

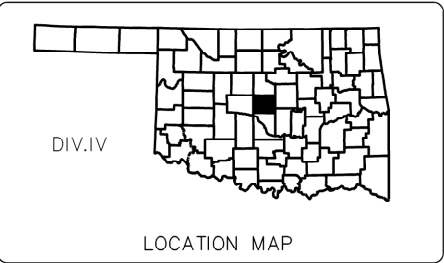
STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED
STATE HIGHWAY
FEDERAL AID PROJECT NO. ACNHPP1-2400-(004)SS

GRADE, DRAIN & SURFACE
INTERSTATE HIGHWAY NOS. I-240 & I-35
OKLAHOMA COUNTY
CONTROL SECTION 35-55-15
STATE JOB NO. 09032(20)
PHASE 1

FED. ROAD DIST. NO.	STATE	F.A.P. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				
REVISIONS					DATE
ADDED FLEX ESALS					12/08/15

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	INDEX OF SHEETS

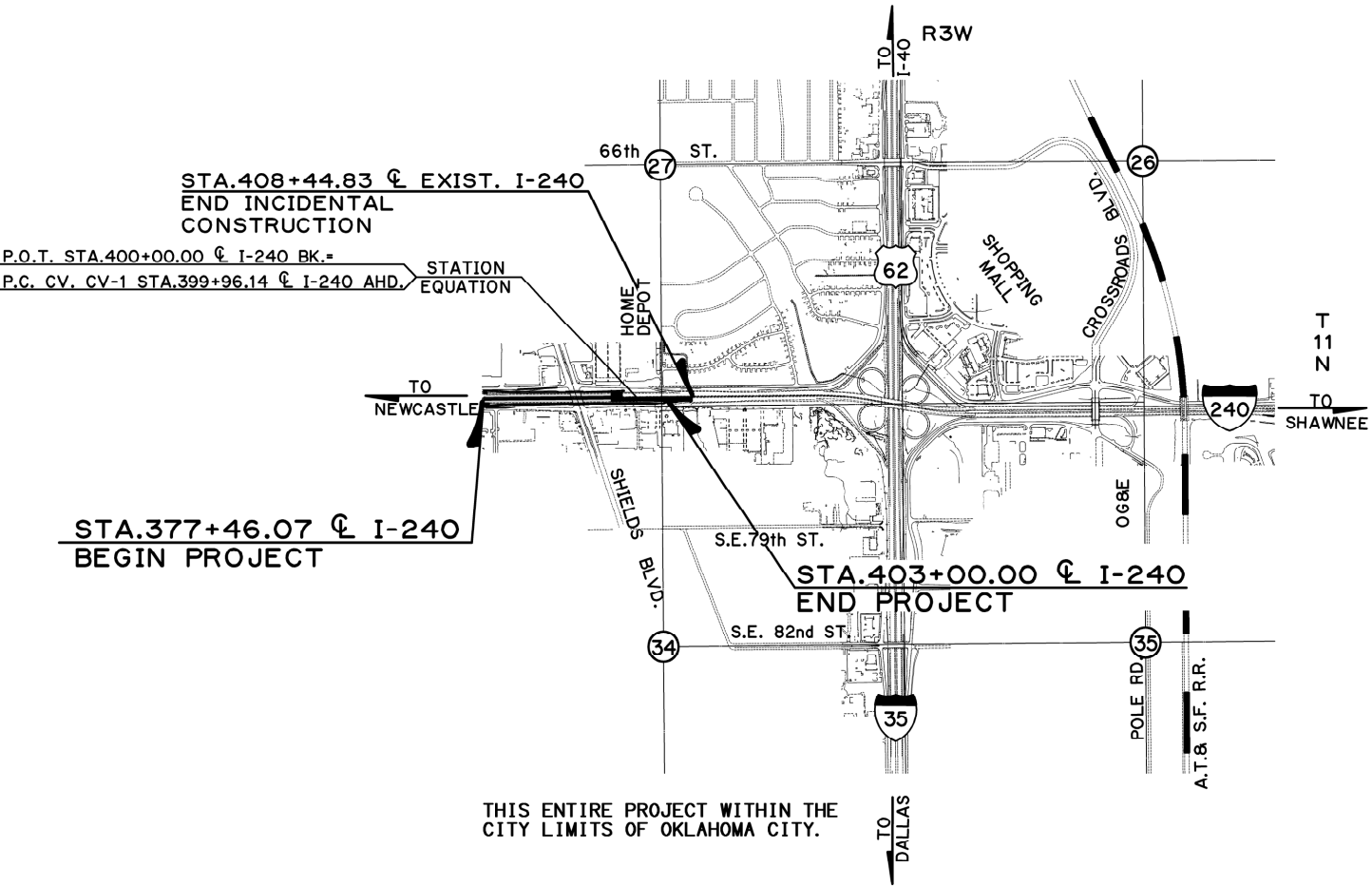


DESIGN DATA	
ADT-(2030)	= 152,000
DHV	= 9%
D	= 55%
T(%ADT)	= 10%
V	= 55 MPH
EXPRESSWAY	= 55 MPH
SERVICE ROADS	= 40 MPH
CROSS STREETS	= 40 MPH
RAMPS (DIRECT)	= 50 MPH
RAMPS (LOOPS)	= 25 MPH
RAMPS (SEMI-DIRECT)	= 45 MPH
20 YEAR FLEX ESALS	= 59.7 M

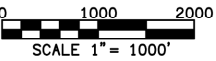
SCALE
PLAN 1" = 100'
PROFILE HOR. 1" = 100'
VER. 1" = 10'
LAYOUT MAP 1" = 1000'
LEVEL DATUM IS MEAN SEA LEVEL (U.S.C. & G.S.)
BEARINGS ARE GRID BEARINGS IN THE O.S.H.D.
PLANE COORDINATE SYSTEM.

CONVENTIONAL SIGNS

PROPOSED ROAD	INTERSTATE HIGHWAY
RAILROADS	U.S. HIGHWAY
RANGE & TOWNSHIP LINES	STATE HIGHWAY
SECTION LINES	
QUARTER SECTION LINES	
FENCES	
GROUND LINE	
EXISTING ROADS	
BASE LINE	
GRADE LINES	
TELEPHONE & TELEGRAPH	
POWER LINES	
OIL WELLS	
BUILDINGS	
DRAINAGE STRUCTURES-IN-PLACE	
DRAINAGE STRUCTURES-NEW	
RIGHT-OF-WAY LINES-EXISTING	
RIGHT-OF-WAY LINES-NEW	
RIGHT-OF-WAY MARKERS-IN PLACE	
RIGHT-OF-WAY MARKERS-REMOVE & RESET	
RIGHT-OF-WAY MARKERS-NEW	
CONTROLLED ACCESS	
EXISTING SANITARY SEWERS	
EXISTING GAS LINES	
EXISTING WATER LINES	
EXISTING TELEPHONE CABLES UNDERGROUND	



THIS ENTIRE PROJECT WITHIN THE
CITY LIMITS OF OKLAHOMA CITY.



PREPARED AND SUBMITTED BY:
POE & ASSOCIATES INC.
Oklahoma City, Oklahoma

Thomas S. Evans
THOMAS S. EVANS, P.E.
Okla. Registered Professional
Engineer No. 25204
Date 11-2-15



Timothy R. Purkeypile
TIMOTHY RAY PURKEYPILE
Okla. Registered Professional
Engineer No. 16021
Date 11/2/15



ROADWAY LENGTH	2,557.79 FT.	-0.484 MILES
BRIDGE LENGTH	0.00 FT.	-0.000 MILES
PROJECT LENGTH	2,557.79 FT.	-0.484 MILES
EQUATIONS	STA. 400+00.00 BK. = STA. 399+96.14 AHD.	
EXCEPTIONS	NONE	

OKLAHOMA DEPARTMENT OF TRANSPORTATION		DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED	DATE	APPROVED	DATE
CHIEF ENGINEER		DIVISION ADMINISTRATOR	
F.A. Project No. ACNHPP1-2400-(004)SS Sht. No. 1			

INDEX OF SHEETS

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18-22	INTERCHANGE GEOMETRIC LAYOUT & POINT COORDINATE TABLES	83A-83B	FOUNDATION REPORT WALL 'E1'
23-24	ULTIMATE FACILITY TRAFFIC DATA SHEETS	84	MSE RETAINING WALL DETAILS
25	STORM WATER MANAGEMENT PLAN	85	DELETED
26	TEMPORARY INLET SEDIMENT FILTER	△6 A01-A09	△6 ARCHITECTURAL FINISH DETAILS
27	DRAINAGE MAP	86	SOIL NAIL WALL SPECIFICATIONS
28-29	DRAINAGE STRUCTURE DESIGN RECORD	87-88	SOIL NAIL WALL DETAILS
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34	SUMMARY OF PAY QUANTITIES & NOTES - SIGNING AND STRIPING	96-98	MONOTUBE STRUCTURE (DRILLED SHAFT DETAILS)
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44	LIGHT POLE & SERVICE POLE SCHEDULES	117-118	SIGN STRUCTURE DETAILS
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55-56	STORM SEWER PROFILES - I-240	139	TRAFFIC CONTROL PLAN SPECIAL SIGN DETAILS
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58	PLAN & PROFILE SHEETS ~ RAMP 'SF4'	SD01-SD24	SURVEY DATA SHEETS
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60	RAMP TERMINAL AND CONST. DETAILS RAMP 'SF4'	X1-X32	CROSS SECTIONS ~ I-240
61	I-240 EB & WB TEMPORARY CONNECTION	X33-X44	CROSS SECTIONS ~ RAMP 'SF3'
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70	SOIL NAIL WALL 'D1' LAYOUT		
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74A-74B	FOUNDATION REPORT WALL 'D1'		
75-76	MSE RETAINING WALL 'E" ~ PLAN & ELEVATION		

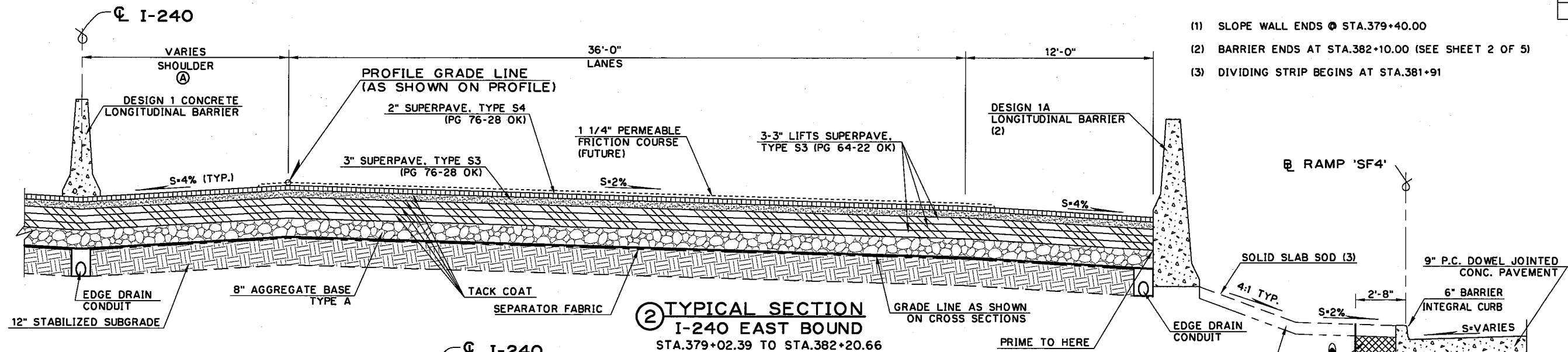
THE FOLLOWING ODOT STANDARDS WILL BE REQUIRED:

ROADWAY & BRIDGE:	LIGHTING:	SIGNING & STRIPING:	TRAFFIC OPERATIONS:
SSS-1-1	SPI-4-1	PM1-1-02	TCS1-1-01
TSC2-3-2	FPI-3-3	PM4-1-01	TCS2-1-00
TSD-2-0	SPB-1-4	PM6-1-00	TCS3-1-01
TFL-1-1	FHTCP-3-1	PM7-1-00	TCS4-1-01
ASCD-5-2	SBI-4-2	WSD2-1-00	TCS5-1-00
CSCD-5-3	PUD-3-2	HLP1-1-00	TCS6-1-02
LECS-4-1	CLB-1-2	HLP2-1-00	TCS7-1-02
LTU-4-0	DC-3-2	PPD1-1-00	TCS8-1-00
PR-3-0	PDT-1-3	HLD1-1-01	TCS9-1-01
PCPR-3-1	SUEL1-3-2	HLD2-1-00	TCS10-1-00
PED-3-2	SUEL3-3-2	HLP3-1-00	TCS11-1-01
WCR-3-1	TR4-2-00E	UPD1-1-00	TCS13-1-00
TWD-1-0	FSHP-42-2-00E	UPD2-1-00	TCS14-1-00
CI-1-2		SPD1-1-00	TCS17-1-00
SSIF-4-0		SCD1-1-00	TCS18-1-01
CIG-3-0		TEWD1-1-01	TCS19-1-01
MFC-4-1			
MJB-3-1			

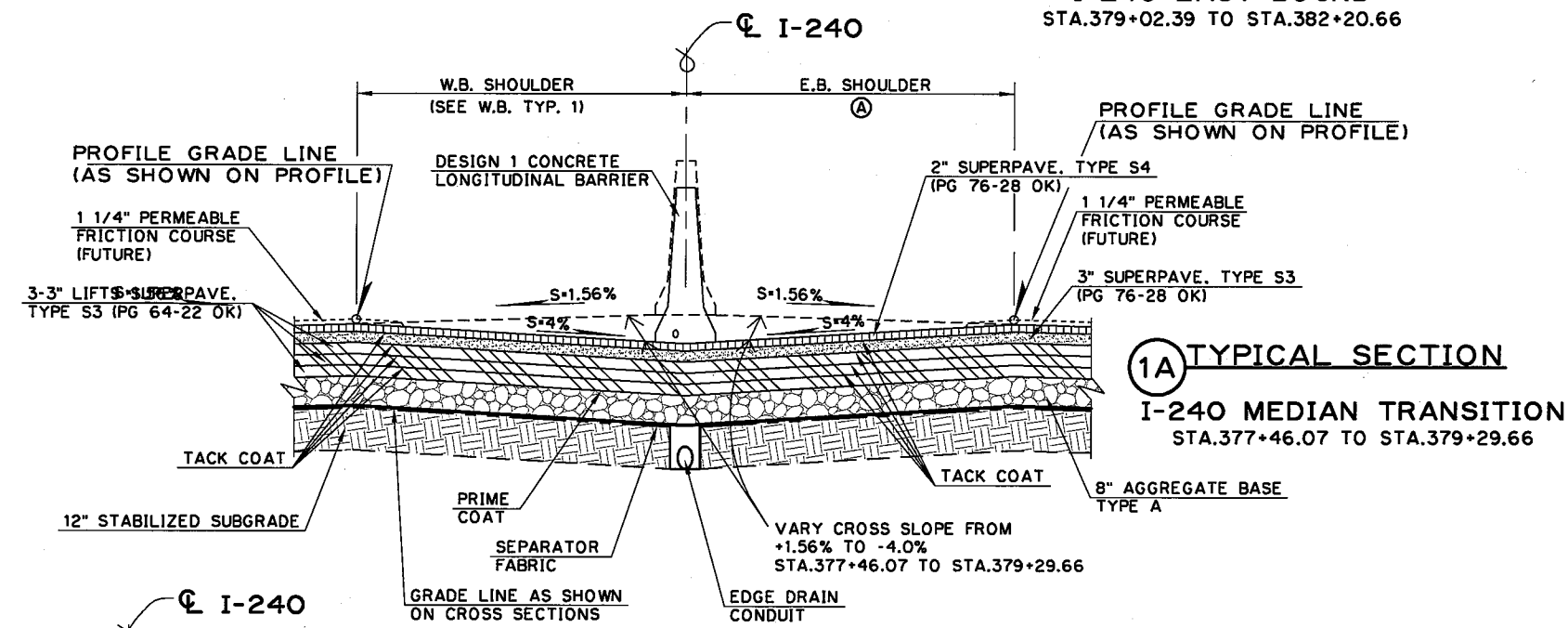
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Approved		
Squad	POE	

INDEX OF SHEETS

State Job No. 09032(20)Sheet No. 2

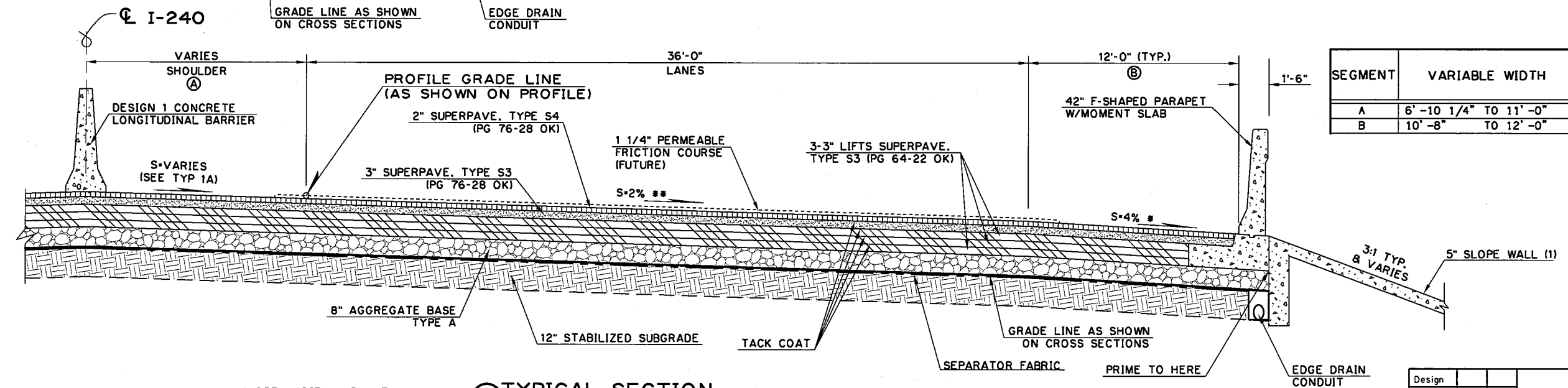


- (1) SLOPE WALL ENDS @ STA.379+40.00
- (2) BARRIER ENDS AT STA.382+10.00 (SEE SHEET 2 OF 5)
- (3) DIVIDING STRIP BEGINS AT STA.381+91



TOPSOIL NOTE:
THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT, AND PLACE IT BACK ON THE SECTION IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATIONS. RESERVED TOPSOIL SHALL BE SPREAD FIRST ON THE COMPLETED SLOPES OF THE CUT SECTIONS AND THE REMAINDER ON COMPLETED FILL SLOPES OR OTHER PRIORITY AREAS LOCATED BY THE ENGINEER. ALL ADDITIONAL COSTS ASSOCIATED WITH OPERATION SHALL BE INCLUDED IN THE PAY ITEM FOR SALVAGED TOPSOIL, LUMP SUM. THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASS LINE BALANCE.

- ⊗ INTERSECTION OF CUT AND/OR FILL SLOPES WITH GROUND LINE TO BE ROUNDED AS PART OF FINISHING OPERATIONS. ROUNDDING SHALL BE 5' MIN. FOR SMALLER CUTS AND FILLS, TO 15' MAX. FOR LARGER CUTS AND FILLS, OR AS DESIGNATED BY THE ENGINEER. COST OF ROUNDDING TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS OF WORK. SEE ROUNDDING DETAIL SHEET 13.
- TO BE BACKFILLED AND COMPACTED AS PART OF FINISHING OPERATIONS. COST TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS OF WORK.



SEGMENT	VARIABLE WIDTH	FEATURE	STATION EXTENTS
A	6'-10 1/4" TO 11'-0"	I-240 EB	377+46.07 TO 380+46.07
B	10'-8" TO 12'-0"	I-240 EB	377+46.07 TO 377+91.07

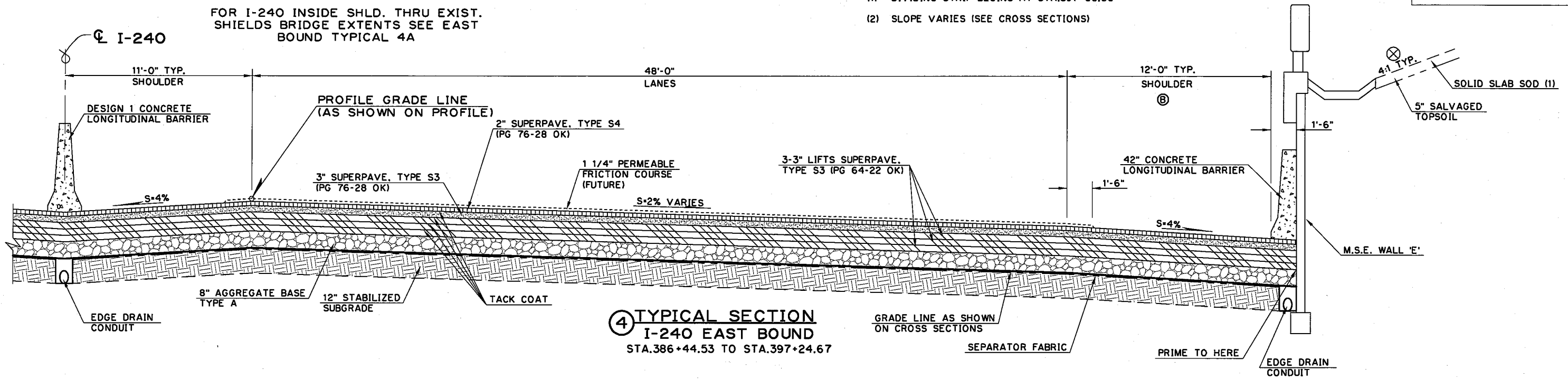
- ** SLOPE VARIES -1.56% TO -2.0% STA.377+46.07 TO STA.377+69.66
- * SLOPE VARIES -1.56% TO -2.0% STA.377+46.07 TO STA.377+69.66
- SLOPE VARIES -2.0% TO -4.0% STA.377+69.66 TO STA.378+22.99

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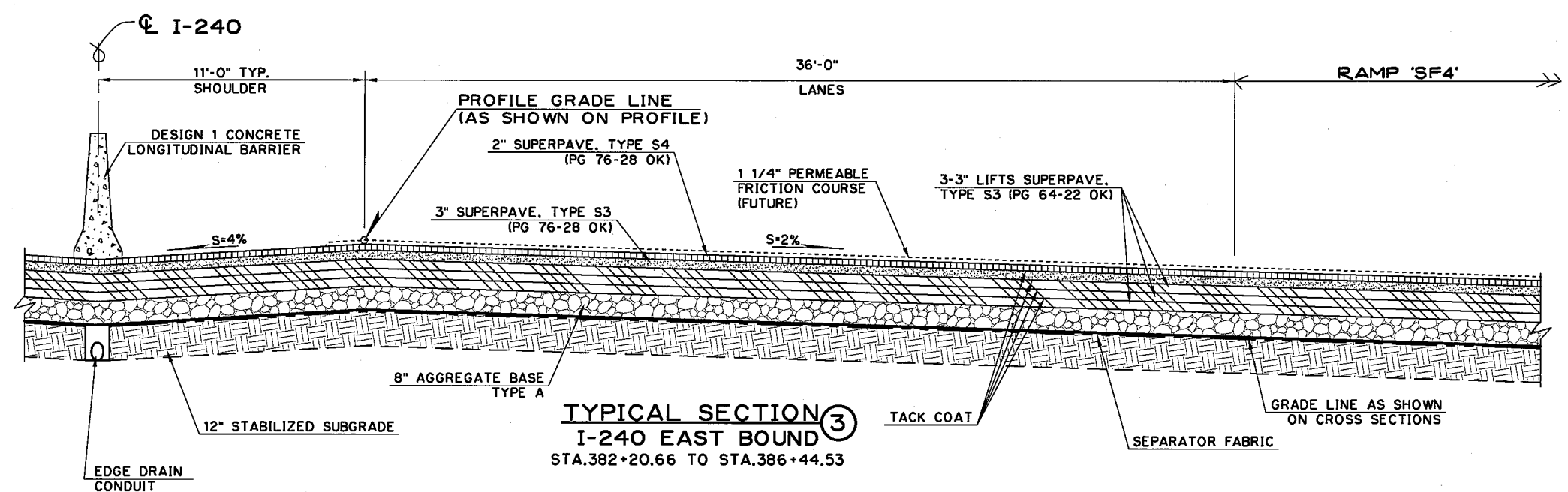
**TYPICAL SECTIONS
EAST BOUND I-240
SHEET 1 OF 5**

State Job No. 09032(20) Sheet No. 3

- (1) DIVIDING STRIP BEGINS AT STA.397+00.00
 (2) SLOPE VARIES (SEE CROSS SECTIONS)



④ TYPICAL SECTION
I-240 EAST BOUND
 STA.386+44.53 TO STA.397+24.67

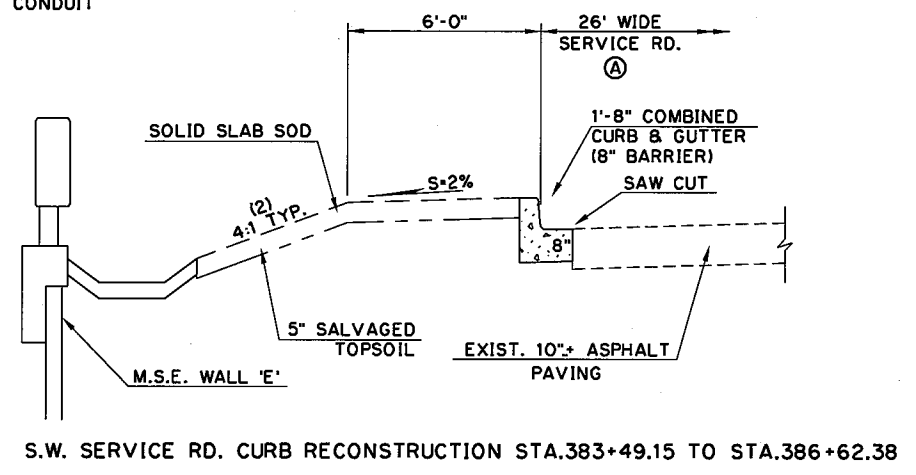


TYPICAL SECTION ③
I-240 EAST BOUND
 STA.382+20.66 TO STA.386+44.53

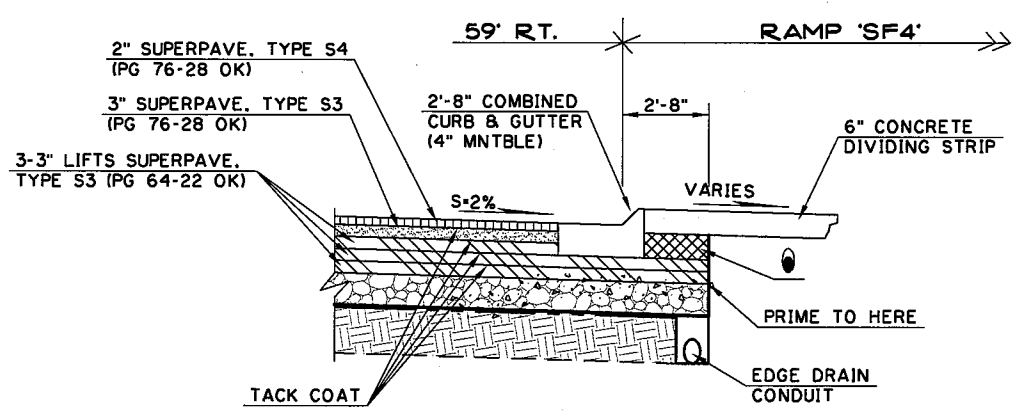
SEGMENT	VARIABLE WIDTH		FEATURE	STATION EXTENTS
A	26'-0"	TO 35'-0"	I-240 EB	385+62.22 TO 386+62.38
B	12'-0"	TO 6'-0"	I-240 EB	389+60.00 TO 395+60.00
B	6'-0"	TO 12'-0"	I-240 EB	394+80.00 TO 397+80.00

TOPSOIL NOTE:
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S.W. SERVICE RD. CURB RECONSTRUCTION
 STA.383+49.15 TO STA.386+62.38

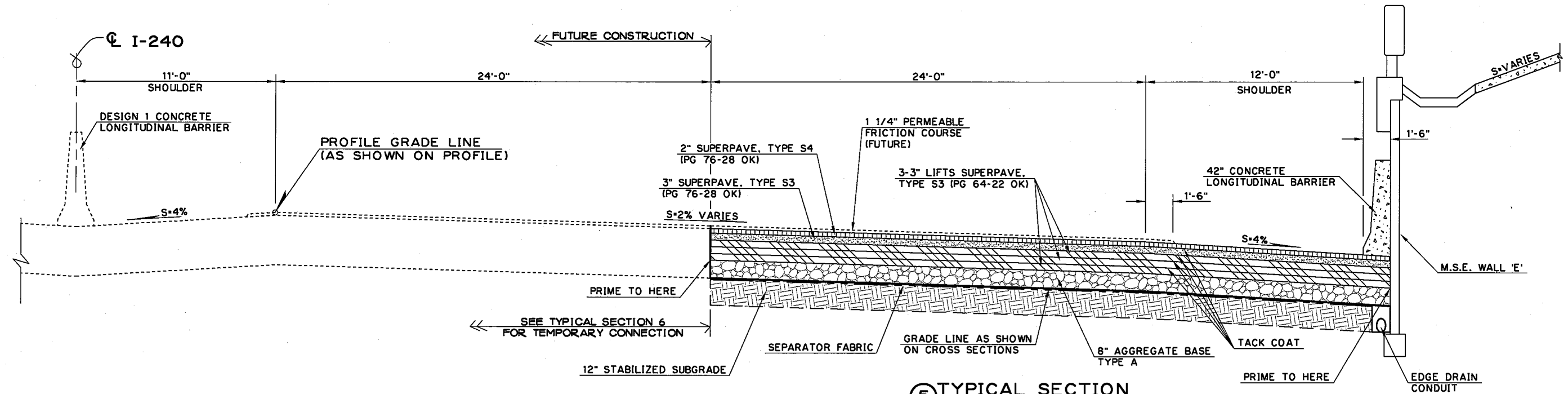


②A TYPICAL SECTION
I-240 E.B. OUTSIDE SHOULDER
 STA.382+10.00 TO STA.382+20.66

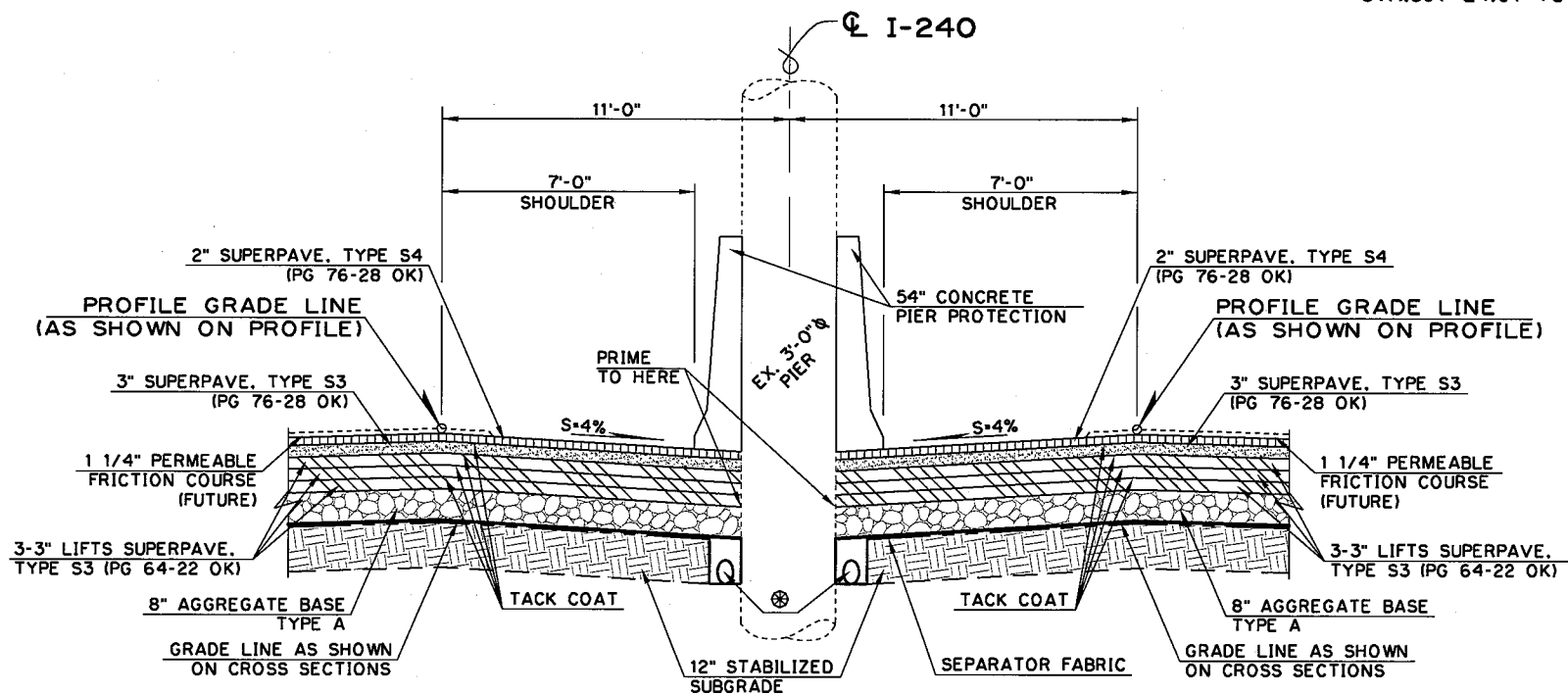
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DESCRIPTION	REVISIONS	DATE

- (1) SLOPE WALL ENDS @ STA.379+40.00
- (2) BARRIER ENDS AT STA.382+10.00 (SEE SHEET 2 OF 5)
- (3) DIVIDING STRIP BEGINS AT STA.381+91



5 TYPICAL SECTION
I-240 EAST BOUND
 STA.397+24.67 TO STA.402+00.00 @ I-240



4A TYPICAL SECTION
 (SEE PIER PROTECTION DETAILS)
I-240 INSIDE SHLD. THRU EXIST.
SHIELDS BRIDGE EXTENTS
 STA.392+85.46 TO STA.394+02.12

TOPSOIL NOTE:
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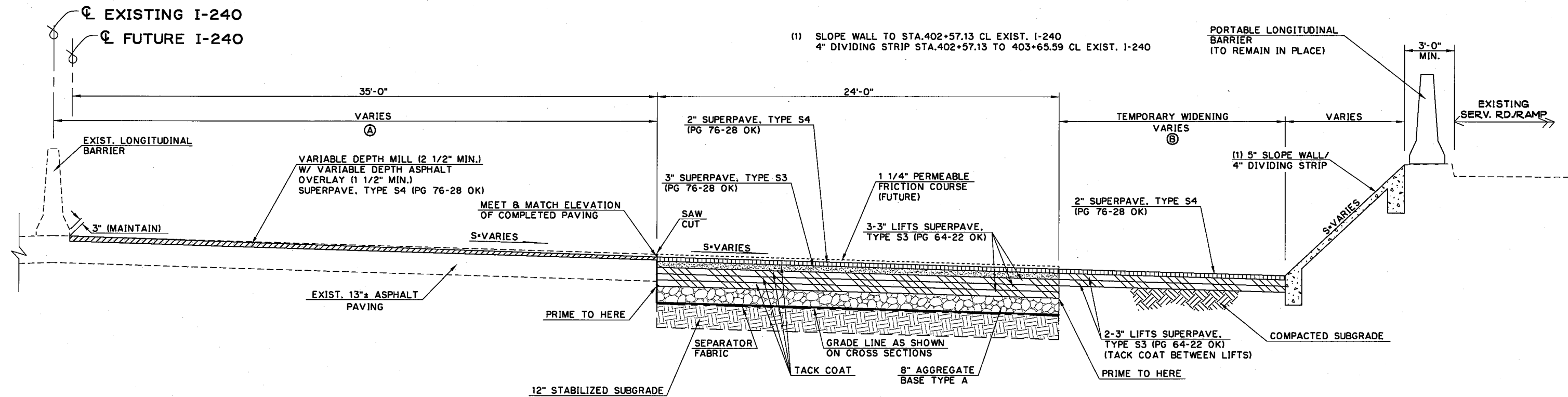
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TYPICAL SECTIONS
EAST BOUND I-240
 SHEET 3 OF 5

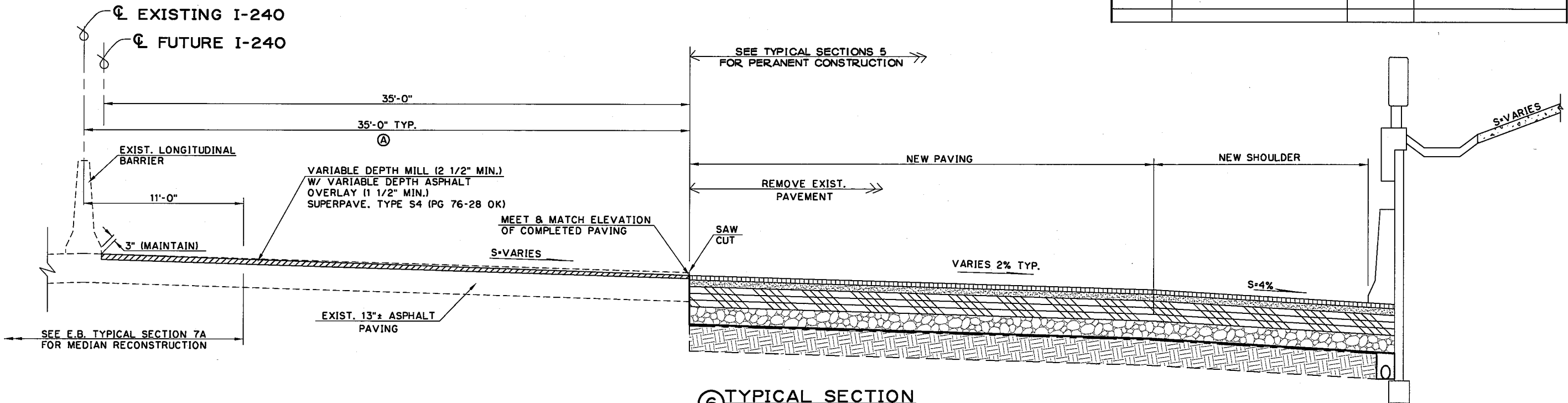
State Job No. 09032(20) Sheet No. 5

DESCRIPTION	REVISIONS	DATE



7 TYPICAL SECTION
I-240 EAST BOUND
STA. 402+00.00 TO STA. 403+00.00 $\text{\textcircled{C}}$ I-240
STA. 402+01.24 TO STA. 403+01.86 $\text{\textcircled{C}}$ EXIST. I-240

SEGMENT	VARIABLE WIDTH		FEATURE	STATION EXTENTS
A	35'-0"	TO 43'-0"	EX. I-240	400+00.00 TO 403+01.86
B	13'-6"	TO 0'-0"	EX. I-240	402+01.24 TO 402+68.47

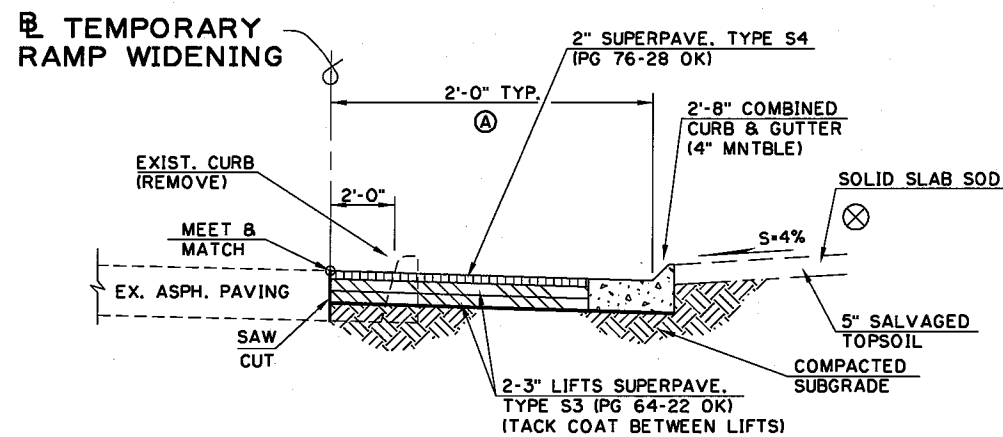


6 TYPICAL SECTION
PRESENT I-240 EAST BOUND TEMPORARY CONNECTION
STA. 397+24.67 TO STA. 402+00.00 $\text{\textcircled{C}}$ I-240
(STA. 400+00.00 $\text{\textcircled{C}}$ I-240 BK. = STA. 400+00.00 $\text{\textcircled{C}}$ EXIST. I-240)

Design	
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Squad	POE

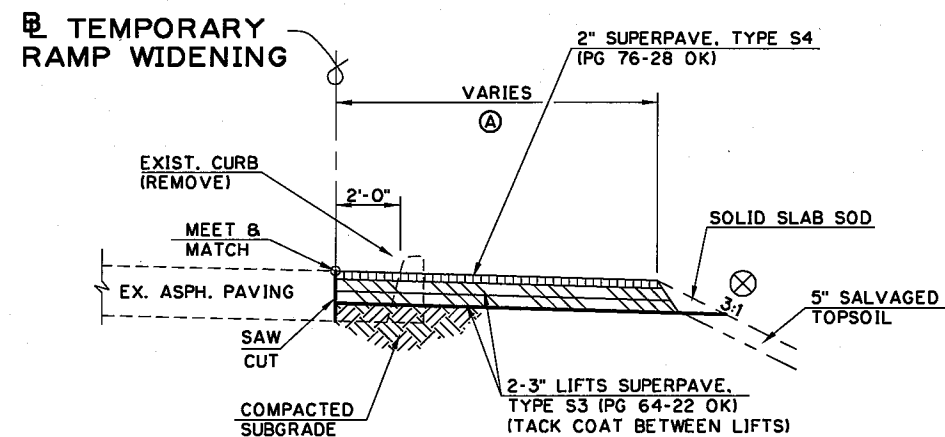
TYPICAL SECTIONS
EAST BOUND I-240
SHEET 4 OF 5

State Job No. 09032(20) Sheet No. 6



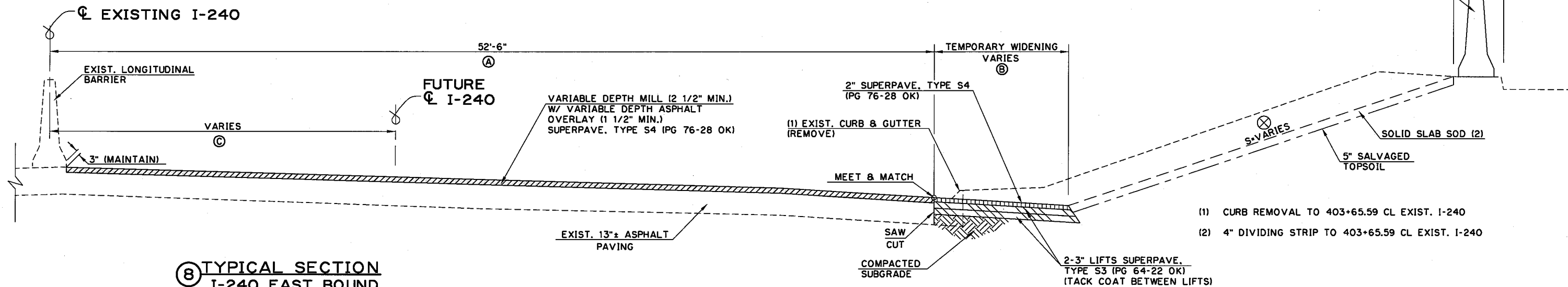
9 TYPICAL SECTION
TEMP. RAMP WIDENING

STA.0+00.00 TO STA.1+16.30 & TEMP. RAMP WIDENING
STA.405+50.15 TO STA.405+66.49 & EXIST. I-240 RT.



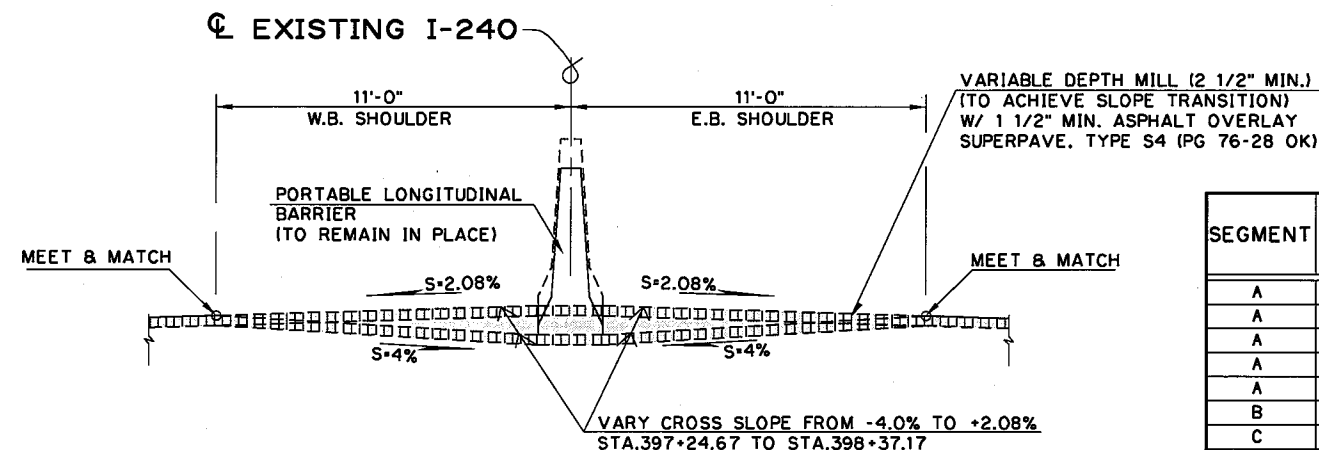
10 TYPICAL SECTION
TEMP. RAMP WIDENING

STA.1+16.30 TO STA.3+95.68 & TEMP. RAMP WIDENING
STA.405+66.49 TO STA.408+44.90 & EXIST. I-240 RT.



8 TYPICAL SECTION
I-240 EAST BOUND

STA.403+00.00 TO STA.406+00.00 & I-240 FUTURE
STA.403+00.59 TO STA.406+05.91 & EXIST. I-240



7A TYPICAL SECTION

TEMPORARY CONNECTION
I-240 MEDIAN RECONSTRUCTION
STA.397+24.67 TO STA.398+37.17

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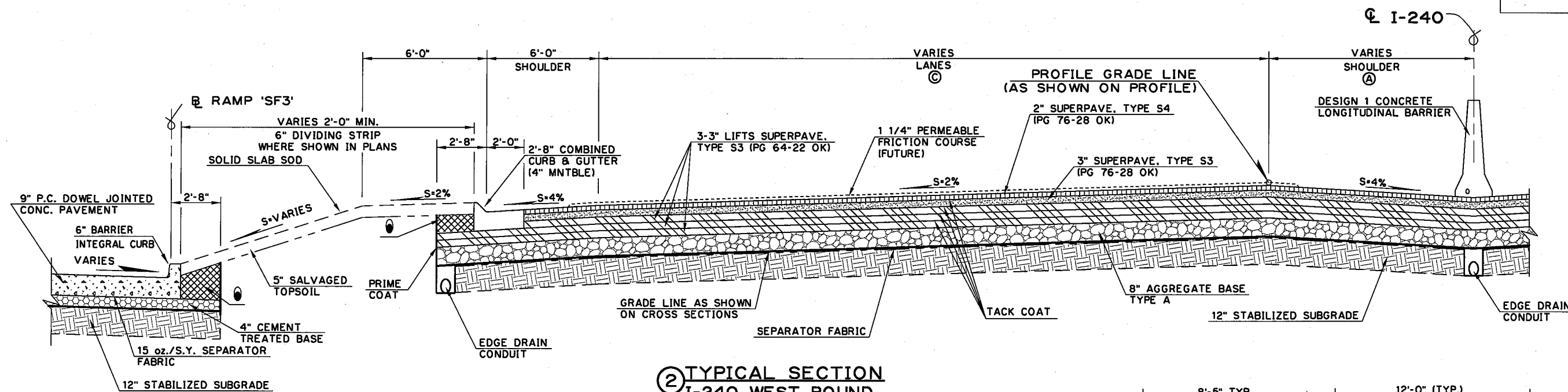
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SEGMENT	VARIABLE WIDTH		FEATURE	STATION EXTENTS
A	52'-6"	TO 52'-6"	EX. I-240	403+65.59 TO 404+43.63
A	43'-6"	TO 43'-6"	EX. I-240	404+43.63 TO 406+05.91
A	2'-0"	TO 13'-1 1/2"	TEMP. WIDE	0+16.31 TO 1+16.30
A	13'-1 1/2"	TO 14'-2 1/8"	TEMP. WIDE	1+16.30 TO 1+56.31
A	14'-2 1/8"	TO 12'-4 5/8"	TEMP. WIDE	1+56.31 TO 3+95.68
B	14'-0"	TO 0'-0"	EX. I-240	403+01.86 TO 403+65.59
C	0'-0"	TO 32'-1 1/2"	EX. I-240	400+00.00 TO 406+05.91

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Squad	POE

TYPICAL SECTIONS
EAST BOUND I-240
SHEET 5 OF 5

State Job No. 09032(20) Sheet No. 7



② TYPICAL SECTION
I-240 WEST BOUND
 STA.380+55.81 TO STA.383+44.32

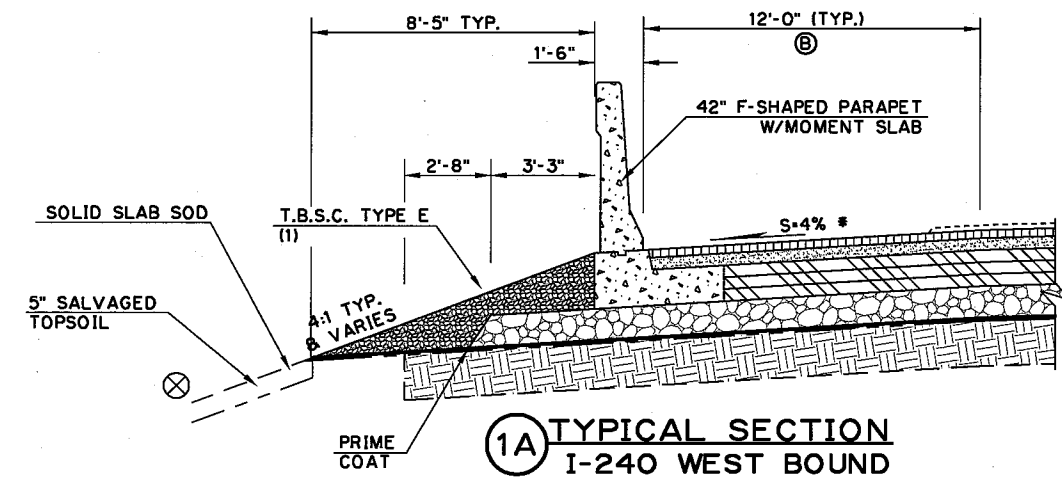
SEGMENT	VARIABLE WIDTH	FEATURE	STATION EXTENTS
A	7'-6" TO 11'-0"	I-240 WB	377+46.07 TO 383+46.07
B	10'-7" TO 12'-0"	I-240 WB	377+46.07 TO 377+91.07
C	36'-0" TO 48'-0"	I-240 WB	377+53.89 TO 384+37.89

TOPSOIL NOTE:
 THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT, AND PLACE IT BACK ON THE SECTION IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATIONS. RESERVED TOPSOIL SHALL BE SPREAD FIRST ON THE COMPLETED SLOPES OF THE CUT SECTIONS AND THE REMAINDER ON COMPLETED FILL SLOPES OR OTHER PRIORITY AREAS LOCATED BY THE ENGINEER. ALL ADDITIONAL COSTS ASSOCIATED WITH OPERATION SHALL BE INCLUDED IN THE PAY ITEM FOR SALVAGED TOPSOIL, LUMP SUM. THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASS LINE BALANCE.

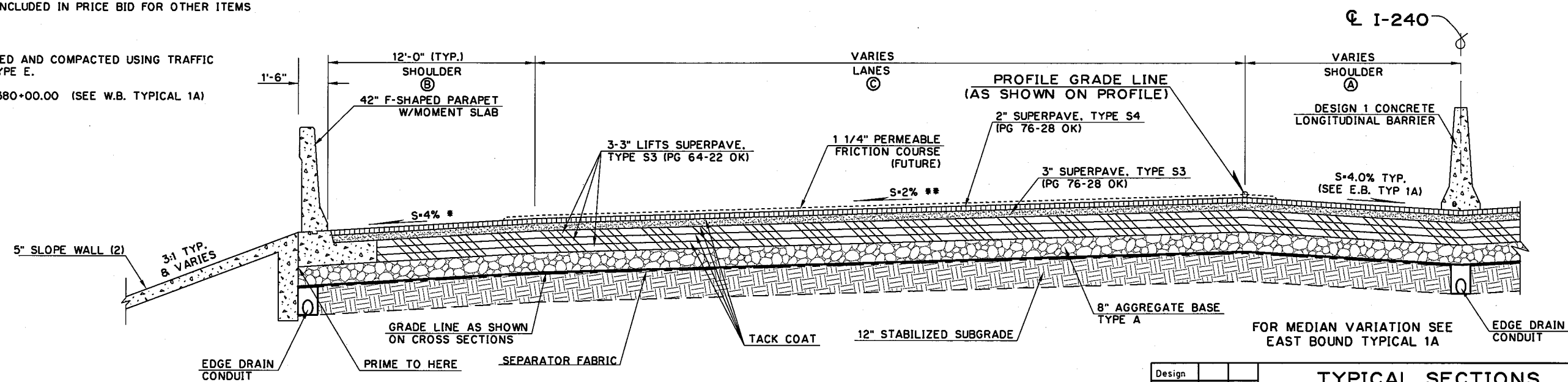
⊗ INTERSECTION OF CUT AND/OR FILL SLOPES WITH GROUND LINE TO BE ROUNDED AS PART OF FINISHING OPERATIONS. ROUNDED SHALL BE 5' MIN. FOR SMALLER CUTS AND FILLS, TO 15' MAX. FOR LARGER CUTS AND FILLS, OR AS DESIGNATED BY THE ENGINEER. COST OF ROUNDED TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS OF WORK. SEE ROUNDED DETAIL SHEET 13.

● TO BE BACKFILLED AND COMPACTED AS PART OF FINISHING OPERATIONS. COST TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS OF WORK.

- (1) BACKFILL NOTE:
 THIS AREA TO BE BACKFILLED AND COMPACTED USING TRAFFIC BOUND SURFACE COURSE, TYPE E.
- (2) SLOPE WALL ENDS AT STA.380+00.00 (SEE W.B. TYPICAL 1A)



①A TYPICAL SECTION
I-240 WEST BOUND
 STA.380+00.00 TO STA.380+55.81



① TYPICAL SECTION
I-240 WEST BOUND
 STA.377+46.07 TO STA.380+55.81

* SLOPE VARIES -1.56% TO -2.0%
 STA.377+46.07 TO STA.377+69.66
 SLOPE VARIES -2.0% TO 4.0%
 STA.377+69.66 TO STA.378+22.99

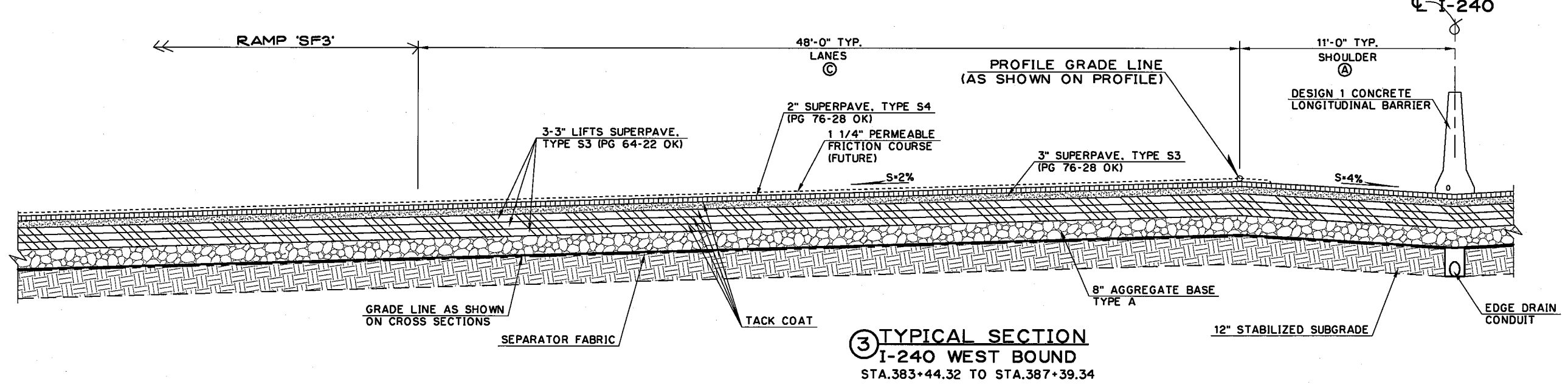
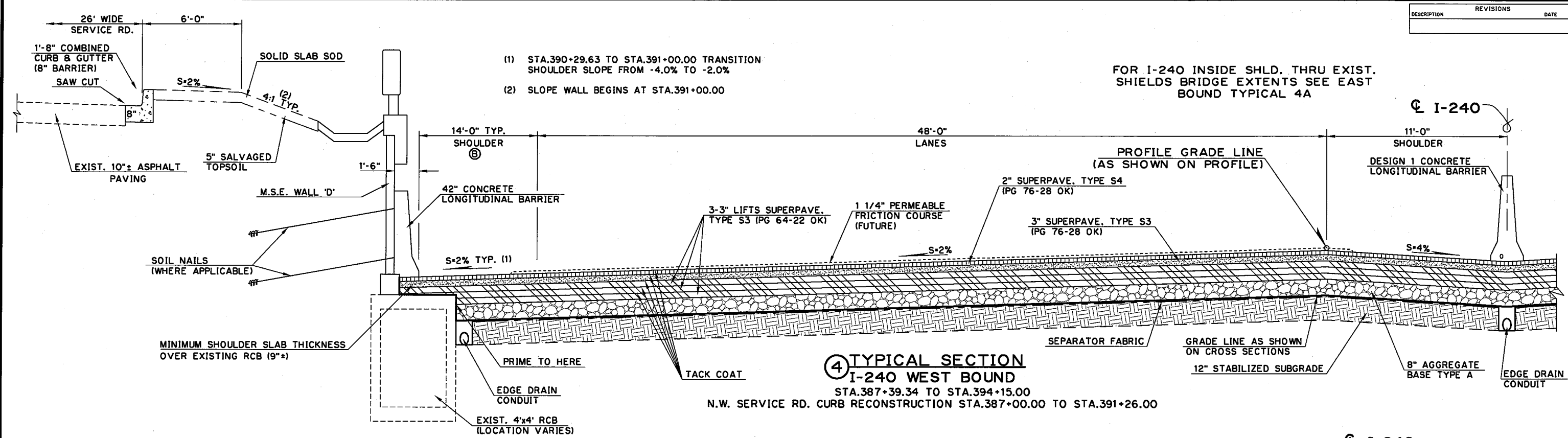
** SLOPE VARIES -1.56% TO -2.0%
 STA.377+46.07 TO STA.377+69.66

Design	
Drawn	
Checked	
Approved	
Squad	POE

TYPICAL SECTIONS
WEST BOUND I-240
 SHEET 1 OF 4

State Job No. 09032(20) Sheet No. 8

DESCRIPTION	REVISIONS	DATE



TOPSOIL NOTE:
 THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT, AND PLACE IT BACK ON THE SECTION IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATIONS. RESERVED TOPSOIL SHALL BE SPREAD FIRST ON THE COMPLETED SLOPES OF THE CUT SECTIONS AND THE REMAINDER ON COMPLETED FILL SLOPES OR OTHER PRIORITY AREAS LOCATED BY THE ENGINEER. ALL ADDITIONAL COSTS ASSOCIATED WITH OPERATION SHALL BE INCLUDED IN THE PAY ITEM FOR SALVAGED TOPSOIL, LUMP SUM. THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASS LINE BALANCE.

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SEGMENT	VARIABLE WIDTH	FEATURE	STATION EXTENTS
A	7' -6" TO 11' -0"	I-240 WB	377+46.07 TO 383+46.07
B	14' -0" TO 6' -0"	I-240 WB	391+18.62 TO 391+58.94
C	36' -0" TO 48' -0"	I-240 WB	377+53.89 TO 384+37.89

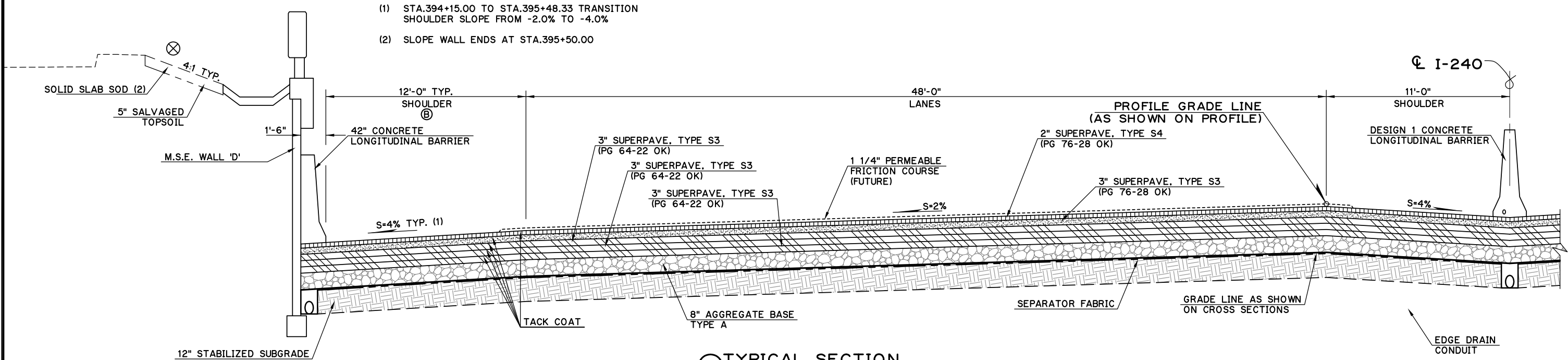
Design	
Drawn	
Checked	
Approved	
Squad	POE

**TYPICAL SECTIONS
WEST BOUND I-240**

SHEET 2 OF 4

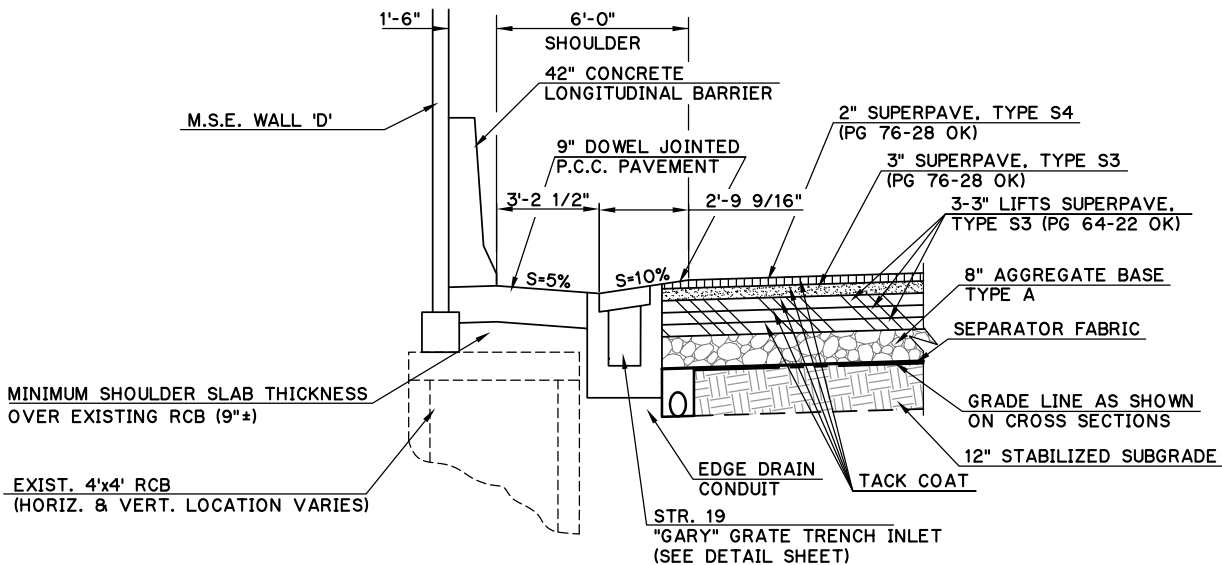
State Job No. 09032(20) Sheet No. 9

DESCRIPTION	REVISIONS	DATE



6 TYPICAL SECTION
I-240 WEST BOUND
STA.394+15.00 TO STA.397+24.67

SEGMENT	VARIABLE WIDTH	FEATURE	STATION EXTENTS
B	6' -0" TO 12' -0"	I-240 WB	394+15.00 TO 397+15.00



5B TYPICAL SECTION

I-240 WEST BOUND OUTSIDE SHLD. THRU
EXIST. 4'x4' RCB EXTENTS
STA.391+58.03 TO STA.393+90.00

TOPSOIL NOTE:
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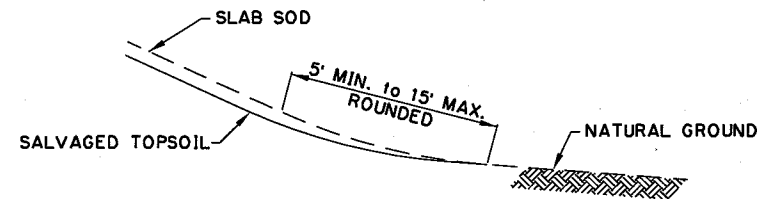
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Design	
Drawn	
Checked	
Approved	
Squad	POE

TYPICAL SECTIONS
WEST BOUND I-240
SHEET 3 OF 4

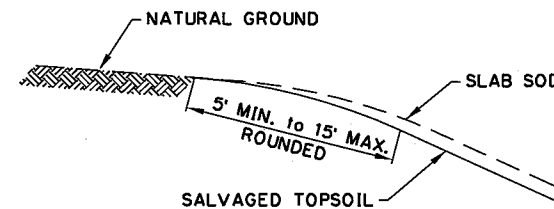
State Job No. 09032(20) Sheet No. 10

DESCRIPTION	REVISIONS	DATE



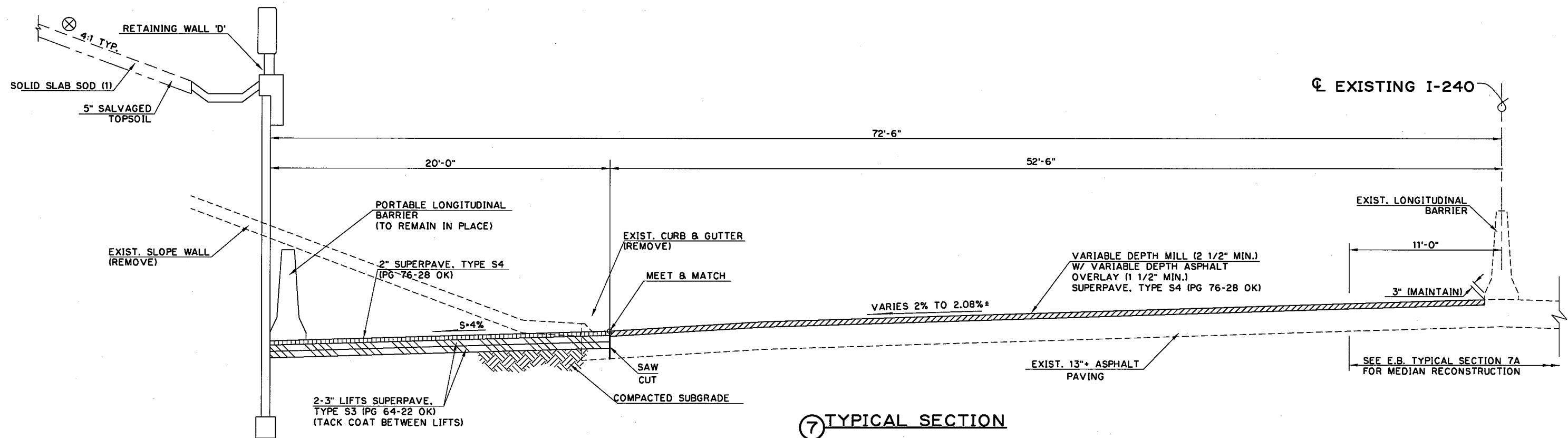
TOE OF FILL ROUNDING

INTERSECTION OF CUT AND FILL SLOPES WITH THE GROUND LINE ARE TO BE ROUNDED AS A PART OF FINISHING OPERATIONS. ROUNDED SHALL BE 5' MINIMUM FOR SMALLER CUTS AND FILLS, TO 15' MAXIMUM FOR LARGER CUTS AND FILLS OR AS DESIGNATED BY THE ENGINEER. COST OF ROUNDED TO BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF WORK.



TOP OF CUT ROUNDED

(1) SLOPE WALL BEGINS AT STA.398+40.00
(SEE PLANS)



⑦ TYPICAL SECTION

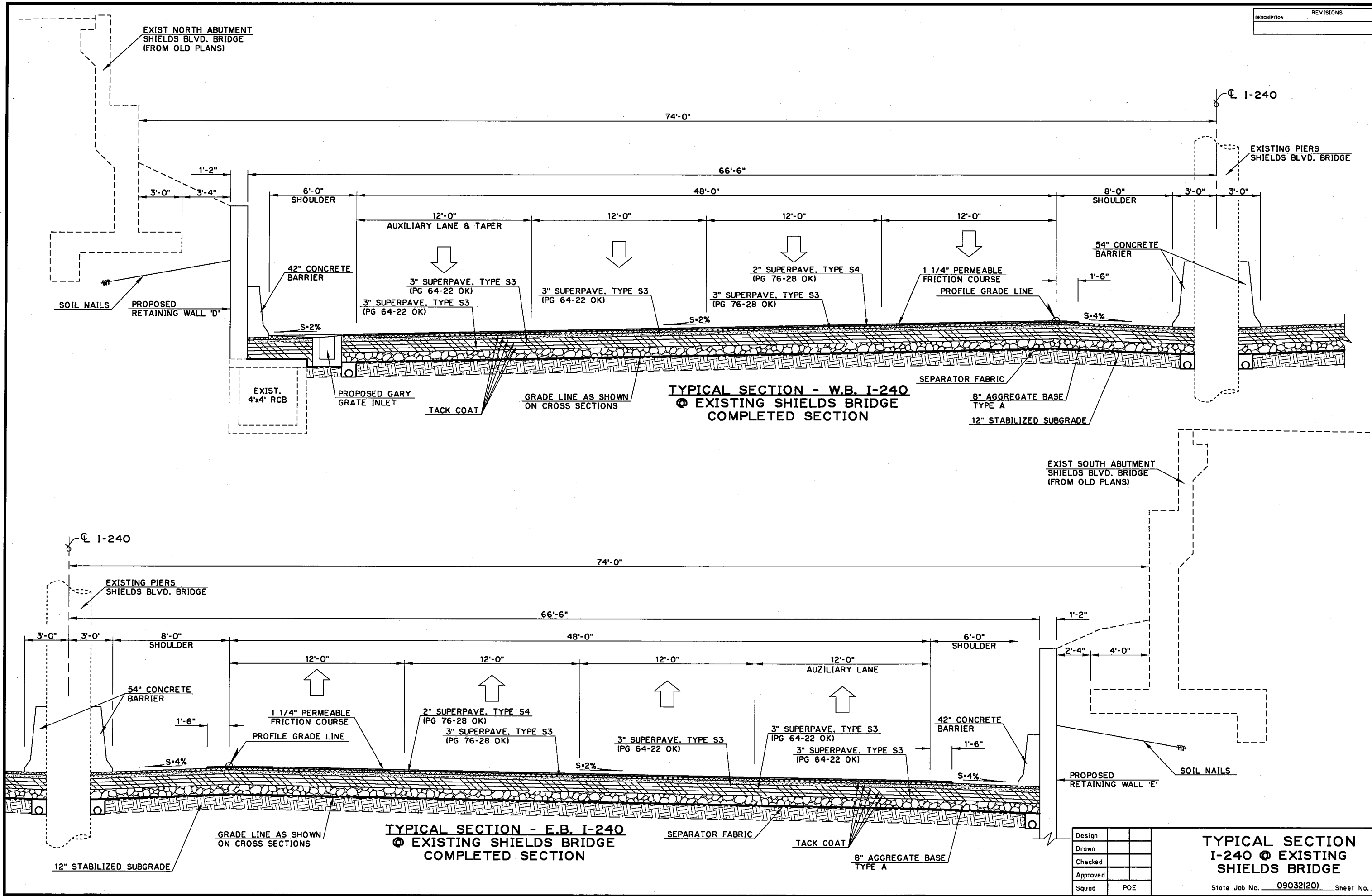
I-240 WEST BOUND TEMPORARY CONNECTION
STA.397+24.67 TO STA.398+40.00

Design	
Drawn	
Checked	
Approved	
Squad	POE

TYPICAL SECTIONS
WEST BOUND I-240
SHEET 4 OF 4

State Job No. 09032(20) Sheet No. 11

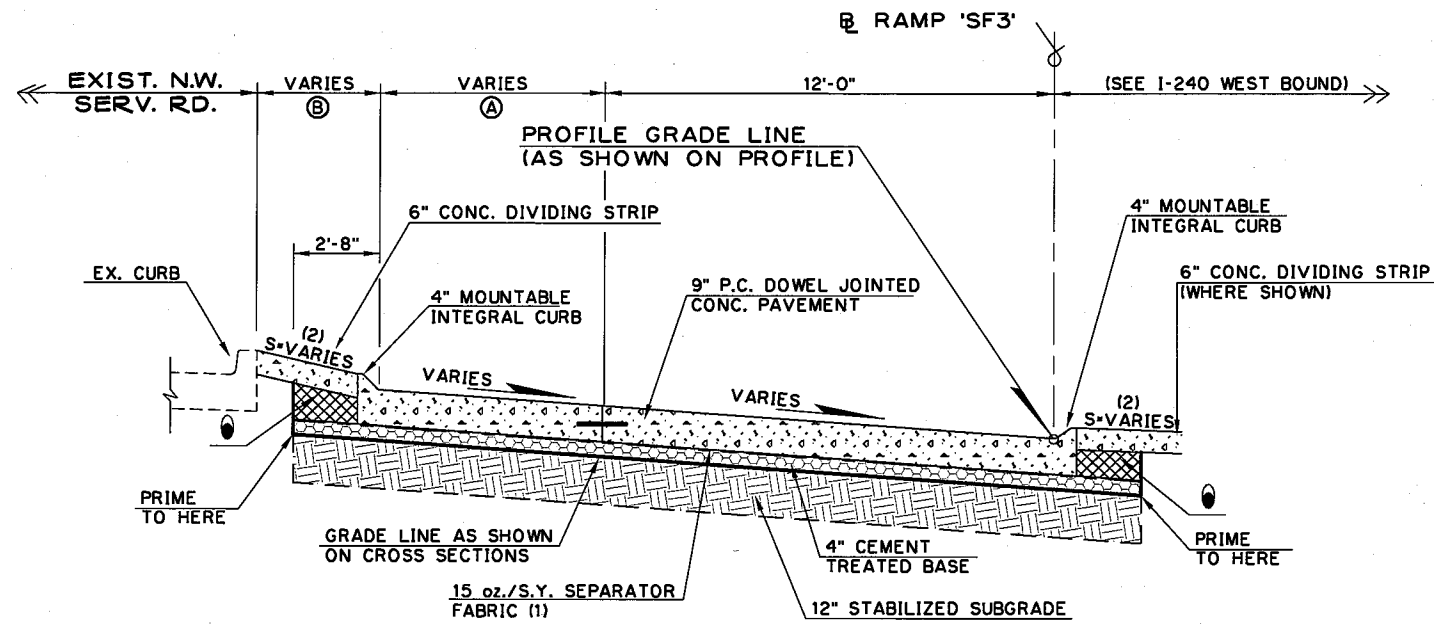
DESCRIPTION	REVISIONS	DATE



Design	
Drawn	
Checked	
Approved	
Squad	POE

TYPICAL SECTION
I-240 @ EXISTING
SHIELDS BRIDGE

DESCRIPTION	REVISIONS	DATE

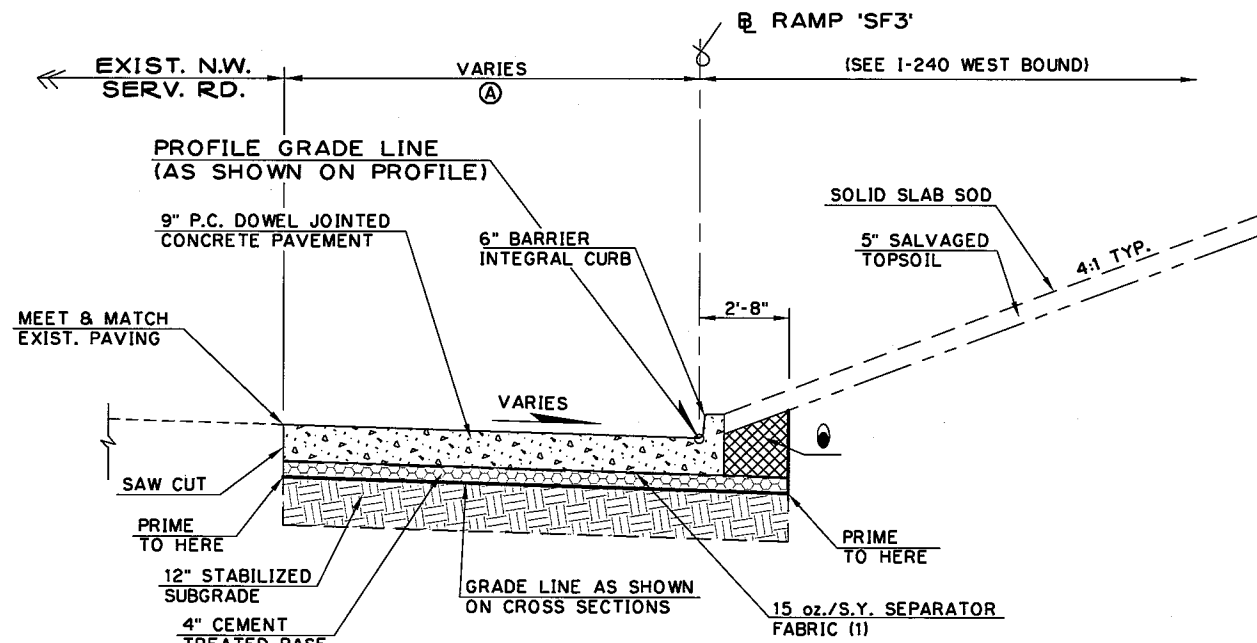


② TYPICAL SECTION
RAMP 'SF4'
STA.382+50.46 TO STA.382+95.64

TOPSOIL NOTE:
THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT, AND PLACE IT BACK ON THE SECTION IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATIONS. RESERVED TOPSOIL SHALL BE SPREAD FIRST ON THE COMPLETED SLOPES OF THE CUT SECTIONS AND THE REMAINDER ON COMPLETED FILL SLOPES OR OTHER PRIORITY AREAS LOCATED BY THE ENGINEER. ALL ADDITIONAL COSTS ASSOCIATED WITH OPERATION SHALL BE INCLUDED IN THE PAY ITEM FOR SALVAGED TOPSOIL, LUMP SUM. THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASS LINE BALANCE.

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● TO BE BACKFILLED AND COMPACTED AS PART OF FINISHING OPERATIONS. COST TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS OF WORK.



① TYPICAL SECTION
RAMP 'SF3'
STA.380+37.16 TO STA.382+50.46

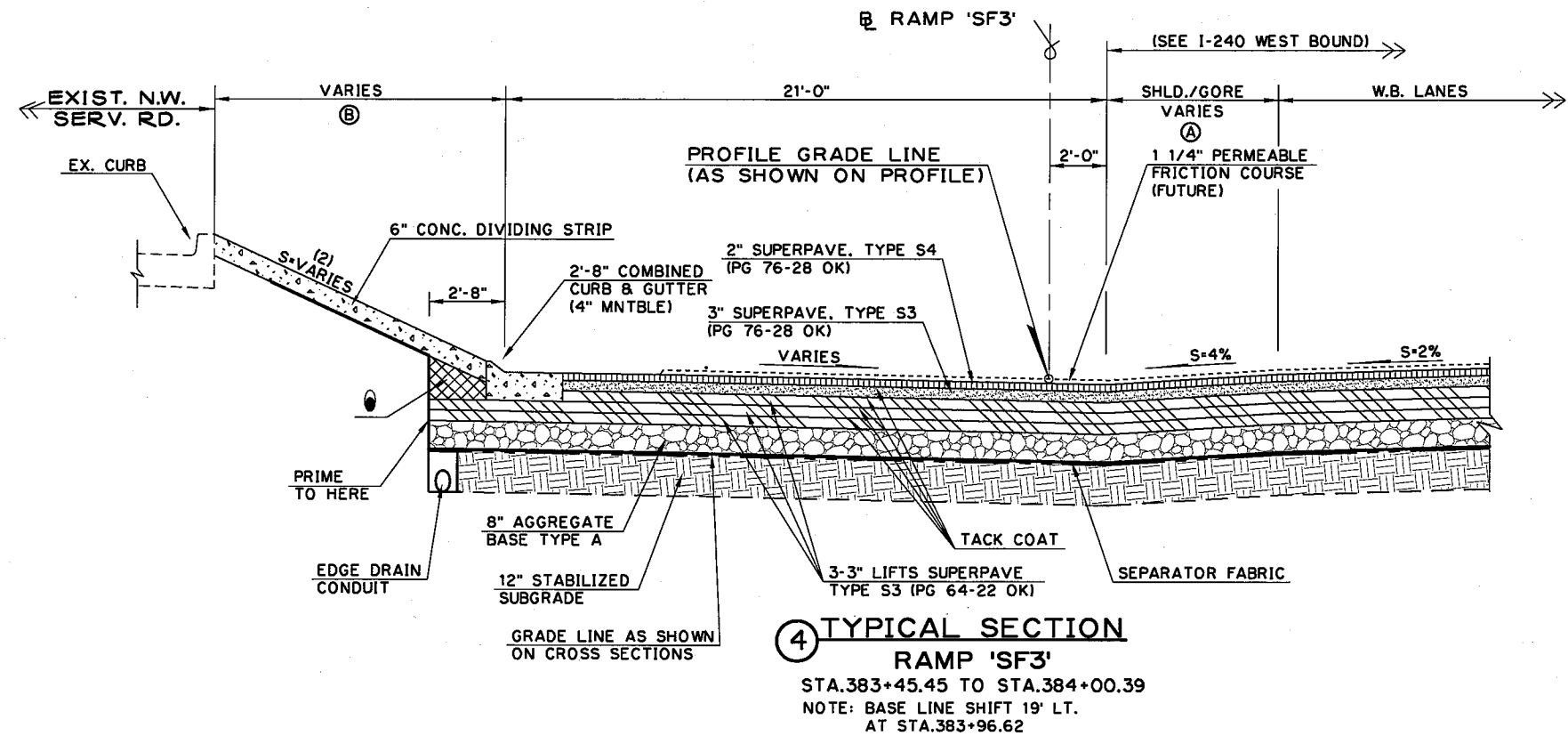
- (1) 15oz/S.Y. SEPARATOR FABRIC SHALL BE CONSIDERED AS INCIDENTAL TO THE 4" CEMENT TREATED BASE AND WILL NOT BE A PAY ITEM.
- (2) SLOPE VARIES (SEE CROSS SECTIONS)

SEGMENT	VARIABLE WIDTH	FEATURE	STATION EXTENTS
A	10'-0" TO 19'-0 1/2"	RAMP SF3	380+37.16 TO 382+50.46
A	2'-0" TO 7'-0"	RAMP SF3	382+50.46 TO 383+30.46
B	4'-0" TO 13'-5 3/8"	RAMP SF3	382+50.46 TO 383+96.62

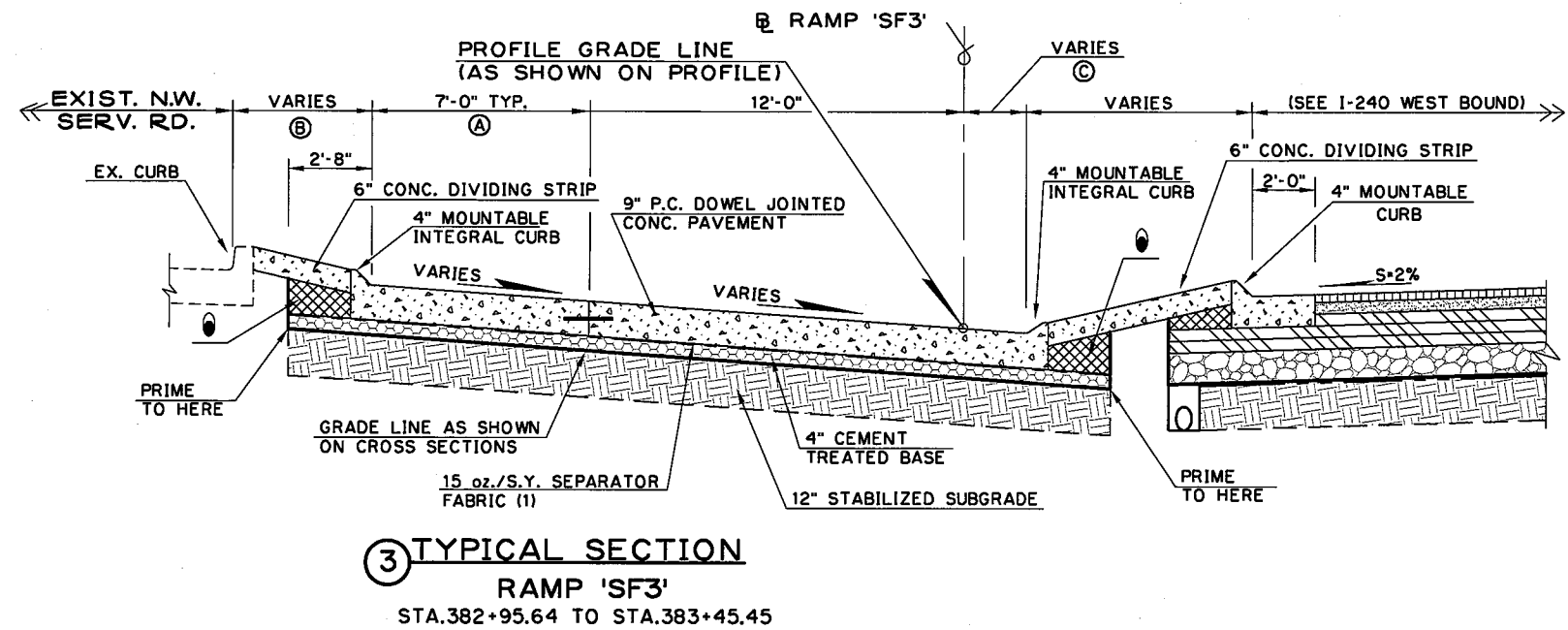
Design	
Drawn	
Checked	
Approved	
Squad	POE

TYPICAL SECTIONS
RAMP 'SF3'
SHEET 1 OF 3

State Job No. 09032(20) Sheet No. 13



SEGMENT	VARIABLE WIDTH	FEATURE	STATION EXTENTS
A	10' -0" TO 0' -0"	RAMP SF3	383+45.45 TO 384+23.59
B	4' -0" TO 13' -10 1/8"	RAMP SF3	382+50.46 TO 384+00.39
C	0' -0" TO 2' -0"	RAMP SF3	382+95.64 TO 383+45.45



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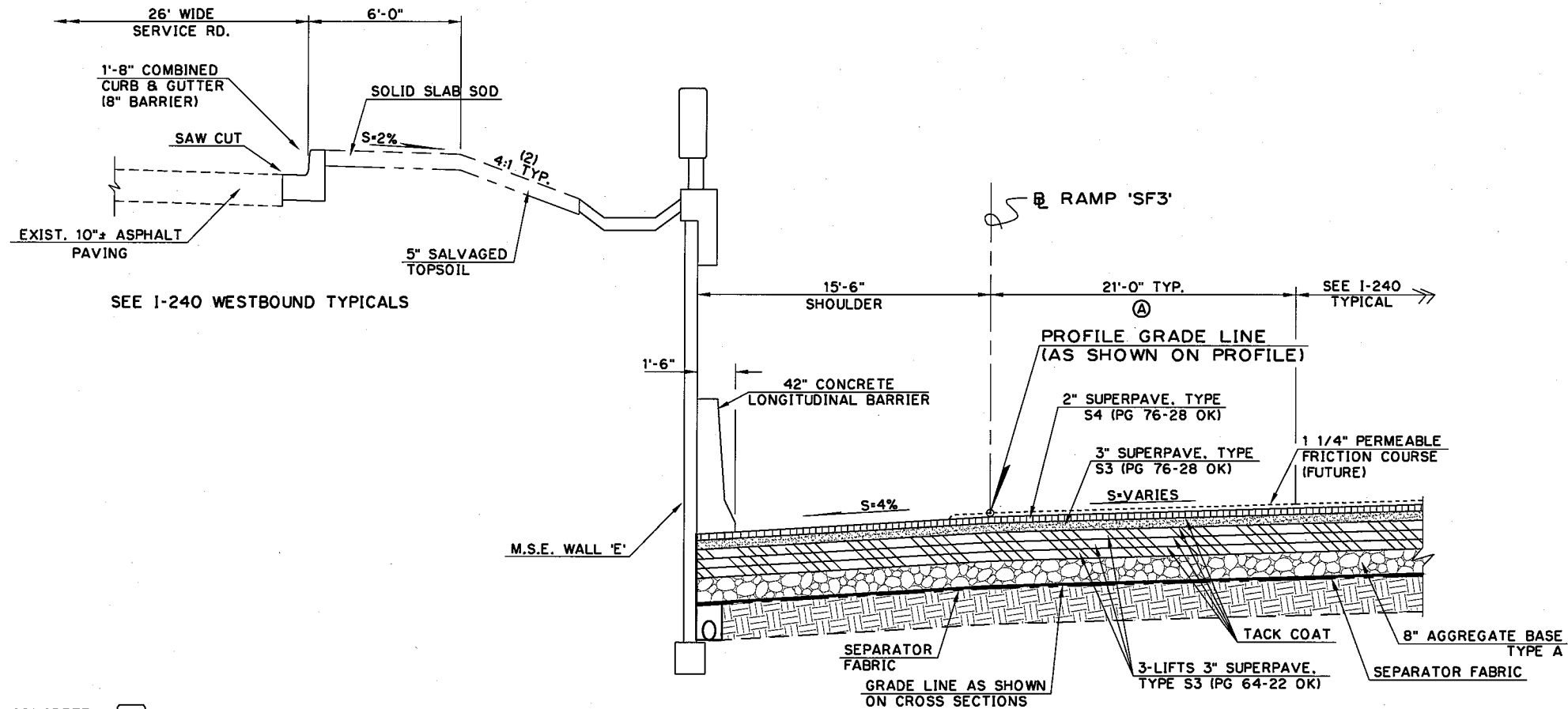
- (1) 15oz/S.Y. SEPARATOR FABRIC SHALL BE CONSIDERED AS INCIDENTAL TO THE 4" CEMENT TREATED BASE AND WILL NOT BE A PAY ITEM.
- (2) SLOPE VARIES (SEE CROSS SECTIONS)

Design	
Drawn	
Checked	
Approved	
Squad	POE

TYPICAL SECTIONS
RAMP 'SF3'
 SHEET 2 OF 3

State Job No. 09032(20) Sheet No. 14

DESCRIPTION	REVISIONS	DATE

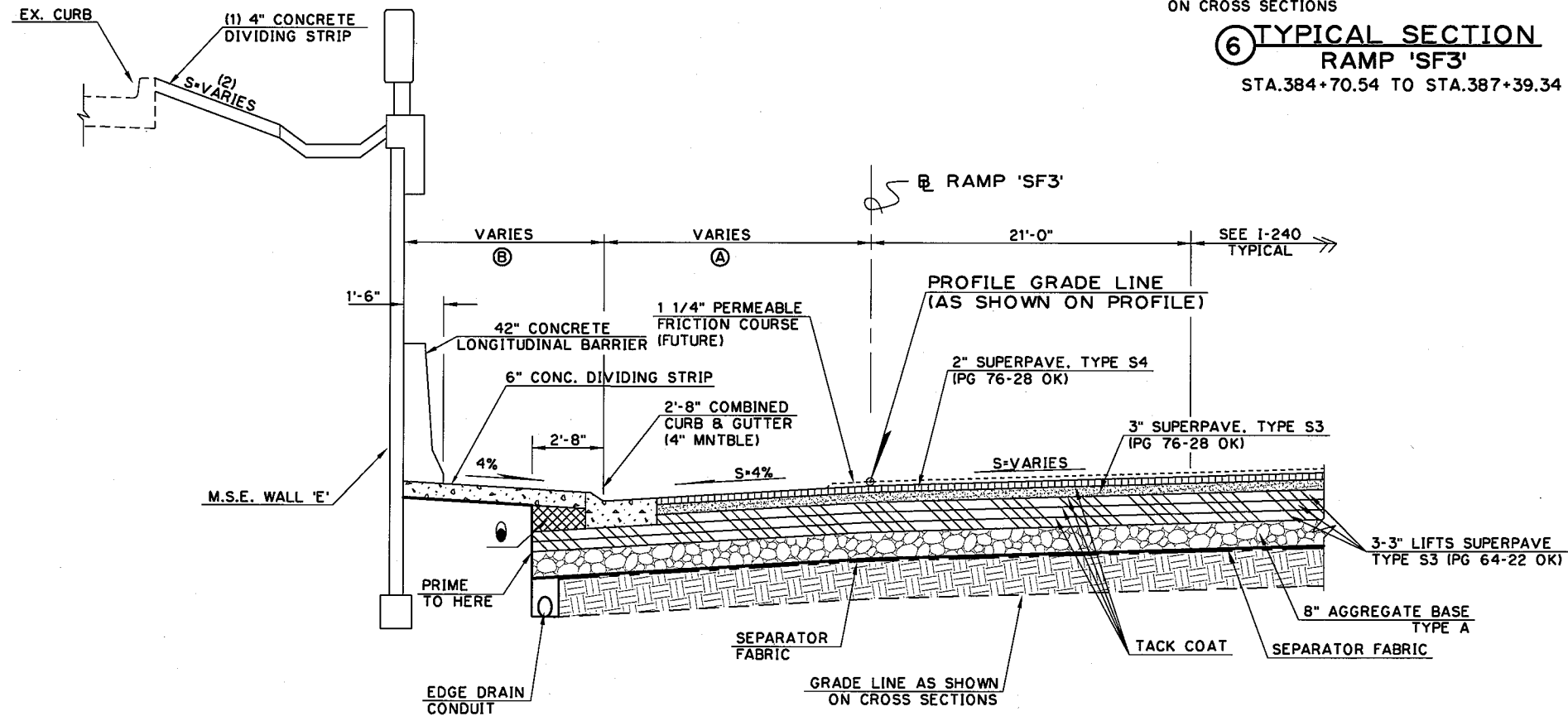


6 TYPICAL SECTION
RAMP 'SF3'
STA.384+70.54 TO STA.387+39.34

TOPSOIL NOTE:
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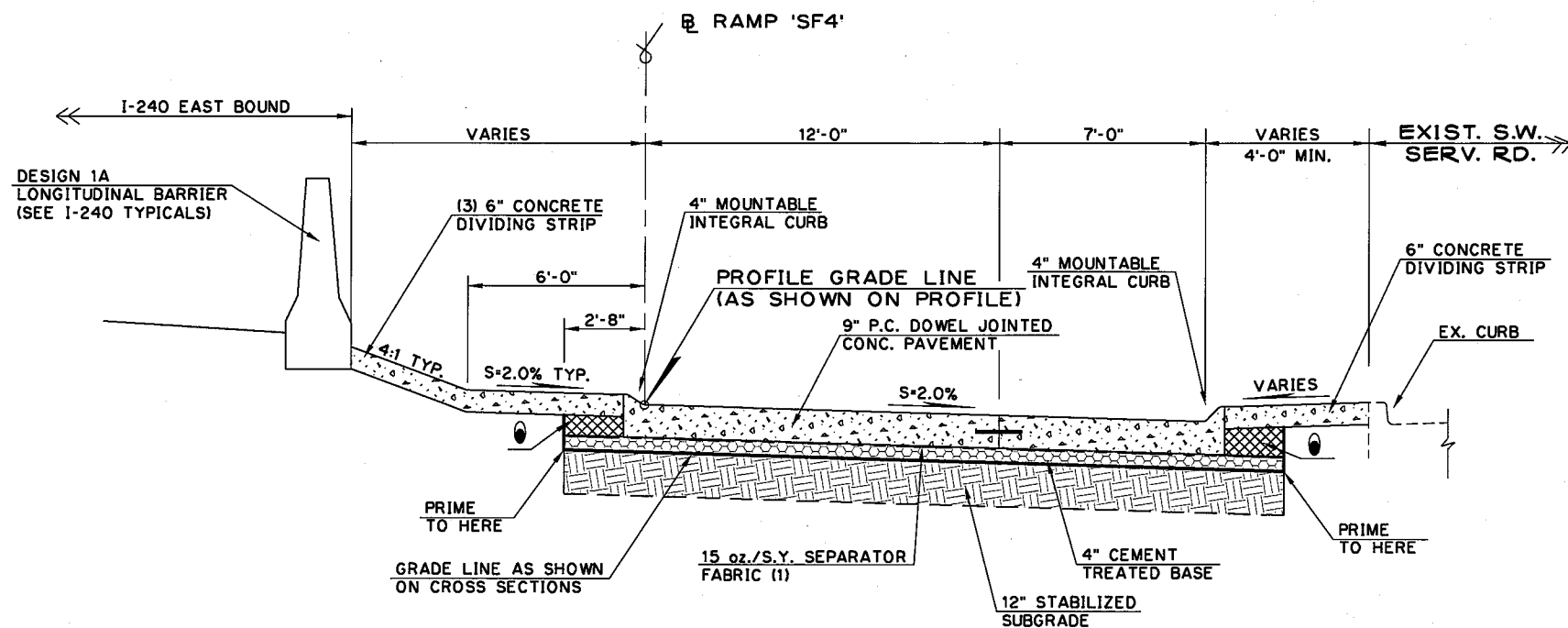
- (1) DIVIDING STRIP ENDS AT STA.385+27.84.
(2) SLOPE VARIES (SEE CROSS SECTIONS)



5 TYPICAL SECTION
RAMP 'SF3'
STA.384+00.39 TO STA.384+70.54

SEGMENT	VARIABLE WIDTH	FEATURE	STATION EXTENTS
A	0'-0" TO 15'-6"	RAMP SF3	384+01.24 TO 384+70.54
A	21'-0" TO 12'-0"	RAMP SF3	385+37.09 TO 387+39.34
B	8'-0 7/8" TO 0'-0"	RAMP SF3	384+00.39 TO 384+70.54

Design		TYPICAL SECTIONS RAMP 'SF3' SHEET 3 OF 3 State Job No. <u>09032(20)</u> Sheet No. <u>15</u>
Drawn		
Checked		
Approved		
Squad	POE	



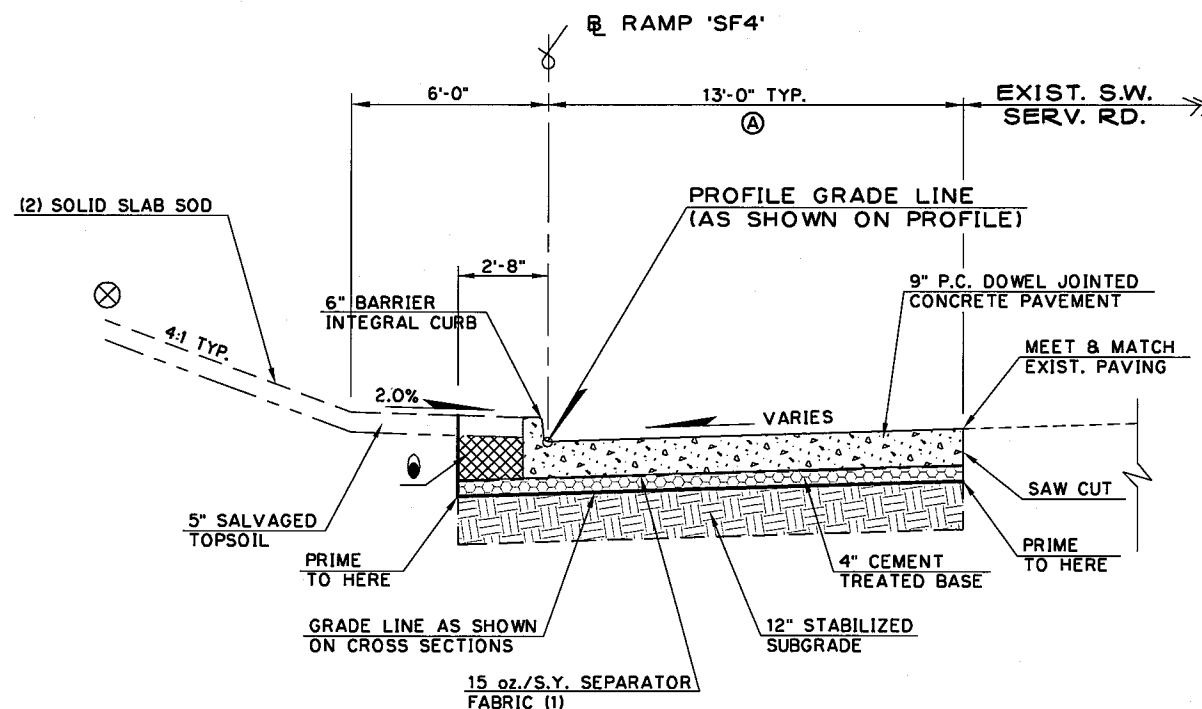
2 TYPICAL SECTION
RAMP 'SF4'
STA.381+79.88 TO STA.382+21.82

SEGMENT	VARIABLE WIDTH	FEATURE	STATION EXTENTS
A	13'-0" TO 14'-8 3/8"	RAMP SF4	379+79.13 TO 379+96.77
A	14'-8 3/8" TO 24'-0"	RAMP SF4	379+96.77 TO 381+79.88

- (1) 15oz/S.Y. SEPARATOR FABRIC SHALL BE CONSIDERED AS INCIDENTAL TO THE 4" CEMENT TREATED BASE AND WILL NOT BE A PAY ITEM.
- (2) SLOPE WALL STA.379+00 TO 379+40.06
- (3) DIVIDING STRIP BEGINS AT STA.381+91.58

TOPSOIL NOTE:
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1 TYPICAL SECTION
RAMP 'SF4'
STA.378+47.39 TO STA.381+79.88

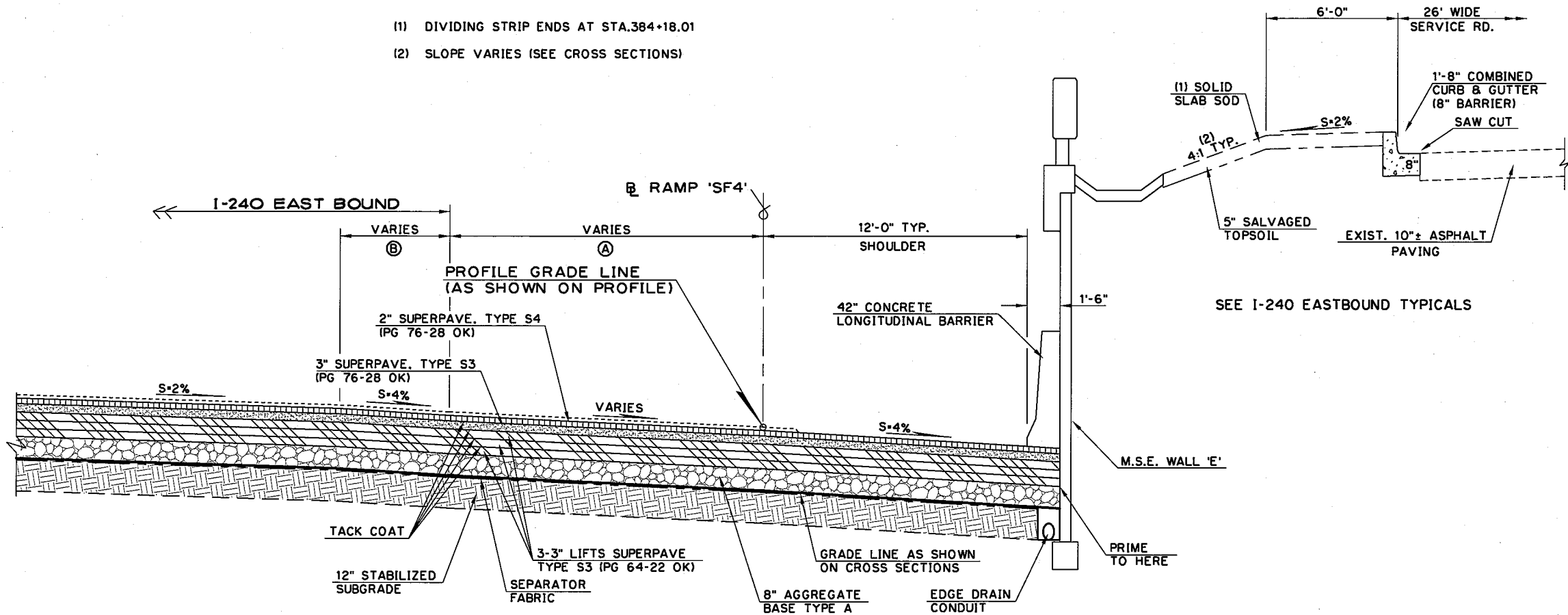
Design	
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Checked	
Approved	
Squad	POE

TYPICAL SECTIONS
RAMP 'SF4'
SHEET 1 OF 2

State Job No. 09032(20) Sheet No. 16

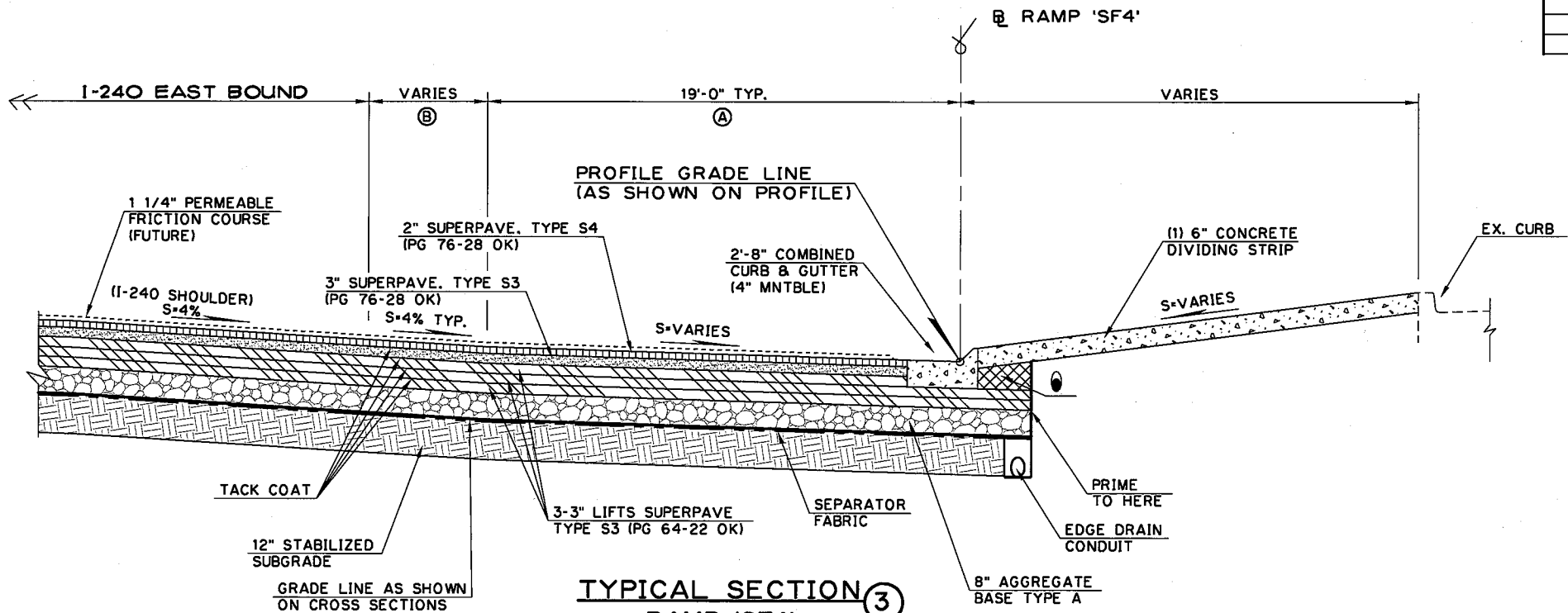
DESCRIPTION	REVISIONS	DATE

- (1) DIVIDING STRIP ENDS AT STA.384+18.01
- (2) SLOPE VARIES (SEE CROSS SECTIONS)



TYPICAL SECTION 4
RAMP 'SF4'
 STA.383+94.63 TO STA.386+44.53

SEGMENT	VARIABLE WIDTH	FEATURE	STATION EXTENTS
A	19'-0" TO 15'-0"	RAMP SF4	382+63.29 TO 383+83.22
A	15'-0" TO 12'-0"	RAMP SF4	383+83.22 TO 386+44.53
B	10'-0" TO 0'-0"	RAMP SF4	382+21.82 TO 385+99.61



TYPICAL SECTION 3
RAMP 'SF4'
 STA.382+21.82 TO STA.383+94.63
 NOTE: BASE LINE SHIFT 19' RT.
 AT STA.382+63.29

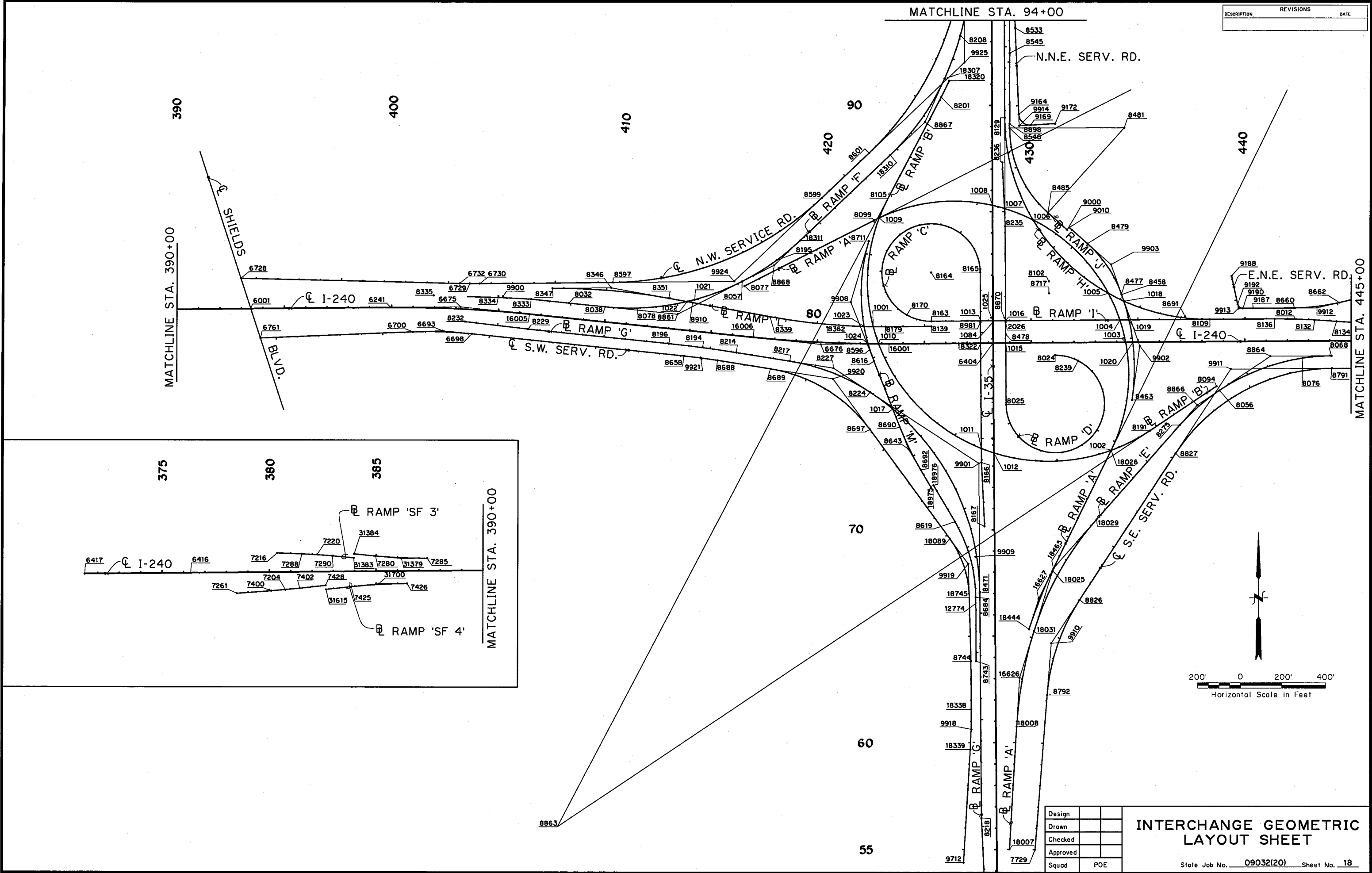
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Design	
Drawn	
Checked	
Approved	
Squad	POE

TYPICAL SECTIONS
RAMP 'SF4'
 SHEET 1 OF 2

State Job No. 09032(20) Sheet No. 17



DESCRIPTION	REVISIONS	DATE

Design	
Drawn	
Checked	
Approved	
Squad	POE

INTERCHANGE GEOMETRIC
LAYOUT SHEET

State Job No. 09032(20) Sheet No. 18

POINT COORDINATE TABLE				
RAMP "A" (N.B. I-35 TO W.B. I-240) CONTINUED				
PT.NO.	STATION AND LOCATION	X COORDINATE	Y COORDINATE	BEARING/CV. DATA
CV. A-3	1008 P.O.C. STA. 89+27.71 P.O.T. STA. 85+27.74 & I-35	2,150,821.3588	143,548.9515	Δ = 142°55'22.69" RT. D = 07°00'00.00" L = 2041.757' T = 2440.82' R = 818.5111'
	1009 P.O.C. STA. 94+70.80 P.O.T. STA. 413+21.31 & RAMP "B"	2,150,291.4166	143,490.2950	
	8099 P.T. CV. A-3 STA. 94+96.10	2,150,268.7204	143,479.1224	
CV. A-4	8077 P.O.T. STA. 101+77.63 SHIFT @ 24' RT.	2,149,661.9877	143,168.7094	S 62°54'18.27" W
	8057 P.C. CV. A-4 STA. 101+77.63	2,149,651.0565	143,190.0755	
	1021 P.O.C. STA. 104+16.56 P.O.T. STA. 414+13.70 & RAMP "L"	2,149,428.5804	143,104.1326	Δ = 33°03'02.30" RT. D = 05°00'00.00" L = 661.013' T = 339.99' R = 1145.9156'
CV. A-5	1022 P.O.C. STA. 104+52.55 P.O.T. STA. 413+80.99 & RAMP "L"	2,149,393.7022	143,095.2755	
	8861 P.I. CV. A-4 STA. 105+17.62	2,149,348.3824	143,035.2232	
	8039 RAD. PT. CV. A-4	2,149,129.1309	144,210.2305	
CV. A-6	8038 P.T. CV. A-4 STA. 108+38.64	2,149,010.2310	143,070.5001	N 84°02'39.43" W
	8333 P.C. CV. A-5 STA. 111+86.64	2,148,664.1094	143,106.6085	
	9900 P.I. CV. A-5 STA. 112+63.59	2,148,587.5784	143,114.5924	Δ = 01°31'12.00" LT. D = 00°59'15.94" L = 153.884' T = 76.95' R = 5800.578'
CV. A-7	16002 RAD. PT. CV. A-5	2,148,062.2430	137,337.3397	
	8334 P.T. CV. A-5 STA. 113+40.53 BEGIN 25:1 TAPER	2,148,510.8626	143,120.5434	
	8335 P.O.T. STA. 116+44.13 END @ 59' LT. P.O.C. STA. 401+94.03 & I-240	2,148,207.2776	143,124.1005	N 89°19'43.36" W
RAMP "B" (S.B. I-35 TO E.B. I-240) V=45 (V=50) e max = 0.06%				
CV. B-1	8187 P.O.T. STA. 395+07.46 BEGIN @ 59' LT. P.O.T. STA. 102+00.00 & I-35	2,150,752.3242	145,218.8247	S 03°26'06.67" W
	8188 P.C. CV. B-1 STA. 400+83.03	2,150,717.8366	144,644.2908	
	8862 P.I. CV. B-1 STA. 403+44.36	2,150,702.1779	144,383.4310	Δ = 20°40'44.10" RT. D = 04°00'00.00" L = 516.973' T = 261.329' R = 1432.3945'
CV. B-2	8189 RAD. PT. CV. B-1	2,150,668.7469	144,348.8898	
	8190 P.O.C. CV. B-1 STA. 406+00.00 BK. SHIFT @ 24' LT. STA. 405+98.58 AHD.	2,150,595.4104	144,144.9069	
	18320 P.C. CV. B-2 STA. 405+98.58	2,150,617.3160	144,135.1015	Δ = 03°22'50.88" RT. D = 03°56'02.70" L = 85.936' T = 42.98' R = 1456.3945'
CV. B-3	18439 P.I. CV. B-2 STA. 406+41.56	2,150,599.7561	144,095.8718	
	8189 RAD. PT. CV. B-2	2,149,288.0158	144,730.1189	
	8201 P.T. CV. B-2 STA. 406+84.52	2,150,579.9133	144,057.7458	S 27°29'41.64" W
CV. B-4	8105 P.C. CV. B-3 STA. 412+19.79	2,150,332.7935	143,582.9299	
	1009 P.O.C. STA. 413+21.31 P.O.C. STA. 94+70.80 & RAMP "A"	2,150,291.4166	143,490.2950	
	1001 P.O.C. STA. 418+43.36 P.O.C. STA. 422+60.93 & RAMP "L"	2,150,266.3137	142,977.1501	Δ = 151°26'41.10" LT. D = 06°45'00.00" L = 2243.626' T = 3335.52' R = 848.8264'
CV. B-5	1010 P.O.C. STA. 419+28.51 P.O.C. STA. 422+85.90 & I-240	2,150,289.8655	142,895.9601	
	1011 P.O.C. STA. 426+37.93 P.O.C. STA. 90+46.20 & RAMP "C"	2,150,770.9270	142,402.7664	
	1012 P.O.C. STA. 427+00.74 P.O.T. STA. 73+62.41 & I-35	2,150,830.0658	142,381.6492	
CV. B-6	1002 P.O.C. STA. 432+59.34 P.O.T. STA. 74+56.43 & RAMP "A"	2,151,378.4977	142,394.3072	
	8863 P.I. CV. B-3 STA. 445+55.31	2,148,792.8849	140,624.1501	
	8102 RAD. PT. CV. B-3	2,151,085.7466	143,191.0525	
CV. B-7	8191 P.T. CV. B-3 STA. 434+63.42	2,151,559.7882	142,486.9283	
	8094 P.O.T. STA. 438+39.71 BK. SHIFT @ 24' RT.	2,151,871.9346	142,697.0765	N 56°03'00.54" E
	8056 P.C. CV. B-4 STA. 438+48.39 AHD.	2,151,885.3378	142,677.1678	
CV. B-8	8864 P.I. CV. B-4 STA. 441+36.16	2,152,124.0465	142,837.8751	Δ = 33°32'24.06" RT. D = 06°00'00.00" L = 559.000' T = 287.765' R = 954.9297'
	8067 RAD. PT. CV. B-3	2,152,418.6346	141,885.0281	
	8068 P.T. CV. B-4 STA. 444+07.39 77' RT. P.O.T. STA. 444+07.39 & I-240	2,152,411.8041	142,839.9334	
RAMP "C" (W.B. I-240 TO S.B. I-35) V=25 (V=30) e max = 0.8%				
CV. C-1	8163 P.C. CV. C-1 STA. 71+30.93 BEG. @ P.O.T. STA. 425+32.69 & RAMP "I"	2,150,535.9001	143,002.5195	Δ = 270°03'56.06" RT. D = 24°54'40.35" L = 1084.113' T = 00.00' R = 230.0000'
	8164 RAD. PT. CV. C-1	2,150,534.2549	143,232.5136	
	8170 P.O.C. STA. 72+50.69	2,150,421.2623	143,032.1822	
CV. C-2	8165 P.T. CV. C-1 STA. 82+15.04	2,150,764.2508	143,233.8956	
	1013 P.O.T. STA. 84+44.78 P.O.T. STA. 427+62.89 & RAMP "I"	2,150,766.0961	143,004.1661	S 00°20'39.33" E
	8981 P.I. STA. 84+50.73 Δ = 00°09'26.1" RT.	2,150,765.6669	142,998.2137	
CV. C-3	18322 P.O.T. STA. 85+49.78 P.O.T. STA. 427+62.58 & I-240	2,150,766.5338	142,899.1665	
	1011 P.O.T. STA. 90+46.20 P.O.C. STA. 426+37.93 & RAMP "B"	2,150,770.9270	142,402.7664	S 00°30'05.37" E
	8166 P.I. STA. 91+13.23 BEGIN 25:1 TAPER	2,150,771.4654	142,335.7384	
CV. C-4	8167 P.O.T. STA. 94+13.47 END @ 47' LT. P.O.T. STA. 70+17.01 & I-35	2,150,786.0907	142,035.8549	S 02°47'31.57" E

POINT COORDINATE TABLE				
RAMP "D" (E.B. I-240 TO N.B. I-35) V=25 (V=30) e max = 0.08%				
PT.NO.	STATION AND LOCATION	X COORDINATE	Y COORDINATE	BEARING/CV. DATA
CV. D-1	8024 P.C. CV. C-1 STA. 65+07.43 BEG. @ 59' RT. P.O.T. STA. 431+11.04 & I-240	2,151,115.4097	142,842.6606	Δ = 269°54'30.02" RT. D = 24°54'40.35" L = 1083.482' T = 00.00' R = 230.0000'
	8021 RAD. PT. CV. D-4	2,151,117.0548	142,612.6664	
	8239 P.O.C. CV. C-1 STA. 66+19.54	2,151,223.3229	142,816.6446	
CV. D-2	8025 P.T. CV. D-1 STA. 75+90.91	2,150,887.0637	142,610.6533	N 00°30'05.37" W
	18323 P.O.T. STA. 78+80.28 P.O.T. STA. 428+80.58 & I-240	2,150,884.5309	142,900.0106	
	2026 P.I. STA. 79+79.34 Δ = 00°09'26.1" RT.	2,150,883.6339	142,999.0696	
CV. D-3	1016 P.O.T. STA. 79+85.28 P.O.T. STA. 428+80.43 & RAMP "I"	2,150,883.6282	143,005.0068	N 00°20'39.33" W
	8235 P.I. STA. 84+30.91 BEG. 25:1 TAPER 59' RT. P.O.T. STA. 84+31.07 & I-35	2,150,880.9507	143,450.6304	
	1007 P.O.T. STA. 85+14.69 P.O.C. STA. 88+70.08 & RAMP "A"	2,150,877.0994	143,534.3185	N 02°38'05.53" W
CV. D-4	8236 P.O.T. STA. 87+31.15 END @ 47' RT. P.O.T. STA. 87+31.07 & I-35	2,150,867.1484	143,750.5528	
RAMP "E" (N.B. I-35 TO E.B. I-240) V=45 (V=40) e max = 0.06%				
CV. E-1	18031 P.C. CV. E-1 STA. 65+33.37 BEG. @ P.T. CV. A-1 STA. 65+33.37 & RAMP "A"	2,151,018.6915	141,544.0195	Δ = 24°09'04.32" RT. D = 04°00'00.00" L = 603.780' T = 306.44' R = 1432.3945'
	18465 P.I. CV. E-1 STA. 68+39.81	2,151,108.3299	141,837.0572	
	18030 RAD. PT. CV. E-1	2,152,388.4360	141,125.0277	
CV. E-2	18029 P.T. CV. E-1 STA. 71+37.15	2,151,310.0156	142,067.7701	N 41°09'34.46" E
	8275 P.C. CV. E-2 STA. 77+29.21	2,151,699.6876	142,513.5232	Δ = 14°53'26.08" RT. D = 06°00'00.00" L = 248.1763' T = 124.791' R = 954.9297'
	8866 P.I. CV. E-2 STA. 78+54.00	2,151,781.8201	142,607.4760	
CV. E-3	8067 RAD. PT. CV. E-2	2,152,418.6346	141,885.0281	
	8056 P.T. CV. E-2 STA. 79+77.39 END @ P.C. CV. B-4 STA. 438+48.39 & RAMP "B"	2,151,885.3378	142,677.1678	
RAMP "F" (S.B. I-35 TO W.B. I-240) V=45 e max = 0.06%				
CV. F-1	8190 P.C. CV. F-1 STA. 406+00.00 BEG. @ P.T. CV. B-1 STA. 406+00.00 BK. & RAMP "B"	2,150,595.4104	144,144.9069	Δ = 22°06'17.86" RT. D = 05°00'00.00" L = 442.099' T = 223.83' R = 1145.9156'
	8867 P.I. CV. F-1 STA. 408+23.83	2,150,503.9624	143,940.6071	
	18309 RAD. PT. CV. F-1	2,149,549.4947	144,613.0765	
CV. F-2	18310 P.T. CV. F-1 STA. 410+42.10	2,150,342.3572	143,785.7364	S 46°13'08.62" W
	18311 P.C. CV. F-2 STA. 416+24.33	2,149,921.9933	143,382.8904	
	8868 P.I. CV. F-2 STA. 417+92.38	2,149,800.6632	143,266.6164	Δ = 16°41'09.65" RT. D = 05°00'00.00" L = 333.720' T = 168.05' R = 1145.9156'
CV. F-3	8039 RAD. PT. CV. F-2	2,149,129.1309	144,210.2305	
	8057 P.T. CV. F-2 STA. 419+58.05 END @ P.C. CV. A-3 STA. 101+77.63 & RAMP "A"	2,149,651.0565	143,190.0755	
RAMP "G" (E.B. I-240 TO S.B. I-35) V=55 (V=50) e max = 0.06%				
CV. G-1	8232 P.O.T. STA. 403+46.03 BEG. @ 59' RT. P.O.C. STA. 403+46.03 & I-240	2,148,354.6410	143,000.3741	S 83°13'40.62" E
	8229 P.I. STA. 406+42.84 END 25:1 TAPER	2,148,649.3755	142,965.3749	S 84°02'39.43" E
	8196 P.C. CV. G-1 STA. 413+05.28	2,149,308.2458	142,896.6397	Δ = 03°11'02.05" RT. D = 01°00'00.00" L = 318.402' T = 159.24' R = 5729.789'
CV. G-2	8194 P.I. CV. G-1 STA. 414+64.52	2,149,466.6282	142,880.1168	
	8213 RAD. PT. CV. G-1	2,148,713.7245	137,197.7779	
	8214 P.T. CV. G-1 STA. 416+23.68	2,149,623.8485	142,854.8227	S 80°51'37.38" E
CV. G-3	8217 P.C. CV. G-2 STA. 418+78.95	2,149,875.8792	142,814.2752	Δ = 24°17'45.73" RT. D = 06°00'00.00" L = 404.934' T = 205.56' R = 954.9297'
	8227 P.I. CV. G-2 STA. 420+84.51	2,150,078.8259	142,781.6244	
	8220 RAD. PT. CV. G-2	2,149,724.1975	141,871.4690	
CV. G-4	8224 P.C.C. CV. G-2 & G-3 STA. 422+83.89	2,150,250.3638	142,668.3628	
	1017 P.O.C. STA. 424+15.75 P.O.T. STA. 422+57.84 & RAMP "M"	2,150,355.9821	142,589.5452	Δ = 56°03'46.28" RT. D = 05°00'00.00" L = 1121.257' T = 610.10' R = 1145.9156'
	9901 P.I. CV. G-3 STA. 428+93.99	2,150,759.4960	142,332.1973	
CV. G-5	8470 RAD. PT. CV. G-3	2,149,618.9642	141,712.0903	
	8471 P.T. CV. G-3 STA. 434+05.15	2,150,764.8359	141,722.1200	S 00°30'05.37" E
	8218 P.I. STA. 444+61.03 BEGIN 25:1 TAPER	2,150,774.0776	140,666.2760	
CV. G-6	8219 P.O.T. STA. 447+61.27 END @ 59' LT. P.O.T. STA. 53+47.59 & I-35	2,150,788.7029	140,366.3925	S 02°47'31.57" E
RAMP "H" (W.B. I-240 TO N.B. I-35) V=45 (V=50) e max = 0.06%				
CV. H-1	8906 P.O.T. STA. 407+32.25 BEG. @ 47' RT. P.O.T. STA. 105+43.03 & I-35	2,150,856.2613	145,562.4815	S 01°09'45.76" E
	1000 P.O.T. STA. 414+32.34 BEG. CONST. 57' RT. STA. 98+43.02 & I-35	2,150,873.3082	144,722.5145	S 01°09'05.76" E
	8905 P.I. STA. 415+33.91 END TAPER	2,150,873.0772	144,760.9983	S 00°20'39.33" E

DESCRIPTION		REVISIONS		DATE		
POINT COORDINATE TABLE						
RAMP "H" (W.B. I-240 TO N.B. I-35) CONTINUED						
e max = 0.06%						
PT.NO.	STATION AND LOCATION	X COORDINATE	Y COORDINATE	BEARING/CV. DATA		
CV. H-1	8129 P.C. CV. H-1 STA. 423+33.91	2,150,877.8840	143,961.0128	S 00°20'39.33" E		
	1006 P.O.C. STA. 428+37.77 P.O.C. STA. 87+26.09 & RAMP "A"	2,151,010.6453	143,480.9951	Δ = 90°03'56.06" L.T. D = 06°00'00.00" L = 1501.093' T = 956.02' R = 954.9297'		
	1005 P.O.C. STA. 433+38.43 P.O.C. STA. 82+23.28 & RAMP "A"	2,151,364.2446	143,134.6747			
	8870 P.I. CV. H-1 STA. 432+89.93	2,150,883.6282	143,005.0068			
	8116 RAD. PT. CV. H-1	2,151,832.7964	143,966.7504			
CV. H-2	1018 P.O.C. STA. 434+19.90 P.O.C. STA. 81+79.21 & RAMP "J"	2,151,436.8552	143,097.7733	N 89°35'24.60" E		
	8109 P.T. CV. 218-1 STA. 438+35.00	2,151,839.6269	143,011.8451			
	8136 P.C. CV. H-2 STA. 441+38.54	2,152,143.1560	143,014.0163			
	8012 P.I. CV. H-2 STA. 442+33.06	2,152,237.6760	143,014.6924			
	8135 RAD. PT. CV. H-2	2,152,163.6474	140,149.3006	Δ = 03°46'46.30" RT. D = 02°00'00.00" L = 188.976' T = 94.52' R = 2864.789'		
8132 P.T. CV. H-2 STA. 443+27.51	2,152,332.0351	143,009.1365				
8133 P.O.T. STA. 449+30.83 END & 59' LT. P.O.T. STA. 449+30.83 & I-240	2,152,934.3129	142,973.6743	S 86°37'49.10" E			
RAMP "I" (W.B. I-240 TO RAMP "C" & "L") V=55 mph e max = 0.06%						
CV. J-1	8163 P.O.T. STA. 425+32.69 BEG. & P.C. CV. C-1 STA. 71+30.93 & RAMP "C"	2,150,535.9001	143,002.5195	N 89°35'24.60" E		
	1013 P.O.T. STA. 427+62.89 P.O.T. STA. 84+44.78 & RAMP "C"	2,150,766.0961	143,004.1661			
	1025 P.O.T. STA. 428+21.43 P.O.T. STA. 79+85.37 & I-35	2,150,824.6337	143,004.5848			
	1016 P.O.T. STA. 428+80.43 P.O.T. STA. 79+85.28 & RAMP "D"	2,150,883.6282	143,005.0068			
	1004 P.O.T. STA. 434+15.00 P.O.C. STA. 80+86.20 & RAMP "A"	2,151,418.1807	143,008.8305			
	1019 P.O.T. STA. 434+57.61 P.O.C. STA. 80+87.37 & RAMP "J"	2,151,460.7901	143,009.1353			
	8109 P.O.T. STA. 438+36.46 END & P.T. CV. H-1 STA. 438+35.00 & RAMP "H"	2,151,839.6269	143,011.8451			
	RAMP "J" (N.B. I-35 TO N.E. SERVICE RD.) V=40 mph e max = 0.06%					
	CV. J-1	8463 P.C. CV. J-1 STA. 77+07.36 BEG. & 24' RT. P.O.C. STA. 77+07.36 & RAMP "A"	2,151,475.5959		142,631.4878	Δ = 27°31'30.50" L.T. D = 05°27'12.52" L = 504.727' T = 257.33' R = 1050.6285'
1020 P.O.C. STA. 79+80.93 P.O.C. STA. 434+74.79 & I-240		2,151,478.7251	142,904.2609			
1019 P.O.C. STA. 80+87.37 P.O.T. STA. 434+57.61 & RAMP "I"		2,151,460.7901	143,009.1353			
9902 P.I. CV. J-1 STA. 79+64.69		2,151,511.9281	142,886.2416			
8464 RAD. PT. CV. J-1		2,150,435.4918	142,779.8241			
CV. J-2	1018 P.O.C. STA. 81+79.21 P.O.C. STA. 434+19.90 & RAMP "H"	2,151,436.8552	143,097.7733	N 19°24'30.74" W		
	8458 P.T. CV. J-1 STA. 82+12.09	2,151,426.4164	143,128.9497			
	8477 P.C. CV. J-2 STA. 82+14.63	2,151,425.5709	143,131.3495			
	9903 P.I. CV. J-2 STA. 83+62.09	2,151,376.5711	143,270.4257			
	8478 RAD. PT. CV. J-2	2,150,885.1725	142,940.9546			
CV. J-3	8479 P.T. CV. J-2 STA. 85+03.28	2,151,266.5209	143,368.5690	N 48°16'23.81" W		
	9010 P.O.T. STA. 86+17.72 SHIFT & 15' LT.	2,151,181.1098	143,444.7390			
	9000 P.O.T. STA. 86+17.72	2,151,171.1261	143,433.5440			
	8485 RAD. PT. CV. J-3	2,151,080.8371	143,514.0641			
	8481 RAD. PT. CV. J-3	2,151,437.5011	143,913.9994			
CV. K-1	8540 P.O.T. STA. 91+88.49	2,150,901.6331	143,912.3033	N 00°10'52.85" W		
	8898 P.O.T. STA. 92+08.49	2,150,901.5698	143,932.3032			
	8545 P.O.T. STA. 95+41.49	2,150,900.5158	144,265.3012			
	8541 P.O.T. STA. 97+34.20 END & 25' LT. P.O.C. STA. 94+40.75 & N.E. SERV. RD.	2,150,900.5158	144,265.3012			
	RAMP "K" (E.B. I-240 TO POLE RD.) V=30 mph e max = 0.06%					
CV. K-1	8949 P.C. CV. K-1 STA. 455+01.07 BEG. & 71' RT. P.O.T. STA. 455+01.07 & I-240	2,153,505.4629	142,847.7564	Δ = 104°34'46.60" RT. D = 16°51'06.12" L = 620.588' T = 439.75' R = 340.0000'		
	9905 P.I. CV. K-1 STA. 459+40.82	2,153,945.1985	142,850.9018			
	8950 RAD. PT. CV. K-1	2,153,507.8949	142,507.7651			
CV. K-2	8951 P.C.C. CV. K-1 & K-2 STA. 461+21.66	2,153,837.5502	142,424.5344	Δ = 45°58'05.60" RT. D = 21°13'14.37" L = 216.6201' T = 114.52' R = 270.000'		
	9906 P.I. CV. K-2 STA. 462+36.18	2,153,809.5162	142,313.4989			
	8971 RAD. PT. CV. K-2	2,153,575.7651	142,490.6294			
	8972 P.T. CV. K-2 STA. 463+38.28	2,153,710.2015	142,256.4780			
Design			POINT COORDINATE TABLES			
Drawn			I-35 & I-240 INTERCHANGE			
Checked						
Approved						

POINT COORDINATE TABLE				
RAMP "K" (E.B. I-240 TO POLE RD.)				e max = 0.06%
PT.NO.	STATION AND LOCATION	X COORDINATE	Y COORDINATE	BEARRING/CV. DATA
	EDGE OF RIGHT TURN LANE			
CV. K-3	8951 P.C.C. STA. 461+21.66	2,153,837.5502	142,424.5344	Δ = 99°42'35.26" RT. D = 45°50'11.85" L = 217.533' T = 148.21' R = 125.000' N 66°07'13.53" W
	9907 P.I. CV. K-3 STA. 462+69.87	2,153,801.2702	142,280.8383	
	8265 RAD. PT. CV. K-3	2,153,716.3534	142,455.1339	
	8264 P.T. CV. K-3 STA. 463+39.19 EDGE LANE	2,153,665.7515	142,340.8342	
	12101 P.O.T. STA. 463+86.09 END LANE * 13' LT. & EXIST. SERVICE ROAD	2,153,622.8697	142,359.8185	
RAMP "L" (W.B. I-240 TO N.W. SERVICE RD.) V=45				e max = 0.06%
CV. L-1	6737 P.O.T. STA. 404+06.51 BEG. & * 25 RT. P.O.T. STA. 66+46.67 & N.W. SERV. RD.	2,148,423.5056	143,154.6038	N 89°27'24.62" E Δ = 10°55'46.38" LT. D = 02°00'00.00" L = 546.477' T = 274.07' R = 2864.789'
	8347 P.C. CV. L-1 STA. 407+47.18	2,148,764.1619	143,157.8333	
	8346 P.I. CV. L-1 STA. 410+21.23	2,149,038.2199	143,160.4314	
	8350 RAD. PT. CV. L-1	2,148,791.3196	140,293.1730	
	8351 P.T. CV. L-1 STA. 412+93.66	2,149,307.7994	143,111.0205	
CV. L-2	1022 P.O.T. STA. 413+80.99 * P.O.C. STA. 104+52.55 & RAMP "A"	2,149,393.7022	143,095.2755	S 79°36'49.00" E Δ = 10°47'46.40" RT. D = 02°00'00.00" L = 539.811' T = 270.71' R = 2864.789'
	8910 P.O.T. STA. 414+06.16 BK.	2,149,418.4561	143,090.7384	
	8339 P.C. CV. L-2 STA. 417+75.78	2,149,782.0208	143,024.1011	
	8362 P.I. CV. L-2 STA. 420+49.31	2,150,050.9963	142,990.0507	
	8290 RAD. PT. CV. L-2	2,150,301.2049	145,856.7028	
	1023 P.O.C. STA. 422+18.37 * P.O.C. STA. 418+46.11 & RAMP "M"	2,150,221.7688	142,978.0096	
	1001 P.O.C. STA. 422+60.93 * P.O.C. STA. 418+43.36 & RAMP "B"	2,150,264.3137	142,977.1501	
	8179 P.T. CV. L-2 STA. 423+18.42	2,150,321.8037	142,976.9874	
	8359 P.O.T. STA. 424+08.82 * 96' LT. P.O.T. STA. 424+08.81 & I-240	2,150,412.0927	142,992.6337	
	8139 P.O.T. STA. 424+08.82 END &	2,150,412.2000	142,977.6341	
RAMP "M" (S.B. I-35 TO S.W. SERVICE RD.) V=45				e max = 0.06%
CV. M-1	8711 P.C. CV. M-1 STA. 414+39.37 BEG. & * 15' RT. P.O.C. STA. 414+39.37 & RAMP "B"	2,150,242.9660	143,380.5701	Δ = 37°37'51.34" LT. D = 06°31'16.81" L = 577.043' T = 299.36' R = 878.5895'
	9908 P.I. CV. M-1 STA. 417+38.73	2,150,159.0625	143,093.2078	
	8717 RAD. PT. CV. M-1	2,151,086.3413	143,134.3230	
	1023 P.O.C. STA. 418+46.11 * P.O.C. STA. 422+18.37 & RAMP "L"	2,150,221.7688	147,978.0096	
	1024 P.O.C. STA. 419+30.06 * P.O.C. STA. 422+36.66 & I-240	2,150,240.6267	142,896.2341	
	8616 P.T. CV. M-1 STA. 420+16.41	2,150,268.0699	142,814.3990	
	1017 P.O.T. STA. 422+57.84 * P.O.C. STA. 424+15.75 & RAMP "G"	2,150,355.9821	142,589.5452	
CV. M-2	8690 P.C. CV. M-2 STA. 423+49.76	2,150,389.4532	142,503.9361	S 21°21'15.40" E Δ = 08°58'43.64" LT. D = 04°00'00.00" L = 224.470' T = 112.47' R = 1432.3945'
	8643 P.I. CV. M-2 STA. 424+62.23	2,150,430.4056	142,399.1921	
	8691 RAD. PT. CV. M-2	2,151,723.5091	143,025.5191	
	8692 P.T. CV. M-2 STA. 425+74.23	2,150,487.2033	142,302.1229	
CV. M-3	18975 P.O.T. STA. 426+70.07 BK. SHIFT & 15' LT.	2,150,535.6050	142,219.4030	S 30°19'59.04" E Δ = 29°49'53.64" RT. D = 08°00'00.00" L = 372.895' T = 190.78' R = 716.1972'
	18976 P.O.T. STA. 426+70.07 AHD. SHIFTED & 15' LT.	2,150,548.5516	142,226.9784	
	8619 P.C. CV. M-3 STA. 428+66.98	2,150,647.9978	142,057.0219	
	9909 P.I. CV. M-3 STA. 430+57.76	2,150,744.3449	141,892.3618	
	8683 RAD. PT. CV. M-3	2,150,029.8449	141,695.3239	
	8684 P.T. CV. M-3 STA. 432+39.88	2,150,746.0147	141,701.5925	
8743 P.O.T. STA. 435+39.70 END & * 25 RT. P.O.T. STA. 63+83.28 & S.W. SERV. RD.	2,150,748.6390	141,401.7775	S 00°30'05.40" E	

POINT COORDINATE TABLE				
NORTHWEST SERVICE ROAD				
PT.NO.	STATION AND LOCATION	X COORDINATE	Y COORDINATE	BEARRING/CV. DATA
6728	P.I. STA. 55+27.59	2,147,304.4828	143,204.3943	S 88°39'01.99" E
6732	J.C. CV. NW-3 STA. 65+52.04	2,148,328.6447	143,180.2685	Δ = 1°53'33.39" LT. D = 2°00'00.00" L = 94.63' T = 47.32' R = 2,864.789'
6729	P.I. CV. NW-3 STA. 65+99.36	2,148,375.9511	143,179.1541	
6731	RAD. PT. CV. NW-3	2,148,396.1109	146,044.2629	
6730	P.T. CV. NW-3 STA. 66+46.67	2,148,423.2686	143,179.6027	
8597	P.I. CV. NW-4 STA. 72+69.02	2,149,045.5948	143,185.5025	N 89°27'24.62" E
9924	P.I. CV. NW-4 STA. 78+36.69	2,149,613.2408	143,190.8839	Δ = 43°14'16.00" LT. D = 04°00'00.00" L = 1080.945' T = 567.67' R = 1432.3945'
8598	RAD. PT. CV. NW-4	2,149,032.0160	144,617.8326	
8599	P.T. CV. NW-4 STA. 83+49.96	2,150,023.0941	143,583.6575	
8601	P.C. CV. NW-5 STA. 86+55.01	2,150,243.3293	143,794.7148	
9925	P.I. CV. NW-5 STA. 92+71.35	2,150,688.3231	144,221.1645	Δ = 46°33'47.95" LT. D = 04°00'00.00" L = 1164.083' T = 616.341' R = 1432.3945'
8602	RAD. PT. CV. NW-5	2,149,252.2512	144,828.8900	
8603	P.T. CV. NW-5 STA. 98+19.09	2,150,684.6199	144,837.4964	
9723	P.O.T. STA. 100+50.00 & 128.99 LT. P.O.T. STA. 100+50.00 & I-35	2,150,683.2325	145,068.4046	
9094	P.O.T. STA. 106+20.18 END & P.O.T. STA. 207+74.00 & S.E. 66th ST.	2,150,679.8066	145,638.5743	N 00°20'39.33" W
EAST NORTHWEST SERVICE ROAD				
PT.NO.	STATION AND LOCATION	X COORDINATE	Y COORDINATE	BEARRING/CV. DATA
18405	P.C. CV. NE-1 STA. 42+25.27 BEG. & 109.24 LT. P.O.T. STA. 471+81.11 & I-240	2,155,185.8491	143,033.3536	Δ = 01°08'45.00" RT. D = 02°00'00.00" L = 57.292' T = 28.65' R = 2864.789'
18438	P.I. CV. NE-1 STA. 42+53.92	2,155,157.2128	143,032.5759	
18404	RAD. PT. CV. NE-1	2,155,108.0753	145,897.0867	
18403	P.T. CV. NE-1 STA. 42+82.56	2,155,128.5668	143,032.3909	
18402	P.C. CV. NE-2 STA. 53+16.41	2,154,094.7478	143,024.9760	S 89°35'24.60" W
18437	P.I. CV. NE-2 STA. 55+98.70	2,153,812.4625	143,022.9568	Δ = 16°48'56.88" RT. D = 03°00'00.00" L = 560.527' T = 282.29' R = 1909.8593'
18401	RAD. PT. CV. NE-2	2,154,081.0868	144,934.7864	
18400	P.T. CV. NE-2 STA. 58+76.93	2,153,541.6635	143,102.6879	
3581	P.C. CV. NE-3 STA. 59+82.86	2,153,440.0475	143,132.6066	
12078	P.O.C. STA. 63+90.29 P.O.T. STA. 62+91.39 & POLE RD.	2,153,038.2018	143,190.9246	Δ = 29°45'21.60" LT. D = 04°00'00.00" L = 743.900' T = 380.542' R = 1432.3945'
18436	P.I. CV. NE-3 STA. 63+63.40	2,153,074.9996	143,240.0874	
3579	RAD. PT. CV. NE-3	2,153,035.4800	141,758.5327	
3578	P.T. CV. NE-3 STA. 67+26.76	2,152,704.7409	143,152.2205	
8662	P.C. CV. NE-4 STA. 69+89.93	2,152,448.6825	143,091.4547	S 76°38'59.89" W
9912	P.I. CV. NE-4 STA. 70+98.23	2,152,343.3132	143,066.4493	Δ = 12°56'24.72" RT. D = 06°00'00.00" L = 215.670' T = 108.30' R = 954.9297'
8388	RAD. PT. CV. NE-4	2,152,228.1898	144,020.5799	
8660	P.T. CV. NE-4 STA. 72+05.60	2,152,235.0202	143,065.6747	
9187	P.I. CV. NE-5 STA. 73+98.56	2,152,042.0648	143,064.2945	
9190	P.C. CV. NE-5 STA. 74+46.23	2,151,994.3963	143,063.9535	Δ = 78°28'12.78" RT. D = 229°10'59.23" L = 34.239' T = 20.42' R = 25.000'
9913	P.I. CV. NE-5 STA. 74+66.65	2,151,973.9818	143,063.8075	
9191	RAD. PT. CV. NE-5	2,151,994.2174	143,088.9528	
9192	P.T. CV. NE-5 STA. 74+80.47	2,151,969.7583	143,083.7808	
9188	P.O.T. STA. 76+16.16 END &	2,151,941.6875	143,216.5315	N 11°56'22.62" W
SOUTHEAST SERVICE ROAD				
PT.NO.	STATION AND LOCATION	X COORDINATE	Y COORDINATE	BEARRING/CV. DATA
7729	P.O.T. STA. 55+00.00 BEG. & 177.63 RT. P.O.T. STA. 54+97.14 & I-35	2,151,024.0136	140,518.0042	N 04°26'13.60" E
8792	P.C. CV. SE-1 STA. 62+27.40	2,151,080.2890	141,243.2273	Δ = 28°34'55.58" RT. D = 06°00'00.00" L = 476.368' T = 243.25' R = 954.9297'
9910	P.I. CV. SE-1 STA. 64+70.65	2,151,099.1080	141,485.7480	
8793	RAD. PT. CV. SE-1	2,152,032.3566	141,169.3494	
8826	P.T. CV. SE-1 STA. 67+03.77	2,151,231.6597	141,689.7100	
8827	P.C. CV. SE-2 STA. 75+26.82	2,151,680.1528	142,379.8220	N 33°01'09.18" E
	P.I. CV. SE-2 STA. 80+01.16	2,151,938.6283	142,777.5473	Δ = 56°34'15.42" RT. D = 06°30'00.00" L = 870.3223' T = 474.34' R = 881.4735'
8790	RAD. PT. CV. SE-2	2,152,419.2576	141,899.4892	
8791	P.T. CV. SE-2 STA. 83+97.14 END & 130.0 RT. P.O.T. STA. 444+08.11 & I-240	2,152,412.9526	142,780.9401	
3567	P.C. CV. SE-3 STA. 85+26.59	2,152,542.4008	142,781.8661	
3568	RAD. PT. CV. SE-3	2,152,550.5974	141,635.9798	Δ = 30°00'00.00" RT. D = 05°00'00.00" L = 600.0000' T = 307.05' R = 1145.9156'
3571	P.O.C. CV. SE-3	2,153,055.6882	142,664.5739	
3572	P.T. CV. SE-3 STA. 91+26.59	2,153,116.4421	142,632.4447	
3573	P.O.T. CV. SE-3 STA. 97+01.59	2,153,616.4504	142,348.5139	

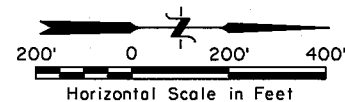
POINT COORDINATE TABLE					
SOUTHEAST SERVICE ROAD CONTINUED				e max = 0.08%	
PT.NO.	STATION AND LOCATION	X COORDINATE	Y COORDINATE	BEARRING/CV. DATA	
CV. SE-4	1044	P.C. CV. SE-4 STA. 97+33.78	2,153,644.4423	142,332.6187	S 60°24'35.40" E
	1046	RAD. PT. CV. SE-4	2,153,570.3734	142,202.1817	Δ = 70°25'09.54" R.T. D = 38°11'49.87" L = 184.3573' T = 105.85' R = 150.0000'
	1047	P.T. CV. SE-4 STA. 99+18.14	2,153,718.0902	142,176.1100	
SOUTHWEST SERVICE ROAD				e max = 0.08%	
PT.NO.	STATION AND LOCATION	X COORDINATE	Y COORDINATE	BEARRING/CV. DATA	
CV. SW-1	9712	P.O.T. STA. 54+39.73 BEG. & 156.09 LT. P.O.T. STA. 54+41.02 & I-35	2,150,690.7987	140,458.9682	N 03°16'40.93" E
	18339	P.C. CV. SW-1 STA. 59+68.57	2,150,721.0382	140,986.9378	Δ = 03°46'46.33" L.T. D = 02°00'00.00" L = 188.977' T = 94.52' R = 2864.789'
	9918	P.I. CV. SW-1 STA. 60+63.09	2,150,726.4431	141,081.3058	
	18336	RAD. PT. CV. SW-1	2,147,860.9365	141,150.7502	
	18338	P.T. CV. SW-1 STA. 61+57.54	2,150,725.6158	141,175.8249	
	8744	P.I. STA. 63+83.28 & 114.99 LT. P.O.T. STA. 63+83.00 & I-35	2,150,723.6399	141,401.5586	N 00°30'05.40" W
CV. SW-2	18745	P.C. CV. SW-2 STA. 66+92.82	2,150,714.7420	141,710.9637	N 01°38'50.15 W
	9919	P.I. CV. SW-2 STA. 68+40.42	2,150,710.4989	141,858.5099	Δ = 34°21'27.96" L.T. D = 12°00'00.00" L = 286.315' T = 147.61' R = 477.4648'
	18799	RAD. PT. CV. SW-2	2,150,237.4745	141,697.2384	
	18089	P.T. CV. SW-2 STA. 69+79.13	2,150,623.7270	141,977.9191	N 36°00'18.10" W
CV. SW-3	8697	P.C. CV. SW-3 STA. 76+14.77	2,150,250.0605	142,492.1321	Δ = 44°51'19.28" L.T. D = 08°00'00.00" L = 560.692' T = 295.60' R = 716.1972'
	9920	P.I. CV. SW-3 STA. 79+10.37	2,150,076.2901	142,731.2623	
	8693	RAD. PT. CV. SW-3	2,149,670.6817	142,071.1111	
CV. SW-4	8689	P.T. CV. SW-3 STA. 81+75.47	2,149,784.4430	142,778.2156	N 80°51'37.38" W
	8688	P.C. CV. SW-4 STA. 84+26.68	2,149,536.4175	142,818.1188	
	9921	P.I. CV. SW-4 STA. 85+06.30	2,149,457.8102	142,830.7654	
	8687	RAD. PT. CV. SW-4	2,149,081.3722	139,989.7005	
	8658	P.T. CV. SW-4 STA. 85+85.88	2,149,378.6219	142,839.0265	
CV. SW-5	6698	P.C. CV. SW-5 STA. 95+82.78	2,148,387.1017	142,942.4647	N 84°02'39.43" W
	6693	P.I. CV. SW-5 STA. 97+21.32	2,148,249.3069	142,956.8398	
	6699	RAD. PT. CV. SW-5	2,148,188.9352	141,042.9141	
	6700	P.T. CV. SW-5 STA. 98+59.38	2,148,110.8801	142,951.1777	
	6761	P.I. STA. 105+73.65 & P.O.T. STA. 146+15.65 & SHIELDS BLVD.	2,147,397.2056	142,921.9857	

POINT COORDINATE TABLE				
NORTH NORTHEAST SERVICE ROAD CON'T.				e max = 0.08%
PT.NO.	STATION AND LOCATION	X COORDINATE	Y COORDINATE	BEARRING/CV. DATA
9172	STA. 87+62.70 BEGIN CONST.	2.151.111.9505	143.933.3731	S 86°26'56.73" W
9169	P.C. CV. NNE-1 STA. 88+75.52	2.150.999.3467	143.926.3856	Δ = 90°38'52.92" RT. D = 108°06'18.88" L = 83.852' T = 53.60' R = 53.0000'
9914	P.I. CV. NNE-1 STA. 89+29.12	2.150.945.8194	143.923.5409	
9166	RAD. PT. CV. NNE-1	2.150.996.5340	143.979.3109	
9164	P.T. CV. NNE-1 STA. 89+59.37	2.150.943.5803	143.977.0970	
8533	P.C. CV. NNE-2 STA. 93+66.49	2.150.926.5744	144.383.8548	N 02°23'38.57" W
9915	P.I. CV. NNE-2 STA. 94+65.10	2.150.922.4553	144.482.3802	Δ = 05°52'17.54" RT. D = 02°58'46.98" L = 197.050' T = 98.61' R = 1922.8593'
3161	RAD. PT. CV. NNE-2	2.152.847.7554	144.464.1762	
8547	P.T. CV. NNE-2 STA. 95+63.54	2.150.928.4367	144.580.8100	
7720	P.C. CV. NNE-3 STA. 97+36.17	2.150.938.9075	144.753.1170	
9916	P.I. CV. NNE-3 STA. 97+99.46	2.150.942.9462	144.816.2861	Δ = 03°49'18.27" LT. D = 03°01'14.02" L = 126.524' T = 63.29' R = 1896.8593'
3164	RAD. PT. CV. NNE-3	2.149.045.5409	144.868.1738	
7721	P.T. CV. NNE-3 STA. 98+62.69	2.150.942.3659	144.879.5706	
7690	P.C. CV. NNE-4 STA. 102+48.86	2.150.940.0457	145.265.7300	
9917	P.I. CV. NNE-4 STA. 103+08.80	2.150.939.6856	145.325.6699	Δ = 03°35'43.00" RT. D = 03°00'00.00" L = 119.843' T = 59.94' R = 1909.8593'
7691	RAD. PT. CV. NNE-4	2.152.849.8706	145.277.2050	
7692	P.T. CV. NNE-4 STA. 103+68.70 END E • 132.76 RT. P.O.T. STA. 103+65.54 & I-35	2.150.943.0849	145.385.5144	
RAMP 'SF3'				
PT.NO.	STATION AND LOCATION	X COORDINATE	Y COORDINATE	BEARRING/CV. DATA
7216	P.O.T. STA. 380+37.16 BEG. RAMP 'SF3' • P.O.T. STA. 380+37.26 & I-240 89.65 LT.	2.146.044.4230	143.137.7041	S 88°05'29.38" E
7288	P.C. CV. SF3-1 STA. 381+51.98	2.146.159.1725	143.133.8804	Δ = 03°35'29.38" RT. D = 02°30'00.00" L = 143.66' T = 71.85' R = 2291.831'
9914	P.I. CV. SF3-1 STA. 382+23.83	2.146.230.9861	143.131.4874	
7289	RAD. PT. CV. SF3-1	2.146.082.8464	140.843.3205	
7290	P.T. CV. SF3-1 STA. 382+95.64	2.146.302.5087	143.124.6006	
31383	P.O.T. STA. 383+96.623 BK RAMP 'SF3' •	2.146.403.0308	143.114.9214	S 84°30'00.00" E
31384	P.O.T. STA. 383+96.62 FWD. RAMP 'SF3'	2.146.404.8518	143.133.8339	R SHIFT 19' LT.
7280	P.C. CV. SF3-2 STA. 384+97.61	2.146.505.3724	143.124.1549	S 84°30'00.00" E
31379	P.I. CV. SF3-2 STA. 386+18.58	2.146.625.7909	143.112.5599	Δ = 06°02'35.38" LT. D = 02°30'00.00" L = 241.73' T = 120.98' R = 2291.831'
7284	RAD. PT. CV. SF3-2	2.146.725.0347	145.405.4349	
7285	P.T. CV. SF3-2 STA. 387+39.34 END R • P.O.T. STA. 387+39.34 & I-240. 59.00 LT.	2.146.746.7608	143.113.7067	
RAMP 'SF4'				
				e max = 0.06%
PT.NO.	STATION AND LOCATION	X COORDINATE	Y COORDINATE	BEARRING/CV. DATA
7261	P.O.T. STA. 378+47.69 BEG. RAMP 'SF4' • P.O.T. STA. 378+47.90 & I-240 98.10 RT.	2.145.856.8555	142.948.1608	N 85°47'00.60" E
7400	P.C. CV. SF4-1 STA. 380+07.49	2.146.016.5286	142.959.9327	Δ = 01°59'59.99" LT. D = 01°30'00.00" L = 133.33' T = 66.67' R = 3819.7186'
7204	P.I. CV. SF4-1 STA. 380+74.16	2.146.083.0215	142.964.8349	
7401	RAD. PT. CV. SF4-1	2.145.735.6821	146.769.3126	
7402	P.T. CV. SF4-1 STA. 381+40.82	2.146.149.3028	142.972.0546	
7428	P.O.T. STA. 382+63.29 BK RAMP 'SF4' •	2.146.271.0441	142.985.3154	N 83°47'00.60" E
31615	P.O.T. STA. 382+63.291 FWD. RAMP 'SF4'	2.146.273.1016	142.966.4272	R SHIFT 19' RT.
7425	P.C. CV. SF4-2 STA. 383+83.22	2.146.392.3296	142.979.4142	4 83°47'00.60" E
31700	P.I. CV. SF4-2 STA. 385+13.98	2.146.522.3210	142.993.5737	Δ = 05°40'24.02" RT. D = 02°10'16.11" L = 261.31' T = 130.76' R = 2638.970'
7427	RAD. PT. CV. SF4-2	2.146.678.0922	140.355.9620	
7426	P.T. CV. SF4-2 STA. 386+44.53 END R • P.O.T. STA. 386+44.53 & I-240. 59.00 RT.	2.146.653.0753	142.994.9133	
				N 89°27'24.62" E

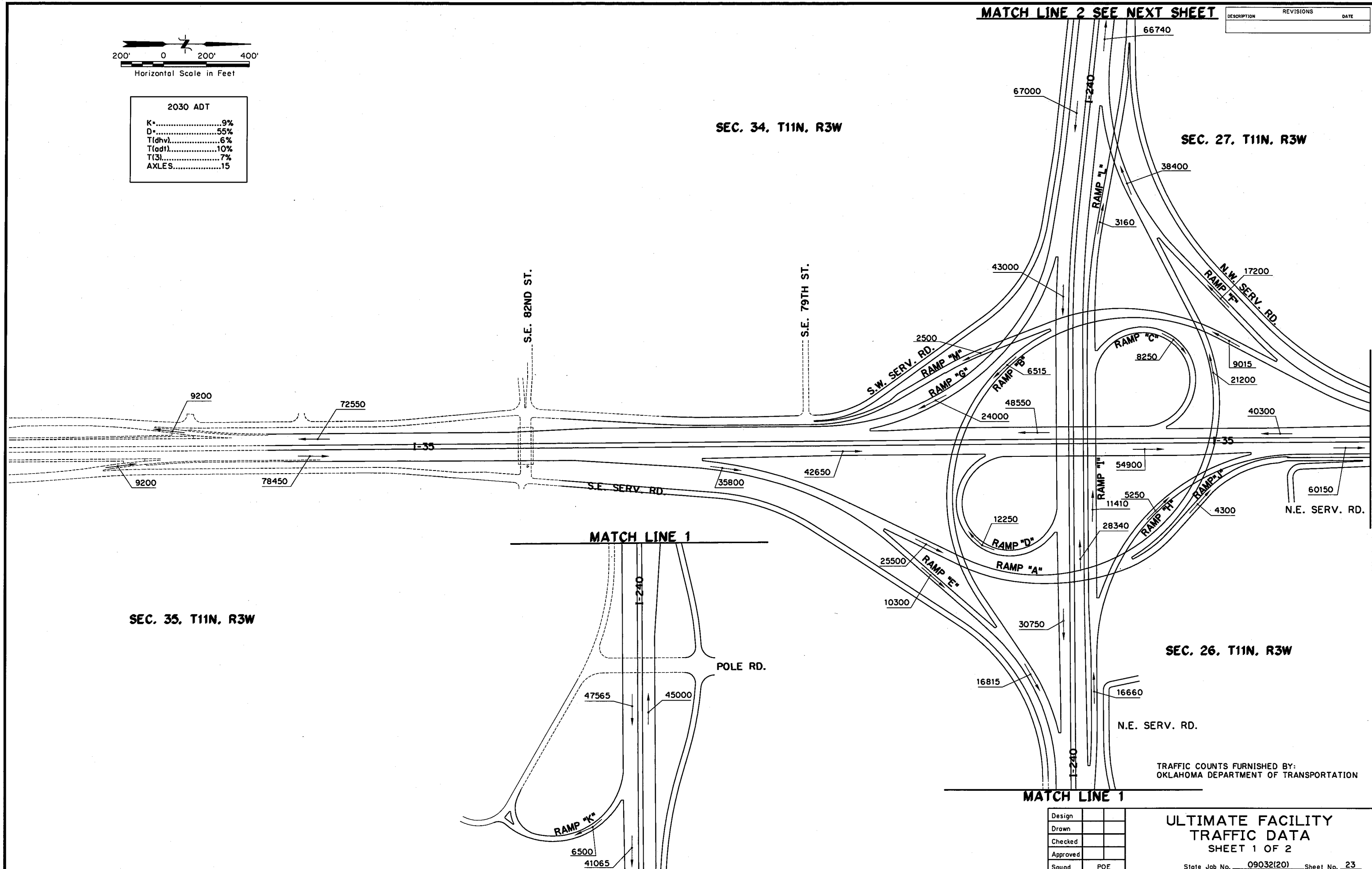
Design	
Drawn	
Checked	
Approved	
Squad	POE

POINT COORDINATE
TABLES
I-35 & I-240 INTERCHANGE

State Job No. 09032(20) Sheet No. 22



2030 ADT	
K*	9%
D*	55%
T(dhv)	6%
T(odt)	10%
T(3l)	7%
AXLES	15



MATCH LINE 2 SEE NEXT SHEET

DESCRIPTION	REVISIONS	DATE

SEC. 27, T11N, R3W

SEC. 34, T11N, R3W

SEC. 35, T11N, R3W

SEC. 26, T11N, R3W

TRAFFIC COUNTS FURNISHED BY:
OKLAHOMA DEPARTMENT OF TRANSPORTATION

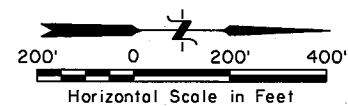
MATCH LINE 1

Design	
Drawn	
Checked	
Approved	
Squad	POE

ULTIMATE FACILITY
TRAFFIC DATA
SHEET 1 OF 2

State Job No. 09032(20) Sheet No. 23

DESCRIPTION	REVISIONS	DATE

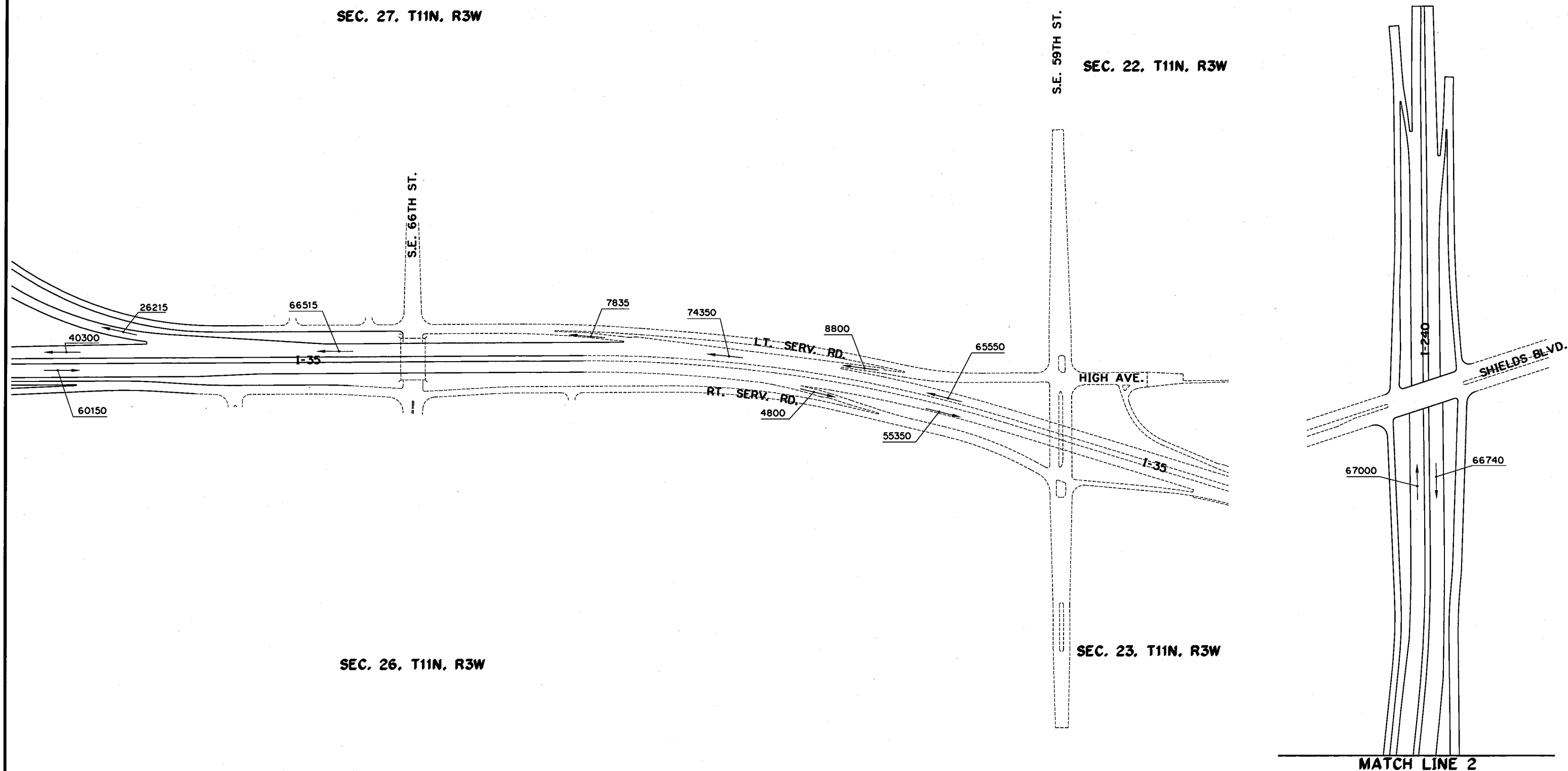


SEC. 27. T11N. R3W

SEC. 22. T11N. R3W

SEC. 26. T11N. R3W

SEC. 23. T11N. R3W



MATCH LINE 2

Design	
Drawn	
Checked	
Approved	
Squad	POE

ULTIMATE FACILITY
TRAFFIC DATA
SHEET 2 OF 2

State Job No. 09032(20) Sheet No. 24

STORM WATER MANAGEMENT PLAN

REVISIONS		
DESCRIPTION	DATE	
2 REV. INFORMATION	12/09/15	

SITE DESCRIPTION

PROJECT LIMITS: I-240/I-35 INTERCHANGE RECONSTRUCTION - PHASE I

PROJECT DESCRIPTION: GRADING, DRAINAGE, AND EROSION CONTROL PLANS FOR PROPOSED 6 LANE I-240 CONSTRUCTION FROM SANTA FE TO APPROX. 300' EAST OF SHIELDS BLVD..

SUGGESTED SEQUENCE OF EROSION CONTROL ACTIVITIES: - PRIOR TO INITIATED SOIL DISTURBING ACTIVITIES, THE CONTRACTOR WILL INSTALL A PERIMETER TEMPORARY SEDIMENT CONTROLS SPECIFIED. STRIP AND 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. 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: SANDY LOAM

AREA TO BE DISTURBED: 11.2 AC. 2

OFFSITE AREA TO BE DISTURBED: (FOR CONTRACTOR USE)

MAXIMUM ACRES TO BE DISTURBED AT ANY ONE TIME: (FOR CONTRACTOR USE)

LATITUDE & LONGITUDE OF CENTER OF PROJECT: 35°23'31" N -97°30'24" W 2

NAME OF RECEIVING WATERS: UNNAMED TRIBUTARY OF LIGHTENING CREEK 2

SENSITIVE WATERS OR WATERSHEDS: YES NO X 2

303(d) IMPAIRED WATERS: YES NO X 2

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
- X VEGETATIVE MULCHING
- SOIL RETENTION BLANKET
- PRESERVATION OF EXISTING VEGETATION

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

STRUCTURAL PRACTICES:

- STABILIZED CONSTRUCTION EXIT
- X TEMPORARY SILT FENCE
- X TEMPORARY SILT DIKES
- X TEMPORARY FIBER LOG
- DIVERSION, INTERCEPTOR OR PERIMETER DIKES
- DIVERSION, INTERCEPTOR OR PERIMETER SWALES
- ROCK FILTER DAMS
- TEMPORARY SLOPE DRAIN
- X PAVED DITCH W/ DITCH LINER PROTECTION
- TEMPORARY DIVERSION CHANNELS
- TEMPORARY SEDIMENT BASINS
- TEMPORARY SEDIMENT TRAPS
- X 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.

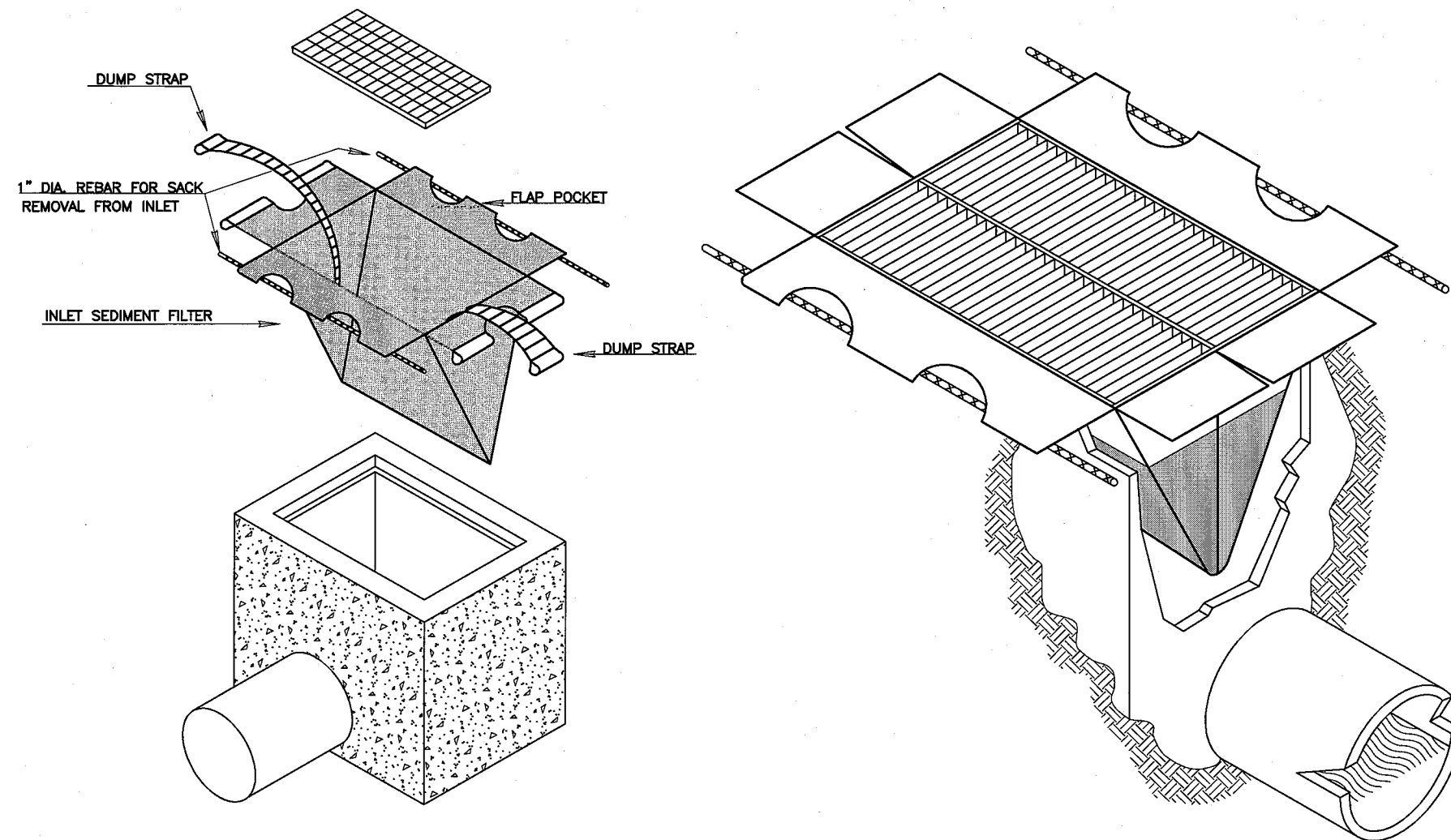
THE FOLLOWING SECTIONS OF THE 2009 ODOT STANDARD SPECIFICATIONS SHOULD BE NOTED:

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

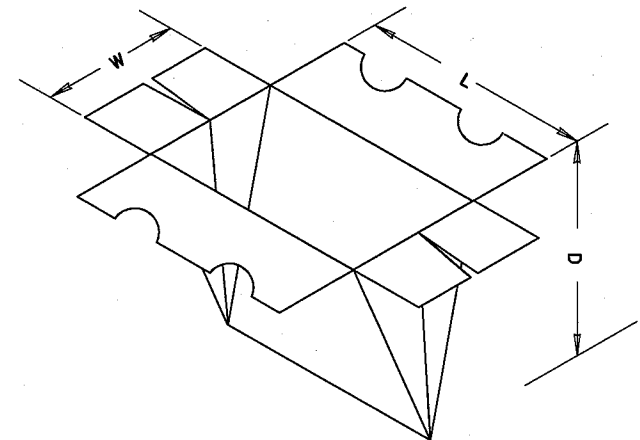
IN ADDITION:

"ODEQ GENERAL PERMIT (OKR10) FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES WITHIN THE STATE OF OKLAHOMA," ODEQ, WATER QUALITY DIVISION, SEPTEMBER 13, 2012.

DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION	
DRAWN			ROADWAY DESIGN DIVISION	
CHECKED			STORM WATER	
APPROVED			MANAGEMENT PLAN	
SQUAD			STATE JOB NO. 09032(20) SHEET NO. 25	



INSTALLATION DETAIL



GENERAL NOTES

AN INLET SEDIMENT FILTER IS A WOVEN, POLYPROPYLENE SACK PLACED INTO UNDERGROUND DRAINS DESIGNED TO TRAP SEDIMENT BEFORE IT ENTERS THE DRAINAGE SYSTEM. THE FILTER HAS FLAP POCKETS ALONG THE TOP EDGES AND DUMP STRAPS ATTACHED TO THE BOTTOM THAT REMAIN ABOVE THE GROUND AND ARE HELD IN PLACE BY THE GRATE. THE FILTER MUST NEVER BE ALLOWED TO BE OVER HALF FULL OF SEDIMENT OR THE DRAINAGE SYSTEM COULD BE POLLUTED, NOT FUNCTION AT ALL OR MAKE IT VERY DIFFICULT TO REMOVE. CONSEQUENTLY, REGULAR MAINTENANCE IS MANDATORY.

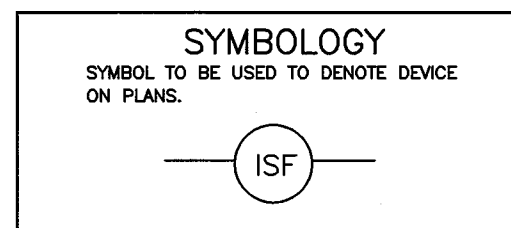
WHEN IT IS DETERMINED THAT THE FILTER NEEDS TO BE CLEANED, TWO PIECES OF 1" REBAR ARE INSERTED THROUGH THE FLAP POCKETS. THE GRATE IS REMOVED AND THE LIFTING BARS ARE ATTACHED TO AVAILABLE EQUIPMENT AND THE SEDIMENT FILTER IS REMOVED TO A DUMPING AREA. ONCE THE INLET SEDIMENT FILTER IS ON THE GROUND, REMOVE THE LIFTING BARS FROM THE FLAT POCKETS AND INSERT THE LIFTING BARS THROUGH THE DUMP STRAPS. LIFT THE FILTER OFF THE GROUND BY THE DUMP STRAPS AND THE FILTER WILL TURN INSIDE OUT AND BE EMPTIED. IT MAY THEN BE RINSED AND REUSED OR DISPOSED OF AND REPLACED WITH A NEW INLET SEDIMENT FILTER.

THE GEOTEXTILE FABRIC SHALL BE WOVEN WITH THE FOLLOWING PROPERTIES:

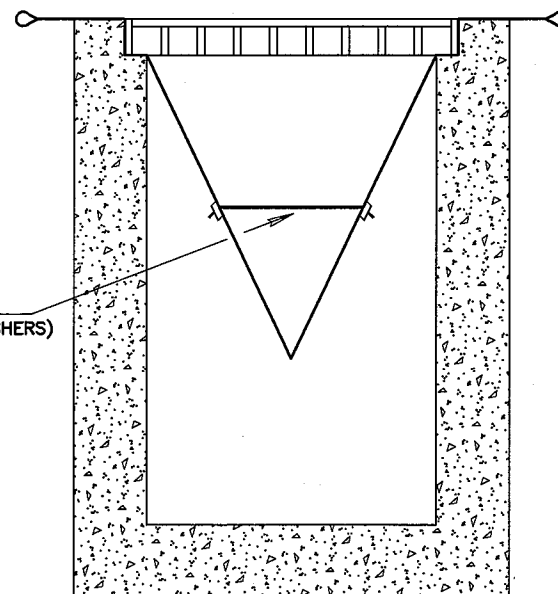
PROPERTY	TEST METHOD	TEST RESULT
GRAB TENSILE	ASTM D-4632	300 lb (Min.)
GRAB ELONGATION	ASTM D-4632	20% (Max.)
PUNCTURE	ASTM D-4833	120 lb (Min.)
MULLEN BURST	ASTM D-3786	800 psi (Min.)
TRAPEZOID TEAR	ASTM D-4533	120 lb (Min.)
UV RESISTANCE	ASTM D-4355	70% @ 150hrs. (Min.)
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE (Max.)
FLOW RATE	ASTM D-4491	40 Gal./min./sq.ft. (Max.)
PERMITTIVITY	ASTM D-4491	0.55 sec. ⁻¹ (Max.)

BASIS OF PAYMENT

ITEM NO.	ITEM	UNIT
221(H)	(PL) TEMPORARY INLET SEDIMENT FILTER	EACH



EXPANSION RESTRAINT
(1/4" NYLON ROPE, 2" FLAT WASHERS)

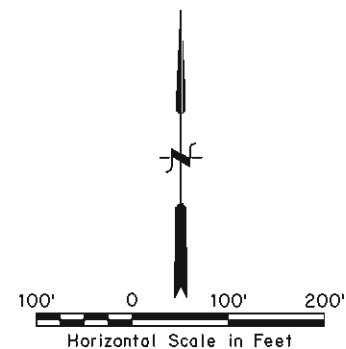


SIDE VIEW

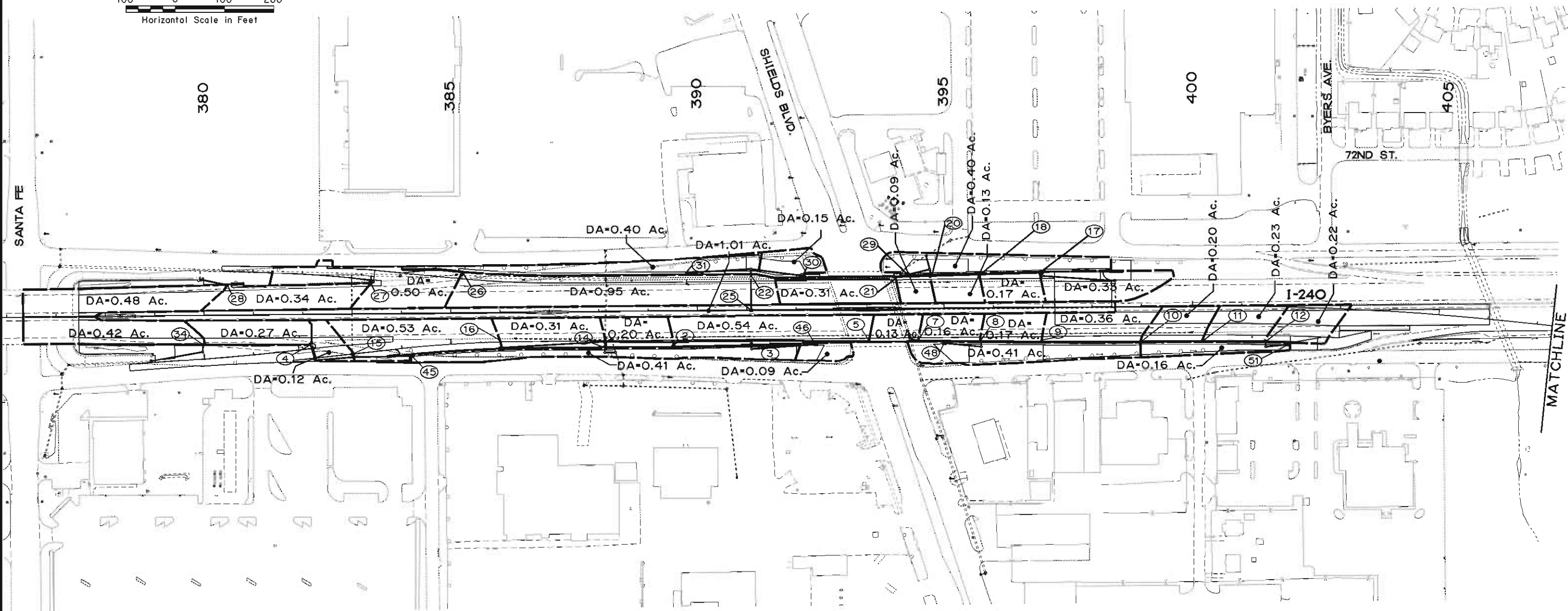
DESIGN	
DRAWN	
CHECKED	
APPROVED	
SQUAD	POE

TEMPORARY INLET SEDIMENT FILTER

STATE JOB NO. 09032(20) SHEET NO. 26



RECEIVING WATERS: UNNAMED TRIBUTARY OF LIGHTNING CREEK



Design	
Drawn	
Checked	
Approved	
Squad	POE

DRAINAGE MAP
SHEET 1 OF 1

State Job No. 09032(20) Sheet No. 27

DRAINAGE STRUCTURE DESIGN RECORD

STRUCTURE NO.	STATION & LOCATION	DESCRIPTION	DESIGN	DESIGN YEAR	DRAINAGE AREA	ANTICIPATED LAND USE	AVG. SLOPE OF WATERSHED	RUNOFF COEFFICIENT (WEIGHTED)	LENGTH OF OVERLAND FLOW	SLOPE OF OVERLAND	LENGTH OF CHANNEL FLOW	SLOPE OF CHANNEL	TIME OF CONCENTRATION	INTENSITY OF DESIGN YEAR 1" (RAINFALL)	DESIGN YEAR DISCHARGE Q _N	DESIGN DISCHARGE BYPASS Q _{BYPASS}	SPREAD	DESIGN TAILWATER	TOP OF COVER OR GRATE	STRUCTURE FLOW LINE	OUTLET FLOW LINE	STRUCTURE SLOPE	MAXIMUM ALLOWABLE HEADWATER	FLOW VELOCITY V _N	CONTROLLING HEADWATER	TYPE OF HYDRAULIC CONTROL
				N	ACRES		%	C	FT.	%	FT.	%	MIN.	IN/HR	CFS	CFS	FT.	FT.		%	ELEV.	FT/SEC	ELEV.			
1	CL I-240 STA. 388+11.82 61.00' RT.	CONST. 4.0' x 4.0' JUNCT. BOX w/ 24" x 9.4' LG. RCP TO EXIST. RCP	MFC-4, MJB-3, SPI-4	10											21.04				1258.00	1251.92	1251.82	1.06		8.99		
2	CL I-240 STA. 389+50.00 71.00' RT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 4.9' LG. RCP TO STR. 37	CLB-1, SPI-4	10	0.20	PV	1.07	0.90	62	2.44	133	0.44	5.67	7.27	1.67	0.47	6.68		1256.76	1252.40	1252.36	0.90		4.43		
3	CL I-240 STA. 391+09.30 68.00' RT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 3.3' LG. RCP TO STR. 38	CLB-1, SPI-4	50	0.54	PV	0.69	0.90	55	2.22	238	0.34	7.10	9.08	5.06		6.17		1256.52	1252.85	1252.83	0.50		4.66		
4	CL I-240 STA. 382+15.00 59.00' RT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 32.6' LG. RCP TO STR. 44	CLB-1, SPI-4	10	0.27	PV	2.56	0.90	66	3.23	211	2.36	5.03	7.46	1.74	0.69	5.27		1264.23	1259.47	1259.33	0.43		3.25		
5	CL I-240 STA. 393+50.00 65.00' RT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 236.7' LG. RCP TO STR. 38	CLB-1, SPI-4	10	0.13	PV	1.04	0.90	55	2.16	97	0.40	5.20	9.75	0.93	0.15	5.29		1257.32	1253.69	1252.83	0.36		2.55		
6	CL I-240 STA. 394+31.58 62.00' RT.	CONST. 6.0' x 4.0' JUNCT. BOX w/ 4.0' x 4.0' x 8.5' LG. RCB TO EXIST. RCB	MFC-4, MJB-3, SBI-4	10											99.60				1257.98	1251.42	1251.41	0.15		7.25		
7	CL I-240 STA. 394+50.00 65.00' RT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 13.1' LG. RCP TO STR. 6	CLB-1, SPI-4	10	0.16	PV	0.94	0.90	57	2.24	122	0.34	5.68	9.57	1.15	0.24	5.65		1257.72	1252.97	1252.77	1.53		9.05		
8	CL I-240 STA. 395+75.00 66.90' RT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 119.7' LG. RCP TO STR. 7	CLB-1, SPI-4	10	0.17	PV	0.97	0.90	59	2.36	122	0.29	5.83	9.52	1.43	0.33	6.36		1258.14	1254.41	1252.97	1.20		8.04		
9	CL I-240 STA. 397+00.00 69.40' RT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 119.7' LG. RCP TO STR. 8	CLB-1, SPI-4	10	0.36	PV	1.44	0.90	85	3.09	197	0.72	6.18	9.39	2.08	0.66	7.50		1258.54	1255.13	1254.41	0.60		5.68		
10	CL I-240 STA. 399+00.00 71.00' RT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 194.6' LG. RCP TO STR. 9	CLB-1, SPI-4	10	0.20	PV	2.35	0.90	77	3.65	122	1.52	5.00	9.83	1.42	0.45	5.14		1260.18	1256.57	1255.13	0.74		5.57		
11	CL I-240 STA. 400+21.14 71.00' RT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 119.3' LG. RCP TO STR. 10	CLB-1, SPI-4	10	0.23	PV	2.51	0.90	95	3.27	121	1.91	5.06	7.45	1.51	0.52	4.99		1262.07	1257.46	1256.57	0.75		6.99		
12	CL I-240 STA. 401+50.00 71.00' RT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 121.9' LG. RCP TO STR. 11	CLB-1, SPI-4	10	0.22	PV	2.51	0.90	95	3.27	121	1.91	5.06	9.81	1.50	0.51	4.98		1264.40	1259.78	1257.46	1.90		6.79		
12A	CL I-240 STA. 402+10.00 71.00' RT.	CONST. 18" x 56.6' LG. RCP w/ PLUG TO STR. 12 (FOR FUTURE CONSTRUCTION)	SPI-4	10																1260.91	1259.78	1.99				
14	CL I-240 STA. 388+11.82 71.00' RT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 6.7' LG. RCP TO STR. 1	CLB-1, SPI-4	10	0.31	PV	1.11	0.90	49	3.55	206	0.52	5.76	7.24	2.35	0.86	7.78		1257.39	1252.52	1252.42	1.49		8.01		
15	BL RAMP SF4 STA. 382+99.00 CL	CONST. INLET CI DES. 2 (STD) ON EXIST. RCP	CI-1, SPI-4	10	0.12	PV	2.26	0.90	84	3.36	65	0.80	5.00	7.46	1.31	0.39	4.92		1262.30	1258.95				12.19		
16	BL RAMP SF4 STA. 385+99.80 12.00' RT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 207.4' LG. RCP TO STR. 1	CLB-1, SPI-4	10	0.53	PV	1.61	0.90	89	3.00	301	1.20	6.59	7.02	2.57	1.20	7.50		1258.36	1254.07	1252.42	0.80		4.80		
17	CL I-240 STA. 397+00.00 70.70' LT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 119.7' LG. RCP TO STR. 18	CLB-1, SPI-4	10	0.33	PV	1.71	0.90	12	2.00	265	1.69	5.00	9.83	1.88	0.59	7.00		1258.49	1255.00	1254.64	0.30		3.45		
18	CL I-240 STA. 395+75.00 68.20' LT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 94.7' LG. RCP TO STR. 20	CLB-1, SPI-4	10	0.17	PV	0.93	0.90	61	2.04	120	0.36	5.76	9.54	1.38	0.31	6.26		1258.09	1254.64	1254.35	0.31		3.72		
19	CL I-240 STA. 391+58.70 61.00' LT.	CONST. GARY GRATE INLET x 231.3' LG. w/ 18" x 1.8' LG. RCP TO EXIST. RCB	SPECIAL DETAIL	50	0.31	PV	2.04	0.90	51	2.04			5.00	9.83	2.91					1253.67	1253.23	24.00		16.75		
20	CL I-240 STA. 394+75.00 66.20' LT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 64.7' LG. RCP TO STR. 21	CLB-1, SPI-4	10	0.13	PV	0.99	0.90	58	2.04	97	0.36	5.40	9.68	1.01	0.18	5.49		1257.84	1254.35	1252.41	3.00		11.49		
21	CL I-240 STA. 394+05.00 65.00' LT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 5.8' LG. RCP TO EXIST. RCB	CLB-1, SPI-4	10	0.09	PV	0.91	0.90	56	2.03	97	0.26	5.60	9.60	0.69	0.08	4.66		1257.66	1252.41	1252.24	3.00		12.37		
22	CL I-240 STA. 391+09.30 73.00' LT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 4.4' LG. RCP TO EXIST. RCB	CLB-1, SPI-4	50	0.95	PV	0.66	0.90	81	2.96	581	0.34	10.9	7.99	8.36		8.84		1256.62	1253.08	1252.96	2.73		10.75		
23	CL I-240 STA. 394+65.00 106.90' LT.	CONST. 4.0' DIA. MH ON EXIST RCP w/ 18" x 24.9' LG. RCP TO STR. 32	MFC-4, MJB-3, SPI-4	10											5.45				1274.75	1258.31	1258.19	0.50		4.89		
24	DELETED																									
25	CL I-240 STA. 391+09.30 CL	CONST. IMB-TYPE 2 DES. 2 w/ 18" x 61.0' LG. RCP TO EXIST. RCB	CLB-1, SPI-4	50	0.50 (N)	PV	1.24	0.90	61	1.05	1272	1.24	12.11	7.71	3.54		4.90		1257.44	1252.83	1252.65	0.30		7.56		
26	BL RAMP SF3 STA. 385+23.00 14.00' LT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 6.6' LG. RCP TO EXIST. RCB	CLB-1, SPI-4	10	0.51 (S)	PV	1.24	0.90	61	1.05	1272	1.24	12.11	7.71	3.46		4.79									
27	CL I-240 STA. 383+39.00 62.80' LT.	CONST. CI DES. 2(STD) w/ 18" x 13.4' LG. RCP TO EXIST. RCB	CI-1, SPI-4	10	0.34	PV	2.36	0.90	77	3.43	288	2.07	5.71	7.26	2.07	0.94	6.00		1262.12	1251.40	1251.33	0.50		3.60		
28	CL I-240 STA. 380+48.00 62.20' LT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 52.7' LG. RCP TO EXIST. INLET	CLB-1, SPI-4	10	0.48	PV	1.79	0.90	59	.03	301	2.13	10.42	6.16	1.86	0.77	5.27		1268.00	1263.56	1262.64	1.75		5.47		
29	CL I-240 STA. 394+25.88 69.50' LT.	CONST. STD. MED. DRAIN TYPE 2 w/ 18" x 44.1' LG. RCP TO STR. 32	SMD-3, SPI-4	50	0.40	PV	2.40	0.90	26	23.77	372	0.91	5.10	9.79	3.48		3.13		1262.01	1259.16	1258.19	2.06		6.94		

LAND USES	
CM	COMMERCIAL
CV	CULTIVATION
PS	PASTURE
PV	PAVED
RS	RESIDENTIAL
WD	WOODLAND

Design	
Drawn	
Checked	
Approved	
Squad	POE

DRAINAGE STRUCTURE
DESIGN RECORD
SHEET 1 OF 2

DRAINAGE STRUCTURE DESIGN RECORD

STRUCTURE NO.	STATION & LOCATION	DESCRIPTION	DESIGN	DESIGN YEAR		ANTICIPATED LAND USE	AVG. SLOPE OF WATERSHED RUNOFF COEFFICIENT (WEIGHTED)		LENGTH OF OVERLAND FLOW	SLOPE OF OVERLAND	LENGTH OF CHANNEL FLOW	SLOPE OF CHANNEL	TIME OF CONCENTRATION	INTENSITY OF DESIGN YEAR DESIGN YEAR "1" (RAINFALL) IN/HR	DESIGN YEAR DISCHARGE Q _N CFS	DESIGN DISCHARGE BYPASS Q _{BYPASS} CFS	SPREAD	DESIGN TAILWATER	TOP OF COVER OR GRATE	STRUCTURE FLOW LINE	OUTLET FLOW LINE	STRUCTURE	MAXIMUM	FLOW	CONTROLLING	TYPE OF
				%	ELEV.		FT/SEC	ELEV.																		
				N	ACRES		%	C														FT.	%	FT.		
30	CL I-240 STA. 392+13.92 69.20' LT.	CONST. STD. MED. DRAIN TYPE 2 w/ 18" x 102.1' LG. RCP TO STR. 33	SMD-3, SPI-4	50	0.15	PV	8.84	0.90	43	20.93	90	3.07	5.00	9.83	1.34		3.02		1261.20	1258.35	1257.84	0.50		3.19		
31	CL I-240 STA. 389+78.00 77.00' LT.	CONST. STD. MED. DRAIN TYPE 2 w/ 18" x 128.6' LG. RCP TO STR. 33	SMD-3, SPI-4	50	0.40	PV	0.36	0.90	5	1.80	576	0.35	8.50	8.64	3.11		3.02		1264.36	1261.32	1257.84	2.71		7.41		
32	CL I-240 STA. 394+71.92 79.14' LT.	CONST. 4.0' DIA. MH w/ 18" x 11.0' LG. RCP TO STR. 20	MFC-4, MJB-3, SPI-4	10											8.93				1267.53	1254.46	1254.35	1.00		6.67		
33	CL I-240 STA. 391+09.30 83.10' LT.	CONST. 4.0' DIA. MH w/ 18" x 7.7' LG. RCP TO STR. 22	MFC-4, MJB-3, SPI-4	10											4.45				1265.66	1253.12	1253.08	0.52		4.46		
34	CL I-240 STA. 379+98.00 58.33' RT.	CONST. IMB-TYPE 1 DES. 2 w/ 18" x 12.8' LG. RCP TO STR. 36	CLB-1, SPI-4	10	0.42	PV	1.28	0.90	59	0.03	341	1.50	10.97	6.06	1.66	0.63	5.00		1269.32	1258.09	1257.07	8.00		9.05		
35	BL RAMP SF4 STA. 382+99.00 6.87' RT.	CONST. 4.0' DIA. MH w/ 18" x 4.4' LG. RCP TO STR. 15	MFC-4, MJB-3, SPI-4	10											4.98				1263.30	1258.97	1258.95	0.50		4.50		
36	BL RAMP SF4 STA. 379+97.39 15.00' LT.	CONST. 4.0' DIA. MH w/ 18" x 103.4' LG. RCP TO EXIST. MH	MFC-4, MJB-3, SPI-4	10											1.66				1263.95	1257.07	1256.55	0.50		3.39		
37	CL I-240 STA. 389+50.00 63.00' RT.	CONST. 4.0' x 4.0' JUNCT. BOX w/ 28" x 18" x 134.3' LG. RCPA TO STR. 1	MFC-4, MJB-3, SPI-4	10											8.54				1257.29	1252.32	1251.92	0.30		4.53		
38	CL I-240 STA. 391+09.30 61.50' RT.	CONST. 4.0' x 4.0' JUNCT. BOX w/ 28" x 18" x 154.7' LG. RCPA TO STR. 37	MFC-4, MJB-3, SPI-4	10											6.87				1256.99	1252.83	1252.32	0.33		4.45		
39	CL I-240 STA. 397+00.00 63.50' LT.	CONST. 4.0' DIA. MH w/ 18" x 3.6' LG. RCP TO STR. 17	MFC-4, MJB-3, SPI-4	10											1.79				1258.97	1255.01	1255.00	0.30		3.05		
40	CL I-240 STA. 398+45.00 53.00' LT.	CONST. 18" x 143.3' LG. RCP FROM EXIST. STR. TO STR. 39	SPI-4	10											1.79					1256.44	1255.01	1.00		4.70		
41	DELETED																									
42	CL I-240 STA. 388+11.83 82.50' RT.	CONST. 4.0' DIA. MH w/ 18" x 9.0' LG. RCP TO STR. 14	MFC-4, MJB-3, SPI-4	10											7.58				1268.23	1252.57	1252.52	0.50		5.18		
43	CL I-240 STA. 388+33.76 82.50' RT.	CONST. 4.0' DIA. MH ON EXIST. RCP w/ 18" x 18.3' LG. RCP TO STR. 42	MFC-4, MJB-3, SPI-4	10											7.58				1268.31	1256.82	1256.73	0.50		5.18		
44	BL RAMP SF4 STA. 382+22.81 23.74' RT.	CONST. 4.0' DIA. MH w/ 18" x 72.6' LG. RCP TO STR. 35	MFC-4, MJB-3, SPI-4	10											1.74				1263.45	1259.33	1258.97	0.50		3.63		
45	BL RAMP SF4 STA. 384+19.00 17.20' RT.	CONST. STD. MED. DRAIN TYPE 2 w/ 18" x 117.0' LG. RCP TO STR. 35	SMD-3, SPI-4	50	0.41	PV	1.30	0.90	31	25.03	777	0.34	10.58	8.07	2.97		3.06		1264.97	1262.12	1258.97	2.69		7.73		
46	CL I-240 STA. 392+40.02 70.46' RT.	CONST. STD. MED. DRAIN TYPE 2 w/ 18" x 127.8' LG. RCP TO STR. 47	SMD-3, SPI-4	50	0.09	PV	25.63	0.90	69	25.63			5.00	9.83	0.78		3.01		1262.59	1259.74	1259.10	0.50		2.89		
47	CL I-240 STA. 391+09.33 78.17' RT.	CONST. 4.0' DIA. MH w/ 18" x 7.7' LG. RCP TO STR. 3	MFC-4, MJB-3, SPI-4	10											0.78				1269.22	1252.89	1252.85	0.50		2.89		
48	CL I-240 STA. 394+99.93 70.50' RT.	CONST. STD. MED. DRAIN TYPE 2 w/ 18" x 72.3' LG. RCP TO STR. 49	SMD-3, SPI-4	50	0.41	PV	4.29	0.50	25	24.64	397	3.01	5.00	9.83	2.02		3.08		1262.59	1259.74	1259.38	0.50		3.79		
49	CL I-240 STA. 395+75.00 78.00' RT.	CONST. 4.0' DIA. MH w/ 18" x 8.6' LG. RCP TO STR. 8	MFC-4, MJB-3, SPI-4	10											2.02				1271.34	1254.45	1254.41	0.50		3.79		
50	CL I-240 STA. 401+50.00 81.50' RT.	CONST. 4.0' DIA. MH w/ 18" x 8.0' LG. RCP TO STR. 12	MFC-4, MJB-3, SPI-4	10											0.79				1275.33	1259.82	1259.78	0.50		2.90		
51	CL I-240 STA. 401+96.16 76.16' RT.	CONST. STD. MED. DRAIN TYPE 2 w/ 18" x 42.7' LG. RCP TO STR. 50	SMD-3, SPI-4	50	0.16	PV	1.84	0.50	27	23.19	386	0.34	6.86	9.16	0.78		3.01		1273.21	1270.36	1270.15	0.50		2.90		

LAND USES	
CM	COMMERCIAL
CV	CULTIVATION
PS	PASTURE
PV	PAVED
RS	RESIDENTIAL
WD	WOODLAND

Design		
Drawn		
Checked		
Approved		
Squad	POE	

DRAINAGE STRUCTURE
DESIGN RECORD
SHEET 2 OF 2

State Job No. 09032(20) Sheet No. 29

SUMMARY OF PAY QUANTITIES (ROADWAY) (0100)			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
104 0300	CONSTRUCTION MISCELLANEOUS (9)(21)	L.F.	100
201(A) 0102	CLEARING AND GRUBBING (16)(26)	L.SUM	1
202(A) 0183	UNCLASSIFIED EXCAVATION	C.Y.	14990
202(D) 4781	UNCLASSIFIED BORROW (TOPSOIL)	C.Y.	838
205(A) 4229	TYPE A-SALVAGED TOPSOIL (R-5)(R-15)	L.SUM	1
221(C) 2801	TEMPORARY SILT FENCE (10)(11)	L.F.	4057
221(D) 2803	TEMPORARY SEDIMENT FILTER (9)(10)(11)	EA.	2
221(F) 0100	TEMPORARY SILT DIKE (10)(11)	L.F.	42
221(H) 0450	(PL) TEMPORARY INLET SEDIMENT FILTER (10)(11)	EA.	62
221(K) 0600	TEMPORARY FIBER LOG (10)(11)	L.F.	237
230(A) 2806	SOLID SLAB SODDING (R-7)(R-8)	S.Y.	6468
233(A) 2817	VEGETATIVE MULCHING (R-11)	AC.	2
241 2832	MOWING (R-16)(12)	AC.	3
303(A) 2100	AGGREGATE BASE TYPE A (R-1)	C.Y.	7408
307(K) 4300	STABILIZED SUBGRADE (7)	S.Y.	34920
317 4270	CEMENT TREATED BASE	S.Y.	1448
325 5271	SEPARATOR FABRIC (13)	S.Y.	35743
402(E) 0225	TRAFFIC BOUND SURFACE COURSE TYPE E (R-25)(27)	TON	79
407(B) 0250	TACK COAT	GAL.	10026
408 5774	PRIME COAT (R-28)	GAL.	20440
411(B) 5935	SUPERPAVE. TYPE S3 (PG 76-28 OK) (R-32)	TON	5651
411(B) 5945	SUPERPAVE. TYPE S3 (PG 64-22 OK) (R-32)	TON	16801
411(C) 5950	SUPERPAVE. TYPE S4 (PG 76-28 OK) (R-32)	TON	4401
412 5267	COLD MILLING PAVEMENT (R-34)	S.Y.	4196
414(B) 5725	DOWEL JOINTED P.C.C.PAVT. (PLACEMENT) (R-1)	S.Y.	1266
414(G) 5275	P.C. CONCRETE FOR PAVEMENT (R-1)	C.Y.	317
501(A) 0313	STRUCTURAL EXCAVATION UNCLASSIFIED	C.Y.	11
501(F) 6352	GRANULAR BACKFILL (29)	C.Y.	50
501(G) 6315	CLSM BACKFILL (9)	C.Y.	10
502 1000	TEMPORARY EARTH RETAINAGE (28)	L.SUM	1
504(D) 6245	CONCRETE RAIL (TR4) (R-1)(30)	L.F.	3249
504(E) 6190	42" F-SHAPED PARAPET (31)	L.F.	3698
509(A) 0319	CLASS AA CONCRETE	C.Y.	5
509(B) 0321	CLASS A CONCRETE (14)	C.Y.	239
509(B) 0325	CLASS A CONCRETE (LONG. BAR. DES. 1-A) (R-54)	C.Y.	85
509(C) 0322	CLASS A CONCRETE, SMALL STRUCTURES	C.Y.	9
509(D) 0325	CLASS C CONCRETE (R-41)(24)	C.Y.	242
510(A) 6334	RETAINING WALL (23)(32)(33)	S.Y.	406
510(C) 6135	SLOPE WALL (5")	S.Y.	2715
510(D) 6341	MSE RETAINING WALL (22)(23)(33)	S.Y.	3405
511(A) 0332	REINFORCING STEEL (18)	LBS.	21238
511(B) 4269	EPOXY COATED REINFORCING STEEL (15)	LBS.	10350
525(C) 1000	(SP) NEST PREVENTION	L.SUM	1
609(A) 0287	CONCRETE CURB (4" MNTBLE-INTEGRAL)	L.F.	494
609(A) 0300	CONCRETE CURB (6" BARRIER-INTEGRAL)	L.F.	648
609(B) 1500	1'-8" COMB.CURB & GUTTER (4" MNTBLE)	L.F.	1088
609(B) 1523	2'-8" COMB.CURB & GUTTER (4" MNTBLE)	L.F.	444
610(C) 0608	4" CONCRETE DIVIDING STRIP	S.Y.	1281
610(C) 0609	6" CONCRETE DIVIDING STRIP	S.Y.	693
611(A) 2657	MANHOLE (4' DIAMETER) (6)(17)	EA.	12
611(G) 4012	SPECIAL INLET DRAIN (25)	EA.	1
611(G) 5112	INLET CI DES. 2 (STD) (R-44)(5)(6)	EA.	2
611(G) 5699	INLET - LONGITUDINAL BARRIER - TYPE I, DES.2 (5)(6)	EA.	20
611(G) 5700	INLET - LONGITUDINAL BARRIER - TYPE II, DES.2 (5)(6)	EA.	1
611(G) 6002	INLET (SMD TYPE 2) (6)	EA.	7
611(L) 0487	JUNCTION BOXES (17)	C.F.	315
612(A) 0641	MANHOLES ADJUST TO GRADE (3)(17)	EA.	2
613(A) 0491	18" R.C.PIPE CLASS III (2)	L.F.	2731
613(A) 0492	24" R.C.PIPE CLASS III (2)	L.F.	10
613(A) 4496	28" X 18" R.C.PIPE ARCH CLASS A-III (2)	L.F.	289
613(J) 5915	EDGE DRAIN CONDUIT-PERFORATED	L.F.	6708
613(K) 5916	EDGE DRAIN OUTLET LATERAL-NONPERFORATED	L.F.	1200
613(Y) 0100	(PL) VIDEO INSPECTION OF CONDUIT (20)	L.F.	100
619(A) 0920	REMOVAL OF STRUCTURES & OBSTRUCTIONS(R-48,R-49,R-50)(4)	L.SUM	1
619(B) 4727	REMOVAL OF CONCRETE PAVEMENT (9)(R-49, R-50)	S.Y.	1000
619(B) 4728	REMOVAL OF ASPHALT PAVEMENT (R-49, R-50)	S.Y.	28331
627(A) 4317	CONCRETE LONGITUDINAL BARRIER, DESIGN 1 (R-54)	L.F.	1348
627(B) 4410	CONCRETE LONGITUDINAL BARRIER END SECTIONS	EA.	10
871(A) 8330	(PL) IMPACT ATTENUATOR (8)	EA.	2
877(A) 8483	PORTABLE LONGITUDINAL BARRIER (1)	L.F.	225

SUMMARY OF PAY QUANTITIES (STAKING) (0600)			
ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
642(B) 0096	CONSTRUCTION STAKING LEVEL II	L.SUM	1

SUMMARY OF PAY QUANTITIES (CONSTRUCTION) (0640)			
ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
220 2800	SWPPP DOCUMENTATION AND MANAGEMENT	L.SUM	1
640(A) 1426	FIELD OFFICE (19)	EA.	1
641 1552	MOBILIZATION	L.SUM	1

PAY QUANTITY NOTES

- (R-1) PAYMENT FOR THIS ITEM WILL BE BASED ON PLAN QUANTITY ONLY. SEE SECTION 109.01B OF THE STANDARD SPECIFICATIONS.
- (R-5) AN ESTIMATED QUANTITY OF 121 C.Y. TOPSOIL TO BE RESERVED FOR REPLACEMENT OF APPROXIMATELY 5" ON COMPLETED FORESLOPES, DITCHES, AND BACKSLOPES. THIS QUANTITY IS INCLUDED IN THE EARTHWORK BALANCE. ANY ADDITIONAL EXCAVATION REQUIRED IN CUT SECTIONS TO ALLOW FOR PLACEMENT OF TOPSOIL TO FINAL GRADE, SHALL BE INCLUDED IN THE PRICE BID.
- (R-7) FOR SOLID SLAB SODDING PRICE BID TO INCLUDE COST OF 18-46-Q FERTILIZER, ESTIMATED AT 150 POUNDS PER ACRE, FOR SOLID SLAB SODDING PRICE BID TO INCLUDE COST OF 10-20-1Q FERTILIZER, ESTIMATED AT 200 POUNDS PER 1000 S.Y. OF SODDING.
- (R-8) FOR SOLID SLAB SODDING PRICE BID TO INCLUDE COST OF WATERING, ESTIMATED AT 40 GALLONS PER S.Y. OF SOLID SLAB SODDING.
- (R-11) THE QUANTITIES ESTIMATED FOR TEMPORARY EROSION AND SEDIMENT CONTROL IS 2 ACRES.
- (R-15) ESTIMATED AT 150 POUNDS OF 18-46-0 FERTILIZER PER ACRE OF AREA ON WHICH TOPSOIL IS TO BE REPLACED.
- (R-16) QUANTITY BASED ON TWO APPLICATIONS.
- (R-25) ESTIMATED AT 120 LBS. PER CU. FT.
- (R-28) PRIME COAT SHALL BE APPLIED AT AN ESTIMATED RATE OF 0.35 GAL. PER SQ. YD. WHEN APPLIED TO SUBGRADE, AND 0.25 GAL. PER SQ. YD. WHEN APPLIED TO AGGREGATE BASE. THE ACTUAL CUTBACK PRIME COAT REQUIRED FOR PLACEMENT OPERATIONS WILL BE DETERMINED BY THE CONTRACTOR, AND SHALL CONSIDER THE RESIDUE FROM DISTILLATION PERCENTAGE SHOWN IN SECTION 708.03 OF THE STANDARD SPECIFICATIONS.
- (R-32) ESTIMATED AT 112 LBS. PER SQ. YD. PER 1" THICK.
- (R-34) PRICE BID TO INCLUDE COST OF FOG SEAL, MEETING THE REQUIREMENTS OF SECTION 407 OF THE STANDARD SPECIFICATIONS.
- (R-41) QUANTITY INCLUDES AN ESTIMATED 100 C.Y. TO BE USED AS DIRECTED BY THE ENGINEER.
- (R-44) PRICE BID TO INCLUDE COST OF 4 -4" MOUNTABLE CURB HOODS, Q -6" MOUNTABLE CURB HOODS, Q -6" BARRIER CURB HOODS, Q -8" BARRIER CURB HOODS.
- (R-48) INCLUDES REMOVAL OF ALL EXISTING ROADWAY DRAINAGE STRUCTURES, HEADWALLS (UNLESS OTHERWISE SPECIFIED), INLETS, FENCES, AND OTHER STRUCTURES WITHIN THE RIGHT OF WAY.
- (R-49) TO BECOME THE PROPERTY OF AND BE DISPOSED OF BY THE CONTRACTOR IN A MANNER APPROVED BY THE ENGINEER.
- (R-50) MATERIALS REMOVED SHALL NOT BE MEASURED FOR PAYMENT UNDER SECTION 202.06 UNCLASSIFIED EXCAVATION.
- (R-54) CONCRETE LONGITUDINAL BARRIER TO INCLUDE POST HOLES FITTED WITH GALVANIZED STEEL SLEEVE FOR GLARE DEFLECTOR FENCE, OR THREADED FLANGE.

PAY ITEM NOTES

- (1) TO REMAIN IN PLACE UPON COMPLETION OF THIS PROJECT.
- (2) PRICE BID SHALL INCLUDE THE COST OF TRENCH EXCAVATION AND STANDARD BEDDING MATERIAL AS SHOWN ON THE SUMMARY OF DRAINAGE STRUCTURES.
- (3) PRICE BID FOR THIS ITEM SHALL INCLUDE COST TO ADJUST TO GRADE (COMPLETE) INCLUDING MANHOLE FRAMES AND COVERS (TYPE R), OF THE SIZE SHOWN ON DRAINAGE STRUCTURE & DETAIL SHEETS.
- (4) PRICE BID SHALL ALSO INCLUDE, BUT IS NOT LIMITED TO, THE REMOVAL OF CONCRETE DITCH LINER, CONCRETE FLUMES, STRUCTURES, STORM SEWERS, PIPELINES, SAWING PAVEMENT, CONC. CURB & GUTTER, SLOPE WALL, PAVEMENT MARKINGS, FENCING, FOOTINGS, POLES, OVERHEAD AND CANTILEVER SIGN STRUCTURES, GROUND MOUNTED SIGN STRUCTURES AND SHEET METAL SIGNS TO BE PERMANENTLY REMOVED AND ANY OTHER NON-ORGANIC ITEM NOT SPECIFICALLY LISTED AS A REMOVAL PAY ITEM. ITEMS TO BE REMOVED SHOULD BE FIELD VERIFIED AS TO THE EXISTING CONDITION AND POSSIBLE NON-STANDARD REMOVAL OPERATIONS THAT MAY BE REQUIRED.
- (5) INCLUDES Q TYPE 'A', 48 TYPE 'B' AND Q TYPE 'C' FRAMES AND GRATES (SEE STD. SSIF-3)
- (6) PRICE BID SHALL INCLUDE THE COST OF ANY ADDITIONAL DEPTH AS SHOWN ON THE SUMMARY OF DRAINAGE STRUCTURES.
- (7) STABILIZED SUBGRADE WILL BE PAID FOR BY THE SQUARE YARD WITH THE COST TO INCLUDE THE CHEMICAL ADDITIVE AT THE RATE SPECIFIED FOR THE APPROPRIATE SOIL CLASSIFICATION AS SPECIFIED IN THE MOST CURRENT ODOT MATERIALS DIVISION OHD L-50. THE SOILS IN THE TOP 24 INCHES OF THE GRADING SECTION SHALL BE RESTRICTED TO A-3, A-2-4, OR A6 SOILS AS CLASSIFIED ACCORDING TO AASHTO M-145. THESE SOILS SHALL BE FURTHER RESTRICTED TO A MAXIMUM PLASTICITY INDEX OF 18.

DESCRIPTION		REVISIONS	DATE
3	ADD/DELETE ITEM		12/14/15
5	ADD ITEM/MOD. DESC.		01/11/16
6	MOD. DESCRIPTION		01/19/16

PAY ITEM NOTES (CONT.)

- (8) IMPACT ATTENUATORS SHALL BE QUADGUARD ELITE, SCI-100 (SMART CUSHION), OR APPROVED EQUAL WITHIN THE SAME CATEGORY. IMPACT ATTENUATORS SHALL MEET ALL NCHRP-350 TL-3 REQUIREMENTS AND OKLAHOMA DEPARTMENT OF TRANSPORTATION IMPACT ATTENUATORS GUIDELINES MATRIX.
- (9) THIS IS AN ESTIMATED QUANTITY, LOCATION, IF AND WHERE REQUIRED, TO BE DETERMINED BY THE ENGINEER.
- (10) REMOVAL OF ACCUMULATED SEDIMENT SHALL BE INCLUDED IN THE PRICE BID FOR THIS ITEM AND WILL NOT BE MEASURED SEPARATELY FOR PAYMENT.
- (11) IF TEMPORARY SILT FENCE, DIKES OR SEDIMENT FILTERS ARE DAMAGED, THE CONTRACTOR SHALL REPAIR OR REPLACE SAID ITEMS AS EXPEDITIOUSLY AS POSSIBLE. THE COST SHALL BE INCURRED BY THE CONTRACTOR.
- (12) THIS IS AN ESTIMATED QUANTITY, ASSUMING TWO MOWINGS. ACTUAL NUMBER AND LOCATION OF MOWING TO BE DETERMINED BY THE ENGINEER. MOWING SHALL INCLUDE LITTER PICKUP BEFORE AND AFTER EACH MOWING AND STRING TRIMMING AROUND SIGNS & STRUCTURES.
- (13) SEPARATOR FABRIC SUITED FOR SUBSURFACE DRAINAGE AND SEPARATOR APPLICATIONS SHALL BE "CONTECH C-70NW" OR COMPARABLE FABRIC MANUFACTURED BY "TENAX", "MIRAFI" OR APPROVED EQUAL.
- (14) INCLUDES 97 CU. YDS. TO CONSTRUCT MEDIAN BARRIER TRANSITIONS AND 65 CU. YDS. TO CONSTRUCT MOMENT SLAB FOR F-SHAPED BARRIER AND 77 CU. YDS. TO CONSTRUCT PIER BARRIER (SEE SHOULDER & MEDIAN BARRIER TRANSITION DETAILS & PIER BARRIER DETAILS.)
- (15) INCLUDES 10350 LBS. TO CONSTRUCT MOMENT SLAB FOR F-SHAPED BARRIER (SEE SHOULDER BARRIER TRANSITION DETAIL)
- (16) PRICE BID FOR CLEARING AND GRUBBING SHALL INCLUDE THE REMOVAL OF TREES, VEGETATIVE DEBRIS, AND ANY OTHER ORGANIC ITEMS NOT SPECIFICALLY PAID FOR AS REMOVAL ITEMS.
- (17) JUNCTION BOX RISERS AND MANHOLES WITHIN PAVED MEDIANS AND SHOULDERS SHALL BE CONSTRUCTED FLUSH AND AT THE SAME CROSS SLOPE AS THE FINISH PAVEMENT. COVERS SHALL BE THE LOCKING TYPE AS APPROVED BY THE ENGINEER.
- (18) INCLUDES 487 LBS. FOR DRAINAGE STRUCTURES AND 8331 LBS. FOR LONGITUDINAL BARRIER, AND 12420 LBS. FOR PIER BARRIER.
- (19) FIELD OFFICE IS TO BE EQUIPPED WITH TWO TELECOMMUNICATION PHONE LINES, BOTH LONG DISTANCE RESTRICTED. ONE LINE SHALL BE FOR AN OPERATIONAL TELEPHONE AND THE OTHER SHALL BE DEDICATED TO THE USE OF A FAX MACHINE AND (SITE MANAGER STAND ALONE USE.) IN ADDITION, THE FIELD OFFICE IS TO BE EQUIPPED WITH A WIRELESS INTERNET CONNECTION AND THE CONTRACTOR IS TO PROVIDE THE PROJECT INSPECTOR A CURRENT YEAR MODEL CELLULAR PHONE. ALL COST ASSOCIATED WITH THESE ITEMS INCLUDING MONTHLY CHARGES AND ANY ADDITIONAL FEES OR TELECOMMUNICATIONS RELATED CONTRACT EXPENSES SHALL BE INCLUDED IN THE PRICE BID FOR FIELD OFFICE.
- (20) THIS IS AN ESTIMATED QUANTITY TO BE USED AS DIRECTED BY THE ENGINEER. THIS PAY ITEM IS FOR VIDEO INSPECTION OF DRAINAGE CONDUITS AS DIRECTED BY THE ENGINEER. CONTRACTOR SHALL USE A VIDEO SOURCE WITH ADEQUATE LIGHTING TO ENSURE PIPE HAS BEEN CLEANED AND IS UNDAMAGED. THIS VIDEO INSPECTION SHALL INCLUDE EITHER AUDIO OR TEXT INFORMATION ON SCREEN TO DEFINE STRUCTURE LOCATIONS. FORMAT TO BE APPROVED BY THE ENGINEER.
- (21) THIS PAY ITEM IS FOR THE RODDING AND CLEANING OUT OF EXISTING DRAINAGE CONDUITS. METHOD IS TO BE APPROVED BY THE ENGINEER. ALL DEBRIS, SEDIMENT, AND OBSTRUCTIONS SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
- (22) MECHANICAL STABILIZED EARTH (M.S.E.) WALLS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF OKLAHOMA. DESIGN CALCULATIONS AND DRAWINGS SHALL BE SUBMITTED TO ODOT BRIDGE DIVISION FOR APPROVAL PRIOR TO CONSTRUCTION. SEE M.S.E. WALL PLAN AND ELEVATION SHEETS FOR LOCATIONS AND LIMITS, INCLUDING LIMITS OF FORMLINER. SEE SECTION 510.04(E), SECTION 2 OF THE 2009 STANDARD SPECIFICATIONS. ALL COSTS ASSOCIATED IN THE DESIGN AND CONSTRUCTION, AND ANY INCIDENTAL ITEMS FOR M.S.E. WALLS SHALL BE INCLUDED IN THIS PAY ITEM.
- (23) PAYMENT FOR THIS ITEM WILL BE BASED ON PLAN QUANTITY. SEE THE 2009 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION - "PLAN QUANTITIES". SECTION 109.01B.

Design			SUMMARY OF PAY QUANTITIES (ROADWAY)
Drawn			
Checked			
Approved	JWE		
Squad	POE		
State Job No. 09032(20) Sheet No. 30			

PAY ITEM NOTES (CONT.)

- (24) QUANTITY INCLUDES 142 C.Y. TO BE USED FOR THE CONSTRUCTION OF PAVED DITCHES AS SHOWN ON THE SUMMARY OF PAVED DITCHES.
- (25) PRICE BID TO INCLUDE ALL COST OF CONSTRUCTING SPECIAL INLET DRAIN, BUT NOT LIMITED TO EXCAVATION, BACKFILL, CONCRETE, REINFORCING STEEL, STRUCTURAL STEEL, GRATES, FRAMES, LABOR AND INCIDENTALS. (SEE SPECIAL INLET DETAIL)
- (26) ANY WASTE EXCAVATION OR OTHER MATERIAL EXISTING ABOVE THE NATURAL GROUND LINE WILL BE REMOVED AS PART OF THE CLEARING AND GRUBBING ITEM AND WILL NOT BE PAID FOR AS UNCLASSIFIED EXCAVATION.
- (27) QUANTITY INCLUDE 100 TONS TO BE USED IF AND AS DIRECTED BY THE ENGINEER.
- (28) 5 TEMPORARY EARTH RETAINAGE (SHEETING AND SHORING) SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF OKLAHOMA. DESIGN CALCULATIONS AND DRAWINGS SHALL BE SUBMITTED TO ODOT BRIDGE DIVISION FOR APPROVAL, PRIOR TO CONSTRUCTION. THE LIMITS OF THE SHEETING AND SHORING ARE TO BE DETERMINED BY THE CONTRACTOR. SEE SECTION 502.04.D OF THE 2009 STANDARD SPECIFICATIONS.
- (29) QUANTITY TO BE USED AT SHIELDS BLVD. PIER BARRIER. (SEE PIER BARRIER DETAILS)
- (30) TO BE CONSTRUCTED ON TOP OF MSE WALLS AND SOIL NAIL WALLS AS SOLID TR4 RAIL.
- (31) QUANTITY INCLUDES 466 L.F. TO BE USED AT SHOULDER BARRIER TRANSITION. (SEE SHOULDER BARRIER TRANSITION DETAILS)
- (32) PRICE BID TO INCLUDE COST OF CONSTRUCTING SOIL NAIL WALLS. REFER TO SOIL NAIL WALL PLAN SHEETS AND SPECIAL PROVISIONS 510-1 AND 510-2.
- (33) 6 ALL COST OF CONCRETE WALL TREATMENT INCLUDING FINISHING, FORM LINERS, LABOR, MATERIALS, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SPECIFIED SHALL BE INCLUDED IN THE PRICE BID FOR SQUARE YARDS OF WALL. SEE SPECIAL PROVISION "AESTHETIC TREATMENTS".

3 ENVIRONMENTAL NOTES

LATITUDE/LONGITUDE	OCC FACILITY NO./OCC CASE NO.	FACILITY
35.3916, -97.5068	55-08554/064-0831	SHIELDS CONOCO
35.3915, -97.5070	55-08224/064-1702	MOSLEY'S TEXACO

PETROLEUM CONTAMINATION MAY EXIST AT OR NEAR THE REFERENCED LEADING UNDERGROUND STORAGE TANK (LUST) SITES. BASED ON THE AVAILABLE INFORMATION, CONTAMINATION IS NOT EXPECTED TO AFFECT CONSTRUCTION ACTIVITIES, BUT IS STILL POSSIBLE. IN THE EVENT CONTAMINATED SOIL OR GROUNDWATER IS ENCOUNTERED, THE CONTRACTOR SHALL ADHERE TO ODOT'S HAZARDOUS MATERIALS SPECIFICATION 107.15 AND NOTIFY THE RESIDENT ENGINEER, WHO MAY THEN CONTACT THE ENVIRONMENTAL PROGRAMS DIVISION AT (405)521-3026 FOR ASSISTANCE.

SWALLOW NOTE

CLIFF SWALLOWS AND BARN SWALLOWS ARE SMALL COLONIAL NESTING BIRDS PROTECTED BY THE FEDERAL MIGRATORY BIRD TREATY ACT. THESE SPECIES COMMONLY USE BRIDGES AND CULVERTS FOR NESTING. THE NESTING SEASON FOR THE SWALLOWS RUNS FROM APRIL 1 TO AUGUST 31. SWALLOW USE CULVERTS AT CL I-240 STA. 406+18.83 & STA. 419+85 HAS BEEN OBSERVED DURING THE INITIAL SURVEYS CONDUCTED AS PART OF THE BIOLOGICAL STUDIES IN 2012. SWALLOW USE OF BRIDGE NBI NO. 20559 AND CULVERTS AT CL I-35 STA. 76+00 & LAT 35.390796 LON -97.496302 (UNDER EXISTING EB I-240 TO SB I-35 RAMP) WAS NOT OBSERVED DURING THE INITIAL SURVEYS. SWALLOWS MAY OCCUPY THE BRIDGE IN THE FUTURE NESTING SEASONS. ANY ACTIVITIES WHICH WOULD DESTROY ACTIVE NESTS OR HARM EGGS OR BIRDS WOULD VIOLATE THE MIGRATORY BIRD TREATY ACT. THE RESIDENT ENGINEER WILL EVALUATE THE CONTRACTOR'S PROPOSED WORK METHODS AND CONCLUDE WHETHER THE PROPOSED WORK WOULD HARM THE NESTING BIRDS BEFORE WORK NEAR THE STRUCTURE IS AUTHORIZED. IF THE PROPOSED WORK WILL HARM THE NESTING BIRDS, THE BRIDGE MAY NETTED PRIOR TO APRIL 1 OR THE WORK DELAYED UNTIL THE NESTING SEASON IS COMPLETE. METHODS OTHER THAN NETTING MUST BE PRE-APPROVED BY THE ODOT BIOLOGIST.

GENERAL CONSTRUCTION NOTES (ROADWAY)

THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING THE EXISTING ROAD TO LOCAL AND THROUGH TRAFFIC. SEE STANDARD SPECIFICATIONS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.

MAINTENANCE OF THROUGH TRAFFIC INCLUDES THE MAINTENANCE OF THE EXISTING ROAD IN CLOSE PROXIMITY TO THE NEW CONSTRUCTION AS SHOWN ON THE PLANS.

FOR PROJECTS THAT INCLUDE WIDENING AND/OR RESURFACING, THE CONTRACTOR SHALL SCHEDULE OPERATIONS TO MINIMIZE POTENTIAL DROP-OFF HAZARDS AND SHALL SUBMIT A SEQUENCE OF CONSTRUCTION OPERATIONS TO THE RESIDENT ENGINEER FOR APPROVAL BEFORE OPERATIONS BEGIN. ANY PORTION OF THE CONSTRUCTION OPERATIONS, SUCH AS SUPERPAVE LAYING OPERATIONS, EXVABATION FOR PAVEMENT WIDENING, OR EXTENSION OF ROADWAY STRUCTURES, SHALL BE LIMITED TO ONE SIDE AT A TIME, AND THE PROCEDURES OUTLINED IN THE PAVEMENT DROP-OFF TREATMENT STANDARD PDT-1 (LATEST REVISION) SHALL BE IMPLEMENTED. ONLY THAT AMOUNT OF OPEN TRENCH WILL BE ALLOWED THAT CAN BE SURFACED IN 1 (ONE) DAY'S TIME WITHOUT APPROVAL BY THE ENGINEER. LIGHTS, SIGNS AND BARRICADES SHALL BE MOVED AS WORK PROGRESSES.

THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY RIGHT-OF-WAY FENCE AS REQUIRED. WHEN THE PORTION OF THE PROJECT THAT REQUIRED THIS FENCE IS COMPLETED, THE TEMPORARY FENCE SHALL BE REMOVED, AND PERMANENT RIGHT-OF-WAY FENCING SHALL BE RESTORED OR INSTALLED IN A MANNER APPROVED BY THE ENGINEER. ALL COST OF TEMPORARY FENCING SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

ALL FLOWLINES THAT ARE TO BE FILLED SHALL BE THOROUGHLY TAMPED BEFORE CONSTRUCTION OR EXTENSION OF DRAINAGE STRUCTURES. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

IN ORDER TO ALLEVIATE DUST CONDITIONS DURING GRADING OPERATIONS AND BEFORE PAVEMENT WORK IS COMPLETED, THE CONTRACTOR SHALL SPRINKLE GRADING AT INTERVALS APPROVED BY THE ENGINEER. COST OF SPRINKLING TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS OF WORK.

THE CONTRACTOR SHALL NOT WASTE ANY EXCESS EXCAVATION UNTIL ALL PLANNED EMBANKMENTS AND BACKFILLS ARE COMPLETED. EXCESS UNCLASSIFIED EXCAVATION MATERIAL DETERMINED BY THE ENGINEER TO BE SUITABLE FOR BACKFILL SHALL BE USED TO REDUCE ANY UNCLASSIFIED BORROW NEEDED. COST OF SECOND HANDLING SHALL BE INCLUDED IN OTHER ITEMS OF WORK. ANY REMAINING EXCESS EXCAVATION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

PRIME COAT SHALL BE APPLIED TO THE SUBGRADE IMMEDIATELY AFTER FINAL COMPACTION AND SHAPING TO RETAIN MOISTURE FOR PROPER CHEMICAL REACTION OF THE SOIL ADDITIVE.

THE CONTRACTOR SHALL KEEP THE OPEN TRENCH DRAINED. COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

VEGETATIVE MULCHING: THE VEGETATIVE MULCH SHALL BE ANCHORED IN ACCORDANCE WITH THE "MULCHING-TILLER METHOD". AS SPECIFIED IN 233.04B(I) OF THE STANDARD SPECIFICATIONS.

AREAS ON WHICH SALVAGED TOPSOIL IS TO BE REPLACED SHALL HAVE 18-46-0 FERTILIZER APPLIED, AT THE RATE OF 150 POUNDS PER ACRE, JUST PRIOR TO THE REPLACEMENT OF SALVAGED TOPSOIL.

AT THE BEGINNING OF TURFING OPERATIONS, ANY AREAS INCLUDED IN PLANNED QUANTITIES THAT HAVE GROWN A SATISFACTORY VOLUNTEER TURF OF PERENNIAL GRASS, AS DETERMINED BY THE ENGINEER, SHALL BE FERTILIZED AND WATERED AS CALLED FOR ON THE PLANS, BUT SHALL NOT BE SEEDED, SODDED, OR SPRIGGED.

PIPE UNDERDRAIN QUANTITIES ESTIMATED ONLY. LOCATION, IF AND WHERE REQUIRED, TO BE DETERMINED BY THE ENGINEER.

T.B.S.C. SURFACES SHALL BE SPRINKLED WITH WATER AND ROLLED WITH A PNEUMATIC ROLLER IN A MANNER APPROVED BY THE ENGINEER.

THE ENGINEER SHALL CHECK GRADES AT RAMP TERMINALS AND MAKE ANY ADJUSTMENTS OF THE GRADES AND SUPERELEVATION WHICH ARE REQUIRED TO OBTAIN SMOOTH PROFILES FOR BOTH EDGES OF THE RAMP PAVEMENT CROSS SLOPE BREAKOVER SHALL NOT EXCEED 5% (FIVE PERCENT).

ONLY THE SILICONE SEALANT OPTIONS, FROM STANDARD LECS-4, WILL BE ALLOWED ON THIS PROJECT.

PRIOR TO FINAL ACCEPTANCE, ALL EXPOSED CURB CONCRETE SURFACES SHALL BE CLEANED OF ALL DISCOLORATION SUCH AS ASPHALT STAIN, TIRE MARKS, OR OTHER DISFIGUREMENT.

IN ACCORDANCE WITH THE OKLAHOMA UNDERGROUND FACILITIES DAMAGE PREVENTION ACT THE CONTRACTOR SHALL NOTIFY THE OKLAHOMA ONE-CALL SYSTEM, INC. 48 HOURS PRIOR TO BEGINNING EXCAVATION. OKLAHOMA ONE-CALL SYSTEM, INC. "CALL OKIE" 1-800-522-6543 OR 811.

CONSTRUCTION NOTES

ALL WORK AND/OR MATERIALS NOT CLASSIFIED AS A "CONTRACT PAY ITEM" SHALL BE CONSIDERED INCIDENTAL AND THE COST THEREOF SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS WHICH ARE CLASSIFIED FOR PAYMENT.

(CAUTION) THE LOCATION OF ALL UTILITIES AS SHOWN ARE APPROXIMATE. DUE TO RELOCATIONS PLANNED OR PRESENTLY UNDER CONSTRUCTION THERE ARE SOME UTILITIES THAT WILL BE RELOCATED AND NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ALL UTILITIES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE HE MAY INFLICT TO THE EXISTING UNDERGROUND UTILITIES WITHIN THE PROJECT AREA AS A RESULT OF HIS DIGGING, TRENCHING, BORING, ETC.. PRIOR TO DIGGING NEAR THE UTILITIES, THE CONTRACTOR SHALL CALL FOR A LIST OF ALL UNDER GROUND FACILITIES REGISTERED IN THE AREA OF CONSTRUCTION LISTED WITH THE FOLLOWING AGENCIES:
THE "OKIE" NOTIFICATION CENTER (405) 840-5021 OR 1-800-522-6543.

THE OWNERS OF UTILITIES LOCATED WITHIN THE LIMITS OF THIS PROJECT ARE:

OG&E 321 N. HARVEY OKLA. CITY, OK 73102 (405)272-1010	ODOT 200 N.E. 21ST STREET OKLA. CITY, OK 73105 (405)521-2661	THE CITY OF OKLAHOMA CITY 420 W. MAIN ST., SUITE 500 OKLA. CITY, OK 73102 (405)297-3548
ONG 401 N. HARVEY OKLA. CITY, OK 73102 (405)551-4000	AT&T 7001 N.W. 23RD ST. OKLA. CITY, OK 73008 (405)291-3229	

3 5 6	DESCRIPTION	REVISIONS	DATE
	MODIFIED NOTE		12/14/15
	MODIFIED NOTE		01/11/16
	ADDED NOTE		01/19/16

CONSTRUCTION NOTES (CONT.)

DEPTH & LOCATION OF EXISTING UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

ALL EXISTING MANHOLES, VALVES, FIRE HYDRANTS AND METERS, WHICH ARE NOT BEING RELOCATED OR REMOVED, SHALL BE RESET TO PROPOSED CONDITIONS. ALL ITEMS THAT ARE TO BE REMOVED AND/OR RESET SHALL BE HANDLED WITH CARE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OCCURRING DURING THESE OPERATIONS.

IN THE EVENT THE EXISTING SECTION LINE ROADS OR PUBLIC ROAD ARE IN ANY WAY DISTURBED AS A RESULT OF THE CONTRACTORS EFFORTS, IT SHALL BE THE RESPONSIBILITY OF SAID CONTRACTOR TO RETURN THE AREA TO ITS ORIGINAL CONDITION WITH NO ADDITIONAL COMPENSATION AS DIRECTED AND TO THE SATISFACTION OF THE ENGINEER.

A CONTRACTOR'S PROGRESS SCHEDULE SHALL BE PREPARED IN ACCORDANCE WITH SECTION 108.03 OF THE 2009 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

THE CONTRACTOR IS RESPONSIBLE FOR THE PROMPT REPLACEMENT AND/OR REPAIR OF ALL TRAFFIC CONTROL DEVICES AND APPURTENANCES DAMAGED OR DISTURBED DUE TO CONSTRUCTION.

A WORK ZONE PERMIT MUST BE OBTAINED FROM THE TRAFFIC MANAGEMENT DIVISION AT LEAST TWO (2) WORKING DAYS PRIOR TO THE START OF WORK AND/OR PLACING OR REMOVING ANY BARRICADES OR MODIFYING EXISTING TRAFFIC CONTROL DEVICES. CALL (405) 297-2531 TO OBTAIN AN APPLICATION.

THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL PAVEMENT MARKINGS THAT WILL BE IN CONFLICT WITH THE PROPOSED WORK.

AT ANY JOINTS IN A CONCRETE STRUCTURE, THE CENTER OF THE FIRST REINFORCING BAR PARALLEL TO THAT JOINT SHALL BE A MAXIMUM OF TWO INCHES FROM THE EDGE OF THE CONCRETE.

REMOVED MATERIAL TO BECOME THE PROPERTY OF THE CONTRACTOR AND IT SHALL BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

ALL BROKEN CONCRETE INCLUDING OLD SIGN FOOTINGS WITH STUBS, WASTE MATERIAL AND DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE LIMITS OF THE PROJECT AND DISPOSED OF IN AN AREA APPROVED BY THE ENGINEER. NO PAYMENT SHALL BE MADE FOR THE DISPOSAL OF THIS MATERIAL.

EXISTING GRADE LINES AND CROSS SLOPES SHALL BE FIELD VERIFIED. MODIFICATIONS TO THE GRADE LINES AND CROSS SLOPES AS SHOWN ON THE PLANS TO OBTAIN POSITIVE DRAINAGE WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

THE USGS 7.5 MINUTES QUADRANGLE SHEETS INDICATE THE "WATERS OF THE UNITED STATES" AND "WETLANDS" EXIST WITHIN THIS PROJECT AREA. THE ISSUE OF "WATERS OF THE UNITED STATES" AND "WETLANDS" FALLS UNDER THE CORP OF ENGINEERS (COE) TULSA DISTRICT REGULATORY DIVISION, BUT THE CITY IS OBLIGATED TO INSURE THAT ALL NECESSARY STATE AND FEDERAL PERMITS HAVE BEEN OBTAINED, PURSUIT TO 44 CFR 60.3. THEREFORE, THE APPLICANT IS REQUIRED TO SUBMIT DOCUMENTATION FROM THE COE SHOWING COE APPROVAL FOR THE PROPOSED WORK.

CONSTRUCTION ACTIVITIES THAT RESULT IN LAND DISTURBANCE OF EQUAL TO OR GREATER THAN ONE (1) ACRE, OR LESS THAN ONE (1) ACRE IF THEY ARE PART OF A LARGER COMMON PLAN OF DEVELOPMENT OR SALE THAT TOTALS AT LEAST ONE (1) ACRE MUST OBTAIN A PERMIT FROM ODEQ (FORM 605-002A) FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES.

A COPY OF THE EROSION CONTROL SITE PLAN MUST BE ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE INSPECTOR UPON REQUEST.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ALL EROSION CONTROL DEVICES DAMAGED DUE TO CONSTRUCTION.

ANY AREA WITHIN THE PROJECT LIMITS DISTURBED BY THE CONTRACTORS CONSTRUCTION ACTIVITIES NOT SPECIFICALLY SHOWN ON THE PLANS I.e. (STAGING AREAS, STORAGE AREAS, HAUL ROADS, ETC.) SHALL BE RESTORED TO ORIGINAL CONDITION AS DIRECTED BY THE ENGINEER. ALL COST TO BE INCLUDED IN OTHER ITEMS.

UNLESS OTHERWISE NOTED ON THE PLANS, HORIZONTAL LOCATIONS OF EX. UTILITIES ARE APPROXIMATE & VERTICAL LOCATIONS OF EX. UTILITIES ARE UNKNOWN.

Design			GENERAL CONST. NOTES (ROADWAY)
Drawn			
Checked			
Approved			
Squad	POE		
State Job No. 09032(20) Sheet No. 31			

DESCRIPTION	REVISIONS	
	DATE	

M.S.E. NOTES

TYPICAL FORM LINER AND CONCRETE FINISH NOTES:

THE EXPOSED CONCRETE SURFACES OF THE RETAINING WALL SYSTEM SHALL HAVE THE FORM LINER SURFACE TREATMENT THAT HAS BEEN PRE-APPROVED BY THE ENGINEER FOR THE AESTHETIC THEME OF THE PROJECT.

THE CONTRACTOR SHALL SUBMIT THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND PRODUCT DATA FOR THE TEXTURE SURFACE TREATMENTS. SHOP DRAWINGS SHALL INDICATE FORM LINER LAYOUT, RUSTICATION, REVEAL, AND CHAMFER STRIPS. LOCATION OF JOINTS AND FORM TIES SHALL BE INCLUDED. THE CONTRACTOR SHALL PROVIDE THE ENGINEER, FOR HIS APPROVAL, A SAMPLE PANEL OF THE APPROVED FORM LINER SURFACE TREATMENTS. THE SAMPLE PANEL SHALL BE AN 2' x 2' PANEL WITH SURFACE TREATMENTS. FOLLOWING THE APPROVAL OF THE SMALL SAMPLE PANEL.

THE CONTRACTOR SHALL PROVIDE ONE FULL SCALE MOCK-UP PANEL OF THE SURFACE TREATMENT USING PROPOSED MATERIALS, METHODS AND WORKMANSHIP. THE PANELS SHALL BE APPROVED BY THE ENGINEER ON THE SITE. THE MOCK-UP PANELS SHALL BE A MINIMUM OF 50 SQUARE FEET IN SIZE, AND MAY BE INCORPORATED INTO THE ACTUAL WALLS.

THE MOCK-UP PANEL SHALL INCORPORATE THE PROPOSED CONCRETE MIX, FORM WORK, TIES, FORM LINER, FORM RELEASE AGENTS, PLACEMENT RATE, FORM PRESSURES, JOINT SEALER, VIBRATING, AND FORM STRIPPING PRACTICES.

THE MOCK-UPS SHALL BE ACCEPTED BY THE ENGINEER PRIOR TO BEGINNING FORM WORK FOR THE PROJECT. THE ACCEPTED MOCK-UPS WILL BE THE STANDARD FOR TECHNICAL AND AESTHETIC MERIT.

FORM WORK SHALL BE DESIGNED BY THE CONTRACTOR TO COMPLY WITH ALL REQUIREMENTS BY THE FORM LINER MANUFACTURER. THIS INCLUDES, ALL REQUIREMENTS OF THE FORM LINER MANUFACTURER FOR HANDLING AND INSTALLATION OF THE FORM LINERS AS WELL AS THE APPLICATION OF RELEASE AGENTS, PLACEMENT OF CONCRETE, VIBRATING OF CONCRETE, AND REMOVAL OF FORMS SHALL BE FOLLOWED. FORM LINER BUTT JOINT SHALL BE CAREFULLY LINED UP TO PROVIDE A SURFACE FREE FROM VISIBLE SEAM LINES.

GENERAL NOTES FOR M.S.E. WALLS:

MATERIALS, DESIGN, AND METHODS USED IN CONSTRUCTION OF RETAINING WALLS SHALL BE IN ACCORDANCE WITH 2009 OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, UNLESS OTHERWISE NOTED.

THE REINFORCED ZONE MATERIALS SHALL EXTEND HORIZONTALLY FROM THE BACK OF THE PANELS TO THE END OF THE EARTH REINFORCEMENTS. THE REINFORCED ZONE MATERIAL SHALL EXTEND VERTICALLY FROM THE TOP OF THE LEVELING PAD TO THE PROPOSED GROUND LINE.

MINIMUM EARTH OR PAVEMENT COVER OF 2.0' SHALL BE PROVIDED FROM THE TOP OF THE LEVELING PAD FINISHED GRADE.

STANDARD PRECAST CONCRETE PANELS SHALL HAVE A MAXIMUM PANEL HEIGHT OF SIX (6') FEET AND A MINIMUM PANEL HEIGHT OF FOUR (4') FEET.

AN OPEN JOINT SHALL BE PROVIDED AROUND THE PERIMETER OF THE CONCRETE PANELS. THEN NOMINAL JOINT OPENING SHALL BE BETWEEN 3/8" AND 3/4". THE JOINT CONFIGURATION SHALL BE SUCH THAT THE FILTER FABRIC OR PAD MATERIALS ARE NOT EXPOSED AT THE WALL FACE.

PANELS SHALL FOLLOW THE CURVATURE OF THE WALL AS SHOWN IN THE PLANS. A ONE PIECE CORNER PANEL SHALL BE PROVIDED FOR WALL ANGLE CHANGES OF GREATER THAN 30 DEGREES. BUTTING OF CHAMFERED PANELS WILL BE ALLOWED FOR ANGLE CHANGES OF 30 DEGREES OR LESS.

A CONCRETE COPING SHALL BE PROVIDED ALONG THE TOP OF WALLS. THE JOINTS BETWEEN ALL COPING SEGMENTS SHALL BE SEALED TO PREVENT INFILTRATION OF WATER INTO THE RETAINING WALL BACKFILL. SEALING SHALL BE IN ACCORDANCE WITH SECTION 504 OF THE STANDARD SPECIFICATIONS. ALL COST FOR SEALING COPING SEGMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQ. YARD OF "PLJ M.S.E. RETAINING WALLS". IF CAST-IN-PLACE COPING IS USED, THEN JOINTS SHALL BE PLACED TO COINCIDE WITH PRECAST PANEL JOINTS. THE WALL FACE PANELS SHALL EXTEND UP INTO THE COPING A MINIMUM OF 2 INCHES.

IF COPING IS PRECAST, A SMOOTH LEVEL-UP STRIP SHALL BE PROVIDED ON TOP OF THE PRECAST PANELS PRIOR TO INSTALLATION OF THE COPING. SHIMS MAY BE USED ON TOP OF THE LEVEL-UP STRIP TO FACILITATE ALIGNMENT.

IF EXISTING OR FUTURE STRUCTURES, PIPES, FOUNDATIONS OR GUARDRAIL POSTS WHICH ARE WITHIN REINFORCED SOIL VOLUME INTERFERE WITH THE NORMAL PLACEMENT OF REINFORCING MESH AND SPECIFIC DIRECTION HAS NOT BEEN PROVIDED ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO DETERMINE WHAT SOURCE OF ACTION SHOULD BE TAKEN.

DESIGN NOTES:

MECHANICALLY STABILIZED EARTH (M.S.E.) WALLS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF OKLAHOMA IN ACCORDANCE WITH THE CURRENT EDITION OF THE AASHTO LRFD DESIGN SPECIFICATIONS AND CURRENT INTERIMS. DESIGN CALCULATIONS AND DRAWINGS SHALL BE SUBMITTED TO ODOT BRIDGE DIVISION FOR APPROVAL PRIOR TO CONSTRUCTION.

THERE SHALL BE NO SURCHARGE WITHIN 25 FEET OF THE CREST OF THE TEMPORARY EXCAVATION SLOPE DURING CONSTRUCTION OF THE RETAINING WALLS.

WHERE RECOMMENDED TEMPORARY EXCAVATION SLOPES WOULD RESULT IN RIGHT-OF-WAY ENCROACHMENT, OR FOR THE PURPOSES OF SOIL STABILITY DURING EXCAVATION, TEMPORARY SHEET PILING SHALL BE REQUIRED. AT THE CONTRACTOR'S OPTION AND WITH APPROVAL OF THE ENGINEER, THE TEMPORARY SHEET PILING MAY BE CUT A MINIMUM OF 2' BELOW THE GROUND LINE AND LEFT IN PLACE.

CARE SHALL BE TAKEN IN THE DESIGN AND DURING CONSTRUCTION TO DEVELOP AND MAINTAIN RAPID, POSITIVE DRAINAGE AWAY FROM THE RETAINING WALL AREA. WATER SHOULD NOT BE ALLOWED TO POND ADJACENT TO EITHER THE UP SLOPE OR DOWN SLOPE SIDES OF THE RETAINING WALL. PROPER SURFACE DRAINAGE IS NEEDED TO PREVENT WATER FROM FLOWING OVER THE FACE OF THE WALL AND SATURATING EITHER THE FILL BEHIND THE WALL OR THE SUBGRADE SOILS AT THE BASE OF THE WALL.

CONVENTIONAL DE-WATERING METHODS SHOULD BE ADEQUATE FOR TEMPORARY REMOVAL OF ANY GROUNDWATER ENCOUNTERED DURING THE SHALLOW EXCAVATION PROCESS. MORE EXTENSIVE DE-WATERING MAY BE REQUIRED FOR EXCAVATIONS TO REMOVE SOFT SOILS AND/OR IF CONSTRUCTION OCCURS DURING WET PERIODS OF THE YEAR.

DESIGN PARAMETERS FOR M.S.E. RETAINING WALLS:

DESIGN OF THE M.S.E. RETAINING WALLS BACKFILL SHALL BE BASED ON THE FOLLOWING DESIGN PARAMETERS:

MINIMUM UNIT WEIGHT = 120 PCF
MAXIMUM FRICTION ANGLE = 34°
COHESION = 0 PSF

FOR ANALYSIS OF ULTIMATE AND ALLOWABLE BEARING CAPACITY, IF THE WATER IS LOCATED AT OR ABOVE THE LEVELING PAD, A BUOYANT UNIT WEIGHT OF 65 POUNDS PER CUBIC FOOT SHALL BE USED. SEE GEOTECHNICAL REPORTS FOR GROUND WATER ELEVATIONS.

IN ALL AREAS, IT IS RECOMMENDED THE CONTRACTOR REVIEW THE GEOTECHNICAL REPORT AND STABILITY RESULTS IN THE REPORT THAT IS AVAILABLE FOR THE CONTRACTOR'S USE. GLOBAL STABILITY EVALUATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. GEOTECHNICAL TESTING WAS COMPLETED IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE OF OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR GEOTECHNICAL INVESTIGATION OF BRIDGES AND RELATED STRUCTURES.

PREPARATION OF THE FOUNDATION MATERIAL FOR THE M.S.E. WALLS, WHETHER IN-SITU MATERIAL OR NEW EMBANKMENT MATERIAL, SHALL BE COMPACTED TO NOT LESS THAN 95% OF THE STANDARD DENSITY.

WHERE NEW EMBANKMENT IS NECESSARY, IT SHALL BE PLACED AND COMPACTED IN 6" LIFTS OF LOOSE MATERIALS TO NOT LESS THAN 95% OF THE STANDARD PROCTOR DENSITY. ALL DENSITY TESTS SHALL BE TESTED IN ACCORDANCE TO SECTION 106.03 OF THE 2009 ODOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN OF THE M.S.E. WALLS FOR:

- INTERNAL STABILITY INCLUDING: TENSILE STRESSES, PULLOUT, FACING CONNECTION, SLIDING ALONG REINFORCEMENT, AND COMPOUND SLOPE STABILITY.
- LOCAL STABILITY INCLUDING: BULGING AND MAXIMUM UNREINFORCED HEIGHTS.
- DESIGN THE M.S.E. WALLS TO ACCOUNT FOR DEAD AND LIVE LOADS, SEISMIC LOADS, HORIZONTAL LOADS FROM GUARDRAILS OR BARRIERS, HYDROSTATIC LOADS, AND OTHER LOADS AS APPROPRIATE.
- DESIGN THE M.S.E. WALL SUCH THAT THE TOE IS AT A DEPTH THAT NO SCOURING OR UNDERMINING WILL OCCUR.
- DESIGN OF M.S.E. WALL STRAPS OR TIE-BACKS SHALL BE LOCATED BELOW THE PROPOSED F-SHAPED PARAPET AND MOMENT SLABS TO PREVENT CONFLICT. SEE M.S.E. WALL TYPICAL SECTIONS AND DETAILS.
- GLOBAL STABILITY EVALUATION.

FOR FURTHER DESIGN INFORMATION NOT PROVIDED IN THE PLANS OR GEOTECHNICAL REPORT, REFER TO THE 2009 OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

PAYMENT:

THE PAYMENT FOR M.S.E. RETAINING WALL SHALL BE BASED ON THE SURFACE AREA SHOWN ON THE PLAN AND PROFILE SHEETS FROM THE TOP OF THE RETAINING WALLS TO TOP OF LEVELING PAD NOT TO EXCEED 2 FEET BE LOW FINISH GRADE AT FACE OF WALL. NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR VARYING OF THE LEVELING PAD ELEVATION. THE ACTUAL TOPS OF LEVELING PADS SHALL BE DETERMINED BY THE CONTRACTOR TO PROVIDE SUPPORT FOR THE PROPOSED WALL SYSTEM AND SUBMITTED TO THE ENGINEER FOR APPROVAL.

ALL COST INCURRED DURING CONSTRUCTION OF THE M.S.E. RETAINING WALLS SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD OF "M.S.E. RETAINING WALL". THE COST SHALL INCLUDE BUT NOT LIMITED TO: EXCAVATION, BACKFILL, BACKFILL MATERIAL, DRAINAGE SYSTEMS, GEOCOMPOSITES, FILTER FABRICS, PERFORATED AND NON-PERFORATED PIPE, CONCRETE, REINFORCING STEEL, SHEETING AND SHORING, DRIVING SHOES, COPING, EARTH REINFORCEMENT, CONCRETE PANELS, CONCRETE SURFACE FORM LINERS, FINISH, LEVELING PADS, CONCRETE MOW STRIPS, AND ENGINEERING AND ASSOCIATED COSTS.

OKLAHOMA COUNTY

Design		
Drawn		
Checked		
Approved		
Squad	POE	

M.S.E. RETAINING WALL NOTES

State Job No. 09032(20) Sheet No. 32

GENERAL CONSTRUCTION NOTES

THE STRUCTURAL DESIGN OF ALL POLES, MAST ARMS, HIGH-MAST POLES, AND OTHER SUPPORTS FOR SIGNS, LUMINAIRES, AND SIGNALS, AS WELL AS THEIR CONNECTIONS, SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS." THE MANUFACTURER SHALL ENSURE THE FOLLOWING ARE APPLIED TO THE DESIGN:

THE MINIMUM DESIGN WIND SPEED AND DESIGN LIFE AS REQUIRED IN THE AASHTO SPECIFICATIONS;

THE CALCULATED STRESSES AND FORCES FROM THE DESIGN LOADINGS DO NOT EXCEED THOSE REQUIRED IN THE AASHTO SPECIFICATIONS;

A CATEGORY I FATIGUE IMPORTANCE FACTOR FOR ALL STRUCTURES; NO VIBRATORY MITIGATION SHALL BE ALLOWED; TRUCK-INDUCED GUSTS SHALL BE APPLIED TO ALL OVERHEAD TRAFFIC SIGNAL SUPPORTS;

ALL MEMBERS ARE AT LEAST THE MINIMUM THICKNESS AS REQUIRED IN THE AASHTO SPECIFICATIONS;

LUMINAIRE MAST ARMS SHALL BE DESIGNED TO SUPPORT AT LEAST A 50 LB. (22.7 KG) LUMINAIRE WITH AN EFFECTIVE PROJECTED AREA OF 2.5 SF (0.23 SM);

THE ANCHOR BOLT DESIGN AND AMOUNT OF ANCHOR BOLTS TO BE USED SHALL BE AS REQUIRED IN THE AASHTO SPECIFICATIONS;

SIGNAL MAST ARMS AND POLES SHALL BE DESIGNED FOR SPECIFIC SIGNAL HEAD AND SIGN PLACEMENT;

UNLESS SITE SPECIFIC GEOTECHNICAL DATA IS AVAILABLE, FOUNDATIONS SHALL BE DESIGNED UTILIZING THESE PARAMETERS:
SHEAR STRENGTH OF COHESIVE SOIL (C) OF 500 PSF;
ANGLE OF INTERNAL FRICTION OF 22 DEGREES; AND
EFFECTIVE UNIT WEIGHT OF SOIL OF 120 PCF;

MINIMUM HAND HOLE SIZE OF 3 INCH WIDTH BY 5 INCH HEIGHT.

SYMBOLS AND LEGENDS ARE DIAGRAMMATIC ONLY AND LOCATIONS SHALL BE ADJUSTED FOR EXISTING FIELD CONDITIONS, BUT NO MAJOR ALTERATIONS OR RELOCATIONS WILL BE MADE WITHOUT FIRST CONSULTING WITH THE TRAFFIC ENGINEERING DIVISION AT (405)521-2861.


THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE HE MAY INFLICT TO THE EXISTING UNDERGROUND UTILITIES WITHIN THE PROJECT AREA AS A RESULT OF HIS DIGGING, TRENCHING, BORING, ETC.... PRIOR TO DIGGING NEAR THE UTILITIES, 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 811 OR (405)522-6543 OR WWW.CALLOKIE.COM OR THE LOCAL COUNTY CLERK'S OFFICE.

PAY QUANTITY NOTES

- (1) PAY ITEM IS TO BE USED FOR THE UNDERPASS LIGHTING.
- (2) PAY ITEM IS FOR THE CONDUIT THAT WILL BE PLACED IN THE CONCRETE MEDIAN BARRIER FOR THE LIGHT POLES ON I-240.
- (3) PAY ITEM IS TO BE USED FOR THE UNDERPASS LIGHTING AND ALSO FOR THE 2" CONDUIT THAT BORED THROUGH THE RETAINING WALLS ON THE RAMPS FOR THE ROADWAY LIGHTING AS CALLED FOR IN THE PLANS.
- (4) PAY ITEM IS FOR THE SPECIAL MEDIAN PULL BOXES AS DETAILED IN THE PLANS TO BE INSTALLED ON THIS PROJECT.
- (5) POLYMER CONCRETE PULL BOXES SHALL BE USED.
- (6) PAY ITEM IS FOR THE REMOVAL OF THE EXISTING LIGHT POLES ON ALONG I-240 AND THE FRONTAGE ROADS THAT WILL BE IN CONFLICT WITH THE NEW LIGHTING SYSTEM TO BE INSTALLED ON THIS PROJECT. THE REMOVED POLES SHALL BECOME THE PROPERTY OF THE CITY OF OKLAHOMA CITY AND SHALL BE DELIVERED TO A LOCATION AS SPECIFIED BY THE ENGINEER. ALSO INCLUDED IN THE PRICE BID FOR THIS ITEM SHALL BE THE OBLITERATION AND REMOVAL OF THE EXISTING FOOTINGS BELOW GROUND LEVEL, AS APPROVED BY THE ENGINEER.
- (7) THE POLES TO BE INSTALLED ON THIS PROJECT SHALL BE 38' ROUND GALVANIZED STEEL POLES TO BE INSTALLED ON BREAKAWAY BASES AND 36' OVAL GALVANIZED STEEL POLES TO BE INSTALLED ON MEDIAN BARRIER, IN ACCORDANCE WITH ODOT STANDARD DRAWING HLD3-1-(LATEST REVISION).
- (8) THE FIXTURES TO BE INSTALLED ON THIS PROJECT SHALL BE LED FIXTURES AS DESCRIBED BELOW:
- 35 - LED MONGOOSE FIXTURES MANUFACTURED BY HOLOPHANE MODEL NUMBER MGLED-6-5K-AH-M-L-H-G. THE HORIZONTAL TWIN TENON MOUNTED MAST ARMS ARE 1'-0" LONG.
- 6 - LED WALLPACK IV FIXTURES MANUFACTURED BY HOLOPHANE MODEL NUMBER W4GLED-20C-1000-50K-T3M-480-GYSDP FOR UNDERPASS LIGHTING.
- (9) LUMINAIRE USED ON THIS PROJECT SHALL BE THE HOLOPHANE LED MONGOOSE, OR APPROVED EQUAL. LIGHTING LAYOUT PRESENTED IN THE PLANS IS BASED ON THE PHOTOMETRICS AND LIGHT DISTRIBUTION OF THIS LIGHT FIXTURE. OTHER LIGHT FIXTURES SATISFYING THE SPECIFICATIONS WILL BE CONSIDERED AS LONG AS THE LIGHT DISTRIBUTION MEETS ODOT DESIGN CRITERIA WITH THE SPACING OF THE POLES AS SHOWN IN THE PLANS AND FUTURE MAINTENANCE CAN BE PROVIDED BY THE CITY OF OKLAHOMA CITY THROUGH OKLAHOMA GAS AND ELECTRIC COMPANY.
- (10) LUMINAIRE USED ON THIS PROJECT FOR UNDERPASS LIGHTING SHALL BE THE HOLOPHANE WALLPACK IV LED FIXTURE, OR APPROVED EQUAL. LIGHTING LAYOUT PRESENTED IN THE PLANS IS BASED ON THE PHOTOMETRICS AND LIGHT DISTRIBUTION OF THIS LIGHT FIXTURE. OTHER LIGHT FIXTURES SATISFYING THE SPECIFICATIONS WILL BE CONSIDERED AS LONG AS THE LIGHT DISTRIBUTION MEETS ODOT DESIGN CRITERIA WITH THE SPACING OF THE POLES AS SHOWN IN THE PLANS AND FUTURE MAINTENANCE CAN BE PROVIDED BY THE CITY OF OKLAHOMA CITY THROUGH OKLAHOMA GAS AND ELECTRIC COMPANY.
- (11) THE CONTRACTOR SHALL CONTACT OG&E REGARDING A PLAN TO KEEP THE LIGHT POLES BURNING THAT ARE ADJACENT TO THIS PROJECT ONCE THE CONFLICTING LIGHT POLES ARE REMOVED. OG&E SHOULD DETERMINE THE LOCATIONS OF ADDITIONAL SERVICE POLES AND OTHER WORK THAT NEEDS TO BE DONE TO KEEP THESE LIGHTS BURNING AND THE CONTRACTOR SHALL INCLUDE THE PRICE BID FOR THIS ITEM. THIS PRICE BID FOR THIS ITEM SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO KEEP THE REMAINING LIGHTING CIRCUITS ADJACENT TO THIS PROJECT COMPLETELY OPERATIONAL TO THE SATISFACTION OF THE ENGINEER.
- (TL-35) SEE SERVICE POLE SCHEDULE; FOR ADDITIONAL INFORMATION CONCERNING THE SERVICE POLE, CONTACT THE FOLLOWING PRIOR TO INSTALLATION:
PERSON'S NAME..... STUART CHAI
WITH THE COMPANY/CITY OF..... OKLAHOMA CITY.
COMPANY'S/CITY'S TELEPHONE NO.(405)297-2003.
- (TP-1) PAYMENT FOR THIS ITEM WILL BE BASED ON PLAN QUANTITY. SEE THE 2009 SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

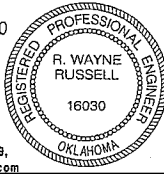
REVISIONS		
NO.	DESCRIPTION	DATE

LIGHTING PAY QUANTITIES				
Phase 1 for I-240 & I-35 Interchange Project in Oklahoma City, OK				
0301 TRAFFIC				
ITEM	DESCRIPTION		UNIT	TOTAL
509(B) 0321	CLASS A CONCRETE	(TP-1)	CY	83.80
802(A) 8300	3/4" GALV. STEEL ELECTRICAL CONDUIT EXPOSED	(TP-1)(1)	LF	190.00
802(A) 8306	1 1/4" GALV. STEEL ELECTRICAL CONDUIT EXPOSED	(TP-1)	LF	80.00
802(B) 8340	2" PVC SCH. 40 PLASTIC CONDUIT BORED	(TP-1)	LF	395.00
802(B) 8342	2" PVC SCH. 40 PLASTIC CONDUIT TRENCHED	(TP-1)	LF	1055.00
802(C) 8557	2" HIGH DENSITY PE PIPE - TRENCHED	(TP-1)(2)	LF	2195.00
802(E) 8372	JUNCTION BOX (8" X 8" X 6")	(3)	EA	4.00
803(A) 8060	PULL BOX	(4)	EA	13.00
803(A) 8065	PULL BOX (SIZE I)	(5)	EA	8.00
804(A) 2915	STRUCTURAL CONCRETE	(TP-1)	CY	5.22
804(B) 2916	REINFORCING STEEL	(TP-1)	LB	6490.60
805(A) 8712	(PL) REMOVAL OF LIGHT POLE	(6)	EA	32.00
806(D) 8995	36' MTG. HT. HL. PTP. (G.STL.)	(7)	EA	13.00
806(D) 8997	38' MTG. HT. HL. PTP. (G.STL.)	(7)	EA	9.00
807 8092	BREAKAWAY BASE (DES. B)		EA	9.00
809(A) 8090	ROADWAY LUMINAIRE	(8,9)	EA	35.00
809(B) 8098	UNDERPASS LUMINAIRE	(8,10)	EA	6.00
810(A) 3118	SERVICE POLE	(TL-35)	EA	1.00
811 8038	1/C NO. 4 ELECTRICAL CONDUCTOR	(TP-1)	LF	10100.00
811 8044	1/C NO. 10 ELECTRICAL CONDUCTOR	(TP-1)(1)	LF	490.00
811 8046	1/C NO. 12 ELECTRICAL CONDUCTOR	(TP-1)	LF	4375.00
890 7700	(PL) TRAFFIC ITEMS	(11)	LSUM	1.00


R. WAYNE RUSSELL, P.E. # 16030
C.A. # 1160, RENEWAL 06-30-17

11-2-15
DATE

Traffic Engineering Consultants, Inc.
6000 S. Western, Suite 300 - Oklahoma City, OK 73139,
Ph: 405-720-7721, Fax: 405-720-9848, Web: www.tecok.com



Design	RWR	11-02-15
Drawn	SB	11-02-15
		

LIGHTING
PAY QUANTITIES & NOTES

\\G:\Project\17-2457 I-240-I-35 Phase I\CAD\PHASE I\QUANT SS.dgn
11-02-15

GENERAL CONSTRUCTION NOTES

SYMBOLS AND LEGENDS ARE DIAGRAMMATIC ONLY AND LOCATIONS SHALL BE ADJUSTED FOR EXISTING FIELD CONDITIONS, BUT NO MAJOR ALTERATIONS OR RELOCATIONS WILL BE MADE WITHOUT FIRST CONSULTING WITH THE TRAFFIC ENGINEERING DIVISION AT (405)521-2861.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE HE MAY INFLICT TO THE EXISTING UNDERGROUND UTILITIES WITHIN THE PROJECT AREA AS A RESULT OF HIS DIGGING, TRENCHING, BORING, ETC.... PRIOR TO DIGGING NEAR THE UTILITIES, 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 811 OR (405)522-6543 OR WWW.CALLOKIE.COM OR THE LOCAL COUNTY CLERK'S OFFICE.

ANY DAMAGE CAUSED BY THE CONTRACTOR TO ANY STRUCTURES, ROADWAY SURFACES, STRIPING, RAISED PAVEMENT MARKERS, GUARDRAIL, SLOPES, AND SIGNS SHALL BE REPAIRED AT CONTRACTORS EXPENSE TO THE SATISFACTION OF THE ENGINEER.

ALL REGULATORY SIGNS SHALL BE HIGH INTENSITY SHEETING. THE HIGH INTENSITY SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956 (LATEST EDITION) FOR TYPE III SHEETING.

ALL WARNING SIGNS SHALL HAVE FLUORESCENT YELLOW SHEETING. THE FLUORESCENT YELLOW SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956 (LATEST EDITION) REQUIREMENTS FOR TYPE VIII SHEETING.

ALL GREEN AND BLUE SIGNS ON CONVENTIONAL HIGHWAYS SHALL HAVE HIGH INTENSITY SHEETING. THE HIGH INTENSITY SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956 (LATEST EDITION) FOR TYPE III SHEETING.

ALL PANEL AND OVERHEAD SIGNS SHALL HAVE TYPE III HIGH INTENSITY BACKGROUND WITH TYPE VIII LEGENDS AND BORDERS. THE TYPE III BACKGROUND AND THE TYPE VIII LEGENDS AND BORDERS SHALL MEET THE REQUIREMENTS OF ASTM D4956 (LATEST EDITION).

THE MANUFACTURER SHALL FURNISH A TYPE "A" CERTIFICATION IN ACCORDANCE WITH ODOT STANDARD SPECIFICATIONS, LATEST EDITION, SUBSECTION 106.04. THE CERTIFICATION SHALL INCLUDE TEST RESULTS ON THE MATERIAL SUBMITTED FOR APPROVAL.

NO SPLICES SHALL BE PERMITTED IN ANY PIPE OR WIDE FLANGE SIGN POSTS.

ALL ANCHOR BOLTS SHALL BE GRADE A-36 STEEL.

THE STATIONS AND LOCATIONS OF THE SIGN PLACEMENT, AS SHOWN ON THE PLAN SHEETS, ARE APPROXIMATE. EXACT STATIONS AND LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR SO THAT THE SIGN IS INSTALLED IN ACCORDANCE WITH DEPARTMENT STANDARDS AND THE MUTCD 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.

POST LENGTHS SHOWN ON SIGN SUMMARY ARE APPROXIMATE, EXACT LENGTH SHALL BE DETERMINED BY FIELD SURVEY BY THE CONTRACTOR.

THE COST OF REPLACEMENT OF MISSING OR DAMAGED EDGE STRIP ON EXISTING SIGNS SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

ALL EXISTING AND NEW BREAKAWAY SIGN POST, PIPE AND WIDE FLANGE BEAMS SHALL HAVE SHEET METAL BOLT RETAINER PLATES AS SPECIFIED IN O.D.O.T. STD. FGS1-1-(LATEST REVISION). REPLACEMENT COST OF MISSING OR DAMAGED BOLT RETAINER PLATES AND ALL ASSOCIATED HARDWARE AND LABOR SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

FOR NEW OR EXISTING GROUND MOUNTED SIGNS MAXIMUM STUB POST PROJECTION ABOVE FOOTING/GROUND LINE SHALL BE 1 3/4" + 1/4" MAXIMUM FOOTING PROJECTION ABOVE GROUND LINE SHALL BE NO MORE THAN 2". SHOULD ADDITIONAL SOIL BE REQUIRED, THE ENGINEER WILL DESIGNATE AN AREA TO OBTAIN ADDITIONAL SOIL. ALL ASSOCIATED COSTS SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

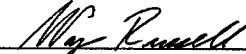
UPRIGHT LENGTHS OF OVERHEAD SIGN STRUCTURES SHOWN ARE APPROXIMATE AND ACTUAL LENGTHS SHALL BE DETERMINED BY THE CONTRACTOR'S FIELD SURVEY.

DETAILS FOR MOUNTING SIGNS TO OVERHEAD STRUCTURES SHALL BE APPROVED BY THE ENGINEER AND SUBMITTED WITH SHOP DRAWINGS FOR OVERHEAD STRUCTURES. NO MOUNTING HOLES SHALL BE PERMITTED IN OVERHEAD STRUCTURES UPRIGHT MEMBERS.

CONTRACTOR SHALL PROVIDE THE ENGINEER A MINIMUM OF SEVEN (7) DAYS ADVANCE NOTICE FOR INSTALLATION OF OVERHEAD SIGN STRUCTURES AND OVERHEAD SIGNS. INSTALLATION SHOULD PREFERABLY BE ACCOMPLISHED ON SUNDAY BETWEEN 7:00 A.M. AND 10:00 A.M.

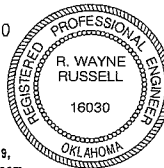
PAY QUANTITY NOTES

- (TP-1) PAYMENT FOR THIS ITEM WILL BE BASED ON PLAN QUANTITY. SEE THE 2009 SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
- (TS-20) QUANTITY SHOWN INCLUDES 7,945 L.F. TRAFFIC STRIPE (PLASTIC) (WHITE) AND 4,960 L.F. TRAFFIC STRIPE (PLASTIC) (YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF SIX INCH (6") WIDE TRAFFIC STRIPE.
- (TS-21) QUANTITY SHOWN INCLUDES 1995 L.F. TRAFFIC STRIPE (PLASTIC) (WHITE) AND 0 L.F. TRAFFIC STRIPE (PLASTIC) (YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF EIGHT INCH (8") WIDE TRAFFIC STRIPE.
- (TS-22) QUANTITY SHOWN INCLUDES 1,070 L.F. TRAFFIC STRIPE (PLASTIC) (WHITE) AND 0 L.F. TRAFFIC STRIPE (PLASTIC) (YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF TWELVE INCH (12") WIDE TRAFFIC STRIPE.
- (TS-32) THE AMOUNT SHOWN IS AN APPROXIMATION AND THE ACTUAL AMOUNT OF REMOVAL, IF NECESSARY, SHALL BE DETERMINED BY THE ENGINEER. PRICE BID FOR PAVEMENT MARKING REMOVAL (TRAFFIC STRIPE) SHALL INCLUDE COST OF REMOVAL OF ARROWS, WORDS, AND SYMBOLS. THE PAVEMENT MARKING TO BE REMOVED SHALL BE CONSIDERED THERMOPLASTIC AND BID ACCORDINGLY.
- (1) PAY ITEM IS FOR THE INSTALLATION OF THE FOOTING FOR THE MONOTUBE OVERHEAD SIGN STRUCTURES.
- (2) THE PRICE BID FOR THIS ITEM SHALL INCLUDE THE REMOVAL OF THE 65' OVERHEAD SIGN STRUCTURE AT APPROXIMATELY STA. 377+80 AND THE SIGNS ON THE STRUCUTRE. THE REMOVED SIGN STRUCTURE AND SIGNS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE JOB SITE IN A MANNER APPROVED BY THE ENGINEER.
- (3) INCLUDED IN THE PRICE BID OF INSTALLING THE NEW OVERHEAD SIGNS SHALL BE THE COST OF REMOVING THE OLD SIGNS FROM THE SIGN STRUCTURES. THESE SIGNS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE JOB SITE IN A MANNER APPROVED BY THE ENGINEER.


R. WAYNE RUSSELL, P.E. # 16030
C.A. # 1160, RENEWAL 06-30-17

11-2-15
DATE

Traffic Engineering Consultants, Inc.
6000 S. Western, Suite 300 - Oklahoma City, OK 73139,
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Design	RWR	11-02-15
Drawn	SB	11-02-15



SIGNING AND STRIPING
PAY QUANTITIES & NOTES

State Job No. 09032(20) Sheet No. 34

OKLAHOMA COUNTY

REVISIONS		
NO.	DESCRIPTION	DATE

SIGNING AND STRIPING PAY QUANTITIES

I-240/I-35 Interchange Project, Phase 1 in OKC, OK

0300 TRAFFIC			
ITEM	DESCRIPTION	UNIT	TOTAL
516(A) 6096	DRILLED SHAFT 60" DIAMETER	(1) LF	144.00
804(A) 2915	STRUCTURAL CONCRETE	(TP-1) CY	1.98
804(B) 2916	REINFORCING STEEL	(TP-1) LB	290.00
805(A) 8718	(PL) REMOVAL OF OVERHEAD SIGN STRUCTURE & SIGNS	(2) LSUM	1.00
850(A) 8110	SHEET ALUMINUM SIGNS	SF	48.19
850(B) 8112	EXTRUDED ALUMINUM PANEL SIGNS	SF	42.00
850(B) 8114	EXTRUDED ALUMINUM PANEL SIGNS (OVERHEAD SIGNS)	(3) SF	2636.15
851(A) 3206	4"@13 GALV. STEEL WIDE FLANGE BEAM POST	LF	45.00
851(B) 3217	2 1/2"@5.79 GALV. STEEL PIPE POST	LF	56.00
851(B) 3218	3"@7.58 GALV. STEEL PIPE POST	LF	34.00
852(D) 0300	OVHD. SN. STR., MONOTUBE TYPE B 70'	EA	1.00
852(D) 0315	OVHD. SN. STR., MONOTUBE TYPE B 85'	EA	1.00
855(A) 8813	TRAFFIC STRIPE (PLASTIC)(6" WIDE)	(TS-20) LF	12905.00
855(A) 8814	TRAFFIC STRIPE (PLASTIC)(8" WIDE)	(TS-21) LF	1995.00
855(A) 8818	TRAFFIC STRIPE (PLASTIC)(12" WIDE)	(TS-22) LF	1070.00
855(B) 8818	TRAFFIC STRIPE (PLASTIC)(ARROWS)	EA	8.00
855(B) 8821	TRAFFIC STRIPE (PLASTIC)(WORDS)	EA	2.00
855(B) 8824	TRAFFIC STRIPE (PLASTIC)(SYMBOLS)	EA	6.00
857(F) 8006	PAVEMENT MARKING REMOVAL (TRAFFIC STRIPE)	(TS-32) LF	2500.00

SUMMARY OF PAY QUANTITIES (TRAFFIC OPERATIONS)				
0303				
ITEM NUMBER	DESCRIPTION			UNIT QUANTITY
857(A) 8839	CONSTRUCTION TRAFFIC STRIPE(PAINT)X4" WIDE) (TC-15,TC-16,TC-17,TC-20,TC-70,TC-75)			L.F. 56345
857(B) 8842	CONSTRUCTION TRAFFIC STRIPE(PAINT)(ARROWS) (TC-15,TC-16,TC-17,TC-20,TC-70,TC-75)			EA. 3
857(C) 8851	REMOVABLE PAVEMENT MARKING TAPE (4" WIDE) (TC-19,TC-21,TC-70)			L.F. 1000
857(E) 8887	(PL) CONSTRUCTION ZONE PAVEMENT MARKERS(FLEX TAB)TYPE 2-1 (TC-21,TC-61,TC-70,TC-73,TC-75)			EA. 1500
857(F) 8006	PAVEMENT MARKING REMOVAL(TRAFFIC STRIPE) (TC-22,TC-70,TC-75)			L.F. 32150
870(A) 8485	SAND FILLED IMPACT ATTENUATION MODULE (TC-21,TC-44, TC-45, TC-70)(TS-36)			S.D. 18240
871(B) 8705	(SP) CONST.ZONE IMPACT ATTEN. (TC-52, TC-70, TC-80)(SP-2)			S.D. 320
876(A) 8482	(PL) TRUCK MOUNTED ATTENUATOR (TC-52,TC-70,TC-76,TC-77)			S.D. 175
877(B) 8484	DELIVER PORTABLE LONGITUDINAL BARRIER (TC-1,TC-2)			L.F. 7112.5
877(C) 8486	RELOCATION OF PORTABLE LONGITUDINAL BARRIER (TC-1)			L.F. 6697.5
880(A) 8812	ARROW DISPLAY (TYPE C) (TC-84)			S.D. 320
880(B) 8818	CONSTRUCTION SIGNS 0 TO 6.25 S.F. (TC-23,TC-24,TC-26,TC-33,TC-84)			S.D. 10880
880(B) 8821	CONSTRUCTION SIGNS 6.26 TO 15.99 S.F. (TC-23,TC-24,TC-26,TC-29,TC-33,TC-84)(SP-1)			S.D. 8320
880(B) 8824	CONSTRUCTION SIGNS 16.0 S.F. TO 32.99 S.F. (TC-23,TC-24,TC-26,TC-30,TC-33,TC-84)			S.D. 16640
880(B) 8827	CONSTRUCTION SIGNS 33.0 S.F. & OVER (TC-23,TC-24,TC-26,TC-31,TC-32,TC-33,TC-84)			S.D. 960
880(C) 8842	CONSTRUCTION BARRICADES (TYPE III) (TC-26,TC-84)			S.D. 1600
880(C) 8848	WING BARRICADES (TC-26,TC-84)			S.D. 2560
880(E) 8860	WARNING LIGHTS (TYPE A) (TC-26,TC-84)			S.D. 12800
880(F) 8878	DRUMS (TC-26,TC-84)(SP-3)			S.D. 7680
880(G) 8884	TUBE CHANNELIZERS (TC-26,TC-84)			S.D. 6720
880(L) 8911	TRAFFIC SURVEILLANCE, POLICE (TC-65, TC-70)			HOURL 1400
882 8370	(SP) SMART WORK ZONE SYSTEM - PORTABLE CHANGEABLE MESSAGE SIGN (TC-84)			S.D. 11200
882 8372	(SP) SMART WORK ZONE SYSTEM - PORTABLE TRAFFIC SENSOR (TC-84)			S.D. 8640
882 8374	(SP) SMART WORK ZONE SYSTEM - PAN-TILT-ZOOM CAMERA (TC-84)			S.D. 320
882 8376	(SP) SMART WORK ZONE SYSTEM - WEB SITE SYSTEM (TC-84)			S.D. 320
882 8378	(PL)SMART WORK ZONE SYSTEM SETUP			EA. 1
882(A) 8306	PORT. CHANGABLE MESSAGE SIGN (TC-52, TC-70, TC-85)(SP-4)			S.D. 1280

TRAFFIC OPERATIONS PAY QUANTITY NOTES

- (TC-1) THE CONTRACTOR SHALL FURNISH AND INSTALL SUCH LIGHTS, SIGNS, BARRICADES, AND PROVIDE FLAGGERS AS MAY BE NECESSARY FOR THE CONTROL, SAFETY, AND MAINTENANCE OF TRAFFIC WHEN INSTALLING, RELOCATING OR DELIVERING PORTABLE LONGITUDINAL BARRIER.
- (TC-2) QUANTITY INCLUDES SUFFICIENT LENGTH OF PORTABLE LONGITUDINAL BARRIER TO PROVIDE FOR THE LONGEST SECTION SHOWN ON THE PLANS. THIS SAME BARRIER WILL BE USED ON OTHER DETOUR PHASES.
- (TC-15) PAY QUANTITY SHALL MEET THE REQUIREMENTS OF ODOT SPECIFICATION SECTION 711.10 TRAFFIC STRIPE PAINT ACRYLIC WATERBORNE WITH THE EXCEPTION OF THE ACRYLIC EMULSION POLYMER SHALL BE ROHM AND HASS HD-21A OR DOW CHEMICAL DT-400.
- (TC-16) PAINT SHALL CONFORM TO SECTION 711 "TRAFFIC STRIPE", OF THE O.D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION). IF CONSTRUCTION TRAFFIC STRIPE PAINT IS INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND FAILS DURING THE FIRST SIX MONTHS OF SERVICE, REPLACEMENT WILL BE MADE AT THE CONTRACTOR'S EXPENSE AND SHALL BE ACCOMPLISHED IN A TIMELY MANNER UPON NOTIFICATION BY THE ENGINEER OF SUCH FAILURE.
- (TC-17) INCLUDES AN ESTIMATED ~~33236~~ L.F. (PAINT)X4" WIDE) WHITE ~~23109~~ L.F. (PAINT)X4" WIDE) YELLOW STRIPE.
- (TC-19) THIS ITEM INCLUDES AN ESTIMATED ~~500~~ L.F. (4" WIDE) WHITE AND ~~500~~ L.F. (4" WIDE) YELLOW STRIPE. THE CONTRACTOR SHALL PROVIDE AND INSTALL AN O.D.O.T. APPROVED REMOVABLE PAVEMENT MARKING TAPE. COST FOR REMOVAL OF THIS TAPE SHALL BE INCLUDED IN THE PRICE BID FOR THIS ITEM. NON-REMOVABLE MARKING TAPE (FOIL BACK) SHALL NOT BE CONSIDERED AN APPROVED EQUAL FOR THIS ITEM.
- (TC-20) ALL STRIPING TO BE PLACED ON TEMPORARY SURFACES OR ON SURFACES SCHEDULED TO BE REMOVED SHALL BE DONE WITH PAINT UNLESS OTHERWISE NOTED ON THE PLANS OR STANDARD DRAWINGS. TEMPORARY PAVEMENT MARKINGS PLACED ON FINISHED PAVEMENT OR EXISTING PAVEMENT TO REMAIN IN PLACE SHALL USE ONE OF THE FOLLOWING METHODS:
*REMOVABLE PAVEMENT MARKING TAPE
*CLASS A PAVEMENT MARKERS
- (TC-21) INCLUDED IN THE COST OF THIS ITEM SHALL BE INSTALLATION, MAINTENANCE AND REMOVAL. THIS ITEM SHALL BE BID ACCORDINGLY.
- (TC-22) AMOUNT SHOWN IS AN APPROXIMATION AND THE ACTUAL AMOUNT OF REMOVAL, IF NECESSARY, SHALL BE DETERMINED BY THE ENGINEER. PRICE BID FOR PAVEMENT MARKING REMOVAL SHALL INCLUDE THE COST OF REMOVING STRIPE, ARROWS, WORDS AND SYMBOLS, AS SHOWN IN THE PLANS. THESE ITEMS MAY CONSIST OF PLASTIC, PAINT OR NON-REMOVABLE MARKING TAPE.
- (TC-23) QUANTITY SHOWN FOR THIS ITEM INCLUDES THOSE SIGNS WHICH COMPRISE THE ROUTE MARKER ASSEMBLIES USED TO INDICATE THE DETOUR ROUTE.
- (TC-24) QUANTITIES SHOWN FOR CONSTRUCTION SIGNING AND STRIPING HAVE BEEN INCREASED TO ALLOW FOR TRAFFIC CONTROL ON CROSS STREETS NOT SHOWN ON THE PLANS.
- (TC-26) ALL CONSTRUCTION TRAFFIC CONTROL WILL BE IMPLEMENTED ACCORDING TO CONSTRUCTION PLANS, AND INSTALLED IN A MANNER APPROVED BY THE ENGINEER, IN ACCORDANCE WITH CHAPTER VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (CURRENT EDITION), AND COMPLIANT WITH APPLICABLE O.D.O.T. STANDARD DRAWINGS. PRICE BID FOR THIS ITEM SHALL BE PAYMENT IN FULL FOR THE INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF ALL NECESSARY CONSTRUCTION TRAFFIC CONTROL DEVICES REQUIRED FOR COMPLETION OF THE PROJECT.

ALL SIGNS AND BARRICADES WHICH ARE SHOWN WITH TYPE "A" LIGHTS IN THE STANDARD DRAWINGS SHALL HAVE THE CORRESPONDING LIGHT ATTACHED DURING NON-DAYLIGHT HOURS.

TRAFFIC OPER. PAY QUANTITY NOTES (CONT.)

- (TC-29) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE BETWEEN 6.26 S.F. AND 15.99 S.F. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS.
- (TC-30) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE BETWEEN 16.00 S.F. AND 32.99 S.F. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS.
- (TC-31) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE 33.0 S.F. AND OVER. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS.
- (TC-32) SPECIAL CONSTRUCTION SIGNS 33.0 S.F. AND OVER SHALL BE CONSTRUCTED OF EXTRUDED ALUMINUM TO THE DIMENSIONS SHOWN ON THE PLANS. THE SIGNS SHALL BE INSTALLED EITHER ON WIDE FLANGE BEAM POSTS OR OVERHEAD SIGN STRUCTURES IN A MANNER APPROVED BY THE ENGINEER.
- (TC-33) ALL CONSTRUCTION WORK ZONE SIGNS SHALL HAVE FLUORESCENT SHEETING. THE FLUORESCENT SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956 (LATEST REVISION) THE MANUFACTURER SHALL FURNISH A TYPE "D" CERTIFICATION IN ACCORDANCE WITH O.D.O.T. STANDARD SPECIFICATIONS (CURRENT EDITION) SUBSECTION 106.04. THE CERTIFICATION SHALL INCLUDE TEST RESULTS ON MATERIAL SUBMITTED FOR APPROVAL.
- (TC-44) PRICE BID FOR THIS ITEM SHALL INCLUDE ATTENUATOR MODULES, SAND, WOODEN PALLETS (IF REQUIRED), RELOCATION, AND MAINTENANCE.
- (TC-45) INCLUDED IN THIS ITEM SHALL BE 19 SAND FILLED MODULES TO BE USED FOR 350 DAYS. THESE MODULES SHALL BE PLACED WHERE SHOWN IN THE PLANS OR ON THE STANDARD DRAWINGS AND INSTALLED AS SHOWN IN THE STANDARD DRAWINGS AND IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- (TC-52) ANY USED TRUCK MOUNTED ATTENUATOR, CHANGEABLE MESSAGE SIGN, CONSTRUCTION ZONE IMPACT ATTENUATOR TO BE PLACED ON THIS PROJECT SHALL BE SUBJECT TO INSPECTION AND APPROVAL, BY THE OKLAHOMA DEPARTMENT OF TRANSPORTATION, TO ASSURE THAT THEY ARE IN GOOD WORKING CONDITION, PRIOR TO PLACEMENT ON THE PROJECT.
- (TC-61) ANY DAMAGE TO A FINISHED OR EXISTING SURFACE RESULTING FROM THE CONTRACTORS NEGLIGENCE IN THE REMOVAL OF CONSTRUCTION ZONE PAVEMENT MARKERS OR CHANNELIZING DEVICES AND THE BITUMINOUS ADHESIVE USED IN THEIR INSTALLATION, SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE AND TO THE SATISFACTION OF THE ENGINEER.
- (TC-65) THE PRICE BID FOR THIS ITEM SHALL INCLUDE THE FOLLOWING:
1. ONE OFFICIALLY MARKED OKLAHOMA HIGHWAY PATROL CAR (WHEN PROJECT INVOLVES A STATE OR FEDERAL HIGHWAY) OR A LOCAL CITY OR COUNTY LAW ENFORCEMENT VEHICLE. PRICE BID FOR THIS ITEM SHALL BE PAID ON A PER UNIT PER HOUR BASIS.
2. ONE LAW ENFORCEMENT OFFICER WITH JURISDICTIONAL AUTHORITY TO WRITE AND ISSUE TRAFFIC CITATIONS. THE LAW ENFORCEMENT OFFICER SHALL BE INSURED, LICENSED AND BONDED, IF REQUIRED, BY THE CONTRACTOR. THIS OFFICER SHALL BE SPECIFICALLY APPROVED AND ASSIGNED TO THIS WORK ACTIVITY.
3. THE CONTRACTOR SHALL MAKE ALL THE NECESSARY ARRANGEMENTS WITH A LAW ENFORCEMENT AGENCY TO PROVIDE THE REQUIRED LAW ENFORCEMENT ON THIS PROJECT.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING HIS ANTICIPATED WEEKLY SCHEDULE TO THE ENFORCEMENT AGENCY TWO WEEKS IN ADVANCE OF THE WORK. THE WORK SCHEDULE WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
5. THE LAW ENFORCEMENT AGENCY WILL BE PAID FOR A MAXIMUM OF ONE (1) HOUR, PER WORK PERIOD, TO ALLOW FOR TRAVEL TO AND FROM THE OFFICERS PERMANENT DUTY STATION AND THE WORK SITE. THIS WILL BE PAID ONE (1) TIME PER WORK PERIOD AS DEFINED BY THE CONTRACTOR IN AGREEMENT WITH THE ENGINEER.
- (TC-70) THIS ITEM IS AN ESTIMATED QUANTITY TO BE USED AS DEEMED NECESSARY BY THE ENGINEER.
- (TC-73) QUANTITY SHOWN INCLUDES ~~600~~ EA. (WHITE) AND ~~900~~ EA. (YELLOW) CONSTRUCTION ZONE PAVEMENT MARKERS (FLEX TAB). THESE CONSTRUCTION ZONE PAVEMENT MARKERS SHALL BE EITHER "DAVIDSON PLASTICS: MODEL TOM", OR AN APPROVED EQUAL. PRICE BID FOR THIS ITEM SHALL INCLUDE THE INITIAL PLACEMENT, SUBSEQUENT REPLACEMENT, AND REMOVAL. THE CONSTRUCTION ZONE PAVEMENT MARKERS (FLEX TABS) SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND AS SHOWN ON STANDARD DRAWING TCS21-1-(LATEST REVISION).
- (TC-75) TEMPORARY PAVEMENT MARKINGS SHALL BE IN PLACE THE SAME DAY THAT EXISTING PAVEMENT MARKINGS ARE REMOVED FROM ANY ROADWAY OPEN TO TRAFFIC. ALSO, ALL TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVED PRIOR TO THE INSTALLATION OF FINAL STRIPING.

DESCRIPTION	REVISIONS	
	DATE	
REV. ITEM NO../DESC.	12/08/15	

TRAFFIC OPER. PAY QUANTITY NOTES (CONT.)

- (TC-76) ANY TRUCK MOUNTED ATTENUATORS USED ON THIS PROJECT SHALL HAVE PASSED ALL MANDATORY AND OPTIONAL TESTS LISTED IN NCHRP 350, TL-3 CRITERIA. THIS ITEM IS TO BE USED WHERE SHOWN IN THE STANDARD DRAWINGS OR AT THE DISCRETION OF THE ENGINEER ON SHADOW VEHICLES PROTECTING THE WORK AREAS AND TEMPORARY ROADSIDE HAZARDS.
- (TC-77) TRUCK MOUNTED ATTENUATORS ARE TO BE INSTALLED ON NON-STATE OWNED TRUCKS HAVING A MINIMUM GROSS WEIGHT RATING OF 15,000 POUNDS. EACH OF THESE TRUCKS SHALL ALSO BE EQUIPPED WITH AN ARROW DISPLAY (TYPE B).
- (TC-80) INCLUDED IN THIS ITEM SHALL BE ONE (1) ADDITIONAL UNIT TO BE USED AS A STAND-BY OR REPLACEMENT. THIS STAND-BY UNIT SHALL BE IMMEDIATELY ACCESSIBLE TO REPLACE A DAMAGED, STOLEN OR MALFUNCTIONING UNIT. THE AMOUNT OF TIME BETWEEN THE REMOVAL OF THE DAMAGED UNIT AND THE INSTALLATION OF THE STAND-BY UNIT SHALL BE NO MORE THAN TWENTY-FOUR (24) HOURS.
- (TC-84) ~~320~~ 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 O.D.O.T. 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.
- (TC-85) THESE SIGNS MUST BE ON THE OKLAHOMA DEPARTMENT OF TRANSPORTATION LIST OF APPROVED CHANGEABLE MESSAGE SIGNS. FOR A LIST OF THE APPROVED SIGNS GO TO THE OKLAHOMA DEPARTMENT OF TRANSPORTATION WEBSITE AT: <http://www.okladot.state.ok.us/traffic/qpl/index.php>
- (TS-36) PRICE BID FOR SAND FILLED IMPACT ATTENUATOR(S) SHALL INCLUDE THE COST FOR OM1-1 OR OM1-3 SIGN(S) WITH TYPE VIII SHEETING, AND THE REMOVAL OF ANY OM-3, OR OM-3E SIGN(S), POST(S) AND FOOTING(S), IF PRESENT, AND ALL OTHER INCIDENTALS NECESSARY TO COMPLETE THE INSTALLATION ACCORDING TO PERTINENT O.D.O.T. STANDARD DRAWINGS.
- (SP-1) SPEED LIMIT SIGNS (R2-1E) SHALL BE PLACED EVERY 1/2 MILE THROUGH THE CONSTRUCTION ZONE.
- (SP-2) CONSTRUCTION ZONE QUADGUARD, CONSTRUCTION ZONE TRACC, AND TAU II CONSTRUCTION ZONE IMPACT ATTENUATOR OR AN APPROVED EQUAL SHALL BE USED ON THIS PROJECT. ALL CONSTRUCTION ZONE IMPACT ATTENUATORS MUST MEET NCHRP-350 TEST LEVEL III AND MUST BE ON ODOT'S IMPACT ATTENUATOR GUIDELINES MATRIX.
- (SP-3) WARNING LIGHTS TYPE 'C' ARE NOT REQUIRED.
- (SP-4) SIGN PLACEMENT SHALL BE DETERMINED BY THE ENGINEER.

GENERAL CONSTR. NOTES (TRAF. OPER.)

THE CONTRACTOR SHALL PROVIDE A PERSON TO BE ON 24 HOUR CALL AS NEEDED AS DETERMINED BY THE ENGINEER. THIS PERSON SHALL HOLD A CURRENT CERTIFICATION FROM THE AMERICAN TRAFFIC SAFETY SERVICE ASSOCIATION (ATSSA) OR THE OKLAHOMA TRAFFIC ENGINEERING ASSOCIATION (OTEA) AS A TRAFFIC CONTROL TECHNICIAN OR TRAFFIC CONTROL SUPERVISOR.

THE REGULATORY SPEED LIMITS THROUGH THE WORK ZONE MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER WITH THE DOCUMENTED APPROVAL OF THE DIVISION ENGINEER IN ACCORDANCE WITH TITLE 47 OF THE OKLAHOMA MOTOR VEHICLE LAWS.

ANY SIGNS AND/OR DELINEATORS WHICH ARE TO BE REMOVED DURING THIS PROJECT WILL BE STORED IN A PROTECTED AREA DESIGNATED BY THE RESIDENT ENGINEER. UNTIL SUCH A TIME THAT THEY ARE TO BE RESET BY THE CONTRACTOR. COST OF THIS WORK TO BE INCLUDED IN OTHER ITEMS OF WORK.

EXISTING ROADWAY SHALL REMAIN OPEN DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER BARRICADES, LIGHTS, AND SIGNING WITHIN THE LIMITS OF CONSTRUCTION. ALL CONSTRUCTION SIGNING WILL BE DONE ACCORDING TO STANDARDS SET FORTH IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION", AND AS SHOWN ON TCS STANDARD DRAWINGS.

THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING TRAFFIC ON CROSS STREETS. A MINIMUM OF ONE LANE IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL MEET ODOT'S "QUALITY STANDARDS FOR TEMPORARY TRAFFIC CONTROL DEVICES".

CONTRACTOR SHALL NOTIFY THE CITY OF OKLAHOMA CITY A MINIMUM OF 72 HOURS IN ADVANCE OF CHANGES TO TRAFFIC PATTERNS, I.E. LANE CLOSURES, SWITCHING TRAFFIC, etc.

Design			SUMMARY OF PAY QUANTITIES (TRAFFIC OPERATIONS)	
Drawn				
Checked				
Approved				
Squad	POE			
State Job No. <u>09032(20)</u> Sheet No. <u>35</u>				

SUMMARY OF DRAINAGE STRUCTURES

STRUCTURE NO.	DESIGN DATA		
	STATION & LOCATION	DESCRIPTION	DESIGN
1	CL I-240 STA. 388+11.82	61.00' RT. CONST. 4.0' x 4.0' JUNCT. BOX w/ 24" x 9.4' LG. RCP TO EXIST. RCP	MFC-4, MJB-3, SPI-4
2	CL I-240 STA. 389+50.00	71.00' RT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 4.9' LG. RCP TO STR. 37	CLB-1, SPI-4
3	CL I-240 STA. 391+09.30	68.00' RT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 3.3' LG. RCP TO STR. 38	CLB-1, SPI-4
4	CL I-240 STA. 382+15.00	59.00' RT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 32.6' LG. RCP TO STR. 44	CLB-1, SPI-4
5	CL I-240 STA. 393+50.00	65.00' RT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 236.7' LG. RCP TO STR. 38	CLB-1, SPI-4
6	CL I-240 STA. 394+31.58	62.00' RT. CONST. 6.0' x 4.0' JUNCT. BOX w/ 4.0' x 4.0' x 8.5' LG. RCB TO EXIST. RCB	MFC-4, MJB-3, SBI-4
7	CL I-240 STA. 394+50.00	65.00' RT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 13.1' LG. RCP TO STR. 6	CLB-1, SPI-4
8	CL I-240 STA. 395+75.00	66.90' RT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 119.7' LG. RCP TO STR. 7	CLB-1, SPI-4
9	CL I-240 STA. 397+00.00	69.40' RT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 119.7' LG. RCP TO STR. 8	CLB-1, SPI-4
10	CL I-240 STA. 399+00.00	71.00' RT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 194.6' LG. RCP TO STR. 9	CLB-1, SPI-4
11	CL I-240 STA. 400+21.14	71.00' RT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 119.3' LG. RCP TO STR. 10	CLB-1, SPI-4
12	CL I-240 STA. 401+50.00	71.00' RT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 121.9' LG. RCP TO STR. 11	CLB-1, SPI-4
13	CL I-240 STA. 402+10.00	71.00' RT. CONST. 18" x 56.6' LG. RCP w/ PLUG TO STR. 12 (FOR FUTURE CONSTRUCTION)	SPI-4
14	CL I-240 STA. 388+11.82	71.00' RT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 6.7' LG. RCP TO STR. 1	CLB-1, SPI-4
15	BL RAMP SF4 STA. 382+99.00	CL CONST. INLET CI DES. 2 (STD) ON EXIST. RCP	CI-1, SPI-4
16	BL RAMP SF4 STA. 385+99.80	12.00' RT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 207.4' LG. RCP TO STR. 1	CLB-1, SPI-4
17	CL I-240 STA. 397+00.00	70.70' LT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 119.7' LG. RCP TO STR. 18	CLB-1, SPI-4
18	CL I-240 STA. 395+75.00	68.20' LT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 94.7' LG. RCP TO STR. 20	CLB-1, SPI-4
19	CL I-240 STA. 391+58.70	61.00' LT. CONST. GARY GRATE INLET x 231.3' LG. w/ 18" x 1.8' LG. RCP TO EXIST. RCB	SPECIAL DETAIL
20	CL I-240 STA. 394+75.00	66.20' LT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 64.7' LG. RCP TO STR. 21	CLB-1, SPI-4
21	CL I-240 STA. 394+05.00	65.00' LT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 5.8' LG. RCP TO EXIST. RCB	CLB-1, SPI-4
22	CL I-240 STA. 391+09.30	73.00' LT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 4.4' LG. RCP TO EXIST. RCB	CLB-1, SPI-4
23	CL I-240 STA. 394+65.00	106.90' LT. CONST. 4.0' DIA. MH ON EXIST RCP w/ 18" x 24.9' LG. RCP TO STR. 32	MFC-4, MJB-3, SPI-4
24	DELETED		
25	CL I-240 STA. 391+09.30	CL CONST. IMB-TYPE 2 DES. 2 w/ 18" x 61.0' LG. RCP TO EXIST. RCB	CLB-1, SPI-4

SUMMARY OF DRAINAGE STRUCTURES

[illegible]

SHT TOTALS:	4.3	5.1	487.1	-	-	1613.5	9.4	-	-	-	-	-	-	-	-	-	-	745.5	506.1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	17	1	26.7	2.1	40	-	2	-	1	-	-	11.5	-	-	214.9	4
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▲ QUANTITIES SHOWN ARE FOR INFORMATIONAL PURPOSES ONLY. COST OF THESE ITEMS ARE INCLUDED IN OTHER ITEMS OF BID.

Design		
Drawn		
Checked		
Approved		
Squad	POE	

SUMMARY OF DRAINAGE STRUCTURES SHEET 1 OF 2

State Job No. 09032(20) Sheet No. 36

REVISIONS	
DESCRIPTION	DATE

SUMMARY OF DRAINAGE STRUCTURES

STRUCTURE NO.	DESIGN DATA		
	STATION & LOCATION	DESCRIPTION	DESIGN
26	BL RAMP SF3 STA. 385+23.00	14.00' LT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 6.6' LG. RCP TO EXIST. RCB	CLB-1, SPI-4
27	CL I-240 STA. 383+39.00	62.80' LT. CONST. CI DES. 2(STD) w/ 18" x 13.4' LG. RCP TO EXIST. RCB	CI-1, SPI-4
28	CL I-240 STA. 380+48.00	62.20' LT. CONST. IMB TYPE 1 DES. 2 w/ 18" x 52.7' LG. RCP TO EXIST. INLET	CLB-1, SPI-4
29	CL I-240 STA. 394+25.88	69.50' LT. CONST. STD. MED. DRAIN TYPE 2 w/ 18" x 44.1' LG. RCP TO STR. 32	SMD-3, SPI-4
30	CL I-240 STA. 392+13.92	69.20' LT. CONST. STD. MED. DRAIN TYPE 2 w/ 18" x 102.1' LG. RCP TO STR. 33	SMD-3, SPI-4
31	CL I-240 STA. 389+78.00	77.00' LT. CONST. STD. MED. DRAIN TYPE 2 w/ 18" x 128.6' LG. RCP TO STR. 33	SMD-3, SPI-4
32	CL I-240 STA. 394+71.92	79.14' LT. CONST. 4.0' DIA. MANHOLE w/ 18" x 11.0' LG. RCP TO STR. 20	MFC-4, MJB-3, SPI-4
33	CL I-240 STA. 391+09.30	83.10' LT. CONST. 4.0' DIA. MANHOLE w/ 18" x 7.7' LG. RCP TO STR. 22	MFC-4, MJB-3, SPI-4
34	CL I-240 STA. 379+98.00	58.33' RT. CONST. IMB-TYPE 1 DES. 2 w/ 18" x 12.8' LG. RCP TO STR. 36	CLB-1, SPI-4
35	BL RAMP SF4 STA. 382+99.00	6.87' RT. CONST. 4.0' DIA. MH w/ 18" x 4.4' LG. RCP TO STR. 15	MFC-4, MJB-3, SPI-4
36	BL RAMP SF4 STA. 379+97.39	15.00' LT. CONST. 4.0' DIA. MH w/ 18" x 103.4' LG. RCP TO EXIST. MH	MFC-4, MJB-3, SPI-4
37	CL I-240 STA. 389+50.00	63.00' RT. CONST. 4.0' x 4.0' JUNCT. BOX w/ 28" x 18" x 134.3' LG. RCPA TO STR. 1	MFC-4, MJB-3, SBI-4
38	CL I-240 STA. 391+09.30	61.50' RT. CONST. 4.0' x 4.0' JUNCT. BOX w/ 28" x 18" x 154.7' LG. RCAPA TO STR. 37	MFC-4, MJB-3, SBI-4
39	CL I-240 STA. 397+00.00	63.50' LT. CONST. 4.0' DIA. MH w/ 18" x 3.6' LG. RCP TO STR. 17	MFC-4, MJB-3, SPI-4
40	CL I-240 STA. 398+45.00	53.00' LT. CONST. 18" x 143.3' LG. RCP FROM EXIST. STR. TO STR. 39	SPI-4
41	DELETED		
42	CL I-240 STA. 388+11.83	82.50' RT. CONST. 4.0' DIA. MH w/ 18" x 9.0' LG. RCP TO STR. 14	MFC-4, MJB-3, SPI-4
43	CL I-240 STA. 388+33.76	82.50' RT. CONST. 4.0' DIA. MH ON EXIST. RCP w/ 18" x 18.3' LG. RCP TO STR. 42	MFC-4, MJB-3, SPI-4
44	BL RAMP SF4 STA. 382+21.00	14.50' RT. CONST. 4.0' DIA. MH w/ 18" x 72.6' LG. RCP TO STR. 35	MFC-4, MJB-3, SPI-4
45	BL RAMP SF4 STA. 384+19.00	17.00' RT. CONST. STD. MED. DRAIN TYPE 2 w/ 18" x 117.0' LG. RCP TO STR. 35	SMD-3, SPI-4
46	CL I-240 STA. 392+40.02	70.46' RT. CONST. STD. MED. DRAIN TYPE 2 w/ 18" x 127.8' LG. RCP TO STR. 47	SMD-3, SPI-4
47	CL I-240 STA. 391+09.33	78.17' RT. CONST. 4.0' DIA. MH w/ 18" x 7.7' LG. RCP TO STR. 3	MFC-4, MJB-3, SPI-4
48	CL I-240 STA. 394+99.93	70.50' RT. CONST. STD. MED. DRAIN TYPE 2 w/ 18" x 72.3' LG. RCP TO STR. 49	SMD-3, SPI-4
49	CL I-240 STA. 395+75.00	78.00' RT. CONST. 4.0' DIA. MH w/ 18" x 8.6' LG. RCP TO STR. 8	MFC-4, MJB-3, SPI-4
50	CL I-240 STA. 401+50.00	81.50' RT. CONST. 4.0' DIA. MH w/ 18" x 8.0' LG. RCP TO STR. 12	MFC-4, MJB-3, SPI-4
51	CL I-240 STA. 401+96.16	76.16' RT. CONST. STD. MED. DRAIN TYPE 2 w/ 18" x 42.7' LG. RCP TO STR. 50	SMD-3, SPI-4

SUMMARY OF DRAINAGE STRUCTURES

[illegible]

SHT TOTALS:	-	3.0	-	-	-	1117.7	-	-	-	-	-	289.0	-	-	-	-	965.9	462.9	-	7	-	2.3	-	1	-	-	-	-	-	-	-	8.2	-	-	-	-	-	-	3	-	14.9	-	8	-	2	-	11	-	-	69.1	-	-	99.6	13
ALL SHT TOTALS:	4.3	8.1	487.1	-	-	2731.2	9.4	-	-	-	-	289.0	-	-	-	-	1711.4	969.0	-	7	-	2.3	-	2	-	-	-	-	-	-	-	9.1	-	-	-	-	-	-	20	1	41.6	2.1	48	-	4	-	12	-	-	80.6	-	-	314.5	17

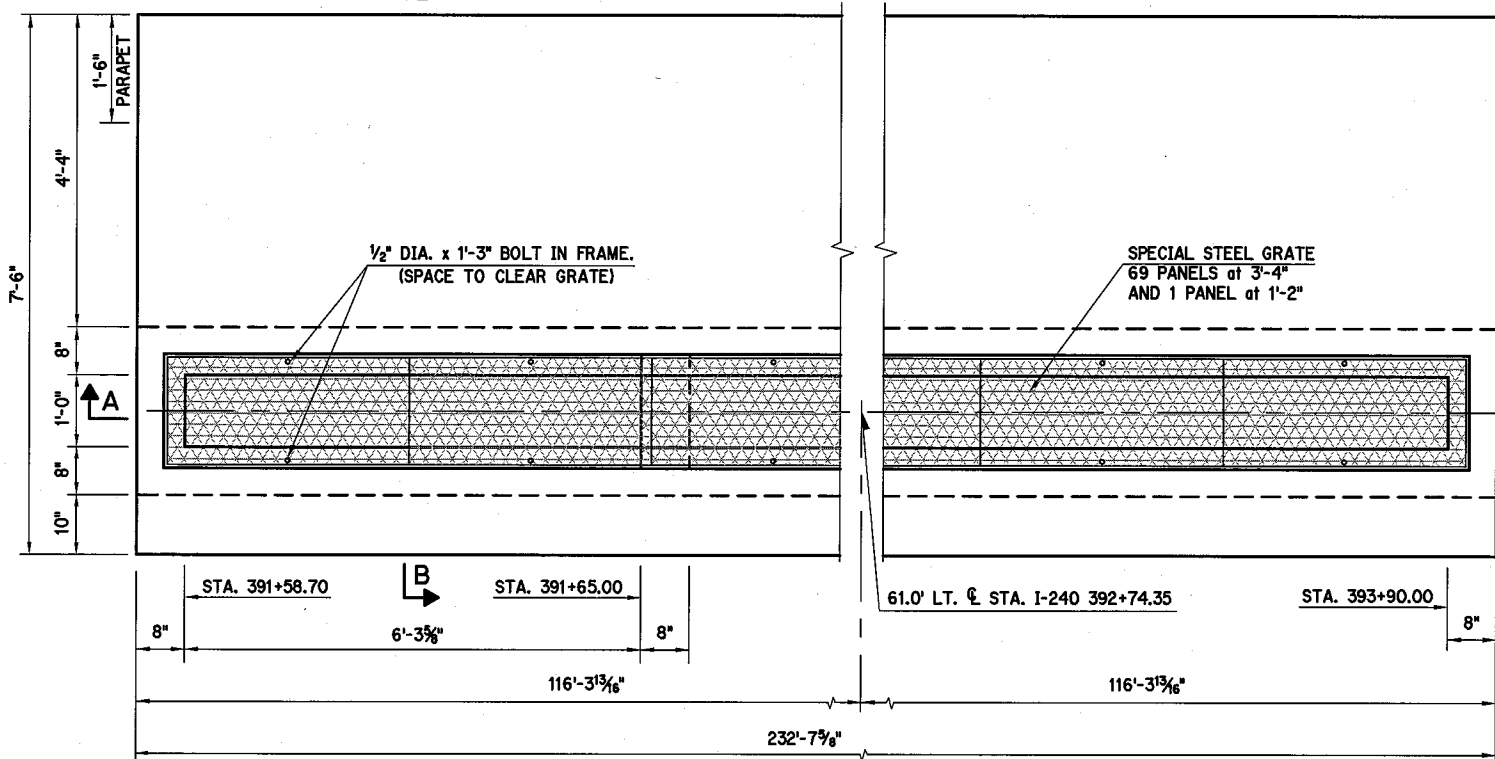
▲ QUANTITIES SHOWN ARE FOR INFORMATIONAL PURPOSES ONLY. COST OF THESE ITEMS ARE INCLUDED IN OTHER ITEMS OF BID.

Design		
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Checked		
Approved		
Squad	POE	

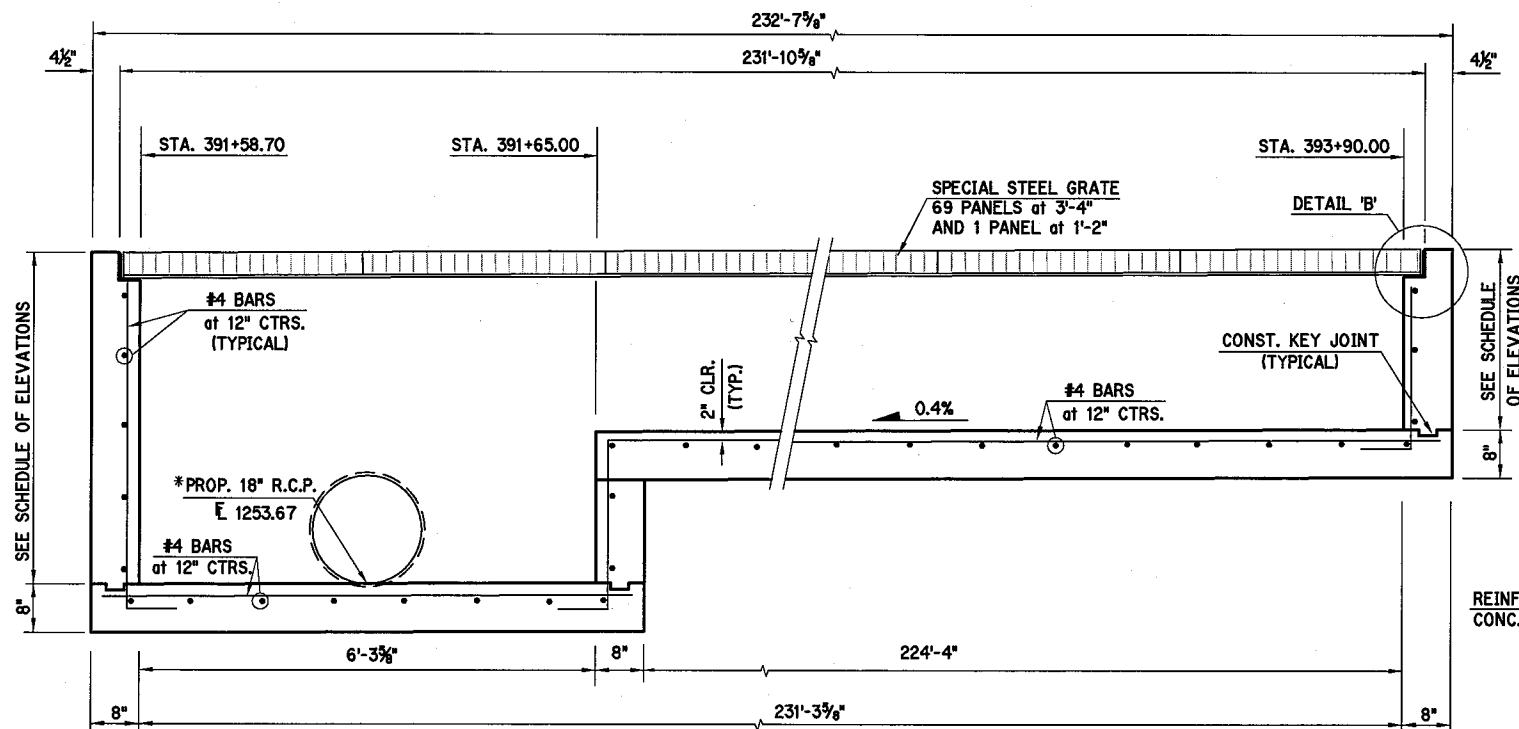
SUMMARY
OF DRAINAGE STRUCTURES
SHEET 2 OF 2

State Job No. 09032(20) Sheet No. 37

NOTE: PARAPET NOT SHOWN FOR CLARITY

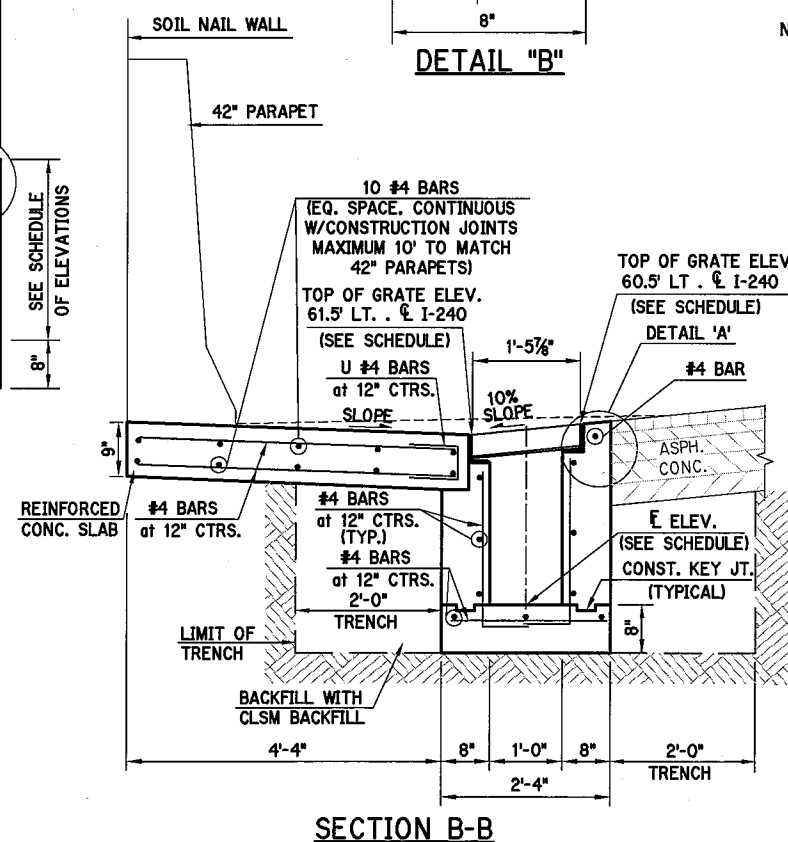
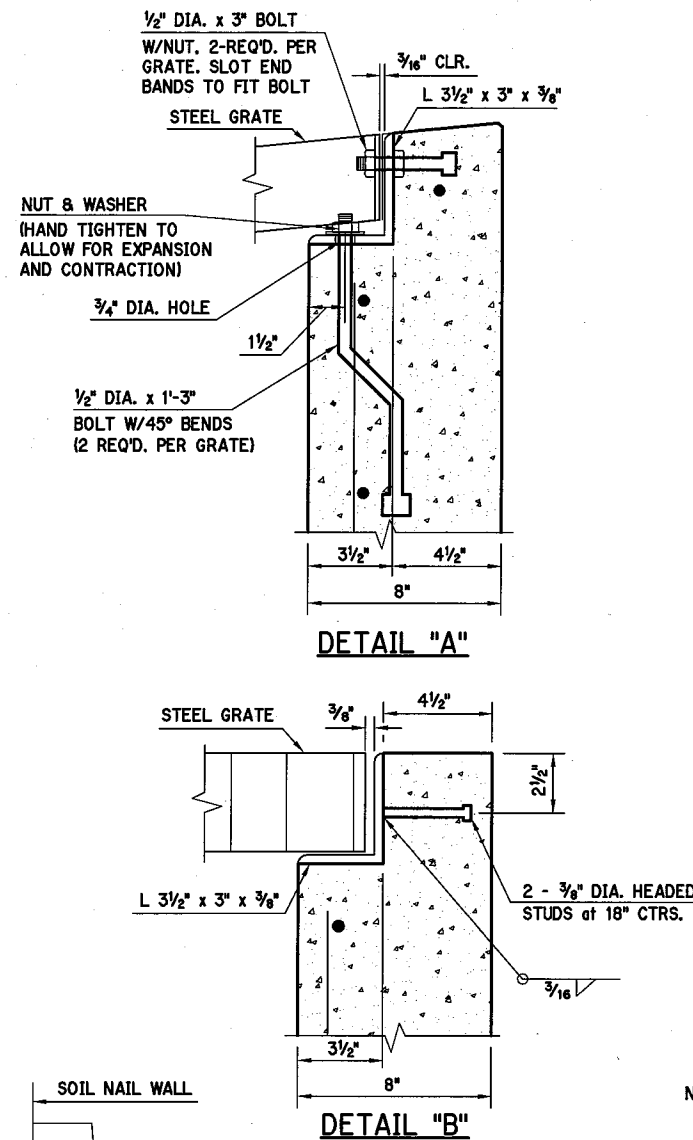
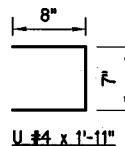


PLAN



SECTION A-A

ALL BAR BEND DIMENSIONS ARE OUT TO OUT.



SECTION B-B

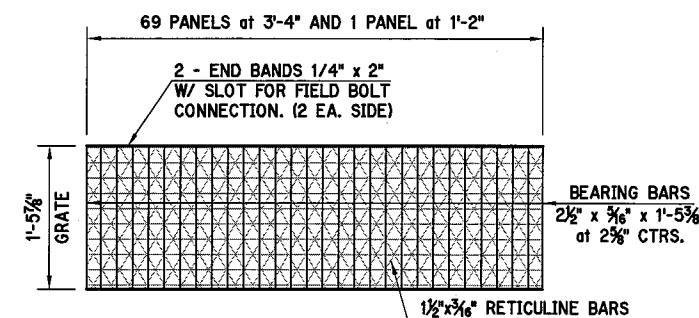
SCHEDULE OF ELEVATIONS

STATION	E ELEVATION	TOP OF GRATE 61.5' LT. E I-240	TOP OF GRATE 60.5' LT. E I-240
391+58.70	1253.67	1256.91	1257.01
391+60.00	1253.67	1256.92	1257.02
391+65.00	1253.67/1255.32		
391+70.00	1255.34	1256.93	1257.03
391+80.00	1255.38	1256.95	1257.05
391+90.00	1255.42	1256.97	1257.07
392+00.00	1255.46	1257.00	1257.10
392+10.00	1255.50	1257.02	1257.12
392+20.00	1255.54	1257.05	1257.15
392+30.00	1255.58	1257.09	1257.19
392+40.00	1255.62	1257.12	1257.22
392+50.00	1255.66	1257.16	1257.26
392+60.00	1255.70	1257.20	1257.30
392+70.00	1255.74	1257.24	1257.34
392+80.00	1255.78	1257.28	1257.38
392+90.00	1255.82	1257.32	1257.42
393+00.00	1255.86	1257.36	1257.46
393+10.00	1255.90	1257.40	1257.50
393+20.00	1255.94	1257.44	1257.54
393+30.00	1255.98	1257.48	1257.58
393+40.00	1256.02	1257.52	1257.62
393+50.00	1256.06	1257.56	1257.66
393+60.00	1256.10	1257.60	1257.70
393+70.00	1256.14	1257.64	1257.74
393+80.00	1256.18	1257.68	1257.78
393+90.00	1256.22	1257.72	1257.82

QUANTITIES
(FOR INFORMATIONAL PURPOSES ONLY)

ITEM	UNIT	TOTAL
CLASS 'AA' CONCRETE	C.Y.	72.00
REINFORCING STEEL	LB.	6,400
CLSM BACKFILL	C.Y.	85

NOTE: ALL COST OF CONSTRUCTING SPECIAL INLET DRAINS INCLUDING, BUT NOT LIMITED TO EXCAVATION, BACKFILL, CONCRETE, REINFORCING STEEL, STRUCTURAL STEEL, GRATES, FRAMES, LABOR AND INCIDENTALS, SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH FOR "SPECIAL INLET DRAIN".



SPECIAL STEEL GRATE

NOTE: SPECIAL STEEL GRATE SHALL BE "TYPE 37-R-5 BRIDGE DECKING WITH SERRATED SURFACE" MANUFACTURED BY GRATING PACIFIC OR APPROVED EQUAL. SHOP DRAWING SHALL BE SUBMITTED TO ODOT FOR APPROVAL.

NOTE: STEEL GRATE SHALL BE IN PLACE PRIOR TO PLACING THE CLSM BACKFILL.

Design	
Drawn	
Checked	
Approved	
Squad	POE

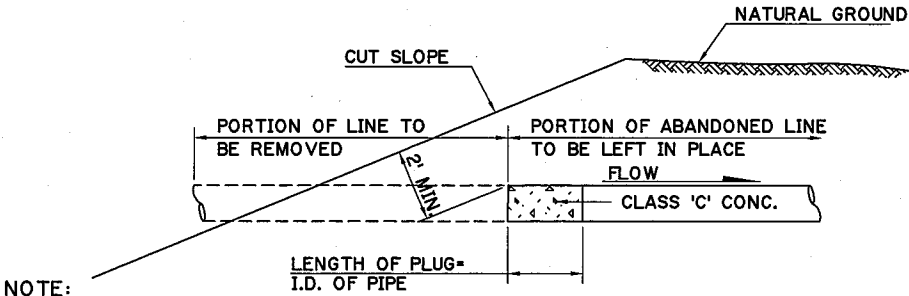
SPECIAL INLET DRAIN DETAILS
(DRAINAGE STRUCTURE 19)

State Job No. 09032(20) Sheet No. 38

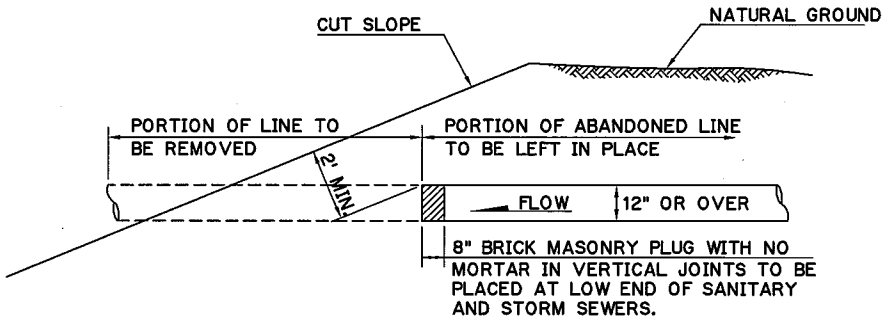
SUMMARY OF REMOVALS						
LOCATION STATION TO STATION	REMOVAL OF CONC. CURB * & GUTTER	REMOVAL OF ASPHALT PAVEMENT	* PAVEMENT SAWCUT	REMOVAL OF CONC. SLOPE PROTECTION	REMOVAL OF CONC. MED. ⊕ BARRIER	REMOVAL OF * CONCRETE DIVIDING STRIP
	L.F.	S.Y.	L.F.	S.Y.	L.F.	S.Y.
I-240						
385+58.94 - 390+00.00	3281	18015	1323	4542	1704	89
390+00.00 - 405+00.00	3044	10036	3481	9651	840	
405+00.00 - 420+00.00	75	280	353			
TOTAL	* 6400	28331	* 5157	14193	2544	* 89

* QUANTITY SHOWN IS FOR INFORMATION PURPOSES ONLY.
SEE GENERAL NOTE 3 THIS SHEET.

① INCLUDES CONCRETE PIER PROTECTION



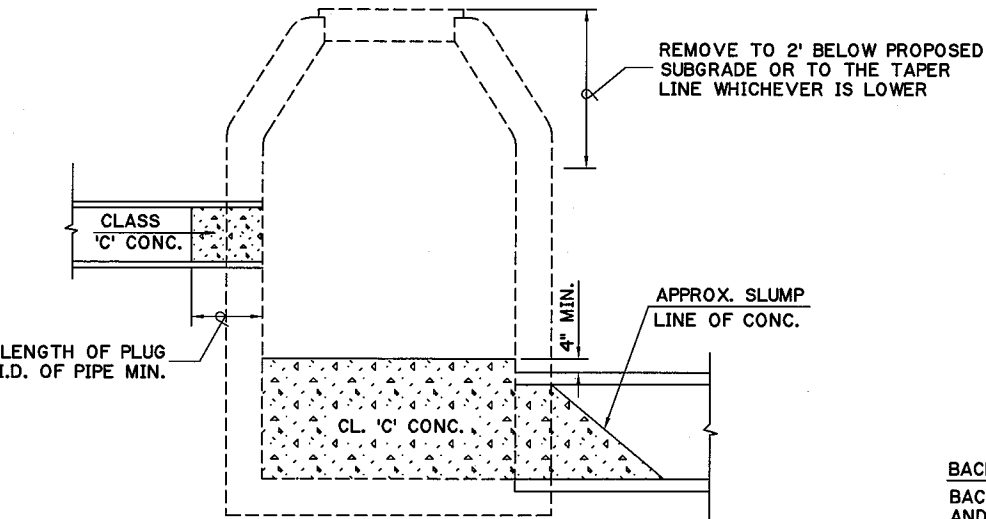
NOTE:
ALL PIPE LINES ABANDONED AND LEFT IN PLACE BY OTHERS AND STORM SEWERS, SANITARY SEWERS AND WATER LINES WHICH ARE ABANDONED UNDER THIS CONTRACT, SHALL BE REMOVED TO THE LIMITS OF CONSTRUCTION IN EXCAVATION SECTIONS AND PLUGGED AS SHOWN. IN EMBANKMENT SECTIONS "ABANDONED" SANITARY SEWER LINES (UNLESS OTHERWISE NOTED ON PLANS) AND WATER LINES "PLACED OUT OF SERVICE" SHALL BE PLUGGED AT BOTH ENDS. STORM SEWER, A PART OF WHICH WILL REMAIN IN SERVICE, SHALL BE PLUGGED AT THE R/W LINE. WHERE NOTED, THE EXISTING ABANDONED SANITARY SEWER LINES SHALL BE COMPLETELY FILLED WITH CLSM.



METHOD OF PLUGGING ABANDONED PIPE LINES
(COST OF PLUGGING SHALL BE INCLUDED IN THE UNIT PRICE BID ON OTHER ITEMS OF WORK.)

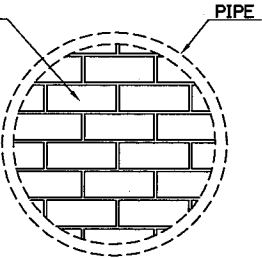
GENERAL NOTES

- ALL MATERIALS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS SPECIFICALLY NOTED OTHERWISE.
- CLASS 'C' CONCRETE SHALL BE PLACED IN THE BOTTOM OF EACH MANHOLE AS SHOWN. MANHOLE THEN SHALL BE REMOVED TO DEPTH SPECIFIED AND BACK-FILLED IN ACCORDANCE WITH SEC. 619, OR FILLED WITH BRICK, BROKEN CONCRETE AND LOOSE SAND IN A MANNER TO ELIMINATE ALL VOIDS IN A MANNER APPROVED BY THE ENGINEER. COST TO BE INCLUDED IN PRICE BID FOR CLASS 'C' CONCRETE.
- PRICE BID SHALL ALSO INCLUDE, BUT IS NOT LIMITED TO, THE REMOVAL OF CONCRETE DITCH LINER, CONCRETE FLUMES, STRUCTURES, STORM SEWERS, PIPELINES, SAWING PAVEMENT, CONC. CURB & GUTTER, SLOPE WALL, PAVEMENT MARKINGS, FENCING, FOOTINGS, POLES, OVERHEAD AND CANTILEVER SIGN STRUCTURES, GROUND MOUNTED SIGN STRUCTURES AND SHEET METAL SIGNS TO BE PERMANENTLY REMOVED AND ANY OTHER NON-ORGANIC ITEM NOT SPECIFICALLY LISTED AS A REMOVAL PAY ITEM. ITEMS TO BE REMOVED SHOULD BE FIELD VERIFIED AS TO THE EXISTING CONDITION AND POSSIBLE NON-STANDARD REMOVAL OPERATIONS THAT MAY BE REQUIRED.
- INTEGRAL CURB REMOVED W/CONCRETE PAVING SHALL BE INCLUDED IN THE PRICE BID FOR REMOVAL OF CONCRETE PAVING S.Y.
- ALL SALVAGE MATERIALS BELONGING TO THE CITY OF OKLAHOMA CITY SHALL BE DELIVERED TO THE OKC TRAFFIC OPERATIONS YARD, 1400 S. SHARTEL, OKLA. CITY, OK 405-297-2648
- CONCRETE RAIL REMOVED WITH EXISTING RETAINING WALL SHALL BE INCLUDED IN THE PRICE BID FOR REMOVAL OF RETAINING WALL L.F..



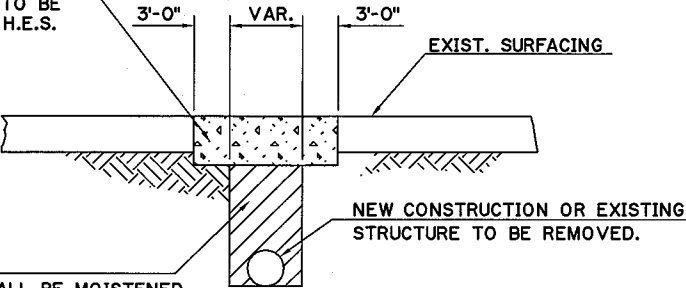
**DETAIL OF REMOVAL OF MANHOLES,
JUNCTION BOXES & INLETS**

CONST. PLUG (BRICK & MORTAR)
COST TO BE INCLUDED IN OTHER
ITEMS OF WORK.



DETAIL OF TEMPORARY PIPE PLUG

9" H.E.S. CONCRETE PAV'T. (PATCHING)
(COST OF REMOVING EXIST. SURFACING,
BACKFILLING AND COMPACTING TO BE
INCLUDED IN PRICE BID FOR 9" H.E.S.
P.C. CONC. PAV'T. (PATCHING).



BACKFILL AND COMPACT
BACKFILL MATERIAL (SEE STD. SPB-1) SHALL BE MOISTENED
AND COMPACTED IN LIFTS NOT TO EXCEED SIX (6)
INCHES TO A DENSITY OF 95% STANDARD PROCTOR

PATCHING DETAIL

(WHERE IT IS NECESSARY TO CUT EXISTING SURFACING FOR REMOVAL OR CONSTRUCTION
OF AN UNDERGROUND FACILITY)

Design	
Drawn	
Checked	
Approved	
Squad	POE

**SUMMARY OF
REMOVALS AND DETAILS**

State Job No. 09032(20) Sheet No. 39

SUMMARY OF SURFACING QUANTITIES (ROADWAY)

[illegible]

Design		
Drawn		
Checked		
Approved		
Squad	POE	

SUMMARY OF SURFACING QUANTITIES

State Job No. 09032(20) Sheet No. 40

SUMMARY OF TEMPORARY SEDIMENT CONTROL					
STATION LOCATION	221(C) SILT FENCE	221(F) SILT DIKE	221(H) TEMP. INLET SEDIMENT FILTER	221(K) TEMP. FIBER LOG	233(A) VEGETATIVE MULCH
	L.F.	L.F.	EA.	L.F.	ACRE
I-240					
STA. 377+46.07 TO STA. 390+00.00	2145	42	30	104	1.12
STA. 390+00.00 TO STA. 405+00.00	1912		32	133	1.34
TOTALS:	4057	42	62	237	2.46

SUMMARY OF EROSION CONTROL					
STATION LOCATION	230(A) SLAB SODDING	FERTILIZING (10-20-10)	FERTILIZING (18-46-0)	WATERING	241 MOWING
	S.Y.	TON	TON	M-GAL.	ACRES
I-240					
STA. 377+46.07 TO STA. 390+00.00	3918	0.39	0.06	314	0.81
STA. 390+00.00 TO STA. 405+00.00	2550	0.26	0.04	204	0.53
TOTALS:	6468	0.65 ●	0.10 ●	518 ●	1.34

● FOR INFORMATIONAL PURPOSES ONLY, COSTS TO BE INCLUDED IN OTHER ITEM OF BID.
SEE SUMMARY OF PAY QUANTITIES (ROADWAY).

CONSTRUCTION NOTES

NO ERODIBLE EXPOSED AREAS WILL BE LEFT BARE OVER AN EXTENDED PERIOD OF TIME.
AND THE ENGINEER WILL HAVE THE AUTHORITY TO DIRECT THE CONTRACTOR TO SHAPE
AND FINISH ANY AREA AND TO BEGIN REPLACEMENT OF TOPSOIL AND THE SOLID SLAB
SOD AS SOON AS PRACTICAL ON THE FINISHED SLOPES.

PERMANENT EROSION CONTROL (VEGETATIVE ITEM)

THE PERMANENT EROSION CONTROL VEGETATIVE ITEM IS SOLID SLAB SODDING. THE
PERMANENT ITEM SHALL BE CONSTRUCTED ONLY DURING THE SEASONAL PERIOD SHOWN ON
THE PLANS, AS CUT AND FILL SECTIONS ARE BROUGHT TO GRADE AND CONSTRUCTED TO
THE LINES AND DIMENSIONS SHOWN ON TYPICAL SECTIONS. THE SALVAGED TOPSOIL SHALL
BE PROMPTLY REPLACED AND FINISHED. IMMEDIATELY AFTER REPLACEMENT OF THE TOPSOIL.
THE PERMANENT EROSION CONTROL ITEM SPECIFIED FOR EACH PARTICULAR AREA SHALL BE
CONSTRUCTED. IF IN ACCORDANCE WITH SEASONAL LIMITATIONS, AS SHOWN ON THE PLANS.
THIS WORK SHALL BEGIN PROMPTLY AND SHALL PROCEED WITHOUT UNDUE DELAY UNTIL
COMPLETED OR UNTIL INTERRUPTED BY THE "OUT OF SEASON PERIOD". CONSTRUCTION OF
THE ITEM SHALL BE RESUMED IMMEDIATELY WITH THE BEGINNING OF THE "IN SEASON
PERIOD" FOR THAT PARTICULAR ITEM. THE PERMANENT EROSION CONTROL ITEM SPECIFIED
FOR THE VARIOUS AREAS SHALL ALSO BE CONSTRUCTED ON THE AREAS THAT HAVE BEEN
PREVIOUSLY TREATED WITH TEMPORARY ITEMS, AND THIS WORK SHALL BEGIN IMMEDIATELY
WITH THE BEGINNING OF THE "IN SEASON PERIOD" FOR THE PERMANENT ITEM AND
CONTINUE UNTIL COMPLETED OR UNTIL INTERRUPTED BY THE "OUT OF SEASON PERIOD".

ALL SLAB SODDING TO BE BERMUDA ONLY.

TEMPORARY EROSION CONTROL

THE TEMPORARY VEGETATIVE EROSION CONTROL IS VEGETATIVE MULCH (STRAW) IT SHALL BE
APPLIED ON ALL CUTS, FILLS, AND DISTURBED ERODIBLE AREAS IN LIEU OF THE PERMANENT
ITEM THAT WAS HELD UP OR INTERRUPTED BY SEASONAL LIMITATIONS. THIS WORK SHALL
BEGIN IMMEDIATELY AFTER REPLACEMENT OF TOPSOIL, OR AS OTHERWISE DIRECTED BY THE
ENGINEER.

SUMMARY OF GRADING ESTIMATE						
STATION LOCATION	202(A) UNCL. EXCAV.	EMB.+15%	202(D) UNCL. BORROW	202(D) UNCL. BORROW (TOPSOIL)	EXCESS EXCAV.	205(A)▲ TYPE 'A' SALVAGE TOPSOIL
	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.
EARTHWORK						
I-240						
STA. 377+46.07 TO STA. 408+44.95	12182	5975	0	658	6207	24
RAMP SF3						
STA. 380+37.16 TO STA. 387+39.34	905	792	0	51	113	60
RAMP SF4						
STA. 378+47.39 TO STA. 386+44.53	1877	387	0	129	1490	37
TOTAL:	14964	7154	0	838	7810	121

▲ TOPSOIL SHALL BE PAID FOR AS A LUMP SUM QUANTITY.

SUMMARY OF DISTURBED DRAINAGE AREAS					
D.A. NO.	OUTFALL STATION	DESCRIPTION	AREA	AREA SEDIMENT CONTROL MEASURES	STANDARDS/ SPECIAL DETAILS
			ACRES		
D 1	5' x 4' RCB APPROX. 500' W. OF SANTA FE VIA EX. 4' x 4' RCB	SHEET RUNOFF TO EXIST. & PROPOSED STORM SEWER INLETS	10.66	SILT FENCE, TEMP. SED. FLTR. & TEMP. INLET SED. FLTR.	SSS-1. TSC2-3, TRFD-1 & DET. SHT. NO.
D 2	CL I-240 STA. 406+08.37 EXISTING STR.	SHEET RUNOFF TO PROPOSED TEMP. DITCH AND EXIST. & PROPOSED STORM SEWER INLETS	0.53	SILT FENCE, SILT DIKE, TEMP. SED. FLTR. & TEMP. INLET SED. FLTR.	SSS-1. TSC2-3, TSD-2, TRFD-1 & DET. SHEET NO.
		TOTAL	11.19		

SCHEDULE OF PAVED DITCHES						
LOCATION STATION TO STATION	LENGTH	CLASS "C" CONCRETE				REMARKS
		BOTTOM WIDTH	NO. OF CURTAIN WALLS	CLASS "C" CONC.	DESIGN NO.	
	L.F.	L.F.		C.Y.		
EASTBOUND I-240						
STA. 384+16.67 TO STA. 390+00.00	583.3	2	8	31.0	1	
STA. 390+00.00 TO STA. 392+43.70	243.9	2	4	13.0	1	
STA. 394+96.24 TO STA. 402+00.00	705	2	10	37.4	1	
WESTBOUND I-240						
STA. 385+17.36 TO STA. 390+00.00	482.6	2	7	25.7	1	
STA. 390+00.00 TO STA. 392+21.00	221.8	2	4	11.9	1	
STA. 394+20.00 TO STA. 398+40.00	420.2	2	7	22.4	1	
TOTAL	2656.8		40	141.4		

DESCRIPTION	REVISIONS	
	DATE	

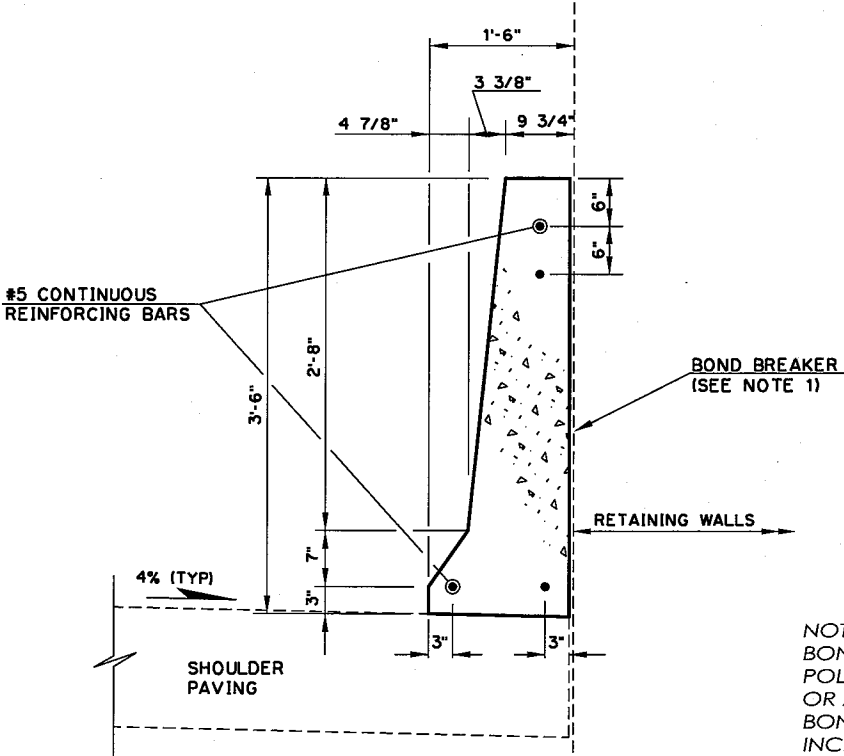
Design			SCHEDULES & SUMMARIES
Drawn			
Checked			
Approved			
Squad	POE		
State Job No. <u>09032(20)</u> Sheet No. <u>42</u>			

SUMMARY OF LONGITUDINAL BARRIER																	
LOCATION STATION TO STATION	504(E) 42" F-SHAPED PARAPET	509(A) CLASS AA CONC.	509(B) CLASS A CONC.	509(B) CLASS A CONC. (LONG. BAR. DES. 1-A)	511(A) REINF. STEEL	610(C) 4" CONC. DIVIDING STRIP	627(A) CONC. LONG. BARRIER (DES. 1)	627(B) CONCRETE LONG. BAR. END SECTIONS	877(A) PORTABLE LONG. BARRIER	DESIGN							
	L.F.	C.Y.	C.Y.	C.Y.	LB.	S.Y.	L.F.	E.A.	L.F.	①	②	③	④	⑤	⑥	⑦	⑧
	L.F.	C.Y.	C.Y.	C.Y.	LB.	S.Y.	L.F.	E.A.	L.F.	1	1A	FSB	FSB	TS	L.P. SUP	O.H. SIGN SUP	FSB P.P.
EAST BOUND I-240																	
377+46.07 TO 390+00.00 RT	861			84.5	8331			3			X	X	X				
390+00.00 TO 405+00.00 RT	1202							1				X					
WEST BOUND I-240																	
377+46.07 TO 390+00.00 LT	909							3				X	X				
390+00.00 TO 405+00.00 LT	726							1	112.5			X					
MEDIAN I-240																	
377+46.07 TO 390+00.00							897	1		X					X	X	
390+00.00 TO 405+00.00							451		112.5	X				X	X		X
								1									
TOTALS	3698			84.5	8331		1348	10	225.0								

- ① DESIGN 1 LONGITUDINAL BARRIER - SEE ODOT STANDARD DRAWING CLB-1-2
- ② DESIGN 1A LONGITUDINAL BARRIER - SEE ODOT STANDARD DRAWING CLB-1-2
- ③ F-SHAPED PARAPET - SEE ODOT STANDARD DRAWING FSHP-42-2-00E
- ④ F-SHAPED PARAPET WITH MOMENT SLAB - SEE DETAIL SHEET NO. ____
- ⑤ MEDIAN BARRIER TRANSITION - SEE DETAIL SHEET NO. ____
- ⑥ MEDIAN BARRIER LIGHT POLE SUPPORT - SEE DETAIL SHEET NO. ____
- ⑦ MEDIAN BARRIER OVERHEAD SIGN STRUCTURE SUPPORT - SEE DETAIL SHEET NO. ____
- ⑧ F-SHAPED PARAPET - PIER & RETAINING WALL PROTECTION - SEE DETAIL SHEET NO. ____

NOTE: FOR QUANTITIES NOT SHOWN SEE
APPROPRIATE DETAIL SHEETS.

SCHEDULE OF ELEVATIONS DESIGN 1-A LONGITUDINAL BARRIER			
STATION	GRADE ELEV. LEFT	GRADE ELEV. RIGHT	REMARKS
I-240 RT			
379+02.40	1271.57	1268.57	
379+50.00	1270.70	1267.69	
380+00.00	1269.58	1267.12	
380+50.00	1268.36	1266.67	
381+00.00	1267.13	1266.20	
381+50.00	1265.95	1265.58	
382+00.00	1264.86	1264.83	
381+10.00	1264.65	1264.65	



TYPICAL SECTION THRU
BARRIER AT RETAINING WALLS
THIS BARRIER BID AS: "42" F-SHAPED PARAPET" L.F.

SUMMARY OF PIPE EDGE DRAIN			
LOCATION STATION TO STATION	EDGE DRAIN CONDUIT PERFORATED	EDGE DRAIN OUTLET LATERAL NON- PERFORATED	REMARKS
	L.F.	L.F.	
	L.F.	L.F.	
EAST BOUND I-240			
STA. 377+46.07 TO STA. 379+98.00 RT.	252		STUB INTO STRUCTURE 34
STA. 379+98.00 TO STA. 382+15.00 RT.	217		STUB INTO STRUCTURE 4
STA. 386+44.53 TO STA. 388+11.82 RT.	168		STUB INTO STRUCTURE 14
STA. 388+11.82 TO STA. 389+50.00 RT.	139		STUB INTO STRUCTURE 2
STA. 389+50.00 TO STA. 391+09.30 RT.	160		STUB INTO STRUCTURE 3
STA. 391+09.30 TO STA. 393+50.00 RT.	241		STUB INTO STRUCTURE 3
STA. 393+50.00 TO STA. 394+50.00 RT.	100		STUB INTO STRUCTURE 5
STA. 394+50.00 TO STA. 395+75.00 RT.	125		STUB INTO STRUCTURE 7
STA. 395+75.00 TO STA. 397+00.00 RT.	125		STUB INTO STRUCTURE 8
STA. 397+00.00 TO STA. 399+00.00 RT.	200		STUB INTO STRUCTURE 9
STA. 399+00.00 TO STA. 400+21.14 RT.	122		STUB INTO STRUCTURE 10
STA. 400+21.14 TO STA. 401+50.00 RT.	129		STUB INTO STRUCTURE 11
STA. 401+50.00 TO STA. 402+00.00 RT.	50		STUB INTO STRUCTURE 12
MISCELLANEOUS		650	
WEST BOUND I-240			
STA. 377+46.07 TO STA. 380+48.00 LT.	302		STUB INTO STRUCTURE 28
STA. 380+48.00 TO STA. 383+39.00 LT.	292		STUB INTO STRUCTURE 27
STA. 387+39.34 TO STA. 391+09.36 LT.	371		STUB INTO STRUCTURE 22
STA. 391+09.36 TO STA. 394+05.00 LT.	296		STUB INTO STRUCTURE 22
STA. 394+05.00 TO STA. 394+75.00 LT.	70		STUB INTO STRUCTURE 21
STA. 394+75.00 TO STA. 395+75.00 LT.	100		STUB INTO STRUCTURE 20
STA. 395+75.00 TO STA. 397+00.00 LT.	125		STUB INTO STRUCTURE 18
STA. 397+00.00 TO STA. 397+24.67 LT.	25		STUB INTO STRUCTURE 17
MISCELLANEOUS		400	
MEDIAN I-240			
STA. 377+46.07 TO STA. 391+09.30 C	1364		STUB INTO STRUCTURE 25
STA. 391+09.36 TO STA. 397+24.67 C	616		STUB INTO STRUCTURE 25
MISCELLANEOUS	300	50	
RAMP SF3			
STA. 383+45.53 TO STA. 385+23.00 LT.	178		STUB INTO STRUCTURE 26
STA. 385+23.00 TO STA. 387+39.34 LT.	217		TIE TO EDGE DRAIN WEST BOUND I-240 LT.
MISCELLANEOUS		50	
RAMP SF4			
STA. 382+21.82 TO STA. 386+00.00 RT.	379		STUB INTO STRUCTURE 16
STA. 386+00.00 TO STA. 386+44.53 RT.	45		TIE TO EDGE DRAIN EAST BOUND I-240 RT.
MISCELLANEOUS		50	
TOTALS:	6708	1200	

- NOTES 1. ALL PERFORATED EDGE DRAIN SHALL BE FACTORY WRAPPED WITH SYNTHETIC
FILTER FABRIC.
2. COST OF ALL FITTINGS, COUPLINGS, STUB-INS, STRUCTURAL OUTLETS AND
TRENCHING SHALL BE INCLUDED IN THE PRICE BID FOR EDGE DRAIN OUTLET
LATERAL NONPERFORATED PIPE.

NOTE 1:
BOND BREAKER:
POLYETHYLENE SHEETING 6 MILS THICK
OR 2 SHEETS 4 MILS THICK TO ACT AS A
BOND BREAKER. COST TO BE
INCLUDED IN OTHER ITEMS OF WORK.

Design	
Drawn	
Checked	
Approved	
Squad	POE

LONGITUDINAL BARRIER
& EDGE DRAIN
SCHEDULES

State Job No. 09032(20) Sheet No. 43

\\02-45 G:\00\Projects\17-2457 I-240-1-35 Phase 1\CAD\PHASE 1\LIGHT SCH.dgn

REVISIONS		
NO.	DESCRIPTION	DATE

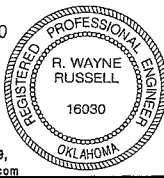
LIGHT POLE SCHEDULE																		
LOCATION				FOOTING				POLE ASSEMBLY								REMARKS		
SHEET NO.	POLE NO.	STATION (CTR. OR REF. LINE)		DISTANCE FROM EDGE OF TRAVEL LANE FT	TYPE	STRL.	CLASS 'A'	STL.	B.BASE DESIGN NO.	POLE LENGTH FT	ARM NO.	ARM NO.	NO./WATTS	IES DIST.	1/C NO 12		LIGHTNING	
						CONC.	CONC.	LB			1	2	EAWATT	TYPE	AWG TYPE THW		ARRESTOR	
						CY	CY	LB			FT	FT			FT	EA		
	1	377+55	CL (MAINLINE I-240)	BARRIER WALL	SEE DETAIL		7.80	430			36	POST TOP	POST TOP	2 - 245	MS4	250	1	OVAL POLE-SEE DETAILS
	2	AS SHOWN	(N SERVICE RD)	7	GMF24X60	0.58		33.4	B	38	POST TOP			1 - 245	MS3	125	1	ROUND POLE-SEE HLD3-1-00
	3	AS SHOWN	(S SERVICE RD)	10	GMF24X60	0.58		33.4	B	38	POST TOP			1 - 245	MS3	125	1	ROUND POLE-SEE HLD3-1-00
	4	379+00	CL (MAINLINE I-240)	BARRIER WALL	SEE DETAIL		6.34	480.00			36	POST TOP	POST TOP	2 - 245	MS4	250		OVAL POLE-SEE DETAILS
	5	379+80	CL (S SERVICE RD)	10	GMF24X60	0.58		33.4	B	38	POST TOP			1 - 245	MS3	125		ROUND POLE-SEE HLD3-1-00
	6	AS SHOWN	(N SERVICE RD)	10	GMF24X60	0.58		33.4	B	38	POST TOP			1 - 245	MS3	125		ROUND POLE-SEE HLD3-1-00
	7	380+45	CL (MAINLINE I-240)	BARRIER WALL	SEE DETAIL		6.34	480.00			36	POST TOP	POST TOP	2 - 245	MS4	250	1	OVAL POLE-SEE DETAILS
	8	380+90	CL (N SERVICE RD)	12	GMF24X60	0.58		33.4	B	38	POST TOP			1 - 245	MS3	125		ROUND POLE-SEE HLD3-1-00
	9	381+25	CL (S SERVICE RD)	10	GMF24X60	0.58		33.4	B	38	POST TOP			1 - 245	MS3	125	1	ROUND POLE-SEE HLD3-1-00
	10	381+90	CL (MAINLINE I-240)	BARRIER WALL	SEE DETAIL		6.34	480.00			36	POST TOP	POST TOP	2 - 245	MS4	250	1	OVAL POLE-SEE DETAILS
	11	382+40	CL (N SERVICE RD)	12	GMF24X60	0.58		33.4	B	38	POST TOP			1 - 245	MS3	125	1	ROUND POLE-SEE HLD3-1-00
	12	382+70	CL (S SERVICE RD)	8	GMF24X60	0.58		33.4	B	38	POST TOP			1 - 245	MS3	125	1	ROUND POLE-SEE HLD3-1-00
	13	383+35	CL (MAINLINE I-240)	BARRIER WALL	SEE DETAIL		6.34	480.00			36	POST TOP	POST TOP	2 - 245	MS4	250	1	OVAL POLE-SEE DETAILS
	14	383+90	CL (N SERVICE RD)	8	GMF24X60	0.58		33.4	B	38	POST TOP			1 - 245	MS3	125	1	ROUND POLE-SEE HLD3-1-00
	15	384+80	CL (MAINLINE I-240)	BARRIER WALL	SEE DETAIL		6.33	480.00			36	POST TOP	POST TOP	2 - 245	MS4	250		OVAL POLE-SEE DETAILS
	16	386+25	CL (MAINLINE I-240)	BARRIER WALL	SEE DETAIL		6.33	480.00			36	POST TOP	POST TOP	2 - 245	MS4	250		OVAL POLE-SEE DETAILS
	17	387+70	CL (MAINLINE I-240)	BARRIER WALL	SEE DETAIL		6.33	480.00			36	POST TOP	POST TOP	2 - 245	MS4	250	1	OVAL POLE-SEE DETAILS
	18	389+15	CL (MAINLINE I-240)	BARRIER WALL	SEE DETAIL		6.33	480.00			36	POST TOP	POST TOP	2 - 245	MS4	250		OVAL POLE-SEE DETAILS
	19	390+60	CL (MAINLINE I-240)	BARRIER WALL	SEE DETAIL		6.33	480.00			36	POST TOP	POST TOP	2 - 245	MS4	250		OVAL POLE-SEE DETAILS
	20	392+05	CL (MAINLINE I-240)	BARRIER WALL	SEE DETAIL		6.33	480.00			36	POST TOP	POST TOP	2 - 245	MS4	250	1	OVAL POLE-SEE DETAILS
	21	394+36	CL (MAINLINE I-240)	BARRIER WALL	SEE DETAIL		6.33	480.00			36	POST TOP	POST TOP	2 - 245	MS4	250	1	OVAL POLE-SEE DETAILS
	22	396+25	CL (MAINLINE I-240)	BARRIER WALL	SEE DETAIL		6.33	480.00			36	POST TOP	POST TOP	2 - 245	MS4	250	1	OVAL POLE-SEE DETAILS
		UNDERPASS LIGHT		PIER CAP										1 - 105	MS3			
		UNDERPASS LIGHT		PIER CAP										1 - 105	MS3			
		UNDERPASS LIGHT		PIER CAP										1 - 105	MS3			
		UNDERPASS LIGHT		PIER CAP										1 - 105	MS3			
		UNDERPASS LIGHT		PIER CAP										1 - 105	MS3			
TOTALS						5.22	83.80	6490.60	9	13 - 36" OVAL POLES 9 - 38' ROUND POLES			35-245 6-105		4375	14		

SERVICE POLE SCHEDULE																	
SHEET NO.	SERVICE POLE NO.	LOCATION	TYPE	SECONDARY VOLTAGE & NO. PHASE	CONTROLLER							WOOD POLE			METER EQUIP.		REMARKS
		STATION (CTR. OR REF. LINE)			RATING			CIRCUIT LOADING				N=NEW E=EX.	TOTAL LENGTH FT	CLASS	IM=INSTALL METER BASE NM=NOT METERED	DISCONNECT SWITCH 100 AMP	
					QUANTITY	NO. OF CONTACTS	AMP RATE OF CONTACTS	CIRCUIT ID	EST. AMPS PER CIR.	MIN. FUSE AMP/CIR.	VOLTAGE DROP %						
	1	STA. 393+84 LT. 30' FROM FOC	UG/1	480-1	1	2	60	A	28.2	35	3.95	N	35	6	NM	YES	
							60	B	3.4	25	0.18						

R. Wayne Russell
R. WAYNE RUSSELL, P.E. # 16030
C.A. # 1160, RENEWAL 06-30-17

11-2-15
DATE

Traffic Engineering Consultants, Inc.
6000 S. Western, Suite 300 • Oklahoma City, OK 73139,
Ph: 405-720-7721, Fax: 405-720-9848, Web: www.tecok.com



Design	RWR	11-02-15
Drawn	SB	11-02-15
TEC A CLEAR DIRECTION		

LIGHT POLE & SERVICE POLE
SCHEDULES

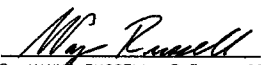
State Job No. 09032(20) Sheet No. 44

OKLAHOMA COUNTY

\\-02-15 G:\0\Projects\11-2457 I-240-I-35 Phase I\CAD\PHASE I\SIGN SUM.dgn

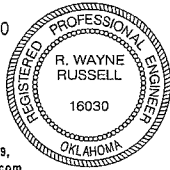
REVISIONS		
NO.	DESCRIPTION	DATE

SIGN SUMMARY															
SHEET NO.	ITEM NO.	APPROXIMATE LOCATION		SIGN TYPE	POSTS				FOOTINGS			SIGN AREA			REMARKS
					TYPE	A L.F.	B L.F.	SPACING	DESIGN NO.	CONCRETE C.Y.	STEEL LBS.	SHEET S.F.	PANEL S.F.	PANEL OVERHEAD S.F.	
	1	AS SHOWN	(I-240)	SPECIAL SIGNS 1, 2										394.30	MOUNTED ON EX. STRUCTURE NO. 1
	2	AS SHOWN	(I-240)	SPECIAL SIGNS 3, 4, 12, 2										657.60	MOUNTED ON EX. STRUCTURE NO. 2
	3	AS SHOWN	(I-240)	SPECIAL SIGNS 5, 6, 11, 4										767.75	MOUNTED ON EX. STRUCTURE NO. 3
	4	378+25	(I-240)	SPECIAL SIGNS 7, 8										504.00	MOUNTED ON NEW STRUCTURE NO. 4
	5	380+73	(S. SERVICE RD.)	ROUTE ASSEMBLY NO. 1	3" PIPE POST	17.0	17.0	1'-11"	A-4	0.46	64.00	16.19			
	6	381+25	(S. SERVICE RD.)	W4-3E(R)	2-1/2" PIPE POST	14.0	14.0	2'-4"	A-3	0.40	48.00	16.00			
	7	383+05	(I-240)	E5-1, E13-1(40)	4" WF @ 13	22.0	23.0	3'-8"	KC-0	0.72	130.00		42.00		
	8	387+00	(I-240)	SPECIAL SIGNS 9, 10										312.50	MOUNTED ON NEW STRUCTURE NO. 5
	9	AS SHOWN	(I-240)	W4-2E(R)	2-1/2" PIPE POST	14.0	14.0	2'-4"	A-3	0.40	48.00	16.00			
TOTAL					2-1/2" PIPE POST	56.0				1.98	290.00	48.19	42.00	2636.15	
					3" PIPE POST	34.0									
					4" WF @ 13	45.0									

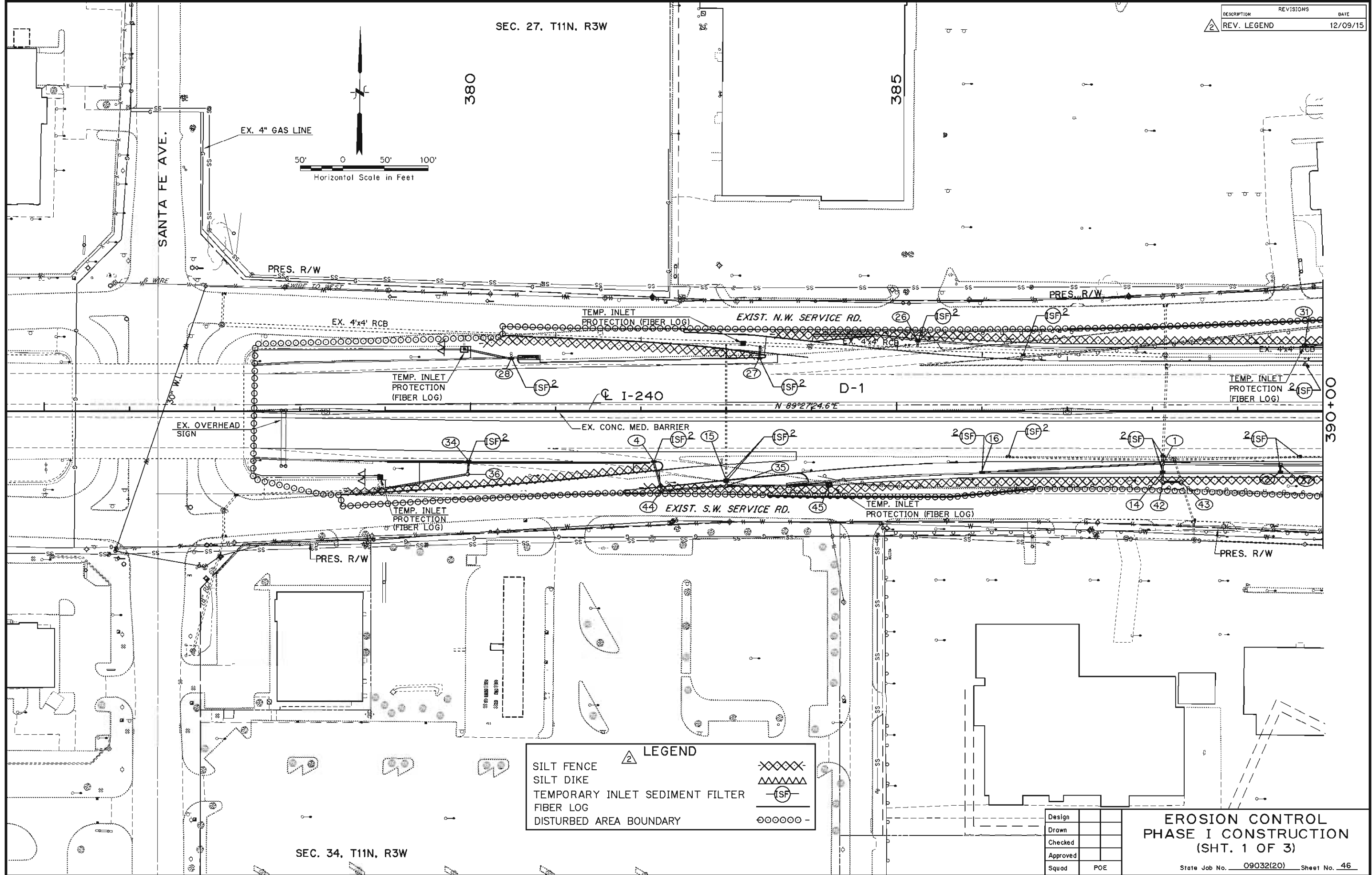

R. WAYNE RUSSELL, P.E. # 16030
C.A. # 1160, RENEWAL 06-30-17

11-2-15
DATE

Traffic Engineering Consultants, Inc.
6000 S. Western, Suite 300 • Oklahoma City, OK 73139,
Ph: 405-720-7721, Fax: 405-720-8848, Web: www.tecok.com



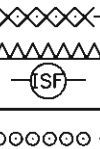
Design	RWR	11-02-15
Drawn	SB	11-02-15
		



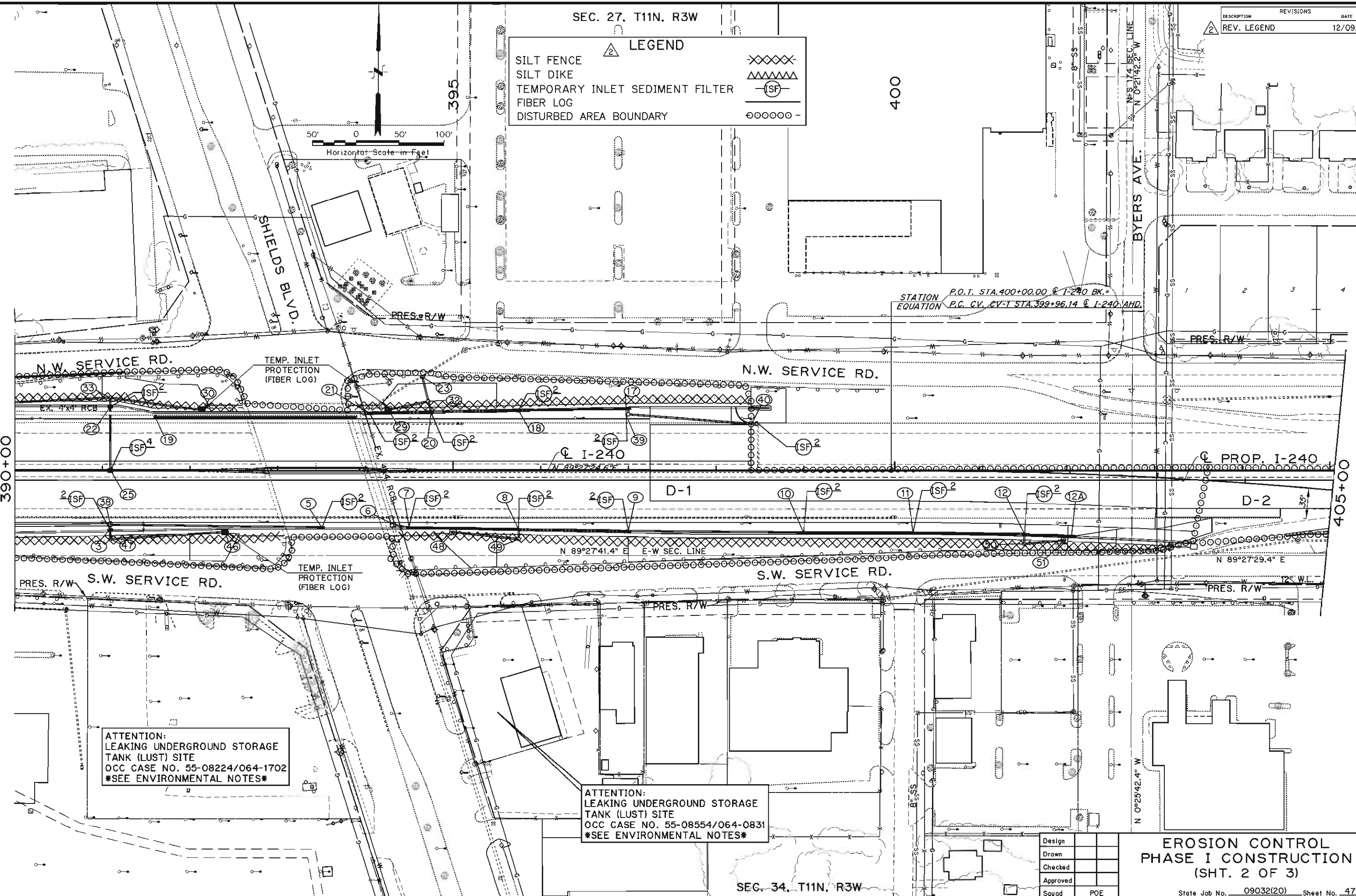
SEC. 27, T11N, R3W

LEGEND

- SILT FENCE
- SILT DIKE
- TEMPORARY INLET SEDIMENT FILTER
- FIBER LOG
- DISTURBED AREA BOUNDARY



DESCRIPTION	REVISIONS	DATE
REV. LEGEND		12/09/15



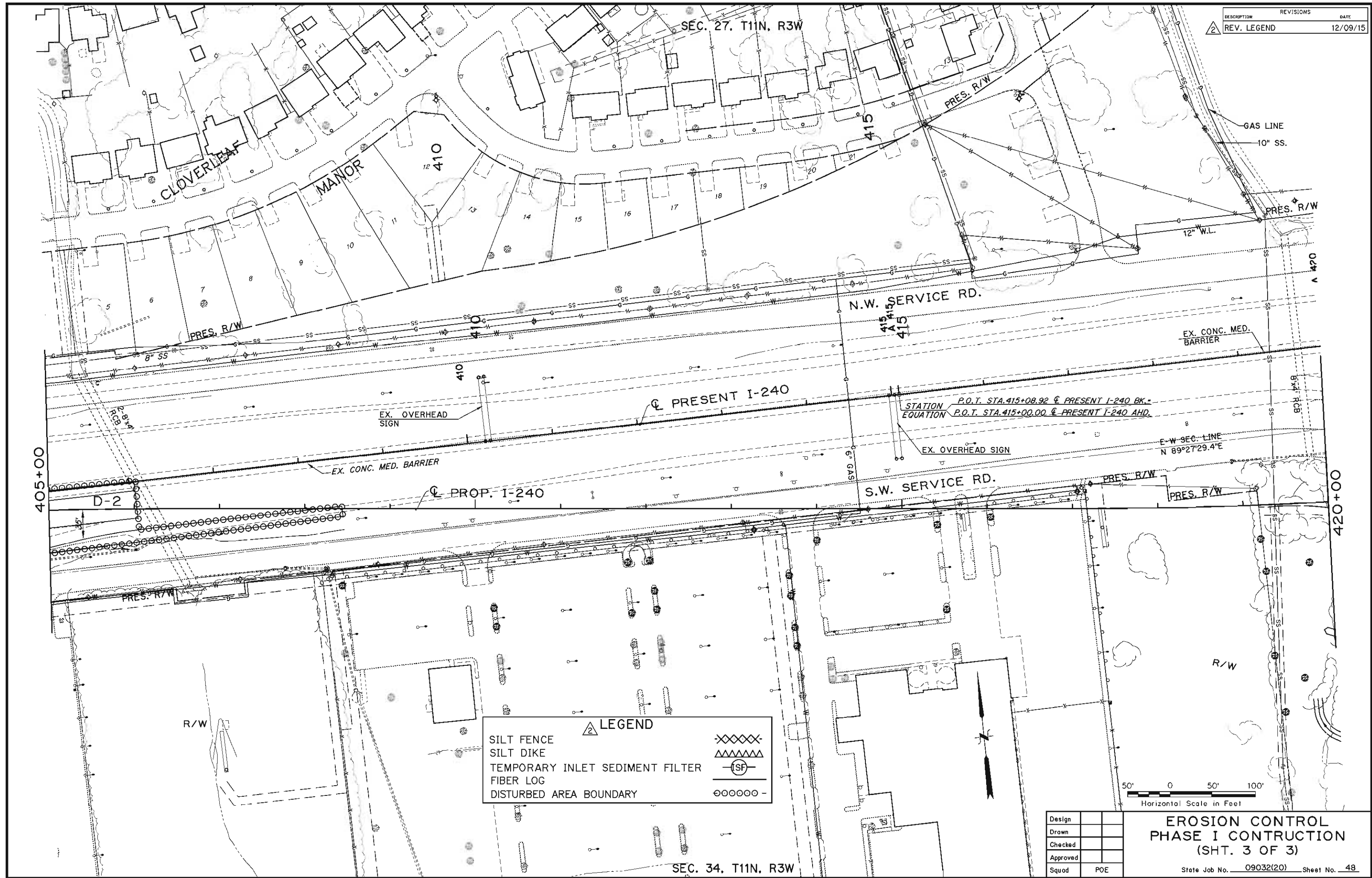
ATTENTION:
LEAKING UNDERGROUND STORAGE
TANK (LUST) SITE
OCC CASE NO. 55-08224/064-1702
SEE ENVIRONMENTAL NOTES

ATTENTION:
LEAKING UNDERGROUND STORAGE
TANK (LUST) SITE
OCC CASE NO. 55-08554/064-0831
SEE ENVIRONMENTAL NOTES

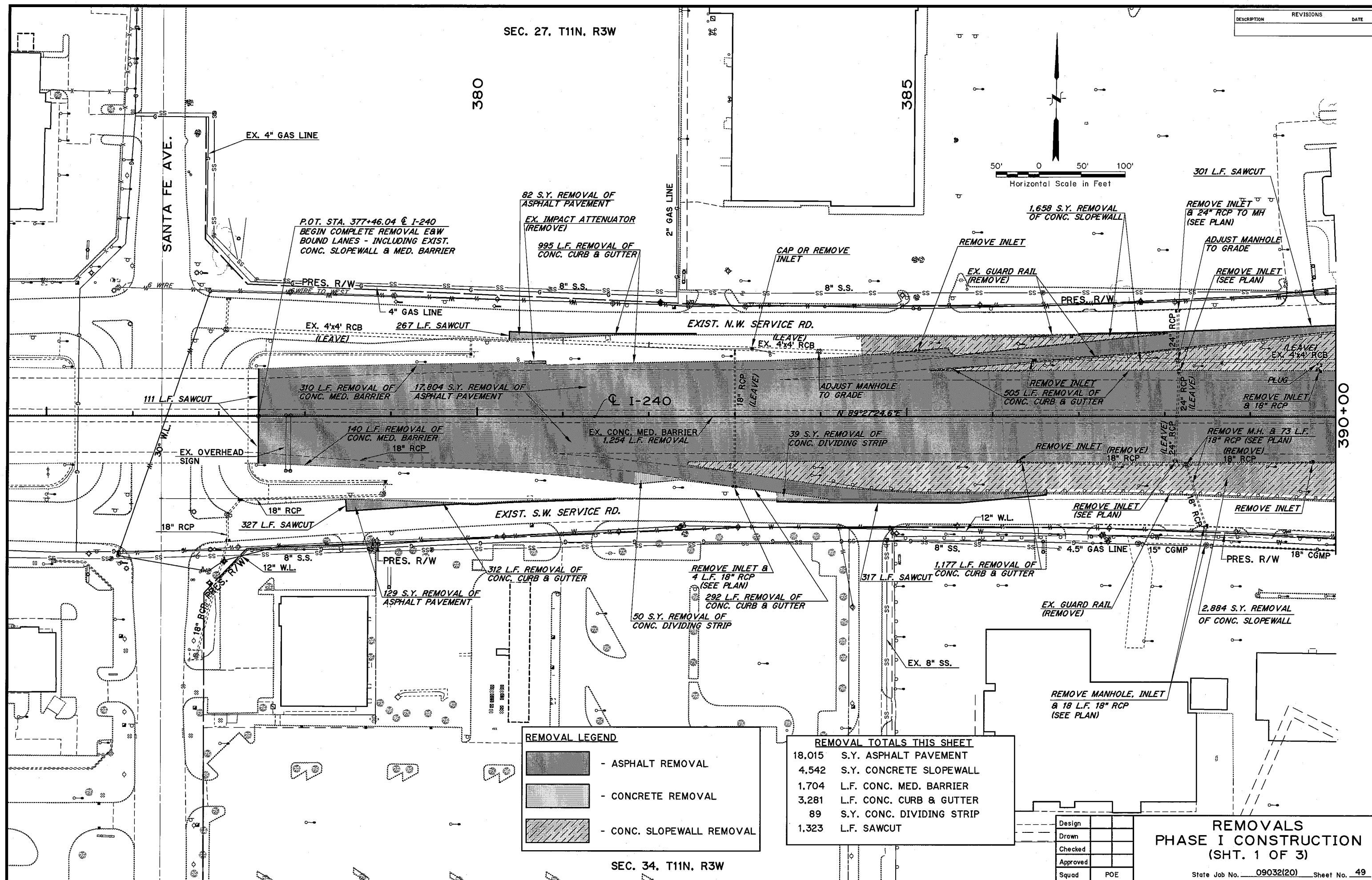
Design	
Drawn	
Checked	
Approved	
Squad	POE

EROSION CONTROL
PHASE I CONSTRUCTION
(SHT. 2 OF 3)

State Job No. 09032(20) Sheet No. 47







SEC. 27, T11N, R3W



Design		
Drawn		
Checked		
Approved		
Squad	POE	

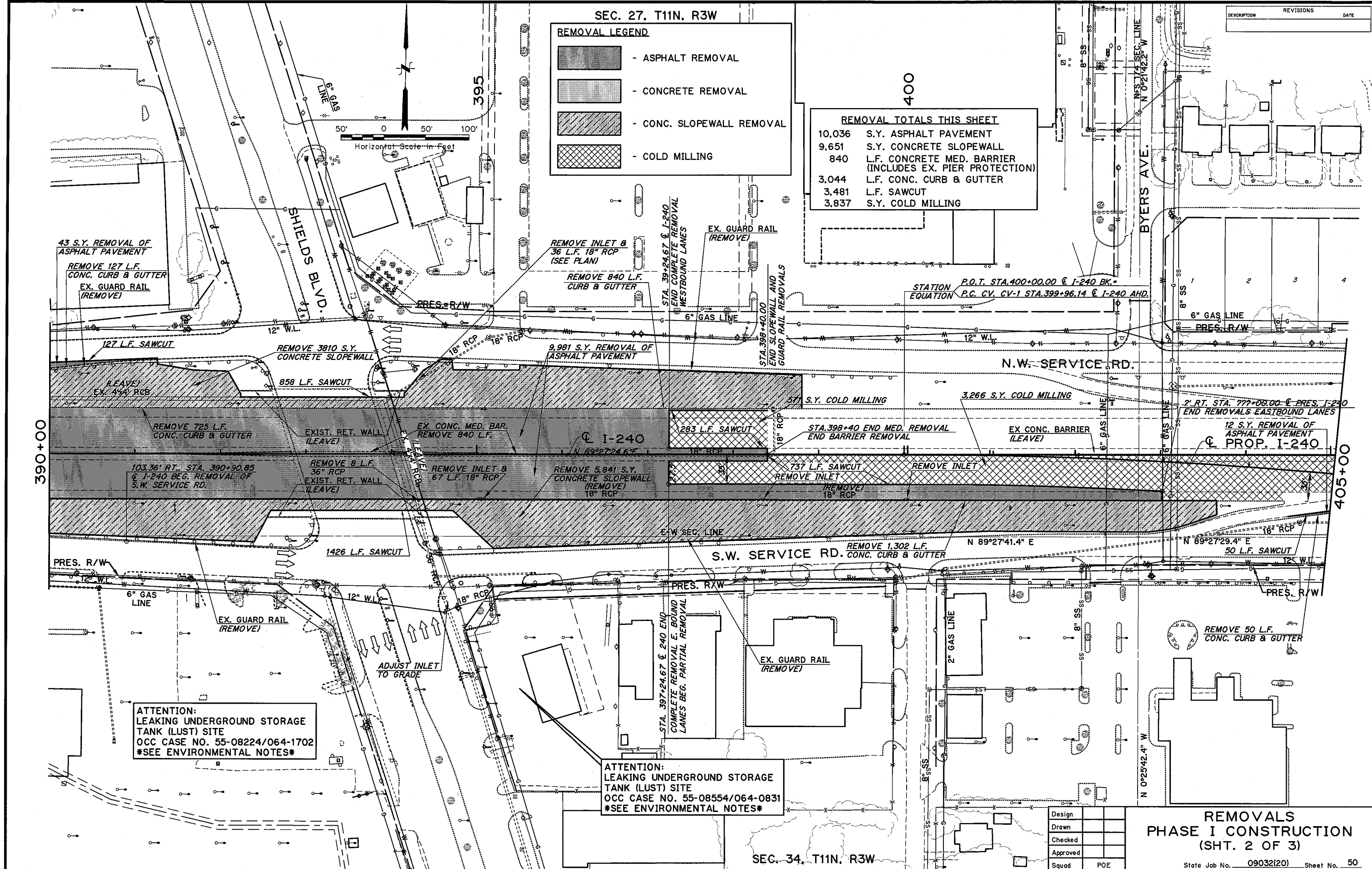
SEC. 27. T11N. R3W

REMOVAL LEGEND

-  - ASPHALT REMOVAL
-  - CONCRETE REMOVAL
-  - CONC. SLOPEWALL REMOVAL
-  - COLD MILLING

REMOVAL TOTALS THIS SHEET

10,036	S.Y. ASPHALT PAVEMENT
9,651	S.Y. CONCRETE SLOPEWALL
840	L.F. CONCRETE MED. BARRIER (INCLUDES EX. PIER PROTECTION)
3,044	L.F. CONC. CURB & GUTTER
3,481	L.F. SAWCUT
3,837	S.Y. COLD MILLING



ATTENTION:
LEAKING UNDERGROUND STORAGE
TANK (LUST) SITE
OCC CASE NO. 55-08224/064-1702
SEE ENVIRONMENTAL NOTES

ATTENTION:
LEAKING UNDERGROUND STORAGE
TANK (LUST) SITE
OCC CASE NO. 55-08554/064-0831
SEE ENVIRONMENTAL NOTES


Design	
Drawn	
Checked	
Approved	
Squad	POE


REMOVALS
PHASE I CONSTRUCTION
(SHT. 2 OF 3)

State Job No. 09032(20) Sheet No. 50

DESCRIPTION	REVISIONS	DATE

REMOVAL LEGEND

 - ASPHALT REMOVAL

 - COLD MILLING

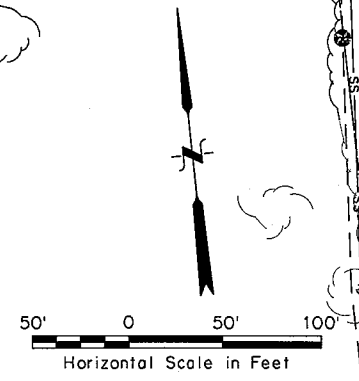
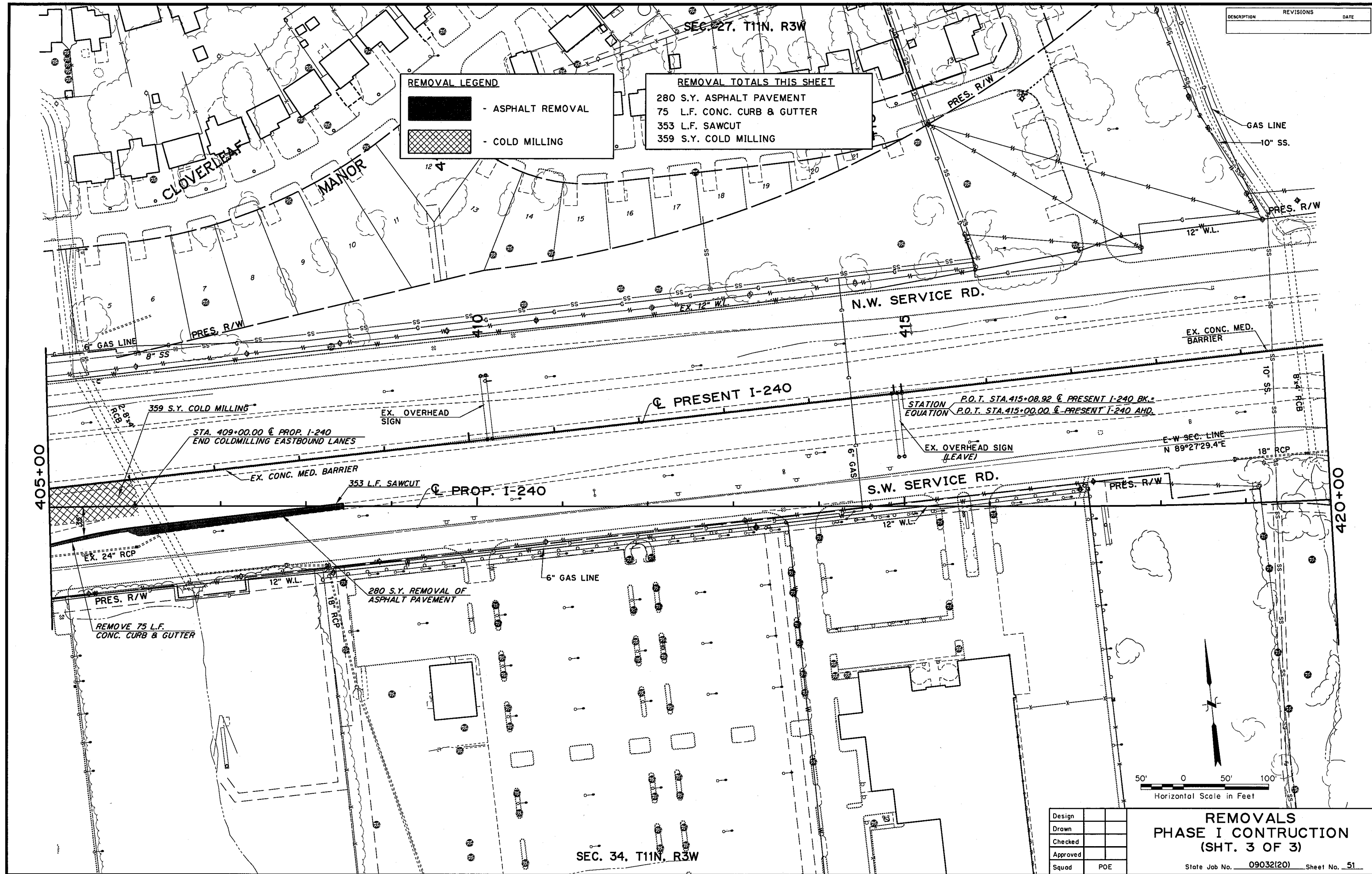
REMOVAL TOTALS THIS SHEET

280 S.Y. ASPHALT PAVEMENT

75 L.F. CONC. CURB & GUTTER

353 L.F. SAWCUT

359 S.Y. COLD MILLING



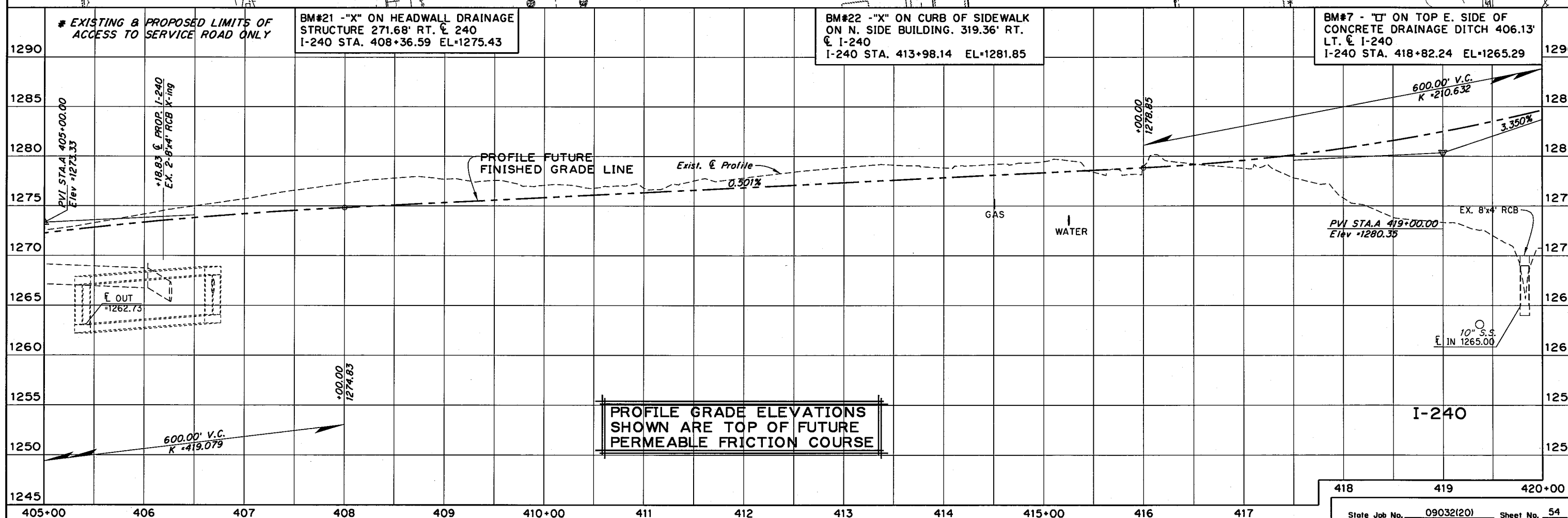
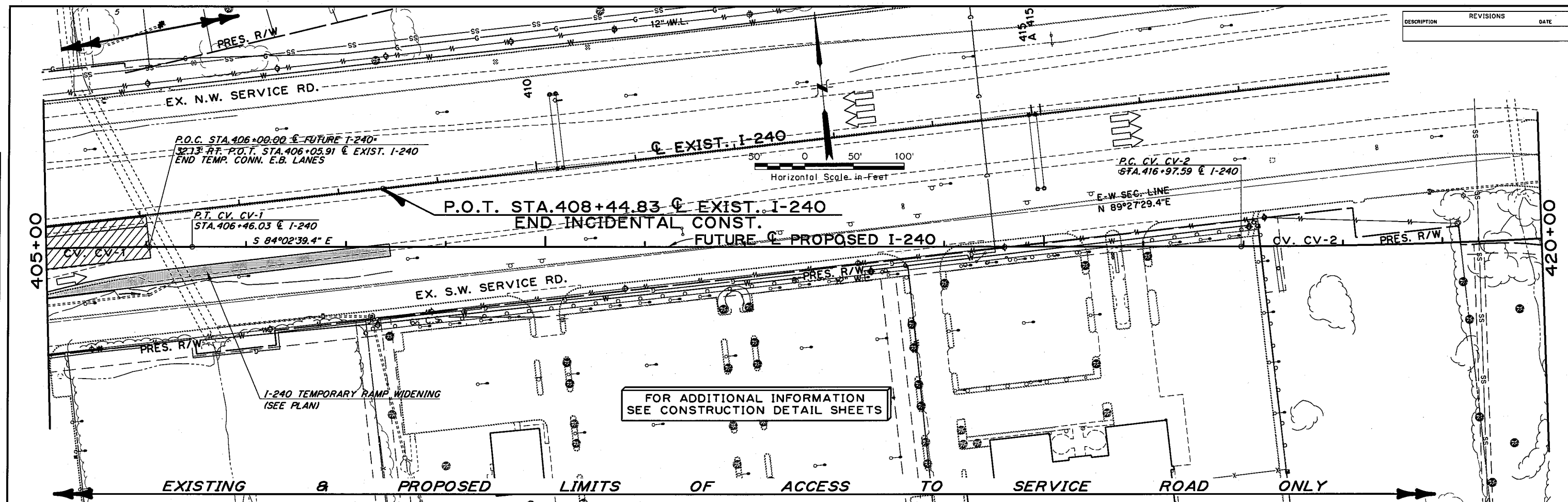
Design	
Drawn	
Checked	
Approved	
Squad	POE

REMOVALS

PHASE I CONSTRUCTION

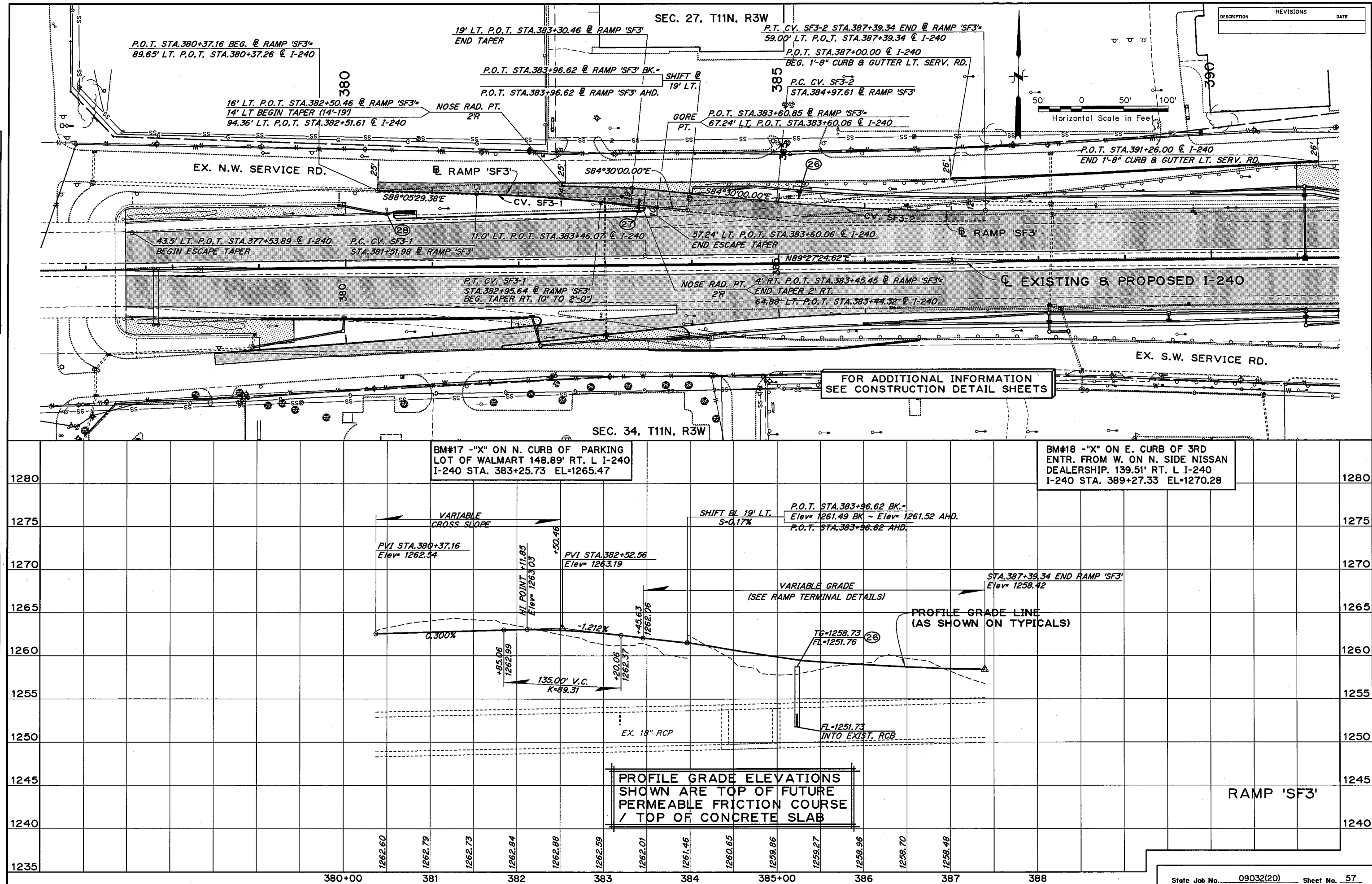
(SHT. 3 OF 3)

State Job No. **09032(20)** Sheet No. **51**



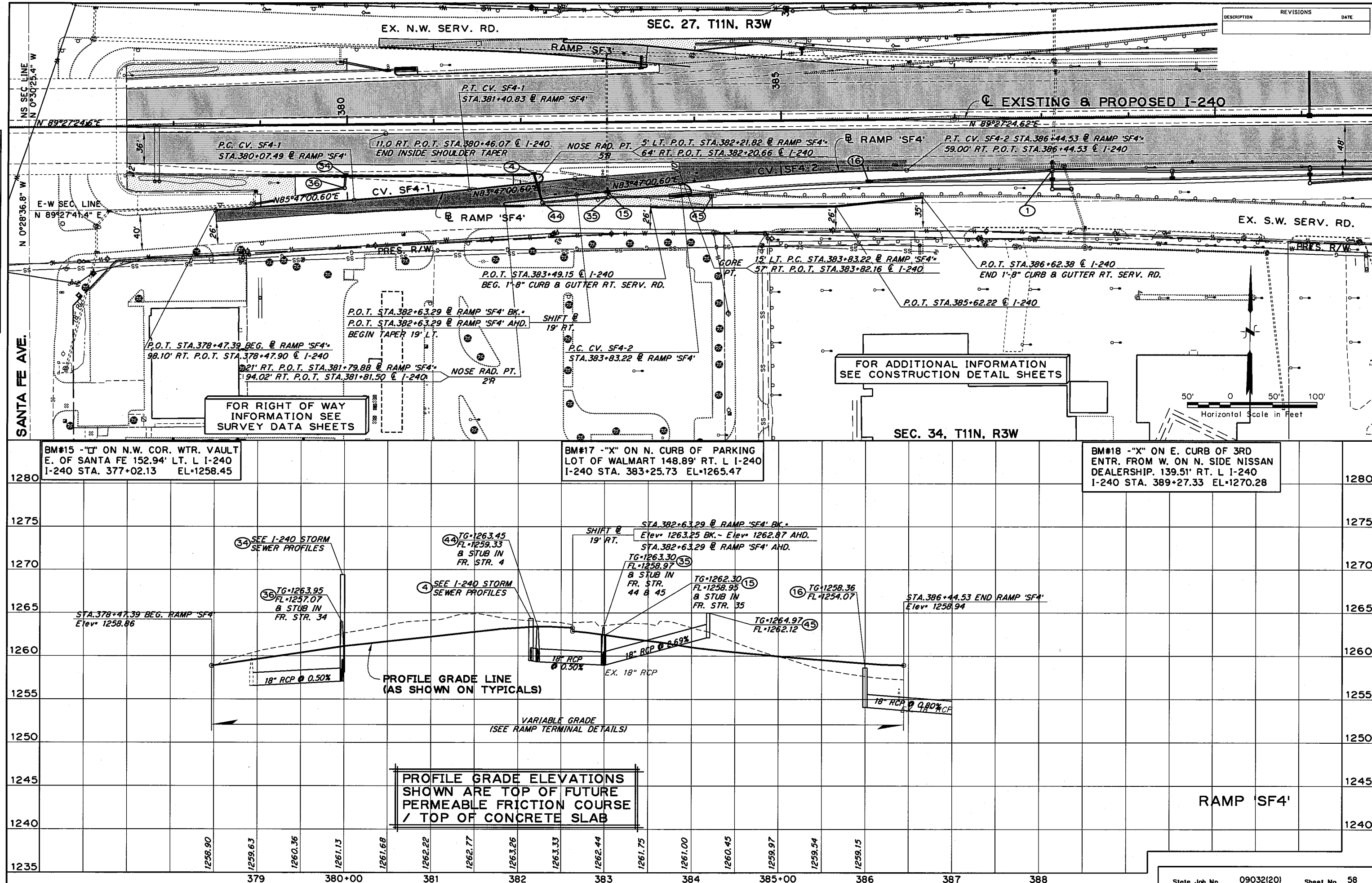
PLAN	DATE	BY
DESIGNED		
NOTED		
ALIGNED		
CHECKED		
RT. OF WAY		
CHECKED		
NO.		

PROFILE	DATE	BY
DESIGNED		
NOTED		
ALIGNED		
CHECKED		
RT. OF WAY		
CHECKED		
NO.		



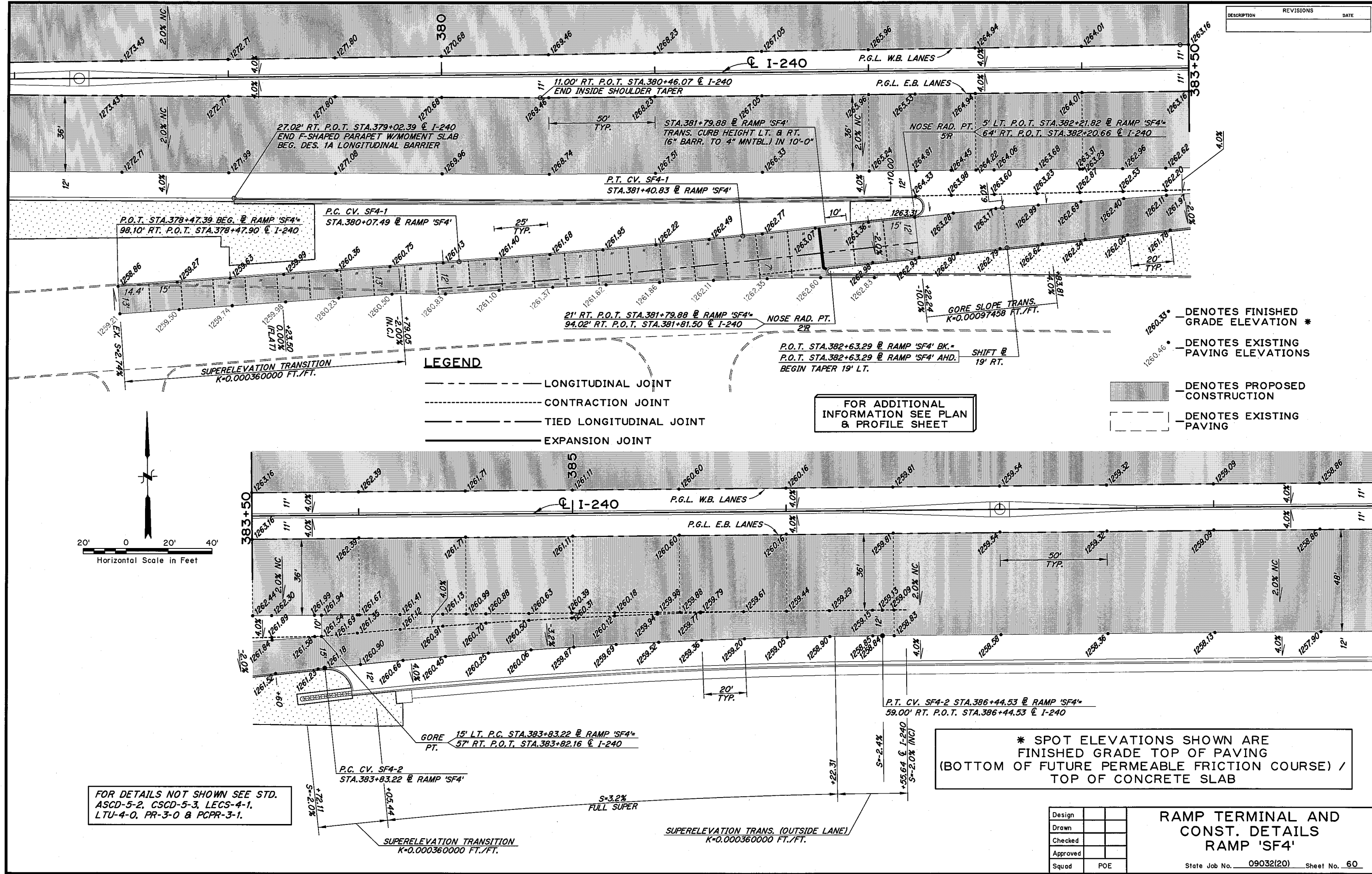
PLAN	DATE
REVISION	
NOTE BOOK	
NO.	

PROFILE	DATE
REVISION	
NOTE BOOK	
NO.	

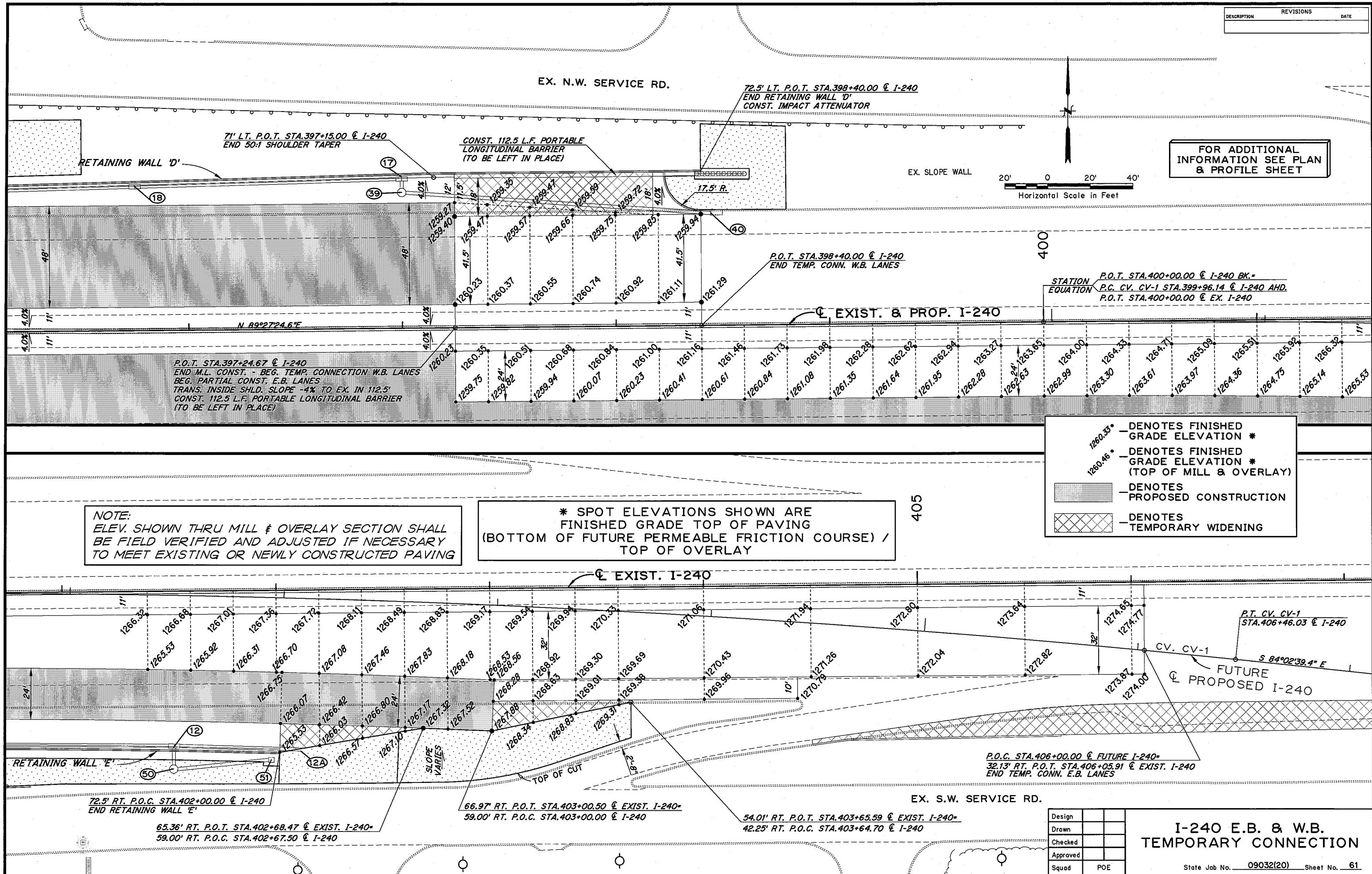




DESCRIPTION	REVISIONS	DATE



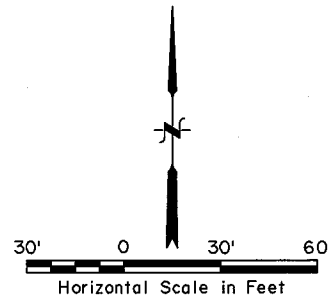
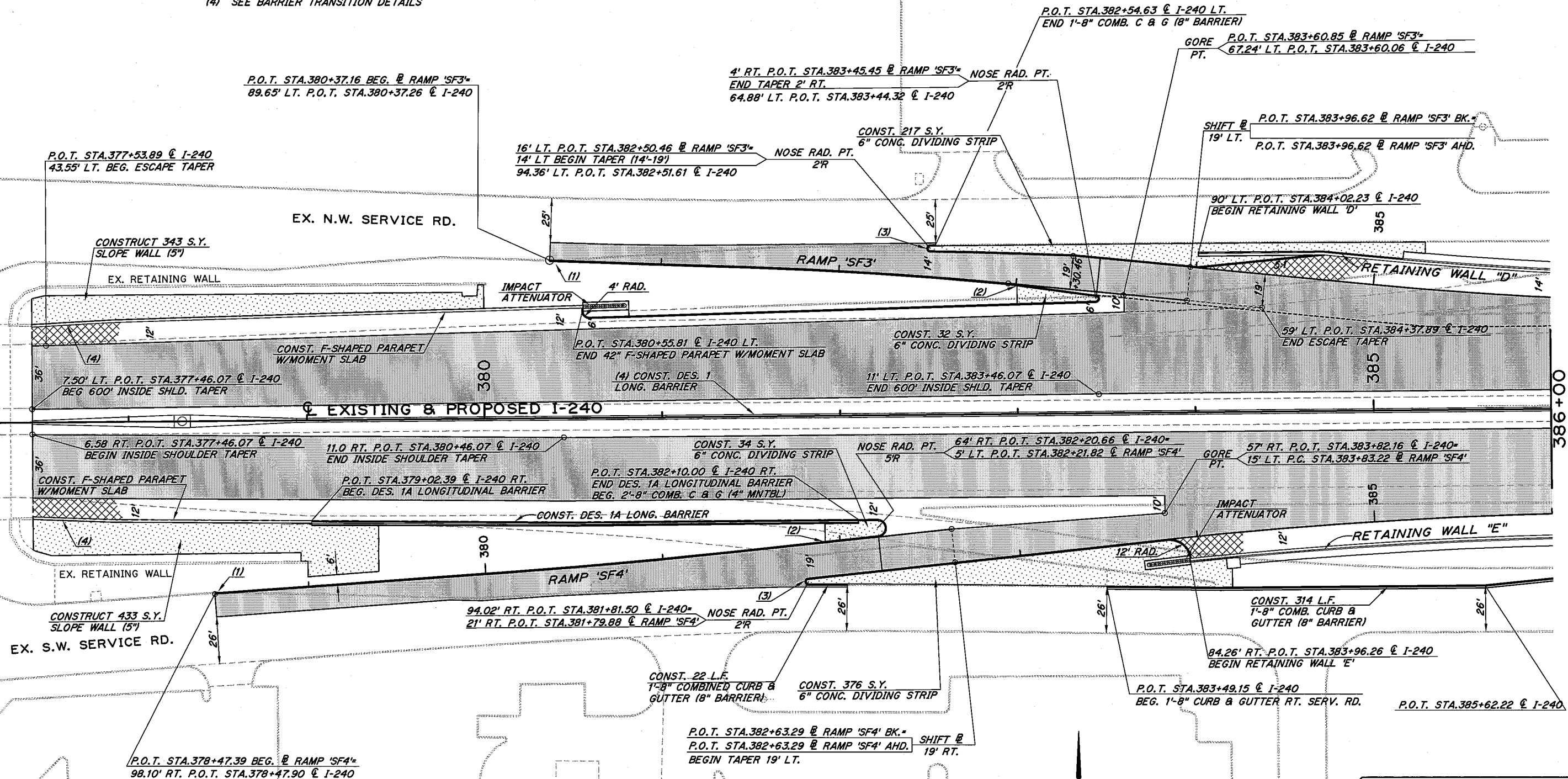
DESCRIPTION	REVISIONS	DATE



SEC. 27, T11N, R3W

DESCRIPTION	REVISIONS	DATE

- (1) TRANSITION CURB HEIGHT 8" TO 6" IN 10'-0"
- (2) TRANSITION CURB HEIGHT 6" TO 4" IN 10'-0"
- (3) TRANSITION CURB HEIGHT 8" TO 4" IN 10'-0"
- (4) SEE BARRIER TRANSITION DETAILS



FOR ADDITIONAL INFORMATION
SEE PLAN & DETAIL SHEETS

SEC. 34, T11N, R3W

Design		
Drawn		
Checked		
Approved		
Squad	POE	

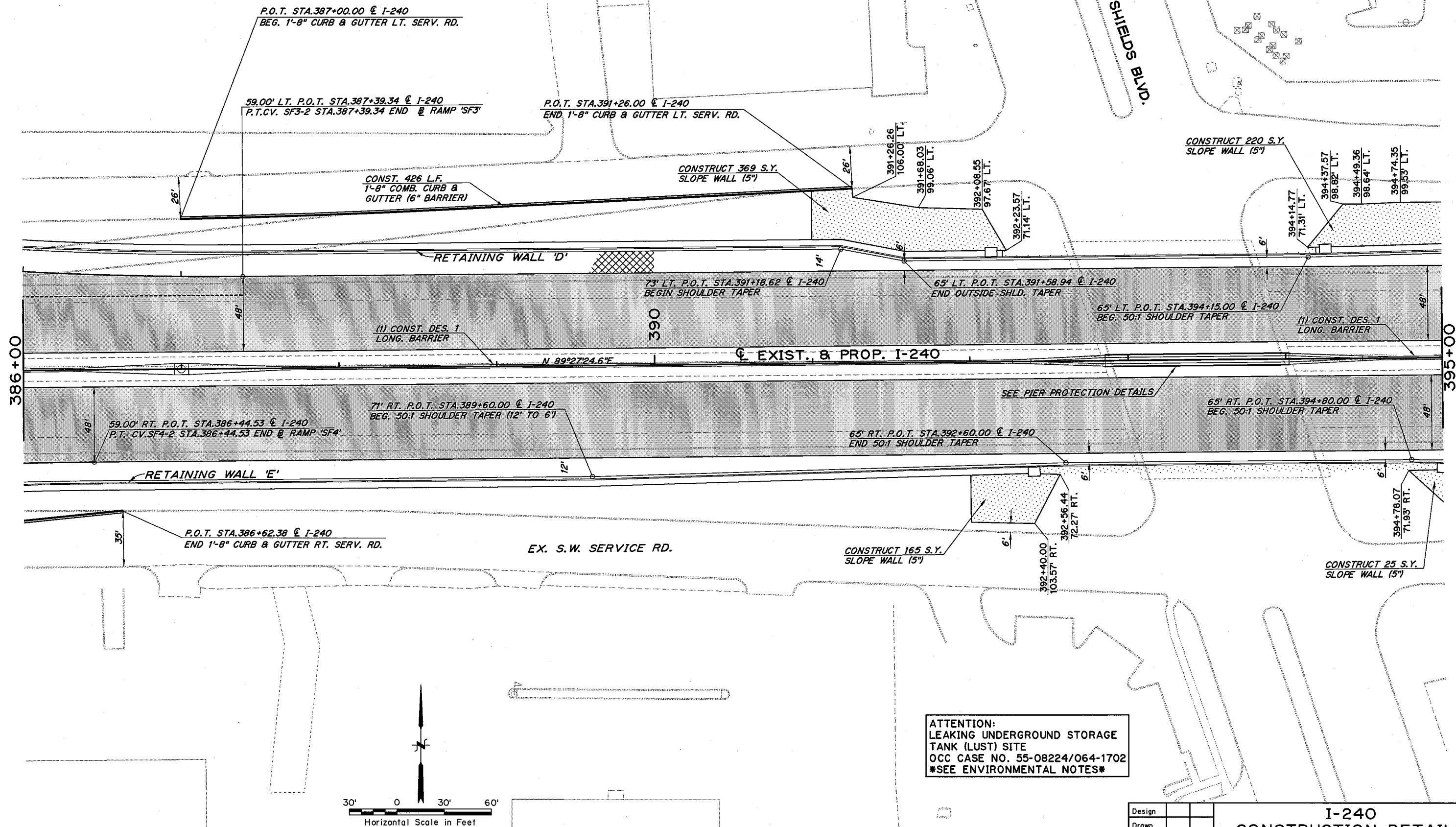
**I-240
CONSTRUCTION DETAILS**

SHEET 1 OF 3

State Job No. 09032(20) Sheet No. 63

DESCRIPTION	REVISIONS	DATE

(1) SEE BARRIER TRANSITION DETAILS



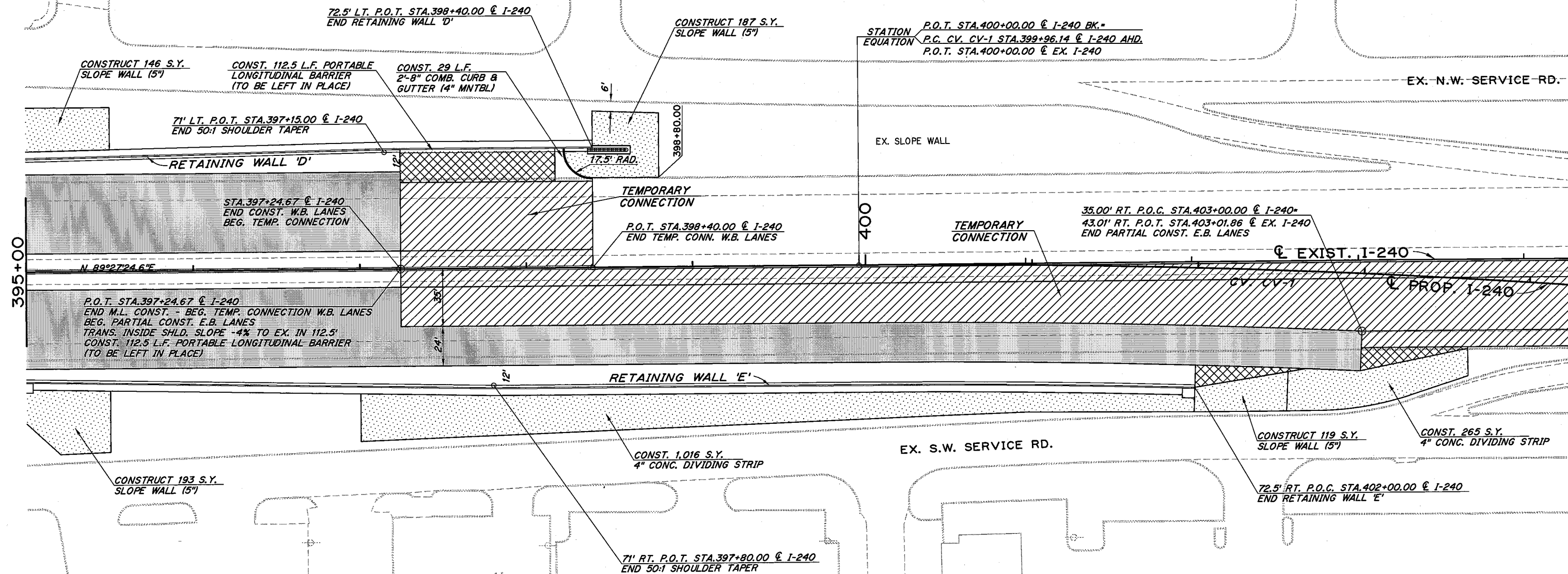
ATTENTION:
LEAKING UNDERGROUND STORAGE
TANK (LUST) SITE
OCC CASE NO. 55-08224/064-1702
SEE ENVIRONMENTAL NOTES

Design	
Drawn	
Checked	
Approved	
Squad	POE

I-240 CONSTRUCTION DETAILS SHEET 2 OF 3

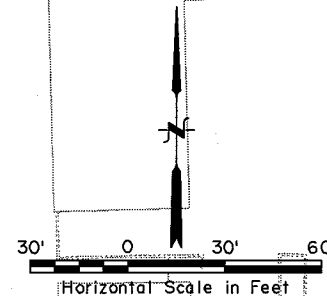
State Job No. 09032(20) Sheet No. 64

DESCRIPTION	REVISIONS	DATE



ATTENTION:
LEAKING UNDERGROUND STORAGE
TANK (LUST) SITE
OCC CASE NO. 55-08554/064-0831
SEE ENVIRONMENTAL NOTES

FOR ADDITIONAL INFORMATION
SEE PLAN & DETAIL SHEETS

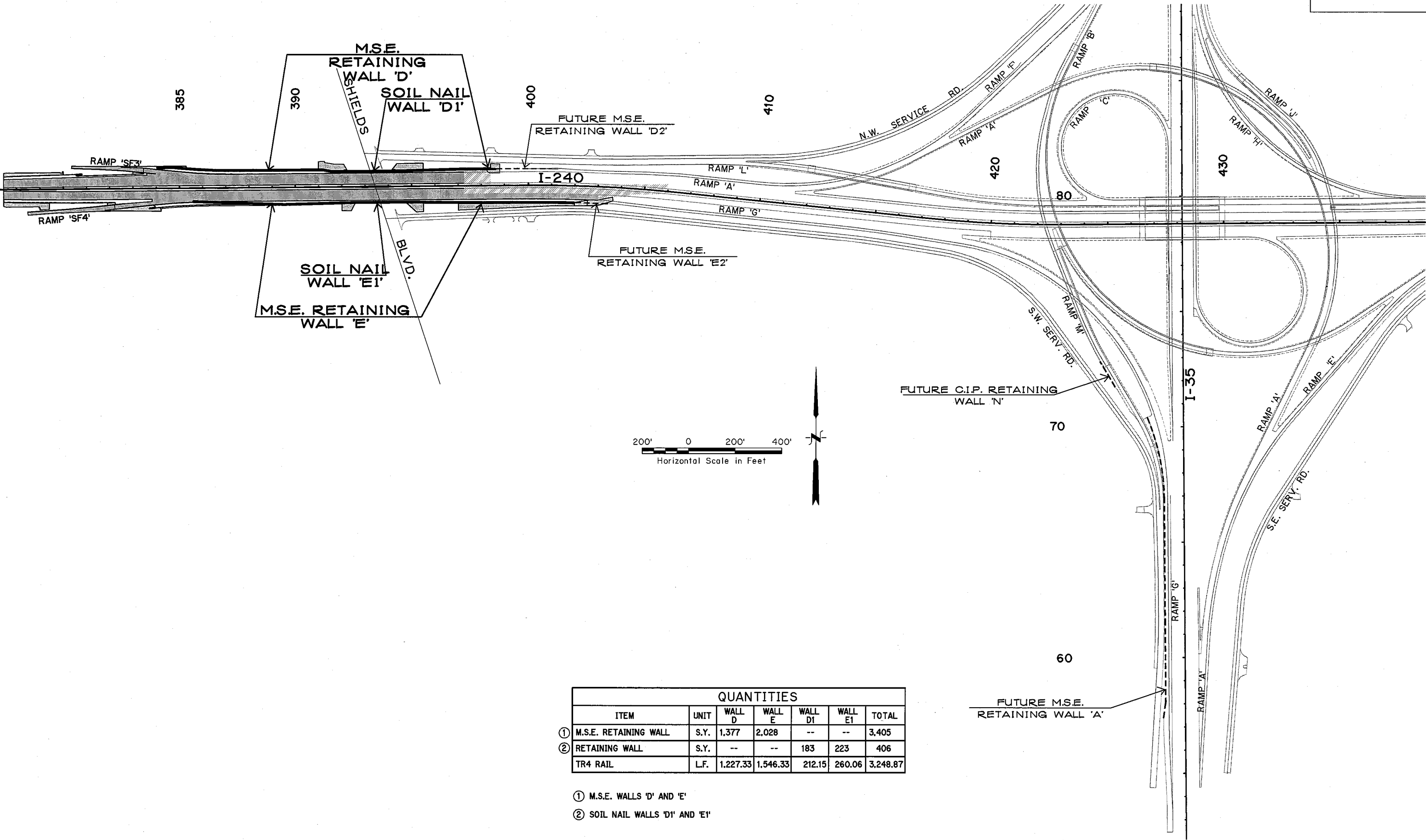


Design		
Drawn		
Checked		
Approved		
Squad	POE	

I-240
CONSTRUCTION DETAILS
SHEET 3 OF 3

State Job No. 09032(20) Sheet No. 65

DESCRIPTION	REVISIONS	DATE



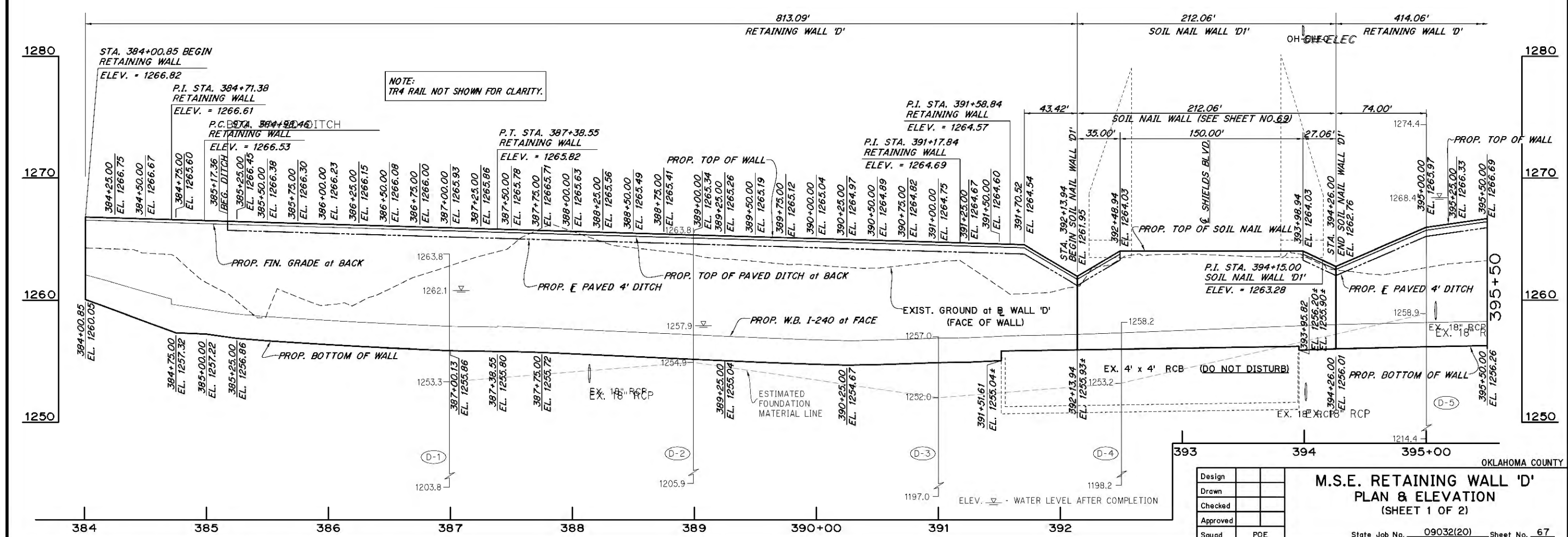
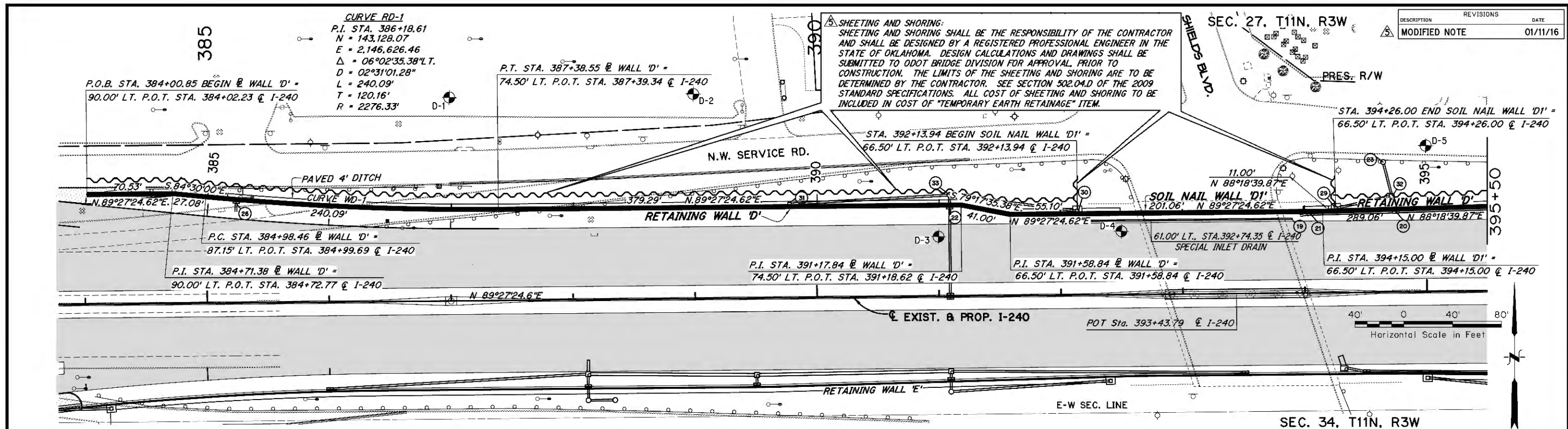
QUANTITIES						
ITEM	UNIT	WALL D	WALL E	WALL D1	WALL E1	TOTAL
① M.S.E. RETAINING WALL	S.Y.	1,377	2,028	--	--	3,405
② RETAINING WALL	S.Y.	--	--	183	223	406
TR4 RAIL	L.F.	1,227.33	1,546.33	212.15	260.06	3,248.87

- ① M.S.E. WALLS 'D' AND 'E'
- ② SOIL NAIL WALLS 'D1' AND 'E1'

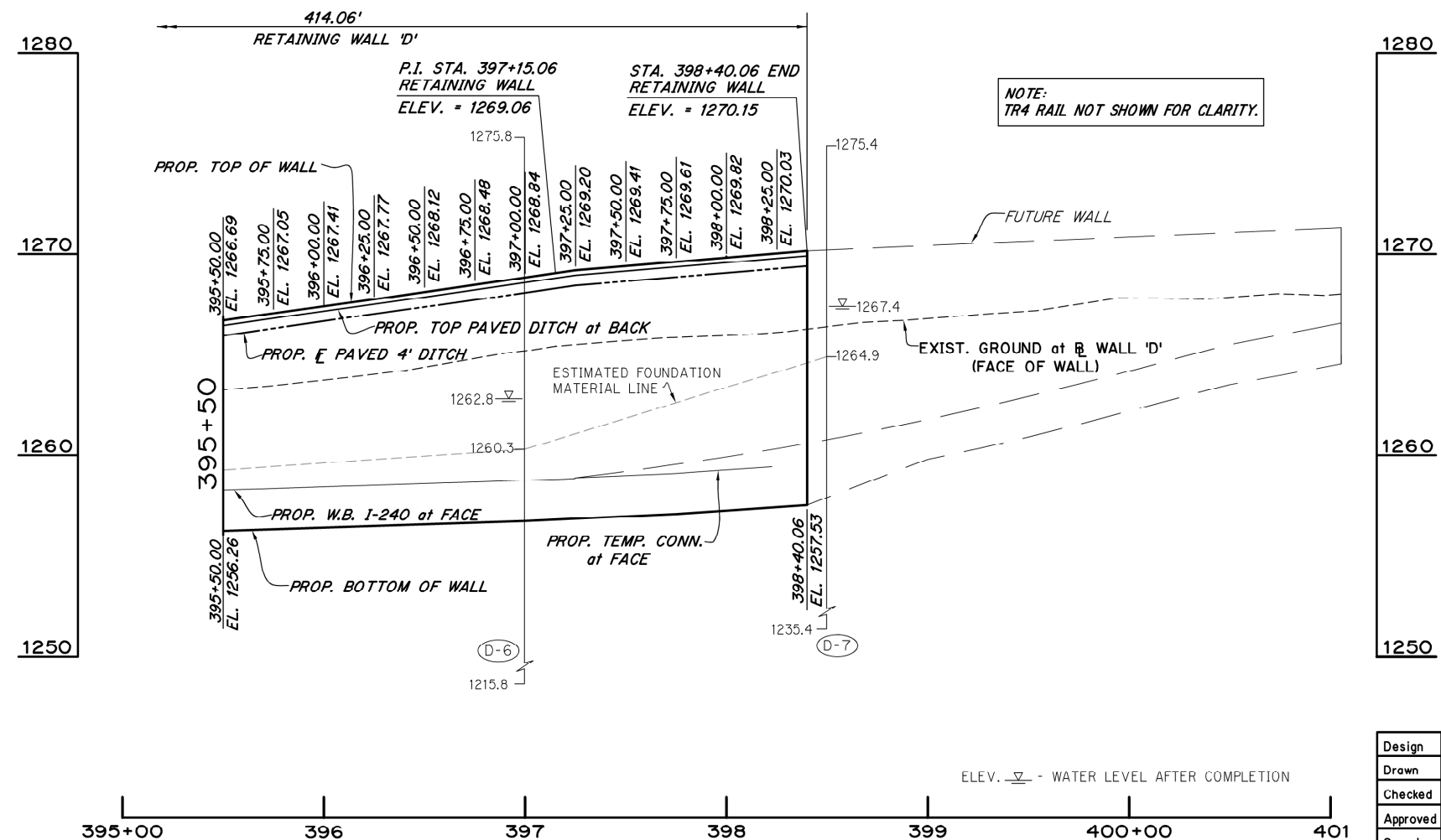
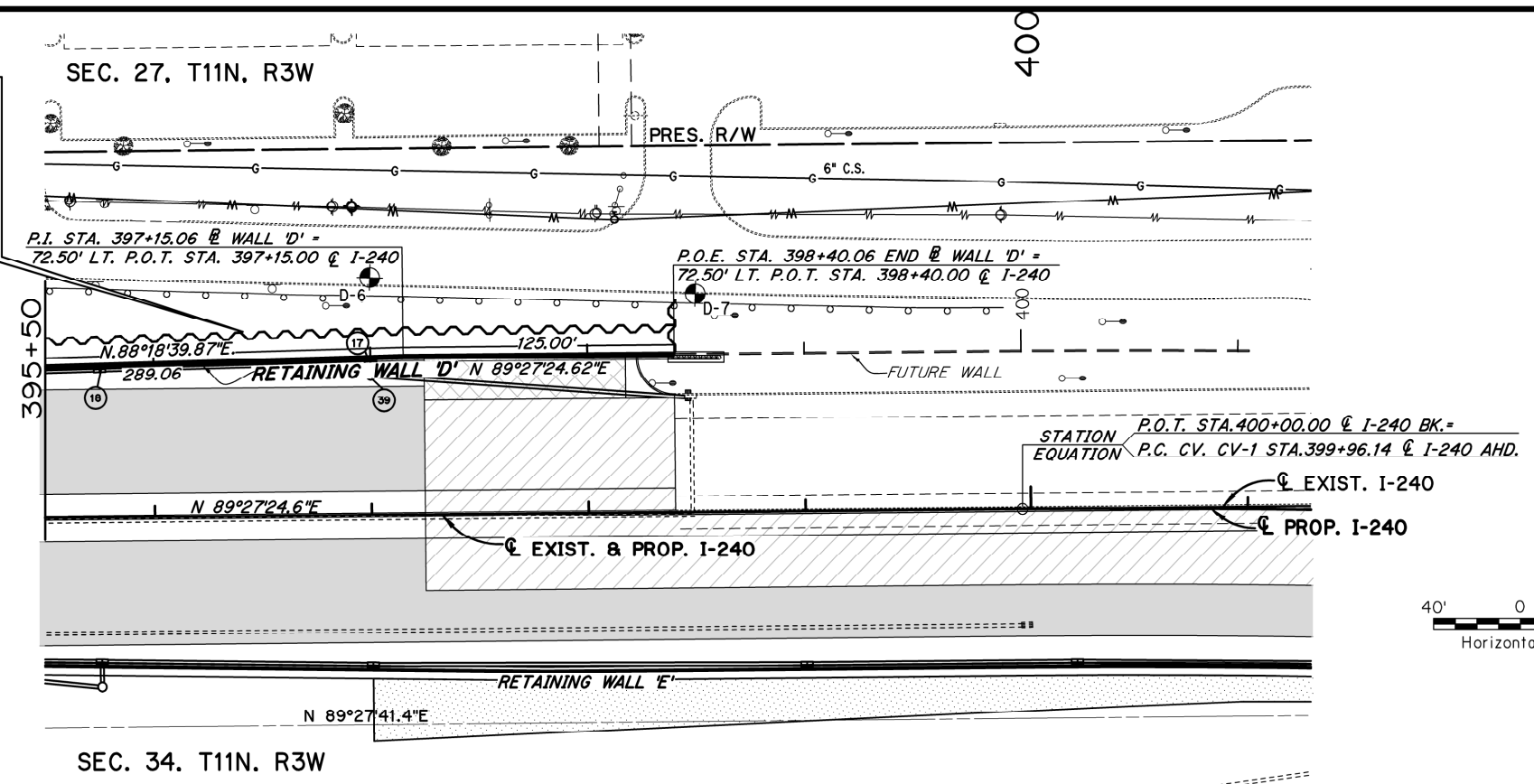
Design	
Drawn	
Checked	
Approved	
Squad	POE

RETAINING WALL
LOCATION MAP

State Job No. 09032(20) Sheet No. 66



SHEETING AND SHORING:
SHEETING AND SHORING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF OKLAHOMA. DESIGN CALCULATIONS AND DRAWINGS SHALL BE SUBMITTED TO ODOT BRIDGE DIVISION FOR APPROVAL PRIOR TO CONSTRUCTION. THE LIMITS OF THE SHEETING AND SHORING ARE TO BE DETERMINED BY THE CONTRACTOR. SEE SECTION 502.04.D OF THE 2009 STANDARD SPECIFICATIONS. ALL COST OF SHEETING AND SHORING TO BE INCLUDED IN COST OF "TEMPORARY EARTH RETAINAGE" ITEM.



Design	
Drawn	
Checked	
Approved	
Squad	POE

M.S.E. RETAINING WALL 'D'
PLAN & ELEVATION
(SHEET 2 OF 2)

State Job No. 09032(20) Sheet No. 68

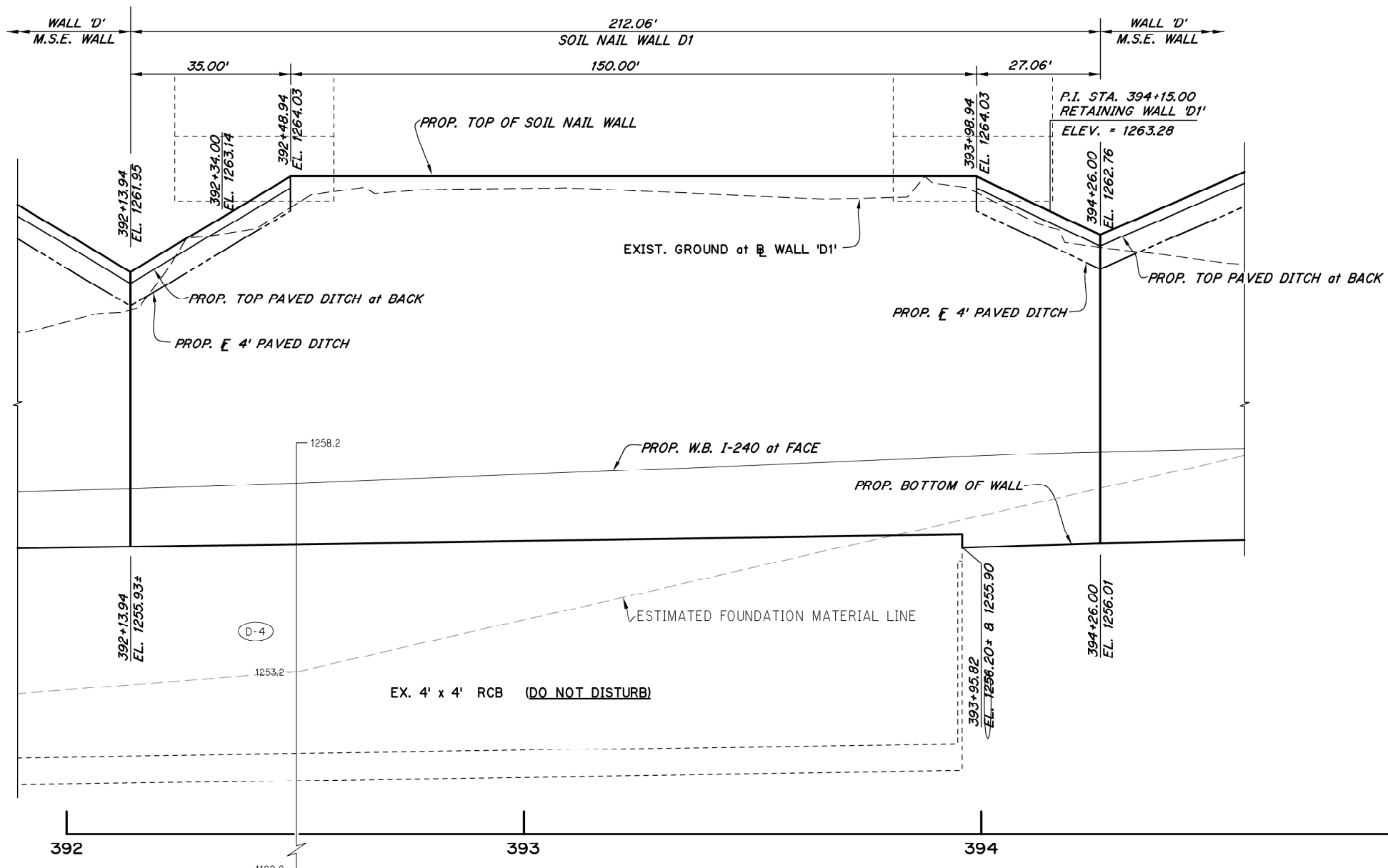
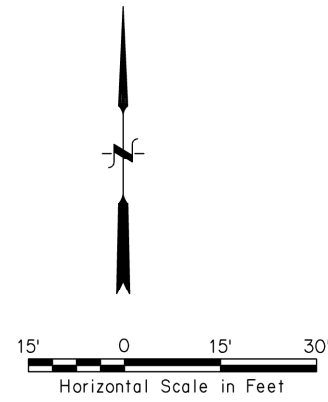
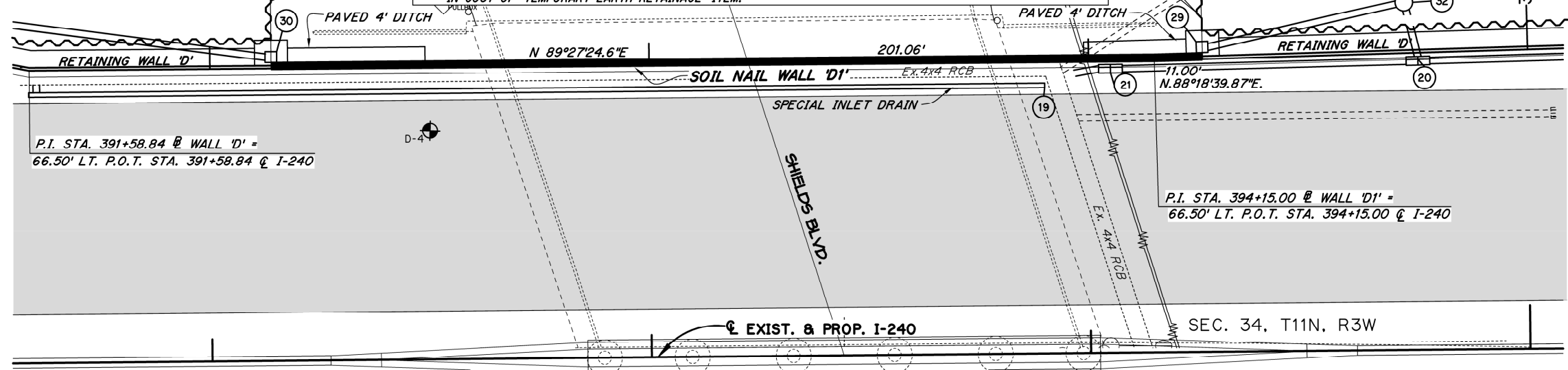
SEC. 27, T11N, R3W

STA. 392+13.94 BEGIN SOIL NAIL WALL 'D1' =
66.50' LT. P.O.T. STA. 392+13.94 @ I-240

SHEETING AND SHORING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF OKLAHOMA. DESIGN CALCULATIONS AND DRAWINGS SHALL BE SUBMITTED TO ODOT BRIDGE DIVISION FOR APPROVAL, PRIOR TO CONSTRUCTION. THE LIMITS OF THE SHEETING AND SHORING ARE TO BE DETERMINED BY THE CONTRACTOR. SEE SECTION 502.04.D OF THE 2009 STANDARD SPECIFICATIONS. ALL COST OF SHEETING AND SHORING TO BE INCLUDED IN COST OF "TEMPORARY EARTH RETAINAGE" ITEM.

STA. 394+26.00 END SOIL NAIL WALL 'D1' =
66.50' LT. P.O.T. STA. 394+26.00 @ I-240

DESCRIPTION	REVISIONS	DATE
MODIFIED NOTE		01/11/16

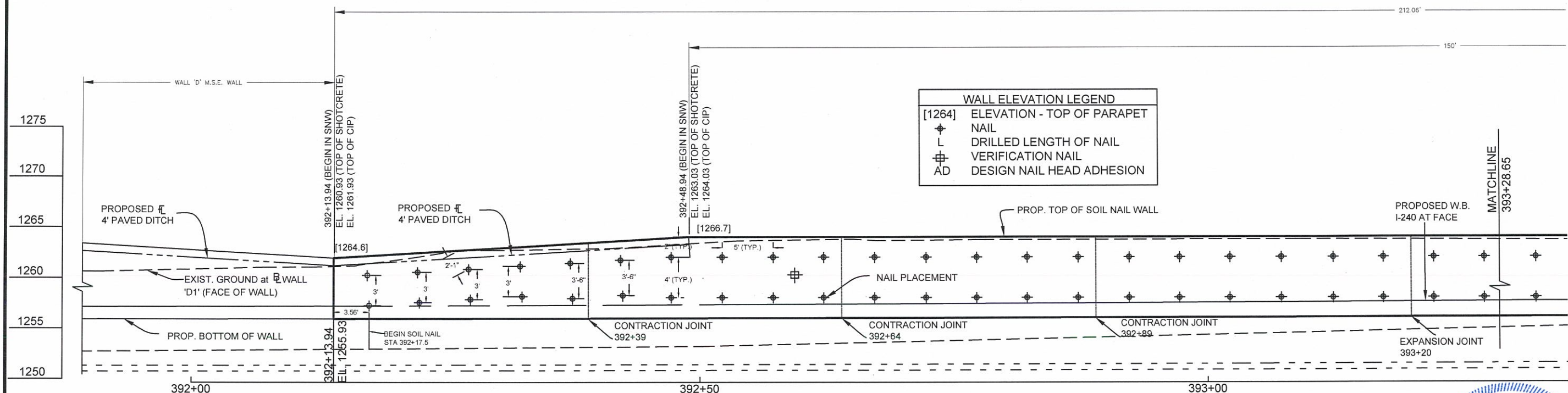


NOTE:
TR4 RAIL NOT SHOWN FOR CLARITY.

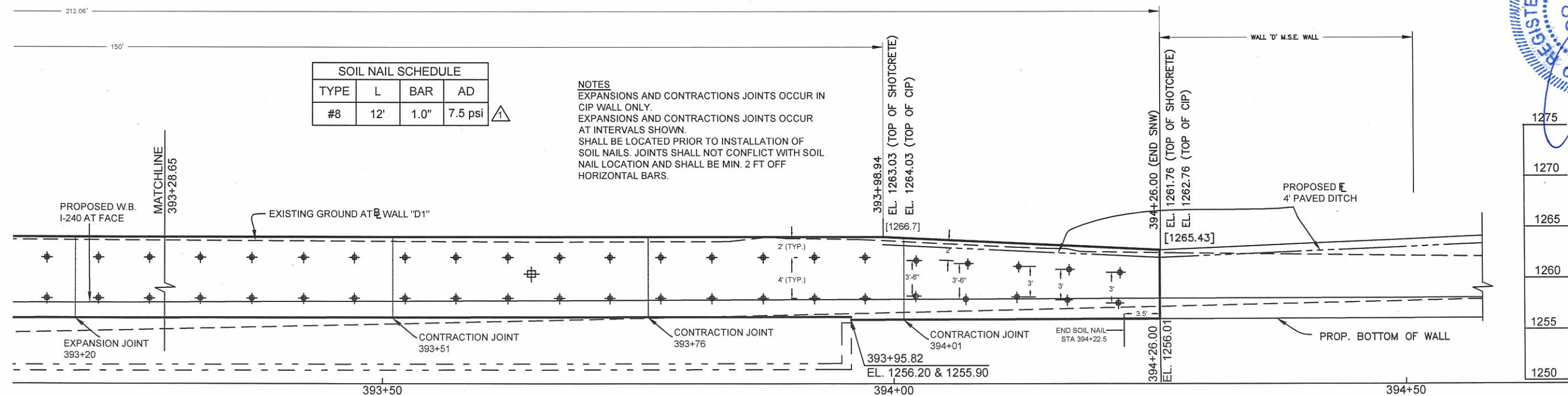
Design	
Drawn	
Checked	
Approved	
Squad	POE

SOIL NAIL WALL 'D1'
PLAN & ELEVATION

State Job No. 09032(20) Sheet No. 69



1 WALL 'D1' ELEVATION
Scale: 1 inch = 10 feet



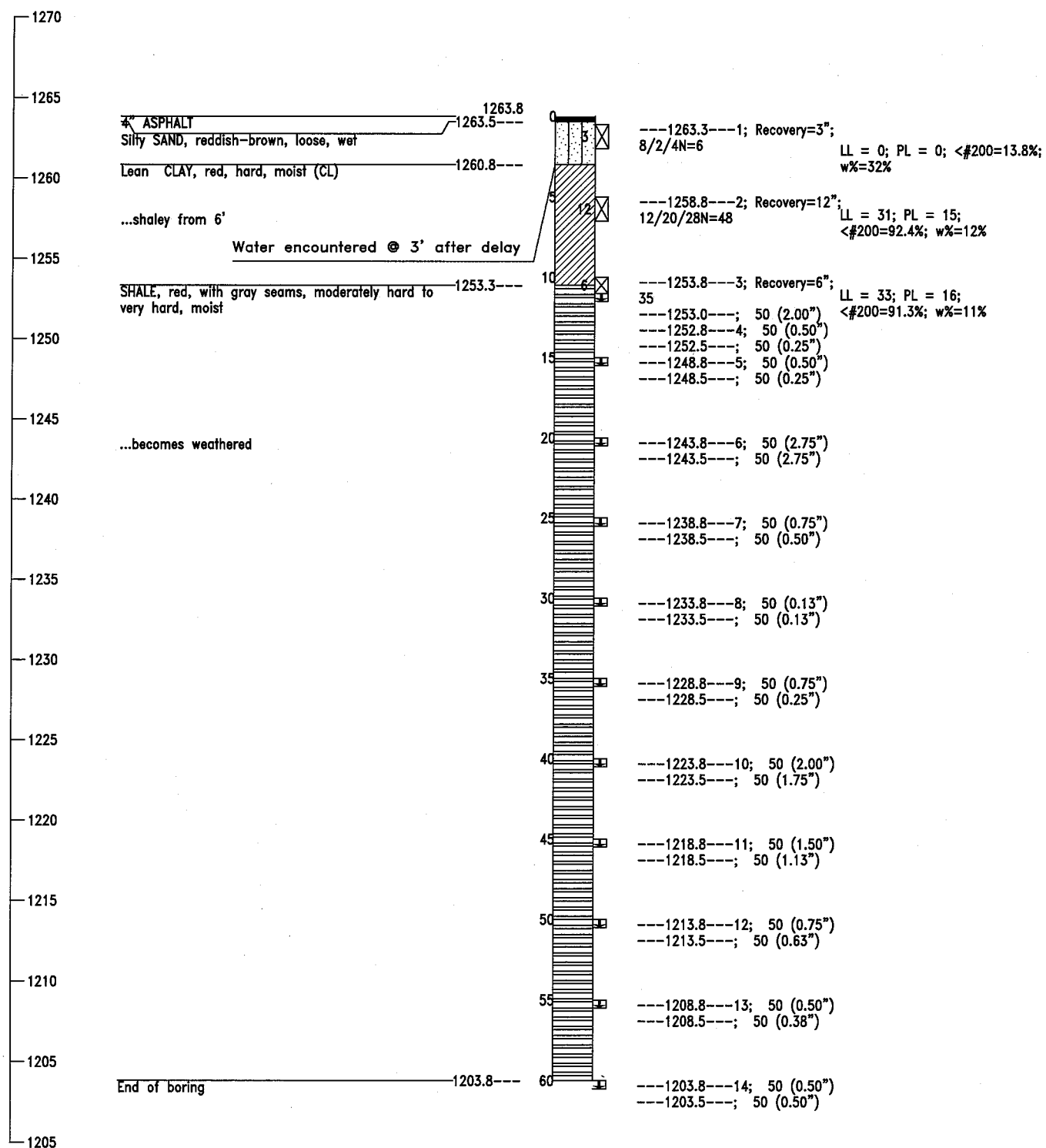
2 WALL 'D1' ELEVATION
Scale: 1 inch = 10 feet



OKLAHOMA DEPARTMENT OF TRANSPORTATION POE & ASSOCIATES CONSULTING ENGINEERS		Design	
		Drawn	
		Checked	
		Approved	
Section Engineer	PSI	Squad	PSI

SOIL NAIL WALL 'D1' LAYOUT

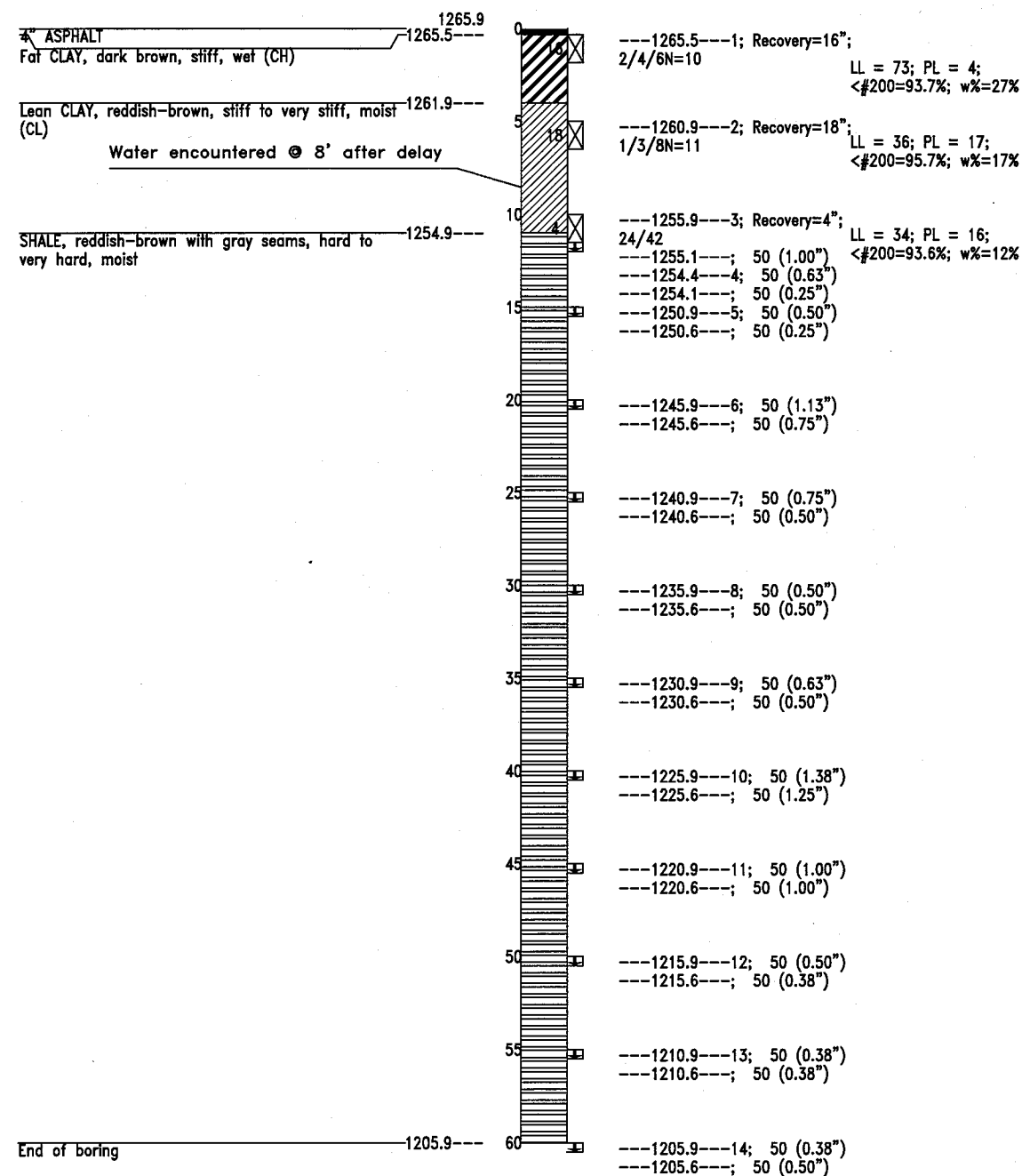
Boring Number D-1
Station: 387+00
Offset: 167 Ft. Lt. CL I-240



GEOLOGIC STATEMENT

"Division Four" of the "Engineering Classification of Geological Materials", published by the Oklahoma Department of Transportation (ODOT) indicates that below alluvium, the site is underlain by the Hennessey Unit (Phy) in Oklahoma County. The geologic unit is described below. This unit consists of red platy to blocky clay shales and mudstone. The mudstones are hard and appear blocky. The red clay shale of the Hennessey Unit is characterized by numerous bands of streaks of white or light green color ranging from a few inches to four feet in thickness. The total thickness of the unit is about 400 feet. The Hennessey Unit outcrops in a 5 to 15 mile north-south band across Grant, Garfield, Kingfisher, Logan, Canadian, and Oklahoma Counties in Division Four. Topographically, the unit is near level to gently rolling and is generally grass covered or cultivated.

Boring Number D-2
Station: 389+00
Offset: 168 Ft. Lt. CL I-240



NOTE: ☒ Denotes Split Spoon Test
☒ Denotes Texas Cone Penetrator Test
* Classification estimated from disturbed samples. Core sample and petrographic analysis may reveal other rock types.

Proposed Retaining Wall "D" Oklahoma City, OK
I-35/I-240 Interchange Reconstruction

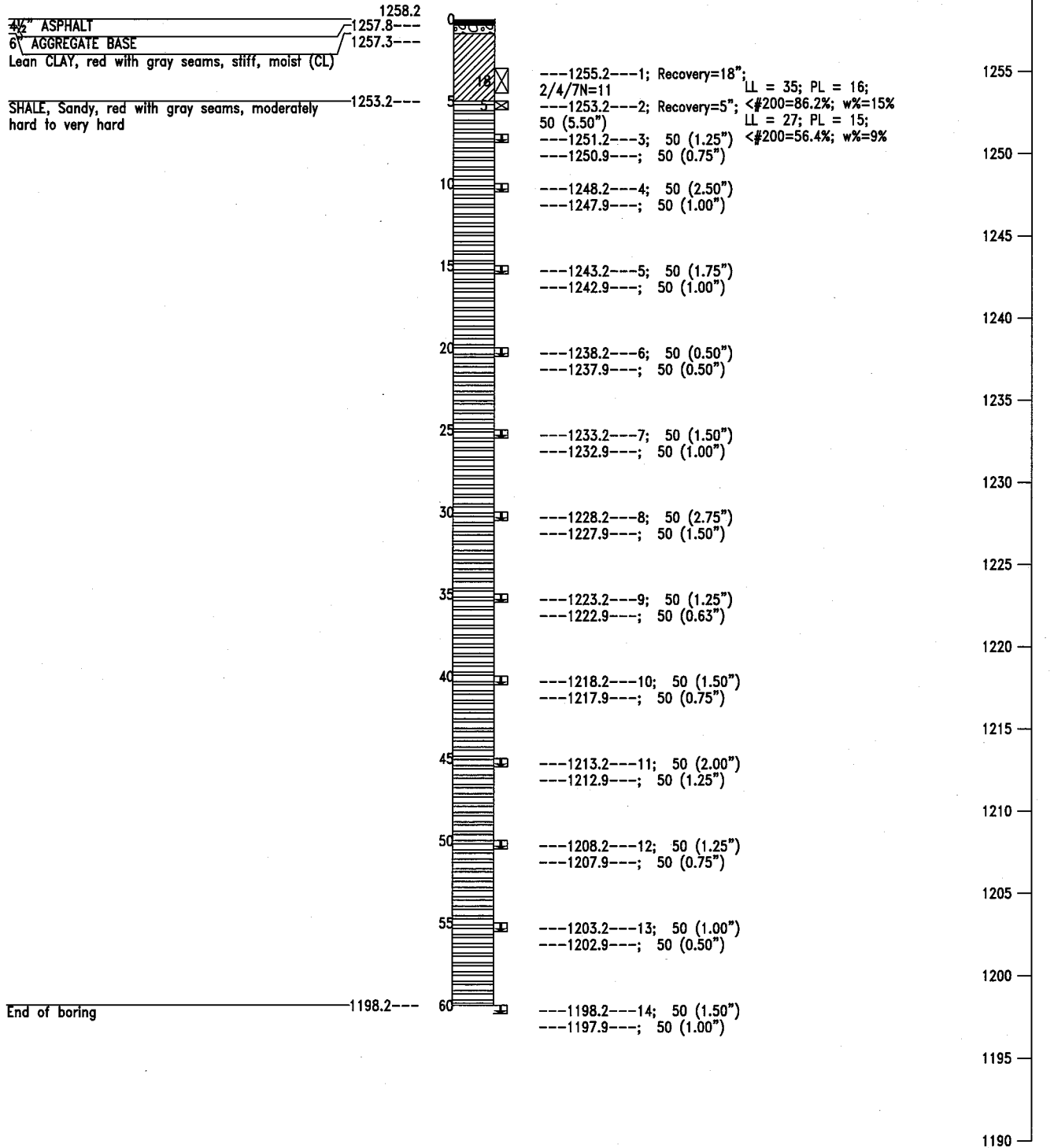
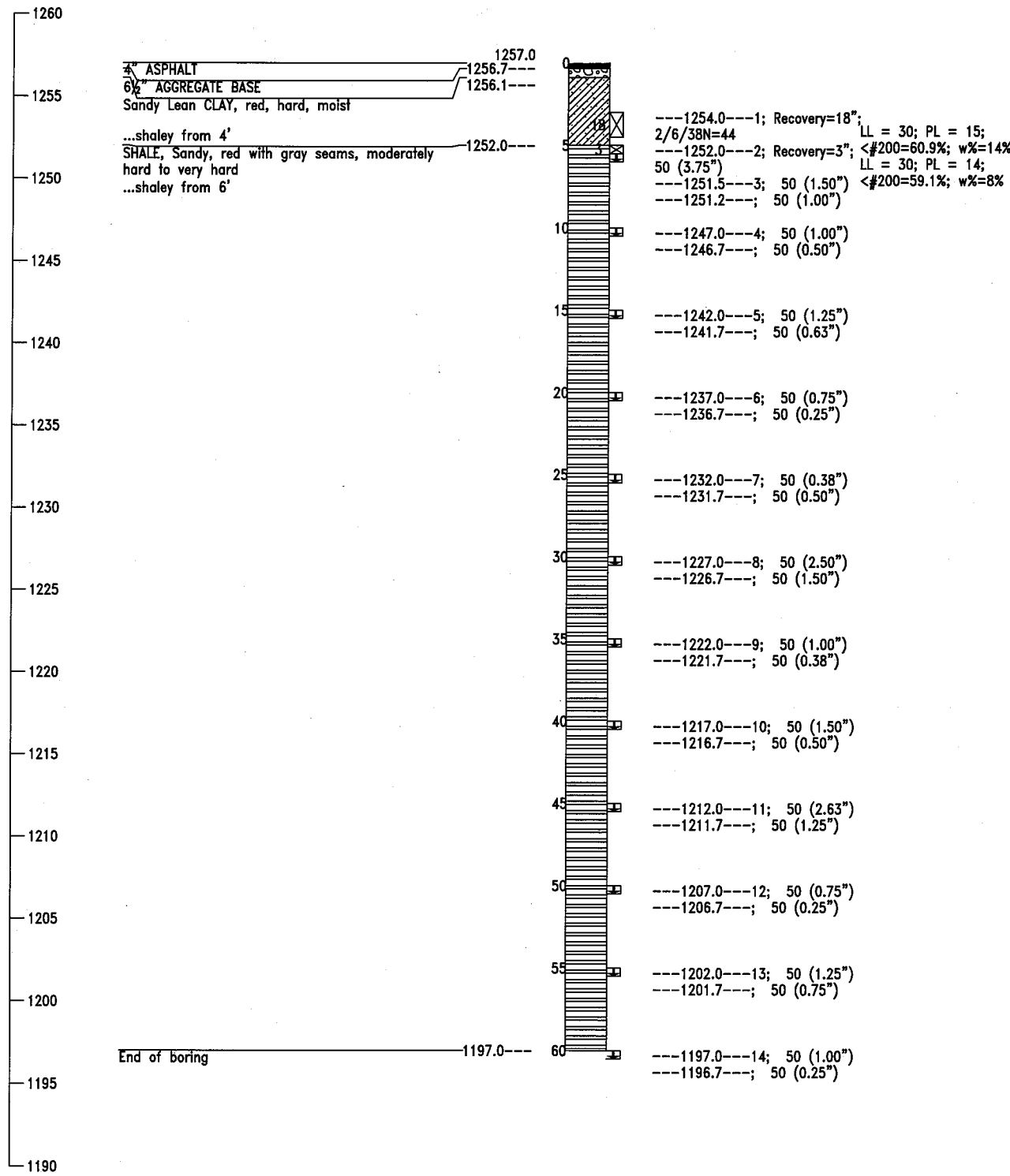
Design	
Drawn	
Checked	
Approved	
Squad	POE

FOUNDATION REPORT WALL 'D'
(SHEET 1 OF 4)

State Job No. 09032(20) Sheet No. 71

Boring Number D-3
Station: 391+00
Offset: 49 Ft. Lt. CL I-240

Boring Number D-4
Station: 392+50
Offset: 52 Ft. Lt. CL I-240



GEOLOGIC STATEMENT

"Division Four" of the "Engineering Classification of Geological Materials", published by the Oklahoma Department of Transportation (ODOT) indicates that below alluvium, the site is underlain by the Hennessey Unit (Phy) in Oklahoma County. The geologic unit is described below. This unit consists of red platy to blocky clay shales and mudstone. The mudstones are hard and appear blocky. The red clay shale of the Hennessey Unit is characterized by numerous bands of streaks of white or light green color ranging from a few inches to four feet in thickness. The total thickness of the unit is about 400 feet. The Hennessey Unit outcrops in a 5 to 15 mile north-south band across Grant, Garfield, Kingfisher, Logan, Canadian, and Oklahoma Counties in Division Four. Topographically, the unit is near level to gently rolling and is generally grass covered or cultivated.

NOTE: ☒ Denotes Split Spoon Test
☒ Denotes Texas Cone Penetrator Test
* Classification estimated from disturbed samples. Core sample and petrographic analysis may reveal other rock types.

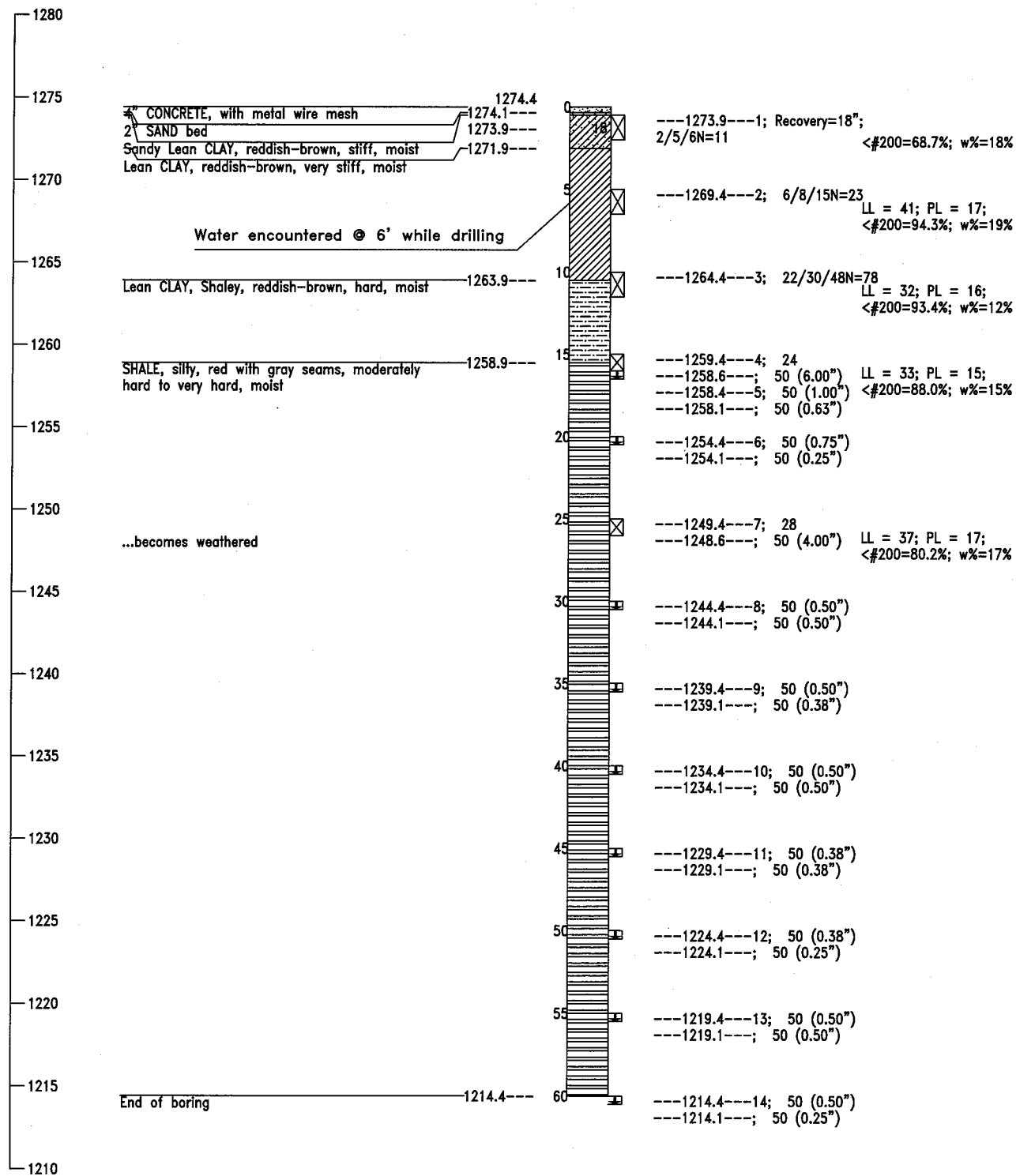
Proposed Retaining Wall "D" Oklahoma City, OK
I-35/I-240 Interchange Reconstruction

Design	
Drawn	
Checked	
Approved	
Squad	POE

FOUNDATION REPORT WALL 'D'
(SHEET 2 OF 4)

State Job No. 09032(20) Sheet No. 72

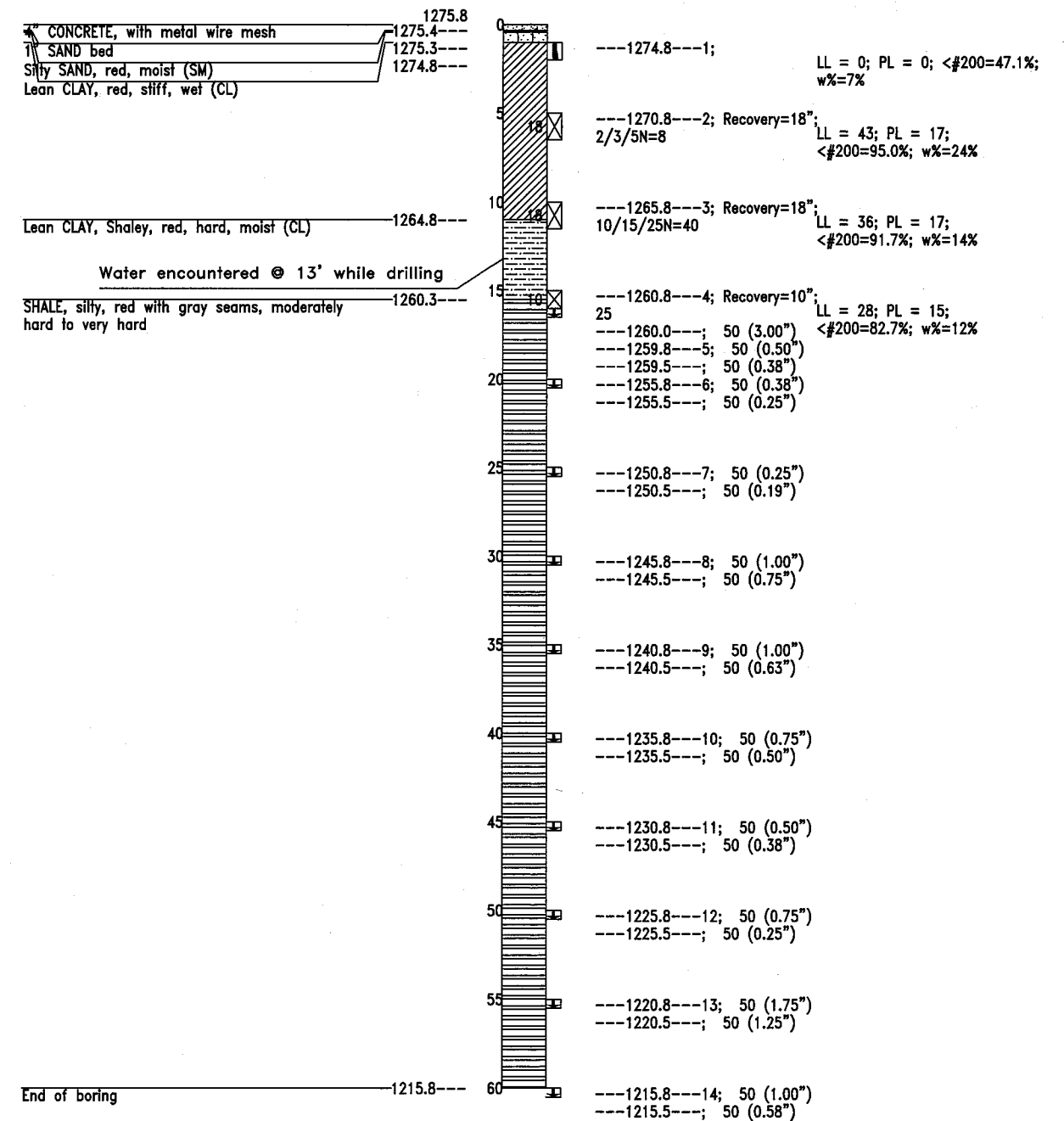
Boring Number D-5
Station: 395+00
Offset: 120 Ft. Lt. CL I-240



GEOLOGIC STATEMENT

"Division Four" of the "Engineering Classification of Geological Materials", published by the Oklahoma Department of Transportation (ODOT) indicates that below alluvium, the site is underlain by the Hennessey Unit (Phy) in Oklahoma County. The geologic unit is described below. This unit consists of red platy to blocky clay shales and mudstone. The mudstones are hard and appear blocky. The red clay shale of the Hennessey Unit is characterized by numerous bands of streaks of white or light green color ranging from a few inches to four feet in thickness. The total thickness of the unit is about 400 feet. The Hennessey Unit outcrops in a 5 to 15 mile north-south band across Grant, Garfield, Kingfisher, Logan, Canadian, and Oklahoma Counties in Division Four. Topographically, the unit is near level to gently rolling and is generally grass covered or cultivated.

Boring Number D-6
Station: 397+00
Offset: 109.5 Ft. Lt. CL I-240



NOTE: ☒ Denotes Split Spoon Test
☒ Denotes Texas Cone Penetrator Test
* Classification estimated from disturbed samples. Core sample and petrographic analysis may reveal other rock types.

Proposed Retaining Wall "D" Oklahoma City, OK
I-35/I-240 Interchange Reconstruction

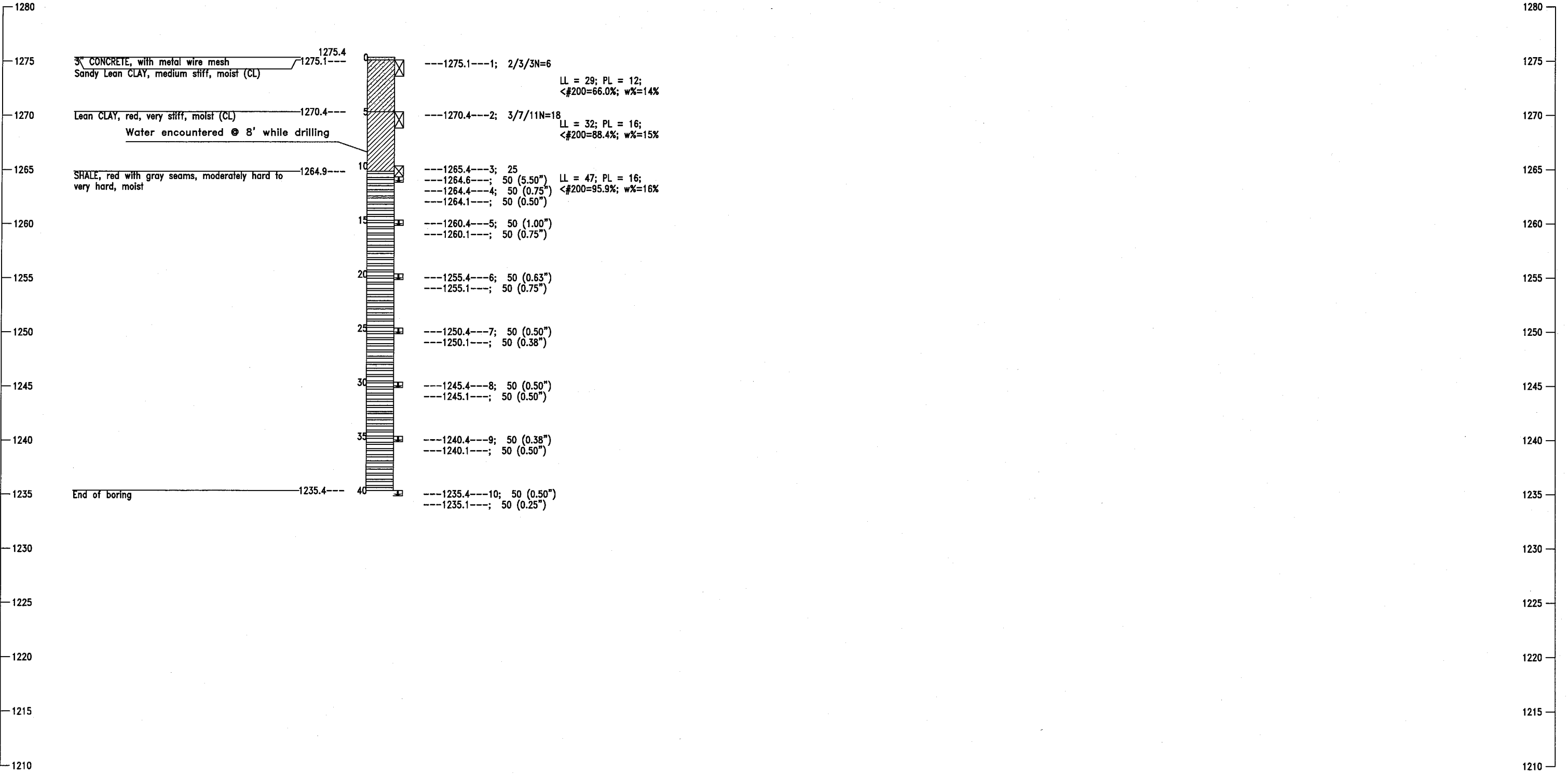
Design	
Drawn	
Checked	
Approved	
Squad	POE

FOUNDATION REPORT WALL 'D'
(SHEET 3 OF 4)

State Job No. 09032(20) Sheet No. 73

DESCRIPTION	REVISIONS	DATE

Boring Number D-7
Station: 398+50
Offset: 100.5 Ft. Lt. CL I-240



GEOLOGIC STATEMENT

"Division Four" of the "Engineering Classification of Geological Materials", published by the Oklahoma Department of Transportation (ODOT) indicates that below alluvium, the site is underlain by the Hennessey Unit (Phy) in Oklahoma County. The geologic unit is described below. This unit consists of red platy to blocky clay shales and mudstone. The mudstones are hard and appear blocky. The red clay shale of the Hennessey Unit is characterized by numerous bands of streaks of white or light green color ranging from a few inches to four feet in thickness. The total thickness of the unit is about 400 feet. The Hennessey Unit outcrops in a 5 to 15 mile north-south band across Grant, Garfield, Kingfisher, Logan, Canadian, and Oklahoma Counties in Division Four. Topographically, the unit is near level to gently rolling and is generally grass covered or cultivated.

NOTE: ☒ Denotes Split Spoon Test
☒ Denotes Texas Cone Penetrator Test
* Classification estimated from disturbed samples. Core sample and petrographic analysis may reveal other rock types.

Proposed Retaining Wall "D" Oklahoma City, OK
I-35/I-240 Interchange Reconstruction

Design	
Drawn	
Checked	
Approved	
Squad	POE

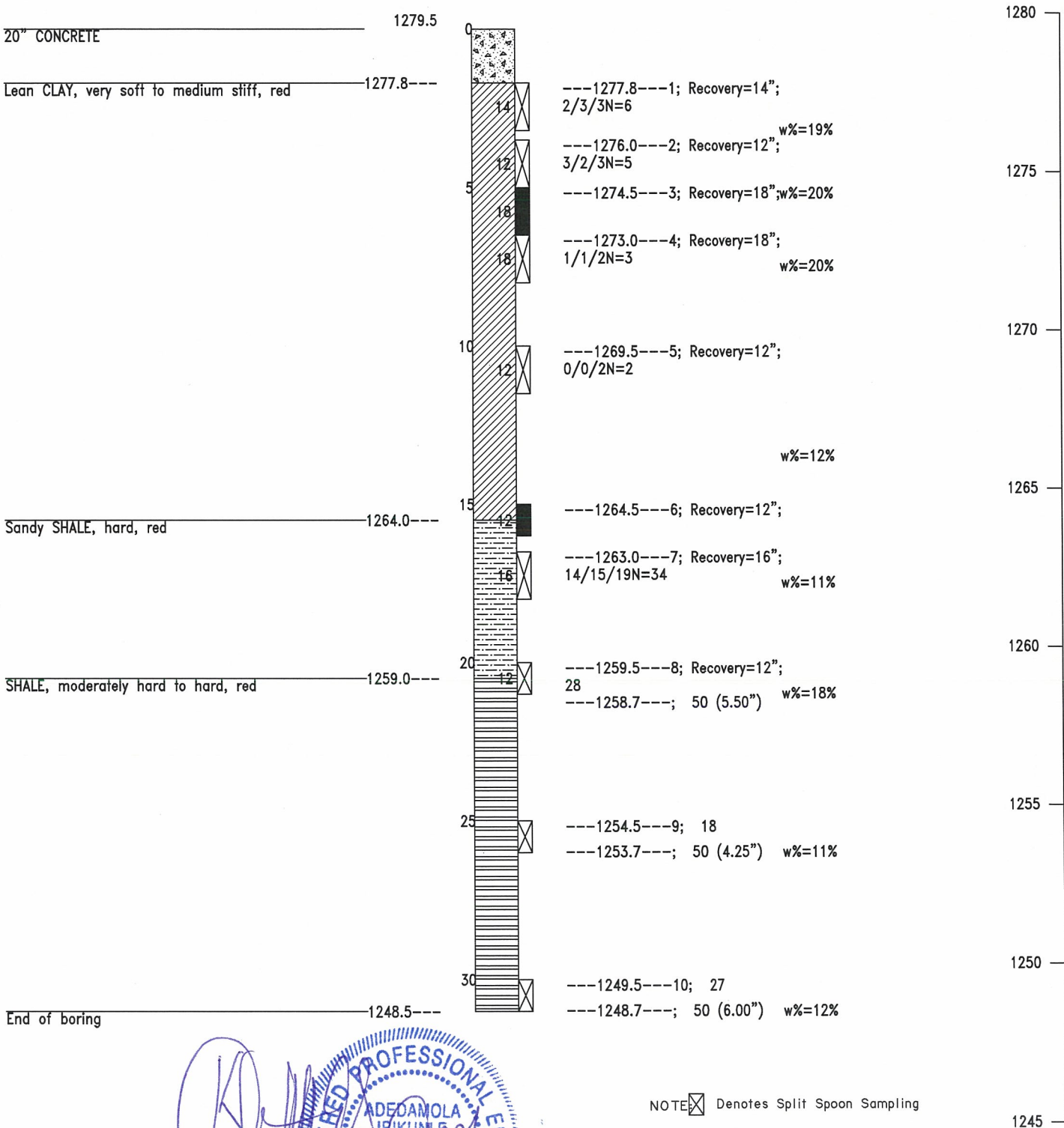
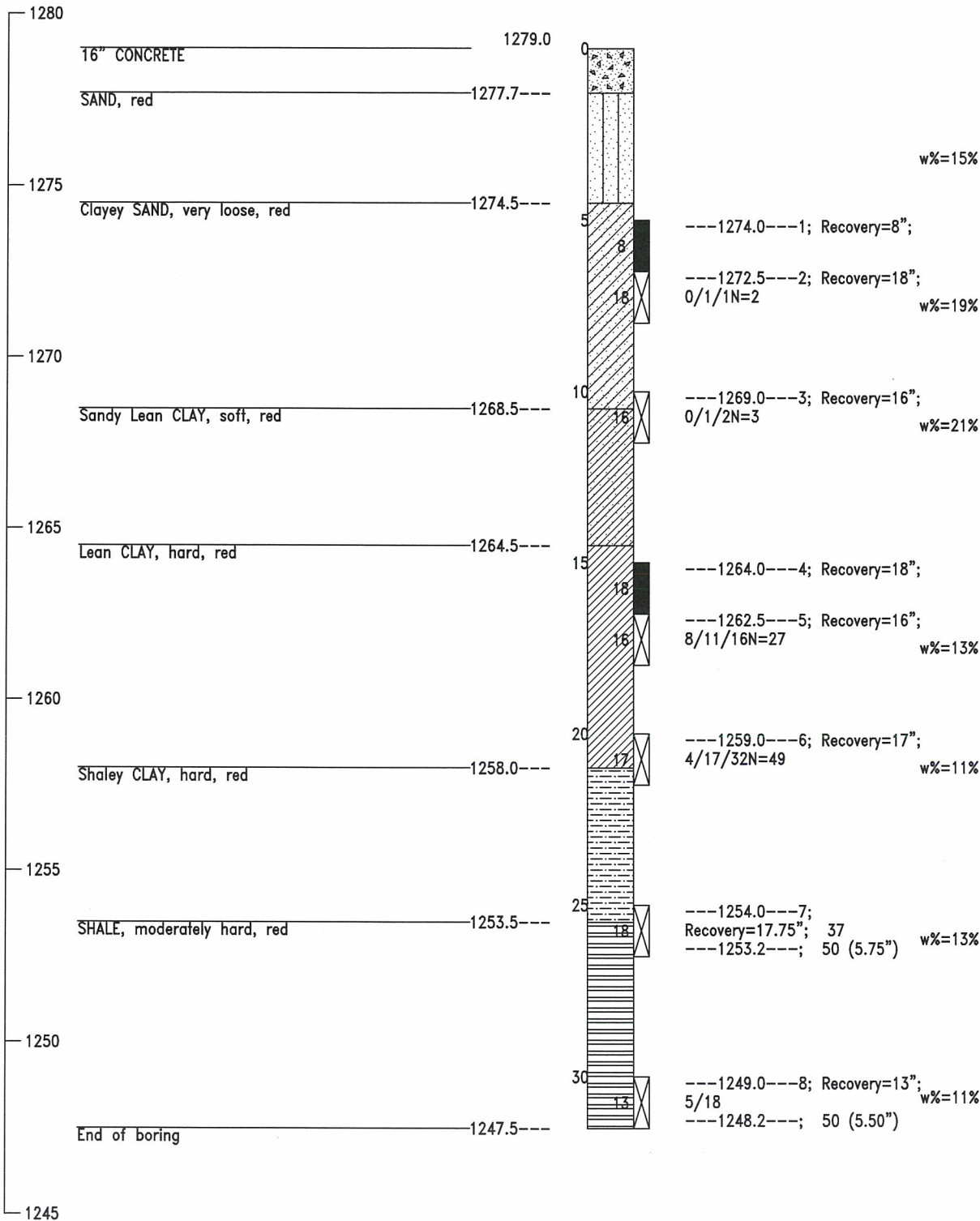
FOUNDATION REPORT WALL 'D'
(SHEET 4 OF 4)

State Job No. 09032(20) Sheet No. 74

DESCRIPTION	REVISIONS	DATE

Boring Number D1-1
Latitude: 35.39223° N
Longitude: 97.50697° W

Boring Number D1-2
Latitude: 35.39222° N
Longitude: 97.50679° W



GEOLOGIC STATEMENT

"Division Four" of the "Engineering Classification of Geological Materials", published by the Oklahoma Department of Transportation (ODOT) indicates that below alluvium, the site is underlain by the Hennessey Unit (Phy) in Oklahoma County. The geologic unit is described below. This unit consists of red platy to blocky clay shales and mudstone. The mudstones are hard and appear blocky. The red clay shale of the Hennessey Unit is characterized by numerous bands of streaks of white or light green color ranging from a few inches to four feet in thickness. The total thickness of the unit is about 400 feet. The Hennessey Unit outcrops in a 5 to 15 mile north-south band across Grant, Garfield, Kingfisher, Logan, Canadian, and Oklahoma Counties in Division Four. Topographically, the unit is near level to gently rolling and is generally grass covered or cultivated.



NOTE: ☒ Denotes Split Spoon Sampling
☒ Denotes Texas Cone Penetrator Test

11-5-15 SOIL NAIL WALL "D1"
I-240 & Shields Blvd. OKLAHOMA COUNTY

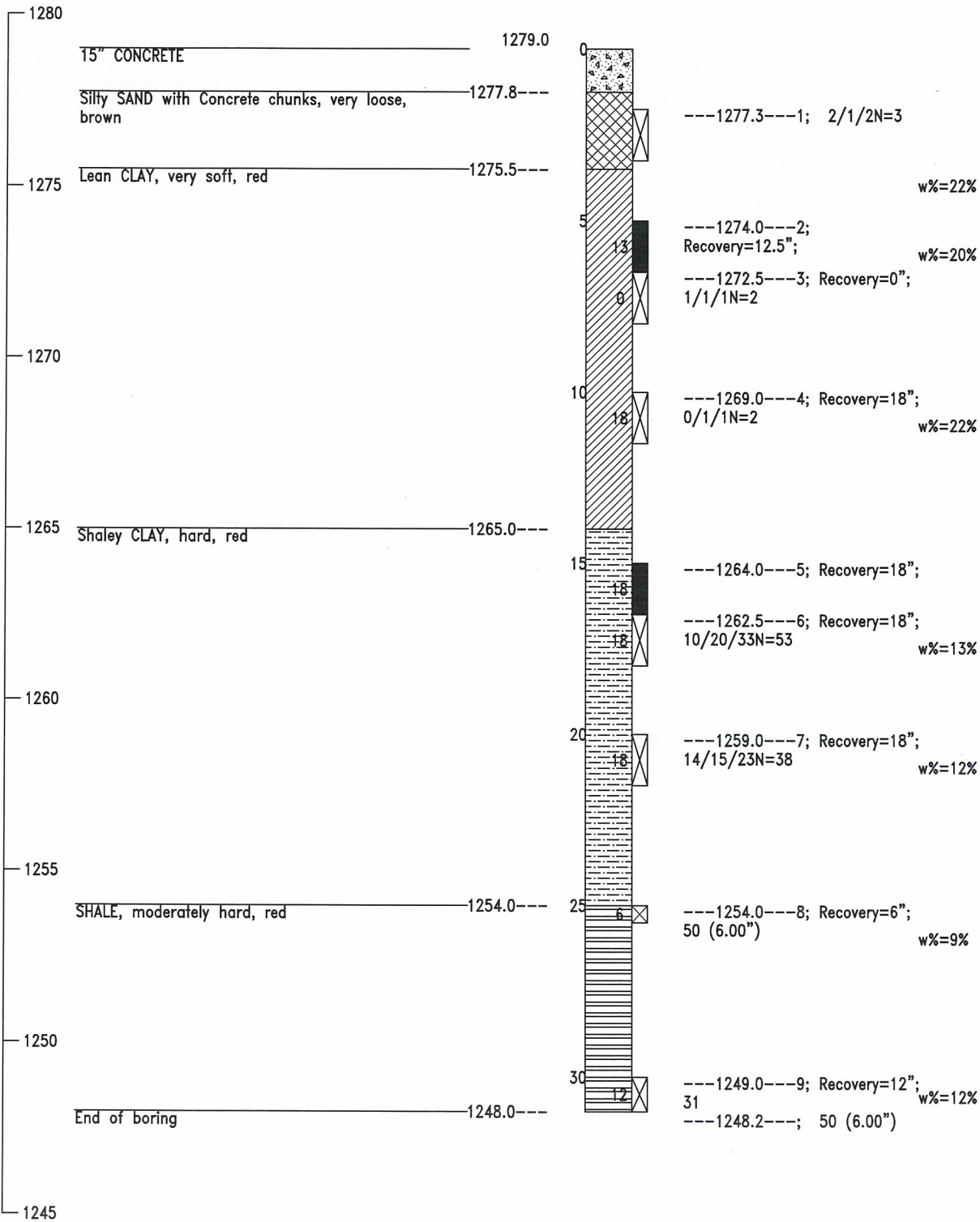
Design	
Drawn	
Checked	
Approved	
Squad	PSI

FOUNDATION REPORT WALL 'D1'
(SHEET 1 OF 2)

State Job No. 09032(20) Sheet No. 74A

Boring Number D1-3
Latitude: 35.39222° N
Longitude: 97.50664° W

DESCRIPTION	REVISIONS	DATE



Soil Strength Lab Results			
Boring	Depth	Cohesion	Phi
D1-1	15 ft	400 psf	28
D1-3	15 ft	400 psf	32

GEOLOGIC STATEMENT

"Division Four" of the "Engineering Classification of Geological Materials", published by the Oklahoma Department of Transportation (ODOT) indicates that below alluvium, the site is underlain by the Hennessey Unit (Phy) in Oklahoma County. The geologic unit is described below. This unit consists of red platy to blocky clay shales and mudstone. The mudstones are hard and appear blocky. The red clay shale of the Hennessey Unit is characterized by numerous bands of streaks of white or light green color ranging from a few inches to four feet in thickness. The total thickness of the unit is about 400 feet. The Hennessey Unit outcrops in a 5 to 15 mile north-south band across Grant, Garfield, Kingfisher, Logan, Canadian, and Oklahoma Counties in Division Four. Topographically, the unit is near level to gently rolling and is generally grass covered or cultivated.



NOTE: ☒ Denotes Split Spoon Sampling
☒ Denotes Texas Cone Penetration Test

SOIL NAIL WALL "D1"
I-240 & Shields Blvd.

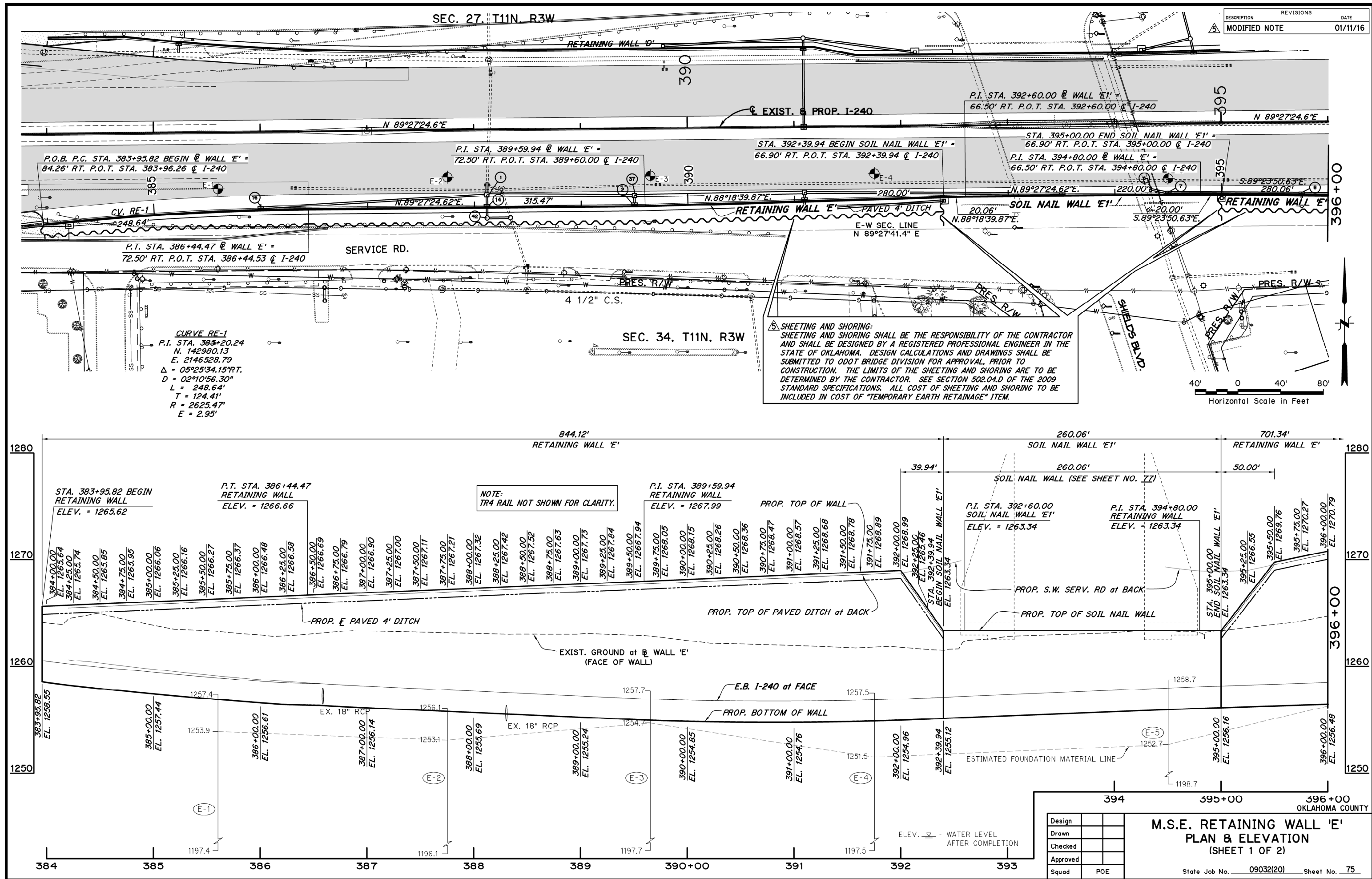
OKLAHOMA COUNTY

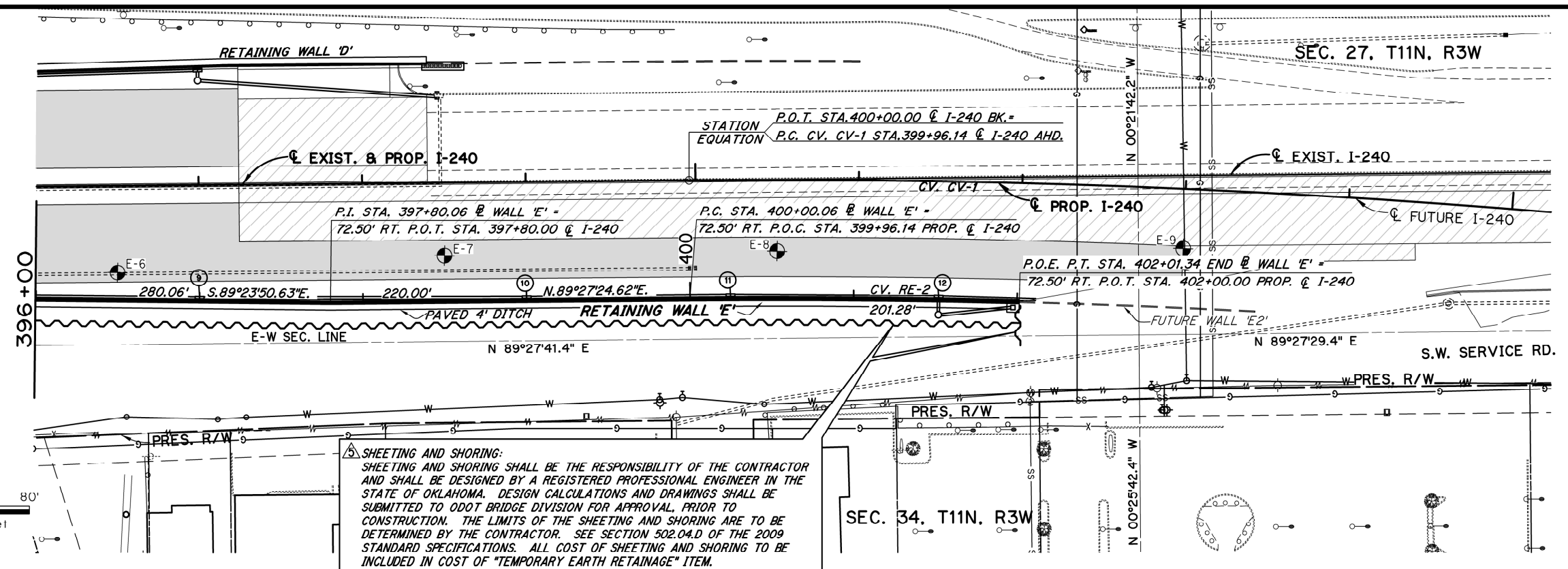
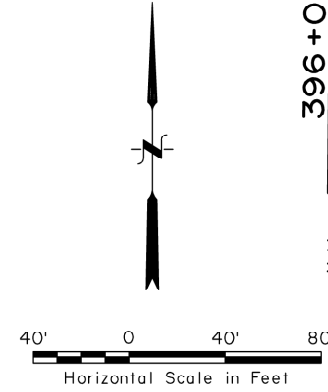
STATE OF OKLAHOMA DEPARTMENT OF TRANSPORTATION

Design	
Drawn	
Checked	
Approved	
Squad	PSI

FOUNDATION REPORT WALL 'D1'
(SHEET 2 OF 2)

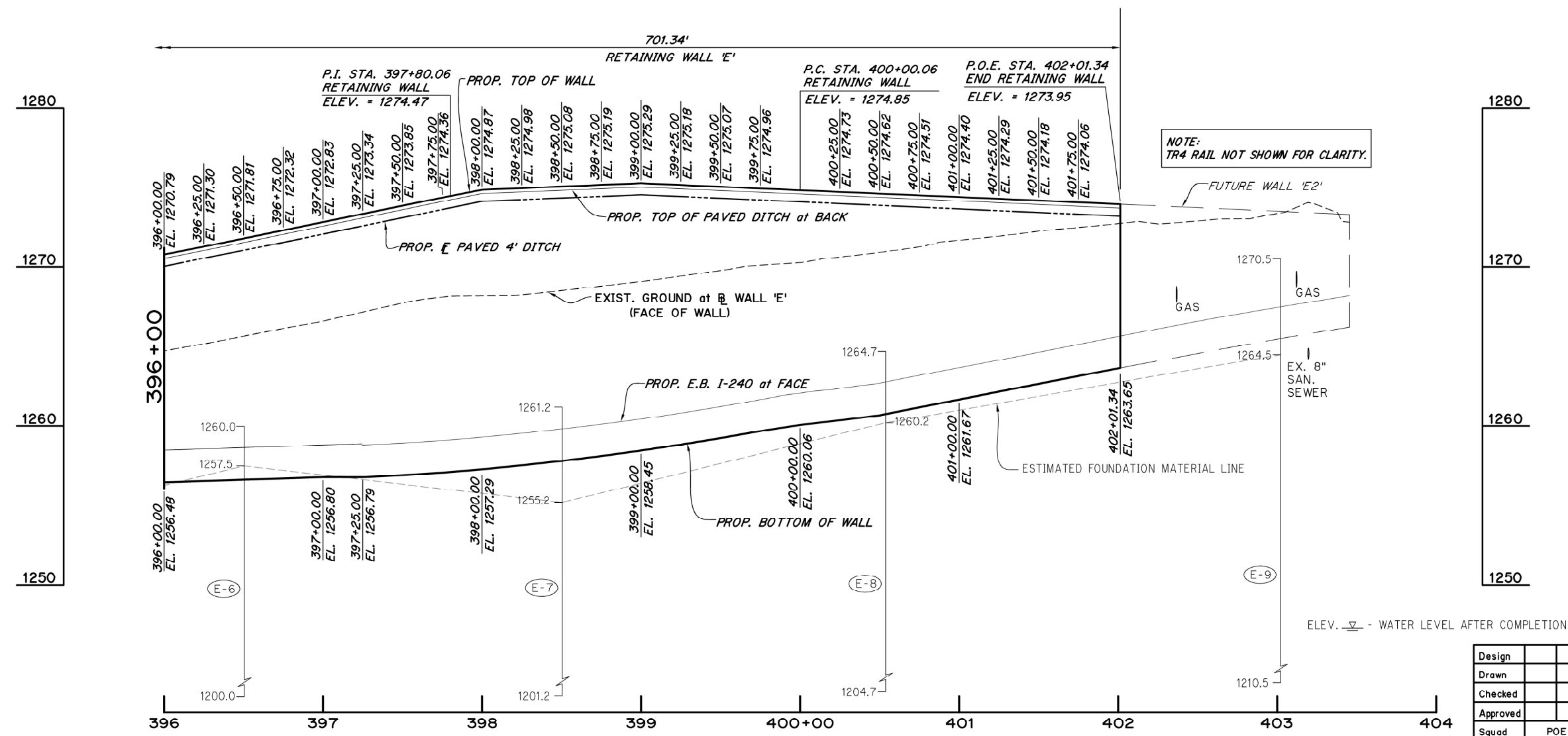
State Job No. 09032(20) Sheet No. 74B





CURVE RE-2
P.I. STA. 401+00.71
N. 142995.12
E. 2148109.26
 $\Delta = 02^{\circ}02'18.96''$ RT.
D = 01'00'46.14"
L = 201.28'
T = 100.65'
R = 5657.08'
E = 0.89'

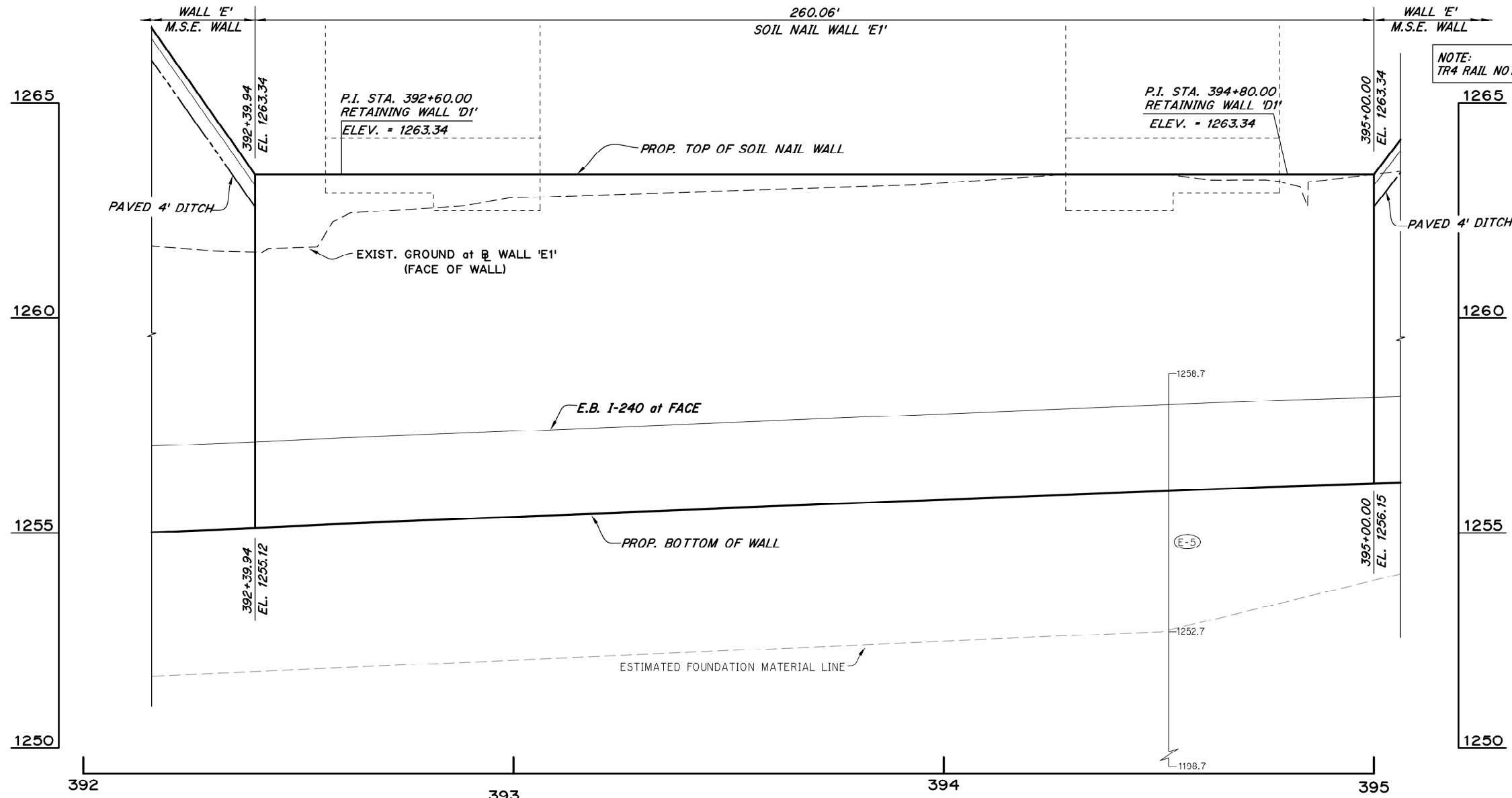
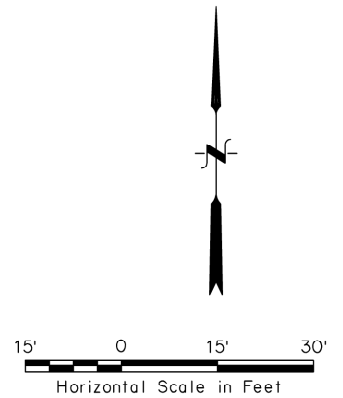
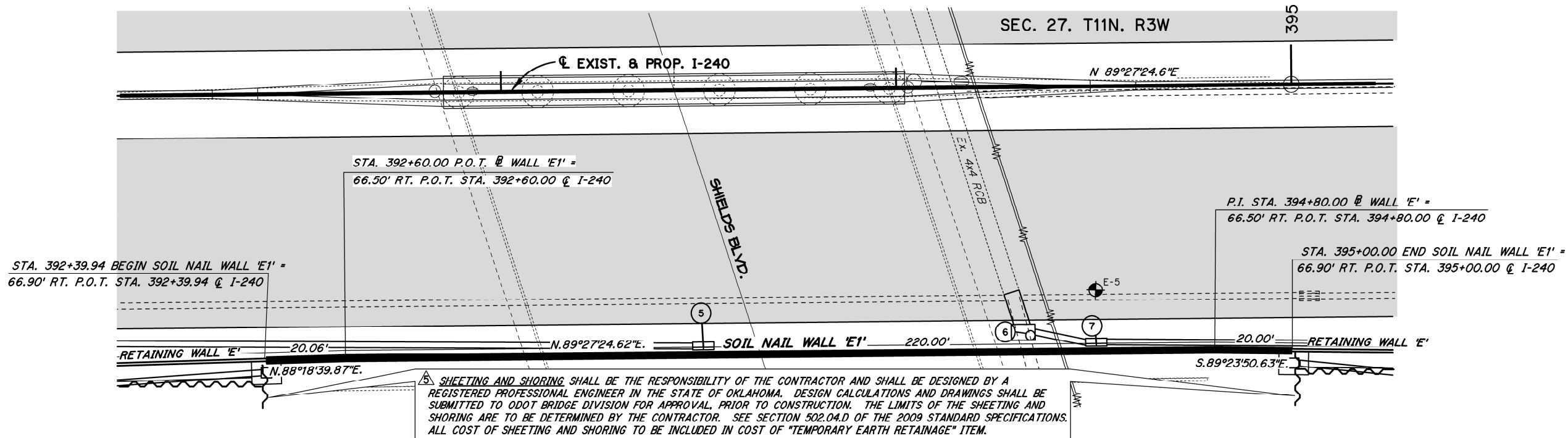
SHEETING AND SHORING:
SHEETING AND SHORING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF OKLAHOMA. DESIGN CALCULATIONS AND DRAWINGS SHALL BE SUBMITTED TO ODOT BRIDGE DIVISION FOR APPROVAL, PRIOR TO CONSTRUCTION. THE LIMITS OF THE SHEETING AND SHORING ARE TO BE DETERMINED BY THE CONTRACTOR. SEE SECTION 502.04.D OF THE 2009 STANDARD SPECIFICATIONS. ALL COST OF SHEETING AND SHORING TO BE INCLUDED IN COST OF "TEMPORARY EARTH RETAINAGE" ITEM.



NOTE:
TR4 RAIL NOT SHOWN FOR CLARITY.

Design	
Drawn	
Checked	
Approved	
Squad	POE

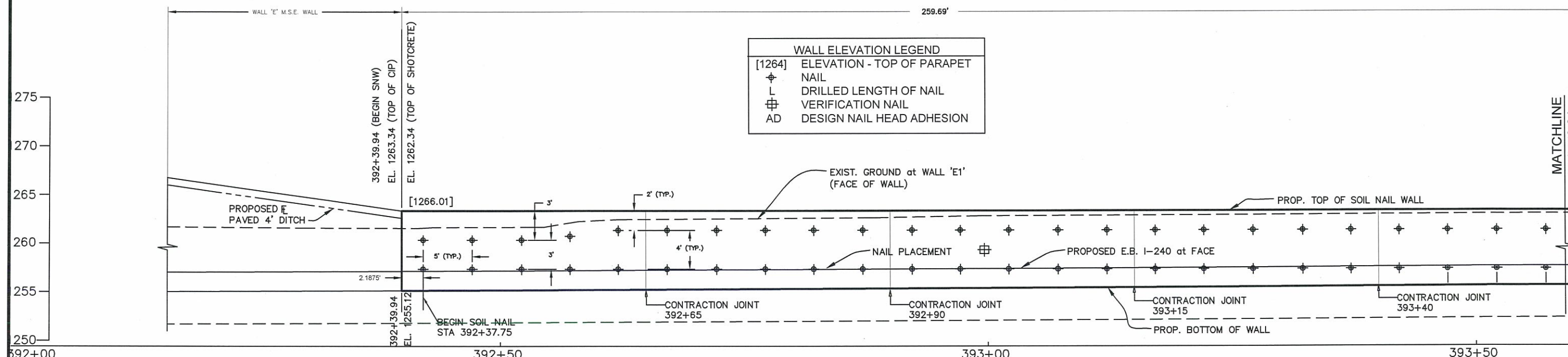
M.S.E. RETAINING WALL 'E'
PLAN & ELEVATION
(SHEET 2 OF 2)



Design	
Drawn	
Checked	
Approved	
Squad	POE

SOIL NAIL WALL 'E1' PLAN & ELEVATION

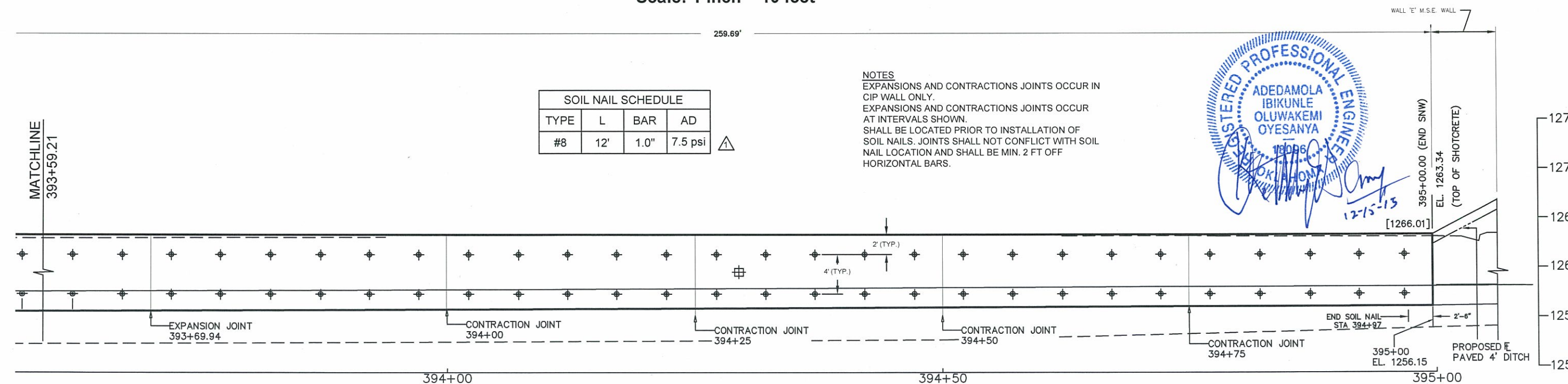
State Job No. 09032(20) Sheet No. 77



1 WALL 'E1' ELEVATION
Scale: 1 inch = 10 feet

SOIL NAIL SCHEDULE			
TYPE	L	BAR	AD
#8	12'	1.0"	7.5 psi

NOTES
EXPANSIONS AND CONTRACTIONS JOINTS OCCUR IN CIP WALL ONLY.
EXPANSIONS AND CONTRACTIONS JOINTS OCCUR AT INTERVALS SHOWN.
SHALL BE LOCATED PRIOR TO INSTALLATION OF SOIL NAILS. JOINTS SHALL NOT CONFLICT WITH SOIL NAIL LOCATION AND SHALL BE MIN. 2 FT OFF HORIZONTAL BARS.



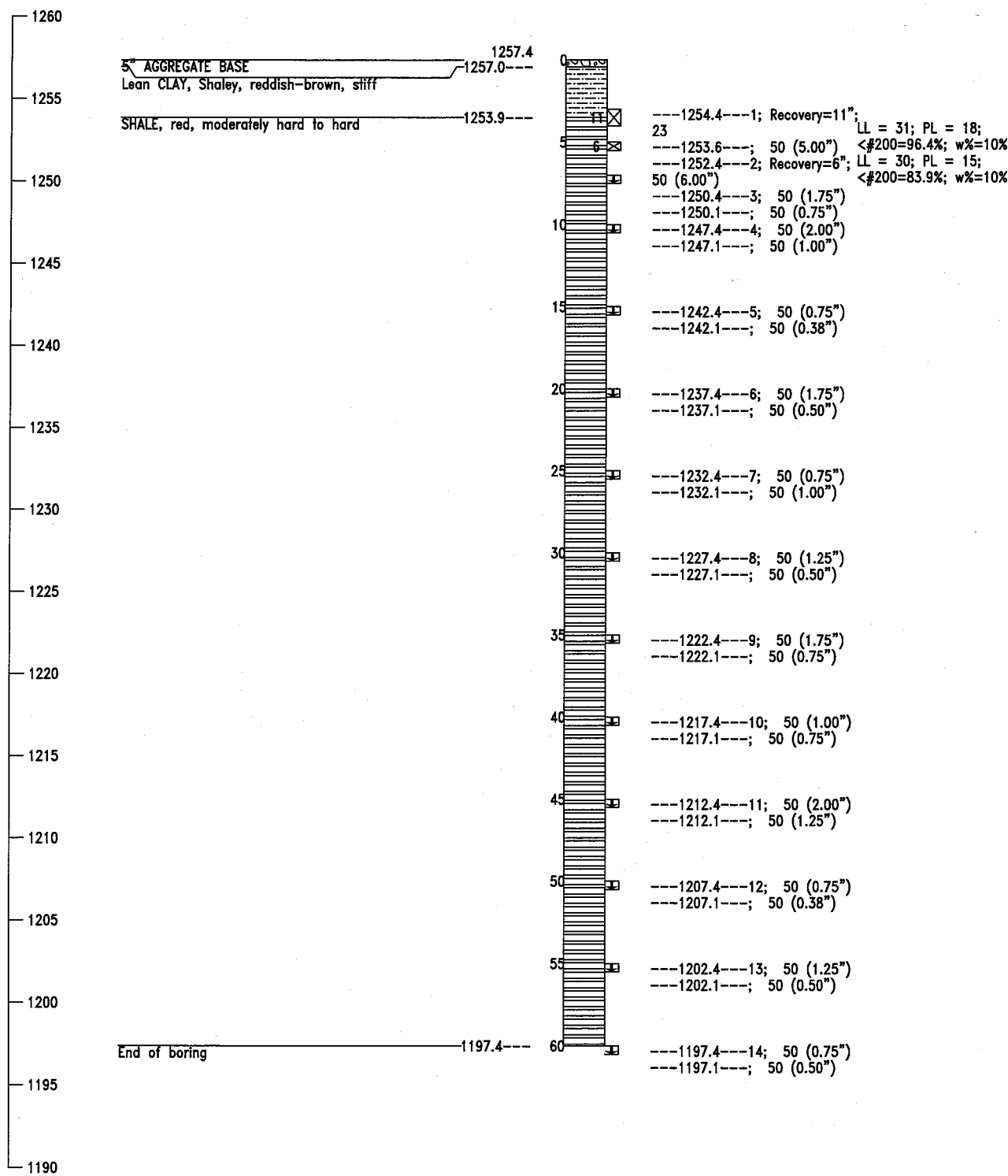
2 WALL 'E1' ELEVATION
Scale: 1 inch = 10 feet

OKLAHOMA DEPARTMENT OF TRANSPORTATION POE & ASSOCIATES CONSULTING ENGINEERS	Design	
	Drawn	
	Checked	
	Approved	
Section Engineer	PSI	Squad
		PSI

SOIL NAIL WALL 'E1' LAYOUT

DESCRIPTION	REVISIONS	
	DATE	

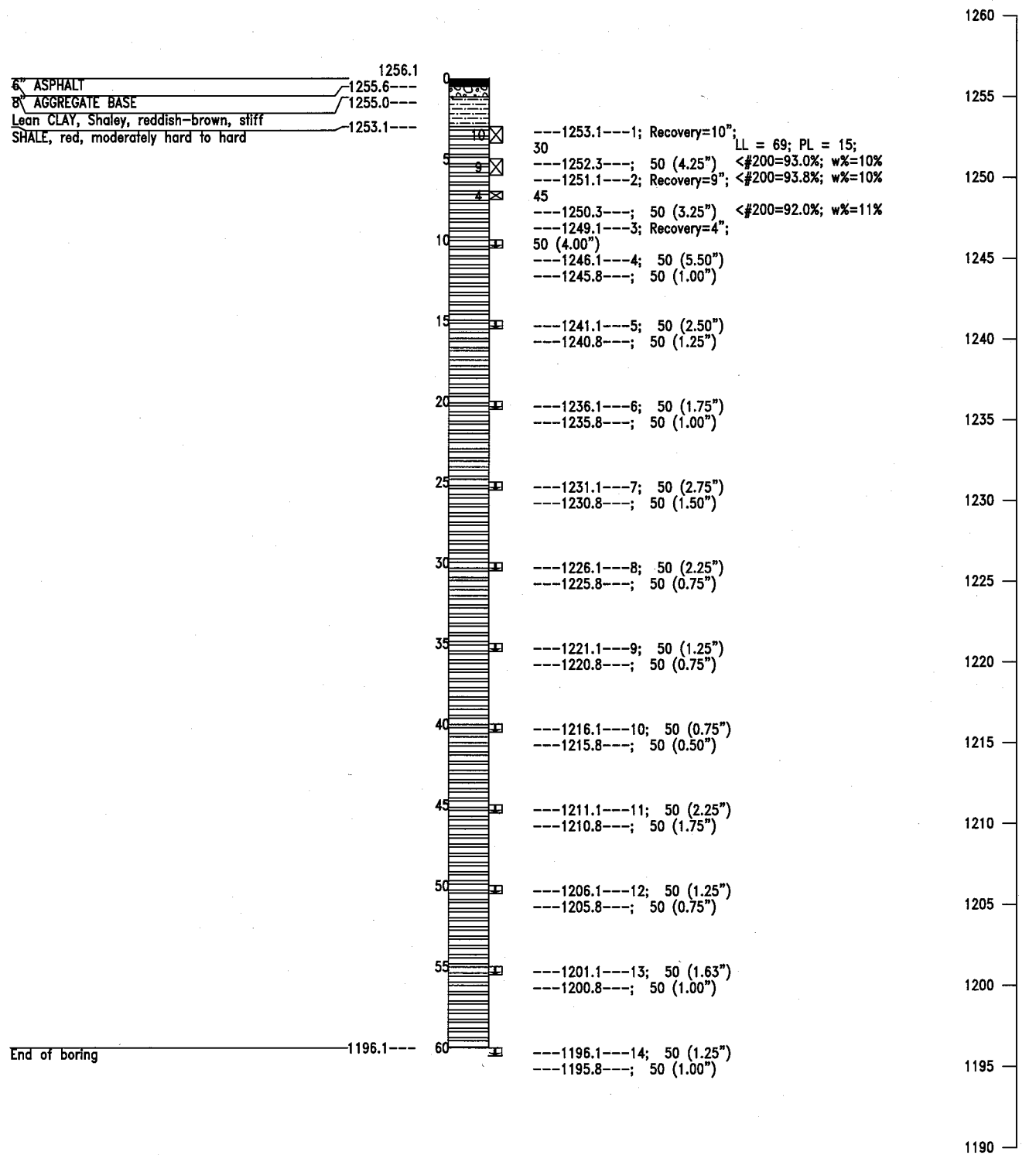
Boring Number E-1
Station: 385+60
Offset: 53 Ft. Rt. CL I-240



GEOLOGIC STATEMENT

"Division Four" of the "Engineering Classification of Geological Materials", published by the Oklahoma Department of Transportation (ODOT) indicates that below alluvium, the site is underlain by the Hennessey Unit (Phy) in Oklahoma County. The geologic unit is described below. This unit consists of red platy to blocky clay shales and mudstone. The mudstones are hard and appear blocky. The red clay shale of the Hennessey Unit is characterized by numerous bands of streaks of white or light green color ranging from a few inches to four feet in thickness. The total thickness of the unit is about 400 feet. The Hennessey Unit outcrops in a 5 to 15 mile north-south band across Grant, Garfield, Kingfisher, Logan, Canadian, and Oklahoma Counties in Division Four. Topographically, the unit is near level to gently rolling and is generally grass covered or cultivated.

Boring Number E-2
Station: 385+60
Offset: 53 Ft. Rt. CL I-240



NOTE: ☒ Denotes Split Spoon Test
☒ Denotes Texas Cone Penetrator Test
* Classification estimated from disturbed samples. Core sample and petrographic analysis may reveal other rock types.

Proposed Retaining Wall "E" Oklahoma City, OK
I-35/I-240 Interchange Reconstruction

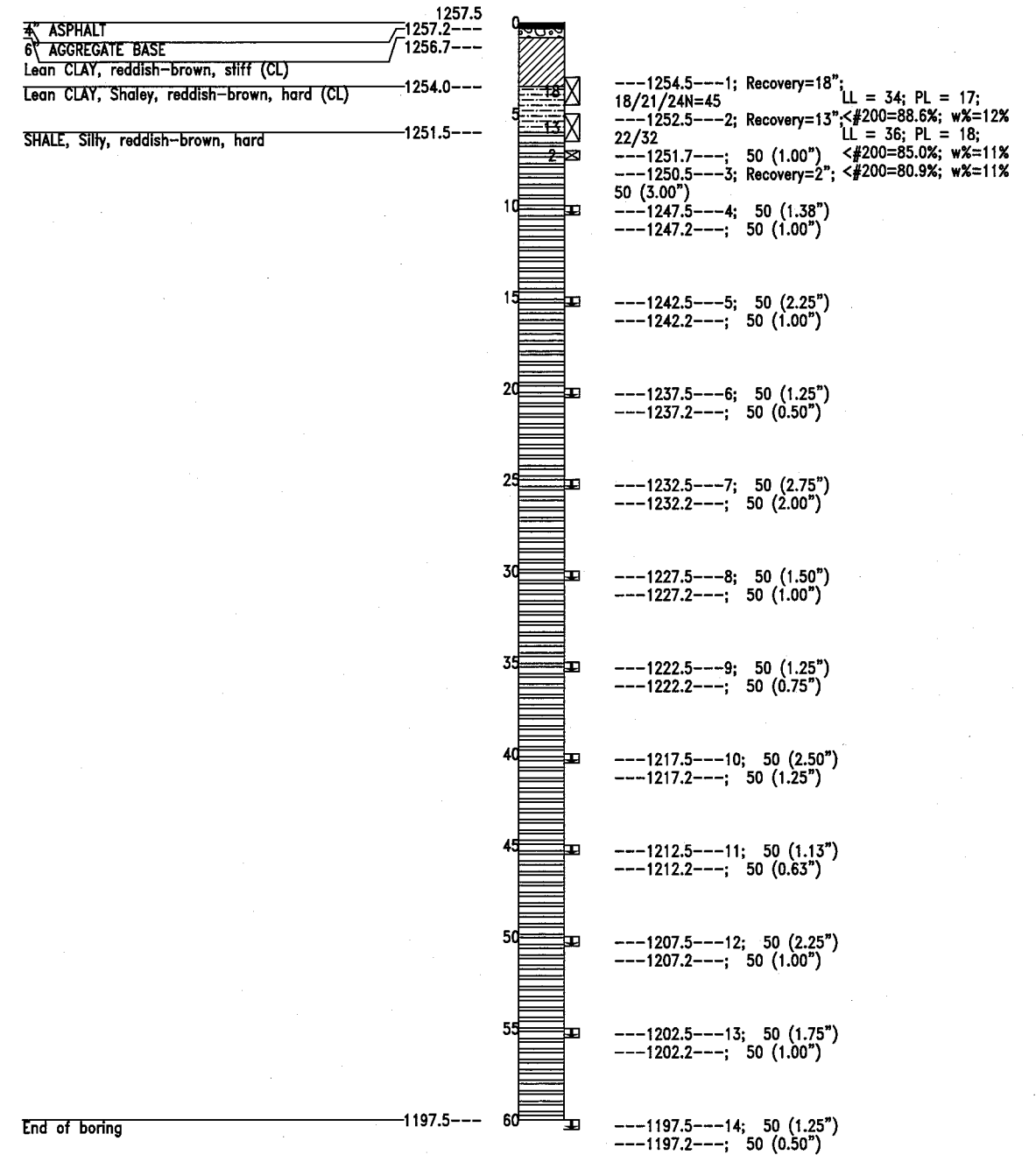
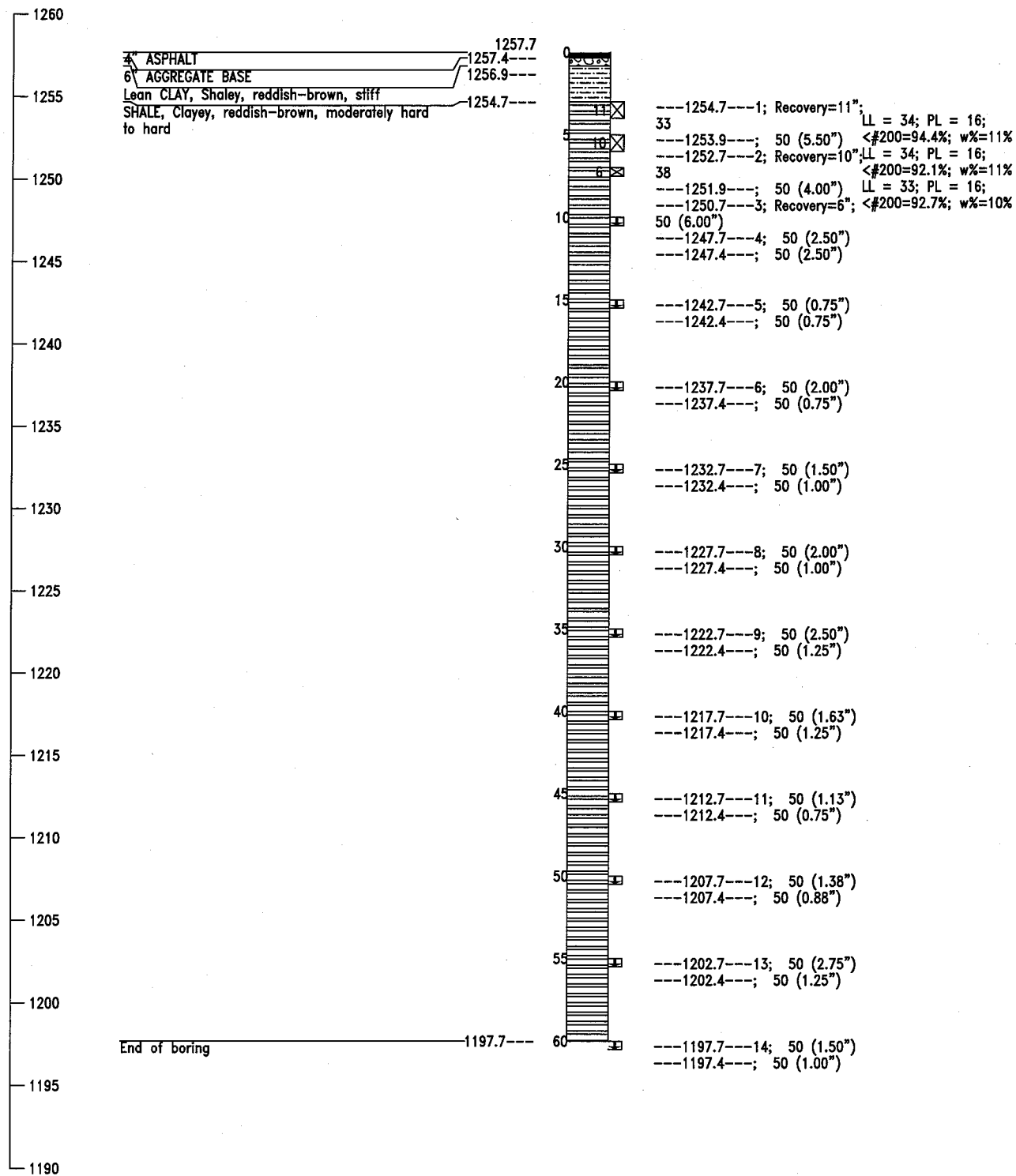
Design	
Drawn	
Checked	
Approved	
Squad	POE

FOUNDATION REPORT WALL 'E'
(SHEET 1 OF 5)

State Job No. 09032(20) Sheet No. 79

Boring Number E-3
Station: 389+65
Offset: 45.5 Ft. Rt. CL I-240

Boring Number E-4
Station: 391+75
Offset: 44.5 Ft. Rt. CL I-240



GEOLOGIC STATEMENT

"Division Four" of the "Engineering Classification of Geological Materials", published by the Oklahoma Department of Transportation (ODOT) indicates that below alluvium, the site is underlain by the Hennessey Unit (Phy) in Oklahoma County. The geologic unit is described below. This unit consists of red platy to blocky clay shales and mudstone. The mudstones are hard and appear blocky. The red clay shale of the Hennessey Unit is characterized by numerous bands of streaks of white or light green color ranging from a few inches to four feet in thickness. The total thickness of the unit is about 400 feet. The Hennessey Unit outcrops in a 5 to 15 mile north-south band across Grant, Garfield, Kingfisher, Logan, Canadian, and Oklahoma Counties in Division Four. Topographically, the unit is near level to gently rolling and is generally grass covered or cultivated.

NOTE: ☒ Denotes Split Spoon Test
☒ Denotes Texas Cone Penetrator Test
* Classification estimated from disturbed samples. Core sample and petrographic analysis may reveal other rock types.

Proposed Retaining Wall "E" Oklahoma City, OK
I-35/I-240 Interchange Reconstruction

Design	
Drawn	
Checked	
Approved	
Squad	POE

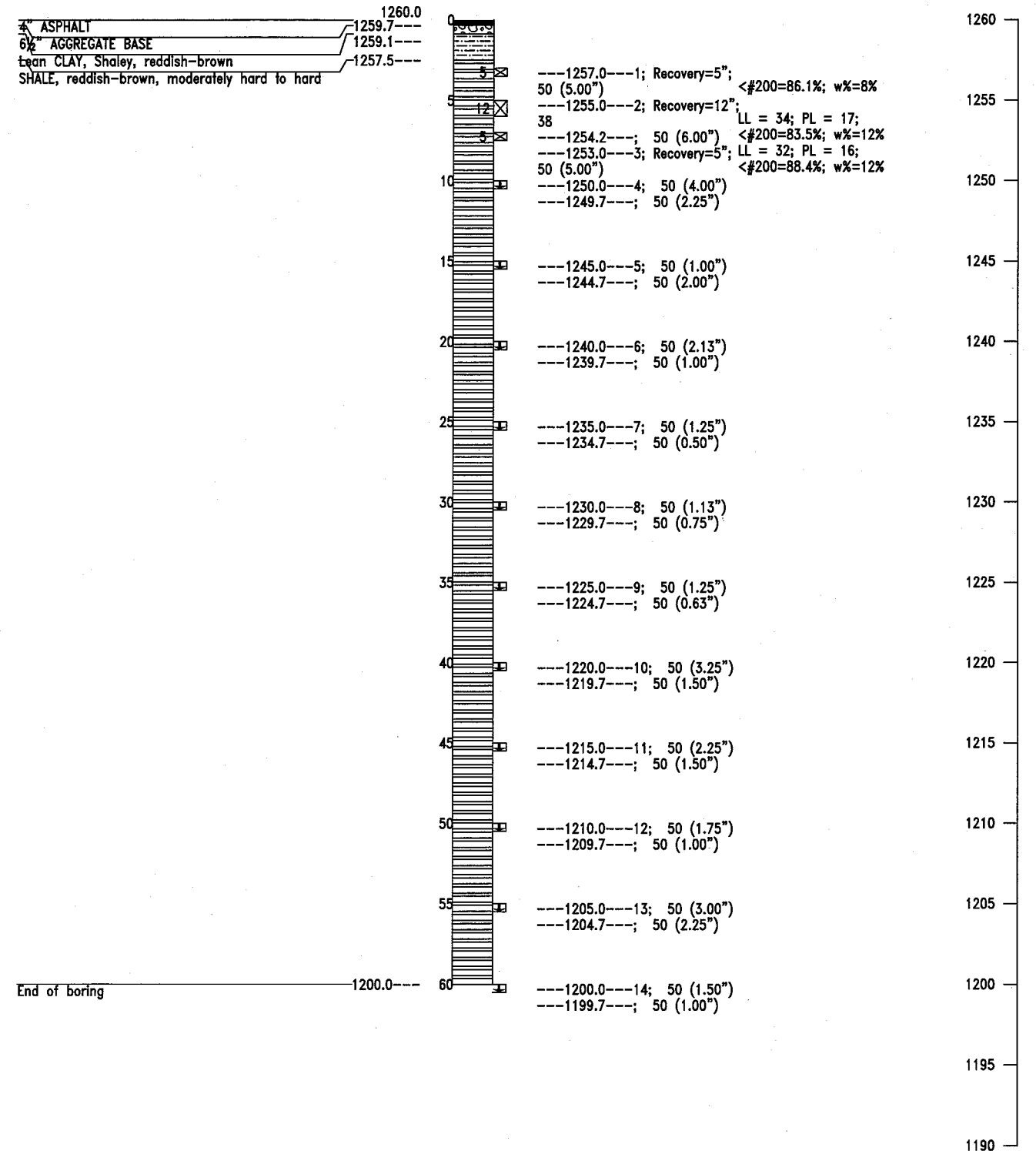
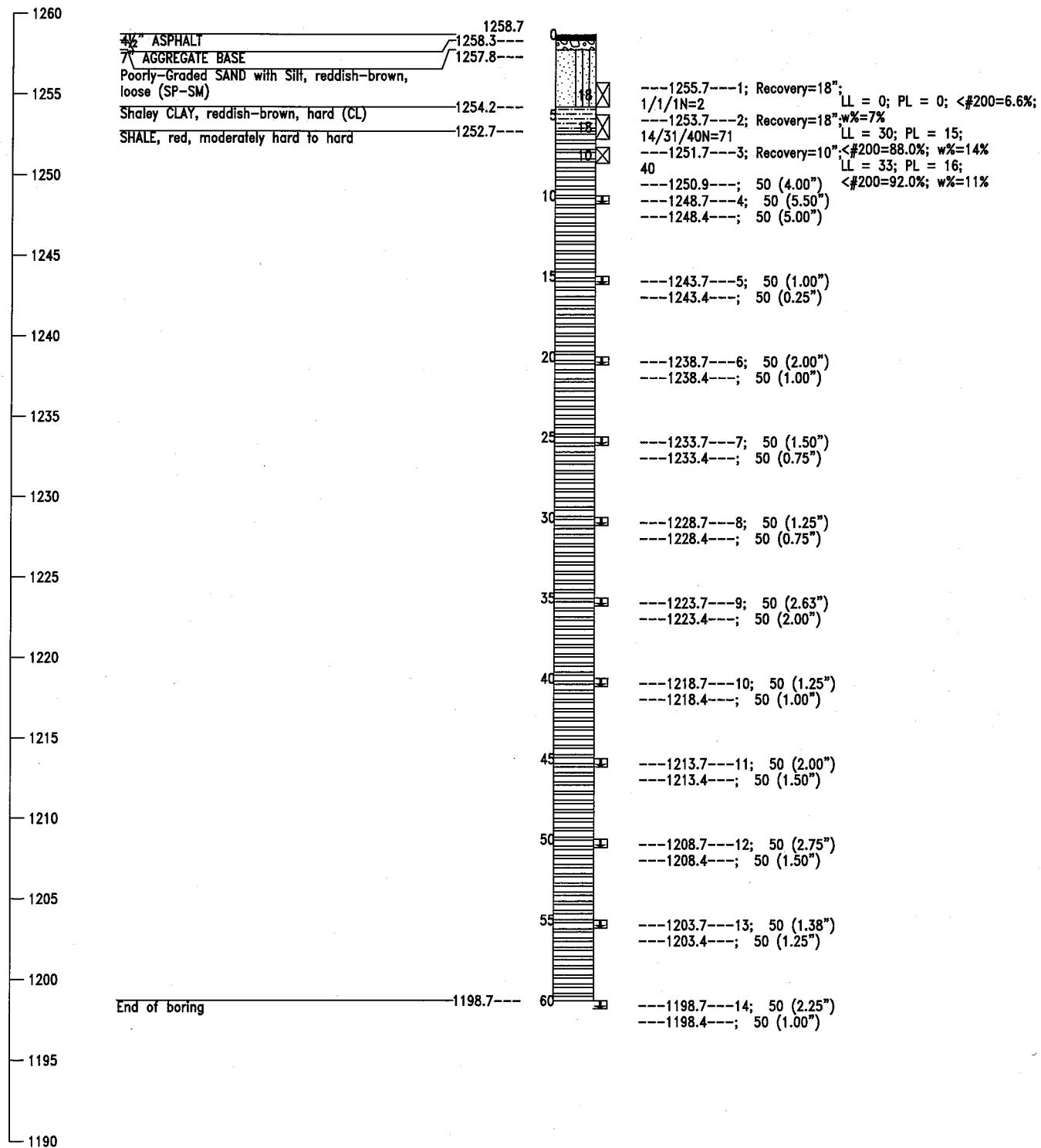
FOUNDATION REPORT WALL 'E'
(SHEET 2 OF 5)

State Job No. 09032(20) Sheet No. 80

DESCRIPTION	REVISIONS	DATE

Boring Number E-5
Station: 394+50
Offset: 51.5 Ft. Rt. CL I-240

Boring Number E-6
Station: 396+50
Offset: 53 Ft. Rt. CL I-240



GEOLOGIC STATEMENT

"Division Four" of the "Engineering Classification of Geological Materials", published by the Oklahoma Department of Transportation (ODOT) indicates that below alluvium, the site is underlain by the Hennessey Unit (Phy) in Oklahoma County. The geologic unit is described below. This unit consists of red platy to blocky clay shales and mudstone. The mudstones are hard and appear blocky. The red clay shale of the Hennessey Unit is characterized by numerous bands of streaks of white or light green color ranging from a few inches to four feet in thickness. The total thickness of the unit is about 400 feet. The Hennessey Unit outcrops in a 5 to 15 mile north-south band across Grant, Garfield, Kingfisher, Logan, Canadian, and Oklahoma Counties in Division Four. Topographically, the unit is near level to gently rolling and is generally grass covered or cultivated.

NOTE: ☒ Denotes Split Spoon Test
☒ Denotes Texas Cone Penetrator Test
* Classification estimated from disturbed samples. Core sample and petrographic analysis may reveal other rock types.

Proposed Retaining Wall "E" Oklahoma City, OK
I-35/I-240 Interchange Reconstruction

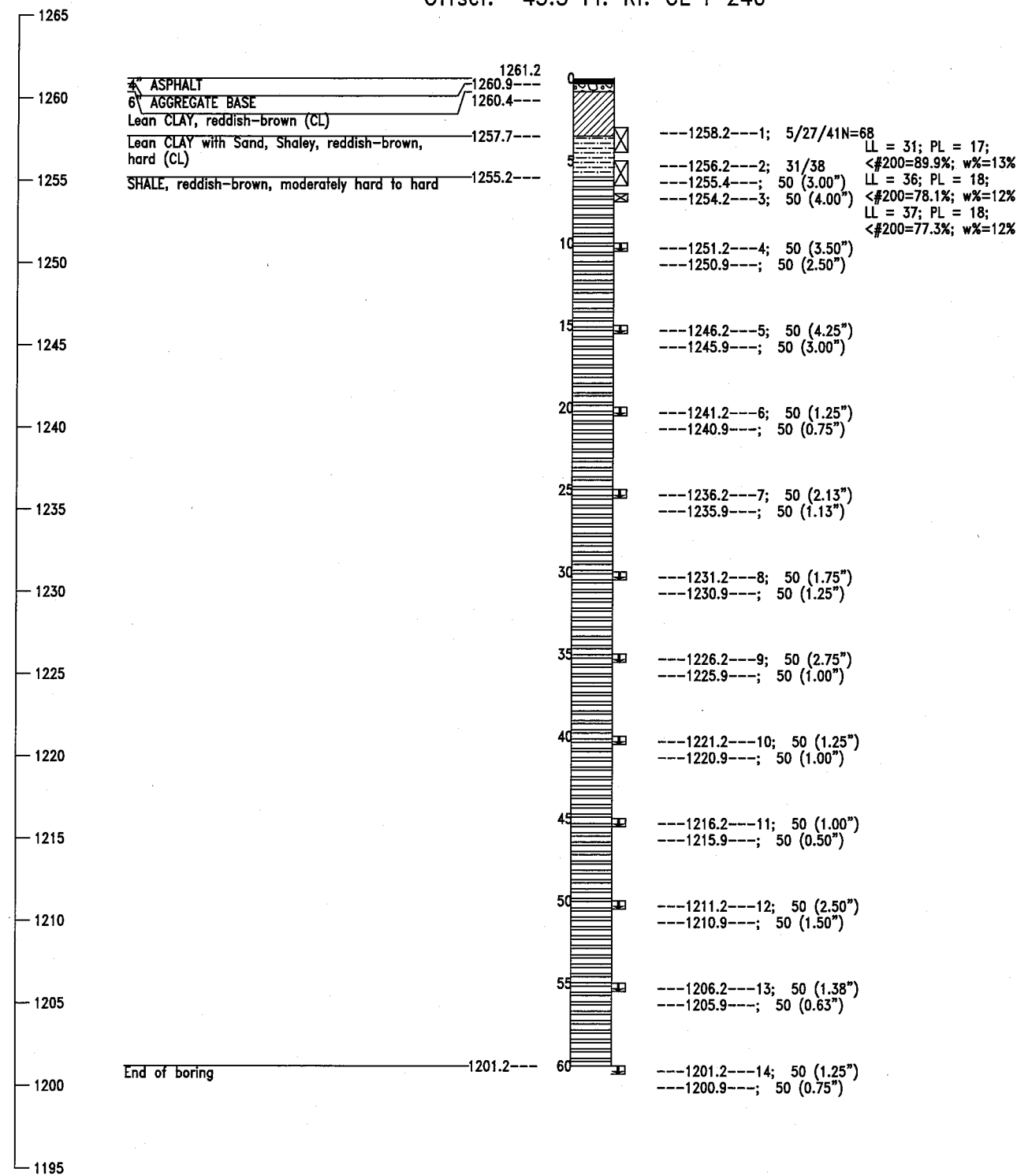
Design	
Drawn	
Checked	
Approved	
Squad	POE

FOUNDATION REPORT WALL 'E'
(SHEET 3 OF 5)

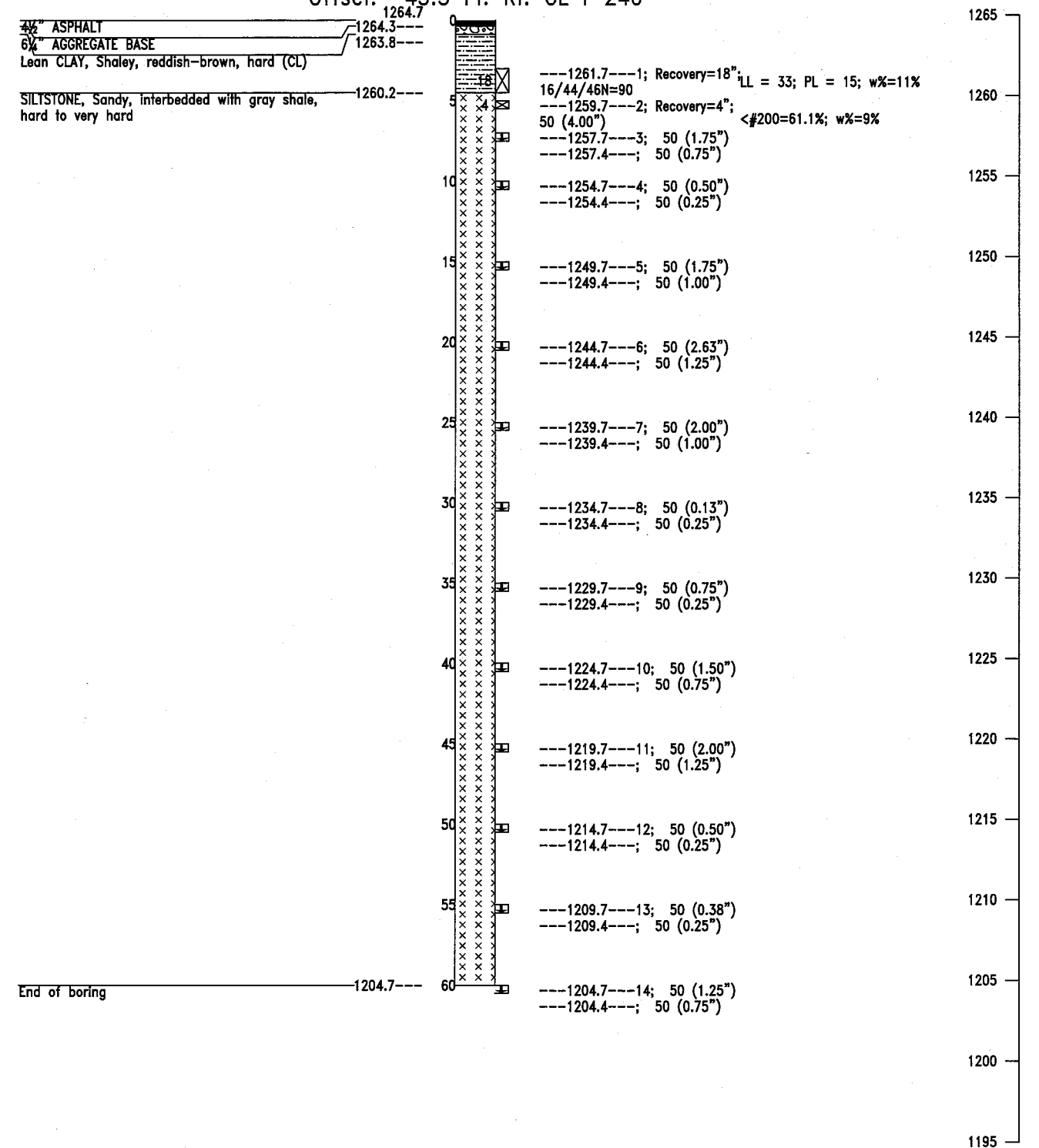
State Job No. 09032(20) Sheet No. 81

DESCRIPTION	REVISIONS	
	DATE	

Boring Number E-7
Station: 398+50
Offset: 45.5 Ft. Rt. CL I-240



Boring Number E-8
Station: 400+50
Offset: 43.5 Ft. Rt. CL I-240



GEOLOGIC STATEMENT

"Division Four" of the "Engineering Classification of Geological Materials", published by the Oklahoma Department of Transportation (ODOT) indicates that below alluvium, the site is underlain by the Hennessey Unit (Phy) in Oklahoma County. The geologic unit is described below. This unit consists of red platy to blocky clay shales and mudstone. The mudstones are hard and appear blocky. The red clay shale of the Hennessey Unit is characterized by numerous bands of streaks of white or light green color ranging from a few inches to four feet in thickness. The total thickness of the unit is about 400 feet. The Hennessey Unit outcrops in a 5 to 15 mile north-south band across Grant, Garfield, Kingfisher, Logan, Canadian, and Oklahoma Counties in Division Four. Topographically, the unit is near level to gently rolling and is generally grass covered or cultivated.

NOTE: ☒ Denotes Split Spoon Test
☒ Denotes Texas Cone Penetrator Test
* Classification estimated from disturbed samples. Core sample and petrographic analysis may reveal other rock types.

Proposed Retaining Wall "E" Oklahoma City, OK
I-35/I-240 Interchange Reconstruction

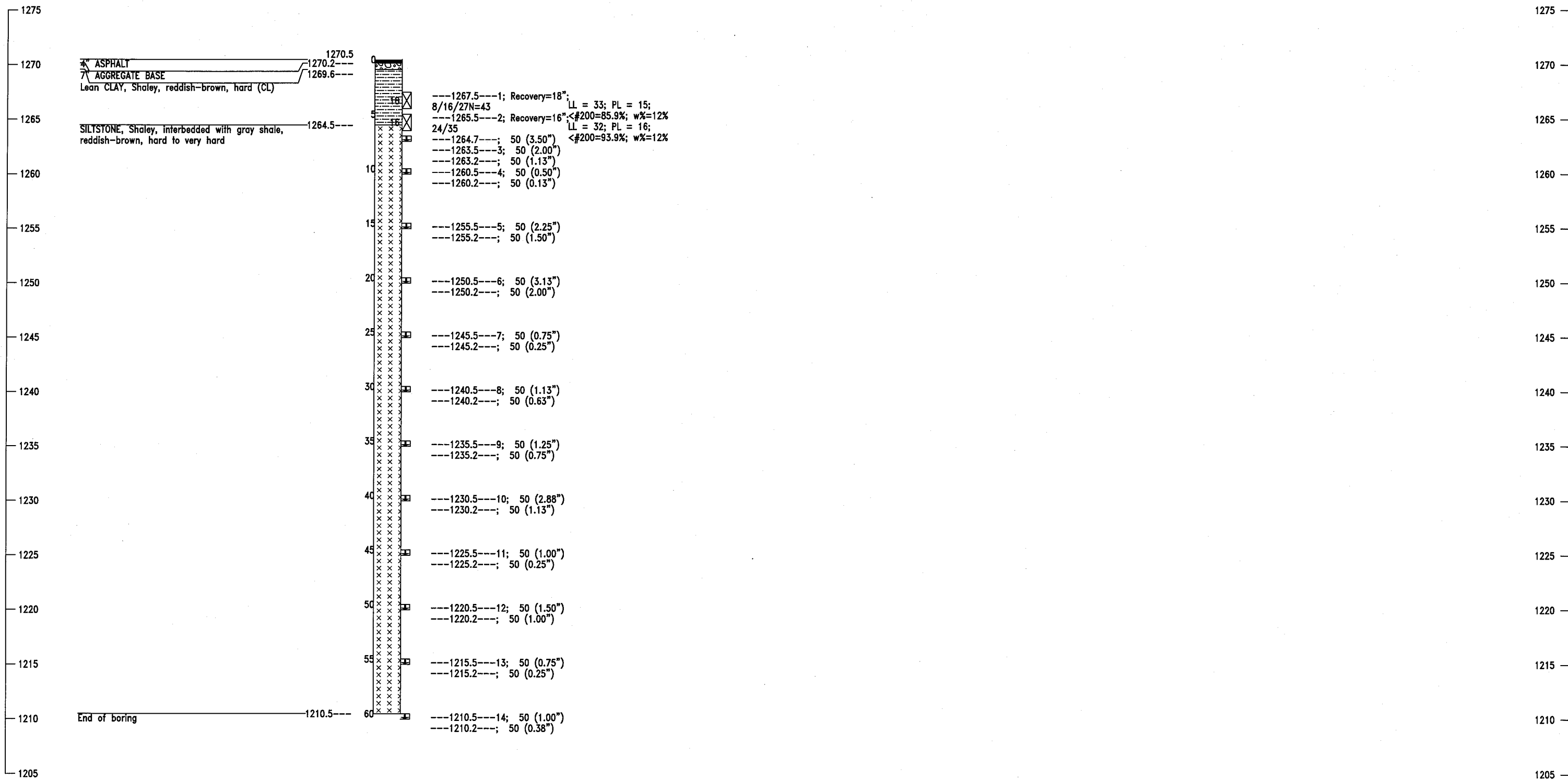
Design	
Drawn	
Checked	
Approved	
Squad	POE

FOUNDATION REPORT WALL "E"
(SHEET 4 OF 5)

State Job No. 09032(20) Sheet No. 82

DESCRIPTION	REVISIONS	DATE

Boring Number E-9
Station: 403+00
Offset: 36.5 Ft. Rt. CL I-240



GEOLOGIC STATEMENT

"Division Four" of the "Engineering Classification of Geological Materials", published by the Oklahoma Department of Transportation (ODOT) indicates that below alluvium, the site is underlain by the Hennessey Unit (Phy) in Oklahoma County. The geologic unit is described below. This unit consists of red platy to blocky clay shales and mudstone. The mudstones are hard and appear blocky. The red clay shale of the Hennessey Unit is characterized by numerous bands of streaks of white or light green color ranging from a few inches to four feet in thickness. The total thickness of the unit is about 400 feet. The Hennessey Unit outcrops in a 5 to 15 mile north-south band across Grant, Garfield, Kingfisher, Logan, Canadian, and Oklahoma Counties in Division Four. Topographically, the unit is near level to gently rolling and is generally grass covered or cultivated.

NOTE: ☒ Denotes Split Spoon Test
☒ Denotes Texas Cone Penetrator Test
* Classification estimated from disturbed samples. Core sample and petrographic analysis may reveal other rock types.

Proposed Retaining Wall "E" Oklahoma City, OK
I-35/I-240 Interchange Reconstruction

Design	
Drawn	
Checked	
Approved	
Squad	POE

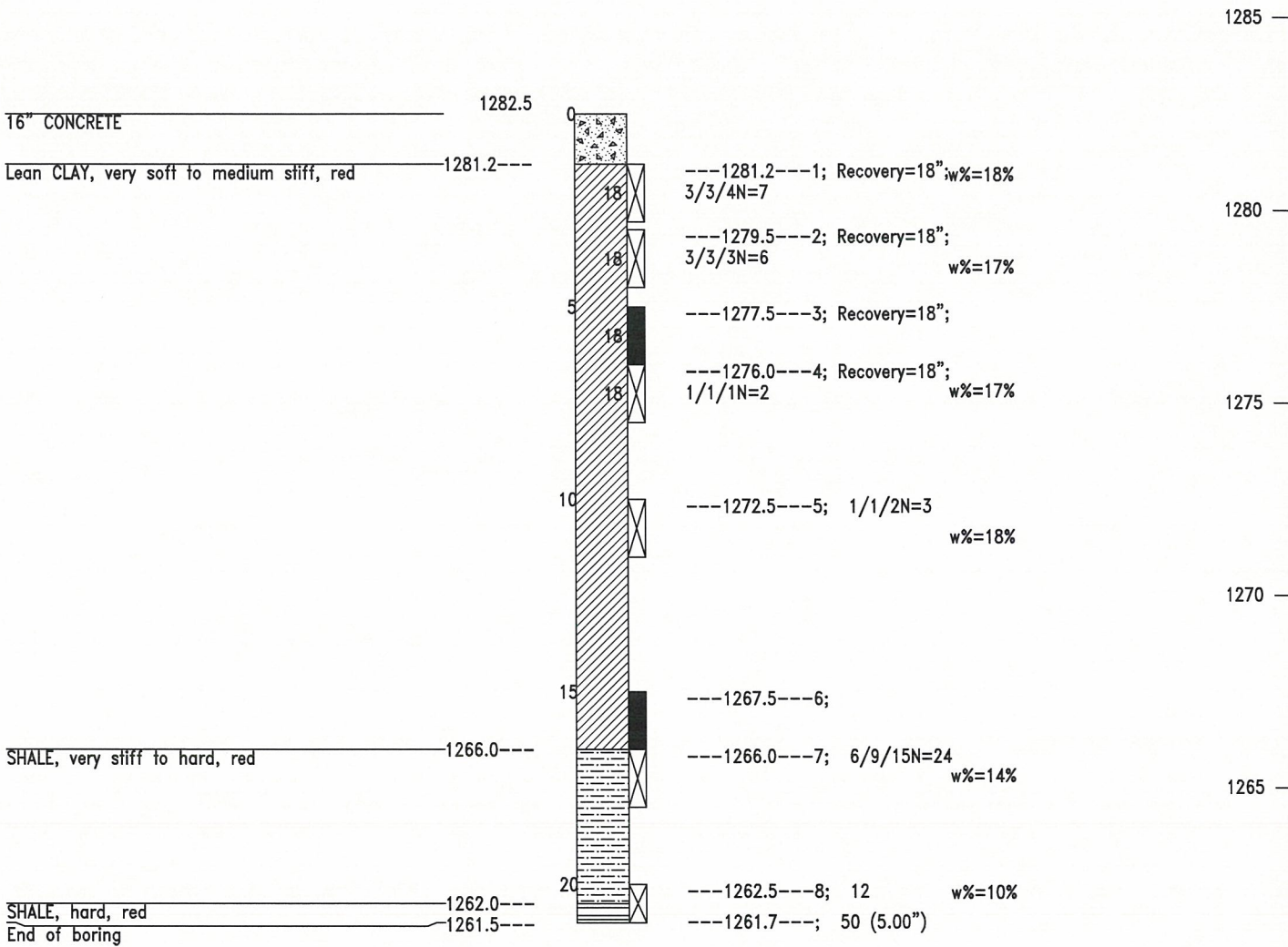
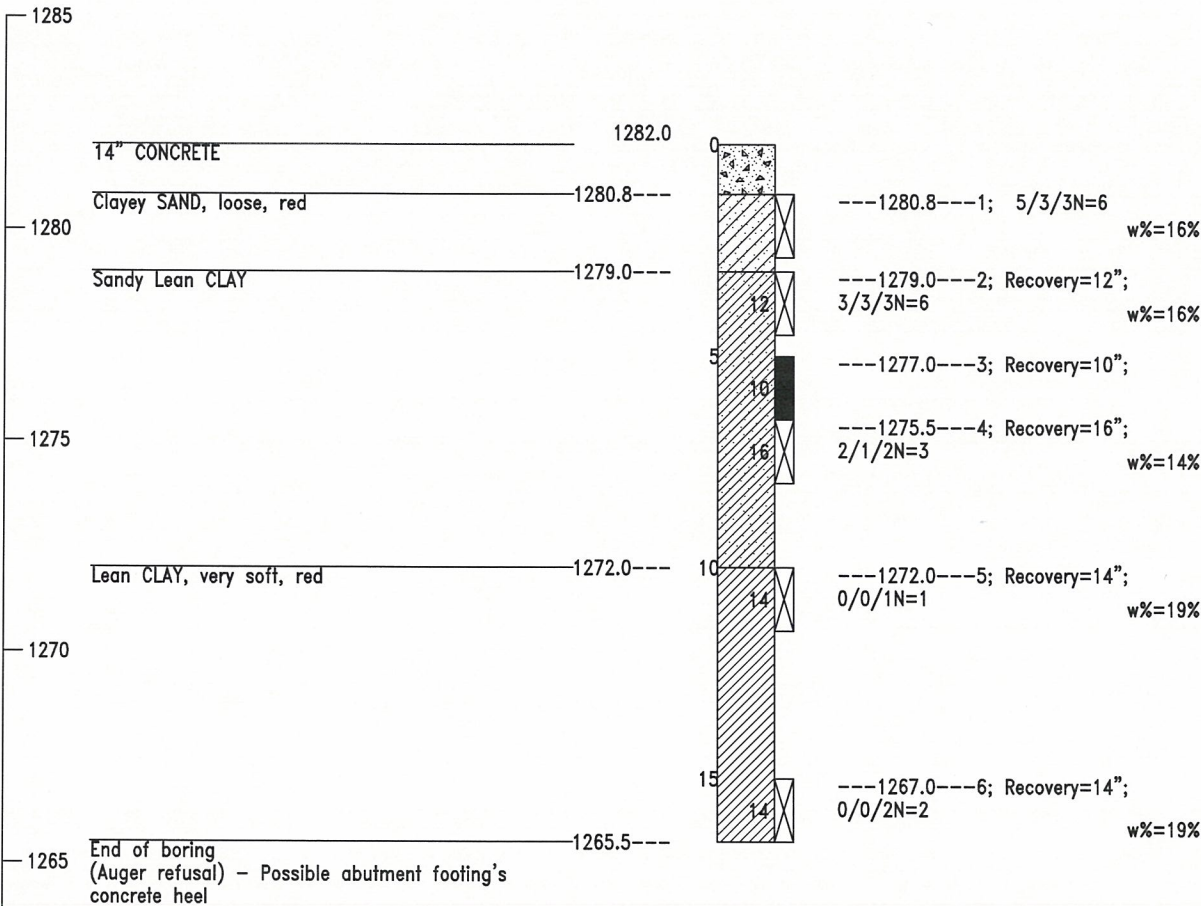
FOUNDATION REPORT WALL 'E' (SHEET 5 OF 5)

State Job No. 09032(20) Sheet No. 83

DESCRIPTION	REVISIONS	DATE

Boring Number E1-1
Latitude: 35.39177° N
Longitude: 97.50679° W

Boring Number E1-2
Latitude: 35.39177° N
Longitude: 97.50662° W



GEOLOGIC STATEMENT

"Division Four" of the "Engineering Classification of Geological Materials", published by the Oklahoma Department of Transportation (ODOT) indicates that below alluvium, the site is underlain by the Hennessey Unit (Phy) in Oklahoma County. The geologic unit is described below. This unit consists of red platy to blocky clay shales and mudstone. The mudstones are hard and appear blocky. The red clay shale of the Hennessey Unit is characterized by numerous bands of streaks of white or light green color ranging from a few inches to four feet in thickness. The total thickness of the unit is about 400 feet. The Hennessey Unit outcrops in a 5 to 15 mile north-south band across Grant, Garfield, Kingfisher, Logan, Canadian, and Oklahoma Counties in Division Four. Topographically, the unit is near level to gently rolling and is generally grass covered or cultivated.



NOTE: ☒ Denotes Split Spoon Sampling
☒ Denotes Texas Cone Penetrator Test

SOIL NAIL WALL "E1"
I-240 & Shields Blvd.

OKLAHOMA COUNTY

STATE OF OKLAHOMA DEPARTMENT OF TRANSPORTATION

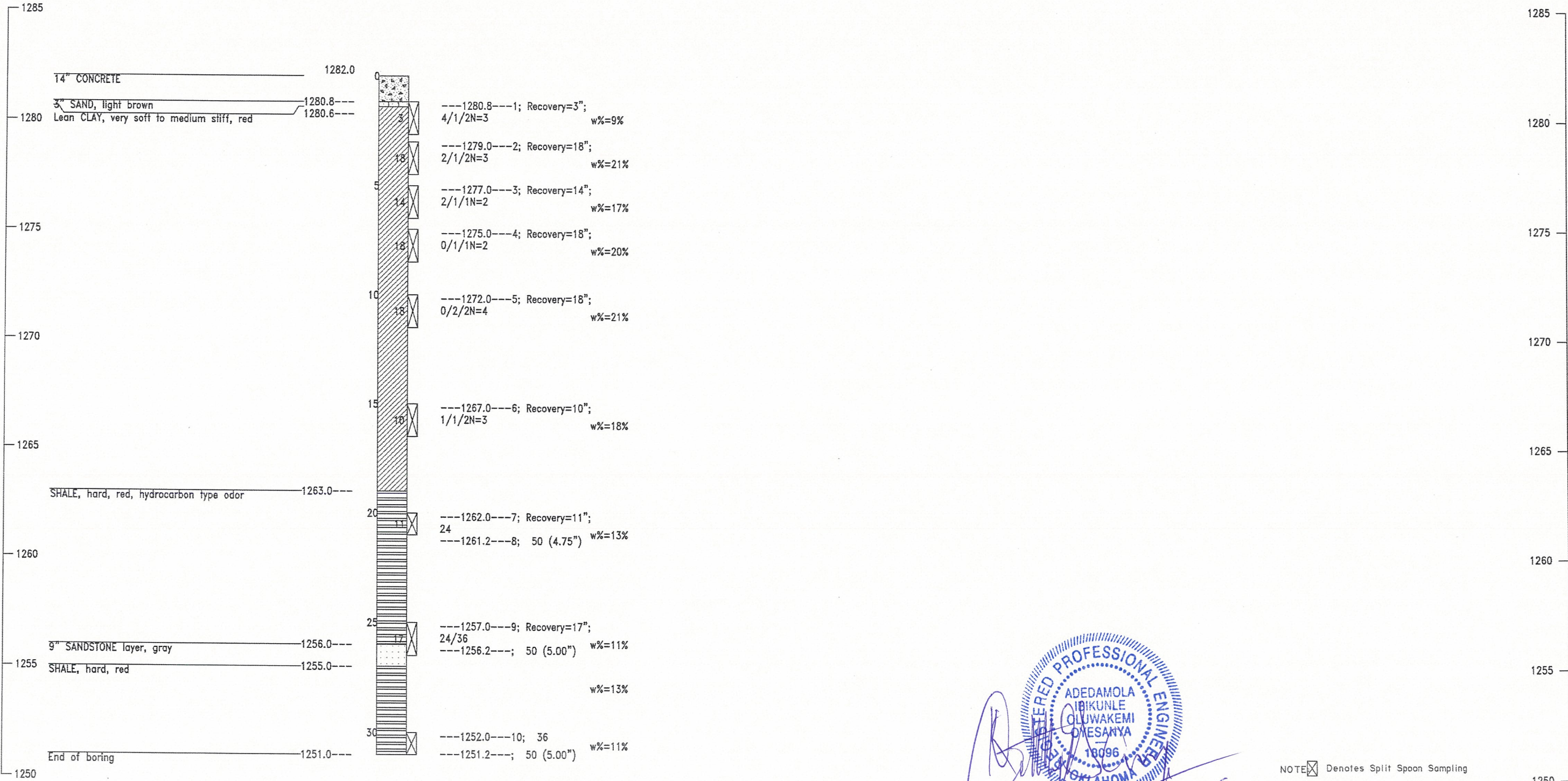
Design	
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Checked	
Approved	
Squad	PSI

FOUNDATION REPORT WALL 'E1'
(SHEET 1 OF 2)

State Job No. 09032(20) Sheet No. 83A

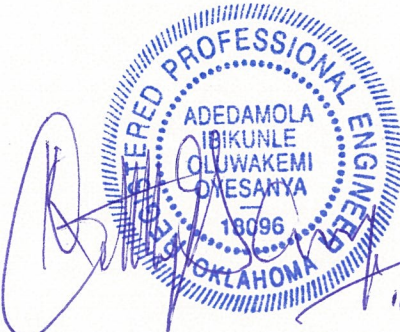
Boring Number E1-3
Latitude: 35.39176° N
Longitude: 97.50647° W

DESCRIPTION	REVISIONS	DATE



GEOLOGIC STATEMENT

"Division Four" of the "Engineering Classification of Geological Materials", published by the Oklahoma Department of Transportation (ODOT) indicates that below alluvium, the site is underlain by the Hennessey Unit (Phy) in Oklahoma County. The geologic unit is described below. This unit consists of red platy to blocky clay shales and mudstone. The mudstones are hard and appear blocky. The red clay shale of the Hennessey Unit is characterized by numerous bands of streaks of white or light green color ranging from a few inches to four feet in thickness. The total thickness of the unit is about 400 feet. The Hennessey Unit outcrops in a 5 to 15 mile north-south band across Grant, Garfield, Kingfisher, Logan, Canadian, and Oklahoma Counties in Division Four. Topographically, the unit is near level to gently rolling and is generally grass covered or cultivated.



NOTE: ☒ Denotes Split Spoon Sampling
☐ Denotes Texas Cone Penetrator Test

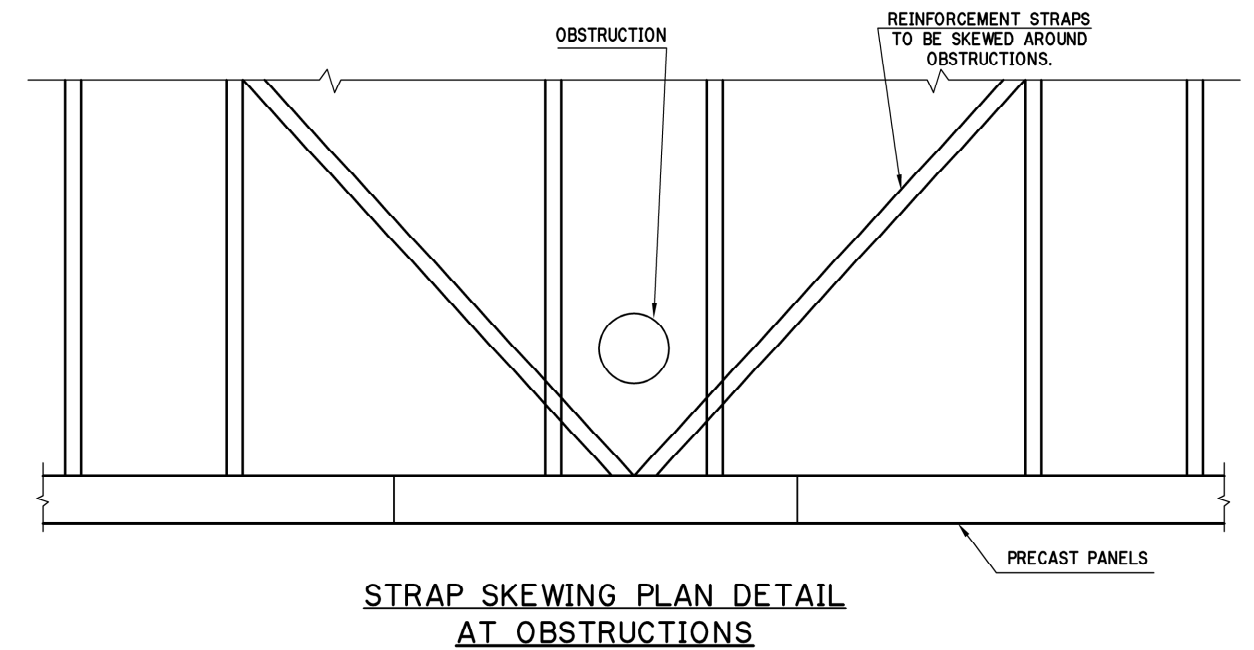
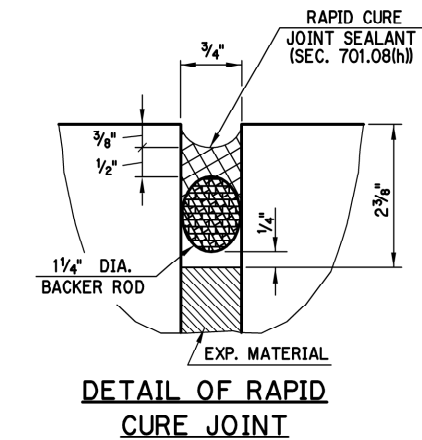
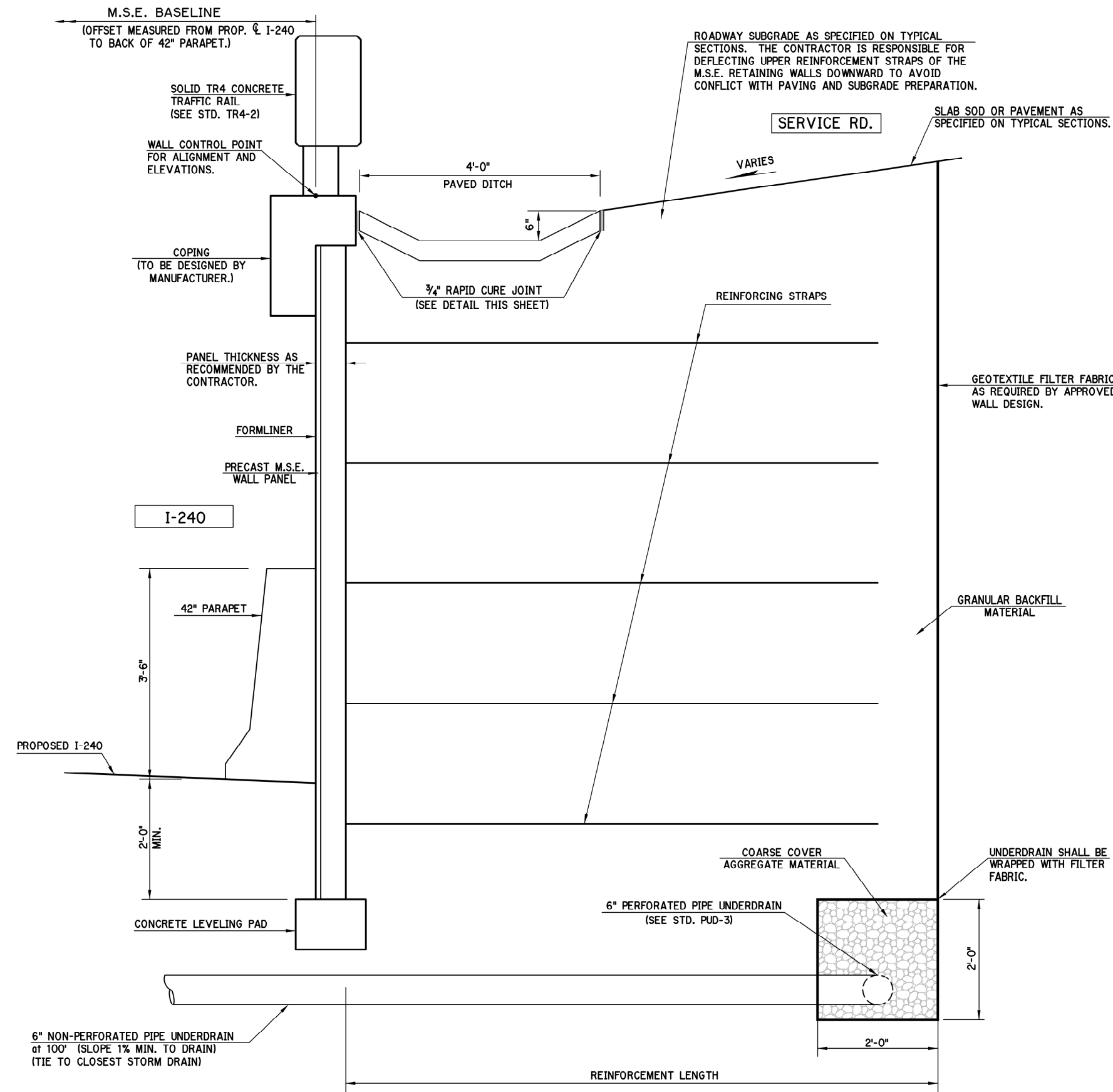
SOIL NAIL WALL "E1"
1-240 & Shields Blvd. OKLAHOMA COUNTY

STATE OF OKLAHOMA DEPARTMENT OF TRANSPORTATION

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Checked	
Approved	
Squad	PSI

FOUNDATION REPORT WALL "E1"
(SHEET 2 OF 2)

State Job No. 09032(20) Sheet No. 83B



NOTE:

IF BARMAT OR WIRE MESH SOIL REINFORCEMENT IS USED, THEN A STRUCTURAL YOKE SYSTEM MUST BE ATTACHED TO THE OBSTRUCTED PANEL(S) AND THE OBSTRUCTED SECTIONS OF SOIL REINFORCEMENTS MUST BE ATTACHED TO THE YOKE ON THE BACKSIDE OF THE OBSTRUCTION.

NOTE:
THE M.S.E. WALL PANELS SHALL BE STACKED AND ERECTED IN A STAGGERED HORIZONTAL JOINT PATTERN.

ALL COST FOR WALL DRAINAGE SHALL BE IN PER SQUARE YARD FOR "MSE RETAINING WALL".


**M.S.E. WALL 'D' AND 'E' SECTION DETAIL
(WALL 'E' SHOWN)**

OKLAHOMA COUNTY

Design	
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Approved	
Squad	POE

**M.S.E. RETAINING WALL
DETAILS**

State Job No. 09032(20) Sheet No. 84

DESCRIPTION	REVISIONS	DATE
 DELETED SHEET		01/19/16

DELETED

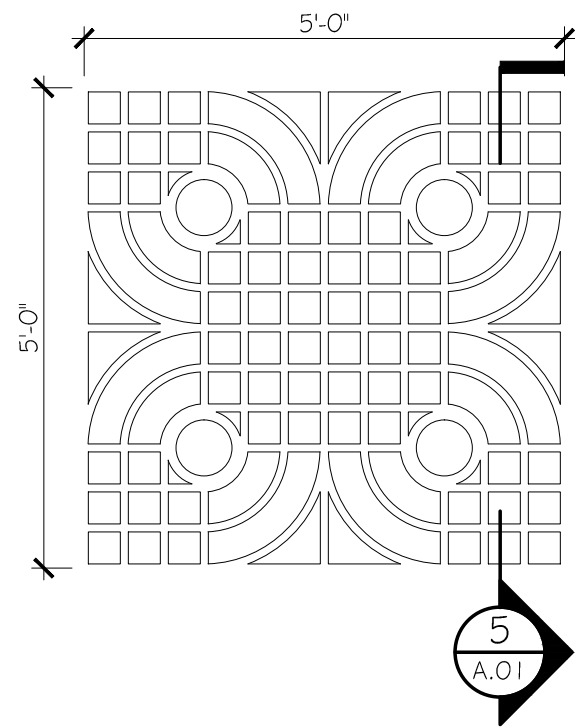
OKLAHOMA COUNTY

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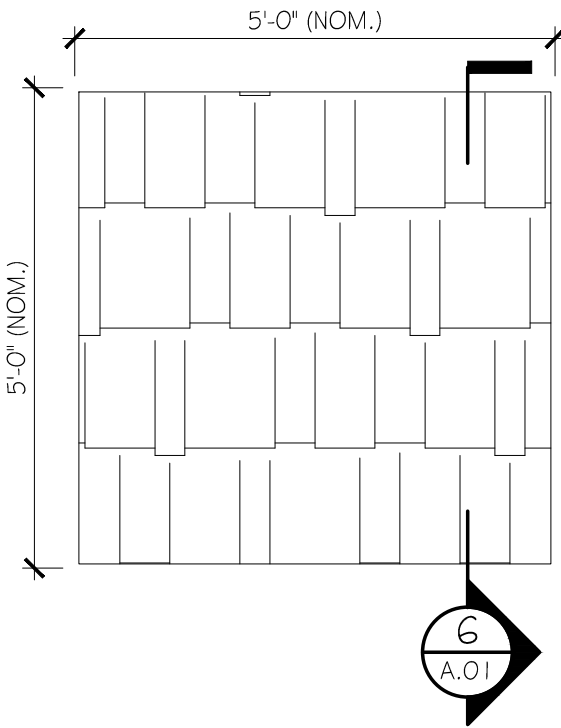
ARCHITECTURAL FINISH
DETAILS

State Job No. 09032(20) Sheet No. 85

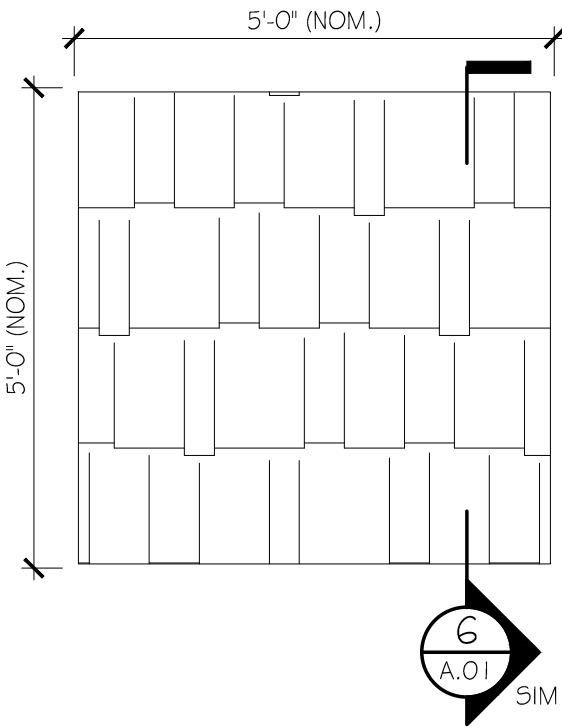




CIP PATTERN A: CFL-FFO15



MSE PATTERN B: CFL-FFO16



MSE PATTERN C: CFL-FFO16

1
A.01

CUSTOM CIP WALL
PATTERN KEY ELEVATION
SCALE: 1/2" = 1'-0"

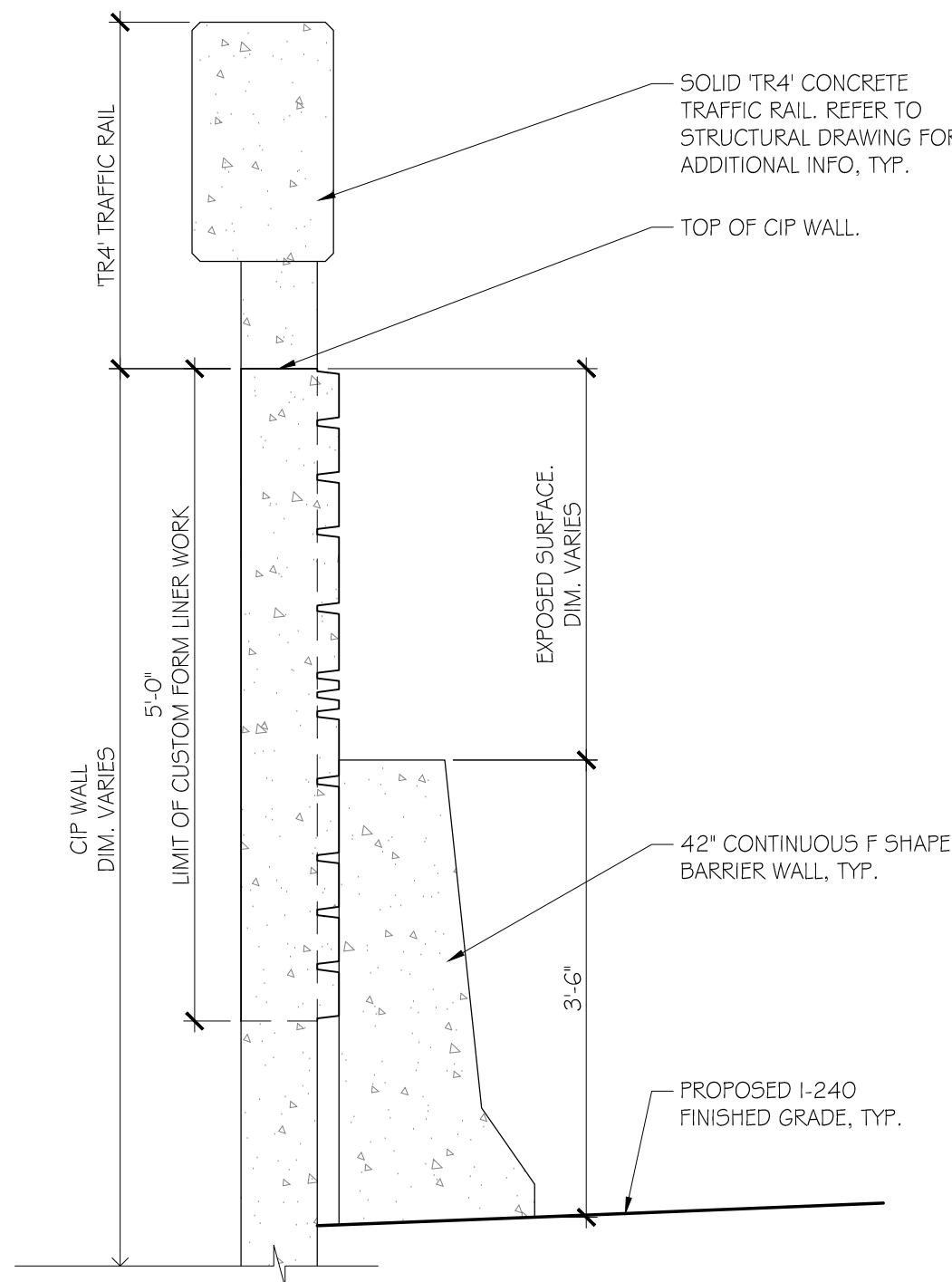
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A.01

CUSTOM MSE WALL PANEL KEY ELEVATIONS
SCALE: 1/2" = 1'-0"

GENERAL NOTE

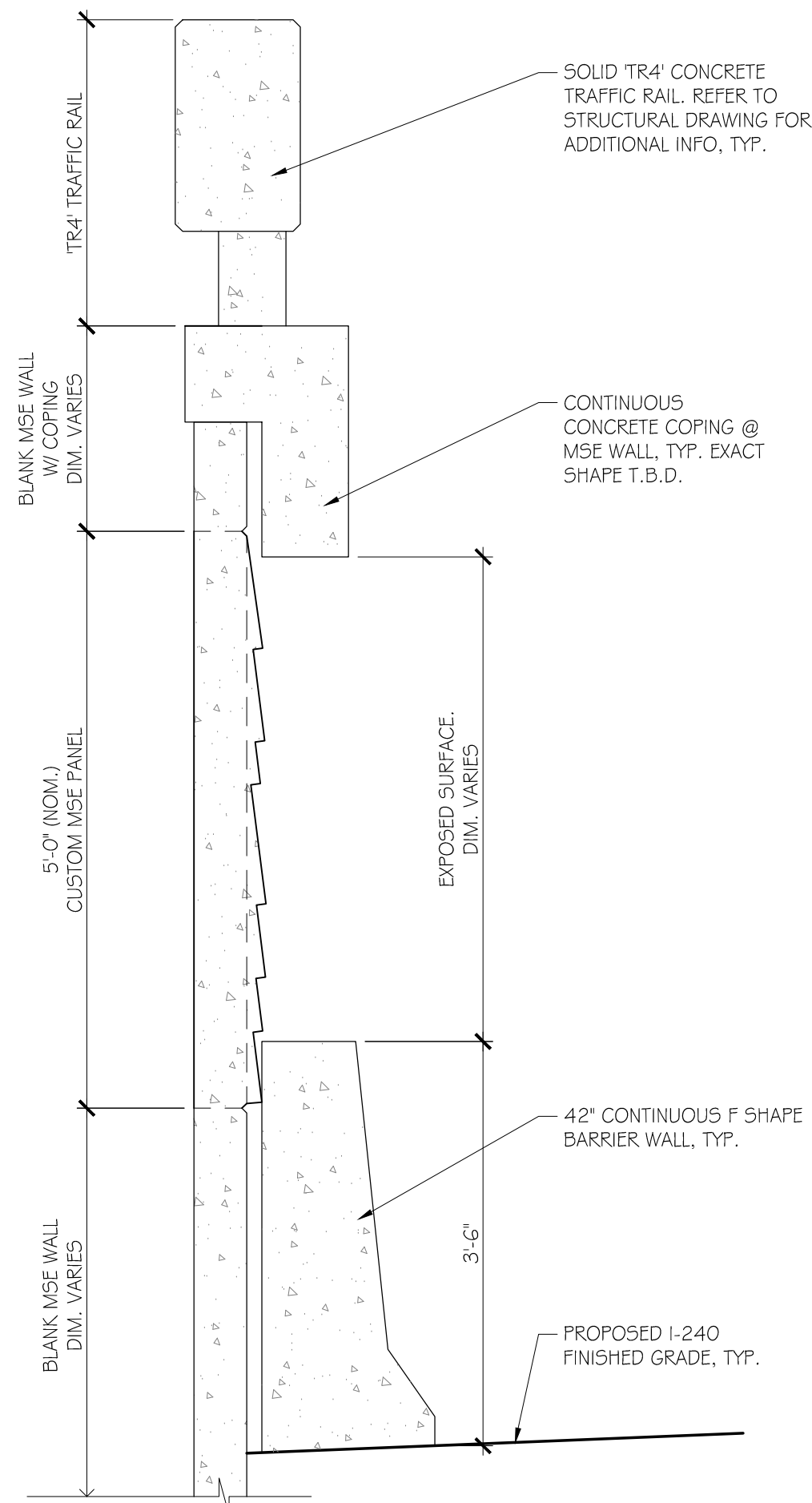
- DO NOT SCALE OFF FROM DRAWING.
- DRAWINGS ARE ONLY A GRAPHIC REPRESENTATION. ALL REQUIRED STRUCTURAL COMPONENTS & INFORMATION ARE OMITTED AND/OR MINIMIZED FOR THE PURPOSE OF GRAPHIC CLARITY. CONTRACTOR SHALL REFER TO STRUCTURAL DRAWINGS FOR INFORMATION OF ALL STRUCTURAL COMPONENTS REQUIREMENTS AND DIMENSIONS.
- SEE PROJECT SPECIAL PROVISIONS FOR SPECIAL CASTING NOTES AND DETAIL, ETC.
- CUSTOM MSE PANEL KEY SHALL ONLY BE APPLIED TO MSE RETAINING WALLS AS SPECIFIED THRU OUT THE PROJECT, UNLESS OTHERWISE NOTED.
- CUSTOM CIP WALL PATTERN KEY SHALL BE APPLY TO ALL EXPOSED FACES OF CIP, SOIL NAIL, AND PILE SUPPORT RETAINING WALLS, BRIDGE ABUTMENTS , UNLESS OTHERWISE NOTED.
- ALL MSE PANELS ARE MEASURED IN NOMINAL DIMENSIONS. MSE PANEL MANUFACTURER SHALL MAKE REQUIRED ADJUSTMENTS TO ACHIEVE DESIGNER'S INTENDED DESIGN, PROPER FIT-UP, JOINTING, ETC.
- CUSTOM CIP WALL PATTERNS ARE TRUE 5' x 5'.
- ALL CUSTOM PATTERNS ARE POSITIVE RELIEFS AND SHALL NOT ENCROACH INTO MINIMUM AND/OR CLEAR DIMENSIONS OF MSE PANEL AND CIP WALL DETERMINED BY STRUCTURAL DRAWING.
- ALL BLANK MSE PANELS SHALL BE FORMED BY CONTRACTOR W/ CONTINUOUS 1/2" CHAMFER @ PERIMETER EDGES OF PANEL TO MATCH CUSTOM MSE PANEL, UNLESS OTHERWISE NOTED.
- CONTRACTOR TO SEE PROJECT SPECIAL PROVISIONS FOR MSE PANEL AND CIP WALL STAIN COLOR & NOTES.
- CONTRACTOR SHALL BE RESPONSIBLE TO IDENTIFY & DETERMINE ANTICIPATED QUANTITIES OF PROJECT SPECIFIC EXTENDED AND/OR PARTIAL CUSTOM FORM LINERS REQUIRED THRU-OUT THE PROJECT. CONTRACTOR SHALL PURCHASE NECESSARY EXTENDED AND/OR PARTIAL CUSTOM FORM LINERS FROM FORM LINER MANUFACTURER AS NEEDED PRIOR TO CONSTRUCTION:

- WHEN PURCHASING FROM THE MANUFACTURER, CONTRACTOR SHALL ACKNOWLEDGE LEAD TIME REQUIRED BY THE MANUFACTURER TO PRODUCE AND DELIVER REQUESTED PARTIAL FORM LINERS AND SHALL SCHEDULE ACCORDINGLY FOR UNINTERRUPTED CONSTRUCTION.



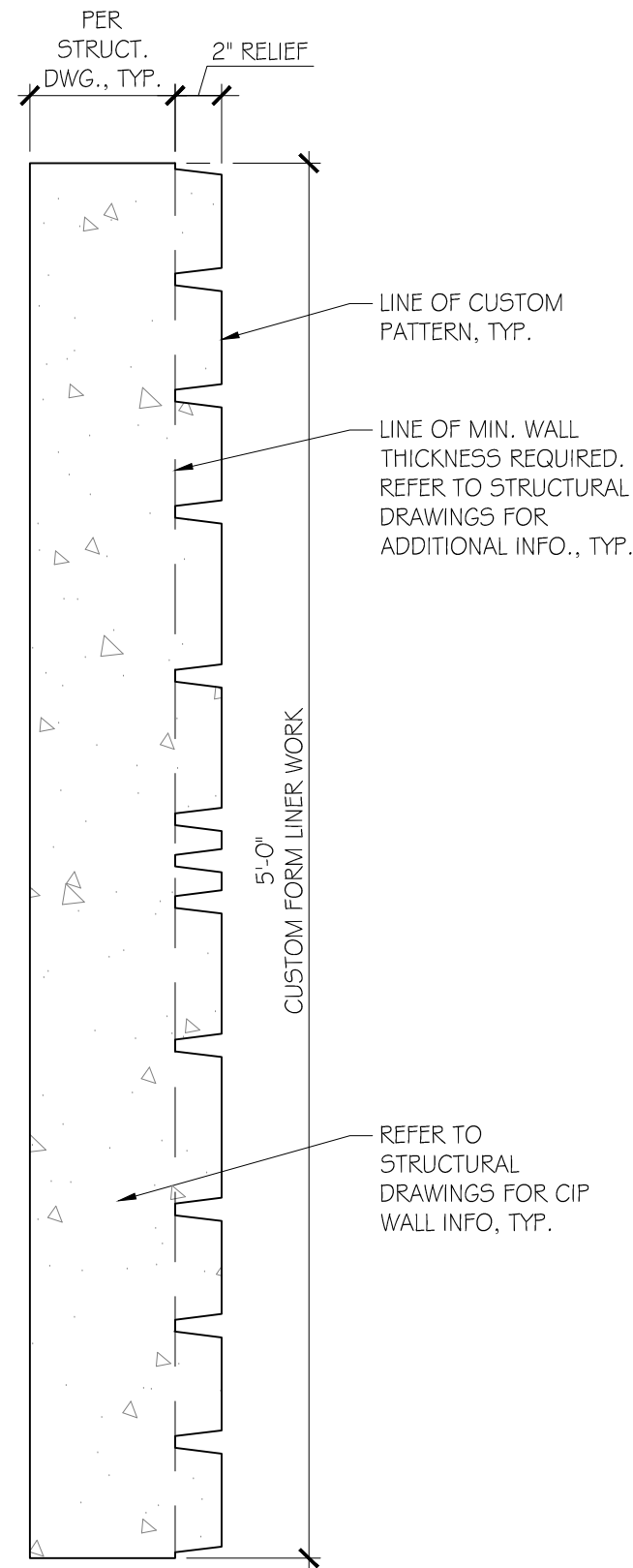
3
A.01

TYPICAL CIP WALL SECTION
SCALE: 3/4" = 1'-0"



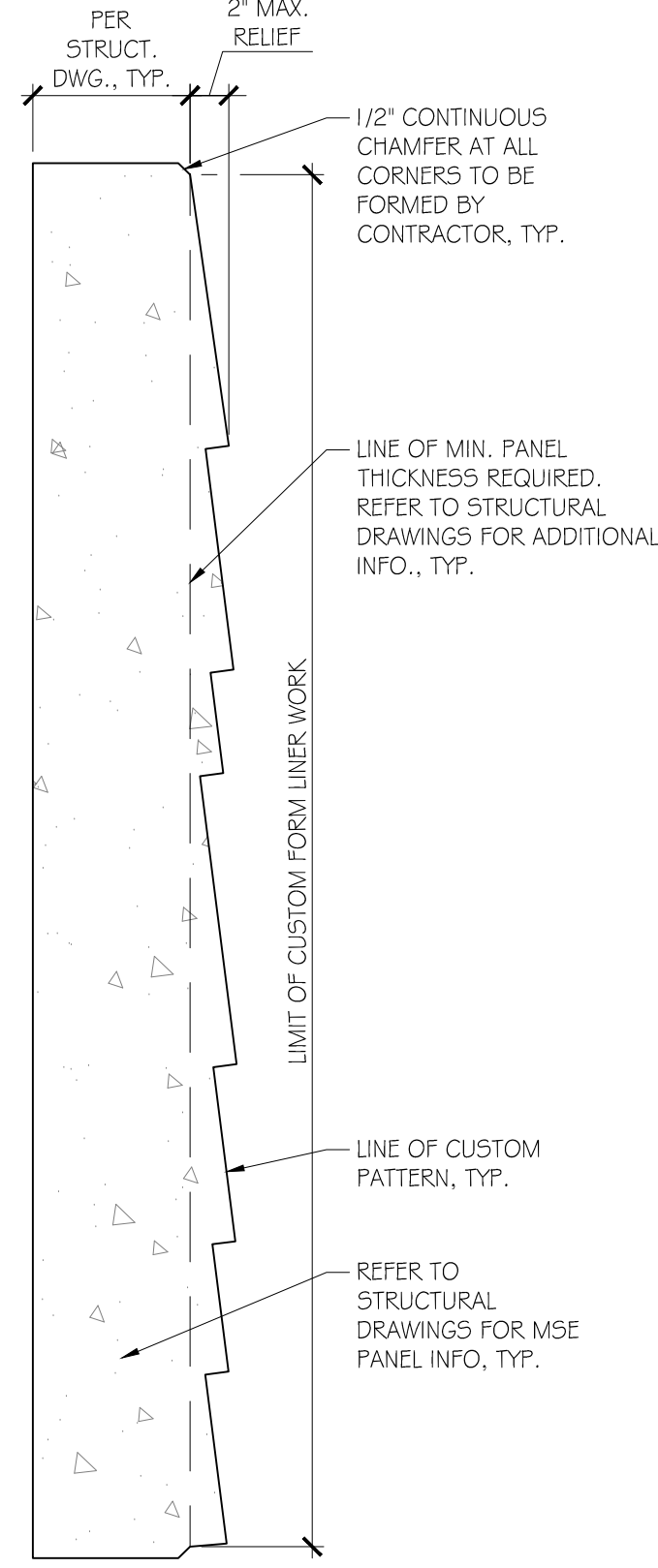
4
A.01

TYPICAL MSE WALL SECTION
SCALE: 3/4" = 1'-0"



5
A.01

TYPICAL CUSTOM
CIP WALL PATTERN SECTION
SCALE: 1 1/2" = 1'-0"



6
A.01

TYPICAL CUSTOM
MSE WALL PATTERN SECTION
SCALE: 1 1/2" = 1'-0"

TYPICAL PANEL KEY ELEVATIONS
& SECTIONS

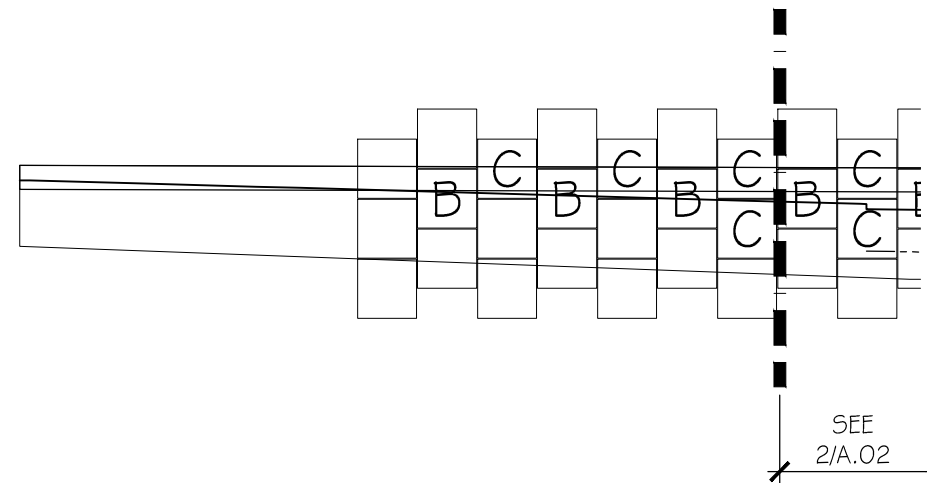
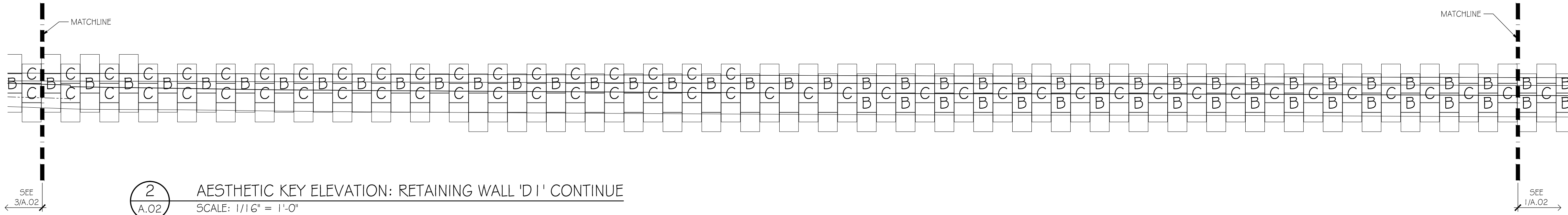
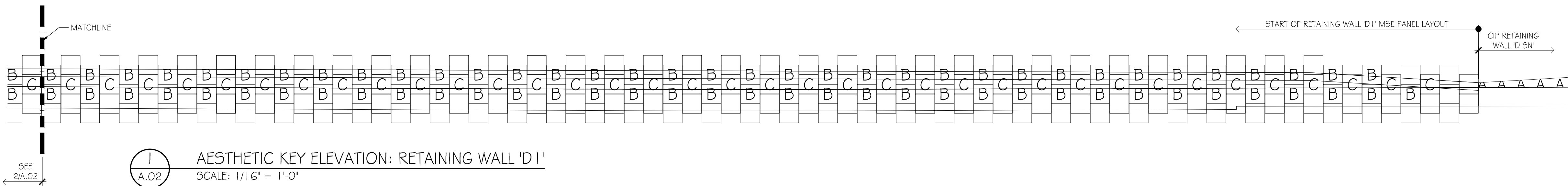
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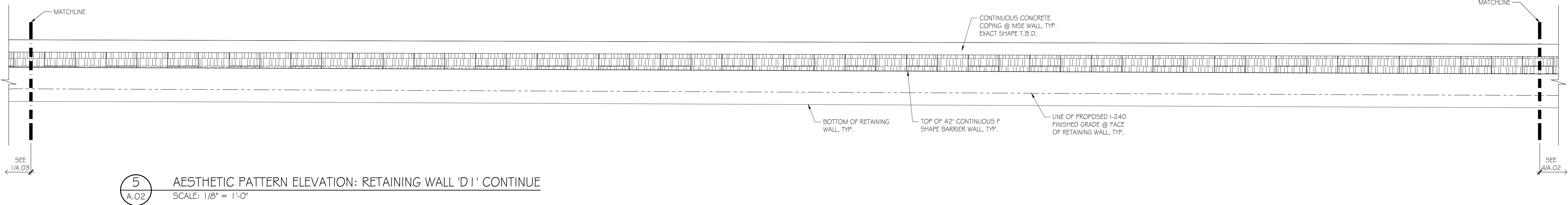
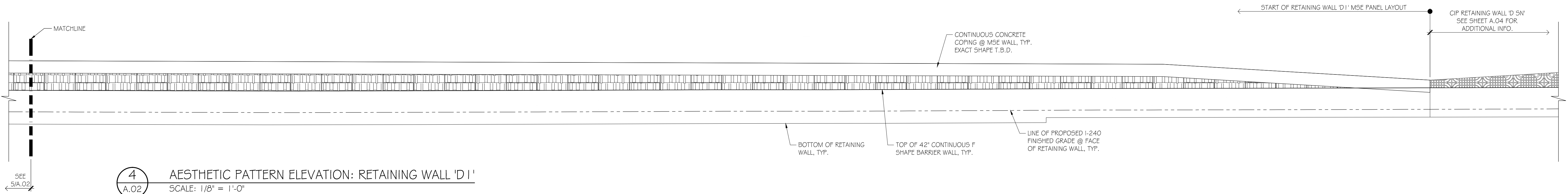
ISSUE DATE 01/18/2016

SHEET A.01

1 OF 9



3 AESTHETIC KEY ELEVATION: RETAINING WALL 'D1' CONTINUE
SCALE: 1/16" = 1'-0"



GENERAL NOTE

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AESTHETIC PATTERN ELEVATIONS: RETAINING WALL 'D1'

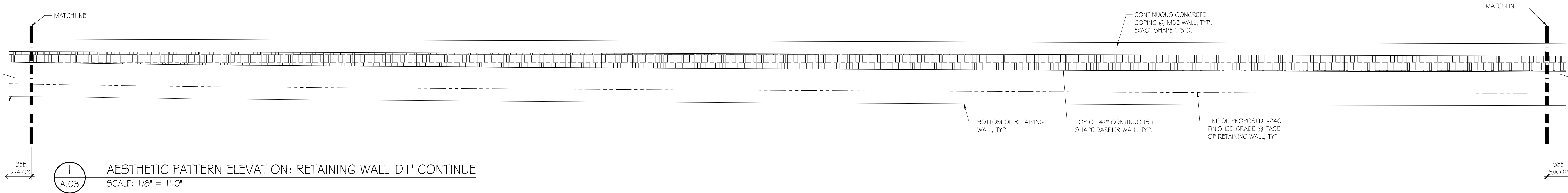
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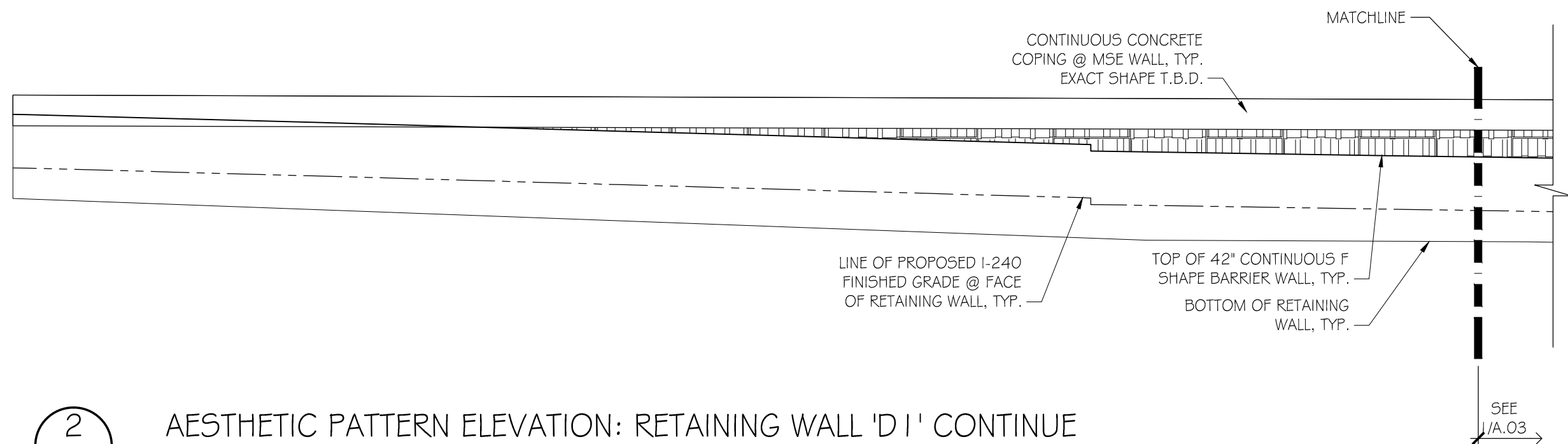
ISSUE DATE 01/18/2016

SHEET A.02

2 OF 9



1
A.03
AESTHETIC PATTERN ELEVATION: RETAINING WALL 'D1' CONTINUE
SCALE: 1/8" = 1'-0"



2
A.03
AESTHETIC PATTERN ELEVATION: RETAINING WALL 'D1' CONTINUE
SCALE: 1/8" = 1'-0"

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AESTHETIC PATTERN ELEVATIONS:
RETAINING WALL 'D1'

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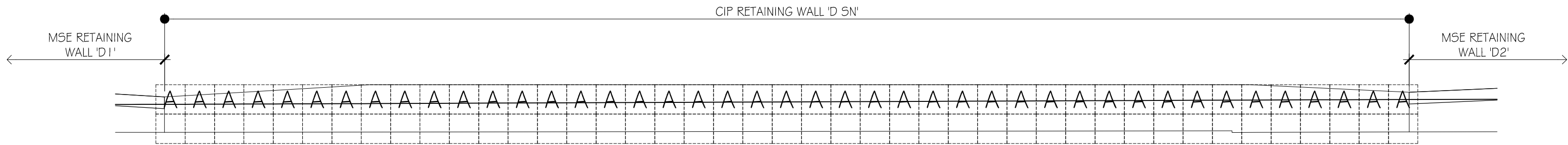
ISSUE
DATE 01/18/2016

SHEET
A.03

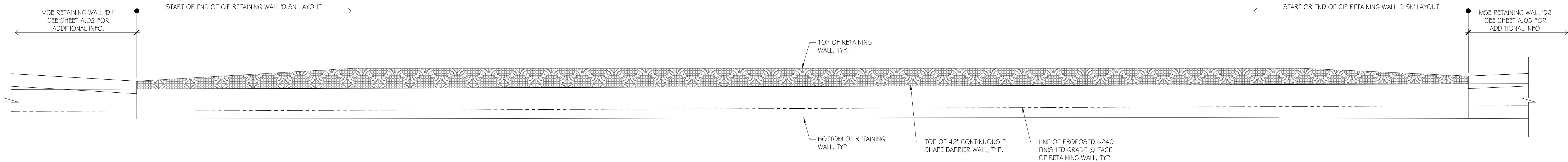
3 OF 9

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- ALL BLANK PANELS WITHOUT NOMENCLATURE SHOWN ON KEY ELEVATIONS SHALL BE FORMED BY CONTRACTOR. NO CUSTOM PATTERNS SHALL BE PRESENT ON FINISHED SURFACE, UNLESS OTHERWISE NOTED.
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1
A.04
AESTHETIC KEY ELEVATION: RETAINING WALL 'D SN'
SCALE: 1/16" = 1'-0"



2
A.04
AESTHETIC PATTERN ELEVATION: RETAINING WALL 'D SN'
SCALE: 1/8" = 1'-0"

AESTHETIC PATTERN ELEVATIONS:
RETAINING WALL 'D SN'

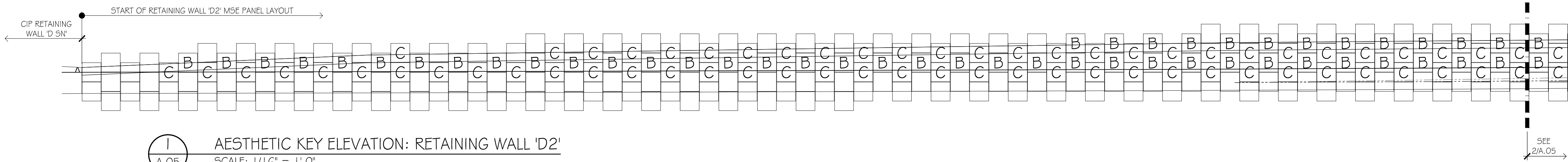
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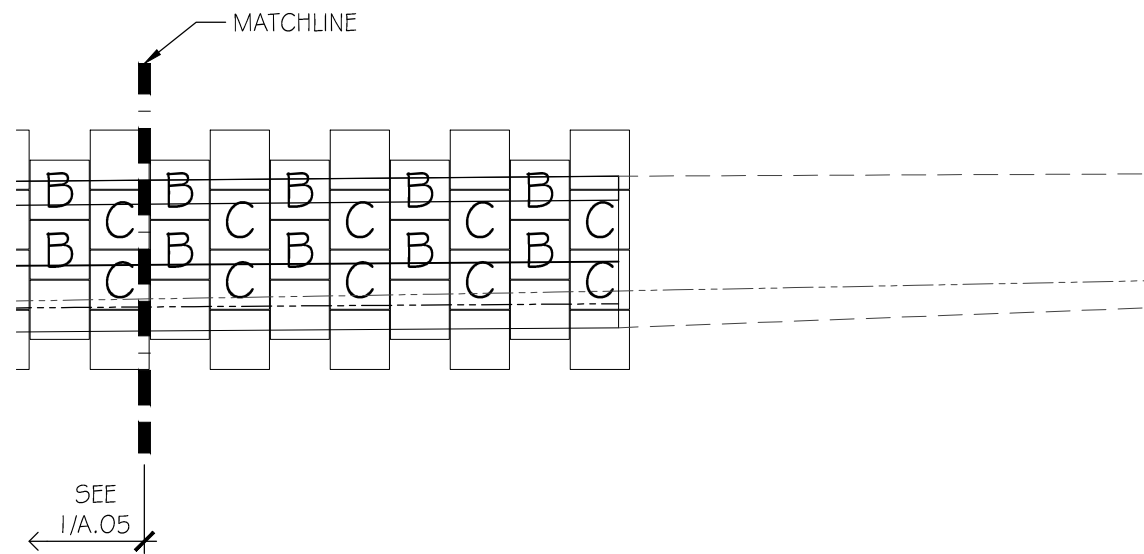
ISSUE
DATE 01/18/2016

SHEET
A.04

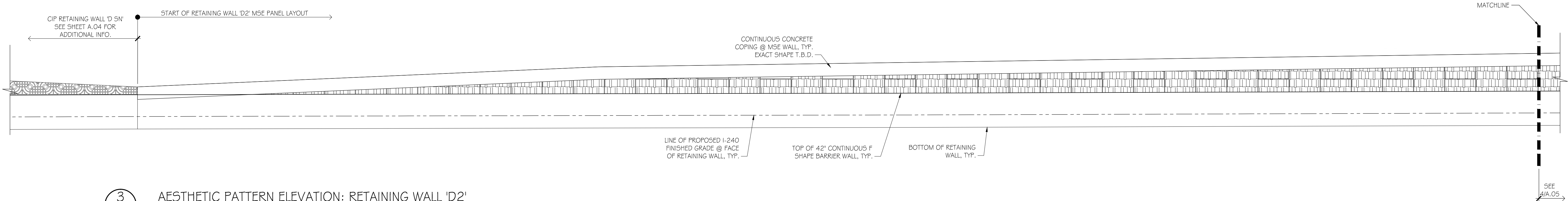
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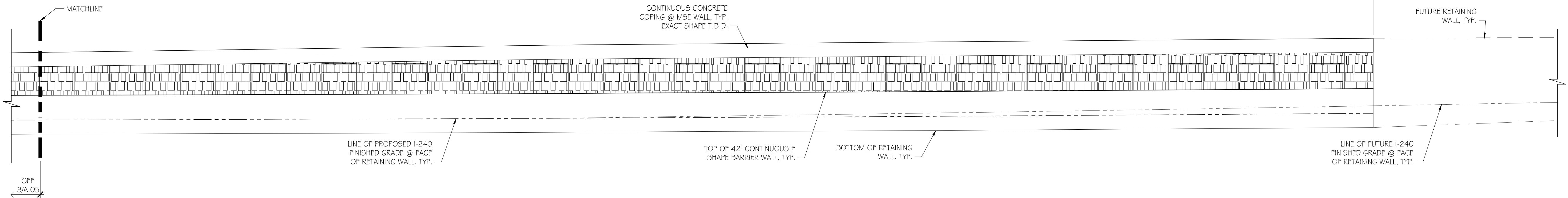
1 AESTHETIC KEY ELEVATION: RETAINING WALL 'D2'
SCALE: 1/16" = 1'-0"



2 AESTHETIC KEY ELEVATION: RETAINING WALL 'D2' CONTINUE
SCALE: 1/16" = 1'-0"



3 AESTHETIC PATTERN ELEVATION: RETAINING WALL 'D2'
SCALE: 1/8" = 1'-0"



4 AESTHETIC PATTERN ELEVATION: RETAINING WALL 'D2' CONTINUE
SCALE: 1/8" = 1'-0"

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AESTHETIC PATTERN ELEVATIONS:
RETAINING WALL 'D2'

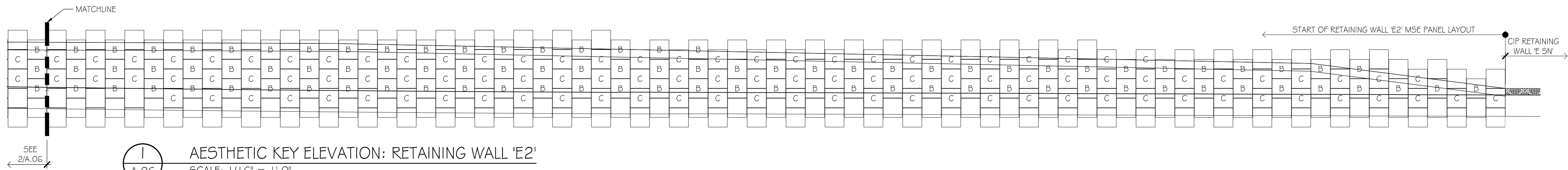
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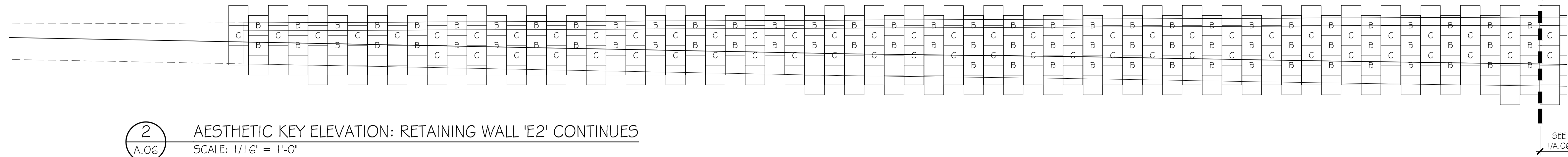
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SHEET A.05

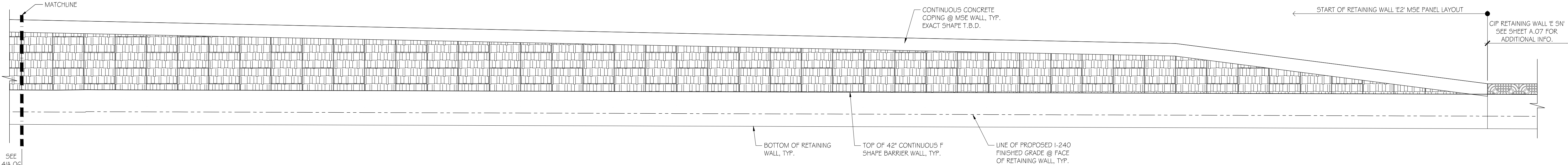
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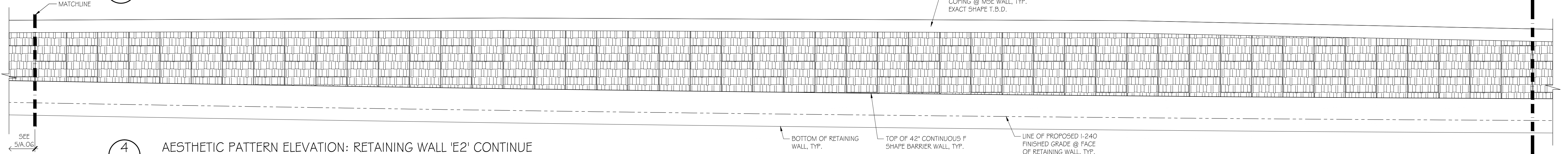
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A.06
AESTHETIC KEY ELEVATION: RETAINING WALL 'E2'
SCALE: 1/16" = 1'-0"



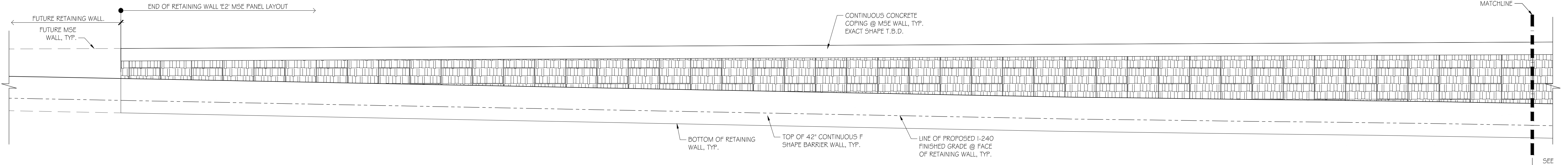
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A.06
AESTHETIC KEY ELEVATION: RETAINING WALL 'E2' CONTINUES
SCALE: 1/16" = 1'-0"



3
A.06
AESTHETIC PATTERN ELEVATION: RETAINING WALL 'E2'
SCALE: 1/8" = 1'-0"



4
A.06
AESTHETIC PATTERN ELEVATION: RETAINING WALL 'E2' CONTINUE
SCALE: 1/8" = 1'-0"



5
A.06
AESTHETIC PATTERN ELEVATION: RETAINING WALL 'E2' CONTINUE
SCALE: 1/8" = 1'-0"

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AESTHETIC PATTERN ELEVATIONS:
RETAINING WALL 'E2'

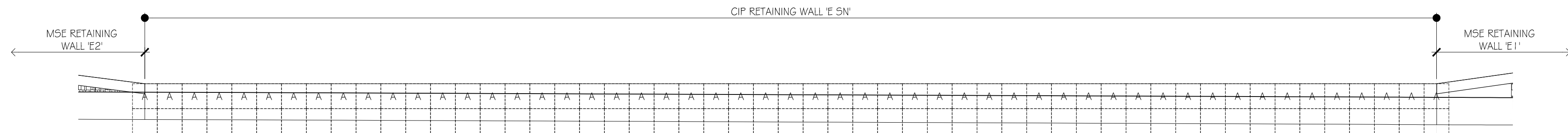
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SHEET
A.06

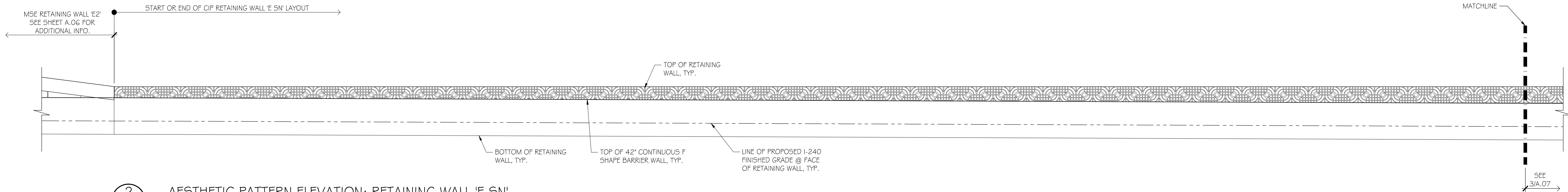
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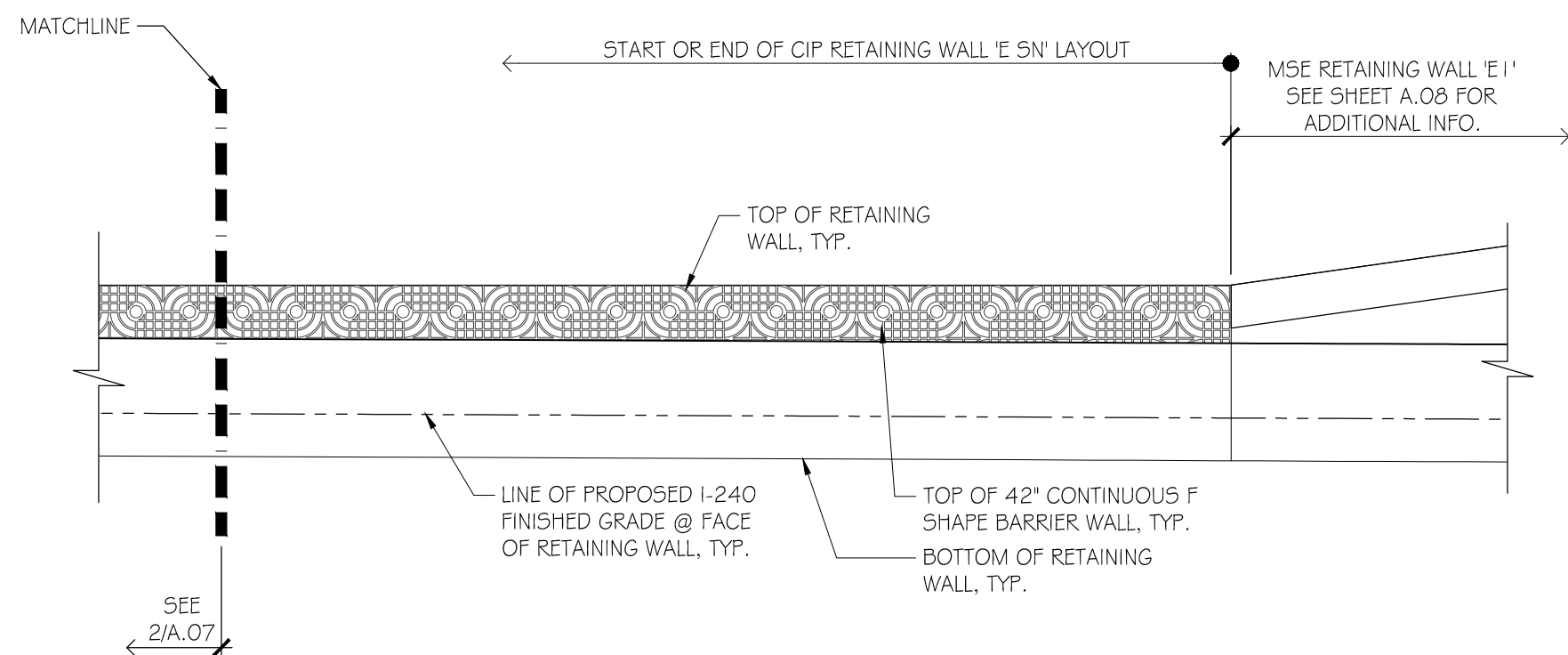
1
A.07
AESTHETIC KEY ELEVATION: RETAINING WALL 'E SN'
SCALE: 1/16" = 1'-0"

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2
A.07
AESTHETIC PATTERN ELEVATION: RETAINING WALL 'E SN'
SCALE: 1/8" = 1'-0"



3
A.07
AESTHETIC PATTERN ELEVATION: RETAINING WALL 'E SN'
SCALE: 1/8" = 1'-0"

AESTHETIC PATTERN ELEVATIONS:
RETAINING WALL 'E SN'

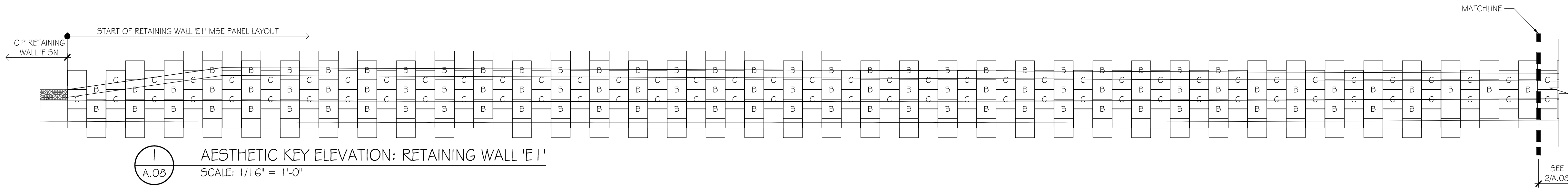
CDR

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3413 Windom Road
Brentwood, MD 20722
phone: 301-699-0581

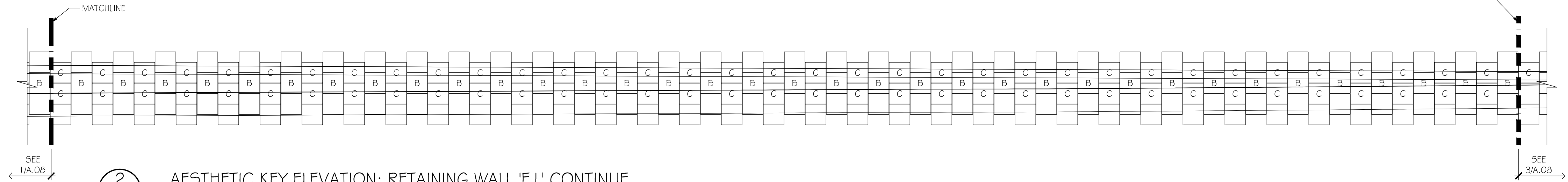
ISSUE DATE 01/18/2016

SHEET A.07

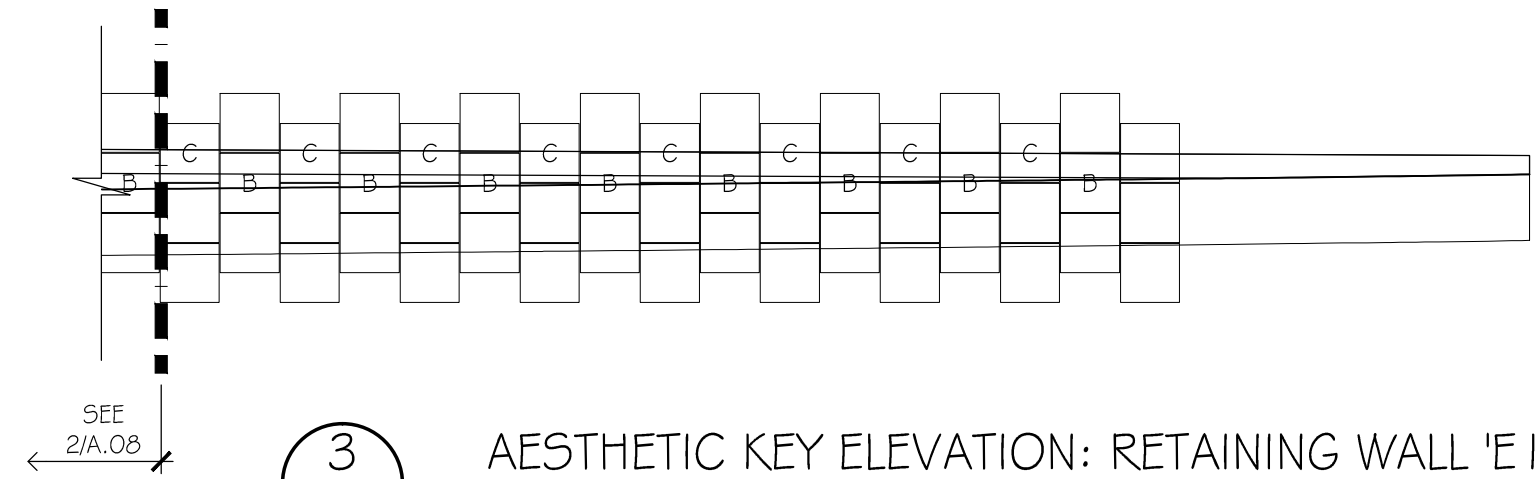
7 OF 9



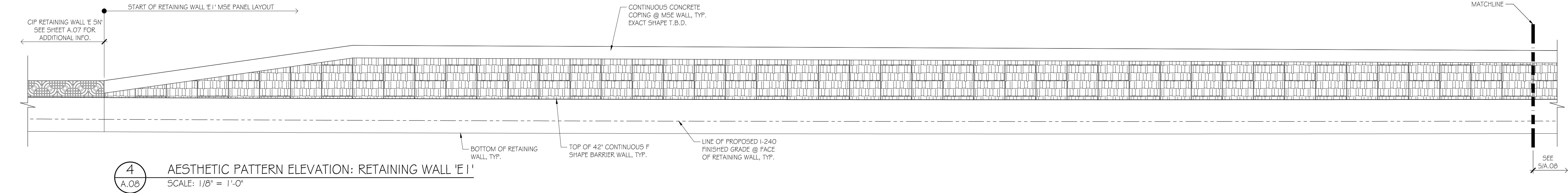
1 AESTHETIC KEY ELEVATION: RETAINING WALL 'E I'
SCALE: 1/16" = 1'-0"



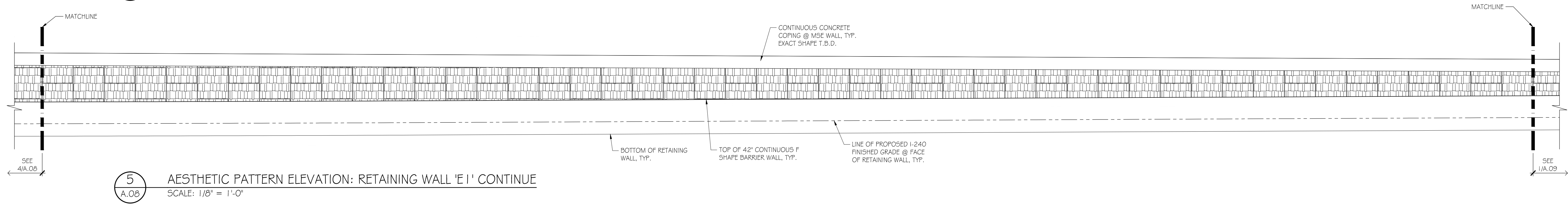
2 AESTHETIC KEY ELEVATION: RETAINING WALL 'E I' CONTINUE
SCALE: 1/16" = 1'-0"



3 AESTHETIC KEY ELEVATION: RETAINING WALL 'E I' CONTINUE
SCALE: 1/16" = 1'-0"

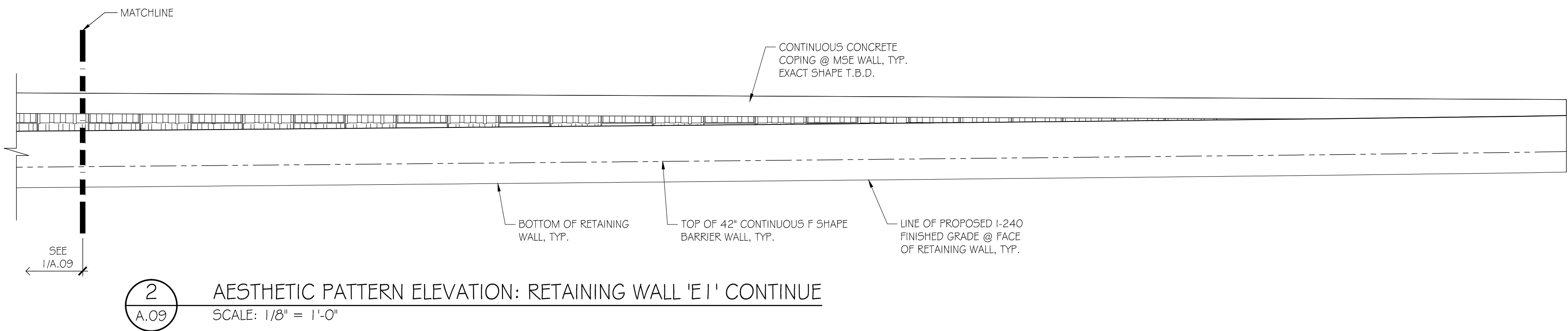
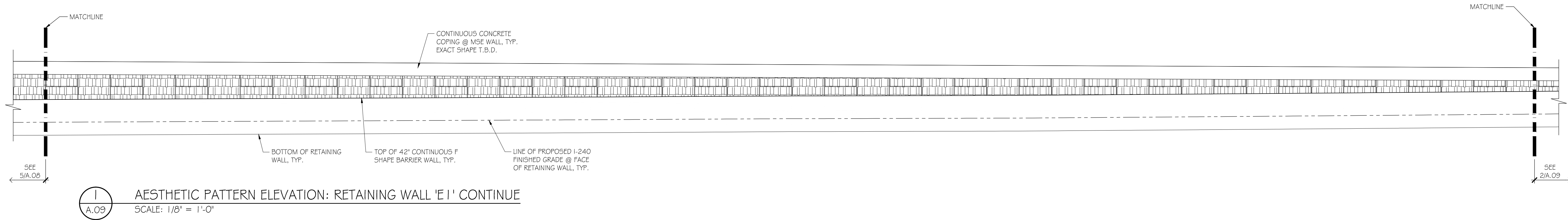


4 AESTHETIC PATTERN ELEVATION: RETAINING WALL 'E I'
SCALE: 1/8" = 1'-0"



5 AESTHETIC PATTERN ELEVATION: RETAINING WALL 'E I' CONTINUE
SCALE: 1/8" = 1'-0"

- GENERAL NOTE
- DO NOT SCALE OFF FROM DRAWING.
 - DRAWINGS ARE ONLY A GRAPHIC REPRESENTATION. ALL REQUIRED STRUCTURAL COMPONENTS & INFORMATION ARE OMITTED AND/OR MINIMIZED FOR THE PURPOSE OF GRAPHIC CLARITY. CONTRACTOR SHALL REFER TO STRUCTURAL DRAWINGS FOR INFORMATION OF ALL STRUCTURAL COMPONENTS REQUIREMENTS AND DIMENSIONS.
 - CONTRACTOR TO SEE SHEET A.01 FOR CUSTOM PATTERN INFORMATION & DETAIL.
 - ALL BLANK MSE PANELS WITHOUT NOMENCLATURE SHALL BE FORMED BY CONTRACTOR W/ CONTINUOUS 1/2" CHAMFER @ PERIMETER EDGES OF PANEL TO MATCH CUSTOM MSE PANEL, UNLESS OTHERWISE NOTED.
 - CONTRACTOR SHALL BE RESPONSIBLE TO IDENTIFY & DETERMINE ANTICIPATED QUANTITIES OF PROJECT SPECIFIC EXTENDED AND/OR PARTIAL CUSTOM FORM LINERS REQUIRED THRU-OUT THE PROJECT. CONTRACTOR SHALL PURCHASE NECESSARY EXTENDED AND/OR PARTIAL CUSTOM FORM LINERS FROM FORM LINER MANUFACTURER AS NEEDED PRIOR TO CONSTRUCTION:
 - WHEN PURCHASING FROM THE MANUFACTURER, CONTRACTOR SHALL ACKNOWLEDGE LEAD TIME REQUIRED BY THE MANUFACTURER TO PRODUCE AND DELIVER REQUESTED PARTIAL FORM LINERS AND SHALL SCHEDULE ACCORDINGLY FOR UNINTERRUPTED CONSTRUCTION.



GENERAL NOTE

- DO NOT SCALE OFF FROM DRAWING.
- DRAWINGS ARE ONLY A GRAPHIC REPRESENTATION. ALL REQUIRED STRUCTURAL COMPONENTS & INFORMATION ARE OMITTED AND/OR MINIMIZED FOR THE PURPOSE OF GRAPHIC CLARITY. CONTRACTOR SHALL REFER TO STRUCTURAL DRAWINGS FOR INFORMATION OF ALL STRUCTURAL COMPONENTS REQUIREMENTS AND DIMENSIONS.
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CDR

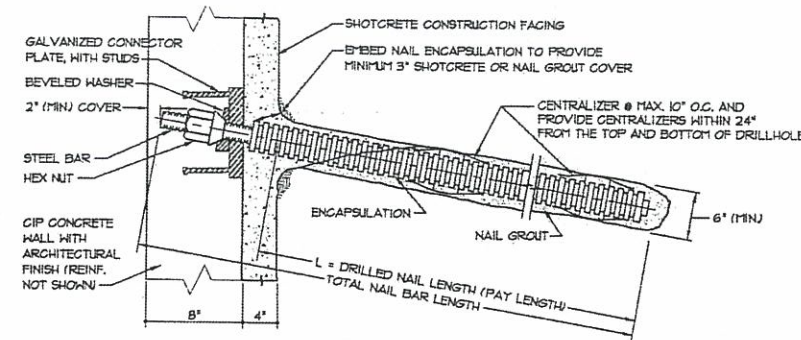
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Brentwood, MD 20722
phone: 301-699-0581

ISSUE DATE 01/18/2016

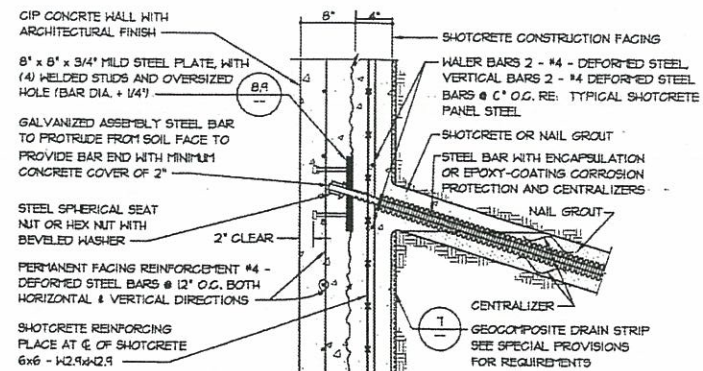
SHEET A.09

9 OF 9

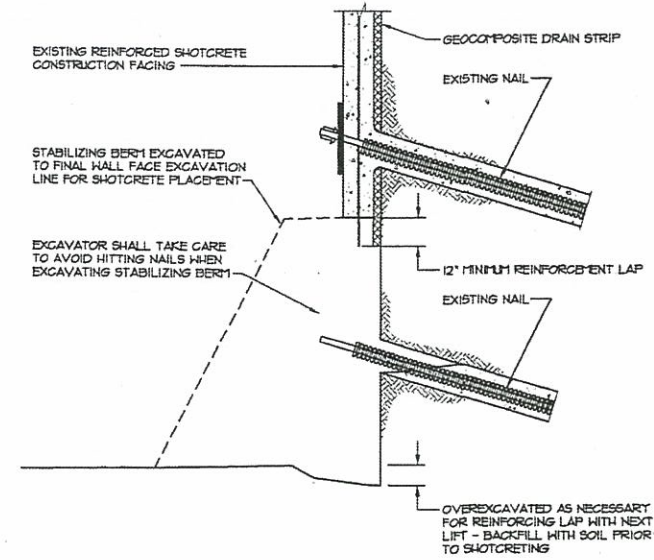
DESCRIPTION	REVISIONS	DATE



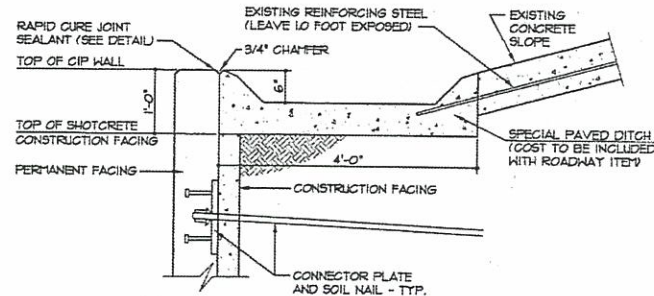
10 ENCAPSULATED SOIL NAIL DETAIL
NOT TO SCALE



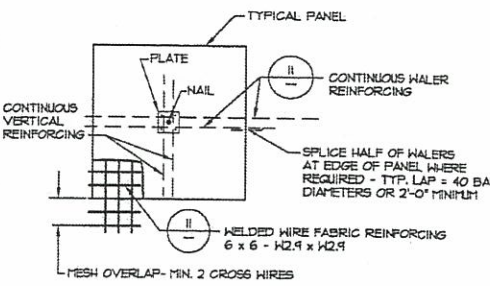
3 FINISHED WALL SECTION
NOT TO SCALE



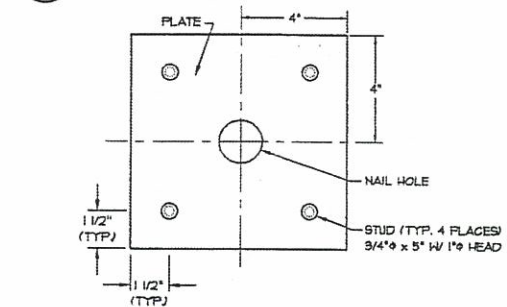
2 EXCAVATION OF TEMPORARY STABILIZING BERM FOR SHOTCRETE PLACEMENT (CONTRACTOR OPTION)
NOT TO SCALE



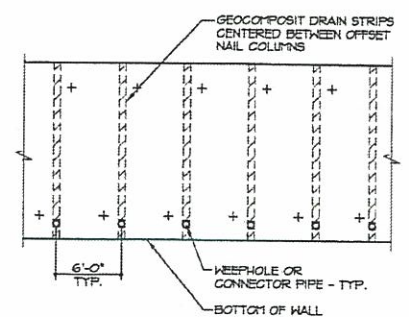
8 WALL TOP WITHOUT PARAPET AND CONCRETE GUTTER DETAIL
NOT TO SCALE



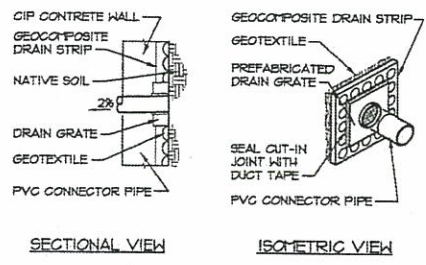
6 TYPICAL SHOTCRETE PANEL STEEL
NOT TO SCALE



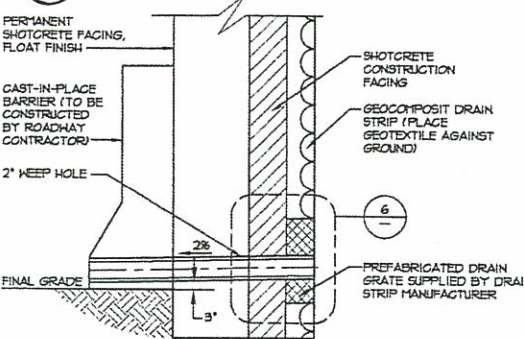
4 CONNECTOR PLATE WITH STUD DETAIL
NOT TO SCALE



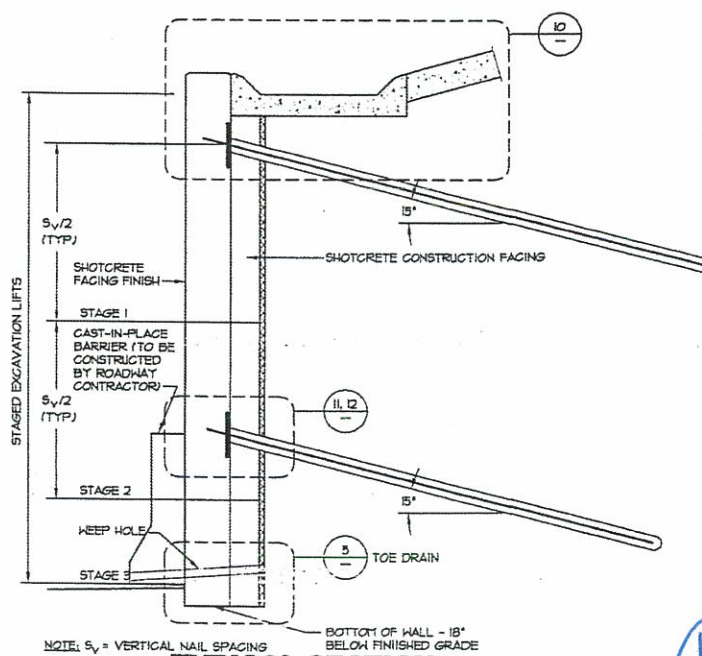
9 TYPICAL WALL TOE DRAIN
NOT TO SCALE



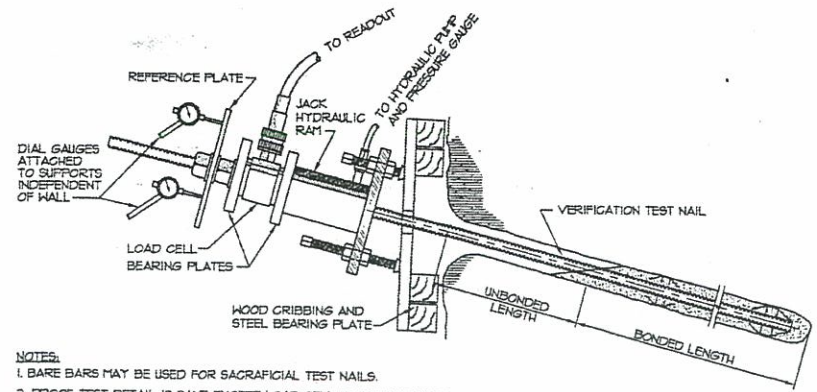
7 DRAIN GRATE DETAILS
NOT TO SCALE



5 TYPICAL WALL TOE DRAIN
NOT TO SCALE



1 TYPICAL SECTION WITHOUT PARAPET
NOT TO SCALE

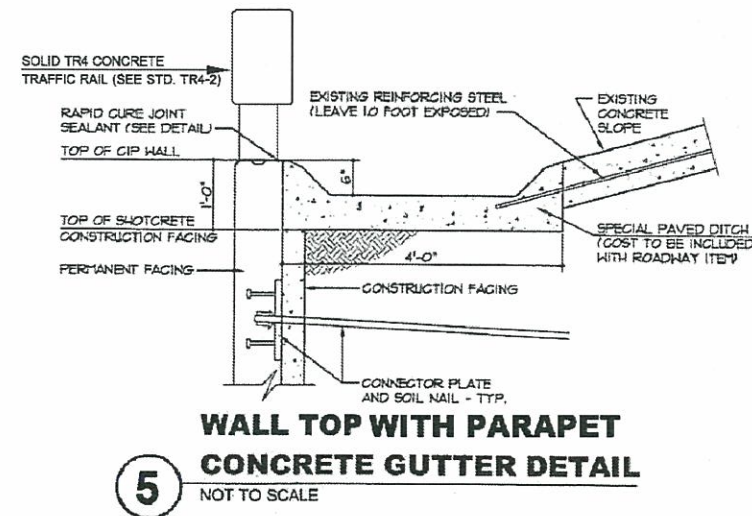


10 VERIFICATION TEST SOIL NAIL DETAIL
NOT TO SCALE



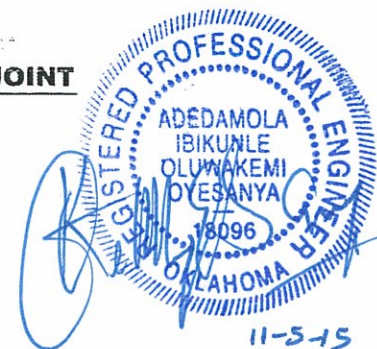
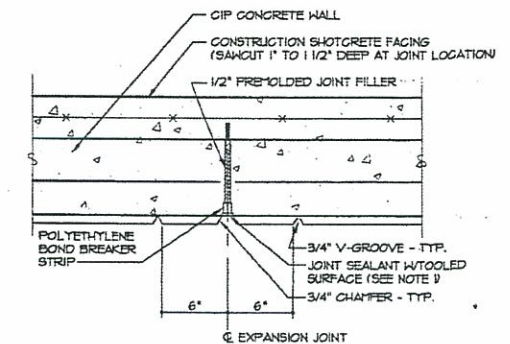
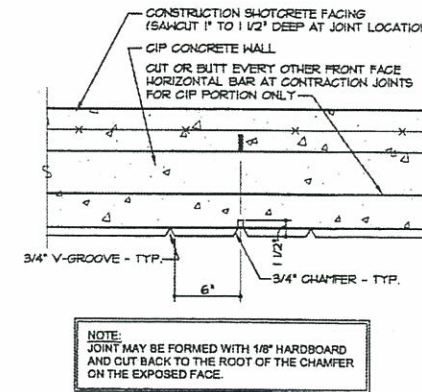
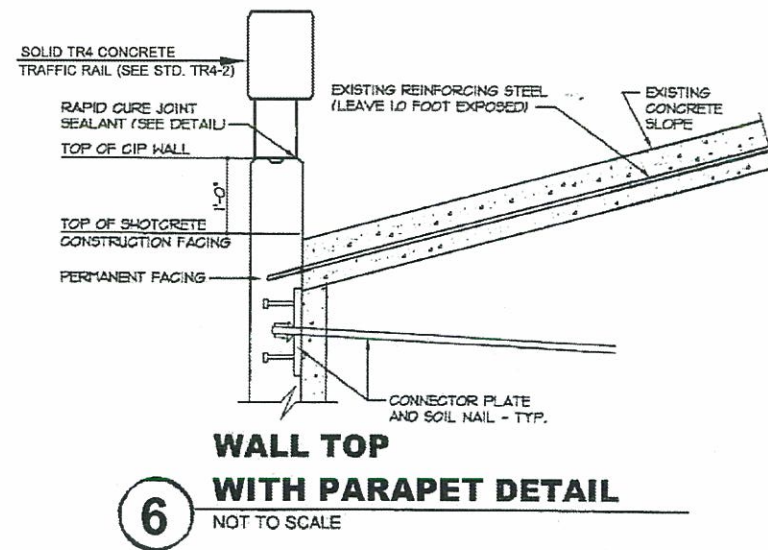
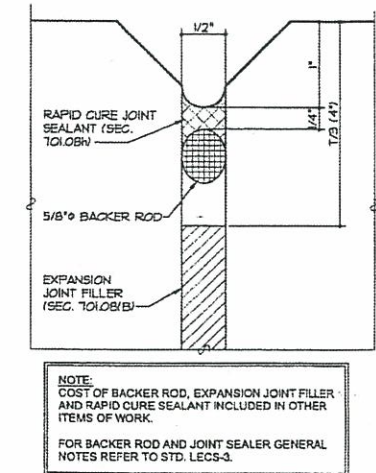
OKLAHOMA DEPARTMENT OF TRANSPORTATION POE & ASSOCIATES CONSULTING ENGINEERS	Design		
	Drawn		
	Checked		
	Approved		
Section Engineer	PSI	Squad	PSI

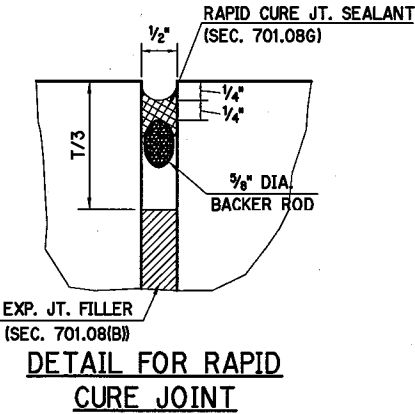
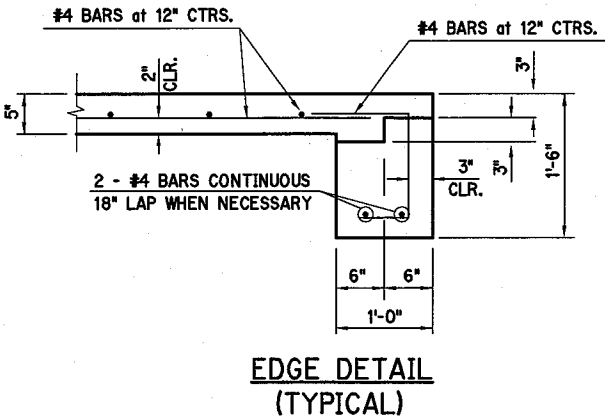
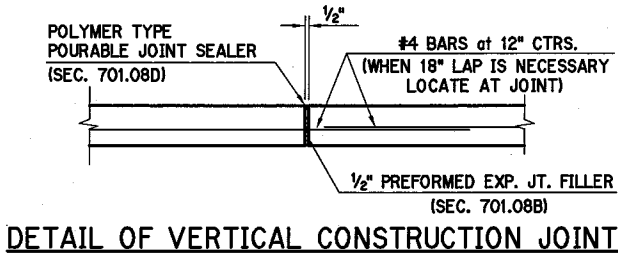
SOIL NAIL WALL DETAILS
PAGE 1 OF 2



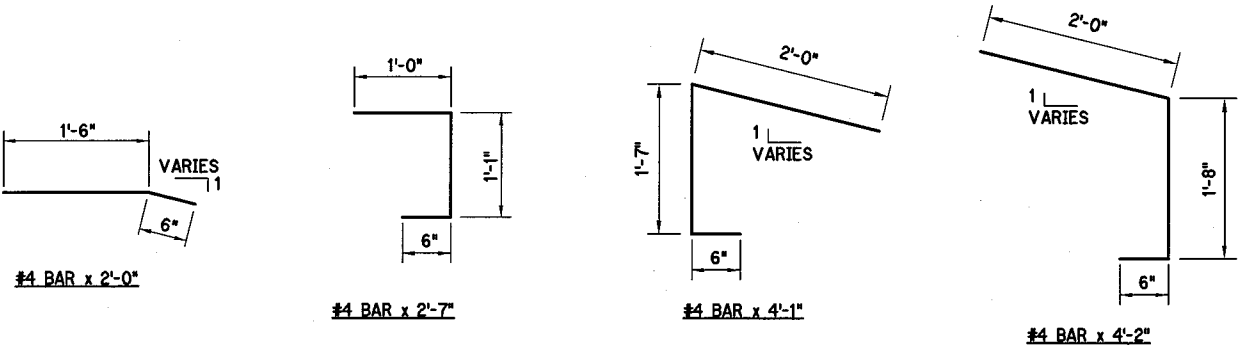
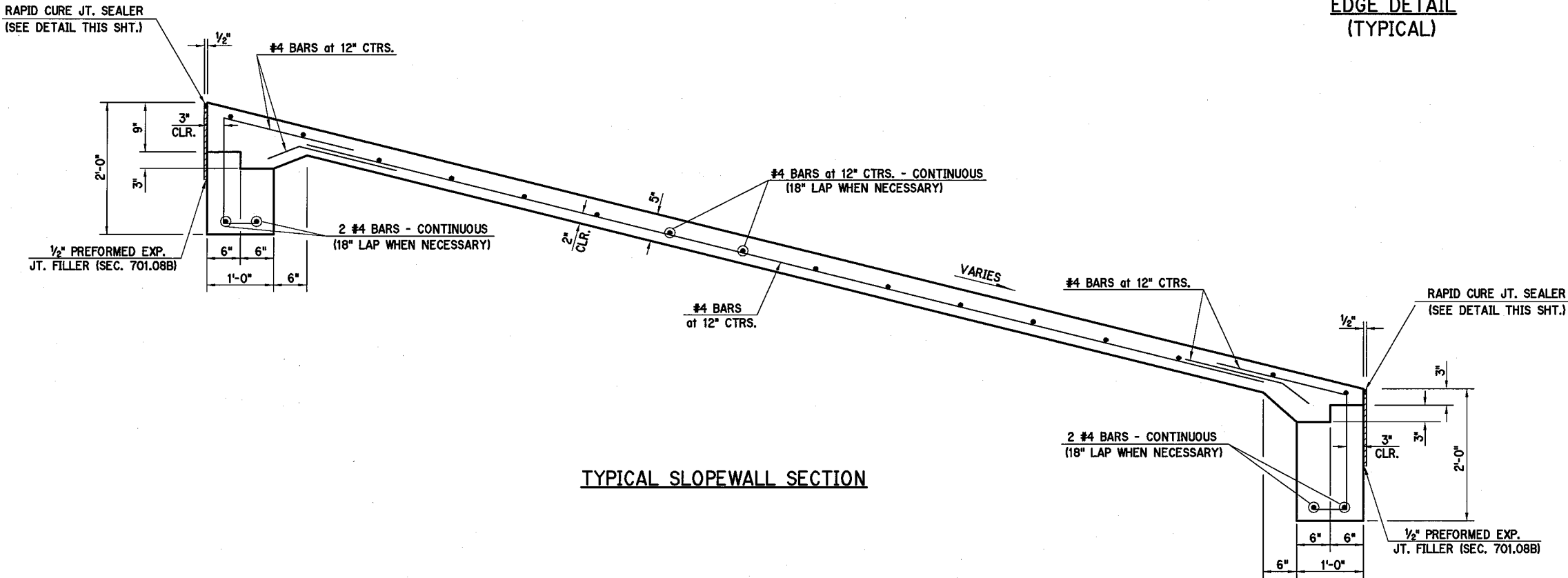
Refer to "Architectural Finish Details"
sheet 85 for formliner pattern

4 ELEVATION OF ARCHITECTURAL TREATMENT
NOT TO SCALE





NOTE:
FOR BACKER ROD AND JOINT SEALER
GENERAL NOTES REFER TO STD. LECS-4.



ALL BAR BEND DIMENSIONS ARE OUT TO OUT.

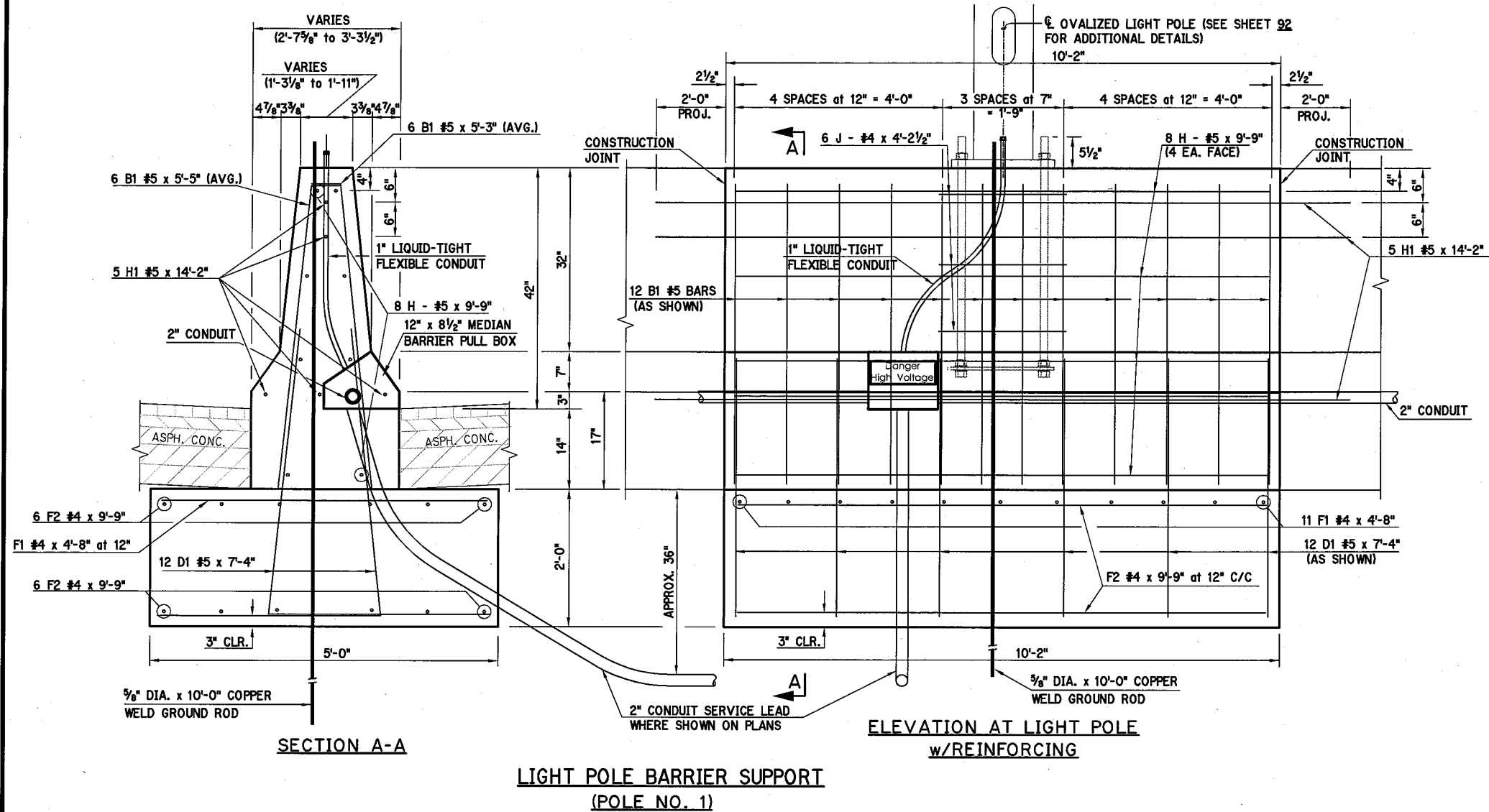
- SLOPEWALL NOTES:**
- ALL CONCRETE IN THE SLOPEWALL SHALL BE CLASS A CONCRETE AND SHALL BE POURED IN THE DRY. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTIONS 509 AND 610 OF THE STANDARD SPECIFICATIONS.
 - NO HORIZONTAL CONSTRUCTION JOINTS WILL BE PERMITTED IN THE SLOPE WALL. FINAL NUMBER AND LOCATION OF VERTICAL CONSTRUCTION JOINTS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER. JOINTS WILL HAVE A MAXIMUM SPACING OF 10' MEASURED ALONG THE TOP OF SLOPE WALL.
 - SURFACE AREA OF TOE AND EDGES OF SLOPE WALL INCLUDED IN PAY QUANTITY SHOWN.
 - ALL COSTS OF THE JOINT SEALER AND FILLER, REINFORCING STEEL, CONCRETE, EXCAVATION, LABOR, FORMS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SHOWN, SHALL BE INCLUDED IN THE CONTRACT PRICE BID FOR SLOPEWALL (5').

QUANTITIES		
ITEM	UNIT	TOTAL
SLOPEWALL (5')	S.Y.	2715

Design	
Drawn	
Checked	
Approved	
Squad	POE

**I-240
SLOPE WALL DETAILS**

State Job No. 09032(20) Sheet No. 89

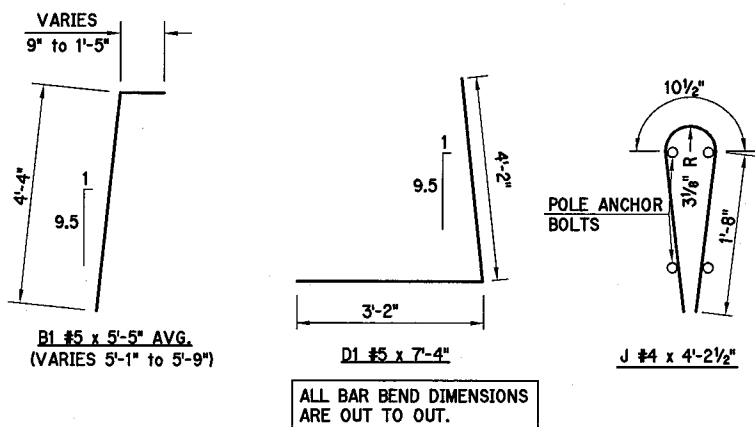


MATERIAL SPECIFICATIONS

- A. ANCHOR BOLTS - 4 REQUIRED AND SHALL MEET THE STRENGTH REQUIREMENTS OF ASTM A36-M55 AND HAVE A MINIMUM YIELD OF 50,000 PSI.
- HEX NUTS - 4 REQUIRED AND SHALL MEET THE REQUIREMENTS OF ASTM-563 GRADE A, OR ANSI B18.2.2 HEX TYPE.
- FLAT WASHERS - 4 REQUIRED AND SHALL MEET THE REQUIREMENTS OF ANSI B27.2 HEAVY WASHERS.
- LOCK WASHERS - 4 REQUIRED AND SHALL MEET THE REQUIREMENTS OF ANSI B18.21 HEAVY WASHERS.
- B. ALL BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A-153 (AASHTO M-232).
- C. ALL CONCRETE SHALL BE CLASS "A", UNLESS OTHERWISE SPECIFIED IN THE PLANS.
- D. REINFORCING STEEL SHALL BE AASHTO M-31, GRADE 60.
- E. ANCHOR BOLT SPACE PLATES SHALL BE AASHTO M-183 (ASTM A-36), MINIMUM PLATE THICKNESS OF 0.0598" (16 GAUGE).
- F. ELECTRICAL CONDUIT OR SLEEVES SHALL BE IN ACCORDANCE WITH THE 2009 STANDARD SPECIFICATIONS AND MAY BE EITHER RIGID GALV. STEEL OR SCH. 40 PVC PLASTIC.

GENERAL NOTES

- A TEMPLATE SHALL BE PROVIDED TO FIX THE LOCATION OF THE ANCHOR BOLTS AND CONDUITS THAT PROJECT OUT OF THE CONCRETE FOOTING.
- SOME FOOTINGS MAY REQUIRE MORE THAN THE 2 CONDUITS SPECIFIED, SEE THE PLANS FOR LOCATIONS.
- FOR INFORMATION ON INSTALLATION OF UNDERGROUND/TRENCHED CONDUIT, SEE STD. CCD I-I (LATEST REVISION).
- THE UNIT PRICE BID FOR THE FOOTING SHALL INCLUDE ANCHOR BOLTS SPACE PLATES, GROUND ROD, GROUND WIRE, ETC.
- FOR ADDITIONAL INFORMATION NOT SHOWN, SEE STD. GMFI-I (LATEST REVISION).
- CONSTRUCT CONDUITS IN THE CENTER OF THE ANCHOR BOLT CIRCLE.
- THE REINFORCING STEEL SHALL BE ADJUSTED TO PROVIDE THE PROPER CLEARANCE FROM THE EDGE OF THE CONCRETE BARRIER.
- NO LIGHT POLE FOOTING SHALL BE PLACED WITHIN 12' OF THE END OF A BARRIER.
- NO LIGHT POLE FOOTING SHALL BE PLACED WITHIN 6' OF A GRATED INLET.
- IF THE CONTRACTOR ELECTS TO USE DOUBLE NUT LEVELING, THE ANCHOR BOLT PROJECTION SHALL BE INCREASED, 4 ADDITIONAL HEX NUTS AND FLAT WASHERS WILL BE REQUIRED, AND THE VOID BELOW THE INSTALLED BASE PLATE SHALL BE FILLED WITH A NON-SHRINK GROUT.
- THE CONTRACTOR SHALL PROTECT THE ANCHOR BOLT THREADS FROM ACCUMULATIONS OF CONCRETE AND SHALL PREVENT THE ENTRY OF CONCRETE INTO THE CONDUIT SYSTEM.
- SEE PLANS FOR FOOTING LOCATIONS, AND SCHEDULE OF BARRIER AND ANCHOR BOLT INFORMATION.
- THE CONTRACTOR SHALL USE THE BUBBLE LEVELING METHOD TO ASSURE THAT THE TOP OF THE LIGHT POLE FOOTINGS ARE LEVEL WHEN BEING CONSTRUCTED. THIS IS TO AVOID THE USE OF SHIMS WHEN INSTALLING THE LIGHT POLES ON THE FOOTINGS.



BAR LIST				
MARK	NO.	SIZE	FORM	LENGTH
B1	12	#5	BENT	5'-5" AVG.
D1	12	#5	BENT	7'-4"
F1	11	#4	STR.	4'-8"
F2	12	#4	STR.	9'-9"
H	8	#5	STR.	9'-9"
H1	5	#5	STR.	14'-2"
J	6	#4	BENT	4'-2 1/2"

① VARIES 4'-11" TO 5'-7"

NOTE: SEE LIGHTING PLAN SHEETS FOR ADDITIONAL DETAILS.

ALL REINFORCING CLEARANCES SHALL BE 2" UNLESS OTHERWISE NOTED.

REINFORCING STEEL THAT CONFLICTS WITH THE PULL BOX SHALL BE CUT TO CLEAR BY 1".

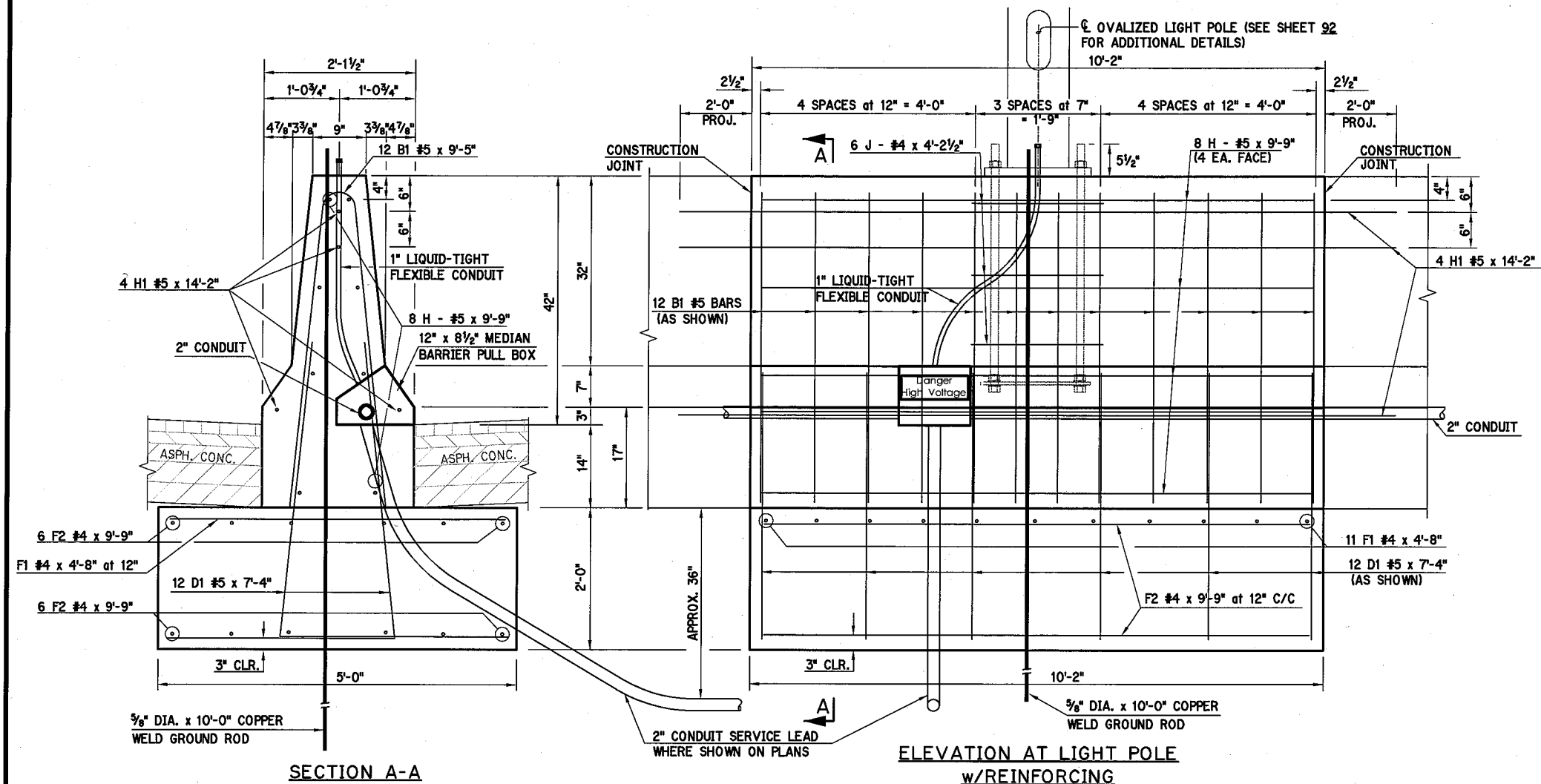
▲ QUANTITIES

ITEM	UNIT	TOTAL
CLASS "A" CONC.	C.Y.	7.80
REINFORCING STEEL	LB.	430

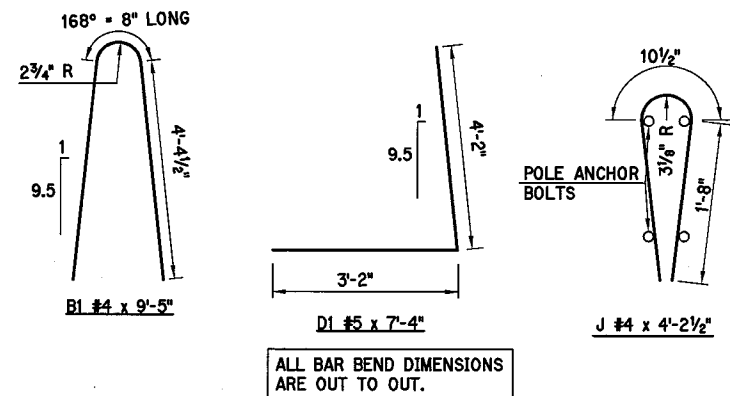
* ALL COST OF MATERIALS, LABOR, EXCAVATION, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SHOWN SHALL BE INCLUDED IN THE UNIT PRICE BID PER CUBIC YARD OF CLASS "A" CONCRETE.

▲ QUANTITIES INCLUDE LIGHT POLE NO. 1. SEE LIGHTING PLAN SHEETS FOR LOCATION.

Design			SPECIAL MEDIAN BARRIER LIGHT POLE FOOTING AND SUPPORT DETAILS (SHEET 1 OF 3)
Drawn			
Checked			
Approved			
Squad	POE		
State Job No. 09032(20) Sheet No. 90			OKLAHOMA COUNTY



LIGHT POLE BARRIER SUPPORT
(POLE NO. 4, 7, 10, 13, 15 THRU 22)



BAR LIST (ONE LIGHT POLE SUPPORT)				
MARK	NO.	SIZE	FORM	LENGTH
B1	12	#5	BENT	9'-5"
D1	12	#5	BENT	7'-4"
F1	11	#4	STR.	4'-8"
F2	12	#4	STR.	9'-9"
H	8	#5	STR.	9'-9"
H1	4	#5	STR.	14'-2"
J	6	#4	BENT	4'-2 1/2"

NOTE: SEE LIGHTING PLAN SHEETS FOR ADDITIONAL DETAILS.

ALL REINFORCING CLEARANCES SHALL BE 2" UNLESS OTHERWISE NOTED.

REINFORCING STEEL THAT CONFLICTS WITH THE PULL BOX SHALL BE CUT TO CLEAR BY 1".

▲ QUANTITIES		
ITEM	UNIT	TOTAL
CLASS "A" CONC.	C.Y.	76.00
REINFORCING STEEL	LB.	5760

* ALL COST OF MATERIALS, LABOR, EXCAVATION, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SHOWN SHALL BE INCLUDED IN THE UNIT PRICE BID PER CUBIC YARD OF CLASS "A" CONCRETE.

▲ QUANTITIES INCLUDE LIGHT POLES NO. 4, 7, 10, 13, 15 THRU 22. SEE LIGHTING PLAN SHEETS FOR LOCATIONS.

MATERIAL SPECIFICATIONS

- ANCHOR BOLTS - 4 REQUIRED AND SHALL MEET THE STRENGTH REQUIREMENTS OF ASTM A36-M55 AND HAVE A MINIMUM YIELD OF 50,000 PSI.
HEX NUTS - 4 REQUIRED AND SHALL MEET THE REQUIREMENTS OF ASTM-563 GRADE A, OR ANSI B18.2.2 HEX TYPE.
FLAT WASHERS - 4 REQUIRED AND SHALL MEET THE REQUIREMENTS OF ANSI B27.2 HEAVY WASHERS.
LOCK WASHERS - 4 REQUIRED AND SHALL MEET THE REQUIREMENTS OF ANSI B18.21 HEAVY WASHERS.
- ALL BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A-153 (AASHTO M-232).
- ALL CONCRETE SHALL BE CLASS "A", UNLESS OTHERWISE SPECIFIED IN THE PLANS.
- REINFORCING STEEL SHALL BE AASHTO M-31, GRADE 60.
- ANCHOR BOLT SPACE PLATES SHALL BE AASHTO M-183 (ASTM A-36), MINIMUM PLATE THICKNESS OF 0.0598" (16 GAUGE).
- ELECTRICAL CONDUIT OR SLEEVES SHALL BE IN ACCORDANCE WITH THE 2009 STANDARD SPECIFICATIONS AND MAY BE EITHER RIGID GALV. STEEL OR SCH. 40 PVC PLASTIC.

GENERAL NOTES

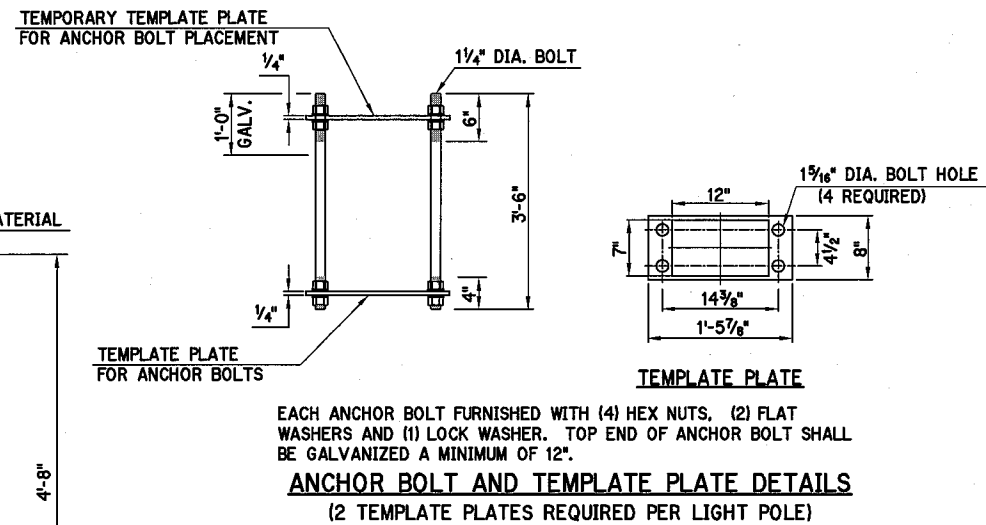
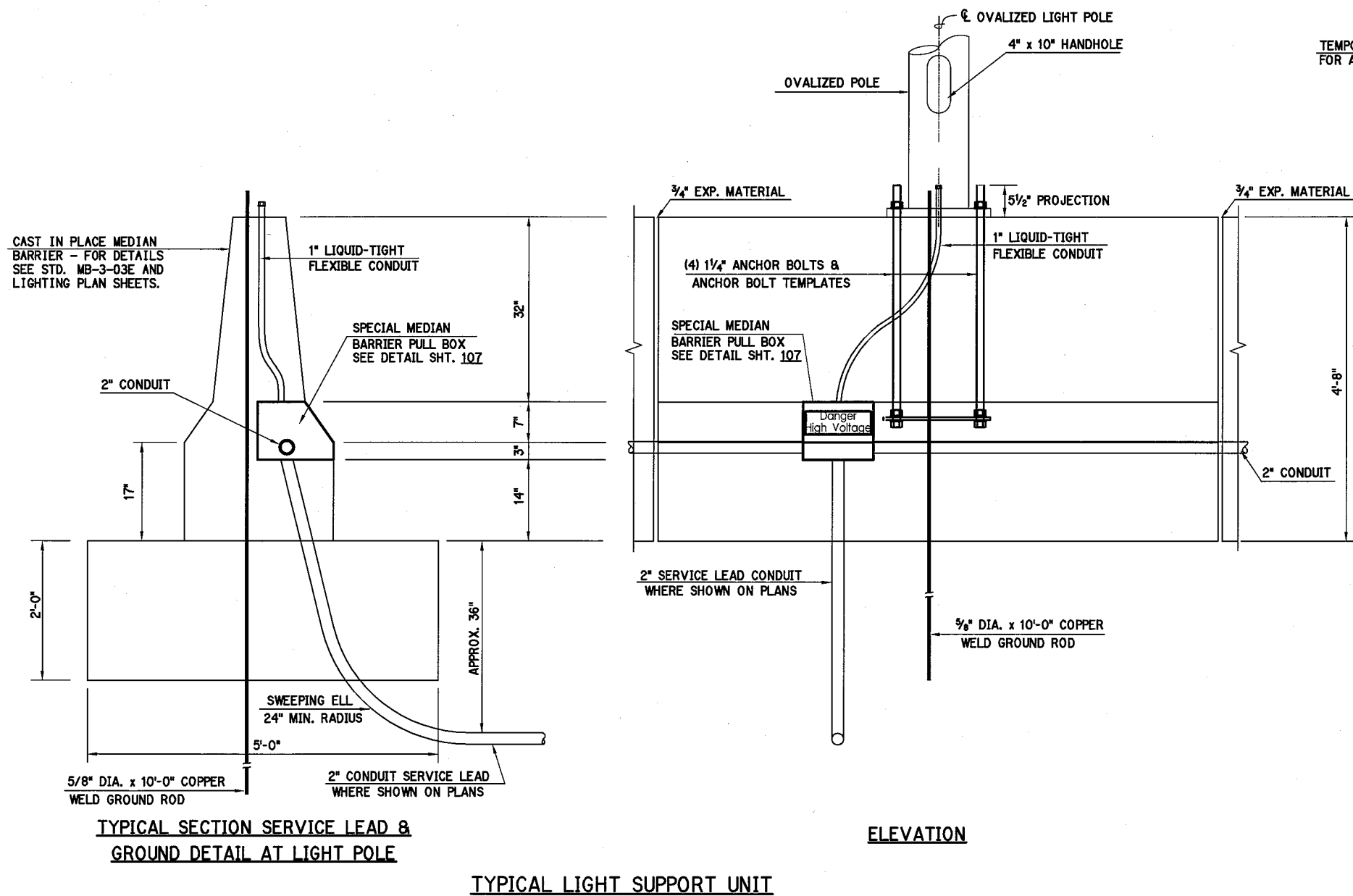
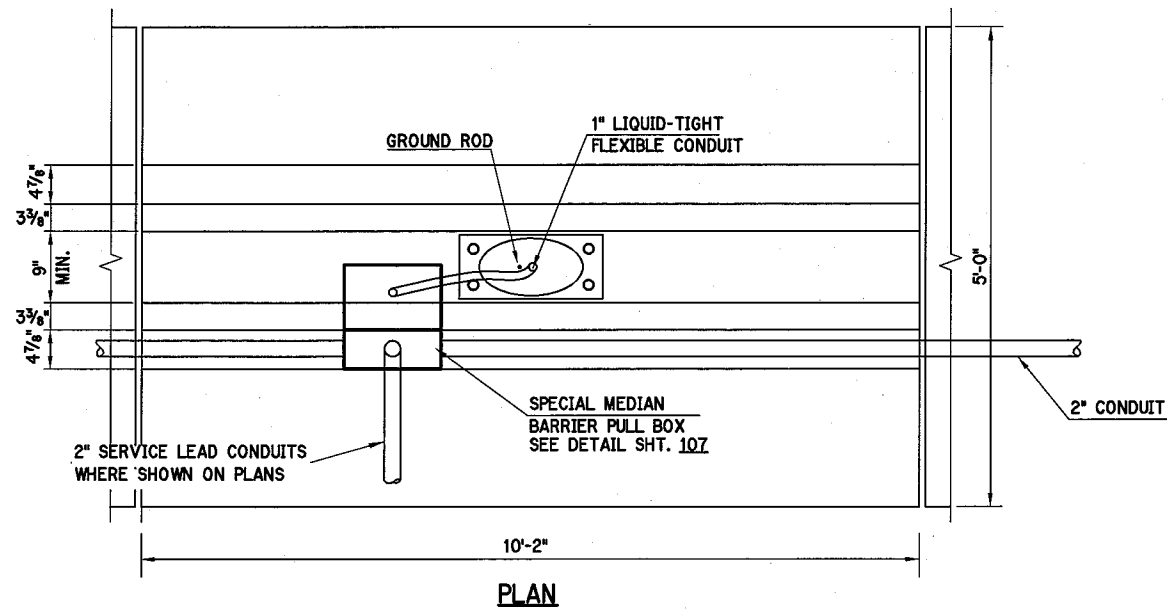
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- SOME FOOTINGS MAY REQUIRE MORE THAN THE 2 CONDUITS SPECIFIED, SEE THE PLANS FOR LOCATIONS.
- FOR INFORMATION ON INSTALLATION OF UNDERGROUND/TRENCHED CONDUIT, SEE STD. CCD I-I-(LATEST REVISION).
- THE UNIT PRICE BID FOR THE FOOTING SHALL INCLUDE ANCHOR BOLTS SPACE PLATES, GROUND ROD, GROUND WIRE, ETC.
- FOR ADDITIONAL INFORMATION NOT SHOWN, SEE STD. GMFI-I-(LATEST REVISION).
- CONSTRUCT CONDUITS IN THE CENTER OF THE ANCHOR BOLT CIRCLE.
- THE REINFORCING STEEL SHALL BE ADJUSTED TO PROVIDE THE PROPER CLEARANCE FROM THE EDGE OF THE CONCRETE BARRIER.
- NO LIGHT POLE FOOTING SHALL BE PLACED WITHIN 12' OF THE END OF A BARRIER.
- NO LIGHT POLE FOOTING SHALL BE PLACED WITHIN 6' OF A GRATED INLET.
- IF THE CONTRACTOR ELECTS TO USE DOUBLE NUT LEVELING, THE ANCHOR BOLT PROJECTION SHALL BE INCREASED, 4 ADDITIONAL HEX NUTS AND FLAT WASHERS WILL BE REQUIRED, AND THE VOID BELOW THE INSTALLED BASE PLATE SHALL BE FILLED WITH A NON-SHRINK GROUT.
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Design				
Drawn				
Checked				
Approved				
Squad	POE			

OKLAHOMA COUNTY
**SPECIAL MEDIAN BARRIER
LIGHT POLE FOOTING
AND SUPPORT DETAILS**
(SHEET 2 OF 3)

State Job No. 09032(20) Sheet No. 91

DESCRIPTION	REVISIONS	DATE



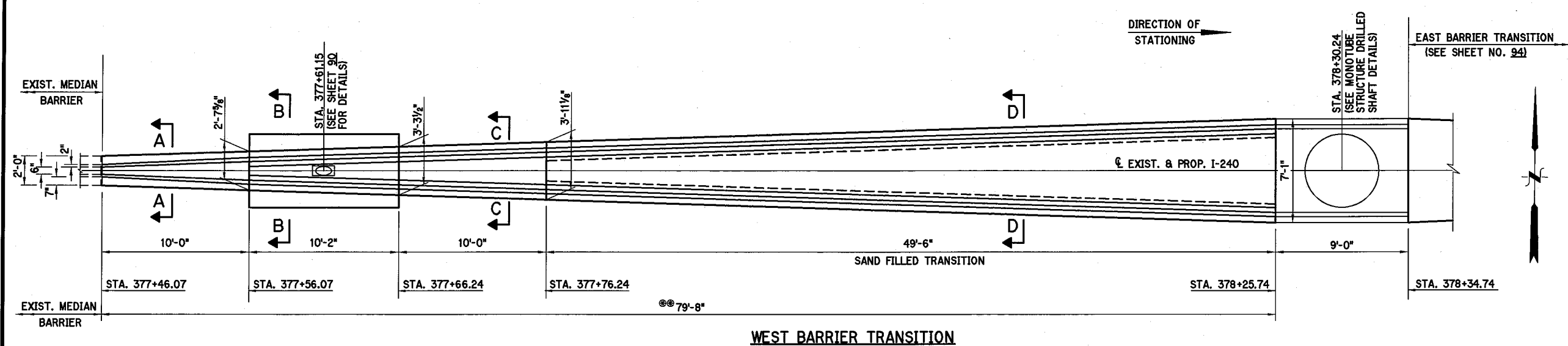
Design	
Drawn	
Checked	
Approved	
Squad	POE

OKLAHOMA COUNTY

**SPECIAL MEDIAN BARRIER
LIGHT POLE FOOTING
AND SUPPORT DETAILS
(SHEET 3 OF 3)**

State Job No. 09032(20) Sheet No. 92

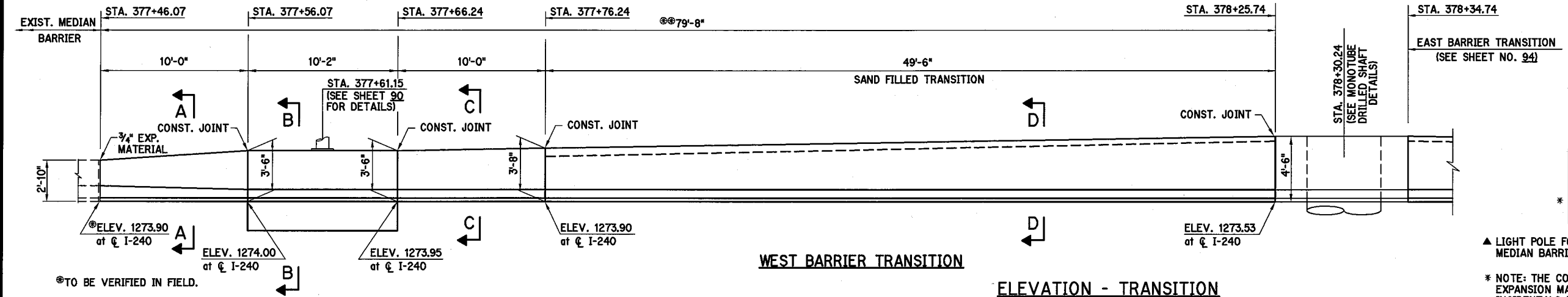
DESCRIPTION	REVISIONS	DATE



WEST BARRIER TRANSITION

NOTE: ACTUAL TRANSITION LENGTH TO BE DETERMINED IN THE FIELD.

PLAN - TRANSITION



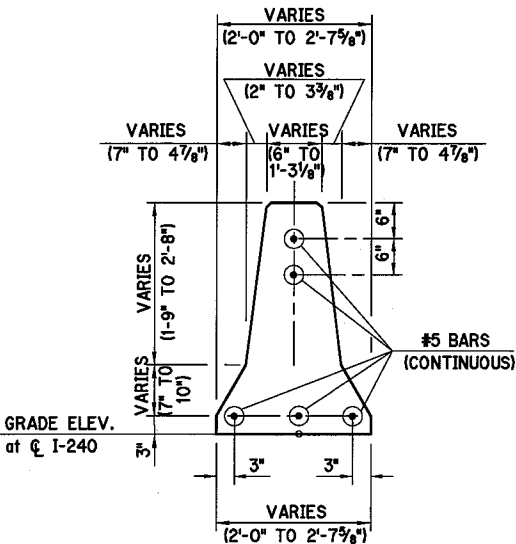
WEST BARRIER TRANSITION

ELEVATION - TRANSITION

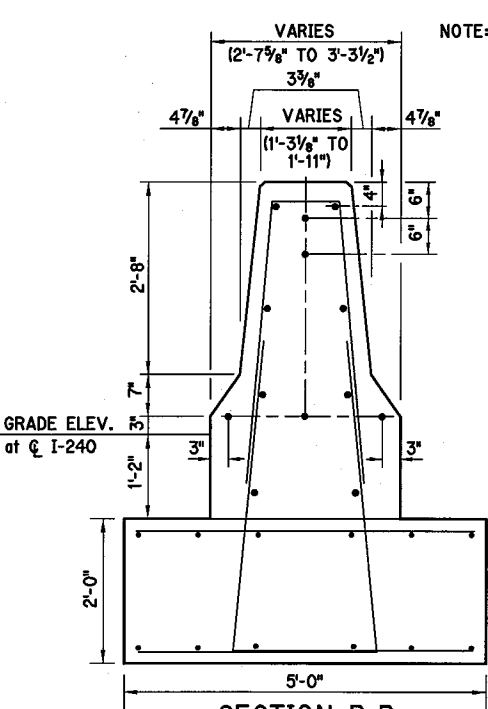
QUANTITIES		
ITEM	UNIT	TOTAL
* CLASS A CONCRETE	C.Y.	19.40

▲ LIGHT POLE FOOTING QUANTITIES NOT INCLUDED HERE. SEE SPECIAL MEDIAN BARRIER LIGHT POLE FOOTING AND SUPPORT DETAILS.

* NOTE: THE COST OF REINFORCING STEEL, SAND BACKFILL, PREMOLDED EXPANSION MATERIAL AND ALL OTHER MATERIALS, LABOR AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SHOWN SHALL BE INCLUDED IN THE PRICE BID PER C.Y. OF "CLASS A CONCRETE".

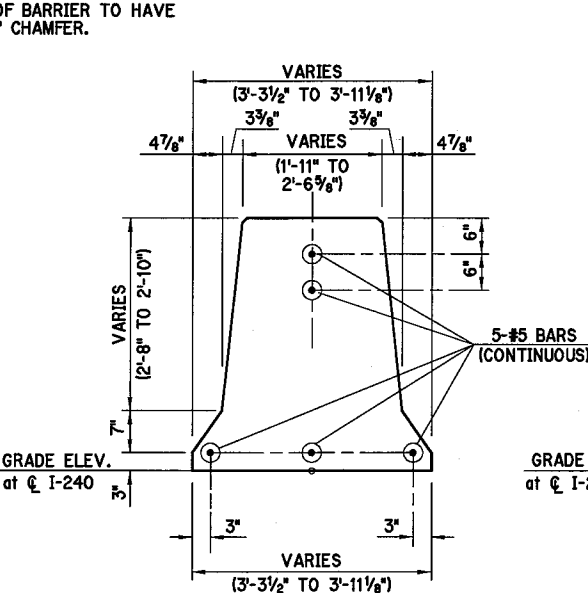


SECTION A-A

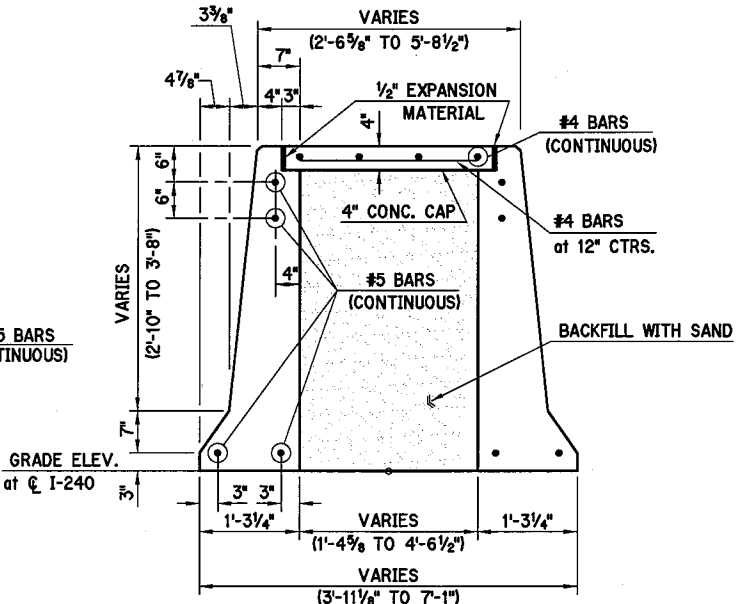


SECTION B-B

NOTE: SEE SHEET 90 FOR LIGHT POLE NO. 1 SUPPORT AND REINFORCING DETAILS.

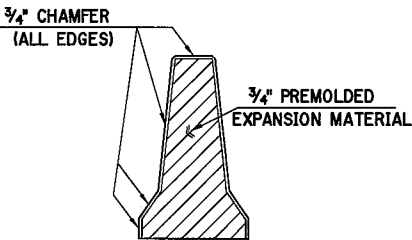


SECTION C-C



SECTION D-D

(TYPICAL THRU SAND FILLED TRANSITION)



AT EXISTING MEDIAN BARRIER

DETAIL OF EXPANSION JOINT

(NOTE: CLEAR ALL REINFORCING STEEL 2" FROM JOINTS.)

NOTE: FOR GENERAL NOTES AND ADDITIONAL INFORMATION, REFER TO STD. CLB-1-2.

Design	
Drawn	
Checked	
Approved	
Squad	POE

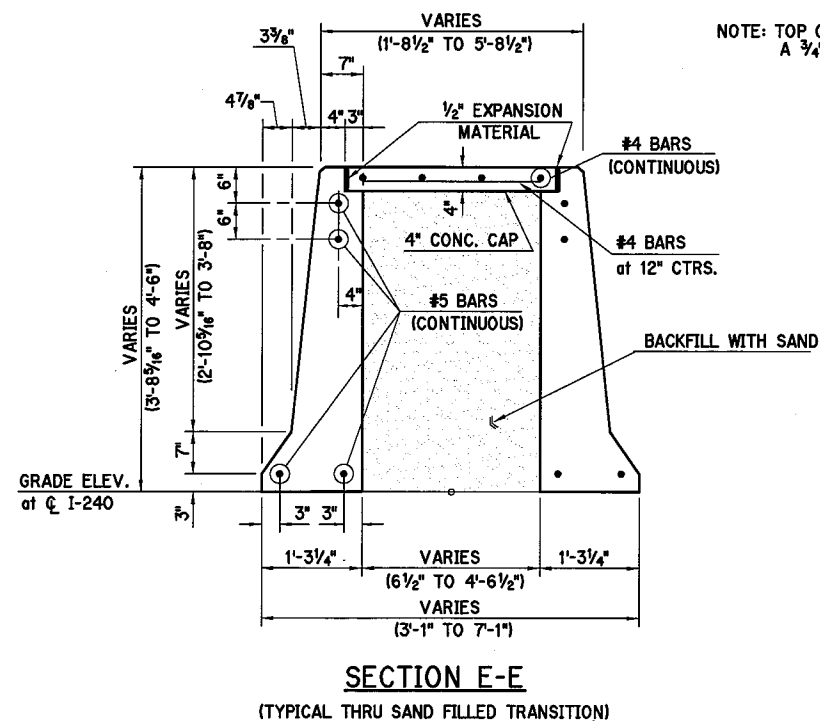
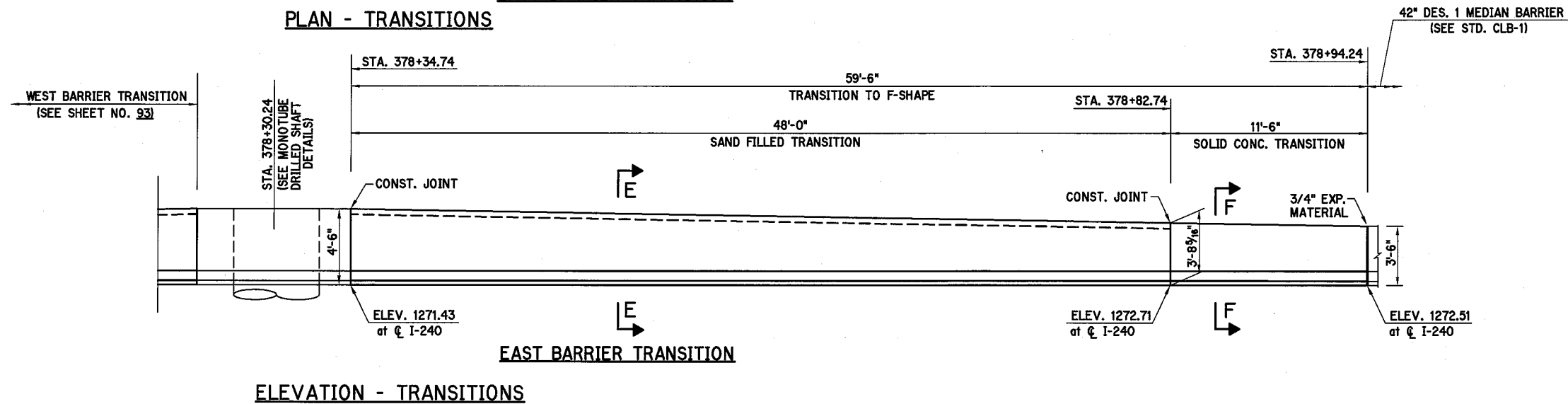
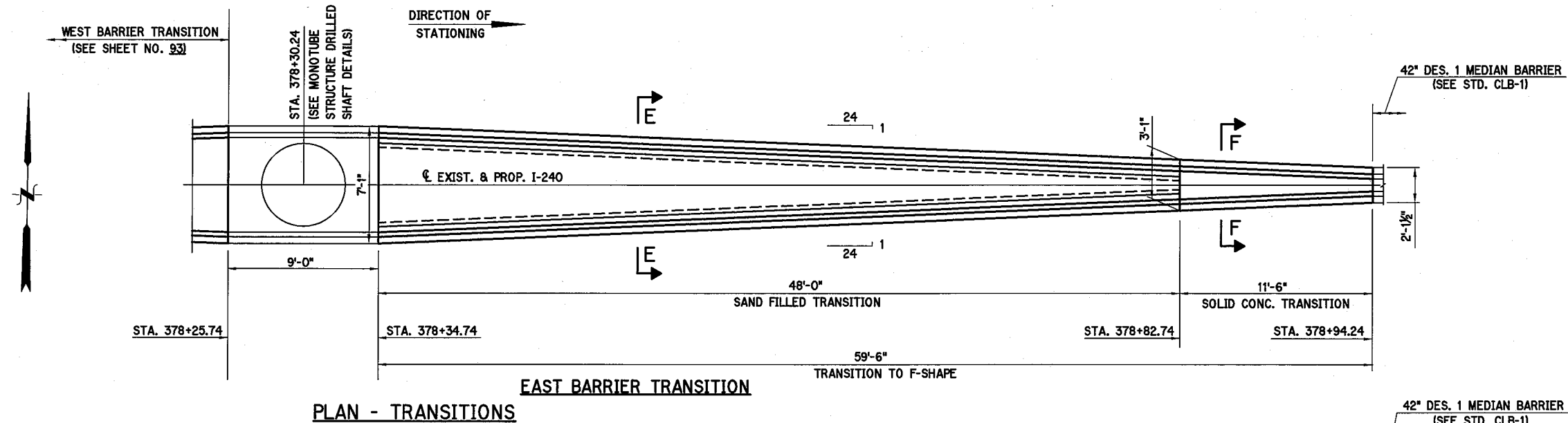
MEDIAN BARRIER TRANSITION

I-240 & SANTA FE AVE.

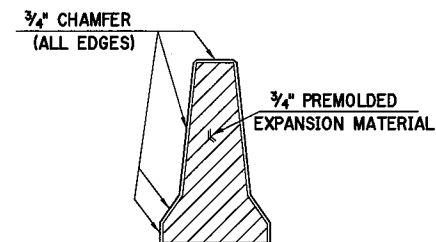
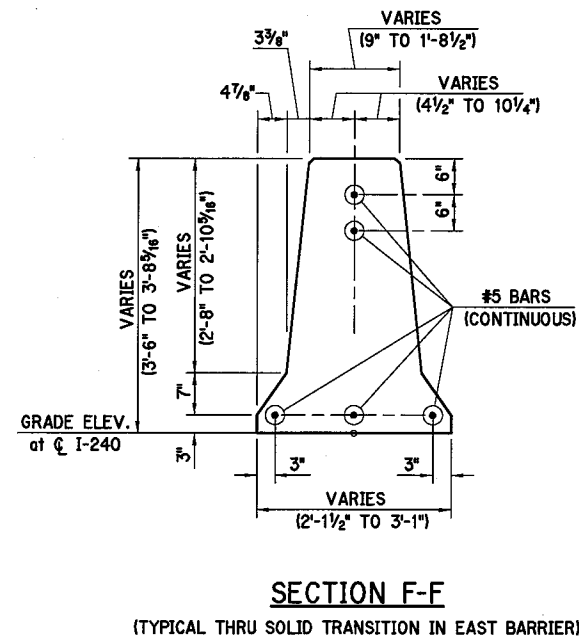
(SHEET 1 OF 2)

State Job No. 09032(20) Sheet No. 93

DESCRIPTION	REVISIONS	DATE



NOTE: TOP OF BARRIER TO HAVE
A 3/4" CHAMFER.



AT STANDARD MEDIAN BARRIER
DETAIL OF EXPANSION JOINT
(NOTE: CLEAR ALL REINFORCING STEEL 2" FROM JOINTS.)

QUANTITIES		
ITEM	UNIT	TOTAL
* CLASS A CONCRETE	C.Y.	15.90

* NOTE: THE COST OF REINFORCING STEEL, SAND BACKFILL, PREMOLDED
EXPANSION MATERIAL AND ALL OTHER MATERIALS, LABOR AND
INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SHOWN SHALL
BE INCLUDED IN THE PRICE BID PER C.Y. OF "CLASS A CONCRETE".

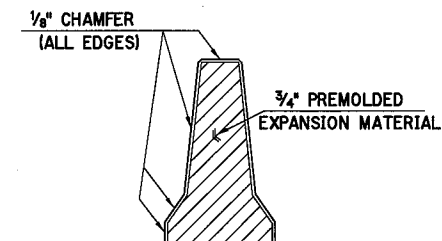
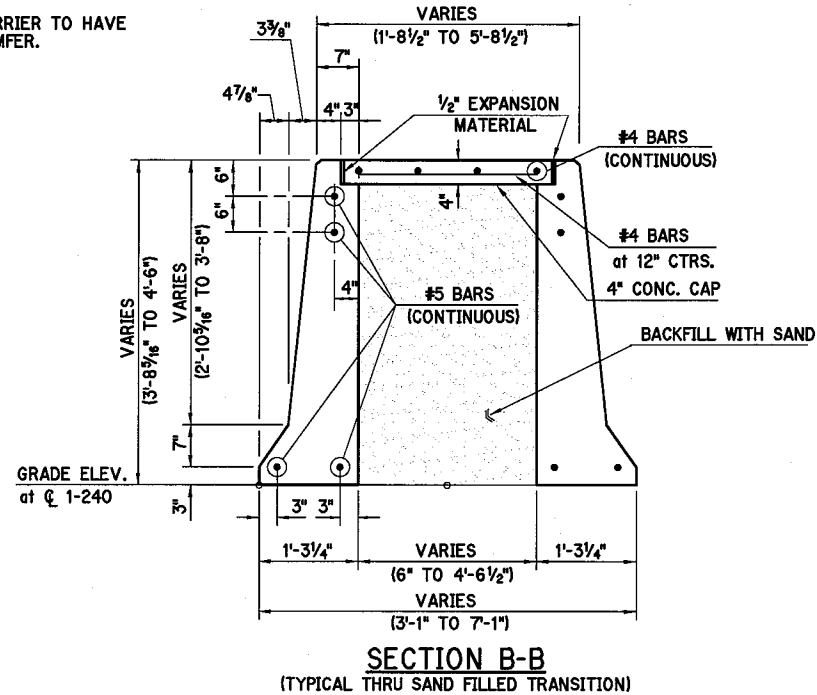
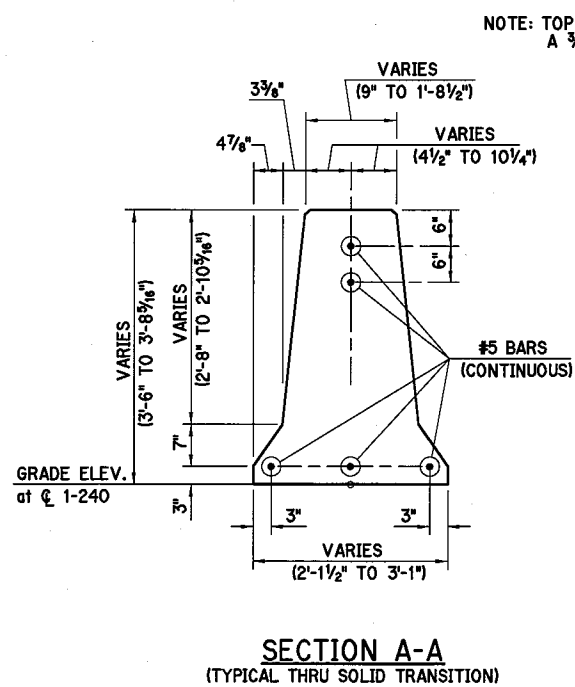
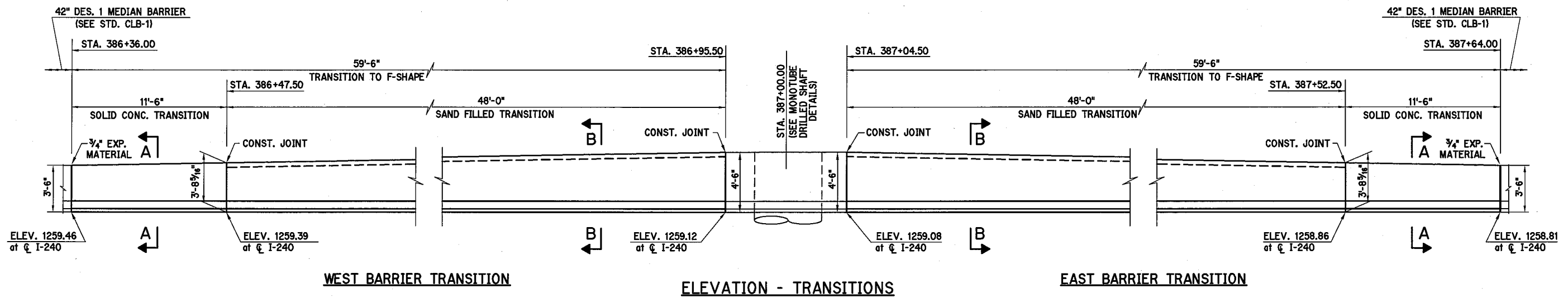
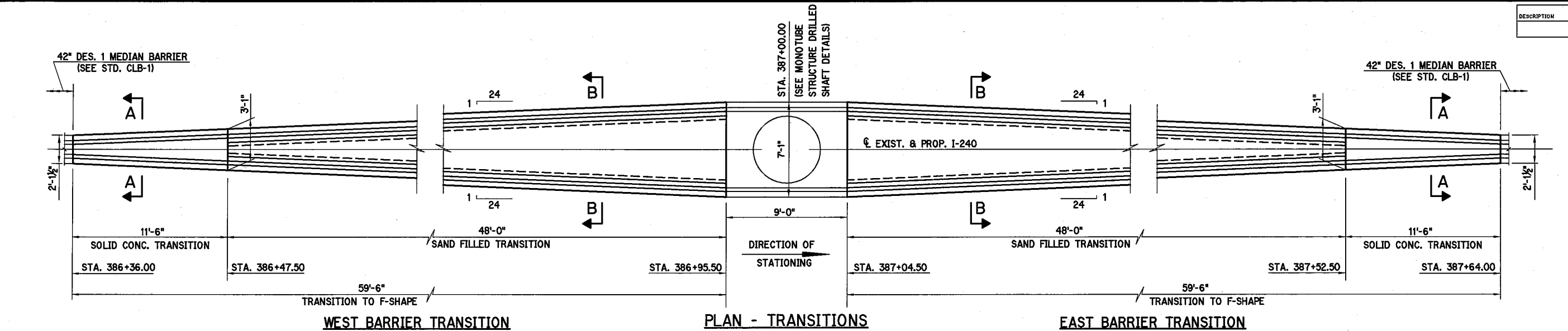
NOTE: FOR GENERAL NOTES AND ADDITIONAL
INFORMATION, REFER TO STD. CLB-1-2.

Design	
Drawn	
Checked	
Approved	
Squad	POE

OKLAHOMA COUNTY

MEDIAN BARRIER TRANSITION
DETAILS
I-240 & SANTA FE AVE.
(SHEET 2 OF 2)

State Job No. 09032(20) Sheet No. 94



AT STANDARD MEDIAN BARRIER

DETAIL OF EXPANSION JOINT

(NOTE: CLEAR ALL REINFORCING STEEL 2" FROM JOINTS.)

QUANTITIES		
ITEM	UNIT	TOTAL
* CLASS A CONCRETE	C.Y.	29.40

* NOTE: THE COST OF REINFORCING STEEL, SAND BACKFILL, PREMOLDED EXPANSION MATERIAL AND ALL OTHER MATERIALS, LABOR AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SHOWN SHALL BE INCLUDED IN THE PRICE BID PER C.Y. OF "CLASS A CONCRETE".

NOTE: FOR GENERAL NOTES AND ADDITIONAL INFORMATION, REFER TO STD. CLB-1-2.

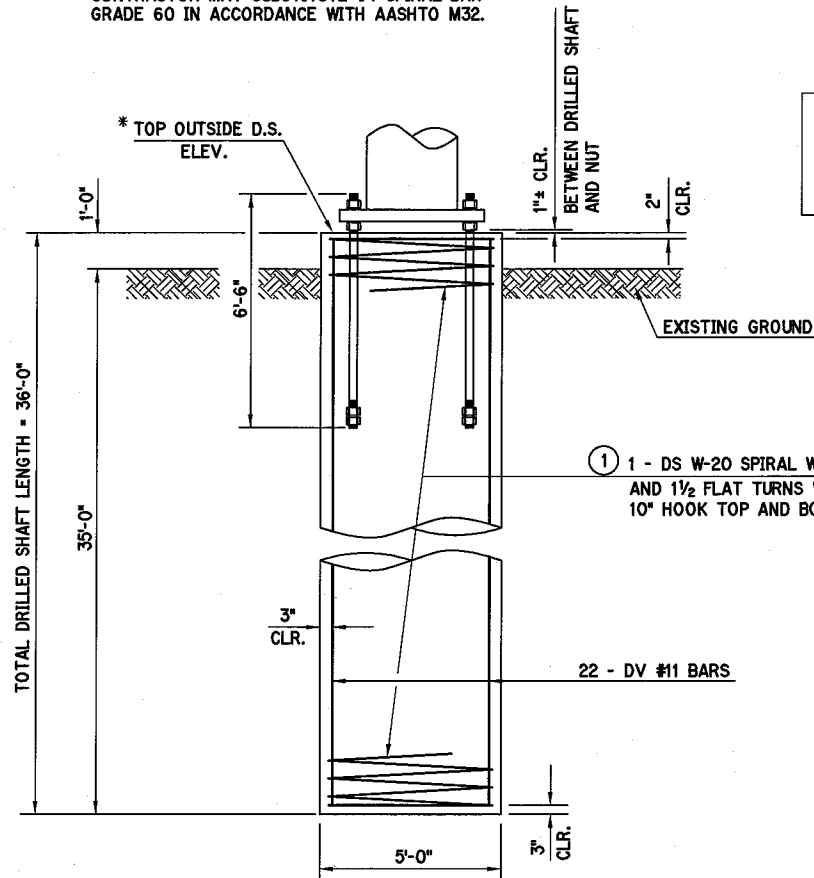
Design	
Drawn	
Checked	
Approved	
Squad	POE

MEDIAN BARRIER TRANSITION DETAILS

I-240 MONOTUBE STRUCTURE

State Job No. 09032(20) Sheet No. 95

① USE W20 SPIRAL IN ACCORDANCE WITH 723.07 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY SUBSTITUTE #4 SPIRAL BAR GRADE 60 IN ACCORDANCE WITH AASHTO M32.

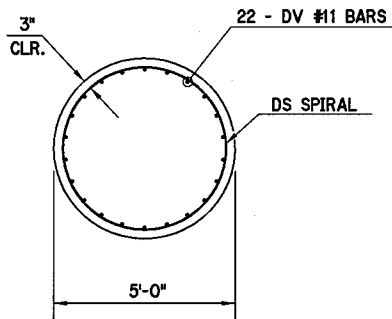


* STA. 378+30.24
TOP DRILLED SHAFT ELEV. = 1270.11
STA. 387+00.00
TOP DRILLED SHAFT ELEV. = 1267.11

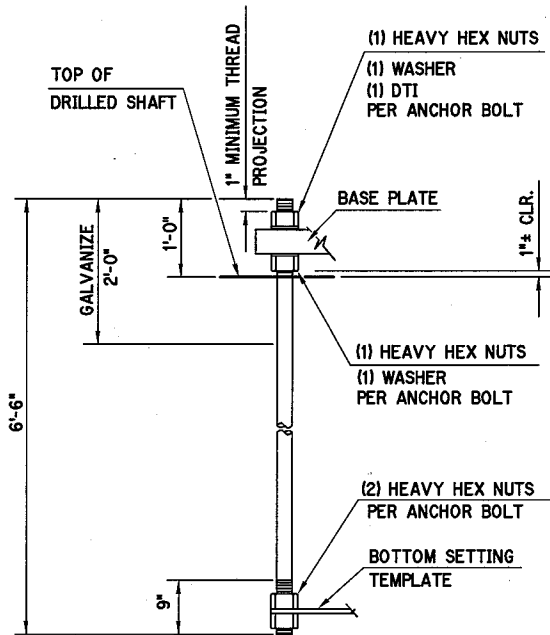
① 1 - DS W-20 SPIRAL WITH 6" PITCH AND 1 1/2 FLAT TURNS WITH 10" HOOK TOP AND BOTTOM.

22 - DV #11 BARS

CROSS SECTION
60" DRILLED SHAFT



TYPICAL SECTION THRU
60" DRILLED SHAFT



2 1/2" DIA. ANCHOR BOLT DETAIL
(F1554 GR. 55)

DRILLED SHAFT NOTES:

MATERIAL PROPERTIES
CLASS 'AA' CONCRETE = 4,000 PSI
REINFORCING STEEL = 60,000 PSI

THE DRILLED SHAFT FOR THE MONOTUBE SIGN STRUCTURE HAS BEEN DESIGNED FOR THE FOLLOWING PROPERTIES:

- COHESIVE SOIL
UNIT WEIGHT = 120 PCF
COHESION = 1000 PSF
- GRANULAR SOIL
UNIT WEIGHT = 120 PCF
INTERNAL FRICTION ANGLE = 28 DEGREES

IF SITE CONDITIONS ARE ENCOUNTERED THAT DIFFER FROM THOSE SPECIFIED ABOVE, THE ENGINEER SHALL BE CONTACTED. SUCH CONDITIONS ARE, BUT NOT LIMITED TO, AS FOLLOWS:

- SOIL HAS HIGH ORGANIC CONTENT OR CONSISTS OF SATURATED SILT AND CLAY.
- THE SITE WON'T SUPPORT THE WEIGHT OF THE DRILLING RIG.
- ROCK IS ENCOUNTERED. (IF SHALE IS ENCOUNTERED AT LESS THAN 10' FROM TOP OF SHAFTS, USE LENGTH SHOWN ON THIS SHEET).

DRILLED SHAFTS SHALL BE CONSTRUCTED ACCORDING TO THE OKLAHOMA DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND ASSOCIATED SPECIAL PROVISIONS. THE USE OF THE "DOUBLE CASING METHOD" IS NOT ALLOWED FOR THIS DESIGN.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING THAT THE LOCATION AND ELEVATION OF THE DRILLED SHAFT ARE AS REQUIRED IN THE PLANS. THE CONTRACTOR SHALL COORDINATE WITH THE MONOTUBE SUPPLIER TO ENSURE THAT THE ORIENTATION OF THE ANCHOR BOLTS IN THE DRILLED SHAFT ALLOW FOR PROPER ALIGNMENT OF ALL BASE PLATES AND FLANGES UPON FINAL INSTALLATION.

NOTE: FOR ADDITIONAL DRILLED SHAFT DETAILS, SEE "MONOTUBE STRUCTURE (DRILLED SHAFT DETAILS) (SHEET 3 OF 3)".
FOR DRILLED SHAFT DETAILS IN THE MEDIAN, SEE "MONOTUBE STRUCTURE (DRILLED SHAFT DETAILS) (SHEET 2 OF 3)".

DRILLED SHAFT BAR LIST				
(INCLUDED IN CONTRACT UNIT PRICE OF DRILLED SHAFT)				
MARK	SIZE	NO.	FORM	LENGTH
PLAIN REINFORCING BARS				
DS	W-20	1	BNT.	1,052'-9"
DV	#11	22	STR.	35'-7"

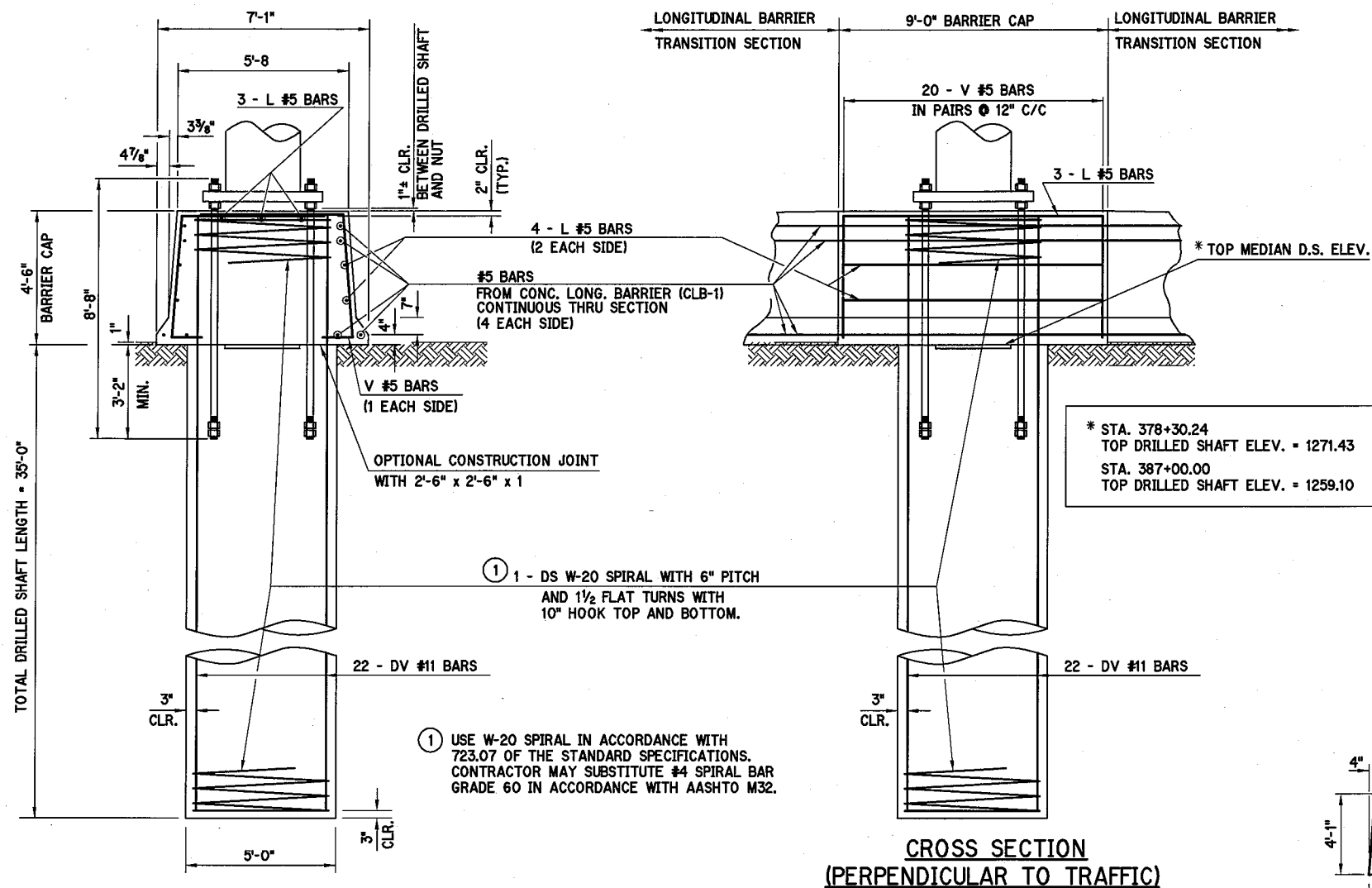
BASIS OF PAYMENT			
ITEM NO.	DESCRIPTION	UNIT	TOTAL
② 516(A)	DRILLED SHAFTS 60" DIAMETER	L.F.	36.00

② ALL COSTS OF CONCRETE AND REINFORCING IN DRILLED SHAFTS SHALL BE INCLUDED IN THE PRICE BID FOR "DRILLED SHAFTS 60" DIAMETER".

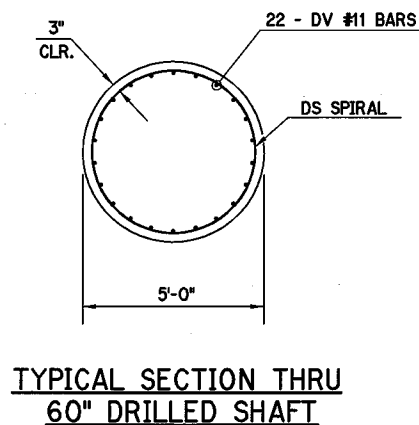
Design	
Drawn	
Checked	
Approved	
Squad	POE

MONOTUBE STRUCTURE
(DRILLED SHAFT DETAILS)
(SHEET 1 OF 3)

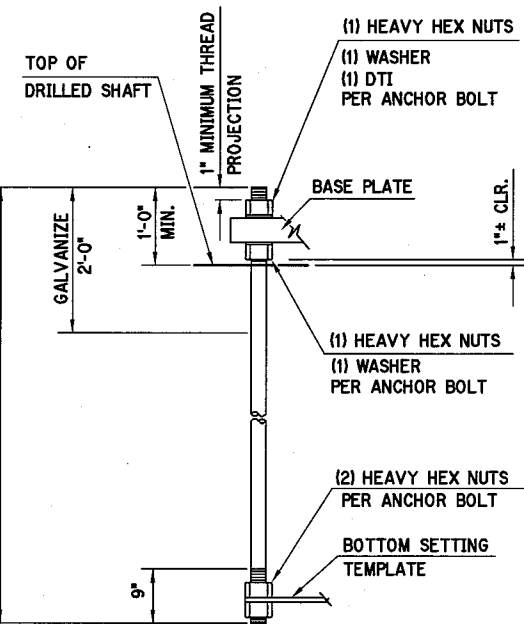
State Job No. 09032(20) Sheet No. 96



CROSS SECTION
(PARALLEL TO TRAFFIC)



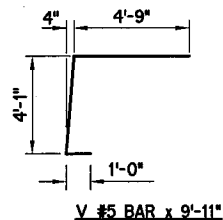
TYPICAL SECTION THRU
60" DRILLED SHAFT



2 1/2" DIA. ANCHOR BOLT DETAIL
(F1554 GR. 55)

* STA. 378+30.24
TOP DRILLED SHAFT ELEV. = 1271.43
STA. 387+00.00
TOP DRILLED SHAFT ELEV. = 1259.10

CROSS SECTION
(PERPENDICULAR TO TRAFFIC)

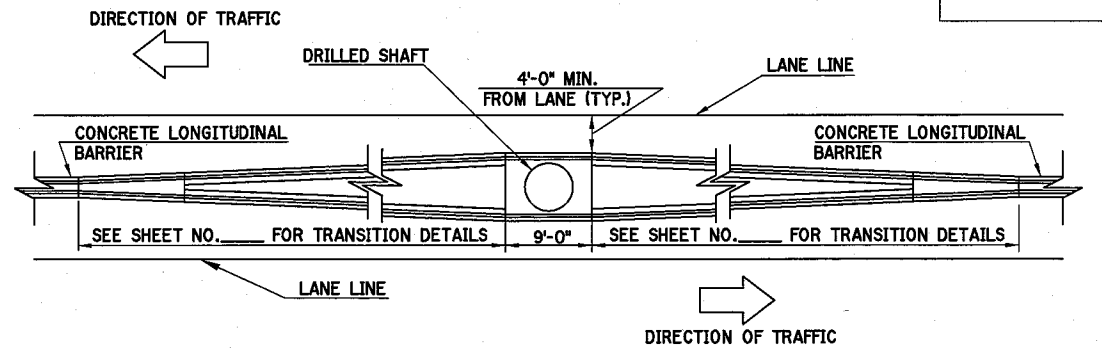


NOTE: FOR ADDITIONAL DRILLED SHAFT DETAILS,
SEE "MONOTUBE STRUCTURE (DRILLED SHAFT
DETAILS) (SHEET 3 OF 3)".

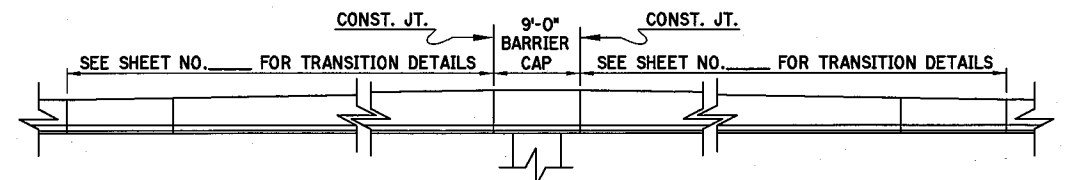
BARRIER CAP QUANTITIES (INCLUDED IN CONTRACT UNIT PRICE OF DRILLED SHAFT)		
ITEM	UNIT	QTY.
CLASS AA CONCRETE	C.Y.	12.50
REINFORCING STEEL	LB.	270.00

BARRIER CAP BAR LIST (INCLUDED IN CONTRACT UNIT PRICE OF DRILLED SHAFT)				
MARK	SIZE	NO.	FORM	LENGTH
PLAIN REINFORCING BARS				
L	#5	7	STR.	8'-8"
V	#5	20	BNT.	9'-11"

DRILLED SHAFT BAR LIST (INCLUDED IN CONTRACT UNIT PRICE OF DRILLED SHAFT)				
MARK	SIZE	NO.	FORM	LENGTH
PLAIN REINFORCING BARS				
DS	W-20	1	BNT.	1,156'-6"
DV	#11	22	STR.	39'-1"



CONCRETE LONGITUDINAL BARRIER DETAIL (PLAN VIEW)



CONCRETE LONGITUDINAL BARRIER DETAIL (ELEVATION VIEW)

NOTE: CONCRETE LONGITUDINAL BARRIER SHALL
BE CONSTRUCTED IN ACCORDANCE WITH
ROADWAY STANDARD CLB-1 EXCEPT FOR
AS SHOWN HERE.

DRILLED SHAFT NOTES:

MATERIAL PROPERTIES
CLASS 'AA' CONCRETE = 4,000 PSI
REINFORCING STEEL = 60,000 PSI

THE DRILLED SHAFT FOR THE MONOTUBE SIGN STRUCTURE HAS BEEN DESIGNED FOR THE FOLLOWING PROPERTIES:

- COHESIVE SOIL
UNIT WEIGHT = 120 PCF
COHESION = 1000 PSF
- GRANULAR SOIL
UNIT WEIGHT = 120 PCF
INTERNAL FRICTION ANGLE = 28 DEGREES

IF SITE CONDITIONS ARE ENCOUNTERED THAT DIFFER FROM THOSE SPECIFIED ABOVE, THE ENGINEER
SHALL BE CONTACTED. SUCH CONDITIONS ARE, BUT NOT LIMITED TO, AS FOLLOWS:

- SOIL HAS HIGH ORGANIC CONTENT OR CONSISTS OF SATURATED SILT AND CLAY.
- THE SITE WON'T SUPPORT THE WEIGHT OF THE DRILLING RIG.
- ROCK IS ENCOUNTERED. (IF SHALE IS ENCOUNTERED AT LESS THAN 10' FROM TOP OF SHAFTS,
USE LENGTH SHOWN ON THIS SHEET)

DRILLED SHAFTS SHALL BE CONSTRUCTED ACCORDING TO THE OKLAHOMA DEPARTMENT OF TRANSPORTATION'S
STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND ASSOCIATED SPECIAL PROVISIONS. THE USE
OF THE "DOUBLE CASING METHOD" IS NOT ALLOWED FOR THIS DESIGN.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING THAT THE LOCATION AND ELEVATION OF THE DRILLED
SHAFT ARE AS REQUIRED IN THE PLANS. THE CONTRACTOR SHALL COORDINATE WITH THE MONOTUBE SUPPLIER
TO ENSURE THAT THE ORIENTATION OF THE ANCHOR BOLTS IN THE DRILLED SHAFT ALLOW FOR PROPER ALIGNMENT
OF ALL BASE PLATES AND FLANGES UPON FINAL INSTALLATION.

BASIS OF PAYMENT			
ITEM NO.	DESCRIPTION	UNIT	TOTAL
② 516(A)	DRILLED SHAFTS 60" DIAMETER	L.F.	35.00

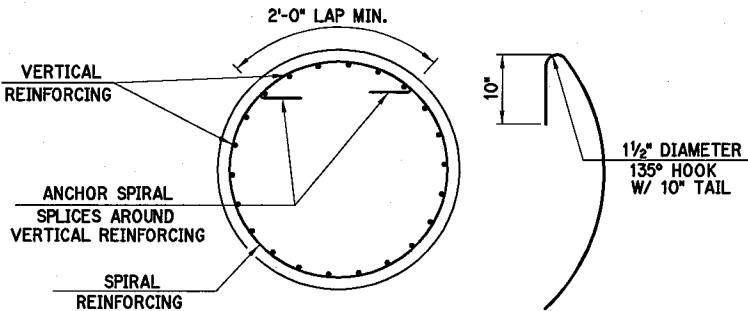
- ② ALL COSTS OF CONCRETE AND REINFORCING IN DRILLED SHAFTS
SHALL BE INCLUDED IN THE PRICE BID FOR "DRILLED SHAFTS 60" DIAMETER".
ALL COSTS OF CONCRETE AND REINFORCING IN THE BARRIER CAP
SHALL BE INCLUDED IN THE PRICE BID FOR "DRILLED SHAFTS 60" DIAMETER".

Design	
Drawn	
Checked	
Approved	
Squad	POE

MONOTUBE STRUCTURE (DRILLED SHAFT DETAILS) (SHEET 2 OF 3)

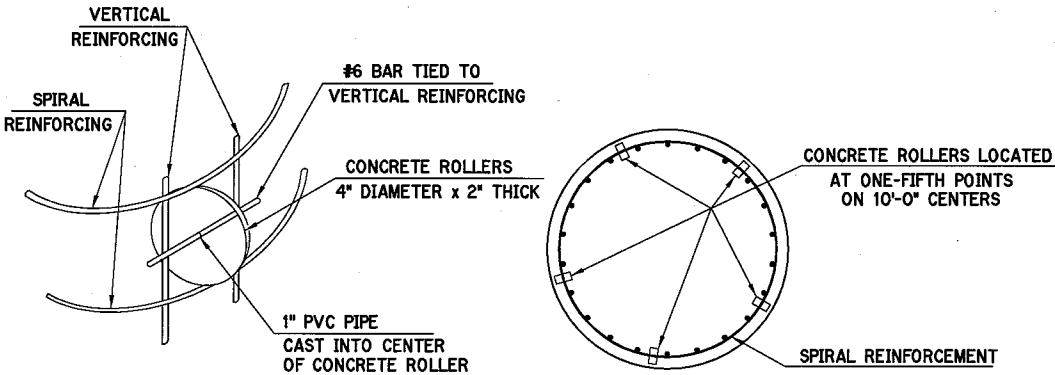
State Job No. 09032(20) Sheet No. 97

DESCRIPTION	REVISIONS	DATE



SPIRAL REINFORCING SPLICE DETAIL

NOTE: SPIRAL BAR LENGTH QUANTITY DOES NOT INCLUDE LAP. IF LAP IS REQUIRED, THE LENGTH OF THE LAP SHALL BE AS SHOWN.

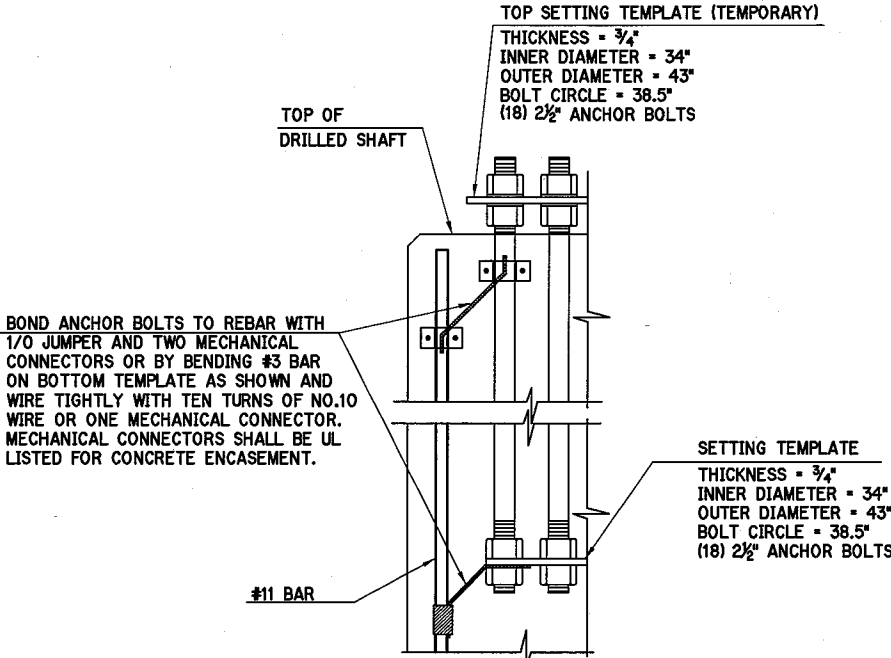


ROLLER INSTALLATION

ROLLER PLACEMENT

DETAIL OF CONCRETE ROLLERS

NOTE: CONCRETE USED IN THE CONCRETE ROLLERS SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 P.S.I. SLAB BOLSTERS, HIGH CHAIRS, AND PLASTIC ROLLERS SHALL NOT BE SUBSTITUTED FOR THE CONCRETE ROLLERS.

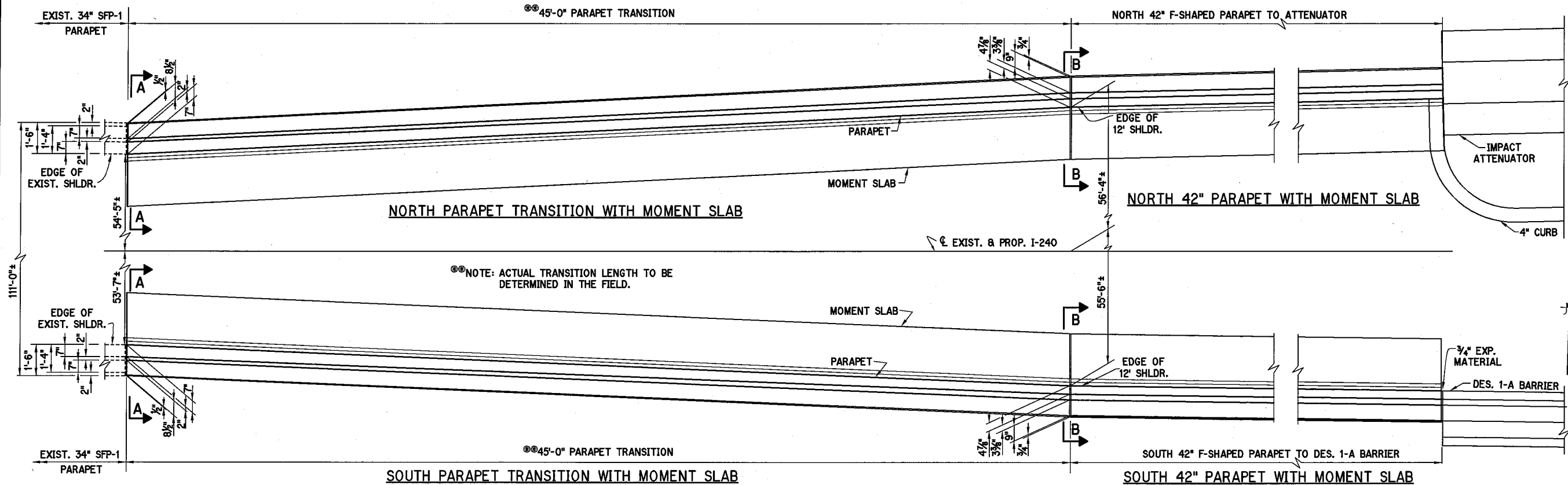


ANCHOR BOLT TEMPLATE AND LIGHTING PROTECTION SYSTEM

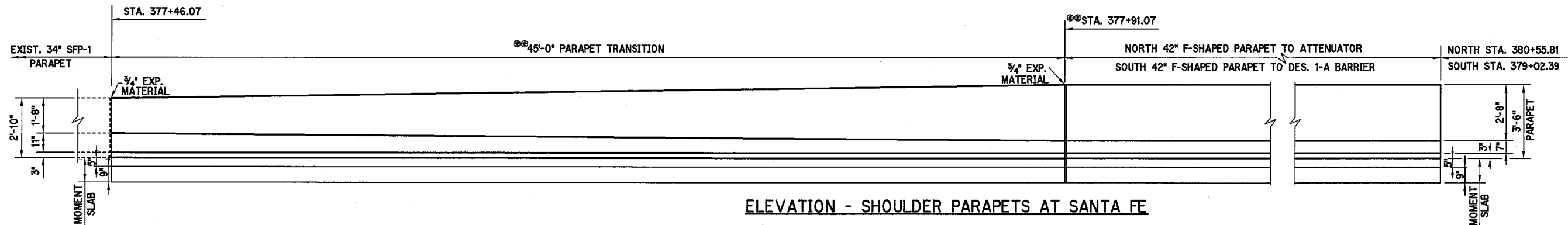
Design	
Drawn	
Checked	
Approved	
Squad	POE

**MONOTUBE STRUCTURE
(DRILLED SHAFT DETAILS)
(SHEET 3 OF 3)**

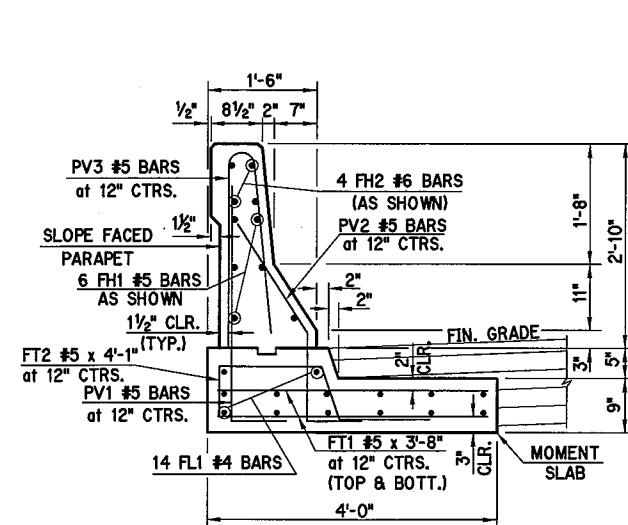
State Job No. 09032(20) Sheet No. 98



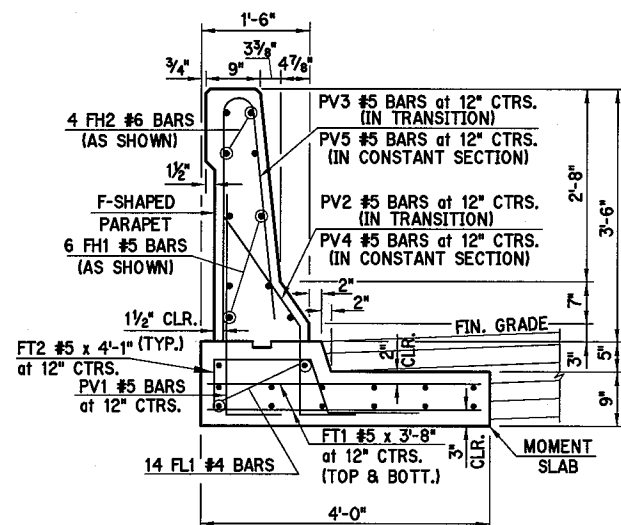
PLAN - SHOULDER PARAPETS AT SANTA FE



ELEVATION - SHOULDER PARAPETS AT SANTA FE



SECTION A-A
TYPICAL AT EXIST. BRIDGE PARAPET



SECTION B-B
TYPICAL AT 42" F-SHAPED PARAPET

QUANTITIES		
ITEM	UNIT	TOTAL
CLASS A CONCRETE	C.Y.	64.40
EPOXY COATED REINFORCING STEEL	LB.	10,350
F-SHAPED PARAPET	L.F.	466.20

NOTE: ALL COST ASSOCIATED WITH THE F-SHAPED BARRIER SHOWN, INCLUDES THE CLASS AA CONCRETE, FH1, FH2, PV3 AND PV5 BARS, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.

NOTE: FOR GENERAL NOTES AND ADDITIONAL INFORMATION, REFER TO STD. FSHP-42-2

BAR LIST (EPOXY COATED)					
MARK	NO.	SIZE	FORM	SPACING	LENGTH
PV1	470	#5	BNT.	12" C/C	4'-0"
PV2	92	#5	BNT.	12" C/C	3'-11" AVG.
PV3	92	#5	BNT.	12" C/C	5'-11 1/2" AVG.
PV4	378	#5	BNT.	12" C/C	4'-0"
PV5	378	#5	BNT.	12" C/C	6'-7"
FH1	12	#5	STR.	AS SHOWN	44'-8"
FH2	8	#6	STR.	AS SHOWN	44'-8"
FL1	28	#4	STR.	AS SHOWN	44'-8"
FT1	940	#5	STR.	AS SHOWN	3'-8"
FT2	470	#5	BNT.	AS SHOWN	4'-1"

- ① LENGTH VARIES:
PV2 = 3'-10" TO 4'-0"
PV3 = 5'-4" TO 6'-7"
- ② LENGTH SHOWN IS BASED ON THE 45-0° TRANSITION.
- ③ NOT INCLUDED IN WEIGHT OF REINFORCING STEEL QUANTITY.

NOTE: ALL BAR BEND DIMENSIONS ARE OUT TO OUT.

3/4" CHAMFER (ALL EDGES)

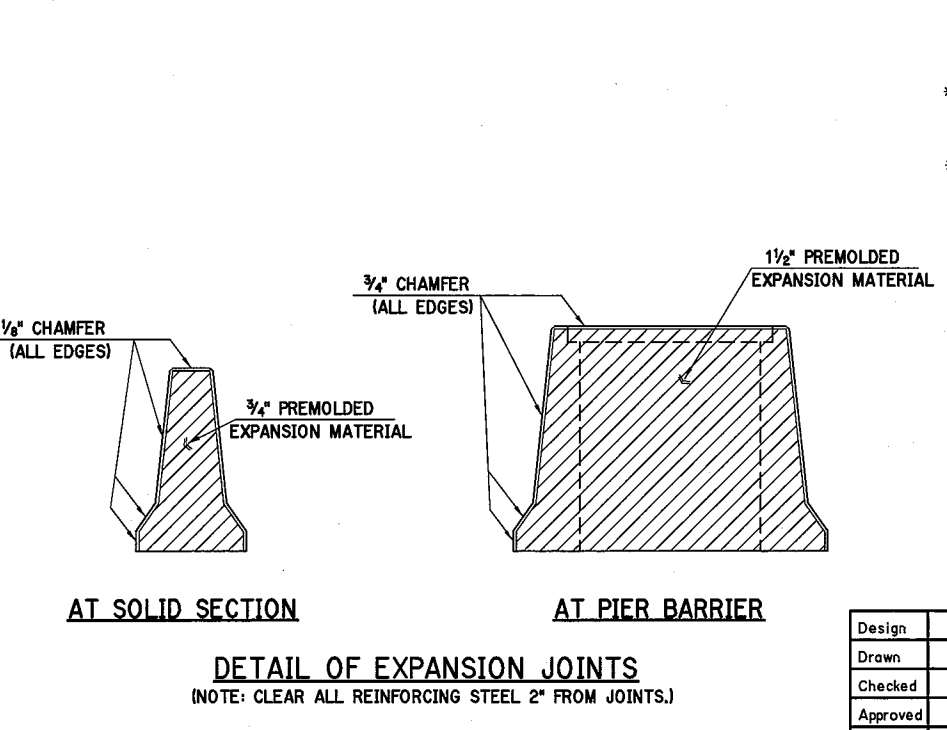
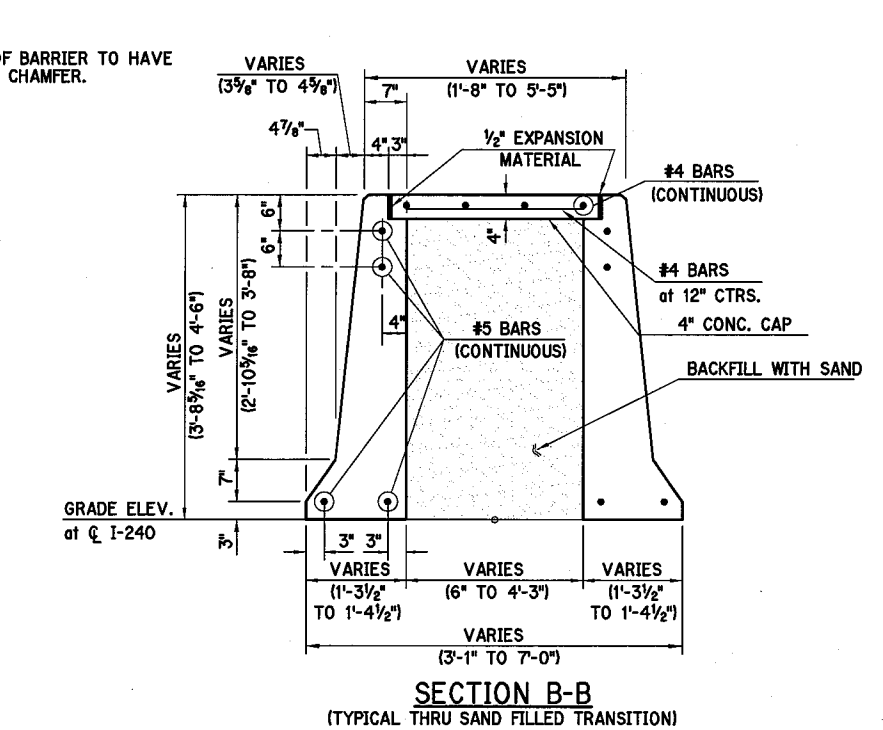
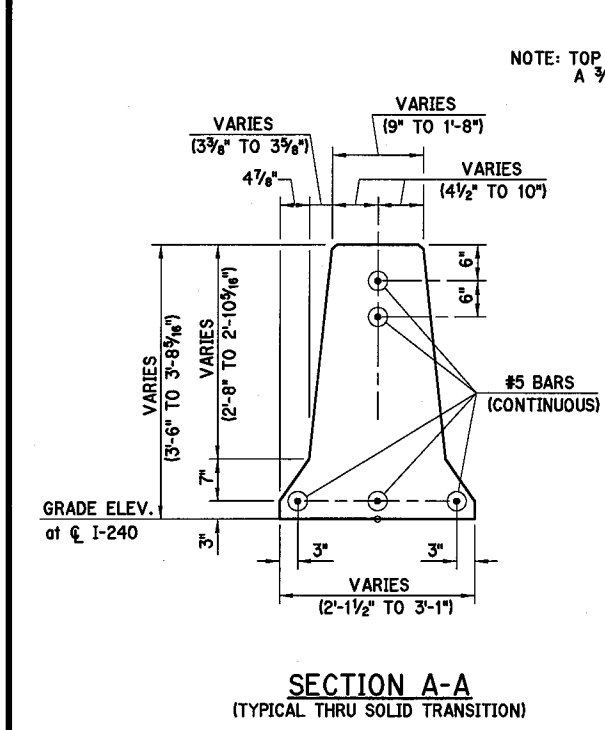
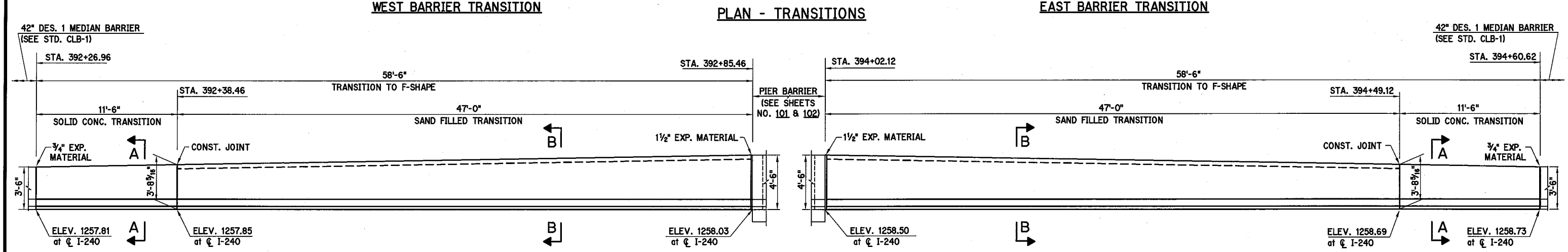
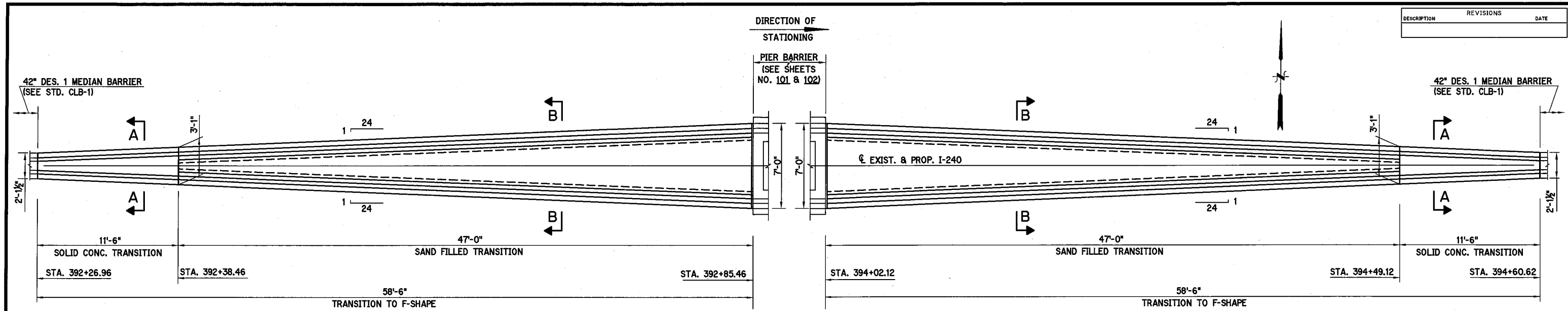
3/4" PREMOLDED EXPANSION MATERIAL

DETAIL OF EXPANSION JOINTS
(NOTE: CLEAR ALL REINFORCING STEEL 2" FROM JOINTS.)

OKLAHOMA COUNTY

SHOULDER BARRIER TRANSITION
DETAILS
I-240 & SANTA FE AVE.
State Job No. 09032120 Sheet No. 99

Design	
Drawn	
Checked	
Approved	
Squad	POE



QUANTITIES		
ITEM	UNIT	TOTAL
* CLASS A CONCRETE	C.Y.	32.00

* NOTE: THE COST OF REINFORCING STEEL, SAND BACKFILL, PREMOLDED EXPANSION MATERIAL AND ALL OTHER MATERIALS, LABOR AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SHOWN SHALL BE INCLUDED IN THE PRICE BID PER C.Y. OF "CLASS A CONCRETE".

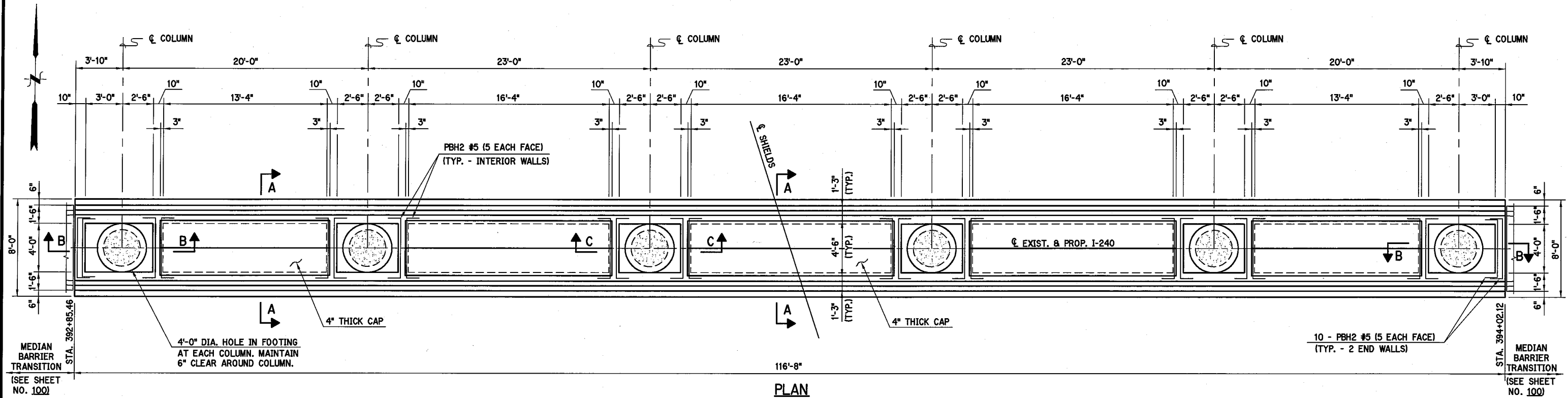
NOTE: FOR GENERAL NOTES AND ADDITIONAL INFORMATION, REFER TO STD. CLB-1-2.

Design		
Drawn		
Checked		
Approved		
Squad	POE	

MEDIAN BARRIER TRANSITION DETAILS
I-240 & SHIELDS BLVD.

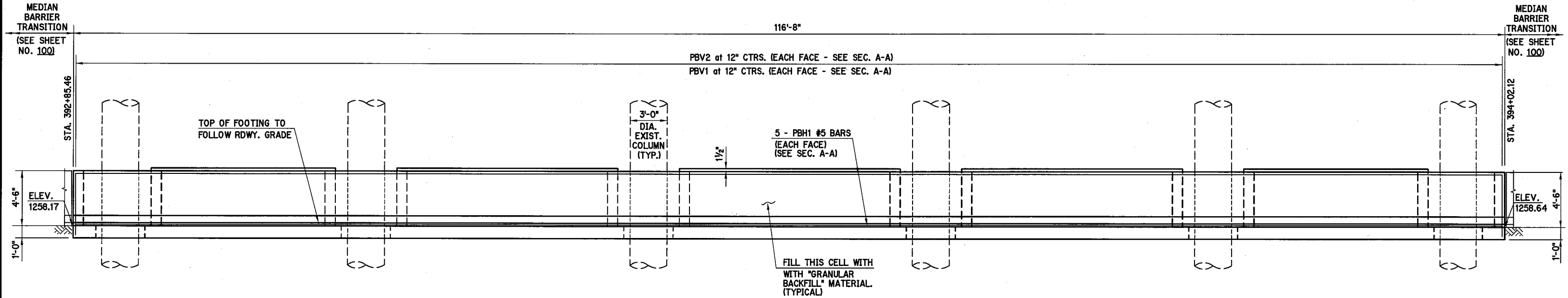
State Job No. 09032120 Sheet No. 100

DESCRIPTION	REVISIONS
DATE	



PLAN

NOTE: FOR SECTIONS A-A, B-B, C-C
SEE SHEET NO. 102



ELEVATION

QUANTITIES		
ITEM	UNIT	TOTAL
GRANULAR BACKFILL	C.Y.	50
CLASS A CONCRETE	C.Y.	76.70
REINFORCING STEEL	LB.	12,420

* NOTE: THE COST OF ANY EXCAVATION NECESSARY TO CONSTRUCT THE PIER BARRIER AND ALL OTHER LABOR, MATERIALS AND INCIDENTALS NEEDED TO COMPLETE THE WORK AS SHOWN SHALL BE INCLUDED IN THE PRICE BID PER C.Y. OF "CLASS A CONCRETE".

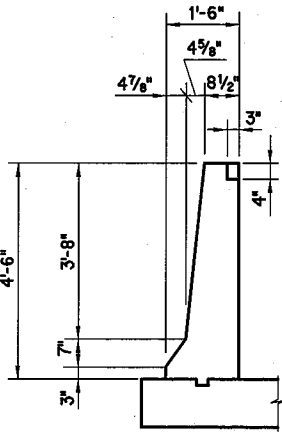
Design	
Drawn	
Checked	
Approved	
Squad	POE

PIER BARRIER DETAILS
I-240 & SHIELDS BLVD.
(SHEET 1 OF 2)

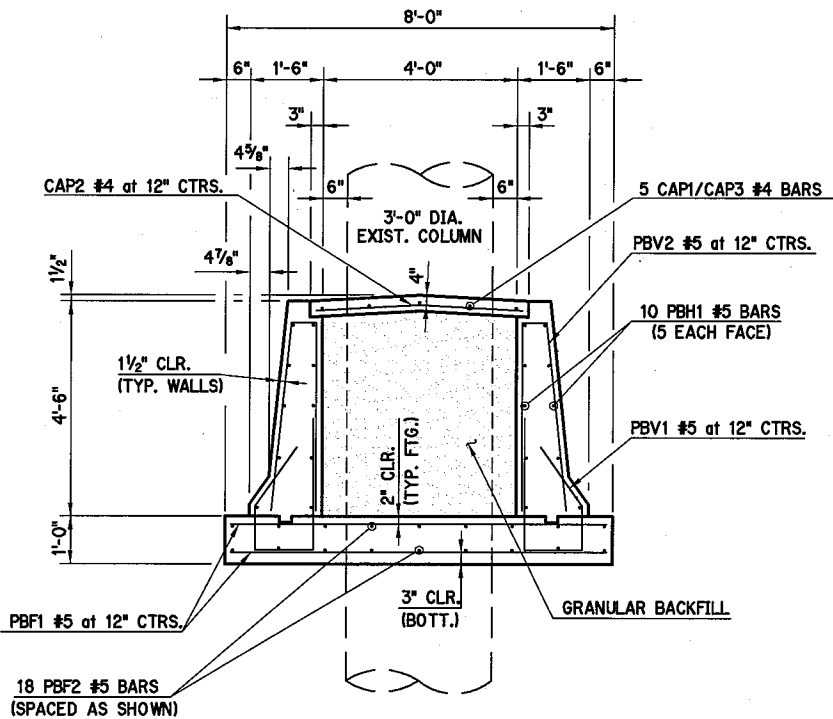
State Job No. 09032(20) Sheet No. 101

PIER BARRIER BAR LIST					
MARK	NO.	SIZE	FORM	SPACING	LENGTH
CAP1	10	#4	STR.	EQUAL	13'-6"
CAP2	79	#4	STR.	12"	4'-2"
CAP3	15	#4	STR.	EQUAL	16'-6"
PBF1	234	#5	STR.	12"	7'-8"
PBF2	18	#5	STR.	EQUAL	118'-4"
PBH1	20	#5	STR.	EQUAL	118'-4"
PBH2	120	#5	BNT.	EQUAL	6'-11"
PBV1	234	#5	BNT.	12"	6'-5"
PBV2	234	#5	BNT.	12"	8'-6"
PBV3	108	#5	BNT.	12"	5'-9"
PBV4	60	#5	BNT.	12"	3'-7"

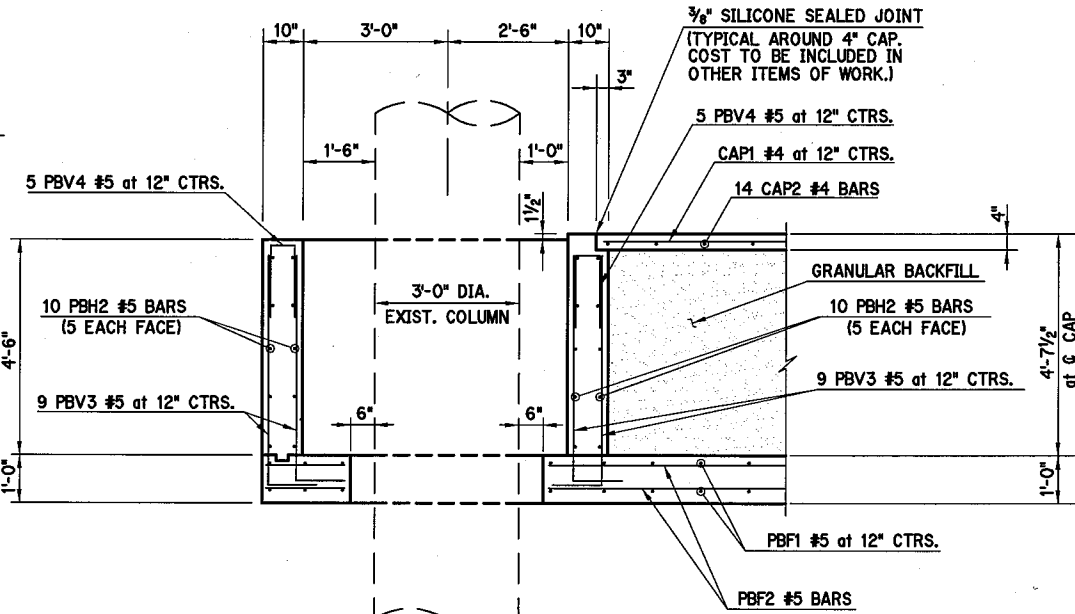
- ① FABRICATE BARS TO ACCOUNT FOR THE 4'-6" DIAMETER HOLES AROUND PIER COLUMNS.
- ② LENGTH SHOWN INCLUDES LAP (STAGGER ALL LAPS)
PBF2 = 1 at 2'-0" (AS REQUIRED)
PBH1 = 1 at 2'-0"



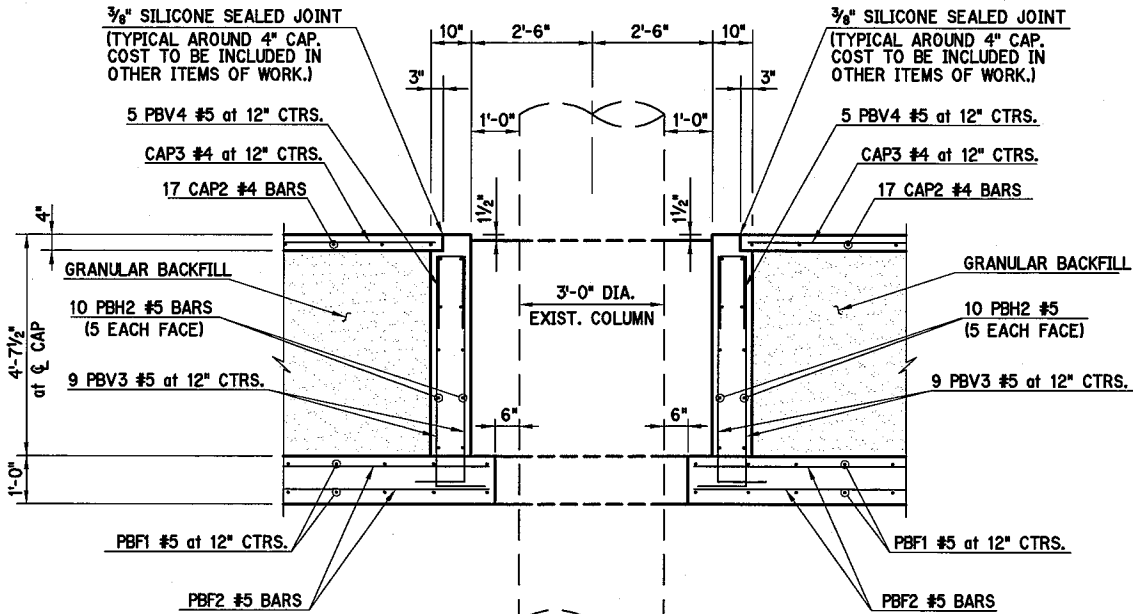
BARRIER WALL
DIMENSIONS



SECTION A-A



SECTION B-B



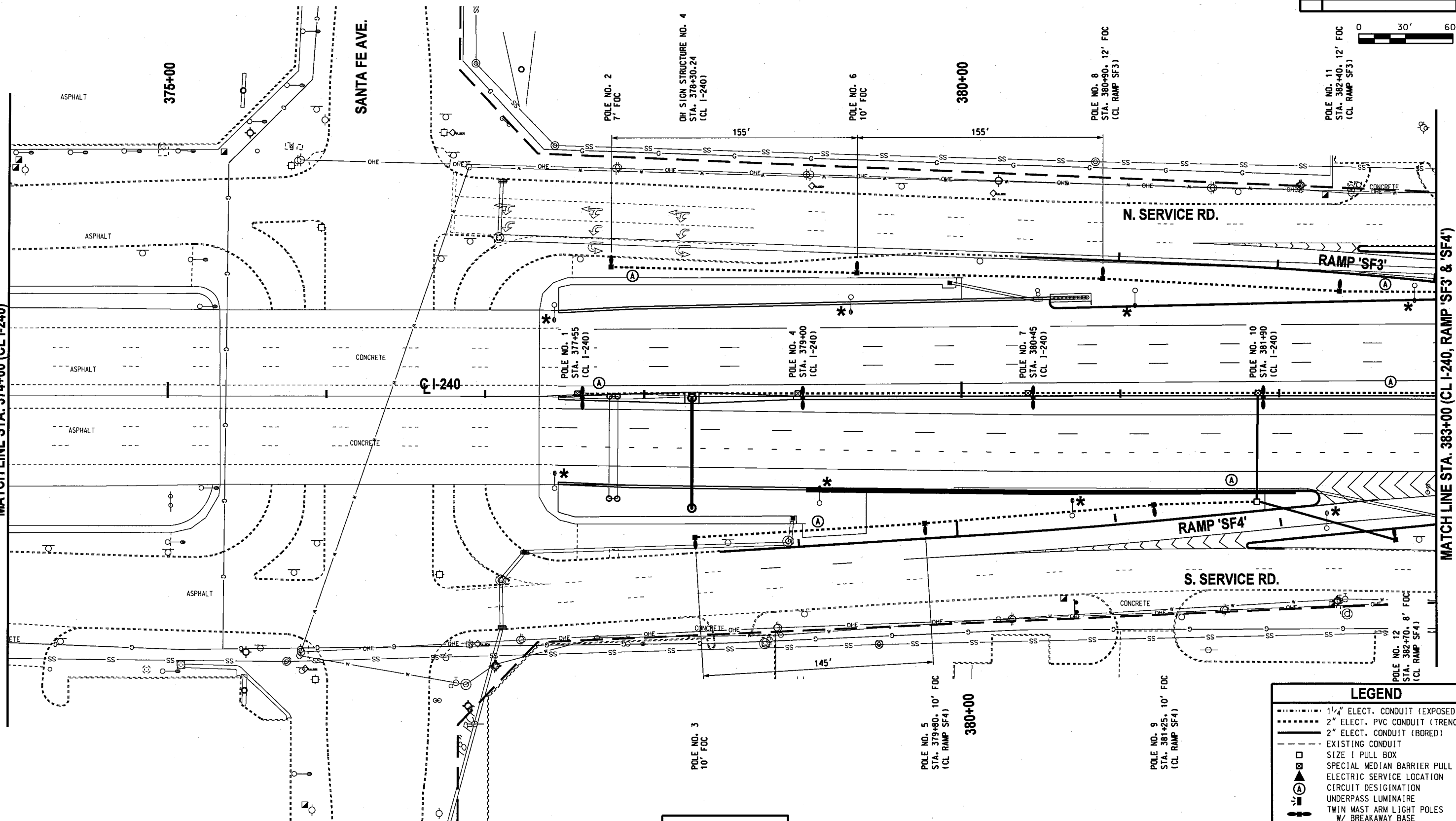
SECTION C-C

Design	
Drawn	
Checked	
Approved	
Squad	POE

PIER BARRIER DETAILS
I-240 & SHIELDS BLVD.
(SHEET 2 OF 2)

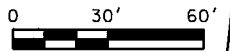
State Job No. 09032120 Sheet No. 102

MATCH LINE STA. 374+00 (CL I-240)



* EXISTING LIGHT POLE TO BE REMOVED

REVISIONS		
NO.	DESCRIPTION	DATE

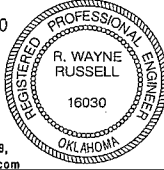


LEGEND	
---	1 1/2" ELECT. CONDUIT (EXPOSED)
---	2" ELECT. PVC CONDUIT (TRENCHED)
---	2" ELECT. CONDUIT (BORED)
---	EXISTING CONDUIT
□	SIZE 1 PULL BOX
▲	SPECIAL MEDIAN BARRIER PULL BOX
⬢	ELECTRIC SERVICE LOCATION
⊙	CIRCUIT DESIGNATION
⬢	UNDERPASS LUMINAIRE
⬢	TWIN MAST ARM LIGHT POLES W/ BREAKAWAY BASE
⬢	TWIN MAST ARM LIGHT POLES W/O BREAKAWAY BASE
⬢	LIGHT POLE W/ BREAKAWAY BASE
⬢	LIGHT POLE W/O BREAKAWAY BASE

R. Wayne Russell
R. WAYNE RUSSELL, P.E. # 16030
C.A. # 1160, RENEWAL 06-30-17

11-2-15
DATE

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Design	RWR	11-02-15
Drawn	CCC	11-02-15



LIGHTING PLAN
STA. 374+00 TO 383+00 (CL I-240)
(1 OF 3)

State Job No. 09032(20) Sheet No. 103



State Job No. 09032(20) Sheet No. 104



11-2-15
DATE

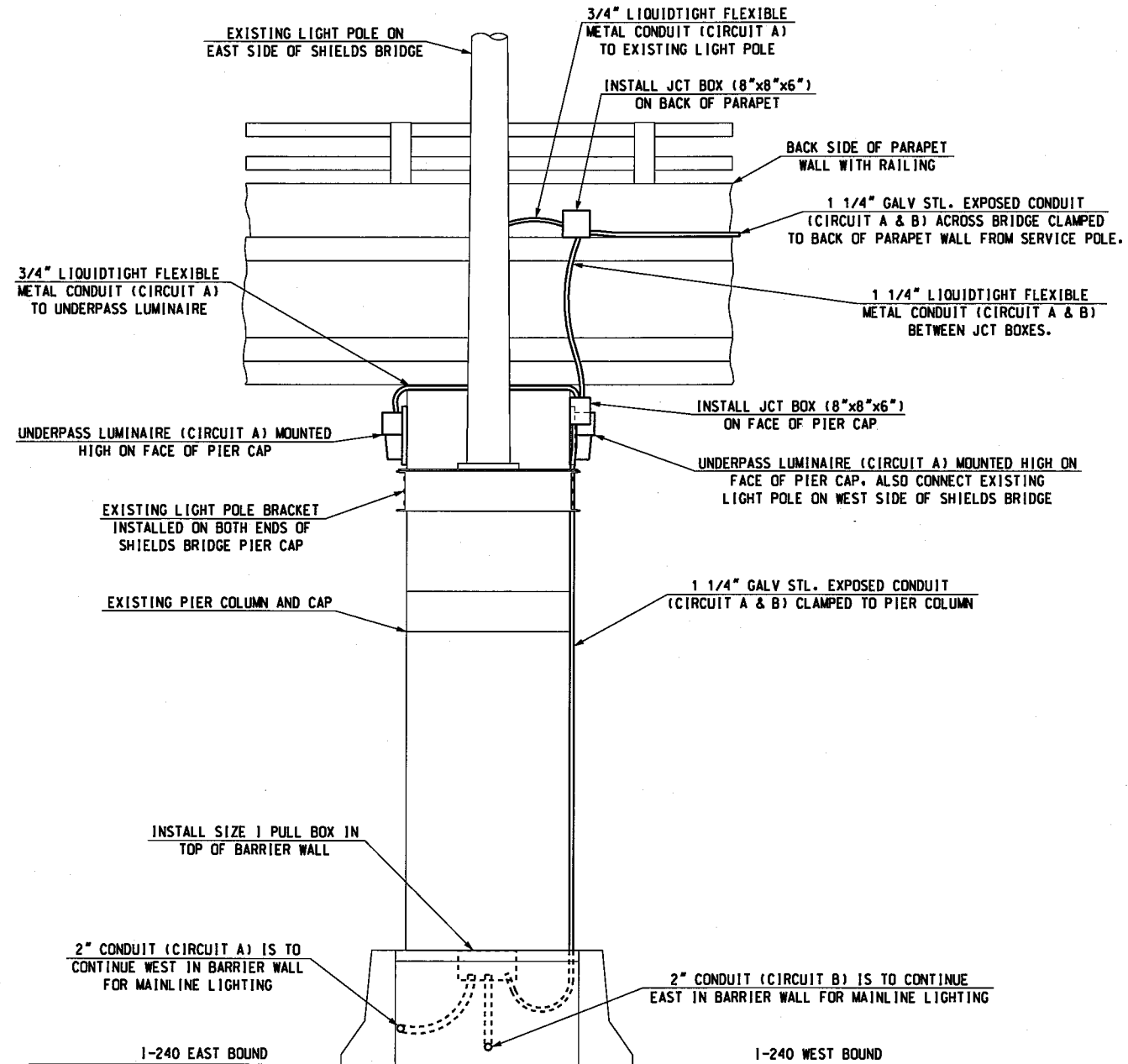
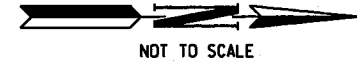


TEC
A CLEAR DIRECTION

State Job No. 09032(20) Sheet No. 105

OKLAHOMA COUNTY

REVISIONS		
NO.	DESCRIPTION	DATE



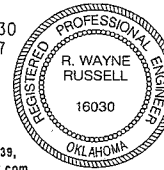
SEE "LIGHTING PLAN" SHEETS
FOR MORE INFORMATION.

I-02-15 G:\00\Projects\1-2457 I-240-I-35 Phase I\CAD\PHASE I\UNDERPASS DETAIL.dgn

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11-2-15
DATE

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Design	RWR	11-02-15
Drawn	SB	11-02-15



**UNDERPASS LUMINAIRE DETAIL
I-240 & SHIELDS BLVD. BRIDGE**

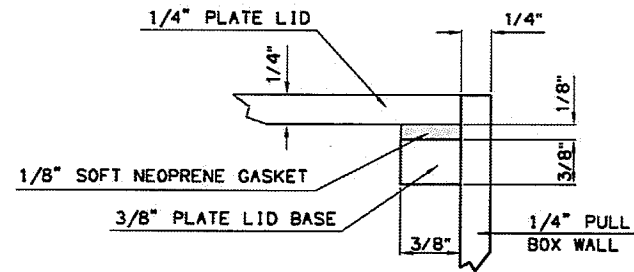
State Job No. 09032(20) Sheet No. 106

OKLAHOMA COUNTY

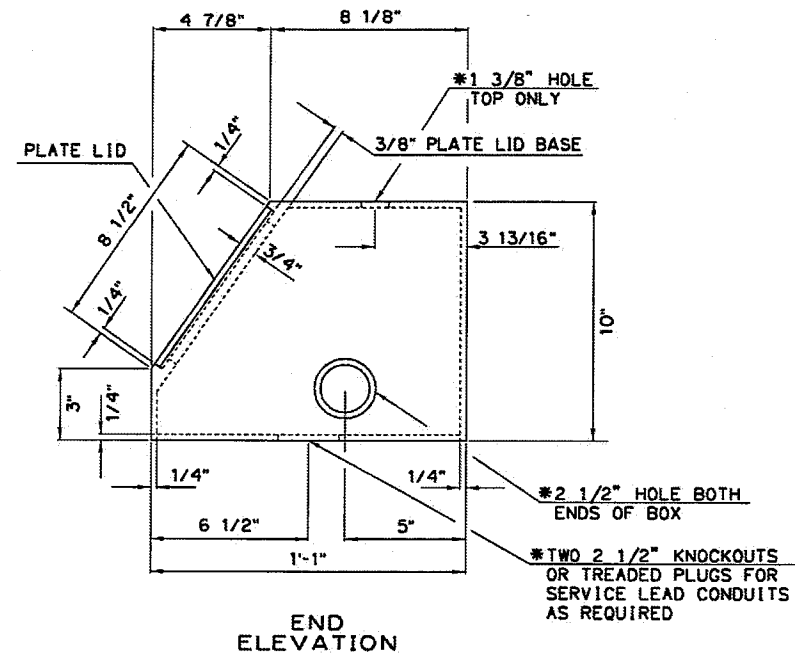
CONSTRUCTION NOTES:

ALL STEEL TO BE 1/4" ASTM A-36
UNLESS NOTED HOT DIP GALV. TO
A.A.S.H.T.O. M 111 M & M 111-03;
ASTM A 123 & A 123M-01a

ALL SHOP & FIELD WELDING WILL BE
CONTINUOUS AND SHALL CONFORM TO ODOT
STANDARD SPECIFICATIONS SEC. 724.03

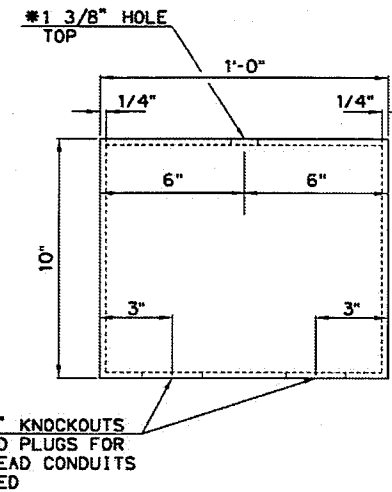


SECTION A-A

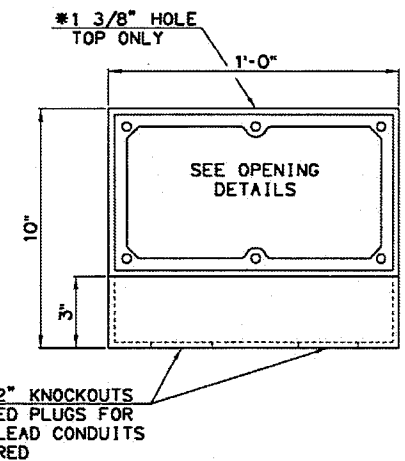


END
ELEVATION

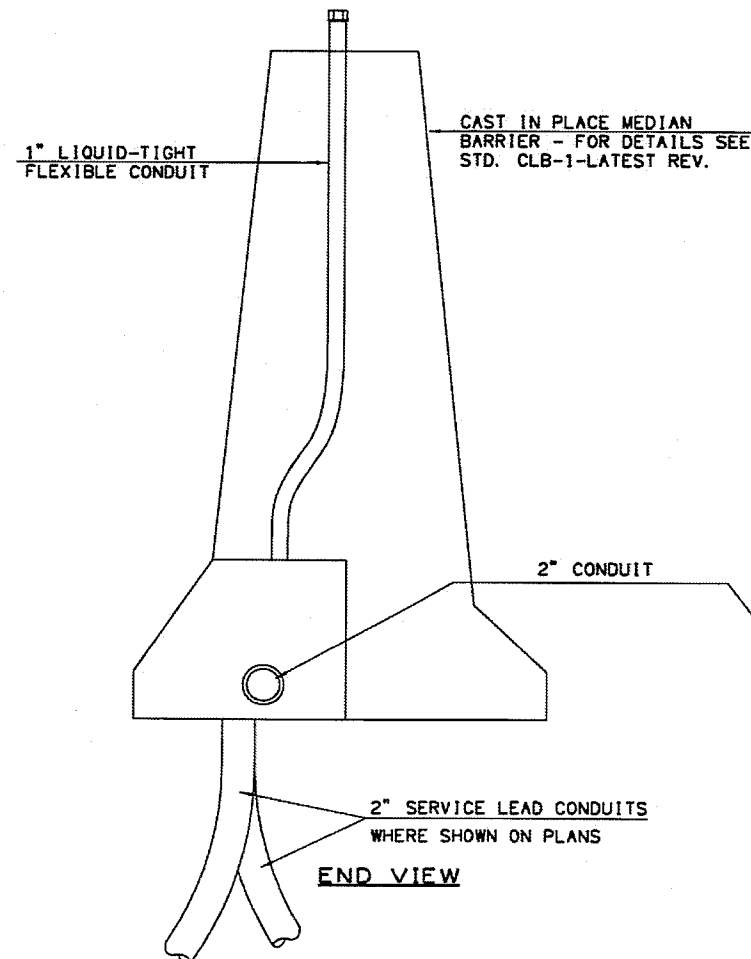
*HOLES NOT NEEDED AT A PARTICULAR LOCATION
SHALL NOT BE KNOCKED OUT OR SHALL BE
PLUGGED WITH A TREADED GALVANIZED PLUG.
(SEE PLAN SHEETS)



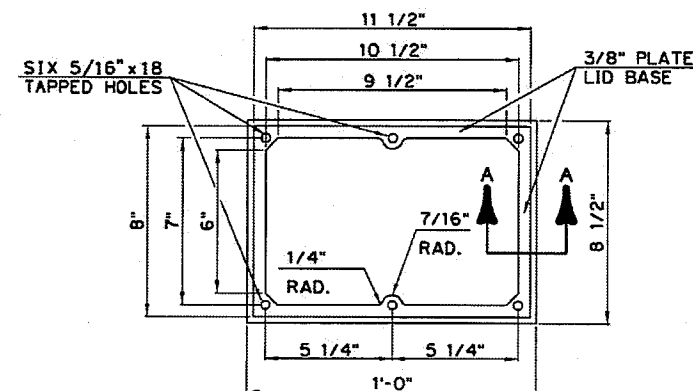
BACK
ELEVATION



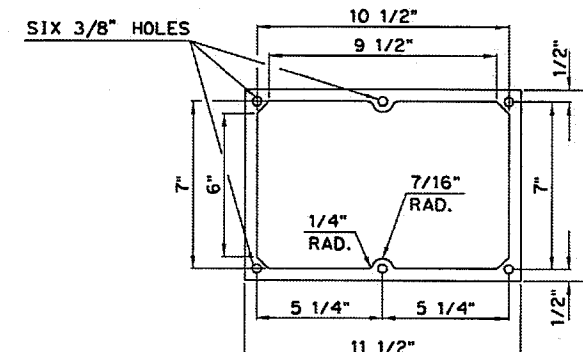
FRONT
ELEVATION



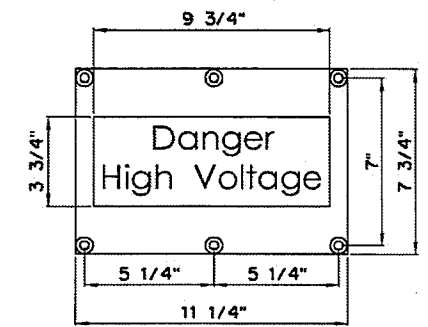
END VIEW



OPENING
DETAILS



1/8" SOFT NEOPRENE
GASKET DETAIL



**1/4" PLATE LID
DETAIL

**REQUIRES:
SIX 5/16" FLAT HEAD SCREWS (SOCKET
ALLEN STAINLESS STEEL)
SIX 7/16" HOLES C.S. FOR 5/16" FLAT
HEAD SCREWS
YELLOW DECAL WITH BLACK LETTERING

NOTE: AS AN OPTION THE CONTRACTOR MAY SUBMIT FOR
APPROVAL A MEDIAN BARRIER PULL BOX WITH
SIMILAR DIMENSIONS MADE OF POLYMER CONCRETE.

BASIS OF PAYMENT		
ITEM NO.	ITEM	UNIT
① 803	(PL) PULL BOX	E.A.

① ALL COST OF MATERIALS, LABOR, AND
INCIDENTALS NECESSARY TO COMPLETE
THE WORK AS SHOWN SHALL BE
INCLUDED IN THE UNIT PRICE BID.

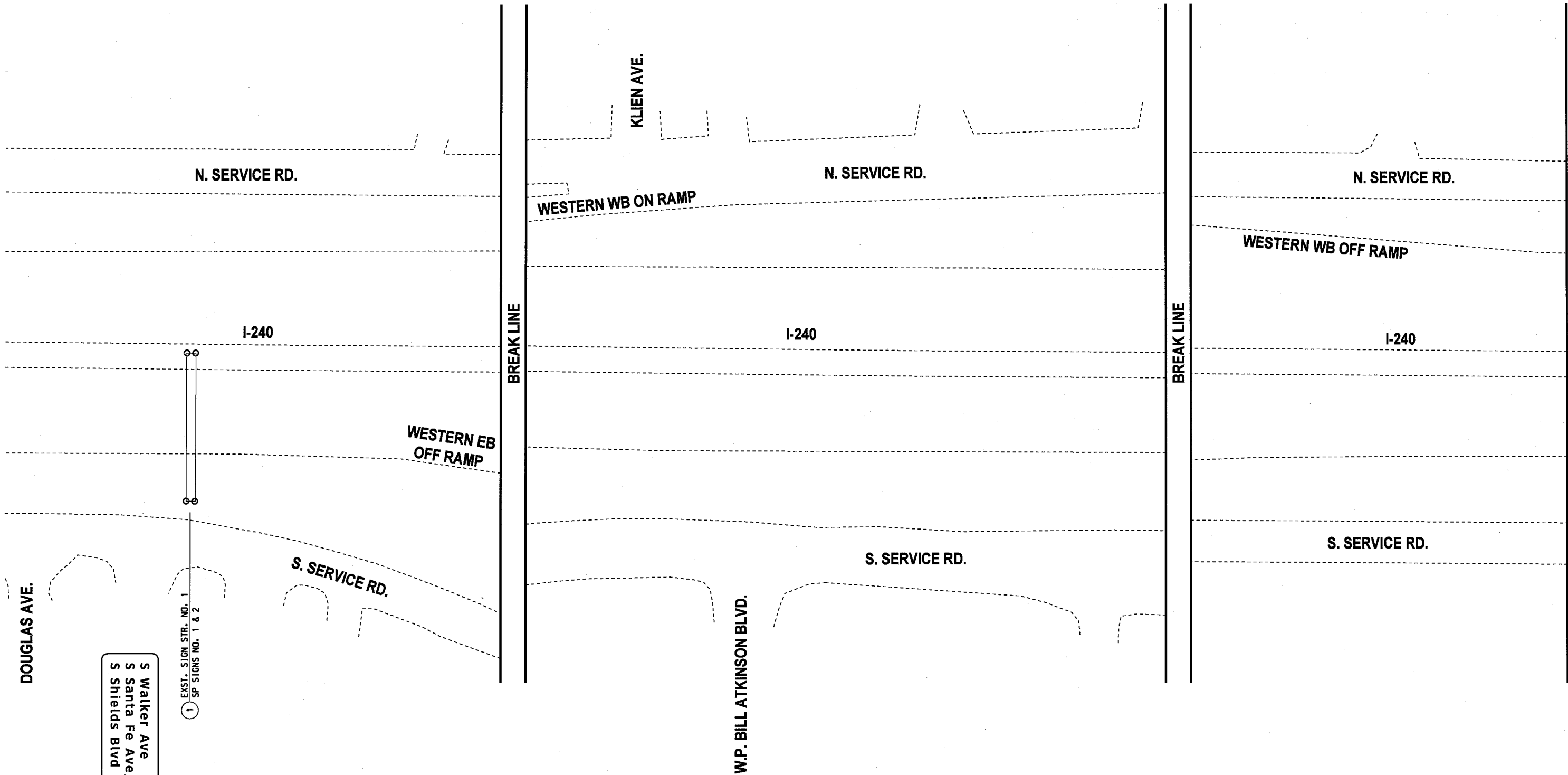
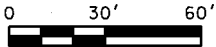
Design	
Drawn	
Checked	
Approved	
Squad	POE

SPECIAL MEDIAN BARRIER
PULL BOX DETAILS

State Job No. 09032(20) Sheet No. 107

11-02-15 G:\00Projects\11-2457 I-240-1-35 Phase 1\CAD\PHASE 1\STRIPES 1.dgn

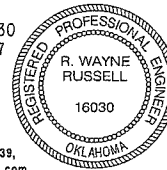
REVISIONS		
NO.	DESCRIPTION	DATE



R. Wayne Russell
R. WAYNE RUSSELL, P.E. # 16030
C.A. # 1160, RENEWAL 06-30-17

11-2-15
DATE

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Design	RWR	11-02-15
Drawn	CCC	11-02-15

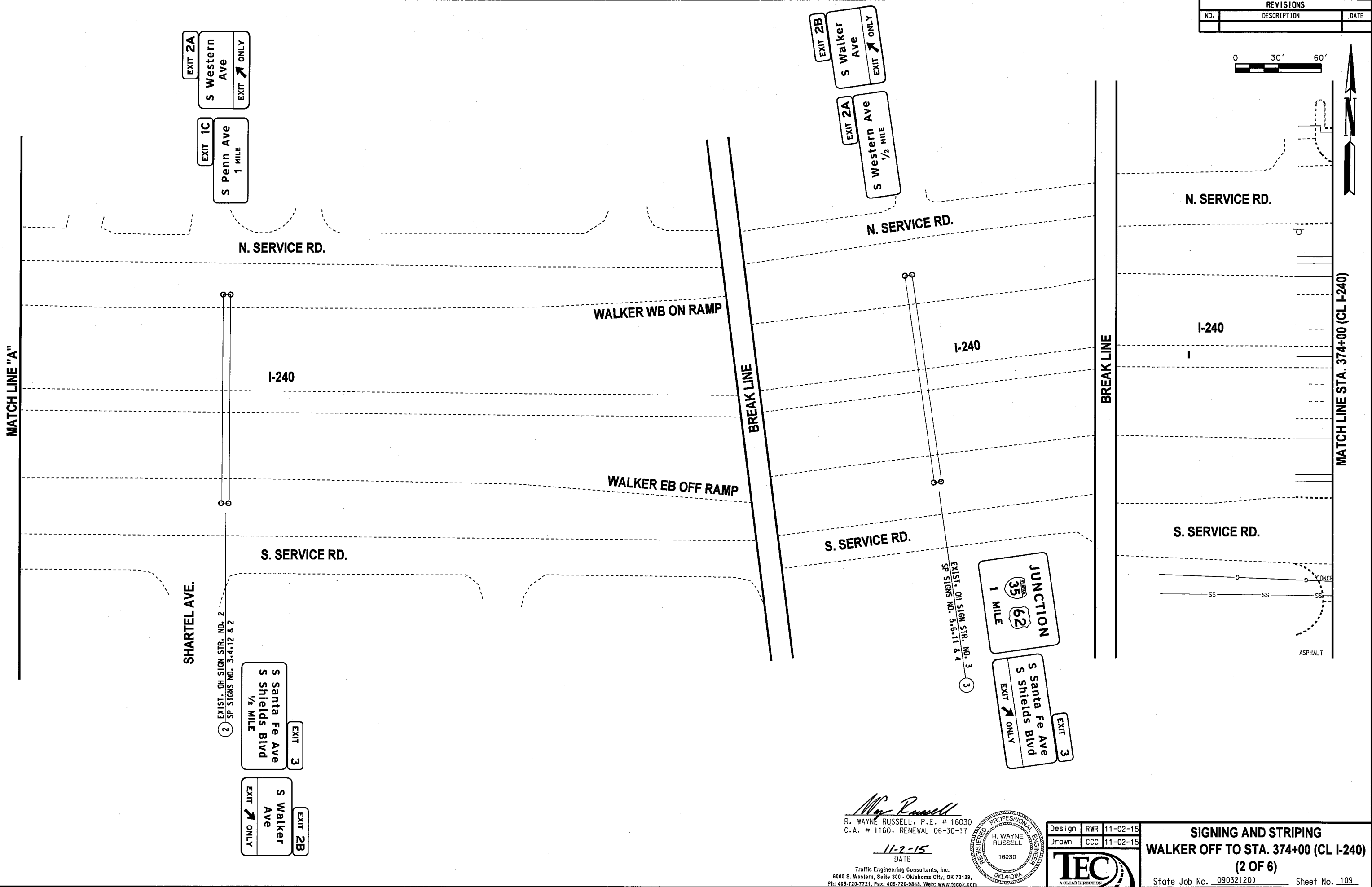


**SIGNING AND STRIPING
WESTERN OFF TO WALKER AVE.**
(1 OF 6)

State Job No. 09032(20) Sheet No. 108

OKLAHOMA COUNTY

11-02-15 G:\00Project\11-2457 I-240-1-35 Phase NCAD\PHASE NSTRPE 2.dgn



11-02-15 G:\Projects\11-2457 I-240-I-35 Phase I\CAD\PHASE I\STRIPING 3.dgn

MATCH LINE STA. 374+00 (CL I-240)

MULTI. POLY. STRIPING SUM. TABLE		
DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI. POLY.) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) 6" WHITE	L.F.	1915
TRAFFIC STRIPE (MULTI. POLY.) 6" YELLOW	L.F.	1110
TRAFFIC STRIPE (MULTI. POLY.) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) 8" WHITE	L.F.	690
TRAFFIC STRIPE (MULTI. POLY.) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) 12" WHITE	L.F.	255
TRAFFIC STRIPE (MULTI. POLY.) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) 24" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI. POLY.) WORDS	EA.	0
TRAFFIC STRIPE (MULTI. POLY.) SYMBOLS	EA.	0

SANTA FE AVE.

CL I-240

S. SERVICE RD.

N. SERVICE RD.

RAMP 'SF3'

RAMP 'SF4'

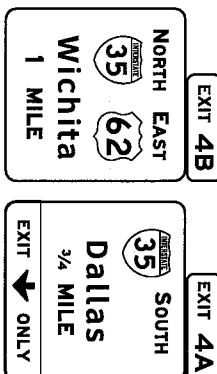
MATCH LINE STA. 383+00 (CL I-240, RAMP 'SF3' & 'SF4')

REVISIONS		
NO.	DESCRIPTION	DATE

0 30' 60'



OH SIGN STR. NO. 4
SP SIGNS NO. 7 & 8
STA. 378+30.24 (CL 240)

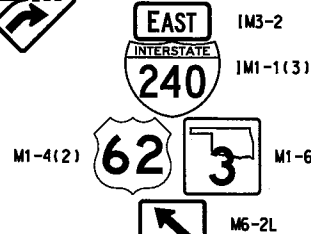


5 ROUTE ASSEMBLY NO. 1
STA. 380+73.133' RT.
(CL 240)



12" WHITE CHEVRONS
AT 10' C/C

6 INSTALL W4-3E(R)
STA. 381+25.62' RT.

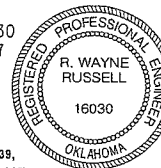


ROUTE ASSEMBLY NO. 1
16.19 SO. FT.

R. Wayne Russell
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C.A. # 1160, RENEWAL 06-30-17

11-2-15
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Design RWR 11-02-15
Drawn CCC 11-02-15



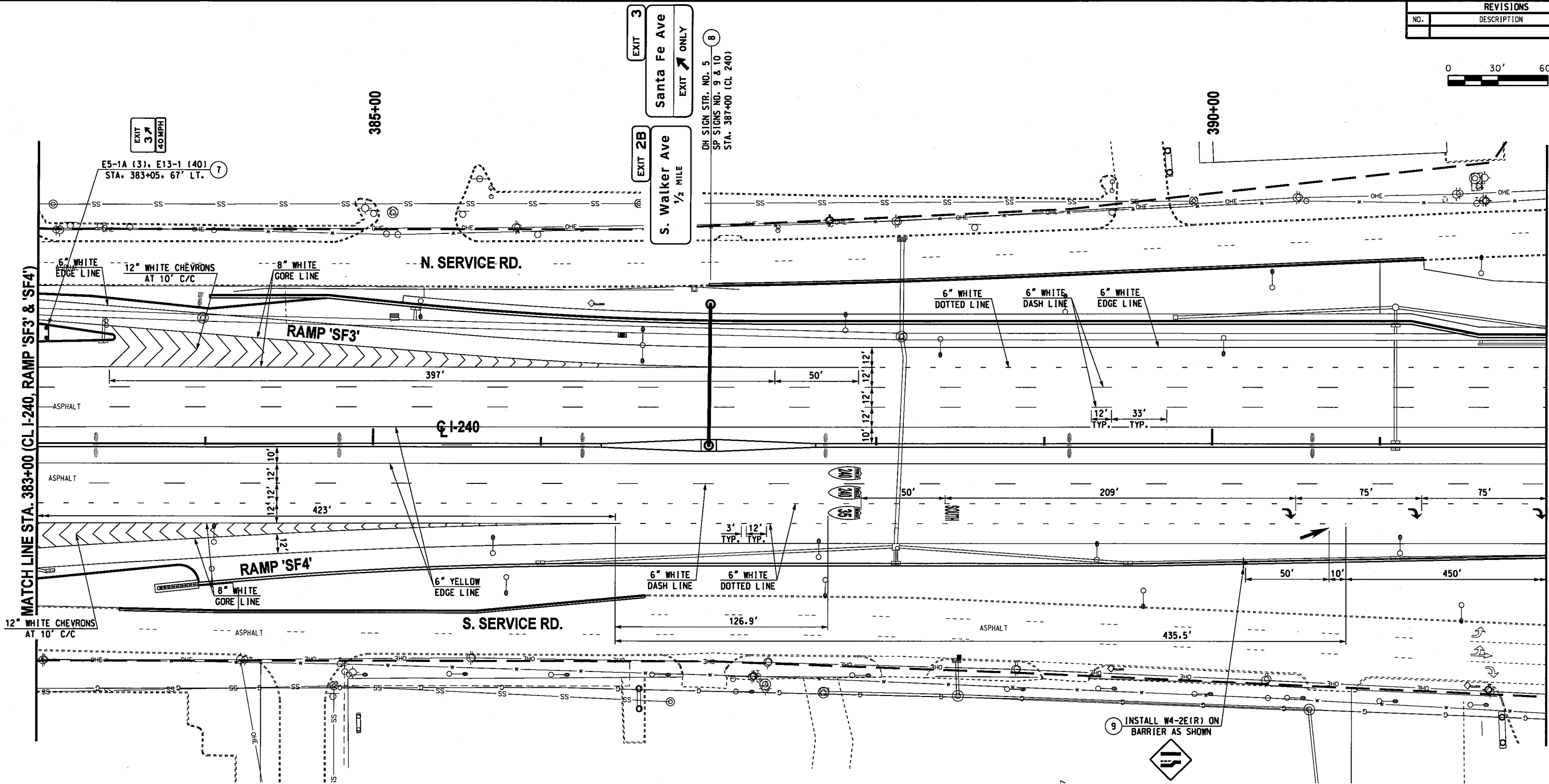
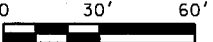
SIGNING AND STRIPING
STA. 374+00 TO 383+00 (CL I-240)
(3 OF 6)

State Job No. 09032(20)

Sheet No. 110

OKLAHOMA COUNTY

REVISIONS		
NO.	DESCRIPTION	DATE



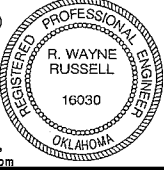
THERMO. PLASTIC STRIPING SUM. TABLE

DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (PLASTIC) 4" WHITE	L.F.	0
TRAFFIC STRIPE (PLASTIC) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (PLASTIC) 6" WHITE	L.F.	2960
TRAFFIC STRIPE (PLASTIC) 6" YELLOW	L.F.	1800
TRAFFIC STRIPE (PLASTIC) 6" BLACK	L.F.	0
TRAFFIC STRIPE (PLASTIC) 8" WHITE	L.F.	1095
TRAFFIC STRIPE (PLASTIC) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (PLASTIC) 12" WHITE	L.F.	635
TRAFFIC STRIPE (PLASTIC) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (PLASTIC) 24" WHITE	L.F.	0
TRAFFIC STRIPE (PLASTIC) ARROWS	EA.	4
TRAFFIC STRIPE (PLASTIC) WORDS	EA.	1
TRAFFIC STRIPE (PLASTIC) SYMBOLS	EA.	3

R. Wayne Russell
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 C.A. # 1160, RENEWAL 06-30-17

11-2-15
 DATE

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Design	RWR	11-02-15
Drawn	CCC	11-02-15



SIGNING AND STRIPING
STA. 383+00 TO 392+00 (CL I-240)
(4 OF 6)

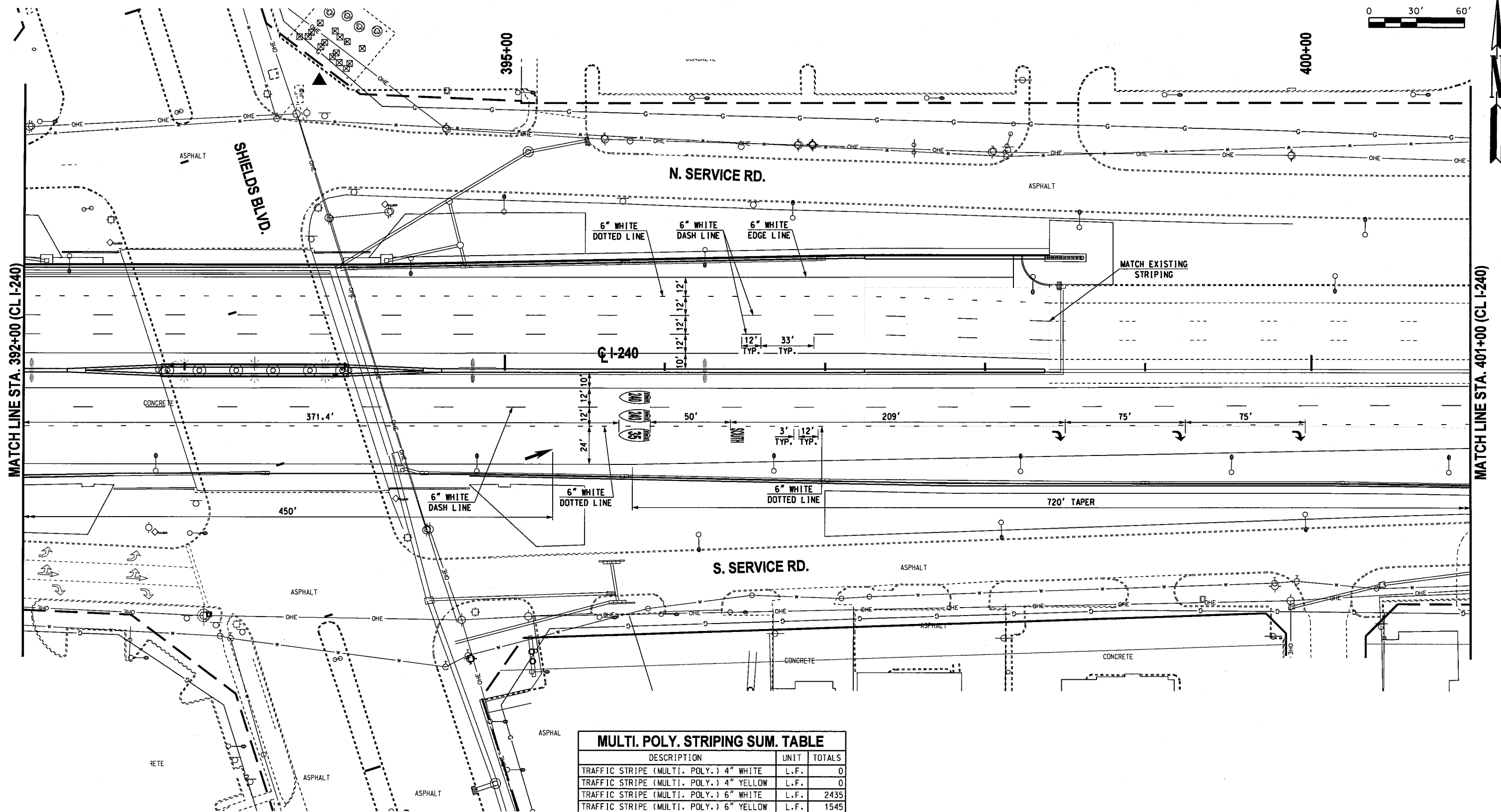
State Job No. 09032(20)

Sheet No. 111

OKLAHOMA COUNTY

REVISIONS		
NO.	DESCRIPTION	DATE

0 30' 60'



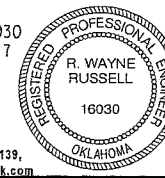
MULTI. POLY. STRIPING SUM. TABLE

DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI. POLY.) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) 6" WHITE	L.F.	2435
TRAFFIC STRIPE (MULTI. POLY.) 6" YELLOW	L.F.	1545
TRAFFIC STRIPE (MULTI. POLY.) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) 8" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) 12" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) 24" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) ARROWS	EA.	4
TRAFFIC STRIPE (MULTI. POLY.) WORDS	EA.	1
TRAFFIC STRIPE (MULTI. POLY.) SYMBOLS	EA.	3

R. Wayne Russell
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11-2-15
DATE

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Design	RWR	11-02-15
Drawn	CCC	11-02-15



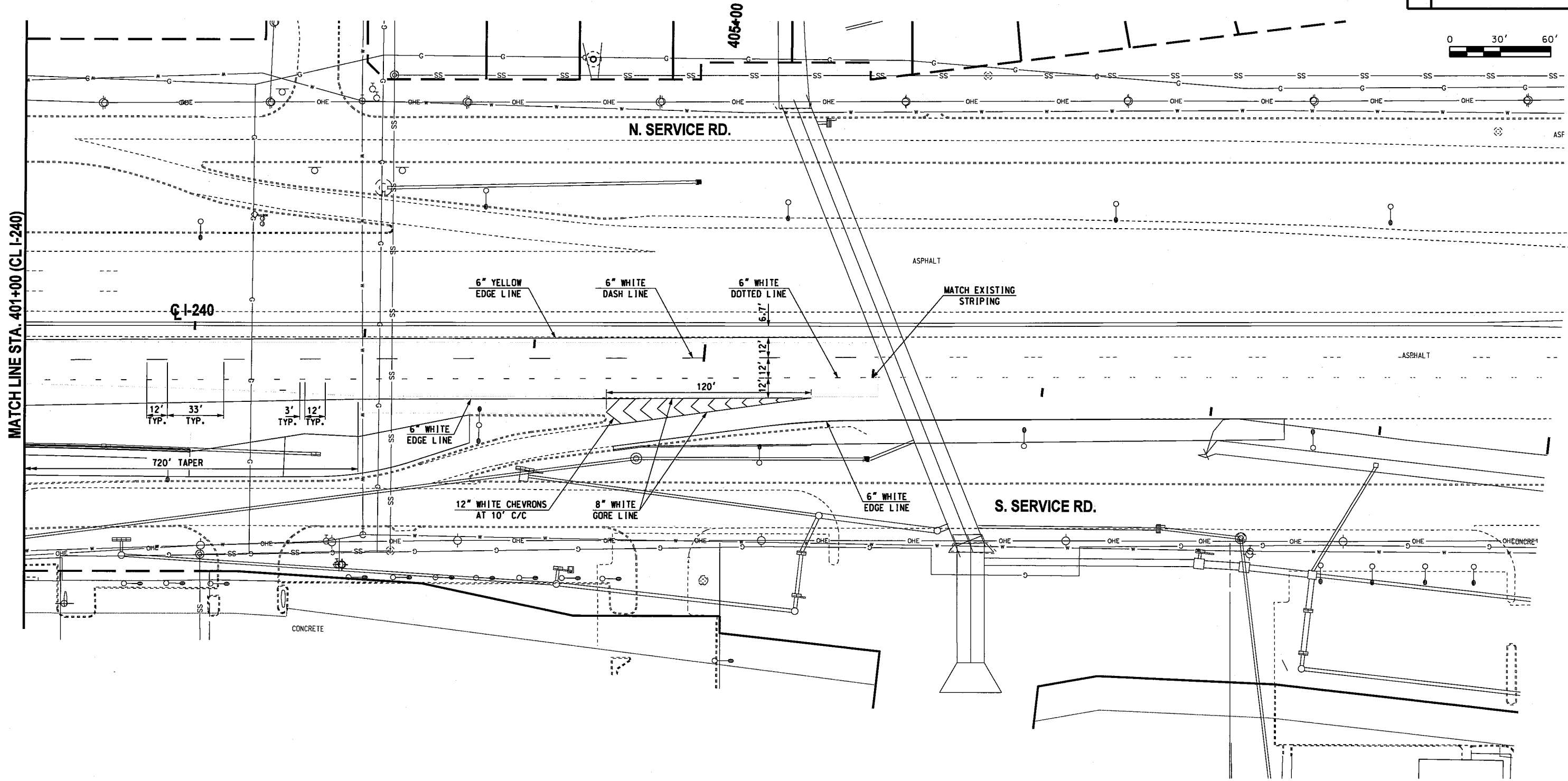
SIGNING AND STRIPING
STA. 392+00 TO 401+00 (CL I-240)
(5 OF 6)

State Job No. 09032(20) Sheet No. 112

OKLAHOMA COUNTY

REVISIONS		
NO.	DESCRIPTION	DATE

0 30' 60'

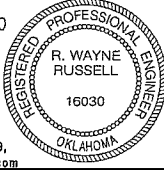


MULTI. POLY. STRIPING SUM. TABLE		
DESCRIPTION	UNIT	TOTALS
TRAFFIC STRIPE (MULTI. POLY.) 4" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) 4" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) 6" WHITE	L.F.	635
TRAFFIC STRIPE (MULTI. POLY.) 6" YELLOW	L.F.	505
TRAFFIC STRIPE (MULTI. POLY.) 6" BLACK	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) 8" WHITE	L.F.	210
TRAFFIC STRIPE (MULTI. POLY.) 8" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) 12" WHITE	L.F.	180
TRAFFIC STRIPE (MULTI. POLY.) 12" YELLOW	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) 24" WHITE	L.F.	0
TRAFFIC STRIPE (MULTI. POLY.) ARROWS	EA.	0
TRAFFIC STRIPE (MULTI. POLY.) WORDS	EA.	0
TRAFFIC STRIPE (MULTI. POLY.) SYMBOLS	EA.	0

R. Wayne Russell
R. WAYNE RUSSELL, P.E. # 16030
C.A. # 1160, RENEWAL 06-30-17

11-2-15
DATE

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Design RWR 11-02-15
Drawn CCC 11-02-15

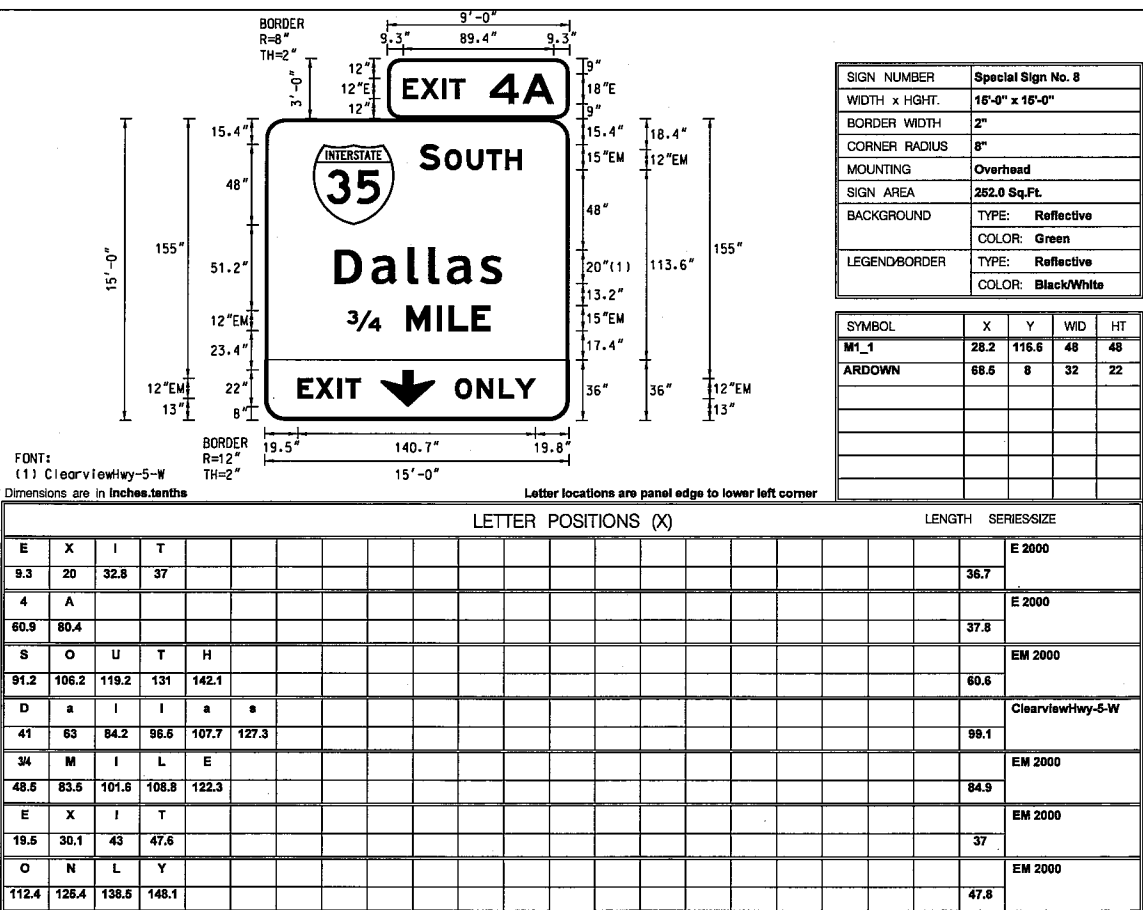
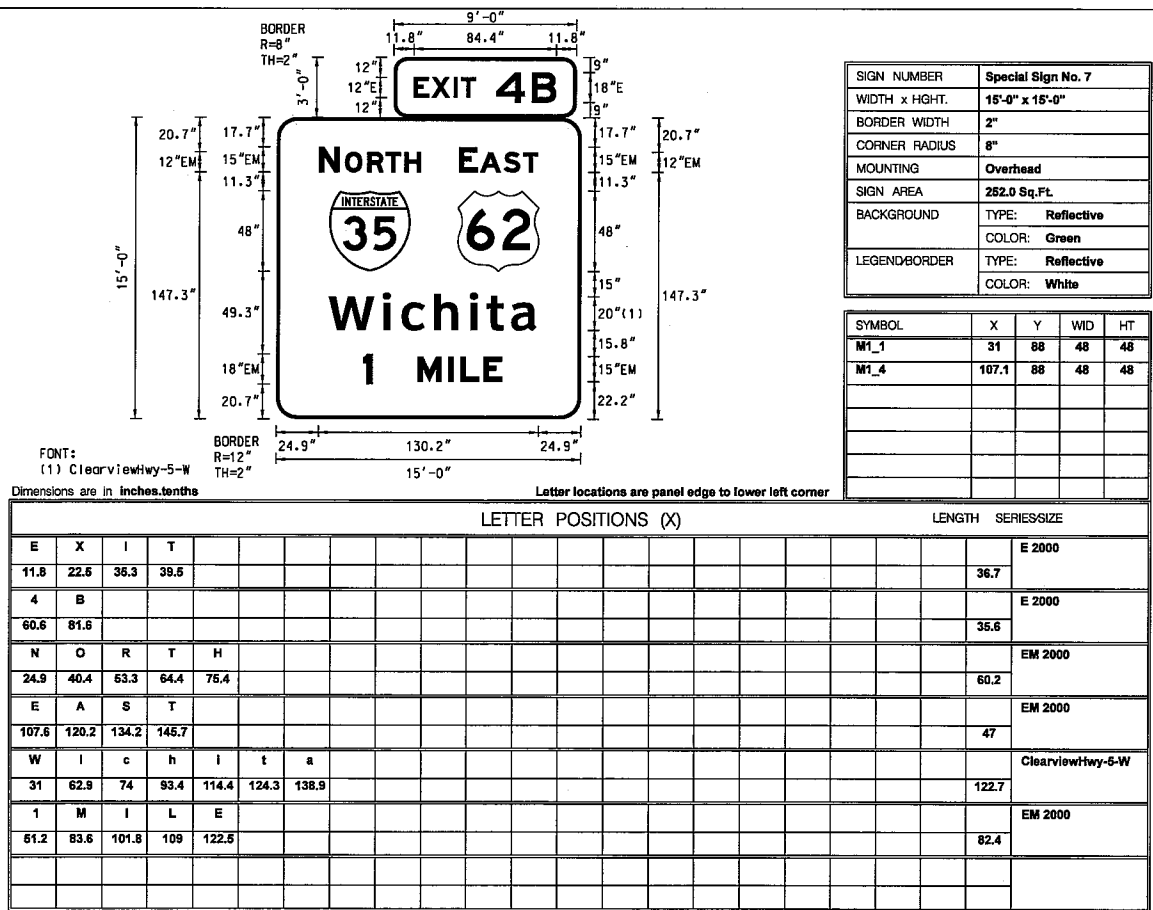
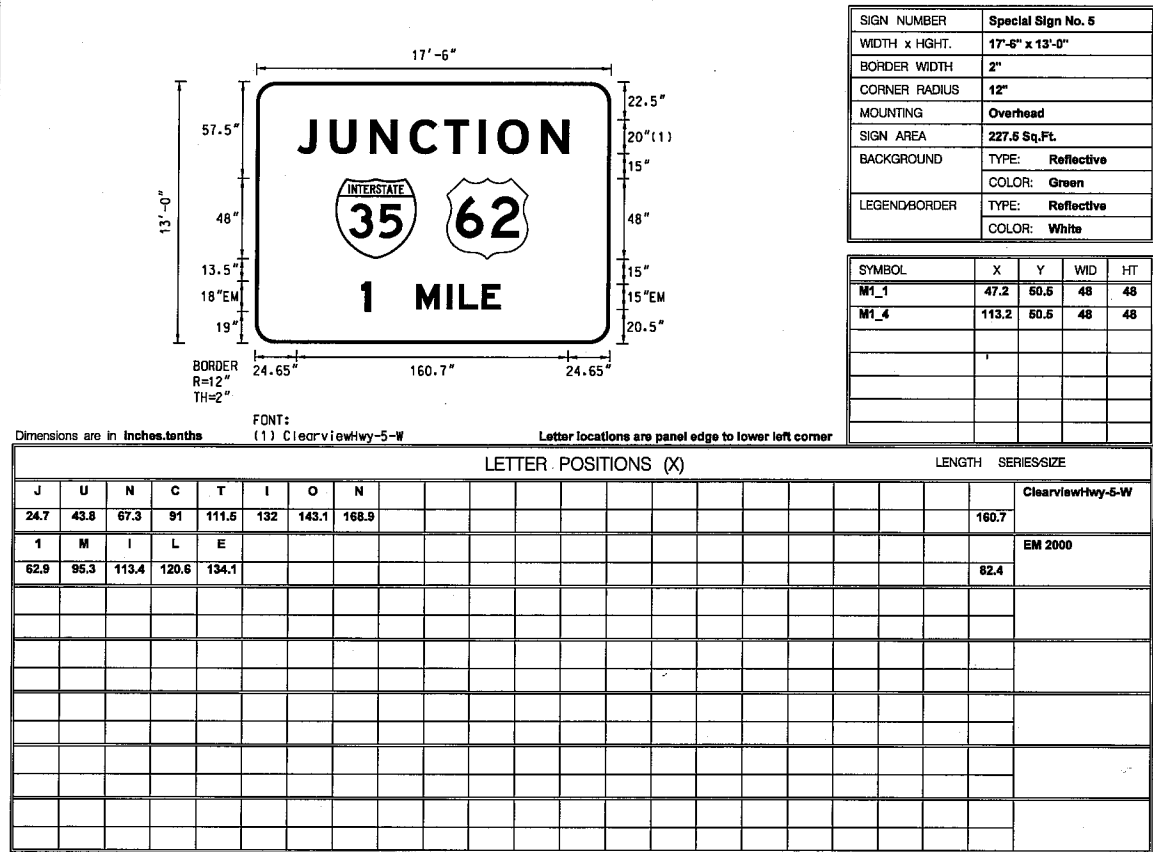


SIGNING AND STRIPING
STA. 401+00 TO 410+00 (CL I-240)
(6 OF 6)

State Job No. 09032(20) Sheet No. 113

OKLAHOMA COUNTY

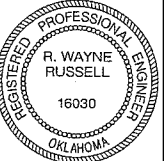
REVISIONS		
NO.	DESCRIPTION	DATE



Way Russell
R. WAYNE RUSSELL, P.E. # 16030
C.A. # 1160, RENEWAL 06-30-17

11-2-15
DATE

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Design	RWR	11-02-15
Drawn	CCC	11-02-15

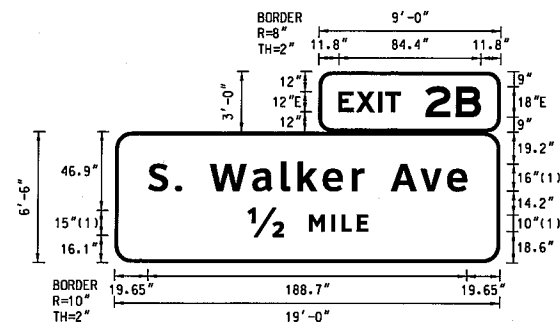


SPECIAL SIGNS
(2 OF 3)

State Job No. 09032(20) Sheet No. 115

OKLAHOMA COUNTY

REVISIONS		
NO.	DESCRIPTION	DATE



SIGN NUMBER	Special Sign No. 9
WIDTH x HIGHT.	19'-0" x 6'-6"
BORDER WIDTH	2"
CORNER RADIUS	6"
MOUNTING	Overhead
SIGN AREA	166.5 Sq.Ft.
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White

Dimensions are in inches.tenths

[illegible]

SIGN NUMBER	Special Sign No. 10
WIDTH x HGT.	18'-0" x 7'-6"
BORDER WIDTH	2"
CORNER RADIUS	8"
MOUNTING	Overhead
SIGN AREA	162.0 Sq.Ft.
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: Black/White

Dimensions are in **Inches.tenths**

[illegible]

SIGN NUMBER	Special Sign No. 11
WIDTH x HIGHT.	19'-6" x 6'-6"
BORDER WIDTH	2"
CORNER RADIUS	8"
MOUNTING	Overhead
SIGN AREA	163.8 Sq.Ft.
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White

Dimensions are in inches.tenths

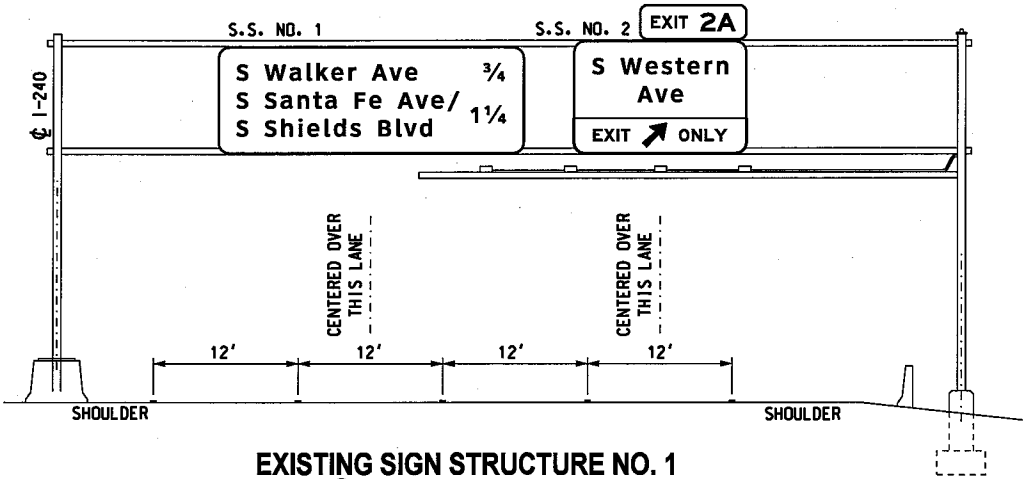
[illegible]

SIGN NUMBER	Special Sign No. 12
WIDTH x HIGHT	16'-0" x 6'-6"
BORDER WIDTH	2"
CORNER RADIUS	8"
MOUNTING	Overhead
SIGN AREA	131.0 Sq.Ft.
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White

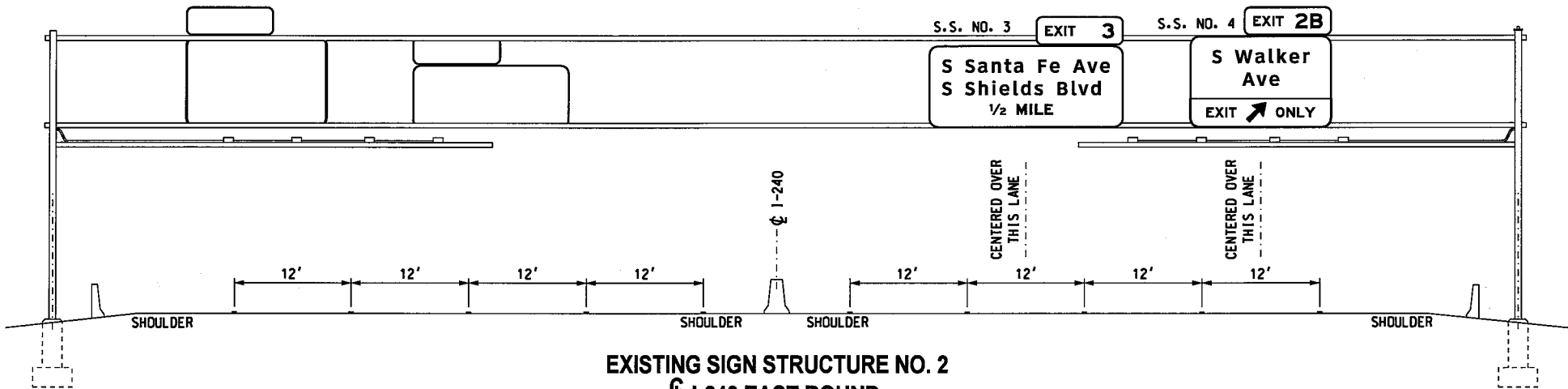
Dimensions are in inches.tenths

[illegible]

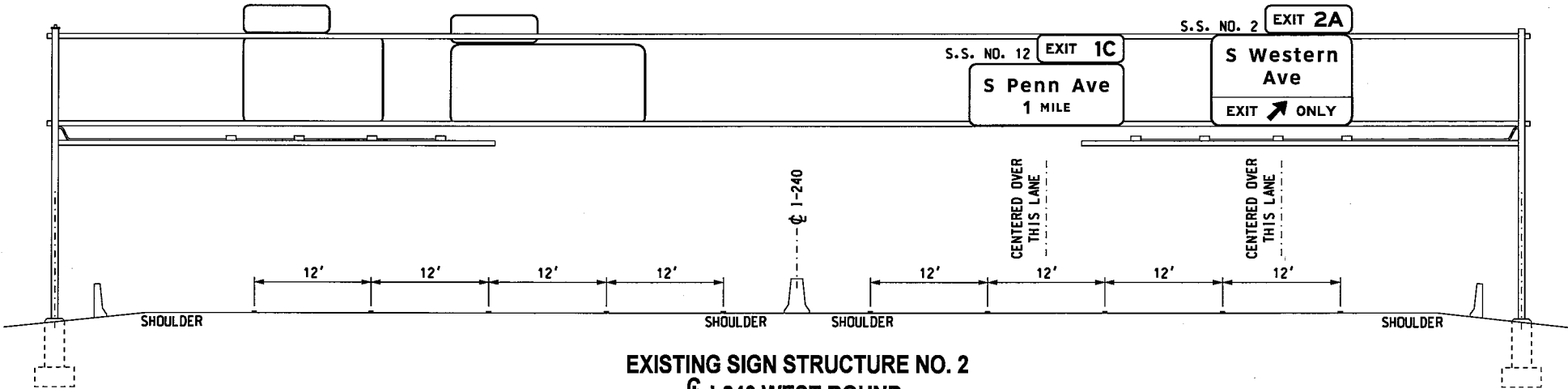
REVISIONS		
NO.	DESCRIPTION	DATE



EXISTING SIGN STRUCTURE NO. 1
 I-240 EAST BOUND
 (394.25 S.F.)



EXISTING SIGN STRUCTURE NO. 2
 I-240 EAST BOUND
 (657.50 S.F.)

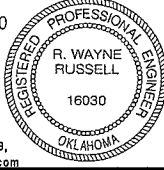


EXISTING SIGN STRUCTURE NO. 2
 I-240 WEST BOUND
 (657.50 S.F.)

R. Wayne Russell
 R. WAYNE RUSSELL, P.E. # 16030
 C.A. # 1160, RENEWAL 06-30-17

11-2-15
 DATE

Traffic Engineering Consultants, Inc.
 6000 S. Western, Suite 300 - Oklahoma City, OK 73139,
 Ph: 405-720-7721, Fax: 405-720-9848, Web: www.tecok.com



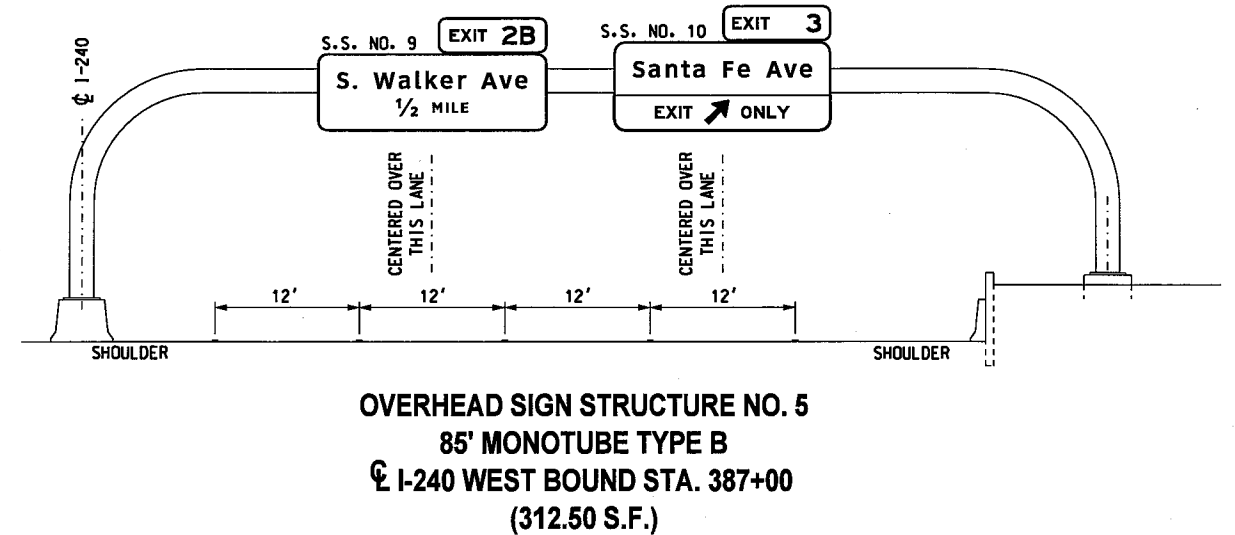
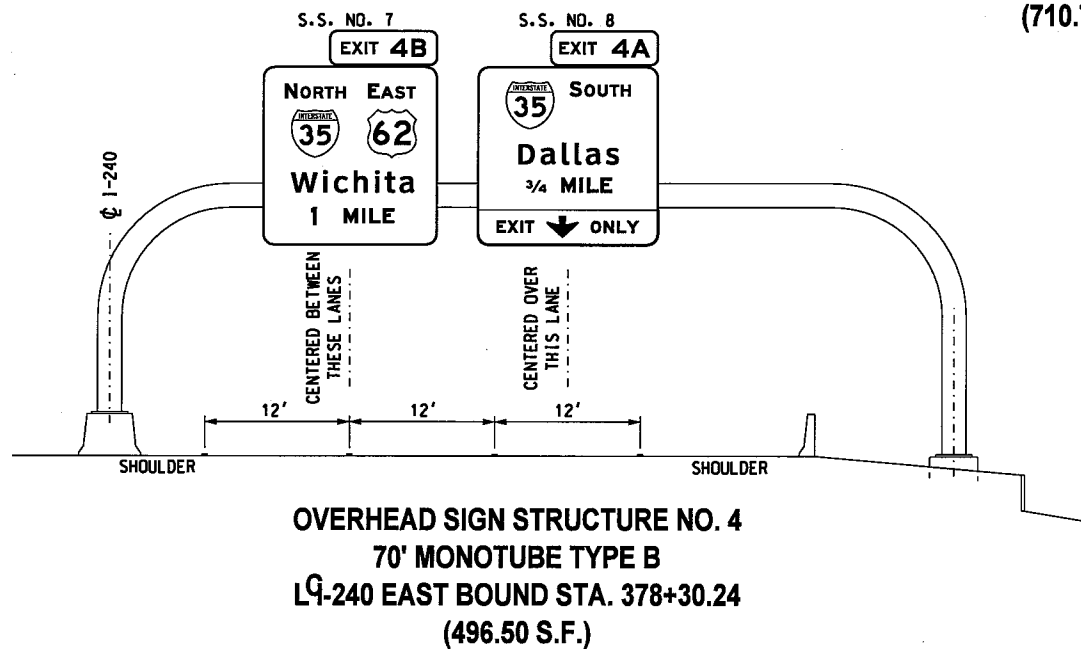
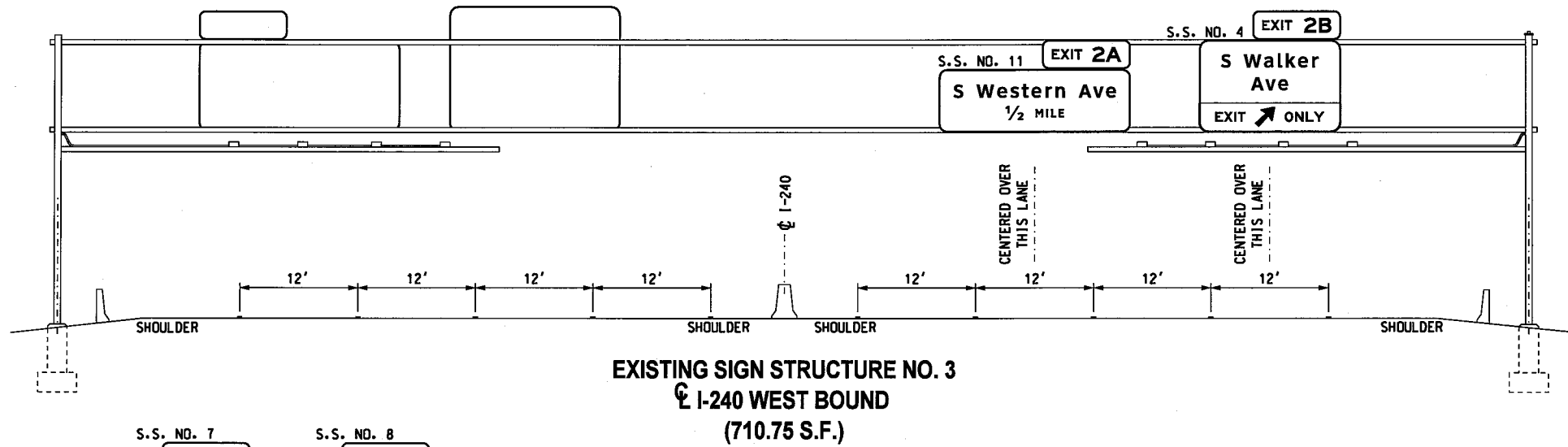
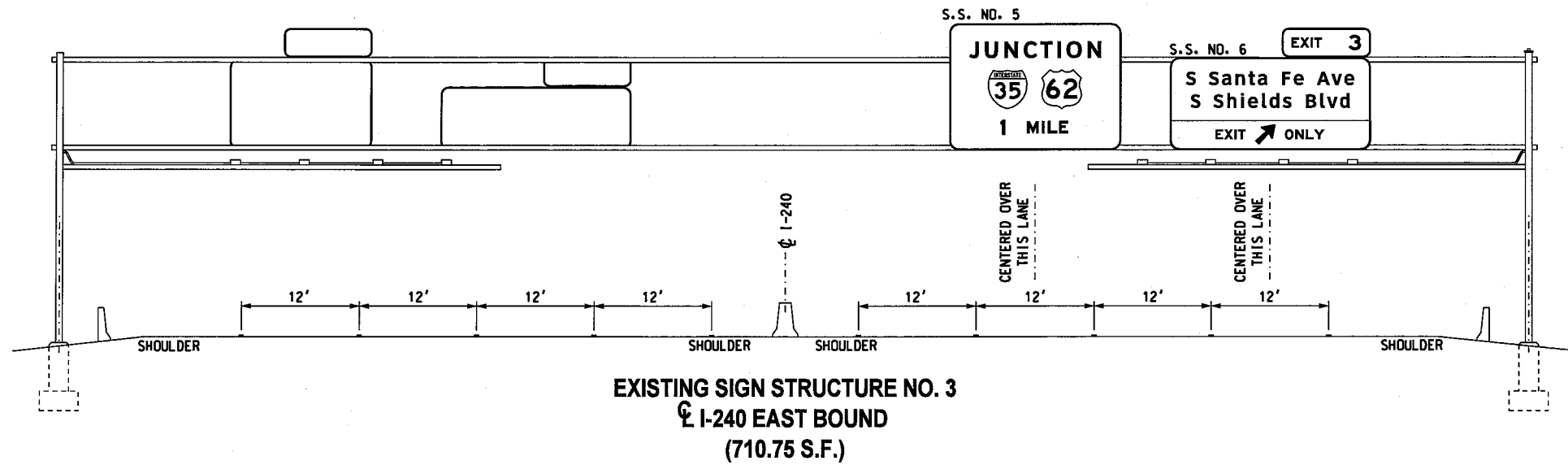
Design	RWR	11-02-15
Drawn	CCC	11-02-15



SIGN STRUCTURE DETAILS
 (1 OF 2)

State Job No. 09032(20) Sheet No. 117

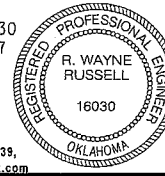
REVISIONS		
NO.	DESCRIPTION	DATE



R. Wayne Russell
 R. WAYNE RUSSELL, P.E. # 16030
 C.A. # 1160, RENEWAL 06-30-17

11-2-15
 DATE

Traffic Engineering Consultants, Inc.
 6000 S. Western, Suite 300 - Oklahoma City, OK 73139,
 Ph: 405-720-7721, Fax: 405-720-9846, Web: www.tecok.com

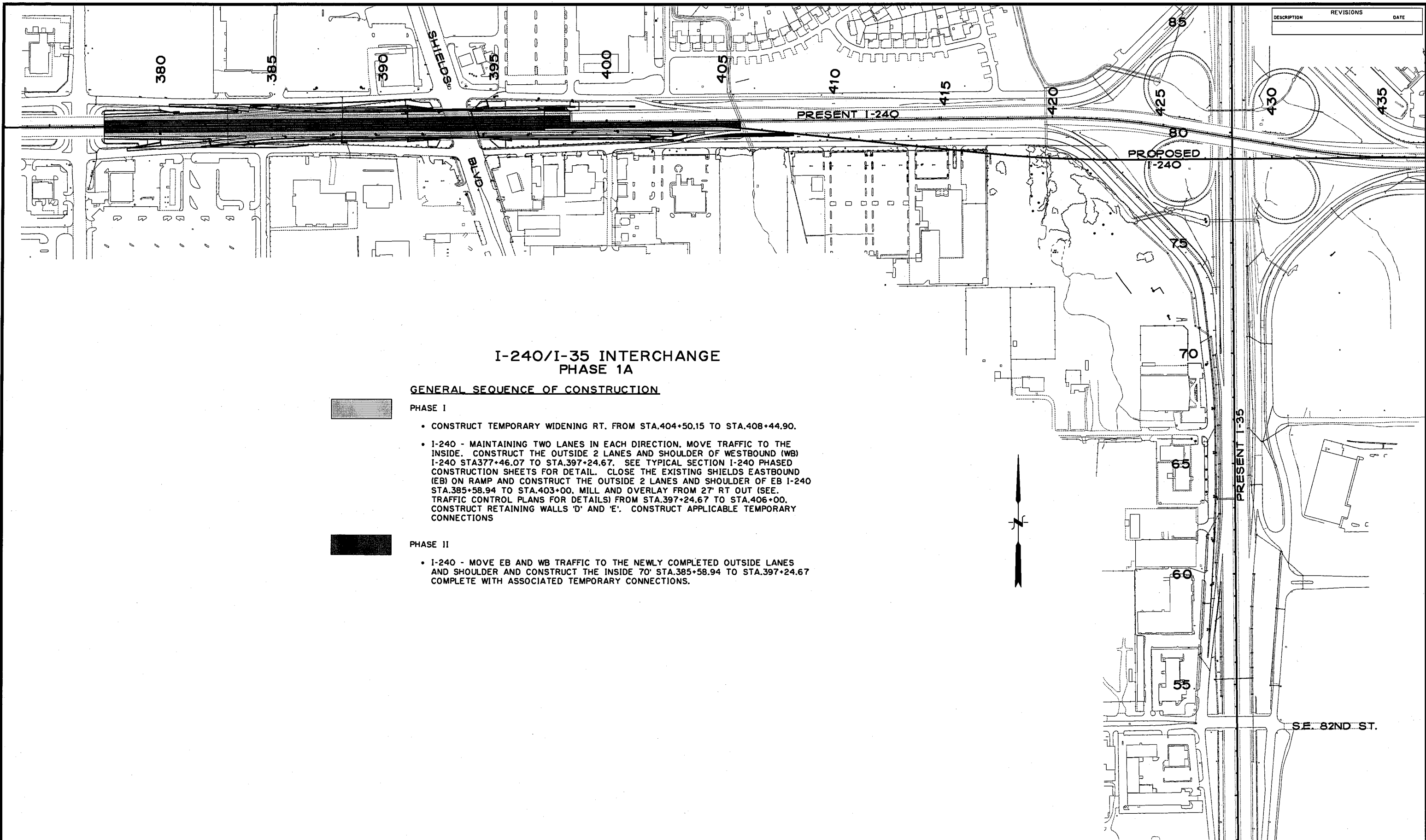


Design	RWR	11-02-15
Drawn	CCC	11-02-15

**SIGN STRUCTURE DETAILS
 (2 OF 2)**

State Job No. 09032(20) Sheet No. 118

OKLAHOMA COUNTY



I-240/I-35 INTERCHANGE
PHASE 1A

GENERAL SEQUENCE OF CONSTRUCTION



PHASE I

- CONSTRUCT TEMPORARY WIDENING RT. FROM STA.404+50.15 TO STA.408+44.90.
- I-240 - MAINTAINING TWO LANES IN EACH DIRECTION. MOVE TRAFFIC TO THE INSIDE. CONSTRUCT THE OUTSIDE 2 LANES AND SHOULDER OF WESTBOUND (WB) I-240 STA.377+46.07 TO STA.397+24.67. SEE TYPICAL SECTION I-240 PHASED CONSTRUCTION SHEETS FOR DETAIL. CLOSE THE EXISTING SHIELDS EASTBOUND (EB) ON RAMP AND CONSTRUCT THE OUTSIDE 2 LANES AND SHOULDER OF EB I-240 STA.385+58.94 TO STA.403+00. MILL AND OVERLAY FROM 27' RT OUT (SEE TRAFFIC CONTROL PLANS FOR DETAILS) FROM STA.397+24.67 TO STA.406+00. CONSTRUCT RETAINING WALLS 'D' AND 'E'. CONSTRUCT APPLICABLE TEMPORARY CONNECTIONS



PHASE II

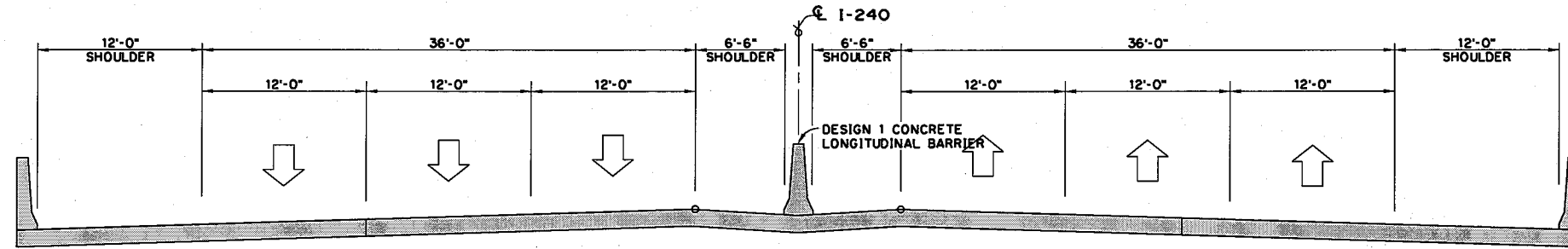
- I-240 - MOVE EB AND WB TRAFFIC TO THE NEWLY COMPLETED OUTSIDE LANES AND SHOULDER AND CONSTRUCT THE INSIDE 70' STA.385+58.94 TO STA.397+24.67 COMPLETE WITH ASSOCIATED TEMPORARY CONNECTIONS.

Design	
Drawn	
Checked	
Approved	
Squad	POE

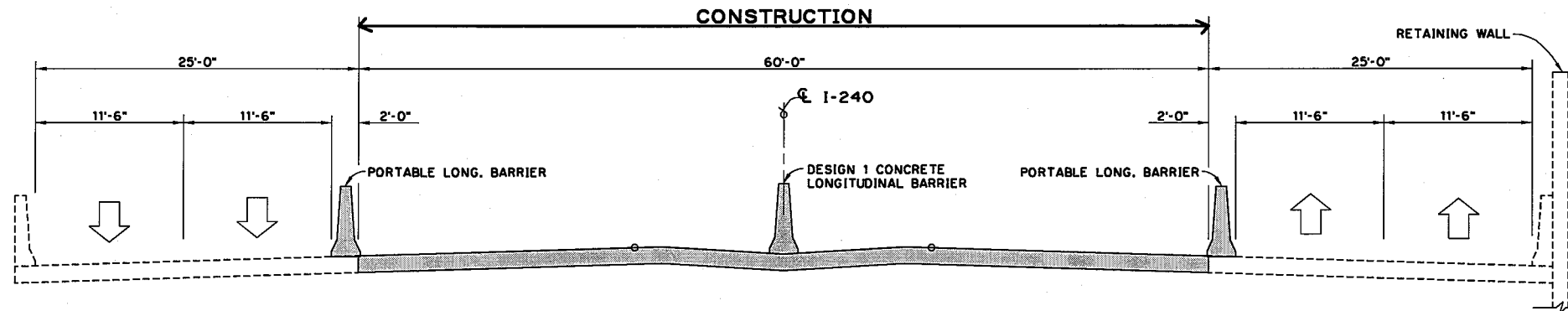
GENERAL SEQUENCE
OF CONSTRUCTION

State Job No. 09032(20) Sheet No. 119

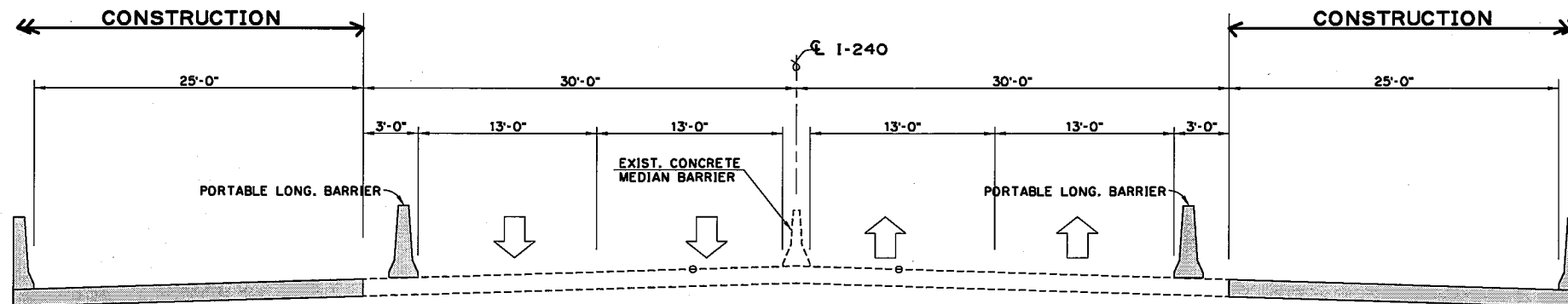
DESCRIPTION	REVISIONS	DATE



TYPICAL SECTION - I-240
⊙ CHOKO POINT STA.277+46.07 B.O.P.
COMPLETED SECTION



TYPICAL SECTION - I-240
⊙ CHOKO POINT STA.277+46.07 B.O.P.
PHASE TWO CONSTRUCTION

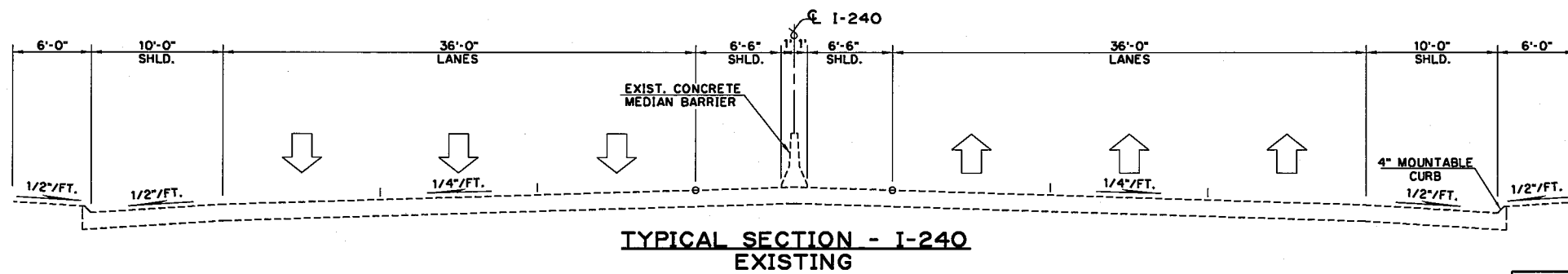
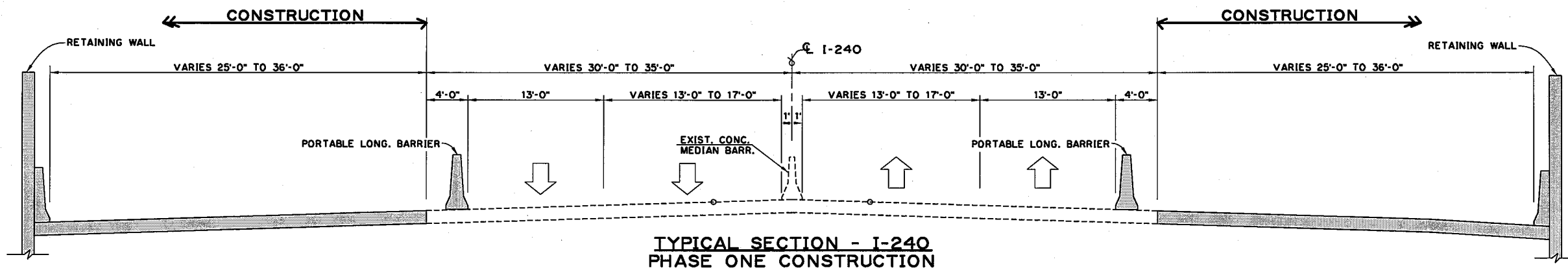
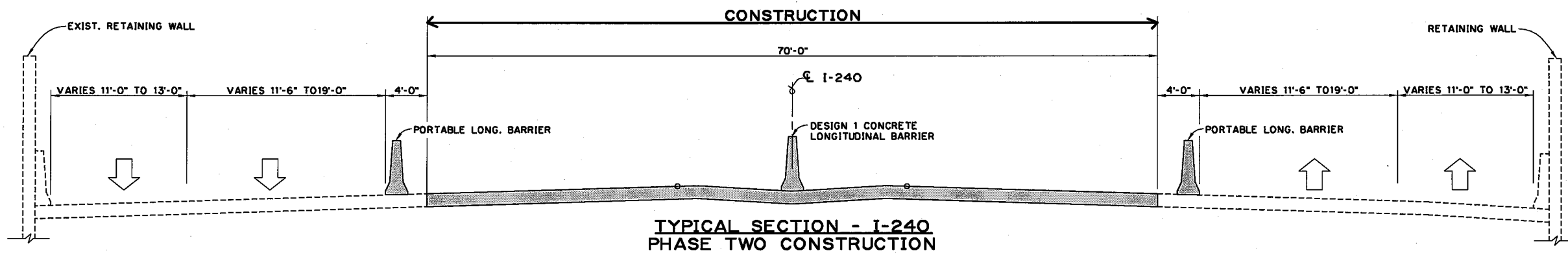
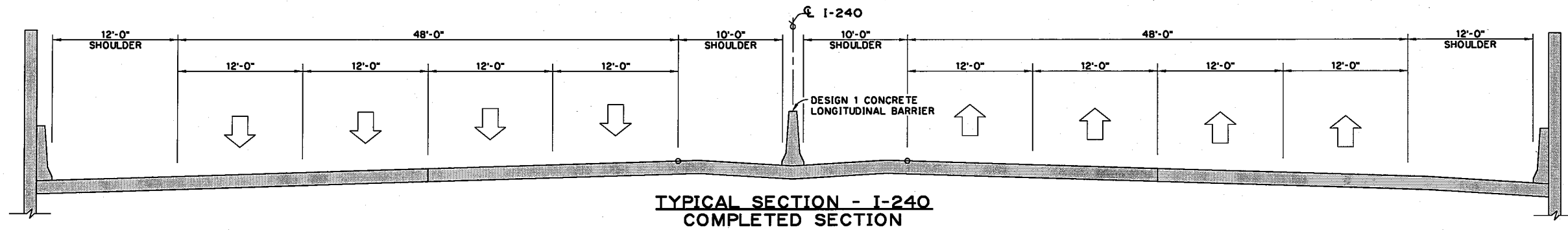


TYPICAL SECTION - I-240
⊙ CHOKO POINT STA.277+46.07 B.O.P.
PHASE ONE CONSTRUCTION

Design	
Drawn	
Checked	
Approved	
Squad	POE

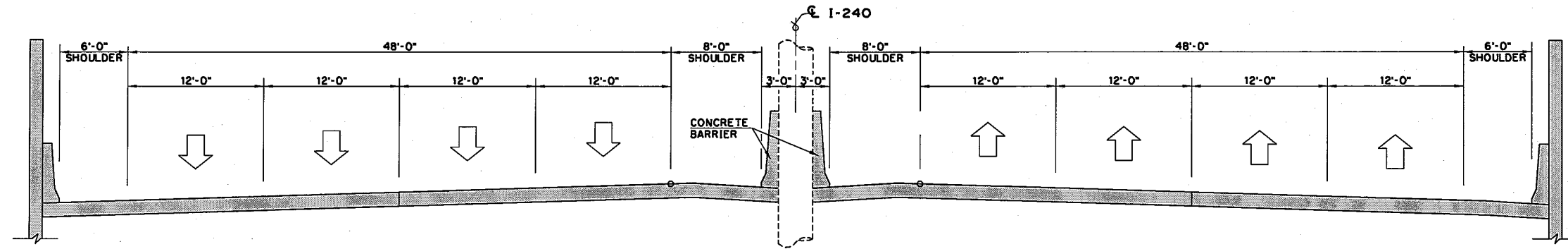
TYPICAL SECTION
I-240
PHASED CONSTRUCTION
⊙ CHOKO POINT
 State Job No. 09032(20) Sheet No. 120

DESCRIPTION	REVISIONS	DATE

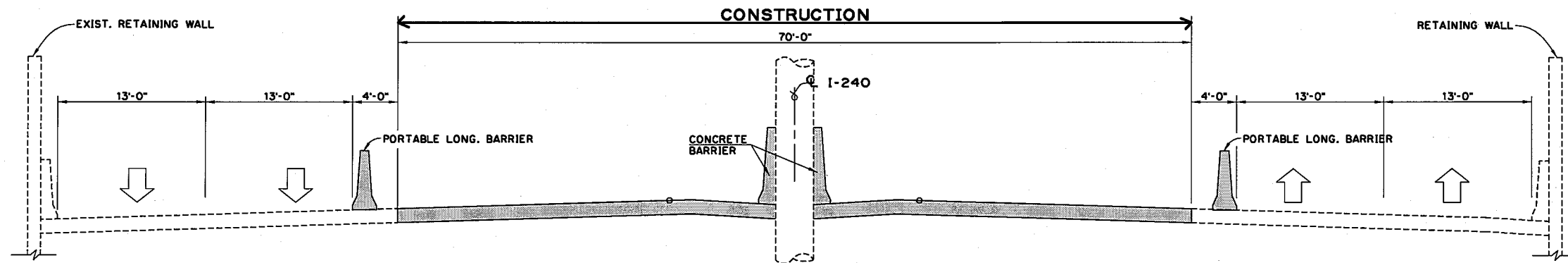


Design	
Drawn	
Checked	
Approved	
Squad	POE

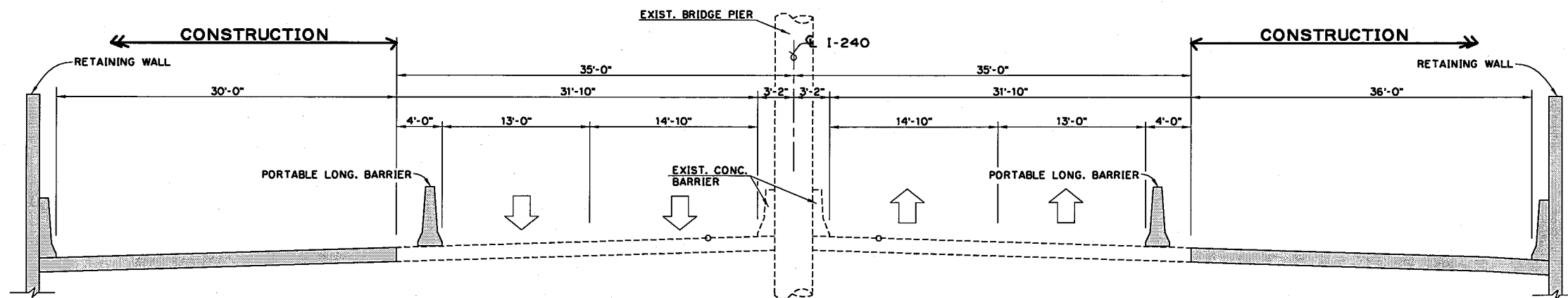
**TYPICAL SECTION
I-240
PHASED CONSTRUCTION
B.O.P TO STA. 397+24.67**
State Job No. 09032(20) Sheet No. 121



TYPICAL SECTION - I-240
Ⓢ EXISTING SHIELDS BRIDGE
COMPLETED SECTION



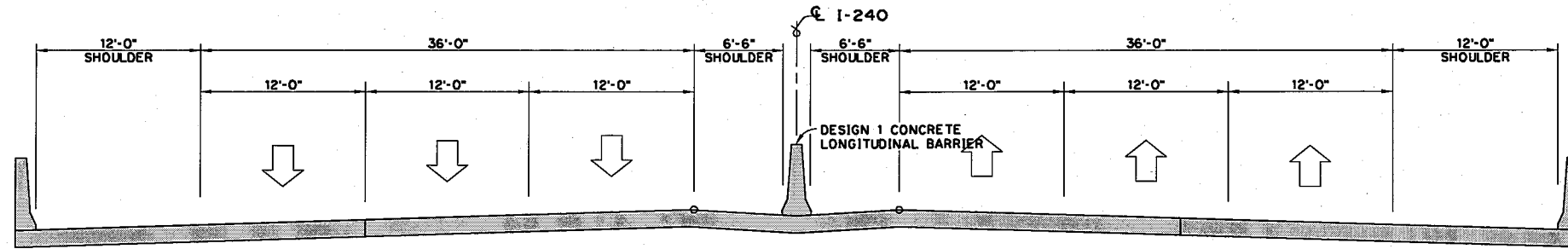
TYPICAL SECTION - I-240
Ⓢ EXISTING SHIELDS BRIDGE
PHASE TWO CONSTRUCTION



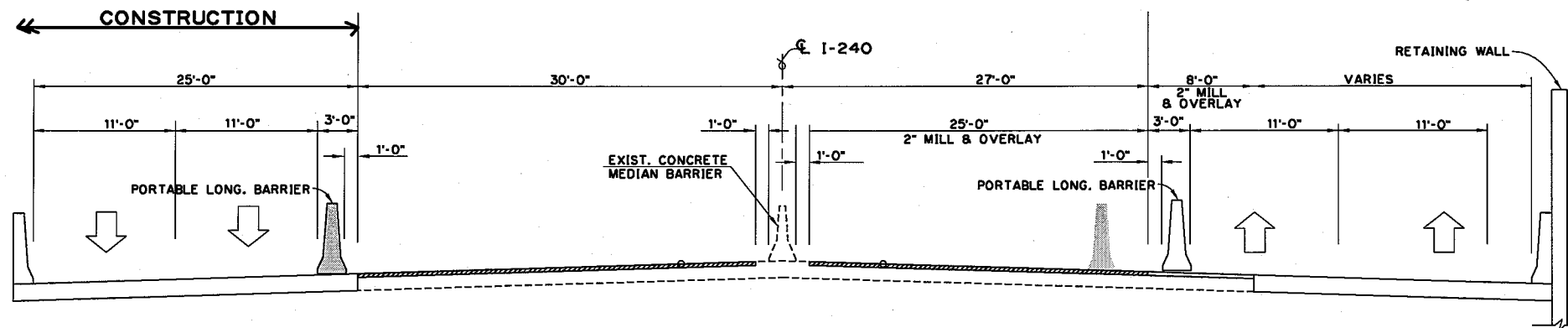
TYPICAL SECTION - I-240
Ⓢ EXISTING SHIELDS BRIDGE
PHASE ONE CONSTRUCTION

Design			TYPICAL SECTION I-240 PHASED CONSTRUCTION Ⓢ EXISTING SHIELDS BRIDGE State Job No. 09032(20) Sheet No. 122
Drawn			
Checked			
Approved			
Squad	POE		

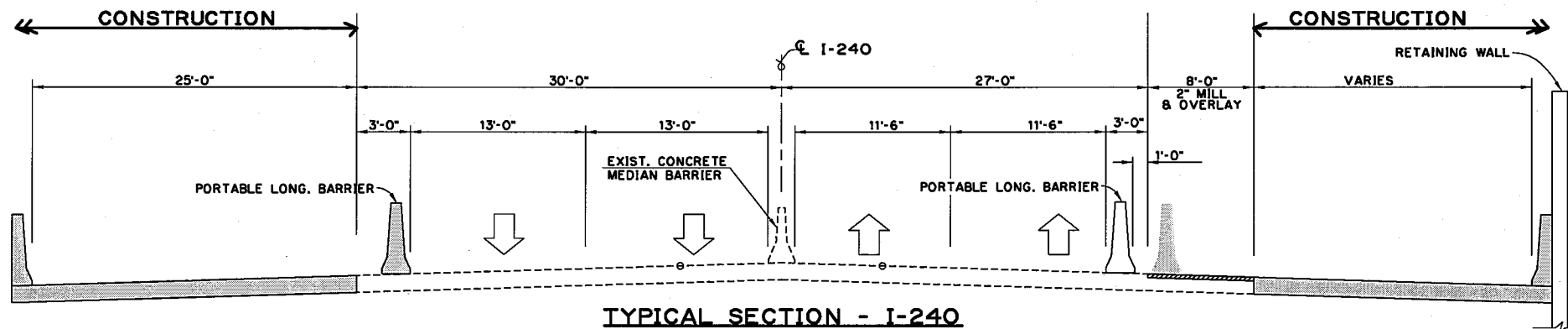
DESCRIPTION	REVISIONS	DATE



TYPICAL SECTION - I-240
STA.397+24.67 TO E.O.P
COMPLETED SECTION



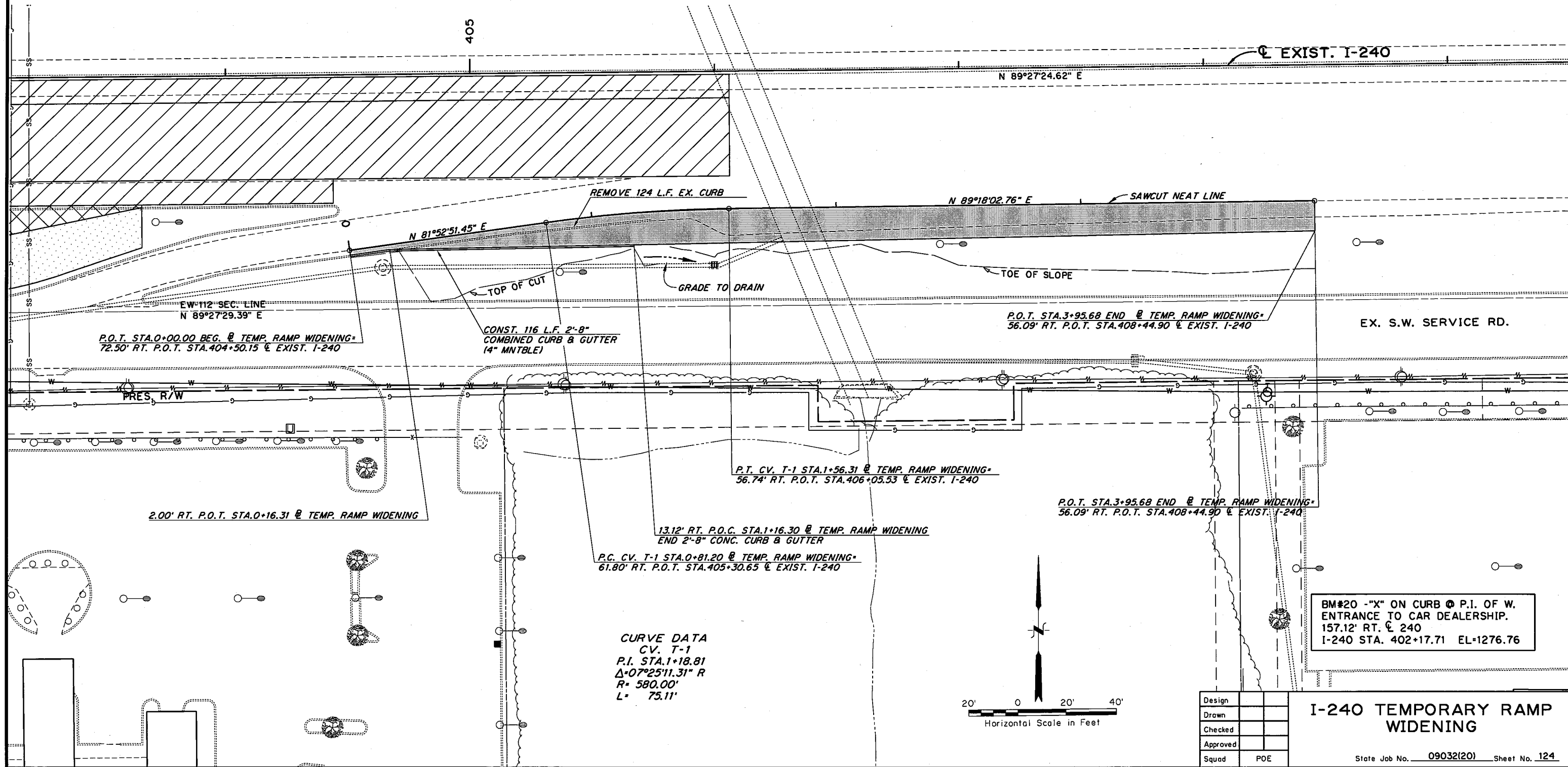
TYPICAL SECTION - I-240
STA.397+24.67 TO E.O.P
PHASE TWO CONSTRUCTION



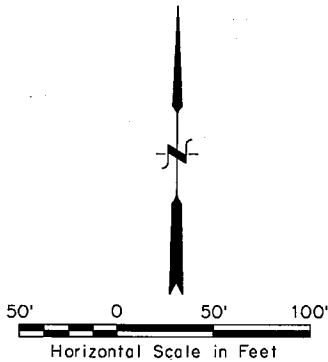
TYPICAL SECTION - I-240
STA.397+24.67 TO E.O.P.
PHASE ONE CONSTRUCTION

Design			TYPICAL SECTION I-240 PHASED CONSTRUCTION STA. 397+24.67 TO E.O.P. State Job No. <u>09032(20)</u> Sheet No. <u>123</u>
Drawn			
Checked			
Approved			
Squad	POE		

DESCRIPTION	REVISIONS	DATE

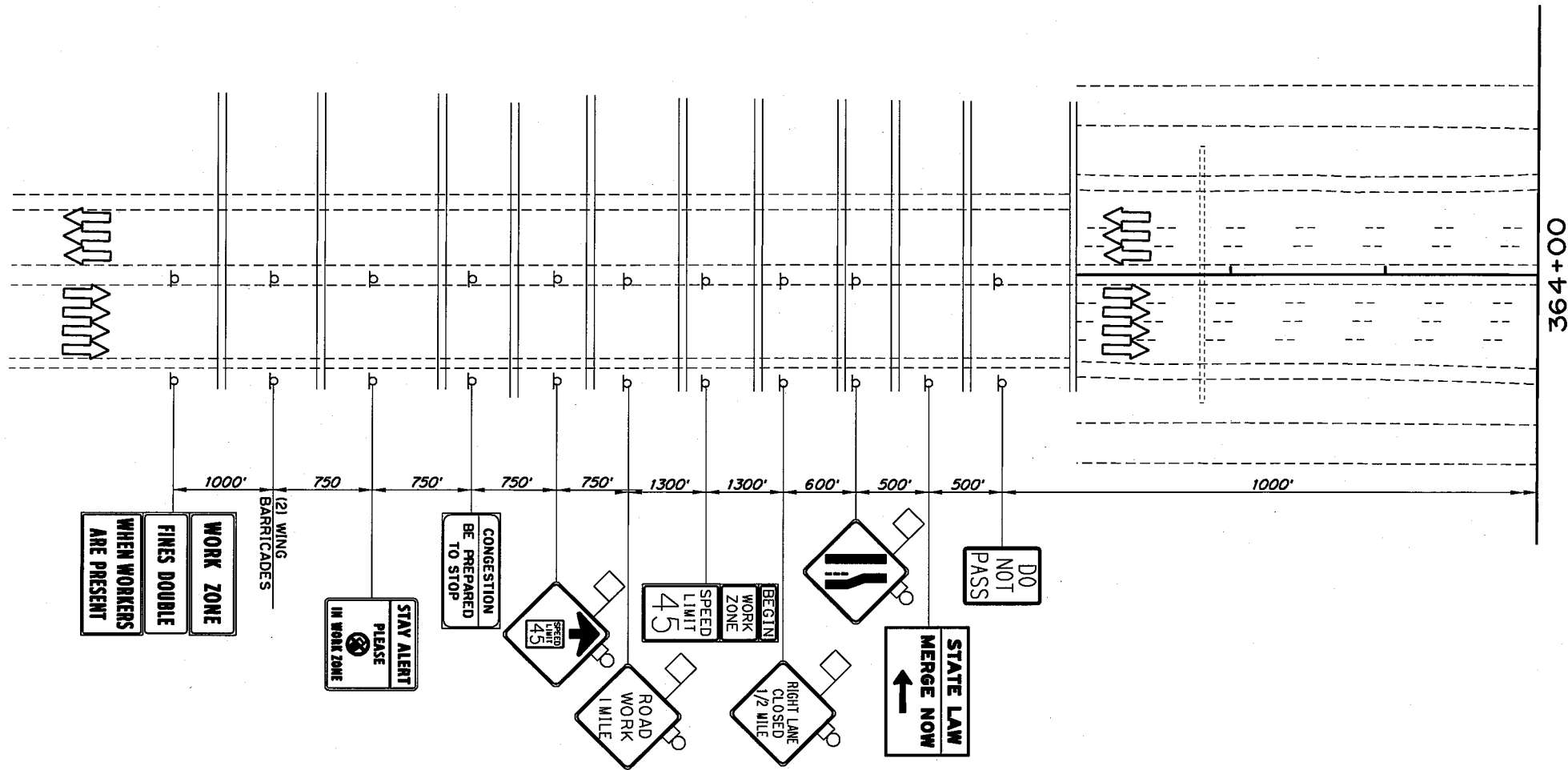


DESCRIPTION	REVISIONS	DATE



BORDER
R=1.5"
TH=0.75"
IN=0.75"

- COLOR:
LEGEND, SYMBOL AND BORDER:
BLACK (NON-REFLECTORIZED)
BACKGROUND:
▲ FLUORESCENT ORANGE (REFLECTORIZED)
* FLUORESCENT YELLOW (REFLECTORIZED)
● WHITE (REFLECTORIZED)
■ RED (NON-REFLECTORIZED)



NOTE: PRIOR TO CLOSING E.B. EXIT RAMP TO SHIELDS, ADVANCE GUIDE SIGNS FOR SHIELDS EXIT MOUNTED ON OVERHEAD SIGN STRUCTURES SHALL BE CHANGED TO NEW SIGNS AS SHOWN ON PERMANENT SIGNING AND STRIPING PLANS. SEE SHEETS ____.

Design	
Drawn	
Checked	
Approved	
Squad	POE

TRAFFIC CONTROL PLAN
PHASE I, STEP 1
1 OF 7

State Job No. 09032(20) Sheet No. 125

DESCRIPTION	REVISIONS	DATE

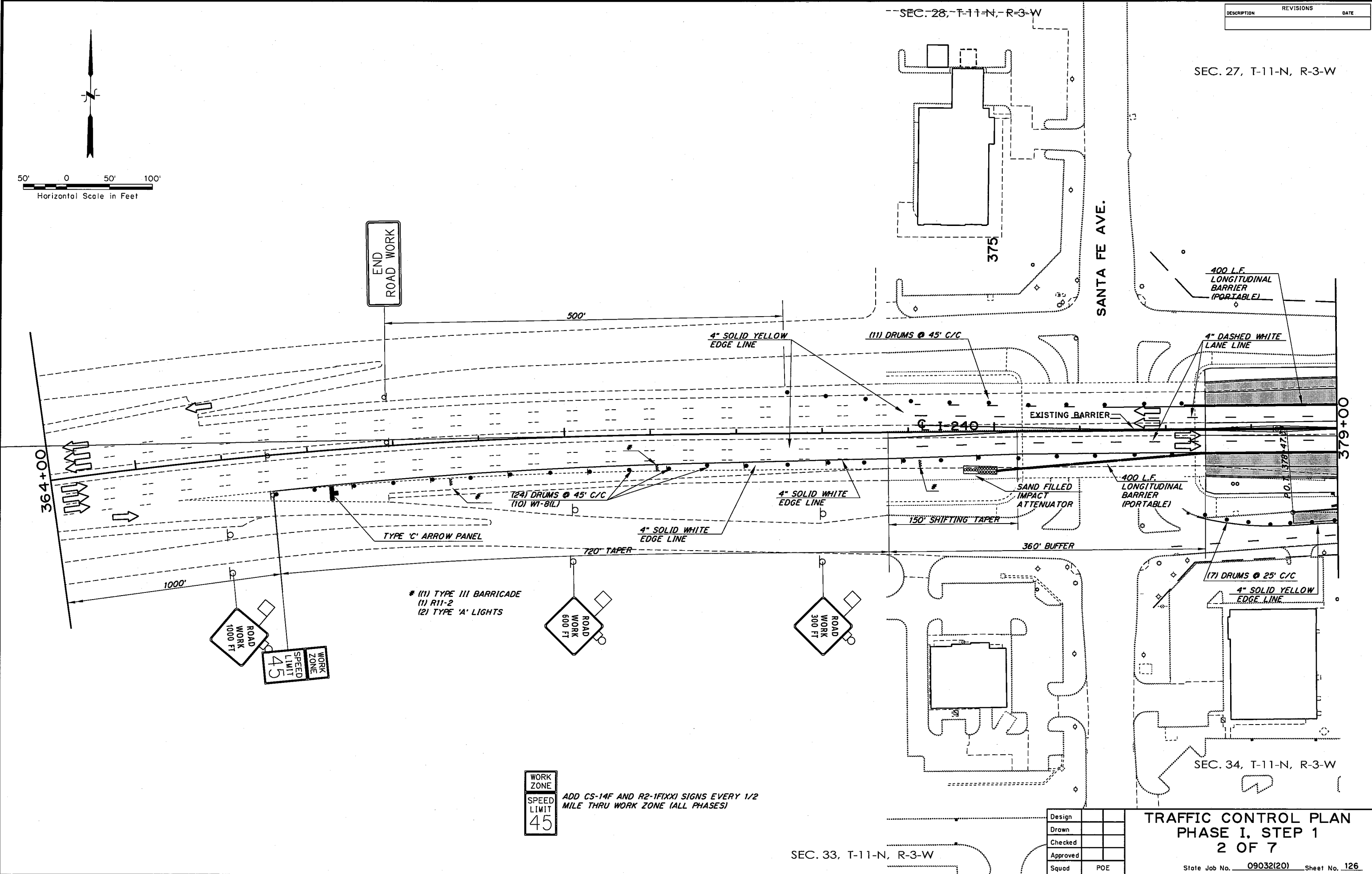
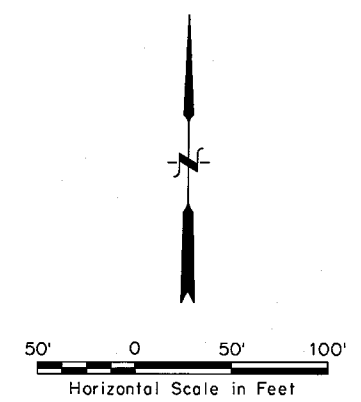
SEC. 27, T-11-N, R-3-W

SEC. 34, T-11-N, R-3-W

SEC. 33, T-11-N, R-3-W

SEC. 28, T-11-N, R-3-W

SANTA FE AVE.



* (1) TYPE III BARRICADE
(1) R11-2
(2) TYPE 'A' LIGHTS

ROAD
WORK
600 FT

ROAD
WORK
300 FT

WORK
ZONE
SPEED
LIMIT
45

ADD CS-14F AND R2-1F(XX) SIGNS EVERY 1/2
MILE THRU WORK ZONE (ALL PHASES)

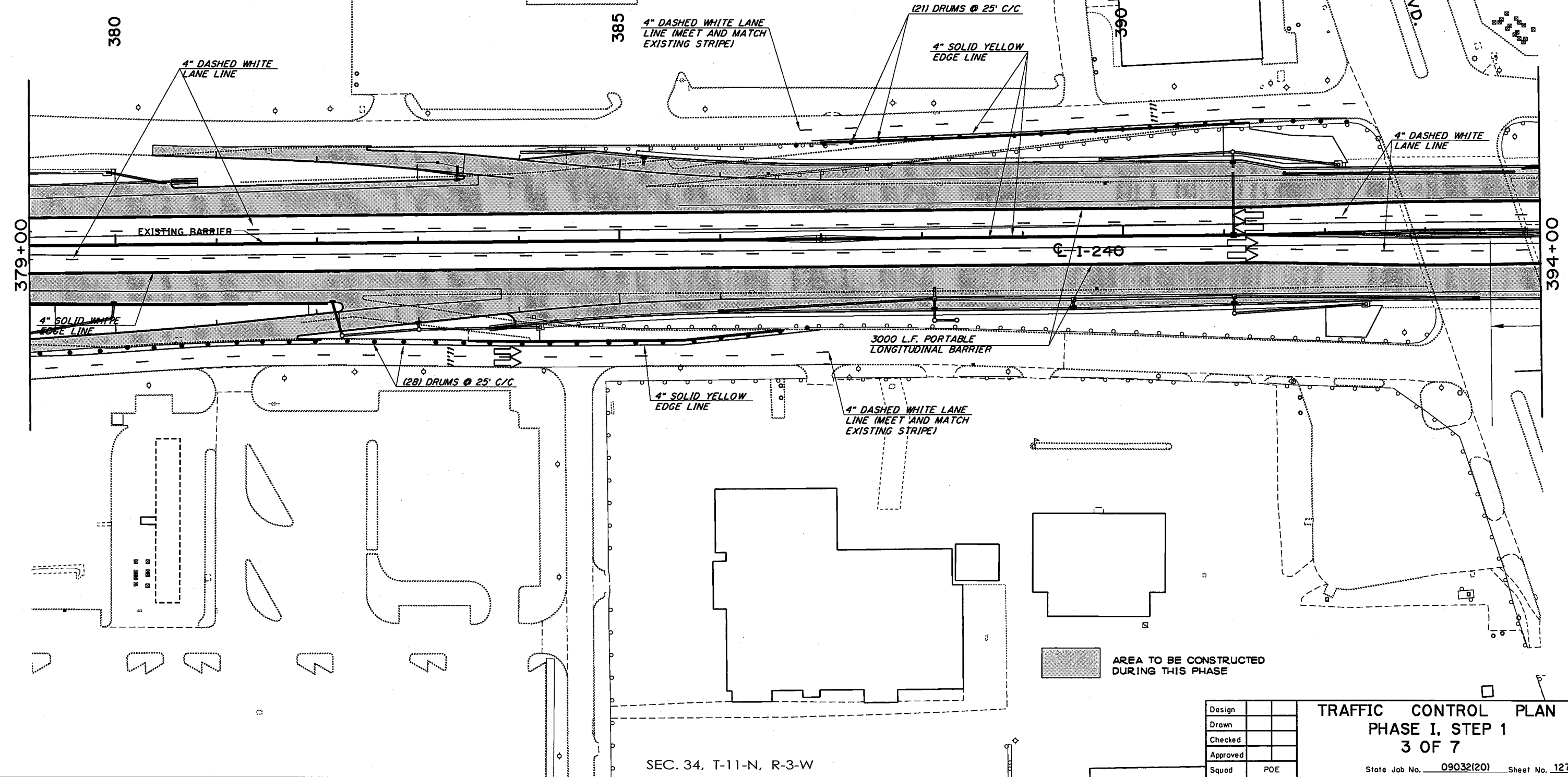
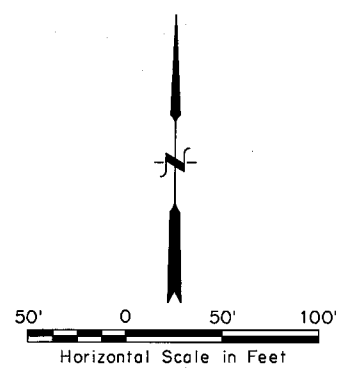
Design	
Drawn	
Checked	
Approved	
Squad	POE

**TRAFFIC CONTROL PLAN
PHASE I, STEP 1
2 OF 7**

State Job No. 09032(20) Sheet No. 126

SEC. 27, T-11-N, R-3-W

DESCRIPTION	REVISIONS	DATE



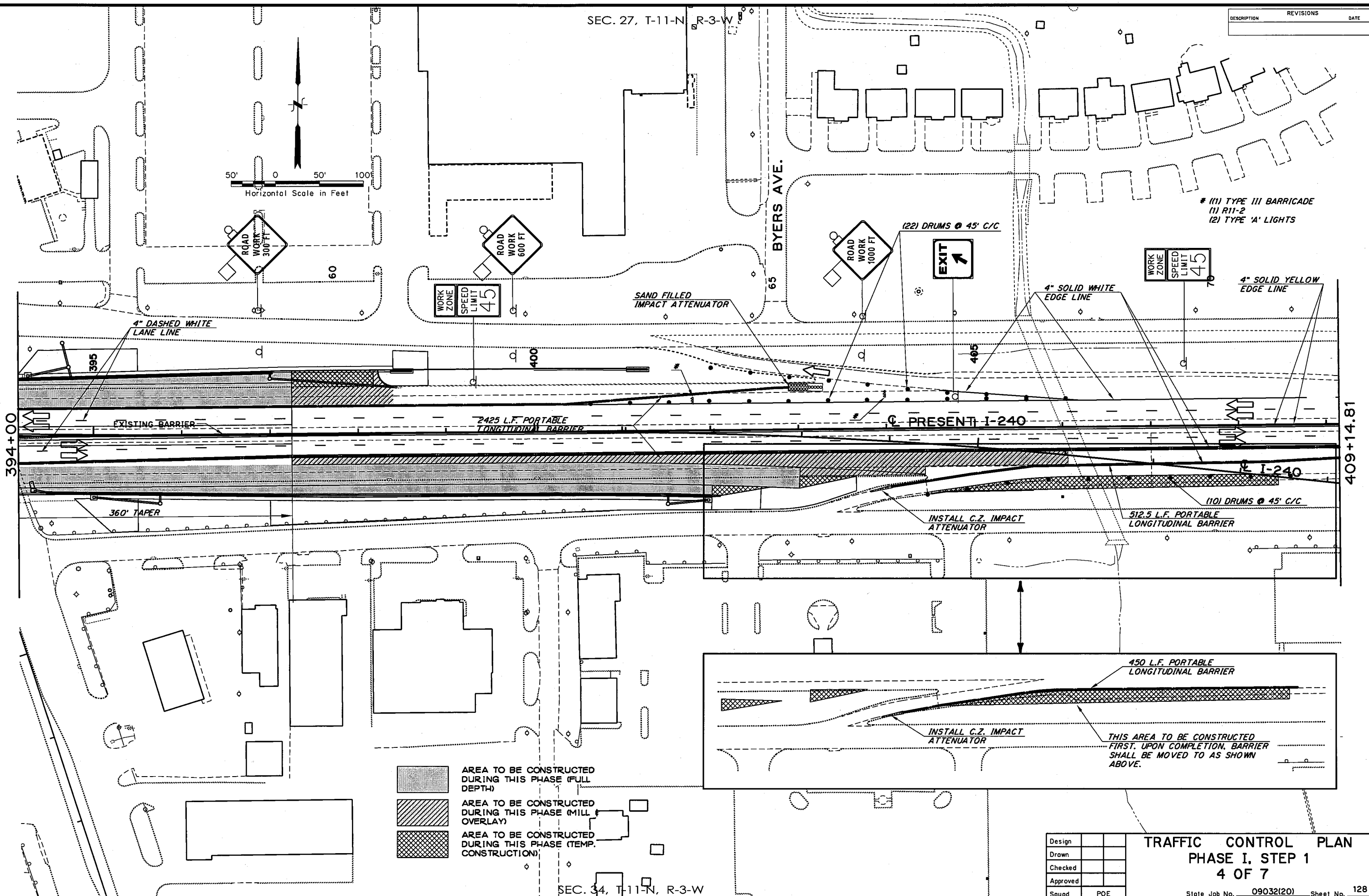
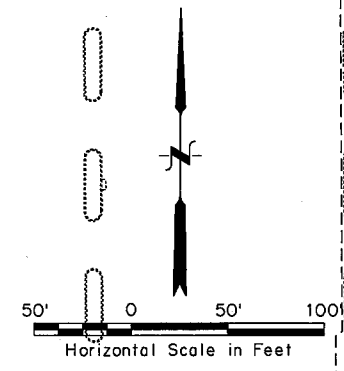
SEC. 34, T-11-N, R-3-W

Design	
Drawn	
Checked	
Approved	
Squad	POE

TRAFFIC CONTROL PLAN
PHASE I, STEP 1
3 OF 7
State Job No. 09032(20) Sheet No. 127

SEC. 27, T-11-N R-3-W

DESCRIPTION	REVISIONS	DATE



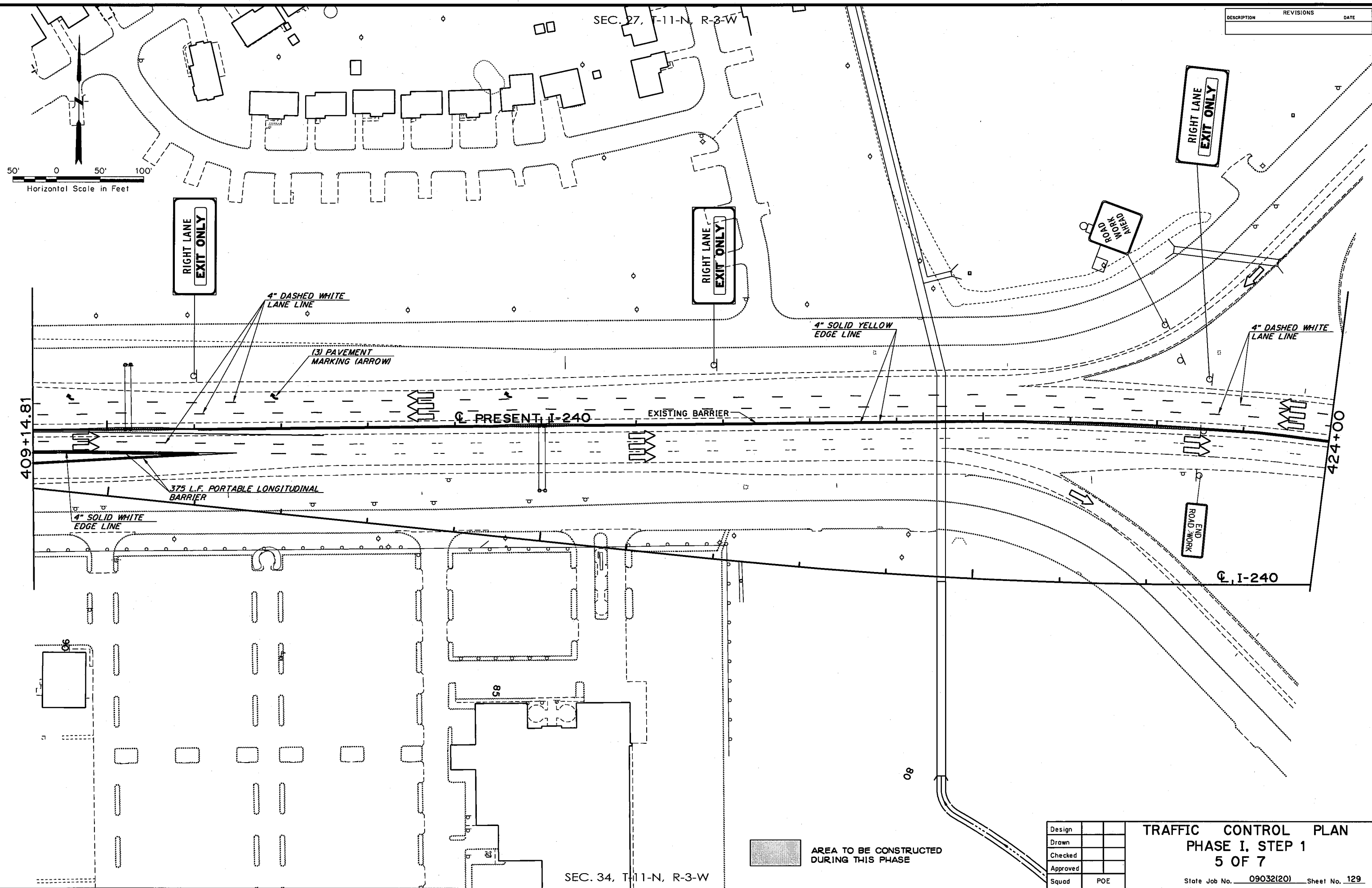
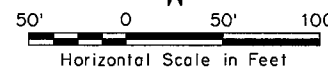
- AREA TO BE CONSTRUCTED DURING THIS PHASE (FULL DEPTH)
- AREA TO BE CONSTRUCTED DURING THIS PHASE (MILL & OVERLAY)
- AREA TO BE CONSTRUCTED DURING THIS PHASE (TEMP. CONSTRUCTION)

Design	
Drawn	
Checked	
Approved	
Squad	POE

TRAFFIC CONTROL PLAN
PHASE I, STEP 1
4 OF 7
State Job No. 09032(20) Sheet No. 128

SEC. 27, T-11-N, R-3-W

DESCRIPTION	REVISIONS	DATE



SEC. 34, T-11-N, R-3-W

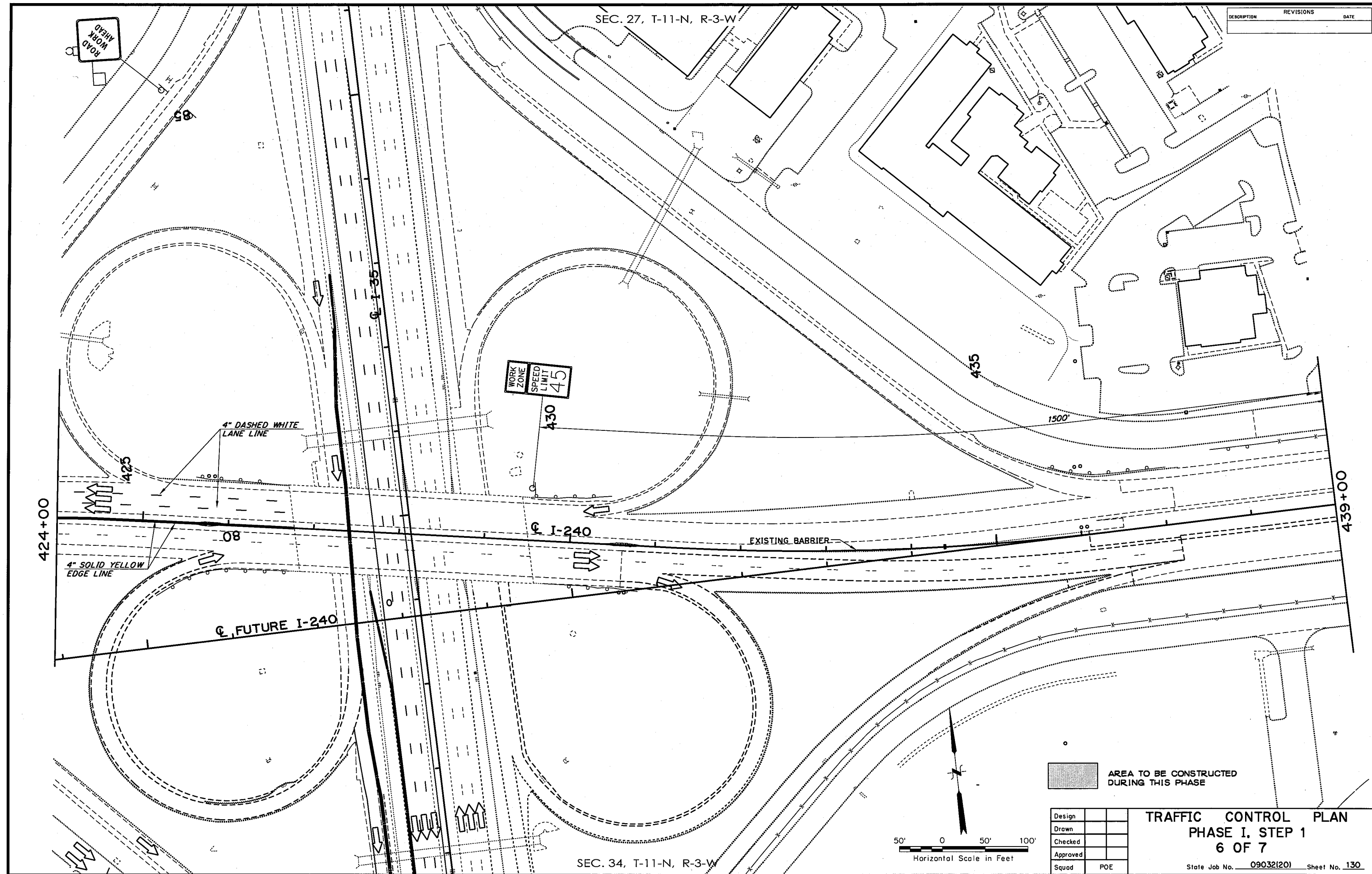
AREA TO BE CONSTRUCTED DURING THIS PHASE

Design	
Drawn	
Checked	
Approved	
Squad	POE

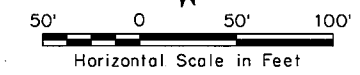
TRAFFIC CONTROL PLAN
PHASE I, STEP 1
5 OF 7
State Job No. 09032(20) Sheet No. 129

SEC. 27, T-11-N, R-3-W

DESCRIPTION	REVISIONS	DATE



SEC. 34, T-11-N, R-3-W

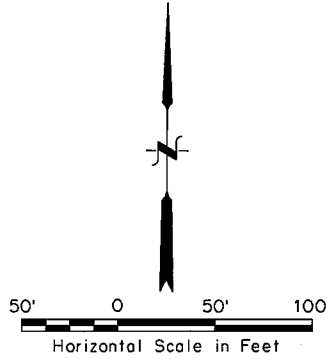
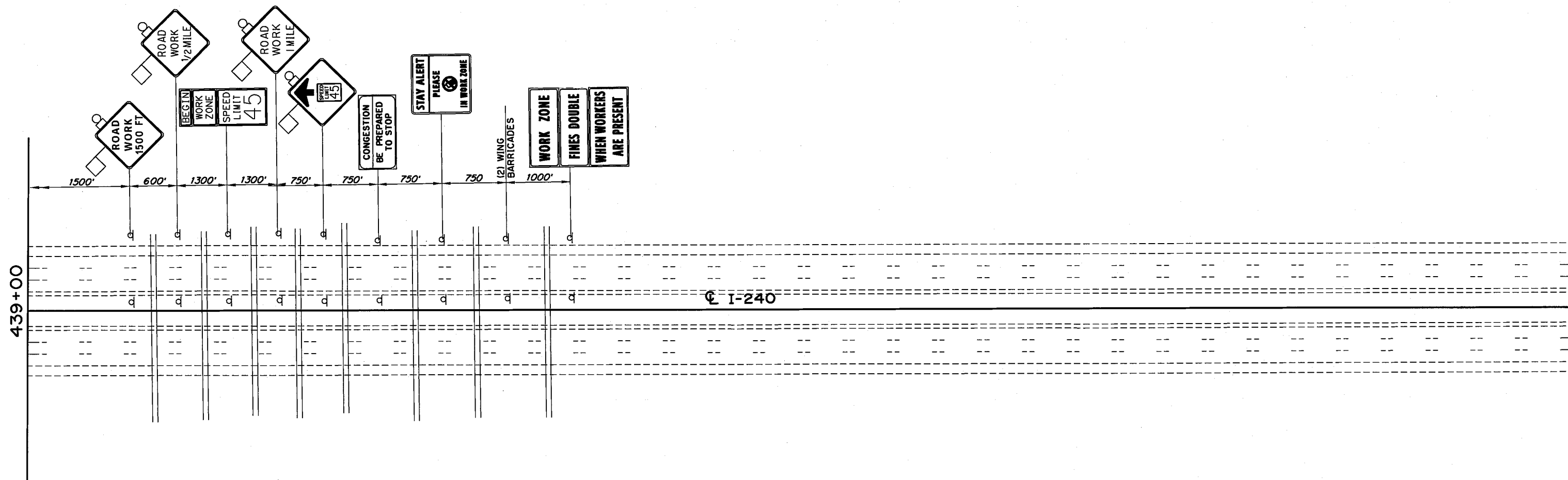


AREA TO BE CONSTRUCTED DURING THIS PHASE

Design	
Drawn	
Checked	
Approved	
Squad	POE

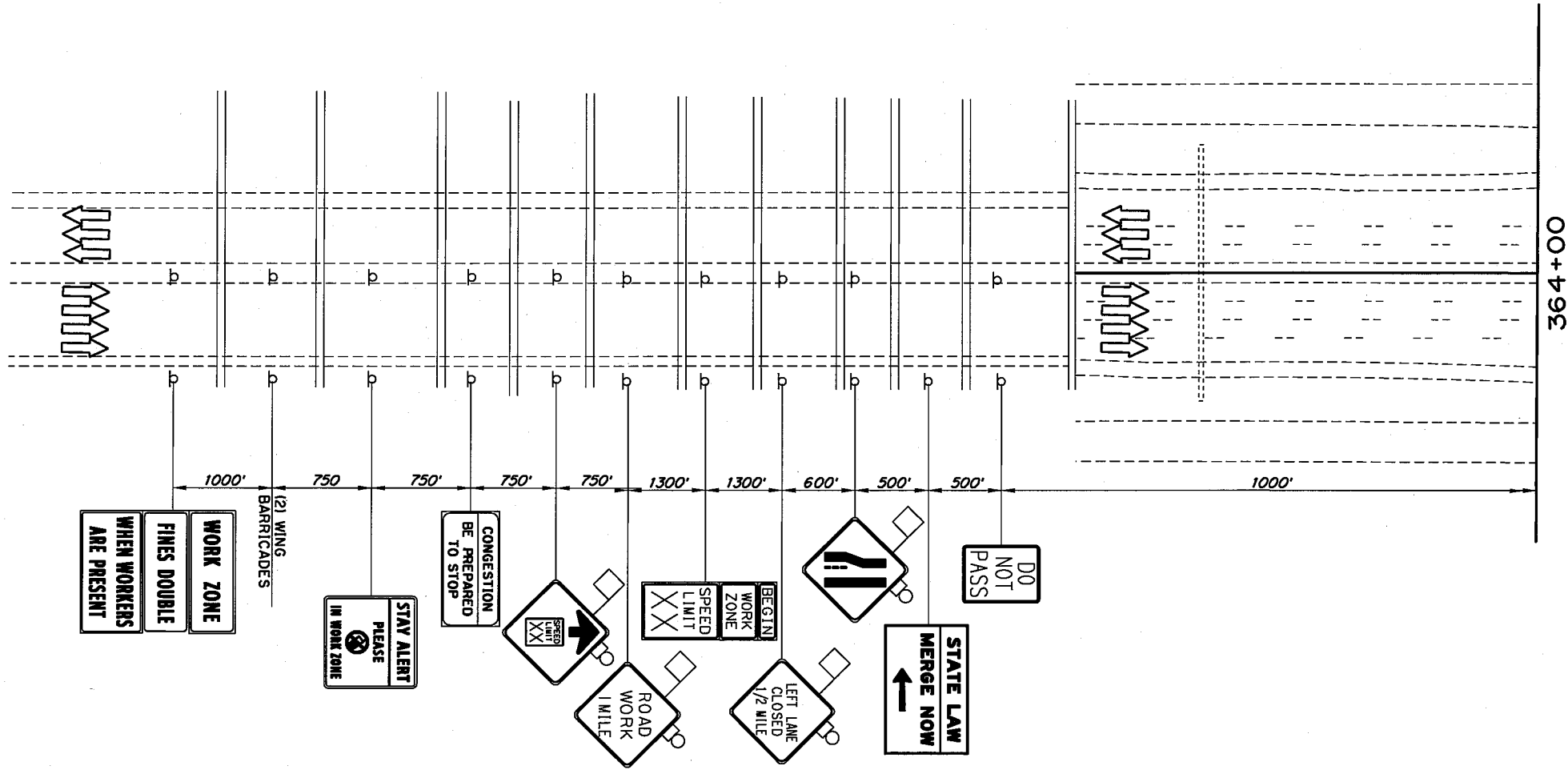
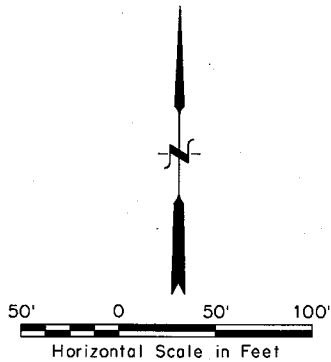
TRAFFIC CONTROL PLAN
PHASE I, STEP 1
6 OF 7
State Job No. 09032(20) Sheet No. 130

DESCRIPTION	REVISIONS	DATE



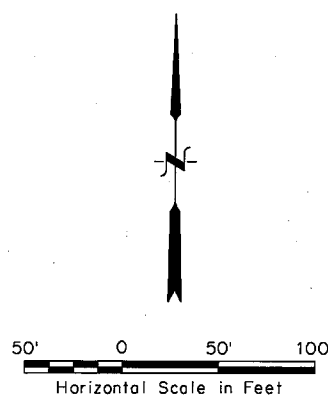
Design			TRAFFIC CONTROL PLAN PHASE I, STEP 1 7 OF 7 State Job No. <u>09032(20)</u> Sheet No. <u>131</u>
Drawn			
Checked			
Approved			
Squad	POE		

DESCRIPTION	REVISIONS	DATE



Design		TRAFFIC CONTROL PLAN PHASE II 1 OF 7 State Job No. 09032(20) Sheet No. 132
Drawn		
Checked		
Approved		
Squad	POE	

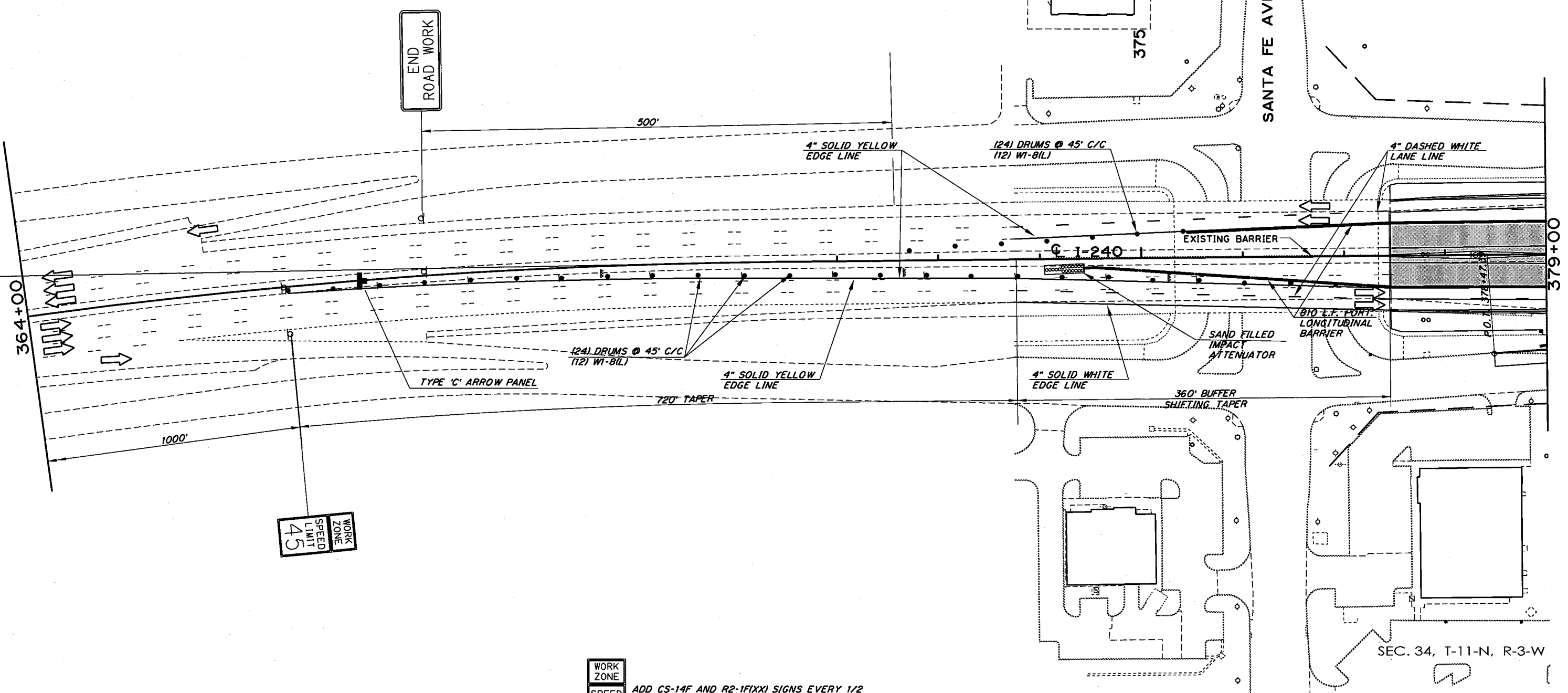
DESCRIPTION	REVISIONS	DATE



SEC. 28, T-11-N, R-3-W

SEC. 27, T-11-N, R-3-W

SANTA FE AVE.



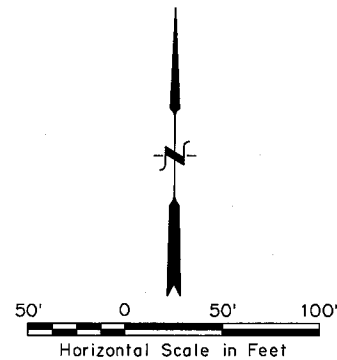
WORK ZONE
SPEED LIMIT 45
ADD CS-14F AND R2-1F(XX) SIGNS EVERY 1/2 MILE THRU WORK ZONE (ALL PHASES)

Design	
Drawn	
Checked	
Approved	
Squad	POE

**TRAFFIC CONTROL PLAN
PHASE II
2 OF 7**

State Job No. 09032(20) Sheet No. 133

SEC. 27, T-11-N, R-3-W



380

385

390

SHEILDS BLVD.

4" SOLID WHITE
EDGE LINE

4" SOLID YELLOW
EDGE LINE

4" DASHED WHITE
LANE LINE

3000 L.F. PORTABLE
LONGITUDINAL BARRIER

CL I-240

4" SOLID WHITE
EDGE LINE

AREA TO BE CONSTRUCTED
DURING THIS PHASE

SEC. 34, T-11-N, R-3-W

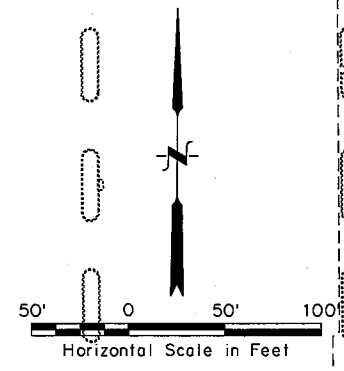
Design	
Drawn	
Checked	
Approved	
Squad	POE

TRAFFIC CONTROL PLAN
PHASE II
3 OF 7

State Job No. 09032(20) Sheet No. 134

SEC. 27, T-11-N, R-3-W

DESCRIPTION	REVISIONS	DATE



BYERS AVE.

WORK
ZONE
SPEED
LIMIT
45

EXIT
↑

WORK
ZONE
SPEED
LIMIT
45

SAND FILLED
IMPACT ATTENUATOR

2437.5 L.F. PORTABLE
LONGITUDINAL BARRIER

(24) DRUMS @ 45' C/C

4" SOLID WHITE
EDGE LINE

4" DASHED WHITE
LANE LINE

4" SOLID WHITE
EDGE LINE

394+00

409+14.81

PRESENT 1-240

4" SOLID WHITE
EDGE LINE

4" SOLID YELLOW
EDGE LINE

SW SERVICE RD.

(16) DRUMS @ 45' C/C
(8) W-8

(21) DRUMS @ 45' C/C

4" SOLID WHITE
EDGE LINE

AREA TO BE CONSTRUCTED
DURING THIS PHASE

Design	
Drawn	
Checked	
Approved	
Squad	POE

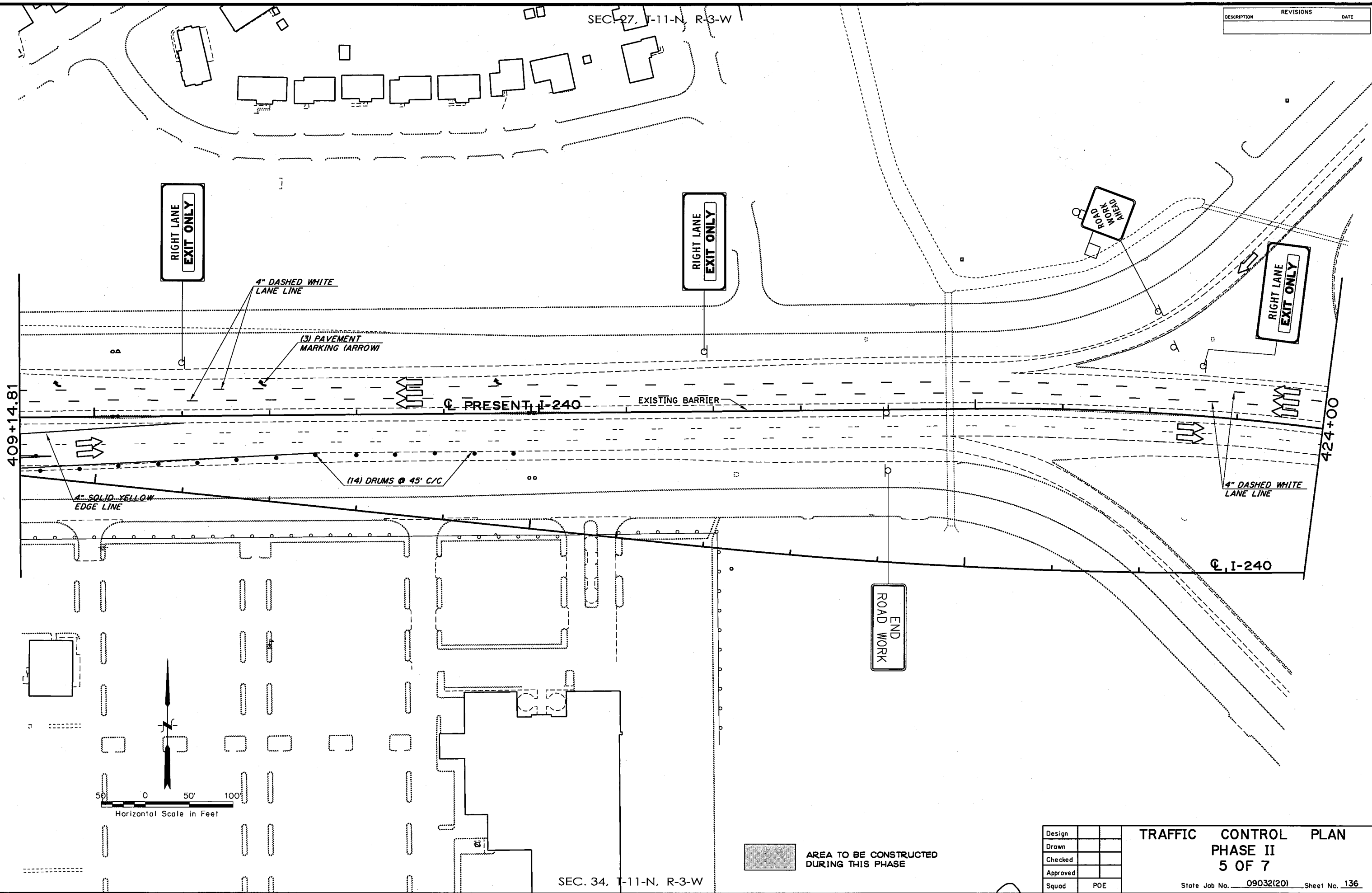
TRAFFIC CONTROL PLAN
PHASE II
4 OF 7

State Job No. 09032(20) Sheet No. 135

SEC. 34, T-11-N, R-3-W

SEC. 27, T-11-N, R-3-W

DESCRIPTION	REVISIONS	DATE

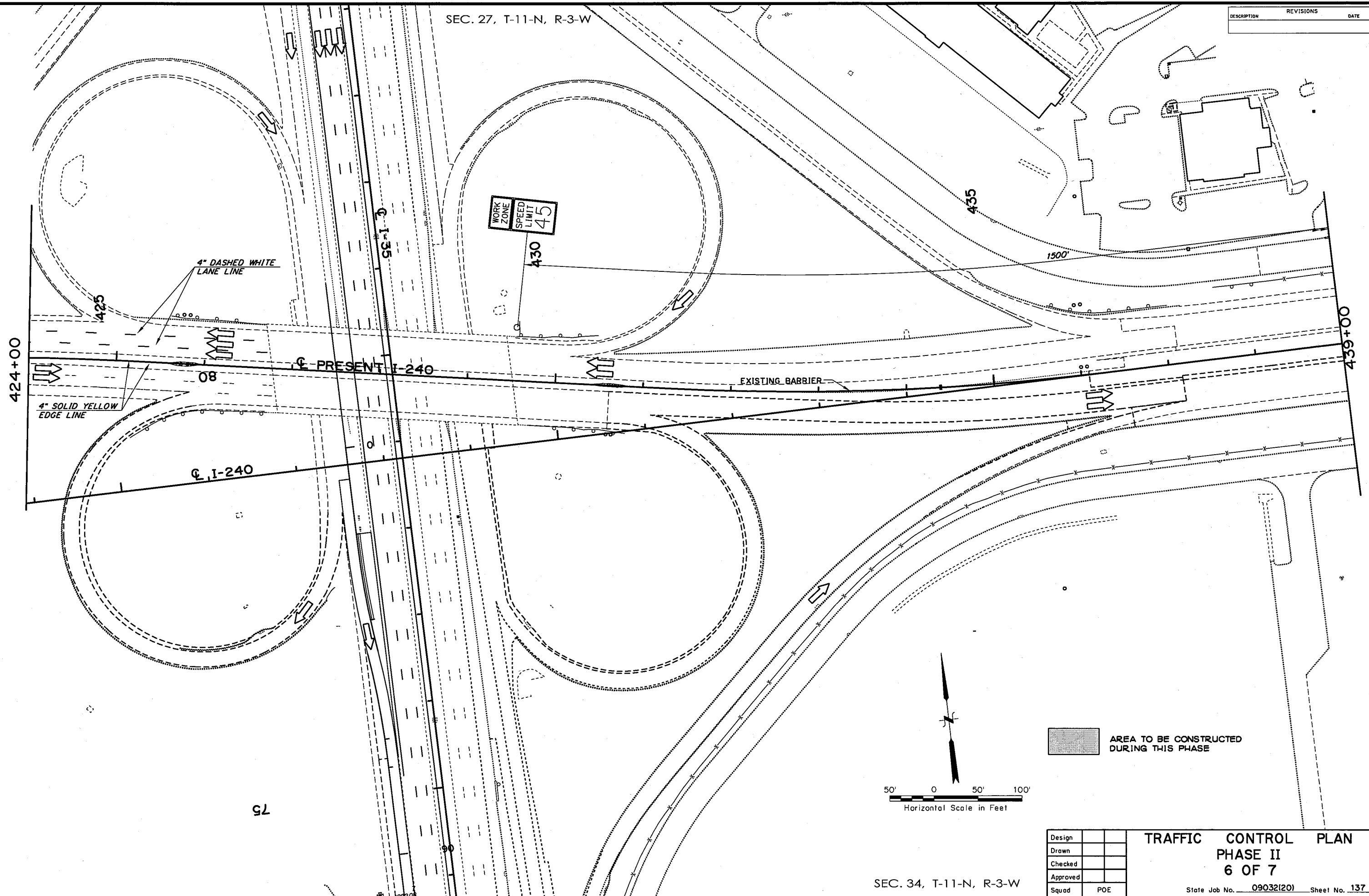


Design	
Drawn	
Checked	
Approved	
Squad	POE

TRAFFIC CONTROL PLAN
PHASE II
5 OF 7

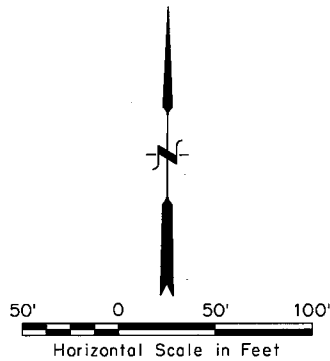
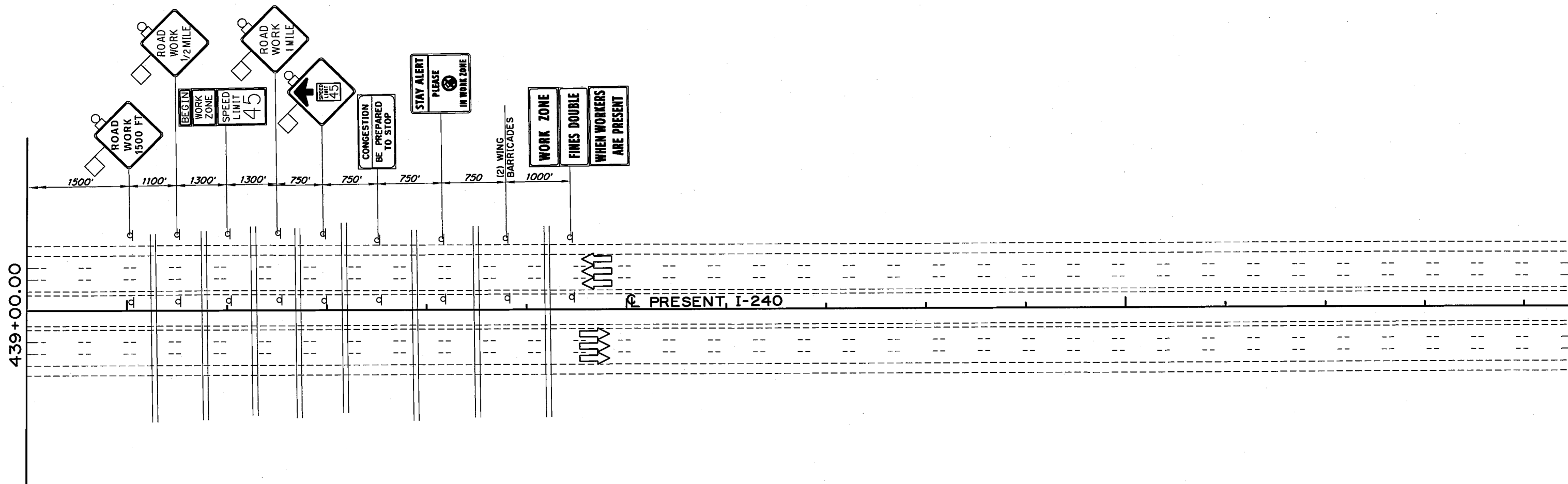
State Job No. 09032(20) Sheet No. 136

SEC. 27, T-11-N, R-3-W



Design		
Drawn		
Checked		
Approved		
Squad	POE	

DESCRIPTION	REVISIONS	DATE



Design	
Drawn	
Checked	
Approved	
Squad	POE

TRAFFIC CONTROL PLAN
PHASE II
7 OF 7

State Job No. 09032(20) Sheet No. 138

SURVEY CONTROL DATA

1. HORIZONTAL CONTROL:

A. HORIZONTAL CONTROL FOR THIS SURVEY IS THE OKLAHOMA DEPARTMENT OF TRANSPORTATION PLANE COORDINATE SYSTEM, LAMBERT PROJECTION (NORTH ZONE). ALL COORDINATES SHOWN ARE OKLAHOMA DEPARTMENT OF TRANSPORTATION PLANE COORDINATES WHICH WERE DERIVED BY MULTIPLYING THE USC&GS OKLAHOMA PLANE COORDINATES BY THE COMBINED ADJUSTMENT FACTOR OF 1.00010. THE OKLAHOMA DEPARTMENT OF TRANSPORTATION COORDINATE SYSTEM PLANE IS 2350 FEET ABOVE THE OKLAHOMA USC&GS PLANE.

B. ACCURACY - THIRD ORDER OR BETTER.

2. BEARINGS:

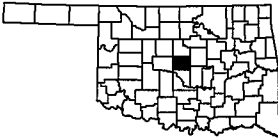
THE BEARINGS SHOWN HEREIN OR HEREON ARE GRID BEARINGS DERIVED FROM THE USC&GS OKLAHOMA PLANE COORDINATE SYSTEM AND ARE NOT ASTRONOMICAL.

3. VERTICAL CONTROLS:

A. LEVEL DATUM IS MEAN SEA LEVEL (USC&GS).

B. ACCURACY - THIRD ORDER OR BETTER.

THIS SURVEY MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKLAHOMA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS, JUNE 11, 2001.



LOCATION MAP

CONVENTIONAL SIGNS

- INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
PROPOSED ROAD
RAILROADS
RANGE & TOWNSHIP LINES
SECTION LINES
QUARTER SECTION LINES
FENCES
GROUND LINE
EXISTING ROADS
BASE LINE
GRADE LINES
TELEPHONE & TELEGRAPH
POWER LINES
OIL WELLS
BUILDINGS
DRAINAGE STRUCTURES-IN-PLACE
DRAINAGE STRUCTURES-NEW
RIGHT-OF-WAY LINES-EXISTING
RIGHT-OF-WAY LINES-NEW
RIGHT-OF-WAY MARKERS-IN PLACE
RIGHT-OF-WAY MARKERS-REMOVE & RESET
RIGHT-OF-WAY MARKERS-NEW
CONTROLLED ACCESS
EXISTING SANITARY SEWERS
EXISTING GAS LINES
EXISTING WATER LINES
EXISTING TELEPHONE CABLES UNDERGROUND

UTILITY CONTACT LIST

AT&T	(405)275-8805
COX COMMUNICATIONS	(405)600-6269
OG&E	(800)272-9741
ONG	(800)664-5463
DCP MIDSTREAM LLC/EDMOND	(405)341-1266
MCLEOD USA	(317)924-2592
QWEST COMMUNICATIONS	(800)899-7780
SOONER UTILITIES (WATER)	(405)721-4700
STEPHENS & JOHNSON OPERATING CO.	(405)235-4146
TOWN OF VALLEY BROOK	(405)677-6948
WHITE OPERATING CO.	(405)239-6001
CITY OF OKLAHOMA CITY	(405)297-2278

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

SURVEY OF
STATE HIGHWAY
SWO 2923(1)
STATE JOB NO. 09032(17)
OKLAHOMA COUNTY
I-35 & I-240 INTERCHANGE

SURVEY SHEET INDEX

NO.	DESCRIPTION
SD1	TITLE SHEET
SD2-SD24	SURVEY DATA SHEETS

SWO 2923(1) Job/Piece 09032(17) Engr. Contract No. 1060

LAND SURVEYOR'S CERTIFICATION

I hereby certify that all land and property sub-division distances, angles, corners, and monumentation made or used in conjunction with this survey and depicted or recorded herein or hereon were recovered, established or re-established in substantial conformity with:

- Applicable instructions contained in the U.S. Government Bureau of Land Management publication "Manual of Survey Instruction".
- Its supplement, "Restoration of Lost or Obliterated Corners and Sub-division of Sections".
- "Oklahoma Minimum Standards for the Practice of Land Surveying" as adopted by the State Board of Licensure for Professional Engineers and Land Surveyors: and
- Sound land surveying practices:

including a thorough search, study, analysis and consideration of all existing records and field evidence.

I further certify that all survey monuments depicted exist and that all land survey work was done by me or under my direct supervision.

DATED THIS _____ DAY OF _____, 20__

POE & ASSOCIATES INC.
Oklahoma City, Oklahoma

SURVEYOR'S NAME - SIGNATURE _____

SURVEYOR'S NAME - JUSTIN LEE TALCOTT

OKLAHOMA REGISTERED LAND SURVEYOR NO. 1646

CERTIFICATE OF AUTHORIZATION NO. 541

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION



PLS	TAW	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN		SURVEY DATA SHEET
CHECKED		
APPROVED		
CREW	POE	SWO 2923(1) PROJECT NO. 09032(20) SHEET NO. SD01

SEC.28, T-11-N, R-3-W

SEC.27, T-11-N, R-3-W

POE & ASSOCIATES, OKLAHOMA CITY, OK.

DESCRIPTION	REVISIONS	DATE

P.O.T. STA. 371+39.31 BEG. I-240 SURVEY
X=2,145,147.3663 Y=143,039.5414

P.O.T. STA. 376+33.43 @ I-240 SURVEY
N-S SEC. LINE 96.724' S. TO SEC. COR.
2,736.652' S. TO 1/4 SEC. COR.
2,534.495' N. TO 1/4 SEC. COR.
X=2,145,641.4636 Y=143,044.2256

SANTA FE AVE.

MODJESKA DEV. CO., TRUSTEE

BM#15 - "D" ON N.W. COR. WTR. VAULT
E. OF SANTA FE 152.94' LT. @ I-240
I-240 STA. 377+02.13 EL=1258.45

BM#14 - "D" ON CONC. BASE TRAFFIC
CONTROL BOX. 136.04' LT. @ I-240
I-240 STA. 379+06.84 EL=1261.56

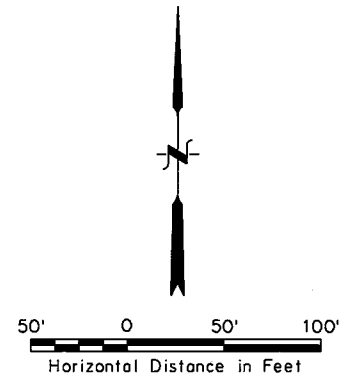
BM#13 - "D" ON CURB @ P.I. OF S. SIDE
OF PARKING LOT S. OF PAYLESS
SHOES. 152.24' LT. @ I-240
I-240 STA. 385+73.15 EL=1263.85

BM#16 - "X" ON CURB @ P.I. OF
PARKING LOT N.W. OF BATTERIES
PLUS. 157.07' RT. @ I-240
I-240 STA. 377+33.76 EL=1257.84

BM#17 - "X" ON N. CURB OF PARKING
LOT OF WALMART 148.89' RT. @ I-240
I-240 STA. 383+25.73 EL=1265.47

SPFC BUSHELL, INC.

WALMART



SEC.33, T-11-N, R-3-W

SEC.34, T-11-N, R-3-W

PLS			OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN	TAW		SURVEY DIVISION
CHECKED			SURVEY DATA SHEET
APPROVED			
CREW	POE	SWO 292311	PROJECT NO. 090321201 SHEET NO. 5002

DESCRIPTION	REVISIONS	DATE

SEC.27, T-11-N, R-3-W

BM#12 - "X" ON CURB IN PARKING LOT
W. OF SHIELDS 453.49' LT. & I-240
(CONTROL PT. "CIRCUIT CITY")
I-240 STA. 391+00.77 EL=1265.35

BM#11 - "X" ON CURB @ P.I. S. COR.
PARKING LOT OF VALERO GAS STA.
176.68' LT. & I-240
I-240 STA. 394+01.73 EL=1275.41

BM#10 - "X" ON CURB @ INLET S.
PARKING LOT OF HOME DEPOT
175.60' LT. & I-240
I-240 STA. 399+94.10 EL=1270.89

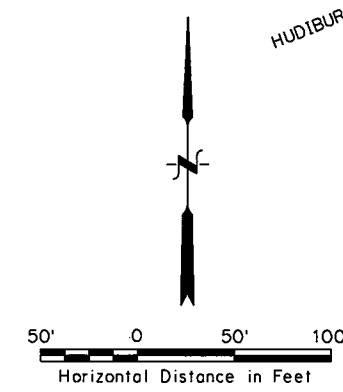
BM#18 - "X" ON E. CURB OF 3RD
ENTR. FROM W. ON N. SIDE NISSAN
DEALERSHIP. 139.51' RT. & I-240
I-240 STA. 389+27.33 EL=1270.28

BM#19 - "X" ON CONC. BASE OF
LIGHT POLE N. OF ENTERPRISE
RENTAL. 155.12' RT. & I-240
I-240 STA. 395+58.73 EL=1280.87

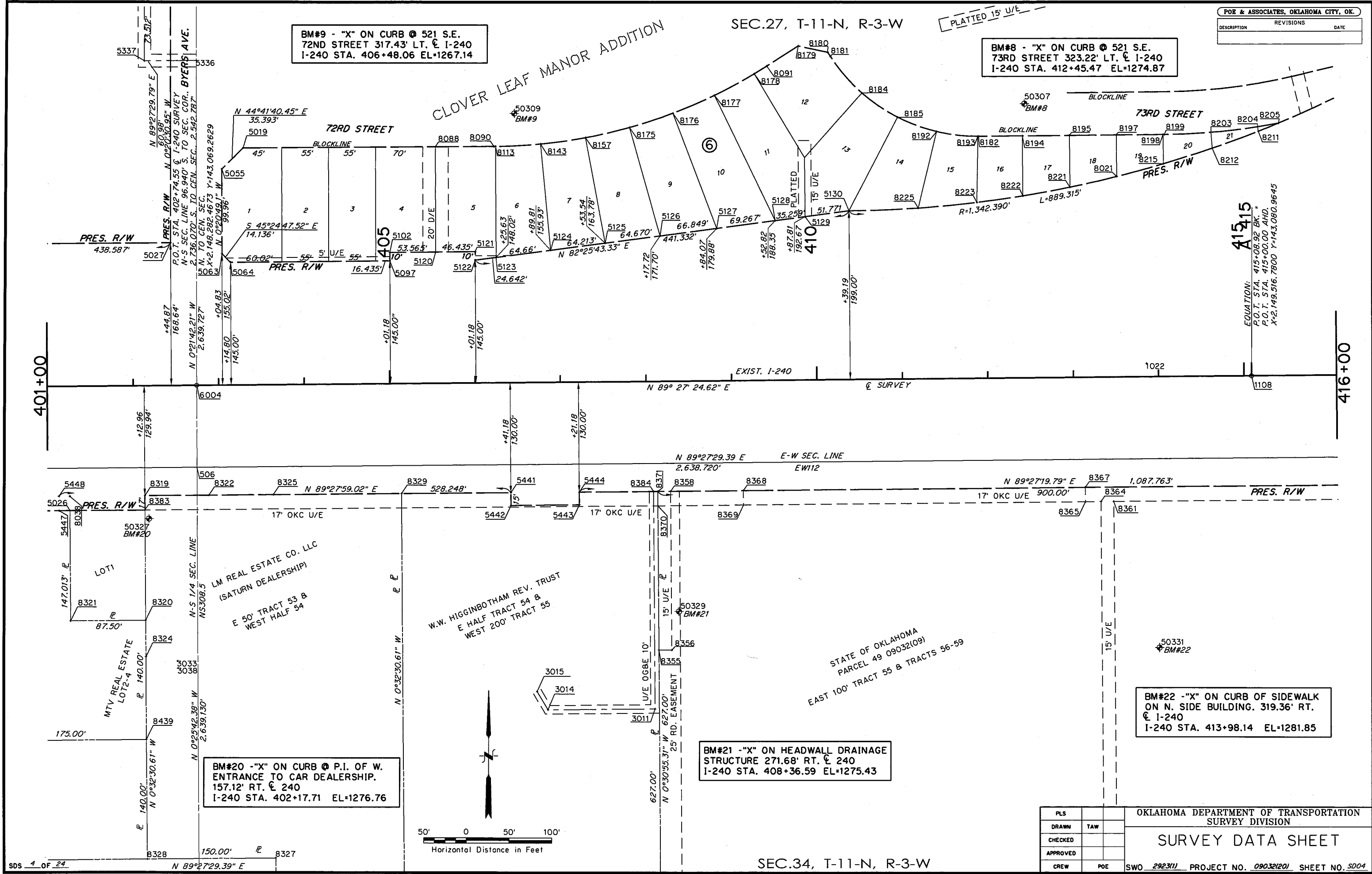
NOTE: LUST SITE
FACILITY NAME: MOSLEY'S TEXACO
LOCATION: 7501 S. SHIELDS BLVD.
OCC FAC #5508224
CASE #064-1702

BARNEY WHITFIELD
ADD.
8438

SEC.34, T-11-N, R-3-W



PLS		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN	TAW	SURVEY DIVISION
CHECKED		SURVEY DATA SHEET
APPROVED		
CREW	POE	SWO 2923111 PROJECT NO. 090321201 SHEET NO. SD03



POE & ASSOCIATES, OKLAHOMA CITY, OK.		
DESCRIPTION	REVISIONS	DATE

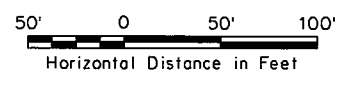
BM#9 - "X" ON CURB @ 521 S.E.
72ND STREET 317.43' LT. & I-240
I-240 STA. 406+48.06 EL=1267.14

BM#8 - "X" ON CURB @ 521 S.E.
73RD STREET 323.22' LT. & I-240
I-240 STA. 412+45.47 EL=1274.87

BM#20 - "X" ON CURB @ P.I. OF W.
ENTRANCE TO CAR DEALERSHIP.
157.12' RT. & 240
I-240 STA. 402+17.71 EL=1276.76

BM#21 - "X" ON HEADWALL DRAINAGE
STRUCTURE 271.68' RT. & 240
I-240 STA. 408+36.59 EL=1275.43

BM#22 - "X" ON CURB OF SIDEWALK
ON N. SIDE BUILDING. 319.36' RT.
& I-240
I-240 STA. 413+98.14 EL=1281.85



PLS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
DRAWN	TAW	SURVEY DATA SHEET	
CHECKED			
APPROVED			
CREW	POE	SWO 292311 PROJECT NO. 09032101 SHEET NO. SD04	

SEC.27, T-11-N, R-3-W

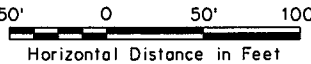
POE & ASSOCIATES, OKLAHOMA CITY, OK.		
DESCRIPTION	REVISIONS	DATE

SEC.26, T-11-N, R-3-W

425

420

430



BM#7 - "I" ON TOP E. SIDE OF
CONCRETE DRAINAGE DITCH 406.13'
LT. & I-240
I-240 STA. 418+82.24 EL+1265.29

EXIST. I-240 SURVEY
P.I. STA. 422+59.2614
X=2150.276,0058
Y=143.088,1621
Δ=10°02'30.00" RI.
D= 2°00'00.00"
R=2,864.789'
T= 251.686'
L= 502.083'

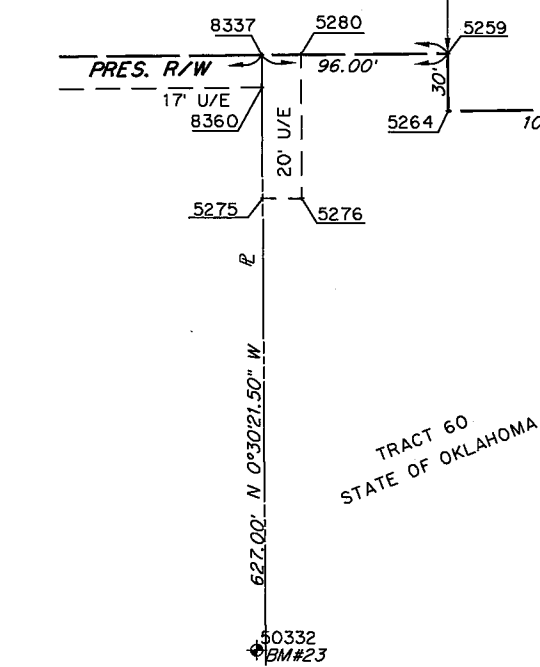
P.O.T. STA. 79+77.14 & I-35 SURVEY
B E-W SEC. LINE 97,000' E. TO SEC. COR.
W TO 1/4 SEC. COR., Δ= 0°00'00.14" LI.
X=2150.824,6854 Y=142.996,3594
P.I. STA. 79+79.44 & I-35 SURVEY
Δ= 0°09'33.96" RI.
X=2150.824,6854 Y=142.996,3594

P.I. STA. 428+14.28 & I-240 SURVEY
B E-W SEC. LINE 97,000' E. TO SEC. COR.
W TO 1/4 SEC. COR., Δ= 0°00'00.14" LI.
X=2150.824,6854 Y=142.996,3594
N-S SEC. LINE
N 0°30'05.37" W
2,641.746'

P.I. STA. 429+12.77 & I-240 SURVEY
B E-W SEC. LINE 17,174' N. TO SEC. COR.
S TO 1/4 SEC. COR., Δ= 0°00'00.14" LI.
X=2150.921,8313 Y=142.980,1033

416+00

431+00



BM#23 - "X" ON BASE OF LIGHT POLE
E. SIDE OF PARKING LOT.
439.75' RT. & I-240
I-240 STA. 416+99.26 EL+1282.385

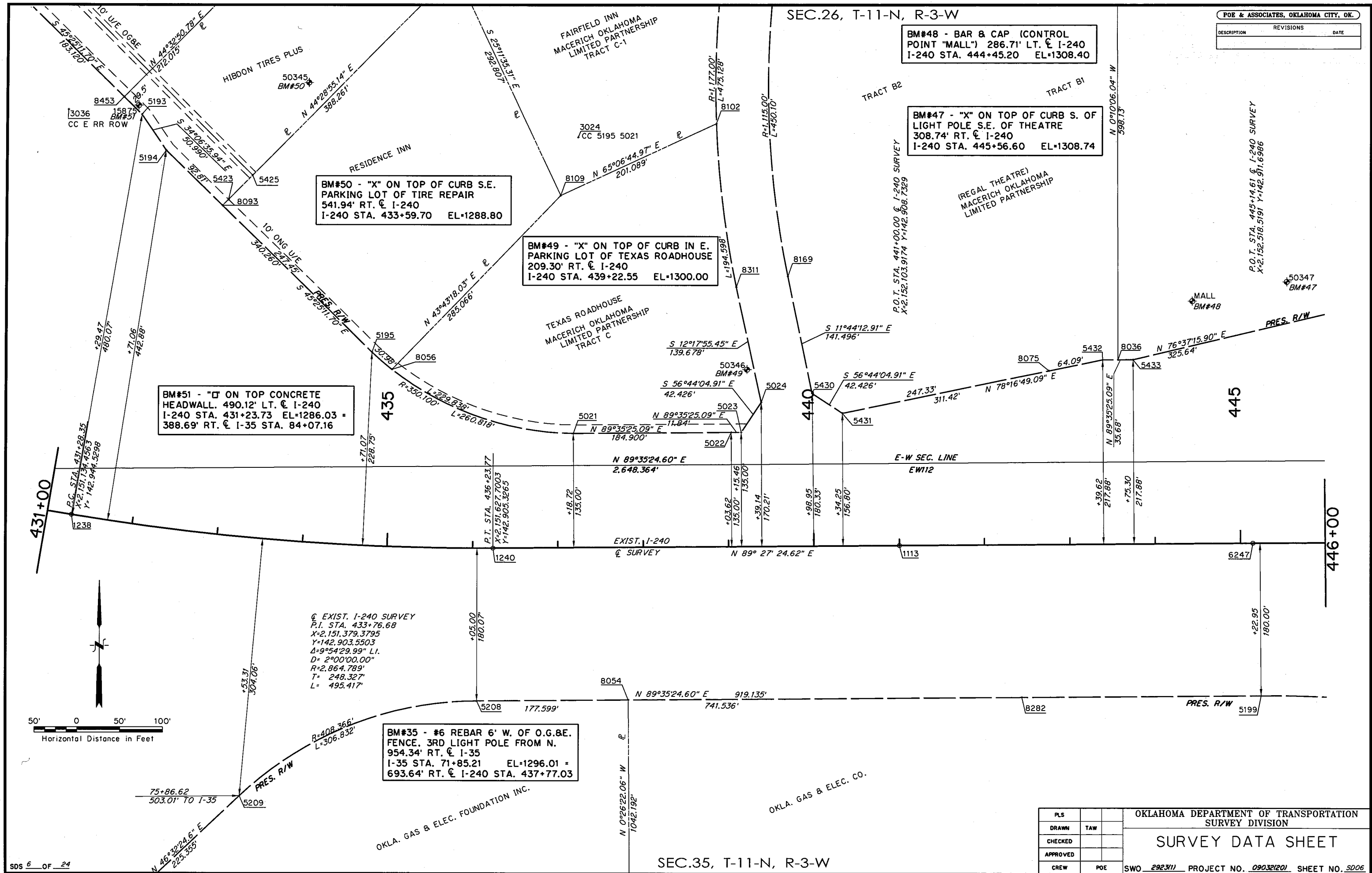
BM#24 - #6 X 30" LG. REBAR E. OF
BEND IN CREEK. 620.62' RT. & I-240
I-240 STA. 421+26.09 EL+1278.215 =
706.28' LT. & I-35 STA. 74+51.09

SEC.34, T-11-N, R-3-W

SEC.35, T-11-N, R-3-W

OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
SURVEY DATA SHEET	
PLS	
DRAWN	TAW
CHECKED	
APPROVED	
CREW	POE

SWO 2923111 PROJECT NO. 090321201 SHEET NO. SD05



POE & ASSOCIATES, OKLAHOMA CITY, OK.		
DESCRIPTION	REVISIONS	DATE

BM#48 - BAR & CAP (CONTROL
POINT "MALL") 286.71' LT. \angle I-240
I-240 STA. 444+45.20 EL=1308.40

BM#47 - "X" ON TOP OF CURB S. OF
LIGHT POLE S.E. OF THEATRE
308.74' RT. \angle I-240
I-240 STA. 445+56.60 EL=1308.74

BM#50 - "X" ON TOP OF CURB S.E.
PARKING LOT OF TIRE REPAIR
541.94' RT. \angle I-240
I-240 STA. 433+59.70 EL=1288.80

BM#49 - "X" ON TOP OF CURB IN E.
PARKING LOT OF TEXAS ROADHOUSE
209.30' RT. \angle I-240
I-240 STA. 439+22.55 EL=1300.00

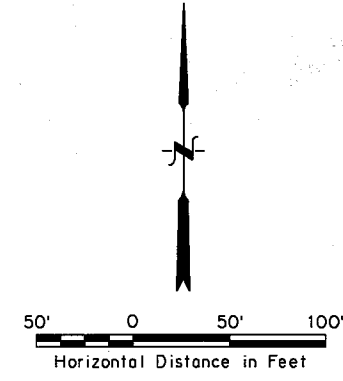
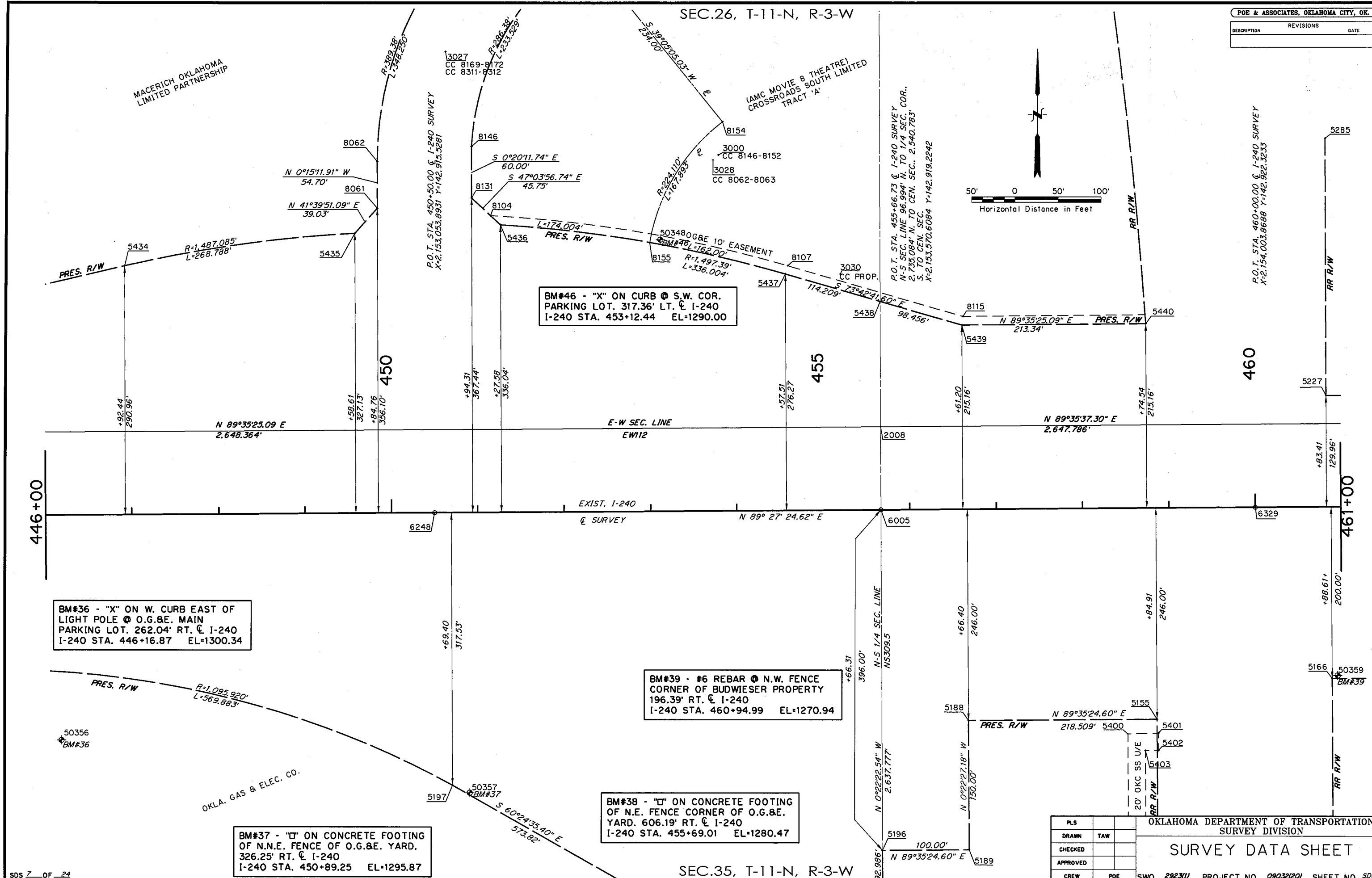
BM#51 - "Q" ON TOP CONCRETE
HEADWALL. 490.12' LT. \angle I-240
I-240 STA. 431+23.73 EL=1286.03 =
388.69' RT. \angle I-35 STA. 84+07.16

BM#35 - #6 REBAR 6' W. OF O.G.&E.
FENCE. 3RD LIGHT POLE FROM N.
954.34' RT. \angle I-35
I-35 STA. 71+85.21 EL=1296.01 =
693.64' RT. \angle I-240 STA. 437+77.03

\angle EXIST. I-240 SURVEY
P.I. STA. 433+76.68
X=2,151,379.3795
Y=142,903.5503
 $\Delta=9^{\circ}54'29.99''$ L.I.
D= 2'00'00.00"
R=2,864.789'
T= 248.327'
L= 495.417'

PLS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
DRAWN	TAW	SURVEY DATA SHEET	
CHECKED			
APPROVED			
CREW	POE	SWO 292311 PROJECT NO. 090321201 SHEET NO. 5006	

DESCRIPTION	REVISIONS	DATE

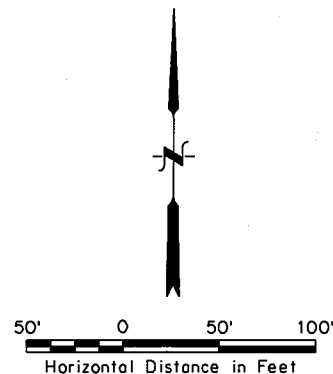


OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION			
SURVEY DATA SHEET			
PLS	TAW	SWO	2923111
DRAWN		PROJECT NO.	090321201
CHECKED		SHEET NO.	5007
APPROVED			
CREW	POE		

SEC.26, T-11-N, R-3-W

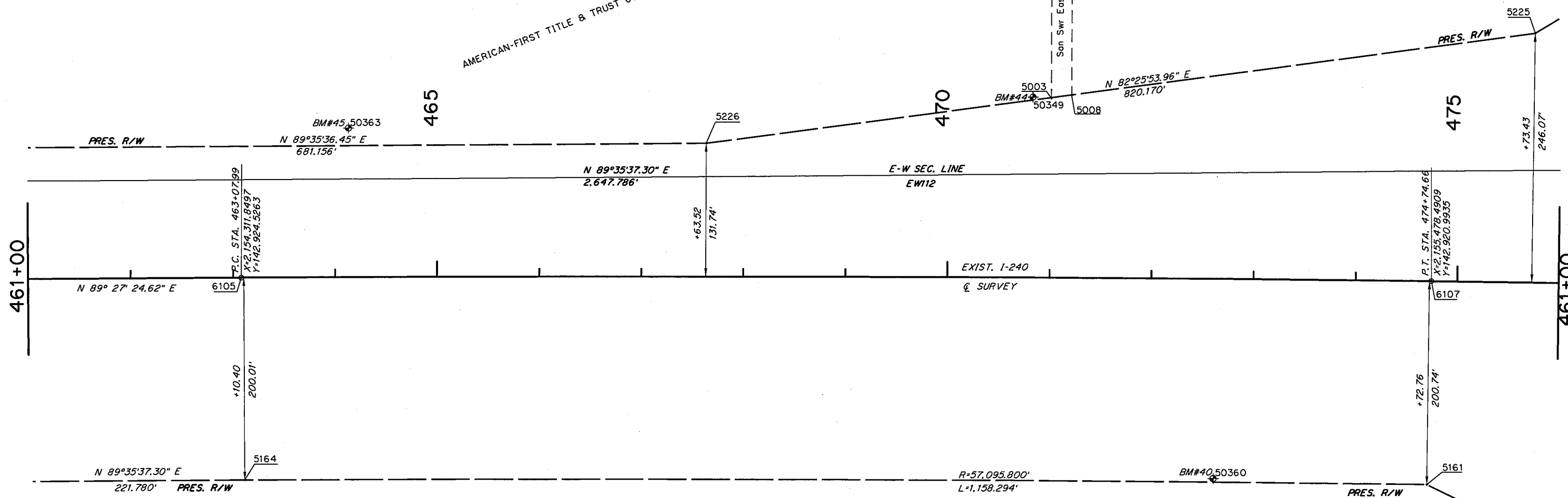
POE & ASSOCIATES, OKLAHOMA CITY, OK.		
DESCRIPTION	REVISIONS	DATE

BM#45 - "I" ON TOP OF SANITARY
SEWER MANHOLE 147.47' LT. \angle I-240
I-240 STA. 464+13.38 EL=1269.68



BM#44 - "I" ON TOP OF CURB @
S.E. CORNER PARKING LOT.
178.33' LT. \angle I-240
I-240 STA. 470+82.54 EL=1259.74

AMERICAN-FIRST TITLE & TRUST CO.



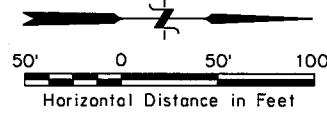
BM#40 - #6 X 30" LG. REBAR
197.10' RT. \angle I-240
I-240 STA. 472+62.48 EL=1259.74

PBO DEV. COMPANY
(BUDWEISER-BUSCH)

\angle EXIST. I-240 SURVEY
P.I. STA. 468+91.34
X=2,154,895.1883
Y=142,928.6990
A=1°10'00.00" RI.
D= 0°06'00.00"
R=57,295.779'
T= 583.353'
L= 1,166.667'

SEC.35, T-11-N, R-3-W

PLS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
DRAWN	TAW	SURVEY DATA SHEET	
CHECKED			
APPROVED			
CREW	POE		
SWO 292311		PROJECT NO. 090321201 SHEET NO. 5008	



25

P.O. T. STA. 25+00.00 @ I-35 SURVEY
X=2150.872, Y=137.519, Z=10

SEC.34, T-11-N, R-3-W

POE & ASSOCIATES, OKLAHOMA CITY, OK.		
DESCRIPTION	REVISIONS	DATE

LOVE'S COUNTRY STORES, INC.

DALE BLISS
CLASSIC AUTO PARTS
OF OKLA. INC.

89TH STREET

5483

5480

N 33°39'10.06" E
26.615'

PRES. R/W N 0°25'57.71" E
300.55'

+50.64'
190.40'
+72.67'
175.46'

395.72'
S 89°37'41.19" W

8469 N 0°33'23.80" W
659.403'

212.72'

5486 N 0°25'57.71" E
327.472'

PRES. R/W

5485

30

1323

I-35
N 0°30'05.37" W

34+00

V110

+59.98'
210.05'

+12.18'
184.91'

PRES. R/W
438.60'
N 3°53'32.39" W

5050

5051 N 26°13'18.39" W
57.94'

(FORD DEALERSHIP)

LINDA BROCK NELSON REV. TRUST
ARMOUR REALTY INC & DKH ENTERPRISES INC.

PRES. R/W
150.44'
N 3°53'32.39" W
5049

+50.01'
158.96'

1258.09'
S 89°31'48.61" W

S 89°31'48.61" W
387.000'

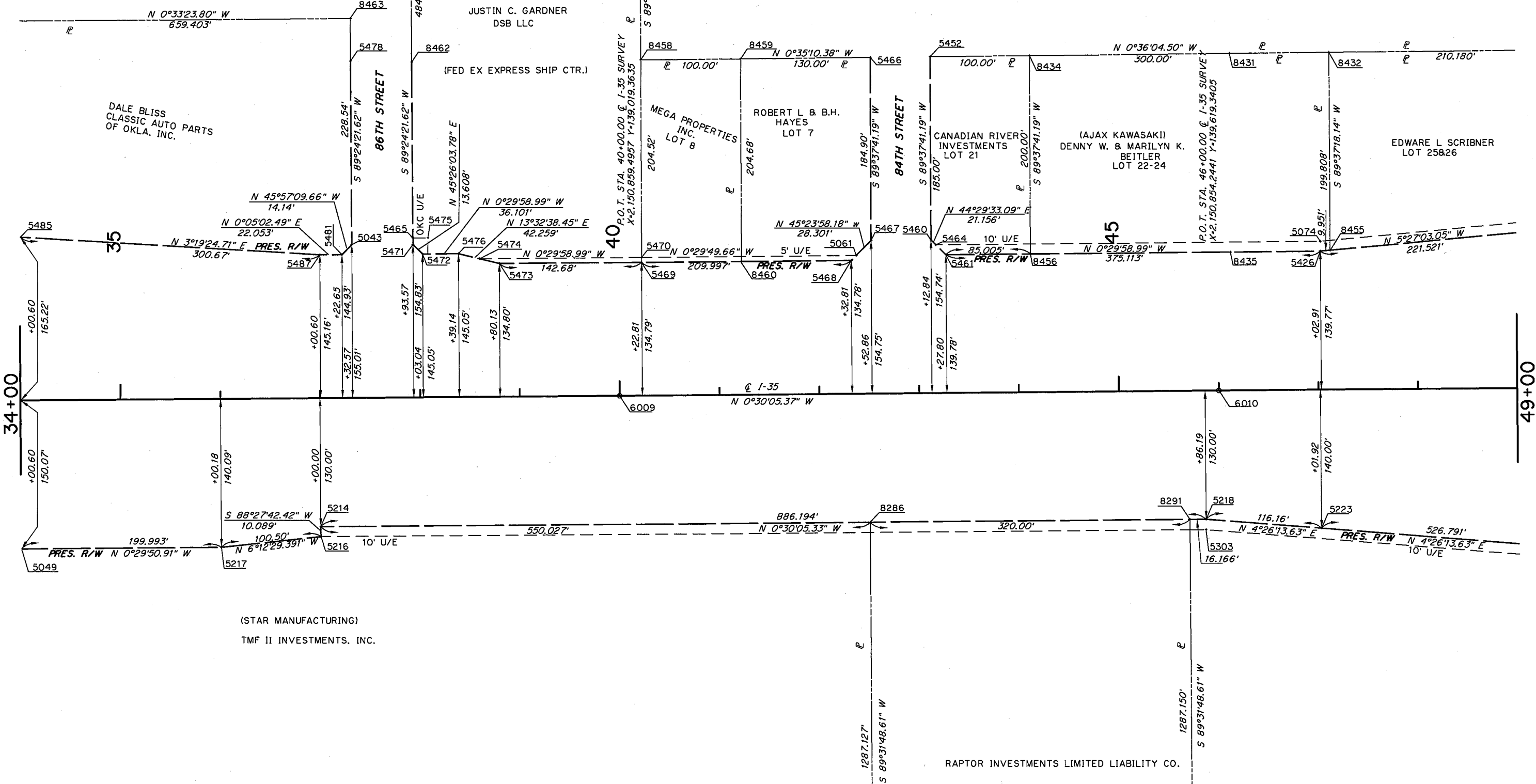
SEC.35, T-11-N, R-3-W

PLS			OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
DRAWN	TAW		SURVEY DATA SHEET	
CHECKED				
APPROVED				
CREW	POE		SWO 292311 PROJECT NO. 090321201 SHEET NO. 5010	

SEC.34, T-11-N, R-3-W

POE & ASSOCIATES, OKLAHOMA CITY, OK.

DESCRIPTION	REVISIONS	DATE



SEC.35, T-11-N, R-3-W

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

PLS	
DRAWN	TAW
CHECKED	
APPROVED	
CREW	POE

SWO 2923111 PROJECT NO. 090321201 SHEET NO. 5011

POE & ASSOCIATES, OKLAHOMA CITY, OK.		
DESCRIPTION	REVISIONS	DATE

SEC.34, T-11-N, R-3-W

BM#30 - #5 IRON ROD IN MEDIAN OF
82ND ST. (CONTROL PT. "HOSPICE")
629.22' LT. \angle I-35
I-35 STA. 53+30.60 EL+1307.67

(LA QUINTA)
BRE/LQ PROPERTIES LLC
BM#29 - "X" ON CURB P.I. \odot S.E. COR.
OF S. PARKING LOT OF DAYS INN
HOTEL 230.16' LT. \angle I-35
I-35 STA. 53+66.62 EL+1309.11

BM#28 - "X" ON EAST CURB OF
PARKING LOT. 154.01' LT. \angle I-35
I-35 STA. 59+00.05 EL+1298.27

BM#31 - "X" ON CURB S.W. RETURN
OF S.E. SERVICE ROAD & S.E. 82ND
STREET 148.34' RT. \angle I-35
I-35 STA. 53+58.07 EL+1308.48

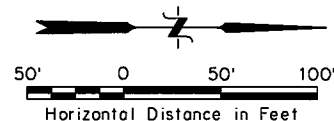
BM#32 - "X" ON CURB E. SIDE OF
MEDIAN ON 80TH STREET
348.75' RT. \angle I-35
I-35 STA. 59+58.93 EL+1297.20

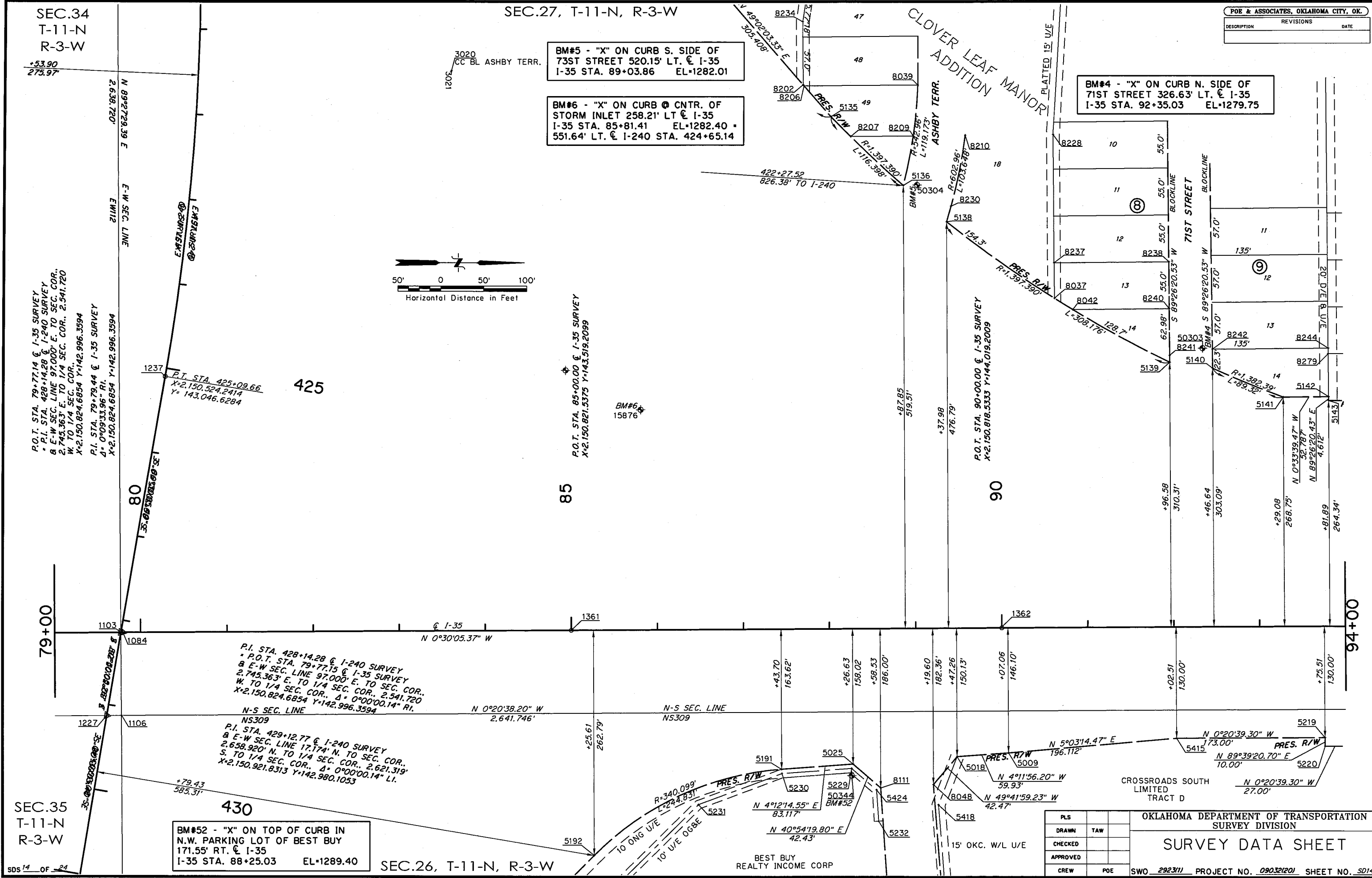
OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

PLS	
DRAWN	TAW
CHECKED	
APPROVED	
CREW	POE

SWO 2923111 PROJECT NO. 090321201 SHEET NO. 5012





POE & ASSOCIATES, OKLAHOMA CITY, OK.		
DESCRIPTION	REVISIONS	DATE

BM#5 - "X" ON CURB S. SIDE OF
73ST STREET 520.15' LT. & I-35
I-35 STA. 89+03.86 EL+1282.01

BM#6 - "X" ON CURB @ CNTR. OF
STORM INLET 258.21' LT. & I-35
I-35 STA. 85+81.41 EL+1282.40
551.64' LT. & I-240 STA. 424+65.14

BM#4 - "X" ON CURB N. SIDE OF
71ST STREET 326.63' LT. & I-35
I-35 STA. 92+35.03 EL+1279.75

BM#52 - "X" ON TOP OF CURB IN
N.W. PARKING LOT OF BEST BUY
171.55' RT. & I-35
I-35 STA. 88+25.03 EL+1289.40

PLS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
DRAWN	TAW	SURVEY DATA SHEET	
CHECKED			
APPROVED			
CREW	POE	SWO 292311 PROJECT NO. 090321201 SHEET NO. SD14	

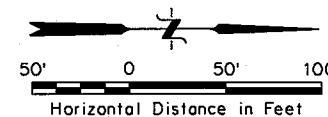
SEC.27, T-11-N, R-3-W

POE & ASSOCIATES, OKLAHOMA CITY, OK.

DESCRIPTION	REVISIONS	DATE

BM#2 - "X" ON CURB E. SIDE OF
PARKING LOT OF ARBY'S 155.87' LT.
I-35
I-35 STA. 105+35.58 EL=1290.09

7/11
QUICK STOP



109+00

BM#1 - "I" @ S.W. CORNER OF BLDG.
JACKIE COOPER/ FIRESTONE 204.35'
RT. I-35
I-35 STA. 107+92.56 EL=1300.22

BM#54 - "X" ON CURB W. SIDE OF
RAMADA HOTEL PARKING LOT.
176.35' RT. I-35
I-35 STA. 101+09.27 EL=1295.68

BM#53 - "I" ON TOP CONCRETE
HEADWALL. (CONTROL PT. "RAMADA")
131.47' RT. I-35
I-35 STA. 94+25.50 EL=1285.56

BM#3 - #5 REBAR 295.24' LT. I-35
(CONTROL PT. "CHURCH")
I-35 STA. 101+11.28 EL=1284.54

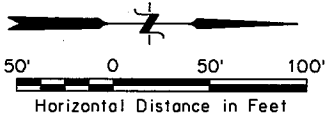
OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION	
SURVEY DATA SHEET	
PLS	TAW
DRAWN	
CHECKED	
APPROVED	
CREW	POE
SWO 292311 PROJECT NO. 09032101 SHEET NO. 5015	

SEC.27, T-11-N, R-3-W

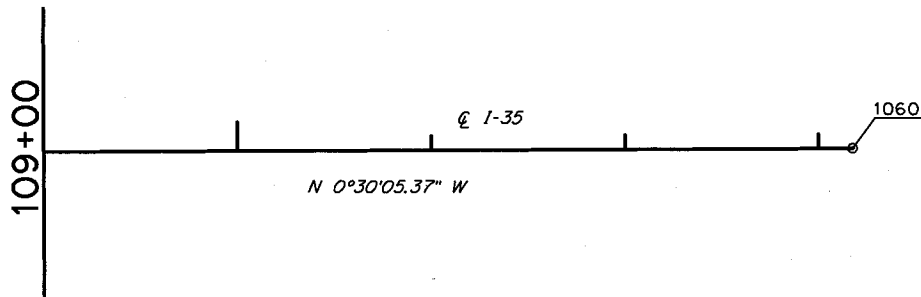
POE & ASSOCIATES, OKLAHOMA CITY, OK.

DESCRIPTION	REVISIONS	DATE

P.O.T. STA. 106+18.82 @ I-35 SURVEY
END SURVEY I-35
X=2,150,804.6077 Y=146,336.8430

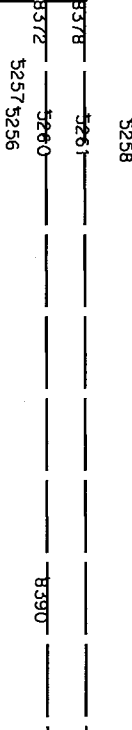
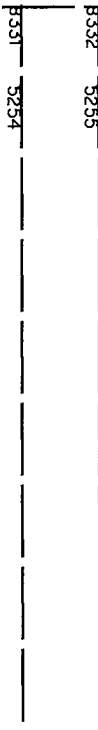


110



N 0°20'36.67" W

N-S SEC. LINE
NS309



SEC.26, T-11-N, R-3-W

PLS			OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN	TAW		SURVEY DIVISION
CHECKED			SURVEY DATA SHEET
APPROVED			
CREW	POE	SWO 292311	PROJECT NO. 090321201 SHEET NO. SD16

SET SANDSTONE 14 X 12 X 3
G.L.O. NOTES APPROVED 09-23-1873
OKLAHOMA CERTIFIED CORNER RECORD
DATED 07-30-2002
FOUND CHISELED X IN CONC

POINT 3169 SEC. COR.
FOUND CHISELED X
X=2150889.9611
Y= 148284.7529
X ON CURB

N58°59'59"W
86.91'
N57°03'10"E
84.91'
N89°47'02"E
51.09'
S29°22'32"E
52.38'
X ON CURB

SET SANDSTONE 15 X 13 X 4
G.L.O. NOTES APPROVED 09-23-1873
OKLAHOMA CERTIFIED CORNER RECORD
07-30-2002 SET CHISELED X IN
PAVEMENT FROM EXISTING REFERENCE
POINTS

400' 0 400' 800'
Horizontal Scale in Feet

SET 14 X 10 X 4 SANDSTONE
GLO NOTES APPROVED 09-23-1873
OKLAHOMA CERTIFIED CORNER RECORD 01-13-1997
FOUND PK NAIL

OKLAHOMA CERTIFIED CORNER RECORD 07-30-2002
FOUND PK NAIL

POINT 504 CEN. SEC.
FOUND PK NAIL
X=2148266.4141
Y= 145611.9997

POINT 3105 1/4 COR.
FOUND PK NAIL
X=2145619.0344
Y= 145578.6212
N48°42'43"W
39.85'
N54°58'29"E
53.91'
E-W 111.5 N 89°16'39.53" E
1/4 SEC. LINE 2647.590'

N44°42'15"W
28.95'
N 89°24'51.81" E
2639.547'
S89°25'01"W
97.00'

POINT 3040 1/4 COR.
SET CHISELED X
X=2150905.8228
Y= 145638.9775
N64°47'27"E
133.46'
S36°55'31"E
131.88'
X ON CURB

POINT 3120 SEC. COR.
FOUND 1/2" I.P.
X=2145642.3196
Y= 142947.5057

POINT 506 1/4 COR.
FOUND PK NAIL
X=2148283.0793
Y= 142972.3253

POINT 1106 SEC. COR.
CALCULATED CORNER
X=2150921.6810
Y= 142997.2789

N 0°30'25.38" W N-S 308
SEC. LINE 2631.219'
S68°04'19"E
36.88'
E-W 112 N 89°27'41.44" E
SEC. LINE 2640.876'
S79°44'10"W
35.46'
S36°52'16"E
115.46'

N85°30'48"W
39.09'
S8°18'54"E
23.89'
S58°35'45"E
44.55'

N 89°27'29.39" E
2638.720'

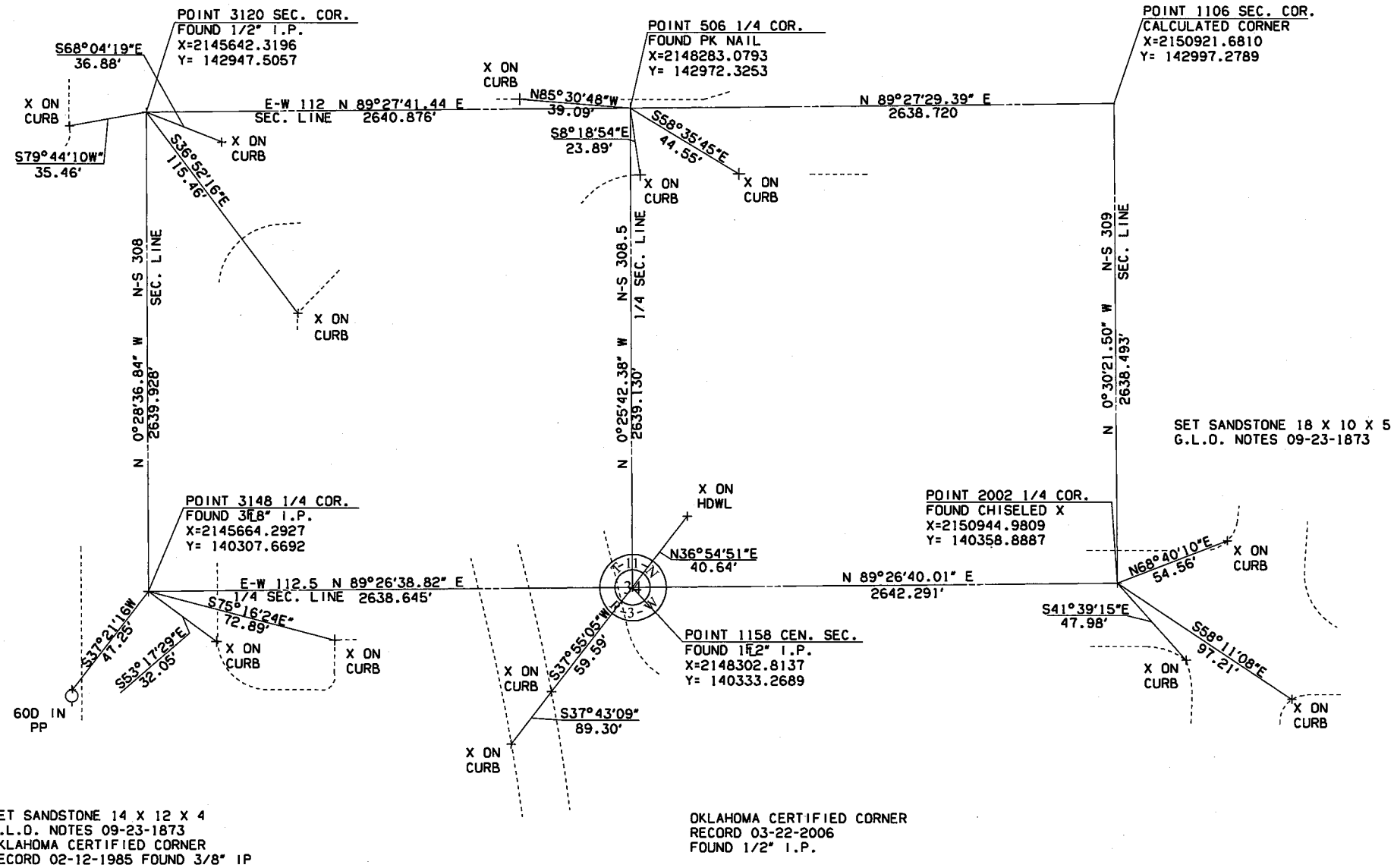
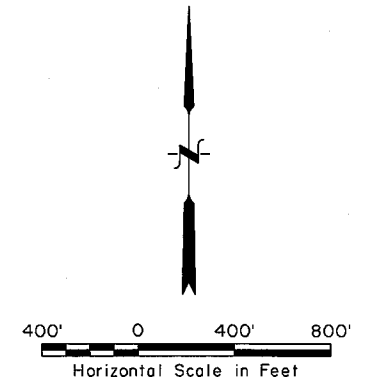
SET 16 X 12 X 3 SANDSTONE
G.L.O. NOTES APPROVED 09-23-1873
OKLAHOMA CERTIFIED CORNER RECORD 02-12-1985
FOUND 1/2" I.P.

SET 14 X 12 X 3 SANDSTONE
OKLAHOMA CERTIFIED CORNER RECORD 03-22-2006
FOUND PK NAIL

PLS		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN	TAN	SURVEY DIVISION
CHECKED		SURVEY DATA SHEET
APPROVED		
CREW	POE	SWO 2923111 PROJECT NO. 090321201 SHEET NO. 3017

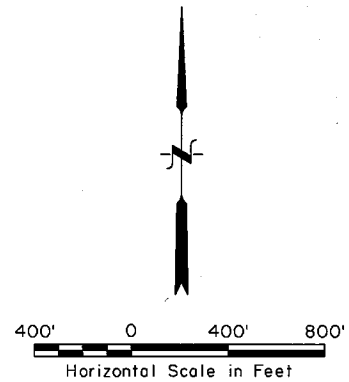
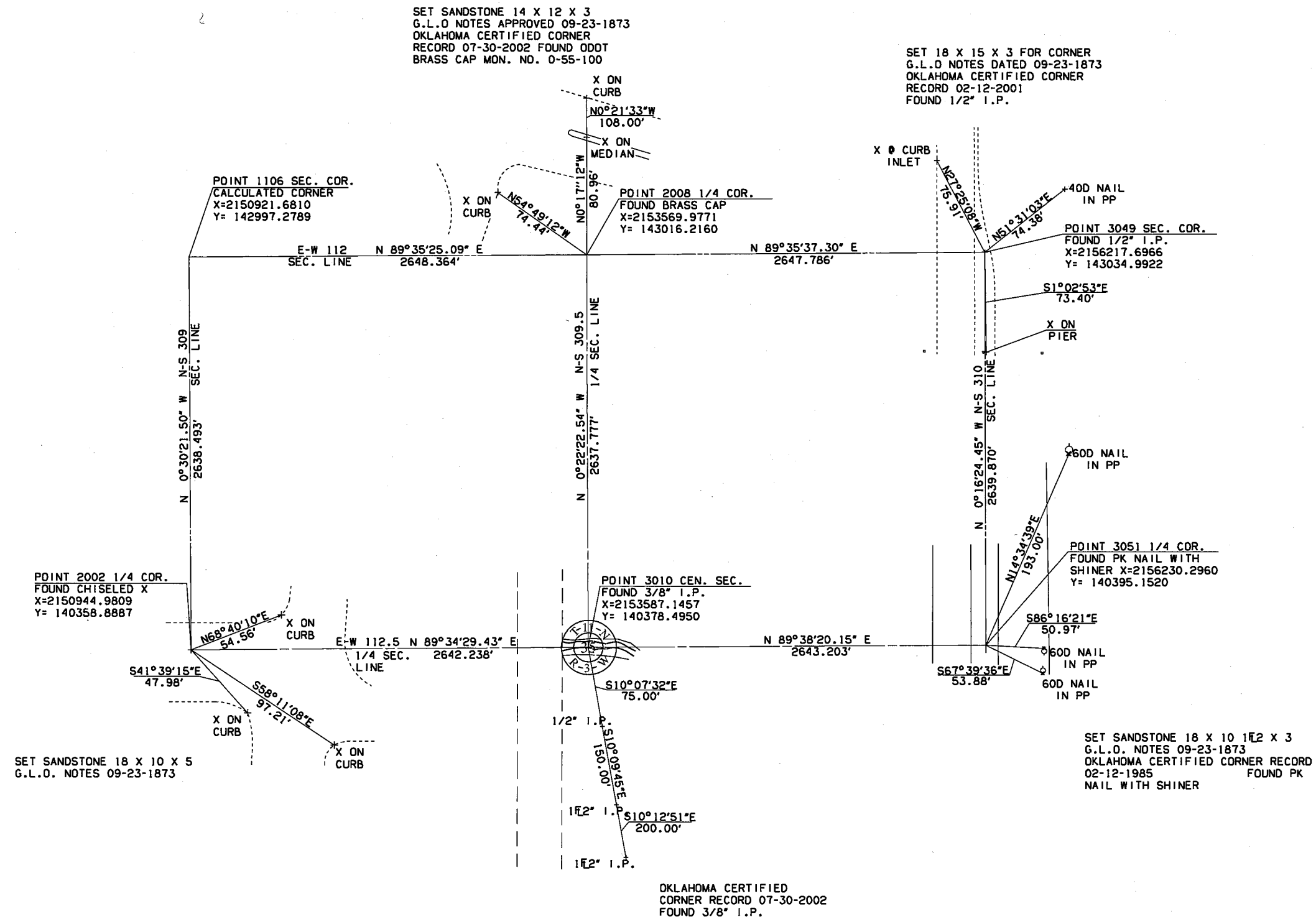
SET 16 X 12 X 3 SANDSTONE
G.L.O. NOTES APPROVED 09-23-1873
OKLAHOMA CERTIFIED CORNER RECORD
02-12-1985 FOUND 1/2" I.P.

SET 14 X 12 X 3 SANDSTONE
OKLAHOMA CERTIFIED CORNER
RECORD 03-22-2006 FOUND PK NAIL



PLS			OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN	TAW		SURVEY DIVISION
CHECKED			SURVEY DATA SHEET
APPROVED			
CREW	POE		SWO 292311 PROJECT NO. 090321201 SHEET NO. 5018

DESCRIPTION	REVISIONS	DATE



PLS		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN	TAW	SURVEY DIVISION
CHECKED		SURVEY DATA SHEET
APPROVED		
CREW	PDE	SWO 292311 PROJECT NO. 090321201 SHEET NO. SD19

DESCRIPTION	REVISIONS	DATE

SET SANDSTONE 14 X 12 X 3
G.L.O. NOTES APPROVED 09-23-1873
OKLAHOMA CERTIFIED CORNER RECORD
DATED 07-30-2002
FOUND CHISELED X IN CONC

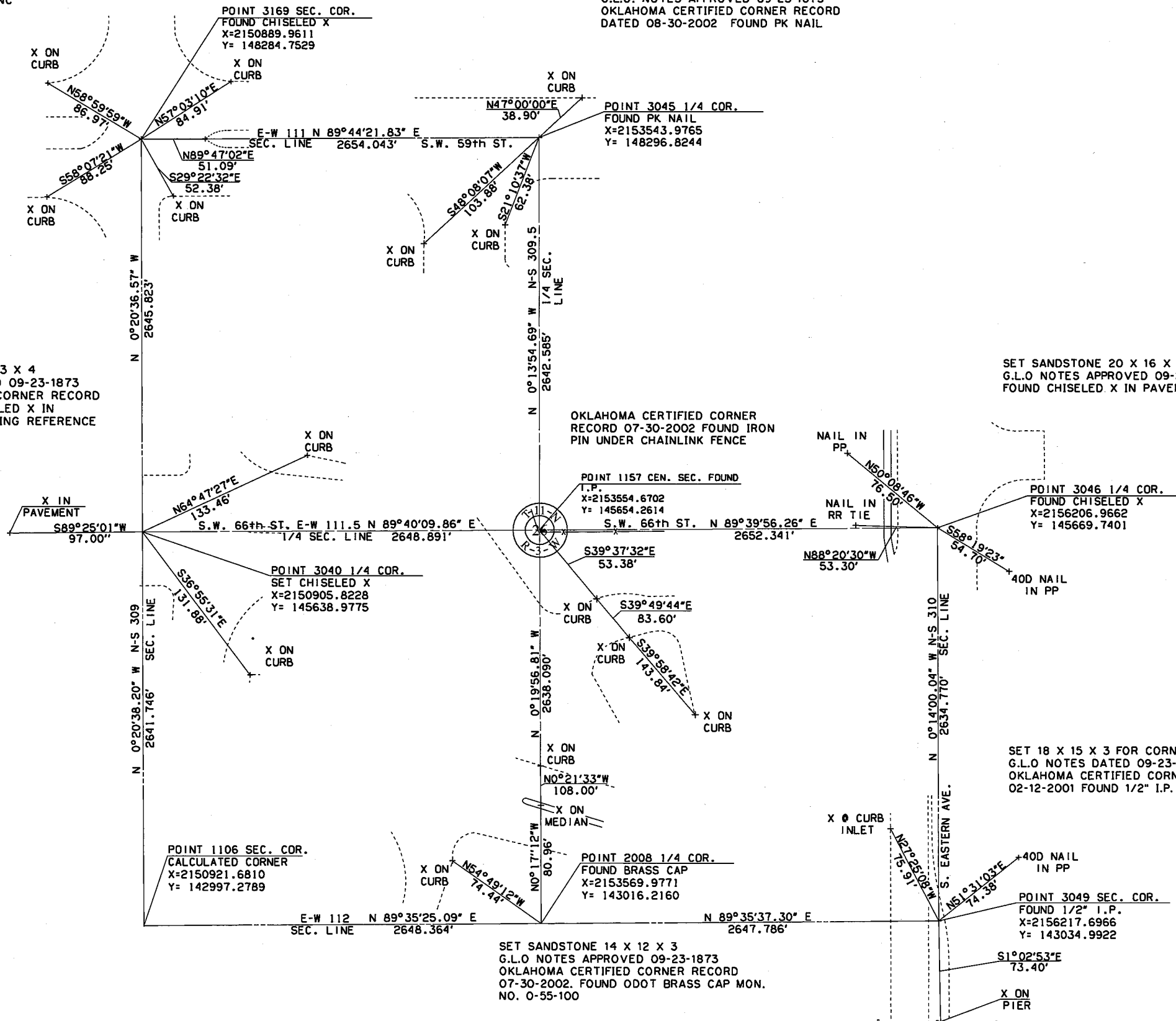
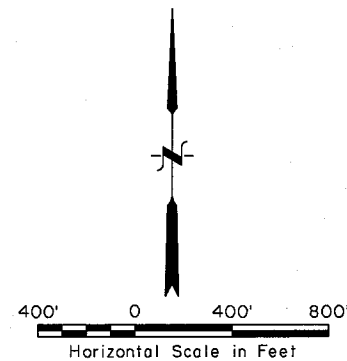
SET SANDSTONE 14 X 10 X 5
G.L.O. NOTES APPROVED 09-23-1873
OKLAHOMA CERTIFIED CORNER RECORD
DATED 08-30-2002 FOUND PK NAIL

SET SANDSTONE 15 X 13 X 4
G.L.O. NOTES APPROVED 09-23-1873
OKLAHOMA CERTIFIED CORNER RECORD
07-30-2002 SET CHISELED X IN
PAVEMENT FROM EXISTING REFERENCE
POINTS

SET SANDSTONE 20 X 16 X 3
G.L.O. NOTES APPROVED 09-23-1873
FOUND CHISELED X IN PAVEMENT

SET 18 X 15 X 3 FOR CORNER
G.L.O. NOTES DATED 09-23-1873
OKLAHOMA CERTIFIED CORNER RECORD
02-12-2001 FOUND 1/2" I.P.

SET SANDSTONE 14 X 12 X 3
G.L.O. NOTES APPROVED 09-23-1873
OKLAHOMA CERTIFIED CORNER RECORD
07-30-2002 FOUND ODOT BRASS CAP MON.
NO. 0-55-100



PLS		OKLAHOMA DEPARTMENT OF TRANSPORTATION
DRAWN	TAW	SURVEY DIVISION
CHECKED		SURVEY DATA SHEET
APPROVED		
CREW	PDE	SWO 292311 PROJECT NO. 090321201 SHEET NO. 5020

Project Name: EC-1060_Crossroads
Description: survey alg for Crossroads Interchange
Horizontal Alignment Name: CL-Present I-240
Description: PF2-Plan5
Style: Default

Project Name: EC-1060_Crossroads
Description: survey alg for Crossroads Interchange
Horizontal Alignment Name: CL-Present I-240
Description: PF2-Plan5
Style: Default

Project Name: EC-1060_Crossroads
Description: survey alg for Crossroads Interchange
Horizontal Alignment Name: CL-I35
Description: PF2-Plan5
Style: Default

POE & ASSOCIATES, OKLAHOMA CITY, OK.

DESCRIPTION	REVISIONS	DATE

	STATION	NORTHING	EASTING
Element: Linear			
POB (6417)	37139.31	143039.5414473	2145147.3663457
PI (6002)	37633.43	143044.2256038	2145641.4636161
Tangent Direction:	N 89°27'24.62" E		
Tangent Length:	494.119		
Element: Linear			
PI (6002)	37633.43	143044.2256038	2145641.4636161
PI (6001)	39343.79	143060.4394888	2147351.7472887
Tangent Direction:	N 89°27'24.62" E		
Tangent Length:	1710.361		
Element: Linear			
PI (6001)	39343.79	143060.4394888	2147351.7472887
PI (6240)	39500.00	143061.9203292	2147507.9502696
Tangent Direction:	N 89°27'24.62" E		
Tangent Length:	156.210		
Element: Linear			
PI (6240)	39500.00	143061.9203292	2147507.9502696
PI (6241)	40000.00	143066.6602320	2148007.9278024
Tangent Direction:	N 89°27'24.62" E		
Tangent Length:	500.000		
Element: Linear			
PI (6241)	40000.00	143066.6602320	2148007.9278024
PI (6004)	40274.55	143069.2629298	2148282.4672851
Tangent Direction:	N 89°27'24.62" E		
Tangent Length:	274.552		
Element: Linear			
PI (6004)	40274.55	143069.2629298	2148282.4672851
PI (1108)	41508.92	143080.9645000	2149516.7800000
Tangent Direction:	N 89°27'24.62" E		
Tangent Length:	1234.368		
Element: Linear			
PI (1108)	41508.92	143080.9645000	2149516.7800000
EQNBK ()	41508.92	143080.9645000	2149516.7800000
EQNAHD ()	A 41500.00	143080.9645000	2149516.7800000
PC (1234)	A 42007.57	143085.7762000	2150024.3309000
Tangent Direction:	N 89°27'24.62" E		
Tangent Length:	507.574		
Element: Circular			
PC (1234)	A 42007.57	143085.7762000	2150024.3309000
PI ()	A 42259.26	143088.1621331	2150276.0058464
CC (1236)	140221.1160000	2150051.4885000	
PT (1237)	A 42509.66	143046.6284000	2150524.2414000
Radius:	2864.789		
Delta:	10°02'30.00" Right		
Degree of Curvature(Arc):	2°00'00.00"		
Length:	502.083		
Tangent:	251.686		
Chord:	501.441		
Middle Ordinate:	10.992		
External:	11.035		
Tangent Direction:	N 89°27'24.62" E		
Radial Direction:	S 0°32'35.38" E		
Chord Direction:	S 85°31'20.38" E		
Radial Direction:	S 9°29'54.62" W		
Tangent Direction:	S 80°30'05.38" E		
Element: Linear			
PT (1237)	A 42509.66	143046.6284000	2150524.2414000
PI (1103)	A 42814.28	142996.3594000	2150824.6854000
Tangent Direction:	S 80°30'05.40" E		
Tangent Length:	304.620		
Element: Linear			
PI (1103)	A 42814.28	142996.3594000	2150824.6854000
PI (1227)	A 42912.77	142980.1053000	2150921.8313000
Tangent Direction:	S 80°30'05.26" E		
Tangent Length:	98.496		
Element: Linear			
PI (1227)	A 42912.77	142980.1053000	2150921.8313000
PC (1238)	A 43128.35	142944.5298000	2151134.4563000
Tangent Direction:	S 80°30'05.40" E		
Tangent Length:	215.581		
Element: Circular			
PC (1238)	A 43128.35	142944.5298000	2151134.4563000
PI ()	A 43376.68	142903.5502795	2151379.3794794
CC (1239)	145770.0422000	2151607.2092000	
PT (1240)	A 43623.77	142905.3265000	2151627.7003000

CURVE DATA CONTINUED:			
Radius:	2864.789		
Delta:	9°54'29.99" Left		
Degree of Curvature(Arc):	2°00'00.00"		
Length:	495.417		
Tangent:	248.327		
Chord:	494.799		
Middle Ordinate:	10.703		
External:	10.743		
Tangent Direction:	S 80°30'05.38" E		
Radial Direction:	S 9°29'54.62" W		
Chord Direction:	S 85°27'20.35" E		
Radial Direction:	S 0°24'35.37" E		
Tangent Direction:	N 89°35'24.63" E		
Element: Linear			
PT (1240)	A 43623.77	142905.3265000	2151627.7003000
PI (1113)	A 44100.00	142908.7329000	2152103.9174000
Tangent Direction:	N 89°35'24.60" E		
Tangent Length:	476.229		
Element: Linear			
PI (1113)	A 44100.00	142908.7329000	2152103.9174000
PI (6247)	A 44514.61	142911.6985623	2152518.5190582
Tangent Direction:	N 89°35'24.60" E		
Tangent Length:	414.612		
Element: Linear			
PI (6247)	A 44514.61	142911.6985623	2152518.5190582
PI (6248)	A 45050.00	142915.5281143	2153053.8930971
Tangent Direction:	N 89°35'24.60" E		
Tangent Length:	535.388		
Element: Linear			
PI (6248)	A 45050.00	142915.5281143	2153053.8930971
PI (6249)	A 45200.00	142916.6010428	2153203.8892598
Tangent Direction:	N 89°35'24.60" E		
Tangent Length:	150.000		
Element: Linear			
PI (6249)	A 45200.00	142916.6010428	2153203.8892598
PI (6005)	A 45566.73	142919.2241992	2153570.6083609
Tangent Direction:	N 89°35'24.60" E		
Tangent Length:	366.728		
Element: Linear			
PI (6005)	A 45566.73	142919.2241992	2153570.6083609
PI (6329)	A 46000.00	142922.3233285	2154003.8687942
Tangent Direction:	N 89°35'24.60" E		
Tangent Length:	433.272		
Element: Linear			
PI (6329)	A 46000.00	142922.3233285	2154003.8687942
PC (6105)	A 46307.99	142924.5263286	2154311.8497422
Tangent Direction:	N 89°35'24.60" E		
Tangent Length:	307.989		
Element: Circular			
PC (6105)	A 46307.99	142924.5263286	2154311.8497422
PI ()	A 46891.34	142928.6989727	2154895.1883068
CC (6106)	85630.2125697	2154721.6782651	
PT (6107)	A 47474.66	142920.9935309	2155478.4909044
Radius:	57295.780		
Delta:	1°10'00.00" Right		
Degree of Curvature(Arc):	0°06'00.00"		
Length:	1166.667		
Tangent:	583.353		
Chord:	1166.647		
Middle Ordinate:	2.969		
External:	2.970		
Tangent Direction:	N 89°35'24.60" E		
Radial Direction:	S 0°24'35.40" E		
Chord Direction:	S 89°49'35.40" E		
Radial Direction:	S 0°45'24.60" W		
Tangent Direction:	S 89°14'35.40" E		
Element: Linear			
PT (6107)	A 47474.66	142920.9935309	2155478.4909044
PI (6000)	A 48214.52	142911.2208020	2156218.2873130
Tangent Direction:	S 89°14'35.40" E		
Tangent Length:	739.861		
Element: Linear			
PI (6000)	A 48214.52	142911.2208020	2156218.2873130
POE (6052)	A 50014.57	142887.4440979	2158018.1858307
Tangent Direction:	S 89°14'35.40" E		
Tangent Length:	1800.056		

Element: Linear			
POB (1323)	2500.00	137519.4209520	2150872.6245422
PI (6009)	4000.00	139019.3634951	2150859.4956665
Tangent Direction:	N 0°30'05.37" W		
Tangent Length:	1500.000		
Element: Linear			
PI (6009)	4000.00	139019.3634951	2150859.4956665
PI (6010)	4600.00	139619.3405124	2150854.2441163
Tangent Direction:	N 0°30'05.37" W		
Tangent Length:	600.000		
Element: Linear			
PI (6010)	4600.00	139619.3405124	2150854.2441163
PI (6008)	5338.63	140357.9461760	2150847.7791607
Tangent Direction:	N 0°30'05.37" W		
Tangent Length:	738.634		
Element: Linear			
PI (6008)	5338.63	140357.9461760	2150847.7791607
PI (1350)	6000.00	141019.2909597	2150841.9904370
Tangent Direction:	N 0°30'05.38" W		
Tangent Length:	661.370		
Element: Linear			
PI (1350)	6000.00	141019.2909597	2150841.9904370
PI (1351)	6500.00	141519.2718074	2150837.6141518
Tangent Direction:	N 0°30'05.37" W		
Tangent Length:	500.000		
Element: Linear			
PI (1351)	6500.00	141519.2718074	2150837.6141518
PI (1354)	7000.00	142019.2526552	2150833.2378665
Tangent Direction:	N 0°30'05.37" W		
Tangent Length:	500.000		
Element: Linear			
PI (1354)	7000.00	142019.2526552	2150833.2378665
PI (1355)	7500.00	142519.2335030	2150828.8615813
Tangent Direction:	N 0°30'05.37" W		
Tangent Length:	500.000		
Element: Linear			
PI (1355)	7500.00	142519.2335030	2150828.8615813
PI (1084)	7979.44	142998.6493000	2150824.6653000
Tangent Direction:	N 0°30'05.37" W		
Tangent Length:	479.434		
Element: Linear			
PI (1084)	7979.44	142998.6493000	2150824.6653000
PI (1361)	8500.01	143519.2099033	2150821.5374945
Tangent Direction:	N 0°20'39.33" W		
Tangent Length:	520.570		
Element: Linear			
PI (1361)	8500.01	143519.2099033	2150821.5374945
PI (1362)	9000.01	144019.2008779	2150818.5332824
Tangent Direction:	N 0°20'39.33" W		
Tangent Length:	500.000		
Element: Linear			
PI (1362)	9000.01	144019.2008779	2150818.5332824
PI (1365)	9500.01	144519.1918526	2150815.5290702
Tangent Direction:	N 0°20'39.33" W		
Tangent Length:	500.000		
Element: Linear			
PI (1365)	9500.01	144519.1918526	2150815.5290702
PI (1366)	10000.01	145019.1828272	2150812.5248580
Tangent Direction:	N 0°20'39.33" W		
Tangent Length:	500.000		
Element: Linear			
PI (1366)	10000.01	145019.1828272	2150812.5248580
PI (6007)	10618.82	145637.9858814	2150808.8067868
Tangent Direction:	N 0°20'39.32" W		
Tangent Length:	618.814		
Element: Linear			
PI (6007)	10618.82	145637.9858814	2150808.8067868
PC (1060)	11317.69	146336.8429785	2150804.6076882
Tangent Direction:	N 0°20'39.33" W		
Tangent Length:	698.870		

DESCRIPTION	REVISIONS	DATE

COORDINATES

POINT NAME	NORTHING	EASTING	ELEVATION
5331	145195.9421199	2153557.8049075	0.000
5332	143525.3691130	2148219.5867863	0.000
5333	143638.9220594	2148278.8708221	0.000
5334	144748.3220126	2153781.3588275	0.000
5335	143638.3668611	2148218.8733908	0.000
5336	143452.4357759	2148280.0481771	0.000
5337	143451.8592266	2148219.0709027	0.000
5338	143793.0339764	2148215.8450441	0.000
5339	143808.5055843	2148200.0780707	0.000
5340	143806.7848238	2148018.0862056	0.000
5341	143791.0178505	2148002.6145977	0.000
5342	143789.3277231	2147823.8625653	0.000
5343	143723.2241854	2147515.4675552	0.000
5344	143394.2258402	2147516.5110372	0.000
5345	143182.8040791	2146250.4746093	0.000
5346	144052.3410568	2146242.7792785	0.000
5347	144058.5659490	2146946.1634531	0.000
5348	141190.3998443	2151123.3147864	0.000
5349	141205.4039688	2151124.4889874	0.000
5350	141206.7818375	2151440.6759852	0.000
5351	141597.5781269	2151438.9729867	0.000
5352	141597.6434928	2151453.9728443	0.000
5353	141256.8467286	2151455.4579566	0.000
5354	141257.1408750	2151522.9573157	0.000
5355	141242.1410174	2151523.0226815	0.000
5356	141241.8468710	2151455.5233224	0.000
5357	141191.8473458	2151455.7412086	0.000
5358	141024.6865171	2151110.3463015	0.000
5359	140363.9695484	2151629.6820089	0.000
5360	141025.8114311	2151626.4040733	0.000
5361	141025.8857214	2151641.4038893	0.000
5362	140364.0838382	2151644.6816268	0.000
5363	141026.2921436	2151356.9710749	0.000
5364	141011.2922861	2151357.0364408	0.000
5365	141012.3689536	2151522.4129361	0.000
5367	141662.6750085	2152256.3259967	0.000
5368	141657.4290973	2151524.7648052	0.000
5369	141025.0970591	2151527.9379678	0.000
5370	141025.0280412	2151512.9381266	0.000
5371	141682.3260706	2151511.3286399	0.000
5372	140390.8699269	2151211.8749272	0.000
5373	140532.8681854	2151211.1716457	0.000
5374	140533.0507999	2151235.7809682	0.000
5375	140523.0509226	2151235.8304951	0.000
5376	140522.9425114	2151221.2208973	0.000
5377	140390.9441304	2151221.8746519	0.000
5378	140389.7478984	2151060.6569253	0.000
5379	140361.7854455	2151335.3501124	0.000
5380	140442.0444611	2151334.9526098	0.000
5381	140441.9701708	2151319.9527938	0.000
5382	140361.7411548	2151320.3501478	0.000
5387	142278.6861239	2153574.7776946	0.000
5388	142301.7711468	2153574.6272940	0.000
5389	142478.6526130	2153263.1351576	0.000
5390	142461.2610195	2153253.2593046	0.000
5392	141191.8995994	2151467.7415211	0.000
5393	141192.0341911	2151498.6512281	0.000
5394	141288.9529282	2151527.3200842	0.000
5395	141012.4355496	2151528.5241380	0.000
5396	141011.8835734	2151443.6959339	0.000
5397	141036.8179595	2151468.4141152	0.000
5398	140380.2500496	2153865.6041539	0.000
5399	141699.8804232	2153860.5996593	0.000
5400	142658.3034318	2153856.9388417	0.000
5401	142659.4268293	2153891.9408185	0.000
5402	142639.4269752	2153892.0172104	0.000
5403	142638.9454733	2153877.0149354	0.000
5404	141700.0123226	2153880.6013090	0.000
5405	141349.8829764	2153861.9365187	0.000
5406	141350.0090126	2153881.9361215	0.000
5407	140380.3760859	2153885.6397568	0.000
5408	142214.7745409	2153687.3273923	0.000
5409	142236.2843651	2153689.9509508	0.000
5410	142282.1029280	2153853.1822925	0.000
5411	142261.3630793	2153853.2625110	0.000
5412	145316.9981000	2150960.5779189	0.000
5413	145389.3122762	2150964.5643721	0.000
5414	144422.4742876	2150960.6323398	0.000
5415	144222.4791375	2150947.3139918	0.000
5416	145570.0514836	2150649.2117103	0.000
5417	143960.3344786	2151207.5771314	0.000
5418	143945.8745525	2151025.0221317	0.000
5419	145586.8394742	2150207.7490928	0.000
5420	144969.3596805	2150973.9850011	0.000
5421	145549.3587185	2150994.4569076	0.000
5422	145534.2973169	2150983.5770831	0.000
5423	143317.6347944	2151316.3029691	0.000
5424	143873.9972732	2151007.7915054	0.000
5425	143346.1736170	2151344.3303564	0.000
5426	139721.0233103	2150713.5764256	0.000
5427	144969.2758917	2150982.6943856	0.000
5428	140279.5054111	2150660.2256794	0.000
5429	140295.9625759	2150643.7681562	0.000
5430	143088.3314945	2152001.5753906	0.000
5431	143065.0601306	2152037.0494529	0.000

COORDINATES

POINT NAME	NORTHING	EASTING	ELEVATION
5432	143128.3169824	2152341.9772921	0.000
5433	143128.5721120	2152377.6563799	0.000
5434	143203.9219445	2152694.4589476	0.000
5435	143241.9989458	2152960.1664506	0.000
5436	143252.1153640	2153129.0641894	0.000
5437	143194.7025299	2153459.4122732	0.000
5438	143162.6445660	2153569.1274229	0.000
5439	143135.0557123	2153663.5412995	0.000
5440	143136.5811990	2153876.8758454	0.000
5441	142942.7443351	2148650.3113661	0.000
5442	142927.7450091	2148650.4535631	0.000
5443	142928.5033935	2148730.4499684	0.000
5444	142943.5027195	2148730.3077713	0.000
5445	142919.6434066	2147997.2531097	0.000
5446	142920.1162411	2148047.2508739	0.000
5447	142920.8254929	2148122.2475203	0.000
5448	142937.8247327	2148122.0867565	0.000
5449	145653.0123846	2153338.2038034	0.000
5450	142127.9074839	2150672.6776738	0.000
5451	140395.8743314	2150632.3420852	0.000
5452	139329.6324393	2150517.0252625	0.000
5453	144085.3846317	2150418.9631818	0.000
5454	143667.2971195	2155650.4067345	0.000
5455	143702.2968292	2155650.2641929	0.000
5456	143699.7176397	2155016.9694449	0.000
5457	143792.8307094	2154393.2312156	0.000
5458	143991.9497703	2154082.1033131	0.000
5459	140289.9351225	2150649.7957408	0.000
5460	139330.8332164	2150702.0213655	0.000
5461	139345.9248702	2150716.8480233	0.000
5463	139941.4456915	2150682.5242110	0.000
5464	139335.8353271	2150706.9356436	0.000
5465	138811.5203036	2150699.9957734	0.000
5466	139269.6544271	2150517.6389448	0.000
5467	139270.8545551	2150702.5350499	0.000
5468	139250.9828635	2150722.6858028	0.000
5469	139040.9939407	2150724.5078246	0.000
5470	139040.9614872	2150719.5079299	0.000
5471	138811.5874818	2150706.4754252	0.000
5472	138821.1365559	2150716.1703994	0.000
5473	138898.3193674	2150725.7522280	0.000
5474	138878.2876746	2150720.9267661	0.000
5475	138826.5194976	2150699.8402685	0.000
5476	138857.2357665	2150715.8555431	0.000
5477	138826.7424916	2150721.3491126	0.000
5478	138748.6676784	2150521.2813862	0.000
5480	137767.8099526	2150625.2457579	0.000
5481	138740.7605118	2150716.9947642	0.000
5483	137768.3854709	2150680.0397355	0.000
5484	137790.5399785	2150694.7885987	0.000
5485	138418.5436530	2150699.5313714	0.000
5486	138091.0814080	2150697.0583307	0.000
5487	138718.7079535	2150716.9624241	0.000
6000	142911.2208020	2156218.2873130	0.000
6001	143060.4394888	2147351.7472887	0.000
6002	143044.2256038	2145641.4636161	0.000
6003	142963.8700675	2147383.4538045	0.000
6004	143069.2629296	2148282.4672851	0.000
6005	142919.2241992	2153570.6083609	0.000
6006	143069.2629298	2148282.4672851	0.000
6007	145637.9858814	2150808.8067868	0.000
6008	140357.9461760	2150847.7791607	0.000
6009	139019.3634951	2150859.4956665	0.000
6010	139619.3405124	2150854.2441163	0.000
6051	142911.1942648	2156220.2961829	0.000
6052	142887.4440979	2158018.1858307	0.000
6105	142924.5263286	2154311.8497422	0.000
6106	85630.2125697	2154721.6782651	0.000
6107	142920.9935309	2155478.4909044	0.000
6236	142918.7468999	2153503.8815852	0.000
6240	143061.9203292	2147507.9502696	0.000
6241	143066.6602320	2148007.9278024	0.000
6244	143080.8799401	2149507.8604008	0.000
6247	142911.6985623	2152518.5190582	0.000
6248	142915.5281143	2153053.8930971	0.000
6249	142916.6010428	2153203.8892598	0.000
6329	142922.3233285	2154003.8687942	0.000
6417	143039.5414473	2145147.3663457	0.000
8001	146312.2486436	2151234.9138830	0.000
8007	143116.5188223	2151508.9391270	0.000
8013	144704.8474071	2153690.5186116	0.000
8014	144662.5879660	2153599.8867207	0.000
8015	144047.8216716	2153904.8972604	0.000
8016	144028.4956262	2153806.7825114	0.000
8017	145641.3448978	2151316.1160151	0.000
8020	144143.4689371	2146918.1491395	0.000
8021	143315.7506400	2149358.5211200	0.000
8022	142727.4608199	2146596.1836774	0.000
8023	142327.8479439	2149927.5540073	0.000
8024	145550.4635976	2151163.6378551	0.000
8025	145390.4662609	2151164.5610429	0.000
8026	145551.3172213	2151316.6595884	0.000
8028	144883.5389797	2151003.2237650	0.000
8029	144884.7222051	2151198.4001785	0.000
8030	144971.3574012	2151320.2092377	0.000

COORDINATES

POINT NAME	NORTHING	EASTING	ELEVATION
8031	144871.5179063	2151255.8388393	0.000
8032	142168.7998517	2150028.9624550	0.000
8033	144681.0689459	2151240.4761774	0.000
8034	144596.4973405	2151239.6921058	0.000
8035	144832.3000188	2151270.6655256	0.000
8036	143128.4453338	2152359.9268332	0.000
8037	144079.7632700	2150431.8785300	0.000
8038	142937.9324199	2148134.6175973	0.000
8039	143920.6542400	2150181.9504000	0.000
8040	141678.8272693	2151050.3583679	0.000
8041	144713.7328719	2151242.5548390	0.000
8042	144101.0815200	2150445.1494800	0.000
8043	143183.1465951	2146240.4711864	0.000
8044	144197.9732057	2151357.1766093	0.000
8045	144133.7143493	2151395.0470347	0.000
8046	144064.7583774	2151441.7085985	0.000
8047	144015.7543487	2151435.3543024	0.000
8048	143939.8912089	2151001.3687401	0.000
8049	143963.8891102	2151299.9519059	0.000
8050	143899.0684582	2151304.2962749	0.000
8051	145563.7769588	2151751.2311822	0.000
8052	145564.6285247	2151901.3047662	0.000
8053	145553.7771476	2151751.2926271	0.000
8054	142726.4568766	2151786.6296248	0.000
8055	144062.2521695	2146232.6911744	0.000
8056	143116.5394247	2151508.9588300	0.000
8058	144636.3287409	2153560.7565975	0.000
8059	142562.4664403	2146597.5570369	0.000
8060	142565.2709445	2146895.9672860	0.000
8061	143271.1564551	2152986.1127370	0.000
8062	143325.8559205	2152985.8703423	0.000
8063	143630.1412026	2153130.1507941	0.000
8064	143676.5229808	2153124.8826783	0.000
8065	143785.4394825	2152992.7969650	0.000
8066	143780.2577760	2152945.7715887	0.000
8069	146283.0062519	2153552.1258527	0.000
8070	142712.3455208	2146958.9678337	0.000
8071	143697.9716963	2152480.9261155	0.000
8072	142377.2775139	2146897.5385287	0.000
8073	142383.0331887	2147497.8514926	0.000
8075	143115.2987702	2152279.2233739	0.000
8076	140939.6764377	2151103.6935359	0.000
8079	144068.5372235	2146942.8733638	0.000
8080	147279.4449627	2152689.3023691	0.000
8081	140941.4918770	2151357.5770452	0.000
8082	143601.8681712	2152194.5029504	0.000
8083	143414.8173400	2147311.3030800	0.000
8084	147223.7180660	2152990.2300313	0.000
8086	143416.7534100	2147514.1338400	0.000
8087	143853.8758225	2148247.5132865	0.000
8088	143350.9590500	2148560.4692500	0.000
8089	140951.4917521	2151357.5270655	0.000
8090	143351.3500400	2148629.1925600	0.000
8091	143446.1040100	2148948.5985800	0.000
8093	143310.5000757	2151309.2961095	0.000
8095	145632.3058892	2152086.9054294	0.000
8096	143884.4083282	2151653.5827671	0.000
8097	144191.9676501	2153670.1062603	0.000
8098	142922.4953686	2146492.5567111	0.000
8099	144882.6648700	2150328.9921300	0.000
8100	142907.4960311	2146492.6976848	0.000
8101	142909.0937332	2146662.6901768	0.000
8102	143407.1841588	2151888.3987892	0.000
8104	143262.7686832	2153117.6135829	0.000
8105	145726.9064512	2152200.6800787	0.000
8106	140952.6733714	2151522.7728490	0.000
8107	143204.2987896	2153462.2184181	0.000
8108	143964.5710049	2151475.3644741	0.000
8109	143322.5583408	2151705.9839525	0.000
8110	143770.1434412	2151928.4933627	0.000
8111	143878.8452992	2151005.3762230	0.000
8112	143949.2990343	2148625.5646358	0.000
8113	143351.3638800	2148630.9912300	0.000
8114	143969.5663037	2151531.4825870	0.000
8115	143145.0715561	2153664.9229499	0.000
8116	143860.3613238	2151702.3569750	0.000
8119	143587.5128095	2151581.3445847	0.000
8120	143760.4734119	2152193.8517296	0.000
8121	147279.4739923	2152689.1483024	0.000
8122	145508.0460052	2152448.7629480	0.000
8123	143806.8910391	2151898.0811275	0.000
8126	142924.0930707	2146662.5492031	0.000
8127	143589.6649318	2151342.3124486	0.000
8128	145181.4604232	2152450.4616867	0.000
8129	145796.3851449	2152531.5913280	0.000
8130	145180.6581893	2152296.2307731	0.000
8131	143283.2783661	2153095.5689689	0.000
8136	143787.9879082	2152017.8502937	0.000
8137	143767.4854120	2153459.8111232	0.000
8138	144442.2632857	2153628.2868227	0.000
8139	142555.5119103	2146496.0413383	0.000
8140	146323.0959244	2153551.9639857	0.000
8141	143739.3957627	2152292.1430940	0.000
8142	147249.0010724	2152834.2077196	0.000
8143	143354.2068300	2148683.9974900	0.000

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POINT NAME	NORTHING	EASTING	ELEVATION
8254	145294.8358502	2150531.4525073	0.000
8255	145174.8322189	2150531.6690663	0.000
8256	145175.4196490	2150591.6661906	0.000
8257	145485.1647766	2150541.0403000	0.000
8258	145485.7032542	2150596.0376639	0.000
8259	145435.0547902	2150530.0516189	0.000
8260	145435.6422203	2150590.0487432	0.000
8261	145125.4693999	2150596.9922671	0.000
8262	140333.1911088	2151525.8690289	0.000
8263	145124.9309224	2150541.9949032	0.000
8265	142331.4507539	2150308.5169716	0.000
8266	145005.3859794	2150597.6917255	0.000
8269	145004.8475018	2150542.6943616	0.000
8270	145005.4349319	2150602.6914859	0.000
8271	145004.8964543	2150547.6941219	0.000
8272	144885.3559999	2150603.8504571	0.000
8273	144884.8175223	2150548.8530932	0.000
8274	144824.7506224	2150546.6309760	0.000
8275	142172.5358119	2150424.0047897	0.000
8276	144704.6718624	2150547.8066660	0.000
8277	144704.7332524	2150554.0776760	0.000
8278	144584.6544924	2150555.2533560	0.000
8279	144398.9440124	2150496.9039960	0.000
8280	144534.0326224	2150495.5813460	0.000
8281	142555.0381882	2146445.6136018	0.000
8282	142729.7578613	2152247.9537050	0.000
8283	140380.4781887	2153901.8415735	0.000
8284	141696.6233930	2153478.5640565	0.000
8285	141684.2956562	2151794.6231802	0.000
8286	139270.5192614	2150987.3021912	0.000
8287	139281.0736930	2152274.3861573	0.000
8288	139601.0616382	2152271.6085767	0.000
8289	138281.11113644	2152283.0660966	0.000
8291	139590.5070169	2150984.5014754	0.000
8292	140368.6924467	2152266.1444859	0.000
8293	141687.6742888	2152256.1363070	0.000
8294	137731.1320837	2152287.8400633	0.000
8295	137764.1308405	2152287.5536253	0.000
8296	143619.5973827	2156215.3156823	0.000
8297	143669.5969681	2156215.1120513	0.000
8298	143620.0903279	2155650.3158973	0.000
8299	143595.0903374	2155650.2940856	0.000
8300	145646.5670334	2152221.1623981	0.000
8301	145646.3362365	2152181.1630640	0.000
8305	145640.9028146	2151239.4987393	0.000
8306	147272.6892203	2152735.0681813	0.000
8307	143796.1057251	2152027.6876269	0.000
8308	145639.1686062	2150938.9437425	0.000
8309	142328.7936130	2150027.5495357	0.000
8310	142717.0979594	2147729.0382849	0.000
8311	143214.2571571	2151912.0888244	0.000
8312	143686.1635427	2151910.6687013	0.000
8313	142661.1435852	2147094.7525562	0.000
8314	142664.0680379	2147405.9088136	0.000
8315	143668.6336794	2156158.1201916	0.000
8316	142314.6123546	2148528.0297330	0.000
8317	142313.1938510	2148378.0364404	0.000
8319	142938.74773108	2148222.1138026	0.000
8320	142791.7538840	2148223.5039362	0.000
8321	142790.9264236	2148136.0078488	0.000
8322	142939.4565626	2148297.1104490	0.000
8324	142748.7558068	2148223.9105739	0.000
8325	142940.1658144	2148372.1070953	0.000
8327	142513.1849079	2148376.1451022	0.000
8328	142511.7664043	2148226.1518096	0.000
8329	142941.5843180	2148522.1003880	0.000
8330	142559.2712094	2146896.0236724	0.000
8331	146270.2572653	2150935.1602972	0.000
8332	146310.2565464	2150934.9204972	0.000
8336	142325.9566058	2149727.5629504	0.000
8337	142952.9321578	2149722.0260598	0.000
8338	142505.9522475	2147611.3593015	0.000
8339	142306.5645270	2147677.0477868	0.000
8348	142317.4464997	2148827.7059539	0.000
8349	141667.4718443	2148833.4459382	0.000
8353	141667.7082616	2148858.4448203	0.000
8354	142317.6829169	2148852.7048360	0.000
8355	142757.4284278	2148823.7176665	0.000
8356	142757.5702782	2148838.7169957	0.000
8358	142944.5629867	2148837.0656464	0.000
8360	142935.9328207	2149721.8759368	0.000
8361	142932.4643902	2149355.1223371	0.000
8362	142453.2830751	2149359.3540302	0.000
8363	142453.1412247	2149344.3547009	0.000
8364	142932.3225399	2149340.1230079	0.000
8365	142932.1501444	2149321.8938230	0.000
8367	142949.1494815	2149321.7437003	0.000
8368	142945.3668053	2148922.0618322	0.000
8369	142928.3674681	2148922.2119549	0.000
8370	142927.4217991	2148822.2164265	0.000
8371	142944.4211362	2148822.0663038	0.000
8372	146941.3452055	2150931.1370519	0.000
8373	142350.9556310	2149727.3421818	0.000
8374	142349.0642929	2149527.3511249	0.000
8377	142321.7010949	2149277.5830585	0.000

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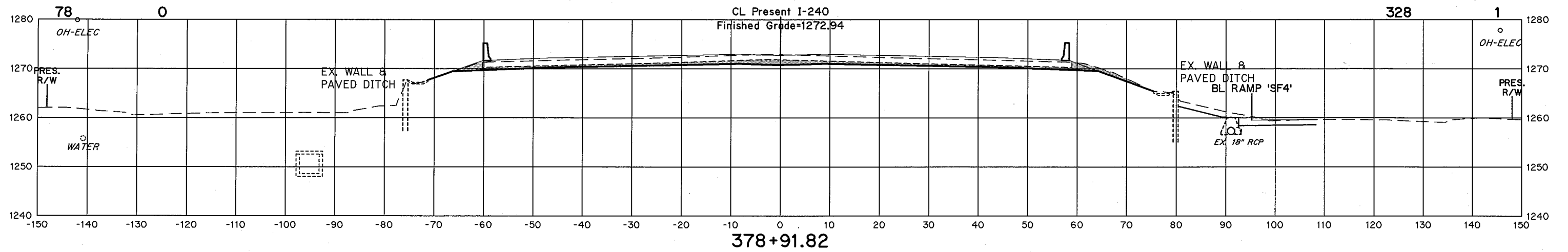
POINT NAME	NORTHING	EASTING	ELEVATION
8378	146961.3448461	2150931.0171519	0.000
8379	142922.0254562	2146442.5589193	0.000
8380	142697.9970639	2147824.2036988	0.000
8381	142699.6417573	2147999.1959700	0.000
8383	142921.7477847	2148222.2432558	0.000
8384	142944.3740418	2148817.0871969	0.000
8387	141633.1378865	2150490.2106447	0.000
8389	141333.1495841	2150492.8598683	0.000
8390	146942.5377295	2151231.2046823	0.000
8391	142331.6306202	2150327.5361211	0.000
8393	146943.7302535	2151531.2723127	0.000
8394	146943.8892196	2151571.2719968	0.000
8395	146945.0817436	2151871.3396271	0.000
8396	146946.2742676	2152171.4072575	0.000
8397	146946.4332337	2152211.4069416	0.000
8399	141678.8189576	2150033.2895201	0.000
8400	142323.2881027	2146047.6689934	0.000
8401	141331.1022105	2150276.3695492	0.000
8402	141031.1139081	2150279.0187727	0.000
8403	142667.9982337	2147824.4686212	0.000
8404	142667.0998480	2147729.4728692	0.000
8405	142914.1902132	2147727.2907920	0.000
8406	146947.4551076	2152468.5349111	0.000
8407	141641.3117272	2146053.3455425	0.000
8408	146948.3453178	2152692.5331421	0.000
8409	142696.9780588	2145894.4102473	0.000
8410	141032.1541440	2150389.0138540	0.000
8411	140678.2302198	2150463.4821505	0.000
8414	142316.9027220	2149827.6530457	0.000
8415	142326.9022748	2149827.5584788	0.000
8416	142317.9429572	2149937.6481271	0.000
8417	143827.3703429	2153376.0673680	0.000
8418	142319.9974003	2145697.5444571	0.000
8419	143844.9790091	2153396.6071487	0.000
8421	142756.3762961	2147636.2644715	0.000
8422	144335.2205261	2153553.8104603	0.000
8423	144360.4971179	2152953.8693342	0.000
8424	145089.1273987	2153272.1682054	0.000
8425	144836.7802244	2153397.8340180	0.000
8426	144650.7353752	2153468.5886848	0.000
8427	145698.9535234	2152870.8737313	0.000
8428	145551.1670340	2153048.3120693	0.000
8429	140292.7685414	2150314.3676414	0.000
8430	139937.9092567	2150317.8119781	0.000
8431	139629.6159216	2150513.8771896	0.000
8432	139729.6104157	2150512.8278320	0.000
8433	139939.7788433	2150510.6222921	0.000
8434	139429.6269334	2150515.9759049	0.000
8435	139630.9182716	2150714.5220018	0.000
8437	142666.6270135	2147679.4751049	0.000
8438	142650.1165410	2148049.6352715	0.000
8439	142651.7585015	2148224.6482265	0.000
8441	144131.3793738	2145631.8423946	0.000
8442	144836.2151917	2152763.8985844	0.000
8443	144468.3501681	2152765.8120387	0.000
8444	144443.4807808	2152790.9414955	0.000
8445	144359.6519149	2152791.3775323	0.000
8446	144358.5800018	2152585.3003201	0.000
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8452	144277.4563686	2152191.7290375	0.000
8453	143438.5681136	2151193.5839071	0.000
8454	143578.7717508	2151353.4233535	0.000
8455	139730.9296301	2150712.6311322	0.000
8456	139430.9250708	2150715.9716919	0.000
8457	138806.5684060	2150222.3614423	0.000
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8459	139139.6612313	2150518.9690075	0.000
8460	139140.9897451	2150723.6446960	0.000
8461	139036.5563676	2150220.0082543	0.000
8462	138809.6785037	2150522.3453207	0.000
8463	138748.2221051	2150478.3036958	0.000
8469	138088.8472662	2150484.3500633	0.000
8471	138086.9357688	2150302.3601015	0.000
8472	137764.4476077	2150305.1234153	0.000
15872	140378.6837730	2150995.9483060	1308.410
15873	141700.3823620	2151070.0733500	1290.530
15875	143428.6951520	2151210.7776840	1286.000
15876	143599.0558960	2150562.8433890	1282.420
50285	145553.8078560	2150653.4402270	1290.090
50303	144252.2513510	2150490.5006800	1278.880
50304	143919.9301930	2150298.9654250	1282.020
50305	143490.7027260	2149895.1502220	1265.310
50307	143401.6750190	2149250.2771580	1274.890
50309	143390.2218670	2148652.9488630	1267.170
50311	143242.1995770	2148000.3678520	1270.930
50313	143237.6604340	2147408.0054470	1275.460
50315	143205.3644390	2146579.6986950	1263.900
50317	143182.8490400	2145913.5696550	1261.610
50318	143197.8093010	2145708.7094360	1258.480
50319	142888.1129440	2145743.2748250	1257.880
50321	142901.9036360	2146335.1472670	1265.510

COORDINATES

POINT NAME	NORTHING	EASTING	ELEVATION	DESCRIPTION
50323	142916.9876250	2146936.6238090	1270.320	BM
50325	142907.3605680	2147568.1486410	1280.910	BM
50327	142911.6066500	2148227.1133380	1276.820	BM
50329	142802.9275290	2148847.0583200	1275.450	BM
50331	142760.5652270	2149409.0325230	1281.840	BM
50332	142643.1187210	2149720.2042730	1282.400	BM
50333	142464.1441130	2150123.0392650	1278.230	BM
50334	142296.1946730	2150304.5431320	1283.530	BM
50335	141839.2050150	2150657.0857100	1289.250	BM
50336	141535.0147150	2150701.4701360	1290.740	BM
50338	140917.9882580	2150688.8599450	1298.270	BM
50340	140383.9186640	2150617.3816870	1309.110	BM
50341	145812.9439860	2151012.1135020	1300.280	BM
50343	145129.4986010	2150988.2197760	1295.730	BM
50344	143845.2559930	2150991.1289140	1289.420	BM
50345	143455.5868870	2151409.9459730	1288.820	BM
50346	143116.7567800	2151924.9735110	1200.010	BM
50347	143220.7316130	2152558.2994020	1308.740	BM
50348	143234.7555270	2153314.4059530	1290.010	BM
50349	143103.1601590	2155087.5292970	1259.730	BM
50350	143227.6751920	2155899.3994280	1268.620	BM
50351	140981.2726690	2151191.0884400	1297.167	BM
50352	141742.5192370	2151700.9568670	1292.891	BM
50355	142212.8005530	2151785.9213220	1295.886	BM
50356	142650.3998690	2152622.6482410	1300.299	BM
50357	142589.5668460	2153095.4772350	1295.852	BM
50358	142313.0682340	2153577.2256960	1280.371	BM
50359	142726.6169390	2154100.2562350	1270.900	BM
50360	142726.3158390	2155264.4566610	1259.679	BM
50361	142543.6667540	2155843.1012460	1278.266	BM
50362	142400.6015830	2156176.7690840	1286.146	BM
50363	143072.6477560	2154416.4572460	1269.670	BM
CHURCH CITY	145128.6796490	2150516.6250320	1284.530	BAR&CAP
CIRCUMTCITY	143511.6047900	2147104.4432610	1265.400	X ON CURB
DIAMOND	140934.0270660	2155986.3656050	1297.690	BAR & CAP
HOSPICE	140344.4017030	2150218.6566280	1207.660	BAR & CAP
MALL	143197.9033480	2152447.0616600	1308.400	BAR & CAP
RAILROAD	145912.2610280	2152981.6647200	1277.812	NGS -STEEL ROD
RAMADA	144445.4785770	2150947.4412100	1285.590	BM RAMADA

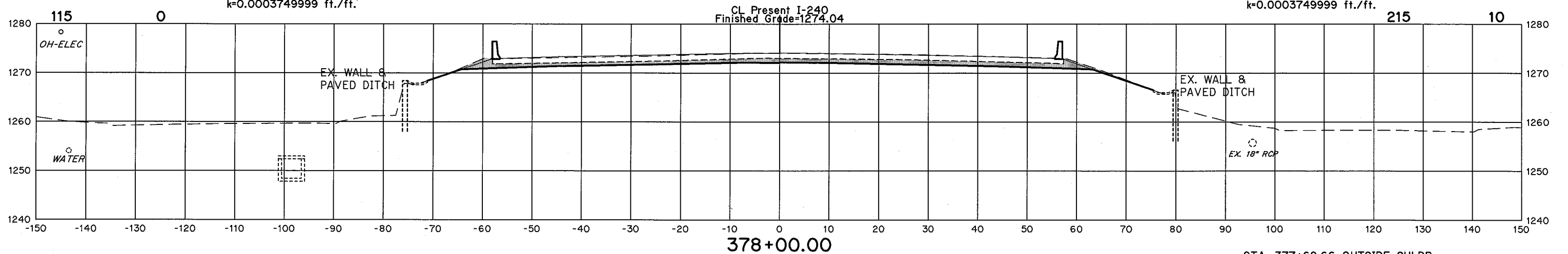
Cut Area Fill

Volume Cut Fill



STA. 378+22.99 OUTSIDE SHLDR.
s=-0.0400 ft./ft.
k=0.0003749999 ft./ft.

STA. 378+22.99 OUTSIDE SHLDR.
s=-0.0400 ft./ft.
k=0.0003749999 ft./ft.



STA. 377+69.66 OUTSIDE SHLDR.
s=-0.0200 ft./ft.
k=0.0003749999 ft./ft.

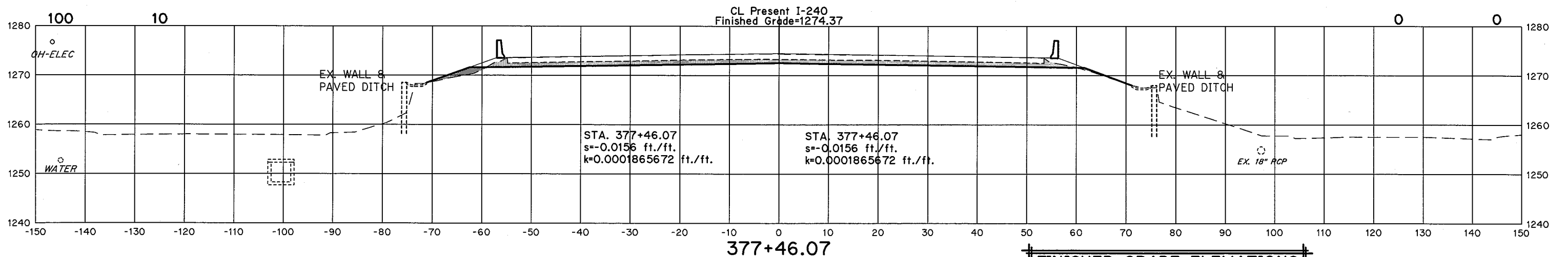
STA. 377+69.66
s=-0.0200 ft./ft.
k=0.0001865672 ft./ft.

STA. 377+69.66 INSIDE SHLDR.
s=-0.0200 ft./ft.
k=0.0001865672 ft./ft.

STA. 377+69.66 INSIDE SHLDR.
s=-0.0200 ft./ft.
k=0.0001865672 ft./ft.

STA. 377+69.66
s=-0.0200 ft./ft.
k=0.0001865672 ft./ft.

STA. 377+69.66 OUTSIDE SHLDR.
s=-0.0200 ft./ft.
k=0.0003749999 ft./ft.



STA. 377+46.07
s=-0.0156 ft./ft.
k=0.0001865672 ft./ft.

STA. 377+46.07
s=-0.0156 ft./ft.
k=0.0001865672 ft./ft.

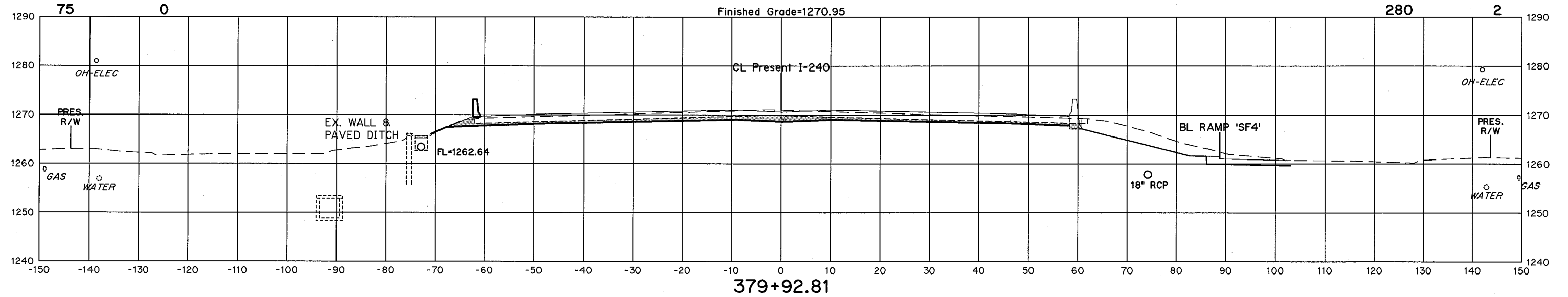
377+46.07
BEGIN CONSTRUCTION

FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X1

Cut Area Fill

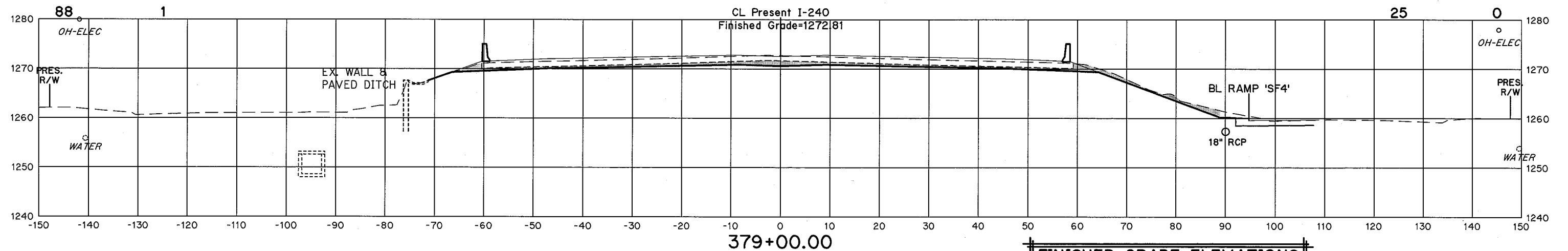
Cut Volume Fill



STA. 379+29.66 INSIDE SHLDR.
s=0.0400 ft./ft.
k=0.0001865672 ft./ft.

STA. 379+29.66 INSIDE SHLDR.
s=0.0400 ft./ft.
k=0.0001865672 ft./ft.

STA. 379+40 RT.
END SLOPE WALL (5")

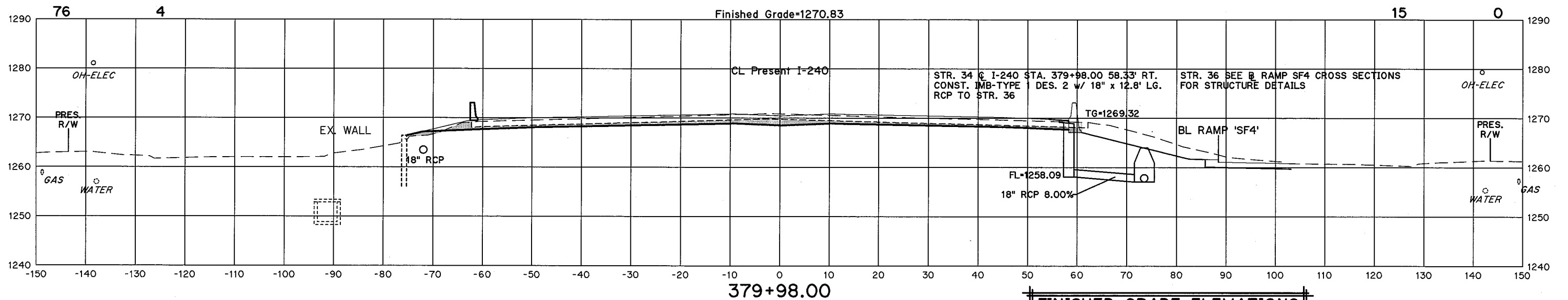
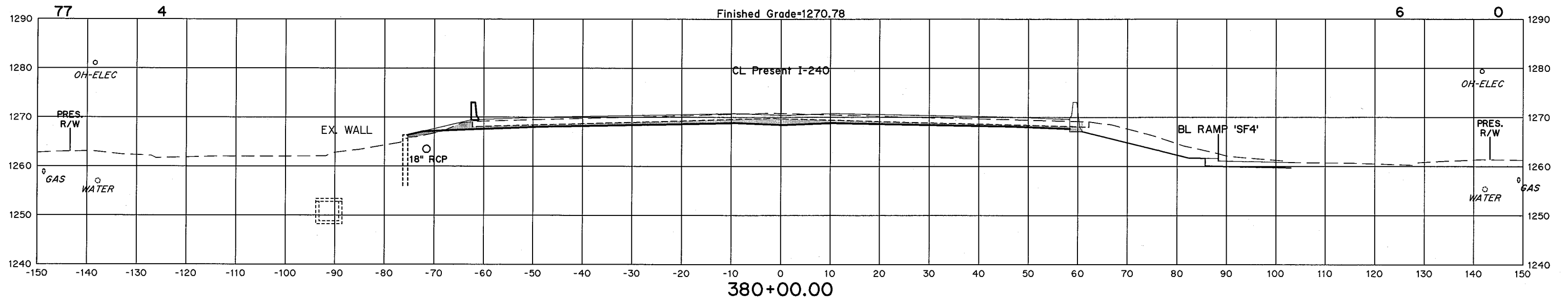


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X2

Cut Area Fill

Cut Volume Fill

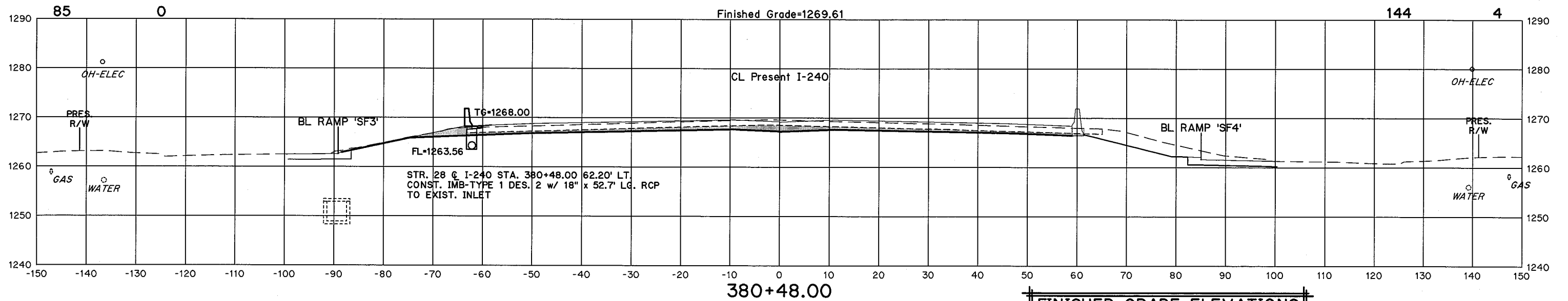
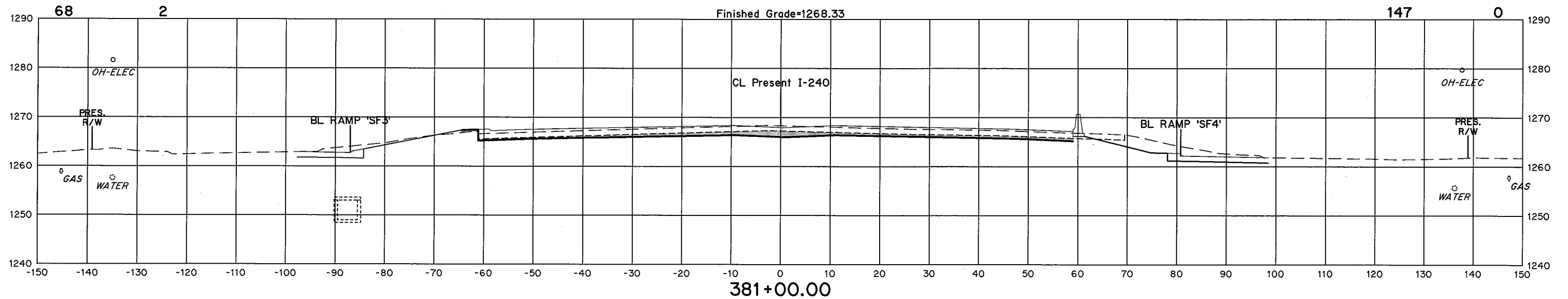


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X3

Cut Area Fill

Volume Cut Fill

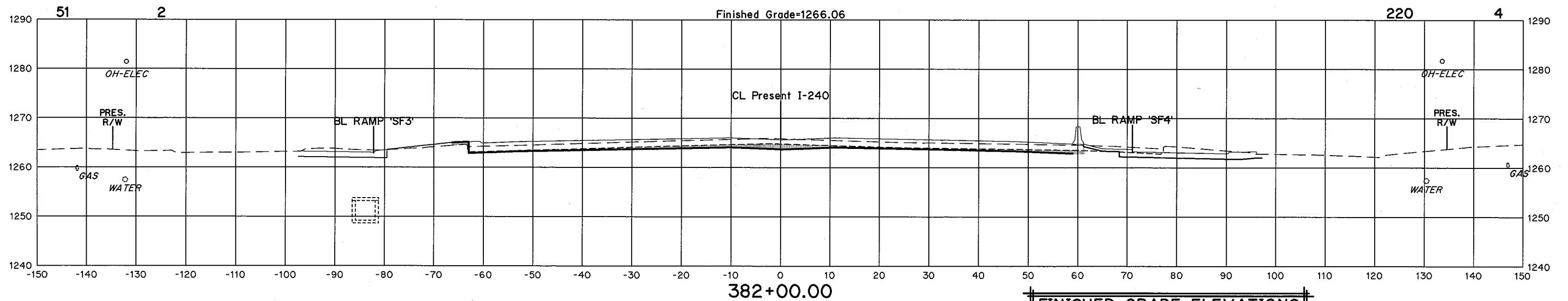
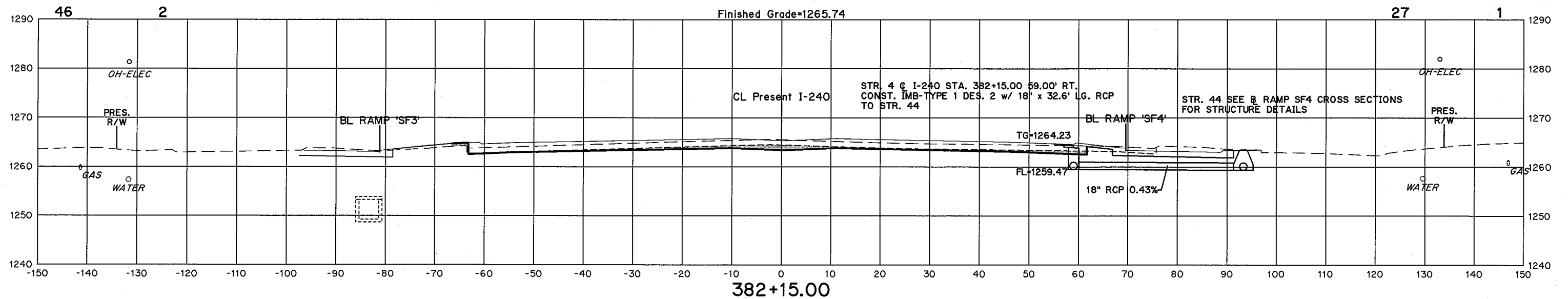


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X4

Cut Area Fill

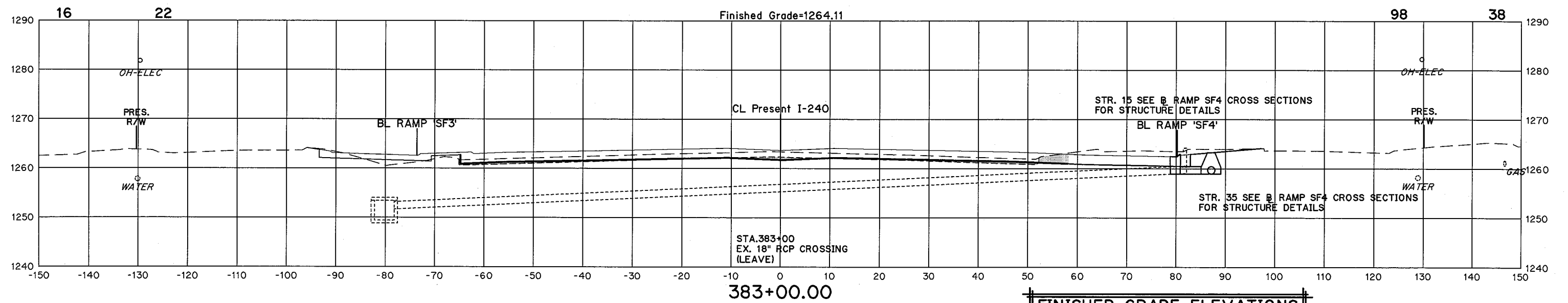
Cut Volume Fill



FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X5

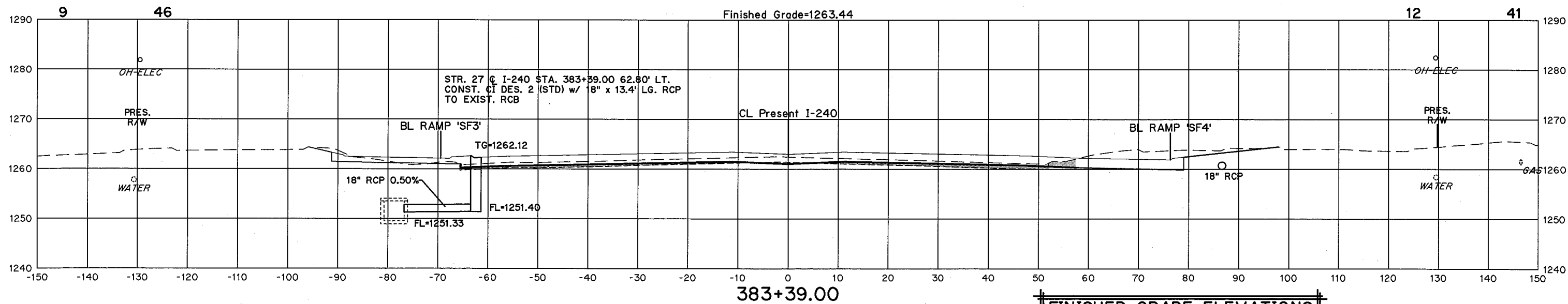
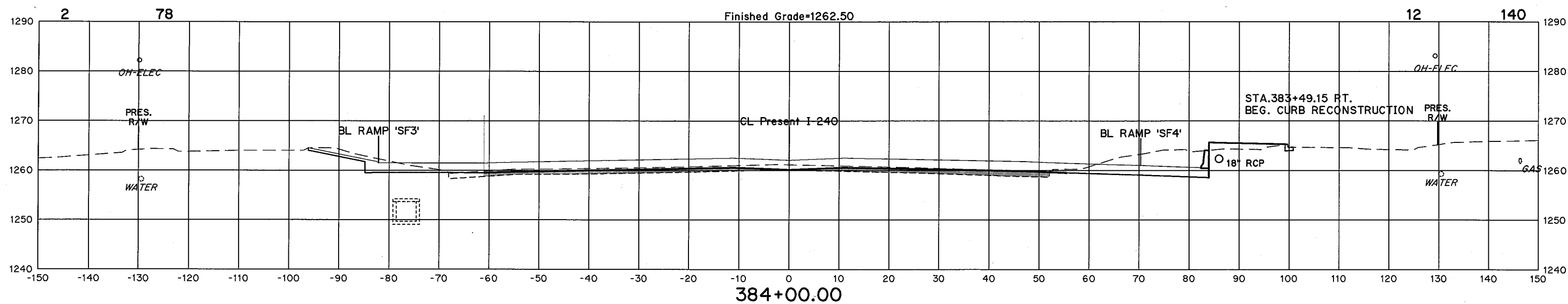
	<u>Volume</u>	
<u>Cut</u>		<u>Fill</u>



STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X6

Cut Area Fill

Volume Cut Fill

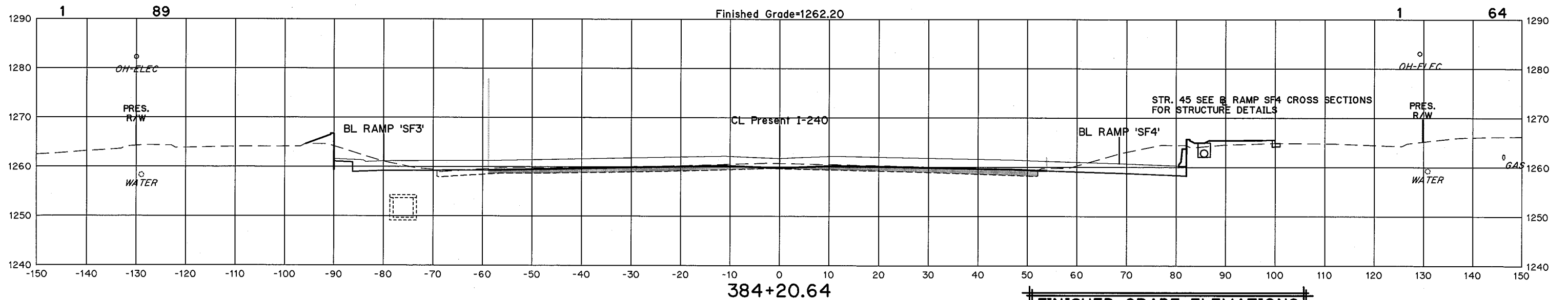
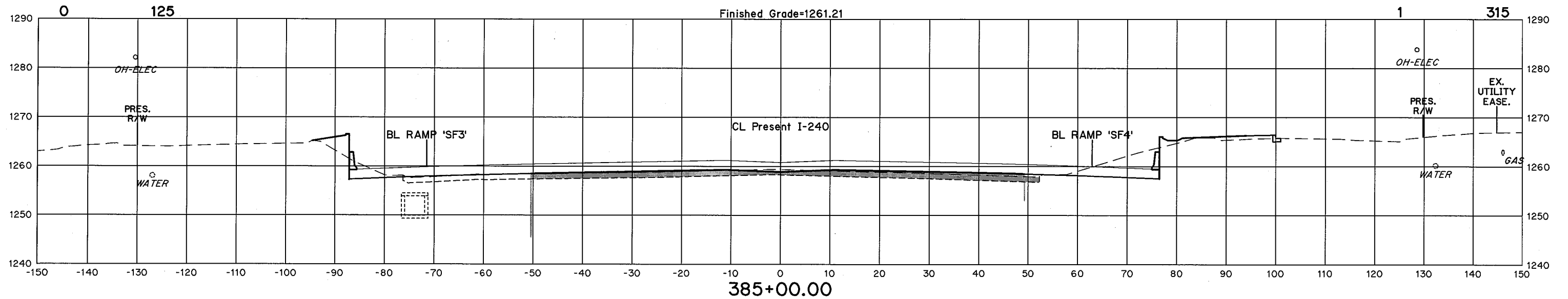


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X7

Cut Area Fill

Cut Volume Fill

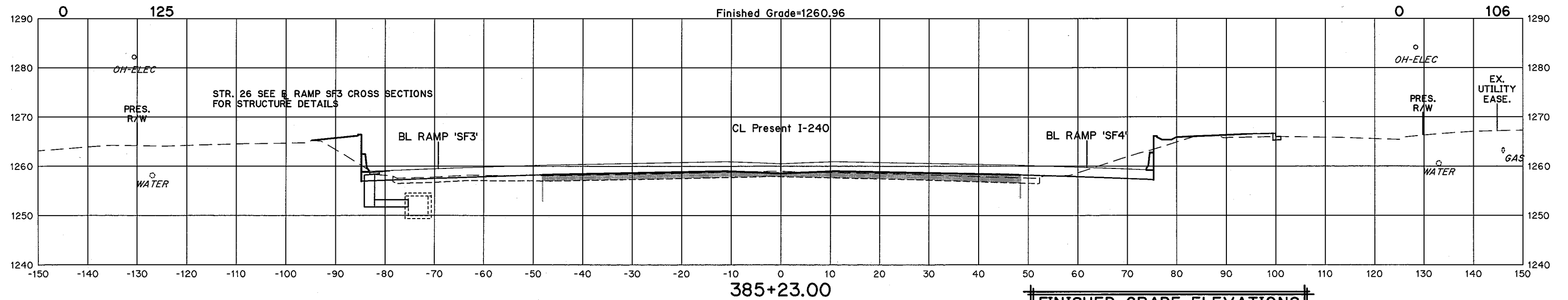
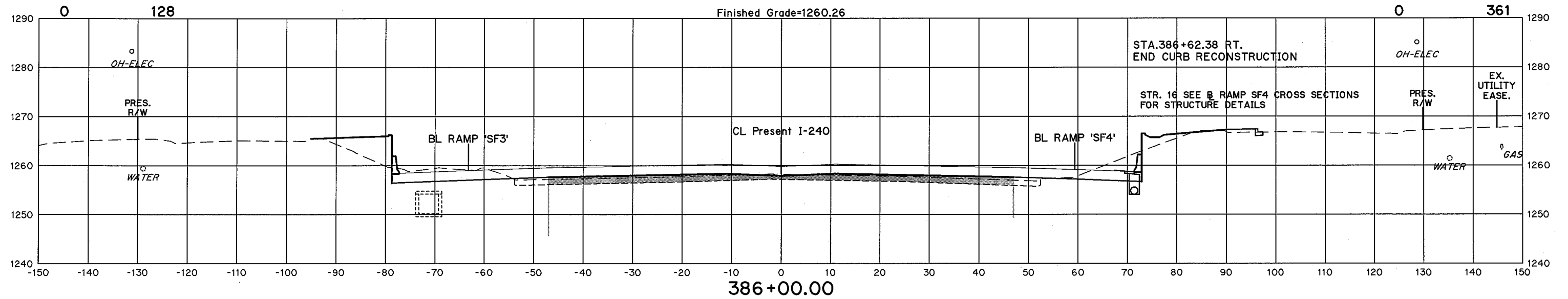


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X8

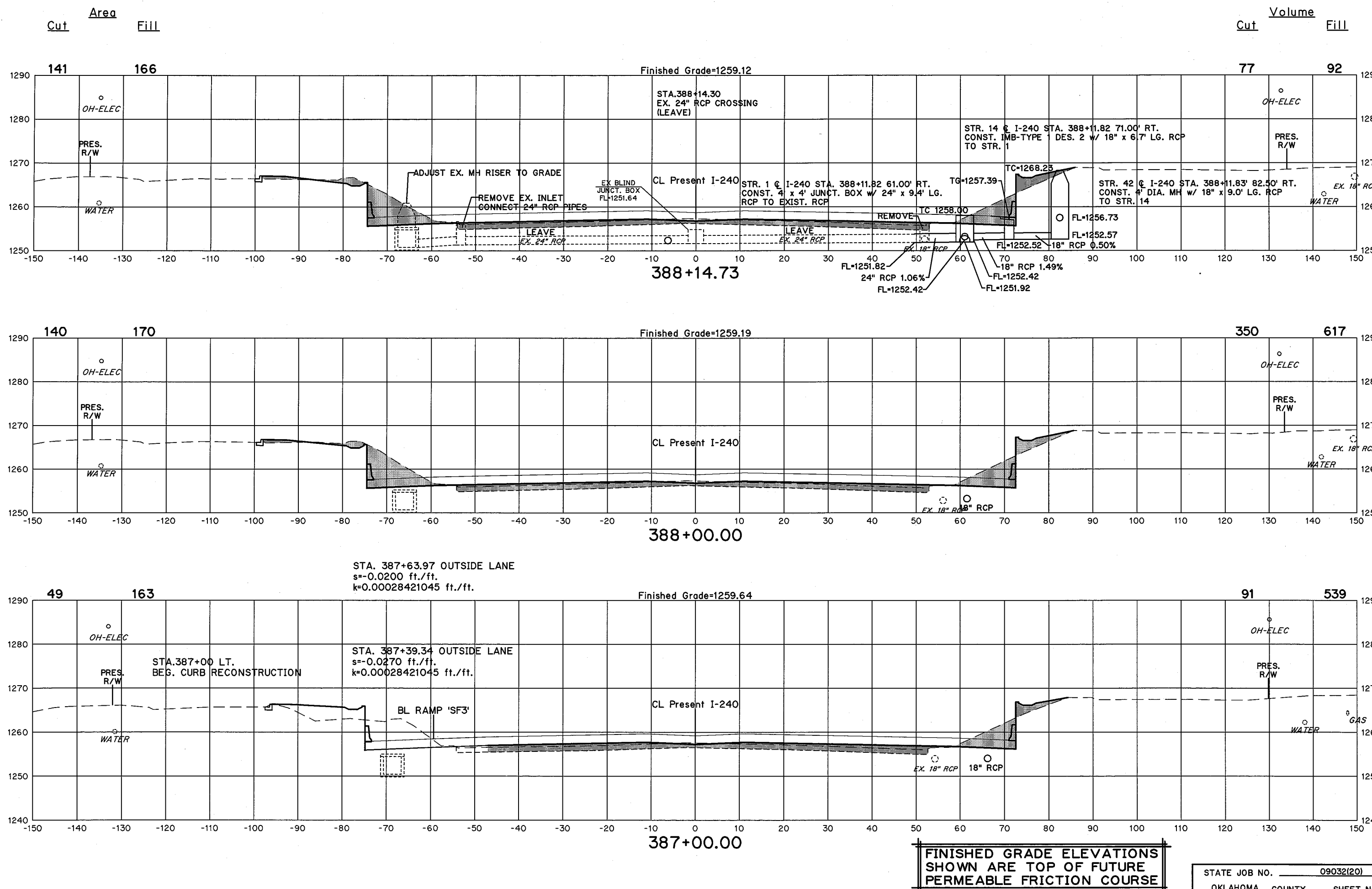
Cut Area Fill

Cut Volume Fill



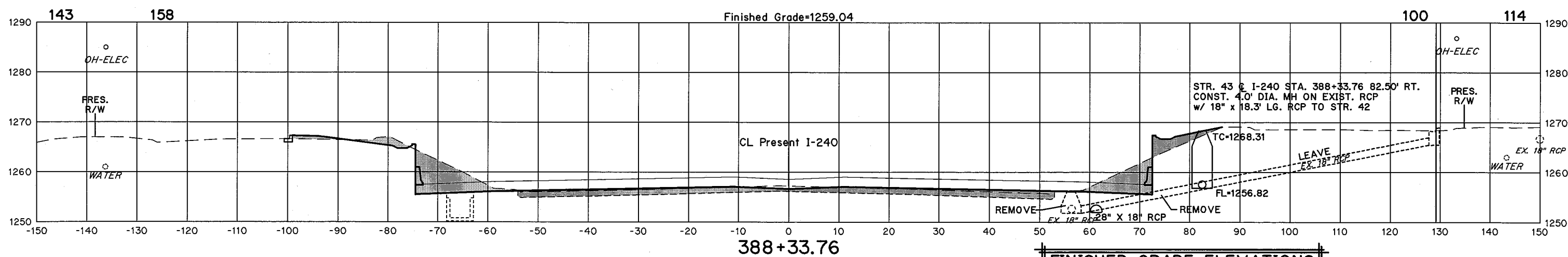
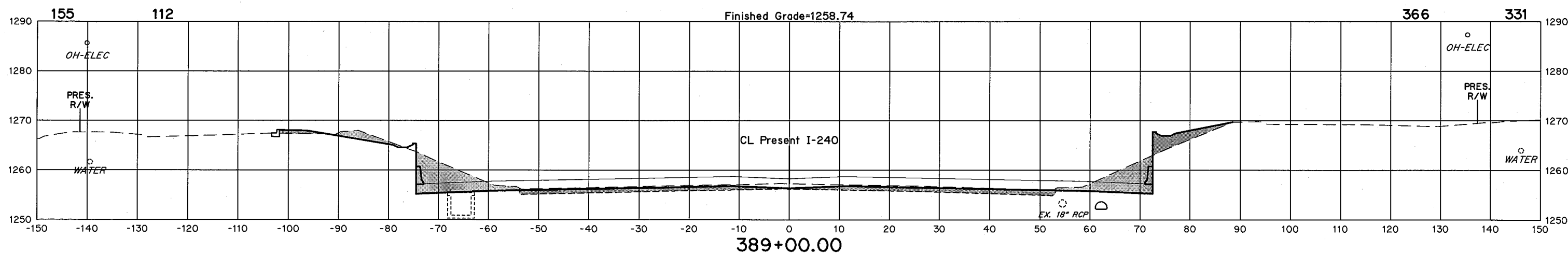
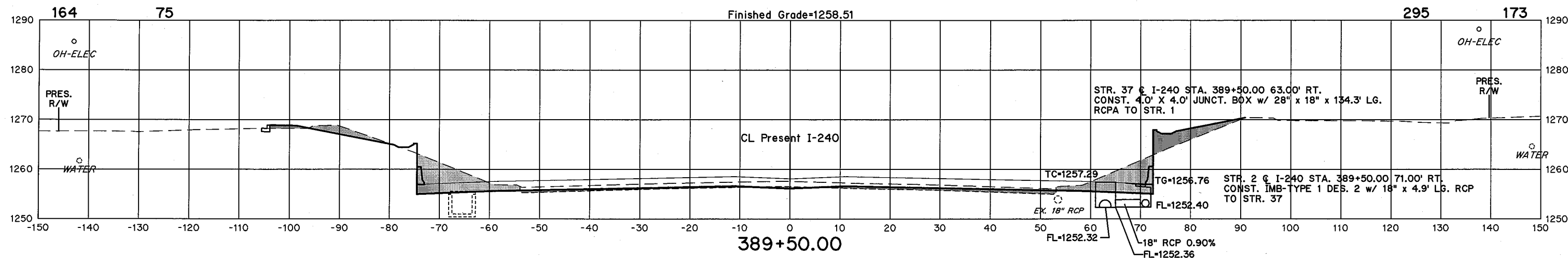
FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X9



Cut Area Fill

Cut Volume Fill

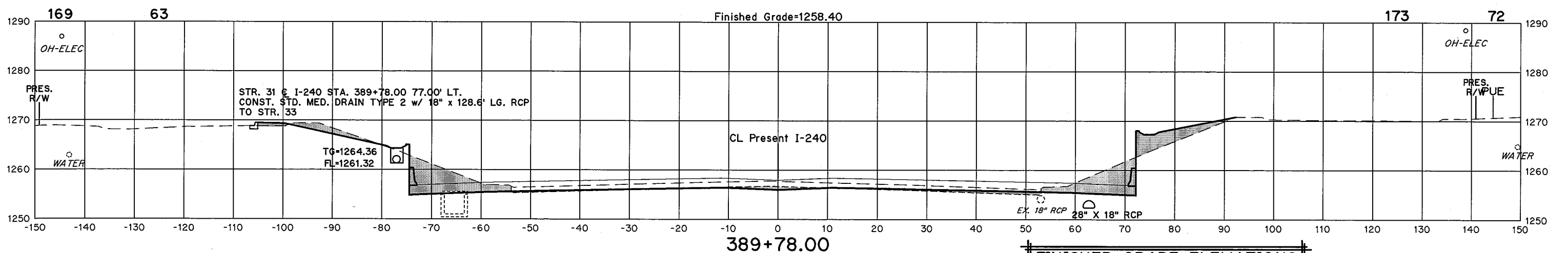
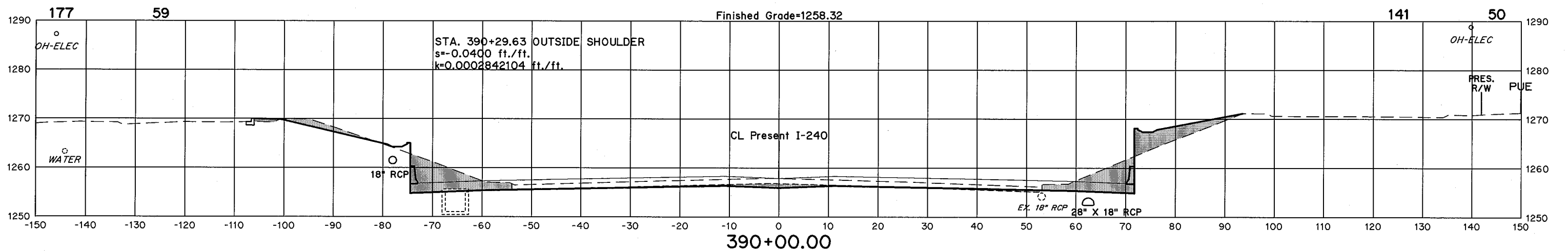
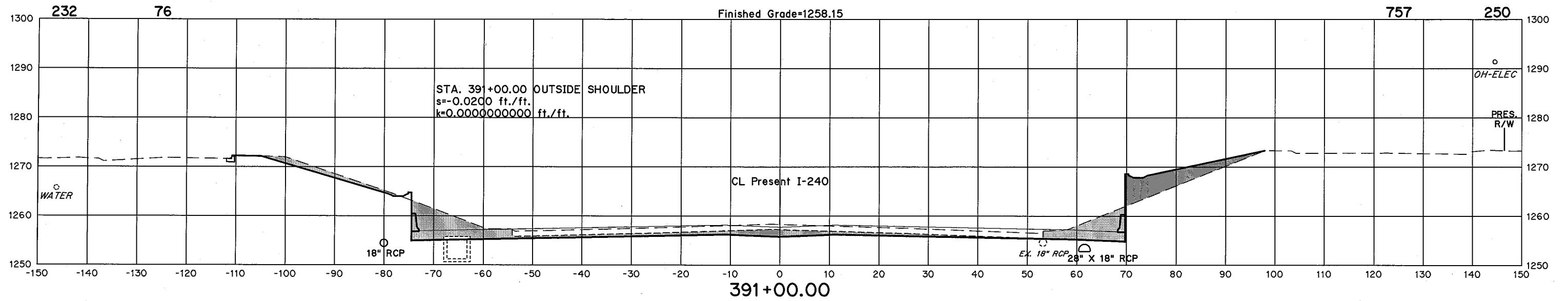


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X11

Cut Area Fill

Volume Cut Fill

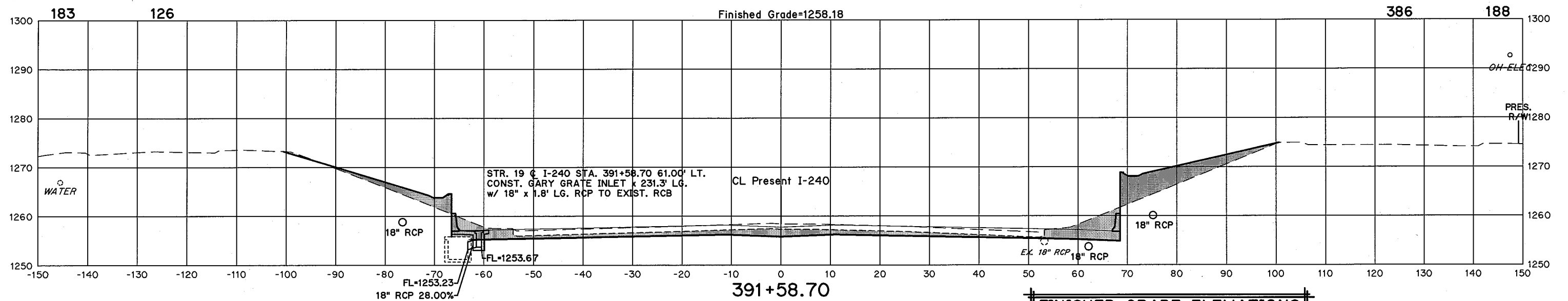


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

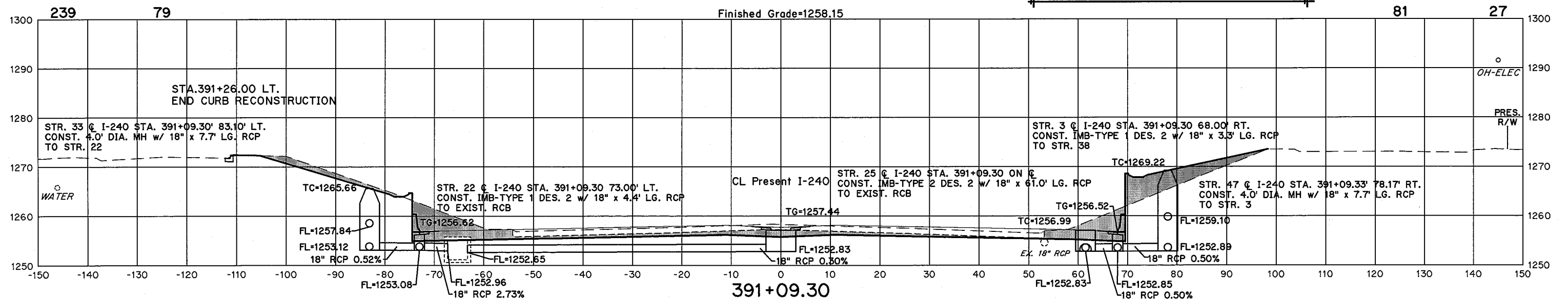
STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X12

Cut Area Fill

Cut Volume Fill



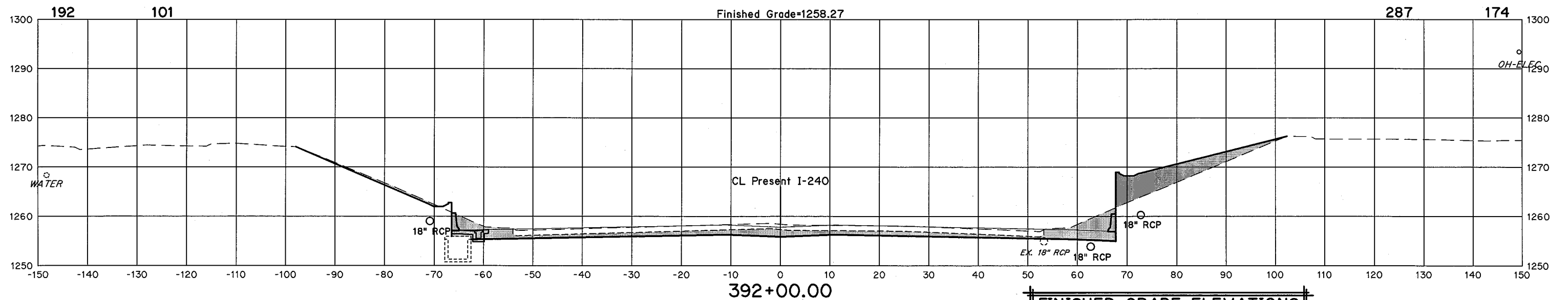
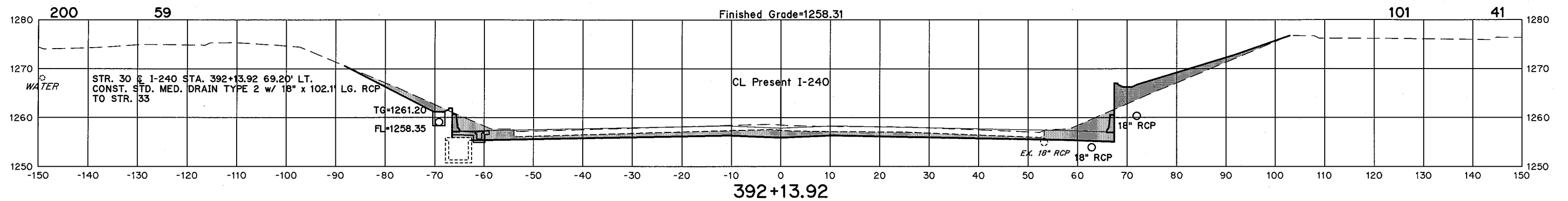
FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE



STR. 38 @ I-240 STA. 391+09.30 61.50' RT.
CONST. 4.0' X 4.0' JUNCT. BOX w/ 28\" x 18\" x 154.7' LG.
RCPA TO STR. 37

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X13

<u>Cut</u>	<u>Volume</u>	<u>Fill</u>
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
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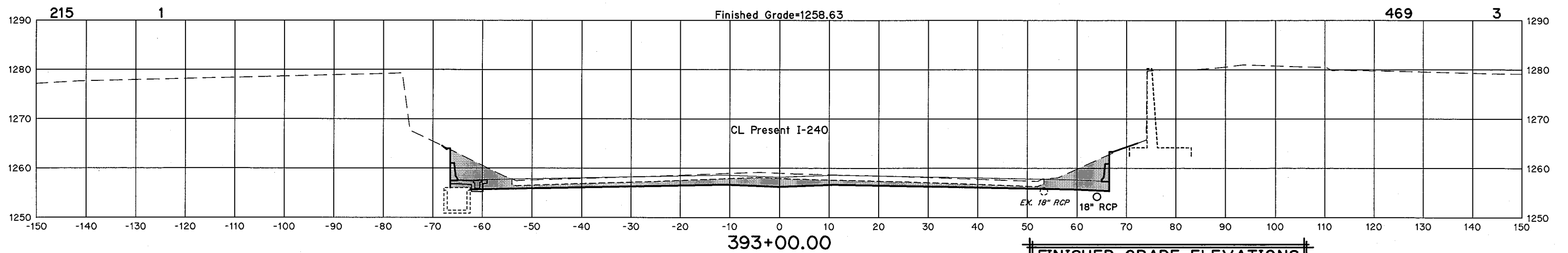
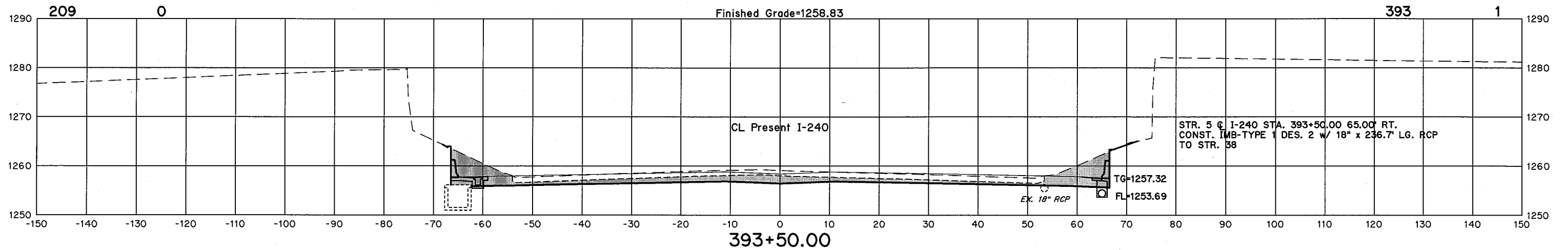
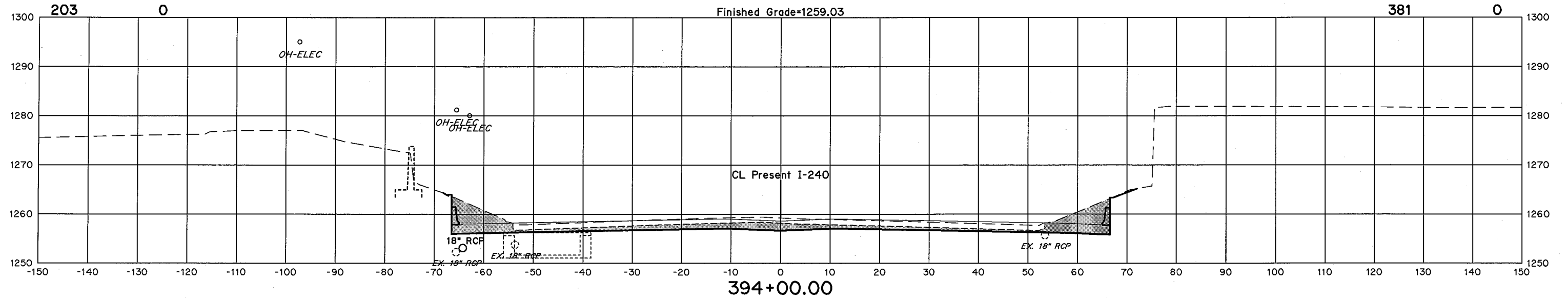


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X14

Cut Area Fill

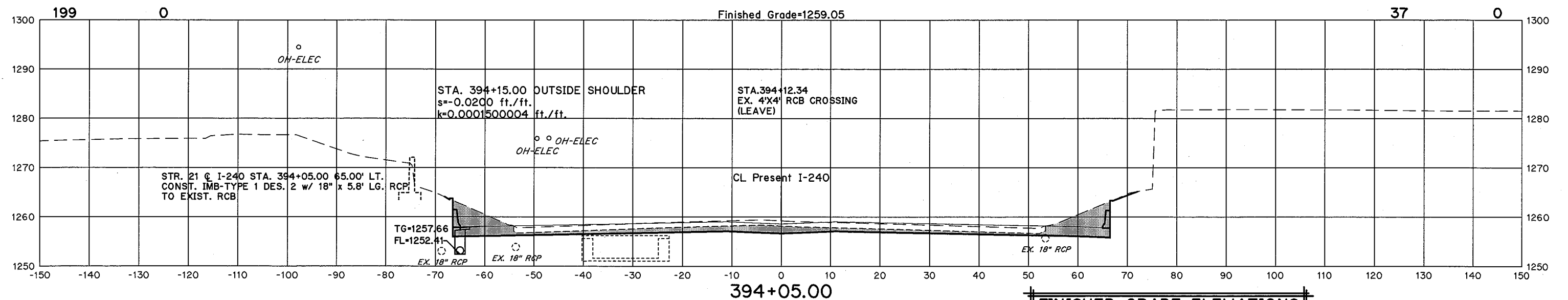
Volume Cut Fill



FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X15

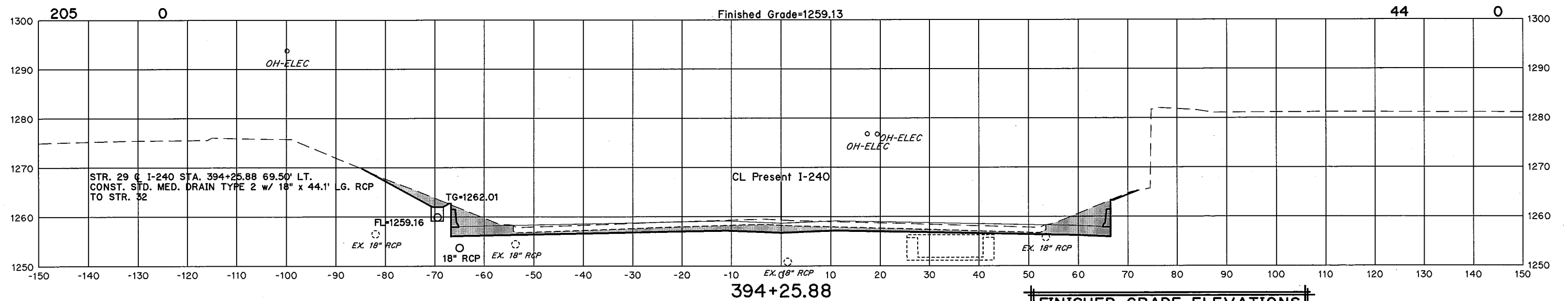
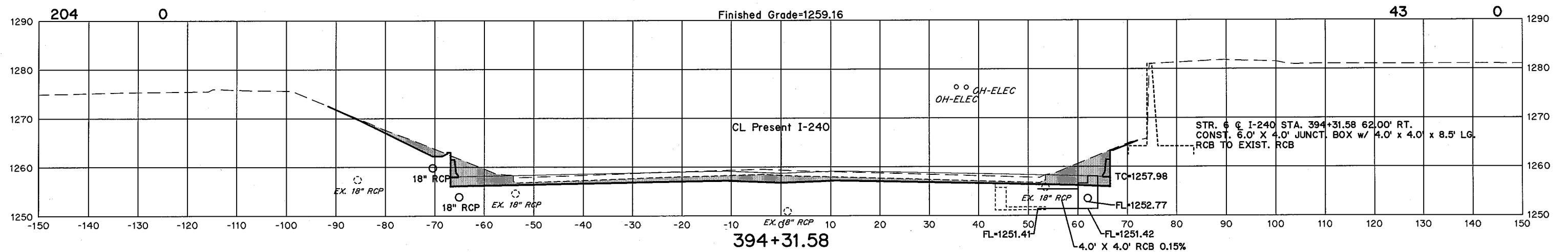
	<u>Volume</u>	
<u>Cut</u>		<u>Fill</u>



STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X16

Cut Area Fill

Cut Volume Fill

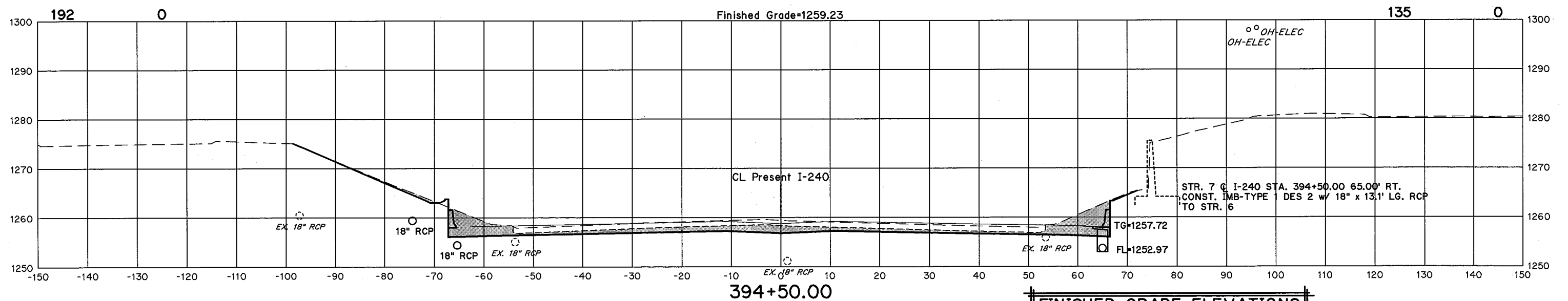
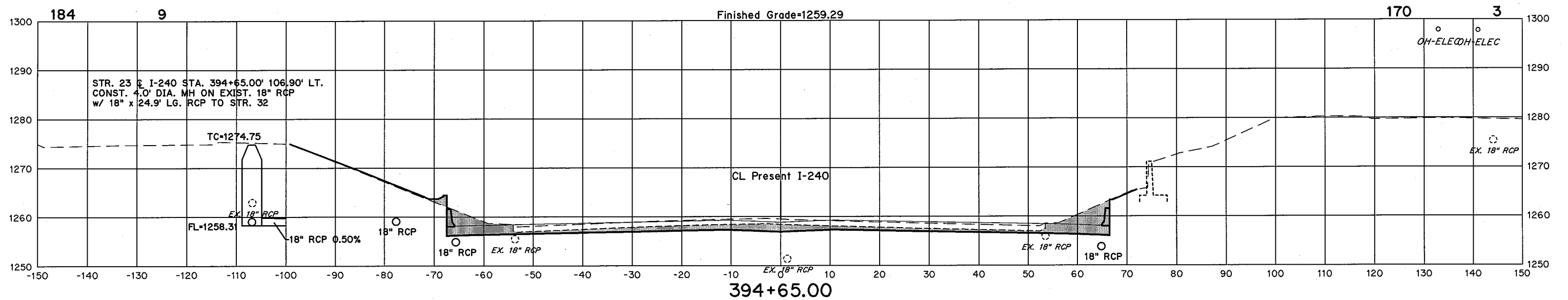


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X17

Cut Area Fill

Cut Volume Fill

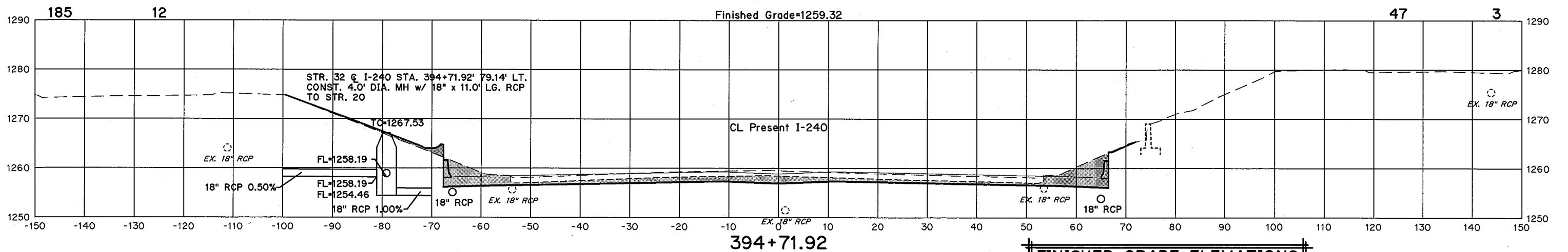
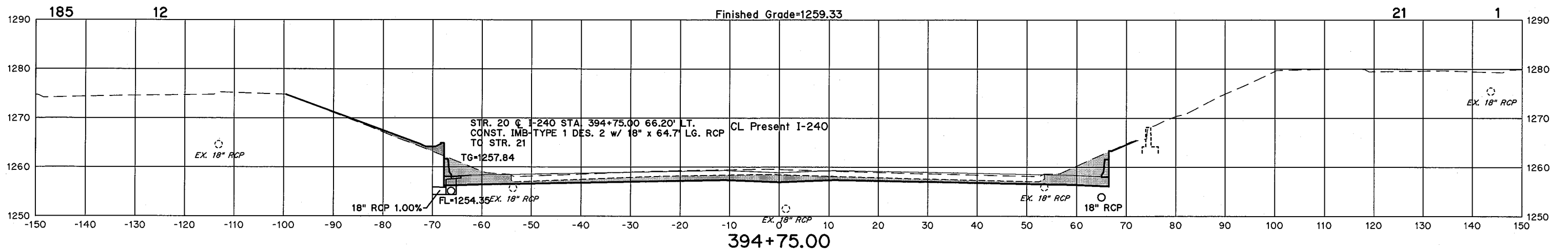
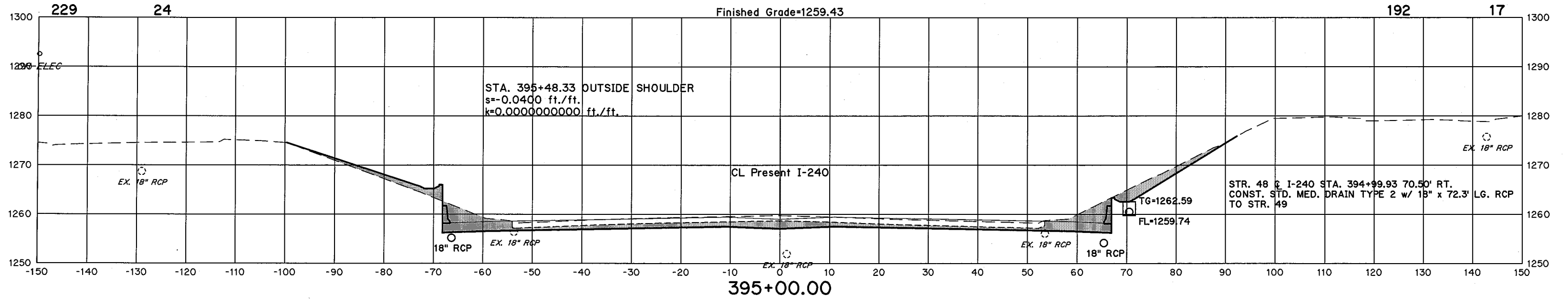


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X18

Cut Area Fill

Volume Cut Fill

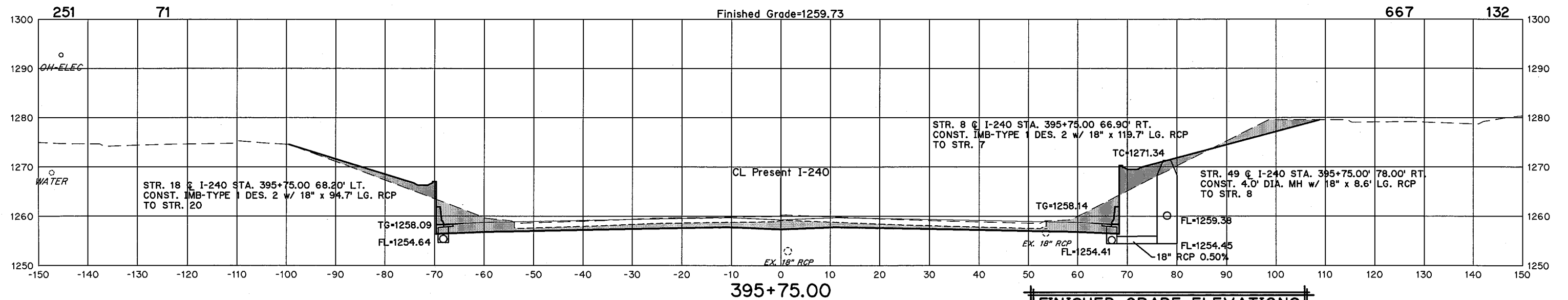
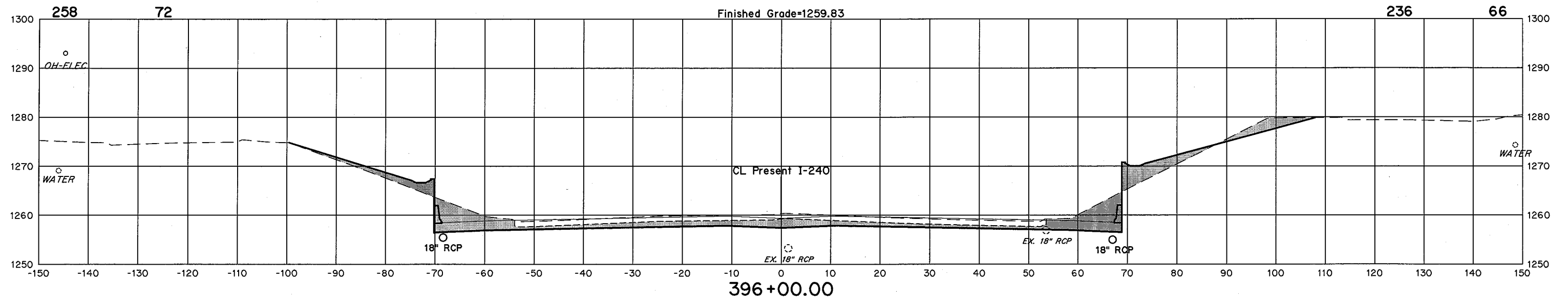


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X19

Cut Area Fill

Cut Volume Fill



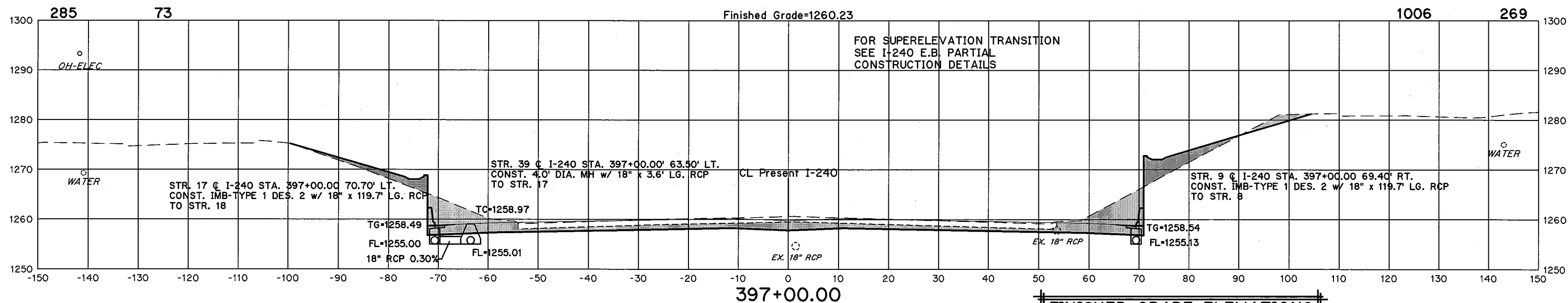
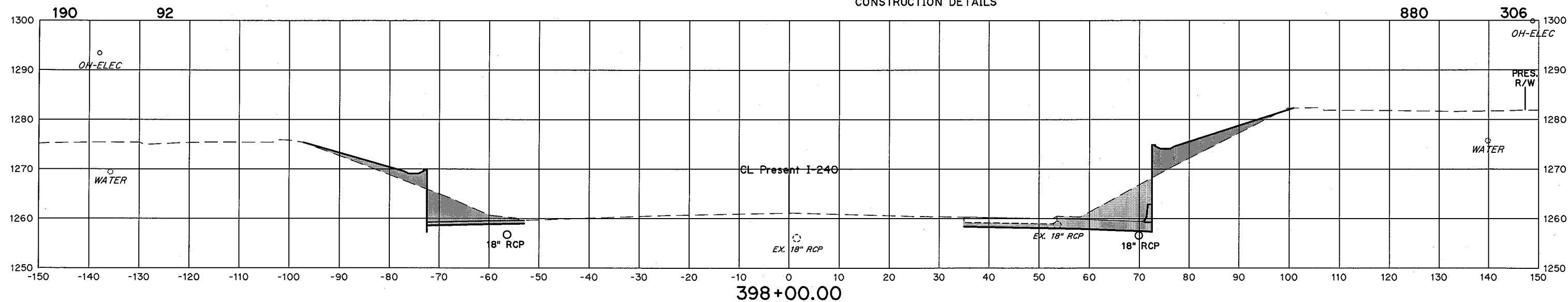
FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X20

Cut Area Fill

Cut Volume Fill

FOR SUPERELEVATION TRANSITION
SEE I-240 E.B. PARTIAL
CONSTRUCTION DETAILS



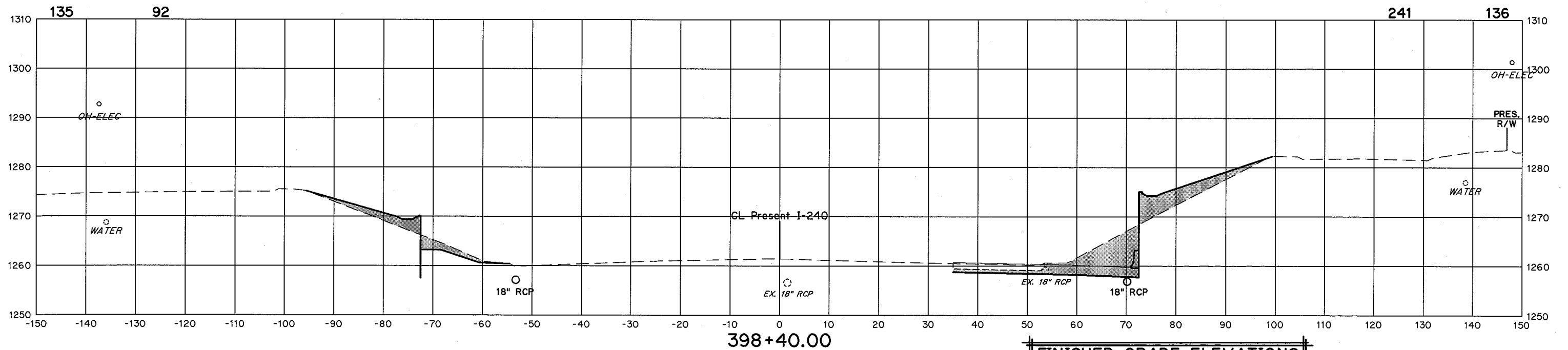
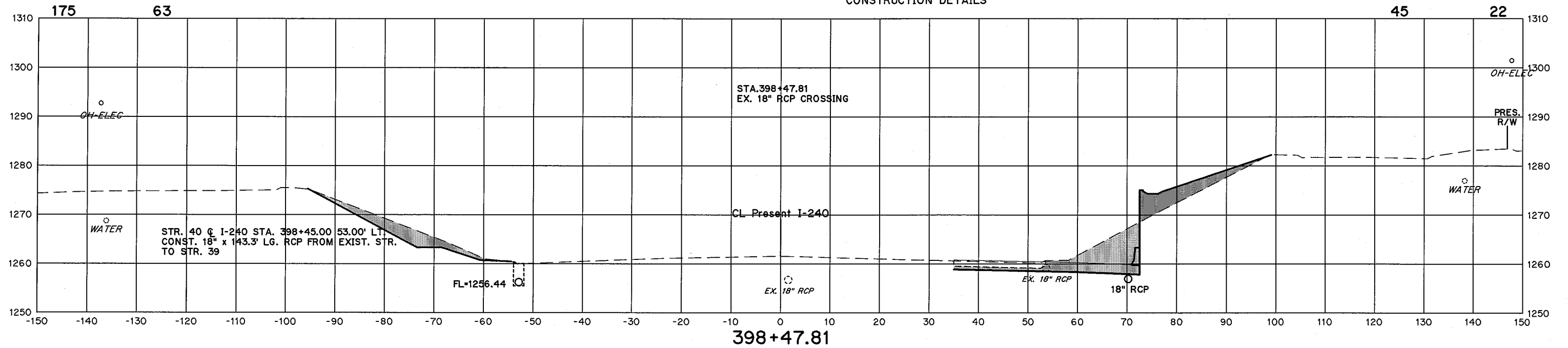
FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X21

Cut Area Fill

Cut Volume Fill

FOR SUPERELEVATION TRANSITION
SEE I-240 E.B. PARTIAL
CONSTRUCTION DETAILS



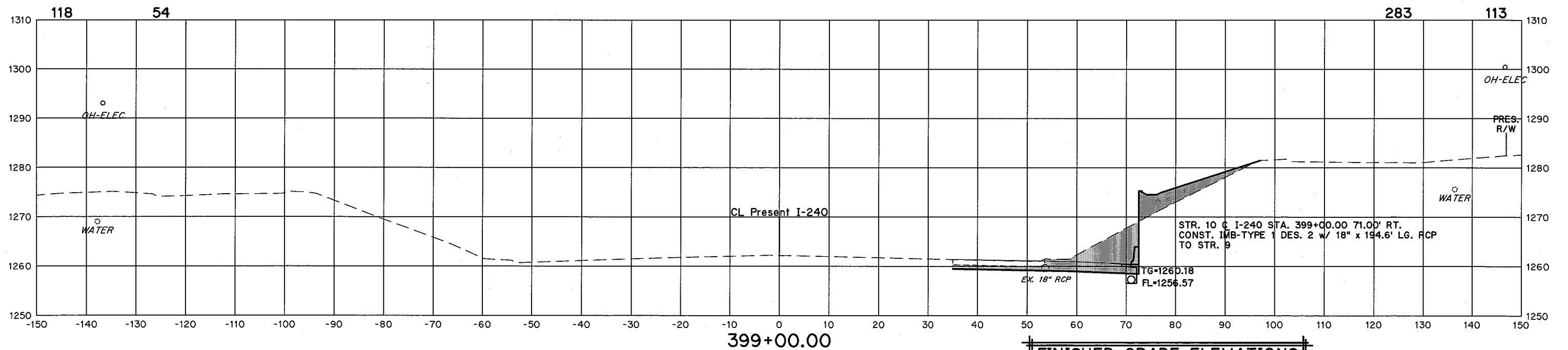
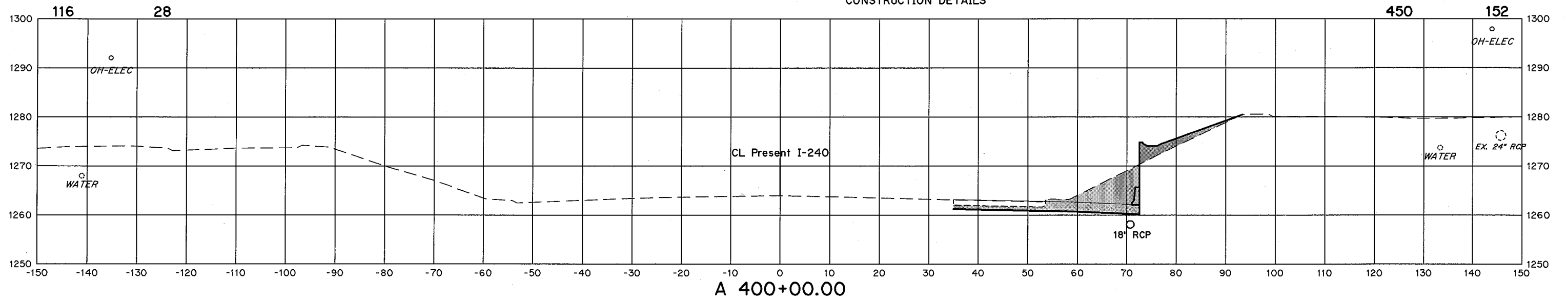
FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X22

Cut Area Fill

Cut Volume Fill

FOR SUPERELEVATION TRANSITION
SEE I-240 E.B. PARTIAL
CONSTRUCTION DETAILS



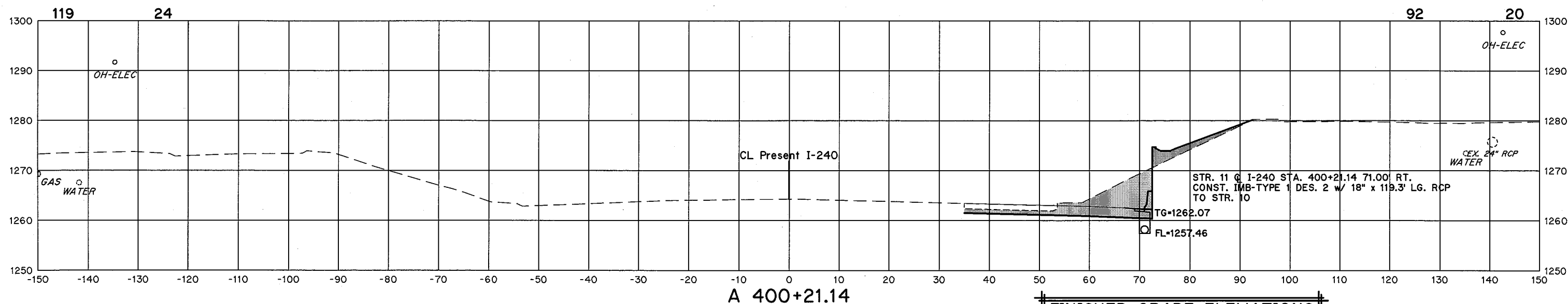
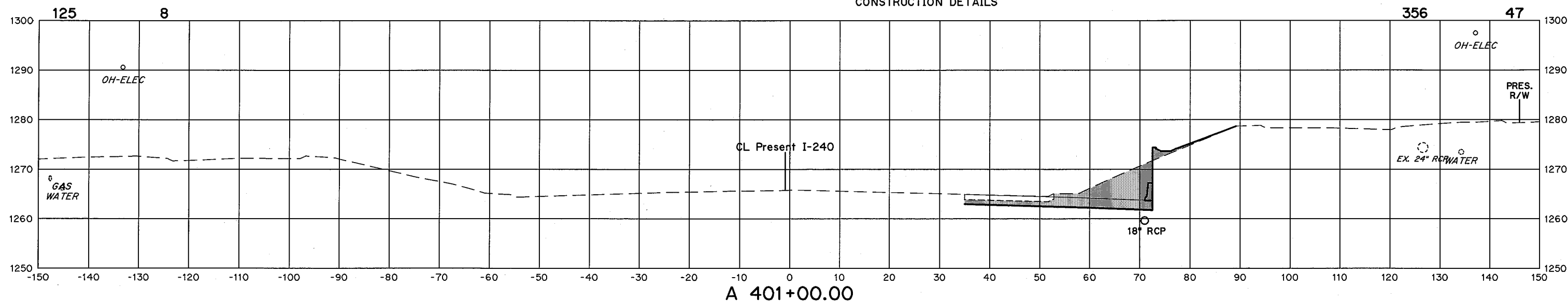
FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X23

Cut Area Fill

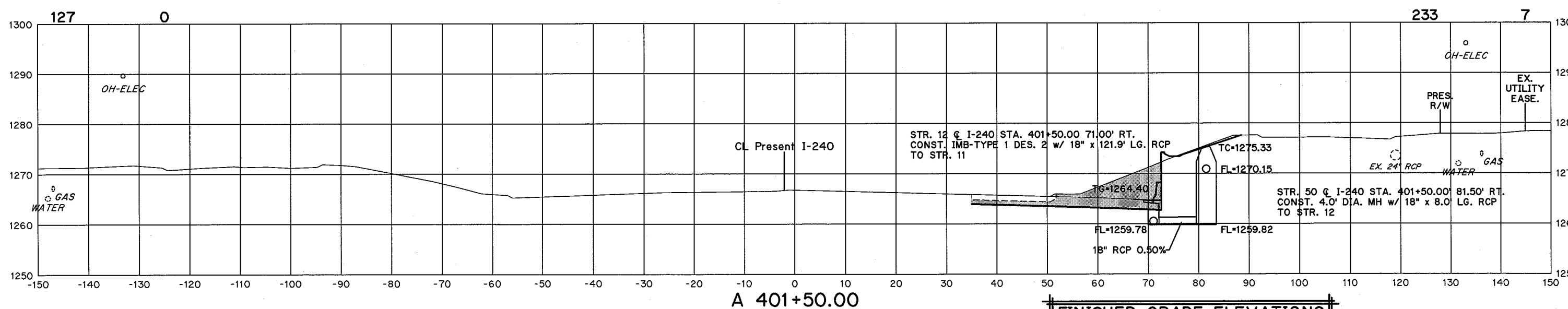
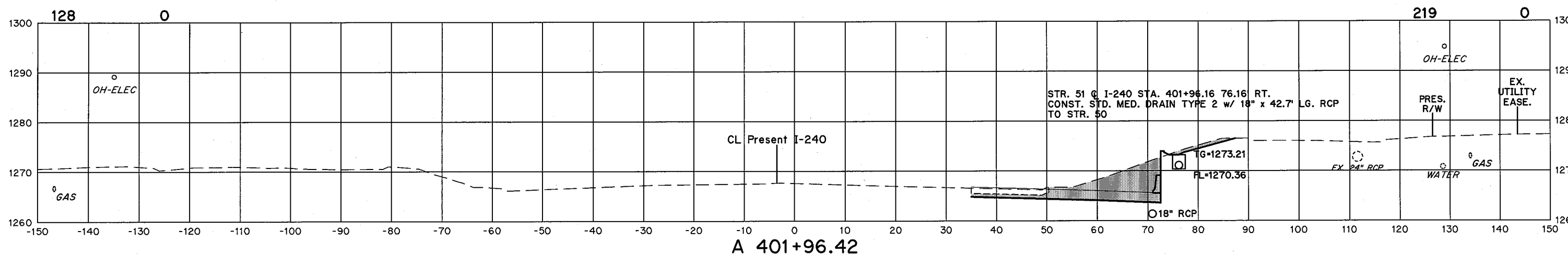
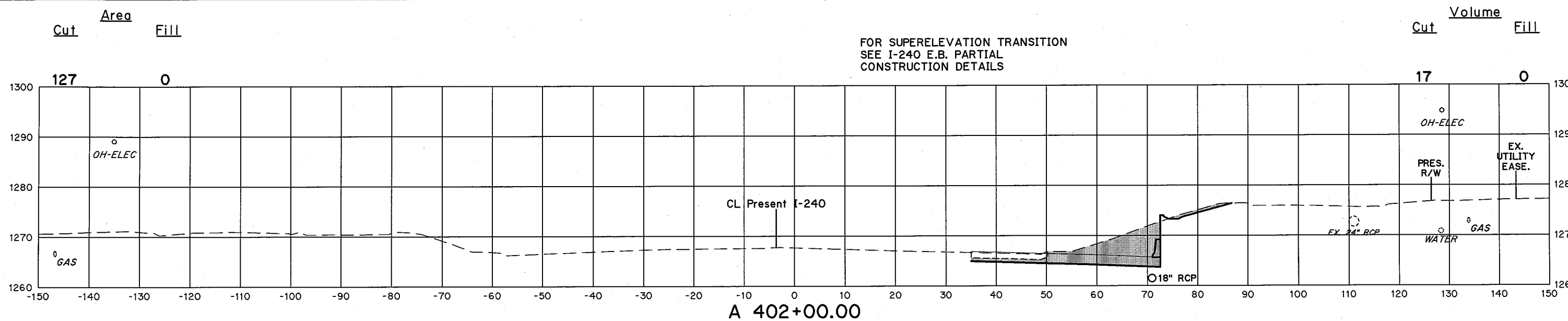
Cut Volume Fill

FOR SUPERELEVATION TRANSITION
SEE I-240 E.B. PARTIAL
CONSTRUCTION DETAILS



FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X24



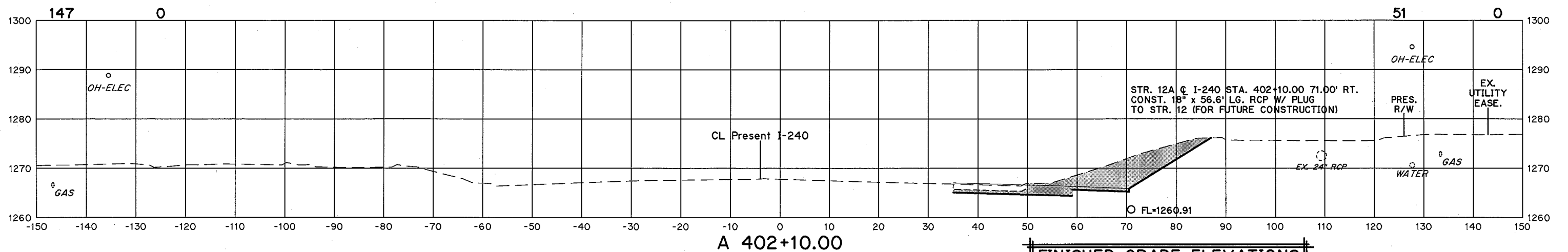
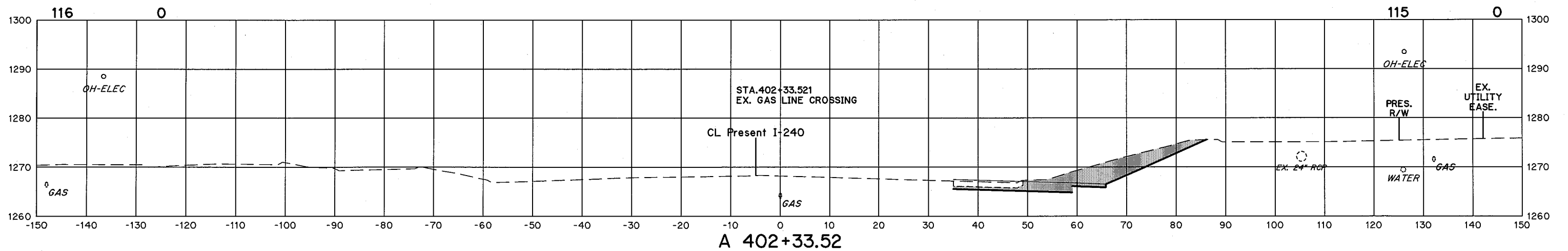
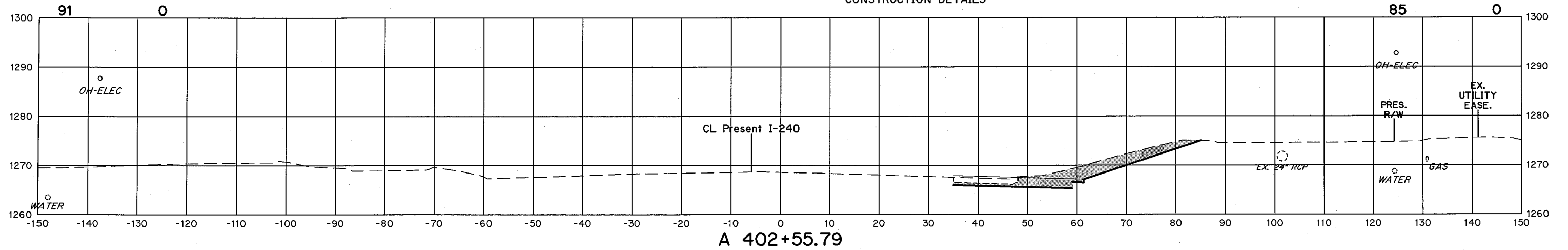
**FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE**

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X25

Cut Area Fill

Cut Volume Fill

FOR SUPERELEVATION TRANSITION
SEE I-240 E.B. PARTIAL
CONSTRUCTION DETAILS

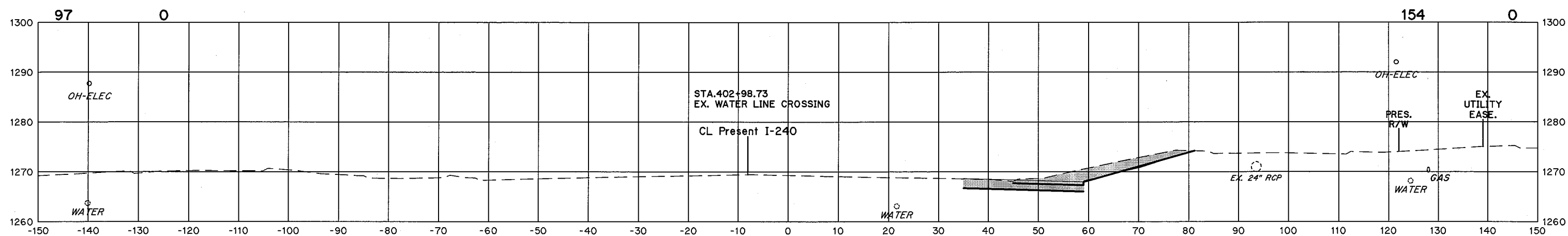


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X26

Cut Area Fill

Cut Volume Fill



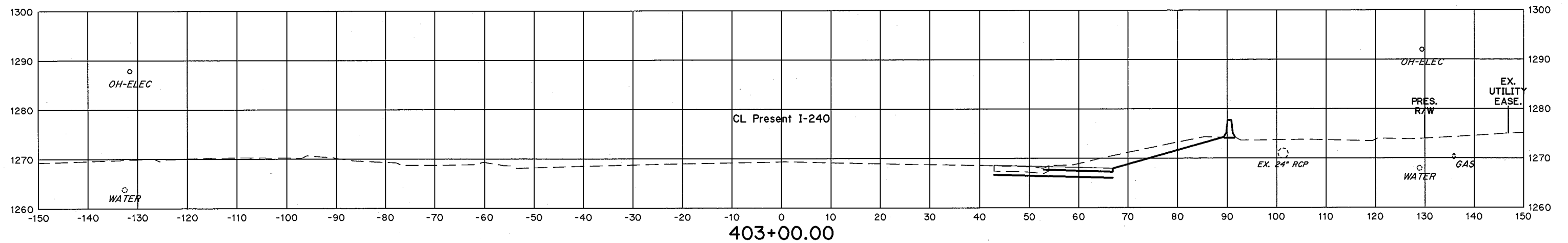
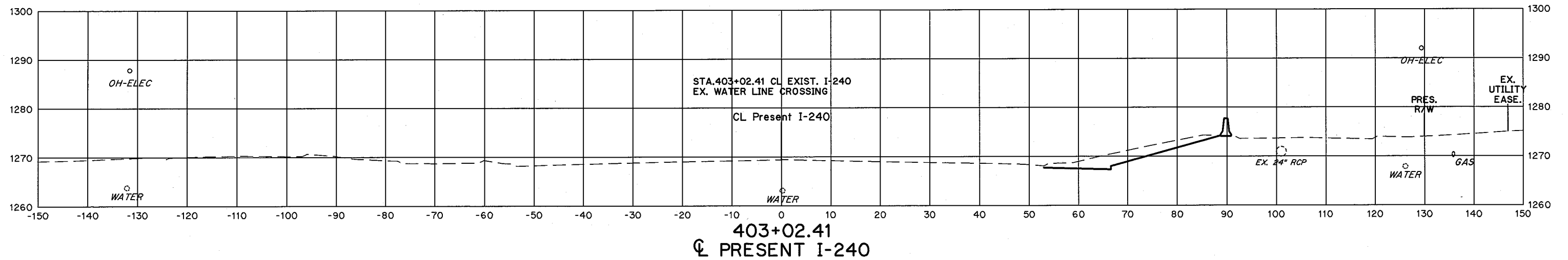
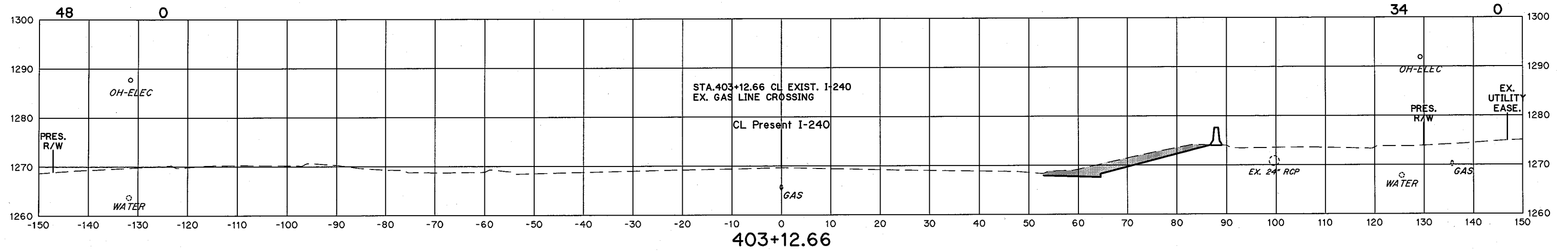
A 403+00.00
8.06' RT. STA. 403+02.41 CL PRESENT I-240
END CONSTRUCTION - BEGIN INCIDENTAL CONST.

FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X27

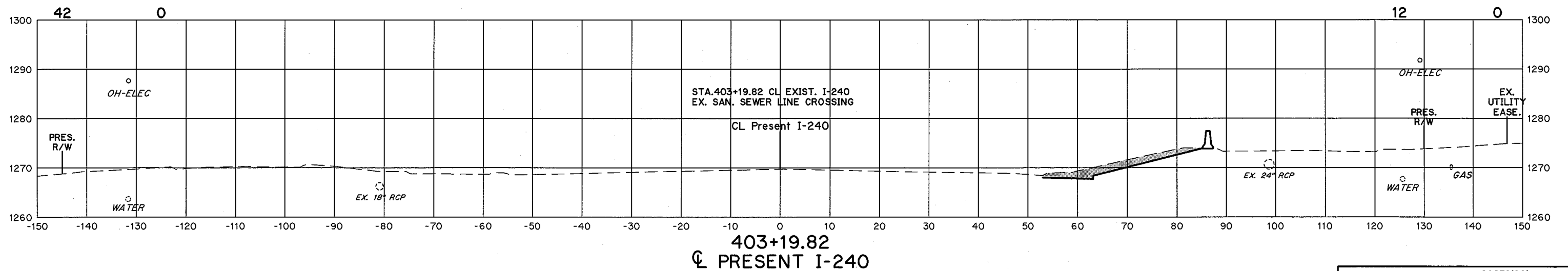
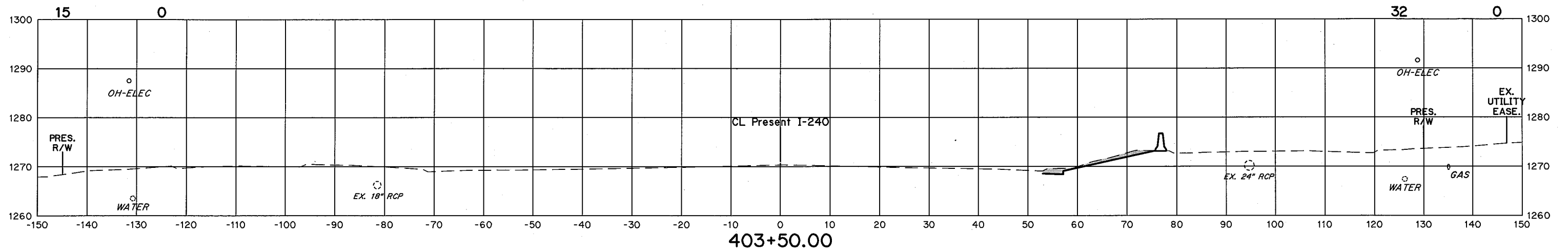
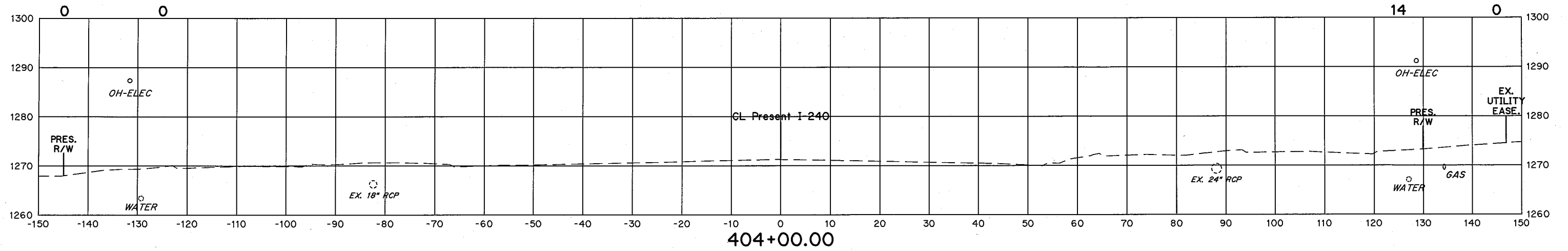
Cut Area Fill

Cut Volume Fill



Cut Area Fill

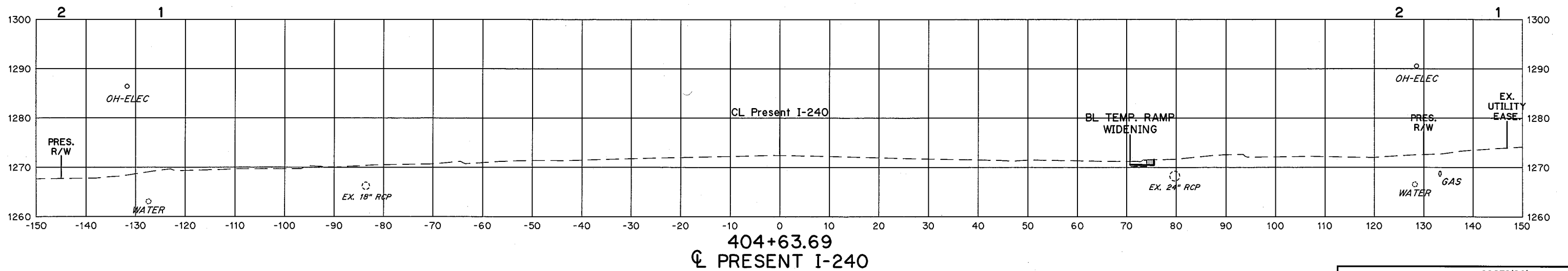
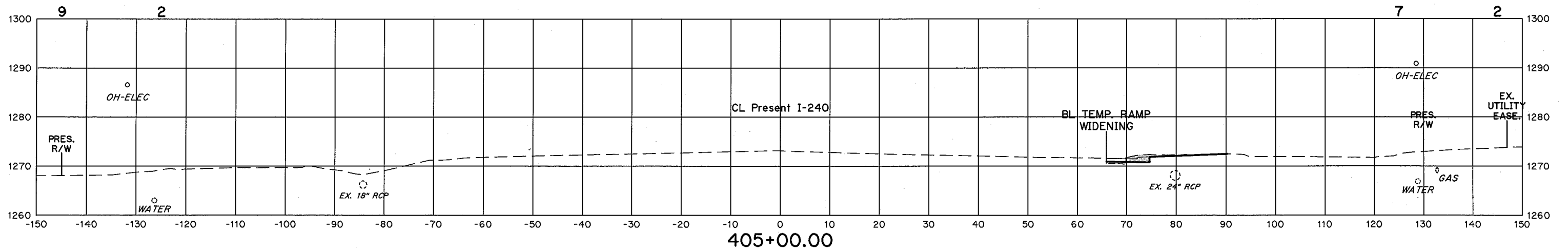
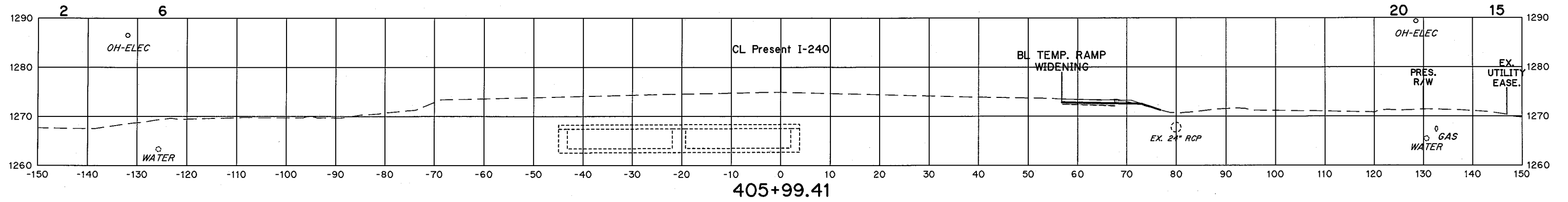
Cut Volume Fill



STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X29

Cut Area Fill

Cut Volume Fill

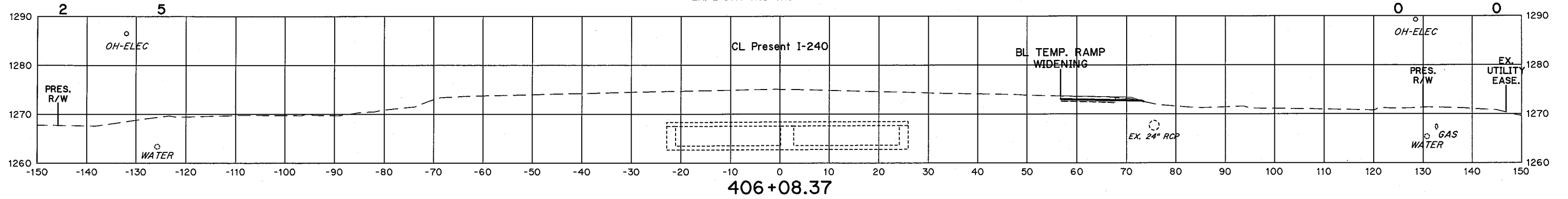


STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X30

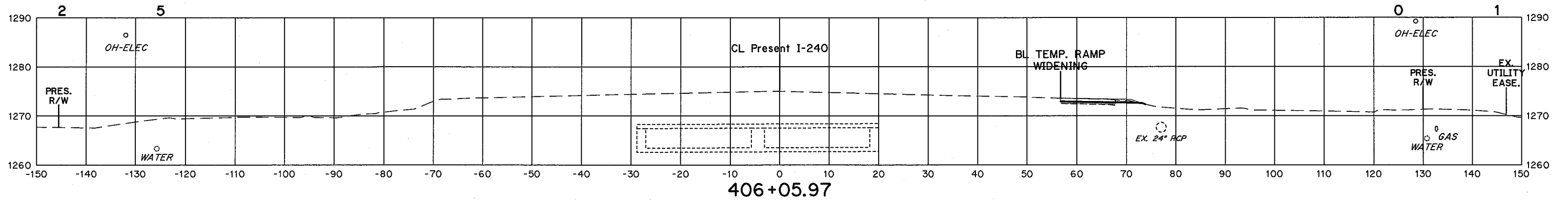
Cut Area Fill

Volume Cut Fill

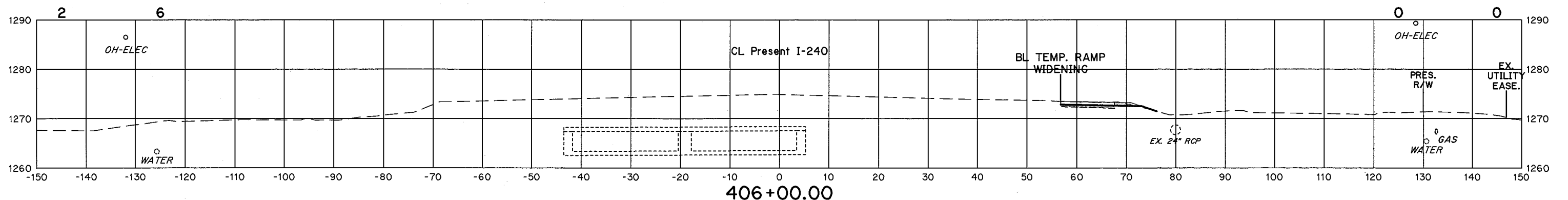
STA. 406+08.37 CL EXIST. I-240
EX. 2'-8"X4' RCB CROSSING



406+08.37



406+05.97

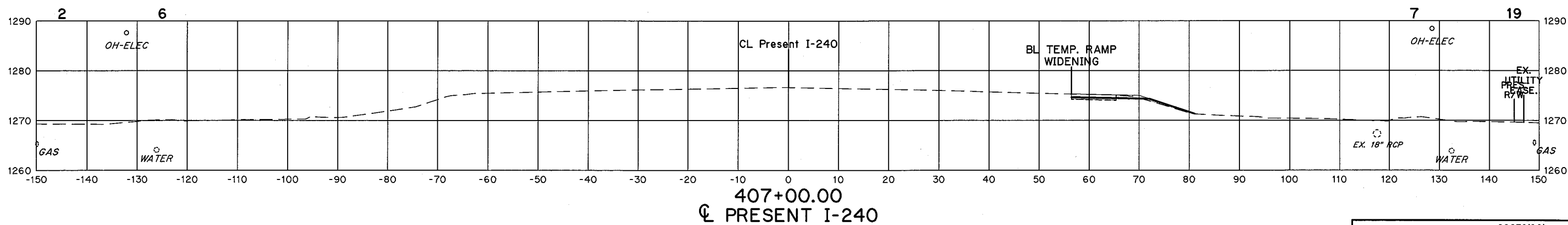
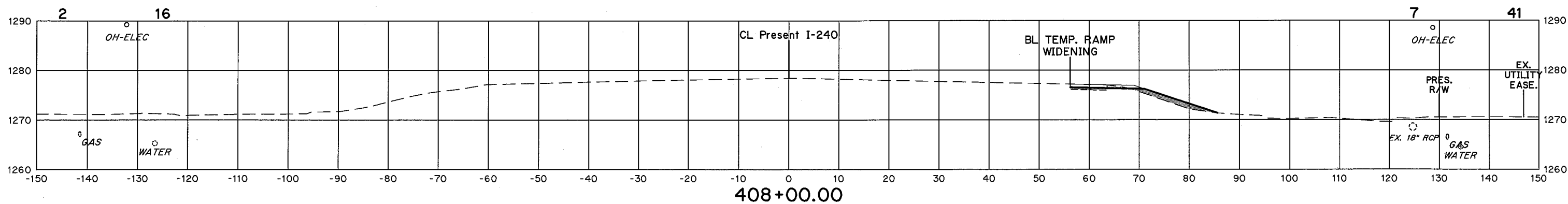
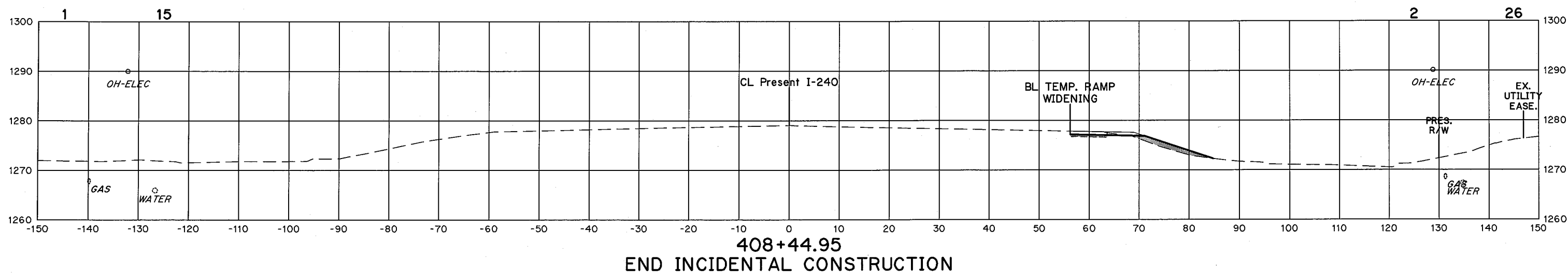


406+00.00
CL PRESENT I-240

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X31

Cut Area Fill

Cut Volume Fill

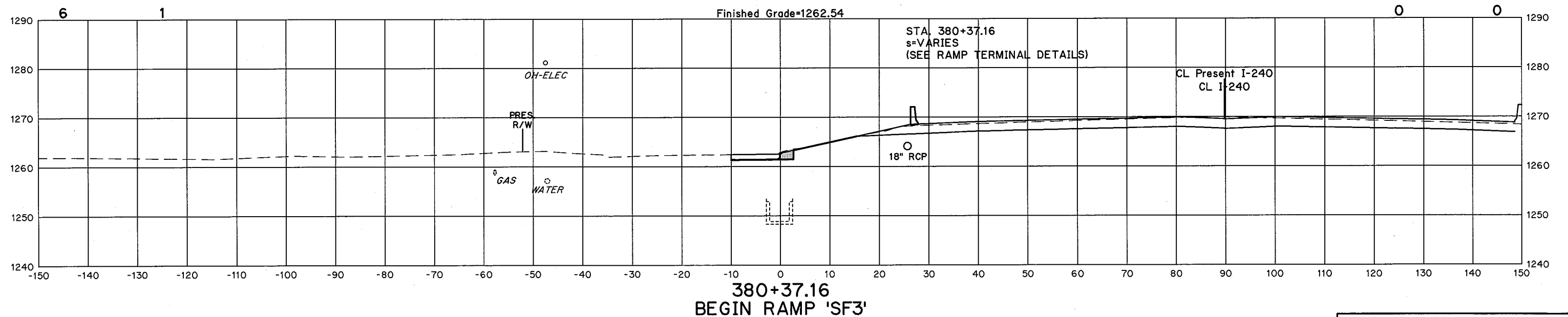
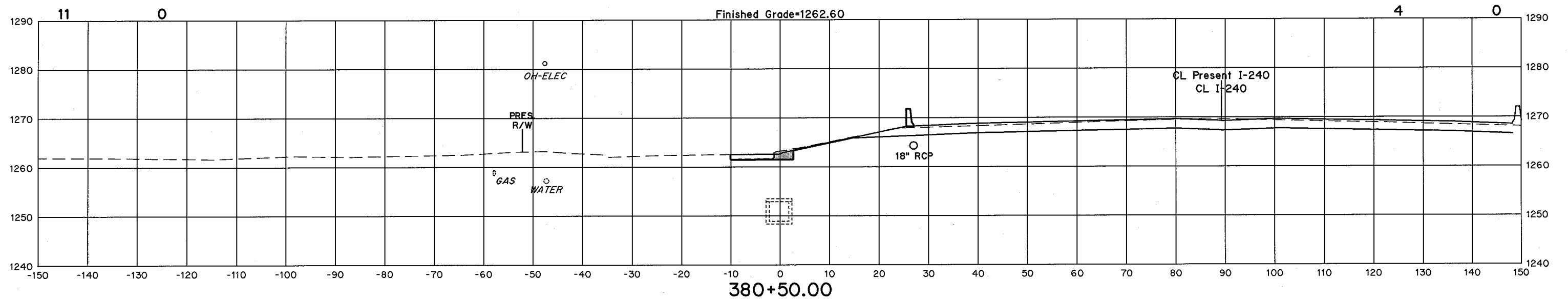


STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X32

Cut Area Fill

Cut Volume Fill

FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE
/ TOP OF CONCRETE SLAB

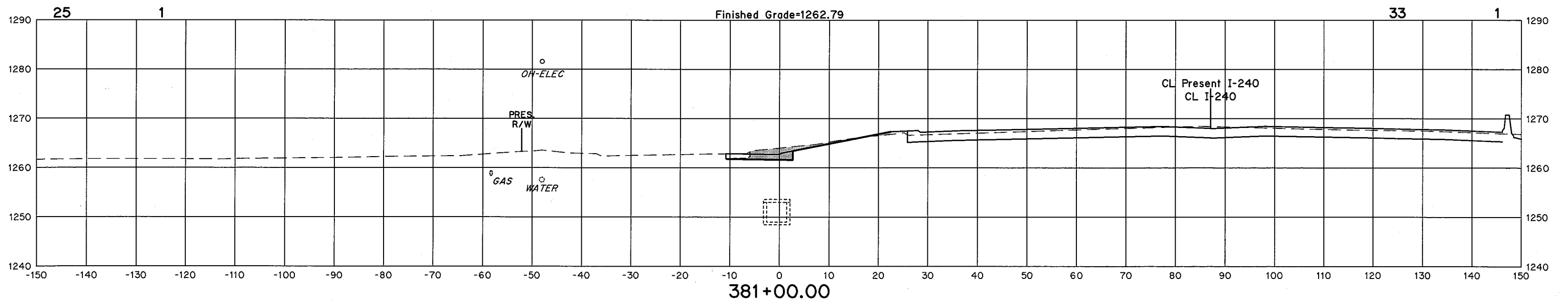
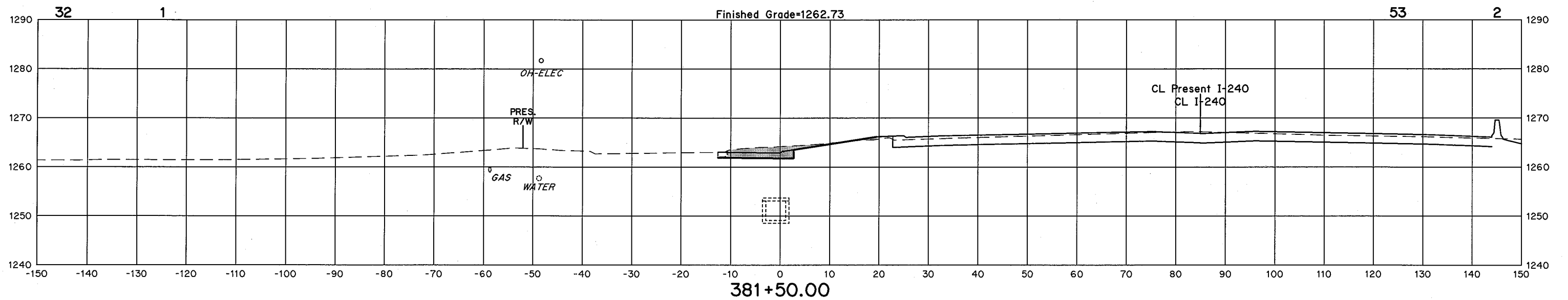


STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X33

Cut Area Fill

Volume Cut Fill

FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE
/ TOP OF CONCRETE SLAB

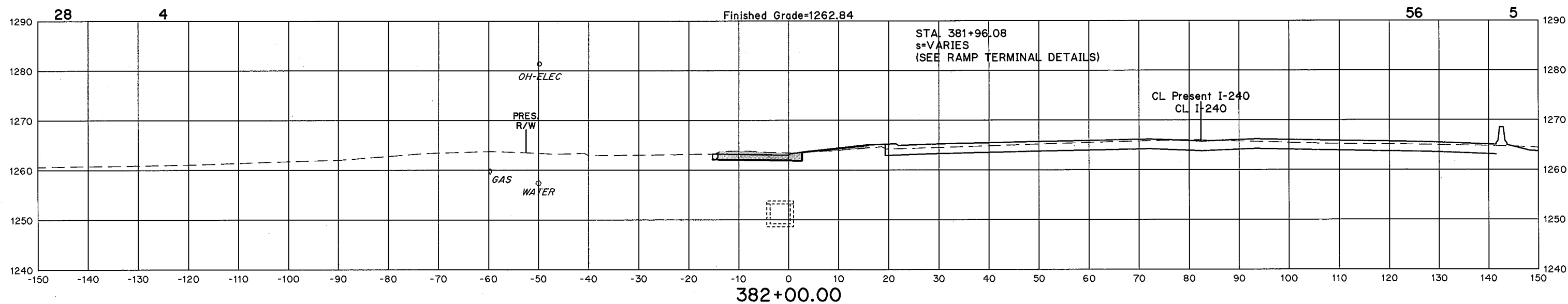
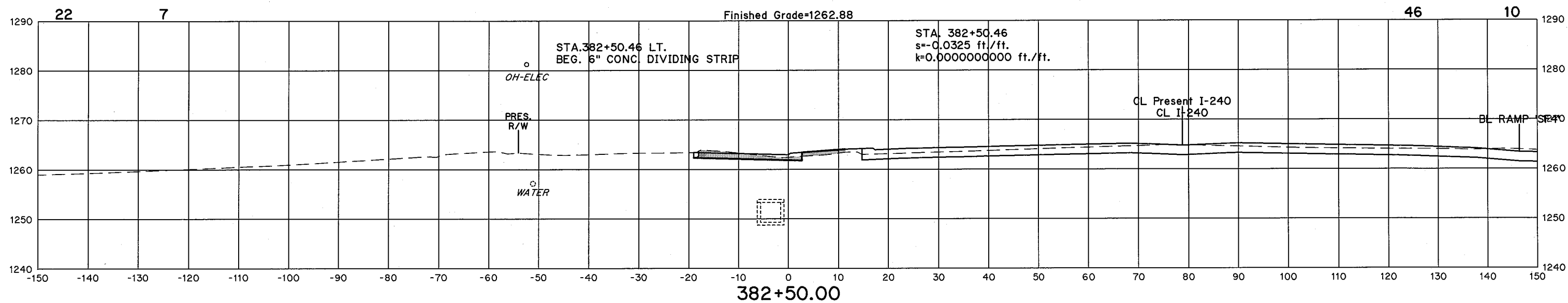


STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X34

Cut Area Fill

Cut Volume Fill

FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE
/ TOP OF CONCRETE SLAB

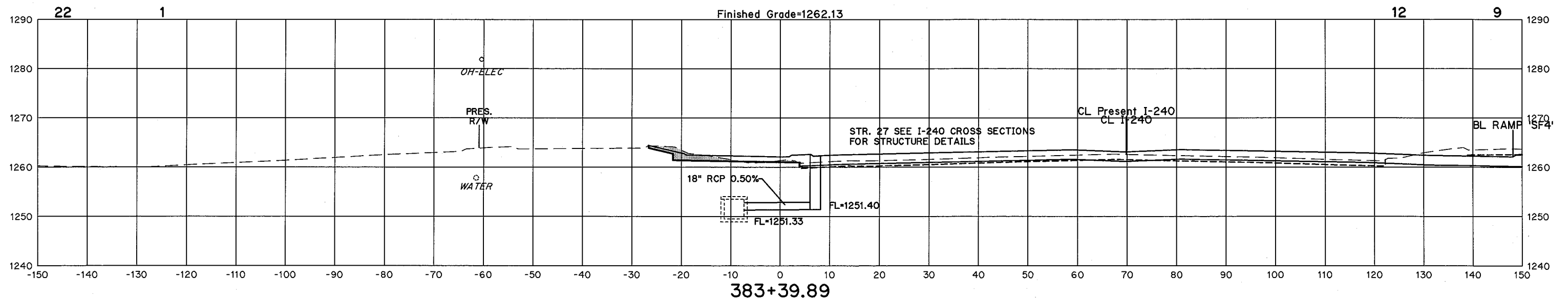
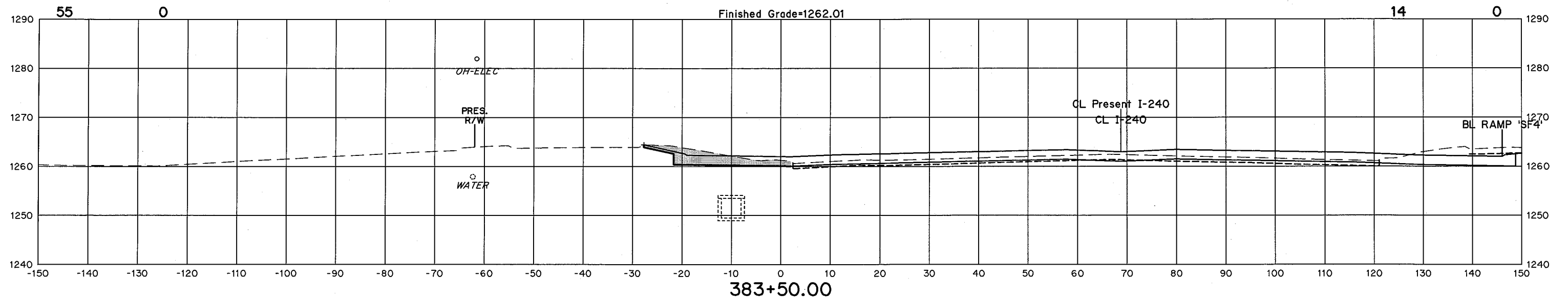


STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X35

Cut Area Fill

Cut Volume Fill

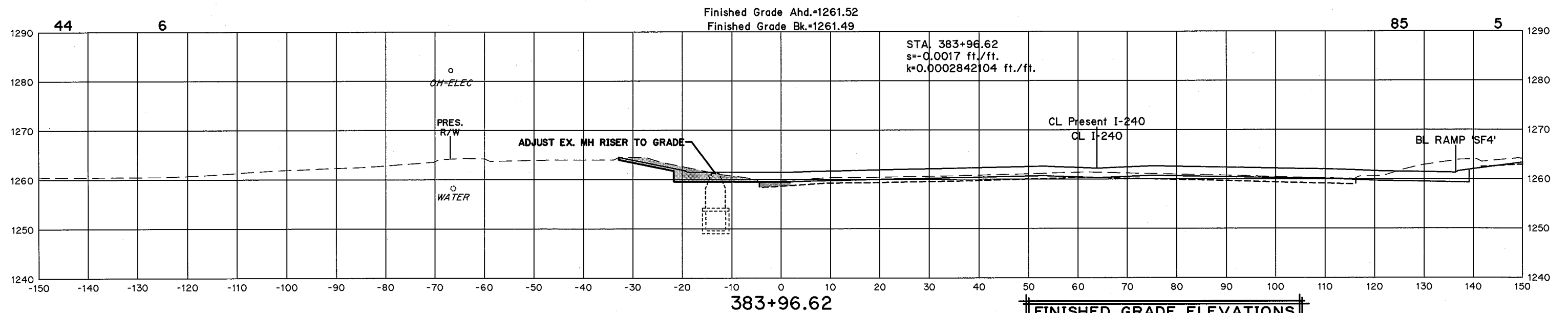
FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE
/ TOP OF CONCRETE SLAB



STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X37

Cut Area Fill

Cut Volume Fill

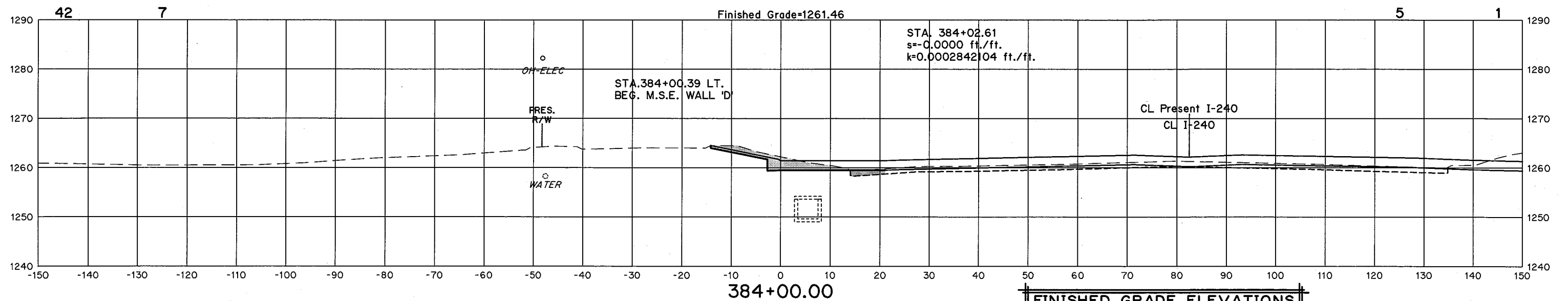
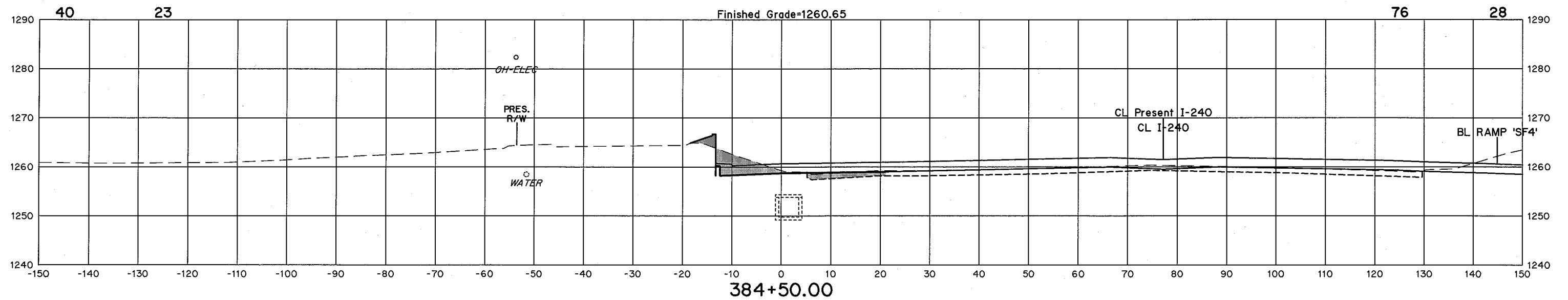


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X38

Cut Area Fill

Cut Volume Fill

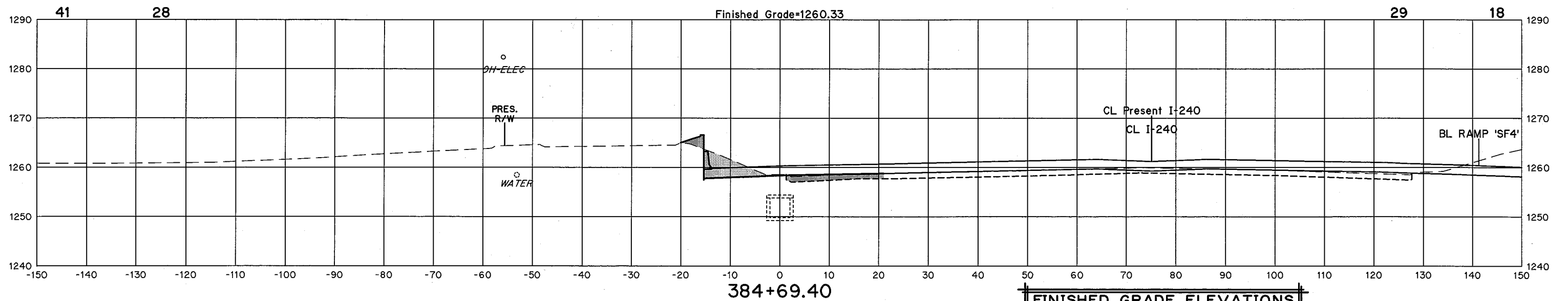
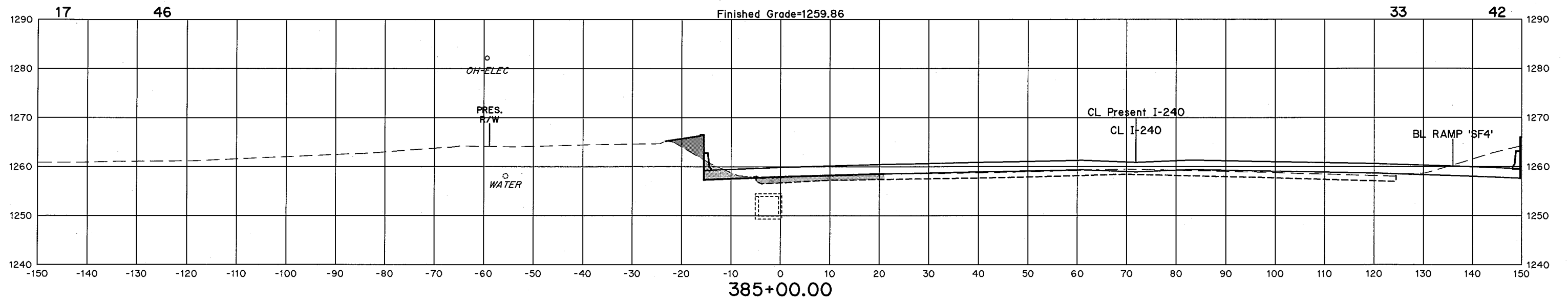


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X39

Cut Area Fill

Cut Volume Fill

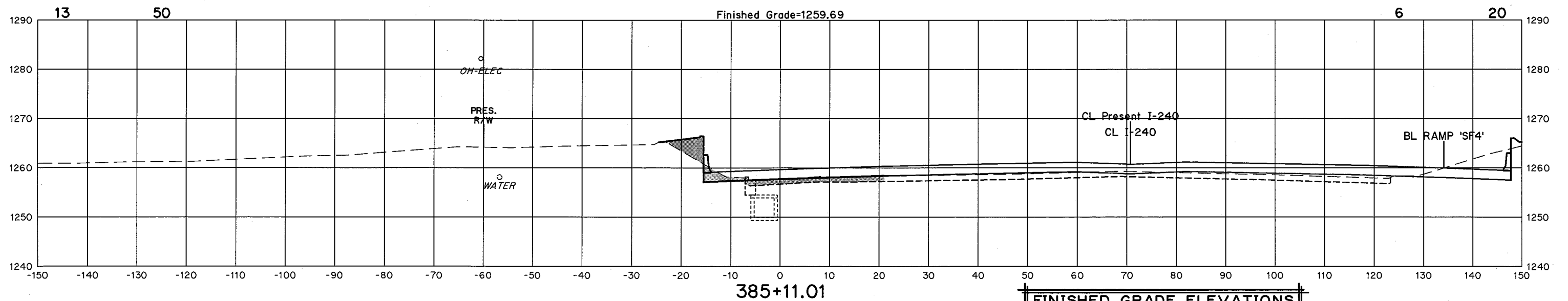
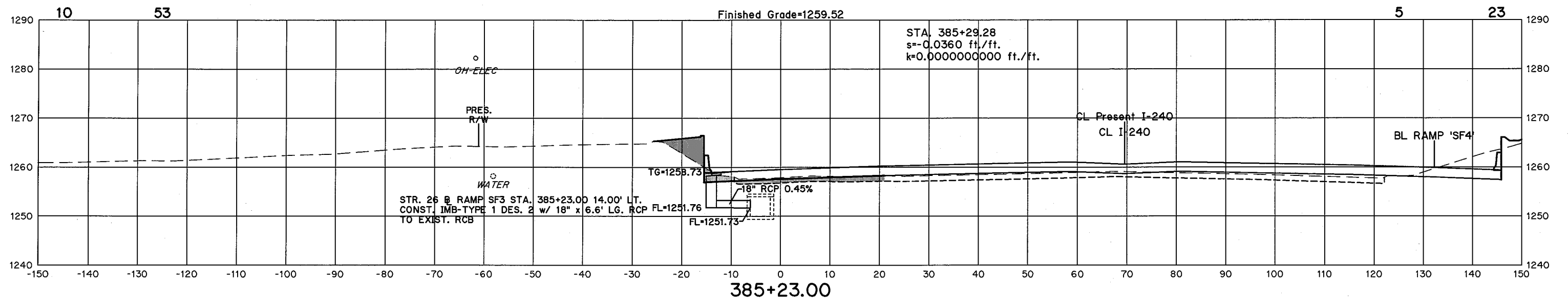


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X40

Cut Area Fill

Cut Volume Fill

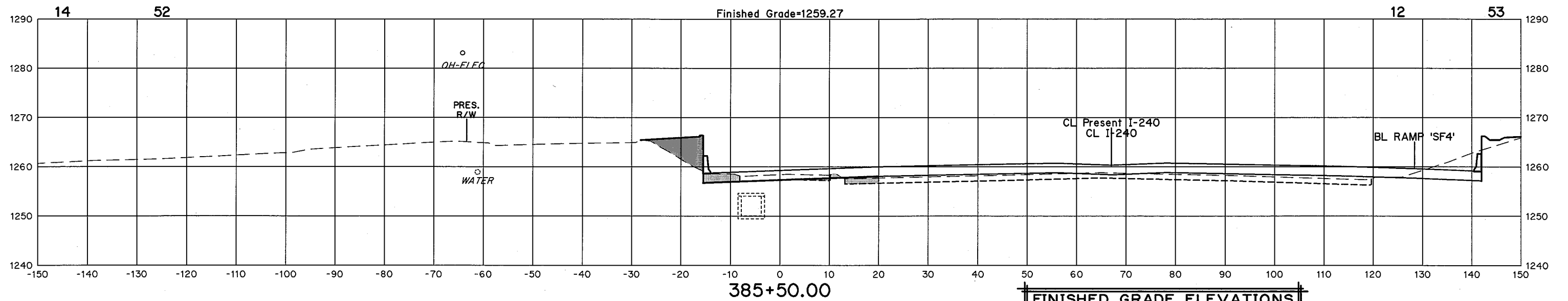
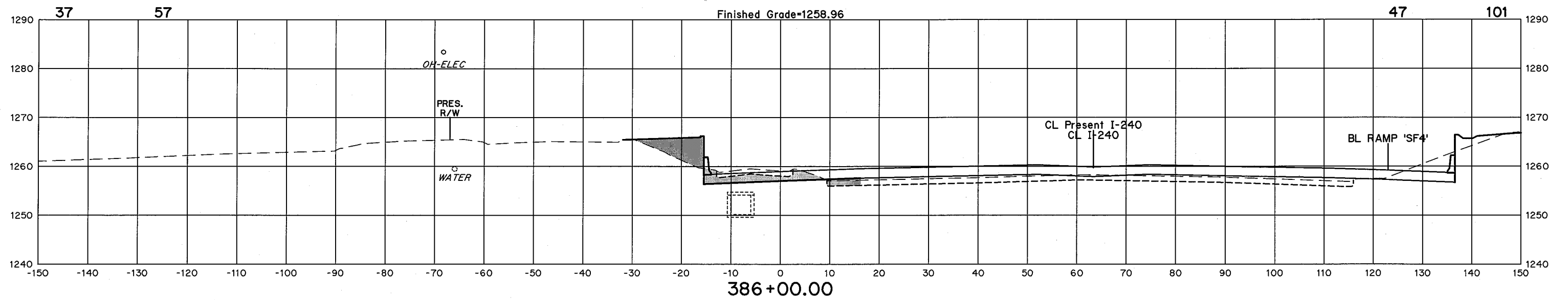


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X41

Cut Area Fill

Cut Volume Fill

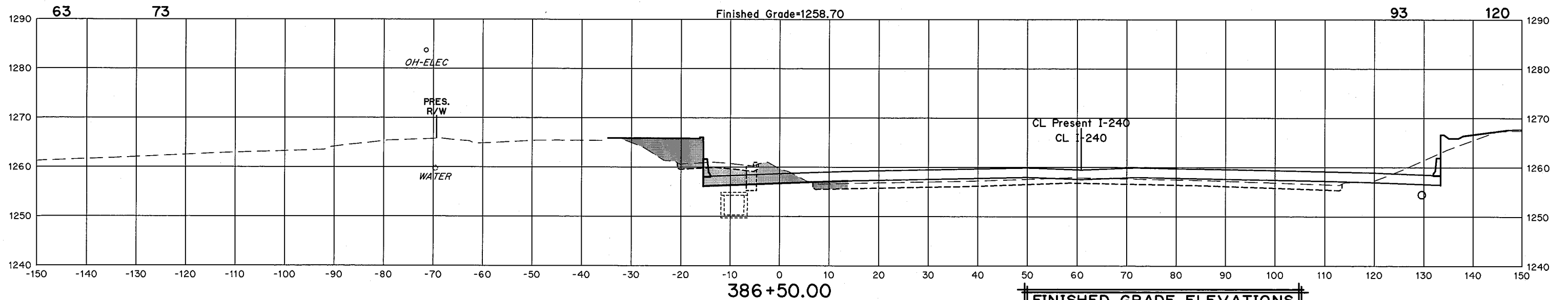
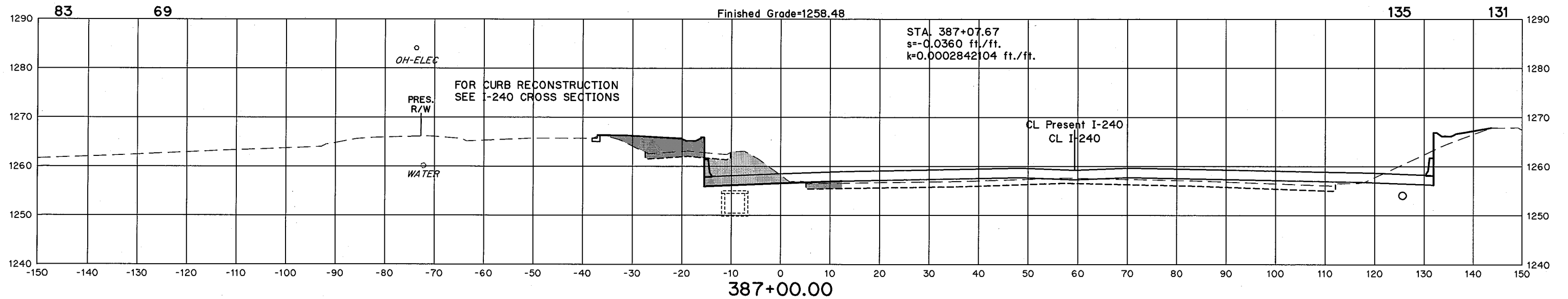


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X42
RAMP 'SF3'

Cut Area Fill

Cut Volume Fill

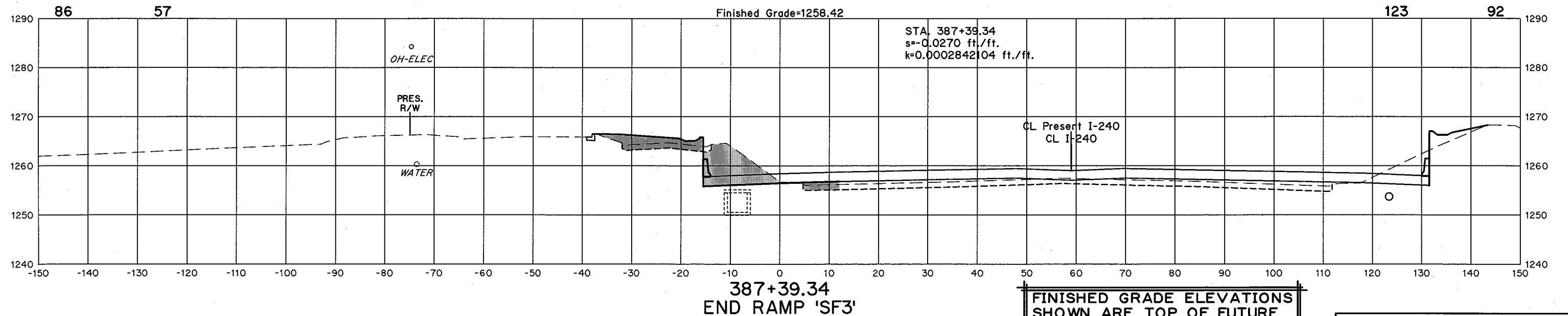


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X43

Cut Area Fill

Cut Volume Fill

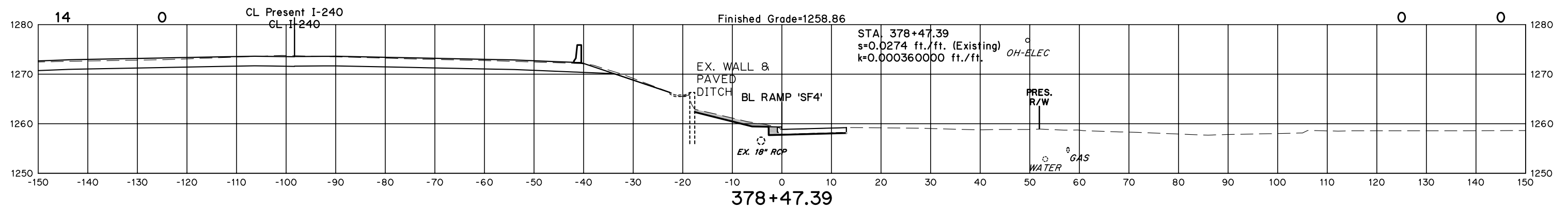
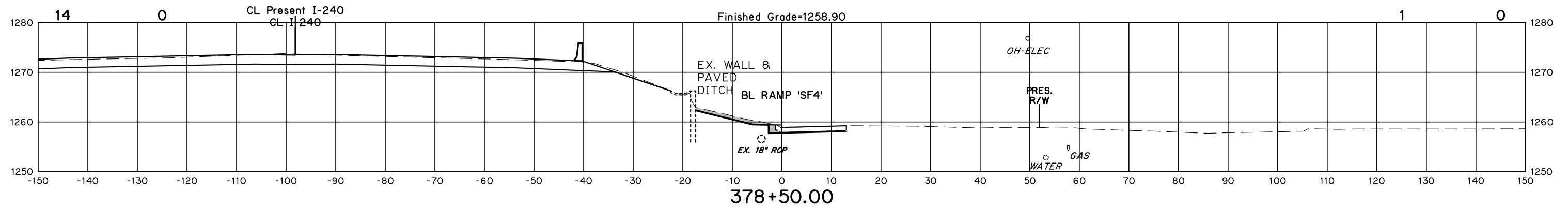
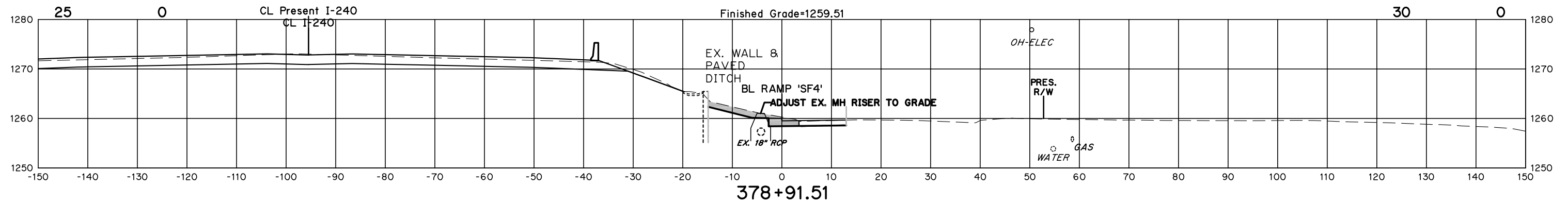


STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X44

Cut Area Fill

FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE
/ TOP OF CONCRETE SLAB

Cut Volume Fill

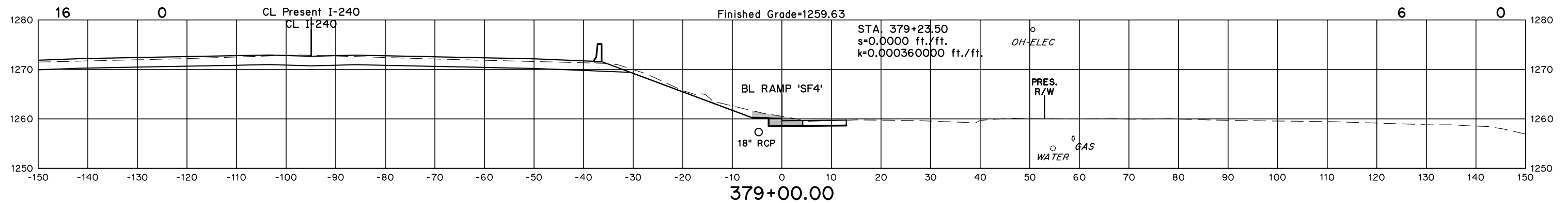
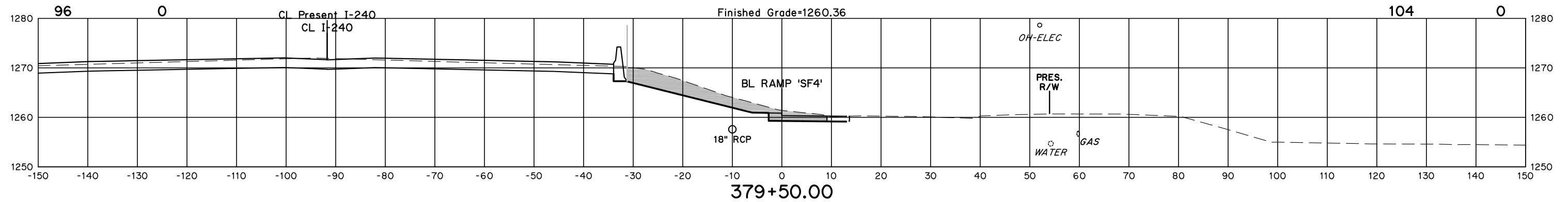
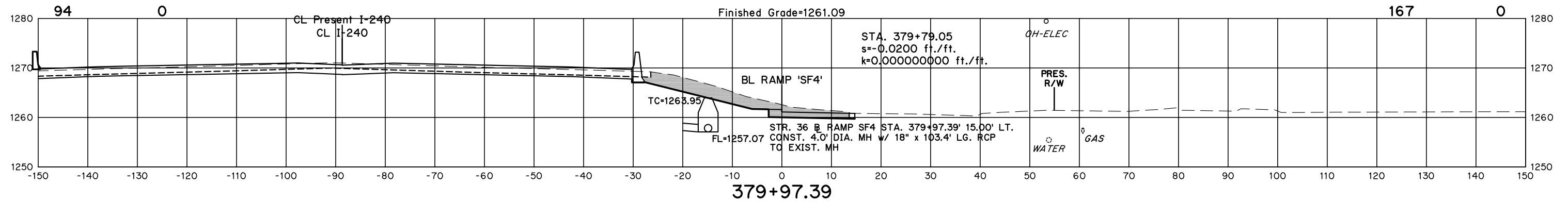


STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X45

Cut Area Fill

FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE
/ TOP OF CONCRETE SLAB

Cut Volume Fill

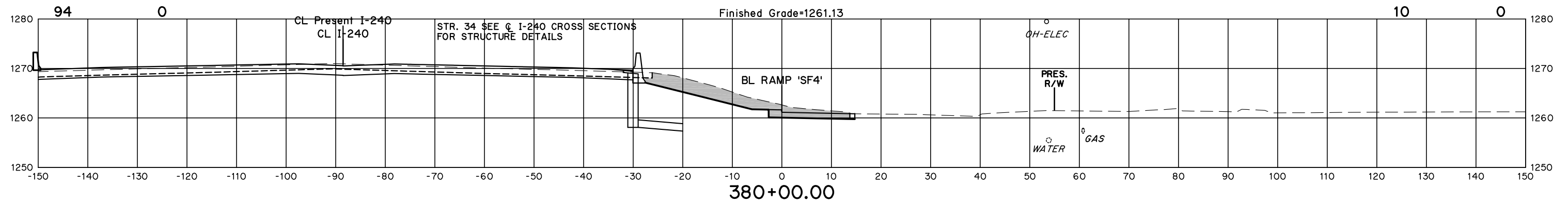
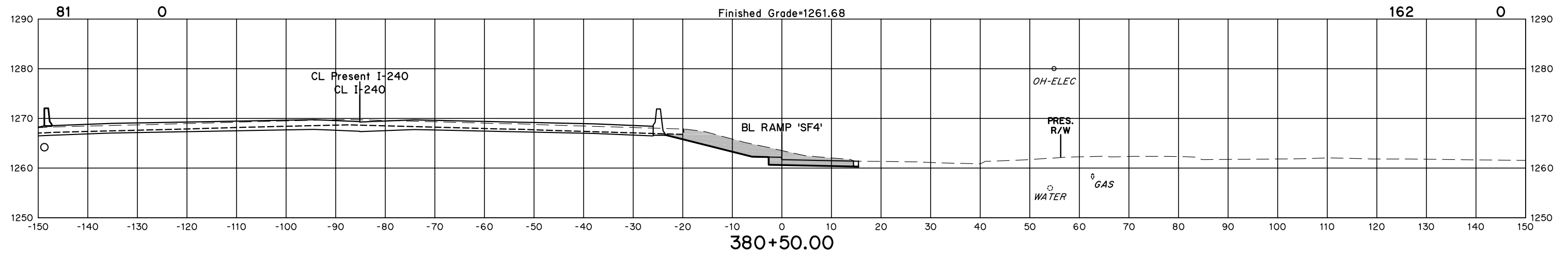
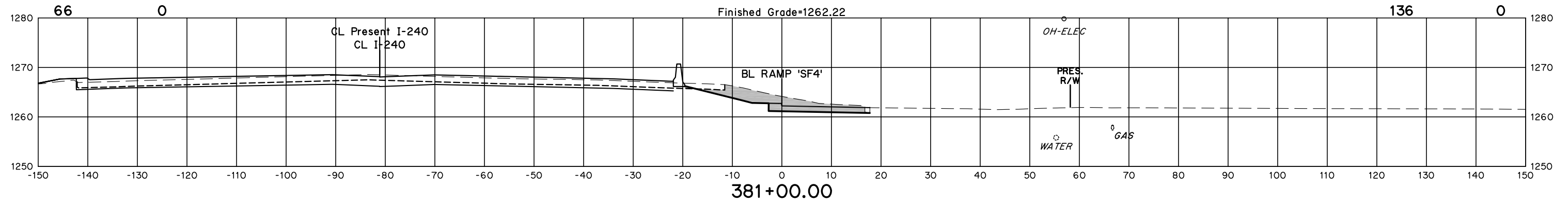


STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X46

Cut Area Fill

FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE
/ TOP OF CONCRETE SLAB

Cut Volume Fill

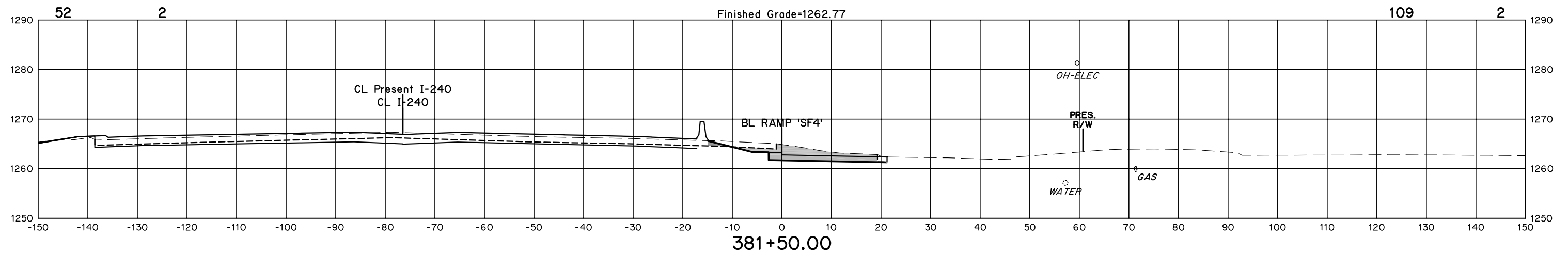
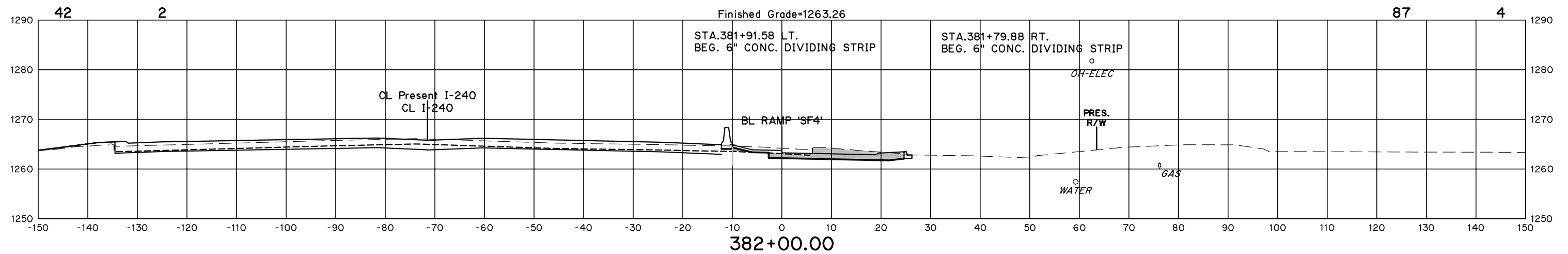
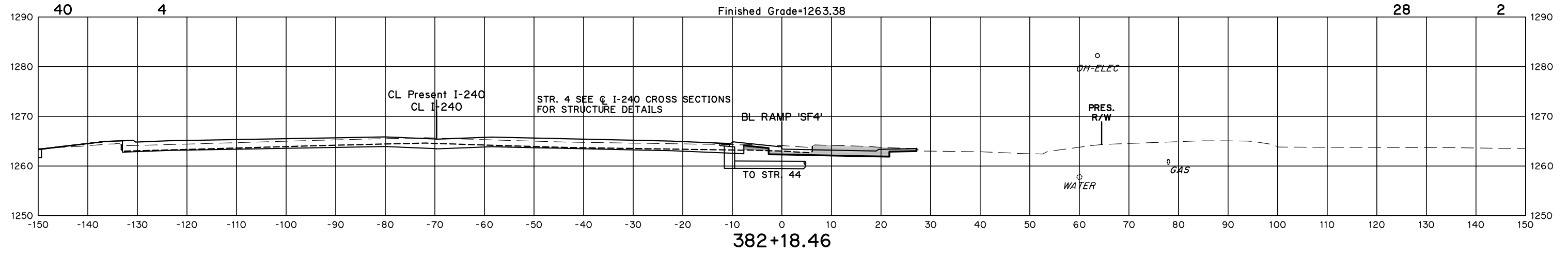


STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X47

Cut Area Fill

FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE
/ TOP OF CONCRETE SLAB

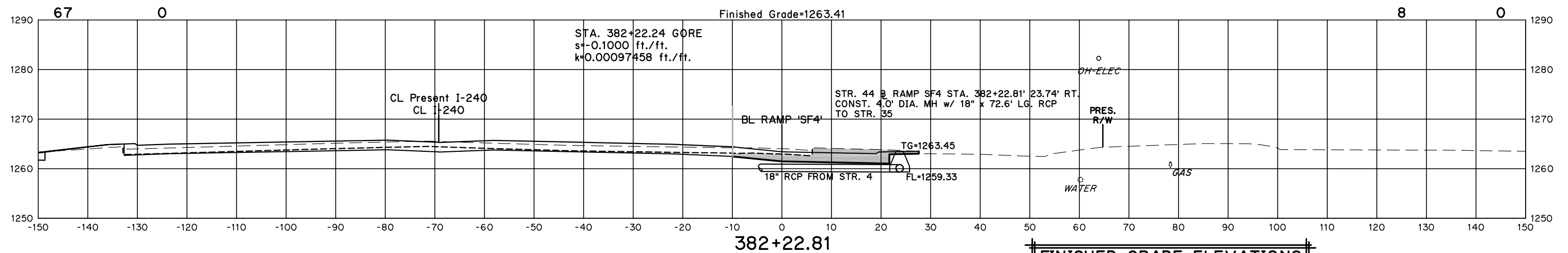
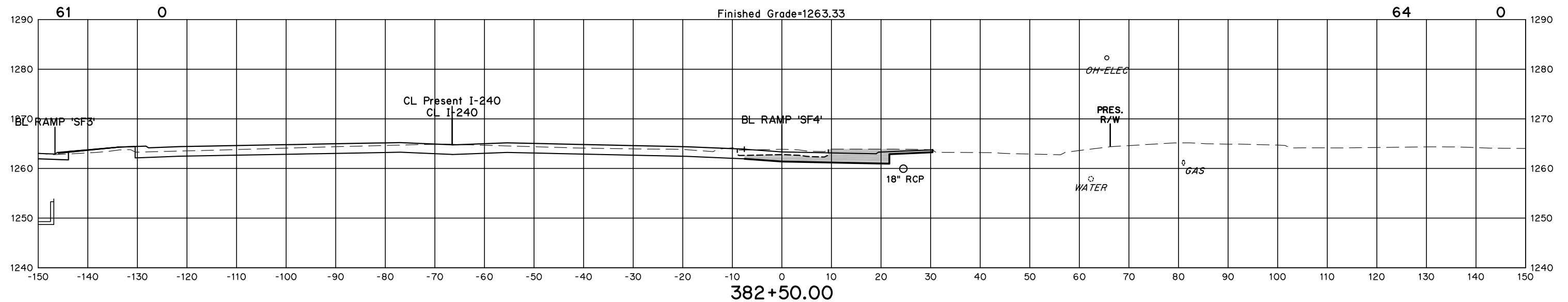
Cut Volume Fill



STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X48

Cut Area Fill

Cut Volume Fill

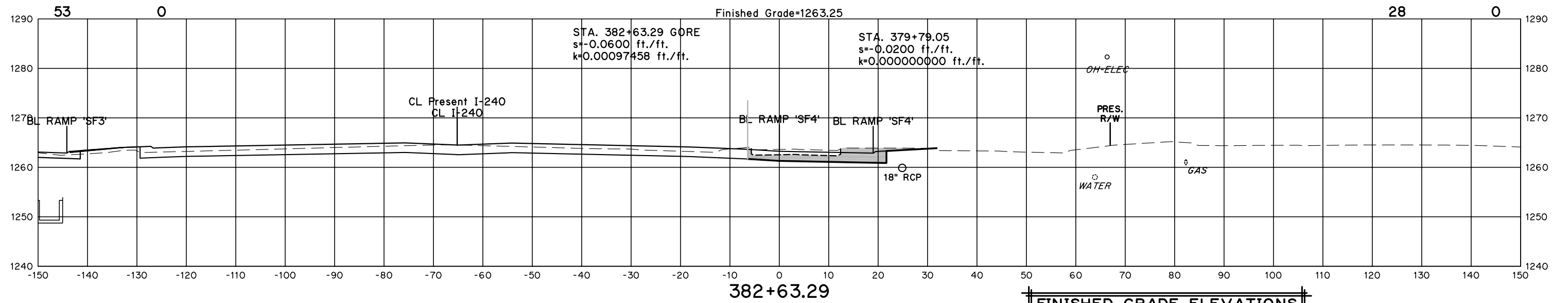


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X49

Cut Area Fill

Cut Volume Fill

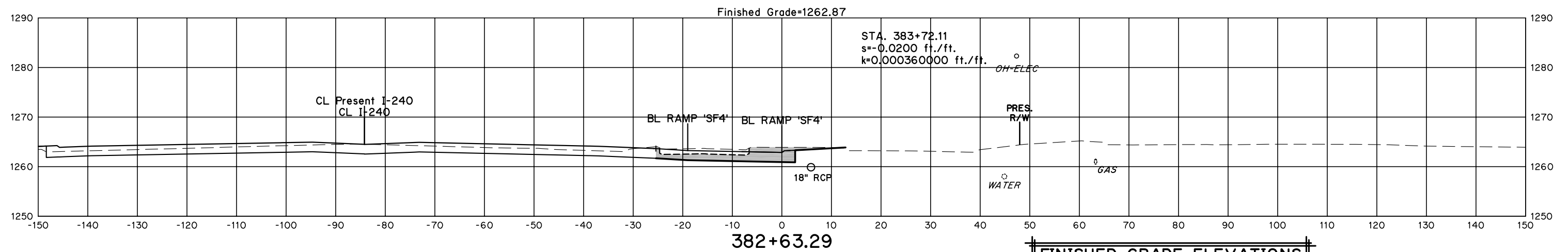
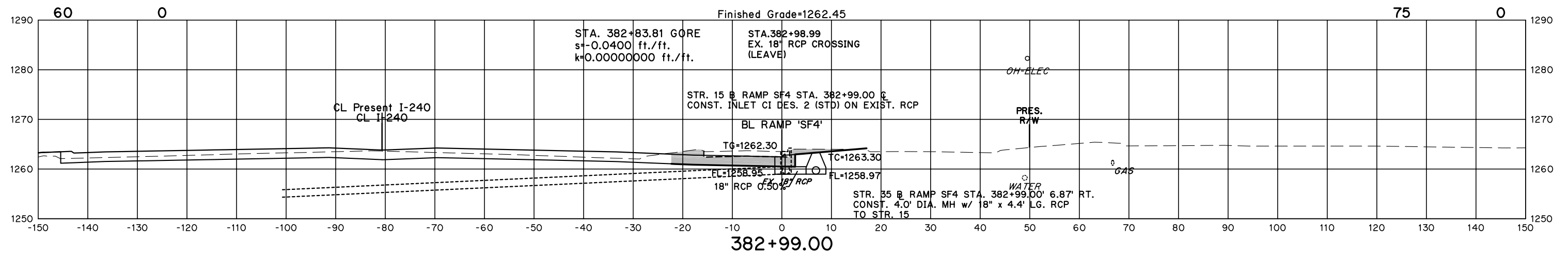
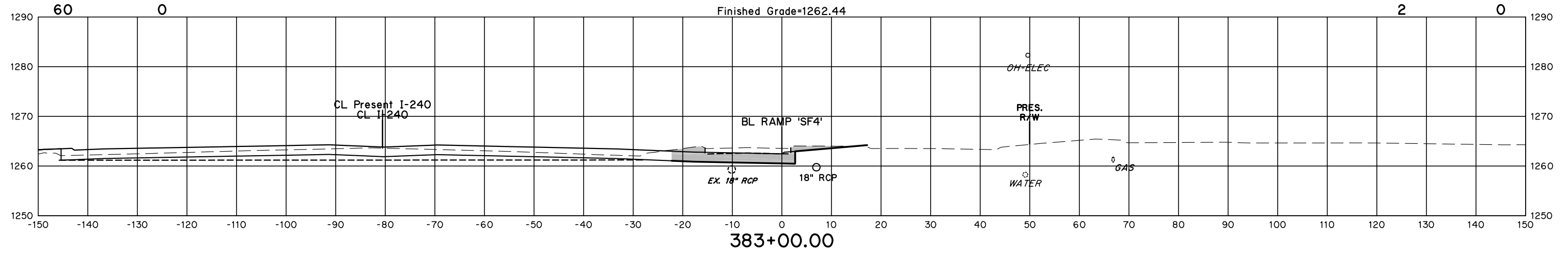


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X50

Cut Area Fill

Cut Volume Fill

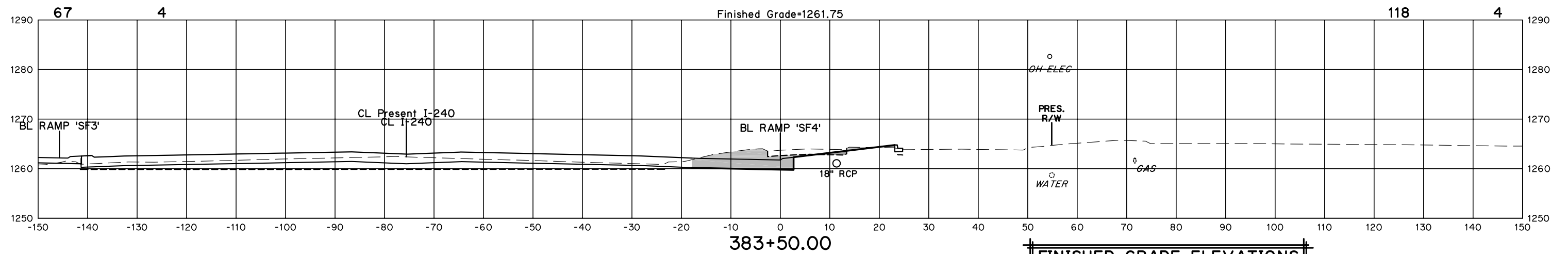
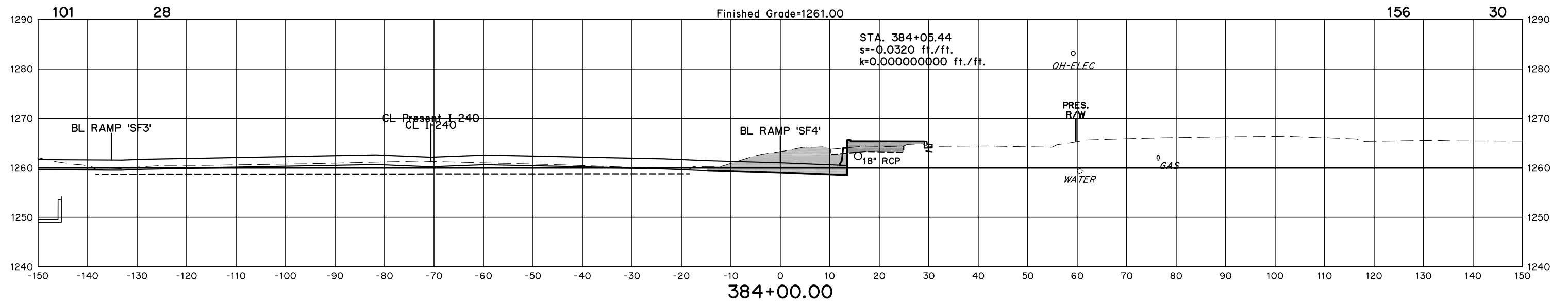


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X51

Cut Area Fill

Cut Volume Fill

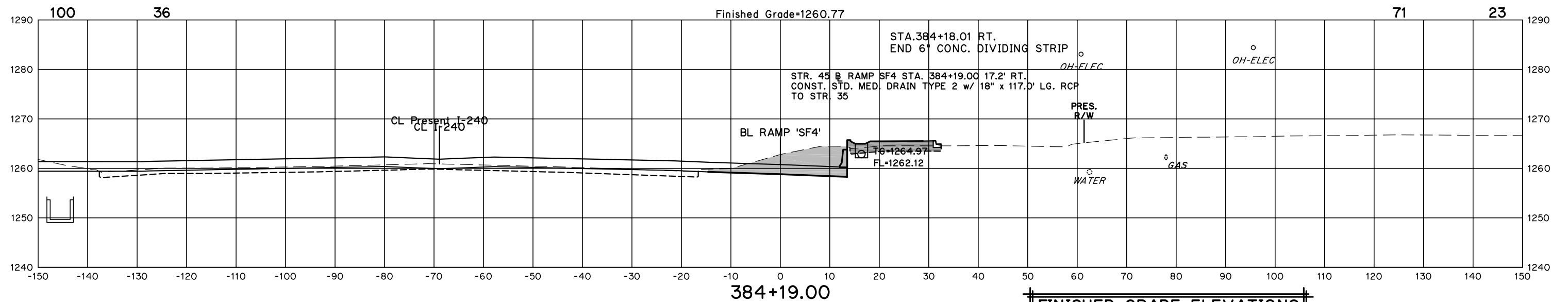
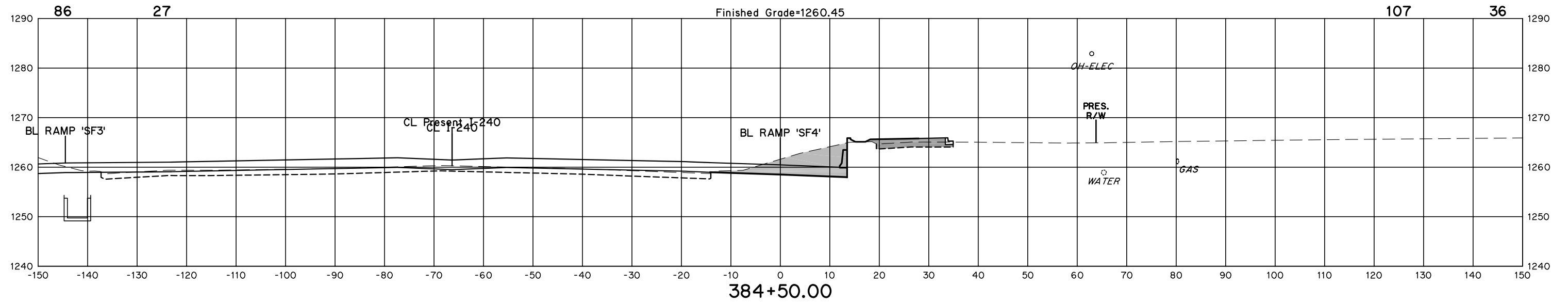


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X52

Cut Area Fill

Cut Volume Fill

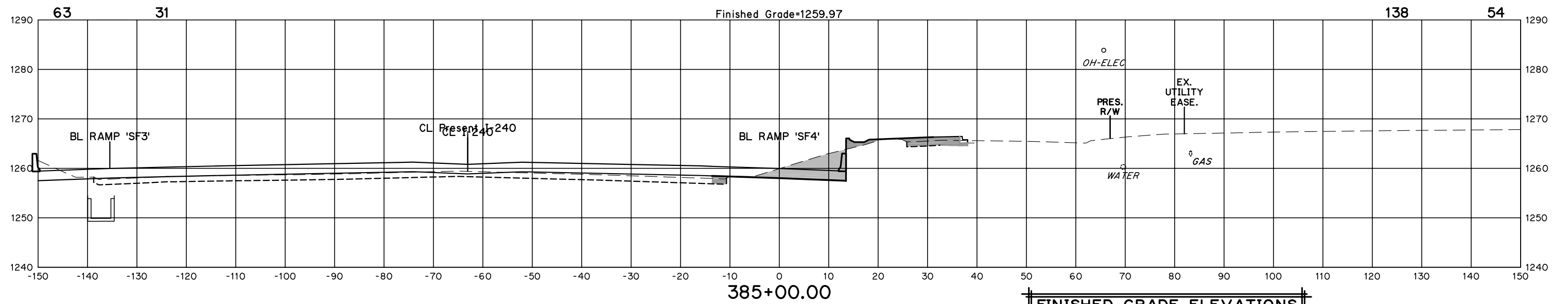
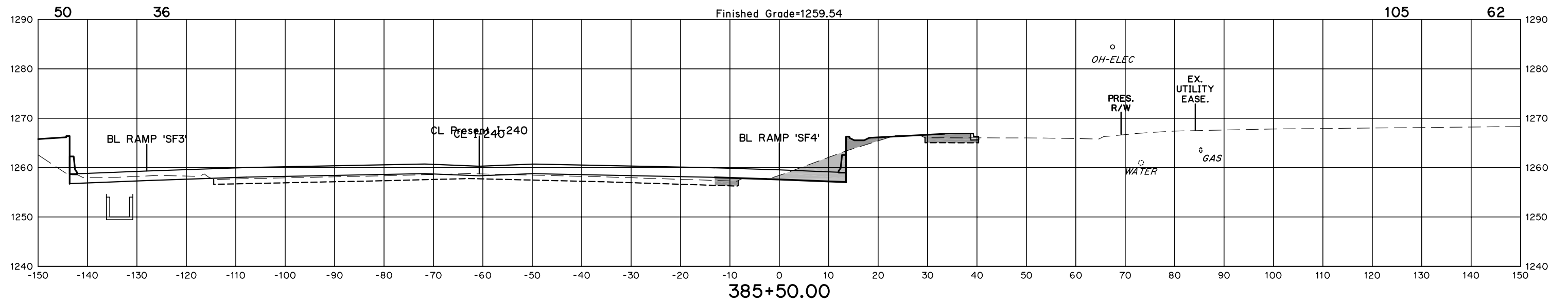


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X53

Cut Area Fill

Cut Volume Fill

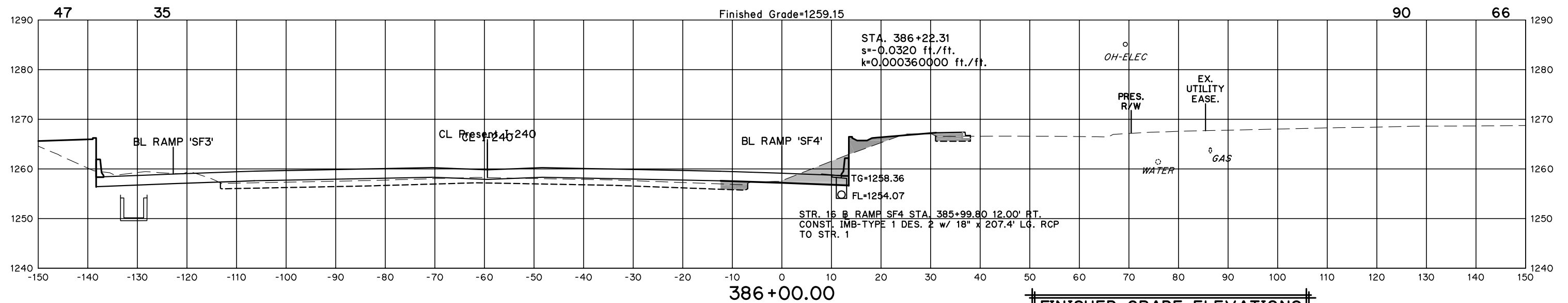
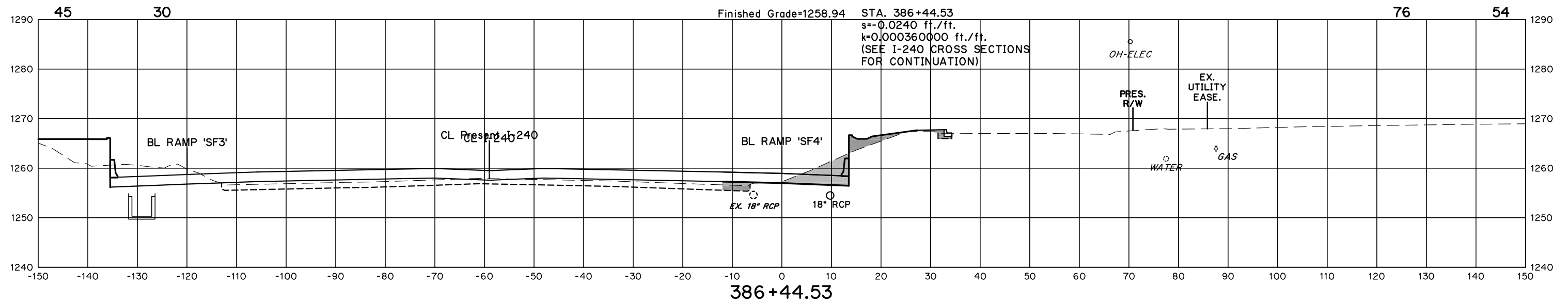


FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X54

Cut Area Fill

Cut Volume Fill



FINISHED GRADE ELEVATIONS
SHOWN ARE TOP OF FUTURE
PERMEABLE FRICTION COURSE

STATE JOB NO. 09032(20)
OKLAHOMA COUNTY SHEET NO. X55