



WATER AND SEWER
Engineering Design

DATE:

TO:
Plan Holders
Contractors

FROM:
Jenna Richardson
918-596-9637
jennarichardson@cityoftulsa.org

EMAIL TRANSMITTAL

ADDENDUM NO. 1

**PROJECT NO. ES 2025-09 COAL CREEK SMALL DIAMETER
CONCRETE PIPE REPLACEMENT**

Number of pages: **6**

All addenda to the contract documents should be denoted on the
last page of the Proposal in the space provided.

Thank you,
Contract Administration



WATER AND SEWER
Engineering Design

DATE:
July 15, 2025

**ADDENDUM NO. 1
TO
PROJECT NO. ES 2025-09
COAL CREEK SMALL DIAMETER CONCRETE PIPE REPLACEMENT**

This Addendum No. 1 consisting of two (2) items, submitted by RJN Group, is hereby made a part of the Contract Documents to the same extent as though it were originally included therein and shall supersede anything contained in the Plans and Specifications with which it might conflict. **All addenda to the contract documents should be denoted on the last page of the Proposal in the space provided.**

This Addendum No. 1 consists of the following:

1. The attached documents list the detailed items that have been modified in Addendum No. 1. These documents shall be inclusive and apply to this project.

All other provisions of the Plans and Specifications shall remain in full force and effect.

CITY OF TULSA

A blue ink signature of Eric Lee, consisting of a stylized 'E' and 'L'.

Eric Lee
Director

Handwritten initials in blue ink, appearing to be "HAS" followed by "MW" and "JR".
HAS/TGP/AL/JR



ADDENDUM NO. 1

TO

TMUA PROJECT NO. ES 2025-09 COAL CREEK SMALL DIAMETER CONCRETE PIPE REPLACEMENT

July 15, 2025

This Addendum No. 1 is hereby made a part of the Contract Documents to the same extent as though it were originally included therein and shall supersede anything contained in the Plans and Specifications with which it might conflict. This Addendum shall be attached to the Index Sheet of the Contract Documents and submitted with the bid. This Addendum shall be acknowledged on the signature page of the Bid Proposal by writing in the number and date received. Failure to do so shall result in the bid being deemed non-responsive.

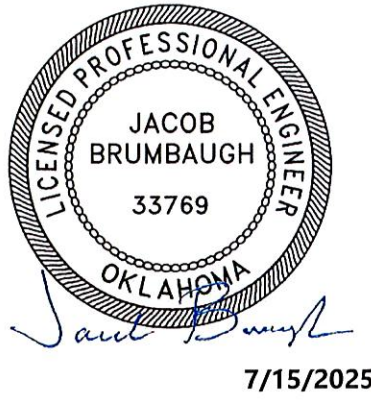
This Addendum No. 1 consists of the following:

PLAN SHEET REVISIONS:

1. Sheet 3: General note 15 has been modified to state, "All pavement removal shall be saw cut at the neat lines as indicated in the specifications and standard details. Saw cuts required for removal and replacement items shall be full depth of the existing pavement."
2. Sheet 4: Pay item note 40 and references to it in the estimated construction quantities table have been added to the plan sheet. The pay item note states, "Pavement removal and replacement for water, sanitary, and stormwater main installations – this pay item supersedes City of Tulsa standard specification section 329.6 and 402.17, with respect to saw cutting and dowels and includes the following (these items shall not be paid separately):
 - a. Saw cutting
 - b. Dowels
 - c. Disposal of broken pavement
 - d. Temporary surface
 - e. Associated excavation
 - f. Preparation of subgrade
 - g. Forms or reinforcing
 - h. Removal or replacement of gravel
 - i. Additional saw cutting or replacement of pavement damaged by the contractor
 - j. Joint sealer, tack coats, or edge sealing

This pay item does not include the following which will be paid separately in accordance with city standard specifications, details, and drawings:

- a. "Curb and gutter"



END OF ADDENDUM

GENERAL NOTES

15.

ALL PAVEMENT REMOVAL SHALL BE SAW CUT AT THE NEAT LINES AS INDICATED IN THE SPECIFICATIONS AND STANDARD DETAILS. SAW CUTS REQUIRED FOR REMOVAL AND REPLACEMENT ITEMS SHALL BE FULL DEPTH OF THE EXISTING PAVEMENT.
- THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SAFETY PLAN TO THE CITY OF TULSA FIELD ENGINEERING DEPARTMENT PRIOR TO COMMENCEMENT OF WORK. THE SAFETY PLAN SHALL ADDRESS, BUT NOT BE LIMITED TO ISSUES SUCH AS TRAFFIC CONTROL, WORK SITE SAFETY, MANHOLE VENTILATION, WORK EQUIPMENT, FIRST AID, HYGIENE, AND OTHER RELATED TOPICS. THE CONTRACTOR SHALL BE EXPECTED TO PERFORM THE WORK IN A MANNER THAT BEST PROTECTS THE SAFETY OF WORKERS, INSPECTORS, BYSTANDERS, AND OTHERS WHO MAY BE IN THE VICINITY OF THE PROJECT. FAILURE TO PERFORM THE WORK AND MAINTAIN THE SITE IN A SAFE MANNER, IN THE OPINION OF THE ENGINEER OR OWNER, SHALL BE SUFFICIENT CAUSE TO STOP ALL WORK UNTIL SAFETY PROBLEMS ARE CORRECTED.
 - ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE CITY OF TULSA AND ODOT ENGINEERING STANDARDS AND SPECIFICATIONS AND IN ACCORDANCE WITH THE SPECIAL PROVISIONS OF THIS CONTRACT.
 - THE CONTRACTOR SHALL HAVE ONE (1) EXECUTED COPY OF THE CONTRACT DOCUMENTS AT THE JOB SITE AT ALL TIMES.
 - THE CONTRACTOR SHALL, IN COOPERATION WITH THE CITY, DEVELOP AND SUBMIT FOR APPROVAL A TRAFFIC CONTROL PLAN (TCP), TO THE CITY OF TULSA PUBLIC WORKS, FIELD ENGINEERING. THIS TCP SHALL DETAIL SUCH MEASURES AS MAY BE REQUIRED TO ESTABLISH, INSTALL, MAINTAIN, AND OPERATE A COMPLETE, ADEQUATE, AND SAFE TRAFFIC CONTROL SYSTEM DURING THE ENTIRE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL PLACE TRAFFIC CONTROL FLAGMEN, BARRICADES, SIGNS, SIGNALS, OR OTHER DEVICES AS MAY BE REQUIRED.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION, PERMITTING, AND EXECUTION OF A STORMWATER POLLUTION PREVENTION PLAN (SWP3). THE CONTRACTOR SHALL PROVIDE ALL DOCUMENTATION REQUIRED OF SWP3 FOR REVIEW AND APPROVAL OF THE PLAN BY FEDERAL, STATE, AND LOCAL AUTHORITIES. THIS INCLUDES, BUT IS NOT LIMITED TO, THE NOTICE OF INTENT AND THE NOTICE OF TERMINATION.
 - THE CONTRACTOR SHALL PROVIDE TEMPORARY ORANGE SAFETY FENCING AROUND ALL EXCAVATION, INCLUDING TRENCHES, PITS, VAULTS, ETC. TO MAINTAIN SECURITY AND SAFETY FOR ANIMALS, CHILDREN OR ANY BYSTANDER. THE COST OF ORANGE SAFETY FENCING SHALL BE INCLUDED IN OTHER PAY ITEMS.
 - ALL EXCAVATED MATERIAL REMOVED DURING TRENCHING OR EXCAVATION SHALL BE DISPOSED OF AT A SITE APPROVED BY THE OWNER. PRIOR TO TRENCHING AND EXCAVATION, THE CONTRACTOR SHALL SUBMIT THE PROPOSED DISPOSAL SITE TO THE ENGINEER FOR HIS REVIEW. STOCKPILING EXCAVATED MATERIALS IN STREET OR ALLEY RIGHT-OF-WAY MAY BE ALLOWED UPON APPROVAL BY THE ENGINEER. MAINTENANCE OF STOCKPILE SITE IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR MUST MAINTAIN STOCKPILE SITES IN A SAFE, POLLUTION FREE CONDITION THROUGHOUT THE PROJECT. THE CONTRACTOR SHALL NOT STOCKPILE MATERIAL OR STORE ANY EQUIPMENT OVERNIGHT IN THE TULSA REGULATORY FLOODPLAIN.
 - BACKFILL UNDER ALL PAVED SURFACES SHALL BE TYPE "A" AGGREGATE BASE PLACED IN 8" MAXIMUM LIFTS AND COMPACTED BY A VIBRATORY HAND TAMPER TO 95% OF THE STANDARD PROCTOR DENSITY, AS MEASURED BY THE NUCLEAR DENSITY METHOD.
 - THE CONTRACTOR SHALL PROVIDE A DETAILED ACCESS PLAN FOR THE CONSTRUCTION OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS, CONSTRUCTION ACTIVITIES, AND PERMITS THAT MAY BE NEEDED FOR THE IMPLEMENTATION OF THIS PLAN.
 - CONTRACTOR MUST NOTIFY THE HOMEOWNER A MINIMUM OF 48 HOURS (SPECIFICATION 400) PRIOR TO BEGINNING ANY REHAB WORK OR CONSTRUCTION ON HOMEOWNER'S PROPERTY.
 - IN ALL AREAS WHERE EXCAVATION WILL OCCUR, CONTRACTOR SHALL VIDEO ALL CONCRETE PAVEMENT, BUILDINGS, FOUNDATIONS, LANDSCAPING, LAWNS AND TREES PRIOR TO CONSTRUCTION AND SUBMIT TO THE ENGINEER FOR PROJECT RECORDS.
 - CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION AND RESTORATION OF ANY EXISTING STORAGE SHEDS, LOCATED WITHIN THE CONSTRUCTION AREA, THAT ARE DAMAGED DURING CONSTRUCTION, AT NO ADDITIONAL COST TO THE CITY OF TULSA OR THE HOMEOWNER.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION OF THE LOCATION OF ALL EXISTING SANITARY SEWER SERVICE LATERALS IN THE PROJECT AREA. IF ENCOUNTERED OR DAMAGED DURING CONSTRUCTION, EXISTING SERVICE LATERALS SHALL BE REMOVED AND REPLACED USING PIPE OF THE SAME SIZE AND MATERIAL AS THE EXISTING SEWER AT THE CONTRACTORS EXPENSE.
 - ALL DAMAGED PAVEMENT OUTSIDE OF THE TRENCH PAY LINE SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE.
 - ALL CONCRETE PAVEMENTS, FLEXIBLE PAVEMENTS, CURB AND GUTTER, AND UNPAVED SURFACES SHALL BE FINISHED TO MATCH EXISTING SURROUNDING SURFACES.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING, NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
 - CONTRACTOR SHALL REPAIR ANY IRRIGATION SYSTEMS DAMAGED DURING THE COURSE OF CONSTRUCTION, PAYMENT SHALL BE INCLUDED IN RIGHT-OF-WAY CLEARING AND RESTORING. NO ADDITIONAL PAYMENTS SHALL BE MADE.
 - ALL SANITARY SEWER AND STORM SEWER MANHOLE CASTING AND LIDS THAT ARE DISTURBED BY THE CONTRACTOR SHALL BE REPLACED WITH NEW ONES, AND THE OLD CASTINGS AND LIDS SHALL BE DELIVERED TO THE SEWER BASE AT 9319 E. 42nd STREET N. AND PLACED IN THE METAL RECYCLE BIN IN THE STOCKROOM AREA 918-669-6130, BETWEEN THE HOURS OF 7:30 AM AND 3:00 PM MONDAY THROUGH FRIDAY.
 - NO FILL, SPOIL, BEDDING MATERIAL OR EQUIPMENT MAY BE STORED OVERNIGHT WITHIN THE FLOOD PLAIN LIMITS.
 - ALL SANITARY SEWER MANHOLES LOCATED IN THE FLOODPLAIN SHALL BE BUILT IN ACCORDANCE WITH THE FLOODPLAIN MANHOLE SPECIFICATION WITH PADDLE - LOCK LID.

MANHOLE REHABILITATION NOTES

- ALL MANHOLES, PIPE SIZES AND LENGTH, DEFECTS, SURFACE TYPES AND THEIR LOCATIONS SHOWN IN THE PLANS ARE ACCORDING TO THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL INFORMATION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO PERFORMING THE WORK.
- REPLACEMENT MANHOLES SHALL HAVE FLOW LINE AND RIM ELEVATIONS SET TO MATCH THOSE OF EXISTING MANHOLES UNLESS OTHERWISE NOTED BY THE ENGINEER. FRAMES AND COVERS SHALL BE PROVIDED IN ACCORDANCE WITH SPECIFICATION REQUIREMENTS.

- CONTRACTOR SHALL ENSURE THAT ALL MANHOLE FRAME AND COVER CASTINGS HAVE MACHINED SEATING SURFACES WITH A TIGHT FIT AND COMPLY WITH THE OTHER PROVISIONS OF THE MATERIALS SPECIFICATION.
- ACTIVE LEAKING JOINTS OR OTHER DEFECTS OBSERVED BY THE CONTRACTOR, BUT NOT SCHEDULED FOR REHABILITATION, SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY UPON DETECTION.
- IN AREAS OF MANHOLE REPAIRS, CONTRACTOR SHALL PLACE SPOILS ON PLASTIC SHEETS, PLYWOOD OR OTHER SUITABLE GROUND PROTECTION.
- THE MANHOLE DEPTHS SHOWN ON THE PLANS ARE FROM SURVEY. HOWEVER, ACCURATE FIELD MEASUREMENTS SHALL BE UTILIZED FOR ANY MANHOLE REPLACEMENT OR REHABILITATION.
- ALL NEW, WALL REHABILITATION, AND REPLACEMENT MANHOLES SHALL NOT HAVE STEPS INSTALLED. MANHOLE WALL REHABILITATION TYPE Gg AND Gs REPAIRS, SHALL HAVE STEPS REMOVED AND ARE CONSIDERED INCIDENTAL TO WALL REHABILITATION PAY ITEMS.
- CONTRACTOR SHALL BE REQUIRED TO VACUUM TEST ALL NEW MANHOLE INSTALLATIONS AND EXISTING MANHOLES WHERE COMPLETE REHABILITATION IS PERFORMED, IN ACCORDANCE WITH THE CITY OF TULSA STANDARDS AND SPECIFICATIONS.
- ALL NEW MANHOLE FRAMES AND COVERS INSTALLED ON THE PROJECT SHALL HAVE A MINIMUM CLEAR OPENING OF 30-INCHES REGARDLESS OF MANHOLE SIZE. NEW MANHOLE FRAMES AND COVERS INSTALLED ON EXISTING MANHOLES MAY HAVE CLEAR OPENING LESS THAN 30-INCHES WITH ENGINEER APPROVAL.

PIPELINE REHABILITATION NOTES

- POST REHABILITATION TELEVISION INSPECTION OF LINES INSTALLED BY TRENCHLESS METHODS SHALL BE PERFORMED BY THE CONTRACTOR AND SHALL BE INCLUDED IN THE COST OF OTHER PAY ITEMS.
- POINT REPAIR LOCATIONS ARE APPROXIMATE AND SHALL BE DETERMINED BY THE CONTRACTOR'S PRE-TELEVISION INSPECTION.
- QUANTITIES SHOWN IN THE SUMMARY TABLE ARE AN ESTIMATE OF QUANTITIES FOR THE WORK SHOWN AND DO NOT REFLECT FINAL WORK ITEM QUANTITIES NECESSARY TO REHABILITATE PIPELINE SEGMENTS.
- POINT REPAIR(S) SHALL BE PERFORMED USING LIKE PIPE ACCORDING TO CITY OF TULSA CONSTRUCTION SPECIFICATION SECTION 412.2.1. (I.E. EXISTING VCP WILL BE REPAIRED USING VCP, EXISTING PVC WILL BE REPAIRED USING PVC, AND EXISTING DIP WILL BE REPAIRED USING DIP). IF AN OBSTRUCTION IS ENCOUNTERED DURING CLEANING AND TELEVISION INSPECTION PRIOR TO OR DURING THE INSERTION OF THE NEW LINE THROUGH THE HOST PIPE, THE CONTRACTOR HAS THE OPTION OF USING VCP OR PVC TO REPAIR THE HOST PIPE AT THE LOCATION OF THE OBSTRUCTION. IN ALL CASES, CONCRETE PIPE SHALL BE REPLACED WITH PVC.
- PIPELINE REHABILITATION PLANS ARE FOR REFERENCE ONLY AND DO NOT DEPICT ALL OF THE EXISTING UTILITIES.
- PIPE EMBEDMENT WILL BE AS SHOWN IN CITY OF TULSA STANDARD DETAILS EXCEPT WHERE SPECIFICALLY NOTED ON THE PLANS.
- CONTRACTOR SHALL SUBMIT A PROFESSIONALLY ENGINEERED TRENCH EXCAVATION SAFETY PLAN FOR ALL EXCAVATIONS IN EXCESS OF 20 FEET OF DEPTH. (NO SEPARATE PAYMENT)
- WHERE THERE IS DISCREPANCY BETWEEN THE PIPELINE LENGTHS TAKEN FROM ACTUAL FIELD MEASUREMENTS AND THOSE SHOWN ON THE PLANS, THE FIELD MEASUREMENTS SHALL GOVERN.
- CONTRACTOR SHALL SUPPLY WITH HIS MONTHLY PAY REQUEST, A LIST SHOWING ALL SEWER LINES REPAIRED, THE ADDRESS OF ANY SERVICE LINES THAT ARE RECONNECTED, AND THE FOOTAGE OF THE RECONNECTION FROM THE NEAREST DOWNSTREAM MANHOLE.
- THE TERM "PIPE BURSTING" THAT IS USED THROUGHOUT THE CONSTRUCTION DRAWINGS IS INTENDED TO INCLUDE OTHER SIMILAR TRENCHLESS PIPE REPLACEMENT METHODS, SUCH AS PIPE REAMING AND PIPE CRUSHING. IT DOES NOT INCLUDE SLIPLINING OR INSTALLATION OF CURED-IN-PLACE PIPE.
- CONTRACTOR MUST EXERCISE DILIGENCE WHEN WORKING AROUND TREES. HOWEVER, IF DAMAGE OCCURS TO TREES LOCATED WITHIN AN EASEMENT CONTRACTOR SHALL NOT BE RESPONSIBLE.

TRAFFIC CONTROL

- ALL TRAFFIC CONTROL DEVICES, CONSTRUCTION SIGNAGE, BARRICADING, ETC. SHALL BE IN ACCORDANCE WITH THE LATEST REVISED EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). CONTRACTOR SHALL PREPARE AND SUBMIT FOR APPROVAL A TRAFFIC CONTROL PLAN (TCP).
- THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTIFICATION FOR ANY AND ALL STREET / LANE CLOSURES, MODIFICATION, OR CHANGES TO THE TRAFFIC CONTROL MEASURES TO:

POLICE

918-596-9222

FIRE

918-596-9977

COT TRAFFIC

918-596-9744

EMSA

918-596-3043

MTTA

918-585-1195
- REFLECTORIZED SHEETING ON SIGNS AND BARRICADES SHALL BE OF A CUBIC PRISMATIC TYPE AND SHALL MEET THE SPECIFICATIONS ESTABLISHED FOR ASTM D 4956-01 TYPE IX RETROREFLECTIVE SHEETING REFLECTORIZED SHEETING ON DRUMS AND TUBE CHANNELIZERS SHALL BE OF A HIGH-INTENSITY TYPE AND SHALL MEET THE SPECIFICATIONS ESTABLISHED FOR ASTM D 4956-01 TYPE III RETROREFLECTIVE SHEETING.
- IF WARNING LIGHTS TO BE USED ON TRAFFIC CONTROL DEVICES, TYPE "A" LIGHTS SHALL ONLY BE USED ON DEVICES WARNING OF UNEXPECTED HAZARDS, AND SHALL NOT BE USED FOR DELINEATION OF THE TRAVELED WAY. ONLY TYPE "C" WARNING LIGHTS SHALL BE USED FOR DELINEATION OF THE TRAVELED WA, AND TYPE "C" LIGHTS SHALL NOT BE USED FOR ANY OTHER PURPOSE.
- THE CONTRACTOR SHALL NOTIFY TRAFFIC OPERATIONS 48 HOURS PRIOR TO STARTING WORK OR PRIOR TO REMOVING OR RELOCATING ANY TRAFFIC SIGNS. ALL SIGNS SHALL BE HANDLED SO AS TO AVOID ANY DAMAGE TO THE SIGN OR POST. ALL SIGNS REMOVED DUE TO CONSTRUCTION SHALL BE REINSTALLED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL CONSTRUCTION SIGNAGE AND BARRICADING, INCLUDING, BUT NOT LIMITED TO, WASHING, REPLACEMENT, REPOSITIONING OF DEVICES. WHEN AND WHERE IT IS DEEMED NECESSARY BY THE CITY OR THE ENGINEER, THE CONTRACTOR SHALL FURNISH AND INSTALL ANY ADDITIONAL TRAFFIC CONTROL DEVICES.

- LOCAL AND THROUGH TRAFFIC SHALL BE MAINTAINED THROUGH THE PROJECT AREA AT ALL TIMES. LOCAL TRAFFIC TO ALL PUBLIC AND PRIVATE STREETS SHALL BE ACCESSIBLE FROM ANY DETOURS DURING THE CONSTRUCTION OF THIS PROJECT. CONTRACTOR SHALL MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIMES.
- ROADSIDE HAZARDS SHALL BE COMPLETELY BARRICADED AROUND THEIR PERIMETER FOR SAFETY OF PEDESTRIANS AND VEHICLES. NO BARRICADES SHALL BE PLACED UNTIL ALL ADVANCED SIGNING IS IN PLACE.
- ALL CHANNELING DEVICES, TYPE III BARRICADES, ETC., SHALL BE WEIGHTED DOWN WITH A NON-HAZARDOUS MATERIAL WHEN NECESSARY OR WHEN DIRECTED BY THE CITY OR THE ENGINEER.
- ALL ADVANCE WARNING SIGNS SHALL BE PROVIDED WITH TYPE "A" WARNING LIGHTS.
- ALL TYPE III BARRICADES SHALL BE FURNISHED WITH A MINIMUM OF TWO (2) TYPE "A" WARNING LIGHTS.
- ALL CHANNELING DEVICES SHALL BE PROVIDED WITH TYPE "C" WARNING LIGHTS.

UTILITIES

- THE LOCATIONS OF THE UTILITY LINES, AS SHOWN ON THESE DRAWINGS, ARE BASED ON ATLAS INFORMATION, UTILITY COMPANY COMMENTS, AND OBSERVED FEATURES. NEITHER THE CITY NOR THE ENGINEER ASSUMES OR IMPLIES ANY RESPONSIBILITY FOR THE ACCURACY OF THIS DATA. SERVICE LINES FROM THE MAIN UTILITY LINES TO ANY BUILDING OR FACILITY MAY NOT BE SHOWN. CONTRACTOR SHALL OBTAIN THE LOCATION OF THESE FROM THE UTILITY COMPANY AND SHALL BE HELD RESPONSIBLE FOR ANY DAMAGES TO THESE LINES OR ANY OTHER LINES OR UTILITIES DURING THE CONSTRUCTION OF THIS PROJECT.
- THE CONTRACTOR SHALL GIVE NOTIFICATION CENTER OF THE OKLAHOMA ONE-CALL SYSTEM, INC., A MINIMUM OF TWO (2) WORKING DAYS AND A MAXIMUM OF TEN (10) WORKING DAYS PRIOR TO BEGINNING WORK IN ANY AREA. PHONE: 1-800-522-6543.
- PRIOR TO EXCAVATING, THE CONTRACTOR IS RESPONSIBLE FOR BRACING AND SUPPORTING ANY POWER POLE OR GUY WIRE WITHIN 5 FEET OF EXCAVATION TO THE SATISFACTION OF THE OWNER AND THE UTILITY COMPANY. NO ADDITIONAL COST TO THE OWNER. IF REQUIRED, CONTRACTOR SHALL CONTACT CITY OF TULSA UTILITY COORDINATION FOR ASSISTANCE.

PLAN & PROFILE SHEET NOTES

- CONTRACTOR MUST FIELD VERIFY ALL DEPTHS, DISTANCE ANGLES, AND GRADES OF EXISTING SANITARY SEWER PRIOR TO START OF CONSTRUCTION. (NO SEPARATE PAY ITEM).
- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM THE BEST RECORDS AVAILABLE AND ARE NOT GUARANTEED TO BE ACCURATE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING, SUPPORTING, AND PROTECTING THE INTEGRITY OF UNDERGROUND UTILITIES AND POWER POLES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL EXCAVATE ALL BURIED UTILITY CROSSINGS AHEAD OF PIPE LAYING OR THE INSTALLATION OF SHEETING-OR SHORING TO AVOID UTILITY CONFLICTS. ALL COSTS ASSOCIATED WITH THIS WORK IS CONSIDERED INCIDENTAL. IF DAMAGED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING THE UTILITY.
- IF DAMAGED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING, STRUCTURES, ETC. TO ITS ORIGINAL OR BETTER CONDITION. NO SEPARATE PAY ITEM IF LOCATED OUTSIDE OF STANDARD CONSTRUCTION PAY LIMITS.
- TRENCH EXCAVATION PROTECTION SHALL BE ACCOMPLISHED AS REQUIRED BY THE PROVISIONS OF PART 1926, SUBPART P-EXCAVATION, TRENCHING, AND SHORING OF THE OCCUPATIONAL SAFETY AND HEALTH'S STANDARDS AND INTERPRETATIONS.
- CONTRACTOR SHALL VERIFY AND REINSTATE ALL ACTIVE SERVICE CONNECTIONS.
- CONTRACTOR SHALL REPLACE ALL SERVICES TO WITHIN 2' OF THE EASEMENT LINE OR RIGHT-OF-WAY LINE.
- DISTANCE FROM DOWNSTREAM MANHOLE TO SERVICE CONNECTION IS APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL MAINTAIN ACCESS TO PRIVATE RESIDENCES AT ALL TIMES.
- WHEN REHABILITATING OR REPLACING MANHOLES, CONTRACTOR SHALL MATCH GRADE OF EXISTING OR FINISHED CONDITIONS.
- FOR ABANDONMENT, REMOVE TOP 3 VF OF EXISTING MANHOLE/LAMPHOLE AND FILL EXISTING SANITARY SEWER AND MANHOLE/LAMPHOLE WITH CELLULAR CONCRETE OR FLOWABLE FILL. ABANDONMENT SHALL BE PERFORMED AFTER CONSTRUCTION OF ALL NEW SEWER MAINS AS PER CITY OF TULSA SPECIFICATION 333.
- CONTRACTOR SHALL TELEWISE ANY SANITARY SEWER LINES CALLED OUT FOR ABANDONMENT TO DETERMINE LOCATION OF ACTIVE SERVICES. ANY ACTIVE SERVICES ON AN ABANDONED LINE SHALL BE RECONNECTED TO AN EXISTING OR PROPOSED SEWER MAIN IN THE IMMEDIATE VICINITY. ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF THERE IS NO SEWER MAIN IN THE VICINITY TO CONNECT THE SERVICE.

REVISION

BY

DATE

ADDENDUM 1

JWB

07/08/2025

LICENSED PROFESSIONAL ENGINEER

JACOB BRUMBAUGH

33769

OKLAHOMA

Paul Burch

7/8/2025

PLAN SCALE:

DRAWN

R/LP

07/2025

DESIGNED

JWB

07/2025

PROFILE SCALE:

SURVEY

HORIZONTAL:

PROJ. MGR.

LEAD ENGR.

VERTICAL

FIELD MGR.

FILE:

DRAWING:

ATLAS PAGE NO:

GENERAL CONSTRUCTION NOTES

TMUA PROJECT NO. ES 2025-09

COAL CREEK SMALL DIAMETER CONCRETE PIPE REPLACEMENT

CITY OF TULSA, OKLAHOMA WATER AND SEWER DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
R/JN GROUP, INC. CONSULTING ENGINEERS
4500 S. GARNETT ROAD SUITE 110, TULSA, OKLAHOMA 74146

APPROVED:

for Thomas Pratz

DESIGN MANAGER

DATE: July 2025

SHEET 3 OF 59 SHEETS

| ESTIMATED CONSTRUCTION QUANTITIES | | | | | | |
|-----------------------------------|----------------|---|-----------------------|-------|---------|--|
| PAY ITEM | SPEC. NO. | DESCRIPTION | PAY ITEM NOTE NOS. | UNIT | TOTAL | |
| BASE BID | | | | | | |
| 1 | 301, SP-10 | RIGHT-OF-WAY CLEARING AND RESTORING | | SY | 3,940 | |
| 2 | 302 | EXCAVATION AND BACKFILL, UNCLASSIFIED | 2 | CY | 1,490 | |
| 3 | 307 | 6-INCH DIA. DIP CLASS 51, POLYETHYLENE WRAPPED (RJ) | | LF | 16 | |
| 4 | 309 | INSTALL 7-INCH DIA. SEWER PIPE OPEN CUT, DR-21 IPS HDPE | 32,33,34,35,36,37,28 | LF | 22 | |
| 5 | 312 | 6-INCH DIA. DUCTILE IRON 45 DEGREE BEND (RJ) | 1,4,5,6,7,9 | EA | 4 | |
| 6 | 313, SP-2 | INSTALL 8-INCH DIA. SEWER PIPE OPEN CUT, ASTM D3034 SDR 26 PVC | 33,34,36 | LF | 1,668 | |
| 7 | 313, SP-2 | INSTALL 8-INCH DIA. SEWER PIPE IN STEEL CASING, ASTM D3034 SDR 26 PVC | 1,4,5,6,7,9 | LF | 81 | |
| 8 | 314 | CONSTRUCT STD. 4-FOOT DIA. MANHOLE (0-6-FOOT DEPTH) | 1,4,5,6,7,9 | EA | 3 | |
| 9 | 314 | MANHOLE DEPTH OVER 6-FOOT FOR STD. 4-FOOT DIA. MANHOLE | 1,6,15,28,29 | VF | 9.7 | |
| 10 | 314 | CONSTRUCT STD. 4-FOOT DIA. DROP MANHOLE (0-6-FOOT DEPTH) | 1,6,15,28,29 | EA | 2 | |
| 11 | 314 | MANHOLE DEPTH OVER 6-FOOT FOR STD. 4-FOOT DIA. DROP MANHOLE | 1,6,15,28,29 | VF | 8.8 | |
| 12 | 314 | CONSTRUCT SHALLOW MANHOLE, 5-FOOT DIA., CITY OF TULSA STD. DETAIL 406 | 1,6,15,28,29 | EA | 2 | |
| 13 | 315 | CONNECT TO EXISTING WATER LINE | | EA | 2 | |
| 14 | 317 | RELOCATE FIRE HYDRANT | | EA | 1 | |
| 15 | 319 | CONCRETE ENCASEMENT | | CY | 18 | |
| 16 | 319 | INSTALL FLOWABLE FILL | 25 | CY | 11 | |
| 17 | 322 | 24-INCH DIA. BORED STEEL CASING | 30 | LF | 81 | |
| 18 | 333, SP-1 | ABANDON EXISTING SANITARY SEWER MANHOLE | 21,22 | EA | 1 | |
| 19 | 333, SP-1 | ABANDON 8-INCH DIA. SANITARY SEWER PIPE | 21,22 | LF | 1,453 | |
| 20 | 333, SP-1 | CUT AND PLUG EXISTING SEWER LINE | 21,22 | EA | 2 | |
| 21 | 334 | CONSTRUCTION AS-BUILT | | LS | 1 | |
| 22 | 335 | CONTRACTOR'S QUALITY CONTROL | | LS | 1 | |
| 23 | 400 | MOBILIZATION | | EA | 1 | |
| 24 | 400 | PHOTOGRAPHIC DOCUMENTATION | | EA | 1 | |
| 25 | 402 | SOD REPLACEMENT | | SY | 1,300 | |
| 26 | 402 | CURB & GUTTER REPLACEMENT | 4,27,40 | LF | 1,340 | |
| 27 | 402 | CONCRETE SIDEWALK REPLACEMENT | 4,27,40 | SY | 10 | |
| 28 | 402 | BRICK DRIVEWAY REPLACEMENT | 4,40 | SY | 20 | |
| 29 | 402 | CONCRETE DRIVEWAY REPLACEMENT | 4,27,40 | SY | 50 | |
| 30 | 402, SP-3 | CONCRETE PAVEMENT REPLACEMENT | 4,27,40 | SY | 1,670 | |
| 31 | 402 | ASPHALT PAVEMENT REPLACEMENT | 4,31,40 | SY | 1,040 | |
| 32 | 402 | FENCE REMOVAL AND REPLACEMENT | 4 | LF | 50 | |
| 33 | 405, SP-2 | 8-INCH OPEN CUT REPLACEMENT, SDR 26 PVC D2241 | 1,4,5,6,7,9 | LF | 564 | |
| 34 | 405, SP-2 | 8-INCH OPEN CUT REPLACEMENT, SDR 26 PVC D3034 | 1,4,5,6,7,9 | LF | 669 | |
| 35 | 408, SP-7 | 8-INCH PIPE BURSTING REPLACEMENT, HDPE DPS DR-17 | 1,5,6,7,8,9,11,16,23 | LF | 4,471 | |
| 36 | 408, 408 | SERVICE RECONNECTIONS | 6,12,13,14,26 | EA | 304 | |
| 37 | 408, 408 | SERVICE LINE REPLACEMENT | 6,12,13,14,26 | LF | 3,330 | |
| 38 | 409, SP-6,7,8 | 7-INCH DIA. SLIPLINING INSTALLATION, DR-21 IPS HDPE/ 8-INCH DIA. CURED-IN-PLACE PIPE (CIPP) | 1,5,6,7,8,9,11,16,39 | LF | 6,211 | |
| 39 | 412 | 7-INCH POINT REPAIR SDR 21 HDPE, (0-10 LF) | 1,2,4,5,6,7,8,9,11,16 | EA | 1 | |
| 40 | 412 | 15-INCH POINT REPAIR SDR 26 PVC ASTM D3034, (0-10 LF) | 1,2,4,5,6,7,8,9,11,16 | EA | 1 | |
| 41 | 412 | 15-INCH ADDITIONAL FOOTAGE POINT REPAIR SDR 26 PVC ASTM D3034 | 1,2,4,5,6,7,8,9,11,16 | LF | 25 | |
| 42 | 415 | PRE-CONSTRUCTION TELEVISION INSPECTION | 3,11,16,22 | LF | 12,410 | |
| 43 | 416 | COMPLETE MANHOLE REPLACEMENT, STD. 4-FOOT DIA. MANHOLE (0-6-FOOT DEPTH) | 1,6,10,15,16,28,29 | EA | 43 | |
| 44 | 416 | EXTRA DEPTH OVER 6-FOOT FOR STD. 4-FOOT DIA. MANHOLE | 1,6,10,15,16,28,29 | VF | 67.7 | |
| 45 | 416 | COMPLETE DROP MANHOLE REPLACEMENT, STD. 4-FOOT DIA. DROP MANHOLE (0-6-FOOT DEPTH) | 1,6,10,15,16,28,29 | EA | 7 | |
| 46 | 416 | EXTRA DEPTH OVER 6-FOOT FOR STD. 4-FOOT DIA. DROP MANHOLE | 1,6,10,15,16,28,29 | VF | 25.4 | |
| 47 | 416 | COMPLETE SHALLOW MANHOLE REPLACEMENT, 5-FOOT DIA., CITY OF TULSA STD. DETAIL 406 | 1,6,10,15,16,28,29 | EA | 7 | |
| 48 | 416 | COMPLETE MANHOLE REPLACEMENT, STD. 5-FOOT DIA. MANHOLE (0-6-FOOT DEPTH) | 1,6,10,15,16,28,29 | EA | 2 | |
| 49 | 416 | EXTRA DEPTH OVER 6-FOOT FOR STD. 5-FOOT DIA. MANHOLE | 1,6,10,15,16,28,29 | VF | 10.9 | |
| 50 | 418 | MANHOLE REHABILITATION COVER, FRAME AND FRAME SEAL REPLACEMENT (TYPE A REPAIR) | 15 | EA | 17 | |
| 51 | 418 | MANHOLE REHABILITATION COVER, FRAME, FRAME SEAL, AND CHIMNEY REPLACEMENT (TYPE C REPAIR) | 15 | EA | 4 | |
| 52 | 419 | MANHOLE REHABILITATION PATCH HOLE (TYPE G ₁ REPAIR) | 15 | EA | 3 | |
| 53 | 421 | MANHOLE REHABILITATION WALL REHABILITATION (TYPE G ₂ REPAIR) | 15 | SF | 1,621.0 | |
| 54 | 423 | OBSTRUCTION REMOVAL | 18 | EA | 15 | |
| 55 | ODOT 611 (G) | INLET, CICI DESIGN 2, COMPLETE IN-PLACE | | EA | 4 | |
| 56 | ODOT 613 (A) | 15-INCH R.C. PIPE CLASS III, ROUND | 24,25 | LF | 48 | |
| 57 | ODOT 613 (A) | 18-INCH R.C. PIPE CLASS III, ROUND | 24,25 | LF | 80 | |
| 58 | ODOT 613 (A) | 21-INCH R.C. PIPE CLASS III, ROUND | 24,25 | LF | 8 | |
| 59 | ODOT 613 (A) | 24-INCH R.C. PIPE CLASS III, ROUND | 24,25 | LF | 8 | |
| 60 | ODOT 613 (A) | 30-INCH R.C. PIPE CLASS III, ROUND | 24,25 | LF | 100 | |
| 61 | ODOT 613 (A) | 42-INCH R.C. PIPE CLASS III, ROUND | 24,25 | LF | 8 | |
| 62 | ODOT 613 (EE) | 18-INCH DIA. CORRUGATED POLYPROPYLENE STORM PIPE | 24,25 | LF | 10 | |
| 63 | ODOT 613 (G) | OUTLET LATERAL HEADWALL | 24,25 | EA | 1 | |
| 64 | ODOT 880, SP-9 | CONSTRUCTION TRAFFIC CONTROL | 19,20 | LS | 1 | |
| 65 | SP-4 | OWNER'S ALLOWANCE | | ALLOW | 100,000 | |
| ADDITIVE ALTERNATE NO. 1 | | | | | | |
| 66 | 334 | CONSTRUCTION AS-BUILTS | | LS | 1 | |
| 67 | 335 | CONTRACTOR'S QUALITY CONTROL | | LS | 1 | |
| 68 | 405, 408 | SERVICE RECONNECTIONS | 6,12,13,14,26 | EA | 39 | |
| 69 | 405, 408 | SERVICE LINE REPLACEMENT | 6,12,13,14,26 | LF | 390 | |
| 70 | 409, SP-6,7,8 | 7-INCH DIA. SLIPLINING INSTALLATION, DR-21 IPS HDPE/ 8-INCH DIA. CURED-IN-PLACE PIPE (CIPP) | 1,5,6,7,8,9,11,16,39 | LF | 1,722 | |
| 71 | 409, SP-6,7,8 | 10-INCH DIA. SLIPLINING INSTALLATION, DR-21 IPS HDPE/ 12-INCH DIA. CURED-IN-PLACE PIPE (CIPP) | 1,5,6,7,8,9,11,16,39 | LF | 166 | |
| 72 | 412 | 8-INCH POINT REPAIR, CONCRETE PIPE (0-10 LF) | 1,2,4,5,6,7,8,9,11,16 | EA | 1 | |
| 73 | 415 | PRE-CONSTRUCTION TELEVISION INSPECTION | 3,11,16,22 | LF | 2,112 | |
| 74 | 416 | COMPLETE MANHOLE REPLACEMENT, STD. 4-FOOT DIA. MANHOLE (0-6-FOOT DEPTH) | 1,6,10,15,16,28,29 | EA | 3 | |
| 75 | 416 | EXTRA DEPTH OVER 6-FOOT FOR STD. 4-FOOT DIA. MANHOLE | 1,6,10,15,16,28,29 | VF | 0.2 | |
| 76 | 416 | COMPLETE DROP MANHOLE REPLACEMENT, STD. 4-FOOT DIA. DROP MANHOLE (0-6-FOOT DEPTH) | 1,6,10,15,16,28,29 | EA | 1 | |
| 77 | 416 | EXTRA DEPTH OVER 6-FOOT FOR STD. 4-FOOT DIA. DROP MANHOLE | 1,6,10,15,16,28,29 | VF | 6 | |
| 78 | 418 | MANHOLE REHABILITATION COVER, FRAME AND FRAME SEAL REPLACEMENT (TYPE A REPAIR) | 15 | EA | 1 | |
| 79 | 418 | MANHOLE REHABILITATION COVER, FRAME, FRAME SEAL, AND CHIMNEY REPLACEMENT (TYPE C REPAIR) | 15 | EA | 3 | |
| 80 | 423 | OBSTRUCTION REMOVAL | 18 | EA | 5 | |
| 81 | ODOT 880, SP-9 | CONSTRUCTION TRAFFIC CONTROL | 19,20 | LS | 1 | |
| ADDITIVE ALTERNATE NO. 2 | | | | | | |
| 82 | 334 | CONSTRUCTION AS-BUILTS | | LS | 1 | |
| 83 | 335 | CONTRACTOR'S QUALITY CONTROL | | LS | 1 | |
| 84 | 405, 408 | SERVICE RECONNECTIONS | 6,12,13,14,26 | EA | 36 | |
| 85 | 405, 408 | SERVICE LINE REPLACEMENT | 6,12,13,14,26 | LF | 360 | |
| 86 | 409, SP-6,7,8 | 7-INCH DIA. SLIPLINING INSTALLATION, DR-21 IPS HDPE/ 8-INCH DIA. CURED-IN-PLACE PIPE (CIPP) | 1,5,6,7,8,9,11,16,39 | LF | 1,562 | |
| 87 | 415 | PRE-CONSTRUCTION TELEVISION INSPECTION | 3,11,16,22 | LF | 1,562 | |
| 88 | 418 | MANHOLE REHABILITATION COVER, FRAME AND FRAME SEAL REPLACEMENT (TYPE A REPAIR) | 15 | EA | 1 | |
| 89 | 418 | MANHOLE REHABILITATION COVER, FRAME, FRAME SEAL, AND CHIMNEY REPLACEMENT (TYPE C REPAIR) | 15 | EA | 1 | |
| 90 | 421 | MANHOLE REHABILITATION WALL REHABILITATION (TYPE G ₂ REPAIR) | 15 | SF | 77.9 | |
| 91 | 421 | MANHOLE REHABILITATION BENCH AND INVERT REHABILITATION (TYPE G ₃ REPAIR) | 15 | EA | 1 | |
| 92 | 423 | OBSTRUCTION REMOVAL | 18 | EA | 5 | |
| 93 | ODOT 880, SP-9 | CONSTRUCTION TRAFFIC CONTROL | 19,20 | LS | 1 | |

PAY ITEM NOTES

- CONTRACTOR IS RESPONSIBLE FOR SUBMITTING AN EROSION CONTROL PLAN BASED ON CONSTRUCTION SEQUENCING. COST TO INCLUDE SILT REMOVAL AND ANY RE-GRADING NECESSARY DUE TO EROSION.
- PRICE TO INCLUDE ANY AND ALL ROCK EXCAVATION. NO BLASTING WILL BE ALLOWED. NO ADDITIONAL PAYMENT WILL BE MADE FOR ROCK EXCAVATION.
- CONSTRUCTION TELEVISION INSPECTION OF SANITARY SEWER QUANTITY CALCULATED BASED ON EXISTING MANHOLE LOCATIONS. CONTRACTOR SHALL USE VIDEO TO CONFIRM LOCATIONS AND DETERMINE POSITIONS OF SERVICE CONNECTIONS. ANY CLEANING REQUIRED, INCLUDING HEAVY CLEANING, SHALL BE INCLUDED IN UNIT PRICE BID FOR VIDEOTAPE INSPECTION. NO ADDITIONAL PAYMENT SHALL BE MADE.

- FOR THE WORK BID UNDER "OPEN CUT", SURFACE RESTORATION ITEMS SHALL BE PAID FOR IN ACCORDANCE WITH SPECIFICATION SECTION 402.17 ONLY WHEN THE OPEN CUT METHOD OF REPLACEMENT IS USED. PAVEMENT REMOVAL AND REPLACEMENT SHALL BE PAID FOR IN SQUARE YARDS. THE PAY QUANTITY SHALL BE COMPUTED AS THE LENGTH ALONG THE CENTERLINE OF PIPE BEING REPLACED BY THE STANDARD PAY WIDTH (SEE CITY OF TULSA STANDARD DETAIL # 315 FOR PAY WIDTH). ALL RESTRIPIPING OF ARTERIAL ROADWAYS SHALL BE CONSIDERED INCIDENTAL.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE BYPASS PUMPING IF NECESSARY. THE PUMP AND BYPASS LINES SHALL BE OF ADEQUATE CAPACITY AND SIZE TO HANDLE THE ANTICIPATED WET WEATHER FLOW. THE COST OF THE BYPASS INCLUDING THE PUMPS, LINES, LABOR AND OTHER MISCELLANEOUS ITEMS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PIPE INSTALLATION. NO ADDITIONAL PAYMENT WILL BE MADE.
- ALL TRENCHES EXCAVATED ACROSS ANY ROADWAY, SIDEWALKS, DRIVEWAYS, PARKING LOTS, ALLEYS OR OTHER PAVED AREAS, SHALL BE BEDDED AND BACKFILLED IN ACCORDANCE WITH THE CITY OF TULSA STANDARD DETAIL # 713. BACKFILL IN STREET RIGHT-OF-WAY AND IN FRONT YARDS SHALL BE COMPACTED TO 95% PROCTOR DENSITY. PRICE OF AGGREGATE BASE IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PIPE INSTALLATION. NO ADDITIONAL PAYMENT WILL BE MADE.
- RESTORATION WILL NOT BE PAID FOR TRENCHLESS CONSTRUCTION METHODS. RESTORATION WILL BE PAID FOR OPEN CUT CONSTRUCTION METHODS.
- IF A LINE CANNOT BE REPLACED BY TRENCHLESS METHODS, OPEN CUT MAY BE USED UPON ENGINEER'S APPROVAL. WORK AND RESTORATION SHALL THEN BE PAID USING THE UNIT PRICE BID FOR OPEN CUT OF THE CORRESPONDING PIPE SIZE AND THE UNIT PRICE BID FOR THE APPROPRIATE RESTORATION ITEMS.
- CONNECTIONS TO ALL EXISTING MANHOLES SHALL BE CORED AND NOT BROKEN OR HAMMERED AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PIPE REPLACEMENT.
- ALL EXTERNAL DROPS CONNECTED TO A MANHOLE WHICH IS CALLED OUT FOR REPLACEMENT SHALL BE REPLACED AND INCLUDED IN THE UNIT PRICE BID FOR "COMPLETE DROP MANHOLE REPLACEMENT". ALL DROP CONNECTIONS CALLED OUT ON THE PLANS FOR INSTALLATION TO AN EXISTING MANHOLE THAT IS NOT BEING REPLACED SHALL BE PAID FOR UNDER THE UNIT PRICE BID FOR "REPLACE MANHOLE OUTSIDE DROP CONNECTION". EXTERNAL DROPS SHALL BE CONSTRUCTED OF LIKE MATERIAL TO THE PIPE INCOMING.
- POST REHABILITATION TELEVISION INSPECTION OF ALL LINES INSTALLED SHALL BE PERFORMED BY THE CONTRACTOR. THE COST OF PRE CONSTRUCTION TELEVISION INSPECTION WILL NOT BE PAID FOR SEPARATELY.
- NUMBER OF SERVICE CONNECTIONS ARE APPROXIMATE, CONTRACTOR TO VERIFY WITH THE USE OF PRE-TELEVISION INSPECTION PER SPECIFICATION 415.
- SERVICE LATERALS LOCATED UNDER PAVEMENT SHALL BE REPLACED TO WITHIN 2' OF THE EASEMENT/RIGHT-OF-WAY LINE. ANY ADDITIONAL PIPE OR FITTINGS REQUIRED TO MAKE A GOOD CONNECTION TO THE MAIN LINE OUTSIDE OF PAVEMENT SHALL BE INCLUDED IN THE COST OF SERVICE RECONNECTION.
- PAYMENT FOR SERVICE LATERALS SHALL INCLUDE ALL INCIDENTAL COSTS ASSOCIATED WITH THE INSTALLATION, INCLUDING, BUT NOT LIMITED TO RESTORATION, PAVEMENT REMOVAL AND REPLACEMENT, EXCAVATION, BEDDING, BACKFILL, PIPE AND FITTINGS.
- THE MANHOLE RING, COVER, GROUT, WATERTIGHT SEAL, 80 MILS OF RAVEN 405 EPOXY OR APPROVED EQUAL AND OTHER MATERIALS INCIDENTAL TO THE CONSTRUCTION OF MANHOLES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EACH ASSOCIATED MANHOLE PAY ITEM; NO ADDITIONAL PAYMENT SHALL BE MADE. 4' I.D. MANHOLES AND 5' I.D. SHALLOW MANHOLES SHALL NOT BE EPOXY COATED.
- IF ANY BRICK SANITARY MANHOLES/STRUCTURES ASSOCIATED WITH THE IDENTIFIED SEWER LINES ARE FOUND, THE CITY SHALL BE NOTIFIED BEFORE WORK COMMENCES FOR AN EVALUATION OF REHABILITATION. REHABILITATION OF ANY BRICK SANITARY MANHOLES/STRUCTURES SHALL BE BY COMPLETED MANHOLE/STRUCTURE REPLACEMENT OR BY METHODS DESCRIBED IN SPECIFICATION 418.
- GRASSED AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED BY SODDING. HYDROMULCH SEEDING WILL BE ALLOWED IN UNDEVELOPED LOTS. MAXIMUM PAY LIMIT FOR SODDING AND SEEDING SHALL BE STANDARD 10-FEET ON EITHER SIDE OF THE CENTERLINE OF PIPE. MAXIMUM PAY WIDTH OF 20-FEET.
- IF REQUIRED, PAYMENT FOR OBSTRUCTION REMOVAL SHALL BE UTILIZED TO REMOVE CONCRETE ENCASED OR DUCTILE IRON PIPE SEGMENTS DURING TRENCHLESS REPLACEMENT AND SHALL BE APPROVED BY ENGINEER. THIS PAY ITEM SHALL NOT BE PAID WHEN THE INSERTION / REMOVAL PIT IS LOCATED AT THE POINT OF OBSTRUCTION REMOVAL.
- THE CONTRACTOR SHALL DEVELOP A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH THE GENERAL NOTES. TRAFFIC CONTROL SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- THE UNIT PRICE BID FOR CONSTRUCTION TRAFFIC CONTROL SHALL INCLUDE INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF ALL NECESSARY CONSTRUCTION TRAFFIC CONTROL DEVICES REQUIRED FOR COMPLETION OF THIS PROJECT.
- ABANDONMENT SHALL BE PERFORMED AFTER CONSTRUCTION AND ACCEPTANCE OF ALL NEW SANITARY SEWER MAINS.
- CONTRACTOR SHALL CCTV (CLOSED CIRCUIT TELEVISION INSPECTION) ALL SEWER LINES PRIOR TO ABANDONMENT TO DETERMINE LOCATION OF EXISTING SERVICE CONNECTIONS. SERVICE CONNECTIONS SHALL BE RECONNECTED TO PROPOSED SANITARY SEWER LOCATED IN THE IMMEDIATE VICINITY OF THE ABANDONED LINE. ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF THERE IS NO PROPOSED SEWER TO COLLECT THE SERVICE.
- IN LIEU OF PIPE BURSTING, CONTRACTOR MAY ELECT TO INSTALL PIPE BY PIPE REAMING OR PIPE CRUSHING PER CITY OF TULSA STANDARD SPECIFICATIONS 406 AND 407 RESPECTIVELY.
- REINFORCED CONCRETE PIPE TO BE CLASS III. ALL REINFORCED CONCRETE PIPE AND MANHOLES TO BE SUPPLIED WITH OMNI-FLEX JOINT GASKET OR APPROVED EQUAL. MASTIC JOINT SEALANT SHALL NOT BE ALLOWED.
- QUICK SET CELLULAR CONCRETE OR FLOWABLE FILL TO BE USED TO BACKFILL AROUND STREET CURB INLETS AND PIPES AS DIRECTED BY THE ENGINEER.
- WHEN CONNECTING PVC SERVICE LATERALS TO ANY PIPE OTHER THAN PVC, ROMAC STYLE 501 COUPLINGS OR ENGINEER APPROVED EQUAL SHALL BE USED. PVC COUPLINGS SHALL BE USED WHEN CONNECTING PVC PIPE. FLEXIBLE COUPLINGS SHALL NOT BE PERMITTED.

- ALL CONCRETE USED FOR PAVING SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 5,000 PSI.
- ALL RISER RINGS INSTALLED ON EXISTING AND NEW MANHOLES SHALL BE CRETEX PRO-RING OR ENGINEER APPROVED EQUAL. NO CONCRETE RISER RINGS ARE PERMITTED FOR USE UNLESS APPROVED BY ENGINEER.
- ALL NEW MANHOLES SHALL HAVE WALL JOINTS WRAPPED WITH 9" INFISHIELD GATOR WRAP AS MANUFACTURED BY SEALING SYSTEMS INC. OR ENGINEER APPROVED EQUAL. (NO SEPARATE PAYMENT).
- ALL STEEL CASING INSTALLED SHALL HAVE A MINIMUM WALL THICKNESS OF 1/2-INCH AND BE IN ACCORDANCE WITH AWWA C200.
- ASPHALT PAVEMENT INSTALLED IN NON-ARTERIAL STREETS SHALL BE PG 64-22 WHILE ARTERIAL STREETS SHALL BE PG 70-28 OK-INSOLUBLE. ALL ASPHALT MIX DESIGNS SHALL BE PAID BY ASPHALT REMOVAL AND REPLACEMENT PAY ITEM. (NO SEPARATE PAYMENT).
- TESTING AND CHLORINATION OF WATER MAINS SHALL BE PERFORMED BY THE CITY OF TULSA. TESTING, CHLORINATION, AND FLUSHING SHALL BE DONE IN ACCORDANCE WITH SECTION 109.3 OF THE GENERAL SPECIFICATIONS.
 - CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY PLUGS WITH ADEQUATE BLOCKING OR RESTRAINTS, PLUS CORPORATION STOPS, AS DIRECTED BY CITY TESTING PERSONNEL. THEN ONCE TESTING, CHLORINATION AND FLUSHING BY CITY PERSONNEL IS COMPLETED, REMOVE TEMPORARY BLOCKING AND TIE INTO EXISTING SYSTEM, USING FITTINGS SWABBED INTERNALLY WITH 2% BLEACH SOLUTION.
 - TESTING, CHLORINATION, AND FLUSHING OF NEW WATER MAIN SHALL BE PERFORMED BY CITY PERSONNEL ON MAINS WHICH ARE PHYSICALLY DISCONNECTED FROM THE EXISTING WATER SYSTEM. TESTING, CHLORINATION, AND FLUSHING OF NEW WATER MAINS SHALL NOT BE PERFORMED AGAINST VALVES WHICH ARE PHYSICALLY CONNECTED TO EXISTING SYSTEM.
 - ALL COSTS FOR TEMPORARY PLUGS, BLOCKING, RESTRAINING, CORPORATION STOPS, TUBING, THREADED CONNECTIONS, BLEACH AND OTHER INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PIPE.
- BURIED BOLTS, HARNESS LUGS, AND COUPLINGS SHALL BE GIVEN TWO COATS OF KOPPER'S BITUMASTIC 300-M (DRY MIL THICKNESS OF 16 MILS) OR EQUAL. COST TO BE INCLUDED IN UNIT PRICE BID FOR PIPE AND FITTINGS.
- ALL COSTS FOR COMPONENTS NECESSARY TO RESTRAIN JOINTS FOR PIPE AND FITTINGS DESIGNATED RESTRAINED JOINT ("RJ") SHALL BE INCLUDED IN UNIT PRICE BID FOR PIPE OR FITTINGS.
 - DUCTILE IRON PIPE RESTRAINED JOINT SYSTEMS: US PIPE TRIFLEX, GRIFFIN SNAPLOK, MCWANE THRUSTLOCK, AMERICAN FLEXRING, EBAA MEGALUG, STAR STARGRIP, SMITH-BLAIR CAMLOCK, CLOW TUFGRIP OR EQUAL SHALL BE USED ON THIS PROJECT.
- ALL CUT ENDS AND WHERE SALVAGED FITTINGS HAVE BEEN REMOVED FROM ABANDONED WATER LINES LEFT IN PLACE, SHALL BE PLUGGED WITH 24" OF CONCRETE INSIDE THE PIPE. COST OF CONCRETE PLUGGING TO BE INCLUDED IN UNIT PRICE BID FOR PIPE. NO ADDITIONAL PAYMENT SHALL BE MADE.
- DETECTABLE MYLAR MARKING TAPE SHALL BE INSTALLED OVER DUCTILE IRON PIPE AS PER CONSTRUCTION SPEC 307.3 AND 307.4. COST WILL BE INCLUDED IN COST OF DUCTILE IRON PIPE.
- ALL LABOR, MATERIALS, AND EQUIPMENT TO CONNECT PROPOSED WATER MAINS TO EXISTING WATER MAINS ARE INCLUDED IN COST OF SLEEVES/ADAPTERS.
- PRESSURE TESTING AND CHLORINATION OF WATER MAINS SHALL NOT BE PERFORMED UNTIL THE CITY INSPECTOR HAS RECEIVED REQUIRED CONSTRUCTION AS-BUILT RECORDS.
- THE CONTRACTOR MAY BID EITHER SLIPLINE OR CIPP FOR THE LINE SEGMENTS INCLUDED IN THIS PAY ITEM.

- PAVEMENT REMOVAL AND REPLACEMENT FOR WATER, SANITARY, AND STORMWATER MAIN INSTALLATIONS - THIS PAY ITEM SUPERSEDES CITY OF TULSA STANDARD SPECIFICATION SECTION 329.6 AND 402.17, WITH RESPECT TO SAW CUTTING AND DOWELS, AND INCLUDES THE FOLLOWING (THESE ITEMS SHALL NOT BE PAID SEPARATELY):

- SAW CUTTING
- DOWELS
- DISPOSAL OF BROKEN PAVEMENT
- TEMPORARY SURFACE
- ASSOCIATED EXCAVATION
- PREPARATION OF SUBGRADE
- FORMS OR REINFORCING
- REMOVAL OR REPLACEMENT OF GRAVEL
- ADDITIONAL SAW CUTTING OR REPLACEMENT OF PAVEMENT DAMAGED BY THE CONTRACTOR
- JOINT SEALER, TACK COATS, OR EDGE SEALING

THIS PAY ITEM DOES NOT INCLUDE THE FOLLOWING WHICH WILL BE PAID SEPARATELY IN ACCORDANCE WITH CITY STANDARD SPECIFICATIONS, DETAILS, AND DRAWINGS:

- CURB AND GUTTER

| REVISION | BY | DATE | PLAN SCALE: | DRAWN | R/LP | 07/2025 | APPROVED: |
|------------|-----|------------|----------------|------------|------|---------|-----------------|
| ADDENDUM 1 | JWB | 07/08/2025 | | DESIGNED | JWB | 07/2025 | |
| | | | PROFILE SCALE: | SURVEY | | | |
| | | | HORIZONTAL: | PROJ. MGR. | | | |
| | | | VERTICAL: | LEAD ENGR. | | | |
| | | | | FIELD MGR. | | | |
| | | | FILE: | DRAWING: | | | DESIGN MANAGER |
| | | | ATLAS PAGE NO: | | | | DATE: July 2025 |



Jacob Brumbaugh
7/14/2025

PAY QUANTITIES & NOTES

TMUA PROJECT NO. ES 2025-09

COAL CREEK SMALL DIAMETER
CONCRETE PIPE REPLACEMENT

CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
R/JN GROUP, INC. CONSULTING ENGINEERS
4500 S. GARNETT ROAD SUITE 110, TULSA, OKLAHOMA 74146

for Thomas

DATE: July 2025

SHEET 4 OF 59 SHEETS