LEGEND

—8"—	PROPOSED SEWER LINE
—T—	EXISTING TELEPHONE
TEL. MH	EXISTING TELEPHONE MANHOLE
TCB	EXISTING TELEPHONE CONTROL BOX
CABLE PED.	EXISTING CABLE PEDESTAL
GM	EXISTING GAS METER
GV	EXISTING GAS VALVE
—G—	EXISTING GAS LINE
EX. 8" SS	EXISTING SEWER LINE
SSMH	EXISTING SS MANHOLE
	EXISTING MANHOLE REMOVAL
WV	EXISTING WATER VALVE
ICV	EXISTING IRRIGATION CONTROL VALVE
FH	EXISTING FIRE HYDRANT
WM	EXISTING WATER METER
8" W	EXISTING WATER
SDMH	EXISTING STORM MANHOLE
24" RCP	EXISTING STORM LINE
CHAIN LINK FENCE	CHAIN LINK FENCE
WIRE FENCE	WIRE FENCE
FENCE OTHER	FENCE OTHER
WOOD FENCE	WOOD FENCE
ELEC. PED.	EXISTING ELECTRICAL PEDESTAL
—FO—	EXISTING FIBER OPTIC LINE
	EXISTING EASEMENT LINE
EM	EXISTING ELECTRIC METER
PP	EXISTING POWER POLE
ELEC MH	EXISTING ELECTRIC MANHOLE
LP	EXISTING LIGHT POLE
FL	EXISTING LIGHT (FLOOD, YARD ETC.)
—E—	EXISTING UNDERGROUND ELECTRIC CABLE
—OE—	EXISTING OVERHEAD ELECTRIC WIRE
	ASPHALT
	CONCRETE PATTERN
SIGN	STREET SIGN
MB	MAILBOX
½" PIPE	IRON ROD/PIPE FOUND
BUSH, 8" PECAN	TREE OR BUSH
BM	BENCHMARK
CP	CONTROL POINT
SSMH	PROPOSED NEW MANHOLE
SSMH	REMOVE AND REPLACE MANHOLE
	ROW LINE
	PROPERTY LINE
	CONCRETE DRIVEWAY REMOVAL & REPLACEMENT
	CONCRETE PAVEMENT REMOVAL & REPLACEMENT
	ASPHALT PAVEMENT REMOVAL & REPLACEMENT
	GRAVEL DRIVEWAY REMOVAL & REPLACEMENT
	LIMITS OF FLOOD ZONE BOUNDARY
	ABANDONMENT OF EXISTING SEWER

PROJECT LOCATION
NORTH HARVARD AVENUE &
EAST MARSHALL STREET



CONSTRUCTION PLANS FOR

COAL CREEK REHABILITATION AND RELIEF, FY24

TMUA PROJECT NO. ES 2024-01

WATER AND SEWER DEPARTMENT CITY OF TULSA, OKLAHOMA

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CITY OF TULSA

PREPARED BY

rjngroup

CONSULTING ENGINEERS
4500 S. GARNETT ROAD, SUITE 110
TULSA, OKLAHOMA 74146
(918) 627-9737

CERTIFICATE OF AUTHORIZATION NO. CA1979, EXP. 6/30/2027

Engineer's Statement - Current City of Tulsa Standard Specifications and Standard Details and Asset Management Guidlines govern. All other construction and materials shall be in accordance with the 2019 Oklahoma Standard Specifications for Highway Construction.

UTILITY COORDINATION INFORMATION
INSIDE OF RIGHT OF WAY

COMPANY	CONTACT	OFFICE
City of Tulsa	Tony Glenn	918-596-9245
AEP/PSO	Emergency	888-216-3523
ONG	Emergency	800-664-5463
AT&T	Emergency	800-288-2020
Cox	Customer Service	918-806-6000
Verizon	Customer Service	888-294-6804
Windstream	Customer Service	800-347-1991
MTTA	Customer Service	918-830-0024

UTILITY COORDINATION INFORMATION
TULSA ENGINEERING SERVICES DEPARTMENT

WATER DESIGN	918-596-9580
WASTEWATER DESIGN	918-596-9564
TRANSPORTATION DESIGN	918-596-9636
TRAFFIC ENGINEERING DESIGN	918-596-9741
STORMWATER DESIGN	918-596-9498

OKIE811 Know what's below 811 before you dig.

SURVEY DATUM:
HORIZONTAL - OKLAHOMA STATE PLANE COORDINATE (NAD 1983)
VERTICAL - (NAVD 1988)

APPROVED BY

WATER AND SEWER DIRECTOR

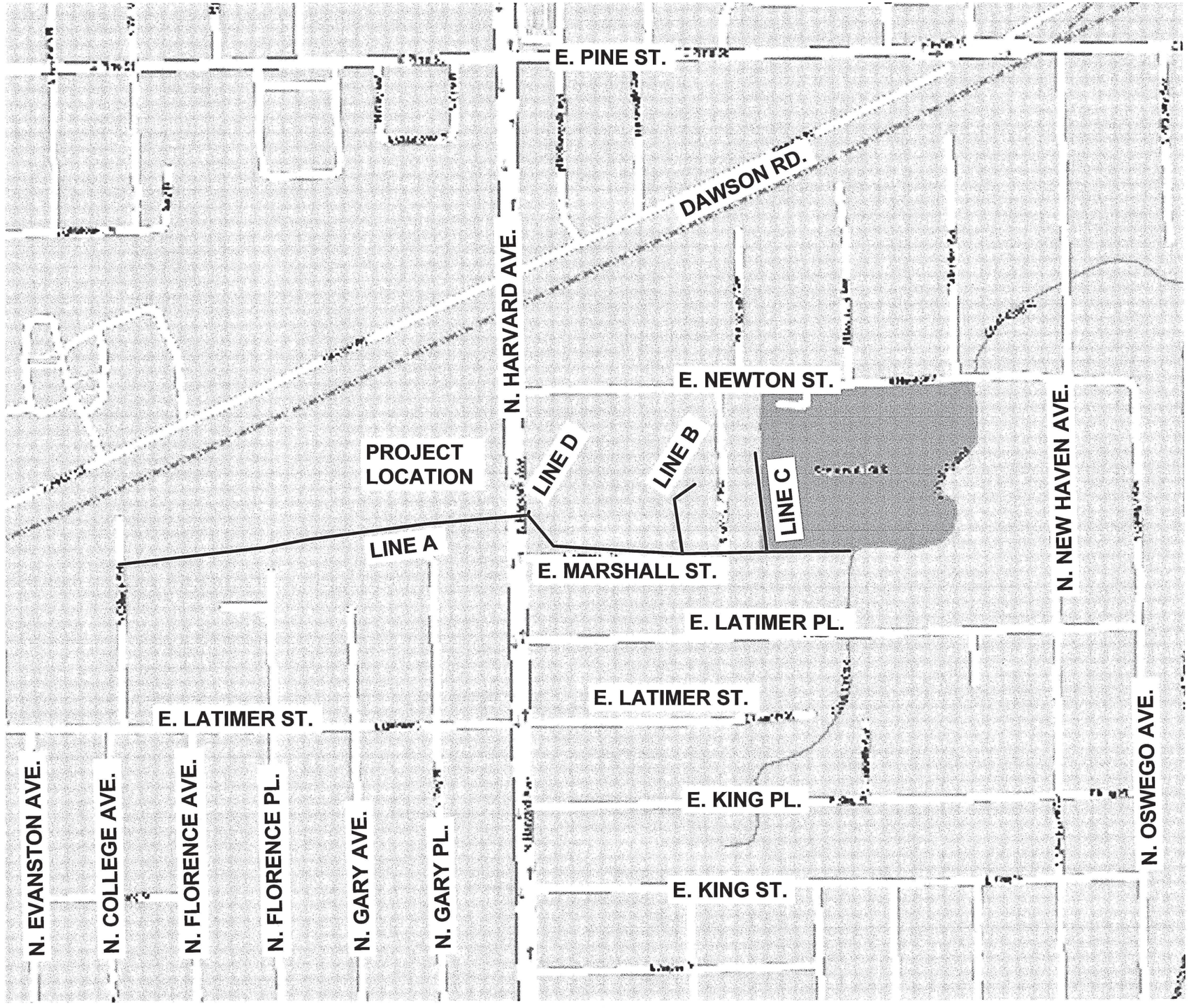
10-29-2026
DATE

LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

JACOB BRUMBAUGH, P.E.
RJN GROUP, INC.

9-25-2026
DATE

COAL CREEK REHABILITATION AND RELIEF, FY24



N.T.S.

9-25-26

LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

LOCATION MAP

TMUA PROJECT NUMBER ES 2024-01

COAL CREEK REHABILITATION AND RELIEF, FY24

CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

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

REVISION	BY	DATE

PLAN SCALE:	DRAWN	RLP	09/2026	APPROVED:
NA	DESIGNED	JWB	09/2026	
PROFILE SCALE:	SURVEY			
HORIZONTAL: NA	PROJ. MGR.			
	LEAD ENGR.		9/26	
VERTICAL NA	FIELD MGR.		10/26	DESIGN MANAGER
FILE:	DRAWING:			DATE: September 2026
ATLAS PAGE NO: 48,49				SHEET 2 OF 24 SHEETS

GENERAL NOTES

1. 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.
2. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE CITY OF TULSA ENGINEERING STANDARDS AND SPECIFICATIONS, TITLE 252 DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ) CHAPTER 656, THE SPECIAL PROVISIONS OF THIS CONTRACT, AND OKLAHOMA DEPARTMENT OF TRANSPORTATION (ODOT) STANDARDS.
3. THE CONTRACTOR SHALL HAVE AT LEAST ONE (1) EXECUTED COPY OF THE CONTRACT DOCUMENTS AT THE JOB SITE AT ALL TIMES.
4. THE CONTRACTOR SHALL SUBMIT A TRENCH EXCAVATION PLAN, SEALED BY A PROFESSIONAL ENGINEER IN THE STATE OF OKLAHOMA, FOR ALL LOCATIONS WHERE TRENCH OR SHAFT EXCAVATION EXCEEDS 20 FEET DEEP.
5. 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. SAW CUTS SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS.
6. 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.
7. ALL EXCAVATED MATERIAL REMOVED DURING TRENCHING OR EXCAVATION NOT REQUIRED IN THE PROJECT SHALL BECOME PROPERTY OF THE CONTRACTOR AND 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 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 IN THE TULSA REGULATORY FLOODPLAIN.
8. 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.
9. 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.
10. CONTRACTOR MUST NOTIFY THE HOMEOWNER A MINIMUM OF 48 HOURS (SPECIFICATION 400) PRIOR TO BEGINNING ANY WORK OR CONSTRUCTION ON HOMEOWNER'S PROPERTY.
11. 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.
12. CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION AND RESTORATION OF ANY EXISTING STORAGE SHEDS, FENCES, LANDSCAPING ETC. LOCATED WITHIN THE CONSTRUCTION AREA THAT ARE DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE CITY OF TULSA OR THE HOMEOWNER.
13. 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 SCHEDULE 40 PVC PIPE OF THE SAME SIZE AS THE EXISTING SEWER SERVICE AT THE CONTRACTOR'S EXPENSE.
14. CONTRACTOR MUST EXERCISE DILIGENCE WHEN WORKING AROUND TREES. HOWEVER, IF DAMAGE OCCURS TO TREES LOCATED WITHIN AN EASEMENT CONTRACTOR SHALL NOT BE RESPONSIBLE.
15. ALL CONCRETE PAVEMENTS, FLEXIBLE PAVEMENTS, CURB AND GUTTER, AND UNPAVED SURFACES SHALL BE FINISHED TO MATCH EXISTING SURROUNDING SURFACES.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING, NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGNING, PROVIDING, INSTALLING, MAINTAINING, AND REMOVING ALL TEMPORARY SHORING, SHIELDING, OR SLOPING SYSTEMS REQUIRED FOR SAFE EXCAVATION WORK. 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. ALL COSTS ARE TO BE CONSIDERED INCIDENTAL TO OTHER BID ITEMS.
18. 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 COMPLETED BY MANHOLE/STRUCTURE REPLACEMENT OR BY METHODS DESCRIBED IN SPECIFICATION 418 BY PAY ITEM OR ALLOWANCE.
19. 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.
20. ALL SANITARY SEWER MANHOLES LOCATED IN THE FLOODPLAIN SHALL BE BUILT IN ACCORDANCE WITH THE FLOODPLAIN MANHOLE STANDARD DETAIL #359 A WITH GASKETED PADDLE - LOCK LID.
21. IF NECESSARY, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE BYPASS PUMPING DURING SANITARY SEWER CONSTRUCTION. THE PUMP AND BYPASS LINES SHALL BE OF ADEQUATE SIZE AND CAPACITY TO PREVENT BACK-UP INTO ANY DWELLING OR BUSINESS DURING WET WEATHER EVENTS. CONTRACTOR SHALL SUBMIT A SEWER BYPASS PLAN PRIOR TO CONSTRUCTION. THE COST OF BYPASS PUMPING INCLUDING THE PUMPS, LINES, LABOR AND ANY OTHER ASSOCIATED ITEMS REQUIRED TO MAINTAIN BYPASS PUMPING SHALL BE INCLUDED IN OTHER ITEMS OF WORK. NO ADDITIONAL PAYMENT WILL BE MADE FOR BYPASS PUMPING. CONTRACTOR IS REQUIRED TO SUBMIT WRITTEN BYPASS PUMPING NOTIFICATION FORM TO SEWER OPERATIONS AND MAINTENANCE AT LEAST ONE WEEK PRIOR TO BYPASS PUMPING. SEE SPECIAL PROVISIONS.
22. ALL MANHOLES, PIPE SIZES AND LENGTHS, 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.
23. IF BORING LOGS ARE AVAILABLE - SOIL BORING LOGS FOR THIS PROJECT ARE AVAILABLE FOR REVIEW AT THE OFFICES OF RJN GROUP, INC. 4500 S. GARNETT RD., SUITE 110 TULSA, OKLAHOMA 74146. NEITHER THE CITY OR THE ENGINEER MAKES OR ACCEPTS, EXPRESS OR IMPLIES, ANY WARRANTIES ABOUT THE INFORMATION SHOWN ON THESE BORING LOGS.
24. IF NOT - THERE ARE NO SOIL BORING LOGS AVAILABLE FOR THIS PROJECT.
25. CONTRACTOR SHALL MAINTAIN SEWER FLOW AT ALL TIMES DURING BYPASS PUMPING OPERATIONS. THE PUMP AND BYPASS LINES SHALL BE OF ADEQUATE CAPACITY AND SIZE TO HANDLE THE ANTICIPATED WET WEATHER FLOW. LIQUID LEVELS SHALL NOT BE ALLOWED TO OVER FLOW OR BACK-UP INTO ANY CUSTOMER'S DWELLING OR BUSINESS.
26. CITY OF TULSA UTILITY LOCATES SUPERVISOR SHALL BE NOTIFIED A MINIMUM OF 72-HOURS IN ADVANCE OF CONSTRUCTION CROSSING ANY CRITICAL INFRASTRUCTURE. THE CONTRACTOR SHALL CALL 918-519-8826 AND EMAIL GBEUTLER@CITYOFTULSA.ORG TO NOTIFY. CONSTRUCTION CROSSING CAN NOT PROCEED UNLESS CITY OF TULSA UTILITY LOCATE PERSONNEL IS ON SITE. CONTRACTOR IS STILL REQUIRED TO SUBMIT A CALL OKIE SERVICE TICKET IN ADDITION TO CONTACTING CITY OF TULSA PERSONNEL. CITY OF TULSA CONSIDERS CRITICAL INFRASTRUCTURE AS:
    A. WATER LINES OF 24 INCHES IN DIAMETER OR LARGER
    B. ALL RAW WATER LINES
    C. SANITARY SEWER LINES OF 16 INCHES IN DIAMETER OR LARGER
    D. ALL SANITARY SEWER FORCE MAINS
    E. CITY OF TULSA-OWNED FIBER OPTIC LINES
27. TO CONTROL EROSION AND SEDIMENTS FROM STORMWATER RUNOFF, FINAL STABILIZATION OF DISTURBED AREAS AND SLOPES SHALL BE ACHIEVED BY ESTABLISHING PERMANENT VEGETATIVE COVER OR INSTALLING APPROVED PERMANENT SURFACE MATERIALS OR STRUCTURES. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN 14 DAYS OF PROJECT COMPLETION. FOR PROJECTS EXCEEDING 40 ACRES OR LOCATED WITHIN ONE (1) MILE OF AN IMPAIRED/TMDL WATERBODY, THE CONTRACTOR SHALL COMPLETE FINAL SOIL STABILIZATION MEASURES WITHIN 7 DAYS OF PROJECT COMPLETION.
28. ALL WORK SHALL BE CONDUCTED IN A MANNER THAT COMPLIES WITH THE CITY'S MUNICIPAL STORMWATER DISCHARGE PERMIT (MS4), POLLUTION ORDINANCE, AND STORMWATER MANAGEMENT PROGRAM (SMWP). CONTRACTORS WILL PREVENT THE DISCHARGE OF POLLUTANTS INTO THE CITY'S STORM SEWER SYSTEM OR WATERS OF THE STATE TO THE MAXIMUM EXTENT PRACTICABLE. CONSTRUCTION VEHICLE WASH WATERS ARE NOT TO BE DISCHARGED INTO CITY OF TULSA WATERS OR WATERS OF THE STATE.
29. IF ROCK IS ENCOUNTERED AND THE CONTRACTOR CHOOSES TO BLAST, BLASTING WILL CONFORM TO THE CITY OF TULSA BLASTING ORDINANCE. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE CONSIDERED INCIDENTAL TO UNCLASSIFIED EXCAVATION AND BACKFILL. ALL LOCATIONS FOR BLASTING SHALL BE SUBJECT TO THE ENGINEER'S APPROVAL.

MANHOLE REHABILITATION NOTES

1. 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.
2. 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.
3. ACTIVE LEAKING JOINTS OR OTHER DEFECTS OBSERVED BY THE CONTRACTOR, BUT NOT SCHEDULED FOR REHABILITATION, SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY UPON DETECTION.
4. IN AREAS OF MANHOLE REPAIRS, CONTRACTOR SHALL PLACES SPOILS ON PLASTIC SHEETS, PLYWOOD OR OTHER SUITABLE GROUND PROTECTION.
5. THE MANHOLE DEPTHS SHOWN ON THE PLANS ARE FROM SURVEY. HOWEVER, ACCURATE FIELD MEASUREMENTS SHALL BE UTILIZED FOR ANY MANHOLE REPLACEMENT OR REHABILITATION.
6. 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.
7. 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 ENGINEERING STANDARDS AND SPECIFICATIONS.
8. ALL FRAMES AND COVERS FOR NEW MAHHOLES 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

1. 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.
2. POINT REPAIR LOCATIONS ARE APPROXIMATE AND SHALL BE DETERMINED BY THE CONTRACTOR'S PRE-TELEVISION INSPECTION.
3. 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.
4. 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.
5. PIPELINE REHABILITATION PLANS ARE FOR REFERENCE ONLY AND DO NOT DEPICT ALL OF THE EXISTING UTILITIES.
6. PIPE EMBEDMENT WILL BE AS SHOWN IN CITY OF TULSA STANDARD DETAILS EXCEPT WHERE SPECIFICALLY NOTED ON THE PLANS.
7. 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.
8. 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.

TRAFFIC CONTROL

1. 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). 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 GROUP. 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.
2. THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTIFICATION TO FIELD ENGINEERING 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

3. 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.
4. THE CONTRACTOR SHALL NOTIFY FIELD ENGINEERING 7-CALENDAR DAYS FOR APPROVAL ON ANY TRAFFIC CONTROL REQUIRED ON ARTERIAL ROADWAYS. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ALL AFFECTED ENTITIES RELATED TO THE TRAFFIC CONTROL PLAN.
5. 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.
6. 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.
7. 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.
8. 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.
9. ALL ADVANCE WARNING SIGNS SHALL BE PROVIDED WITH TYPE "A" WARNING LIGHTS.
10. ALL TYPE III BARRICADES SHALL BE FURNISHED WITH A MINIMUM OF TWO (2) TYPE "A" WARNING LIGHTS.
11. ALL CHANNELING DEVICES SHALL BE PROVIDED WITH TYPE "C" WARNING LIGHTS.
12. 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 WAY, AND TYPE "C" LIGHTS SHALL NOT BE USED FOR ANY OTHER PURPOSE.
13. 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.

UTILITIES

1. 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.
2. 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.
3. CONTRACTOR SHALL BRACE UTILITY POLES AND GUY WIRES WITHIN 5 FEET OF AN EXCAVATION. CONTRACTOR SHALL CONTACT AND COORDINATE WITH THE PUBLIC SERVICE OF OKLAHOMA/AMERICAN ELECTRIC POWER (PSO/AEP) A MINIMUM OF THREE (3) WEEKS PRIOR TO ANY REQUIRED BRACING, REMOVAL, OR RELOCATION OF EXISTING UTILITY POLES.
4. CONTRACTOR SHALL MEET MINIMUM CLEARANCE REQUIREMENTS SET BY PUBLIC SERVICE COMPANY OF OKLAHOMA(PSO).

PLAN & PROFILE SHEET NOTES

1. CONTRACTOR MUST FIELD VERIFY ALL DEPTHS, DISTANCE ANGLES, AND GRADES OF EXISTING SANITARY SEWER PRIOR TO START OF CONSTRUCTION. (NO SEPARATE PAY ITEM).
2. 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 UNDERGROUND UTILITIES AND POWER POLES DURING CONSTRUCTION.
3. 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.
4. CONTRACTOR SHALL REPLACE ALL SERVICES TO WITHIN 2' OF THE EASEMENT LINE OR RIGHT-OF-WAY LINE.
5. DISTANCE FROM DOWNSTREAM MANHOLE TO SERVICE CONNECTION IS APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY PRIOR TO CONSTRUCTION.
6. ALL EXISTING FACILITIES SHALL BE ABANDONED IN ACCORDANCE WITH CITY OF TULSA SPECIFICATION 333. FOR ABANDONMENT, REMOVE TOP 3 VF OF EXISTING MANHOLE/LAMPHOLE AND FILL EXISTING SANITARY SEWER AND MANHOLE/LAMPHOLE WITH CELLULAR CONCRETE OR OTHER APPROVED MATERIAL. ABANDONMENT SHALL BE PERFORMED AFTER CONSTRUCTION AND TESTING OF ALL NEW SEWER MAINS.
7. CONTRACTOR SHALL TELEVISE 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.

9-25-26

LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

REVISION	BY	DATE

GENERAL NOTES

TMUA PROJECT NUMBER ES 2024-01

COAL CREEK REHABILITATION AND RELIEF, FY24

CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

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

PLAN SCALE: NA	DRAWN	RLP	09/2026	APPROVED:
	DESIGNED	JWB	09/2026	
PROFILE SCALE:	SURVEY			
HORIZONTAL: NA	PROJ. MGR.			
	LEAD ENGR.		10/26	Thomas B. Mc
VERTICAL NA	FIELD MGR.		10/26	DESIGN MANAGER
FILE:	DRAWING:			DATE: September 2026
ATLAS PAGE NO:				SHEET 3 OF 24 SHEETS

PAY ITEM NOTES

RIGHT-OF-WAY CLEARING AND RESTORATION

1. RIGHT-OF-WAY CLEARING WILL BE PAID FOR AT THE UNIT BID PRICE, ON A SQUARE YARD BASIS, FOR OPEN CUT CONSTRUCTION. NO ADDITIONAL PAYMENT WILL BE MADE FOR TRENCHLESS CONSTRUCTION.

2. ANY ITEMS REMOVED AS PART OF THIS PROJECT SHALL BE RESTORED TO EQUAL OR BETTER CONDITION. PAYMENT WILL BE INCLUDED IN THE BID PRICE FOR RIGHT-OF-WAY CLEARING AND RESTORATION.

3. THE COST OF ANY TEMPORARY FENCING FOR LIVESTOCK OR PETS IS PART OF AND INCLUDED IN RIGHT-OF-WAY CLEARING AND RESTORATION.

4. ALL COSTS ASSOCIATED WITH THE REMOVALS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR RIGHT-OF-WAY CLEARING AND RESTORATION. THIS INCLUDES, BUT IS NOT LIMITED TO, STRUCTURES, TREES, BUSHES, FENCES, AND OTHER ITEMS AS MAY BE ENCOUNTERED.

5. UNLESS NOTED FOR SALVAGE, ALL ITEMS REMOVED SHALL BE REMOVED AS PART OF THE UNIT PRICE BID FOR RIGHT-OF-WAY CLEARING AND RESTORATION. ITEMS SCHEDULED FOR SALVAGE SHALL BE RETURNED TO A SITE DESIGNATED BY THE CITY. CASTING AND LIDS ON ALL SANITARY AND STORM SEWERS SHALL BE REPLACED WITH NEW ONES AND THE OLD LIDS AND CASTINGS SHALL BE RETURNED TO THE SEWER BASE AT 9319 E. 42nd STREET NORTH AND PLACED IN THE METAL RECYCLE BINS IN THE STOCKROOM AREA, PHONE: (918) 586-6996, BETWEEN THE HOURS OF 7:30 A.M. AND 3:00 P.M., MONDAY THROUGH FRIDAY. MATERIALS NOT SALVAGED SHALL BE DISPOSED OF BY THE CONTRACTOR IN A MANNER ACCEPTABLE TO THE CITY AND THE ENGINEER AT NO COST TO THE PROJECT.

6. AS PART OF THE UNIT BID PRICE FOR RIGHT-OF-WAY CLEARING AND RESTORATION, THE CONTRACTOR SHALL REPAIR OR REPLACE, ANY PRIVATE UTILITIES DISTURBED. THIS INCLUDES, BUT IS NOT LIMITED TO, IRRIGATION, YARD LIGHTING, EITHER GAS OR ELECTRIC, AND PET CONFINEMENT SYSTEMS. NO ADDITIONAL COMPENSATION WILL BE MADE FOR THIS WORK.

TRAFFIC CONTROL

7. CONTRACTOR TO PROVIDE BUSINESS ACCESS SIGNS AT ALL BUSINESS ACCESS POINTS. ALL COST TO BE INCIDENTAL TO OTHER BID ITEMS.

8. THE CONTRACTOR SHALL DEVELOP AND IMPLEMENT TRAFFIC CONTROL PLAN IN ACCORDANCE WITH THE GENERAL AND TRAFFIC CONTROL NOTES ON THE GENERAL NOTES SHEET.

9. ALL REFLECTORIZED SHEETING USED ON SIGN AND BARRICADES SHALL BE A CUBIC PRISMATIC TYPE AND SHALL MEET ASTM D-4956-01, TYPE IX. SHEETING ON DRUMS SHALL BE TYPE III SHEETING MEETING ASTM D-4956-04.

10. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). THIS ITEM SHALL BE PAID PER CALENDAR DAYS FOR ALL NECESSARY TRAFFIC CONTROL. PAYMENT IS NOT GUARANTEED FOR FULL AMOUNT OF CALENDAR DAYS LISTED. PAYMENT FOR TRAFFIC CONTROL WILL BE BASED ON ACTUAL CALENDAR DAYS THAT TRAFFIC CONTROL ITEMS AND/OR DEVICES ARE USED.

SWPPP

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROL AND MAINTENANCE OF THE STORM WATER DRAINAGE FROM THE CONSTRUCTION SITE. STORM WATER PONDING ON THE CONSTRUCTION SITE THAT IS THE RESULT OF CONSTRUCTION WILL NOT BE ALLOWED. ALL COST ASSOCIATED WITH STORM WATER MANAGEMENT, AS WELL AS REMOVAL OF ALL SILT AND DEBRIS FROM ALL DRAINAGE STRUCTURES, STORM SEWER PIPES AND APPURTENANCES WITHIN THE PROJECT LIMITS AT END OF PROJECT, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THIS ITEM.

EXCAVATION AND BACKFILL

12. THE CONTRACTOR SHALL INCLUDE THE COST OF RELOCATING UTILITY POLE ANCHORS, AND ANY BRACING OF POLES THAT MAY BE REQUIRED BY THE APPROPRIATE UTILITY COMPANY. THE CONTRACTOR SHALL CONTACT AND COORDINATE WITH THE APPROPRIATE UTILITY COMPANY. ALL WORK ASSOCIATED WITH THE MAINTENANCE OF OTHER UTILITIES, FACILITIES, AND LINES IS CONSIDERED AS WORK INCIDENTAL TO EXCAVATION AND BACKFILL, UNCLASSIFIED AND AS SUCH, WILL NOT BE MEASURED FOR SEPARATE PAYMENT.

13. 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 TO UNCLASSIFIED EXCAVATION AND BACKFILL. NO ADDITIONAL PAYMENT SHALL BE MADE.

14. PIPE SHALL BE BEDDED IN ACCORDANCE WITH BEDDING DETAILS AS SHOWN ON PIPE BEDDING DETAILS SHEET AND AS CALLED OUT ON THE PLAN AND PROFILE SHEETS. THE COST FOR THE MATERIALS ASSOCIATED WITH THE SPECIFIED BEDDING ARE CONSIDERED INCIDENTAL. THE PAY LIMITS ARE IN ACCORDANCE WITH CITY OF TULSA STANDARD DETAIL NO. 305. NO ADDITIONAL PAYMENT SHALL BE MADE FOR ADDITIONAL EXCAVATION AND BACKFILL DUE TO THE REQUIRED BEDDING DETAILS.

SODDING & SEEDING

15. THE PAYMENT OF THE UNIT BID PRICE FOR SOLID SLAB SODDING SHALL INCLUDE ALL COSTS FOR PLACEMENT OF THE TOPSOIL AND SOD, FERTILIZATION, AND PERIODIC WATERING. FERTILIZATION SHALL BE ACCOMPLISHED USING 10-20-10 FERTILIZER APPLIED AT A RATE OF 1.5 POUNDS PER SQUARE YARD. WATERING SHALL BE AS NEEDED AND SHALL CONTINUE UNTIL THE VEGETATION IS FULLY ESTABLISHED OR THE PROJECT HAS BEEN ACCEPTED BY THE OWNER.

16. WATER AND FERTILIZATION FOR HYDROMULCH SEEDING SHALL BE IN ACCORDING WITH CITY STANDARDS AND SPECIFICATION PART 325. WILL BE MADE AT THE UNIT PRICE PER SQUARE YARD AND SHALL INCLUDE ALL NECESSARY TOP SOIL REPLACEMENT, FERTILIZATION, WATERING AND MAINTENANCE. NO SEPARATE PAYMENT SHALL BE MADE FOR SODDING AND SEEDING OUTSIDE OF PAY LIMIT. MAXIMUM PAY LIMIT FOR SODDING AND SEEDING SHALL BE 10 FEET EACH SIDE OF TRENCH TOTALING 20 FEET IN WIDTH.

MANHOLES

17. MANHOLES WILL BE MEASURED FOR PAYMENT USING THE CITY OF TULSA'S STANDARD PAY ITEMS.

18. NO TRANSITIONS BETWEEN PIPE TYPES OR SIZES MAY BE MADE EXCEPT AT A STRUCTURE. IF A TRANSITION IS REQUIRED AT A LOCATION OTHER THAN ONE SCHEDULED FOR THE INSTALLATION OF A MANHOLE, THE CONTRACTOR WILL INSTALL AN ADDITIONAL MANHOLE AT HIS COST.

19. ALL FRAME AND COVERS INSTALLED ON NEW MANHOLES IN THIS PROJECT SHALL HAVE A MINIMUM CLEAR OPENING OF 30-INCHES. THE COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.FRAMES AND COVERS FOR ALL MANHOLES SHALL BE 3200 SERIES COMPOSITE UTILITY ACCESS COVER WITH QUARTER TURN PADDLE LOCKS AS MANUFACTURED BY EJ OR ENGINEER APPROVED EQUAL. MANHOLE GRADE ADJUSTMENTS SHALL BE CRETEX PRO-RINGS OR ENGINEER APPROVAL EQUAL.

20. PRECAST CONCRETE MANHOLES OR FIBERGLASS MANHOLES SHALL BE INSTALLED ON THIS PROJECT. ALL PRECAST CONCRETE MANHOLES 5-FOOT IN DIAMETER AND LARGER SHALL BE EPOXY COATED. NO ADDITIONAL PAYMENT.

21. CLOSED-BOTTOM FIBERGLASS MANHOLES, AS MANUFACTURED BY L.F. MANUFACTURING, INC., OR ENGINEER APPROVED EQUIVALENT, SHALL BE INSTALLED. MANHOLES SHALL BE SUITABLE FOR HS-20 LOADING. AN ANTI-FLOATATION RING WITH AN EXTENDED, REINFORCED CONCRETE BASE SHALL ALSO BE REQUIRED. EXTENDED BASES SHALL BE A MINIMUM OF 12 INCHES THICK WITH A MINIMUM DIAMETER OF 24 INCHES GREATER THAN MANHOLE OUTSIDE DIAMETER OR PER MANUFACTURER'S RECOMMENDATION. A PRE-CONSTRUCTION SUBMITTAL, COMPLETE WITH BUOYANCY CALCULATIONS, TO ENGINEER SHALL BE REQUIRED. SEE TECHNICAL SPECIFICATIONS AND DETAIL ON FRP MANHOLE AND BEDDING DETAILS SHEET FOR ADDITIONAL REQUIREMENTS.

22. MANHOLE 030-0704 IS AN EXISTING FRP MANHOLE. CONTRACTOR SHALL CONNECT TO AND REFORM THE BENCH AND INVERT. THE WORK SHALL BE PERFORMED BY THE ORIGINAL MANUFACTURER, L.F. MANUFACTURING, INC. OR ENGINEER APPROVED EQUIVALENT. ALL WORK ASSOCIATED WITH THIS SHALL BE INCLUDED IN THE PAY ITEM AND NO ADDITIONAL PAYMENT SHALL BE MADE.

PIPE

23. THE CONTRACTOR SHALL UTILIZE SDR 26 ASTM D3034 PVC PIPE. UNLESS OTHERWISE NOTED IN THE DRAWINGS.

24. ALL PIPE INSTALLED IN STEEL CASINGS SHALL HAVE RESTRAINED JOINTS. SDR 26 ASTM D 3034 PVC SHALL BE RESTRAINED BY UTILIZING FORD 1390-P RESTRAINED HARNESS OR ENGINEERED APPROVED EQUAL. THE COST OF THE RESTRAINED SYSTEM SHALL BE INCLUDED IN THE UNIT PRICE OF THE STEEL CASING. NO ADDITIONAL PAYMENT SHALL BE MADE.

25. UNIT PRICE QUANTITY FOR INSTALLATION OF PIPE SHALL INCLUDE ALL NECESSARY LABOR, EQUIPMENT, MATERIAL AND CONFORM TO THE CITY OF TULSA STANDARD DETAILS EXCEPT WHERE SPECIFICALLY NOTED ON THE PLANS. FLOWABLE FILL FOR PIPE INSTALLATION SHALL BE INCLUSIVE WITH THE UNIT PRICE FOR PIPE INSTALLATION.

26. 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.

27. QUICK SET CELLULAR CONCRETE OR FLOWABLE FILL TO BE USED TO BACKFILL AROUND STREET CURB INLETS AND PIPES AS DIRECTED BY THE ENGINEER. NO SEPARATE PAYMENT.

ABANDONMENT OF SEWERS

28. MANHOLES SHALL HAVE THE TOP 3 FEET REMOVED. MANHOLES AND SANITARY SEWERS SHALL BE FILLED WITH CELLULAR CONCRETE OR FLOWABLE FILL.

29. ABANDONMENT SHALL BE PERFORMED AFTER CONSTRUCTION AND ACCEPTANCE OF ALL NEW SANITARY SEWER MAINS.

30. CONTRACTOR SHALL CCTV (CLOSED CIRCUIT TELEVISION INSPECTION) ALL SEWER LINES PRIOR TO ALL 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.

SERVICE CONNECTIONS

31. 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.

CONSTRUCTION STAKING

32. UNIT PRICE QUANTITY FOR CONTRACTOR CONSTRUCTION STAKING INCLUDES ALL SURVEY WORK NECESSARY FOR CONSTRUCTION OF ALL SPECIFIED LINEAR FEET OF SANITARY SEWER PIPE AND MANHOLE INSTALLATION.

SEQUENTIAL RESTORATION

33. THIS RESTORATION SHALL INCLUDE, BUT IS NOT LIMITED TO, SUCH ITEMS AS SODDING, REPLACEMENT OF SIDEWALKS, FENCES, DRIVEWAYS, AND STREET PAVEMENT, GROUTING OF SEWER SCHEDULED TO BE ABANDONED, AND ANY OTHER ITEMS SPECIFICALLY SHOWN ON THE PLANS.

34. ANY RESTORATION WORK DAMAGED OR DESTROYED BY THE CONTRACTOR'S SUBSEQUENT WORK SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE. NO ADDITIONAL PAYMENT SHALL BE MADE FOR SEQUENTIAL RESTORATION.

STEEL CASING

35. ALL STEEL CASINGS SHALL HAVE A MINIMUM WALL THICKNESS OF $\frac{1}{2}$-INCH AND BE IN ACCORDANCE WITH AWWA C200.

PAVEMENT

36. 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

37. 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).

ESTIMATED CONSTRUCTION QUANTITIES

PAY ITEM	SPEC. NO.	DESCRIPTION	PAY ITEM NOTE NOS.	UNIT	BASE BID QUANTITY
1	102	PROJECT SIGN (CITY OF TULSA)		EA	2
2	301, SP-8	RIGHT-OF-WAY CLEARING AND RESTORING	1,2,3,4,5,6,33,34	SY	20,000
3	302	UNCLASSIFIED EXCAVATION AND BACKFILL	12,13,14	CY	6,600
4	303	MOBILIZATION		EA	1
5	304	CONTRACTOR CONSTRUCTION STAKING	32	EA	1
6	313, SP-1	INSTALL 8-INCH DIAMETER SEWER PIPE OPEN CUT, ASTM D3034 SDR 26 PVC	23,25	LF	518
7	313, SP-1	INSTALL 15-INCH DIAMETER SEWER PIPE OPEN CUT, ASTM D3034 SDR 26 PVC	23,25	LF	2,780
8	313, 322, 332, SP-1	INSTALL 15-INCH DIAMETER SEWER PIPE (RJ) IN STEEL CASING, ASTM D3034 SDR 26 PVC	23,24,25	LF	225
9	314, SP-4,5,6	CONSTRUCT STD. 4-FOOT DIAMETER MANHOLE (0-6-FOOT DEPTH)	17,18,19,20,21	EA	1
10	314, SP-4,5,6	MANHOLE DEPTH OVER 6-FOOT FOR STD. 4-FOOT DIAMETER MANHOLE	17,18,19,20,21	VF	3.9
11	314, SP-4,5,6	CONSTRUCT STD. 5-FOOT DIAMETER MANHOLE (0-6-FOOT DEPTH)	17,18,19,20,21	EA	4
12	314, SP-4,5,6	MANHOLE DEPTH OVER 6-FOOT FOR STD. 5-FOOT DIAMETER MANHOLE	17,18,19,20,21	VF	47.4
13	314, SP-4,5,6	CONSTRUCT STD. 5-FOOT DIAMETER DROP MANHOLE (0-6-FOOT DEPTH)	17,18,19,20,21	EA	4
14	314, SP-4,5,6	MANHOLE DEPTH OVER 6-FOOT FOR STD. 5-FOOT DIAMETER DROP MANHOLE	17,18,19,20,21	VF	45.7
15	315	CONNECT TO EXISTING SANITARY SEWER MANHOLE	22	EA	1
16	316	CONSTRUCT 8-INCH DIA. PVC LAMPHOLE		EA	1
17	319	INSTALL FLOWABLE FILL		CY	21
18	322	30-INCH DIAMETER STEEL CASING BY JACK & BORE	24,35	LF	185
19	327	SAFETY FENCE		LF	500
20	332	30-INCH DIAMETER STEEL CASING BY OPEN CUT	24,35	LF	40
21	333	CUT AND PLUG EXISITING SEWER PIPE	28,29,30	EA	1
22	333	ABANDON EXISTING SANITARY SEWER MANHOLE	28,29,30	EA	9
23	333	ABANDON EXISTING 8-INCH DIAMETER SANITARY SEWER	28,29,30	LF	1,559
24	333	ABANDON EXISTING 10-INCH DIAMETER SANITARY SEWER	28,29,30	LF	1,125
25	333	ABANDON EXISTING 16-INCH DIAMETER SANITARY SEWER	28,29,30	LF	268
26	333	REMOVE EXISTING SANITARY SEWER / PATCH AND SEAL EXISTING RCP STORM	28,29,30	EA	4
27	334	CONSTRUCTION AS-BUILT		LS	1
28	335	CONTRACTOR'S QUALITY CONTROL		LS	1
29	400	PHOTOGRAPHIC DOCUMENTATION		EA	1
30	402	SOD REPLACEMENT	15,16	SY	7,400
31	402, SP-2	CONCRETE DRIVEWAY REPLACEMENT	36	SY	40
32	402	GRAVEL SIDEWALK REPLACEMENT	36	SY	470
33	402	GRAVEL PAVEMENT REPLACEMENT	36	SY	20
34	402	ASPHALT PAVEMENT REPLACEMENT	36,37	SY	300
35	405	SERVICE RECONNECTIONS	31	EA	1
36	405	SERVICE LINE REPLACEMENT	31	LF	150
37	405	PRE-CONSTRUCTION TELEVISION INSPECTION OF SANITARY SEWER	30	LF	2,952
38	416, SP-4,5,6	COMPLETE MANHOLE REPLACEMENT, STD. 4-FOOT DIAMETER MANHOLE (0-6-FOOT DEPTH)	17,18,19,20,21	EA	2
39	416, SP-4,5,6	EXTRA DEPTH OVER 6-FOOT FOR STD. 4-FOOT DIAMETER MANHOLE	17,18,19,20,21	VF	7.5
40	416, SP-4,5,6	COMPLETE MANHOLE REPLACEMENT, STD. 5-FOOT DIAMETER DROP MANHOLE (0-6-FOOT DEPTH)	17,18,19,20,21	EA	4
41	416, SP-4,5,6	EXTRA DEPTH OVER 6-FOOT FOR STD. 5-FOOT DIAMETER DROP MANHOLE	17,18,19,20,21	VF	37.5
42	ODOT 220	SWPPP DOCUMENTATION AND MANAGEMENT	11	LS	1.0
43	ODOT 613 (A)	18-INCH DIAMETER REINFORCED CONCRETE PIPE CLASS III, ROUND	26,27	LF	8
44	ODOT 613 (A)	24-INCH DIAMETER REINFORCED CONCRETE PIPE CLASS III, ROUND	26,27	LF	16
45	ODOT 613 (A)	72-INCH DIAMETER REINFORCED CONCRETE PIPE CLASS III, ROUND	26,27	LF	50
46	ODOT 880 (J)	CONSTRUCTION TRAFFIC CONTROL	7,8,9,10	CD	365
47	SPECIAL	OWNER'S ALLOWANCE		ALLOW	100,000

9-25-26

LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

REVISION	BY	DATE

PAY ITEM NOTES

TMUA PROJECT NUMBER ES 2024-01

COAL CREEK REHABILITATION AND RELIEF, FY24

CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

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

PLAN SCALE: NA	DRAWN	RLP	09/2026	APPROVED:
	DESIGNED	JWB	09/2026	
PROFILE SCALE:	SURVEY			
HORIZONTAL: NA	PROJ. MGR.			
	LEAD ENGR.		9/26	DESIGN MANAGER
VERTICAL NA	FIELD MGR.		9/26	
FILE:	DRAWING:			DATE: September 2026
ATLAS PAGE NO:				SHEET 4 OF 24 SHEETS

T:\TULSA\PROJECTS\30-4076-00 ES 2024-01 COAL CREEK REHAB AND RELIEF FY24\CAD\DRAWINGS\ES 2024-01 COAL CREEK REHAB & RELIEF, FY24\DRAWINGS\(03-05) GENNOTES.DWG
9:52:3, 9 November 25, 2026

ITEM NO.	SPEC NO.	PAY QUANTITIES			LINE ID										
					A	A	A	A & D	A	A	A	A	B	C	ABANDONMENT
		ITEM DESCRIPTION	UNIT	TOTAL BASE BID	PAGE NUMBER										
					12	13	14	15	16	17	18	19	20	21	22
1	102	PROJECT SIGN (CITY OF TULSA)	EA	2											
2	301, SP-8	RIGHT-OF-WAY CLEARING AND RESTORING	SY	20,000	2,222	2,500	2,222	2,289	2,222	1,944	2,222	1,139	1,183	1,633	
3	302	UNCLASSIFIED EXCAVATION AND BACKFILL	CY	6,600	1,000	1,100	900	600	525	600	675	375	300	500	
4	303	MOBILIZATION	EA	1											
5	304	CONTRACTOR CONSTRUCTION STAKING	EA	1											
6	313, SP-1	INSTALL 8-INCH DIAMETER SEWER PIPE OPEN CUT, ASTM D3034 SDR 26 PVC	LF	518				11					213	294	
7	313, SP-1	INSTALL 15-INCH DIAMETER SEWER PIPE OPEN CUT, ASTM D3034 SDR 26 PVC	LF	2,780	400	450	360	290	325	350	400	205			
8	313, 322, 332, SP-1	INSTALL 15-INCH DIAMETER SEWER PIPE (RJ) IN STEEL CASING, ASTM D3034 SDR 26 PVC	LF	225			40	110	75						
9	314, SP-4,5,6	CONSTRUCT STD. 4-FOOT DIAMETER MANHOLE (0-6-FOOT DEPTH)	EA	1									1		
10	314, SP-4,5,6	MANHOLE DEPTH OVER 6-FOOT FOR STD. 4-FOOT DIAMETER MANHOLE	VF	3.9									3.9		
11	314, SP-4,5,6	CONSTRUCT STD. 5-FOOT DIAMETER MANHOLE (0-6-FOOT DEPTH)	EA	4	1		1		1		1				
12	314, SP-4,5,6	MANHOLE DEPTH OVER 6-FOOT FOR STD. 5-FOOT DIAMETER MANHOLE	VF	47.4	15.6		13.3		9.8		8.7				
13	314, SP-4,5,6	CONSTRUCT STD. 5-FOOT DIAMETER DROP MANHOLE (0-6-FOOT DEPTH)	EA	4		1	1	2							
14	314, SP-4,5,6	MANHOLE DEPTH OVER 6-FOOT FOR STD. 5-FOOT DIAMETER DROP MANHOLE	VF	45.7		10.9	12.5	22.3							
15	315	CONNECT TO EXISTING SANITARY SEWER MANHOLE	EA	1	1										
16	316	CONSTRUCT 8-INCH DIA. PVC LAMPHOLE	EA	1				1							
17	319	INSTALL FLOWABLE FILL	CY	21			7					14			
18	322	30-INCH DIAMETER STEEL CASING BY JACK & BORE	LF	185				110	75						
19	327	SAFETY FENCE	LF	500											
20	332	30-INCH DIAMETER STEEL CASING BY OPEN CUT	LF	40			40								
21	333	CUT AND PLUG EXISITING SEWER PIPE	EA	1											1
22	333	ABANDON EXISTING SANITARY SEWER MANHOLE	EA	9											9
23	333	ABANDON EXISTING 8-INCH DIAMETER SANITARY SEWER	LF	1,559											1,559
24	333	ABANDON EXISTING 10-INCH DIAMETER SANITARY SEWER	LF	1,125											1,125
25	333	ABANDON EXISTING 16-INCH DIAMETER SANITARY SEWER	LF	268											268
26	333	REMOVE EXISTING SANITARY SEWER / PATCH AND SEAL EXISTING RCP STORM	EA	4											4
27	334	CONSTRUCTION AS-BUILT	LS	1											
28	335	CONTRACTOR'S QUALITY CONTROL	LS	1											
29	400	PHOTOGRAPHIC DOCUMENTATION	EA	1											
30	402	SOD REPLACEMENT	SY	7,400	889	1,000	800	644	722	778	889	456	473	653	
31	402, SP-2	CONCRETE DRIVEWAY REPLACEMENT	SY	40				5	29						
32	402	GRAVEL SIDEWALK REPLACEMENT	SY	470	412	53									
33	402	GRAVEL PAVEMENT REPLACEMENT	SY	20				16							
34	402	ASPHALT PAVEMENT REPLACEMENT	SY	300		98		166	21			13			
35	405	SERVICE RECONNECTIONS	EA	1				1							
36	405	SERVICE LINE REPLACEMENT	LF	150				150							
37	405	PRE-CONSTRUCTION TELEVISION INSPECTION OF SANITARY SEWER	LF	2,952											2,952
38	416, SP-4,5,6	COMPLETE MANHOLE REPLACEMENT, STD. 4-FOOT DIAMETER MANHOLE (0-6-FOOT DEPTH)	EA	2									1	1	
39	416, SP-4,5,6	EXTRA DEPTH OVER 6-FOOT FOR STD. 4-FOOT DIAMETER MANHOLE	VF	7.5									1.6	5.9	
40	416, SP-4,5,6	COMPLETE MANHOLE REPLACEMENT, STD. 5-FOOT DIAMETER DROP MANHOLE (0-6-FOOT DEPTH)	EA	4					1	1	1	1			
41	416, SP-4,5,6	EXTRA DEPTH OVER 6-FOOT FOR STD. 5-FOOT DIAMETER DROP MANHOLE	VF	37.5					9.3	10.3	9.9	8.0			
42	ODOT 220	SWPPP DOCUMENTATION AND MANAGEMENT	LS	1											
43	ODOT 613 (A)	18-INCH DIAMETER REINFORCED CONCRETE PIPE CLASS III, ROUND	LF	8					8						
44	ODOT 613 (A)	24-INCH DIAMETER REINFORCED CONCRETE PIPE CLASS III, ROUND	LF	16							16				
45	ODOT 613 (A)	72-INCH DIAMETER REINFORCED CONCRETE PIPE CLASS III, ROUND	LF	50								50			
46	ODOT 880 (J)	CONSTRUCTION TRAFFIC CONTROL	CD	365											
47	SPECIAL	OWNER'S ALLOWANCE	ALLOW	100,000											

9-25-26

LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

SUMMARY OF QUANTITIES

TMUA PROJECT NUMBER ES 2024-01

COAL CREEK REHABILITATION AND RELIEF, FY24

CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

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

REVISION	BY	DATE

PLAN SCALE: NA	DRAWN	RLP	09/2026	APPROVED:
	DESIGNED	JWB	09/2026	
PROFILE SCALE:	SURVEY			
HORIZONTAL: NA	PROJ. MGR.			
VERTICAL NA	LEAD ENGR.		9/26	
	FIELD MGR.		10/26	DESIGN MANAGER
FILE:	DRAWING:			DATE: September 2026
ATLAS PAGE NO:				SHEET 5 OF 24 SHEETS

T:\TULSA\PROJECTS\30-4079-00 ES 2024-01 COAL CREEK REHAB AND RELIEF FY24\CADD\DRAWINGS\ES 2024-01 COAL CREEK REHAB & RELIEF, FY24\DRAWINGS\03-05) GENNOTES.DWG
Friday, September 25, 2026
8:29:29 AM

PIPE REHABILITATION WORK ITEM TABLE

ITEM NO.	PIPE REPLACEMENT ID	PLAN SHEET NUMBER	ATLAS PAGE	MAINTENANCE AREA	DOWNSTREAM MANHOLE	UPSTREAM MANHOLE	LENGTH (FT)	PROPOSED PIPE DIAMETER (IN)	PROPOSED PIPE MATERIAL	PROPOSED REPLACEMENT METHOD	STANDARD SPECIFICATION NO.
BASE BID											
1	A	12	49	30-N	030-0704	MH-1A	288	15	SDR 26 ASTM D3034 PVC	OPEN CUT	313, SP-1
2	A	12 & 13	49	30-N	MH-1A	MH-2A	355	15	SDR 26 ASTM D3034 PVC	OPEN CUT	313, SP-1
3	A	13 & 14	49	30-N	MH-2A	MH-3A	407	15	SDR 26 ASTM D3034 PVC	OPEN CUT	313, SP-1
4	A	14	49	30-N	MH-3A	MH-4A	170	15	SDR 26 ASTM D3034 PVC W/ 30-INCH DIA. 1/2-INCH THICK STEEL CASING	OPEN CUT	313, 332, SP-1
5	A	14 & 15	49	30-N	MH-4A	MH-5A	136	15	SDR 26 ASTM D3034 PVC	OPEN CUT	313, SP-1
6	A	15	48 & 49	30-N	MH-5A	MH-6A	241	15	SDR 26 ASTM D3034 PVC W/ 30-INCH DIA. 1/2-INCH THICK STEEL CASING	OPEN CUT AND BORE AND JACK	313, 322, SP-1
7	A	15 & 16	48	30-N	MH-6A	030-0110	177	15	SDR 26 ASTM D3034 PVC	OPEN CUT	313, SP-1
8	A	16	48	30-N	030-0110	MH-7A	250	15	SDR 26 ASTM D3034 PVC W/ 30-INCH DIA. 1/2-INCH THICK STEEL CASING	OPEN CUT AND BORE AND JACK	313, 322, SP-1
9	A	16 & 17	48	30-N	MH-7A	030-0114	223	15	SDR 26 ASTM D3034 PVC	OPEN CUT	313, SP-1
10	A	17 & 18	48	30-N	030-0114	030-0120	172	15	SDR 26 ASTM D3034 PVC	OPEN CUT	313, SP-1
11	A	18	48	30-N	030-0120	MH-8A	281	15	SDR 26 ASTM D3034 PVC	OPEN CUT	313, SP-1
12	A	18 & 19	48	30-N	MH-8A	030-0125	305	15	SDR 26 ASTM D3034 PVC	OPEN CUT	313, SP-1
13	B	20	49	30-N	MH-2A	MH-1B	173	8	SDR 26 ASTM D3034 PVC	OPEN CUT	313, SP-1
14	B	20	49	30-N	MH-1B	030-0094	40	8	SDR 26 ASTM D3034 PVC	OPEN CUT	313, SP-1
15	C	21	49	30-N	MH-1A	030-0092	294	8	SDR 26 ASTM D3034 PVC	OPEN CUT	313, SP-1
16	D	15	48	30-N	MH-5A	LH-1D	11	8	SDR 26 ASTM D3034 PVC	OPEN CUT	313, SP-1
17	ABANDONMENT	22	49	30-N	030-0009	030-0088	268	-	-	ABANDON	333
18	ABANDONMENT	22	49	30-N	030-0088	030-0089	351	-	-	ABANDON	333
19	ABANDONMENT	22	49	30-N	030-0089	030-0092	42	-	-	ABANDON	333
20	ABANDONMENT	22	49	30-N	030-0092	030-0091	230	-	-	ABANDON	333
21	ABANDONMENT	22	49	30-N	030-0092	030-0093	296	-	-	ABANDON	333
22	ABANDONMENT	22	49	30-N	030-0093	030-0094	35	-	-	ABANDON	333
23	ABANDONMENT	22	49	30-N	030-0094	030-0096	130	-	-	ABANDON	333
24	ABANDONMENT	22	49	30-N	030-0096	MH-2A	73	-	-	ABANDON	333
25	ABANDONMENT	22	49	30-N	030-0094	030-0099	401	-	-	ABANDON	333
26	ABANDONMENT	22	48	30-N	030-0099	MH-3A	168	-	-	ABANDON	333
27	ABANDONMENT	22	48 & 49	30-N	030-0099	030-0106	425	-	-	ABANDON	333
28	ABANDONMENT	22	48	30-N	030-0106	030-0107	24	-	-	ABANDON	333
29	ABANDONMENT	22	48	30-N	030-0107	030-0110	172	-	-	ABANDON	333
30	ABANDONMENT	22	48	30-N	030-0110	030-0113	177	-	-	ABANDON	333
31	ABANDONMENT	22	48	30-N	030-0113	030-0114	160	-	-	ABANDON	333

MANHOLE REHABILITATION WORK ITEM TABLE

ITEM NO.	COT BASIN NO.	PLAN MH ID	MH DEPTH (VF)	RELATED LINE ID	PLAN SHEET NO.	CONSTRUCT STD. 4-FOOT DIAMETER MANHOLE (0-6-FOOT DEPTH) 314, SP-5,6,7 EA	MANHOLE DEPTH OVER 6-FOOT FOR STD. 4-FOOT DIAMETER MANHOLE 314, SP-5,6,7 VF	CONSTRUCT STD. 5-FOOT DIAMETER MANHOLE (0-6-FOOT DEPTH) 314, SP-5,6,7 EA	MANHOLE DEPTH OVER 6-FOOT FOR STD. 5-FOOT DIAMETER MANHOLE 314, SP-5,6,7 VF	CONSTRUCT STD. 5-FOOT DIAMETER DROP MANHOLE (0-6-FOOT DEPTH) 314, SP-5,6,7 EA	MANHOLE DEPTH OVER 6-FOOT FOR STD. 5-FOOT DIAMETER DROP MANHOLE 314, SP-5,6,7 VF	CONNECT TO EXISTING SANITARY SEWER MANHOLE 315 EA	CONSTRUCT 8-INCH DIAMETER PVC LAMPHOLE 316 EA	ABANDON EXISTING SANITARY SEWER MANHOLE 333 EA	CUT AND PLUG EXISTING SANITARY PIPE 333 EA	REMOVE EXISTING MANHOLE NO SEPARATE PAYMENT 333 EA	COMPLETE MANHOLE REPLACEMENT, STD. 4-FOOT DIAMETER MANHOLE (0-6-FOOT DEPTH) 416, SP-5,6,7 EA	EXTRA DEPTH OVER 6-FOOT FOR STD. 4-FOOT DIAMETER MANHOLE 416, SP-5,6,7 VF	COMPLETE MANHOLE REPLACEMENT, STD. 5-FOOT DIAMETER DROP MANHOLE (0-6-FOOT DEPTH) 416, SP-5,6,7 EA	EXTRA DEPTH OVER 6-FOOT FOR STD. 5-FOOT DIAMETER DROP MANHOLE 416, SP-5,6,7 VF
BASE BID																				
1	30-N	030-0704	15.1	A	12							1								
2	30-N	MH-1A	21.6	A & C	12			1	15.6											
3	30-N	MH-2A	16.9	A & B	13					1	10.9									
4	30-N	MH-3A	18.5	A	14					1	12.5									
5	30-N	MH-4A	19.3	A	14			1	13.3											
6	30-N	MH-5A	18.4	A	15					1	12.4									
7	30-N	MH-6A	15.9	A	15					1	9.9									
8	30-N	030-0110	15.3	A	16														1	9.3
9	30-N	MH-7A	15.8	A	16			1	9.8											
10	30-N	030-0114	16.3	A	17														1	10.3
11	30-N	030-0120	15.9	A	18														1	9.9
12	30-N	030-0123	9.4	A	18											1				
13	30-N	MH-8A	14.7	A	18			1	8.7											
14	30-N	030-0124	9.1	A	18											1				
15	30-N	030-0125	14.0	A	19														1	8.0
16	30-N	MH-1B	9.9	B	20	1	3.9													
17	30-N	030-0094	7.6	B	20												1	1.6		
18	30-N	030-0092	11.9	C	21												1	5.9		
19	30-N	MH-1D	6.9	D	15								1							
20	30-N	030-0009	9.0	ABANDONMENT	22										1					
21	30-N	030-0088	14.5	ABANDONMENT	22									1						
22	30-N	030-0089	15.0	ABANDONMENT	22									1						
23	30-N	030-0091	6.5	ABANDONMENT	22									1						
24	30-N	030-0093	8.5	ABANDONMENT	22									1						
25	30-N	030-0096	5.9	ABANDONMENT	22									1						
26	30-N	030-0099	14.4	ABANDONMENT	22									1						
27	30-N	030-0106	12.4	ABANDONMENT	22									1						
28	30-N	030-0107	10.1	ABANDONMENT	22									1						
29	30-N	030-0113	9.0	ABANDONMENT	22									1						

9-25-26

LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

WORK ITEM TABLES

TMUA PROJECT NUMBER ES 2024-01

COAL CREEK REHABILITATION AND RELIEF, FY24

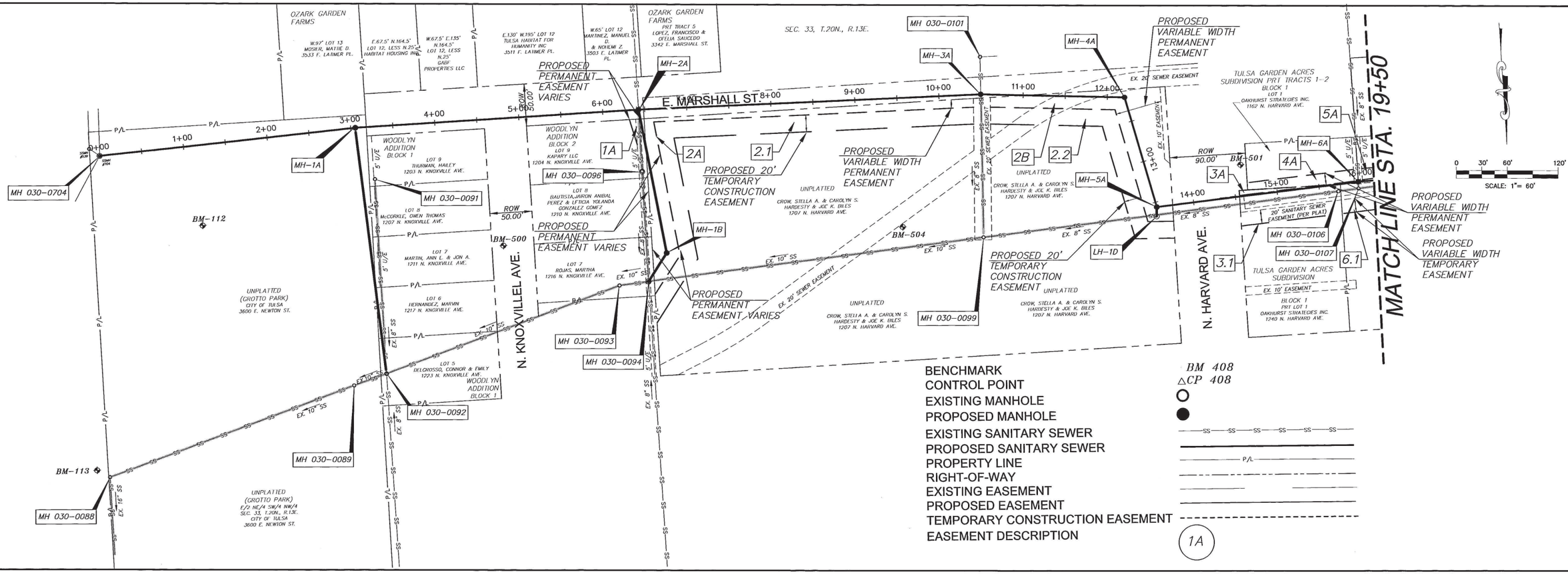
CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

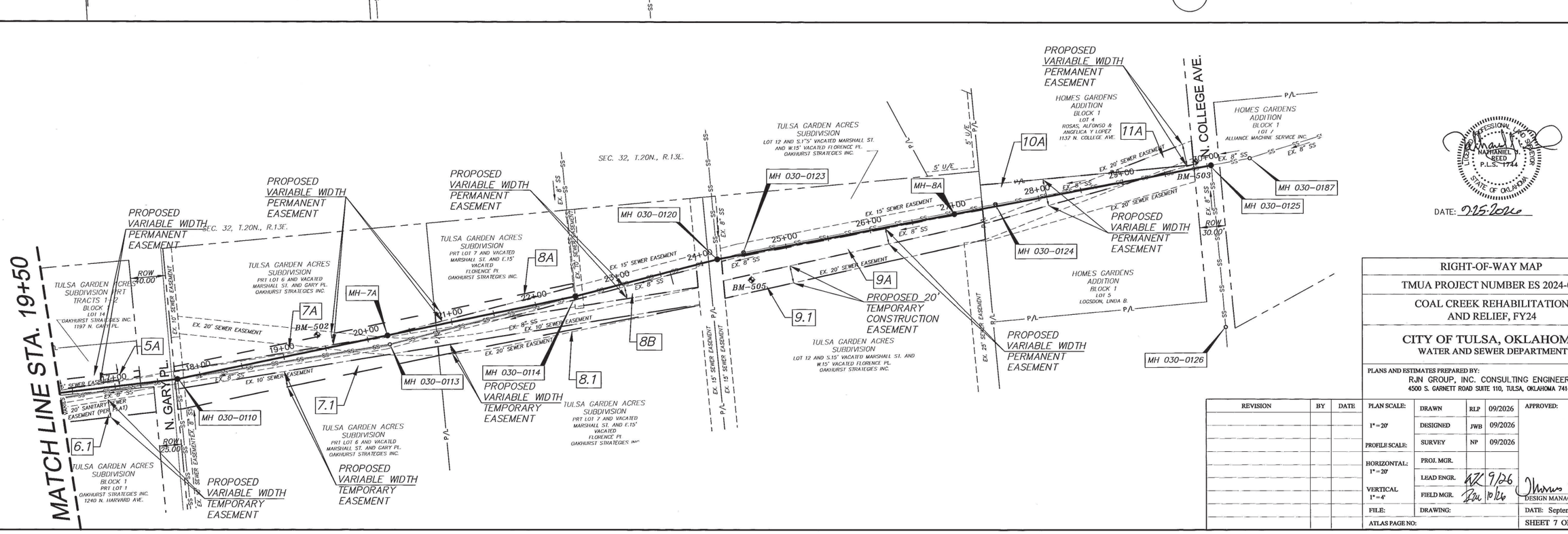
PLANS AND ESTIMATES PREPARED BY:
RJN GROUP, INC. CONSULTING ENGINEERS
4500 S. GARNETT ROAD SUITE 110, TULSA, OKLAHOMA 74146

REVISION	BY	DATE

PLAN SCALE:	DRAWN	RLP	09/2026	APPROVED:
1" = 20'	DESIGNED	JWB	09/2026	
PROFILE SCALE:	SURVEY			
HORIZONTAL: 1" = 20'	PROJ. MGR.			
	LEAD ENGR.		9/26	
VERTICAL 1" = 4'	FIELD MGR.		10/26	DESIGN MANAGER
FILE:	DRAWING:			DATE: September 2026
ATLAS PAGE NO:				SHEET 6 OF 24 SHEETS

P:\TULSA\PROJECTS\30-4076-00 ES 2024-01 COAL CREEK REHAB AND RELIEF FY24\CAD\DRAWINGS\ES 2024-01 COAL CREEK REHAB & RELIEF, FY24\DRAWINGS\06 WORK ITEM TABLE.DWG
Friday, November 22, 2026
3:32:12 PM





REVISION	BY	DATE

PLAN SCALE: 1" = 20'	DRAWN	RLP	09/2026
	DESIGNED	JWB	09/2026
PROFILE SCALE:	SURVEY	NP	09/2026
HORIZONTAL: 1" = 20'	PROJ. MGR.		
	LEAD ENGR.		9/26
VERTICAL 1" = 4'	FIELD MGR.		10/26
FILE:	DRAWING:		
ATLAS PAGE NO:			

APPROVED:

DESIGN MANAGER

DATE: September 2026

SHEET 7 OF 24 SHEETS

OKLAHOMA LICENSED PROFESSIONAL ENGINEER NATHANIEL D. REED P.L.S. 1744 STATE OF OKLAHOMA

DATE: 9.25.2026

RIGHT-OF-WAY MAP

TMUA PROJECT NUMBER ES 2024-01

COAL CREEK REHABILITATION AND RELIEF, FY24

CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

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

T:\TULSA\PROJECTS\2024\078-00 ES 2024-01 COAL CREEK REHAB AND RELIEF FY24\CAD\DRAWINGS\ES 2024-01 COAL CREEK REHAB & RELIEF, FY24\DRAWINGS\07-08) SURVEY DATA.DWG
9/18/24 AM

SURVEY CONTROL

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
109	432623.2483	2576971.3269	695.14	3/8" IRON PIN SET w/CAP (NATIVE PLAINS)
110	432658.3733	2577329.6746	689.02	60D NAIL SET
112	433101.0596	2577567.7785	685.32	BENCH MARK (3/8" IPSC - NATIVE PLAINS)
113	433384.3013	2577705.6178	680.76	3/8" IRON PIN SET w/CAP (NATIVE PLAINS)
115	433694.6610	2578013.7867	670.28	3/8" IRON PIN SET w/CAP (NATIVE PLAINS)
400	432916.2900	2576911.5900	690.80	BM MAGSPIKES
500	433139.6424	2577211.8031	684.36	BM MAGSPIKES
501	433080.0729	2576333.1706	691.90	BENCH MARK (3/8" IPSC - NATIVE PLAINS)
502	433058.7731	2575851.8324	694.99	BENCH MARK (3/8" IPSC - NATIVE PLAINS)
503	432932.6516	2574815.5159	705.45	BENCH MARK (3/8" IPSC - NATIVE PLAINS)
504	433137.1941	2576736.8837	689.92	BENCH MARK (3/8" IPSC - NATIVE PLAINS)
505	433031.9524	2575341.6606	699.29	BENCH MARK (3/8" IPSC - NATIVE PLAINS)
40318	432777.6540	2575694.4354	701.98	IRON PIPE FOUND
40319	432520.1106	2575703.4455	709.75	IRON PIPE FOUND
40320	432956.5052	2576064.6298	695.18	1/2" IRON PIN FOUND
40321	432626.6656	2576072.2169	703.09	3/8" IRON PIN FOUND
40322	432526.6011	2576074.3447	707.71	1/2" IRON PIN FOUND
40323	432366.0753	2576028.0466	713.01	1/2" IRON PIN FOUND
40324	432415.6859	2576026.9538	712.00	IRON PIN FOUND W/CAP (#1056)
40325	432931.0521	2575366.4188	700.07	3/8" IRON PIN FOUND
40326	432768.4981	2575204.3942	705.32	3/8" IRON PIN FOUND
40328	432938.6727	2575715.2942	695.44	3/8" IRON PIN FOUND
40329	432778.9291	2575718.2615	701.66	MAG NAIL FOUND
50011	432924.9822	2575066.6066	702.44	3/8" IRON PIN FOUND
50090	432953.1043	2577369.5117	691.44	IRON PIN FOUND w/CAP (FRITZ)
50091	432812.2551	2577304.8803	690.76	IRON PIN FOUND w/CAP (FRITZ)
50092	432813.5855	2577372.4623	689.91	IRON PIN FOUND w/CAP (FRITZ)
50093	432950.2237	2577234.4670	691.19	3/8" IRON PIN FOUND
50395	432972.5373	2577104.1878	688.72	3/8" IRON PIN FOUND
50408	432947.6721	2577104.5780	688.78	3/8" IRON PIN FOUND
50503	433000.1621	2577228.6939	689.33	3/8" IRON PIN FOUND
50504	433120.3695	2577225.9253	686.34	3/8" IRON PIN FOUND
50505	433543.9404	2577167.4653	679.75	3/8" IRON PIN FOUND
50506	433603.7352	2577166.3282	681.31	3/8" IRON PIN FOUND
50507	433604.8789	2577216.4950	680.74	3/8" IRON PIN FOUND

HORIZONTAL DATUM: OKLAHOMA STATE PLANE COORDINATE SYSTEM, NORTH ZONE 3501, NAD 83 (1993)

VERTICAL DATUM: NAVD 1988
SCALE FACTOR: 0.99991736

BENCH MARK: 5/8" REBAR-1 1/2" ALUMINUM CAP - STAMPED 503 SET
SW CORNER OF THE INTERSECTION OF 21ST ST. AND HARVARD AVE.
NAVD 1988 790.33

NOTE:

1. CONTROL POINTS ARE SHOWN ON PLAN AND PROFILE SHEETS.
2. BENCHMARKS ARE SHOWN, OR DESCRIBED, ON PLAN AND PROFILE SHEETS.

PROPOSED MANHOLES & LAMPHOLES LINES A, B, C & D

MH ID #	STATION	DIA.	FRAME & COVER	DROP	N	E	RIM ELEVATION
MH 030-0704	0+00.00	5'-0"	30" COMPOSITE		433013.49	2577686.60	682.61
MH-1A	2+88.32	5'-0"	30" COMPOSITE		432993.83	2577398.95	690.49
MH-2A	6+42.69	5'-0"	30" COMPOSITE	8-INCH	432985.54	2577044.68	687.12
MH-3A	10+49.66	5'-0"	30" COMPOSITE	8-INCH	432983.60	2576637.71	690.25
MH-4A	12+20.43	5'-0"	30" COMPOSITE		432994.19	2576467.27	691.71
MH-5A	13+55.93	5'-0"	30" COMPOSITE	8-INCH	433125.66	2576434.47	692.29
MH-6A	15+96.87	5'-0"	30" COMPOSITE	8-INCH	433105.98	2576194.33	692.00
MH 030-0110	17+73.58	5'-0"	30" COMPOSITE	8-INCH	433098.05	2576017.80	692.78
MH-7A	20+23.62	5'-0"	30" COMPOSITE		433065.24	2575769.92	695.19
MH 030-0114	22+47.39	5'-0"	30" COMPOSITE	8-INCH	433035.87	2575548.09	697.28
MH 030-0120	24+18.56	5'-0"	30" COMPOSITE	8-INCH	433005.06	2575379.72	699.34
MH-8A	27+00.00	5'-0"	30" COMPOSITE		432972.75	2575100.14	702.24
MH 030-0125	30+04.63	5'-0"	30" COMPOSITE	(2) 8-INCH	432937.77	2574797.52	705.91
MH-1B	1+72.55	4'-0"	30" COMPOSITE		433156.08	2577018.48	683.59
MH 030-0094	2+12.58	4'-0"	30" COMPOSITE		433189.07	2577041.16	682.05
MH 030-0092	2+94.43	4'-0"	30" COMPOSITE		433285.24	2577356.93	683.35
LH-1D	0+10.96	8"	STANDARD		433136.60	2576435.10	692.35

NOTE:

1. MANHOLE NUMBERS AND COORDINATES ARE SHOWN IN PLAN AND PROFILE SHEETS.
2. MANHOLE FRAMES AND COVERS SHALL BE EJ 3200 SERIES COMPOSITE GASKETED UTILITY COVERS WITH QUARTER TURN PADDLE LOCKS OR ENGINEER APPROVED EQUAL.
3. 4'-0" AND 5'-0" I.D. MANHOLES SHALL BE AS PER CITY OF TULSA STANDARD DRAWING NO. 358 OR FRP MANHOLE DETAILS.

I LICENSED PROFESSIONAL LAND SURVEYOR
NATHANIEL J. REED
P.L.S. 1744
STATE OF OKLAHOMA

DATE: 9-25-2026

SURVEY DATA SHEET

TMUA PROJECT NUMBER ES 2024-01

COAL CREEK REHABILITATION AND RELIEF, FY24

CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

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

REVISION	BY	DATE

PLAN SCALE:	DRAWN	RLP	09/2026	APPROVED:
1" = 20'	DESIGNED	JWB	09/2026	
PROFILE SCALE:	SURVEY	NP	09/2026	
HORIZONTAL: 1" = 20'	PROJ. MGR.			
	LEAD ENGR.		10/26	
VERTICAL 1" = 4'	FIELD MGR.		10/26	DESIGN MANAGER
FILE:	DRAWING:			DATE: September 2026
ATLAS PAGE NO:				SHEET 8 OF 24 SHEETS

T:\TULSA\PROJECTS\JO-4078-00 ES 2024-01 COAL CREEK REHAB AND RELIEF FY24\CADD\DRAWINGS\ES 2024-01 COAL CREEK REHAB & RELIEF, FY24\DRAWINGS\(07-08) SURVEY DATA.DWG
Wednesday, October 28, 2026
8:54:41 AM

PROPERTY/EASEMENT CORNER LOCATION

PARCEL ID	POINT	NORTHING	EASTING	DIRECTION	DISTANCE
1A	BEGIN	432996.46	2577048.47	N 01°12'03" W	29.90'
		433026.35	2577047.84	S 15°11'43" E	30.82'
		432996.61	2577055.92	S 88°48'43" W	7.45'
1A	END	432996.46	2577048.47		
2A	BEGIN	432988.12	2576646.57	N 01°51'56" E	10.52
		432998.64	2576646.91	N 89°42'56" E	380.29
		433000.53	2577027.20	N 08°44'07" W	161.11
		433159.77	2577002.73	N 35°07'34" E	54.53
		433204.37	2577034.11	S 01°12'03" E	208.17
		432996.25	2577038.47	S 88°48'43" W	391.99
2A	END	432988.12	2576646.57		
2B	BEGIN	432983.52	2576424.61	N 01°12'03" W	86.00
		433069.50	2576422.80	N 46°12'03" W	8.49
		433075.38	2576416.68	N 01°12'03" W	68.00
		433143.36	2576415.25	S 88°23'02" E	30.49
		433142.50	2576445.73	S 14°00'31" E	138.13
		433008.48	2576479.17	S 86°26'37" E	148.04
		432999.29	2576626.92	S 01°51'56" W	11.59
		432987.71	2576626.55	S 88°48'43" W	201.98
2B	END	432983.52	2576424.61		
2.1	BEGIN	432998.64	2576646.91	N 01°51'56" E	20.01
		433018.64	2576647.56	N 89°43'37" E	356.36
		433020.34	2577003.92	N 08°44'07" W	146.05
		433164.69	2576981.74	N 35°07'34" E	89.79
		433238.13	2577033.40	S 01°12'03" E	33.76
		433204.37	2577034.11	S 35°07'34" W	54.53
		433159.77	2577002.73	S 08°44'07" E	161.11
		433000.53	2577027.20	S 89°42'56" W	380.29
2.1	END	432998.64	2576646.91		
2.2	BEGIN	433143.36	2576415.25	N 01°12'03" W	20.02
		433163.38	2576414.83	S 88°23'02" E	46.65
		433162.07	2576461.46	S 14°00'31" E	138.66
		433027.53	2576495.03	S 86°26'37" E	132.80
		433019.29	2576627.57	S 01°51'56" W	20.01
		432999.29	2576626.92	N 86°26'37" W	148.04
		433008.48	2576479.17	N 14°00'31" W	138.13
		433142.50	2576445.73	N 88°23'02" W	30.49
2.2	END	433143.36	2576415.25		
3A	BEGIN	433110.37	2576335.93	S 88°56'09" W	92.79'
		433108.64	2576243.16	N 85°16'49" E	92.96'
		433116.29	2576335.80	S 01°12'03" E	5.93'
3A	END	433110.37	2576335.93		
3.1	BEGIN	433136.330	2576335.380	S 85°16'49" W	120.57'
		433126.410	2576215.230	N 01°17'40" W	16.42'
		433142.820	2576214.850	N 85°24'10" E	120.58'
		433152.490	2576335.040	S 01°12'03" E	16.16'
3.1	END	433136.330	2576335.380		
4A	BEGIN	433110.18	2576325.93	S 01°12'03" E	8.58'
		433101.60	2576326.11	S 85°22'16" W	127.17'
		433091.33	2576199.35	N 01°17'40" W	13.67'
		433105.00	2576199.04	N 85°16'49" E	44.27'
		433108.64	2576243.16	N 88°56'09" E	82.79'
4A	END	433110.18	2576325.93		
5A	BEGIN	433104.18	2576189.06	S 01°17'40" E	13.44'
		433090.74	2576189.36	S 87°25'40" W	153.40'
		433083.85	2576036.11	N 01°12'03" W	6.22'
		433090.07	2576035.98	N 84°38'03" E	129.44'
		433102.18	2576164.85	N 85°16'49" E	24.29'
5A	END	433104.18	2576189.06		
6.1	BEGIN	433126.410	2576215.230	S 85°16'49" W	180.31'
		433111.570	2576035.530	N 01°12'03" W	22.24'
		433133.810	2576035.060	N 87°34'55" E	142.69'
		433139.830	2576177.630	N 85°24'10" E	37.34'
		433142.820	2576214.850	S 01°17'40" E	16.42'
6.1	END	433126.410	2576215.230		

PARCEL ID	POINT	NORTHING	EASTING	DIRECTION	DISTANCE
7A	BEGIN	433042.590	2575713.110	N 01°12'03" W	12.05'
		433054.640	2575712.860	N 79°35'43" E	62.66'
		433065.950	2575774.490	N 84°43'47" E	262.60'
		433090.070	2576035.980	S 01°12'03" E	6.22'
		433083.850	2576036.110	S 87°25'40" W	17.00'
		433083.090	2576019.130	S 82°27'36" W	308.68'
7A	END	433042.590	2575713.110		
7.1	BEGIN	433082.260	2575712.280	N 01°12'03" W	10.62'
		433092.880	2575712.060	N 82°27'36" E	305.30'
		433132.940	2576014.720	N 87°34'13" E	20.36'
		433133.810	2576035.060	S 01°12'03" E	22.24'
		433111.570	2576035.530	S 82°39'12" W	13.87'
		433109.800	2576021.770	S 84°54'59" W	310.71'
7.1	END	433082.260	2575712.280		
8A	BEGIN	433042.590	2575713.110	S 82°26'57" W	164.74'
		433020.940	2575549.800	N 01°12'03" W	3.74'
		433024.680	2575549.720	N 79°35'43" E	165.87'
		433054.640	2575712.860	S 01°12'03" E	12.05'
8A	END	433042.590	2575713.110		
8B	BEGIN	433055.39	2575633.90	S 79°35'43" W	232.76'
		433013.35	2575404.97	N 01°18'30" W	22.15'
		433035.50	2575404.46	N 85°02'40" E	230.30'
8B	END	433055.39	2575633.90		
8.1	BEGIN	433082.260	2575712.280	S 85°02'38" W	309.40'
		433055.540	2575404.040	N 01°12'03" W	0.92'
		433056.450	2575404.020	N 83°15'19" E	310.18'
		433092.880	2575712.060	S 01°12'03" E	10.62'
8.1	END	433082.260	2575712.280		
9A	BEGIN	432970.07	2575067.03	N 01°12'03" W	14.07'
		432984.13	2575066.73	N 79°51'01" E	30.62'
		432989.53	2575096.87	N 81°38'26" E	280.68'
		433030.33	2575374.56	S 01°12'03" E	22.52'
		433007.82	2575375.04	S 79°21'03" W	22.51'
		433003.66	2575352.91	S 83°17'54" W	287.85'
9A	END	432970.07	2575067.03		
9.1	BEGIN	432984.13	2575066.73	N 01°12'03" W	20.34'
		433004.47	2575066.31	N 80°03'47" E	28.08'
		433009.32	2575093.96	N 81°38'26" E	283.19'
		433050.49	2575374.14	S 01°12'03" E	20.16'
		433030.33	2575374.56	S 81°38'26" W	280.68'
		432989.53	2575096.87	S 79°51'01" W	30.62'
9.1	END	432984.13	2575066.73		
10A	BEGIN	432940.980	2575067.640	S 88°47'27" W	246.40'
		432935.780	2574821.300	N 78°19'19" E	250.57'
		432986.500	2575066.680	S 01°12'03" E	45.53'
10A	END	432940.980	2575067.640		
11A	BEGIN	432935.780	2574821.300	N 88°47'27" E	95.94'
		432937.800	2574917.220	S 72°52'21" W	103.54'
		432907.310	2574818.270	N 01°12'03" W	27.73'
		432935.030	2574817.690	N 78°19'19" E	3.69'
11A	END	432935.780	2574821.300		

PERMANENT EASEMENT DESCRIPTIONS

PARCEL	OWNER	DESCRIPTION	PERMANENT EASEMENT
1A	KAPARY LLC	LOT 9, BLOCK 2, WOODLYN ADDITION	0.003
2A	STELLA. CROW AND CAROLYN S. HARDESTY	S/2 NW/4 SW/4 NW/4 33-20-13	0.16
2B	STELLA. CROW AND CAROLYN S. HARDESTY	S/2 NW/4 SW/4 NW/4 33-20-13	0.22
3A	OAKHURST STRATEGIES, INC.	PRT LOT 1, BLOCK 1, TULSA GARDEN ACRES SUB	0.006
4A	OAKHURST STRATEGIES, INC.	LOT 1, BLOCK 1, TULSA GARDEN ACRES SUB PRT TRACTS 1-2	0.04
5A	OAKHURST STRATEGIES, INC.	LOT 14, BLOCK 1, TULSA GARDEN ACRES SUB PRT TRACTS 1-2	0.04
7A	OAKHURST STRATEGIES, INC.	PRT LOT 6, BLOCK 1, TULSA GARDEN ACRES SUB	0.08
8A	OAKHURST STRATEGIES, INC.	PRT LOT 7, BLOCK 1, TULSA GARDEN ACRES SUB	0.03
8B	OAKHURST STRATEGIES, INC.	PRT LOT 7, BLOCK 1, TULSA GARDEN ACRES SUB	0.06
9A	OAKHURST STRATEGIES, INC.	PRT LOT 12, BLOCK 1, TULSA GARDEN ACRES SUB	0.14
10A	LOGSDON, LINDA B.	LOT 5, BLOCK 1, HOMES GARDENS ADDITION	0.13
11A	ROSAS, ALFONSO & ANGELICA Y. LOPEZ	LOT 4, BLOCK 1, HOMES GARDENS ADDITION	0.03

TEMPORARY CONSTRUCTION EASEMENT DESCRIPTIONS

PARCEL	OWNER	DESCRIPTION	TEMPORARY CONSTRUCTION EASEMENT (ACRES)
2.1	STELLA. CROW AND CAROLYN S. HARDESTY	S/2 NW/4 SW/4 NW/4 33-20-13	0.27
2.2	STELLA. CROW AND CAROLYN S. HARDESTY	S/2 NW/4 SW/4 NW/4 33-20-13	0.15
3.1	OAKHURST STRATEGIES, INC.	PRT LOT 1, BLOCK 1, TULSA GARDEN ACRES SUB	0.05
6.1	OAKHURST STRATEGIES, INC.	PRT LOT 1, BLOCK 1, TULSA GARDEN ACRES SUB	0.08
8.1	OAKHURST STRATEGIES, INC.	PRT LOT 7, BLOCK 1, TULSA GARDEN ACRES SUB	0.04
9.1	OAKHURST STRATEGIES, INC.	PRT LOT 12, BLOCK 1, TULSA GARDEN ACRES SUB	0.14



DATE: 07-25-2026

EASEMENT DESCRIPTIONS

TMUA PROJECT NUMBER ES 2024-01

COAL CREEK REHABILITATION AND RELIEF, FY24

CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

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

REVISION	BY	DATE

PLAN SCALE:
1" = 20'
PROFILE SCALE:
HORIZONTAL: 1" = 20'
VERTICAL 1" = 4'

DRAWN	RLP	09/2026
DESIGNED	JWB	09/2026
SURVEY	NP	09/2026
PROJ. MGR.		
LEAD ENGR.		9/26
FIELD MGR.		10/26
FILE:	DRAWING:	
ATLAS PAGE NO:		

APPROVED:

DESIGN MANAGER

DATE: September 2026

SHEET 9 OF 24 SHEETS

STORM WATER MANAGEMENT PLAN

SITE DESCRIPTION

PROJECT LIMITS: SEWER CONSTRUCTION LINE: BEGINNING AT SEQUOYAH PARK AND EXTENDS SOUTHWEST FOR 3,005 LF AND ENDS AT NORTH COLLEGE AVENUE. TWO ADDITIONAL SEWER LINES , TOTALING 518 LF NEAR KNOXVILLE AVENUE WILL BE CONSTRUCTED.

PROJECT DESCRIPTION: CONSTRUCTION OF SANITARY SEWER INTERCEPTOR.

SUGGESTED SEQUENCE OF EROSION CONTROL ACTIVITIES:

1. PLACE TEMPORARY SEDIMENT CONTROL DEVICES AT DRAINAGE LOCATIONS PRIOR TO STRUCTURE MODIFICATION AND CLEARING OPERATIONS.
2. PERFORM CLEARING OPERATIONS AND REMOVALS, PRESERVING ANY VEGETATION NOT IMPEDING CONSTRUCTION. PROVIDE ADDITIONAL EROSION CONTROL DEVICES AS NEEDED TO PREVENT EROSION.
3. AS PERMANENT VEGETATION IS ESTABLISHED (70% COVER) TEMPORARY SEDIMENT DEVICES MAY BE REMOVED.
4. AS CONDITIONS WARRANT, THE CONTRACTOR, AT THE DISCRETION OF THE ENGINEER, MAY MODIFY THE TYPE OR ARRANGEMENT OF SPECIFIC PRACTICE OR CONTROLS TO IMPROVE EFFECTIVENESS.

NOTE: THIS SHOULD INCLUDE MAJOR ACTIVITIES REQUIRED TO CONSTRUCT THE PROJECT AND EROSION CONTROL ITEMS.

SOIL TYPE: PRIMARILY CLAY & SANDSTONE

TOTAL AREA OF THE CONSTRUCTION SITE:

ESTIMATED AREA TO BE DISTURBED: 3.5 ACRES

OFFSITE AREA TO BE DISTURBED: (FOR CONTRACTOR USE)

TOTAL IMPERVIOUS AREA PRE-CONSTRUCTION: 0.9 ACRES

TOTAL IMPERVIOUS AREA POST-CONSTRUCTION: 0.9 ACRES

POST-CONSTRUCTION RUNOFF COEFFICIENT OF THE SITE: 0.20

LATITUDE & LONGITUDE OF CENTER OF PROJECT: 36°10'12"N - 95°56'24"W

PROJECT WILL DISCHARGE TO:

NAME OF RECEIVING WATERS: COAL CREEK

SENSITIVE WATERS OR WATERSHEDS:	YES [ ]	NO [X]
303(d) IMPAIRED WATERS:	YES [X]	NO [ ]
IF YES, LIST IMPAIRMENT:	MACROINVERTEBRATE	
LOCATED IN A TMDL:	YES [ ]	NO [X]
LAKE THUNDERBIRD TMDL:	[ ]	NO [X]
MS4 ENTITY	YES [X]	NO [ ]

IF YES, LOCATION: CITY OF TULSA

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

EROSION AND SEDIMENT CONTROLS

SOIL STABILIZATION PRACTICES:

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

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

STRUCTURAL PRACTICES:

- X STABILIZED CONSTRUCTION EXIT
- X TEMPORARY SILT FENCE
- ____ TEMPORARY SILT DIKES
- X TEMPORARY FIBER LOG
- ____ DIVERSION, INTERCEPTOR OR PERIMETER DIKES
- ____ DIVERSION, INTERCEPTOR OR PERIMETER SWALES
- ____ ROCK FILTER DAMS
- ____ TEMPORARY SLOPE DRAIN
- ____ PAVED DITCH W/ DITCH LINER PROTECTION
- ____ TEMPORARY DIVERSION CHANNELS
- ____ TEMPORARY SEDIMENT BASINS
- ____ TEMPORARY SEDIMENT TRAPS
- ____ TEMPORARY SEDIMENT FILTERS
- X TEMPORARY SEDIMENT REMOVAL
- ____ RIP RAP
- ____ INLET SEDIMENT FILTER
- ____ TEMPORARY BRUSH SEDIMENT BARRIERS
- ____ SANDBAG BERMS
- ____ TEMPORARY STREAM CROSSINGS

OFFSITE VEHICLE TRACKING:

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

NOTES:

SILT SHALL BE REMOVED FROM TEMPORARY EROSION CONTROL DEVICES WHEN HALF FULL. COST TO BE INCLUDED IN THE PRICE BID FOR EROSION CONTROL DEVICE. INLETS, JUNCTION BOXES, AND PIPES TO BE CLEANED AT END OF CONSTRUCTION ACTIVITIES BEFORE FINAL ACCEPTANCE OF PROJECT. COST TO BE INCLUDED IN THE PRICE BID FOR EROSION CONTROL DEVICE.

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE FOLLOWING:

MAINTENANCE AND INSPECTION:

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

WASTE MATERIALS:

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

HAZARDOUS MATERIALS:

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

GENERAL NOTES:

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

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

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

IN ADDITION:

"ODEQ GENERAL PERMIT (OKR10) FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES WITHIN THE STATE OF OKLAHOMA." ODEQ, WATER QUALITY DIVISION, NOVEMBER 1, 2023.

ADDITIONAL PERMITS REQUIRED FROM OKLAHOMA WATER RESOURCES BOARD

9-25-26
LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

STORM WATER MANAGEMENT PLAN
TMUA PROJECT NUMBER ES 2024-01
COAL CREEK REHABILITATION AND RELIEF, FY24

CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

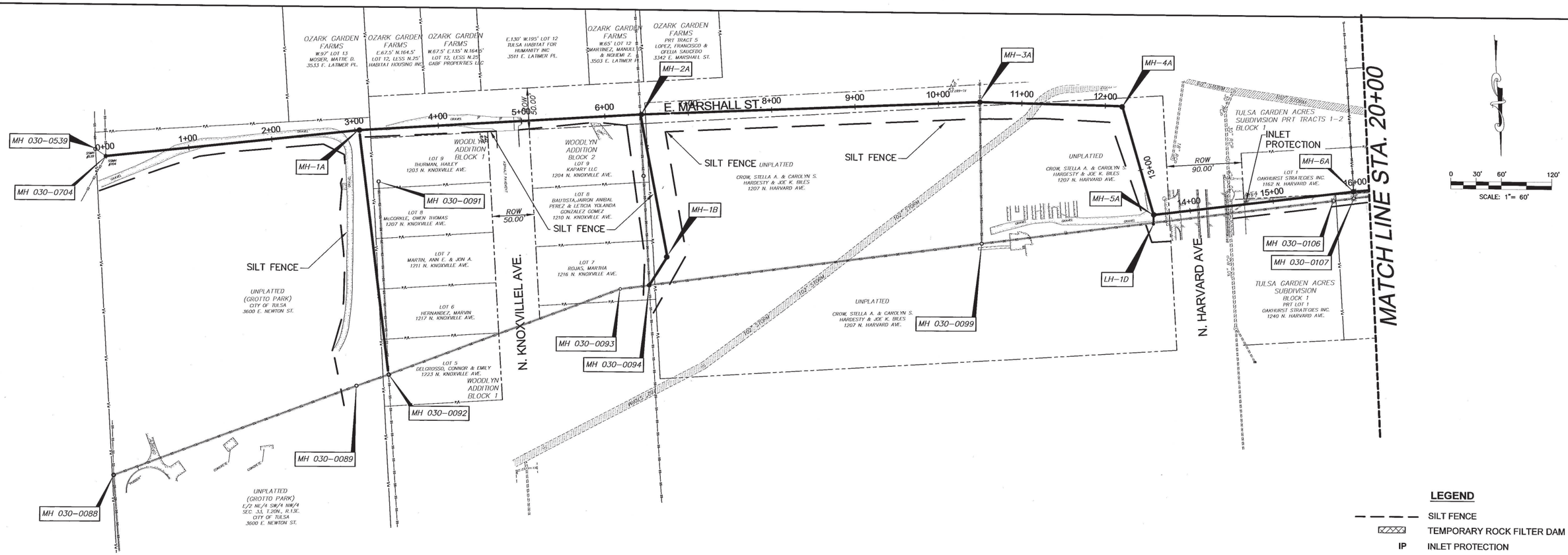
PLANS AND ESTIMATES PREPARED BY:
RJN GROUP, INC. CONSULTING ENGINEERS
4500 S. GARNETT ROAD SUITE 110, TULSA, OKLAHOMA 74146

REVISION	BY	DATE

PLAN SCALE: 1" = 20'	DRAWN	RLP	09/2026
	DESIGNED	JWB	09/2026
PROFILE SCALE:	SURVEY		
HORIZONTAL: 1" = 20'	PROJ. MGR.		
VERTICAL 1" = 4'	LEAD ENGR.		9/26
	FIELD MGR.		9/26
FILE:	DRAWING:		
ATLAS PAGE NO:			

APPROVED:
DESIGN MANAGER
DATE: September 2026
SHEET 10 OF 24 SHEETS

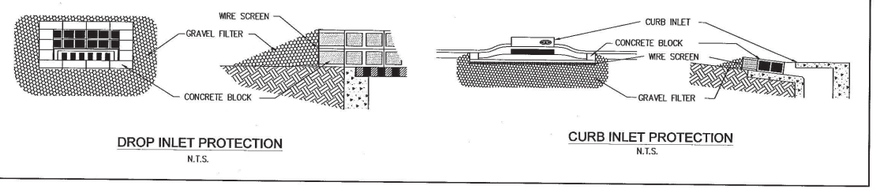
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9:28:17 AM September 25, 2026



LEGEND

- SILT FENCE
- TEMPORARY ROCK FILTER DAM
- IP INLET PROTECTION
- EX. SEWER LINE
- EX. RIGHT-OF-WAY LINE
- EX. LOT LINE
- PROP. SEWER LINE
- LIMITS OF FLOOD ZONE BOUNDARY

INLET PROTECTION DETAIL



DROP INLET PROTECTION
N.T.S.

CURB INLET PROTECTION
N.T.S.

9-25-26

LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

REVISION	BY	DATE

EROSION CONTROL PLAN

TMUA PROJECT NUMBER ES 2024-01

COAL CREEK REHABILITATION AND RELIEF, FY24

CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

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

PLAN SCALE: 1" = 20'	DRAWN	RLP	09/2026	APPROVED:
	DESIGNED	JWB	09/2026	
PROFILE SCALE:	SURVEY	NP	09/2026	
HORIZONTAL: 1" = 20'	PROJ. MGR.			
	LEAD ENGR.		9/26	
VERTICAL 1" = 4'	FIELD MGR.		10/26	DESIGN MANAGER
FILE:	DRAWING:			DATE: September 2026
ATLAS PAGE NO: 356,435				SHEET 11 OF 24 SHEETS

T:\TULSA\PROJECTS\30-4276-00 ES 2024-01 COAL CREEK REHAB AND RELIEF FY24\CAD\DRAWINGS\ES 2024-01 COAL CREEK REHAB & RELIEF, FY24\DRAWINGS\(1) EROSION CONTROL PLAN.DWG
Friday, September 25, 2026
2:24:48 PM

CONSTRUCT 400 LF OF 15-INCH SEWER PIPE BY OPEN CUT

STA. 0+00.00 ~ 15-INCH SS CONNECT TO EX. MH 030-0704 (SEE NOTE 1)
N=433013.49
E=2577686.60

REMOVE & REPLACE 353 SY OF GRAVEL SIDEWALK

TREE TO BE REMOVED BY OTHERS

REMOVE & REPLACE EXISTING METAL GATE

REMOVE & REPLACE 59 SY OF GRAVEL SIDEWALK

OZARK GARDEN FARMS
W.97' LOT 13
MOSIER, MATTIE D.
3533 E. LATIMER PL.

OZARK GARDEN FARMS
E.67.5' N.164.5'
LOT 12, LESS N.25'
HABITAT HOUSING INC.

50090 IPEC (FRITZ)

EX. 12" SS

EX. 24" SS

SSMH #539

SSMH #704

0+00

1+00

2+00

3+00

LINE A

15-INCH

38" TREE

3' CHAIN LINK FENCE

15" TREE

GP

GPO

METAL FENCE

3' CHAIN LINK FENCE

3-15" TREE

4' CHAIN LINK FENCE

SHED

MATCH LINE STA. 4+00

UNPLATTED
(GROTTO PARK)
CITY OF TULSA
3600 E. NEWTON ST.

14" TREE

15" TREE

GRAVEL

EX. 24" SS

22" TREE

STA. 2+88.32 ~ 15-INCH SS LINE A
STA. 0+00.00 ~ 8-INCH SS LINE C
CONSTRUCT
STD. 5-FOOT DIA. MH-1A
N=432993.83
E=2577398.95

ABANDON EX. MH 030-0091 (SEE ABANDONMENT SHEET)

LOT 9
THURMAN, HAILEY
1203 N. KNOXVILLE AVE.

3-GUY

SIGN
"TULSA PARKS"
BOLTED DOWN WOOD

CONTRACTOR SHALL BRACE POWER POLE DURING CONSTRUCTION (NO SEPARATE PAYMENT)

LINE C

5' U/E

CHAIN LINK FENCE

SSMH #91

ABANDON EX. 8-INCH SS (SEE ABANDONMENT SHEET)

EX. 8" SS

LOT 8
McCORKLE, OWEN THOMAS
1207 N. KNOXVILLE AVE.

BM-112

BENCHMARKS:

BM-112
IRON PIN SET 111-FEET WEST AND 96-FEET NORTH OF EX. MH 030-0704

N=433101.06
E=2577567.78
EL=685.32

LEGEND

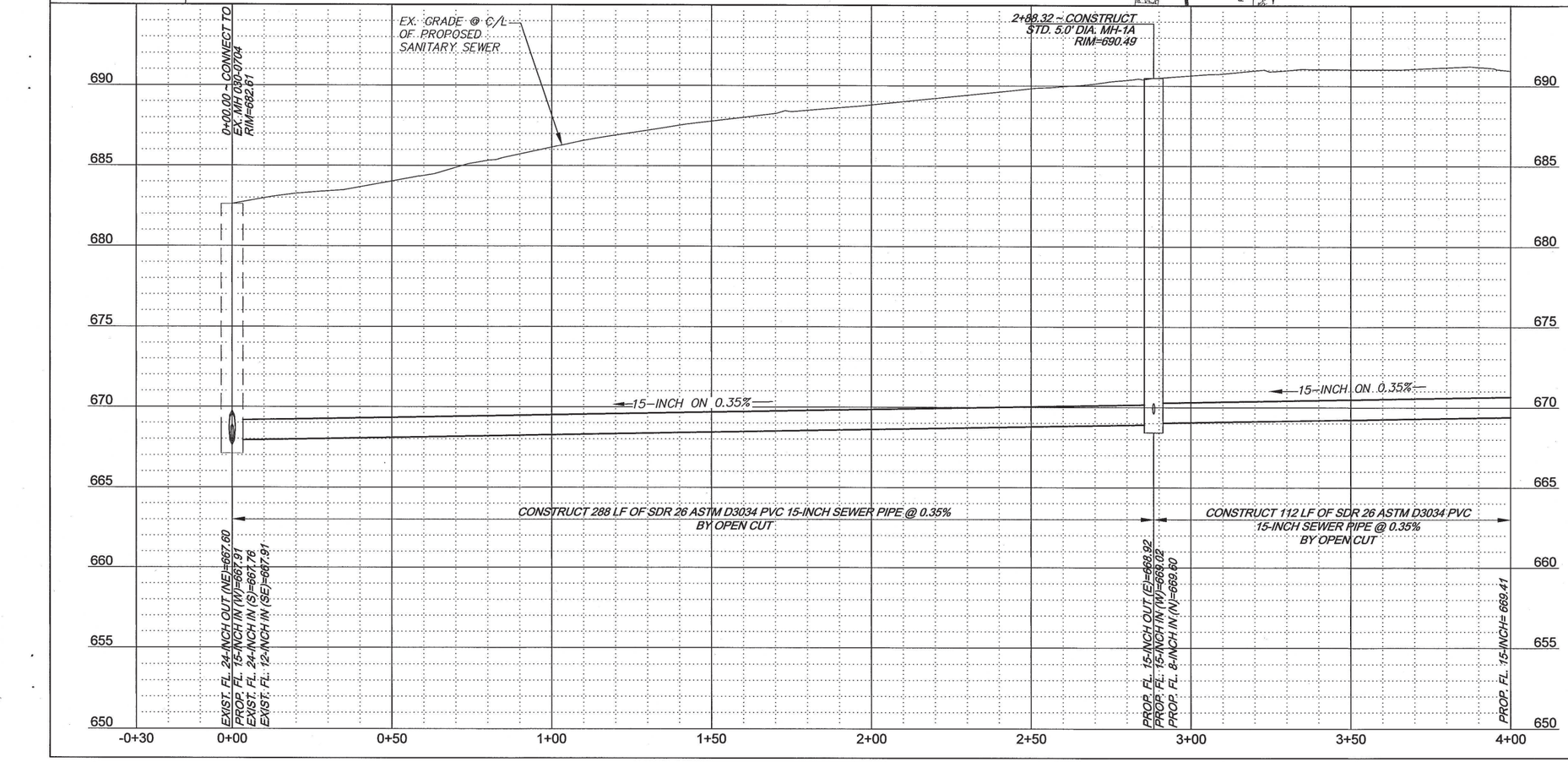
GRAVEL PAVEMENT REMOVAL & REPLACEMENT

ABANDONMENT OF EXISTING SEWER

0 10' 20' 40'
SCALE: 1"= 20'

OKIE811 Know what's below 811 before you dig.

WARNING!!!
EXISTING UNDERGROUND TELEPHONE, OVERHEAD, UNDERGROUND ELECTRIC AND GAS UTILITIES IN AREA, CONTACT UTILITY 48 HOURS PRIOR TO CONSTRUCTION 1-800-522-6543



NOTES:

1. MH 030-0704 IS AN EXISTING FRP MANHOLE. CONTRACTOR SHALL CONNECT TO AND REFORM THE BENCH AND INVERT. THE WORK SHALL BE PERFORMED BY THE ORIGINAL MANUFACTURER, L.F. MANUFACTURING, INC. OR ENGINEER APPROVED EQUIVALENT.
2. THE CONTRACTOR SHALL NOTIFY TIM THORNTON AND GEOFF BRAGA WITH THE CITY OF TULSA PARKS DEPARTMENT AT LEAST FOURTEEN (14) CALENDAR DAYS PRIOR TO MOBILIZATION FOR CONSTRUCTION WITHIN SEQUOYAH PARK. THE CITY OF TULSA PARKS DEPARTMENT WILL INSTALL TREE PROTECTION MEASURES AROUND TREES POTENTIALLY IMPACTED BY THE CONSTRUCTION ACTIVITIES. TIM THORNTON MAY BE CONTACTED AT 918-519-8701 OR TIMTHORNTON@CITYOFTULSA.ORG. GEOFF BRAGA MAY BE CONTACTED AT 918-519-8700 OR GBBRAGA@CITYOFTULSA.ORG. ADDITIONAL DETAILS REGARDING TREE PROTECTION CAN BE FOUND IN SP-9.
3. THE CONTRACTOR SHALL CONSTRUCT THE GRAVEL SIDEWALK USING A MIXTURE OF 55-60% LIMESTONE CHAT AND 40-45% MANUFACTURED SAND. THE ROLLING AND WATERING OF THE LIMESTONE CHAT WILL BE COMPLETED BY THE CONTRACTOR AS DIRECTED BY TIM THORNTON WITH THE CITY OF TULSA PARKS DEPARTMENT.

9-25-26
LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

STA. 0+00 TO STA. 4+00 PLAN & PROFILE LINE A

TMUA PROJECT NUMBER ES 2024-01

COAL CREEK REHABILITATION AND RELIEF, FY24

CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

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

REVISION	BY	DATE

PLAN SCALE: 1" = 20'
PROFILE SCALE:
HORIZONTAL: 1" = 20'
VERTICAL 1" = 4'
FILE:

DRAWN	RLP	09/2026	
DESIGNED	JWB	09/2026	
SURVEY	NP	09/2026	
PROJ. MGR.			
LEAD ENGR.		10/26	
FIELD MGR.		10/26	
DRAWING:			

APPROVED:

Thomas D. Mx
DESIGN MANAGER

DATE: September 2026

ATLAS PAGE NO: 49

SHEET 12 OF 24 SHEETS

CONSTRUCT 450 LF OF 15-INCH SEWER PIPE BY OPEN CUT

OZARK GARDEN FARMS
W.67.5' E.135' N.164.5' LOT 12, LESS N.25'
GABF PROPERTIES LLC

E.130' W.195' LOT 12
TULSA HABITAT FOR HUMANITY INC
3511 E. LATIMER PL.

W.65' LOT 12
MARTINEZ, MANUEL D. & NOHEMI Z.
3503 E. LATIMER PL.

PRT TRACT 5
LOPEZ, FRANCISCO & OFELIA SAUCEDO
3342 E. MARSHALL ST.

OZARK GARDEN FARMS
PRT TRACT 5
BORDERLESS INVESTMENTS, LLC
3336 E. MARSHALL ST.

REMOVE & REPLACE 98 SY OF ASPHALT PAVEMENT

REMOVE & REPLACE 53 SY OF GRAVEL SIDEWALK

STA. 6+42.69 ~ 15-INCH SS LINE A
STA. 0+00.00 ~ 8-INCH SS LINE B
CONSTRUCT
STD. 5-FOOT DIA. DROP MH-2A
N=432985.54
E=2577044.68

BM-400

WMH (WM)
TR=689.41

E. MARSHALL ST

MATCH LINE STA. 4+00

MATCH LINE STA. 8+50

LINE A

LINE B

15-INCH

3/8" IPF

16" CATALPA

2-14" DEAD TREE

5-12" TREE

8" HACKBERRY

8" TREE

30" TREE

2-18" ASH

30" ASH

6-6" HACKBERRY

10" TREE

20" TREE

24" HACKBERRY

24" TREE

15" TREE

12" TREE

6" TREE

4' CHAIN LINK FENCE

6' WOOD FENCE

WROUGHT IRON FENCE

GRAVEL

1-STORY FRAME
FF=692.73

1-STORY FRAME
FF=690.14

CONTRACTOR SHALL BRACE POWER POLE DURING CONSTRUCTION (NO SEPARATE PAYMENT)

KNOXVILLE AVE.

ASPHALT PAVEMENT

PROPOSED VARIABLE WIDTH PERMANENT EASEMENT

ABANDON EX. 8-INCH SS (SEE ABANDONMENT SHEET)

ABANDON EX. MH 030-0096 (SEE ABANDONMENT SHEET)

EX. 8" SS

5' UE

LOT 9
KAPARY LLC
1204 N. KNOXVILLE AVE.

WOODLYN ADDITION BLOCK 2

PROPOSED 20' TEMPORARY CONSTRUCTION EASEMENT

PROPOSED VARIABLE WIDTH PERMANENT EASEMENT

UNPLATTED

CROW, STELLA A. & CAROLYN S.
HARDESTY & JOE K. BILES
1207 N. HARVARD AVE.

BENCHMARKS:

BM-400
MAG NAIL SET 141-FEET SOUTH AND 134-FEET EAST OF EX. MH 030-0096

N=432916.29
E=2576911.59
EL=690.80

0 10' 20' 40'
SCALE: 1"= 20'

LEGEND

- ASPHALT PAVEMENT REMOVAL & REPLACEMENT
- GRAVEL PAVEMENT REMOVAL & REPLACEMENT
- ABANDONMENT OF EXISTING SEWER

OKIE811 Know what's below 811 before you dig.

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4+62.55 ~ EX. 6" WATER

EX. GRADE @ C/L OF PROPOSED SANITARY SEWER

6+42.69 ~ CONSTRUCT STD. 5-FOOT DIA. DROP MH-2A RIM=687.12

INSTALL: 8-INCH OUTSIDE DROP CONNECTION PER COT STD. DETAIL 419

15-INCH ON 0.35%

15-INCH ON 0.35%

CONSTRUCT 243 LF OF SDR 26 ASTM D3034 PVC 15-INCH SEWER PIPE @ 0.35% BY OPEN CUT

CONSTRUCT 207 LF OF SDR 26 ASTM D3034 PVC 15-INCH SEWER PIPE @ 0.35% BY OPEN CUT

PROP. FL. 15-INCH= 669.41

PROP. FL. 15-INCH OUT (E)=670.26
PROP. FL. 15-INCH IN (W)=670.36
PROP. FL. 8-INCH IN (S)=680.63
PROP. FL. 8-INCH IN (N)=670.94

PROP. FL. 15-INCH = 671.08

695 690 685 680 675 670 665 660 655

4+00 4+50 5+00 5+50 6+00 6+50 7+00 7+50 8+00 8+50

9-25-26
LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

STA. 4+00 TO STA. 8+50 PLAN & PROFILE LINE A

TMUA PROJECT NUMBER ES 2024-01

COAL CREEK REHABILITATION AND RELIEF, FY24

CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

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

REVISION	BY	DATE

PLAN SCALE: 1" = 20'	DRAWN	RLP	09/2026	APPROVED:
	DESIGNED	JWB	09/2026	
PROFILE SCALE:	SURVEY	NP	09/2026	
HORIZONTAL: 1" = 20'	PROJ. MGR.			
VERTICAL 1" = 4'	LEAD ENGR.		12/9/26	DESIGN MANAGER
	FIELD MGR.		10/26	
FILE:	DRAWING:			DATE: September 2026
ATLAS PAGE NO: 49				SHEET 13 OF 24 SHEETS

CONSTRUCT 400 LF OF 15-INCH SEWER PIPE BY OPEN CUT

OZARK GARDEN FARMS
PRT TRACT 5
3326 EAST MARSHALL ST LLC SERIES
3326 E. MARSHALL ST.

OZARK GARDEN FARMS
BLOCK 1
LOT 1
GLOWACKI, DANIEL S. & APRIL R.
3322 E. MARSHALL ST.

LOT 2
GLOWACKI, DANIEL S. & APRIL R.
3318 E. MARSHALL ST.

LOT 3
GLOWACKI, DAN & APRIL
3316 E. MARSHALL ST.

STEVENSON SUB B4
OZARK GARDEN FARMS
BLOCK 1
N.60' LOT 4
RANDALL, MICHAEL C.
1145 N. HARVARD AVE.

E. MARSHALL ST
ASPHALT PAVEMENT

25" STUMP
CONC. WM
WM
4-BOULDERS
CONCRETE
SSMH #101
SSMH #102
WMH (WM) TR=685
4" PVC
EX. 8" SS
20" TREE
25" TREE
20" TREE
23" TREE
4' CHAIN LINK FENCE
3-12" TREES
9+00
10+00
11+00
12+00
LINE A
15-INCH
MATCH LINE STA. 8+50
MATCH LINE STA. 12+50
102" STORM
CONC
SIGN
POWER POLE
4' CHAIN LINK FENCE
EX. 20' SEWER EASEMENT
UNPLATTED
CROW, STELLA A. & CAROLYN S.
HARDESTY & JOE K. BILES
1207 N. HARVARD AVE.

STA. 12+20.43 ~ 15-INCH SS
CONSTRUCT
STD. 5-FOOT DIA. MH-4A
N=432994.19
E=2576467.27

INSTALL 40 LF OF 30-INCH DIA. STEEL CASING BY OPEN CUT SEE NOTE 2

PROPOSED VARIABLE WIDTH PERMANENT EASEMENT

PROPOSED 20' TEMPORARY CONSTRUCTION EASEMENT VARIES

STA. 10+49.66 ~ 15-INCH SS
CONSTRUCT
STD. 5' DIA. DROP MH-3A
N=432983.60
E=2576637.71

ABANDON EX. 8-INCH SS (SEE ABANDONMENT SHEET)

PROPOSED VARIABLE WIDTH PERMANENT EASEMENT

BENCHMARKS:

BM-400
MAG NAIL SET 141-FEET SOUTH AND 134-FEET EAST OF EX. MH 030-0096
(SEE PREVIOUS SHEET)
N=432916.29
E=2576911.59
EL=690.80

0 10' 20' 40'
SCALE: 1"= 20'

LEGEND

ABANDONMENT OF EXISTING SEWER

OKIE811 Know what's below 811 before you dig.

WARNING!!!
EXISTING UNDERGROUND TELEPHONE, OVERHEAD, UNDERGROUND ELECTRIC AND GAS UTILITIES IN AREA, CONTACT UTILITY 48 HOURS PRIOR TO CONSTRUCTION 1-800-522-6543

CONTRACTOR TO REMOVE EXISTING 8" SANITARY SEWER FROM 102" RCP STORM AND PATCH AND SEAL HOLES SEE NOTE 1

10+49.66 ~ CONSTRUCT STD. 5' DIA. DROP MH-3A RIM=690.25

EX. GRADE @ C/L OF PROPOSED SANITARY SEWER

11+60.00 ~ EX. 102-INCH STORM FL.=674.55±

12+20.43 ± CONSTRUCT STD. 5' DIA. MH-4A RIM=691.71

INSTALL: 8-INCH OUTSIDE DROP CONNECTION PER COT STD. DETAIL 419

STA. 11+40

STA. 11+80

15-INCH ON 0.35%

15-INCH ON 0.91%

CONSTRUCT 200 LF OF SDR 26 ASTM D3034 PVC 15-INCH SEWER PIPE @ 0.35% BY OPEN CUT

CONSTRUCT 90 LF OF SDR 26 ASTM D3034 PVC 15-INCH SEWER PIPE @ 0.35% BY OPEN CUT

A = CONSTRUCT 40 LF OF SDR 26 ASTM D3034 PVC 15-INCH SEWER PIPE (RJ) W/ 40 LF OF 30-INCH DIAMETER ¼ INCH THICK STEEL CASING @ 0.35% BY OPEN CUT

B = CONSTRUCT 40 LF OF SDR 26 ASTM D3034 PVC 15-INCH SEWER PIPE @ 0.35% BY OPEN CUT

C = CONSTRUCT 30 LF OF SDR 26 ASTM D3034 PVC 15-INCH SEWER PIPE @ 0.91% BY OPEN CUT

PROP. FL. 15-INCH = 671.08

PROP. FL. 15-INCH OUT (E)=671.78
PROP. FL 15-INCH IN (W)=671.88
PROP. FL 8-INCH IN (S)=682.08

PROP. FL. 15-INCH OUT (E)=672.48
PROP. FL 15-INCH IN (N)=672.67

PROP. FL. 15-INCH=672.94

700 695 690 685 680 675 670 665 660

8+50 9+00 9+50 10+00 10+50 11+00 11+50 12+00 12+50

NOTE:
1. REMOVE SECTION OF 8-INCH SANITARY SEWER INSTALLED THROUGH 102-INCH STORM. PATCH AND SEAL HOLES WITH NON-SHRINK GROUT FOLLOWING REMOVAL.

2. THE TOP OF THE STEEL CASING MAY EXTEND INTO THE BOTTOM OF THE 102-INCH STORM PIPE. CONTRACTOR SHALL REMOVE AND RECONSTRUCT 102-INCH STORM PIPE AS NEEDED TO AVOID SAG IN SANITARY SEWER PIPE. IF EXTERIOR OF STEEL CASING IS EXPOSED IN THE BOTTOM OF THE 102-INCH STORM PIPE, THEN EXTERIOR SURFACE EXPOSED TO THE INTERIOR OF THE 102-INCH STORM PIPE SHALL BE COATED WITH KOPPERS 200 TNEMEC SERIES 66 EPOXOLINE, RUST-OLEUM 9100 EPOXY PAINT (OR EQUAL). ALL WORK ASSOCIATED WITH THIS STORM PIPE CROSSING IS CONSIDERED INCIDENTAL AND NO ADDITIONAL PAYMENT SHALL BE MADE.

9-25-26
LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

STA. 8+50 TO STA. 12+50 PLAN & PROFILE LINE A

TMUA PROJECT NUMBER ES 2024-01

COAL CREEK REHABILITATION AND RELIEF, FY24

CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

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

REVISION	BY	DATE

PLAN SCALE: 1" = 20'
PROFILE SCALE: HORIZONTAL: 1" = 20' VERTICAL 1" = 4'

DRAWN	RLP	09/2026
DESIGNED	JWB	09/2026
SURVEY	NP	09/2026
PROJ. MGR.		
LEAD ENGR.		10/26
FIELD MGR.		10/26

APPROVED:
DESIGN MANAGER
FILE: DRAWING:
DATE: September 2026
ATLAS PAGE NO: 49
SHEET 14 OF 24 SHEETS

CONSTRUCT 290 LF OF 15-INCH SEWER PIPE & 11 LF OF 8-INCH BY OPEN CUT & 110 LF OF BORE & JACK

MATCH LINE STA. 12+50

PROPOSED VARIABLE WIDTH PERMANENT EASEMENT

CELLA A. & CAROLYN S. HARDESTY & JOE K. BILES 1207 N. HARVARD AVE.

PROPOSED 20' TEMPORARY CONSTRUCTION EASEMENT

REMOVE & REPLACE 5 SY OF CONCRETE DRIVEWAY

REMOVE & REPLACE 16 SY OF GRAVEL PAVEMENT

WARNING!!! FIBER OPTIC USE CAUTION!!!

STA. 13+55.93 ~ 15-INCH SS LINE A
STA. 0+00.00 ~ 8-INCH SS LINE D
CONSTRUCT
STD. 5-FOOT DIA. DROP MH-5A
N=433125.66
E=2576434.47

BORE PIT LIMITS

STA. 0+10.96 ~ 8-INCH SS
CONSTRUCT
8-INCH DIA. PVC LAMPHOLE-1D
N=433136.60
E=2576435.10

N. HARVARD AVE.
ASPHALT PAVEMENT

TULSA GARDEN ACRES SUBDIVISION PRT TRACTS 1-2 BLOCK 1

STA. 15+96.87 ~ 15-INCH SS
CONSTRUCT
STD. 5-FOOT DIA. DROP MH-6A
N=433105.98
E=2576194.33

BM-501

PROPOSED VARIABLE WIDTH PERMANENT EASEMENT

PROPOSED VARIABLE WIDTH PERMANENT EASEMENT

LOT 1 OAKHURST STRATEGIES INC. 1162 N. HARVARD AVE.

BORE PIT LIMITS

WARNING!!! OVERHEAD ELECTRIC USE CAUTION!!!

PROPOSED VARIABLE WIDTH PERMANENT EASEMENT

PRT LOT 1

CONC BUMPER GUARDS

GRAVEL RETAINING WALL (1.2' WIDE ROCK)

4' CHAIN LINK FENCE

CONCRETE

GRAVEL

LINE A

LINE D

14+00

15+00

16+00

20' SANITARY SEWER EASEMENT (PER PLA

EX. 8" SS

EX. 15-INCH

EX. 8" SS

GMH

TREE

2-BUSH

24" TREE

24" STUMP

WOOD STAKE w/SENSOR

CONC BUMPER GUARDS

4' CHAIN LINK FENCE

EX. 20' SANITARY SEWER EASEMENT (PER PLAT)

SSMH #106

SSMH #107

EX. 8" SS

MATCH LINE STA. 16+50

PROPOSED VARIABLE WIDTH PERMANENT EASEMENT

PROPOSED 20' TEMPORARY CONSTRUCTION EASEMENT

WARNING!!! OVERHEAD ELECTRIC USE CAUTION!!!

WARNING!!! GAS MAIN USE CAUTION!!!

WARNING!!! 30" WATER LINE USE CAUTION!!!

REMOVE & REPLACE 166 SY OF ASPHALT PAVEMENT

PROPOSED VARIABLE WIDTH TEMPORARY CONSTRUCTION EASEMENT

ASPHALT PAVEMENT

REROUTE EX. SERVICE TO PROPOSED LINE D

ABANDON EX. 8-INCH SS (SEE ABANDONMENT SHEET)

UNPLATTED CROW, STELLA A. & CAROLYN S. HARDESTY & JOE K. BILES 1207 N. HARVARD AVE.

ABANDON EX. 8-INCH SS (SEE ABANDONMENT SHEET)

PRT LOT 1 OAKHURST STRATEGIES INC. 1240 N. HARVARD AVE.

PRT LOT 1 OAKHURST STRATEGIES INC. 1240 N. HARVARD AVE.

ABANDON EX. 8-INCH SS (SEE ABANDONMENT SHEET)

ABANDON EX. MH 030-0107 & 030-0106 (SEE ABANDONMENT SHEET)

TULSA GARDEN ACRES SUBDIVISION BLOCK 1

LINE D PLAN & PROFILE

BENCHMARKS:

BM-501
IRON PIN SET 113 FEET EAST AND 43 FEET SOUTH OF EX. MH 030-0106

N=433080.07
E=2576333.17
EL=691.90

LEGEND

- ASPHALT PAVEMENT REMOVAL & REPLACEMENT
- GRAVEL PAVEMENT REMOVAL & REPLACEMENT
- ABANDONMENT OF EXISTING SEWER
- CONCRETE DRIVEWAY REMOVAL & REPLACEMENT

NOTE:

1. CITY OF TULSA FLOWLINE CREWS SHALL BE NOTIFIED A MINIMUM OF 72- HOURS IN ADVANCE OF CONSTRUCTION CROSSING OF TRANSMISSION MAIN. THE CONTRACTOR SHALL CALL 918-596-8037 TO NOTIFY. CONSTRUCTION CROSSING CAN NOT PROCEED UNLESS CITY OF TULSA FLOWLINE PERSONNEL IS ON SITE.

0 10' 20' 40'
SCALE: 1" = 20'

OKIE811 Know what's below 811 before you dig.

WARNING!!!
EXISTING UNDERGROUND TELEPHONE, OVERHEAD, UNDERGROUND ELECTRIC AND GAS UTILITIES IN AREA, CONTACT UTILITY 48 HOURS PRIOR TO CONSTRUCTION
1-800-522-6543

700 / 695 / 690 / 685 / 680 / 675 / 670 / 665 / 660

13+55.93 ~ CONSTRUCT STD. 5' DIA. DROP MH-5A RIM=692.29

13+92.28 ~ EX. PHONE

14+10.15 ~ EX. 30" WATER

14+47.01 ~ EX. 30" STORM FL =686.24

14+53.28 ~ EX. GAS

14+63.38 ~ EX. 12" STORM FL =689.94

EX. GRADE @ C/L OF PROPOSED SANITARY SEWER

14+60.96 ~ EX. FIBER OPTIC

15+96.87 ~ CONSTRUCT STD. 5-FOOT DIA. DROP MH-6A RIM=692.00

0+00.00 ~ CONNECT TO NEW MH-5A RIM=692.29

0+10.96 ~ CONSTRUCT 8-INCH DIA. PVC LAMPHOLE-1D RIM=692.35

EX. GRADE @ C/L OF PROPOSED SANITARY SEWER

INSTALL: 8-INCH OUTSIDE DROP CONNECTION PER COT STD. DETAIL 419

8-INCH ON 1.00%

INSTALL: 8-INCH OUTSIDE DROP CONNECTION PER COT STD. DETAIL 419

CONSTRUCT 11 LF OF SDR 26 ASTM D3034 PVC 8-INCH SEWER PIPE @ 1.00% BY OPEN CUT

EX. 8" SS

STA.13+68

STA. 14+78

15-INCH ON 0.91%

15-INCH ON 0.90%

15-INCH ON 0.71%

A

CONSTRUCT 106 LF OF SDR 26 ASTM D3034 PVC 15-INCH SEWER PIPE @ 0.91% BY OPEN CUT

CONSTRUCT 110 LF OF SDR 26 ASTM D3034 PVC 15-INCH SEWER PIPE (RJ) W/ 110 LF OF 30-INCH DIAMETER 1/2 - INCH THICK STEEL CASING @ 0.90% BY JACK & BORE

CONSTRUCT 119 LF OF SDR 26 ASTM D3034 PVC 15-INCH SEWER PIPE @ 0.90% BY OPEN CUT

CONSTRUCT 53 LF OF SDR 26 ASTM D3034 PVC 15-INCH SEWER PIPE @ 0.71% BY OPEN CUT

A= CONSTRUCT 12 LF OF SDR 26 ASTM D3034 PVC 15-INCH SEWER PIPE @ 0.90% BY OPEN CUT

PROP. FL. 15-INCH=672.94

PROP. FL. 15-INCH OUT (S)=673.90
PROP. FL 15-INCH IN (W)=674.00
PROP. FL 8-INCH IN (N)=685.44

PROP. FL. 15-INCH OUT (E)=676.17
PROP. FL 15-INCH IN (W)=676.27
PROP. FL 8-INCH IN (S)=683.06

PROP. FL. 15-INCH=676.65

PROP. FL. 15-INCH OUT (W)=673.90
PROP. FL. 8-INCH IN (N)=685.44
PROP. FL. 15-INCH IN (S)=674.00

PROP. FL. 8INCH OUT (S)=685.55

12+50 / 13+00 / 13+50 / 14+00 / 14+50 / 15+00 / 15+50 / 16+50

-0+30 / 0+00 / 0+30

9-25-26
LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

REVISION	BY	DATE

STA. 12+50 TO STA. 16+50 PLAN & PROFILE
LINE A & LINE D

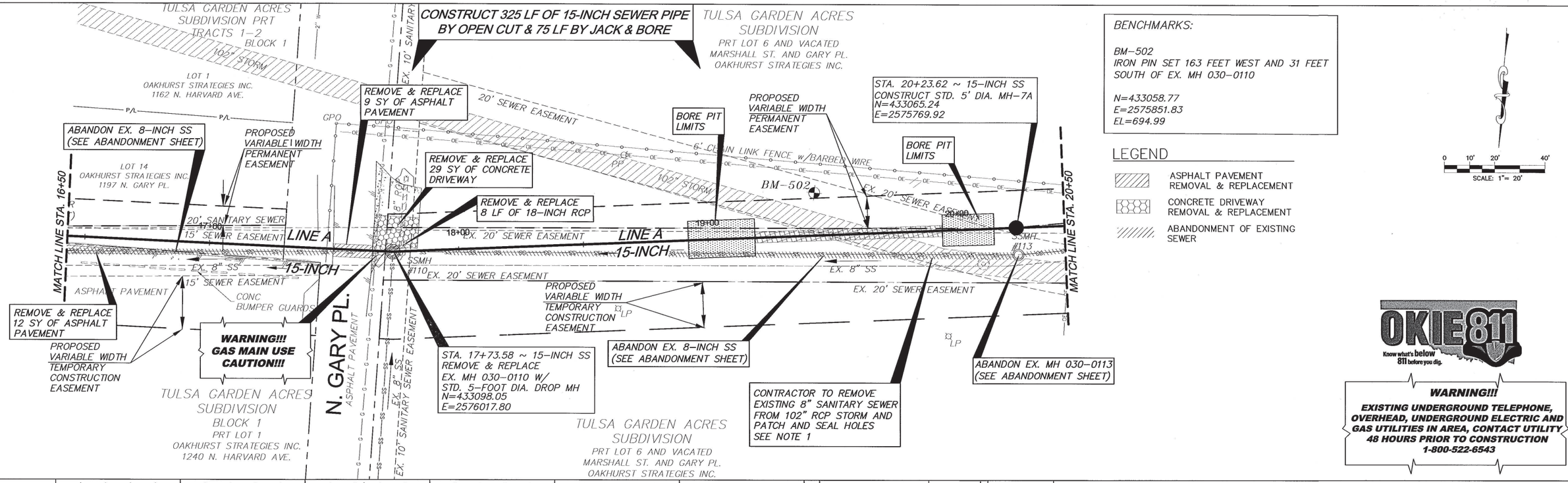
TMUA PROJECT NUMBER ES 2024-01

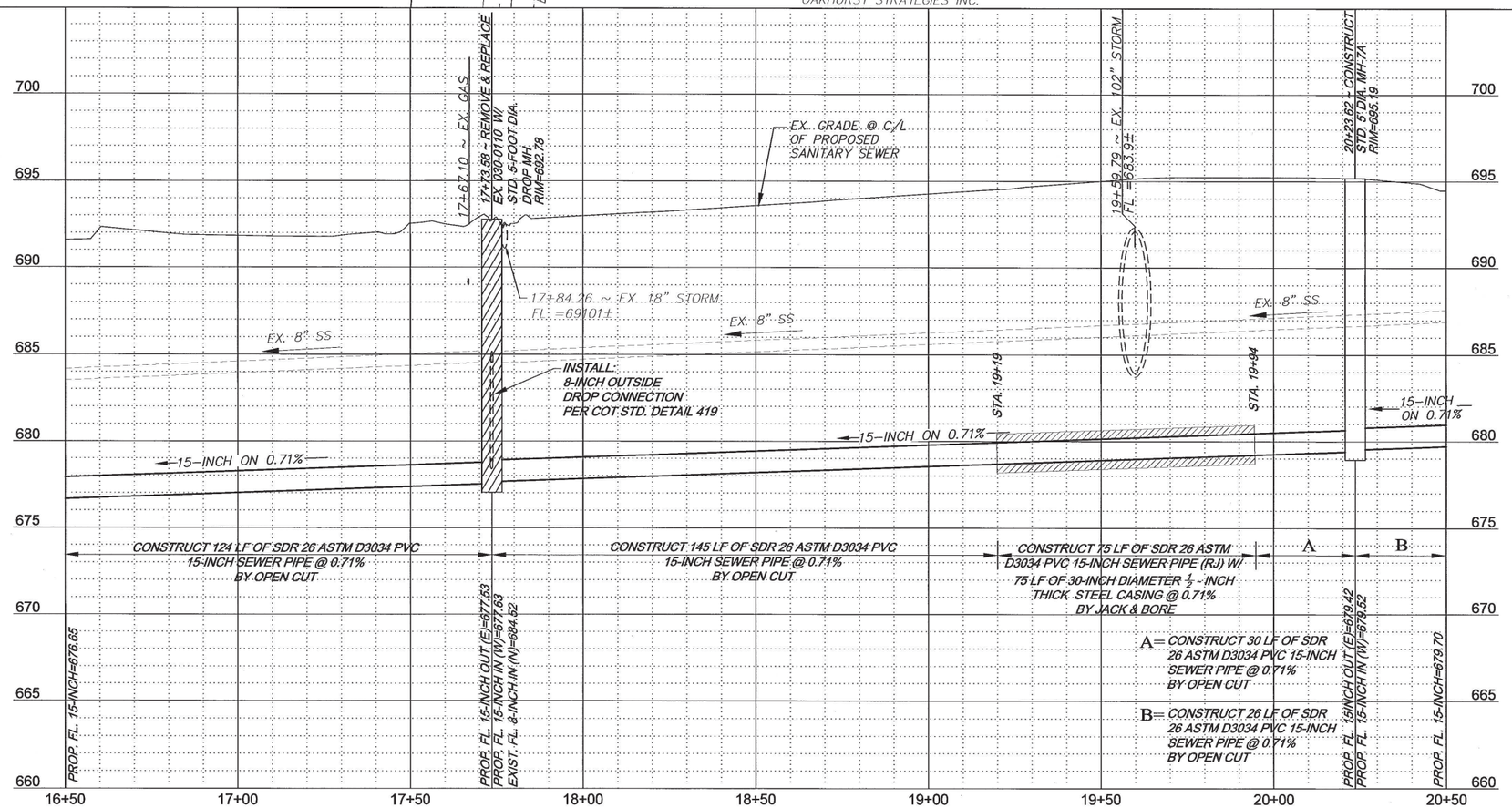
COAL CREEK REHABILITATION AND RELIEF, FY24

CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

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

PLAN SCALE: 1" = 20'	DRAWN	RLP	09/2026	APPROVED:
	DESIGNED	JWB	09/2026	
PROFILE SCALE:	SURVEY	NP	09/2026	
HORIZONTAL: 1" = 20'	PROJ. MGR.			
VERTICAL 1" = 4'	LEAD ENGR.		9/29/26	DESIGN MANAGER
	FIELD MGR.		10/26	
FILE:	DRAWING:			DATE: September 2026
ATLAS PAGE NO: 49				SHEET 15 OF 24 SHEETS





NOTE:
1. REMOVE SECTION OF 8-INCH SANITARY SEWER INSTALLED THROUGH 102-INCH STORM. PATCH AND SEAL HOLES WITH NON-SHRINK GROUT FOLLOWING REMOVAL

9-25-26
LICENSED PROFESSIONAL ENGINEER JACOB BRUMBAUGH 33769 OKLAHOMA

STA. 16+50 TO STA. 20+50 PLAN & PROFILE LINE A

TMUA PROJECT NUMBER ES 2024-01

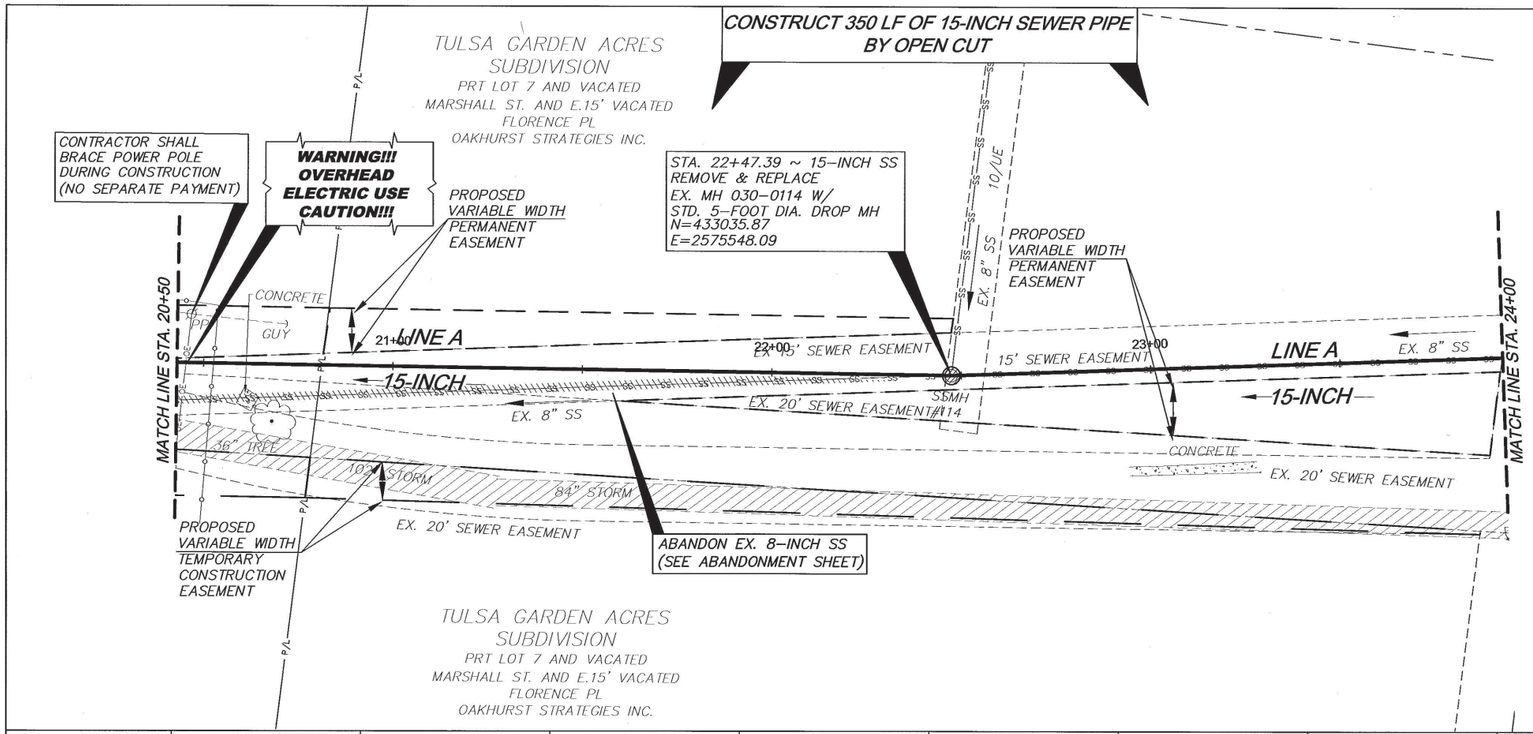
COAL CREEK REHABILITATION AND RELIEF, FY24

CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

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

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	LEAD ENGR.		9/26	DESIGN MANAGER
VERTICAL 1" = 4'	FIELD MGR.		10/26	
FILE:	DRAWING:			DATE: September 2026
ATLAS PAGE NO: 48				SHEET 16 OF 24 SHEETS



BENCHMARKS:

BM-505
IRON PIN SET 40 FEET WEST AND 28 FEET NORTH OF EX. MH 030-0120
(SEE NEXT SHEET)
N=433031.95
E=2575341.66
EL=699.29

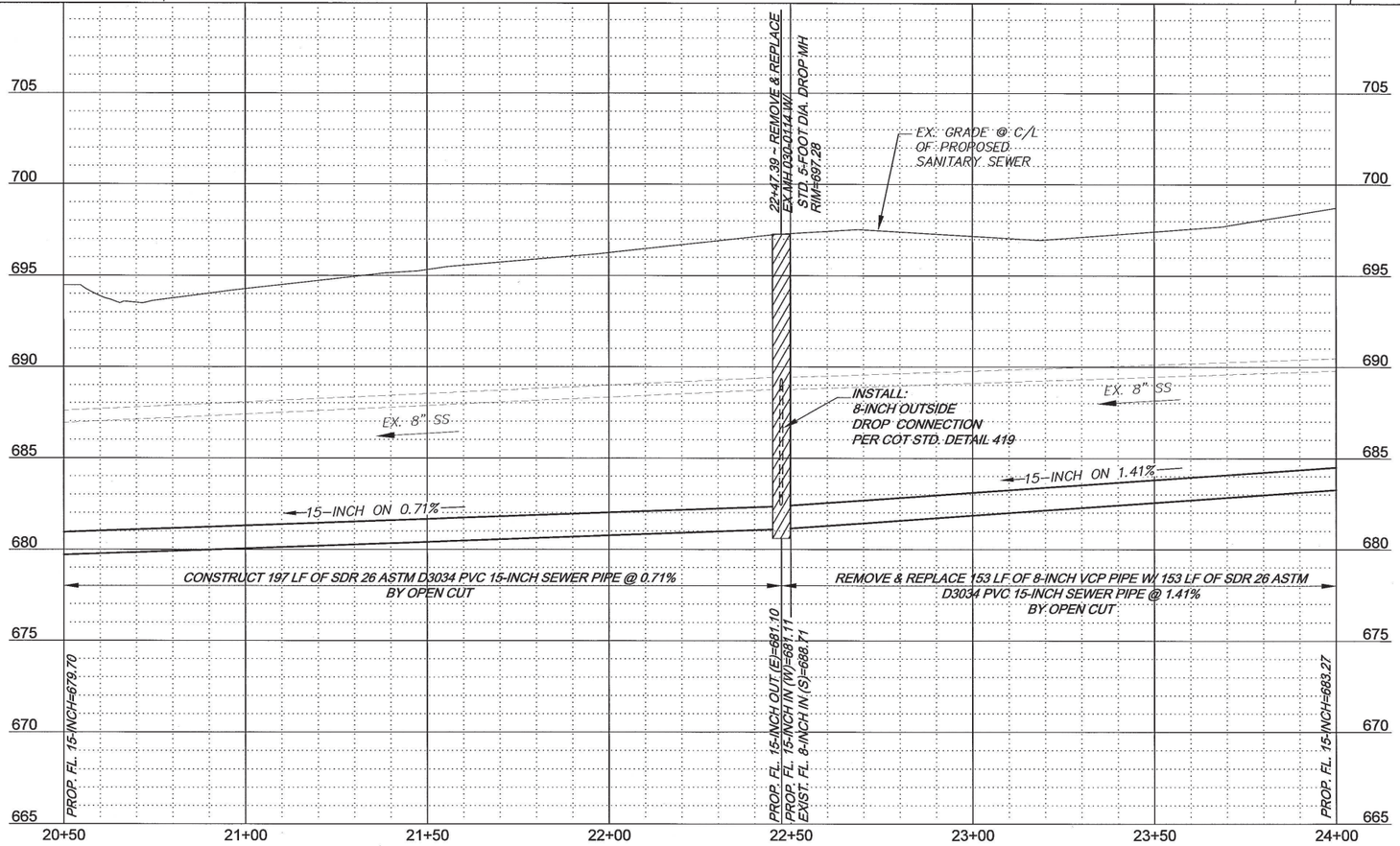
LEGEND

////// ABANDONMENT OF EXISTING SEWER

0 10' 20' 40'
SCALE: 1"= 20'

OKIE811 Know what's below 811 before you dig.

WARNING!!!
EXISTING UNDERGROUND TELEPHONE, OVERHEAD, UNDERGROUND ELECTRIC AND GAS UTILITIES IN AREA, CONTACT UTILITY 48 HOURS PRIOR TO CONSTRUCTION 1-800-522-6543



9-25-26
LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

STA. 20+50 TO STA. 24+00 PLAN & PROFILE LINE A

TMUA PROJECT NUMBER ES 2024-01

COAL CREEK REHABILITATION AND RELIEF, FY24

CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
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4500 S. GARNETT ROAD SUITE 110, TULSA, OKLAHOMA 74146

REVISION	BY	DATE

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1" = 20'	DESIGNED	JWB	09/2026
PROFILE SCALE:	SURVEY	NP	09/2026
HORIZONTAL: 1" = 20'	PROJ. MGR.		
	LEAD ENGR.		9/26
VERTICAL 1" = 4'	FIELD MGR.		10/25
FILE:	DRAWING:		
ATLAS PAGE NO: 48			

APPROVED:

DESIGN MANAGER

DATE: September 2026

SHEET 17 OF 24 SHEETS

CONSTRUCT 400 LF OF 15-INCH SEWER PIPE BY OPEN CUT

REMOVE & REPLACE 16 LF OF 24" RCP

STA. 24+18.56 ~ 15-INCH SS
REMOVE & REPLACE
EX. MH 030-0120 W/
STD. 5-FOOT DIA. DROP MH
N=433005.06
E=2575379.72

STA. 24+50.10 ~ 15-INCH SS
REMOVE EX. MH 030-0123
(NO SEPARATE PAYMENT)
N=432999.28
E=2575348.64

STA. 27+49.16 ~ 8-INCH SS
REMOVE
EX. MH 030-0124
(NO SEPARATE PAYMENT)
N=432964.67
E=2575051.58

STA. 27+00.00 ~ 15-INCH SS
CONSTRUCT STD. 5' DIA. MH-8A
N=432972.75
E=2575100.14

PROPOSED VARIABLE WIDTH PERMANENT EASEMENT

PROPOSED 20' TEMPORARY CONSTRUCTION EASEMENT

LOT 12 AND S.15' VACATED MARSHALL ST. AND W.15' VACATED FLORENCE PL. OAKHURST STRATEGIES INC.

TULSA GARDEN ACRES SUBDIVISION

MATCH LINE STA. 24+00

MATCH LINE STA. 28+00

LINE A — 15-INCH

EX. 30' SEWER EASEMENT

EX. 25' SEWER EASEMENT

EX. 15' SEWER EASEMENT

EX. 20' SEWER EASEMENT

EX. 8" SS

EX. 24" RCP

84" STORM

6' CHAIN LINK/BARBEDWIRE FENCE

7' METAL FENCE

5' U/E

2-12" TREES

10" TREE

12" TREE

3-12" TREES

SSMH #120

SSMH #123

SSMH #124

BM-505

BENCHMARKS:

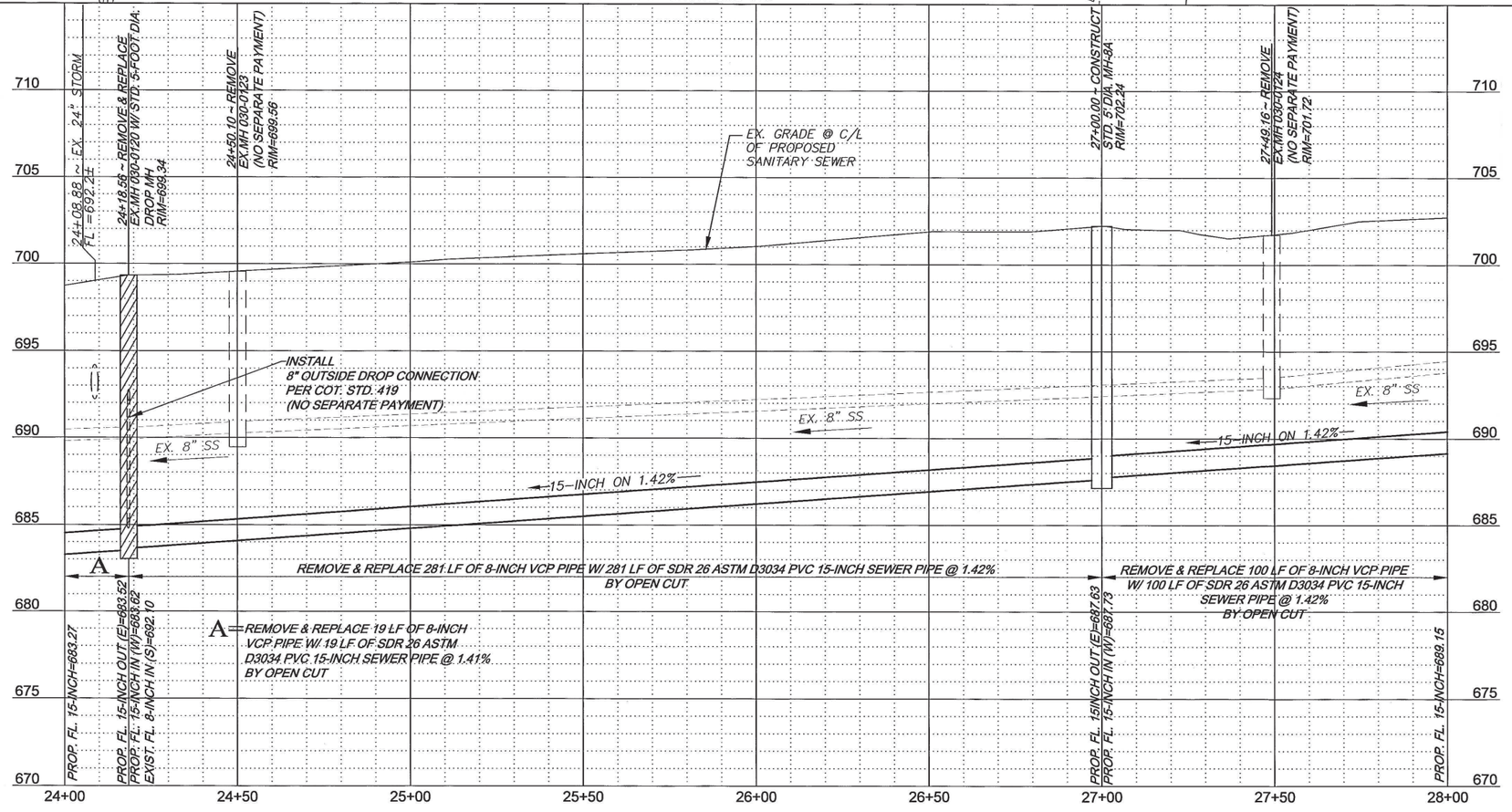
BM-505
IRON PIN SET 40 FEET WEST AND 28 FEET NORTH OF EX. MH 030-0120

N=433031.95
E=2575341.66
EL=699.29

0 10' 20' 40'
SCALE: 1"= 20'

OKIE811 Know what's below 811 before you dig.

WARNING!!!
EXISTING UNDERGROUND TELEPHONE, OVERHEAD, UNDERGROUND ELECTRIC AND GAS UTILITIES IN AREA, CONTACT UTILITY 48 HOURS PRIOR TO CONSTRUCTION 1-800-522-6543



9-25-26
LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

STA. 24+00 TO STA. 28+00 PLAN & PROFILE LINE A

TMUA PROJECT NUMBER ES 2024-01

COAL CREEK REHABILITATION AND RELIEF, FY24

CITY OF TULSA, OKLAHOMA
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	LEAD ENGR.		10/26
VERTICAL 1" = 4'	FIELD MGR.		10/26
FILE:	DRAWING:		

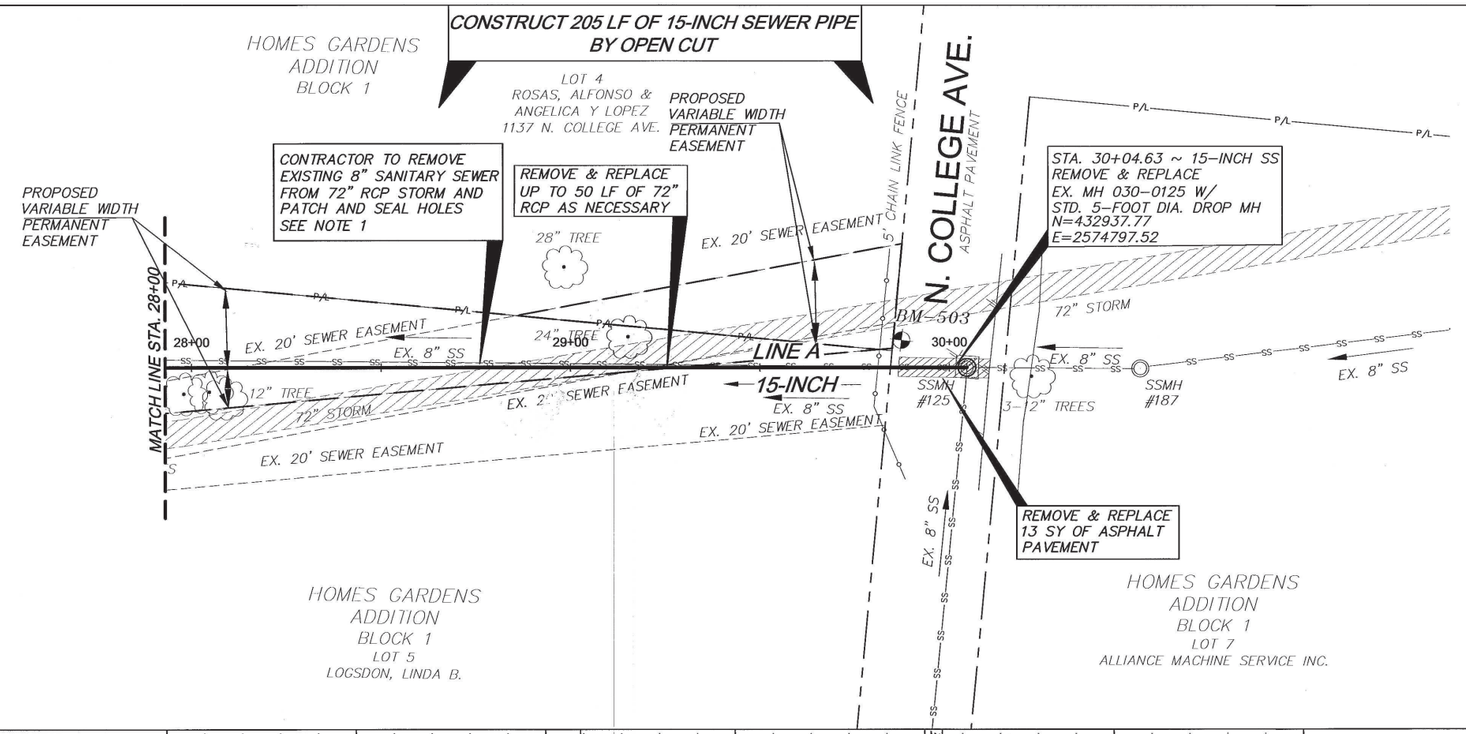
APPROVED:

DESIGN MANAGER

DATE: September 2026

ATLAS PAGE NO: 48

SHEET 18 OF 24 SHEETS



BENCHMARKS:

BM-503
IRON PIN SET 18' EAST AND 7' SOUTH OF EX. MH 030-0125

N=432932.5
E=2574815.52
EL=705.45

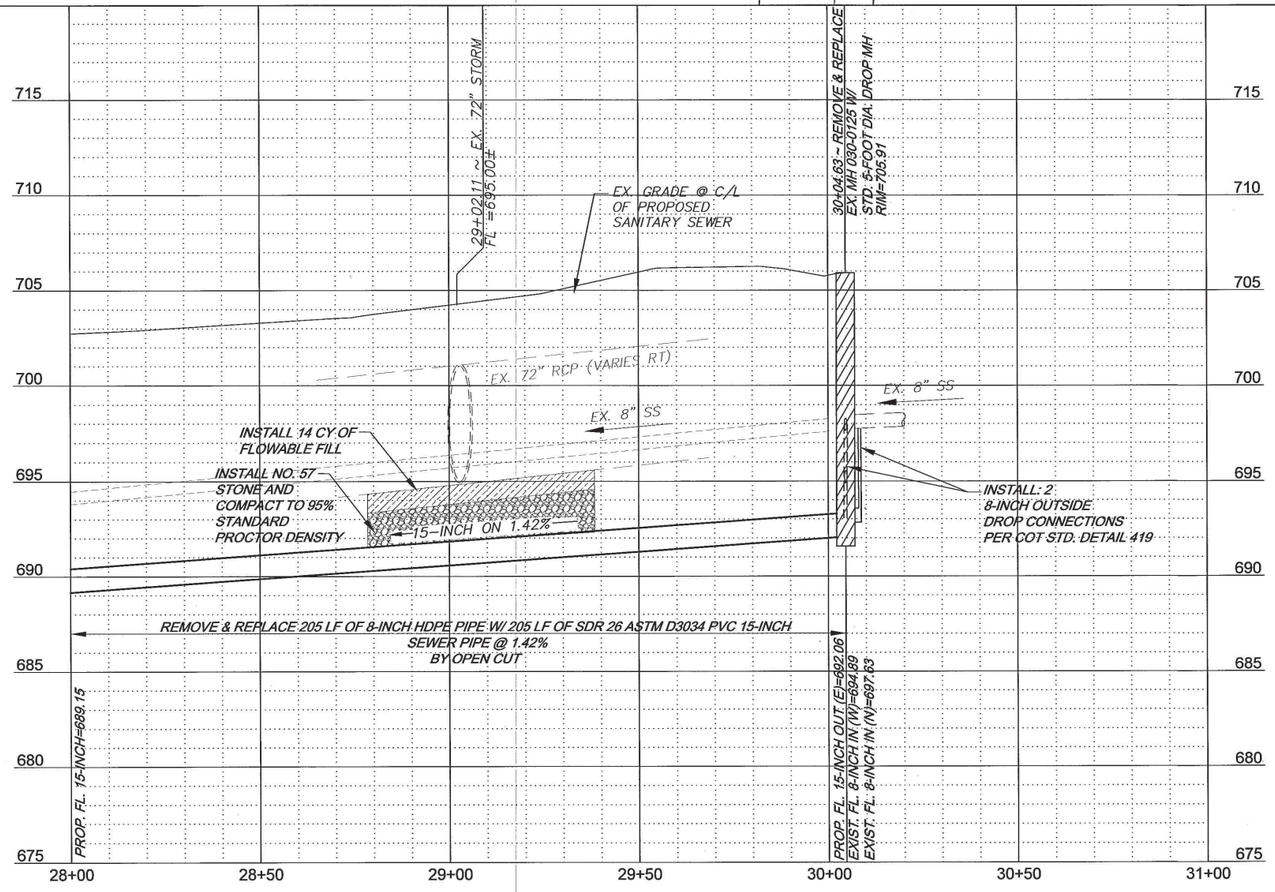
LEGEND

ASPHALT PAVEMENT REMOVAL & REPLACEMENT

0 10' 20' 40'
SCALE: 1" = 20'

OKIE811 Know what's below 811 before you dig.

WARNING!!!
EXISTING UNDERGROUND TELEPHONE, OVERHEAD, UNDERGROUND ELECTRIC AND GAS UTILITIES IN AREA, CONTACT UTILITY 48 HOURS PRIOR TO CONSTRUCTION 1-800-522-6543



NOTE:
1. REMOVE SECTION OF 8-INCH SANITARY SEWER INSTALLED THROUGH 72-INCH STORM. PATCH AND SEAL HOLES WITH NON-SHRINK GROUT FOLLOWING REMOVAL

9-25-26
LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

STA. 28+00 TO STA. 30+05 PLAN & PROFILE LINE A

TMUA PROJECT NUMBER ES 2024-01

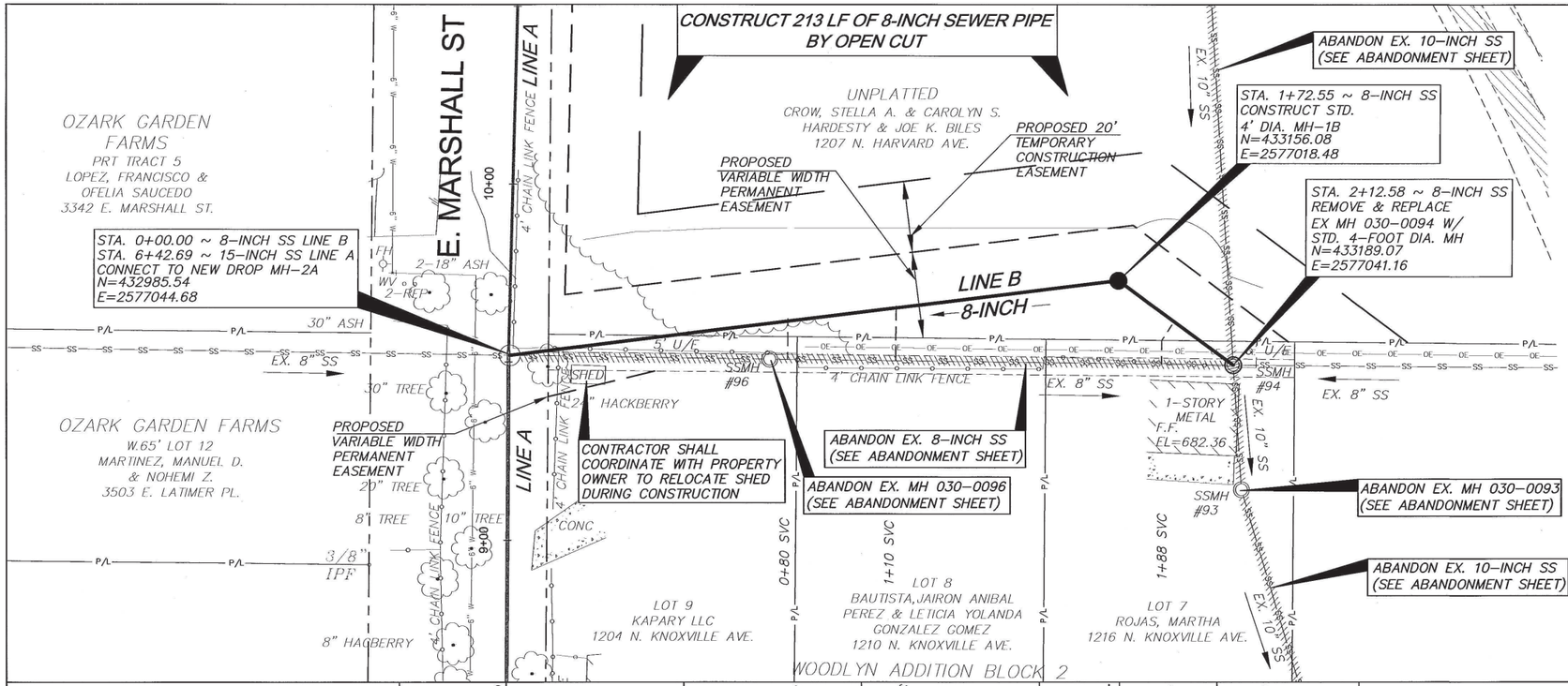
COAL CREEK REHABILITATION AND RELIEF, FY24

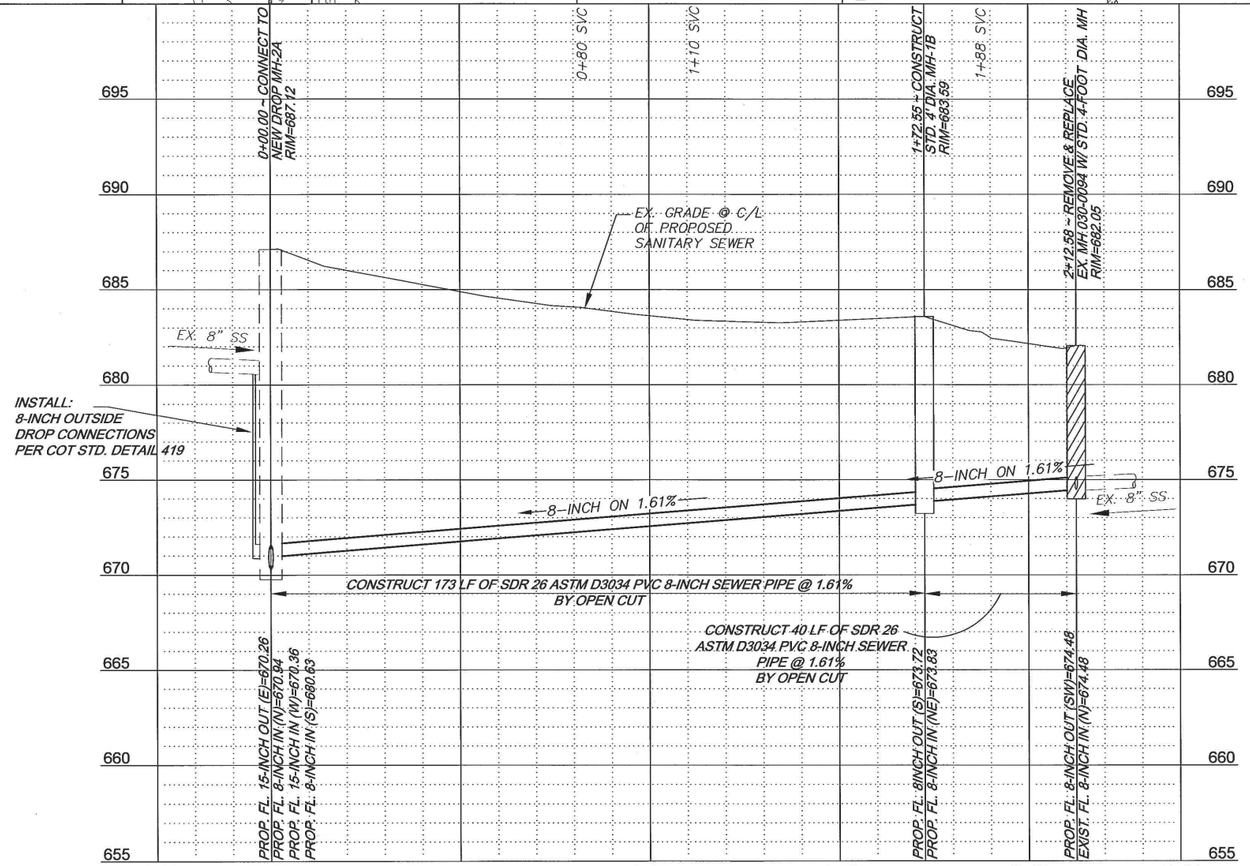
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WATER AND SEWER DEPARTMENT

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	LEAD ENGR.		9/26	
VERTICAL 1" = 4'	FIELD MGR.		10/26	DESIGN MANAGER
FILE:	DRAWING:			DATE: September 2026
ATLAS PAGE NO: 48				SHEET 19 OF 24 SHEETS





BENCHMARKS:

BM–500
MAG NAIL SET 80–FEET NORTH AND 170–FEET EAST OF EX. MH 030–0096

N=433139.64 (NOT SHOWN)
E=2577211.80
EL=684.36

BENCHMARKS:

BM–504
IRON PIN SET 95–FEET EAST AND 2–FEET SOUTH OF EX. MH 030–0099

N=433137.19 (NOT SHOWN)
E=2576736.88
EL=689.92

LEGEND

////// ABANDONMENT OF EXISTING SEWER

0 10' 20' 40'
SCALE: 1"= 20'

OKIE811 Know what's below 811 before you dig.

WARNING!!!
EXISTING UNDERGROUND TELEPHONE, OVERHEAD, UNDERGROUND ELECTRIC AND GAS UTILITIES IN AREA, CONTACT UTILITY 48 HOURS PRIOR TO CONSTRUCTION 1-800-522-6543

9-25-26
LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

PLAN & PROFILE LINE B

TMUA PROJECT NUMBER ES 2024-01

COAL CREEK REHABILITATION AND RELIEF, FY24

CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

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4500 S. GARNETT ROAD SUITE 110, TULSA, OKLAHOMA 74146

REVISION	BY	DATE

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PROFILE SCALE:	SURVEY	NP	09/2026	
HORIZONTAL: 1" = 20'	PROJ. MGR.			
	LEAD ENGR.		9/26	
VERTICAL 1" = 4'	FIELD MGR.		10/26	DESIGN MANAGER
FILE:	DRAWING:			DATE: September 2026
ATLAS PAGE NO: 49				SHEET 20 OF 24 SHEETS

CONSTRUCT 294 LF OF 8-INCH SEWER PIPE BY OPEN CUT

ABANDON EX. 10-INCH SS (SEE ABANDONMENT SHEET)

WOODLYN ADDITION BLOCK 1

LOT 9 THURMAN, HAILEY 1203 N. KNOXVILLE AVE.

LOT 8 McCORKLE, OWEN THOMAS 1207 N. KNOXVILLE AVE.

LOT 7 MARTIN, ANN E. & JON A. 1211 N. KNOXVILLE AVE.

LOT 6 HERNANDEZ, MARVIN 1217 N. KNOXVILLE AVE.

LOT 5 DELGROSSO, CONNOR & EMILY 1223 N. KNOXVILLE AVE.

OZARK GARDEN FARMS
E.67.5' N.164.5'
LOT 12, LESS N.25'
HABITAT HOUSING INC.

OZARK GARDEN FARMS
W.97' LOT 13
MOSIER, MATTIE D.
3533 E. LATIMER PL.

E. MARSHALL ST

ROW 25.50'

LINE A

LINE C

8-INCH

ABANDON EX. MH 030-0091 (SEE ABANDONMENT SHEET)

ABANDON EX. 8-INCH SS (SEE ABANDONMENT SHEET)

CONTRACTOR SHALL BRACE POWER POLE DURING CONSTRUCTION (NO SEPARATE PAYMENT)

WARNING!!! OVERHEAD ELECTRIC USE CAUTION!!!

3-15" TREE

SHED

WOOD DECK

4' METAL FENCE

3' CHAIN LINK FENCE

15" TREE

5' U/E

6' WOOD FENCE

EX. 8" SS

4' CHAIN LINK FENCE

3' HOG WIRE FENCE

EX. 10" SS

CLOTHESLINE POLE

FF=683.77
1-STORY METAL

1-STORY METAL
FF=684.44

SSMH #91

SSMH #92

2-GPO

3-GUY

SIGN "TULSA PARKS"

BOLTED DOWN WOOD

GRAVEL

13" TREE

36" TREE

12" TREE

SSMH #89

STA. 2+94.43 ~ 10" SS
REMOVE & REPLACE
EX. MH 030-0092 W/
STD. 4' DIA. MH
N=433285.24
E=2577356.93

ABANDON EX. 10-INCH SS (SEE ABANDONMENT SHEET)

ABANDON EX. 10-INCH SS (SEE ABANDONMENT SHEET)

ABANDON EX. MH 030-0089 (SEE ABANDONMENT SHEET)

REMOVE & REPLACE GRAVEL SIDEWALK SEE LINE A

STA. 0+00.00 ~ 8-INCH SS LINE C
STA. 2+88.32 ~ 15-INCH SS LINE A
CONNECT TO
NEW MH-1A
N=432993.83
E=2577398.95

UNPLATTED (GROTTO PARK) CITY OF TULSA 3600 E. NEWTON ST.

BENCHMARKS:

BM-112
IRON PIN SET 111-FEET WEST AND 96-FEET NORTH OF EX. MH 030-0704
(SEE LINE A STA. 0+00 TO STA. 4+00)
N=433101.06
E=2577567.78
EL=685.32

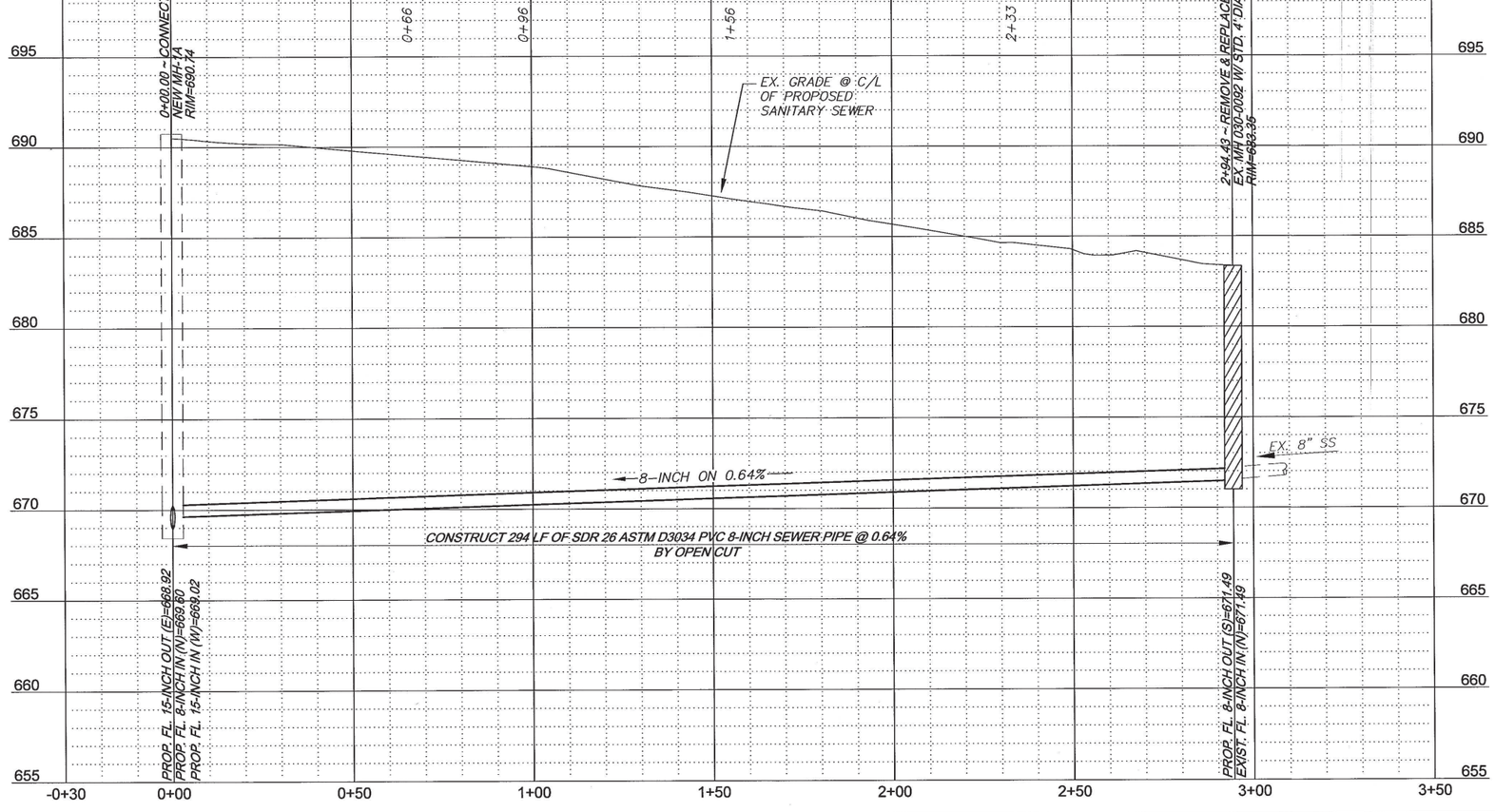
0 10' 20' 40'
SCALE: 1"= 20'

LEGEND

ABANDONMENT OF EXISTING SEWER

OKIE811 Know what's below 811 before you dig.

WARNING!!!
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9-25-26
LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

PLAN & PROFILE LINE C

TMUA PROJECT NUMBER ES 2024-01

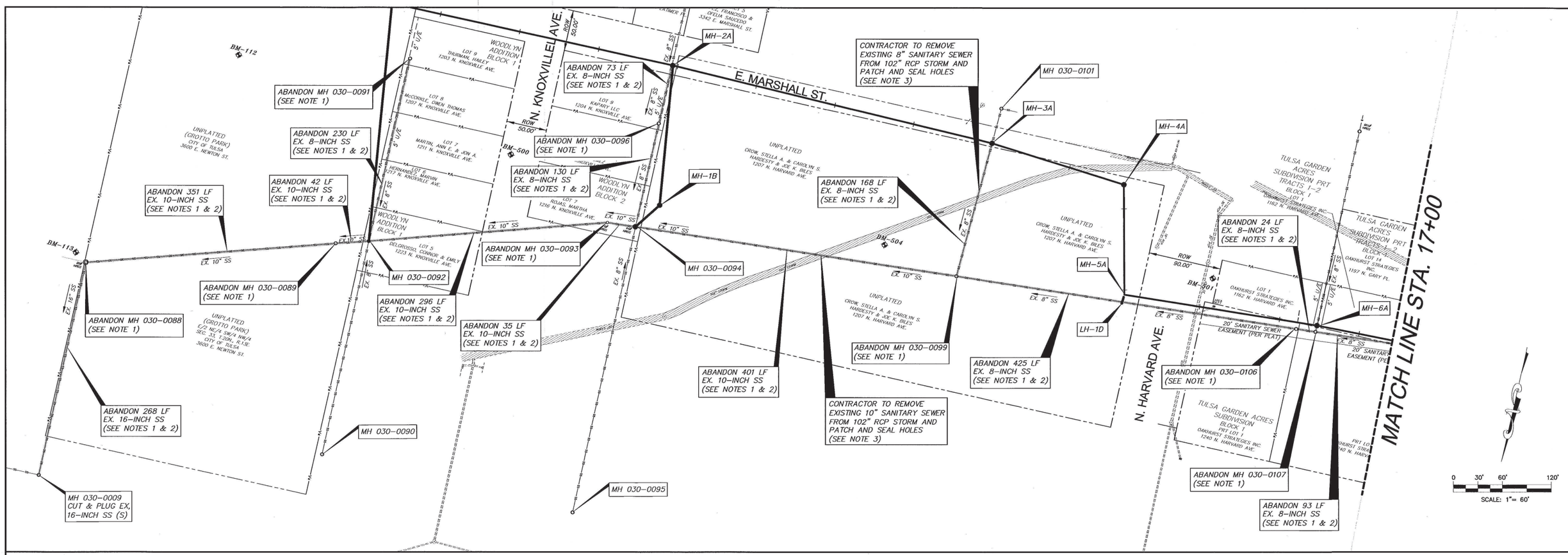
COAL CREEK REHABILITATION AND RELIEF, FY24

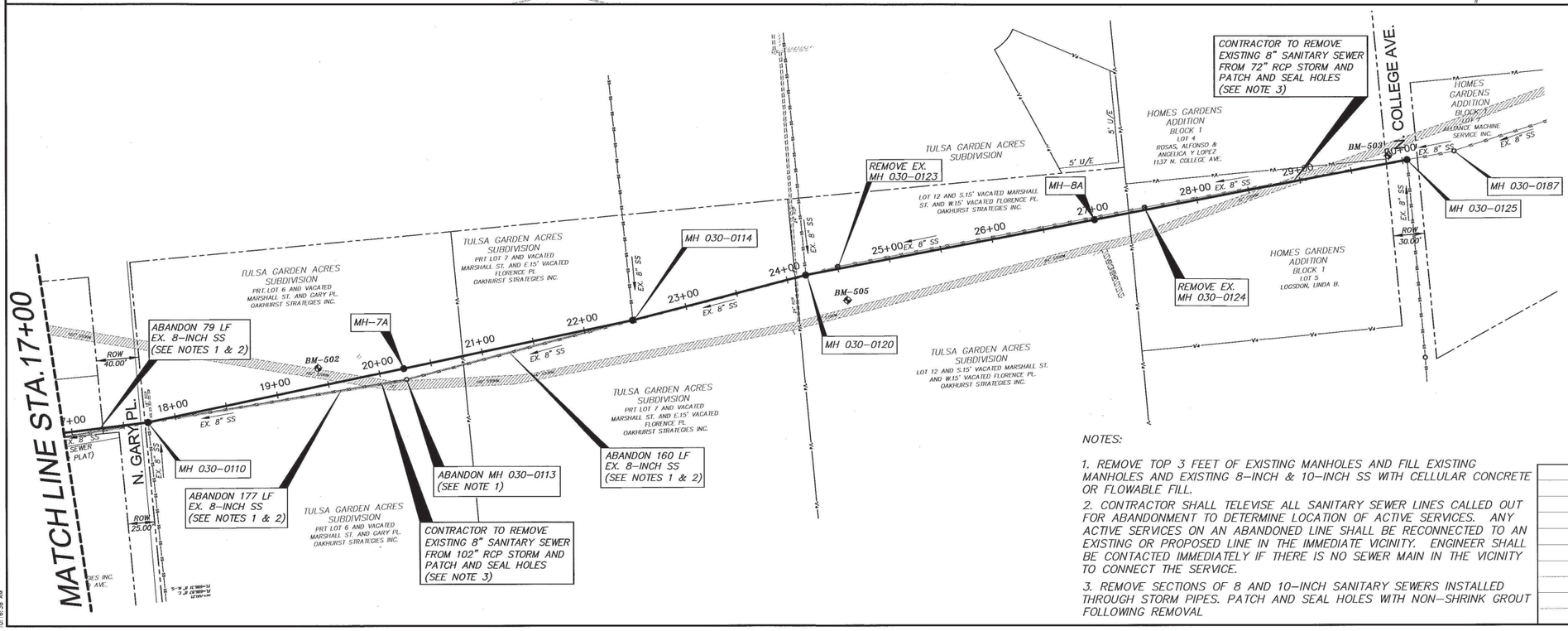
CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

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

REVISION	BY	DATE

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PROFILE SCALE:	SURVEY	NP	09/2026	
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VERTICAL 1" = 4'	LEAD ENGR.		9/26	DESIGN MANAGER
	FIELD MGR.		10/26	
FILE:	DRAWING:			DATE: September 2026
ATLAS PAGE NO: 49				SHEET 21 OF 24 SHEETS





NOTES:

1. REMOVE TOP 3 FEET OF EXISTING MANHOLES AND FILL EXISTING MANHOLES AND EXISTING 8-INCH & 10-INCH SS WITH CELLULAR CONCRETE OR FLOWABLE FILL.
2. CONTRACTOR SHALL TELEVISE ALL 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 LINE IN THE IMMEDIATE VICINITY. ENGINEER SHALL BE CONTACTED IMMEDIATELY IF THERE IS NO SEWER MAIN IN THE VICINITY TO CONNECT THE SERVICE.
3. REMOVE SECTIONS OF 8 AND 10-INCH SANITARY SEWERS INSTALLED THROUGH STORM PIPES. PATCH AND SEAL HOLES WITH NON-SHRINK GROUT FOLLOWING REMOVAL

REVISION	BY	DATE

9-25-26
LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

ABANDONMENT PLAN

TMUA PROJECT NUMBER ES 2024-01

COAL CREEK REHABILITATION AND RELIEF, FY24

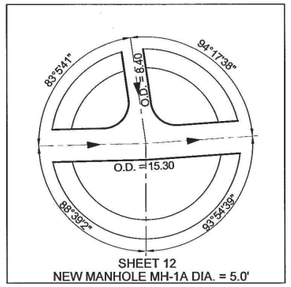
CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

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4500 S. GARNETT ROAD SUITE 110, TULSA, OKLAHOMA 74146

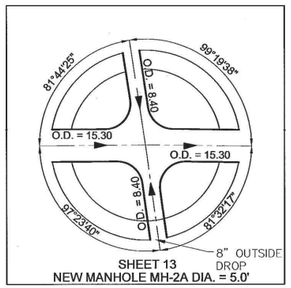
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	DESIGNED	JWB	09/2026	
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	LEAD ENGR.		9/26	
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FILE:	DRAWING:			DATE: September 2026
ATLAS PAGE NO: 48,49				SHEET 22 OF 24 SHEETS

T:\TULSA\PROJECTS\30-4076-00 ES 2024-01 COAL CREEK REHAB AND RELIEF FY24\CADD\DRAWINGS\ES 2024-01 COAL CREEK REHAB & RELIEF, FY24\DRAWINGS\(22) ABANDONMENT PLAN.DWG
Friday, September 26, 2026
8:29 AM

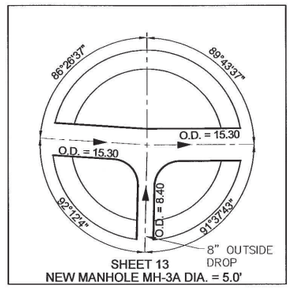
NEW & REPLACEMENT MANHOLES LINE A



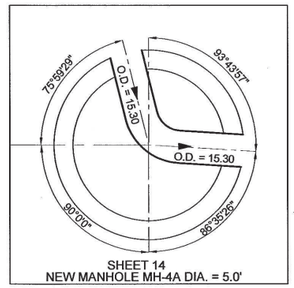
SHEET 12
NEW MANHOLE MH-1A DIA. = 5.0'



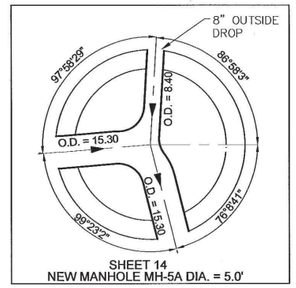
SHEET 13
NEW MANHOLE MH-2A DIA. = 5.0'



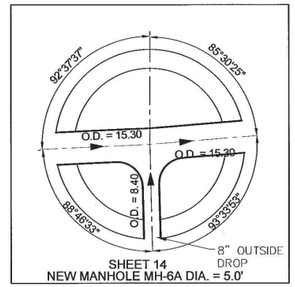
SHEET 13
NEW MANHOLE MH-3A DIA. = 5.0'



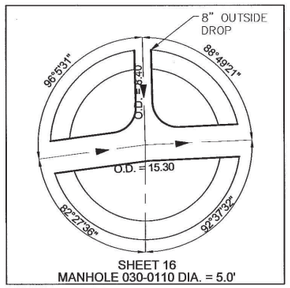
SHEET 14
NEW MANHOLE MH-4A DIA. = 5.0'



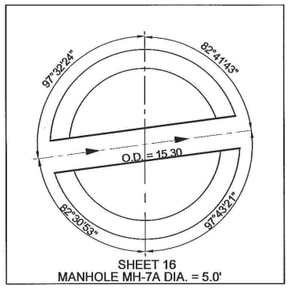
SHEET 14
NEW MANHOLE MH-5A DIA. = 5.0'



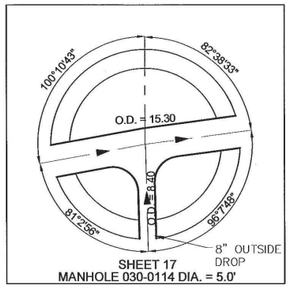
SHEET 14
NEW MANHOLE MH-6A DIA. = 5.0'



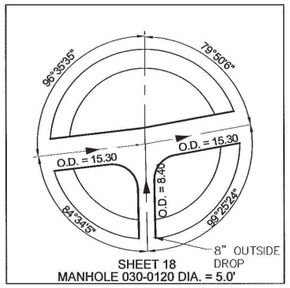
SHEET 16
MANHOLE 030-0110 DIA. = 5.0'



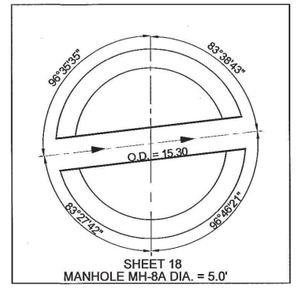
SHEET 16
MANHOLE MH-7A DIA. = 5.0'



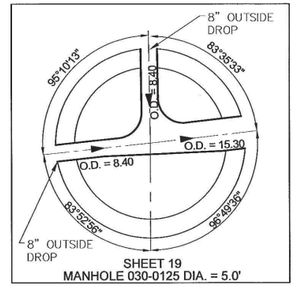
SHEET 17
MANHOLE 030-0114 DIA. = 5.0'



SHEET 18
MANHOLE 030-0120 DIA. = 5.0'

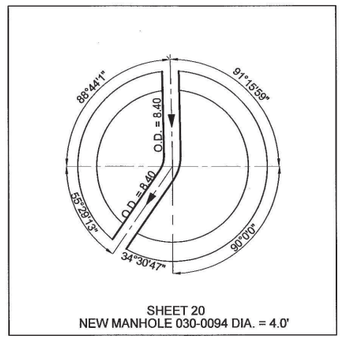


SHEET 18
MANHOLE MH-8A DIA. = 5.0'

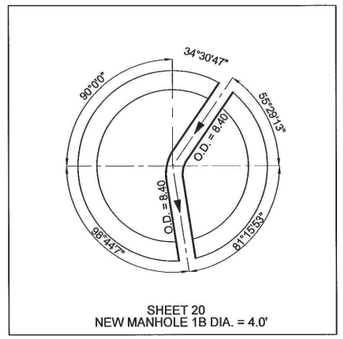


SHEET 19
MANHOLE 030-0125 DIA. = 5.0'

NEW & REPLACEMENT MANHOLE LINE B

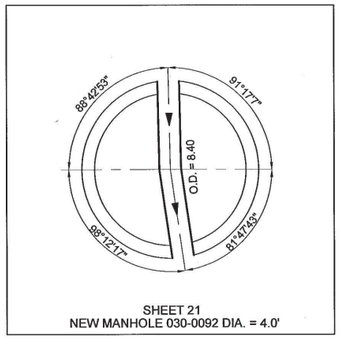


SHEET 20
NEW MANHOLE 030-0094 DIA. = 4.0'



SHEET 20
NEW MANHOLE 1B DIA. = 4.0'

NEW & REPLACEMENT MANHOLE LINE C



SHEET 21
NEW MANHOLE 030-0092 DIA. = 4.0'

9-25-26
LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

MANHOLE LAYOUT

TMUA PROJECT NUMBER ES 2024-01

COAL CREEK REHABILITATION AND RELIEF, FY24

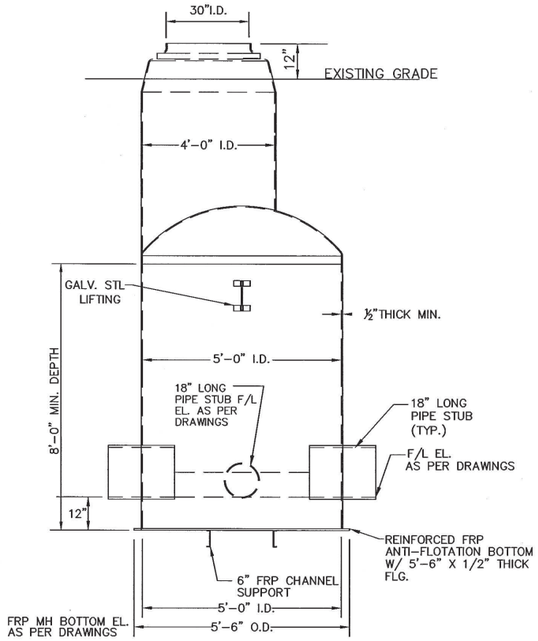
CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

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

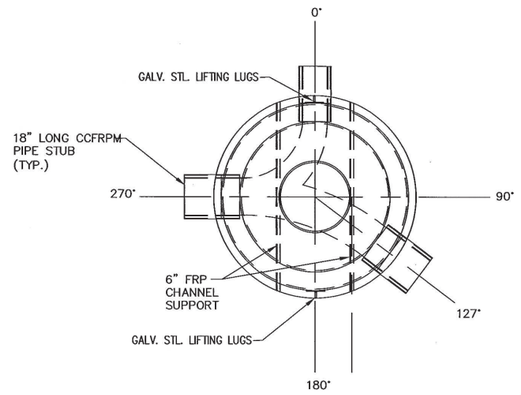
REVISION	BY	DATE

PLAN SCALE: NA	DRAWN	RLP	09/2026	APPROVED:
	DESIGNED	JWB	09/2026	
PROFILE SCALE:	SURVEY	NP	09/2026	
HORIZONTAL: NA	PROJ. MGR.			
	LEAD ENGR.		9/26	
VERTICAL NA	FIELD MGR.		10/26	DESIGN MANAGER
FILE:	DRAWING:			DATE: September 2026
ATLAS PAGE NO:				SHEET 23 OF 24 SHEETS

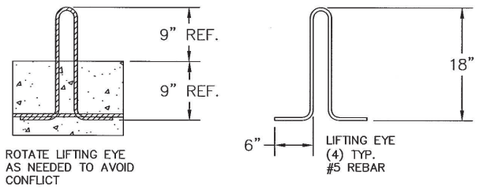
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Friday, September 25, 2026
9:09:29 AM



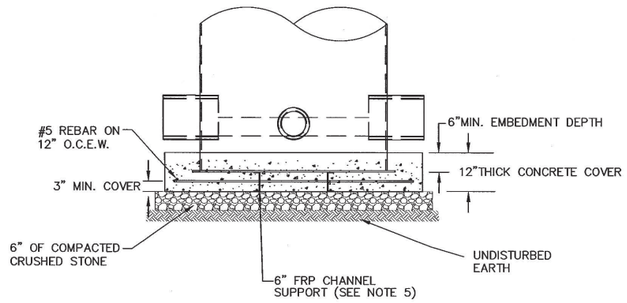
5'-0" ID FRP MANHOLE DETAIL
N.T.S.

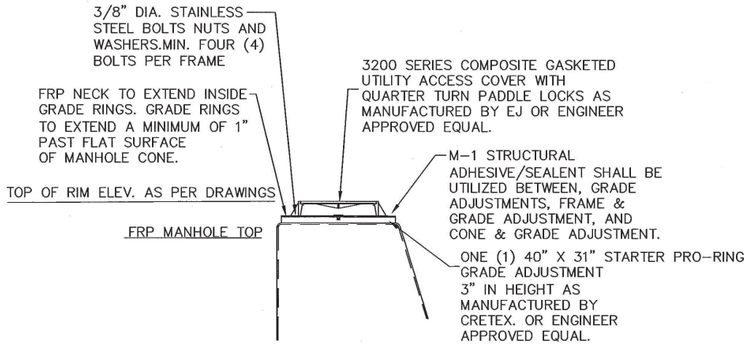


5' - ID FRP MANHOLE PLAN DETAIL
N.T.S.

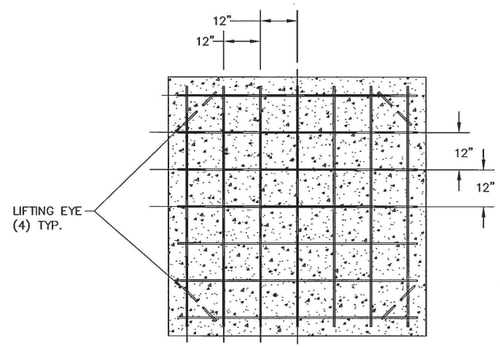


FRP LIFTING EYE DETAIL
N.T.S.



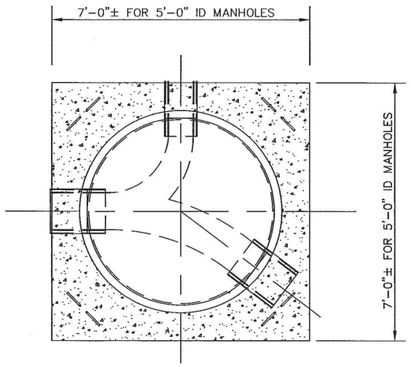


FRP GRADE RING DETAIL
N.T.S.

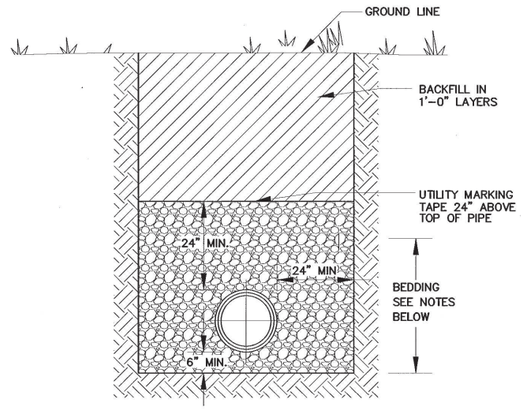


VIEW A-A

FRP MANHOLE CONCRETE CONCRETE BASE DETAIL
N.T.S.



CONCRETE BASE:
MIN. 12" THICK X 12" FROM OUTSIDE WALL OF FRP MANHOLE.
MIN. 5,000 PSI CONCRETE SLAB W/ #5 REBAR ON 12" O.C.E.W.
ALL SIZING AND DIMENSIONS OF CONCRETE BASE SHALL BE IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.



TRENCH CROSS-SECTION

1. COMPACTION TEST LOCATIONS WILL BE DETERMINED BY THE CITY AND AT LEAST TWO (2) TESTS ON RANDOM LIFTS SHALL BE CARRIED OUT FOR EACH 1000 LINEAR FEET OF PIPE AS A MINIMUM.
2. IF ANY COMPACTION TEST RESULTS ARE UNSATISFACTORY, THE CONTRACTOR SHALL RE-EXCAVATE AND RE-COMPACT THE BACKFILL AT ITS EXPENSE UNTIL THE DESIRED COMPACTION IS OBTAINED.
3. BEDDING ZONE MATERIAL SHALL BE COMPACTED 3/4-INCH TO NO.4 CLEAN CRUSHED STONE (ASTM C33 NO.57 OR NO.67), PLACED IN 12-INCH MAX LOOSE LIFTS AND FREE FROM ORGANIC MATTER, TRASH, AND OTHER DELETERIOUS MATERIALS. SHOVEL SLICING IS REQUIRED FOR COMPACTION UNDERNEATH PIPE HAUNCHES.
4. BACKFILL SHALL BE SUITABLE NATIVE MATERIAL OR IMPORTED MATERIAL APPROVED BY OR APP ROCTOs ENGINEER, PLACED IN 12-INCH MAX LOOSE LIFTS COMPACTED TO 90% STANDARD PROCTOR DENSITY AS DETERMINED BY ASTM D698 AND AASHTO T99, AND FREE FROM ORGANIC MATTER, TRASH, AND OTHER DELETERIOUS MATERIALS. ROCKS LARGER THAN 3 INCHES SHALL NOT BE ALLOWED WITHIN 15 INCHES BELOW FINISHED GRADE OR WITHIN 18 INCHES ABOVE THE PIPE CROWN

PVC PIPE BEDDING DETAIL
N.T.S.

9-25-26
LICENSED PROFESSIONAL ENGINEER
JACOB BRUMBAUGH
33769
OKLAHOMA

FRP MANHOLE & PIPE BEDDING DETAILS

TMUA PROJECT NUMBER ES 2024-01

COAL CREEK REHABILITATION AND RELIEF, FY24

CITY OF TULSA, OKLAHOMA
WATER AND SEWER DEPARTMENT

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

REVISION	BY	DATE

PLAN SCALE: 1" = 20'	DRAWN	RLP	09/2026	APPROVED:
	DESIGNED	JWB	09/2026	
PROFILE SCALE:	SURVEY			
HORIZONTAL: 1" = 20'	PROJ. MGR.			
VERTICAL 1" = 4'	LEAD ENGR.		9/26	DESIGN MANAGER
	FIELD MGR.		10/16	
FILE:	DRAWING:			DATE: September 2026
ATLAS PAGE NO:				SHEET 24 OF 24 SHEETS

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Friday, September 25, 2026
7:50:37 AM