



PURCHASING

May 7, 2026

MEMO TO: Prospective Bidders

FROM: Kimberly Toon, Purchasing Manager

SUBJECT: **Addendum #4:** Locks Creek Drainage Improvements

DUE DATE AND TIME: **MAY 21, 2026; 2:00 p.m.**

1. The Bid Documents are hereby modified by this Addendum #4 dated May 7, 2026. To include the following:

a. Q&A

b. Updated construction drawings which include: (Attached)

- i. CU-01 with revised water main design
- ii. CU-02 with revised water main design
- iii. CU-02A showing temporary water main bypass
- iv. CU-03 referencing updated construction sequencing on other sheets
- v. DT-04 – construction detail sheet with addition of fire hydrant assembly

c. Updated Bid Schedule to include: (Attached)

- i. Item C-02: updated quantity for “remove existing 8” water main”
- ii. Item C-03: updated quantity for “furnish & install new 8” restrained joint ductile iron water main”
- iii. Item C-04: updated quantity for “furnish & install new 8” RJ gate valve w/ valve box”
- iv. Item C-06: new item for “furnish & install fire hydrant assembly”
- v. Item C-07: new item for “furnish & install temporary water main bypass”

d. Updated Division 01 specification section 01 29 01 Measurement & Basis for Payment adding paragraphs for: (Attached)

- i. Item C-06: Furnish & install fire hydrant assembly
- ii. Item C-07: Furnish & install temporary water main bypass

1. **Question:** Can the box culvert be cast in a place in lieu of precast or does it have to be precast with cast in place wing walls?

Answer: Owner will consider a cast-in-place culvert in lieu of precast. If proposed, the selected contractor must furnish design drawings, signed and sealed by a professional engineer licensed in the State of North Carolina, for review by the Owner and their engineer. Contractor and their engineer will be responsible for additional geotechnical investigations (if desired), and periodic observation, at a minimum, of the construction sufficient to provide a certification to the Owner upon completion that the cast-in-place culvert has been constructed in accordance with the approved design. Additional tests regarding concrete strength, slump, etc. may also be required to verify compliance with the design. Contractor shall also provide any necessary revisions to the temporary water main bypass as shown in Addendum #4.

2. The foregoing changes shall be incorporated in the Bid Documents, and a copy of the Addendum #4, signed by the Bidder, must accompany the Bid to indicate the Bidder's familiarity with the changes.

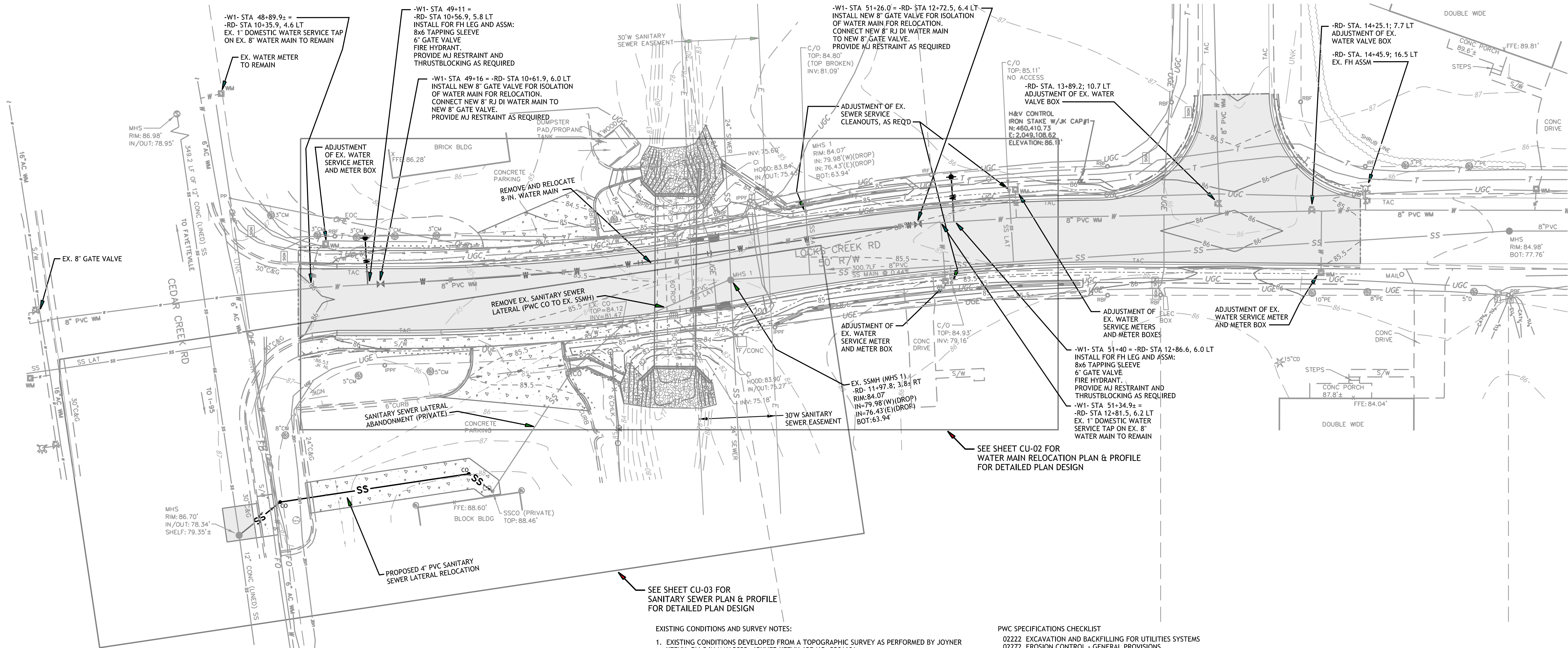
Bidder Acknowledgement:

Bidder Name (Print): _____

Bidder Signature: _____

Date of Signature: _____

Z:\PROJECTS\FAY1024\DESIGN\DRAWINGS\Project\Sub-Sheets\FAY1024-CU01.dgn



EXISTING CONDITIONS AND SURVEY NOTES:

1. EXISTING CONDITIONS DEVELOPED FROM A TOPOGRAPHIC SURVEY AS PERFORMED BY JOYNER KEENEY, PLLC IN MAY 2022. JOYNER KEENEY JOB NO. 220160A.
2. HORIZONTAL DATUM IS NAD 83 (NAD83) AND VERTICAL DATUM IS NAVD 88.
3. ADDITIONAL EXISTING CONDITIONS SHOWN BASED ON AS-BUILT DRAWINGS AS PROVIDED BY FAYETTEVILLE PWC, AND AVAILABLE G.I.S. DATA FROM VARIOUS SOURCES.

PWC UTILITY CONSTRUCTION NOTES:

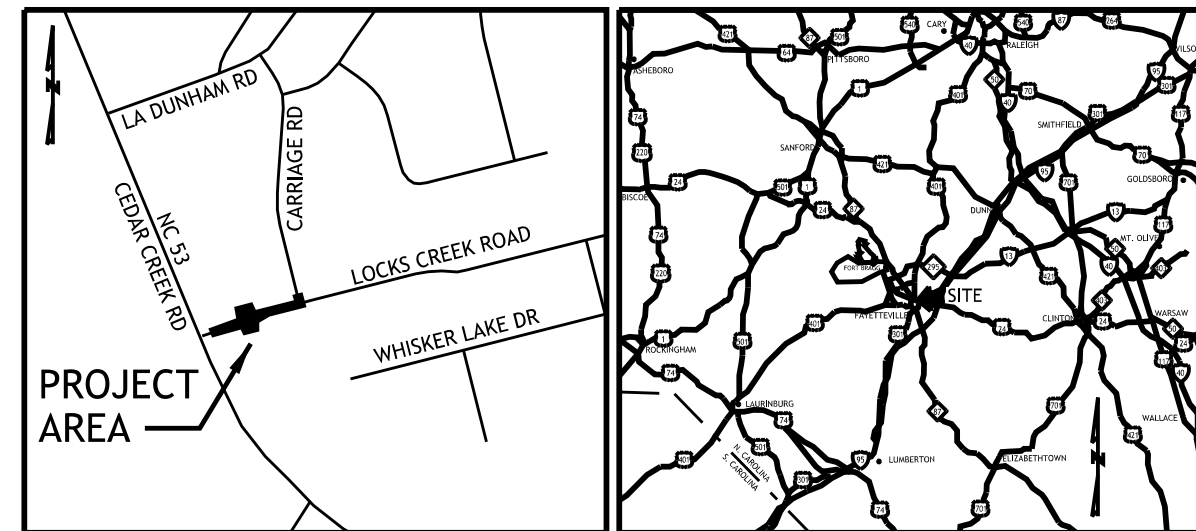
1. ALL WATER MAINS, LATERALS AND APPURTENANCES SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH FAYETTEVILLE PWC STANDARDS.
2. ALL SEWER MAINS, LATERALS, AND APPURTENANCES SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH FAYETTEVILLE PWC STANDARDS.
3. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH FAYETTEVILLE PWC STANDARDS.
4. CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
5. CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS NOTICE FOR ALL WATER OUTAGES.
6. CONSTRUCTION STAKING IS REQUIRED FOR ALL PWC WATER AND SEWER UTILITY INSTALLATIONS. CUT SHEETS, SIGNED AND SEALED BY A NC PLS, SHALL BE PROVIDED TO THE PWC WATER RESOURCES ENGINEERING DEPARTMENT AND THE CONTRACTOR IN ADVANCE OF CONSTRUCTION FOR PWC WATER AND SEWER UTILITIES.
7. CONTRACTOR SHALL MAINTAIN A COPY OF THE SIGNED AND SEALED CUT SHEET ON THE JOB SITE. CONSTRUCTION ON PWC WATER AND SEWER UTILITIES CANNOT BEGIN UNTIL THE CONTRACTOR POSSESSES, ON SITE, A SIGNED AND SEALED CUT SHEET FROM THE PROFESSIONAL LAND SURVEYOR.
8. ALL NEW WATER AND SEWER MAINS, LATERALS, AND APPURTENANCES SHALL BE TESTED AND/OR DISINFECTED IN ACCORDANCE WITH FAYETTEVILLE PWC STANDARDS PRIOR TO PLACING INTO SERVICE.
9. CONTRACTOR SHALL COORDINATE TESTING AND INSPECTION WITH THE FAYETTEVILLE PWC PROJECT COORDINATOR.
10. ALL DUCTILE IRON PIPE IN SANITARY SEWER SERVICE SHALL HAVE AN INTERIOR LINING OF PROTECTO 401 OR APPROVED EQUAL.
11. ALL NEW MANHOLES ARE TO BE VACUUM-TESTED IN ACCORDANCE WITH FAYETTEVILLE PWC STANDARDS.
12. CONTRACTOR SHALL ABANDON ("KILL-OUT") ANY EXISTING WATER SERVICES THAT WILL NOT BE UTILIZED BY CUTTING THE SERVICE AT THE MAIN, PLUGGING THE CORPORATION, AND TURNING OFF THE CORPORATION. AT THE METER BOX, THE ABANDONED SERVICE IS TO BE CUT OR CRIMPED, AND BURIED A MINIMUM OF 3 FEET BELOW GRADE.
13. CONTRACTOR SHALL ABANDON ("KILL-OUT") ANY EXISTING SEWER SERVICES THAT WILL NOT BE UTILIZED BY UNCOVERING THE EXISTING LATERAL AT THE MAIN, CUT AND PLUG AT BOTH ENDS, REMOVE THE EXISTING CLEANOUT AND COMBINATION, AND PLUG THE TAP OR TEE AT THE MAIN. FOR LATERALS THAT CONNECT TO A MANHOLE AND ARE TO BE ABANDONED ("KILLED-OUT"), THE LATERAL SHALL BE REMOVED FROM THE MANHOLE AND THE REMAINING VOID IN THE MANHOLE SHALL BE FILLED WITH BLOCK AND MORTAR.
14. ALL EXISTING UTILITIES IMPACTED BY CONSTRUCTION SHALL BE ADJUSTED TO FINISHED GRADE IN ACCORDANCE WITH PWC REQUIREMENTS.

PWC SPECIFICATIONS CHECKLIST

- 02222 EXCAVATION AND BACKFILLING FOR UTILITIES SYSTEMS
- 02272 EROSION CONTROL - GENERAL PROVISIONS
- 02273 TEMPORARY SILT FENCE
- 02505 ADJUSTMENTS OF EXISTING STRUCTURES
- 02573 PERMANENT PAVEMENT PATCH
- 02660 WATER DISTRIBUTION
- 02730 SANITARY SEWER SYSTEM
- 02931 SOD
- 09802 SPECIAL COATINGS - CERAMIC EPOXY (PROTECTO 401)

COORDINATION NOTES:

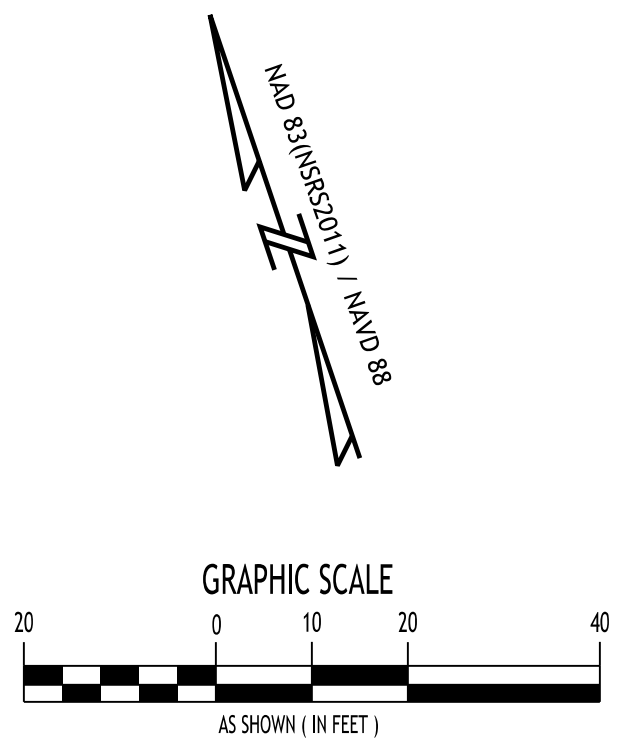
1. IN ACCORDANCE WITH STATE LAW, AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF DIGGING OPERATIONS, THE CONTRACTOR SHALL CALL AND SCHEDULE FOR UTILITY LOCATES THRU NC 811 (1-800-632-4949).
2. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF WATER MAINS, FIRE LINES, HYDRANT ASSEMBLIES, AND WATER AND SEWER SERVICES WITH THE FAYETTEVILLE PUBLIC WORKS COMMISSION (PWC).
3. WATER AND SEWER SERVICE MATERIALS AND INSTALLATION METHODS SHALL BE IN ACCORDANCE WITH FAYETTEVILLE PWC STANDARDS AND SPECIFICATIONS AND STATE AND LOCAL FIRE CODES, AS REQUIRED. REFER TO DETAIL SHEETS FOR PWC WATER AND SEWER DETAILS APPLICABLE TO THIS PLAN.
4. BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED A MIN OF 5' FROM WATER METERS. COORDINATE WITH FAYETTEVILLE PUBLIC WORKS COMMISSION (PWC) FOR APPROVED MODELS LIST AND INSTALLATION AND INSPECTION REQUIREMENTS FOR BACKFLOW PREVENTERS.
5. COORDINATE OTHER UTILITY AND SITE RELATED WORK AS SHOWN ON THE STORM SYSTEM PLANS (RD-01 & STRM-01).
6. REFER TO SHEET CU-02A FOR TEMPORARY WATER MAIN PLAN AND CONSTRUCTION SEQUENCE RELATED NOTES.



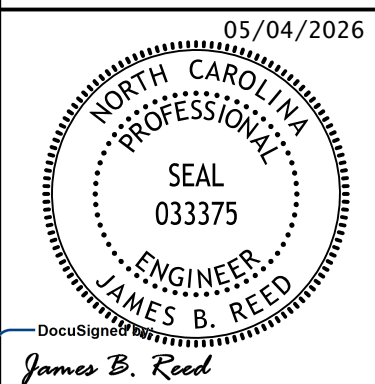
PROJECT LOCATION MAP

VICINITY MAP

WATER		SANITARY SEWER		STORM DRAINAGE		EASEMENTS	
EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED



REVISIONS:
1 - 5/4/26
REV. WATER MAIN
DESIGN



DATE: JUNE 20, 2025
PROJECT NO.: FAY1024
SHEET SIZE: ARCH D - 24x36

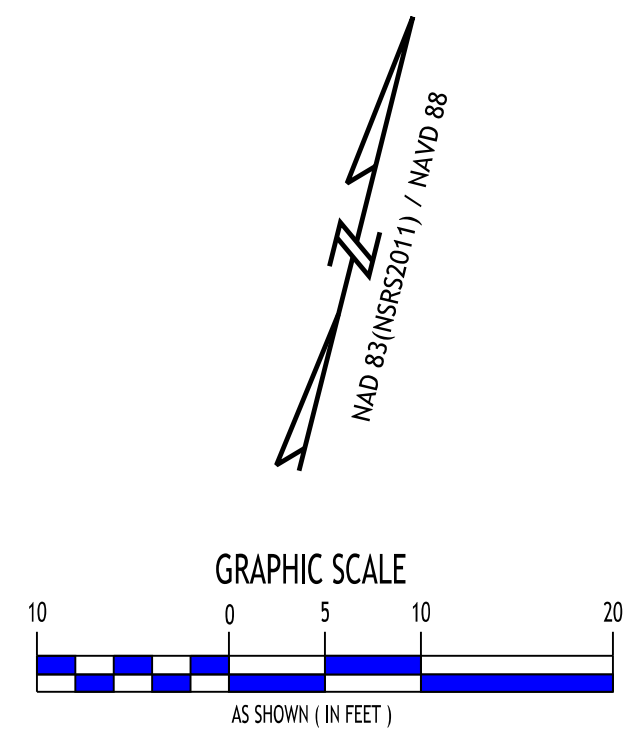
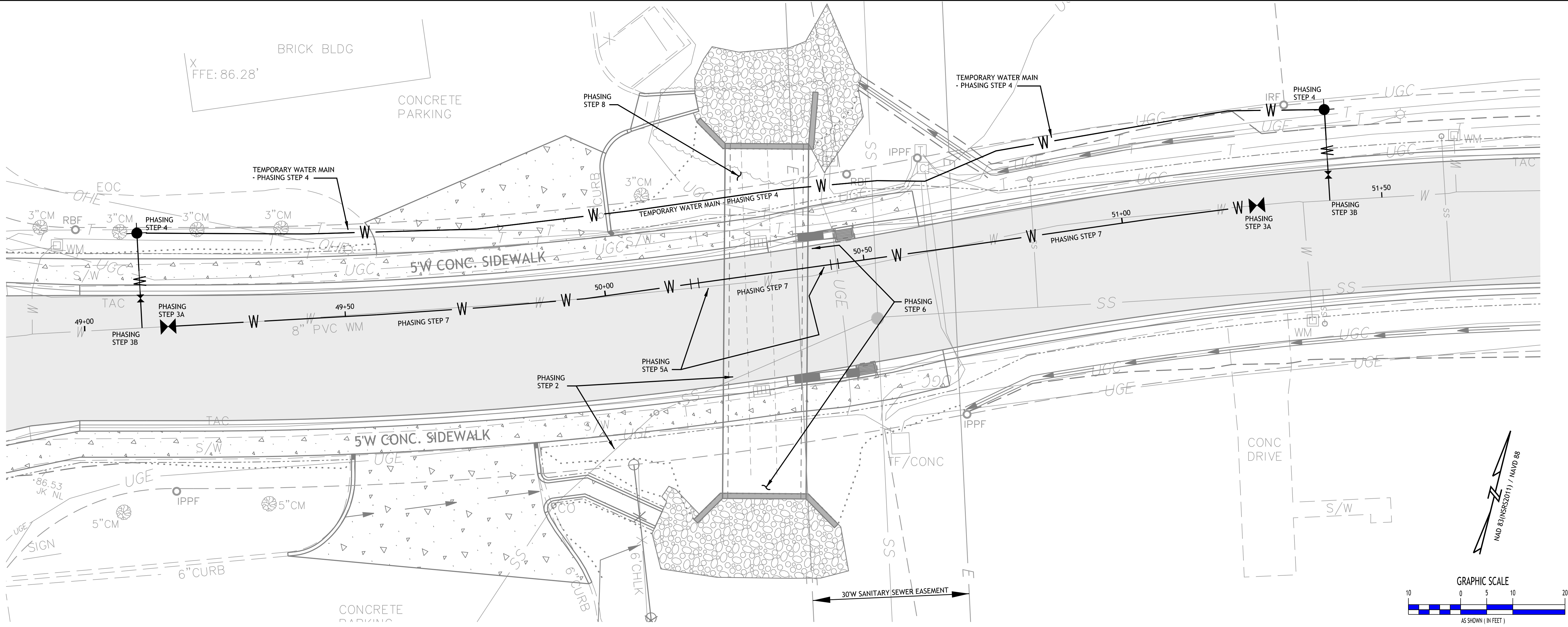
STATUS:
REVISED DESIGN
PRELIMINARY - FOR
REVIEW PURPOSES
ONLY

05/04/2026
NORTH CAROLINA
PROFESSIONAL
SEAL
033375
ENGINEER
JAMES B. REED
DocuSign Envelope ID: 070E9F21E6D3458...

GRADIENT
LAND-WATER INNOVATION
230 DOWNSON STREET, SUITE 500A
FAYETTEVILLE, NC 28404
PHONE: 910.824.7731
NC FIRM LICENSE NO. P-1875

FAYETTEVILLE
STORMWATER

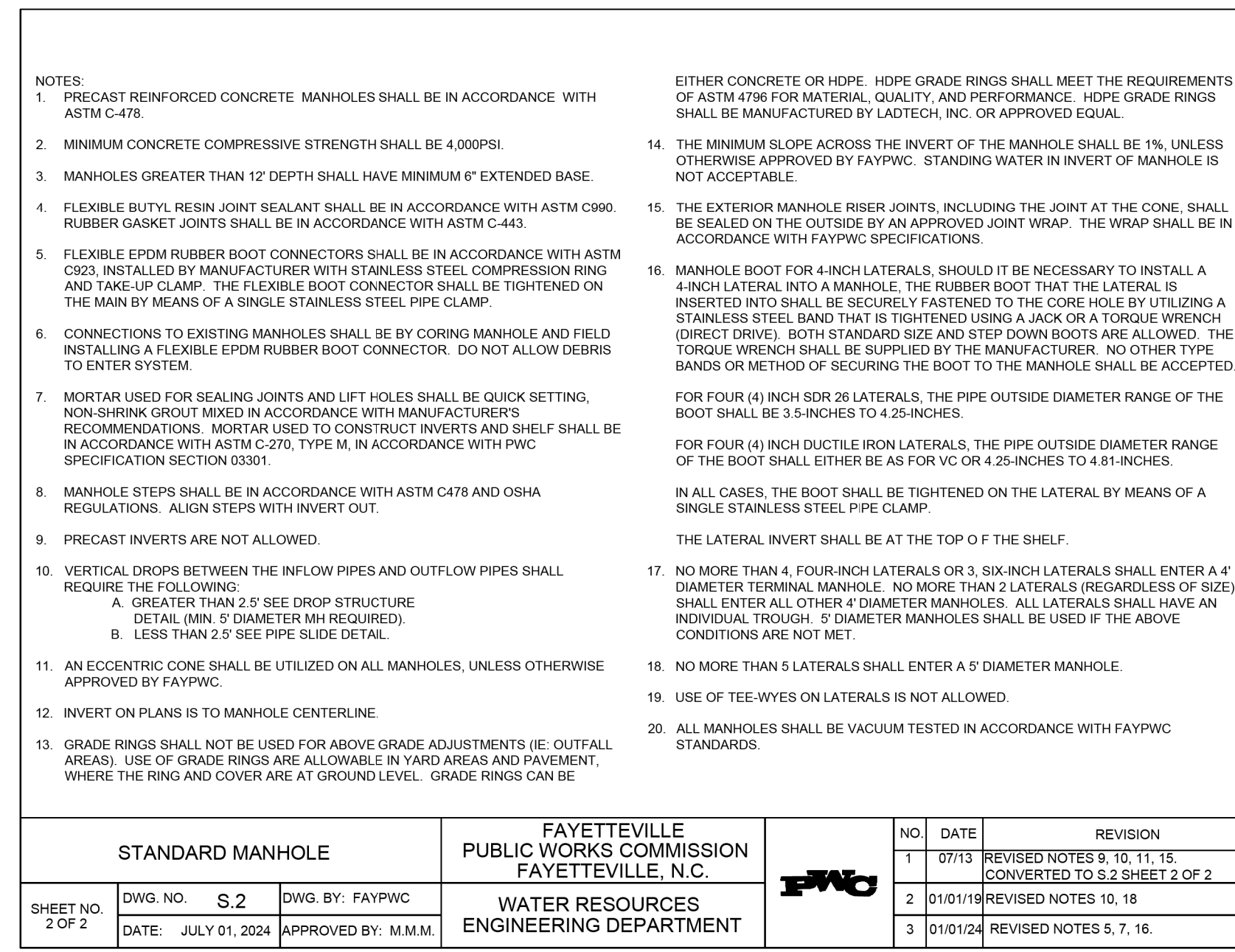
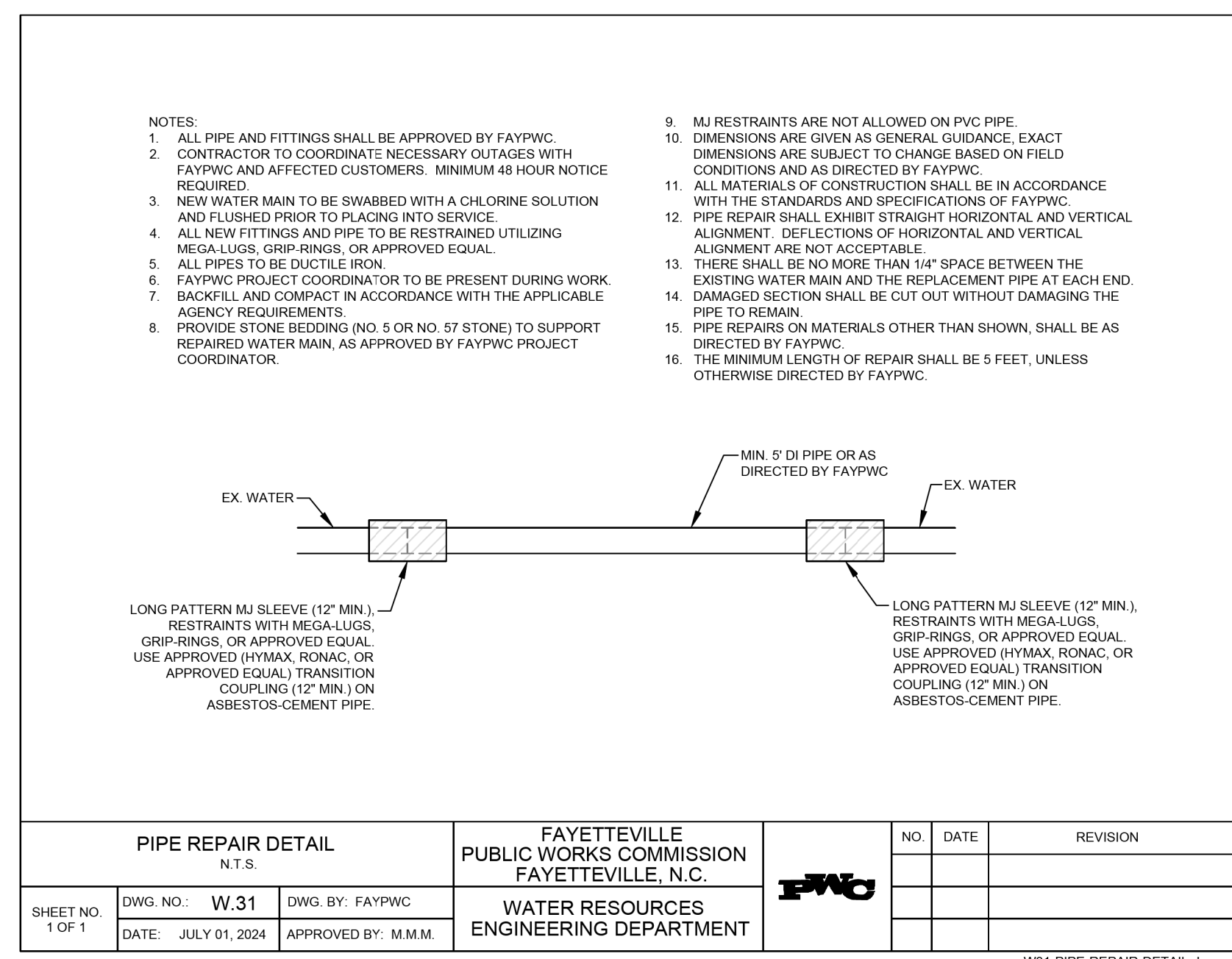
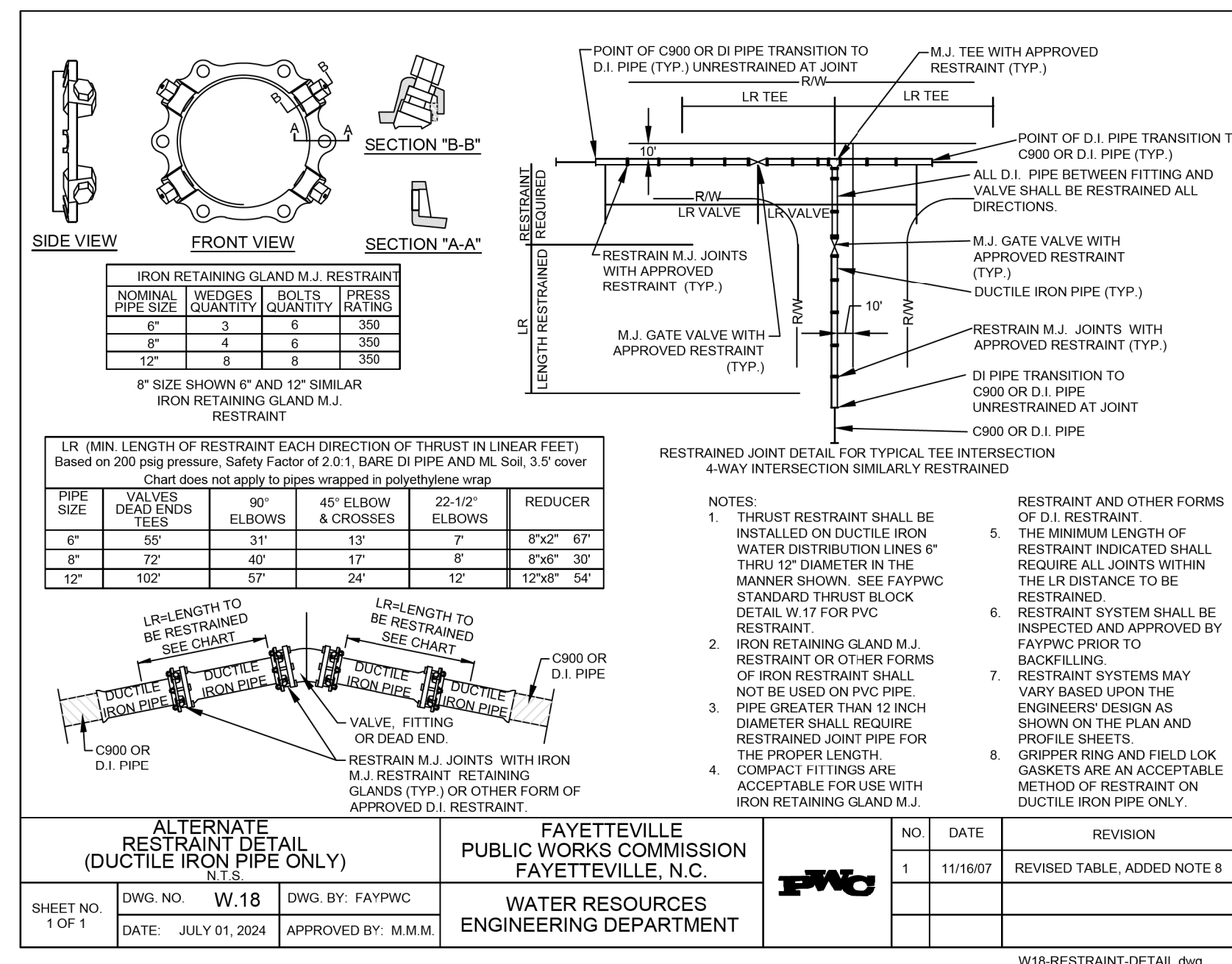
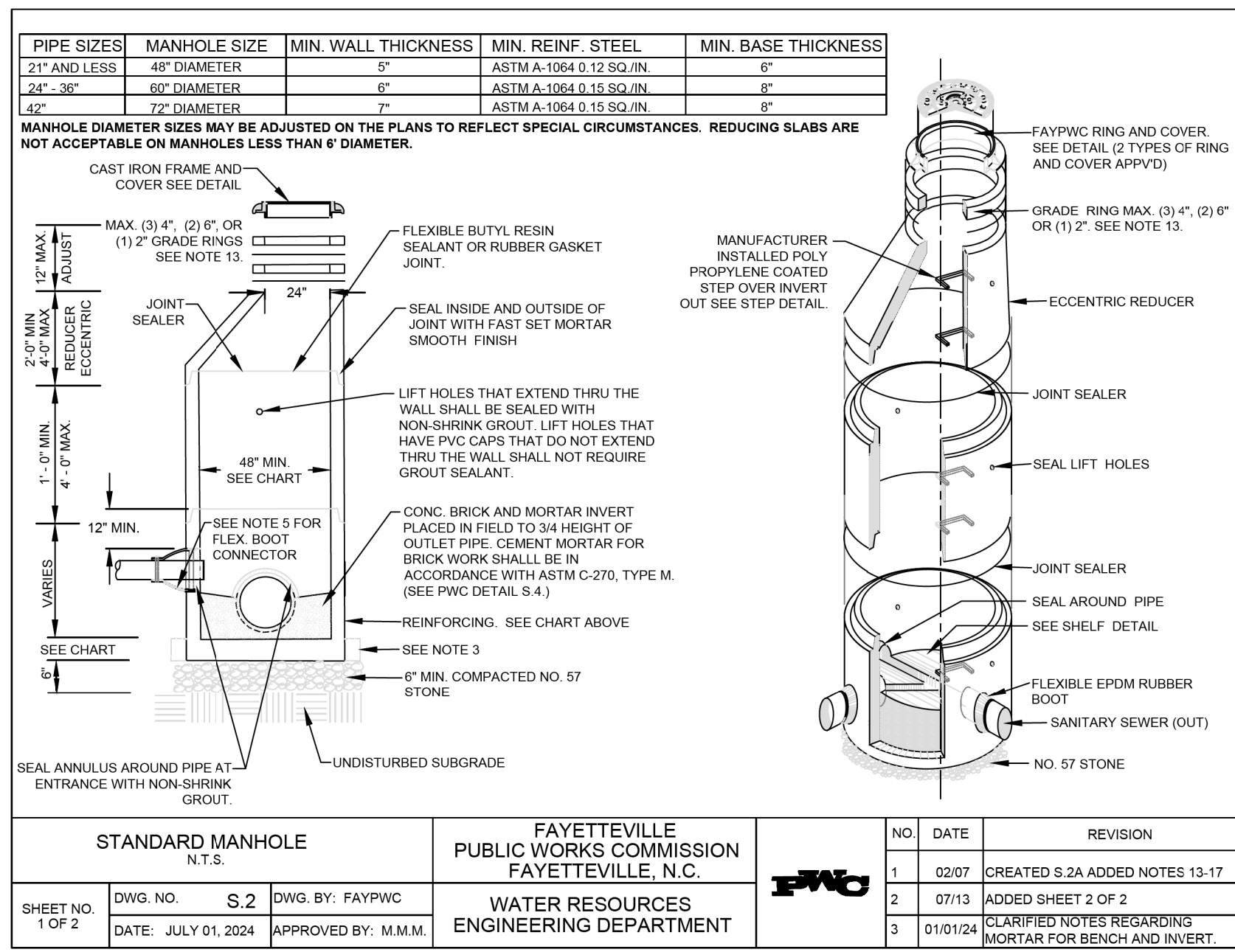
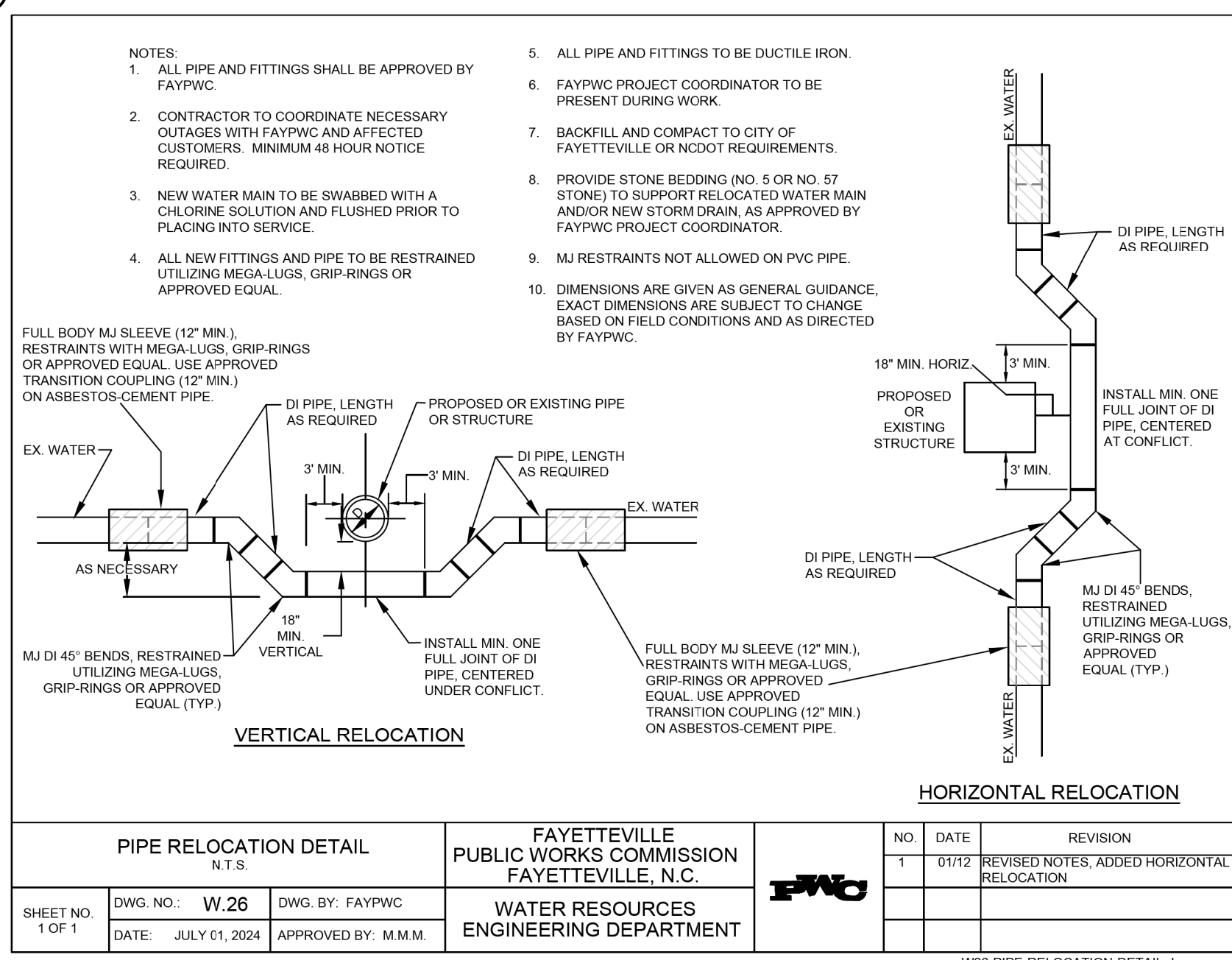
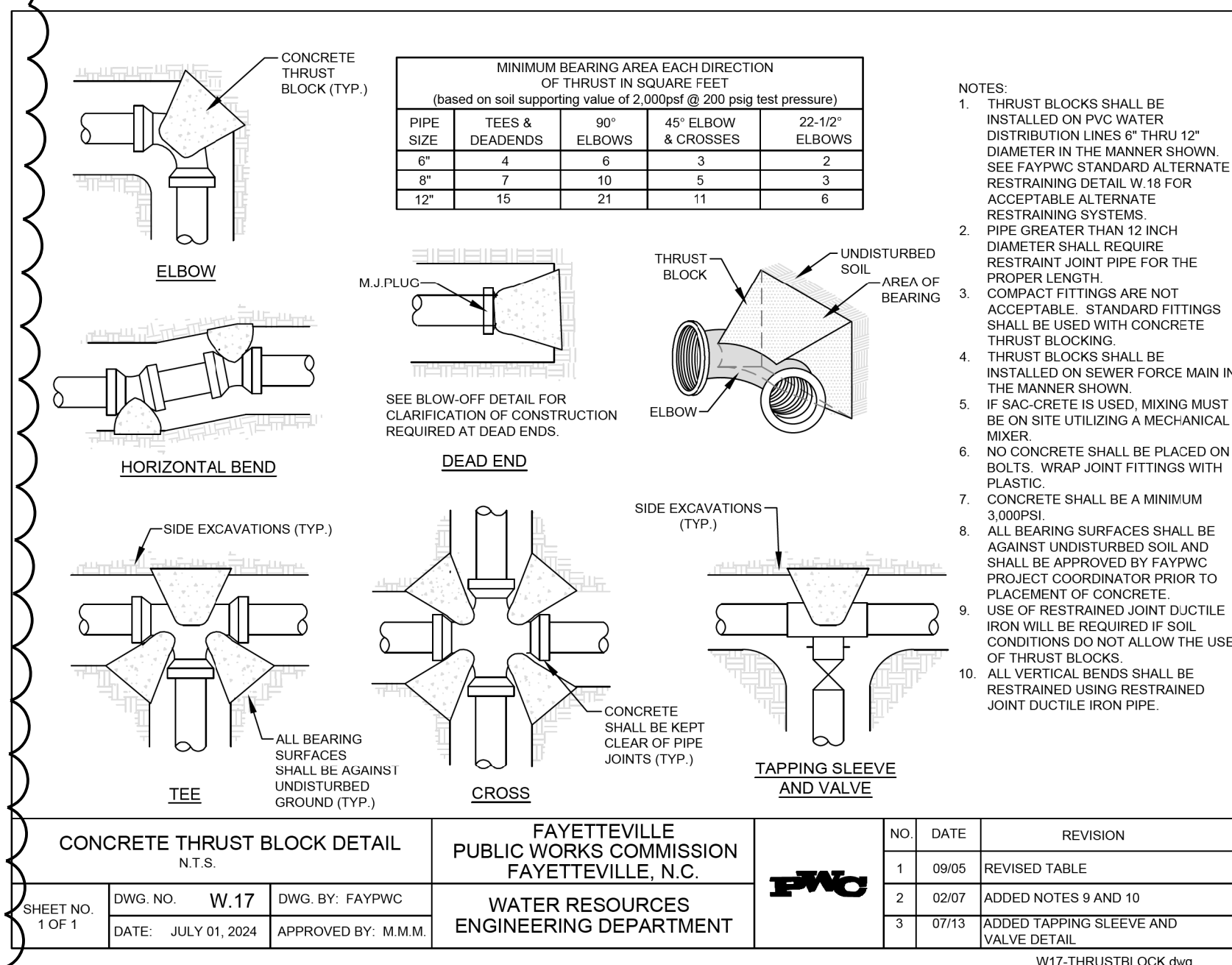
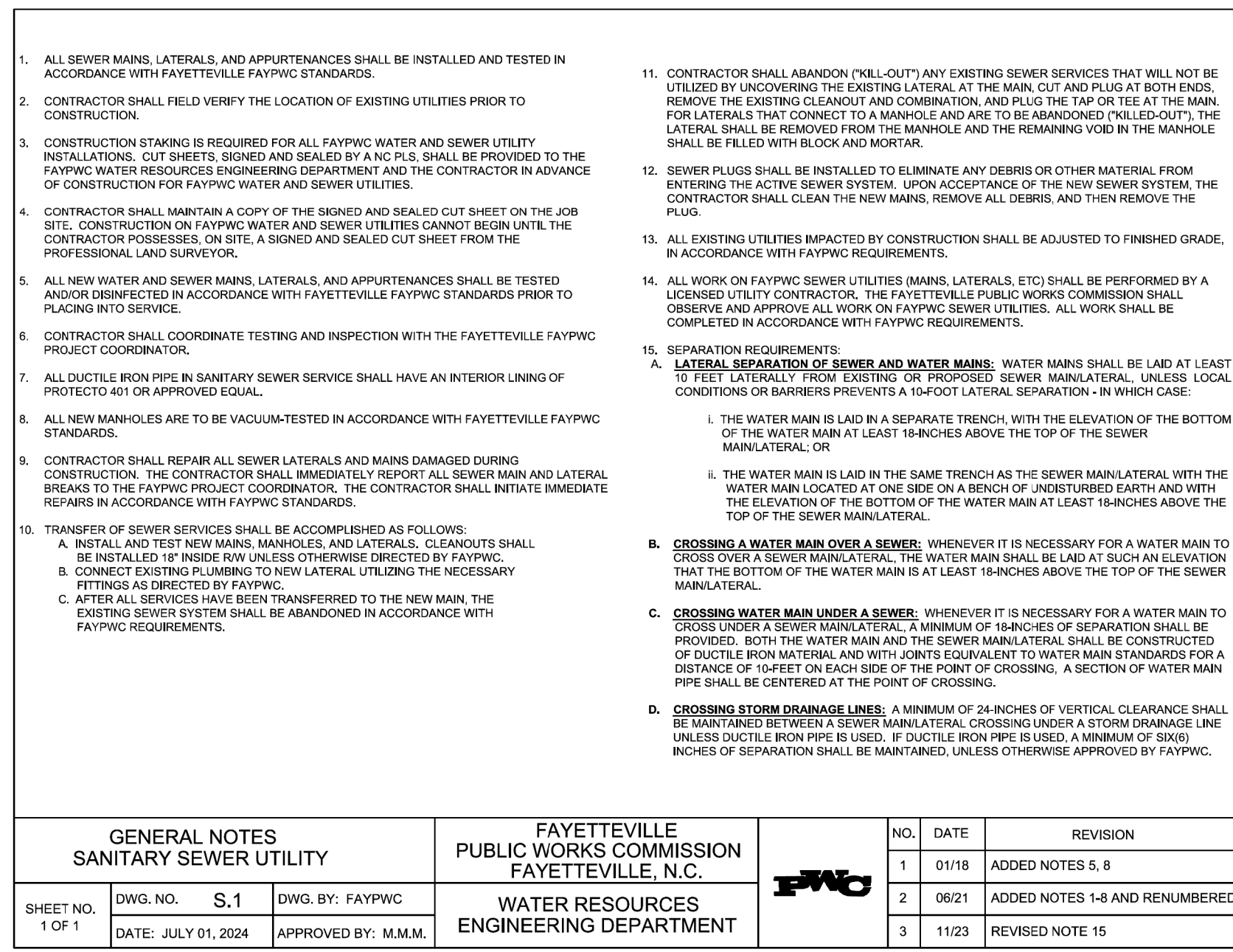
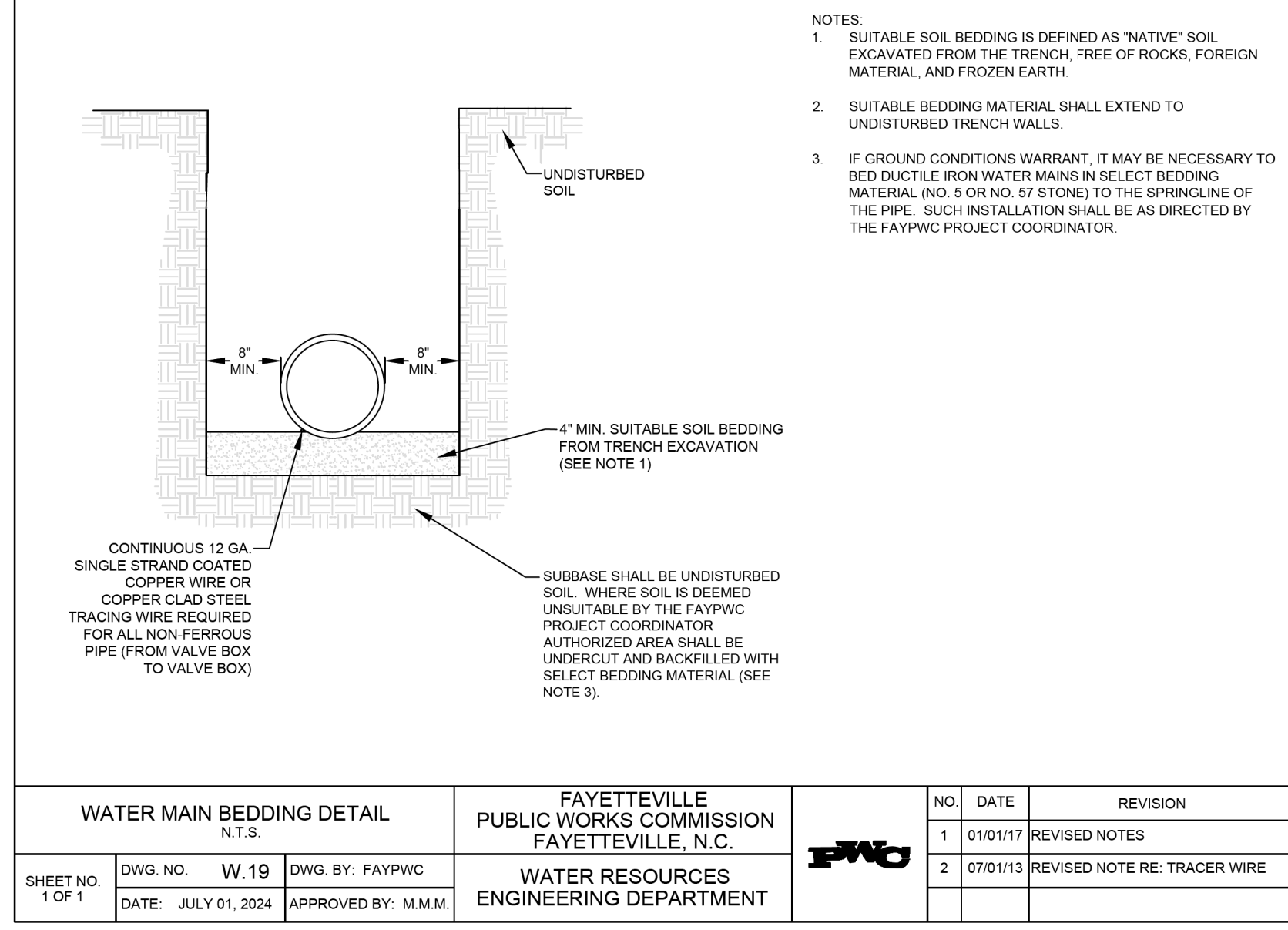
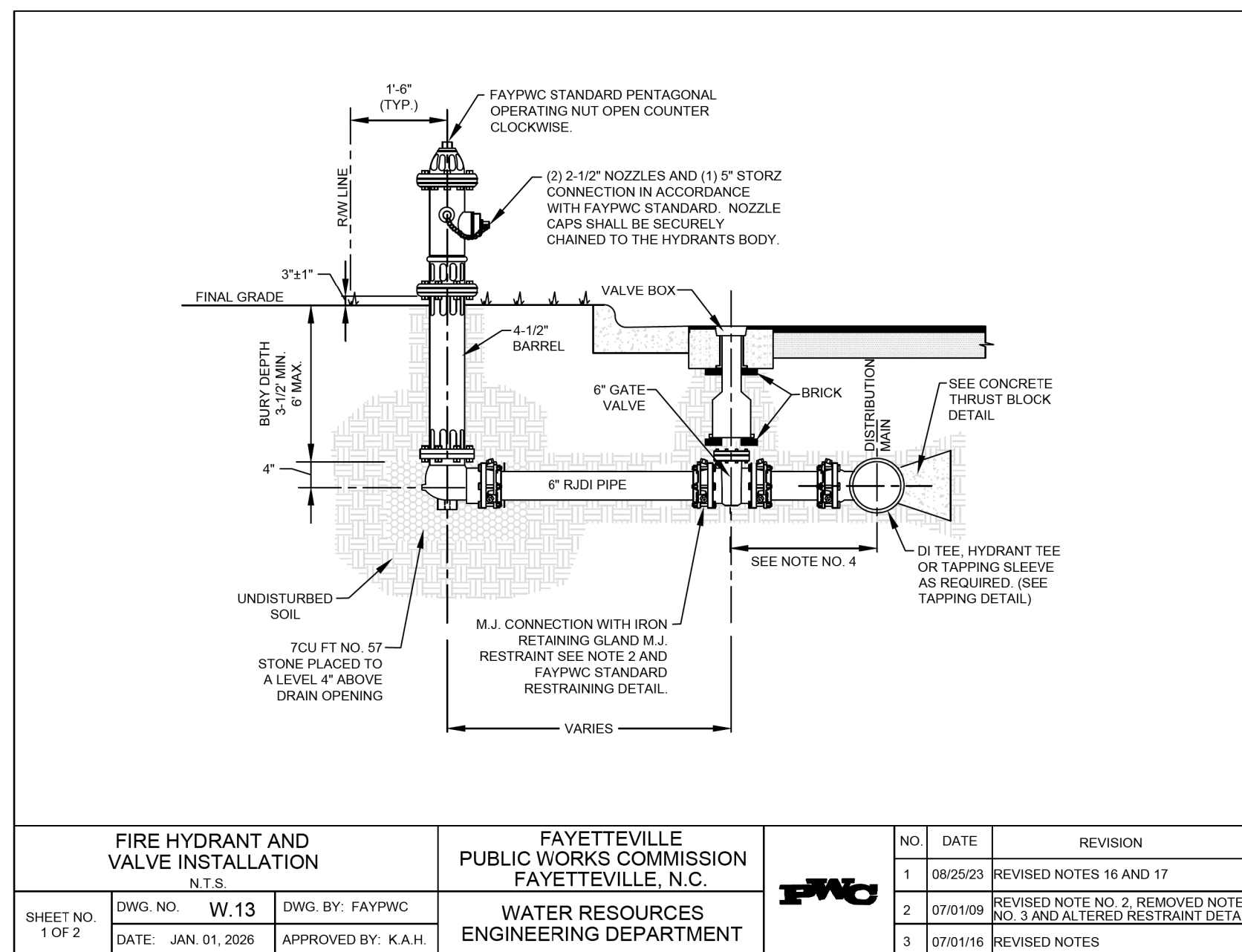
Z:\PROJECTS\FAY1024\DESIGN DRAWINGS\Project.b-Sheets\FAY1024-CU02A.dgn



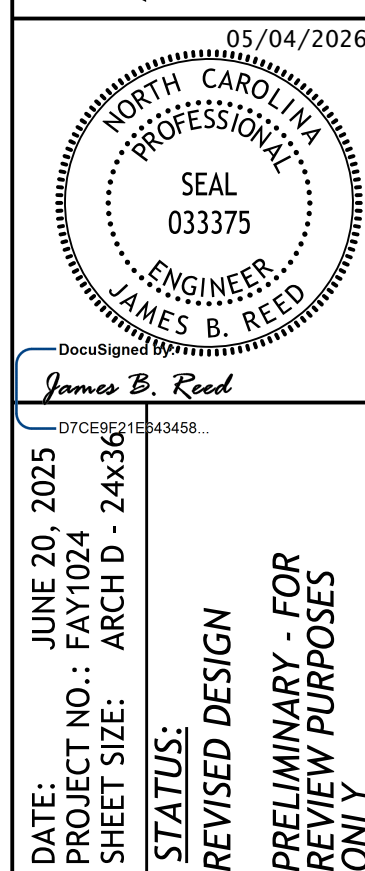
- PROVISION OF TEMPORARY WATER MAIN TO ACCOMMODATE BOX CULVERT CONSTRUCTION AND UTILITY WORK RELATED TO REMOVAL AND REPLACEMENT OF FAYETTEVILLE PVC - 8" WATER MAIN:
- STANDARDS AND REQUIREMENTS:
- STANDARDS FOR CONSTRUCTION, METHOD OF MEASUREMENT AND PAYMENT, AND TECHNICAL SPECIFICATIONS FOR RELATED WORK SHALL CONFORM TO STANDARDS, SPECIFICATIONS AND OTHER REQUIREMENTS SET FORTH AS NOTED ON THESE CONSTRUCTION DRAWINGS AND WITHIN THE PURVIEW OF THE ENTIRETY OF THE CONSTRUCTION CONTRACT DOCUMENTS.
 - ADDITIONALLY, RELATED WORK SHALL ALSO BE IN ACCORDANCE WITH ALL APPLICABLE STANDARDS SET REQUIRED BY THE CITY OF FAYETTEVILLE, NC, THE FAYETTEVILLE PUBLIC WORKS COMMISSION (PWC), AND THE STATE OF NORTH CAROLINA.
 - THE CONTRACTOR SHALL PROVIDE THE FOLLOWING SUBMITTALS FOR REVIEW BY THE OWNER RELATED TO THE TEMPORARY WATER MAIN:
 - DESCRIPTION OF PIPE MATERIAL, FITTING TYPE(S), AND JOINING METHOD(S). DESCRIPTION SHALL INCLUDE ALL METHODS OF RESTRAINT, DEADMAN, OR BALLASTING TO BE USED FOR TEMPORARY WATER MAIN.
 - LICENSING OF ANY PLUMBERS OR UTILITY WORKERS PERFORMING WORK ON THE TEMPORARY WATER MAIN AND SERVICE CONNECTIONS AND DOCUMENTATION OF ANY REQUIRED PERMITS.
 - TEST RESULTS FOR DISINFECTION OF INSTALLED TEMPORARY WATER MAIN AND SERVICE CONNECTIONS.
 - TEST RESULTS FOR PRESSURE TESTING OF INSTALLED TEMPORARY WATER MAIN.
- PHASING:
- AS NOTED WITHIN THE CONTEXT OF NOTE 3 OF THE CONSTRUCTION SEQUENCE ON PLAN SHEET G-02, THE FOLLOWING IS THE SUGGESTED PHASING AS RELATED BETWEEN THE SANITARY SEWER SERVICE, WATER MAIN RELOCATION AND BOX CULVERT CONSTRUCTION.
 - SANITARY SEWER SERVICE TO 1701 CEDAR CREEK ROAD:
 - INSTALL NEW PROPOSED SANITARY SEWER SERVICE FOR 1701 CEDAR CREEK ROAD (SOUTHEAST CORNER OF CEDAR CREEK ROAD AND LOCKS CREEK ROAD) AS INDICATED ON PLAN SHEET CU-03. SWITCH OVER TO NEW SEWER SERVICE AND REMOVE AND/OR ABANDON IN PLACE (AS NOTED ON PLANS) FORMER SANITARY SEWER SERVICE FROM THE PARCEL TO THE EXISTING SSMH AT APPX. -RD- STA. 11+97.8. IF NECESSARY, A PORTION OF THE FORMER SANITARY SEWER SERVICE LINE CAN BE REMOVED IN STEP 6A.
 - REQUIRED ADDITIONS TO EXISTING 8" WATER MAIN TO SET UP FOR TEMPORARY MAIN:
 - COORDINATE WITH FAYETTEVILLE PWC OVERNIGHT SHUTDOWNS OF EXISTING 8" PVC WATER MAIN WITHIN LOCKS CREEK ROAD. AT THE APPROVED TIMES, SHUTDOWN THE MAIN FOR CUT-IN OF NEW 8" GATE VALVES AT -W1- STA 49+16 AND -W1- STA 51+26.
 - INSTALL ON THE EXISTING 8" PVC WATER MAIN NEW FIRE HYDRANTS AS SHOWN ON PLAN SHEET CU-02. WORK TO INCLUDE INSTALLATION OF NEW TAPPING SLEEVES, 6" GATE VALVES, AND FIRE HYDRANT ASSEMBLIES AT -W1- STA. 49+11 AND -W1- STA. 51+40.
 - INSTALL TEMPORARY 6" WATER MAIN BETWEEN NEW HYDRANTS:
 - INSTALL TEMPORARY 6" WATER MAIN BETWEEN NEW FIRE HYDRANT INSTALLED NEAR -W1- STA. 49+11 AND NEAR -W1- STA. 51+40. FULLY SECURE AND ANCHOR JOINTS AND CONNECTIONS, ELBOWS AND FITTINGS FOR THE TEMPORARY WATER MAIN. IF BURIAL OF ALL OR PORTIONS OF THE TEMPORARY WATER MAIN IS REQUIRED, DEPTH OF BURIAL FROM EXISTING GROUND TO TOP OF WATER MAIN SHALL BE NO LESS THAN 3.5 FEET. PERFORM DISINFECTION WITH TESTING, AS WELL AS PRESSURE TESTING TO ENSURE THE TEMPORARY WATER MAIN WILL MEET OR EXCEED FAYETTEVILLE PWC STANDARDS.
 - AFTER APPROVAL OF REQUIRED TESTING, AND ACCEPTANCE OF TEMPORARY WATER MAIN INSTALLATION, PLACE TEMPORARY WATER MAIN INTO SERVICE, AND ISOLATE THE SECTION OF THE EXISTING SECTION OF 8" PVC WATER MAIN TO BE REMOVED AND REPLACED. ENSURE PROPER RESTRAINT OF WATER MAINS AND BALLASTING AT OR NEAR NEW 8" GATE VALVES.
 - REMOVE PORTION OF EXISTING 8" WATER MAIN:
 - IN PREPARATION OF INSTALLATION OF BOX CULVERT, REMOVE A PORTION OF THE EXISTING 8" PVC WATER MAIN ONLY AS NECESSARY TO PROVIDE CLEARANCE TO REMOVE EXISTING STORM PIPE, AND INSTALL A PORTION OF THE BOX CULVERT. ADDITIONALLY, KEEP IN PLACE AN ADEQUATE LENGTH OF THE EXISTING WATER MAIN BETWEEN THE NEW 8" GATE VALVES TOWARD THE CULVERT LOCATION TO ASSIST IN KEEPING THE UPSTREAM PORTIONS OF THE EXISTING WATER MAIN RESTRAINED.
 - REMOVE DOWNSTREAM PORTION OF EXISTING 60" RCP CULVERT PIPE AND INSTALL DOWNSTREAM PORTION OF BOX CULVERT:
 - BEGINNING AT THE DOWNSTREAM END OF THE EXISTING 60" RCP CULVERT PIPE, EXCAVATE AND REMOVE THE 60" RCP PIPE TOWARD THE CURB INLET AT THE NORTH SIDE OF THE ROADWAY (LOCKS CREEK ROAD). IF NECESSARY, REMOVE THE FORMER EXISTING SANITARY SERVICE LINE TO THE EXISTING SANITARY SEWER SERVICE MANHOLE (MHS 1).
 - PREPARE SUBGRADE, BEDDING, AND PROCEED WITH INSTALLATION OF THE PORTION OF THE BOX CULVERT FROM THE DOWNSTREAM END TOWARD THE NORTH SIDE CURB OF LOCKS CREEK ROAD. PROCEED TO A POINT BEYOND THE POINT OF CROSSING OF THE NEW 8" WATER MAIN AND THE BOX CULVERT, BUT NOT AS FAR NORTH AS THE LOCATION OF THE TEMPORARY 6" WATER MAIN.
 - REMOVE REMAINDER OF EXISTING 8" WATER MAIN AND INSTALL NEW 8" R/DI WATER MAIN:
 - BEGIN INSTALL OF NEW 8" R/DI WATER MAIN BETWEEN THE TWO NEW 8" GATE VALVES. CONTINUE PROVIDING RESTRAINT AND BALLASTING AS NECESSARY TO ENSURE NO MOVEMENT OF WATER MAINS WILL OCCUR. REMOVE SECTIONS OF EXISTING 8" WATER MAIN AS THE WORK PROGRESSES TO INSTALL NEW WATER MAIN.
 - AFTER NEW 8" R/DI WATER MAIN IS IN PLACE, DISINFECT WITH TESTING, AND PRESSURE TEST NEW 8" R/DI WATER MAIN. AFTER APPROVAL OF REQUIRED TESTING, AND ACCEPTANCE OF THE NEW WATER MAIN, PLACE WATER MAIN INTO SERVICE AND DEACTIVATE THE TEMPORARY WATER MAIN. REMOVE 6" TEMPORARY WATER MAIN.
 - REMOVE UPSTREAM PORTION OF EXISTING 60" RCP CULVERT PIPE AND INSTALL UPSTREAM PORTION OF BOX CULVERT:
 - SIMILAR TO STEPS 6A AND 6B., CONTINUE REMOVAL OF CULVERT PIPE, EXCAVATION AND PREPARATION OF SUBGRADE, PLACE OF BEDDING AND INSTALLATION OF BOX CULVERT TOWARD THE UPSTREAM END.
- TEMPORARY WATER MAIN PLAN LAYOUT:
- TEMPORARY 6" WATER MAIN BYPASS SCHEMATIC LAYOUT ROUTE SHOWN ON THIS PLAN. THE BYPASS SHALL BE INSTALLED TO ACCOMMODATE FAYETTEVILLE PWC REQUIREMENTS TO MINIMIZE SERVICE DISRUPTION FOR THE REMOVAL AND RELOCATION OF THE EXISTING 8" WATER MAIN. THE CONTRACTOR SHALL PROVIDE A DETAILED PLAN, SHOP DRAWINGS AND SUBMITTALS TO THE ENGINEER AND FAYETTEVILLE PWC FOR REVIEW AND APPROVAL PRIOR TO IMPLEMENTATION AND COMMENCEMENT OF THE WORK AND IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS NOTED ABOVE.
 - WORK FOR THE TEMPORARY WATER MAIN SHALL OCCUR WITHIN THE LIMITS OF CONSTRUCTION AS SHOWN ON SHEET EC-01.
- ADDITIONAL APPLICABLE PLANS PERTINENT TO THIS PLAN INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING PLANS:
- SHEET CU-01 WET UTILITIES RELOCATIONS - OVERVIEW
 - SHEET CU-02 WATER MAIN RELOCATION PLAN & PROFILE
 - SHEET CU-02A TEMPORARY WATER MAIN WITH CONSTRUCTION SEQUENCE
 - SHEET CU-03 SANITARY SEWER LATERAL RELOCATION PLAN & PROFILE
 - SHEET CD-01 DEMOLITION PLAN
 - SHEET STRM-01 PLAN & PROFILE
 - SHEET EC-01 EROSION CONTROL PLAN
 - ALL DETAIL SHEETS.

 230 DONALDSON STREET, SUITE 500A FAYETTEVILLE, NC 28404 PHONE: 910.824.7731 NC FIRM LICENSE NO. P-1875	
REVISIONS: 1 - 5/4/26 ADDED TEMP. WATER MAIN PLAN	
05/04/2026 NORTH CAROLINA PROFESSIONAL SEAL 033375 ENGINEER JAMES B. REED	
DATE: JUNE 20, 2025 PROJECT NO.: FAY1024 SHEET SIZE: ARCH D - 24x36	STATUS: REVISED DESIGN PRELIMINARY - FOR REVIEW PURPOSES ONLY
CITY OF FAYETTEVILLE - LOCKS CREEK DRAINAGE IMPROVEMENTS TEMPORARY WATER MAIN WITH CONSTRUCTION SEQUENCE	
CU-02A	

1



REVISIONS:
1 - 5/14/26
ADDED FH DETAIL



DATE: JUNE 20, 2025
PROJECT NO.: FAY102-4
SHEET NO.: ARCH D - 2433
STATUS: REVISED DESIGN
PRELIMINARY - FOR REVIEW PURPOSES ONLY

CITY OF FAYETTEVILLE -
LOCKS CREEK DRAINAGE IMPROVEMENTS

DETAILS

DT-04

GRADIENT
LAND - WATER INNOVATION
230 DOWNSON STREET, SUITE 500A
FAYETTEVILLE, NC 28404
PHONE: 910.824.7731
NC FIRM LICENSE NO. P-1875

FAYETTEVILLE
STORMWATER

Project:	Lock's Creek Drainage Improvements		Project No.:
Owner:	City of Fayetteville, NC		
Engineer:	Gradient, PLLC		
Offeror:			

Base Bid

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Extended Amount
Items in Base Bid (excluding Allowances) per Section 01 29 01 "Measurement and Basis for Payment"					
A-01	MOBILIZATION (5%) - COF	LS	1	5.0%	
A-02	EROSION CONTROL (5%) - COF	LS	1	5.0%	
A-03	TRAFFIC CONTROL (5%) - COF	LS	1	5.0%	
A-04	CLEARING AND GRUBBING - COF	AC	0.3		\$ -
A-05	TEMPORARY STREAM PUMP AROUND	LS	1		\$ -
A-06	UNDERCUT EXCAVATION - COF	CY	170		\$ -
A-07	SELECT BORROW MATERIAL - COF	CY	230		\$ -
A-08	REMOVE AND DISPOSE OF EXISTING FENCE	LF	40		\$ -
A-09	INSTALL NEW CHAIN LINK FENCE	LF	40		\$ -
A-10	INSTALL, MAINTAIN, AND REMOVE TEMPORARY BARRIER FENCE	LF	220		\$ -
A-11	REMOVE ASPHALT PAVEMENT - COF	SY	900		\$ -
A-12	INSTALL AGGREGATE BASE COURSE - COF	TON	340		\$ -
A-13	MILLING BITUMINOUS PAVEMENT - COF	SY	520		\$ -
A-14	PLANT MIX BITUMINOUS CONCRETE SURFACE COURSE, TYPE S9.5C - COF	TON	150		\$ -
A-15	REMOVE EXISTING ASPHALT CURB	LF	800		\$ -
A-16	REMOVE EXISTING CONCRETE CURB	LF	120		\$ -
A-17	INSTALL 24-INCH VERTICAL CONCRETE CURB AND GUTTER	LF	72		\$ -
A-18	INSTALL 30-INCH VERTICAL CONCRETE CURB AND GUTTER	LF	45		\$ -
A-19	INSTALL 24-INCH ROLL CONCRETE CURB AND GUTTER	LF	752		\$ -
A-20	INSTALL 8-INCH x 6-INCH CONCRETE CURB	LF	70		\$ -
A-21	REMOVE EXISTING CONCRETE SIDEWALK	SY	145		\$ -
A-22	INSTALL NEW CONCRETE SIDEWALK (4-inch thick)	SY	165		\$ -
A-23	INSTALL NEW CONCRETE SIDEWALK (5-inch thick)	SY	50		\$ -
A-24	MISCELLANEOUS CONCRETE FOR FLUMES	SY	20		\$ -
A-25	REMOVE MISCELLANEOUS CONCRETE ON GROUND	SY	300		
A-26	MISCELLANEOUS CONCRETE RECONSTRUCTION	SY	270		\$ -
A-27	ROADSIDE SWALES	LF	200		\$ -
A-28	ADJUSTMENT OF EXISTING STRUCTURES	EA	9		\$ -

B-01	REMOVE AND DISPOSE OF EXISTING SW STRUCTURE	EA	2		\$ -
B-02	REMOVE AND DISPOSE OF EXISTING 60" RCP	LF	65		\$ -
B-03	18" RCP, CLASS III, 6'-8' DEPTH	LF	24		\$ -
B-04	INSTALL STANDARD CATCH BASIN, 6'-8' DEPTH	EA	2		\$ -
B-05	INSTALL 5.75'Hx14'W REINFORCED CONCRETE BOX CULVERT	LS	1		\$ -
B-06	INSTALL #57 STONE BEDDING FOR BOX CULVERT	TN	62		\$ -
B-07	RIP RAP, CLASS 1 WITH FILTER FABRIC	TN	114		\$ -
B-08	SEEDING AND MULCHING, AC	AC	0.1		\$ -
B-09	SODDING, CENTIPEDE GRASS	SY	220		\$ -
C-01	PERMANENT PAVEMENT PATCH	SY	20		\$ -
C-02	REMOVE EXISTING 8" WATER MAIN	LF	210		\$ -
C-03	FURNISH & INSTALL NEW 8" RESTRAINED JOINT DUCTILE IRON WATER MAIN	LF	210		\$ -
C-04	FURNISH & INSTALL NEW 8" RJ GATE VALVE w/ VALVE BOX	EA	2		\$ -
C-05	STERILIZATION & TESTING	LS	1		\$ -
C-06	FURNISH & INSTALL FIRE HYDRANT ASSEMBLY	EA	2		\$ -
C-07	FURNISH & INSTALL TEMPORARY WATER MAIN BYPASS	LS	1		\$ -
D-01	REMOVE SANITARY SEWER LATERAL AND CLEANOUT	EA	1		\$ -
D-02	FURNISH & INSTALL NEW 4" DI SANITARY SEWER SERVICE LATERAL AND CLEANOUT	EA	1		\$ -
D-03	MANHOLE ADJUSTMENT	EA	2		\$ -
					\$ -
	Total Base Bid Items Amount (Sum of Extended Amounts for each Base Bid Line Item) in Figures: (I.E. 650,000.00)				\$ -

BID SUBMITTED BY:

Offeror: _____
Signature: _____
Printed Name: _____
Title: _____

Item No.	Item Description	Unit	Estimated Quantity	Unit Price	Extended Amount
Date: _____					

01 29 01 MEASUREMENT AND BASIS FOR PAYMENT

PART 1 - GENERAL

1.01 PAYMENT FOR MATERIALS AND EQUIPMENT

- A. Payment will be made for materials and equipment materials properly stored and successfully incorporated into the Project less the specified retainage.
- B. Provide a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of Liens. Provide documentation of payment for materials and equipment with the next Application for Payment. Remove items from the tabulation of materials and equipment if this documentation is not provided with the next Application for Payment.
- C. Provide evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest.
- D. The Work covered by progress payments becomes the property of the Owner at the time of payment. The Contractor's obligations with regard to proper care and maintenance, insurance, and other requirements are not changed by this transfer of ownership until final acceptance in accordance with the General Conditions.
- E. Payment for materials and equipment does not constitute acceptance of the product.

1.02 MEASUREMENT AND BASIS FOR PAYMENTS ON LUMP SUM ITEMS

- A. Measurement for progress payments is the invoice value for stored materials and the earned value for all other cost for constructing each item. Earned value is expressed as the value of the Work completed divided by the total value of installation cost. The total amount paid will be equal to the total lump sum amount for that item.

1.03 MEASUREMENT AND BASIS FOR PAYMENTS ON UNIT PRICE ITEMS

- A. Measure the Work using the unit of measure indicated in this Section for each unit price line item. Payment will be made only for the actual measured unit and/or computed length, area, solid contents, number, and weight unless other provisions are made in the Contract Documents. Payment on a unit price basis will not be made for Work outside dimensions shown in the Contract Documents.
- B. Payment will be made for the actual quantity of Work completed and for materials and equipment stored during the payment period. Payment amount is the Work quantity measured per Paragraph A above multiplied by the unit price for that line item in the Agreement.

1.04 MEASUREMENT AND BASIS FOR PAYMENT FOR BASE ITEMS

- A. Item A-01 – Mobilization (maximum 5% of total contract price) - COF:
 - 1. Measuring for payment is on a lump sum basis. Payment for Mobilization associated with drainage improvements (water and sewer utilities included with Item C-01), unless otherwise specified here within, will be made on the first and second payments in equal portions of 2.5%.

- B. Item A-02 – Erosion Control (includes Temporary Seeding) (maximum 5% of total contract price) – COF:
1. Measurement and payment for Erosion Control will be per lump sum per City of Fayetteville Specifications sections 00127, 00430 and 00480. This payment shall be considered full compensation for all materials, labor, equipment, and incidentals necessary to install the system of erosion and sedimentation control measures in accordance with the approved project Erosion and Sediment Control (E&SC) plans, as well as to maintain, remove, and dispose of erosion control measures as described in the Contract Documents. Approved E&SC plans serve as the minimum requirements and additional measures and/or modifications may be required by the Engineer and shall be provided at no additional cost to the Owner.
- C. Item A-03 – Traffic Control (maximum 5% of total contract price) – COF:
1. Measurement shall not be made for this item.
 2. Traffic Control will be paid as contract lump sum price. Partial payments for Traffic Control will be made on the following schedule of pay estimates:
 - a. 50% of lump sum on First Partial Pay Estimate
 - b. 25% of lump sum at Completion of 50% of the Project
 - c. 15% of lump sum at Substantial Completion of the Project
 - d. 10% of lump sum at Final Payment
 3. These payments shall be considered full compensation for all materials, labor, equipment, and incidentals necessary to install and maintain traffic control measures as described in the Contract Documents and City of Fayetteville Specifications Section 00497. No additional payment shall be made for adjustments to the signage or traffic control plan during construction.
- D. Item A-04 – Clearing and Grubbing – COF:
1. Measurement and payment for Clearing and Grubbing shall be made on the basis of the unit price and shall be per acre per City of Fayetteville Specifications section 00127. This item includes removal of rip rap around existing culvert as required for construction of the new culvert.
- E. Item A-05 – Temporary Stream Pump Around
1. Measurement and payment for Temporary Stream Pump Around will be lump sum. Payment shall be considered full compensation for all materials, labor, equipment and incidentals necessary to provide a bypass of the stream flow as needed for the duration of construction of the box culvert. This item includes pumps, intake and discharge hoses, sediment filtering device, dikes and any other item needed to provide a complete and workable system. Contractor shall be responsible for determining size of pump and volume of water to be pumped.
- F. Item A-06 – Undercut Excavation – COF:
1. Measurement and payment for Undercut Excavation shall be made on the basis of the unit price and shall be by the volume (cubic yards) per City of Fayetteville Specifications sections 00127 and 00425.

- G. Item A-07 – Select Borrow Material – COF:
1. Measurement and payment for Select Borrow Material shall be made on the basis of the unit price and shall be by the volume (cubic yards) per City of Fayetteville Specifications section 00127 and 00425.
- H. Item A-08 – Remove and Dispose of Existing Fence:
1. Measurement and payment to Remove and Dispose of Existing Fence shall be made on the basis of the unit price per linear foot per City of Fayetteville Specifications section 00127, paragraph 1.47 FENCE REMOVAL.
- I. Item A-09 – Install New Chain Link Fence:
1. Measurement and payment to Install New Chain Link Fence shall be made on the basis of the unit price per linear foot per City of Fayetteville Specifications sections 00127 and 02831.
- J. Item A-10 – Install, Maintain, and Remove Temporary Barrier Fence:
1. Measurement and payment for Temporary Barrier Fence shall be made on the basis of the unit price per linear foot per City of Fayetteville Specifications sections 00150.
- K. Item A-11 - Remove Asphalt Pavement - COF
1. Measurement and payment for removal of asphalt pavement shall be made on the basis of the unit price and shall be per square yard removed per City of Fayetteville Specification section 00127. This payment shall be considered full compensation for all materials (asphalt, base course, etc.), labor, equipment, and incidentals necessary to cut, remove and dispose of existing asphalt as described in the Contract Documents.
- L. Item A-12 – Install Aggregate Base Course – COF:
1. Measurement and basis of payment for Aggregate Base Course (ABC), shall be made at the unit price bid per ton of stone placed as per City of Fayetteville Specifications section 00127 and 00420.. Installation of the aggregate base course shall be completed in areas where existing pavement has been removed and new pavement is to be placed in accordance with these Contract Documents.
- M. Item A-13 – Milling Bituminous Pavement – COF:
1. Measurement and payment for Milling Bituminous Pavement shall be made on the basis of the unit price per square yard milled per City of Fayetteville Specifications sections 00127, and 00440. This payment shall be considered full compensation for all materials, labor, equipment, and incidentals necessary to mill pavement, clean the milled surface, load, haul, and legally dispose of milled materials as described in the Contract Documents. Any equipment necessary to remove, install, and compact asphalt in the areas of manholes, water valves, curb and gutter and any other obstructions shall be included in the unit price. Testing will be the responsibility of the Owner.
- N. Item A-14 – Plant Mix Bituminous Concrete Surface Course, Type S9.5C – COF:
1. Measurement and payment for Plant Mix Bituminous Concrete Surface Course shall be made on the basis of the unit price per ton of the asphalt type placed per City of Fayetteville Specifications sections 00127 and 00450. Minimum thickness of surface

course shall be 2 inches. This payment shall be considered full compensation for all materials, labor, equipment, and incidentals necessary to produce, deliver, tackcoat, place, and compact bituminous plant mixed surface course. Testing will be the responsibility of the Owner.

O. Item A-15 – Remove Existing Asphalt Curb:

1. Measurement and payment to remove and properly dispose of existing asphalt curb shall be per unit price per linear foot removed similar to per City of Fayetteville Specifications sections 00127, paragraph 1.19 REMOVE AND REPLACE CONCRETE CURB AND GUTTER.. This payment shall be considered full compensation for all materials, labor, equipment, and incidentals necessary to saw cut, remove and dispose existing curb as described in the Contract Documents. Work for replacement of curb shall be measured and paid under separate items.

P. Item A-16 – Remove Existing Concrete Curb:

1. Measurement and payment to remove and properly dispose of existing concrete curb shall be per unit price per linear foot removed similar per City of Fayetteville Specifications sections 00127, paragraph 1.19 REMOVE AND REPLACE CONCRETE CURB AND GUTTER. . This payment shall be considered full compensation for all materials, labor, equipment, and incidentals necessary to saw cut, remove and dispose of existing concrete curb as described in the Contract Documents. Work for replacement of curb shall be measured and paid under separate items.

Q. Item A-17 – Install 24-inch Vertical Concrete Curb and Gutter:

1. Measurement and payment to install 24" vertical curb and gutter shall be per unit price per linear foot installed per City of Fayetteville Specifications sections 00127 and 00455 and City of Fayetteville detail SD-1. This payment shall be considered full compensation for all materials, labor, equipment, and incidentals necessary for grading, compaction, form work, install concrete curb, and backfill behind curb with topsoil as described in the Contract Documents. All transitions and aprons for catch basins required as described in the Contract Documents shall be included in the linear foot price of curb. Testing will be the responsibility of the Owner.

R. Item A-18 – Install 30-inch Vertical Concrete Curb and Gutter:

1. Measurement and payment to install 30" vertical curb and gutter shall be per unit price per linear foot installed per City of Fayetteville Specifications sections 00127 and 00455 and City of Fayetteville detail SD-1. This payment shall be considered full compensation for all materials, labor, equipment, and incidentals necessary for grading, compaction, form work, install concrete curb, and backfill behind curb with topsoil as described in the Contract Documents. All transitions and aprons for catch basins required as described in the Contract Documents shall be included in the linear foot price of curb. Testing will be the responsibility of the Owner.

S. Item A-19 – Install 24-inch Roll Concrete Curb and Gutter:

1. Measurement and payment to install 24" roll curb and gutter shall be per unit price per linear foot installed per City of Fayetteville Specifications sections 00127 and 00455 and City of Fayetteville detail SD-1. This payment shall be considered full compensation for all materials, labor, equipment, and incidentals necessary for

grading, compaction, form work, install concrete curb, and backfill behind curb with topsoil as described in the Contract Documents. Testing will be the responsibility of the Owner.

T. Item A-20 – Install 8-inch x 6-inch Concrete Curb:

1. Measurement and payment to install 8-inch x 6-inch concrete curb gutter shall be per unit price per linear foot installed per City of Fayetteville Specifications sections 00127 and 00455. This payment shall be considered full compensation for all materials, labor, equipment, and incidentals necessary for grading, compaction, form work, install concrete curb, and backfill behind curb with topsoil as described in the Contract Documents. Testing will be the responsibility of the Owner.

U. Item A-21 – Remove Existing Concrete Sidewalk:

1. Measurement and payment to remove existing concrete sidewalk (varying thickness) shall be made on the basis of the unit price and shall be per square yard removed. This payment shall be considered full compensation for saw cutting and removal of the existing sidewalk and disposing of excess or unsuitable materials off-site, and all equipment, materials, tools, labor, and incidentals necessary to complete the work as described in the Contract Documents.

V. Item A-22 – Install Concrete Sidewalk (4-inch thick):

1. Measurement and payment for installation of concrete sidewalk (4-inch thick) shall be made on the basis of the unit price and shall be per square yard installed per City of Fayetteville Specifications sections 00127 and 00455. This payment shall be considered full compensation for grading, backfilling, compaction, placement of concrete, expansion joint materials, curing compound, form work, and all equipment, materials, tools, labor, and incidentals necessary to complete the work as described in the Contract Documents.

W. Item A-23 – Install Concrete Sidewalk (5-inch thick):

1. Measurement and payment for installation of concrete sidewalk (5-inch thick) shall be made on the basis of the unit price and shall be per square yard installed per City of Fayetteville Specifications sections 00127 and 00455. This payment shall be considered full compensation for grading, backfilling, compaction, expansion joint materials, curing compound, form work, and all equipment, materials, tools, labor, and incidentals necessary to complete the work as described in the Contract Documents.

X. Item A-24 – Miscellaneous Concrete for Flumes:

1. Measurement and payment for installation of concrete flumes shall be made on the basis of the unit price and shall be per square yard installed per City of Fayetteville Specifications sections 00127 and 00455. This payment shall be considered full compensation for grading, backfilling, compaction, placement of concrete, expansion joint materials, curing compound, form work, and all equipment, materials, tools, labor, and incidentals necessary to complete the work as described in the Contract Documents.

Y. Item A-25 – Remove Miscellaneous Concrete on ground:

1. Measurement and payment to remove existing concrete driveways, parking areas, etc. (varying thickness) shall be made on the basis of the unit price and shall be per square yard removed. This payment shall be considered full compensation for saw cutting and removal of the existing concrete and disposing of excess or unsuitable materials off-site, and all equipment, materials, tools, labor, and incidentals necessary to complete the work as described in the Contract Documents.

Z. Item A-26 – Miscellaneous Concrete Reconstruction:

1. Measurement and payment to install replacement concrete for driveways, parking areas, etc. (minimum 6-inch thickness) shall be made on the basis of the unit price and shall be per square yard of concrete surface installed. This payment shall be considered full compensation for grading, backfilling, compaction, placement of concrete, expansion joint materials, curing compound, form work, and all equipment, materials, tools, labor, and incidentals necessary to complete the work as described in the City of Fayetteville Specifications sections 00127 and 00455 and the Contract Documents.

AA. Item A-27 – Roadside Swale:

1. Convert roadside diversion ditches to permanent roadside swales upon completion of construction. Measurement and payment shall be made on the basis of the unit price per linear foot of swale approved for conversion. This payment shall be considered full compensation for cleaning, re-grading as necessary, compaction, and seeding including all equipment, materials, tools, labor and incidentals necessary to complete the work as identified on the drawings and described in the Contract Documents.

BB. Item A-28 – Adjustment of Existing Structures:

1. Perform the adjustment of storm manholes, inlets and junction boxes with brick masonry, block masonry, concrete adjustment grade rings or Portland cement concrete on existing walls in accordance with City of Fayetteville specifications sections 00127 and 02532. Perform the adjustment of sewer manholes, cleanouts, water meter boxes and valve boxes in accordance with PWC specifications section 02505.
2. Place bituminous plant mix flush with the top of the raised structure within 7 days after raising the structure. Make the adjustments before the final layer of surfacing material is placed in areas to be surfaced or resurfaced. Salvage and reuse existing frames, grates, manhole covers, rings, meter boxes and valve boxes in the adjustment.
3. Adjustment of Existing Structures will be measured and paid in units of each for manholes, meter boxes and valve boxes satisfactorily adjusted. Such price includes, but is not limited to, excavation and backfilling, removal of a portion of the existing structure, installing brick masonry, mortar, grout, concrete, reinforcing steel, fittings, and any other materials as required.

CC. Item B-01 – Remove and Dispose of Existing SW Structure:

1. Measurement and payment to Remove and Dispose of Existing SW Structure shall be on the basis of the unit price per each removed per City of Fayetteville Specifications section 00425. This payment shall be considered full compensation for all materials,

labor, equipment, and incidentals necessary to remove, haul, legally dispose of waste materials, and complete all temporary pipe connections (as required) as described in the Contract Documents including excavation, trenching/shoring, dewatering, backfilling, and compaction as specified per City of Fayetteville Specifications sections 00425 and 00435.

DD. Item B-02 – Remove and Dispose of Existing 60" RCP:

1. Measurement and payment to Remove and Dispose of Existing 60" RCP culvert shall be on the basis of the unit price per linear foot removed per City of Fayetteville Specifications section 00425. This payment shall be considered full compensation for all materials, labor, equipment, and incidentals necessary to remove, haul, legally dispose of waste materials, and complete all temporary pipe connections (as required) as described in the Contract Documents including excavation, trenching/shoring, dewatering, backfilling, and compaction as specified per City of Fayetteville Specifications sections 00425 and 00435.

EE. Item B-03 – 18" RCP, CLASS III, 6'-8' Depth:

1. Measurement and payment shall be per the depth of the 18" RCP Class III, (6' - 8' depth) and made on the basis of the unit price per linear foot installed per City of Fayetteville Specifications sections 00127 and 00475. This payment shall be considered full compensation for all materials, labor, equipment, and incidentals necessary to install the new storm pipes as described in the Contract Documents including excavation, trenching/shoring, dewatering, backfilling, compaction and connections to the box culvert as specified per City of Fayetteville Specifications Section 00425 and 00435 and as indicated on the drawings.

FF. Item B-04 – Install Standard Catch Basin, 6'-8' Depth:

1. Measurement and payment shall be per the depth of the catch basin (6' - 8' depth) and made on the basis of the unit price per each installed per City of Fayetteville Specifications section 00127 and 00475. This payment shall be considered full compensation for all materials, labor, equipment, and incidentals necessary to furnish, install, and complete all pipe connections as described in the Contract Documents including excavation, trenching/shoring, dewatering, backfilling, and compaction as specified per City of Fayetteville Specifications Section 00425 and 00435.

GG. Item B-05 – Install 5.75'Hx14'W Reinforced Concrete Box Culvert:

1. Measurement and payment shall be per lump sum for the installation of the box culvert, and all associated headwalls, sill walls, and wingwalls. This payment shall be considered full compensation for all materials, labor, equipment, transportation costs, precast structures, and incidentals necessary to furnish and install the structure and complete all pipe connections as described in the Contract Documents including excavation, trenching/shoring, dewatering, backfilling, and compaction as specified per City of Fayetteville Specifications Section 00425 and 00435.

HH. Item B-06 – Install #57 Stone Bedding for Box Culvert

1. Measurement and payment shall be per ton of material furnished and installed underneath the box culvert. Thickness of the stone bedding shall be per manufacturer's recommendations but in no case shall be less than 12-inches. This

payment shall be considered full compensation for all materials, labor, equipment, transportation costs, and incidentals necessary to furnish and install the stone bedding as described in the Contract Documents including excavation, trenching/shoring, dewatering, backfilling, and compaction.

II. Item B-07 – Rip Rap, Class 1 with Filter Fabric:

1. Measurement and payment for Rip Rap, Class 1 with Filter Fabric shall be made on the basis of the unit price per ton per City of Fayetteville Specifications sections 00127, 00430, and 02542. This payment shall be considered full compensation for all riprap, stone, geotextile fabric, materials, labor, equipment, and incidentals necessary to install riprap and removal and disposal of unsuitable material off site as described in the Contract Documents including excavation, dewatering, grading, backfilling, and compaction as specified per City of Fayetteville Specifications Section 00425, 00435.

JJ. Item B-08 – Seeding and Mulching, AC:

1. Measurement and payment for (Permanent) Seeding and Mulching will be on the basis per acre seeded as per City of Fayetteville Specifications sections 00127 and 00480. This payment shall be considered full compensation for all materials, labor, equipment to properly remove and dispose of debris and excess material, grade disturbed areas to original or proposed surface profile, cleaning of paved surfaces, and proper seeding, fertilizing, mulching and other incidentals necessary to properly seed the project area.

KK. Item B-09 – Sodding, Centipede Grass:

2. Measurement and payment for Sodding will be on the basis per square yard as per City of Fayetteville Specifications sections 00127 and 02931. This payment shall be considered full compensation for all materials, labor, equipment to properly remove and dispose of debris and excess material, grade disturbed areas to original or proposed surface profile, prepare soil bed(s), rake, topsoil, apply soil amendments such as limestone and fertilizer, place sod, water, maintain, replace sod as necessary, and other incidentals need to properly establish sod within the acceptance and warranty period as per City of Fayetteville Specifications section 02931.

LL. Item C-01 – Permanent Pavement Patch:

1. Work shall consist of placing the minimum required thickness of Asphalt Pavement Surface Course (S9.5C) and minimum required thickness Aggregate Base Course (ABC) in accordance with NCDOT standards. At a minimum the pavement shall match the existing roadway pavement section. Payment shall be made at the unit price bid per square yard completed and accepted as listed in the Bid Form. Installation of the permanent pavement patch shall be completed in accordance with these Contract Documents. Measurement shall be based on the number of square yards included in the bid form.
2. Payment for furnishing and placing permanent asphalt pavement patch shall include re-cutting pavement to straight uniform widths parallel and perpendicular to the road with no jagged edges, removal and disposal of asphalt offsite, compaction of pavement subgrade, placement and compaction of ABC, installation and maintenance of transitions to accommodate road travel, adjusting structures as required, tack coat, placing and compacting of asphalt material, cleanup, and all costs for labor, materials, tools, equipment, and incidentals necessary to complete the work.

3. All materials and workmanship shall be in accordance with the North Carolina Department of Transportation (NCDOT) standards, the NCDOT HMA/QMS Manual, and as specified within PWC specifications section 02573 PERMANENT PAVEMENT PATCH.

MM.Item C-02 – Remove Existing 8” Water Main

1. All work shall be in accordance with PWC standards. Work shall include all costs for cutting, plugging, temporary thrust blocks, removal, hauling and disposal of water mains and appurtenances, and all labor, materials, equipment, and incidentals necessary to complete the work. Removing water main is usually only required where the existing water main is located within other work trench areas (water, sewer or storm drain trenching areas for removal, replacement, or installation). Cutting and removal of pavement, excavation, backfill, compaction, and removal and disposal of excess unsuitable material off site is not included with this line item, and these items are included with the associated water, sewer or storm drain removal, replacement, or installation line items. Unless otherwise noted on the drawings, removal of the water main shall occur after PWC has accepted the new water main and laterals.
2. Payment under this item shall be per linear foot as listed in the Bid Form and shall include all costs necessary to remove the water main in accordance with PWC Specifications Section 02660.

NN. Item C-03 - Furnish and Install New 8” Restrained Joint Ductile Iron Water Main

1. Work shall consist of cutting and removal of pavement as required, excavation, shoring, removal and disposal of excess unsuitable material off site, bedding material, installation of the pipe at the specified line and grade, including all tees, fittings, bends, etc., backfill, compaction, all required compaction testing and all labor, materials, equipment, and incidentals necessary to complete the work. No payment for installation of water main will be made until all required testing has been satisfactorily completed.
2. Payment will be per unit price per linear foot as indicated on the Contract Drawings and in accordance with PWC Specifications Section 02660.

OO. Item C-04 - Furnish and Install New 8” RJ Gate Valve w/ Valve

1. Work shall consist of furnishing new valve & valve box, cutting and removal of pavement as required, excavation, shoring, removal and disposal of excess unsuitable material off site, valve boxes, concrete protection rings, tracing wire, backfill, compaction, and all labor, materials, equipment, and incidentals necessary to complete the work.
2. Payment will be per unit price per each 8” RJ Gate Valve furnished and installed as indicated on the Contract Drawings and in accordance with PWC Specifications Section 02660.

PP. Item C-05 – Sterilization & Testing

1. Work shall include all costs for furnishing test equipment, installation of temporary taps for testing and/or disinfection, coordination with the Project Coordinator, legal disposal of hazardous chemicals from the site, removal of all unnecessary taps and fittings upon completion of the work, and all labor, materials, equipment, and incidentals necessary to complete the testing. The PWC Project Coordinator shall be

present for all testing. When the main is tested for sterilization, the PWC Project Coordinator shall take a sample to the PWC lab to verify disinfection.

2. Payment under this line item will be per a lump sum price and shall include all costs necessary to perform the required sterilization and testing on the water mains, laterals and appurtenances in accordance with PWC standards and all applicable standards, laws, and regulations prior to placing it into service.

QQ. Item C-06 – Furnish & Install Fire Hydrant Assembly

1. Work shall consist of furnishing and installing new fire hydrant assembly to include tapping sleeve and valve onto existing main, 6" fire hydrant branch, valve & valve box, and fittings, cutting and removal of pavement as required, excavation, shoring, removal and disposal of excess unsuitable material off site, concrete protector rings, tracing wire, backfill, compaction, and all labor, materials, equipment, and incidentals necessary to complete the work in accordance with PWC details and standards.
2. Payment will be per unit price per each Fire Hydrant Assembly furnished and installed as indicated on the Contract Drawings and in accordance with PWC Specifications Section 02660.

RR. Item C-07 – Furnish & Install Temporary Water Main Bypass

1. Work shall consist of furnishing, installing, testing and maintaining temporary bypass water line between the two new fire hydrants as shown on the construction drawings until such time as the replacement water main has been installed, tested and accepted by PWC.
2. Payment under this line item will be per a lump sum price and shall include all costs necessary to furnish, install and perform the required sterilization and testing on the temporary water main and appurtenances in accordance with PWC standards and all applicable standards, laws, and regulations prior to placing it into service.

SS. Item D-01 – Remove Sanitary Sewer Service Lateral and Cleanout

1. Work shall consist of all labor, materials, equipment, tools, and other incidentals, not specifically covered in other bid items, necessary to complete the work including but not limited to excavation, removal of pavement, removal of existing lateral and clean out, abandonment and grout-filling of pipe to remain in place, proper disposal of waste materials, and all other incidentals necessary in accordance with PWC Standards.
2. Payment shall be based upon the number of laterals and associated clean outs removed and disposed per PWC Specifications Section 02730. This payment shall be considered full compensation for all materials, labor, equipment, testing and incidentals necessary for removal and replacement as described in the Contract Documents.

TT. Item D-02 – Furnish & Install New 4" D.I. Sanitary Sewer Service Lateral & Cleanout

1. Work shall consist of all labor, materials, equipment, tools, and other incidentals, not specifically covered in other bid items, necessary to complete the work including but not limited to excavation, removal of pavement, installation of new lateral and cleanout, proper disposal of waste materials and all other incidentals as necessary.

2. Payment shall be based upon the number of laterals and associated clean outs installed per PWC Specifications Section 02730. This payment shall be considered full compensation for all materials, labor, equipment, testing and incidentals necessary to installation as described in the Contract Documents.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION