

# CONSTRUCTION PLANS FOR E CAMERON STREET STREETSCAPE PROJECT NO 164003 TIF ACCOUNT NUMBER 6963-5453102-840040164003

**CITY UTILITIES:**

THE CITY OF TULSA  
UTILITY COORDINATOR  
CHRIS KOVAC  
2317 SOUTH JACKSON AVENUE  
TULSA, OKLAHOMA 74103  
918.596.9649

**GAS:**

OKLAHOMA NATURAL GAS COMPANY  
ATTN: SCOTT GIDEON  
918/831-8293

**TELEPHONE:**

AT&T COMMUNICATION INC.  
ATTN: DAVID DUER  
5305 EAST 71ST STREET  
TULSA, OKLAHOMA 74135  
918/596-4273

**CABLE TELEVISION:**

COX COMMUNICATIONS  
ATTN: GARY HAMILTON  
11811 E. 51ST STREET S.  
TULSA, OKLAHOMA 74146  
918/286-4666

**ELECTRIC:**

AEP/PUBLIC SERVICE COMPANY OF OKLAHOMA  
ATTN: JOHN GILKEY  
5524 E 15TH STREET  
TULSA, OKLAHOMA 74112  
918/599-6502

**OWNER:**

BRADY ARTS DISTRICT  
OWNERS ASSOCIATION  
STEVE GANZKOW  
TULSA, OK 74103

**ENGINEER:**

WALLACE ENGINEERING  
STRUCTURAL CONSULTANTS, INC  
SCOTT RODEHAVER, P.E.  
200 EAST MATHEW BRADY  
TULSA, OKLAHOMA 74103  
918/584-5858

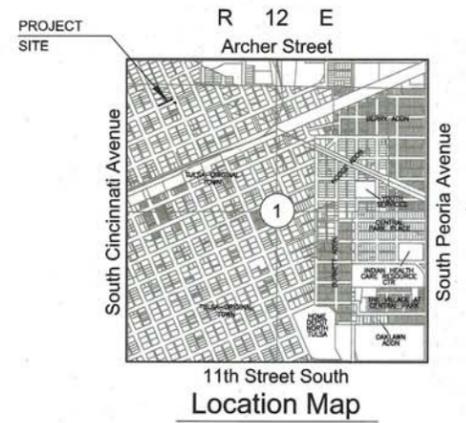
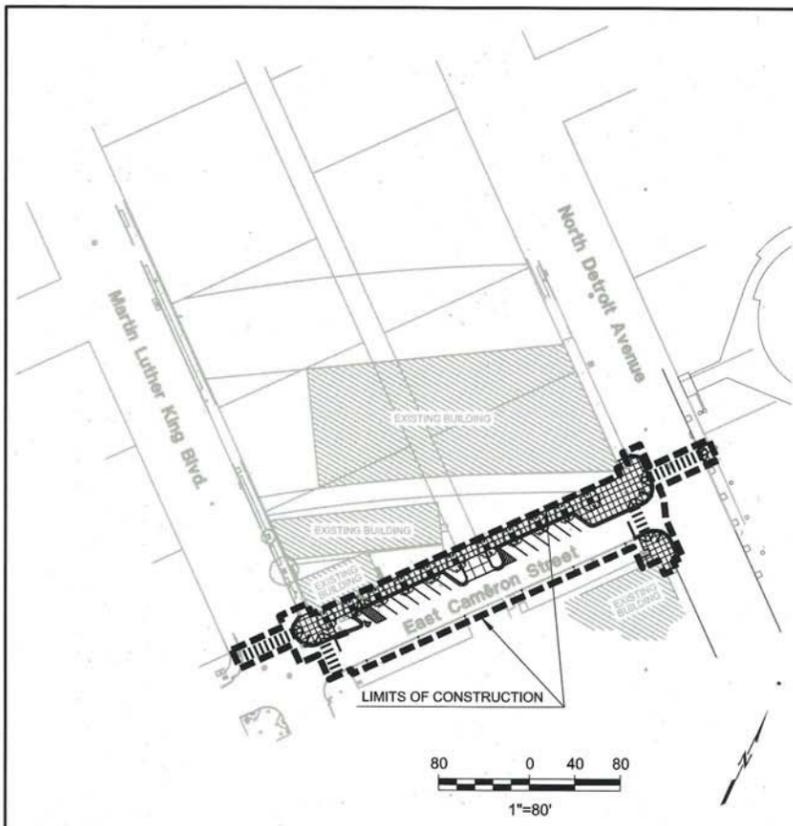
IMPERVIOUS AREA TABLE	
TOTAL DISTURBED AREA	0.30 ACRES
IMPERVIOUS AREA REMOVED	6327 SF
IMPERVIOUS AREA ADDED	12,128 SF
INCREASE IN IMPERVIOUS AREA	5801 SF

\*\* R.O.W. PERMIT REQUIRED FOR THIS ITEM.  
CALL CITY OF TULSA AT (918) 576-5404.

EXISTING TOPOGRAPHY IS BASED ON AN ACTUAL FIELD SURVEY  
PERFORMED BY BENNETT SURVEYING, INC., DATED SEPTEMBER 24, 2015

Benchmark	Benchmark	Benchmark
CHISELED "X" ELEV=719.17 N=428833.7246 E=2561117.5791	CHISELED "X" ELEV=715.39 N=428738.1375 E=2561161.7983	3/8" IRON PIN ELEV=712.97 N=428709.9312 E=2561509.7567

THE VERTICAL DATUM FOR THIS SURVEY IS BASED ON NAVD88 GPS DATA.  
THE HORIZONTAL DATUM FOR THIS SURVEY IS BASED OKLAHOMA STATE  
PLANE NAD83.



- LIST OF SHEETS:**
- 1.....COVER SHEET
  - 2.....SUMMARY OF PAY QUANTITIES
  - 3.....PAY QUANTITY NOTES
  - 4.....GENERAL CONSTRUCTION NOTES
  - 5.....SURVEY DATA
  - 5A.....STORMWATER MANAGEMENT PLAN
  - 6.....DEMOLITION AND EROSION CONTROL PLAN
  - 7.....SITE PLAN
  - 8.....GRADING PLAN
  - 9.....DETAILS
  - 10.....DETAILS
  - EE01.....ELECTRICAL
  - EE02.....ELECTRICAL
  - EE03.....ELECTRICAL
  - EE04.....ELECTRICAL
  - EE05.....ELECTRICAL

- CITY OF TULSA STANDARD DRAWINGS**
- 126 - STANDARD SILT FENCE AND CONSTRUCTION ENTRANCE
  - 304 - BEDDING DETAIL - RIGID PIPE
  - 726 - ASPHALT PAVEMENT STANDARD DETAILS FOR RESIDENTIAL AND COLLECTOR STREETS
  - 727 - CONCRETE PAVEMENT STANDARD DETAILS FOR RESIDENTIAL AND COLLECTOR STREETS
  - 730 - STANDARD ASPHALT PAVEMENT CUT AND REPAIR
  - 731 - STANDARD CONCRETE PAVEMENT CUT AND REPAIR
  - 764 - STANDARD REINFORCED CONCRETE STORMWATER INLET
  - 790 - STANDARD SIDEWALK RAMP (TYPE A)

- ODOT STANDARD DRAWINGS**
- TSD-2 TEMPORARY SILT DIKE

- NOTES**
1. ALL CONSTRUCTION TO BE IN STRICT ACCORDANCE WITH CURRENT CITY OF TULSA ENGINEERING SERVICES DEPARTMENT STANDARDS AND SPECIFICATIONS.
  2. ENTIRE PROJECT IS WITHIN CORPORATE LIMITS OF CITY OF TULSA.
  3. THIS PROJECT COMPLIES WITH ALL OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ) REQUIREMENTS.
  4. REFERENCE ATLAS PAGE #8 FOR CITY OF TULSA UTILITIES.
  5. ROW PERMIT REQUIRED FOR SIDEWALK, CURB, DRIVEWAYS AND ACCESSIBLE RAMPS LOCATED IN ROW. ROW PERMIT NOT REQUIRED FOR PRIVATE STREETS PLEASE CALL (918) 596-2519 FOR PERMIT INFO.
  6. CONTRACTOR AND ALL SUBCONTRACTORS DOING WORK IN THE ROW SHALL BE APPROVED BY THE CITY OF TULSA TO DO INFRASTRUCTURE DEVELOPMENT PROCESS WORK. CONTACT JULIE MILLER AT (918) 596-2514 FOR MORE INFORMATION.
  7. ALTERNATE A - STREET LIGHT WIRING TO BRADY CONTROLLER

**MYLAR PLANS**  
JUNE 17, 2016

CITY OF TULSA, OKLAHOMA  
  
DIRECTOR OF ENGINEERING SERVICES  
DEPARTMENT

09.27.16  
DATE

ADVERTISEMENT DATE

PREPARED BY:

SCOTT M. RODEHAVER, PE NO 18694

CITY OF TULSA  
ATLAS PAGE 8

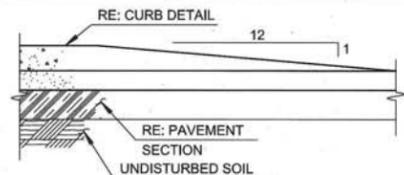
**LEGEND**

--- 660 ---	EXISTING MAJOR CONTOUR	BM	BENCH MARK	BC	BOT OF CURB	PAVT	PAVEMENT
- - - 662 - - -	EXISTING MINOR CONTOUR	CO	CLEANOUT	CI	CAST IRON	PE	POLYETHYLENE
--- 660 ---	NEW MAJOR CONTOUR	EP	EMERGENCY PHONE	CLR	CLEAR	PVC	POLY VINYL CHLORIDE
- - - 662 - - -	NEW MINOR CONTOUR	FDC	FIBER OPTIC MANHOLE	CJ	CONSTRUCTION JOINT	R	RADIUS
X	FENCE	FH	FIRE DEPT CONNECTION	DB	DRAINAGE BASIN	RD	ROOF DRAIN
T	TELEPHONE OVERHEAD	GM	FIRE HYDRANT	DIP	DUCTILE IRON PIPE	R/W	RIGHT OF WAY
~	POWER LINE OVERHEAD	LP	GAS / OIL WELL	DGDI	DOUBLE GRATE CURB INLET	RCP	REINFC CONCRETE PIPE
G	GAS LINE	OH	GAS METER	DO	DOOR OPENING	RJ	RESTRAINED JOINT
O	OIL LINE	TP	GAS / OIL WELL	EJ	EXPANSION JOINT	SGDI	SINGLE GRATE CURB INLET
-PUG-	POWER UNDERGROUND	EL	LIGHT POLE	EL	ELEVATION	SF	SQUARE FEET
-TUG-	TELEPHONE UNDERGROUND	FF	LIGHT POLE	FF	FINISH FLOOR	SJ	SAW JOINT
-TVUG-	TV UNDERGROUND	FG	POWER MANHOLE	FG	FINISH GRADE	TC	TOP OF CURB
W	WATER LINE	FL	POWER POLE	FL	FLOWLINE	TG	TOP OF GRATE
SS	SANITARY SEWER LINE	FB	PULL BOX	FL	FLOWLINE	TOF	TOP OF FOOTING
- - - - -	FLOW LINE DITCH	HB	SANITARY MANHOLE	HB	HOSE BIB	TP	TOP OF PAVEMENT
--- SF ---	ODOT TEMPORARY SILT FENCE	HDPE	STEAM MANHOLE	HDPE	HIGH DENSITY POLYETHYLENE	TR	TOP OF RIM
		IRR	STORM MANHOLE	IRR	IRRIGATION	TS	TOP OF SIDEWALK
		IST	TELEPHONE MANHOLE	IST	INLET SEDIMENT TRAP	TW	TOP OF WALL
		LF	TELEPHONE PEDESTAL	LF	LINEAR FEET	UNO	UNLESS NOTED OTHERWISE
		OHD	TRANSFORMER PAD	OHD	OVERHEAD DOOR		
			VALVE				
			WH				
			WM				
			W				
			W				
			W				
			W				

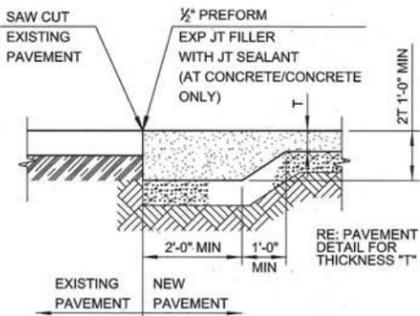
**CAUTION**

NOTICE TO CONTRACTOR  
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THE LOCATION AND ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES

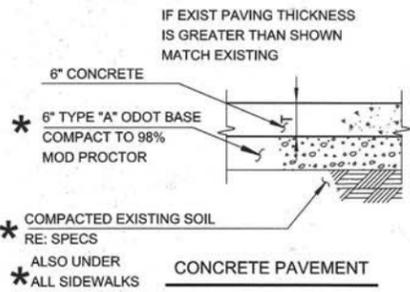




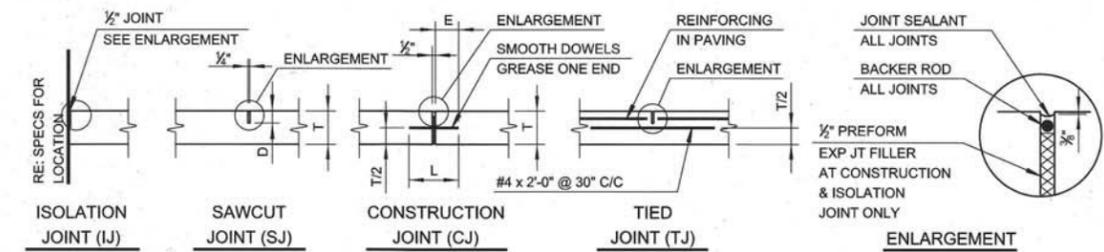
**3 CURB TERMINATION**  
SCALE: NTS



**2 PAVEMENT TRANSITION**  
SCALE: NTS



**1 PAVEMENT DETAIL**  
SCALE: NTS



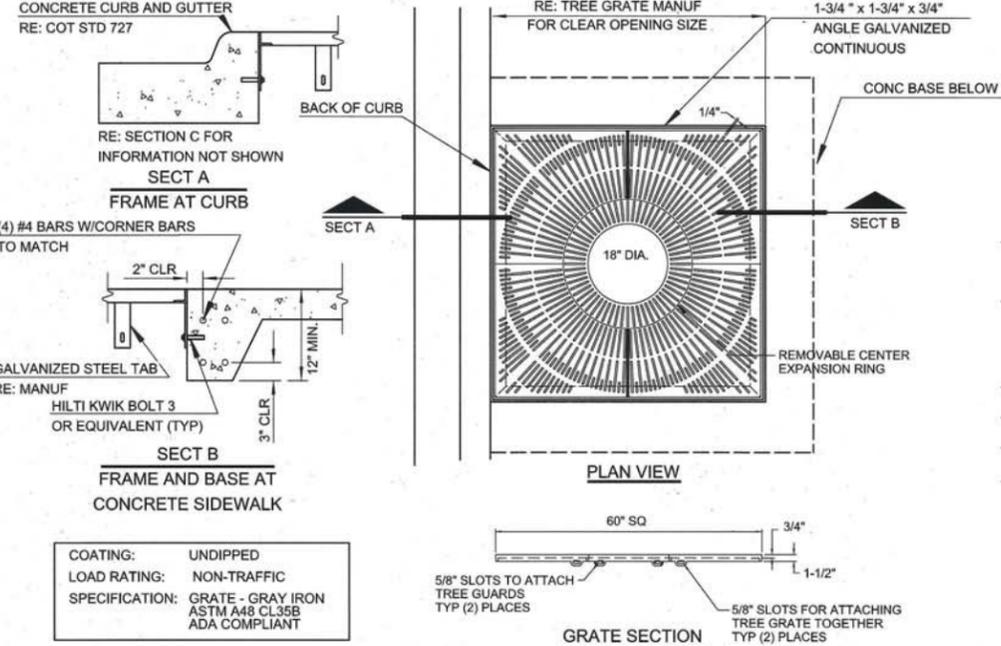
JOINTS NOT SHOWN OTHERWISE SHALL BE SAW JOINTS. SAW JOINTS SHALL BE MADE WITHIN 10 HOURS AFTER CONCRETE POUR.

CONCRETE PAVING JOINT SPACING SEE SCHEDULE

ALL DOWELS & BARS TO BE EPOXY COATED

"T" PAVEMENT THICKNESS	DOWEL DIAMETER @ 12" C/C	"L" LENGTH	"E" EMBEDMENT	"D" SAWCUT DEPTH	MAX JOINT SPACING
5"	---	---	---	1 1/2"	12.5'
6"	3/4"	14"	6"	1 1/2"	15'
7"	7/8"	14"	6"	1 3/4"	15'
8"	1"	14"	6"	2"	15'

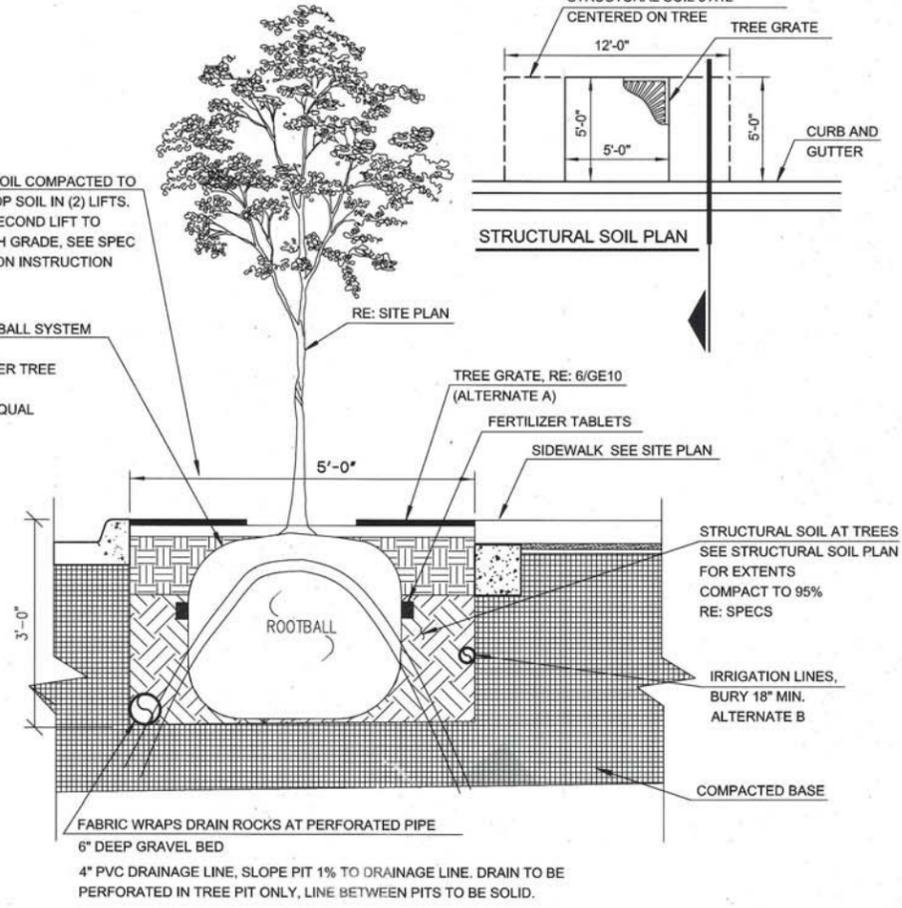
**4 PAVING JOINT DETAIL**  
SCALE: NTS



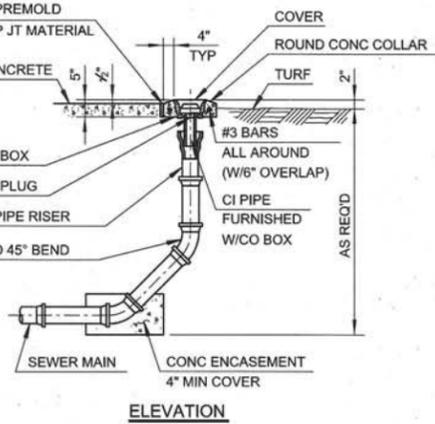
**6 TREE GRATE FRAME & CONCRETE BASE**  
SCALE: NTS

AMENDED TOP SOIL COMPACTED TO 85%. INSTALL TOP SOIL IN (2) LIFTS. INITIAL LIFT: 3", SECOND LIFT TO SPECIFIED FINISH GRADE, SEE SPEC FOR INSTALLATION INSTRUCTION

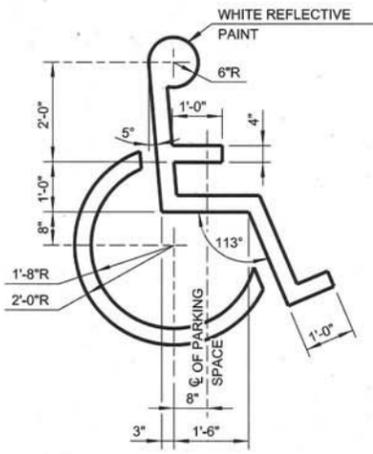
DUCKBILL ROOT BALL SYSTEM  
88 RBK KIT  
UP TO 6" DIAMETER TREE  
1 KIT PER TREE  
OR APPROVED EQUAL



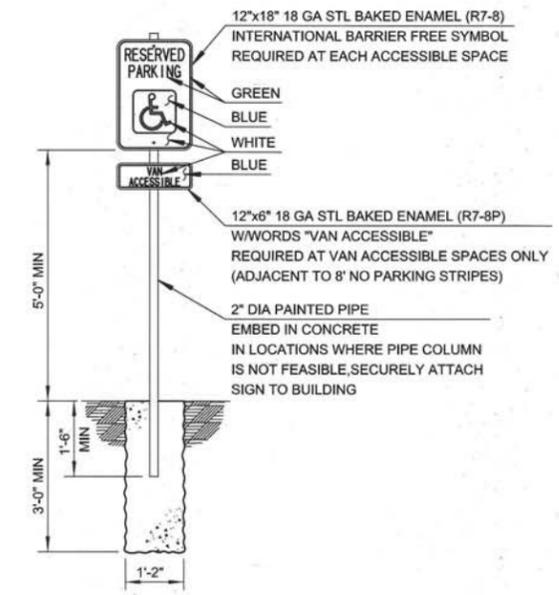
**5 PLANTING PIT AND STAKING AT TREE GRATE**  
SCALE: NTS



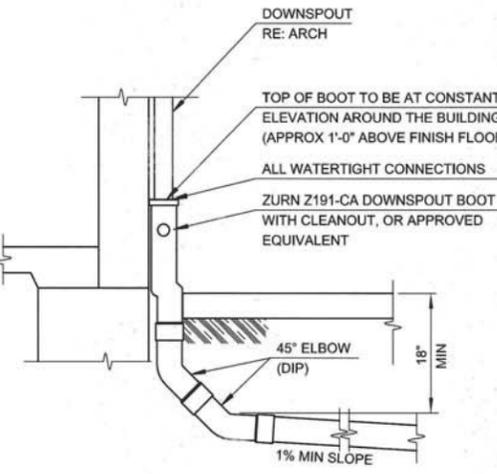
**7 CLEANOUT**  
SCALE: NTS



**8 ACCESSIBLE STRIPING**  
SCALE: NTS



**9 ACCESSIBLE SIGNAGE**  
SCALE: NTS

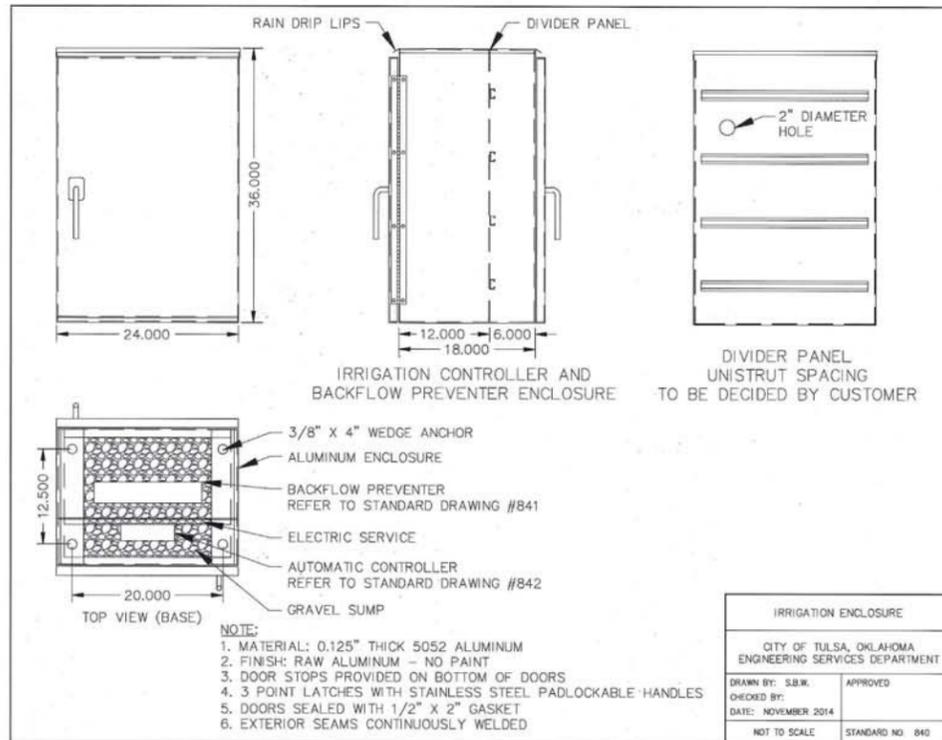


**10 DOWNSPOUT TO CONNECTION**  
SCALE: NTS

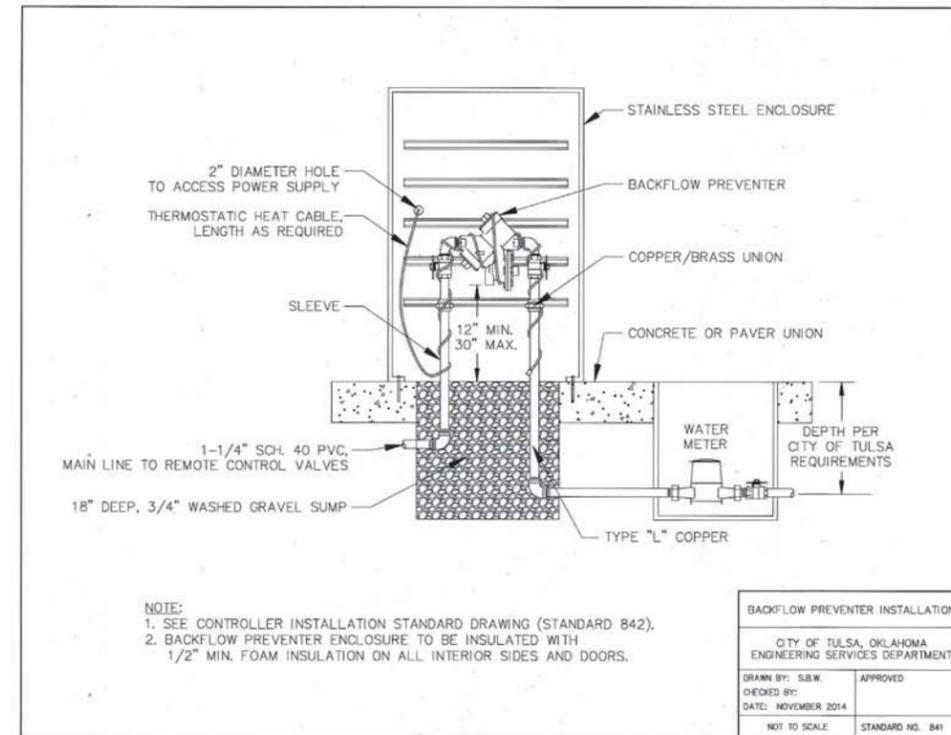


REVISION		BY	DATE	PLAN SCALE:	DRAWN	REI	01/11/16	APPROVED:
				NTS	DESIGNED	SR	01/11/16	
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				HORIZONTAL:	SECT. MGR.			
				VERTICAL:	PROJ. MGR.			
					RECOMMENDED:			
					DESIGN MANAGER			
				FILE: 15400091	DRAWING:			DATE:
				ATLAS PAGE NO.: 8				SHEET 9 OF 16 SHEETS

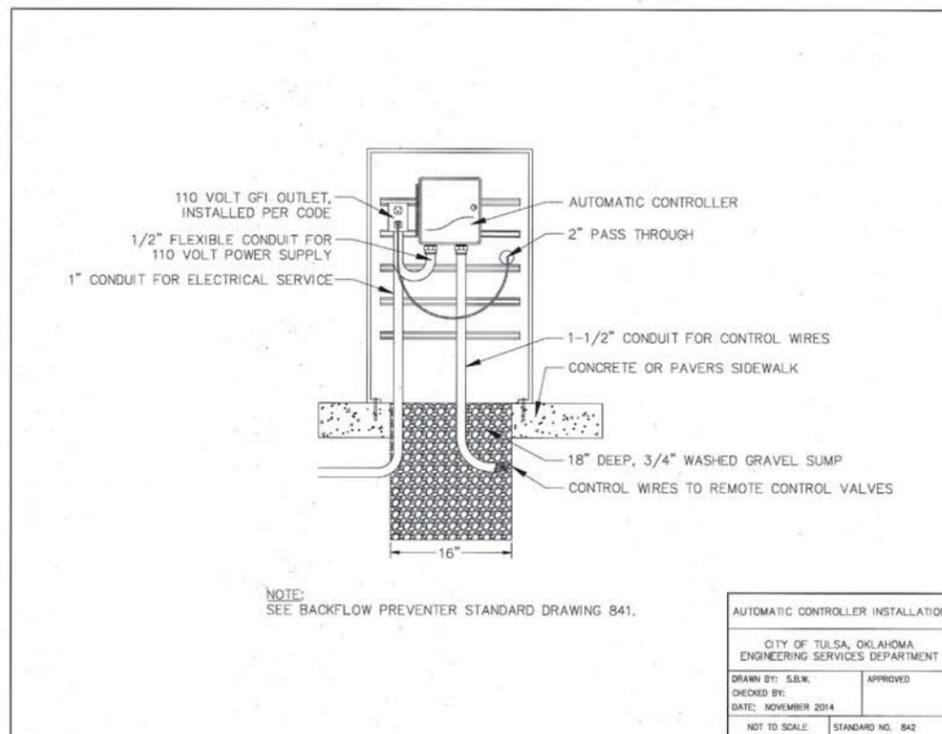
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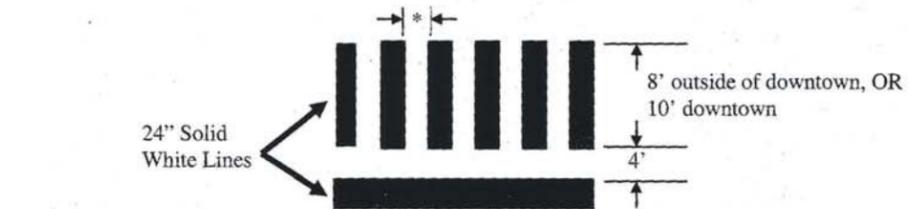
**10** IRRIGATION ENCLOSURE (#840)  
SCALE: NTS



**11** BACKFLOW PREVENTER INSTALLATION (#841)  
SCALE: NTS



**12** AUTOMATIC CONTROLLER INSTALLATION (#842)  
SCALE: NTS



\* Crosswalk bars are to be placed in line with the lane lines and at the centerline of each lane.

**13** CROSSWALK DETAIL  
SCALE: NTS



**DETAILS**  
**E CAMERON ST STREETSCAPE**  
**CITY OF TULSA, OKLAHOMA**

PLANS AND ESTIMATES PREPARED BY:  
**wallace**  
WALLACE ENGINEERING  
STRUCTURAL CONSULTANTS INC.  
200 EAST BRADY STREET  
TULSA, OK 74103  
(918) 584-5658

REVISION	BY	DATE	PLAN SCALE:	DRAWN	REI	01/11/16	APPROVED:
			NTS	DESIGNED	SR	01/11/16	
				SURVEY			
			PROFILE SCALE:	FIELD MGR.	7/16		
			HORIZONTAL:	SECT. MGR.	6/16		
			VERTICAL:	PROJ. MGR.	1/16		
				RECOMMENDED:			
				DESIGN MANAGER:			
			FILE: 15400091	DRAWING:			DATE:
			ATLAS PAGE NO.:	8			SHEET 10 OF 18 SHEETS

**SCOPE OF WORK:**

SCOPE OF WORK IN GENERAL SHALL CONSIST OF ALL ITEMS SHOWN ON THE PLANS. WORK SHALL BE PERFORMED IN SUCH A MANNER AND SEQUENCE AS TO MINIMIZE THE AMOUNT OF INTERRUPTION OF ACCESS TO THE STREETS AND SIDEWALKS. ALL WORK SHALL BE PERFORMED IN A PROFESSIONAL MANNER IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE. ALL MATERIAL AND EQUIPMENT IS TO BE NEW (NO EXCEPTIONS).

**BASE BID SCOPE OF WORK:**

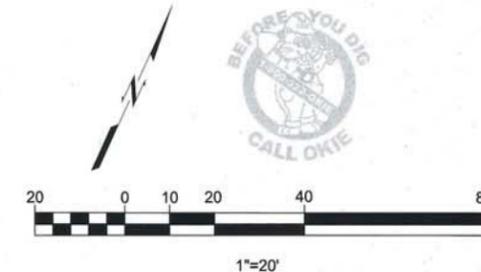
BY PROVIDING A BID ON THIS WORK, CONTRACTOR IS CONFIRMING THEY ARE QUALIFIED AND EXPERIENCED IN THE TYPE OF WORK IDENTIFIED AND THEY HAVE REVIEWED THE PLANS AND THE SITE.

1. DEMOLISH EXISTING ELECTRICAL ITEMS AS IDENTIFIED ON THE PROJECT DEMOLITION SHEETS AND DISPOSE OF ALL REMOVED MATERIAL. CONTRACTOR IS TO PROVIDE LABOR AND MATERIAL. DEMOLITION WORK TO BE COORDINATED WITH INSTALLATION OF NEW LIGHTING AND POWER SYSTEM.
2. CONTRACTOR TO INSTALL NEW LIGHTING PER THE PLANS. THIS INCLUDES INSTALLATION OF FEEDERS FOR LIGHTS AND ASSOCIATED CONDUIT, TRENCHING AND BACKFILL.
3. CONTRACTOR TO INSTALL CONDUIT, WIRE, POLE BASES, POLES AND ASSOCIATED MATERIAL FOR THE INSTALLATION OF NEW LIGHTING.
4. CONTRACTOR IS RESPONSIBLE FOR LABOR AND MATERIAL FOR MAKING CONNECTIONS TO CONTROLLER. ALL WIRING ON THE RENOVATED BLOCK FACES WILL BE IN UNDERGROUND CONDUIT. CONTRACTOR TO PROVIDE BORING OF THE ROADWAY WHERE SHOWN.
5. OBTAIN POWER FOR THE CAMERON LIGHTING BY ADDING A NEW 20A/2P CIRCUIT TO THE LIGHTING CONTACTOR IN CONTROLLER LC-1A AT BRADY AND DETROIT. TWO NEW #4 CONDUCTORS AND ONE NEW #8 GROUND WOULD BE PULLED IN EXISTING CONDUITS ON THE NORTH SIDE OF BRADY AND THE EAST SIDE OF MLK TO EXISTING LIGHT POLE 20. A NEW PULL BOX WOULD BE ADDED AT THIS LOCATION. THE FEED FOR THE NEW CAMERON LIGHTS WOULD COME FROM THIS PULL BOX, WITH THE LIGHTS ON THE NORTH SIDE OF THE STREET FED FROM THE NEW BORE.

ELECTRICAL PAY QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
COT 601(A)	FLUSH MOUNT SIZE 1 PULL BOX	EA.	4
COT 602(A)	2" PVC SCH 40 PLASTIC CONDUIT (TRENCHED)	L.F.	700'
COT 602(C)	2" HDPE SCH 40 CONDUIT (DIRECTIONAL BORE)	L.F.	60'
COT 611(A)	#12 THHN ELECTRICAL CONDUCTOR (INSTALLED IN POLES) INCLUDING GROUND	L.F.	1,400'
E611(B)	1/C NO.4 ELECTRICAL THHN/THWN CONDUCTOR PULLED IN BURIED CONDUIT FOR SERVICES	L.F.	2,400'
E611(C)	1/C NO.8 ELECTRICAL THHN/THWN CONDUCTOR PULLED IN BURIED CONDUIT FOR SERVICES	L.F.	1,250'
E803(A)	CONCRETE BASE ONLY, FOR 15' PEDESTRIAN LIGHT POLES.	EA.	11
E803(B)	CONCRETE BASE ONLY FOR 22' INTERSECTION LIGHT POLE.	EA.	3
E804	15' PEDESTRIAN LIGHT POLE & FIXTURE (TYPE II)	EA.	11
E806	22' INTERSECTION LIGHT POLE & FIXTURE (TYPE I)	EA.	3
E807	INSTALLATION OF POWER PEDESTAL & METER FOR NEW SERVICE FOR IRRIGATION CONTROLLER & BACKFLOW PREVENTER HEAT TRACE CIRCUIT ON CAMERON.	EA.	1
E808	INSTALLATION OF TWO NEW OUTDOOR GFCI RECEPTACLE FOR IRRIGATION CONTROLLER AND ASSOCIATED HEAT TRACING.	EA.	1
E809	MODIFICATION TO EXISTING LIGHTING CONTROLLER.	EA.	1
E810	FEE TO BE PAID TO PSO FOR ELECTRICAL WORK ASSOCIATED WITH THIS PROJECT. ELECTRICAL CONTRACTOR TO INCLUDE AMOUNT IN BID.	LOT	

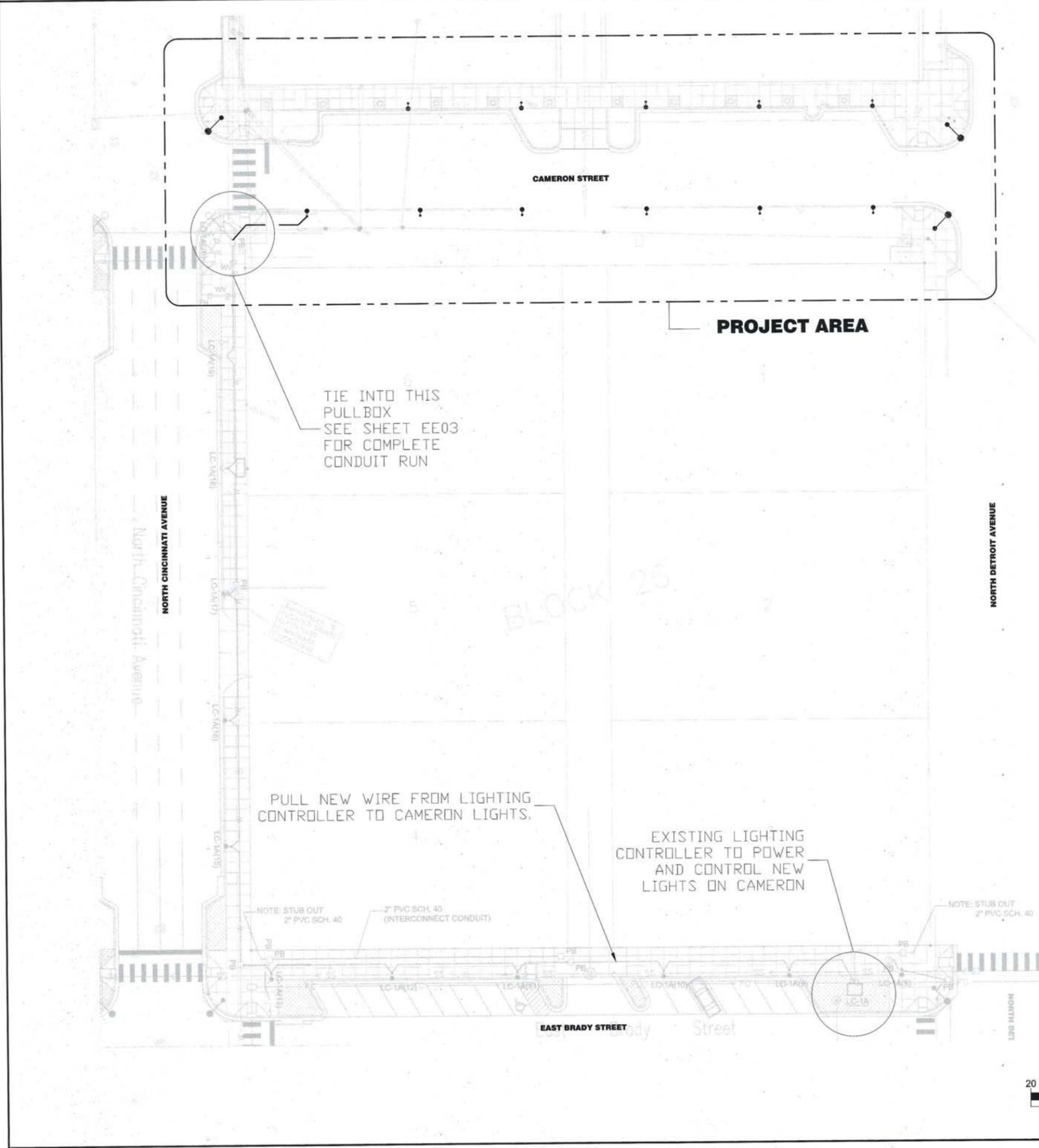
SHEET NUMBERS & TITLES		
FILE NO.	SHT. NO.	TITLE
EE01	.	ELECTRICAL SCOPE & PAY QUANTITIES
EE02	.	NEW OVERALL SITE PLAN
EE03	.	STREET PLAN EAST CAMERON STREET
EE04	.	LIGHTING CONTROLLER LC SCHEMATIC
EE05	.	ELECTRICAL DETAILS SHEET

FIXTURE SCHEDULE	
SYMBOL	DESCRIPTION
	(NEW) INTERSECTION POLE, TYPE I
	(NEW) PEDESTRIAN POLE, TYPE II

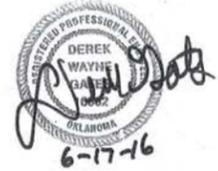


<b>CAMERON STREETScape</b>																																																									
<b>EE01</b>																																																									
<b>ELEC. SCOPE/PAY QUANTITIES</b>																																																									
PLANS AND ESTIMATES PREPARED BY: <b>D. W. GATES ENGINEERING</b> 616 S. MAIN STREET SUITE 112 Tulsa, OK 74119 (918) 583-6905																																																									
<table border="1"> <tr> <th>REVISION</th> <th>BY</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	REVISION	BY	DATE																<table border="1"> <tr> <td>PLAN SCALE</td> <td>DRAWN</td> <td>FLT</td> <td>APPROVED:</td> </tr> <tr> <td>AS NOTED</td> <td>DESIGNED</td> <td></td> <td rowspan="2"></td> </tr> <tr> <td></td> <td>CHECKED</td> <td>DWG</td> </tr> <tr> <td>PROFILE SCALE</td> <td>FIELD MGR.</td> <td>RSY 7/16</td> <td rowspan="2"></td> </tr> <tr> <td>HORIZONTAL</td> <td>SECT. MGR.</td> <td>GRS 7/16</td> </tr> <tr> <td>AS NOTED</td> <td>PROJ. MGR.</td> <td>GRS 7/16</td> <td></td> </tr> <tr> <td>VERTICAL</td> <td>RECOMMENDED:</td> <td>HAY 8/16</td> <td></td> </tr> <tr> <td>AS NOTED</td> <td>DESIGN MANAGER</td> <td></td> <td></td> </tr> <tr> <td>FILE:</td> <td>DRAWING: EE01</td> <td>DATE: 03/03/16</td> <td></td> </tr> <tr> <td>ATLAS PAGE NO.</td> <td></td> <td>SHEET 11 OF 16 SHEETS</td> <td></td> </tr> </table>	PLAN SCALE	DRAWN	FLT	APPROVED:	AS NOTED	DESIGNED				CHECKED	DWG	PROFILE SCALE	FIELD MGR.	RSY 7/16		HORIZONTAL	SECT. MGR.	GRS 7/16	AS NOTED	PROJ. MGR.	GRS 7/16		VERTICAL	RECOMMENDED:	HAY 8/16		AS NOTED	DESIGN MANAGER			FILE:	DRAWING: EE01	DATE: 03/03/16		ATLAS PAGE NO.		SHEET 11 OF 16 SHEETS	
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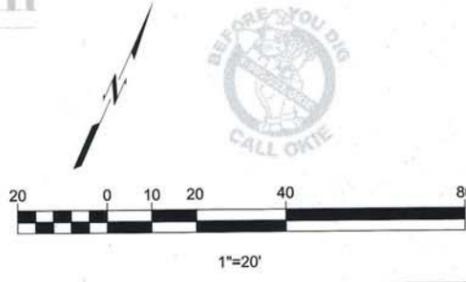
1. THIS PROJECT WILL ADD 7 NEW LIGHTS TO THE SOUTH SIDE OF CAMERON, 7 NEW LIGHTS TO THE NORTH SIDE OF CAMERON AND ONE NEW IRRIGATION CONTROLLER CIRCUIT.
2. POWER FOR THE LIGHTS WILL COME FROM THE EXISTING LIGHTING CONTROLLER LOCATED ON BRADY NEAR NORTH DETROIT.
3. POWER FOR NEW LIGHTING WILL BE ROUTED TO CAMERON IN CONDUIT USED FOR EXISTING LED LIGHTS.
4. LIGHTS TO MATCH IN, APPEARANCE, EXISTING LIGHTS.



BLOCK 25



**CAMERON STREETSCAPE**  
**EE02**  
**OVERALL SITE PLAN**  
 PLANS AND ESTIMATES PREPARED BY:  
**D. W. GATES ENGINEERING**  
 616 S. MAIN STREET SUITE 112 Tulsa, OK 74119 (918) 583-6905

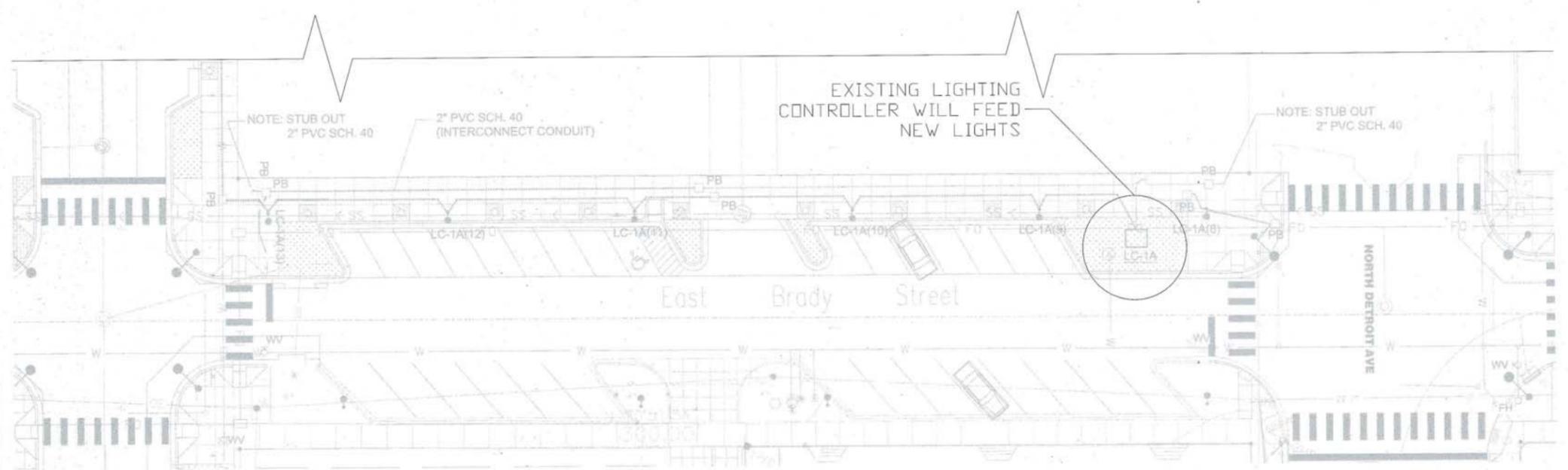
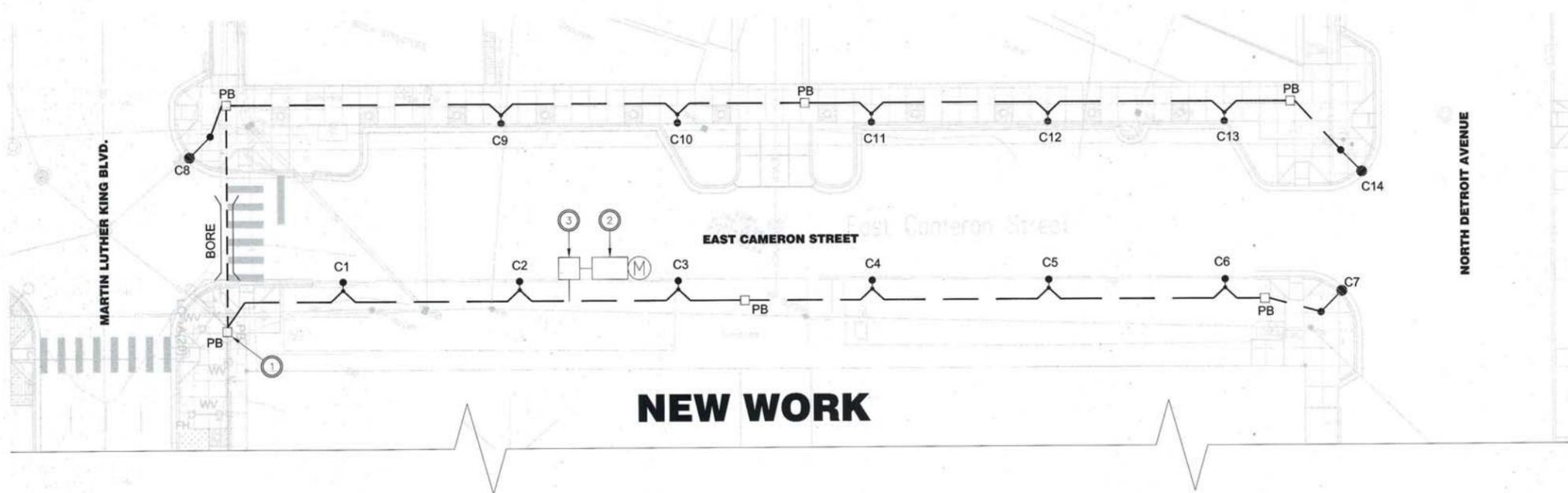


REVISION	BY	DATE	PLAN SCALE	DRAWN	FLT	APPROVED:
			NTS	DESIGNED		
				CHECKED	DWG	
			PROFILE SCALE	FIELD MGR.		 CITY ENGINEER
			HORIZONTAL	SECT. MGR.	625 9/16	
			VERTICAL	PROJ. MGR.	625 9/16	
			NTS	RECOMMENDED	625 9/16	
			FILE:	DESIGN MANAGER		
			ATLAS PAGE NO.	DRAWING: EE02	DATE: 03/03/16	SHEET 12 OF 16 SHEETS

**LEGEND:**

- L# ●—● TYPE I (INTERSECTION) POLE AND FIXTURE
- L# —● TYPE II (PEDESTRIAN SIDEWALK) POLE AND FIXTURE
- PB □ FLUSH MOUNT PULL BOX
- STREET BORE
- LIGHTING CONTROLLER

1. INSTALL NEW PULL BOX AT THIS LOCATION FOR FEED TO NEW LIGHTING ON CAMERON BETWEEN MLK AND DETROIT.
2. INSTALL NEW PSO METER AND 240/120V NEMA 3R 60A POWER PEDASTAL AT THIS LOCATION. PEDESTAL TO FEED IRRIGATION CONTROLLER PANEL AND TO CONTAIN (2) 20A/1P CIRCUIT BREAKERS.
3. INSTALL IRRIGATION CONTROLLER AT THIS LOCATION. CONTRACTOR TO PROVIDE TWO 120V GFCI DUPLEX RECEPTACLES FOR IRRIGATION CONTROLLER AND ASSOCIATED HEAT TRACING.



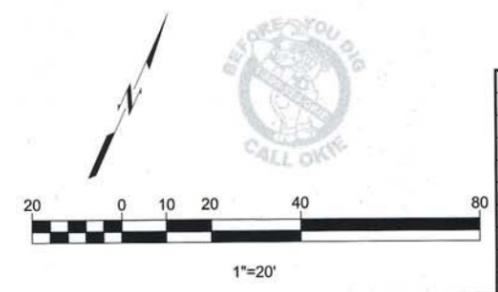
DEREK WAYNE GATES  
 6-17-16

**CAMERON STREETScape**

EE03

**CAMERON STREET**

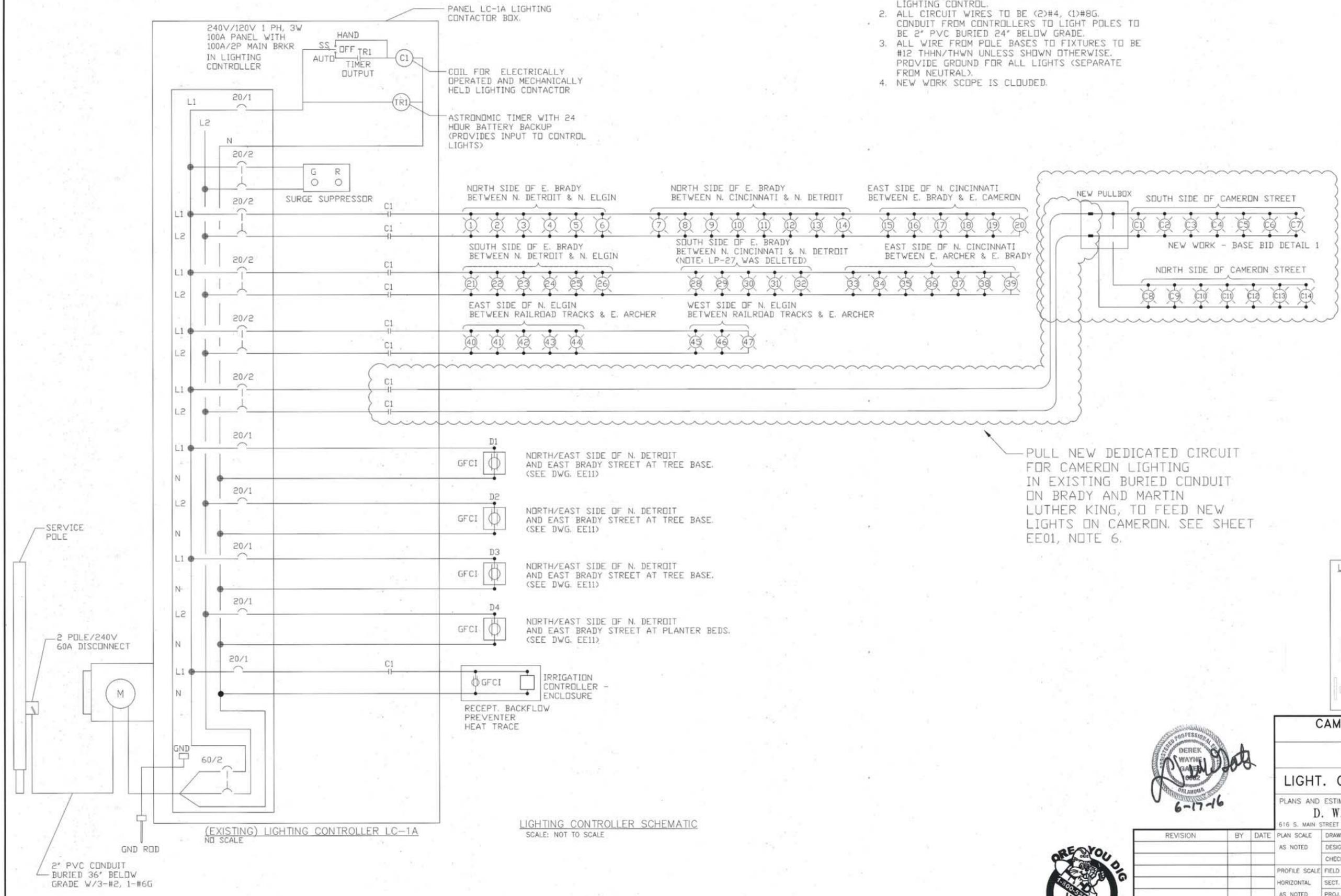
PLANS AND ESTIMATES PREPARED BY:  
**D. W. GATES ENGINEERING**  
 616 S. MAIN STREET SUITE 112 • Tulsa, OK 74119 (918) 583-6905



REVISION	BY	DATE	PLAN SCALE	DRAWN	FLT	APPROVED:
AS NOTED			AS NOTED	DESIGNED		 DESIGN MANAGER DATE: 03/03/16 SHEET 13 OF 16 SHEETS
			PROFILE SCALE	CHECKED	DWG	
			HORIZONTAL	FIELD MGR.		
			AS NOTED	SECT. MGR.	GRS 9/16	
			VERTICAL	PROJ. MGR.	GRS 9/16	
			AS NOTED	RECOMMENDED:	HAS 9/16	
			FILE:	DESIGN MANAGER		
			ATLAS PAGE NO.	DRAWING: EE03		

**NOTES:**

1. PROVIDE AND INSTALL ALL EQUIPMENT SHOWN FOR LIGHTING CONTROL.
2. ALL CIRCUIT WIRES TO BE (2) #4, (1) #8G. CONDUIT FROM CONTROLLERS TO LIGHT POLES TO BE 2" PVC BURIED 24" BELOW GRADE.
3. ALL WIRE FROM POLE BASES TO FIXTURES TO BE #12 THHN/THWN UNLESS SHOWN OTHERWISE. PROVIDE GROUND FOR ALL LIGHTS (SEPARATE FROM NEUTRAL).
4. NEW WORK SCOPE IS CLOUDED.



**LIGHTING CONTROLLER SCHEMATIC**  
SCALE: NOT TO SCALE

**LIGHTING CONTROLLER SCHEMATIC**  
SCALE: NOT TO SCALE

**LEGEND:**

- (#) = EXISTING LIGHTS
- (#) = PEDESTRIAN LIGHTS
- (#) = INTERSECTION LIGHTS
- D# = GFCI 120V, DUPLEX IN-USE RECEPTACLE
- [Cabinet Icon] = EXISTING LC-1 CONTROLLER CABINET, METER & SERVICE POLE

**CAMERON STREETSCAPE**  
**EE04**  
**LIGHT. CONTR. LC SCHEMATIC**

PLANS AND ESTIMATES PREPARED BY:  
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REVISION	BY	DATE	PLAN SCALE	DRAWN	FLT	APPROVED:
			AS NOTED	DESIGNED	???	
				CHECKED	???	
			PROFILE SCALE	FIELD MGR.	RBV 7/16	
			HORIZONTAL	SECT. MGR.	DS 7/16	
			AS NOTED	PROJ. MGR.	GRS 7/16	
			VERTICAL	RECOMMENDED		
			AS NOTED	DESIGN MANAGER		
			FILE:	DRAWING: EED4	DATE: 03/03/16	
			ATLAS PAGE NO.			SHEET 14 OF 16 SHEETS





**SUMMARY OF PAY QUANTITIES - ROADWAY**

ITEM	SPEC	DESCRIPTION	NOTES	UNIT	QTY
1	201(A)	CLEARING AND GRUBBING	1,48	ACRE	0.3
2	202(A)	UNCLASSIFIED EXCAVATION	2,10,40,60	CY	100
3	221(C)	TEMPORARY SILT FENCE	12	LF	585
4	221(F)	TEMPORARY SILT DIKE	12	LF	75
5	225	SWPPP DOCUMENTATION AND MANAGEMENT	64	LSUM	1
6	230(A)	SOLID SLAB SODDING (LIKE KIND)	13,14,15	SY	70
7	303(A)	AGGREGATE BASE, TYPE A	2,4	CY	198
8	310(B)	SUBGRADE METHOD B	2	SY	594
9	325	SEPARATOR FABRIC	2,5	SY	782
10	411(B)	SUPERPAVE, TYPE S3 (PG64-22)	16,17,18,50	TON	120
11	411(C)	SUPERPAVE, TYPE S4 (PG64-22)(INSOLUBLE)	16,17,18,50	TON	120
12	501(E)	SELECT BORROW	19	CY	25
13	608(A)	GROUND SIGN		SF	48
14	608(B)	1 1/2" SIGN POST		LF	16
15	608(C)	1 3/4" SIGN POST		LF	64
16	608(D)	2" SIGN POST		LF	16
17	609(B)	COMBINED CURB & GUTTER (8" BARRIER)	20,22,23,24	LF	552
18	610(A)	4" CONCRETE SIDEWALK	20,23,24,25	SY	657
19	610(B)	6" CONCRETE DRIVEWAY (HES)	20,23,24,25	SY	83
20	610(I)	TACTILE WARNING DEVICE		SF	56
21	611(G)	CURB INLET (DESIGN 3), COMPLETE IN PLACE	31,32,33,34,56	EA	1
22	612(F)	VALVE BOX ADJUST TO GRADE	20,21,28	EA	5
23	613(A)	6" PVC, COMPLETE IN PLACE	45	LF	51
24	619(B)	REMOVE INLET	10,21,65	EA	1
25	619(B)	REMOVAL OF SIDEWALK	10,21,65	SY	133
26	619(B)	REMOVAL OF CURB	10,21,65	LF	423
27	619(B)	REMOVAL OF ASPHALT PAVEMENT	10,21,65	SY	582
28	619(B)	REMOVE STRIPING	10,21,65	LF	342
29	619(C)	SAWING PAVEMENT	53	LF	100
30	COT 625	REMOVAL OF TRAFFIC ITEMS	66	LSUM	1
31	641	MOBILIZATION	58	EA	1
32	642	STAKING	7,47	EA	1
33	855(A)	TRAFFIC STRIPE (PLASTIC)	36	LF	2488
34	855(A)	TRAFFIC STRIPE (PLASTIC)(SYMBOLS)	36	EA	1
35	880(B)	SIGNS 0 TO 6.25 SF	(TO-25,84) 37,38,46	SD	480
36	880(B)	SIGNS 6.25 TO 15.99 SF	(TO-25,84) 37,38,46	SD	240
37	880(B)	SIGNS 16.0 TO 32.99 SF	(TO-25,84) 37,38,46	SD	240
38	880(C)	BARRICADES (TYPE III)	(TO-25,84) 37,38,46	SD	240
39	880(E)	TYPE "A" WARNING LIGHT	(TO-25,84) 37,38,46	SD	1440
40	880(E)	TYPE "C" WARNING LIGHT	(TO-25,84) 37,38,46	SD	2640
41	880(F)	DRUMS	(TO-25,84) 37,38,46	SD	1320
42	880(G)	TUBE CHANNELIZERS	(TO-25,84) 37,38,46	SD	1320
43	SP-1	RECTANGULAR RAPID FLASH BEACON		EA	4
44	SP-2	TREES, COMPLETE IN PLACE	41	EA	11
45	SP-3	TREE GRATE, COMPLETE IN PLACE		EA	11
46	SP-4	IRRIGATION SYSTEM, COMPLETE IN PLACE		EA	1
47	SP-5	CURB RAMP		EA	6
48	SP-6	URBAN RIGHT-OF-WAY RESTORATION	11,14,29,41,59	EA	1
49	SP-7	STRUCTURAL SOIL		CY	45
50	SP-8	QUICK SET FLOWABLE FILL	19,32	CY	10
51	SP-9	RELOCATION OF GAS LINE		EA	1
52	SP-10	OWNER ALLOWANCE		ALLOW	1

**SUMMARY OF PAY QUANTITIES - ELECTRICAL**

ITEM	SPEC	DESCRIPTION	NOTES	UNIT	QTY
53	COT 601(A)	FLUSH MOUNT SIZE 1 PULL BOX	E1	EA	4
54	COT 602(A)	2" PVC SCH 40 PLASTIC CONDUIT (TRENCHED)	E2	LF	700
55	COT 602(C)	2" HDPE SCH 40 CONDUIT (DIRECTIONAL BORE)	E3	LF	60
56	COT 611(A)	#12 THHN ELECTRICAL CONDUCTOR (INSTALLED IN POLES) INCLUDING GROUND	E4	LF	1400
57	E611(B)	1/C NO.4 ELECTRICAL THHN/THWN CONDUCTOR PULLED IN BURIED CONDUIT FOR SERVICES		LF	2400
58	E611(C)	1/C NO.8 ELECTRICAL THHN/THWN CONDUCTOR PULLED IN BURIED CONDUIT FOR SERVICES		LF	1250
59	E803(A)	CONCRETE BASE ONLY, FOR 15' PEDESTRIAN LIGHT POLES.	E5	EA	11
60	E803(B)	CONCRETE BASE ONLY, FOR 22' INTERSECTION LIGHT POLES.	E5	EA	3
61	E804	15' PEDESTRIAN LIGHT POLE AND FIXTURE (TYPE II)	E6	EA	11
62	E806	22' INTERSECTION LIGHT POLE AND FIXTURE (TYPE I)	E6	EA	3
63	E807	INSTALLATION OF POWER PEDESTAL & METER FOR NEW SERVICE FOR IRRIGATION CONTROLLER & BACKFLOW PREVENTER HEAT TRACE CIRCUIT ON CAMERON	E7	EA	1
64	E808	INSTALLATION OF TWO NEW OUTDOOR GFCI RECEPTACLE FOR IRRIGATION CONTROLLER AND ASSOCIATED HEAT TRACING		EA	1
65	E811	MODIFICATION TO EXISTING LIGHTING CONTROLLER		EA	1
66	E812	FEE TO BE PAID TO PSO FOR ELECTRICAL WORK ASSOCIATED WITH THIS PROJECT ELECTRICAL CONTRACTOR TO INCLUDE IN BID AMOUNT		ALLOW	\$2500

**ELECTRICAL PAY QUANTITY NOTES**

- E1 INSTALL PULL BOX IN CONCRETE WALKWAY. LID TO BE ENGRAVED "ELECTRIC" OR "LIGHTING".
- E2 INCLUDE COST FOR TRENCHING, BACKFILL AND COMPACTION.
- E3 INCLUDE COST FOR EQUIPMENT AND PITS AT BOTH ENDS OF BORE, AND RESTORATION.
- E4 COST IS FOR WIRE INSTALLED IN THE POLE FROM THE POLE BASE TO THE FIXTURE, INCLUDING GROUND WIRE.
- E5 SEE DETAIL, SHEET EE05 FOR BASE DETAIL
- E6 LIGHT FIXTURE AND POLE TO MATCH ITEM SHOWN ON DETAIL ON SHEET EE005. EQUAL POLES AND FIXTURES ARE ACCEPTABLE, BUT SHOULD BE APPROVED BY THE ENGINEER IN ADVANCE.
- E7 COORDINATE PLACEMENT OF THIS ITEM WITH ENGINEER. PAY PSO RELATED FEE FROM PAY ITEM E812.
- E8 RECEPTACLES TO BE INSTALLED NEAR NEW PEDESTAL AND IRRIGATION CONTROLLER.

**TRAFFIC OPERATIONS PAY QUANTITY NOTES**

(TO-25) CONSTRUCTION TRAFFIC CONTROL WILL BE INSTALLED IN A MANNER APPROVED BY THE ENGINEER, IN ACCORDANCE WITH CHAPTER VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, AND APPLICABLE ODOT STANDARD DRAWINGS. THE CONTRACTOR SHALL PROVIDE A PROPOSED TRAFFIC CONTROL PLAN FOR APPROVAL BY THE ENGINEER PRIOR TO STARTING WORK. PRICE BID FOR THIS ITEM SHALL BE PAYMENT IN FULL FOR THE INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF ALL NECESSARY CONSTRUCTION TRAFFIC CONTROL DEVICES AND PAVEMENT MARKINGS REQUIRED FOR COMPLETION OF THE PROJECT.

ALL SIGNS, BARRICADES AND CHANNELIZING DEVICES WHICH ARE SHOWN WITH EITHER TYPE 'A' OR TYPE 'C' LIGHTS IN THE STANDARD DRAWINGS SHALL HAVE THE CORRESPONDING LIGHT ATTACHED DURING NON-DAYLIGHT HOURS.

(TO-84) 60 CONSTRUCTION CALENDAR DAYS WERE USED TO COMPUTE THE SIGN DAY PAY ITEMS. THE AMOUNT OF CALENDAR DAYS USED TO COMPUTE THE SIGN DAY PAY ITEMS IS AN ESTIMATED QUANTITY ONLY, BASED ON THE CURRENT ODOT STANDARDS AND SUGGESTED CONSTRUCTION SEQUENCE FOR THIS PROJECT. THESE ESTIMATED SIGN DAY QUANTITIES MAY CHANGE AS THE PROJECT'S CONSTRUCTION TRAFFIC CONTROL IS MODIFIED DURING CONSTRUCTION.



<b>SUMMARY OF PAY QUANTITIES ROADWAY</b>	
<b>E CAMERON ST STREETScape</b>	
<b>CITY OF TULSA, OKLAHOMA</b>	
PLANS AND ESTIMATES PREPARED BY: <b>wallace</b> WALLACE ENGINEERING STRUCTURAL CONSULTANTS INC. 200 EAST BRADY STREET TULSA, OK 74103 (918) 584-5858	
REVISION: _____ BY: _____ DATE: _____	PLAN SCALE: _____ DRAWN: _____ REI: _____ DESIGNED: SR 01/11/16 SURVEY: _____ PROFILE SCALE: _____ FIELD MGR: [Signature] 7/16 HORIZONTAL: _____ SECT. MGR: [Signature] 6/16 PROJ. MGR: GRS 7/16 VERTICAL: _____ RECOMMENDED: _____ DESIGN MANAGER: [Signature] 8/16 CITY ENGINEER: [Signature]
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ATLAS PAGE NO: 8	SHEET 2 OF 16 SHEETS

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**PAY ITEM NOTES (06/03/2016)**

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.
2. THIS QUANTITY INCLUDES AN ADDITIONAL 10% ABOVE PLAN QUANTITY FOR UNDERCUTTING OF UNSUITABLE SUBGRADE MATERIAL OR ADDITIONAL PATCHING AS DIRECTED BY THE ENGINEER.
3. NOT USED.
4. INCLUDES COMPACTION OF AGGREGATE TO 98% AASHTO T180 MODIFIED PROCTOR.
5. 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.
6. NOT USED.
7. 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.
8. NOT USED.
9. NOT USED.
10. WASTE MATERIAL TO BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE IN A MANNER APPROVED BY THE ENGINEER.
11. CONTRACTOR SHALL REPAIR ANY IRRIGATION SYSTEMS DAMAGED OR REQUIRING RELOCATION DURING THE CONSTRUCTION OF THIS PROJECT TO THE SATISFACTION OF THE PROPERTY OWNER AND CITY ARBORIST. COST SHALL BE INCLUDED IN THE PRICE BID.
12. 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
13. THE PAY ITEM FOR SOLID SLAB SODDING INCLUDES QUANTITIES FOR PLACEMENT AND COMPACTION OF SUITABLE BACKFILL AND SOD AT EXISTING GRASS AREAS WHICH MAY BE DAMAGED DURING CONSTRUCTION OF CURBS, SIDEWALKS, DRIVEWAYS, AND OTHER MISCELLANEOUS ITEMS. THE QUANTITIES ARE BASED ON UTILIZING A 3 FOOT WIDE STRIP IN THESE AREAS. THE SOD SHALL BE OF LIKE KIND TO THE EXISTING SOD. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF DAMAGE TO EXISTING GRASS THAT EXCEEDS THESE LIMITS.
14. PAY ITEM INCLUDES ALL MOWING WITHIN THE RIGHT-OF-WAY AS DIRECTED DURING CONSTRUCTION.
15. 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.
16. 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.
17. ESTIMATED AT 112 LBS PER SQ YD PER 1 INCH THICK.
18. 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.
19. 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.
20. THE USE OF FLY-ASH IN CONCRETE IS PROHIBITED.
21. ALL SAW CUTTING AND REMOVAL SHALL BE INCLUDED IN THE COST OF THE ITEM TO BE ADJUSTED, REMOVED, REPAIRED, OR REPLACED.
22. 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.
23. INCLUDES ALL COST OF SAWED JOINTS AND SEALING OF ALL JOINTS INCLUDING LONGITUDINAL JOINTS.
24. CURB, GUTTER, AND/OR SIDEWALK ASSOCIATED WITH THE DRIVEWAY AND THROUGH THE DRIVEWAY IS INCLUDED IN THE COST OF THE DRIVEWAY.
25. 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.
26. NOT USED.
27. NOT USED.
28. THE TOTAL COST FOR RUBBERIZED ASPHALT AND/OR SILICONE AT MANHOLES, VALVE BOXES, INLETS, AND INLET APRONS, SHALL BE INCLUDED.
29. 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.
30. NOT USED.
31. 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.
32. QUICK SET FLOWABLE FILL TO BE USED TO BACKFILL AROUND STREET CURB INLETS AND PIPES AS DIRECTED BY THE ENGINEER.
33. ALL INLETS COMPLETE IN PLACE SHALL BE CAST IN PLACE CONCRETE OR PRECAST CONCRETE. NO BRICK INLETS SHALL BE ALLOWED. THIS PAY ITEM INCLUDES INLET FRAME, GRATE, HOOD AND CONCRETE.
34. NO MASONRY STRUCTURES SHALL BE CONSTRUCTED WITHIN THE RIGHT OF WAY.
35. NOT USED.
36. ALL PLASTIC PAVEMENT MARKINGS SHALL BE EITHER:  
 EXTRUDED-APPLIED THERMOPLASTIC (USE ON ASPHALT PAVEMENT). THERMOPLASTIC PAVEMENT MARKINGS SHALL ONLY BE APPLIED WHEN THE SURFACE TEMPERATURE EXCEEDS 55°F FOR ALL OF THE SIX HOURS PRIOR TO INSTALLATION AND MAXIMUM 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.  
 OR  
 MULTI-POLYMER PAINT (USE ON CONCRETE PAVEMENT). MULTI-POLYMER PAVEMENT MARKINGS SHALL ONLY BE APPLIED 30 DAYS AFTER PAVING WHEN PAVEMENT SURFACE EXCEEDS 40°F FOR ALL OF THE SIX HOURS PRIOR TO INSTALLATION WITH A MINIMUM WIND CHILL TEMPERATURE OF 35°F. PRICE BID TO INCLUDE FLEX TABS OR LIKE KIND FOR POST CONSTRUCTION LANE MARKING/SEPARATION

37. 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.
38. 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.
39. NOT USED.
40. THE CONTRACTOR SHALL BE PAID FOR UNCLASSIFIED EXCAVATION ON THE BASIS OF ACTUAL 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.
41. A CERTIFIED ARBORIST SHALL OVERSEE ALL PLANTINGS AND/OR REMOVAL OF TREES. CONTACT CITY ARBORIST TO ACCEPT FINAL PLANTINGS. CONTACT #: 918-596-2548.
42. NOT USED.
43. NOT USED.
44. NOT USED.
45. 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.
46. PRICE BID FOR THIS ITEM SHALL BE PAYMENT IN FULL FOR THE INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF ALL NECESSARY CONSTRUCTION TRAFFIC CONTROL REQUIRED FOR COMPLETION OF THE PROJECT.
47. 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.
48. 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.
49. NOT USED.
50. 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.

A HIGHER GRADE OF ASPHALT BINDER THAN INDICATED ON THE PLANS MAY BE USED, BUT AT NO ADDITIONAL COST TO THE DEPARTMENT.

BINDER 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.

51. NOT USED.
52. NOT USED.
53. INCLUDES SAWING NOT INCLUDED IN OTHER ITEMS OF WORK.
54. NOT USED.
55. NOT USED.
56. FOR INLET DESIGN NUMBERS AND CONFIGURATIONS REFER TO CITY OF TULSA STANDARD NO. 755. INLET DETAIL / LIST WILL BE PROVIDED IN THE PLANS FOR CONFIGURATIONS NOT SHOWN IN CITY OF TULSA STANDARDS.
57. NOT USED.
58. MOBILIZATION FOR THE TOTAL PROJECT (EXCLUDING WATER MOBILIZATION) IS TO BE INCLUDED IN THIS PAY ITEM. THE MAXIMUM ALLOWABLE AMOUNT WILL BE IN ACCORDANCE WITH THE OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION TABLE 641:1.
59. CONTRACTOR SHALL COORDINATE WITH HOMEOWNERS TO RESET ALL PAVERS, LANDSCAPE STONE, PRIVATE SIDEWALKS AND FENCES THAT ARE DISTURBED DURING CONSTRUCTION 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.
60. UNCLASSIFIED EXCAVATION INCLUDES REMOVAL OF AGGREGATE BASE AND MODIFIED SUBGRADE UNDER EXISTING PAVEMENT TO BE REPAIRED.
61. NOT USED.
62. NOT USED.
63. SHALL INCLUDE ALL COSTS ASSOCIATED WITH PLUGGING/ PATCHING HOLES IN EXISTING STRUCTURES TO REMAIN.
64. 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 SHALL BE INCLUDED IN THE PRICE BID FOR THIS ITEM.
65. ITEMS TO BE REMOVED MAY OR MAY NOT BE PRESENT IN ANY SPECIFIED CONDITION.
66. ALL TRAFFIC MATERIALS REMOVED SHALL BE HANDLED PER COT SPECIFICATION 625 REMOVAL OF TRAFFIC ITEMS

**PAY QUANTITY NOTES**

**E CAMERON ST STREETScape**

**CITY OF TULSA, OKLAHOMA**

PLANS AND ESTIMATES PREPARED BY:  
**wallace** WALLACE ENGINEERING  
 STRUCTURAL CONSULTANTS INC.  
 200 EAST BRADY STREET  
 TULSA, OK 74103  
 (918) 554-5668

REVISION	BY	DATE	PLAN SCALE:	DRAWN	REI	01/11/16	APPROVED:
				DESIGNED	SR	01/11/16	
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			PROFILE SCALE:	FIELD MGR.	SR	7/16	
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*[Signature]*  
 CITY ENGINEER

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**GENERAL CONSTRUCTION NOTES (02/01/2016)**

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE 2009 OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND THE CURRENT CITY OF TULSA ENGINEERING SERVICES DEPARTMENT'S STANDARD SPECIFICATIONS AND STANDARD DETAILS AND STANDARD DRAWINGS AND CITY OF TULSA SPECIAL PROVISIONS.
2. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS GOVERNING SAFETY, HEALTH AND SANITATION. THE CONTRACTOR SHALL PROVIDE ALL SAFEGUARDS, SAFETY DEVICES AND PROTECTIVE EQUIPMENT, AND TAKE ANY OTHER NEEDED ACTION ON AS HIS OWN RESPONSIBILITY OR AS THE ENGINEER MAY DETERMINE REASONABLY NECESSARY TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACT.
3. PAY ITEMS SHALL BE AS SPECIFIED ON THE CITY OF TULSA OR ON THE ODOT STANDARD DRAWINGS EXCEPT AS MODIFIED BY THE CONTRACT.
4. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK IN EACH AREA. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM HIS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UTILITIES.
5. THE LOCATIONS OF THE UTILITIES ARE SHOWN ACCORDING TO ALL AVAILABLE INFORMATION. THE CONTRACTOR SHALL NOTIFY EACH UTILITY OWNER PRIOR TO COMMENCEMENT OF WORK TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS. THE FOLLOWING IS A LIST OF UTILITY OWNERS; AT&T, PUBLIC SERVICE COMPANY OF OKLAHOMA (AEP), OKLAHOMA NATURAL GAS (ONG), COX COMMUNICATIONS, 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 918-596-9404 FOR AN INSPECTION BEFORE PROCEEDING WITH WORK.
22. THE PROJECT SHALL BE CONSTRUCTED WITH CONTINUOUS FLOW OF MATERIAL SUPPLIED TO THE PROJECT SUCH THAT THE LAYDOWN MACHINE WILL REMAIN IN MOTION. ANY DELAY IN FORWARD PROGRESSION OF THE LAYDOWN MACHINE MAY REQUIRE A TRANSVERSE JOINT AS DIRECTED BY THE ENGINEER.
23. NO FLY ASH IS ALLOWED TO BE USED ON THIS PROJECT.
24. PHYSICAL TESTING FOR QUALITY ASSURANCE SHALL BE FURNISHED BY THE CITY.
25. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY QUALITY CONTROL TESTING TO ENSURE THAT PROJECT REQUIREMENTS ARE MET.
26. MASONRY STRUCTURES SHALL NOT BE CONSTRUCTED WITHIN THE STREET RIGHT-OF-WAY.
27. ALL CONCRETE CURB AND GUTTERS SHALL BE MONOLITHIC POURS. DOWELED-ON CURBS WILL NOT BE ALLOWED.
28. NO LIFTING HOLES WILL BE ALLOWED ON ANY REINFORCED CONCRETE PIPES OR REINFORCED CONCRETE BOXES.
29. HANDICAP 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. 42NS 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 DICOLORATION 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.

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**GENERAL CONSTRUCTION NOTES**  
**E CAMERON ST STREETScape**  
**CITY OF TULSA, OKLAHOMA**

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					SR	01/11/16	 CITY ENGINEER
			PROFILE SCALE:	FIELD MGR.	SR	7/16	
			HORIZONTAL:	SECT. MGR.	SR	6/16	
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				DESIGN MANAGER	SR	8/16	
			FILE: 15400091	DRAWING:			DATE:
			ATLAS PAGE NO.: 8				SHEET 4 OF 16 SHEETS



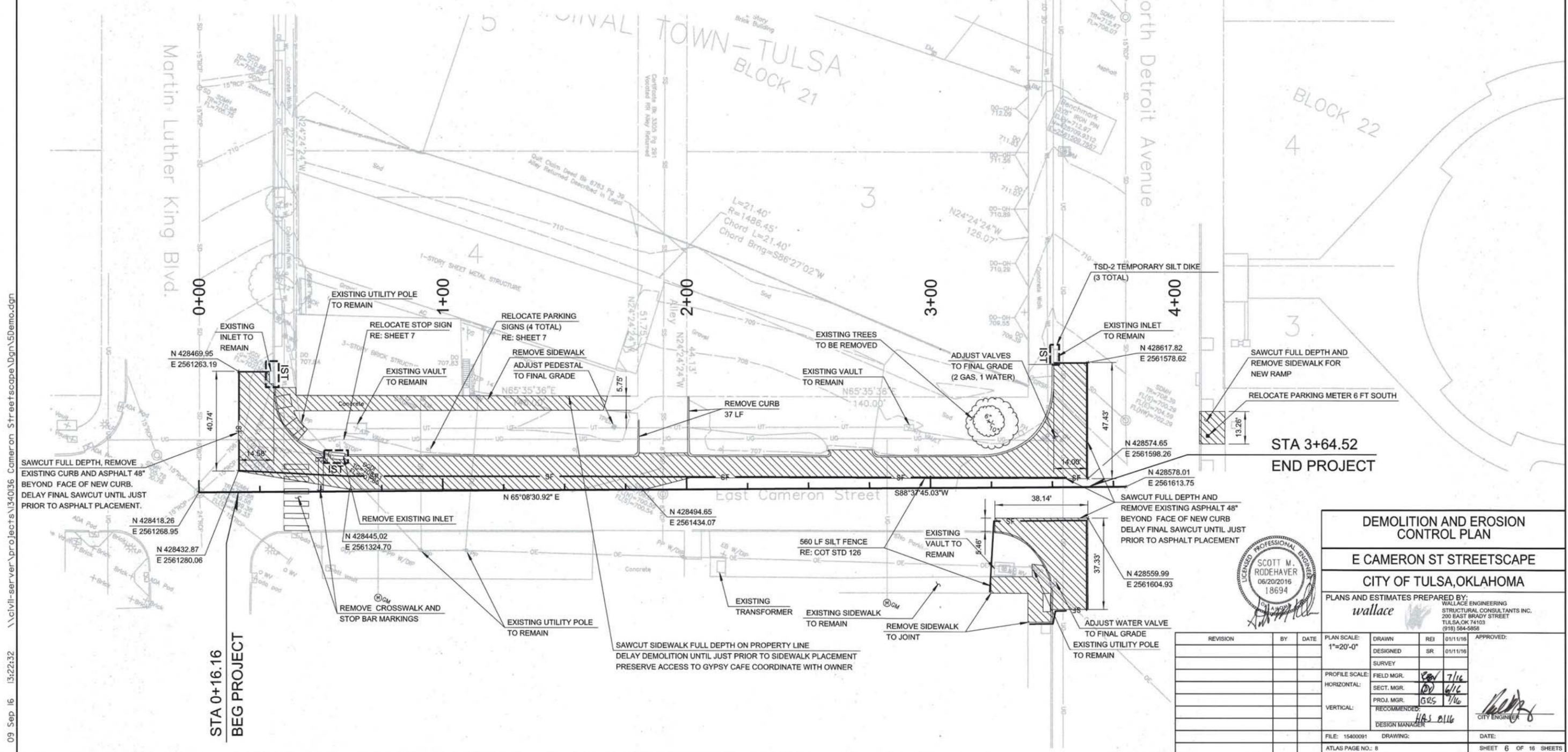


**GENERAL DEMOLITION NOTES**

1. ALL CONCRETE AND ASPHALT SHALL BE SAW CUT FULL DEPTH AND REMOVED OFF SITE UNLESS NOTED OTHERWISE.
2. CONTRACTOR SHALL PROTECT ALL SURVEY CONTROL POINTS.
3. CONTRACTOR SHALL REMOVE ALL WASTE MATERIALS OFF SITE.
4. ON-SITE VEGETATION SHALL BE PROTECTED AS NOTED. IN DESIGNATED PROTECTION AREAS WHERE THE CONTRACTOR DOES NOT PROTECT VEGETATION AS NOTED, CONTRACTOR SHALL RESTORE VEGETATION TO EXISTING CONDITION AT NO ADDITIONAL EXPENSE TO THE OWNER, TO THE SATISFACTION OF THE ARCHITECT.

**CAUTION**

NOTICE TO CONTRACTOR  
 THE CONTRACTOR IS SPECIFICALLY CAUTIONED THE LOCATION AND ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES  
 CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS BEFORE CONSTRUCTION



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<b>DEMOLITION AND EROSION CONTROL PLAN</b>			
<b>E CAMERON ST STREETScape</b>			
<b>CITY OF TULSA, OKLAHOMA</b>			
PLANS AND ESTIMATES PREPARED BY: WALLACE ENGINEERING STRUCTURAL CONSULTANTS INC. 200 EAST BRADY STREET TULSA, OK 74103 (918) 584-5858			
LICENSED PROFESSIONAL ENGINEER SCOTT M. RODEHAVER 06/20/2016 18694	REVISION BY DATE	PLAN SCALE: 1"=20'-0"	DRAWN REI 01/11/16 DESIGNED SR 01/11/16 SURVEY
PROFILE SCALE: FIELD MGR. <i>ESV</i> 7/16 HORIZONTAL: SECT. MGR. <i>DD</i> 6/16 PROJ. MGR. <i>BRS</i> 1/16 VERTICAL: RECOMMENDED: DESIGN MANAGER <i>HAS 01/16</i>	APPROVED: CITY ENGINEER	FILE: 15400091 DRAWING:	DATE: SHEET 6 OF 16 SHEETS

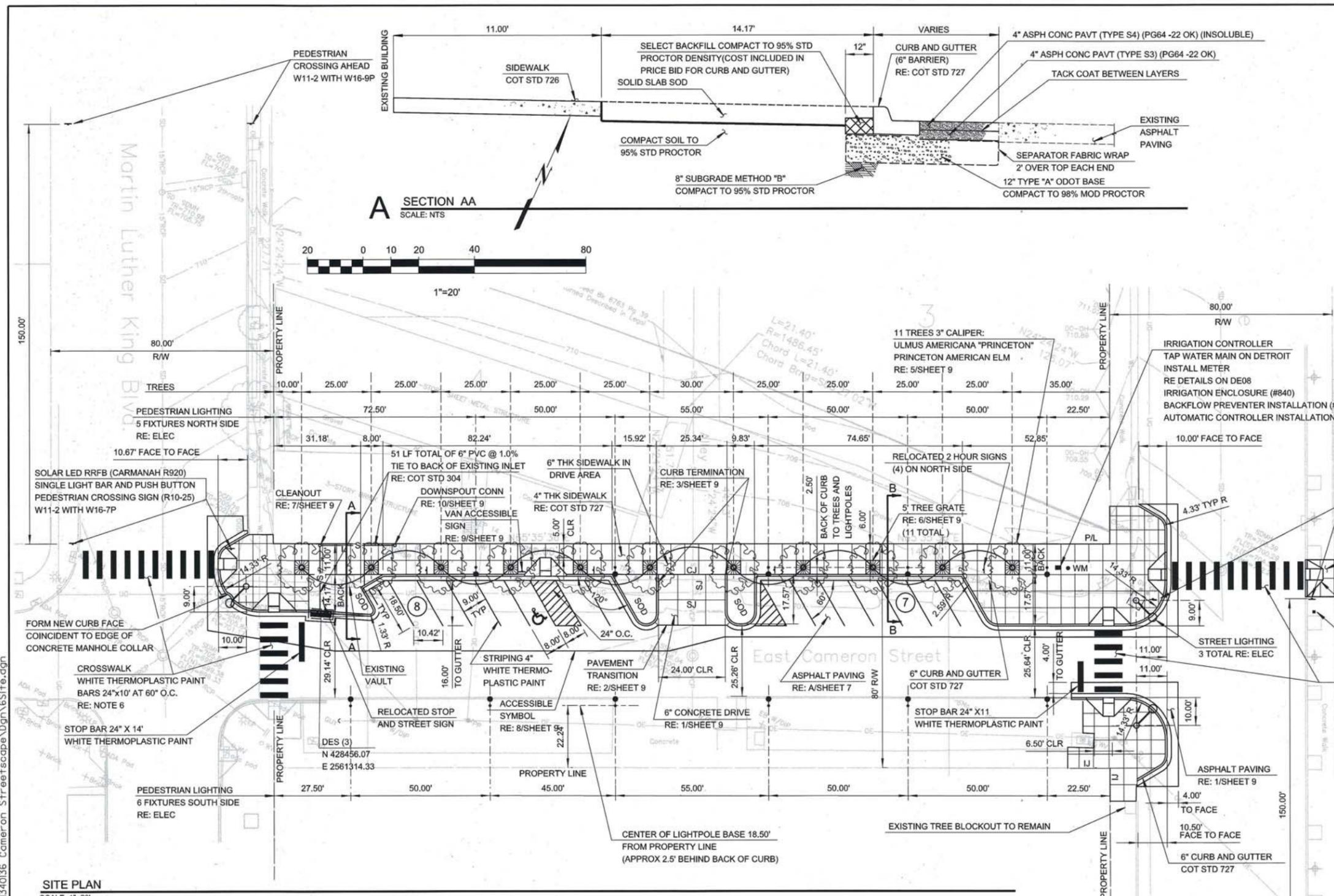
**GENERAL SITE NOTES**

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL MUNICIPAL REGULATIONS AND CODES, WHICHEVER IS MORE STRINGENT.
2. ALL WORK AND MATERIALS SHALL COMPLY WITH O.S.H.A. STANDARDS.
3. ALL DIMENSIONS AND COORDINATES ARE FROM BACK OF CURB UNLESS SHOWN OTHERWISE.
4. PROVIDE IRRIGATION FOR SOD AND TREE AREAS. RE: SPECS
5. RADII ARE 4.33' TYP UNLESS SHOWN OTHERWISE
6. CROSSWALK BARS ARE TO BE PLACED IN LINE WITH THE LANE LINES AT THE CENTERLINE OF EACH LINE

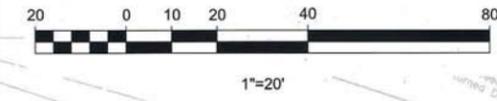
**CAUTION**

**NOTICE TO CONTRACTOR**

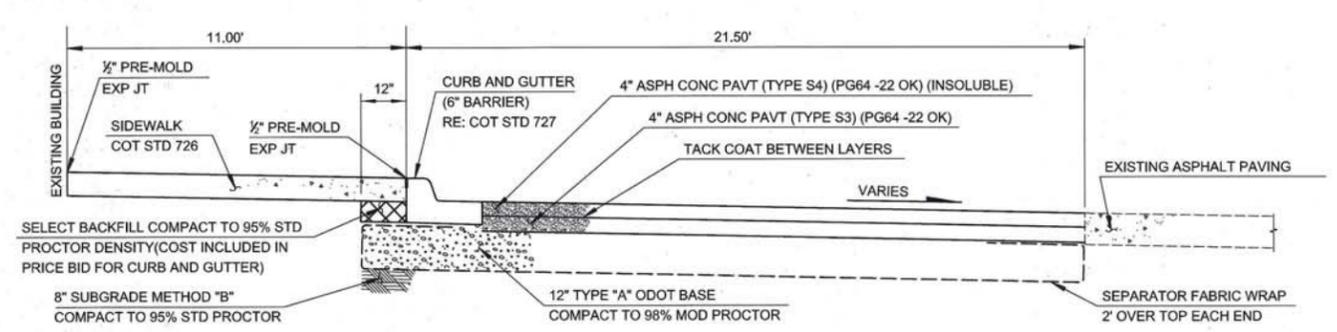
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**A SECTION AA**  
SCALE: NTS



**SITE PLAN**  
SCALE: 1"=20'



**B SECTION BB**  
SCALE: NTS

FOR ADDITIONAL DETAILS SEE SHEET 9



**SITE PLAN**  
**E CAMERON ST STREETScape**  
**CITY OF TULSA, OKLAHOMA**

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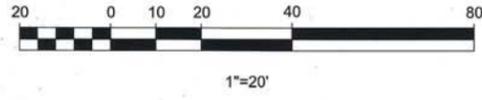
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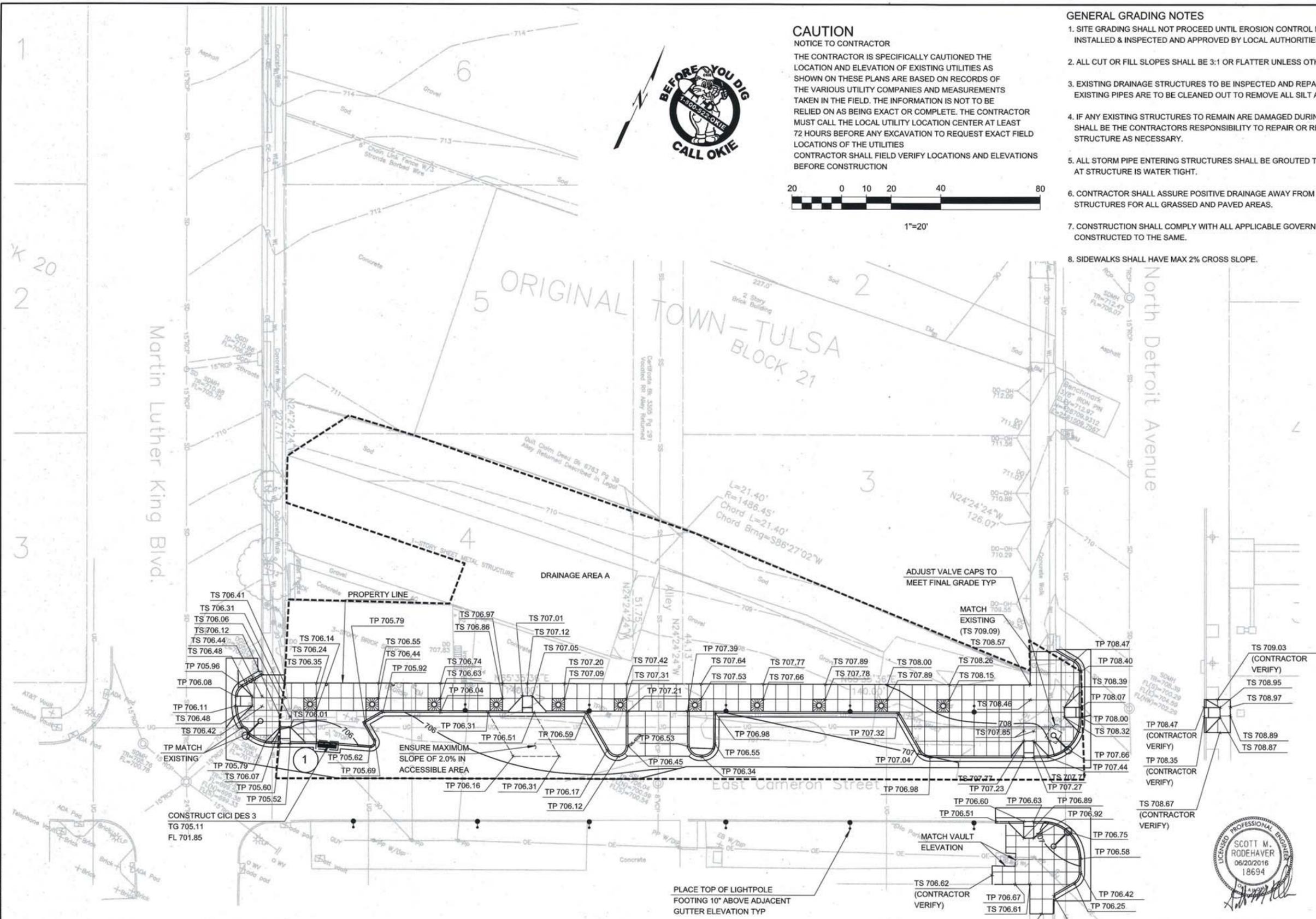
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**CAUTION**  
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 CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS BEFORE CONSTRUCTION



- GENERAL GRADING NOTES**
1. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED & INSPECTED AND APPROVED BY LOCAL AUTHORITIES.
  2. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
  3. EXISTING DRAINAGE STRUCTURES TO BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES ARE TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
  4. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR OR REPLACE THE EXISTING STRUCTURE AS NECESSARY.
  5. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATER TIGHT.
  6. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND STRUCTURES FOR ALL GRASSED AND PAVED AREAS.
  7. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO THE SAME.
  8. SIDEWALKS SHALL HAVE MAX 2% CROSS SLOPE.



**GRADING PLAN**

**E CAMERON ST STREETSCAPE**

**CITY OF TULSA, OKLAHOMA**

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			ATLAS PAGE NO.: 8			SHEET 8 OF 16 SHEETS

INLET DESIGN TABLE																			
DRAINAGE AREA BASIN	INLET NO.	DRAINAGE AREA (SF)	DRAINAGE AREA (ACRES)	PAVED AREA (SF)	"C" FACTOR	REACH PAVING (FEET)	SLOPE PAVING (%)	VELOCITY PAVING (FPS)	TOTAL Tc (MIN)	I 100 (IN/HR)	Q 100 (CFS)	% SLOPE AT INLET	SUM Q 100 AT INLET (CFS)	MAX DEPTH AT INLET (FEET)	INLET MAX CAPACITY (CFS)	Q 100 BYPASS (CFS)	TO STRUCTURE	CLOGGING FACTOR	INLET DESIGN
A	1	29,352	0.67	29,352	0.90	304	0.80%	1.80	2.8	11.1	6.75	sump	6.75	0.20	6.72	0.03	-	0.7	CICI Design 3

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