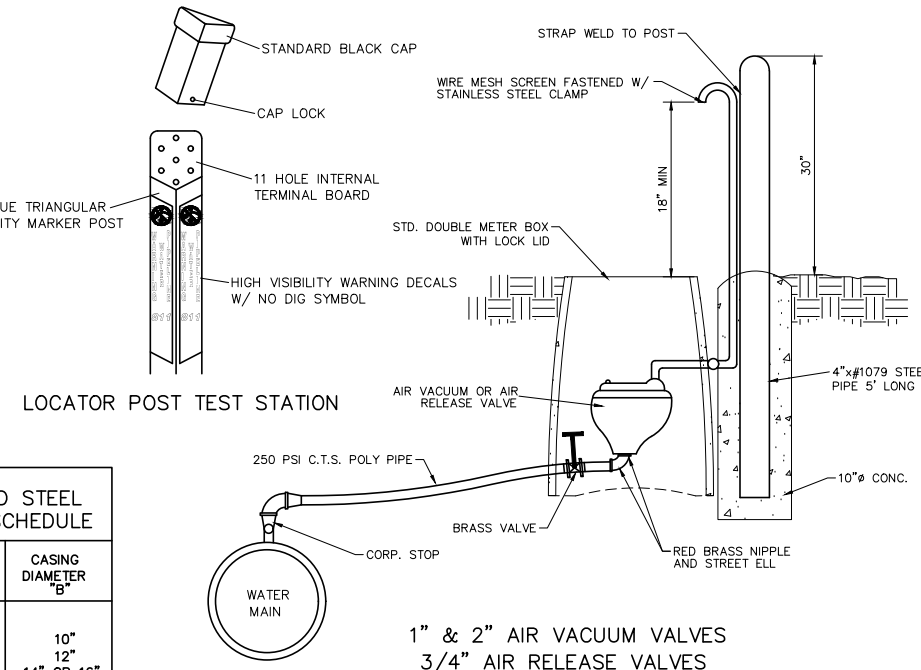
TYPICAL SECTION PAVING CUTS AND PERMANENT REPAIRS



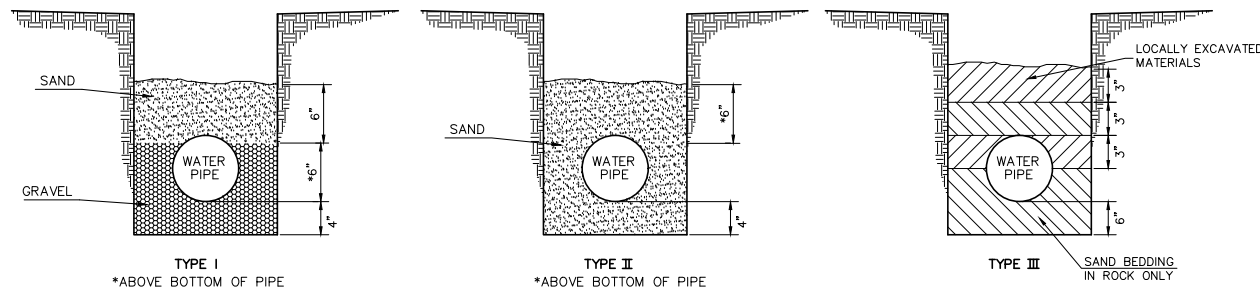
NOTE: CONSTRUCT CASING END SEAL AT EACH END OF CASING



TYPICAL SECTION FOR BORING PUBLIC STREETS
WATER MAIN INSTALLATIONS

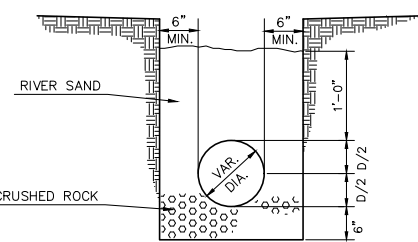


LOCATOR POST TEST STATION



UNLESS OTHERWISE SPECIFIED, TYPE I OR TYPE II SHALL BE USED FOR STEEL, CONCRETE, ASBESTOS CEMENT, P.V.C., AND CAST IRON. TYPE III SHALL BE USED FOR DUCTILE IRON EXCEPT UNDER ROADWAY CROSSINGS.

BEDDING DETAILS



TYPICAL TRENCH WITH GRAVEL CRADLE

PIPE AND STEEL CASING SCHEDULE	
PIPE DIAMETER "A"	CASING DIAMETER "B"
4	10"
6	12"
8	14" OR 16"
10	18"
12	20"
16	24"
18	26"
20	30"
24	33"

1" & 2" AIR VACUUM VALVES
3/4" AIR RELEASE VALVES

Design		WDB ENGINEERING PLLC 6330 S.E. 74TH STREET OKC, OK 73135 PH: 405-741-7090 CERTIFICATE OF AUTHORIZATION: #3987 EXP: 6-30-2023
Drawn		
Checked		
Approved		
Date		
STANDARD DETAILS W-100		Sheet No. 5



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CA# 6414 EXPIRES 6/30/2024

N. EUFAULA AVENUE BRIDGE

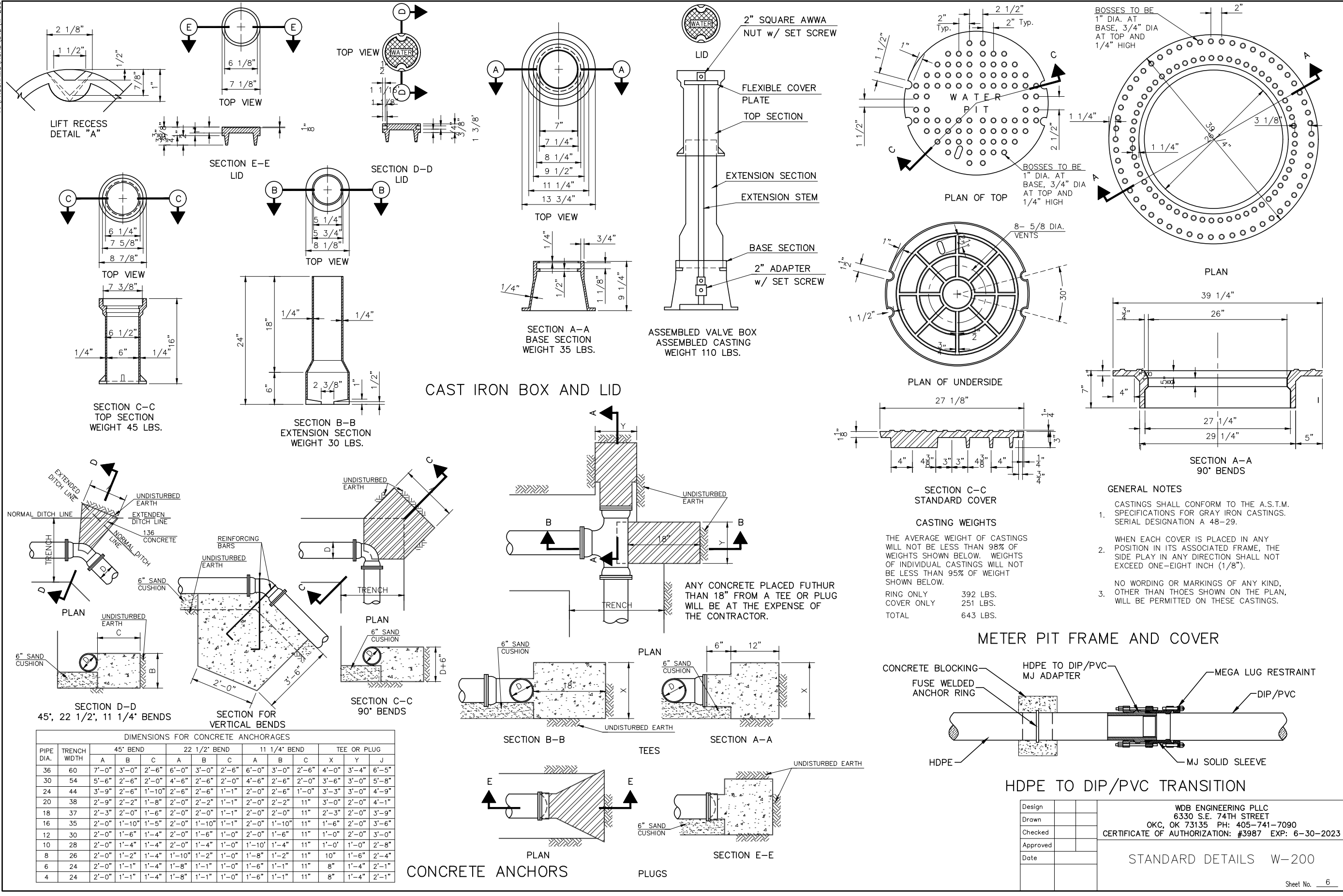
CITY OF COWETA
WAGNER COUNTY, OKLAHOMA

WATER DETAILS
(1 OF 3)

DESIGNED BY	WDB
DRAWN BY	WDB
REVIEWED BY	WDB
PROJECT NUMBER	22-151
DATE	06/02/2023

REVISIONS

SHEET NUMBER



COWAN GROUP ENGINEERING
7100 N. GLASSER, SUITE 500
OKLAHOMA CITY, OK 73116
405-463-3369 FAX 405-463-3381
WWW.COWANGROUP.COM
DA# 6414 EXPIRES 6/30/2024

N. EUFAULA AVENUE BRIDGE CITY OF COWETA WAGNER COUNTY, OKLAHOMA

WATER DETAILS (2 OF 3)

DESIGNED BY WDB
DRAWN BY WDB
REVIEWED BY WDB
PROJECT NUMBER 22-151
DATE 06/02/2023

REVISIONS

SHEET NUMBER 15

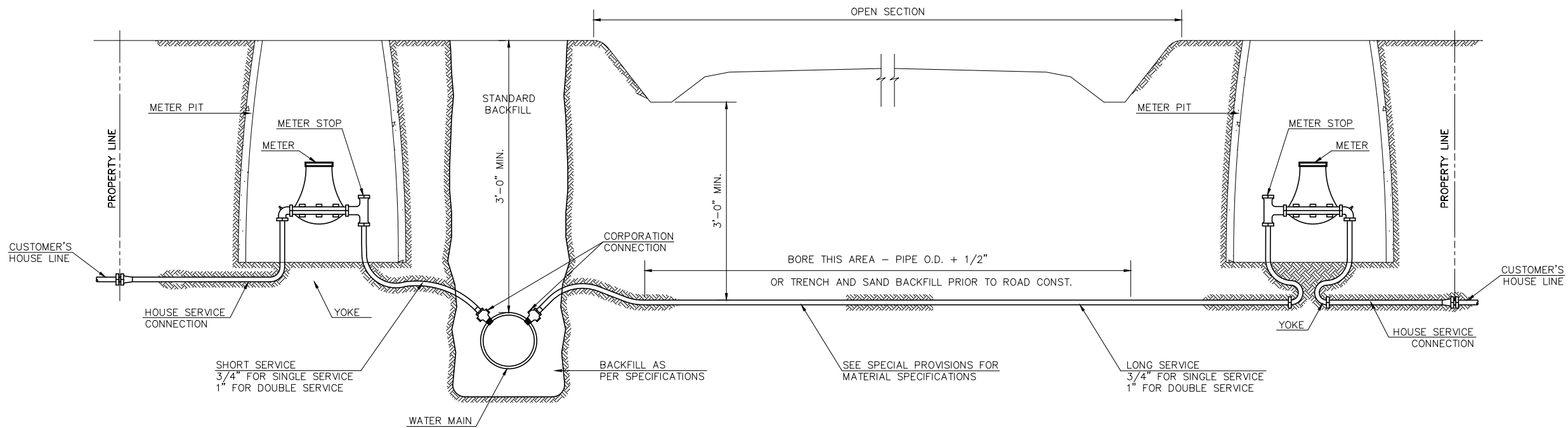
WDB ENGINEERING PLLC
6330 S.E. 74TH STREET
OKC, OK 73135 PH: 405-741-7090
CERTIFICATE OF AUTHORIZATION: #3987 EXP: 6-30-2023

STANDARD DETAILS W-200

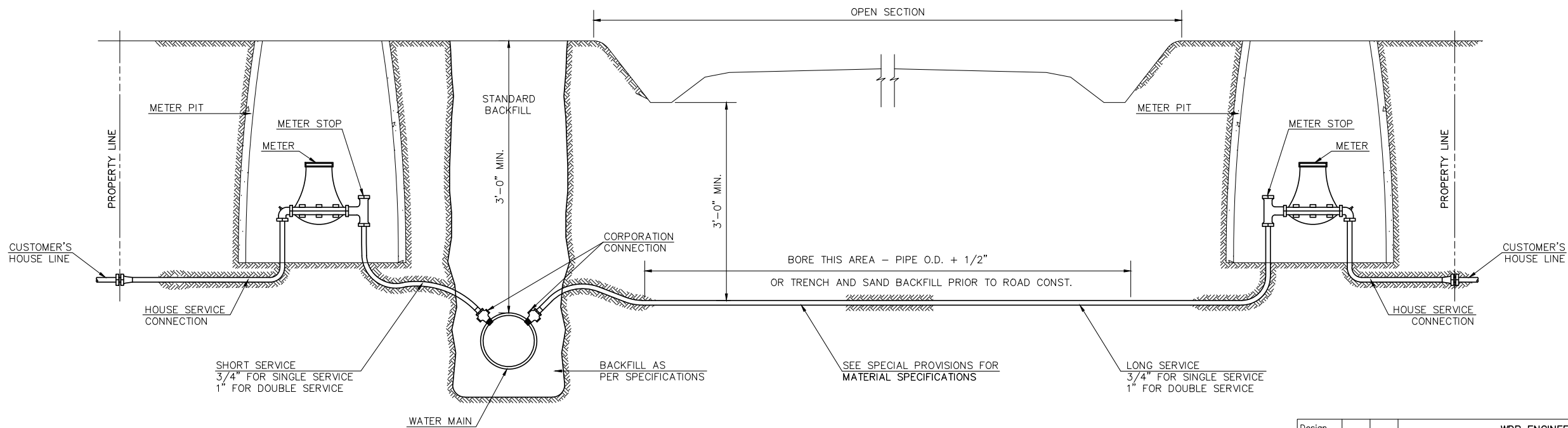
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Friday, June 2, 2023 10:24:47 AM



SERVICE CONNECTION TYPE "A"



SERVICE CONNECTION TYPE "B"

Design		
Drawn		
Checked		
Approved		
Date		

WDB ENGINEERING PLLC
6330 S.E. 74TH STREET
OKC, OK 73135 PH: 405-741-7090
CERTIFICATE OF AUTHORIZATION: #3987 EXP: 6-30-2023

STANDARD DETAILS W-700

Sheet No. 7



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N. EUFAULA AVENUE BRIDGE

CITY OF COWETA
WAGNER COUNTY, OKLAHOMA

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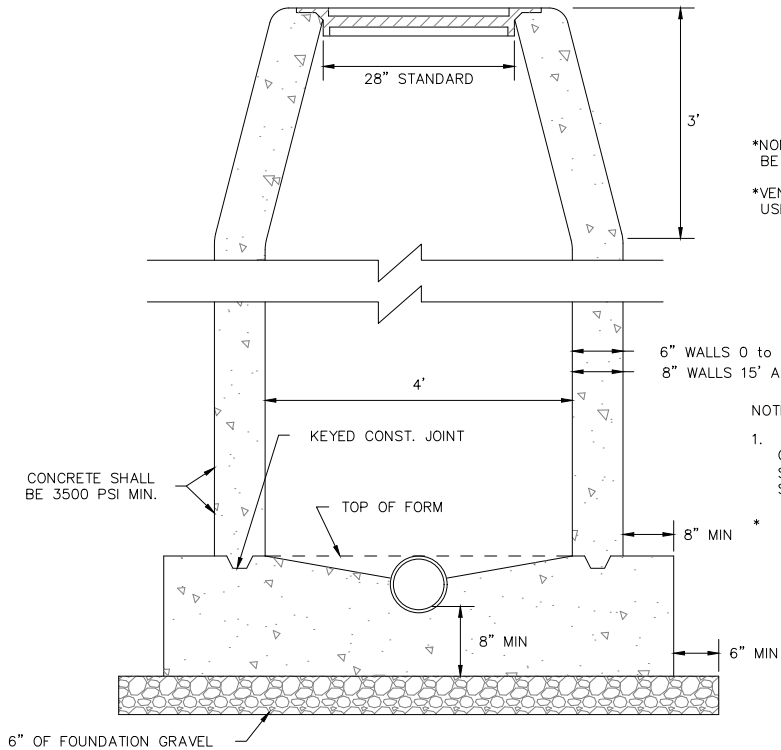
WATER DETAILS (3 OF 3)

DESIGNED BY	WDB
DRAWN BY	WDB
REVIEWED BY	WDB
PROJECT NUMBER	22-151
DATE	06/02/2023

REVISIONS
SHEET NUMBER
16

GENERAL NOTES

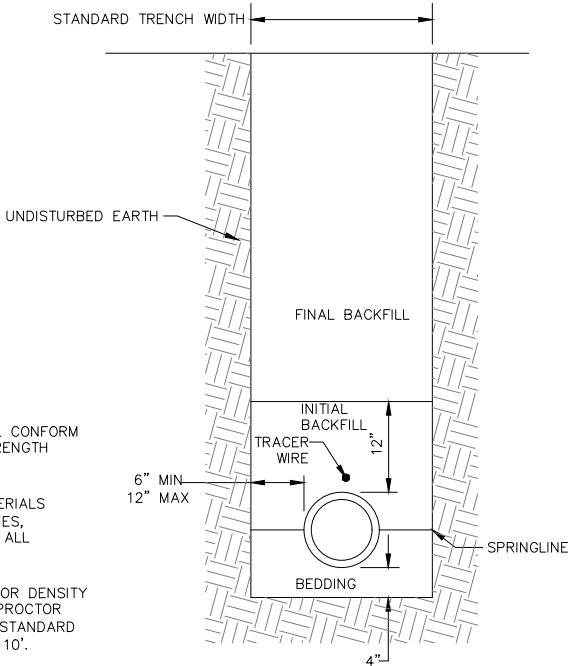
- BACKFILL WITH SUITABLE, ON SITE SOIL COMPACTED TO REQUIRED DENSITY. IN ACCORDANCE WITH SPECIFICATIONS.
- THE COST OF MOVING, REMOVING AND REPLACING ALL FENCES, TREES, STRUCTURES OR OTHER OBSTRUCTIONS NECESSARY FOR CONSTRUCTION WILL NOT BE PAID FOR AS SUCH, BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS UNLESS OTHERWISE NOTED.
- A WATER TIGHT PLUG SHALL BE INSTALLED IN ANY NEW LINE AT ITS ENTRANCE INTO AN EXISTING MANHOLE. UPON SATISFACTORY COMPLETION OF THE PROJECT, PERMISSION WILL BE GIVEN BY THE CITY ENGINEER TO REMOVE THE PLUG.
- DO NOT BREAK OUT THE EXISTING SEWER PIPE WITHIN ANY MANHOLE BUILT AROUND AN EXISTING SEWER UNTIL PROPER APPROVAL TO DO SO IS GIVEN BY THE CITY ENGINEER.
- ALL STUBS SHALL BE ONE LENGTH OF BELL-END PIPE EXTENDING THRU THE MANHOLE WALL AND SHALL BE TIGHTLY PLUGGED.
- AT ABANDONED MANHOLES AND SEWERS, PLUG ALL SEWERS AT MANHOLES, TEAR MANHOLES DOWN 3' BELOW FINISHED GROUND ELEVATION, AND FILL BALANCE OF MANHOLES WITH APPROVED BACKFILL.
- ALL ABANDONED MANHOLE RINGS AND LIDS SHALL BE PROPERTY OF THE CITY OF COWETA UTILITY LINE MAINTENANCE WASTEWATER DEPARTMENT.
- PIERS AND COLLARS TO BE BUILT ACCORDING TO STANDARD SPECIFICATIONS, OR AS NOTED.
- ALL FILL AREAS SHOWN ON PROFILE SHALL BE MADE BEFORE CONSTRUCTION OF SEWER.
- UNLESS OTHERWISE REQUIRED, DENSITY TESTING SHALL BE PERFORMED ON A AVERAGE OF EVERY 200 L.F. OF TRENCH EACH 5 FT. OF DEPTH. DENSITY REQUIREMENTS FOR TRANSVERSE CROSSINGS UNDER PAVING OR DRIVEWAYS SHALL COMPLY WITH THE SCHEDULE SHOWN ON STANDARD CONSTRUCTION PAVING DETAILS.
- THE CONSTRUCTION OF MONOLITHICALLY CAST-IN-PLACE MANHOLES WILL BE ALLOWED ONLY AS SHOWN ON THE PLANS. THE SUBMITTAL OF PROPOSED LEG SUPPORTS SHALL BE REQUIRED AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
- PLACEMENT OF CONCRETE STRUCTURES, MANHOLES AND ETC., SHALL COMPLY WITH THE SPECIFICATIONS.
- IN LIEU OF THE COLD WEATHER REQUIREMENTS SHOWN IN THE SPECIFICATIONS, PLACEMENT OF CONCRETE BELOW GRADE WILL BE ALLOWED TO TEMPERATURES AS LOW AS 25° F. HOWEVER, UNTIL SUCH TIME AS FINAL BACKFILL IS PLACED, ADDITIONAL PROTECTION, INSULATION, HEATING AND ETC. SHALL BE REQUIRED.
- EXCAVATION AND BACKFILL NEAR MANHOLES SHALL BE EQUAL ON ALL SIDES OF THE MANHOLE.
- REINFORCING STEEL: ASTM 416 GR60
- WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1.
- GROUT SHALL BE NON-SHRINK EPOXY GROUT.
- ALL COUPLINGS SHALL BE SUBSIDIARY AND INCLUDED IN THE BID PRICE.



STANDARD MANHOLE

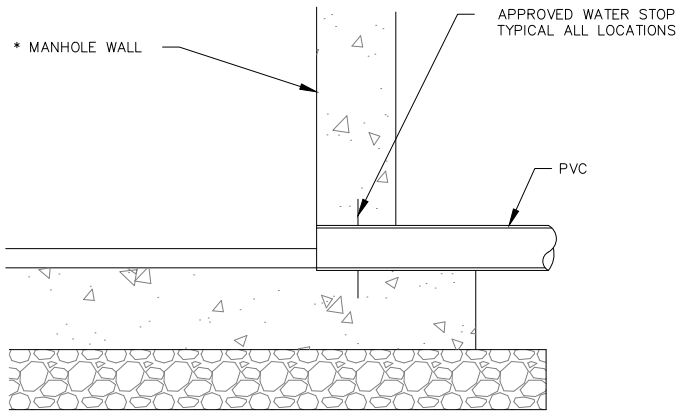
INSIDE PIPE DIAMETER (IN.)	STANDARD TRENCH WIDTH (IN.)
8	24
10	30
12	30
15	36
18	36
21	42
24	42
27	48
30	48
36	54
42	60
48	66

- NOTES:
- STANDARD BEDDING MATERIAL (SBM) SHALL CONFORM TO TYPE 1B AGGREGATE BASE OR LOW STRENGTH BACKFILL MATERIAL.
 - SELECT FILL CONSISTS OF EXCAVATED MATERIALS FREE OF ROCKS LARGER THAN 2-1/2 INCHES, ORGANIC MATERIAL, RUBBISH, DEBRIS, AND ALL OTHER OBJECTIONABLE MATERIAL.
 - COMPACTION REQUIREMENTS:
A. PAVED AREAS: 95% STANDARD PROCTOR DENSITY
B. NON-PAVED AREAS: 90% STANDARD PROCTOR DENSITY IF COVER DEPTH < 10'. 95% STANDARD PROCTOR DENSITY IF COVER DEPTH > 10'.



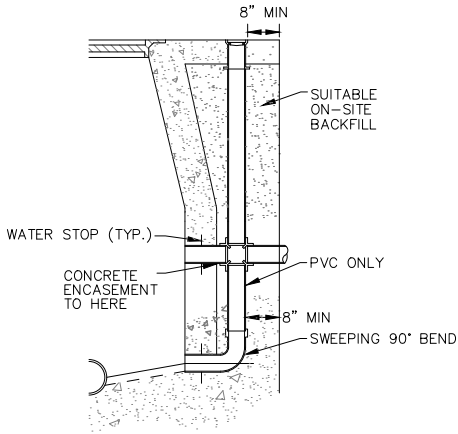
DESCRIPTION	BEDDING MATERIALS			
	PAVED AREAS		NON-PAVED AREAS	
	FLEXIBLE PIPE	RIGID PIPE	FLEXIBLE PIPE	RIGID PIPE
FINAL BACKFILL	STAND. BEDDING MATERIAL (SBM)	STAND. BEDDING MATERIAL (SBM)	EXCAVATED MATERIAL	EXCAVATED MATERIAL
INITIAL BACKFILL	STAND. BEDDING MATERIAL (SBM)	STAND. BEDDING MATERIAL (SBM)	COVER DEPTH ≤ 10' - SELECT FILL COVER DEPTH ≥ 10' - STAND. BEDDING MATERIAL	SELECT FILL
BEDDING	STAND. BEDDING MATERIAL (SBM)	STAND. BEDDING MATERIAL (SBM)	STAND. BEDDING MATERIAL (SBM)	STAND. BEDDING MATERIAL (SBM)

PIPE INSTALLATION

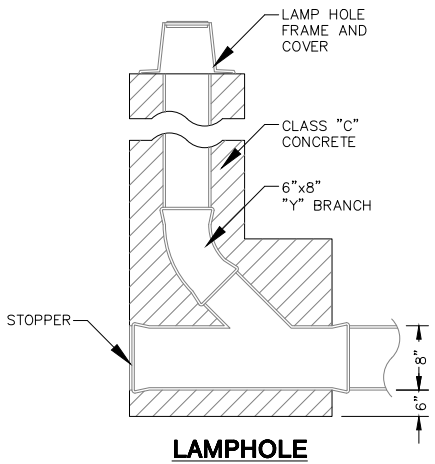


PVC PIPE DETAILS

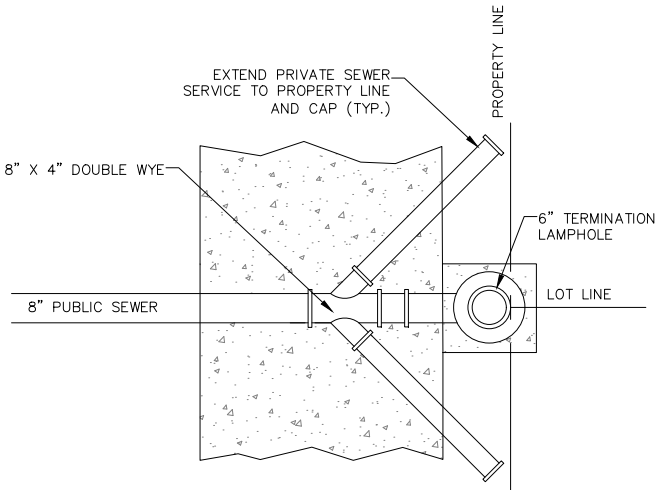
- NOTE:
- COMPRESSION JOINTS AND COUPLINGS SHALL BE ASSEMBLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. JOINTS AND COUPLINGS SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH ASTM-D3212-92.



STANDARD DROP MANHOLE



LAMPHOLE



PLAN VIEW OF SEWER LAMPHOLE WITH DOUBLE WYE SEWER SET

SCALE: N.T.S.

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N. EUFAULA AVENUE BRIDGE

CITY OF COWETA
WAGNER COUNTY, OKLAHOMA

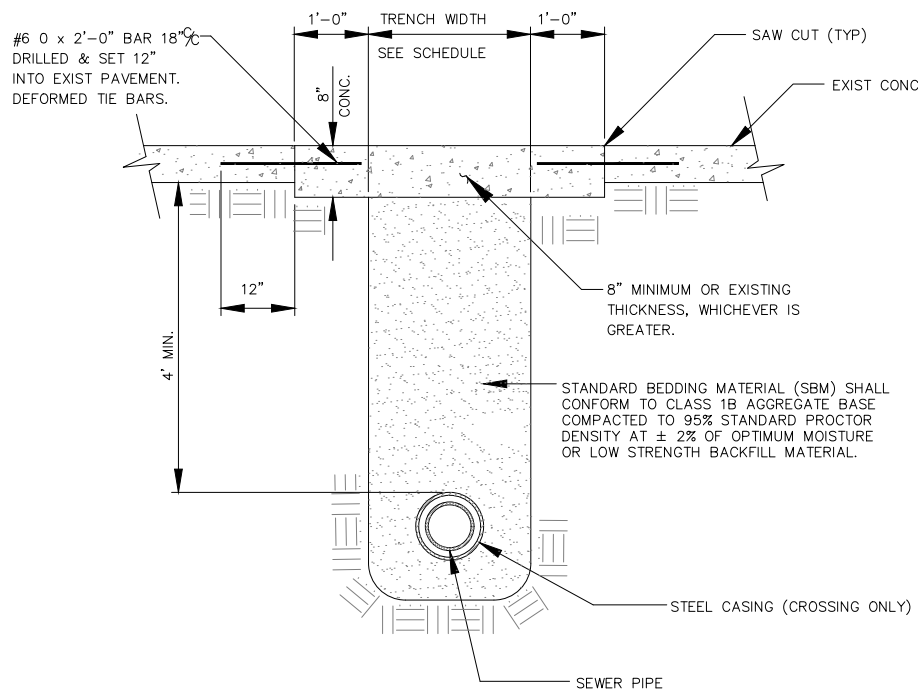
SS DETAIL
(1 OF 2)

DESIGNED BY	MJD
DRAWN BY	MJD
REVIEWED BY	JDC
PROJECT NUMBER	22-151
DATE	06/02/2023

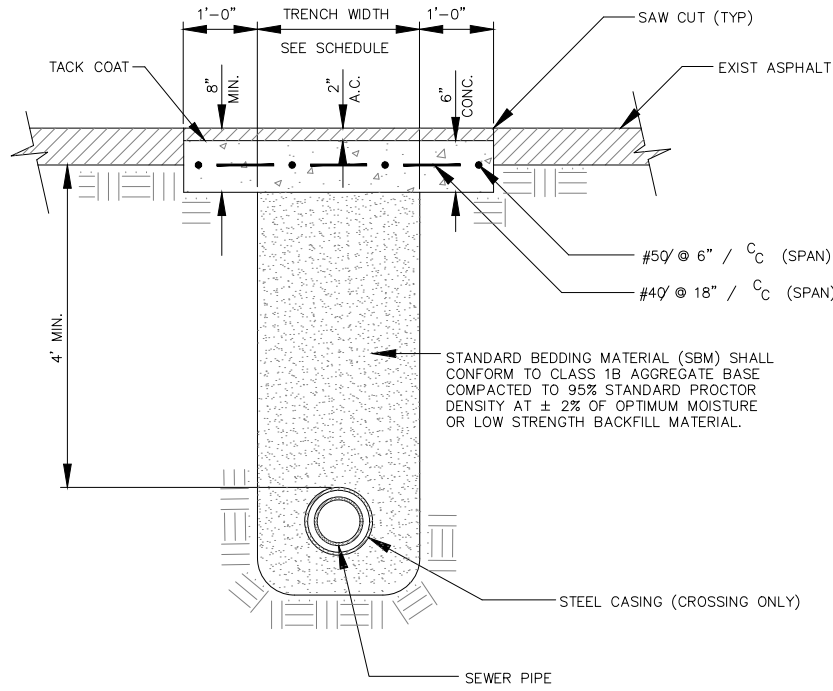
REVISIONS

SHEET NUMBER

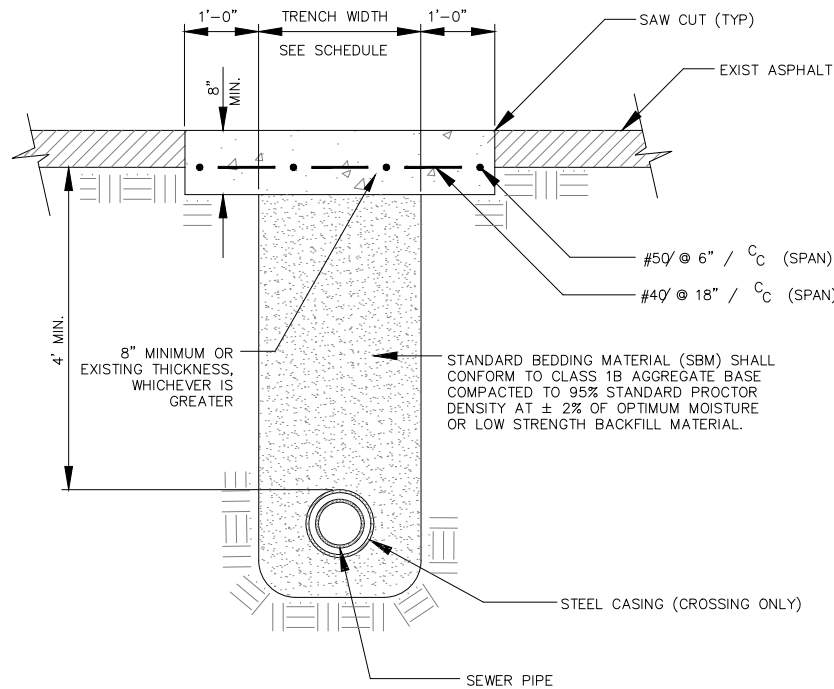
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CONCRETE PAVEMENT CUT



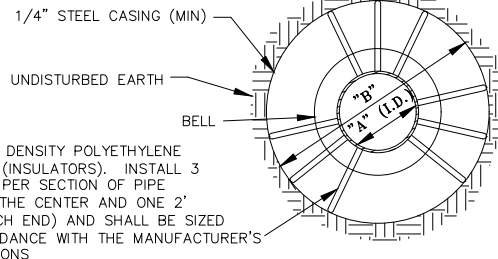
ASPHALT PAVEMENT CUT: CONCRETE-ASPHALT COMBINATION



ASPHALT PAVEMENT CUT: FULL DEPTH CONCRETE

PIPE & STEEL CASING SCHEDULE	
PIPE DIA. "A"	CASING DIA. "B"
6"	12"
8"	14" OR 16"
10"	18"
12"	20"
16"	24"
18"	26"
24"	33"

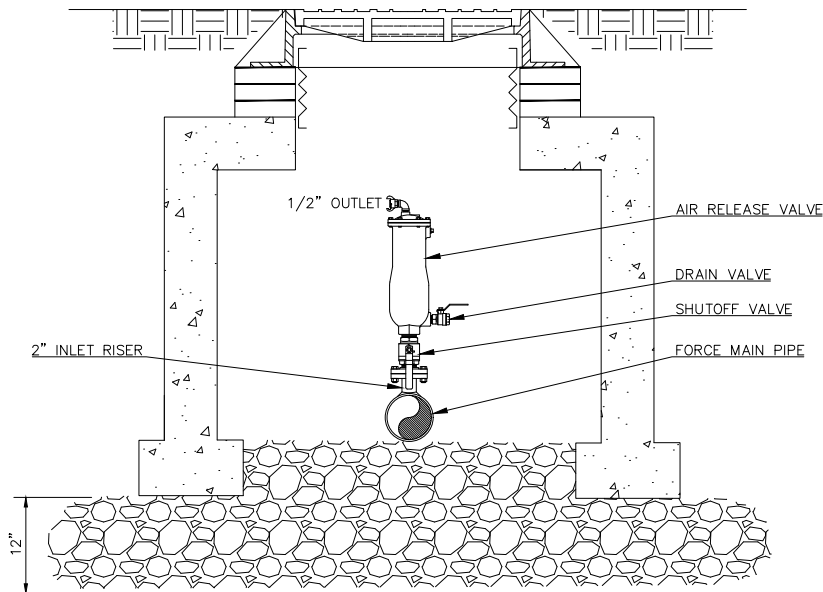
NOTE: CONSTRUCT WATER TIGHT PLUG
AT EACH END OF CASING



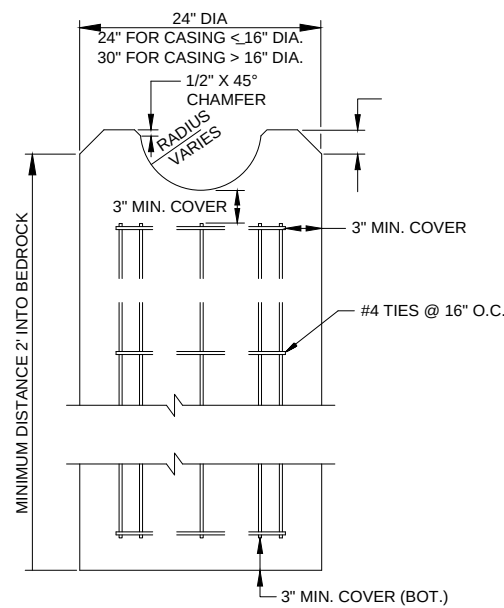
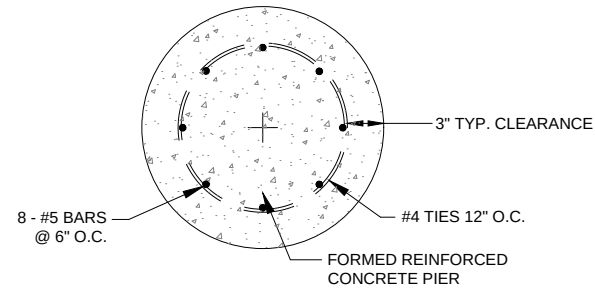
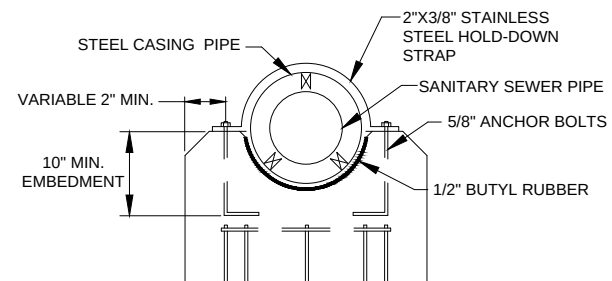
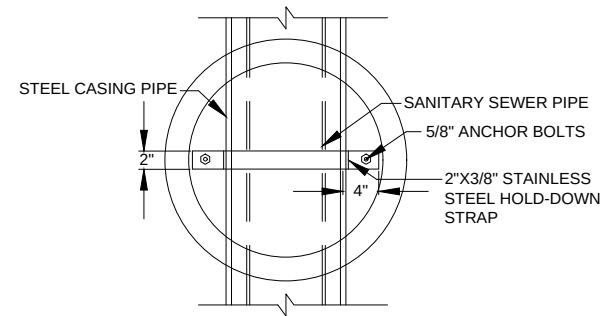
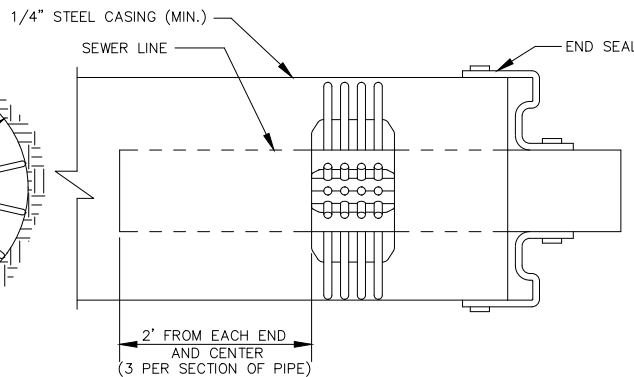
USE HIGH DENSITY POLYETHYLENE
SPACERS (INSULATORS). INSTALL 3
SPACERS PER SECTION OF PIPE
(ONE AT THE CENTER AND ONE 2'
FROM EACH END) AND SHALL BE SIZED
IN ACCORDANCE WITH THE MANUFACTURER'S
INSTRUCTIONS

NOTE: STEEL CASING PIPE SHALL CONFORM WITH ASTM A-139.
STANDARD SPECIFICATION FOR ELECTRIC-FUSION(ARC)-WELDED
STEEL PIPE (NPS4 AND OVER). THE STEEL MATERIAL SHALL BE
NEW, SMOOTH WALL, CARBON STEEL, GRADE B, WITH A MINIMUM
TENSILE STRENGTH, AND MINIMUM 35,000 PSI YIELD STRENGTH.

CASING DETAIL



2" AIR RELEASE VALVE



CONCRETE PIER
FOR AERIAL CROSSING

N. EUFAULA AVENUE BRIDGE

CITY OF COWETA
WAGNER COUNTY, OKLAHOMA

SS DETAIL
(2 OF 2)

DESIGNED BY	MJD
DRAWN BY	MJD
REVIEWED BY	JDC
PROJECT NUMBER	22-151
DATE	06/02/2023

REVISIONS

SHEET NUMBER

18



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7100 N. CLASSEN, SUITE 500
OKLAHOMA CITY, OK 73116
405-463-3369
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CONTRACT DOCUMENTS AND SPECIFICATIONS

FOR

N. EUFAULA AVENUE BRIDGE

PROJECT NUMBER: COW-BR 22.001

BID DATE: October 26, 2023

By:

Cowan Group Engineering, LLC
7100 N. Classen, Suite 500
Oklahoma City, OK 73116
Phone: 405.463.3369
CA # 6414 Expires 6/30/24

September 2023

TABLE OF CONTENTS

PAGE NO.

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

SOLICITATION FOR BIDS	1
INSTRUCTIONS TO BIDDERS.	2
BID PROPOSAL FORM.....	5
NON-COLLUSION AFFIDAVIT	8
BUSINESS RELATIONSHIP AFFIDAVIT.....	9
BID BOND... ..	10
CONTRACT AGREEMENT.....	12
MAINTENANCE BOND.....	15
PERFORMANCE BOND.....	16
STATUTORY BOND.....	17
INVOICE AFFIDAVIT.....	18
APPLICATION AND CERTIFICATE FOR PAYMENT	19
CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS	21
STATEMENT OF QUALIFICATIONS.....	22
CONTRACT SPECIFICATIONS	23

CONSTRUCTION PRODUCTS AND ACTIVITIES

DIVISION 01 – GENERAL REQUIREMENTS

SECTION 01 00 00 – GENERAL CONDITIONS	1-16
SECTION 01 11 00 – SUMMARY OF WORK	1
SECTION 01 11 50 – MEASUREMENTS AND PAYMENTS.....	1-3
SECTION 01 33 00 – SUBMITTALS AND SUBSTITUTIONS	1-6
SECTION 01 45 00 – QUALITY CONTROL.....	1-6
SECTION 01 60 00 – PRODUCT REQUIREMENTS	1-3
SECTION 01 70 00 – CONTRACT CLOSEOUT	1-4

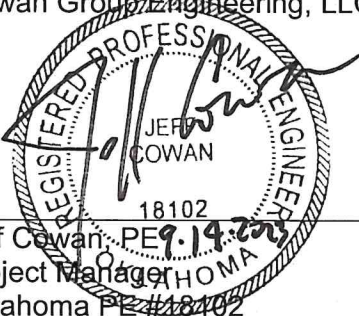
DIVISION 33 – UTILITIES

SECTION 33 11 00 – WATER AND SANITARY SEWER SPECIFICATIONS	1-33
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Responsible Registrant

Cowan Group Engineering, LLC

CA No. 6414 (Expires 6/30/2024)


Jeff Cowan, PE
Project Manager
Oklahoma PE #18102

City of Coweta

SOLICITATION FOR BIDS

Notice is hereby given that the City of Coweta will receive Sealed Bids for the construction of:

**N. Eufaula Avenue Bridge
Project Number: COW-BR 22.001**

in the Office of the City Clerk, 310 S. Broadway, Coweta, OK 74429, until 10:00 A.M./P.M. C.S.T., on the 26th day of October, 2023. If mailing your bid, utilize this address: City of Coweta, P.O. Box 850, Coweta, OK 74429. Bids shall be opened at the above stated time for receipt of Bids or as soon thereafter as practicable. This project consists of furnishing all required materials, supplies, equipment, tools, and personnel to perform all necessary labor for the construction of the Eufaula Avenue RCB. This project is eligible for sales tax exemption.

The work shall be done in accordance with specifications on file in the City Engineer's Office. Plans, specifications and other bidding documents are available for public inspection and copies may be obtained by visiting the respective Engineer: Cowan Group Engineering, LLC, 7100 N. Classen, Suite 500, Oklahoma City, OK 73116.

Complete digital project bidding documents are available for a non-refundable fee of \$75.00 by going to www.cowangroup.co, navigating to the Bid Documents page, and by entering Quest Project #8412820 the website's project search page. Please contact QuestCDN.com at 952-233-1632 or info@questcdn.com for assistance in free membership registration, downloading and working with this digital project information.

Hardcopy plans and specifications are available for a non-refundable fee of \$100.00 from Cowan Group Engineering. No documents will be mailed until payment is received in full.

Each bid must be submitted in a sealed envelope bearing on the outside, the name of the bidder, his/her address and the name of the project for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified in the bid form. All blank spaces for bid prices must be completed in ink or typewritten and in both words and figures.

Bids received more than ninety-six (96) hours, excluding Saturdays, Sundays and holidays, before the time set for opening of bids, as well as bids received after the time set for receipt of bids, WILL NOT be considered and will be RETURNED UNOPENED.

A cashier's check, a certified check or a surety bond in the amount of five percent (5%) of the bid shall accompany the sealed proposal of each bidder. Deposits will be returned to unsuccessful bidders. Each bid submitted is a legal offer and when accepted by the City, constitutes a FIRM AND BINDING CONTRACT. The City reserves the right to REJECT ANY or ALL BIDS. The City of Coweta reserves the unconditional right to cancel all or any portion of this project within thirty (30) days from the date of the opening of the bids, for any reason and at its sole discretion.

INSTRUCTIONS TO BIDDERS

EXAMINATION OF SITE Each bidder by making his bid represents that he has visited the site and familiarized himself with all the conditions under which the work is to be performed. No extra compensation will be allowed by reason of any matters or things concerning which the bidder did not inform himself prior to bidding.

EASEMENTS Work performed on, or use of, easements shall be subject to the provisions of the easement agreements on file and open to inspection in the office of the Owner.

EXAMINATION OF BIDDING DOCUMENTS Each bidder by making his bid represents that he has read and understands the bidding documents. The bidder shall include in his bid prices any and all costs that may be necessary to complete the work in accordance with the requirements of the contract documents.

SUBSURFACE EXPLORATION DATA Investigations of subsurface conditions at the site is the responsibility of the Contractor. The Owner assumes no responsibility whatsoever with respect to the sufficiency of the Contractor's investigations, or of their interpretation, and there is no guarantee, either expressed or implied, that the conditions found by the Contractor are representative of those existing throughout the work or any part of it, or that unforeseen developments may not occur. The Contractor shall plan his work based upon his own subsurface information and assume responsibility for conditions other than those he may find.

INTERPRETATION OF CONTRACT DOCUMENTS Questions regarding documents, discrepancies, omissions, or intent of the specifications or drawings shall be submitted in writing to the Owner through the Engineer at least seven (7) days prior to opening of bids to provide time for issuing and forwarding an addendum. Any interpretation of the contract documents will be made only by addendum duly issued or delivered by the Owner to each person receiving a set of documents. The Owner will not be responsible for any other explanations or interpretation of the contract documents.

MATERIAL SUBSTITUTION Each bidder shall base his bid upon the materials and equipment as described in the bidding documents. The successful contractor will not be allowed to make any substitutions on his own initiative, but in each instance will be required to obtain authorization from the Owner before installing any work in variance with the requirements of the contract documents.

APPROXIMATE QUANTITIES On all items on which bids are to be received on a unit price basis, the quantities stated in the bid will not be used in establishing final payment due the Contractor. The quantities stated, on which unit prices are invited, are approximate only and each bidder shall make his own estimate from the contract drawings of the quantities required on each item and calculate his unit price bid for each item accordingly. Bids will be compared on the basis of number of units stated in the bidding schedule. Payment on the contract or unit price items shall be based on the actual number of units installed in the completed work.

BID SECURITY No bid will be considered unless the original copy filed with the Purchasing Director is accompanied by a Bidder's Bond, Certified Check, or Cashier's Check in the required amount, made payable to the Owner. The bid security shall be in the amount of five percent (5%) of the total amount of the bid. It shall be five percent (5%) of the highest amount in the event of an alternate or several bids. The bid security is required as evidence of good faith and as a guarantee that if awarded the Contract, the bidder will execute the Contract and furnish the required bonds and insurance within the required time and the guarantee will serve as liquidated damages in the event of failure to do so.

QUALIFICATIONS OF BIDDERS In determining the lowest responsible bid, the following elements will be considered: Whether the bidder involved (A) Maintains a permanent place of business; (B) Has adequate station equipment to do the work properly and expeditiously; (C) has a suitable financial status to meet obligations incidental to the work; and (D) has appropriate technical experience.

Each bidder may be required to show that former work performed by him has been handled in such manner that there are no just or proper claims pending against such work. No bidder will be acceptable if he is engaged on any other work which impairs his ability to finance this contract or provide proper equipment for the proper execution of same. Each bidder shall demonstrate his ability of meeting all requirements herein stipulated, if asked for them.

Each bidder shall submit a STATEMENT OF QUALIFICATIONS (SOQ) which demonstrates the bidder's experience with similar projects. The SOQ must list all similar projects in progress or completed within the past five (5) years. The SOQ shall include the name of project; location; construction cost; summary of work completed; date completed; client contact name and phone number.

RETURN OF BID SECURITIES The security of the three lowest bidders will be returned after the execution of the agreement with the successful bidder and the approval of his bonds and insurance. The security of all other bidders will be returned promptly after the bids have been opened and reviewed by the Owner. If all bids are rejected, the securities will be returned at the time of rejection.

AGREEMENT, BONDS, INSURANCE The attention of bidders is specifically directed to the forms of agreement and bonds to be executed and the types of insurance to be taken out in the event a contract award is made.

BID SUBMITTAL Each bid, properly signed, together with the bid security, affidavits, and qualification statements (if required), shall be enclosed in a sealed envelope addressed and entitled as specified in the Invitation to Bid. All addenda issued shall be signed and included with the documents at the time of bid submittal.

Complete and submit one (1) original of the following documents:

- 1. Bid Proposal Form**
- 2. Bid Bond, Cashier's Check, or Certified Check**
- 3. Business Relationship Affidavit**
- 4. Non-Collusion Affidavit**
- 5. Qualification Statement**

WITHDRAWAL OF BID Any bid may be withdrawn at any time prior to the hour fixed in the Invitation to Bid for the opening of bids, provided that a request in writing executed by the bidder or his duly authorized representative for the withdrawal of such bid is filed with the Owner prior to the time specified for the opening of bids. The withdrawal of a bid will not prejudice the right of a bidder to file a new bid, except that the new bid must be submitted prior to the date and time for submitting bids.

PENALTY FOR COLLUSION If at any time it shall be found that the person, firm, or corporation to whom the Contract has been awarded has, in presenting any bid or bids, colluded with any other party or parties, then the Contract so awarded shall be null and void, and the Contractor and his sureties shall be liable to the Owner for all loss for damage which the Owner may suffer thereby, and the Owner may advertise for new bids for said work.

LICENSE Each bidder shall possess state and local licenses as are required by law and shall furnish satisfactory proof to the Owner upon request that the licenses are in effect during the entire period of the Contract.

AWARD OF CONTRACT The award of any contract or contracts will be made to the lowest responsible bidder or bidders. The Owner reserves the right to reject any or all bids, or to waive irregularities or informalities at its discretion. In the event that the approvals are not received or the Owner cannot award or reject said proposals within 90 days from the date of opening of bids, bidders shall have the right to withdraw their bids on written notice to the Owner.

EFFECTIVE DATE OF AWARD If a contract is awarded by the Owner, such award shall be effective when formal notice of such award, signed by the authorized representative of the Owner, has been delivered to the intended awardee, or mailed to him at the main business address shown on his bid, by some officer or agent of the Owner duly authorized to give such notice.

EXECUTION OF AGREEMENT Copies of the agreement in the number stated in the form of agreement shall be executed by the successful bidder and returned, together with the required bonds and insurance, within fifteen (15) days from and after the date of the award of the Contract. Effective date of bonds shall be the same or later than the date of the agreement.

FAILURE TO EXECUTE AGREEMENT AND FILE BONDS AND INSURANCE Failure of a successful bidder to execute the agreement and file required bonds and insurance within the required time shall be just cause for the annulment of the award. On failure of a successful bidder to execute the agreement and file the required bonds and insurance within the required time, he shall forfeit his bid security as agreed herein above. Upon annulment of an award as aforesaid, the Owner may then award a contract to the next lowest responsible bidder.

PAYMENT FOR EXCESS COSTS AND LIQUIDATED DAMAGES The successful contractor will be required to pay for the excess cost of field engineering and inspection and liquidated damages as defined in the General Conditions of the Standard Specifications for Construction and the Contract Agreement, if extensions of time are not granted by Owner because of avoidable delays as therein defined.

STANDARD SPECIFICATIONS FOR CONSTRUCTION The 2019 Standard Specifications for Highway Construction by the Oklahoma Department of Transportation and these standard City of Coweta Specifications for Construction and Standard Design Drawings shall be a part of these contract documents as if included herein. Each bidder shall have a copy in their possession to be eligible to bid on this project.

ADMINISTRATIVE MATTERS

The Contractor shall obtain all permits and licenses required. The Contractor shall pay all fees associated with such permits, licenses and other. This project is eligible for sales tax exemption.

BID PROPOSAL FORM

CITY OF COWETA
BID NOTICE: COW-BR 22.001

THE UNDERSIGNED BIDDER, having examined the plans, specifications, the locations, arrangements, and conditions of roads, street, utilities and other facilities or appurtenances which affect or may be affected by the proposed work, the actual sites of the proposed improvements and being acquainted with and fully understanding: (1) the extent and character of the work covered by this proposal; (2) the locations and specified requirements of and for the proposed improvements and other items of work appurtenant thereto; and (3) the normal existing and probable construction difficulties, hazards or all other factors or conditions which may or may not be apparent, which may affect or be affected by the specified work.

HEREBY PROPOSES to furnish all required materials, supplies, equipment, tools, and plant; to perform all necessary labor; and to construct, erect, equip, and complete all work stipulated in, required by, and in accordance with the contract documents hereto attached and the specifications referred to therein (as altered, changed, or modified by any and all addenda thereto), for and in connection with the Contract for which this proposal is herein submitted for and in consideration of the prices set out herein.

The undersigned bidder hereby agrees to furnish the required Performance Bond, Statutory Bond, Maintenance Bond, and evidence of insurance and to enter into a contract within fifteen (15) days after the acceptance of this proposal, and further agrees to complete the work in **120** days (stipulated in the Contract Agreement) from the date of the issuance by the City of a Work Order authorizing commencement of work.

Attached hereto is a Certified Check, Cashier's Check or Bidder's Surety Bond in the amount of:

_____ DOLLARS \$ _____ which the undersigned agrees is to be forfeited to and become the property of the City of Coweta, as liquidated damages, should this proposal be accepted and the Contract be awarded to him, he fails to enter into a Contract in the form prescribed and to furnish the required bonds and evidence of insurance within fifteen (15) days as above stipulated, but otherwise the proposal guarantee shall be returned to the undersigned upon the signing of the Contract and delivery of the approved bonds and evidence of insurance to the City of Coweta.

DATED this _____ day of _____ 2023.

Signature: _____

Name and Title: _____

Company: _____ Circle One: Corporation Partnership Individual

Address: _____

Phone: _____ Fax: _____

E-mail Address: _____

Federal Tax I.D. _____

Attest: _____

Secretary

Corporate Seal
(if applicable)

**N. EUFAULA AVENUE BRIDGE
BASE BID SCHEDULE**

ITEM NUMBER		DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
ROADWAY						
1	201(A)	CLEARING AND GRUBBING	1	LSUM		
2	202(A)	UNCLASSIFIED EXCAVATION	107	CY		
3	205(A)	TYPE-A SALVAGED TOPSOIL	1	LSUM		
4	221	TEMPORARY SILT FENCE	200	LF		
5	221	TEMPORARY SILT DIKE	28	LF		
6	230(A)	SOLID SLAB SODDING	84	SY		
7	303(A)	AGGREGATE BASE TYPE A	66	CY		
8	407(B)	TACK COAT	46	GAL		
9	411(B)	SUPERPAVE, TYPE S3 (PG 64-22 OK)	85	TON		
10	411(C)	SUPERPAVE, TYPE S4 (PG 64-22 OK)	43	TON		
11	509(D)	CLASS C CONCRETE	7	CY		
12	601(A)	TYPE 1 PLAIN RIPRAP	74	TON		
13	609(B)	1'-8" COMB. CURB & GUTTER (6" BARRIER)	206	LF		
14	615(A)	8" POLYVINYL CHLORIDE (PVC) PIPE	58	LF		
15	616(I)	16" STEEL CASING	58	LF		
16	619(A)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1	LSUM		
17	619(B)	REMOVAL OF ASPHALT PAVEMENT	269	SY		
18	619(C)	SAWING PAVEMENT	71	LF		
19	629(E)	REMOVE AND RESET MAILBOX	2	EA		
CONSTRUCTION						
20	220	(SP) SWPPP DOCUMENTATION AND MANAGEMENT	1	LSUM		
21	641	MOBILIZATION	1	LSUM		
22	880(J)	CONSTRUCTION TRAFFIC CONTROL	1	LSUM		
BRIDGE						
23	501(A)	STRUCTURAL EXCAVATION UNCLASSIFIED	80	CY		
24	501(G)	CLSM BACKFILL	126	CY		
25	509(A)	CLASS AA CONCRETE	141	CY		
26	511(A)	REINFORCING STEEL	21700	LB		
27	516(A)	DRILLED SHAFTS 24" DIAMETER	75	LF		
BASE BID TOTAL						

ALL ITEMS TO INCLUDE ALL APPURTENANCES NECESSARY TO PROVIDE A COMPLETE AND OPERABLE ROADWAY SYSTEM AS DESCRIBED IN THE PLANS AND SPECIFICATIONS.

BASE BID

TOTAL BASE BID \$ _____

TOTAL BASE BID IN WORDS _____

ADD ALTERNATE NO. 1 WATER LINE					
ITEM NUMBER	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
1	6" WATERLINE (AWWA C-900 DR18)	580	LF		
2	12" BORE AND STEEL CASING	69	LF		
3	TRACER WIRE	580	LF		
4	6" X 6" TAPPING SLEEVE	1	EA		
5	6" TAPPING VALVE	1	EA		
6	6" SOLID SLEEVE	1	EA		
7	6" 90 DEG BEND	2	EA		
8	6" GATE VALVE	2	EA		
9	6" X 6" TEE	1	EA		
10	6" PLUG	1	EA		
11	6" X 3/4" SERVICE SADDLE	1	EA		
12	CUSTOMER METER SHORT CONNECTION	1	EA		
13	1" COMBINATION AIR/VACUUM VALVE W/ BOX	1	EA		
14	FIRE HYDRANT W/ ALL APPURTENANCES	1	EA		
15	CUT & PLUG EXISTING 2" WATERLINE (2" PLUG)	1	EA		
16	ANCHOR	8	EA		
17	SAND BACKFILL	65	TON		
18	PRESSURE AND LEAKAGE TEST	1	LSUM		
19	DISINFECTION	1	LSUM		
ADD ALTERNATE NO. 1 TOTAL					

ALTERNATE BID #1

TOTAL ALTERNATE BID \$ _____

TOTAL ALTERNATE BID IN WORDS _____

NON-COLLUSION AFFIDAVIT

STATE OF OKLAHOMA)
) SS.
COUNTY OF WAGONER)

_____, of lawful age, being first duly sworn on oath that (s)he is the agent authorized by the firm of _____ to submit the above Contract to the City of Coweta.

Affiant further states that such firm has not paid, given, or donated or agreed to pay, give, or donate to any officer or employee of the City of Coweta, any money or other thing of value, either directly or indirectly, in the procuring of the Contract.

Affiant further states that the bidder has not been a party to any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding; or with any city official or employee as to quantity, quality or price in the prospective contract, or any other terms of said prospective contract; or in any discussions between bidders and any state officials concerning exchange of money or other thing of value for special consideration in the letting of a contract.

Contractor Signature

Printed Name/Title

Subscribed and sworn before me this _____ day of _____, 20__

Notary Public

My Commission Expires:

(Seal)

BUSINESS RELATIONSHIP AFFIDAVIT

STATE OF OKLAHOMA)
) SS.
COUNTY OF WAGONER)

_____, of lawful age, being first duly sworn, on oath says that (s)he is the agent authorized by the bidder to submit the attached bid. Affiant further states that the nature of any partnership, joint venture, or other business relationship presently in effect or which existed within one (1) year prior to the date of this statement with the architect, engineer, or other party to the project is as follows:

Affiant further states that any such business relationship presently in effect or which existed within one (1) year prior to the date of this statement between any officer or director of the bidding company and any officer or director of the architectural or engineering firm or other party to the project is as follows:

Affiant further states that the names of all persons having any such business relationships and the positions they hold with their respective companies or firms are as follows:

(If none of the business relationships hereinabove mentioned exists, affiant should so state.)

Contractor Signature

Printed Name/Title

SUBSCRIBED AND SWORN TO before me this _____ day of _____, 20__

Notary Public
(Seal)

My commission expires:

BID BOND

We, the undersigned, _____, as Principal, and _____, as Surety, are hereby held and firmly bound unto **City of Coweta**, as Owner, in the penal sum of _____ for the payment of which, well and truly to be made, hereby jointly and severally bind ourselves, our successors and our assigns.

Signed this _____ day of _____, _____.

The condition of the above obligation is such that, whereas the Principal has submitted to **City of Coweta**, a certain bid, attached hereto and hereby made a part hereof, to enter into a contract, in writing, for the **N. Eufaula Avenue Bridge**;

NOW, THEREFORE, if said bid shall be rejected or if said bid shall be accepted and the Principal shall execute and deliver a contract in the form of the contract attached hereto (properly completed in accordance with said bid) and shall furnish a bond for faithful performance of said contract and for the payment of all persons performing labor or furnishing materials in connection therewith and shall in all other respects perform the agreement created by the acceptance of said bid, then this obligation shall be void; otherwise, the same shall remain in force and effect, it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bonds shall in no way be impaired or affected by any extension of the time within which the Owner may accept such bid and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers the day and year first set forth above.

Principal _____

Surety _____

By: _____

ATTEST: (if by corporation)

Type Name & Title

Corporate Seal

NOTE: This form is to be submitted with the bid.

CONTRACT AGREEMENT

THIS CONTRACT AND AGREEMENT, made and entered into this ____ day of _____, 20__ by and between the City of Coweta, Coweta, Oklahoma, party of the first part, hereinafter termed "Owner", and _____ party of the second part, hereinafter termed "Contractor".

WITNESSETH:

WHEREAS, the Owner has caused to be prepared, in accordance with law, certain specifications, plans, and other bidding documents for the work hereinafter described and has approved and adopted all of said bidding documents and has received sealed proposals for furnishing materials, labor, and equipment for either of the indicated works.

This project consists of furnishing all required materials, supplies, equipment, tools, and plant to perform all necessary labor for the construction of **N. Eufaula Avenue Bridge**.

The work shall be done in accordance with plans and specifications on file in the City Engineer's Office as outlined and set out in the bidding documents and in accordance with the terms, specifications, plans, and provisions of said Contract; and,

WHEREAS, Contractor, in response to request for bids, has submitted to the City of Coweta in the manner and at the time specified, a sealed proposal in accordance with the terms of this Contract; and,

WHEREAS, the City of Coweta, in the manner provided by law, has publicly opened, examined, and canvassed the proposals submitted and has determined and declared the above named Contractor to be the lowest responsible bidder on the above described project, and has duly awarded this Contract to said Contractor, for the sum named in the proposal to-wit:

_____ DOLLARS (\$_____)

NOW, THEREFORE, for and in consideration of the mutual agreements and covenants herein contained, the parties to this Contract have agreed, and hereby agree, as follows:

(1) That the Contractor hereby agrees to furnish all tools, equipment, materials, and labor, and to build and complete the above described project in accordance with the specifications therefore on file in the office of the City Clerk of Coweta, Oklahoma.

(2) That the Owner shall pay the Contractor for the work performed, as follows:

- a. Payment for unit price items shall be at the unit price bid for actual construction quantities.
- b. Construction items specified but not included as bid items shall be considered incidental and shall not be paid for directly but shall be included in the bid price for any or all of the pay quantities.
- c. At the end of each month the Engineer will make written estimates of the materials in place and accepted, and the amount of work performed in accordance with the contract during the current period of time between estimates and the value thereof computed at the contract unit prices. Payment to the Contractor shall be in the amount of the estimate minus the retainage as permitted by law.
- d. Should any defective work or materials be discovered or should a reasonable doubt arise as to the quality of any work completed, there will be deducted from the next estimate an

amount equal to the value of the defective or questionable work and shall not be paid until the defects are remedied.

e. And that the Contractor's bid is hereby made a part of this Agreement.

(3) That the City of Coweta reserves the right to add to or subtract from the estimated quantities or amount of work to be performed. The work to be performed or deducted shall be at the unit price bid.

(4) That the Contractor will not undertake to furnish any materials or to perform any work not specifically authorized under the terms of this Agreement unless additional materials or work are authorized by written work directive change; and that in the event any additions are provided by the Contractor without such authorization, the Contractor shall not be entitled to any compensation therefor whatsoever.

(5) That if any additional work is performed or additional materials provided by the Contractor upon authorization by the Owner, the Contractor shall be compensated therefore at the unit price bid and as agreed to by both parties in the execution of the Change Order.

(6) That the Contractor shall perform the work and provide the materials strictly in accordance with the specifications as to quality and kind and all work and materials shall be subject to rejection by the Owner through its authorized representatives for failure to meet such requirements, and in the event of such rejection, the Contractor shall replace the work and materials without compensation therefore by the Owner.

(7) The Contractor shall complete the work in accordance with the terms of this Agreement within a period of time not to exceed **120 calendar days** following the issuance by the City Engineer of a Work Order authorizing the Contractor to commence work on the project.

(8) The Contractor shall furnish bonds and certificate of insurance as specified in the "Instructions to Bidders" and/or the "General Provisions", which must be approved by the Owner prior to issuance of the Work Order and commencement of the work on the project.

(9) On completion of the work, but prior to the acceptance thereof by the City of Coweta, it shall be the duty of the City Engineer or other appropriate person to determine that said work has been completely and fully performed in accordance with said Contract Documents; and upon making such determination said official shall make his final certificate to the City of Coweta.

(10) Liquidated damages shall be paid by the Contractor at the rate of **\$500** per each and every **calendar** day required by him to complete the contract in excess of the contract time.

(11) **APPROXIMATE QUANTITIES** on all items which bids are to be received on a unit price basis; the quantities stated in the bid will not be used in establishing final payment due the contractor. The quantities stated, on which unit prices are invited, are approximate only and each bidder shall make his own estimate from the contract drawings of the quantities required on each item and calculate his unit price bid for each item accordingly. Bids will be compared on the basis of number of units stated in the bidding schedule. Payment on the contract or unit price items will be based on the actual number of units installed in the completed work. No increases or decreases in the approximate quantities shall exceed twenty (20%) percent without approval of the City Engineer.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed, in four duplicate originals, the day and year first above written.

"OWNER"

CITY OF COWETA

By: _____

ATTEST

City Clerk

APPROVED as to form and legality this _____ day of _____, 20____.

CITY ATTORNEY

APPROVED by the City of Coweta this _____ day of _____, 20____.

"CONTRACTOR"

If an Individual: *(signature)*_____

doing business as: _____

If a Partnership: *(signature)*_____

By *(Printed Name and Title)*: _____

Names of other partners: _____

If a Corporation: *(signature)*_____

By *(Printed Name and Title)*: _____

ATTEST:

Secretary

(CORPORATE SEAL)

Business Address of Contractor

MAINTENANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we, _____,
hereinafter called the Principal, and the _____
of, _____, a corporation duly organized under the laws of the State
of _____, hereinafter called the Surety, as Surety, are held and firmly bound unto
City of Coweta, hereinafter call the Oblige, in the sum of _____
_____ Dollars (\$_____), for the payment of which sum well and truly to be made, the said
Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly
and severally, firmly by these presents.

WHEREAS, said Principal entered into a written Contract with said Oblige dated _____,
for N. Eufaula Avenue Bridge, all in compliance with the plans and specifications therefore, made a part of said
Contract and on file in the office of Cowan Group Engineering, 7100 N. Classen Blvd., Ste. 500, Oklahoma City, OK
73116.

WHEREAS, this bond is given in compliance with Title 61, Oklahoma Statutes 2001, Section 113(B)(3).

NOW THEREFORE, if said Principal shall pay or cause to be paid to Oblige all damage, loss, and expense which
may result by reason of defective materials and/or workmanship in connection with said work, occurring within a
period of one (1) year after acceptance of said project by Oblige; and if Principal shall pay or cause to be paid all
labor and materials, including the prime contractor and all subcontractors; and if Principal shall save and hold
Oblige harmless from all damages, loss, and expense occasioned by, or resulting from, any failure whatsoever of
said Principal, then this obligation shall be null and void, otherwise to be and remain in full force and effect.

It is further expressly agreed and understood by the parties hereto that no changes or alternations in said Contract
and no deviations from the plan or mode of procedure herein fixed shall have the effect of releasing the sureties, or
any of them, from the obligations of this Bond.

IN WITNESS WHEREOF, this instrument is executed in 3 counterparts, each of which shall be deemed an
original, this _____ day of _____, 20____.

WITNESS AS TO PRINCIPAL ((_____
PRINCIPAL
(
(BY: _____

WITNESS AS TO SURETY ((_____
SURETY
(
(BY: _____
(ATTORNEY-IN-FACT

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most current list
(Circular 570 as amended) and be authorized to transact business in the State of Oklahoma. Attach a certified
Copy of the Power of Attorney.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we, _____,
hereinafter called the Principal, and the _____
of, _____, a corporation duly organized under the laws of the State
of _____, hereinafter called the Surety, as Surety, are held and firmly bound unto
City of Coweta, hereinafter call the Obligee, in the sum of _____
_____ Dollars (\$_____), for the payment of which sum well and truly to be made, the said
Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly
and severally, firmly by these presents.

WHEREAS, said Principal entered into a written Contract with said Obligee dated _____,
for N. Eufaula Avenue Bridge, all in compliance with the plans and specifications therefore, made a part of said
Contract and on file in the office of Cowan Group Engineering, 7100 N. Classen Blvd., Ste. 500, Oklahoma City, OK
73116.

WHEREAS, this bond is given in compliance with Title 61, Oklahoma Statutes 2001, Section 113(B)(2).

NOW THEREFORE, if said Principal shall, in all particulars, well, truly and faithfully perform and abide by said
Contract and each and every covenant, condition, and part thereof, and shall fulfill all obligations resting upon said
Principal by the terms of said Contract and said specifications, and if said Principal shall protect and save harmless
said Obligee from any pecuniary loss resulting from the breach of any of the items, covenants and conditions of
said Contract resting upon said Principal, the this obligation shall be null and void, otherwise to be and remain in full
force and effect.

It is further expressly agreed and understood by the parties hereto that no changes or alternations in said Contract
and no deviations from the plan or mode of procedure herein fixed shall have the effect of releasing the sureties, or
any of them, from the obligations of this Bond.

IN WITNESS WHEREOF, this instrument is executed in 3 counterparts, each of which shall be deemed an
original, this _____ day of _____, 20____.

WITNESS AS TO PRINCIPAL ((_____
PRINCIPAL
(
(BY: _____

WITNESS AS TO SURETY ((_____
SURETY
(
(BY: _____
(ATTORNEY-IN-FACT

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most current list
(Circular 570 as amended) and be authorized to transact business in the State of Oklahoma. Attach a certified
Copy of the Power of Attorney.

STATUTORY BOND

KNOW ALL MEN BY THESE PRESENTS, that we, _____,
hereinafter called the Principal, and the _____
of, _____, a corporation duly organized under the laws of the State
of _____, hereinafter called the Surety, as Surety, are held and firmly bound unto
City of Coweta, hereinafter call the Oblige, in the sum of _____
_____ Dollars (\$_____), for the payment of which sum well and truly to be made, the said
Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly
and severally, firmly by these presents.

WHEREAS, said Principal entered into a written Contract with said Oblige dated _____,
for N. Eufaula Avenue Bridge, all in compliance with the plans and specifications therefore, made a part of said
Contract and on file in the office of Cowan Group Engineering, 7100 N. Classen Blvd., Ste. 500, Oklahoma City, OK
73116.

WHEREAS, this bond is given in compliance with Title 61, Oklahoma Statutes 2001, Sections 1 and 113(B)(1).
NOW THEREFORE, if said Principal shall fail or neglect to pay all indebtedness incurred by said Principal or
subcontractors of said Principal who perform work in the performance of such contract, for labor and materials and
repairs to and parts for equipment used and consumed in the performance of said contract after the same becomes
due and payable the person, firm, or corporation entitled thereto may sue and recover on this bond, the amount so
due and unpaid.

It is further expressly agreed and understood by the parties hereto that no changes or alternations in said Contract
and no deviations from the plan or mode of procedure herein fixed shall have the effect of releasing the sureties, or
any of them, from the obligations of this Bond.

IN WITNESS WHEREOF, this instrument is executed in 3 counterparts, each of which shall be deemed an
original, this _____ day of _____, 20____.

WITNESS AS TO PRINCIPAL ((PRINCIPAL
BY: _____

WITNESS AS TO SURETY ((SURETY
BY: _____
ATTORNEY-IN-FACT

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most current list
(Circular 570 as amended) and be authorized to transact business in the State of Oklahoma. Attach a certified
Copy of the Power of Attorney

INVOICE AFFIDAVIT

STATE OF OKLAHOMA)
) SS.
COUNTY OF WAGONER)

The undersigned (architect, contractor, supplier, engineer, or supervisory official), of lawful age, being first duly sworn, on oath says that this invoice is true and correct. Affiant further states that the (work, services, or materials) as shown by this invoice have been (completed or supplied) in accordance with the plans, specifications, orders, or requests furnished to the affiant. Affiant further states that (s)he has made no payment, given, or donated or agreed to pay, give, or donate, either directly or indirectly, to any elected official, officer, or employee of the City of Coweta, of money or any other thing of value to obtain payment of this invoice.

Contractor or Supplier

Subscribed and sworn to before me this _____ day of _____, 20__

Notary Public

My Commission Expires:

(Seal)

Architect, Engineer, or other
Supervisory Official

Subscribed and sworn to before me this _____ day of _____, 20__

Notary Public

My Commission Expires:

(Seal)

APPLICATION AND CERTIFICATE FOR PAYMENT

PROJECT: N. EUFAULA AVENUE BRIDGE
TO: (OWNER): CITY OF COWETA

ENGINEER: Cowan Group Engineering, LLC

CONTRACTOR:

CONTRACT FOR:

APPLICATION DATE:

APPLICATION NO:

PERIOD FROM:

TO:

CHANGE ORDER SUMMARY

Application is made for Payment, as shown below, in connection with the Contract. The present status of the account for this Contract is as follows:

Change Orders approved		ADDITIONS \$	DEDUCTIONS \$		
in previous months by				ORIGINAL CONTRACT SUM	\$ _____
Owner					
TOTAL				Net change by Change Orders	\$ _____
Subsequent Change Orders					
No.	Approved			CONTRACT SUM TO DATE	\$ _____
	(Date)			TOTAL COMPLETED TO DATE	\$ _____
				RETAINAGE <u>5</u> %	\$ _____
				TOTAL EARNED LESS RETAINAGE	\$ _____
				LESS PREVIOUS CERTIFICATES FOR PAYMENT	\$ _____

TOTALS

Net change by Change Orders \$ _____

CURRENT PAYMENT DUE \$ _____

The undersigned Contractor certifies that the work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by him for work for which previous Certificates for Payment were issued and payments received from the Owner, and that the current payment shown herein is now due.

CONTRACTOR:

By: _____ Date: _____

In accordance with the Contract Documents, based on on-site observations and the data comprising the above application, the Engineer certifies to the Owner that to the best of the Engineer's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED. \$ _____

INSPECTOR:

By: _____

ENGINEER:

By: _____

OWNER:

By: _____

Item No.	Description of Item	Scheduled Quantities	Unit Price	<u>Quantities of Work Completed</u>				
				<u>Previous Applications</u>		<u>This Application</u>		Amount Completed to Date
				Quantities	Amount	Quantities	Amount	

Subtotal or Total

CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS

THIS DOCUMENT HAS IMPORTANT LEGAL CONSEQUENCES; CONSULTATION WITH AN ATTORNEY IS ENCOURAGED WITH RESPECT TO ITS COMPLETION OR MODIFICATION.

TO OWNER: **City of Coweta**
310 S. Broadway
Coweta, OK 74429

PROJECT: **N. Eufaula Avenue Bridge**

CONTRACT DATED: _____

STATE OF: OKLAHOMA

COUNTY OF: WAGONER

The undersigned hereby certifies that, except as listed below, payment has been made in full and all obligations have otherwise been satisfied for all materials and equipment furnished, for all work, labor and services performed, and for all known indebtedness and claims against the Contractor for damages arising in any manner in connection with the performance of the Contract referenced above for which the Owner or Owner's property might in any way be held responsible or encumbered against any property of the Owner arising in any manner out of the performance of the Contract referenced above:

EXCEPTIONS:

SUPPORTING DOCUMENTS ATTACHED HERETO:

The following supporting documents should be attached hereto if required by Owner:

1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.
2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof.
3. Contractor's Affidavit of Release of Liens.

CONTRACTOR:
(Name and address)

BY: _____
(Signature of authorized representative)

(Printed name and title)

Subscribed and sworn before me on this date:

Notary Public: _____

My Commission Expires: _____

STATEMENT OF QUALIFICATIONS:

Bidder

Address

Similar Projects Completed by Bidder:

1. NAME OF PROJECT: _____

OWNER: _____ ADDRESS: _____

DATE STARTED: _____ DATE COMPLETED: _____

APPROX. QUANTITIES OF MAJOR ITEMS: _____

VALUE OF CONTRACT: _____

2. NAME OF PROJECT: _____

OWNER: _____ ADDRESS: _____

DATE STARTED: _____ DATE COMPLETED: _____

APPROX. QUANTITIES OF MAJOR ITEMS: _____

VALUE OF CONTRACT: _____

3. NAME OF PROJECT: _____

OWNER: _____ ADDRESS: _____

DATE STARTED: _____ DATE COMPLETED: _____

APPROX. QUANTITIES OF MAJOR ITEMS: _____

VALUE OF CONTRACT: _____

4. OTHER PROJECT REFERENCES: _____

NOTE: This form is to be submitted with the bid.

CONTRACT SPECIFICATIONS

A. GENERAL

1. This Contract is intended to, and hereby does, provide for complete in place, **N. EUFAULA AVENUE BRIDGE, PROJECT NO COW-BR 22.001**, including all necessary work and material for a total job, whether or not such work and material is shown or implied in the plans and specifications.
2. All construction and materials shall conform to the 2019 Standard Specifications for Highway Construction by the Oklahoma Department of Transportation. All work necessary to make for a complete and operable bridge as intended by these plans and specifications for which bid items are not provided, it shall be considered incidental work and the cost thereof shall be included in other appropriate bid items.
3. The cost to include the furnishing and installation of all temporary sheeting, shoring, timbering and bracing required to maintain any excavation in a condition to furnish safe working conditions and to permit the safe and efficient installation of all items of contract work shall be included in other items of work. The Contractor shall further, at his own expense, shore up or otherwise protect all fences, buildings, walls, walks, curbs, or other property adjacent to any excavation which might be disturbed during the progress of the work. The Contractor will be held liable for any damage which may result to neighboring property from excavation or construction operations.
4. Whenever any excavation is carried beyond the lines and grades shown on the Contract Drawings, written in the Contract Documents, and/or given by the Engineer, the Contractor shall, at his own expense, refill all such excavated space with such materials and in such a manner as may be directed. Beneath and around concrete structures, space excavated without authority shall be thoroughly compacted when refilling, or if deemed necessary by the Engineer, shall be refilled with concrete at the Contractor's expense.
5. If the materials encountered on any excavation are not suitable for structural foundations, or if necessary, to go an additional depth or width from that designated on the contract drawings to provide proper bearing for pipe and concrete, the Contractor shall make such additional excavations outside the regular limits of the work as may be directed by the Engineer. The cost of such additional excavation shall be merged into the appropriate unit price.
6. Excavated material shall be deposited so as to interfere as little as possible with the execution of the whole work or its several parts. Such material as cannot be placed in its final position in fills and embankment shall be removed to a temporary spoil bank, from which it shall later be taken and placed in embankment or fills.
7. Unsuitable and surplus excavated material not incorporated in the improvement shall be disposed of by the Contractor at his own expense unless otherwise designated in the project specifications, or on the contract drawings.

8. If private land is used by the Contractor as a spoil site, the Contractor shall obtain written permission from the owner or agent of the land agreeing to its use for this purpose and provide the project owner with a certified copy of such agreement.
9. The Contractor shall notify residents and business owners of construction by distributing door hangers to each and every house, business, and /or occupied structure located on the street or alley where the construction shall occur, at least 48 hours in advance of the commencement of construction.

B. SITE CONDITIONS

The Contractor shall be responsible for familiarizing himself with surface and subsurface conditions. The base bid as shown in the proposal shall include cost for unclassified excavating of earth, rock, dewatering, stabilizing unsuitable soils such as quicksand or other unsuitable materials, or any hazard that may be encountered. The cost for such work shall be included in the appropriate bid item. No additional compensation shall be given for such work. The Contractor shall satisfy himself as to the accuracy of all measurements before constructing any permanent structure.

C. SURVEYS

The Contractor shall develop and make all detailed surveys needed for construction such as slope stakes, batter boards, stakes for construction location and other working points, lines and elevations. The Contractor shall carefully preserve all benchmarks, reference points and stakes established by the Engineer and in case he causes damage or disturbance, he will be charged for the cost of replacement and shall be responsible for any mistakes that may be caused by their loss.

D. UTILITY LOCATIONS

The elevation and location of all utilities shown on the contract drawings were taken from public records. It shall be the duty of the Contractor to make final and exact determination of the location and extent of these utilities, and he will be liable for any expense resulting from damage to them. Unless otherwise indicated on the contract drawings or unless otherwise taken care of by the Owner thereof, all utilities and all structures of any nature, whether below or above ground, that may be affected by the work shall be protected and maintained by the Contractor and shall not be disturbed or damaged by him during the progress of the work. Should the Contractor disturb, disconnect or damage any utility or any structure, all expenses of whatever nature arising from such disturbance or the replacement or repair thereof shall be borne by the Contractor. This provision shall apply whether or not said utility or structure is shown on the plans. All utility locations shown or not shown on these plans shall be the responsibility of the Contractor prior to excavation. Utility location telephone numbers are:

1-800-522-6543	Statewide
1-800-654-8349	Out of State

E. AS-BUILT RECORDS

The Contractor is required to keep a current record of all field changes on jobsite at all times. They shall be legibly marked on his plan and shall become property of the City of Coweta prior to completion for purposes of constructing an as-built record of this project.

F. ARRANGEMENT AND CHARGE FOR WATER FURNISHED BY THE CITY

If the Contractor desires to use City water, he shall pay the rate established by City Ordinance for such service and he shall make complete and satisfactory arrangements with the City Utility Department for so doing. Flush meters will be used and the Contractor shall deposit the cost of the flush meter with the Utility Department and will pay for repairs and maintenance of the meter for the period which he has the meter in use in his possession. Contractor shall be charged for the amount of water he uses, including any monthly minimum charge.

G. USE OF FIRE HYDRANTS

The Contractor or his employees shall not open, turn off, interfere with, attach pipe or hose to, or connect anything with any fire hydrant, stop valve or stop cock or tap any water-main belonging to the City unless duly authorized to do so by the Owner.

H. PROTECTION AND OPENING TO PEDESTRIANS AND TRAFFIC

The Contractor is required to receive permission from the City Engineer to close any traffic lanes or alleys or roads during construction. No road shall be permanently or temporarily closed without prior approval by the City Engineer. The Contractor shall conduct his work so as to interfere as little as possible with public travel, whether vehicular or pedestrian; whenever it is necessary to cross, obstruct, or temporarily close roads, driveways and walks, whether public or private. The Contractor shall, at his own expense, provide and maintain suitable and safe bridges, detours, barricades, signing, lighting, striping and/or other temporary expedients for the accommodation of public and private travel, and shall give reasonable notice to owners of private drives before interfering with them; provided, however, that such maintenance of traffic will not be required at any point where the Contractor has obtained permission from the owner and/or tenant of private property, or from the authority having jurisdiction over public property involved to obstruct traffic at any designated point thereon and for the duration of whatever period of time as may be agreed upon. All work pertaining to traffic control shall be in accordance with the latest revision of "The Manual on Uniform Traffic Control Devices."

I. MATERIALS & CONSTRUCTION

All materials and construction shall be in accordance with the 2019 Oklahoma Department of Transportation Standard Specifications for Construction (Standard Specifications) and Construction Standards unless otherwise specified in the contract plans and specifications.

J. TESTING AND ACCEPTANCE REQUIREMENTS

The Contractor shall be responsible for paying the cost of all testing outlined in the Standard Specifications. Testing shall be performed by a qualified testing laboratory approved by the Owner.

K. PROTECTION AND PRESERVATION OF PROPERTY AND LANDSCAPE

The Contractor will be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal working hours. The Contractor shall furnish such watchmen, guards, fences, warning signs, lights and walkways, and shall take all other precautions as shall be necessary to prevent damage to persons or property. All structures and improvements damaged by the Contractor, his employees, subcontractors, or agents, shall be restored to a condition as good as when he entered upon the work. The duty of the Engineer to

conduct construction inspection of the Contractor's performance does not include any review of the adequacy of the Contractor's safety measures in, on, or near the construction site or sites. The Engineer has not been retained or compensated to provide design and construction review services relating to the Contractor's safety precautions or to means, methods, techniques, sequences, or procedures required for the Contractor to perform his work.

No trees shall be removed on the site of the work where outside of excavation limits, except where their removal is authorized by the Engineer. Where trees are on the line of the trench or adjacent thereto such trees and roots shall be removed and disposed of by and at the expense of the Contractor.

Trees remaining at the end of construction shall be adequately protected from permanent damage by reason of construction operations. Trimming of remaining trees where required shall be as directed by the Engineer.

All turf, shrubbery, and other landscaping, damaged or removed by the Contractor shall be replaced under the direction and to the satisfaction of the Owner, by and at the expense of the Contractor.

Any traffic signal loop wire, pull box, or conduit that is damaged or destroyed shall be replaced under the direction and to the satisfaction of the Owner, by and at the expense of the Contractor.

L ADMINISTRATION MATTERS

All permits, fees, and licenses required under City Ordinance not regulated by state or federal law will be collected.

DIVISION 01 – GENERAL REQUIREMENTS

SECTION 01 00 00 – GENERAL CONDITIONS

PART 1 – GENERAL

1.1 DESCRIPTION

The General Conditions shall govern and control all work to which they apply; however, since these specifications are of a general nature, they may refer to work not found in this project, in which case such non-applicable stipulations will have no meaning in this Contract. In case of conflict between the General Conditions and the Special Conditions, the Special Conditions shall govern. In case of conflict with either the General or Special Conditions by Supplemental Conditions of a funding agency such as EPA, FMHA, EDA or HUD, the Supplemental Conditions will govern.

PART 2 – DEFINITIONS

2.1 DEFINITIONS

DEFINITIONS: Whenever the words defined below, or pronouns used in their stead occur hereinafter, they shall have the meanings given as follows:

- A. "OWNER" shall mean the City of El Reno or El Reno Public Works Authority.
- B. "ENGINEER" shall mean Cowan Group Engineering, LLC, who has been employed by the OWNER for this work, or his duly authorized agent.
- C. "Inspector" shall mean the engineering or technical inspector or inspectors duly authorized by the ENGINEER, limited to the particular duties entrusted to him or them.
- D. "CONTRACTOR" shall mean the person, persons, partnership, company, firm or corporation entering into this contract for the performance of the work, or the agent appointed to act for such party.
- E. "Specification" shall mean, collectively, all of the terms and stipulations contained in the written portion of information furnished.
- F. "Drawings or Plan Sheets" shall mean, collectively, all of the drawings pertaining to the contract and made a part thereof, and also such supplementary drawings as the ENGINEER may issue from time to time in order to clarify the drawings, or for the purpose of showing authorized changes in the work, or for showing details which are not shown thereon.
- G. The term "Grade" used in these Specification is understood to refer to and indicate the established elevations of the paving, flow line of waterlines and other appurtenances as shown on the drawings.
- H. Whenever in these CONTRACT DOCUMENTS the words "as ordered", "as directed", "as permitted", "as allowed", or words or phrases of like import are used, it shall

be understood that the order, direction, requirements, permission, or allowance of the OWNER and ENGINEER is intended.

- I. Similarly, the words "approved", "reasonable", "suitable", "acceptable", "properly", "satisfactory", or words of like effect and import, unless otherwise particularly specified herein, shall mean approved, reasonable, suitable, acceptable, proper, or satisfactory in the judgment of the OWNER and ENGINEER.
- J. Whenever the term "or equal" is used in the drawings and/or Specification it shall refer to a material which will adequately perform the same function, in the opinion of the ENGINEER, as the material specified or shown on the drawings.

PART 3 - SCOPE OF WORK

The work to be covered under these contracts in accordance with the drawings listed herein and, in these specifications, consists of the furnishing of all materials, equipment, tools, labor, transportation and services necessary to complete the construction as outlined herein and as shown on the drawings. The complete installation shall not lack any part which can be reasonably implied as necessary to its proper functioning nor any subsidiary which is customarily furnished.

PART 4 - EXAMINATION OF SITE OF WORK

It is the obligation of the bidder to examine carefully the site of the proposed work; to ascertain for himself all the facts concerning conditions therein, including all physical characteristics above, on and below the surface of the ground; to investigate the subsurface conditions and to determine for his information the character and proportionate quantities of soils, rock and other subsurface material which may be encountered in the work; to inform himself by independent research of the difficulties to be encountered and judge for himself the accessibility of the work and all other circumstances affecting the cost of doing the work or the time required for its completion; and the bidder agrees to this obligation in signing the proposal. When provided, the soils boring and testing report is attached to these Specification for the CONTRACTOR'S information and is not a part of the contract. No guarantee is made as to their accuracy or completeness. The OWNER assumes no responsibility whatsoever with respect to ascertaining for the bidder such facts covering physical characteristics at the site of the work. The bidder agrees that, if awarded the contract, he will make no claim for, and will have no right to, additional payment or extension of time for completion of the work or any other concession because of any failure on his part to fully acquaint himself with all conditions relating to the work. The bidder shall rely exclusively upon his own estimate, investigation and evaluation of site conditions.

PART 5 - SITE CONDITIONS

Where connections to existing utilities are shown on the drawings, the work may be required to be done at night or at a time which will least interfere with the operation of the existing facility.

The tie to existing utilities will be coordinated with personnel of the OWNER of the existing lines and will be done at a time to least inconvenience their operation. The work may be required to be done at night or weekends or both.

Where possible the existing utilities (water, gas, etc.) have been noted on the drawings. There may be additional buried lines that are not shown and if such is encountered, said lines will be left in service. CONTRACTOR shall take all precautions available prior to construction to locate, identify, and verify utilities. If said lines are broken by the CONTRACTOR, they shall be repaired as soon as possible.

The work along or across state highways shall be done in accordance with the permit from Division Engineer, Department of Transportation. The right-of-way shall be maintained in a satisfactory manner at all times. All roads, streets, drives, etc., cut during construction shall be properly protected by barricades, flashing lights, etc., and shall be made passable as soon as possible after laying of lines during the day and always at night. CONTRACTOR shall maintain the above cut roads in a passable condition until the wearing surface is replaced and then kept in a satisfactory condition for five (5) years after job is completed.

PART 6 - EXPLOSIVES

In handling explosives used during the construction of the project, the CONTRACTOR shall adhere to all Federal and State laws and City ordinances regulating the purchase, transportation, storage, handling, and use of such explosives. No blasting shall be done without 12-hour notification of the OWNER and ENGINEER, proof of insurance, and the presence of the Inspector. All equipment, tools, and materials used shall be of the correct type and in good condition for the operation. The CONTRACTOR shall take all necessary precautions to avoid damage to property resulting from the transportation, storage, handling and use of explosives. Before blasting, the CONTRACTOR shall take all necessary precautions to ensure that rock and debris will be confined to the excavation. Any blasting within 10 ft. of a water, sewer, gas or pipeline shall be done with very light charges, and utmost care shall be taken to avoid disturbance to these lines.

PART 7 - SUBMITTALS

Engineering data covering all equipment and fabricated materials to be furnished under this contract shall be submitted to the ENGINEER for review. This data shall include drawings and operation of component materials and devices; the external connections; anchorages and supports required; performance characteristics; and dimensions needed for installation and correlation with other materials and equipment. Data submitted shall include drawings showing essential details of any changes proposed by CONTRACTOR and all required structural layout and wiring diagrams.

No work shall be performed in connection with the fabrication or manufacture of materials and equipment, nor shall any accessory or appurtenance be purchased until the drawings and data therefore have been reviewed, except at the CONTRACTOR'S own risk and responsibility.

At least five (5) copies of each drawing and necessary data with statement of approval by the CONTRACTOR, shall be submitted to the ENGINEER. Each drawing or data sheet shall be clearly marked with the name of the project, the ENGINEER'S name, CONTRACTOR'S name and references to applicable specification paragraphs and drawing sheets. When catalog pages are submitted, the applicable items shall be identified.

The ENGINEER'S review of drawings and data submitted by the CONTRACTOR will cover only general conformity to the drawings and specifications, external connections and

dimensions which affect the layout. The ENGINEER'S review of drawings returned marked NO EXCEPTIONS NOTED or EXCEPTIONS NOTED does not indicate a thorough review of all dimensions, quantities and details of the material, equipment, device or items shown and does not relieve the CONTRACTOR from any responsibility for errors, omissions, or deviations from the contract requirements.

All drawings and data, after final processing by the ENGINEER, shall become a part of the contract documents, and the work shown or described thereby shall be performed in conformance therewith unless otherwise authorized by the OWNER or the ENGINEER.

After drawings and data have been accepted by OWNER or ENGINEER, the CONTRACTOR shall submit three (3) additional copies of all data and one (1) set of reproducible of all drawings to OWNER for file records. Also, CONTRACTOR shall keep accurate "record drawings" records of the work and turn these records over to the OWNER at the completion of the work.

PART 8 - SURVEYS

The OWNER shall establish base lines or control points for the location of the principal component parts of the work together with benchmarks adjacent to the work as shown or indicated on the Drawings. The CONTRACTOR shall develop and make all detail surveys necessary for construction. The CONTRACTOR shall be responsible for the accuracy of all lines and grades for all parts of the work. He shall do all field work necessary to lay out and maintain the work and shall make available to the OWNER all facilities and information necessary for properly checking the accuracy of such field work. Such checking shall in no way relieve the CONTRACTOR of his responsibility of the correctness of all field work.

The OWNER will provide survey of property including reference points, property corners and benchmarks where necessary in the opinion of the ENGINEER. If necessary, the CONTRACTOR shall transfer these reference points and benchmarks to permanent locations where they will not be disturbed. If disturbed, the CONTRACTOR shall re-install them to OWNER'S satisfaction, at CONTRACTOR'S cost.

PART 9 - PERMITS AND REGULATIONS

The CONTRACTOR shall secure and pay for all construction permits required to carry out the work unless otherwise specified and shall produce same upon demand of the OWNER. The CONTRACTOR shall give all notices and pay all fees and shall, before starting work, ascertain whether the drawings and specification are at variance with any codes or regulations applying at the site. The CONTRACTOR shall obtain completion survey, certificate of completion or occupancy if required by local regulations.

All features of design and construction shall comply with the local building regulations and/or other lawful or public regulations which apply at the site. If any features of construction as shown on the OWNER'S plan, do not conform to the regulations, the CONTRACTOR shall notify the OWNER of such discrepancy, and shall base his quotation and work on features of construction which do conform to the regulations.

If the CONTRACTOR performs any work contrary to such laws, ordinances, rules and regulations and without such notice to the OWNER, he shall bear all costs arising therefrom.

PART 10 - INSPECTION

The CONTRACTOR will provide access to the work site and facilities for representatives of the Environmental Protection Agency, Oklahoma Department of Environmental Quality and other agencies, as well as, OWNER and ENGINEER, as required whenever the work is in progress.

PART 11 - SATURDAY, SUNDAY, HOLIDAY AND NIGHT WORK

No work shall be done between the hours of 7:00 p.m. and 7:00 a.m., nor on Saturday, Sunday or legal holidays without the written approval or permission of the ENGINEER in each case, except such work as may be necessary for the proper care, maintenance and protection of work already done, or of equipment, or in the case of an emergency.

PART 12 - PROTECTION OF PROPERTY

- A. The protection of City, State and Government monuments, street signs and other OWNER's property is of prime importance, and if the same be damaged, destroyed or removed, they shall be repaired, replaced or paid for by the CONTRACTOR. Disturbance to this property must first be approved by the agency which controls it.
- B. No valves or other control on any utility main or building service line shall be operated for any purpose by the CONTRACTOR.
- C. At places where the CONTRACTOR'S operations are adjacent to the plant of railway, telegraph, telephone, electric and gas companies, or water, sanitary sewers and storm sewers, damage to which might result in expense, loss or inconvenience, work shall not be commenced until all arrangements necessary for the protection thereof have been made.
- D. The OWNER has attempted to locate all storm sewers, culverts, buried telephone or electrical conduits, sanitary sewers and water mains that might interfere with the construction of this project. The CONTRACTOR shall cooperate with the owners of any underground or overhead utility lines in their removal and rearrangement operations in order that these operations may progress in a reasonable manner and duplication or rearrangement work may be reduced to a minimum and that services rendered by those parties will not be unnecessarily interrupted. The revision and crossings of the various types of lines shall be made as follows:
 - 1. Storm sewers and culverts may be removed at the time of crossing or may be adequately braced and held in position while the pipe is placed beneath them. If the storm sewer or culvert is removed, it shall be replaced with pipe of the same type and size as that removed and it shall be re-joined to the undisturbed line with a joint satisfactory to the ENGINEER. Backfill over the main up to and around the storm sewer shall be thoroughly compacted in order that no settlement will occur. The revision and crossing of said lines shall be at the expense of the CONTRACTOR.
 - 2. All overhead and buried telephone and electrical conduits, to be revised or crossed by the construction of this project shall be protected in accordance with the directions of the utility company owning the conduits and/or mains. The CONTRACTOR shall notify the companies and obtain their permission before

making any crossing or revisions. The revision and crossing of said lines shall be at the expense of the CONTRACTOR. Any overhead cables or buried cables or conduits damaged by the CONTRACTOR shall be repaired at his expense to the satisfaction of the ENGINEER and of the OWNER.

3. The CONTRACTOR shall not remove any water or sanitary sewer lines except as directed by the ENGINEER or as required by the Drawings and specifications and shall adequately brace and protect them from any damage during construction. Any existing water main or sewer main or lateral damage caused by the CONTRACTOR'S operations will be repaired by the CONTRACTOR. The repairs will be made at the CONTRACTOR'S expense.
- E. The location of utility service lines serving individual properties may or may not be shown on the Drawings, but the CONTRACTOR shall assume that such service lines exist whether or not they are shown on the Drawings, and it shall be the responsibility of the CONTRACTOR to make any necessary changes in the line and/or grade of such services, or to secure the necessary changes therein to be made by the particular utility company involved or other OWNER thereof, or by an agent or individual CONTRACTOR approved by such utility company or other OWNER. CONTRACTOR shall pay the cost of all such revisions whether performed by CONTRACTOR, the utility company or other OWNER, or an approved CONTRACTOR. In the event of interruption of a utility service as a result of accidental breakage, CONTRACTOR shall promptly notify the ENGINEER and the OWNER of the utility and shall repair or cause the same to be repaired, in the same manner as necessary changes above are provided for, the CONTRACTOR shall do all things necessary to see that the restoration of services is done as promptly as may be reasonably done. All sanitary sewer service lines damaged shall be replaced with cast iron pipe regardless of type or kind damaged.
- F. In the event the CONTRACTOR in any way fails to comply with the requirements of protecting, repairing and restoring of any utility or utility service, the OWNER may, upon forty-eight (48) hours written notice proceed to protect, repair, rebuild or otherwise restore such utility or utility service as may be deemed necessary, and the cost thereof will be deducted from any money due, or which may become due the CONTRACTOR pursuant to the terms of his contract.

PART 13 - FIELD OFFICE

Copies of the drawings, specification, and other contract documents shall be kept at the site of the work available for use at all times.

PART 14 – MATERIALS AND CONSTRUCTION

All materials and construction shall be in accordance with the 2019 Oklahoma Department of Transportation Standard Specifications for Construction (Standard Specifications) and Construction Standards unless otherwise specified in the contract plans and specifications.

PART 15 - ALTERATION OF QUANTITIES

The CONTRACTOR agrees that the quantities of work as stated in the Bid Schedule or indicated on the drawings are only approximate, and that the OWNER shall have the right to omit portions of the work and to increase or decrease the quantities of any item of work. Final payment will be based on the actual quantities used and installed in accordance with the drawings and Specification.

PART 16 - QUALITY CONTROL

When required in writing by the ENGINEER, the CONTRACTOR shall make such tests as may be necessary to show that the requirements of the Specification have been fulfilled.

All tests shall be made under the supervision and direction of the ENGINEER, and the CONTRACTOR will provide all required materials, labor and apparatus, etc., or so directed, engage an approved testing laboratory for making same. Any work found defective shall be removed, replaced and retested until satisfactory to the ENGINEER, all at the CONTRACTOR'S expense.

Should tests required by the ENGINEER, except those specifically called for elsewhere in these General Requirements or in the Specification show that the requirements of the Specification have been fulfilled, then the costs of such tests shall be paid for by the OWNER.

PART 17 - MEASUREMENT AND FITTING OF PARTS

The CONTRACTOR, without extra charge, shall make such slight alterations as may be necessary to make adjustable parts fit the fixed parts, leaving all complete and in proper shape when done. The CONTRACTOR shall verify all dimensions given in the drawings and shall report any error or inconsistency to the ENGINEER before commencing work.

PART 18 - CONTRACTOR'S SUPERINTENDENT

The CONTRACTOR shall keep a competent Superintendent and any necessary assistants at the site throughout the progress of the work. All directions given to said Superintendent shall be as binding as if given to the CONTRACTOR. Upon request, such directions will be confirmed, in writing, to the CONTRACTOR.

The CONTRACTOR'S Superintendent and/or any of his assistants shall be promptly replaced in the event he or they shall prove to be incompetent and/or unsatisfactory to the ENGINEER.

PART 19 - ASSISTANCE BY ENGINEER

It is distinctly understood and agreed that such assistance as the ENGINEER may render to the CONTRACTOR in connection with the interpretation of drawings and specification shall not relieve the CONTRACTOR from any responsibility for the work. Any work which proves faulty shall be made right by the CONTRACTOR without delay. The failure of the ENGINEER, or his Inspectors to call the CONTRACTOR'S attention to faulty work or work done which is not in accordance with drawings and specification shall not prevent the OWNER from insisting that the CONTRACTOR make all work right.

PART 20 - INCIDENTAL WORK

Work called for on the drawings and/or specifications and are not set forth in the Bid Schedule as pay items, shall be considered as incidental work and will not be paid for directly, but shall be included in the price bid for the various pay items.

PART 21 - TERMINATION OF CONTRACT

If the CONTRACTOR shall be adjudged bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he should persistently or repeatedly refuse, or should fail, except in cases for which extension of time is provided, to supply enough properly skilled workmen, equipment or proper materials, or if he should fail to make prompt payment to SUBCONTRACTOR or for material or labor, or persistently disregard laws, ordinances or the instructions of the ENGINEER, or otherwise be guilty of a substantial violation of any provision of the Contract, then the OWNER upon the certificate of the ENGINEER that sufficient cause exists to justify such action, may without prejudice to any other right or remedy and after giving the CONTRACTOR seven days written notice, terminate the employment of the CONTRACTOR and take possession of the premises and of all materials, tools and appliances thereon and finish the work by whatever method the OWNER may deem expedient. In such case, the CONTRACTOR shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the Contract Price shall exceed the expense of finishing the work, including compensation for additional managerial and administrative services, such excess shall be paid to the CONTRACTOR. If such expense shall exceed such unpaid balance, the CONTRACTOR shall pay the difference to the OWNER as herein provided, and the damage incurred through the CONTRACTOR's default shall be certified by the ENGINEER.

In the event of termination of Contract before completion of the work, due to abandonment of the project or discontinuance thereof, the CONTRACTOR will be paid in proportion to the work completed and in progress as per scope of work described in the drawings and specification and in accordance with the unit price schedule.

PART 22 – PROGRESS PAYMENTS, ACCEPTANCE AND FINAL PAYMENT

Basis for Progress Payments: The Schedule of Quantities as shown in the Plans will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period. The amount of retainage with respect to progress payments will be 5% until 50 percent completion after which retainage shall be 2.5%.

Upon receipt of written notice from the CONTRACTOR that the work is ready for final inspection and acceptance, the ENGINEER shall promptly make such inspection and when he finds the work acceptable under the Contract and the Contract fully performed, he shall promptly issue a final certificate over his own signature, stating that the work provided for in this Contract has been completed and is accepted by him under the terms and conditions thereof, and the entire balance found to be due the CONTRACTOR, including the retained percentage, shall be paid to the CONTRACTOR, as approved by the OWNER, at the office of the OWNER within 30 days after the date of said final certificate.

If, after receipt of written notice from CONTRACTOR requesting final inspection and the performance of said final inspection by ENGINEER, additional inspections are necessary in order for ENGINEER to issue a final certificate; the OWNER shall withhold the cost associated with said additional inspections from the final payment due the CONTRACTOR.

Before issuance of final certificate, the CONTRACTOR shall submit evidence satisfactory to the ENGINEER that all payrolls, material bills, equipment rentals, and all other indebtedness connected with the work have been paid.

PART 23 - PLACING WORK IN SERVICE

If desired by the OWNER, portions of the work may be placed in service when completed and the CONTRACTOR shall give prior access to the work for this purpose, but such use and operation shall not constitute an acceptance of the work.

PART 24 - SCHEDULES

The CONTRACTOR shall furnish the ENGINEER with a tentative schedule, in a format approved by the ENGINEER, setting forth in detail the procedure he proposes to follow, and giving the dates on which he expects to start and to complete separate portions of the work. If at any time, in the opinion of the ENGINEER, proper progress is not being maintained, such changes shall be made in the schedule of operations which will satisfy the ENGINEER that the work will be completed within the period stated in the proposal, or extension thereof made as herein provided.

CONTRACTOR is to prepare list of proposed SUBCONTRACTORS including material suppliers; submit to ENGINEER for approval before subcontracts are awarded. No SUBCONTRACTOR is to be employed on work unless approved by OWNER and ENGINEER.

PART 25 - PROJECT SIGN

A project sign is not required for this project.

PART 26 - INSURANCE

The CONTRACTOR shall protect, indemnify, save and hold harmless the OWNER, their officers, agents, and employees from all suits, actions or claims of any kind or character brought because of bodily injuries, sickness, disease or personal injury, or damages received or sustained by any person, persons, or property on account of any operations of the CONTRACTOR, his agents, employees, his subcontractors or any others authorized by the CONTRACTOR to perform work on the project.

Third Party Beneficiary Clause. It is specifically agreed by and between the parties executing this Contract, that it is not intended by any of the provisions of any part of the Contract to create in the public or any member thereof any third-party beneficiary provisions or to authorize anyone not a party to this Contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of this Contract.

The CONTRACTOR shall carry insurance of the following kinds and amounts on all City Contracts:

A. CONTRACTOR'S Public Liability, Auto Liability and Property Damage Liability Insurance. The CONTRACTOR shall provide regular CONTRACTOR'S Public

Liability Insurance for a combined amount of one million (\$1,000,000) dollars of coverage for all damages arising out of bodily injury, death, and property damage for each occurrence with an aggregate limit of two million (\$2,000,000) dollars.

The CONTRACTOR shall provide business auto liability coverage for an aggregate limit of one million (\$1,000,000) dollars of coverage for bodily injury and property damage arising out of the operation or maintenance of any vehicle including owned, non-owned and hired vehicles, and employee non-ownership use.

B. Insurance for SUBCONTRACTOR'S and CONTRACTOR'S Protective Public Liability and Property Damage Liability Insurance. In the event that any of the work to be performed by the CONTRACTOR on the project is sublet or assigned or is otherwise to be performed by anyone other than the CONTRACTOR'S own employees, then the insurance specified above shall extend to cover such work.

C. Workmen's Compensation Insurance and Employer's Liability Insurance. The CONTRACTOR shall furnish satisfactory evidence to the City that, with respect to the work to be performed by him on the project, he carries regular Workmen's Compensation and Employers Liability Insurance covering his liability under the "Workmen's Compensation Law of the State of Oklahoma". The CONTRACTOR shall maintain the aforementioned insurance in full force and effect for the duration of the Contract. Should the CONTRACTOR fail or neglect to maintain the aforementioned insurance, the City specifically reserves the right to withhold all funds due and owing the CONTRACTOR until such time as the required insurance is in effect.

In addition to the aforementioned insurance coverage, on any project in which the CONTRACTOR shall perform any Railway-Highway work, the CONTRACTOR shall also secure the following: "Railroads' Protective Liability and Property Damage Insurance".

D. Railroads' Protective Liability and Property Damage Insurance. In addition to the above, the CONTRACTOR shall furnish satisfactory evidence to the City that, with respect to the work to be performed by him under the Contract, he has provided for and on behalf of the Railway Company or Railway Companies involved, Protective Public Liability Insurance in an amount as may be required by the Railway Company, which amount shall be specified in the bid documents. Policies shall not include liability for negligence on the part of the Railway Company, its agents or employees, except as set out in Coverage A, B, or C of the form of policy, or amendments thereto, referred to under paragraph 6 below. This insurance applies to each and all Railway Companies involved in the work.

E. General. The insurance hereinbefore specified shall be carried in Insurance Companies approved by the City, and where applicable the Railway Company, during all times when work is being carried on under the terms of the Contract, until all work required to be performed under the Contract is satisfactorily completed as evidenced by the formal acceptance by the City.

F. Certificates of Insurance. Required insurance shall be documented by Certificates of Insurance which provide that the OWNER shall be notified at least thirty (30) days in advance of cancellation, non-renewal or adverse change. The Certificate of

Insurance shall show the OWNER as the named insured.

For general liability, the CONTRACTOR shall provide an indication of the amounts of claims, payments or reserves chargeable to the aggregate amount of liability coverage.

PART 27 - SAFETY STANDARDS AND ACCIDENT PREVENTION

With respect to all work performed under this Contract, the CONTRACTOR shall:

- A. Comply with the safety standards provisions of applicable laws, building and construction codes and the Manual of Accident Prevention in Construction published by the Associated General Contractors of America, the requirements of the Occupational Safety and Health Act of 1970 (Public Law 91-596), and the requirements of Title 29 of the Code of Federal Regulations, Section 1910 or 1926 as applicable.
- B. Exercise every precaution at all times for the prevention of accidents and the protection of persons (including employees) and property.
- C. Trench Excavation and Safety System: All work under this item shall be in accordance with the current edition of the OSHA Standard for Excavation and Trench Safety Systems, 29 CFR 1926 Subpart P.

The CONTRACTOR shall notify all utility companies and OWNERS in accordance with the OSHA requirements given in 29 CFR 1926.651 (b) (2) for the purpose of locating utilities and underground installations.

Where the trench or excavation endangers the stability of a building, wall, street, highway, utilities, or other facility, the CONTRACTOR shall provide support systems such as shoring, bracing, or underpinning to ensure the stability of such facility. The CONTRACTOR may elect to remove and replace or relocate such facilities with the written approval of the facility owner, the ENGINEER, and the OWNER.

Payment for the work required by this item shall be included in the lump sum price bid. With each periodic payment request, CONTRACTOR shall submit a certification that the CONTRACTOR has complied with the provisions of the OSHA standards.

PART 28 - WAGE RATES

NO SPECIFIC REQUIREMENTS FOR THIS PROJECT.

PART 29 - WORKMEN

The CONTRACTOR shall employ foreman and skilled laborers where necessary, and if any person employed on the work shall refuse or neglect to obey orders of the ENGINEER or Inspector when such orders are in keeping with the provisions of these specifications or shall appear to the ENGINEER or his Inspector to be incompetent, disorderly or unfaithful, he shall, upon order of the ENGINEER, be at once discharged and not again employed upon any part of the work. It shall be the responsibility of the superintendent representing the CONTRACTOR to transmit all necessary orders and instructions. If requested by the ENGINEER, the

CONTRACTOR shall submit, in written form, qualifications including work experience of any workman used on the project.

PART 30 - NUMBER OF WORKING DRAWINGS AND SPECIFICATIONS

The ENGINEER will furnish to the CONTRACTOR not more than two (2) sets of drawings and specifications for construction. The CONTRACTOR may procure additional copies of drawings and specifications for construction at cost of reproduction. Such costs are reimbursable by the ENGINEER.

PART 31 - PRECONSTRUCTION CONFERENCE

Prior to the commencement of work at the site, a preconstruction conference will be held at a mutually agreed time and place. The conference shall be attended by:

- A. CONTRACTOR and his superintendent.
- B. Principal SUBCONTRACTORS.
- C. Representatives of principal suppliers and manufacturers as appropriate.
- D. ENGINEER and its Resident Project Representative.
- E. Representatives of OWNER.
- F. Government representatives as appropriate.
- G. Others as requested by CONTRACTOR, OWNER, or ENGINEER.
- H. Unless previously submitted to ENGINEER, CONTRACTOR shall bring to the conference a preliminary schedule for each of the following:
 - 1. Progress.
 - 2. Procurement.
 - 3. Values for progress payment purposes.
 - 4. Shop Drawings and other submittals.

The purpose of the conference is to designate responsible personnel and establish a working relationship. Matters requiring coordination will be discussed and procedures for handling such matters established. The agenda will include:

- A. CONTRACTOR'S preliminary schedules.
- B. Transmittal, review, and distribution of CONTRACTOR'S submittals.
- C. Processing applications for payment.
- D. Maintaining record documents.
- E. Critical work sequencing.
- F. Field decisions and change orders.

- G. Use of premises, office and storage areas, security, housekeeping, and OWNER'S needs.
- H. Major equipment deliveries and priorities.
- I. CONTRACTOR'S assignments for safety and first aid.

ENGINEER will preside at the conference and will arrange for keeping the minutes and distributing the minutes to all persons in attendance.

PART 32 - PROGRESS MEETINGS

CONTRACTOR shall schedule and hold regular progress meetings at least monthly and at other times as requested by ENGINEER or required by progress of the work. CONTRACTOR, ENGINEER, and all SUBCONTRACTORS active on the site shall be represented at each meeting. CONTRACTOR may at its discretion request attendance by representatives of its suppliers, manufacturers, and other SUBCONTRACTORS.

CONTRACTOR shall preside at the meetings. Meeting minutes will be prepared and distributed by CONTRACTOR. The purpose of the meetings will be to review the progress of the work, maintain coordination of efforts, discuss changes in scheduling, and resolve other problems which may develop.

PART 33 - SUBSTANTIAL AND FINAL COMPLETION

All work including site restoration shall be finished within the time called out on the Bid Form for final completion.

PART 34 - EXCAVATION

All excavation shall be unclassified. No additional payment shall be made for rock, groundwater, or other natural formations encountered. Payment for excavation shall be included in other items of work.

PART 35 - SUBCONTRACTORS

CONTRACTOR is to prepare a list of proposed SUBCONTRACTORS including material suppliers and submit to ENGINEER for approval before SUBCONTRACTORS are awarded.

No SUBCONTRACTOR is to be employed on work unless approved by OWNER and ENGINEER.

PART 36 - RIGHT-OF-WAY/PROJECT VIDEO

CONTRACTOR shall video the complete right-of-way of the project prior to initiating construction and deliver video tape to the ENGINEER at the pre-construction conference. The video shall be taken in such a way to document pre-construction conditions for use in documenting satisfactory right-of-way restoration and other issues relative to initial conditions prior to construction.

PART 37 - RECORD DRAWINGS

37.1 GENERAL

- A. The CONTRACTOR shall be responsible for accumulation and maintenance of a complete set of Project Record Documents and upon completion and acceptance of the project shall submit these documents to the ENGINEER, as the OWNER'S representative, for a permanent record.
- B. The Project Record Documents shall consist of:
 - 1. One complete set of drawings, with revisions.
 - 2. One complete Project Manual with all addenda, field bulletins and change orders.
 - 3. Complete set of all field test data.
 - 4. Complete set of approved shop drawings, product data brochures and samples.
 - 5. Six complete sets of maintenance and operating instructions, parts lists and supplier identification on all operating fixtures and equipment.

37.2 MAINTENANCE OF RECORD DOCUMENTS

- A. The CONTRACTOR shall maintain, on the site, one complete set of contract documents, other than those used for construction, throughout the life of the job.
 - 1. This set of documents shall be marked "Record Set" and shall be maintained up to date at all times and available to the ENGINEER for inspection.
 - 2. The only notations or other markings to be made on this set are notations of field variations made from the work shown on the drawings for purposes of "Record Drawings" revisions when the project is complete. Failure to record revisions by each CONTRACTOR, shall be considered a breach of contract.
 - 3. This set of Documents will be turned over to the ENGINEER for preparation of "Record Drawings" **prior to approval of final application for payment.**

37.3 MAINTENANCE AND OPERATING INSTRUCTIONS

- A. A complete set of maintenance and operating instructions on the project shall be prepared for the OWNER'S continual use.
 - 1. To be bound in booklet form, 8-1/2" x 11" in size, labeled "Operating Manual".
 - 2. To be indexed for quick reference use.
 - 3. To contain manufacturer's printed data, record forms, diagrams, parts lists, maintenance procedures, start-up procedures, operating procedures, service requirements and schedules, and names, addresses and phone numbers of SUBCONTRACTOR, manufacturer and local service agent.
 - 4. To contain all written warranties and guarantees.
- B. Each CONTRACTOR shall submit six complete copies of this "Operating Manual" material from his trade to the ENGINEER at the completion of the project.
- C. The ENGINEER shall assemble, bind, label and index this material for the OWNER as stated above. Failure to submit the data listed on the part of any CONTRACTOR may

be considered cause to withhold final payment until all such information is received.

PART 38 - CHANGES IN THE WORK

ALL CHANGES SHALL BE MADE IN WRITING AND APPROVED BY THE OWNER OR ENGINEER. THIS INCLUDES CHANGES INVOLVING COST OR THOSE NOT INVOLVING COST. NO CHANGE WILL BE ACCEPTABLE UNLESS APPROVED IN WRITING.

The OWNER, without invalidating the Contract, may order extra work or make changes by altering, adding to or deducting from the work with the Contract Total being adjusted accordingly. All changes involving cost shall be made using a written modification order and shall be supported with necessary documentation as to the increase or decrease in cost and time. No increase or decrease in cost or time will be made without an approved modification order that is completed at or before the change is made. Increases in cost or time will not be allowed at the end of the job for work completed earlier without an approved change order. The OWNER shall have authority to make minor changes in the work which do not involve extra cost, and which do not significantly change the design. All such changes shall be made with a written field order.

PART 39 – WEATHER DAYS

CONTRACTOR IS RESPONSIBLE FOR TRACKING ADVERSE WEATHER DAYS. CONTRACTOR SHALL NOTIFY THE ENGINEER THAT THEY WILL BE TAKING A WEATHER DAY. THE WEATHER DAY WILL NOT BE CONSIDERED UNLESS IT MEETS THE REQUIREMENTS BELOW. IT IS UP TO THE ENGINEER TO ACCEPT THE WEATHER DAY.

The contract time consists of the number of calendar days stated in the Contract for the completion of the work beginning on the effective date of the work order including all weekends, holiday, and normal adverse weather days. All calendar days elapsing between effective dates of any orders of the Owner to suspend work and to resume work for suspensions, not the fault of the Contractor shall be excluded.

The occurrence of unusually severe weather during the life of the Contract will be considered a basis for extending contract time when work is not already suspended for other reasons. Unusually severe weather shall mean weather which at the time of year it occurs is unusual for the place in which it occurs.

Extension of time for unusually severe weather will include only those actual adverse weather days in excess of the normal adverse weather days included in the contract time. Normal adverse weather shall mean adverse weather which, regardless of its severity, is to be reasonably expected for that particular place at that particular time of year. The normal adverse weather days included in the contract time as shown in Table A are based on historical records of temperature and precipitation.

Actual adverse weather days are those days meeting one or more of the criteria in A, B, C, or D below. Time extensions for days meeting more than one criterion will take into consideration only that criterion having the greatest impact. Those actual adverse weather days covered by criterion A, B, or C that are **in excess of** the days in Table A will be allowed without regard to when they occur (except prior to mobilization, during suspension for other reasons, or after the project completion date) or their impact on contract completion. However, those days covered by criterion D will be subject to the limitations as noted.

A. Days with Maximum temperature of 32°F or less - one full day allowed.

- B. Days with Minimum temperature of 32°F or less, but whose maximum temperature is over 32°F - one-half day allowed.
- C. Days when 1" or more precipitation (rain or snow equivalent) occurs - one full day allowed.
- D. Days when weather related conditions exist which prohibit proper performance of work as specified - one full day allowed. Allowance of such days will be subject to the work which is being delayed, being critical to timely contract completion and the Contractor making every reasonable effort to minimize the adverse impact of the conditions.

TABLE A
NORMAL ADVERSE WEATHER DAYS
(BY MONTH)

<u>MONTH</u>	<u>NORMAL ADVERSE WEATHER DAYS</u>
January	8
February	7
March	5
April	3
May	3
June	3
July	2
August	2
September	2
October	3
November	4
December	7

END OF SECTION 01 00 00

SECTION 01 11 00 - SUMMARY OF WORK

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The work covered by these specifications and drawings shall consist of all materials, transportation costs, equipment, and tools that are related to, or are to be incorporated in this contract and must be received, unloaded, stored, installed, erected, service connections provided, and coordinated with the construction by the CONTRACTOR under this contract. Installation of equipment and materials shall mean furnishing of all labor and materials as required to place the improvements in successful operation. The CONTRACTOR shall be responsible for all equipment and materials and shall replace at his own expense all such equipment and materials found defective in manufacture or damaged in handling after delivery by the manufacturer. The improvements are as listed:

**CITY OF COWETA / COWETA PUBLIC WORKS AUTHORITY
N. EUFAULA AVENUE BRIDGE**

- B. This contract shall include minor items not specifically mentioned herein but shown on the accompanying plans or obviously necessary to provide a complete job.
- C. The following description, while not intended to cover all details, outlines some items of the work to be accomplished under this Contract:
1. **Removal of existing pipe cross drain along N. Eufaula Avenue between SH-51 and East Magnolia Street.**
 2. **Construct new double barrel 10' x 8' concrete bridge structure.**
 3. **Sewer removal and replacement with steel casing.**
 4. **Overlay N. Eufaula Avenue.**
 5. **Approximately 580 LF of 6" C900 PVC waterline and includes any fittings, valves or appurtenances. (Add Alt Number 1)**
 6. **Approximately 69 LF of 12" steel casing by bore. (Add Alt Number 1)**
- D. The price named in the Proposal shall include the furnishing of all labor, material, transportation costs, equipment rental, etc., necessary to construct the project as herein specified and as shown on the accompanying plans.
- E. The CONTRACTOR shall cooperate with the OWNER during construction so as to place the improvements in operation at minimum inconvenience and without significant disruption of the OWNER. The CONTRACTOR shall minimize his area of operation. Any areas disturbed will be restored to the OWNER'S satisfaction.

END OF SECTION 01 11 00

SECTION 01 11 50 – MEASUREMENTS AND PAYMENTS

PART 1 – PAY REQUESTS

1.1 CONTRACTOR TO SUBMIT DETAILED BREAKDOWN OF CONTRACT AMOUNT

- A. Except in the cases where the unit prices form the basis for payment under the contract, the CONTRACTOR shall, within ten (10) days of receipt of the Notice to Proceed, submit a complete breakdown of the contract amount showing the value assigned to each part of the work, including an allowance for profit and overhead. Upon approval of the breakdown of the contract amount by the ENGINEER, it shall be used as the basis for all requests for payment.

1.2 CONTRACTOR MONTHLY PAY REQUESTS

- A. The CONTRACTOR may submit periodically, but not more than once each month, a request for payment for work done and materials delivered and stored on the site. The CONTRACTOR shall furnish the ENGINEER all reasonable facilities required for obtaining the necessary information relative to the progress and execution of the work. Payment for materials stored on the site will be conditioned upon evidence submitted to establish the OWNER'S title to such materials. Each request for payment shall be computed from the work completed on all items listed in the detailed breakdown of contract amount, less five (5) percent to be retained until 50 percent completion and acceptance of the work, and less previous payments, provided that any after 50 percent of the work has been satisfactorily completed, the OWNER shall reduce the percentage retainage to two and one-half (2 ½) percent where unit prices are specified. The request for payment shall be based on the quantities completed.

1.3 MATERIAL STORED ON SITE

- A. The following items will be required if the CONTRACTOR requests payment for material stored on the site.
 - 1. CONTRACTOR must furnish invoices showing quantity, size, costs, etc. of the material.
 - 2. The invoices must be approved by the OWNER, PROJECT INSPECTOR and/or ENGINEER.
 - 3. Payment will be made only for material stored in a location approved by the ENGINEER and the OWNER. The storage area must provide adequate protection from the weather and vandalism.
 - 4. The 5 percent retainer which applies to materials installed will also apply to materials stored.
 - 5. Payment for materials stored on the site for this project will be made as follows: The above items must be furnished with the current pay estimate, and the CONTRACTOR will be paid as per invoice. In order for the CONTRACTOR to receive payment for the next pay estimate, he must furnish a notarized statement of payment in full from the suppliers for materials invoiced in preceding pay estimate. The procedure shall hold true for all successive materials payments until all materials have been acquired by the CONTRACTOR.

1.4 ENGINEER'S ACTIONS TO PENDING PAY REQUESTS

- A. Within ten (10) days of submission of any request for payment by the CONTRACTOR, the ENGINEER shall:
1. Approve the request for payment as submitted.
 2. Approve such other amount as he shall decide is due the CONTRACTOR, informing the CONTRACTOR in writing of his reasons for approving the amended amount.
 3. Withhold the request for payment, informing the CONTRACTOR in writing for his reasons for withholding it.

1.5 OWNER'S ACTIONS TO APPROVED PAYMENT REQUEST

- A. Within thirty (30) days from the date of approval of a request for payment by the ENGINEER, the OWNER shall:
1. Pay the request of payment as approved.
 2. Pay such other amount in accordance as herein provided as he shall decide is due the CONTRACTOR, informing the CONTRACTOR and the ENGINEER in writing of his reasons for paying the amended amount.
 3. Withhold payment in accordance as herein provided informing the CONTRACTOR and the ENGINEER of his reasons for withholding payment in writing.

1.6 OWNER'S RIGHT TO WITHHOLD PAYMENT ON APPROVED REQUESTS

- A. The OWNER may withhold payment in whole or in part on an approved request for payment to the extent necessary to protect himself from loss on account of any of the following causes discovered subsequent to approval of a request for payment by the ENGINEER:
1. Defective work.
 2. Evidence indicating the probable filing of claims by other parties against the CONTRACTOR.
 3. Failure of the CONTRACTOR to make payments to SUBCONTRACTORS, material suppliers or labor.
 4. Damage to another CONTRACTOR.

1.7 PAYMENT FOR UNCORRECTED WORK

- A. If, in the opinion of the ENGINEER, it is undesirable to replace any defective or damaged material or to reconstruct or correct any portion of the work injured or not performed in accordance with the contract documents, the compensation to be paid the CONTRACTOR hereunder shall be reduced by such amount as in the judgment of the ENGINEER shall be equitable.

1.8 PAYMENT FOR REJECTED WORK AND MATERIALS

- A. The removal of work and materials rejected by the OWNER and the re-execution of acceptable work by the CONTRACTOR shall be at the expense of the CONTRACTOR, and he shall pay the cost of replacing the work of other CONTRACTORS destroyed or damaged by the removal of the rejected work or materials and the subsequent replacement of acceptable work.
- B. Removal of rejected work or materials and storage of materials by the OWNER shall be paid by THE CONTRACTOR within thirty (30) days after written notice to pay is given by the OWNER. If the CONTRACTOR does not pay expenses of such removal and after ten (10) days written notice being given by the OWNER of his intent to sell the materials, the OWNER may sell the materials at auction or at private sale and shall pay to the CONTRACTOR the net proceeds therefrom after deducting all the costs and expenses that should have been borne by the CONTRACTOR.

1.9 ACCEPTANCE AND FINAL PAYMENT

- A. When the CONTRACTOR shall have completed the work in accordance with the terms of the contract documents, the ENGINEER shall certify his acceptance to the OWNER and his approval of the CONTRACTOR'S final request for payment, which shall be the contract amount plus all approved additions less all approved deductions and less previous payments made. The CONTRACTOR shall furnish evidence that he has fully paid all debts for labor, materials, and equipment incurred in connection with the work, following which the OWNER shall accept the work and release the CONTRACTOR except as to the conditions of the Performance Bond, any legal rights of the OWNER, required guarantee and correction of faulty work after final payment, and shall authorize payment of the CONTRACTOR'S final request for payment. The CONTRACTOR must allow sufficient time between the time of completion of the work and approval of the final request for payment for the ENGINEER to assemble and check the necessary data.

1.10 CORRECTION OF FAULTY WORK AFTER FINAL PAYMENT

- A. The approval of the final request for payment by the ENGINEER and the making of the final payment by the OWNER to the CONTRACTOR shall not relieve the CONTRACTOR of responsibility for faulty materials or workmanship. The OWNER shall promptly give notice of faulty materials or workmanship and the CONTRACTOR shall promptly replace any such defects discovered within one year from the date of written acceptance of the work. The ENGINEER shall decide all questions arising under this paragraph.

END OF SECTION 01 11 50

SECTION 01 33 00 - SUBMITTALS AND SUBSTITUTIONS

PART 1 - GENERAL

1.1 DESCRIPTION

A. Work Included

1. Wherever possible throughout the contract documents, the minimum acceptable quality of workmanship and materials has been defined by manufacturer's name and catalog number, reference to recognized industry and government standards, or description of required attributes and performance.
2. To ensure that the specified products are furnished and installed in accordance with design intent, procedures have been established for advance submittal of design data and for their review by the ENGINEER.
3. Make all submittals required by the contract documents, and revise and resubmit as necessary to establish compliance with the specified requirements.

B. Related Work Described Elsewhere: Individual requirements for submittals are described in pertinent other Sections of these specifications.

1.2 QUALITY ASSURANCE

A. Coordination of Submittals: Prior to each submittal, carefully review and coordinate all aspects of each item being submitted and verify that each item and the submittal for it conforms in all respects with the requirements of the contract documents. By affixing the CONTRACTOR'S signature to each submittal, certify that this coordination has been performed.

B. Certificates of Compliance

1. When requested, certify that materials used in the work comply with specified provisions thereof. Certification shall not be construed as relieving the CONTRACTOR from furnishing satisfactory materials if, after tests are performed on selected samples, the material is found to not meet specified requirements.
2. Show on each certification the name and location of the work, name and address of CONTRACTOR, quantity and date or dates of shipment or delivery to which the certificate applies, and name of the manufacturing or fabricating company. Certification shall be in the form of letter or company-standard forms containing all required data. Certificates shall be signed by an officer of the manufacturing or fabricating company.
3. In addition to the above information, all laboratory test reports submitted with certificates of compliance shall show the date or dates of testing, the specified requirements for which testing was performed, and results of the test or tests.

1.3 SUBMITTALS

- A. Submittal Schedule: Within 10 days after award of Contract, and before any items are submitted for approval, submit to the ENGINEER two copies of the schedule described in Article 2.1 of this Section.
- B. Certificates of Compliance: Upon completion of the work, and as a condition of its acceptance, submit to the ENGINEER all Certificates of Compliance.
- C. Procedures: Make submittals in strict accordance with the provisions of this Section.
- D. Schedule of Values: Within 10 days of the Pre-Construction Conference, submit a schedule of values for lump sum bid items indicating the cost breakdown of lump sum bid items for use in progress payment preparation. Submit to the ENGINEER two copies of the schedule described in Article 2.2 of this Section.

PART 2 - PRODUCTS

2.1 SUBMITTAL SCHEDULE

- A. General: Compile a complete and comprehensive schedule of all submittals anticipated to be made during progress of the work. Include a list of each type of item for which CONTRACTOR'S drawings, Shop Drawings, Certificates of Compliance, material samples, guarantees, Operations and Maintenance manuals or other types of submittals are required. Upon approval by the ENGINEER this schedule will become part of the Contract and the CONTRACTOR will be required to adhere to the schedule except when specifically otherwise permitted.
- B. Coordination: Coordinate the schedule with all necessary subcontractors and materials suppliers to ensure their understanding of the importance of adhering to the approved schedule and their ability to so adhere. Coordinate as required to ensure the grouping of submittals as described in Article 1.3.
- C. Revisions: Revise and update the schedule on a monthly basis as necessary to reflect conditions and sequences. Promptly submit revised schedules to the ENGINEER for review and comment.

2.2 SCHEDULE OF VALUES

- A. The ENGINEER will review the tentative schedule of values to determine whether, in his judgment, the schedule of values is of sufficient detail and if the prices included are "unbalanced" or "front-end loaded", in an effort to inflate the prices of those items of work to be completed in the early stages of the work.
- B. Breakdown cost to list major products or operations for each line item which has an installed value of more than \$5,000.00. The sum of the items listed on the schedule of values shall equal the contract lump sum price.

- C. The ENGINEER will provide the CONTRACTOR with his comments and/or may request additional information from the CONTRACTOR to justify certain item quantities and prices, therefore. On the basis of the ENGINEER'S comments, the CONTRACTOR shall revise and resubmit the tentative schedule for further review and/or approval.
- D. Once the ENGINEER accepts the tentative schedule, it shall become the schedule of values to be used in determining partial payment estimates. Two (2) copies of this schedule shall be submitted to the ENGINEER for distribution and his use. No modifications will be made to the schedule of values, except as required by approved change orders.
- E. No partial payment request (including the first) shall be approved until the schedule of values has been approved by the OWNER and ENGINEER.

2.3 SHOP DRAWINGS AND COORDINATION DRAWINGS

A. Shop Drawings

- 1. Scale and Measurements: Make all Shop Drawings accurately to a scale sufficiently large to show all pertinent aspects of the item and its method of connection to the work.
- 2. Type of Prints Required: Submit all Shop Drawings in the form of electronic (.pdf) or hardcopy, minimum of 8 ½" by 11".

2.4 MANUFACTURERS' LITERATURE

- A. General: Where contents of submitted literature from manufacturers includes data not pertinent to the submittal, clearly indicate which portion of the contents is being submitted for review.
- B. Number of Copies Required: Submit the number of copies which are required to be returned plus two copies which will be retained by the ENGINEER. Under no circumstances shall less than five copies be submitted.

2.5 SAMPLES

- A. Accuracy of Samples: Samples shall be of the precise article proposed to be furnished. Samples shall have stickers or tags which bear identification of the project, the subcontractor, the vendor or manufacturer, the product color name or number, model, style or series, and the size and thickness of components.
- B. Number of Samples Required: Unless otherwise specified, submit all Samples in the quantity which is required to be returned plus one which will be retained by the ENGINEER.
- C. Reuse of Samples: In situations specifically so approved by the ENGINEER, the ENGINEER'S retained sample may be used in the construction as one of the installed items.

- D. Match Existing Materials: Brick or other materials that are to match existing materials shall require a "test panel" to be erected adjacent to the existing material to allow the OWNER to approve the match in size, color, and texture.

2.6 COLORS AND PATTERNS

- A. Unless the precise color and pattern is specifically described in the contract documents, and whenever a choice of color or pattern is available in a specified product, submit accurate color and pattern charts to the ENGINEER for review and selection.

2.7 SUBSTITUTIONS

A. Approval Required

1. The Contract is based on the standards of quality established in the contract documents.
2. All products proposed for use, including those specified by required attributes and performance, shall require approval by the ENGINEER before being incorporated into the work.
3. Do not substitute materials, equipment, or methods unless such substitution has been specifically approved for this work by the ENGINEER.

B. "Or Equal":

1. Where the phrase "or equal" or "approved or equal" occurs in the contract documents, do not assume that materials, equipment, or methods will be approved as equal unless the item has been specifically approved for this work by the ENGINEER.
2. The decision of the ENGINEER shall be final.

PART 3 - EXECUTION

3.1 IDENTIFICATION OF SUBMITTALS

- A. General: Bind submittals with cover label that identifies project, division of work, subcontractor, and vendor/manufacturer. Consecutively number all submittals. Accompany each submittal with a letter of transmittal containing all pertinent information required for identification and checking of submittals.
- B. Internal Identification: On at least the first page of each copy of each submittal, and elsewhere as required for positive identification, clearly indicate the submittal number in which the item was included.
- C. Resubmittals: When material is resubmitted for any reason, transmit under a new letter of transmittal and with a new submittal number.

3.2 COORDINATION OF SUBMITTALS

- A. General: Prior to submittal for approval, use all means necessary to fully coordinate all material including, but not necessarily limited to:
 - 1. Determine and verify all interface conditions, catalog numbers, and similar data.
 - 2. Coordinate with other trades as required.
 - 3. Clearly indicate all deviations from requirements of the contract documents.
- B. Grouping of Submittals: Unless otherwise specified, make all submittals in groups containing all associated items to ensure that information is available for checking each item when it is received. Partial submittals may be rejected as not complying with the provisions of the contract documents and the CONTRACTOR shall be strictly liable for all delays so occasioned.

3.3 TIMING OF SUBMITTALS

- A. General: Make all submittals far enough in advance of scheduled dates for installation to provide all time required for reviews, for securing necessary approvals, for possible revisions and resubmittals, and for placing orders and securing delivery.
- B. ENGINEER'S Review Time: In scheduling, allow at least 21 calendar days for review by the ENGINEER following his receipt of the submittal. Should unanticipated circumstances prevent the normal review time, a minimum of 10 working days review time must be allowed for reviews.
- C. Delays: Delays caused by tardiness in receipt of submittals will not be an acceptable basis for extension of the contract completion date.

3.4 ENGINEER'S REVIEW

- A. CONTRACTOR'S approval: Prior to submission to the ENGINEER, all submittals shall have been reviewed and approved by the CONTRACTOR.
- B. General: Review by the ENGINEER shall not be construed as a complete check, but only that the general method of construction and detailing is satisfactory. Review shall not relieve the CONTRACTOR from responsibility for errors which may exist.
- C. Authority to Proceed: The notations "Reviewed, No Exceptions Noted" or "Reviewed, Exceptions Noted" authorize the CONTRACTOR to proceed with fabrication, purchase, or both, of the items so noted, subject to the revisions, if any, required by the ENGINEER'S review comments.
- D. Revisions: Make all revisions required by the ENGINEER. If the CONTRACTOR considers any required revision to be a change, he shall so notify the ENGINEER as provided for under "Changes" in the General Considerations. Show each drawing revision by number, date, and subject in a revision block on the drawing. Make only those revisions directed or approved by the ENGINEER.

- E. Revisions After Approval: When a submittal has been reviewed by the ENGINEER, resubmittal for substitution of materials or equipment will not be considered unless accompanied by an acceptable explanation as to why the substitution is necessary.

END OF SECTION 01 33 00

SECTION 01 45 00 - QUALITY CONTROL

PART 1 - GENERAL

1.1 DESCRIPTION

A. Section Includes

1. Quality assurance - control of installation.
2. Tolerances
3. References and standards.
4. Mock-up.
5. Testing laboratory services.
6. Inspection services.
7. Manufacturers' field services.
8. Subcontracting.

B. Related Sections

1. Section 01 33 00 – Submittals and Substitutions: Submission of manufacturers' instructions and certificates.

1.2 QUALITY ASSURANCE

- A. The CONTRACTOR will be held strictly to the intent of the contract documents in regard to the quality of materials, workmanship, and execution of the work. Inspections may be made at the factory or fabrication plant of the source of material supply.
- B. The ENGINEER will not be responsible for the construction means, controls, techniques, sequences, procedure, or construction safety.
- C. The CONTRACTOR shall monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- D. The CONTRACTOR will supervise and direct the work. He will be solely responsible for the means, methods, techniques, sequences, and procedures of construction. The CONTRACTOR will employ and maintain on the work a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR'S representative at the site. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications given to the supervisor shall be as binding as if given to the CONTRACTOR. The supervisor shall be present on the site at all times as required to perform adequate supervisor and coordination of the work.
- E. The CONTRACTOR shall comply with manufacturers' instructions, including each step in sequence.

- F. Should the manufacturers' instructions conflict with Contract Documents, the CONTRACTOR shall request clarification from ENGINEER before proceeding.
- G. The CONTRACTOR shall comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- H. The CONTRACTOR shall perform work by persons qualified to produce required and specified quality.
- I. The CONTRACTOR shall verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- J. The CONTRACTOR shall secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1.3 IMPROPER COVERAGE OF BURIED CONSTRUCTION

- A. If any work is covered contrary to the written instructions of the ENGINEER, it must, if requested by the ENGINEER, be uncovered for the ENGINEER'S observation, and replaced at the CONTRACTOR'S expense.
- B. If the ENGINEER considers it necessary or advisable that covered WORK be inspected or tested by others, the CONTRACTOR, at the ENGINEER'S request, will uncover, expose or otherwise make available for observation, inspection or testing as the ENGINEER may require, that portion of the work in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that such work is defective, the CONTRACTOR will bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction; if, however, such work is not found to be defective, the CONTRACTOR will be allowed an increase in the contract price or an extension of the contract time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate change order shall be issued.
- C. Defect Assessment
 - 1. Replace the work, or portions of the work, not conforming to specified requirements.
 - 2. If, in the opinion of the ENGINEER it is not practical to remove and replace the work, the ENGINEER will direct an appropriate remedy or adjust payment.
- D. Tolerances
 - 1. The CONTRACTOR shall monitor fabrication and installation tolerance control of all products to produce acceptable work. Do not permit products and installation outside of allowable tolerances to accumulate.
 - 2. The CONTRACTOR shall comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from ENGINEER before proceeding.

3. The CONTRACTOR shall adjust products to appropriate dimension and position before securing products in place.

E. References and Standards

1. For products or workmanship specified by association, trade, or other consensus standards, the CONTRACTOR shall comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
2. The CONTRACTOR shall conform to reference standard by date of issue current date for receiving bids, except where a specific date is established by code.
3. The CONTRACTOR shall obtain copies of standards where required by product specification sections.
4. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of the ENGINEER shall be altered from the Contract Documents by mention or inference otherwise in any reference document.

F. Mock-Up

1. Tests will be performed under provisions identified in this section and identified in the respective product specification sections.
2. The CONTRACTOR shall assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.
3. Accepted mock-ups shall be a comparison standard for the remaining work.
4. Where mock-up has been accepted by ENGINEER and is specified in product specification sections to be removed; remove mock-up and clear area when directed to do so.

G. Testing Services

1. The CONTRACTOR will appoint and employ services of an independent firm to perform testing. CONTRACTOR shall pay for services and include the price in the respective bid items.
2. The independent firm will perform tests and other services specified in individual specification sections and as required by the ENGINEER.
3. Testing and source quality control may occur on or off the project site. Perform off-site testing as required by the ENGINEER or the OWNER.
4. Reports will be submitted by the independent firm to the ENGINEER and CONTRACTOR, in duplicate indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.
5. The CONTRACTOR shall cooperate with the independent firm; furnish samples of materials, design mix, equipment, tools, storage, safe access, and assistance by incidental labor as requested.

- a. Notify ENGINEER and independent firm 24 hours prior to expected time for operations requiring services.
 - b. Make arrangements with independent firm and pay for additional samples and tests required for CONTRACTOR'S use.
 6. Testing does not relieve CONTRACTOR to perform work to contract requirements.
 7. Re-testing required because of non-conformance to specified requirements shall be performed by the same independent firm on instructions by the ENGINEER. Payment for re-testing will be charged to the CONTRACTOR or by deducting testing charges from the Contract Sum/Price.
- J. Removal of Defective and Unauthorized Work
1. All work which has been rejected or condemned shall be repaired, or, if it cannot be satisfactorily repaired it shall be removed and replaced at the CONTRACTOR'S expense. Defective materials shall be removed immediately from the site of the work.
 2. Work done without lines and grades having been given, work done beyond the lines or not in conformity with the grades shown on the plans or as given, save as herein provided, work done without proper inspection will be done at the contractor's risk and will be considered unauthorized and at the option of the ENGINEER may not be accepted and may be ordered removed at the CONTRACTOR'S expense.
 3. If any work is covered contrary to the written instructions of the ENGINEER it must, if requested by the ENGINEER, be uncovered for the ENGINEER'S observation, and replaced at the CONTRACTOR'S expense.
 4. If the ENGINEER considers it necessary or advisable that covered work be inspected or tested by others, the CONTRACTOR, at the ENGINEER'S request, will uncover, expose or otherwise make available for observation, inspection or testing as the ENGINEER may require, that portion of the work in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that such work is defective, the CONTRACTOR will bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction; if, however, such work is not found to be defective, the CONTRACTOR will be allowed an increase in the contract price or an extension of the contract time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate change order shall be issued.
- K. Inspection Services
1. Owner will appoint, employ, and pay for specified services of an independent firm to perform inspection.
- L. Manufacturers' Field Services
1. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of

equipment, test, adjust and balance of equipment as applicable, and to initiate instructions when necessary.

2. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
3. Refer to Section 01 33 00 – Submittals and Substitutions, Manufacturers' Field Reports article.
4. Coordination of Plans, Specifications, and Special General Conditions: The plans, these specifications, Special General Conditions, and all supplementary documents are intended to describe a complete work and are essential parts of the contract. A requirement occurring in any of them is binding. In case of discrepancies, figured dimensions shall govern over scaled dimensions; plans shall govern over specifications. Special General Conditions shall govern over both General and Standard Specifications, and the plans and quantities shown on the plans shall govern over those shown on the proposal. The CONTRACTOR shall take no advance of any apparent error or omission in the plans and specifications, and the ENGINEER shall be permitted to make such corrections or interpretations as may be deemed necessary for the fulfillment of the intent of the plans and specification.

In the event the CONTRACTOR discovers any apparent error or discrepancy, he shall immediately call such error or discrepancy to the attention of the ENGINEER, and request in writing an interpretation thereof by the ENGINEER.

M. Subcontracting

1. The CONTRACTOR may utilize the services of specialty SUBCONTRACTORS on those parts of the work which, under normal contracting practices, are performed by specialty SUBCONTRACTORS.
2. The CONTRACTOR shall not award work to SUBCONTRACTOR(S) in excess of fifty (50) percent of contract price, or in excess of fifty (50) percent of the labor and equipment required to install the project, without prior written approval of the OWNER.
3. The CONTRACTOR shall be fully responsible to the OWNER for the acts and omissions of its SUBCONTRACTORS, and of persons either directly or indirectly employed by them, as the CONTRACTOR is for the acts and omissions of persons directly employed by the CONTRACTOR.
4. The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind SUBCONTRACTORS to the CONTRACTOR by the terms of the contract documents insofar as applicable to the work of SUBCONTRACTORS and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provision of the CONTRACT DOCUMENTS.
5. Nothing contained in this CONTRACT shall create any contractual relationship between the SUBCONTRACTOR and the OWNER.

PART 2 - PRODUCTS

NOT USED.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Beginning new work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Verify that utility services are available, of the correct characteristics, and in the correct locations.

3.2 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

END OF SECTION 01 45 00

SECTION 01 60 00 – PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 DESCRIPTION

A. Section Includes

1. Products.
2. Transportation and handling.
3. Storage and protection.
4. Product options.
5. Substitutions.

B. Related Sections

1. Section 01 45 00 - Quality Control: Product quality monitoring.

C. Products

1. The CONTRACTOR shall not use materials and equipment removed from existing premises, except as specifically permitted by the contract documents.
2. The CONTRACTOR shall provide interchangeable components of the same manufacture for components being replaced.

D. Transportation and Handling

1. The CONTRACTOR shall:
 - a. Transport and handle products in accordance with manufacturer's instructions.
 - b. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
 - c. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

E. Storage and Protection

1. The CONTRACTOR shall:
 - a. Store and protect products in accordance with manufacturers' instructions.
 - b. Store with seals and labels intact and legible.
 - c. Store sensitive products in weathertight, climate controlled enclosures in an environment favorable to product.
 - d. Provide for exterior storage of fabricated products, which shall be placed on sloped supports above ground.

- e. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.
- f. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- g. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- h. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- i. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

F. Product Options

- 1. The CONTRACTOR shall provide products specified by reference standards or by description only: any product meeting those standards or description.
- 2. The CONTRACTOR shall provide products specified by naming one or more manufacturers with a provision for substitutions: Submit a request for substitution for any manufacturer not named in accordance with the following article.

G. Substitutions

- 1. ARCHITECT / ENGINEER will consider requests for substitutions only within 15 days after date established in Notice to Proceed.
- 2. Substitutions may be considered when a product becomes unavailable through no fault of the CONTRACTOR.
- 3. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.

A request constitutes a representation that the BIDDER or CONTRACTOR:

- a. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 - b. Will provide the same warranty for the substitution as for the specified product.
 - c. Will coordinate installation and make changes to other work which may be required for the work to be completed with no additional cost to OWNER.
 - d. Waives claims for additional costs or time extension which may subsequently become apparent.
 - e. Will reimburse OWNER and ARCHITECT / ENGINEER for review or redesign services associated with re-approval by authorities.
- 4. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the contract documents.

5. Substitution Submittal Procedure:
 - a. Submit three copies of request for substitution for consideration. Limit each request to one proposed substitution.
 - b. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
 - c. The ARCHITECT / ENGINEER will notify CONTRACTOR in writing of decision to accept or reject request.

PART 2 - PRODUCTS

NOT USED.

PART 3 - EXECUTION

NOT USED.

END OF SECTION 01 60 00

SECTION 01 70 00 - CONTRACT CLOSEOUT

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Closeout procedures
- B. Final cleaning
- C. Adjusting
- D. Project record documents
- E. Operation and maintenance data
- F. Spare parts and maintenance products
- G. Maintenance service

1.2 CLOSEOUT PROCEDURES

- A. The CONTRACTOR shall:
 - 1. Submit written certification that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for ENGINEER'S review.
 - 2. Provide submittals to ENGINEER that are required by governing or other authorities.
 - 3. Submit final Application for Payment identifying total adjusted contract sum, previous payments, and sum remaining due.

1.3 FINAL CLEANING

- A. The CONTRACTOR shall:
 - 1. Execute final cleaning prior to final project assessment.
 - a. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
 - b. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
 - c. Replace filters of operating equipment.
 - d. Clean debris from roofs, gutters, downspouts, and drainage systems.
 - e. Clean site, sweep paved areas, rake clean landscaped surfaces.
 - f. Remove waste and surplus materials, rubbish, and construction facilities from the site.

1.4 ADJUSTING

- A. The CONTRACTOR shall adjust operating products and equipment to ensure smooth and unhindered operation.

1.5 PROJECT RECORD DOCUMENTS

- A. The CONTRACTOR shall maintain on site one set of the following record documents and record actual revisions to the work:
 - 1. Drawings
 - 2. Specifications
 - 3. Addenda
 - 4. Change Orders and other modifications to the Contract
 - 5. Reviewed Shop Drawings, Product Data, and Samples
 - 6. Manufacturer's instruction for assembly, installation, and adjusting
- B. The CONTRACTOR shall ensure entries are complete and accurate, enabling future reference by OWNER.
- C. The CONTRACTOR shall store record documents separate from documents used for construction.
- D. The CONTRACTOR shall record information concurrent with construction progress.
- E. Specifications: The CONTRACTOR shall legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 1. Product substitutions or alternates utilized.
 - 2. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: The CONTRACTOR shall legibly mark each item to record actual construction including:
 - 1. Measured depths of foundations in relation to finish floor datum.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the work.
 - 4. Field changes of dimension and detail.
 - 5. Details not on original contract drawings.

1.6 OPERATION AND MAINTENANCE DATA

A. The CONTRACTOR shall:

1. Submit data bound in 8 ½ x 11-inch text pages, three D side ring binders with durable plastic or cloth covers.
2. Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project, and subject matter of binder when multiple binders are required.
3. Internally subdivide the binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
4. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, typed on 20-pound white paper, in three parts as follows:
 - a. Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, CONTRACTOR, SUBCONTRACTORS, and major equipment suppliers.
 - b. Part 2: Operation and maintenance instructions, arranged by system. For each category, identify names, addresses, and telephone numbers of SUBCONTRACTORS and suppliers. Identify the following:
 - 1) Significant design criteria
 - 2) List of equipment
 - 3) Parts list for each component
 - 4) Operating instructions
 - 5) Maintenance instructions for equipment and systems
 - 6) Maintenance instructions for special finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents
 - c. Part 3: Project documents and certificates, including the following:
 - 1) Shop drawings and product data
 - 2) Air and water balance reports
 - 3) Certificates
 - 4) Photocopies of warranties and bonds
5. Submit one (1) draft copy of completed volumes 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with ENGINEER'S comments. Revise content of all document sets as required prior to final submission.
6. Submit five sets of revised final volumes, prior to final payment.

1.7 SPARE PARTS AND MAINTENANCE PRODUCTS

A. The CONTRACTOR shall:

1. Provide spare parts, maintenance, and extra products in quantities specified in individual specification sections.
2. Deliver to project site and place in location as directed and obtain a receipt prior to final payment.

1.8 MAINTENANCE SERVICE

A. The CONTRACTOR shall:

1. Furnish service and maintenance of components indicated in specification sections during the warranty period.
2. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
3. Maintenance service shall not be assigned or transferred to any agent or SUBCONTRACTOR without prior written consent of the OWNER.

PART 2 - PRODUCTS

NOT USED.

PART 3 - EXECUTION

NOT USED.

END OF SECTION 01 70 00

SECTION 33 11 00 - WATERLINE AND SANITARY SEWER SPECIFICATIONS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. This division shall consist of the material and construction specification of water distribution lines, sanitary sewer lines, appurtenances, and related work, at the locations and grades as set out on the plans or established by the ENGINEER.

1.2 SUBMITTALS

- A. Submittals shall be in accordance with Section 01 33 00 "Submittal Procedures" and shall include:
 - 1. Shop Drawings:
 - a. Drawings shall show complete physical description and performance capabilities of the equipment, including, but not necessarily limited to dimensions, flange ratings, weights, materials of construction, assemblies, sectional views.
 - b. Hydraulic calculations and CV characteristics certifying the valve can meet all the design conditions attached to this specification.
 - 2. Operation and Maintenance Manuals: Manuals shall be prepared by the equipment manufacturer and shall also incorporate appropriate final certified shop drawings. Manuals may be the manufacturer's standard instructions but shall be supplemented as necessary to cover any special feature not included in standard material. O&M manuals shall include storage instructions, valve installation and adjustment procedures and troubleshooting procedures. Manuals shall be provided in hard copy and digital format fully indexed.

PART 2 - APPLICABLE SPECIFICATIONS

2.1 DESCRIPTION

- A. The specifications, standards, and publications, including the latest amendments thereto, listed in these specifications by basic designation only, form a part of this specification to the extent indicated by the references thereto.
- B. Specification 03 30 00 – Cast-In Place Concrete
- C. Specification 31 23 33 – Trenching, Backfilling, & Compaction
- D. Specification 32 12 16.39 – Plant Mix Bituminous Bases and Surfaces
- E. Specification 33 05 07.13 – Directional Bore
- F. Specification 33 31 30 – Pipe Busting

PART 3 - CAST IRON AND DUCTILE IRON PIPE, FITTINGS AND VALVES**3.1 DESCRIPTION**

- A. The work under this item shall include furnishing, hauling, placing, and jointing of Cast Iron and Ductile Iron Pipe in the trench in specific conformity with the lines and levels given. For all pipe, the AWWA Standard for Installation of Cast Iron Water Mains, AWWA Designation C-600 shall govern the installation as applicable. The method of bedding shall be in accordance with Specification 31 23 33 and as shown on the plan Standard Details. If the paint is damaged, the valve shall be cleaned by wire-brushing and given two coats of black asphalt paint.

3.2 PIPE AND FITTINGS

- A. Where Ductile Iron Pipe (DIP) three (3) inches in diameter and larger is specified or required, it shall conform to, and be tested in accordance with, the current American Standard Specification for Ductile Iron Pipe, Centrifugally Cast in metal molds or sand-lined molds, for water or other liquids, AWWA Designation C 151 (ANSI A21.51). Ductile iron pipe less than three (3) inches in diameter shall conform to the manufacturer's standards, either centrifugally or statically cast with a minimum thickness of 0.25 inches. The ductile iron (nodular cast iron) shall conform to ASTM Specification A536 with physical properties of Grade 60-40-18. Length of joints shall be either eighteen or twenty feet. The minimum standard thickness of each size pipe shall be as follows:

<u>Pipe Size</u>	<u>Thickness Class</u>
3" thru 4"	51
6" thru 24"	50
30" thru 54"	51

For larger diameter or deep cover, special design will be provided.

- B. Where Cast Iron Pipe (CIP) is specified or required, it shall conform to, and be tested in accordance with, the American Standard for Gray Iron Pipe Centrifugally Cast in Metal Molds for water or other liquids, AWWA Designation C106. Lengths shall be either eighteen feet or twenty feet. Strength of iron shall be 18/40 and the minimum standard thickness of each size pipe shall be as follows:

<u>Pipe Size</u>	<u>Thickness Class</u>
3" thru 10"	22
12"	23
14" thru 24"	24
30" thru 48"	25

- C. Where Cast Iron Pipe (CIP) and Ductile Iron Fittings are specified or required, they shall conform to, and be tested in accordance with the American Standard for Gray Iron and Ductile Iron Fittings, 3-inch through 48-inch for water and other liquids, AWWA Designation C110. Pressure rating shall be 250 psi. All sleeves shall be the longest of the lengths allowed.

- D. The work under this item shall include all of the requirements specified under the item

of pipe, in that "pipe" is understood to also mean "bends, tees, crosses, sleeves, outlet assemblies and other specified fittings". Unless otherwise specified, outlet assemblies shall consist of a flanged outlet constructed into the wall of steel or concrete pipe. If cast or ductile iron pipe is used, the outlet shall consist of a tee with the outlet flanged. If a gate valve or butterfly valve is shown on the drawings to be attached to the outlet, the line side end shall be flanged, and the opposite end shall be bell or mechanical joint according to the item for valves. All bends, tees, crosses, outlet assemblies, and plugs shall be blocked with concrete as shown on the attached Standard Details, except where the fittings have flanged, welded, or harnessed joints, the ENGINEER may under certain conditions delete the blocking. Concrete blocking shall be placed so that joints are accessible for repair.

3.3 JOINTS

- A. Cast Iron and Ductile Iron Pipe and Fittings shall be jointed with any of the end types as specified below unless a particular end type is specified. Flange ends shall be used only where specifically noted on the drawings except that the valve connection end of all tapping sleeves shall be flanged.
- B. Push-on joints shall conform to, and be tested in accordance with, the American Standard for Rubber Gasket Joints for Ductile Iron and Gray Iron Pressure Pipe and Fittings, AWWA Designation C111.
- C. Mechanical joints shall conform to, and be tested in accordance with, the American Standard for Rubber Gasket Joints for Ductile Iron and Gray Iron Pressure Pipe and Fittings, AWWA Designation C111.
- D. Bell and spigot joints shall consist of square, braided, sterilized hemp and 99.73 percent pure lead caulking.
- E. Flange joints shall conform to the American Standard for Cast Iron Pipe Flanges and Flanged Fittings, A.S.A. Designation B.16.1.

3.4 LINING AND COATING

- A. All Cast Iron and Ductile Iron Pipe and Fittings shall be bituminous coated outside and cement-mortar lined inside with seal coat in accordance with American Standards for Cement Mortar Lining for Ductile Iron and Gray Iron Pipe and Fittings for Water, AWWA Designation C104.

3.5 VALVES

- A. All valves shall be rated for 250 psi working pressure.
- B. Valve boxes shall consist of a cast iron valve box, encased with a concrete collar over a section of 6-inch PVC pipe, SDR-35 typically, which is of adequate length enabling the valve box to be set at ground level as shown on the standard drawings.

3.6 GATE VALVES

- A. Where gate valves are specified or required, they shall conform to, and be tested in accordance with, the AWWA Standard for Gate Valves, 3-inch through 48-inch NPS for Water and Sewage Systems, AWWA Designation C500. Valves shall have double disc parallel seats, non-rising stem, vertical mounting "O" ring stem seal, counterclockwise opening, and ends to fit the pipe or fitting to which attached.

3.7 BUTTERFLY VALVES

- A. Where butterfly valves are specified or required, they shall conform to, and be tested in accordance with the AWWA Standard for Rubber-Seated Butterfly Valves, AWWA Designation C504. Valves shall have operators which are side mounted with plumb, non-rising stems, counterclockwise opening, and have mechanical joint connections of the size shown on the plans. The operator shall be mounted so that the square operating nut on the valve can be operated from the top.

3.8 AIR RELIEF VALVES

- A. Where air relief valves are specified or required, the valve shall be heavy-duty combination air release and vacuum type for 300 psi water working pressure, tested to 300 psi unless otherwise specified, two-inch size. Body, cover, and baffle shall be cast iron. All internal parts to be either highest quality stainless steel or bronze, and the inside of valve coated with rust inhibitor. Air relief valves shall be set so that the square operating nut on the valve can be operated from the top. Construction standards for air relief valve vaults shall be the same as for manholes.

3.9 CHECK VALVES

- A. Where check valves are specified or required, they shall conform to, and be tested in accordance with the AWWA Standard for Swing Check Valves for Ordinary Water Works Service, AWWA Designation C508. They shall be horizontally mounted, single disc, swing type with a full diameter passage providing minimum pressure loss. Valves shall be of the non-slamming type designed for the future installation of outside lever and weight. Disc faces and seat rings shall be bronze. Ends shall fit the pipe or fitting to which attached (push-on, mechanical, bell and spigot, or flanged). Construction standards for check valve vaults shall be the same as for manholes.

3.10 TAPPING VALVES

- A. Tapping valves shall have the same features as above double disc gate valves and shall have piloted flange or centering lip on the valve flange to fit the tapping sleeve flange.

3.11 FIRE HYDRANTS

- B. Fire hydrants shall conform to the AWWA Standard for Dry-Barrel Fire Hydrants, AWWA Designation C502 as to design, composition, quality of materials, workmanship and shall be manufactured by Mueller, American, M & H, or approved equal by ENGINEER.
- C. All fire hydrants shall be 6" mechanical joint connection, 5-1/4" valve openings

- furnished with two 2-1/2" nozzles, and one 4-1/2" pumper connection, with National Standard threads. Two 2-1/2" nozzles shall be spaced 180 degrees apart, with the 4-1/2" pumper nozzle centered between them.
- D. Hydrants shall be of the compression type and shall have incorporated in their design a special section or bolts which intentionally have a lower breaking point than the balance of the unit (traffic flange).
 - E. Hydrants shall have a 1-1/2" pentagon shaped operating nut, open left and shall be sized for 3-1/2 feet depth of bury.
 - F. All nozzles shall be equipped with chained caps provided with gaskets made of suitable plastic or neoprene.
 - G. All fire hydrants shall be painted with two coats of Pittsburg, first line, or approved equal paint. Colors are to be designated by the OWNER'S Fire Department to conform with color-coding system.
 - H. Where fire hydrant extensions are specified or required, they shall be of the proper design to accommodate the make of fire hydrant installed.

3.12 CONSTRUCTION

- A. Proper implements, tools and facilities satisfactory to the ENGINEER shall be provided and used by the CONTRACTOR for the safe and convenient performance of the work. All pipe, valves and hydrants shall be carefully lowered into the trench piece by piece by means of a derrick, ropes, or other suitable tools or equipment, in such a manner as to prevent damage to water main materials and protective coatings and linings. Under no circumstances shall water main materials be dropped or dumped into the trench. If damage occurs to any pipe or water main accessories in handling, the damage shall be immediately brought to the ENGINEER'S attention. The ENGINEER shall prescribe corrective repairs or rejection of the damaged items. All pipe and fittings shall be carefully examined for cracks and other defects while suspended above the trench immediately before installation in final position. Defective pipe or fittings shall be laid aside for inspection by the ENGINEER, who will prescribe corrective repairs or rejection. All lumps, blisters, and excess coating shall be removed from the bell and spigot end of each pipe, and the outside of the spigot and the inside of the bell shall be wire brushed and wiped clean and dry and free from oil and grease before the pipe is laid.

Every precaution shall be taken to prevent foreign material from entering the pipe while it is being placed in the line. During laying operations, no debris, tools, clothing, or other materials shall be placed in the pipe. As each length of pipe is placed in the trench, the spigot end shall be centered in the bell and pipe forced home and brought to correct line and grade. The pipe shall be secured in place with approved backfill material tamped under it except at the bells. Precautions shall be taken to prevent dirt from entering the joint space.

1. Joining of Push-On Joint Pipe: The inside of the bell and the outside of the spigot

end shall be thoroughly cleaned to remove oil, grit, excess coating and other foreign matter. The circular rubber gasket shall be flexed inward and inserted in the gasket recess of the bell socket.

A thin film of gasket lubricant shall be applied to either the inside surface of the gasket or the spigot end of the pipe or both. Gaskets lubricant shall be as supplied by the pipe manufacturer and approved by the ENGINEER.

The spigot end of the pipe shall be entered into the socket with care used to keep the joint from contacting the ground. The joint shall then be completed by forcing the plain end to the bottom of the socket with a forked tool, jack-type tool or other device approved by the ENGINEER.

Pipe that is not furnished with a depth mark shall be marked before assembly to assure that the spigot end is inserted to the full depth of the joint. Field-cut pipe lengths shall be filed or ground to resemble the spigot end of such pipe as manufactured.

2. Joining of Mechanical-Joint Pipe: The outside of the spigot and inside of the bell of mechanical-joint pipe shall be thoroughly cleaned to remove oil, grit, excess coating and other foreign matter from the joint, and then a thin film of gasket lubricant shall be applied to either the inside surface of the gasket or the spigot end of the pipe or both. Gasket lubricant shall be as supplied by the pipe manufacturer and approved by the ENGINEER.

The cast-iron gland shall be coated with the lubricant and placed on the spigot end with the thick edge toward the gland. The entire section of the pipe shall be pushed forward to seat the spigot end in the bell. The gasket shall then be pressed into place within the bell; care shall be taken to locate the gasket evenly around the entire joint.

When tightening bolts, the gland shall be brought up toward the pipe flange evenly, maintaining approximately the same distance between the gland and the face of the flange at all points around the socket. This shall be done by partially tightening the bottom bolt first then the top bolt, next the bolts at either side, and last, the remaining bolts. This cycle should be repeated until all bolts are within the range of torques as shown below:

Bolt Size (Inches)	Range of Torque (Ft. – Lb.)	Length of Wrench (Inches)
5/8	40 – 60	8
3/4	60 – 90	10
1	70 – 100	12
1 1/4	90 – 120	14

The torque loads may be applied with torque-measuring or torque-indicating wrenches, which may also be used to check the application of approximate torque loads applied by men trained to give an average pull on a definite length or regular socket wrench. If effective sealing is not attained at the maximum torque indicated, the joint should be disassembled, thoroughly cleaned, and reassembled. Overstressing of bolts to compensate for poor installation practice shall not be allowed.

3. For waterlines, all fittings or specials included as pipe shall be blocked in accordance with the attached Standard Details.
 4. For sanitary sewers, a joint between cast iron pipe and vitrified clay pipe or reinforced concrete pipe shall be made with special adapters as approved by the ENGINEER. If adapters are not available, the joint shall be made as instructed by the ENGINEER and encased with concrete one foot (1 ft.) each side of the joints and six inches (6) in thickness.
- I. Fire hydrants shall be located as shown or as directed to provide complete accessibility and minimize the possibility of damage from vehicles or injury to pedestrians.
1. When placed behind the curb, the hydrant barrel shall be set so that no portion of the pumper or hose nozzle cap will be closer than three (3) feet nor more than six (6) feet from the face of the curb.
 2. When set in the lawn space between the curb and the sidewalk, no portion of the hydrant or nozzle cap shall be within six (6) inches of the sidewalk.
 3. All hydrants shall stand plumb and shall have their nozzles parallel with, or at right angles to the curb, with the pumper nozzle facing the curb, and centerline nozzles at least eighteen (18) inches above the ground.
 4. Each hydrant shall be connected to the main with a six (6) inch ductile iron branch controlled by an independent six (6) inch gate valve, unless otherwise specified.
 5. Each hydrant shall be placed upon a slab of stone or concrete not less than six (6) inches thick and fifteen (15) inches square. The rear side of the hydrant, opposite the pipe, shall be blocked with concrete or stone, firmly wedged between the hydrant and the vertical face of the end of the trench of undisturbed earth or it shall be tied to the pipe with suitable straps or metal tension rods as shown on the standard drawings or as directed by the ENGINEER.
 6. Dry walls shall be constructed of crushed stone or coarse gravel having a volume of approximately one-half cubic yard and shall be placed beneath and around the drain ports of the hydrant so the hydrant will properly drain when closed.
 7. Fire hydrant extensions shall be required to bring the fire hydrant up to the existing or proposed grade of the surrounding areas, whereby an 18-inch minimum distance from the ground level to the center of the pumper nozzle may be obtained as shown on the standard drawings.

3.13 METHOD OF PAYMENT

- A. Cast Iron and Ductile Iron Pipe (CIP and DIP) shall be measured for payment by the linear foot of pipe of the size specified in the proposal and shown on the plans and placed as shown on the drawings. Total footage shall be the actual horizontal measurement along the center line of the pipe. No additional payment shall be made for vertical bends in the pipe, fittings used with drop manholes, fittings or specials not included in this specification, or for concrete blocking.
- B. Deductions will not be made for bends or specials.

3.14 BASIS OF PAYMENT

- A. Accepted quantities of Cast Iron and Ductile Iron Pipe (CIP and DIP) measured as provided above, will be paid for at the contract unit price for:

Cast Iron Pipe Lineal Feet

Ductile Iron Pipe. Lineal Feet

which shall be full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

PART 4 - STEEL PIPE AND FITTINGS

4.1 DESCRIPTION

- A. The work under this item shall include furnishing, hauling, placing, and jointing of steel pipe in the trench in specific conformity with the lines and levels given. For all lines, the AWWA Standard for Installation of Cast Iron Water Mains, AWWA Designation C-600 shall govern the installation, as applicable. The method bedding shall be in accordance with Specification 31 23 33 and as shown on the attached Standard Details. The drawings show the plan and grade for the pipeline. The CONTRACTOR shall submit detail drawings to the ENGINEER for approval, showing his proposed method of laying the pipe to these grades. All pipelines to be crossed shall be located before these drawings are prepared. Fittings or specials included as pipe shall be blocked in accordance with the attached Standard Details

4.2 PIPE AND FITTINGS

- A. Where steel pipe is specified or required, it shall conform to the AWWA Standard for Steel Water Pipe 6-inches and larger, AWWA Designation C200. Only the following mill pipes specified under AWWA C200 shall be acceptable: ASTM A139, Grades B and C; ASTM A53, Grade B; ASTM A135, Grade B. Only the following steel plate fabricated under ASTM A134 shall be acceptable: ASTM A36, ASTM A572.
- B. All pipe shall be hydrostatically tested to 80% of the minimum yield point with the hydrostatic test pressure indicated on shop fabrication drawings. AWWA Designation C200 shall govern the testing. Pipe length shall be not less than 35 feet per joint, except for specials unless otherwise noted. There shall be no more than one longitudinal or girth seam per section. Nominal pipe diameter and steel thickness shall be as specified on the drawings. The diameter shown is the required inside diameter of steel pipe if coal tar lining is used or inside diameter of lining if mortar lining is used.
- C. All pipe shall be manufactured by an established manufacturer who has had at least three (3) years' experience in successfully building this type of pipe. Openings for air valves, main connections, and blow-off connections must be provided with suitable reinforcements around the opening, welded to the body of the pipe. Openings of the sizes shown on the drawings shall be furnished with steel blind flanges of proper strength to withstand the working pressure of the line where no other provision is made for closing the openings. The pipe shall have ends for slip joints for field welding,

beveled ends for field welding, beveled ends for field butt welding, or plain ends for mechanically coupled field joints.

- D. Twenty-four inch (24") or smaller pipe shall be manufactured with ends of true circular shape, free from indentations, projections, or roll marks for a distance of eight inches (8") from the end of the pipe. This shall be done by hydraulic expansion or some other method satisfactory to the ENGINEER. The outside diameter of the pipe shall be true enough in dimension to permit the passage for a distance of eight inches (8") from the end of the pipe a ring gauge with a bore three-thirty seconds (3/32") of an inch larger than the outside diameter of the pipe.
- E. Where steel fittings or special fittings are specified or required, they shall conform to all of the steel pipe specification requirements and to the AWWA Standard for Dimensions for Steel Water Pipe Fittings, AWWA Designation C208. Where fittings and specials are fabricated from mill pipe, they shall be fabricated from pipe hydrostatically tested to 80% of the pipe steel yield point with mitered joints dye checked for welding flaws. Where fittings and specials are fabricated from plate, they shall be hydrostatically tested to 80% of the minimum plate steel yield point. Changes in line and grade shall be made by steel specials or in the joints. Steel specials shall be used wherever the angle exceeds ten degrees (10°).
- F. Where field cutting of steel pipe is permitted, pipe shall be cut by sawing. The inside lining shall be removed for a minimum of eight inches each side of the cut and the pipe surface shall be cleaned and brushed to bright metal. After welding, the inside lining shall be replaced in accordance with AWWA C203.
- G. All steel blind flanges supplied in accordance with Section 405 shall be ASTM A36 Steel, 5/8-inch thick with approved gaskets and bolts. All bolts shall be carbon steel ASTM A307 Grade A only, in accordance with AWWA C207.
- H. The work under this item shall include all of the requirements specified under the item of pipe, in that "pipe" is understood to also mean "bends, tees, crosses, sleeves, outlet assemblies and other specified fittings". Unless otherwise specified, outlet assemblies shall consist of a flanged outlet constructed into the wall of steel or concrete pipe. If cast or ductile iron pipe is used, the outlet shall consist of a tee with the outlet flanged. If a gate valve or butterfly valve is shown on the drawings to be attached to the outlet, the line side end shall be flanged, and the opposite end shall be bell or mechanical joint according to the item for valves. All bends, tees, crosses, outlet assemblies, and plugs shall be blocked with concrete as shown on the attached Standard Details, except where the fittings have flanged, welded, or harnessed joints, the ENGINEER may under certain conditions delete the blocking. Concrete blocking shall be placed so that joints are accessible for repair.

4.3 JOINTS

- A. Steel Pipe and fittings shall be jointed with any of the end types as specified below unless a particular end type is specified. Flange ends shall be used only where specifically noted on the drawings.
- B. Welded joints shall conform to, and be tested in accordance with, the AWWA Standard

- for Field Welding of Steel Water Pipe, AWWA Designation C206.
- C. Mechanically coupled joints shall consist of Dresser Couplings, Style 38, or equal, or as specified on the drawings.
 - D. Flanged joints shall conform to the AWWA Standard for Steel Pipe Flanges for Waterworks Service Size 4-inch through 144-inch, AWWA Des. C207, Class E.

4.4 LINING AND COATING

- A. Steel pipe and fittings shall be lined in accordance with the AWWA Standard for Cement Mortar Protective Lining and Coat for Steel Water Pipe, AWWA Designation C205, or the AWWA Standard for Coal-Tar Enamel Protective Coatings for Steel Water Pipe, AWWA Designation C203. The exterior of all underground pipe shall be cleaned, primed, and coated with coal-tar enamel, fibrous glass mat, and a bonded asbestos felt wrapper, and with either a whitewash coating or a final wrap of kraft paper, and the exterior of all above ground pipe shall be cleaned, primed, and painted, all in accordance with the AWWA Standard for Coal-Tar Enamel Protective Coatings and Linings for Steel Water Pipe, AWWA Designation C203, or in accordance with the AWWA Standard for Chlorinated Rubber-Alkyd Paint System for the Exterior of Above Ground Steel Water Piping.
- B. If mechanical couplings are used for field joints, the ends of the pipe shall be primed and enameled before the pipe is laid. If field welding is used, the pipe joints shall be furnished with the inside lining and outside coating held back twelve inches on each end for field welding. All of the lining and coating, including any field touch-up work, shall be done under the direction of the manufacturer of the lining and coating to the satisfaction of the ENGINEER. The lining at the joints on welded pipe may be patched with a minimum of two (2) coats of a coal tar or epoxy-based paint which shall be compatible with the interior lining and which shall impart no taste or odor to the water in the lines.

4.5 CONSTRUCTION

- A. If joints are field-welded, they shall develop the full strength of the pipe. The CONTRACTOR shall file with the ENGINEER a description of the method of welding which he proposes to use, the name of the individual or company who will do the welding, and a statement regarding the previous experience of such individual or company in this particular line of work. If requested, coupons shall be cut across the field welds and tested by an approved testing laboratory. The line may be welded continuously with provisions for slack in the line, or in sections to be lowered in the trench and connected by a position weld.
- B. If joints are to be mechanically coupled, sections up to 240 feet may be coupled and lowered carefully into the ditch. Electrical continuity shall be provided at all joints. Preparation for, protection of, and repair of pipe coating and lining, and coating of mechanical couplings shall conform to the applicable section of these specifications.

4.6 METHOD OF PAYMENT

- A. Steel pipe shall be measured for payment by the linear foot of pipe specified in the proposal and placed as shown on the drawings. Total footage shall be the actual horizontal measurement along the centerline of the pipe. No additional payment shall be made for vertical bends in the pipe, fittings used with drop manholes, fittings or specials included as pipe, or for concrete blocking.

4.7 BASIS OF PAYMENT

- A. Accepted quantities of steel pipe measured as provided above, will be paid for at the contract unit price for:

STEEL PIPE Lineal Feet

which shall be full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

PART 5 - REINFORCED CONCRETE PIPE AND FITTINGS

5.1 DESCRIPTION

- A. The work under this item shall include furnishing, hauling, placing and jointing of reinforced concrete pipe (RCP) in the trench in specific conformity with the lines and levels given.

5.2 PIPE AND FITTINGS

- A. Where reinforced concrete pipe (RCP) and fittings are specified or required for waterlines, they shall conform to and be tested in accordance with the AWWA Standard for Prestressed Concrete Pressure Pipe, Steel Cylinder Type, for Water and Other Liquids, AWWA Designation C301. All pipe shall be manufactured by an established manufacturer who has had at least three years' experience in successfully building this type of pipe. All specials and fittings shall be either of Type A or Type B and must be built to the details furnished by the manufacturer and approved by the ENGINEER. Each special and each length of straight pipe shall be plainly marked to indicate the head for which the pipe is designed and to indicate where the pipe will be used by reference to the layout drawings.
- B. Where reinforced concrete pipe (RCP) and fittings are specified or required for sanitary sewers, they shall conform to and be tested in accordance with the specifications for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe, ASTM Designation C76, Class as shown on the drawings. No lengths of pipe shall be less than eight feet. All concrete pipe shall be coated inside with two (2) coats of a coal-tar base paint (Standard Inertol®, or approved equal), with a twenty-four hour drying period between coats.

5.3 JOINTS

- A. Reinforced concrete pipe and fittings for waterlines shall be jointed according to AWWA Standard for Prestressed Concrete Pressure Pipe Steel Cylinder Type, for Water and Other Liquids, AWWA Designation C301.
- B. Reinforced concrete pipe and fittings for sanitary sewer shall be jointed with a single natural rubber or neoprene gasket and cement mortar formed by a diaper. It shall be formed in a continuous ring of suitable cross sections and of such size as to assure a watertight joint. Each length of pipe shall be provided with bell-and-spigot ends formed in the concrete wall. The spigot end shall contain a groove so that the gasket will be enclosed and compressed on four surfaces when the joint is in final position. All jointing materials shall be used in accordance with the manufacturer's instructions and subject to approval of the ENGINEER.

5.4 CONSTRUCTION

- A. For waterlines, the AWWA Standard for Installation of Cast Iron Water Mains, AWWA designation C-600, shall govern the installation as applicable. The method of bedding shall be in accordance with Specification 31 23 33 and as shown on the attached Standard Details. The drawings show the plan and grade for the pipeline. The CONTRACTOR shall submit detailed drawings to the ENGINEER for approval, showing the proposed method of laying the pipe to these grades. All pipelines to be crossed shall be located before these drawings are prepared. The ends of the pipes to be jointed shall be cleaned immediately prior to joining and the rubber gasket thoroughly lubricated with a thin film of gasket lubricant before it is placed in position on the spigot end.
- B. Gasket lubricant shall be as supplied by the pipe manufacturer and approved by the ENGINEER. Extreme care shall be taken in moving the spigot end of the pipe into the bell end of previously laid pipe. If the gasket is damaged or moved out of place, the new pipe shall be removed, and a new gasket applied before rejoining. Any lubricant remaining on the exposed concrete surfaces inside or outside the pipe shall be completely removed. Fittings or specials included as pipe shall be blocked in accordance with the attached Standard Details.
- C. For sanitary sewers, the methods of laying pipe, foundation, and grade specified under Pipe, Vitrified Clay, shall apply. All pipe shall be installed with the mark "C-76" visible on the top of the pipe. The ends of the pipes to be jointed shall be cleaned immediately prior to joining and the rubber gasket thoroughly lubricated with gasket lubricant before it is placed in position on the spigot end. Extreme care shall be taken in moving the spigot end of the pipe into the bell end of the previously laid pipe. If the gasket is damaged or moved out of place, the new pipe shall be removed, and a new gasket applied before rejoining.
- D. For all lines, after the pipe has been jointed, a band at least 5-1/2 inches wide shall be placed around the outside of the pipe at the joint. This band shall serve as a form for placing 1:1 cement mortar grout in the external recess formed by the face of the groove and the shoulder of the tongue. If a reinforced paper joint bank is used, it shall be drawn up tight around the pipe and the backfill tamped against it up to the spring line before pouring the grout. If a cloth band is used, it shall be wired around the outside

of the pipe, and the grout poured before backfilling. On all pipes, the joint space remaining on the inside of the pipe shall be filled with a stiff mixture of 1:1 cement mortar which shall be troweled in place to produce a continuous, smooth, flush surface across the joint.

5.5 METHOD OF PAYMENT

- A. Reinforced Concrete Pipe (RCP) shall be measured for payment by the linear foot of pipe of the size specified in the proposal and on the plans and placed as shown on the drawings. Total footage shall be the actual horizontal measurement along the centerline of the pipe. No additional payment shall be made for vertical bends in the pipe, fittings used with drop manholes, fittings or specials included as pipe, or for concrete blocking.

5.6 BASIS OF PAYMENT

- A. Accepted quantities of Reinforced Concrete Pipe (RCP), measured as provided above, will be paid for at the contract unit price for:

REINFORCED CONCRETE PIPE (RCP) Lineal Feet

which shall be full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

PART 6 - THERMOPLASTIC POLYVINYL CHLORIDE (PVC) WATER PIPE AND FITTINGS

6.1 DESCRIPTION

- A. Thermoplastic Polyvinyl Chloride (PVC) water pipe 6 to 12-inches in size shall be allowed in the distribution system of the OWNER. The AWWA Standard for the installation of PVC water mains, AWWA Designation C-605 shall govern the installation, as applicable.

6.2 PIPE AND FITTINGS

- A. Where thermoplastic polyvinyl chloride (PVC) water pipe is specified or required, it shall conform to the AWWA Standard for Polyvinyl Chloride (PVC) Pressure Pipe, 4-inch through 12-inch, for water, AWWA Designation C900. PVC pipe shall conform to the dimensions shown in Table 2 of AWWA C900, Dimensions and Pressure Classes for Dimension Ratio (DR) for PVC 1120 Pipe with Cast Iron Pipe Equivalent ODS. The minimum DR shall be in accordance with the plans and the minimum working pressure rating shall be 150 psi.
- B. Fittings for PVC pipe 8-inches in diameter and smaller shall be Cast Iron Short Body Fittings in accordance with AWWA C110 specification for Cast Iron Fittings, 2-inch through 48-inch, for Water and Other Liquids. All fittings shall be designed and rated for 250 psi water working pressure.

- C. The work under this item shall include all of the requirements specified under the item of pipe, in that "pipe" is understood to also mean "bends, tees, crosses, sleeves, outlet assemblies and other specified fittings". Unless otherwise specified, outlet assemblies shall consist of a flanged outlet constructed into the wall of steel or concrete pipe. If cast or ductile iron pipe is used, the outlet shall consist of a tee with the outlet flanged. If a gate valve or butterfly valve is shown on the drawings to be attached to the outlet, the line side end shall be flanged, and the opposite end shall be bell or mechanical joint according to the item for valves. All bends, tees, crosses, outlet assemblies, and plugs shall be blocked with concrete as shown on the attached Standard Details, except where the fittings have flanged, welded, or harnessed joints, the ENGINEER may under certain conditions delete the blocking. Concrete blocking shall be placed so that joints are accessible for repair.

6.3 JOINTS

- A. Jointing of plastic pipe shall be accomplished by push-on type joints. Push-on joints consisting of a rubber "O" ring shall be used. The CONTRACTOR shall furnish to the ENGINEER details of the proposed joint in triplicate for approval before any such jointing material is delivered to the job site.

6.4 CONSTRUCTION

- A. Pipe shall be laid to the lines and grades established by the ENGINEER. The bottom of the trench shall be relatively uniform and in no case shall pipe be laid on rock. Where rock is encountered, Class "A" bedding shall be required.
- B. Long plastic pipelines, over three hundred feet (300 ft.) in length without an abrupt change in direction, shall be "snaked" in the trench to provide for expansion and contraction. Snaking shall be equivalent to the pipe touching opposite sides of a twenty-four inch (24) wide trench within a distance of eighty feet (80 ft.). It is recommended that, during warm weather, whenever practical, pipelines be filled with cold water or allowed to cool overnight before backfilling trench. Push-on joints shall be made with extreme care and by following the manufacturer's recommendation as to installation procedures. If the design of the joint permits for linear expansion of the pipe, the trench width may be reduced. Adequate thrust blocks as approved by the ENGINEER will be required at all bends, tees, and crosses.

6.5 METHOD OF PAYMENT

- A. Thermoplastic Polyvinyl Chloride (PVC) water pipe shall be measured for payment by the linear foot of pipe of the size specified in the proposal and on the plans and placed as shown on the drawings. Total footage shall be the actual horizontal measurement along the centerline of the pipe. No additional payment shall be made for vertical bends in the pipe.

6.6 BASIS OF PAYMENT

- A. Accepted quantities of Thermoplastic Polyvinyl Chloride (PVC) water pipe, measured as provided above, will be paid for at the contract unit price for:

THERMOPLASTIC POLYVINYL CHLORIDE (PVC) PIPE Lineal Feet

which shall be full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

PART 7 - TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS

7.1 DESCRIPTION

- A. Type PSM Polyvinyl Chloride (PVC) sewer pipe ranging in size from 4 inches to 15 inches, may be installed within the OWNER'S collection system, as approved by the ENGINEER. The work under this item shall include furnishing, hauling, placing, and joining of PVC sewer pipe within the trench in specific conformity with lines and levels given. For all pipe, the ASTM Standard 2321-89 "Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications" shall govern with respect to installation of the pipe. The method of bedding shall be in accordance with PART 5 of this specification and any exceptions listed below, and as shown on the attached standard details.

7.2 PIPE AND FITTINGS

- A. Where Type PSM polyvinyl chloride (PVC) sewer pipe is specified or required, it shall conform to ASTM Standard D3034-94 "Standard Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings". Nominal pipe diameter may be from 4 inches to 15 inches in size. All PVC sewer pipe shall have a minimum pipe stiffness of 115 psi and shall have a Standard Thermoplastic Pipe Dimension Ratio (SDR) in accordance to the plans. The pipe shall be made of PVC plastic having a cell classification of 12454-B or 12454-C or 12364-C or 13364-B (with minimum tensile modulus of 3450 MPa (500,000 psi) as defined in ASTM Standard D1784. The pipe shall be clearly marked at intervals of 1.5 meters (5 ft.) or less, and the markings shall indicate manufacturer's name or trademark and code, nominal pipe size, the cell classification, the designation "Type PSM SDR-XX PVC Sewer Pipe", and the designation "Specification D3034". The fittings shall be marked with manufacturer's name or trademark, nominal size, the material designation "PVC", PSM, and the designation "Specification D3034".

7.3 JOINTS

- A. Jointing of plastic pipe shall be accomplished by push-on type joint, with an elastomeric seal conforming to ASTM Standard D3212-92 "Standard Specification for Joint for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals". The CONTRACTOR shall furnish to the ENGINEER details of proposed joint in triplicate for approval before any such jointing material is delivered to the job site.

7.4 CONSTRUCTION

- A. The pipe shall be laid on a firm foundation as required in over-excavated areas, and a bedding with a minimum thickness of 4 inches (6 inches in rock cuts). Haunching material shall be placed to the springline of the pipe and be installed in layers with a maximum thickness of 6 inches. The haunching material shall be worked around the pipe by hand, and the shovel slicing method to provide uniform support of the pipe. The initial backfill shall be placed in layers to a minimum depth of 6 inches to the top of the pipe and be placed in layers with a maximum thickness of 6 inches. All material for foundation, bedding, haunching and initial backfill shall be compacted to 85% or 95% of Standard Proctor as required according to the USCS soil classification system, and in conjunction with ASTM Standard D2321-89. Maximum particle size for all backfill material shall be 3/4 inch. All backfill shall be free from clods, lumps, boulders and frozen matter.
- B. Place pipe and fittings in the trench with the invert conforming to the required elevations, slopes and alignment. Provide bell holes in the pipe bedding, no larger than necessary, in order to ensure uniform pipe support. Fill all voids under the bell by working in bedding material. In special cases where the pipe is to be installed to a curved alignment, maintain angular "joint deflection" (axial alignment) or pipe bending radius, or both, within acceptable design limits.
- C. Comply with manufacturers recommendation for assembly of joint components, lubrication, and making of joints. When pipe laying is interrupted, secure piping against movement and seal open ends to prevent the entrance of water, mud, or foreign material.
- D. For elastomeric seal joints conforming to ASTM D3212-92 "Standard Specification for Joints for Drain and Sewer Plastic Pipe Using Flexible Elastomeric Seal", the pipe ends shall be marked to indicate insertion stop position and ensure that the pipe is inserted into pipe or fitting bells to this mark. Push spigot into bell using methods recommended by the manufacturer, keeping pipe true to line and grade. Protect end of the pipe during homing and do not use excessive force that may result in over-assembled joints or dislodged gaskets. If full entry is not achieved, disassemble and clean the joint and reassemble. Use only lubricant supplied or recommended for use by the pipe manufacturer. Do not exceed manufacturer's recommendation for angular "joint deflection" (axial alignment).
- E. Where coarse and open-graded material is placed adjacent to finer material and within anticipated ground water elevations, a geotextile filter fabric shall be placed around the bedding and initial backfill material to prevent the migration of the surrounding fines into the open voided area.
- F. After installation of the pipe has been completed and air tested, the CONTRACTOR shall pull a mandrel that has been machined to 5% of the inside diameter of the pipe from manhole to manhole. The pulling of the mandrel shall be performed no earlier than 30 days from the date of the air testing.

7.5 METHOD OF PAYMENT

- A. Type PSM Polyvinyl Chloride (PVC) sewer pipe shall be measured for payment by linear foot of pipe of the size specified in the proposal and on the plans and placed as shown on the drawings. Total footage shall be the actual horizontal measurement along the centerline of the pipe. No additional payment shall be made for vertical bends in the pipe or fittings used with drop manholes.

7.6 BASIS OF PAYMENT

- A. Accepted quantities of Polyvinyl Chloride (PVC) sewer pipe, measured as provided above, will be paid for at the contract price for:

Polyvinyl Chloride (PVC) Sewer Pipe Lineal Feet

which shall be full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

PART 8 – HDPE PIPE AND FITTINGS

8.1 DESCRIPTION

- A. This specification covers the material, joining methods, and general installation practice for high density polyethylene pipe (HDPE) piping systems for use as indicated on the drawings. For all pipe, it must be installed in accordance with AWWA C901 and C906.

8.2 PIPE AND FITTINGS

- A. All materials shall be manufactured from a PE 4710 resin listed with the Plastic Pipe Institute (PPI) as TR-4. The resin material shall meet the specifications of ASTM D3350 with a minimum cell classification of 445474C or 445574C. HDPE pipe and fittings shall contain no recycled compounds except that generated in the manufacturer's own plant from resin of the same specification from the same raw material. HDPE products shall be homogenous throughout and free of visible cracks, holes, foreign inclusions, voids, or other injurious defects.
- B. Pipe shall be made of HDPE material with a minimum material designation code of PE 4710 and with a minimum Cell classification as noted in Section A. The polyethylene compound shall be suitably protected against degradation by ultraviolet light by means of carbon black of not less than 2 percent. The manufacturer of the HDPE resin shall certify the cell classification indicated.
- C. Pipe sizes 3" DIPS/4" IPS and larger shall have a manufacturing standards of ASTM F714, while IPS pipe 3" and smaller shall be manufactured to the dimensional requirements listed in ASTM D3035. Dimension Ratio (DR) and Outside Diameter (IPS/DIPS) shall be as specified on plans.

- D. Pipe shall be manufactured by an ISO 9001 certified manufacturer. The pipe manufacturer shall have an ongoing Quality Control program for incoming and outgoing materials and shall assure that the pipe will meet the material requirements of this specification. HDPE resins for manufacturing of pipe shall be checked for density, melt flow rate, and decontamination. For potable water systems the facility shall have the necessary testing equipment to verify that pipe meets the AWWA and NSF standards. Pipe shall be checked for outside diameter, wall thickness, length, and surface finish on the inside and outside. The manufacturer's production facilities shall be open for inspection by the Owner or Engineer.
- E. All pipe may be color coded for the intended service. When required, the color coding shall be permanently co-extruded stripes on the pipe outside surface as part of the pipe's manufacturing process. Painting HDPE pipe to accomplish color coding is not permitted.
- F. All fabricated elbows, tees, reducing tees and end caps shall be produced and meet the requirements of ASTM F2206, as manufactured by ISCO Industries, Inc or other approved manufacturer holding an ISO 9001 quality system certificate. Each fitting will be marked per ASTM F2206 section 10 including the nominal size and fitting EDR, which will meet or exceed the pipe DR identified for the project. Fabricated fittings shall be manufactured using a data recording device to record fusion pressure and temperature and shall be stamped with unique joint number that corresponds to the joint report. A graphic representation of the temperature and pressure data for all fusion joints made producing fittings shall be maintained for a minimum of 5 years as part of the quality control and will be available upon request of owner. Test results to validate ASTM F2206 section 7.3 and 9 shall be provided to owner or owner's representative upon request.
- G. Fittings shall have a minimum pressure rating equal to or greater than the pipe to which they are joined unless otherwise specified on the plans or accepted by ENGINEER.
- H. The work under this item shall include all of the requirements specified under the item of pipe, in that "pipe" is understood to also mean "bends, tees, crosses, sleeves, outlet assemblies and other specified fittings". Unless otherwise specified, outlet assemblies shall consist of a flanged outlet constructed into the wall of steel or concrete pipe. If cast or ductile iron pipe is used, the outlet shall consist of a tee with the outlet flanged. If a gate valve or butterfly valve is shown on the drawings to be attached to the outlet, the line side end shall be flanged, and the opposite end shall be bell or mechanical joint according to the item for valves. All bends, tees, crosses, outlet assemblies, and plugs shall be blocked with concrete as shown on the attached Standard Details, except where the fittings have flanged, welded, or harnessed joints, the ENGINEER may under certain conditions delete the blocking. Concrete blocking shall be placed so that joints are accessible for repair.
- I. Bolted Connections
 - 1. Flanged and Mechanical Joint Adapters can be made to ASTM D3261. Flange adapters, if machined, may also meet the requirements of ASTM F2880. Flanges and MJ Adapters shall be fused onto the pipe and have a minimum pressure rating equal to or greater than the pipe unless otherwise specified on the plans.

2. Metallic back-up rings (Van-Stone style lap joint flanges), shall have a radius on the inside diameter of the bore so as to be compatible with AWWA C207 Class D (or B or E), ASME/ANSI B 16.5 Class 150, ASME/ANSI B 16.1 Class 125, or ASME/ANSI B16.47 Series A.
3. Flange assemblies shall be assembled and torqued according to PPI TN-38, "Bolt Torque for Polyethylene Flanged Joints."

J. Mechanical Fittings

1. The use of mechanical coupling and saddles shall be approved by the ENGINEER prior to installation. Mechanical fittings shall be designed for use an compatible with HDPE pipe.
2. Coupling without self-restraining capabilities (integrated serrated teeth or grippers) shall include a plan for external restraint or isolation from pipeline generated forces.
3. Mechanical saddles shall have wide straps for distribution of clamping loads. No U-Bolts shall be allowed.
4. When required by mechanical coupling manufacturer, pipe stiffeners shall be employed to support the interior wall of the HDPE. The stiffeners shall support the pipe's end and control the "necking down" reaction to the pressure applied during normal installation. The pipe stiffeners shall be formed of 304 or 316 stainless steel, with a wedged style design to fit the HDPE manufacturers published average inside diameter of the specific size and DR of the HDPE.

8.3 EQUIPMENT

- A. All fusion equipment, whether new or used, rented or owned, shall comply with the requirements of ISO 12176-1 "Equipment for Fusion Jointing Polyethylene Systems".
- B. Butt Fusion
 1. Butt fusion equipment must be in satisfactory working order and the hydraulic system must be leak free. Heater plates shall be free from scrapes, gouges, and have a consistent clean coated surface. The pressure gauge and thermometer should be properly calibrated. When requested by the ENGINEER, records showing a maintenance service or inspection within 3 months prior to use for this project shall be provided.
 2. For 16" and larger pipe sizes, the butt fusion machine shall be capable of autonomously calculating the drag pressure and perform the shift sequence autonomously.

3. For 6" and larger pipe sizes, the pipe butt fusion machine shall be a self-contained hydraulic fusion machine capable of butt fusing HDPE pipe. The carriage must be removable from the chassis for in-ditch use. The machine must be compatible with an electronic data recording device. Accessories will include all butt fusion inserts for the specified range of pipe sizes, a pyrometer kit for checking the surface temperature of the heater, extension cord of appropriate gauge (25' minimum), and hydraulic extension hoses (minimum of four). The butt fusion machine will be McElroy, or approved equivalent.
 4. In areas where there may be insufficient space for layout of the entire length of fused pipe to be pulled-back, the Contractor shall utilize a continuous HDPE pipe fusion equipment such as a PolyHorse by McElroy or other means in order to fuse the length of pipe necessary for the installation.
- C. Electrofusion processors shall be maintained and calibrated per manufacturer's requirements and recommendations.

8.4 JOINTS

- A. All HDPE pipe shall be joined to by the heat fusion process which produces homogeneous, sealed, leak-tight joints. Tie-ins between sections of HDPE pipe shall be made by butt fusion whenever possible.
- B. Butt Fusion
1. The pipe shall be joined by the butt fusion procedure outlined in ASTM F2620 or PPI TR-33. All fusion joints shall be made in compliance with the pipe or fitting manufacturer's recommendations. Fusion joints shall be made by qualified fusion technicians per ASTM F3190. A record or certificate of training for the fusion operator must be provided that documents training to the fundamentals of ASTM F2620. Considerations should be given to and provisions made for adverse weather conditions, such as temperatures below freezing, precipitation, or wind, which is accepted by the owner/engineer. The use of a controlled cooling cycle procedure to reduce cooling time is acceptable only as part of a controlled cooling cycle procedure where testing demonstrates that acceptable joints are produced using the controlled cooling cycle procedure.
- C. Electrofusion
1. Electrofusion joining shall be done in accordance with the manufacturers recommended procedure. Other sources of electrofusion joining information are PPI TN 34 and PPI Municipal Advisory Board (MAB) Generic Electrofusion Procedure for Field Joining of 12 Inch and Smaller Polyethylene (PE) Pipe. The process of electrofusion requires an electric source, commonly called an electrofusion processor that has wire leads and a method to read electronically (by laser) or otherwise input the barcode of the fitting. The electrofusion processor must be capable of reading and storing the input parameters and the fusion results for later download to a record file. Qualification of the fusion technician shall be demonstrated by evidence electrofusion training within the past year on the equipment to be utilized for this project.

D. Data Recording

1. For 6" and larger pipe sizes, McElroy DataLogger or equivalent fusion data recorder shall be used to record all fusion welds on hydraulically operated fusion machines. The device shall be capable of meeting the requirements of ASTM F3124, "Standard Practice for Data Recording the Procedure used to Produce Heat Butt Fusion Joints in Plastic Piping Systems or Fittings". The device, or combination of devices, shall record the following variables of each fused joint:
 - i. Heater surface temperature- immediately before inserting the heater plate, measure with a pyrometer and manually enter into the weld record.
 - ii. Gauge pressure during the initial heat cycle
 - iii. Gauge pressure and elapsed time during the heat-soak cycle
 - iv. Heater removal (dwell) time
 - v. Gauge pressure and elapsed time during the fusing/cool cycle
 - vi. Drag pressure
 - vii. Pipe diameter and wall thickness
 - viii. Type of HDPE material (Specification and Classification) and manufacturer
 - ix. Fusion Machine Identification
2. The device shall record the operator name and a unique operator ID number, along with the date and time of each weld.
3. Records showing the device is up to date on all required calibration should be available for presentation when requested.
4. All fusion welds should be traceable to the report (via operator and weld ID) with an indentation weld stamp or by permanent paint marker/pen next to fusion weld.
5. A weld location map may be requested, prior to commencement of work, by the owner or owner's representative.

8.5 CONSTRUCTION

A. For direct burial, refer to Specification 31 23 33.

B. Pull-In Installation

1. Per ASTM F1804 and/or www.HDPEapp.com, the contractor shall determine and document the maximum proposed pull-in length and pull-in force for the pressure class and pipe diameter to be pulled into an open trench. Pull-in lengths will not exceed the maximum lengths for the class and diameter pipe. A commercially available load limiter (weak link) approved by the Engineer shall be used between the puller and the pipe.
2. Prior to pulling the pipeline, contractor shall place rollers or other approved devices beneath the pipe to avoid unnecessary damage and to reduce pipe drag.

3. Trenchless installations:

- i. For Horizontal Directional Drilling (HDD), refer to Specification 33 05 07.13 and ASTM F1962, PPI TR-46, PPI PE Handbook (Chapter 12).
- ii. For sliplining, refer to ASTM F585, PPI PE Handbook (Chapter 11).
- iii. For pipe bursting, refer to Specification 33 31 30 and PPI PE Handbook (Chapter 16)

C. Appurtenances

1. All appurtenances (tees, elbows, services, valves, air relief valves, fire hydrants, etc.), must be independently supported and shall not rely on the pipeline and its connections for this support. Excessive stresses may be encountered when appurtenances are inadequately supported.
2. Hydrant Assemblies shall be installed and field tested according to the requirements of AWWA M17.
3. Installation of Tracer Wire. When tracer wire is required, the Contractor shall install along the entire section of pipeline and along all service connections as listed below. The tracer wire shall be installed simultaneously with the polyethylene piping system. Tracer wire shall be installed by the Contractor once backfill has been placed and compacted to at least 12 inches above the top of the pipe and not more than 18 inches above the top of the pipe. Tracer wire shall be properly spliced at each end connection and each service connection. Care should be taken to adequately wrap and protect wire at all splice locations. No bare tracer wire shall be accepted. Provide Magnesium alloy anode for cathodic protection that conforms to the requirements of ASTM B843. Install tracer wire per local and manufacturer's requirements.

8.6 METHOD OF PAYMENT

- A. HDPE pipe shall be measured for payment by the linear foot of pipe of the size specified in the proposal and on the plans and placed as shown on the drawings. Total footage shall be the actual horizontal measurement along the centerline of the pipe. No additional payment shall be made for vertical bends in the pipe.

PART 9 – SEWER CONNECTION

9.1 DESCRIPTION

- A. The work under this item shall include all excavation, furnishing all materials required, construction, finishing, and backfilling of connections to existing mains, manholes, drop connections to manholes, special connections, service line connections, or plugs, as indicated on the drawings or as directed by the ENGINEER.

9.2 CONSTRUCTION

- A. Connections to existing manholes shall be made by cutting into the manhole at the specified grade, inserting the pipe, and encasing the joint with concrete. CONTRACTOR shall not break into any existing sewer unless the OWNER'S REPRESENTATIVE is present and the work done shall be under the direction of the OWNER'S REPRESENTATIVE. The manhole base shall be cut and reconstructed in such a manner that a proper invert section is maintained. All waste mortar, debris, and sharp edges shall be removed from the joints, bottom, and invert. CONTRACTOR shall remove and replace the manhole steps in the proper location and in accordance with the attached standard details if they are not properly located after the connection is made. Any and all diversion or pumping of water or sewage in a wet connection is included in this item.
- B. Methods of construction shall be the same for sewer service line reconnections as for main sewers. All reconnections shall be constructed in conformance with the Plumbing Code of the OWNER unless modified herein. New pipe used shall be of the same diameter as the existing line.
- C. Plugs shall be constructed of manhole brick and mortar, extending at least one foot into the line plugged from the manhole. The plug shall be watertight and troweled to a smooth finish on the interior of the manhole.
- D. At points indicated on the plans or by the ENGINEER, risers of the size indicated on the plans, or as required by the ENGINEER, shall be constructed. A 45-degree bell and spigot bend shall be jointed to the wye to a point level with lower side of bell of 45-degree bend. Pipe for risers shall be regular length joints of sewer pipe. Risers using full joints of pipe shall be set so that the top of riser is near to but not less than ten (10) feet below finished ground grade at rear of building location. If the OWNER desires, the CONTRACTOR may, at the OWNER's expense, extend risers to a point not less than six (6) feet below finished grade at rear of the building locations, but, in no case, shall there be less than four (4) feet of cover over riser.

When contained wholly on the public right-of-way, or within the boundaries of utility easements, risers may be laid on a slope of 45 degrees.

9.3 METHOD OF MEASUREMENT

- A. Connections will be measured for payment per each classification of connection as shown on the proposal. No additional payment will be made for excavation, backfilling, furnishing and placing concrete, removing and replacing manhole steps, or for diversion or pumping of water or sewage necessary to make the connection. Connections shown on the plans but not classified on the proposal shall be considered incidental to the work and will not be measured for payment but the cost shall be included in other items.

9.4 BASIS OF PAYMENT

- A. Accepted quantities measured as provided above will be paid for at the contract unit price as shown on the proposal for each connection which shall be full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

PART 10 – WATER CONNECTION

10.1 DESCRIPTION

- A. The work under this item shall include all excavation, furnishing all materials required, construction, finishing, and backfilling of connections to existing mains, valves, special connections, service line connections, as indicated on the drawings or as directed by the ENGINEER.

10.2 CONSTRUCTION

- A. The drawing shows details of the various connections and they shall be made in accordance with the details or as directed by the ENGINEER. On water mains, the CONTRACTOR will make the pressure and wet connections to existing mains as shown on the drawing unless specifically noted otherwise. In making these connections all material, equipment, and personal necessary for the job shall be assembled at the site and all work possible shall be done before the service is interrupted. The order and time of the work will be under the jurisdiction of the ENGINEER. If deemed necessary, the ENGINEER may order the CONTRACTOR to make the connection at night so as to inconvenience the public as little as possible.

- B. Where called for on the plans, or by the specifications, tapping valves and sleeves shall be used to make connections with existing water mains. The CONTRACTOR, when ready to make any of these connections, will notify the ENGINEER 48 hours in advance. The CONTRACTOR shall furnish all material, labor and equipment to make the taps.

The tapping valves furnished shall be Mueller, American Flow, or approved equal and tapping sleeves furnished shall be Ford, Smith Blair, or approved equal satisfactory to the ENGINEER. The tapping sleeves shall be the bolted type, heavy duty, using iron bolts, cast iron or equal satisfactory to the ENGINEER.

- C. Service line connections for water services shall be constructed as shown on the standard drawings and materials shall be copper, brass, municipex, or approved equal by ENGINEER.
- D. The material and workmanship for brass goods shall be of the highest quality and shall interchange with brass goods presently in use by the owner. Brass goods shall conform to the same precise standards as described in AWWA Specifications Number C800 Standard Specifications for underground service line fittings.
- E. Brass goods shall contain 85 percent copper and 5 percent each of tin, lead, and zinc and shall be tested by hydrostatic pressure of 200 pounds per square inch. The bidder shall furnish a complete description of brass goods with his bid.

- F. Copper tubing shall be Type "K" soft annealed seamless tubing and shall conform to ASTM-B88 Standard Specification for Seamless Copper Water Tube.
- G. The coils of copper tubing shall be in individual packages. The CONTRACTOR shall furnish an affidavit that the copper tubing furnished complies with all specifications.
- H. Municipex pipe shall be in accordance with AWWA 904 and ASTM F876.

PART 11 – CASTINGS

11.1 GENERAL

- A. Castings for valve boxes, valve vaults, manholes, lamp holes, and other appurtenances shall conform to, and be tested in accordance with the specifications for Gray Cast Iron, ASTM Designation A48, Class 30. Design shall be according to the attached Standard Details. Frames and covers that are to be located within dedicated public right-of-way, or any other location subject to vehicular traffic, shall have all bearing surfaces machined so that fittings parts will not rattle or rock under traffic. All castings shall be subject to a hammer test before installation.

PART 12 - RIGHT-OF-WAY CLEARING AND RESTORING

12.1 DESCRIPTION

- A. Work under this item shall include the removal and reconstruction or replacement of all obstructions affected, other than those covered in this specification, by the construction of the project including, but not limited to fences, retaining walls, patios, barbecues, signs, mailboxes, outbuildings, landscaping, sidewalks, driveways, parking lot surfacing, curbs, and the like. Any such obstructions which are not to be reconstructed are so designed on the drawings. Such shall be removed and disposed of by the CONTRACTOR. All obstructions to be replaced or reconstructed shall be restored to substantially the same condition as existed prior to the construction, except as otherwise noted. All sidewalk, driveway, and parking lot replacement shall be of at least equal quality, thickness, compacted subgrade and base course, and surface course as that removed or damaged. The CONTRACTOR shall remove and dispose of all debris, restore the grade of the surface of the earth as reasonably as may be done to the grade existing prior to construction, and upon completion of the work shall leave the site in as neat, clean, and orderly condition as nearly as it was prior to construction as may be reasonably done.

12.2 MATERIALS AND TESTS

- A. Backfill materials under parking lots and driveways shall be in accordance with Specification 31 23 33 or as approved by the ENGINEER.
- B. Portland Cement Concrete shall be in accordance with Specification 03 30 00. All concrete placed in parking lots, driveways, sidewalks, and all other concrete structures within the right-of-way shall use high-early strength cement.
- C. Asphaltic Concrete - Bituminous pavement shall meet the requirements shown in Section 32 12 16.39.

- D. Sampling and Testing - Sampling of materials will be made in accordance with the appropriate methods specified in the corresponding section listed above. Tests will be conducted in accordance with the schedule of tests provided in the special provisions or as shown on the plans.

12.3 CONSTRUCTION

- A. Passable surfaces across or along the construction vicinity shall be maintained at all times with gravel, steel mat or plate, or temporary bituminous surfacing material where a sidewalk, driveway, or parking lot previously existed.
- B. Sidewalks, driveways, parking lots, and other paved areas, all or partially composed of concrete, asphaltic concrete, or bituminous material shall be saw cut, removed, and replaced to at least the standard trench width if the project crossing is at right angles to the obstruction. If a construction joint is within two (2) feet of any proposed sawed line, the cut shall be extended to the joint, or as directed by the ENGINEER. Curbs shall be tunneled under in all cases, unless otherwise approved in writing by the ENGINEER.
- C. Backfill under sidewalks, driveways, parking lots, and other paved areas shall be in accordance with Specification 31 23 33. All backfill shall be thoroughly compacted with sufficient moisture and by mechanical means to prevent settlement. Settlement or other failure of backfill or restored right-of-way shall be corrected immediately. The method of correction shall be as directed by the ENGINEER.
- D. Existing water and sewer lines: Wherever existing water or sewer lines are encountered, the CONTRACTOR shall protect the same from damage. In case damage does result, the CONTRACTOR shall, as directed by the ENGINEER, repair the same at his own expense.
- E. Vertical and horizontal separation of water and sewer lines: Where a sanitary sewer crosses any existing or proposed water main and is closer than 10-feet horizontally or 2-feet vertically the sanitary sewer shall be ductile iron pipe for a distance of 20-feet horizontally. If the sanitary sewer crosses above the water main, the sanitary sewer shall be ductile iron pipe and concrete encased. Where a sanitary sewer is constructed closer than 50 feet to a water well (existing or proposal) the sanitary sewer shall be ductile iron pipe.

Where a water main crosses any existing or proposed sanitary sewer and is closer than 10-feet horizontally or 2-feet vertically, the sanitary sewer shall be replaced for a distance of 20-feet horizontally with ductile iron pipe. If the water main crosses below the sanitary sewer, the sanitary sewer shall be replaced with ductile iron pipe and concrete encased.

- F. Existing structures which are to be abandoned shall be broken off or removed to a depth of not less than six (6) inches below the foundation grade of new structures. Any blasting or other operation which might endanger the new work shall be completed prior to the construction of any part of the new structure. After the removal of any existing structures, all excavations not to be occupied by new structures and all holes created shall be cleaned up and the site left in a neat and orderly condition.

- G. If an obstruction is of public ownership, the CONTRACTOR shall notify the appropriate agency, and obtain any necessary permit or license forty-eight (48) hours before beginning any operations affecting the obstruction. All work shall conform to the current standards and specifications of that agency and shall be approved by the agency before completion of the project. At the CONTRACTOR'S request, the ENGINEER will furnish information as to what licenses or permits are required.
- H. The CONTRACTOR shall notify all utility companies prior to beginning construction and shall provide an electrical or mechanical device or use such other means he may select, to locate any hidden utility line, oil or gas pipe line, water pipe line, sewer pipe line, telegraph and telephone line or other structures provided for in these specifications and locate such line or structures shown on the plans and any uncharted line or structure whether shown on the plans or not and protect, adjust to grade, disconnect and replace, relocate and replace, remove, provide supports during the construction and settlement of backfill and protect against freezing or unnecessary damage by the elements of existing utility lines, oil or gas pipe lines, water pipe lines, sewer pipe lines, telegraph and telephone lines, railroad right-of-way lines and other structures and shall pay all fees to County, City, State or Federal agencies which may be required in the performance of this work. In the event injury does result to any gas lines, power lines or poles, telephone lines or poles, etc., the CONTRACTOR shall, holding the OWNER entirely blameless, make proper restitution.

12.4 METHOD OF MEASUREMENT

- A. Remove and replace paved driveways, paved parking lots and other paved areas, except sidewalks, shall be measured by the square yard. This area will be derived by multiplying the length along the centerline of the pipe by the standard trench width and converting to square yards, unless otherwise approved by the ENGINEER.
- B. Remove and replace sidewalks shall be measured by the square foot, whereby the area was measured in the same manner as paved driveways in 12.3(B) above.
- C. Gravel and rock driveways, parking lots, and other areas will not be measured for payment, but rather shall be considered incidental to the work.
- D. Temporary materials required for maintenance of traffic through pavement cut locations will not be measured for payment.
- E. Compaction of backfill to 90% Standard Density in driveways, parking lots, etc. will not be measured for payment, and the cost of this work shall be included in other bid items.
- F. Other structures and obstructions shall not be measured for payment, unless shown on the proposal, and the cost of this work shall be included in other bid items.

12.5 BASIS OF PAYMENT

- A. Accepted quantities, measured as provided above will be paid at the contract unit price for:

Pavement repair, HES concrete Sq. Yd.

Pavement repair, asphaltic Sq. Yd.

Sidewalk repair, concrete Sq. Yd.

which shall be full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

PART 13 - STREET AND ALLEY, RIGHT-OF-WAY CROSSINGS

13.1 DESCRIPTION

- A. Work under this item shall consist of backfilling, compacting, and pavement repair, where applicable, of all trenches crossing streets and alleys, dedicated or proposed to be dedicated to the public in accordance with the lines, grades and dimensions shown on the plans or as directed by the ENGINEER.

13.2 MATERIALS AND TESTS

- A. Backfill materials and streets and alleys shall be in accordance with Specification 31 23 33.
- B. Portland Cement Concrete shall be in accordance with 03 30 00. All concrete placed within the right-of-way shall be high-early-strength (HES) cement.
- C. Asphaltic Concrete - Bituminous Pavement shall meet the requirements of Specification 32 12 16.39.
- D. Sampling and Testing - Sampling of materials will be made in accordance with the appropriate methods specified in the corresponding section listed above. Tests will be conducted in accordance with the schedule of tests provided in the special provisions or as shown on the plans.

13.3 CONSTRUCTION

- A. Compaction: The CONTRACTOR shall place the select soil in accordance with Specification 31 23 33.
- B. Pavement Removal: Removal of paved surfaces shall be in accordance with the standard drawings.
- C. Pavement Repair: Concrete and Bituminous Pavement shall be repaired in accordance with the standard drawings and the Standard Specifications for Streets and Alley Construction of the OWNER.

13.4 METHOD OF MEASUREMENT

- A. Compacted backfill in unpaved streets and alleys will be measured by the cubic yard. This volume will be derived by multiplying the length along the centerline of the pipe by the standard trench width and by the average depth of the trench and converting to cubic yards, unless otherwise approved by the ENGINEER.
- B. Compaction of backfill to 95% Standard Density in paved streets and alleys will not be measured for payment, and the cost of this work shall be included in removal and replacement of pavement.
- C. Remove and replace concrete and bituminous pavement will be measured by the square yard. This area will be derived by multiplying the length along the centerline of the pipe by the standard trench width plus 12-inches on each side of the trench and converting to square yards.
- D. Over-breakage (the removal of more paving than is specified in 4.4(C) above) will not be measured for payment but shall be repaired in accordance with these specifications at the expense of the CONTRACTOR.

13.5 BASIS OF PAYMENT

- A. Accepted quantities of the type specified on the proposal, measured as provided above, will be paid for at the contract unit price for:

Remove and replace pavement Sq. Yd.

which shall be full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

PART 14 - PIERS, REINFORCED CONCRETE

14.1 DESCRIPTION

- A. The work under this item shall include all materials, forming, pipe anchorage, construction and finishing of above ground standard reinforced concrete piers and below ground, restraining collar, reinforced concrete piers. Piers shall be located and constructed as shown on the drawings and the attached standard drawings.

14.2 MATERIALS AND TESTS

- A. Materials and testing shall be in accordance with Section 03 30 00.

14.3 CONSTRUCTION

- A. Forms shall be made to conform to the shape of the pier and securely braced. Reinforcing steel shall be bent as detailed and securely tied in place. Bearing area for the pipe shall be made to fit the outside diameter of the pipe and shall support the pipe at the proper grade. Any honeycomb or other unevenness in the concrete shall be patched with cement mortar immediately after form removal. Construction of piers shall be in accordance with Specification 03 30 00.

14.4 METHOD OF PAYMENT

- A. Reinforced concrete piers and restraining collars shall be measured by the number of units constructed. No additional payment will be made for excavation, forming, bracing, dewatering, backfilling, reinforcing steel, or pipe anchorage.

14.5 BASIS OF PAYMENT

- A. Accepted quantities of reinforced concrete piers, measured as provided above, will be paid at the contract unit price for:

Reinforced Concrete Pier, Standard EA.

Reinforced Concrete Pier, Restraining Collar EA.

which shall be full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

PART 15 - FIELD TESTS AND REVISIONS:

15.1 DESCRIPTION

- A. Field tests and revisions of water and sewer mains shall be successfully completed prior to final acceptance. All discrepancies shall be corrected by the CONTRACTOR to make a complete and workable system.

15.2 MATERIALS AND TESTS

- A. Sewer:

1. Alignment: After joints have been inspected and approved and trench backfilled as specified, the ENGINEER shall check alignment between manholes or manhole locations. Any misplaced pipes detected shall be corrected to line and grade at the CONTRACTOR'S expense.
2. Deflection: In accordance with OAC 252:656-5-5(a), CONTRACTOR shall perform deflection tests on all flexible pipe after the final backfill has been in place at least 30 days. Deflection must not exceed 5%. Tests must be run using a rigid ball or mandrel with a diameter equal to 95% of the inside diameter of the pipe, taking into account manufacturing tolerances. Tests must be performed without mechanical pulling devices. Tests must be in accordance with applicable ASTM standards.
3. Line Leakage Test: Leakage tests shall be required for all new construction in accordance with OAC 252:656-5-5(b). The leakage test shall be an exfiltration test, whereby a minimum positive head of two (2) feet shall be exerted on a section of line by plugging the lower end and filling the manhole upstream with water. The leakage outward shall not exceed 10 gallons per inch of pipe diameter per mile per day (10 gallons/inches/miles/day) for any section of the system. If infiltration is observed due to hydrostatic ground water leakage the infiltration shall be reduced so as not to exceed 10 gallons/inches/miles/day. The procedures listed in the Handbook of PVC Pipe, Uni-Bell PVC Pipe Association, 2001 may be used for PVC pipe. Pipe testing must meet the provisions for the applicable ASTM standard

for the test to be used.

4. Manhole Leakage Test: Leakage tests shall be required for all new construction in accordance with OAC 252:656-5-4(g)(7) and shall be performed per ASTM C1244.
5. Where test results, in the opinion of the ENGINEER, indicated construction deficiencies, the CONTRACTOR shall make all effort to locate same and make satisfactory corrections. Infiltration through manhole walls shall be corrected regardless of the results of these tests.

B. Water:

1. Hydrostatic and Leakage Test:
 - a. PVC: Shall be in accordance with AWWA C605 procedures. After the pipe has been laid and backfilled, all newly laid pipe or any valved section thereof shall be subjected to a hydrostatic gauge pressure of 200 psi, for a duration of two hours, said pressure not to vary more than five pounds, except that PVC pipe shall be tested a design working pressure.
 - b. HDPE: Shall be in accordance with AWWA C906 procedures. After the pipe has been laid and backfilled, subject the pipe to a pressure of 1.5 times the design working pressure at the lowest point in the test section is used as the test pressure. Acceptance is found by reducing the test pressure by 10 psi and monitoring the pressure for one hour. If the pressure remains steady – within five percent of the target value – for one hour, leakage is not indicated.
2. Each valved section of pipe shall be slowly filled with water and the specified test pressure, based on the elevation of the lowest point of the line of lowest point of the section under test, and corrected to the elevation of the test gauge shall be applied by means of a test pump connected to the pipe in a manner satisfactory to the ENGINEER. The CONTRACTOR shall make arrangements for metering the amount of water used during the test.
3. The CONTRACTOR shall backfill all pipe and provide all reaction blocking before hydrostatic testing. It shall be the CONTRACTOR'S responsibility to locate and repair any and all leaks that may develop. The ENGINEER may direct the CONTRACTOR to leave certain joints and connections uncovered until testing has been completed.
 - a. Before applying the specified test pressure, all air shall be expelled from the pipe. If hydrants or blow-offs are not available at high places taps at points of highest elevation shall be made before test is made and plugs inserted after the test has been completed. Any cracked or defective pipe, fittings, valves or hydrants discovered in consequence of this pressure test shall be removed and replaced with sound material and the test shall be repeated until satisfactory to the ENGINEER.
 - b. In conjunction with the hydrostatic test, a leakage test shall be conducted as detailed in Section 4 of ANSI/AWWA Specification C-600/605, a portion of which is stated below.
 - c. Leakage shall be defined as the quantity of water that must be supplied into the newly laid pipe, or any valved section thereof, to maintain pressure within

5 psi of the specified test pressure after the air in the pipeline has been expelled and the pipe has been filled with water. No pipe installation will be accepted if the leakage is greater than that determined by the following formula:

$$L = \frac{ND P^{1/2}}{7400}$$

in which "L" is the allowable leakage in gallons per hour; "N" is the number of joints in the length of pipe test; "D" is the nominal diameter of the pipe, in inches; and "P" is the average test pressure during the leakage test, in pounds per square inch gage. Allowable leakage per 1000 ft. of pipeline in gallons per hour at 200 psi for selected pipe diameters is listed below for 18-foot nominal lengths. Leakage tests for PVC pipe shall be at the design working pressure.

Nominal Pipe Diameter (Inches)	Allowable Leakage Per 1000 Feet of Pipeline (GPH)
2	0.22
3	0.33
4	0.44
6	0.65
8	0.87
10	1.09
12	1.31
Nominal Pipe Diameter (Inches)	Allowable Leakage Per 1000 Feet of Pipeline (GPH)
16	1.74
18	1.96
20	2.18
24	2.61
30	3.27
36	3.92
42	4.58
48	5.23
54	5.88

- d. When testing against closed metal-seated valves, an additional leakage per closed valve of 0.0078 gallons/hours/inches of nominal valve size shall be allowed. When hydrants are in the test section, the test shall be made against the closed hydrant. Acceptance shall be determined on the basis of allowable leakage. If any test of pipe laid discloses leakage greater than that specified, the CONTRACTOR shall, at his own expense, locate and repair the defect until the leakage is within the specified allowance. All visible leaks are to be repaired regardless of the amount of leakage.
- e. In accordance with OAC 252:626-19-2 (e), leakage must not exceed 10 gal/inch diameter per mile of pipe per 24 hours at 150 psi testing pressure.
4. Disinfection of Waterlines: All waterlines shall be flushed and disinfected, after testing and before being placed in service, by the methods detailed in AWWA C-601 except as modified herein.
 - a. Chlorine shall be introduced into the main in a liquid solution or as dry gas in a

continuous feed unless otherwise approved by the ENGINEER.

- b. The results of the disinfection procedure shall produce a residual of a minimum of ten parts per million (10 ppm) of chlorine in the portion of the main farthest from the point of application, after a period of twenty-four (24) hours has elapsed, as well as any other portion of the main. Samples shall be taken at location determined by the ENGINEER for tests of residual chlorine.
5. Water and sewer lines shall be constructed at the locations shown on the plans or as directed by the ENGINEER. Planned locations, grades or depths shall be adhered to unless, in the opinion of the ENGINEER, actual field conditions dictate revisions thereof. When the ENGINEER considers it necessary to deviate from planned locations, the CONTRACTOR shall construct said water or sewer lines to new alignment and/or grades established by the ENGINEER or as directed by the ENGINEER, such directions, construction stakes showing alignment and depth of cut, or revised construction plans issued by the ENGINEER.

15.3 BASIS OF PAYMENT

- A. No extra payment will be made for construction to revised locations other than increased or decreased quantities of pipe, fittings, manholes, or other items tabulated on the proposal. No extra payment will be made for additional excavation required by deviations from planned alignment or grades. Leakage tests will not be measured for payment, but the cost shall be included in other bid items. The CONTRACTOR'S bid price for waterlines to include all costs of hydrostatic and leakage test and sterilization as no separate payment will be made for these items.

END OF SECTION 33 11 00



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Memorandum

To: Honorable Mayor and City Council

From: Julie Casteen, Assistant City Manager

Re: Change Order No. 2, The Village Subdivision Water Line Project

Date: November 2, 2023

BACKGROUND

Changes to the materials for the CDBG Water Line Improvements project in the Village Subdivision resulted in an increase of \$12,706.51 to the original contract price.

STAFF RECOMMENDATION

Staff recommends affirmation of the Assistant City Manager's action to approve change order No. 2 related to the Village Subdivision Waterlines.

ATTACHMENTS

Change Order No. 2

CHANGE ORDER

Order No. 2 and FINAL
Date: September 11, 2023
Agreement Date: May 13, 2022
NAME OF PROJECT: CDBG Water Line Improvements - Village Subdivision
OWNER: City of Coweta
CONTRACTOR: Stronghand LLC

The following changes are hereby made to the CONTRACT DOCUMENTS:

Justification:

Additional 6" waterline was necessary on 295th Ave and 294th Ave to meet field conditions and tie into existing customer meters to complete the project. These items were completed using the existing unit price bid amounts in the contract.

295 th Ave:	65 L.F. @ \$55.46/L.F.	\$3,604.90
294 th Ave:	132 L.F. @ \$55.29/L.F.	\$7,298.28
Additional 6" Waterline:		\$10,903.18

Removal and replacement of an ADA ramp and sidewalk panels were unavoidable during construction and did not have an existing unit price bid in the contract. This item was completed as a lump sum addition.

Remove and Replace Sidewalk Panels and ADA Ramp **\$1,803.33**

Total Change Order #2 and FINAL: **\$12,706.51**

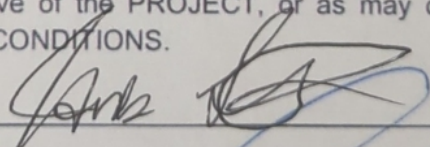
Change to CONTRACT: Increase of \$12,706.51

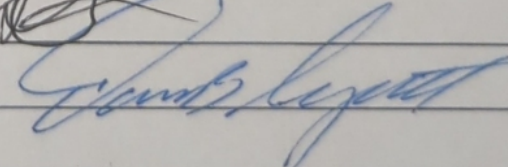
Original CONTRACT PRICE: \$561,538.65

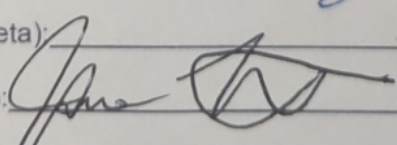
The CONTRACT PRICE including CHANGE ORDER No.1: \$561,498.90

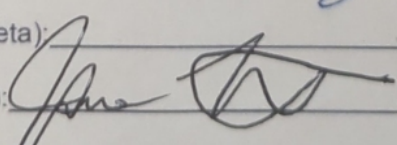
The new CONTRACT PRICE including this CHANGE ORDER will be: **\$574,205.41**

Approvals Required: To be effective this Order must be approved by the Federal agency if it changes the scope or objective of the PROJECT, or as may otherwise be required by the SUPPLEMENTAL GENERAL CONDITIONS.

Requested by (Contractor): 

Recommended by (WDB Engineering PLLC): 

Ordered by (City of Coweta): 

Accepted by (Contractor): 

Federal Agency Approval (where applicable) _____



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Memorandum

To: Honorable Mayor and City Council

From: Julie Casteen, Assistant City Manager

Re: The Village Subdivision Water Line Project Payments

Date: November 2, 2023

BACKGROUND

Pursuant to 62 O.S. §310.1(C), the City of Coweta has adopted purchasing procedures whereby the City Council has authorized the City Manager or authorized designee to approve the payment of invoices. Following this practice, the Assistant City manager approved payments to Stronghand, LLC related to the CDBG Village Subdivision Water Line Improvements project as follows:

- Payment Application No. 4: \$78,159.53 paid 9/19/2023 by check 269856 approved by the City Manager.
- Payment Application No. 5: \$134,031.49 approved by the Assistant City Manager and scheduled for the next Accounts Payable check run on 10/6/23 or before.

The Oklahoma Department of Commerce, the CDBG grant passthrough agency, has requested that the City Council affirm the approval of the payments made to the contractor.

STAFF RECOMMENDATION

Staff recommends affirmation of the City Manager's and Assistant City Manager's actions to approve the payments related to the Village Subdivision Waterline project.

ATTACHMENTS

Payment Application No. 4 and Final Payment Application No. 5.

Contractor's Application for Payment

Received on: 8/23/23 CDB6 Funds: \$39,079.76
P.O. # 23-1624 City match: \$39,079.77
Pay \$ 78,159.53

Owner: City of Coweta Owner's Project No.: 730
Engineer: WDB Engineering Engineer's Project No.: 730
Contractor: Stronghand, LLC Leave Open/Please Close Contractor's Project No.: 730
Project: Coweta Waterline Replacement Signed: [Signature]
Contract: Roger Kolman

Application No.: 4 Application Date: 8/18/2023
Application Period: From 8/4/2023 to 8/18/2023

1. Original Contract Price	\$	561,538.65
2. Net change by Change Orders	\$	10,863.43
3. Current Contract Price (Line 1 + Line 2)	\$	572,402.08
4. Total Work completed and materials stored to date (Sum of Column G Lump Sum Total and Column J Unit Price Total)	\$	463,340.97
5. Retainage		
a. <u>5%</u> X \$ <u>463,340.97</u> Work Completed	\$	23,167.05
b. <u>5%</u> X \$ <u>-</u> Stored Materials	\$	-
c. Total Retainage (Line 5.a + Line 5.b)	\$	23,167.05
6. Amount eligible to date (Line 4 - Line 5.c)	\$	440,173.92
7. Less previous payments (Line 6 from prior application)	\$	362,014.39
8. Amount due this application	\$	78,159.53
9. Balance to finish, including retainage (Line 3 - Line 4)	\$	109,061.11

Contractor's Certification

The undersigned Contractor certifies, to the best of its knowledge, the following:

- (1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment;
- (2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such liens, security interest, or encumbrances); and
- (3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

Contractor: Stronghand LLC

Signature: [Signature] Date: 8/22/2023

Recommended by Engineer

By: [Signature]
Title: Project Engineer
Date: 8/23/23

Approved by Owner

By: _____
Title: _____
Date: _____

Approved by Funding Agency

By: _____
Title: _____
Date: _____

By: _____
Title: _____
Date: _____

Contractor's Application for Payment

Owner's Project No.: _____
 Engineer's Project No.: _____
 Contractor's Project No.: 730

[illegible]

Progress Estimate - Unit Price Work

Owner:	City of Coweta	Contractor's Project No.:	
Engineer:	WD8 Engineering	Engineer's Project No.:	
Contractor:	Stronghand, LLC	Contractor's Project No.:	730
Project:	Coweta Waterline Replacement		
Contract:	Roger Kolman		

Contractor's Application for Payment

Owner's Project No.:	
Engineer's Project No.:	
Contractor's Project No.:	730

Application No.:			4		Application Period:			From		04/20/23		to		07/17/23		Application Date:			08/04/23	
A	B	C	D	E	Contract Information		F	G	H	I	J	K	L							
Bid Item No.	Description	Item Quantity	Units	Unit Price (\$)	Value of Bid Item (C X E)		Estimated Quantity Incorporated in the Work	Work Completed		Materials Currently Stored (not in G)	Work Completed and Materials Stored to Date (H + I) (\$)	% of Value of (I / F) (%)	Balance to Finish (F - J) (\$)							
								Value of Work Completed (E X G)												
Original Contract																				
1	5 297TH E AVE - 8" WATERLINE	2,252.70		48.25	108,692.78	2,252.70	108,692.78				108,692.78	100%								
2	5 297TH E AVE - TRACER WIRE	2252.7		0.28	630.76	2,252.70	630.76				630.76	100%								
3	5 297TH E AVE - 12" X 8" X 12" TEE	1		1,427.83	1,427.83	1.00	1,427.83				1,427.83	100%								
4	5 297TH E AVE - 8" X 8" X 8" TEE	1		991.97	991.97	1.00	991.97				991.97	100%								
5	5 297TH E AVE - 8" X 6" X 8" TEE	10		892.78	8,927.80	10.00	8,927.80				8,927.80	100%								
6	5 297TH E AVE - 12" RW GATE VALVE	1		3,747.70	3,747.70	1.00	3,747.70				3,747.70	100%								
7	5 297TH E AVE - 8" RW GATE VALVE	14		1,992.84	27,899.76	14.00	27,899.76				27,899.76	100%								
8	5 297TH E AVE - 6" RW GATE VALVE	5		1,299.38	6,496.90	5.00	6,496.90				6,496.90	100%								
9	5 297TH E AVE - VALVE BOX	20		284.24	5,684.80	20.00	5,684.80				5,684.80	100%								
10	5 297TH E AVE - 8" SOLID SLEEVE	2		591.16	1,182.32	2.00	1,182.32				1,182.32	100%								
11	5 297TH E AVE - 8" X 90 DEGREE BEND	1		635.03	635.03	1.00	635.03				635.03	100%								
12	5 297TH E AVE - 8" X 45 DEGREE BEND	2		611.42	1,222.84	2.00	1,222.84				1,222.84	100%								
13	5 297TH E AVE - 8" X 22 1/2 DEGREE BEND	4		607.83	2,431.32	4.00	2,431.32				2,431.32	100%								
14	5 297TH E AVE - 3-WAY FIRE HYDRANT	6		4,664.97	27,989.82	6.00	27,989.82				27,989.82	100%								
15	5 297TH E AVE - ASPHALT PAVEMENT CUT/REPLACE	41		589.79	24,181.39							0%	24,181.39							
16	5 297TH E AVE - CONCRETE SIDEWALK CUT/REPLACE																			
17	5 297TH E AVE - CONCRETE DW CUT/REPLACE																			
18	5 297TH E AVE - SAND BACKFILL																			
19	5 297TH E AVE - PRESSURE & LEAKAGE TESTING	1		3,259.56	3,259.56	1.00	3,259.56				3,259.56	100%								
20	5 297TH E AVE - DISINFECTION	1		338.37	338.37	1.00	338.37				338.37	100%								
21	5 297TH E AVE - CUSTOMER METER CONNECTION	13		1,890.90	24,581.70	9.00	17,018.10				17,018.10	69%	7,563.60							
1	5 296TH E AVE - 6" WATERLINE	839.96		56.12	47,138.56	839.96	47,138.56				47,138.56	100%								
2	5 296TH E AVE - TRACER WIRE	839.96		0.28	235.19	839.96	235.19				235.19	100%								
3	5 296TH E AVE - 6" X 6" X 6" TEE	2		744.56	1,489.12	2.00	1,489.12				1,489.12	100%								
4	5 296TH E AVE - 6" RW GATE VALVE	3		1,241.84	3,725.52	3.00	3,725.52				3,725.52	100%								
5	5 296TH E AVE - VALVE BOX	3		284.14	852.42	3.00	852.42				852.42	100%								
6	5 296TH E AVE - 6" CAP	1		348.47	348.47	1.00	348.47				348.47	100%								
7	5 296TH E AVE - 3-WAY FIRE HYDRANT	2		5,366.91	10,733.82	2.00	10,733.82				10,733.82	100%								
8	5 296TH E AVE - CONCRETE DW CUT/REPLACE																			
9	5 296TH E AVE - SAND BACKFILL																			
10	5 296TH E AVE - 30" RCP																			
11	5 296TH E AVE - 15" RCP W/HANDWALLS																			
12	5 296TH E AVE - 10" RCP																			
13	5 296TH E AVE - 12" RCP																			
14	5 296TH E AVE - 12" CMP																			
15	5 296TH E AVE - CUSTOMER METER CONNECTION	20.00		1,840.79	36,815.80	20.00	36,815.80				36,815.80	100%								
1	5 295TH E AVE - 6" WATERLINE	836.86		55.46	46,412.26	836.86	46,412.26				46,412.26	100%								
2	5 295TH E AVE - TRACER WIRE	836.86		0.28	234.32	836.86	234.32				234.32	100%								
3	5 295TH E AVE - 6" X 6" X 6" TEE	2.00		744.56	1,489.12	2.00	1,489.12				1,489.12	100%								
4	5 295TH E AVE - 6" RW GATE VALVE	3.00		1,299.17	3,897.51	3.00	3,897.51				3,897.51	100%								
5	5 295TH E AVE - VALVE BOX	3.00		284.14	852.42	3.00	852.42				852.42	100%								
6	5 295TH E AVE - 6" CAP	1.00		348.47	348.47	1.00	348.47				348.47	100%								
7	5 295TH E AVE - 3-WAY FIRE HYDRANT	2.00		5,366.91	10,733.82	2.00	10,733.82				10,733.82	100%								
8	5 295TH E AVE - CONCRETE DW CUT/REPLACE																			
9	5 295TH E AVE - SAND BACKFILL																			
10	5 295TH E AVE - 12" RCP																			
11	5 295TH E AVE - CUSTOMER METER CONNECTION	22.00		1,840.86	40,498.92	2.00	3,681.72				3,681.72	9%	36,817.20							
1	5 294TH E AVE - 6" WATERLINE	838.36		55.29	46,352.92	838.36	46,352.92				46,352.92	100%								
2	5 294TH E AVE - TRACER WIRE	838.36		0.28	234.74	838.36	234.74				234.74	100%								
3	5 294TH E AVE - 6" X 6" X 6" TEE	2.00		744.56	1,489.12	2.00	1,489.12				1,489.12	100%								
4	5 294TH E AVE - 6" RW GATE VALVE	3.00		1,299.17	3,897.51	3.00	3,897.51				3,897.51	100%								
5	5 294TH E AVE - VALVE BOX	3.00		284.14	852.42	3.00	852.42				852.42	100%								

Contractor's Application for Payment

Owner's Project No.:	
Engineer's Project No.:	
Contractor's Project No.:	730

[illegible]

Contractor's Application for Payment

Owner's Project No.:	
Engineer's Project No.:	
Contractor's Project No.:	730

Application Date: 08/18/23

[illegible]

CLAIM OR INVOICE AFFIDAVIT

STATE OF OKLAHOMA)
) ss.
 COUNTY OF Tulsa)

The undersigned Chris Byrne, of lawful age, being first duly sworn upon oath, states that this invoice is true and correct. Affiant further states that the work, services or materials, as shown by this invoice, have been completed or supplied in accordance with the plans, specifications, orders or requests furnished to the Affiant. Affiant further states that (s)he has not paid, given or donated or agree to pay, give or donate, either directly or indirectly, to any elected official, officer or employee of the State of Oklahoma any money or any other thing of value to obtain payment or the award of this contract.

Chris Byrne

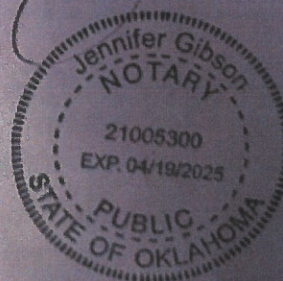
Affiant (Engineer or other Supervisory Official)

Subscribed and sworn to before me this 22nd day of August, 2023.

Jennifer Gibson
 Notary Public

My Commission Expires:

4/19/2025



Subcontractor Partial Lien Release

DATE 8/22/2023

CONTRACTOR/SUPPLIER
Stronghand LLC

PROJECT Coweta: Waterline Replacement

Proposed Price: \$	\$561,538.65
Approved Change Orders (+ or -): \$	\$10,863.43
Revised Contract Amount: \$	\$572,402.08
Value of Work Performed to Date: \$	\$463,340.97
Value of Material Stored to Date: \$	\$0.00
TOTAL Work Completed and Materials Stored to date: \$	\$463,340.97
Less: 5% Retainage (stored materials): \$	\$0.00
Less: 5% Retainage (completed work): \$	\$23,167.05
Amount Paid to Date: \$	\$362,014.39
Balance Due This Request: \$	\$78,159.53

The undersigned hereby certifies that the amounts Earned and Due the undersigned from Stronghand LLC., for all material and supplies furnished, and labor and service of every nature performed by the undersigned for use on or in connection with the above named Project:

1. Has been paid in full (except amount due as listed above) through the above mentioned date, and;
2. The undersigned hereby warrants that the premises of the above job cannot be made subject to any valid lien or claim by anyone who furnished material, supplies, labor, or services to the undersigned for use in the above named Project, and;
3. The undersigned hereby waves any and all claims whatsoever kind or nature against the above mentioned Owner and Contractor, the building(s) improvements or Project, the land on which same is located for any labor, materials, or supplies furnished or services performed through the above mentioned date.

This release is given in order to induce payment in the amount above upon completion of proposed work, and upon receipt of the amount due, this release is recorded, becomes valid, enforceable, and in full effect.

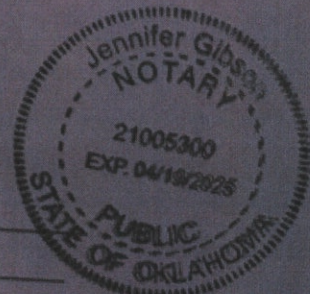
Executed this 22nd day of August, 2023
State of Oklahoma County of Tulsa

By: Jim Lucht

Title: Project Manager

Contractor/Supplier: Stronghand, LLC

Subscribed and sworn before me this 22nd day of August, 2023
State of Oklahoma County of Tulsa
Notary Public Jennifer Gibson Commission Expires 4/19/2025



CDBG Funds: \$67,015.74
City Match: \$ \$67,015.75

Received on: 9/20/2023
P.O. # 24-0624
Pay \$ \$134,031.49

Contractor's Application for Payment

Owner: <u>City of Coweta</u>	Owner's Project No.: <u>Leave Open / Please Close</u>
Engineer: <u>WDB Engineering</u>	Engineer's Project No.: _____
Contractor: <u>Stronghand, LLC</u>	Contractor's Project No.: <u>730</u>
Project: <u>Coweta Waterline Replacement</u>	Signed: <u>Julie Casteen</u>
Contract: <u>Roger Kolman</u>	
Application No.: <u>5 - Final</u>	Application Date: <u>9/7/2023</u>
Application Period: <u>From</u> <u>8/18/2023</u> <u>to</u> <u>9/7/2023</u>	

1. Original Contract Price	\$ 561,538.65
2. Net change by Change Orders	\$ 12,666.76
3. Current Contract Price (Line 1 + Line 2)	\$ 574,205.41
4. Total Work completed and materials stored to date (Sum of Column G Lump Sum Total and Column J Unit Price Total)	\$ 574,205.41
5. Retainage	
a. <u>0%</u> X <u>\$ 574,205.41</u> Work Completed	\$ -
b. <u>0%</u> X <u>\$ -</u> Stored Materials	\$ -
c. Total Retainage (Line 5.a + Line 5.b)	\$ -
6. Amount eligible to date (Line 4 - Line 5.c)	\$ 574,205.41
7. Less previous payments (Line 6 from prior application)	\$ 440,173.92
8. Amount due this application	\$ 134,031.49
9. Balance to finish, including retainage (Line 3 - Line 4)	\$ -

Contractor's Certification

The undersigned Contractor certifies, to the best of its knowledge, the following:

- (1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment;
- (2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such liens, security interest, or encumbrances); and
- (3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

Contractor: Stronghand LLC

Signature: Jim Lucht Digitally signed by Jim Lucht
DN: cn=Jim Lucht, email=jim.lucht@stronghand.com, o=Stronghand, LLC, ou=Project
Manager, date=2023.09.19 16:00:27 -0500 **Date:** 9/5/2023

Recommended by Engineer

By: Maggie Wyatt
Title: project engineer
Date: 9/13/23

Approved by Funding Agency

By: _____
Title: _____
Date: _____

Approved by Owner

By: _____
Title: _____
Date: _____

By: _____
Title: _____
Date: _____

Progress Estimate - Unit Price Work

Owner:	City of Coweta	Contractor's Application for Payment
Engineer:	WDB Engineering	Owner's Project No.:
Contractor:	Stronghand, LLC	Engineer's Project No.:
Project:	Coweta Waterline Replacement	Contractor's Project No.: 730
Contract:	Roger Kolman	

Application No.: 5 - Final			Application Period: From 08/18/23 to 09/07/23			Application Date: 09/07/23						
A	B	C	D	E	F	G	H	I	J	K	L	
Bid Item No.	Description	Contract Information				Value of Bid Item (C X E)	Work Completed		Materials Currently Stored (not in G)	Work Completed and Materials Stored to Date (H + I)	% of Value of Item (J / F) (%)	Balance to Finish (F - J) (\$)
		Item Quantity	Units	Unit Price (\$)	Estimated Quantity Incorporated in the Work		Value of Work Completed to Date (E X G) (\$)					
Original Contract												
1	S 297TH E AVE - 8" WATERLINE	2,252.70		48.25	108,692.78	2,252.70	108,692.78		108,692.78	100%	-	
2	S 297TH E AVE - TRACER WIRE	2252.7		0.28	630.76	2,252.70	630.76		630.76	100%	-	
3	S 297TH E AVE - 12" X 8" X 12" TEE	1		1,427.83	1,427.83	1.00	1,427.83		1,427.83	100%	-	
4	S 297TH E AVE - 8" X 8" X 8" TEE	1		991.97	991.97	1.00	991.97		991.97	100%	-	
5	S 297TH E AVE - 8" X 6" X 8" TEE	10		892.78	8,927.80	10.00	8,927.80		8,927.80	100%	-	
6	S 297TH E AVE - 12" RW GATE VALVE	1		3,747.70	3,747.70	1.00	3,747.70		3,747.70	100%	-	
7	S 297TH E AVE - 8" RW GATE VALVE	14		1,992.84	27,899.76	14.00	27,899.76		27,899.76	100%	-	
8	S 297TH E AVE - 6" RW GATE VALVE	5		1,299.38	6,496.90	5.00	6,496.90		6,496.90	100%	-	
9	S 297TH E AVE - VALVE BOX	20		284.24	5,684.80	20.00	5,684.80		5,684.80	100%	-	
10	S 297TH E AVE - 8" SOLID SLEEVE	2		591.16	1,182.32	2.00	1,182.32		1,182.32	100%	-	
11	S 297TH E AVE - 8" X 90 DEGREE BEND	1		635.03	635.03	1.00	635.03		635.03	100%	-	
12	S 297TH E AVE - 8" X 45 DEGREE BEND	2		611.42	1,222.84	2.00	1,222.84		1,222.84	100%	-	
13	S 297TH E AVE - 8" X 22 1/2 DEGREE BEND	4		607.83	2,431.32	4.00	2,431.32		2,431.32	100%	-	
14	S 297TH E AVE - 3-WAY FIRE HYDRANT	6		4,664.97	27,989.82	6.00	27,989.82		27,989.82	100%	-	
15	S 297TH E AVE - ASPHALT PAVEMENT CUT/REPLACE	41		589.79	24,181.39	41.00	24,181.39		24,181.39	100%	-	
16	S 297TH E AVE - CONCRETE SIDEWALK CUT/REPLACE				-		-		-	-	-	
17	S 297TH E AVE - CONCRETE DW CUT/REPLACE				-		-		-	-	-	
18	S 297TH E AVE - SAND BACKFILL				-		-		-	-	-	
19	S 297TH E AVE - PRESSURE & LEAKAGE TESTING	1		3,259.56	3,259.56	1.00	3,259.56		3,259.56	100%	-	
20	S 297TH E AVE - DISINFECTION	1		338.37	338.37	1.00	338.37		338.37	100%	-	
21	S 297TH E AVE - CUSTOMER METER CONNECTION	13		1,890.90	24,581.70	13.00	24,581.70		24,581.70	100%	-	
1	S 296TH E AVE - 6" WATERLINE	839.96		56.12	47,138.56	839.96	47,138.56		47,138.56	100%	-	
2	S 296TH E AVE - TRACER WIRE	839.96		0.28	235.19	839.96	235.19		235.19	100%	-	
3	S 296TH E AVE - 6" X 6" X 6" TEE	2.00		744.56	1,489.12	2.00	1,489.12		1,489.12	100%	-	
4	S 296TH E AVE - 6" RW GATE VALVE	3.00		1,241.84	3,725.52	3.00	3,725.52		3,725.52	100%	-	
5	S 296TH E AVE - VALVE BOX	3.00		284.14	852.42	3.00	852.42		852.42	100%	-	
6	S 296TH E AVE - 6" CAP	1.00		348.47	348.47	1.00	348.47		348.47	100%	-	
7	S 296TH E AVE - 3-WAY FIRE HYDRANT	2.00		5,366.91	10,733.82	2.00	10,733.82		10,733.82	100%	-	
8	S 296TH E AVE - CONCRETE DW CUT/REPLACE				-		-		-	-	-	
9	S 296TH E AVE - SAND BACKFILL				-		-		-	-	-	
10	S 296TH E AVE - 30" RCP				-		-		-	-	-	
11	S 296TH E AVE - 15" RCP W/HANDWALLS				-		-		-	-	-	
12	S 296TH E AVE - 10" RCP				-		-		-	-	-	
13	S 296TH E AVE - 12" RCP				-		-		-	-	-	
14	S 296TH E AVE - 12" CMP				-		-		-	-	-	
15	S 296TH E AVE - CUSTOMER METER CONNECTION	20.00		1,840.79	36,815.80	20.00	36,815.80		36,815.80	100%	-	
1	S 295TH E AVE - 6" WATERLINE	836.86		55.46	46,412.26	836.86	46,412.26		46,412.26	100%	-	
2	S 295TH E AVE - TRACER WIRE	836.86		0.28	234.32	836.86	234.32		234.32	100%	-	
3	S 295TH E AVE - 6" X 6" X 6" TEE	2.00		744.56	1,489.12	2.00	1,489.12		1,489.12	100%	-	

Contractor's Application for Payment

Owner's Project No.:	
Engineer's Project No.:	
Contractor's Project No.:	730

[illegible]

Progress Estimate - Unit Price Work

Contractor's Application for Payment

Owner:	City of Coweta	Owner's Project No.:	
Engineer:	WOB Engineering	Engineer's Project No.:	
Contractor:	Stronghand, LLC	Contractor's Project No.:	730
Project:	Coweta Waterline Replacement		
Contract:	Roger Kolman		

Application No.:	5 - Final	Application Period:	From 08/18/23 to 09/07/23	Application Date:	09/07/23
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[illegible]



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Memorandum

To: Honorable Mayor and City Council

From: Julie Casteen, Assistant City Manager

Re: Village Subdivision Waterline Project Closeout

Date: November 2, 2023

BACKGROUND

The Village Subdivision Waterline Project was recently inspected by City staff and the City Engineer (WDB Engineering). The improvements have been constructed according to the approved plans and specifications. The work was constructed at a final cost of \$574,205.41, with \$299,999.00 to be reimbursed with CDBG grant funds.

Staff is in possession of the required one-year maintenance bond for the construction cost. The City will assume maintenance of the improvements upon expiration of the one-year period once the improvements have been accepted by the Coweta City Council.

STAFF RECOMMENDATION

Staff recommends acceptance of the Village Subdivision waterline improvements completed by Stronghand, Inc. through the adoption of Resolution 2023-37.

ATTACHMENTS

Resolution 2023-37
Maintenance bond

**CITY OF COWETA, OKLAHOMA
RESOLUTION 2023-37**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COWETA, OKLAHOMA,
ACCEPTING THE COMPLETED CDBG VILLAGE SUBDIVISION WATER LINE
REPLACEMENT PROJECT (#18229 CDBG 21).**

WHEREAS, the City of Coweta, Oklahoma received a Community Development Block Grant (CDBG) grant to complete a Water Line Replacement project located in the City; and

WHEREAS, the City selected Stronghand, LLC. to complete the work and related improvements; and

WHEREAS, the CDBG grant also included funds for the administration of the grant for which the City contracted with INCOG for administrative services; and

WHEREAS, upon completion of the Waterline Replacement project and the related site improvements, the project was inspected and approved by WDB Engineering; and

WHEREAS, the City is in possession of the required one-year maintenance bond and is prepared to assume maintenance of the improvements upon expiration of the one-year period; and

WHEREAS, a CDBG Closeout Public Hearing was held on October 2, 2023 to receive citizen comments.

NOW THEREFORE BE IT RESOLVED BY THE COWETA CITY COUNCIL that:

SECTION 1. The City Council of the City of Coweta moves to accept the improvements that were completed in the Village Subdivision for the Waterlines Improvement project #18229 CDBG 21 and has made/authorizes final payment to Stronghand, LLC, and INCOG.

SECTION 2. The Mayor is authorized to sign all documents related to the closeout of the grant, and may authorize a designee to sign on her behalf.

PASSED BY THE CITY COUNCIL FOR THE CITY OF COWETA, OKLAHOMA, and signed by the Mayor this 6th Day of November, 2023.

Naomi Hogue, Mayor

Attest:

Approved as to form:

Marcy Kilgore, City Clerk

Jeff Stephens, City Attorney

MAINTENANCE BOND
(Defect Bond)

Bond No. GM224409

Stronghand, LLC, as Principal, and Great Midwest Insurance Company, a corporation organized under the laws of the State of Texas and authorized to transact business in the State of Oklahoma, as Surety, are held and firmly bound unto City of Coweta, in the penal sum of Five Hundred Sixty-One Thousand Five Hundred Thirty-Eight and 65/100 Dollars (\$ 561,538.65) in lawful money of the United States of America, said sum being equal to one hundred percent (100%) of the contract price, for payment of which, well and truly to be made, we bind ourselves and each of us, our heirs, executors, administrators, trustees, successors and assigns, jointly and severally, firmly by these presents.

The condition of this obligation is such that, whereas said Principal entered into a written contract with City of Coweta dated May 13th, 2022, for CDBG Waterline Improvements - Village Subdivision all in compliance with the plans and specifications therefor, made a part of said contract and on file in the office of City of Coweta: 310 S. Broadway, Coweta OK 74429;

NOW, THEREFORE, if said Principal shall pay or cause to be paid to City of Coweta all damage, loss and expense which may result by reason of defective materials and/or workmanship in connection with said work occurring within a period of one (1) year from and after the acceptance of said project by City of Coweta, then this obligation shall be null and void, otherwise to be and remain in full force and effect.

It is further expressly agreed and understood by the parties that no changes or alterations in said contract and no deviations from the plan or mode of procedures herein fixed shall have the effect of releasing the sureties, or any of them, from the obligations of this Bond.

IN WITNESS WHEREOF, the said Principal has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its duly-authorized officers and the said Surety has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its Attorney-In-Fact, duly authorized so to do, the day and year set forth below.

DATED this 13th day of May, 2022.

PRINCIPAL:

Stronghand, LLCBy: [Signature]

ATTEST:

[Signature]
Bridget Truxillo, Witness

SURETY:

Great Midwest Insurance CompanyBy: [Signature]Attorney-In-Fact
Sean McCauley, Jr., Attorney-in-Fact

POWER OF ATTORNEY
Great Midwest Insurance Company

KNOW ALL MEN BY THESE PRESENTS, that **GREAT MIDWEST INSURANCE COMPANY**, a Texas Corporation, with its principal office in Houston, TX, does hereby constitute and appoint:

Sean McCauley, Jr., Claudia Nuñez, Benjamin K. Farley, Sam Duckett, Katie Rooney, Jeff Scott, Bridget Truxillo

its true and lawful Attorney(s)-In-Fact to make, execute, seal and deliver for, and on its behalf as surety, any and all bonds, undertakings or other writings obligatory in nature of a bond.

This authority is made under and by the authority of a resolution which was passed by the Board of Directors of **GREAT MIDWEST INSURANCE COMPANY**, on the 1st day of October, 2018 as follows:

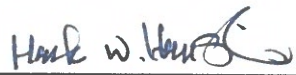
Resolved, that the President, or any officer, be and hereby is, authorized to appoint and empower any representative of the Company or other person or persons as Attorney-In-Fact to execute on behalf of the Company any bonds, undertakings, policies, contracts of indemnity or other writings obligatory in nature of a bond not to exceed Ten Million dollars (\$10,000,000.00), which the Company might execute through its duly elected officers, and affix the seal of the Company thereto. Any said execution of such documents by an Attorney-In-Fact shall be as binding upon the Company as if they had been duly executed and acknowledged by the regularly elected officers of the Company. Any Attorney-In-Fact, so appointed, may be removed in the Company's sole discretion and the authority so granted may be revoked as specified in the Power of Attorney.

Resolved, that the signature of the President and the seal of the Company may be affixed by facsimile on any power of attorney granted, and the signature of the Secretary, and the seal of the Company may be affixed by facsimile to any certificate of any such power and any such power or certificate bearing such facsimile signature and seal shall be valid and binding on the Company. Any such power so executed and sealed and certificate so executed and sealed shall, with respect to any bond of undertaking to which it is attached, continue to be valid and binding on the Company.

IN WITNESS THEREOF, **GREAT MIDWEST INSURANCE COMPANY**, has caused this instrument to be signed by its President, and its Corporate Seal to be affixed this 11th day of February, 2021.

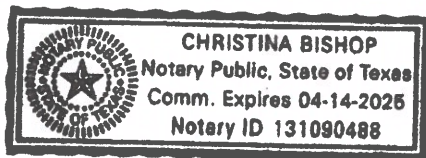


GREAT MIDWEST INSURANCE COMPANY

BY 
Mark W. Haushill
President

ACKNOWLEDGEMENT

On this 11th day of February, 2021, before me, personally came Mark W. Haushill to me known, who being duly sworn, did depose and say that he is the President of **GREAT MIDWEST INSURANCE COMPANY**, the corporation described in and which executed the above instrument; that he executed said instrument on behalf of the corporation by authority of his office under the By-laws of said corporation.



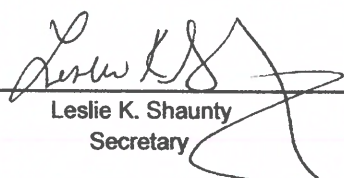
BY 
Christina Bishop
Notary Public

CERTIFICATE

I, the undersigned, Secretary of **GREAT MIDWEST INSURANCE COMPANY**, A Texas Insurance Company, DO HEREBY CERTIFY that the original Power of Attorney of which the foregoing is a true and correct copy, is in full force and effect and has not been revoked and the resolutions as set forth are now in force.

Signed and Sealed at Houston, TX this 13th Day of May, 20 22.



BY 
Leslie K. Shaunty
Secretary

"WARNING: Any person who knowingly and with intent to defraud any insurance company or other person, files and application for insurance of claim containing any materially false information, or conceals for the purpose of misleading, information concerning any fact material thereto, commits a fraudulent insurance act, which is a crime and subjects such person to criminal and civil penalties.



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Mé morandum

To: Honorable Mayor and City Council
From: Chief of Police, Michael Bell
Re: Purchase of 1 Police Service Dog (PSD)
Date: 10/23/2023

BACKGROUND

Coweta Police Department is requesting the purchase of 1 Police Service Dog.

BENEFITS

Ensures officers have available resources to combat illicit drugs and to supplement patrol efforts throughout the city.

COSTS

The cost to purchase this fully trained police service dog is \$ 16,000.00 including basic training equipment for the dog and handler, food for the dog, a 6-week handler course, and logging during training. The budget line-item number for this purchase is 12-5404-007.

STAFF RECOMMENDATION

The staff recommends the council approve the purchase of 1 Police Service Dog.

ATTACHMENTS

Quote from Shallow Creek Kennels Inc.
Purchase Order

Shallow Creek Kennels, Inc.

6572 Seneca Road
Sharpsville, PA 16150

Quote

Date	Estimate #
8/15/2023	6585

Name / Address
Coweta Police Department 212 N Broadway Coweta, OK 74429

Description	Qty	Rate	Total
Dual Purpose Narcotics/Patrol K9 with 6 Week Handler Course at Shallow Creek Kennels, Inc. Includes: All Manuals and Handouts, Leather Work Lead, Leather Waist Lead, Leather Collar, Tracking Harness. Herm Springer Fur Saver or Choke Chain and Prong Collar. 15ft Nylon Tracking Line. 500 Series Vari Kennel. Coat Rake, Bende Ball or Tug Rewards. 37.5 lb Bag of Purina ProPlan Sport Dog Food. Lodging available at no additional cost to the first 24 students registered to each class. N.A.P.W.D.A. Certification Upon Successful Completion of Class..Must Be a Member in Good Standing.		16,000.00	16,000.00
Thank you, Any questions; 1-724-646-1895		Total	\$16,000.00

**This Quote reflects a 3.5% cash discount. If payment via CC is preferred please email Shallowcreekk9@gmail.com or phone 724-646-1895 and we will adjust the quote.



Single and Dual Purpose K9 Courses

2024 Class Schedule

Spring Class #157

Trainers: February 5th thru April 26th, 2024.

Handlers: March 18th thru April 26th, 2024.

4 Week Handlers: March 18th thru April 12th, 2024

2 Week Handlers: April 15th thru April 26th 2024.

Summer Class #158

Trainers: May 6th thru July 26th, 2024.

Handlers: June 17th thru July 26th, 2024.

4 Week Handlers: June 17th thru July 12th, 2024

2 Week Handler: July 15th thru July 26th, 2024.

Fall Class #159

Trainers: August 5th thru October 25th, 2024.

Handlers: September 26th thru October 25th, 2024.

4 Week Handlers: September 26th thru October 11th, 2024

2 Week Handler: October 24th thru October 25th 2024.

Winter Class #160

Trainers: November 4th, 2024 thru January 24th, 2025.

Handlers: December 16th, 2024 thru January 24th, 2025.

4 Week Handlers: December 16th thru January 10th, 2025

2 Week Handler: January 13th thru January 24th, 2025.



REQUEST FOR PURCHASE ORDER PO: _____

(office use only)

DATE: 10/23/2023

PERSON COMPLETING THE REQUEST: R. Peterson

DEPARTMENT: PD (CD = Community Development; CH = City Hall; FD = Fire; PD = Police; PWA = Public Works; LIB = Library)

PROJECT: Police K-9 for the Coweta Police Department

VENDOR NAME: Shallow Creek Kennels, Inc

VENDOR BILLING ADDRESS: 6572 Seneca Road Sharpsville, PA 16150

VENDOR PHONE: 1-724-646-1895

DESCRIPTION*:

Purchase a K-9 with 6 weeks Handler Course that includes all manuals and handouts, leather work lead, leather waist lead, leather collar, tracking harness, 15ft Nylon tracking line and lodging during the handler course.

*IF FOR VEHICLE, PROVIDE UNIT NUMBER: _____

ACCOUNT/PRICE (INCLUDE SHIPPING CHARGES) For more than 5 accounts please attach a list with amount total

FUND: 12 ACCT#: 5404 DEPT: 007 \$ AMOUNT: \$ 16,000.00

FUND: _____ ACCT#: _____ DEPT: _____ \$ AMOUNT: _____

FUND: _____ ACCT#: _____ DEPT: _____ \$ AMOUNT: _____

FUND: _____ ACCT#: _____ DEPT: _____ \$ AMOUNT: _____

FUND: _____ ACCT#: _____ DEPT: _____ \$ AMOUNT: _____

TOTAL \$ AMOUNT OF REQUISITION: \$ 16,000.00

DATE APPROVED BY COUNCIL/TRUSTEES: _____

SIGNATURE (DEPT HEAD)

SIGNATURE (CITY/TRUST MANAGER)

- Purchases totaling up to **\$500.00** require approval by the department head – email **PO Request to Purchasing@cityofcoweta-ok.gov**
- Purchases totaling \$500.01 to \$15,000 require approval by the City/Trust Manager – email PO request to **rkolman@cityofcoweta-ok.gov**
- Purchases totaling more than \$15,000 require approval by the City Council/Trustees – email PO request to **rkolman@cityofcoweta-ok.gov**

Include any estimates or invoices with your request

VANCE COUNTRY FORD

FLEET & GOVERNMENT SALES
PO BOX 1600, GUTHRIE, OK 73044
405-282-3800
Ok Vendor #0000075466



QUOTE

DATE	10/24/2023
QUOTE NUMBER	000Q12526
EXPIRATION DATE	10/31/2023
SHIP VIA	Factory Order
TERMS	SW035 - STATE CONTRACT

SOLD TO:

SHIP TO:

City of Coweta Fire Dept

City of Coweta Fire Dept

Any Questions? Call 405-282-3800

Brian Woodward
PO BOX 850
Coweta, OK 74429
(918)279-7238

Brian Woodward
PO BOX 850
Coweta, OK 74429
(918)279-7238

Shauna Ford

shauna@vancefleet.com

Qty	OPTION	Description	Unit Price	Ext. Price
1	W1L	2024 FORD F150 CREW CAB, 5.5' BED	\$41,014.00	\$41,014.00
1	4WD	4 WHEEL DRIVE	\$3,880.00	\$3,880.00
1	103A	XL HIGH EQUIPMENT GROUP - CHROME BUMPERS - LED FOG LAMPS - REAR WINDOW FIXED PRIVACY GLASS w/ DEFROSTER - WHEELS: 17" SILVER PAINTED ALUMINUM	\$960.00	\$960.00
1	995	ENGINE: 5.0L V8	\$0.00	\$0.00
1	44G	TRANSMISSION: 10 SPEED AUTOMATIC	\$0.00	\$0.00
1	XL3	ELECTRONIC LOCKING w/ 3.31 AXLE RATIO	\$570.00	\$570.00
1	ATT	TIRES: 265/70R17 BSW ALL TERRAIN	\$295.00	\$295.00
1	SYNC	SYNC 4 w/ BLUETOOTH CONNECTIVITY	\$0.00	\$0.00
1	GVWR	GVWR: 7,050 LBS PAYLOAD PACKAGE	\$0.00	\$0.00
1	942	DAYTIME RUNNING LIGHTS (NON-CONTROLLABLE)	\$50.00	\$50.00
1	18B	BLACK PLATFORM RUNNING BOARDS	\$250.00	\$250.00
1	HITCH	CLASS IV HITCH w/ TRAILER WIRING HARNESS	\$0.00	\$0.00
1	CS	INTERIOR: MEDIUM DARK SLATE CLOTH 40/20/40	\$0.00	\$0.00
1	E4	EXTERIOR: VERMILLION RED	\$633.60	\$633.60
SubTotal:				\$47,652.60

Accepted By: _____

Terms:

THIS QUOTE DOES NOT GUARANTEE THE FACTORY WILL BUILD THE VEHICLE.

- 1) TAG & TAXES ARE NOT INCLUDED UNLESS ITEMIZED ON QUOTE
- 2) ALL REBATES & INCENTIVES HAVE BEEN INCLUDED IN TOTAL PRICE.
- 3) PURCHASE ORDER REQUIRED TO ORDER VEHICLE

SUB-TOTAL	\$47,652.60
	\$0.00
TOTAL DUE	\$47,652.60



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Memorandum

To: Honorable Mayor and City Council

From: Brian Woodward, Interim Fire Chief

Re: 2024 F-150 Purchase

Date: October 24, 2023

BACKGROUND

The Coweta Fire Department's Fire Chief is currently assigned a 2014 Chevy Tahoe. Firefighters are 14% more likely of being diagnosed with cancer. Currently, the Fire Chief is assigned structural firefighting gear that is stored inside a Chevy Tahoe. Studies have proven that storing the firefighting gear inside of any vehicle further increases chances of being diagnosed with cancer. Purchasing a truck will allow the firefighting gear to be stored in a covered bed area to limit the increased chances of cancer. Fire Administration is asking for approval to purchase this new vehicle. The purchase (\$47,652.60) has been budgeted in account 12-5403-009 for this FY.

STAFF RECOMMENDATION

Staff recommends a motion to approve the purchase of \$47,652.60.

CONTRACT FOR PROFESSIONAL SERVICES

Public Relations Consultation Services
Crossroads Communications, LLC

This Contract (“Contract”) for Public Relations Consultation Services is made and entered into as of the 1st day of Nov 2023 by and between the **City of Coweta** (“City”), an Oklahoma municipal corporation, and **Crossroads Communications, LLC** (“Consultant”).

This Contract shall be in effect as of the 1st day of Nov 2023 and shall be in effect through the 30th day of June 2024. The Contract Term may be extended or renewed by written mutual agreement of both parties.

WHEREAS, the Consultant offers specialized services for which the Consultant is a uniquely and discretely qualified source, to wit: municipal-focused public relations and marketing strategy, communication, planning, and implementation; crisis communications and Public Information Officer (PIO) services; social media and citizen-outreach communications management and execution; successful business attraction projects in numerous Oklahoma communities; providing expert support for economic development efforts; and in-depth research through public and private industry-leading sources to support data assessments and add strength and credibility to its recommendations; and

WHEREAS, the City desires to enter into a Contract with the Consultant for the purposes set forth below.

NOW THEREFORE, the City and the Consultant do mutually agree as follows:

I. Scope of Services

A. Objectives of Contract/Performance Criteria

The objectives of the contractual relationship between City and Consultant are to: manage the City’s public image through public relations; provide consultation regarding community outreach and communication; improve the community environment through public communication across multiple channels; improve the retail environment by providing support, information, advice, assistance and publicity for existing or potential businesses/developers/retailers in the City. Consultant will serve as a resource for public relations advice and project management/execution for the City, as a marketing and advertising advisor and resource for City staff.

B. Public Relations

1. Manage public relations efforts for the City, including writing for the media, distribution, coordination efforts, utilizing media contacts, and event planning within reasonable limitations;

2. As necessary, serve as City spokesperson and media coordinator for interviews, information, and other necessary media contact; write, create graphics, and execute social media;
3. Build content and graphics for the city newsletter “Coweta Connections” to be published approximately 4 times per year (every three months); prepare print files and coordinate with city’s chosen vendor as necessary.
4. Execute “Coweta Connections Online videos” on periodic basis as needs and communication plans dictate with the general expectation of 6 videos produced in any 12-month period, to be pro-rated if contract covers less than a 12-month period (videos to be produced in offsetting months without a city newsletter as much as possible).
5. Work with City staff to identify, write and share potential positive stories to build community image and engagement; and
6. Serve as crisis communications point person when necessary or advisable.
7. Advise and assist the City pertaining to any aspect of communications planning, community or public relations where City has a need and Consultant has applicable knowledge or experience.
8. Serve as PIO for City departments, including Police, Fire, and Public Works as necessary.

D. Other

The foregoing scope of services is exemplary only and Consultant may be called upon to perform such other tasks as are reasonably consistent with, and will best facilitate achievement of, the stated Objectives.

E. Acknowledgement of Disclaimer and Representation of Good Faith

1. Although Consultant expects to complete successfully the Objectives identified in subsection A. of this section, City acknowledges and agrees it is impossible to guarantee any level of investment (or any investment at all) because market conditions, retailers’ business plans, City policies and other market drivers are subject to change at any time and are beyond the control of Consultant. City acknowledges that Consultant expressly disclaims all warranties, either express or implied, with respect to general or specific results from services delivered.
2. In no event shall Consultant be liable for any damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information, internal expenses or opportunity costs, consequential damages, or other pecuniary loss) arising out of the use of, or failure of City to use, the services delivered or the results thereof, except to the extent such damages result from grossly negligent or intentional acts of Consultant, or Consultant acting without authority from City.

3. The Consultant agrees that any advice or service provided under this Contract will be to the best knowledge and ability of Consultant and will be provided in good faith.

II. Compensation

Description	Quantity	Unit Price	Cost
Consultation fee, per month, payable to Consultant monthly on the 15th of each month during the Term of the Agreement – Public Relations, as set forth in Sections (A) and (B), Scope of Services	8	\$2,500.00	\$20,000.00
Notes: specific deliverables, such as city newsletter printing, web site development, photography or videography outside of that specified in the scope, posters, etc., are not included in the consultation fee and, if required, will be estimated separately based on the City's specific public relations needs. Periodic reports and related information provided by Section J. of this Contract are included in the consultation fee and there will be no additional charge for such reports and information. Any additional fees above the monthly consultation fee must be approved in writing by the City Manager in advance.			
			\$20,000.00

IV. General Terms And Conditions

A. Termination.

City and Consultant agree that the term of this Contract is for eight months, as specified above, and the Contract shall not be revoked, canceled or terminated by City except for gross negligence, unsatisfactory level of performance by Consultant, or intentional misconduct of Consultant or an unforeseeable bona fide change of circumstances rendering the Contract unable to be performed, upon fifteen (15) days prior notice by City. Prior to such termination by City being effective, if requested by Consultant in writing, the parties shall meet and confer within ten (10) calendar days in an attempt to resolve the issue(s). The Contract shall not be revoked, canceled or terminated by Consultant except for a default of payment by City to Consultant for an undisputed amount that is not remedied within 30 days of notification by Consultant.

B. Subcontract/Assignment Notification

None of the work and services covered by this Contract may be subcontracted or assigned to any third party without written consent of the City. Any work or services subcontracted hereunder shall be specified by written agreement and shall be subject to each provision of this Contract.

C. Amendments

The work and services to be performed and any other terms or conditions of this Contract may be amended only upon written agreement of both parties.

D. Event of Default.

An “Event of Default” under this Agreement shall be defined as, and shall occur when, either party fails or refuses to perform and/or pay in connection with any of its obligations or representations provided for in this Agreement, and if such failure or refusal shall continue uncured for 30 days following written notice of default served on the defaulting party by the non-defaulting Party.

E. Disputes, Interpretation, Remedies

1. In the occurrence of an event of default as provided by subsection D., or the parties fail to agree on the interpretation and implementation of any material provision of this Contract, the details of such event of default or disagreement shall be forwarded to the legal counsels of both parties for review and recommendation. Both parties shall attempt in good faith to resolve any dispute without further recourse.
2. In the event that the parties are unable otherwise to resolve any dispute under this Contract, prior to litigation being commenced, the parties agree that such dispute shall be submitted to a mediator in the Tulsa, Oklahoma, geographic area that is mutually agreeable to both parties. Each party shall pay one-half (1/2) of the mediation fee. Mediation shall be required prior to either party commencing litigation against the other for claims related to this Contract.
3. Remedies shall be limited to direct and indirect damages, without consequential or punitive damages.
4. Neither forbearance nor payment by the City shall be construed to constitute waiver of any remedies for any default by the Consultant that exists then or occurs later.

F. Severability Clause

If any provision under this Contract or its application to any person or circumstance is held invalid by any court of competent jurisdiction, such invalidity shall not affect any other provision of this Contract or its application that can be given effect without the invalid provision or application.

G. Limited Indemnification.

The City accepts full responsibility for its decisions to act or not act according to the advice provided by Consultant. To the extent permitted by law, City agrees to indemnify and hold harmless Crossroads Communications, LLC, its principals and employees, and associates pertaining solely to claims by third parties for any claims or damages resulting in litigation that arise from the advice, materials or other items provided under this Contract by Consultant, but only with respect to economic development services, and only for the actions of Consultant directed or authorized by City.

1. The Consultant represents that it will secure all such personnel as may be required in performing the services provided under this Contract. Such personnel shall not be employees or agents of, or have any contractual relationship with, the City.
2. The Consultant has full responsibility for payment of workers' compensation insurance, general liability insurance, unemployment insurance, social security, state and federal income tax and any other deductions required by law for its employees. Consultant will provide current insurance certificates upon request by City.
3. All of the services required hereunder will be performed by the Consultant or under its supervision and all personnel engaged in the work shall be fully qualified and shall be authorized or permitted under state and local law to perform such services.

I. Conflict of Interest

1. No member of the governing body of the City, and no other officer, employee, or agent of the City who exercises any function or responsibility in connection with the planning and carrying out of any project or service pursuant to this Contract, shall have any personal financial interest, direct or indirect in such project or service, and the City shall take appropriate steps to assure compliance herewith.
2. No partner, member, associate or employee of the Consultant who exercises any function or responsibility in connection with the planning and carrying out of any project or service pursuant to the Contract, shall have any personal financial interest, direct or indirect in such project or service, and the Consultant shall take appropriate steps to assure compliance herewith.
3. The Consultant covenants that it presently has no interest and shall not acquire interest, direct or indirect, which would conflict in any manner or degree with the performance of its services under this Contract. The Consultant further covenants that, in the performance of this Contract, no person having any such interest shall be employed.

J. Reports and Information

1. The Consultant, at such times and in such forms as the City may require, shall furnish the City such periodic reports as the City may reasonably request pertaining to the services undertaken pursuant to the Contract, costs and obligations incurred or to be incurred in connection therewith and any other matters covered by this Contract.
2. Consultant shall furnish the City narrative reports and financial reports, as applicable, related to the performance of this Contract in the forms and at such times as may be required by the City.

K. Records and Audits

1. The City and its authorized representatives shall have the right, at any time during normal business hours and subject to a three-day notice of request, to audit, examine and make copies of or extracts from all documents, reports, correspondence, records and any other materials without limitation, to the extent they pertain to performing such audit, examination, copying or extraction, whether maintained in

written, electronic, or other form, relating to or pertaining to this Contract kept by or under the control of the Consultant, its employees, agents, assigns, successors, and subcontractors.

2. Consultant shall retain all books, documents, papers, records, and other materials involving all activities and transactions related to this Contract throughout the Term of this Contract and for a period of five years following the termination of this Contract or any extension or renewal of this Contract. Consultant shall, as often as deemed necessary by the City, permit authorized representatives of the City and its authorized representatives to have full access to and the right to examine fully all such materials.
3. Costs of any audits conducted under the authority of this right to audit and not addressed elsewhere will be borne by City. If an audit performed under this authority discovers substantive findings related to fraud, misrepresentation, or non-performance, City may recoup the costs of the audit from the Consultant. Any adjustments and/or payments that must be made as a result of any such audit of the Consultant's records shall be made within a reasonable amount of time (not to exceed 90 days) from presentation of City's findings to Consultant. Such reimbursement shall not exhaust City's remedies under this authority.

L. Choice of Law.

This Agreement is made and entered into in the State of Oklahoma and shall in all respects be interpreted, enforced and governed under the laws of that state. The venue for any lawsuit arising under this contract shall be the District Court of Wagoner County, Oklahoma.

M. Entire Agreement.

This Agreement sets forth the entire understanding between the parties, and there are no terms, conditions, representations, warranties or covenants other than those contained herein. This Agreement supersedes any and all prior discussions or negotiations, whether oral or written, of the Parties.

N. Amendment or Termination.

No term or provision of this Contract may be amended, waived, released, discharged or modified in any respect, nor may this Contract be terminated or cancelled, except in writing signed by the parties.

O. Notice.

All notices required under this Contract may be in writing, communicated by mail or electronic means, or verbal, including telephone and cell phone, as reasonably appropriate or as required elsewhere in this Contract. The parties shall follow any telephone, cell phone or electronic notices by a mailed notice so that the other party receives a "hard copy" of the notice given.

For notices to City

City of Coweta
Attn: City Manager
310 S Broadway
Coweta, OK 74429
ltaylor@cityofcoweta-ok.gov

For notices to Consultant:

Crossroads Communications, LLC
Attn: Mandy Vavrinak, Managing Member
6660 S. Sheridan Rd., Ste. 200
Tulsa, OK 74133
(918)-633-4397
mandy@crossroads-team.com

In addition to any other notice required by this Agreement, the Parties shall provide each other notice in the event that the foregoing contact information changes or is updated within five business days of such change or update.

REMAINDER OF PAGE IS BLANK

IN WITNESS WHEREOF, the City and Consultant have executed this Contract as of the date first written above.

Accepted for the City of Coweta

Lisa Taylor, Interim City Manager

Date _____

ATTEST:

Marcy Kilgore, City Clerk

Approved as to form:

Jeff M. Stephens, City Attorney

Accepted for Crossroads Communications, LLC

Mandy Vavrinak, Managing Member

Date _____