CITY OF TULSA, OKLAHOMA
CONSTRUCTION PLANS FOR
S. UTICA AVE. - 11th ST. TO 15th ST. and 11th ST. and UTICA AVE. INTERSECTION
AND
12th ST. and UTICA AVE. INTERSECTION
and WATERLINE REPLACEMENT
PROJECT NO. 144017-W AND 144017-AX
TMUA-W-16-33 AND TMUA-W 16-36

PUBLIC WORKS DEPARTMENT
TULSA, OKLAHOMA

UTILITY COORDINATION

UTILITY	CONTACT	PHONE NO.
CITY OF TULSA	TONY GLYNN	918-596-9245
AEP/PSO	LONNY HICKS	918-250-6211
ONG	CODY YOST	918-831-8292
AT&T	ALFRED NICHOLS	539-444-1069
COX COMMUNICATIONS	JASON HOLT	918-830-7238
MTTA	BILL NORMAN	918-398-1424
COT FIBER OPTIC	ANDREW MAGGARD	918-576-5197

SYMBOL LEGEND

- EM – Electric Meter
- EB – Electric Box
- ET – Electric Transformer
- FH – Fire Hydrant
- FP – Flagpole
- GM – Gas Meter
- GV – Gas Valve
- GUY – Guy Anchor
- ICV – Irrigation Control Valve
- JB – Junction Box
- LP – Light Pole
- MB – Mailbox
- PP – Power Pole
- SN – Sign
- SSCO – Sanitary Sewer Cleanout
- SSMH – Sanitary Sewer Manhole
- SWMH – Storm Water Manhole
- SH – Sprinkler Head
- TS – Traffic Signal
- TSB – Traffic Signal Box
- TSJB – Traffic Signal Junction Box
- TPED – Telephone Pedestal
- WM – Water Meter
- WV – Water Valve
- Deciduous Tree
- Coniferous Tree
- Bush
- X – Fence Line (All Types)
- OHE – Overhead Electric
- EUG – Underground Electric
- CATV – Underground Cable Television
- FOC – Underground Fiber Optic
- TUG – Underground Telephone
- G – Natural Gas Line
- Stormwater Line
- SS – Sanitary Sewer Line
- W – Water Line
- Bench Mark
- Survey Control Point Found
- Survey Control Point Set
- Type III Barricade w/ 2 Type "A" Lights
- Drums w/ Type "C" Light

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

DESIGN DATA
S. UTICA AVE.
E. 11TH ST. TO E. 15TH ST.
V=30 MPH
ADT(2015) = 10,900 VPD
ADT(2035) = 16,200 VPD
RIGID ESALs 2.9 X 10^6
Kmin = 19 (CREST)
Kmin = 37 (SAG)

CITY OF TULSA PERMANENT BENCHMARKS

BENCH MARKS: SOURCE BENCH MARK IS C.O.T. BM#2016-13 5/8" REBAR w/ 3" ALUMINUM CAP FLUSH STAMPED "2016-13" SET IN CONCRETE POST 36" IN GROUND APPROX. 60' N. AND 30' W. OF INTERSECTION OF E. 22ND ST. AND S. UTICA AVE. NAVD 1988 ELEV=747.279

BENCH MARKS: SOURCE BENCH MARK IS C.O.T. BM#2016-17 5/8" REBAR w/ 3" ALUMINUM CAP FLUSH STAMPED "2016-17" SET IN CONCRETE POST 36" IN GROUND APPROX. 15' S. AND 45' W. OF INTERSECTION OF E. 8TH ST. AND S. UTICA AVE. NAVD 1988 ELEV=711.571

BENCH MARKS: SOURCE BENCH MARK IS C.O.T. BM#2016-18 5/8" REBAR w/ 3" ALUMINUM CAP FLUSH STAMPED "2016-18" SET IN CONCRETE POST 36" IN GROUND APPROX. 250' E. AND 35' S. OF INTERSECTION OF E. 11TH ST. AND S. LEWIS AVE. NAVD 1988 ELEV=746.030

IN ACCORDANCE WITH ODOT SECTION 105.14, THE CITY OF TULSA IS ANTICIPATING THAT THE SUCCESSFUL CONTRACTOR WILL UTILIZE THE APPROPRIATE MEANS AND METHODS TO ACCOMPLISH THE WORK DESCRIBED IN THE PLANS WITHOUT CAUSING COLLATERAL DAMAGE TO THE EXISTING INFRASTRUCTURE.

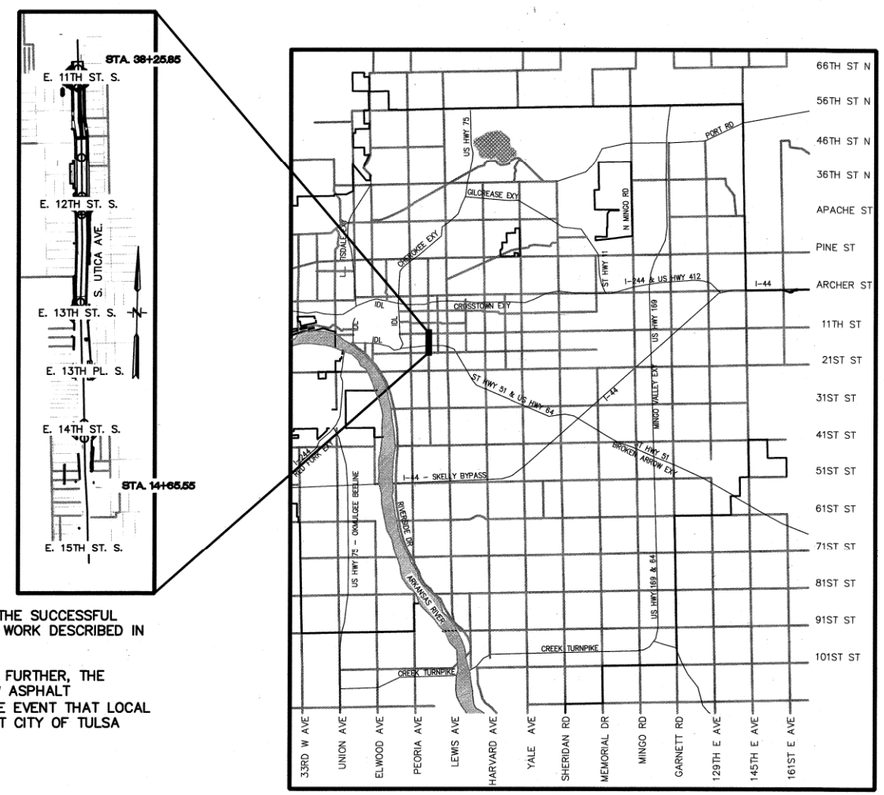
FURTHER, THE ANTICIPATED CONSTRUCTION PHASING WILL MINIMIZE THE TIME BETWEEN MILLING AND NEW ASPHALT PLACEMENT. LEAVING OPEN MILLED SECTIONS WILL BE AT THE CONTRACTOR'S RISK IN THE EVENT THAT LOCAL OR CONSTRUCTION TRAFFIC CAUSES DAMAGE TO PREVIOUSLY UNDAMAGED AREA. CURRENT CITY OF TULSA CONSTRUCTION BUDGETS DO NOT ALLOW FOR GROWTH OF THE PROJECT.

VERTICAL CONTROL
NAVD 1988

HORIZONTAL CONTROL
OKLAHOMA STATE PLANE COORDINATE SYSTEM
NAD 1983 (1993)

NOTE:
CURRENT CITY OF TULSA STANDARD SPECIFICATIONS AND STANDARD DETAILS GOVERN. ALL OTHER CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH 2019 OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION as Adopted by City of Tulsa.

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



LOCATION MAP
N.T.S.

Note: Entire project is within the Corporate and City Limits of Tulsa, Oklahoma

11TH TO 15TH – PROJECT LENGTH = 2360.30 FT = 0.45 MILES
TOTAL PROJECT LENGTH = 2360.30 FT = 0.45 MILES

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764	STANDARD REINFORCED CONCRETE STORMWATER INLETS
765	STANDARD STORMWATER FRAMES
766	STANDARD STORMWATER GRATES
769B	RECESSED CURB INLET DETAILS RCI 1096-10" THROAT
775	STANDARD PRECAST CONCRETE STORMWATER MANHOLE
790	STANDARD SIDEWALK RAMP

ODOT STANDARDS

ROADWAY
TESCA-0, TSD-0, TFL-0, SSS-2-1, ASCD6-1, CSCD-6-2, LECS-5-2, LTU-5-1

TRAFFIC
PM1-1-03, PM3-1-02, PM5-1-00, PM6-1-00, RSD1-1-00, RSD2-1-00, SBS1-1-00, SBS2-1-00, SSA1-1-00, SSP1-1-02, TCS1-1-01, TCS2-1-00, TCS4-1-01, TCS5-1-00, TCS6-1-02, TCS8-1-00, TCS9-1-01, TCS10-1-00, TCS11-1-01, TCS13-1-00, TCS14-1-00, TCS19-1-01, TCS21-1-02

APPROVED BY:
CITY ENGINEER — DATE 8/22/2025

AUGUST 29, 2025
ADVERTISE DATE

PREPARED BY:

BKL ARCHITECTS ENGINEERS
CA. 262 (PE) 6-30-2026
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DANIEL E. POLASEK, P.E.
PROJECT MANAGER
BKL, INCORPORATED

LICENSED PROFESSIONAL ENGINEER Daniel E. Polasek 24920 OKLAHOMA
9/12/2024

SHEET 1 OF 77

CITY OF TULSA

S. UTICA AVE. – PROJ. No. 144017-W & -AX
TMUA-W 16-33 & TMUA-W 16-36

BKL
1623 E. 6TH STREET TULSA, OKLAHOMA 74120
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ROADWAY PAY QUANTITIES

ITEM	SPEC. NO.	DESCRIPTION	NOTES	UNIT	QTY
1	201(A)	CLEARING AND GRUBBING	E-1,2	ACRE	0.25
2	202(A)	UNCLASSIFIED EXCAVATION	E-3,4,5, R-1	CY	1284
3	COT202	QUICK SET FLOWABLE FILL	G-1, D-8	CY	100
4	205(A)	TYPE A SALVAGED TOPSOIL		CY	203
5	220	SWPPP DOCUMENTATION AND MANAGEMENT	E-6,7,8,9	LSUM	1
6	230(A)	SOLID SLAB SODDING	E-10,11	SY	1216
7	303(A)	AGGREGATE BASE TYPE "A"	E-5,S-1,2	CY	419
8	310(B)	SUBGRADE METHOD B	E-5	SY	1254
9	325	SEPARATOR FABRIC	E-5, S-3	SY	1819
10	COT334	CONSTRUCTION AS-BUILT		LSUM	1
11	COT335	CONTRACTOR'S QUALITY CONTROL		LSUM	1
12	409	FABRIC REINFORCEMENT	S-4	SY	6445
13	411(B)	SUPERPAVE, TYPE S3 (PG 70-28 OK)	S-5,6,7,8	TON	2166
14	411(C)	SUPERPAVE, TYPE S4 (PG 70-28 OK)	S-5,6,7,8	TON	723
15	411(D)	SUPERPAVE, TYPE S6 (PG 70-28 OK)	S-5,6,7,8	TON	344
16	412	COLD MILL PAVEMENT	S-9	SY	6445
17	414(A)	P.C. CONCRETE PAVEMENT (PLACEMENT)	S-10,11,12,13	SY	3360
18	414(G)	P.C. CONCRETE FOR PAVEMENT	S-10,11,12,13	CY	837
19	COT 608(A)	GROUND SIGN		SF	274
20	COT 608(B)	1-1/2" SIGN POST		LF	8
21	COT 608(B)	1-3/4" SIGN POST		LF	347
22	COT 608(B)	2" SIGN POST		LF	93
23	609(B)	COMBINED CURB AND GUTTER (6" BARRIER)	S-12,13,15,16	LF	2470
24	610(A)	CONCRETE SIDEWALK 4"	S-12,13,16,17	SY	2026
25	610(A)	STAMPED CONCRETE SIDEWALK 4"	S-12,13,17,18	SY	230
26	610(B)	CONCRETE DRIVEWAY (6" H.E.S.)	S-12,13,16,17	SY	304
27	610(C)	6" CONCRETE DIVIDING STRIP		SY	2
28	610(I)	TACTILE WARNING DEVICE - NEW		SF	410
29	611(A)	(4' I.D.) MANHOLE, COMPLETE IN PLACE	D-1,2,3,4,5	EA	4
30	611(A)	(5' I.D.) MANHOLE, COMPLETE IN PLACE	D-1,2,3,4,5	EA	2
31	611(A)	(6' I.D.) MANHOLE, COMPLETE IN PLACE	D-1,2,3,4,5	EA	1
32	611(G)	INLET CICI DESIGN NO. 2, COMPLETE IN PLACE	D-2,3,7,8,9,10	EA	6
33	611(G)	INLET CICI DESIGN NO. 2 W/ AMH, COMPLETE IN PLACE	D-1,2,3,7,8,9	EA	1
34	611(G)	INLET CICI DESIGN NO. 2(D), COMPLETE IN PLACE	D-1,2,3,7,8,9	EA	1
35	611(G)	INLET CICI DESIGN NO. 3, COMPLETE IN PLACE	D-2,3,7,8,9,10	EA	1
36	611(G)	INLET CICI DESIGN NO. 4(B), COMPLETE IN PLACE	D-2,3,7,8,9,10	EA	2
37	611(H)	ADDITIONAL DEPTH IN INLET (DES. NO. 2)	D-10	VF	1
38	611(H)	ADDITIONAL DEPTH IN INLET (DES. NO. 4)	D-10	VF	1
39	612(A)	MANHOLE ADJUSTED TO GRADE (PUBLIC)	S-12, R-2, D-1,2,6	EA	4
40	619(A)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	R-1,2,3,4,5	LSUM	1
41	619(B)	REMOVAL OF EXISTING PAVEMENT	R-1,2,5,6	SY	1120
42	619(B)	REMOVAL OF CURB & GUTTER	R-1,2,5,6	LF	2386
43	619(B)	REMOVAL OF SIDEWALK	R-1,2,5,6	SY	2190
44	619(B)	REMOVAL OF DRIVEWAY	R-1,2,5,6	SY	267
45	641	MOBILIZATION	G-2	EA	1
46	642	CONSTRUCTION STAKING LEVEL II	G-3,4	EA	1
47	850(D)	(PL) REMOVE & RESET EXISTING SIGNS		EA	9
48	855(A)	TRAFFIC STRIPE (THERMOPLASTIC.)(4")	T-3	LF	9601
49	855(A)	TRAFFIC STRIPE (THERMOPLASTIC.)(8")	T-3	LF	331
50	855(A)	TRAFFIC STRIPE (THERMOPLASTIC.)(24")	T-3	LF	1752
51	855(B)	TRAFFIC STRIPE (THERMOPLASTIC. ARROWS)	T-3	EA	51
52	857(C)	REMOVABLE PAVEMENT MARKING TAPE		LF	10000
53	857(F)	PAVEMENT MARKING REMOVAL		LF	12000
54	857(F)	PAVEMENT MARKING REMOVAL (ARROWS)		EA	24
55	880(A)	ARROW DISPLAY	T-4	SD	360
56	880(B)	SIGNS 0.00 TO 6.25 SF	T-2,4,5	SD	4100
57	880(B)	SIGNS 6.26 TO 15.99 SF	T-2,4,5	SD	20430
58	880(B)	SIGNS 16.00 AND UP	T-2,4,5	SD	6360
59	880(C)	BARRICADES (TYPE III)	T-2,4,5	SD	17640
60	880(E)	TYPE "A" WARNING LIGHT	T-5	SD	41640
61	880(F)	DRUMS	T-2,4,5	SD	38160
62	880(G)	TUBE CHANNELIZERS	T-2,4,5	SD	30090
63	880(I)	FLAGGER	T-6	FD	180
64	882(B)	REMOTE CONTROLLED CHANGEABLE MESSAGE SIGN	T-4	SD	374
65	SPECIAL	PROJECT SIGN (CITY OF TULSA)	T-7	EA	2
66	SPECIAL	TYPE I APC PATCH (ARTERIAL)	S-21, G-1	CY	101
67	SPECIAL	TYPE I PCC PATCH	S-21, G-1	CY	81
68	SPECIAL	CURB RAMP		EA	29
69	SPECIAL	URBAN RIGHT-OF-WAY RESTORATION	G-5,6,7,8,9,10	EA	1
70	SPECIAL	OWNER ALLOWANCE		EA	10000
		STORMWATER PIPE MATERIAL OPTION 1 (RCP)			
71	613(A)	18" REINFORCED CONCRETE PIPE (RCP), COMPLETE IN PLACE	D-8,12,13	LF	654
72	613(A)	24" REINFORCED CONCRETE PIPE (RCP), COMPLETE IN PLACE	D-8,12,14	LF	36
		STORMWATER PIPE MATERIAL OPTION 2 (CPP)			
73	(SP)COT215	18" CORRUGATED POLYPROPYENE PIPE (CPP), COMPLETE IN PLACE	D-13,14,15	LF	654
74	(SP)COT215	24" CORRUGATED POLYPROPYENE PIPE (CPP), COMPLETE IN PLACE	D-13,14,15	LF	36

ITEMS LISTED OR SHOWN ON DRAWINGS AND/OR DESCRIBED IN THE SPECIFICATIONS THAT ARE NOT INCLUDED AS A SEPARATE PAY ITEM QUANTITY SHALL BE CONSIDERED INCIDENTAL AND THE COST SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS. THE PRICE BID FOR ALL WORK SHALL INCLUDE ALL MATERIALS, EQUIPMENT, LABOR, INCIDENTALS , AND ALL OTHER REQUIRED ITEMS TO COMPLETE THE WORK AS SHOWN ON PLANS AND SPECIFICATION

ENGINEERING SERVICES - TRANSPORTATION DESIGN

PAY ITEM NOTES (VERSION: 11/14/2018)

EARTHWORK / EROSION CONTROL / SITE PREPARATION

E-1: ALL COSTS FOR REMOVING TREES, SHRUBS, STUMPS, POSTS, AND ALL OTHER DEBRIS AND/OR OBSTRUCTIONS NOT COVERED BY A SEPARATE PAY ITEM ARE INCLUDED IN THE PRICE BID.

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-5: THIS QUANTITY INCLUDES AN ADDITIONAL 10% ABOVE PLAN QUANTITY FOR UNDERCUTTING OF UNSUITABLE SUBGRADE MATERIAL OR ADDITIONAL PATCHING AS DIRECTED BY THE ENGINEER.

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 AROUND DRAINAGE INLETS AS REQUIRED TO PREVENT ENTRANCE OF EROSION MATERIAL. EROSION PROTECTION SHALL BE PLACED AS NECESSARY TO PREVENT EROSION WASH TO ADJACENT PROPERTY. ALL EROSION PROTECTION INSTALLED MUST BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF THE PROJECT. EROSION PROTECTION SHALL BE REMOVED AT THE END OF THE PROJECT AS DIRECTED BY THE ENGINEER, COST TO BE INCLUDED IN THE PRICE BID. THE PRICE INCLUDES THE COST OF SEDIMENT REMOVAL PER THE STORMWATER MANAGEMENT PLAN.

E-8: PRICE BID SHALL INCLUDE MAINTENANCE, SEDIMENT REMOVAL, DISPOSAL, AND REMOVAL OF FILTERS AT PROJECT COMPLETION.

E-9: INCLUDES 28 TYPE "B" FILTERS.

E-10: ESTIMATED QUANTITY IS BASED ON SODDING OF ALL DISTURBED AREAS OUTSIDE THE FINAL PAVING LIMITS AND WITHIN THE FINAL GRADING LIMITS AS INDICATED BY THE TOP-OF-CUT/TOE-OF-SLOPE LINE ON THE PLANS (EXCLUDING SURFACES OF STRUCTURES, FIXTURES AND APPURTENANCES). SOD SHALL BE OF LIKE-KIND TO EXISTING SOD. PRICE BID INCLUDES PLACEMENT AND COMPACTION OF SUITABLE BACKFILL. ANY EXISTING GRASSED AREAS BEYOND THE ABOVE STATED LIMITS THAT ARE DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS SHALL BE RESODDED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S SOLE EXPENSE.

E-11: COST OF WATERING AND FERTILIZING SHALL BE INCLUDED. FERTILIZERS SHALL BE 10-20-10 AND SHALL BE APPLIED AT THE RATE OF 1.5 LBS PER 10 SQ YDS. FERTILIZER SHALL BE APPLIED PER SECTION 230.04H OF ODOT STANDARD SPECIFICATIONS. WATERING SHALL BE APPLIED AS NECESSARY UNTIL VEGETATION IS ESTABLISHED OR UNTIL THE WORK IS ACCEPTED AS COMPLETE.

SURFACING / STRUCTURES

S-1: TYPE A AGGREGATE BASE WAS ESTIMATED TO BE USED AS THE BASE MATERIAL FOR 90% OF THE PATCHING. QUICK SET FLOWABLE FILL WAS ESTIMATED TO BE USED AS THE BASE MATERIAL FOR 10% OF THE PATCHING. ACTUAL QUANTITIES TO BE DETERMINED BY THE ENGINEER.

S-2: INCLUDES COMPACTION OF AGGREGATE TO 98% AASHTO T180 MODIFIED PROCTOR.

S-3: SEPARATOR FABRIC SHALL BE USED AT ALL PAVEMENT PATCHES AND RECONSTRUCTION SECTIONS. THE SEPARATOR FABRIC SHALL BE CUT AND OVERLAPPED A MINIMUM OF 2 FT AT ALL EDGES OF THE REPAIR.

S-4: FABRIC REINFORCEMENT SHALL BE USED ON OVERLAY AREAS. THE COST OF BITUMINOUS BINDER FOR FABRIC REINFORCEMENT SHALL BE INCLUDED IN THE UNIT COST OF THIS PAY ITEM. THE BITUMINOUS BINDER SHALL MEET ODOT STANDARD SPECIFICATIONS AND THE RECOMMENDATIONS OF THE FABRIC REINFORCEMENT MANUFACTURER.

S-5: THE COST OF TACK COAT, EDGE JOINT SEAL MATERIAL AND SCREENINGS FOR BLOTTING, AND ALL LABOR ASSOCIATED WITH THESE ITEMS, SHALL BE INCLUDED IN ASPHALT CONCRETE.

S-6: ESTIMATED AT 112 LBS PER SQ YD PER 1 INCH THICK.

S-7: ODOT PAY FACTOR FOR AVERAGE LOT DENSITY SHALL NOT BE USED FOR THIS PROJECT. FAILURE TO REACH AVERAGE LOT DENSITY OF 92%-97% WILL RESULT IN REJECTION OF WORK.

S-8: A HIGHER GRADE OF ASPHALT BINDER THAN IS INDICATED ON THE PLANS MAY BE USED, BUT AT NO ADDITIONAL COST TO THE CITY.

S-8 (TABLE):

NOTE S8 (50) TABLE			
BINDER[2] GRADE	MESALs	ADT[1]	NOTES
PG 64-22 OK	< 3	< 5,000	USE WHEN MORE THAN 4-6 INCHES BELOW THE SURFACE. ALSO USE FOR SHOULDERS, DRIVEWAYS, BELOW PCC, AND TEMPORARY CONSTRUCTION.
PG 70-28 OK	< 10	< 10,000	USE ONLY IN THE TOP 4-6 INCHES FOR DRIVING LANES.
PG 76-28 OK	>= 10	>= 10,000	USE ONLY IN THE TOP 4-6 INCHES FOR DRIVING LANES .
PG 76-28 E	—	—	CONTACT ODOT MATERIALS DIVISION FOR RECOMMENDED USE.
[1]USE ADT ONLY WHEN ESAL COMPUTATIONAL DATA IS NOT AVAILABLE. CALCULATE THE DESIGN ESALs BASED ON 20 YEARS.			
[2]PG 70-28 OK OR PG 76-28 OK MAY BE DESIRABLE IN HIGH VOLUME AREAS WHERE SLOW, STANDING, OR TURNING TRAFFIC OCCURS, SUCH AS URBAN INTERSECTIONS OR OFF-RAMPS. OFF RAMPS SHOULD AT LEAST USE THE SAME BINDER AS THE MAINLINE.			

S-9: THIS ITEM INCLUDES ALL COSTS ASSOCIATED WITH COLD MILLING AND TO PROVIDE BUTT JOINTS AS REQUIRED. NO ADDITIONAL PAYMENT SHALL BE MADE FOR COLD MILLING BEYOND THE AVERAGE DEPTH SHOWN ON THE TYPICAL SECTIONS.

S-10: FOR P.C. CONCRETE TYPICAL SECTIONS, CONTRACTOR MAY SUBSTITUTE INTEGRAL CURB FOR CURB & GUTTER, AND VICE VERSA, ONLY WITH APPROVAL OF THE ENGINEER, WITH NO ADJUSTMENT MADE TO UNIT PRICE OR QUANTITY.

S-11: CONCRETE PAVEMENT SHALL BE COMPLETE IN PLACE. NO PARTIAL OR FINAL PAYMENT SHALL BE MADE UNTIL PAVEMENT HAS BEEN SAWED AND SEALED. ANY SECTIONS OF PAVEMENT WITH UNAPPROVED DEVIATIONS FROM THE JOINT LAYOUT PROVIDED IN THE PLANS MAY BE REJECTED AT THE DISCRETION OF THE ENGINEER.

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.

S-14: NOT USED.

S-15: THIS ITEM SHALL BE MEASURED AS THE ACTUAL AMOUNT OF CURB AND/OR GUTTER INSTALLED. NO PAYMENT WILL BE MADE FOR CURB AND/OR GUTTER THROUGH DRIVEWAYS AND INLETS.

S-16: CURB, GUTTER, AND/OR SIDEWALK ASSOCIATED WITH THE DRIVEWAY AND THROUGH THE DRIVEWAY IS INCLUDED IN THE COST OF THE DRIVEWAY.

S-17: ONE SIDEWALK PANEL ON EACH SIDE OF DRIVEWAYS SHALL BE A MINIMUM OF 6" THICK OR MATCH EXISTING DRIVEWAY THICKNESS, WHICHEVER IS GREATER. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THE COST OF THE THICKENED SIDEWALK THROUGH THIS AREA.

S-18: STAMPED CONCRETE SIDEWALK SHALL BE INSTALLED WITH RUNNING BOND BRICK PATTERN. COLOR SHALL BE INTEGRAL AND MATCH HUE WITH FEDERAL STANDARD AMS-595 # 21105 (RED), OR APPROVED EQUAL. PAINTING OF STAMPED CONCRETE IS PROHIBITED AND WILL RESULT IN REJECTION OF WORK PRODUCT. CONTRACTOR SHALL PROVIDE A 1'X1'X4" TEST SQUARE FOR APPROVAL BY ENGINEER PRIOR TO INSTALLATION, WITH ALL COST INCLUDED IN UNIT PRICE BID FOR STAMPED CONCRETE SIDEWALK.

S-19: NOT USED.

S-20: NOT USED.

S-21: THIS PAY ITEM INCLUDES THE FOLLOWING

A. SAW CUTTING
B. REMOVAL OF THE EXISTING CONCRETE AND/OR ASPHALTIC CONCRETE ROADWAY (CY)
C. TYPE S3 ASPHALTIC CONCRETE OR PC CONCRETE COMPLETE AND IN PLACE PER DETAIL
D. SEALING OF EDGES AND TACK COAT

DOES NOT INCLUDE THE FOLLOWING:

A. UNCLASSIFIED EXCAVATION
B. SUBGRADE METHOD B (SY)
C. SEPARATOR FABRIC (SY)
D. AGGREGATE BASE (TYPE A)
E. ASPHALT CONCRETE LEVELING OR SURFACE COURSE

REMOVAL AND ADJUSTMENT

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-2: ALL SAW CUTTING AND REMOVAL SHALL BE INCLUDED IN THE COST OF THE ITEM TO BE ADJUSTED, REMOVED, REPAIRED, OR REPLACED.

R-3: PAY ITEM INCLUDES REMOVAL OF ALL STRUCTURES AND OBSTRUCTIONS WITHIN PROJECT LIMITS NOT SPECIFIED BY OTHER ITEMS OF WORK.

R-4: INCLUDES SAWING NOT INCLUDED IN OTHER ITEMS OF WORK.

R-5: ITEMS TO BE REMOVED MAY OR MAY NOT BE PRESENT IN ANY SPECIFIED CONDITION.

R-6: SHALL INCLUDE ALL COSTS ASSOCIATED WITH PLUGGING/ PATCHING HOLES IN EXISTING STRUCTURES TO REMAIN.

LICENSED PROFESSIONAL ENGINEER
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OKLAHOMA
9/12/2024

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

PAY QUANTITIES AND NOTES (ROADWAY)(1)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: NA	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		9/2024	
HORIZONTAL: NA	LEAD ENGR.		5/6	
	FIELD MGR.		8/25	
VERTICAL: NA	RECOMMENDED: DESIGN MANAGER		8-25	CITY ENGINEER

FILE: DRAWING: DATE JULY 2024
ATLAS PAGE NO: 3 SHEET 02 OF 77 SHEETS

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GENERAL

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.
EXCLUDES MOBILIZATION FOR WATERLINE WORK.

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.

G-5: SHALL INCLUDE THREE ROW BARBED WIRE ON TOP OF FENCE AND GATES.

G-6 ALL HOUSE NUMBERS SHALL BE REPLACED/ REESTABLISHED THROUGHOUT PROJECT LIMITS. COST TO BE INCLUDED IN URBAN RIGHT OF WAY RESTORATION. CONTRACTOR SHALL REESTABLISH DRAINS, ROOF DRAINS AND OTHER DRAINAGE THROUGH THE CURBS IN ACCORDANCE WITH CITY OF TULSA STANDARD 758. NO NEW CURB OUTLETS SHALL BE CONSTRUCTED WITHOUT APPROVAL OF THE ENGINEER.

G-7 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 42ND STREET NORTH, BETWEEN THE HOURS OF 7:30 AM AND 3:00 PM MONDAY THROUGH FRIDAY.

G-8 TREE GRATES ARE NOT ACCEPTABLE PER CITY ARBORIST. CONCRETE PAVERS ARE TO BE USED AS NECESSARY AROUND TREES.

G-9 CONTRACTOR SHALL COORDINATED HOMEOWNERS TO RESET ALL PAVERS, LANDSCAPE STONE, PRIVATE SIDEWALKS AND FENCES THAT ARE DISTURBED DURING CONSTRICTION OPERATIONS. ALL MATERIALS, LABOR, AND EQUIPMENT REQUIRED FOR RESETTING OF SUCH ITEMS IS TO BE INCLUDED IN PRICE BID FOR URBAN RIGHT OF WAY RESTORATION.

G-10 PAY ITEM INCLUDES ALL MOWING WITHIN THE RIGHT-OF-WAY AS DIRECTED DURING CONSTRUCTION

DRAINAGE

D-1: THIS ITEM SHALL INCLUDE THE COST OF NEW MANHOLE FRAME AND COVER PER CITY OF TULSA STD NOS.752, 753, 754, 761, 762, 769A, 769B AND 775. ALL WORK PERFORMED ON SANITARY SEWER MANHOLES SHALL MEET COT SPECIFICATION 41B.

D-2: THE TOTAL COST FOR RUBBERIZED ASPHALT AND/OR SILICONE AT MANHOLES, VALVE BOXES, INLETS, AND INLET APRONS, SHALL BE INCLUDED.

D-3: NO MASONRY STRUCTURES SHALL BE CONSTRUCTED WITHIN THE RIGHT OF WAY.

D-4: ADDITIONAL DEPTH IN A MANHOLE SHALL BE MEASURED FROM 6FT AS MEASURED FROM THE TOP OF RIM TO THE LOWEST FLOWLINE.

D-5: ALL MANHOLES SHALL BE COMPLETE IN PLACE. THIS PAY ITEM INCLUDES FRAME, COVER, CONCRETE AND ALL OTHER INCIDENTALS REQUIRED FOR PLACEMENT.

D6: 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.

D-7: INCLUDES THE COST REQUIRED TO MAKE CONNECTION AND REMOVAL OF EXISTING INLETS. THE COST OF PC CONCRETE CURB AND GUTTER THROUGH THE INLET, 5' EACH SIDE OF THE INLET, AND THE PC CONCRETE INLET APRON SHALL BE INCLUDED. GRATE AND FLOWLINE ELEVATIONS SHALL MATCH EXISTING CONDITIONS UNLESS OTHERWISE NOTED IN THE PLANS.

D-8: QUICKSET FLOWABLE FILL SHALL BE USED TO BACKFILL AROUND STREET CURB INLETS AND REINFORCED CONCRETE PIPE, AS NEEDED, AT THE DIRECTION OF THE ENGINEER.

D-9: ALL INLETS, COMPLETE IN PLACE, SHALL BE CAST IN PLACE CONCRETE OR PRECAST CONCRETE. THIS PAY ITEM INCLUDES ANY INLET FRAME(S), GRATE(S), HOOD(S) AND CONCRETE REQUIRED FOR COMPLETE INSTALLATION OF STRUCTURE PER THE CONSTRUCTION DOCUMENTS.

D-10: ADDITIONAL DEPTH QUANTITIES SHALL BE MEASURED AND PAID FOR ALL INLETS EXCEEDING STANDARD DEPTH. STANDARD DEPTHS ARE AS FOLLOWS:

A) CAST IRON CURB INLET: 3.71 VF, MEASURED FROM CENTER ELEVATION OF LOWEST CAST IRON CURB TO FLOWLINE OF OUTLET PIPE.
B) RECESSED CURB INLET: 3.00 VF, MEASURED FROM TOP OF SLAB TO FLOWLINE OF OUTLET PIPE.
C) STANDARD DROP INLET: SEE STANDARD DETAILS 770, 771, 772 AND 773 - VARIES BASED ON PIPE SIZE, MEASURED FROM LOWEST ELEVATION OF INFLOW APRON TO FLOWLINE OF OUTLET PIPE.

D-11: NOT USED

D-12: REINFORCED CONCRETE PIPE TO BE CLASS III. ALL REINFORCED CONCRETE PIPE AND MANHOLES TO BE SUPPLIED WITH AN OMNI-FLEX JOINT GASKET OR APPROVED EQUAL. MASTIC JOINT SEALANT SHALL NOT BE ALLOWED.

D-13: THIS PAY ITEM SHALL BE COMPLETE IN PLACE AND SHALL INCLUDE ALL PIPE, STANDARD BEDDING MATERIAL AND TRENCH EXCAVATION, JOINT GASKETS AND ALL OTHER INCIDENTALS. NO ADDITIONAL COST WILL BE MADE. PRIOR TO ACCEPTANCE, INTERIOR OF PIPE SHALL BE INSPECTED FOR DEFECTS USING SELF-PROPELLED MOBILE CLOSED-CIRCUIT CAMERA SYSTEM.

D-14: WHERE CORRUGATED POLYPROPYLENE PIPE CONNECTS TO REINFORCED CONCRETE STRUCTURES, CONTRACTOR SHALL ENSURE CONNECTIONS ARE WATER-TIGHT AND FULLY SEALED AGAINST SOIL INFILTRATION.

D-15: WHERE QUICKSET FLOWABLE FILL IS USED TO BACKFILL AROUND CORRUGATED POLYPROPYLENE PIPE, THE CONTRACTOR SHALL UTILIZE AN ANCHORING SYSTEM APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. ALL COSTS FOR LABOR, EQUIPMENT AND MATERIALS REQUIRED TO IMPLEMENT APPROVED ANCHORING SYSTEM INCLUDED IN PRICE BID FOR CORRUGATED POLYPROPYLENE PIPE.

TRAFFIC

T-1: NOT USED

T-2: 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.

T-3: ALL PAVEMENT MARKINGS SHALL BE:THERMOPLASTIC

EXTRUDED APPLIED THERMOPLASTIC. THERMOPLASTIC PAVEMENT MARKINGS SHALL ONLY BE APPLIED WHEN PAVEMENT SURFACE TEMPERATURE EXCEEDS 55°F FOR ALL OF THE SIX HOURS PRIOR TO INSTALLATION WITH A MINIMUM WIND GUSTS ARE BELOW 15 MPH AT THE TIME OF APPLICATION. PRICE BID TO INCLUDE FLEX TABS OR LIKE KIND FOR POST CONSTRUCTION LANE MARKING/SEPARATION. MECHANICALLY APPLIED PREFORMED PLASTIC TAPE ("COLD TAPE") WILL NOT BE ACCEPTED.

T-4: PAYMENT SHALL BE MADE ON A SIGN-DAY 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-6: THE PAY ITEM FOR FLAGGER SHALL BE PAID FOR ON A FLAG DAY (F.D.) BASIS. ONE F.D. IS ONE COMPLETE WORKDAY PERFORMED BY THE CONTRACTOR AS SET FORTH IN THE CONTRACT DOCUMENTS AND SPECIFICATIONS.

T-7: PRICE BID FOR THIS ITEM INCLUDES INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF PROJECT SIGN.

T-8: NOT USED

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Know what's below 811 before you dig.

PAY QUANTITIES AND NOTES (ROADWAY)(2)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: NA	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		9/2024	
HORIZONTAL: NA	LEAD ENGR.		5/25	
	FIELD MGR.		6/25	
VERTICAL: NA	RECOMMENDED: DESIGN MANAGER		8/25 HAS 8-25	CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 03 OF 77 SHEETS

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WATERLINE PAY QUANTITIES BASE BID

ITEM	SPEC. NO.	DESCRIPTION	NOTES	UNIT	BASE BID QTY
75	WS 302	EXCAVATION AND BACKFILL, UNCLASSIFIED	14	CY	1951
76	WS 303	MOBILIZATION		EA	1
77	ODOT 642	CONSTRUCTION STAKING LEVEL II		EA	1
78	WS 307(B)	6" DIP, CL51 POLYETHYLENE WRAPPED (RJ)	1,2,3,8,9,11,27	LF	382
79	WS 307(C)	12" DIP, CL50 POLYETHYLENE WRAPPED	1,2,3,9,11,27	LF	164
80	WS 307(D)	12" DIP, CL50 POLYETHYLENE WRAPPED (RJ)	1,2,3,8,9,11,27	LF	1245
81	WS 312(B)	12" DI 11.25 DEGREE BEND (RJ)	2,8	EA	2
82	WS 312(C)	6" DI 45 DEGREE BEND (RJ)	2,8	EA	16
83	WS 312(D)	12" DI 45 DEGREE BEND (RJ)	2,8	EA	10
84	WS 312(F)	12"x12"x6" DI TEE (RJ)	2,8	EA	10
85	WS 312(G)	12"x12"x12" DI TEE (RJ)	2,8	EA	1
86	WS 312(I)	12"x12"x12"x12" DI CROSS (RJ)	2,8	EA	1
87	WS 312(J)	6" SLEEVE DI (RJ)	2,8,12	EA	38
88	WS 312(K)	12" SLEEVE DI (RJ)	2,8,12	EA	36
89	WS 312(L)	12"x6" DI REDUCER (RJ)	2,8	EA	2
90	WS 315(B)	3/4" WATER SERVICE CONNECTION (LONG)	15,16	EA	1
91	WS 315(B)	3/4" WATER SERVICE CONNECTION (SHORT)	15,16	EA	3
92	WS 315(D)	3/4" WATER SERVICE METER CAN, LID, & RIM		EA	4
93	WS 317(A)	6" GATE VALVE (RJ)	8	EA	11
94	WS 317(B)	12" GATE VALVE (RJ)	8	EA	8
95	WS 317(C)	3-WAY FIRE HYDRANT, IN PLACE		EA	5
96	WS 317(D)	6" FIRE HYDRANT EXTENSION		EA	5
97	WS 317(E)	12" FIRE HYDRANT EXTENSION		EA	5
98	WS 317(F)	18" FIRE HYDRANT EXTENSION		EA	5
99	WS 318(A)	VALVE BOX	21	EA	19
100	WS 318(B)	VALVE BOX EXTENSION	21	VF	19
101	WS 325	SODDING AND SEEDING	23	SY	18
102	WS 329(A)	PAVEMENT, REMOVAL AND REPLACEMENT (ASPH)	31	SY	1046
103	COT 334	CONSTRUCTION AS-BUILTS	24,25,27	LSUM	1
104	COT 335	CONTRACTOR'S QUALITY CONTROL		LSUM	1
105	SPECIAL	OWNER ALLOWANCE	18	EA	5000

WATERLINE PAY QUANTITIES ADD ALT.

ITEM	SPEC. NO.	DESCRIPTION	NOTES	UNIT	ADD ALT. QTY
106	WS 302	EXCAVATION AND BACKFILL, UNCLASSIFIED	14	CY	1872
107	WS 307(A)	6" DIP, CL51 POLYETHYLENE WRAPPED	1,2,3,9,11,27	LF	137
108	WS 307(B)	6" DIP, CL51 POLYETHYLENE WRAPPED (RJ)	1,2,3,8,9,11,27	LF	451
109	WS 307(C)	12" DIP, CL50 POLYETHYLENE WRAPPED	1,2,3,9,11,27	LF	264
110	WS 307(D)	12" DIP, CL50 POLYETHYLENE WRAPPED (RJ)	1,2,3,8,9,11,27	LF	645
111	WS 312(B)	12" DI 11.25 DEGREE BEND (RJ)	2,8	EA	2
112	WS 312(C)	6" DI 45 DEGREE BEND (RJ)	2,8	EA	17
113	WS 312(D)	12" DI 45 DEGREE BEND (RJ)	2,8	EA	10
114	WS 312(E)	6"x6"x6" DI TEE (RJ)	2,8	EA	2
115	WS 312(F)	12"x12"x6" DI TEE (RJ)	2,8	EA	3
116	WS 312(I)	12"x12"x12"x12" DI CROSS (RJ)	2,8	EA	2
117	WS 312(J)	6" SLEEVE DI (RJ)	2,8,12	EA	33
118	WS 312(K)	12" SLEEVE DI (RJ)	2,8,12	EA	25
119	WS 312(L)	12"x6" DI REDUCER (RJ)	2,8	EA	3
120	WS 315(F)	1" WATER SERVICE CONNECTION (LONG)	15,16	EA	2
121	WS 315(F)	1" WATER SERVICE CONNECTION (SHORT)	15,16	EA	4
122	WS 315(H)	1" WATER SERVICE METER CAN, LID, & RIM		EA	6
123	WS 317(A)	6" GATE VALVE (RJ)	8	EA	9
124	WS 317(B)	12" GATE VALVE (RJ)	8	EA	4
125	WS 317(C)	3-WAY FIRE HYDRANT, IN PLACE		EA	3
126	WS 317(D)	6" FIRE HYDRANT EXTENSION		EA	3
127	WS 317(E)	12" FIRE HYDRANT EXTENSION		EA	3
128	WS 317(F)	18" FIRE HYDRANT EXTENSION		EA	3
129	WS 318(A)	VALVE BOX	21	EA	13
130	WS 318(B)	VALVE BOX EXTENSION	21	VF	13
131	WS 325	SODDING AND SEEDING	23	SY	28
132	WS 329(A)	PAVEMENT, REMOVAL AND REPLACEMENT (ASPH)	31	SY	867

ITEMS LISTED OR SHOWN ON DRAWINGS AND/ OR DESCRIBED IN THE SPECIFICATIONS THAT ARE NOT INCLUDED AS A SEPARATE PAY ITEM QUANTITY SHALL BE CONSIDERED INCIDENTAL AND THE COST SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS. THE PRICE BID FOR ALL WORK SHALL INCLUDE ALL MATERIALS, EQUIPMENT, LABOR, INCIDENTALS, AND ALL OTHER REQUIRED ITEMS TO COMPLETE THE WORK AS SHOWN ON PLANS AND SPECIFICATIONS.

WATER LINE PAY ITEM NOTES (05/15/2025):

1. TESTING AND CHLORINATION OF WATER MAINS SHALL BE PERFORMED BY THE CITY OF TULSA. TESTING, CHLORINATION, AND FLUSHING SHALL BE DONE IN ACCORDANCE WITH SECTION 109.3 OF THE GENERAL SPECIFICATIONS.

   A. CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY PLUGS WITH ADEQUATE BLOCKING OR RESTRAINTS, PLUSRECOR CORPORATION STOPS, AS DIRECTED BY CITY TESTING PERSONNEL. THEN, ONCE TESTING, CHLORINATION AND FLUSHING BY CITY PERSONNEL IS COMPLETED, REMOVE TEMPORARY BLOCKING AND TIE INTO EXISTING SYSTEM USING FITTINGS SWABBED INTERNALLY WITH 2% BLEACH SOLUTION.

   B. TESTING, CHLORINATION, AND FLUSHING OF NEW WATER MAIN SHALL BE PERFORMED BY CITY PERSONNEL ON MAINS WHICH ARE PHYSICALLY DISCONNECTED FROM THE EXISTING WATER SYSTEM. TESTING, CHLORINATION, AND FLUSHING OF NEW WATER MAINS SHALL NOT BE PERFORMED AGAINST VALVES WHICH ARE PHYSICALLY CONNECTED TO THE EXISTING SYSTEM.

   C. ALL COSTS FOR TEMPORARY PLUGS, BLOCKING, RESTRAINING, CORPORATION STOPS, TUBING, THREADED CONNECTIONS, BLEACH, AND OTHER INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PIPE.

2. BURIED BOLTS, HARNESS LUGS, AND COUPLINGS SHALL BE GIVEN TWO COATS OF KOPPER'S BITUMASTIC 300-M (DRY MIL THICKNESS OF 16 MILS) OR EQUAL. COST TO BE INCLUDED IN UNIT PRICE BID FOR PIPE AND FITTINGS.

3. CONTRACTOR TO EXCAVATE ALL UTILITY CROSSINGS AHEAD OF PIPE LAYING SO THAT THE GRADES CAN BE ADJUSTED ON THE PROPOSED WATER MAIN TO AVOID UTILITY CONFLICTS. FAILURE TO DO SO SHALL NOT ENTITLE THE CONTRACTOR TO CLAIM EXTRA COMPENSATION FOR ADJUSTMENTS TO THE PROPOSED WATER MAIN. THE COST FOR EXCAVATING UTILITY CROSSINGS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PIPE.

4. CONTRACTOR SHALL INSURE ALL POLES WHICH ARE AFFECTED BY TRENCHING CONDITIONS ARE BRACED BY OWNERS. PAYMENT SHALL BE INCLUDED IN "RIGHT-OF-WAY CLEARING AND RESTORING". NO ADDITIONAL PAYMENT SHALL BE MADE.

5. ALL HYDRANTS, VALVES AND OTHER FITTINGS FROM ABANDONED WATER MAINS SHALL BE SALVAGED AND DELIVERED TO THE SOUTH YARD AT 2317 S JACKSON AVE. PAYMENT TO BE MADE UNDER RIGHT OF WAY CLEARING AND RESTORING. NO ADDITIONAL PAYMENT SHALL BE MADE.

6. CONTRACTOR SHALL REPAIR ANY IRRIGATION SYSTEMS, ROOF DRAINS, AND FENCING DAMAGED IN THE ZONE OF CONSTRUCTION DURING THE COURSE OF CONSTRUCTION TO SATISFACTION OF THE PROPERTY OWNER. PAYMENT SHALL BE INCLUDED IN RIGHT-OF-WAY CLEARING AND RESTORING. NO ADDITIONAL PAYMENT SHALL BE MADE.

7. COST OF ANY TEMPORARY LIVESTOCK FENCING AND POLES SHALL BE INCLUDED IN COST OF RIGHT OF WAY CLEARING AND RESTORING. NO ADDITIONAL PAYMENT SHALL BE MADE.

8. ALL COSTS FOR COMPONENTS NECESSARY TO RESTRAIN JOINTS FOR PIPE AND FITTINGS DESIGNATED RESTRAINED JOINT ("RJ") SHALL BE INCLUDED IN UNIT PRICE BID FOR PIPE OR FITTINGS.

   A. DUCTILE IRON PIPE RESTRAINED JOINT SYSTEMS: US PIPE TRFLEX, GRIFFIN SNAPLOK, MCWANE THRUSTLOCK, AMERICAN FLEXRING, EBAA MEGALUG, STAR STARGRIP, SMITH-BLAIR CAMLOCK, CLOW TUFGRIP OR EQUAL SHALL BE USED ON THIS PROJECT. SHOULD RJ PIPE BE SPECIFIED THROUGH UNCASED BORES, ONLY USPIPE TRFLEX, GRIFFIN SNAPLOK, MCWANE THRUSTLOCK, OR AMERICAN FLEXRING IS TO BE USED. LOCKING GASKETS NOT PERMITTED.

   B. POLYVINYL CHLORIDE (PVC) RESTRAINED JOINT SYSTEMS: EBAA MEGALUG, STAR STARGRIP OR EQUAL SHALL BE USED ON THIS PROJECT. LOCKING GASKETS NOT PERMITTED; SHOULD RJ PIPE BE SPECIFIED ON BORE, CASING IS REQUIRED.

   C. HIGH DENSITY POLYETHYLENE (HDPE) RESTRAINED JOINT SYSTEMS: EBAA MEGALUG, STAR STARGRIP OR EQUAL SHALL BE USED ON THIS PROJECT.

   NO ADDITIONAL PAYMENT SHALL BE MADE.

9. ALL WATER MAINS TO BE ABANDONED SHALL BE FILLED TO 100% OF THE ABANDONED PIPE VOLUME. FILL MATERIAL SHALL BE EITHER CELLULAR CONCRETE OR FLOWABLE FILL AS APPROVED BY THE ENGINEER. COST OF CONCRETE PLUGGING TO BE INCLUDED IN THE UNIT PRICE BID FOR PIPE. NO ADDITIONAL PAYMENT SHALL BE MADE.

10. TRACER WIRE AND DETECTABLE MYLAR MARKING TAPE SHALL BE INSTALLED ABOVE ALL PVC AND HDPE PIPE, TERMINATING ONLY ONTO HYDRANTS JUST ABOVE GROUND LEVEL AS PER CONST SPEC 310. COST OF TRACER WIRE AND DETECTABLE MYLAR TAPE SHALL BE INCLUDED IN UNIT PRICE BID FOR PVC AND HDPE PIPE. CONST SPEC 310.1 NOW ALLOWS #12 COPPER-CLAD STEEL (CCS) WIRE, 21% CONDUCTIVITY, IN LIEU OF #8 COPPER WIRE AS TRACER WIRE ATOP PVC AND HDPE PIPE.

11. DETECTABLE MYLAR MARKING TAPE SHALL BE INSTALLED OVER DUCTILE IRON PIPE AS PER CONST SPEC 307.3 AND 307.4. COST WILL BE INCLUDED IN THE COST OF DUCTILE IRON PIPE.

12. ALL LABOR, MATERIALS, AND EQUIPMENT TO CONNECT PROPOSED WATER MAINS TO EXISTING WATER MAINS ARE INCLUDED IN THE COST OF PIPE. CONTRACTOR TO EXCAVATE ALL EXISTING WATER MAINS AHEAD OF PIPE LAYING SO THAT THE GRADES CAN BE ADJUSTED ACCORDINGLY. FAILURE TO DO SO SHALL NOT ENTITLE THE CONTRACTOR TO CLAIM EXTRA COMPENSATION FOR ADJUSTMENTS TO THE PROPOSED WATER MAIN. THE COST FOR EXCAVATING EXISTING WATER MAINS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR SLEEVES. NO ADDITIONAL PAYMENT SHALL BE MADE.

13. AT THE DIRECTION OF THE ENGINEER, CONTRACTOR SHALL FURNISH A "LICENSED AND BONDED PLUMBER", WHICH SHALL INCLUDE ALL COSTS OF LABOR, TOOLS, PERMIT FEES, AND EQUIPMENT TO REROUTE THE EXISTING CUSTOMER SERVICE ON CUSTOMER PROPERTY TO THE PROPOSED CUSTOMER METER CAN. COST SHALL NOT EXCEED AN ALLOWANCE OF $1000 PER OCCURRENCE. MATERIALS COSTS SHALL BE INCLUDED UNDER THE UNIT PRICE FOR WATER SERVICE CONNECTION AND/OR WATER SERVICE LINE EXTENSION. NO ADDITIONAL PAYMENT SHALL BE MADE.

14. CONTRACTOR IS REMINDED TO BACKFILL ALL TRENCHES EXCAVATED ACROSS ANY EXISTING OR PROPOSED DRIVING OR PARKING SURFACE WITH 1½ -IN TYPE A AGGREGATE BASE, PLACED IN 8-INCH MAXIMUM LIFTS AND COMPACTED TO 98% MODIFIED PROCTOR DENSITY. COST TO BE INCLUDED IN THE UNIT PRICE FOR EXCAVATION AND BACKFILL. NO ADDITIONAL PAYMENT SHALL BE MADE.

15. WATER SERVICE CONNECTIONS SHALL INCLUDE COST OF MATERIAL, LABOR, AND EQUIPMENT TO REMOVE AND INSTALL SADDLES, SERVICE CLAMPS, CORPORATION STOPS, BENDS, 3-PART UNIONS, COUPLINGS, SETTERS AND ANY OTHER INCIDENTALS REQUIRED FOR A COMPLETE WATER SERVICE CONNECTION, WITH THE EXCEPTION OF METER CANS, RIMS AND LIDS. NO ADDITIONAL PAYMENT SHALL BE MADE. METER CANS, LIDS AND RIMS SHALL BE PAID AS A SEPARATE BID ITEM.

   A. A SHORT SERVICE SHALL BE ANY SERVICE LINE THAT IS 25-FEET OR LESS IN LENGTH. SHORT SERVICES DO NOT INCLUDE PAVEMENT REPLACEMENT.

   B. LONG SERVICE SHALL BE ANY SERVICE LINE THAT IS GREATER THAN 25-FEET UP TO 80-FEET IN LENGTH. LONG SERVICES INCLUDE PAVEMENT REPLACEMENT AND/ OR COST TO BORE.

   C. SERVICE LINES EXCEEDING THE ABOVE PARAMETERS WILL BE COMPENSATED FOR LINEAR FOOTAGE ABOVE AND BEYOND. COMPENSATION SHALL BE PAID AS "SERVICE LINES, EXTENSION", PER LF

16. SERVICE LINES ON NON-ARTERIALS SHALL BE EITHER COPPER TUBING (TYPE K SOFT ANNEALED CONFORMING TO ASTM B 88) OR PEX TUBING (VIEGA PUREFLOW PEX BLUE 5306 OR UPONOR AQUA PEX 5206 BLUE CONFORMING TO ASTM F876/F877/F2023). PEX TUBING IS NOT PERMITTED WITHIN ARTERIAL RIGHT OF WAY. WHEN CONTRACTOR ELECTS TO USE PEX TUBING:

   A. ¾-INCH WATER SERVICE CONNECTION SHALL USE 1-INCH PEX TUBING MINIMUM
   B. 1-INCH WATER SERVICE CONNECTION SHALL USE 1¼-INCH PEX TUBING MINIMUM

17. CONTRACTOR'S PLUMBER SHALL PROVIDE AN INFORMATIONAL BROCHURE TO THE PROPERTY OWNERS OUTLINING THE STEPS REQUIRED TO THOROUGHLY FLUSH THEIR WATERLINES AFTER CONNECTION TO THE NEW WATER MAIN. ALL COSTS TO PRODUCE AND DISTRIBUTE THE BROCHURE SHALL BE INCLUDED IN THE PRICE BID FOR THIS ITEM. /

WATER LINE PAY ITEM NOTES (CONT.):

18. THE "OWNER ALLOWANCE" CAN BE USED FOR VARIOUS WORK AND MISCELLANEOUS ITEMS NOT IDENTIFIED IN THE CONTRACT DOCUMENTS WITH THE FOLLOWING PROVISIONS: THE ALLOWANCE SHALL BE USED FOR COST OF MATERIALS, LABOR, INSTALLATION AND OVERHEAD AND PROFIT FOR ADDITIONAL WORK AND MISCELLANEOUS ITEMS THAT ARE NOT IDENTIFIED IN THE CONSTRUCTION DOCUMENTS AND PLANS, AND NOT INCLUDED IN THE BID ITEMS OF THE CONTRACT.

   A. THE ALLOWANCE SHALL BE USED ONLY AT THE DISCRETION OF THE CITY. ANY ALLOWANCE BALANCE REMAINING AT THE COMPLETION OF THE PROJECT WILL BE CREDITED BACK TO THE CITY ON THE FINAL APPLICATION FOR PAYMENT SUBMITTED BY THE CONTRACTOR.

   I. WATER SERVICE LINES OF UNKNOWN OR UNEXPECTED SIZE.

   B. THE CONTRACTOR SHALL PROVIDE, TO THE CITY, A WRITTEN REQUEST FOR THE USE OF ANY ALLOWANCE, WITH A SCHEDULE OF VALUES, AND ALL ASSOCIATED BACKUP INFORMATION, INCLUDING ANY TIME EXTENSIONS REQUIRED TO PERFORM THE WORK.

   C. THE CONTRACTOR SHALL PROCEED WITH THE WORK INCLUDED IN THE ALLOWANCE ONLY AFTER RECEIVING A WRITTEN ORDER, FROM THE ENGINEER AND CITY AUTHORIZING SUCH WORK. PROCEEDING WITH WORK IN THE ALLOWANCE WITHOUT A WRITTEN ORDER FROM THE CITY WILL BE AT THE CONTRACTOR'S EXPENSE.

19. WHERE PLANS IDENTIFY A 22.5-DEG OR 11.25-DEG VERTICAL OR HORIZONTAL BEND, HDPE WILL BE DEFLECTED PER MANUFACTURER'S MINIMUM ALLOWABLE BEND RADIUS.

20. WHERE PLANS IDENTIFY A CROSS, HDPE WILL USE TWO (2) TEE'S. NO ADDITIONAL PAYMENT SHALL BE MADE.

21. TOP OF VALVE BOX SHALL BE FLUSH WITH FINISHED GRADE.

22. THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO A CONDITION EQUAL TO OR BETTER THAN THE EXISTING IMPROVEMENTS. LIMITS OF DISTURBANCE SHALL NOT EXCEED 9-FEET CENTERED ON THE WATERLINE. ANY DISTURBANCE OUTSIDE OF THIS AREA SHALL BE RESTORED AT THE CONTRACTORS EXPENSE. STREETS, DRIVEWAYS AND ASSOCIATED ITEMS SHALL BE PAID FOR UNDER OTHER ITEMS OF WORK.

23. THE CONTRACTOR SHALL RESTORE ALL DISTURBED GRASS AREAS TO A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION. THE CONTRACTOR SHALL REPLACE THE SOD TO MATCH IN-KIND AND QUALITY. LIMITS OF DISTURBANCE SHALL NOT EXCEED 9-FEET CENTERED ON THE WATERLINE. ANY DISTURBANCE OUTSIDE OF THIS AREA SHALL BE RESTORED AT THE CONTRACTORS EXPENSE. PAY ITEM INCLUDES ALL MOWING WITHIN THE RIGHT-OF-WAY AS DIRECTED DURING CONSTRUCTION.

24. SPOT ELEVATIONS ON THE MAIN WATER LINE RELATIVE TO FINISHED GRADE SHALL BE PROVIDED AT EACH 100-FT INTERVAL, COMPLETE WITH STATION AND OFFSET. IN ADDITION, ALL VALVES, FITTINGS, FIRE HYDRANTS (TOP OF NUT) AND OTHER MAJOR APPURTENANT ITEMS SHALL BE SHOWN WITH THE PROPER DESCRIPTION, STATION, OFFSET (NORTHING, EASTING) AND ELEVATION PER PLAN SURVEY CONTROL DATUM.

25. SPOT ELEVATIONS ON WATER METER CANS, VAULTS, SHALL BE SHOWN WITH THE PROPER DESCRIPTION (METER TYPE, METER SIZE, METER NUMBER, SERVICE MATERIAL, SERVICE SIZE), STATION, OFFSET (NORTHING, EASTING) AND ELEVATION PER PLAN SURVEY CONTROL DATUM. UPON DISCOVERY OF A LEAD SERVICE, NOTIFICATION SHALL BE MADE TO WATER DISTRIBUTION AND WORK SHALL CEASE UNTIL RELEASED AT WHICH TIME ANY AND ALL SERVICE LINES LOCATED THAT ARE LEAD OR GALVANIZED ARE TO BE REPLACED WITH APPROVED MATERIALS.

26. WORK UNDER THIS ITEM SHALL INCLUDE FURNISHING AND INSTALLING HDPE WALL ANCHOR AS SHOWN ON DRAWINGS OR AS DIRECTED BY THE ENGINEER. THE UNIT PRICE SHALL INCLUDE THE COST OF ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED. NO ADDITIONAL PAYMENT SHALL BE MADE FOR EXCAVATION, BACKFILLING, OR CONCRETE BLOCKING.

27. PRESSURE TESTING AND CHLORINATION OF WATER MAINS SHALL NOT BE PERFORMED UNTIL THE CITY INSPECTOR HAS RECEIVED REQUIRED CONSTRUCTION AS-BUILT RECORDS.

28. MARKER BALLS SHALL BE INSTALLED ABOVE ALL FITTINGS, BLIND FLANGES, SERVICE TAPS AND EVERY 100 FEET, IF THE DISTANCE BETWEEN FITTINGS IS GREATER THAN 100 FEET. COST OF MARKER BALLS SHALL BE INCLUDED IN UNIT PRICE BID FOR PIPE. MARKERS SHALL BE VIVAX WATER MARKER BALLS OR EQUAL THAT WORK WITH THE VIVAX VLOC3 -PRO RECEIVER AND LOC3-10TX TRANSMITTER.

29. COST INCLUDES EBAA MEGASTOPS OR EQUAL, INSTALLED ON ALL PVC JOINTS THROUGH BORES TO PREVENT OVERBELLING.

30. AGG BASE AND SUBGRADE, PER CITY STANDARD SPECIFICATIONS AND STANDARD DETAILS 701 - 702, SHALL BE PAID UNDER EXCAVATION AND BACKFILL.

31. AGG BASE AND SUBGRADE, PER CITY STANDARD SPECIFICATIONS AND STANDARD DETAILS 703 - 704, SHALL BE PAID UNDER EXCAVATION AND BACKFILL.

32. 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.

33. 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.

34. PRICE BID SHALL INCLUDE MAINTENANCE, SEDIMENT REMOVAL, DISPOSAL, AND REMOVAL OF FILTERS AT PROJECT COMPLETION.

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

LICENSED PROFESSIONAL ENGINEER Daniel E. Polasek 24920 OKLAHOMA
7/14/2025

TMUA-W 16-33 & 16-36

PAY QUANTITIES AND NOTES (WATER)(1)

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

REVISION	BY	DATE

PLAN SCALE: NA	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		7/2025
HORIZONTAL: NA	LEAD ENGR.		7/2025
	FIELD MGR.		7/25
VERTICAL: NA	RECOMMENDED: DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING:

DATE JULY 2024

ATLAS PAGE NO: 3

SHEET 04 OF 77 SHEETS

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WATERLINE CONSTRUCTION NOTES (05/15/2025):

1. THE CITY OF TULSA FIELD ENGINEERING DEPARTMENT SHALL INSPECT ALL TRENCHING, BEDDING, PIPE INSTALLATION, BACKFILL AND COMPACTION.

2. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARD SPECIFICATIONS AND STANDARD DETAILS OF THE CITY OF TULSA ENGINEERING SERVICES DEPARTMENT.

3. EXISTING SERVICE CONNECTIONS ARE TO BE KEPT IN SERVICE UNTIL CONNECTIONS TO NEW MAIN ARE MADE. ALL SERVICE LINE RECONNECTIONS SHALL BE MADE BY THE CONTRACTOR. SERVICE RECONNECTIONS SHALL BE INSTALLED AS PER CITY OF TULSA STANDARD SPECIFICATIONS AND STANDARD DETAILS.

4. MINIMUM COVER OVER WATER LINES SHALL BE AS NOTED ON THE PLANS.

5. CONTRACTOR SHALL REPLACE EXISTING GRASS WITH SEED/SOD OF THE SAME TYPE AND VARIETY OR AS NOTED ON PLANS.

6. CONTRACTOR SHALL BORE EXISTING TREES UNDER DRIP LINE, UNLESS DIRECTED OTHERWISE BY ENGINEER.

7. CONTRACTOR SHALL BORE EXISTING DRIVEWAYS, UNLESS DIRECTED OTHERWISE BY ENGINEER.

8. WATER OPERATIONS SHALL OPERATE ALL VALVES ON TRANSMISSION MAINS (16" AND LARGER). CONTRACTOR SHALL OPERATE ALL VALVES ON DISTRIBUTION MAINS (SMALLER THAN 16") WITH THE COORDINATION OF FIELD ENGINEERING AND WATER OPERATIONS AND IN THE PRESENCE OF A FIELD ENGINEERING INSPECTOR.

A. ATTEMPTS WILL BE MADE WITH ASSISTANCE FROM THE CONTRACTOR TO NOTIFY ALL AFFECTED CUSTOMERS 48 HOURS IN ADVANCE, PARTICULARLY IF COMMERCIAL OR INDUSTRIAL CUSTOMERS ARE INVOLVED. PRIOR TO SHUTDOWN, FIELD ENGINEERING WILL NOTIFY WATER OPERATIONS AT 918-596-9488, GIVING AN ESTIMATED DOWNTIME. WATER OPERATIONS WILL NOTIFY THE FIRE DEPARTMENT OF ALL FIRE HYDRANTS OUT OF SERVICE AND WHEN THEY ARE BACK IN SERVICE, BY STREET ADDRESS OR INTERSECTION.

B. WHERE COMMERCIAL, INDUSTRIAL, OR CRITICAL CUSTOMERS ARE AFFECTED, AND FOR ALL LINES 16-INCH AND LARGER IN SIZE, FIELD ENGINEERING WILL REQUEST WATER OPERATIONS TO SHUT DOWN THE MAIN. THERE WILL BE A MINIMUM OF 48-HOUR NOTICE TO WATER OPERATIONS.

9. CONTRACTOR SHALL PROVIDE AT LEAST 48 HOUR NOTICE TO ALL RESIDENTS OR BUSINESSES AFFECTED BEFORE TURNING OFF ANY WATER. CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING DOOR HANGERS ON AFFECTED HOMES AND BUSINESSES.

10. CONTRACTOR SHALL GIVE THE NOTIFICATION CENTER OF THE OKLAHOMA ONE-CALL SYSTEM, INC, NOTICE OF ANY EXCAVATION NO LATER THAN 48 HOURS OR SOONER THAN 10 DAYS PRIOR TO COMMENCEMENT OF WORK (EXCLUDING SATURDAYS, SUNDAYS, LEGAL HOLIDAYS). PHONE: 1-800-522-6543.

11. LOCAL AND THROUGH TRAFFIC SHALL BE MAINTAINED THROUGH PROJECT AT ALL TIMES. OPEN CUT STREET CROSSINGS REQUIRE AN APPROVED TRAFFIC CONTROL PLAN WITH TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH CURRENT MUTCD REQUIREMENTS.

12. ANY DAMAGE CAUSED BY THE CONTRACTOR TO ADJACENT TRAFFIC SIGNAL INFRASTRUCTURE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE TRAFFIC ENGINEER.

13. PRIOR TO PAVEMENT SAWING AND EXCAVATION NEAR SIGNALIZED INTERSECTION, CONTRACTOR SHALL CONTACT ENGINEERING SERVICES AND TRAFFIC OPERATIONS (918-596-9766) FOR SITE SPECIFIC, UNDERGROUND TRAFFIC UTILITY LOCATES.

14. CONSTRUCTION FOR ALL ENGINEERING SERVICE FACILITIES SHALL BE IN COMPLIANCE WITH THE LATEST EDITION OF TITLE 252, DEPARTMENT OF ENVIRONMENTAL QUALITY, CHAPTER 626, PUBLIC WATER SUPPLY CONSTRUCTION STANDARDS, OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ).

15. ALL EXCAVATED MATERIAL NOT REQUIRED IN OTHER AREAS OF 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 SHALL BE REQUIRED TO OBTAIN AN EARTH CHANGE PERMIT IF ANY EXCESS MATERIAL IS TO BE DISPOSED OF WITHIN THE CITY LIMITS OF TULSA.

16. ANY CHANGES FROM THE APPROVED PLANS SHALL BE SUBMITTED TO THE CITY OF TULSA FOR WRITTEN APPROVAL PRIOR TO INSTALLATION.

LICENSED PROFESSIONAL ENGINEER
Daniel E. Polaski
24920
OKLAHOMA
7/14/2025

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

TMUA-W 16-33 & 16-36

PAY QUANTITIES AND NOTES (WATER)(2)

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
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REVISION	BY	DATE

PLAN SCALE: NA	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		7/2025	
HORIZONTAL: NA	LEAD ENGR.	CEW	7/2025	
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FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 05 OF 77 SHEETS

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TRAFFIC PAY QUANTITIES

Utica Ave. at BAXY, 12th St. and 11th St.

ITEM	SPEC	DESCRIPTION	UNIT	BAXY	12TH	11TH	TOTAL
133	COT 601	PULL BOX SIZE II	EA	6	3	3	12
134	COT 601	PULL BOX SIZE III	EA	2	1	1	4
135	COT 602	2" PVC SCH. 40 PLASTIC CONDUIT (TRENCHED)	LF	80	70	75	225
136	COT 602	3" PVC SCH. 40 PLASTIC CONDUIT (TRENCHED)	LF	170	70	80	320
137	COT 602	3" HDPE SCH. 40 CONTINUOUS CONDUIT (DIRECTIONAL BORE) (OUTSIDE IDL) (80)	LF	10			10
138	COT 602	4" HDPE SCH. 40 CONTINUOUS CONDUIT (DIRECTIONAL BORE) (OUTSIDE IDL)	LF	260			260
139	COT 602	2-3" HDPE SCH. 40 CONTINUOUS CONDUIT (DIRECTIONAL BORE) (OUTSIDE IDL)	LF	735	300	320	1355
140	COT 603	30" SIGNAL FOOTING S-30/36 (20)	EA	2		3	5
141	COT 603	36" SIGNAL FOOTING S-42/50 (20)	EA	2		1	3
142	COT 603	24" PEDESTAL FOOTING F-1 (20)	EA	9	7	7	23
143	COT 606	PRE-EMPTION CABLE (93)	LF	1350		705	2055
144	COT 606	INFRARED PRE-EMPTION DETECTOR (93)	EA	4		4	4
145	COT 606	PRE-EMPTION PHASE SELECTOR (93)	EA	2		2	4
146	COT 607	SERVICE TO SIGNAL STANDARD (1)	EA		1	1	2
147	COT 608	GROUND SIGN (96)	SF	25.0			25.0
148	COT 608	OVERHEAD SIGN	SF	162.0	69.0	89.0	320.0
149	COT 610	TRAFFIC SIGNAL CONTROLLER CABINET ASSEMBLY (COT 610)(2,10,11) (91,92,93,94)	EA	1	1	1	3
150	COT 611	2#14 SHIELDED ELECTRICAL CONDUCTOR (95)	LF	1780	920	1160	3860
151	COT 611	4#14 TRAFFIC SIGNAL ELECTRICAL CABLE (95)	LF	200	135	150	485
152	COT 611	20#14 TRAFFIC SIGNAL ELECTRICAL CABLE (95)	LF	820	410	450	1680
153	COT 611	GREEN #12 THHN ELECTRICAL CONDUCTOR (95)	LF	2070	1055	1300	4425
154	COT 611	2#12 UF ELECTRICAL CONDUCTOR WITH GROUND (95)	LF	1145	320	1345	2810
155	COT 611	7#14 TRAFFIC SIGNAL ELECTRICAL CABLE (95)	LF	2200	935	1450	4585
156	COT 611	GREEN #6 THHN ELECTRICAL CONDUCTOR (95)	LF	810	325	355	1490
157	COT 611	CAT 6 ETHERNET CABLE (17)	LF	260	210	235	705
158	COT 612	CABINET BASE, APRON AND GUARD	EA	2	1	1	4
159	COT 613	AUDIBLE PEDESTRIAN PUSH BUTTON STATION AND SIGN (81,82)	EA	12	8	8	28
160	COT 613	AUDIBLE PEDESTRIAN PUSH BUTTON CONTROL CARD/UNIT (81,82)	EA	2	1	1	4
161	COT 613	AUDIBLE PEDESTRIAN PUSH BUTTON CONFIG/PROGRAMMING DEVICE	EA	1	1	1	3
162	COT 614	LED 3 SECTION TRAFFIC SIGNAL HEAD (#36) (19,22)	EA	12		8	20
163	COT 614	LED 3 SECTION TRAFFIC SIGNAL HEAD (#54L) (19,22)	EA	2			2
164	COT 614	LED 4 SECTION TRAFFIC SIGNAL HEAD (#13L)(FLTYA) (19,22)	EA	2	2	4	8
165	COT 614	LED ICC PEDESTRIAN HEAD (#33) (83)	EA	12	8	8	28
166	COT 615	BASE COVERS	EA	2		4	6
167	COT 617	36' MODULAR TRAF. SIGNAL MAST ARM AND POLE W/LUM EXT	EA	1		3	4
168	COT 617	42' MODULAR TRAF. SIGNAL MAST ARM AND POLE W/LUM EXT	EA	1		1	2
169	COT 617	42' MODULAR TRAF. SIGNAL MAST ARM AND POLE W/O LUM EXT	EA	1			1
170	COT 617	10' PEDESTAL POLE	EA	9	7	7	23
171	COT 619	TEMP SIGNAL SPAN (80)	EA	1			1
172	COT 619	TEMP SIGNAL POLE (80)	EA	1			1
173	COT 619	TEMP SIGNAL CABINET (80)	EA	1			1
174	COT 619	TEMP SIGNAL SERVICE (80)	EA	1			1
175	COT 620	VIDEO DETECTION SYSTEM (13,92)	EA	1	1	1	3
176	COT 621	ROADWAY LUMINAIRE (3)	EA	3	1	4	8
177	COT 622	WIRELESS TRAFFIC SIGNAL COMMUNICATIONS SYSTEM (16,24)	EA	1	1	1	3
178	COT 623	BATTERY BACKUP SYSTEM (23)	EA	1		1	2
179	COT 625	REMOVAL OF TRAFFIC ITEMS (4,8)	EA	1	1	1	3
180	COT 626	TRAFFIC SIGNAL MAINTENANCE (80)	HR	1			1
181	COT 626	SIGNAL MODIFICATIONS FOR LANE CLOSURES (PER SIGNALIZED INTERSECTION) (80)	EA	1			1
182	SPECIAL	TRAFFIC ITEMS (19,22,97)	LSUM	1			1

TRAFFIC OPERATIONS GENERAL CONSTRUCTION NOTES

(A) THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE TRAFFIC SIGNAL IN A PROPER WORKING CONDITINO DURING CONSTRUCTION, AS DIRECTED BY THE TRAFFIC ENGINEER, AND FOR FOLLOWING THE REQUIREMENTS OF COT SPEC 626 - TRAFFIC SIGNAL CONSTRUCTION AND OPERATION. ALL TRAFFIC MATERIALS SHALL MEET THE REQUIREMENTS OF COT SPEC 627 - PREQUALIFICATION FOR TRAFFIC OPERATIONS MATERIALS, OR AS DIRECTED BY THE TRAFFIC ENGINEER. CONTRACTORS SHALL MEET THE REQUIREMENTS OF COT SPEC 628 - SIGNAL AND LIGHTING PROJECT CONTRACTOR EXPERIENCE REQUIREMENTS.

(B) THE CONTRACTOR SHALL OBTAIN THE NECESSARY PERMITS FOR ELECTRICAL INSPECTION ON ALL SIGNAL AND LIGHTING WORK PER COT SPEC 626 – TRAFFIC SIGNAL CONSTRUCTION AND OPERATION.

USE THE FOLLOWING ADDRESS(ES) FOR THE ELECTRICAL PERMIT:
702 E 11TH ST S (TRAFFIC SIGNAL)
1200 S UTICA AVE (TRAFFIC SIGNAL)
1352 S UTICA AVE (TRAFFIC SIGNAL)

(D) ALL TRAFFIC MATERIALS REMOVED SHALL BE HANDLED PER COT SPEC 625 – REMOVAL OF TRAFFIC ITEMS.

(F) THIS PROJECT HAS BEEN DESIGNED AND IS TO BE CONSTRUCTED ACCORDING TO THE REQUIREMENTS OF THE 2022 VERSION OF THE CITY OF TULSA TRAFFIC OPERATIONS STANDARDS AND SPECIFICATIONS.

TRAFFIC OPERATIONS PAY ITEM NOTES

(1) THE INSTALLED SERVICE SHALL BE FULLY OPERATIONAL AND ANY COSTS CHARGED BY THE UTILITY COMPANY FOR THE SERVICE INSTALLATION SHALL BE PAID BY THE CONTRACTOR AND IS INCLUDED IN THIS PAY ITEM.

(2) THE CONTRACTOR SHALL DELIVER THE SIGNAL CABINET FULLY WIRED AND READY FOR INSTALLATION TO THE COT TRAFFIC OPERATIONS DIVISION FOR INSPECTION AND APPROVAL PRIOR TO INSTALLATION. COT WILL NOTIFY THE CONTRACTOR OF ANY DEFICIENCIES OR APPROVE THE CABINET WITHIN TWO WEEKS PER COT SPECIFICATION 610 FOR TRAFFIC SIGNAL CONTROLLER CABINET ASSEMBLIES.

(3) The CONTRACTOR SHALL PROVIDE LED LUMINAIRES APPROVED BY THE CITY OF TULSA TRAFFIC ENGINEER. THIS PAY ITEM INCLUDES THE LUMINAIRE AND ALL RELATED EQUIPMENT SUCH AS AMERICAN ELECTRIC LIGHTING ATBM SERIES LED LUMINARIES OR APPROVED EQUIVALENT 120V PHOTOCELL, INLINE FUSE HOLDER AND 5 AMP KTK FUSE, ETC.

(4) THIS PAY ITEM INCLUDES THE REMOVAL AND DELIVERY OF THE FOLLOWING EQUIPMENT, WHICH IS TO REMAIN THE PROPERTY OF THE CITY OF TULSA, TO THE CITY OF TULSA TRAFFIC OPERATIONS YARD AT 3801 N HARVARD AVE: MULTI-SIDED GALVANIZED TRAFFIC SIGNAL POLES, SIGNAL HEADS, PEDESTRIAN HEADS AND PUSH BUTTONS, BACK PLATES, CONTROLLER CABINET ASSEMBLY, CABINET GUARD, UNDAMAGED PULL BOX LIDS, MAST ARM SIGNS, ASTRO-BRACKETS, SPAN WIRE EQUIPMENT, AND ANY OTHER TRAFFIC SIGNAL EQUIPMENT REMOVED EXCEPT FOR THE PULL BOXES, CONDUIT, AND WIRE WHICH SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THE PRICE BID SHALL INCLUDE THE REMOVAL OF ALL FOOTINGS BELOW GROUND LEVEL OR AS DIRECTED BY THE ENGINEER. FOOTINGS, GREEN MAST ARM POLES, AND ALL OTHER SIGNAL POLES OTHER THAN THE MULTI-SIDED POLES, ARE TO BECOME THE PROPERTY OF THE CONTRACTOR.

(8) CONTRACTOR SHALL NOTIFY CITY OF TULSA AT LEAST TWO BUSINESS DAYS PRIOR TO REMOVAL OF SIGNAL EQUIPMENT TO COORDINATE REMOVAL OF ALL SIGNAL COMMUNICATIONS EQUIPMENT. THE CITY OF TULSA SHALL REMOVE AND REINSTALL THE COMMUNICATIONS EQUIPMENT.

(10) THE TRAFFIC SIGNAL CONTROLLER PROVIDED SHALL BE AN ECONOLITE ATC COBALT CONTROLLER IN A 332S SIGNAL CABINET

THE CONFLICT MONITOR SHALL BE AN 18 CHANNEL EDI 2018ECLIP OR APPROVED EQUAL. AN ETHERNET PORT SHALL BE PROVIDED ON THE FRONT PANEL. THE ETHERNET PORT SHALL BE ELECTRICALLY ISOLATED FROM THE MMU ELECTRONICS AND SHALL PROVIDE A MINIMUM OF 1500 VRMS ISOLATION. THE CONNECTOR SHALL BE AN RJ-45 EIGHT PIN CONNECTOR. AN HTML BASED CAPABILITY SHALL BE PROVIDED IN THE MONITOR TO CONFIGURE THE NETWORK PARAMETERS OF THE MMU ETHERNET PORT USING A STANDARD HTML BROWSER. ALL DISPLAY INDICATORS SHALL BE MOUNTED ON THE FRONT PANEL OF THE SIGNAL MONITOR AND SHALL BE WATER CLEAR, T-1 PACKAGE, SUPER BRIGHT TYPE LEDS. ALL FAULT LEDS SHALL BE RED EXCEPT THE POWER INDICATOR WHICH SHALL BE GREEN. A SEPARATE RED, YELLOW AND GREEN INDICATOR SHALL BE PROVIDED FOR EACH CHANNEL.

THE CABINET SHALL INCLUDE TWO 19" RACK SHELVES, CHATSWORTH PRODUCTS PART NUMBER 10758-701, OR APPROVED EQUAL, IN ADDITION TO WHAT IS OUTLINED IN COT SPECIFICATION 610. RACKS SHALL BE DESIGNED TO HOLD SMALL PERIPHERAL EQUIPMENT IN A CENTRAL LOCATION. EACH SHELF TYPICALLY HOLDS TWO UNITS AND ALLOWS A CONVENIENT CABLE RUN DOWN THE INSIDE OF THE RACK CHANNEL. THE RACK SHALL HOLD EQUIPMENT UP TO 17.35" WIDE BY 9.82" DEEP AND MADE OF STRONG, LIGHTWEIGHT ALUMINUM THAT CAN SUPPORT UP TO 50 LBS.

(11) THE CABINET PROVIDED SHALL BE A STRETCH CABINET MEETING THE CABINET AND DOOR HEIGHT SPECIFICATIONS OF A MCCAIN 332S CABINET. ALL OTHER DIMENSIONS SHALL MEET CURRENT CITY OF TULSA STANDARDS AND SPECIFICATIONS.

(13) THE VIDEO CAMERAS PROVIDED SHALL MEET THE SPECIFICATIONS FOR THE ITERIS VANTAGE NEXT CAMERAS OR APPROVED EQUAL. THE VIDEO CAMERAS PROVIDED SHALL DETECT VEHICLES, BICYCLES, AND MOTORCYCLES ON A ROADWAY BY PROCESSING VIDEO IMAGES THAT PROVIDE VEHICLE PRESENCE, TRAFFIC FLOW DATA, EVENT ALARMS, AND FULL-MOTION VIDEO FOR REAL-TIME TRAFFIC CONTROL AND MANAGEMENT SYSTEMS. VIDEO DETECTION SYSTEMS MATERIALS FOR THIS BID SHALL ALSO MEET THE FOLLOWING REQUIREMENTS:

1. VIDEO DETECTION SYSTEMS SHALL INCLUDE ALL MATERIALS INCLUDING VIDEO CAMERAS, VIDEO CARDS, COMMUNICATIONS CARDS, CABLING, AND OTHER MATERIALS NECESSARY TO MAKE VIDEO DETECTION FULLY OPERATIONAL AT AN INTERSECTION.

2. VIDEO DETECTION CAMERAS SHALL USE A CAT 6 THERNET CABLE, NOT COAXIAL,

3. VIDEO DETECTION SYSTEM SHALL ALSO BE IP-ADDRESSABLE.

(16) THE LOCATION OF THE COMMUNICATIONS EQUIPMENT SHOWN IS FOR ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF TULSA TO DETERMINE WHICH POLE THE CAT 6 CABLE SHOULD BE PULLED TO DURING CONSTRUCTION.

(17) ETHERNET CABLE USED FOR WIRELESS SIGNAL COMMUNICATIONS SHALL BE INDUSTRIAL GRADE SHIELDED CAT 6 CABLE RATED FOR OUTDOOR USE, UNLESS OTHERWISE SPECIFIED IN THE PROJECT PLANS. SHIELDING SHALL BE RISER RATED, POLYOLEFIN INSULATION SHIELD BONDED TO AN OIL RESISTANT AND SUN RESISTANT PVC JACKET.

THIS PAY ITEM SHALL INCLUDE CAT 6 CABLE INSTALLED FROM THE CONTROLLER TO THE SIGNAL POLE. EXCESS CABLE SHOULD BE STORED IN THE HANDHOLE OF THE SIGNAL POLE AND IN PULL BOXES. USE CAUTION WHEN WORKING WITH CAT 6 CABLE NOT TO BEND OR CRIMP THE CABLE.

(19) HINGES SHALL BE LOCATED TO THE LEFT SIDE FOR 3-SECTION AND 4-SECTION SIGNAL HEADS AND TOWARD THE OUTSIDE EDGES FOR A 5-SECTION SIGNAL HEAD.

(20) POLE FOUNDATIONS SHALL BE CONSTRUCTED ACCORDING TO THE APPLICABLE REQUIREMENTS OF ODOT STANDARD SPECIFICATIONS FOR DRILLED SHAFT FOUNDATIONS AS DIRECTED BY THE TRAFFIC ENGINEER.

(22) THIS PAY ITEM SHALL INCLUDE 22 3-SECTION BACKPLATES AND 10 4-SECTION BACKPLATES. ALL BACKPLATES SHALL BE ALUMINUM WITH A DURABLE, FACTORY-APPLIED, NON-REFLECTIVE BLACK FINISH (POWDER COATED, BAKED ENAMEL, OR OTHER FINISH AS APPROVED BY THE TRAFFIC ENGINEER) WITH LOUVERS IN THE BACKPLATE.

BACKPLATES SHALL HAVE 2" REFLECTIVE FLUORESCENT YELLOW TAPE APPLIED TO THE PERIMETER. THE TAPE SHALL BE TYPE IX.

(23) THE BATTERY BACKUP SYSTEM SHALL BE A ZINC BLUE 2 UPS PER CITY OF TULSA REQUIREMENTS.

(24) WIRELESS COMMUNICATIONS SYSTEM SHALL COMPLY WITH THE LATEST CITY OF TULSA REQUIREMENTS AND SPECIFICATIONS.

(80) THIS ITEM IS AN ESTIMATED QUANTITY TO BE USED AS DEEMED NECESSARY BY THE ENGINEER.

(81) THE NORTH/SOUTH PUSH BUTTONS (4) SHALL BE FACTORY PROGRAMMED WITH THE FOLLOWING VERBAL MESSAGES:
DURING FLASHING DON'T WALK AND STEADY DON'T WALK-
"WAIT TO CROSS 11TH STREET AT UTICA AVENUE"
DURING WALK-
"11TH STREET – WALK SIGN IS ON TO CROSS 11TH STREET"
THE EAST/WEST PUSH BUTTONS (4) SHALL BE FACTORY PROGRAMMED WITH THE FOLLOWING VERBAL MESSAGES:
DURING FLASHING DON'T WALK AND STEADY DON'T WALK-
"WAIT TO CROSS UTICA AVENUE AT 11TH STREET"
DURING WALK-
"UTICA AVENUE – WALK SIGN IS ON TO CROSS UTICA AVENUE"

(82) THE NORTH/SOUTH PUSH BUTTONS (4) SHALL BE FACTORY PROGRAMMED WITH THE FOLLOWING VERBAL MESSAGES:
DURING FLASHING DON'T WALK AND STEADY DON'T WALK-
"WAIT TO CROSS 12TH STREET AT UTICA AVENUE"
DURING WALK-
"12TH STREET – WALK SIGN IS ON TO CROSS 12TH STREET"
THE EAST/WEST PUSH BUTTONS (4) SHALL BE FACTORY PROGRAMMED WITH THE FOLLOWING VERBAL MESSAGES:
DURING FLASHING DON'T WALK AND STEADY DON'T WALK-
"WAIT TO CROSS UTICA AVENUE AT 12TH STREET"
DURING WALK-
"UTICA AVENUE – WALK SIGN IS ON TO CROSS UTICA AVENUE"

(83) THIS PAY ITEM INCLUDES RELOCATING ONE PED HEAD ON THE SOUTHWEST CORNER AND ONE PED HEAD ON THE SOUTHEAST CORNER OF 14TH STREET.

(91) THE DIAMOND INTERCHANGE JUNCTION CABINET SHALL BE A 336S CABINET. THE INTERIOR SHALL BE POWDER COATED WHITE. IT SHALL HAVE A 12-POSITION CARD RACK WIRED FOR RACK MOUNT, VIDEO DETECTION, VIEWCOM AND 3M OPTICOM 752 CARD. IT SHALL HAVE A 24-VOLT STAND ALONE POWER SUPPLY FOR CARD RACK AND RELAY POWER. IT SHALL HAVE A RELAY PANEL WITH EIGHT 24-VOLT COIL RELAYS. THE RELAYS SHALL BE STRUTHER DUNN A314XBX48P-24VDC OR EQUAL.

THE CABINET SHALL HAVE A VIDEO FILTER/ POWER PANEL. THE VIDEO FILTERS SHALL BE INNOVATIVE TECHNOLOGIES VIDEO FILTER COAX-BNC-1.5GHZ. IT SHALL HAVE A DUPLEX OUTLET WITH GFI FOR AC POWER. IT SHALL HAVE TERMINAL BLOCKS FOR FIELD WIRING CONNECTIONS, PEDESTRIAN PUSH BUTTONS, SIGNAL HEADS, AND PEDESTRIAN HEADS. IT SHALL HAVE A 20 AMP AC CIRCUIT BREAKER FOR AUXILIARY AND A 30 AMP AC CIRCUIT BREAKER FOR MAIN. IT SHALL HAVE AN INNOVATIVE TECHNOLOGIES HS-30A FOR POWER FILTERING. THE CABINET SHALL BE WIRED FOR 3M OPTICOM GREEN SENSING AND SHALL HAVE AN INTERFACE PANEL FOR 3M OPTICOM DETECTOR HOOKUP.

THE CABINET SHALL HAVE A FAN, AIR FILTER, FAN THERMOSTAT, AND CABINET LIGHT. THE EXTERIOR SHALL BE ANODIZED ALUMINUM FINISH OR CLEAR POWDER COAT. IT SHALL BE INSTALLED ON AN ALUMINUM BASE THAT IS 18 INCHES TALL.

SEE ADDITIONAL CABINET DETAILS ON CABINET MODIFICATION DETAILS SHEET.

(92) A SEPARATE VIDEO PROCESSOR AND RELATED EQUIPMENT SHALL BE INSTALLED IN THE JUNCTION CABINET SO THAT ONLY THE OUTPUT IS TRANSMITTED BACK TO THE CONTROL CABINET.

(93) ALL OPTICOM DETECTOR SIGNALS SHALL BE TRANSMITTED TO THE CONTROL CANINET WITHOUT ANY INTERMEDIATE PROCESSING.

(94) THE JUNCTION CABINET SHALL BE FURNISHED AS PART OF THE "TRAFFIC SIGNAL CONTROLLER CABINET ASSEMBLY".

(95) CONTRACTOR IS TO DETERMINE IF LARGER GAUGE CONDUCTORS ARE REQUIRED TO CROSS UNDER THE HIGHWAY AND SERVE THE NORTH INTERSECTION DUE TO THE DISTANCE INVOLVED. IF LARGER GAUGE CONDUCTORS ARE REQUIRED THE ADDITIONAL COST IS TO BE INCLUDED IN THE CABLE PAY ITEMS INCLUDED IN THE PLANS.

(96) THIS PAY ITEM INCLUDES TWO R3-7R (30"X30") AND TWO R3-8L (30"X30") ON 14TH STREET WEST OF UTICA AVENUE. REUSE EXISTING POSTS.

(97) THIS PAY ITEM INCLUDES TWO S-16L TRAFFIC SIGNAL HEADS TO BE USED AT THE INTERSECTIONS OF 14TH STREET AND 13TH PLACE.

(COT 610) THE CONTROLLER CABINET DOORS SHALL BE EQUIPPED WITH A CL-TC1 GEN 2 CYBERLOCK CYLINDER AND EITHER A15481RS CCL TRAFFIC CABINET LOCK RH, OR A15481LS CCL TRAFFIC CABINET LOCK LH. THE CONTRACTOR WILL BE REQUIRED TO PURCHASE A CYBERKEY BLUE 3 THAT SHALL BE PROGRAMMED BY TRAFFIC OPERATIONS AT 4015 N HARVARD AVE, TULSA, OK 74115.

ESTHER M. SHAW-SMITH, P.E. # 23711
C.A. # 1160, RENEWAL 06-30-25

9-6-24
DATE

REGISTERED PROFESSIONAL ENGINEER ESTHER M. SHAW-SMITH 9-6-24 23711 OKLAHOMA

Traffic Engineering Consultants, Inc.
2770 Washington Dr., Suite 100 - Norman, OK 73069
Ph: 405-720-7721, Web: www.tecusa.com

PROJECT NO. 144017 w and ax

TRAFFIC SIGNAL QUANTITIES & NOTES

14th ST., 13th PL., 12th ST. & 11th ST. at S. UTICA AVE.

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY: TEC A CLEAR DIRECTION
TRAFFIC ENGINEERING CONSULTANTS
6631 S. 66TH E. AVE., STE 100
TULSA, OK. 74133
PHONE: 918-481-8484 FAX: 918-481-3163

REVISION	BY	DATE

PLAN SCALE: 1" = NA	DRAWN	CAL	09/06/24	APPROVED:
	DESIGNED	EMS	09/06/24	
	SURVEY			
PROFILE SCALE:	PROJ. MGR.		10/2024	
HORIZONTAL: 1" = NA	LEAD ENGR.	MVS	03/2025	
	FIELD MGR.		6/25	
VERTICAL 1" = NA	RECOMMENDED: DESIGN MANAGER		8-25	CITY ENGINEER
FILE:	DRAWING:			DATE: 8/22/2025
ATLAS PAGE NO:				SHEET 6 OF 77 SHEETS

09/06/24 Q:\0Projects\TO-804 (13th Pl14th St & Utica Signal\Mod - Tulsa (See TO-826 & TO-6220\CAD\QUANT.dgn

GENERAL CONSTRUCTION NOTES: (9/12/2016)

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE 2019 OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, AS ADOPTED BY COT, AND THE CURRENT COT 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, MCI/VERIZON, 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 ADDITION, 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 918-596-9508 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.

GENERAL CONSTRUCTION NOTES CONT.:

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.

TRAFFIC CONTROL CONSTRUCTION NOTES:

ALL TRAFFIC CONTROL DEVICES, CONSTRUCTION SIGNAGE, BARRICADING, ETC., SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC DEVICES (MUTCD), LATEST EDITION. TRAFFIC CONTROL PLANS SHALL BE APPROVED BY FIELD ENGINEERING.

THE CONTRACTOR SHALL NOTIFY THE FOLLOWING DEPARTMENTS 48 HOURS IN ADVANCE OF ALL STREET CLOSURES:

POLICE 596-9222
FIRE 596-9977
CITY OF TULSA, TRAFFIC OPERATIONS 596-9744
CITY OF TULSA, FIELD ENGINEERING 596-9404
EMSA 596-3043
MTTA 585-1195

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL CONSTRUCTION SIGNING AND BARRICADING INCLUDING BUT NOT LIMITED TO WASHING, REPLACING AND REPOSITIONING THE DEVICES. THE CONTRACTOR SHALL ALSO PROVIDE AND INSTALL OTHER TRAFFIC CONTROL DEVICES WHERE DEEMED NECESSARY BY THE CITY OR THE ENGINEER, DUE TO CHANGING TRAFFIC CONDITIONS.

ROADSIDE HAZARDS SHALL BE COMPLETELY BARRICADED AROUND THE PERIMETER FOR THE SAFETY OF PEDESTRIANS AS WELL AS VEHICLES.

NO BARRICADES SHALL BE PLACED WITHIN THE ROADWAY UNTIL ALL ADVANCE SIGNING IS IN PLACE.

CHANNELING DEVICES SHALL EXTEND UPSTREAM OF TRAFFIC BEYOND THE HORIZONTAL OR VERTICAL CURVE UNTIL THE DEVICES ARE CLEARLY VISIBLE TO APPROACHING TRAFFIC.

ALL CHANNELING DEVICES, TYPE III BARRICADES, ETC., SHALL BE WEIGHTED DOWN WITH A NON-HAZARDOUS MATERIAL IF DEEMED NECESSARY AND SO DIRECTED BY THE CITY OR ENGINEER.

ALL ADVANCE WARNING SIGNS SHALL REQUIRE TYPE 'A' WARNING LIGHTS.

ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF TWO (2) TYPE "A" WARNING LIGHTS.

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.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES HE MAY INFLICT TO THE EXISTING UNDERGROUND UTILITIES WITHIN THE PROJECT AREA AS A RESULT OF HIS DIGGING, TRENCHING, BORING, ETC.. DEPTH OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. PRIOR TO DIGGING , THE CONTRACTOR SHALL CALL FOR A LIST OF ALL UNDERGROUND FACILITIES REGISTERED IN THE AREA OF CONSTRUCTION LISTED WITH THE FOLLOWING AGENCIES:

THE "OKIE" NOTIFICATION CENTER 1-800-522-6543

OKLAHOMA PROFESSIONAL ENGINEER
Daniel Polosel
24920
OKLAHOMA
9/12/2024

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

REVISION	BY	DATE

GENERAL CONSTRUCTION NOTES
PROJ. 144017–W, 144017–AX
ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

PLAN SCALE: NA	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		9/2024	
HORIZONTAL: NA	LEAD ENGR.		9/2024	
	FIELD MGR.		6/25	
VERTICAL: NA	RECOMMENDED: HBS 8·25 DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 07 OF 77 SHEETS

ROADWAY PAY QUANTITIES

ITEM	SPEC. NO.	DESCRIPTION	UNIT	QTY	SHEET 28	SHEET 29	SHEET 30	SHEET 31	SHEET 32	SHEET 33
1	201(A)	CLEARING AND GRUBBING	ACRE	0.25	0.04	0.03	0.06	0.04	0.04	0.04
2	202(A)	UNCLASSIFIED EXCAVATION	CY	1284	0	25	5	600	71	583
3	COT202	QUICK SET FLOWABLE FILL	CY	100	-	-	-	-	-	-
4	205(A)	TYPE A SALVAGED TOPSOIL	CY	203	32	28	45	30	35	33
5	220	SWPPP DOCUMENTATION AND MANAGEMENT	LSUM	1	-	-	-	-	-	-
6	230(A)	SOLID SLAB SODDING	SY	1216	191	168	268	180	211	198
7	303(A)	AGGREGATE BASE TYPE "A"	CY	419	15	15	44	86	136	123
8	310(B)	SUBGRADE METHOD B	SY	1254	44	45	131	257	409	368
9	325	SEPARATOR FABRIC	SY	1819	63	65	190	373	594	534
10	COT334	CONSTRUCTION AS-BUILT	LSUM	1	1					
11	COT335	CONTRACTOR'S QUALITY CONTROL	LSUM	1	-	-	-	-	-	-
12	409	FABRIC REINFORCEMENT	SY	6445	0	0	1309	1793	2463	880
13	411(B)	SUPERPAVE, TYPE S3 (PG 70-28 OK)	TON	2166	0	0	440	602	828	296
14	411(C)	SUPERPAVE, TYPE S4 (PG 70-28 OK)	TON	723	0	0	147	201	276	99
15	411(D)	SUPERPAVE, TYPE S6 (PG 70-28 OK)	TON	344	-	-	57	100	138	49
16	412	COLD MILL PAVEMENT	SY	6445	0	0	1309	1793	2463	880
17	414(A)	P.C. CONCRETE PAVEMENT (PLACEMENT)	SY	3360	0	0	0	1801	0	1559
18	414(G)	P.C. CONCRETE FOR PAVEMENT	CY	837	0	0	0	448	0	389
19	COT 608(A)	GROUND SIGN	SF	311	93	82	43	23	11	4
20	COT 608(B)	1-1/2" SIGN POST	LF	8	2		4			
21	COT 608(B)	1-3/4" SIGN POST	LF	423	113	86	46	46	28	18
22	COT 608(B)	2" SIGN POST	LF	113	30	22	12	13	8	5
23	609(B)	COMBINED CURB AND GUTTER (6" BARRIER)	LF	2417	124	128	372	731	558	504
24	610(A)	CONCRETE SIDEWALK 4"	SY	1988	158	156	418	477	488	291
25	610(A)	STAMPED CONCRETE SIDEWALK 4"	SY	222	0	20	69	92	41	0
26	610(B)	CONCRETE DRIVEWAY (6" H.E.S.)	SY	304	104	0	46	0	117	37
27	610(C)	6" CONCRETE DIVIDING STRIP	SY	2				2		
28	610(I)	TACTILE WARNING DEVICE - NEW	SF	410	70	80	40	100	0	120
29	611(A)	(4' I.D.) MANHOLE, COMPLETE IN PLACE	EA	4	0		0		1	3
30	611(A)	(5' I.D.) MANHOLE, COMPLETE IN PLACE	EA	2	0	2				
31	611(A)	(6' I.D.) MANHOLE, COMPLETE IN PLACE	EA	1	0					1
32	611(G)	INLET CICI DESIGN NO. 2, COMPLETE IN PLACE	EA	6	1		0		2	3
33	611(G)	INLET CICI DESIGN NO. 2 W/ AMH, COMPLETE IN PLACE	EA	1						1
34	611(G)	INLET CICI DESIGN NO. 2(D), COMPLETE IN PLACE	EA	1		1				
35	611(G)	INLET CICI DESIGN NO. 3(A), COMPLETE IN PLACE	EA	1	1					
36	611(G)	INLET CICI DESIGN NO. 4(B), COMPLETE IN PLACE	EA	2		2				
37	611(H)	ADDITIONAL DEPTH IN INLET (DES. NO. 2)	VF	1	1					
38	611(H)	ADDITIONAL DEPTH IN INLET (DES. NO. 4)	VF	1		1				
39	612(A)	MANHOLE ADJUSTED TO GRADE (PUBLIC)	EA	4					2	2
40	619(A)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LSUM	1	-	-	-	-	-	-
41	619(B)	REMOVAL OF EXISTING PAVEMENT	SY	1120				600		520
42	619(B)	REMOVAL OF CURB & GUTTER	LF	2386	124	128	352	720	558	504
43	619(B)	REMOVAL OF SIDEWALK	SY	2190	158	156	487	569	529	291
44	619(B)	REMOVAL OF DRIVEWAY	SY	267	104		46		117	
45	641	MOBILIZATION	EA	1						
46	642	CONSTRUCTION STAKING	EA	1						
47	850(D)	(PL) REMOVE & RESET EXISTING SIGNS	EA	9	1		6		1	1
48	855(A)	TRAFFIC STRIPE (THERMOPLASTIC.)(4")	LF	9601	2456	1134	1708	1561	1517	1225
49	855(A)	TRAFFIC STRIPE (THERMOPLASTIC.)(8")	LF	331	37	0	109	138	47	0
50	855(A)	TRAFFIC STRIPE (THERMOPLASTIC.)(24")	LF	1752	457	384	180	394	0	337
51	855(B)	TRAFFIC STRIPE (THERMOPLASTIC. ARROWS)	EA	51	14	15	5	6	5	6
52	857(C)	REMOVABLE PAVEMENT MARKING TAPE	LF	10000	-	-	-	-	-	-
53	857(F)	PAVEMENT MARKING REMOVAL	LF	12000	-	-	-	-	-	-
54	857(F)	PAVEMENT MARKING REMOVAL	EA	24	12	12				
55	880(A)	ARROW DISPLAY	SD	360	-	-	-	-	-	-
56	880(B)	SIGNS 0.00 TO 6.25 SF	SD	4100	-	-	-	-	-	-
57	880(B)	SIGNS 6.26 TO 15.99 SF	SD	20430	-	-	-	-	-	-
58	880(B)	SIGNS 16.00 AND UP	SD	6360	-	-	-	-	-	-
59	880(C)	BARRICADES (TYPE III)	SD	17640	-	-	-	-	-	-
60	880(E)	TYPE "A" WARNING LIGHT	SD	41640	-	-	-	-	-	-
61	880(F)	DRUMS	SD	38160	-	-	-	-	-	-
62	880(G)	TUBE CHANNELIZERS	SD	30090	-	-	-	-	-	-
63	880(I)	FLAGGER	FD	180	-	-	-	-	-	-
64	882(B)	REMOTE CONTROLLED CHANGEABLE MESSAGE SIGN	SD	374	-	-	-	-	-	-
65	SPECIAL	PROJECT SIGN (CITY OF TULSA)	EA	2	-	-	-	-	-	-
66	SPECIAL	TYPE I APC PATCH (ARTERIAL)	CY	101					53	48
67	SPECIAL	TYPE I PCC PATCH	CY	81		77	4			
68	SPECIAL	CURB RAMP	EA	30	7	5	4	7	0	7
69	SPECIAL	URBAN RIGHT-OF-WAY RESTORATION	EA	1	-	-	-	-	-	-
70	SPECIAL	OWNER ALLOWANCE	ALLOW	10000	-	-	-	-	-	-
STORMWATER PIPE MATERIAL OPTION 1 (RCP)										
71	613(A)	18" REINFORCED CONCRETE PIPE (RCP), COMPLETE IN PLACE	LF	654		177			217	260
72	613(A)	24" REINFORCED CONCRETE PIPE (RCP), COMPLETE IN PLACE	LF	36						36
STORMWATER PIPE MATERIAL OPTION 2 (CPP)										
73	(SP)COT215	18" CORRUGATED POLYPROPYENE PIPE (CPP), COMPLETE IN PLACE	LF	654		177			217	260
74	(SP)COT215	24" CORRUGATED POLYPROPYENE PIPE (CPP), COMPLETE IN PLACE	LF	36						36

Daniel Polosek 24920 OKLAHOMA PROFESSIONAL ENGINEER

9/12/2024

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

SUMMARIES (1 OF 4)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: NA	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		9/2024	
HORIZONTAL:	LEAD ENGR.		8/25	
	FIELD MGR.		6/25	
VERTICAL:	RECOMMENDED: DESIGN MANAGER		8-25	CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 08 OF 77 SHEETS

X:\Projects\705-COT Utica 11th to 15th, 11th St. Intersection\DWG\Sheets\705-SM01.dwg, 240813 - 2:16 PM, DEP

WATERLINE PAY QUANTITIES BASE BID

ITEM	SPEC. NO.	DESCRIPTION	NOTES	UNIT	BASE BID QTY	A 40	A 41	A 42	A 43	F 46	G 46	H 47
75	WS 302	EXCAVATION AND BACKFILL, UNCLASSIFIED	14	CY	1951	172.23	479.41	539.12	392.76	95.50	104.22	167.98
76	WS 303	MOBILIZATION		EA	1	-	-	-	-	-	-	-
77	ODOT 642	CONSTRUCTION STAKING LEVEL II		EA	1	-	-	-	-	-	-	-
78	WS 307(B)	6" DIP, CL51 POLYETHYLENE WRAPPED (RJ)	1,2,3,8,9,11,27	LF	382	-	53	37	46	84	-	162
79	WS 307(C)	12" DIP, CL50 POLYETHYLENE WRAPPED	1,2,3,9,11,27	LF	164	-	46	37	81	-	-	-
80	WS 307(D)	12" DIP, CL50 POLYETHYLENE WRAPPED (RJ)	1,2,3,8,9,11,27	LF	1245	172	559	211	218	-	85	-
81	WS 312(B)	12" DI 11.25 DEGREE BEND (RJ)	2,8	EA	2	-	-	1	1	-	-	-
82	WS 312(C)	6" DI 45 DEGREE BEND (RJ)	2,8	EA	16	-	4	2	2	2	-	6
83	WS 312(D)	12" DI 45 DEGREE BEND (RJ)	2,8	EA	10	2	-	-	6	-	2	-
84	WS 312(F)	12"x12"x6" DI TEE (RJ)	2,8	EA	10	1	4	3	2	-	-	-
85	WS 312(G)	12"x12"x12" DI TEE (RJ)	2,8	EA	1	-	1	-	-	-	-	-
86	WS 312(I)	12"x12"x12"x12" DI CROSS (RJ)	2,8	EA	1	-	-	-	1	-	-	-
87	WS 312(J)	6" SLEEVE DI (RJ)	2,8,12	EA	38	2	11	8	6	3	0	8
88	WS 312(K)	12" SLEEVE DI (RJ)	2,8,12	EA	36	5	8	6	14	0	3	0
89	WS 312(L)	12"x6" DI REDUCER (RJ)	2,8	EA	2	-	-	-	-	-	-	2
90	WS 315(B)	3/4" WATER SERVICE CONNECTION (LONG)	15,16	EA	1	0	1	0	0	0	0	0
91	WS 315(B)	3/4" WATER SERVICE CONNECTION (SHORT)	15,16	EA	3	0	1	0	2	0	0	0
92	WS 315(D)	3/4" WATER SERVICE METER CAN, LID, & RIM		EA	4	0	2	0	2	0	0	0
93	WS 317(A)	6" GATE VALVE (RJ)	8	EA	11	1	3	3	2	0	0	2
94	WS 317(B)	12" GATE VALVE (RJ)	8	EA	8	1	2	2	2	0	1	0
95	WS 317(C)	3-WAY FIRE HYDRANT, IN PLACE		EA	5	1	1	2	1	0	0	0
96	WS 317(D)	6" FIRE HYDRANT EXTENSION		EA	5	1	1	2	1	0	0	0
97	WS 317(E)	12" FIRE HYDRANT EXTENSION		EA	5	1	1	2	1	0	0	0
98	WS 317(F)	18" FIRE HYDRANT EXTENSION		EA	5	1	1	2	1	0	0	0
99	WS 318(A)	VALVE BOX	21	EA	19	2	5	5	4	0	1	2
100	WS 318(B)	VALVE BOX EXTENSION	21	VF	19	2	5	5	4	0	1	2
101	WS 325	SODDING AND SEEDING	23	SY	18	2	9	3	4	0	0	0
102	WS 329(A)	PAVEMENT, REMOVAL AND REPLACEMENT (ASPH)	31	SY	1046	87	273	258	219	56	57	96
103	COT 334	CONSTRUCTION AS-BUILTS	24,25,27	LSUM	1							
104	COT 335	CONTRACTOR'S QUALITY CONTROL		LSUM	1							
105	SPECIAL	OWNER ALLOWANCE	18	EA	5000							

WATERLINE PAY QUANTITIES ADD ALT.

ITEM	SPEC. NO.	DESCRIPTION	NOTES	UNIT	ADD ALT. QTY	A 38	A 39	A 40	B 44	C 44	D 45	E 45
106	WS 302	EXCAVATION AND BACKFILL, UNCLASSIFIED	14	CY	1872	463.83	557.62	372.09	143.54	38.49	155.49	141.38
107	WS 307(A)	6" DIP, CL51 POLYETHYLENE WRAPPED	1,2,3,9,11,27	LF	137	137	-	-	-	-	-	-
108	WS 307(B)	6" DIP, CL51 POLYETHYLENE WRAPPED (RJ)	1,2,3,8,9,11,27	LF	451	155	-	-	-	43	141	112
109	WS 307(C)	12" DIP, CL50 POLYETHYLENE WRAPPED	1,2,3,9,11,27	LF	264	182	82	-	-	-	-	-
110	WS 307(D)	12" DIP, CL50 POLYETHYLENE WRAPPED (RJ)	1,2,3,8,9,11,27	LF	645	42	234	237	132	-	-	-
111	WS 312(B)	12" DI 11.25 DEGREE BEND (RJ)	2,8	EA	2	-	-	2	-	-	-	-
112	WS 312(C)	6" DI 45 DEGREE BEND (RJ)	2,8	EA	17	3	-	-	-	4	4	6
113	WS 312(D)	12" DI 45 DEGREE BEND (RJ)	2,8	EA	10	2	-	-	8	-	-	-
114	WS 312(E)	6"x6"x6" DI TEE (RJ)	2,8	EA	2	1	-	-	-	-	1	-
115	WS 312(F)	12"x12"x6" DI TEE (RJ)	2,8	EA	3	-	2	1	-	-	-	-
116	WS 312(I)	12"x12"x12"x12" DI CROSS (RJ)	2,8	EA	2	1	-	1	-	-	-	-
117	WS 312(J)	6" SLEEVE DI (RJ)	2,8,12	EA	33	8	2	2	0	5	8	8
118	WS 312(K)	12" SLEEVE DI (RJ)	2,8,12	EA	25	5	3	7	10	0	0	0
119	WS 312(L)	12"x6" DI REDUCER (RJ)	2,8	EA	3	1	-	-	-	-	-	2
120	WS 315(F)	1" WATER SERVICE CONNECTION (LONG)	15,16	EA	2	2	0	0	0	0	0	0
121	WS 315(F)	1" WATER SERVICE CONNECTION (SHORT)	15,16	EA	4	4	0	0	0	0	0	0
121	WS 315(H)	1" WATER SERVICE METER CAN, LID, & RIM		EA	6	6	0	0	0	0	0	0
122	WS 317(A)	6" GATE VALVE (RJ)	8	EA	9	3	0	1	0	1	2	2
123	WS 317(B)	12" GATE VALVE (RJ)	8	EA	4	0	1	1	2	0	0	0
124	WS 317(C)	3-WAY FIRE HYDRANT, IN PLACE		EA	3	1	0	1	0	0	1	0
125	WS 317(D)	6" FIRE HYDRANT EXTENSION		EA	3	1	0	1	0	0	1	0
126	WS 317(E)	12" FIRE HYDRANT EXTENSION		EA	3	1	0	1	0	0	1	0
127	WS 317(F)	18" FIRE HYDRANT EXTENSION		EA	3	1	0	1	0	0	1	0
128	WS 318(A)	VALVE BOX	21	EA	13	3	1	2	2	1	2	2
129	WS 318(B)	VALVE BOX EXTENSION	21	VF	13	3	1	2	2	1	2	2
130	WS 325	SODDING AND SEEDING	23	SY	28	0	0	0	0	7	21	0
131	WS 329(A)	PAVEMENT, REMOVAL AND REPLACEMENT (ASPH)	31	SY	867	217	230	164	80	26	84	66

LICENSED PROFESSIONAL ENGINEER Daniel E. Polasek 24920 OKLAHOMA

7/14/2025

TMUA-W 16-33 & TMUA-W 16-36

SUMMARIES (2 OF 4)

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

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

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.	MBrown	7/2025
HORIZONTAL:	LEAD ENGR.	CEW	7/2025
	FIELD MGR.	CMW	7/25
VERTICAL:	RECOMMENDED: DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING: DATE JULY 2024

ATLAS PAGE NO: 3 SHEET 09 OF 77 SHEETS

X:\Projects\705-COT Utica 11th to 15th, 11th St. Intersection\DWG\Sheets\705-SM01.dwg, 250714 - 8:21 AM, FLK

FITTING SUMMARY

TYPE	NORTHING	EASTING	LINE	STATION	OFFSET	ELEV.	SIZE	CONNECTION
SLEEVE	421827.17	2568724.68	A*	14+30.67	28.03 R	744.12	6	TO EXIST.
45° BEND (H)	421837.44	2568714.31	A*	14+41.65	18.40 R	743.91	6	
6"x6"x6" TEE	422090.55	2568719.56	A*	16+95.35	32.06 R	743.73	6	FH
12"x6" REDUCER	422116.35	2568720.10	A*	17+20.90	33.04 R	745.77	6	
12"x12"x12"x12" CROSS	422117.85	2568720.13	A*	17+23.15	33.11 R	745.77	12	LINE B
45° BEND (V)	422120.85	2568720.10	A*	17+26.15	33.12 R	745.79	12	
45° BEND (V)	422125.15	2568720.06	A*	17+30.46	33.13 R	741.47	12	
12"x12"x6" TEE	422456.64	2568714.90	A*	20+61.63	34.47 R	745.94	12	LINE C
12"x12"x6" TEE	422489.53	2568712.91	A*	21+00.70	39.53 R	743.68	12	LINE D
12"x12"x6" TEE	422755.95	2568694.73	A*	23+67.49	27.98 R	749.61	12	FH
12"x12"x12"x12" CROSS	422785.54	2568692.71	A*	23+97.12	26.69 R	749.62	12	LINE E
11.25° BEND	422833.15	2568689.46	A*	24+44.79	24.63 R	749.62	12	
11.25° BEND	422848.44	2568685.31	A*	24+60.18	20.86 R	749.62	12	
SLEEVE	422875.86	2568692.00	A	24+88.86	27.64 R	750.26	12	TO EXIST.
45° BEND (H)	422880.86	2568691.85	A	24+93.85	27.35 R	750.26	12	
45° BEND (H)	422887.17	2568685.87	A	25+00.00	21.21 R	750.26	12	
12"x12"x6" TEE	422979.23	2568688.51	A	25+92.10	21.42 R	753.91	12	FH
12"x12"x6" TEE	423212.79	2568691.29	A	28+24.95	19.12 R	756.18	12	FH
45° BEND (H)	423377.32	2568721.28	A	29+90.22	51.46 R	753.47	6	
SLEEVE	423377.32	2568723.28	A	29+90.24	53.64 R	753.47	6	TO EXIST.
12"x12"x6" TEE	423383.02	2568689.95	A	29+95.62	20.26 R	753.31	12	
45° BEND (H)	423383.22	2568714.86	A	29+96.05	45.16 R	753.30	6	
12"x12"x6" TEE	423387.52	2568689.92	A	30+00.12	20.18 R	753.17	12	LINE F
12"x12"x12" TEE	423393.35	2568689.87	A	30+05.95	20.08 R	753.00	12	LINE G
45° BEND (H)	423432.65	2568694.56	A	30+45.20	24.39 R	751.81	6	
12"x12"x6" TEE	423432.61	2568689.56	A	30+45.20	19.39 R	751.81	12	
45° BEND (H)	423436.53	2568698.39	A	30+49.21	28.17 R	751.81	6	
SLEEVE	423436.53	2568700.39	A	30+49.22	30.67 R	751.81	6	TO EXIST.
12"x12"x6" TEE	423450.56	2568689.42	A	30+63.15	19.07 R	751.27	12	
45° BEND (H)	423450.60	2568694.42	A	30+63.24	24.07 R	751.27	6	
45° BEND (H)	423454.48	2568698.25	A	30+67.16	27.86 R	751.27	6	
SLEEVE	423454.48	2568700.25	A	30+67.18	29.86 R	751.27	6	TO EXIST.
12"x12"x6" TEE	423546.25	2568688.67	A	31+58.16	19.12 R	746.32	12	FH
12"x12"x6" TEE	423811.03	2568686.58	A	34+20.32	22.34 R	734.35	12	FH
11.25° BEND	423818.19	2568686.53	A	34+26.95	23.51 R	733.93	12	
11.25° BEND	423884.13	2568672.42	A	34+95.73	19.95 R	730.82	12	
12"x12"x6" TEE	424072.08	2568669.25	A	36+85.63	21.28 R	723.06	12	
45° BEND (H)	424072.26	2568679.87	A	36+85.81	31.90 R	721.15	6	
45° BEND (H)	424075.43	2568682.52	A	36+88.99	34.96 R	721.15	6	
SLEEVE	424075.43	2568684.93	A	36+88.99	36.96 R	721.15	6	TO EXIST.
12"x12"x6" TEE	424086.49	2568669.01	A	37+00.00	21.04 R	723.06	12	FH
45° BEND (V)	424095.91	2568668.85	A	37+04.11	20.88 R	723.06	12	
45° BEND (V)	424090.55	2568668.94	A	37+09.47	20.97 R	718.21	12	
45° BEND (V)	424115.01	2568668.53	A	37+28.06	20.56 R	718.21	12	
45° BEND (V)	424118.11	2568668.48	A	37+34.07	20.51 R	724.22	12	
12"x12"x12"x12" CROSS	424126.31	2568668.31	A	37+39.86	20.37 R	724.18	12	
45° BEND (H)	424205.13	2568667.01	A	38+18.19	19.93 R	722.74	12	
45° BEND (H)	424208.18	2568669.96	A	38+21.16	22.96 R	722.65	12	
SLEEVE	424210.18	2568669.96	A	38+23.16	23.01 R	722.58	12	TO EXIST.

FITTING SUMMARY (CONT.)

TYPE	NORTHING	EASTING	LINE	STATION	OFFSET	ELEV.	SIZE	CONNECTION
SLEEVE	422120.20	2568625.58	B*	100+00.00	0.00	746.49	12	TO EXIST.
45° BEND (H)	422120.25	2568628.08	B*	100+02.50	0.00	746.47	12	
45° BEND (H)	422116.71	2568631.77	B*	100+07.62	0.00	746.42	12	
45° BEND (V)	422117.39	2568684.11	B*	100+59.96	0.00	745.90	12	
45° BEND (V)	422117.45	2568689.26	B*	100+63.68	0.00	742.90	12	
45° BEND (V)	422117.56	2568697.63	B*	100+73.48	0.00	742.90	12	
45° BEND (V)	422117.59	2568699.84	B*	100+75.69	0.00	745.72	12	
45° BEND (H)	422118.19	2568746.44	B*	101+22.30	0.00	745.83	12	
45° BEND (H)	422121.79	2568750.04	B*	101+27.38	0.00	745.85	12	
SLEEVE	422121.78	2568755.04	B*	101+32.38	0.00	745.86	12	
45° BEND (V)	422456.59	2568720.23	C*	200+04.39	0.00	745.94	6	
45° BEND (V)	422456.57	2568722.11	C*	200+07.21	0.00	748.34	6	
45° BEND (H)	422456.41	2568738.09	C*	200+23.20	0.00	748.56	6	
45° BEND (H)	422448.94	2568745.45	C*	200+33.68	0.00	748.69	6	
SLEEVE	422448.96	2568748.25	C*	200+36.47	0.00	748.73	6	TO EXIST.
SLEEVE	422493.24	2568584.97	D*	300+00.00	0.00	748.37	6	TO EXIST.
45° Bend (H)	422493.38	2568589.96	D*	300+05.00	0.00	748.31	6	
45° Bend (H)	422488.53	2568595.16	D*	300+12.11	0.00	748.22	6	
6"x6"x6" TEE	422488.56	2568598.65	D*	300+15.60	0.00	748.18	6	FH
45° BEND (V)	422489.40	2568698.33	D*	301+12.23	0.00	746.98	6	
45° BEND (V)	422489.38	2568695.28	D*	301+15.28	0.00	743.68	6	
SLEEVE	422782.26	2568614.24	E*	400+00.00	0.00	750.52	6	TO EXIST.
45° BEND (H)	422782.24	2568616.74	E*	400+02.50	0.00	750.49	6	
45° BEND (H)	422785.31	2568619.79	E*	400+06.83	0.00	750.49	6	
12"x6" REDUCER	424126.33	2568670.84	E*	400+79.75	0.00	749.62	6	LINE A
12"x6" REDUCER	422785.54	2568691.68	E*	400+79.75	0.00	749.62	6	LINE A
45° BEND (V)	422785.58	2568703.93	E*	400+89.75	0.00	749.86	6	
45° BEND (V)	422785.59	2568708.27	E*	400+94.09	0.00	753.55	6	
45° BEND (H)	422785.63	2568718.29	E*	401+05.33	0.00	753.90	6	
45° BEND (H)	422782.58	2568721.37	E*	401+09.66	0.00	754.03	6	
SLEEVE	422782.60	2568723.87	E*	401+12.16	0.00	754.11	6	TO EXIST.
SLEEVE	423384.12	2568606.80	F	500+00.00	0.00	754.39	6	TO EXIST.
45° BEND (H)	423384.15	2568609.30	F	500+02.35	0.00	754.35	6	
45° BEND (H)	423386.65	2568611.78	F	500+06.02	0.00	754.30	6	
SLEEVE	423389.31	2568606.13	G	600+00.00	0.00	753.97	12	TO EXIST.
45° BEND (H)	423389.34	2568608.63	G	600+02.50	0.00	753.95	12	
45° BEND (H)	423392.48	2568611.76	G	600+06.92	0.00	753.92	12	
SLEEVE	424125.07	2568557.31	H	700+00.00	0.00	726.30	6	TO EXIST.
45° BEND (V)	424125.29	2568577.38	H	700+20.07	0.00	725.92	6	
45° BEND (V)	424125.32	2568579.38	H	700+22.07	0.00	724.22	6	
45° BEND (V)	424125.54	2568599.38	H	700+42.07	0.00	724.22	6	
45° BEND (V)	424125.55	2568600.85	H	700+43.54	0.00	725.77	6	
12"x6" REDUCER	424126.28	2568666.84	H	701+08.53	0.00	724.21	6	LINE A
12"x6" REDUCER	424126.32	2568669.32	H	701+13.53	0.00	724.14	6	LINE A
45° BEND (H)	424126.54	2568689.22	H	701+31.91	0.00	723.65	6	
45° BEND (V)	424126.54	2568689.22	H	701+38.92	0.00	723.65	6	
45° BEND (V)	424115.77	2568700.22	H	701+43.21	0.00	720.00	6	
45° BEND (H)	424107.10	2568709.09	H	701+59.71	0.00	720.00	6	
SLEEVE	424107.09	2568711.59	H	701+62.21	0.00	720.00	6	TO EXIST.

WATER VALVE SUMMARY

NORTHING	EASTING	LINE	STATION	OFFSET	ELEV.	SIZE (INCHES)	CONNECTION
421827.17	2568724.68	A*	14+30.67	28.03 R	744.12	6	
421842.44	2568714.41	A*	14+46.63	18.86 R	743.73	6	
422090.50	256872.06	A*	16+95.23	34.55 R	743.73	6	FH
422115.35	2568720.08	A*	17+19.40	32.99 R	747.83	6	
422469.90	2568714.25	A*	20+74.90	34.01 R	743.94	12	
422753.46	2568694.90	A*	23+64.99	28.08 R	754.97	12	
422756.12	2568697.22	A*	23+67.49	30.47 R	754.33	6	FH
422783.05	2568692.88	A*	23+94.63	26.80 R	749.62	12	
422976.73	2568688.43	A	25+89.60	21.41 R	753.85	12	
422979.25	2568691.01	A	25+92.19	23.92 R	753.91	6	FH
423210.30	2568691.22	A	28+22.49	19.03 R	756.15	12	
423212.81	2568693.79	A	28+24.95	21.62 R	756.15	6	FH
423383.04	2568692.45	A	29+95.66	22.76 R	753.31	6	CONNECTION
423385.12	2568689.94	A	29+97.71	20.22 R	753.25	12	
423432.63	2568692.06	A	30+45.24	21.89 R	751.81	6	CONNECTION
423450.58	2568691.92	A	30+63.19	21.57 R	751.27	6	CONNECTION
423558.75	2568688.57	A	31+70.98	19.12 R	748.01	12	
423561.27	2568697.05	A	31+73.48	21.62 R	747.93	6	FH
423808.53	2568686.60	A	34+18.07	22.10 R	734.49	12	
423811.05	2568689.08	A	34+20.02	24.91 R	734.35	6	FH
424072.12	2568671.74	A	36+85.68	23.77 R	723.57	6	CONNECTION
424083.99	2568669.05	A	36+97.54	21.08 R	723.57	12	
424086.53	2568671.51	A	37+00.00	23.54 R	723.57	6	FH
424128.80	2568668.28	A	37+42.36	20.32 R	724.16	12	CONNECTION
422117.82	2568717.63	B*	100+93.48	NA	745.77	12	
422117.89	2568722.63	B*	100+98.48	NA	745.77	12	
422456.62	2568717.40	C*	200+02.50	NA	745.94	6	
422491.13	2568598.59	D*	300+15.56	2.57 L	748.18	6	FH
422489.51	2568710.41	D*	301+27.36	NA	743.68	6	
422785.54	2568690.21	E*	400+77.25	NA	749.65	6	
422785.55	2568695.21	E*	400+82.25	NA	749.68	12	
423387.50	2568687.42	F	500+81.67	NA	752.88	6	
423393.33	2568687.37	G	600+82.57	NA	752.26	12	
424126.28	2568665.84	H	701+06.03	NA	724.23	6	
424126.33	2568670.84	H	701+13.53	NA	724.14	6	
424126.33	2568670.84	H	701+16.03	NA	723.98	6	

FIRE HYDRANT SUMMARY

NORTHING	EASTING	LINE	STATION	OFFSET	ELEV.	TYPE.
421805.38	2568737.71	A*	14+08.02	39.50 R	751.70	EX TO STAY
422122.70	2568740.68	A*	17+17.77	53.61 R	N/A	EX REMOVED
422522.74	2568613.75	A*	21+36.37	58.77 L	N/A	EX REMOVED
422750.61	2568707.62	A*	23+61.83	40.73 R	N/A	EX REMOVED
422756.85	2568707.91	A*	23+68.06	41.18 R	759.51	PROP
423059.44	2568705.36	A	26+72.73	36.15 R	763.68	PROP
423372.92	2568598.51	A	29+84.64	71.08 L	761.93	EX TO STAY
423759.04	2568698.14	A	33+70.97	31.09 R	N/A	EX REMOVED
423763.63	2568698.28	A	33+75.55	31.30 R	746.16	PROP
424086.96	2568696.79	A	37+00.51	48.82 R	732.23	PROP
424087.65	2568685.56	A	37+01.20	37.59 R	N/A	EX REMOVED
422116.78	2568754.04	B*	101+31.38	5.00 R	754.06	PROP
422488.56	2568598.65	D*	300+15.60	10.00 L	755.26	PROP

* WATERLINE ADD ALTERNATE

WATER METER SUMMARY

NORTHING	EASTING	LINE	STA.	OFFSET	ADDRESS	SERVICE SIZE	METER CAN SIZE
421874.94	2568732.9	A*	14+78.60	39.19 R	1419 S. UTICA AVE.	1"	
421969.93	2568732.5	A*	15+74.42	41.77 R	1415 S. UTICA AVE.	1"	
421995.76	2568732.5	A*	16+00.33	38.85 R	1401 S. UTICA AVE.	3/4"	
422029.40	2568731.7	A*	16+33.90	42.58 R	1401 S. UTICA AVE.	3/4"	
422076.77	2568647.4	A*	16+83.57	40.46 L	1404 S. UTICA AVE.	3/4"	
423159.56	2568633.9	A	27+70.99	37.88 L	1630 E. 12TH ST.	3/4"	
423379.27	2568620.1	A	29+91.19	49.56 L	1630 E. 12TH ST.	3/4"	
423453.66	2568727.1	A	30+66.61	56.69 R	(VAULT) 1145 S. UTICA AVE.		
423988.01	2568680.5	A	36+00.88	30.86 R	1101 S. UTICA AVE.	1"	
422077.30	2568647.52	A*	16+84.08	40.32 L	1404 S. UTICA AVE.	3/4"	
423988.55	2568680.50	A	36+01.42	30.87 R	1101 S. UTICA AVE.	3/4"	

DENSEN PROFESSIONAL ENGINEER Daniel E. Polosek 14920 OKLAHOMA
9/12/2024

TMUA-W 16-33 & TMUA-W 16-36

SUMMARIES (3 OF 4)

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

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

REVISION	BY	DATE

PLAN SCALE: NA	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		9/2024	
HORIZONTAL:	LEAD ENGR.	CEW	7/2025	
	FIELD MGR.		6/25	
VERTICAL:	RECOMMENDED: DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 10 OF 77 SHEETS

X:\Projects\705-COT Utica 11th to 15th, 11th St. Intersection\DWG\Sheets\705-SM01.dwg, 240813 - 2:16 PM, DEP

SIGN SUMMARY

ACTION	STA.	OFFSET	SIGN DESCRIPTION	AREA (SF)	SIZE	POST LENGTH (FT) 1.5"	1.75"	2"
REMOVE/REPLACE	14+55	49.1 RT	STOP (R1-1)	5.18	30"X30"	2	9.5	2.5
			E. 14TH PL. 1700 (2 EA)	3.76	LENGTH X 9"			
			S. UTICA AV. 1400 (2 EA)	3.76	LENGTH X 9"			
REMOVE/RESET			TERRACE DRIVE NEIGHBORHOOD					
REMOVE/REPLACE	14+74	36.3 RT	JUNCTION (M2-1)	2.19	21"X15"		9.5	2.5
			US HWY 64 (M1-4)	4.00	30"X24"			
			STATE HWY 51 (M1-5)	4.00	30"X24"			
REMOVE/REPLACE	15+79	42.4 RT	WEST (M3-4)	2.00	24"X12"		9.5	2.5
			US HWY 64 (M1-4)	4.00	30"X24"			
			STATE HWY 51 (M1-5)	4.00	30"X24"			
REMOVE/REPLACE	15+91	44' RT	EAST (M3-2P)	2.00	24"X12"	2	9.5	2.5
			RIGHT ARROW (M5-1P(R))	2.19	21"X15"			
			WEST (M3-4P)	2.00	24"X12"			
			US HWY 64 (M1-4) (2 EA)	4.00	30"X24"		9.5	2.5
			STATE HWY 51 (M1-5) (2 EA)	4.00	30"X24"			
			AHEAD ARROW (M6-3P)	2.19	21"X15"			
REMOVE/~~REPLACE~~	15+95	0' RT	KEEP RIGHT (R4-7)	~~5.00~~	24"X30"		~~9.5~~	~~2.5~~
REMOVE/RESET	16+42	41.6' LT	TULSA TRANSIT BUS STOP				8.5	2.5
REMOVE/~~REPLACE~~	16+99	8' LT	KEEP RIGHT (R4-7)	~~5.00~~	24"X30"		~~9.5~~	~~2.5~~
REMOVE/REPLACE	17+00	45.9' RT	EAST (M3-2P)	2.00	24"X12"		9.5	2.5
			US HWY 64 (M1-4)	4.00	30"X24"			
			STATE HWY 51 (M1-5)	4.00	30"X24"			
			RIGHT ARROW (M6-1(R))	2.19	21"X15"			
REMOVE/REPLACE	17+06	48' RT	ONE WAY(FR6-1R)	3.00	36"X12"		9.5	2.5
REMOVE/REPLACE	17+20	182' LT	LANE CONTROL MODIFIED (R3-8B)	6.25	30"X30"		9.5	2.5
REMOVE/REPLACE	17+24	80' LT	DO NOT ENTER (R5-1)	6.25	30"X30"		9.5	2.5
			ADVANCE INTERSECTION LANE CONTROL (R3-8)		30"X24"			
REMOVE/RESET	17+25	117' LT	HOSPITAL (D9-2)	4.00			9.5	2.5
			"ST. JOHN" (SERVICE SIGN)					
			RIGHT ARROW (SERVICE SIGN)					
REMOVE/RESET	17+80	73' LT	HOSPITAL (D9-2)	4.00			9.5	2.5
			"HILCREST" (SERVICE SIGN)					
			LEFT ARROW (SERVICE SIGN)					
			DO NOT ENTER (R5-1)	6.25	30"X30"			
REMOVE/REPLACE	17+90	44' LT	ONE WAY(FR6-1R)	3.00	36"X12"		9.5	2.5
REMOVE/~~REPLACE~~	17+97	0' RT	KEEP RIGHT (R4-7)	~~5.00~~	24"X30"		~~9.5~~	~~2.5~~
REMOVE/REPLACE	18+15	50' RT	WEST (M3-4P)	2.00	24"X12"		9.5	2.5
			US HWY 64 (M1-4)	4.00	30"X24"			
			STATE HWY 51 (M1-5)	4.00	30"X24"			
			LEFT ARROW (M5-1P(L))	2.19	21"X15"			
REMOVE/REPLACE	18+20	51' LT	NO LEFT TURN (R3-1)	4.00	24"X24"		9.5	2.5
REMOVE/REPLACE	18+26	51' RT	SIGNAL AHEAD (W3-3)	6.25	30"X30"		9.5	2.5
REMOVE/REPLACE	18+37	52.3' LT	EAST (M3-2P)	2.00	24"X12"		9.5	2.5
			US HWY 64 (M1-4)	4.00	30"X24"			
			STATE HWY 51 (M1-5)	4.00	30"X24"			
			LEFT ARROW (M6-1P(L))	2.19	21"X15"			
REMOVE/REPLACE	19+95	51.5' LT	EAST (M3-2P)	2.00	24"X12"		9.5	2.5
			US HWY 64 (M1-4)	4.00	30"X24"			
			STATE HWY 51 (M1-5)	4.00	30"X24"			
			LEFT ARROW (M5-1P (L)	2.19	21"X15"			
REMOVE/REPLACE	20+00	48.9' RT	WEST (M3-4P)	2.00	24"X12"		9.5	2.5
			US HWY 64 (M1-4)	4.00	30"X24"			
			STATE HWY 51 (M1-5)	4.00	30"X24"			
			LEFT ARROW (M6-1P(L))	2.19	21"X15"			
REMOVE/REPLACE	20+35	50' RT	NO RIGHT TURN (R3-1)	4.00	24"X24"		9.5	2.5
REMOVE/~~REPLACE~~	20+37	0.4' RT	KEEP RIGHT (R4-7)	~~5.00~~	24"X30"		~~9.5~~	~~2.5~~
REMOVE/REPLACE	20+53	55.2' RT	DO NOT ENTER (R5-1)	6.25	30"X30"		9.5	2.5
			ONE WAY(FR6-1L)	3.00	36"X12"			
REMOVE/RESET			HOSPITAL (D9-2)	4.00				
			ST JOHN (SERVICE SIGN)					
			LEFT ARROW (SERVICE SIGN)					
REMOVE/RESET	21+05	77.2' RT	HOSPITAL (D9-2)	4.00			9.5	2.5
			HILCREST (SERVICE SIGN)					
			RIGHT ARROW (SERVICE SIGN)					
REMOVE/REPLACE			ONE WAY(FR6-1L)	3.00	36"X12"			
			DO NOT ENTER (R5-1)	6.25	30"X30"			
REMOVE/REPLACE	21+27	6' LT	NO LEFT TURN (R3-2)	4.00	24"X24"		9.5	2.5
REMOVE/~~REPLACE~~	21+31	15' RT	KEEP RIGHT (R4-7)	~~5.00~~	24"X30"		~~9.5~~	~~2.5~~
REMOVE/REPLACE	21+87	47.5' LT	NO PARKING (R7-1)	1.50	18"X24"		9.5	2.5

SIGN SUMMARY CONT.

ACTION	STA.	OFFSET	SIGN DESCRIPTION	AREA (SF)		POST LENGTH (FT) 1.5"	1.75"	2"
REMOVE/REPLACE	22+30	49.8' LT	EAST (M3-2P)	2.00	24"X12"		9.5	2.5
			WEST (M3-4P)	2.00	24"X12"			
			US HWY 64 (M1-4) (2 EA)	4.00	30"X24"			
			STATE HWY 51 (M1-5) (2 EA)	4.00	30"X24"			
			AHEAD ARROW (M6-3P)	2.19	21"X15"			
			RIGHT ARROW (M5-1P(R))	2.19	21"X15"			
REMOVE/~~REPLACE~~	23+66	6.9' RT	KEEP RIGHT (R4-7)	~~2.19~~	24"X30"		~~9.5~~	~~2.5~~
REMOVE/REPLACE	23+76	46.1 RT	JUNCTION (M2-1)	5.00	21"X15"		9.5	2.5
			US HWY 64 (M1-4)	2.19	30"X24"			
			STATE HWY 51 (M1-5)	4.00	30"X24"			
REMOVE/RESET	23+86		NEIGHBORHOOD SIGN			2	9.5	2.5
REMOVE/REPLACE			STOP (R1-1)	5.18	30"X30"			
			S. UTICA AV. 1300 (2 EA)	3.76	LENGTH X 9"			
			E. 13TH ST. 1600 (2 EA)	3.76	LENGTH X 9"			
REMOVE/RESET		59.5' LT	ALERT NEIGHBOR (2 EA)					
REMOVE/RESET	24+35	57.1' RT	TERRACE DRIVE NEIGHBORHOOD			2	9.5	2.5
REMOVE/REPLACE			STOP (R1-1)	5.18	30"X30"			
			S. UTICA AV. 1300 (2 EA)	3.76	LENGTH X 9"			
			E. 13TH ST. 1700 (2 EA)	3.76	LENGTH X 9"			
			NO LEFT TURN (R3-2)	4.00	24"X24"			
REMOVE/RESET	25+29	33.4' RT	TULSA TRANSIT BUS STOP				8.5	2.5
REMOVE/~~REPLACE~~	28+23	2' RT	KEEP RIGHT (R4-7)	~~5.00~~	24"X30"		~~9.5~~	~~2.5~~
REMOVE/RESET	28+56	30.5' LT	TULSA TRANSIT BUS STOP				8.5	2.5
REMOVE/~~REPLACE~~	29+66	3.6' LT	KEEP RIGHT (R4-7)	~~5.00~~	24"X30"		~~9.5~~	~~2.5~~
REMOVE/REPLACE	29+90	75' LT	LEFT LANE MUST TURN LEFT (R3-7)	6.25	30"X30"		9.5	2.5
REMOVE/REPLACE	30+50	60' RT	RIGHT ONLY (R3-5(R))	6.25	30"X36"		9.5	2.5
REMOVE/RESET	31+67	32.7' RT	TULSA TRANSIT BUS STOP				8.5	2.5
REMOVE/REPLACE	35+03	31.9' RT	WHEELCHAIR CROSSING (W11-9)	6.25	24"X24"		9.5	2.5
REMOVE/REPLACE	35+14	31.3' LT	SPEED LIMIT 30 (R2-1)	5.00	24"X30"		9.5	2.5
REMOVE/RESET	35+74	31.4' LT	HOSPITAL (D9-2)	4.00			9.5	2.5
			AHEAD ARROW (SERVICE SIGN)		21"X15"			
REMOVE/RESET	36+19	30.7' RT	TULSA TRANSIT BUS STOP				8.5	2.5
			TOTAL =	273.94		8.00	346.50	92.50

STRIPING SUMMARY

DESCRIPTION	UNIT	QTY	S. UTICA AVE. 48	49	50	51
TRAFFIC STRIPE (PLASTIC)(4" WHITE)	LF	4344	1287	1580	835	642
TRAFFIC STRIPE (PLASTIC)(4" YELLOW)	LF	5257	1152	1134	2140	831
TRAFFIC STRIPE (PLASTIC)(8" YELLOW)	LF	332	37	87	208	0
TRAFFIC STRIPE (PLASTIC)(24" WHITE)	LF	1752	457	565	393	337
TRAFFIC STRIPE (PLASTIC ARROW)	EA	51	14	20	11	6

DRIVEWAY SUMMARY

STA.	WIDTH	DEPTH	RADIUS	AGG. BASE 303 (A)	6" CONCRETE DRIVEWAY 610 (B)
	FT.		FT.	C.Y.	S.Y.
15+40.19 LT	42	10	0	8	47
15+55.78 RT	37	7	0	5	29
16+14.16 RT	32	8	0	5	28
26+01.21 LT	46	9	0	5	32
34+45.39 RT	24	14	15	6	37
34+81.97 LT	45	16	15 L, 10 R	13	80
35+36.20 LT	28	12	10	6	37
			TOTAL:	48	290

PROFESSIONAL ENGINEER LICENSED Daniel E. Polasek No. 24920 OKLAHOMA

7/14/2025

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

SUMMARIES (4 OF 4)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: NA	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		7/2025
HORIZONTAL:	LEAD ENGR.		7/25
	FIELD MGR.		7/25
VERTICAL:	RECOMMENDED: HAS 8-25 DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING:
ATLAS PAGE NO: 3
DATE JULY 2024
SHEET 11 OF 77 SHEETS

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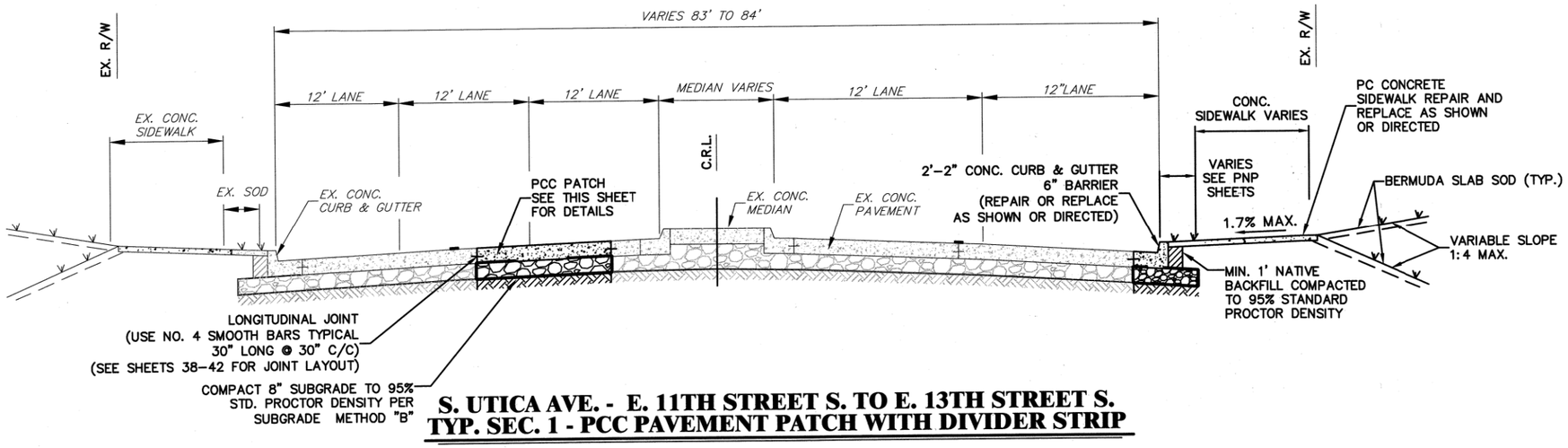
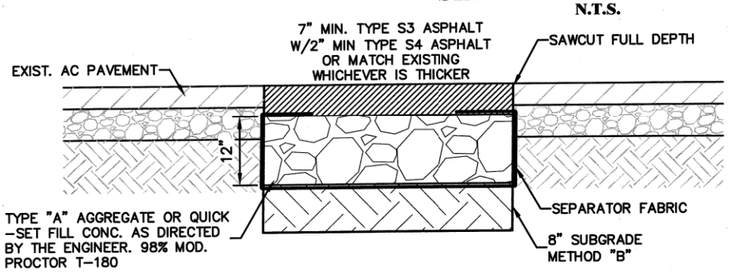


S. UTICA AVE. - E. 11TH STREET S. TO E. 13TH STREET S.
TYP. SEC. 1 - PCC PAVEMENT PATCH WITH DIVIDER STRIP

STA 14+65.55 TO STA 25+07.13
N.T.S.

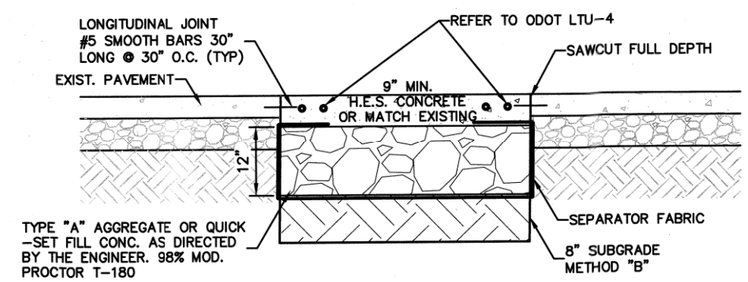
NOTES:

1. SEE PAY ITEM NOTE E-10, SHEET 2 FOR LIMITS OF SOLID SLAB SOD REPLACEMENT,
2. SEE REHABILITATION SHEETS FOR LIMITS OF COMBINED CURB & GUTTER REPLACEMENT,
3. CONTRACTOR SHALL USE TYPE S6 ASPHALT AT THE DISCRETION OF THE ENGINEER AS A SELECT LEVELING COURSE.
4. PER ODOT SECTION 417-COLD MILLING PAVEMENT: MILL THE EXISTING PAVEMENT UNIFORMLY TO PROVIDE A UNIFORM TEXTURE, TRUE TO LINE, GRADE & CROSS SECTION; IT SHALL HAVE NO DEVIATIONS IN EXCESS OF 3/16" IN 10 FEET, MAKE AS MANY PASSES AS NECESSARY TO REMOVE IRREGULARITIES AND TO PROFILE THE SURFACE TO THE DEPTH AND CROSS SLOPE SHOWN.



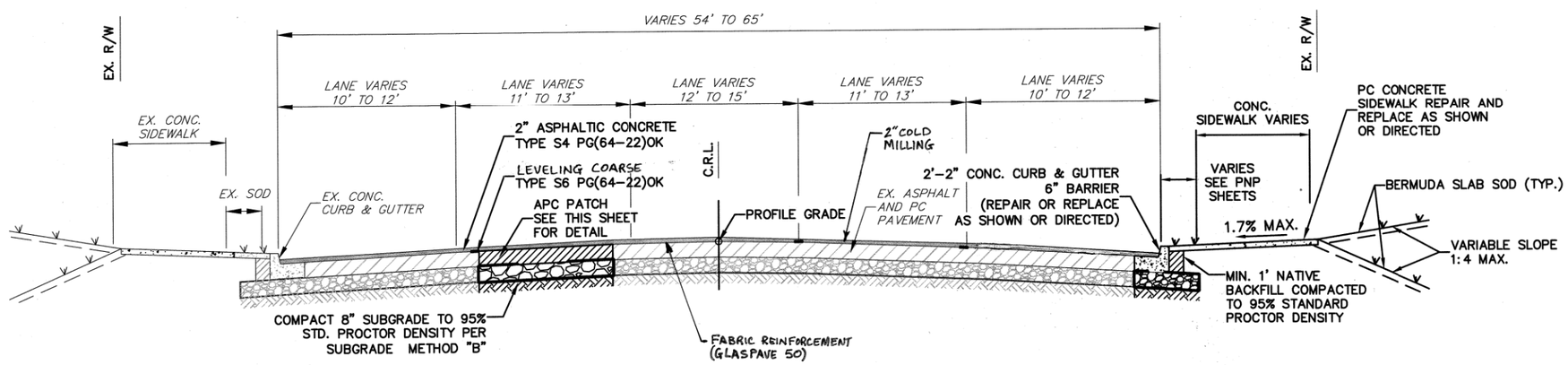
S. UTICA AVE. - E. 11TH STREET S. TO E. 12TH STREET S.
AC PATCH DETAIL

STA 33+94.24 TO STA. 36+69.53
N.T.S.



S. UTICA AVE. - E. 13TH STREET S. TO E. 15TH STREET S.
PCC PATCH DETAIL

STA 14+65.55 TO STA. 25+07.13
N.T.S.



S. UTICA AVE. - E. 11TH STREET S. TO E. 13TH STREET S.
TYP. SEC. 2 - MILL AND AC OVERLAY

STA 25+07.13 TO STA 28+18.01
STA 30+68.08 TO STA 36+69.53
N.T.S.

LICENSED PROFESSIONAL ENGINEER Daniel E. Polasek 24920 OKLAHOMA
9/12/2024

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

REVISION	BY	DATE

TYPICAL SECTIONS (1 OF 2)
PROJ. 144017-W, 144017-AX
ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE HORIZONTAL: 1"=20'	PROJ. MGR.		9/2024	
	LEAD ENGR.		8/25	
	FIELD MGR.		6/25	
VERTICAL: 1"=5'	RECOMMENDED: DESIGN MANAGER		8·25	CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 12 OF 77 SHEETS

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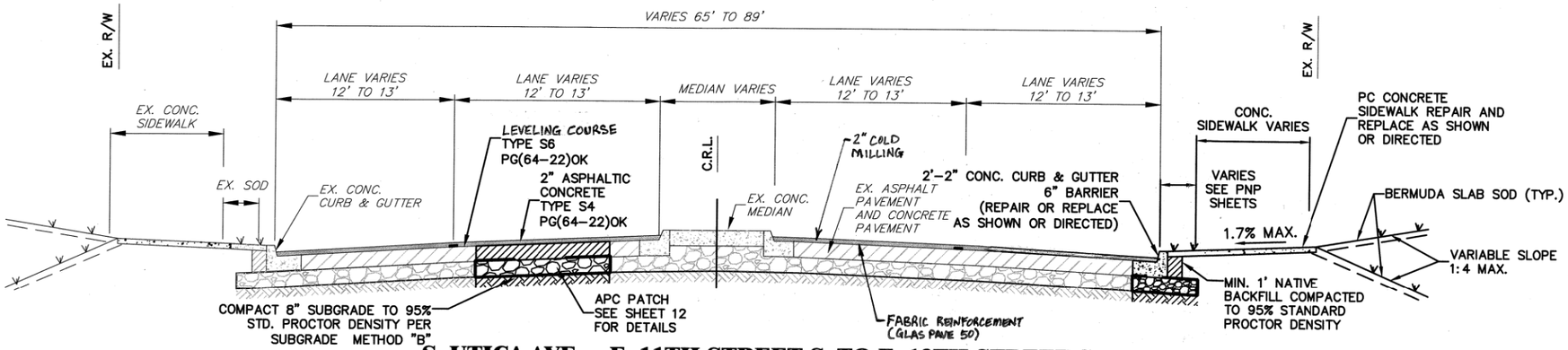
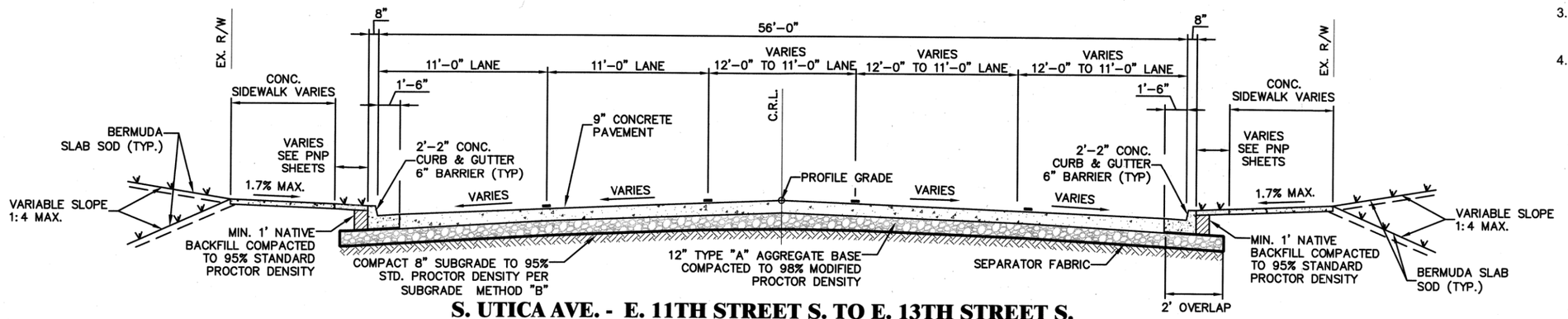


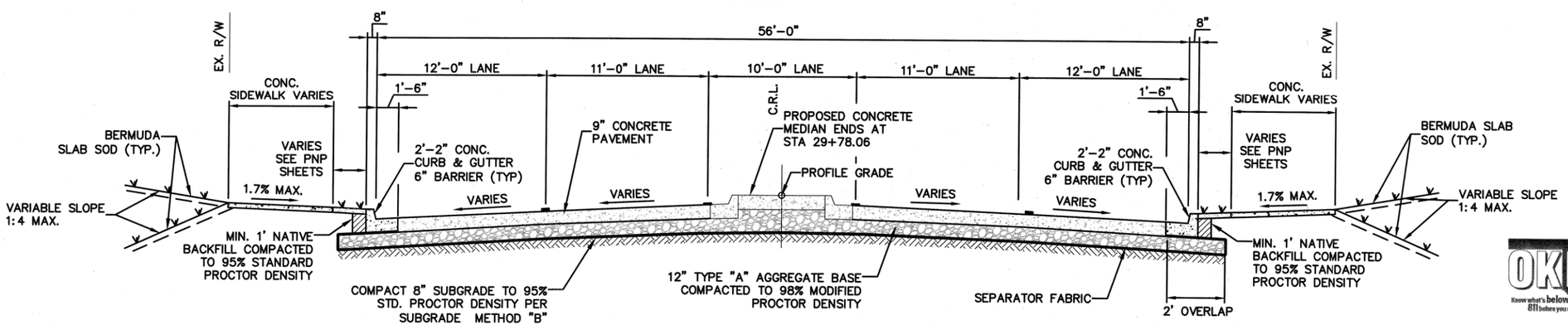
S. UTICA AVE. - E. 11TH STREET S. TO E. 13TH STREET S.
TYP. SEC. 3 - COLD MILL AND AC OVERLAY WITH DIVIDER STRIP

STA 28+18.01 TO STA 29+66.36
N.T.S.



S. UTICA AVE. - E. 11TH STREET S. TO E. 13TH STREET S.
TYP. SEC. 4 - FULL DEPTH PCC RECONSTRUCTION

STA 29+78.06 TO STA 30+68.08
STA 36+69.53 TO STA. 38+25.85
N.T.S.



S. UTICA AVE. - E. 11TH STREET S. TO E. 13TH STREET S.
TYP. SEC. 5 - FULL DEPTH PCC RECONSTRUCTION WITH MEDIAN

STA 29+66.36 TO STA. 29+78.06
N.T.S.

NOTES:

1. SEE PAY ITEM NOTE E-10, SHEET 2 FOR LIMITS OF SOLID SLAB SOD REPLACEMENT,
2. SEE REHABILITATION SHEETS FOR LIMITS OF COMBINED CURB & GUTTER REPLACEMENT,
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LICENSED PROFESSIONAL ENGINEER Daniel E. Polasek 24920 OKLAHOMA
9/12/2024

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REVISION	BY	DATE

TYPICAL SECTIONS (2 OF 2)
PROJ. 144017-W, 144017-AX
ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

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1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

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	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		9/2024
HORIZONTAL: 1"=20'	LEAD ENGR.		5/25
VERTICAL: 1"=5'	FIELD MGR.		6/25
	RECOMMENDED: DESIGN MANAGER		8-25

APPROVED: CITY ENGINEER

FILE: DRAWING: DATE JULY 2024
ATLAS PAGE NO: 3 SHEET 13 OF 77 SHEETS

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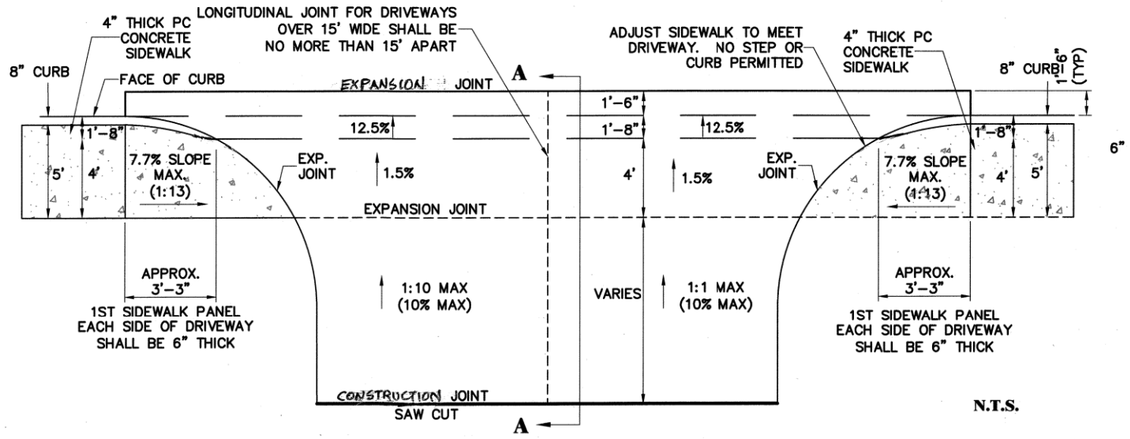
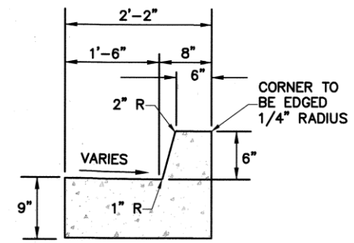


N.T.S.

TYPICAL DRIVEWAY PLAN

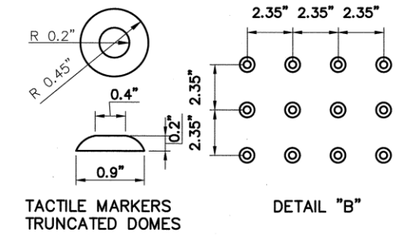
N.T.S.

NOTES: CURB RADII AS SHOWN ON CONSTRUCTION PLANS



DETAIL OF 2'-2" COMBINATION CURB & GUTTER (6" BARRIER)

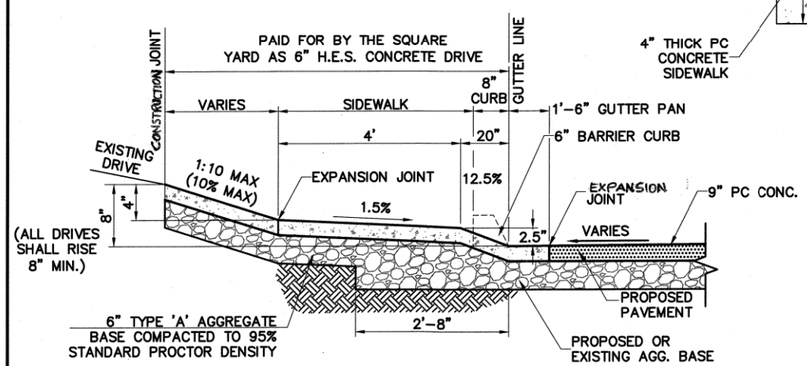
N.T.S.



TACTILE MARKERS TRUNCATED DOMES

N.T.S.

FOR TACTILE WARNING DETAILS AND INSTALLATION NOTES SEE COT STANDARD 790

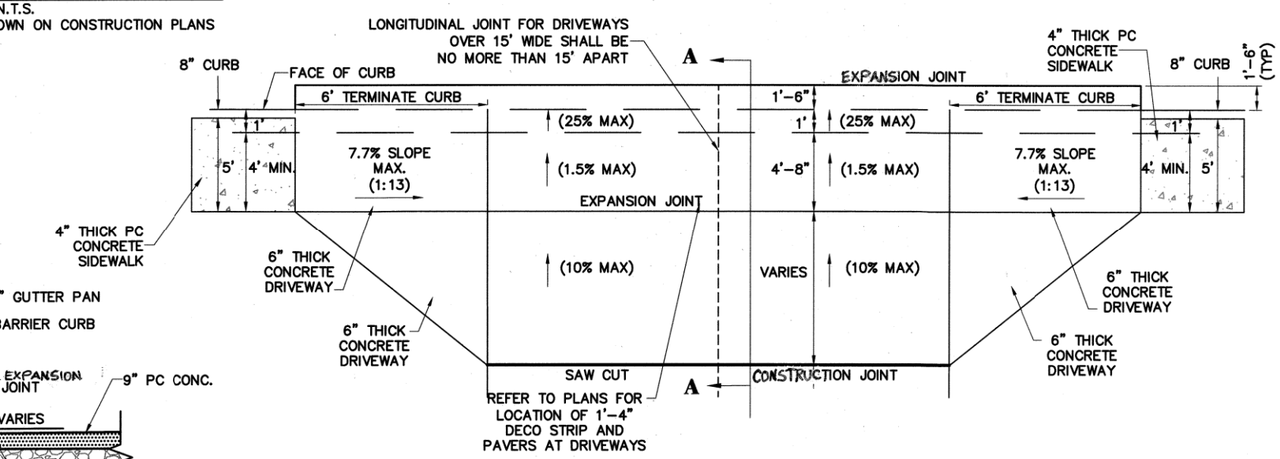


* SEE CROSS SECTIONS FOR INDIVIDUAL DRIVEWAY SLOPES

DRIVEWAY PLAN SECTION A-A

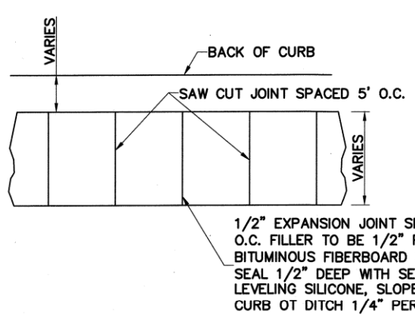
N.T.S.

JOINTS SHOWN FOR P.C. CONCRETE DRIVEWAY



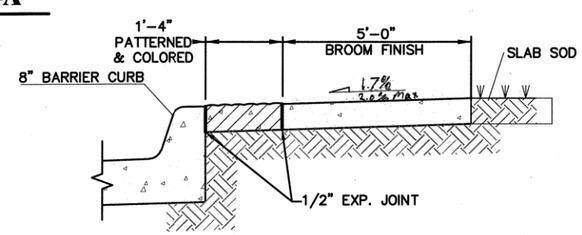
TYPICAL RAMP DRIVEWAY PLAN

N.T.S.



PLAN DETAIL OF CONCRETE SIDEWALK

N.T.S.

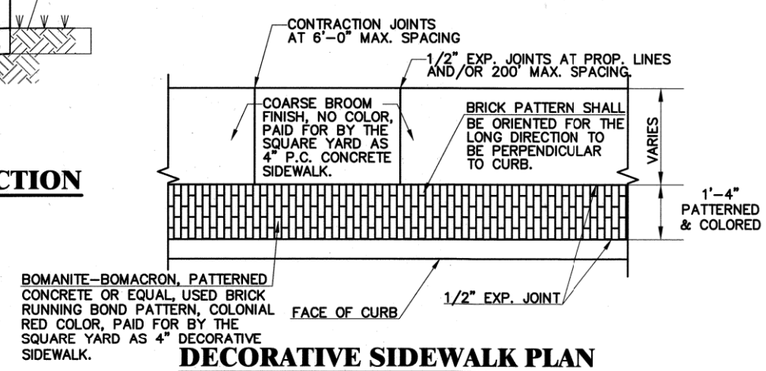


DECORATIVE SIDEWALK SECTION

N.T.S.

SIDEWALK NOTES:

1) JOINT SEALER SHALL MEET THE REQUIREMENTS OF SECTIONS 701.08b AND 701.08e.
2) WHEREVER PRACTICABLE, TRANSVERSE SIDEWALK JOINTS SHALL BE ALIGNED WITH PAVING JOINTS AND/OR BRICK PATTERN.



DECORATIVE SIDEWALK PLAN

N.T.S.

LICENSED PROFESSIONAL ENGINEER Daniel E. Polosel 24920 OKLAHOMA
9/12/2024

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

REVISION	BY	DATE

MISCELLANEOUS DETAILS

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

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BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

PLAN SCALE: NA	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		9/2024	
HORIZONTAL: NA	LEAD ENGR.		5/25	
	FIELD MGR.		6/25	
VERTICAL: NA	RECOMMENDED: HAS 8-25 DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 14 OF 77 SHEETS

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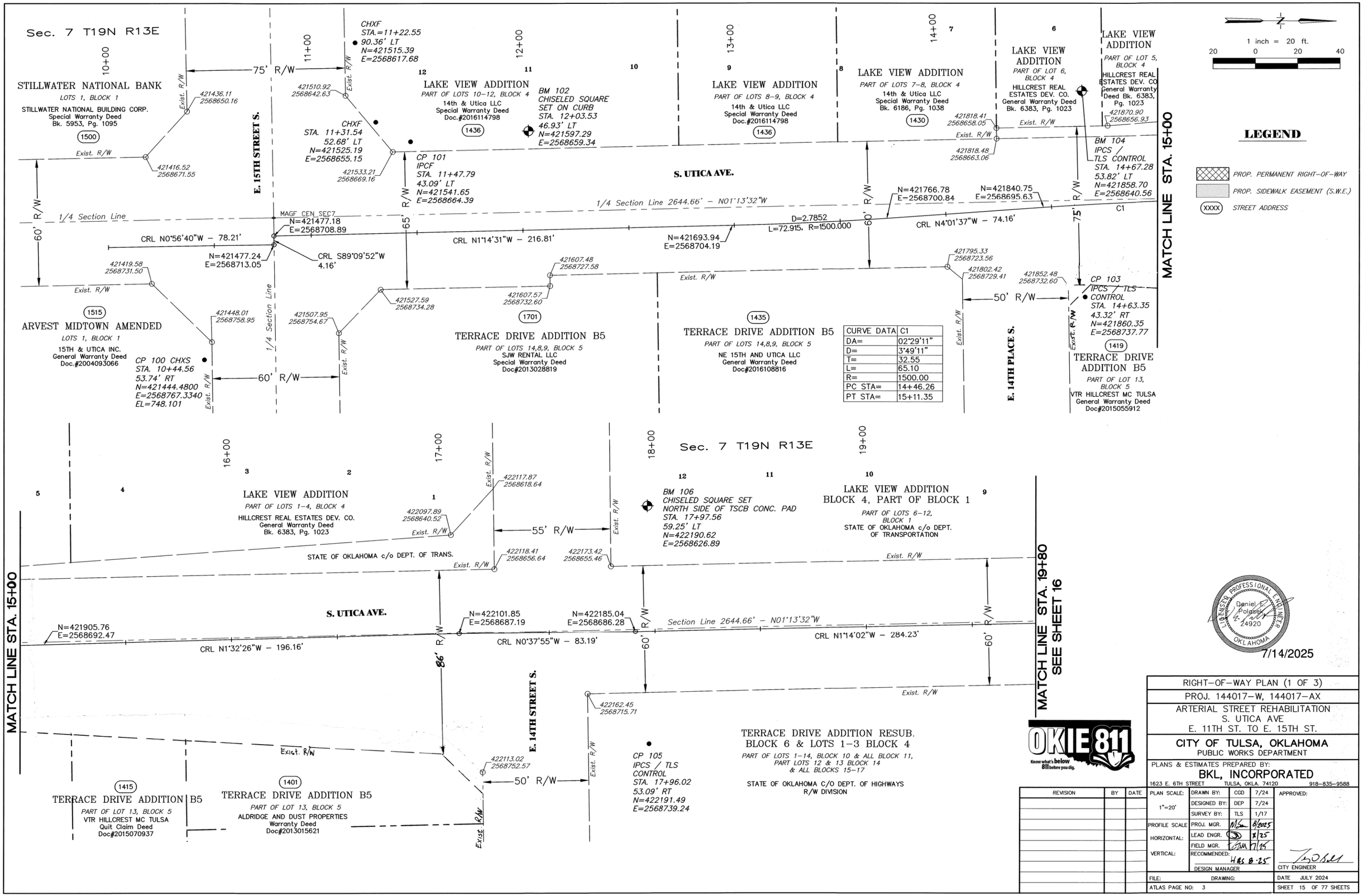

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D=	3°49'11"
T=	32.55
L=	65.10
R=	1500.00
PC STA=	14+46.26
PT STA=	15+11.35

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

RIGHT-OF-WAY PLAN (1 OF 3)

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		8/2025
HORIZONTAL:	LEAD ENGR.		8/25
	FIELD MGR.		7/25
VERTICAL:	RECOMMENDED: DESIGN MANAGER		8-25

APPROVED: CITY ENGINEER

FILE: DRAWING: DATE JULY 2024

ATLAS PAGE NO: 3 SHEET 15 OF 77 SHEETS

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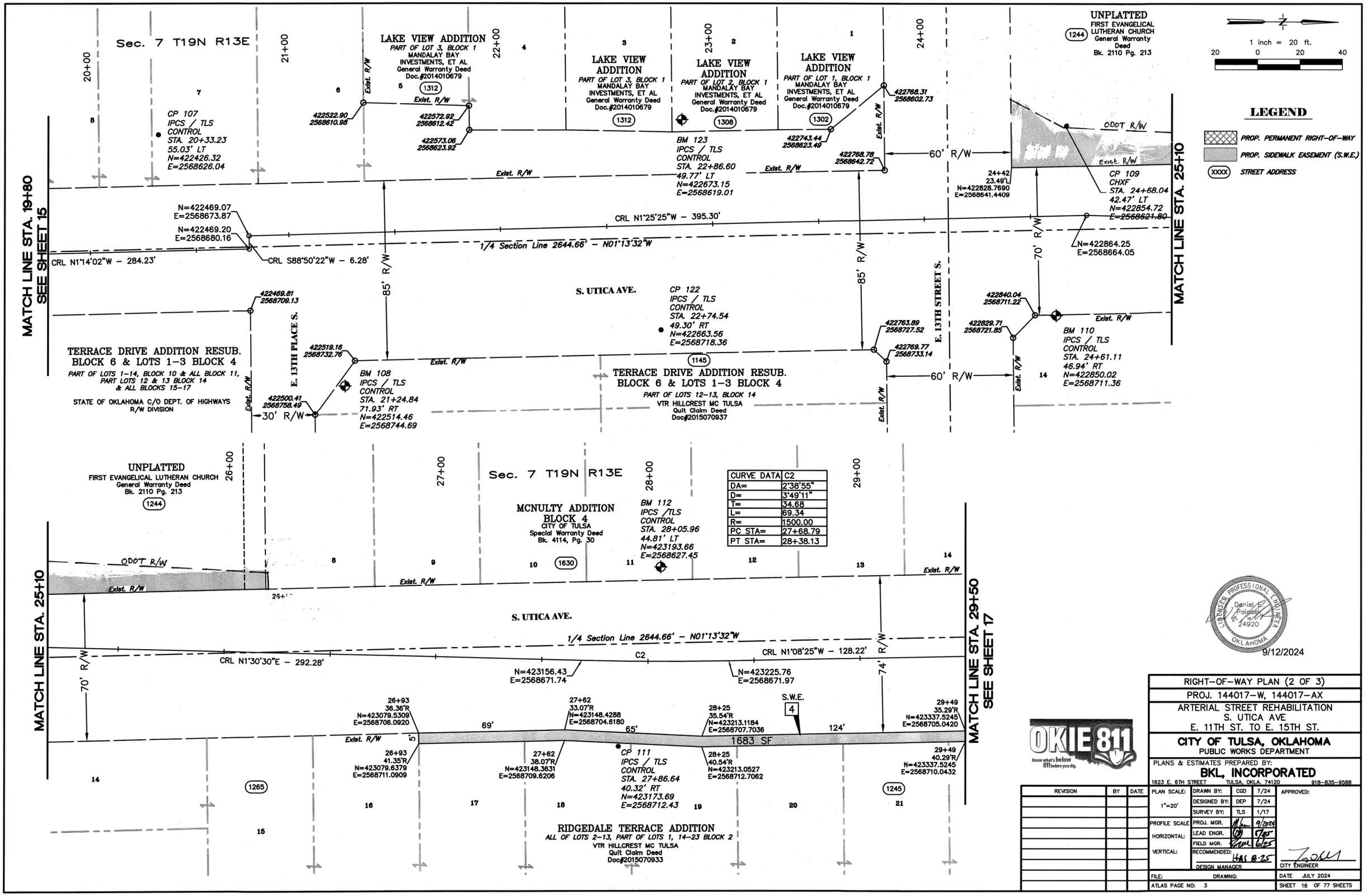

CURVE DATA	C2
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D=	3°49'11"
T=	34.68
L=	69.34
R=	1500.00
PC STA=	27+68.79
PT STA=	28+38.13

9/12/2024

RIGHT–OF–WAY PLAN (2 OF 3)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

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1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		9/2024	
HORIZONTAL:	LEAD ENGR.		6/25	
	FIELD MGR.		6/25	
VERTICAL:	RECOMMENDED: HAS 8-25 DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 16 OF 77 SHEETS

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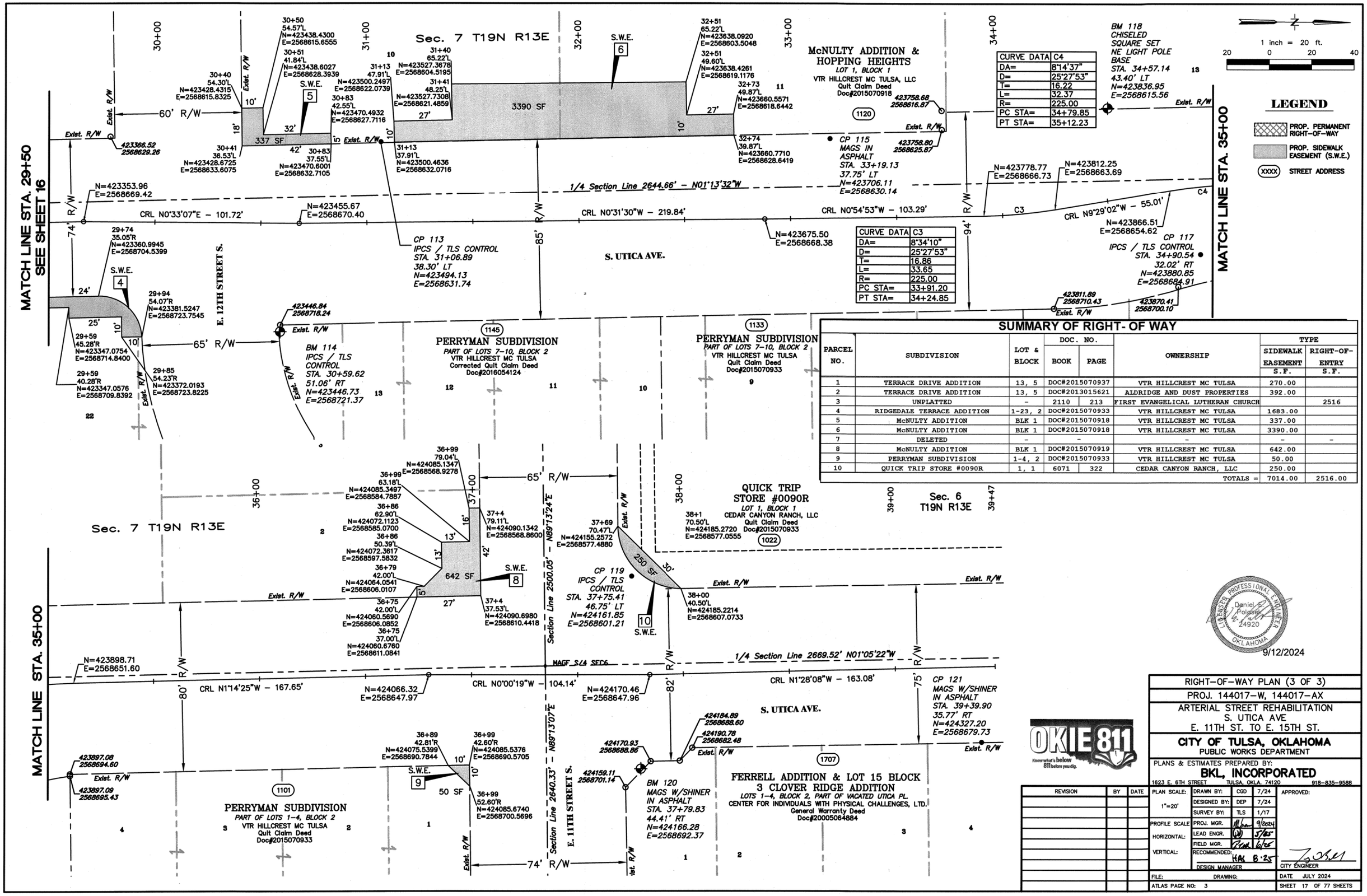

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D=	25°27'53"
T=	16.22
L=	32.37
R=	225.00
PC STA=	34+79.85
PT STA=	35+12.23

CURVE DATA	C3
DA=	8°34'10"
D=	25°27'53"
T=	16.86
L=	33.65
R=	225.00
PC STA=	33+91.20
PT STA=	34+24.85

SUMMARY OF RIGHT- OF WAY

PARCEL NO.	SUBDIVISION	LOT & BLOCK	DOC. NO. BOOK	DOC. NO. PAGE	OWNERSHIP	TYPE SIDEWALK EASEMENT S.F.	TYPE RIGHT-OF-ENTRY S.F.
1	TERRACE DRIVE ADDITION	13, 5	DOC#2015070937		VTR HILLCREST MC TULSA	270.00	
2	TERRACE DRIVE ADDITION	13, 5	DOC#2013015621		ALDRIDGE AND DUST PROPERTIES	392.00	
3	UNPLATTED	-	2110	213	FIRST EVANGELICAL LUTHERAN CHURCH		2516
4	RIDGEDALE TERRACE ADDITION	1-23, 2	DOC#2015070933		VTR HILLCREST MC TULSA	1683.00	
5	McNULTY ADDITION	BLK 1	DOC#2015070918		VTR HILLCREST MC TULSA	337.00	
6	McNULTY ADDITION	BLK 1	DOC#2015070918		VTR HILLCREST MC TULSA	3390.00	
7	DELETED	-	-		-	-	-
8	McNULTY ADDITION	BLK 1	DOC#2015070919		VTR HILLCREST MC TULSA	642.00	
9	PERRYMAN SUBDIVISION	1-4, 2	DOC#2015070933		VTR HILLCREST MC TULSA	50.00	
10	QUICK TRIP STORE #0090R	1, 1	6071	322	CEDAR CANYON RANCH, LLC	250.00	
					TOTALS =	7014.00	2516.00

9/12/2024

RIGHT-OF-WAY PLAN (3 OF 3)

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
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	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		9/2024
HORIZONTAL:	LEAD ENGR.		5/25
	FIELD MGR.		6/25
VERTICAL:	RECOMMENDED: HAK 8·25 DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING:
DATE JULY 2024
ATLAS PAGE NO: 3
SHEET 17 OF 77 SHEETS

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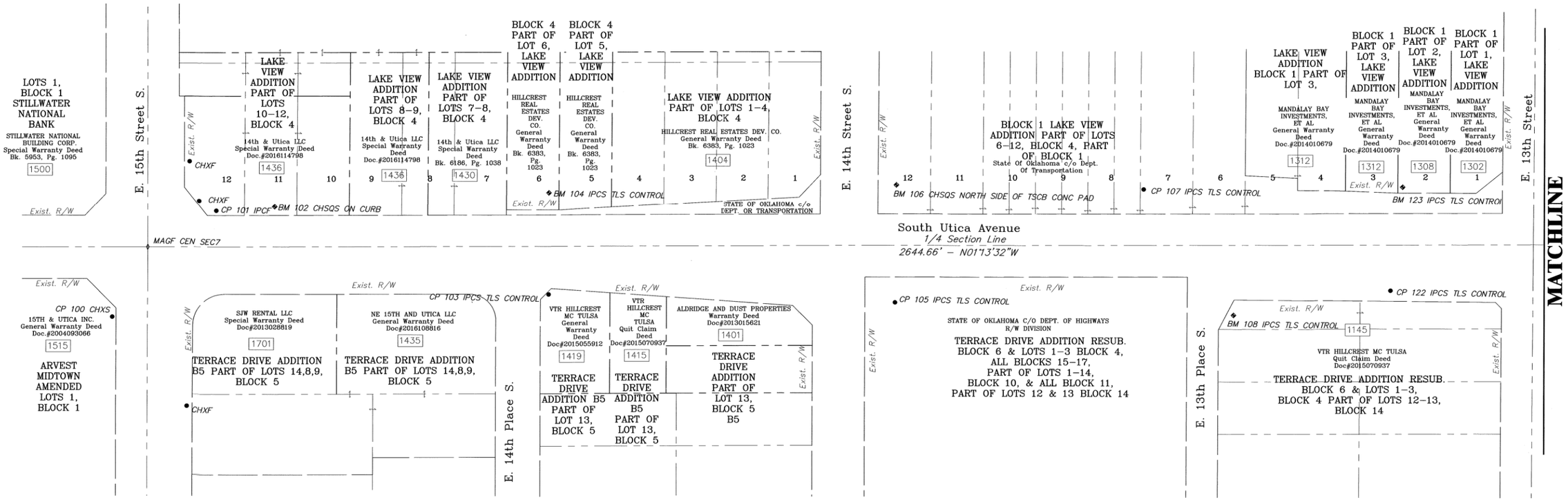
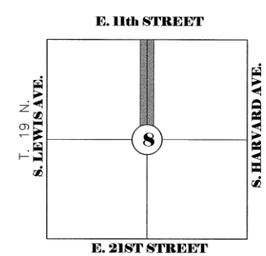




1 inch = 50 ft.

50 0 50 100

E. DANE TROUT, P.L.S. #1893

SURVEYORS CERTIFICATE

I, E. Dane Trout of Tulsa County, State of Oklahoma, and a Professional Surveyor, do hereby certify that the above shown survey is true and correct to the best of my knowledge.

WITNESS MY HAND AND SEAL THIS 17 th DAY OF SEP , 2024

SURVEY DATA SHEET (1)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
SOUTH UTICA AVENUE
E. 11th ST. S. TO E. 15th ST. S.

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

TROUT LAND SURVEYING, LLC
918.734.3423 · 5710 S. Garnett Tulsa, OK 74146
CA 7312 (LS) 6/30/2017

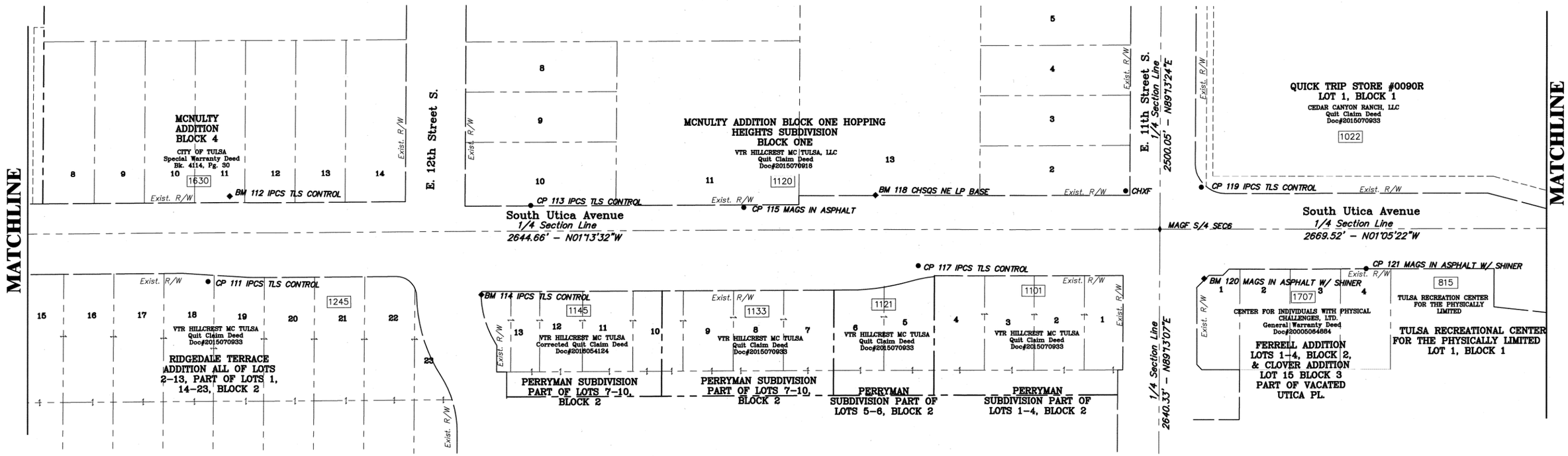
REVISION	BY	DATE

PLAN SCALE: 1"= 50'	DRAWN BY:	DT	4/17
	DESIGNED BY:	DT	4/17
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		9/2024
HORIZONTAL: N/A	LEAD ENGR.		5/25
	FIELD MGR.		5/25
VERTICAL: N/A	RECOMMENDED: HDI 8-25 DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING: DATE: 8/22/2025

ATLAS PAGE NO.: 2, 3 SHEET 18 OF 77 SHEETS



CONTROL POINTS

Pnt. NO.	Northing	Easting	Elevation	Description
100	421444.4800	2568767.3340	748.101	CP 100 CHXS
117	423880.8540	2568684.9140	737.010	CP 117 IPCS TLS CONTROL
109	422854.7240	2568621.8010	757.371	CP 109 CHXF
101	421541.6460	2568664.3920	751.100	CP 101 IPCF
111	423173.6900	2568712.4280	762.170	CP 111 IPCS TLS CONTROL
103	421860.3520	2568737.7700	748.990	CP 103 IPCS TLS CONTROL
105	422191.4910	2568739.2350	752.331	CP 105 IPCS TLS CONTROL
107	422426.3190	2568626.0380	753.370	CP 107 IPCS TLS CONTROL
115	423706.1094	2568630.1406	753.290	CP 115 MAGS IN ASPHALT
119	424161.8520	2568601.2100	730.181	CP 119 IPCS TLS CONTROL
121	424327.2040	2568679.7280	724.550	CP 121 MAGS IN ASPHALT W/ SHINER
122	422663.5600	2568718.3590	756.518	CP 122 IPCS TLS CONTROL
113	423494.1330	2568631.7390	756.890	CP 113 IPCS TLS CONTROL

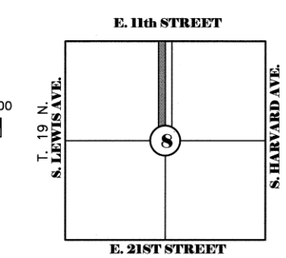
BENCHMARKS

Pnt. NO.	Northing	Easting	Elevation	Description
5	429170.4350	2568517.2720	751.591	BM
110	422850.0150	2568711.3650	759.401	BM 110 IPCS TLS CONTROL
102	421597.2920	2568659.3370	751.645	BM 102 CHSQS ON CURB
6	429170.4400	2568517.2740	751.560	BM
112	423193.6590	2568627.4490	760.271	BM 112 IPCS TLS CONTROL
104	421858.7040	2568640.5600	750.231	BM 104 IPCS TLS CONTROL
8	424128.6830	2571530.6850	746.043	BM 2016–18
106	422190.6150	2568626.8930	753.071	BM 106 CHSQS NORTH SIDE OF TSCB CONC PAD
108	422514.4650	2568744.6920	756.429	BM 108 IPCS TLS CONTROL
114	423446.7270	2568721.3730	758.090	BM 114 IPCS TLS CONTROL
118	423836.9470	2568615.5620	740.750	BM 118 CHSQS NE LP BASE
120	424166.2760	2568692.3740	728.031	BM 120 MAGS IN ASPHALT W/ SHINER
123	422673.1530	2568619.0130	754.690	BM 123 IPCS TLS CONTROL

N

1 inch = 50 ft.

50 0 50 100



LICENSED PROFESSIONAL LAND SURVEYOR
E. DANE TROUT
1893
OKLAHOMA

E. DANE TROUT, P.L.S. #1893

SURVEYORS CERTIFICATE

I, E. Dane Trout of Tulsa County, State of Oklahoma, and a Professional Surveyor, do hereby certify that the above shown survey is true and correct to the best of my knowledge.

WITNESS MY HAND AND SEAL THIS 18th DAY OF SEP 2024

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

SURVEY DATA SHEET (2)

PROJ. 144017–W, 144017–AX

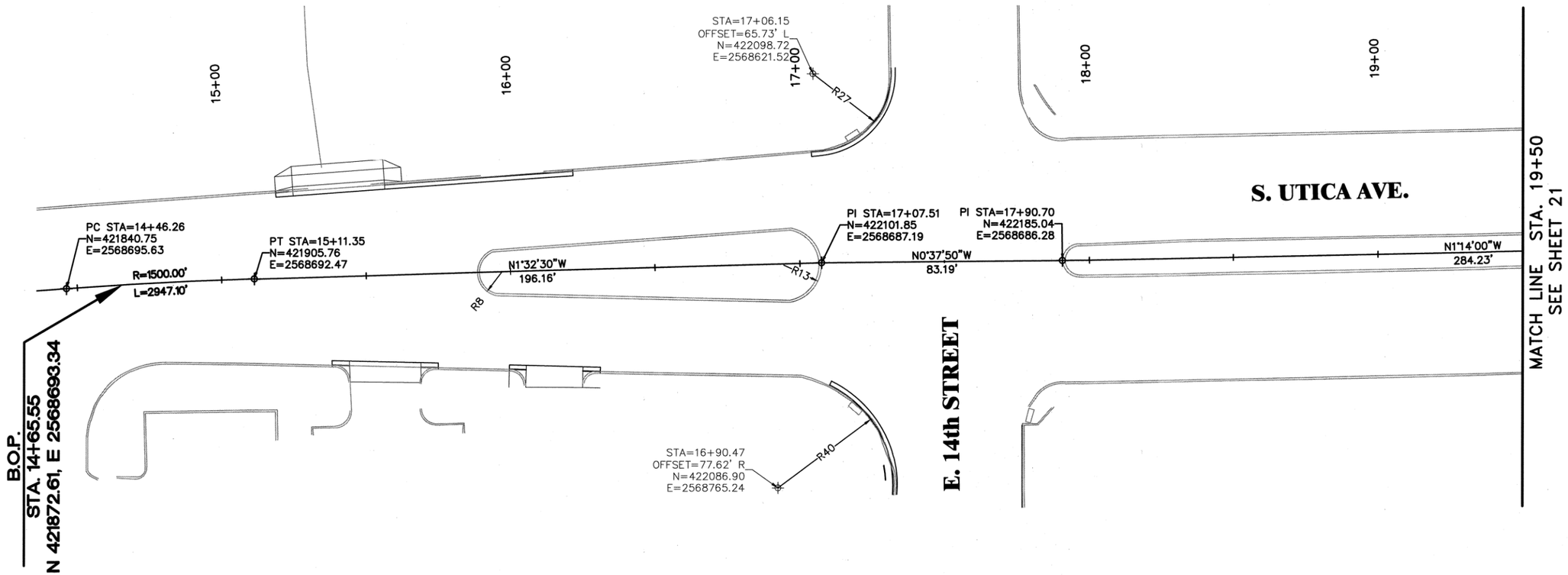
ARTERIAL STREET REHABILITATION
SOUTH UTICA AVENUE
E. 11th ST. S. TO E. 15th ST. S.

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

TROUT LAND SURVEYING, LLC
918.734.3423 • 5710 S. Garnett Tulsa, OK 74146
CA 7312 (LS) 6/30/2017

REVISION	BY	DATE

PLAN SCALE: 1"= 50'	DRAWN BY:	DT	4/17	APPROVED:
	DESIGNED BY:	DT	4/17	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		9/2024	
HORIZONTAL: N/A	LEAD ENGR.		5/25	
	FIELD MGR.		6/25	
VERTICAL: N/A	RECOMMENDED: DESIGN MANAGER		B-25	CITY ENGINEER
FILE:	DRAWING:			DATE: 8/22/2025
ATLAS PAGE NO.: 2, 3				SHEET 19 OF 77 SHEETS



1 inch = 20 ft.

20 0 20 40

LEGEND

PROP. DRIVEWAY

LICENSED PROFESSIONAL ENGINEER
Daniel E. Polgar
24920
OKLAHOMA
9/12/2024

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

GEOMETRIC DATA SHEET (1 OF 3)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		9/2024
HORIZONTAL: NA	LEAD ENGR.		9/2024
	FIELD MGR.		6/25
VERTICAL: NA	RECOMMENDED: HAS 8-25 DESIGN MANAGER		

APPROVED:
CITY ENGINEER

FILE: DRAWING:
ATLAS PAGE NO: 3

DATE JULY 2024
SHEET 20 OF 77 SHEETS

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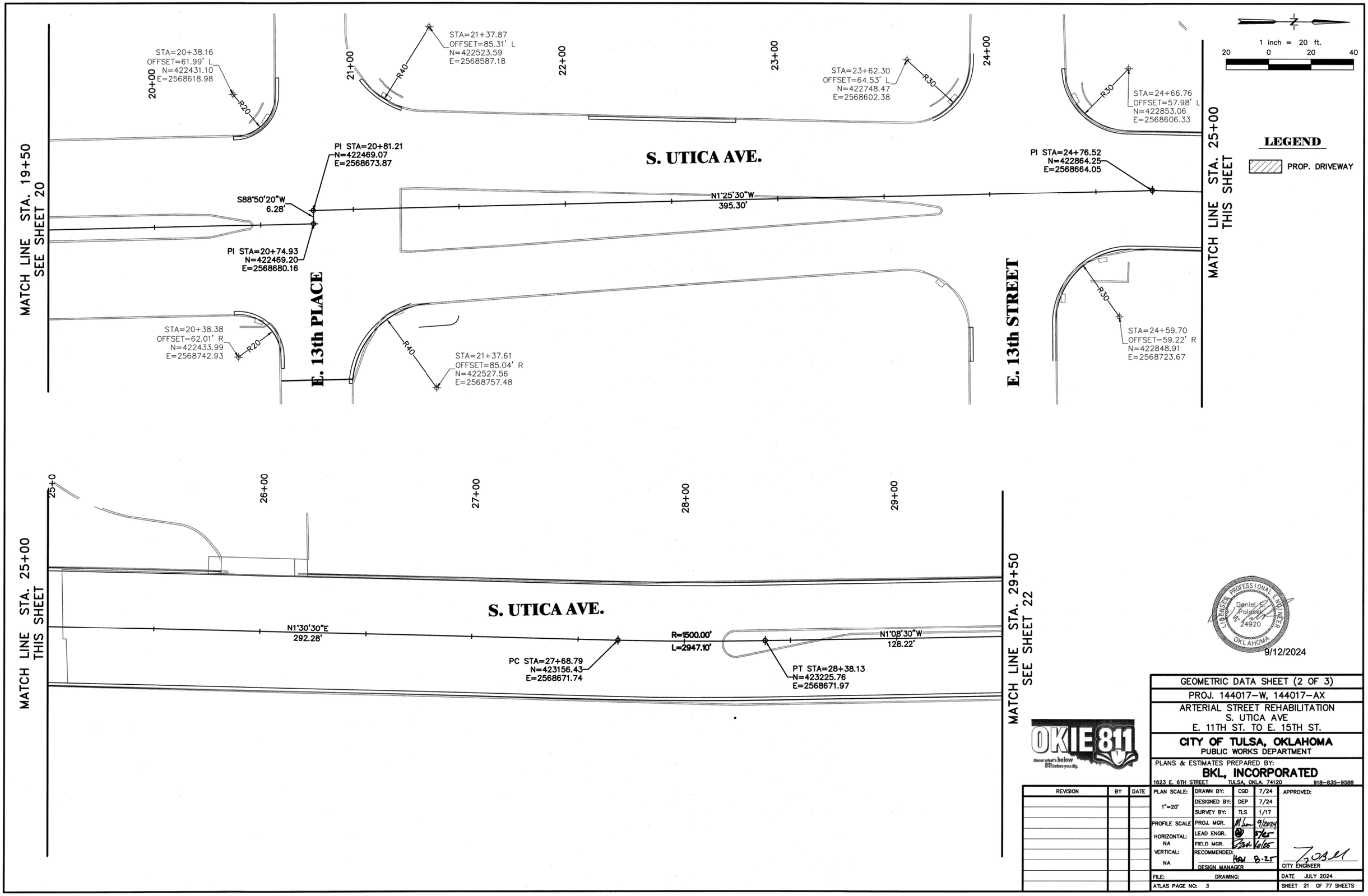

LICENSED PROFESSIONAL ENGINEER
Daniel E. Polasek
24920
OKLAHOMA
9/12/2024

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

REVISION	BY	DATE

GEOMETRIC DATA SHEET (2 OF 3)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

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	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		9/2024	
HORIZONTAL: NA	LEAD ENGR.		8/25	
	FIELD MGR.		8/25	
VERTICAL: NA	RECOMMENDED: DESIGN MANAGER		8.25	CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 21 OF 77 SHEETS

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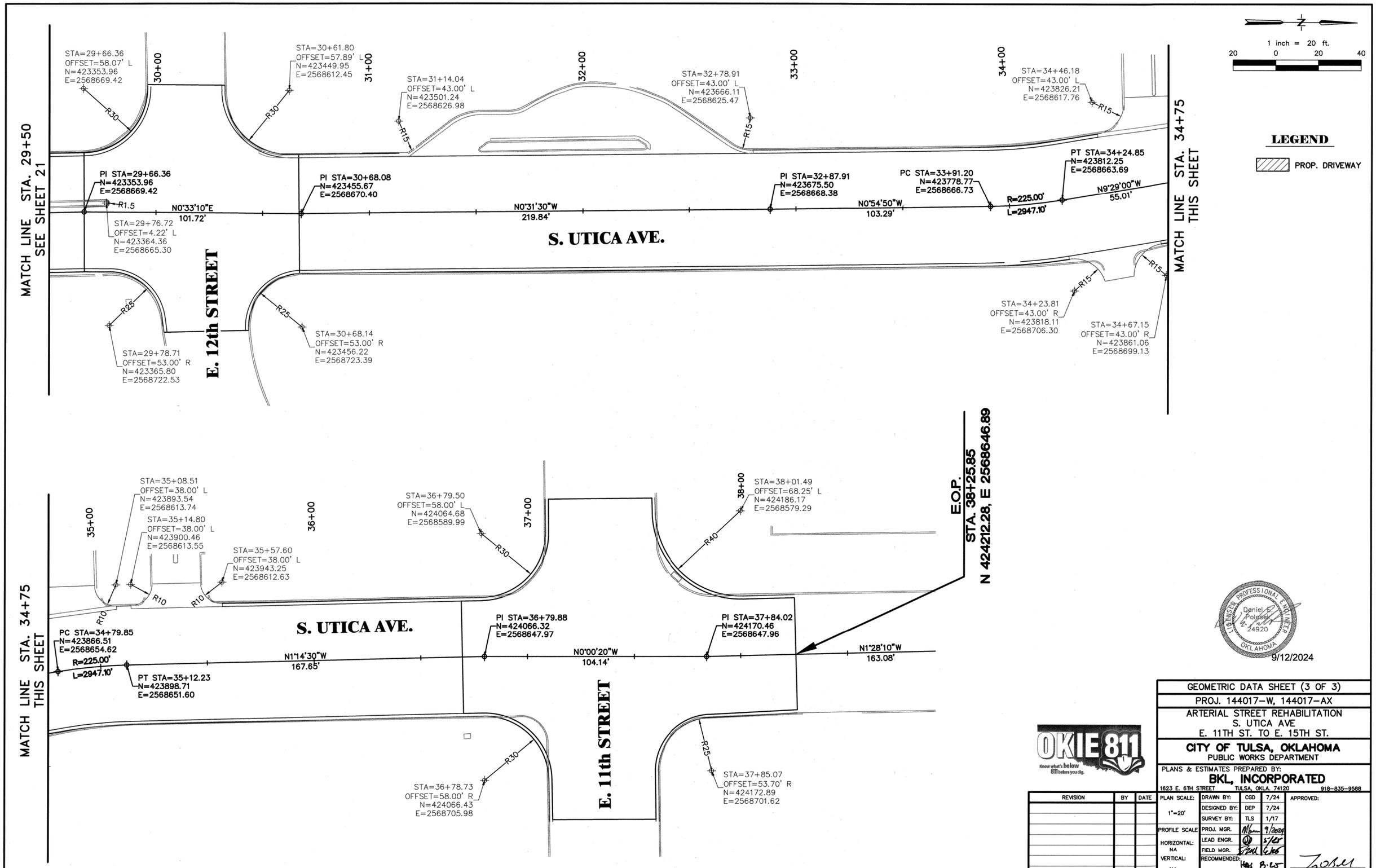

LICENSED PROFESSIONAL ENGINEER
Daniel E. Polasek
24920
OKLAHOMA
9/12/2024

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

REVISION	BY	DATE

GEOMETRIC DATA SHEET (3 OF 3)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

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	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		9/2024
HORIZONTAL: NA	LEAD ENGR.		5/25
	FIELD MGR.		6/25
VERTICAL: NA	RECOMMENDED: DESIGN MANAGER		8-25

APPROVED:
CITY ENGINEER

FILE: DRAWING:
DATE JULY 2024
ATLAS PAGE NO: 3
SHEET 22 OF 77 SHEETS

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SUMMARY OF DRAINAGE STRUCTURES

STR. NO.	STATION/OFFSET	NORTHING	EASTING	DESCRIPTION	DESIGN	ELEV. TOP OF GRATE (CI INLET)	ELEV. TOP OF COVER (MANHOLE)	FL. ELEV. BOTTOM OF INLET, MANHOLE OR JCT. BOX	STRUCTURE DEPTH	PIPE SLOPE	PIPE FLOWLINE UPSTREAM	PIPE FLOWLINE DOWNSTREAM	MANHOLE (4' DIAMETER)	MANHOLE (5' DIAMETER)	MANHOLE (6' DIAMETER)	INLET CI DES. 2	INLET CI DES. 2 W/ACCESS MANHOLE	INLET CI DES. 2(D)	INLET CI DES. 3(A)	INLET CI DES. 4(B)	REINFORCED CONCRETE PIPE 613 (A)	
													611 (A)			611 (G)	611 (G)	611 (G)	611 (G)	611 (G)	18"	24"
						FT	FT	FT	FT	FT/FT	FT	FT	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	L.F.	
Inlet-1	17+26.22, 58.95' RT	422121.21	2568745.93	CONS. CAST IRON CURB INLET	3(A)	750.79	-	746.99	3.80	-			-	-	-	-	-	-	1	-	-	-
Inlet-2	17+28.76, 52.82' LT	422122.51	2568634.15	CONS. CAST IRON CURB INLET	2	751.03	-	745.65	5.38	-			-	-	-	1	-	-	-	-	-	-
Inlet-3	20+58.22, 79.70' RT	422454.20	2568760.20	CONS. CAST IRON CURB INLET W/36.5 LF 18" RCP TO SWMH-1	4(B)	754.47	-	750.53	3.94	2.19			-	-	-	-	-	-	-	1	38	-
Inlet-4	20+97.50, 86.39' RT	422487.56	2568759.83	CONS. CAST IRON CURB INLET W/30.5 LF 18" RCP TO INLET 3	4(B)	754.70	-	751.20	3.50	2.20			-	-	-	-	-	-	-	1	32	-
Inlet-5	21+38.29, 44.92' RT	422527.24	2568717.36	CONS. CAST IRON CURB INLET W/55.5 LF 18" RCP TO SWMH-2	2(D)	753.64	-	750.14	3.50	0.47			-	-	-	-	-	1	-	-	52	-
Inlet-6	34+00.00, 28.00' RT	423789.08	2568695.05	CONS. CAST IRON CURB INLET W/ 23.87 LF 18" RCP TO SWMH-3	2	741.68	-	738.17	3.51	5.58			-	-	-	1	-	-	-	-	24	-
Inlet-7	34+00.00, 28.00' LT	423786.03	2568637.79	CONS. CAST IRON CURB INLET W/ 29.51 LF 18" RCP TO SWMH-3	2	741.68	-	738.17	3.51	2.63			-	-	-	1	-	-	-	-	30	-
Inlet-8	36+75.25, 28.00' RT	424062.27	2568676.07	CONS. CAST IRON CURB INLET W/ 16.00 LF 18" RCP TO SWMH-4	2	728.69	-	726.08	2.61	0.50			-	-	-	1	-	-	-	-	16	-
Inlet-9	36+75.25, 28.00' LT	424061.13	2568620.08	CONS. CAST IRON CURB INLET W/ ACCESS MH W/ 33.00 LF 18" RCP TO SWMH-4	2	730.34	-	726.08	4.26	1.24			-	-	-	1	-	-	-	-	34	-
Inlet-10	37+08.15, 67.85' LT	424094.59	2568580.12	CONS. CAST IRON CURB INLET W/ACCESS MH W/22.50 LF 18" RCP TO SWMH-6	2 W/MH	731.13	-	726.00	5.13	4.56			-	-	-	-	1	-	-	-	24	-
Inlet-11	37+59.66, 70.98' LT	424146.09	2568576.98	CONS. CAST IRON CURB INLET W/46.00 LF 18" RCP TO INLET 10	2	730.79	-	727.35	3.44	2.92			-	-	-	1	-	-	-	-	46	-
SWMH-1	20+34.93, 49.79' RT	422430.27	2568730.80	CONS. 5' I.D. MANHOLE	STD. 5' MH	-	753.27	749.73	3.54	-			-	1	-	-	-	-	-	-	-	-
SWMH-2	20+83.86, 21.08' RT	422472.24	2568694.88	CONS. 5' I.D. MANHOLE W/50.5 LF 18" RCP TO SWMH-1	STD. 5' MH	-	753.43	749.88	3.55	0.30			-	1	-	-	-	-	-	-	52	-
SWMH-3	34+00.00, 2.82' RT	423787.75	2568699.23	CONS. 4' I.D. MANHOLE W/161.1 LF 18" RCP TO SWMH-4	STD 4' MH	-	741.75	737.08	4.67	4.88			1	-	-	-	-	-	-	-	160	-
SWMH-4	35+62.09, 8.50' RT	423948.74	2568659.02	CONS. 4' I.D. MANHOLE W/109.50 LF 18" RCP TO SWMH-5	STD 4' MH	-	733.88	729.36	4.52	3.07			1	-	-	-	-	-	-	-	112	-
SWMH-5	36+75.30, 8.75' RT	424061.93	2568656.82	CONS. 4' I.D. MANHOLE W/34 LF 24" RCP TO SWMH-6	STD 4' MH	-	729.51	724.87	4.64	1.00			1	-	-	-	-	-	-	-	-	36
SWMH-6	37+13.35, 8.23' RT	424099.79	2568656.20	CONS. 4' I.D. MANHOLE	STD 4' MH	-	729.04	724.53	4.51	-			1	-	-	-	-	-	-	-	-	-
SWMH-7	37+13.00, 29.05' LT	424099.44	2568618.92	CONS. 6' I.D. MANHOLE W/32.5 LF 18" RCP TO SWMH-6	STD 6' MH	-	730.28	725.67	4.61	1.29			-	-	1	-	-	-	-	-	34	-
												TOTALS:	4	2	1	6	1	1	1	2	654	36

SEE STORM PROFILES FOR HGL, EGL, Q100 & V100.

PROFESSIONAL ENGINEER LICENSED Daniel E. Polasek 24920 OKLAHOMA
9/12/2024

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

REVISION	BY	DATE

STORMWATER STRUCTURE SUMMARY

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

PLAN SCALE: NA	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		10/2024	
HORIZONTAL:	LEAD ENGR.	BOC	12/24	
	FIELD MGR.			
VERTICAL:	RECOMMENDED: DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 23 OF 77 SHEETS

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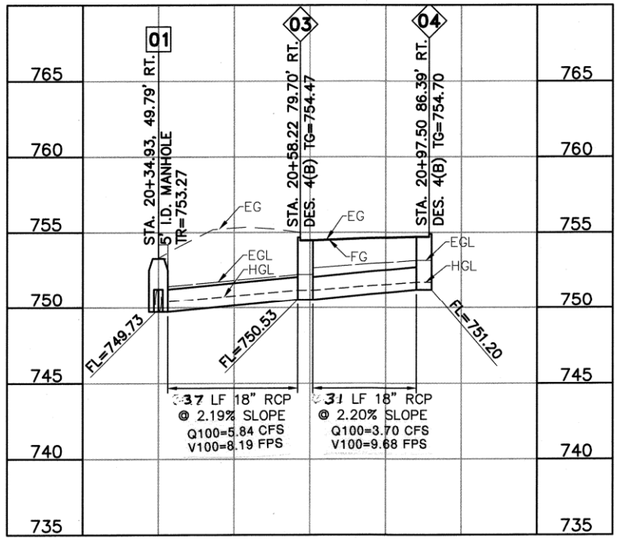
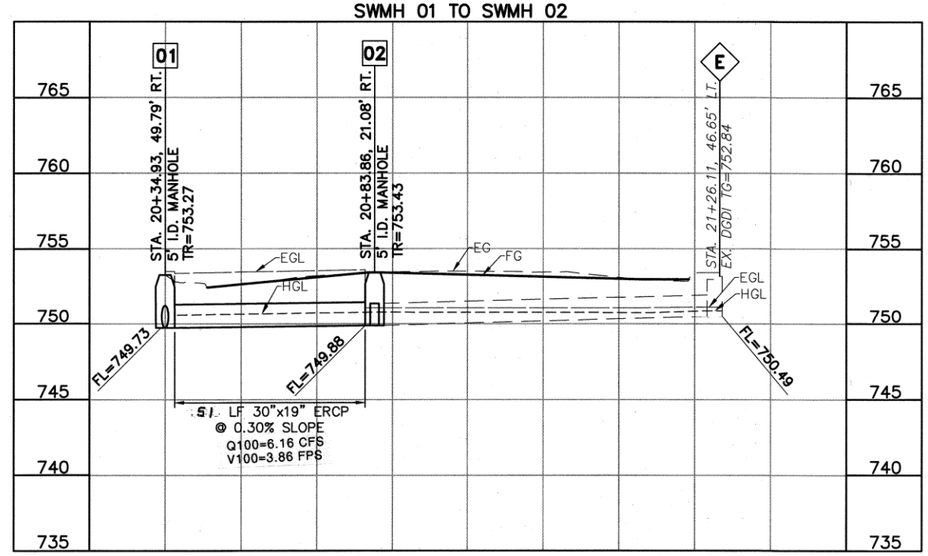
SWMH 01 TO INLET 04



SWMH 01 TO SWMH 02



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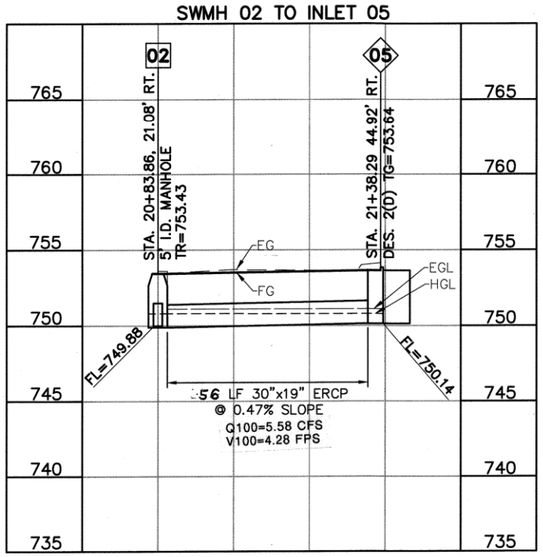

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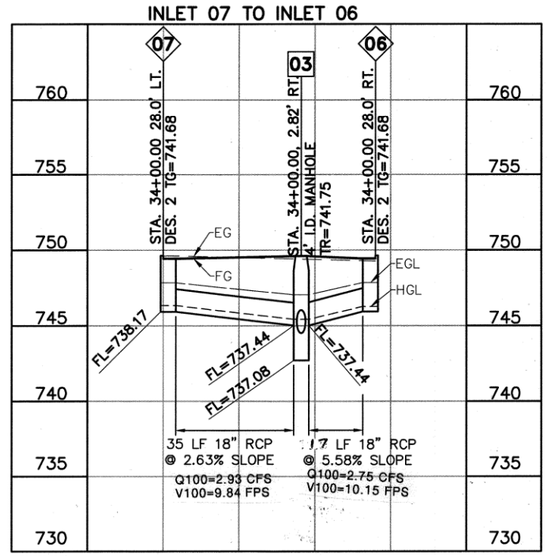

LICENSED PROFESSIONAL ENGINEER
Daniel Polsek
24920
OKLAHOMA
9/12/2024

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

STORMWATER PROFILES (1 OF 2)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE:	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		10/2024	
HORIZONTAL: 1"=20'	LEAD ENGR.	BDL	12/24	
	FIELD MGR.		6/23	
VERTICAL: 1"=5'	RECOMMENDED: DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE: JULY 2024
ATLAS PAGE NO: 3				SHEET 24 OF 77 SHEETS

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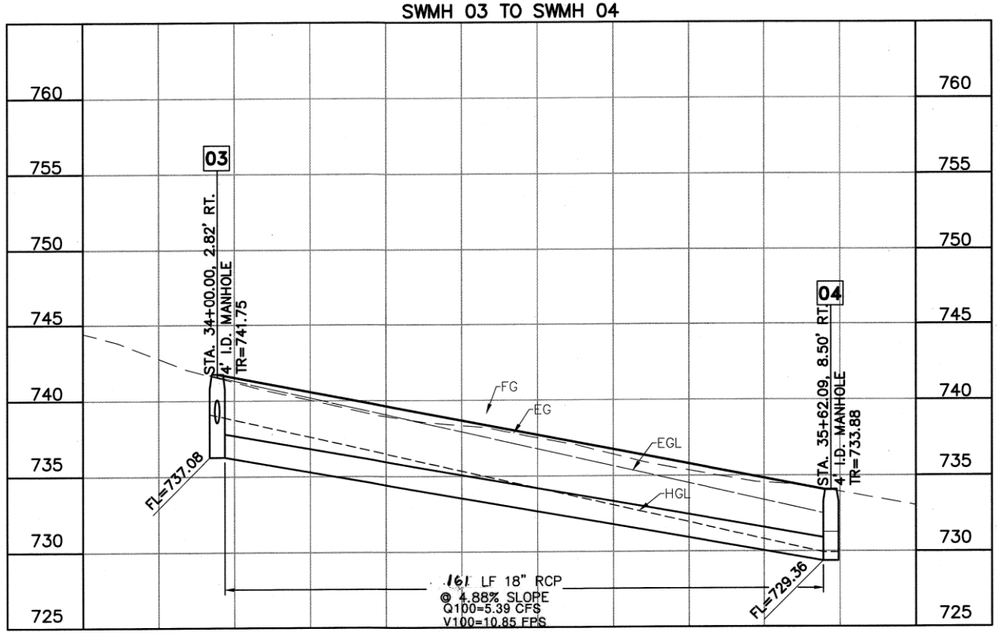
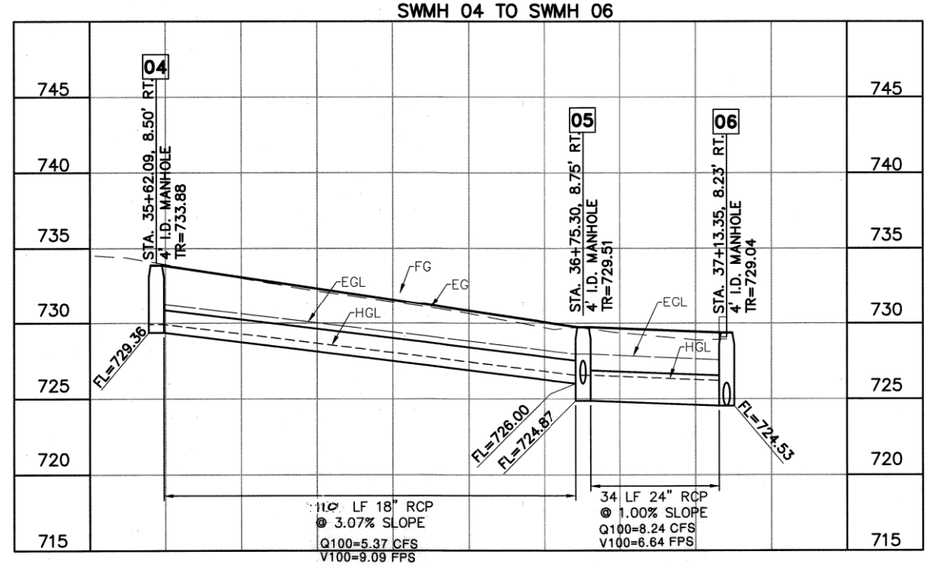
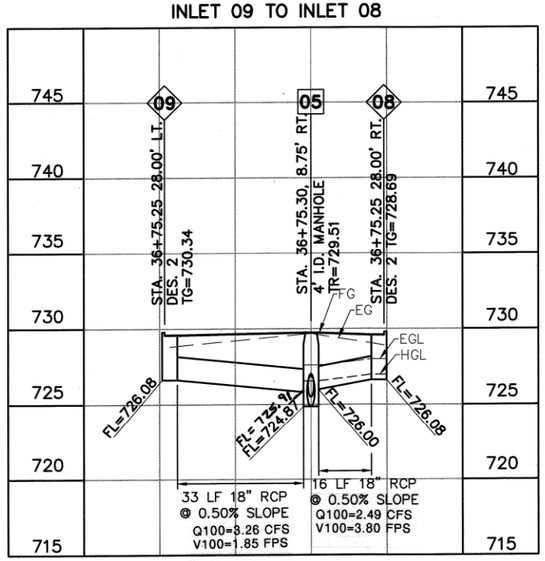
SWMH 03 TO SWMH 04



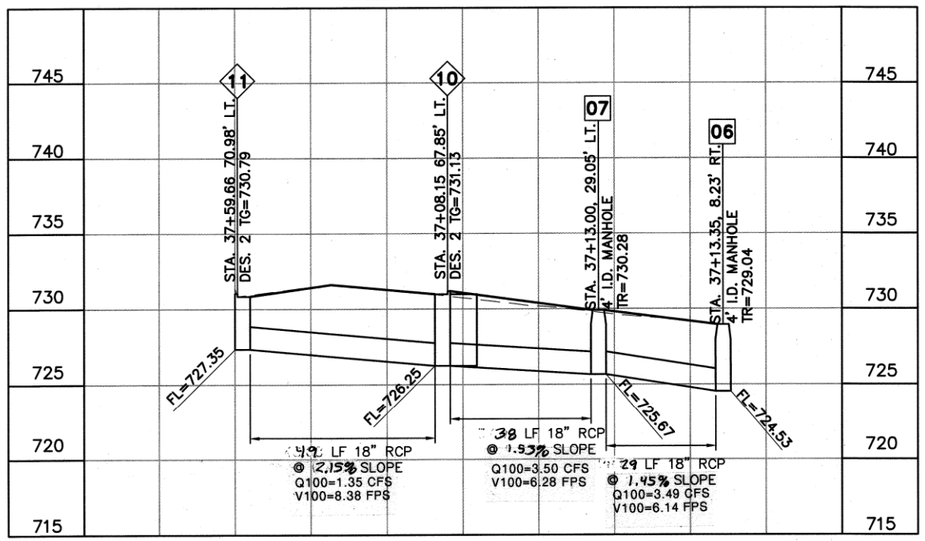
SWMH 04 TO SWMH 06



INLET 09 TO INLET 08



INLET 11 TO SWMH 06



PROFESSIONAL ENGINEER
Daniel E. Polaski
24920
OKLAHOMA
9/12/2024

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

STORMWATER PROFILES (2 OF 2)

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

REVISION	BY	DATE

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VERTICAL: 1"=5'	FIELD MGR.		6/25	
	RECOMMENDED: DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE: JULY 2024
ATLAS PAGE NO: 3				SHEET 25 OF 77 SHEETS

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STORMWATER MANAGEMENT PLAN

SITE DESCRIPTION

PROJECT LIMITS: UTICA AVE. BETWEEN 11TH ST. AND 15TH ST.

PROJECT DESCRIPTION: ARTERIAL REHABILITATION. PAVEMENT REHABILITATION, STORM SEWER DESIGN.

SUGGESTED SEQUENCE OF EROSION CONTROL ACTIVITIES:

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

SOIL TYPE: URBAN LAND–DENNIS COMPLEX 0 TO 5 PERCENT SLOPES

TOTAL AREA OF THE CONSTRUCTION SITE: 4.50 ACRES

ESTIMATED AREA TO BE DISTURBED: 4.50 ACRES

OFFSITE AREA TO BE DISTURBED: (FOR CONTRACTOR USE)

TOTAL IMPERVIOUS AREA PRE–CONSTRUCTION: 2.37 ACRES

TOTAL IMPERVIOUS AREA POST–CONSTRUCTION: 2.37 ACRES

POST–CONSTRUCTION RUNOFF COEFFICIENT OF THE SITE: 0.85

LATITUDE & LONGITUDE OF CENTER OF PROJECT: 36° 08' 39" N., 95° 58' 02" W.

PROJECT WILL DISCHARGE TO:

NAME OF RECEIVING WATERS: ELM CREEK, SWAN CREEK AND ARKANSAS RIVER

SENSITIVE WATERS OR WATERSHEDS: YES ☒ NO ☐

303 (d) IMPAIRED WATERS: YES ☒ NO ☐

IF YES, LIST IMPAIRMENT: CADMIUM, 5A

LOCATED IN A TMDL: YES ☐ NO ☒

LAKE THUNDERBIRD TMDL: YES ☐ NO ☒

MS4 ENTITY YES ☒ 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
- X 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
- X TEMPORARY SILT FENCE
- X TEMPORARY SILT DIKES
- ____ TEMPORARY FIBER LOG
- ____ DIVERSION, INTERCEPTOR OR PERIMETER DIKES
- ____ DIVERSION, INTERCEPTOR OR PERIMETER SWALES
- ____ ROCK FILTER DAMS
- ____ TEMPORARY SLOPE DRAIN
- ____ PAVED DITCH W/ DITCH LINER PROTECTION
- ____ TEMPORARY DIVERSION CHANNELS
- ____ TEMPORARY SEDIMENT BASINS
- ____ TEMPORARY SEDIMENT TRAPS
- ____ TEMPORARY SEDIMENT FILTERS
- X TEMPORARY SEDIMENT REMOVAL
- ____ RIP RAP
- X INLET SEDIMENT FILTER
- ____ TEMPORARY BRUSH SEDIMENT BARRIERS
- ____ SANDBAG BERMS
- ____ TEMPORARY STREAM CROSSINGS

OFFSITE VEHICLE TRACKING:

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

NOTES:

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.

PROFESSIONAL ENGINEER LICENSED Daniel E. Polgar 24920 OKLAHOMA
9/12/2024

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

REVISION	BY	DATE

STORMWATER MANAGEMENT PLAN
PROJ. 144017–W, 144017–AX
ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

PLAN SCALE: NA	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		10/2024
HORIZONTAL: NA	LEAD ENGR.	BDC	12/24
	FIELD MGR.		6/25
VERTICAL: NA	RECOMMENDED: DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING: DATE JULY 2024
ATLAS PAGE NO: 3 SHEET 26 OF 77 SHEETS

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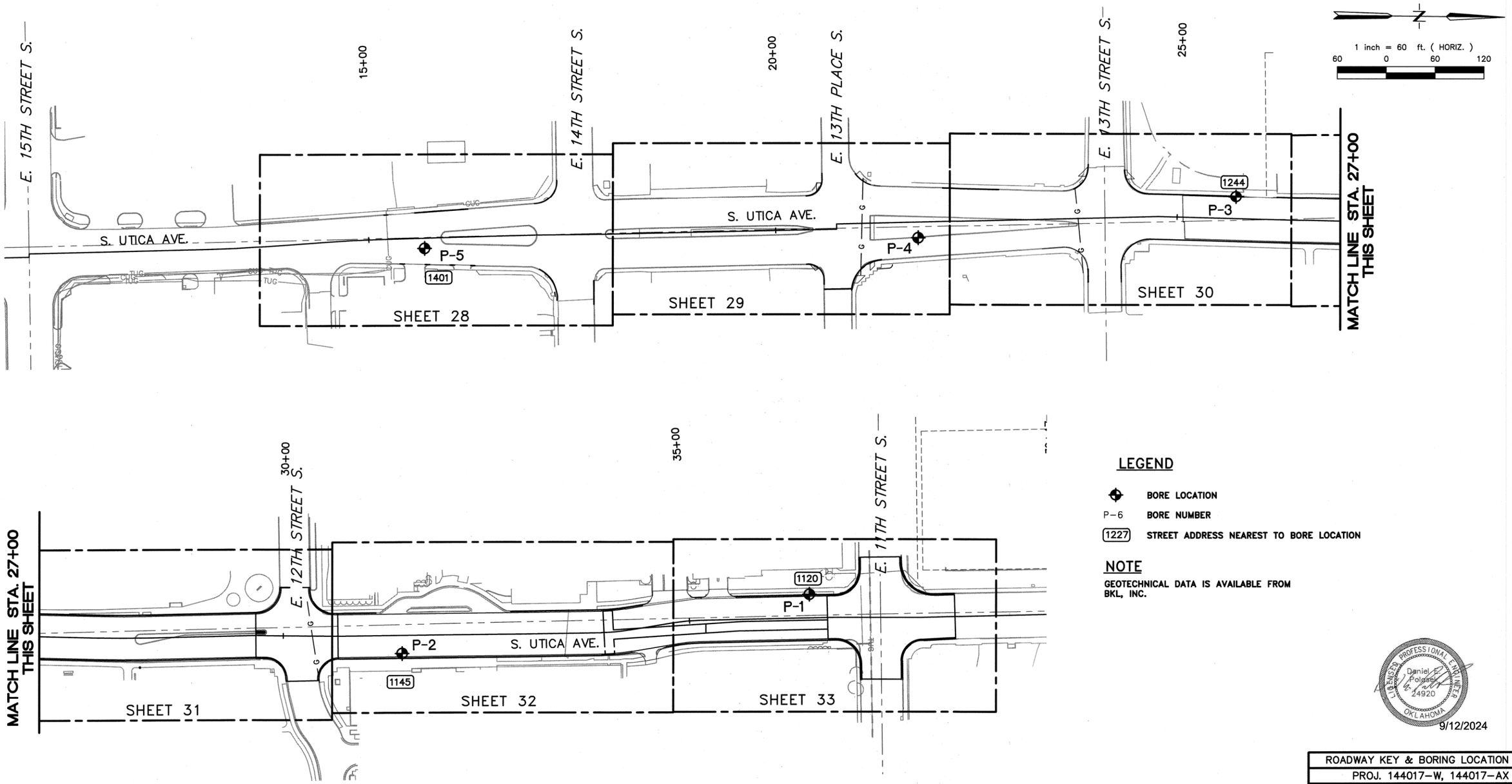

LEGEND

- BORE LOCATION
- P-6 BORE NUMBER
- 1227 STREET ADDRESS NEAREST TO BORE LOCATION

NOTE

GEOTECHNICAL DATA IS AVAILABLE FROM BKL, INC.

LICENSED PROFESSIONAL ENGINEER
Daniel E. Polaski
24920
OKLAHOMA
9/12/2024

OKIE 811
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ROADWAY KEY & BORING LOCATION MAP

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: 1"=60'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		9/2024
HORIZONTAL:	LEAD ENGR.		5/25
	FIELD MGR.		6/25
VERTICAL:	RECOMMENDED: HAS 8-25 DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING:
ATLAS PAGE NO: 3

DATE JULY 2024
SHEET 27 OF 77 SHEETS

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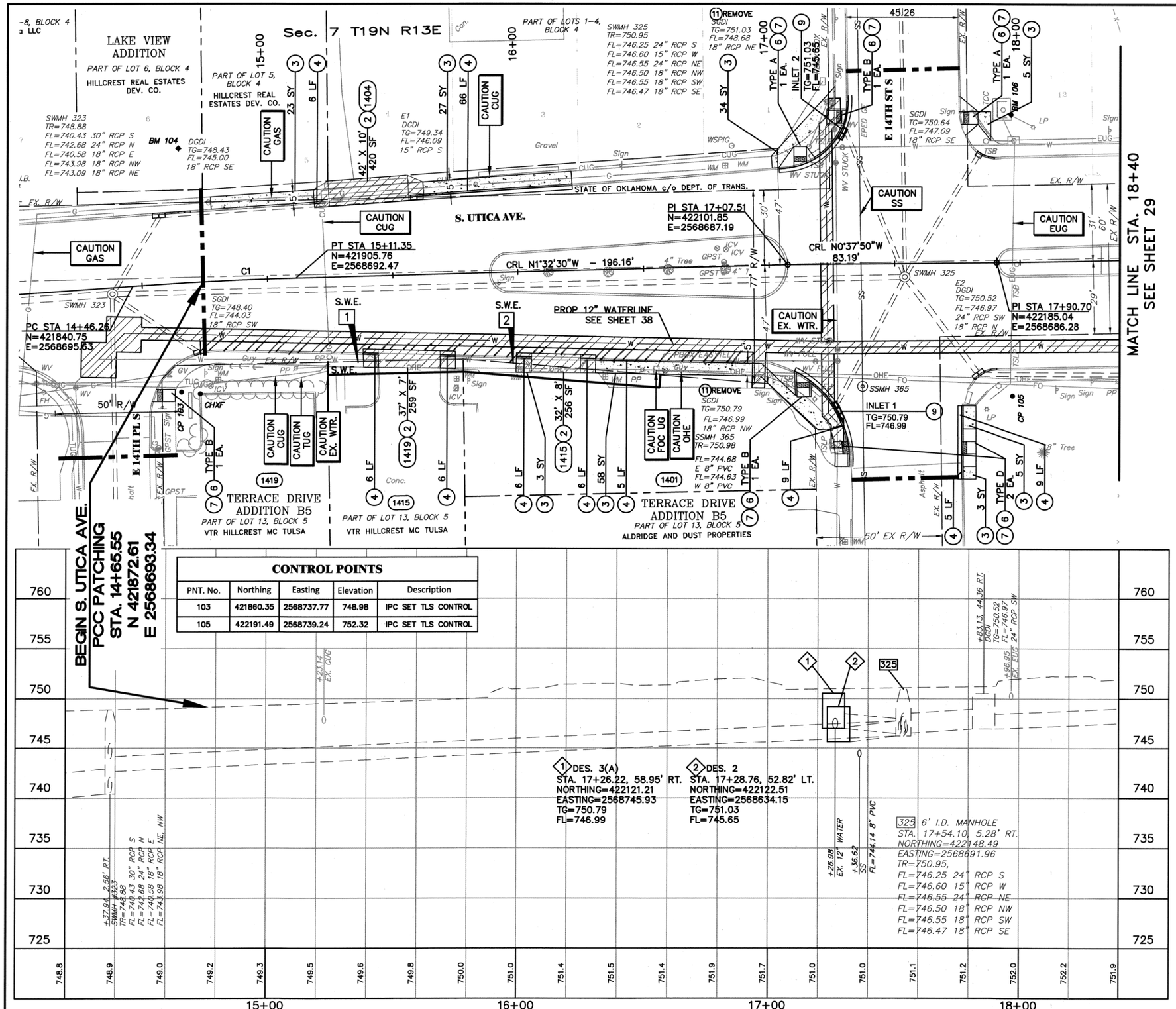

CONTROL POINTS

PNT. No.	Northing	Easting	Elevation	Description
103	421860.35	2568737.77	748.98	IPC SET TLS CONTROL
105	422191.49	2568739.24	752.32	IPC SET TLS CONTROL

Bench Mark #104

IRON PIN W/CAP SET,
TLS CONTROL
N=421858.70
E=2568640.56
ELEV. 750.23

Bench Mark #106

CHISELED SQUARE SET,
NORTH SIDE OF TSCB
CONC PAD
N=422190.62
E=2568626.89
ELEV. 753.06

CURVE DATA	C1
DA=	02°29'11"
D=	3°49'11"
T=	32.55
L=	65.10
R=	1500.00
PC STA=	14+46.26
PT STA=	15+11.35

1 inch = 20 ft. (HORIZ.)
1 inch = 5 ft. (VERT)

REPAIR LEGEND:

- FULL DEPTH APC PATCH
- FULL DEPTH ASPHALT
- FULL DEPTH PC CONCRETE PATCH
- FULL DEPTH PC CONCRETE
- PC CONCRETE DRIVE
- PC CONCRETE SIDEWALK
- MILL AND OVERLAY
- 1'-4" PATTERNED SIDEWALK
- PROPOSED WATERLINE BASE BID
- PROPOSED WATERLINE ADD ALT
- (1) ASPHALT MILL AND OVERLAY
- (2) REMOVE AND REPLACE EXISTING DRIVE WITH PC CONCRETE DRIVE
- (3) REMOVE AND REPLACE EXISTING SIDEWALK WITH PC CONCRETE SIDEWALK
- (4) REMOVE AND REPLACE CONCRETE CURB AND GUTTER
- (5) ADJUST TO GRADE
- (6) CONSTRUCT HANDICAP RAMP
- (7) CONSTRUCT TRUNCATED DOMES
- (8) CONSTRUCT MANHOLE
- (9) CONSTRUCT INLET
- (10) CONSTRUCT PC CONCRETE MEDIAN
- (11) REMOVE INLET
- (12) CONSTRUCT 1'-4" PATTERNED SIDEWALK
- (13) FULL DEPTH PC CONCRETE
- (14) FULL DEPTH AC PATCH
- (15) FULL DEPTH PC CONCRETE PATCH
- PROJECT LIMITS
- (1111) NEAREST ADDRESS

LICENSED PROFESSIONAL ENGINEER Daniel E. Polston 24920 OKLAHOMA
9/12/2024

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

ROADWAY PLAN & PROFILE (1 OF 6)
PROJ. 144017-W, 144017-AX
ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		9/12/24
HORIZONTAL: 1"=20'	LEAD ENGR.		5/6/25
VERTICAL: 1"=5'	FIELD MGR.		6/6/25
	RECOMMENDED: HAS 8.25 DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING: DATE: JULY 2024
ATLAS PAGE NO: 3 SHEET 28 OF 77 SHEETS

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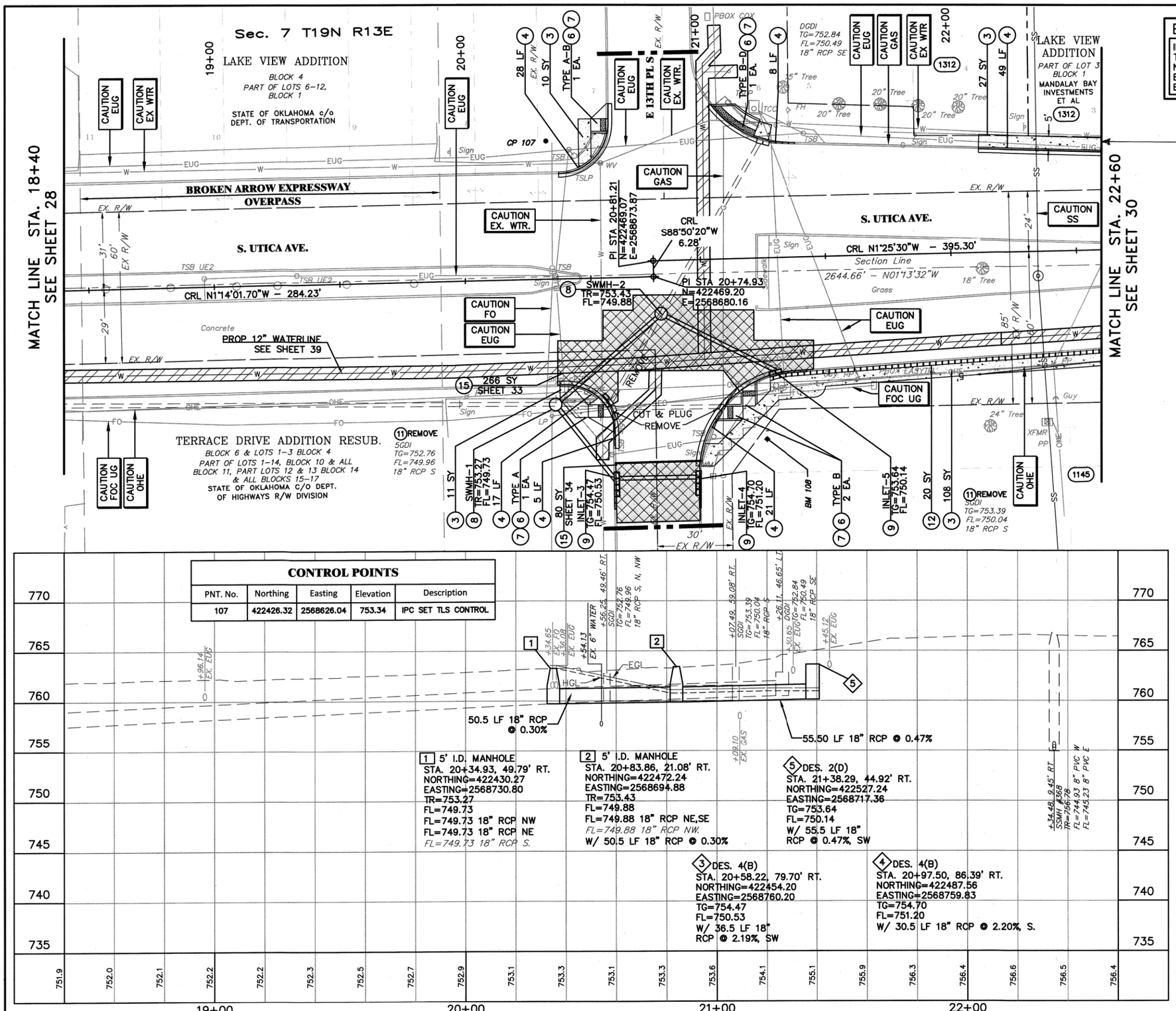

Bench Mark #108
IRON PIN W/CAP SET, TLS CONTROL
N=422514.46
E=2568744.69
ELEV. 756.40

1 inch = 20 ft. (HORIZ.)
1 inch = 5 ft. (VERT)

COORDINATE PROPOSED SIDEWALK AND CURB IMPROVEMENTS ON WEST SIDE OF UTICA AVE FROM STATION 21+00 TO STA 24+00 WITH RECENT ITEMS CONSTRUCTED AS PART OF CHICK-FIL-A DEVELOPMENT.

REPAIR LEGEND:

- FULL DEPTH APC PATCH
- FULL DEPTH ASPHALT
- FULL DEPTH PC CONCRETE PATCH
- FULL DEPTH PC CONCRETE
- PC CONCRETE DRIVE
- PC CONCRETE SIDEWALK
- MILL AND OVERLAY
- 1'–4" PATTERNED SIDEWALK
- PROPOSED WATERLINE BASE BID
- PROPOSED WATERLINE ADD ALT

1. ASPHALT MILL AND OVERLAY
2. REMOVE AND REPLACE EXISTING DRIVE WITH PC CONCRETE DRIVE
3. REMOVE AND REPLACE EXISTING SIDEWALK WITH PC CONCRETE SIDEWALK
4. REMOVE AND REPLACE CONCRETE CURB AND GUTTER
5. ADJUST TO GRADE
6. CONSTRUCT HANDICAP RAMP
7. CONSTRUCT TRUNCATED DOMES
8. CONSTRUCT MANHOLE
9. CONSTRUCT INLET
10. CONSTRUCT PC CONCRETE MEDIAN
11. REMOVE INLET
12. CONSTRUCT 1'–4" PATTERNED SIDEWALK
13. FULL DEPTH PC CONCRETE
14. FULL DEPTH AC PATCH
15. FULL DEPTH PC CONCRETE PATCH

PROJECT LIMITS

(1111) NEAREST ADDRESS

LICENSED PROFESSIONAL ENGINEER Daniel E. Polasek No. 24920 OKLAHOMA 9/12/2024

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

ROADWAY PLAN & PROFILE (2 OF 6)
PROJ. 144017–W, 144017–AX
ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE HORIZONTAL: 1"=20' VERTICAL: 1"=5'	PROJ. MGR.		9/2024	
	LEAD ENGR.		5/25	
	FIELD MGR.		6/25	
	RECOMMENDED: DESIGN MANAGER		8·25	CITY ENGINEER
FILE:	DRAWING:			DATE: JULY 2024
ATLAS PAGE NO: 3				SHEET 29 OF 77 SHEETS

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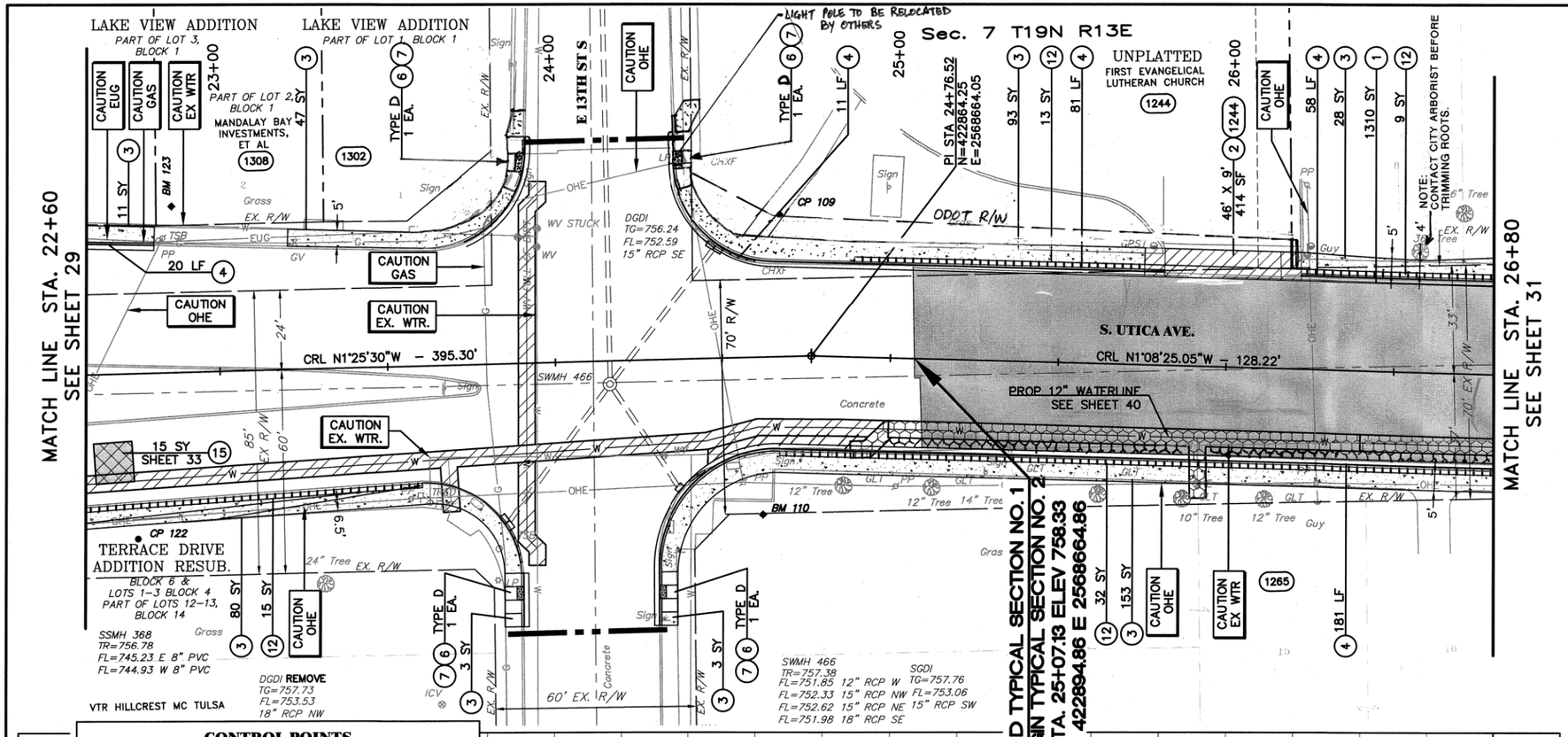
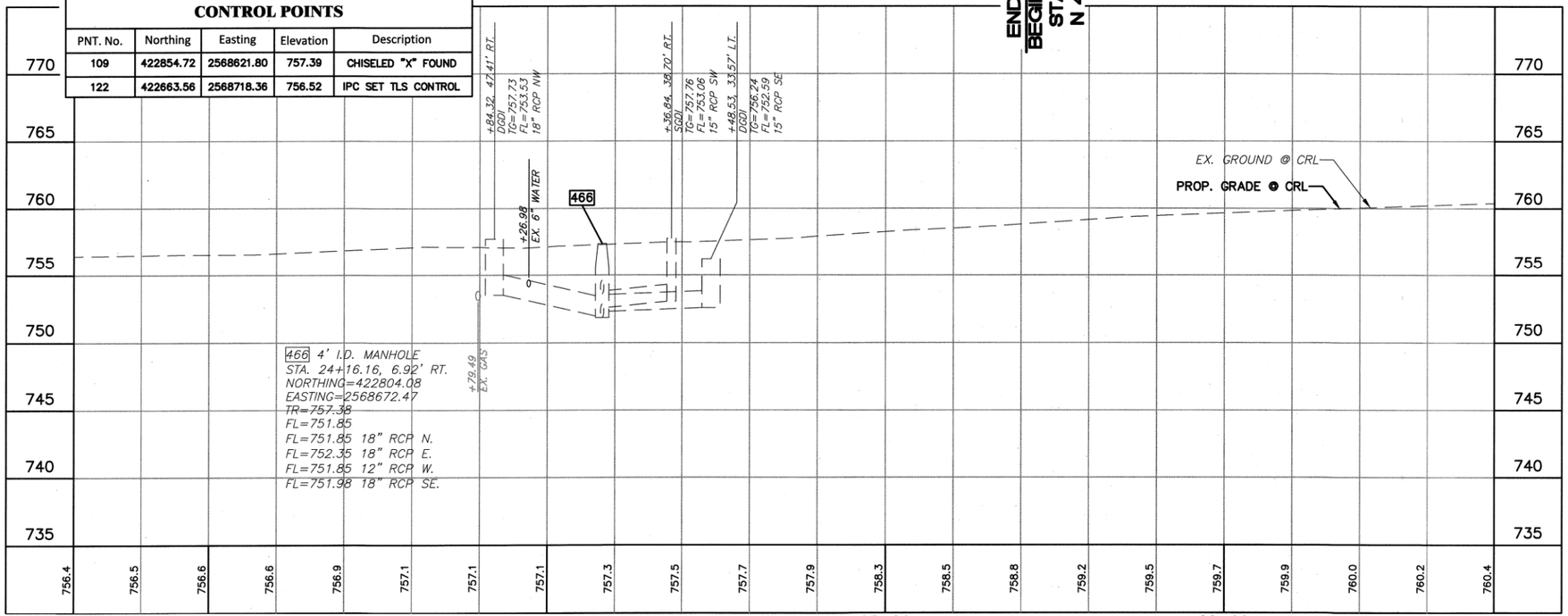


CONTROL POINTS

PNT. No.	Northing	Easting	Elevation	Description
109	422854.72	2568621.80	757.39	CHISELED "X" FOUND
122	422663.56	2568718.36	756.52	IPC SET TLS CONTROL



Bench Mark #123
IRON PIN W/CAP SET,
TLS CONTROL
N=422673.15
E=2568619.01
ELEV. 754.68

Bench Mark #110
IRON PIN W/CAP SET,
TLS CONTROL
N=422850.02
E=2568711.36
ELEV. 759.43

1 inch = 20 ft. (HORIZ.)
10 0 10 20
5 0 5 10
1 inch = 5 ft. (VERT)

REPAIR LEGEND:

- FULL DEPTH APC PATCH
- FULL DEPTH ASPHALT
- FULL DEPTH PC CONCRETE PATCH
- FULL DEPTH PC CONCRETE
- PC CONCRETE DRIVE
- PC CONCRETE SIDEWALK
- MILL AND OVERLAY
- 1'-4" PATTERNED SIDEWALK
- PROPOSED WATERLINE BASE BID
- PROPOSED WATERLINE ADD ALT

1. ASPHALT MILL AND OVERLAY
2. REMOVE AND REPLACE EXISTING DRIVE WITH PC CONCRETE DRIVE
3. REMOVE AND REPLACE EXISTING SIDEWALK WITH PC CONCRETE SIDEWALK
4. REMOVE AND REPLACE CONCRETE CURB AND GUTTER
5. ADJUST TO GRADE
6. CONSTRUCT HANDICAP RAMP
7. CONSTRUCT TRUNCATED DOMES
8. CONSTRUCT MANHOLE
9. CONSTRUCT INLET
10. CONSTRUCT PC CONCRETE MEDIAN
11. REMOVE INLET
12. CONSTRUCT 1'-4" PATTERNED SIDEWALK
13. FULL DEPTH PC CONCRETE
14. FULL DEPTH AC PATCH
15. FULL DEPTH PC CONCRETE PATCH

PROJECT LIMITS

1111 NEAREST ADDRESS

LICENSED PROFESSIONAL ENGINEER
Daniel E. Polasek
24920
OKLAHOMA
9/12/2024

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

ROADWAY PLAN & PROFILE (3 OF 6)
PROJ. 144017–W, 144017–AX
ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE HORIZONTAL: 1"=20' VERTICAL: 1"=5'	PROJ. MGR.		9/2024
	LEAD ENGR.		5/25
	FIELD MGR.		6/25
	RECOMMENDED: HAS 8-25 DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING: DATE: JULY 2024
ATLAS PAGE NO: 3 SHEET 30 OF 77 SHEETS

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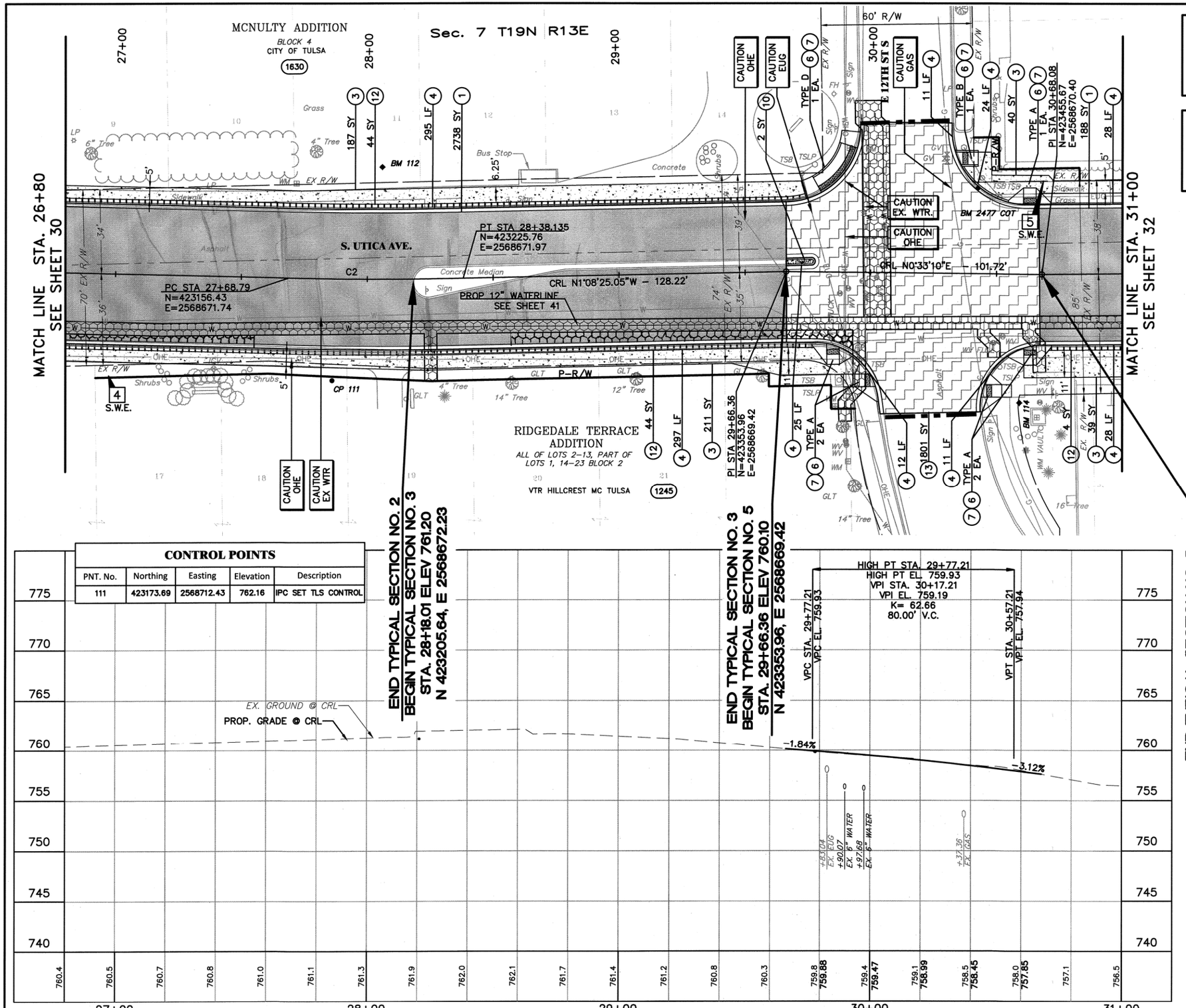

CONTROL POINTS

PNT. No.	Northing	Easting	Elevation	Description
111	423173.69	2568712.43	762.16	IPC SET TLS CONTROL

Bench Mark #112

IRON PIN W/CAP SET,
TLS CONTROL
N=423193.66
E=568627.45
ELEV. 760.26

Bench Mark #114

IRON PIN W/CAP SET,
TLS CONTROL
N=423446.73
E=2568721.37
ELEV. 758.11

CURVE DATA	C2
DA=	2°38'55"
D=	3°49'11"
T=	34.68
L=	69.34
R=	1500.00
PC STA=	27+68.79
PT STA=	28+38.13

1 inch = 20 ft. (HORIZ.)
20 0 20 40
5 0 5 10
1 inch = 5 ft. (VERT)

REPAIR LEGEND:

- FULL DEPTH APC PATCH
- FULL DEPTH ASPHALT
- FULL DEPTH PC CONCRETE PATCH
- FULL DEPTH PC CONCRETE
- PC CONCRETE DRIVE
- PC CONCRETE SIDEWALK
- MILL AND OVERLAY
- 1'–4" PATTERNED SIDEWALK
- PROPOSED WATERLINE BASE BID
- PROPOSED WATERLINE ADD ALT

1. ASPHALT MILL AND OVERLAY
2. REMOVE AND REPLACE EXISTING DRIVE WITH PC CONCRETE DRIVE
3. REMOVE AND REPLACE EXISTING SIDEWALK WITH PC CONCRETE SIDEWALK
4. REMOVE AND REPLACE CONCRETE CURB AND GUTTER
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9. CONSTRUCT INLET
10. CONSTRUCT PC CONCRETE MEDIAN
11. REMOVE INLET
12. CONSTRUCT 1'–4" PATTERNED SIDEWALK
13. FULL DEPTH PC CONCRETE
14. FULL DEPTH AC PATCH
15. FULL DEPTH PC CONCRETE PATCH

PROJECT LIMITS

1111 NEAREST ADDRESS

LICENSED PROFESSIONAL ENGINEER
Daniel E. Poldoski
24920
OKLAHOMA
9/12/2024

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

ROADWAY PLAN & PROFILE (4 OF 6)
PROJ. 144017–W, 144017–AX
ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		9/2024	
HORIZONTAL: 1"=20'	LEAD ENGR.		5/25	
VERTICAL: 1"=5'	FIELD MGR.		6/25	
	RECOMMENDED: HAI 8-25 DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE: JULY 2024
ATLAS PAGE NO: 3				SHEET 31 OF 77 SHEETS

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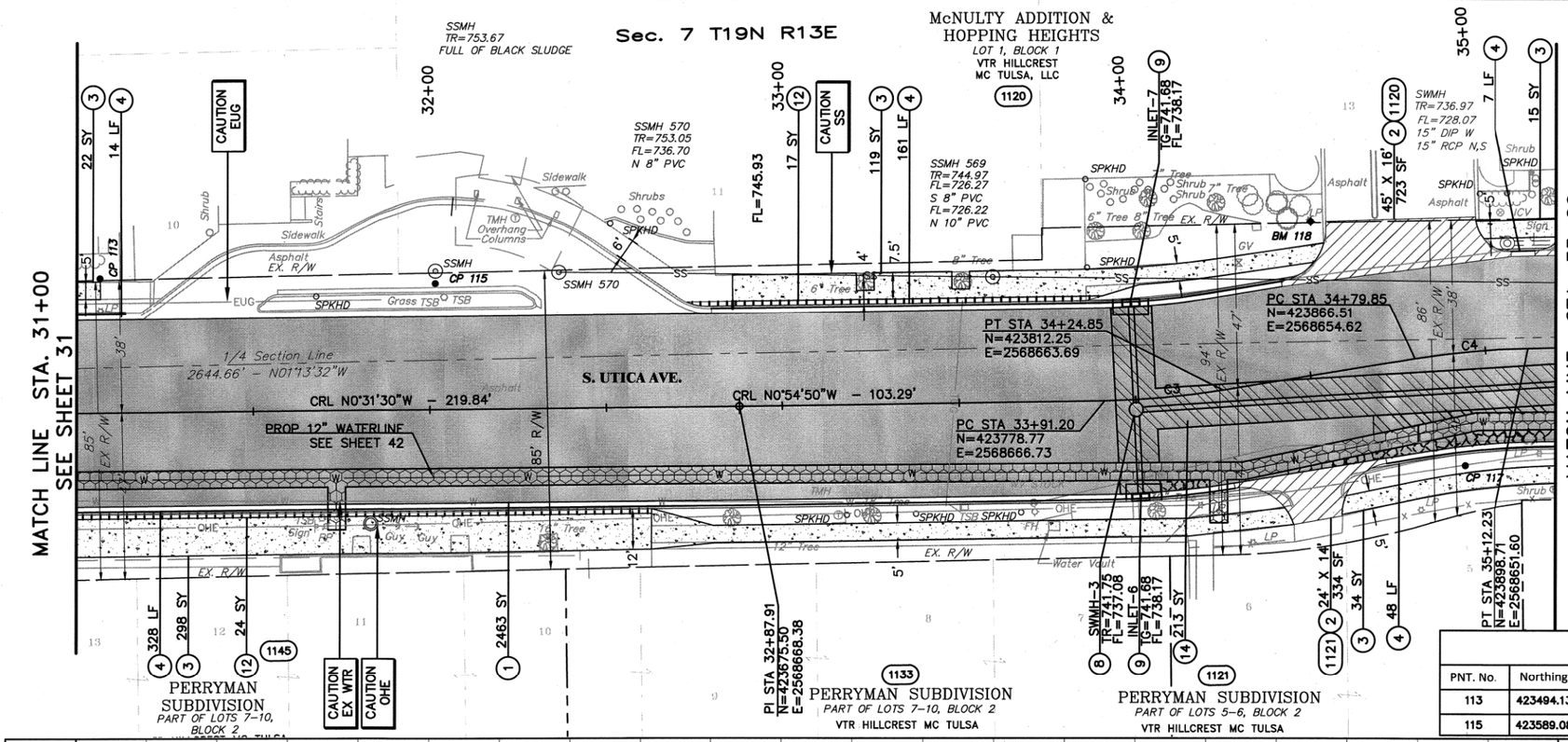

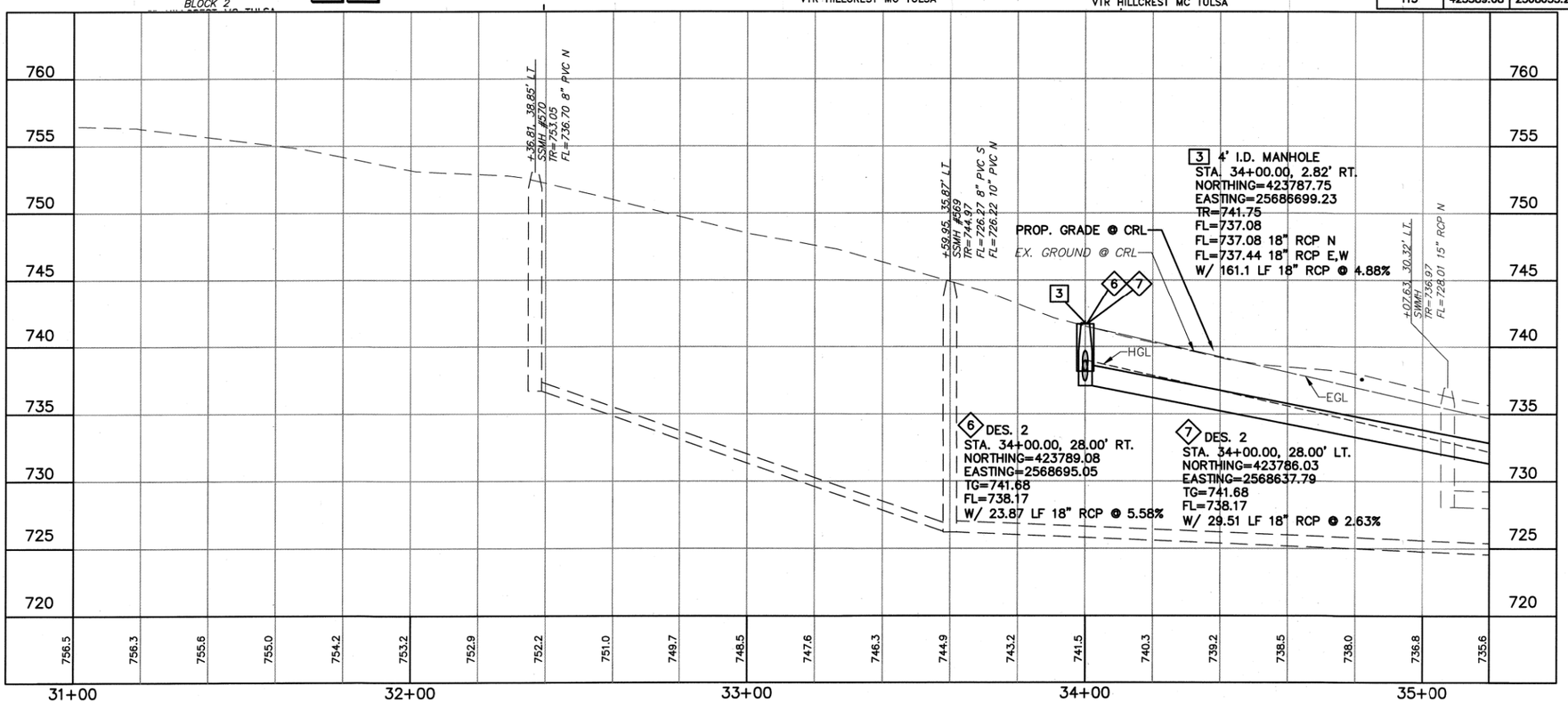

Bench Mark #118

CHISELED SQUARE SET, NE LAMP POLE BASE
N=423836.95
E=568615.56
ELEV. 740.81

1 inch = 20 ft. (HORIZ.)
20 0 20 40
5 0 5 10
1 inch = 5 ft. (VERT)

CURVE DATA	C3
DA=	8°34'10"
D=	25°27'53"
T=	16.86
L=	33.65
R=	225.00
PC STA=	33+91.20
PT STA=	34+24.85

CURVE DATA	C4
DA=	8°14'37"
D=	25°27'53"
T=	16.22
L=	32.37
R=	225.00
PC STA=	34+79.85
PT STA=	35+12.23

CONTROL POINTS

PNT. No.	Northing	Easting	Elevation	Description
113	423494.13	2568631.74	756.89	IPC SET TLS CONTROL
115	423589.08	2568633.24	753.35	MAG SET IN ASPHALT

REPAIR LEGEND:

- FULL DEPTH APC PATCH
- FULL DEPTH ASPHALT
- FULL DEPTH PC CONCRETE PATCH
- FULL DEPTH PC CONCRETE
- PC CONCRETE DRIVE
- PC CONCRETE SIDEWALK
- MILL AND OVERLAY
- 1'-4" PATTERNED SIDEWALK
- PROPOSED WATERLINE BASE BID
- PROPOSED WATERLINE ADD ALT

1. ASPHALT MILL AND OVERLAY
2. REMOVE AND REPLACE EXISTING DRIVE WITH PC CONCRETE DRIVE
3. REMOVE AND REPLACE EXISTING SIDEWALK WITH PC CONCRETE SIDEWALK
4. REMOVE AND REPLACE CONCRETE CURB AND GUTTER
5. ADJUST TO GRADE
6. CONSTRUCT HANDICAP RAMP
7. CONSTRUCT TRUNCATED DOMES
8. CONSTRUCT MANHOLE
9. CONSTRUCT INLET
10. CONSTRUCT PC CONCRETE MEDIAN
11. REMOVE INLET
12. CONSTRUCT 1'-4" PATTERNED SIDEWALK
13. FULL DEPTH PC CONCRETE
14. FULL DEPTH AC PATCH
15. FULL DEPTH PC CONCRETE PATCH

PROJECT LIMITS

1111 NEAREST ADDRESS

LICENSED PROFESSIONAL ENGINEER Daniel Polsell 24920 OKLAHOMA
9/12/2024

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

ROADWAY PLAN & PROFILE (5 OF 6)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE HORIZONTAL: 1"=20' VERTICAL: 1"=5'	PROJ. MGR.		9/2024
	LEAD ENGR.		5/25
	FIELD MGR.		6/25
	RECOMMENDED: HBS 8-25 DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING:
ATLAS PAGE NO: 3
DATE: JULY 2024
SHEET 32 OF 77 SHEETS

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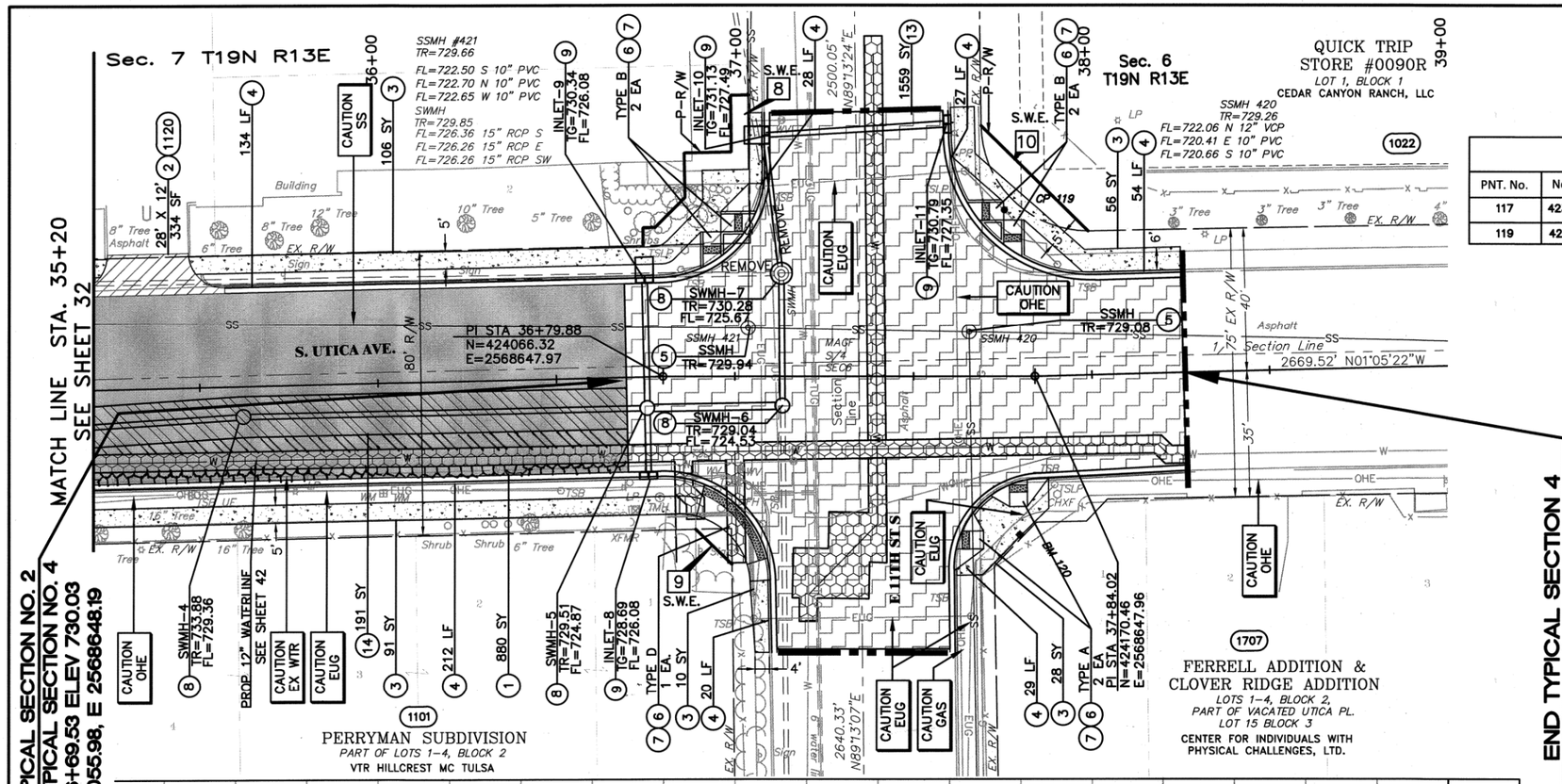


Bench Mark #120
MAG SET IN ASPHALT W/ SHINER
N=424166.28
E=2568692.37
ELEV. 728.04

CONTROL POINTS

PNT. No.	Northing	Easting	Elevation	Description
117	423880.85	2568684.91	737.07	IPC SET TLS CONTROL
119	424161.85	2568601.21	730.17	IPC SET TLS CONTROL

1 inch = 20 ft. (HORIZ.)

1 inch = 5 ft. (VERT)

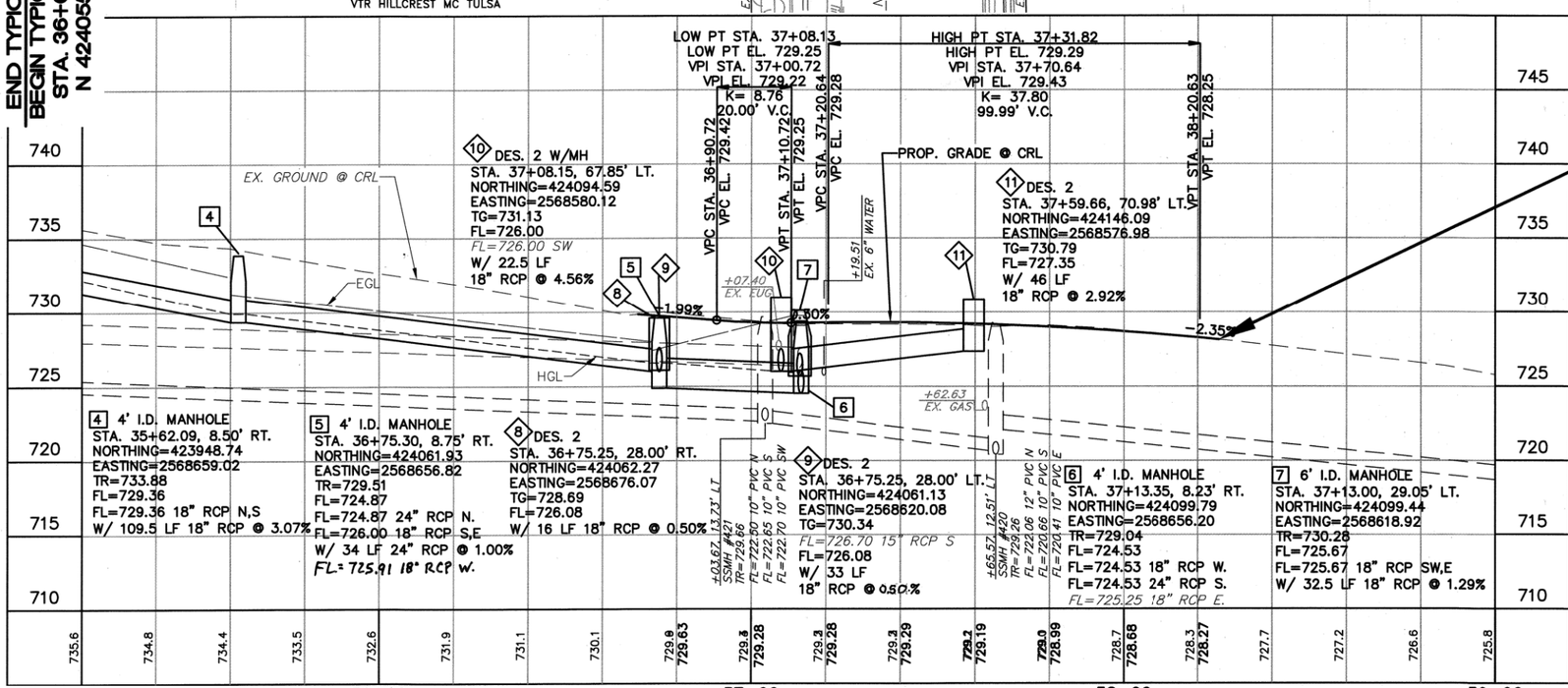
REPAIR LEGEND:

- FULL DEPTH APC PATCH
- FULL DEPTH ASPHALT
- FULL DEPTH PC CONCRETE PATCH
- FULL DEPTH PC CONCRETE
- PC CONCRETE DRIVE
- PC CONCRETE SIDEWALK
- MILL AND OVERLAY
- 1'-4" PATTERNED SIDEWALK
- PROPOSED WATERLINE BASE BID
- PROPOSED WATERLINE ADD ALT

1. ASPHALT MILL AND OVERLAY
2. REMOVE AND REPLACE EXISTING DRIVE WITH PC CONCRETE DRIVE
3. REMOVE AND REPLACE EXISTING SIDEWALK WITH PC CONCRETE SIDEWALK
4. REMOVE AND REPLACE CONCRETE CURB AND GUTTER
5. ADJUST TO GRADE
6. CONSTRUCT HANDICAP RAMP
7. CONSTRUCT TRUNCATED DOMES
8. CONSTRUCT MANHOLE
9. CONSTRUCT INLET
10. CONSTRUCT PC CONCRETE MEDIAN
11. REMOVE INLET
12. CONSTRUCT 1'-4" PATTERNED SIDEWALK
13. FULL DEPTH PC CONCRETE
14. FULL DEPTH AC PATCH
15. FULL DEPTH PC CONCRETE PATCH

PROJECT LIMITS

1111 NEAREST ADDRESS



9/12/2024

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

ROADWAY PLAN & PROFILE (6 OF 6)

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE HORIZONTAL: 1"=20' VERTICAL: 1"=5'	PROJ. MGR.		9/3/24
	LEAD ENGR.		9/6/24
	FIELD MGR.		9/6/24
	RECOMMENDED: HB 8-25 DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING: DATE: JULY 2024

ATLAS PAGE NO: 3 SHEET 33 OF 77 SHEETS

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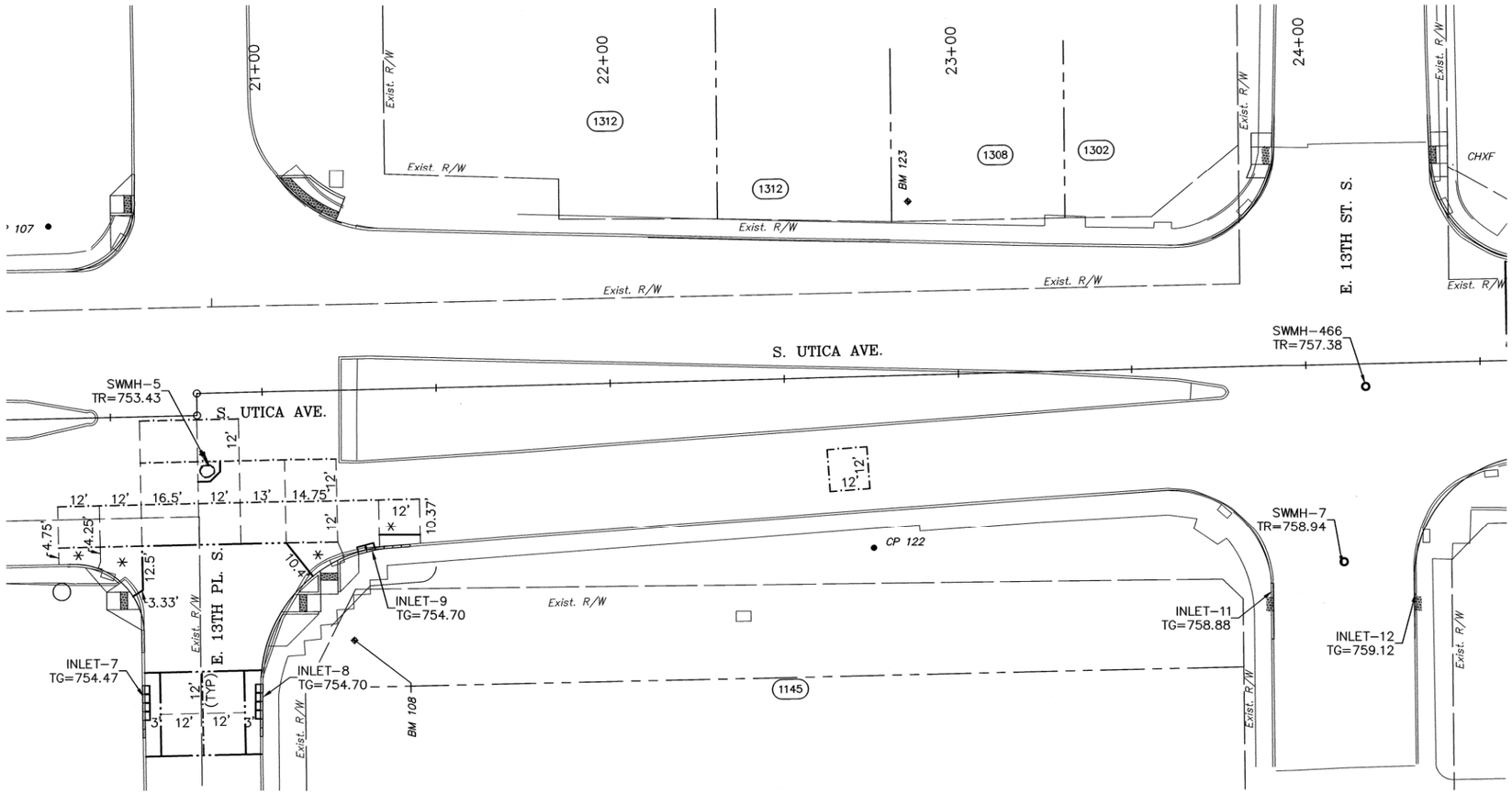

1 inch = 20 ft.

20 0 20 40

LEGEND

- BUTT JOINT
- SAWED DOWELED CONTRACTION JOINT
- TIED LONGITUDINAL JOINT
- ISOLATION JOINT/EXPANSION JOINT
- MANHOLE BLOCKOUT WITH ISOLATION JOINT
- PROJECT LIMITS

NOTE: PATCHED AREA TO MATCH EXISTING ELEVATIONS AND GRADE.

* IRREGULAR SHAPED PANELS SHALL BE REINFORCED. REINFORCEMENT SHOULD BE #4 BARS EACH DIRECTION AND EQUALLY SPACED NOT MORE THAN 12". PROVIDE SUPPORT CHAIRS AS NEEDED. SEE SHEET 35 FOR DETAIL.

LICENSED PROFESSIONAL ENGINEER
Daniel E. Polasek
24920
OKLAHOMA
7/14/2025

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

JOINT LAYOUT (1 OF 3)

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		8/2025	
HORIZONTAL: NA	LEAD ENGR.		8/25	
	FIELD MGR.		7/25	
VERTICAL: NA	RECOMMENDED: DESIGN MANAGER		8-25	CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 34 OF 77 SHEETS

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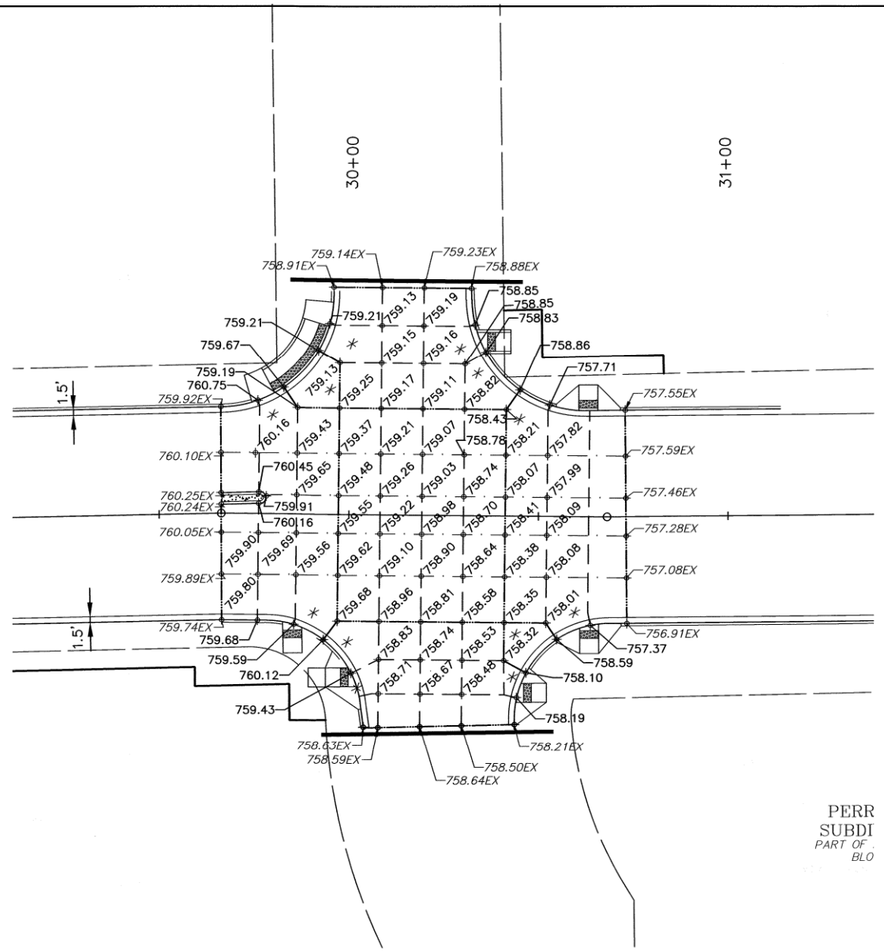
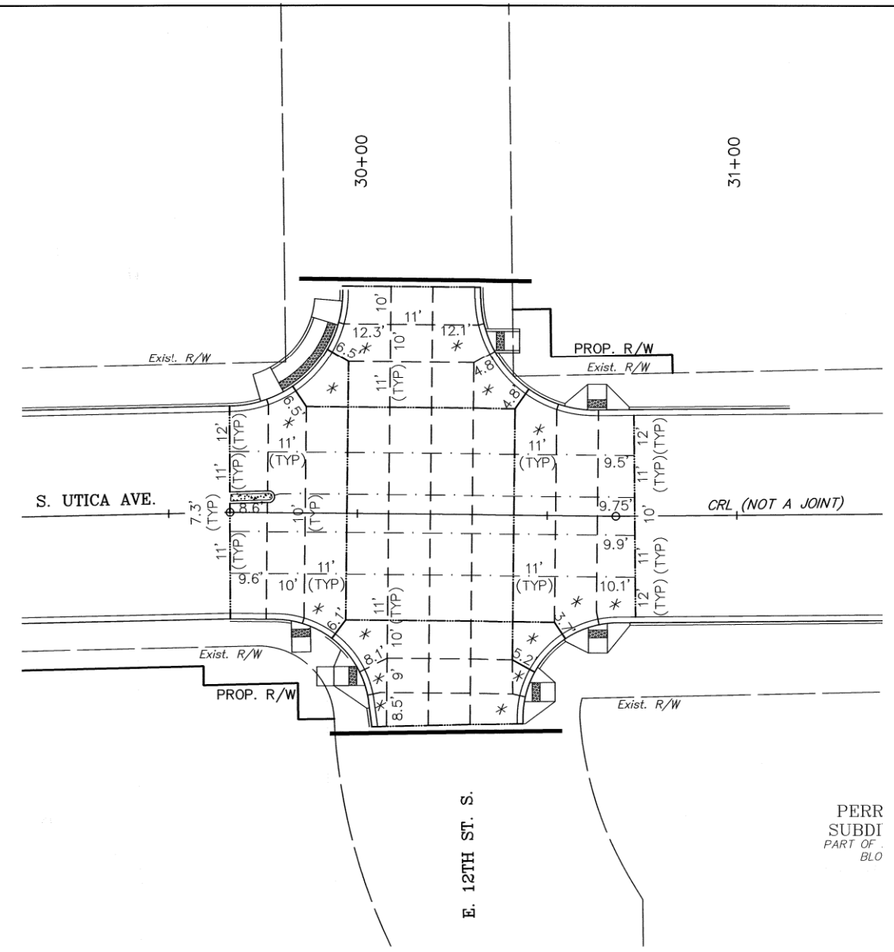
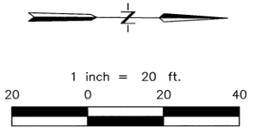
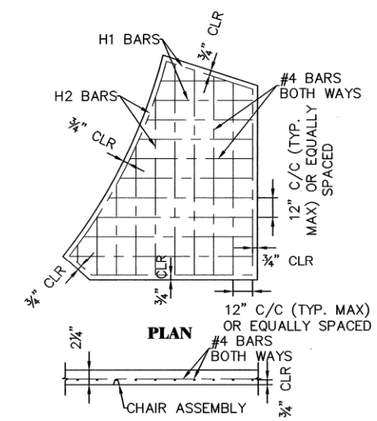






LEGEND

- BUTT JOINT
- SAWED DOWELED CONTRACTION JOINT
- TIED LONGITUDINAL JOINT
- ISOLATION JOINT/EXPANSION JOINT
- MANHOLE BLOCKOUT WITH ISOLATION JOINT
- PROJECT LIMITS



TYPICAL PANEL REINFORCEMENT DETAIL

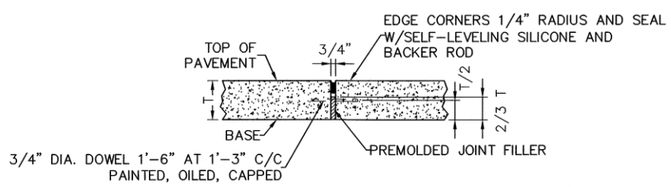
NOT TO SCALE

* IRREGULAR SHAPED PANELS SHALL BE REINFORCED. REINFORCEMENT SHOULD BE #4 BARS EACH DIRECTION AND EQUALLY SPACED NOT MORE THAN 12". PROVIDE SUPPORT CHAIRS AS NEEDED.

NOTE: SEE ODOT ROADWAY STANDARD LECS-5 FOR BUTT JOINT DETAIL.

LICENSED PROFESSIONAL ENGINEER Daniel E. Polasek 24920 OKLAHOMA

7/14/2025

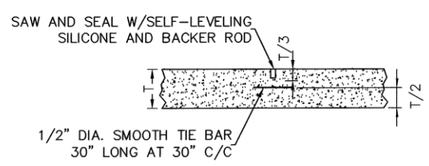


TYPE AA

NOT TO SCALE

EXPANSION JOINT/ISOLATION JOINT

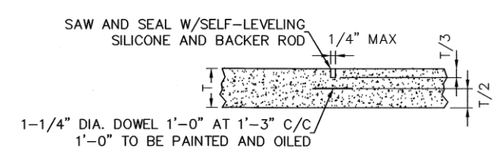
BASKET ASSEMBLY TO BE APPROVED PRIOR TO INSTALLATION



TYPE CC

NOT TO SCALE

SAWED LONGITUDINAL JOINT (IN LIEU OF TONGUE AND GROOVE CONST. JOINT)



TYPE DD

NOT TO SCALE

SAWED DOWELED CONTRACTION JOINT PER ODOT ROADWAY STD LTU-5-1

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

REVISION	BY	DATE

JOINT LAYOUT (2 OF 3)

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		8/2025	
HORIZONTAL: 1"=20'	LEAD ENGR.		8/25	
	FIELD MGR.		7/25	
VERTICAL: 1"=5'	RECOMMENDED: HAS 8-25 DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 35 OF 77 SHEETS

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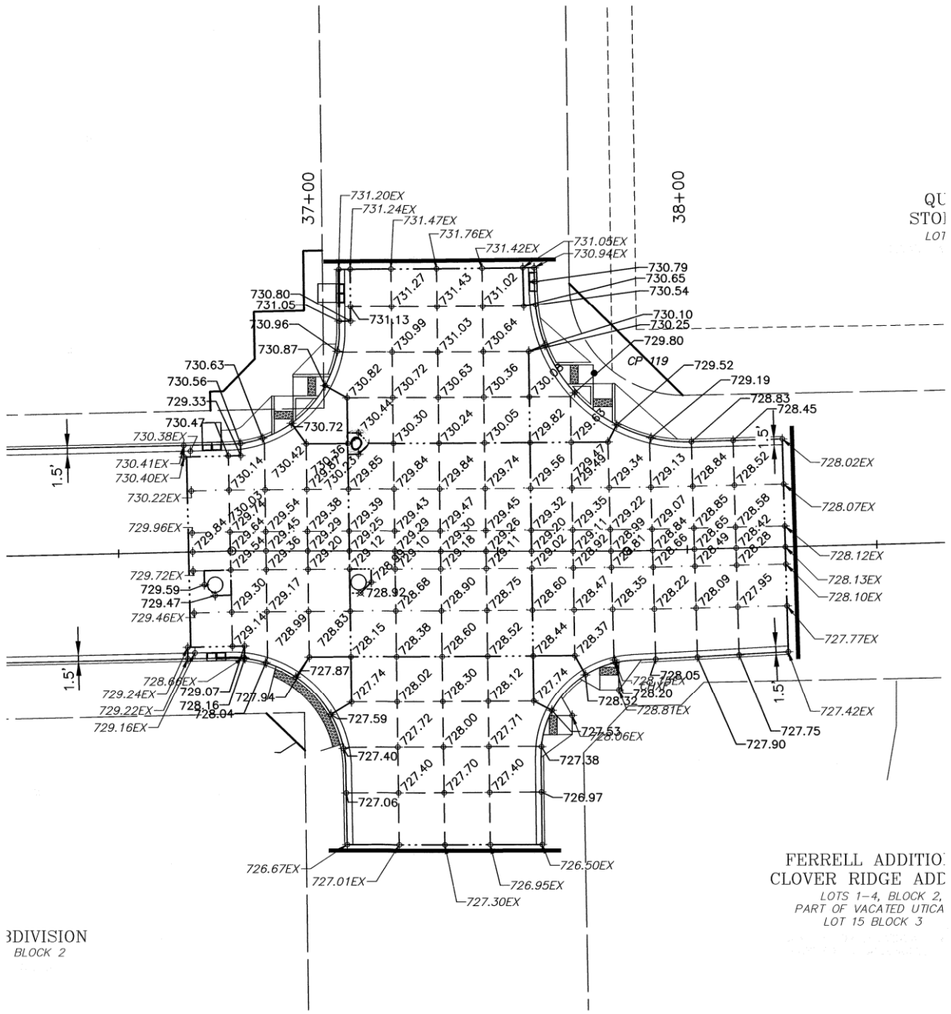
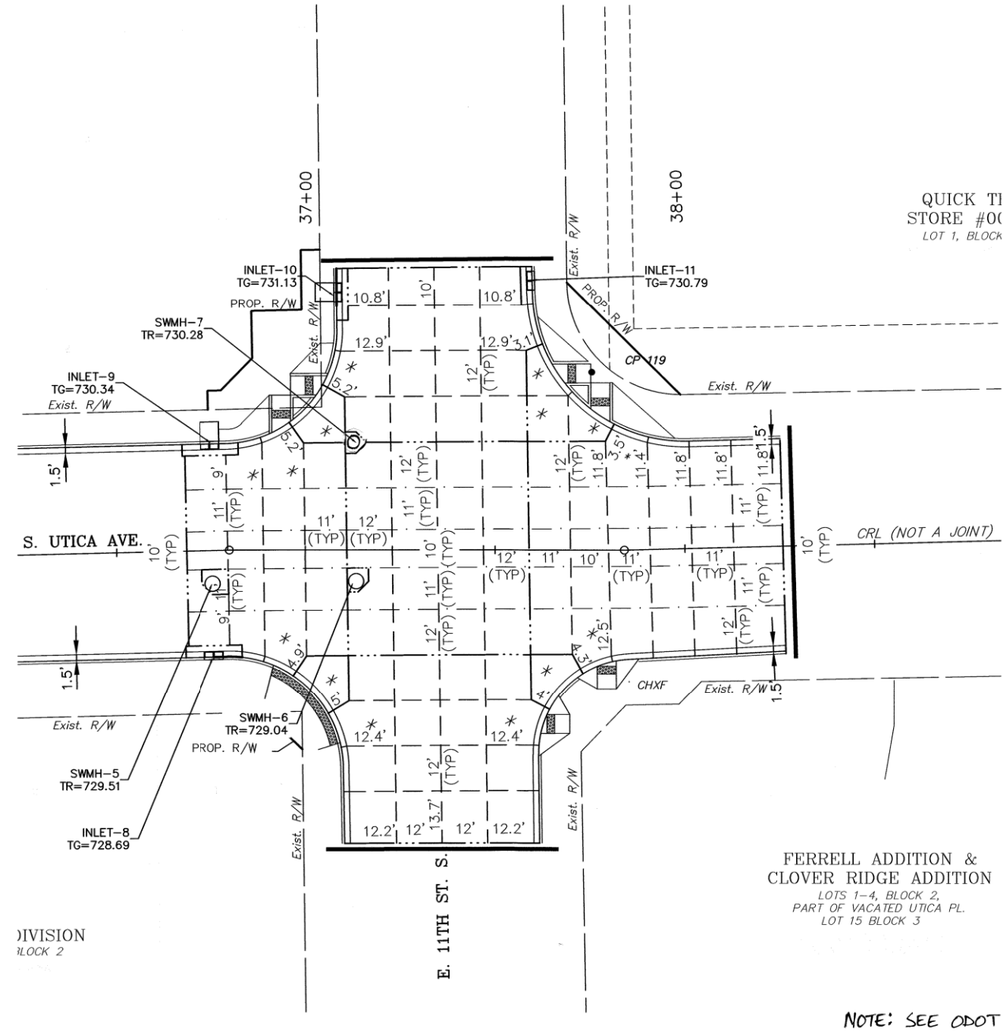


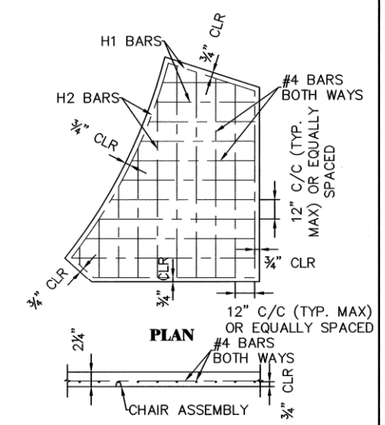


1 inch = 20 ft.

20 0 20 40

LEGEND

- BUTT JOINT
- SAWED DOWELED CONTRACTION JOINT
- TIED LONGITUDINAL JOINT
- ISOLATION JOINT/EXPANSION JOINT
- MANHOLE BLOCKOUT WITH ISOLATION JOINT
- PROJECT LIMITS



TYPICAL PANEL REINFORCEMENT DETAIL

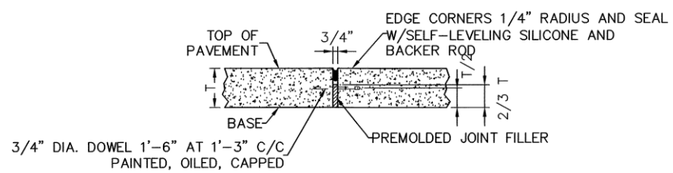
NOT TO SCALE

NOTE: SEE ODOT ROADWAY STANDARD LECS-5 FOR BUTT JOINT DETAIL.

LICENSED PROFESSIONAL ENGINEER Daniel E. Polasek 24920 OKLAHOMA

7/14/2025

* IRREGULAR SHAPED PANELS SHALL BE REINFORCED. REINFORCEMENT SHOULD BE #4 BARS EACH DIRECTION AND EQUALLY SPACED NOT MORE THAN 12". PROVIDE SUPPORT CHAIRS AS NEEDED.

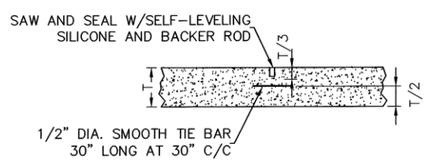


TYPE AA

NOT TO SCALE

EXPANSION JOINT/ISOLATION JOINT

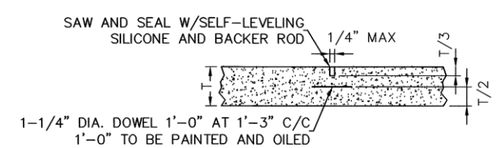
BASKET ASSEMBLY TO BE APPROVED PRIOR TO INSTALLATION



TYPE CC

NOT TO SCALE

SAWED LONGITUDINAL JOINT (IN LIEU OF TONGUE AND GROOVE CONST. JOINT)



TYPE DD

NOT TO SCALE

SAWED DOWELED CONTRACTION JOINT PER ODOT ROADWAY STD LTU-5-1

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

JOINT LAYOUT (3 OF 3)

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		8/2025	
HORIZONTAL: 1"=20'	LEAD ENGR.		8/25	
	FIELD MGR.		7/25	
VERTICAL: 1"=5'	RECOMMENDED: HAS 8-25 DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 36 OF 77 SHEETS

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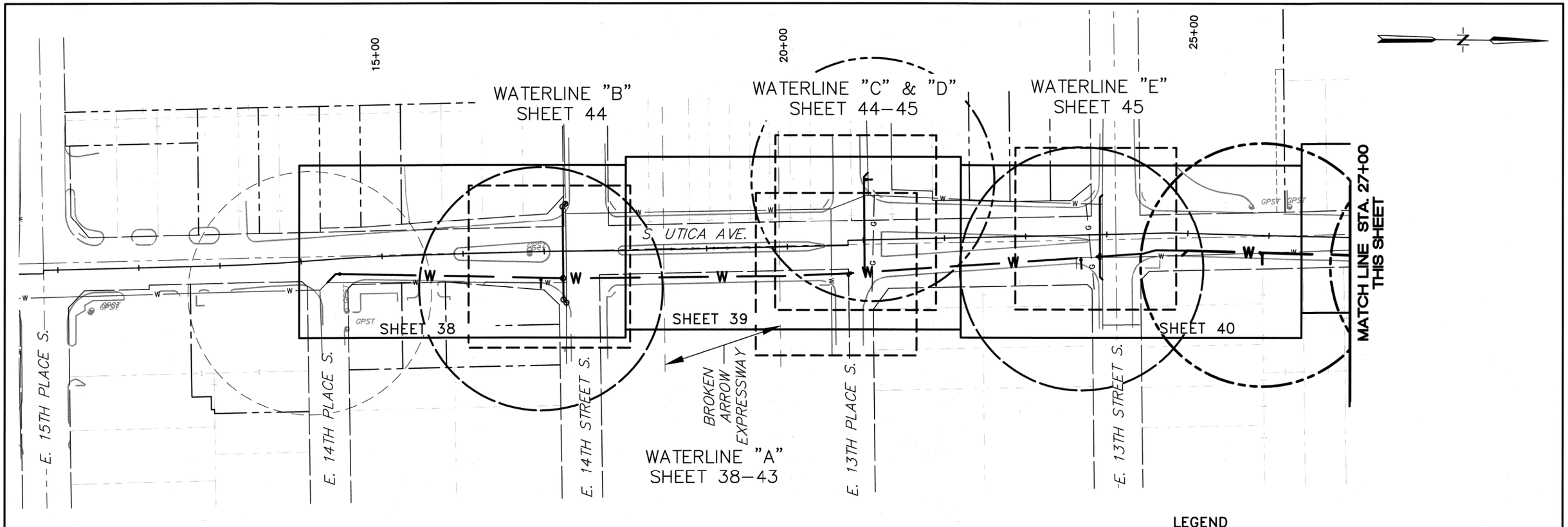

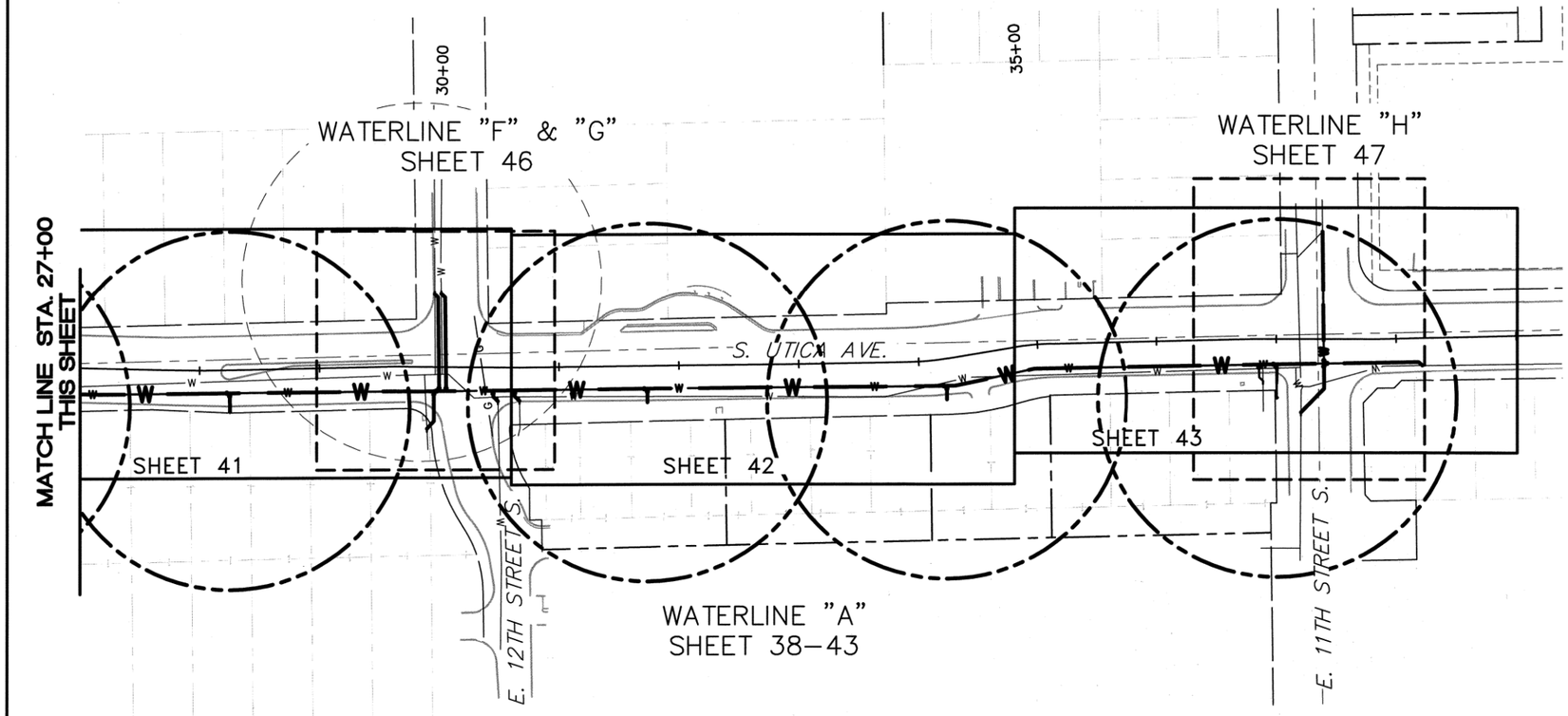

LEGEND

- TMUA–W 16–33 & 16–36 WATER LINE SHEETS
- TMUA–W 16–33 & 16–36 LATERAL WATER LINE SHEETS
- EXISTING WATERLINE
- PROPOSED WATERLINE BASE BID
- PROPOSED WATERLINE ADD ALT
- PROPOSED FIRE HYDRANT AT 300' RADIUS BASE BID
- PROPOSED FIRE HYDRANT AT 300' RADIUS ADD ALT
- EXISTING FIRE HYDRANT AT 300' RADIUS

LICENSED PROFESSIONAL ENGINEER Daniel E. Polasek 24920 OKLAHOMA
9/12/2024

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

TMUA–W 16–33 & TMUA–W 16–36
PROPOSED WATERLINE & FIRE HYDRANT LOCATION MAP

PROJECT NO. 144107–W, 144107–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE.
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: 1"=60'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		10/2024
HORIZONTAL:	LEAD ENGR.	CGD	7/2025
	FIELD MGR.		6/25
VERTICAL:	RECOMMENDED: DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING: DATE: JULY 2024
ATLAS PAGE NO: 3 SHEET 37 OF 77 SHEETS

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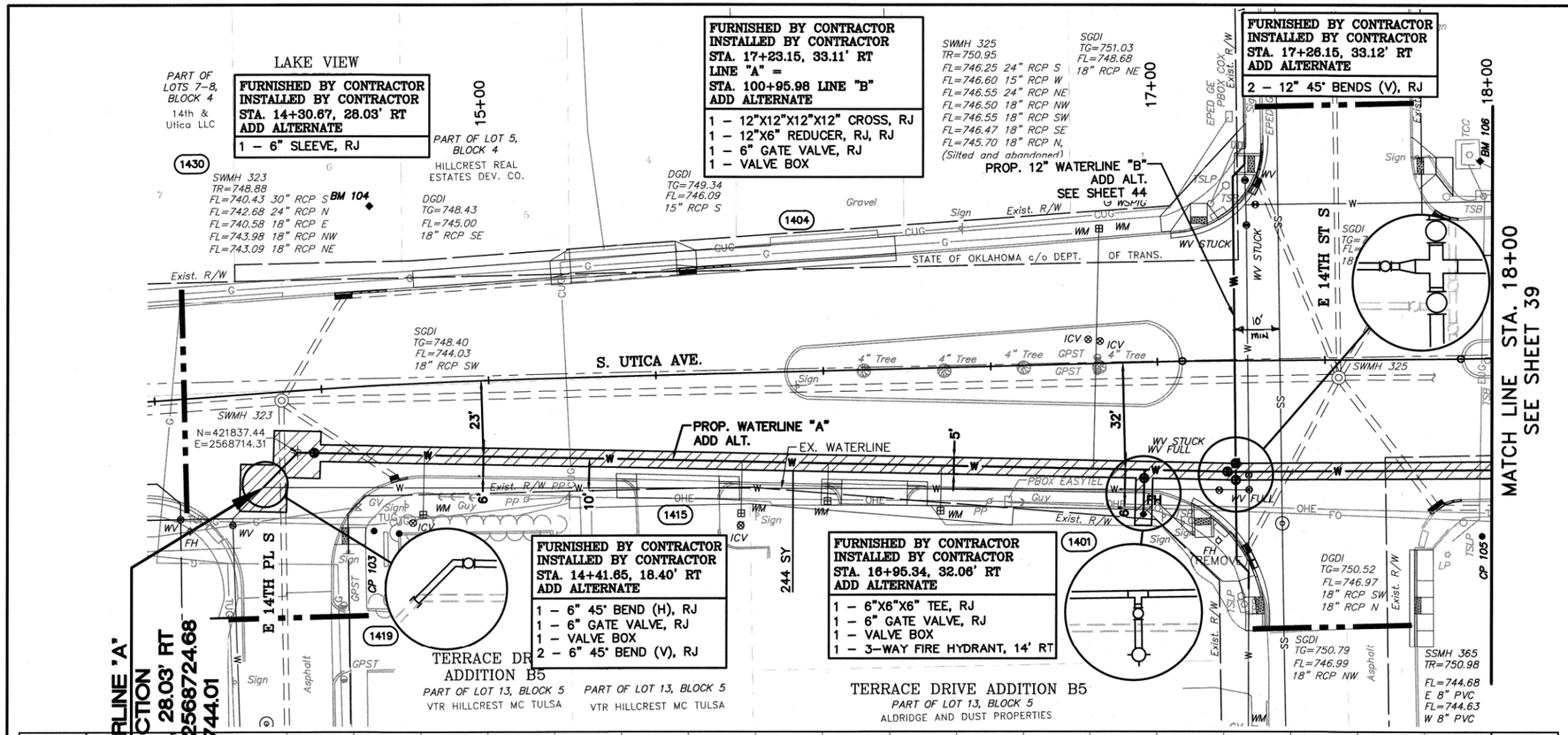

Bench Mark #104

IRON PIN W/CAP SET,
TLS CONTROL
N=421858.70
E=2568640.56
ELEV. 750.23

Bench Mark #106

CHISELED SQUARE SET,
NORTH SIDE OF TSCB
CONC PAD
N=422190.62
E=2568626.89
ELEV. 753.06

1 inch = 20 ft. (HORIZ.)
20 0 20 40
5 0 5 10
1 inch = 5 ft. (VERT)

CONTROL POINTS

PNT. No.	Northing	Easting	Elevation	Description
103	421860.35	2568737.77	748.98	IPC SET TLS CONTROL
105	422191.49	2568739.24	752.32	IPC SET TLS CONTROL

SERVICE CONNECTIONS

FOUR (4) SHORT SERVICE CONNECTIONS THIS SHEET
ONE (1) LONG SERVICE CONNECTIONS THIS SHEET

LEGEND

- PAVEMENT, REMOVE AND REPLACE BASE BID
- PAVEMENT, REMOVE AND REPLACE ADD ALTERNATE
- PROPOSED DIP WATER LINE
- AGGREGATE BASE
- DIP RESTRAINED JOINT
- RJ RESTRAINED JOINT

PROFESSIONAL ENGINEER Daniel Polasek 24920 OKLAHOMA
9/12/2024

ADD ALTERNATE
TMUA–W 16–33 & TMUA–W 16–36

WATERLINE "A"
WATERLINE REHABILITATION PLAN (1 OF 10)

PROJECT NO. 144107–W, 144107–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE.
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		10/2024
HORIZONTAL: 1"=20'	LEAD ENGR.	CEW	1/2025
VERTICAL: 1"=5'	FIELD MGR.		
	RECOMMENDED: DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING: DATE: JULY 2024
ATLAS PAGE NO: 3 SHEET 38 OF 77 SHEETS

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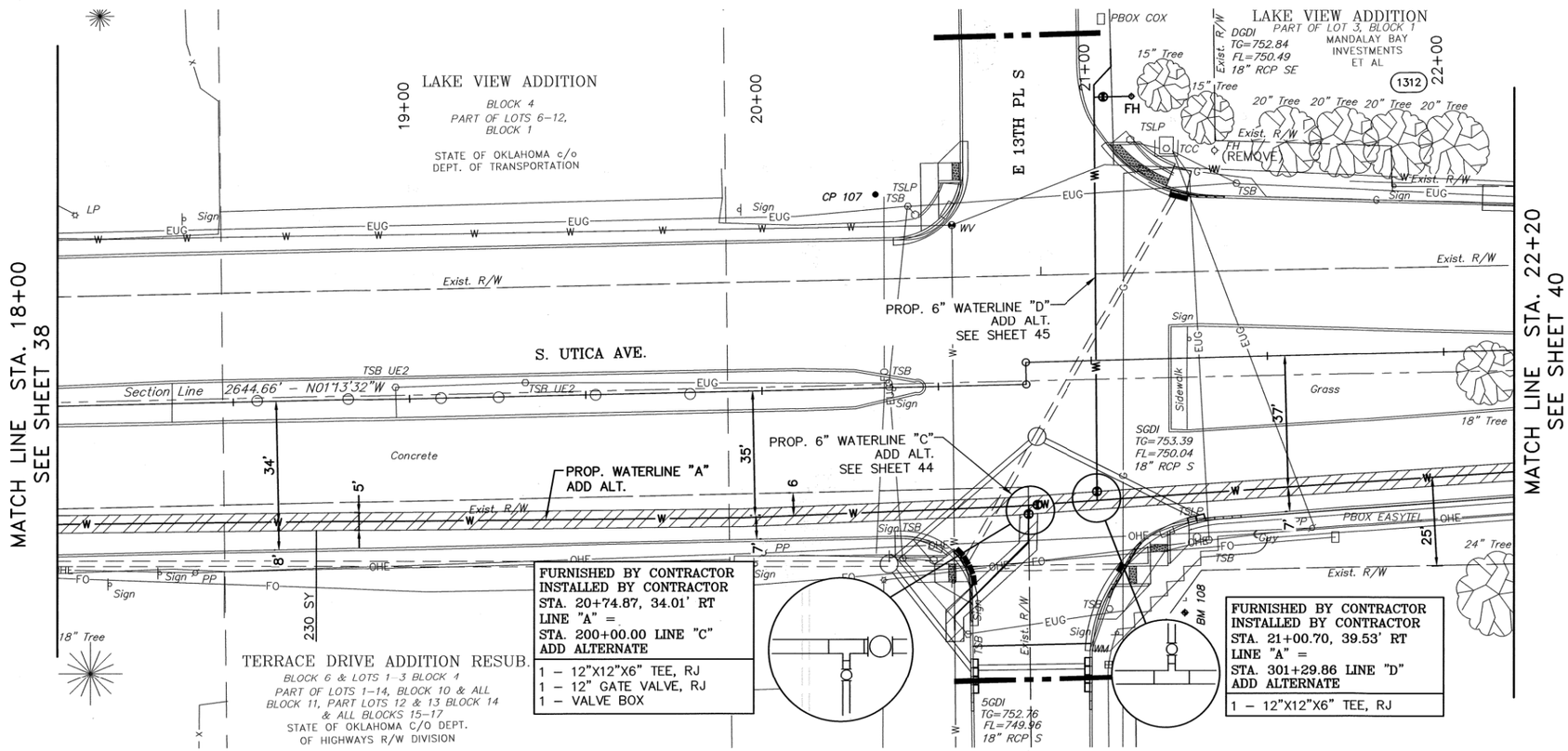


Bench Mark #108

IRON PIN W/CAP SET,
TLS CONTROL
N=422514.46
E=2568744.69
ELEV. 756.40

1 inch = 20 ft. (HORIZ.)
20 0 20 40
5 0 5 10
1 inch = 5 ft. (VERT)

CONTROL POINTS

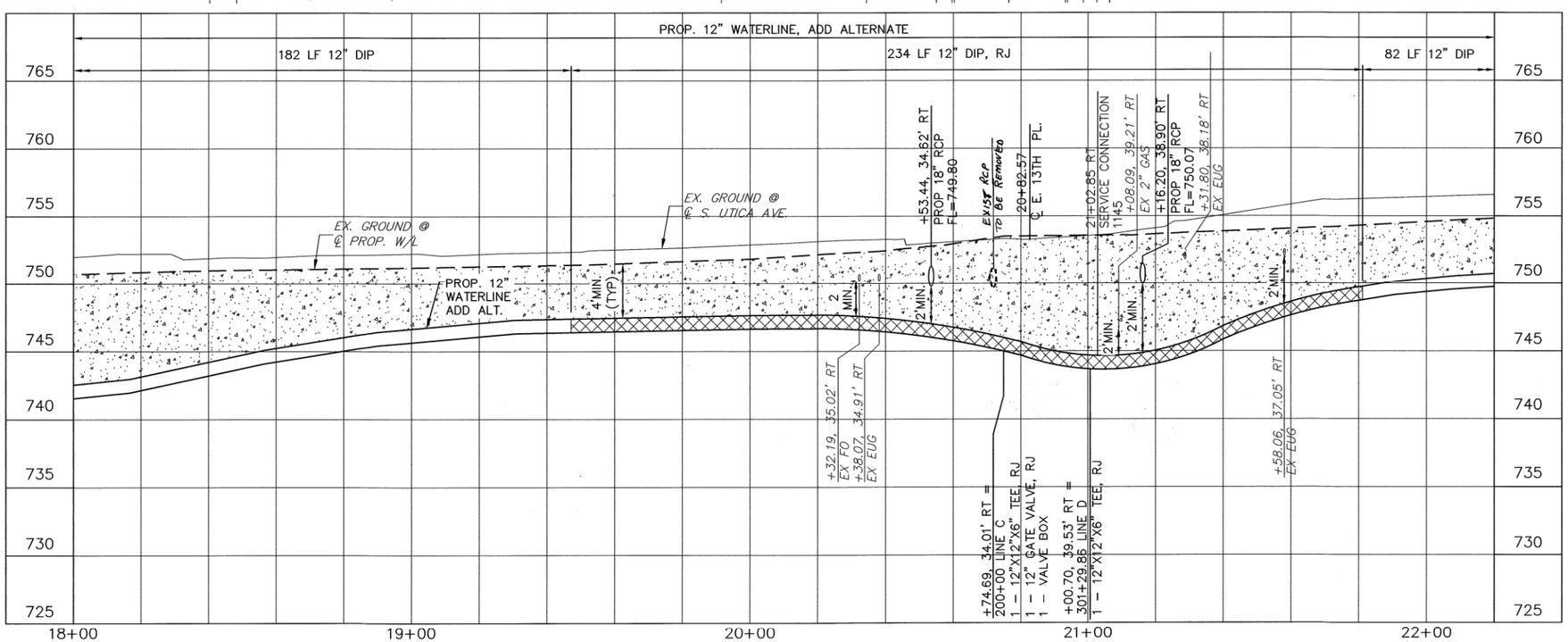
PNT. No.	Northing	Easting	Elevation	Description
107	422426.32	2568626.04	753.34	IPC SET TLS CONTROL

SERVICE CONNECTIONS

ZERO (0) SHORT SERVICE CONNECTIONS THIS SHEET
ZERO (0) LONG SERVICE CONNECTIONS THIS SHEET

LEGEND

- PAVEMENT, REMOVE AND REPLACE BASE BID
- PAVEMENT, REMOVE AND REPLACE ADD ALTERNATE
- PROPOSED DIP WATER LINE
- AGGREGATE BASE
- DIP RESTRAINED JOINT
- RJ — RESTRAINED JOINT



LICENSED PROFESSIONAL ENGINEER
Daniel E. Polasek
24920
OKLAHOMA
7/14/2025

ADD ALTERNATE

TMUA-W 16-33 & TMUA-W 16-36

WATERLINE "A"
WATERLINE REHABILITATION PLAN (2 OF 10)

PROJECT NO. 144107-W, 144107-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE.
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

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

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		7/2025
HORIZONTAL: 1"=20'	LEAD ENGR.		7/25
	FIELD MGR.		7/25
VERTICAL: 1"=5'	RECOMMENDED: DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING:
ATLAS PAGE NO: 3
DATE: JULY 2024
SHEET 39 OF 77 SHEETS

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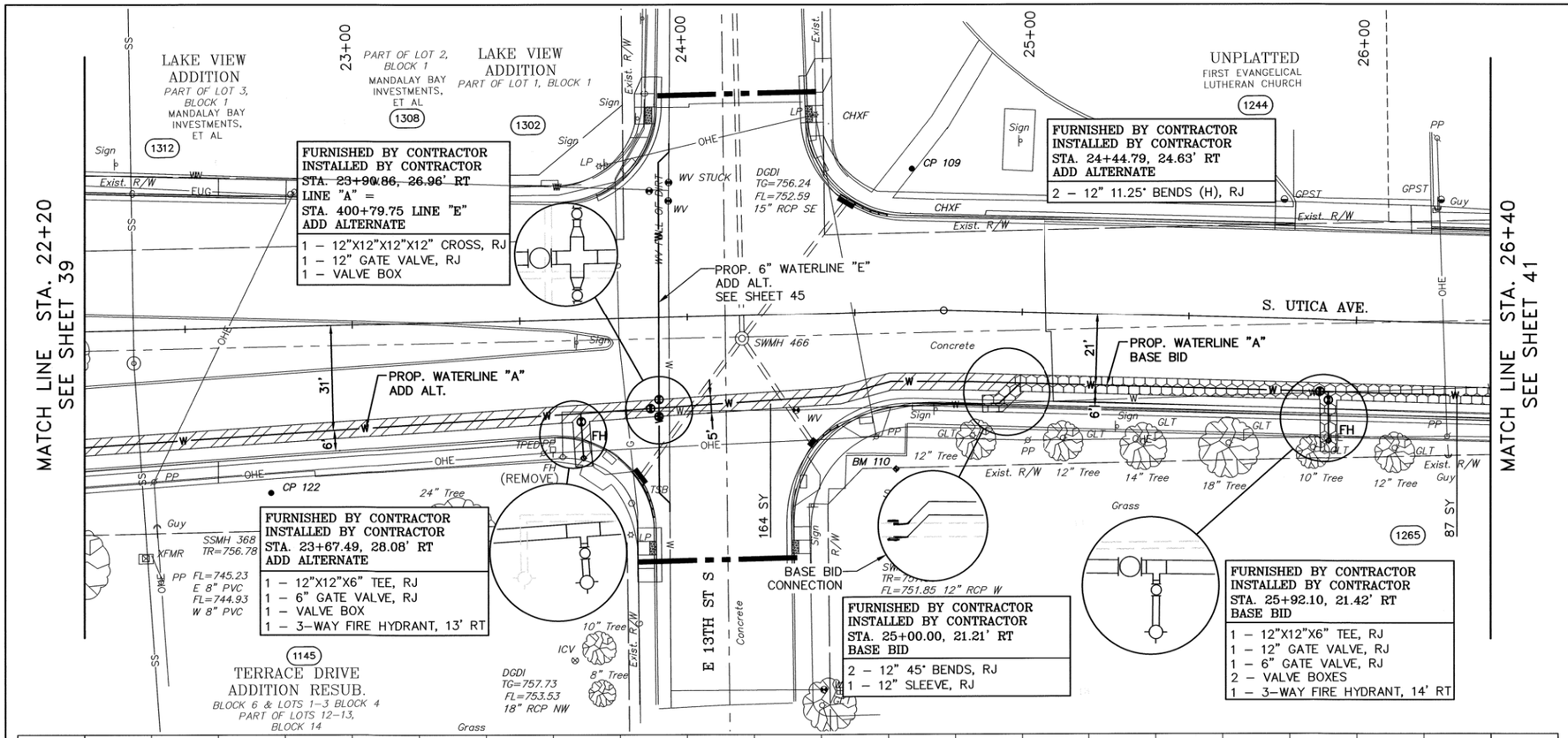

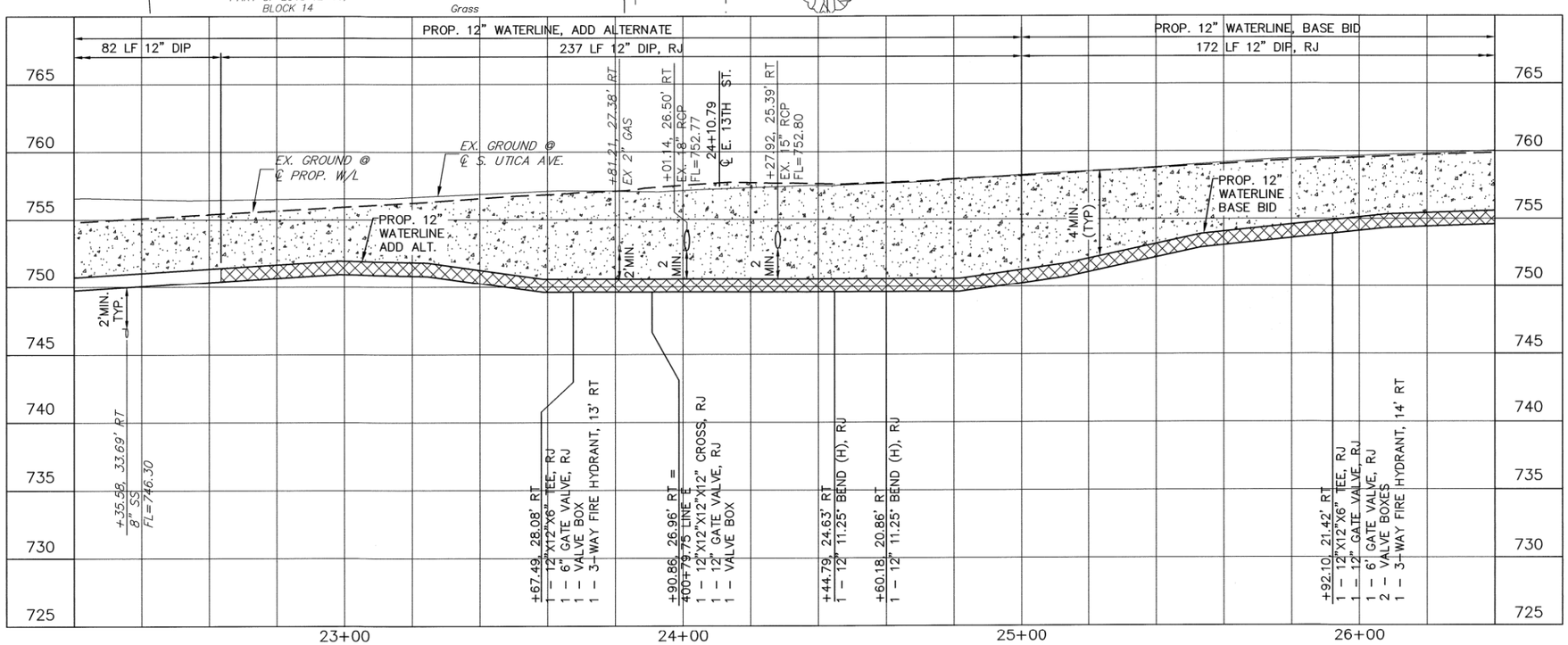

Bench Mark #110

IRON PIN W/CAP SET,
TLS CONTROL
N=422850.02
E=2568711.36
ELEV. 759.43

Bench Mark #123

IRON PIN W/CAP SET,
TLS CONTROL
N=422673.15
E=2568619.01
ELEV. 754.68

1 inch = 20 ft. (HORIZ.)
20 0 20 40
5 0 5 10
1 inch = 5 ft. (VERT)

CONTROL POINTS

PNT. No.	Northing	Easting	Elevation	Description
109	422854.72	2568621.80	757.39	CHISELED "X" FOUND
122	422663.56	2568718.36	756.52	IPC SET TLS CONTROL

SERVICE CONNECTIONS

ZERO (0) SHORT SERVICE CONNECTIONS THIS SHEET
ZERO (0) LONG SERVICE CONNECTIONS THIS SHEET

LEGEND

- PAVEMENT, REMOVE AND REPLACE BASE BID
- PAVEMENT, REMOVE AND REPLACE ADD ALTERNATE
- PROPOSED DIP WATER LINE
- AGGREGATE BASE
- DIP RESTRAINED JOINT
- RJ RESTRAINED JOINT

LICENSED PROFESSIONAL ENGINEER
Daniel E. Polosek
24920
OKLAHOMA
7/14/2025

ADD ALTERNATE & BASE BID

TMUA-W 16-33 & TMUA-W 16-36

WATERLINE "A"
WATERLINE REHABILITATION PLAN (3 OF 10)

PROJECT NO. 144107-W, 144107-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE.
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

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

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		07/25
HORIZONTAL: 1"=20'	LEAD ENGR.		7/2025
VERTICAL: 1"=5'	FIELD MGR.		7/25
	RECOMMENDED: DESIGN MANAGER		

APPROVED:
CITY ENGINEER

FILE: DRAWING:
ATLAS PAGE NO: 3
DATE: JULY 2024
SHEET 40 OF 77 SHEETS

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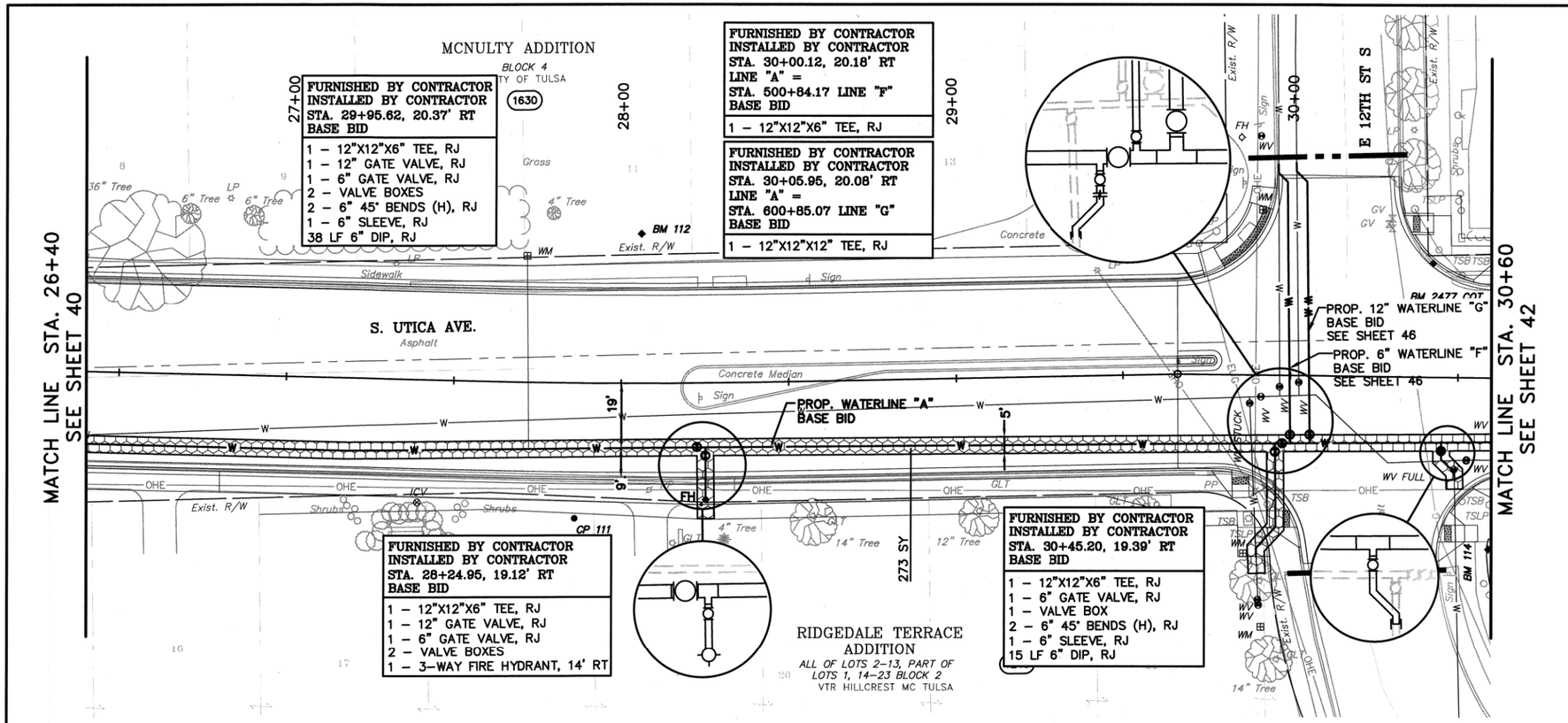

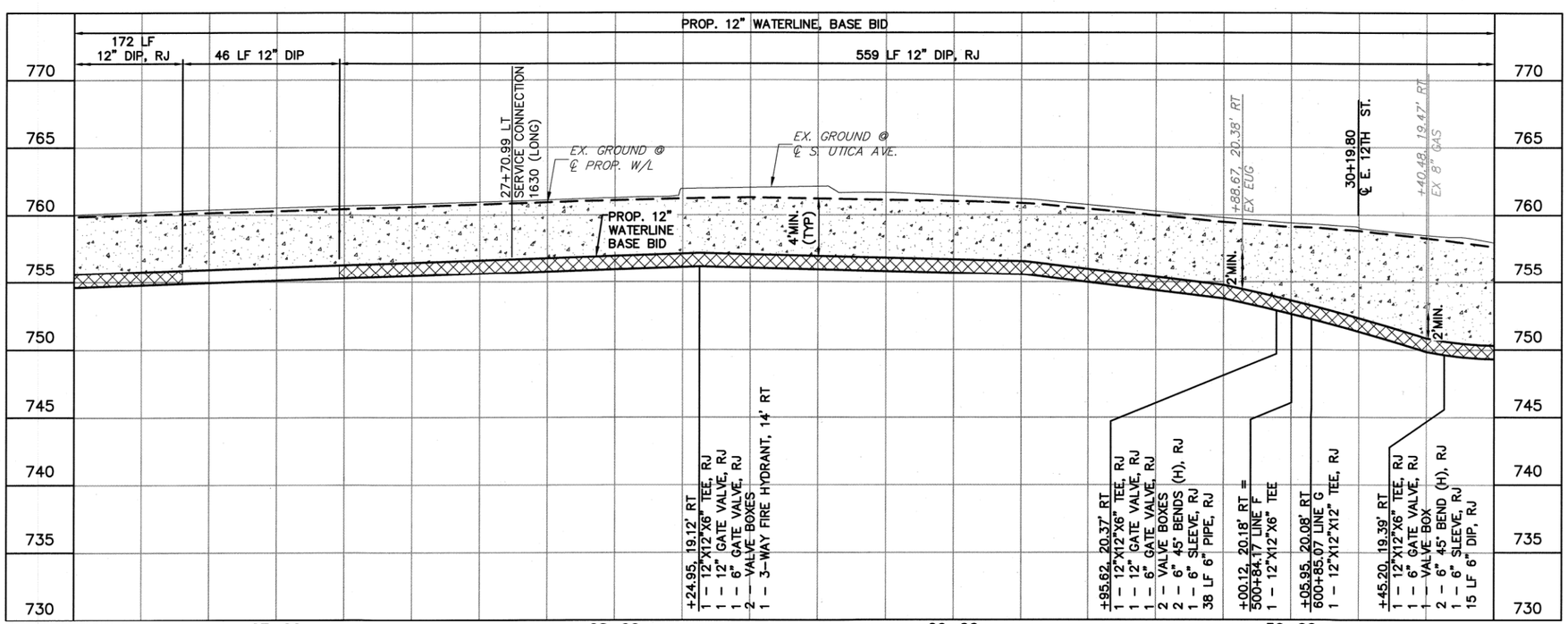

Bench Mark #112
IRON PIN W/CAP SET,
TLS CONTROL
N=423193.66
E=568627.45
ELEV. 760.26

Bench Mark #114
IRON PIN W/CAP SET,
TLS CONTROL
N=423446.73
E=2568721.37
ELEV. 758.11

1 inch = 20 ft. (HORIZ.)
20 0 20 40
5 0 5 10
1 inch = 5 ft. (VERT)

CONTROL POINTS

PNT. No.	Northing	Easting	Elevation	Description
111	423173.69	2568712.43	762.16	IPC SET TLS CONTROL

SERVICE CONNECTIONS

ZERO (0) SHORT SERVICE CONNECTIONS THIS SHEET
ONE (1) LONG SERVICE CONNECTIONS THIS SHEET

LEGEND

- PAVEMENT, REMOVE AND REPLACE BASE BID
- PAVEMENT, REMOVE AND REPLACE ADD ALTERNATE
- PROPOSED DIP WATER LINE
- AGGREGATE BASE
- DIP RESTRAINED JOINT
- RJ RESTRAINED JOINT

LICENSED PROFESSIONAL ENGINEER Daniel E. Polasek 24920 OKLAHOMA
9/12/2024

BASE BID

TMUA-W 16-33 & TMUA-W 16-36

WATERLINE "A"
WATERLINE REHABILITATION PLAN (4 OF 10)

PROJECT NO. 144107-W, 144107-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE.
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

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

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		10/2024
HORIZONTAL: 1"=20'	LEAD ENGR.		1/2025
	FIELD MGR.		6/25
VERTICAL: 1"=5'	RECOMMENDED: DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING:
ATLAS PAGE NO: 3
DATE: JULY 2024
SHEET 41 OF 77 SHEETS

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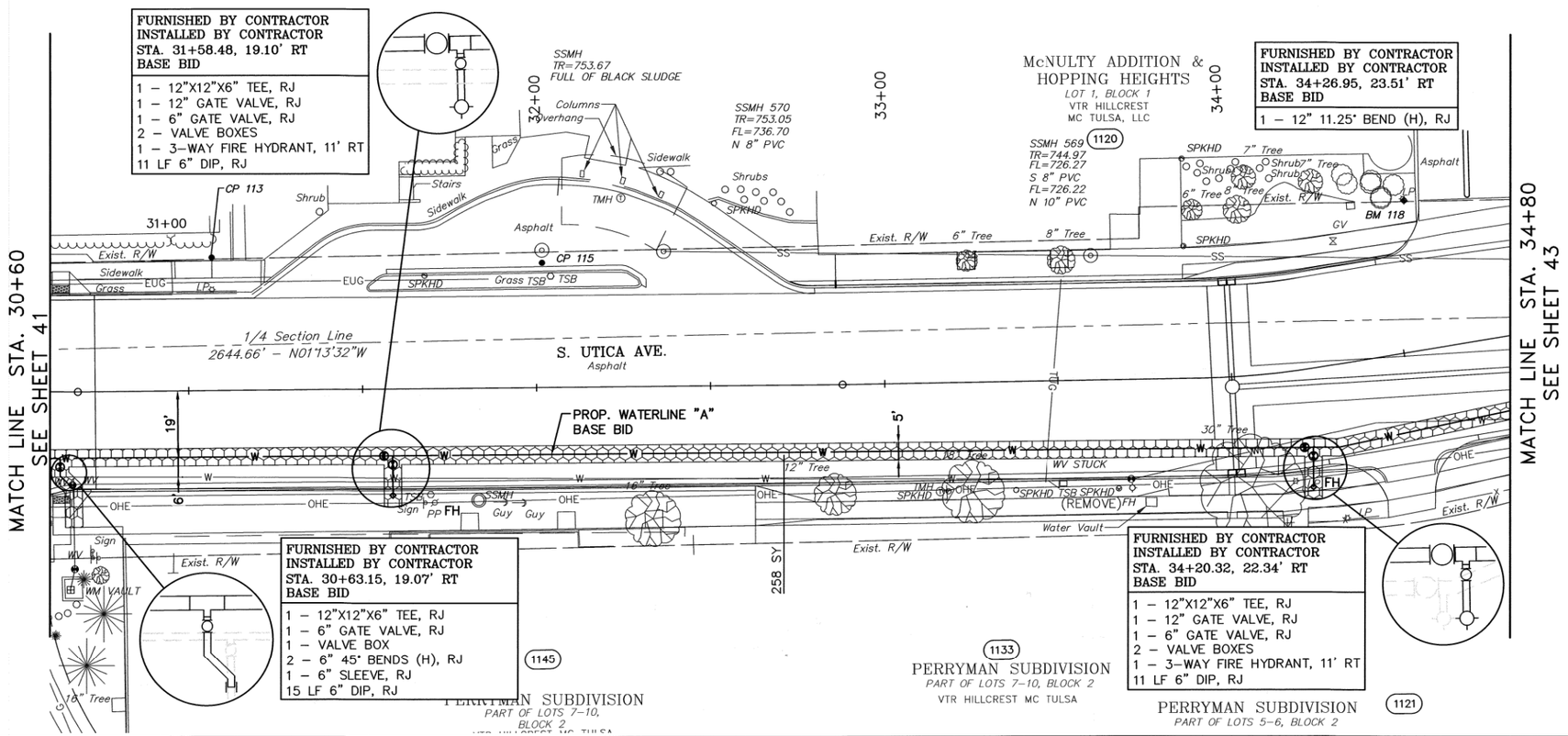


Bench Mark #118

CHISELED SQUARE SET,
NE LAMP POLE BASE
N=423836.95
E=568615.56
ELEV. 740.81

1 inch = 20 ft. (HORIZ.)
20 0 20 40
5 0 5 10
1 inch = 5 ft. (VERT)

CONTROL POINTS

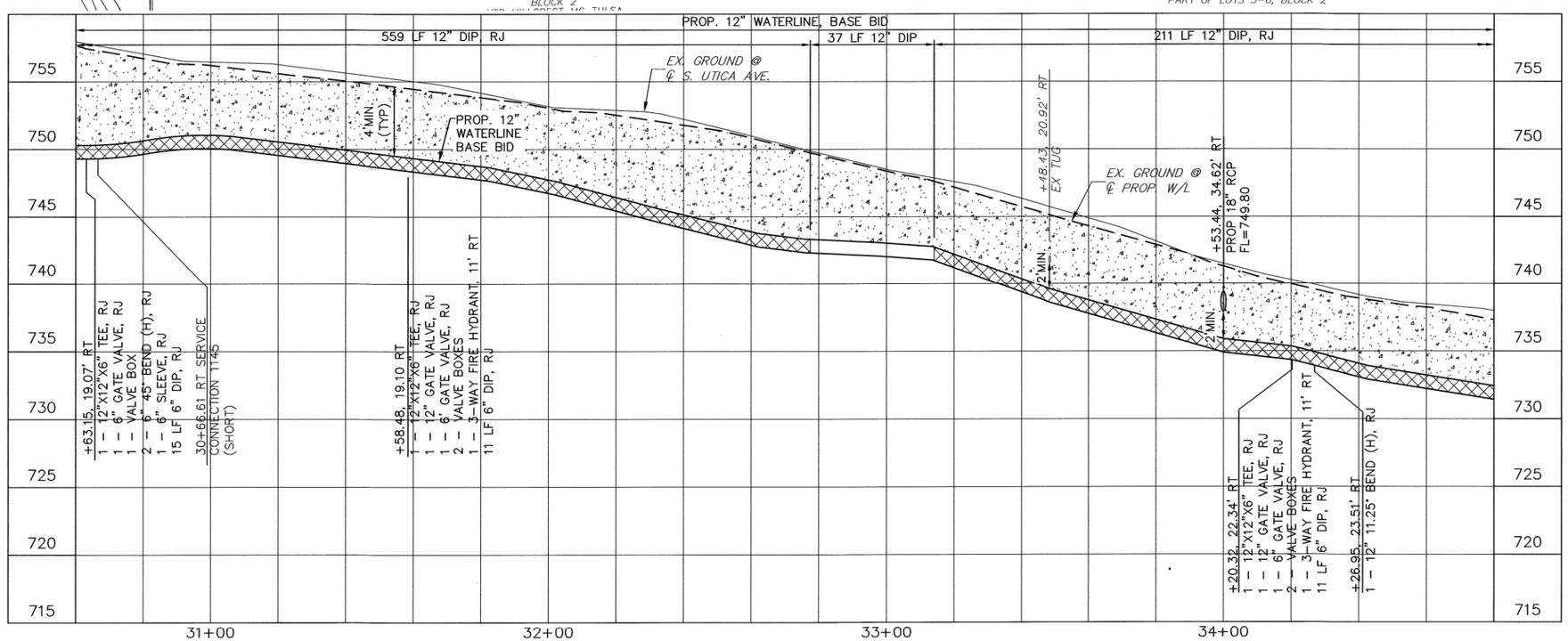
PNT. No.	Northing	Easting	Elevation	Description
113	423494.13	2568631.74	756.89	IPC SET TLS CONTROL
115	423589.08	2568633.24	753.35	MAG SET IN ASPHALT

SERVICE CONNECTIONS

ONE (1) SHORT SERVICE CONNECTIONS THIS SHEET
ZERO (0) LONG SERVICE CONNECTIONS THIS SHEET

LEGEND

- PAVEMENT, REMOVE AND REPLACE BASE BID
- PAVEMENT, REMOVE AND REPLACE ADD ALTERNATE
- PROPOSED DIP WATER LINE
- AGGREGATE BASE
- DIP RESTRAINED JOINT
- RJ RESTRAINED JOINT



LICENSED PROFESSIONAL ENGINEER
Daniel E. Polasek
24920
OKLAHOMA
7/14/2025

BASE BID

TMUA–W 16–33 & TMUA–W 16–36

WATERLINE "A"
WATERLINE REHABILITATION PLAN (5 OF 10)

PROJECT NO. 144107–W, 144107–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE.
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

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

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		07/25
HORIZONTAL: 1"=20'	LEAD ENGR.	CEW	7/2025
	FIELD MGR.		7/25
VERTICAL: 1"=5'	RECOMMENDED: DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING: DATE: JULY 2024
ATLAS PAGE NO: 3 SHEET 42 OF 77 SHEETS

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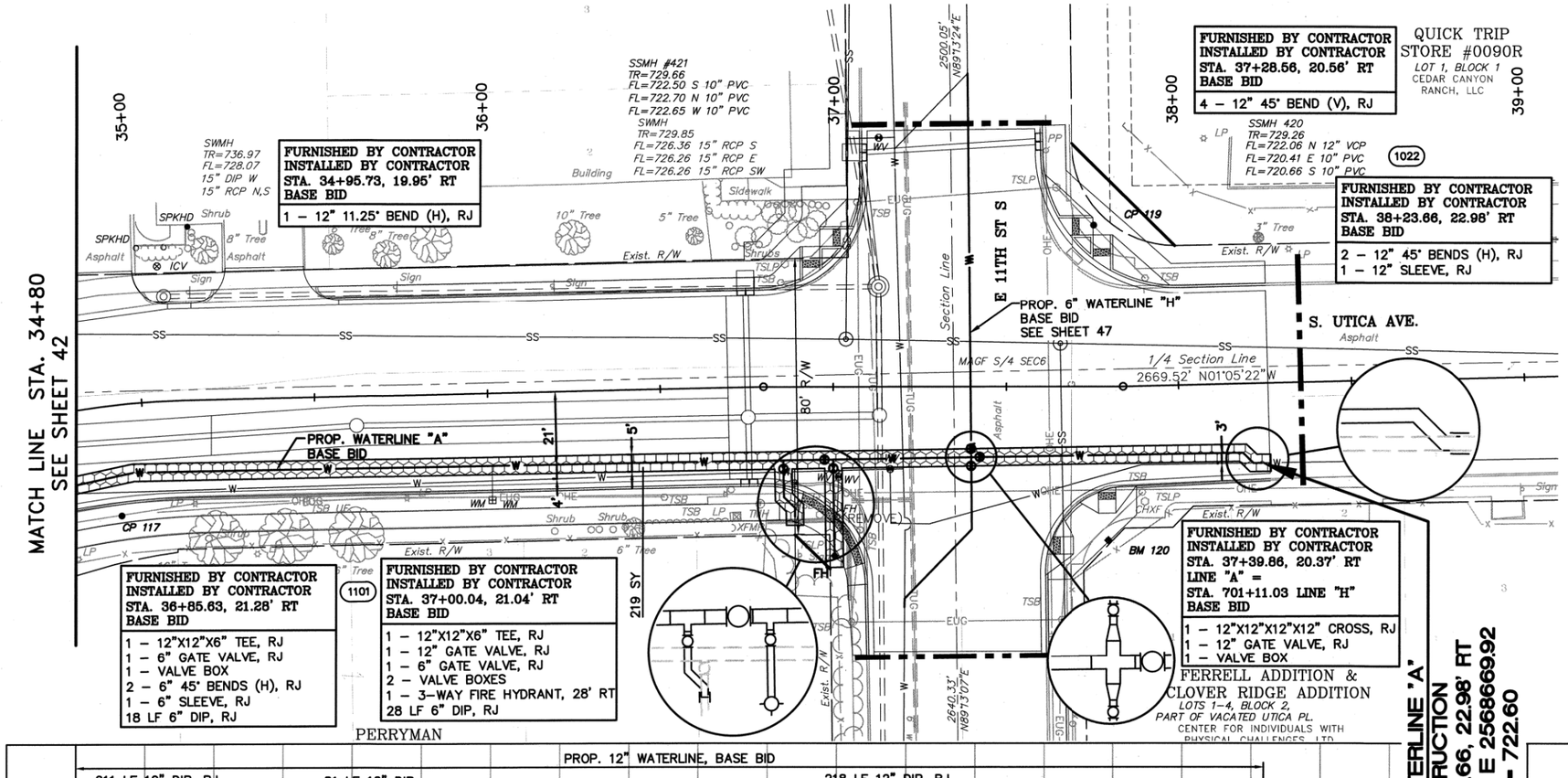

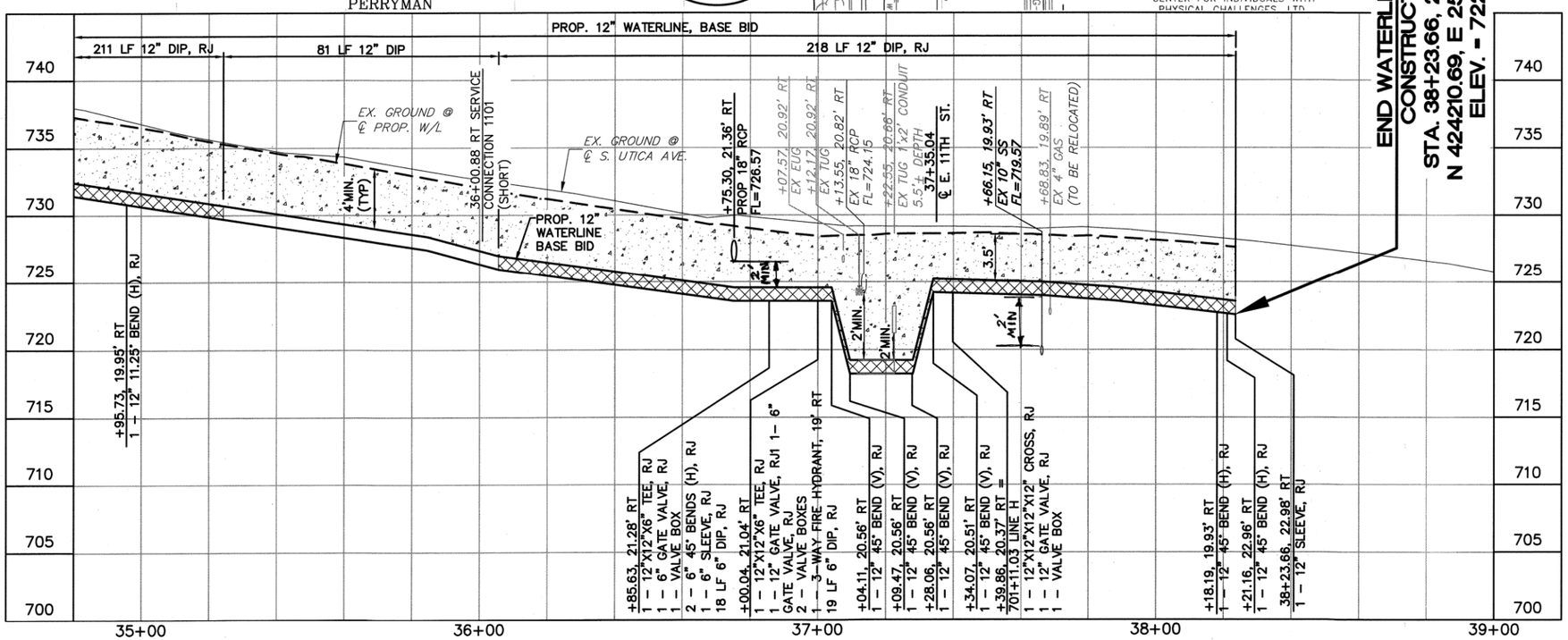

Bench Mark #120
MAG SET IN ASPHALT W/ SHINER N=424166.28 E=2568692.37 ELEV. 728.04

1 inch = 20 ft. (HORIZ.)
20 0 20 40
5 0 5 10
1 inch = 5 ft. (VERT)

CONTROL POINTS

PNT. No.	Northing	Easting	Elevation	Description
117	423880.85	2568684.91	737.07	IPC SET TLS CONTROL
119	424161.85	2568601.21	730.17	IPC SET TLS CONTROL

PNT. NO.	Northing	Easting	Elevation	Description
CP–117	423880.85	2568684.91	737.07	IPC SET TLS CONTROL
CP–119	424161.85	2568601.21	730.17	IPC SET TLS CONTROL

SERVICE CONNECTIONS

ONE (1) SHORT SERVICE CONNECTIONS THIS SHEET
ZERO (0) LONG SERVICE CONNECTIONS THIS SHEET

LEGEND

- PAVEMENT, REMOVE AND REPLACE BASE BID
- PAVEMENT, REMOVE AND REPLACE ADD ALTERNATE
- PROPOSED DIP WATER LINE
- AGGREGATE BASE
- DIP RESTRAINED JOINT
- RJ RESTRAINED JOINT

PROFESSIONAL ENGINEER
Daniel E. Polaski
24920
OKLAHOMA
9/12/2024

BASE BID

TMUA–W 16–33 & TMUA–W 16–36

WATERLINE "A'
WATERLINE REAHABILITATION PLAN (6 OF 10)

PROJECT NO. 144107–W, 144107–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE.
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		10/2024
HORIZONTAL: 1"=20'	LEAD ENGR.	CEW	1/2025
	FIELD MGR.		1/6/25
VERTICAL: 1"=5'	RECOMMENDED: DESIGN MANAGER		

APPROVED:
CITY ENGINEER

FILE: DRAWING:
DATE: JULY 2024
ATLAS PAGE NO: 3
SHEET 43 OF 77 SHEETS

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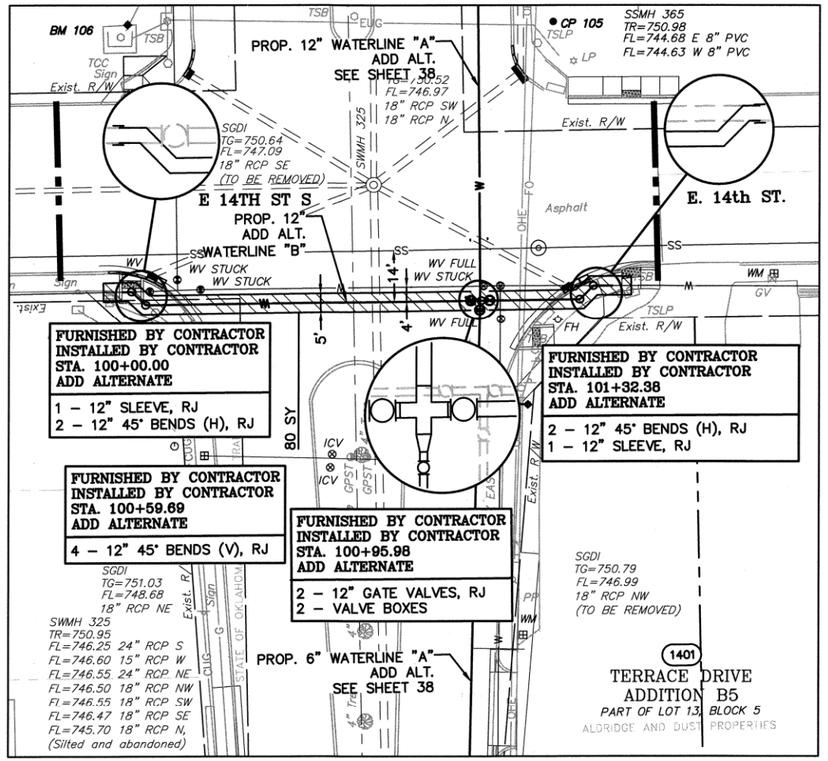
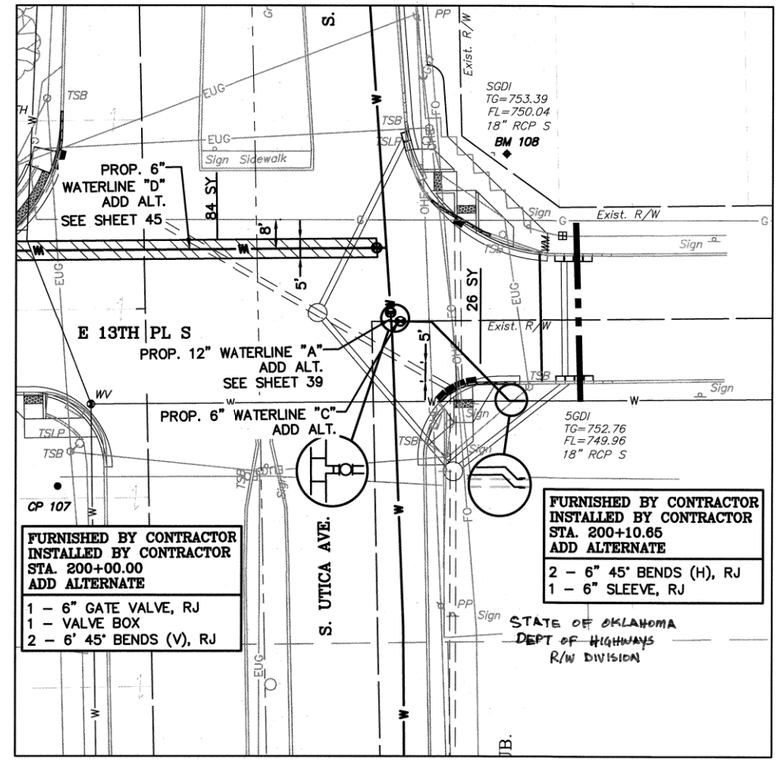
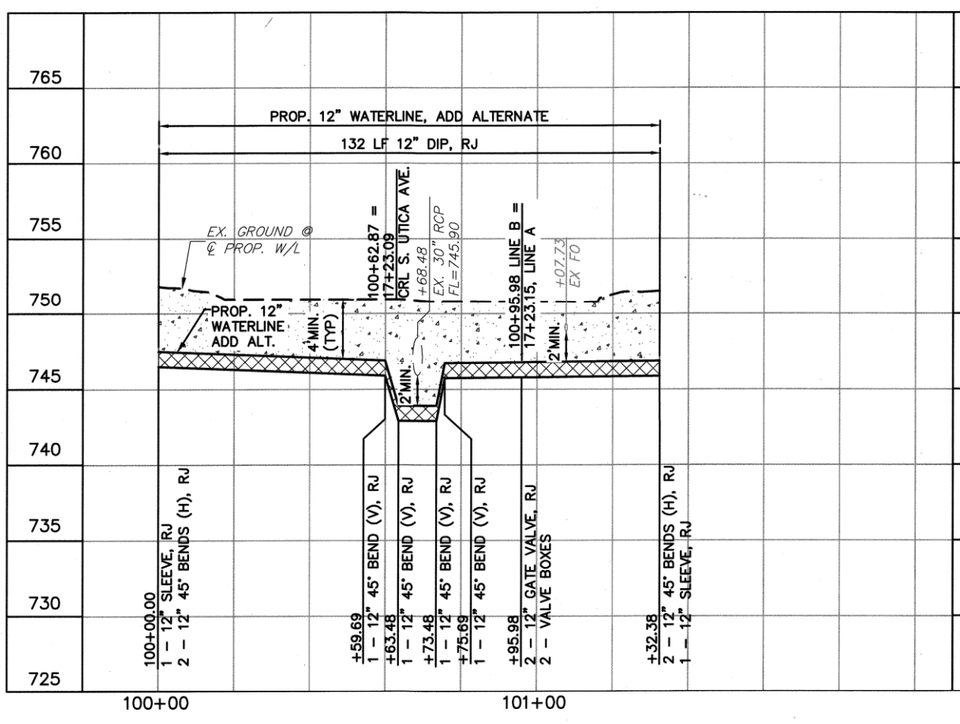
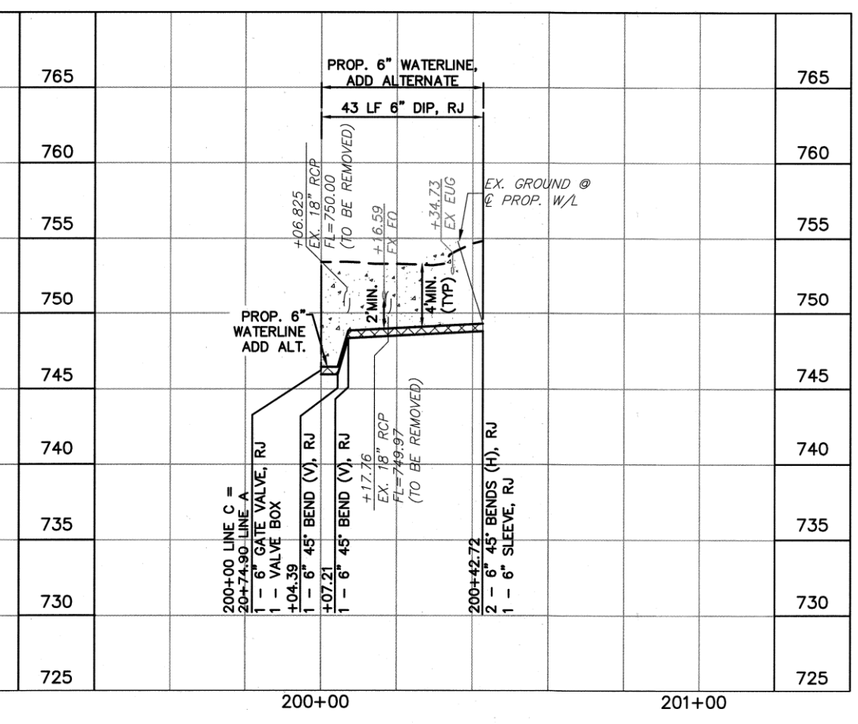


WATERLINE "B"



WATERLINE "C"





Bench Mark #106

CHISELED SQUARE SET,
NORTH SIDE OF TSCB
CONC PAD
N=422190.62
E=2568626.89
ELEV. 753.06

Bench Mark #108

IRON PIN W/CAP SET,
TLS CONTROL
N=422514.46
E=2568744.69
ELEV. 756.40

1 inch = 20 ft. (HORIZ.)
20 0 20 40
5 0 5 10
1 inch = 5 ft. (VERT)

CONTROL POINTS

PNT. No.	Northing	Easting	Elevation	Description
105	422191.49	2568739.24	752.32	IPC SET TLS CONTROL
107	422426.32	2568626.04	753.34	IPC SET TLS CONTROL

SERVICE CONNECTIONS

ZERO (0) SHORT SERVICE CONNECTIONS THIS SHEET
ZERO (0) LONG SERVICE CONNECTIONS THIS SHEET

LEGEND

- PAVEMENT, REMOVE AND REPLACE BASE BID
- PAVEMENT, REMOVE AND REPLACE ADD ALTERNATE
- PROPOSED DIP WATER LINE
- AGGREGATE BASE
- DIP RESTRAINED JOINT
- RJ RESTRAINED JOINT

LICENSED PROFESSIONAL ENGINEER
Daniel E. Polgar
24920
OKLAHOMA
9/12/2024

ADD ALTERNATE

TMUA–W 16–33 & TMUA–W 16–36

WATERLINE "B" & "C"
WATERLINE REHABILITATION PLAN (7 OF 10)

PROJECT NO. 144107–W, 144107–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE.
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

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

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.	MLan	10/2024	
HORIZONTAL: 1"=20'	LEAD ENGR.	CEW	7/25	
	FIELD MGR.		6/25	
VERTICAL: 1"=5'	RECOMMENDED: DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE: JULY 2024
ATLAS PAGE NO: 3				SHEET 44 OF 77 SHEETS

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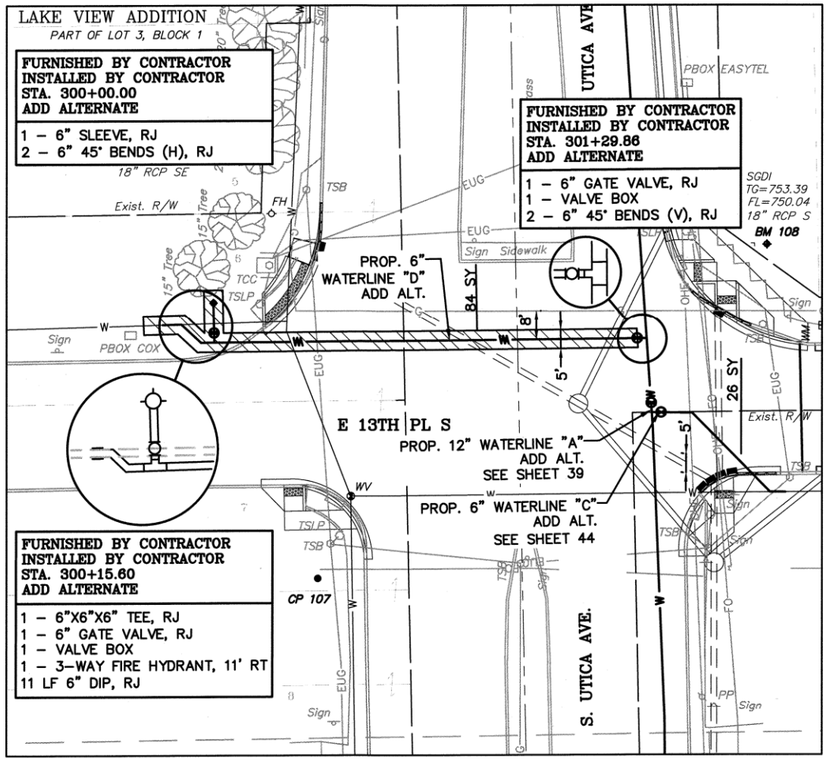
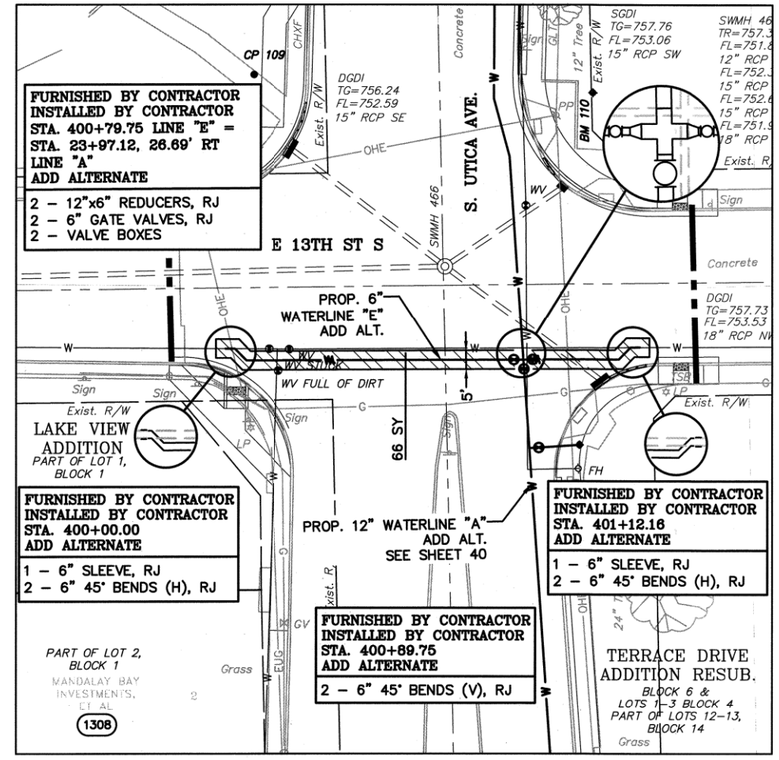
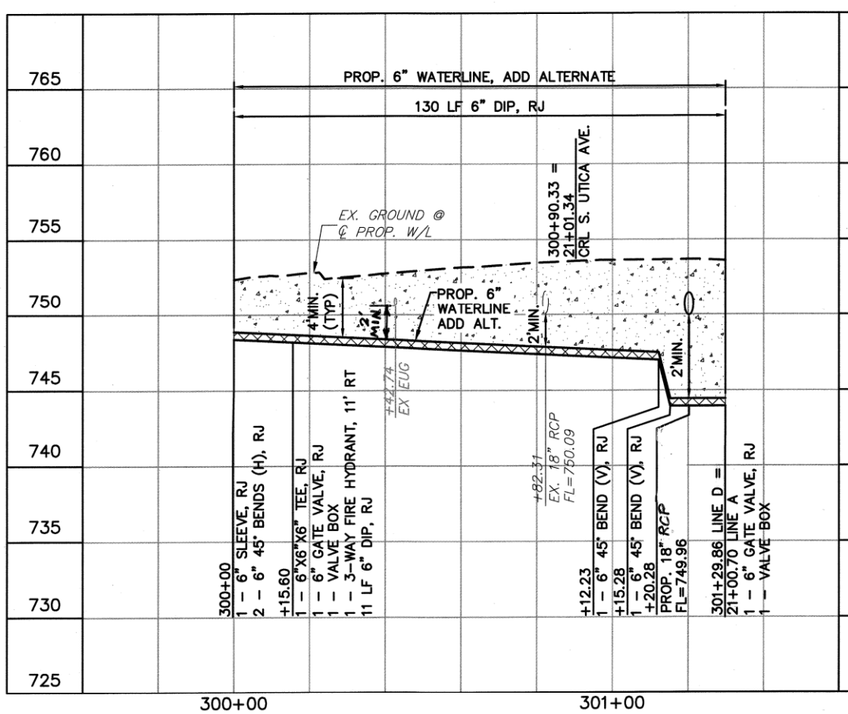
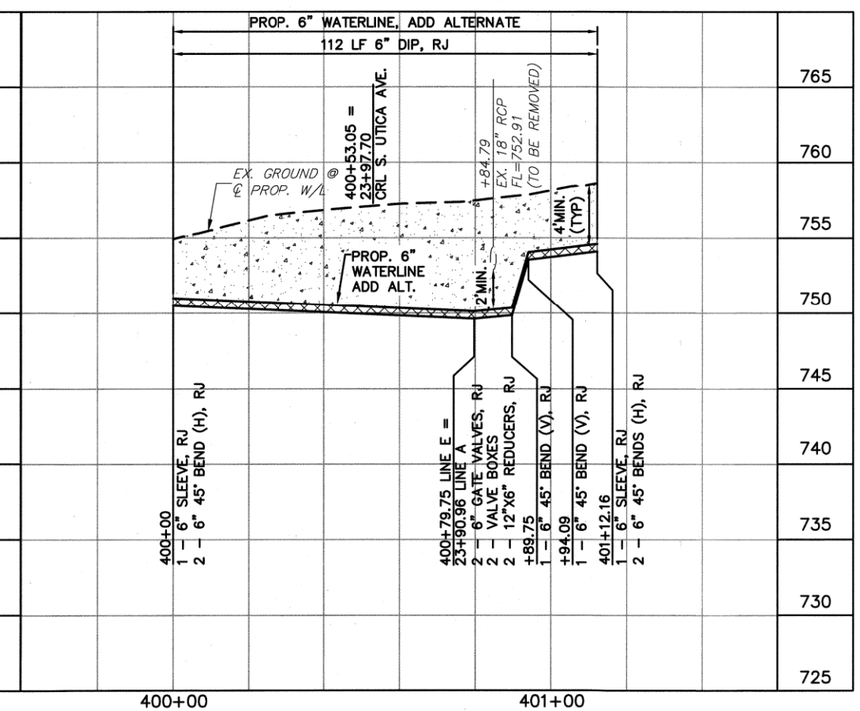


WATERLINE "D"



WATERLINE "E"





Bench Mark #108

IRON PIN W/CAP SET,
TLS CONTROL
N=422514.46
E=2568744.69
ELEV. 756.40

Bench Mark #110

IRON PIN W/CAP SET,
TLS CONTROL
N=422850.02
E=2568711.36
ELEV. 759.43

1 inch = 20 ft. (HORIZ.)
20 0 20 40

1 inch = 5 ft. (VERT)
5 0 5 10

CONTROL POINTS

PNT. No.	Northing	Easting	Elevation	Description
107	422426.32	2568626.04	753.34	IPC SET TLS CONTROL
109	422854.72	2568621.80	757.39	CHISELED "X" FOUND

SERVICE CONNECTIONS

ZERO (0) SHORT SERVICE CONNECTIONS THIS SHEET
ZERO (0) LONG SERVICE CONNECTIONS THIS SHEET

LEGEND

- PAVEMENT, REMOVE AND REPLACE BASE BID
- PAVEMENT, REMOVE AND REPLACE ADD ALTERNATE
- PROPOSED DIP WATER LINE
- AGGREGATE BASE
- DIP RESTRAINED JOINT
- RJ RESTRAINED JOINT

LICENSED PROFESSIONAL ENGINEER
Daniel E. Polasek
24920
OKLAHOMA
9/12/2024

ADD ALTERNATE
TMUA–W 16–33 & TMUA–W 16–36

WATERLINE "D" & "E"
WATERLINE REAHBILITATION PLAN (8 OF 10)

PROJECT NO. 144107–W, 144107–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE.
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.	NS	10/2024	
HORIZONTAL: 1"=20'	LEAD ENGR.	CEW	1/2025	
	FIELD MGR.	RW	6/25	
VERTICAL: 1"=5'	RECOMMENDED: DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE: JULY 2024
ATLAS PAGE NO: 3				SHEET 45 OF 77 SHEETS

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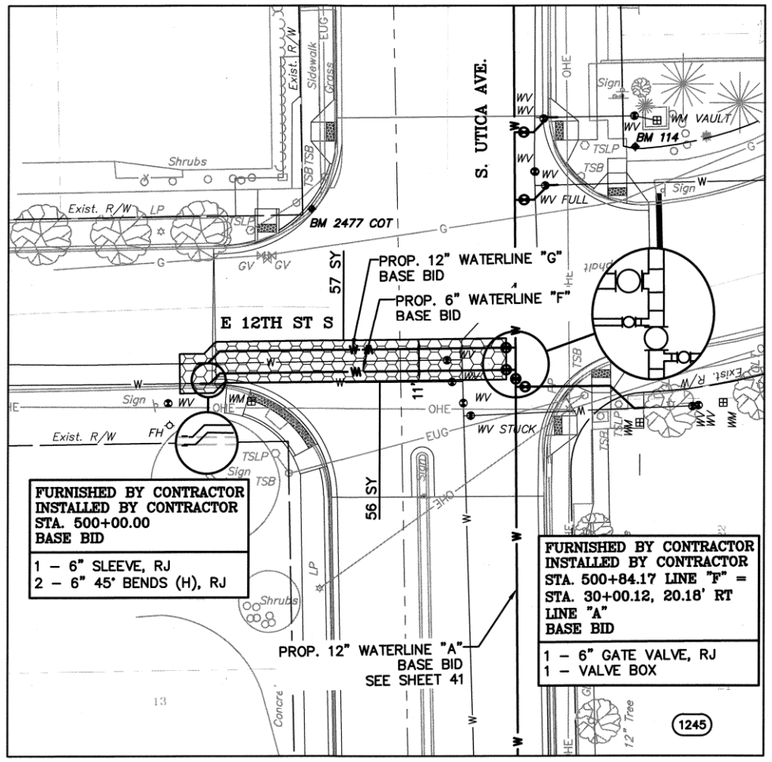
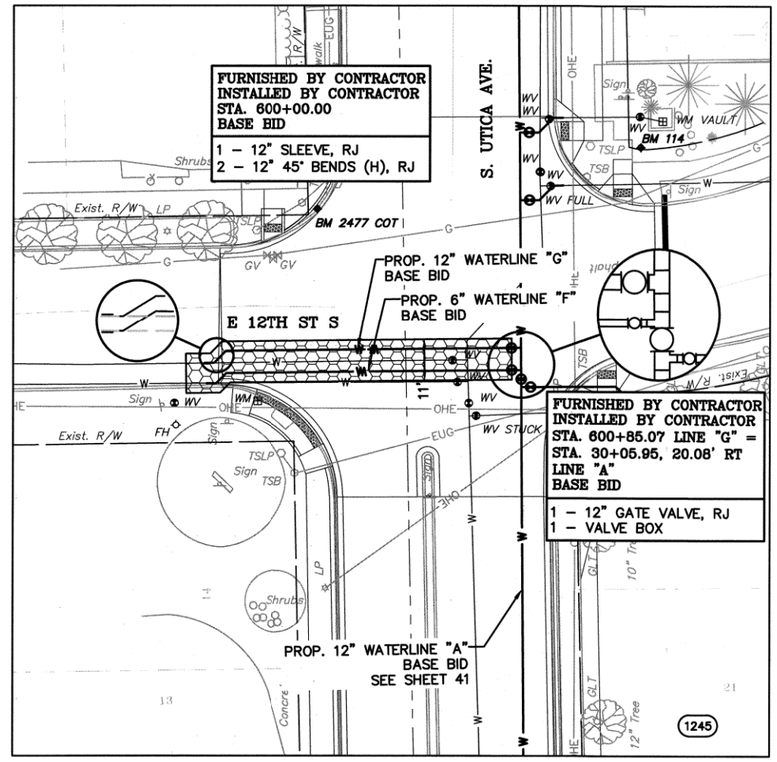


WATERLINE "F"



WATERLINE "G"

Bench Mark #114
IRON PIN W/CAP SET,
TLS CONTROL
N=423446.73
E=2568721.37
ELEV. 758.11

Bench Mark #2477
COT BENCHMARK CAP
P.F.P.I. 2477
N=423430.24
E=2568635.95
ELEV. 758.64

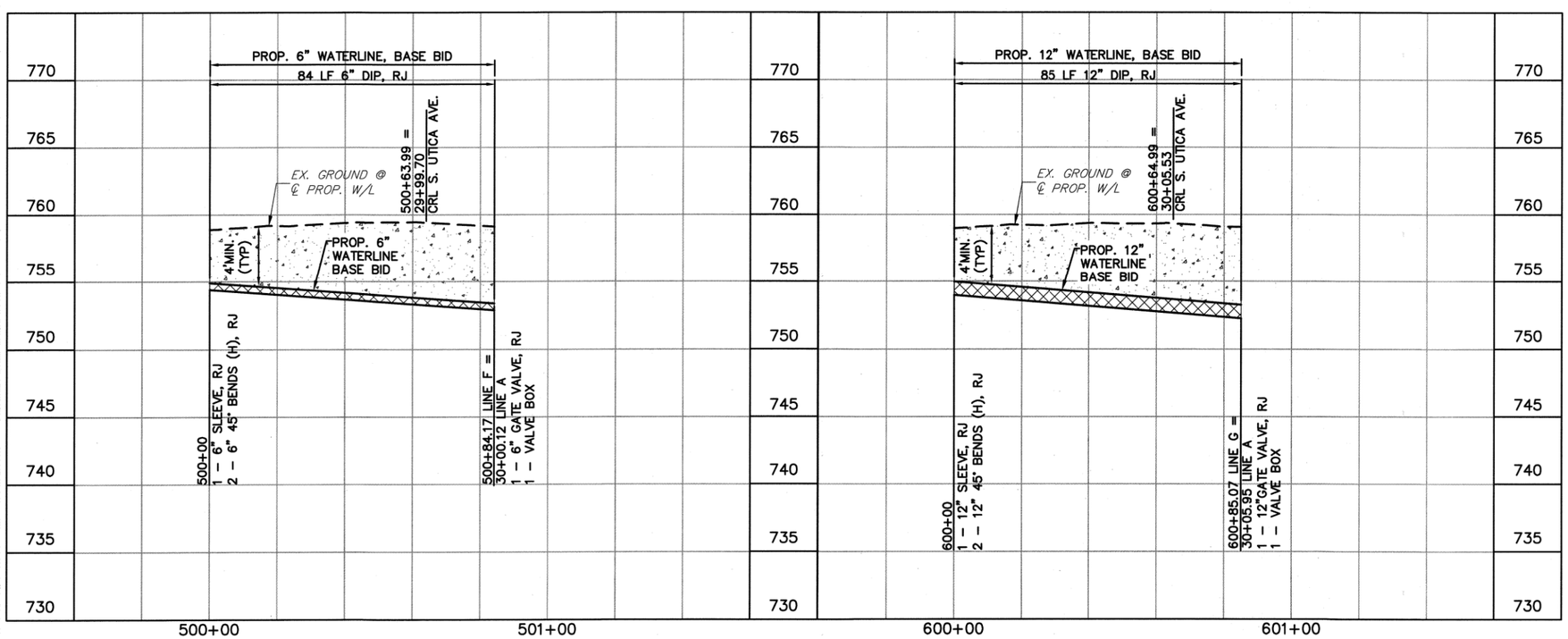
1 inch = 20 ft. (HORIZ.)
20 0 20 40
5 0 5 10
1 inch = 5 ft. (VERT)

SERVICE CONNECTIONS

ZERO (0) SHORT SERVICE CONNECTIONS THIS SHEET
ZERO (0) LONG SERVICE CONNECTIONS THIS SHEET

LEGEND

- PAVEMENT, REMOVE AND REPLACE BASE BID
- PAVEMENT, REMOVE AND REPLACE ADD ALTERNATE
- PROPOSED DIP WATER LINE
- AGGREGATE BASE
- DIP RESTRAINED JOINT
- RJ — RESTRAINED JOINT



LICENSED PROFESSIONAL ENGINEER
Daniel E. Polasek
24920
OKLAHOMA
9/12/2024

BASE BID

TMUA–W 16–33 & TMUA–W 16–36

WATERLINE "F" & "G"
WATERLINE REHABILITATION PLAN (9 OF 10)

PROJECT NO. 144107–W, 144107–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE.
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

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

REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		10/2024	
HORIZONTAL: 1"=20'	LEAD ENGR.	CEJ	1/2025	
VERTICAL:	FIELD MGR.		6/25	
1"=5'	RECOMMENDED: DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE: JULY 2024
ATLAS PAGE NO: 3				SHEET 46 OF 77 SHEETS

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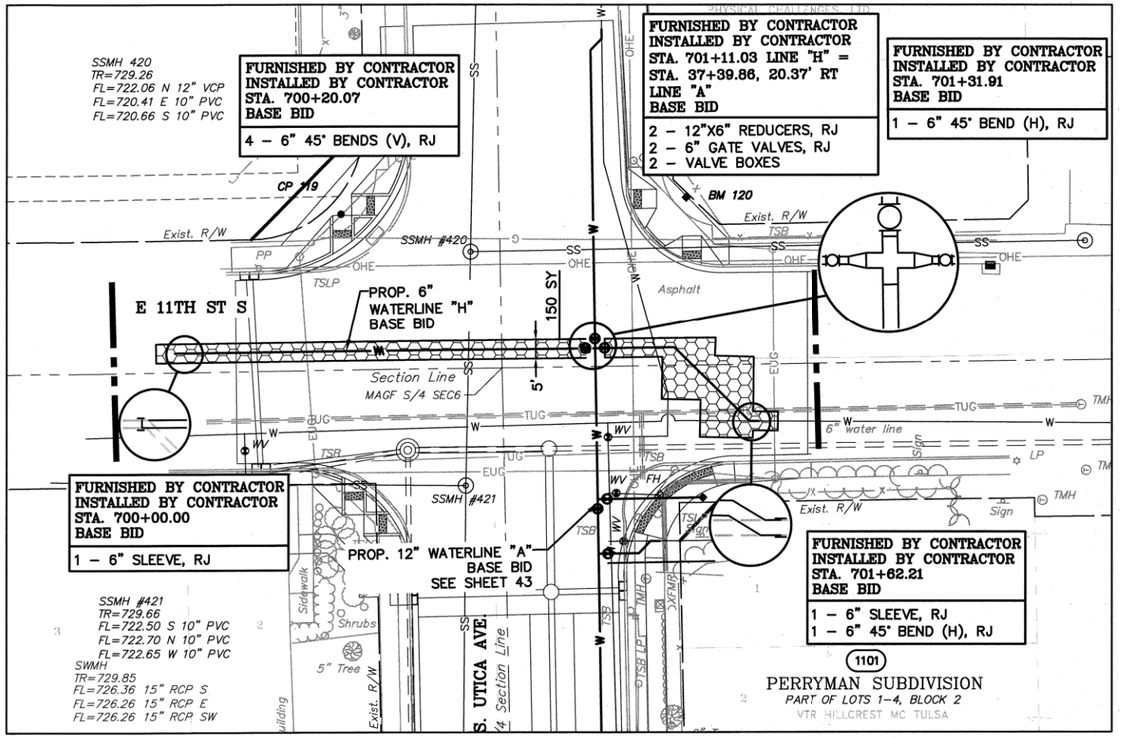
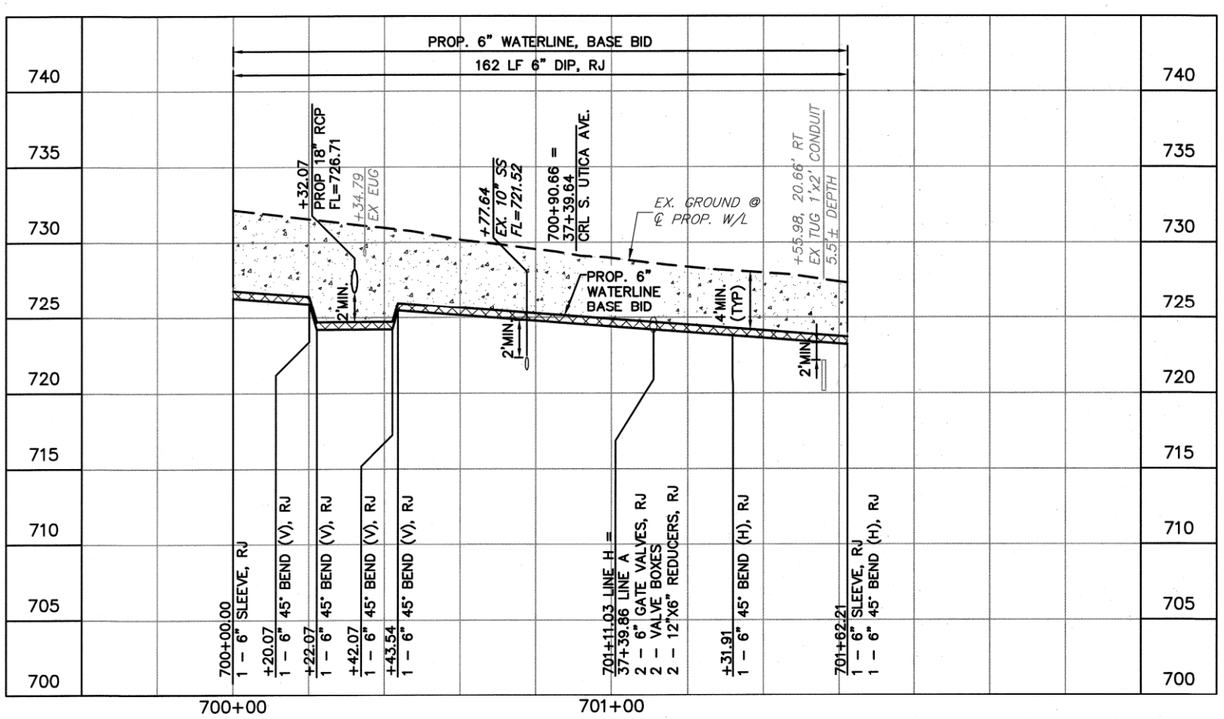


WATERLINE "H"



Bench Mark #120

MAG SET IN
ASPHALT W/ SHINER
N=424166.28
E=2568692.37
ELEV. 728.04

1 inch = 20 ft. (HORIZ.)
20 0 20 40
5 0 5 10
1 inch = 5 ft. (VERT)

CONTROL POINTS

PNT. No.	Northing	Easting	Elevation	Description
119	424161.85	2568601.21	730.17	IPC SET TLS CONTROL

SERVICE CONNECTIONS

ZERO (0) SHORT SERVICE CONNECTIONS THIS SHEET
ZERO (0) LONG SERVICE CONNECTIONS THIS SHEET

LEGEND

- PAVEMENT, REMOVE AND REPLACE BASE BID
- PAVEMENT, REMOVE AND REPLACE ADD ALTERNATE
- PROPOSED DIP WATER LINE
- AGGREGATE BASE
- DIP RESTRAINED JOINT
- RJ RESTRAINED JOINT

LICENSED PROFESSIONAL ENGINEER Daniel E. Polasek 24920 OKLAHOMA
9/12/2024

BASE BID

TMUA–W 16–33 & TMUA–W 16–36

WATERLINE "H"
WATERLINE REHABILITATION PLAN (10 OF 10)

PROJECT NO. 144107–W, 144107–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE.
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

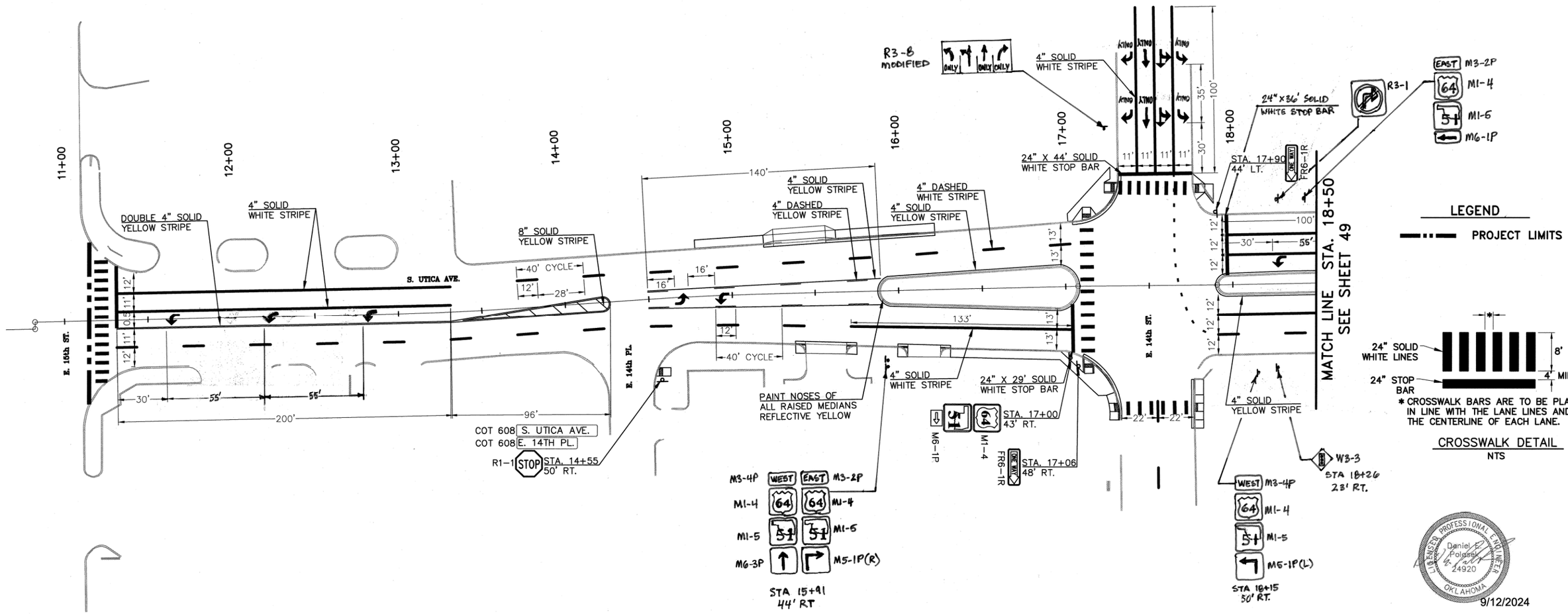
REVISION	BY	DATE

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		10/2024
HORIZONTAL: 1"=20'	LEAD ENGR.	CEW	1/2025
	FIELD MGR.		6/25
VERTICAL: 1"=5'	RECOMMENDED: DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING:
ATLAS PAGE NO: 3
DATE: JULY 2024
SHEET 47 OF 77 SHEETS

X:\Projects\705-COT Utica 11th to 15th, 11th St. Intersection\DWG\Sheets\705-WR02.dwg, 240813 - 2:26 PM, DEP



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

STRIPING PLAN (1 OF 4)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

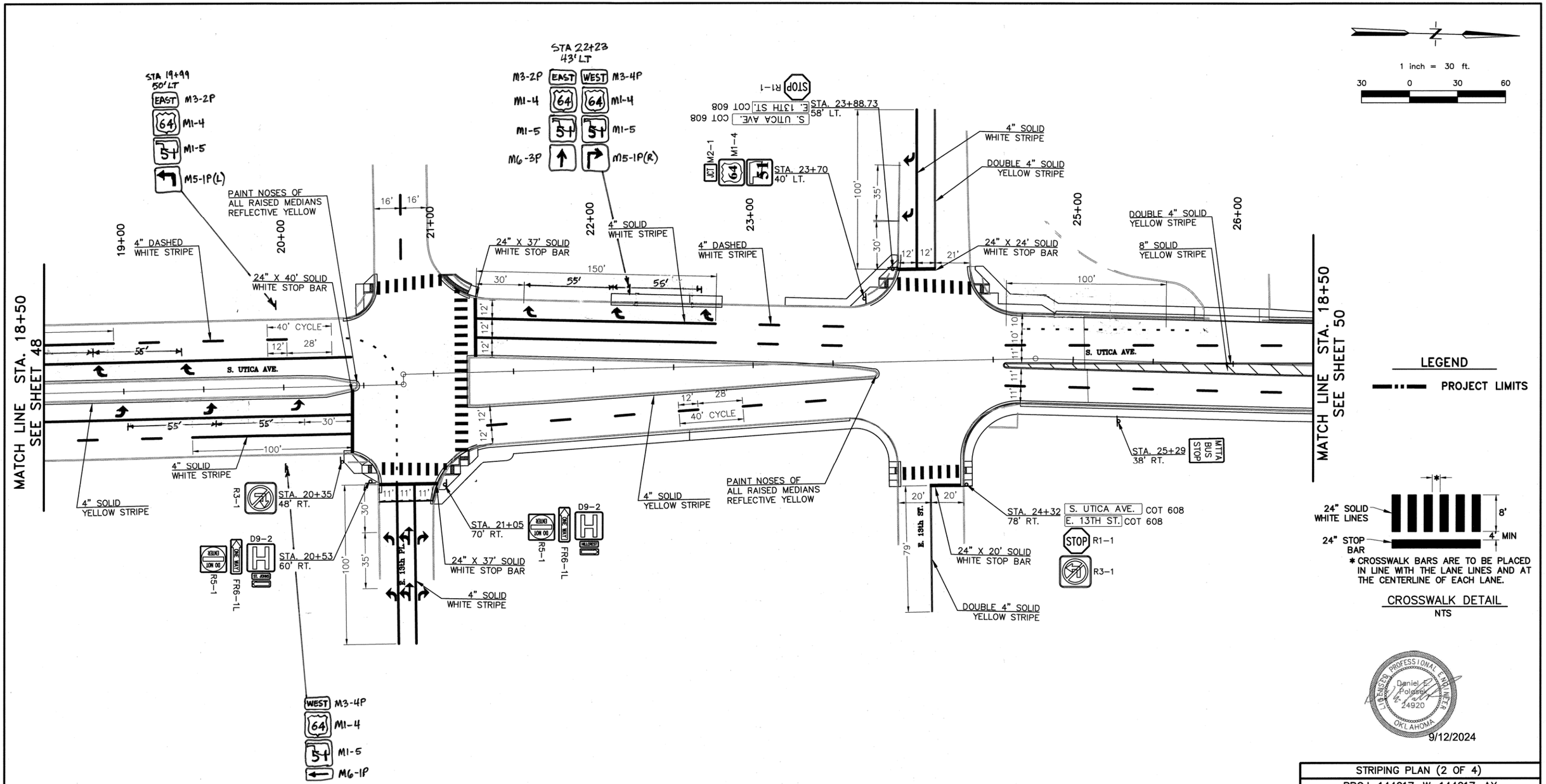
CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: 1"=30'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		10/2024	
HORIZONTAL: NA	LEAD ENGR.	MVS	8/25	
	FIELD MGR.		6/25	
VERTICAL: NA	RECOMMENDED: DESIGN MANAGER		8·25	CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 48 OF 77 SHEETS

X:\Projects\705-COT Utica 11th to 15th, 11th St. Intersection\DWG\Sheets\705-ST01.dwg, 240813 - 2:26 PM, DEP



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STRIPING PLAN (2 OF 4)

PROJ. 144017–W, 144017–AX

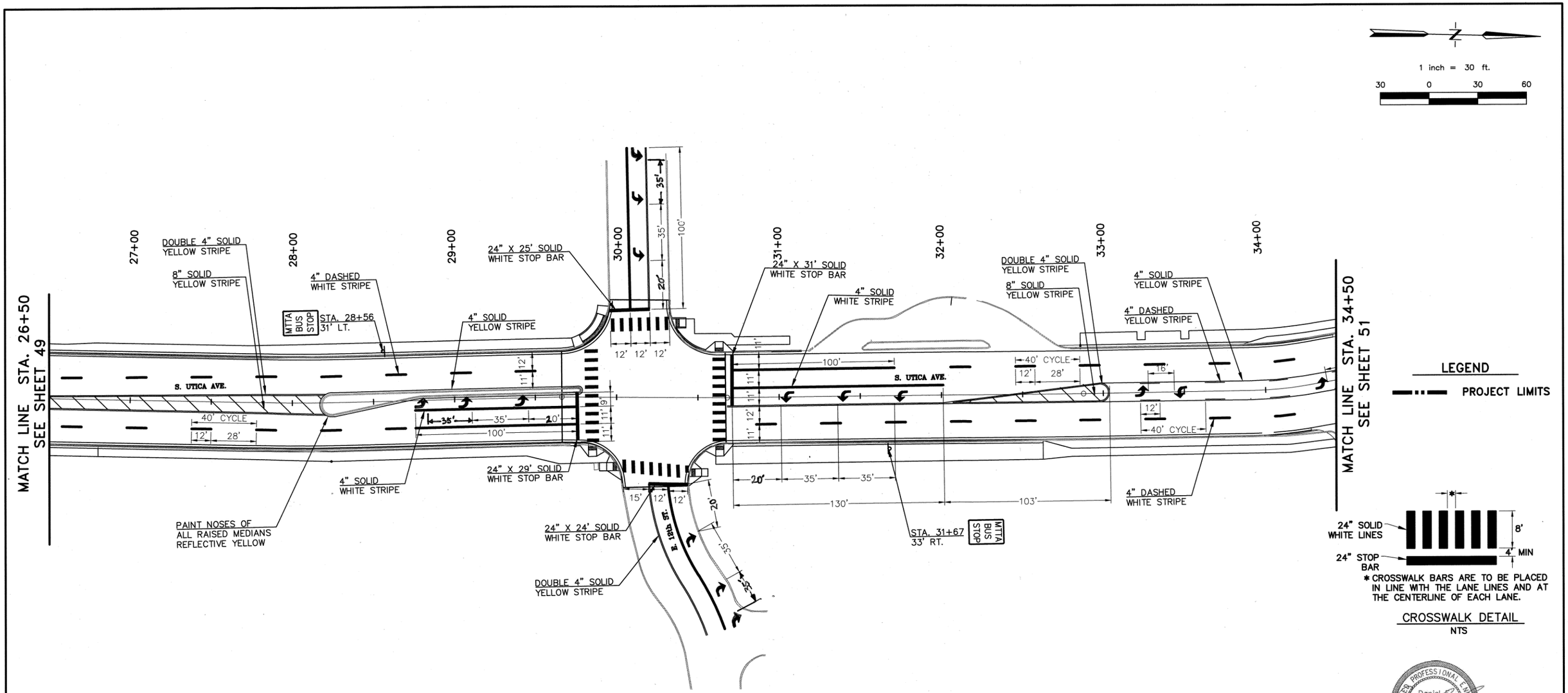
ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: 1"=30'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		10/2024	
HORIZONTAL: NA	LEAD ENGR.	MWS	3/2025	
	FIELD MGR.		6/25	
VERTICAL: NA	RECOMMENDED: DESIGN MANAGER		8-25	CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 49 OF 77 SHEETS



LEGEND

PROJECT LIMITS

CROSSWALK DETAIL
NTS

LICENSED PROFESSIONAL ENGINEER
Daniel E. Polgar
24920
OKLAHOMA
9/12/2024

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

REVISION	BY	DATE

STRIPING PLAN (3 OF 4)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

PLAN SCALE: 1"=30'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE HORIZONTAL: NA VERTICAL: NA	PROJ. MGR.		10/2024	
	LEAD ENGR.	MVS	3/2025	
	FIELD MGR.		3/25	
	RECOMMENDED: DESIGN MANAGER	MVS	3-25	CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 50 OF 77 SHEETS

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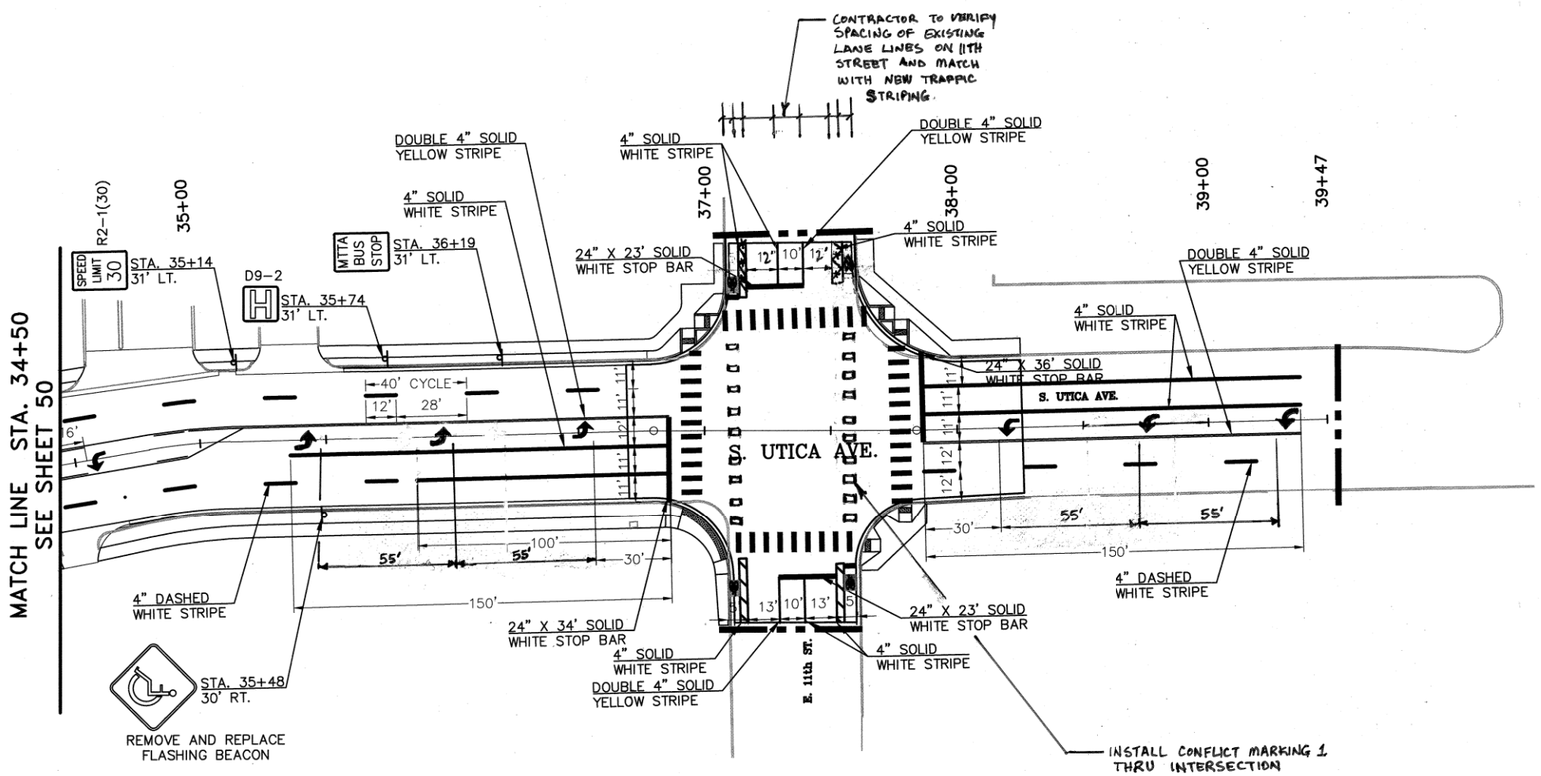
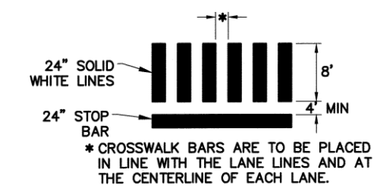


1 inch = 30 ft.

30 0 30 60

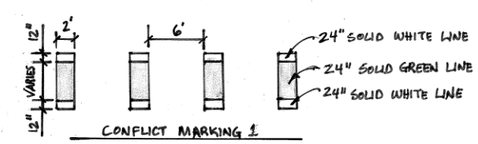
LEGEND

PROJECT LIMITS



* CROSSWALK BARS ARE TO BE PLACED IN LINE WITH THE LANE LINES AND AT THE CENTERLINE OF EACH LANE.

CROSSWALK DETAIL
NTS



CONFLICT MARKING 1

9/12/2024

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

STRIPING PLAN (4 OF 4)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: 1"=30'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		10/2024
HORIZONTAL: NA	LEAD ENGR.	NVS	3/2025
	FIELD MGR.		6/25
VERTICAL: NA	RECOMMENDED: DESIGN MANAGER	HPS	8-25

APPROVED:
CITY ENGINEER

FILE: DRAWING:
ATLAS PAGE NO: 3

DATE JULY 2024
SHEET 51 OF 77 SHEETS

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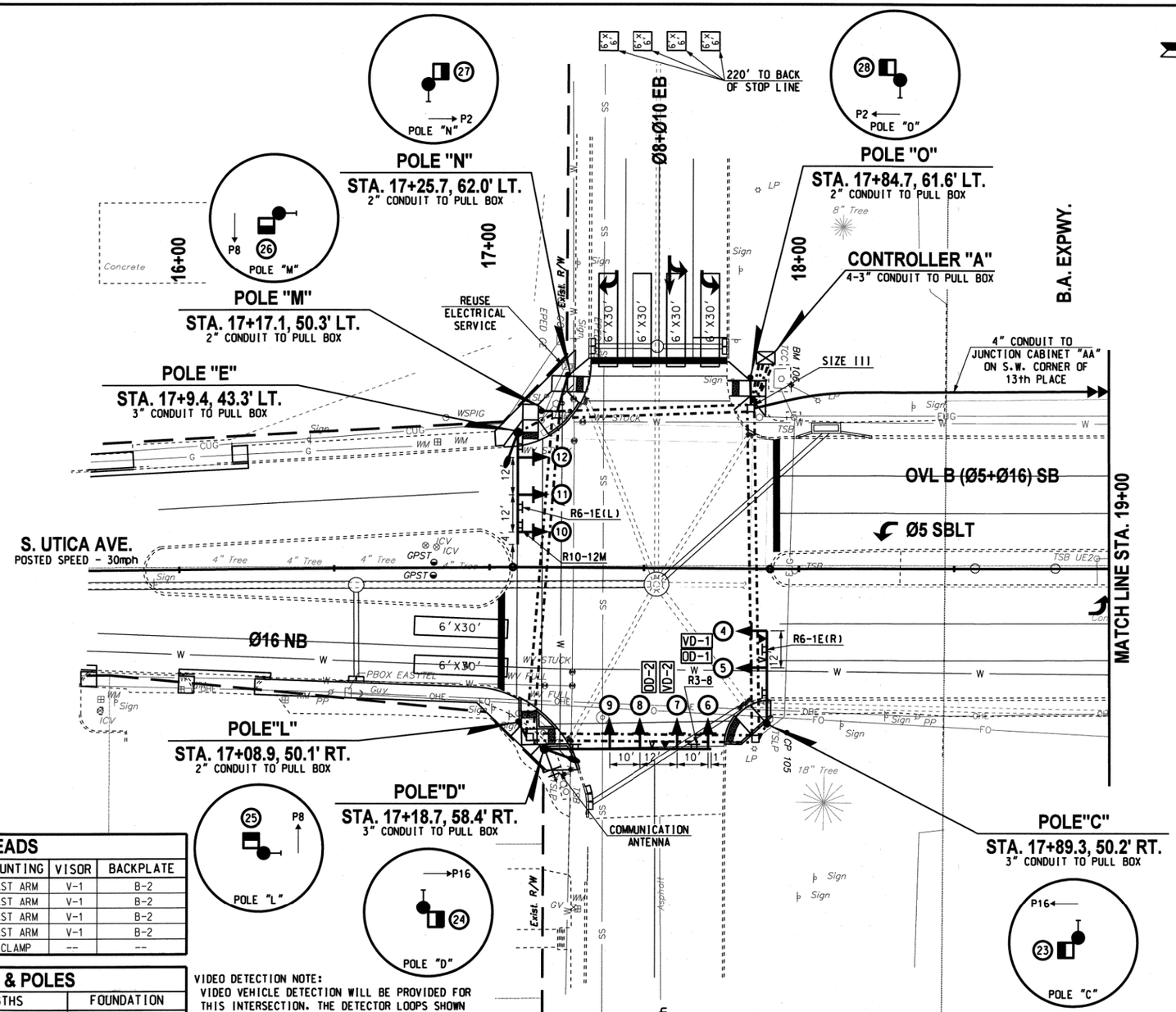


LEGEND

- 1½" ELECT. CONDUIT
- 2" ELECT. CONDUIT
- 3" ELECT. CONDUIT
- EXISTING CONDUIT
- SIZE II PULL BOX (UNLESS OTHERWISE NOTED)
- EXISTING PULL BOX
- SERVICE POLE
- CONTROLLER
- PEDESTRIAN PUSH BUTTON
- WALK AND DON'T WALK
- SIGNAL HEAD WITH BACKPLATE
- LUMINAIRE WITH MAST ARM
- OPTICAL DETECTOR
- VIDEO DETECTION
- STREET NAME SIGN
- MAST ARM WITH POLE
- SIGNAL HEAD NO.
- MAST ARM & POLE WITH ABOVE SYMBOLS
- DETECTOR LOOP/ VIDEO DETECTION AREA

0 20' 40'

TABLE # 1 SIGNAL HEADS

SIGNAL HEAD NUMBER	NUMBER AND TYPE	MOUNTING	VISOR	BACKPLATE
10	1 - ONEWAY (S-13)L	MAST ARM	V-1	B-2
7	1 - ONEWAY (S-16)L	MAST ARM	V-1	B-2
6	1 - ONEWAY #54L	MAST ARM	V-1	B-2
4,5,8,9,11,12	6 - ONEWAY #36	MAST ARM	V-1	B-2
23,24,25,26,27,28	6 - ONEWAY #33	CLAMP	--	--

TABLE # 2 MAST ARMS & POLES

LOCATION	MOUNTING HT.	MAST ARMS LENGTHS	FOUNDATION
C	20'	2B30	S-30/36
D	30'	4Y54-E	S-54/58
E	30'	2B36-E	S-30/36
L-O	10'	4 - PEDESTAL POLE	F-1

TABLE # 3 ELECTRICAL CABLE

ELECTRICAL CABLE TO CONTROLLER "A" LOCATION

C-20C#14/#12 THHN GREEN/#6 THHN GREEN/VIDEO/OPTICOM/7C#14
D-20C#14/#12 THHN GREEN/#6 THHN GREEN/VIDEO/OPTICOM/7C#14/2C#12UF
E-20C#14/#12 THHN GREEN/#6 THHN GREEN/VIDEO/OPTICOM/2C#12UF
L-#12 THHN GREEN/#6 THHN GREEN/7C#14/2C#14
M-#12 THHN GREEN/#6 THHN GREEN/7C#14/2C#14
N-#12 THHN GREEN/#6 THHN GREEN/7C#14/2C#14
O-#12 THHN GREEN/#6 THHN GREEN/7C#14/2C#14

VIDEO DETECTION NOTE:
VIDEO VEHICLE DETECTION WILL BE PROVIDED FOR THIS INTERSECTION. THE DETECTOR LOOPS SHOWN ON THE PAVEMENT ARE SHOWN ONLY TO DEPICT THE AREAS OF DETECTION FOR THE VIDEO DETECTION UNITS ALONG WITH THE PHASES THAT EACH VIDEO DETECTOR UNIT WILL CALL.

PUSH BUTTON NOTE:
THE POLE ENLARGEMENT DETAIL IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE PLACEMENT OF THE PEDESTRIAN PUSH BUTTONS AND SIGNAL HEADS SHALL BE INSTALLED ON THE POLES SUCH THAT THE SIGNAL HEADS ARE VISIBLE FROM THE CROSSWALK AND THE PUSH BUTTONS TO BE INSTALLED 10 INCHES MAXIMUM FROM THE EDGE OF THE LEVEL. ALL-WEATHER SURFACE (SIDEWALK) AND 10 FEET MAXIMUM FROM THE FACE OF THE CURB AT THE RAMP. THE PUSH BUTTONS ARE TO BE MOUNTED ON THE SIDE OF THE POLE CLOSEST TO THE CORRESPONDING CROSSWALK.

ESTHER M. SHAW-SMITH, P.E. # 23711
C.A. # 1160, RENEWAL 06-30-25
9-6-24
DATE

Traffic Engineering Consultants, Inc.
2770 Washington Dr., Suite 100 - Norman, OK 73069
Ph: 405-720-7721, Web: www.tecusa.com

REGISTERED PROFESSIONAL ENGINEER ESTHER M. SHAW-SMITH 9-6-24 23711 OKLAHOMA

BEFORE YOU DIG CALL OKIE 1-800-522-OKIE 811

PROJECT NO. 144017 w and ax

SIGNAL PLAN

E. 14th ST. S. & S. UTICA AVE.

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

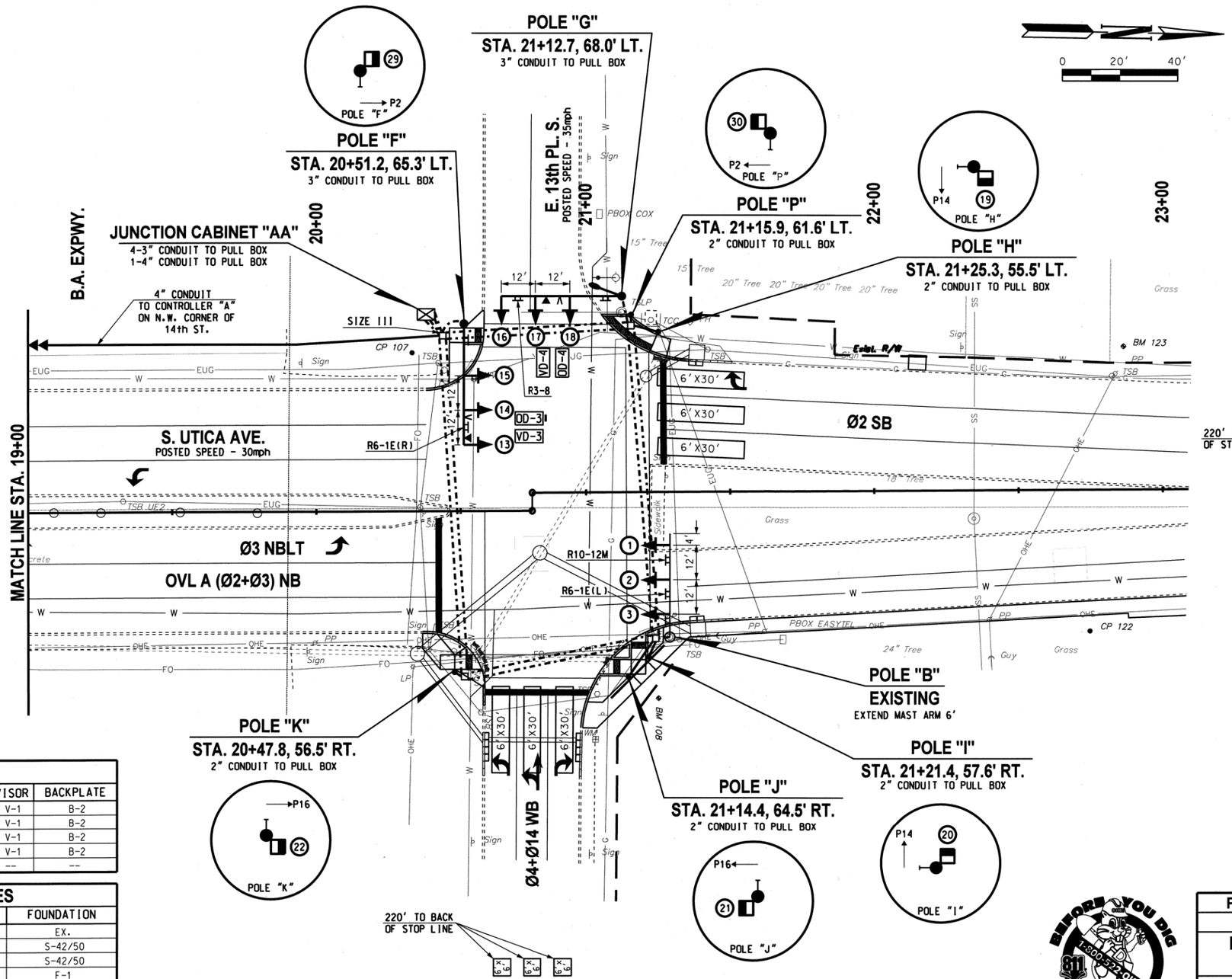
PLANS AND ESTIMATES PREPARED BY: TEC A CLEAR VISION FOCUS

TRAFFIC ENGINEERING CONSULTANTS
8831 S. 66TH E. AVE., STE 100
TULSA, OK. 74133
PHONE: 918-481-8484 FAX: 918-481-3163

REVISION	BY	DATE

PLAN SCALE: 1" =	DRAWN	CAL	09/06/24	APPROVED:
	DESIGNED	EMS	09/06/24	
	SURVEY			
PROFILE SCALE:	PROJ. MGR.			
HORIZONTAL: 1" =	LEAD ENGR.	MS	8/25	
	FIELD MGR.		6/25	
VERTICAL 1" =	RECOMMENDED: DESIGN MANAGER		8-25	CITY ENGINEER
FILE:	DRAWING:			DATE: 8/22/2025
ATLAS PAGE NO:				SHEET 52 OF 77 SHEETS

09/06/24 G:\0IProjects\T0-804 13th Pl/14th St & Utica SignalMod - Tulsa (See T0-826 & T0-6220)\CAD\14th SIG.dgn



LEGEND

- 1½" ELECT. CONDUIT
- 2" ELECT. CONDUIT
- 3" ELECT. CONDUIT
- EXISTING CONDUIT
- SIZE II PULL BOX (UNLESS OTHERWISE NOTED)
- EXISTING PULL BOX
- SERVICE POLE
- CONTROLLER
- PEDESTRIAN PUSH BUTTON
- WALK AND DON'T WALK
- SIGNAL HEAD WITH BACKPLATE
- LUMINAIRE WITH MAST ARM
- OPTICAL DETECTOR
- VIDEO DETECTION
- STREET NAME SIGN
- MAST ARM WITH POLE
- SIGNAL HEAD NO.
- MAST ARM & POLE WITH ABOVE SYMBOLS
- DETECTOR LOOP/ VIDEO DETECTION AREA

VIDEO DETECTION NOTE:
VIDEO VEHICLE DETECTION WILL BE PROVIDED FOR THIS INTERSECTION. THE DETECTOR LOOPS SHOWN ON THE PAVEMENT ARE SHOWN ONLY TO DEPICT THE AREAS OF DETECTION FOR THE VIDEO DETECTION UNITS ALONG WITH THE PHASES THAT EACH VIDEO DETECTOR UNIT WILL CALL.

TABLE # 1 SIGNAL HEADS

SIGNAL HEAD NUMBER	NUMBER AND TYPE	MOUNTING	VISOR	BACKPLATE
1	1 - ONEWAY (S-13)L	MAST ARM	V-1	B-2
17	1 - ONEWAY (S-16)L	MAST ARM	V-1	B-2
16	1 - ONEWAY #54L	MAST ARM	V-1	B-2
2,3,13,14,15,18	6 - ONEWAY #36	MAST ARM	V-1	B-2
19,20,21,22,29,30	6 - ONEWAY #33	CLAMP	--	--

TABLE # 2 MAST ARMS & POLES

LOCATION	MOUNTING HT.	MAST ARMS LENGTHS	FOUNDATION
B	EX.	2B36	EX.
F	20'	3G42	S-42/50
G	30'	3G42-E	S-42/50
H,I,J,K,P	10'	5 - PEDESTAL POLE	F-1

TABLE # 3 ELECTRICAL CABLE

ELECTRICAL CABLE TO CONTROLLER "A" LOCATION
B - 20C#14/#12 THHN GREEN/#6 THHN GREEN/VIDEO/OPTICOM
F - 20C#14/#12 THHN GREEN/#6 THHN GREEN/VIDEO/OPTICOM/7C#14
G - 20C#14/#12 THHN GREEN/#6 THHN GREEN/VIDEO/OPTICOM/2C#12UF
H - #12 THHN GREEN/#6 THHN GREEN/7C#14/2C#14
I - #12 THHN GREEN/#6 THHN GREEN/7C#14/2C#14
J - #12 THHN GREEN/#6 THHN GREEN/7C#14/2C#14
K - #12 THHN GREEN/#6 THHN GREEN/7C#14/2C#14
P - #12 THHN GREEN/#6 THHN GREEN/7C#14/2C#14

PUSH BUTTON NOTE:
THE POLE ENLARGEMENT DETAIL IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE PLACEMENT OF THE PEDESTRIAN PUSH BUTTONS AND SIGNAL HEADS SHALL BE INSTALLED ON THE POLES SUCH THAT THE SIGNAL HEADS ARE VISIBLE FROM THE CROSSWALK AND THE PUSH BUTTONS TO BE INSTALLED 10 INCHES MAXIMUM FROM THE EDGE OF THE LEVEL, ALL-WEATHER SURFACE (SIDEWALK) AND 10 FEET MAXIMUM FROM THE FACE OF THE CURB AT THE RAMP. THE PUSH BUTTONS ARE TO BE MOUNTED ON THE SIDE OF THE POLE CLOSEST TO THE CORRESPONDING CROSSWALK.

ESTHER M. SHAW-SMITH, P.E. # 23711
C.A. # 1160, RENEWAL 06-30-25
9-6-24
DATE

Traffic Engineering Consultants, Inc.
2770 Washington Dr., Suite 100 - Norman, OK 73069
Ph: 405-720-7721, Web: www.tecusa.com

REGISTERED PROFESSIONAL ENGINEER ESTHER M. SHAW-SMITH 9-6-24 23711 OKLAHOMA

BEFORE YOU DIG CALL OKIE 1-800-522-OKIE 811

REVISION	BY	DATE

PROJECT NO. 144017 w and ax
SIGNAL PLAN
E. 13th PL. S. & S. UTICA AVE.

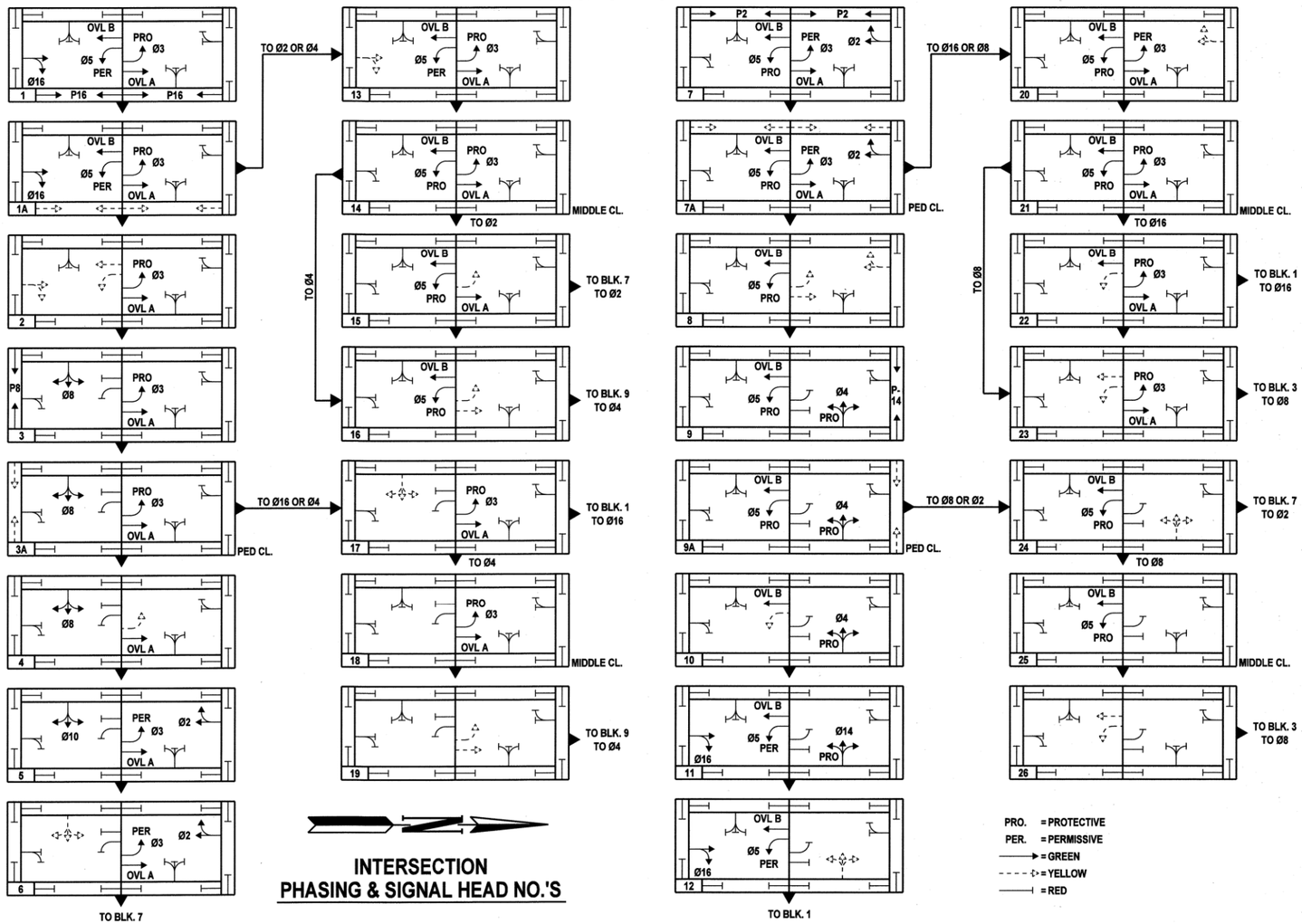
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY: TEC A CLEAR DIRECTION
TRAFFIC ENGINEERING CONSULTANTS
6931 S. 66TH E. AVE., STE 100
TULSA, OK. 74133
PHONE: 918-401-8484 FAX: 918-401-3163

PLAN SCALE: 1" =	DRAWN	CAL	09/06/24	APPROVED:
	DESIGNED	EMS	09/06/24	
	SURVEY			
PROFILE SCALE:	PROJ. MGR.			
HORIZONTAL: 1" =	LEAD ENGR.	MWS	1/25	
	FIELD MGR.		6/25	
VERTICAL 1" =	RECOMMENDED: HAJ 8-25 DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE: 8/22/2025
ATLAS PAGE NO:				SHEET 53 OF 77 SHEETS

09/06/24 G:\0Projects\T0-804 (3th Pl&4th St & Utica SignalMod - Tulsa (See T0-826 & T0-6220)\CAD\13th SIG.dgn

PHASING DIAGRAM

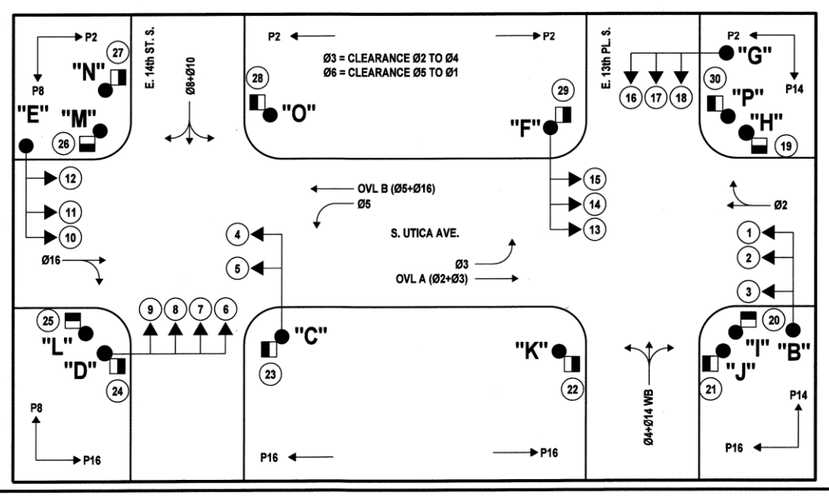


INTERSECTION PHASING & SIGNAL HEAD NO.'S

PRO. = PROTECTIVE
PER. = PERMISSIVE
→ = GREEN
- - - → = YELLOW
—| = RED

SEQUENCE CHART

DIRECTION	BLOCK NO.	Ø3	OVL A	Ø16	Ø8+Ø10	Ø8+Ø10	Ø8+Ø10	Ø5	OVL B	Ø2	Ø4+Ø14	Ø4+Ø14	Ø4+Ø14	P14	P16	P8	P2
		PHASE															
		SIGNAL HEAD NO.															
		1	2,3	4,5	6	7	8,9	10	11,12	13-15	16	17	18	19,20	21-24	25,26	27-30
Ø3, Ø5, Ø16, OVL A, OVL B, P1 ROW	1	←G	G	G	←R	R	R	↖G	G	R	←R	R	R	DW	W	DW	DW
Ø3, Ø5, Ø16, OVL A, OVL B ROW & P1 CL	1A	←G	G	G	←R	R	R	↖G	G	R	←R	R	R	DW	FDW	DW	DW
Ø3, OVL A ROW & Ø5, Ø16, OVL B CL	2	←G	G	Y	←R	R	R	←Y	Y	R	←R	R	R	DW	DW	DW	DW
Ø3, Ø8, OVL A, P2 ROW	3	←G	G	R	←G	G / ←G	G	←R	R	R	←R	R	R	DW	DW	W	DW
Ø3, Ø8, OVL A ROW & P2 CL	3A	←G	G	R	←G	G / ←G	G	←R	R	R	←R	R	R	DW	DW	FDW	DW
Ø8, OVL A ROW & Ø3 CL	4	←Y	G	R	←G	G / ←G	G	←R	R	R	←R	R	R	DW	DW	DW	DW
Ø2, Ø3, Ø10, OVL A ROW	5	↖G	G	R	←G	G / ←G	G	←R	R	G	←R	R	R	DW	DW	DW	DW
Ø2, Ø3, OVL A ROW & Ø10 CL	6	↖G	G	R	←Y	Y	Y	←R	R	G	←R	R	R	DW	DW	DW	DW
Ø2, Ø3, Ø5, OVL A, OVL B, P4 ROW	7	↖G	G	R	←R	R	R	←G	G	G	←R	R	R	DW	DW	DW	W
Ø2, Ø3, Ø5, OVL A, OVL B ROW & P4 CL	7A	↖G	G	R	←R	R	R	←G	G	G	←R	R	R	DW	DW	DW	FDW
Ø5, OVL B ROW & Ø2, Ø3, OVL A CL	8	←Y	Y	R	←R	R	R	←G	G	Y	←R	R	R	DW	DW	DW	DW
Ø4, Ø5, OVL B, P5 ROW	9	←R	R	R	←R	R	R	←G	G	R	←G	G / ←G	G	W	DW	DW	DW
Ø4, Ø5, OVL B ROW & P5 CL	9A	←R	R	R	←R	R	R	←G	G	R	←G	G / ←G	G	FDW	DW	DW	DW
Ø4, OVL B ROW & Ø5 CL	10	←R	R	R	←R	R	R	←Y	G	R	←G	G / ←G	G	DW	DW	DW	DW
Ø5, Ø14, Ø16, OVL B ROW	11	←R	R	G	←R	R	R	↖G	G	R	←G	G / ←G	G	DW	DW	DW	DW
Ø5, Ø16, OVL B ROW & Ø14 CL	12	←R	R	G	←R	R	R	↖G	G	R	←Y	Y	Y	DW	DW	DW	DW
Ø3, Ø5, OVL A, OVL B ROW & Ø16 CL	13	←G	G	Y	←R	R	R	↖G	G	R	←R	R	R	DW	DW	DW	DW
Ø3, Ø5, OVL A, OVL B ROW	14	←G	G	R	←R	R	R	←G	G	R	←R	R	R	DW	DW	DW	DW
Ø5, OVL A, OVL B ROW & Ø3 CL	15	←Y	G	R	←R	R	R	←G	G	R	←R	R	R	DW	DW	DW	DW
Ø5, OVL B ROW & Ø3, OVL A CL	16	←Y	Y	R	←R	R	R	←G	G	R	←R	R	R	DW	DW	DW	DW
Ø3, OVL A ROW & Ø8 CL	17	←G	G	R	←Y	Y	Y	←R	R	R	←R	R	R	DW	DW	DW	DW
Ø3, OVL A ROW	18	←G	G	R	←R	R	R	←R	R	R	←R	R	R	DW	DW	DW	DW
Ø3, OVL A CL	19	←Y	Y	R	←R	R	R	←R	R	R	←R	R	R	DW	DW	DW	DW
Ø3, Ø5, OVL A, OVL B ROW, Ø2 CL	20	↖G	G	R	←R	R	R	←G	G	Y	←R	R	R	DW	DW	DW	DW
Ø3, Ø5, OVL A, OVL B ROW	21	←G	G	R	←R	R	R	←G	G	R	←R	R	R	DW	DW	DW	DW
Ø3, OVL A, OVL B ROW & Ø5 CL	22	←G	G	R	←R	R	R	←Y	G	R	←R	R	R	DW	DW	DW	DW
Ø3, OVL A ROW & Ø5, OVL B CL	23	←G	G	R	←R	R	R	←Y	Y	R	←R	R	R	DW	DW	DW	DW
Ø5, OVL B ROW & Ø4 CL	24	←R	R	R	←R	R	R	←G	G	R	←Y	Y	Y	DW	DW	DW	DW
Ø5, OVL B ROW	25	←R	R	R	←R	R	R	←G	G	R	←R	R	R	DW	DW	DW	DW
Ø5, OVL B CL	26	←R	R	R	←R	R	R	←Y	Y	R	←R	R	R	DW	DW	DW	DW
FLASHING OPERATION	--	FR	FR	FR	←FR	FR	FR	FR	FR	FR	←FR	FR	FR	--	--	--	--



ESTHER M. SHAW-SMITH, P.E. # 23711
C.A. # 1160, RENEWAL 06-30-25
9-6-24
DATE
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Ph: 405-720-7721, Web: www.tecusa.com

REGISTERED PROFESSIONAL ENGINEER ESTHER M. SHAW-SMITH 9-6-24 23711 OKLAHOMA

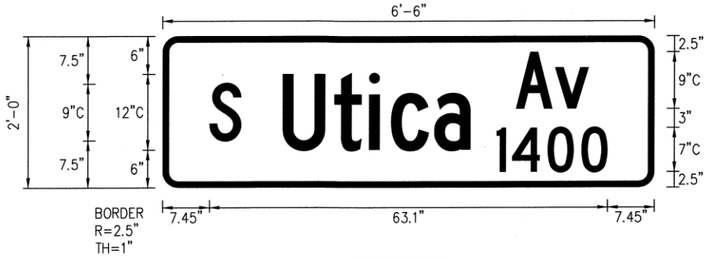
REVISION	BY	DATE

PROJECT NO. 144017 w and ax
SIGNAL DETAIL PLAN (1 of 2)
S. UTICA AVE. &
E. 13th PL. S./E. 14th ST. S.
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

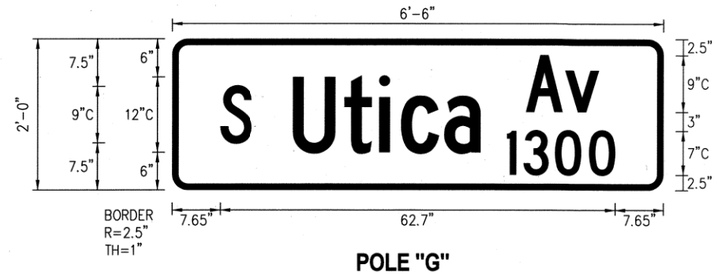
PLANS AND ESTIMATES PREPARED BY: TEC A CLEAR DIRECTION
TRAFFIC ENGINEERING CONSULTANTS
5831 S. 66TH E.AVE., STE 100
TULSA, OK. 74133
PHONE: 918-481-8484 FAX: 918-481-3163

PLAN SCALE: 1" = NA	DRAWN	CAL	09/06/24	APPROVED:
	DESIGNED	EMS	09/06/24	
	SURVEY			
PROFILE SCALE:	PROJ. MGR.			
HORIZONTAL: 1" = NA	LEAD ENGR.	MWS	1/25	
	FIELD MGR.		6/25	
VERTICAL 1" = NA	RECOMMENDED: DESIGN MANAGER	HAS	8-25	CITY ENGINEER
FILE:	DRAWING:			DATE: 8/22/2025
ATLAS PAGE NO:				SHEET 54 OF 77 SHEETS

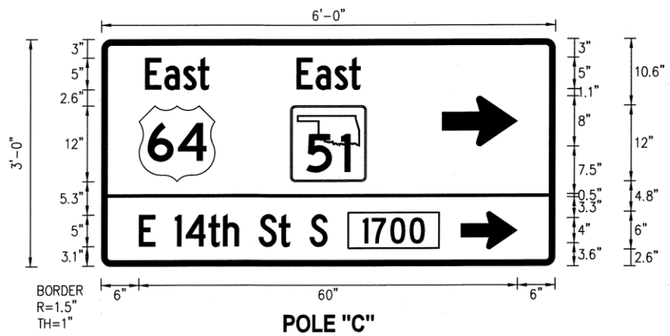
09/06/24 G:\DiProjects\T0-804 (3th Pl14th St & Utica SignalMod - Tulsa (See T0-826 & T0-6220)\CAD\DET 1194.dgn



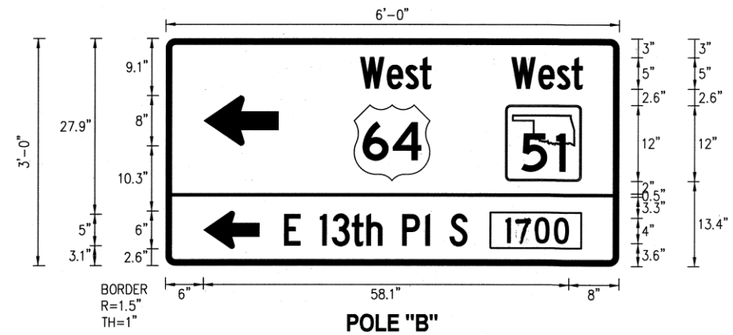
POLE "D"



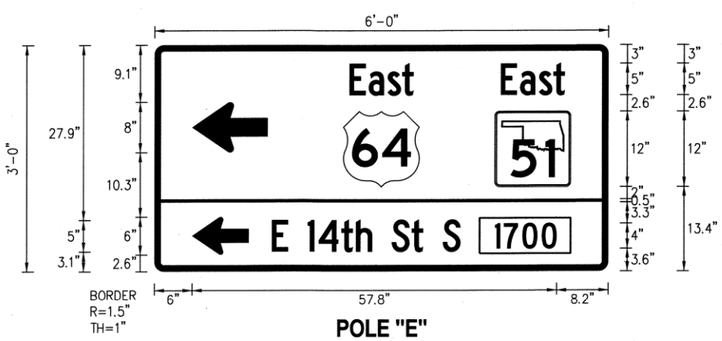
POLE "G"



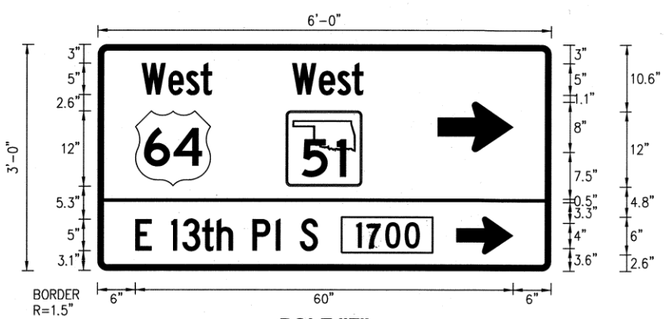
POLE "C"
SPECIAL SIGN NO. 1
18.00 SQ. FT.
LEGEND, SYMBOL & BORDER - WHITE REFLECTIVE
BACKGROUND - GREEN REFLECTIVE



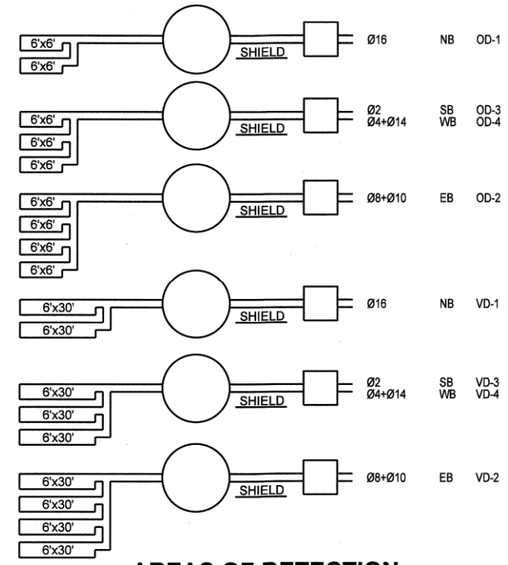
POLE "B"
SPECIAL SIGN NO. 2
18.00 SQ. FT.
LEGEND, SYMBOL & BORDER - WHITE REFLECTIVE
BACKGROUND - GREEN REFLECTIVE



POLE "E"
SPECIAL SIGN NO. 3
18.00 SQ. FT.
LEGEND, SYMBOL & BORDER - WHITE REFLECTIVE
BACKGROUND - GREEN REFLECTIVE



POLE "F"
SPECIAL SIGN NO. 4
18.00 SQ. FT.
LEGEND, SYMBOL & BORDER - WHITE REFLECTIVE
BACKGROUND - GREEN REFLECTIVE



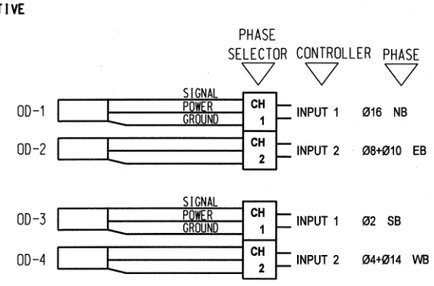
AREAS OF DETECTION

SUMMARY OF MAST ARM MOUNTED SIGNS

MESSAGE	POLE LOCATION	NO. OF SIGN	LENGTH	HEIGHT	SQ. FT. SIGN AREA	TOTAL AREA SQ. FT.
S Utica Av	D,G	2	78"	24"	13.00	26.00
SP. SIGN NO. 1	C	1	72"	24"	18.00	18.00
SP. SIGN NO. 2	B	1	72"	24"	18.00	18.00
SP. SIGN NO. 3	E	1	72"	24"	18.00	18.00
SP. SIGN NO. 4	F	1	72"	24"	18.00	18.00
R10-12	B,E	2	30"	36"	7.50	15.00
R3-8	D,G	2	36"	36"	9.00	18.00
R6-1E(L)	B,E	2	54"	18"	6.75	13.50
R6-1E(R)	C,F	2	54"	18"	6.75	13.50
					TOTAL	158.00

PRIMARY DIRECTION = 9" SERIES 'C' 2000 (WHITE)
NUMBER / NAME = 12" SERIES 'C' 2000 (WHITE)
NUMBER SUFFIX = 9" SERIES 'C' 2000 (WHITE)
SECONDARY DIRECTION = 12" SERIES 'C' 2000 (WHITE)
STREET TYPE = 9" SERIES 'C' 2000 (WHITE)
BLOCK NUMBER = 7" SERIES 'C' 2000 (WHITE)

SHEETING = DIAMOND GRADE VIP (WHITE)
OVERLAY = ELECTRONIC CUTTABLE OVERLAY FILM (GREEN)



PRE-EMPTOR DETAILS

ESTHER M. SHAW-SMITH, P.E. # 23711
C.A. # 1160, RENEWAL 06-30-25

9-6-24
DATE

Traffic Engineering Consultants, Inc.
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Ph: 405-720-7721, Web: www.tecusa.com

REGISTERED PROFESSIONAL ENGINEER
ESTHER M SHAW-SMITH
9-6-24
23711
OKLAHOMA

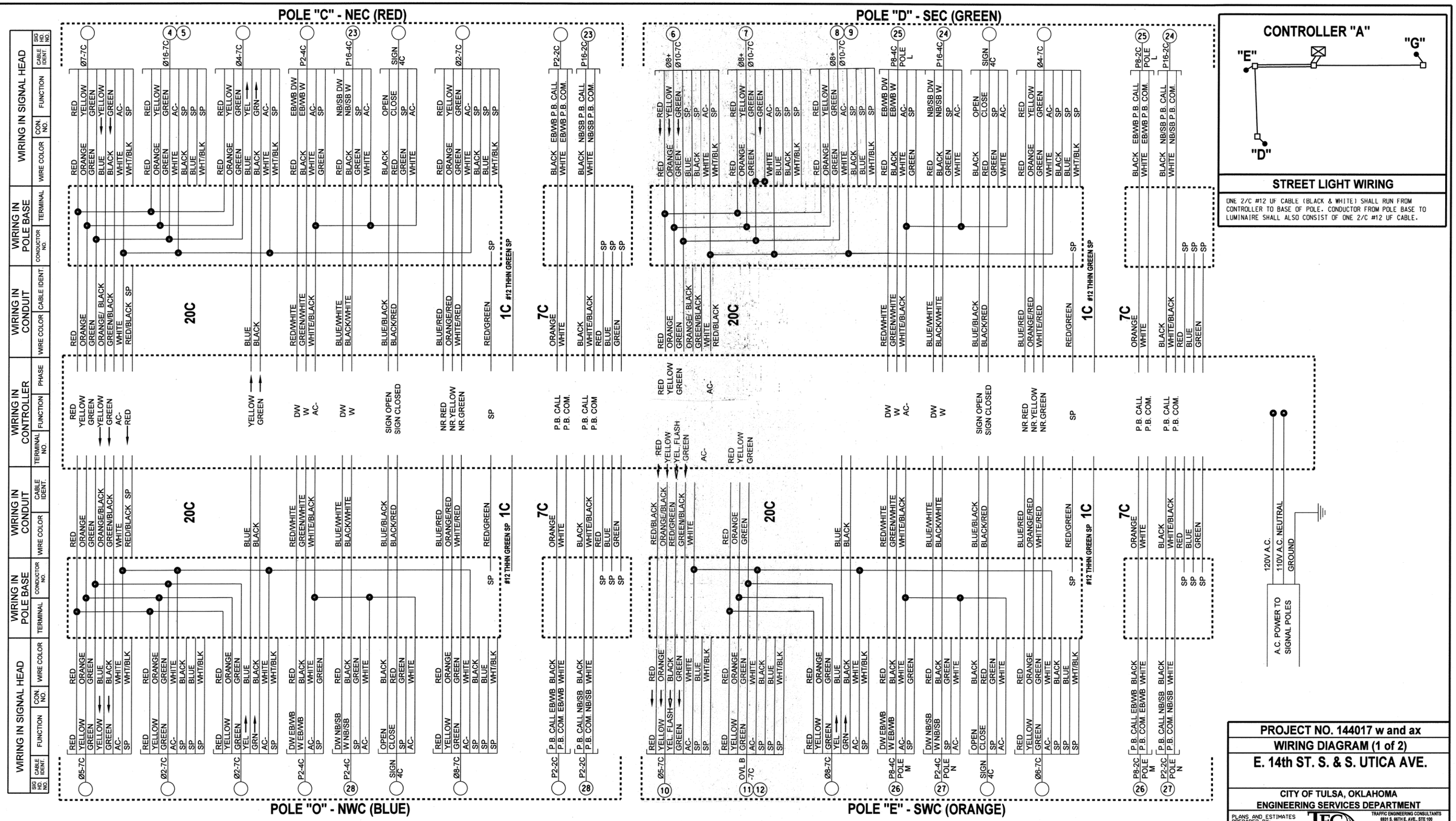
PROJECT NO. 144017 w and ax
SIGNAL DETAIL PLAN (2 of 2)
S UTICA AVE. &
E 13th PL. S. / E 14th ST. S.
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY: TEC
TRAFFIC ENGINEERING CONSULTANTS
6931 S. 66TH E AVE., STE 100
TULSA, OK. 74133
PHONE: 918-481-8484 FAX: 918-481-3163

REVISION	BY	DATE

PLAN SCALE: 1" = NA	DRAWN	CAL	09/06/24	APPROVED:
	DESIGNED	EMS	09/06/24	
	SURVEY			
PROFILE SCALE:	PROJ. MGR.	MWS	03/2025	
HORIZONTAL: 1" = NA	LEAD ENGR.			
	FIELD MGR.		6/06	
VERTICAL 1" = NA	RECOMMENDED: DESIGN MANAGER		8-01-25	CITY ENGINEER
FILE:	DRAWING:			DATE: 8/22/2025
ATLAS PAGE NO:				SHEET 55 OF 77 SHEETS

09/06/24 G:\0Projects\10-804 13th Pl14th St & Utica SignalMod - Tulsa (See T0-826 & T0-6220)\CAD\DET 2 (34.dgn



NOTE:
IF JUMPERS OR OTHER CONNECTIONS ARE MADE IN THE FIELD DURING INSTALLATION, AND ARE ACCEPTED BY THE ENGINEER THIS SHOULD BE SHOWN ON THE WIRING DIAGRAM FOR FUTURE REFERENCE.

ESTHER M. SHAW-SMITH, P.E. # 23711
C.A. # 1160, RENEWAL 06-30-25

9-6-24
DATE

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REGISTERED PROFESSIONAL ENGINEER — ESTHER M. SHAW-SMITH 9-6-24 23711 — OKLAHOMA

REVISION	BY	DATE

PROJECT NO. 144017 w and ax

WIRING DIAGRAM (1 of 2)

E. 14th ST. S. & S. UTICA AVE.

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY: TEC

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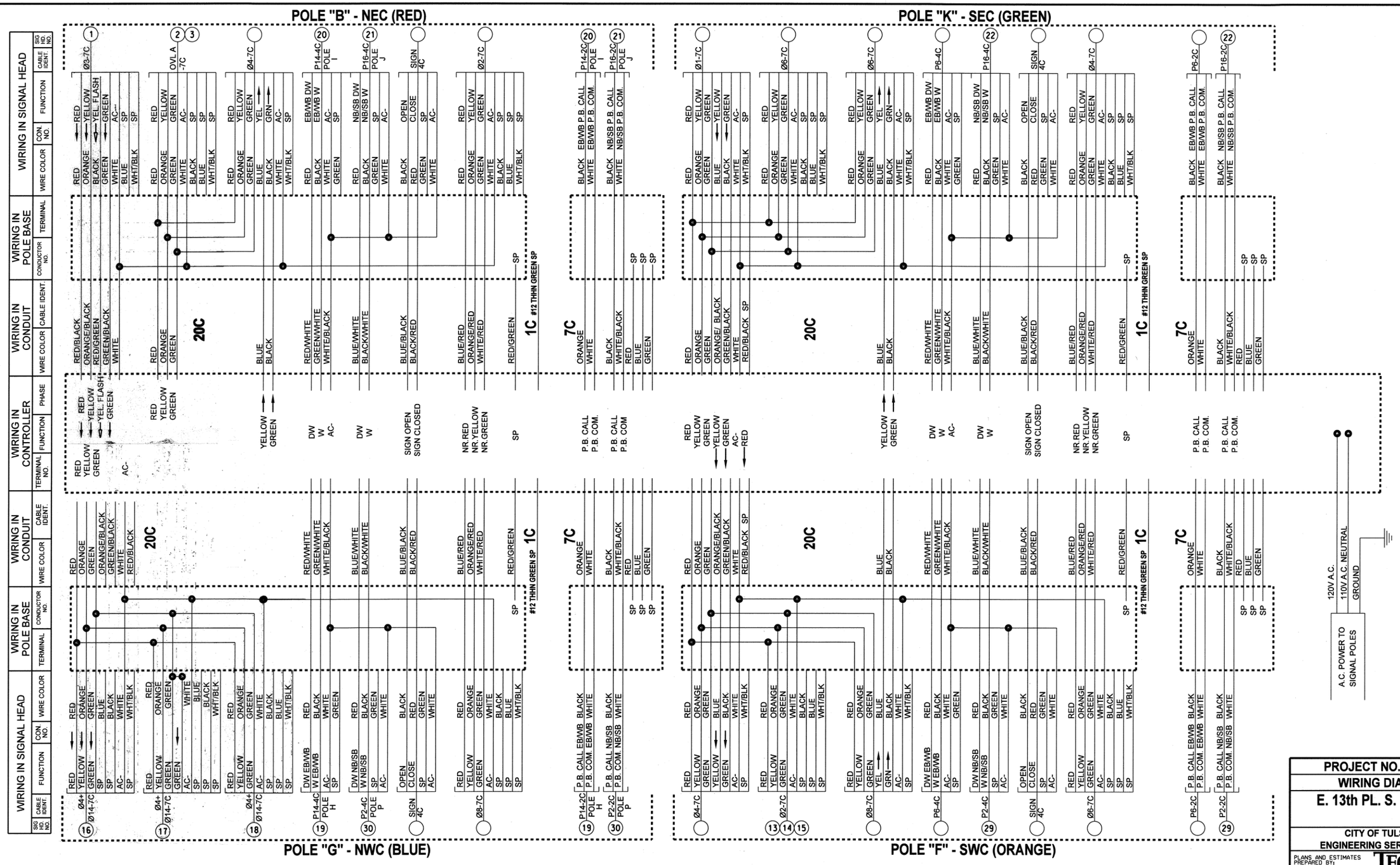
PLAN SCALE: 1" =	DRAWN	CAL	09/06/24	APPROVED:
	DESIGNED	EMS	09/06/24	
	SURVEY			
PROFILE SCALE:	PROJ. MGR.	NKS	08/20/25	
HORIZONTAL: 1" =	LEAD ENGR.			
	FIELD MGR.		6/25	
VERTICAL 1" =	RECOMMENDED: HAJ 8.25 DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE: 8/22/2025
ATLAS PAGE NO:				SHEET 56 OF 77 SHEETS

09/06/24 G:\0Projects\T0-804 (31th Pl14th St & Utica SignalMod - Tulsa (See T0-826 & T0-6220)\CAD\14th WIRE.dgn



NOTE:
IF JUMPERS OR OTHER CONNECTIONS ARE MADE IN THE FIELD DURING INSTALLATION, AND ARE ACCEPTED BY THE ENGINEER THIS SHOULD BE SHOWN ON THE WIRING DIAGRAM FOR FUTURE REFERENCE.

ESTHER M. SHAW-SMITH, P.E. # 23711
C.A. # 1160, RENEWAL 06-30-25

9-6-24
DATE

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Ph: 405-720-7721, Web: www.tecusa.com

REGISTERED PROFESSIONAL ENGINEER ESTHER M. SHAW-SMITH 9-6-24 23711 OKLAHOMA

REVISION	BY	DATE

PROJECT NO. 144017 w and ax

WIRING DIAGRAM (2 of 2)

E. 13th PL. S. & S. UTICA AVE.

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

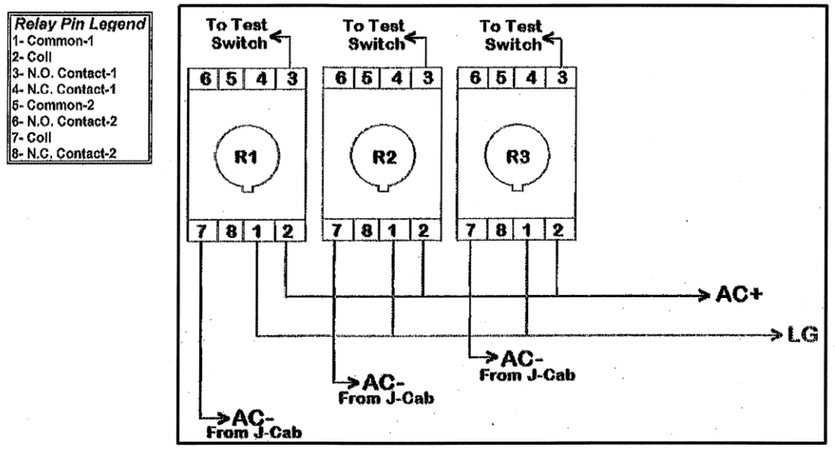
PLANS AND ESTIMATES PREPARED BY: TEC A CLIENT DIRECTED

TRAFFIC ENGINEERING CONSULTANTS
6931 S. 66TH E. AVE., STE 100
TULSA, OK. 74133
PHONE: 918-481-8484 FAX: 918-481-3163

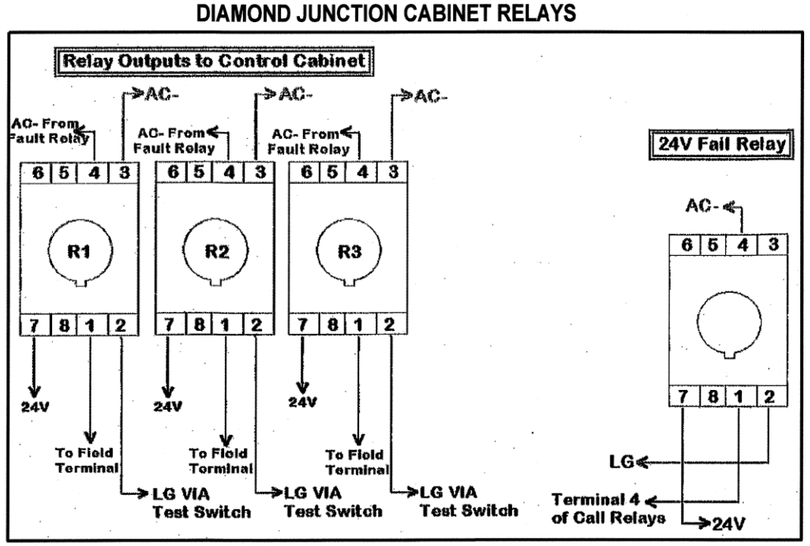
PLAN SCALE: 1" =	DRAWN	CAL	09/06/24	APPROVED:
	DESIGNED	EMS	09/06/24	
	SURVEY			
PROFILE SCALE:	PROJ. MGR.	MVS	08/2025	
HORIZONTAL: 1" =	LEAD ENGR.			
	FIELD MGR.		8/25	
VERTICAL 1" =	RECOMMENDED: HAS 8-25 DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE: 8/22/2025
ATLAS PAGE NO:				SHEET 57 OF 77 SHEETS

09/06/24 G:\0Projects\T0-804 (13th Pl\4th St & Utica SignalMod - Tulsa (See T0-826 & T0-6220)\CAD\13th WIRE.dgn

DIAMOND CONTROL CABINET RELAYS



DIAMOND JUNCTION CABINET RELAYS



Junction Cabinet

	VIP 3.2-1		VIP 3.2-2		VIEWCOMM		
	T-1	T-2	T-3	T-4	T-5	T-6	
SPARE							SPARE
F	OUT 3	OUT 1	OUT 3	OUT 1			F
W	OUT 4	OUT 2	OUT 4	OUT 2			W
D	V2+	V1+	V2+	V1+	T4-J	T2-J	D
E	V2-	V1-	V2-	V1-	T4-K	T2-K	E
J	T5-J	T6-D	T5-J	T5-D	T1+3-J		J
K	T5-K	T6-E	T5-K	T5-E	T1+3-K		K
L							L

Control Cabinet

	VIP 3.2-1		VIP 3.2-2		VIEWCOMM		
	T-2	T-3	T-6	T-7	T-8	T-9	
SPARE							SPARE
F	OUT 3	OUT 1	OUT 3	OUT 1			F
W	OUT 4	OUT 2	OUT 4	OUT 2			W
D	V2+	V1+	V2+	V1+	T7-J	T3-J	D
E	V2-	V1-	V2-	V1-	T7-K	T3-K	E
J	T8-J	T9-D	T8-J	T8-D	T2+6-J		J
K	T8-K	T9-E	T8-K	T8-E	T2+6-K		K
L							L

PROVIDED BY THE CITY OF TULSA.

ESTHER M. SHAW-SMITH, P.E. # 23711
C.A. # 1160, RENEWAL 06-30-25

9-6-24
DATE

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9-6-24
23711
OKLAHOMA

PROJECT NO. 144017 w and ax
CABINET MODIFICATION DETAIL
S. UTICA AVE. &
E. 13th PL. S. / E. 14th ST. S.
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
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TULSA, OK. 74133
PHONE: 918-481-9494 FAX: 918-481-3163

REVISION	BY	DATE

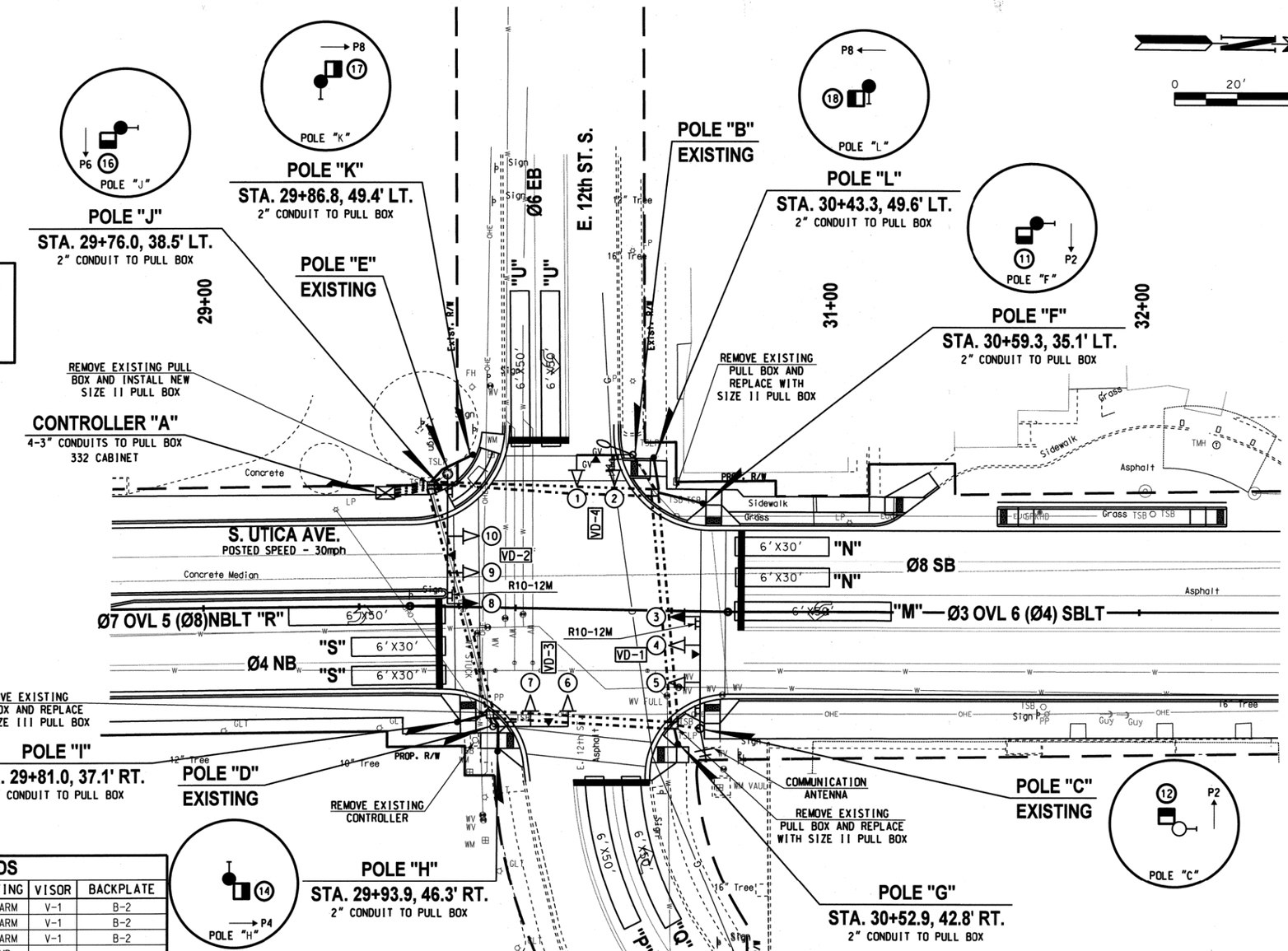
PLAN SCALE: 1" = NA	DRAWN	CAL	09/06/24
	DESIGNED	EMS	09/06/24
	SURVEY		
PROFILE SCALE:	PROJ. MGR.	MVS	8/25
HORIZONTAL: 1" = NA	LEAD ENGR.		
	FIELD MGR.		8/25
VERTICAL 1" = NA	RECOMMENDED: DESIGN MANAGER		8-25
FILE:	DRAWING:		
ATLAS PAGE NO:			

APPROVED:
CITY ENGINEER
DATE: 8/22/2025
SHEET 58 OF 77 SHEETS

09/06/24 G:\0Projects\T0-804 (13th Pl&4th St & Utica SignalMod - Tulsa (See T0-826 & T0-6220)\CAD\JUNCTION CABINET.dgn

NOTE: ALL ELECTRICAL CABLES TO BE REPLACED AT THIS INTERSECTION .

NOTE: REUSE EXISTING MAST ARM POLES.



LEGEND

- 1½" ELECT. CONDUIT
- 2" ELECT. CONDUIT
- 3" ELECT. CONDUIT
- EXISTING CONDUIT
- SIZE II PULL BOX (UNLESS OTHERWISE NOTED)
- EXISTING PULL BOX
- SERVICE POLE
- CONTROLLER
- PEDESTRIAN PUSH BUTTON
- WALK AND DON'T WALK
- SIGNAL HEAD WITH BACKPLATE
- LUMINAIRE WITH MAST ARM
- OPTICAL DETECTOR
- VIDEO DETECTION
- STREET NAME SIGN
- MAST ARM WITH POLE
- SIGNAL HEAD NO.
- MAST ARM & POLE WITH ABOVE SYMBOLS
- DETECTOR LOOP/ VIDEO DETECTION AREA

0 20' 40'

TABLE # 1 SIGNAL HEADS

SIGNAL HEAD NUMBER	NUMBER AND TYPE	MOUNTING	VISOR	BACKPLATE
3,8 NEW	2 - (S-13)L	MAST ARM	V-1	B-2
1,4,5,6,7,9,10 EX.	7 - #36	MAST ARM	V-1	B-2
2 EX.	1 - #64R	MAST ARM	V-1	B-2
11,12,13,14,15,16,17,18 EX	8 - #33	CLAMP	--	--

TABLE # 2 MAST ARMS & POLES

LOCATION	MOUNTING HT.	MAST ARMS LENGTHS	FOUNDATION
B EX.	32' EX.	EXISTING 18' T.S. & 10' LUM.	EX.
C EX.	21' EX.	EXISTING 36' T.S.	EX.
D EX.	21' EX.	EXISTING 24' T.S.	EX.
E EX.	21' EX.	EXISTING 42' T.S.	EX.
F-L	10' NEW	7 - PEDESTAL POLE	F-1

TABLE # 3 ELECTRICAL CABLE

ELECTRICAL CABLE TO CONTROLLER "A" LOCATION
B-20#14/#12 THHN GREEN/VIDEO/2C#12 UF/#6 THHN GREEN
C-20#14/#12 THHN GREEN/VIDEO/7C#14/#6 THHN GREEN
D-20#14/#12 THHN GREEN/VIDEO/#6 THHN GREEN
E-20#14/#12 THHN GREEN/VIDEO/#6 THHN GREEN
F-L-#12 THHN GREEN/#6 THHN GREEN/7C#14/2C#14

VIDEO DETECTION NOTE:
VIDEO VEHICLE DETECTION WILL BE PROVIDED FOR THIS INTERSECTION. THE DETECTOR LOOPS SHOWN ON THE PAVEMENT ARE SHOWN ONLY TO DEPICT THE AREAS OF DETECTION FOR THE VIDEO DETECTION UNITS ALONG WITH THE PHASES THAT EACH VIDEO DETECTOR UNIT WILL CALL.

PUSH BUTTON NOTE:
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ESTHER M. SHAW-SMITH, P.E. # 23711
C.A. # 1160, RENEWAL 06-30-25
9-6-24
DATE

Traffic Engineering Consultants, Inc.
2770 Washington Dr., Suite 100 - Norman, OK 73069
Ph: 405-720-7721, Web: www.tecusa.com

REGISTERED PROFESSIONAL ENGINEER ESTHER M. SHAW-SMITH 9-6-24 23711 OKLAHOMA

BEFORE YOU DIG CALL OKIE 1-800-522-OKIE 811

REVISION	BY	DATE

PROJECT NO. 144017 w and ax
SIGNAL PLAN
E. 12th ST. S. & S. UTICA AVE.

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

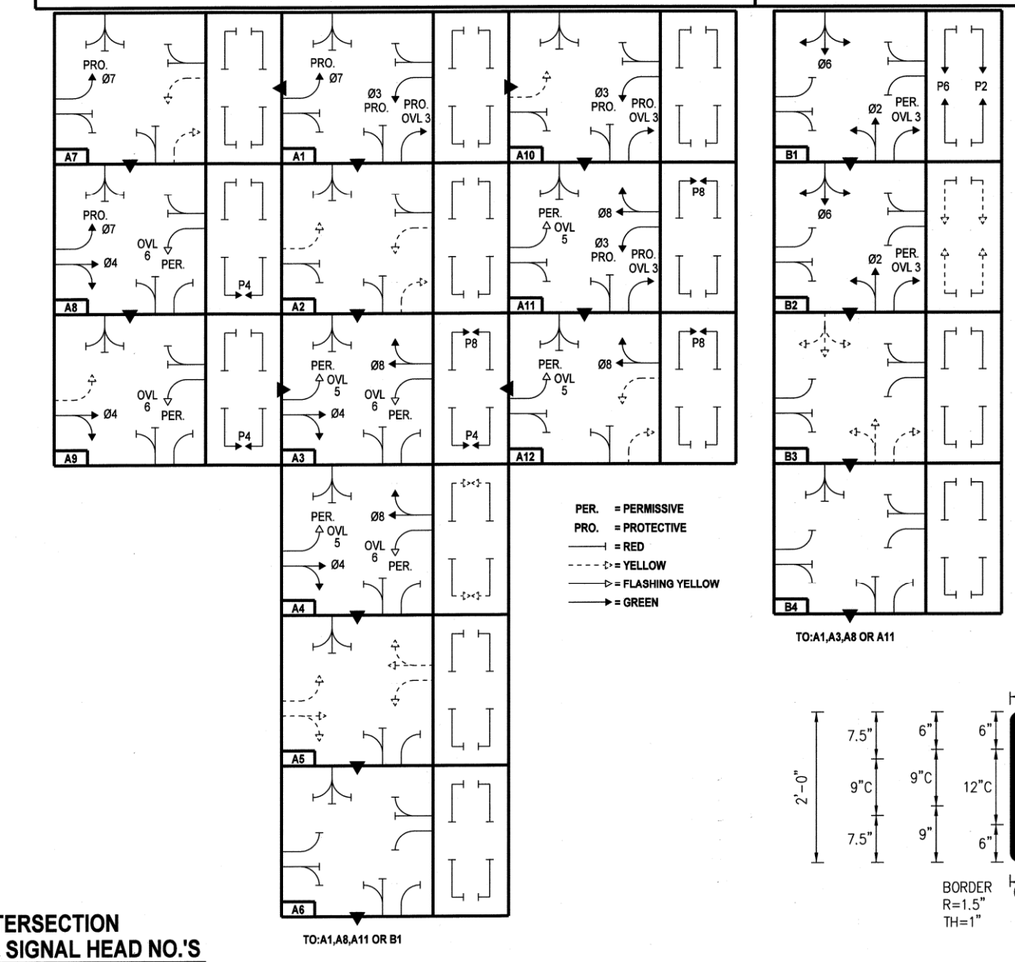
PLANS AND ESTIMATES PREPARED BY: TEC A CLARK DIVISION
TRAFFIC ENGINEERING CONSULTANTS
6931 S. 66TH E. AVE., STE 100
TULSA, OK. 74133
PHONE: 918-481-8484 FAX: 918-481-3163

PLAN SCALE: 1" = 20'	DRAWN	CAL	09/06/24	APPROVED:
	DESIGNED	EMS	09/06/24	
	SURVEY			
PROFILE SCALE:	PROJ. MGR.			
HORIZONTAL: 1" =	LEAD ENGR.	NWS	6/25	
	FIELD MGR.		6/25	
VERTICAL 1" =	RECOMMENDED: DESIGN MANAGER		8-25	CITY ENGINEER
FILE:	DRAWING:			DATE: 8/22/2025
ATLAS PAGE NO:				SHEET 59 OF 77 SHEETS

09/06/24 G:\0Projects\T0-803 12th & Utica SignalMod - Tulsa\CAD\12TH S6.dgn

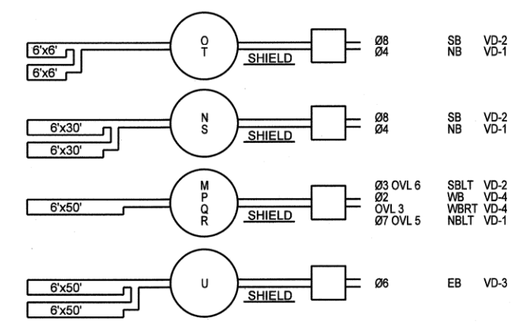
PHASING DIAGRAM

PHASE "A"	PHASE "B"
S. UTICA AVE.	E. 12th ST. S.

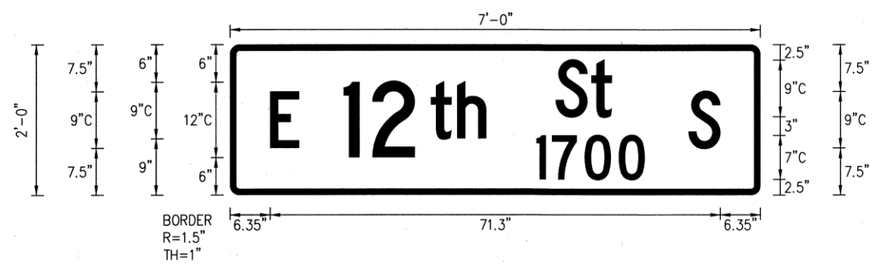


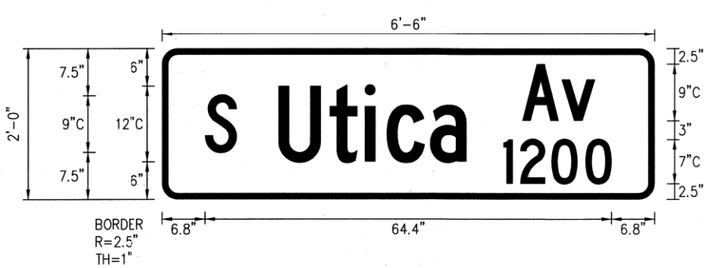
SEQUENCE CHART

DIRECTION	BLOCK NO.	PHASE Ø2	OVL 3	Ø7 OVL 5	Ø4	Ø6	Ø3 OVL 6	Ø8	P2	P4	P6	P8
		SIGNAL HEAD NO. 1	2	3	4,5	6,7	8	9,10	11,12	13,14	15,16	17,18
Ø3, Ø7, OVL 3 ROW	A1	R	R/~~G~~	~~G~~	R	R	~~G~~	R	DW	DW	DW	DW
Ø3, Ø7, OVL 3 CL	A2	R	R/~~Y~~	~~Y~~	R	R	~~Y~~	R	DW	DW	DW	DW
Ø4, Ø8, OVL 5, OVL 6, P4, P8 ROW	A3	R	R	F/~~Y~~	G	R	F/~~Y~~	G	DW	W	DW	W
Ø4, Ø8, OVL 5, OVL 6 ROW & P4, P8 CL	A4	R	R	F/~~Y~~	G	R	F/~~Y~~	G	DW	FDW	DW	FDW
Ø4, Ø8, OVL 5, OVL 6 CL	A5	R	R	~~Y~~	Y	R	~~Y~~	Y	DW	DW	DW	DW
ALL RED	A6	R	R	~~R~~	R	R	~~R~~	R	DW	DW	DW	DW
Ø7 ROW & Ø3, OVL 3 CL	A7	R	R/~~Y~~	~~G~~	R	R	~~Y~~	R	DW	DW	DW	DW
Ø4, Ø7, OVL 6, P4 ROW	A8	R	R	~~G~~	G	R	F/~~Y~~	R	DW	W	DW	DW
Ø4, OVL 6, P4 ROW & Ø7 CL	A9	R	R	~~Y~~	G	R	F/~~Y~~	R	DW	W	DW	DW
Ø3, OVL 3 ROW & Ø7 CL	A10	R	R/~~G~~	~~Y~~	R	R	~~G~~	R	DW	DW	DW	DW
Ø3, Ø8, OVL 3, OVL 5. P8 ROW	A11	R	R/~~G~~	F/~~Y~~	R	R	~~G~~	G	DW	DW	DW	W
Ø8, OVL 5, P8 ROW & Ø3, OVL 3 CL	A12	R	R/~~Y~~	F/~~Y~~	R	R	~~Y~~	G	DW	DW	DW	W
Ø2, Ø6, OVL 3, P2, P6 ROW	B1	G	G	~~R~~	R	G	~~R~~	R	W	DW	W	DW
Ø2, Ø6, OVL 3 ROW & P2, P6 CL	B2	G	G	~~R~~	R	G	~~R~~	R	FDW	DW	FDW	DW
Ø2, Ø6, OVL 3 CL	B3	Y	Y	~~R~~	R	Y	~~R~~	R	DW	DW	DW	DW
ALL RED	B4	R	R	~~R~~	R	R	~~R~~	R	DW	DW	DW	DW
FLASHING OPERATION	--	FR	~~FR~~	~~FR~~	FR	FR	~~FR~~	FR	--	--	--	--

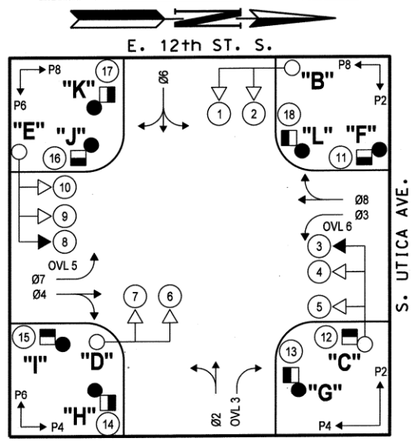


AREAS OF DETECTION





INTERSECTION PHASING & SIGNAL HEAD NO.'S



SUMMARY OF MAST ARM MOUNTED SIGNS

MESSAGE	POLE LOCATION	NO. OF SIGN	LENGTH	HEIGHT	SQ. FT. SIGN AREA	TOTAL AREA SQ. FT.
S Utica Av	B,D	2	78"	24"	13.00	26.00
E 12th St S	C,E	2	84"	24"	14.00	28.00
R10-12ML	C,E	2	30"	36"	7.50	15.00
					TOTAL	69.00

PRIMARY DIRECTION = 9" SERIES 'C' 2000 (WHITE)
NUMBER / NAME = 12" SERIES 'C' 2000 (WHITE)
NUMBER SUFFIX = 9" SERIES 'C' 2000 (WHITE)
SECONDARY DIRECTION = 12" SERIES 'C' 2000 (WHITE)
STREET TYPE = 9" SERIES 'C' 2000 (WHITE)
BLOCK NUMBER = 7" SERIES 'C' 2000 (WHITE)

SHEETING = DIAMOND GRADE VIP (WHITE)
OVERLAY = ELECTRONIC CUTTABLE OVERLAY FILM (GREEN)

ESTHER M. SHAW-SMITH, P.E. # 23711
C.A. # 1160, RENEWAL 06-30-25

9-6-24
DATE

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Ph: 405-720-7721, Web: www.tecusa.com

REGISTERED PROFESSIONAL ENGINEER ESTHER M. SHAW-SMITH 9-6-24 23711 OKLAHOMA

REVISION	BY	DATE

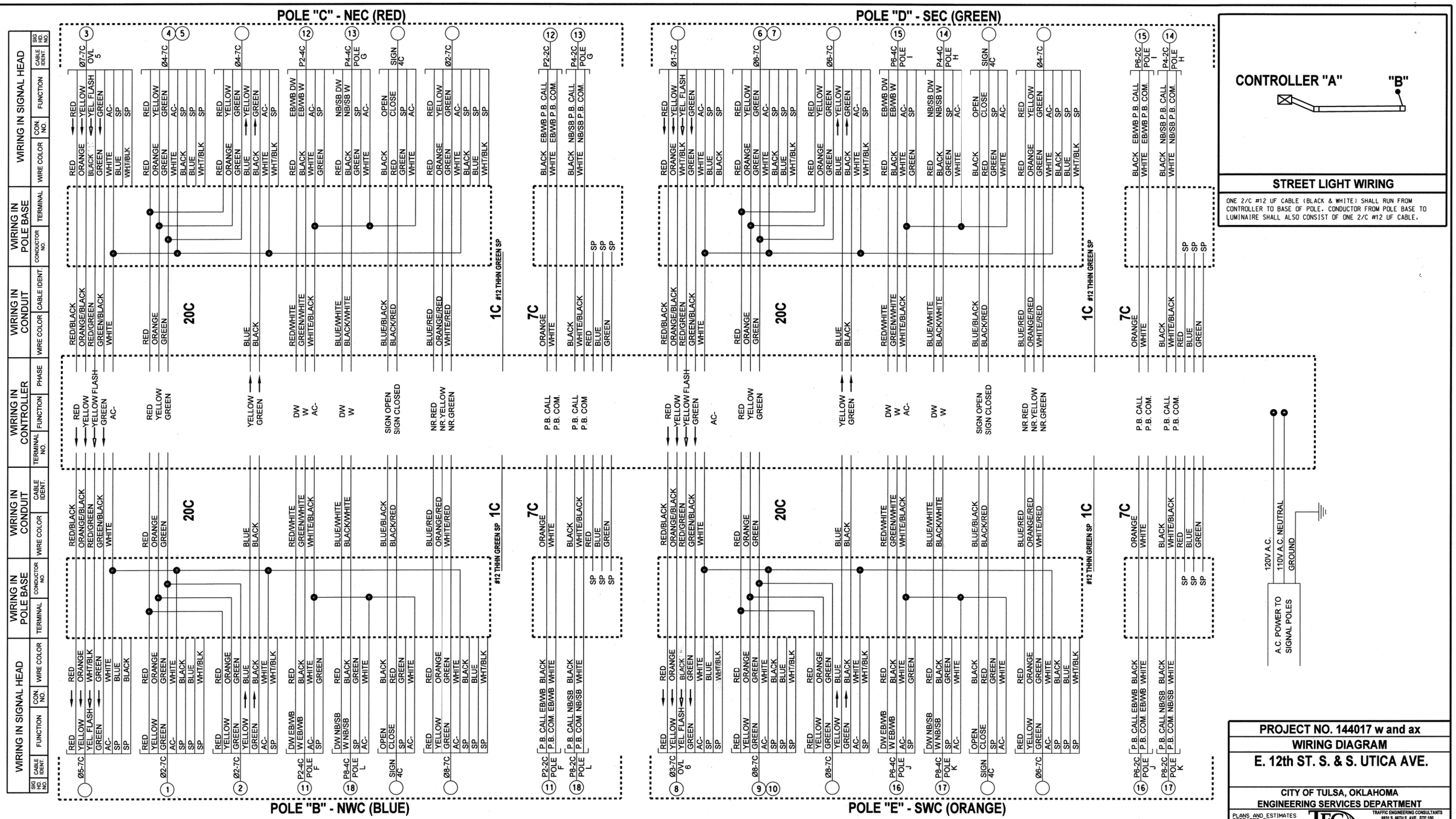
PROJECT NO. 144017 w and ax
SIGNAL DETAIL
E. 12th ST. S. & S. UTICA AVE.

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEP8RTMENT

PLANS AND ESTIMATES PREPBRED BY: TEC A CLEAR DIRECTION
TRAFFIC ENGINEERING CONSULTANTS
8801 S. 66TH E. AVE., STE 100
TULSA, OK. 74133
PHONE: 918-481-8404 FAX: 918-481-3163

PLAN SCALE: 1" = NA	DRAWN	CAL	09/06/24	APPROVED:
	DESIGNED	EMS	09/06/24	
	SURVEY			
PROFILE SCALE:	PROJ. MGR.			
HORIZONTAL: 1" = NA	LEAD ENGR.	WMS	8/25	
	FIELD MGR.		8/25	
VERTICAL 1" = NA	RECOMMENDED: DESIGN MANAGER	WMS	8·25	CITY ENGINEER
FILE:	DRAWING:			DATE: 8/22/2025
ATLAS PBGE NO:				SHEET 60 OF 77 SHEETS

09/06/24 G:\0Projects\10-803 12th & Utica Signal\Mod - Tulsa\CAD\12TH DET.dgn



STREET LIGHT WIRING

ONE 2/C #12 UF CABLE (BLACK & WHITE) SHALL RUN FROM CONTROLLER TO BASE OF POLE. CONDUCTOR FROM POLE BASE TO LUMINAIRE SHALL ALSO CONSIST OF ONE 2/C #12 UF CABLE.

NOTE:
IF JUMPERS OR OTHER CONNECTIONS ARE MADE IN THE FIELD DURING INSTALLATION. AND ARE ACCEPTED BY THE ENGINEER THIS SHOULD BE SHOWN ON THE WIRING DIAGRAM FOR FUTURE REFERENCE.

ESTHER M. SHAW-SMITH, P.E. # 23711
C.A. # 1160, RENEWAL 06-30-25
9-6-24
DATE
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Ph: 405-720-7721, Web: www.tecuss.com

REGISTERED PROFESSIONAL ENGINEER ESTHER M. SHAW-SMITH 9-6-24 23711 OKLAHOMA

PROJECT NO. 144017 w and ax
WIRING DIAGRAM
E. 12th ST. S. & S. UTICA AVE.

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY: TEC
TRAFFIC ENGINEERING CONSULTANTS
6801 S. 66TH E. AVE., STE 100
TULSA, OK. 74133
PHONE: 918-481-9484 FAX: 918-481-3163

REVISION	BY	DATE

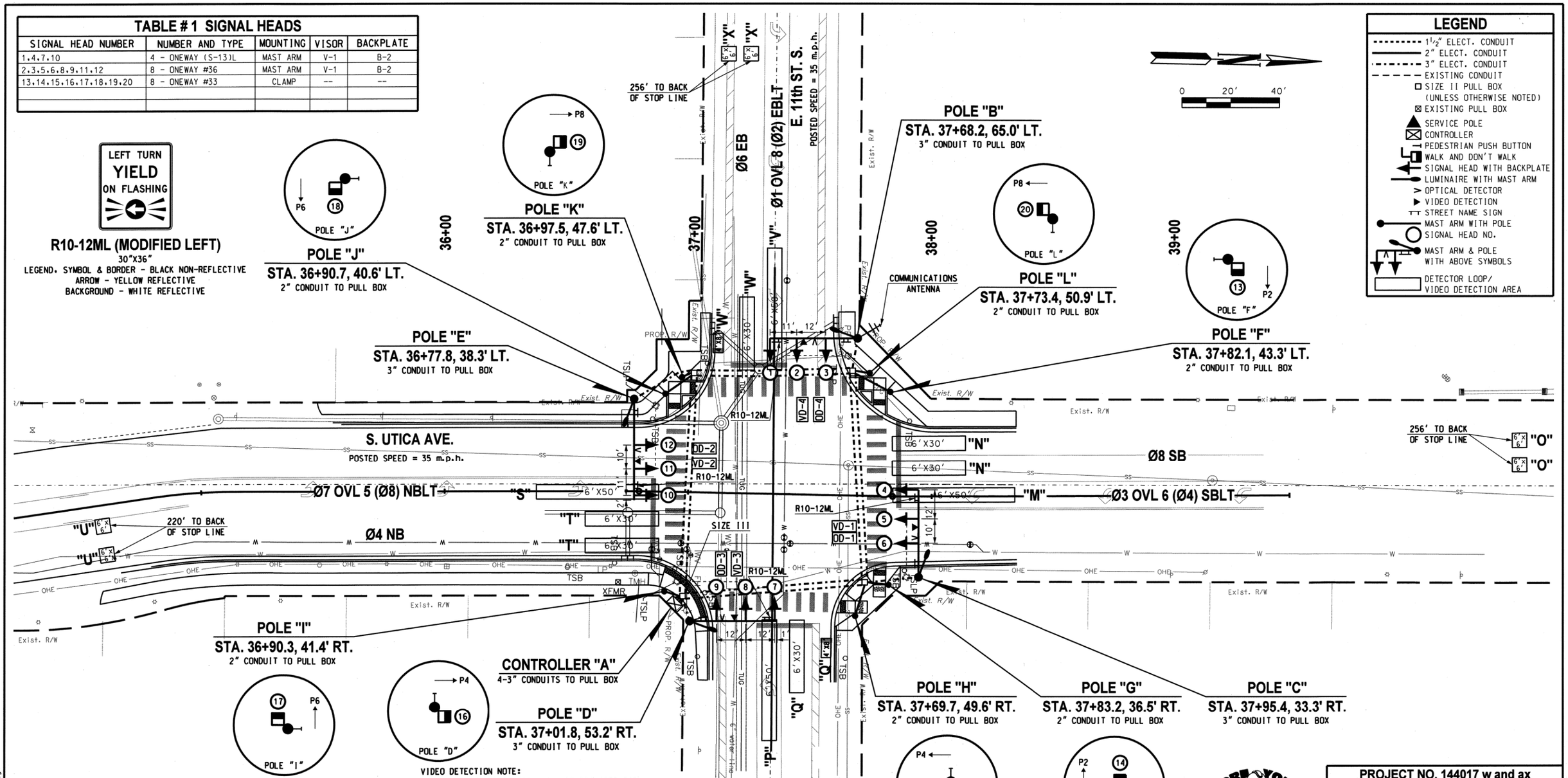
PLAN SCALE: 1" = N/A	DRAWN	CAL	09/06/24
	DESIGNED	EMS	09/06/24
	SURVEY		
PROFILE SCALE:	PROJ. MGR.	MPS	08/22/2025
HORIZONTAL: 1" =	LEAD ENGR.		
	FIELD MGR.		6/25
VERTICAL 1" =	RECOMMENDED: DESIGN MANAGER		8-25
FILE:	DRAWING:		
ATLAS PAGE NO:			

APPROVED:
CITY ENGINEER
DATE: 8/22/2025
SHEET 61 OF 77 SHEETS

09/06/24 G:\0\Projects\10-803 12th & Utica Signal\Mod - Tulsa\CAD\12TH WIRE.dgn

TABLE # 1 SIGNAL HEADS

SIGNAL HEAD NUMBER	NUMBER AND TYPE	MOUNTING	VISOR	BACKPLATE
1,4,7,10	4 - ONEWAY (S-13)L	MAST ARM	V-1	B-2
2,3,5,6,8,9,11,12	8 - ONEWAY #36	MAST ARM	V-1	B-2
13,14,15,16,17,18,19,20	8 - ONEWAY #33	CLAMP	--	--



LEGEND

- 1½" ELECT. CONDUIT
- 2" ELECT. CONDUIT
- 3" ELECT. CONDUIT
- EXISTING CONDUIT
- SIZE II PULL BOX (UNLESS OTHERWISE NOTED)
- EXISTING PULL BOX
- SERVICE POLE
- CONTROLLER
- PEDESTRIAN PUSH BUTTON
- WALK AND DON'T WALK
- SIGNAL HEAD WITH BACKPLATE
- LUMINAIRE WITH MAST ARM
- OPTICAL DETECTOR
- VIDEO DETECTION
- STREET NAME SIGN
- MAST ARM WITH POLE
- SIGNAL HEAD NO.
- MAST ARM & POLE WITH ABOVE SYMBOLS
- DETECTOR LOOP/ VIDEO DETECTION AREA

TABLE # 2 MAST ARMS & POLES

LOCATION	MOUNTING HT.	MAST ARMS LENGTHS	FOUNDATION
B	30'	2B36E	S-30/36
C	30'	2B36E	S-30/36
D	30'	2B36E	S-30/36
E	30'	3G42E	S-42/50
F-L	10'	7 - PED. POLES	F-1

TABLE # 3 ELECTRICAL CABLE

ELECTRICAL CABLE TO CONTROLLER "A" LOCATION

B-20#14/#12 THHN GREEN/#6 THHN GREEN/VIDEO/OPTICOM/2C#12 UF
C-20#14/#12 THHN GREEN/#6 THHN GREEN/VIDEO/OPTICOM/2C#12 UF
D-20#14/#12 THHN GREEN/#6 THHN GREEN/VIDEO/OPTICOM/2C#12 UF/7C#14
E-20#14/#12 THHN GREEN/#6 THHN GREEN/VIDEO/OPTICOM/2C#12 UF
F-L-#12 THHN GREEN/#6 THHN GREEN/7C#14/2C#14

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ESTHER M. SHAW-SMITH, P.E. # 23711
C.A. # 1160, RENEWAL 06-30-25
9-6-24
DATE

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BEFORE YOU DIG CALL OKIE 1-800-522-OKIE 811

REVISION	BY	DATE

PROJECT NO. 144017 w and ax

SIGNAL PLAN

E. 11th ST. S. & S. UTICA AVE.

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

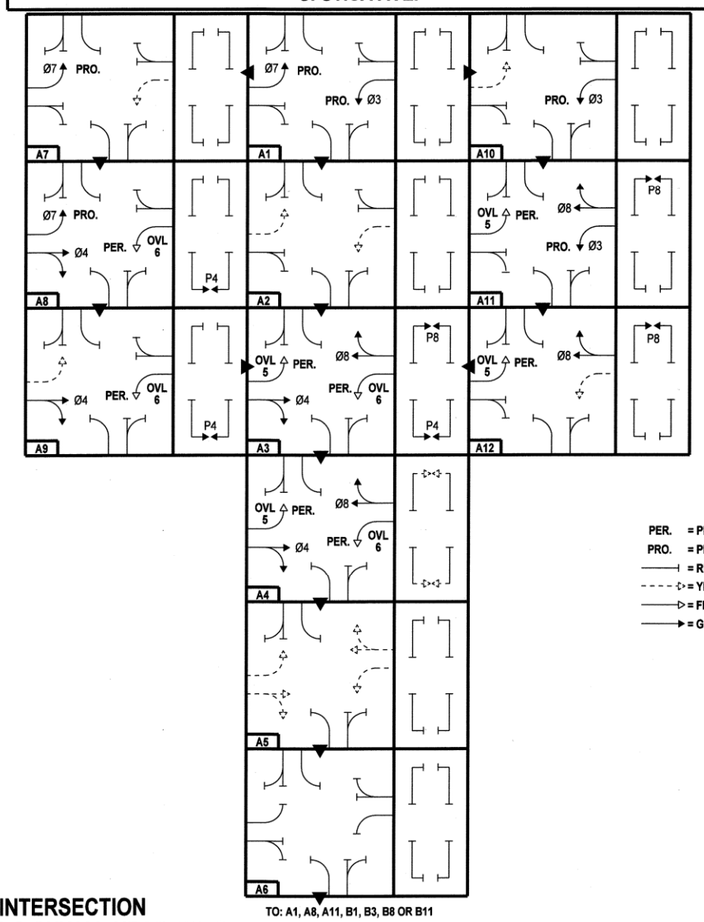
PLANS AND ESTIMATES PREPARED BY: TEC A CLEAR DIRECTION
TRAFFIC ENGINEERING CONSULTANTS
5801 S. 66TH E. AVE., STE 100
TULSA, OK 74133
PHONE: 918-481-9494 FAX: 918-481-3163

PLAN SCALE: 1" = 20'	DRAWN	CAL	09/06/24	APPROVED:
	DESIGNED	EMS	09/06/24	
	SURVEY			
PROFILE SCALE:	PROJ. MGR.			
HORIZONTAL: 1" =	LEAD ENGR.	MWS	1/25	
	FIELD MGR.	BEM	6/25	
VERTICAL 1" =	RECOMMENDED: DESIGN MANAGER	HAS	8-25	CITY ENGINEER
FILE:	DRAWING:			DATE: 8/22/2025
ATLAS PAGE NO:				SHEET 62 OF 77 SHEETS

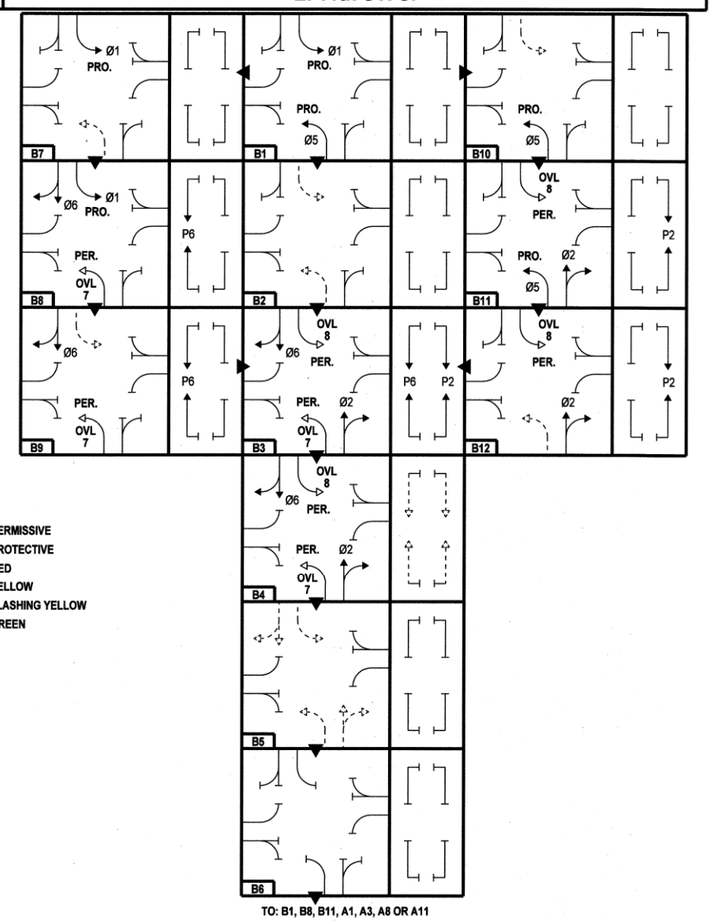
09/06/24 G:\0Projects\T0-T70 11th & Utica Signal\CAD\11TH SIG.dgn

PHASING DIAGRAM

PHASE "A" — S. UTICA AVE.

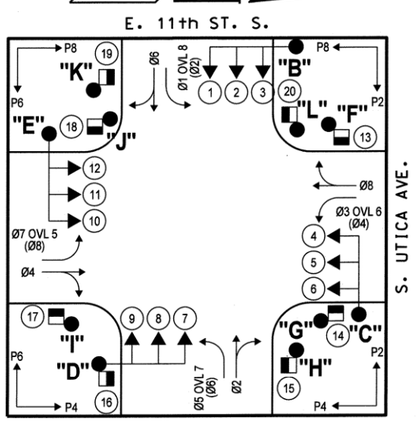


PHASE "B" — E. 11th ST. S.



PER. = PERMISSIVE
PRO. = PROTECTIVE
= RED
= YELLOW
= FLASHING YELLOW
= GREEN

INTERSECTION PHASING & SIGNAL HEAD NO.'S



SEQUENCE CHART

DIRECTION	BLOCK NO.	PHASE: Ø5 OVL 7	Ø2	Ø7 OVL 5	Ø4	Ø1 OVL 8	Ø6	Ø3 OVL 6	Ø8	P2	P4	P6	P8
		SIGNAL HEAD NO.											
		1	2,3	4	5,6	7	8,9	10	11,12	13,14	15,16	17,18	19.20
Ø3, Ø7 ROW	A1	◄R	R	◄G	R	◄R	R	◄G	R	DW	DW	DW	DW
Ø3, Ø7 CL	A2	◄R	R	◄Y	R	◄R	R	◄Y	R	DW	DW	DW	DW
Ø4, Ø8, OVL 5, OVL 6, P4, P8 ROW	A3	◄R	R	◁F/Y	G	◄R	R	◁F/Y	G	DW	W	DW	W
Ø4, Ø8, OVL 5, OVL 6 ROW & P4, P8 CL	A4	◄R	R	◁F/Y	G	◄R	R	◁F/Y	G	DW	FDW	DW	FDW
Ø4, Ø8, OVL 5, OVL 6 CL	A5	◄R	R	◄Y	Y	◄R	R	◄Y	Y	DW	DW	DW	DW
ALL RED	A6	◄R	R	◄R	R	◄R	R	◄R	R	DW	DW	DW	DW
Ø7 ROW & Ø3 CL	A7	◄R	R	◄G	R	◄R	R	◄Y	R	DW	DW	DW	DW
Ø4, Ø7, OVL 6, P4 ROW	A8	◄R	R	◄G	G	◄R	R	◁F/Y	R	DW	W	DW	DW
Ø4, OVL 6, P4 ROW & Ø7 CL	A9	◄R	R	◄Y	G	◄R	R	◁F/Y	R	DW	W	DW	DW
Ø3 ROW & Ø7 CL	A10	◄R	R	◄Y	R	◄R	R	◄G	R	DW	DW	DW	DW
Ø3, Ø8, OVL 5, P8 ROW	A11	◄R	R	◁F/Y	R	◄R	R	◄G	G	DW	DW	DW	W
Ø8, OVL 5, P8 ROW & Ø3 CL	A12	◄R	R	◁F/Y	R	◄R	R	◄Y	G	DW	DW	DW	W
Ø1, Ø5 ROW	B1	◄G	R	◄R	R	◄G	R	◄R	R	DW	DW	DW	DW
Ø1, Ø5 CL	B2	◄Y	R	◄R	R	◄Y	R	◄R	R	DW	DW	DW	DW
Ø2, Ø6, OVL 7, OVL 8, P2, P6 ROW	B3	◁F/Y	G	◄R	R	◁F/Y	G	◄R	R	W	DW	W	DW
Ø2, Ø6, OVL 7, OVL 8 ROW & P2, P6 CL	B4	◁F/Y	G	◄R	R	◁F/Y	G	◄R	R	FDW	DW	FDW	DW
Ø2, Ø6, OVL 7, OVL 8 CL	B5	◄Y	Y	◄R	R	◄Y	Y	◄R	R	DW	DW	DW	DW
ALL RED	B6	◄R	R	◄R	R	◄R	R	◄R	R	DW	DW	DW	DW
Ø1 ROW & Ø5 CL	B7	◄Y	R	◄R	R	◄G	R	◄R	R	DW	DW	DW	DW
Ø1, Ø6, OVL 7, P6 ROW	B8	◁F/Y	R	◄R	R	◄G	G	◄R	R	DW	DW	W	DW
Ø6, OVL 7, P6 ROW & Ø1 CL	B9	◁F/Y	R	◄R	R	◄Y	G	◄R	R	DW	DW	W	DW
Ø5 ROW & Ø1 CL	B10	◄G	R	◄R	R	◄Y	R	◄R	R	DW	DW	DW	DW
Ø2, Ø5, OVL 8, P2 ROW	B11	◄G	G	◄R	R	◁F/Y	R	◄R	R	W	DW	DW	DW
Ø2, OVL 8, P2 ROW & Ø5 CL	B12	◄Y	G	◄R	R	◁F/Y	R	◄R	R	W	DW	DW	DW
FLASHING OPERATION	--	◄FR	FR	◄FR	FR	◄FR	FR	◄FR	FR	--	--	--	--

ESTHER M. SHAW-SMITH, P.E. # 23711
C.A. # 1160, RENEWAL 06-30-25

9-6-24
DATE

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REGISTERED PROFESSIONAL ENGINEER — ESTHER M. SHAW-SMITH 9-6-24 23711 — OKLAHOMA

PROJECT NO. 144017 w and ax
SIGNAL DETAIL (1 OF 2)
E. 11th ST. S. & S. UTICA AVE.

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY: TEC — TRAFFIC ENGINEERING CONSULTANTS, 6931 S. 66TH E. AVE., STE 100, TULSA, OK. 74133, PHONE: 918-481-9484 FAX: 918-481-3163

REVISION	BY	DATE

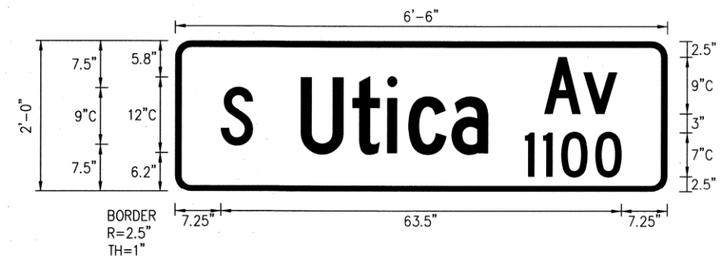
PLAN SCALE: 1" = NA	DRAWN	CAL	09/06/24	APPROVED:
	DESIGNED	EMS	09/06/24	
	SURVEY			
PROFILE SCALE:	PROJ. MGR.			
HORIZONTAL: 1" = NA	LEAD ENGR.	HMS	1/25	
	FIELD MGR.		6/25	
VERTICAL: 1" = NA	RECOMMENDED: HMS 8-25 DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE: 8/22/2025
ATLAS PAGE NO:				SHEET 63 OF 77 SHEETS

09/06/24 G:\0Projects\TO-770 11th & Utica Signal\CAD\11TH DET.dgn

TOP OF SIGN
- DIRECTION = 9" SERIES 'C' 2000 (WHITE)
- NUMBER / NAME = 12" SERIES 'C' 2000 (WHITE)
- NUMBER SUFFIX = 9" SERIES 'C' 2000 (WHITE)
- STREET TYPE = 6" SERIES 'C' 2000 (WHITE)
- BLOCK NUMBER = 5" SERIES 'C' 2000 (WHITE)

BOTTOM OF SIGN
- HISTORIC ROUTE 66 = 7.5" SERIES 'C' 2000 (WHITE)
- HWY SHIELD = 17"x17" (WHITE) BORDER (BROWN)
- UKLAHOMA / ROUTE = 2.25" SERIES 'C' 2000 (BROWN)
- 66 (INSIDE SHIELD) = 6" SERIES 'C' 2000 (BROWN)

SHEETING = DIAMOND GRADE VIP (WHITE)
TOP OVERLAY = ELECTRONIC CUTTABLE OVERLAY FILM (GREEN)
BOTTOM OVERLAY = ELECTRONIC CUTTABLE OVERLAY FILM (BROWN)

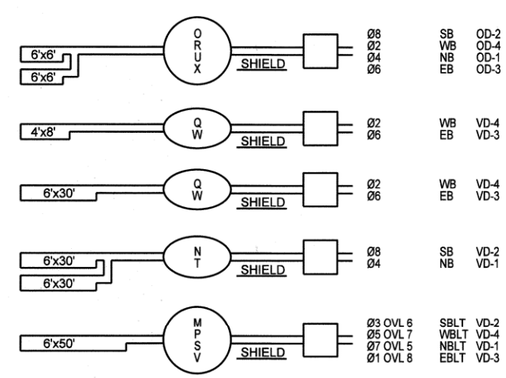


PRIMARY DIRECTION = 9" SERIES 'C' 2000 (WHITE)
NUMBER / NAME = 12" SERIES 'C' 2000 (WHITE)
NUMBER SUFFIX = 9" SERIES 'C' 2000 (WHITE)
SECONDARY DIRECTION = 12" SERIES 'C' 2000 (WHITE)
STREET TYPE = 9" SERIES 'C' 2000 (WHITE)
BLOCK NUMBER = 7" SERIES 'C' 2000 (WHITE)

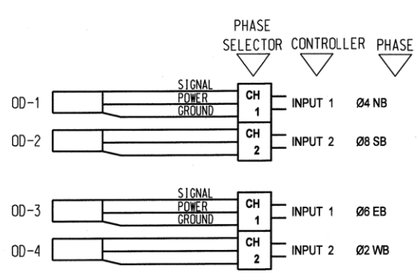
SHEETING = DIAMOND GRADE VIP (WHITE)
OVERLAY = ELECTRONIC CUTTABLE OVERLAY FILM (GREEN)

SUMMARY OF MAST ARM MOUNTED SIGNS

MESSAGE	POLE LOCATION	NO. OF SIGN	LENGTH	HEIGHT	SQ. FT. SIGN AREA	TOTAL AREA SQ. FT.
S Utica Av	B,D	2	78"	24"	13.00	26.00
E 11th St S	C,E	2	66"	36"	16.50	33.00
R10-12ML	B,C,D,E	4	30"	36"	7.50	30.00
					TOTAL	89.00



AREAS OF DETECTION



PRE-EMPTOR DETAILS

ESTHER M. SHAW-SMITH, P.E. # 23711
C.A. # 1160, RENEWAL 06-30-25

9-6-24
DATE

Traffic Engineering Consultants, Inc.
2770 Washington Dr., Suite 100 - Norman, OK 73069
Ph: 405-720-7721, Web: www.tecusa.com

REGISTERED PROFESSIONAL ENGINEER ESTHER M. SHAW-SMITH 9-6-24 23711 OKLAHOMA

PROJECT NO. 144017 w and ax
SIGNAL DETAIL (2 OF 2)
E. 11th ST. S. & S. UTICA AVE.

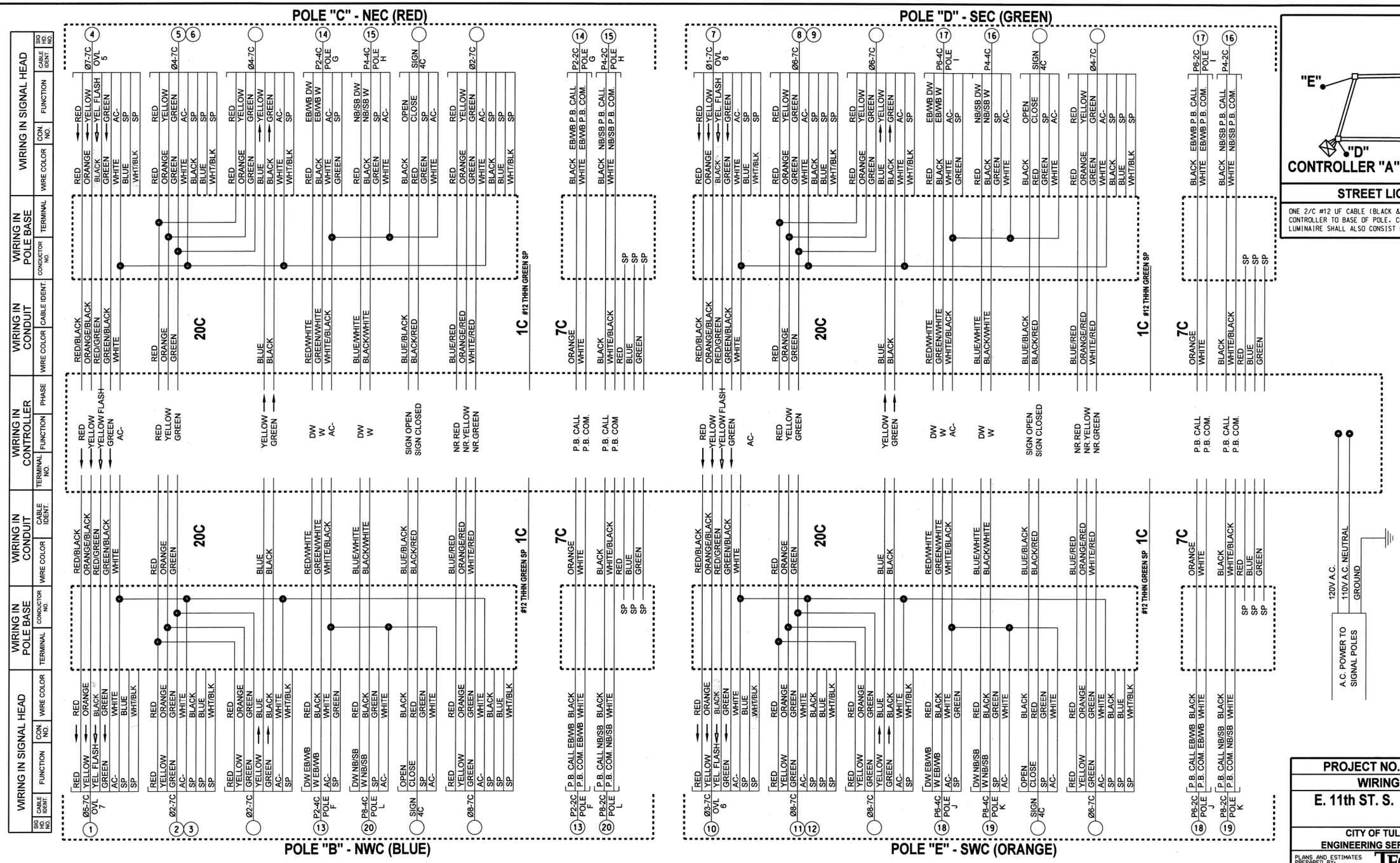
CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

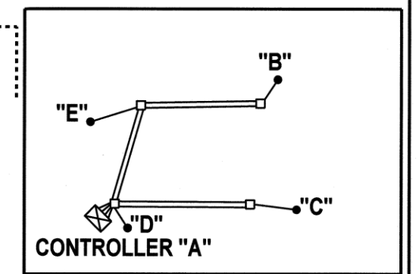
PLANS AND ESTIMATES PREPARED BY: TEC A CLEAR CONNECTION
TRAFFIC ENGINEERING CONSULTANTS
6931 S. 66TH E. AVE., STE 100
TULSA, OK. 74133
PHONE: 918-481-5484 FAX: 918-481-3163

REVISION	BY	DATE

PLAN SCALE: 1" = NA	DRAWN	CAL	09/06/24	APPROVED:
	DESIGNED	EMS	09/06/24	
	SURVEY			
PROFILE SCALE:	PROJ. MGR.			
HORIZONTAL: 1" = NA	LEAD ENGR.	MWS	1/25	
	FIELD MGR.		6/05	
VERTICAL 1" = NA	RECOMMENDED: HBS 8-25 DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE: 8/22/2025
ATLAS PAGE NO:				SHEET 64 OF 77 SHEETS

09/06/24 G:\0Projects\TG-770 11th & Utica Signal\CAD\11th DET2.dgn





STREET LIGHT WIRING

ONE 2/C #12 UF CABLE (BLACK & WHITE) SHALL RUN FROM CONTROLLER TO BASE OF POLE. CONDUCTOR FROM POLE BASE TO LUMINAIRE SHALL ALSO CONSIST OF ONE 2/C #12 UF CABLE.

NOTE:
IF JUMPERS OR OTHER CONNECTIONS ARE MADE IN THE FIELD DURING INSTALLATION, AND ARE ACCEPTED BY THE ENGINEER THIS SHOULD BE SHOWN ON THE WIRING DIAGRAM FOR FUTURE REFERENCE.

ESTHER M. SHAW-SMITH, P.E. # 23711
C.A. # 1160, RENEWAL 06-30-25
9-6-24
DATE
Traffic Engineering Consultants, Inc.
2770 Washington Dr., Suite 100 - Norman, OK 73069
Ph: 405-720-7721, Web: www.tecusa.com

PROFESSIONAL ENGINEER — ESTHER M. SHAW-SMITH — 9-6-24 — 23711 — REGISTERED — OKLAHOMA

PROJECT NO. 144017 w and ax

WIRING DIAGRAM

E. 11th ST. S. & S. UTICA AVE.

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

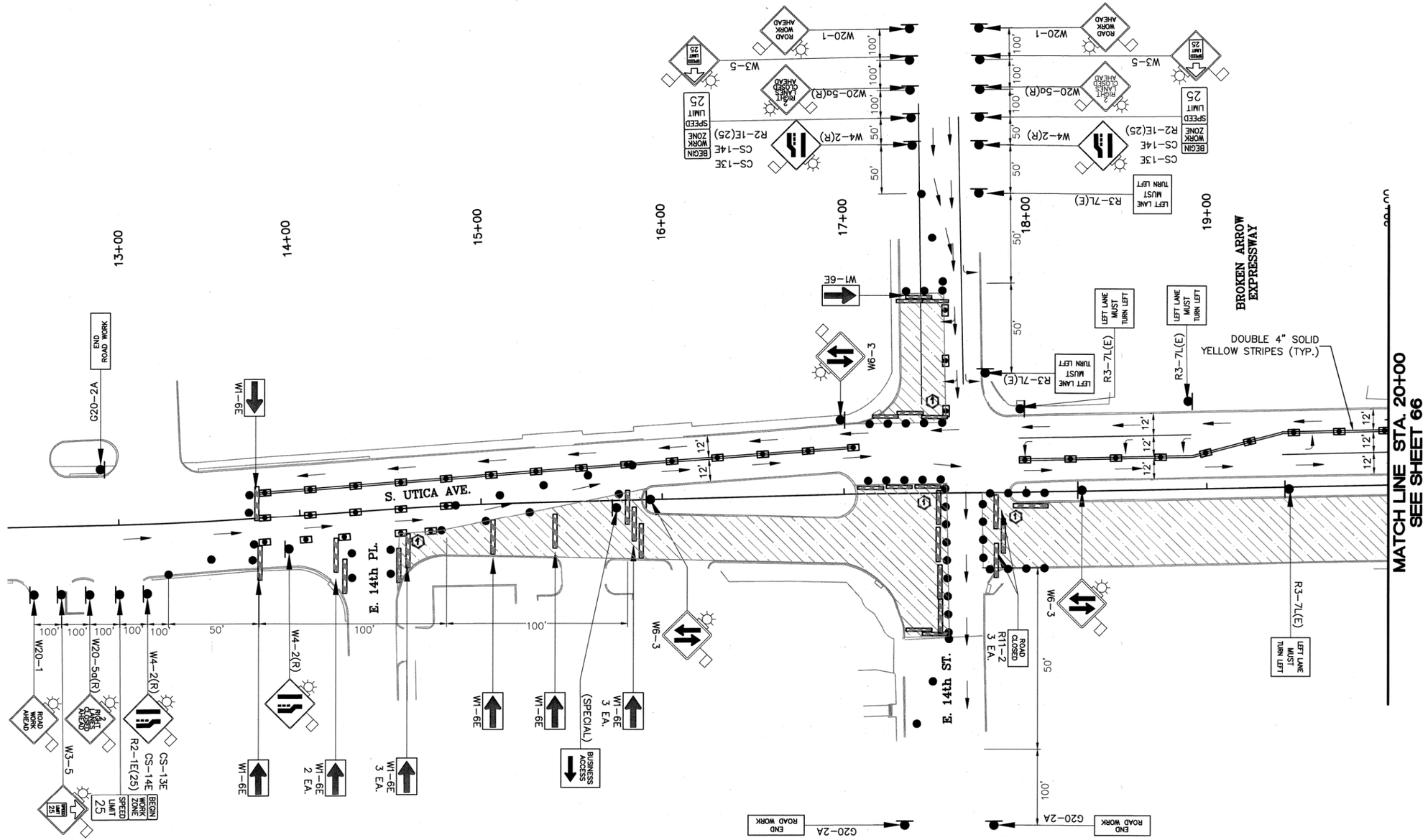
PLANS AND ESTIMATES PREPARED BY: TEC — TRAFFIC ENGINEERING CONSULTANTS, 6931 S. 66TH E. AVE., STE 100, TULSA, OK. 74133, PHONE: 918-481-8484 FAX: 918-481-3163

REVISION	BY	DATE

PLAN SCALE: 1" = N/A	DRAWN	CAL	09/06/24
	DESIGNED	EMS	09/06/24
	SURVEY		
PROFILE SCALE:	PROJ. MGR.	MWS	08/2025
HORIZONTAL: 1" =	LEAD ENGR.		
	FIELD MGR.		8/26/25
VERTICAL 1" =	RECOMMENDED: DESIGN MANAGER	HAS	8-25
FILE:	DRAWING:		
ATLAS PAGE NO:			

APPROVED:
CITY ENGINEER
DATE: 8/22/2025
SHEET 64A OF 77 SHEETS

09/06/24 G:\DOProjects\T0-770 11th & Utica Signal\CAD\WITH WIRE.dgn



LEGEND

- TYPE III BARRICADE
- CONSTRUCTION SIGN
- DRUMS
- CONE CHANNELIZER
- CONSTRUCTION AREA
- TRAFFIC DIRECTION

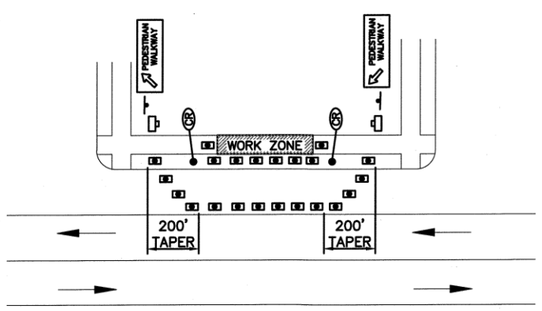
1 inch = 30 ft. (HORIZ.)

30 0 30 60

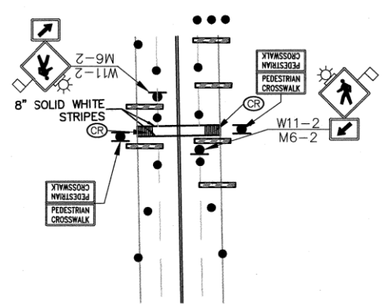
NOTES:

1. SCHEDULED WORK WITHIN CONSTRUCTION AREAS SHALL BE SEQUENCED TO COMPLETE ITEMS LOCATED ADJACENT TO DETOUR TRAFFIC TURNING MOVEMENTS FIRST. WHEN POSSIBLE, BARRICADES, DRUMS, AND CHANNELIZERS SHALL BE ARRANGED ON A RADIUS AT THE CORNERS OF CONSTRUCTION AREAS TO EASE TRAFFIC TURNING MOVEMENTS.

- PEDESTRIAN ACCESS CONTROL PLAN TO BE DEVELOPED AND USED IN CONJUCTION WITH THE TRAFFIC CONTROL PLAN.
- CONTRACTOR TO DETERMIN SIDEWALK AND CURB RAMP CONSTRUCTION SEQUENCE THAT COORDINATES WITH PROVIDING AND MAINTAINING AN ADA APPROVED PATH FOR PEDESTRIANS.



MID-BLOCK SIDEWALK CLOSURE WITH TEMPORARY WALKWAY



TEMPORARY PEDESTRIAN CROSSWALK DETAIL

LICENSED PROFESSIONAL ENGINEER Daniel Poloski 24920 OKLAHOMA

9/12/2024

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

REVISION	BY	DATE

TRAFFIC CONTROL PHASE I (1 OF 3)

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

PLAN SCALE: 1"=30'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		10/2024	
HORIZONTAL:	LEAD ENGR.		9/25	
	FIELD MGR.		9/25	
VERTICAL:	RECOMMENDED: HBS 9-25 DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 65 OF 77 SHEETS

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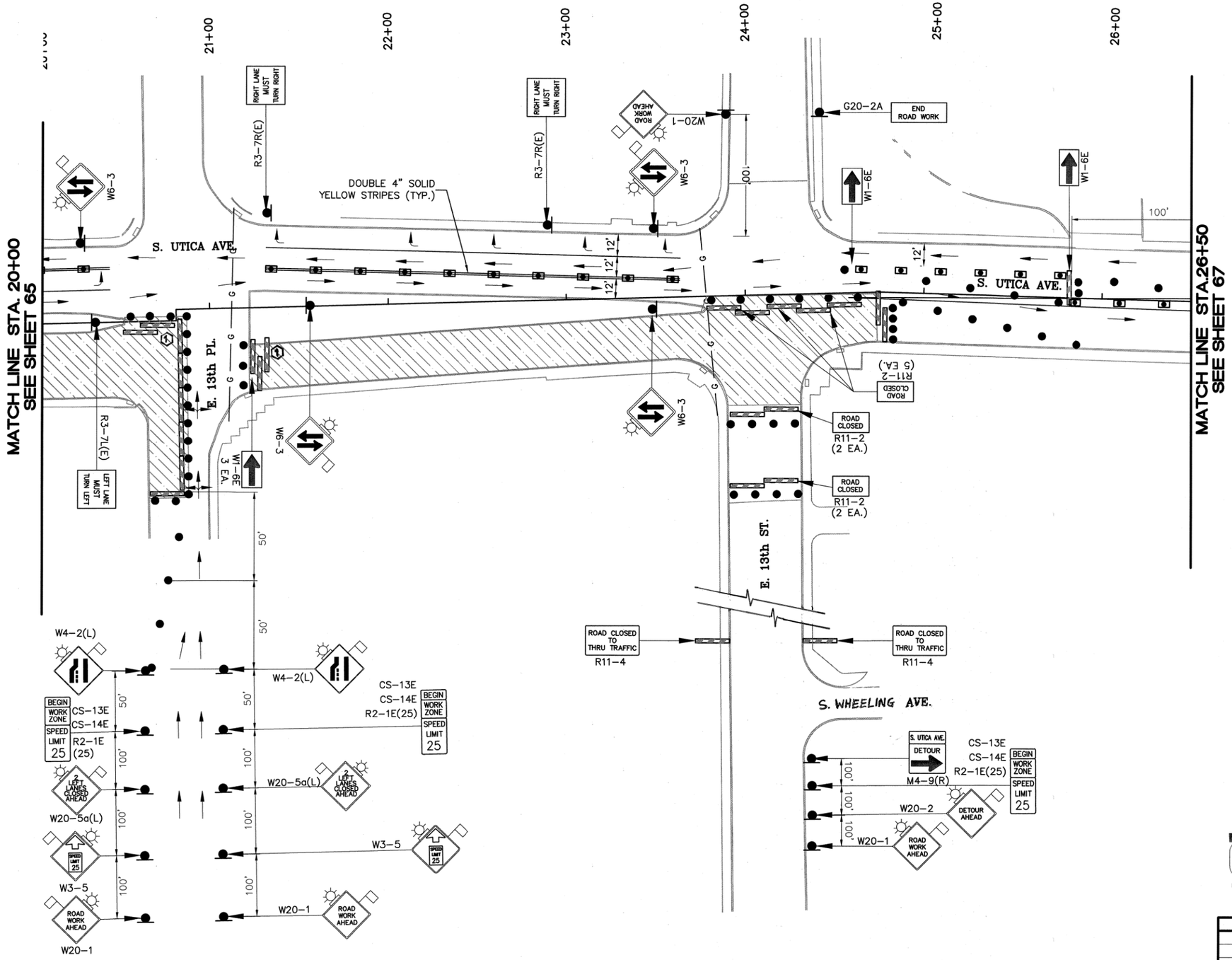

1 inch = 30 ft. (HORIZ.)

30 0 30 60

LEGEND

- TYPE III BARRICADE
- CONSTRUCTION SIGN
- DRUMS
- CONE CHANNELIZER
- CONSTRUCTION AREA
- TRAFFIC DIRECTION

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LICENSED PROFESSIONAL ENGINEER
Daniel E. Polasek
24920
OKLAHOMA
9/12/2024

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

TRAFFIC CONTROL PHASE I (2 OF 3)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: 1"=30'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		10/2024	
HORIZONTAL:	LEAD ENGR.		8/25	
VERTICAL:	FIELD MGR.		6/25	
	RECOMMENDED: HBS 8-25 DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 66 OF 77 SHEETS

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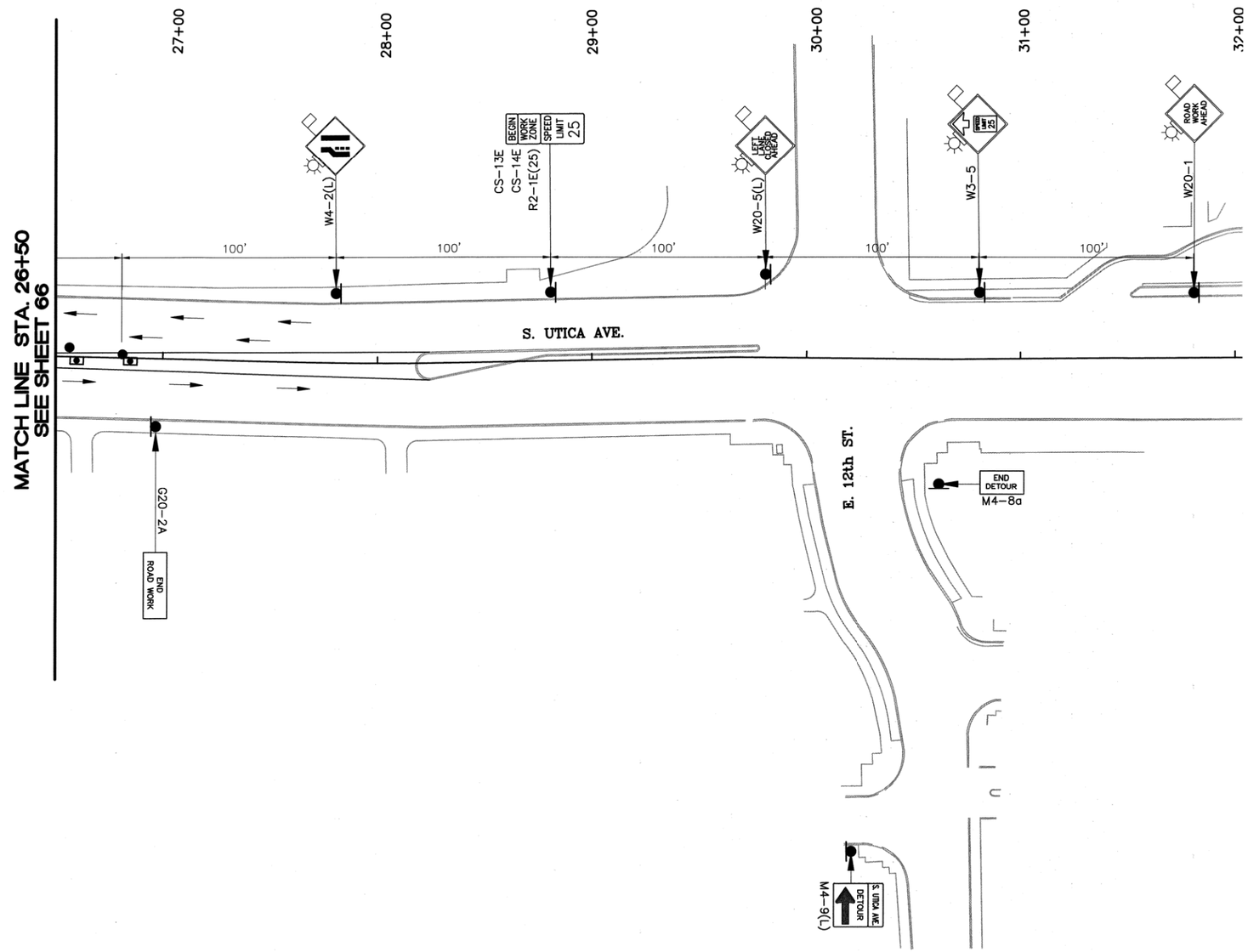

1 inch = 30 ft. (HORIZ.)

30 0 30 60

LEGEND

- TYPE III BARRICADE
- CONSTRUCTION SIGN
- DRUMS
- CONE CHANNELIZER
- CONSTRUCTION AREA
- TRAFFIC DIRECTION

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LICENSED PROFESSIONAL ENGINEER
Daniel E. Polasek
24920
OKLAHOMA
9/12/2024

TRAFFIC CONTROL PHASE I (3 OF 3)

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

REVISION	BY	DATE

PLAN SCALE: 1"=30'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		10/2024
HORIZONTAL:	LEAD ENGR.		8/25
	FIELD MGR.		11/25
VERTICAL:	RECOMMENDED: HAS 8·25 DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING:

ATLAS PAGE NO: 3

DATE JULY 2024

SHEET 67 OF 77 SHEETS

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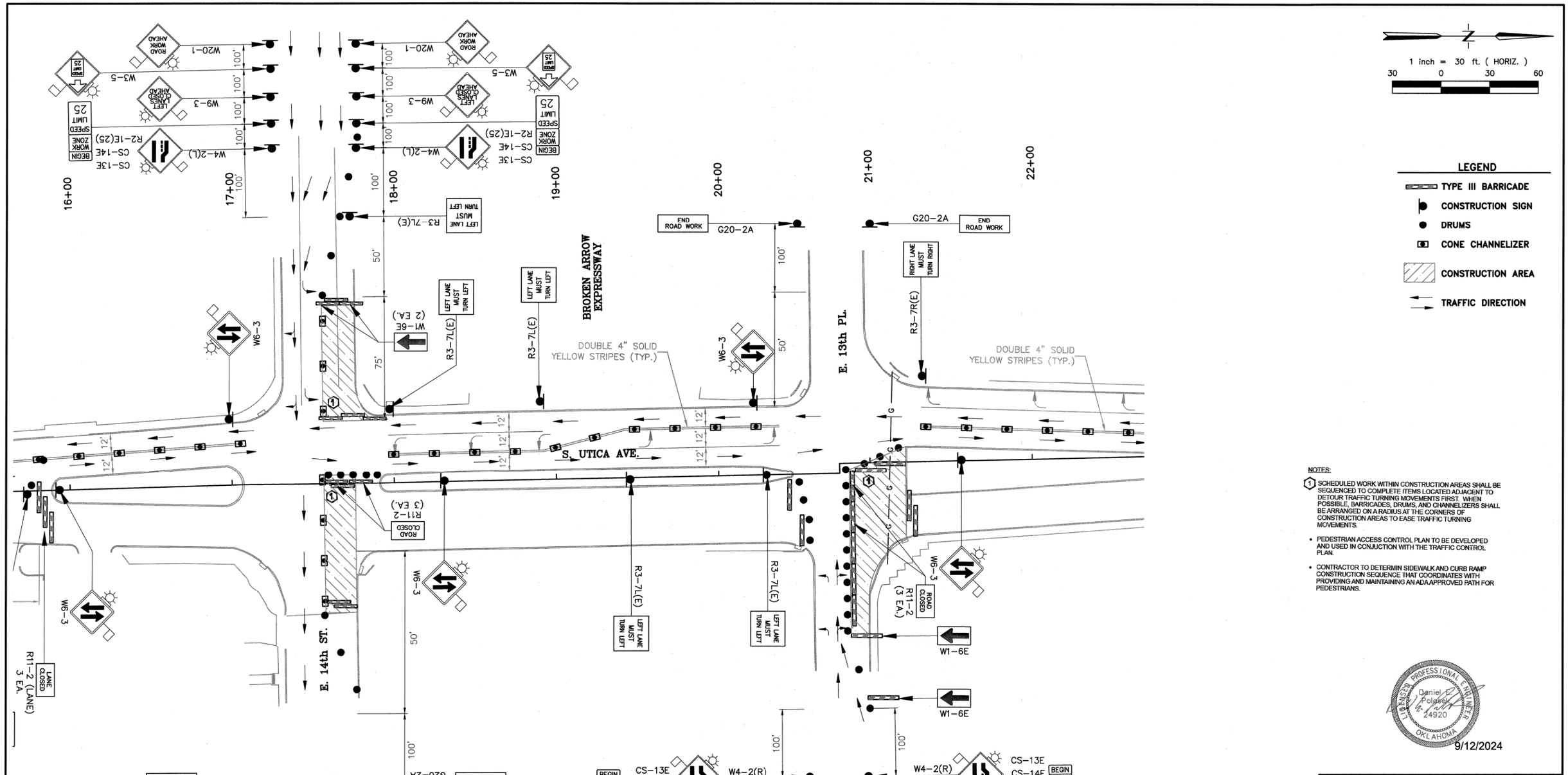

TRAFFIC CONTROL PHASE I–B (1 OF 1)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: 1"=30'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.			
HORIZONTAL:	LEAD ENGR.			
	FIELD MGR.			
VERTICAL:	RECOMMENDED: HAS 8-26-25 DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 68 OF 77 SHEETS

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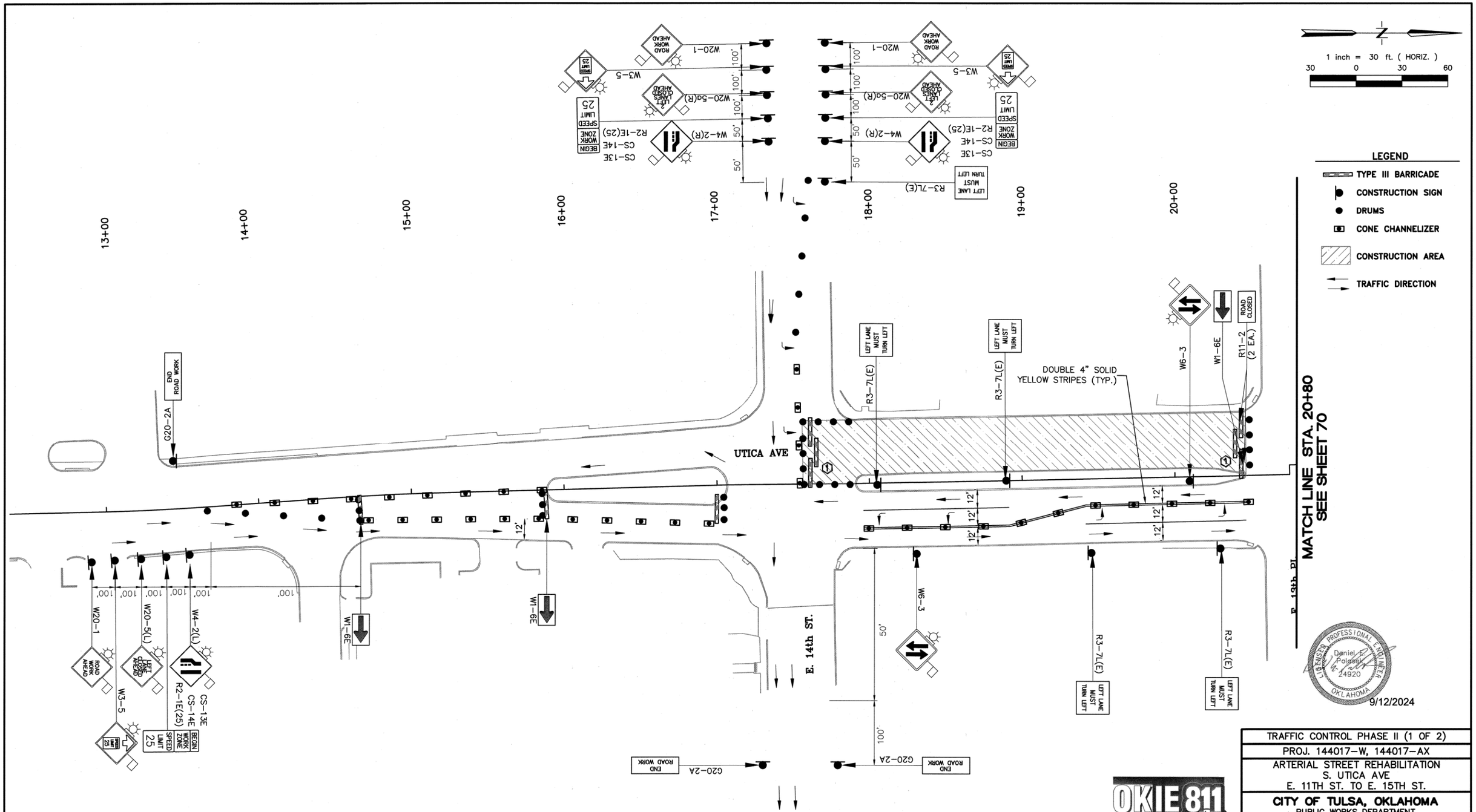

NOTES:

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

REVISION	BY	DATE

TRAFFIC CONTROL PHASE II (1 OF 2)

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

PLAN SCALE: 1"=30'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		10/2024
HORIZONTAL:	LEAD ENGR.		5/05
	FIELD MGR.		6/05
VERTICAL:	RECOMMENDED: HAS 8-25 DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING: DATE JULY 2024

ATLAS PAGE NO: 3 SHEET 69 OF 77 SHEETS

LICENSED PROFESSIONAL ENGINEER Daniel E. Polasek 24920 OKLAHOMA 9/12/2024

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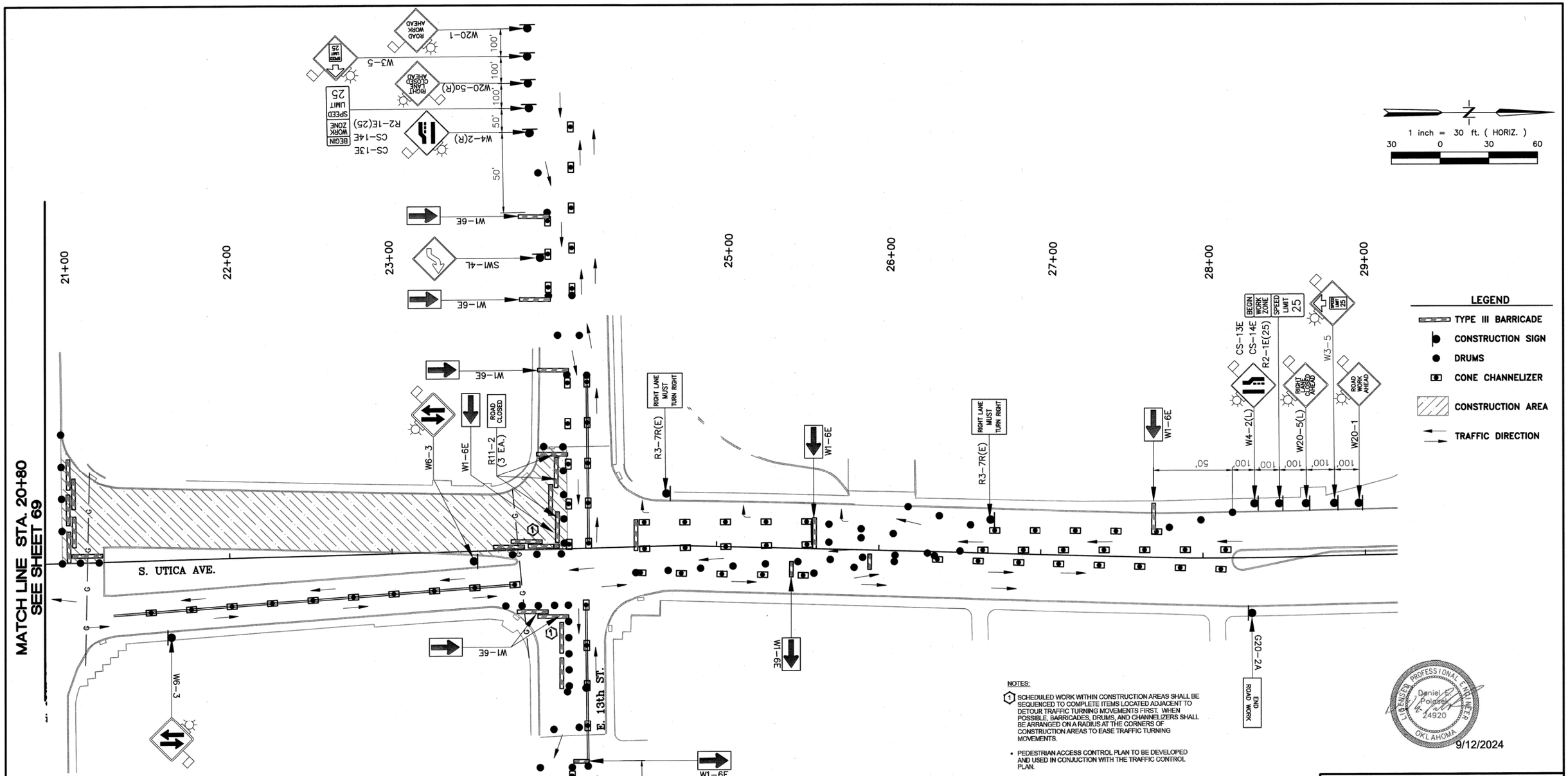

NOTES:

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LICENSED PROFESSIONAL ENGINEER
Daniel Polasek
24920
OKLAHOMA
9/12/2024

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

TRAFFIC CONTROL PHASE II (2 OF 2)

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

REVISION	BY	DATE

PLAN SCALE: 1"=30'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		10/2024	
HORIZONTAL:	LEAD ENGR.		6/25	
	FIELD MGR.		6/25	
VERTICAL:	RECOMMENDED: DESIGN MANAGER		8-25	CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 70 OF 77 SHEETS

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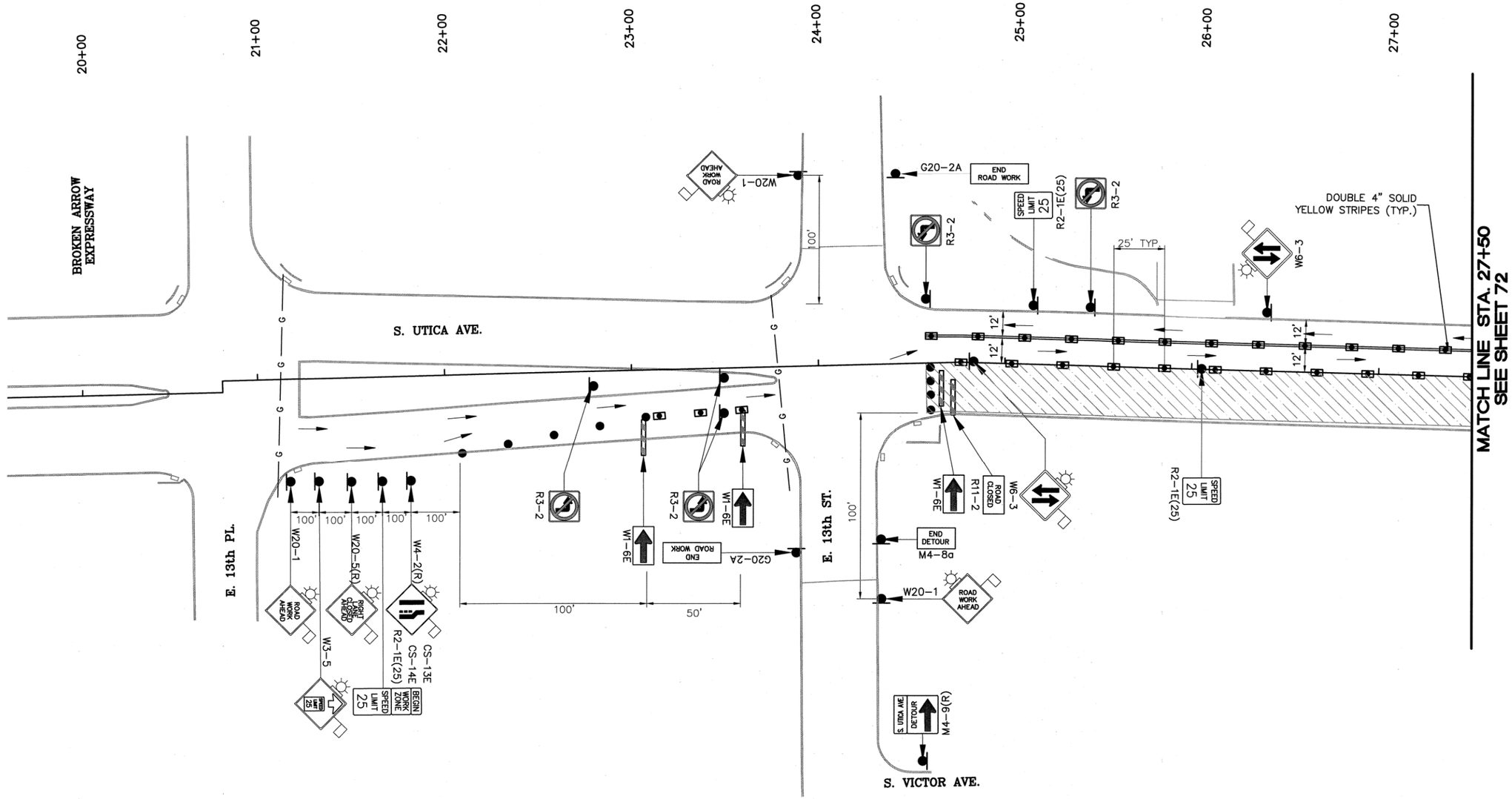

1 inch = 30 ft. (HORIZ.)

30 0 30 60

LEGEND

- TYPE III BARRICADE
- CONSTRUCTION SIGN
- DRUMS
- CONE CHANNELIZER
- CONSTRUCTION AREA
- TRAFFIC DIRECTION

NOTES:

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LICENSED PROFESSIONAL ENGINEER
Daniel E. Polasek
24920
OKLAHOMA
9/12/2024

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

TRAFFIC CONTROL PHASE III (1 OF 3)

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

REVISION	BY	DATE

PLAN SCALE: 1"=30'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		10/2024
HORIZONTAL:	LEAD ENGR.		5/25
	FIELD MGR.		6/05
VERTICAL:	RECOMMENDED: DESIGN MANAGER		8-25

APPROVED: CITY ENGINEER

FILE: DRAWING: DATE JULY 2024

ATLAS PAGE NO: 3 SHEET 71 OF 77 SHEETS

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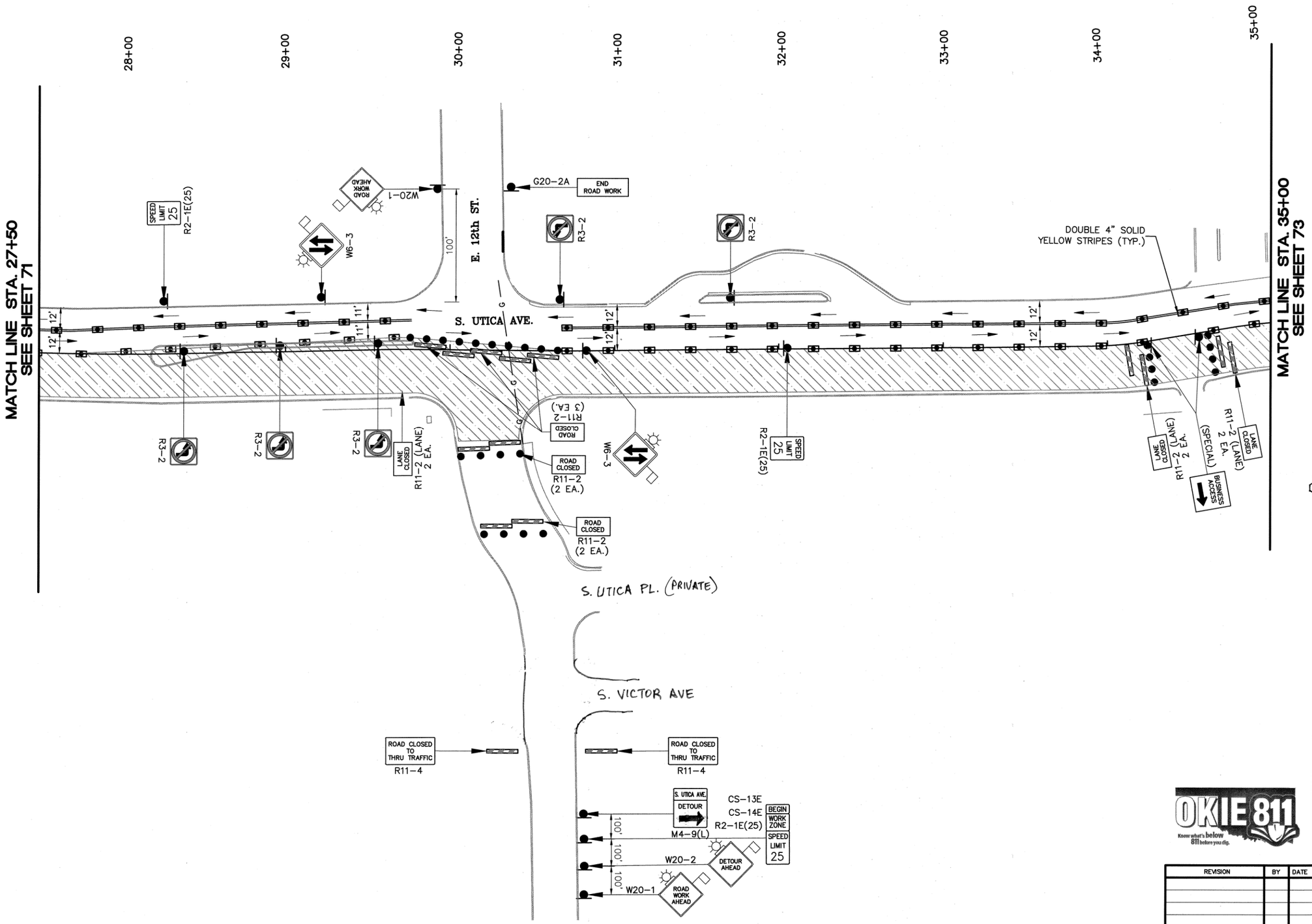

1 inch = 30 ft. (HORIZ.)

30 0 30 60

LEGEND

- TYPE III BARRICADE
- CONSTRUCTION SIGN
- DRUMS
- CONE CHANNELIZER
- CONSTRUCTION AREA
- TRAFFIC DIRECTION

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LICENSED PROFESSIONAL ENGINEER
Daniel E. Polgari
24920
OKLAHOMA
9/12/2024

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

TRAFFIC CONTROL PHASE III (2 OF 3)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: 1"=30'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		10/2024	
HORIZONTAL:	LEAD ENGR.		5/25	
	FIELD MGR.		6/25	
VERTICAL:	RECOMMENDED: HAS 8-25 DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 72 OF 77 SHEETS

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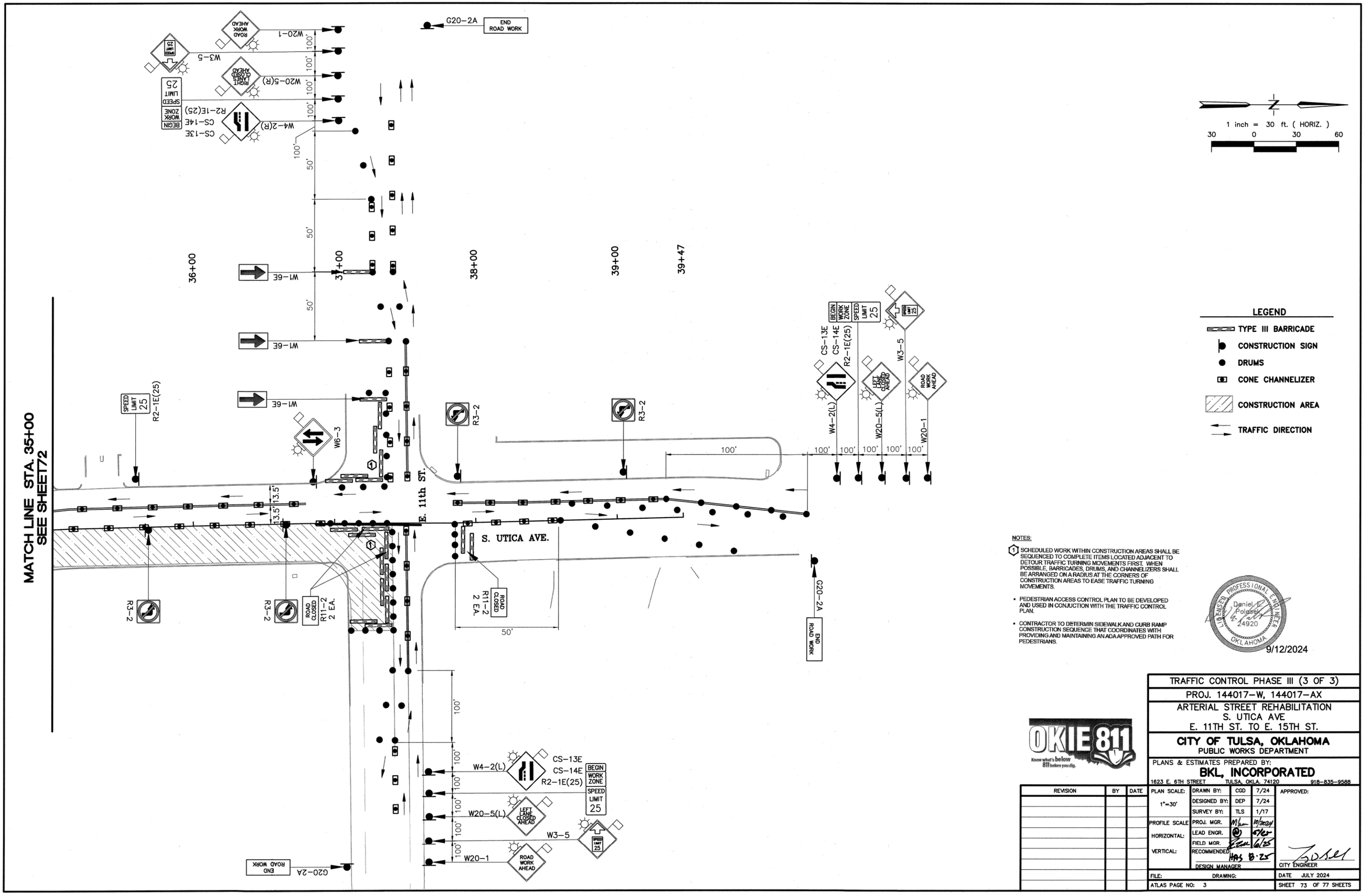

NOTES:

1. SCHEDULED WORK WITHIN CONSTRUCTION AREAS SHALL BE SEQUENCED TO COMPLETE ITEMS LOCATED ADJACENT TO DETOUR TRAFFIC TURNING MOVEMENTS FIRST. WHEN POSSIBLE, BARRICADES, DRUMS, AND CHANNELIZERS SHALL BE ARRANGED ON A RADIUS AT THE CORNERS OF CONSTRUCTION AREAS TO EASE TRAFFIC TURNING MOVEMENTS.

- PEDESTRIAN ACCESS CONTROL PLAN TO BE DEVELOPED AND USED IN CONJUCTION WITH THE TRAFFIC CONTROL PLAN.
- CONTRACTOR TO DETERMIN SIDEWALK AND CURB RAMP CONSTRUCTION SEQUENCE THAT COORDINATES WITH PROVIDING AND MAINTAINING AN ADA APPROVED PATH FOR PEDESTRIANS.

LICENSED PROFESSIONAL ENGINEER
Daniel E. Polgar
24920
OKLAHOMA
9/12/2024

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

TRAFFIC CONTROL PHASE III (3 OF 3)

PROJ. 144017-W, 144017-AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918-835-9588

REVISION	BY	DATE

PLAN SCALE: 1"=30'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		10/2024
HORIZONTAL:	LEAD ENGR.		6/25
	FIELD MGR.		6/25
VERTICAL:	RECOMMENDED: DESIGN MANAGER		8·25

APPROVED: CITY ENGINEER

FILE: DRAWING: DATE JULY 2024

ATLAS PAGE NO: 3 SHEET 73 OF 77 SHEETS

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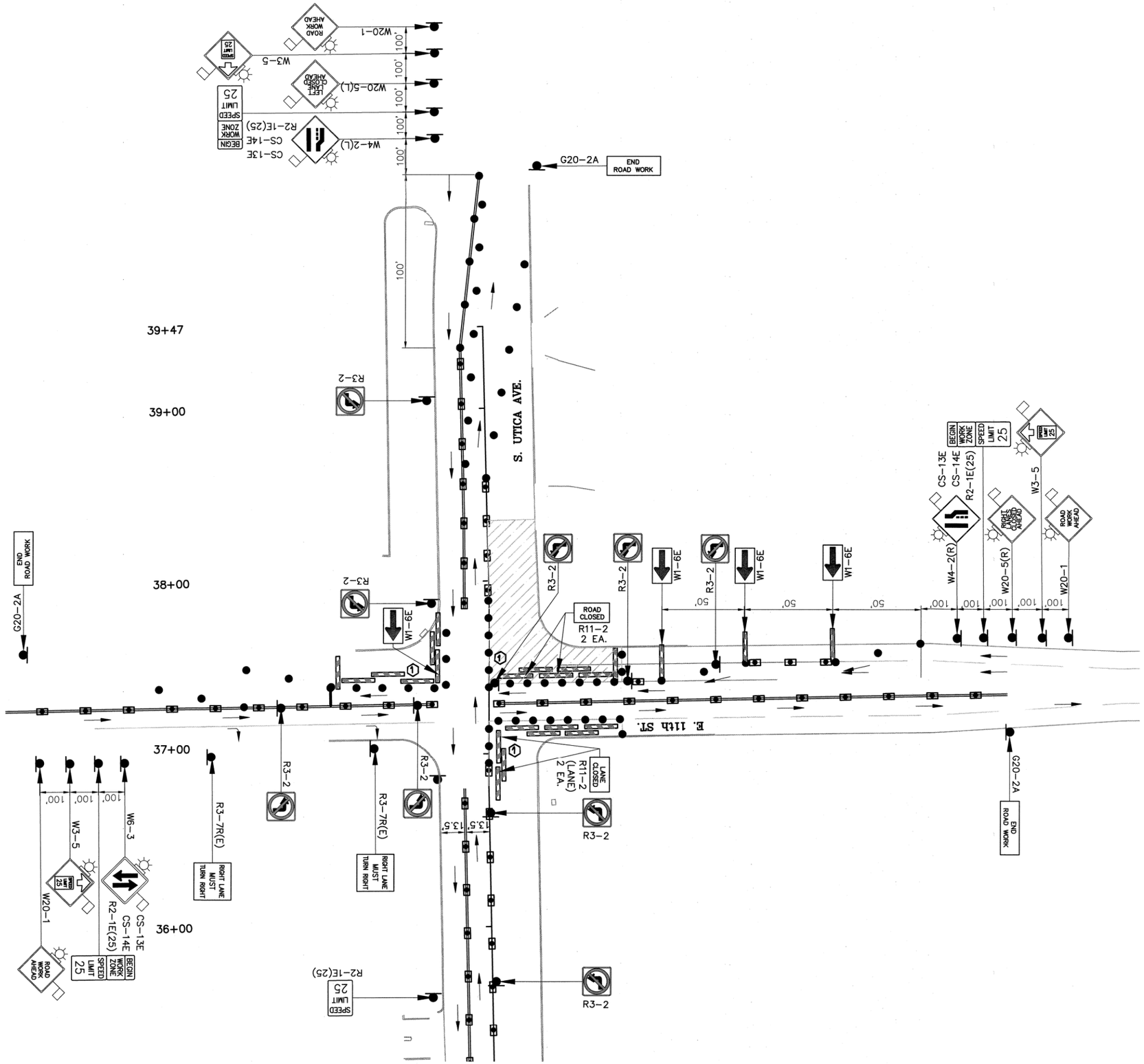

1 inch = 30 ft. (HORIZ.)

30 0 30 60

LEGEND

- TYPE III BARRICADE
- CONSTRUCTION SIGN
- DRUMS
- CONE CHANNELIZER
- CONSTRUCTION AREA
- TRAFFIC DIRECTION

NOTES:

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- CONTRACTOR TO DETERMIN SIDEWALK AND CURB RAMP CONSTRUCTION SEQUENCE THAT COORDINATES WITH PROVIDING AND MAINTAINING AN ADA APPROVED PATH FOR PEDESTRIANS.

LICENSED PROFESSIONAL ENGINEER
Daniel E. Colosi
24920
OKLAHOMA
9/12/2024

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

TRAFFIC CONTROL PHASE III B (1 OF 1)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

REVISION	BY	DATE

PLAN SCALE: 1"=30'	DRAWN BY:	CGD	7/24
	DESIGNED BY:	DEP	7/24
	SURVEY BY:	TLS	1/17
PROFILE SCALE	PROJ. MGR.		10/2024
HORIZONTAL:	LEAD ENGR.		5/25
	FIELD MGR.		6/25
VERTICAL:	RECOMMENDED: HAS 8-25 DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: DRAWING: DATE JULY 2024

ATLAS PAGE NO: 3 SHEET 74 OF 77 SHEETS

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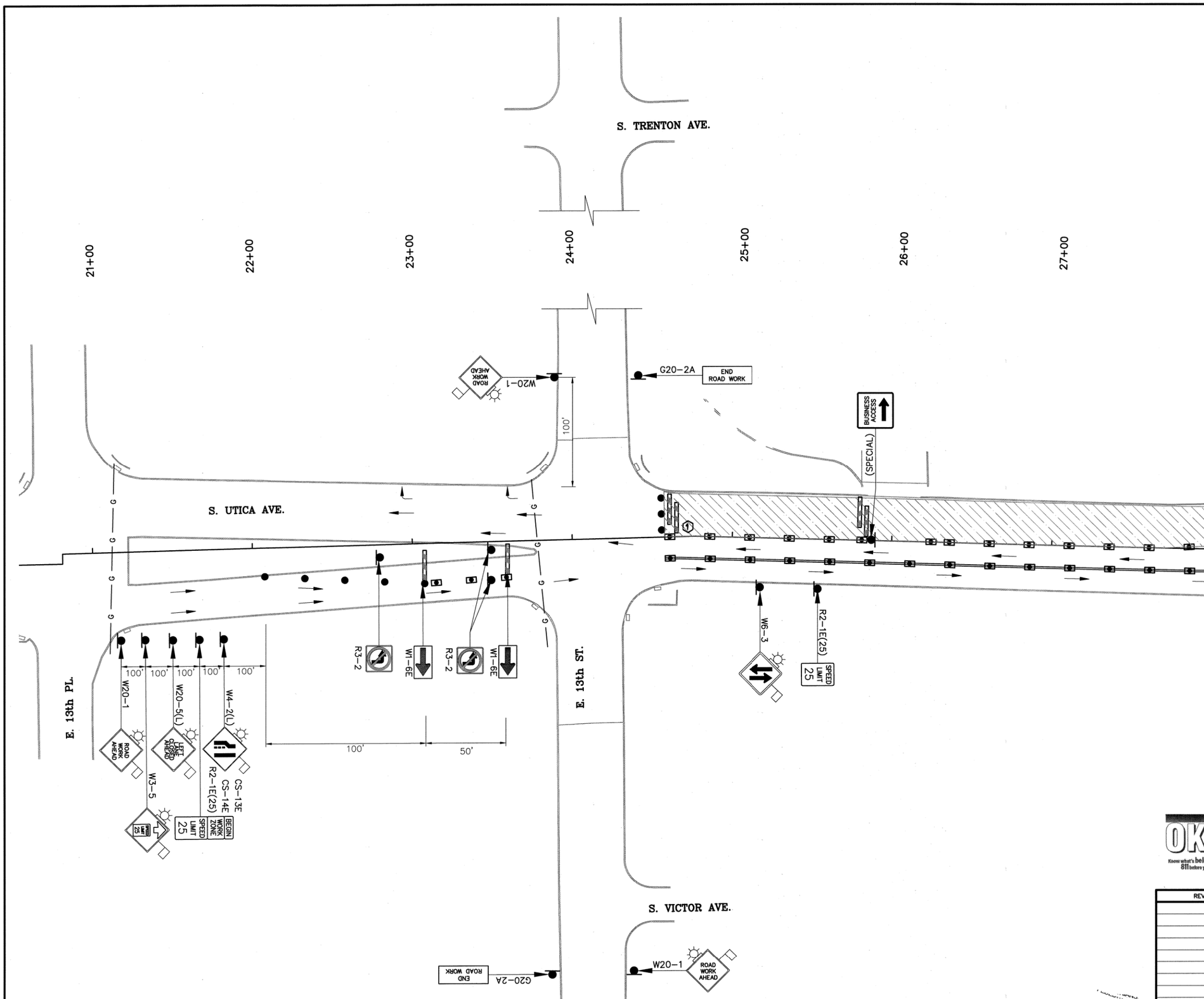

1 inch = 30 ft. (HORIZ.)

30 0 30 60

LEGEND

- TYPE III BARRICADE
- CONSTRUCTION SIGN
- DRUMS
- CONE CHANNELIZER
- CONSTRUCTION AREA
- TRAFFIC DIRECTION

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REGISTERED PROFESSIONAL ENGINEER
Daniel E. Polosek
24920
OKLAHOMA
9/12/2024

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

REVISION	BY	DATE

TRAFFIC CONTROL PHASE IV (1 OF 3)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

PLAN SCALE: 1"=20'	DRAWN BY:	CGD	7/24	APPROVED:
	DESIGNED BY:	DEP	7/24	
	SURVEY BY:	TLS	1/17	
PROFILE SCALE	PROJ. MGR.		10/2024	
HORIZONTAL:	LEAD ENGR.		9/25	
	FIELD MGR.		6/25	
VERTICAL:	RECOMMENDED: HBS 8-25 DESIGN MANAGER			CITY ENGINEER
FILE:	DRAWING:			DATE JULY 2024
ATLAS PAGE NO: 3				SHEET 75 OF 77 SHEETS

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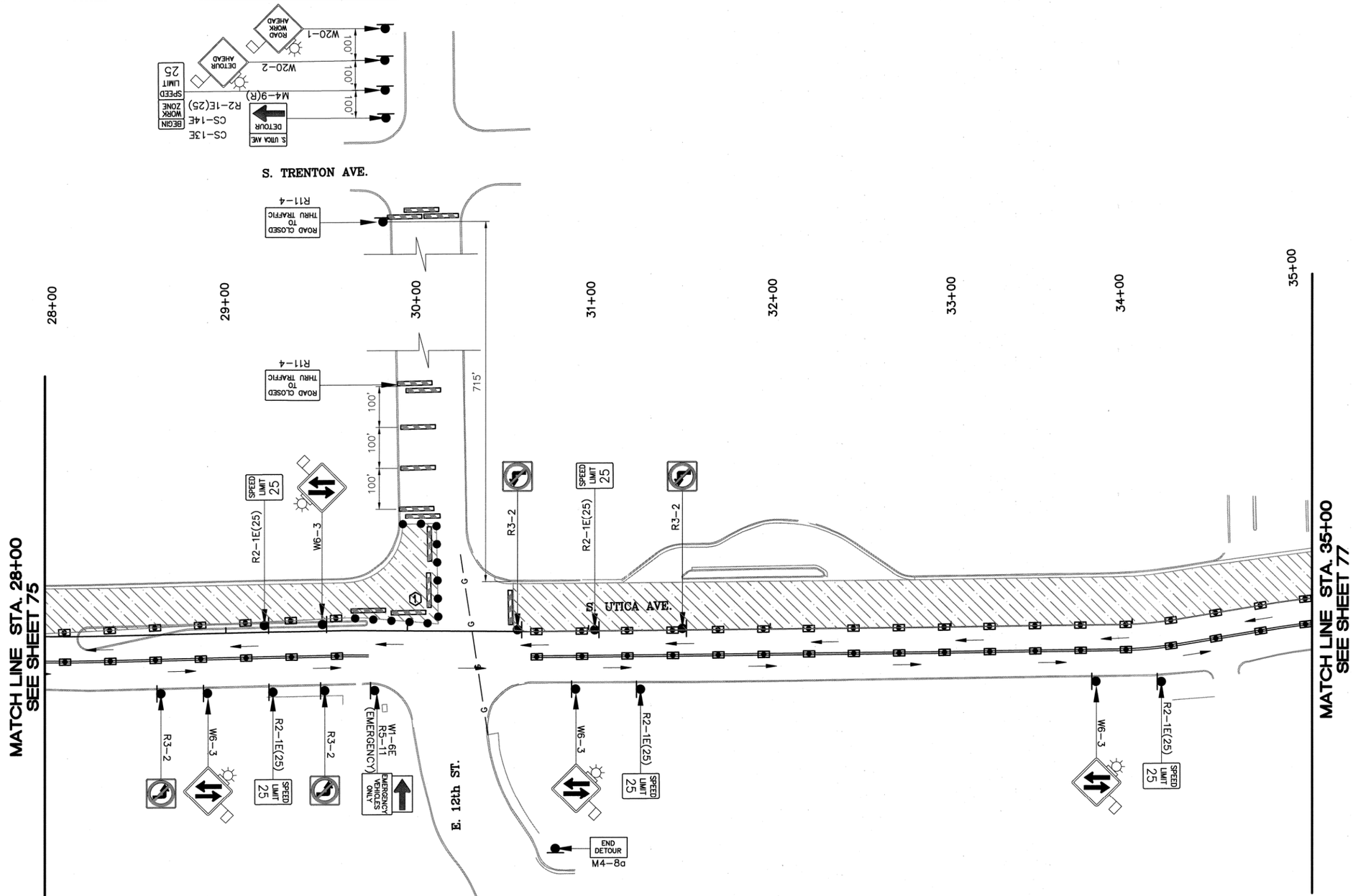

1 inch = 30 ft. (HORIZ.)

30 0 30 60

LEGEND

- TYPE III BARRICADE
- CONSTRUCTION SIGN
- DRUMS
- CONE CHANNELIZER
- CONSTRUCTION AREA
- TRAFFIC DIRECTION

NOTES:

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LICENSED PROFESSIONAL ENGINEER
Daniel E. Polasek
24920
OKLAHOMA
9/12/2024

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

TRAFFIC CONTROL PHASE IV (2 OF 3)

PROJ. 144017–W, 144017–AX

ARTERIAL STREET REHABILITATION
S. UTICA AVE
E. 11TH ST. TO E. 15TH ST.

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS & ESTIMATES PREPARED BY:
BKL, INCORPORATED
1623 E. 6TH STREET TULSA, OKLA. 74120 918–835–9588

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PROFILE SCALE	PROJ. MGR.		10/2024	
HORIZONTAL:	LEAD ENGR.		6/25	
	FIELD MGR.		6/25	
VERTICAL:	RECOMMENDED: DESIGN MANAGER		8·25	CITY ENGINEER

FILE: DRAWING:	DATE JULY 2024
ATLAS PAGE NO: 3	SHEET 76 OF 77 SHEETS

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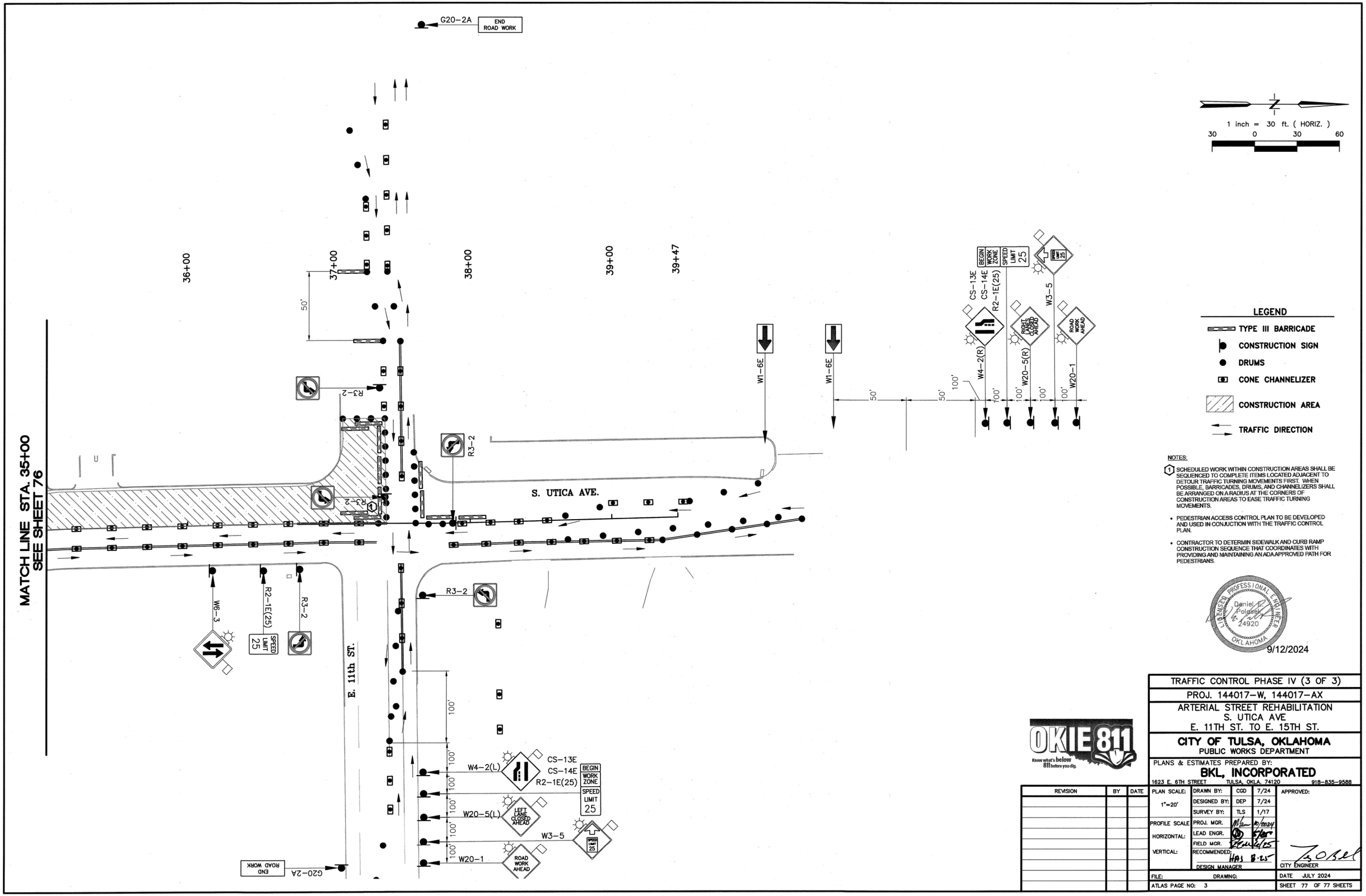

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