

SURVEY DATUM

HORIZONTAL CONTROL: OKLAHOMA STATE PLANE COORDINATE SYSTEM
NAD 1983 (2011)
VERTICAL CONTROL: NAVD 1988
SCALE FACTOR: 0.9999151988

Symbol Legend

	- Electric Meter
	- Gas Meter
	- Gas Valve
	- Irrigation Control Valve
	- Water Meter
	- Water Valve
	- Water Valve Vault
	- Blowoff Hydrant Assembly
	- Fire Hydrant
	- Storm Sewer Manhole
	- Sanitary Sewer Manhole
	- Communication Manhole
	- Cleanout
	- Power Pole
	- Guy Anchor
	- Light Pole
	- Traffic Signal Pole
	- Telephone Pedestal
	- Sign
	- Mailbox
	- Bench Mark
	- Boring
	- Survey Control Point
	- Property Pin
	- Deciduous Tree
	- Deciduous Tree
	- Coniferous Tree
	- Bush
	- Treeline
	- Corrugated Metal Pipe
	- Reinforced Concrete Pipe
	- Existing Electric
	- Telephone Underground
	- Existing Natural Gas Line
	- Existing Water Line
	- Existing Stormwater Line
	- Sanitary Sewer Line
	- Property Line
	- Ditch Line/Swale
	- Fence Line
	- Right-Of-Way (ROW)
	- Existing Utility Line Easement
	- Survey Basement Line (S.B.L.)
	- Flood Plain Boundary

UTILITY COORDINATION	
UTILITY/DEPARTMENT	NUMBER
OKLAHOMA ONE-CALL SYSTEM, INC.	1-800-522-6543
ENGINEERING SERVICES	
WATER DESIGN	918-596-9566
WASTEWATER DESIGN	918-596-9564
TRANSPORTATION DESIGN	918-596-9636
TRAFFIC ENGINEERING DESIGN	918-596-9741
COT TRAFFIC ENGINEER	918-596-9749
STORMWATER DESIGN	918-596-9498
CITY OF TULSA-WATER AND SEWER	918-596-9560
CITY OF TULSA-TRAFFIC OPERATIONS	918-596-9766
UTILITY COORDINATOR: CHRIS KOVAC	918-596-9649
OKLAHOMA NATURAL GAS - JONATHON MEADOWS	918-831-8215
AT&T-AL NICHOLS	918-596-4237
AEP/PSO - ADAM FIELDS	918-250-6257
COX COMMUNICATIONS - BRANDON WADE	918-286-4716
MCIVERIZON	918-590-2160
EASYTEL COMMUNICATIONS	
WELLSCO VALLOR TELECOM	918-451-3441



GOVERNING SPECIFICATIONS:
CURRENT CITY OF TULSA STANDARD CONSTRUCTION SPECIFICATIONS AND STANDARD DETAILS GOVERN. ALL OTHER CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE 2019 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

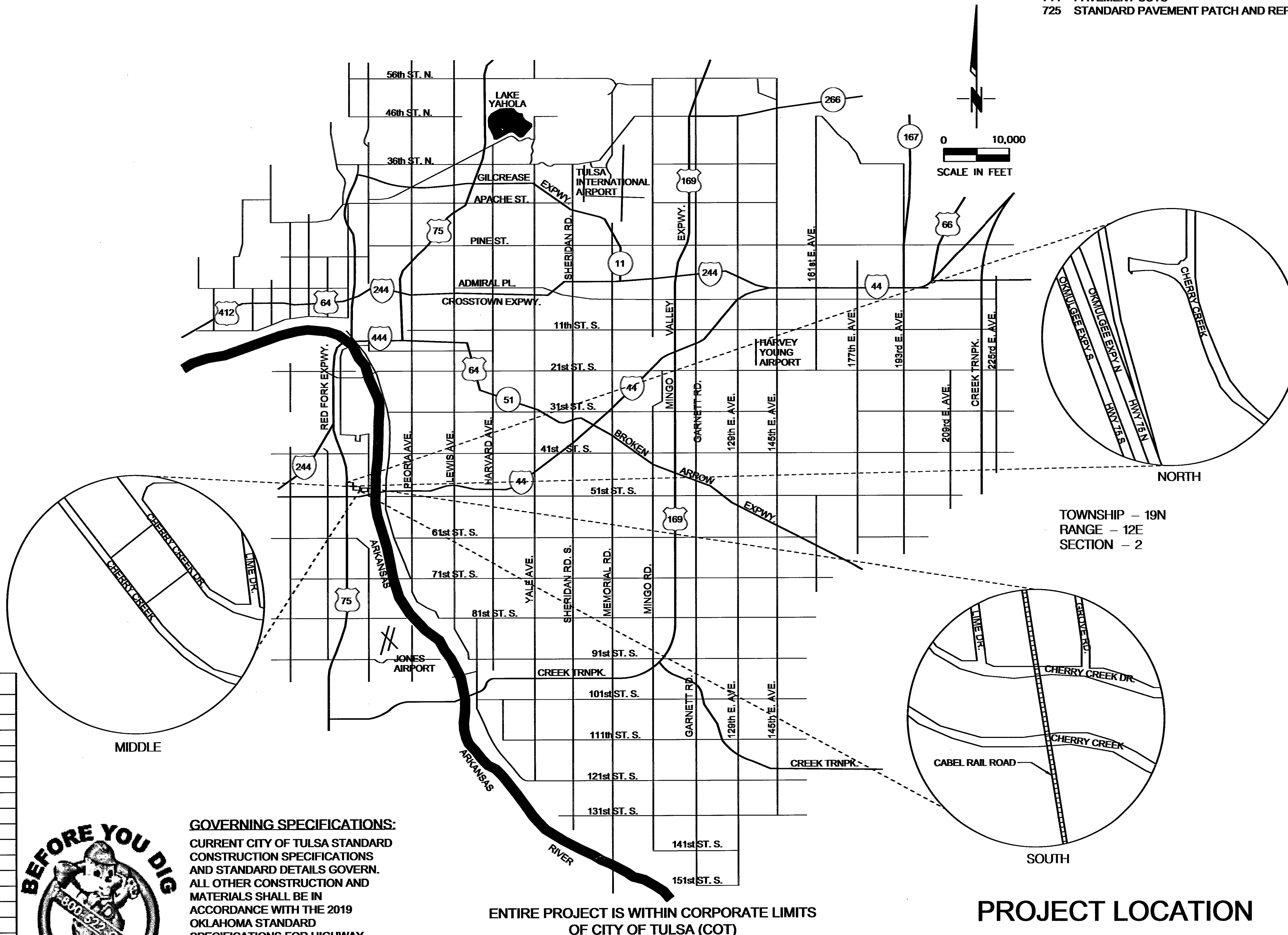
THIS PROJECT COMPLIES WITH ALL OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ) REQUIREMENTS

CONSTRUCTION PLANS FOR CHERRY CREEK CHANNEL LINING RECONSTRUCTION

PROJECT NO. SW-2020-01-07-TO4
ACCOUNT NO. 5603113-531105,
2131F0005Z STRMSEWER. 56003122-541101
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

THE FOLLOWING CITY OF TULSA STANDARDS
102 PROJECT SIGN
713 PAVEMENT REMOVAL AND REPLACEMENT
714 PAVEMENT CUTS
725 STANDARD PAVEMENT PATCH AND REPAIR

THE FOLLOWING OKLAHOMA
DEPARTMENT OF TRANSPORTATION
STANDARDS
TSD-0 TEMPORARY SILT DIKE
LECS-5-1 JOINTS AND SEALERS- LONGITUDINAL,
EXPANSION/ISOLATION & CONTRACTION
TCS19-1 TRAFFIC CONTROL STANDARD
CONSTRUCTION SIGNS



PROJECT LOCATION



APPROVED BY

CITY OF TULSA ENGINEERING
SERVICES DIVISION

CITY ENGINEER

06-06-22
DATE

June 2022
ADVISE DATE

PREPARED BY

CGA ENGINEERS, INC.
8179 E 41st ST.
TULSA, OKLAHOMA 74145
PHONE: (918) 749-5800
FAX: (918) 749-5858



C.A. No.: 1371 - Expires: 6/30/22

DWAIN M. GARNER, P.E.
OKLAHOMA REG. P.E. NO. 18300
DATE 4/18/2022



GENERAL CONSTRUCTION NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE 2019 OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND THE CURRENT CITY OF TULSA ENGINEERING SERVICES DEPARTMENT'S STANDARD SPECIFICATIONS AND STANDARD DETAILS AND STANDARD DRAWINGS AND CITY OF TULSA SPECIAL PROVISIONS.
2. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS GOVERNING SAFETY, HEALTH AND SANITATION. THE CONTRACTOR SHALL PROVIDE ALL SAFEGUARDS, SAFETY DEVICES AND PROTECTIVE EQUIPMENT, AND TAKE ANY OTHER NEEDED ACTION ON AS HIS OWN RESPONSIBILITY OR AS THE ENGINEER MAY DETERMINE REASONABLY NECESSARY TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACT.
3. PAY ITEMS SHALL BE AS SPECIFIED ON THE CITY OF TULSA OR ON THE ODOT STANDARD DRAWINGS EXCEPT AS MODIFIED BY THE CONTRACT.
4. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK IN EACH AREA. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM HIS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UTILITIES.
5. THE LOCATIONS OF THE UTILITIES ARE SHOWN ACCORDING TO ALL AVAILABLE INFORMATION. THE CONTRACTOR SHALL NOTIFY EACH UTILITY OWNER PRIOR TO COMMENCEMENT OF WORK TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS. THE FOLLOWING IS A LIST OF UTILITY OWNERS: AT&T, PUBLIC SERVICE COMPANY OF OKLAHOMA (AEP), OKLAHOMA NATURAL GAS (ONG), COX COMMUNICATIONS, MCIVERIZON, EASYTEL COMMUNICATIONS, WELLSCO VALLOR TELECOM, CITY OF TULSA-WATER AND SEWER, CITY OF TULSA-TRAFFIC OPERATIONS. SEE TITLE SHEET FOR CONTACT INFORMATION.
6. THE CONTRACTOR SHALL GIVE THE NOTIFICATION CENTER OF OKLAHOMA ONE-CALL SYSTEM, INC. NOTICE OF ANY EXCAVATION NO SOONER THAN TEN DAYS NOR LATER THAN 48 HOURS, EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS, PRIOR TO THE COMMENCEMENT OF WORK. PHONE 1-800-522-6543.
7. THE CONTRACTOR SHALL TAKE REASONABLE PRECAUTIONS TO PREVENT EXCESS MOISTURE FROM INCLEMENT WEATHER OR OTHER SOURCES FROM ENTERING ANY STREET EXCAVATION. IF EXCESS MOISTURE DOES ENTER THE EXCAVATION THROUGH THE NEGLIGENCE OF THE CONTRACTOR AND THE ADJOINING PAVEMENT IS ADVERSELY EFFECTED BY THE EXCESS MOISTURE, THE CONTRACTOR SHALL REPLACE THE ADJOINING PAVEMENT AND SUBBASE AT HIS SOLE EXPENSE.
8. THE CONTRACTOR SHALL PRESERVE THE INTEGRITY OF THE SANITARY SEWER STRUCTURES AND ALL OTHER UTILITY STRUCTURES WITHIN THE PROJECT EXTENTS.
9. THE CONTRACTOR SHALL WORK IN COOPERATION WITH THE CITY OF TULSA TO ESTABLISH, INSTALL, MAINTAIN, AND OPERATE COMPLETE, ADEQUATE, AND SAFE TRAFFIC CONTROLS DURING THE ENTIRE CONSTRUCTION PERIOD. ALL FLAGMEN, BARRICADES, AND TRAFFIC CONTROL DEVICES SHALL BE APPROVED BY THE FIELD ENGINEERING REPRESENTATIVE.
10. CONSTRUCTION SIGNAGE WILL BE INSTALLED IN A MANNER APPROVED BY THE ENGINEER, IN ACCORDANCE WITH CHAPTER VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, AND APPLICABLE ODOT STANDARD DRAWINGS. THE CONTRACTOR SHALL PROVIDE A PROPOSED TRAFFIC CONTROL PLAN FOR APPROVAL BY THE ENGINEER PRIOR TO BEGINNING WORK.
11. THE CONTRACTOR SHALL NOTIFY THE CITY OF TULSA FIELD ENGINEERING, 918-596-9404, A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK OR PRIOR TO REMOVING TRAFFIC SIGNS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ALL EXISTING TRAFFIC SIGNS AND MARKINGS REMOVED OR DAMAGED AS LISTED IN THE SIGNAGE SCHEDULE FOR THE PROJECT. ALL SIGNS AND POLES PROVIDED SHALL BE NEW AND UNDAMAGED AND SHALL MEET THE REQUIREMENTS OF COT SPECIFICATION 608 TRAFFIC SIGNS. ALL TRAFFIC MATERIALS REMOVED SHALL BE HANDLED PER COT SPECIFICATION 625 REMOVAL OF TRAFFIC ITEMS.
13. THE CONTRACTOR WILL BE RESPONSIBLE FOR PREPARATION AND DISTRIBUTION OF A WRITTEN NOTICE TO RESIDENTS 48 HOURS PRIOR TO BEGINNING PAVEMENT REMOVAL AND MILLING AND OVERLAY OPERATIONS.
14. LOCAL AND THROUGH TRAFFIC SHALL BE MAINTAINED THROUGH THE PROJECT AT ALL TIMES.
15. ALL PUBLIC AND PRIVATE STREETS AND DRIVES SHALL BE ACCESSIBLE AT ALL TIMES.
16. ALL BROKEN CONCRETE, WASTE MATERIAL, AND OTHER DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE LIMITS OF THE PROJECT AND DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER. NO ADDITIONAL PAYMENT WILL BE MADE FOR THE DISPOSAL OF THIS MATERIAL.
17. ALL EXCAVATED MATERIAL NOT REQUIRED IN THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY THE CONTRACTOR IN A MANNER ACCEPTABLE TO THE ENGINEER WITHOUT COST TO THE CITY. THE CONTRACTOR WILL BE REQUIRED TO OBTAIN AN EARTH CHANGE PERMIT IF ANY MATERIAL IS STORED ON THE PROJECT SITE AND/OR DISPOSED OF WITHIN THE CITY LIMITS.
18. ALL TREES, BRUSH AND OTHER DEBRIS THAT MIGHT INTERFERE WITH THE FLOW OF WATER IS TO BE CLEANED OUT TO THE RIGHT-OF-WAY LINE IN A MANNER APPROVED BY THE ENGINEER. ALL COST TO BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF WORK. TREES OUTSIDE THE FILL SLOPES AND THE TOP OF CUT SLOPES SHALL NOT BE DISTURBED EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.
19. WHERE MATERIALS ARE TRANSPORTED IN THE PROSECUTION OF WORK, VEHICLES SHALL NOT BE LOADED BEYOND THE CAPACITY RECOMMENDED BY THE VEHICLE MANUFACTURER OR AS PRESCRIBED BY ANY FEDERAL, STATE OR LOCAL LAW OR REGULATION.
20. ANY DAMAGE TO THE ROADWAY PAVEMENT, CURB, DRIVEWAYS OR SIDEWALK CAUSED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED TO THE ENGINEER'S SATISFACTION AND SHALL BE ACCOMPLISHED AT THE CONTRACTOR'S SOLE EXPENSE. ALL DISTURBED ITEMS SHALL BE REPAIRED TO MATCH EXISTING MATERIALS AND PATTERNING.
21. IF THE CONTRACTOR ENCOUNTERS VOIDS WHEN PATCHING STREETS, THE CONTRACTOR SHALL CALL FIELD ENGINEERING AT 918-596-7814 FOR AN INSPECTION BEFORE PROCEEDING WITH WORK.
22. THE PROJECT SHALL BE CONSTRUCTED WITH CONTINUOUS FLOW OF MATERIAL SUPPLIED TO THE PROJECT SUCH THAT THE LAYDOWN MACHINE WILL REMAIN IN MOTION. ANY DELAY IN FORWARD PROGRESSION OF THE LAYDOWN MACHINE MAY REQUIRE A TRANSVERSE JOINT AS DIRECTED BY THE ENGINEER.
23. NO FLY ASH IS ALLOWED TO BE USED ON THIS PROJECT.
24. PHYSICAL TESTING FOR QUALITY ASSURANCE SHALL BE FURNISHED BY THE CITY.
25. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY QUALITY CONTROL TESTING TO ENSURE THAT PROJECT REQUIREMENTS ARE MET.
26. MASONRY STRUCTURES SHALL NOT BE CONSTRUCTED WITHIN THE STREET RIGHT-OF-WAY.
27. ALL CONCRETE CURB AND GUTTERS SHALL BE MONOLITHIC POURS. DOWELED-ON CURBS WILL NOT BE ALLOWED.
28. NO LIFTING HOLES WILL BE ALLOWED ON ANY REINFORCED CONCRETE PIPES OR REINFORCED CONCRETE BOXES.
29. CURB RAMP CONSTRUCTION SHALL COMPLY WITH THE CURRENT AMERICANS WITH DISABILITIES ACT STANDARDS.
30. 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.
31. ALL SANITARY AND STORM SEWER MANHOLE CASTINGS AND LIDS THAT ARE LOCATED IN THE STREET AND ARE DISTURBED BY THE CONTRACTOR SHALL BE REPLACED WITH NEW LIDS AND CASTINGS AND THE OLD ONES SHALL BE SALVAGED AND DELIVERED TO THE METAL RECYCLE BINS IN THE STOCKROOM AREA AT SEWER OPERATIONS AND MAINTENANCE, 9319 E. 42ND STREET NORTH, BETWEEN THE HOURS OF 7:30 AM AND 3:00 PM MONDAY THROUGH FRIDAY.
32. THE SIGN PLACEMENT STATIONING AND LOCATIONS SHOWN ON THE PLAN SHEETS AND SUMMARY SHEETS ARE APPROXIMATE. EXACT STATIONING AND LOCATIONS SHALL BE VERIFIED BY THE CONTRACTOR SO THAT THE SIGN IS INSTALLED IN ACCORDANCE WITH CITY OF TULSA STANDARDS, CURRENT AMERICANS WITH DISABILITIES ACT STANDARDS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES IN ORDER TO PROVIDE OPTIMUM VISIBILITY TO THE ONCOMING/APPROACHING MOTORIST. IF A PROPOSED LOCATION CONFLICTS WITH OTHER SIGNS, UTILITIES, OR OTHER ROADWAY FEATURES, THE ENGINEER SHALL BE NOTIFIED.
33. POST LENGTHS SHOWN ON SIGN SUMMARY ARE APPROXIMATE. EXACT LENGTHS SHALL BE DETERMINED BY A FIELD SURVEY CONDUCTED BY THE CONTRACTOR.
34. ALL ASPHALT STREETS THAT ARE TO BE RECONSTRUCTED SHALL BE LEFT WITH A DRIVABLE SURFACE AT ALL TIMES. THE CONTRACTOR WILL NOT BE ALLOWED TO MILL OFF ALL THE ASPHALT BEFORE EXCAVATION BEGINS.
35. THE CONTRACTOR SHALL REPLACE ANY SECTION CORNERS OR OTHER PERMANENT RIGHT OF WAY MARKERS REMOVED OR DISTURBED AS A RESULT OF THE CONSTRUCTION OF THIS PROJECT. REPLACEMENT OF SECTION CORNERS OR ANY OTHER MONUMENTS SHALL BE PERFORMED BY A LICENSED LAND SURVEYOR AUTHORIZED TO PERFORM WORK IN THE STATE OF OKLAHOMA.
36. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL AND MAINTENANCE OF THE STORMWATER DRAINAGE. STORMWATER PONDING ON THE CONSTRUCTION SITE THAT IS THE RESULT OF CONSTRUCTION WILL NOT BE ALLOWED.
37. STRAW OR HAY BALES AS STORMWATER BEST MANAGEMENT PRACTICES ARE NO LONGER ALLOWED ON CONSTRUCTION PROJECTS.
38. THE CONTRACTOR MUST CALL 1-800-458-4251 IMMEDIATELY IF A NATURAL GAS PIPELINE IS CUT, DAMAGED, OR OTHERWISE DISTURBED.
39. PRIOR TO FINAL ACCEPTANCE, ALL EXPOSED CURB SURFACES SHALL BE CLEANED OF ALL DISCOLORATION SUCH AS ASPHALT STAIN, TIRE MARKS, OR OTHER DISFIGUREMENT.

40. ALL FEATURES OF THIS PROJECT INCLUDING, BUT NOT LIMITED TO, SIDEWALKS, CURB RAMPS, AND CROSSWALKS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT, ACCESSIBILITY GUIDELINES, AND THE PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY, PUBLISHED ON JULY 26, 2011 BY THE U.S. ACCESS BOARD. WHERE SPATIAL LIMITATIONS OR EXISTING FEATURES WITHIN THE LIMITS OF THE PROJECT PREVENT FULL COMPLIANCE WITH THIS ACT, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER UPON DISCOVERY OF SUCH FEATURES. THE CONTRACTOR SHALL NOT PROCEED WITH ANY ASPECT OF THE WORK, WHICH IS NOT IN FULL COMPLIANCE WITH THE ADA WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER. ANY WORK, WHICH IS NOT PERFORMED WITHIN THE GUIDELINES OF THE ADA, FOR WHICH THE CONTRACTOR DOES NOT HAVE WRITTEN APPROVAL, SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
41. ALL TRENCH WIDTHS & BEDDING MATERIAL SHALL BE AS SHOWN ON COT STANDARD PIPE BEDDING DETAIL, STANDARD NO. 751. SPECIFIED TRENCH WIDTHS SHALL BE MAINTAINED FULL DEPTH FROM THE FLOWLINE TO THE GRADING TEMPLATE. THE CONTRACTOR SHALL KEEP THE OPEN TRENCH DRAINED.
42. THE CONTRACTOR SHALL NOTIFY THE METROPOLITAN TULSA TRANSIT AUTHORITY (MTTA), ERIC SMITH 918-830-0024, A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK, LANE CLOSURES OR PRIOR TO DETOURING TRAFFIC.
43. CONTRACTOR SHALL NOT STORE EQUIPMENT OR MATERIALS IN THE FLOODPLAIN.
44. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ALL EXISTING NEIGHBORHOOD, MTTA, ALERT NEIGHBORS, ETC. TRAFFIC SIGNS AND MARKINGS REMOVED OR DAMAGED AS PART OF THIS PROJECT.

ADDITIONAL PEDESTRIAN TRAFFIC CONTROL NOTES:

1. WHEN IT IS NOT POSSIBLE TO MAINTAIN A MINIMUM WIDTH OF 60 INCHES THROUGHOUT THE ENTIRE LENGTH OF THE PEDESTRIAN PATHWAY, A 60 X 60-INCH PASSING SPACE SHOULD BE PROVIDED AT LEAST EVERY 200 FEET TO ALLOW INDIVIDUALS IN WHEELCHAIRS TO PASS.
2. BARRICADE RAIL SUPPORTS SHOULD NOT PROJECT INTO PEDESTRIAN CIRCULATION ROUTES MORE THAN 4 INCHES FROM THE SUPPORT BETWEEN 27 AND 80 INCHES FROM THE SURFACE AS DESCRIBED IN SECTION 4.4.1 OF THE "AMERICANS WITH DISABILITIES ACT ACCESSIBLY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG)".
3. LONGITUDINAL CHANNELIZING DEVICES MAY BE USED FOR PEDESTRIAN TRAFFIC CONTROL. IF USED FOR PEDESTRIAN TRAFFIC CONTROL, LONGITUDINAL CHANNELIZING DEVICES SHALL BE INTERLOCKED TO DELINEATE OR CHANNELIZE FLOW. THE INTERLOCKING DEVICES SHALL NOT HAVE GAPS THAT ALLOW PEDESTRIANS TO STRAY FROM THE CHANNELIZING PATH. LONGITUDINAL CHANNELIZING DEVICES HAVE NOT MET THE CRASHWORTHY REQUIREMENTS FOR TEMPORARY TRAFFIC BARRIERS AND SHOULD NOT BE USED TO SHIELD OBSTACLES OR PROVIDE POSITIVE PROTECTION FOR PEDESTRIANS OR WORKERS.
4. SIGN POST MINIMUM HEIGHT: THE MINIMUM HEIGHT, MEASURED VERTICALLY FROM THE BOTTOM OF THE SIGN TO THE TOP OF THE CURB, OR IN THE ABSENCE OF CURB, MEASURED VERTICALLY FROM THE BOTTOM OF THE SIGN TO THE ELEVATION OF THE NEAR EDGE OF THE TRAVELED WAY, OF SIGNS INSTALLED AT THE SIDE OF THE ROAD IN BUSINESS, COMMERCIAL, OR RESIDENTIAL AREAS WHERE PARKING OR PEDESTRIAN MOVEMENTS ARE LIKELY TO OCCUR, OR WHERE THE VIEW OF THE SIGN MIGHT BE OBSTRUCTED, SHALL BE 7 FEET.
5. BARRICADES USED TO CHANNELIZE PEDESTRIANS SHALL BE CONTINUOUS DETECTABLE BOTTOM AND TOP NAIL.

PAY ITEM NOTES

ENGINEERING SERVICES - TRANSPORTATION DESIGN
PAY ITEM NOTES (VERSION: 11/14/2018)

EARTHWORK / EROSION CONTROL / SITE PREPARATION (E1 - E11)

- E-2: ALL EXISTING DRAINAGE STRUCTURES SHALL BE CLEANED AND CLEARED OF ALL SEDIMENTATION AND DEBRIS TO THE RIGHT OF WAY. COST OF CLEARING SHALL BE INCLUDED IN THE PRICE BID.
- E-3: THE CONTRACTOR SHALL BE PAID FOR UNCLASSIFIED EXCAVATION ON THE BASIS OF PLAN QUANTITY. ANY ADDITIONAL EXCAVATION REQUIRED OR OVERRUN OF PLAN QUANTITY WILL BE PAID FOR ON THE BASIS OF UNIT PRICE BID FOR THE ITEM. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SURVEY TO VERIFY ANY ADDITIONAL QUANTITIES.
- E-4: UNCLASSIFIED EXCAVATION INCLUDES REMOVAL OF AGGREGATE BASE AND MODIFIED SUBGRADE UNDER EXISTING PAVEMENT TO BE REPAIRED.
- E-6: 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.
- E-7: EROSION PROTECTION SHALL BE PLACED AS FOLLOWS:
A) AROUND INLETS TO PREVENT INFLOW OF ERODED MATERIAL INTO STORM SEWER SYSTEM;
B) IN LOCATIONS THROUGHOUT PROJECT SITE, AS DETERMINED BY THE ENGINEER, TO PREVENT WASH OF ERODED MATERIAL ONTO ADJACENT PROPERTY;
C) FOR ENTIRE DURATION OF PROJECT, WITH MAINTENANCE AND REPLACEMENTS, AS DIRECTED BY THE ENGINEER;
D) WITH PERIODIC REMOVAL OF SEDIMENT IN ACCORDANCE WITH STORMWATER MANAGEMENT PLAN.
ALL COST FOR ITEMS A-D ABOVE SHALL BE INCLUDED IN UNIT PRICE BID FOR THIS ITEM.

GENERAL (G1 - G11)

- G-1: LOCATIONS TO BE DETERMINED IN THE FIELD AND WORK TO BE PERFORMED AT THE DIRECTION OF THE FIELD ENGINEER. QUANTITY IS ESTIMATED AND MAY BE OMITTED IN ITS ENTIRETY.
- G-2: MAXIMUM OVERALL DOLLAR AMOUNT AND SCHEDULE OF PAYMENTS SHALL BE IN ACCORDANCE SECTION 641 OF THE OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, CURRENT EDITION.
- G-3: CONSTRUCTION STAKING SHALL INCLUDE SURVEYING AND THE FURNISHING, PLACING, AND MAINTAINING OF THE CONSTRUCTION LAYOUT STAKES NECESSARY FOR THE PROPER COMPLETION AND INSPECTION OF THE ENTIRE PROJECT.
- G-4: THE COST TO REPLACE REMOVED OR DAMAGED SECTION CORNERS AND ALL OTHER PERMANENT RIGHT OF WAY MARKERS SHALL BE INCLUDED IN THE PRICE BID FOR THIS ITEM. NO ADDITIONAL PAYMENT WILL BE MADE.

REMOVAL / ADJUSTMENT (R1 - R6)

- R-1: WASTE MATERIAL TO BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE IN A MANNER APPROVED BY THE ENGINEER.
- R-3: PAY ITEM INCLUDES REMOVAL OF ALL STRUCTURES AND OBSTRUCTIONS WITHIN PROJECT LIMITS NOT SPECIFIED BY OTHER ITEMS OF WORK.
- R-5: ITEMS TO BE REMOVED MAY OR MAY NOT BE PRESENT IN ANY SPECIFIED CONDITION.

TRAFFIC (T1 - T9)

- T-1: ALL TRAFFIC MATERIALS REMOVED SHALL BE HANDLED PER COT SPECIFICATION 625 REMOVAL OF TRAFFIC ITEMS.
- T-4: PAYMENT SHALL BE MADE ON A LUMP SUM BASIS ONLY FOR TRAFFIC CONTROL DEVICES THAT ARE PROPERLY INSTALLED AND IN GOOD WORKING ORDER. COSTS FOR DELIVERY, INSTALLATION, RELOCATION, MAINTENANCE REMOVAL AND REPLACEMENT, AS NEEDED AT THE DISCRETION OF THE ENGINEER, INCLUDED IN UNIT PRICE BID.
- T-5: IF WARNING LIGHTS ARE 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.
- T-7: PRICE BID FOR THIS ITEM INCLUDES INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF PROJECT SIGN.
- T-9: INCLUDED IN THIS PAY ITEM IS RAILROAD FLAGGING. THE RAILROAD COMPANY'S REQUIREMENTS FOR FLAGGING AND RIGHT OF ENTRY MAY VARY SIGNIFICANTLY FROM THOSE IMPLIED BY OTHER CONTRACT DOCUMENTS. THE CONTRACTOR SHALL REIMBURSE THE RAILROAD COMPANY DIRECTLY FOR THE COST OF ALL RAILROAD FLAGGING REQUIRED AND PROVIDED BY THE RAILROAD COMPANY FOR WORK ON RAILROAD PROPERTY. THE CONTRACTOR SHALL INCLUDE THE COST OF FLAGGING IN THE CONTRACT UNIT PRICES FOR OTHER RELEVANT PAY ITEMS UNLESS A PAY ITEM FOR RAILROAD FLAGGING IS INCLUDED IN THE PROPOSAL FORMS.

STREETS (S12 - S13)

S-12: THE USE OF FLY-ASH IN CONCRETE IS PROHIBITED.

S-13: INCLUDES ALL COST OF SAWED JOINTS AND SEALING OF ALL JOINTS INCLUDING LONGITUDINAL JOINTS.

SUMMARY OF QUANTITIES TABLE					
ITEM NO.	SPEC. NO.	ITEM DESCRIPTION	PAY ITEM NOTE	BID UNIT	QUANTITY
1	104	RAILROAD FLAGGING (NON BIDDABLE)	T-9	DAY	7
2	202(A)	UNCLASSIFIED EXCAVATION	E-3, E-4, G-11	CY	170
3	220	SWPPP DOCUMENTATION AND MANAGEMENT	E-6, E-7	EA	1
4	221(F)	TEMPORARY SILT DIKE (EROSION CONTROL)	E-2	LF	112
5	303	AGGREGATE NO. 57 STONE		CY	144
6	509 (B)	CLASS A CONCRETE	S-12, S-13	CY	170
7	511(A)	REINFORCING STEEL		LB	11102
8	619(B)	REMOVAL OF TRI LOCK CHANNEL BOTTOM	R-1, R-2, R-3, R-5	SY	751
9	619(C)	SAWING PAVEMENT		LF	572
10	641	MOBILIZATION	G-2	EA	1
11	642	CONTRACTOR CONSTRUCTION STAKING LEVEL II	G-3, G-4	EA	1
12	643	CONTRACTOR'S QUALITY CONTROL		LSUM	1
13	SPECIAL	PROJECT SIGN (CITY OF TULSA)	T-7	EA	1
14	SPECIAL	TEMPORARY TRAFFIC CONTROL	T-1, T-4, T-5	LSUM	1
15	SPECIAL	QUICK SET FLOWABLE FILL	G-1	CY	12
16	SPECIAL	OWNER ALLOWANCE	G-1	EA	1

ADD ALTERNATE 1 NORTH AREA					
ITEM NO.	SPEC. NO.	ITEM DESCRIPTION	PAY ITEM NOTE	BID UNIT	QUANTITY
1	202(A)	UNCLASSIFIED EXCAVATION	E-3, E-4, G-11	CY	23
2	303	AGGREGATE NO. 57 STONE		CY	17
3	509 (B)	CLASS A CONCRETE	S-12, S-13	CY	23
4	511(A)	REINFORCING STEEL		LB	1831
5	619(B)	REMOVAL OF TRI LOCK CHANNEL BOTTOM	R-1, R-2, R-3, R-5	SY	100
6	619(B)	REMOVAL OF CONCRETE CHANNEL BOTTOM	R-1, R-2, R-3, R-5	SY	11
7	619(C)	SAWING PAVEMENT		LF	134
8	SPECIAL	QUICK SET FLOWABLE FILL	G-1	CY	2
9	221(F)	TEMPORARY SILT DIKE (EROSION CONTROL)	E-2	LF	86

45. IN ACCORDANCE WITH DIVISIONAL GENERAL SPECIFICATIONS PART 111 DEWATERING, ALL DEWATERING WILL NOT BE MEASURED AND PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN OTHER ITEMS OF WORK.



GENERAL CONSTRUCTION NOTES

PROJECT NO. SW-2020-01-07-TO4

CHERRY CREEK CHANNEL
LINING RECONSTRUCTION

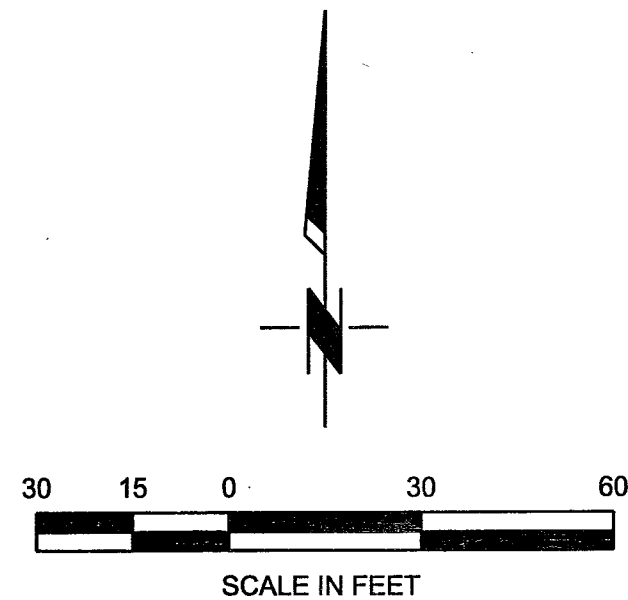
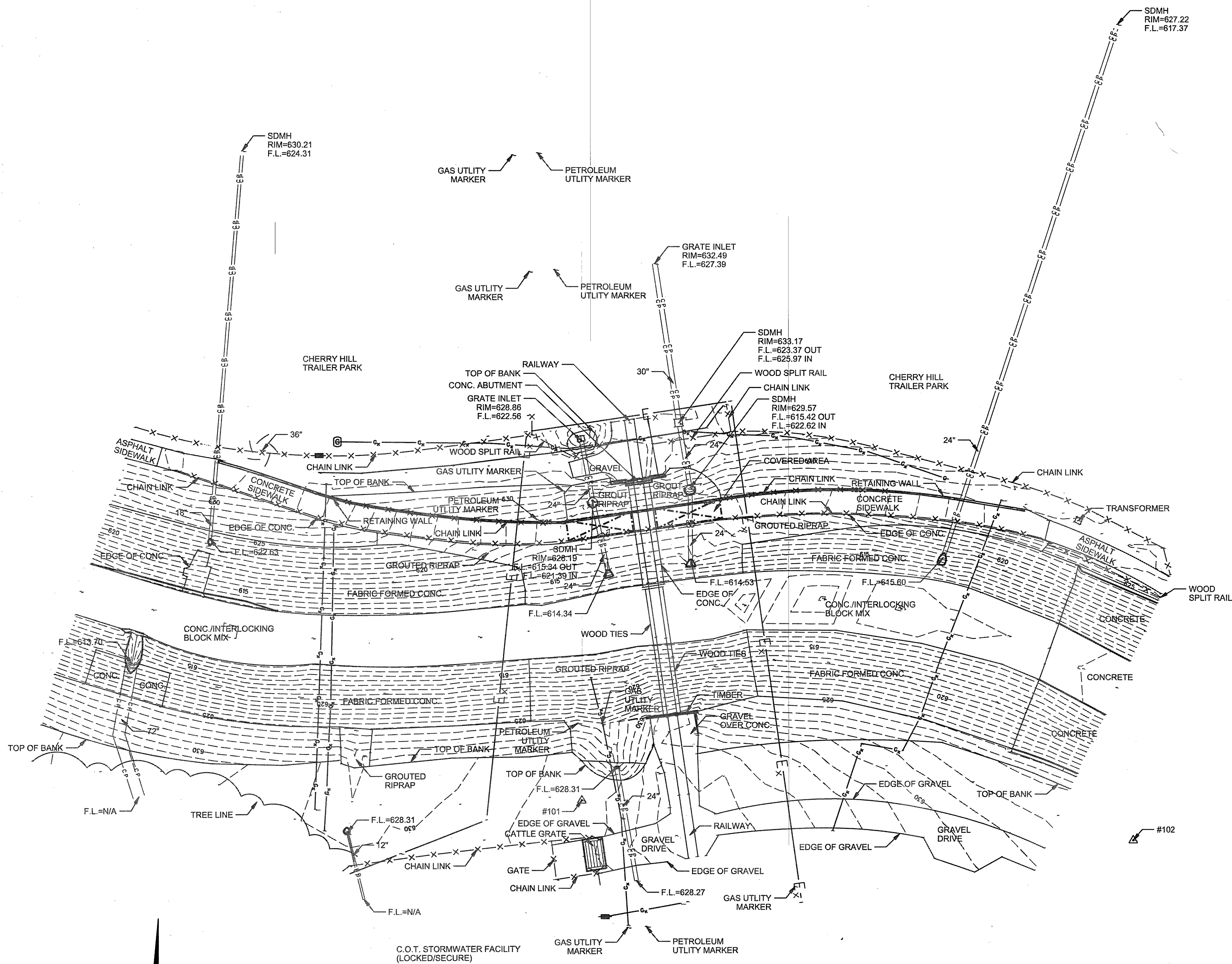
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:

CIVIL/ENVIRONMENTAL ENGINEERING
8179 EAST 41ST STREET,
TULSA, OKLAHOMA 74145

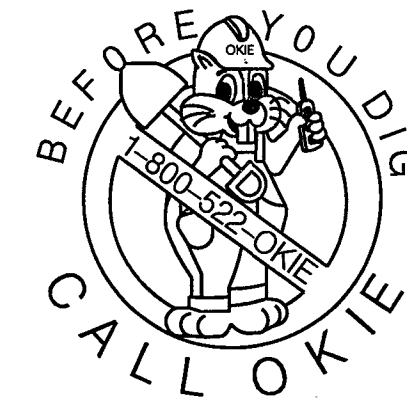
PHONE: (918) 749-5800 FAX: (918) 749-5858
C.A. NO.: 1371 - EXPIRES: 6/30/22

PLAN SCALE:	DRAWN	<i>SL</i> <i>02/22</i>	APPROVED:
	DESIGNED	<i>DB</i> <i>02/22</i>	
	SURVEY	<i>CB</i> <i>02/22</i>	
PROFILE SCALE:	PROJ. MNGR.	<i>AW</i> <i>05/22</i>	CITY ENGINEER
	LEAD ENGR.	<i>BBL</i> <i>05/22</i>	
	FIELD MNGR.	<i>BBL</i> <i>05/22</i>	
HORIZONTAL:	RECOMMENDED:	<i>HAS</i> <i>5-22</i>	DEPUTY DIRECTOR
VERTICAL:			DATE
FILE: 20-53-001-35-TO4/DESIGN/SHTS/G-NOTES			03/2022
ATLAS PAGE NO. 191, 250			SHEET 2 OF 14 SHEETS



NAME	NORTHING	EASTING	ELEVATION	DISCRIPTION
CP-101	404106.285	2560427.732	631.72	1/2" REBAR W/CAP
CP-102	404085.884	2560709.269	627.31	1/2" REBAR W/CAP

ENGINEERING TOPOGRAPHIC SURVEY
NOT TO BE USED FOR RIGHT OF WAYS OR
BOUNDARIES
CONTROL TAKEN FOR PUBLISHED MONUMENTS

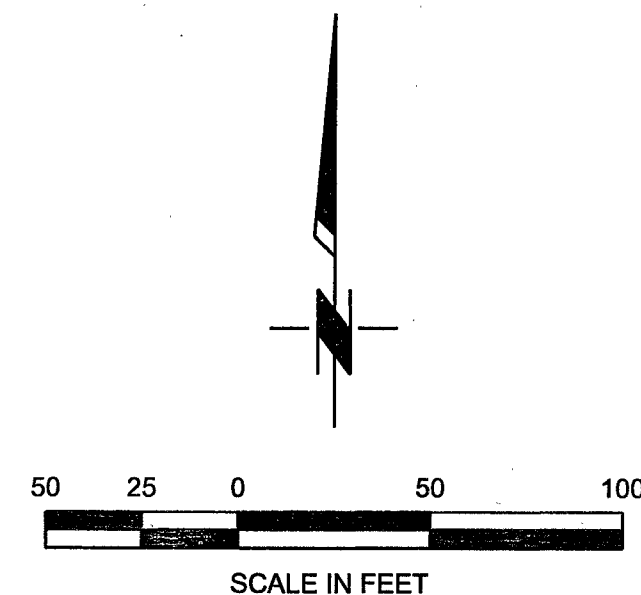


REVISION	BY	DATE

SURVEY DATA (SOUTH)			
PROJECT NO. SW-2020-01-07-TO4			
CHERRY CREEK CHANNEL LINING RECONSTRUCTION			
CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT			
PLANS AND ESTIMATES PREPARED BY:			
PLAN SCALE:	DRAWN	CB	02/22
1"=30'	DESIGNED	DG	02/22
	SURVEY	CB	02/22
PROFILE SCALE:	PROJ. MNGR.	HA	05/22
HORIZONTAL:	LEAD ENGR.	BOB	5/22
VERTICAL:	FIELD MNGR.	TM	5/22
	RECOMMENDED:	HA	5/22
	DEPUTY DIRECTOR		
FILE: 20-53-001-35-TO4/DESIGN/SHS/G-CGA-SURVEY	DATE	03/2022	
ATLAS PAGE NO. 191, 250	SHEET	3	OF 14 SHEETS

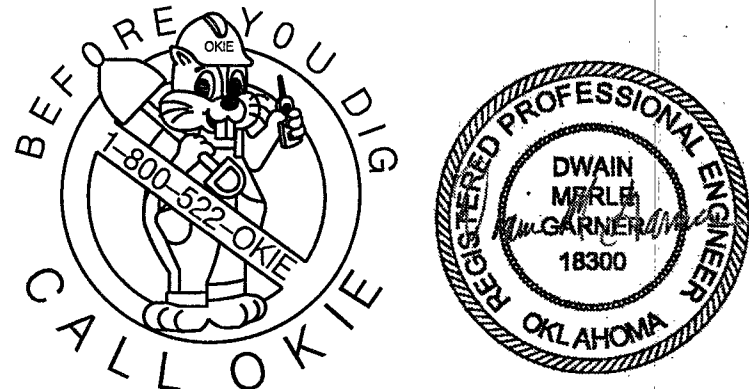
CONTROL DATA		Adjusted Horizontal Control Data	
Station Name: GPS 5	Date: JULY, 2008	Order: FIRST	Survey Method: GPS <input checked="" type="checkbox"/> TRAV <input type="checkbox"/> OTHER <input type="checkbox"/>
Monument Type: 1/2" REBAR- 2" ALUMINUM CAP- SET IN A CONCRETE POST	City: TULSA County: TULSA State: OK	Combined Scale Factor: 0.999911087	
Surveyor: E. SEATON	Prepared by: AERIAL DATA SERVICE	NAD83(1993) Grid Data	Coordinates (U.S. Survey Feet)
Project Name: TULSA COUNTY		State: OKLA. Zone: NORTH Code: 3501	Plane Azimuth Angle (Convergence)
Distances & Directions To Prominent & Reference Marks			
Reference Point	Direction	Distance (feet)	
TO FENCE	EAST	14.70'	
600 NAIL IN LONE OAK TREE	SOUTH	59.50'	
Azimuth Mark		Grid Azimuth	Distance
Metric Conversion Factor: 3.2808333333			
Geodetic Data		Position NAD83 (1993)	<input checked="" type="checkbox"/> ELEV(Feet)
		Latitude 36°05'56.97312"	North NAVD 1988
		Longitude 96°00'22.99161"	West 732.348'
Description of Points: 1/2" REBAR- 2" ALUMINUM CAP- FLUSH- STAMPED "DOT GPS 5", SET ON THE EAST SIDE OF HWY. 75, AND IS APPROX. 0.75 MILE NORTH OF I-44, ON TOP OF A HILL.			
Field Sketch:			
Firm Name: AERIAL DATA SERVICE, INC. 8301 E. 51ST, SUITE 100 TULSA, OKLAHOMA 74145			


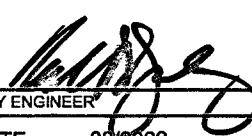
CONTROL DATA		Adjusted Horizontal Control Data	
Station Name: GPS 6	Date: JANUARY, 2002	Order: FIRST	Survey Method: GPS <input checked="" type="checkbox"/> TRAV <input type="checkbox"/> OTHER <input type="checkbox"/>
Monument Type: 1/2" REBAR- 2" ALUMINUM CAP- SET IN A CONCRETE POST	City: TULSA County: TULSA State: OK	Combined Scale Factor: 0.999913760	
Surveyor: E. SEATON	Prepared by: AERIAL DATA SERVICE	NAD83(1993) Grid Data	Coordinates (U.S. Survey Feet)
Project Name: TULSA COUNTY		State: OKLA. Zone: NORTH Code: 3501	Plane Azimuth Angle (Convergence)
Distances & Directions To Prominent & Reference Marks			
Reference Point	Direction	Distance (feet)	
TO S.W. CORNER OF OVERPASS	NORTH	91.80'	
BOTTOM OF 1" BOLT	N.W.	85.90'	
Azimuth Mark		Grid Azimuth	Distance
Metric Conversion Factor: 3.2808333333			
Geodetic Data		Position NAD83 (1993)	<input checked="" type="checkbox"/> ELEV(Feet)
		Latitude 36°06'37.62261"	North NAVD 1988
		Longitude 96°00'42.10614"	West 671.974'
Description of Points: 1/2" REBAR- 2" ALUMINUM CAP- FLUSH- STAMPED "DOT GPS 6", SET IN THE CENTER MEDIAN OF HWY. 75, SOUTH OF R.R. OVERPASS, AND APPROX. 0.45 MILE NORTH OF 41ST ST.			
Field Sketch:			
Firm Name: AERIAL DATA SERVICE, INC. 10822 EAST NEWTON PLACE TULSA, OKLAHOMA 74116			



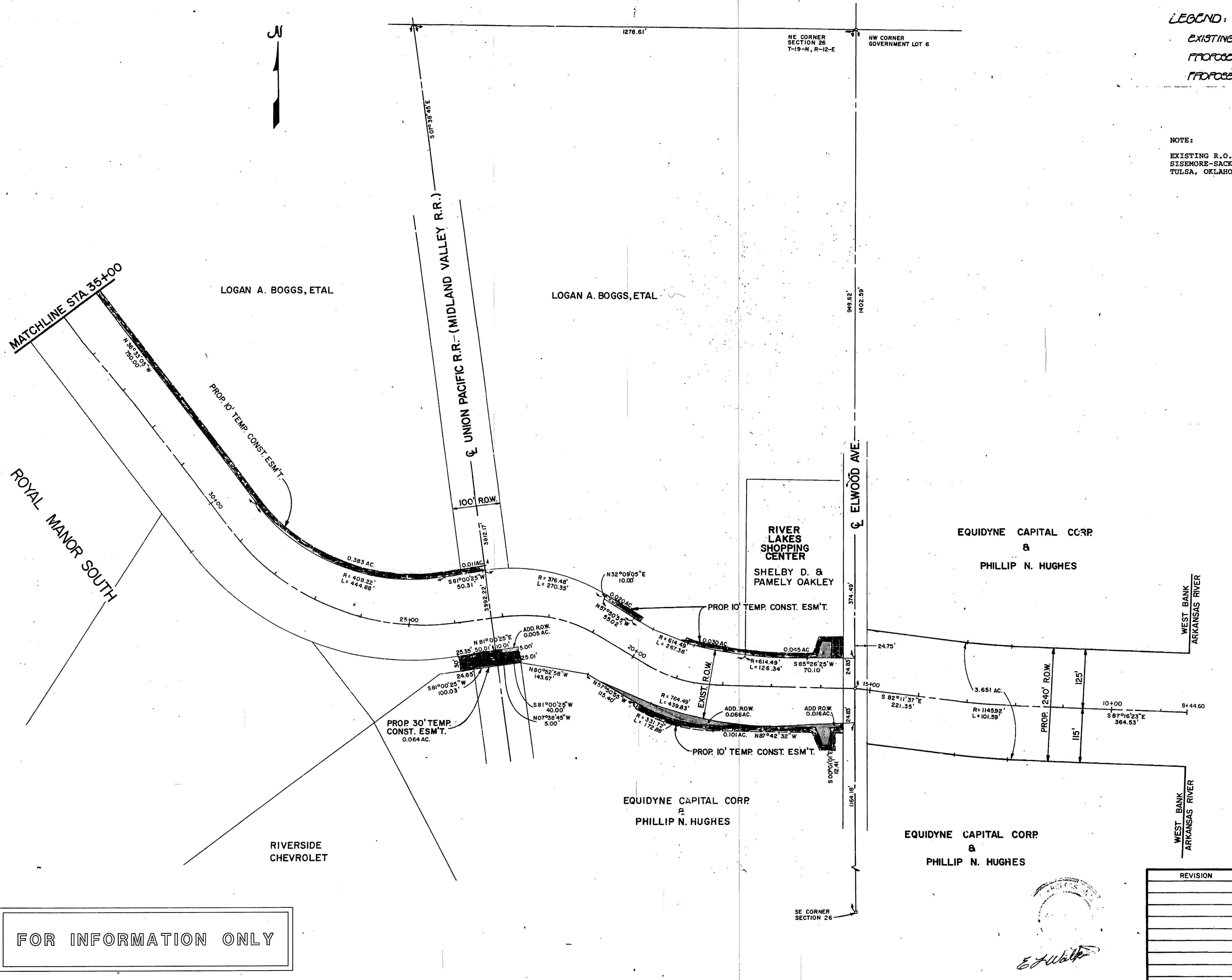
Station Name: 74		Date: JULY, 2008		CONTROL DATA			
Monument Type: 3" BRASS CAP, SET IN A CONCRETE POST				Adjusted Horizontal Control Data			
City: TULSA		County: TULSA		State: OK		Order: FIRST	
Surveyor: E. SEATON		Prepared by: AERIAL DATA SERVICE		Survey Method: GPS <input checked="" type="checkbox"/> TRAV <input type="checkbox"/> OTHER <input type="checkbox"/>		Combined Scale Factor: 0.999912343	
Project Name: TULSA COUNTY				NAD83(1993) Grid Data		Coordinates (U.S. Survey Feet)	
Distances & Directions To Prominent & Reference Marks				State: OKLA. Zone: NORTH Code: 3501		Plane Azimuth Angle (Convergence)	
Reference Point		Direction		Distance (feet)		N 408028.258 E 2550167.224	
TOP CURB OF PARKING LOT		S. E.		42.15'		001°09' 43.597"	
TO STOP SIGN		SOUTH		36.15'		001°09' 43.597"	
CHISELED "4" ON DROP INLET		S. W.		47.25'		001°09' 43.597"	
Azimuth Mark		Grid Azimuth		Distance		001°09' 43.597"	
Description of Points 3" BRASS CAP- SET IN A CONCRETE POST- FLUSH- SET N.W. OF THE INTERSECTION OF 41ST ST, AND S. 34TH W. AVE.				Metric Conversion Factor: 3.2808333333			
Geodetic Data		Position NAD83 (1993)		North		ELEV(Feet)	
Latitude 36°08'16.91168"		Longitude 96°01'50.92385"		West		NAD83 1988 703.787'	
Field Sketch:							
41ST ST.				34TH W. AVE.			
Firm Name: AERIAL DATA SERVICE, INC. 8301 E. 51ST, SUITE 100 TULSA, OKLAHOMA 74145				36.15' TO STOP SIGN			

Station Name: GPS 4			Date: JANUARY, 2002			Adjusted Horizontal Control Data		
Monument Type: 1/2" REBAR- 2" ALUMINUM CAP- SET IN A CONCRETE POST			Order: FIRST			Survey Method: GPS <input checked="" type="checkbox"/> TRAV <input type="checkbox"/> OTHER <input type="checkbox"/>		
City: TULSA			County: TULSA			State: OK		
Surveyor: E. SEATON			Prepared by: AERIAL DATA SERVICE			Combined Scale Factor: 0.999912488		
Project Name: TULSA COUNTY			NAD83(1993) Grid Data			Coordinates (U.S. Survey Feet)		
			State: OKLA. Zone: NORTH Code: 3501			Plane Azimuth Angle (Convergence)		
						001°10'34.924"		
Distances & Directions To Prominent & Reference Marks								
Reference Point			Direction			Distance (feet)		
CHISELED 'X' ON BRIDGE			S. E.			16.60'		
CHISELED 'X' ON BRIDGE			S. W.			16.60'		
Azimuth Mark			Grid Azimuth			Distance		
Description of Points:								
1/2" REBAR- 2" ALUMINUM CAP- FLUSH- STAMPED '000T GPS 4', SET IN THE CENTER MEDIAN OF HWY. 75, ON THE NORTH SIDE OF 49TH ST. OVERPASS.								
Firm Name: AERIAL DATA SERVICE, INC. 10822 EAST NEWTON PLACE TULSA, OKLAHOMA 74116			NAD 83 Grid Data			Coordinates (U.S. Survey Feet)		
			State: Zone: Code:			Plane Azimuth Angle (Convergence)		
						001°10'34.924"		
			Metric Conversion Factor:			3.28083333333		
			Geodetic Data			ELEV(Feet)		
			Position NAD83 (1993)			<input checked="" type="checkbox"/> North		
			Latitude 36°05'33.31222"			NAVD 1988 706.042'		
			Longitude 96°00'23.95094"			West		
			Field Sketch:					



<h1 style="margin: 0;">SURVEY DATA</h1> <h2 style="margin: 0;">(NORTH)</h2>		
<h3 style="margin: 0;">PROJECT NO. SW-2020-01-07-TO4</h3>		
CHERRY CREEK CHANNEL LINING RECONSTRUCTION		
<h2 style="margin: 0;">CITY OF TULSA, OKLAHOMA</h2> <h2 style="margin: 0;">ENGINEERING SERVICES DEPARTMENT</h2>		
PLANS AND ESTIMATES PREPARED BY:		
 <div style="display: inline-block; vertical-align: middle; text-align: left;"> <p>CIVIL/ENVIRONMENTAL ENGINEERING 8179 EAST. 41ST STREET TULSA, OKLAHOMA 74145</p> <p>PHONE: (918)749-5800 FAX: (918)749-5858 C.A. NO.: 1371 - EXPIRES: 6/30/22</p> </div>		
PLAN SCALE: 1"=50'	DRAWN DESIGNED SURVEY	CB DG CB 02/22 02/22 02/22
PROFILE SCALE HORIZONTAL: VERTICAL:	PROJ. MNGR. LEAD ENGR. FIELD MNGR. RECOMMENDED: DEPUTY DIRECTOR	<i>hw</i> <i>hwl</i> <i>Rwa</i> <i>5/22</i> <i>5/22</i> <i>5/22</i> <i>5-22</i>
FILE: 2023-001-35-TO4/DESIGN/SHS/IG-CGA-SURVEY		APPROVED:  CITY ENGINEER
ATLAS PAGE NO. 191, 250		DATE 03/2022 SHEET 4 OF 14 SHEET

REVISION	BY	DATE	PROFILE SCALE	PROJ. MNGR.	<i>W</i>	<i>05/22</i>
			HORIZONTAL:	LEAD ENGR.	<i>BOL</i>	<i>5/22</i>
				FIELD MNGR.	<i>LIM</i>	<i>5/22</i>
			VERTICAL:	RECOMMENDED:	<i>HAS</i>	<i>5-22</i>
				DEPUTY DIRECTOR		<i>[Signature]</i>
			FILE: 20-53-001-35-TQ-4	DESIGNS/HTS/SGA-SURVEY	DATE	<i>05/22/22</i>
			ATLAS PAGE NO.	191, 250	SHEET	4 OF 14 SHEETS



LEGEND:

- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- PROPOSED TEMPORARY CONSTRUCTION EASEMENT

NOTE:
EXISTING R.O.W. AND SURVEY DATA PROVIDED BY
SISEMORE-SACK-SISEMORE & ASSOCIATES, INC.
TULSA, OKLAHOMA

NOTE: RIGHT-OF-WAY MAPS ARE FOR
REFERENCE ONLY. NOT FOR
CONSTRUCTION PURPOSES.

RED FORK CREEK/CHERRY CREEK
CHANNEL IMPROVEMENTS

C.I.P. PROJECT NUMBERS 816207 AND 862221

R.O.W. MAP
CHERRY CREEK
STA. 08+44.60 TO STA. 35+00

CITY OF TULSA, OKLAHOMA

PLANS AND ESTIMATES PREPARED BY:

MPI

5110 SOUTH YALE
TULSA, OKLAHOMA 74135

IN ASSOCIATION WITH

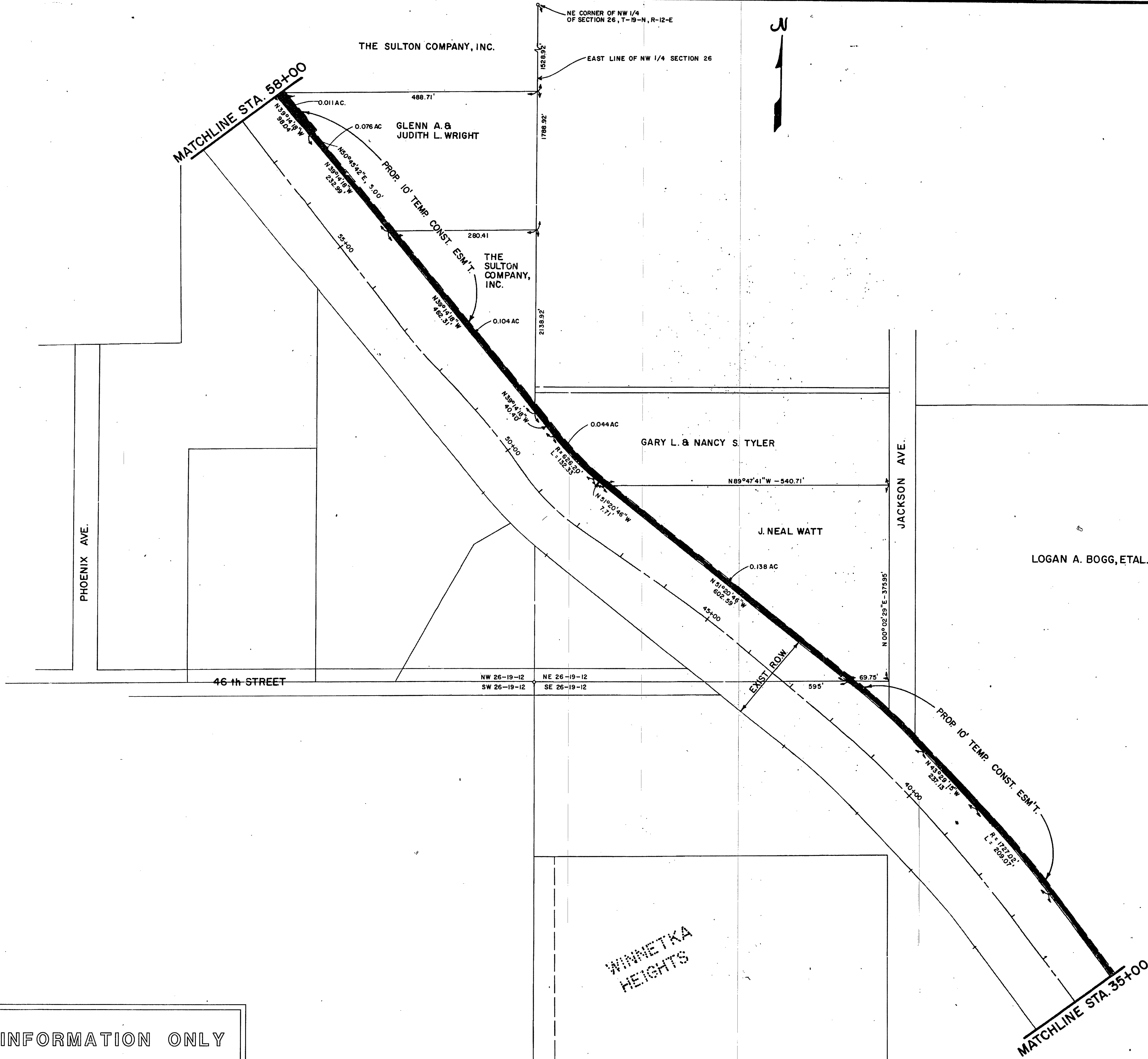
Wilbur Smith and Associates, Inc.

SUITE 400
908 TOWN AND COUNTRY BLVD.
HOUSTON, TEXAS 77024

REVISION	BY	DATE	PLAN SCALE: 1"=100'	DESIGNED BY: MEA	APPROVED:
				CHECKED BY: TTC	
				DRAWN BY: HLT	
			PROFILE SCALE:		
			HORIZONTAL:	SEQ. NO.:	
			VERTICAL:	RECOMMENDED:	
				ENGINEERING DIRECTOR	
			FILE: 241-2-5	DRAWING: 9977	DATE: JAN. 1988
			ATLAS PAGE NO:		SHEET 4A OF 124 SHEETS

FOR INFORMATION ONLY

FOR INFORMATION ONLY



LEGEND:

- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- PROPOSED TEMPORARY CONSTRUCTION EASEMENT

NOTE:
EXISTING R.O.W. AND SURVEY DATA PROVIDED BY
SISEMORE-SACK-SISEMORE & ASSOCIATES, INC.
TULSA, OKLAHOMA

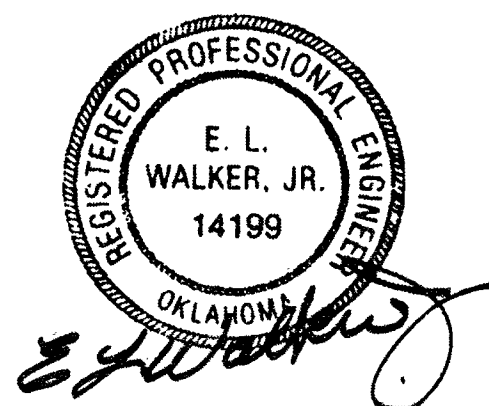
NOTE: RIGHT OF WAY MAPS ARE FOR
REFERENCE ONLY. NOT FOR
CONSTRUCTION PURPOSES.

RED FORK CREEK/CHERRY CREEK
CHANNEL IMPROVEMENTS
C.I.P. PROJECT NUMBERS 816207 AND 862221

R.O.W. MAP
CHERRY CREEK
STA. 35+00 TO STA. 58+00

CITY OF TULSA, OKLAHOMA

PLANS AND ESTIMATES PREPARED BY
NPI
5110 SOUTH YALE
TULSA, OKLAHOMA 74135
IN ASSOCIATION WITH
Wilbur Smith and Associates, Inc.
SUITE 400
908 TOWN AND COUNTRY BLVD.
HOUSTON, TEXAS 77024



REVISION	BY	DATE	PLAN SCALE:	DESIGNED BY: MEA	APPROVED:
			1"=100'	CHECKED BY: TTC	
				DRAWN BY: KAD	
			PROFILE SCALE:		
			HORIZONTAL:	SEQ. NO.:	
			VERTICAL:	RECOMMENDED:	
				ENGINEERING DIRECTOR	
			FILE: 24-145	DRAWING: 977	DATE: JAN. 1988
			ATLAS PAGE NO:		SHEET 48 OF 124 SHEETS

LEGEND:

EXISTING RIGHT-OF-WAY

PROPOSED RIGHT-OF-WAY

PROPOSED TEMPORARY CONSTRUCTION EASEMENT

NOTE:

EXISTING R.O.W. AND SURVEY DATA PROVIDED BY
SISEMORE-SACK-SISEMORE & ASSOCIATES, INC.
TULSA, OKLAHOMA

NOTE: RIGHT OF WAY MAPS ARE FOR
REFERENCE ONLY. NOT FOR
CONSTRUCTION PURPOSES.

RED FORK CREEK/CHERRY CREEK
CHANNEL IMPROVEMENTS

C.I.P. PROJECT NUMBERS 816207 AND 862221

R.O.W. MAP
CHERRY CREEK
STA. 58+00 TO 77+09.85

CITY OF TULSA, OKLAHOMA

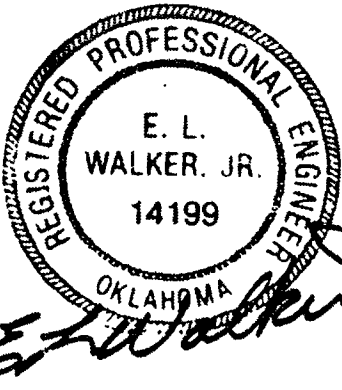
PLANS AND ESTIMATES PREPARED BY

MPI

5110 SOUTH YALE
TULSA, OKLAHOMA 74135
IN ASSOCIATION WITH

Wilbur Smith and Associates, Inc.

SUITE 400
908 TOWN AND COUNTRY BLVD.
HOUSTON, TEXAS 77024



REVISION	BY	DATE	PLAN SCALE:	DESIGNED BY: MEA	APPROVED:
			1"=100'	CHECKED BY: TTC	
				DRAWN BY: KAD	
			PROFILE SCALE:		
			HORIZONTAL:	SEQ. NO.:	
			VERTICAL:	RECOMMENDED:	
				ENGINEERING DIRECTOR	
			FILE: <i>862221</i>	DRAWING: <i>862221</i>	DATE: JAN. 1988
			ATLAS PAGE NO:		SHEET 40 OF 124 SHEETS

FOR INFORMATION ONLY

STORMWATER MANAGEMENT PLAN

SITE DESCRIPTION

PROJECT LIMITS: CHERRY CREEK CHANNEL LINER REHABILITATION

PROJECT DESCRIPTION: BANK STABILIZATION, INVERT REPAIRS, AND REHABILITATION ALONG THREE SEPERATE SECTIONS.

SUGGESTED SEQUENCE OF EROSION CONTROL ACTIVITIES:

(1) INSTALL TRAFFIC CONTROL MEASURES, SIGNAGE

(2) INSTALL TEMPORARY EROSION CONTROL MEASURES

(3) REMOVE CHANNEL BOTTOM TO BE REPLACED

(4) EXCAVATE FOR NO. 57 ROCK

(5) INSTALL NO. 57 ROCK

(6) POUR CONCRETE BOTTOM

(7) MAINTAIN EROSION CONTROL PLAN AND INSPECT PERIODICALLY

(8) FINAL INSPECTION

(9) COMPLETE SITE FINAL INSPECTION CHECKLIST

(10) CLEAN SITE AND REMOVE ALL TEMPORARY ITEMS

SOIL TYPE: _____

TOTAL AREA OF THE CONSTRUCTION SITE: 0.18 ACRES

ESTIMATED AREA TO BE DISTURBED: 0.18 ACRES

OFFSITE AREA TO BE DISTURBED: (FOR CONTRACTOR USE) _____

TOTAL IMPERVIOUS AREA PRE-CONSTRUCTION: 0.18 ACRES

TOTAL IMPERVIOUS AREA POST-CONSTRUCTION: 0.18 ACRES

POST-CONSTRUCTION RUNOFF COEFFICIENT OF THE SITE: 0.95

LATITUDE & LONGITUDE OF CENTER OF PROJECT:

NORTH SEC- 36°06'09.13" N
96°00'26.16" W

SOUTH SEC- 36°05'36.78" N
95°59'46.84" W

PROJECT WILL DISCHARGE TO:

NAME OF RECEIVING WATERS: CHERRY CREEK

SENSITIVE WATERS OR WATERSHEDS:

YES ☐

NO ☒

303(d) IMPAIRED WATERS:

YES ☐

NO ☒

IF YES, LIST IMPAIRMENT: _____

LOCATED IN A TMDL:

YES ☐

NO ☒

LAKE THUNDERBIRD TMDL:

YES ☐

NO ☒

MS4 ENTITY

YES ☐

NO ☐

IF YES, LOCATION: _____

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

EROSION AND SEDIMENT CONTROLS

SOIL STABILIZATION PRACTICES:

_____ TEMPORARY SEEDING

_____ 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:

_____ STABILIZED CONSTRUCTION EXIT

_____ TEMPORARY SILT FENCE

☒ TEMPORARY SILT DIKES

_____ TEMPORARY FIBER LOG

_____ DIVERSION, INTERCEPTOR OR PERIMETER DIKES

☒ DIVERSION, INTERCEPTOR OR PERIMETER SWALES

_____ ROCK FILTER DAMS

_____ TEMPORARY SLOPE DRAIN

☒ PAVED DITCH W/ DITCH LINER PROTECTION

_____ TEMPORARY DIVERSION CHANNELS

_____ TEMPORARY SEDIMENT BASINS

_____ TEMPORARY SEDIMENT TRAPS

_____ TEMPORARY SEDIMENT FILTERS

_____ TEMPORARY SEDIMENT REMOVAL

_____ RIP RAP

_____ INLET SEDIMENT FILTER

_____ TEMPORARY BRUSH SEDIMENT BARRIERS

_____ SANDBAG BERMS

_____ TEMPORARY STREAM CROSSINGS

OFFSITE VEHICLE TRACKING:

☒ HAUL ROADS DAMPENED FOR DUST CONTROL

☒ LOADED HAUL TRUCKS TO BE COVERED WITH TARPULIN

☒ EXCESS DIRT ON ROAD REMOVED DAILY

NOTES:

MAINTAIN EROSION CONTROLS IN GOOD CONDITION AT ALL TIMES AND INSPECTIONS 24 HOURS AFTER A MAJOR STORM.

REMOVE EXCESS SOILS AFTER EACH MAJOR STORM EVENT

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, SEPTEMBER 13, 2017.

REVISION

BY

DATE

PLAN SCALE:

DRAWN

SRL

02/22

DESIGNED

DMG

02/22

SURVEY

CGA

02/22

PROFILE SCALE

PROJ. MNGR.

2

05/22

HORIZONTAL:

LEAD ENGR.

ONE

5/22

VERTICAL:

FIELD MNGR.

ONE

5/22

RECOMMENDED:

HAS

5-22

DEPUTY DIRECTOR

FILE: 20-53-001-35-TO4DESIGN(SHTS)G-SWMP

DATE

03/2022

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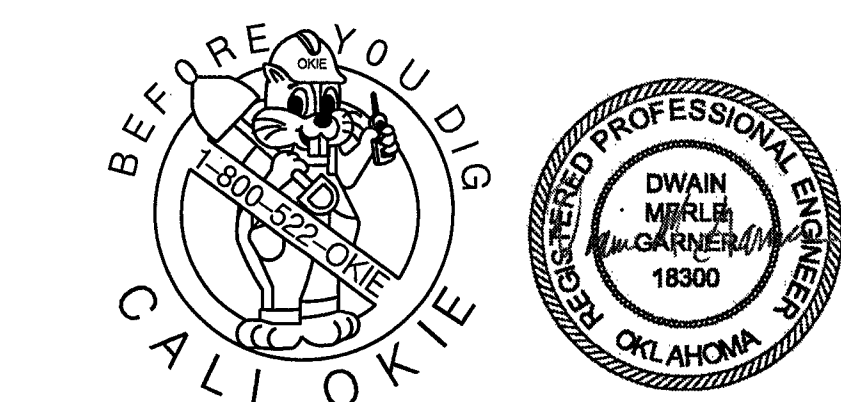
SHEET

8

OF

14

SHEETS



STORMWATER MANAGEMENT PLAN

PROJECT NO. SW-2020-01-07-TO4

CHERRY CREEK CHANNEL LINING RECONSTRUCTION

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:

CIVIL/ENVIRONMENTAL ENGINEERING
8179 EAST. 41ST STREET.
TULSA, OKLAHOMA 74145
PHONE: (918) 749-5800 FAX: (918) 749-5858
C.A. NO.: 1371 - EXPIRES: 6/30/22

APPROVED:

CITY ENGINEER

DATE

03/2022

PLAN SCALE:

DRAWN

SRL

02/22

DESIGNED

DMG

02/22

SURVEY

CGA

02/22

PROFILE SCALE

PROJ. MNGR.

2

05/22

HORIZONTAL:

LEAD ENGR.

ONE

5/22

VERTICAL:

FIELD MNGR.

ONE

5/22

RECOMMENDED:

HAS

5-22

DEPUTY DIRECTOR

FILE: 20-53-001-35-TO4DESIGN(SHTS)G-SWMP

DATE

03/2022

ATLAS PAGE NO.

191, 250

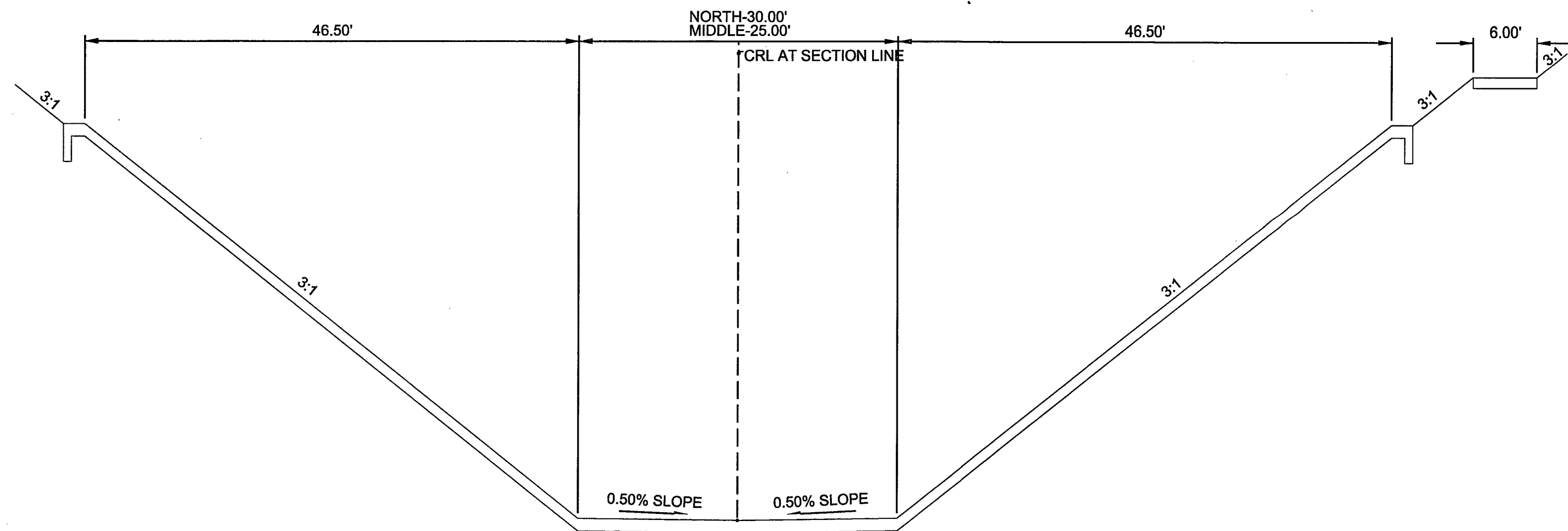
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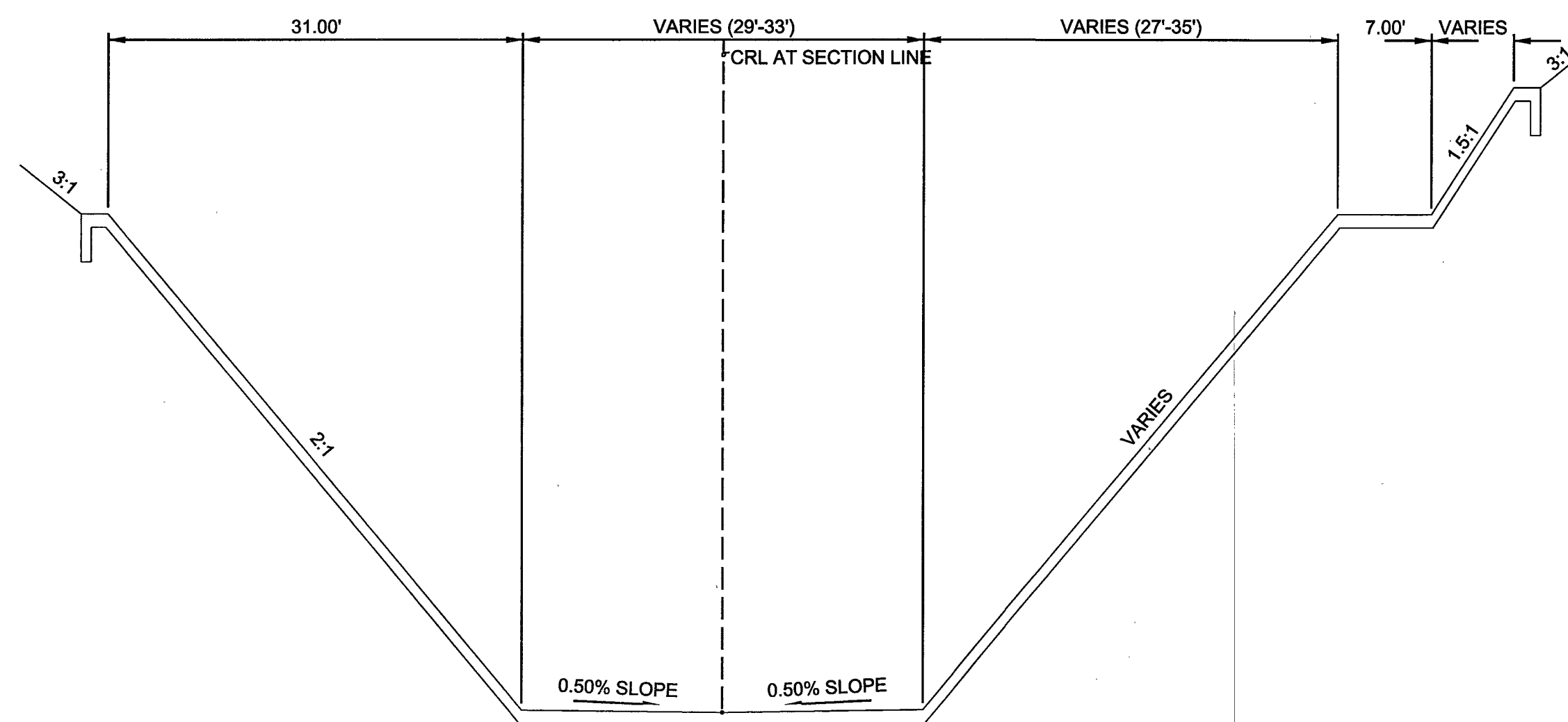
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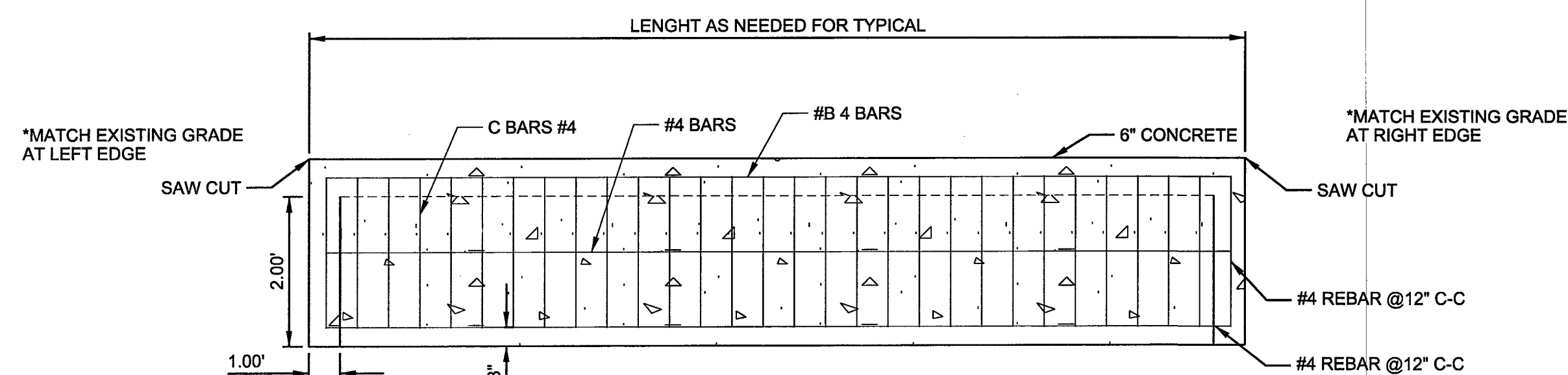
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EXISTING CHERRY TREE CHANNEL- NORTH & MIDDLE

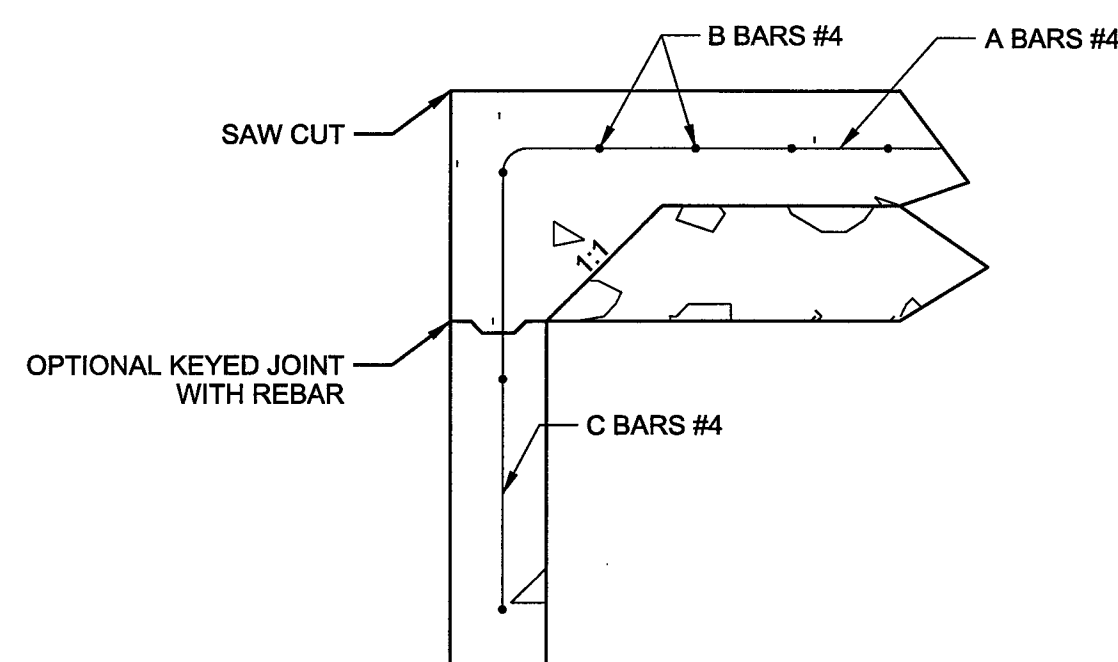


EXISTING CHERRY TREE CHANNEL- SOUTH

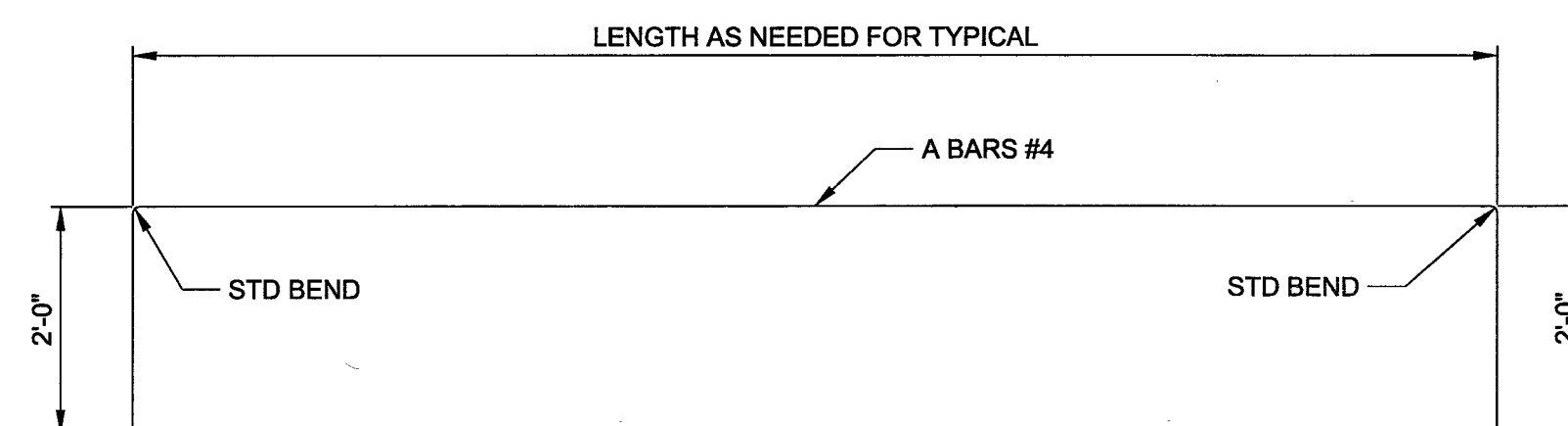


6" TOE WALL DETAIL- BEGINNING & END

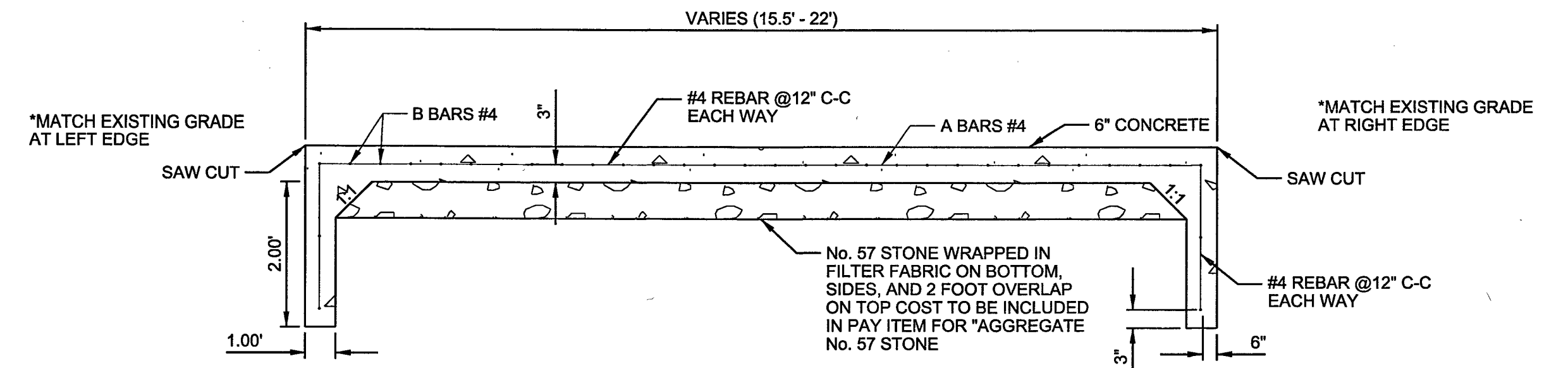
TOE WALL TO BE PLACE AT THE BEGINNING AND END OF EACH REPAIR.



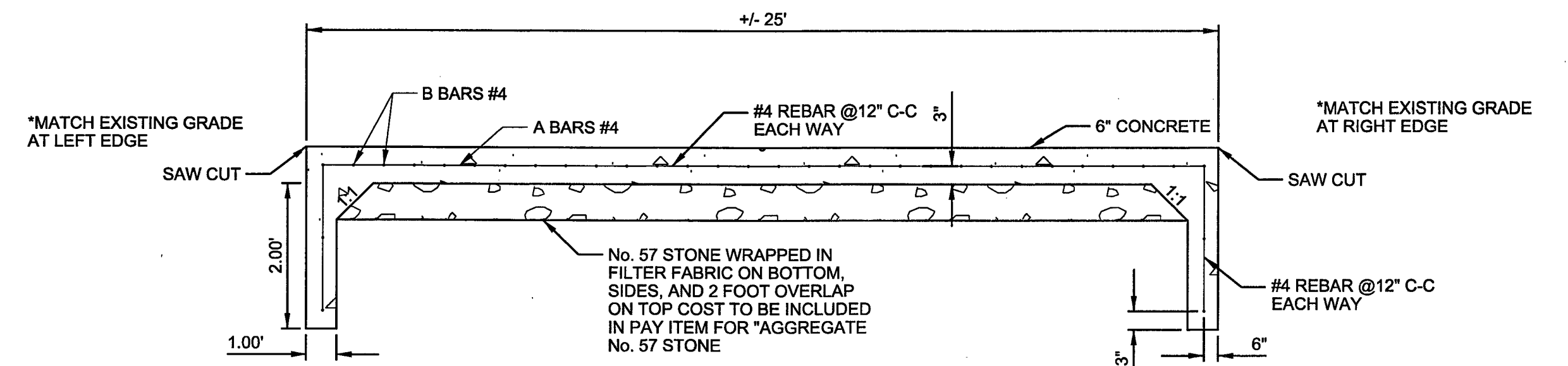
ALTERNATE KEYED JOINT WITH CAST IN PLACE C BAR



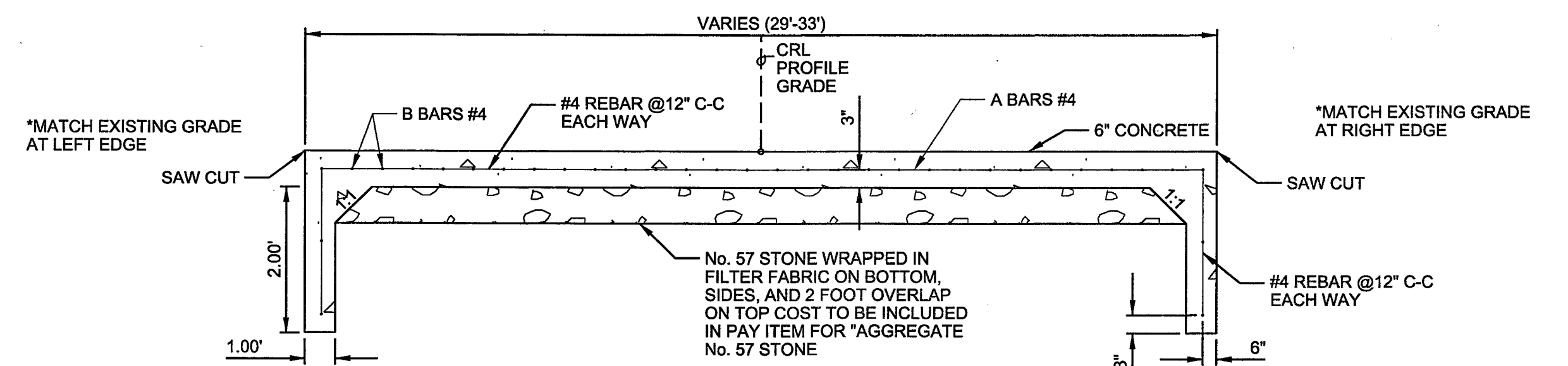
A BAR



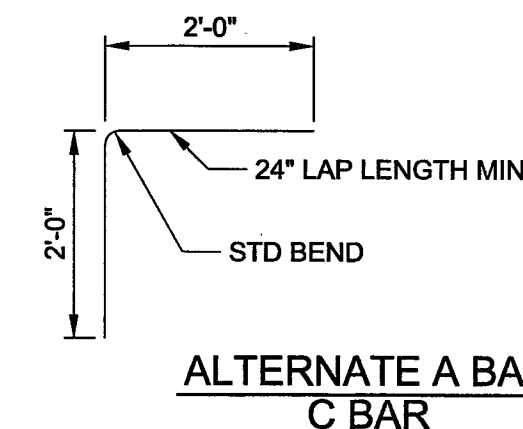
③ TYPICAL BOTTOM REPAIR CHERRY TREE CHANNEL- NORTH
ADD ALTERNATE 1



② TYPICAL BOTTOM REPAIR CHERRY TREE CHANNEL- MIDDLE

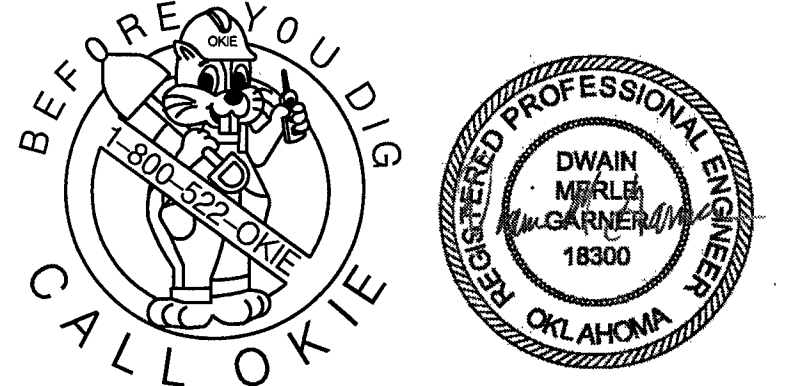


① TYPICAL BOTTOM REPAIR CHERRY TREE CHANNEL- SOUTH



ALTERNATE A BAR
C BAR

- REINFORCING NOTES:
1. ALL REINFORCING SHALL BE GRADE 60
 2. MIN LAP LENGTH FOR #4 BARS SHALL BE 24"
 3. ALL BARS SHALL BE MIN 3" CLEAR WITH THE GROUND
 4. ALL BARS SHALL BE SUPPORTED ON CHAIRS
 5. QUANTITIES FOR REINFORCING DOES NOT INCLUDE LAP LENGTHS



TYPICAL SECTIONS

PROJECT NO. SW-2020-01-07-TO4

CHERRY CREEK CHANNEL
LINING RECONSTRUCTION

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:



CIVIL/ENVIRONMENTAL ENGINEERING
8179 EAST. 41ST STREET,
TULSA, OKLAHOMA 74145

PHONE: (918) 749-5800 FAX: (918) 749-5858
C.A. NO.: 1371 - EXPIRES: 6/30/22

PLAN SCALE: DRAWN SL 02/22

N.T.S. DESIGNED DB 02/22

SURVEY CB 02/22

PROFILE SCALE: PROJ. MNGR. AS 05/22

HORIZONTAL: LEAD ENGR. BOC 5/22

FIELD MNGR. KIM 5/22

RECOMMENDED: HAS 5/22

DEPUTY DIRECTOR

FILE: 20-53-001-35-TO4/DESIGNS/SHS/G-TYPICALS

ATLAS PAGE NO. 191, 250

APPROVED:

CITY ENGINEER

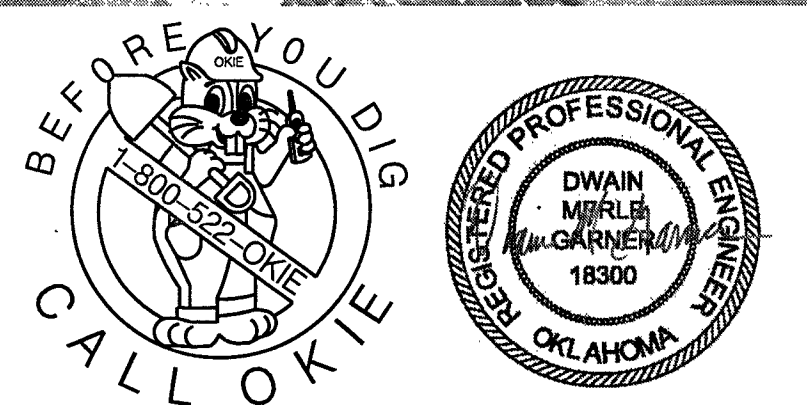
DATE 03/20/22

SHEET 9 OF 14 SHEETS




SHEET #14

SHEET #14



PROJECT NO. SW-2020-01-07-TO4

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT



CIVIL/ENVIRONMENTAL ENGINEERING
8179 EAST. 41ST STREET.
TULSA, OKLAHOMA 74145

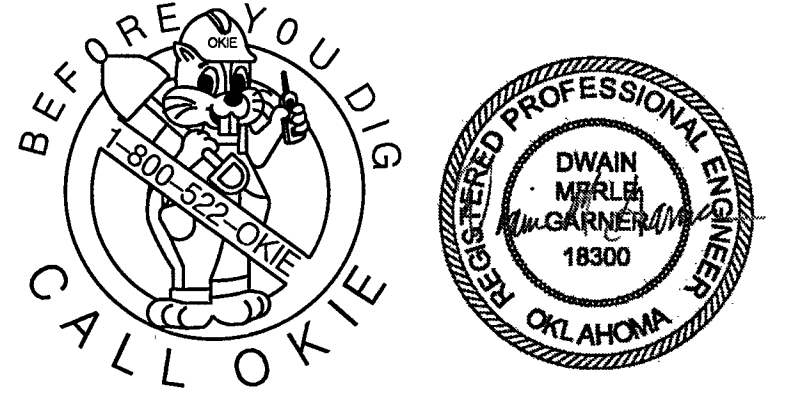
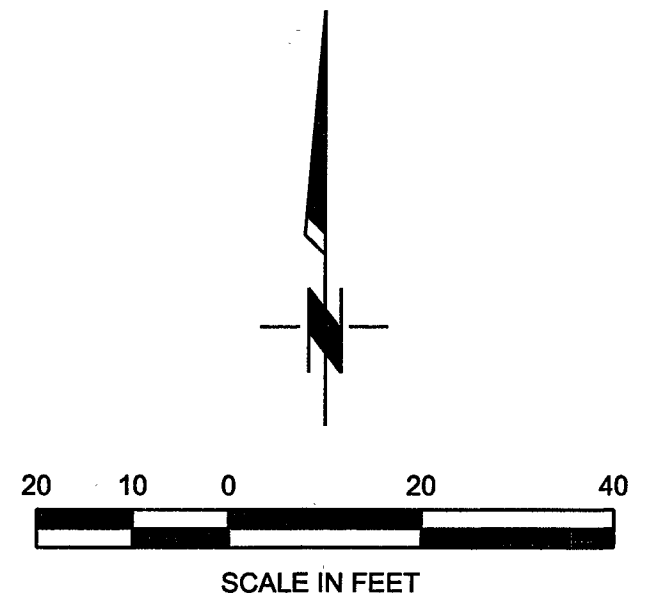
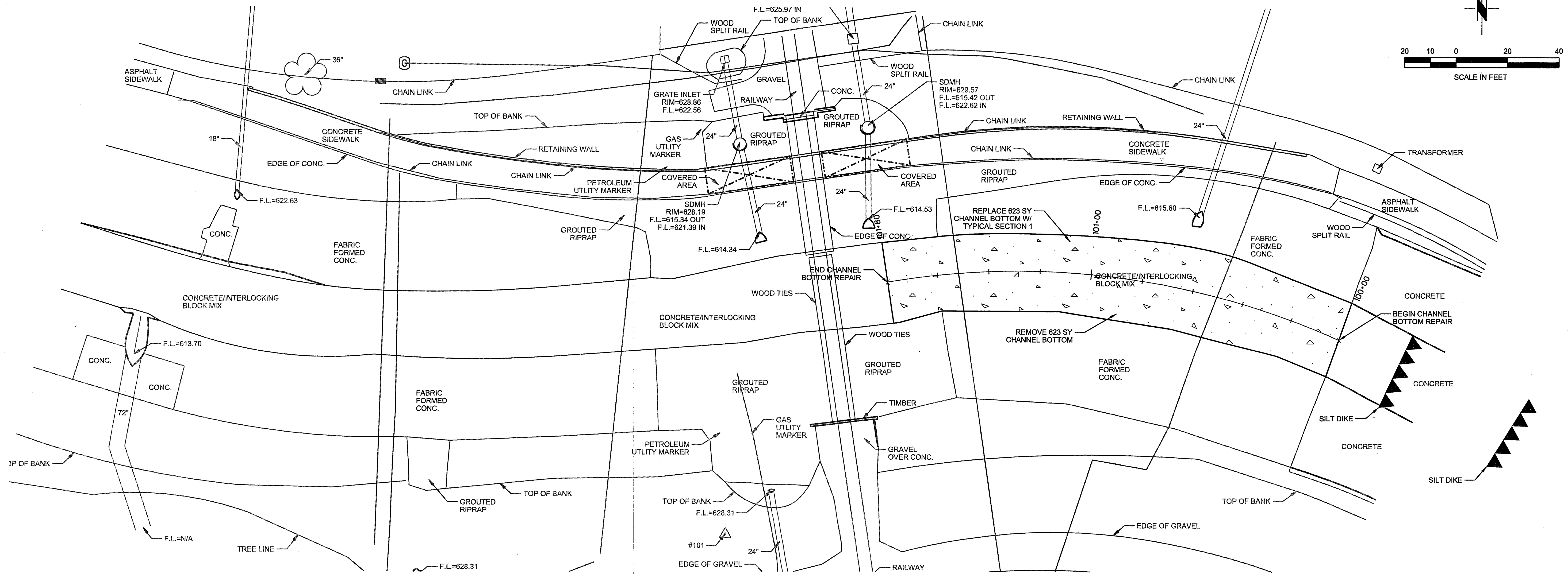


1"=200'	DESIGNED	DB	02/22
	SURVEY	CB	02/22

HORIZONTAL:	LEAD ENGR.	BOL	5/22
	FIELD MNGR.	BIM	5/22

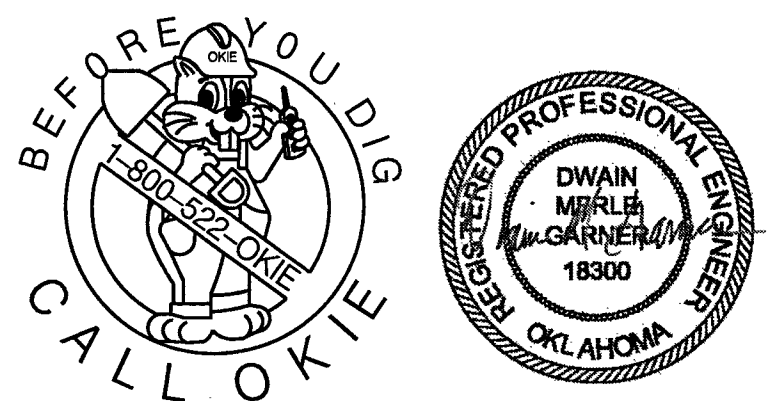
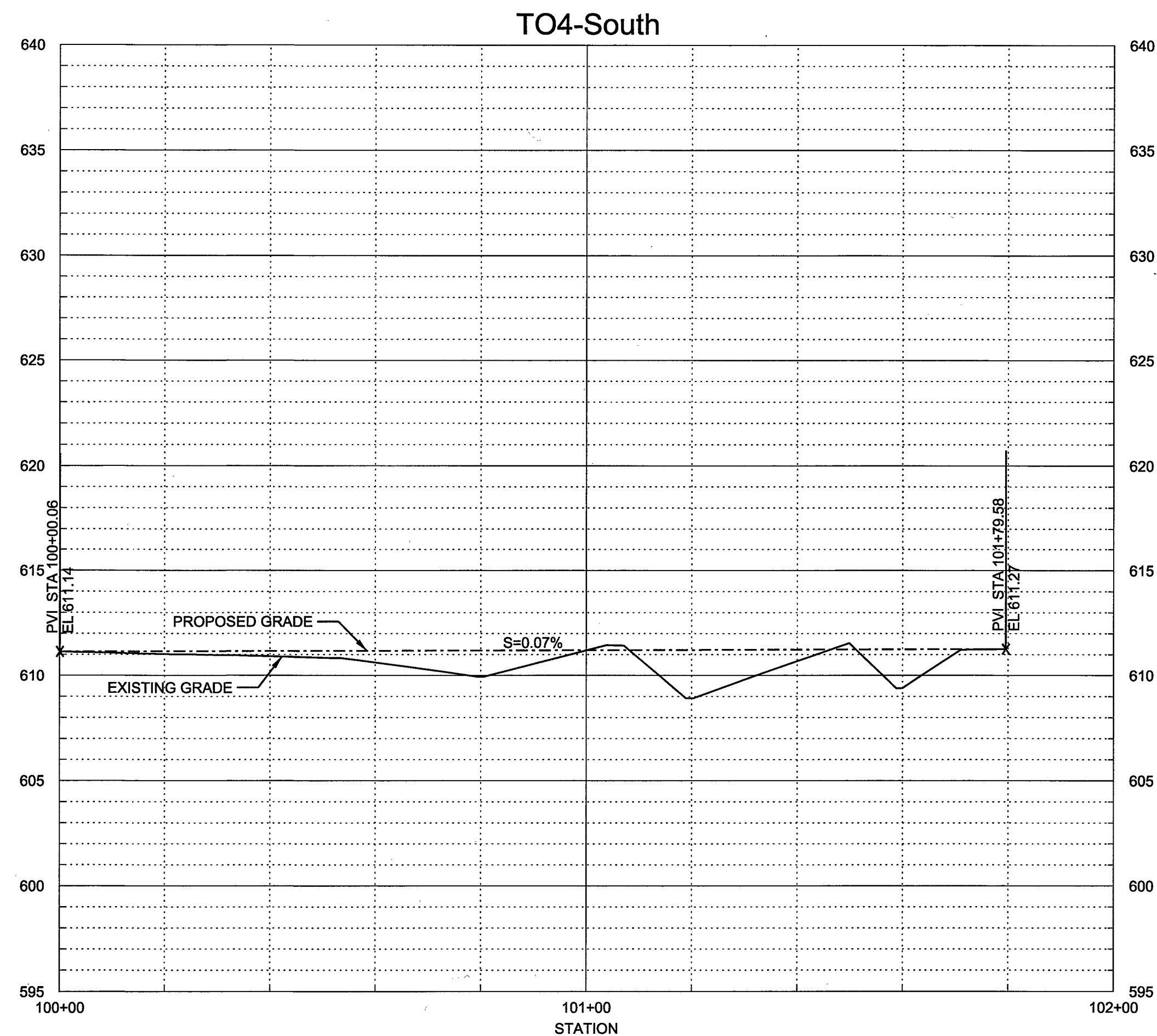
	DEPUTY DIRECTOR	HAS 5-22
FILE: 20-53-001-35-TO4\DESIGN\SHTS\IG-KEYMAP		

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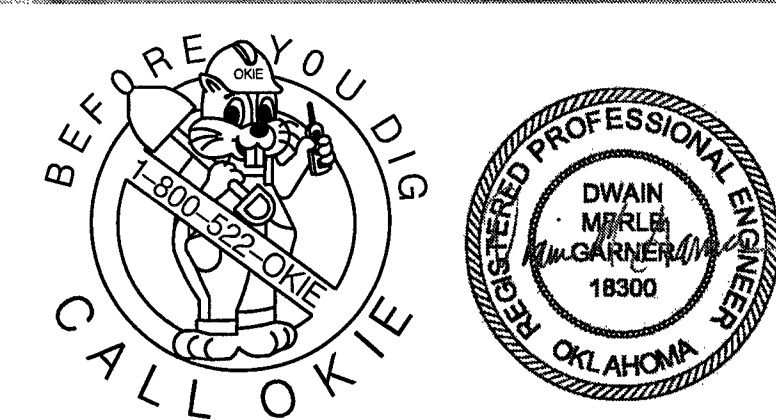
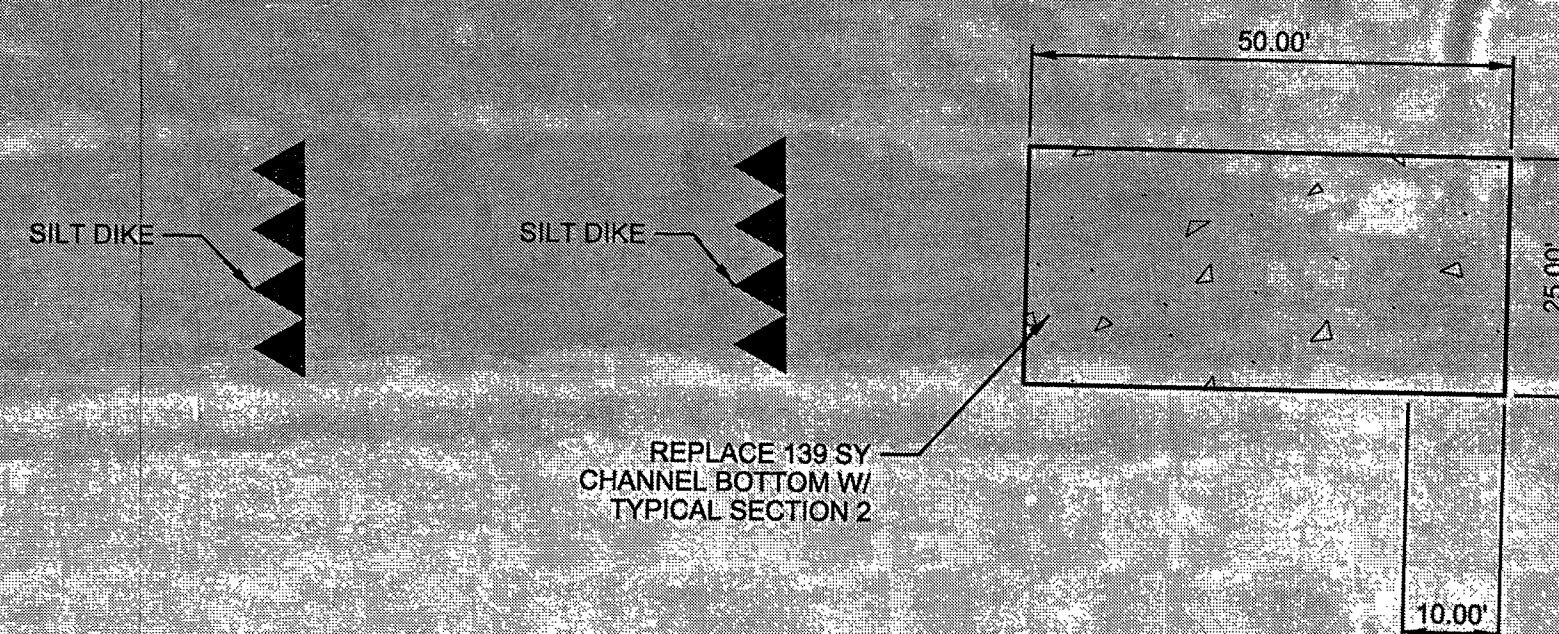
SITE PLAN- SOUTH			
PROJECT NO. SW-2020-01-07-TO4			
CHERRY CREEK CHANNEL LINING RECONSTRUCTION			
CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT			
PLANS AND ESTIMATES PREPARED BY:			
CIVIL/ENVIRONMENTAL ENGINEERING 8179 EAST 41ST STREET, TULSA, OKLAHOMA 74145 PHONE: (918) 749-5800 FAX: (918) 749-5858 C.A. NO.: 1371 - EXPIRES: 6/30/22			
PLAN SCALE:	DRAWN	SL	02/22
1" = 20'	DESIGNED	DB	02/22
	SURVEY	CB	02/22
	PROJ. MNGR.	Z	05/22
PROFILE SCALE:	LEAD ENGR.	BOB	5/22
HORIZONTAL:	FIELD MNGR.	BOB	5/22
VERTICAL:	RECOMMENDED:	HAS	5-22
FILE: 20-53-001-35-TO4/DESIGNS/SHS/G-SITE_SOUTH			DATE: 05/2022
ATLAS PAGE NO. 191, 250			SHEET 11 OF 14 SHEETS

REVISION	BY	DATE



PROFILES- SOUTH			
PROJECT NO. SW-2020-01-07-TO4			
CHERRY CREEK CHANNEL LINING RECONSTRUCTION			
CITY OF TULSA, OKLAHOMA ENGINEERING SERVICES DEPARTMENT			
PLANS AND ESTIMATES PREPARED BY: CIVIL/ENVIRONMENTAL ENGINEERING 8179 EAST 41ST STREET. TULSA, OKLAHOMA 74145 PHONE: (918) 749-5800 FAX: (918) 749-5858 C.A. NO.: 1371 - EXPIRES: 6/30/22			
PLAN SCALE:	DRAWN	SL	02/22
	DESIGNED	DB	02/22
	SURVEY	CB	02/22
PROFILE SCALE	PROJ. MNGR.	W	05/21
HORIZONTAL:	LEAD ENGR.	BOC	5/22
1"=20'	FIELD MNGR.	W	5/22
VERTICAL:	RECOMMENDED:	HAS	5-22
1"=5'	DEPUTY DIRECTOR		
FILE: 20-53-001-35-TO4\DESIGN\SHTS\G-PROFILE_S			
ATLAS PAGE NO. 191, 250			
APPROVED: CITY ENGINEER DATE 03/2022			

REVISION	BY	DATE




**SITE PLAN-
MIDDLE**

PROJECT NO. SW-2020-01-07-TO4

CHERRY CREEK CHANNEL LINING RECONSTRUCTION

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:



CIVIL/ENVIRONMENTAL ENGINEERING
8179 EAST. 41ST STREET.
TULSA, OKLAHOMA 74145
PHONE: (918)749-5800 FAX: (918)749-5855
C.A. NO.: 1371 - EXPIRES: 6/30/22

PLAN SCALE: $1" = 20'$	DRAWN	SL	02/
	DESIGNED	DG	02/
	SURVEY	CB	02/

E	PROFILE SCALE	PROJ. MNGR.	<i>n</i>	05/22
	HORIZONTAL:	LEAD ENGR.	<i>Pool</i>	6/22
		FIELD MNGR.	<i>Sam</i>	5/22
	VERTICAL:	RECOMMENDED:		
		<i>HAS 5-22</i>		
		NEARBY DIRECTOR		

	DEPUTY DIRECTOR
FILE: 20-53-001-35-TO4\DESIGN\SHTS\G-SITE NOR	

ATLAS PAGE NO. 191.250

APPROVED

TH	DATE
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DATE	03/2022
SHEET	13 OF 14 SHEETS

REVISION	BY	DATE

