



# Iowa Department of Transportation

## Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

### INTERSTATE ROAD SYSTEM

# SCOTT COUNTY

## UNKNOWN PAVEMENT-GRADE AND REPLACE

### I-74 FROM 12th AVE. IN MOLINE TO NORTH OF LINCOLN ROAD IN BETTENDORF

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.15 of the Specifications.



### MILEAGE SUMMARY

Div.	Location	Lin. Ft.	Miles
	Sta. 6746+86.92 to Sta. 6837+00.00	9013.08	
	Deduct River Bridge and Viaducts Sta. 6746+86.92 to Sta. 6804+58.53	5771.61	
	<b>Total Length of Roadway (Division 1)</b>	<b>3241.47</b>	<b>0.614</b>

### REVISIONS

TOTAL

431

PROJECT IDENTIFICATION NUMBER

03-82-074-010-03

PROJECT NUMBER

IM-74-1(207)5--13-82

R.O.W. PROJECT NUMBER

IM-074-1(144)5--13-82

LETTING DATE  
T.B.D. 2019

UNKNOWN PAVEMENT-GRADE AND REPLACE  
IM-74-1(207)5--13-82

SCOTT CO.

No.	Description
<b>INDEX OF SHEETS</b> 105-3 10-18-05	
<b>A Sheets</b> A.1 A.2 A.3	<b>Title Sheets</b> Title Sheet Project Location Map Key Map Sheets
<b>B Sheets</b> B.1 - B.4 B.5 - B.6 B.7 - B.8	<b>Typical Cross Sections And Details</b> Proposed Typical Sections Typical Details Existing Typical Sections
<b>C Sheets</b> C.1 - C.26	<b>Quantities And General Information</b> Tabulations
<b>D Sheets</b> *D.1 - D.17	<b>Mainline Plan And Profile Sheets</b> Plan and Profile Sheets - Mainline
<b>G Sheets</b> G.1 - G.5 G.6 - G.14 G.15 - G.16	<b>Survey Sheets</b> Bench Mark and Reference Information Sheets Mainline and Ramps Alignments Mainline and Ramps Horizontal Control Tabulations
<b>J Sheets</b> *J.1 - J.2 *J.3 - J.5 *J.6 - J.13 *J.14 - J.52	<b>Traffic Control And Staging Sheets</b> Traffic Control Plan, Staging Notes, and Special Events Traffic Control Legend and Symbol Sheet and Detours Staging Typical Section Sheets Mainline and Ramps Staging Detail Sheets
<b>K Sheets</b> *K.1 - K.4 *K.5 - K.8 K.9	<b>Interchange Sheets</b> Plan and Profile Sheets - Ramps Ramp Geometrics and Staking Detail Sheets Detention Pond Grading Plan
<b>L Sheets</b> L.1 L.2 - L.7 L.8 - L.9	<b>Geometric, Staking And Jointing Sheets</b> Legend and Symbol Information Sheet Mainline Jointing, Geometrics and Staking Detail Sheets Sideroad Jointing, Geometrics and Staking Detail Sheets
<b>M Sheets</b> M.1 M.2 - M.14	<b>Storm Sewer Sheets</b> Storm Sewer Tabulations Storm Sewer Detail Sheets
<b>N Sheets</b> N.1 - N.14	<b>Traffic Signal and ITS Sheets</b> Traffic Signal Sheets
<b>P Sheets</b> P.1 - P.3 P.4 - P.6 P.7 - P.10 P.11 - P.14	<b>Lighting Layout Sheets</b> Lighting General Notes and Quantities Lighting Removals Proposed Lighting Plan Lighting Details

No.	Description
<b>INDEX OF SHEETS</b> 105-3 10-18-05	
<b>Q Sheets</b> *Q.1 - Q.12	<b>Soils Sheets</b> Soil Sheets
<b>SPS Sheets</b> SPS.1	<b>Bridge Plan Soils Sheets</b> Retaining Wall Soils Sheet
<b>T Sheets</b> T.1 - T.2	<b>Earthwork Quantity Sheets</b> Earthwork Quantity Sheets
<b>U Sheets</b> U.1 - U.3 U.4 - U.8 U.9 - U.16 U.17 U.18 - U.20 U.21 - U.30 U.31 - U.34 U.35 - U.45	<b>500 Series, Modified Standards and Detail Sheets</b> Ramp Taper Detail Sheets Removal Details Final Pavement Marking Plans Details of Temporary Slope Drain Contaminated Soil Areas Site Details Guardrail and Barrier Detail and Modified Standards Traffic and Bicycle Railing and Concrete Wall Detail Bridge Approach Pavement Modified Standards
<b>V Sheets</b> V.1 - V.2 V.3 - V.8 V.9 - V.27	<b>Bridge and Culvert Situation Plans</b> MSE Retaining Wall Sheets MSE Aesthetic Wall Panel Detail Sheets Identity Element Aesthetic Plan
<b>W Sheets</b> *W.1 - W.2 W.3 - W.132	<b>Cross Section Key Plan</b> Cross Section Key Plan Cross Section Sheets - Mainline
<b>Y Sheets</b> Y.1 - Y.30	<b>Ramp Cross Sections</b> Cross Section Sheets - Ramps

\* COLOR PLANS  
\*\* TO BE INSERTED AT LATER DATE

\* COLOR PLANS  
\*\* TO BE INSERTED AT LATER DATE

For Project Location Map  
Refer to Sheet No. A.2

DESIGN DATA URBAN	
2002 AADT	TBD V.P.D.
2035 AADT	99,800 V.P.D.
2035 DHV	9850 V.P.H.
TRUCKS	5 %
Total Design ESALs	--

INDEX OF SEALS		
SHEET NO.	NAME	DATE
A.1	Jeffrey J. Tardy	
G.1	Coventine Fiddler	Reference Ties/Benchmarks
N.1	Todd	Traffic Signal Design
N.8	Steven	ITS Design
Q.1	Stephane K. Chepkoi	Geotechnical Design
V.1	Robert Chantome	Retaining Wall Design

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

**John C. Sample** Date \_\_\_\_\_  
Signature Printed or Typed Name

My license renewal date is December 31, \_\_\_\_\_

Pages or sheets covered by this seal: \_\_\_\_\_

## MODIFIED PLANS

Subject to change by final design.

### MODIFIED 100% PLAN

Date: 12-17-2012



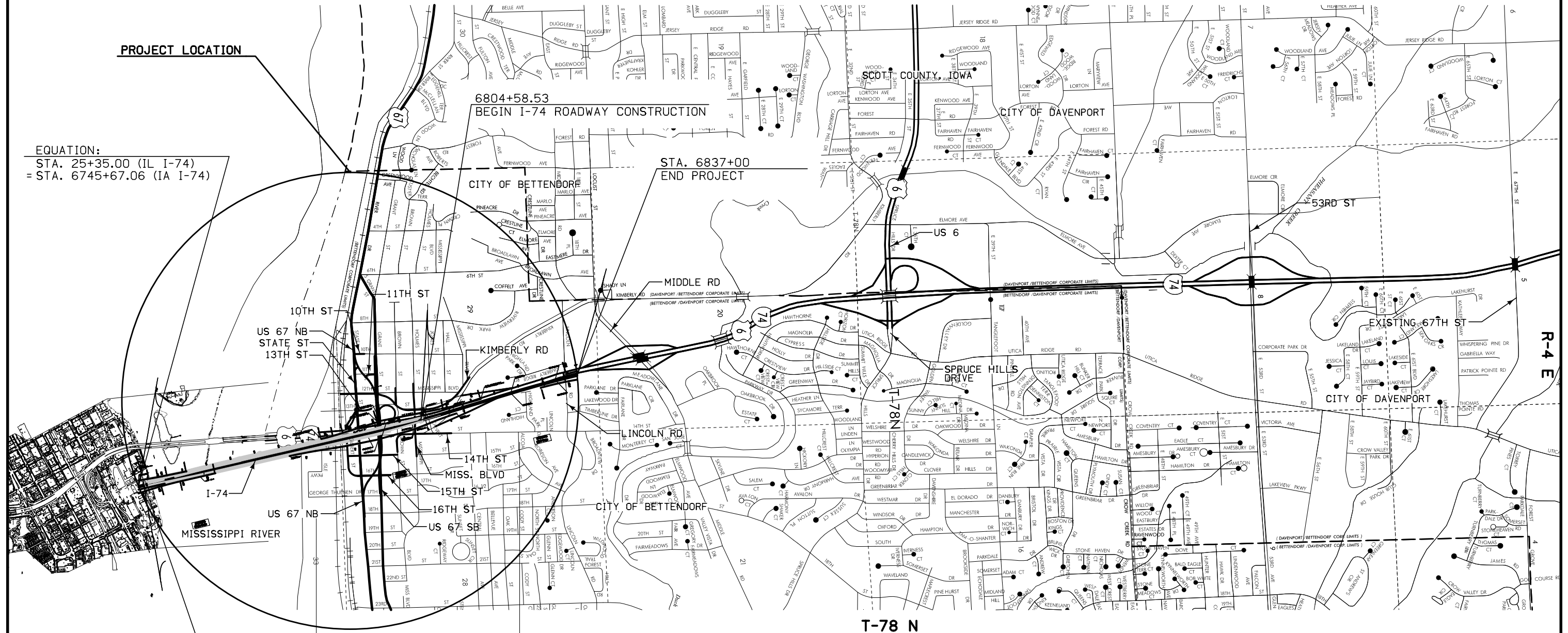
PRIORITY I ACCESS

PROJECT LOCATION

EQUATION:  
STA. 25+35.00 (IL I-74)  
= STA. 6745+67.06 (IA I-74)

6804+58.53  
BEGIN I-74 ROADWAY CONSTRUCTION

STA. 6837+00  
END PROJECT



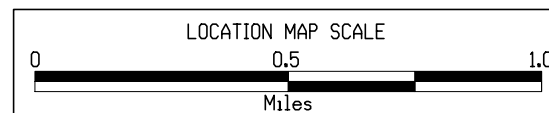
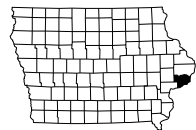
10TH ST  
US 67 NB  
STATE ST  
13TH ST

MISSISSIPPI RIVER

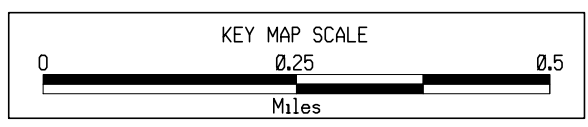
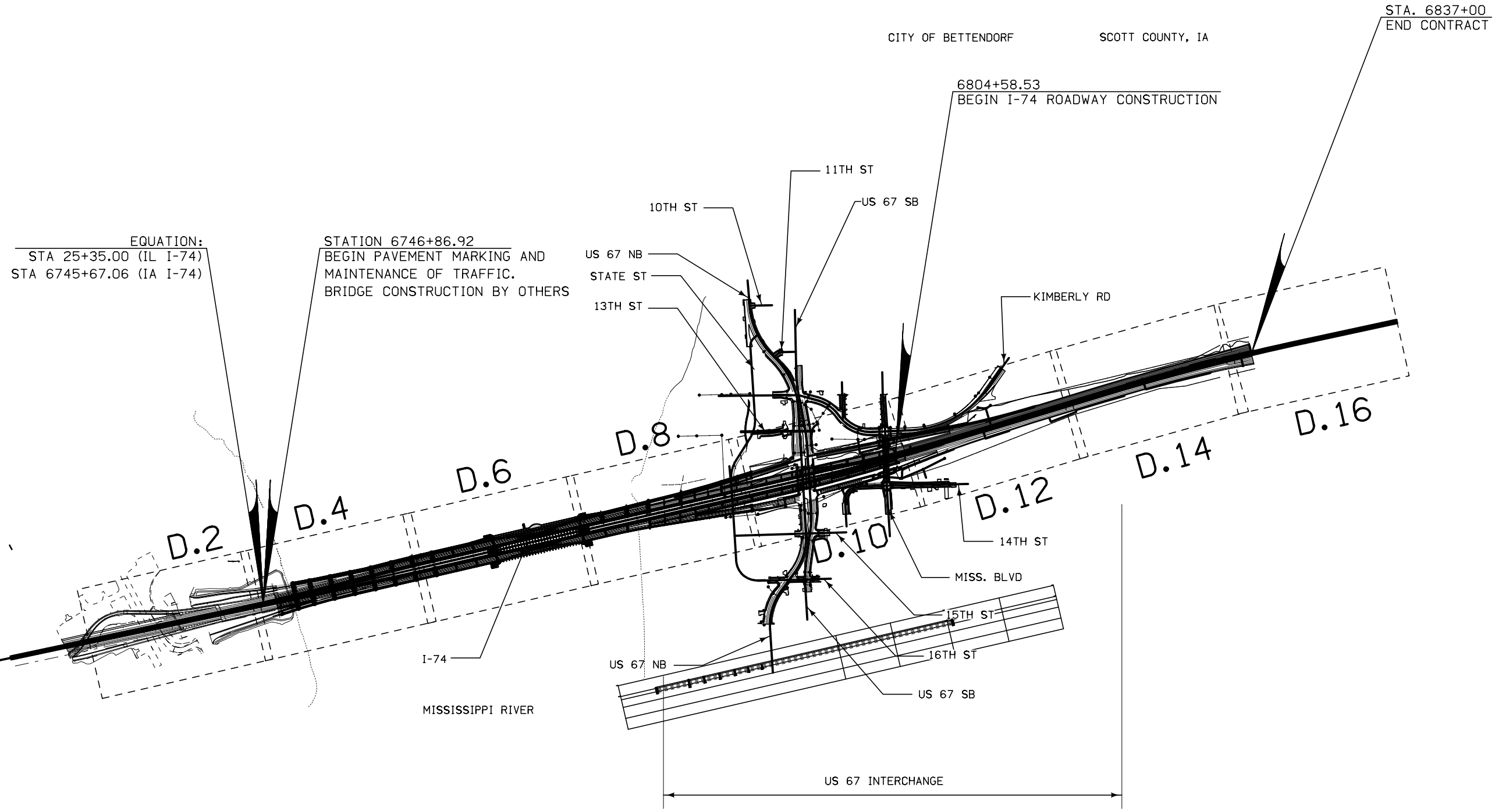
US 67 NB

US 67 INTERCHANGE

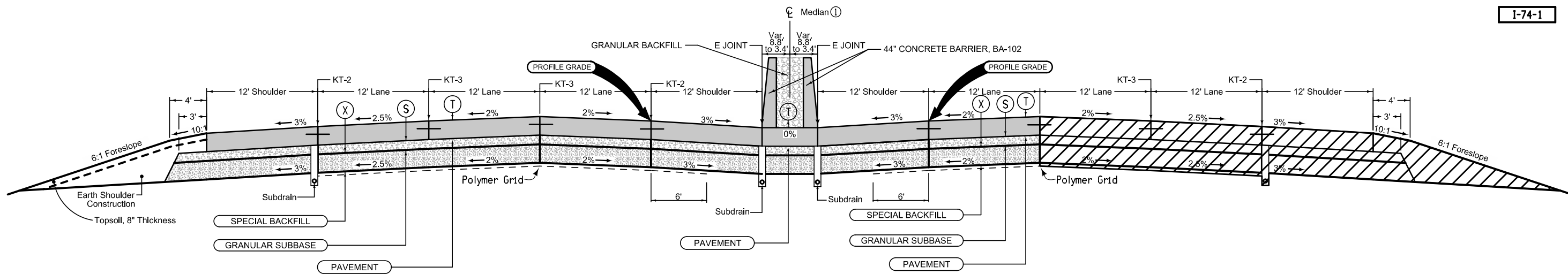
STATION 6746+86.92  
BEGIN PAVEMENT MARKING AND  
MAINTENANCE OF TRAFFIC.  
BRIDGE CONSTRUCTION BY OTHERS.



PROJECT LOCATION



# MAINLINE KEY MAP

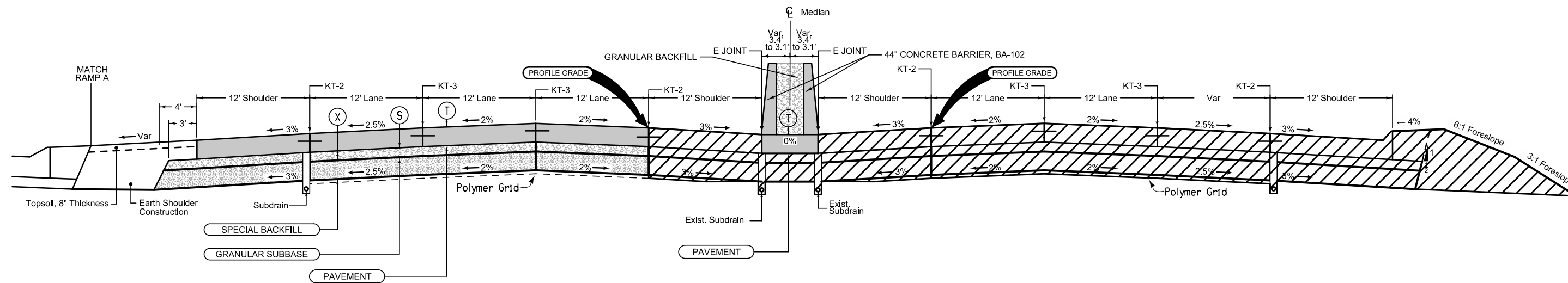


① Median and Barrier begins at Sta. 6803+90.34

Location		(T)	(S)	(X)	Granular Backfill	
Road Identification	Station To Station	Inches	Inches	Inches	CY	
I-74	6804+58.53	6808+25.00	11	6	12	504.9

Existing Pavement

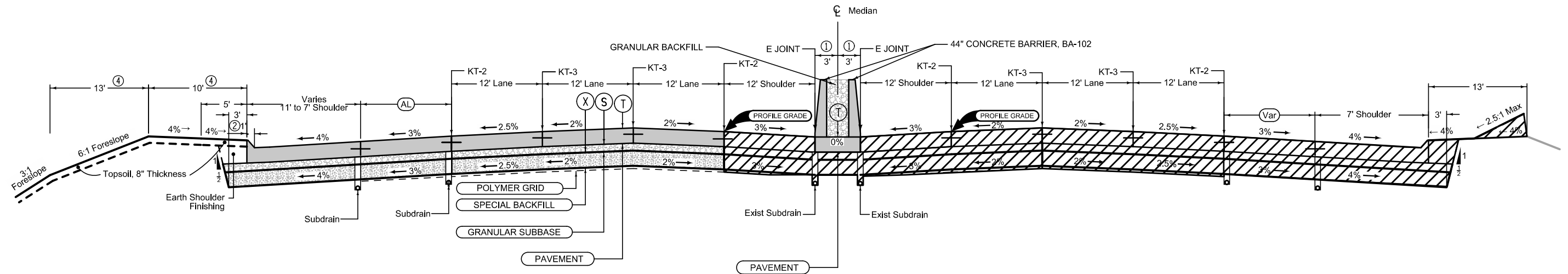
**I-74  
TYPICAL SECTION  
6-LANE ROADWAY**



Location		(T)	(S)	(X)	Granular Backfill	
Road Identification	Station To Station	Inches	Inches	Inches	CY	
I-74	6808+25.00	6809+10.00	11	6	12	42.4

Existing Pavement

**I-74  
TYPICAL SECTION  
6-LANE ROADWAY**

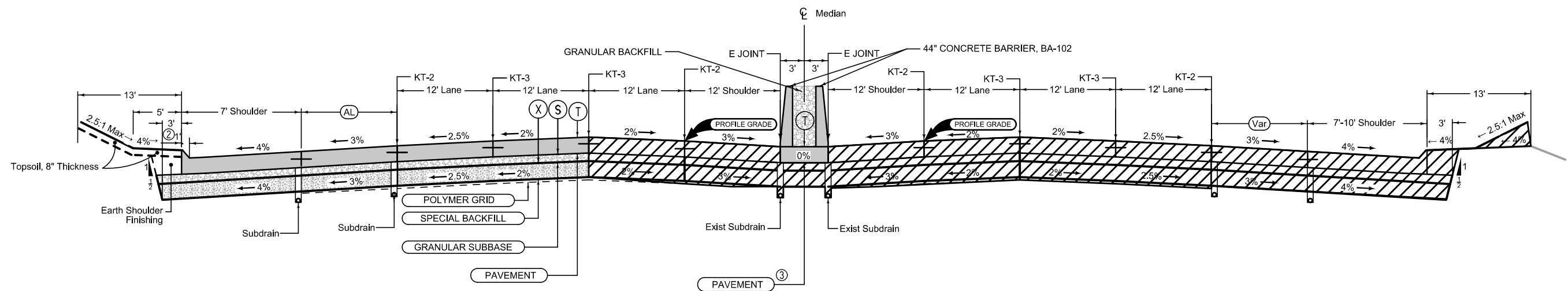


Existing Pavement

Location		T	S	X	AL	Granular Backfill
Road Identification	Station To Station	Inches	Inches	Inches	Feet	CY
I-74	6809+10.00 - 6825+50.00	11	6	12	12*	705.9

- \* Varies at Ramp Gores
- ① Varies 3.1' to 3.0' Sta. 6809+10.00 to Sta. 6809+84.33
- ② Integral 6" Sloped Curb. See PV-102
- ④ Retaining Wall 165 Sta. 6809+10.00 to 6810+75.00. See Typical Wall-1

**TYPICAL SECTION  
6-LANE ROADWAY**



Existing Pavement

Location		T	S	X	AL	Granular Backfill
Road Identification	Station To Station	Inches	Inches	Inches	Feet	CY
I-74	6825+50.00 - 6837+00.00	11	6	12	12*	442.9

- \* Varies at Ramp Gores
- ② Integral 6" Sloped Curb. See PV-102
- ③ Match Existing Median at Sta. 6833+90.00 and Sta. 6835+10.00

**TYPICAL SECTION  
6-LANE ROADWAY**

### Curbed Shoulder

Shoulder jointing:  
Longitudinal joint not required when distance from back of curb to nearest joint is less than 16':

Transverse: C at 20' spacing  
Single pour: L-2  
Staged: KT-2

1R_Curb 04-19-11			
BEGIN STATION	END STATION	(P) Feet	Curb Type See PV-102
1497+02.31	1502+46.78	11	6" Sloped

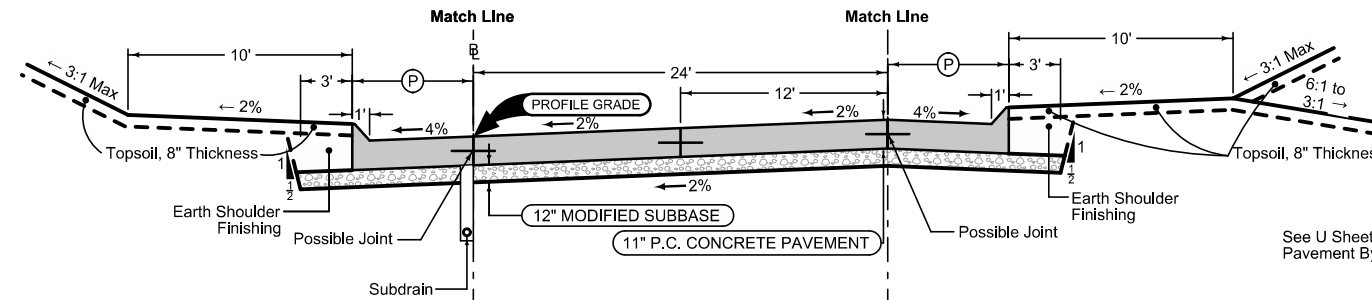
See U Sheets for Bridge Approach Pavement By Others

### Curbed Shoulder

Shoulder jointing:  
Longitudinal joint not required when distance from back of curb to nearest joint is less than 16':

Transverse: C at 20' spacing  
Single pour: L-2  
Staged: KT-2

1R_Curb 04-19-11			
BEGIN STATION	END STATION	(P) Feet	Curb Type See PV-102
1497+02.31	1502+46.78	7	6" Sloped
1504+28.48	1506+33.80	7	4" Sloped
1506+33.80	1509+11.75	7	6" Sloped



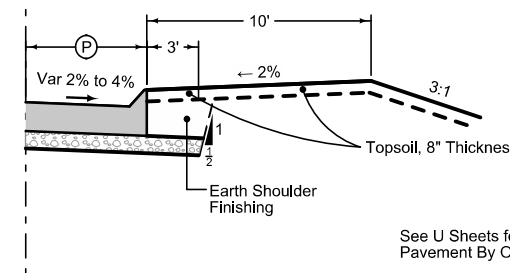
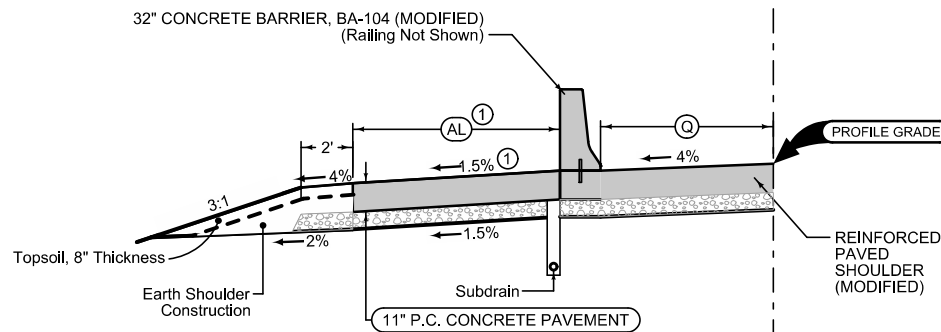
See U Sheets for Bridge Approach Pavement By Others

### Shared Use Path

Longitudinal joint: L or KT  
Transverse joint: Match Mainline

2_AuxLane_PCC_ Modified			
STATION TO STATION	(AL) Feet	(Q) Feet	
3591+15.45	3594+25.27	14	10

① Refer to K Sheets for Shared Use Path slope and width transitions



See U Sheets for Bridge Approach Pavement By Others

### Curbed Shoulder

Shoulder jointing:  
Longitudinal joint not required when distance from back of curb to nearest joint is less than 16':

Transverse: C at 20' spacing  
Single pour: L-2  
Staged: KT-2

1R_Curb 04-19-11			
BEGIN STATION	END STATION	(P) Feet	Curb Type See PV-102
3591+15.45	3592+86.71	7	4" Sloped
3592+86.71	3594+30.26	7	6" Sloped

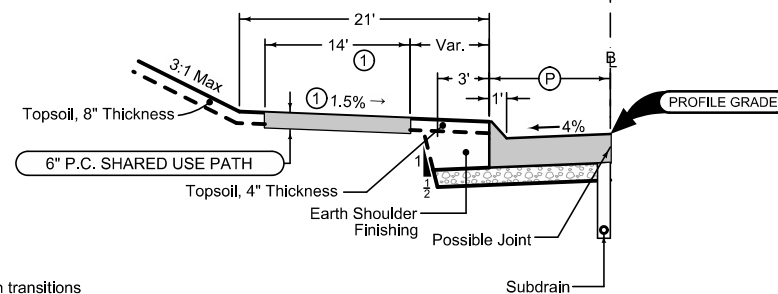
### Curbed Shoulder

Shoulder jointing:  
Longitudinal joint not required when distance from back of curb to nearest joint is less than 16':

Transverse: C at 20' spacing  
Single pour: L-2  
Staged: KT-2

1R_Curb 04-19-11			
BEGIN STATION	END STATION	(P) Feet	Curb Type See PV-102
3594+25.27	3595+30.26	11	6" Sloped

① Refer to K Sheets for Shared Use Path slope and width transitions



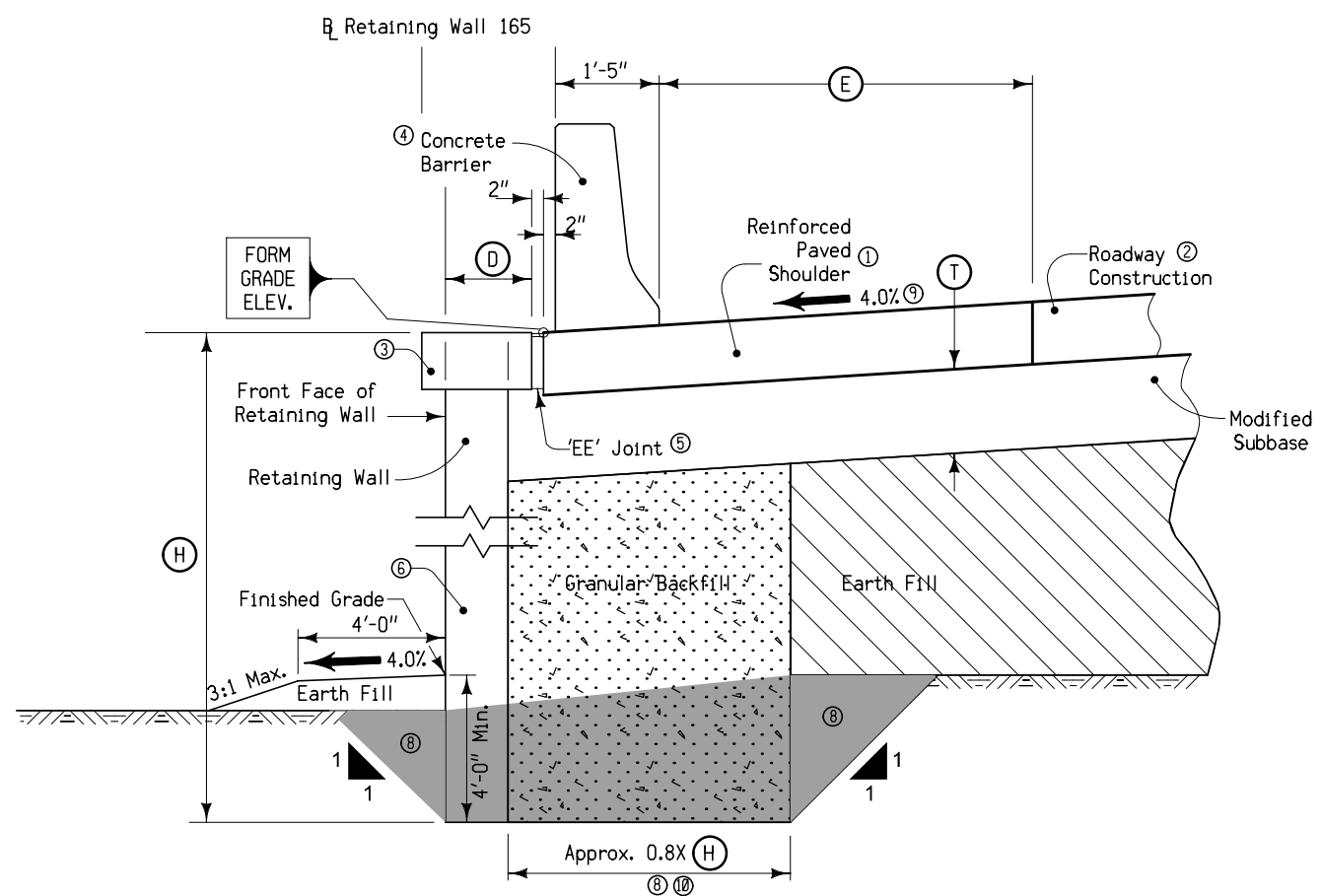
### 2 Lane PCC Ramp

2RP_ 10-18-11	
BEGIN STATION	END STATION
1497+02.31	1501+96.78
1504+78.48	1509+11.06
3591+65.45	3594+30.26

See U Sheets for Bridge Approach Pavement By Others

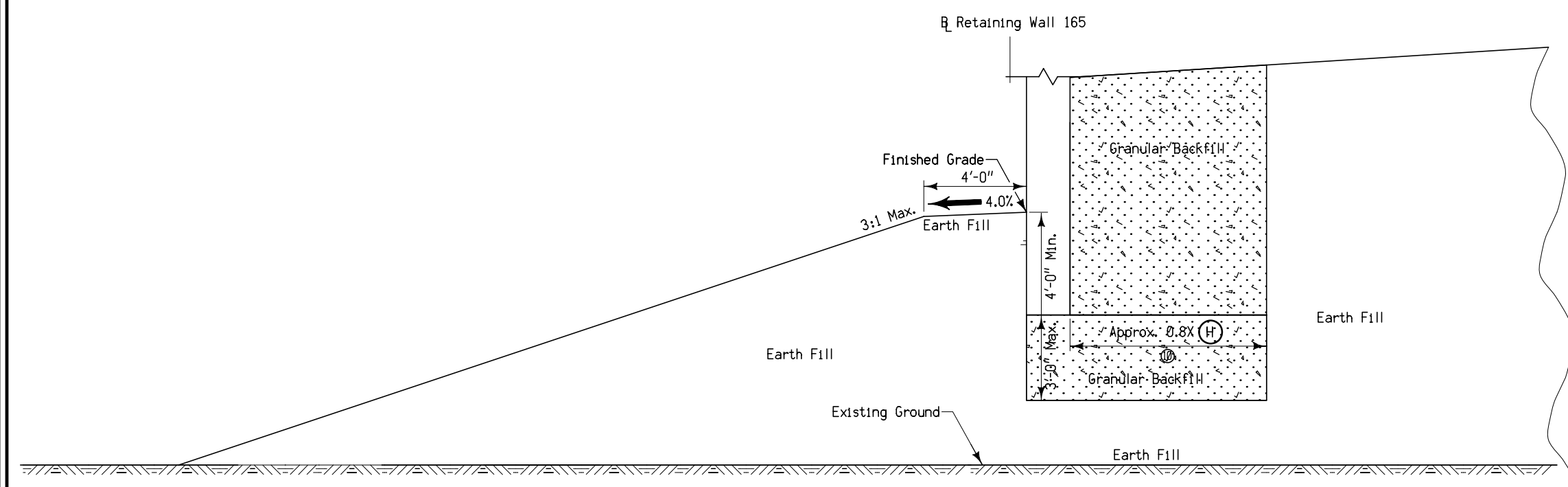
## US 67 RAMP A AND C

LOCATION			(E)	(D)	(T)	
ROAD IDENTIFICATION	STATION TO STATION		Feet	Feet	Inches	
RET. WALL 165						
US 67 - RAMP A	1504+31.80	1504+40.10	LT	10	4.25	12
US 67 - RAMP A	1504+40.10	1504+60.00	LT	10	4.25-2.25	12
US 67 - RAMP A	1504+60.00	1510+73.26	LT	10	2.25	12
	STATION EQUATION					
US 67 - RAMP A	1509+08.71=	1510+73.26=	LT			
I-74	=6809+10.00	=6810+75.00	LT			



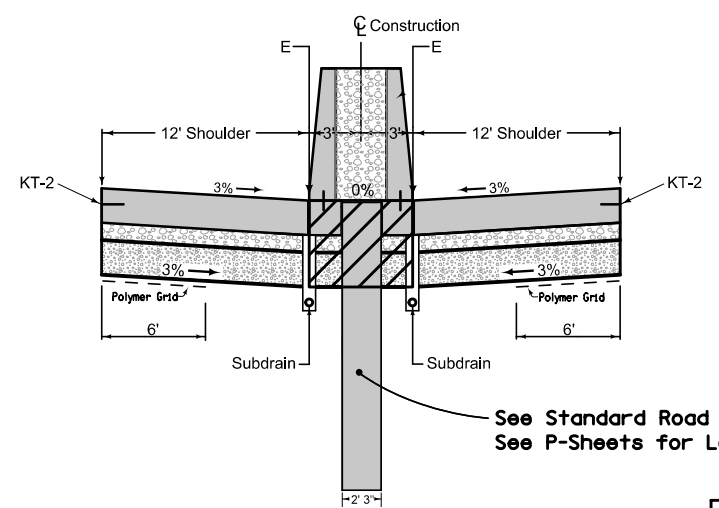
- ① Refer to Modified Standard BA-106 for details of reinforced paved shoulder for 44' concrete barrier.
- ② Refer to B Sheets for details of roadway construction.
- ③ Refer to V-sheets for details of retaining wall coping.
- ④ Refer to Modified Standard BA-102 for details of 44' concrete barrier.
- ⑤ See Standard Road Plan PV-101 for details.
- ⑥ MSE Wall. Refer to SPS and V sheets for details.
- ⑦ Reinforced paved shoulder, barrier, modified subbase, and polymer grid included in approach pavement construction by BRFM-074-11(1995)-05-82 from STA 4501+25.00 to Ramp D Bridge.
- ⑧ Excavation, Class 10, Roadway and Borrow
- ⑨ Refer to K Sheets for Slope Details
- ⑩ Refer to V Sheets for exact limits

**TYPICAL SECTION  
RETAINING WALL DETAILS  
AND LOCATIONS**



**TYPICAL SECTION  
RETAINING WALL:  
WHEN LEVELING PAD IS  
ABOVE EXISTING GROUND**

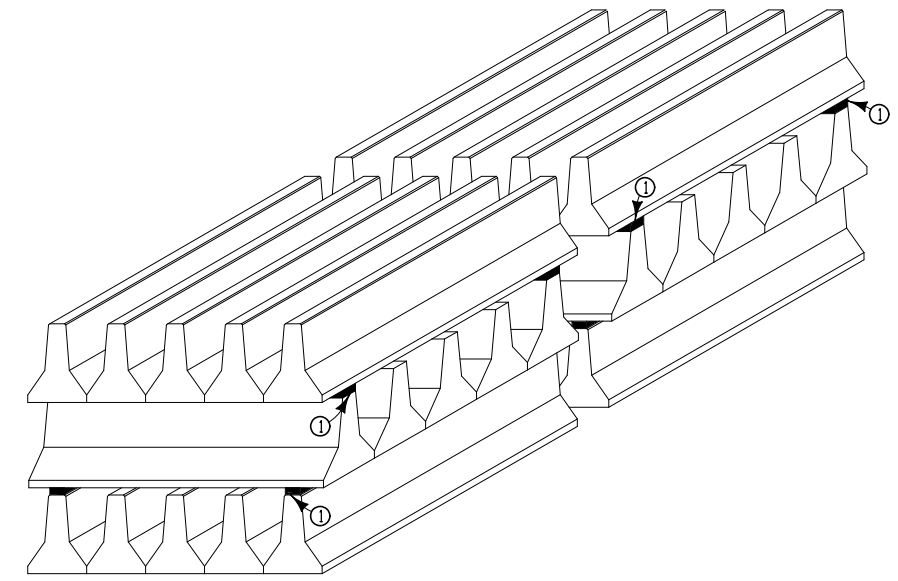
**Footing-1**



See Standard Road Plan RM-47  
See P-Sheets for Locations

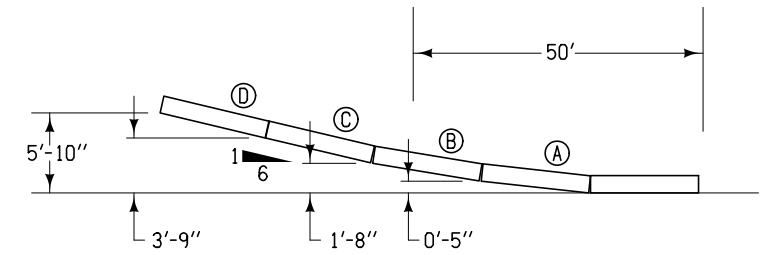
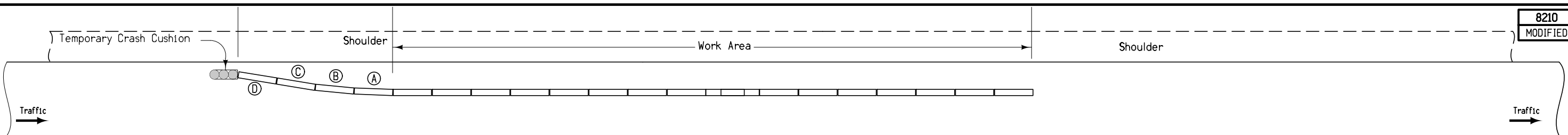
**Footing for Slip-Base Light Poles**

Existing Subbase, Special Backfill,  
& Temporary Pavement



Notes:  
At the completion of the project, the contractor shall stack the temporary barrier rail at locations designated in the plans.  
Barrier sections shall be stacked 3 high in alternating layers or as modified by the Engineer.  
The cost of hauling and stacking the temporary barrier rail shall be incidental to the item "Temporary Barrier Rail".  
① 2x4 or scrap lumber.

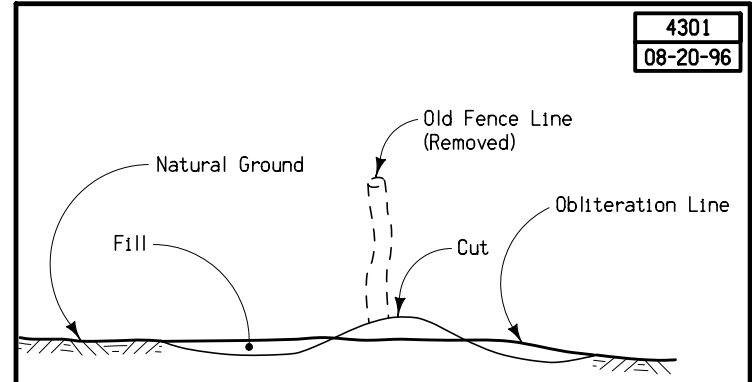
**STORAGE PLAN FOR BARRIER RAIL**



**BARRIER OFFSETS FOR FLARE SECTIONS**

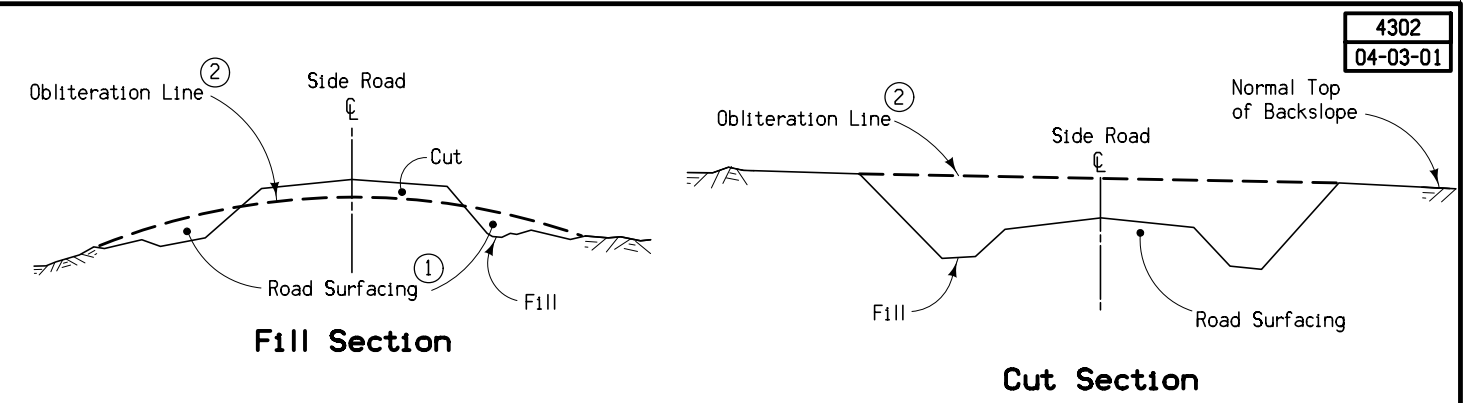
**TEMPORARY CONCRETE BARRIER LAYOUT**

See J Sheets for Locations



**TYPICAL DETAILS FOR OBLITERATION OF OLD FENCE RIDGE**

Notes:  
The work of obliterating or reshaping old fence ridges shall be done at the direction of the Engineer.



**Fill Section**

**Cut Section**

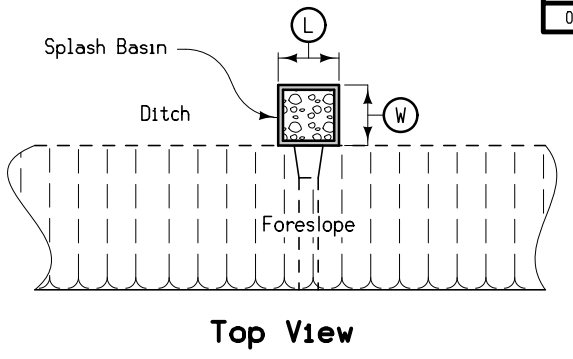
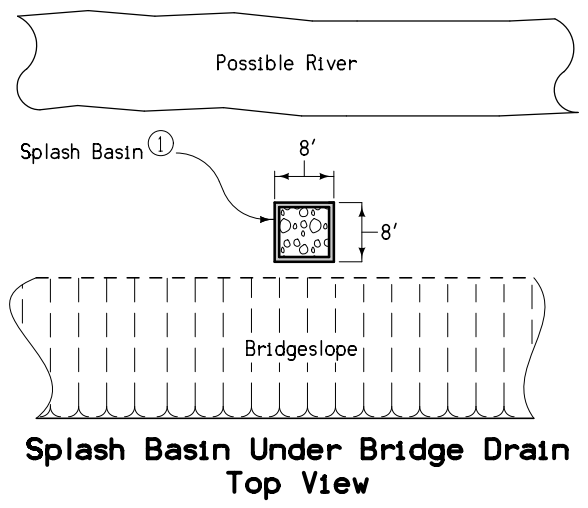
① Existing road surfacing (granular material) shall be placed as shown unless otherwise directed by the Engineer or provided for in the detail project plans.  
② When specified, the upper 1' to be suitable for vegetation (grass or crops).

Note:  
The work of obliterating or reshaping old roadbeds shall be done at the direction of the Engineer.

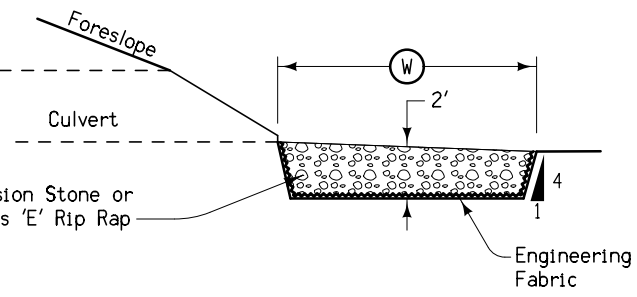
**TYPICAL DETAILS FOR OBLITERATION EXISTING ROADBED**



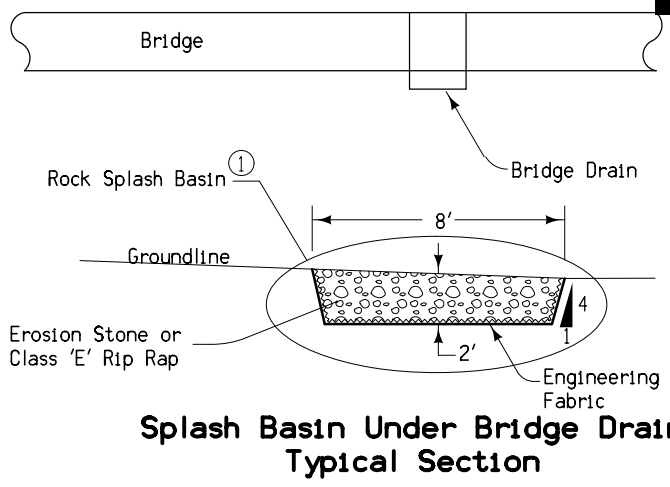
4404  
04-18-06



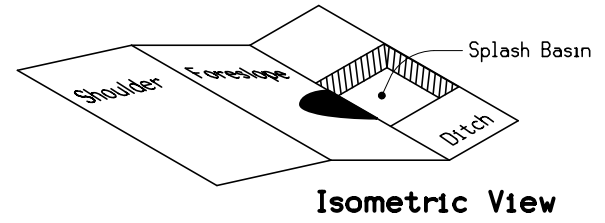
Top View



Typical Section



Splash Basin Under Bridge Drain  
Typical Section

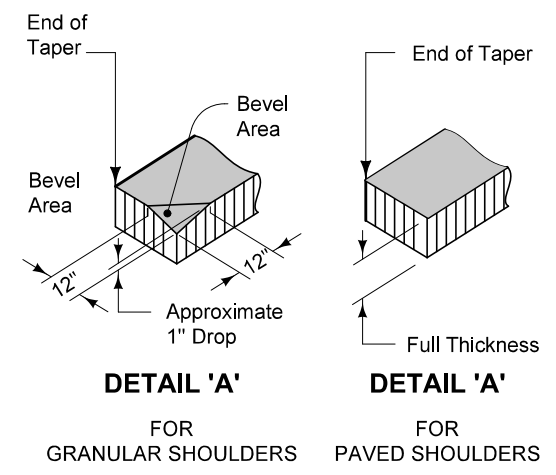


Isometric View

DETAILS OF ROCK  
SPLASH BASIN

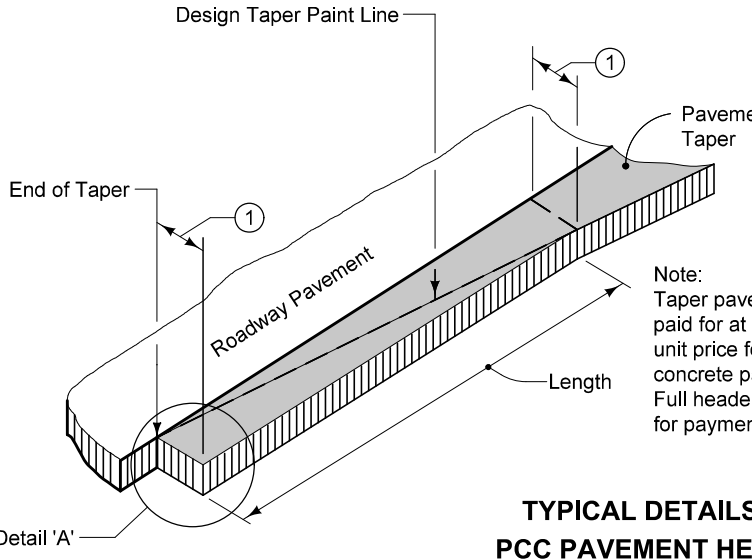
① Splash basins under bridge drains shall typically be 8' wide x 8' long and centered directly under the bridge drain, where water would otherwise land on soil. See Tabulation 100-23 for additional information.

7101  
Modified



DETAIL 'A'

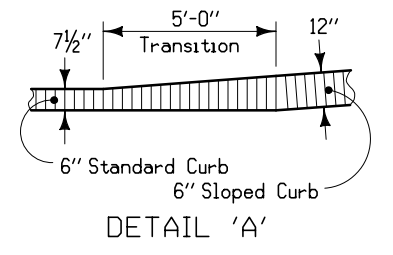
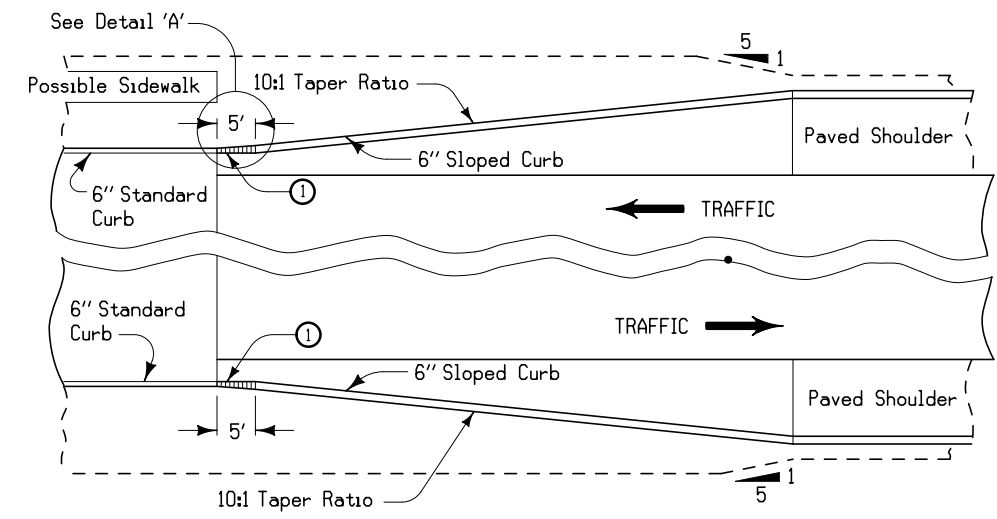
① Normal width is 2'-0".



TYPICAL DETAILS OF  
PCC PAVEMENT HEADER

Note:  
Taper pavement to be paid for at the contract unit price for P.C. concrete pavement. Full header is included for payment.

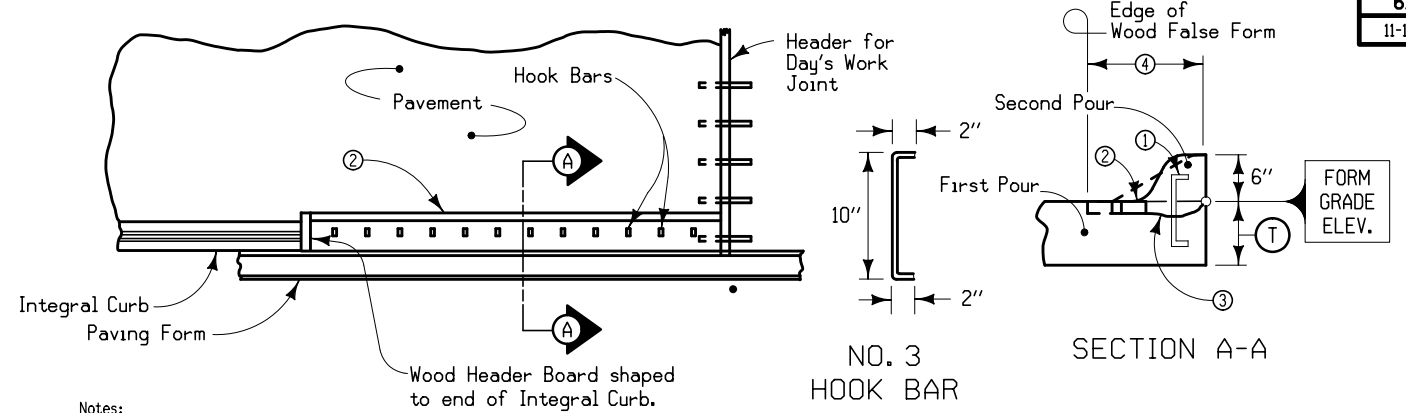
6148  
11-10-92



① Transition to sloped curb in 5'.

TRANSITION BETWEEN  
STANDARD CURB AND  
SLOPED CURB ON SHOULDER

6115  
11-10-92

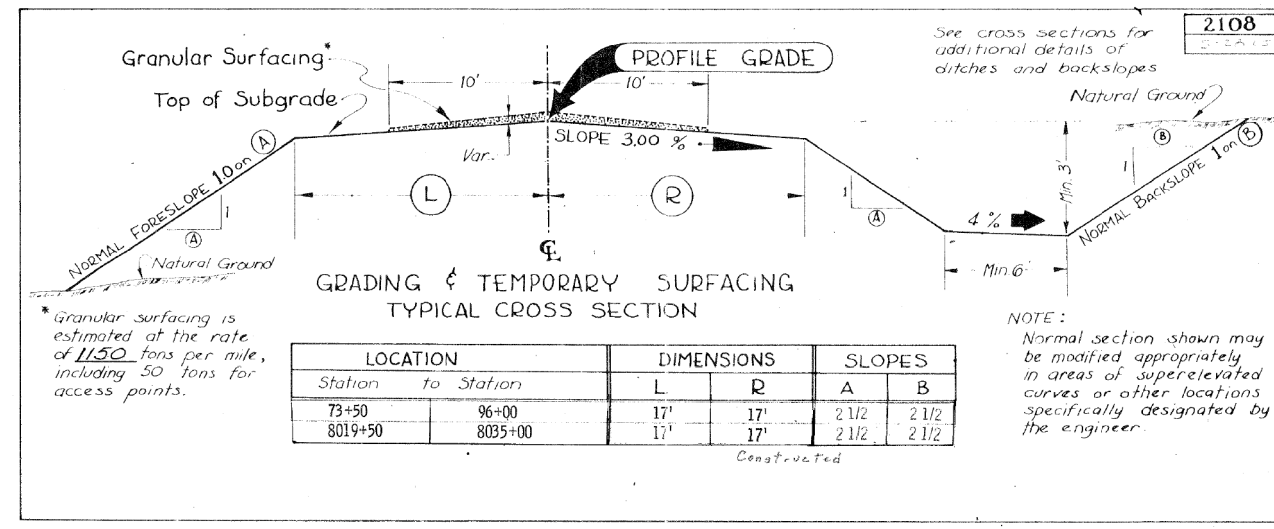
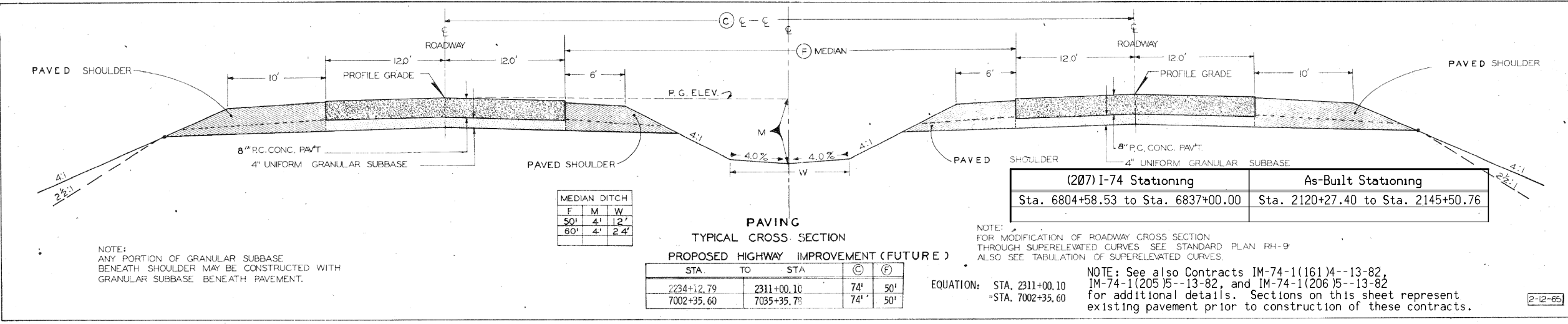
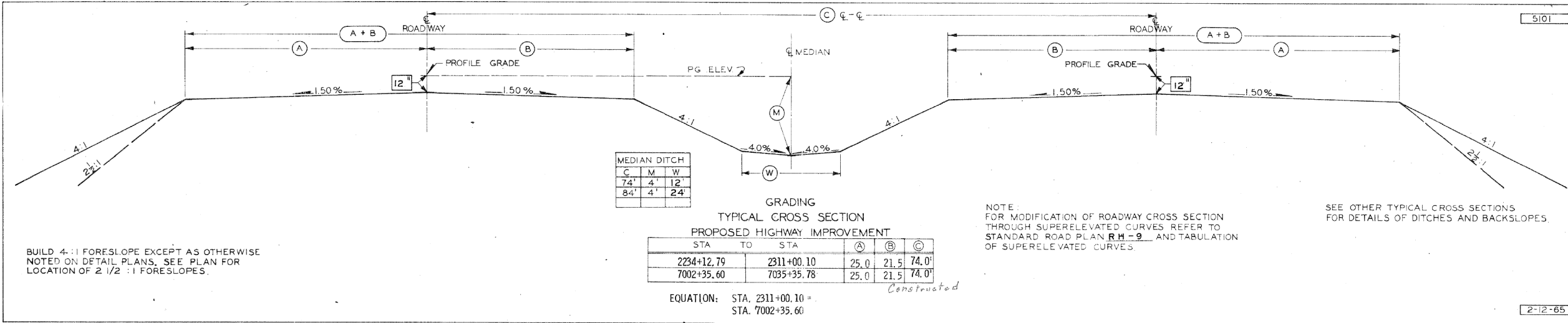


NO. 3  
HOOK BAR

SECTION A-A

CONSTRUCTION WHERE CURB IS  
OMITTED AT END OF DAY'S RUN

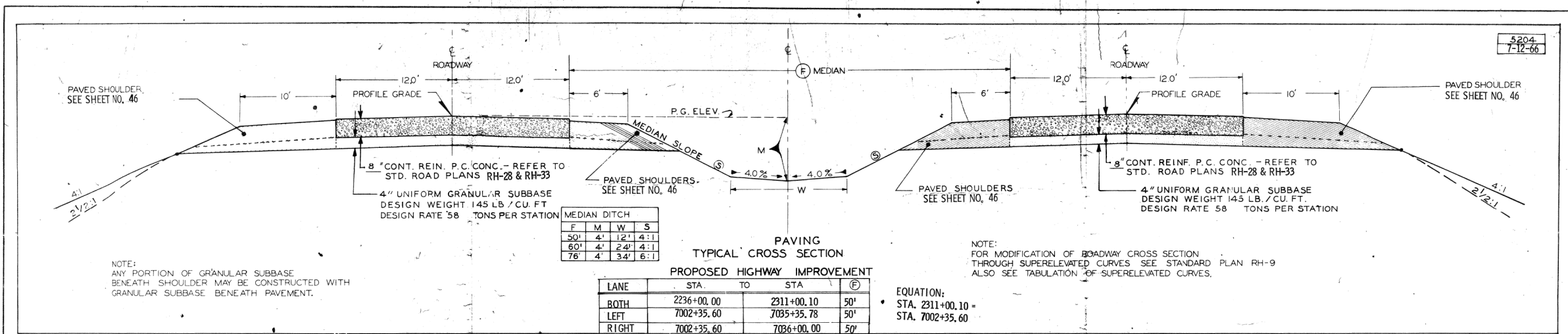
- Notes:
- ① Install hook bar at 12" intervals with top projecting so as to clear the paving equipment and as near the false form board as possible to maintain 2" surface clearance.
  - ② 2" x 4" False Form.
  - ③ Excavate a slight cavity in concrete around each bar.
  - ④ 12" maximum for Standard 6" Curb.  
16" maximum for Sloped 6" Curb.



FOR INFORMATION ONLY

NOTE: See also Contracts IM-74-1(161)4--13-82, IM-74-1(205)5--13-82, and IM-74-1(206)5--13-82 for additional details. Sections on this sheet represent existing pavement prior to construction of these contracts.

**EXISTING PAVEMENT TYPICALS**  
**INTERSTATE 74**



MEDIAN DITCH

F	M	W	S
50'	4'	12'	4:1
60'	4'	24'	4:1
76'	4'	34'	6:1

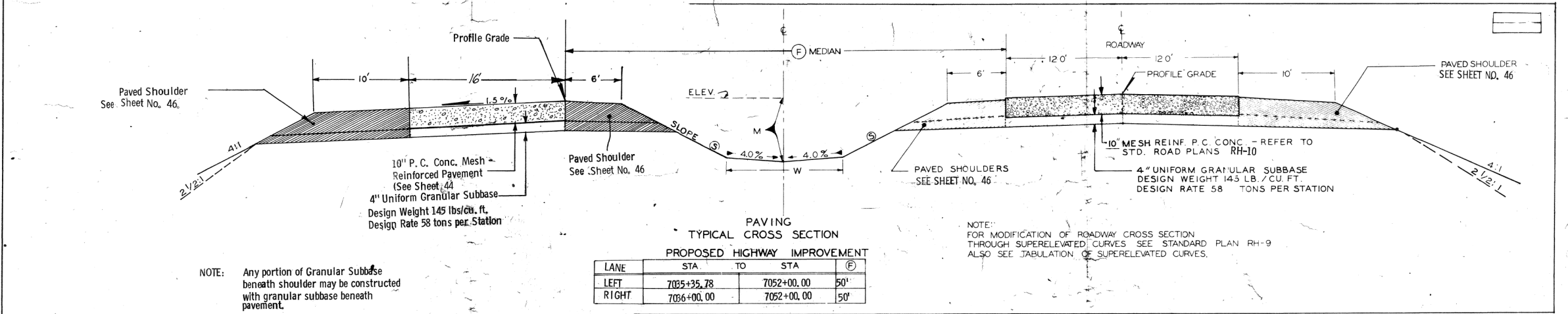
PROPOSED HIGHWAY IMPROVEMENT

LANE	STA.	TO STA.	(F)
BOTH	2236+00.00	2311+00.10	50'
LEFT	7002+35.60	7035+35.78	50'
RIGHT	7002+35.60	7036+00.00	50'

EQUATION:  
 STA. 2311+00.10 =  
 STA. 7002+35.60

NOTE:  
 ANY PORTION OF GRANULAR SUBBASE  
 BENEATH SHOULDER MAY BE CONSTRUCTED WITH  
 GRANULAR SUBBASE BENEATH PAVEMENT.

NOTE:  
 FOR MODIFICATION OF ROADWAY CROSS SECTION  
 THROUGH SUPERELEVATED CURVES SEE STANDARD PLAN RH-9  
 ALSO SEE TABULATION OF SUPERELEVATED CURVES.

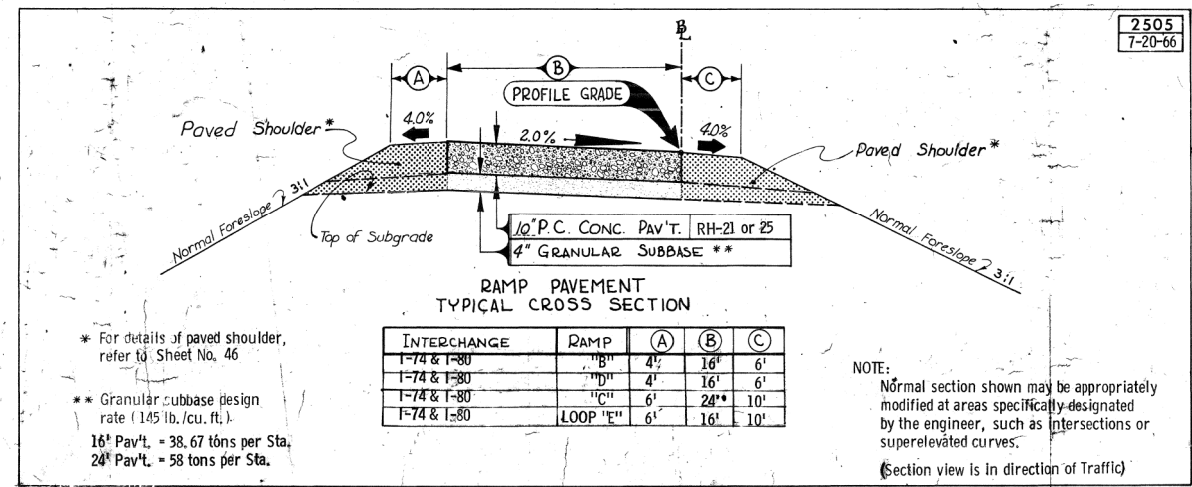


PROPOSED HIGHWAY IMPROVEMENT

LANE	STA.	TO STA.	(F)
LEFT	7035+35.78	7052+00.00	50'
RIGHT	7036+00.00	7052+00.00	50'

NOTE:  
 Any portion of Granular Subbase  
 beneath shoulder may be constructed  
 with granular subbase beneath  
 pavement.

NOTE:  
 FOR MODIFICATION OF ROADWAY CROSS SECTION  
 THROUGH SUPERELEVATED CURVES SEE STANDARD PLAN RH-9  
 ALSO SEE TABULATION OF SUPERELEVATED CURVES.



RAMP PAVEMENT TYPICAL CROSS SECTION

INTERCHANGE	RAMP	(A)	(B)	(C)
I-74 & I-80	"B"	4'	16'	6'
I-74 & I-80	"D"	4'	16'	6'
I-74 & I-80	"C"	6'	24'	10'
I-74 & I-80	LOOP "E"	6'	16'	10'

\* For details of paved shoulder,  
 refer to Sheet No. 46

\*\* Granular subbase design  
 rate (145 lb./cu. ft.)  
 16' Pav't. = 38.67 tons per Sta.  
 24' Pav't. = 58 tons per Sta.

NOTE:  
 Normal section shown may be appropriately  
 modified at areas specifically designated  
 by the engineer, such as intersections or  
 superelevated curves.  
 (Section view is in direction of Traffic)

Revised March 19, 1968

WT

STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
IOWA	5		2	62

Scott COUNTY PROJECT NUMBER I-74-1(8)3--01-82

FOR INFORMATION ONLY

NOTE: See also Contracts IM-74-1(161)4--13-82,  
 IM-74-1(205)5--13-82, and IM-74-1(206)5--13-82  
 for additional details. Sections on this sheet represent  
 existing pavement prior to construction of these contracts.

EXISTING PAVEMENT  
 TYPICALS  
 INTERSTATE 74



**ESTIMATED PROJECT QUANTITIES  
(UP TO A 5 DIVISION PROJECT)**

Division 1: IOWA DOT COST  
Division 2: CITY OF BETTENDORF COST  
Division 3: 72.23% IOWA /27.77% BETTENDORF COST  
Division 4: NON-PARTICIPATING

Item No.	Item Code	Item	Unit	Quantities											
				Estimated					As Built						
				Division 1	Division 2	Division 3	Division 4	Division 5	Total	Division 1	Division 2	Division 3	Division 4	Division 5	
1	2101-0850001	CLEARING AND GRUBBING	ACRE	7.3						7.3					
2	2102-0425071	SPECIAL BACKFILL	CY	7492.6						7492.6					
3	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW	CY	115436						115436					
4	2102-2712015	EXCAVATION, CLASS 12, BOULDERS OR ROCK FRAGMENTS	CY	50						50					
5	2102-2712070	EXCAVATION, CLASS 12, ROADWAY AND BORROW	CY	22907						22907					
6	2105-8425005	TOPSOIL, FURNISH AND SPREAD	CY	2994.35						2994.35					
7	2105-8425011	TOPSOIL, SPREAD	CY	1783						1783					
8	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD	CY	3841						3841					
9	2107-0875100	COMPACTION W/MOISTURE CONTROL	CY	88800						88800					
10	2111-8174100	GRANULAR SUBBASE	SY	24596						24596					
11	2113-0001100	SUBGRADE STABILIZATION MATERIAL, POLYMER GRID	SY	18087.1						18087.1					
12	2115-0100000	MODIFIED SUBBASE	CY	2823.74						2823.74					
13	2122-5191004	REINFORCED PAVED SHOULDER (MODIFIED)	SY	354.9						354.9					
14	2123-7450000	SHOULDER CONSTRUCTION, EARTH	STA	7.76						7.76					
15	2123-7450020	SHOULDER FINISHING, EARTH	STA	47.4						47.4					
16	2301-1032080	STD/S-F PCC PAV'T, CL C CL 2, 8"	SY	54.8						54.8					
17	2301-1032100	STD/S-F PCC PAV'T, CL C CL 2, 10"	SY	723.2						723.2					
18	2301-1034110	STD/S-F PCC PAV'T, CL C CL 3I, 11"	SY	29156.2						29156.2					
19	2301-6911722	PORTLAND CEMENT CONCRETE PAVEMENT SAMPLES	LS	1						1					
20	2401-6745356	REMOVAL OF CONCRETE FOOTINGS OF LIGHT POLES	EACH	14						14					
21	2401-6745765	REMOVAL OF LIGHT POLES	EACH	14						14					
22	2401-6750001	REMOVALS, AS PER PLAN	LS	1						1					
23	2402-0425030	GRANULAR BACKFILL	CY	12587.11						12587.11					
24	2402-2720000	EXCAVATION, CLASS 20	CY	0				39		39					
25	2402-2722000	EXCAVATION, CLASS 22	CY	0				4		4					
26	2403-0100010	STRUCTURAL CONCRETE (BRIDGE)	CY	0				20.2		20.2					
27	2404-7775000	REINFORCING STEEL	LB	0				1533		1533					
28	2412-0000100	LONGITUDINAL GROOVING IN CONCRETE	SY	96810						96810					
29	2416-0100015	APRONS, CONCRETE, 15 IN. DIA.	EACH	1						1					
30	2416-0100024	APRONS, CONCRETE, 24 IN. DIA.	EACH	1						1					
31	2416-0100072	APRONS, CONCRETE, 72 IN. DIA.	EACH	1						1					
32	2432-0000100	MECHANICALLY STABILIZED EARTH RETAINING WALL	SF	15127						15127					
33	2435-0140148	MANHOLE, STORM SEWER, SW-401, 48 IN.	EACH	9						9					
34	2435-0140160	MANHOLE, STORM SEWER, SW-401, 60 IN.	EACH	1						1					
35	2435-0250800	INTAKE, SW-508	EACH	13						13					
36	2435-0250814	INTAKE, SW-508, TOP ONLY	EACH	2						2					
37	2435-0250900	INTAKE, SW-509	EACH	1						1					
38	2435-0251100	INTAKE, SW-511	EACH	1						1					
39	2435-0254800	BARRIER INTAKE, SW-548	EACH	7						7					
40	2435-0254802	BARRIER INTAKE, SW-548, WELL ONLY	EACH	1						1					
41	2435-0700010	CONNECTION TO EXISTING MANHOLE	EACH	5						5					
42	2435-0700020	CONNECTION TO EXISTING INTAKE	EACH	2						2					
43	2502-8212034	SUBDRAIN, LONGITUDINAL, (SHOULDER) 4 IN. DIA.	LF	9332.8						9332.8					
44	2502-8220193	SUBDRAIN OUTLET (RF-19C)	EACH	57						57					
45	2502-8220196	SUBDRAIN OUTLET, RF-19E	EACH	4						4					
46	2503-0114215	STORM SWR G-MAIN, TRENCHED, RCP 2000D, 15"	LF	1744						1744					
47	2503-0114218	STORM SWR G-MAIN, TRENCHED, RCP 2000D, 18"	LF	181						181					
48	2503-0114224	STORM SWR G-MAIN, TRENCHED, RCP 2000D, 24"	LF	1403						1403					
49	2503-0114472	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 3000D (CLA	LF	72						72					
50	2503-0200036	REMOVE STORM SEWER PIPE LESS THAN OR EQUAL TO 36 IN	LF	1203						1203					
51	2503-0200136	REMOVE STORM SEWER PIPE GREATER THAN 36 IN.	LF	244						244					
52	2505-4008300	STEEL BEAM GUARDRAIL	LF	287.5						287.5					
53	2505-4008400	STEEL BEAM GUARDRAIL BARRIER TRANSITION SECTION	EACH	4						4					
54	2505-4021010	STEEL BEAM GUARDRAIL END ANCHOR, BOLTED	EACH	4						4					
55	2505-4021700	STEEL BEAM GUARDRAIL END TERMINAL	EACH	4						4					
56	2507-3250005	ENGINEERING FABRIC	SY	278.2						278.2					
57	2507-6800061	REVTMENT, CLASS E	TON	238						238					
58	2510-6745850	REMOVAL OF PAVEMENT	SY	26679.7						26679.7					
59	2510-6750600	REMOVAL OF INTAKES AND UTILITY ACCESSES	EACH	4						4					
60	2513-0001020	CONCRETE BARRIER, BA-102	LF	6332						6332					
61	2513-0001040	CONCRETE BARRIER, BA-104	LF	280						280					
62	2513-0001050	CONCRETE BARRIER, BA-105	EACH	1						1					
63	2513-0001070	CONCRETE BARRIER RAIL, BA-107	EACH	1						1					
64	2513-0001081	CONCRETE BARRIER, TAPERED END, BA-108 (MODIFIED)	EACH	1						1					
65	2515-2475006	DRIVEWAY, P.C. CONCRETE, 6 IN.	SY	94						94					
66	2516-8725000	P.C. CONCRETE RETAINING WALL	CY	1.61						1.61					
67	2519-1002072	FENCE, CHAIN LINK, 72 IN. HEIGHT	LF	3683.9						3683.9					
68	2519-4200120	REMOVAL OF FENCE, CHAIN LINK	LF	2048.6						2048.6					
69	2520-3350015	FIELD OFFICE	EACH	1						1					
70	2523-0000200	ELECTRICAL CIRCUITS	LF	7258						7258					
71	2523-0000310	HANDHOLES AND JUNCTION BOXES	EACH	57						57					
72	2525-0000105	TRAFFIC SIGNAL INSTALLATION	LS	1						1					
73	2526-8285000	CONSTRUCTION SURVEY	LS	1						1					
74	2527-9263109	PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED	STA	675.16						675.16					
75	2527-9263112	PAINTED PAVEMENT MARKINGS, HIGH-BUILD WATERBORNE	STA	1723.86						1723.86					
76	2527-9263131	WET RETROREFLECTIVE REMOVABLE TAPE MARKINGS	STA	210.72						210.72					
77	2527-9263138	PAINTED SYMBOLS AND LEGENDS, HIGH-BUILD WATERBORNE	EACH	16						16					
78	2527-9263180	PAVEMENT MARKINGS REMOVED	STA	329.08						329.08					
79	2528-3800000	MODULAR GLARE SCREEN SYSTEM	LF	9013						9013					
80	2528-8400048	TEMPORARY BARRIER RAIL, CONCRETE	LF	25800						25800					

**ESTIMATED PROJECT QUANTITIES  
(UP TO A 5 DIVISION PROJECT)**

Division 1: IOWA DOT COST  
 Division 2: CITY OF BETTENDORF COST  
 Division 3: 72.23% IOWA /27.77% BETTENDORF COST  
 Division 4: NON-PARTICIPATING

Item No.	Item Code	Item	Unit	Quantities												
				Estimated					Total	As Built						
				Division 1	Division 2	Division 3	Division 4	Division 5		Division 1	Division 2	Division 3	Division 4	Division 5		
81	2528-8400055	TEMPORARY TO PERMANENT BARRIER CONNECTION	EACH	3							3					
82	2528-8445110	TRAFFIC CONTROL	LS	1							1					
83	2528-8445113	FLAGGERS	EACH	0							0					
84	2533-4980005	MOBILIZATION	LS	1							1					
85	2537-8900000	REMEDICATION OF PETROLEUM CONTAMINATED SOIL	CY	100							100					
86	2537-8900100	SAMPLE+TEST-PETRO CONTAM (REMEDICATION)	EACH	1							1					
87	2545-1000000	OVERLAY TYPE B GUIDE SIGNS	SF	500							500					
88	2551-0000110	TEMP CRASH CUSHION	EACH	5							5					
89	2555-0000010	DELIVER AND STOCKPILE SALVAGED MATERIALS	LS				1				1					
90	2599-9999005	LIGHTING POLES, INSTALL ONLY	EACH	49							49					
91	2599-9999005	ROADWAY LUMINAIRE, INSTALL ONLY	EACH	70							70					
92	2599-9999005	COLLAPSIBLE BOLLARD	EACH	2							2					
93	2599-9999009	TEMPORARY SLOPE DRAIN, AS PER PLAN	LF	75							75					
94	2599-9999009	STRUCTURAL STEEL RAILING, TRAFFIC AND BICYCLE	LF	280							280					
95	2599-9999009	CONCRETE BARRIER, BA-102 (MODIFIED)	LF	644							644					
96	2599-9999010	FURNISH & INSTALL ITS INFRASTRUCTURE	LS	1							1					
97	2599-9999010	IDENTITY ELEMENTS	LS	0				1			1					
98	2599-9999018	REINFORCED PAVED SHOULDER FOR 44" CONCRETE BARRIER	SY	826.6							826.6					
99	2601-2634100	MULCHING	ACRE	6.76							6.76					
100	2601-2636044	SEEDING AND FERTILIZING (URBAN)	ACRE	6.76							6.76					
101	2602-0000010	SILT DITCHES	LF	1001							1001					
102	2602-0000020	SILT FENCE	LF	4750							4750					
103	2602-0000050	SILT BASINS	EACH	2							2					
104	2602-0000071	REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS	LF	3800							3800					
105	2602-0000101	MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK	LF	380							380					
106	2602-0000312	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 12 IN. DIA.	LF	1352							1352					
107	2602-0000320	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 20 IN. DIA.	LF	1110							1110					
108	2602-0000350	REMOVAL OF PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE	LF	2462							2462					
109	2602-0010010	MOBILIZATION, EROSION CONTROL	EACH	1							1					
110	2602-0010020	MOBILIZATION, EMERGENCY EROSION CONTROL	EACH	1							1					
		For Additional Tabulations and Quantities, See N Sheets and P Sheets														

**ESTIMATE REFERENCE INFORMATION**

Item No.	Item Code	Description
1	2101-0850001	CLEARING AND GRUBBING See sheets U.4 to U.7. Quantity includes non-pavement area within proposed ground line intercepts. Locations as directed by the Engineer.
2	2102-0425071	SPECIAL BACKFILL See Tab 103-3 on C Sheets. Item underneath all mainline I-74 pavement as shown on sheets B.1 and B.2. For additional information, refer to the Q sheets.
3	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW See T-sheets for template quantities. CL 10 Bid quantity of 115,436 CY includes: Year 4 Stage 2 35,279 CY Suitable Excavation 15 CY Fill Year 5 Stage 1 11,434 CY Suitable Excavation 115,349 CY Fill Year 5 Stage 2 10 CY Suitable Excavation 72 CY Fill Project Need = 68,713 CY Contractor furnished Overhaul will not be measured or paid for, but shall be considered incidental to roadway excavation. Contractor-furnished borrow.
4	2102-2712015	EXCAVATION, CLASS 12, BOULDERS OR ROCK FRAGMENTS For boulders encountered in excavation. Existing rip rap is not included. See Tab 103-7 on C Sheets.
5	2102-2712070	2102-2712070 EXCAVATION, CLASS 12, ROADWAY AND BORROW See T Sheets for Template Quantities CL 10 Bid quantity of 22,907 CY includes: Estimated rock excavation in proposed detention pond. Rock level estimated from soil boring data Additional rock excavation for storm sewers shall be considered incidental to the storm sewers
6	2105-8425005	TOPSOIL, FURNISH AND SPREAD See Tab 103-4 on C Sheets. Contractor to provide topsoil from stockpile.
7	2105-8425011	TOPSOIL, SPREAD
8	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD
9	2107-0875100	COMPACTION W/MOISTURE CONTROL See Tab 103-6 on the C Sheets Cubic Yards shown on the contract documents as determined by the template volume. See T-sheets for template quantities. I-74 and ramps = 71769 cy. Local roads = 2275 cy. Shrinkage will not be included in moisture control quantity.
10	2111-8174100	GRANULAR SUBBASE 6" thick underneath I-74 Mainline Pavement. See Typical on sheets B.1 and B.2. See Tab 100-24 on C Sheets.
11	2113-0001100	SUBGRADE STABILIZATION MATERIAL, POLYMER GRID Place underneath I-74 mainline pavement See Typical on sheets B.1 and B.2 and Tab 103-3 on C Sheets
12	2115-0100000	MODIFIED SUBBASE Includes area under the ramps and side roads, Refer to Typical on sheets B.3 and B.4. See Tab 100-24 and 112-9 on the C Sheets
13	2599-9999018	REINFORCED PAVED SHOULDER (MODIFIED) See Tab 108-18B and 112-9 on the C Sheets. Reinforced Paved Shoulder modified for 32" concrete barrier as detailed on sheet U.28.  DESCRIPTION. Modified Standard BA-106 to account for 32" barrier height. Per Standard Specifications Section 2513 and Modified Standard BA-106  MATERIALS Per Standard Specifications Section 2513 and Modified Standard BA-106  CONSTRUCTION Per Standard Specifications Section 2513 and Modified Standard BA-106

**ESTIMATE REFERENCE INFORMATION**

Item No.	Item Code	Description
		METHOD OF MEASUREMENT Per Standard Specifications Section 2513 and Modified Standard BA-106
		BASIS OF PAYMENT Per Standard Specifications Section 2513 and Modified Standard BA-106
14	2123-7450000	SHOULDER CONSTRUCTION, EARTH Sta. 6804+58.53 to Sta. 6809+10.00 = 4.51 STA Earth Construction Sta. 3591+00.00 to Sta. 3594+25.00 = 3.25 STA Earth Construction See Sheet B.1 and B.3 for typicals
15	2123-7450020	SHOULDER FINISHING, EARTH Work shall consist of backfilling, compacting and shaping areas directly behind the curb. No separate measurement or payment will be made for excavation or overhaul. See Sheet B.2 and B.3 for typicals Sta. 6810+75.00 to Sta. 6837+00.00 = 26.25 STA Earth Finishing Sta. 1497+02.31 to Sta. 1502+50.00 = 5.47*2 = 10.95 STA Earth Finishing Sta. 1504+25.00 to Sta. 1509+11.06 = 4.86 STA Earth Finishing Sta. 3591+00.00 to Sta. 3594+25.00 = 3.25 STA Earth Finishing Sta. 3594+25.00 to Sta. 3594+30.26 = 0.0526*2 = 0.10 STA Earth Finishing
16	2301-1032080	STD/S-F PCC PAV'T, CL C CL 2, 8"
17	2301-1032100	STD/S-F PCC PAV'T, CL C CL 2, 10" See Tab 100-24 on the C Sheets.
18	2301-1034110	STD/S-F PCC PAV'T, CL C CL 3I, 11" Refer to Tab 100-24 on the C Sheets and typicals on sheets B.1, B.2 and B.3. For mainline I-74 and Ramp construction. Storm sewer intake areas are excluded from the quantity
19	2301-6911722	PORTLAND CEMENT CONCRETE PAVEMENT SAMPLES Refer to Tab 100-24 on the C Sheets for pavement schedule.
20	2401-6745356	REMOVAL OF CONCRETE FOOTINGS OF LIGHT POLES See P sheets for locations and details. The foundation must be completely removed or broken down to a point three feet below grade. Debris must be disposed of according to Article 1104.6B of the standard specifications. Backfill must meet requirements of Article 2523.03E of the standard specifications.
21	2401-6745765	REMOVAL OF LIGHT POLES See P sheets for locations and details. Any damage resulting from the removal and/or transportation of the lighting luminaire and associated hardware, shall be repaired or replaced in kind. The Engineer will be the sole judge to determine the extent of damage and the suitability of repair or replacement. The removal shall include the pole, breakaway device, arms, luminaires, and associated hardware and appurtenances.
22	2401-6750001	REMOVALS, AS PER PLAN See P sheets for locations, details, and additional tabulations. Removal shall include all handholes and control cabinets called to be removed, as well as all abandoned cable.
23	2402-0425030	GRANULAR BACKFILL 1696.1 CY is for fill between the I-74 median barriers. Refer to I-74 typicals on Sheets B.1 and B.2. 10649 CY is for behind MSE Wall 165. 242CY is for below MSE Wall 165. See Typical Wall-1 and Wall-2 on sheet B.4 and refer to sheets V.1 and V.2 for Wall 165 details.
24	2402-2720000	EXCAVATION, CLASS 20 See Sheets V.9 and V.10 for Identity Element Footing locations and details
25	2402-2722000	EXCAVATION, CLASS 22 See Sheets V.9 and V.10 for Identity Element Footing locations and details
26	2403-0100010	STRUCTURAL CONCRETE (BRIDGE) See Sheets V.9 and V.10 for Identity Element Footing locations and details
27	2404-7775000	REINFORCING STEEL See Sheets V.9 and V.10 for Identity Element Footing locations and details
28	2412-0000100	LONGITUDINAL GROOVING IN CONCRETE Refer to Tab 100-28 on the C Sheets. Coordinate with the Bridge Contracts.
29	2416-0100015	APRONS, CONCRETE, 15 IN. DIA.
30	2416-0100024	APRONS, CONCRETE, 24 IN. DIA.
31	2416-0100072	APRONS, CONCRETE, 72 IN. DIA. See Tab 104-5B on the M Sheets.

**ESTIMATE REFERENCE INFORMATION**

Item No.	Item Code	Description
32	2432-0000100	MECHANICALLY STABILIZED EARTH RETAINING WALL Item is for Retaining Wall 165. Refer to sheets V.1 and V.2 All required precast panels and the associated form liners and aesthetic considerations as shown on sheets V.3 to V.8 are to be included in the contract unit price.
33	2435-0140148	MANHOLE, STORM SEWER, SW-401, 48 IN.
34	2435-0140160	MANHOLE, STORM SEWER, SW-401, 60 IN. See Tab 104-5B on the M Sheets.
35	2435-0250800	INTAKE, SW-508 See Tab 104-5B on M Sheets. Modify dimensions as required to accommodate 6" sloped curbs per note 1 of Roadway Standard SW-508
36	2435-0250814	INTAKE, SW-508, TOP ONLY
37	2435-0250900	INTAKE, SW-509
38	2435-0251100	INTAKE, SW-511
39	2435-0254800	BARRIER INTAKE, SW-548 See Tab 104-5B on the M Sheets.
40	2435-0254802	BARRIER INTAKE, SW-548, WELL ONLY
41	2435-0700010	CONNECTION TO EXISTING MANHOLE See Tab 104-5B on the M Sheets for locations. Refer to M sheets for additional details.
42	2435-0700020	CONNECTION TO EXISTING INTAKE
43	2502-8212034	SUBDRAIN, LONGITUDINAL, (SHOULDER) 4 IN. DIA.
44	2502-8220193	SUBDRAIN OUTLET (RF-19C)
45	2502-8220196	SUBDRAIN OUTLET (RF-19E) A. See Tab 104-9 on the C Sheets.
46	2503-0114215	STORM SWR G-MAIN, TRENCHED, RCP 2000D, 15"
47	2503-0114218	STORM SWR G-MAIN, TRENCHED, RCP 2000D, 18"
48	2503-0114224	STORM SWR G-MAIN, TRENCHED, RCP 2000D, 24"
49	2503-0114472	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 3000D (CLASS IV), 72 IN. See Tab 104-5B on the M Sheets.
50	2503-0200036	REMOVE STORM SEWER PIPE LESS THAN OR EQUAL TO 36 IN
51	2503-0200136	REMOVE STORM SEWER PIPE GREATER THAN 36 IN. See Tab 110-14 on the C Sheets.
52	2505-4008300	STEEL BEAM GUARDRAIL
53	2505-4008400	STEEL BEAM GUARDRAIL BARRIER TRANSITION SECTION
54	2505-4021010	STEEL BEAM GUARDRAIL END ANCHOR, BOLTED
55	2505-4021700	STEEL BEAM GUARDRAIL END TERMINAL See Tab 108-8A on the C Sheets for locations. Refer to sheets U.21 to U.24 for details. Coordinate with Bridge Contracts.
56	2507-3250005	ENGINEER FABRIC Engineering fabric shall be material as specified for embankment erosion control, Article 4196.01C. Material shall be measured in sq. yd. of actual area covered. Refer to typical detail 4404 on sheet B.6 See Tab 100-23 on the C sheets for locations.
57	2507-6800061	REVTMENT, CLASS E Refer to Typical 4404 on the sheet B.6 and Tab 100-23 on C Sheets.
58	2510-6745850	REMOVAL OF PAVEMENT See U Sheets for locations and Tab 110-1 on the C Sheets See the B Sheets and Tab 102-5 on the C Sheets for available existing pavement information. Includes approximately 568.8 LF of full depth sawcut.
59	2510-6750600	REMOVAL OF INTAKES AND UTILITY ACCESSES See Tab 110-15 on the C Sheets. Remove the top and sides of the structure a minimum of 10 feet below the subgrade or 6 feet below the finished grade in other areas. Plug all of the pipes in the structure to be removed using Class C concrete. If the structure is more than 10 feet deep, fill the remaining structure with flowable mortar. Place compacted fill over excavation.
60	2513-0001020	CONC BARRIER, BA-102 See Tab 108-18B on the C Sheets. BA-102 along the I-74 median is per the Standard Road Plans. See sheets B.1 and B.2 for locations.
61	2513-0001040	CONC BARRIER, BA-104 See Tab 108-18B on the C Sheets See Sheet K.7 for location. See Sheet U.28 for details.

**ESTIMATE REFERENCE INFORMATION**

Item No.	Item Code	Description
62	2513-0001050	CONC BARRIER, BA-105 See Tab 108-18B on the C Sheets See sheet L.3 for location at end of Wall 165
63	2513-0001070	CONC BARRIER RAIL, BA-107 See Tab 108-18B on the C Sheets. See sheet L.3 for location at end of Wall 165 See Sheet U.23 for guardrail details.
64	2513-0001081	CONCRETE BARRIER, TAPERED END, BA-108 (MODIFIED) See Tab 108-18B on the C Sheets Item is to be constructed per the Modified Standard Road Plans on the sheet U.30. See sheet K.7 for location.
65	2515-2475006	DRIVEWAY, P.C. CONCRETE, 6 IN. See sheet K.7 and Tab 102-3 on the C Sheets for locations and details
66	2516-8725000	P.C. CONCRETE RETAINING WALL Refer to U sheet CONCRETE CLOSURE WALL DETAIL. For retaining Granular Backfill between median barrier at south end of median.
67	2519-1002072	FENCE, CHAIN LINK, 72 IN. HEIGHT
68	2519-4200120	REMOVAL OF FENCE, CHAIN LINK See Tab 100-7 the C Sheets for tabulations. See sheets U.4 to U.7 for removal locations. See D and K sheets for proposed fence locations.
69	2520-3350015	FIELD OFFICE
70	2523-0000200	ELECTRICAL CIRCUITS Bid to include 600 volt fuses at 5 amperes for luminaire supply (L-1 connectors) and 20 amperes for tap circuit protection (Y-1 connectors) located in the junction boxes or handholes. Included are 1346 type L-1 connectors, 946 Y-1 connectors, 312 type Y-3 connectors, and 950 type L-2 connectors. Electrical circuit length is calculated from plan dimensions as the linear, one-way length of both new and existing embedded conduits. No allowance has been added to this quantity. Allowances have been added to all wire and cable quantities listed in Tab 108-12. Refer to P Sheets.
71	2523-0000310	HANDHOLES AND JUNCTION BOXES All handholes to be RM-42 Type 1, except where noted. Refer to P Sheets
72	2525-0000105	TRAFFIC SIGNAL INSTALLATION Refer to N Sheets.
73	2526-8285000	CONSTRUCTION SURVEY
74	2527-9263109	PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED
75	2527-9263112	PAINTED PAVEMENT MARKINGS, HIGH-BUILD WATERBORNE See Tab 108-22 on the C Sheets for locations and details. For Final I-74 Mainline and Ramp Pavement Markings. See sheets U.9 to U.15.
76	2527-9263131	WET RETROREFLECTIVE REMOVABLE TAPE MARKINGS See Tab 108-22 on the C Sheets for locations and details. For Temporary pavement marking on the mainline and Ramps during Staging See J Sheets.
77	2527-9263138	PAINTED SYMBOLS AND LEGENDS, HIGH-BUILD WATERBORNE See Tab 108-22 on the C Sheets for locations and details See Sheet U.12 for locations
78	2527-9263180	PAVEMENT MARKINGS REMOVED See Tab 108-22 on the C Sheets NOTE: All conflicting Waterborne/Solvent Paint pavement markings on the final pavement surface shall be removed by high pressure water blasting. Grinding is not allowed on the final pavement or bridge surface.
79	2528-3800000	MODULAR GLARE SCREEN SYSTEM For use on temporary barrier rail during Year 5 Stage 1. See J Sheet Typical Sections. See Tab 108-33 on C Sheets
80	2528-8400048	TEMPORARY BARRIER RAIL, CONCRETE See J sheets and Tab 108-33 on C sheets for locations. All temporary barrier rail including barrier placed by previous contracts shall be removed by the Contractor at the end of the contract.
81	2528-8400055	TEMPORARY TO PERMANENT BARRIER CONNECTION See J sheets and refer to Tab 108-33 on C Sheets for locations. See sheet U.25 "TBR Connection to 44-Inch F-Shape Barrier"



**ESTIMATE REFERENCE INFORMATION**

Item No.	Item Code	Description
82	2528-8445110	TRAFFIC CONTROL See Traffic Control Plan on J Sheets.
83	2528-8445113	FLAGGERS
84	2533-4980005	MOBILIZATION
85	2537-8900000	REMEDIATION OF PETRO CONTAMINATED SOIL Nominal quantity provided in case of encountering contaminated soil. Based on limit of contamination shown on sheets U.18 to U.20, no contamination is expected in this contract. All petroleum contaminated soil shall be disposed at a permitted sanitary landfill. Copies of the landfill receipts shall be submitted to the Engineer
86	2537-8900100	SAMPLE+TEST-PETRO CONTAM (REMEDIATION) Nominal quantity provided in case of encountering contaminated soil. Based on limit of contamination shown on sheets U.18 to U.20 no contamination is expected in this contract A. Refer to sheets U.18, U.19, and U.20 for locations. B. The Contractor shall have an Iowa Groundwater Professional, certified in accordance with 567 IAC Chapter 134, on site during excavation activities on parcels 101, 102, 103, 104, 117, 122, 159, 171, 218, 235,316, 317, 344, 349, 354, 520, 521 and 618. The Groundwater Professional shall monitor excavated material through soil vapor analysis and sampling. Samples shall be submitted to a laboratory accredited in accordance with 567 IAC Chapter 83 and analyzed for petroleum compounds using Iowa 0A-1 and 0A-2 testing procedures. Additional analyses may be added at the discretion of the Groundwater Professional and approved by the Engineer. C. The Groundwater professional shall be available on an on-call basis during all other excavation activities. The Contractor shall cease operations in the immediate area upon encountering suspect contamination and contact the Groundwater Professional for field review and sampling. D. Compensation for oversight by the Groundwater Professional, and sample analysis beyond petroleum compounds shall be negotiated and paid for in accordance with Article 1109.03, B, of the Standard Specifications. E. Samples shall be taken every 100' of excavation along the properties shown on sheets U.18 to U.20.
87	2545-1000000	OVERLAY TYPE B GUIDE SIGNS Details pending Final Sign Design.
88	2551-0000110	TEMP CRASH CUSHION Placed at end of Temporary concrete barrier rail. See Tab 108-30 on C Sheets All temporary crash cushions including those placed by previous contacts shall be removed by the Contractor at the end of the contract. Refer to J Sheets
89	2555-0000010	DELIVER AND STOCKPILE SALVAGED MATERIALS See Tab 110-13 on N.5 Sheets and P.1 Sheets. Transportation of salvaged materials is not eligible for federal funds
90	2599-9999005	LIGHTING POLES, INSTALL ONLY See P sheets for locations, details, and additional tabulations. Additional reference information provided in the Special Provisions
91	2599-9999005	ROADWAY LUMINAIRE, INSTALL ONLY See P sheets for locations, details, and additional tabulations Additional reference information provided in the Special Provisions
92	2599-9999005	COLLAPSIBLE BOLLARD
93	2599-9999009	TEMPORARY SLOPE DRAIN, AS PER PLAN Per DETAILS OF TEMPORARY SLOPE DRAIN on sheet U.17. Quantity provided for 25' on side of embankment. One placement on each side of embankment. Bid quantity estimates 3 placements.  DESCRIPTION. Details are for the installation of a temporary slope drain on the foreslope of the roadway fill. The intent of the temporary slope drain is to prevent foreslope erosion during construction and to minimize the water pollution which might be caused by soil erosion from the project.  CONSTRUCTION. At the completion of each day's grading, a temporary berm will be constructed on both sides of the subgrade. At points a maximum of 500' apart, at low points of vertical curves, and as determined by the Engineer, temporary intercepting wing dikes shall be graded and slope drains installed. All special grading work shall be considered incidental to other grading work on the project. Foreslopes with a vertical height of ten feet or less shall not have temporary slope drains installed.  MATERIALS. The temporary slope drain shall consist of a length of pipe capable of extending to the top of foreslope when all grading has been completed. The pipe shall be moved up the foreslope to the new temporary top of slope berm at the completion of each

**ESTIMATE REFERENCE INFORMATION**

Item No.	Item Code	Description
		day's work. The pipe shall be Solid Tubing complying with all requirements of ASTM F 405, Standard Duty Tubing.
		METHOD OF MEASUREMENT. Method of measurement shall be along the centerline of pipe in its final position.
		BASIS OF PAYMENT. The price bid for "Temporary Slope Drain, As Per Plan", measured in lineal feet, shall be considered full compensation for the construction of all required temporary top of slope berms, for installing and maintaining the slope drain for the duration of the contract, and for removal of all materials upon the completion of the embankment.
94	2599-9999009	STRUCTURAL STEEL RAILING, TRAFFIC AND BICYCLE  DESCRIPTION. Furnish and construct railings of the type, dimensions, and materials shown in the TRAFFIC AND BICYCLE RAILING on sheets U.31 and U.32. See Tab 108-18B on the C Sheets See Sheet K.7 for location.  MATERIALS See notes on the TRAFFIC AND BICYCLE RAILING sheets U.31 and U.32.  CONSTRUCTION See notes on the TRAFFIC AND BICYCLE RAILING sheets U.31 and U.32.  METHOD OF MEASUREMENT The structural Steel Railing is to be bid on a per lineal foot basis measured from end to end of steel railing.  BASIS OF PAYMENT The number of lineal foot of structural steel railing installed will be paid of at the contract unit price per foot based in the plan quantities.
95	2599-9999009	CONCRETE BARRIER, BA-102 (MODIFIED) See Tab 108-18B on the C Sheets. 44" BA-102 along Ramp A is per the Modified Standard Road Plan BA-102 on sheet U.26 See sheet K.6 and L .3 for locations.  DESCRIPTION. Modified Standard BA-102 to account for 44" barrier height. Per Standard Specifications Section 2513 and Modified Standard BA-102  MATERIALS Per Standard Specifications Section 2513 and Modified Standard BA-102  CONSTRUCTION Per Standard Specifications Section 2513 and Modified Standard BA-102  METHOD OF MEASUREMENT Per Standard Specifications Section 2513 and Modified Standard BA-102  BASIS OF PAYMENT Per Standard Specifications Section 2513 and Modified Standard BA-102
96	2599-9999010	FURNISH AND INSTALL ITS INFRASTRUCTURE See Tabulation on Sheet N.5 for details. Refer to N sheets for locations and details. Additional reference information provided in the Special Provisions
97	2599-9999010	IDENTITY ELEMENTS  DESCRIPTION: Bid to include fabrication and installation of 12 identity elements of 3 types: See Sheets V.11 through V.27 for details.  MATERIALS. Materials include Structural Steel HSS framing members, precast concrete panels, steel panel cabinets and curved acrylic panels. Anchor bolts and nuts are not included in this bid item, but are to be provided with the footings or bridge elements upon which the identity elements are installed. See Sheets V.13 and V.25 for material specifications.  CONSTRUCTION. Fabrication of all identity elements shall be by the same fabricator to ensure uniformity of appearance. Installation shall be at locations in both Iowa and Illinois as described on Sheet V.11, and shall be performed after all other project work is completed. Installation shall be coordinated with the Iowa

**ESTIMATE REFERENCE INFORMATION**

Item No.	Item Code	Description
		bridge contractor and Illinois general contractor.
		METHOD OF MEASUREMENT. Lump sum item. No method of measurement.
		BASIS OF PAYMENT. Payment will be the lump sum contract price.
98	2599-9999018	REINFORCED PAVED SHOULDER FOR 44" CONCRETE BARRIER See Tab 108-18B and 112-9 on the C Sheets. Reinforced Paved Shoulder modified for 44" concrete barrier as detailed in the U Sheet REINFORCED PAVED SHOULDER FOR 44" CONCRETE BARRIER sheet U.29 See sheet K.6 and L .3 for locations.  DESCRIPTION. Modified Standard BA-106 to account for 44" barrier height. Per Standard Specifications Section 2122 and Modified Standard REINFORCED PAVED SHOULDER FOR 44" CONCRETE BARRIER  MATERIALS Per Standard Specifications Section 2122 and Modified Standard REINFORCED PAVED SHOULDER FOR 44" CONCRETE BARRIER  CONSTRUCTION Per Standard Specifications Section 2122 and Modified Standard REINFORCED PAVED SHOULDER FOR 44" CONCRETE BARRIER  METHOD OF MEASUREMENT Per Standard Specifications Section 2122 and Modified Standard REINFORCED PAVED SHOULDER FOR 44" CONCRETE BARRIER  BASIS OF PAYMENT Per Standard Specifications Section 2122 and Modified Standard REINFORCED PAVED SHOULDER FOR 44" CONCRETE BARRIER
99	2601-2634100	MULCHING See Tab 100-11 on C Sheets and disturbed areas shown on sheets U.4 to U.7. All seeded areas shall be mulched. Area disturbed but not seeded by September 30 shall be scarified to a 3 inch depth, and mulched. All mulch is to be consolidated into the soil with the mulch stabilizer. Mulch shall be Certified Noxious Weed Seed Free Mulch as certified by the Iowa Crop Improvement Association or adjacent states Crop Improvement Associations Quantity is estimated as disturbed area to 10' past the need line.
100	2601-2636044	SEEDING AND FERTILIZING (URBAN) Included for all urban disturbed areas following the final construction as designated by the engineer. See Standard Note 232-3B. See Tab 100-11 on C Sheets and disturbed areas shown on sheets U.4 to U.7. Quantity is estimated as disturbed area to 10' past the need line.
101	2602-0000020	SILT DITCHES See Tab 100-13 on the C Sheets. Locations to be approved by the Engineer.
102	2602-0000020	SILT FENCE This item includes 25% more silt fence than the tab quantity for field adjustments and replacements. See Tab 100-17 on the C Sheets for locations and details. Place silt fence around intakes per EC-201
103	2602-0000050	SILT BASINS Refer to Tab. 100-14. The tabulation includes estimated locations for placement of "Silt Basins" to address erosion to be encountered during construction. Verify the specific locations with the Engineer prior to beginning placement. Bid item includes 100% additional quantity for field adjustments and maintenance
104	2602-0000071	REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS This item is included for silt fence and silt fence for ditch check removal required for staging reasons, removal to allow for replacement (replacement to be paid separately), or for areas that have achieved 70% permanent growth.
105	2602-0000101	MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK This item is included for maintaining the new silt fence and silt fence ditch checks installed for this project and existing silt fence and silt fence for ditch checks installed as part of the previous projects This item is for 10% of the Tabulation quantity on Tab 100-17.
106	2602-0000312	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 12 IN. DIA.
107	2602-0000320	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 20 IN. DIA. See Tab 100-19 on the C Sheets  This item is included for the temporary perimeter sediment control and water velocity reduction on slopes. Wattles and sediment logs shall consist of wood excelsior or straw contained in a tube of ultraviolet (UV) degradable open weave fabric (synthetic netting). Wattle or sediment log installation shall be as per

**ESTIMATE REFERENCE INFORMATION**

Item No.	Item Code	Description
		manufacturer's recommended installation procedures. Filter socks shall be a continuous, tubular, knitted mesh netting with 3/8" opening, constructed of 5-mil thickness, photodegradable HDPE. The filter material shall be compost from an approved source meeting Article 4169.08 of the Standard Specifications. The sock shall be filled by blowing the filter material into the tube with a special pneumatic blower truck or similar device. Hand filling is not an acceptable means to fill the sock. Compost filter socks shall be installed as per manufacturer's recommended installation procedures.
108	2602-0000350	REMOVAL OF PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE This item is included for removal required for staging reasons, removal to allow for replacement (replacement to be paid separately), or for areas that have achieved 70% permanent growth. This item is for 100% of the Tab 100-19 quantity.
109	2602-0010010	MOBILIZATION, EROSION CONTROL Refer to supplemental Specification 09011
110	2602-0010020	MOBILIZATION, EMERGENCY EROSION CONTROL Refer to supplemental Specification 09011



**POLLUTION PREVENTION PLAN**

This Base Pollution Prevention Plan (PPP) includes information on Roles and Responsibilities, Project Site Description, Controls, Maintenance Procedures, Inspection Requirements, Non-Storm Water Controls, Potential Sources of Off Right-of-Way Pollution, and Definitions. This plan references other documents rather than repeating the information contained in the documents. A copy of this Base Pollution Prevention Plan, amended as needed per plan revisions or by contract modification, will be readily available for review.

All contractors shall conduct their operations in a manner that controls pollutants, minimizes erosion, and prevents sediments from entering waters of the state and leaving the highway right-of-way. The prime contractor shall be responsible for compliance and implementation of the PPP for their entire contract. This responsibility shall be further shared with subcontractors whose work is a source of potential pollution as defined in this PPP.

**I. ROLES AND RESPONSIBILITIES****A. Designer:**

1. Prepares Base PPP included in the project plan.
2. Prepares Notice of Intent (NOI) submitted to Iowa DNR.
3. Signature authority on the Base PPP and NOI.

**B. Contractor/Subcontractor:**

1. Affected contractors/subcontractors are co-permittees with the IDOT and will sign a certification statement adhering to the requirements of the NPDES permit and this PPP plan. All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP.
2. Submit a detailed schedule according to Article 2602 of the Specifications and any additional plan notes.
3. Install and maintain appropriate controls.
4. Supervise and implement good housekeeping practices.
5. Conduct joint required inspections of the site with inspection staff.
6. Signature authority on Co-Permittee Certification Statements and storm water inspection reports.

**C. RCE/Inspector:**

1. Update PPP whenever there is a change in design, construction, operation or maintenance, which has a significant effect on the discharge of pollutants from the project.
2. Maintain an up-to-date list that identifies contractors and subcontractors as co-permittees.
3. Make these plans available to the DNR upon their request.
4. Conduct joint required inspections of the site with the contractor/subcontractor.
5. Complete an inspection report after each inspection.
6. Signature authority on storm water inspection reports and Notice of Discontinuation (NOD).

**II. PROJECT SITE DESCRIPTION**

A. This Pollution Prevention Plan (PPP) is for the construction of I-74 mainline, ramps, and local roads.

B. This PPP covers approximately 100 acres with an estimated 63.6 acres being disturbed. The portion of the PPP covered by this contract has 13.2 acres disturbed.

C. The PPP is located in an area of one soil association Kenyon-Floyd-Clyde.

The estimated average SCS runoff curve number for this PPP after completion will be 94.

D. Storm Water Site Map - Multiple sources of information comprise the base storm water site map including:

1. Drainage patterns - Plan and Profile sheets and Situation plans.
2. Proposed Slopes - Cross Sections.
3. Areas of Soil Disturbance - construction limits shown on Plan and Profile sheets.
4. Location of Structural Controls - Tabulations on C sheets.
5. Locations of Non-structural Controls - Tabulations on C sheets.
6. Locations of Stabilization Practices - generally within construction limits shown on Plan and Profile sheets.
7. Surface Waters (including wetlands) - Plan and Profile sheets.
8. Locations where storm water is discharged - Plan and Profile sheets.

E. The base site map is amended by contract modifications and progress payments of completed erosion control work.

F. Runoff from this work will flow into the Mississippi River.

**III. CONTROLS**

A. The contractor's work plan and sequence of operations specified in Article 2602.03 for accomplishment of storm water controls should clearly describe the intended sequence of major activities and for each activity define the control measure and the timing during the construction process that the measure will be implemented.

B. Preserve vegetation in areas not needed for construction.

C. Section 2601 and 2602 of the Standard Specifications define requirements to implement erosion and sediment control measures.

Actual quantities used may vary from the Base PPP and amendment of the plan will be documented via fieldbook entries or by contract modification. Additional erosion and sediment control items may be required as determined by the inspector and/or contractor during storm water monitoring inspections. If the work involved is not applicable to any contract items, the work will be paid for according to Article 1109.03 paragraph B.

**1. EROSION AND SEDIMENT CONTROLS****a. Stabilization Practices**

- 1) Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized.
- 2) Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased.
- 3) Temporary stabilizing seeding shall be completed as the disturbed areas are constructed. If construction activity is not planned to occur in a disturbed area for at least 21 days, the area shall be stabilized by temporary seeding or mulching within 14 days. Other stabilizing methods shall be used outside the seeding time period.
- 4) Stabilization measures to be used for this project are located in the Estimated Project Quantities (100-1A) and Estimate Reference Information (100-4A) located on the C sheets of the plan. Additional items may be found in the Inspector's Daily Reports (IDR) or Contract Modifications.

**b. Structural Practices**

- 1) Structural practices will be implemented to divert flows from exposed soils and detain or otherwise limit runoff and the discharge of pollutants from exposed areas of the site.
- 2) Structural items to be used for this project are located in the Estimated Project Quantities (100-1A) and Estimate Reference Information (100-4A) located on the C sheets of the plan, as well as all other item specific Tabulations. Typical drawings detailing construction of the devices to be used on this project can be found on the B sheets of the plan or are referenced in the Standard Road Plans Tabulation.

**c. Storm Water Management**

- 1) Measures shall be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

**2. OTHER CONTROLS**

- a. Contractor disposal of unused construction materials and construction material wastes shall comply with applicable state

**POLLUTION PREVENTION PLAN**

and local waste disposal, sanitary sewer, or septic system regulations. In the event of a conflict with other governmental laws, rules and regulations, the more restrictive laws, rules or regulations shall apply.

- 1) Vehicle Entrances and Exits - Construct and maintain entrances and exits to prevent tracking of sediments onto roadways.
- 2) Material Delivery, Storage and Use - Implement practices to prevent discharge of construction materials during delivery, storage, and use.
- 3) Stockpile Management - Install controls to reduce or eliminate pollution of storm water from stockpiles of soil and paving.
- 4) Waste Disposal - Do not discharge any materials, including building materials, into waters of the state, except as authorized by a Section 404 permit.
- 5) Spill Prevention and Control - Implement procedures to contain and clean-up spills and prevent material discharges to the storm drain system and waters of the state.
- 6) Concrete Residuals and Washout Wastes - Designate temporary concrete washout facilities for rinsing out concrete trucks. Provide directions to truck drivers where designated washout facilities are located.
- 7) Vehicle and Equipment Cleaning - Employ washing practices that prevent contamination of surface and ground water from wash water.
- 8) Vehicle and Equipment Fueling and Maintenance - Perform on site fueling and maintenance in accordance with all environment laws such as proper storage of onsite fuels and proper disposal of used engine oil or other fluids on site.
- 9) Litter Management - Ensure employees properly dispose of litter.

**3. APPROVED STATE OR LOCAL PLANS**

During the course of this construction, it is possible that situations will arise where unknown materials will be encountered. When such situations are encountered, they will be handled according to all federal, state, and local regulations in effect at the time.

**IV. MAINTENANCE PROCEDURES**

The contractor is required to maintain all temporary erosion and sediment control measures in proper working order, including cleaning, repairing, or replacing them throughout the contract period. This shall begin when the features have lost 50% of their capacity.

**V. INSPECTION REQUIREMENTS**

A. Inspections shall be made jointly by the contractor and the contracting authority at least once every seven calendar days and after each rain event that is 1/8" or greater. Storm water monitoring inspections will include:

1. Date of the inspection.
2. Summary of the scope of the inspection.
3. Name and qualifications of the personnel making the inspection.
4. Rainfall amount.
5. Review erosion and sediment control measures within disturbed areas for the effectiveness in preventing impacts to receiving waters.
6. Major observations related to the implementation of the PPP.
7. Identify corrective actions required to maintain or modify erosion and sediment control measures.

B. Include storm water monitoring inspection reports in the Amended PPP. Incorporate any additional erosion and sediment control measures determined as a result of the inspection. Immediately begin corrective actions on all deficiencies found and complete all actions within 3 calendar days of the inspection.

**VI. NON-STORM WATER DISCHARGES**

This includes subsurface drains (i.e. longitudinal and standard subdrains) and slope drains. The velocity of the discharge from these features may be controlled by the use of patio blocks, Class A stone, erosion stone or other appropriate materials.

**VII. POTENTIAL SOURCES OF OFF RIGHT-OF-WAY (ROW) POLLUTION**

Silts, sediment, and other forms of pollution may be transported onto highway right-of-way (ROW) as a result of a storm event. Potential sources of pollution located outside highway ROW are beyond the control of this PPP. Pollution within highway ROW will be conveyed and controlled per this PPP.

**VIII. DEFINITIONS**

A. Base PPP - Initial Pollution Prevention Plan.

B. Amended PPP - May include Plan Revisions or Contract Modifications for new items and fieldbook entries made by the inspector.

C. IDR - Inspector's Daily Report - this contains the inspector's daily diary and item postings.

D. Controls - Methods, practices, or measures to minimize or prevent erosion, control sedimentation, control storm water, or minimize contaminants from other types of waste or materials.

E. Signature Authority - Representative from Designer, Contractor/Subcontractor, or RCE/Inspector authorized to sign various storm water documents.

<b>213-3</b> 10-18-11
<b>SUBSOIL TILLAGE</b>
All borrow areas, stockpile areas, haul roads, and areas used for equipment on this project require subsoil tillage to an average depth of 16 to 20 inches prior to placement of topsoil and/or stabilizing crop seeding. Complete this tillage at 3 foot maximum centers and at right angles to the finished slope.
Use tillage equipment equipped with an arrowhead type shoe that will provide lateral displacement and limit the movement of the subsoil to the surface. Obtain the Engineer's approval for the equipment. This work is incidental to other work on the project.
Following the subsoil tillage, the area is to remain in a "loosened" condition. Additional compaction or the operation of heavy equipment, other than required for topsoil placement and shaping, will not be allowed on areas which have received subsoil tillage.

<b>232-3B</b> 10-16-12
<b>EROSION CONTROL (URBAN SEEDING)</b>
Following the completion of work in a disturbed area, place seed, fertilizer, and mulch on the disturbed area as follows:
SEEDING MIXTURE: Seeding Rate: 4 lbs. per 1000 sq. ft.
Bluegrass, KY 70%
Fescue, Creeping Red 20%
Ryegrass, Perennial (Fineleaf) (Derby, Manhattan or equivalent) 10%
FERTILIZER:
17 lbs. of 13-13-13 (or equivalent) commercial fertilizer per 1000 sq. ft.
MULCH:
70 lbs. of dry cereal straw per 1000 sq. ft. For areas disturbed, but not seeded by September 30th, scarify to a 3 inch depth and mulch. Consolidate all mulch into the soil with a mulch stabilizer.
Use Certified Noxious Weed Seed Free Mulch as determined by the Iowa Crop Improvement Association or adjacent state's Crop Improvement Association.
Preparing the seedbed and furnishing and applying seed, fertilizer, and mulch is incidental to mobilization and will not be paid for separately.

<b>232-6</b> 10-18-11
<b>EROSION CONTROL (SELECTIVE CLEARING)</b>
Selective clearing will be required on this project. Do not remove any trees outside of the construction limits without the Engineer's approval.

<b>252-1</b> 10-16-12
<b>TEMPORARY CROSSINGS AND DETOURS</b>
Blading, shaping, and other work in preparation for maintaining temporary crossings or detours is incidental to other work. Furnish and spread additional granular surfacing needed for temporary crossings or detours during construction at the contract price.

<b>253-1</b> 10-18-11
<b>MEDIAN CROSSOVER</b>
The Contractor is prohibited from using any established or other type median crossover on this project unless specifically designated for the Contractor's use by this plan.

<b>254-1</b> 10-02-01
<b>INCIDENT MANAGEMENT</b>
An incident management plan, provided by the District Office, will be discussed at the pre-construction conference.

<b>262-5</b> 10-18-05
<b>UTILITIES (POINT 25 PROJECT)</b>
This is a POINT 25 project and is subject to the provisions of IAC 761-115.25.

<b>281-1</b> 10-18-11
<b>SECTION 404 PERMIT AND CONDITIONS</b>
Construct this project according to the requirements of U.S. Army Corps of Engineers _____, Permit No. TBD. A copy of this permit is available from the Iowa DOT Office of Contracts upon request. The U.S. Army Corps of Engineers reserves the right to visit the site without prior notice.

**FENCING**

\* Bid Item  
\*\* Channel Crossing Type A or Type B, FP = Flood Plain

Refer to MI-101, MI-102, MI-103, MI-104, 510-3, and 510-5

Location				Side	Chain Link				Deer				Field				Remarks					
From		To			Fence		Gate	Channel Crossing		Fence Length*	Brace Panels*	Gate		Channel Crossing	Fence Length*	Brace Panels*		Gate		Channel Crossing		
Station	Offset	Station	Offset		Length*	Type	No.*	Type	Length*	Type**	Length*	Type**	Length*	Type**	Length*	Type**		Length*	Type**	Length*	Type**	
				LF					LF	EACH	EACH			LF	EACH	EACH			LF	Type**		
RAMP C																						
3590+93.7	26.5	3590+96.7	76.4	LT	50.0	72 IN.															Div.(1)	
3590+96.7	76.4	3594+66.3	53.8	LT	370.2	72 IN.															Div.(1)	
RAMP A																						
1496+79.2	32.5	1500+78.9	33.2	LT	399.6	72 IN.															Div.(1)	
1500+78.9	33.2	1501+99.8	55.4	LT	122.9	72 IN.															Div.(1)	
1501+99.8	55.4	1502+59.6	59.4	LT	59.9	72 IN.															Div.(1)	
1502+59.6	59.4	1502+61.7	13.4	LT	46.1	72 IN.															Div.(1)	
I-74																						
6810+84.8	193.0	6811+24.7	195.0	LT	105.0	72 IN.															Div.(1)	
6811+24.7	195.0	6832+42.7	90.2	LT	2124.9																Div.(1)	
6832+42.7	90.2	6834+44.3	137.5	LT	208.1	72 IN.															Div.(1)	
6835+14.4	148.8	6837+10.1	149.9	LT	197.0	72 IN.															Div.(1)	
TOTAL =					3683.9																	
I-74																						
6816+58.7	277.7	6819+29.8	241.1	LT	271.1	RMVL OF FENCE, CHAIN LINK															Div.(1)	
6819+29.8	241.1	6821+21.8	252.5	LT	192.4	RMVL OF FENCE, CHAIN LINK															Div.(1)	
6821+21.8	252.5	6822+04.2	244.8	LT	82.8	RMVL OF FENCE, CHAIN LINK															Div.(1)	
6822+04.2	244.8	6822+81.7	224.7	LT	80.0	RMVL OF FENCE, CHAIN LINK															Div.(1)	
6822+81.7	224.7	6823+98.7	169.0	LT	130.2	RMVL OF FENCE, CHAIN LINK															Div.(1)	
6823+98.7	169.0	6824+97.7	139.7	LT	104.0	RMVL OF FENCE, CHAIN LINK															Div.(1)	
6824+97.7	139.7	6825+47.1	130.9	LT	50.4	RMVL OF FENCE, CHAIN LINK															Div.(1)	
6825+47.1	130.9	6826+57.4	122.9	LT	111.2	RMVL OF FENCE, CHAIN LINK															Div.(1)	
6826+57.4	122.9	6829+00.7	150.4	LT	246.3	RMVL OF FENCE, CHAIN LINK															Div.(1)	
6829+00.7	150.4	6830+16.3	157.5	LT	118.8	RMVL OF FENCE, CHAIN LINK															Div.(1)	
6830+16.3	165.9	6832+64.4	165.9	LT	247.8	RMVL OF FENCE, CHAIN LINK															Div.(1)	
6832+64.4	165.9	6834+44.0	172.5	LT	181.0	RMVL OF FENCE, CHAIN LINK															Div.(1)	
6834+44.0	172.5	6834+43.3	137.3	LT	35.3	RMVL OF FENCE, CHAIN LINK															Div.(1)	
6835+15.1	149.1	6837+11.3	148.4	LT	197.5	RMVL OF FENCE, CHAIN LINK															Div.(1)	
TOTAL =					2048.6																	

**INCIDENTAL ITEMS**

Special or unique items where method of measurement / basis of payment is not indicated in the specifications or other contract documents.

No.	Incidental Item	Quantity	Incidental To		Remarks
			Item Code	Item	
1	MSE Wall 165 Aesthetic Details		2432-0000100	MECHANICALLY STABILIZED EARTH RETAINING WALL	See Sheets V.3 to V.8

100-11  
08-01-08

### TABULATION OF EROSION CONTROL DETAILS

Location		Over-Seeding and Fertilizing	Seeding and Fertilizing	Mulching	Special Ditch Control		Sod	Crown-Vetch Seeding	Seeding Special Areas	Ditch Reshaping	Mowing
Begin Station	End Station				Wood Excelsior Mat						
		ACRE	ACRE	ACRE	SQ		SQ	ACRE	ACRE	STA	ACRE
3590+67.0	3594+31.0		0.4	0.4							
3591+00.0	3594+08.0		0.2	0.2							
4496+96.0	4502+99.0		0.6	0.6							
4497+00.0	4503+42.0		0.4	0.4							
6803+41.0	6809+10.0		0.4	0.4							
6803+63.0	6834+32.0		3.6	3.6							
6835+02.0	6837+00.0		0.2	0.2							
		Total=	5.8	5.8							

100-17  
04-20-10

### TABULATION OF SILT FENCES

Refer to EC-201

Location			Length	Remarks
Begin Station	End Station	Side		
3591+00.0	3594+10.0	LT	350.0	Div.(1)
3590+66.0	3594+30.0	RT	400.0	Div.(1)
1500+50.0	1503+00.0	RT	336.0	Div.(1)
6812+00.0	6826+00.0	LT	1548.0	Div.(1)
6790+26.5	+00.0		36.0	916 Div.(1)
3591+25.3	+09.8		36.0	803 Div.(1)
3591+25.3	+31.0		36.0	802 Div.(1)
1498+14.3	+31.0		36.0	426 Div.(1)
1498+14.3	+11.0		36.0	425 Div.(1)
6836+00.0	+83.6		36.0	734 Div.(1)
6833+00.0	+74.1		36.0	369 Div.(1)
6830+00.0	+70.0		36.0	370 Div.(1)
6826+98.9	+70.0		36.0	371 Div.(1)
6824+00.0	+70.0		36.0	372 Div.(1)
6821+00.0	+70.0		36.0	373 Div.(1)
6818+00.0	+70.0		36.0	374 Div.(1)
6815+00.0	+76.5		36.0	375 Div.(1)
1501+50.0	+31.0		36.0	424 Div.(1)
1501+50.0	+11.0		36.0	423 Div.(1)
6806+50.0	+03.2		36.0	356 Div.(1)
6806+50.0	+07.2		36.0	691 Div.(1)
6804+35.0	+04.3		36.0	357 Div.(1)
6804+35.2	+12.9		36.0	758 Div.(1)
1509+00.0	+09.8		36.0	401 Div.(1)
1506+50.0	+31.0		36.0	692 Div.(1)
1506+50.0	+09.8		36.0	402 Div.(1)
1504+59.7	+09.8		36.0	403 Div.(1)
1504+59.7	+31.0		36.0	756 Div.(1)
1504+65.0	+50.0		36.0	404 Div.(1)
6812+00.0	+89.7		36.0	380 Div.(1)
6812+00.1	+86.8		36.0	992 Div.(1)
1505+06.0	+25.4		36.0	
6813+28.6	1+90.3		36.0	
6813+81.6	2+67.1		36.0	
6814+43.4	2+48.5		36.0	
Local Roads			50.0	
	Total		3800.0	

100-13  
04-20-10

### TABULATION OF SILT DITCHES

Refer to RL-9

Station to Station	Side	LF	Remarks
1502+00.0	1502+75.0	LT	75.0 Div.(1)
1504+25.0	1509+11.0	LT	486.0 Div.(1)
3591+00.0	3594+00.0	LT	300.0 Div.(1)
6809+10.0	6810+50.0	LT	140.0
	TOTAL		1001.0

100-19  
10-16-12

### PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE

Refer to EC-204

Location		Side	Length of Installation				Remarks
Begin Station	End Station		6 inch Dia	9 inch Dia	12 inch Dia	20 inch Dia	
			LF	LF	LF	LF	
1497+03.00	1503+13.00	LT			329.0		
1503+48.00	1505+50.00				321.0		
6806+05.00	6810+75.00			572.0			
6826+00.00	66837+00.00			451.0	789.0		
				TOTAL	1352.0	1110.0	

100-14  
04-20-10

### TABULATION OF SILT BASINS

Refer to RL-9

Location Station	Side	Remarks
6790+26.45	RT	Inlet 916 Div.(1)
Total	1	

100-23  
10-19-10

\* Design shown for mandatory locations is the minimum allowed.

### ROCK DITCH CHECKS/DITCHES/FLUMES/SPLASH BASINS/SLOPE PROTECTION

Refer to Typical's 4401, 4402, 4403, 4404, and 4405

Location		Type							Material			Remarks		
Road Identification	Station	Side	Mandatory* Location (yes or no)	Rock Ditch Check	Rock Ditch	Rock Flume	Rock Splash Basin	Rock Slope Protection	(L)	(W)	Erosion Stone		Class E Revetment	Eng. Fabric
		Lt./Rt.							FT	FT	TON	TON	SY	
I-74	6790+26.44	0	Yes				1		18.0	18.0		41.1	52.5	Div.(1)
Ramp A	1498+14.49	Lt.	Yes				1		13.0	13.0		21.9	30.7	Div.(1)
I-74 - Detention Pond Outlet - P980	6800+56.93	Lt.	Yes				1		38.0	38.0		175.0	195.0	Div.(1)
											TOTAL	238.0	278.2	







100-27  
10-20-09

**PAVEMENT SMOOTHNESS + PCC TEXTURE**

Road Identification	Begin Station	End Station	Proposed Posted Speed			Remarks
			35 or less	40 - 45	over 45	
Ramp C	3591+65.5	3594+30.2	X			12' LANE Div.(1)
	3591+65.5	3594+30.2	X			12' LANE Div.(1)
Ramp A	1497+02.3	1501+96.8	X			12' LANE Div.(1)
	1497+02.3	1501+96.8	X			12' LANE Div.(1)
	1504+78.5	1510+06.5	X			12' LANE Div.(1)
	1510+06.5	1512+61.1	X			12' LANE Div.(1)
	1504+78.5	1510+06.5	X			12' LANE Div.(1)
	1510+06.5	1512+61.8	X			12' LANE Div.(1)
	1510+06.5	1512+61.8	X			12' LANE Div.(1)
MAINLINE	6812+61.3	6817+00.0		X		12' LANE Div.(1)
	6812+61.3	6817+89.3		X		12' LANE Div.(1)
	6817+89.3	6823+17.3		X		12' LANE Div.(1)
	6823+17.3	6828+45.3		X		12' LANE Div.(1)
	6828+45.3	6833+73.3		X		12' LANE Div.(1)
	6833+73.3	6836+99.5		X		12' LANE Div.(1)
	6804+58.4	6808+25.0		X		12' LANE Div.(1)
	6804+79.3	6810+07.3		X		12' LANE Div.(1)
	6810+07.3	6815+35.3		X		12' LANE Div.(1)
	6815+35.3	6820+63.3		X		12' LANE Div.(1)
	6820+63.3	6825+50.0		X		12' LANE Div.(1)
	6804+79.6	6810+07.6		X		12' LANE Div.(1)
6810+07.6	6815+35.6		X		12' LANE Div.(1)	
6815+35.6	6820+63.6		X		12' LANE Div.(1)	
6820+63.6	6825+91.6		X		12' LANE Div.(1)	
6825+91.6	6831+19.6		X		12' LANE Div.(1)	
6831+19.6	6836+47.6		X		12' LANE Div.(1)	
6836+47.6	6837+00.0		X		12' LANE Div.(1)	
6804+80.0	6810+08.0		X		12' LANE Div.(1)	
6810+08.0	6815+36.0		X		12' LANE Div.(1)	
6815+36.0	6820+64.0		X		12' LANE Div.(1)	
6820+64.0	6825+92.0		X		12' LANE Div.(1)	
6825+92.0	6831+20.0		X		12' LANE Div.(1)	
6831+20.0	6836+48.0		X		12' LANE Div.(1)	
6836+48.0	6837+00.0		X		12' LANE Div.(1)	
TOTAL			8	25		

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10-19-10

**LONGITUDINAL GROOVING**

Location	Total	Remarks
	SY	
DES. NO. 2808	16657.0	South Approach Westbound Div.(1)
DES. NO. 2908	19602.0	South Approach Eastbound Div.(1)
DES. NO. 3108	4740.0	North Approach Westbound Div.(1)
DES. NO. 3208	6102.0	North Approach Eastbound Div.(1)
DES. NO. 3508	2568.0	U.S. 67 Ramp B Div.(1)
DES. NO. 3608	1788.0	U.S. 67 Ramp C Div.(1)
DES. NO. 3708	0.0	U.S. 67 Ramp D grooved in Contract 205
DES. NO. 3808	996.0	U.S. 67 Ramp A Div.(1)
DES. NO.4508	6072.0	Arch Span Westbound Div.(1)
DES. NO. 4608	7040.0	Arch Span Eastbound Div.(1)
WB Viaduct		
Unit 1	4191.8	Div.(1)
Unit 2	4191.8	Div.(1)
Unit 3	4191.8	Div.(1)
Unit 4	4191.8	Div.(1)
EB Viaduct		
Unit 1	6382.2	Div.(1)
Unit 2	3387.8	Div.(1)
Unit 3	2825.6	Div.(1)
Unit 4	3682.2	Div.(1)
TOTAL	98609.8	

**PROPOSED SUBGRADE TREATMENT**

(For Additional Details see Soils Survey Sheet Nos. Q.1 to Q.12 .)

No.	Location		Description		Type	Shrink %	Quantity		Polymer Grid	Available From		Remarks	
	Begin Station	End Station	Side	Depth FT	Width FT		Material	CY	TON	SY	Quantity CY		Location or Station to Station
2	6803+90.3	6809+10.0		1.0	Var.		0.00%	172.3		0.0			
3	6804+79.3	6809+10.0		1.0	15.0	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	239.3				DIVISION #1 - I74 [SHOWN ON TYPICAL SECTION, B SHEETS]	
4	6804+79.3	6837+00.0		1.0	24.0	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	2,862.8		8,588.5		DIVISION #1 - I74 [SHOWN ON TYPICAL SECTION, B SHEETS]	
5	6804+79.3	6825+50.0		1.0	12.0	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	920.3		2,760.9		DIVISION #1 - I74 [SHOWN ON TYPICAL SECTION, B SHEETS]	
6	6809+10.0	6812+61.3		1.0	Var.	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	157.8		473.4		DIVISION #1 - I74 [SHOWN ON TYPICAL SECTION, B SHEETS]	
7	6809+12.3	6812+61.3		1.0	24.0	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	310.2		930.7		DIVISION #1 - I74 [SHOWN ON TYPICAL SECTION, B SHEETS]	
8	6812+61.3	6817+00.0		1.0	Var.	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	195.0		585.0		DIVISION #1 - I74 [SHOWN ON TYPICAL SECTION, B SHEETS]	
9	6812+61.3	6837+00.0		1.0	Var.	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	1,158.8		3,476.4		DIVISION #1 - I74 [SHOWN ON TYPICAL SECTION, B SHEETS]	
10	6812+61.3	6817+00.0		1.0	14.0	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	227.5				DIVISION #1 - I74 [SHOWN ON TYPICAL SECTION, B SHEETS]	
11	6817+00.0	6817+40.0		1.0	Var.	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	17.8				DIVISION #1 - I74 [SHOWN ON TYPICAL SECTION, B SHEETS]	
12	6817+40.0	6836+98.5		1.0	10.0	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	725.4				DIVISION #1 - I74 [SHOWN ON TYPICAL SECTION, B SHEETS]	
13	6832+95.1	6836+99.5		1.0	12.0	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	179.7		539.2		DIVISION #1 - I74 [SHOWN ON TYPICAL SECTION, B SHEETS]	
								7,492.6	TOTAL	18,087.1			

103-5  
08-01-08

**SETTLEMENT PLATES**  
Refer to Standard Road Plan RL-6

No.	Location		Remarks
	Station	Offset	
1	6804+37.8	52' LT.	I-74 EB
2	3591+00.0	0.0	RAMP C

103-6  
04-19-11

**EMBANKMENT WITH MOISTURE CONTROL**

Moisture content shall be within the limits of minus 2 and plus 2 percentage points of Optimum Moisture Content for maximum density within the area described and listed below.

Moisture Control is required for all Class 10 fill placed in all locations and depths. Stability berms placed outside the normal foreslope template and topsoil will not require Moisture Control.

Moisture Control is also required on all select subgrade treatments.

Proposed Subgrade Treatment: Special Backfill  
Quantity: 7493 CY

103-7  
08-01-08

**SHRINKAGE DATA**

Material	%	Remarks
TOPSOIL	50%	
CLASS 10	30%	
		BOULDERS 50 Cu. Yds. excluding Class 12 Rock Excavation

### LONGITUDINAL SUBDRAIN SHOULDER AND BACKSLOPE

① Refer to RL-13 or RL-15.

Refer to Soils Sheets

\* Not a bid item

Line No.	Road or Lane Ident.	Location Station to Station		Side	Longitudinal Subdrain (RF-19C)							Subdrain Outlet			Porous* Backfill CY	Class "A"* Crushed Stone CY	Remarks	
					Depth ⊙	Shoulder		Backslope		Bridge Berm ①			RF-19C, RF-19E, or RF-19F					
						Size	Length	Size	Length	Size	Type	Length	Station	Size				Standard Road Plan and Type
						IN	FT	IN	FT	IN		FT		IN				
1	I74 WB	6804+11.7	6808+25.0	Left	24.0	4.0	417.3						6804+16.3	6.0	RF-19C	19.3		CAP @ 6804+11.7 TIE INTO EXIST. DRAINAGE CAP @ 6804+07
2	I74 EB	6804+16.3	6804+35.0	Right	24.0	4.0	22.7						6808+25.0	6.0	RF-19C	1.1		
3	I74 EB	6808+25.0	6809+00.0	Right	24.0	4.0	79.0						6809+00.0	6.0	RF-19C	3.7		
4	I74 EB	6809+00.0	6812+00.0	Right	24.0	4.0	304.0						6809+00.0	6.0	RF-19C	14.1		
5	I74 EB	6812+00.0	6815+00.0	Right	24.0	4.0	304.0						6812+00.0	6.0	RF-19C	14.1		
6	I74 EB	6815+00.0	6818+00.0	Right	24.0	4.0	304.0						6815+00.0	6.0	RF-19C	14.1		
7	I74 EB	6818+00.0	6821+00.0	Right	24.0	4.0	304.0						6818+00.0	6.0	RF-19C	14.1		
8	I74 EB	6821+00.0	6824+00.0	Right	24.0	4.0	304.0						6821+00.0	6.0	RF-19C	14.1		
9	I74 EB	6824+00.0	6826+98.9	Right	24.0	4.0	302.9						6824+00.0	6.0	RF-19C	14.0		
10	I74 EB	6826+98.9	6830+00.0	Right	24.0	4.0	305.1						6826+98.9	6.0	RF-19C	14.1		
11	I74 EB	6830+00.0	6833+00.0	Right	24.0	4.0	304.0						6830+00.0	6.0	RF-19C	14.1		
12	I74 EB	6833+00.0	6836+00.0	Right	24.0	4.0	304.0						6833+00.0	6.0	RF-19C	14.1		
13	I74 EB	6836+00.0	6837+00.0	Right	24.0	4.0	104.0						6836+00.0	6.0	RF-19C	4.8		CAP @ 6837+00
14	I74 EB	6804+06.3	6806+50.0	Left	24.0	4.0	247.7						6806+50.0	6.0	RF-19E	11.5		CAP @ 6804+07
15	I74 EB	6806+50.0	6809+00.0	Left	24.0	4.0	254.0						6806+50.0	6.0	RF-19E	11.8		
16	I74 EB	6809+00.0	6812+00.0	Left	24.0	4.0	304.0						6809+00.0	6.0	RF-19E	14.1		
17	I74 EB	6812+00.0	6815+00.0	Left	24.0	4.0	304.0						6812+00.0	6.0	RF-19C	14.1		
18	I74 EB	6815+00.0	6818+00.0	Left	24.0	4.0	304.0						6815+00.0	6.0	RF-19C	14.1		
19	I74 EB	6818+00.0	6821+00.0	Left	24.0	4.0	304.0						6818+00.0	6.0	RF-19C	14.1		
20	I74 EB	6821+00.0	6824+00.0	Left	24.0	4.0	304.0						6821+00.0	6.0	RF-19C	14.1		
21	I74 EB	6824+00.0	6826+98.9	Left	24.0	4.0	302.9						6824+00.0	6.0	RF-19C	14.0		
22	I74 EB	6826+98.9	6830+00.0	Left	24.0	4.0	305.1						6826+98.9	6.0	RF-19C	14.1		
23	I74 EB	6830+00.0	6833+00.0	Left	24.0	4.0	304.0						6830+00.0	6.0	RF-19C	14.1		
24	I74 EB	6833+00.0	6836+00.0	Left	24.0	4.0	304.0						6833+00.0	6.0	RF-19C	14.1		
25	I74 EB	6836+00.0	6837+00.0	Left	24.0	4.0	104.0						6836+00.0	6.0	RF-19C	4.8		CAP @ 6837+00
26	RAMP A	1496+58.3	1498+14.3	Right	24.0	4.0	160.0						1498+14.3	6.0	RF-19C	7.4		CAP @ 1496+58
27	RAMP A	1498+14.3	1501+50.0	Right	24.0	4.0	339.7						1498+14.3	6.0	RF-19C	15.7		
28	RAMP A	1501+50.0	1501+96.8	Right	24.0	4.0	50.8						1501+50.0	6.0	RF-19C	2.4		CAP @ 1501+97
29	RAMP A	1504+82.8	1506+50.0	Right	24.0	4.0	171.2						1501+50.0	6.0	RF-19C	7.9		CAP @ 1504+82
30	RAMP A	1506+50.0	1509+11.1	Right	24.0	4.0	265.1						1506+50.0	6.0	RF-19C	12.3		CAP @ 1509+11
31	RAMP A	1496+58.3	1498+14.3	Left	24.0	4.0	160.0						1506+50.0	6.0	RF-19C	7.4		CAP @ 1496+58
32	RAMP A	1498+14.3	1501+50.0	Left	24.0	4.0	339.7						1498+14.3	6.0	RF-19C	15.7		
33	RAMP A	1501+50.0	1501+96.8	Left	24.0	4.0	50.8						1498+14.3	6.0	RF-19C	2.4		CAP @ 1501+97
34	RAMP A	1504+82.8	1506+50.0	Left	24.0	4.0	171.2						1501+50.0	6.0	RF-19C	7.9		CAP @ 1504+82
35	RAMP A	1506+50.0	1509+00.0	Left	24.0	4.0	254.0						1506+50.0	6.0	RF-19C	11.8		
36	RAMP A	1509+00.0	1509+11.1	Left	24.0	4.0	15.1						1506+50.0	6.0	RF-19C	0.7		CAP @ 1509+11
37	RAMP C	3591+65.2	3594+87.0	Right	24.0	4.0	325.8						1509+00.0	6.0	RF-19C	15.1		TIE INTO BRIDGE APPROACH TERMINATE INTO INLET
38	RAMP C	3591+65.2	3594+90.0	Left	24.0	4.0	328.8						3594+87.0	6.0	RF-19C	15.2		TIE INTO BRIDGE APPROACH TERMINATE INTO INLET
				TOTAL			9332.8						3594+90.0	6.0	RF-19C			

NOTE: ALL ITEMS ARE DIVISION #1.  
 NOTE: ALL MAINLINE AND RAMP SUBDRAINS ARE RF-19C TYPE 7A INSTALLATION. ALL LOCAL ROAD SUBDRAINS ARE RF-19C TYPE 12 INSTALLATION. ALL OUTLETS ARE RF-19C "INTAKE OUTLET" WITH THE OUTLET INTO STORM SEWER INTAKES.  
 NOTE: ANY EXISTING LONGITUDINAL SUBDRAINS, IF ENCOUNTERED, SHALL BE REMOVED IN THEIR ENTIRETY.  
 NOTE: ADJUST ALL SUBDRAINS AND OUTLETS IN FIELD AS NECESSARY AND APPROVED BY ENGINEER.



108-8A  
10-19-10

### STEEL BEAM GUARDRAIL AT CONCRETE BARRIER OR BRIDGE END POST

Refer to BA-200, BA-201, BA-202, BA-205, BA-250, SI-172, SI-173 and SI-211.

① See Standards for list of materials.

Location Station			Layout Lengths				Delineators and Object Markers				Bid Items ①					Remarks			
			VT	V	VT	E	Type	Delineator	Object Marker			End Anchor Bolted	Barrier Transition Section	Steel Beam Guardrail	End Terminal		Adapter		
									Type 1	Type 2	Type 3				Standard			Flared for Cable Connection	
								White No.	No.	OM-3L No.	OM-3R No.	BA-202 Type	BA-201 No.	BA-200 LF	BA-205 No.		BA-206 No.	BA-210 No.	
No.	Station	Offset	LF	LF	LF	LF													
1	1504+16.6	30.8'RT	115.6	-	-	50.0	3	-	7	-	1	A	1	87.5	1	-	-	Div.(1)	
2	1510+90.3	10.8'LT	90.6	-	-	50.0	3	-	5	1	-	A	1	62.5	1	-	-	Div.(1)	
3	3590+94.5	30.8'RT	91.0	-	-	50.0	3	-	5	-	1	A	1	62.5	1	-	-	Div.(1)	
4	6804+29.9	73.6'LT	40.6	12.5	50.0	50.0	3		6	1	-	A	1	75.0	1	-	-	Div.(1)	
TOTAL													4	4	287.5	4			

108-18B  
MODIFIED

### CONCRETE BARRIER AT SIDE LOCATIONS

Refer to BA-102, BA-103, BA-104, BA-105, BA-106, BA-107, and BA-150.

- ① Lane(s) to which the installation is adjacent.
  - ② Refer to the Shoulders tabulation (112-9) for quantities.
- \* Bid Item

Location				Side Barrier					Remarks	
No.	① Direction of Traffic	Station to Station	Side	② L2 Offset FT	Barrier Type (BA-102, BA-103, or BA-104)	③ L Length of Barrier* LF	BA-105 Transition Section* No.	BA-107 or BA-108 End Section* No.		Reinforced Paved ② Shoulder (Required?) Yes/No
RAMPS										
1	EB	1504+28.5	1509+07.7	LT	10.0	MOD BA-102	479.3		Yes	MODIFIED BA-102 Div.(1)
2	EB	6809+12.3	6810+74.7	LT	10.0	MOD BA-102	164.8		Yes	MODIFIED BA-102 Div.(1)
		=1509+11.06				TOTAL	644.1			
3	EB	6810+74.7	6810+84.7	LT				1	Yes	BA-105 Div.(1)
4	EB	6810+84.7	6810+91.7	LT				1	Yes	BA-107 Div.(1)
5	EB	3591+15.5	3593+95.5	LT	10.0	MOD BA-104	280.0		Yes	MODIFIED BA-104 Div.(1)
6	EB	3593+95.5	3594+25.3	LT	10.0			1	Yes	MODIFIED BA-108 Div.(1)
7	EB	3591+15.5	3593+95.5	LT	10.0	Railing	280.0		NO	Railing on BA-104 (1)
I-74										
8	WB	6804+11.7	6833+90.0	LT	VAR	BA-102	2978.3		NO	I-74 Median Div.(1)
9	WB	6835+10.0	6837+00.0	LT	3.0	BA-102	190.0		NO	I-74 Median Div.(1)
10	EB	6804+16.3	6833+90.0	RT	VAR	BA-102	2973.7		NO	I-74 Median Div.(1)
11	EB	6835+10.0	6837+00.0	RT	3.0	BA-102	190.0		NO	I-74 Median Div.(1)
						TOTAL	6332.0			

**TEMPORARY BARRIER RAIL**

Refer to BA-400 and BA-401

No.	Station to Station	Length LF	(Select One)		Remarks
			Concrete BA-401	Steel BA-400	
					See Contract IM-74-1(206)5--13-82 for TBR remaining from previous contract
1	YR-4, STAGE-1 6796+18.8    6808+31.6	1212.8 1225.0	X		Div.(1) 12.5' Sections
2	6807+75.0    6837+00.0	2925.0 2925.0	X		Div.(1) 12.5' Sections
3	YR-4, STAGE-2 6808+31.4    6818+16.1	984.7 987.5	X		Div.(1) 12.5' Sections
4	YR-4, WINTER 6804+01.3    6813+46.0	944.7 950.0	X		Div.(1) PLACE BARRIER END BEHIND EXIST BARRIER AT 6804+00 12.5' Sections
5	YR 5, STAGE-1 6746+86.9    6837+00.0	9013.1 9025.0	X		MODULAR GLARE SCREEN Div.(1) 12.5' Sections
6	6804+00.0    6822+00.0	1800.0 1800.0	X		BARRIER CONNECTION AT 6804+00 12.5' Sections
7	6822+00.0    6838+55.3	1655.3 1662.5	X		Div.(1) 12.5' Sections
8	6835+10.0    6837+21.6	211.6 212.5	X		BARRIER CONNECTION Div.(1) 12.5' Sections
9	6835+10.0    6837+00.0	190.0 200.0	X		BARRIER CONNECTION. Div.(1) 12.5' Sections
10	YR-5, STAGE-2 6803+56.7    6837+00.0	3343.3 3350.0	X		Div.(1) 12.5' Sections
11	6803+93.7    6838+50.0	3456.3 3462.5	X		Div.(1) 12.5' Sections
	TOTAL	25800.0			

**CRASH CUSHIONS**

① Lane(s) to which the installation is adjacent.

② Complete this section when using the Temporary Crash Cushion bid item. Refer to BA-500

\* Bid Item

No.	Direction of Traffic	Location Station	Side	Obstacle Width FT	Crash Cushion (Select One)*					Sand Barrel Details (2)					Earthwork*		Remarks	
					Temporary	Temporary Redirective	Temporary Severe Use	Permanent	Permanent Severe Use	V	W	X	Y	Z	Excavation Class 10	Embankment in Place		
																		Length
1	WB	YR 4 STAGE 1 6796+18.8	RT		X						N/A	N/A	N/A	N/A	N/A			Div.(1)
2	EB	YR 5, STAGE 1 6838+55.3	LT		X						N/A	N/A	N/A	N/A	N/A			Div.(1)
	EB	6837+21.6	LT		X						N/A	N/A	N/A	N/A	N/A			Div.(1)
5	WB	YR 5, STAGE 2 6803+56.7	RT		X						N/A	N/A	N/A	N/A	N/A			Div.(1)
6	EB	6838+50.0	LT		X						N/A	N/A	N/A	N/A	N/A			Div.(1)
		TOTAL			5													

### PAVEMENT MARKING LINE TYPES

See PM Series

\*BCY4 - Place on the same side of the roadway to match existing markings near the project.  
 \*\*NPY4 - For estimating purposes only. No Passing Zone Lines will be located in the field.

BCY4: Broken Centerline (Yellow) @ 0.25      CHW8: Channelizing Line (White) @ 2.00      DLW4: Dotted Line (White) @ 0.33      BLW4: Broken Lane Line (White) @ 0.25      ELW4: Edge Line Right (White) @ 1.00  
 ELY4: Edge Line Left (Yellow) @ 1.00      CHY8: Channelizing Line (Yellow) @ 2.00      SLW4: Solid Lane Line (White) @ 1.00      SLW2: Stop Line (White) @ 6.00      DCY4: Double Centerline (Yellow) @ 2.00

Location				Length by Line Type (Unfactored)																	Remarks		
Road ID	Station to Station		Dir. of Travel	Marking Type	Side			BCY4*	CHW8	DLW4	BLW4	ELW4	ELY4	CHY8	SLW4	SLW2	DCY4						
					L	C	R	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA		STA	STA
RampRD-H	6746+86.9	6776+75.0	WB	Highbuild Waterborne Paint			X					29.88										Div.(1)	
I-74	6746+86.9	6750+94.0	WB	Highbuild Waterborne Paint			X					4.07										Div.(1)	
RampRD-H	6746+86.9	6750+18.0	WB	Highbuild Waterborne Paint			X						3.38									Div.(1)	
RampRD-H	6750+18.0	6757+31.3	WB	Highbuild Waterborne Paint			X		7.13													Div.(1)	
RampRD-H	6750+18.3	6757+31.3	WB	Highbuild Waterborne Paint	X				7.13													Div.(1)	
RampRD-H	6750+18.3	6750+18.3	WB	Highbuild Waterborne Paint		X			0.20													Div.(1)	
I-74	6757+31.3	6776+75.0	WB	Highbuild Waterborne Paint			X				19.44											Div.(1)	
I-74	6776+75.0	6781+13.7	WB	Highbuild Waterborne Paint			X			4.39												Div.(1)	
Ramp B	6781+13.7	6785+20.0	WB	Highbuild Waterborne Paint			X		4.06													Div.(1)	
I-74	6785+20.0	6807+50.0	WB	Highbuild Waterborne Paint			X					22.30										Div.(1)	
Ramp B	2581+12.6	2585+19.5	WB	Highbuild Waterborne Paint			X		4.07													Div.(1)	
Ramp B	2585+19.5	2585+19.5	WB	Highbuild Waterborne Paint		X			0.26													Div.(1)	
I-74	6814+49.8	6829+25.0	WB	Highbuild Waterborne Paint			X															Div.(1)	
I-74	6829+25.0	6834+70.0	WB	Highbuild Waterborne Paint			X			5.45												Div.(1)	
Ramp B	6834+70.0	6837+00.0	WB	Highbuild Waterborne Paint			X		2.30													Div.(1)	
Ramp B	6834+70.0	6837+00.0	WB	Highbuild Waterborne Paint			X		2.30													Div.(1)	
I-74	6746+86.9	6837+00.0	WB	Highbuild Waterborne Paint			X					90.13										Div.(1)	
I-74	6746+86.9	6837+00.0	WB	Highbuild Waterborne Paint			X					90.13										Div.(1)	
Ramp B	2576+75.0	2595+01.9	WB	Highbuild Waterborne Paint			X					18.27										Div.(1)	
Ramp B	2582+10.2	2589+74.7	WB	Highbuild Waterborne Paint			X				7.64											Div.(1)	
Ramp B	2585+19.5	2595+01.9	WB	Highbuild Waterborne Paint			X					9.82										Div.(1)	
Ramp B	2592+10.0	2594+62.3	WB	Highbuild Waterborne Paint			X							2.52								Div.(1)	
Ramp B	2589+74.7	2594+62.3	WB	Highbuild Waterborne Paint			X							4.88								Div.(1)	
Ramp B	2592+10.0	2594+65.5	WB	Highbuild Waterborne Paint			X							2.56								Div.(1)	
Ramp B	2594+61.4	2594+61.3	WB	Highbuild Waterborne Paint			X								35.65							Div.(1)	
Ramp B	2594+51.3	2594+51.3	WB	Highbuild Waterborne Paint			X								30.73							Div.(1)	
Ramp D	4495+45.8	4507+50.7	WB	Highbuild Waterborne Paint			X					12.05										Div.(1)	
Ramp D	4495+45.8	4507+50.7	WB	Highbuild Waterborne Paint			X						12.05									Div.(1)	
Ramp D	4495+99.8	4500+29.5	WB	Highbuild Waterborne Paint			X							4.30								Div.(1)	
I-74	6807+50.0	6814+49.8	WB	Highbuild Waterborne Paint			X		7.00													Div.(1)	
I-75	6807+50.0	6814+49.8	WB	Highbuild Waterborne Paint			X		7.00													Div.(1)	
I-76	6807+50.0	6807+50.0	WB	Highbuild Waterborne Paint			X		0.24													Div.(1)	
I-74	6807+50.7	6837+00.0	WB	Highbuild Waterborne Paint			X					29.49										Div.(1)	
I-74	6829+25.0	6837+00.0	WB	Highbuild Waterborne Paint			X				7.75											Div.(1)	
I-74	6746+86.9	6837+00.0	WB	Highbuild Waterborne Paint			X						90.13									Div.(1)	
Ramp RD-H	6746+86.9	6748+00.0	EB	Highbuild Waterborne Paint		X							1.13									Div.(1)	
Ramp RD-H	6746+86.9	6748+00.0	EB	Highbuild Waterborne Paint		X							1.13									Div.(1)	
RampRD-H	6748+00.0	6752+76.0	EB	Highbuild Waterborne Paint		X			11.15													Div.(1)	
I-74	6746+86.9	6783+75.0	EB	Highbuild Waterborne Paint		X																Div.(1)	
I-74	6746+86.9	6783+75.0	EB	Highbuild Waterborne Paint		X																Div.(1)	
I-74	6746+86.9	6783+75.0	EB	Highbuild Waterborne Paint		X																Div.(1)	
I-74	6746+86.9	6783+75.0	EB	Highbuild Waterborne Paint		X																Div.(1)	
I-74	6746+86.9	6783+75.0	EB	Highbuild Waterborne Paint		X																Div.(1)	
I-74	6746+86.9	6783+75.0	EB	Highbuild Waterborne Paint		X																Div.(1)	
I-74	6746+86.9	6783+75.0	EB	Highbuild Waterborne Paint		X																Div.(1)	
I-74	6746+86.9	6783+75.0	EB	Highbuild Waterborne Paint		X																Div.(1)	
I-74	6746+86.9	6783+75.0	EB	Highbuild Waterborne Paint		X																Div.(1)	
I-74	6746+86.9	6783+75.0	EB	Highbuild Waterborne Paint		X																Div.(1)	
I-74	6746+86.9	6783+75.0	EB	Highbuild Waterborne Paint		X																Div.(1)	
I-74	6746+86.9	6783+75.0	EB	Highbuild Waterborne Paint		X																Div.(1)	
I-74	6746+86.9	6783+75.0	EB	Highbuild Waterborne Paint		X																Div.(1)	
Ramp C	3583+75.0	3594+30.3	EB	Highbuild Waterborne Paint		X																Div.(1)	
Ramp C	3583+75.0	3595+22.9	EB	Highbuild Waterborne Paint			X															Div.(1)	
Ramp C	3583+75.0	3595+22.9	EB	Highbuild Waterborne Paint			X															Div.(1)	
Ramp C	3583+75.0	3587+97.0	EB	Highbuild Waterborne Paint			X		12.74													Div.(1)	
Ramp C	3587+98.8	3595+15.1	EB	Highbuild Waterborne Paint			X															Div.(1)	
I-74	6788+00.0	6809+10.0	EB	Highbuild Waterborne Paint		X																Div.(1)	
Ramp A	1496+58.3	1517+00.0	EB	Highbuild Waterborne Paint			X															Div.(1)	
Ramp A	1496+58.3	1517+00.0	EB	Highbuild Waterborne Paint			X															Div.(1)	
Ramp A	1496+58.3	1517+00.0	EB	Highbuild Waterborne Paint			X															Div.(1)	
Ramp A	1496+58.3	1509+11.1	EB	Highbuild Waterborne Paint			X															Div.(1)	
Ramp A	1509+11.1	1512+62.4	EB	Highbuild Waterborne Paint			X		7.31													Div.(1)	
Ramp A	1512+62.4	1517+00.0	EB	Highbuild Waterborne Paint			X			4.38												Div.(1)	
I-74	6817+00.0	6837+00.0	EB	Highbuild Waterborne Paint		X						22.15										Div.(1)	
I-74	6817+00.0	6832+95.1	EB	Highbuild Waterborne Paint		X							15.95									Div.(1)	
I-74	6832+95.1	6837+00.0	EB	Highbuild Waterborne Paint		X			4.05													Div.(1)	
I-74	6832+95.1	6837+00.0	EB	Highbuild Waterborne Paint		X			4.05													Div.(1)	
Temporary	Year 4	Stage 1																					
Ramp B	2576+75.0	2592+06.5	WB	Highbuild Waterborne Paint			X					15.32										Div.(1)	
Ramp B	2592+06.5	2594+56.1	WB	Highbuild Waterborne Paint			X					2.81										Div.(1)	
Ramp B	2585+19.5	2594+62.4	WB	Highbuild Waterborne Paint			X						9.43									Div.(1)	
Ramp B	2589+74.7	2594+61.3	WB	Highbuild Waterborne Paint			X							4.87								Div.(1)	
Ramp B	2592+10.0	2594+61.3	WB	Highbuild Waterborne Paint			X							2.51								Div.(1)	
Ramp B	2592+10.0	2594+61.3	WB	Highbuild Waterborne Paint			X							2.51								Div.(1)	
Ramp B	2594+61.4	2594+61.3	WB	Highbuild Waterborne Paint			X								35.65							Div.(1)	
Ramp B	2594+51.3	2594+51.3	WB	Highbuild Waterborne Paint			X								30.73							Div.(1)	
I-74	6746+86.9	6795+41.0	WB	Waterborne/Solvent Paint			X						48.54									Div.(1)	
I-74	6746+86.9	6776+76.0	WB	Waterborne/Solvent Paint			X					29.89										Div.(1)	





### PAVEMENT MARKING LINE TYPES

See PM Series

\*BCY4 - Place on the same side of the roadway to match existing markings near the project.

\*\*NPY4 - For estimating purposes only. No Passing Zone Lines will be located in the field.

BCY4: Broken Centerline (Yellow) @ 0.25

CHW8: Channelizing Line (White) @ 2.00

DLW4: Dotted Line (White) @ 0.33

BLW4: Broken Lane Line (White) @ 0.25

ELW4: Edge Line Right (White) @ 1.00

ELY4: Edge Line Left (Yellow) @ 1.00

CHY8: Channelizing Line (Yellow) @ 2.00

SLW4: Solid Lane Line (White) @ 1.00















SLW2: Stop Line (White) @ 6.00

DCY4: Double Centerline (Yellow) @ 2.00

Location				Length by Line Type (Unfactored)																Remarks				
Road ID	Station to Station		Dir. of Travel	Marking Type	Side			BCY4*	CHW8	DLW4	BLW4	ELW4	ELY4	CHY8	SLW4	SLW2	DCY4	STA	STA		STA	STA	STA	
					L	C	R	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA		STA	STA	STA	STA
I-74	6782+56.9	6785+20.0	WB	Wet Retroreflective Removable Tape			X																Div.(1)	
I-74	6809+95.6	6811+49.8	WB	Wet Retroreflective Removable Tape			X																Div.(1)	
I-74	6807+50.0	6811+49.8	WB	Wet Retroreflective Removable Tape			X																Div.(1)	
I-74	6828+90.0	6833+85.0	WB	Wet Retroreflective Removable Tape			X																Div.(1)	
I-74	6828+90.0	6832+90.0	WB	Wet Retroreflective Removable Tape			X																Div.(1)	
I-74	6834+22.3	6837+00.0	WB	Wet Retroreflective Removable Tape			X																Div.(1)	
I-74	6834+22.3	6837+00.0	WB	Wet Retroreflective Removable Tape			X																Div.(1)	
I-74	6833+85.4	6843+70.5		Wet Retroreflective Removable Tape										9.85									Div.(1)	
Removals																								
Year 4		Stage 1																						
I-74	6806+12.4	6811+94.6	WB	Removal			X																Div.(1)	
Year 4		Stage 2																						
I-74	6755+54.5	6795+41.4	WB	Removal			X																Div.(1)	
I-74	6799+00.8	6809+21.1	WB	Removal			X																Div.(1)	
I-74	6806+10.6	6807+50.0	WB	Removal			X																Div.(1)	
I-74	6809+21.1	6817+14.4	WB	Removal			X			7.93													Div.(1)	
Year 5		Stage 1																						
I-74	6746+86.9	6755+54.5	EB	Removal			X																Div.(1)	
I-74	6755+54.5	6761+35.3	WB	Removal			X			5.81													Div.(1)	
I-74	6750+35.7	6792+04.1	WB	Removal			X																Div.(1)	
I-74	6776+76.0	6781+13.7	WB	Removal			X			4.38													Div.(1)	
I-74	6785+20.0	6792+99.8		Removal			X																Div.(1)	
I-74	6792+99.8	6807+50.0		Removal			X																Div.(1)	
I-74	6814+69.1	6834+70.0		Removal			X																Div.(1)	
I-74	6746+86.9	6837+00.0	EB	Removal			X																Div.(1)	
I-74	6746+86.9	6793+18.0	WB	Removal			X																Div.(1)	
I-74	6796+79.0	6806+26.0	WB	Removal			X																Div.(1)	
I-74	6809+70.4	6837+00.0	WB	Removal			X																Div.(1)	
I-74	6806+17.5	6839+62.8	WB	Removal			X																Div.(1)	
I-74	6806+16.1	6807+63.7	WB	Removal			X																Div.(1)	
Stage 1																								
Kimberly Roa	4623+51.1		BOTH	Removal			X																Div.(1)	
Kimberly Roa	4623+94.1		BOTH	Removal			X																Div.(1)	
Kimberly Roa	4623+51.1	4623+94.1	BOTH	Highbuild Waterborne Paint			X																Div.(1)	
US 67 SB	205+99.7	208+14.6	WB	Highbuild Waterborne Paint			X																Div.(1)	
US 67 SB	205+99.7	208+14.6	WB	Highbuild Waterborne Paint			X																Div.(1)	
Factored Total: Waterborne/Solvent Paint								-	4.41	19.39	73.61	256.17	321.59	-	-	-	-	-	-	-	-	-	-	
Factored Total: Highbuild Waterborne Paint								-	161.96	5.74	123.71	262.38	247.37	-	28.43	805.08	94.87	-	-	-	-	-	-	-
Factored Total: Wet Retroreflective Removable Tape								-	145.04	-	-	22.67	1.34	41.67	-	-	-	-	-	-	-	-	-	
Factored Total: Removal								-	-	12.71	20.77	147.38	147.50	-	-	2.22	-	-	-	-	-	-	-	
Bid Quantity: Painted Pavement Markings, Waterborne or Solvent-Based																								
Bid Quantity: Painted Pavement Markings, Highbuild Waterborne																								
Bid Quantity: Wet Retroreflective Removable Tape Markings																								
Bid Quantity: Pavement Markings Removed																								
NOTE: All conflicting Waterborne/Solvent Paint pavement markings on the final pavement surface shall be removed by high pressure water blasting. Grinding is not allowed on the final pavement or bridge surface.																								

PAVEMENT MARKING SYMBOLS AND LEGENDS

See PM Series

Road Identification	Location																SCHOOL	XING	STOP	AHEAD	ONLY	BIKE	LANE	EXIT	Remarks	
	Station	Side	STAW	RTAW	LTAW	CSRW	CSLW	CSTW	CRLW	FERW	LLRW	RLRW	RRCW	BLSW	WCSW	WPSB	SCLW	XNGW	STPW	AHDW	ONLW	BIKW	LANW	XITW		
Ramp B	2593+11.9	RT		x																					High-Build Waterborne Div.(1)	
Ramp B	2593+12.5	RT		x																					High-Build Waterborne Div.(1)	
Ramp B	2593+86.7	RT		x																					High-Build Waterborne Div.(1)	
Ramp B	2593+87.5	RT		x																					High-Build Waterborne Div.(1)	
Ramp B	2593+46.6	RT																				x			High-Build Waterborne Div.(1)	
Ramp B	2593+46.4	RT																				x			High-Build Waterborne Div.(1)	
Ramp B	2593+94.7	LT																				x			High-Build Waterborne Div.(1)	
Ramp B	2593+94.4	LT																				x			High-Build Waterborne Div.(1)	
Ramp B	2593+60.6	LT			x																				High-Build Waterborne Div.(1)	
Ramp B	2593+60.0	LT			x																				High-Build Waterborne Div.(1)	
Ramp B	2594+35.3	LT			x																				High-Build Waterborne Div.(1)	
Ramp B	3594+35.1	LT			x																				High-Build Waterborne Div.(1)	
RAMP A	1497+27.9	RT		x																					High-Build Waterborne Div.(1)	
RAMP A	1497+69.1	RT																				x			High-Build Waterborne Div.(1)	
RAMP A	1497+28.4	RT																				x			High-Build Waterborne Div.(1)	
RAMP A	1496+87.7	RT			x																				High-Build Waterborne Div.(1)	
			TOTAL	5	5																	6				

110-1  
08-01-08

**REMOVAL OF PAVEMENT**

Refer to Tabulation 102-5

\* Not a Bid Item

Begin Station	End Station	Pavement Type	Area	Saw Cut*	Intakes and Utility Accesses	Remarks
			SY	LF	No.	
I-74						
6803+69.1	6808+25.0	PCC	1449.0			Temporary Median Bypass Pavement Div.(1)
6808+25.0	6837+00.0	HMA	1842.0			Temporary Median Pavement Div.(1)
6811+91.9	6837+00.0	HMA	15315.3			Div.(1)
I-74EXITRAMP						
6812+44	6813+91.0	Detour	691.0			Div.(1)
State Street						
	SB Ent	PCC	1176.0	463.2		Div. (1)
	E of 14th		1737.3	99.3		Div. (1)
14th Street						
	EX Ramp D		2138.9			Div. (1)
	Temp Ramp D		387.7			Div. (1)
Loop						
	Temp Loop		485.9			Div. (1)
	EX Loop		1456.6			Div. (1)
TOTAL			26679.7	562.5		

110-15  
10-16-12

**REMOVAL OF INTAKES AND UTILITY ACCESSES**

Location/Description	Type	No.	Remarks
6803+50,99'lt TM205	Concrete Apron		Div. (1)
TM202	Intakes		Div. (1)
TM203	Intakes		Div. (1)
TM204	Intakes		Div. (1)

110-14  
04-16-13

**SANITARY OR STORM SEWER ABANDONMENT OR REMOVAL**

\* Not a bid item

Location/Description	Sanitary or Storm Sewer	Abandonment, Plug Only or Abandonment, Plug and Fill or Removal	Length of Pipe		Fill Material*	Remarks
			≤ 36 inch diameter	> 36 inch diameter	Flowable Mortar or CLSM	
			LF	LF	CY	
6801+00, 94' LT - 37' LT	Storm Sewer	Removal	57			Div. (1)
6803+75, 75' LT - 6803+92, 17' LT	Storm Sewer	Removal	57			Div. (1)
6803+92 - 6804+98	Storm Sewer	Removal	99			Div. (1)
6804+98 - 6807+01	Storm Sewer	Removal	196			Div. (1)
6826+98 - 6832+98	Storm Sewer	Removal	602			Div. (1)
6835+97 - 6837+88	Storm Sewer	Removal	192			Div. (1)
6798+54-6800+96	Storm Sewer	Removal		244		Div.(1)
TOTAL			1203	244		

### SHOULDERS

- ① Lane(s) to which the shoulder is adjacent.
- ② Bid Item
- ③ Applies only for Paved Shoulders constructed on project with existing granular shoulders.
- ④ Does not include shrink.

Calculations assume a HMA unit weight (lbs/cf) of 0, a Special Backfill unit weight (lbs/cf) of 140, and a Granular Shoulder unit weight (lbs/cf) of 140.

Road Identification	Direction Of Traffic	Location			Quantities																Remarks		
		Station to Station		Side	P	G	L	Class 13 ③ Excavation Widening		HMA Base Widening ③		Hot Mix Asphalt		Paved Shoulder	Reinforced Paved Shoulder	Special Backfill		Modified Subbase	Granular Shoulder			Earth Shoulder Construction	
		FT	FT	FT	FT	FT	FT	CY ②	TON ②	TON/STA	TON	TON/STA	SY ②	SY ②	TON ②	TON/STA	CY ②	TON ②	TON/STA	STA ②		CY ④	
RAMP C	S	3591+15.5	3594+25.3	RT	11.6		309.8						354.9	354.9			118.3					Div.(1) Reinforced Paved Shoulder (Modified)	
RAMP A	S	1504+28.5	1510+90.3	RT	11.6		661.8					826.6	826.6			275.5						Div.(1) Reinforced Paved Shoulder For 44" Concrete Barrier	
												TOTAL	1181.6		Total	393.9							

**SURVEY SYMBOLS**

	Interstate Highway Symbol		Septic Tank
	U.S. Highway Symbol		Cistern
	Iowa Highway Symbol		L.P. Gas Tank (No Footing)
	County Road Highway Symbol		Underground Storage Tank
	Evergreen Tree		Latrine
	Deciduous Tree		Luminaire
	Fruit Tree		Traffic Signal
	Shrub (Bushes)		Traffic Signal with Luminaire
	Timber		Telephone Pedestal
	Hedge		Television Pedestal
	Stump		Telephone Pole
	Swamp		Telephone Pole (Second Company)
	Rock Outcrop		Telephone Pole (Third Company)
	Broken Concrete		Telephone Pole (Fourth Company)
	Revetment (Rip Rap)		Telephone Pole (Fifth Company)
	Cemetery		Power Pole
	Grave		Power Pole (Second Company)
	Cave		Power Pole (Third Company)
	Sink Hole		Power Pole (Fourth Company)
	Board Fence		Power Pole (Fifth Company)
	Chain Link or Security Fence		Electrical Highline Tower (Metal or Concrete)
	Wire Fence		Telephone Riser Pole
	Terrace		Power Riser Pole
	Earth Dam or Dike (Existing)		Telegraph Pole
	Earth Dam or Dike (Proposed)		Satellite TV Dish
	Tile Outlet		Guardrail (Beam or Cable)
	Edge of Water		Guard Post (one or two)
	Existing Drainage		Guard Post (over two)
	Proposed Drainage		Filler Pipe
	Right of Way Rail or Lot Corner		Gas Valve
	Concrete Monument		Water Valve
	Well		Speed Limit Sign
	Windmill		Mile Marker Post
	Beehive Intake		Sign
	Existing Intake		Water Hook Up
	Proposed Intake		Radio Tower
	Existing Utility Access (Manhole)		Electric Box
	Proposed Utility Access (Manhole)		Traffic Signal Control Box
	Fire Hydrant		Rail Road Signal Control Box
	Water Hydrant (Rural)		Telephone Switch Box

**TABULATION OF UTILITIES**

102-13A  
10-29-02

CENTRAL SCOTT TELEPHONE: Fiber Optics  
 McLEOD USA: Fiber Optics  
 QWEST COMMUNICATIONS: Fiber Optics, Telephone Lines  
 AT&T: Fiber Optics  
 MEDIACOM: Fiber Optics, Television  
 BETTENDORF: Fiber Optics  
 IOWA DOT: Fiber Optics, Power Lines  
 MIDAMERICAN ENERGY - Power Lines, Gas  
 BETTENDORF: Sanitary Sewer Line  
 DAVENPORT: Sanitary Sewer Line  
 IA-AMERICAN: Water Line

**PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS (ROAD)**

LINE WORK	Design Color No.		
Green	(2)		Existing Topographic Features and Labels
Blue	(1)		Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)		Existing Utilities
SHADING		Design Color No.	
Yellow	(4)		Highlight for Critical Notes or Features
Red	(3)		Delineates Restricted Areas
Lavender	(9)		Temporary Pavement Shading
Gray, Light	(48)		Proposed Bridge Shading (By Others)
Gray, Med	(80)		Proposed Granular Shading
Gray, Dark	(112)		Proposed Pavement Shading
Brown, Light	(236)		Grading Shading
Tan	(8)		Proposed Sidewalk Shading
Pink	(11)		Proposed Sidewalk Ramp Shading

**PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS (ROAD)**

LINE WORK	Design Color No.		
Green	(2)		Existing Ground Line Profile
Blue	(1)		Proposed Profile and Annotation
Magenta	(5)		Existing Utilities
Blue, Light	(230)		Proposed Ditch Grades, Left
Black	(0)		Proposed Ditch Grades, Median
Rust	(14)		Proposed Ditch Grades, Right

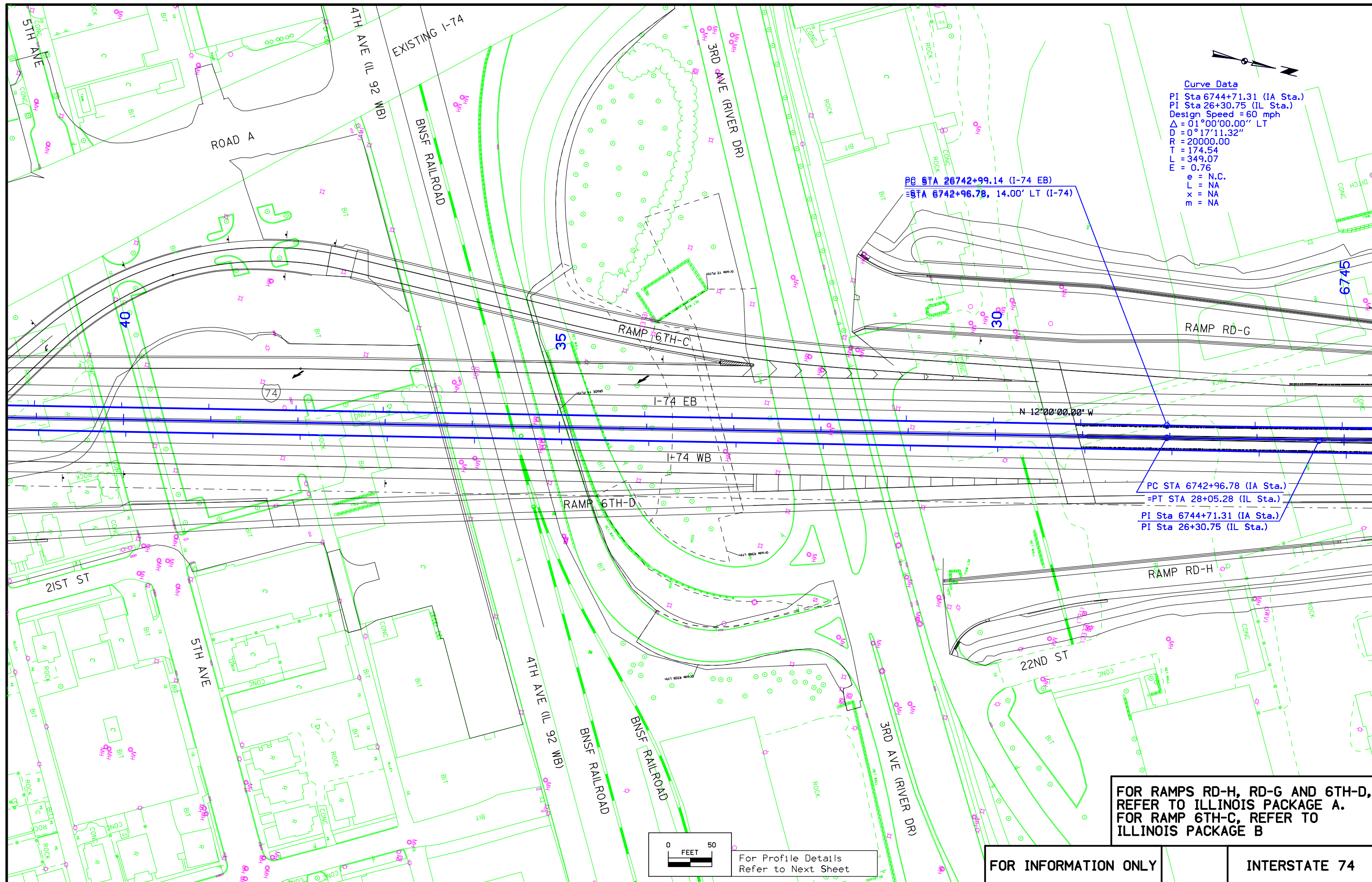
**CONVENTIONAL SIGNS**

	Survey Line
	Section Corner
	Ground Line Intercept
	Saw Cut
	Guardrail

**RIGHT OF WAY LEGEND**

	Proposed Right of Way
	Existing and Proposed Right of Way
	Easement and Existing Right of Way
	Borrow
	Easement (Temporary)
	Easement
	Excess
	Access Control

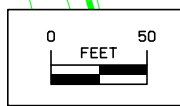
**Legend And Symbol Information Sheet**  
**D, E, F, AND K SHEETS**  
 (Symbols are Typical Only)



Curve Data  
 PI Sta 6744+71.31 (IA Sta.)  
 PI Sta 26+30.75 (IL Sta.)  
 Design Speed = 60 mph  
 $\Delta = 01^{\circ}00'00.00''$  LT  
 $D = 0^{\circ}17'11.32''$   
 $R = 20000.00$   
 $T = 174.54$   
 $L = 349.07$   
 $E = 0.76$   
 e = N.C.  
 L = NA  
 x = NA  
 m = NA

PC STA 26742+99.14 (I-74 EB)  
 =STA 6742+96.78, 14.00' LT (I-74)

PC STA 6742+96.78 (IA Sta.)  
 =PT STA 28+05.28 (IL Sta.)  
 PI Sta 6744+71.31 (IA Sta.)  
 PI Sta 26+30.75 (IL Sta.)



For Profile Details  
 Refer to Next Sheet

FOR RAMPS RD-H, RD-G AND 6TH-D,  
 REFER TO ILLINOIS PACKAGE A.  
 FOR RAMP 6TH-C, REFER TO  
 ILLINOIS PACKAGE B

FOR INFORMATION ONLY

INTERSTATE 74





ILLINOIS JURISDICTION IOWA JURISDICTION

BEGIN PAVEMENT MARKING, TRAFFIC CONTROL, LIGHTING, AND ITS CONSTRUCTION. BRIDGE CONSTRUCTION BY OTHERS.

PT STA 26752+05.69 (I-74 EB)  
=STA 6752+03.50, 21.78' LT (I-74)

Curve 21003 (I-74 EB)  
PI Sta 26747+52.49  
 $\Delta = 2^\circ 35' 56.05''$  (LT)  
D =  $0^\circ 17' 12.05''$   
R = 19,986.00'  
T = 453.35'  
L = 906.55'  
E = 5.14'  
e = N.C.  
L = NA  
x = NA  
m = NA

Curve 21005 (I-74 EB)  
PI Sta 26758+58.62  
 $\Delta = 1^\circ 35' 56.05''$  (RT)  
D =  $0^\circ 17' 11.32''$   
R = 20,000.00'  
T = 279.08'  
L = 558.12'  
E = 1.95'  
e = N.C.  
L = NA  
x = NA  
m = NA

PI STA 26758+58.62 (I-74 EB)  
=STA 6758+56.18, 40.00' LT (I-74)

PC STA 26755+79.54 (I-74 EB)  
=STA 6755+77.21, 32.21' LT (I-74)

EQUATION:  
STA. 25+35.00 (IL I-74)  
= STA. 6745+67.06 (IA I-74)

PT Sta 6746+45.84 (IA Sta.)  
=PC Sta. 24+56.21 (IL Sta.)

RAMP RD-G

I-74 EB

I-74 WB

RAMP RD-H

BIKE TRAIL

PI STA 26747+52.49 (I-74 EB)  
=STA 6747+50.32, 9.13' LT (I-74)

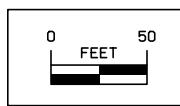
PC STA 16757+83.79 (I-74 WB)  
=STA 6757+86.21, 36.95' RT (I-74)

Curve 21001 (I-74 WB)  
PI Sta 16759+58.32  
 $\Delta = 1^\circ 00' 00''$  (LT)  
D =  $0^\circ 17' 11.32''$   
R = 20,000.00'  
T = 174.54'  
L = 349.07'  
E = 0.76'  
e = N.C.  
L = NA  
x = NA  
m = NA

MISSISSIPPI RIVER

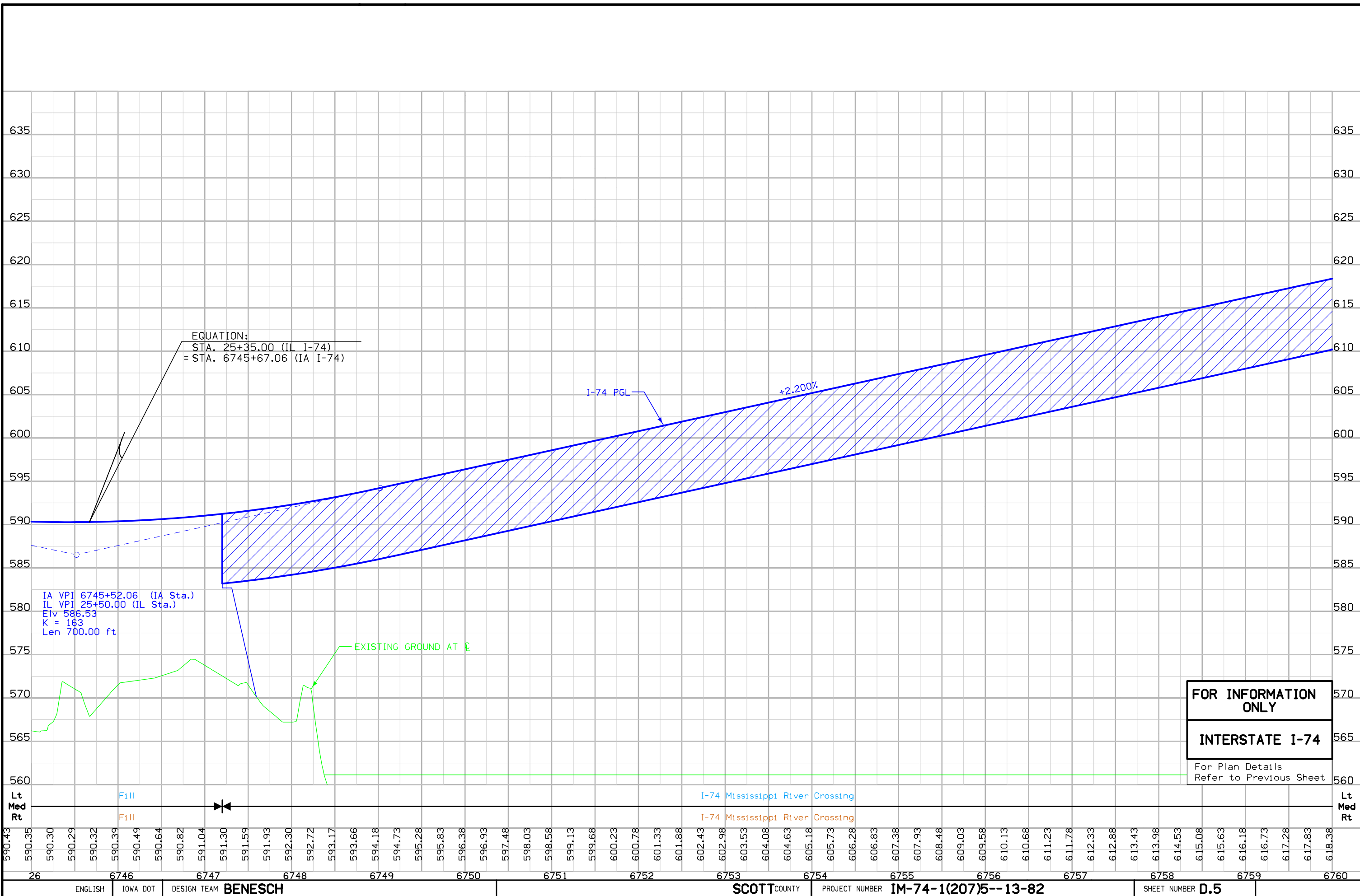
PI STA 16759+58.32 (I-74 WB)  
=STA 6759+60.72, 40.00' RT (I-74)

FOR RAMPS RD-H, RD-G AND 6TH-D, REFER TO ILLINOIS PACKAGE A. FOR RAMP 6TH-C, REFER TO ILLINOIS PACKAGE B



For Profile Details Refer to Next Sheet

INTERSTATE 74





EX. I-74 EB

EX. I-74 WB

PT STA 26761+37.66 (I-74 EB)  
=STA 6761+35.26, 40.00' LT (I-74)

SEE BRFIM-074-1(197)5--05-82  
BRFIM-074-1(198)5--05-82  
BRFIM-074-1(199)5--05-82  
BRFIM-074-1(200)5--05-82

6760

6765

6770

6775

74

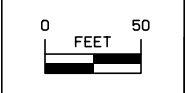
BIKE TRAIL

48'

80'

48'

PT STA 16761+32.85 (I-74 WB)  
=STA 6761+35.26, 40.00' RT (I-74)



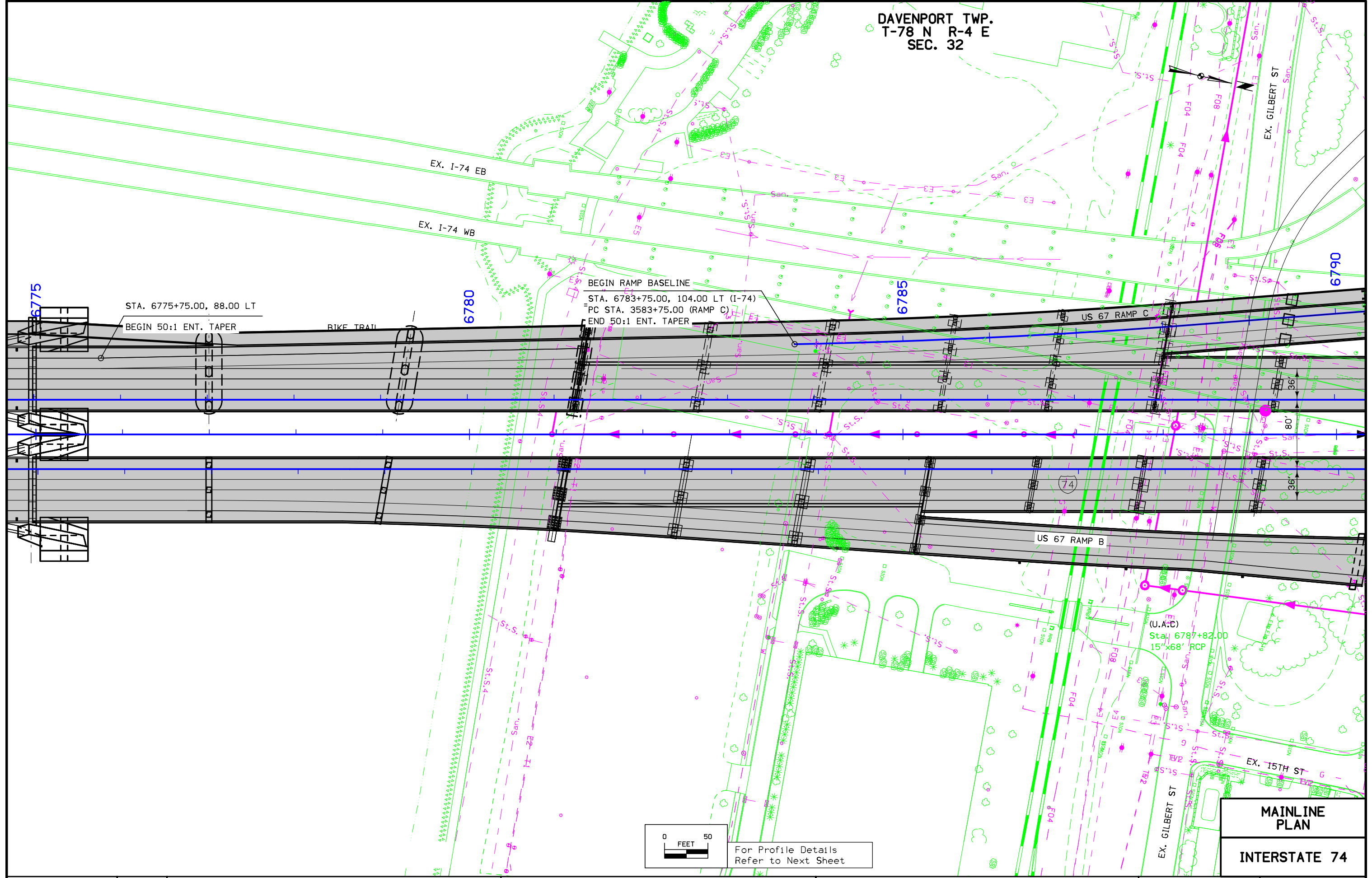
For Profile Details  
Refer to Next Sheet

FOR INFORMATION ONLY

INTERSTATE 74

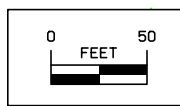


DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 32



STA. 6775+75.00, 88.00 LT  
BEGIN 50:1 ENT. TAPER

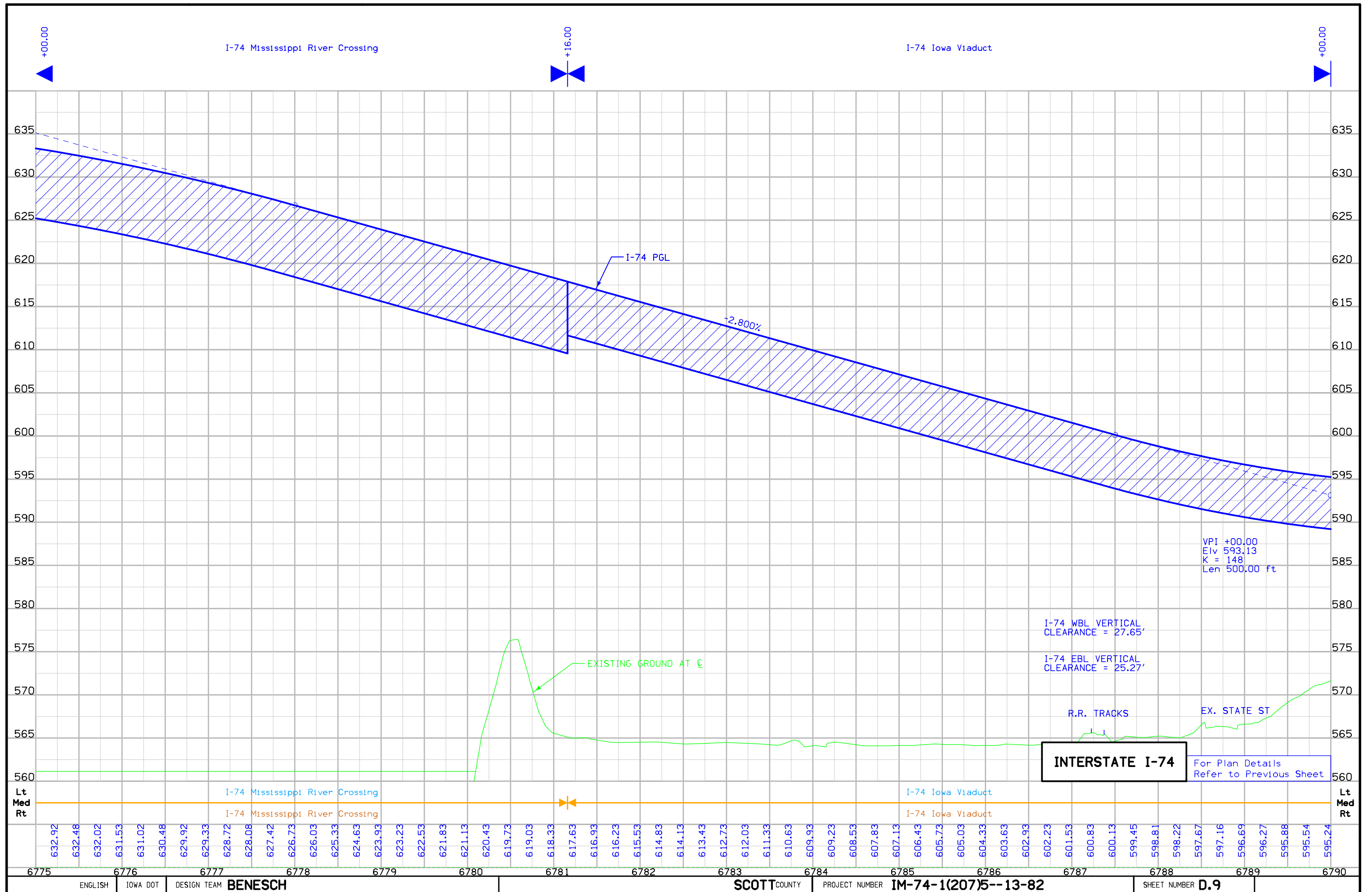
BEGIN RAMP BASELINE  
STA. 6783+75.00, 104.00 LT (I-74)  
PC STA. 3583+75.00 (RAMP C)  
END 50:1 ENT. TAPER



For Profile Details  
Refer to Next Sheet

(U.A:C)  
Sta. 6787+82.00  
15'x68' RCP

**MAINLINE PLAN**  
**INTERSTATE 74**



DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29

Curve 21015 (I-74)  
PI Sta 6801+41.31  
 $\Delta = 03^{\circ}50'58.23''$  LT  
 $D = 0^{\circ}24'33.32''$   
R = 14000.00  
T = 470.48  
L = 940.61  
E = 7.90  
e = N.C.  
L = NA  
x = NA  
m = NA

Curve 21017 (I-74 EB)  
PI Sta 26805+14.75  
 $\Delta = 03^{\circ}50'58.22''$  LT  
 $D = 0^{\circ}24'33.32''$   
R = 14000.00  
T = 470.48  
L = 940.61  
E = 7.90  
e = N.C.  
L = NA  
x = NA  
m = NA

STA. 6804+58.53  
BEGIN PROPOSED PAVEMENT CONSTRUCTION  
BRIDGE APPROACH PAVEMENT BY  
BRF IM-074-1(1995)--05-82

US 67 RAMP A  
PC STA. 26800+44.27 (I-74 EB)  
=POC STA. 6800+42.84, 35.07 LT (I-74)

STA. 6803+90.34  
BEGIN PROPOSED MEDIAN  
PAVEMENT CONSTRUCTION

PI STA. 16797+67.87 (I-74 WB)  
=STA. 6797+70.00, 40.35 RT (I-74)

PI Sta 6801+41.31

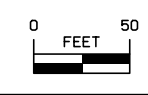
PT STA. 16802+38.00 (I-74 WB)  
=POC STA. 6802+39.05, 19.96 RT (I-74)

PI STA. 26805+14.75 (I-74 EB)  
=STA. 6805+13.74, 14.66 LT (I-74)

PC STA. 16792+97.39 (I-74 WB)  
=POC STA. 6792+99.80, 40.00 RT (I-74)

POT STA. 6802+94.47 (I-74)  
=POT STA. 14+35.64 (MISSISSIPPI BLVD)

Curve 21016 (I-74 WB)  
PI Sta 16797+67.87  
 $\Delta = 03^{\circ}50'58.24''$  LT  
 $D = 0^{\circ}24'33.32''$   
R = 14000.00  
T = 470.48  
L = 940.61  
E = 7.90  
e = N.C.  
L = NA  
x = NA  
m = NA



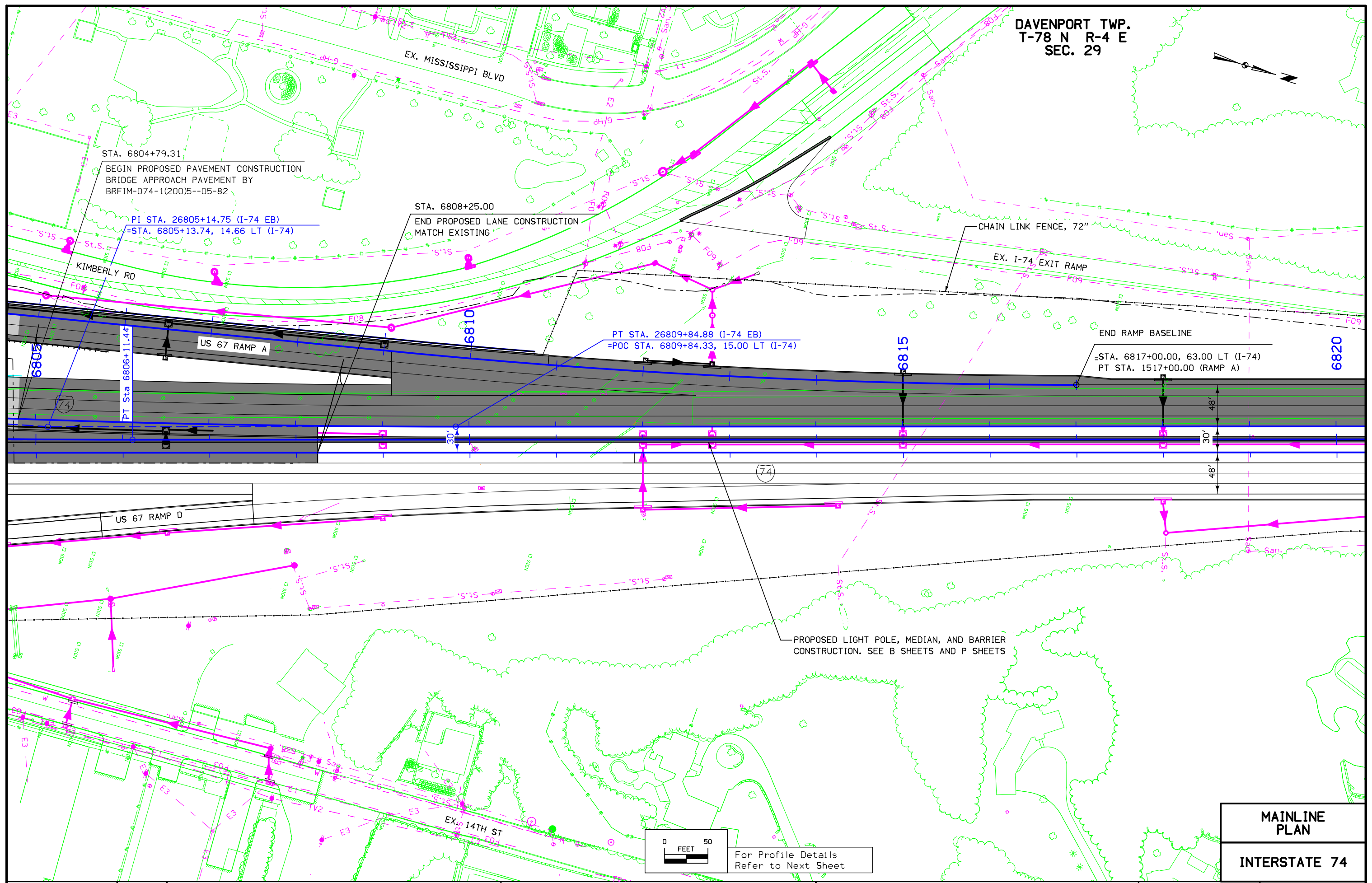
For Profile Details  
Refer to Next Sheet

MAINLINE  
PLAN  
INTERSTATE 74





DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29



STA. 6804+79.31  
BEGIN PROPOSED PAVEMENT CONSTRUCTION  
BRIDGE APPROACH PAVEMENT BY  
BRFIM-074-1(200)5--05-82

PI STA. 26805+14.75 (I-74 EB)  
=STA. 6805+13.74, 14.66 LT (I-74)

STA. 6808+25.00  
END PROPOSED LANE CONSTRUCTION  
MATCH EXISTING

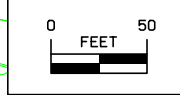
CHAIN LINK FENCE, 72"

EX. I-74 EXIT RAMP

PT STA. 26809+84.88 (I-74 EB)  
=POC STA. 6809+84.33, 15.00 LT (I-74)

END RAMP BASELINE  
=STA. 6817+00.00, 63.00 LT (I-74)  
PT STA. 1517+00.00 (RAMP A)

PROPOSED LIGHT POLE, MEDIAN, AND BARRIER  
CONSTRUCTION. SEE B SHEETS AND P SHEETS



For Profile Details  
Refer to Next Sheet

**MAINLINE  
PLAN**  
**INTERSTATE 74**

+00.00

+00.00

Stage 4-2  
 CL 10 Cut = 433 CY  
 433 CY

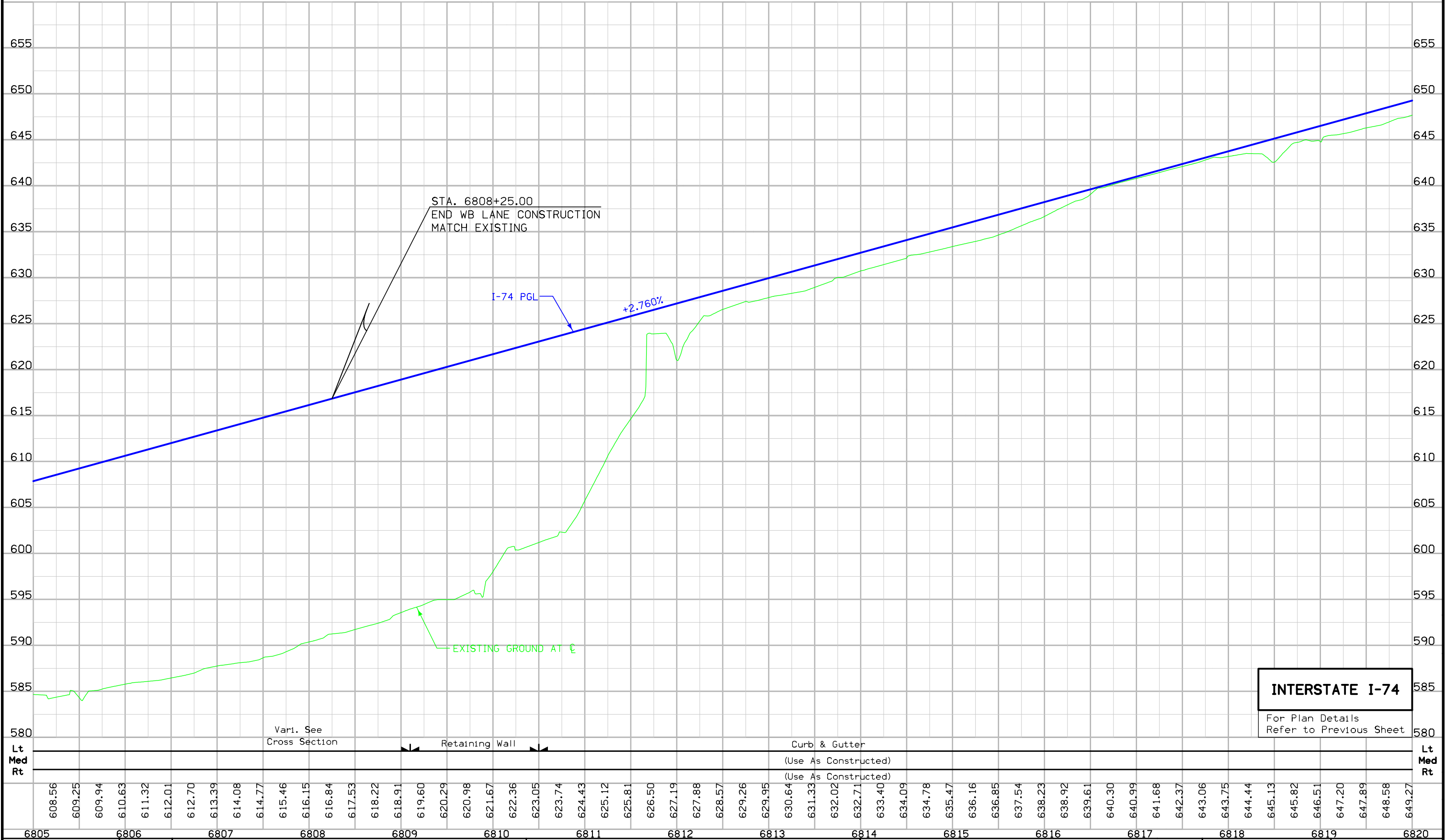
Stage 5-1  
 CL 10 Cut = 1173 CY  
 From Stockpile = 57,699 CY  
 From I-74 STA 6836+00.00 = 469 CY  
 59,341 CY

Stage 5-2  
 CL 10 Cut = 7 CY  
 Borrow = 15 CY  
 22 CY

Stage 4-2  
 Fill + 30% = 9 CY  
 To Stockpile = 424 CY  
 433 CY

Stage 5-1  
 Fill + 30% = 59,341 CY  
 59,341 CY

Stage 5-2  
 Fill + 30% = 22 CY  
 22 CY



6805	6806	6807	6808	6809	6810	6811	6812	6813	6814	6815	6816	6817	6818	6819	6820																																												
608.56	609.25	609.94	610.63	611.32	612.01	612.70	613.39	614.08	614.77	615.46	616.15	616.84	617.53	618.22	618.91	619.60	620.29	620.98	621.67	622.36	623.05	623.74	624.43	625.12	625.81	626.50	627.19	627.88	628.57	629.26	629.95	630.64	631.33	632.02	632.71	633.40	634.09	634.78	635.47	636.16	636.85	637.54	638.23	638.92	639.61	640.30	640.99	641.68	642.37	643.06	643.75	644.44	645.13	645.82	646.51	647.20	647.89	648.58	649.27

ENGLISH IOWA DOT DESIGN TEAM **BENESCH** SCOTT COUNTY PROJECT NUMBER **IM-74-1(207)5--13-82** SHEET NUMBER **D.13**

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29

Curve 21020 (I-74)  
PI Sta 6832+57.30  
 $\Delta = 04^{\circ}39'39.15''$  RT  
D =  $0^{\circ}14'56.80''$   
R = 23000.00  
T = 936.01  
L = 1871.00  
E = 19.04  
e = N.C.  
L = NA  
x = NA  
m = NA

Curve 21022 (I-74 EB)  
PI STA. = 26832+58.47  
 $\Delta = 4^{\circ}39'39''$  (RT)  
D =  $0^{\circ}14'56''$   
R = 23,015.00'  
T = 936.62'  
L = 1,872.22'  
E = 19.05'  
e = N.C.  
L = NA  
x = NA  
m = NA

PC STA. 26823+21.85 (I-74 EB)  
=STA. 6823+21.29, 15.00' LT (I-74)

PI STA. 26832+58.47 (I-74 EB)  
=STA. 6832+56.79, 34.05' LT (I-74)

CHAIN LINK FENCE, 72"

STA. 6825+50.00, 27' LT

EX. KIMBERLY RIDGE RD

END PROPOSED LANE CONSTRUCTION  
MATCH EXISTING

STA. 6831+00.00, 63.00 LT  
BEGIN 40:1 ENT. TAPER

POC STA. 6834+50.52 (I-74)  
POT STA. 1813+07.16 (LINCOLN RD)

PI Sta 6832+57.30

6820

6825

6830

6835

EX. I-74 EXIT RAMP

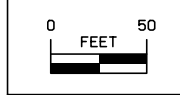
PROPOSED LIGHT POLE, MEDIAN, AND BARRIER  
CONSTRUCTION. SEE B SHEETS AND P SHEETS

STA. 6833+90.00  
MATCH EXISTING  
MEDIAN AND BARRIER

PC STA. 16823+20.73 (I-74 WB)  
=STA. 6823+21.29, 15.00' RT (I-74)

PI STA. 16832+56.13 (I-74 WB)  
=STA. 6832+56.79, 4.03' LT (I-74)

Curve 21021 (I-74 WB)  
PI STA. = 16832+56.13  
 $\Delta = 4^{\circ}39'39''$  (RT)  
D =  $0^{\circ}14'57''$   
R = 22,985.00'  
T = 935.40'  
L = 1,869.78'  
E = 19.03'  
e = N.C.  
L = NA  
x = NA  
m = NA



For Profile Details  
Refer to Next Sheet

**MAINLINE PLAN**  
**INTERSTATE 74**



DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 20



BEGIN RAMP BASE LINE  
STA 6835+00.00 73.00' LT (I-74)  
= PT STA 3535+00.00 (RAMP C)  
END 40:1 ENTRANCE TAPER

STA. 6835+10.00  
MATCH EXISTING  
MEDIAN AND BARRIER

STA. 6837+00.00  
END CONSTRUCTION

PT STA. 26841+94.06 (I-74 EB)  
=STA. 6841+92.28, 15.00' LT (I-74)

PT STA. 16841+90.50 (I-74 WB)  
=STA. 6841+92.28, 15.00' RT (I-74)

PT Sta 6841+92.29

6840

6845

6850

74

EX. I-74 ENT. RAMP

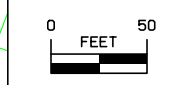
EX. I-74 EXIT RAMP

PROPOSED LIGHT POLE, MEDIAN, AND BARRIER  
CONSTRUCTION. SEE B SHEETS AND P SHEETS

EX. FAIRLANE DR

EX. MEADOW LANE DR

EX. PARKLANE DR



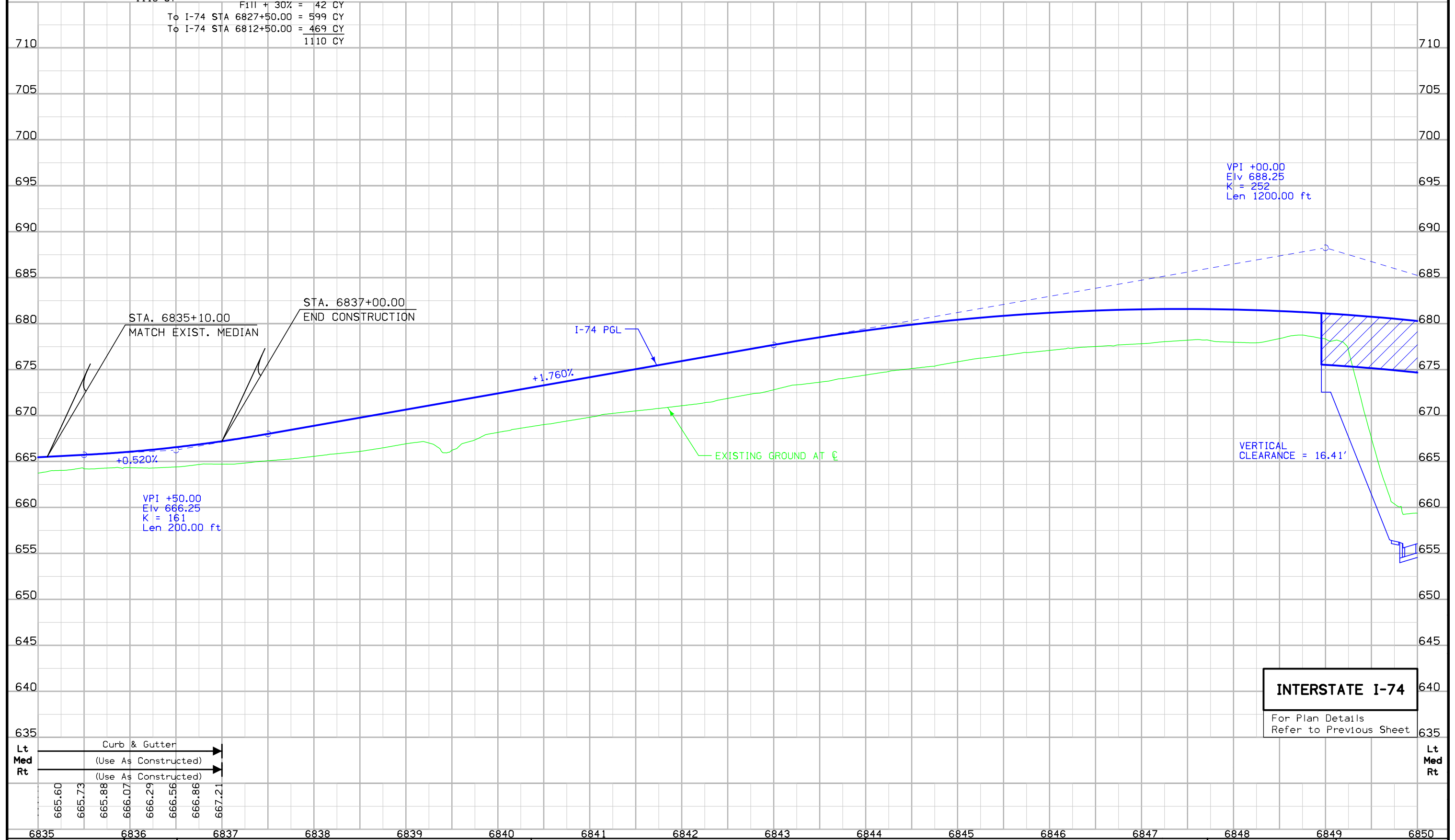
For Profile Details  
Refer to Next Sheet

**MAINLINE  
PLAN**  
**INTERSTATE 74**

Stage 5-1  
CL 10 Cut = 1110 CY

Stage 5-1  
Fill + 30% = 42 CY  
To I-74 STA 6827+50.00 = 599 CY  
To I-74 STA 6812+50.00 = 469 CY  
1110 CY

Middle Rd  
Bridge



**INTERSTATE I-74**  
For Plan Details  
Refer to Previous Sheet

Lt	Curb & Gutter	
Med	(Use As Constructed)	
Rt	(Use As Constructed)	
	665.60	667.21
	665.73	
	665.88	
	666.07	
	666.29	
	666.56	
	666.86	

DATUM INFORMATION

THE DATUM PLANE FOR THIS SURVEY IS RELATIVE TO N.A.V.D. 88 DATUM. IN IOWA BENCHES WERE RUN FROM NGS BENCHMARK "DAVENPORT" TO NGS BENCHMARK "F TO RESET". IN ILLINOIS A BENCH CHECK WAS RUN FROM NGS BENCHMARK "W 52" TO NGS BENCHMARK "Z 52", THEN DATUM WAS CARRIED SOUTH TO THE END OF PROJECT.

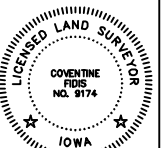
ALL CONTROL POINT COORDINATES SHOWN ARE LOCAL PROJECT PLANE (GROUND) COORDINATES.  
 CONVERSION EQUATION GRID TO GROUND: GROUND COORD = (STATE PLANE - HOLD POINT) 1/GRID FACTOR + HOLD POINT  
 CONVERSION EQUATION GROUND TO GRID: GRID COORD = (GROUND - HOLD POINT) GRID FACTOR + HOLD POINT

HOLD POINT = G021      NORTH      EAST      GRID FACTOR      1/GRID FACTOR  
 580322.54      2455353.37      0.999936506      1.000063498

BENCH MARKS

IOWA BENCHMARKS:

			ELEVATION	NORTHING	EASTING	STATION	OFFSET
No. 500	Sta.	CHISELED "X" IN BOLT E. SIDE CONC. STRUCTURE-----	575.797	N 568688.8797	E 2458216.7809	6781+18.92	161.19' LT.
No. 501	Sta.	CHISELED "X" IN S.W. FLANGE BOLT IN FHYD-----	568.923	N 569456.8395	E 2458524.4416	6787+97.99	311.34' RT.
No. 502	Sta.	CHISELED "X" IN FLANGE BOLT IN WORD "MUELLER" FHYD-----	575.247	N 569737.4808	E 2458179.1280	6791+49.11	38.00' RT.
No. 503	Sta.	CHISELED "X" IN FLANGE BOLT IN WORD "MUELLER" FHYD-----	580.282	N 570811.0288	E 2458144.2367	6801+93.58	255.44' RT.
No. 504	Sta.	CUT "X" IN CONC. LUMINAIRE POLE BASE-----	602.945				
No. 505	Sta.	CUT "X" IN E. END OF CONC. WINGWALL-----	621.930	N 571626.0731	E 2457715.7804	6810+90.27	75.28' RT.
No. 506	Sta.	CUT "X" IN CONC. LUMINAIRE POLE BASE-----	655.749	N 572755.6346	E 2457383.6739	6822+67.60	84.84' RT.
No. 507	Sta.	CUT "X" IN HEADWALL UNDER BRIDGE-----	668.133				
No. 508	Sta.	CUT "X" IN CONC. LUMINAIRE POLE BASE-----	671.518				
No. 509	Sta.	FD. IHC BM ON N. END CONC. WALL-----	677.578				
No. 510	Sta.	CUT "X" IN CONC. LUMINAIRE POLE BASE-----	645.087				
No. 511	Sta.	FD. IHC BM ON N. END CONC. HDWL-----	638.647				
No. 512	Sta.	CUT "X" IN CONC. LUMINAIRE POLE BASE-----	631.703				
No. 513	Sta.	CUT "X" IN TOP OF CONC. F.E.S.-----	649.572				
No. 514	Sta.	FD. IHC BM ON S.E. END CONC. HDWL-----	681.022				
No. 515	Sta.	CHISELED "X" IN FLANGE BOLT IN WORD "MUELLER" FHYD-----	683.991				
No. 516	Sta.	CUT "X" IN CONC. LUMINAIRE POLE BASE-----	686.241				
No. 517	Sta.	CUT "T" IN CONC. LUMINAIRE POLE BASE-----	681.041				
No. 518	Sta.	CUT "T" IN HDWL R.C.B.-----	668.354				
No. 519	Sta.	CUT "X" IN CONC. LUMINAIRE POLE BASE-----	667.743				
No. 520	Sta.	CUT "X" IN CONC. LUMINAIRE POLE BASE-----	646.765				
No. 521	Sta.	CUT "X" IN CONC. LUMINAIRE POLE BASE-----	660.130				
No. 522	Sta.	CUT "X" IN CONC. LUMINAIRE POLE BASE-----	679.620				
No. 523	Sta.	CUT "T" IN CONC. LUMINAIRE POLE BASE-----	700.669				
No. 524	Sta.	CUT "X" IN CONC. LUMINAIRE POLE BASE-----	719.358				
No. 525	Sta.	CUT "T" IN CONC. LUMINAIRE POLE BASE-----	727.605				
No. 526	Sta.	CUT "X" IN CONC. LUMINAIRE POLE BASE-----	731.873				
No. 527	Sta.	SET R.R. SPIKE IN FENCE POST-----	738.163				
No. 528	Sta.	CUT "X" IN CONC. LUMINAIRE POLE BASE-----	733.087				
No. 529	Sta.	FD. IHC BM ON S.E. END CONC. HDWL-----	751.468				
No. 533	Sta.	CITY OF DAVENPORT B.M. BRASS MON IN CONC.-----	711.250				
No. 564	Sta.	CHISELED "□" ON LIGHT POLE FOUNDATION WITH MILE MARKER 1.2-----	701.761				
No. 565	Sta.	CHISELED "□" ON SOUTH SIDE OF LIGHT POLE FOUNDATION-----	687.923				
No. 566	Sta.	CHISELED "□" ON SOUTH SIDE OF MAST ARM FOUNDATION IN CONC. ISLAND-----	710.862				
No. 567	Sta.	CHISELED "□" ON WEST SIDE OF LIGHT POLE FOUNDATION-----	709.702				
No. 568	Sta.	CHISELED "X" ON EAST LEG OF SPRUCE HILL DR. KIMBERLY RD. 1/2 MILE EXIT SIGN-----	652.314				
No. 569	Sta.	CHISELED "X" ON EAST LEG OF KAPLAN UNIVERSITY EXIT 2 SIGN-----	679.946				
No. 570	Sta.	FOUND CUT "X" ON NORTH SIDE OF LIGHT POLE-----	657.126				
No. 571	Sta.	SET CHISELED "X" ON TRAFFIC SIGNAL MAST ARM WITH LIGHT-----	678.869				
No. 572	Sta.	SET CHISELED "X" ON EAST SIDE OF LIGHT POLE FOUNDATION-----	651.912				
No. 588	Sta.	SET CHISELED "X" ON WEST SIDE OF LIGHT POLE FOUNDATION-----	667.029				



COVENTINE FIDIS  
NO. 9174  
IOWA

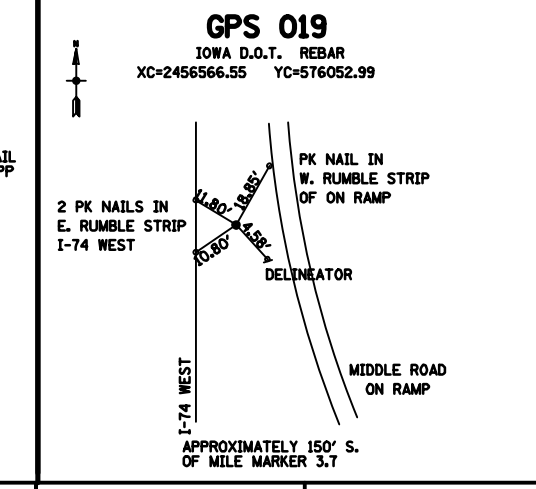
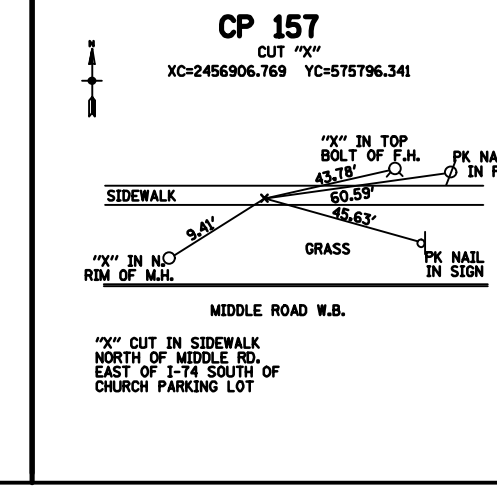
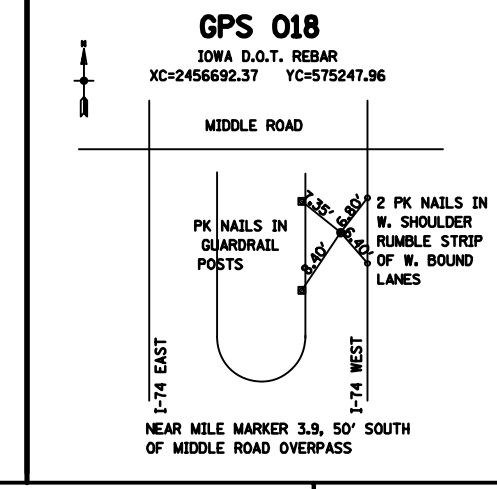
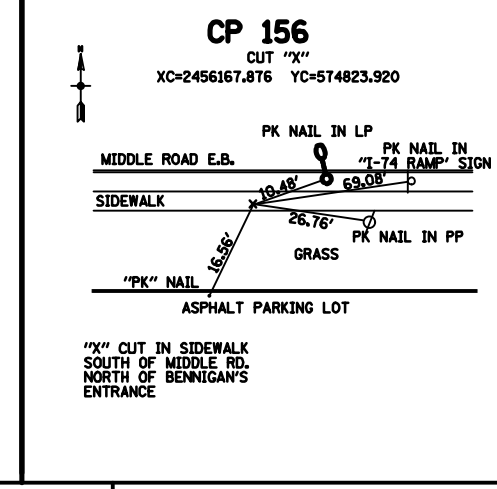
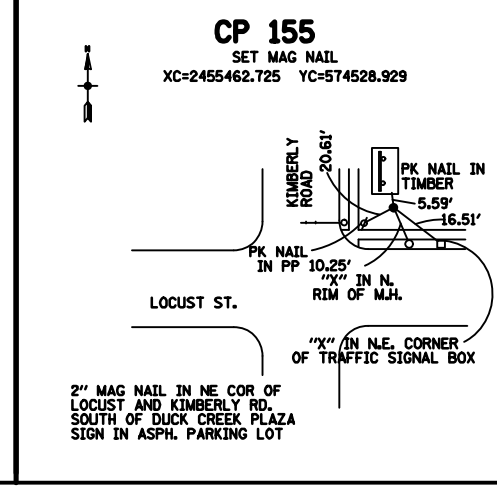
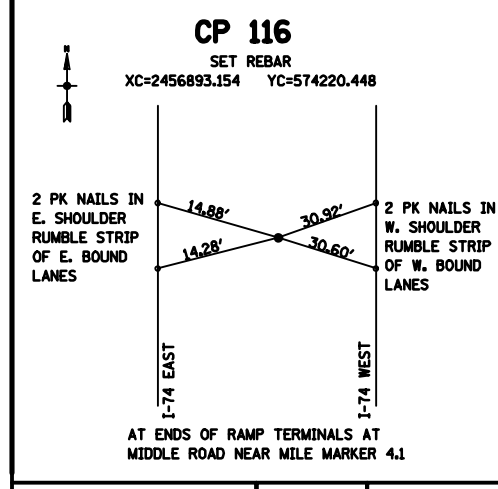
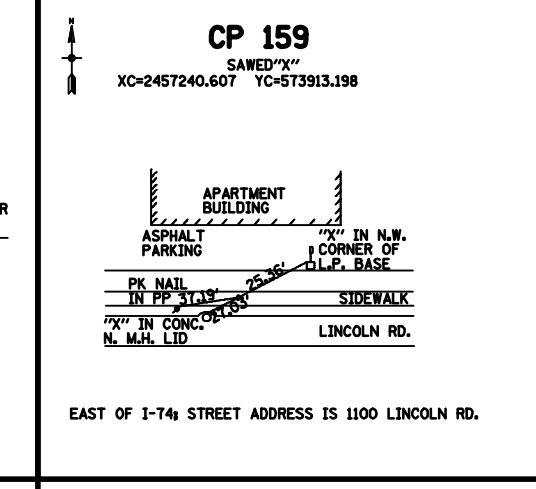
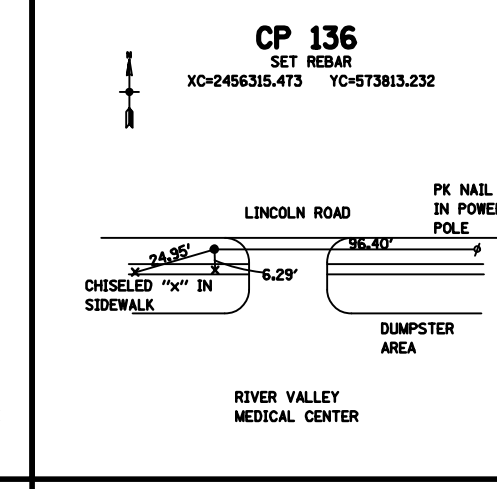
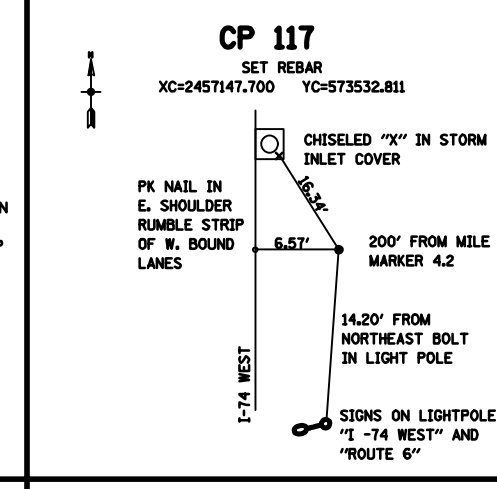
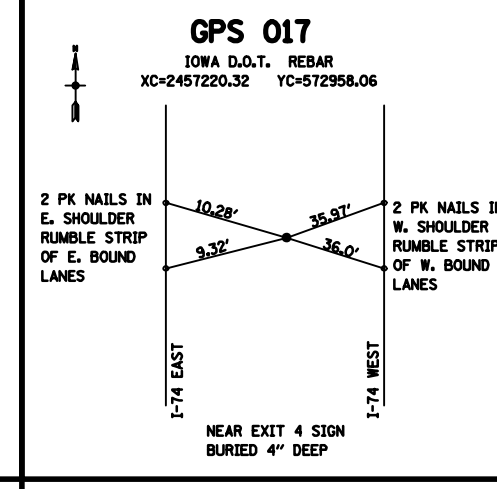
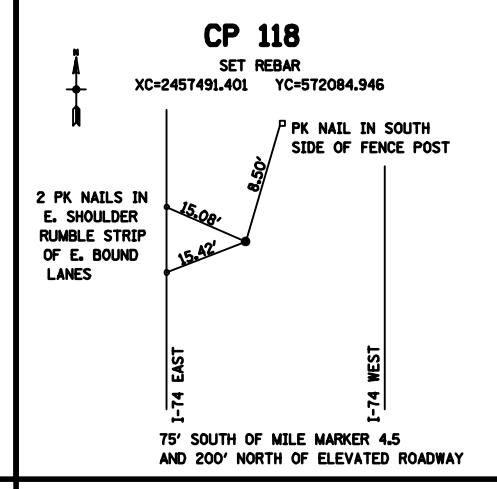
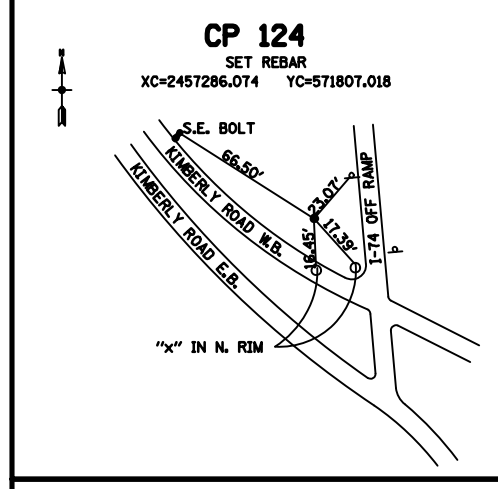
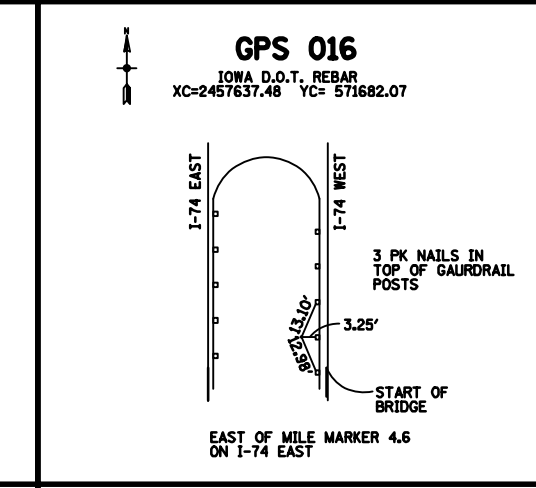
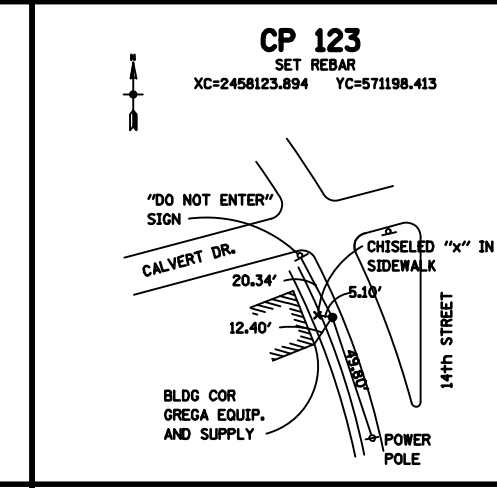
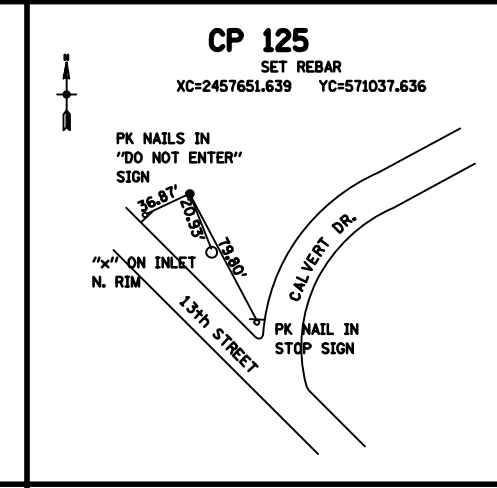
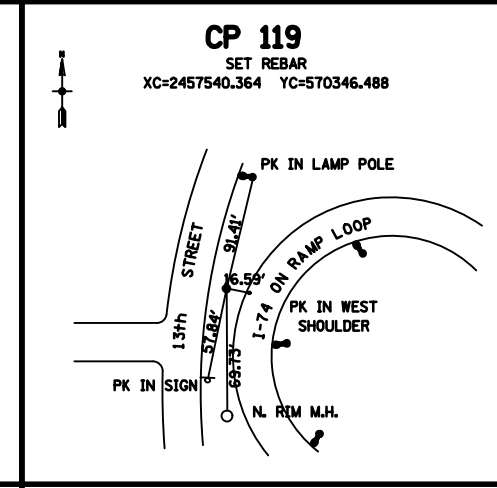
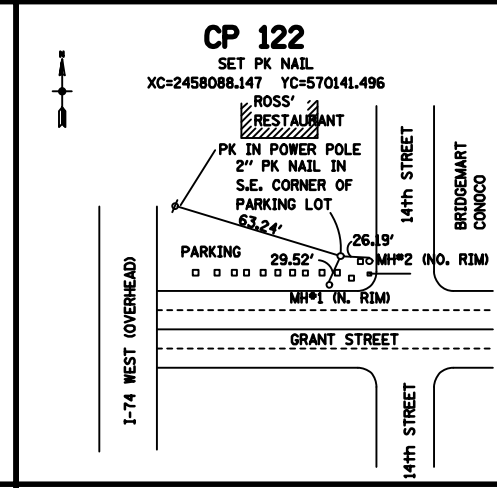
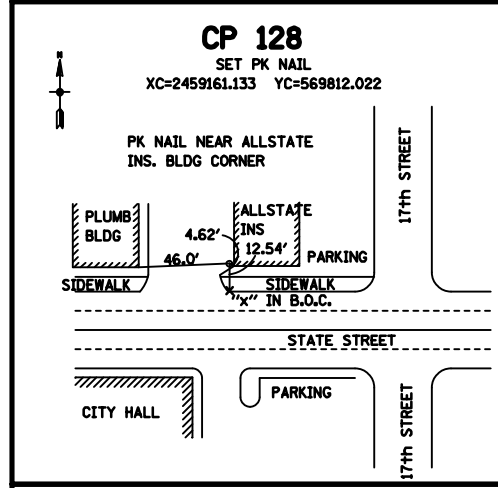
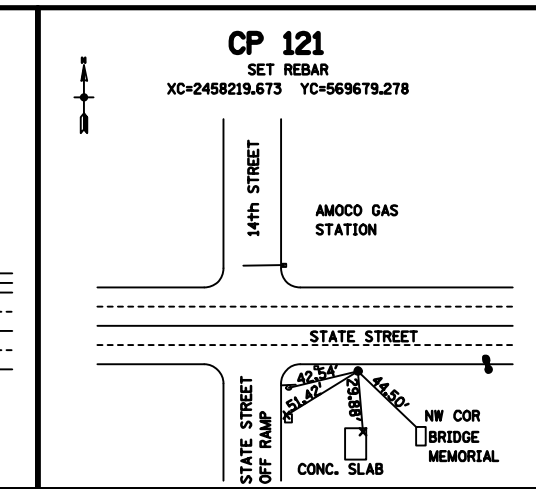
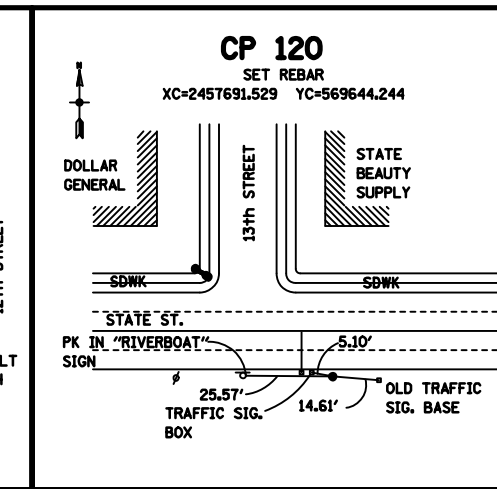
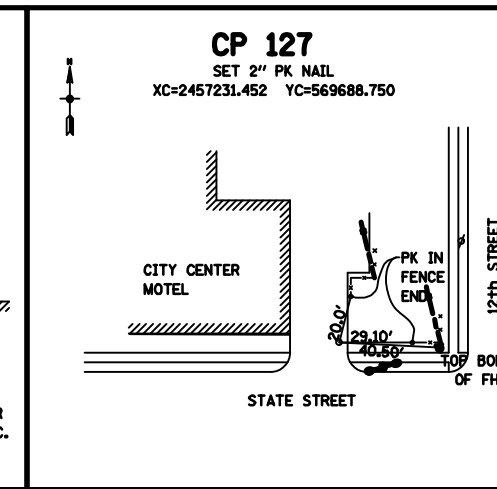
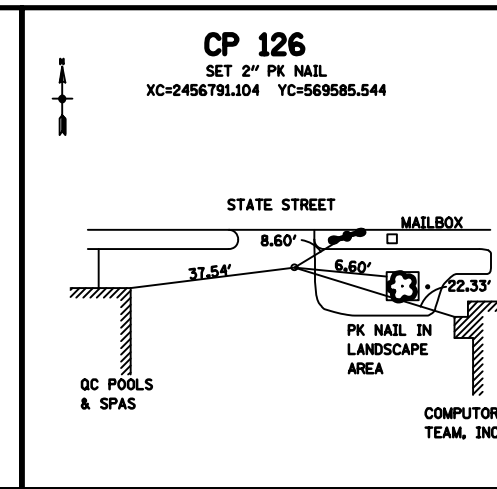
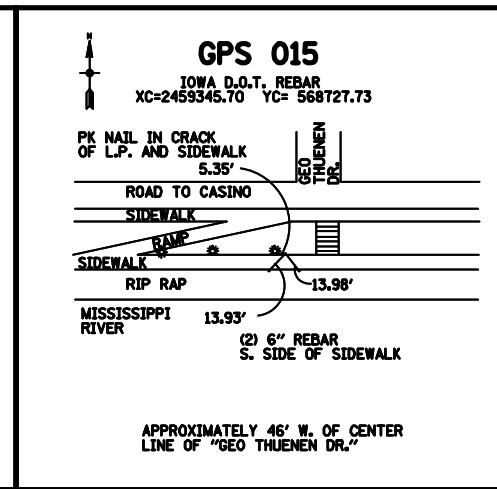
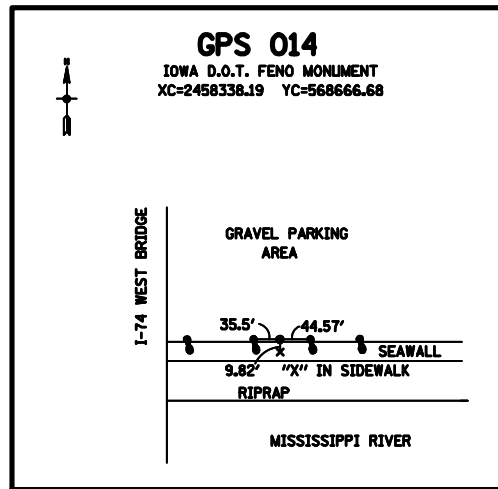
I hereby certify that this plan was prepared by me or under my direct personal supervision and that I am a duly licensed Land Surveyor under the laws of the State of Iowa.

*et al.*

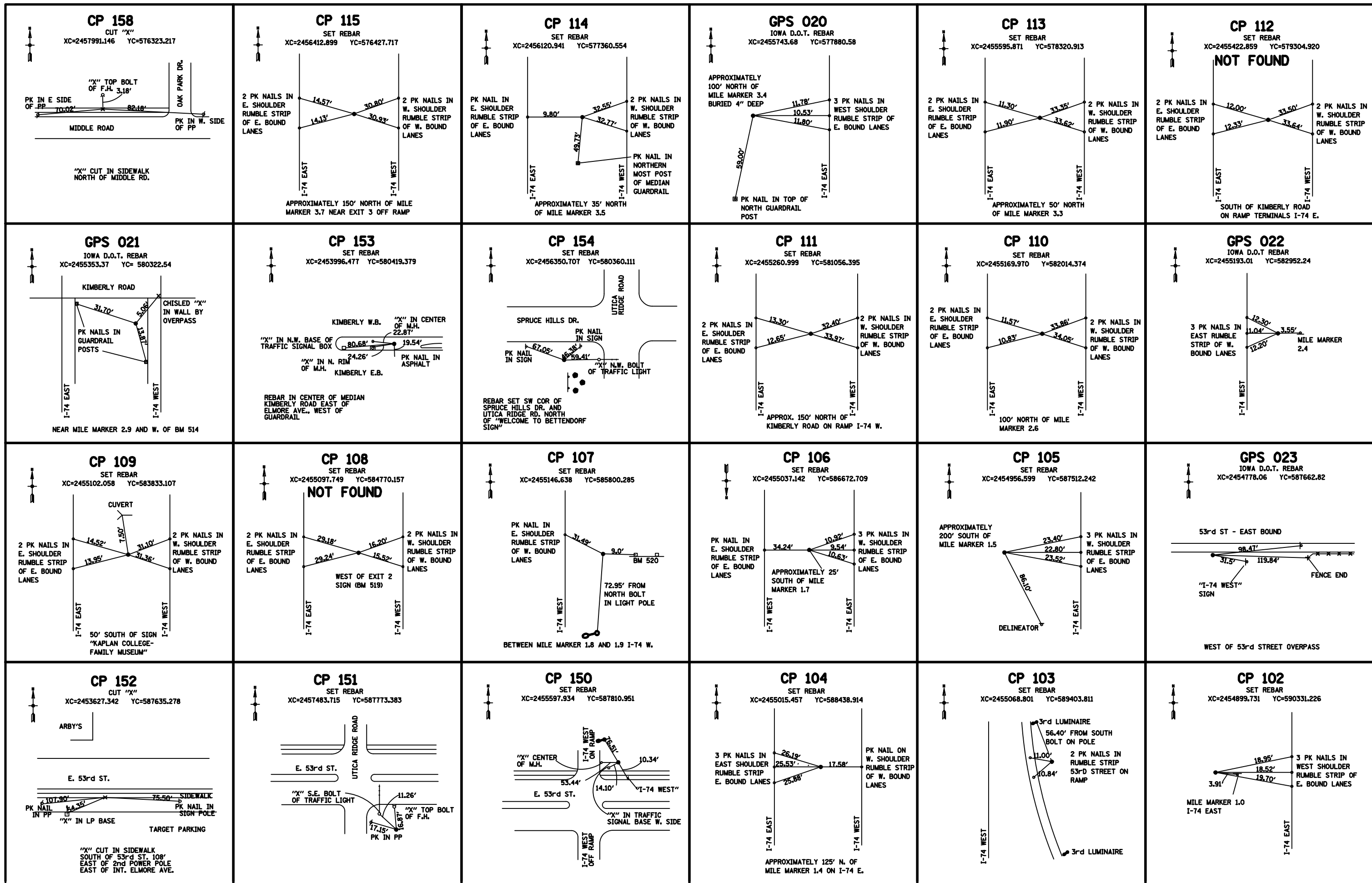
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 License number      09174

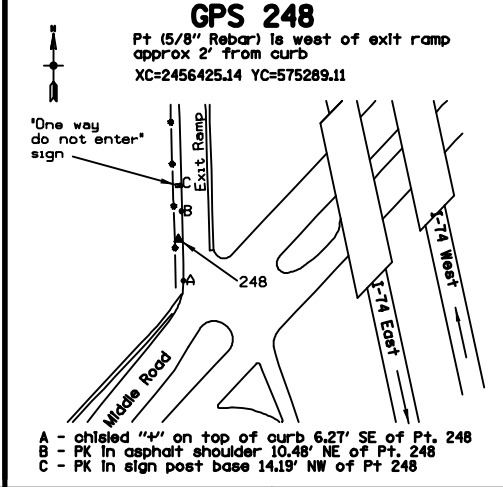
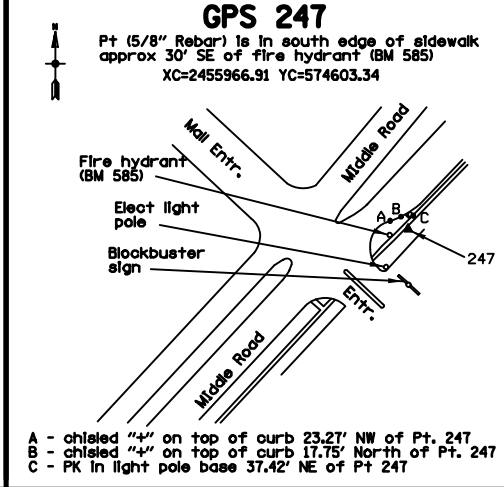
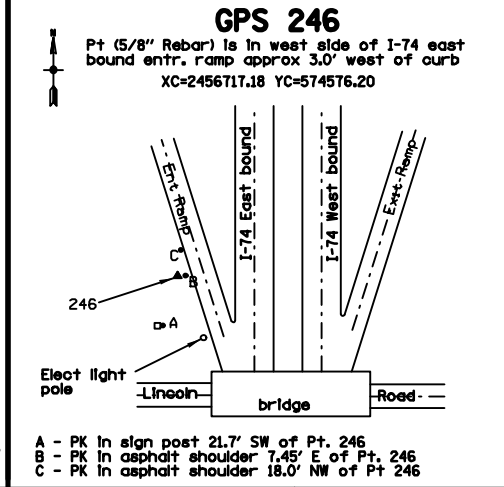
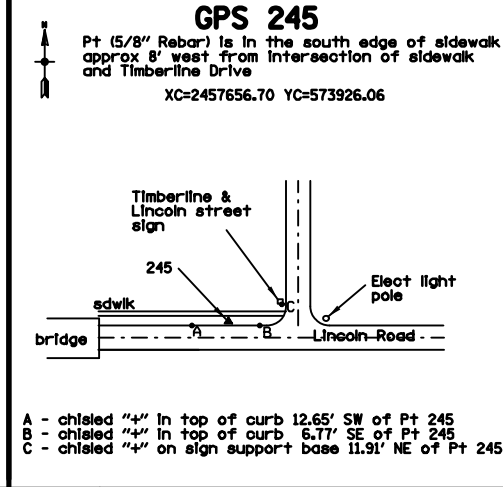
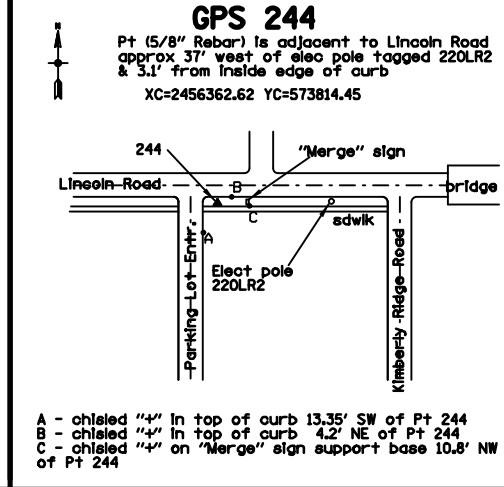
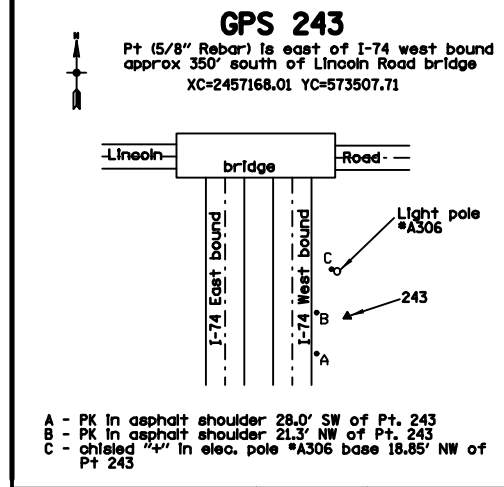
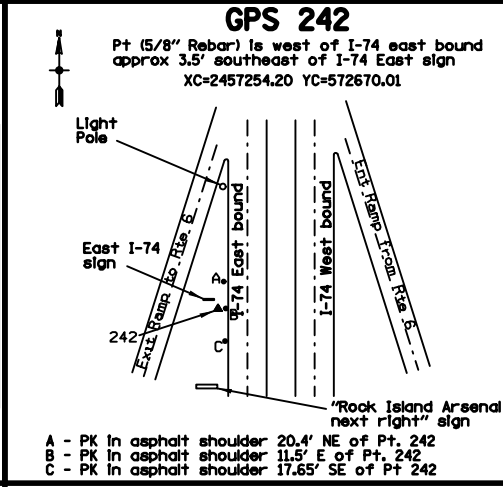
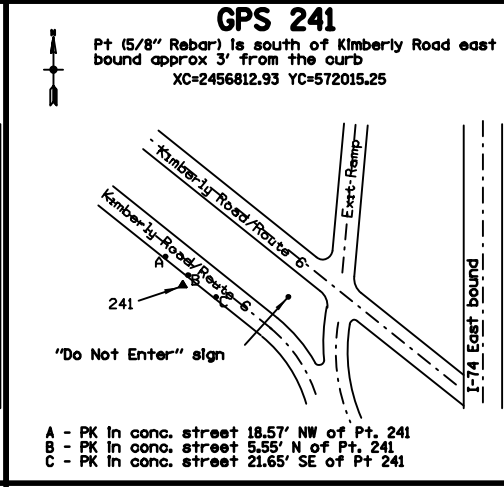
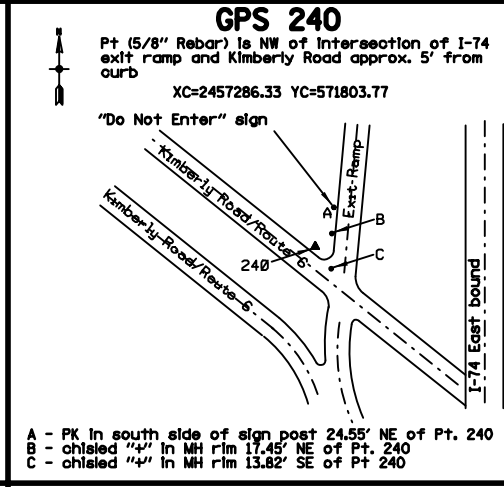
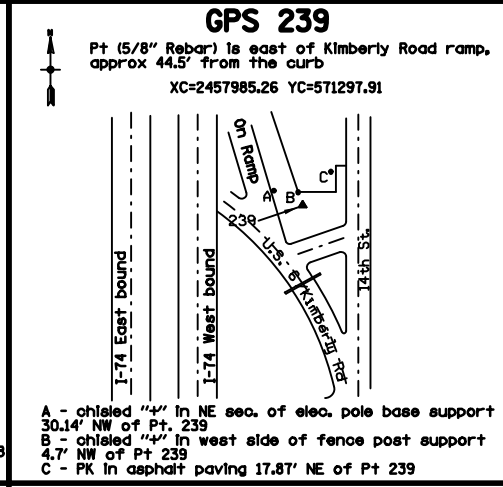
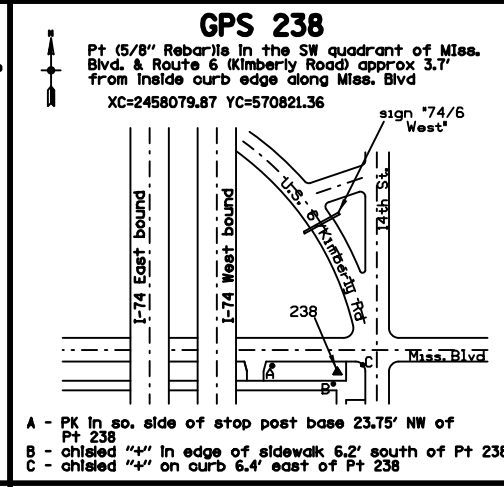
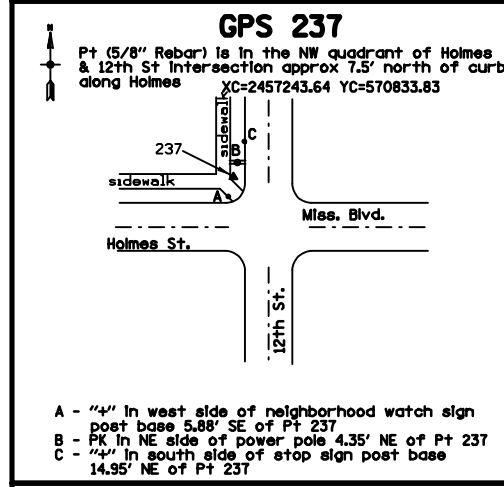
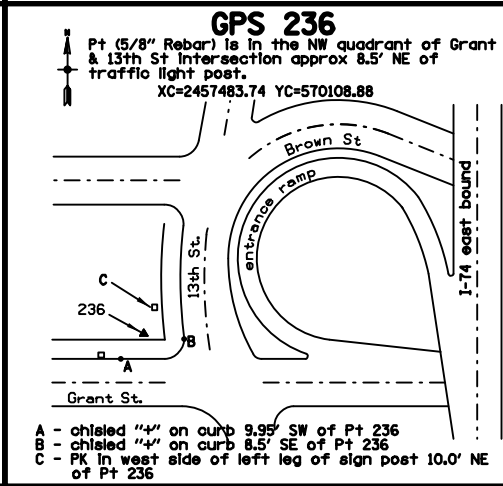
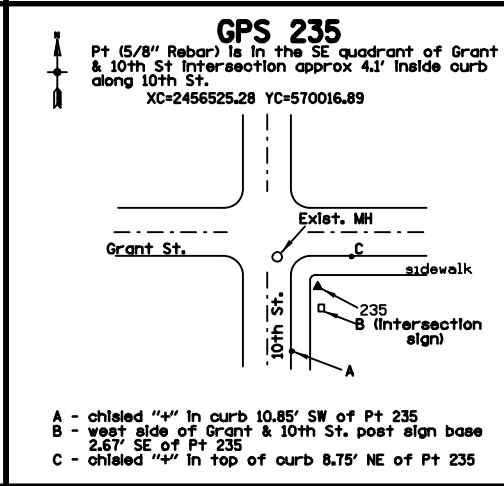
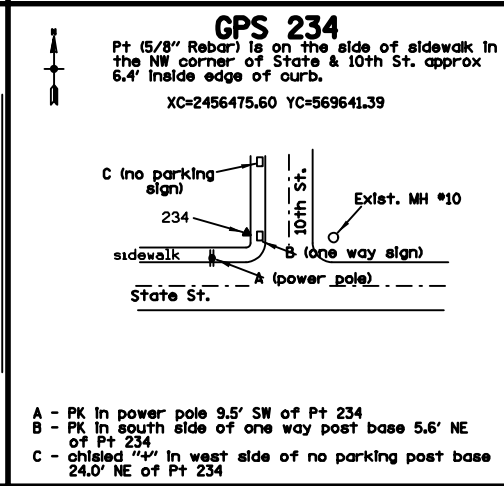
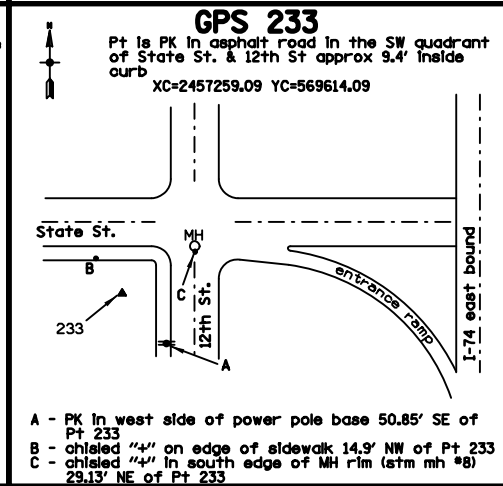
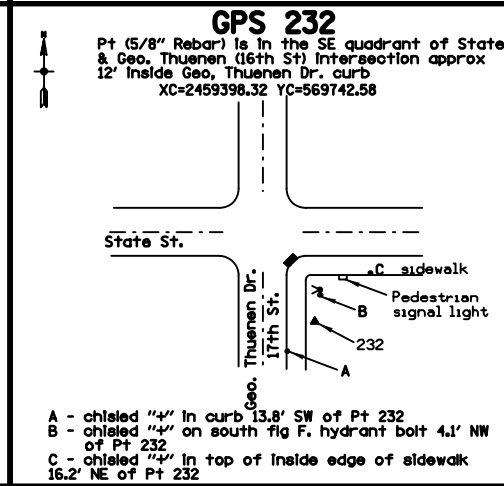
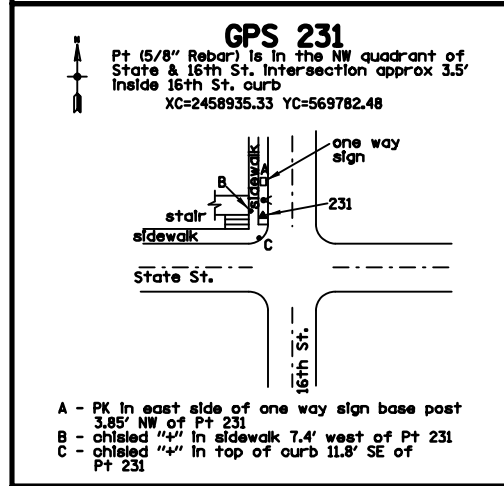
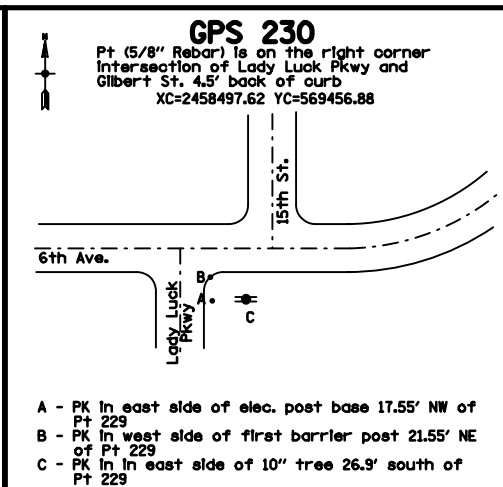
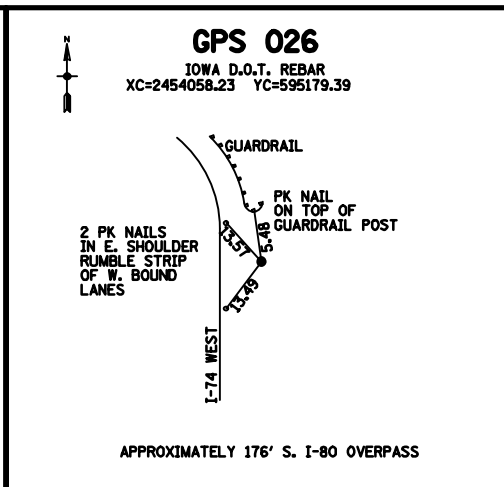
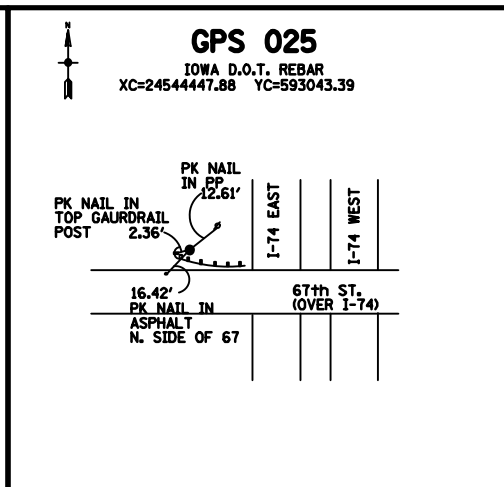
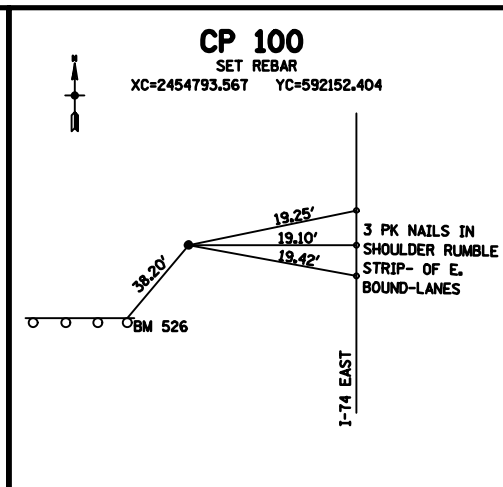
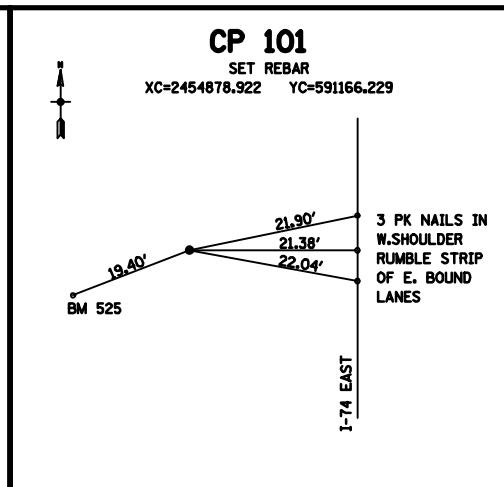
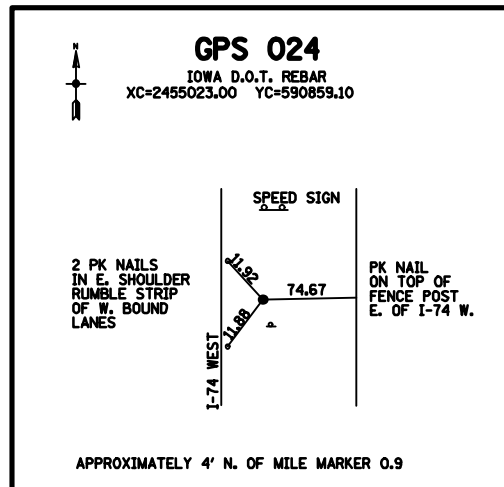
My license renewal date is December, 2012

Pages or sheets covered by this seal: \_\_\_\_\_  
 G.01, G.02, G.03, G.04 & G.05









**GPS 249**  
Pt (5/8" Rebar) is on north edge of sidewalk approx 85' west of stop light  
XC=2456926.95 YC=575652.60

A - PK In light pole support base 16.23' SW of Pt. 249  
B - chisled "+" on top of curb 6.0' NE of Pt. 249  
C - chisled "+" on top of curb 10.45' NE of Pt. 249

**GPS 250**  
Pt (5/8" Rebar) is in asphalt shoulder of I-74 approx 2.5' from guardrail and 20' south of bridge  
XC=2456144.71 YC=577349.39

A - PK In guardrail support 6.73' NW of Pt. 250  
B - PK In asphalt shoulder 5.0' W of Pt. 250  
C - PK In guardrail support 19.3' SW of Pt. 250

**GPS 251**  
Pt (5/8" Rebar) is in left side of exit ramp to Spruce Hills Drive approx 14' NE of light pole #14  
XC=2455523.13 YC=579197.56

A - PK In asphalt shoulder 8.1' E of Pt. 251  
B - PK In sign post base 63.32' SW of Pt. 251  
C - PK In asphalt shoulder 26.3' SW of Pt. 251

**GPS 252**  
Pt (5/8" Rebar) is in right side of exit ramp to Spruce Hills Drive approx 70' SW of light pole  
XC=2455934.74 YC=580350.09

A - chisled "+" in MH conc wall 15.74' SW of Pt. 252  
B - chisled "+" in asphalt shoulder 9.74' NW of Pt. 252  
C - PK In sign post support base 22.8' NE of Pt. 252

**GPS 253**  
Pt (5/8" Rebar) is west of exit ramp from I-74 to Spruce Hills Drive approx 50' NE of light pole #5  
XC=2454573.06 YC=580492.52

A - PK In sign post base 24.35' NE of Pt. 253  
B - PK In asphalt shoulder 8.8' SE of Pt. 253  
C - PK In asphalt shoulder 12.67' SW of Pt. 253

**GPS 254**  
Pt (5/8" Rebar) is west of entr. ramp from Spruce Hills Drive to I-74 approx 120' SE of merge sign  
XC=2455405.58 YC=581336.46

A - PK In sign post base 24.35' NE of Pt. 253  
B - PK In asphalt shoulder 8.8' SE of Pt. 253  
C - PK In asphalt shoulder 12.67' SW of Pt. 253

**GPS 255**  
Pt (5/8" Rebar) is east of exit 2 ramp from I-74 to Spruce Hills Drive approx 75' NW of light pole  
XC=2455097.17 YC=582180.60

A - PK on west side of exit 2 sign post 25.8' NE of Pt. 255  
B - PK In asphalt shoulder 18.42' NE of Pt. 255  
C - PK In asphalt shoulder 21.58' SE of Pt. 255

**GPS 257**  
Pt (5/8" Rebar) is in north edge of sidewalk approx 9' from the back of the curb  
XC=2457485.35 YC=576147.27

A - "+" marked on an intersection sign support base 11.5' NE of Pt. 257  
B - "+" marked in MH rim 16.7' SE of Pt. 257  
C - PK In Jot sign post base 41.4' SW of Pt. 257

**BM 564**  
Chis. "□" on light pole foundation with mile marker 1.2  
XC=2454904.27 YC=589267.60 EL=701.761

A - 1st delineator 20.5' N of BM 564  
B - Set PK in bit. shoulder of 53rd St. off ramp 25.4' NE of BM 564  
C - Set PK in bit. shoulder of 53rd St. off ramp 21.1' SE of BM 564  
D - 1st delineator 80.5' S of BM 564

**BM 565**  
Chis. "□" on south side of light pole foundation.  
XC=2454440.76 YC=587747.03 EL=687.923

A - SE top of bolt on light pole 53.9' W of BM 565  
B - Chis. "x" in curb 14.5' SW of BM 565  
C - Chis. "x" in curb 14.3' SE of BM 565  
D - PK in "One Way" sign post 40.8' NE of BM 565

**BM 566**  
Chis. "□" on south side of mast arm foundation in conc. island  
XC=2456363.79 YC=587728.98 EL=710.862

A - Chis. "x" on Wly corner of conc. island 21.3' W of BM 566  
B - Chis. "x" in W curb ent. 37.1' SW of BM 566  
C - Chis. "x" on median curb 42.0' SE of BM 566  
D - Chis. "x" on N end of median curb 26.2' E of BM 566

**BM 567**  
Chis. "□" on west side of light pole foundation  
XC=2455565.24 YC=587854.25 EL=709.702

A - Delineator 45.0' N of BM 567  
B - Set PK in ramp shoulder 52.0' NW of BM 567  
C - Chis. "x" in conc. slab 13.7' W of BM 567  
D - Chis. "x" in curb 24.1' SW of BM 567

**BM 568**  
Chis. "x" on east leg of "Spruce Hills Dr. Kimberly Rd. 1/2 Mile Exit Sign"  
XC=2454991.04 YC=585295.37 EL=652.314

A - 1st delineator 54.9' NE of BM 568  
B - Set PK in E.B. shoulder 28.1' NE of BM 568  
C - Set PK in Ely "Speed Zone Ahead" sign post 22.8' SE of BM 568  
D - Set Mag nail in E.B. shoulder 61.6' SE of BM 568

**BM 569**  
Chis. "x" on east leg of "Kaplan University Exit 2 Sign"  
XC=2455026.11 YC=583690.39 EL=679.946

A - Brace post on R-O-W fence 93.0' NW of BM 569  
B - 1st delineator 47.1' N of BM 569  
C - Set PK in E.B. I-74 shoulder 35.3' E of BM 569  
D - Set PK in E.B. I-74 shoulder 54.8' SE of BM 569

**BM 570**  
Found out "x" on north side of light pole  
XC=2454523.52 YC=580492.15 EL=657.126

A - PK In Stop sign 72.2' NE of BM 570  
B - Mag nail bit. shoulder 40.0' E of BM 570  
C - Brace post in fence 107.5' NW of BM 570  
D - PK In West Route 6 sign 92.4' W of BM 570

**BM 571**  
Set chis. "x" on traffic signal mast arm with light  
XC=2456407.40 YC=580345.54 EL=678.869

A - Control Point #154 58.5' W of BM 571  
B - Chis. "x" in curb 39.6' N of BM 571  
C - Chis. "x" end curb center median 58.5' NE of BM 571  
D - Chis. "x" end curb center median 32.5' E of BM 571

**BM 572**  
Set chis. "x" on east side of light pole foundation  
XC=2455511.64 YC=579190.64 EL=651.912

A - Mile Post "West I-74 3.1" 80.7' N of BM 572  
B - Set PK in W.B. shoulder 16.0' W of BM 572  
C - West post for "Exit 2" sign 48.4' S of BM 572  
D - Set PK in inside shoulder of Spruce Hills off ramp 16.2' E of BM 572

**BM 588**  
Set chis. "x" on west side of light pole foundation  
XC=2456998.92 YC=574129.18 EL=667.029

A - Mile post "West I-74 4.1" 115.3' N of BM 588  
B - Set PK in W.B. I-74 shoulder 35.9' NW of BM 588  
C - Set PK in W.B. I-74 shoulder 23.4' SW of BM 588  
D - Chis. "x" in conc. curb 43.2' SW of BM 588

Curve 6RD\_IL-1 (6TH-D)

PISTA. = 421+45.59  
 $\Delta$  = 4° 18' 49" (LT)  
 D = 4° 46' 29"  
 R = 1,200.00'  
 T = 45.19'  
 L = 90.35'  
 E = 0.85'  
 e = R.C.  
 L = NA  
 x = NA  
 m = NA

Curve 6RD\_IL-2 (6TH-D)

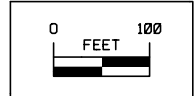
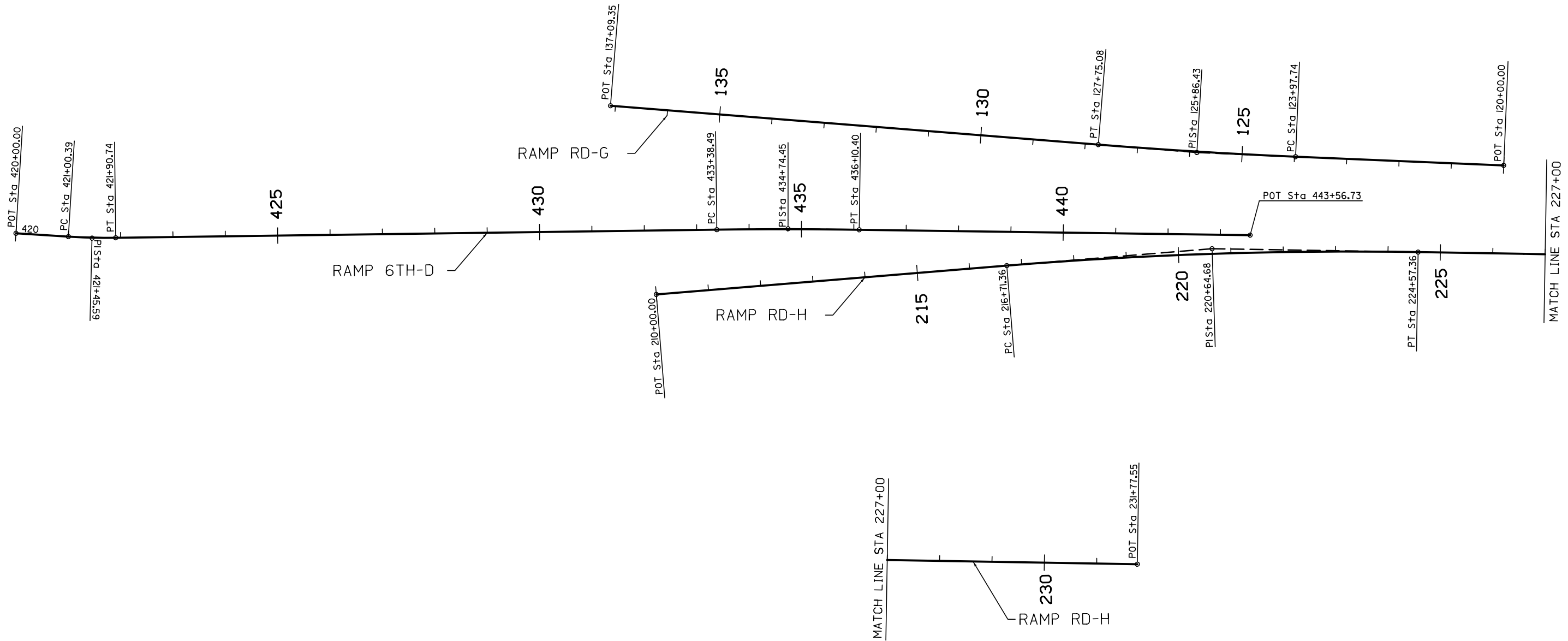
PISTA. = 434+74.45  
 $\Delta$  = 1° 33' 29" (RT)  
 D = 0° 34' 23"  
 R = 10,000.00'  
 T = 135.97'  
 L = 271.92'  
 E = 0.92'  
 e = R.C.  
 L = NA  
 x = NA  
 m = NA

Curve RRD-G-1 (RD-G)

PISTA. = 125+86.43  
 $\Delta$  = 2° 09' 43" (RT)  
 D = 0° 34' 23"  
 R = 10,000.00'  
 T = 188.69'  
 L = 377.33'  
 E = 1.78'  
 e = N.C.  
 L = NA  
 x = NA  
 m = NA

Curve 3RH\_IL-1 (RD-H)

PISTA. = 220+64.68  
 $\Delta$  = 5° 37' 46" (RT)  
 D = 0° 42' 58"  
 R = 8,000.00'  
 T = 393.32'  
 L = 786.00'  
 E = 9.66'  
 e = R.C.  
 L = NA  
 x = NA  
 m = NA



**ALIGNMENTS**  
**Illinois Ramps**

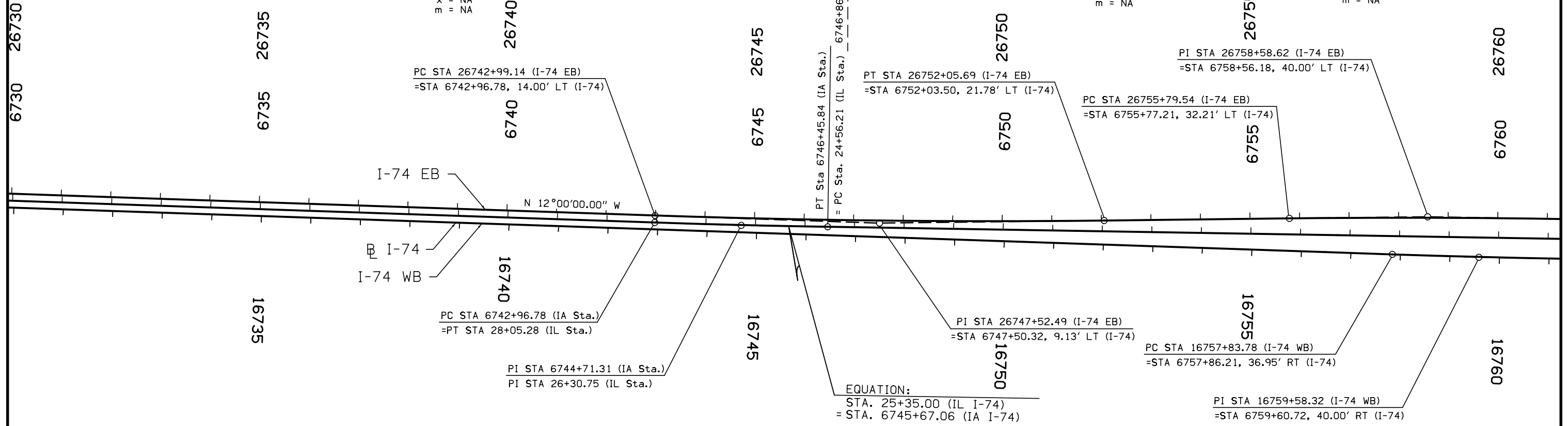


Curve 21010 (I-74)  
 PI Sta 6744+71.31 (IA Sta.)  
 PI Sta 26+30.75 (IL Sta.)  
 $\Delta = 01^{\circ}00'00.00''$  LT  
 $D = 0^{\circ}17'11.32''$   
 $R = 20000.00'$   
 $T = 174.54'$   
 $L = 349.07'$   
 $E = 0.76'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

Curve 21003 (I-74 EB)  
 PI Sta 26747+52.49  
 $\Delta = 2^{\circ}35'56.05''$  (LT)  
 $D = 0^{\circ}17'12.05''$   
 $R = 19,986.00'$   
 $T = 453.35'$   
 $L = 906.55'$   
 $E = 5.14'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

Curve 21005 (I-74 EB)  
 PI Sta 26758+58.62  
 $\Delta = 1^{\circ}35'56.05''$  (RT)  
 $D = 0^{\circ}17'11.32''$   
 $R = 20,000.00'$   
 $T = 279.08'$   
 $L = 558.12'$   
 $E = 1.95'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

ILLINOIS JURISDICTION | IOWA JURISDICTION



PC STA 26742+99.14 (I-74 EB)  
 =STA 6742+96.78, 14.00' LT (I-74)

PT STA 26752+05.69 (I-74 EB)  
 =STA 6752+03.50, 21.78' LT (I-74)

PI STA 26758+58.62 (I-74 EB)  
 =STA 6758+56.18, 40.00' LT (I-74)

PC STA 26755+79.54 (I-74 EB)  
 =STA 6755+77.21, 32.21' LT (I-74)

PC STA 6742+96.78 (IA Sta.)  
 =PT STA 28+05.28 (IL Sta.)

PI STA 26747+52.49 (I-74 EB)  
 =STA 6747+50.32, 9.13' LT (I-74)

PC STA 16757+83.78 (I-74 WB)  
 =STA 6757+86.21, 36.95' RT (I-74)

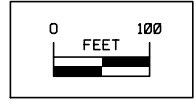
PI STA 6744+71.31 (IA Sta.)  
 PI STA 26+30.75 (IL Sta.)

EQUATION:  
 STA. 25+35.00 (IL I-74)  
 = STA. 6745+67.06 (IA I-74)

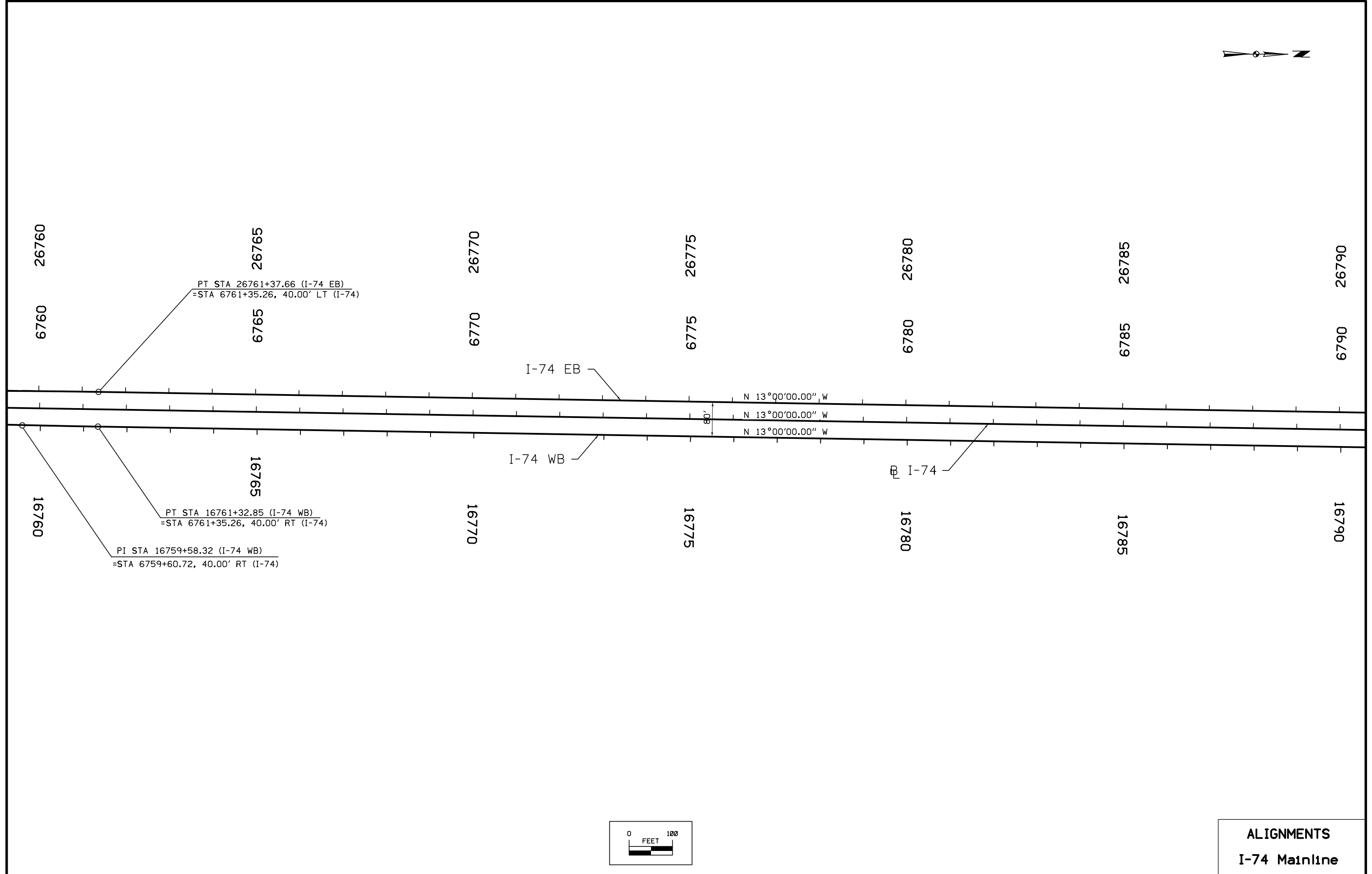
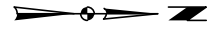
PI STA 16759+58.32 (I-74 WB)  
 =STA 6759+60.72, 40.00' RT (I-74)

Curve 21001 (I-74 WB)  
 PI Sta 16759+58.32  
 $\Delta = 1^{\circ}00'00''$  (LT)  
 $D = 0^{\circ}17'11.32''$   
 $R = 20,000.00'$   
 $T = 174.54'$   
 $L = 349.07'$   
 $E = 0.76'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

FOR RAMP RD-H, RD-G AND 6TH-D, REFER TO ILLINOIS PACKAGE A, FOR RAMP 6TH-C, REFER TO ILLINOIS PACKAGE B



ALIGNMENTS  
 I-74 Mainline

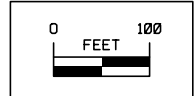


PT STA 26761+37.66 (I-74 EB)  
 =STA 6761+35.26, 40.00' LT (I-74)

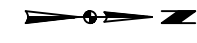
PT STA 16761+32.85 (I-74 WB)  
 =STA 6761+35.26, 40.00' RT (I-74)

PI STA 16759+58.32 (I-74 WB)  
 =STA 6759+60.72, 40.00' RT (I-74)

N 13°00'00.00\" W  
 N 13°00'00.00\" W  
 N 13°00'00.00\" W



**ALIGNMENTS**  
**I-74 Mainline**



Curve 21015 (I-74)  
 PI Sta 6801+41.31  
 $\Delta = 03^\circ 50' 58.23''$  LT  
 $D = 0^\circ 24' 33.32''$   
 $R = 14000.00$   
 $T = 470.48$   
 $L = 940.61$   
 $E = 7.90$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

Curve 21017 (I-74 EB)  
 PI Sta 26805+14.75  
 $\Delta = 03^\circ 50' 58.22''$  LT  
 $D = 0^\circ 24' 33.32''$   
 $R = 14000.00$   
 $T = 470.48$   
 $L = 940.61$   
 $E = 7.90$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

PC STA. 26800+44.27 (I-74 EB)  
 =POC STA. 6800+42.84, 35.07 LT (I-74)

PT STA. 16802+38.00 (I-74 WB)  
 =POC STA. 6802+39.05, 19.96 RT (I-74)

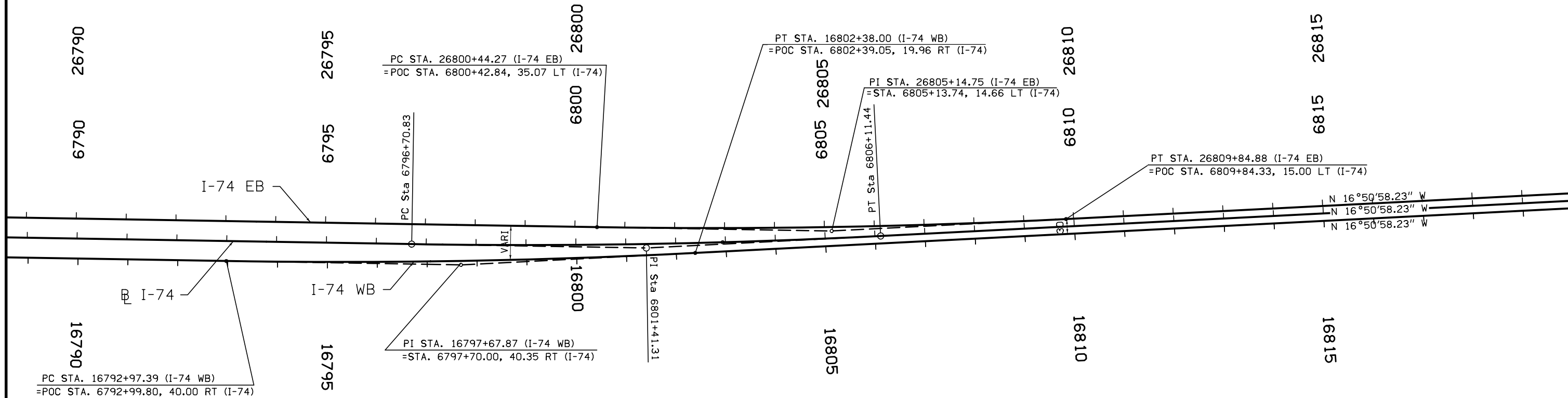
PI STA. 26805+14.75 (I-74 EB)  
 =STA. 6805+13.74, 14.66 LT (I-74)

PT STA. 26809+84.88 (I-74 EB)  
 =POC STA. 6809+84.33, 15.00 LT (I-74)

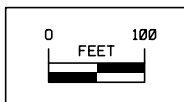
PI STA. 16797+67.87 (I-74 WB)  
 =STA. 6797+70.00, 40.35 RT (I-74)

PC STA. 16792+97.39 (I-74 WB)  
 =POC STA. 6792+99.80, 40.00 RT (I-74)

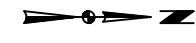
Curve 21016 (I-74 WB)  
 PI Sta 16797+67.87  
 $\Delta = 03^\circ 50' 58.24''$  LT  
 $D = 0^\circ 24' 33.32''$   
 $R = 14000.00$   
 $T = 470.48$   
 $L = 940.61$   
 $E = 7.90$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$



N 16°50'58.23" W  
 N 16°50'58.23" W  
 N 16°50'58.23" W

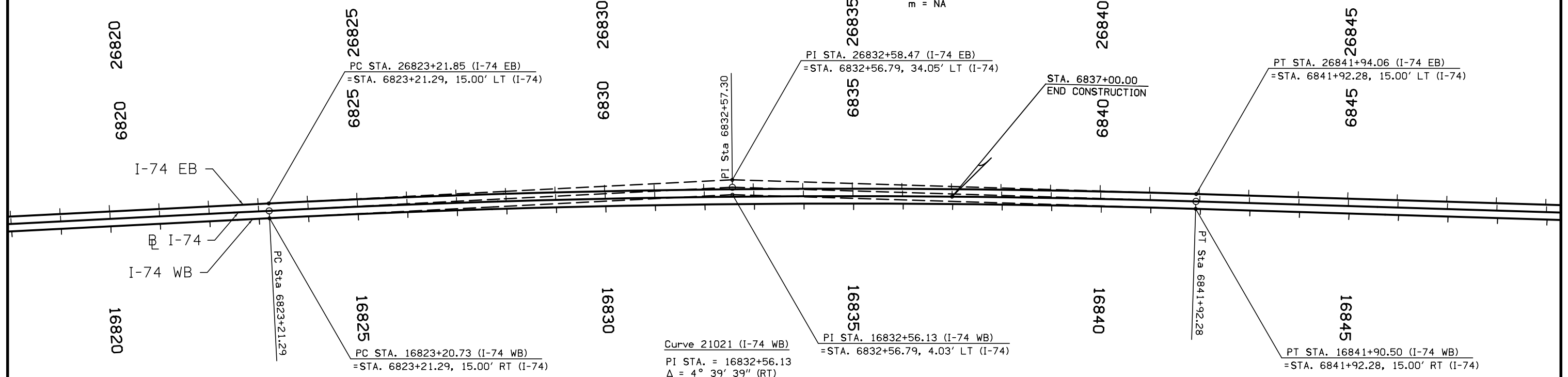


ALIGNMENTS  
 I-74 Mainline

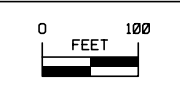


Curve 21020 (I-74)  
 PI Sta 6832+57.30  
 $\Delta = 04^{\circ}39'39.15''$  RT  
 $D = 0^{\circ}14'56.80''$   
 $R = 23000.00$   
 $T = 936.01$   
 $L = 1871.00$   
 $E = 19.04$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

Curve 21022 (I-74 EB)  
 PI STA. = 26832+58.47  
 $\Delta = 4^{\circ}39'39''$  (RT)  
 $D = 0^{\circ}14'56''$   
 $R = 23,015.00'$   
 $T = 936.62'$   
 $L = 1,872.22'$   
 $E = 19.05'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

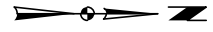


Curve 21021 (I-74 WB)  
 PI STA. = 16832+56.13  
 $\Delta = 4^{\circ}39'39''$  (RT)  
 $D = 0^{\circ}14'57''$   
 $R = 22,985.00'$   
 $T = 935.40'$   
 $L = 1,869.78'$   
 $E = 19.03'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$



**ALIGNMENTS**  
**I-74 Mainline**





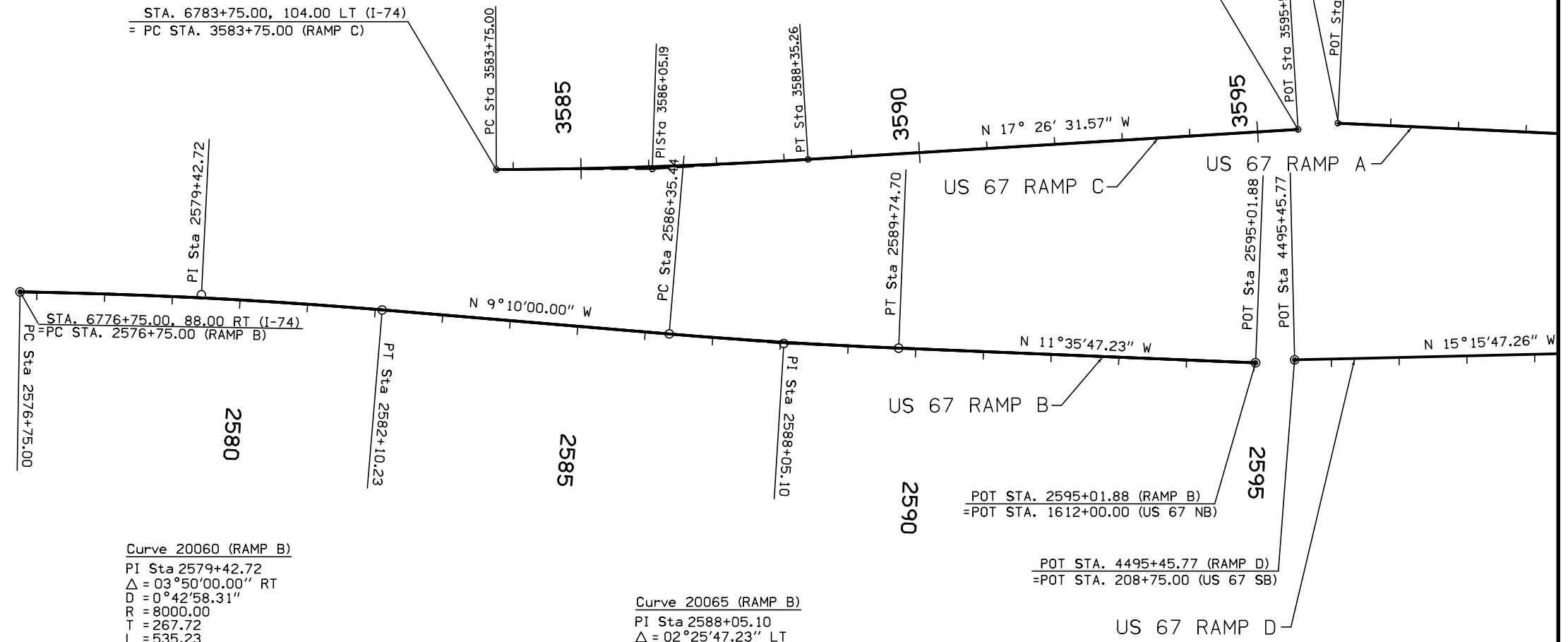
Curve 20110 (RAMP C)

PI Sta 3586+05.19  
Δ = 3° 17' 47" (LT)  
D = 0° 42' 58"  
R = 8,000.00'  
T = 230.19'  
L = 460.26'  
E = 3.31'  
e = N.C.  
L = NA  
x = NA  
m = NA

POT STA. 1496+21.97 (RAMP A)  
= POT STA. 205+20.00 (US 67 SB)

POT STA. 3595+59.96 (RAMP C)  
= POT STA. 1608+50.00 (US 67 NB)

STA. 6783+75.00, 104.00 LT (I-74)  
= PC STA. 3583+75.00 (RAMP C)



Curve 20060 (RAMP B)

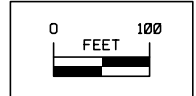
PI Sta 2579+42.72  
Δ = 03° 50' 00.00" RT  
D = 0° 42' 58.31"  
R = 8000.00  
T = 267.72  
L = 535.23  
E = 4.48  
e = N.C.  
L = NA  
x = NA  
m = NA

Curve 20065 (RAMP B)

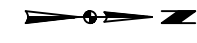
PI Sta 2588+05.10  
Δ = 02° 25' 47.23" LT  
D = 0° 42' 58.31"  
R = 8000.00  
T = 169.66  
L = 339.26  
E = 1.80  
e = N.C.  
L = NA  
x = NA  
m = NA

POT STA. 2595+01.88 (RAMP B)  
= POT STA. 1612+00.00 (US 67 NB)

POT STA. 4495+45.77 (RAMP D)  
= POT STA. 208+75.00 (US 67 SB)

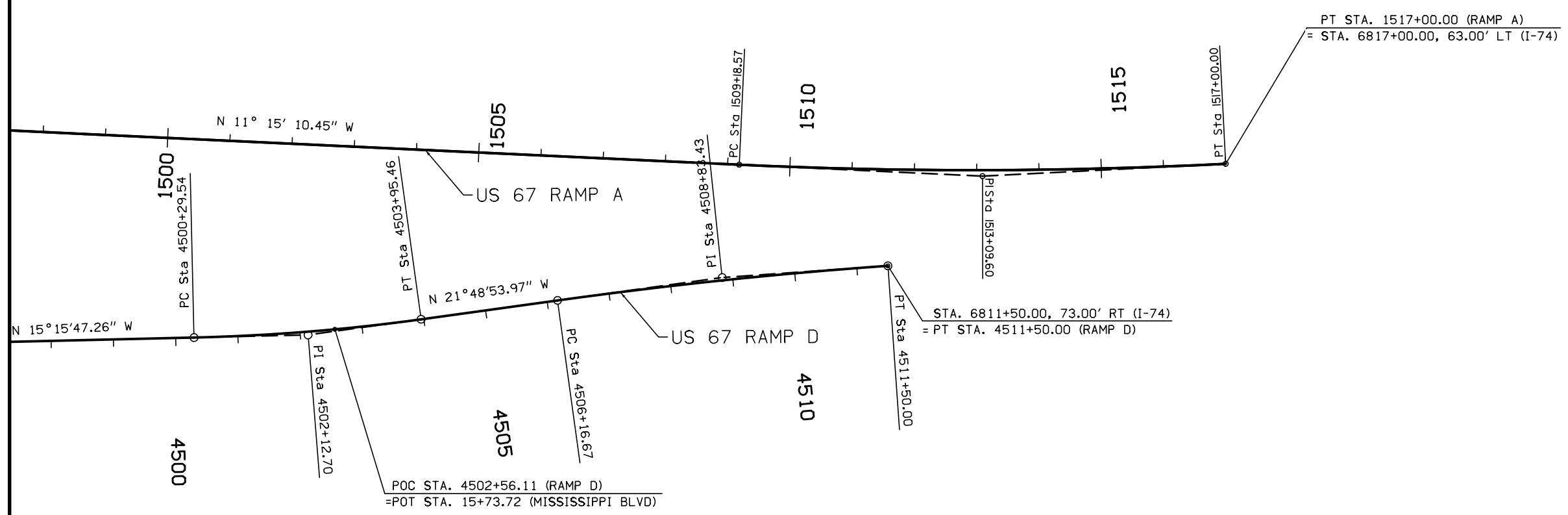


ALIGNMENTS  
US 67 Ramps



Curve 20010 (RAMP A)

PI Sta 1513+09.60  
Δ = 5° 35' 48" (LT)  
D = 0° 42' 58"  
R = 8,000.00'  
T = 391.03'  
L = 781.43'  
E = 9.55'  
e = N.C.  
L = NA  
x = NA  
m = NA

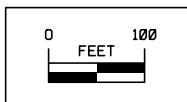


Curve 20155 (RAMP D)

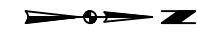
PI Sta 4502+12.70  
Δ = 06° 33' 06.71" LT  
D = 1° 47' 25.78"  
R = 3200.00  
T = 183.16  
L = 365.93  
E = 5.24  
e = 2.80  
L = 71.00  
x = 52.00  
m = 21.30

Curve 20160 (RAMP D)

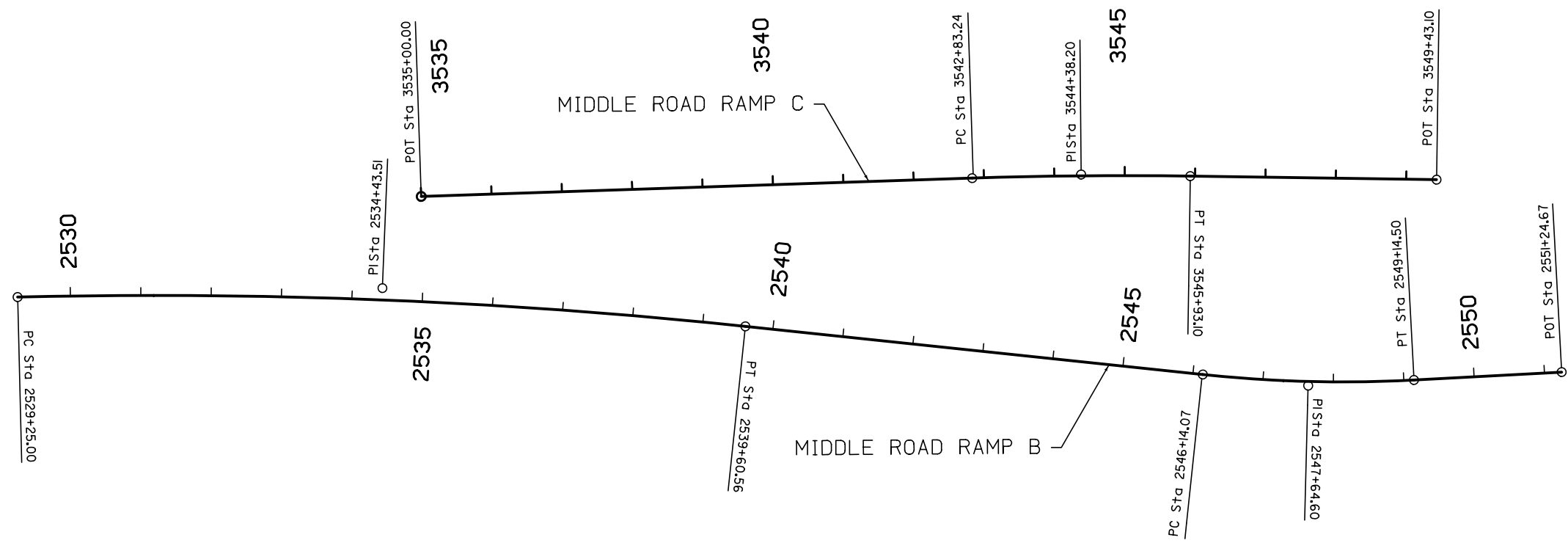
PI Sta 4508+83.43  
Δ = 03° 49' 10.99" RT  
D = 0° 42' 58.31"  
R = 8000.00  
T = 266.77  
L = 533.33  
E = 4.45  
e = N.C.  
L = NA  
x = NA  
m = NA



ALIGNMENTS  
US 67 Ramps

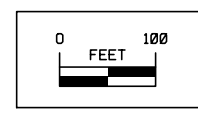


Curve 20315 (RAMP C)  
 PI Sta 3544+38.20  
 $\Delta = 2^\circ 43' 52.68''$  (RT)  
 $D = 0^\circ 52' 53.30''$   
 $R = 6,500.00$   
 $T = 154.96$   
 $L = 309.86$   
 $E = 1.85$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

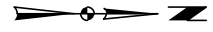


Curve 20265 (RAMP B)  
 PI Sta 2534+43.51  
 $\Delta = 7^\circ 25' 00.00''$  (RT)  
 $D = 0^\circ 42' 58.31''$   
 $R = 8,000.00$   
 $T = 518.51$   
 $L = 1,035.56$   
 $E = 16.79$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

Curve 20275 (RAMP B)  
 PI Sta 2547+64.60  
 $\Delta = 9^\circ 03' 34.99''$  (LT)  
 $D = 3^\circ 00' 56.04''$   
 $R = 1,900.00$   
 $T = 150.53$   
 $L = 300.43$   
 $E = 5.95$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$



**ALIGNMENTS**  
**Middle Rd Ramps**

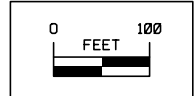
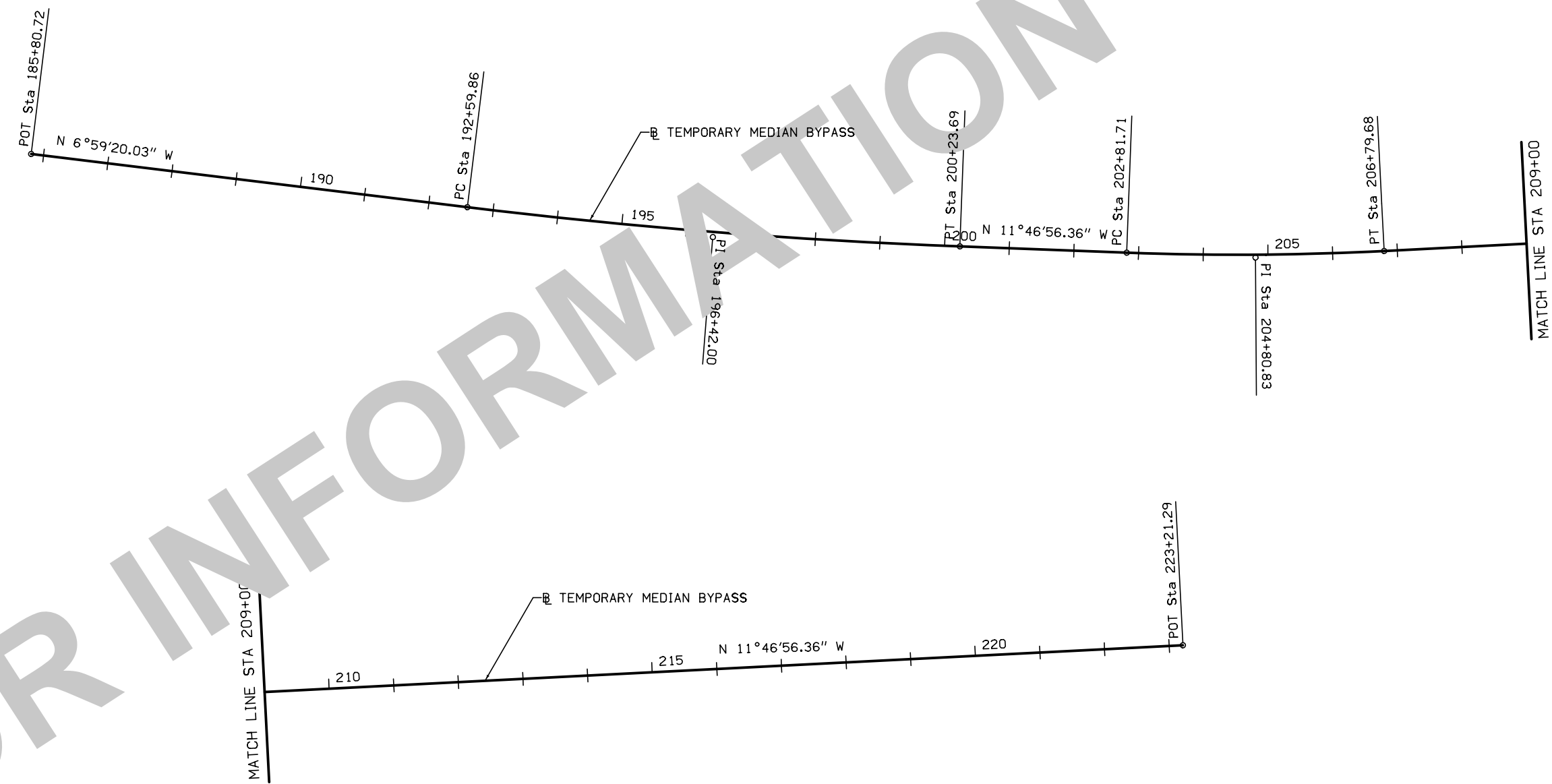


Curve 25001  
 PI Sta 301+04.02  
 $\Delta = 19^\circ 04' 40.62''$  (LT)  
 $D = 11^\circ 27' 32.96''$   
 $R = 500.00$   
 $T = 84.02$   
 $L = 166.49$   
 $E = 7.01$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

Curve 25002  
 PI Sta 302+46.19  
 $\Delta = 13^\circ 37' 03.33''$  (RT)  
 $D = 11^\circ 27' 32.96''$   
 $R = 500.00$   
 $T = 59.70$   
 $L = 118.84$   
 $E = 3.55$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

Curve 24001  
 PI Sta 196+42.00  
 $\Delta = 4^\circ 47' 36.34''$  (LT)  
 $D = 0^\circ 37' 39.20''$   
 $R = 9,130.00$   
 $T = 382.14$   
 $L = 763.83$   
 $E = 7.99$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

Curve 24002  
 PI Sta 204+80.83  
 $\Delta = 5^\circ 04' 01.87''$  (LT)  
 $D = 1^\circ 16' 23.66''$   
 $R = 4,500.00$   
 $T = 199.12$   
 $L = 397.98$   
 $E = 4.40$   
 $e = 3.4\%$   
 $L = \text{See Modified PV-301, Contract IM-74-1(205)5--13-82}$   
 $x = \text{See Modified PV-301, Contract IM-74-1(205)5--13-82}$   
 $m = \text{See Modified PV-301, Contract IM-74-1(205)5--13-82}$



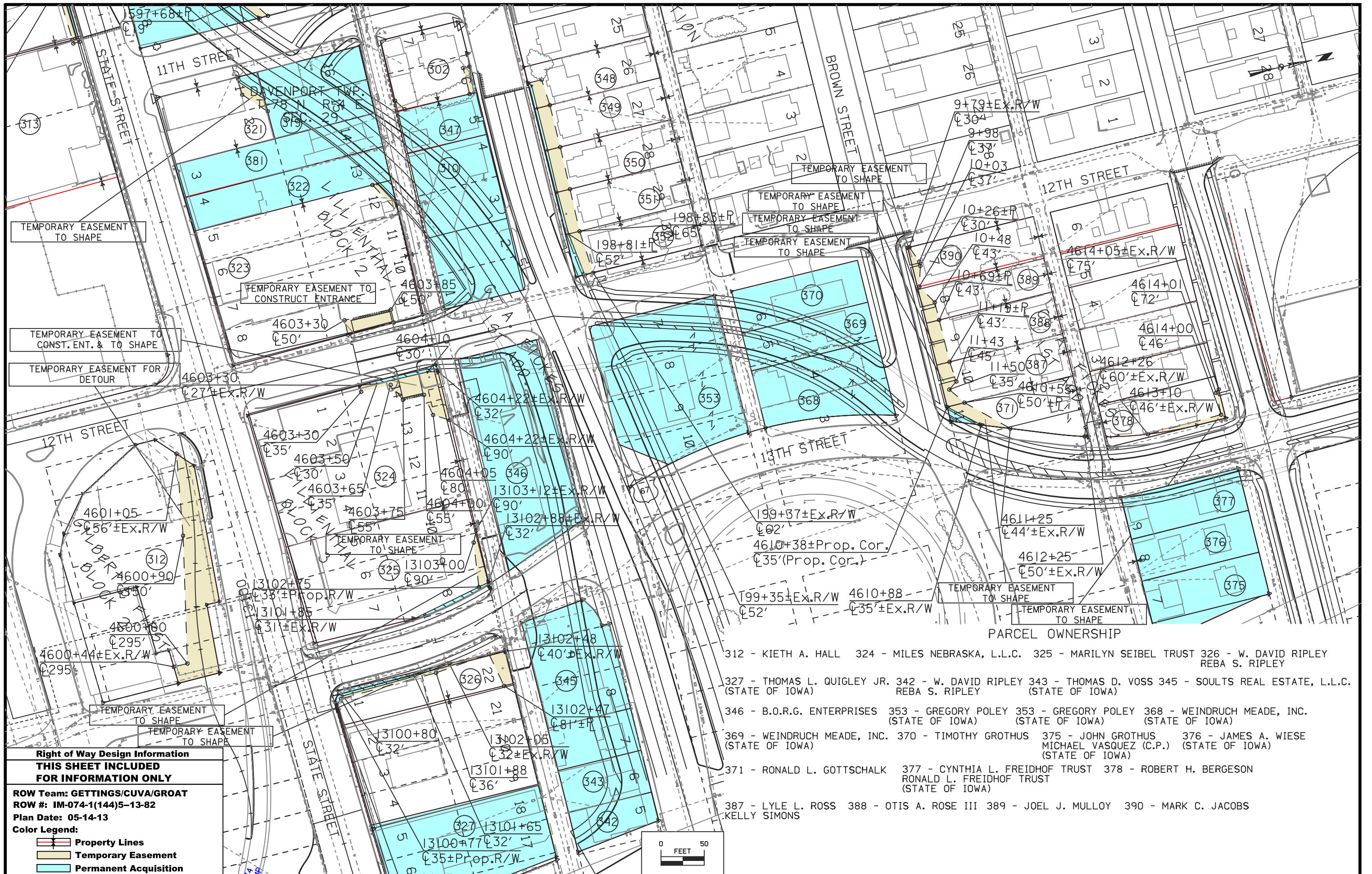
**TEMPORARY  
ALIGNMENTS**  
**I-74 Mainline**

ALIGNMENT COORDINATES

101-16  
10-20-09

Name	Location	Point on Tangent			Begin Spiral			Begin Curve			Simple Curve PI or Master PI of SCS			End Curve			End Spiral		
		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates	
			Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)
POT 21009	I-74 MAINLINE	6719+17.38	562672.89	2459725.37															
CURVE 21010	I-74 MAINLINE						6742+96.78	565000.29	2459230.66	6744+71.31	565171.01	2459194.38	6746+45.84	565341.08	2459155.11				
CURVE 21015	I-74 MAINLINE						6796+70.83	570237.28	2458024.74	6801+41.31	570695.70	2457918.90	6806+11.44	571145.99	2457782.53				
CURVE 21020	I-74 MAINLINE						6823+21.29	572782.43	2457286.91	6832+57.30	573678.26	2457015.60	6841+92.28	574593.17	2456817.98				
POT 21001	I-74 EB	26722+61.55	563004.32	2459640.61															
CURVE 21003	I-74 EB						26742+99.14	564997.38	2459216.97	26747+52.49	565440.83	2459122.71	26752+05.69	565879.54	2459008.44				
CURVE 21005	I-74 EB						26755+79.54	566241.33	2458914.21	26758+58.62	566511.40	2458843.87	26761+37.66	566783.32	2458781.09				
CURVE 21017	I-74 EB						26800+44.27	570589.80	2457902.30	26805+14.75	571048.23	2457796.46	26809+84.88	571498.51	2457660.09				
CURVE 21022	I-74 EB						26823+21.85	572778.08	2457272.56	26832+58.47	573674.49	2457001.07	26841+94.06	574590.00	2456803.32				
POT 21000	I-74 WB	16722+56.30	563010.14	2459668.00															
CURVE 21001	I-74 WB						16757+83.78	566460.53	2458934.59	16759+58.32	566631.26	2458898.31	16761+32.85	566801.32	2458859.04				
CURVE 21016	I-74 WB						16792+97.39	569884.75	2458147.18	16797+67.87	570343.18	2458041.34	16802+38.00	570793.46	2457904.97				
CURVE 21021	I-74 WB						16823+20.73	572786.78	2457301.27	16832+56.13	573682.02	2457030.14	16841+90.50	574596.34	2456832.64				
POT 24000	WB TEMP. BYPASS	185+80.72	569145.75	2458120.97															
CURVE 24001	WB TEMP. BYPASS						192+59.86	569819.84	2458038.33	196+42.00	570199.14	2457991.84	200+23.69	570573.23	2457913.81				
CURVE 24002	WB TEMP. BYPASS						202+81.71	570825.81	2457861.12	204+80.83	571020.73	2457820.46	206+79.68	571211.30	2457762.75				
POT 24003	WB TEMP. BYPASS	223+21.29	572782.43	2457286.91															
POT 20005	RAMP A	1496+21.97	570140.13	2457849.37															
CURVE 20010	RAMP A						1509+18.57	571411.80	2457596.35	1513+09.60	571795.31	2457520.05	1517+00.00	572169.55	2457406.70				
POT 20010	RAMP A	1517+00.00	572169.55	2457406.70															
POT 20060	RAMP B	2576+75.00	568312.39	2458559.45															
CURVE 20060	RAMP B						2576+75.00	568312.39	2458559.45	2579+42.72	568573.25	2458499.22	2582+10.23	568837.55	2458456.57				
CURVE 20065	RAMP B						2586+35.44	569257.33	2458388.84	2588+05.10	569424.82	2458361.81	2589+74.70	569591.01	2458327.70				
POT 20070	RAMP B	2595+01.88	570107.42	2458221.73															
POT 20110	RAMP C	3583+75.00	568951.26	2458214.90															
CURVE 20110	RAMP C						3583+75.00	568951.26	2458214.90	3586+05.19	569174.47	2458158.65	3588+35.26	569394.08	2458089.65				
POT 20115	RAMP C	3595+59.96	570085.46	2457872.42															
POT 20150	RAMP D	4495+45.77	570162.40	2458203.67															
CURVE 20155	RAMP D						4500+29.54	570629.09	2458076.32	4502+12.70	570805.80	2458028.10	4503+95.46	570975.84	2457960.04				
CURVE 20160	RAMP D						4506+16.67	571181.20	2457877.84	4508+83.43	571428.87	2457778.70	4511+50.00	571682.58	2457696.29				
POT 20160	RAMP D	4511+50.00	571682.58	2457696.29															
POT RRDG1	RAMP RD-G	120+00.00	566229.23	2458867.76															
CURVE RRD-G-1	RAMP RD-G						123+97.74	565839.53	2458947.34	125+86.43	565654.65	2458985.09	127+75.08	565468.49	2459015.84				
POT RRDG2	RAMP RD-G	137+09.35	564546.70	2459168.10															
POT RRDH1	RAMP RD-H	210+00.00	564718.25	2459496.40															
CURVE 3RH IL-1	RAMP RD-H						216+71.36	565354.44	2459281.94	220+64.68	565727.15	2459156.30	224+57.36	566110.38	2459067.82				
POT RRDH2	RAMP RD-H	231+77.55	566812.12	2458905.81															
POT RSIXD1	RAMP 6TH-D	420+00.00	563503.63	2459677.85															
CURVE 6RD IL-1	RAMP 6TH-D						421+00.39	563602.38	2459659.74	421+45.59	563646.83	2459651.59	421+90.74	563690.55	2459640.12				
CURVE 6RD IL-2	RAMP 6TH-D						433+38.49	564800.71	2459348.80	434+74.45	564932.22	2459314.29	436+10.40	565064.62	2459283.36				
POT RSIXD2	RAMP 6TH-D	443+56.73	565791.39	2459113.63															
POT RW200	RET WALL 165	11503+85.96	570886.40	2457684.57															
POT RW201	RET WALL 165	11504+40.00	570939.40	2457674.02															
POT RW202	RET WALL 165	11504+60.00	570959.31	2457672.10															
CURVE RW165 1	RET WALL 165						11509+18.57	571409.06	2457582.62	11509+95.78	571484.79	2457567.55	11510+72.99	571560.22	2457551.02				





TEMPORARY EASEMENT TO SHAPE

TEMPORARY EASEMENT TO CONST. ENT. & TO SHAPE

TEMPORARY EASEMENT FOR DETOUR

TEMPORARY EASEMENT TO CONSTRUCT ENTRANCE

TEMPORARY EASEMENT TO SHAPE

TEMPORARY EASEMENT TO SHAPE

TEMPORARY EASEMENT TO SHAPE

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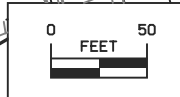
**Right of Way Design Information**  
**THIS SHEET INCLUDED FOR INFORMATION ONLY**

ROW Team: GETTINGS/CUVA/GROAT  
 ROW #: IM-074-1(144)5-13-82  
 Plan Date: 05-14-13

**Color Legend:**  
 [Red Line] Property Lines  
 [Yellow Area] Temporary Easement  
 [Cyan Area] Permanent Acquisition

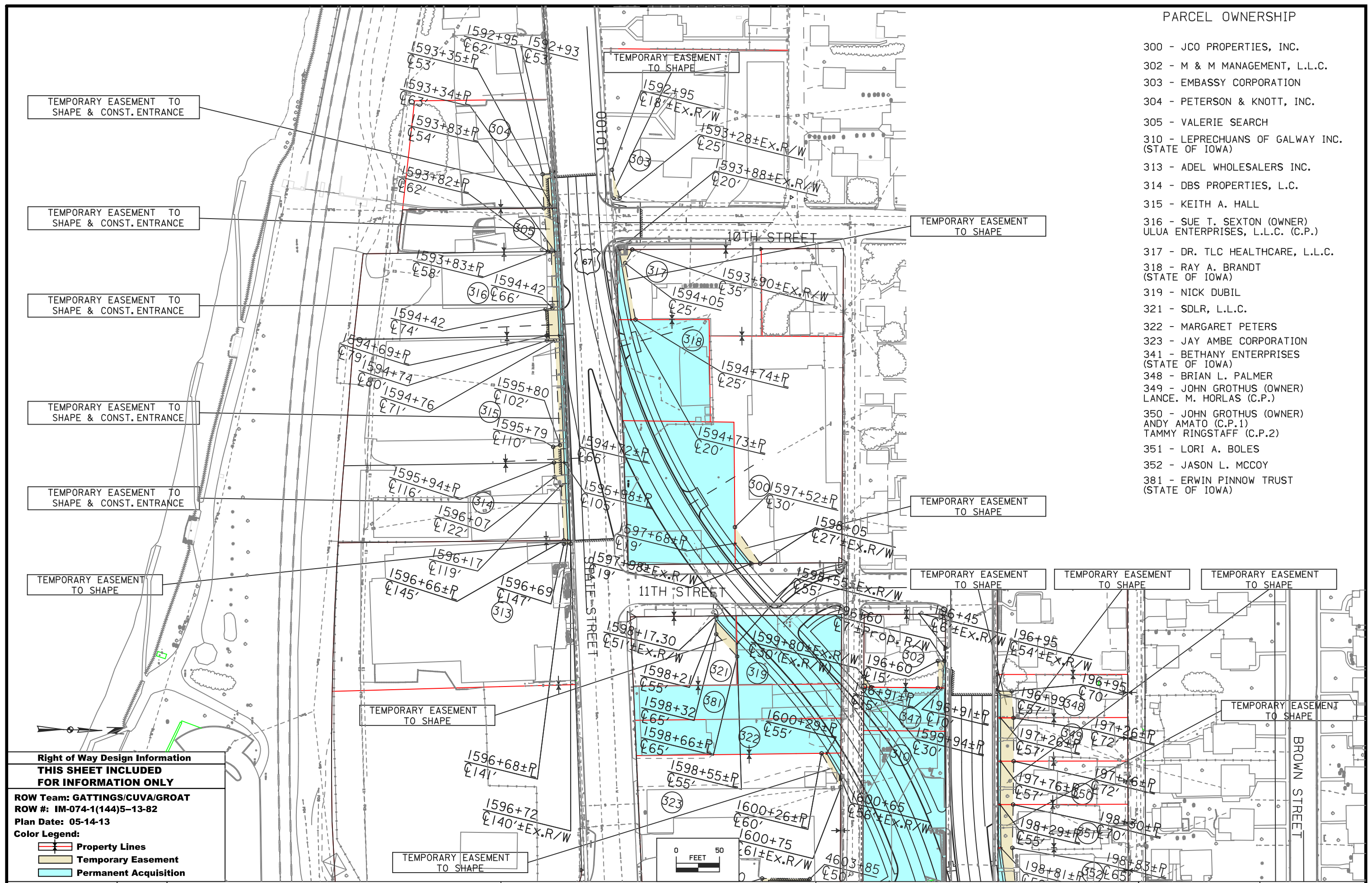
**PARCEL OWNERSHIP**

- 312 - KIETH A. HALL    324 - MILES NEBRASKA, L.L.C.    325 - MARILYN SEIBEL TRUST    326 - W. DAVID RIPLEY REBA S. RIPLEY
- 327 - THOMAS L. QUIGLEY JR. (STATE OF IOWA)    342 - W. DAVID RIPLEY REBA S. RIPLEY    343 - THOMAS D. VOSS (STATE OF IOWA)    345 - SOULTS REAL ESTATE, L.L.C.
- 346 - B.O.R.G. ENTERPRISES    353 - GREGORY POLEY (STATE OF IOWA)    353 - GREGORY POLEY (STATE OF IOWA)    368 - WEINDRUCH MEADE, INC. (STATE OF IOWA)
- 369 - WEINDRUCH MEADE, INC. (STATE OF IOWA)    370 - TIMOTHY GROTHUS (STATE OF IOWA)    375 - JOHN GROTHUS MICHAEL VASQUEZ (C.P.) (STATE OF IOWA)    376 - JAMES A. WIESE (STATE OF IOWA)
- 371 - RONALD L. GOTTSCHALK    377 - CYNTHIA L. FREIDHOF TRUST RONALD L. FREIDHOF TRUST (STATE OF IOWA)    378 - ROBERT H. BERGESON
- 387 - LYLE L. ROSS KELLY SIMONS    388 - OTIS A. ROSE III    389 - JOEL J. MULLOY    390 - MARK C. JACOBS



PARCEL OWNERSHIP

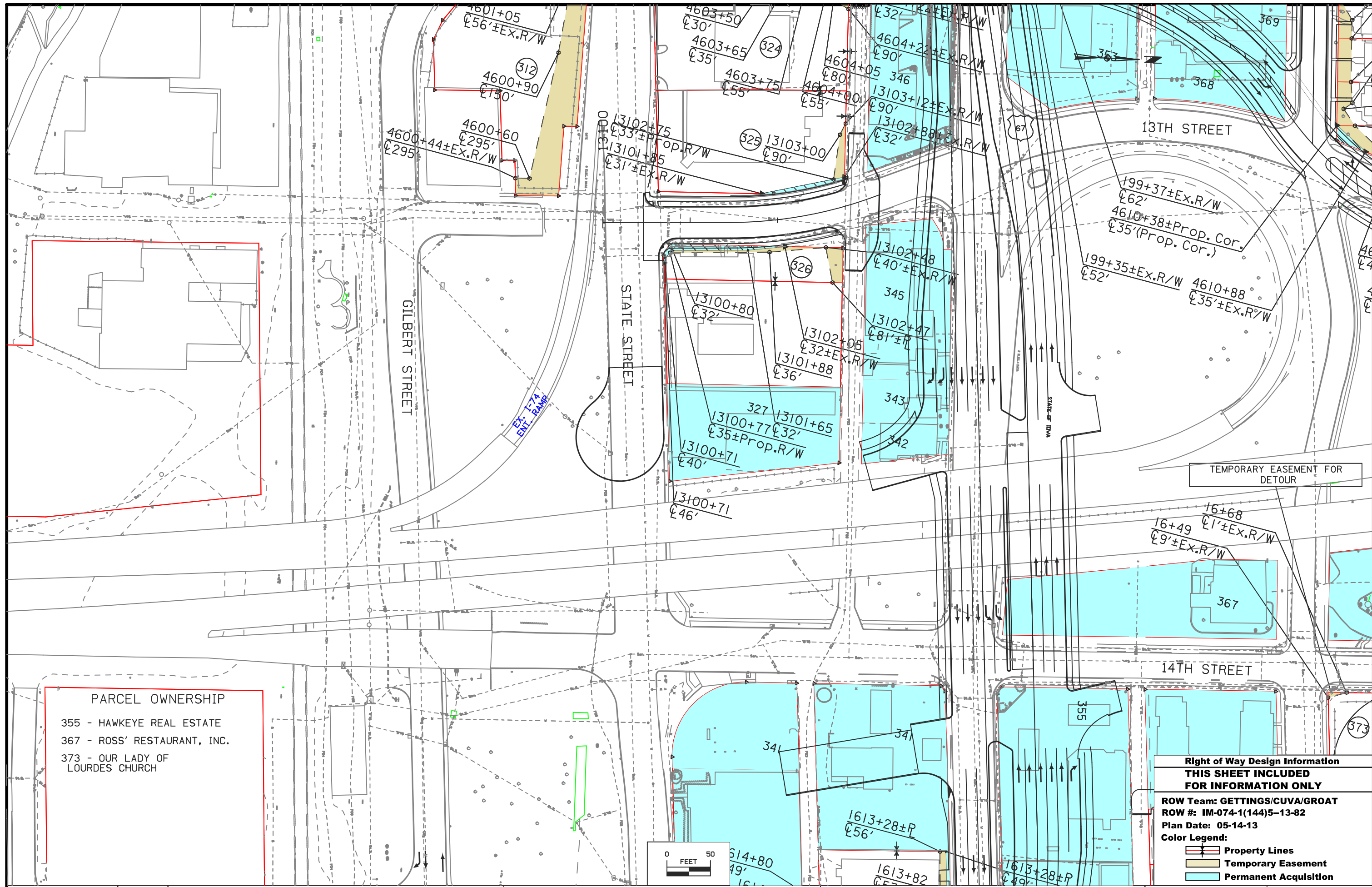
- 300 - JCO PROPERTIES, INC.
- 302 - M & M MANAGEMENT, L.L.C.
- 303 - EMBASSY CORPORATION
- 304 - PETERSON & KNOTT, INC.
- 305 - VALERIE SEARCH
- 310 - LEPRECHUANS OF GALWAY INC. (STATE OF IOWA)
- 313 - ADEL WHOLESALERS INC.
- 314 - DBS PROPERTIES, L.C.
- 315 - KEITH A. HALL
- 316 - SUE T. SEXTON (OWNER) ULUA ENTERPRISES, L.L.C. (C.P.)
- 317 - DR. TLC HEALTHCARE, L.L.C.
- 318 - RAY A. BRANDT (STATE OF IOWA)
- 319 - NICK DUBIL
- 321 - SDLR, L.L.C.
- 322 - MARGARET PETERS
- 323 - JAY AMBE CORPORATION
- 341 - BETHANY ENTERPRISES (STATE OF IOWA)
- 348 - BRIAN L. PALMER
- 349 - JOHN GROTHUS (OWNER) LANCE. M. HORLAS (C.P.)
- 350 - JOHN GROTHUS (OWNER) ANDY AMATO (C.P.1) TAMMY RINGSTAFF (C.P.2)
- 351 - LORI A. BOLES
- 352 - JASON L. MCCOY
- 381 - ERWIN PINNOW TRUST (STATE OF IOWA)



**Right of Way Design Information  
THIS SHEET INCLUDED  
FOR INFORMATION ONLY**

ROW Team: GATTINGS/CUVA/GROAT  
 ROW #: IM-074-1(144)5-13-82  
 Plan Date: 05-14-13  
 Color Legend:  
 - Property Lines (solid black line)  
 - Temporary Easement (yellow shaded area)  
 - Permanent Acquisition (blue shaded area)





**PARCEL OWNERSHIP**

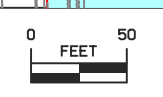
355 - HAWKEYE REAL ESTATE  
 367 - ROSS' RESTAURANT, INC.  
 373 - OUR LADY OF LOURDES CHURCH

**Right of Way Design Information**  
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ROW Team: GETTINGS/CUVA/GROAT  
 ROW #: IM-074-1(144)5-13-82  
 Plan Date: 05-14-13

**Color Legend:**

- Property Lines
- Temporary Easement
- Permanent Acquisition



PARCEL OWNERSHIP

- 306 - MARK D. SPRANGLER
- 307 - JAROSLAVA ODVAROK
- 308 - OTIS ROSE III
- 309 - LANUM PROPERTIES, L.L.C.
- 311 - CITY OF BETTENDORF
- 320 - KNOX CORPORATION  
(STATE OF IOWA)
- 328 - JEFFERY L. WEINDRUCH (OWNER)  
RICHARD I. VESOLE (C.P.)
- 329 - VERNON MATTSSEN  
FABRIZIO FEDRIZZA
- 330 - DONNA J. WAINWRIGHT REVOCABLE TRUST
- 331 - MIDWEST DEV. & INV. CORP.
- 332 - KO PROPERTY MANAGEMENT
- 333 - JEFFERY L. & HELEN M. WEINDRUCH  
(STATE OF IOWA)
- 334 - ANJ LTD.
- 335 - JAMIE L. GRENER REVOCABLE TRUST  
(STATE OF IOWA)
- 336 - DANIEL E. GROTHUS
- 337 - CHARLES J. DIXON
- 338 - LEONA M. FERGUSON
- 339 - NORTHWESTERN BELL TELLEPHONE COMPANY
- 340 - RONALD L. & NOLA L. GOTTSCHALK  
(STATE OF IOWA)
- 357 - JAMES E. REISTROFFER  
QUINT CITIES PETROLIUM (C.P.)  
(STATE OF IOWA)
- 358 - MOLO QUINT, L.L.C.  
(STATE OF IOWA)
- 359 - APOSTOLIC ASSEMBLY CHURCH  
(STATE OF IOWA)
- 360 - MICHAEL A. LEIGHT  
(STATE OF IOWA)
- 361 - RICHARD L. HELSLANDER, JR.  
(STATE OF IOWA)
- 362 - ERIC V. TOTHEROW  
(STATE OF IOWA)
- 363 - RICHARD LIVING TRUST  
(STATE OF IOWA)
- 364 - RICHARD LIVING TRUST  
(STATE OF IOWA)
- 365 - DOROTHY J. FOLWELL

TEMPORARY EASEMENT TO SHAPE

TEMPORARY EASEMENT TO SHAPE

TEMPORARY EASEMENT TO SHAPE

TEMPORARY EASEMENT TO SHAPE & CONST. ENT.

TEMPORARY EASEMENT TO SHAPE & CONST. ENT.

TEMPORARY EASEMENT TO SHAPE

TEMPORARY EASEMENT TO SHAPE & CONST. ENT.

TEMPORARY EASEMENT TO SHAPE

TEMPORARY EASEMENT TO SHAPE & CONST. ENT.

TEMPORARY EASEMENT TO SHAPE

TEMPORARY EASEMENT TO SHAPE



**Right of Way Design Information**  
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ROW Team: GETTINGS/CUVA/GROAT  
ROW #: IM-074-1(144)5-13-82  
Plan Date: 05-14-13

- Color Legend:
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  - Temporary Easement
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**Right of Way Design Information**  
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ROW Team: GETTINGS/CUVA/GROAT  
 ROW #: IM-074-1(144)5-13-82  
 Plan Date: 05-14-13

**Color Legend:**

- Property Lines
- Temporary Easement
- Permanent Acquisition

## PARCEL CHECK LIST

R2360003 PARCEL CHECK LIST BY PROJECT NUMBER

COUNTY : SCOTT

PROJECT NO. : IM-074-1(144)5--13-82

PIN: 03-82-074010-00

CONSTRUCTION NO. : IM-074-1(122)0--13-82

ASSIGNED TO: FLD

DESCRIPTION : I-74 From S. Of 23rd Ave. In Moline To N. Of 53rd St. In Davenport

PARCEL	KEY	OWNER	TYPE	R/W W.D OR EASE.	BORROW W.D OR EASE.	HOUSE OR OTHER	COMMERCIAL	OCC ENVIRONMENTAL CONCERNS
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0300	26040	JCO PROPERTIES, INC.	FEE STATE OF IOWA					
				216.00	WD	SQFT		
0301	26041	GREEN BRIDGE REAL ESTATE	FEE					
0302	26067	M & M MANAGEMENT, L.L.C.	FEE STATE OF IOWA					
				87.00	WD	SQFT		
0303	26068	EMBASSY CORPORATION	FEE					
0304	26069	PETERSON & KNOTT INC.	FEE STATE OF IOWA					
				204.00	WD	SQFT		
0305	26070	VALERIE SEARCH	FEE STATE OF IOWA					
				268.00	WD	SQFT		
0306	26071	MARK D. SPRANGLER	FEE STATE OF IOWA					
				75.00	WD	SQFT		
0307	26072	JAROSLAVA ODVARKO	FEE STATE OF IOWA					
				58.00	WD	SQFT		
0308	26073	OTIS A. ROSE III	FEE					
0309	26074	LANUM PROPERTIES, L.L.C.	FEE					
0310	25371	LEPRECHAUNS OF GALWAY COUNTY, INC.	FEE STATE OF IOWA					
		BECKMAN HAMILTON & SMITH INSURANCE	T	0.40	WD	ACRE		
		EDWARD JONES	T					
		ORGANIC THERAPIES	T					
		LONNY L. WILKEN	T					
0311	26076	CITY OF BETTENDORF	FEE STATE OF IOWA					
				299.00	WD	SQFT		
0312	26099	KIETH A. HALL	FEE					
0313	26077	ADEL WHOLESALERS INC.	FEE					
0313 A	26078	PARCEL R. DELETED						
		BOTTLED GAS CORPORATION	FEE					
0314	26079	DBS PROPERTIES, L.C.	FEE STATE OF IOWA					
				321.00	WD	SQFT		
0315	26080	KEITH A. HALL	FEE STATE OF IOWA					
				650.00	WD	SQFT		
0316	26081	SUE T. SEXTON	FEE STATE OF IOWA					
		ULUA ENTERPRISES, L.L.C.	CP1	501.00	WD	SQFT		

## PARCEL CHECK LIST

R2360003 PARCEL CHECK LIST BY PROJECT NUMBER

COUNTY : SCOTT

PROJECT NO. :IM-074-1(144)5--13-82

PIN: 03-82-074010-00

CONSTRUCTION NO.:IM-074-1(122)0--13-82

ASSIGNED TO: FLD

DESCRIPTION : I-74 From S. Of 23rd Ave. In Moline To N. Of 53rd St. In Davenport

PARCEL	KEY	OWNER	TYPE	R/W W.D OR EASE.	BORROW W.D OR EASE.	HOUSE OR OTHER	COMMERCIAL	OCC ENVIRONMENTAL CONCERNS
--------	-----	-------	------	------------------	---------------------	----------------	------------	----------------------------

0317	26100	DR TLC HEALTHCARE, LLC	FEE STATE OF IOWA					
				728.00	WD	SQFT		
0318	26042	RAY A. BRANDT	FEE STATE OF IOWA					
		CHRISTINA A. BRANDT	FEE	0.28	WD	ACRE		
		BRANDT PARTNERS, INC.	T					
0319	25630	NICK DUBIL	FEE STATE OF IOWA					
				0.22	WD	ACRE		
0320	25262	KNOX CORPORATION	FEE STATE OF IOWA					
		PATRICK A. GARRELS	T	0.83	WD	ACRE		
0321	26043	SDLR, L.L.C.	FEE STATE OF IOWA					
0321	26043			450.00	WD	SQFT		
0322	26044	MARGARET M. PETERS	FEE STATE OF IOWA					
		FASHION TWENTY COSMETICS	T	0.21	WD	ACRE		
		GLANCY'S BARBERSHOP	T					
		AUTUMN HICKMAN	T					
0323	26045	JAY AMBE CORP.	FEE STATE OF IOWA					
				234.00	WD	SQFT		
0324	26046	MILES NEBRASKA, L.L.C.	FEE BETTENDORF CITY					
				367.00	WD	SQFT		
0325	26047	MARILYN SEIBEL TRUST	FEE BETTENDORF CITY					
				331.00	WD	SQFT		
0326	26048	KATHY WHITTY REVOCABLE TRUST	FEE BETTENDORF CITY					
				704.00	WD	SQFT		
0327	25631	THOMAS L. QUIGLEY, JR	FEE STATE OF IOWA					
				19,394.00	WD	SQFT		
0328	26049	JEFFERY L. WEINDRUCH	FEE					
		RICHARD I. VESOLE	CP1					
0329	25632	FABRIZIO FEDRIZZA	FEE STATE OF IOWA					
		CONNIE L. FEDRIZZA	FEE	0.58	WD	ACRE		
		VERNON MATTSON	FEE					
		HAYWARD MCGEE	T					
0330	25633	DONNA J. WAINWRIGHT REVOC TRUST	FEE STATE OF IOWA					
				0.24	WD	ACRE		
0331	26050	MIDWEST DEV & INV CORP.	FEE STATE OF IOWA					
				1,586.00	WD	SQFT		

PARCEL CHECK LIST

R2360003 PARCEL CHECK LIST BY PROJECT NUMBER

COUNTY : SCOTT

PROJECT NO. :IM-074-1(144)5--13-82

PIN: 03-82-074010-00

CONSTRUCTION NO.:IM-074-1(122)0--13-82

ASSIGNED TO: FLD

DESCRIPTION : I-74 From S. Of 23rd Ave. In Moline To N. Of 53rd St. In Davenport

PARCEL	KEY	OWNER	TYPE	R/W W.D OR EASE.	BORROW W.D OR EASE.	HOUSE OR OTHER	COMMERCIAL	OCC ENVIRONMENTAL CONCERNS
0332	26051	KO PROPERTY MANAGEMENT	FEE STATE OF IOWA					
				579.00	WD	SQFT		
0333	25634	HELEN M. WEINDRUCH	FEE STATE OF IOWA					
0333	25634	JEFFERY L. WEINDRUCH	FEE	0.11	WD	ACRE		
		HELEN NEWMAN WEINDRUCH	FEE					
		JOEL E. PREISSER	T					
		KEVIN VANTHEEMSCHKE	T					
0334	25635	ANJ LTD.	FEE STATE OF IOWA					
				0.22	WD	ACRE		
0335	25636	JAMIE L. GRENER REVOC TRUST	FEE STATE OF IOWA					
				0.17	WD	ACRE		
0336	25637	DANIEL E. GROTHUS	FEE STATE OF IOWA					
				0.17	WD	ACRE		
0337	25638	CHARLES J. DIXON	FEE STATE OF IOWA					
				806.00	WD	SQFT		
0338	26052	LEONA M. FERGUSON	FEE STATE OF IOWA					
				425.00	WD	SQFT		
0339	26101	NORTHWESTERN BELL TELEPHONE CO.	FEE STATE OF IOWA					
				612.00	WD	SQFT		
0340	26075	NOLA L. GOTTSCHALK	FEE STATE OF IOWA					
		RONALD L. GOTTSCHALK	FEE	0.17	WD	ACRE		
0341	25639	BETHANY ENTERPRISES, INC.	FEE STATE OF IOWA					
				0.28	EASE	ACRE		
0341 A	25684	BETHANY ENTERPRISES, INC.	FEE STATE OF IOWA					
		ABSOLUTE CASH, INC.	T	0.65	EASE	ACRE		
		HORIZON MOVERS AND STORAGE	T					
0342	25640	W. DAVID RIPLEY	FEE STATE OF IOWA					
		REBA S. RIPLEY	FEE	0.09	WD	ACRE		
0343	25641	THOMAS D. VOSS	FEE STATE OF IOWA					
		TINA L. VOSS	FEE	0.11	WD	ACRE		
0344	25642	PARCEL R. DELETED						
0344	25642	ARLENE K. SOULTS REVOC TRUST	FEE					
0345	25643	SOULTS REAL ESTATE LLC	FEE STATE OF IOWA					
		CRESCENT-ECONOMY INC	T	0.39	EASE	ACRE		
0346	25644	B.O.R.G. ENTERPRISES	FEE STATE OF IOWA					
				0.51	WD	ACRE		

**PARCEL CHECK LIST**

R2360003 PARCEL CHECK LIST BY PROJECT NUMBER

COUNTY : SCOTT PROJECT NO. : IM-074-1(144)5--13-82 PIN: 03-82-074010-00

CONSTRUCTION NO. : IM-074-1(122)0--13-82 ASSIGNED TO: FLD

DESCRIPTION : I-74 From S. Of 23rd Ave. In Moline To N. Of 53rd St. In Davenport

PARCEL	KEY	OWNER	TYPE	R/W W.D OR EASE.	BORROW W.D OR EASE.	HOUSE OR OTHER	COMMERCIAL	OCC ENVIRONMENTAL CONCERNS
0347	25713	JUANITA J. CARRILLO ESTATE	FEE STATE OF IOWA	0.01	WD	ACRE		
0348	26053	BRIAN L. PALMER	FEE STATE OF IOWA	95.00	WD	SQFT		
0349	26054	JOHN GROTHUS LANCE M. HORLAS	FEE STATE OF IOWA CP1	166.00	WD	SQFT		
0350	26055	JOHN F. GROTHUS ANDY AMATO TAMMY RINGSTAFF	FEE STATE OF IOWA CP1 CP2	149.00	WD	SQFT		
0351	26056	LORI A. BOLES	FEE STATE OF IOWA	154.00	WD	SQFT		
0352	26057	JASON L. MCCOY	FEE STATE OF IOWA	348.00	WD	SQFT		
0353	25645	GREGORY POLEY JANET POLEY	FEE STATE OF IOWA FEE	0.17	WD	ACRE		
0354	25646	PARCEL R. DELETED CYNTHIA L. FREIDHOF RONALD L. FREIDHOF	FEE FEE					
0355	25647	HAWKEYE REAL ESTATE	FEE STATE OF IOWA	0.69	EASE	ACRE		
0356	25648	PARCEL R. DELETED ANN I. SCHROEDER	FEE					
0357	25649	JAMES E. REISTROFFER IRENE REISTROFFER QUINT CITIES PETROLEUM JEFFREY A. PICK	FEE STATE OF IOWA FEE CP1 T	0.34	EASE	ACRE		
0358	25650	MOLO QUINT, LLC	FEE STATE OF IOWA	0.17	WD	ACRE		
0359	25651	APOSTOLIC ASSEMBLY CHURCH	FEE STATE OF IOWA	7,500.00	WD	SQFT		
0360	25652	MICHAEL A. LEIGHT SUSAN B. LEIGHT	FEE STATE OF IOWA FEE	0.17	WD	ACRE		
0361	25653	RICHARD L. HELSLANDER, JR BRET J. GENTRY JEREMY HELSLANDER	FEE STATE OF IOWA FEE T	7,500.00	WD	SQFT		
0362	25654	ERIC V. TOTHEROW TERRY L. TOTHEROW	FEE STATE OF IOWA FEE	7,500.00	WD	SQFT		





## PARCEL CHECK LIST

R2360003 PARCEL CHECK LIST BY PROJECT NUMBER

COUNTY : SCOTT

PROJECT NO. : IM-074-1(144)5--13-82

PIN: 03-82-074010-00

CONSTRUCTION NO.: IM-074-1(122)0--13-82

ASSIGNED TO: FLD

DESCRIPTION : I-74 From S. Of 23rd Ave. In Moline To N. Of 53rd St. In Davenport

PARCEL	KEY	OWNER	TYPE	R/W W.D OR EASE.	BORROW W.D OR EASE.	HOUSE OR OTHER	COMMERCIAL	OCC ENVIRONMENTAL CONCERNS
0378	26102	ROBERT H. BERGESON	FEE					
0379	26098	UNKNOWN	FEE					
0380	26103	GOETTSCHE BROS REALTY GREEN ENDEAVORS GROUP LLC DBA THE FENCE GUYS	FEE STATE OF IOWA T T	0.55 EASE ACRE				
0380	26103	MIDWEST LAWNS, LLC	T					
0381	26061	ERWIN PINNOW TRUST JANET PINNOW TRUST	FEE STATE OF IOWA FEE	0.21 WD ACRE				
0382	26062	WG BLOCK CO.	FEE					
0383	26063	ABEL - KEPPY PC	FEE					
0384	26064	DONNA BYARS FREEMAN TRUST	FEE					
0385	26065	ROBERT G. HENZEN	FEE					
0386	26066	LOUIS M. KEPPY TRUST	FEE					
0387	26083	LYLE L. ROSS KELLY SIMONS	FEE FEE					
0388	26084	OTIS A. ROSE III	FEE					
0389	26085	JOEL J. MULLOY	FEE					
0390	26086	MARK C. JACOBS	FEE					
0391	26087	RAMONA K. PEIFFER	FEE					
0392	26088	KATHLEEN A. WISEMAN	FEE					
0393	26089	KELLEY L. SMITH THOMAS L. SMITH	FEE FEE					
0394	26090	JAMES E. LEVSEN SANDRA J. LEVSEN	FEE FEE					
0395	26091	BETTENDORF PARK BOARD	FEE					
0396	26092	UNKNOWN	FEE					
0397	26390	UNKNOWN	FEE					

### TRAFFIC CONTROL PLAN

Two lanes of thru traffic in each direction shall be maintained at all times in both directions of I-74.

Access to existing entrance and exit ramps shall be maintained at all times except as noted in the Staging notes.

The Middle Road Eastbound exit ramp will be closed in Year 5 Stage 1 and detour provided per the J Sheets.

Maintain existing traffic control and detour signing from previous year construction project.

Temporary message boards will be placed at ramps 2 weeks prior to closure and for duration of detours. Message boards will be placed by others and shall not be moved by the Contractor without permission of the Engineer.

Portable Message Boards will be supplied and maintained by others. Contractor to coordinate the placement and timing with the Work Zone System contract

Bridge construction is by others. However Contractor is to provide all necessary Traffic Control, Staging devices, and pavement markings as shown on the J Sheets and directed by the Engineer, including the devices on the bridges.

Contractor shall coordinate traffic control with the Illinois contract as well as contracts IM-74-1(162)2--13-82 and IM-74-1(213)4--13-82 at the north end of the contract.

Lane closure will be permitted from 7 PM to 6 AM beginning at 7:00 PM Monday and ending at 6:00 AM Friday. Lane closures will also be permitted from 9:00 PM Sunday to 6:00 AM Monday. The contractor shall notify the Engineer at least 72 hours before any closure starts.

For additional complementary information, refer to part 6 of the Manual on Uniform Traffic Control Devices and to the current Standard Specifications.

### STAGING NOTES

Note: "Year 4" and "Year 5" in the plans refers to the overall I-74 project schedule for coordination with Bridge Contracts. This is a two year contract.  
I-74 Mainline and Ramps  
Year 4 Stage 1 - I-74

Construction:  
Construct westbound lighting

Traffic Control:  
Maintain eastbound I-74 traffic on existing I-74. Maintain westbound I-74 traffic on the temporary median fill, temporary bridge over Mississippi Boulevard and median pavement previously constructed.  
Maintain traffic on the previously constructed US 67 Ramp D.  
Maintain Illinois Ramp RD-H across the new River Bridge and westbound pavement.  
Merge the Illinois Ramp RD-H and US 67 Ramp D traffic prior to shifting mainline I-74 westbound traffic from the median to the previously constructed westbound pavement.  
Maintain two thru lanes and 1 auxiliary lane to the westbound exit to Middle Road.

Year 4 Stage 2 - I-74

Construction:  
Construct the Detention Pond.  
Optional start of construction of US 67 Ramp A and MSE Wall 165. To be completed in Year 5.  
Remove the temporary median pavement and construct the permanent westbound inside shoulder, and westbound lane 1 to Station 6808+25  
Bridge removals are by others.  
Remove temporary connection from 14th Street to Ramp B.  
Construct remaining Ramp B left shoulder using Standard TC-402

Traffic Control:  
Maintain eastbound I-74 traffic on existing I-74. Shift westbound I-74 traffic onto the new River Bridge. Match the Illinois traffic control. Open previously constructed US 67 Ramp B.  
Maintain traffic on the previously constructed US 67 Ramp D.  
Maintain 2 thru lanes and 1 auxiliary lane on the previously constructed westbound pavement to the westbound Middle Road Exit Ramp. Match Stage 1 pavement marking near Station 6820+13.  
Detour the removed eastbound loop ramp as shown on J Sheet J.4

YEAR 4, STAGE 2 - Local Roads Improvements

Construction:  
Construct 2.5' of curb and gutter at Temporary Loop Ramp Removal location.  
Remove 14th St. from Exit Ramp bridge to North of Temporary Connection for Ramp B.  
Remove Temporary Connection for Ramp B.

Year 4 Winter:  
Upon completion of the proposed stage 2 work, shift traffic into the configuration shown on the "Year 4 Winter" sheets. Maintain eastbound I-74 traffic on existing I-74.  
Upon completion of the construction of the westbound viaduct and inside median pavement, remove the lane shifts and temporary barrier from the Year 4 Stage 2 work zone from approximately Station 6793+0 to 6809+00.

No I-74 construction is proposed during this stage

Year 5 Stage 1 - I-74

Construction:  
Complete construction of US 67 Ramp A. Construct US 67 Ramp C.  
Remove the remaining existing eastbound pavement and construct the proposed eastbound pavement.  
Remove the existing eastbound exit Ramp. Bridge removals are by others.  
Complete Ramp A and C lighting  
Complete eastbound viaduct and River bridge lighting

Traffic Control:  
Shift eastbound traffic onto the westbound pavement and bridges.  
Maintain the eastbound Middle Road entrance ramp an merge with eastbound traffic south of the Lincoln Road Bridge. Maintain 2 eastbound lanes to the Illinois contract.  
Maintain 2 westbound lanes and 1 auxiliary lane from the Illinois contract to US 67 Ramp B.  
Maintain Traffic on previously constructed US 67 Ramps B and D.  
Maintain two thru lanes and 1 auxiliary lane to the westbound exit to Middle Road.  
Install a modular glare screen system on the Temporary barrier rail between opposing directions of traffic as shown on the Stage Typical sheets J.11 and J.12.  
Detour the removed eastbound loop ramp as shown on J Sheet J.4  
Detour the existing eastbound exit ramp as shown on J Sheet J.5

Year 5 Stage 2 - I-74

Construction:  
Remove the temporary median pavement and construct the permanent median pavement, barrier, and light poles from Station 6803+92 to Station 6837+00. Match the existing median and barrier under Lincoln Road

Traffic Control:  
Install permanent pavement markings from the Illinois Traffic Control to the north end of the project.

### TABULATION OF SPECIAL EVENTS

Event	Location	Date

### COORDINATED OPERATIONS

Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.

Project	Type of Work
BRFIM-074-1(199)5--05-82	Westbound Viaduct
BRFIM-074-1(200)5--05-82	Eastbound Viaduct
BRFIM-074-1(198)5--05-82	Arch Bridge over River
Illinois Package A	Illinois road and bridge
IM-074-1(162)2--13-82	Grade and Pave
IM-074-1(213)4--13-82	Grade and Pave
IM-074-1(218)5--13-82	Signing
Work Zone System	Portable Message Boards

### STAGING NOTES

at the start of this stage. Maintain all lanes of traffic.  
Close the I-74 median shoulders per Standard TC-402 and with Temporary Barrier Rail as shown on the J Sheets.

YEAR 5, STAGE 2 - Local Roads Improvements

Construction:  
Construct gapped portion of US 67 WB under I-74 bridge.  
Construct 2.5' of Kimberly Road at temporary exit ramp removal location.

Traffic Control:  
US 67 EB traffic will be allowed to turn left to US 67 Ramp D.  
Two left turn lanes on US 67 WB will be closed.

Year 5 Stage 3 - I-74

Construction:  
Mainline I-74 ramp and pavement construction is complete.  
Work ongoing by Illinois contractors  
Traffic Control  
Maintain all lanes of Traffic













Year 5 Stage 4 - I-74

Construction:  
Mainline I-74 ramp and pavement construction is complete.  
Work ongoing by Illinois contractors.  
Construct Identity Elements.








Traffic Control:  
Maintain all lanes of Traffic  
Upon completion of the Illinois contracts. Complete remaining Final pavement marking on the River Bridge

-----  
A series of empty horizontal lines for additional notes or staging information.




**PLAN VIEW COLOR LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS**

LINE WORK	Design Color No.		
Green	(2)		Existing Topographic Features and Labels
Magenta	(5)		Pavement Marking Call Outs
Blue	(1)		Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Yellow	(4)		Pavement Markings, Yellow
Off White	(254)		Pavement Markings, White
SHADING	Design Color No.		
Green, Light	(225)		Existing Pavement Shading
Green	(2)		Existing Viaduct Shading
Blue, Light	(230)		Proposed Pavement Shading
Red	(3)		Proposed Bridge Shading (By Others)
Gray, Light	(48)		Previously Constructed Pavement or Structure Shading
Brown, Dark	(237)		Previously Constructed Pavement by Others
Lavender	(9)		Temporary Pavement Shading








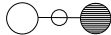











**CROSS SECTION VIEW PATTERN AND SYMBOL LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS**

SHADING	Design Color No.		
Green, Light	(225)		Existing Pavement and Bridge Shading
Brown, Light	(236)		Proposed Grading Shading
Blue, Light	(230)		Proposed Pavement Shading
Red	(3)		Proposed Bridge Shading
Gray, Light	(48)		Previously Constructed Pavement or Structure Shading
Brown, Dark	(237)		Previously Constructed Pavement by Others
Lavender	(9)		Temporary Pavement Shading

**CROSS SECTION VIEW PATTERN AND SYMBOL LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS**

	Pavement Removal		Temporary Barrier Rail
			42 Inch Channelizer

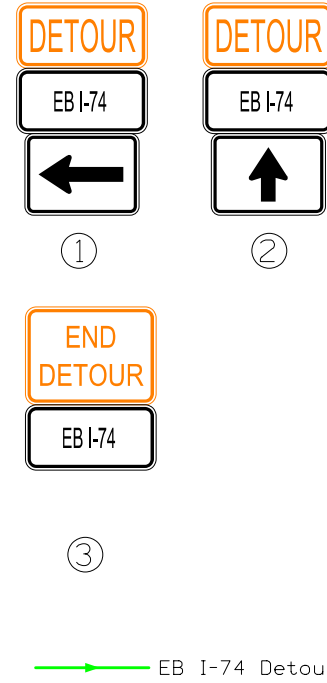
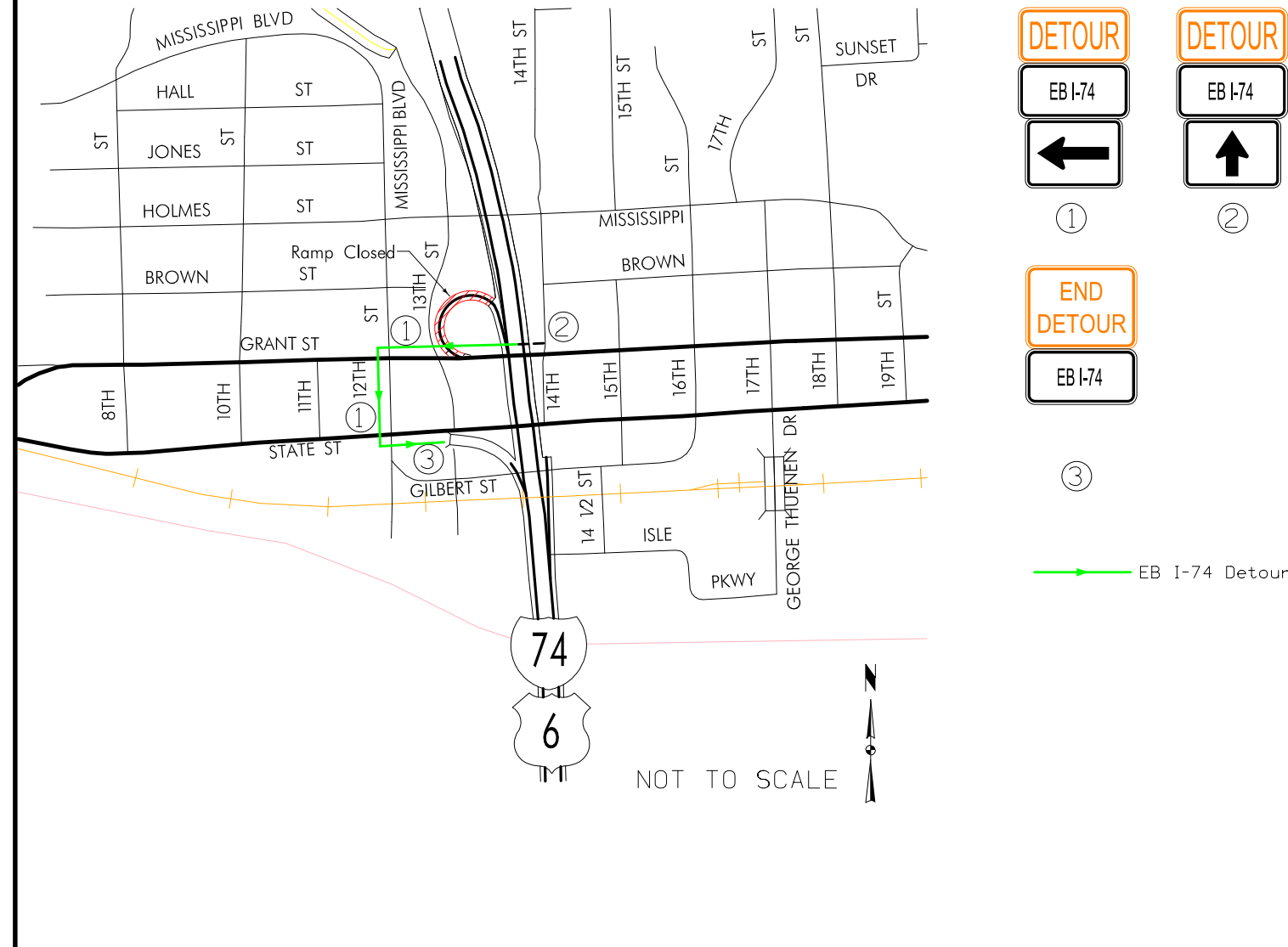
**PLAN VIEW PATTERN AND SYMBOL LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS**

	Channelizing Device		Crash Cushion
	Drum		Traffic Signal
	Temporary Lane Separator		Flagger
	Tubular Marker		Temporary Floodlighting
	Channelizer Marker		Traffic Sign
	Concrete Barrier Marker		Type III Barricade
	Delineator		Type A Warning Light
	Temporary Barrier Rail		Direction of Traffic
	Pavement Removal		Safety Closure
	Bridge Removal by Others		

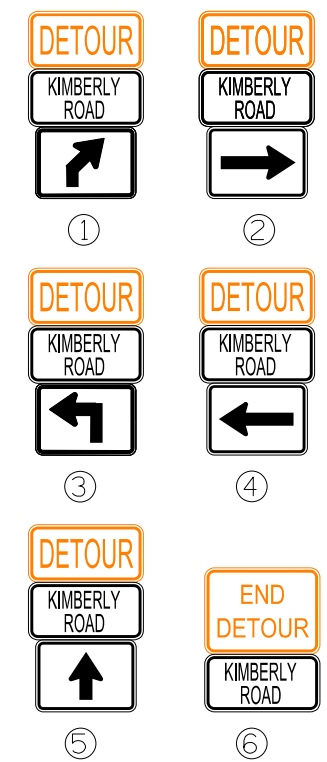
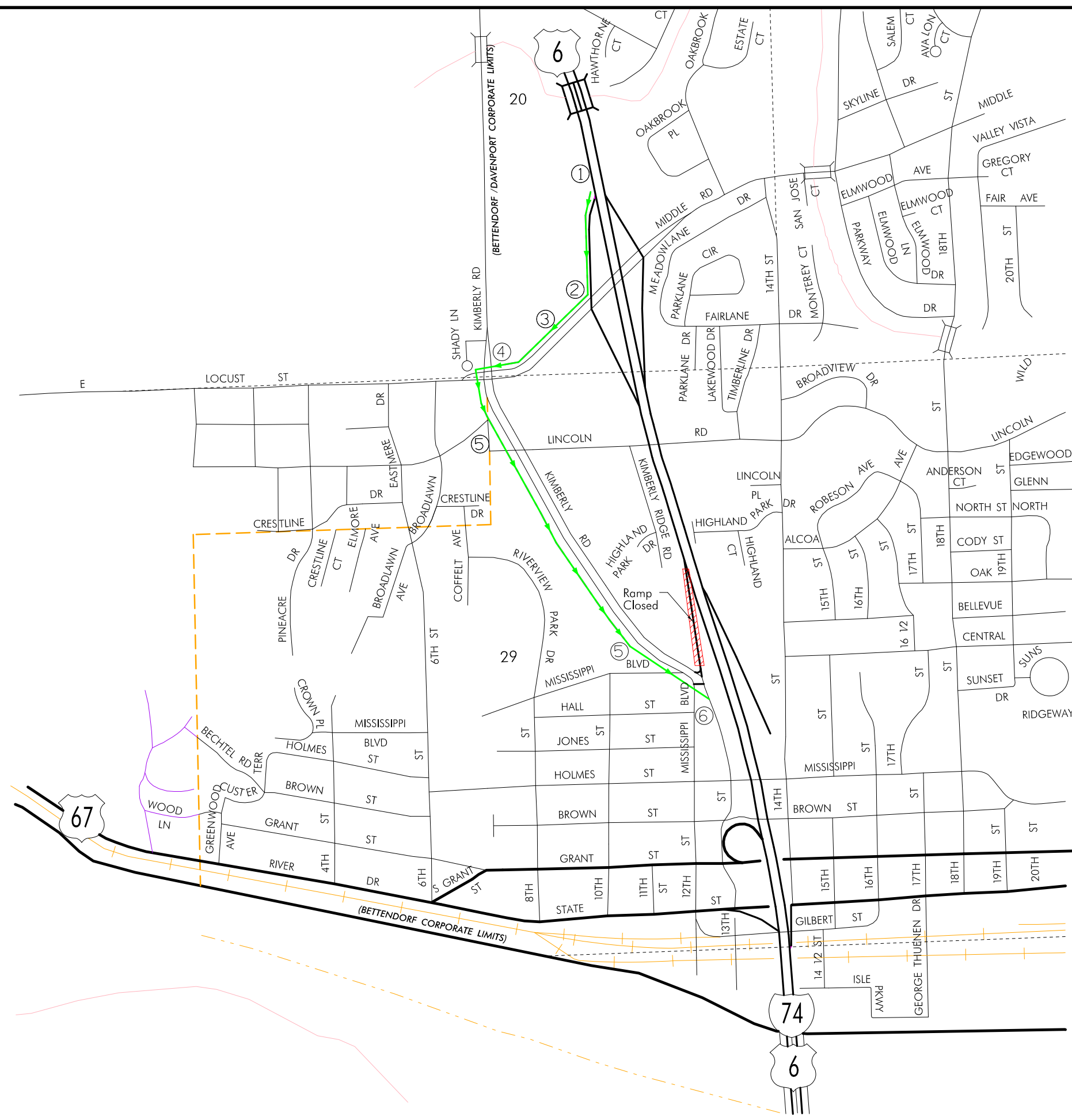
NOTE: Device spacing according to Standard Road Plans unless specifically dimensioned.

**TRAFFIC CONTROL AND STAGING LEGEND AND SYMBOL INFORMATION SHEET (COVERS SHEET SERIES J)**

EB I-74 Entrance Ramp  
 Year 4 Stage 2  
 Year 5 Stage 1



NOTE: All Detour signs are to be provided, placed, maintained, and removed by the contractor.



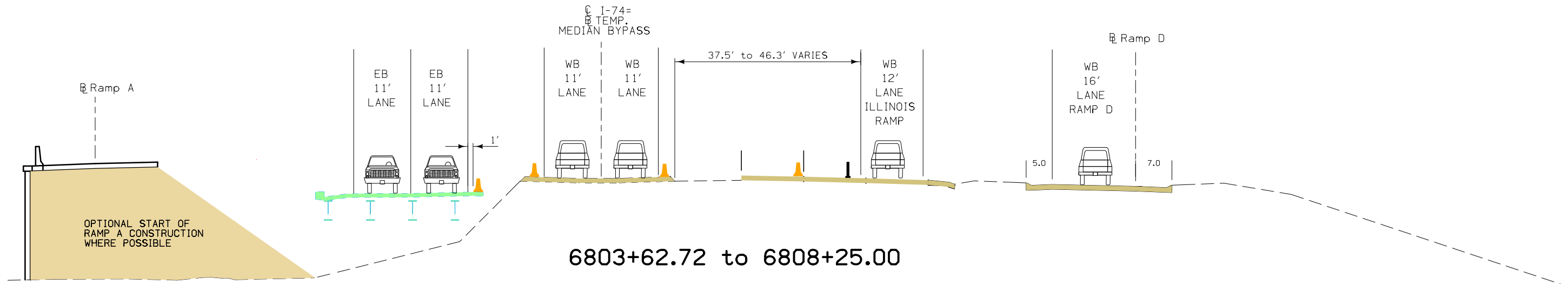
→ SB Kimberly Road Detour

Note: All detour signs are to be provided, placed, maintained, and removed by the contractor.

EB EXIT RAMP  
DETOUR  
YEAR 5 STAGE 1

NOT TO SCALE

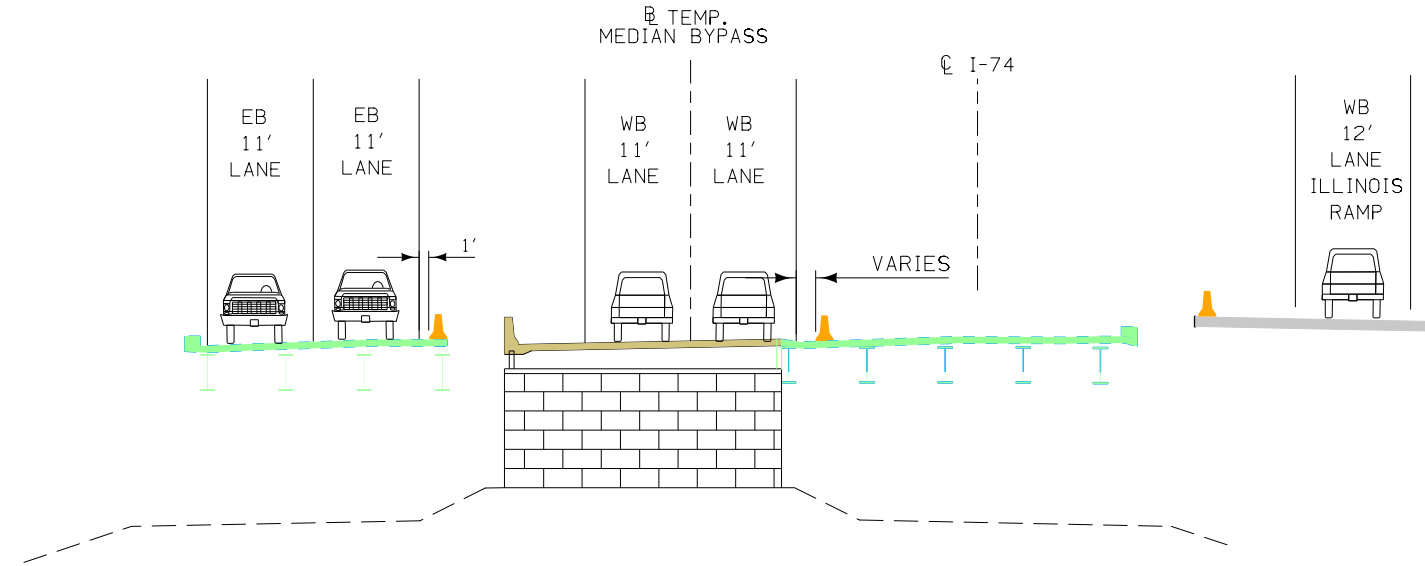
# I-74 YEAR 4 STAGE 1 TYPICAL SECTIONS



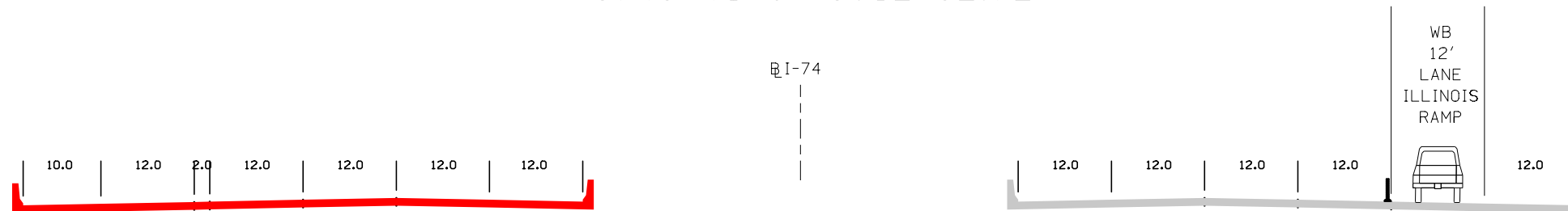
6803+62.72 to 6808+25.00

**GENERAL NOTES:**

1. VIADUCT REMOVAL BY OTHERS. COORDINATE CONSTRUCTION STAGING WITH PROJECT #BRFIM-074-1(199)5-05-82.
2. ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE NOTED.
3. TEMPORARY BARRIER RAIL IS OFFSET 2' FROM EDGE OF TRAVELED WAY, UNLESS OTHERWISE NOTED.
4. REFER TO CROSS SECTION SHEETS AND TYPICAL SHEETS FOR ADDITIONAL INFORMATION.
5. SEE STANDARD BA-401 FOR ANCHORAGE REQUIREMENTS OF TEMPORARY BARRIER RAIL.

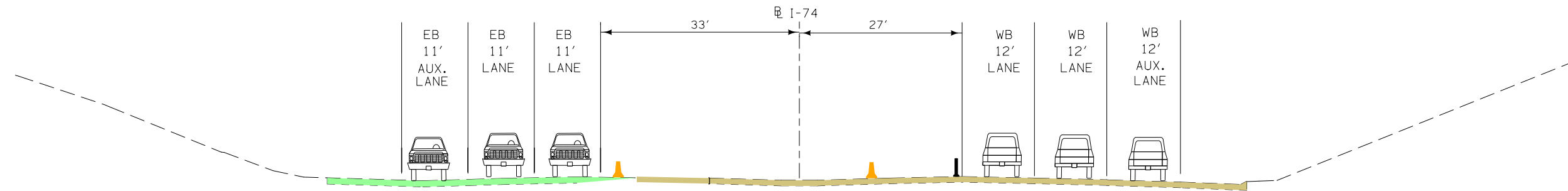


6795+41 to 6802+62.72



6746+86.92 to 6795+41

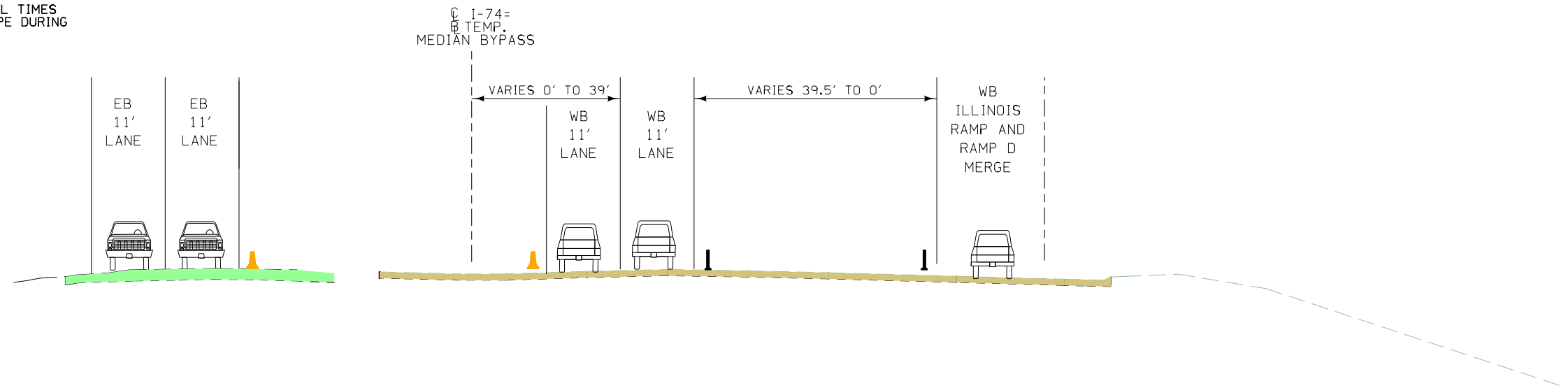
# I-74 YEAR 4 STAGE 1 TYPICAL SECTIONS



6820+16.27 to 6837+00.00

**GENERAL NOTES:**

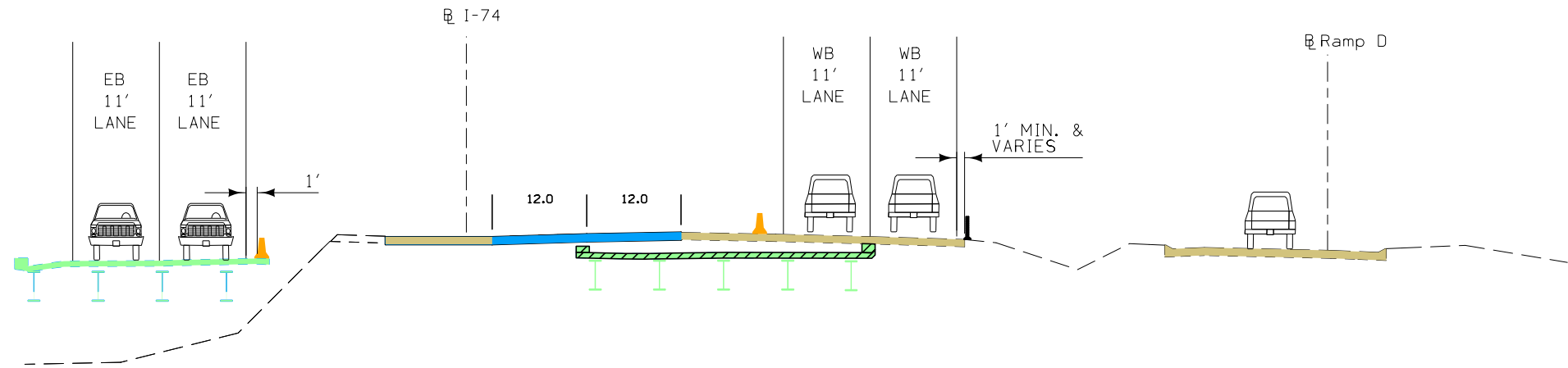
1. VIADUCT REMOVAL BY OTHERS. COORDINATE CONSTRUCTION STAGING WITH PROJECT #BRFIM-074-1(199)5-05-82.
2. ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE NOTED.
3. TEMPORARY BARRIER RAIL IS OFFSET 2' FROM EDGE OF TRAVELED WAY, UNLESS OTHERWISE NOTED.
4. REFER TO CROSS SECTION SHEETS AND TYPICAL SHEETS FOR ADDITIONAL INFORMATION.
5. SEE STANDARD BA-401 FOR ANCHORAGE REQUIREMENTS OF TEMPORARY BARRIER RAIL.
6. EXISTING RAMP D TRAFFIC TO REMAIN OPEN AT ALL TIMES IN STAGE 1. COMPLETE GRADING AT TOE OF SLOPE DURING STAGE 2 IF NECESSARY.



6808+25.00 to 6820+16.27



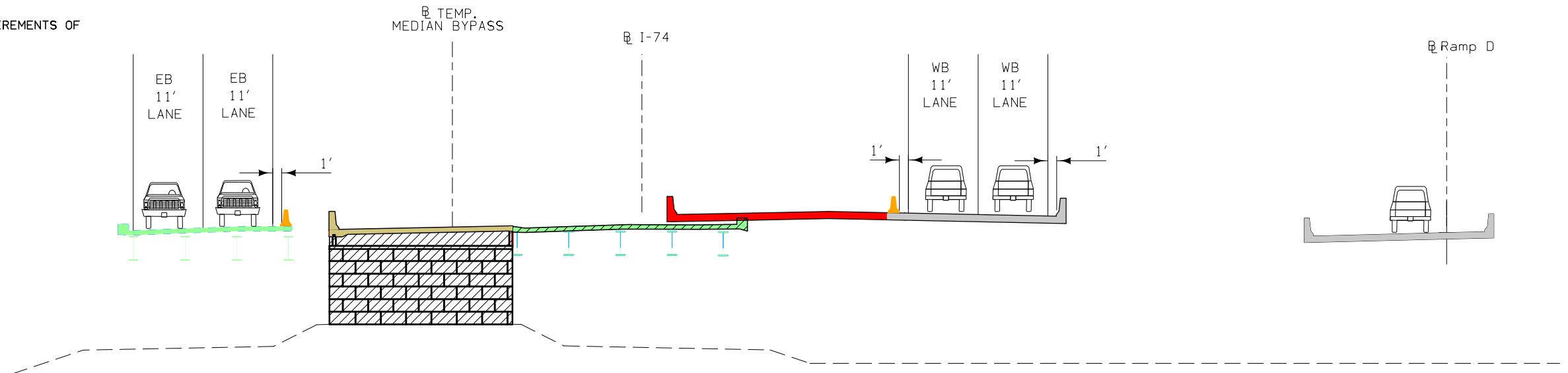
# I-74 YEAR 4 STAGE 2 TYPICAL SECTIONS



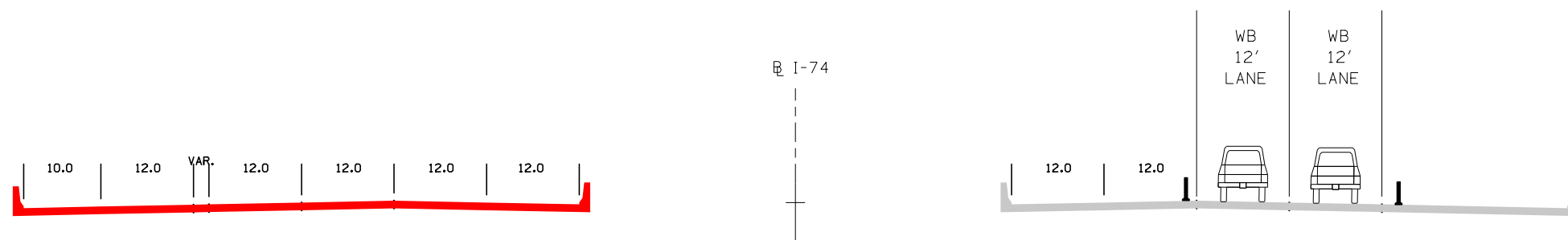
6804+55.70 to 6808+25.00

**GENERAL NOTES:**

1. VIADUCT REMOVAL BY OTHERS. COORDINATE CONSTRUCTION STAGING WITH PROJECT #BRFIM-074-1(199)5-05-82.
2. ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE NOTED.
3. TEMPORARY BARRIER RAIL IS OFFSET 2' FROM EDGE OF TRAVELED WAY, UNLESS OTHERWISE NOTED.
4. REFER TO CROSS SECTION SHEETS AND TYPICAL SHEETS FOR ADDITIONAL INFORMATION.
5. SEE STANDARD BA-401 FOR ANCHORAGE REQUIREMENTS OF TEMPORARY BARRIER RAIL.

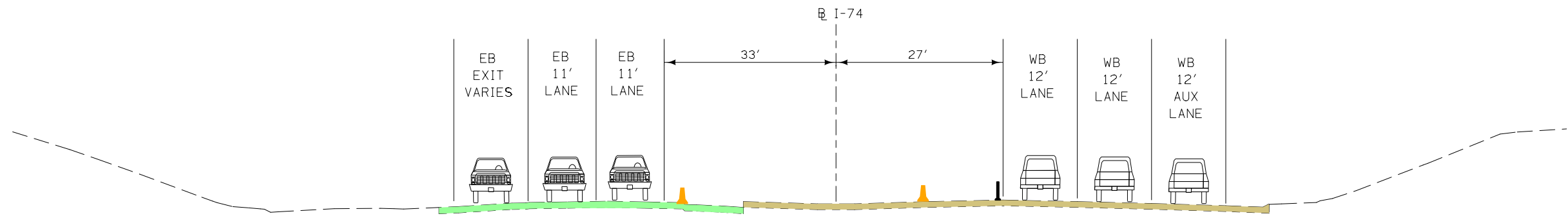


6796+79.00 to 6804+55.70



6746+86.92 to 6796+79.00

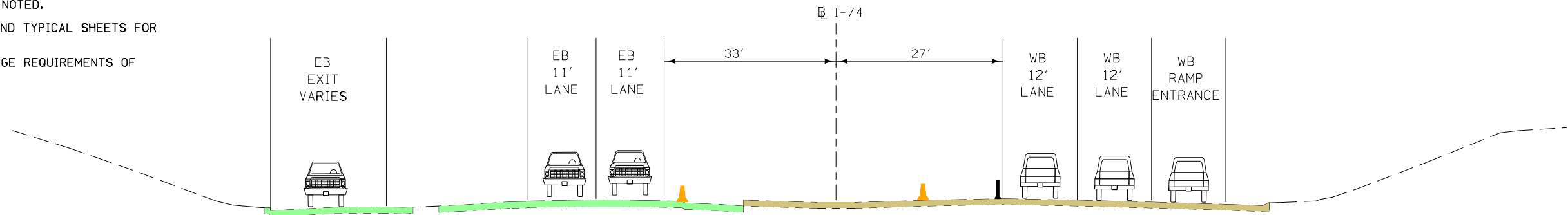
# I-74 YEAR 4 STAGE 2 TYPICAL SECTIONS



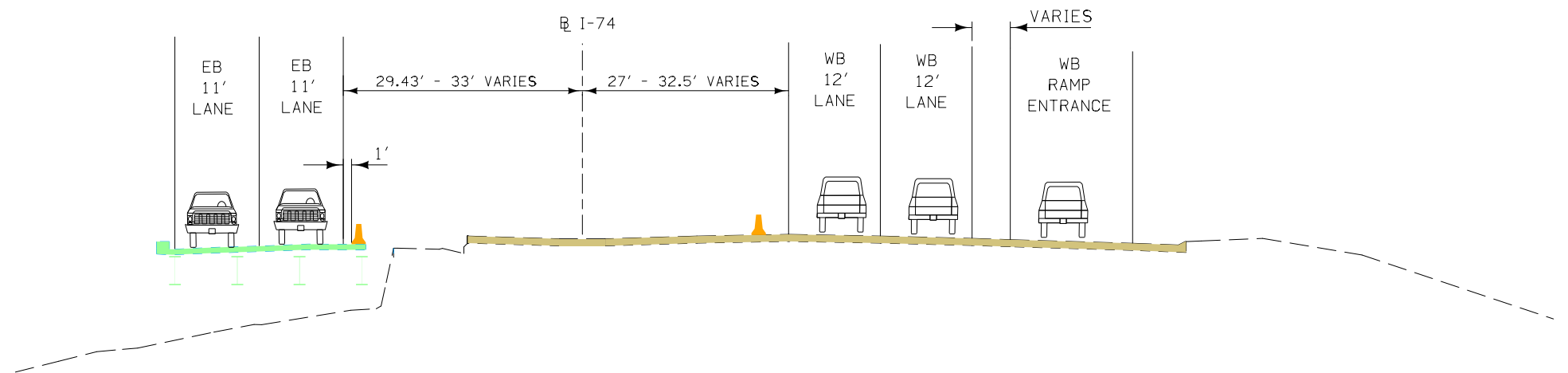
6822+00.00 to 6837+00.00

**GENERAL NOTES:**

1. VIADUCT REMOVAL BY OTHERS. COORDINATE CONSTRUCTION STAGING WITH PROJECT #BRFIM-074-1(199)5-05-82.
2. ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE NOTED.
3. TEMPORARY BARRIER RAIL IS OFFSET 2' FROM EDGE OF TRAVELED WAY, UNLESS OTHERWISE NOTED.
4. REFER TO CROSS SECTION SHEETS AND TYPICAL SHEETS FOR ADDITIONAL INFORMATION.
5. SEE STANDARD BA-401 FOR ANCHORAGE REQUIREMENTS OF TEMPORARY BARRIER RAIL.

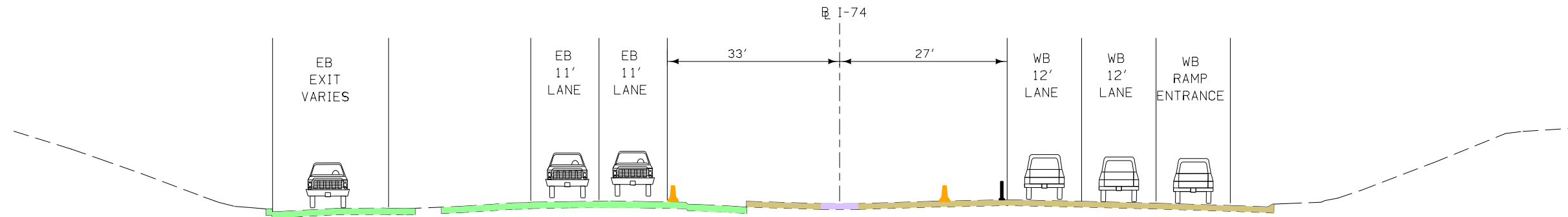


6814+49.84 to 6822+00.00



6808+25.00 to 6814+49.84

# I-74 YEAR 4 STAGE WINTER TYPICAL SECTIONS

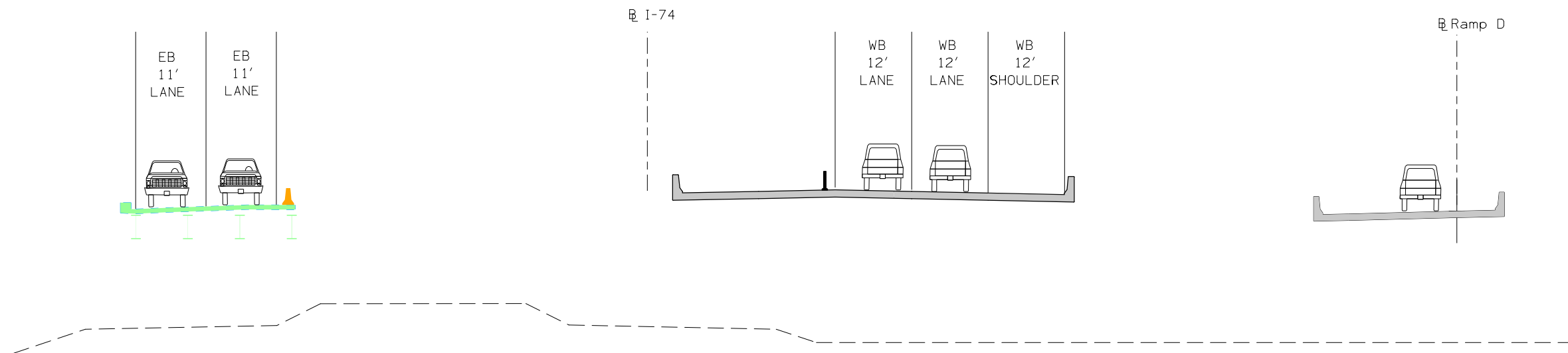


6804+55.70 to 6809+70.37

MATCH YEAR 4 STAGE 2 AT 6809+70.37

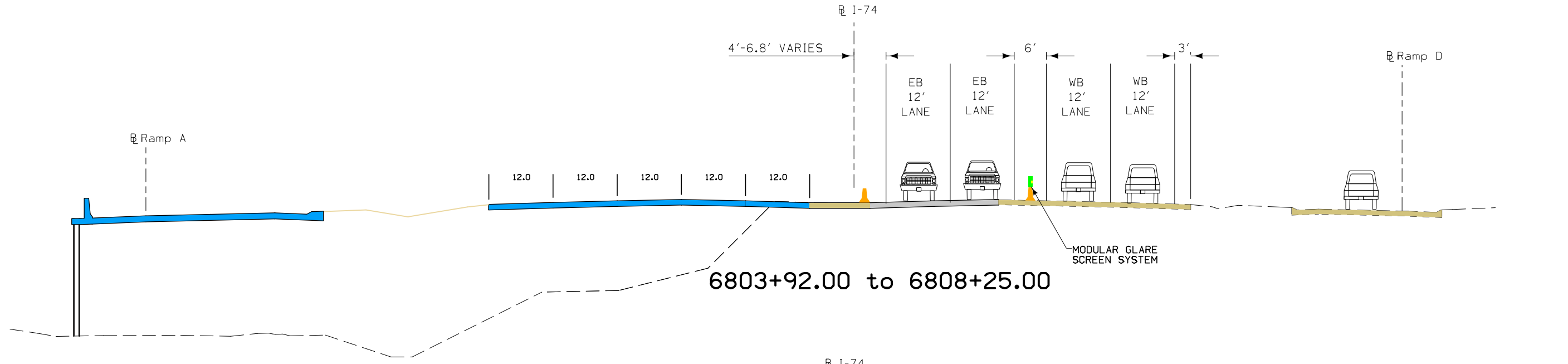
**GENERAL NOTES:**

1. VIADUCT REMOVAL BY OTHERS. COORDINATE CONSTRUCTION STAGING WITH PROJECT #BRFIM-074-1(199)5-05-82.
2. ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE NOTED.
3. TEMPORARY BARRIER RAIL IS OFFSET 1' FROM EDGE OF TRAVELED WAY, UNLESS OTHERWISE NOTED.
4. REFER TO CROSS SECTION SHEETS AND TYPICAL SHEETS FOR ADDITIONAL INFORMATION.
5. SEE STANDARD BA-401 FOR ANCHORAGE REQUIREMENTS OF TEMPORARY BARRIER RAIL.



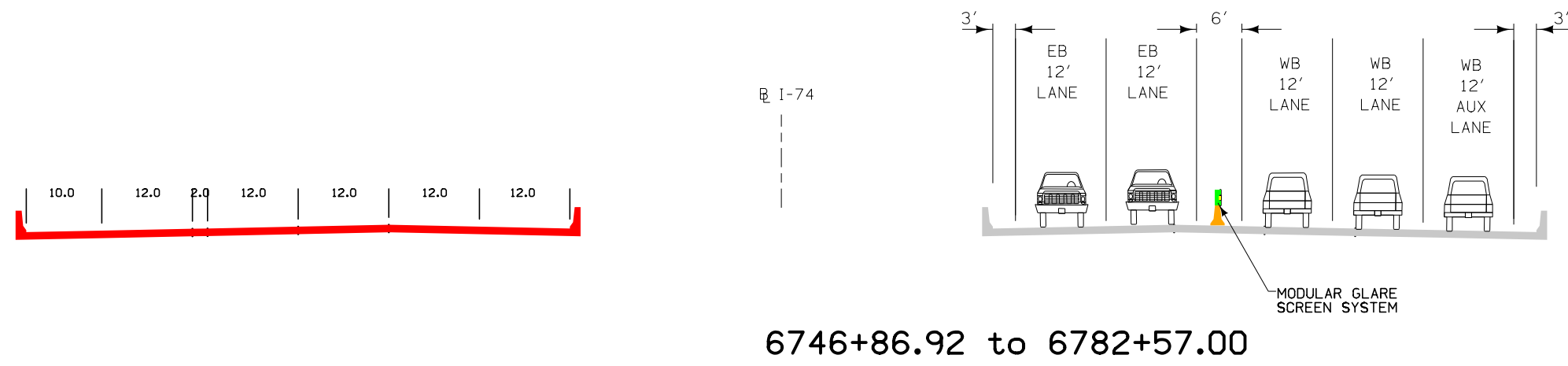
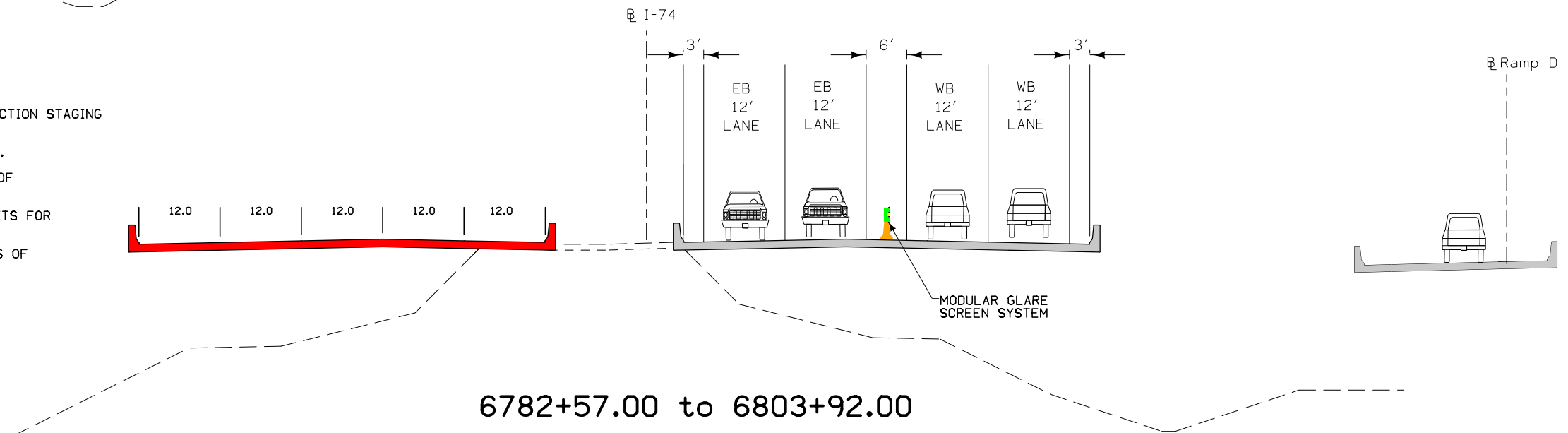
6792+99.80 to 6804+55.70

# I-74 YEAR 5 STAGE 1 TYPICAL SECTIONS

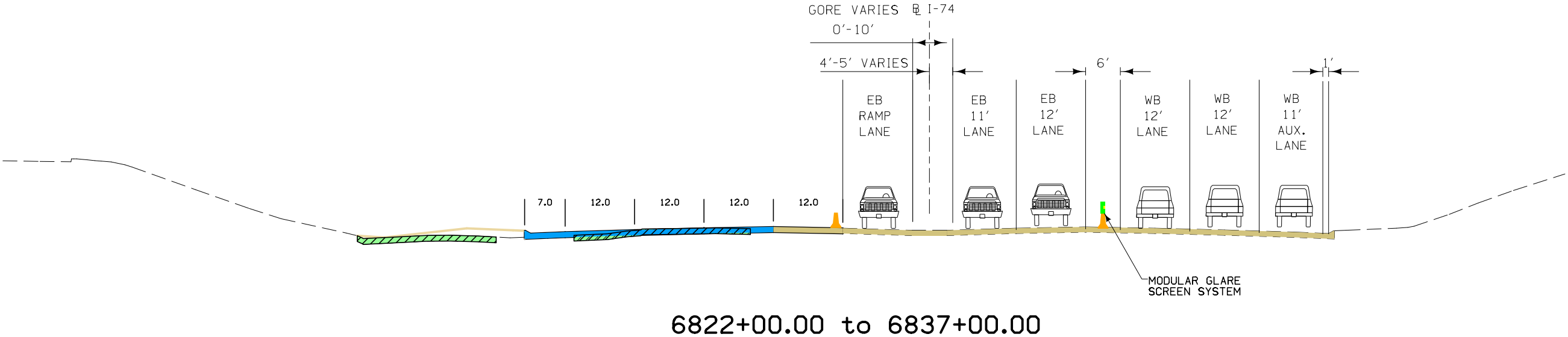


**GENERAL NOTES:**

1. VIADUCT REMOVAL BY OTHERS, COORDINATE CONSTRUCTION STAGING WITH PROJECT #BRFIM-074-1(199)5-05-82.
2. ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE NOTED.
3. TEMPORARY BARRIER RAIL IS OFFSET 2' FROM EDGE OF TRAVELED WAY, UNLESS OTHERWISE NOTED.
4. REFER TO CROSS SECTION SHEETS AND TYPICAL SHEETS FOR ADDITIONAL INFORMATION.
5. SEE STANDARD BA-401 FOR ANCHORAGE REQUIREMENTS OF TEMPORARY BARRIER RAIL.

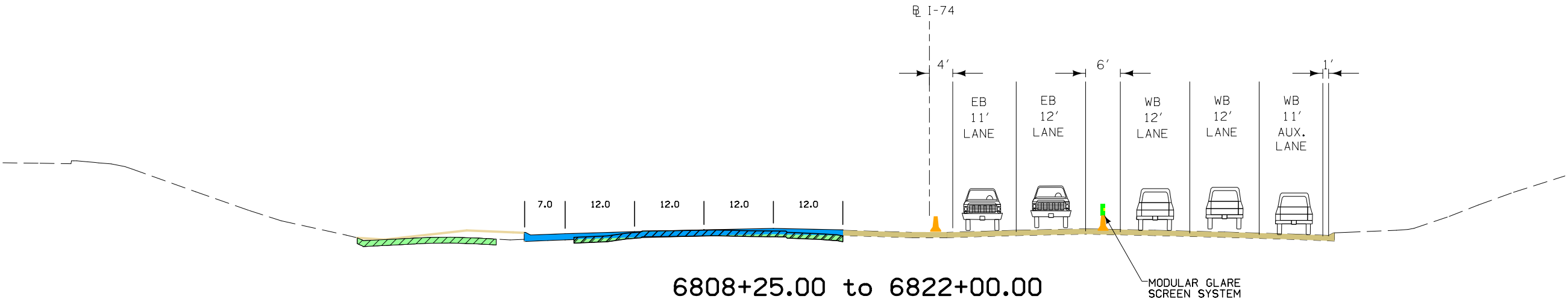


# I-74 YEAR 5 STAGE 1 TYPICAL SECTIONS

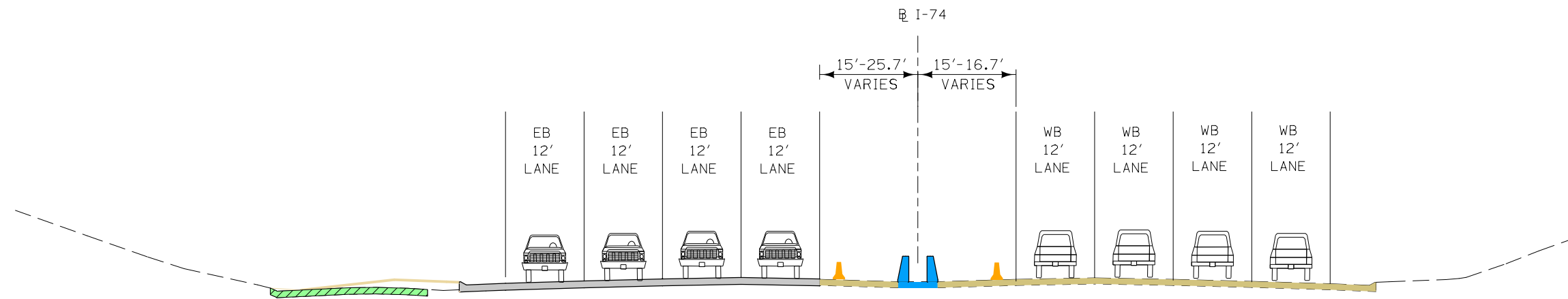


**GENERAL NOTES:**

1. VIADUCT REMOVAL BY OTHERS. COORDINATE CONSTRUCTION STAGING WITH PROJECT #BRFIM-074-1(199)5-05-82.
2. ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE NOTED.
3. TEMPORARY BARRIER RAIL IS OFFSET 2' FROM EDGE OF TRAVELED WAY, UNLESS OTHERWISE NOTED.
4. REFER TO CROSS SECTION SHEETS AND TYPICAL SHEETS FOR ADDITIONAL INFORMATION.
5. SEE STANDARD BA-401 FOR ANCHORAGE REQUIREMENTS OF TEMPORARY BARRIER RAIL.



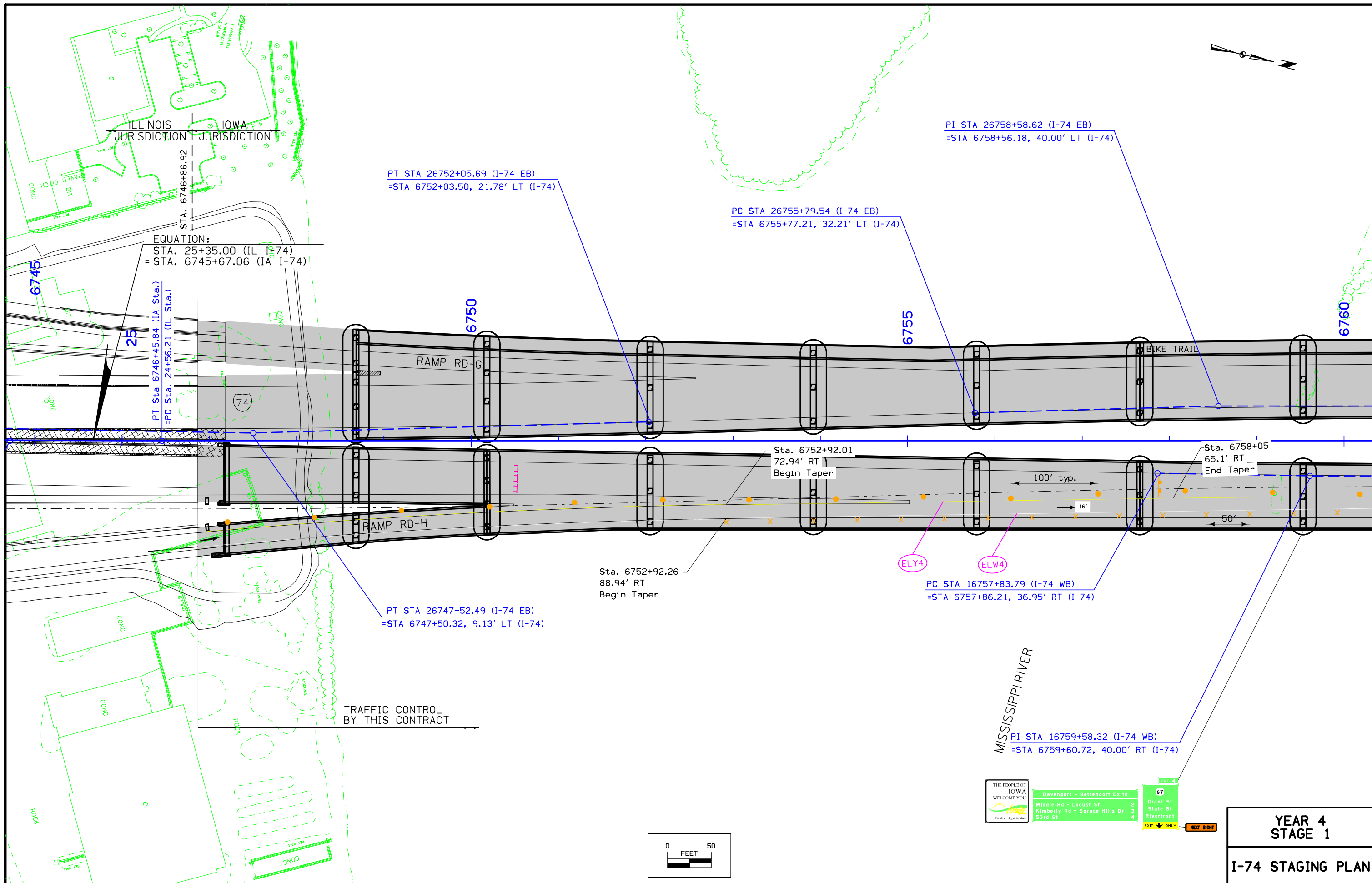
# I-74 YEAR 5 STAGE 2 TYPICAL SECTIONS



6803+92.00 to 6837+00.00

**GENERAL NOTES:**

1. VIADUCT REMOVAL BY OTHERS, COORDINATE CONSTRUCTION STAGING WITH PROJECT #BRFIM-074-1(199)5-05-82.
2. ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE NOTED.
3. TEMPORARY BARRIER RAIL IS OFFSET 2' FROM EDGE OF TRAVELED WAY, UNLESS OTHERWISE NOTED.
4. REFER TO CROSS SECTION SHEETS AND TYPICAL SHEETS FOR ADDITIONAL INFORMATION.
5. SEE STANDARD BA-401 FOR ANCHORAGE REQUIREMENTS OF TEMPORARY BARRIER RAIL.

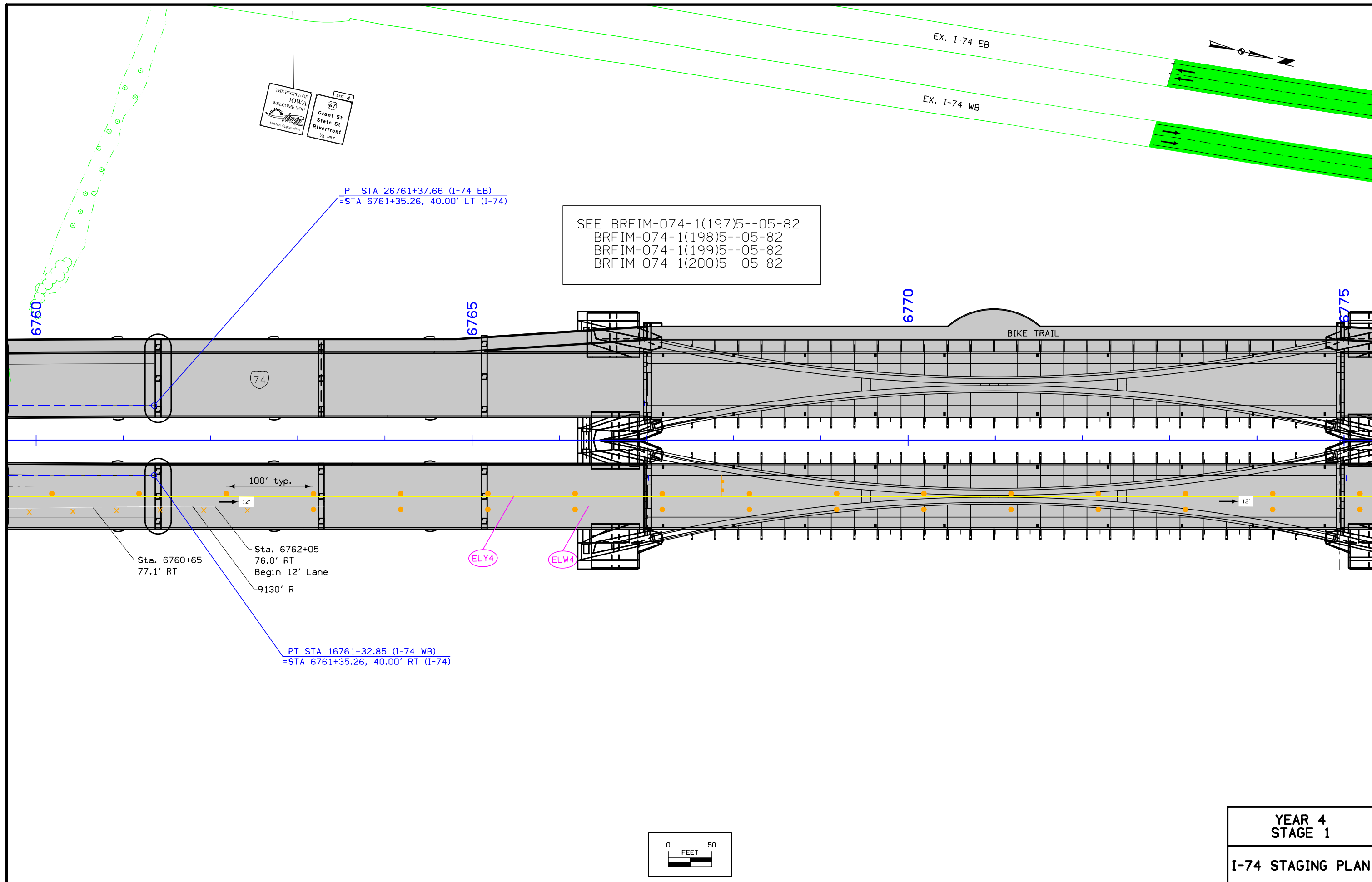


THE PEOPLE OF IOWA WELCOME YOU Field of Opportunity	Davenport - Bettendorf Exits	67
	Middle Rd - Locust St	2
	Kimberly Rd - Spruce Hills Dr	3
	53rd St	4

EXIT ONLY    NEXT RIGHT

**YEAR 4  
STAGE 1**

**I-74 STAGING PLAN**



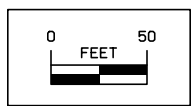
SEE BRFIM-074-1(197)5--05-82  
 BRFIM-074-1(198)5--05-82  
 BRFIM-074-1(199)5--05-82  
 BRFIM-074-1(200)5--05-82

PT STA 26761+37.66 (I-74 EB)  
 =STA 6761+35.26, 40.00' LT (I-74)

PT STA 16761+32.85 (I-74 WB)  
 =STA 6761+35.26, 40.00' RT (I-74)

Sta. 6760+65  
 77.1' RT

Sta. 6762+05  
 76.0' RT  
 Begin 12' Lane  
 -9130' R

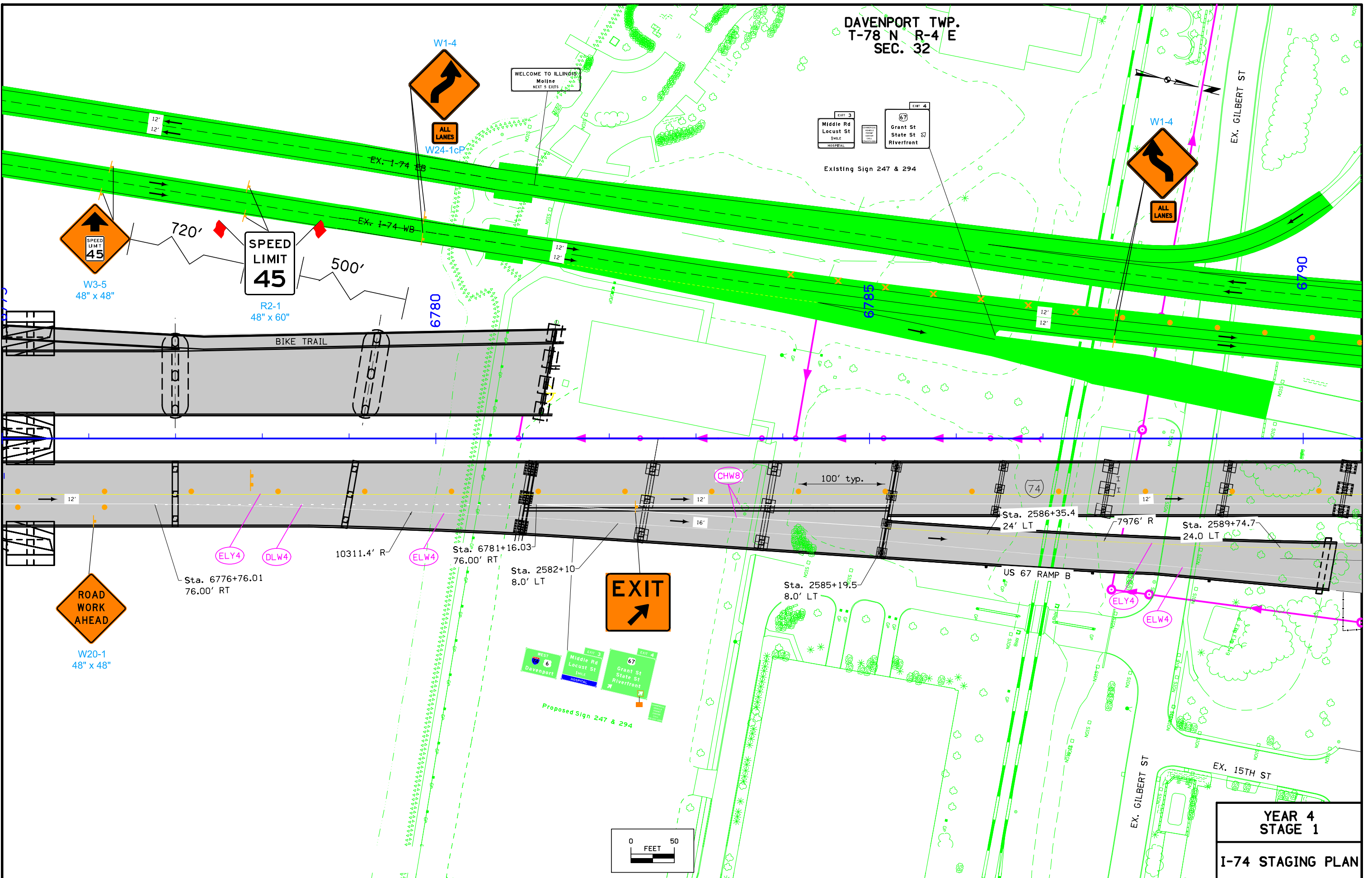


**YEAR 4  
 STAGE 1**

**I-74 STAGING PLAN**



DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 32



**YEAR 4  
STAGE 1**  
**I-74 STAGING PLAN**

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29



Existing Sign 297

Sta. 6796+18.8  
39.7 RT  
Begin TBR and  
Crash Cushion



W1-6  
48" x 24"



W1-4  
ALL LANES



ROAD CLOSED

6800

6805

EXIST TBR

EXIST TBR

Sta. 2592+06.5  
24' RT

ELY4

ELW4

6795+41  
73.9' RT  
Begin Taper

CHW8

Sta. 4496+94

US 67 RAMP D

ELW4

Sta. 4500+30  
24.0' LT

ELY4

US 67 RAMP D

Sta. 4503+95  
16.0' LT

Sta. 4503+95

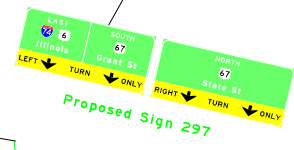


W20-1  
48" x 48"

POT STA. 6802+94.47 (I-74)  
=POT STA. 14+35.64 (MISSISSIPPI BLVD)



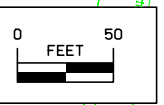
W1-4R  
48" x 48"



Proposed Sign 297

EX. 15TH ST

EX. BROWN ST



YEAR 4  
STAGE 1  
I-74 STAGING PLAN

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29



Rock Island Arsenal  
NEXT RIGHT  
Existing Sign 276

Existing Sign 73

EX. I-74 EXIT RAMP

6820

6815

6810

Sta. 6807+75.00  
TBR Previously  
Connect to  
Ex. Barrier

Sta. 6809+21.12  
63.00' RT

EXIST TBR

9130' R

55' typ.

Sta. 6817+14.41  
63.00' RT  
Match Existing

Sta. 6808+31.6  
29.1' RT  
End TBR

8000' R

6811+93

CHW8

ELW4

DLW4

Sta. 6807+50  
62.0' RT  
Begin Taper

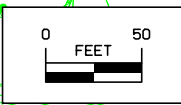
R1-2  
48" x 48" x 48"

Proposed Sign 252

W4-3  
48" x 48"

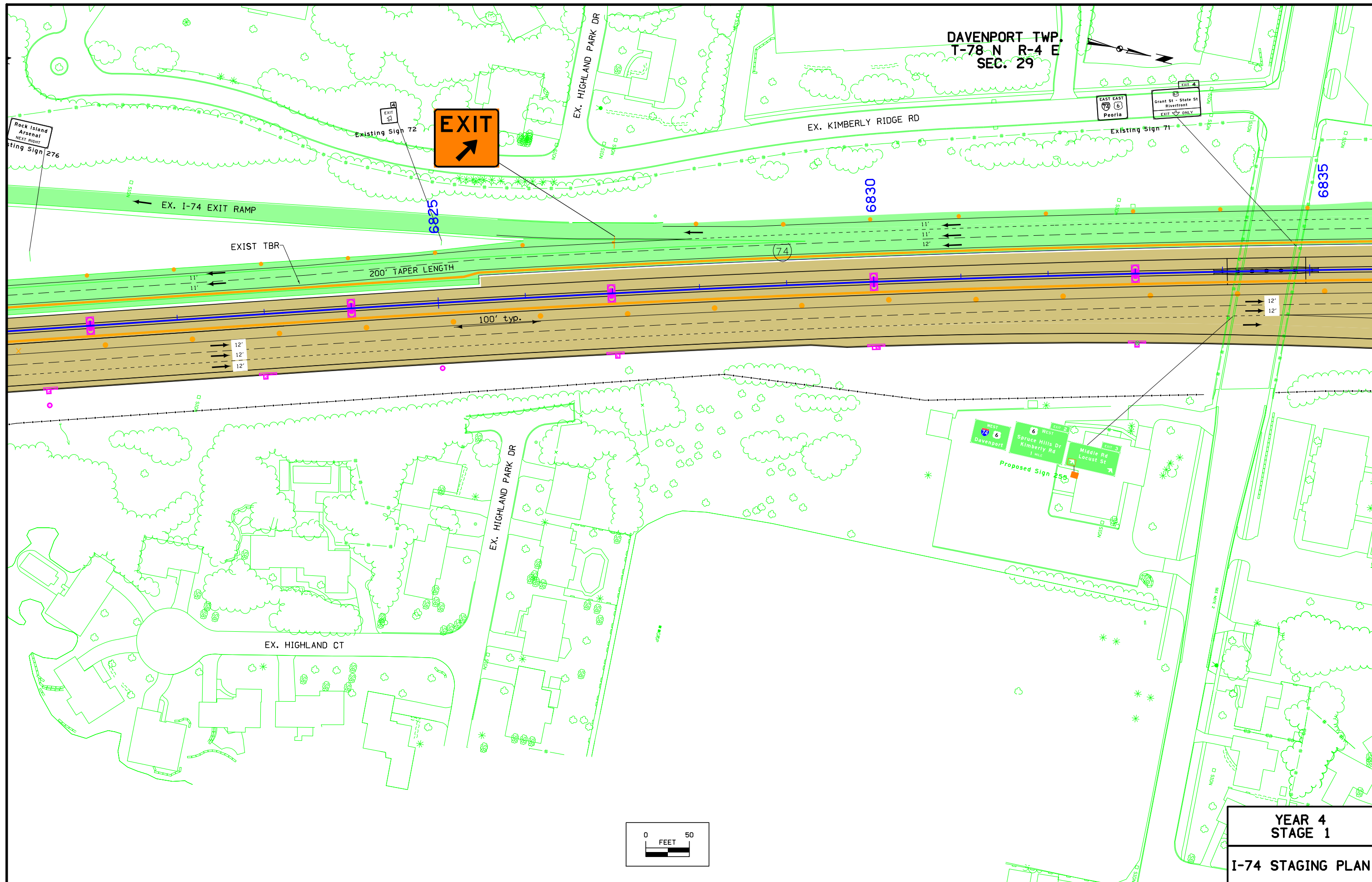
W4-1  
48" x 48"

EX. 14TH ST

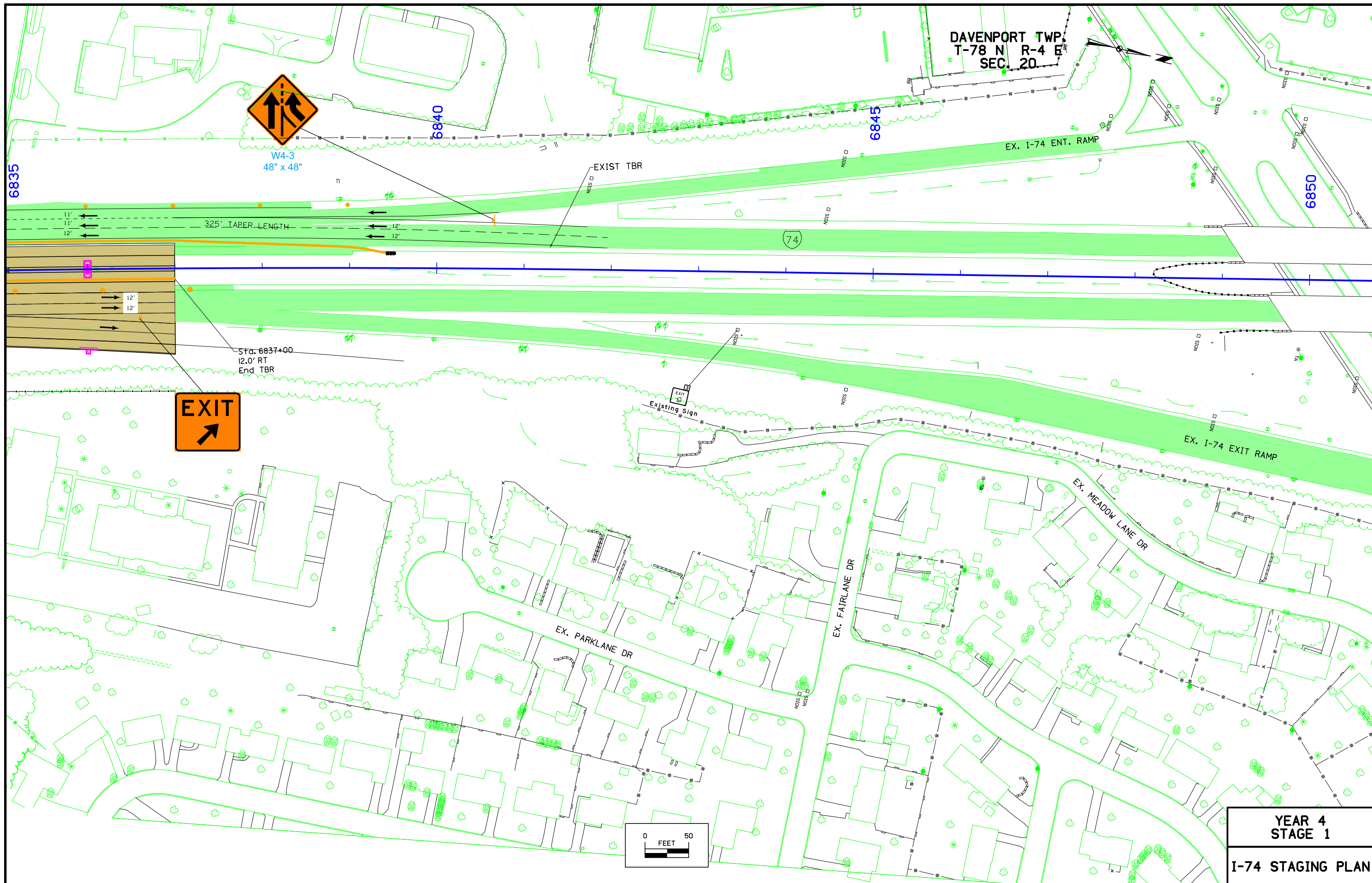


YEAR 4  
STAGE 1

I-74 STAGING PLAN

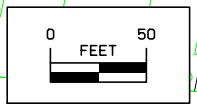


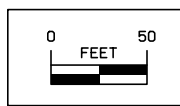
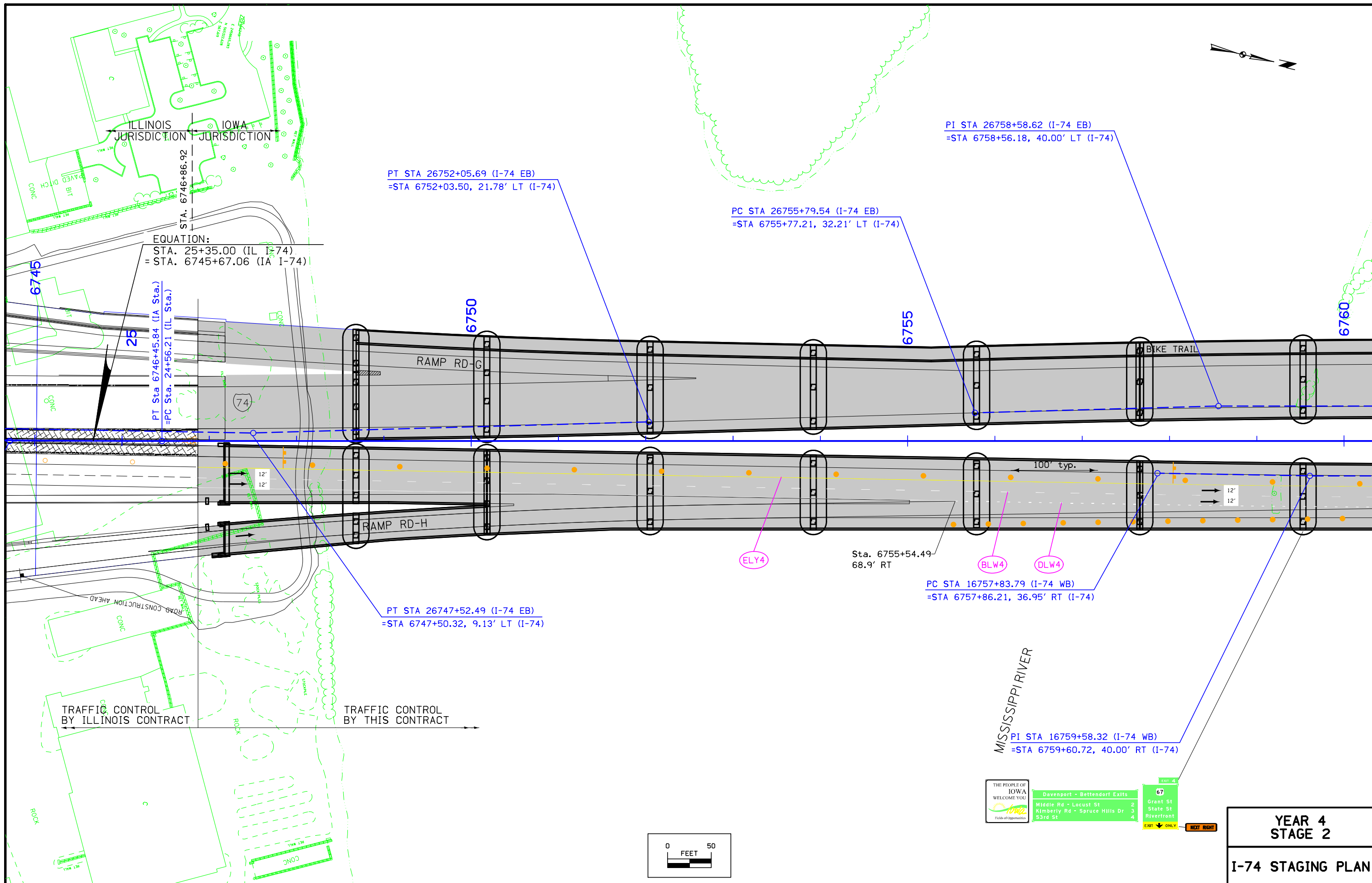
**YEAR 4  
STAGE 1**  
**I-74 STAGING PLAN**



**YEAR 4  
STAGE 1**

**I-74 STAGING PLAN**



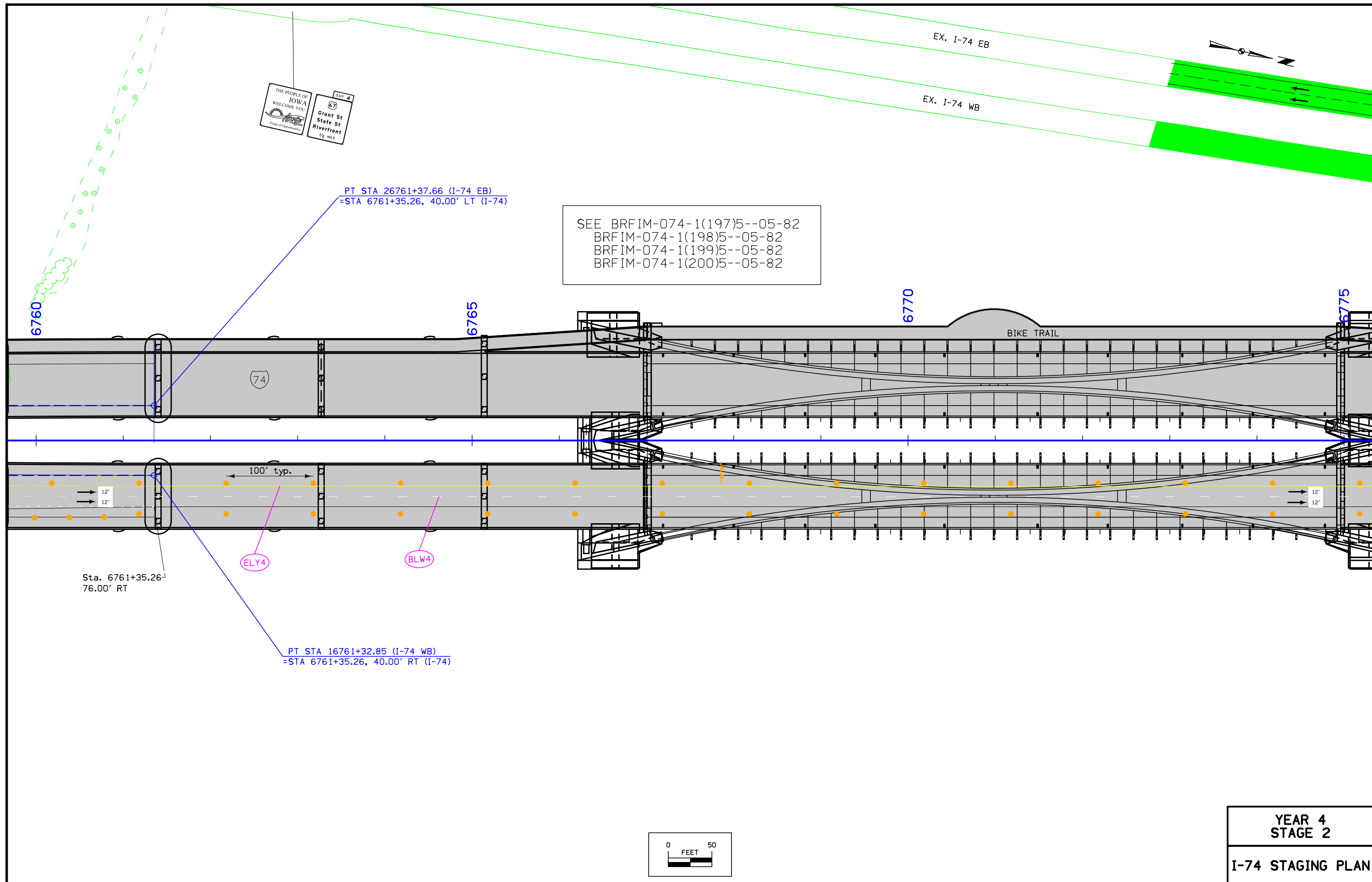


MISSISSIPPI RIVER

THE PEOPLE OF IOWA WELCOME YOU Field of Opportunity	Davenport - Bettendorf Exits	67
	Middle Rd - Locust St	2
	Kimberly Rd - Spruce Hills Dr	3
	53rd St	4

**YEAR 4  
STAGE 2**

**I-74 STAGING PLAN**



SEE BRFIM-074-1(197)5--05-82  
 BRFIM-074-1(198)5--05-82  
 BRFIM-074-1(199)5--05-82  
 BRFIM-074-1(200)5--05-82

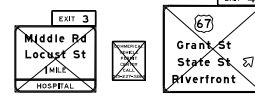
**YEAR 4  
 STAGE 2**

**I-74 STAGING PLAN**

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 32

WELCOME TO ILLINOIS  
Moline  
NEXT 5 EXITS

REMOVED BY BRIDGE CONTRACTOR



Existing Sign 247 & 294

EX. GILBERT ST

EX. I-74 EB

EX. I-74 WB

6780

6785

6790

BIKE TRAIL

ELY4

100' typ.

BLW4

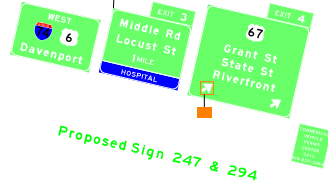
ELY4

Sta. 6776+75.70  
76.00' RT

BLW4



W20-1  
48" x 48"



Proposed Sign 247 & 294

US 67 RAMP B

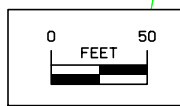


ALL LANES  
W24-1c

EX. GILBERT ST

EX. 15TH ST

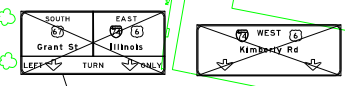
YEAR 4  
STAGE 2  
I-74 STAGING PLAN



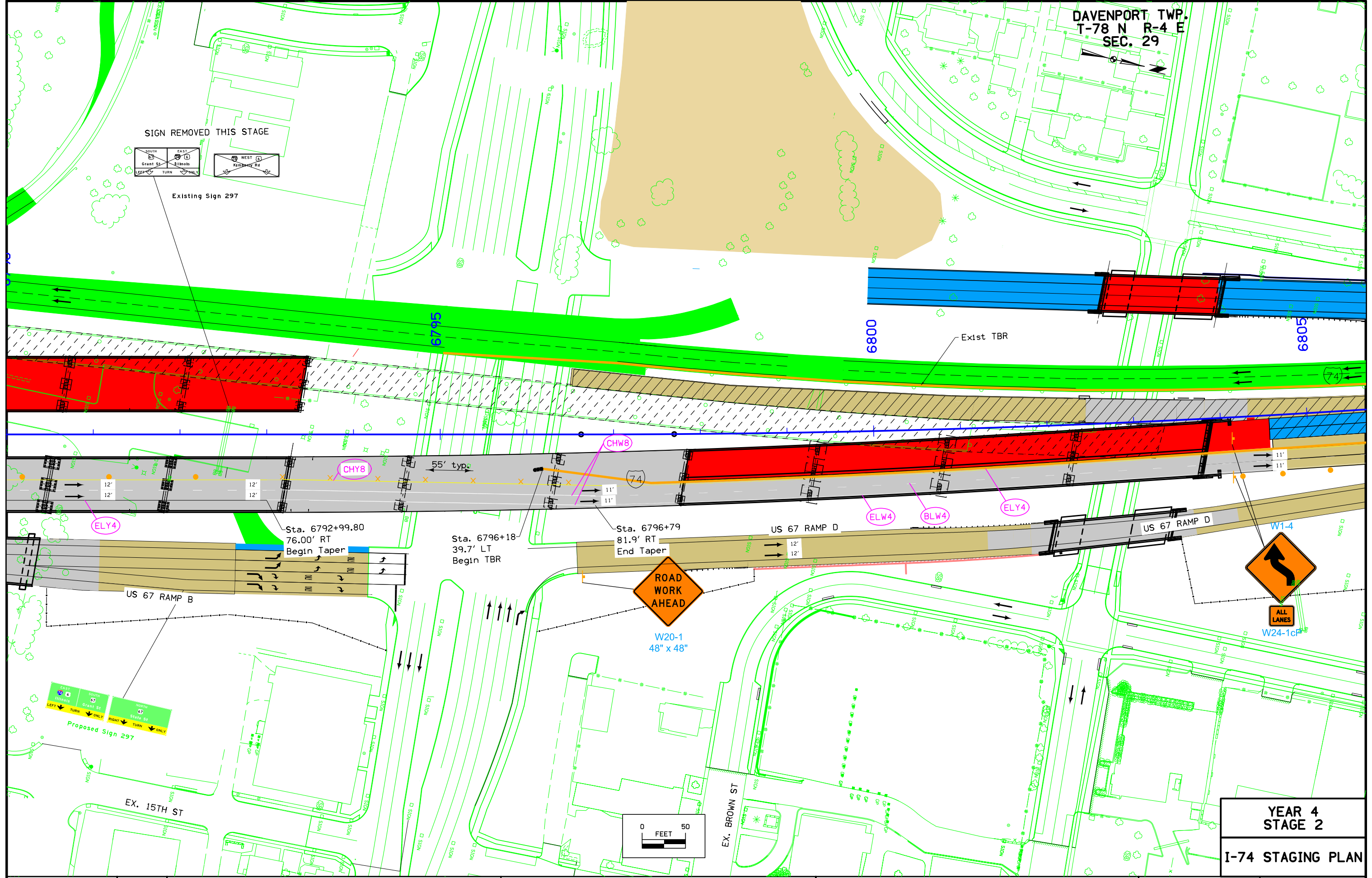


DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29

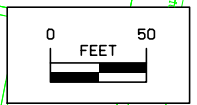
SIGN REMOVED THIS STAGE



Existing Sign 297

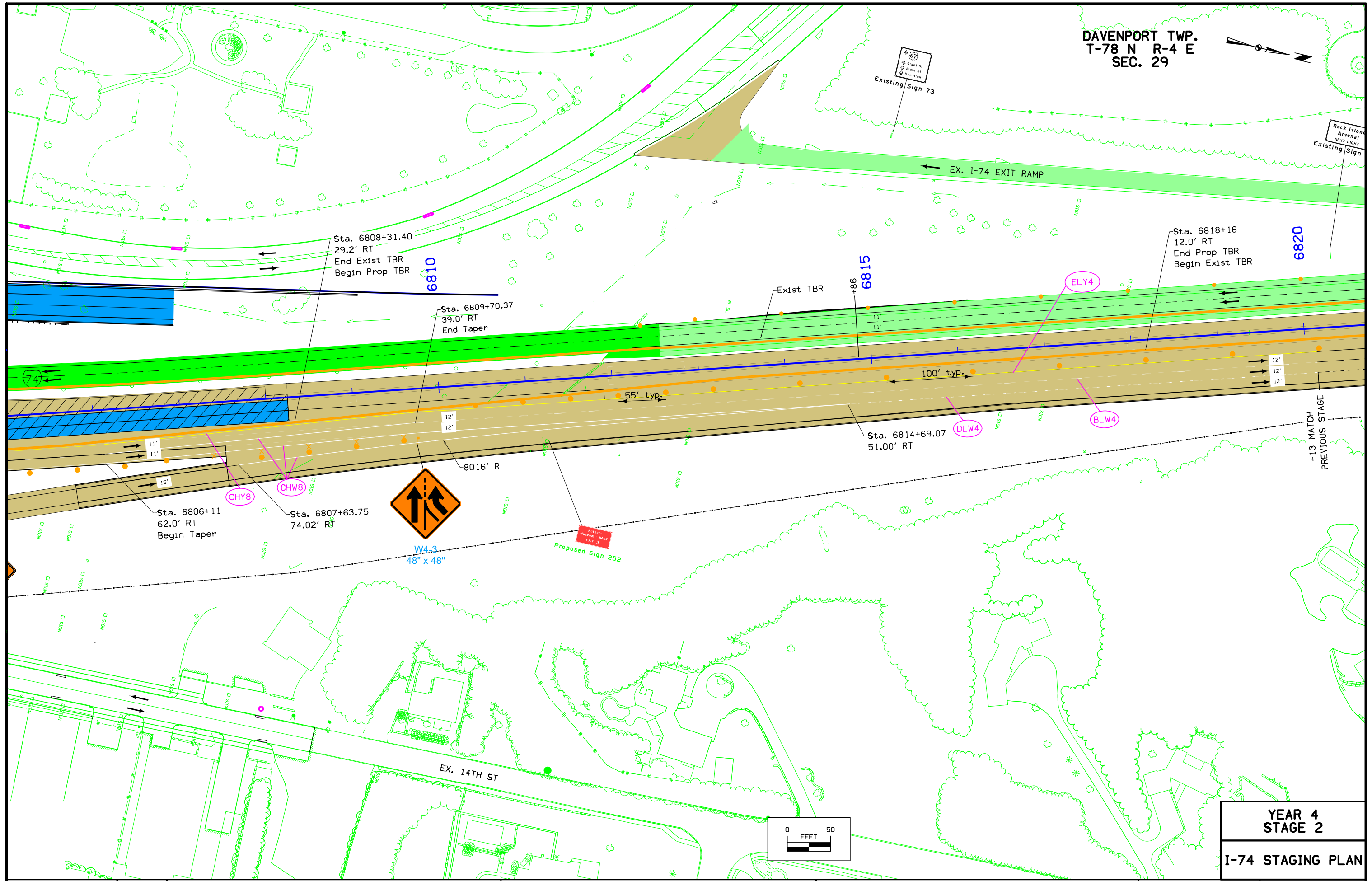


ALL LANES  
W24-1c



**YEAR 4  
STAGE 2**  
**I-74 STAGING PLAN**

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29



Rock Island Arsenal  
NEXT RIGHT  
Existing Sign

Existing Sign 73

EX. I-74 EXIT RAMP

Sta. 6808+31.40  
29.2' RT  
End Exist TBR  
Begin Prop TBR

6810

Sta. 6809+70.37  
39.0' RT  
End Taper

6815

Sta. 6818+16  
12.0' RT  
End Prop TBR  
Begin Exist TBR

6820

Exist TBR

ELY4

100' typ.

Sta. 6814+69.07  
51.00' RT

DLW4

BLW4

+13 MATCH  
PREVIOUS STAGE

8016' R



W4-3  
48" x 48"

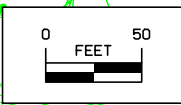
Proposed Sign 252

Sta. 6806+11  
62.0' RT  
Begin Taper

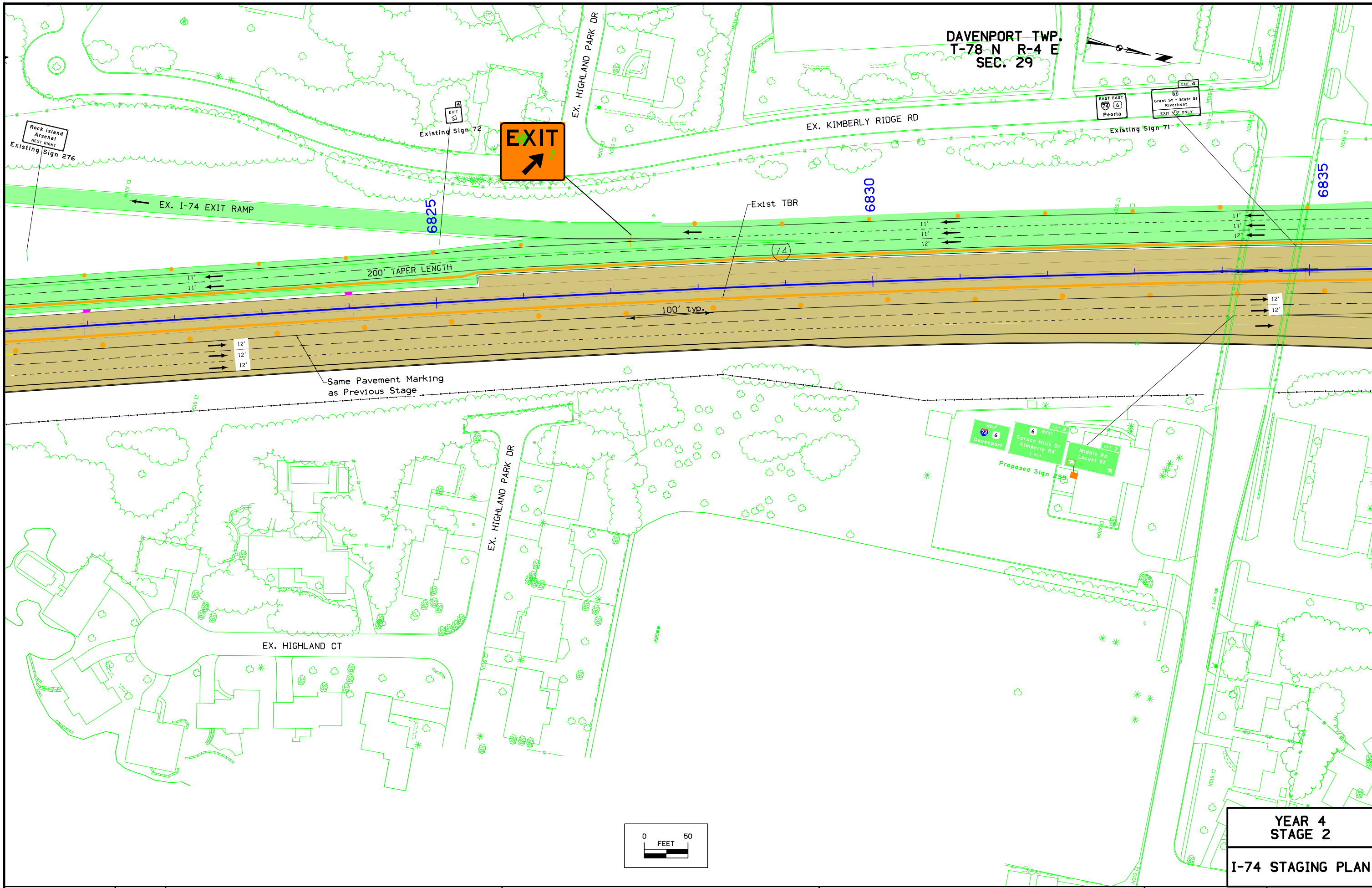
CHY8

CHW8

Sta. 6807+63.75  
74.02' RT



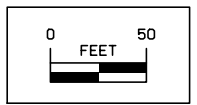
YEAR 4  
STAGE 2  
I-74 STAGING PLAN



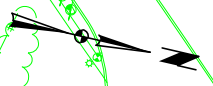
DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29

**EXIT**  
↑

**YEAR 4  
STAGE 2**  
**I-74 STAGING PLAN**



DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 20



W4-3  
48" x 48"

6840

6845

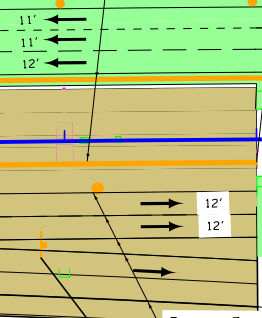
6850

6835

Exist TBR

Sta. 6837+00  
12.0' RT  
End TBR

325' TAPER LENGTH



Same Pavement Marking  
as Previous Stage



Existing Sign

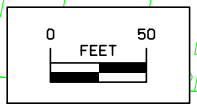
EX. I-74 ENT. RAMP

EX. I-74 EXIT RAMP

EX. MEADOW LANE DR

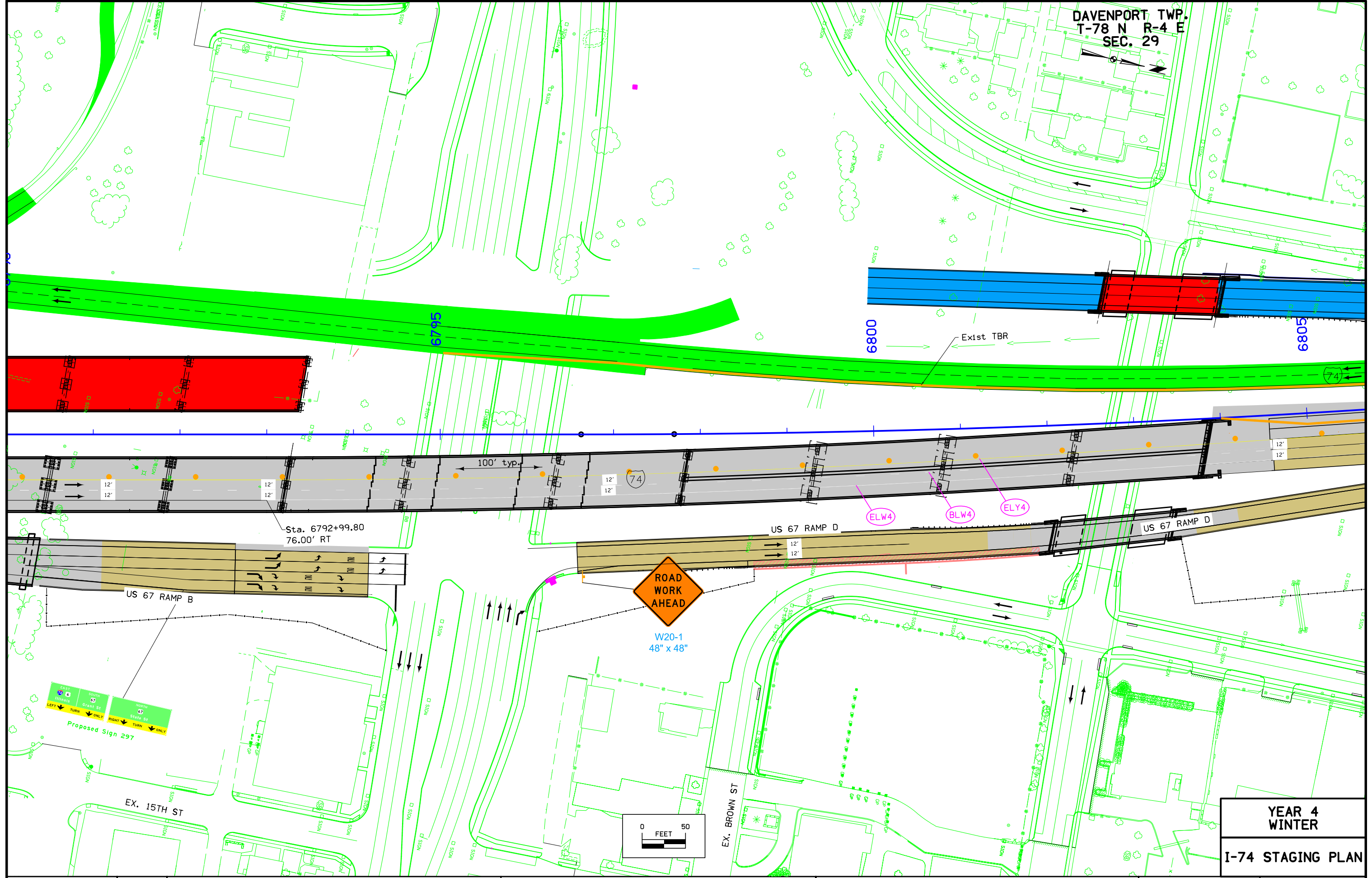
EX. FAIRLANE DR

EX. PARKLANE DR



YEAR 4  
STAGE 2  
I-74 STAGING PLAN

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29



**YEAR 4  
WINTER**  
**I-74 STAGING PLAN**

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29



Existing Sign 73  
67  
Gravel St  
Gravel St  
Riverfront

Rock Island Arsenal  
NEXT RIGHT  
Existing Sign

EX. I-74 EXIT RAMP

6810

6815

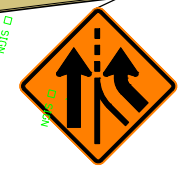
6820

Exist TBR

100' typ.

ELY4  
BLW4

CHWB

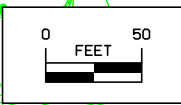


W4-3  
48" x 48"

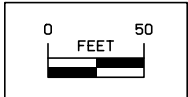
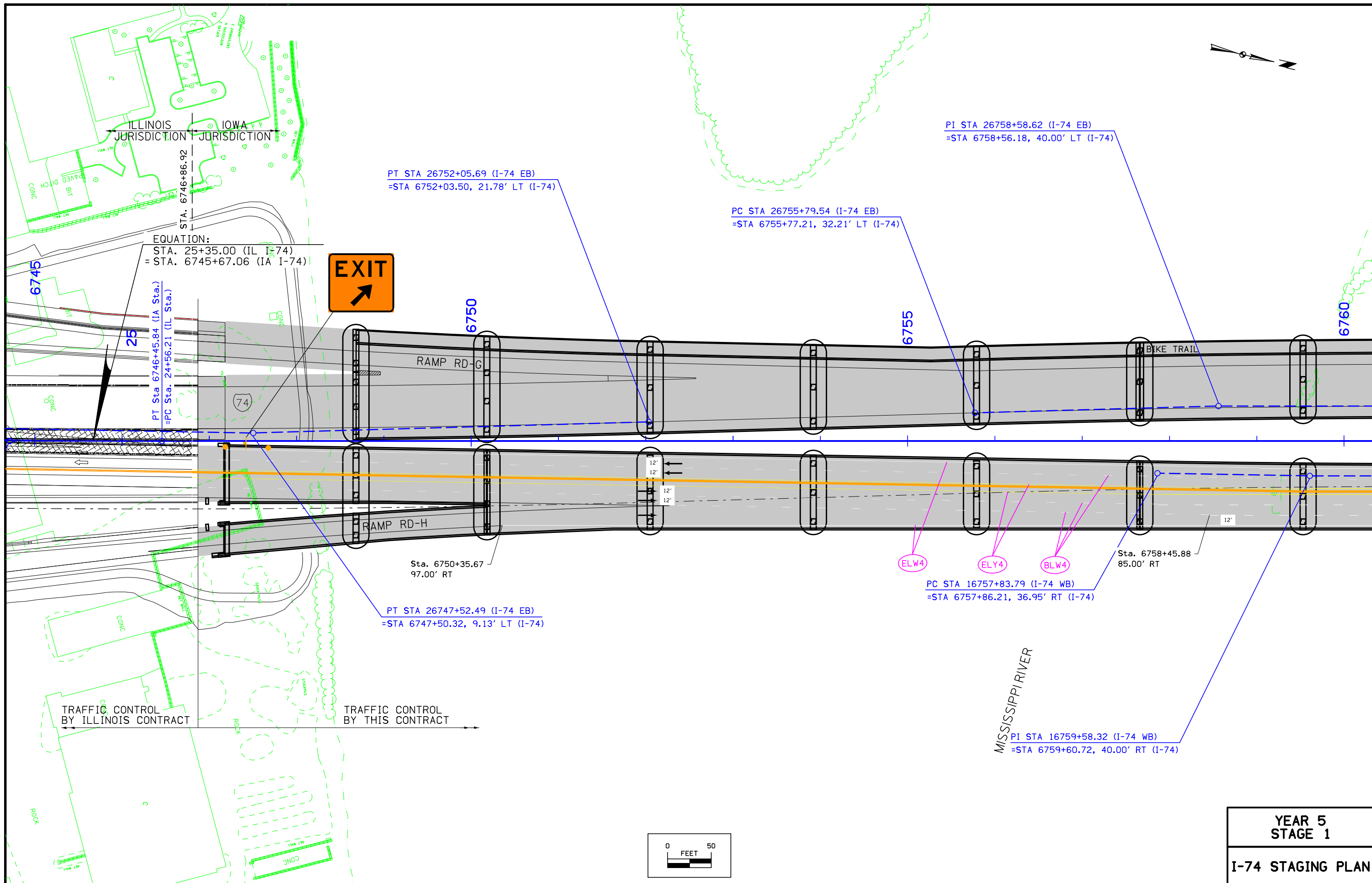
STA 6809+70.60  
51.00' RT  
MATCH EXISTING  
PAVEMENT MARKING

Proposed Sign 252  
Pavement Marking  
EXIT 3

EX. 14TH ST

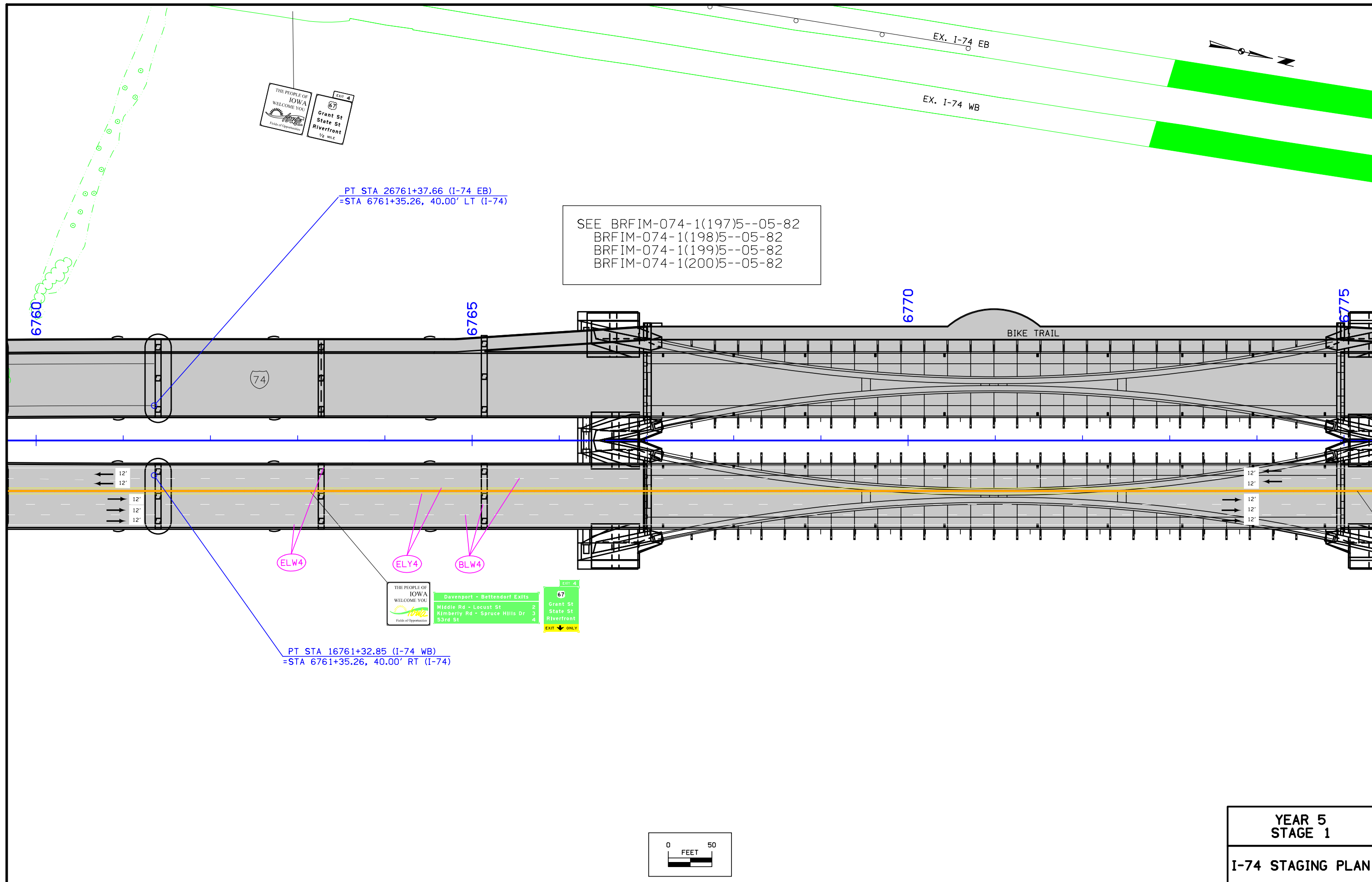


YEAR 4  
WINTER  
I-74 STAGING PLAN



**YEAR 5  
STAGE 1**

**I-74 STAGING PLAN**



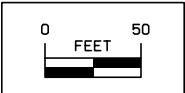
PT STA 26761+37.66 (I-74 EB)  
 =STA 6761+35.26, 40.00' LT (I-74)

SEE BRFIM-074-1(197)5--05-82  
 BRFIM-074-1(198)5--05-82  
 BRFIM-074-1(199)5--05-82  
 BRFIM-074-1(200)5--05-82

THE PEOPLE OF IOWA WELCOME YOU Fields of Opportunity	Davenport - Bettendorf Exits		EXIT 4
	Middle Rd - Locust St	2	67
	Kimberly Rd - Spruce Hills Dr	3	Grant St
	53rd St	4	State St Riverfront
			EXIT ONLY

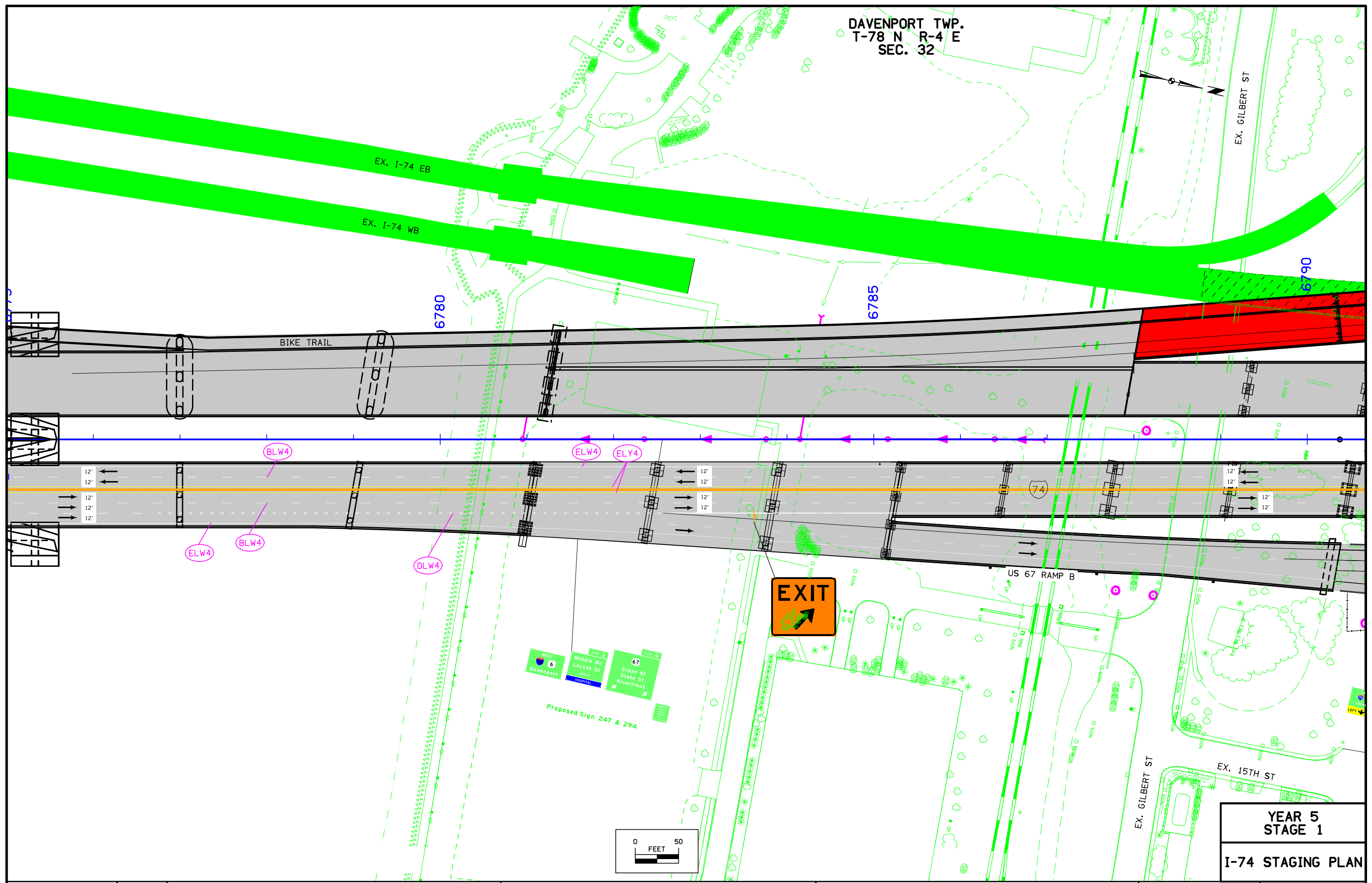
PT STA 16761+32.85 (I-74 WB)  
 =STA 6761+35.26, 40.00' RT (I-74)

YEAR 5  
 STAGE 1  
 I-74 STAGING PLAN





DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 32



EX. I-74 EB

EX. I-74 WB

6780

6785

6790

BIKE TRAIL

BLW4

ELW4

ELY4

ELW4

BLW4

DLW4



US 67 RAMP B

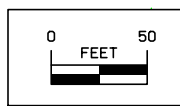


Proposed Sign 247 & 294

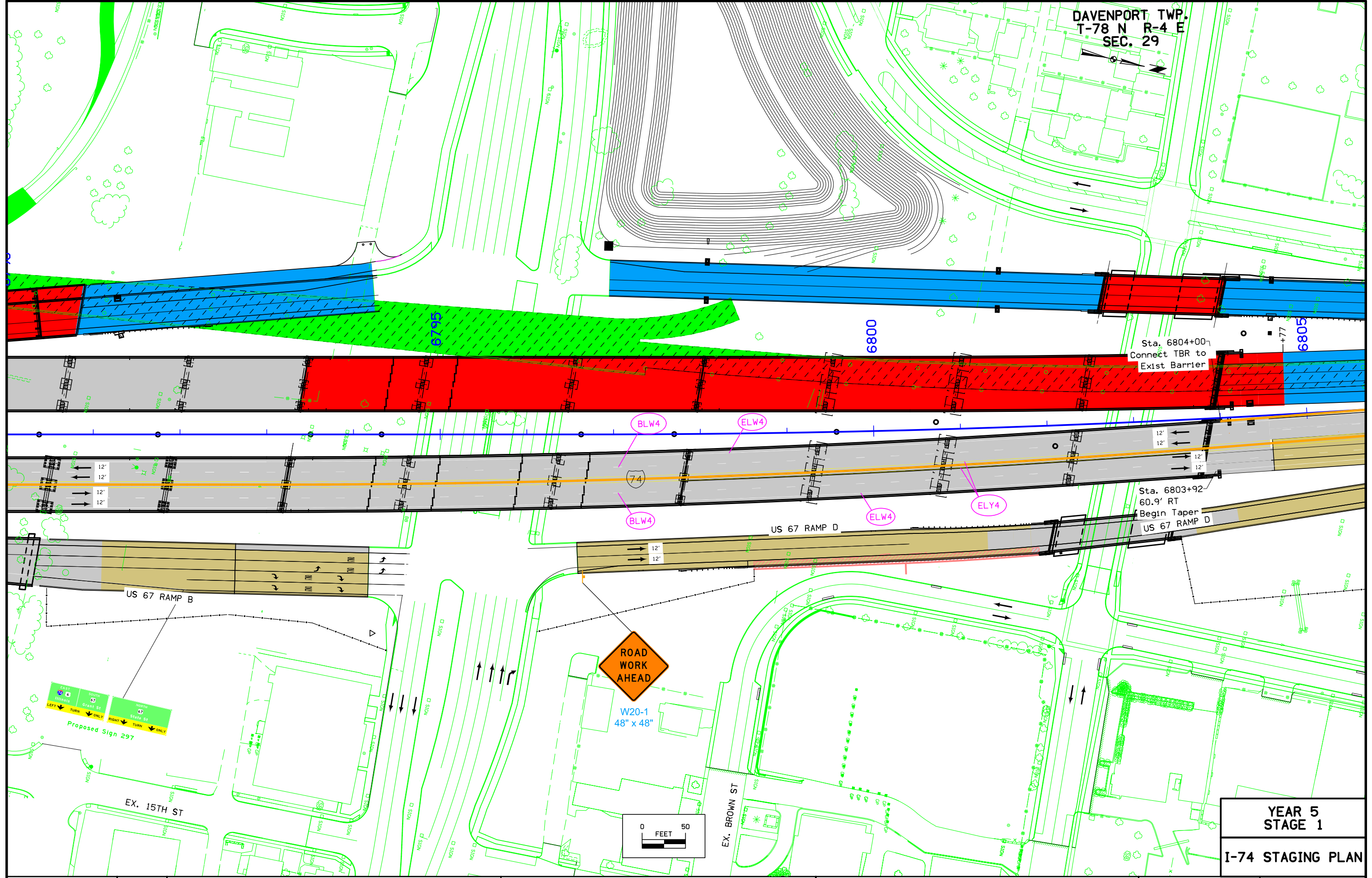
EX. GILBERT ST

EX. 15TH ST

YEAR 5  
STAGE 1  
I-74 STAGING PLAN



DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29

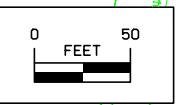


Sta. 6804+00  
Connect TBR to  
Exist Barrier

Sta. 6803+92  
60.9' RT  
Begin Taper  
US 67 RAMP D



W20-1  
48" x 48"



**YEAR 5  
STAGE 1**  
**I-74 STAGING PLAN**

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29



EX. 1-74 EXIT RAMP

INSTALL SIGN  
THIS STAGE



6810

6815

6820

Sta. 6805+90.78  
4.02' RT  
Begin 12' Lane

BLW4

ELW4

ELY4

11'  
12'

12'  
12'

DLW4

Sta. 6817+50.00  
68.00' RT

BLW4

ELW4

Sta. 4509+96.31  
20.6' LT

CHW8

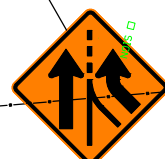
Sta. 6811+49.84  
57.00' RT

Proposed Sign 252

Sta. 4506+16.5  
0'

ELW4

ELY4

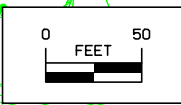


W4-3  
48" x 48"

Sta. 6805+91  
57.0' RT  
End Taper

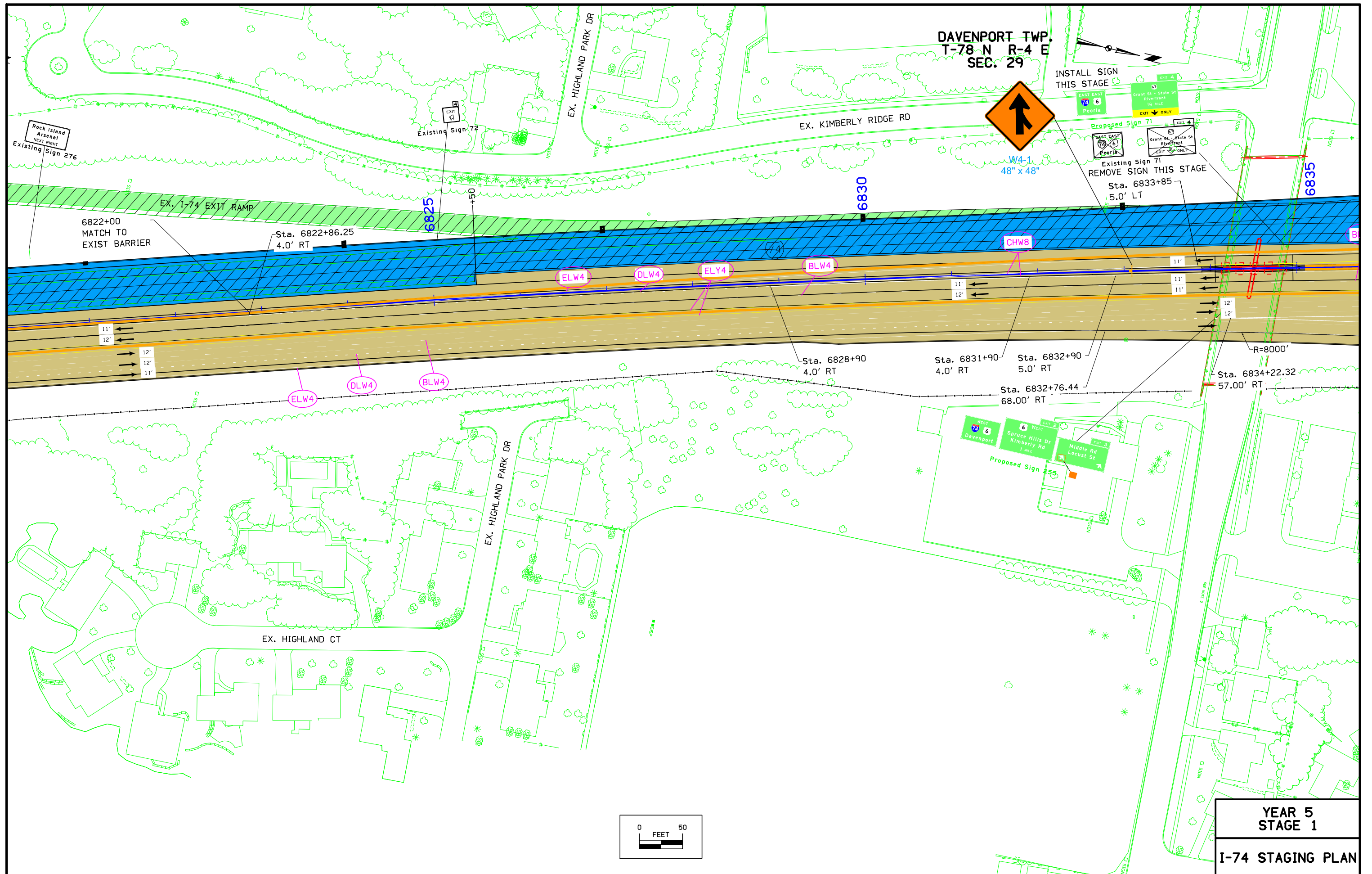
R=8000'

EX. 14TH ST



YEAR 5  
STAGE 1

I-74 STAGING PLAN



DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29

INSTALL SIGN  
THIS STAGE



W4-1  
48" x 48"

REMOVE SIGN  
THIS STAGE

Sta. 6833+85  
5.0' LT

6822+00  
MATCH TO  
EXIST BARRIER

Sta. 6822+86.25  
4.0' RT

Sta. 6828+90  
4.0' RT

Sta. 6831+90  
4.0' RT

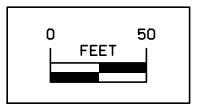
Sta. 6832+90  
5.0' RT

Sta. 6832+76.44  
68.00' RT

Sta. 6834+22.32  
57.00' RT

R=8000'

**YEAR 5  
STAGE 1**  
**I-74 STAGING PLAN**



DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 20

SPEED  
LIMIT  
35

R2-1  
48" x 60"

ELW4

Sta. 6837+21.56  
6.5' LT  
End TBR &  
Crash Cushion

Sta. 6838+55.34  
48.1' LT  
End TBR &  
Crash Cushion

BLW4

ELY4

CHW8

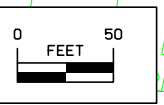
ELW4

EXIT  
↑

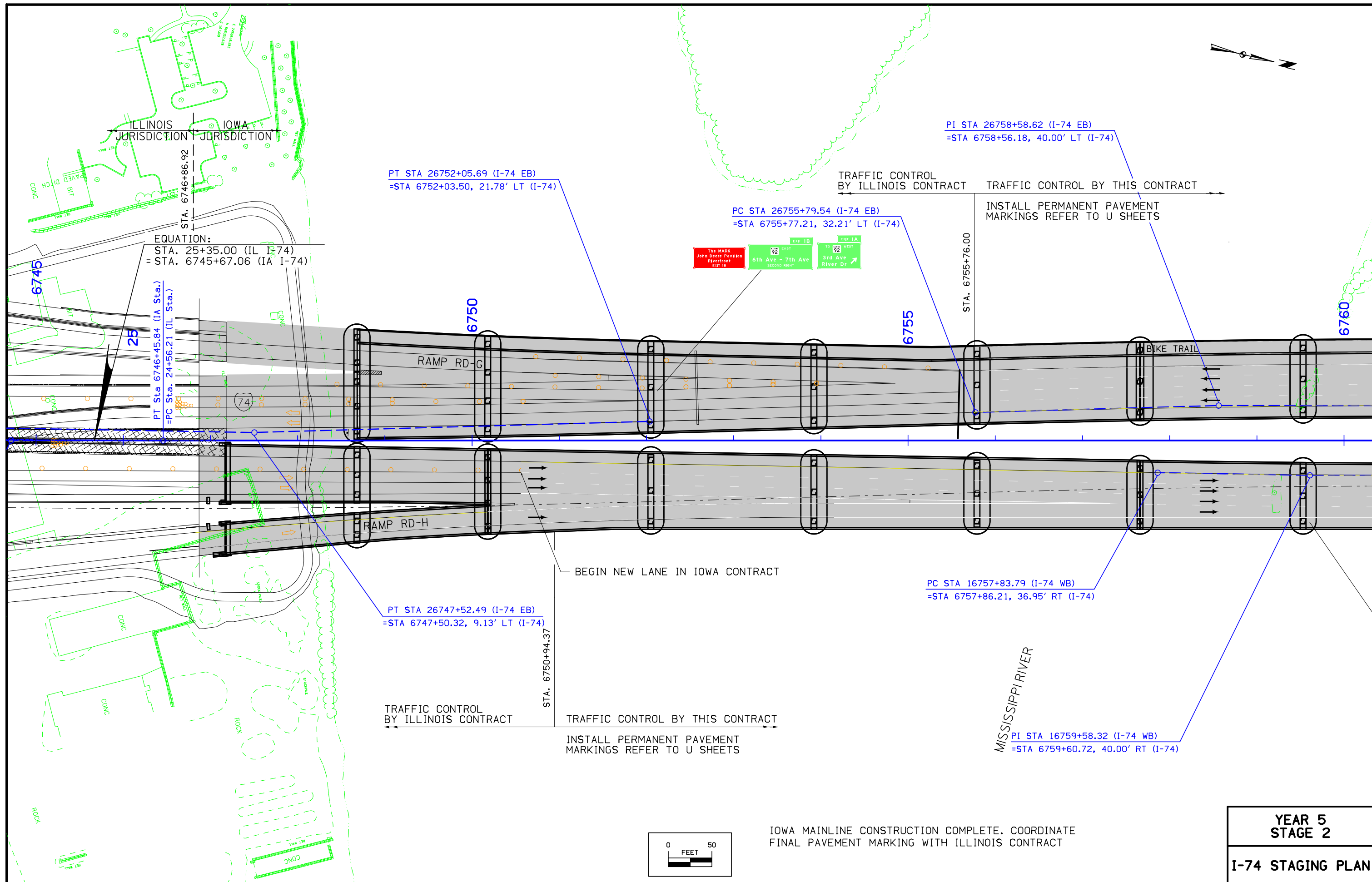
Sta. 6835+10.00  
CONNECT TO EXIST  
44" BARRIER  
(2 CONNECTIONS)

Sta. 6837+00  
End TBR

Sta. 6837+00  
30.0' RT  
End TBR



YEAR 5  
STAGE 1  
I-74 STAGING PLAN



ILLINOIS JURISDICTION | IOWA JURISDICTION

EQUATION:  
 STA. 25+35.00 (IL I-74)  
 = STA. 6745+67.06 (IA I-74)

PT STA 26752+05.69 (I-74 EB)  
 =STA 6752+03.50, 21.78' LT (I-74)

PC STA 26755+79.54 (I-74 EB)  
 =STA 6755+77.21, 32.21' LT (I-74)

PI STA 26758+58.62 (I-74 EB)  
 =STA 6758+56.18, 40.00' LT (I-74)

EXIT 1B  
 6th Ave - 7th Ave  
 SECOND RIGHT

EXIT 1A  
 3rd Ave  
 River Dr

INSTALL PERMANENT PAVEMENT MARKINGS REFER TO U SHEETS

BEGIN NEW LANE IN IOWA CONTRACT

PT STA 26747+52.49 (I-74 EB)  
 =STA 6747+50.32, 9.13' LT (I-74)

PC STA 16757+83.79 (I-74 WB)  
 =STA 6757+86.21, 36.95' RT (I-74)

TRAFFIC CONTROL BY ILLINOIS CONTRACT

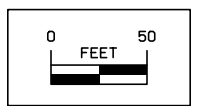
TRAFFIC CONTROL BY THIS CONTRACT

INSTALL PERMANENT PAVEMENT MARKINGS REFER TO U SHEETS

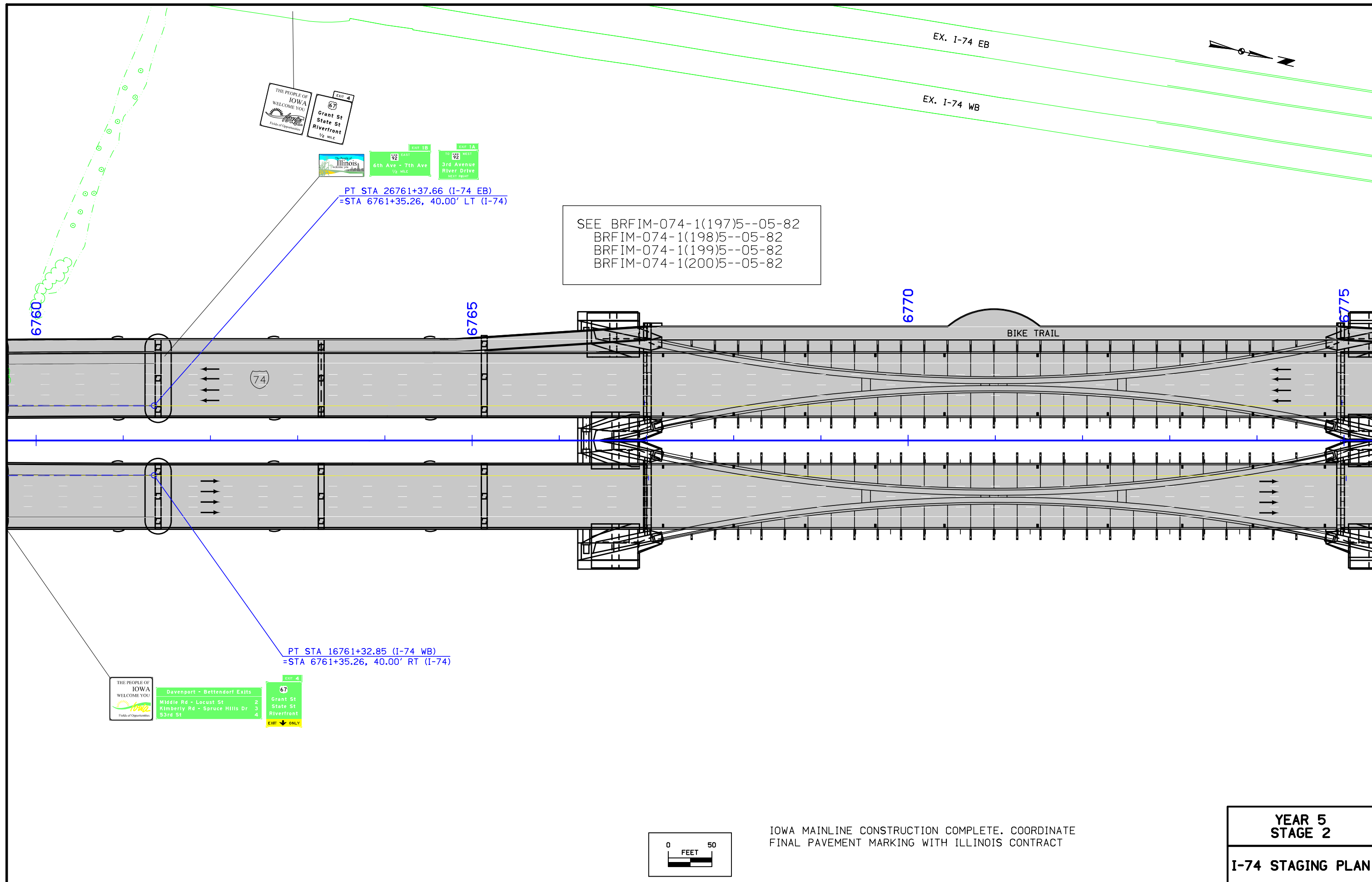
MISSISSIPPI RIVER

PI STA 16759+58.32 (I-74 WB)  
 =STA 6759+60.72, 40.00' RT (I-74)

IOWA MAINLINE CONSTRUCTION COMPLETE. COORDINATE FINAL PAVEMENT MARKING WITH ILLINOIS CONTRACT



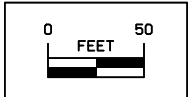
**YEAR 5  
 STAGE 2**  
**I-74 STAGING PLAN**



SEE BRFIM-074-1(197)5--05-82  
 BRFIM-074-1(198)5--05-82  
 BRFIM-074-1(199)5--05-82  
 BRFIM-074-1(200)5--05-82

**YEAR 5  
 STAGE 2**

**I-74 STAGING PLAN**



DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 32



EX. GILBERT ST

EX. I-74 EB

EX. I-74 WB

6790

6785

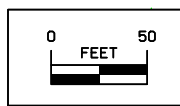
6780

BIKE TRAIL

US 67 RAMP C

74

US 67 RAMP B

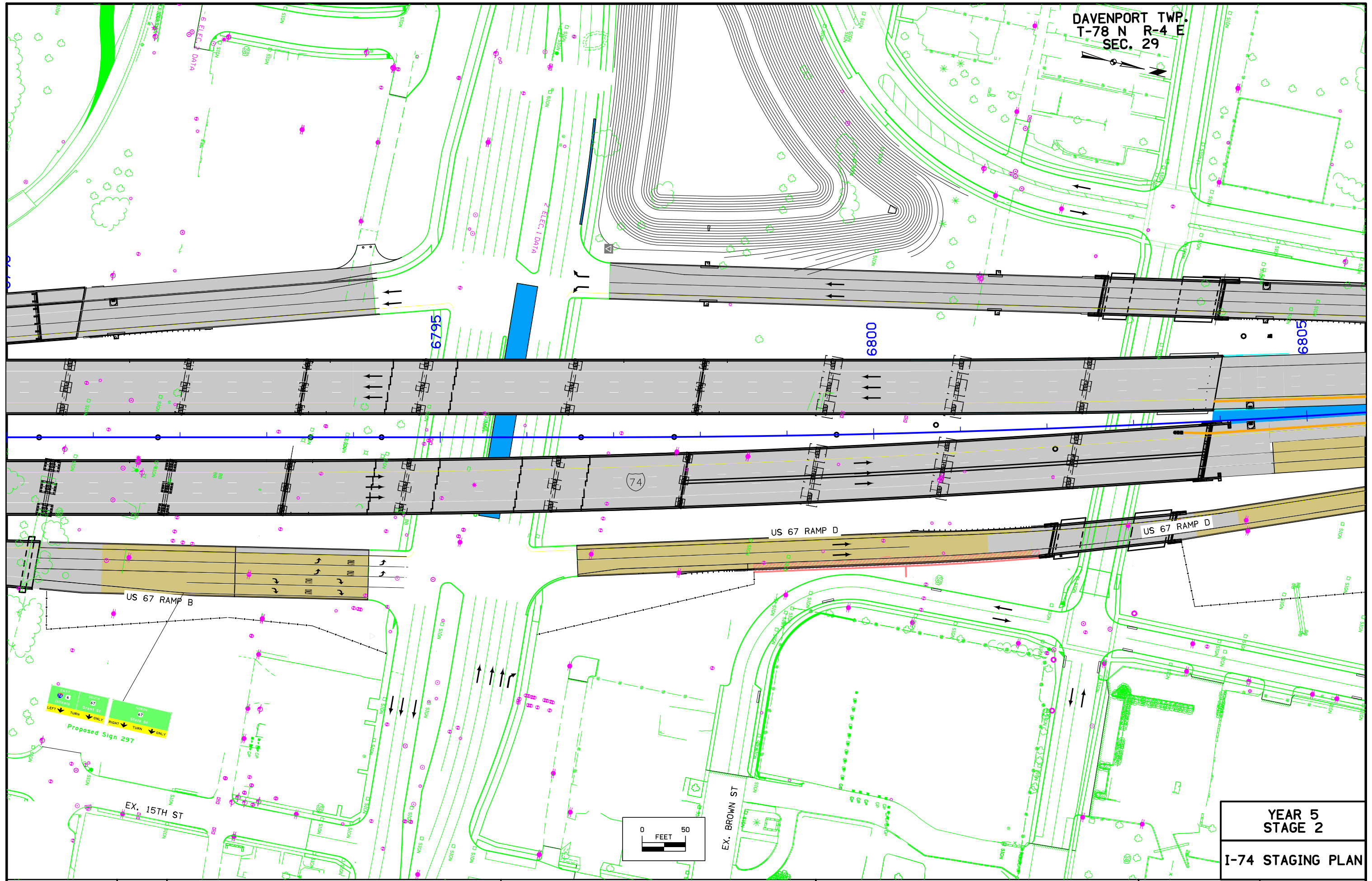


IOWA MAINLINE CONSTRUCTION COMPLETE. COORDINATE  
FINAL PAVEMENT MARKING WITH ILLINOIS CONTRACT

**YEAR 5  
STAGE 2**  
**I-74 STAGING PLAN**



DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29



YEAR 5  
STAGE 2  
I-74 STAGING PLAN

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29



6810

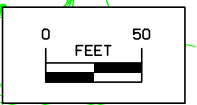
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6820

Proposed Sign 252  
Pictogram  
Maximum - MAX  
EXIT 3

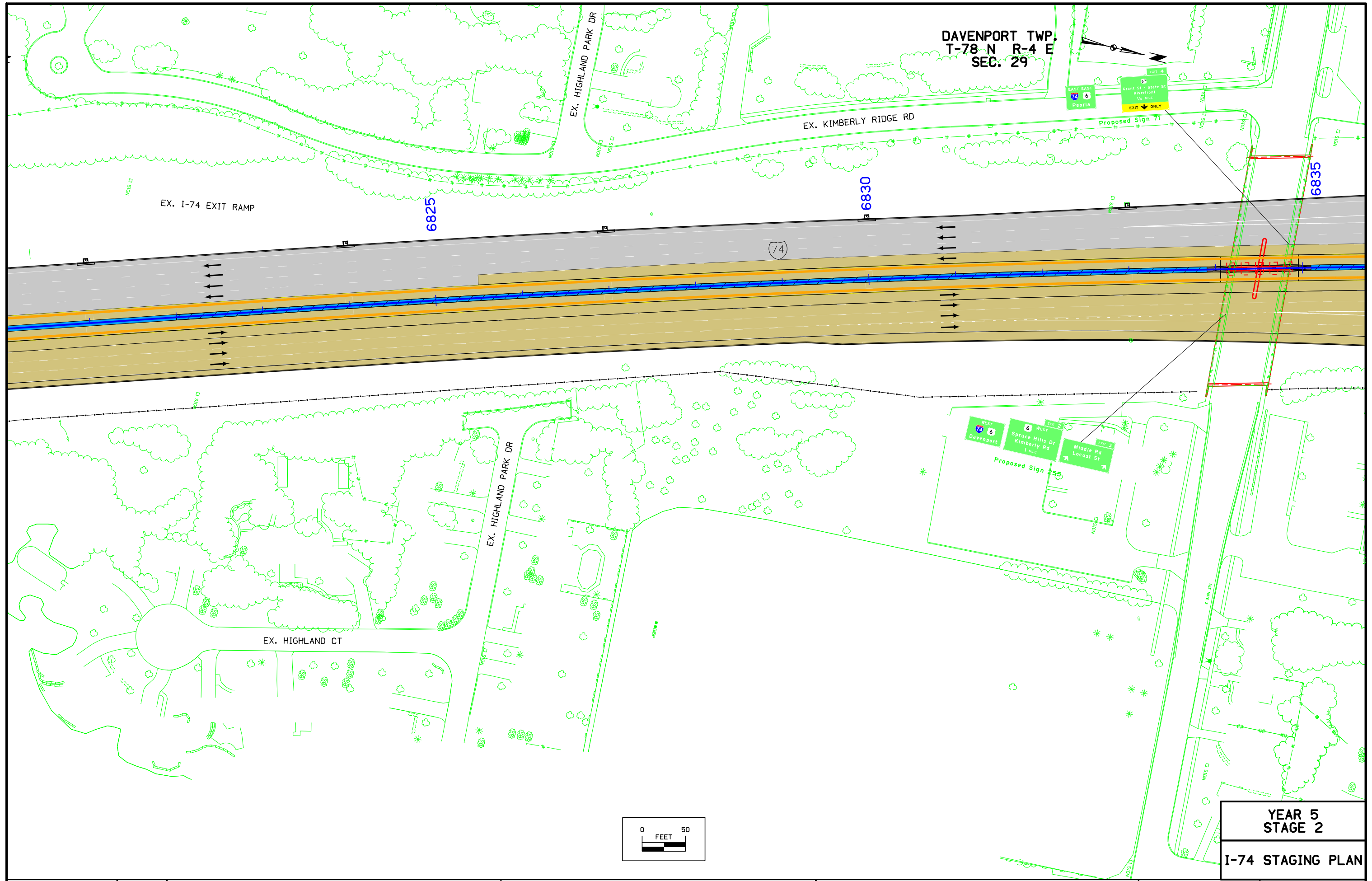
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EX. 14TH ST



YEAR 5  
STAGE 2  
I-74 STAGING PLAN

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29



EX. I-74 EXIT RAMP

6825

6830

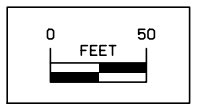
6835

74

EX. HIGHLAND CT

EX. HIGHLAND PARK DR

EX. KIMBERLY RIDGE RD



YEAR 5  
STAGE 2  
I-74 STAGING PLAN

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 20

6840

6845

6850

6835

Sta. 6838+50.00, 48.1' LT  
End TBR & Crash Cushion

Sta. 6837+00  
10.0' RT  
End TBR

EX. I-74 ENT. RAMP

74

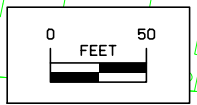
Existing Sign

EX. I-74 EXIT RAMP

EX. MEADOW LANE DR

EX. FAIRLANE DR

EX. PARKLANE DR



**YEAR 5  
STAGE 2**

**I-74 STAGING PLAN**



ILLINOIS JURISDICTION | IOWA JURISDICTION

EQUATION:  
STA. 25+35.00 (IL I-74)  
= STA. 6745+67.06 (IA I-74)

PT Sta 6746+45.84 (IA Sta.)  
=PC Sta. 24+56.21 (IL Sta.)

PT STA 26752+05.69 (I-74 EB)  
=STA 6752+03.50, 21.78' LT (I-74)

PC STA 26755+79.54 (I-74 EB)  
=STA 6755+77.21, 32.21' LT (I-74)

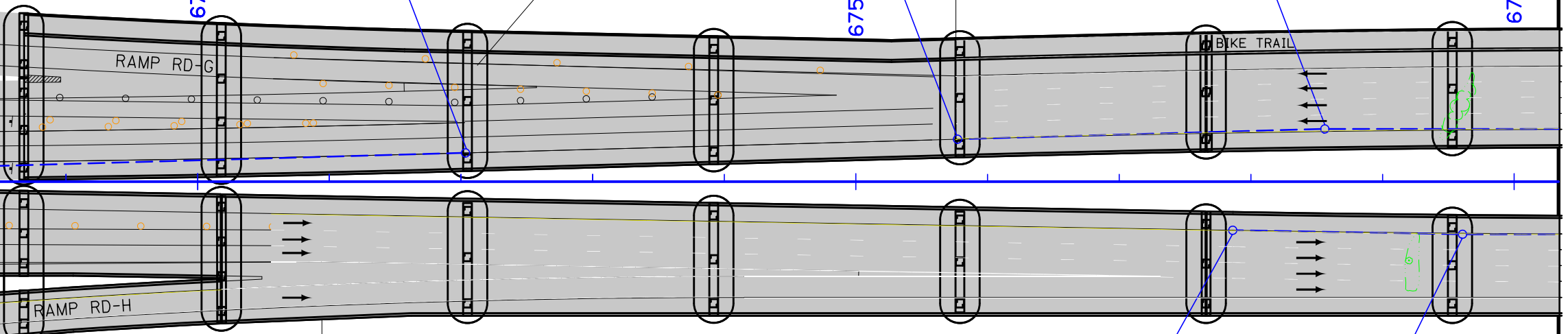
PI STA 26758+58.62 (I-74 EB)  
=STA 6758+56.18, 40.00' LT (I-74)

TRAFFIC CONTROL BY ILLINOIS CONTRACT | TRAFFIC CONTROL BY THIS CONTRACT

INSTALL PERMANENT PAVEMENT MARKINGS REFER TO U SHEETS



STA. 6755+76.00



PT STA 26747+52.49 (I-74 EB)  
=STA 6747+50.32, 9.13' LT (I-74)

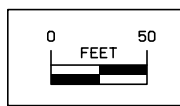
PC STA 16757+83.79 (I-74 WB)  
=STA 6757+86.21, 36.95' RT (I-74)

TRAFFIC CONTROL BY ILLINOIS CONTRACT | TRAFFIC CONTROL BY THIS CONTRACT

INSTALL PERMANENT PAVEMENT MARKINGS REFER TO U SHEETS

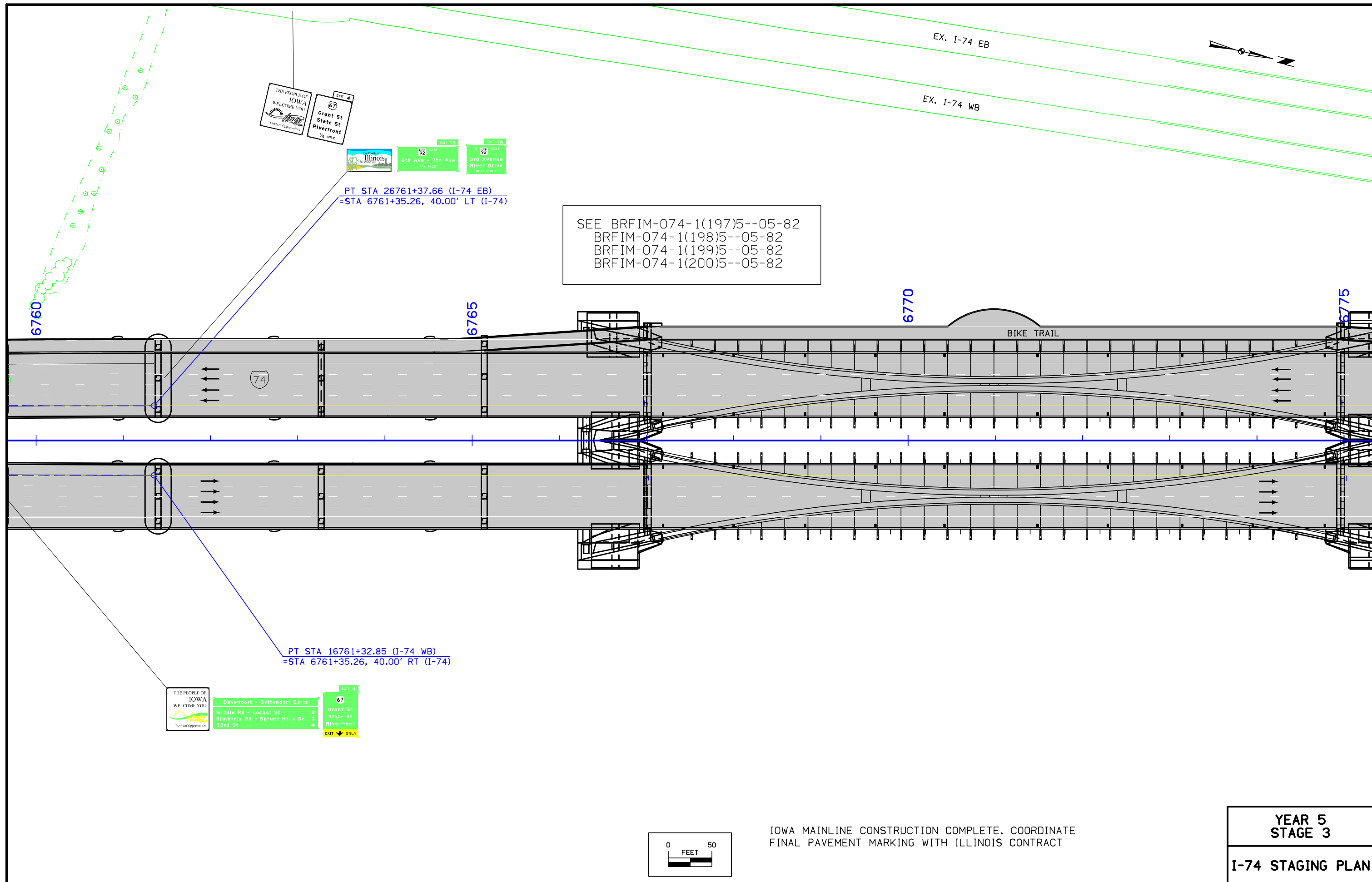
MISSISSIPPI RIVER

PI STA 16759+58.32 (I-74 WB)  
=STA 6759+60.72, 40.00' RT (I-74)



IOWA MAINLINE CONSTRUCTION COMPLETE. COORDINATE FINAL PAVEMENT MARKING WITH ILLINOIS CONTRACT

YEAR 5  
STAGE 3  
I-74 STAGING PLAN



PT STA 26761+37.66 (I-74 EB)  
 =STA 6761+35.26, 40.00' LT (I-74)

SEE BRFIM-074-1(197)5--05-82  
 BRFIM-074-1(198)5--05-82  
 BRFIM-074-1(199)5--05-82  
 BRFIM-074-1(200)5--05-82

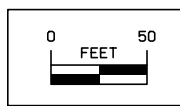
PT STA 16761+32.85 (I-74 WB)  
 =STA 6761+35.26, 40.00' RT (I-74)

THE PEOPLE OF IOWA WELCOME YOU

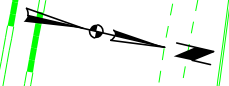
Davenport - Bettendorf Exits		EXIT 4
Middle Rd - Locust St	2	67
Kimberly Rd - Spruce Hills Dr	3	Grant St
53rd St	4	State St
		Riverfront
		EXIT ONLY

YEAR 5  
 STAGE 3  
 I-74 STAGING PLAN

IOWA MAINLINE CONSTRUCTION COMPLETE. COORDINATE FINAL PAVEMENT MARKING WITH ILLINOIS CONTRACT



DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 32



EX. I-74 EB

EX. I-74 WB

EX. GILBERT ST

6790

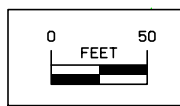
6780

6785

BIKE TRAIL

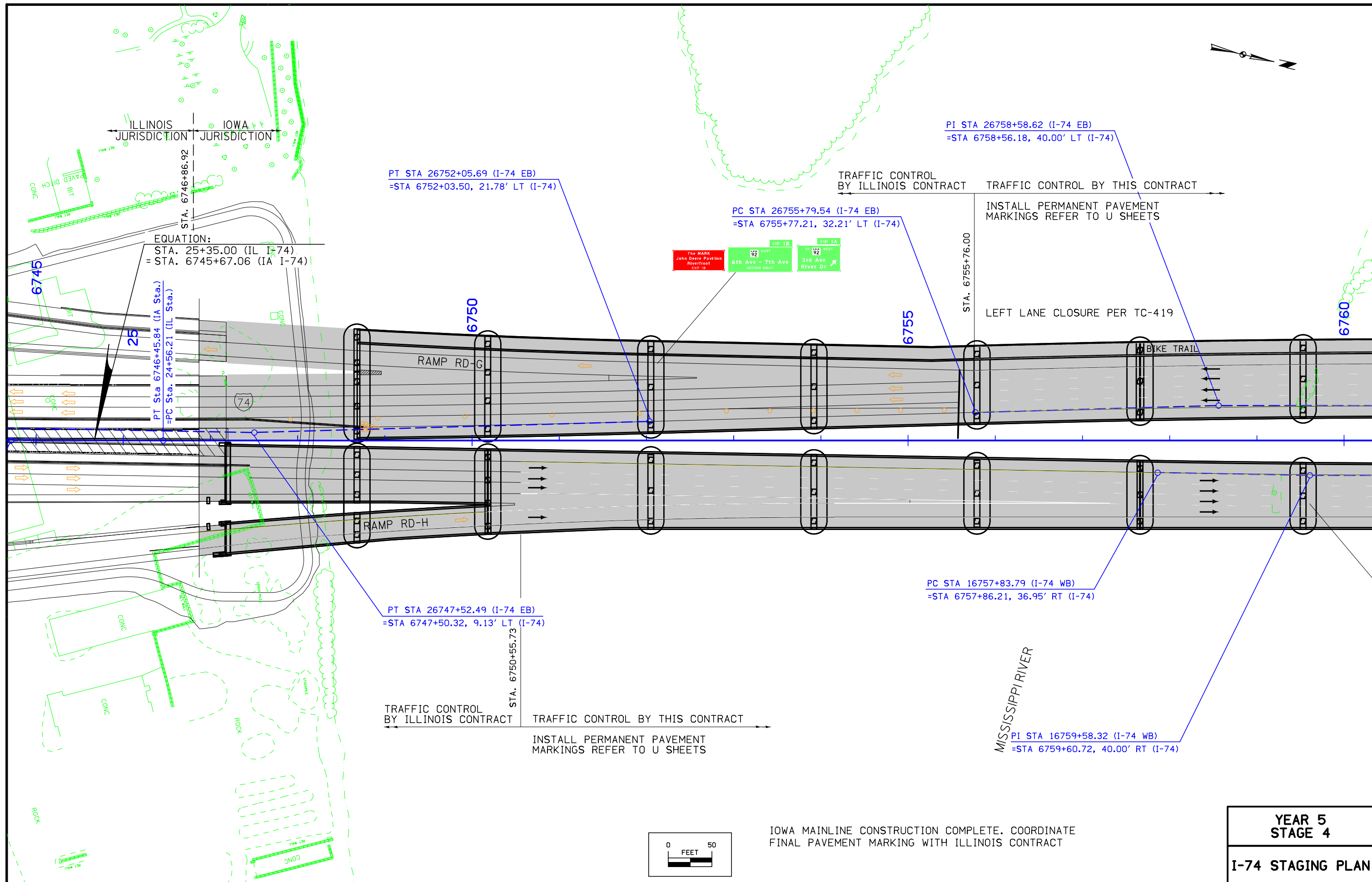
74

US 67 RAMP B



IOWA MAINLINE CONSTRUCTION COMPLETE. COORDINATE  
FINAL PAVEMENT MARKING WITH ILLINOIS CONTRACT

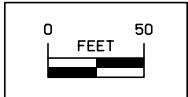
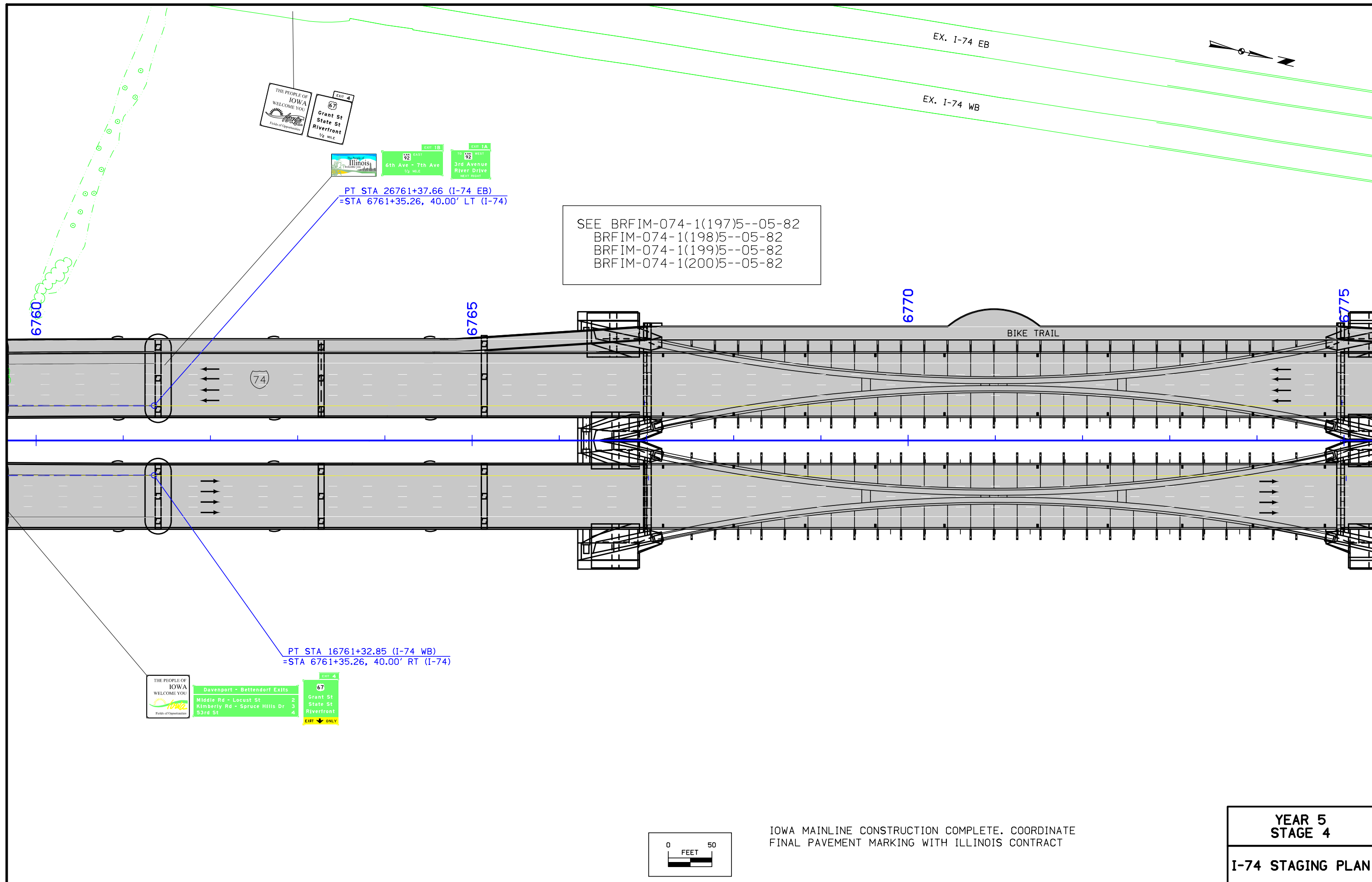
**YEAR 5  
STAGE 3**  
**I-74 STAGING PLAN**



**YEAR 5  
 STAGE 4**

**I-74 STAGING PLAN**





IOWA MAINLINE CONSTRUCTION COMPLETE. COORDINATE FINAL PAVEMENT MARKING WITH ILLINOIS CONTRACT

YEAR 5  
STAGE 4  
I-74 STAGING PLAN

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 32

EX. I-74 EB

EX. I-74 WB

EX. GILBERT ST

6790

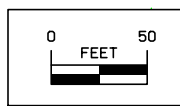
6780

6785

BIKE TRAIL

74

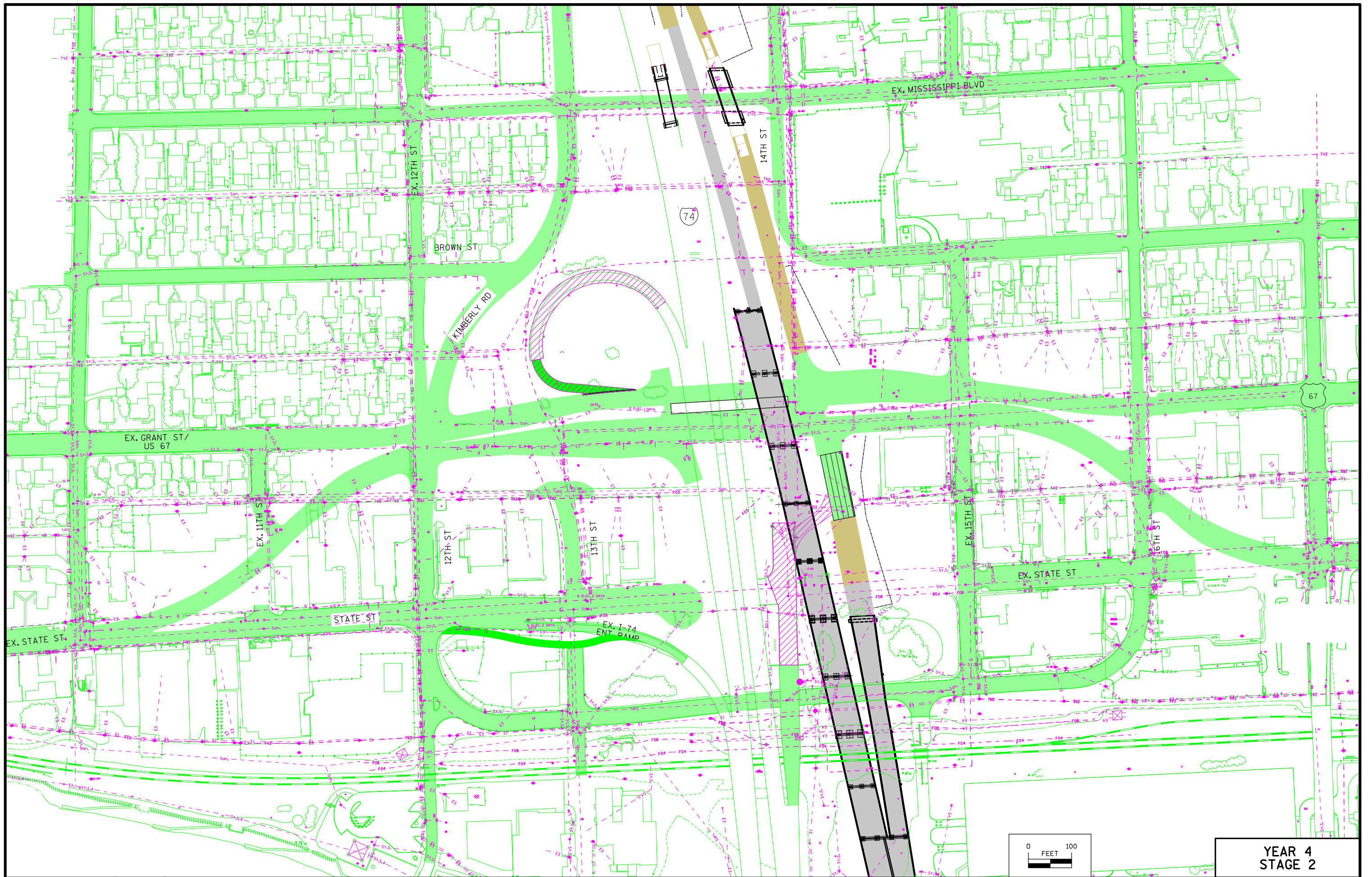
US 67 RAMP B

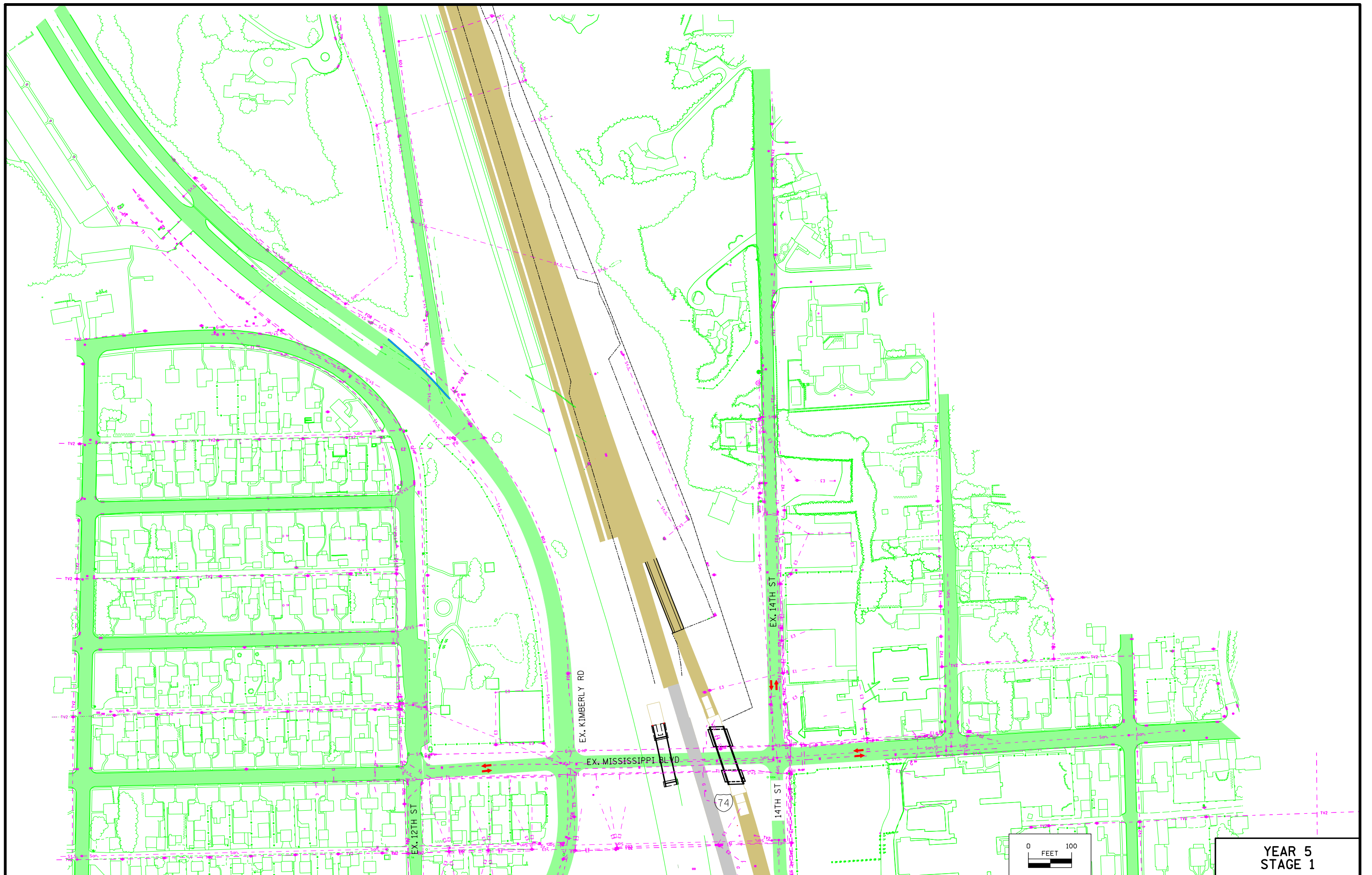


IOWA MAINLINE CONSTRUCTION COMPLETE. COORDINATE  
FINAL PAVEMENT MARKING WITH ILLINOIS CONTRACT

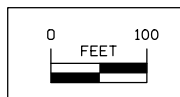
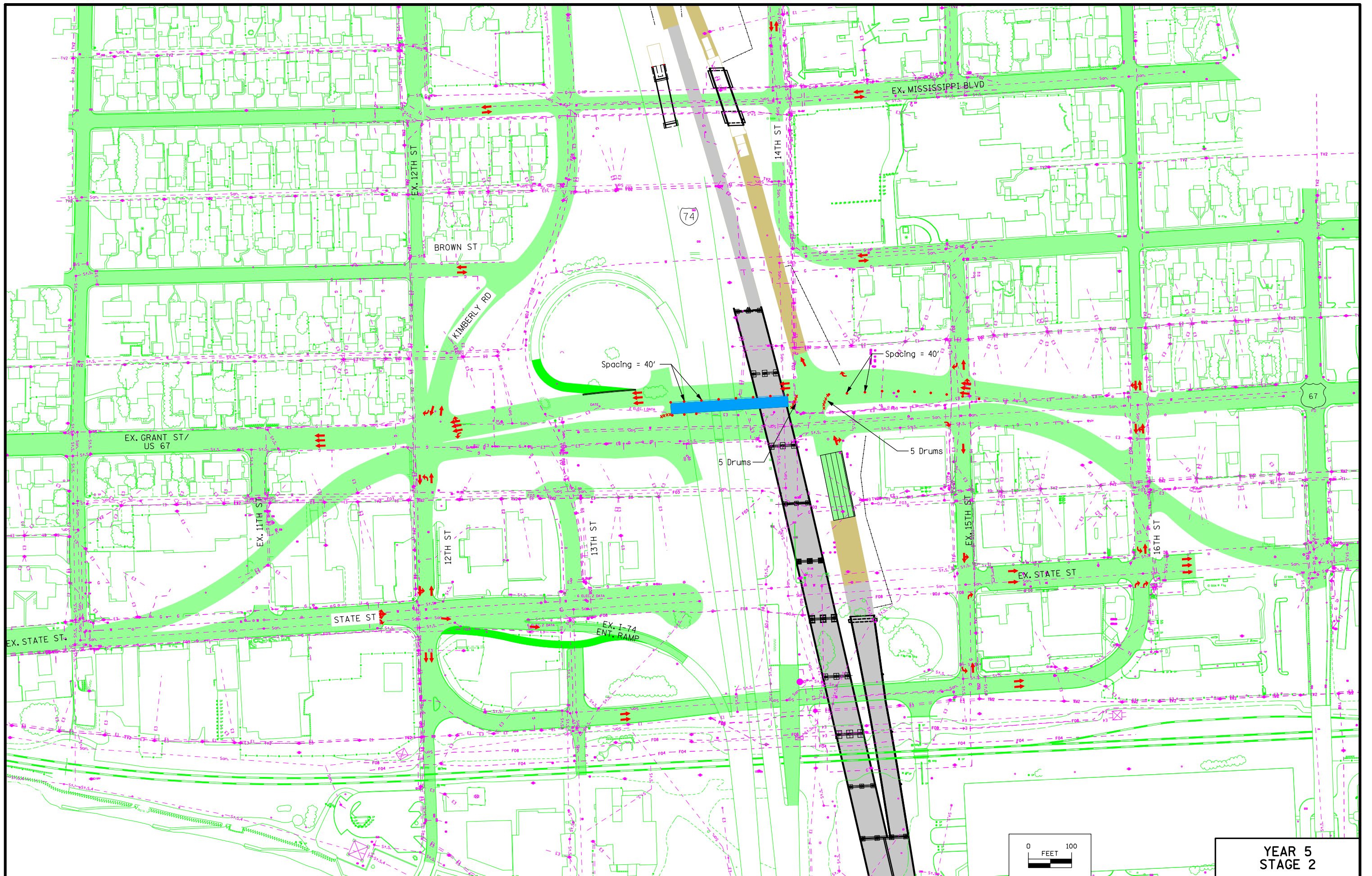
YEAR 5  
STAGE 4

I-74 STAGING PLAN





**YEAR 5  
STAGE 1**



YEAR 5  
STAGE 2

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 32

Refer to M Sheets  
for Storm Sewer Details

For Main Line Details  
Refer to D Sheets

For Profile Details  
Refer to Next Sheet

For Ramp Taper Details  
Refer to U Sheets

Curve 20010 (RAMP A)  
PI Sta 1513+09.60  
 $\Delta = 5^\circ 35' 48" (LT)$   
 $D = 0^\circ 42' 58"$   
 $R = 8,000.00'$   
 $T = 391.03'$   
 $L = 781.43'$   
 $E = 9.55'$   
e = N.C.  
L = NA  
X = NA  
m = NA

STA. 1509+11.06  
=POT STA. 6809+12.34  
101.87 LT (I-74)  
END RAMP A CONSTRUCTION

82°20'36.83"  
STA. 1497+02.31  
BEGIN RAMP A CONSTRUCTION

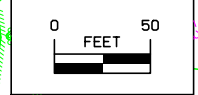
POT STA. 1496+21.97 (RAMP A)  
=POT STA. 205+20.00 (US 67 SB)

80°18'51.50"  
POT STA. 1503+32.72 (RAMP A)  
=POT STA. 12+75.29 (MISSISSIPPI BLVD)

US 67 RAMP D

14TH ST

For K Sheets Legend,  
Refer to Sheet D.1



US 67 RAMP A



DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 32

Curve 20110 (RAMP C)  
PI Sta 3586+05.19  
 $\Delta = 3^\circ 17' 47" (LT)$   
D =  $0^\circ 42' 58"$   
R = 8,000.00'  
T = 230.19'  
L = 460.26'  
E = 3.31'  
e = N.C.  
L = NA  
x = NA  
m = NA

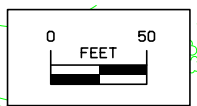
BEGIN RAMP BASELINE  
PC STA. 3583+75.00 (RAMP C)  
=STA. 6783+75.00, 104.00 LT (I-74)

STA. 3587+98.76  
=POT STA. 6787+98.25  
123.69 LT (I-74)  
BEGIN RAMP C CONSTRUCTION  
BRIDGE AND APPROACH PAVEMENT  
CONSTRUCTION BY OTHERS.

STA. 3594+30.26  
END RAMP C CONSTRUCTION

POT STA. 3595+59.96 (RAMP C)  
=POT STA. 1608+50.00 (US 67 NB)

Refer to M Sheets for Storm Sewer Details	For Ramp Taper Details Refer to U Sheet
For Main Line Details Refer to D Sheets	For Profile Details Refer to Next Sheet



US 67 RAMP C





DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29

Curve 20010 (RAMP A)  
PI Sta 1513+09.60  
 $\Delta = 5^\circ 35' 48''$  (LT)  
 $D = 0^\circ 42' 58''$   
 $R = 8,000.00'$   
 $T = 391.03'$   
 $L = 781.43'$   
 $E = 9.55'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

IDENTITY ELEMENT  
3 SIDED, NEIGHBORHOOD  
SEE U SHEETS FOR FOOTING DETAILS AND LOCATION  
SEE V SHEETS FOR DETAILS OF IDENTITY ELEMENT

STA 1497+02.31, 11.00' LT  
END RADIUS  
ELEV. = 571.20

STA 1497+87.81

ELEV. = 570.82

ELEV. = 571.46

FENCE, CHAIN LINK, 72"

RAMP A PGL

ELEV. = 586.39

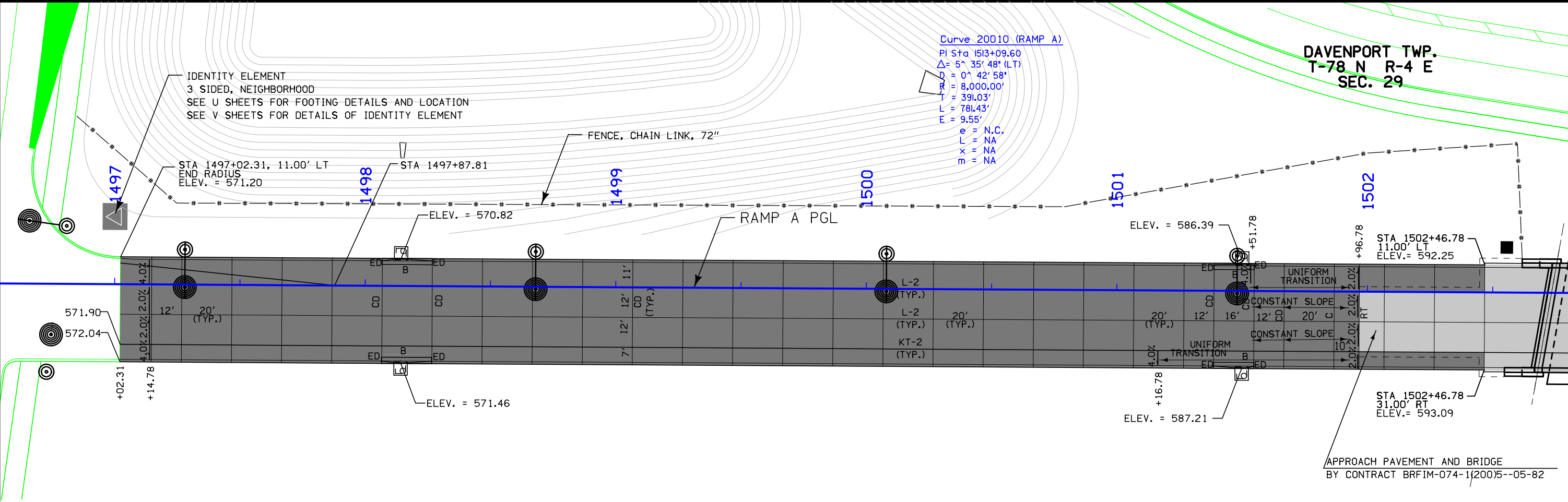
+51.78

+96.78

STA 1502+46.78  
11.00' LT  
ELEV. = 592.25

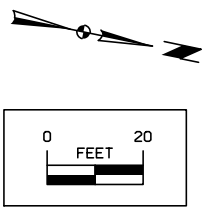
STA 1502+46.78  
31.00' RT  
ELEV. = 593.09

APPROACH PAVEMENT AND BRIDGE  
BY CONTRACT BRFIM-074-1(200)5--05-82



- NOTES:
1. ALL LONGITUDINAL JOINTS SHALL BE EITHER KT-2 OR L-2 UNLESS INDICATED OTHERWISE.
  2. ALL TRAVERSE JOINTS SHALL BE CD JOINTS WITH A MAXIMUM 20' SPACING UNLESS INDICATED OTHERWISE.
  3. IF A JOINT LENGTH IS 2', A C JOINT SHALL BE USED INSTEAD OF A CD JOINT.
  4. REFER TO STANDARD ROAD PLANS FOR DETAILS OF PAVED HEADER, IF APPLICABLE.
  5. REFER TO STANDARD ROAD PLAN PV-1 FOR ADDITIONAL DETAILS.
  6. REFER TO STANDARD ROAD PLANS FOR ADDITIONAL JOINTING DETAILS AROUND PHYSICAL FEATURES.

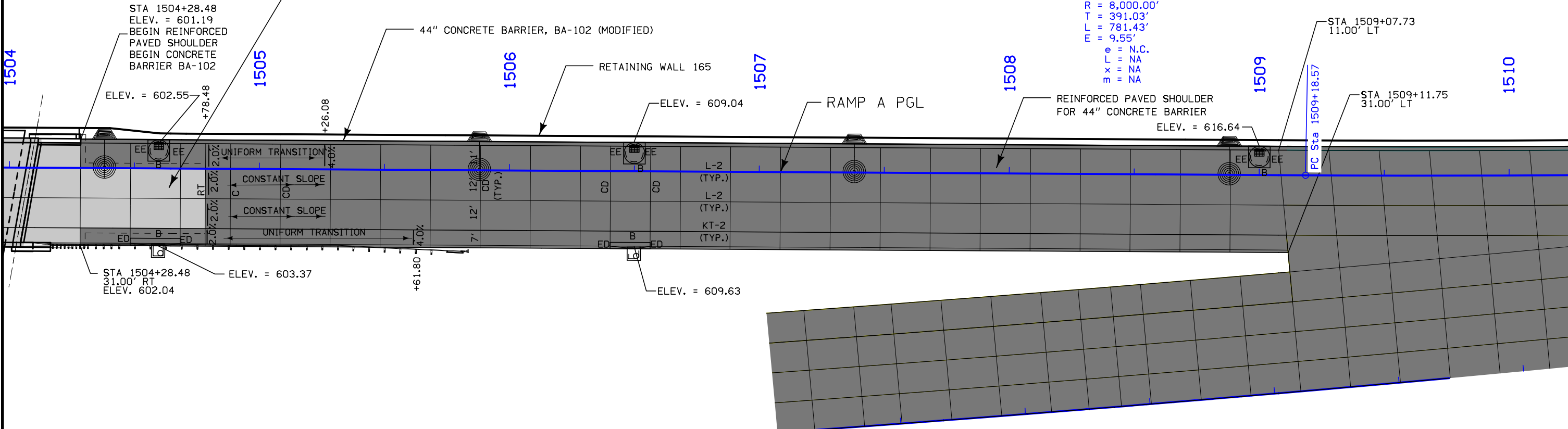
For Bridge Approach Pavement  
Details Refer to U Sheets



**JOINTING,  
GEOMETRICS &  
STAKING PLAN**  
  
US 67 RAMP A

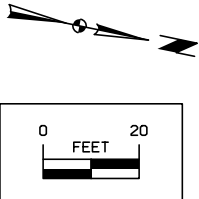
APPROACH PAVEMENT AND BRIDGE  
BY CONTRACT BRFIM-074-1(200)5--05-82

Curve 20010 (RAMP A)  
PI Sta 1513+09.60  
 $\Delta = 5^\circ 35' 48''$  (LT)  
 $D = 0^\circ 42' 58''$   
 $R = 8,000.00'$   
 $T = 391.03'$   
 $L = 781.43'$   
 $E = 9.55'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$



- NOTES:
1. ALL LONGITUDINAL JOINTS SHALL BE EITHER KT-2 OR L-2 UNLESS INDICATED OTHERWISE.
  2. ALL TRAVERSE JOINTS SHALL BE CD JOINTS WITH A MAXIMUM 20' SPACING UNLESS INDICATED OTHERWISE.
  3. IF A JOINT LENGTH IS 2', A C JOINT SHALL BE USED INSTEAD OF A CD JOINT.
  4. REFER TO STANDARD ROAD PLANS FOR DETAILS OF PAVED HEADER, IF APPLICABLE.
  5. REFER TO STANDARD ROAD PLAN PV-1 FOR ADDITIONAL DETAILS.
  6. REFER TO STANDARD ROAD PLANS FOR ADDITIONAL JOINTING DETAILS AROUND PHYSICAL FEATURES.

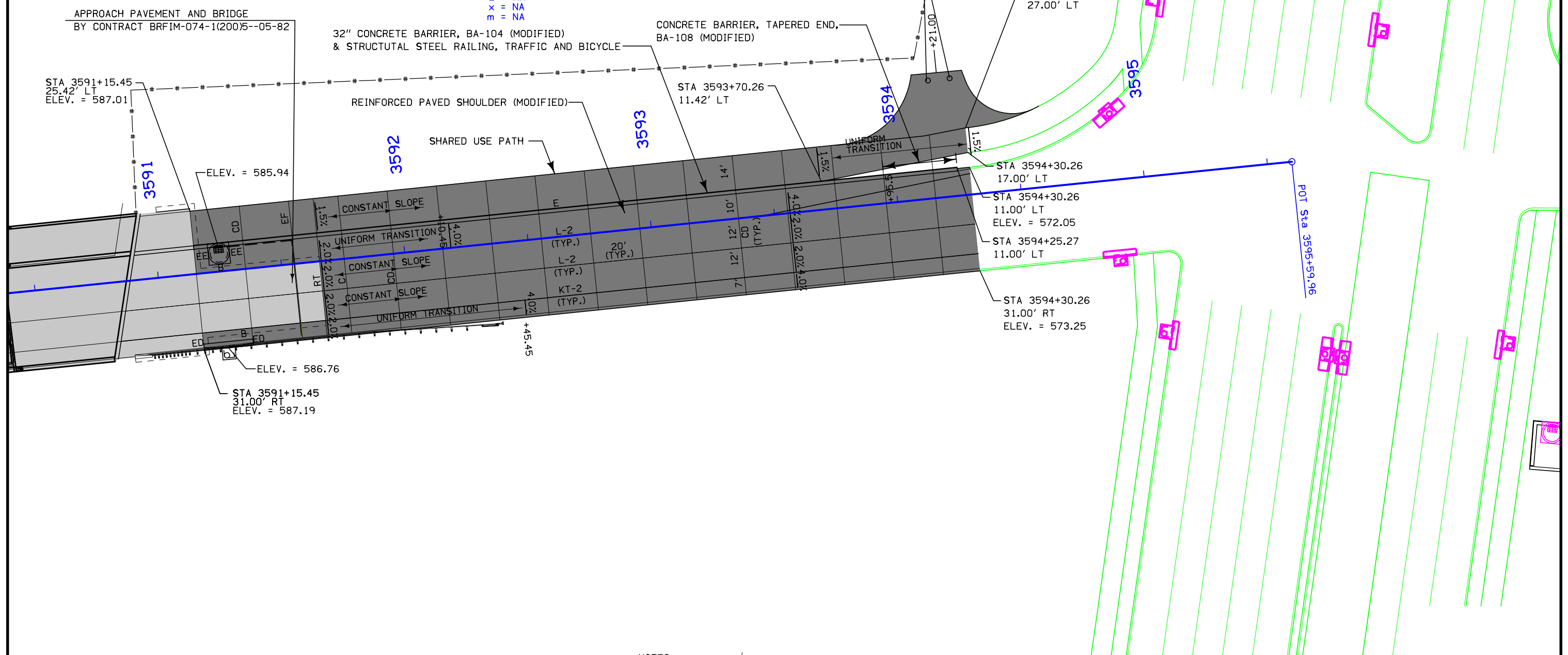
For Bridge Approach Pavement  
Details Refer to U Sheets



**JOINTING,  
GEOMETRICS &  
STAKING PLAN**  
**US 67 RAMP A**

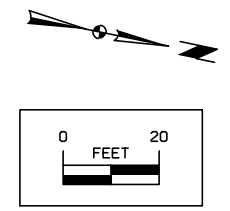
Curve 20110 (RAMP C)  
 PI Sta 3586+05.19  
 $\Delta = 3^\circ 17' 47''$  (LT)  
 $D = 0^\circ 42' 58''$   
 $R = 8,000.00'$   
 $T = 230.19'$   
 $L = 460.26'$   
 $E = 3.31'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

DAVENPORT TWP.  
 T-78 N R-4 E  
 SEC. 29

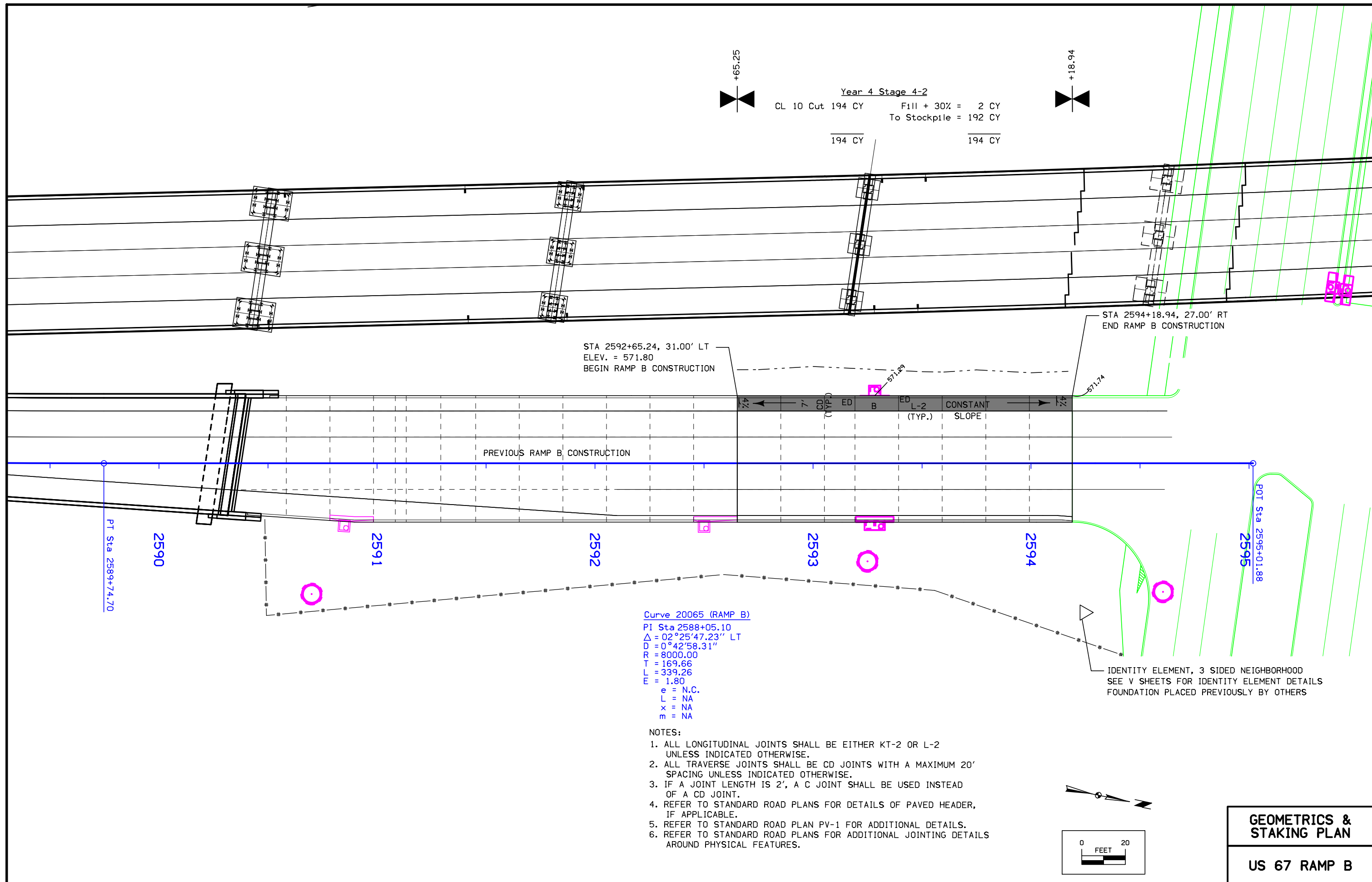


- NOTES:
1. ALL LONGITUDINAL JOINTS SHALL BE EITHER KT-2 OR L-2 UNLESS INDICATED OTHERWISE.
  2. ALL TRAVERSE JOINTS SHALL BE CD JOINTS WITH A MAXIMUM 20' SPACING UNLESS INDICATED OTHERWISE.
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  4. REFER TO STANDARD ROAD PLANS FOR DETAILS OF PAVED HEADER, IF APPLICABLE.
  5. REFER TO STANDARD ROAD PLAN PV-1 FOR ADDITIONAL DETAILS.
  6. REFER TO STANDARD ROAD PLANS FOR ADDITIONAL JOINTING DETAILS AROUND PHYSICAL FEATURES.

For Bridge Approach Pavement  
 Details Refer to U Sheets

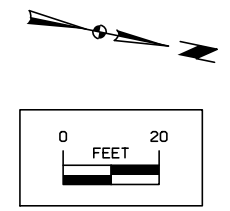


**JOINTING,  
 GEOMETRICS &  
 STAKING PLAN**  
 US 67 RAMP C

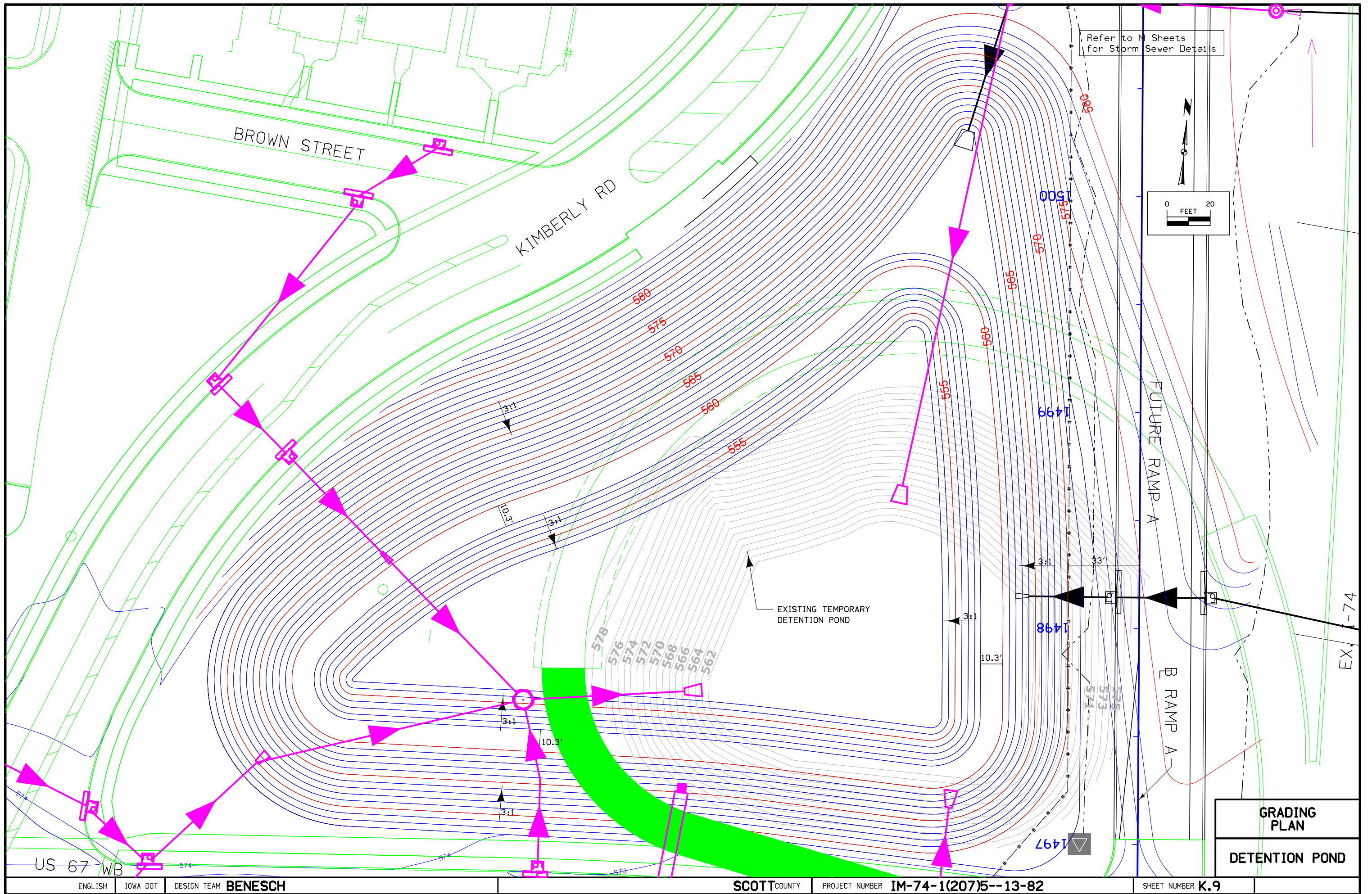


Curve 20065 (RAMP B)  
 PI Sta 2588+05.10  
 $\Delta = 02^{\circ}25'47.23''$  LT  
 $D = 0^{\circ}42'58.31''$   
 $R = 8000.00$   
 $T = 169.66$   
 $L = 339.26$   
 $E = 1.80$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

- NOTES:
1. ALL LONGITUDINAL JOINTS SHALL BE EITHER KT-2 OR L-2 UNLESS INDICATED OTHERWISE.
  2. ALL TRAVERSE JOINTS SHALL BE CD JOINTS WITH A MAXIMUM 20' SPACING UNLESS INDICATED OTHERWISE.
  3. IF A JOINT LENGTH IS 2', A C JOINT SHALL BE USED INSTEAD OF A CD JOINT.
  4. REFER TO STANDARD ROAD PLANS FOR DETAILS OF PAVED HEADER, IF APPLICABLE.
  5. REFER TO STANDARD ROAD PLAN PV-1 FOR ADDITIONAL DETAILS.
  6. REFER TO STANDARD ROAD PLANS FOR ADDITIONAL JOINTING DETAILS AROUND PHYSICAL FEATURES.



**GEOMETRICS & STAKING PLAN**  
**US 67 RAMP B**



**GRADING PLAN**  
**DETENTION POND**

**SURVEY SYMBOLS**

	Interstate Highway Symbol		Septic Tank
	U.S. Highway Symbol		Cistern
	Iowa Highway Symbol		L.P. Gas Tank (No Footing)
	County Road Highway Symbol		Underground Storage Tank
	Evergreen Tree		Latrine
	Deciduous Tree		Luminaire
	Fruit Tree		Traffic Signal
	Shrub (Bushes)		Traffic Signal with Luminaire
	Timber		Telephone Pedestal
	Hedge		TVP Television Pedestal
	Stump		Telephone Pole
	Swamp		Telephone Pole (Second Company)
	Rock Outcrop		Telephone Pole (Third Company)
	Broken Concrete		Telephone Pole (Fourth Company)
	Revetment (Rip Rap)		Telephone Pole (Fifth Company)
	Cemetery		Power Pole
	Grave		Power Pole (Second Company)
	Cave		Power Pole (Third Company)
	Sink Hole		Power Pole (Fourth Company)
	Board Fence		Power Pole (Fifth Company)
	Chain Link or Security Fence		Electrical Highline Tower (Metal or Concrete)
	Wire Fence		Telephone Riser Pole
	Terrace		Power Riser Pole
	Earth Dam or Dike (Existing)		Telegraph Pole
	Earth Dam or Dike (Proposed)		Satellite TV Dish
	Tile Outlet		Guardrail (Beam or Cable)
	Edge of Water		Guard Post (one or two)
	Existing Drainage		Guard Post (over two)
	Proposed Drainage		Filler Pipe
	Right of Way Rail or Lot Corner		Gas Valve
	Concrete Monument		Water Valve
	Well		Speed Limit Sign
	Windmill		Mile Marker Post
	Beehive Intake		Sign
	Existing Intake		Water Hook Up
	Proposed Intake		Radio Tower
	Existing Utility Access (Manhole)		Tower Anchor
	Proposed Utility Access (Manhole)		Electric Box
	Fire Hydrant		Traffic Signal Control Box
	Water Hydrant (Rural)		Rail Road Signal Control Box
			Telephone Switch Box

— F0 —	Existing Fiber Optics (Central Scott)
— F02 —	Existing Fiber Optics (McLeod USA)
— F03 —	Existing Fiber Optics (Qwest)
— F04 —	Existing Fiber Optics (ATT)
— F06 —	Existing Fiber Optics (MediaCom)
— F08 —	Existing Fiber Optics (Bettendorf)
— F09 —	Existing Fiber Optics (IowaDOT)
— E —	Existing Power Line (MidAmerican)
— E2 —	Existing Power Line (MidAmerican)
— E3 —	Existing Power Line (MidAmerican)
— E4 —	Existing Power Line (MidAmerican)
— E5 —	Existing Power Line (IowaDOT)
— G —	Existing Gas Line (MidAmerican)
— G-HP —	Existing High Pressure Gas Line (MidAmerican)
— San. —	Existing Sanitary Sewer Line (Bettendorf)
— San.2 —	Existing Sanitary Sewer Line (Davenport)
— T —	Existing Telephone Line (Qwest)
— TV —	Existing Cable Television Line (MediaCom)
— TV2 —	Existing Cable Television Line (MediaCom)
— W —	Existing Water Line (IA American)

**PLAN VIEW LEGEND OF PLAN SHEETS (ROAD)**

SHADING	Design Color No.	
Gray, Light	(48)	Proposed Bridge Shading
Gray, Med	(80)	Proposed Granular Shading
Gray, Dark	(112)	Proposed Pavement Shading

**CONVENTIONAL SIGNS**

	Survey Line
	Section Corner
	Ground Line Intercept
	Saw Cut
	Guardrail
	Linear Removal
	Abandon Pipe
	Clearing & Grubbing Area
	Pavement Removal
	Bridge Removal by Others

**RIGHT OF WAY LEGEND**

	Proposed Right of Way
	Existing and Proposed Right of Way
	Easement and Existing Right of Way
	Borrow
	Easement (Temporary)
	Easement
	Excess
	Access Control

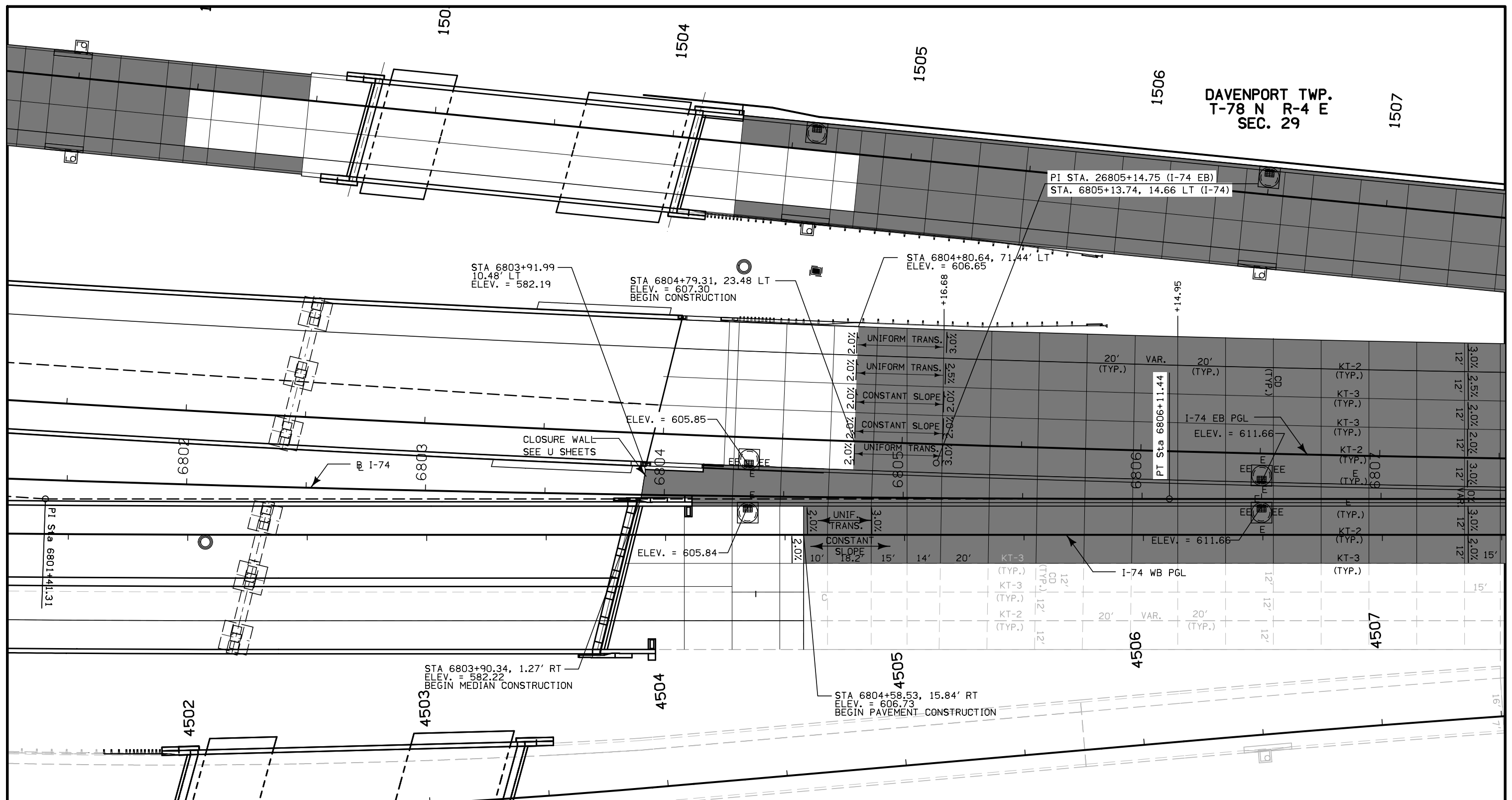
**TABULATION OF UTILITIES**

102-13A  
10-29-02

CENTRAL SCOTT TELEPHONE: Fiber Optics  
 McLEOD USA: Fiber Optics  
 QWEST COMMUNICATIONS: Fiber Optics, Telephone Lines  
 AT&T: Fiber Optics  
 MEDIACOM: Fiber Optics, Television  
 BETTENDORF: Fiber Optics  
 IOWA DOT: Fiber Optics, Power Lines  
 MIDAMERICAN ENERGY - Power Lines, Gas  
 BETTENDORF: Sanitary Sewer Line  
 DAVENPORT: Sanitary Sewer Line  
 IA-AMERICAN: Water Line

**Legend And Symbol  
Information Sheet  
L AND U SHEETS  
(Symbols are Typical Only)**

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29



PI STA. 26805+14.75 (I-74 EB)  
STA. 6805+13.74, 14.66 LT (I-74)

STA 6803+91.99  
10.48' LT  
ELEV. = 582.19

STA 6804+79.31, 23.48 LT  
ELEV. = 607.30  
BEGIN CONSTRUCTION

STA 6804+80.64, 71.44' LT  
ELEV. = 606.65

CLOSURE WALL  
SEE U SHEETS

ELEV. = 605.85

ELEV. = 605.84

STA 6803+90.34, 1.27' RT  
ELEV. = 582.22  
BEGIN MEDIAN CONSTRUCTION

STA 6804+58.53, 15.84' RT  
ELEV. = 606.73  
BEGIN PAVEMENT CONSTRUCTION

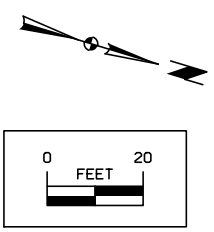
Curve 21015 (I-74)  
PI Sta 6801+41.31  
 $\Delta = 03^\circ 50' 58.23''$  LT  
 $D = 0^\circ 24' 33.32''$   
R = 14000.00  
T = 470.48  
L = 940.61  
E = 7.90  
e = N.C.  
L = NA  
x = NA  
m = NA

Curve 21017 (I-74 EB)  
PI Sta 26805+14.75  
 $\Delta = 03^\circ 50' 58.22''$  LT  
 $D = 0^\circ 24' 33.32''$   
R = 14000.00  
T = 470.48  
L = 940.61  
E = 7.90  
e = N.C.  
L = NA  
x = NA  
m = NA

Curve 21016 (I-74 WB)  
PI Sta 16797+67.87  
 $\Delta = 03^\circ 50' 58.24''$  LT  
 $D = 0^\circ 24' 33.32''$   
R = 14000.00  
T = 470.48  
L = 940.61  
E = 7.90  
e = N.C.  
L = NA  
x = NA  
m = NA

NOTES:

1. ALL LONGITUDINAL JOINTS SHALL BE EITHER KT-2 OR L-2 UNLESS INDICATED OTHERWISE.
2. ALL TRAVERSE JOINTS SHALL BE CD JOINTS WITH A MAXIMUM 20' SPACING UNLESS INDICATED OTHERWISE.
3. IF A JOINT LENGTH IS 2', A C JOINT SHALL BE USED INSTEAD OF A CD JOINT.
4. REFER TO STANDARD ROAD PLANS FOR DETAILS OF PAVED HEADER, IF APPLICABLE.
5. REFER TO STANDARD ROAD PLAN PV-1 FOR ADDITIONAL DETAILS.
6. REFER TO STANDARD ROAD PLANS FOR ADDITIONAL JOINTING DETAILS AROUND PHYSICAL FEATURES.
7. SEE K SHEETS FOR RAMP JOINTING, GEOMETRICS & STAKING PLAN.



**JOINTING, GEOM.  
& STAKING PLAN**

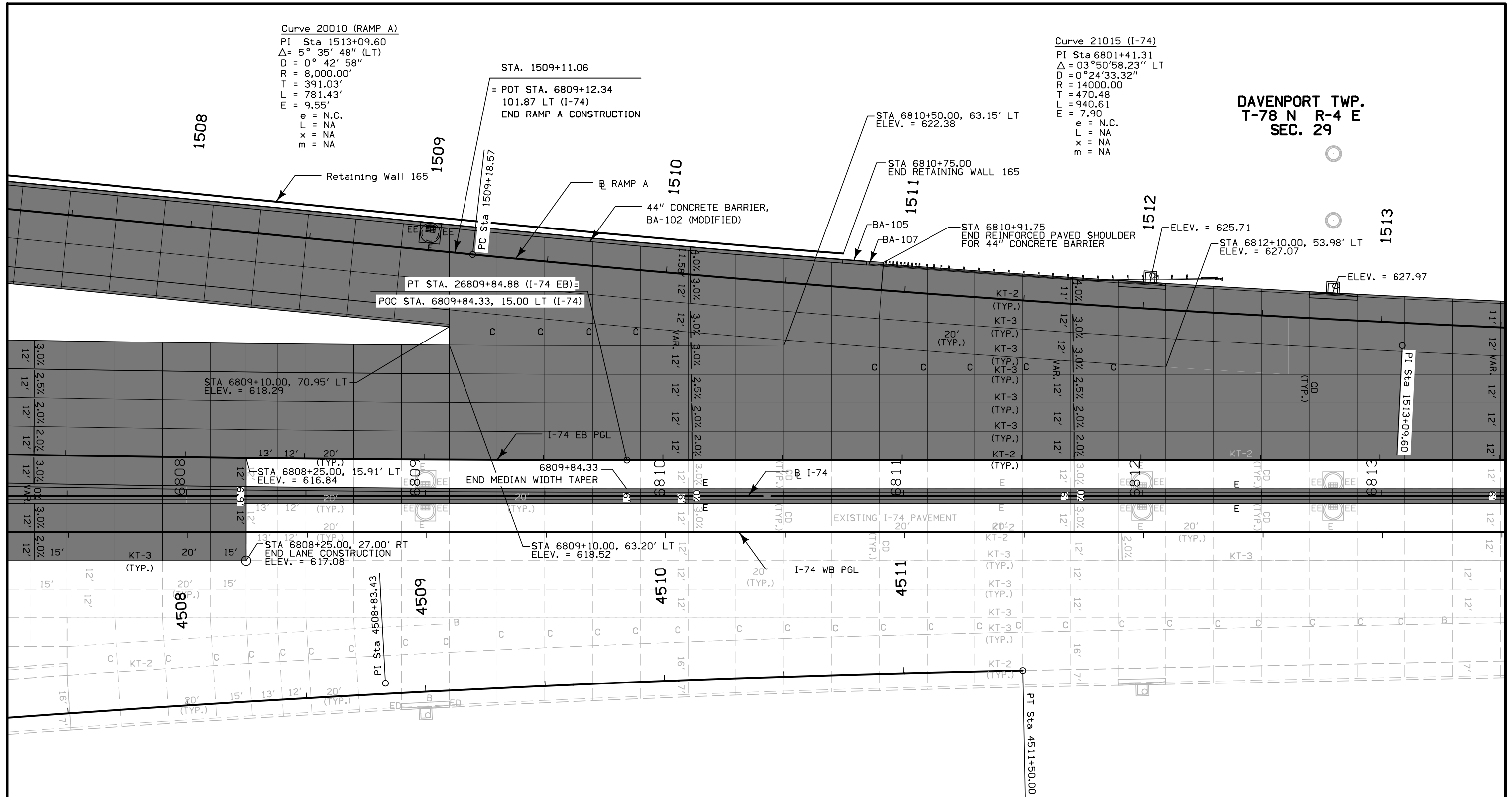
**INTERSTATE 74**



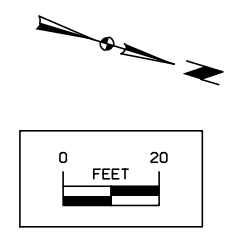
Curve 20010 (RAMP A)  
 PI Sta 1513+09.60  
 $\Delta = 5^\circ 35' 48''$  (LT)  
 $D = 0^\circ 42' 58''$   
 $R = 8,000.00'$   
 $T = 391.03'$   
 $L = 781.43'$   
 $E = 9.55'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

Curve 21015 (I-74)  
 PI Sta 6801+41.31  
 $\Delta = 03^\circ 50' 58.23''$  LT  
 $D = 0^\circ 24' 33.32''$   
 $R = 14,000.00'$   
 $T = 470.48'$   
 $L = 940.61'$   
 $E = 7.90'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

DAVENPORT TWP.  
 T-78 N R-4 E  
 SEC. 29



- NOTES:
1. ALL LONGITUDINAL JOINTS SHALL BE EITHER KT-2 OR L-2 UNLESS INDICATED OTHERWISE.
  2. ALL TRAVERSE JOINTS SHALL BE CD JOINTS WITH A MAXIMUM 20' SPACING UNLESS INDICATED OTHERWISE.
  3. IF A JOINT LENGTH IS 2', A C JOINT SHALL BE USED INSTEAD OF A CD JOINT.
  4. REFER TO STANDARD ROAD PLANS FOR DETAILS OF PAVED HEADER, IF APPLICABLE.
  5. REFER TO STANDARD ROAD PLAN PV-1 FOR ADDITIONAL DETAILS.
  6. REFER TO STANDARD ROAD PLANS FOR ADDITIONAL JOINTING DETAILS AROUND PHYSICAL FEATURES.
  7. SEE K SHEETS FOR RAMP JOINTING, GEOMETRICS & STAKING PLAN.

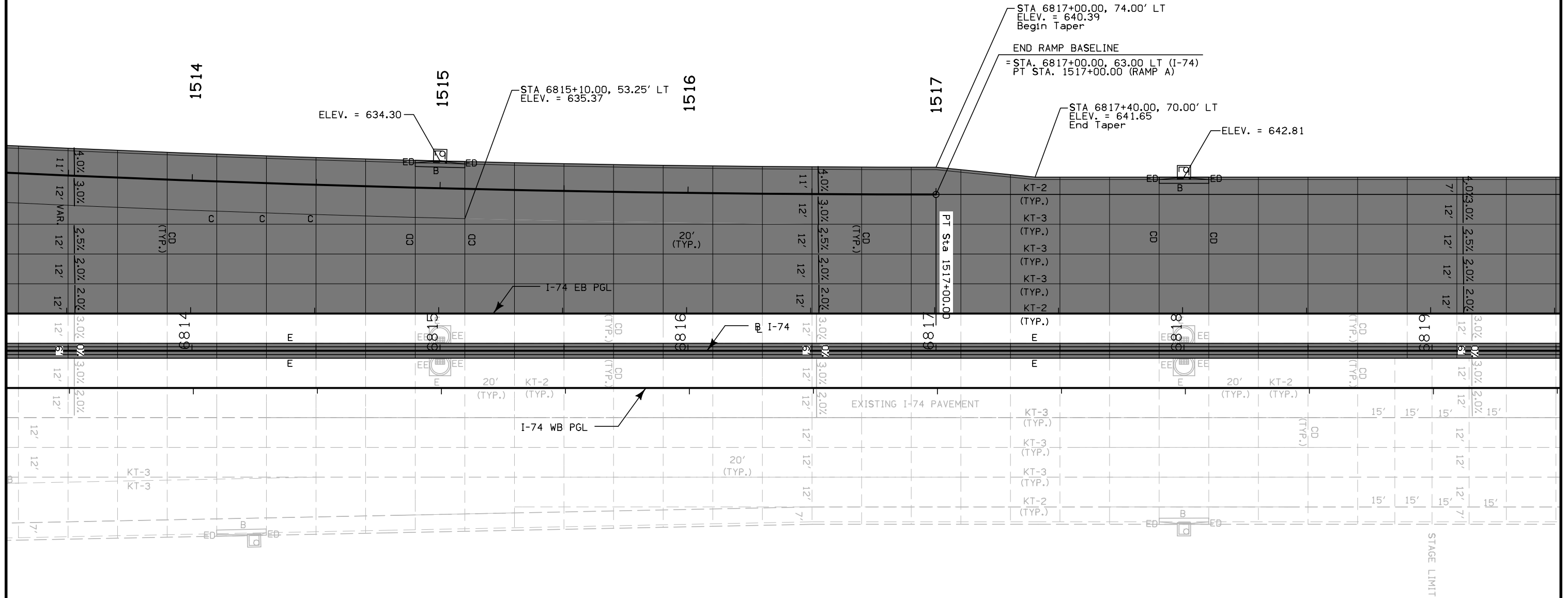


**JOINTING, GEOM. & STAKING PLAN**  
**INTERSTATE 74**

Refer to U Sheets  
 For Additional Gore Details

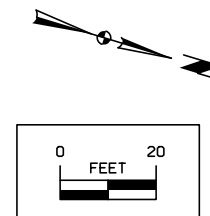
DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29

Curve 20010 (RAMP A)  
PI Sta 1513+09.60  
 $\Delta = 5^\circ 35' 48''$  (LT)  
D =  $0^\circ 42' 58''$   
R = 8,000.00'  
T = 391.03'  
L = 781.43'  
E = 9.55'  
e = N.C.  
L = NA  
x = NA  
m = NA



NOTES:

1. ALL LONGITUDINAL JOINTS SHALL BE EITHER KT-2 OR L-2 UNLESS INDICATED OTHERWISE.
2. ALL TRAVERSE JOINTS SHALL BE CD JOINTS WITH A MAXIMUM 20' SPACING UNLESS INDICATED OTHERWISE.
3. IF A JOINT LENGTH IS 2', A C JOINT SHALL BE USED INSTEAD OF A CD JOINT.
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6. REFER TO STANDARD ROAD PLANS FOR ADDITIONAL JOINTING DETAILS AROUND PHYSICAL FEATURES.
7. SEE K SHEETS FOR RAMP JOINTING, GEOMETRICS & STAKING PLAN.



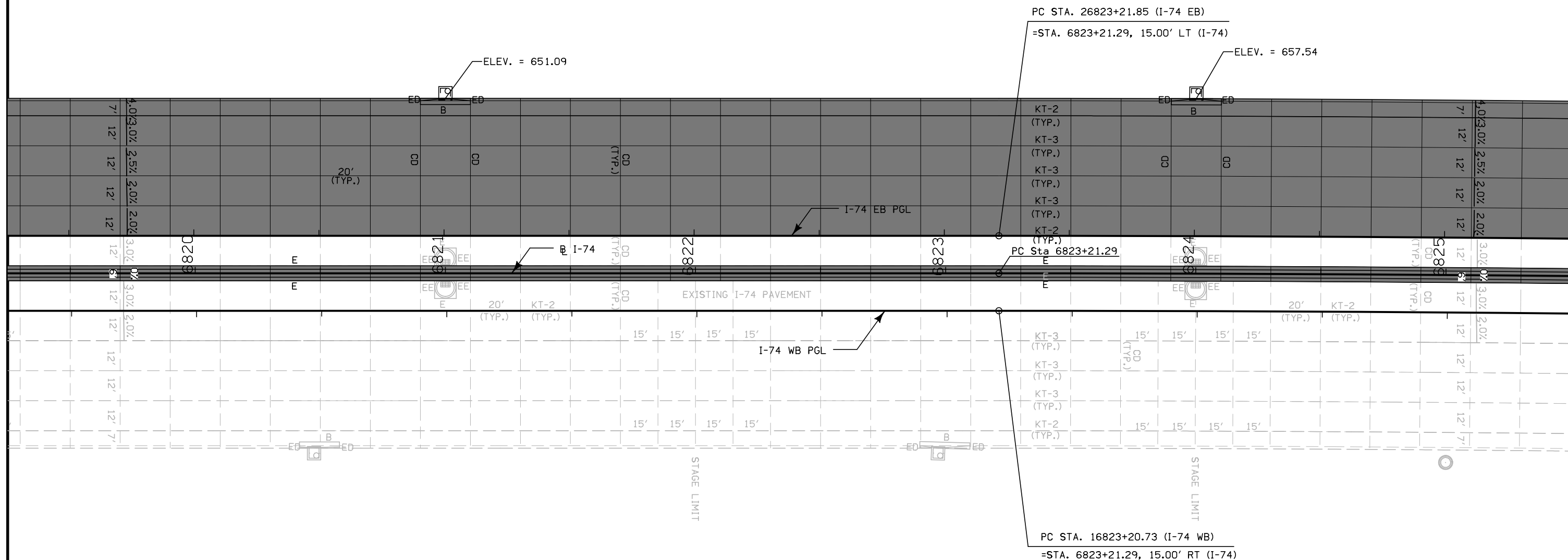
**JOINTING, GEOM.  
& STAKING PLAN**  
**INTERSTATE 74**

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29

Curve 21020 (I-74)  
PI Sta 6832+57.30  
 $\Delta = 04^{\circ}39'39.15''$  RT  
D =  $0^{\circ}14'56.80''$   
R = 23000.00  
T = 936.01  
L = 1871.00  
E = 19.04  
e = N.C.  
L = NA  
x = NA  
m = NA

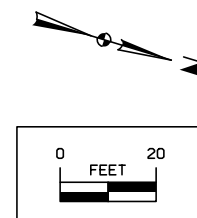
Curve 21022 (I-74 EB)  
PI STA. = 26832+58.47  
 $\Delta = 4^{\circ}39'39''$  (RT)  
D =  $0^{\circ}14'56''$   
R = 23,015.00'  
T = 936.62'  
L = 1,872.22'  
E = 19.05'  
e = N.C.  
L = NA  
x = NA  
m = NA

Curve 21021 (I-74 WB)  
PI STA. = 16832+56.13  
 $\Delta = 4^{\circ}39'39''$  (RT)  
D =  $0^{\circ}14'57''$   
R = 22,985.00'  
T = 935.40'  
L = 1,869.78'  
E = 19.03'  
e = N.C.  
L = NA  
x = NA  
m = NA



NOTES:

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2. ALL TRAVERSE JOINTS SHALL BE CD JOINTS WITH A MAXIMUM 20' SPACING UNLESS INDICATED OTHERWISE.
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7. SEE K SHEETS FOR RAMP JOINTING, GEOMETRICS & STAKING PLAN.



JOINTING, GEOM.  
& STAKING PLAN

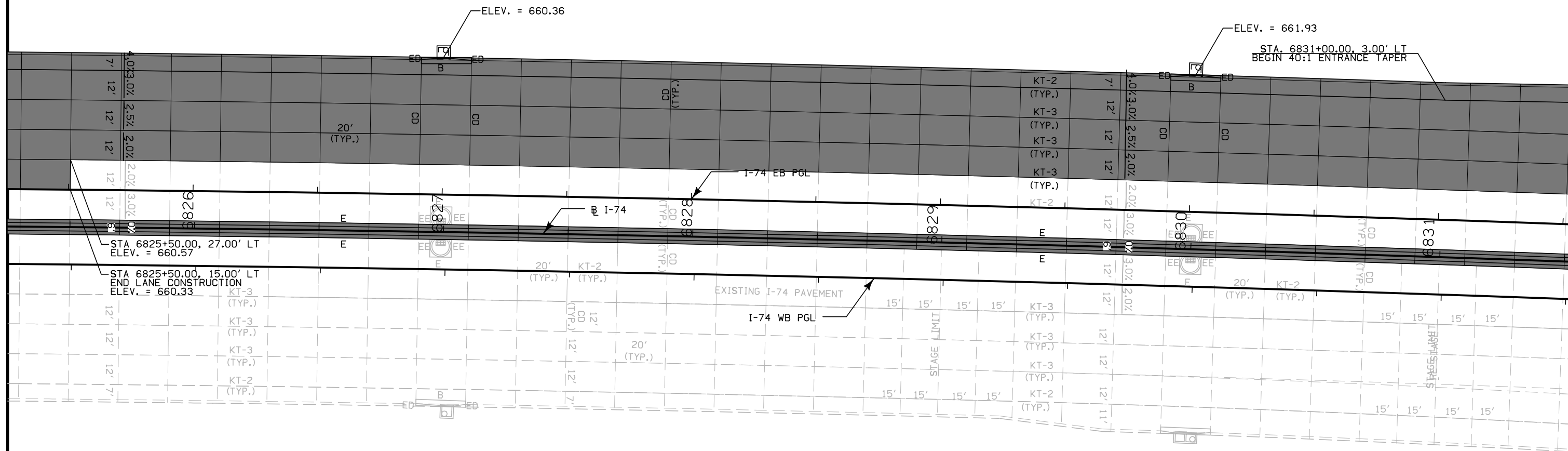
INTERSTATE 74

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29

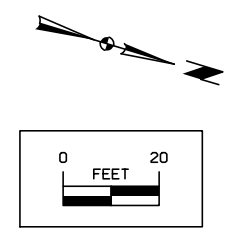
Curve 21020 (I-74)  
PI Sta 6832+57.30  
 $\Delta = 04^{\circ}39'39.15''$  RT  
D = 0°14'56.80"  
R = 23000.00  
T = 936.01  
L = 1871.00  
E = 19.04  
e = N.C.  
L = NA  
x = NA  
m = NA

Curve 21022 (I-74 EB)  
PI STA. = 26832+58.47  
 $\Delta = 4^{\circ}39'39''$  (RT)  
D = 0°14'56"  
R = 23,015.00'  
T = 936.62'  
L = 1,872.22'  
E = 19.05'  
e = N.C.  
L = NA  
x = NA  
m = NA

Curve 21021 (I-74 WB)  
PI STA. = 16832+56.13  
 $\Delta = 4^{\circ}39'39''$  (RT)  
D = 0°14'57"  
R = 22,985.00'  
T = 935.40'  
L = 1,869.78'  
E = 19.03'  
e = N.C.  
L = NA  
x = NA  
m = NA



- NOTES:
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  5. REFER TO STANDARD ROAD PLAN PV-1 FOR ADDITIONAL DETAILS.
  6. REFER TO STANDARD ROAD PLANS FOR ADDITIONAL JOINTING DETAILS AROUND PHYSICAL FEATURES.
  7. SEE K SHEETS FOR RAMP JOINTING, GEOMETRICS & STAKING PLAN.



**JOINTING, GEOM.  
& STAKING PLAN**

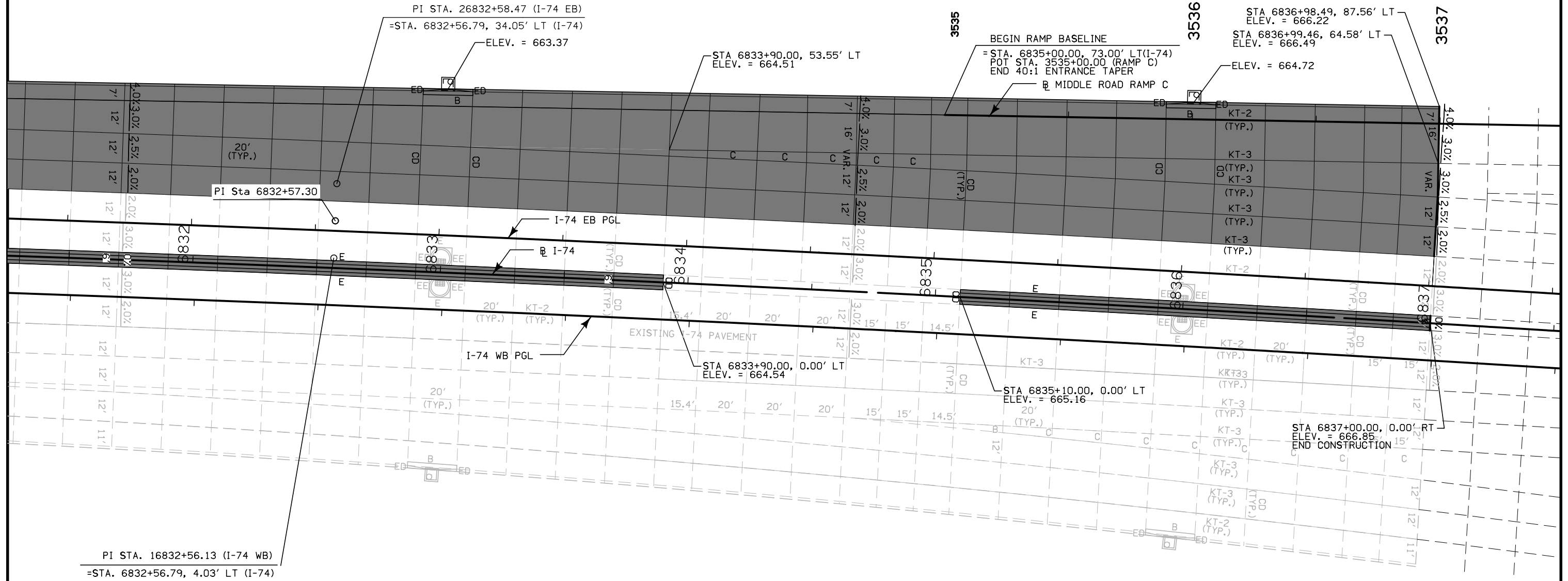
**INTERSTATE 74**

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29

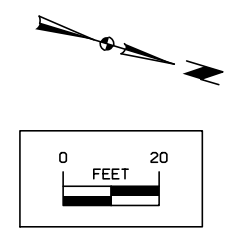
Curve 21020 (I-74)  
PI Sta 6832+57.30  
 $\Delta = 04^{\circ}39'39.15''$  RT  
D =  $0^{\circ}14'56.80''$   
R = 23000.00  
T = 936.01  
L = 1871.00  
E = 19.04  
e = N.C.  
L = NA  
x = NA  
m = NA

Curve 21022 (I-74 EB)  
PI STA. = 26832+58.47  
 $\Delta = 4^{\circ}39'39''$  (RT)  
D =  $0^{\circ}14'56''$   
R = 23,015.00'  
T = 936.62'  
L = 1,872.22'  
E = 19.05'  
e = N.C.  
L = NA  
x = NA  
m = NA

Curve 21021 (I-74 WB)  
PI STA. = 16832+56.13  
 $\Delta = 4^{\circ}39'39''$  (RT)  
D =  $0^{\circ}14'57''$   
R = 22,985.00'  
T = 935.40'  
L = 1,869.78'  
E = 19.03'  
e = N.C.  
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m = NA

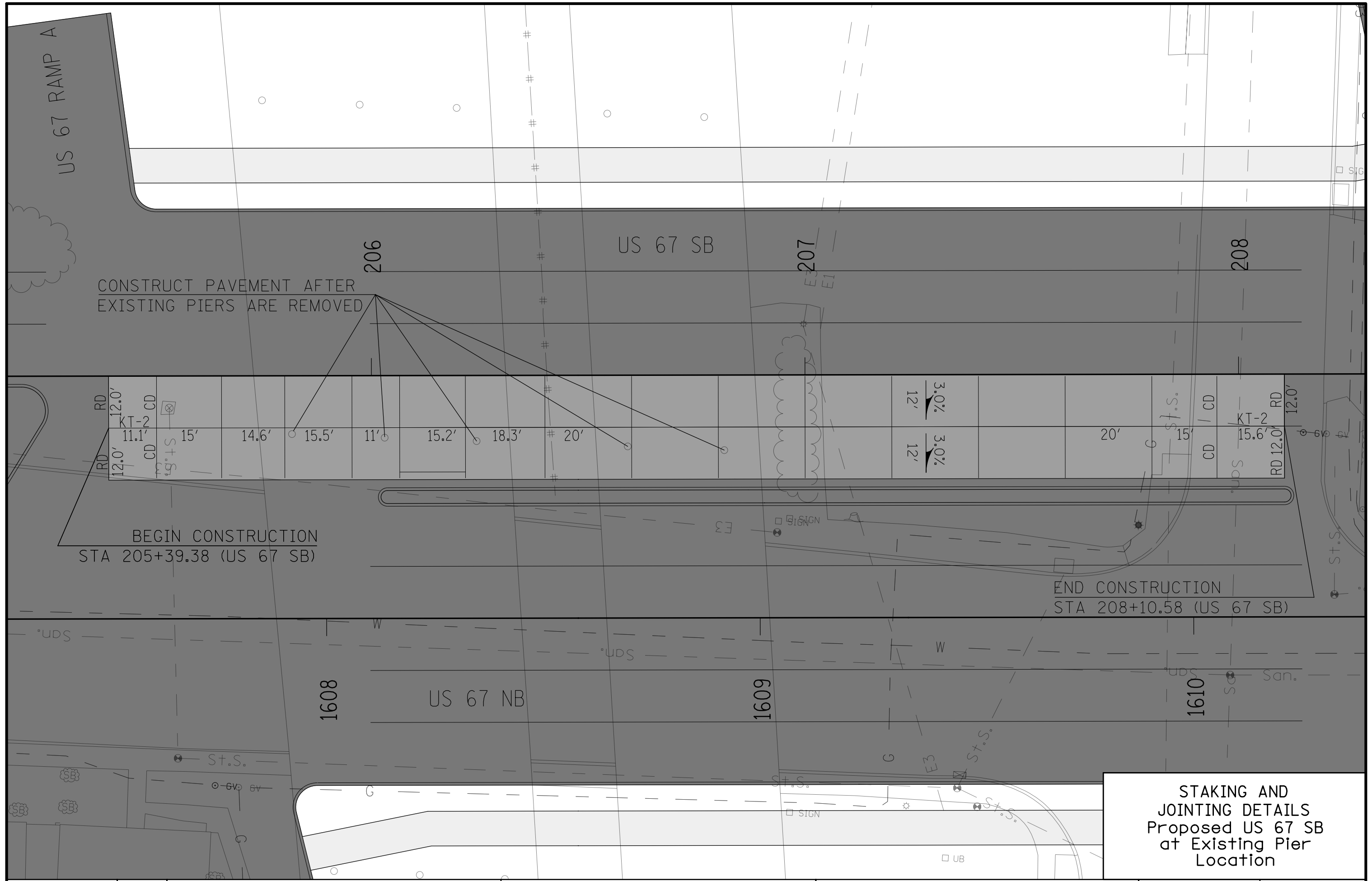


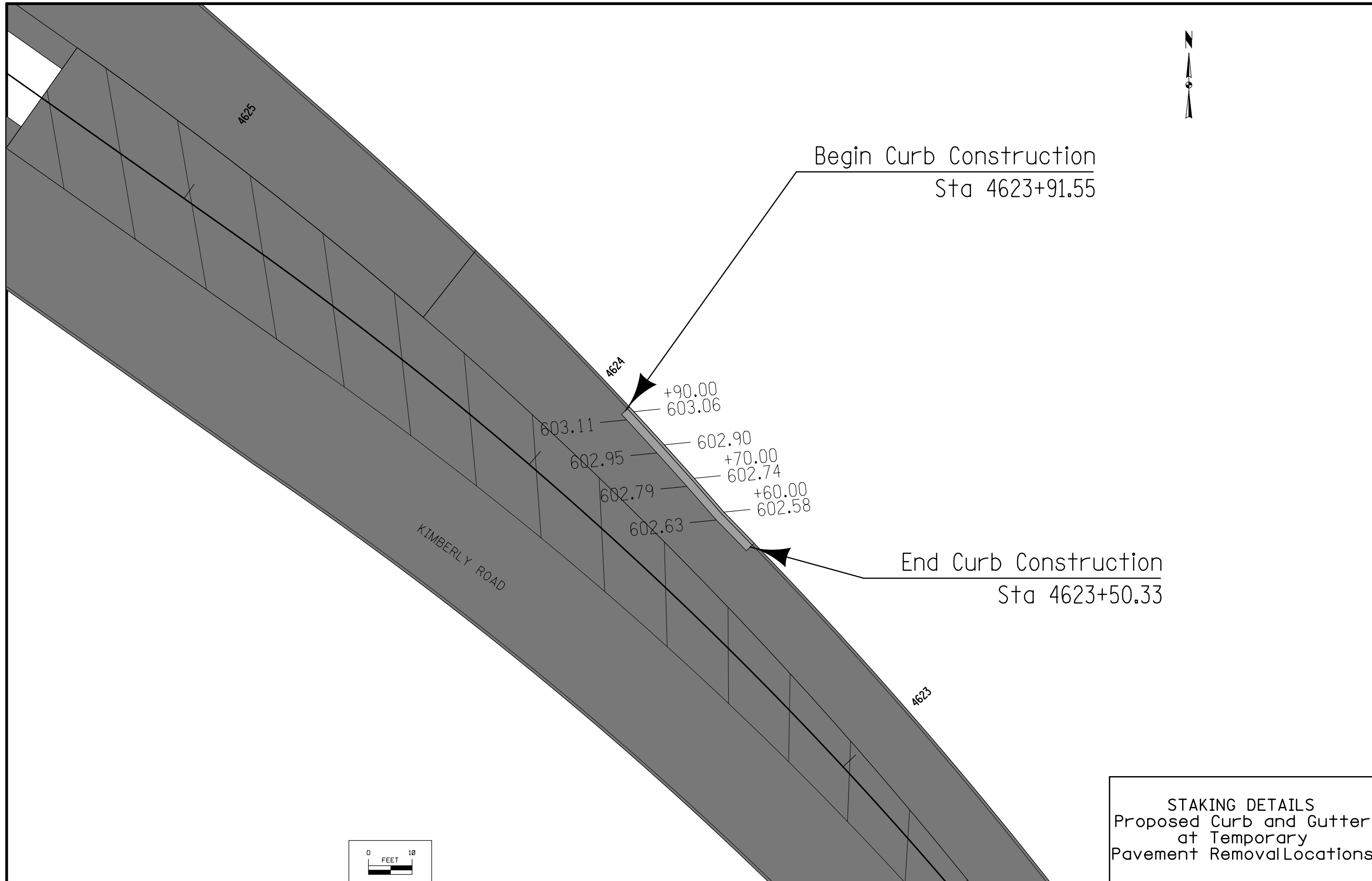
- NOTES:
1. ALL LONGITUDINAL JOINTS SHALL BE EITHER KT-2 OR L-2 UNLESS INDICATED OTHERWISE.
  2. ALL TRAVERSE JOINTS SHALL BE CD JOINTS WITH A MAXIMUM 20' SPACING UNLESS INDICATED OTHERWISE.
  3. IF A JOINT LENGTH IS 2', A C JOINT SHALL BE USED INSTEAD OF A CD JOINT.
  4. REFER TO STANDARD ROAD PLANS FOR DETAILS OF PAVED HEADER, IF APPLICABLE.
  5. REFER TO STANDARD ROAD PLAN PV-1 FOR ADDITIONAL DETAILS.
  6. REFER TO STANDARD ROAD PLANS FOR ADDITIONAL JOINTING DETAILS AROUND PHYSICAL FEATURES.
  7. SEE K SHEETS FOR RAMP JOINTING, GEOMETRICS & STAKING PLAN.



**JOINTING, GEOM.  
& STAKING PLAN**

**INTERSTATE 74**





Begin Curb Construction  
Sta 4623+91.55

4624

+90.00  
603.06

602.90

+70.00  
602.74

602.95

+60.00  
602.58

602.79

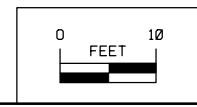
602.63

End Curb Construction  
Sta 4623+50.33

KIMBERLY ROAD

4623

STAKING DETAILS  
Proposed Curb and Gutter  
at Temporary  
Pavement Removal Locations



STORM SEWER

\* Bid Item  
\*\* For SW-545

For bedding and backfill purposes under Primary roads, use material complying with Article 4120.04 (Class A Crushed Stone) of the Standard Specifications for all bedding and backfill. Place and compact the material according to Article 2435.03, A and Article 2552.03, E (Class I materials).

INTAKES AND UTILITY ACCESSES						PIPES													
No.	Location Station and Offset	*Type or Standard Road Plan	Form Grade Elev.	Bottom Well Elev.	Extension Length** FT	Notes	Line Number	Intake/Utility Access No.		Class 'D'	Pipe Diameter IN	Bid* Length FT	Design Length FT	Slope %	Flow Lines			Pipe Profile Sheet No.	Notes
								From	To						Inlet Elevation	Outlet Elevation	Other Elevation		
981	6800+32.31, 256.05'L	RF-3, 72"	562.90			I-74 Div.(1) Existing: See U sheets for details	P980	980EX	981	3000D	72"	72	66	0.36	563.14	562.90		M.4	CONNECT TO EXIST MANHOLE Div.(1)
916	6790+26.45, 0.0'R	24" RF-3	568.50			Mainline I-74 Div.(1), Includes RF-26	P916	916	915	2000D	24	16	10	0.60	568.50	568.44		M.4	Div.(1)
915	6790+37.48, 0.1'R	SW-401, 48"	573.20	567.84		Mainline I-74 Div.(1)	P915	915	914	2000D	24	141	135	0.52	568.34	567.64		M.4	Div.(1)
914	6791+74.48, 0.1'R	SW-401, 48"	573.00	567.04		Mainline I-74 Div.(1)	P914	914	913	2000D	24	179	173	0.52	567.54	566.64		M.4	Div.(1)
913	6793+50.53, 0.0'R	SW-401, 48"	571.40	566.04		Mainline I-74 Div.(1)	P913	913	940	2000D	24	84	78	0.54	566.54	566.12		M.4	Div.(1)
940	6794+32.44, 0.0'R	SW-401, 60"	571.94	565.50		Mainline I-74 Div.(1)	P940	940	941EX	2000D	24	123	117	0.48	566.00	565.44		M.4	CONNECT TO EXISTING MANHOLE DIV. (1)
803	3591+25.33, 9.79'L	SW-548	585.94	581.60		US 67 Ramp C Div.(1)	P803	803	802	2000D	15	41	35	0.60	582.10	581.89		M.14	Div.(1)
802	3591+25.33, 31.0'R	SW-508	586.76	581.29		US 67 Ramp C Div.(1)	P802	802	941EX	2000D	15	330	324	4.59	581.79	566.93		M.14	CONNECT TO EXISTING MANHOLE DIV. (1)
912	6796+62.53, 0.0'R	SW-401, 48"	576.00	571.53		Mainline I-74 Div.(1)	P912	912	950	2000D	15	110	104	1.86	572.03	570.10		M.4	Div.(1)
950	6797+69.91, 0.0'R	SW-401, 48"	574.00	569.50		Mainline I-74 Div.(1)	P950	950	426	2000D	15	160	154	2.01	570.00	566.90		M.4	Div.(1)
426	1498+14.26, 31.0'R	SW-508	571.46	566.30		US 67 Ramp A Div.(1)	P426	426	425	2000D	15	48	42	3.17	566.80	565.47		M.12	Div.(1)
425	1498+14.26, 11.0'L	SW-508	570.82	564.87		US 67 Ramp A Div.(1)	P425	425	785	2000D	15	43	37	3.86	565.37	563.94		M.12	Div.(1)
785	1498+14.49, 38.9L	15" RF-3	563.94			US 67 Ramp A Div.(1), Includes RF-26													
734	6836+00.00, 83.6'L	SW-509	664.72	660.22		Mainline I-74 Div.(1)	P734	734	385EX	2000D	24	63	57	0.55	660.72	660.41		M.10	CONNECT TO EXIST PIPE Div.(1)
369	6833+00.00, 74.1'L	SW-509	663.37	656.50		Mainline I-74 Div.(1)	P369	369	386EX	2000D	24	54	48	0.85	657.00	656.60		M.8	CONNECT TO EXIST PIPE Div.(1)
370	6830+00.00, 70'L	SW-509	661.93	654.80		Mainline I-74 Div.(1)	P370	370	387EX	2000D	24	49	43	0.58	655.30	655.06		M.8	CONNECT TO EXIST PIPE Div.(1)
371	6826+98.88, 70'L	SW-508	660.36	652.44		Mainline I-74 Div.(1)	P371	371	388EX	2000D	24	50	44	0.55	652.94	652.70		M.8	CONNECT TO EXIST PIPE Div.(1)
372	6824+00.00, 70'L	SW-508	657.54	649.05		Mainline I-74 Div.(1)	P372	372	389EX	2000D	24	61	55	0.56	649.55	649.24		M.8	CONNECT TO EXIST PIPE Div.(1)
373	6821+00.00, 70'L	SW-508	651.09	642.35		Mainline I-74 Div.(1)	P373	373	390EX	2000D	24	61	55	0.56	642.85	642.54		M.8	CONNECT TO EXIST PIPE Div.(1)
374	6818+00.00, 70'L	SW-508	642.81	635.35		Mainline I-74 Div.(1)	P374	374	391EX	2000D	24	61	55	0.56	635.85	635.54		M.6	CONNECT TO EXIST PIPE Div.(1)
375	6815+00.00, 76.5'L	SW-508	634.30	628.38		Mainline I-74 Div.(1)	P375	375	392EX	2000D	24	68	62	0.56	628.88	628.54		M.6	CONNECT TO EXIST PIPE Div.(1)
424	1501+50.00, 31'R	SW-508	587.21	575.25		US 67 Ramp A Div.(1)	P424	424	423	2000D	15	48	42	1.52	575.75	575.11		M.12	Div.(1)
423	1501+50.00, 11'L	SW-508	586.39	574.50		US 67 Ramp A Div.(1)	P423	423	782EX	2000D	15	39	33	8.97	575.00	572.04		M.12	CONNECT TO EXISTING MANHOLE Div.(1)
394EX	Existing SW-548		618.55	613.97		Mainline I-74 Div.(1)	P394	394EX	691	2000D	24	57	51	2.87	608.93	607.47		M.6	CONNECT TO EXIST PIPE Div.(1)
356	6806+50.00, 3.21'R	SW-548	611.66	607.02		Mainline I-74 Div.(1)	P356	356	691	2000D	24	15	9	0.56	607.52	607.47		M.6	Div.(1)
691	6806+50.00, 7.21'L	SW-548	611.66	606.87		Mainline I-74 Div.(1)	P691	691	758	2000D	24	214	208	2.89	607.37	601.35		M.6	Div.(1)
357	6804+35.00, 4.32'R	SW-548	605.84	600.84		Mainline I-74 Div.(1)	P357	357	758	2000D	24	22	16	0.50	601.34	601.26		M.4	Div.(1)
758	6804+35.21, 12.87'L	SW-548 Well	605.85	600.65		Well Only, Mainline I-74 Div.(1)	P758	758	404	2000D	24	85	79	3.19	601.15	598.63		M.4	Div.(1)
401	1509+00.00, 9.79'L	SW-548	616.64	612.00		US 67 Ramp A Div.(1)	P401	401	402	2000D	15	249	243	3.09	612.50	605.00		M.12	Div.(1)
692	1506+50.00, 31'R	SW-508	609.63	605.16		US 67 Ramp A Div.(1)	P692	692	402	2000D	15	41	35	1.86	605.66	605.01		M.12	Div.(1)
402	1506+50.00, 9.79'L	SW-548	609.04	604.40		US 67 Ramp A Div.(1)	P402	402	403	2000D	15	190	184	3.32	604.90	598.80		M.12	Div.(1)
403	1504+59.71, 9.79'L	SW-548	602.55	598.10		US 67 Ramp A Div.(1)	P403	403	756	2000D	18	41	35	1.17	598.60	598.19		M.12	Div.(1)
756	1504+59.71, 31'R	SW-508	603.37	597.59		US 67 Ramp A Div.(1)	P756	756	404	2000D	18	21	15	1.20	598.09	597.91		M.12	Div.(1)
404	1504+65.00, 50.3'R	SW-511	602.94	592.13		US 67 Ramp A Div.(1)	P404	404	406	2000D	18	33	27	7.11	592.63	590.71		M.12	Div.(1)
406	1504+34.86, 51.42'R	SW-401, 48"	596.74	584.21		US 67 Ramp A Div.(1)	P406	406	407EX	2000D	18	86	80	6.40	584.71	579.59		M.12	CONNECT TO EXISTING INTAKE Div.(1)
910	6799+57.14, 0'	SW-401, 48"	578.00	573.24		Mainline I-74 Div.(1)	P910	910	907	2000D	15	118	112	0.56	573.74	573.11		M.4	Div.(1)
911	6802+08.55, 23.85'R	SW-401, 48"	579.00	573.39		Mainline I-74 Div.(1)	P911	911	907	2000D	15	143	137	0.58	573.89	573.10		M.4	Div.(1)
907	6800+72.11, 8.47'L	SW-401, 48"	578.00	572.50		Mainline I-74 Div.(1)	P907	907	908EX	2000D	15	105	99	3.12	573.00	569.91		M.4	CONNECT TO EXISTING MANHOLE Div.(1)
380	6812+03.14, 89.47' L	SW-508	625.71	615.80		Mainline I-74 Div.(1)	P380	380	992EX	2000D	15	79	73	0.38	616.30	616.02		M.6	CONNECT TO EXISTING INTAKE DIV. 1
992	6812+80.12, 86.75'L	SW-508Top	627.97	608.39		Mainline I-74 Div.(1)- Top Only													
573	004+22.22, 38.50' Lt	SW-508Top	571.33	561.32		US 67 WB Div. (1)													
						Div.(1) (IOWA DOT COST) Div.(2) (CITY OF BETTENDORF COST) Div.(3) 72.23% IOWA/27.77% BETTENDORF Div.(4) (NON-PARTICIPATING) Div.(5) (50% Iowa/50% Illinois)													



**SURVEY SYMBOLS**

	Interstate Highway Symbol		Septic Tank
	U.S. Highway Symbol		Cistern
	Iowa Highway Symbol		L.P. Gas Tank (No Footing)
	County Road Highway Symbol		Underground Storage Tank
	Evergreen Tree		Latrine
	Deciduous Tree		Luminaire
	Fruit Tree		Traffic Signal
	Shrub (Bushes)		Traffic Signal with Luminaire
	Timber		Telephone Pedestal
	Hedge		TVP Television Pedestal
	Stump		Telephone Pole
	Swamp		Telephone Pole (Second Company)
	Rock Outcrop		Telephone Pole (Third Company)
	Broken Concrete		Telephone Pole (Fourth Company)
	Revetment (Rip Rap)		Telephone Pole (Fifth Company)
	Cemetery		Power Pole
	Grave		Power Pole (Second Company)
	Cave		Power Pole (Third Company)
	Sink Hole		Power Pole (Fourth Company)
	Board Fence		Power Pole (Fifth Company)
	Chain Link or Security Fence		Electrical Highline Tower (Metal or Concrete)
	Wire Fence		Telephone Riser Pole
	Terrace		Power Riser Pole
	Earth Dam or Dike (Existing)		Telegraph Pole
	Earth Dam or Dike (Proposed)		Satellite TV Dish
	Tile Outlet		Guardrail (Beam or Cable)
	Edge of Water		GP Guard Post (one or two)
	Existing Drainage		GP Guard Post (over two)
	Proposed Drainage		FP Filler Pipe
	Right of Way Rail or Lot Corner		GV Gas Valve
	Concrete Monument		WV Water Valve
	Well		SL Speed Limit Sign
	Windmill		MM Mile Marker Post
	Beehive Intake		SIGN Sign
	Existing Intake		WHU Water Hook Up
	Proposed Intake		RT Radio Tower
	Existing Utility Access (Manhole)		TA Tower Anchor
	Proposed Utility Access (Manhole)		EB Electric Box
	Fire Hydrant		TCB Traffic Signal Control Box
	Water Hydrant (Rural)		RRB Rail Road Signal Control Box
			TSB Telephone Switch Box

— F0 —	Existing Fiber Optics (Central Scott)
— F02 —	Existing Fiber Optics (McLeod USA)
— F03 —	Existing Fiber Optics (Qwest)
— F04 —	Existing Fiber Optics (ATT)
— F06 —	Existing Fiber Optics (MediaCom)
— F08 —	Existing Fiber Optics (Bettendorf)
— F09 —	Existing Fiber Optics (IowaDOT)
— E —	Existing Power Line (MidAmerican)
— E2 —	Existing Power Line (MidAmerican)
— E3 —	Existing Power Line (MidAmerican)
— E4 —	Existing Power Line (MidAmerican)
— E5 —	Existing Power Line (IowaDOT)
— G —	Existing Gas Line (MidAmerican)
— G-HP —	Existing High Pressure Gas Line (MidAmerican)
— San. —	Existing Sanitary Sewer Line (Bettendorf)
— San.2 —	Existing Sanitary Sewer Line (Davenport)
— T —	Existing Telephone Line (Qwest)
— TV —	Existing Cable Television Line (MediaCom)
— TV2 —	Existing Cable Television Line (MediaCom)
— W —	Existing Water Line (IA American)

**PLAN VIEW COLOR LEGEND OF STORM SEWER SHEETS**

LINE WORK	Design Color No.	
Grey, Dark	(112)	Existing Topographic Features, Utilities and Labels
Black	(0)	Proposed Storm Sewer Details, Alignment, Stationing, Tic Marks, and Alignment Annotation
SHADING		
Gray Dark	(112)	Proposed Pavement Shading

**PROFILE VIEW COLOR LEGEND OF STORM SEWER SHEETS**

LINE WORK	Design Color No.	
Grey, Dark	(2)	Existing Ground Line Profile and Existing Utilities Information
Black	(58)	Proposed Pipes and Intakes

**PLAN VIEW LINE STYLE LEGEND OF STORM SEWER SHEETS**

	Removal of Existing Pipe or Structure
	Previously Constructed Pipe or Structure
	Direction of Pipe Flow

**PROFILE VIEW LINE STYLE LEGEND OF STORM SEWER SHEETS**

	Existing Ground
	Proposed Ground
	Previously Constructed Pipe or Structure
	Proposed Pipe or Structure

**CONVENTIONAL SIGNS**

	Survey Line
	Section Corner
	Ground Line Intercept
	Saw Cut
	Guardrail
	Linear Removal
	Abandon Pipe
	Clearing & Grubbing Area
	Pavement Removal
	Bridge Removal by Others

**RIGHT OF WAY LEGEND**

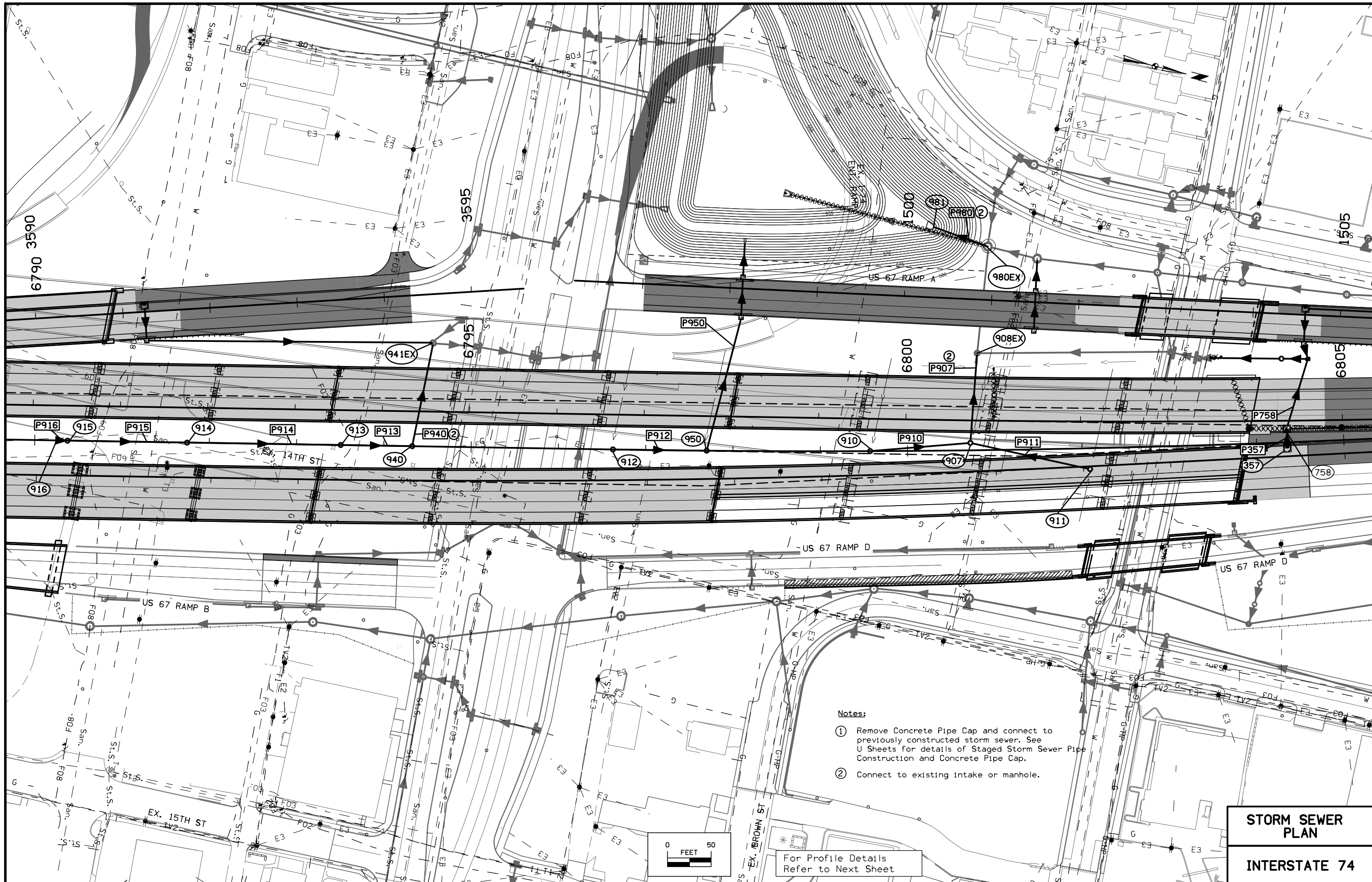
	Proposed Right of Way
	Existing and Proposed Right of Way
	Easement and Existing Right of Way
	Borrow
	Easement (Temporary)
	Easement
	Excess
	A/C Access Control

**TABULATION OF UTILITIES**

CENTRAL SCOTT TELEPHONE: Fiber Optics McLEOD USA: Fiber Optics QWEST COMMUNICATIONS: Fiber Optics, Telephone Lines AT&T: Fiber Optics MEDIACOM: Fiber Optics, Television BETTENDORF: Fiber Optics IOWA DOT: Fiber Optics, Power Lines MIDAMERICAN ENERGY - Power Lines, Gas BETTENDORF: Sanitary Sewer Line DAVENPORT: Sanitary Sewer Line IA-AMERICAN: Water Line
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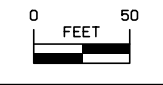
102-13A  
10-29-02

**Legend And Symbol Information Sheet**  
M SHEETS  
(Symbols are Typical Only)



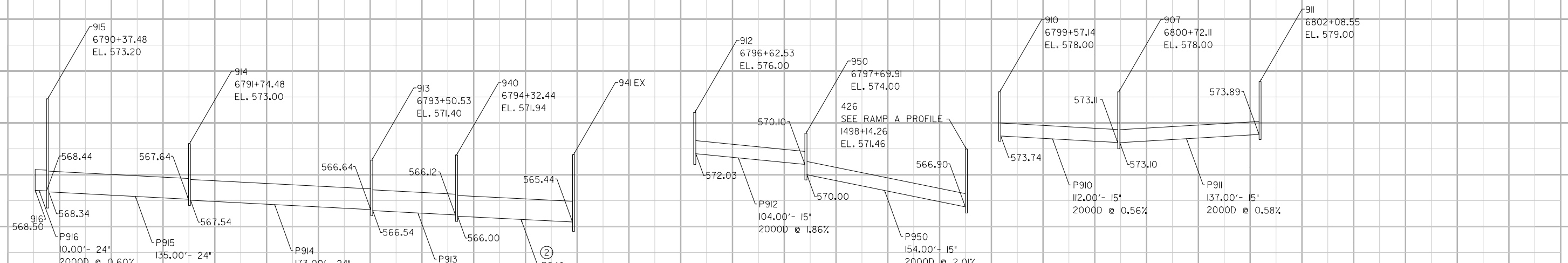
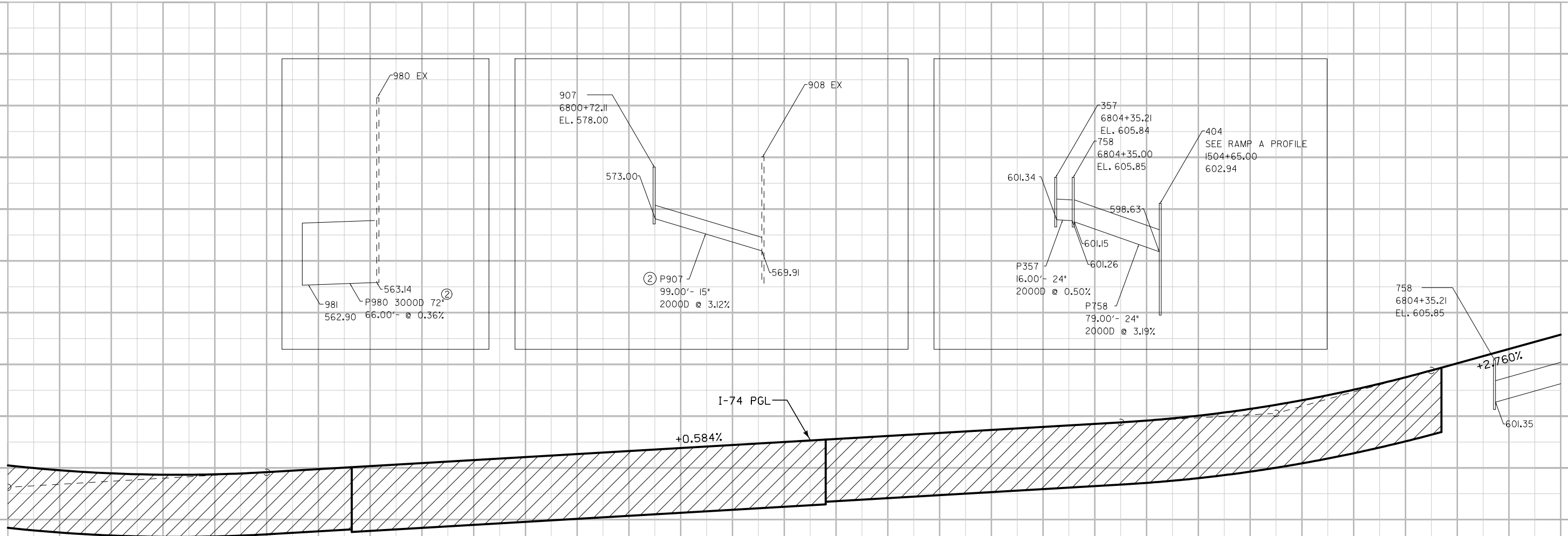
**Notes:**

- ① Remove Concrete Pipe Cap and connect to previously constructed storm sewer. See U Sheets for details of Staged Storm Sewer Pipe Construction and Concrete Pipe Cap.
- ② Connect to existing intake or manhole.



For Profile Details Refer to Next Sheet

**STORM SEWER PLAN**  
**INTERSTATE 74**

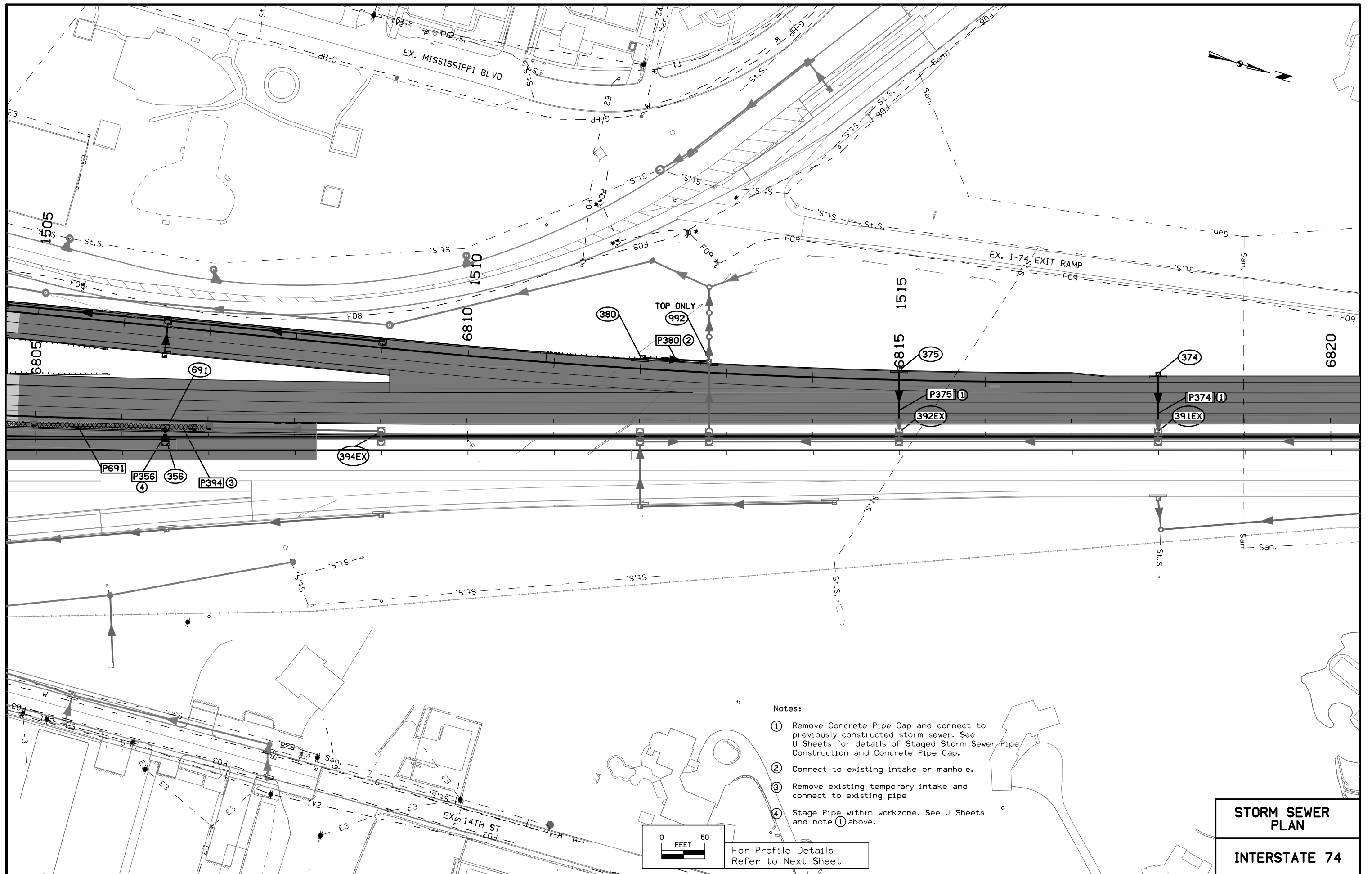


- Notes:**
- ① Remove Concrete Pipe Cap and connect to previously constructed storm sewer. See U Sheets for details of Staged Storm Sewer Pipe Construction and Concrete Pipe Cap.
  - ② Connect to existing intake or manhole.

**STORM SEWER  
PROFILE**

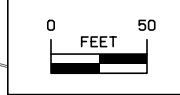
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**INTERSTATE 74**



**Notes:**

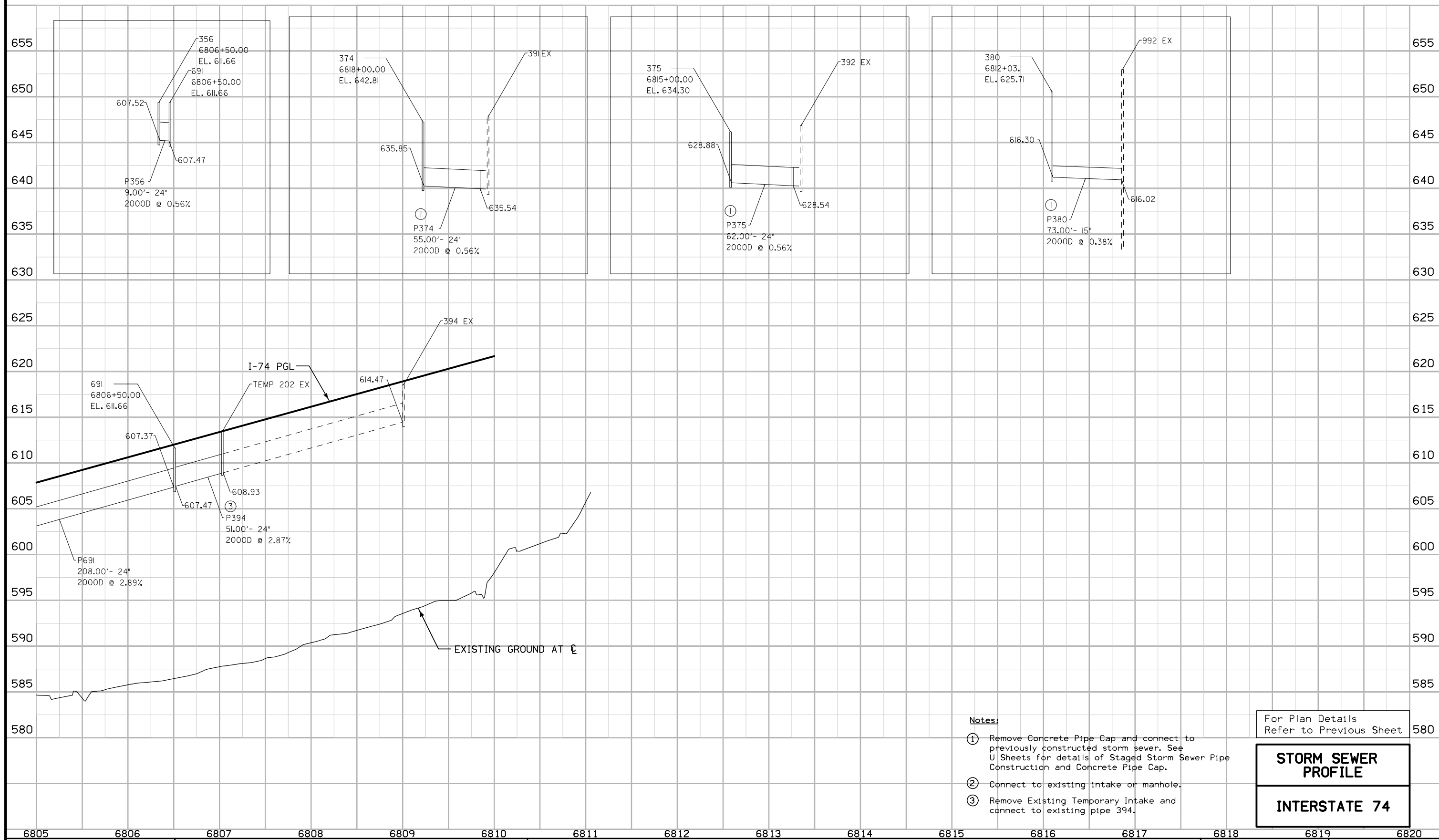
- ① Remove Concrete Pipe Cap and connect to previously constructed storm sewer. See U Sheets for details of Staged Storm Sewer Pipe Construction and Concrete Pipe Cap.
- ② Connect to existing intake or manhole.
- ③ Remove existing temporary intake and connect to existing pipe
- ④ Stage Pipe within workzone. See J Sheets and note ① above.



For Profile Details  
Refer to Next Sheet

**STORM SEWER  
PLAN**

**INTERSTATE 74**



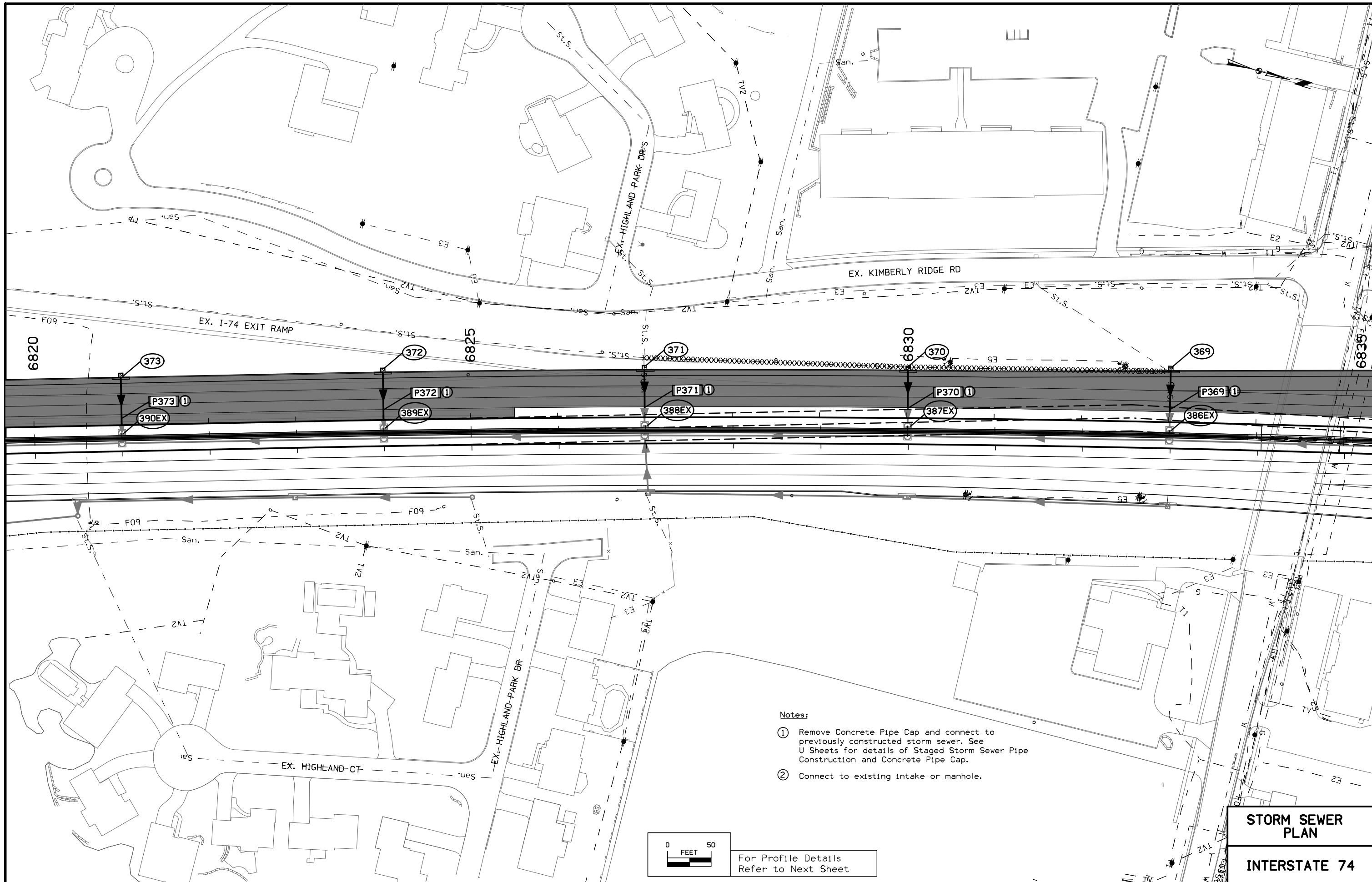
- Notes:**
- ① Remove Concrete Pipe Cap and connect to previously constructed storm sewer. See U Sheets for details of Staged Storm Sewer Pipe Construction and Concrete Pipe Cap.
  - ② Connect to existing intake or manhole.
  - ③ Remove Existing Temporary Intake and connect to existing pipe 394.

For Plan Details  
Refer to Previous Sheet

**STORM SEWER  
PROFILE**

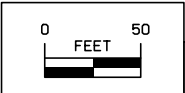
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**INTERSTATE 74**



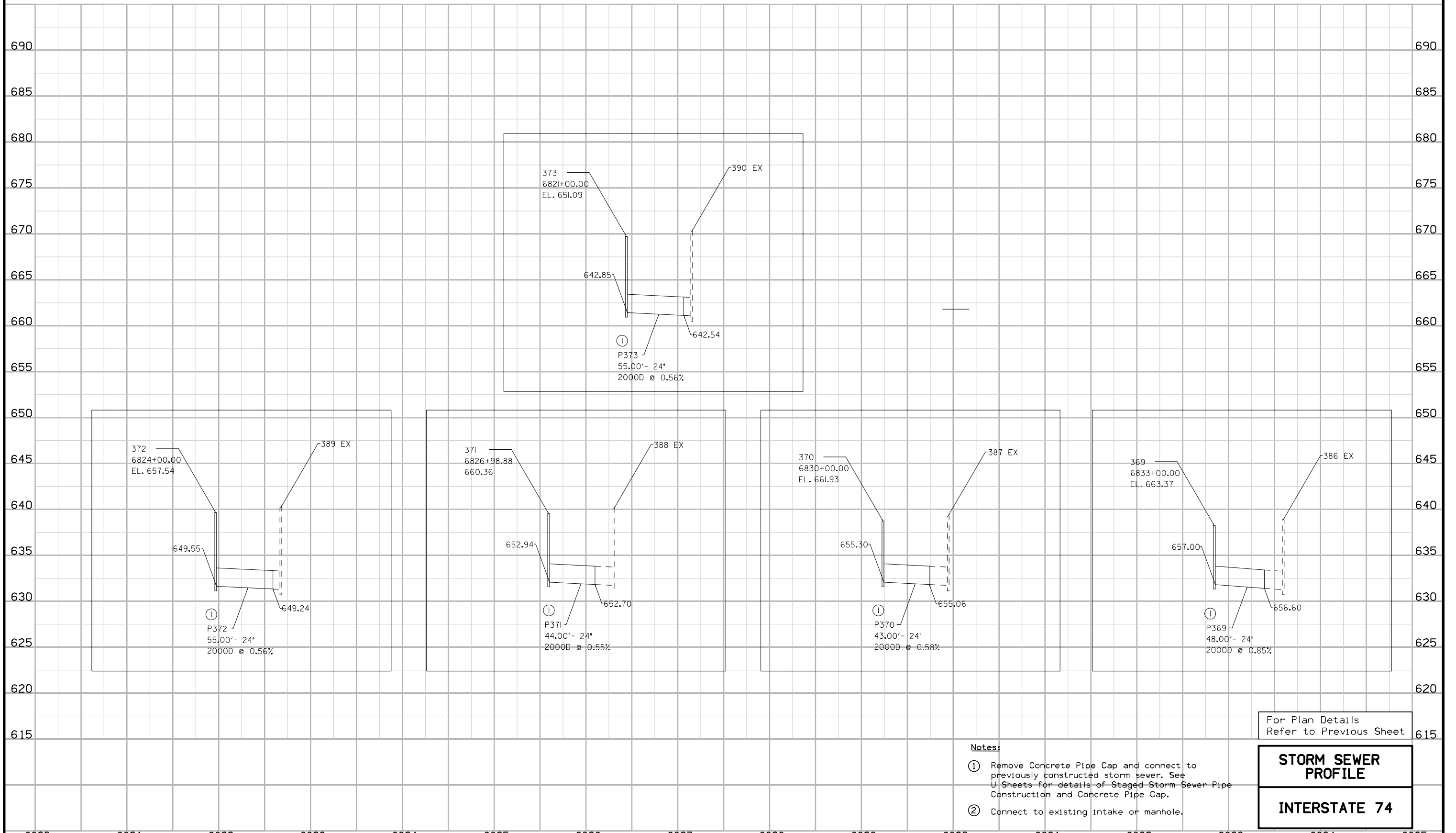
**Notes:**

- ① Remove Concrete Pipe Cap and connect to previously constructed storm sewer. See U Sheets for details of Staged Storm Sewer Pipe Construction and Concrete Pipe Cap.
- ② Connect to existing intake or manhole.



For Profile Details Refer to Next Sheet

**STORM SEWER PLAN**  
**INTERSTATE 74**

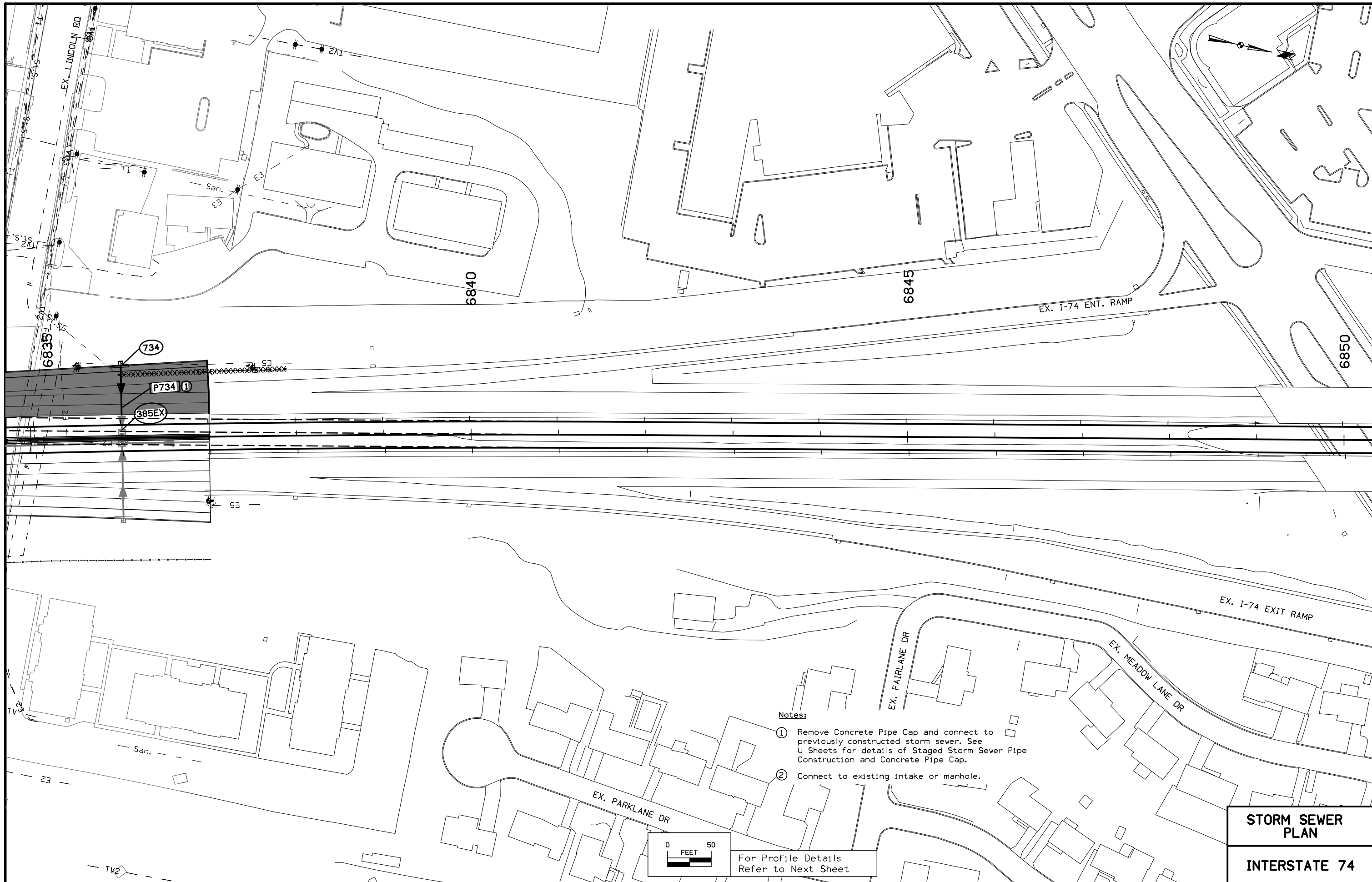


- Notes:**
- ① Remove Concrete Pipe Cap and connect to previously constructed storm sewer. See U Sheets for details of Staged Storm Sewer Pipe Construction and Concrete Pipe Cap.
  - ② Connect to existing intake or manhole.

For Plan Details  
Refer to Previous Sheet

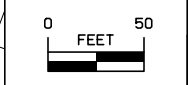
**STORM SEWER  
PROFILE**

**INTERSTATE 74**



**Notes:**

- ① Remove Concrete Pipe Cap and connect to previously constructed storm sewer. See U Sheets for details of Staged Storm Sewer Pipe Construction and Concrete Pipe Cap.
- ② Connect to existing intake or manhole.



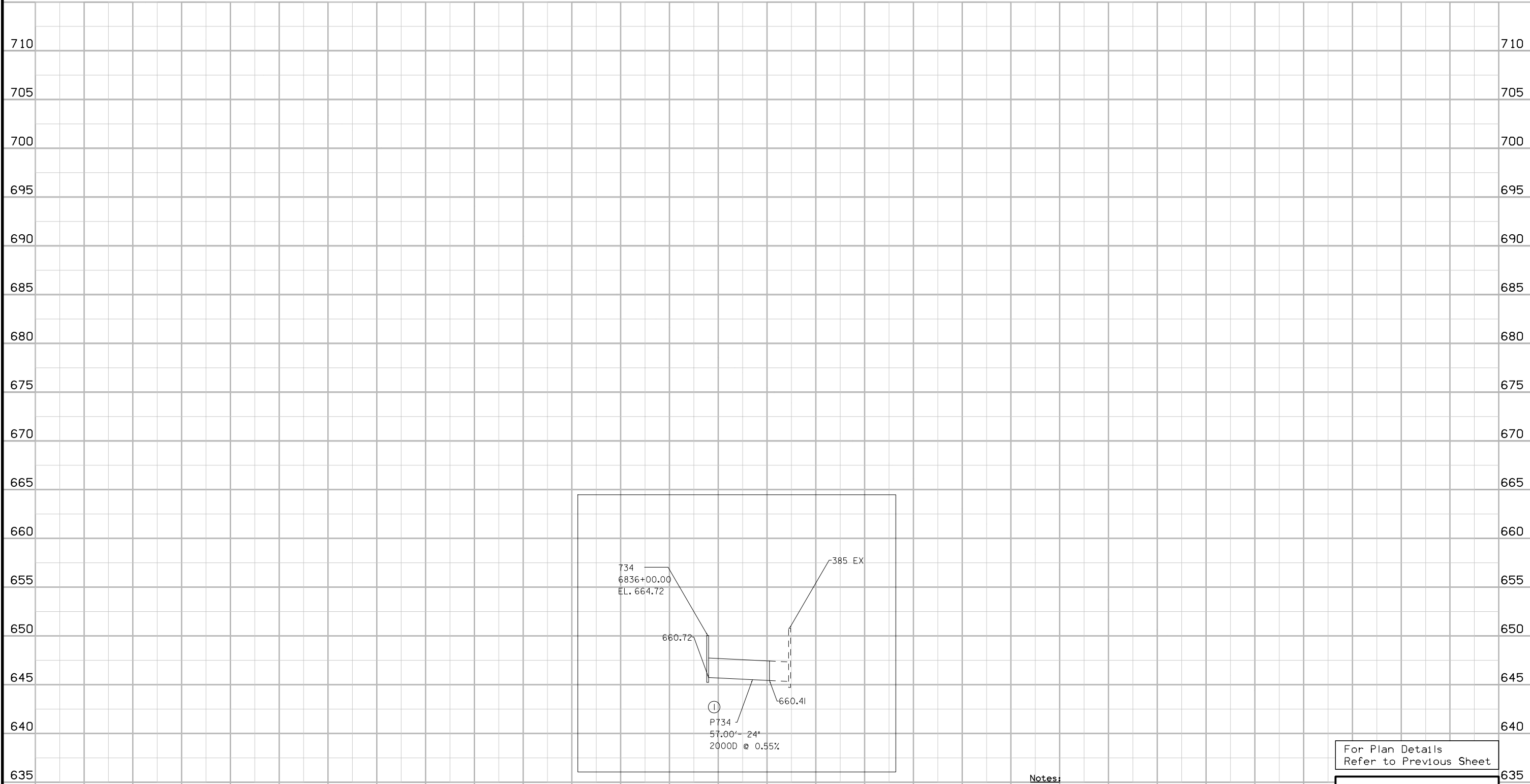
For Profile Details  
Refer to Next Sheet

**STORM SEWER  
PLAN**

---

**INTERSTATE 74**





734  
6836+00.00  
EL. 664.72

660.72

385 EX

660.41

①  
P734  
57.00' - 24"  
2000D @ 0.55%

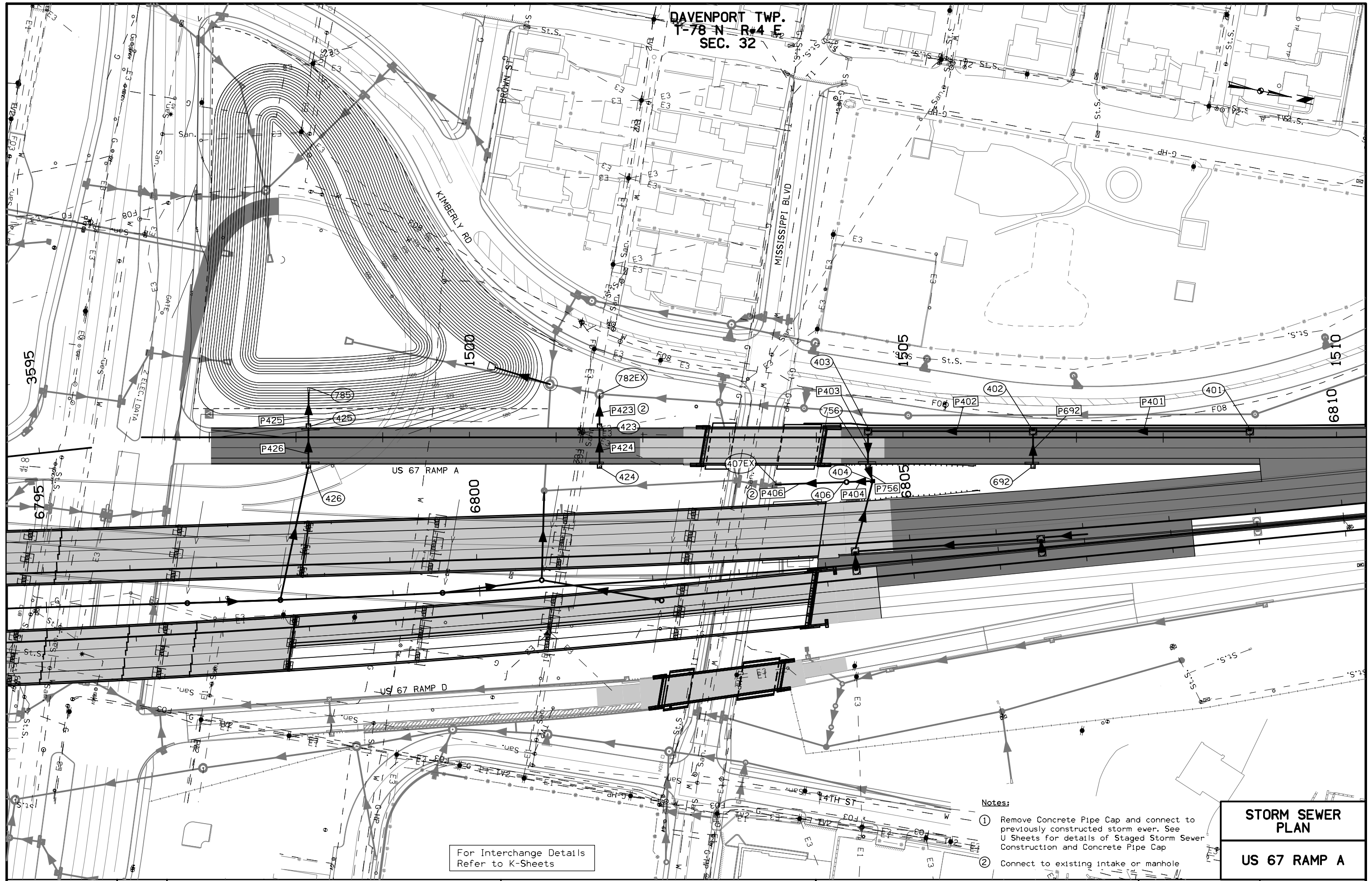
- Notes:
- ① Remove Concrete Pipe Cap and connect to previously constructed storm sewer. See U Sheets for details of Staged Storm Sewer Pipe Construction and Concrete Pipe Cap.
  - ② Connect to existing intake or manhole.

For Plan Details  
Refer to Previous Sheet

**STORM SEWER  
PROFILE**

**INTERSTATE 74**

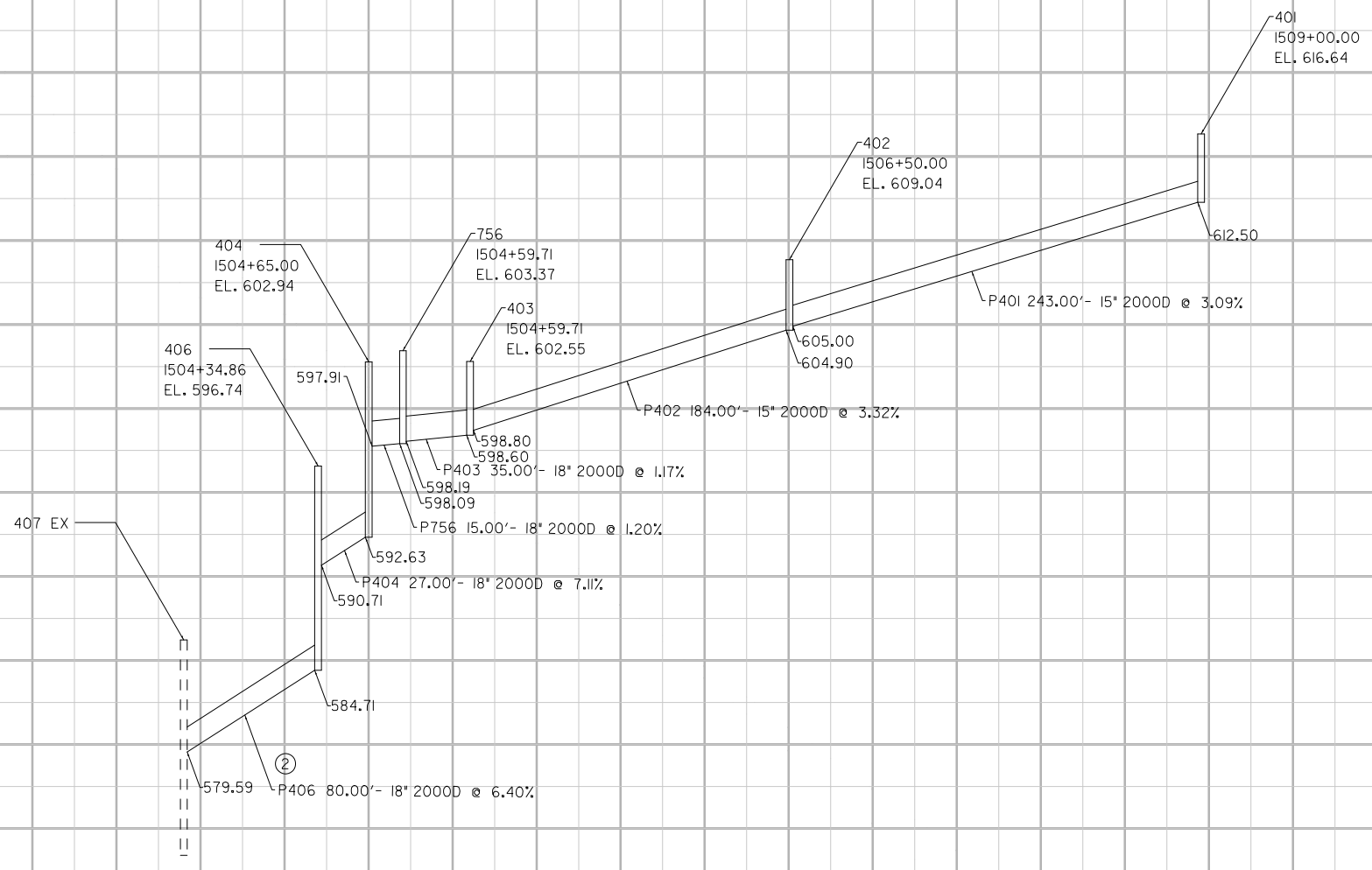
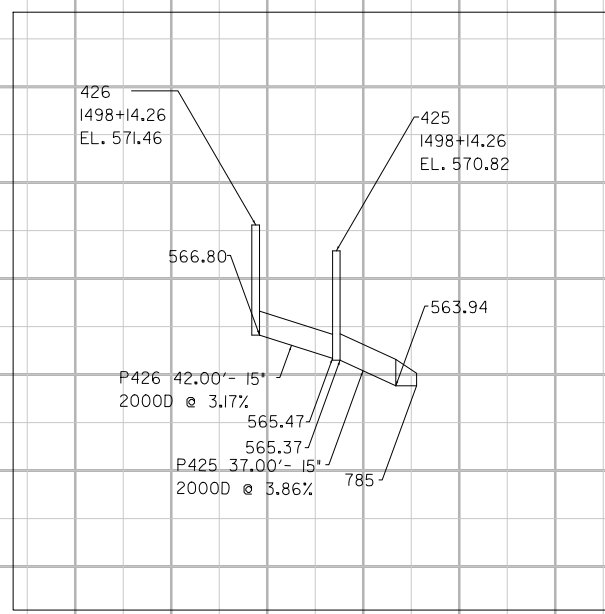
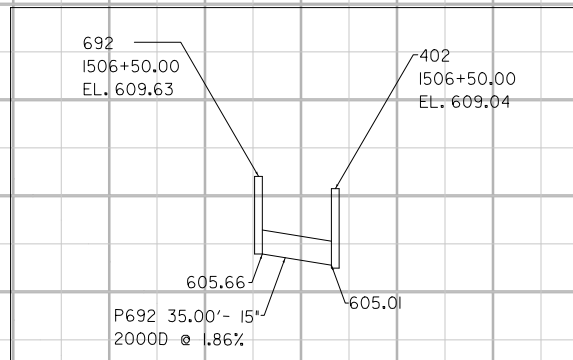
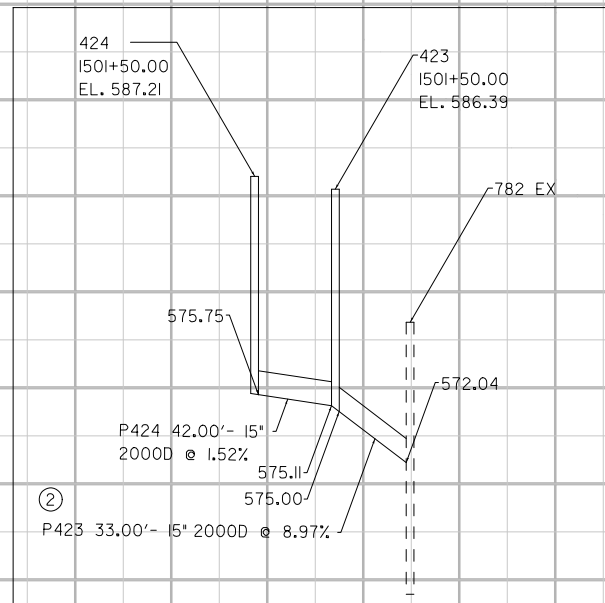
DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 32



For Interchange Details  
Refer to K-Sheets

- Notes:
- ① Remove Concrete Pipe Cap and connect to previously constructed storm sewer. See U Sheets for details of Staged Storm Sewer Construction and Concrete Pipe Cap
  - ② Connect to existing intake or manhole

**STORM SEWER PLAN**  
**US 67 RAMP A**

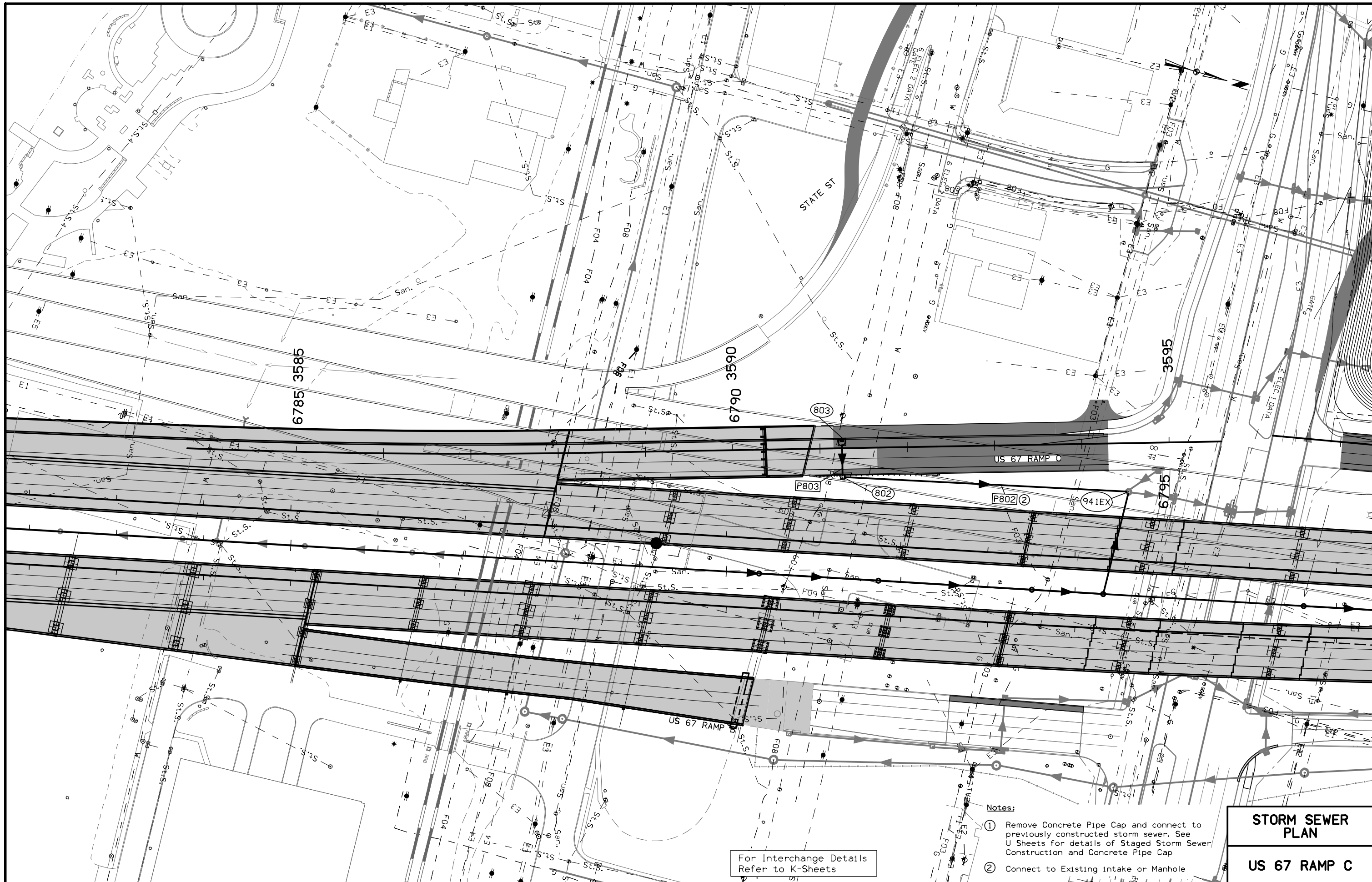


- Notes:**
- ① Remove Concrete Pipe Cap and connect to previously constructed storm sewer. See U Sheets for details of Staged Storm Sewer Construction and Concrete Pipe Cap
  - ② Connect to existing intake or Manhole

**STORM SEWER  
PROFILE**

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**US 67 RAMP A**



6785 3585

6790 3590

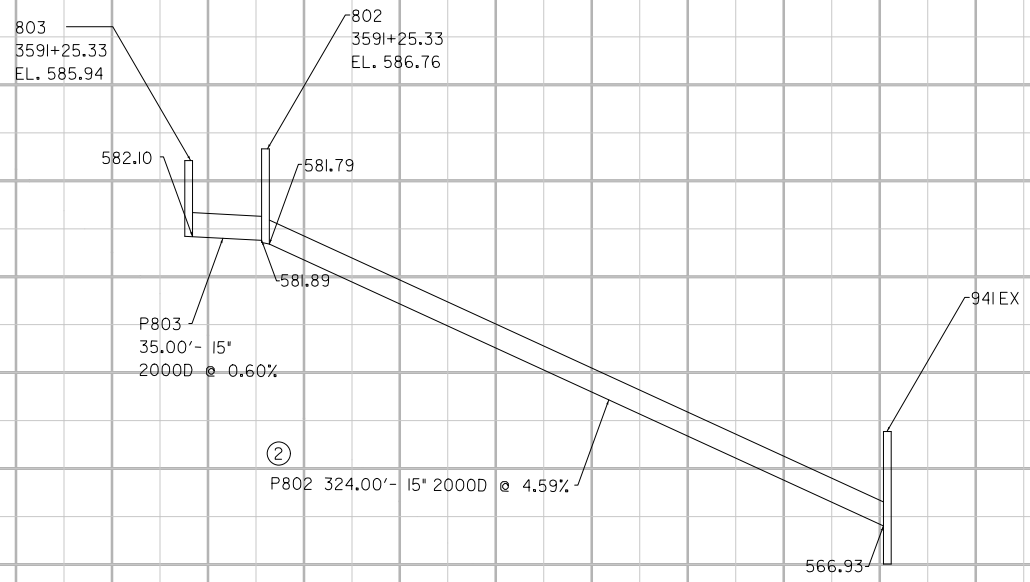
3595

6795

For Interchange Details  
Refer to K-Sheets

- Notes:
- ① Remove Concrete Pipe Cap and connect to previously constructed storm sewer. See U Sheets for details of Staged Storm Sewer Construction and Concrete Pipe Cap
  - ② Connect to Existing Intake or Manhole

**STORM SEWER PLAN**  
**US 67 RAMP C**



**Notes:**

- ① Remove Concrete Pipe Cap and connect to previously constructed storm sewer. See U Sheets for details of Staged Storm Sewer Construction and Concrete Pipe Cap
- ② Connect to existing Intake or Manhole

**STORM SEWER  
PROFILE**

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**US 67 RAMP C**

## TRAFFIC SIGNAL GENERAL NOTES

1. ALL QUANTITIES SHOWN IN THE PLANS AND SPECIFICATIONS ARE FOR INFORMATIONAL AND ESTIMATING PURPOSES ONLY. THE CONTRACTOR'S LUMP SUM BID FOR THIS PROJECT SHALL INCLUDE ALL LABOR AND MATERIAL NECESSARY TO PROVIDE A COMPLETE AND FUNCTIONAL TRAFFIC SIGNAL SYSTEM IN CONFORMANCE WITH THE PLANS AND SPECIFICATIONS.
2. THE PLAN LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO EXCAVATION ON THE PROJECT.
3. THE LOCATIONS OF ALL FOOTINGS, HANDHOLES, AND CONDUIT ARE TO BE COORDINATED WITH THE ENGINEER AND ARE SUBJECT TO ADJUSTMENT IN THE FIELD BY THE ENGINEER.
4. "GR/TR/PR" REPRESENTS "GR" = GROUND WIRE, "TR" = TRACER WIRE, "PR" = PULL ROPE.
5. THE STATIONS AND OFFSETS LISTED ON THE SIGNAL PLANS ARE TO THE CENTER OF THE ITEM UNLESS OTHERWISE NOTED.
6. ANY COMPONENT OF AN EXISTING TRAFFIC SIGNAL INSTALLATION TO BE REMOVED SHALL BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE IOWA DEPARTMENT OF TRANSPORTATION, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER.
7. THE CONTRACTOR HAS THE OPTION TO BORE OR TRENCH CONDUIT; HOWEVER, CONDUIT SHALL BE BORED UNDER NEW OR EXISTING PAVEMENT. PAVEMENT SHALL NOT BE DISTURBED BY SIGNAL CONSTRUCTION.
8. AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
9. ALL MOUNTED SIGNALS HEADS SHALL COME FURNISHED WITH BACK-PLATES
10. THE TRAFFIC SIGNAL CONTROLLERS SHALL BE ORIENTED WITH THE BACK OF THE CABINET TOWARD THE INTERSECTION SUCH THAT THE SIGNAL HEADS CAN BE VIEWED WHILE FACING THE CONTROLLER, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER.
11. A #6 A.W.G. BARE COPPER GROUND WIRE SHALL BE INSTALLED IN ALL PVC CONDUITS THAT CARRY 120 VOLT SIGNAL CABLES. ALL STEEL CONDUIT, POLES, PEDESTALS, AND CONTROLLER CABINETS AT EACH INTERSECTION SHALL BE BONDED TO FORM A CONTINUOUS SYSTEM AND BE EFFECTIVELY GROUNDED. BONDING JUMPERS SHALL BE #6 A.W.G. BARE COPPER WIRE CONNECTED BY APPROVED CLAMPS.
12. THE CONTRACTOR SHALL COMPLETELY REMOVE ANY EXISTING SIGNAL POLE AND CONTROLLER FOOTINGS.
13. THE CONTRACTOR SHALL INSTALL ONE SIGNAL CABLE FROM EACH SIGNAL HEAD TO THE BASE OF THE POLE. A 5-CONDUCTOR CABLE SHALL BE USED FOR A 3-SECTION SIGNAL HEAD AND A 7-CONDUCTOR CABLE SHALL BE USED FOR EITHER A 4 OR 5 SECTION SIGNAL HEAD.

## SIGNAL LEGEND

		CABINET AND CONTROLLER
	4	TRAFFIC SIGNAL POLE, FOOTING SYMBOL, AND IDENTIFYING NUMBER
	4	PEDESTAL POLE, FOOTING SYMBOL, AND IDENTIFYING NUMBER
	4	TRAFFIC SIGNAL HEAD WITH BACKPLATE SYMBOL AND IDENTIFYING NUMBER
	4	PEDESTRIAN HEAD SYMBOL AND IDENTIFYING NUMBER
	4	MAST ARM MOUNTED SIGN SYMBOL AND IDENTIFYING NUMBER
	4	30"x40" "TUB" HANDHOLE SYMBOL AND IDENTIFYING NUMBER
	4	24" HANDHOLE SYMBOL AND IDENTIFYING NUMBER
	11	VIDEO DETECTION AREA SYMBOL AND IDENTIFYING NUMBER
		VIDEO DETECTION CAMERA
		EMERGENCY VEHICLE PREEMPTION

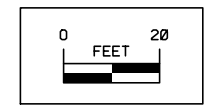
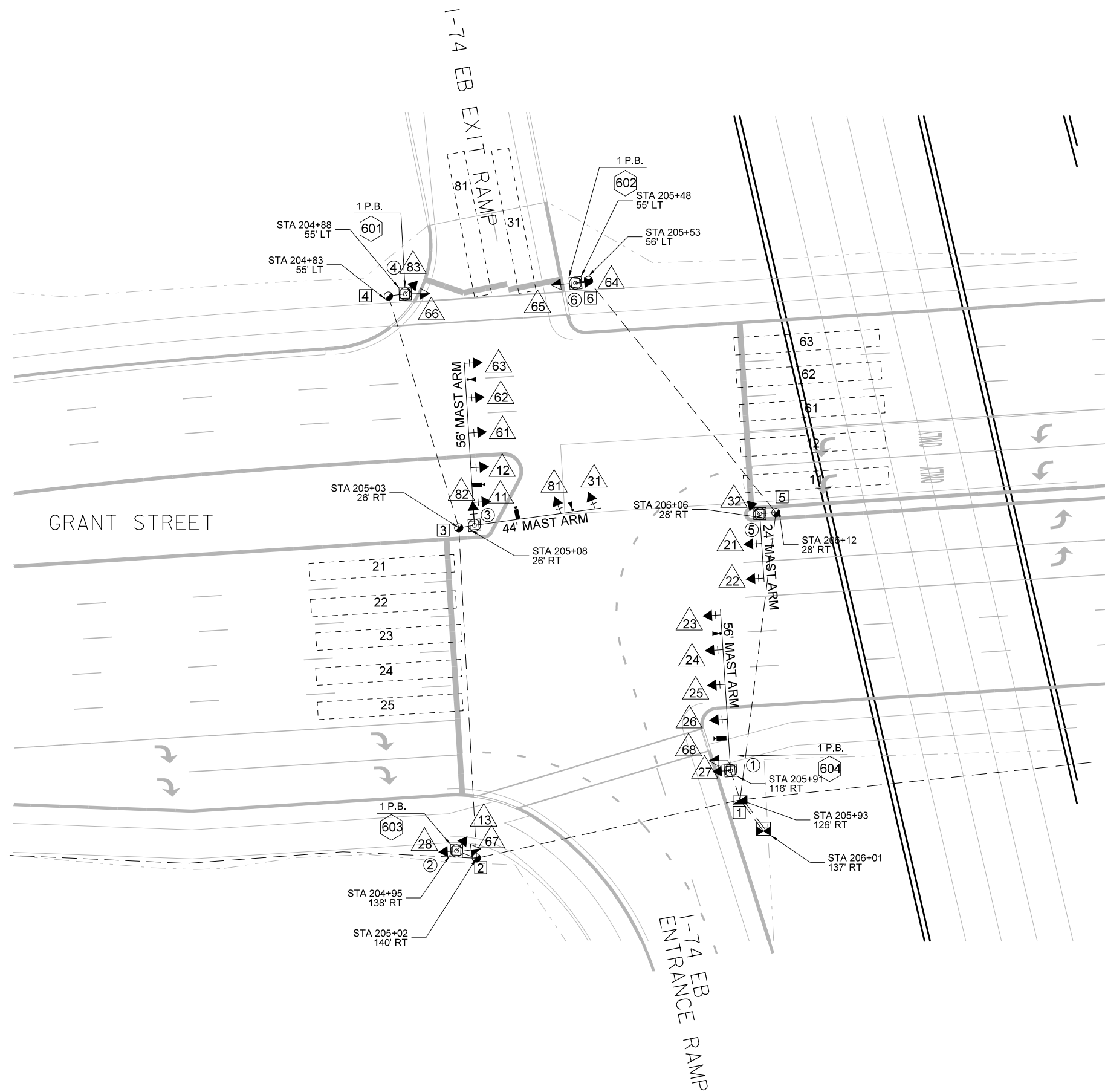
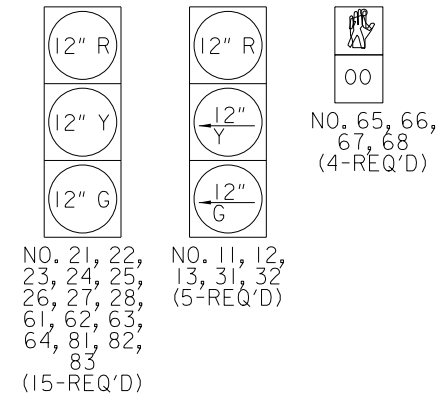
	I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.	
	Signature <i>Todd Artz</i> Todd M. Artz Printed or Typed Name	Date Dec 07, 2012
My license renewal date is December 31, 2014		
Pages or sheets covered by this seal: N.1 - N.4		

TRAFFIC SIGNAL  
PLAN

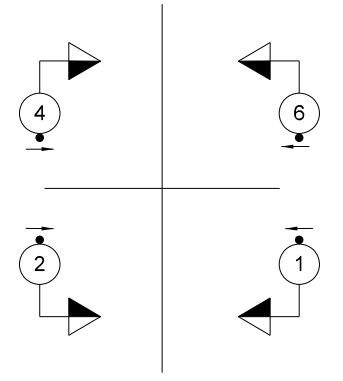
GENERAL NOTES

LAYOUT	TMA	4/11/11
DRAWN	RLA	4/8/11
REVIEWED	KNB	4/13/11

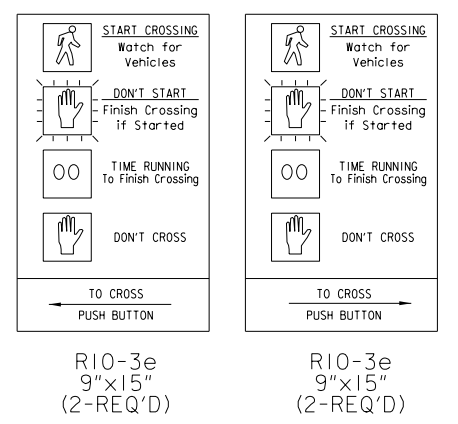
TRAFFIC SIGNAL FACES



PEDESTRIAN PUSHBUTTON AND SIGNAL FACE MOUNTING



PEDESTRIAN PUSHBUTTON SIGNS



**TRAFFIC SIGNAL PLAN**

**US 67 AND EASTBOUND RAMPS**

LAYOUT	TMA	4/11/11
DRAWN	RLA	4/8/11
REVIEWED	KNB	4/13/11





494' OF 2" PVC  
(HANDHOLE 1 TO HANDHOLE 2)  
1-12MM (FIBER)  
GR/TR/PR

263' OF 2" PVC  
(HANDHOLE 1 TO HANDHOLE 1)  
1-12MM (FIBER)  
GR/TR/PR

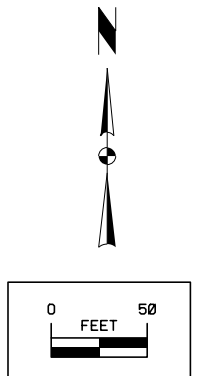
302' OF 2" PVC  
(HANDHOLE 4 TO HANDHOLE 11)  
1-12MM (FIBER)  
GR/TR/PR

389' OF 2" PVC  
(HANDHOLE 11 TO HANDHOLE 2)  
1-12MM (FIBER)  
GR/TR/PR

STA 212+61  
76' RT

131' OF 2" PVC  
(HANDHOLE 3 TO HANDHOLE 4)  
1-12MM (FIBER)  
GR/TR/PR

382' OF 2" PVC  
(HANDHOLE 1 TO HANDHOLE 2)  
1-12MM (FIBER)  
GR/TR/PR



**TRAFFIC SIGNAL  
PLAN**  
**INTERCONNECT PLAN**

LAYOUT	TMA	4/11/11
DRAWN	RLA	4/8/11
REVIEWED	KNB	4/13/11



### GENERAL NOTES

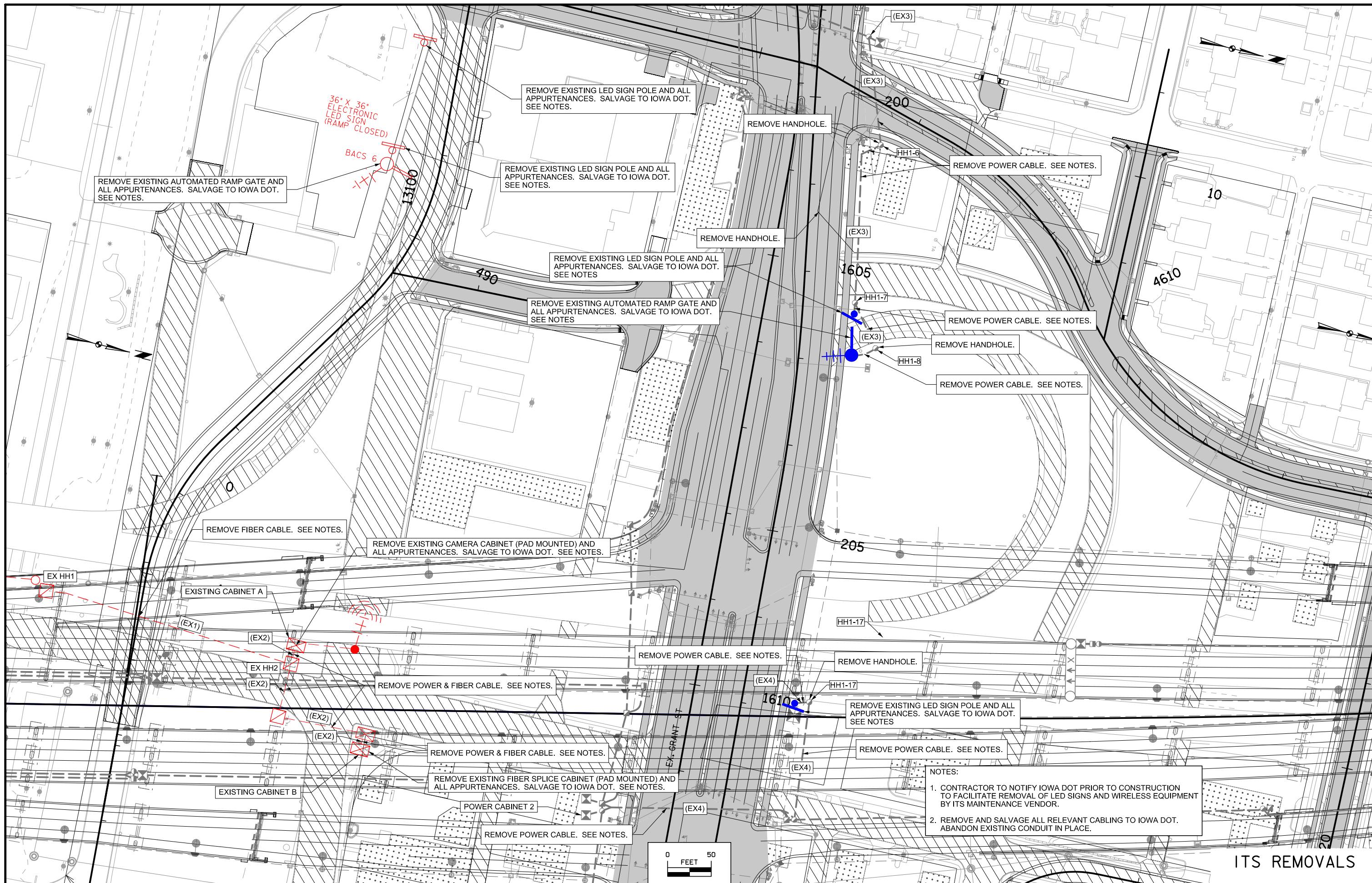
1. ALL QUANTITIES SHOWN IN THE PLANS AND SPECIFICATIONS ARE FOR INFORMATIONAL AND ESTIMATING PURPOSES ONLY. THE CONTRACTOR'S BID SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIAL NECESSARY TO PROVIDE A COMPLETE AND FUNCTIONAL ITS INSTALLATION IN CONFORMANCE WITH THE PLANS AND SPECIFICATIONS.
2. THE PLAN LOCATIONS OF UNDERGROUND UTILITIES, WHEN SHOWN, ARE APPROXIMATE ONLY. IN ADDITION, A PORTION OF UTILITY INFORMATION MAY NOT HAVE BEEN PROVIDED. ALL UTILITIES SHALL BE LOCATED AND MARKED PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING UTILITIES AND LOCATOR SERVICES AND SCHEDULING THE LOCATION OF UNDERGROUND UTILITIES. THE CONTRACTOR SHALL ALSO CONTACT ANY AND ALL UTILITIES AND LOCAL GOVERNMENT AGENCIES NOT PARTICIPATING IN LOCATION SERVICES.
3. PROPOSED ITS EQUIPMENT LOCATIONS ARE APPROXIMATE AND MAY REQUIRE MODIFICATION TO AVOID CONFLICTS WITH UNDERGROUND UTILITIES OR OTHER OBSTRUCTIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ANY CONFLICTS WITH EXISTING UTILITIES AT SITES IN THE FIELD PRIOR TO INITIATION OF CONSTRUCTION AT THAT SITE. AS THE CCTV AND SENSOR LOCATIONS ARE LOCATION SENSITIVE, THE CONTRACTOR SHALL RECEIVE WRITTEN APPROVAL FROM THE ENGINEER PRIOR TO REVISING THE PLAN LOCATION OF ANY CONDUIT, POLES, FOUNDATIONS, OR CABINETS.
4. ABOVE GROUND RISERS SHALL BE RIGID STEEL CONDUIT. ALL OTHER CONDUIT SHALL BE HDPE CONDUIT. RIGID P.V.C. CONDUIT (SCHEDULE 40 OR AS APPROVED) MAY BE SUBSTITUTED FOR CONDUIT RUNS UNDER 50 FEET.
5. ANY AND ALL IMPROVEMENTS SUCH AS ASPHALT OR CONCRETE PAVEMENTS, CURBS, GUTTERS, WALKS, DRAINAGE DITCHES, CULVERTS, DRAIN TILES, EMBANKMENTS, SHRUBS, TREES, GRASS, SOD, ETC., IF DAMAGED, SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS (OR BETTER) AS DIRECTED BY THE ENGINEER.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR EXISTING CONDUIT, CONDUCTORS, OR OTHER FACILITIES DAMAGED DURING CONSTRUCTION. ALL EXISTING INFRASTRUCTURE REMOVED OR DAMAGED BY THE CONTRACTOR SHALL BE REPLACED IN KIND BY THE CONTRACTOR, WITH NO ADDITIONAL COMPENSATION.
7. THE CONTRACTOR SHALL NOT DISTURB ANY EXISTING UTILITIES EXCEPT AS SPECIFICALLY DEFINED WITHIN THE SCOPE OF WORK FOR THIS CONTRACT. WHERE WORK AFFECTS OR IS AFFECTED BY THE EXISTING UTILITIES, THE WORK SHALL BE COORDINATED WITH THE UTILITY COMPANY AND/OR OWNER. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE DOT.
8. UTILITY COMPANIES WHOSE FACILITIES ARE SHOWN ON THE PLANS OR KNOWN TO BE WITHIN THE CONSTRUCTION LIMITS SHALL BE NOTIFIED BY THE CONTRACTOR OF THE STARTING CONSTRUCTION DATE.
9. ALL ITS CONDUITS SHALL INCLUDE ONE POLYPROPYLENE PULL ROPE WITH A MINIMUM 2,670N PROPER TENSILE STRENGTH (COST INCIDENTAL TO THE CONDUIT).
10. ALL CONDUIT SHALL BE PLACED AT A 36 INCH MINIMUM COVER UNLESS OTHERWISE SPECIFIED ON THE PLANS.
11. THE CONTRACTOR SHALL BORE UNDER ANY EXISTING ASPHALT OR CONCRETE PAVEMENT, RAILROAD, OR OTHER STRUCTURE.
12. THE CONTRACTOR SHALL TRENCH ALL CONDUIT WHERE EXISTING CONDITIONS ALLOW UNLESS OTHERWISE SPECIFIED ON THE PLANS. THE CONTRACTOR MAY BORE IN LIEU OF TRENCHING AT THE CONTRACTOR'S EXPENSE.
13. THE MINIMUM BENDING RADIUS OF CONDUIT AND MULTIDUCT SYSTEMS SHALL BE THE LARGER OF THE FIBER OPTIC CABLE MANUFACTURER'S RECOMMENDATION OR NATIONAL ELECTRIC CODE (NEC) REQUIREMENTS. ALL CONDUIT SWEEP RADII SHALL BE GREATER AND/OR EQUAL TO 15 INCHES.
14. ALL WIRING AND GROUNDING SYSTEMS SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.

### GENERAL NOTES

15. THIS PROJECT DOES NOT INCLUDE PURCHASING, OR INSTALLTION OF, ANY CAMERA OR SENSOR EQUIPMENT.
16. LINEAR MEASUREMENTS ARE TAKEN BETWEEN POLE BASE, HANDHOLE, AND JUNCTION BOX CENTERS AND DO NOT INCLUDE ALLOWANCES FOR VERTICAL RISES OR SPLICES.
17. MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF ALL APPLICABLE SECTIONS INCLUDING BUT NOT LIMITED TO SECTION 2523 AND 2525, OF THE "IOWA DEPARTMENT OF TRANSPORTATION ENGLISH STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, SERIES 2012" PLUS CURRENT SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.
18. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ANTICIPATE, COMMUNICATE, AND COORDINATE THIS WORK WITH ADJACENT CONSTRUCTION PROJECTS, THAT INCLUDE BUT LIMITED TO ADJACENT ROADWAY AND VIADUCT PROJECTS.

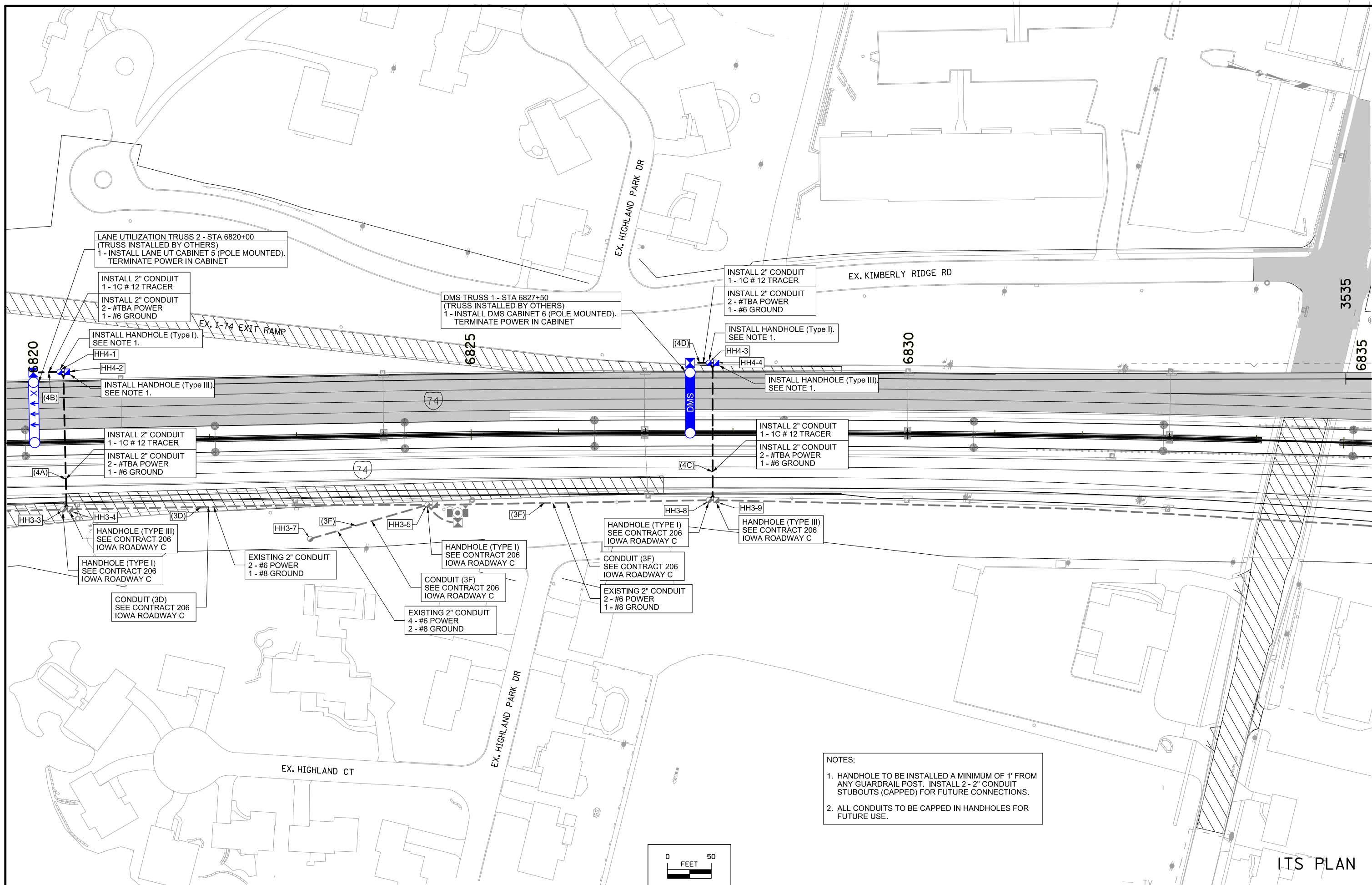
### GENERAL NOTES

ITS GENERAL NOTES



NOTES:  
 1. CONTRACTOR TO NOTIFY IOWA DOT PRIOR TO CONSTRUCTION TO FACILITATE REMOVAL OF LED SIGNS AND WIRELESS EQUIPMENT BY ITS MAINTENANCE VENDOR.  
 2. REMOVE AND SALVAGE ALL RELEVANT CABLING TO IOWA DOT. ABANDON EXISTING CONDUIT IN PLACE.

**ITS REMOVALS**



LANE UTILIZATION TRUSS 2 - STA 6820+00  
(TRUSS INSTALLED BY OTHERS)  
1 - INSTALL LANE UT CABINET 5 (POLE MOUNTED).  
TERMINATE POWER IN CABINET

INSTALL 2" CONDUIT  
1 - 1C # 12 TRACER  
INSTALL 2" CONDUIT  
2 - #TBA POWER  
1 - #6 GROUND

INSTALL HANDHOLE (Type I).  
SEE NOTE 1.

HH4-1  
HH4-2

INSTALL HANDHOLE (Type III).  
SEE NOTE 1.

INSTALL 2" CONDUIT  
1 - 1C # 12 TRACER  
INSTALL 2" CONDUIT  
2 - #TBA POWER  
1 - #6 GROUND

HANDHOLE (TYPE III)  
SEE CONTRACT 206  
IOWA ROADWAY C

HANDHOLE (TYPE I)  
SEE CONTRACT 206  
IOWA ROADWAY C

CONDUIT (3D)  
SEE CONTRACT 206  
IOWA ROADWAY C

EXISTING 2" CONDUIT  
2 - #6 POWER  
1 - #8 GROUND

DMS TRUSS 1 - STA 6827+50  
(TRUSS INSTALLED BY OTHERS)  
1 - INSTALL DMS CABINET 6 (POLE MOUNTED).  
TERMINATE POWER IN CABINET

INSTALL 2" CONDUIT  
1 - 1C # 12 TRACER  
INSTALL 2" CONDUIT  
2 - #TBA POWER  
1 - #6 GROUND

INSTALL HANDHOLE (Type I).  
SEE NOTE 1.

HH4-3  
HH4-4

INSTALL HANDHOLE (Type III).  
SEE NOTE 1.

INSTALL 2" CONDUIT  
1 - 1C # 12 TRACER  
INSTALL 2" CONDUIT  
2 - #TBA POWER  
1 - #6 GROUND

HANDHOLE (TYPE I)  
SEE CONTRACT 206  
IOWA ROADWAY C

CONDUIT (3F)  
SEE CONTRACT 206  
IOWA ROADWAY C

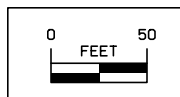
EXISTING 2" CONDUIT  
2 - #6 POWER  
1 - #8 GROUND

HANDHOLE (TYPE III)  
SEE CONTRACT 206  
IOWA ROADWAY C

CONDUIT (3F)  
SEE CONTRACT 206  
IOWA ROADWAY C

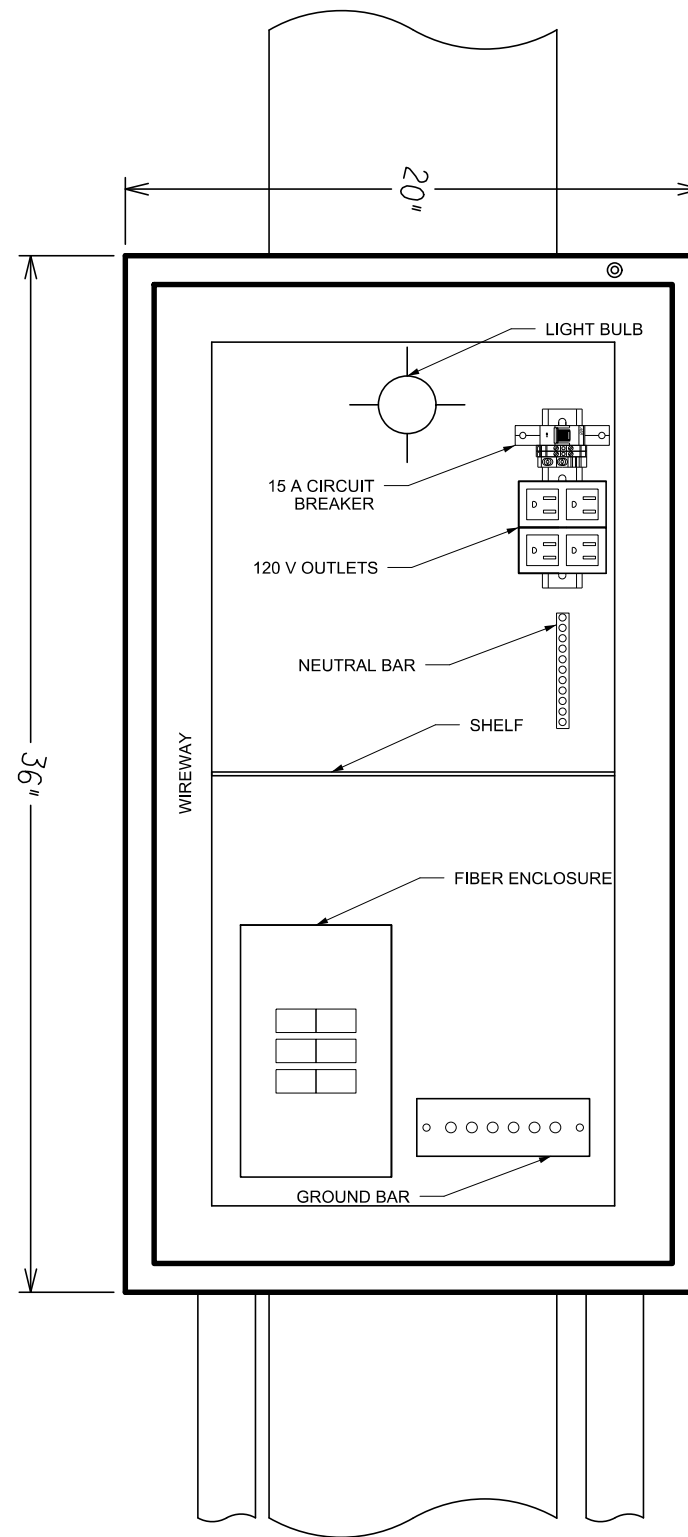
EXISTING 2" CONDUIT  
4 - #6 POWER  
2 - #8 GROUND

NOTES:  
1. HANDHOLE TO BE INSTALLED A MINIMUM OF 1' FROM ANY GUARDRAIL POST. INSTALL 2 - 2" CONDUIT STUBOUTS (CAPPED) FOR FUTURE CONNECTIONS.  
2. ALL CONDUITS TO BE CAPPED IN HANDHOLES FOR FUTURE USE.

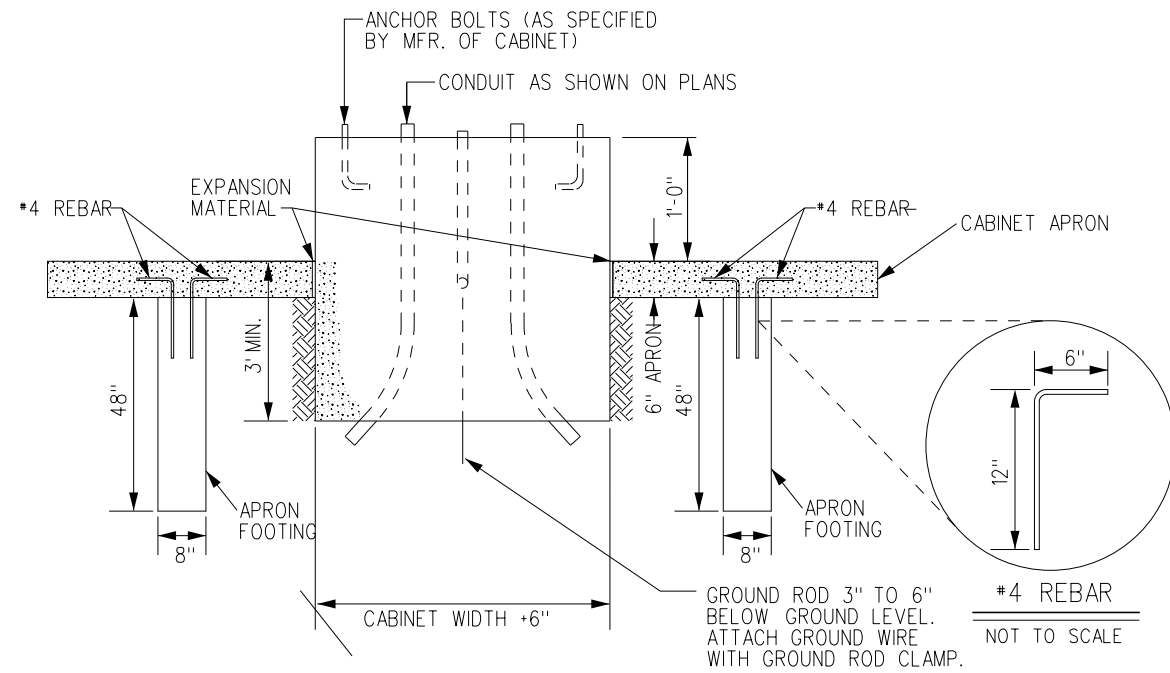


ITS PLAN

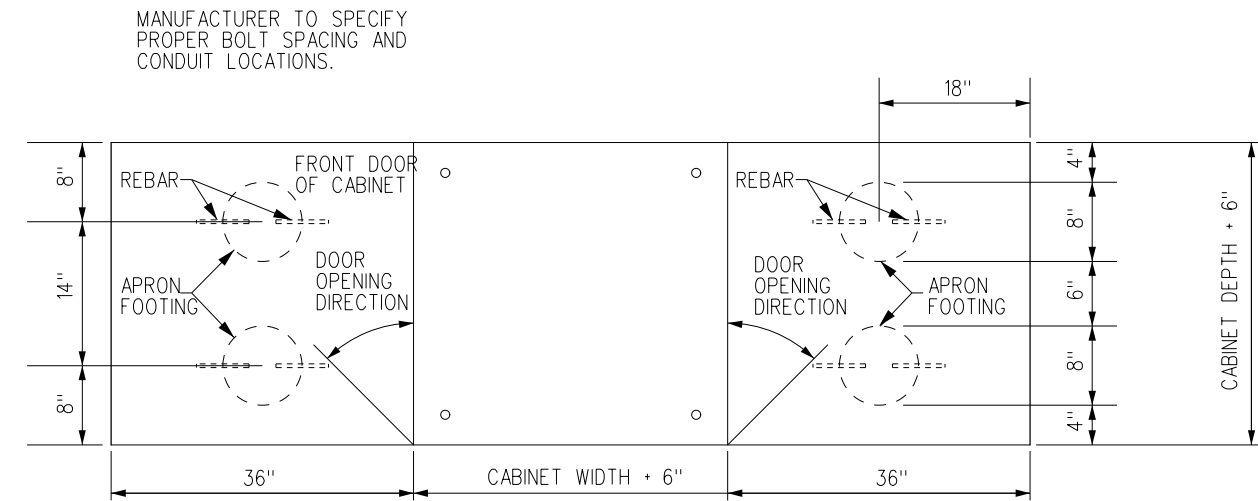
POLE MOUNTED CABINET FOR CAMERA CABINETS, SENSOR CABINETS,  
LANE UT CABINETS, DMS CABINETS, AND JOINT CABINETS.



ITS DETAILS



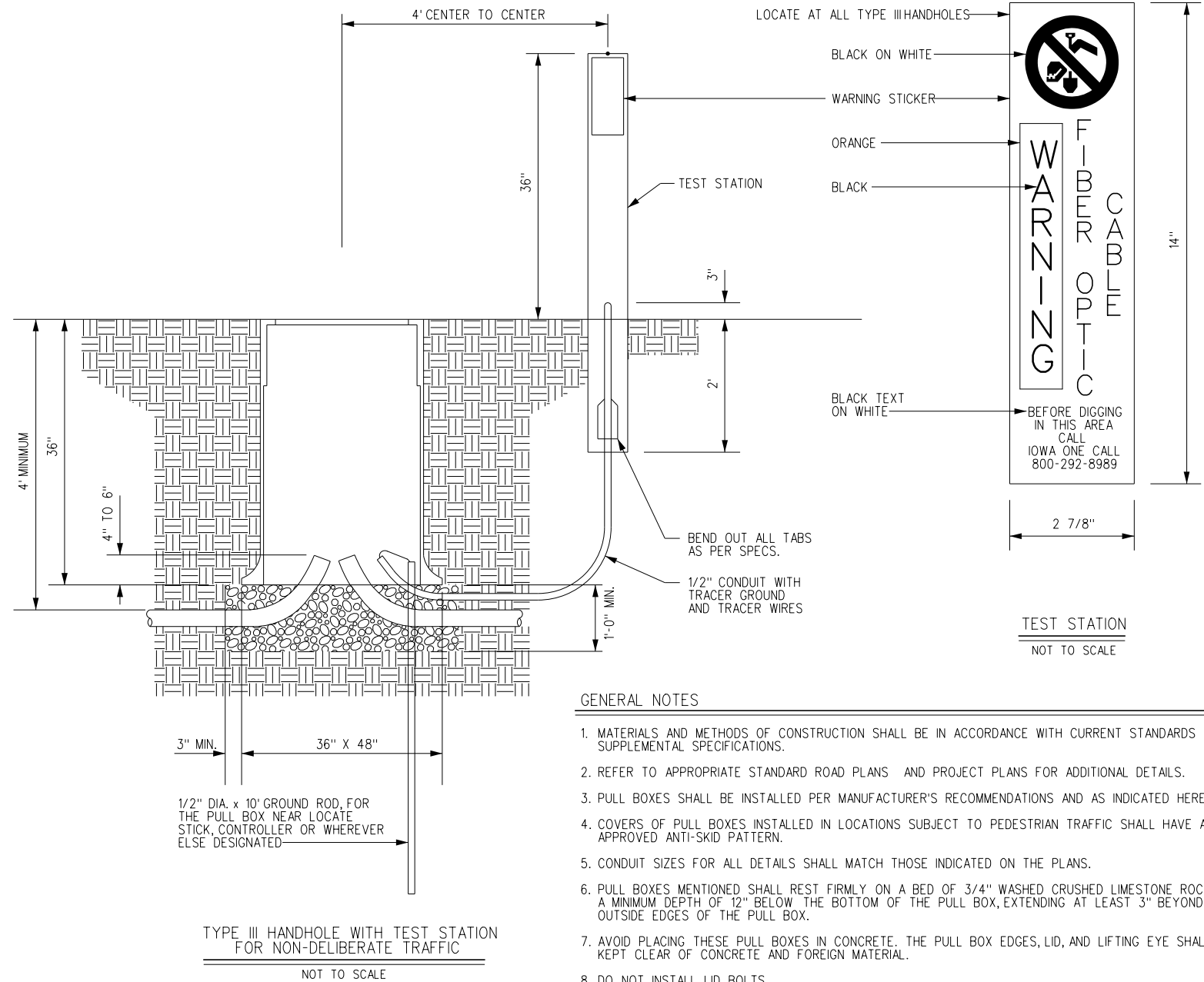
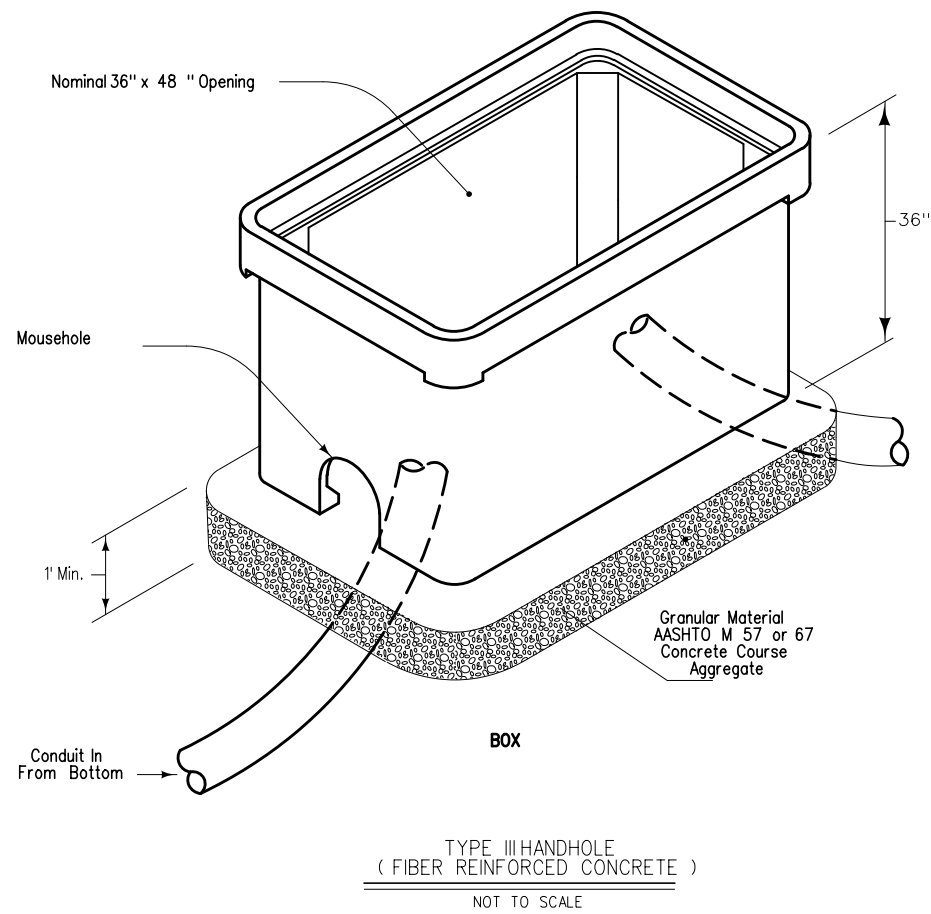
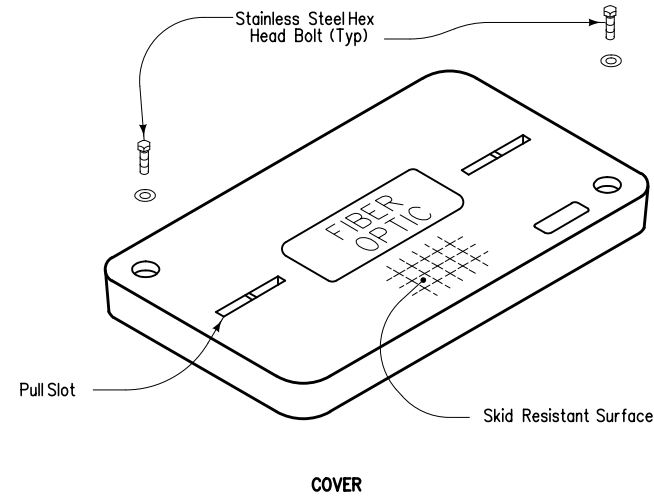
ITS CABINET FOOTING  
NOT TO SCALE



ITS CABINET CONCRETE APRON  
NOT TO SCALE

GENERAL NOTES

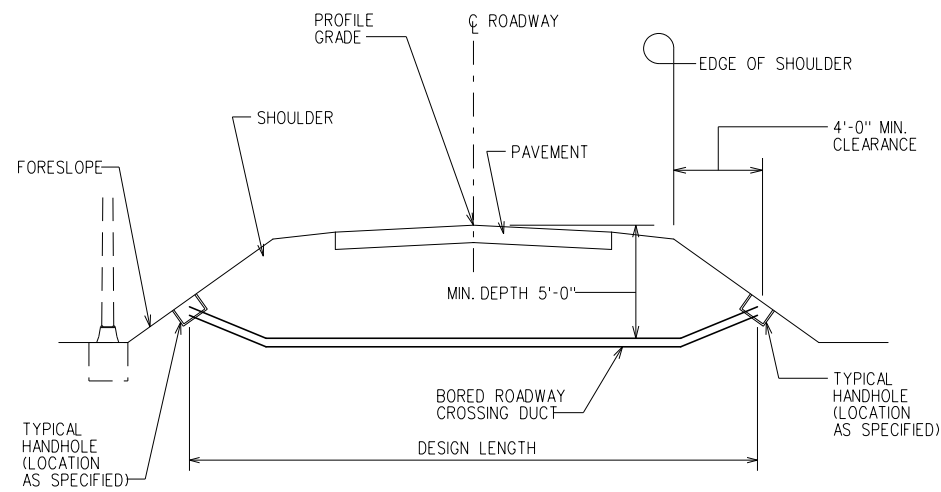
1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT STANDARDS AND SUPPLEMENTAL SPECIFICATIONS.
2. REFER TO APPROPRIATE STANDARD ROAD PLANS AND PROJECT PLANS FOR ADDITIONAL DETAILS.
3. CABINET HARDWARE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
4. COVERS OF JUNCTION BOXES INSTALLED IN LOCATIONS SUBJECT TO PEDESTRIAN TRAFFIC SHALL HAVE AN APPROVED ANTI-SKID PATTERN.
5. CONDUIT SIZES FOR ALL DETAILS SHALL MATCH THOSE INDICATED ON THE PLANS.
6. LOCATION OF INTERNAL CABINET HARDWARE MAY VARY FROM LOCATION SHOWN IN TYPICAL DETAIL.



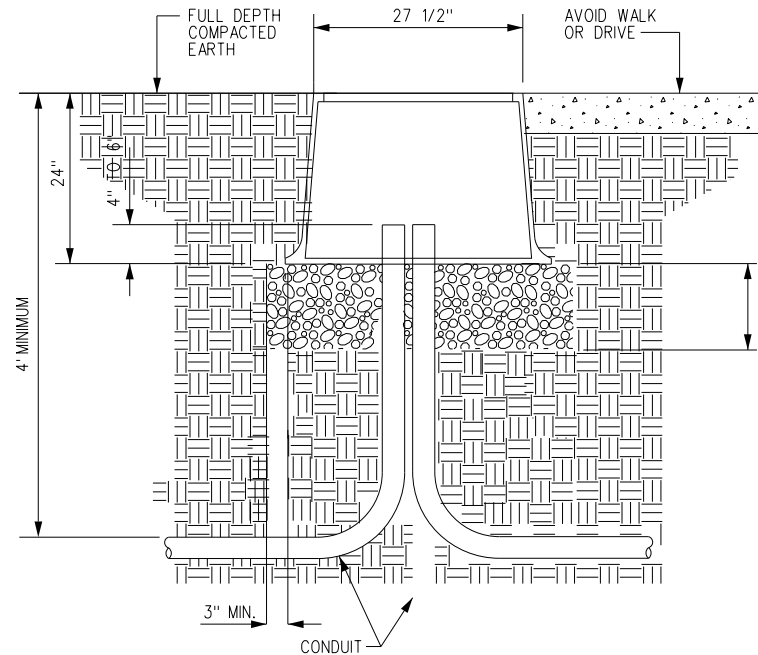
**GENERAL NOTES**

1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT STANDARDS AND SUPPLEMENTAL SPECIFICATIONS.
2. REFER TO APPROPRIATE STANDARD ROAD PLANS AND PROJECT PLANS FOR ADDITIONAL DETAILS.
3. PULL BOXES SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND AS INDICATED HEREIN.
4. COVERS OF PULL BOXES INSTALLED IN LOCATIONS SUBJECT TO PEDESTRIAN TRAFFIC SHALL HAVE AN APPROVED ANTI-SKID PATTERN.
5. CONDUIT SIZES FOR ALL DETAILS SHALL MATCH THOSE INDICATED ON THE PLANS.
6. PULL BOXES MENTIONED SHALL REST FIRMLY ON A BED OF 3/4" WASHED CRUSHED LIMESTONE ROCK WITH A MINIMUM DEPTH OF 12" BELOW THE BOTTOM OF THE PULL BOX, EXTENDING AT LEAST 3" BEYOND THE OUTSIDE EDGES OF THE PULL BOX.
7. AVOID PLACING THESE PULL BOXES IN CONCRETE. THE PULL BOX EDGES, LID, AND LIFTING EYE SHALL BE KEPT CLEAR OF CONCRETE AND FOREIGN MATERIAL.
8. DO NOT INSTALL LID BOLTS.
9. THE TYPE, SIZE, AND LOCATION OF ELECTRICAL ROADWAY DUCTS WILL BE SHOWN ON THE PROJECT PLANS. ROADWAY CROSSINGS SHALL BE INSTALLED AS SHOWN HEREON UNLESS OTHERWISE SPECIFIED OR DIRECTED BY THE ENGINEER.
10. CROSSINGS ARE TO BE PLACED WITHOUT DISTURBING THE EXISTING ROADWAY SURFACE BY JACKING OR BORING METHODS APPROVED BY THE ENGINEER. NO ACCESS TO DUCT OR JACKING OF DUCT FROM MEDIAN WILL BE ALLOWED WITHOUT THE SPECIFIC APPROVAL OF THE ENGINEER.
11. AFTER CABLE IS INSTALLED, ALL DUCT TERMINALS ENDS IN HANDHOLES, TRANSFORMER BASES, LIGHT POLE SHAFTS, OR SIMILAR LOCATIONS AS DIRECTED BY THE ENGINEER SHALL BE SEALED AGAINST ENTRY OF MOISTURE. SEALANTS SHALL BE EITHER APPROVED SEALING BUSHINGS OR A NON-HARDENING SEALING COMPOUND.
12. ALL LIDS SHALL BE LABELED. LID TEXT SHALL BE STANDARDIZED FOR DESIGNED USE ACCEPTABLE TO THE ENGINEER.

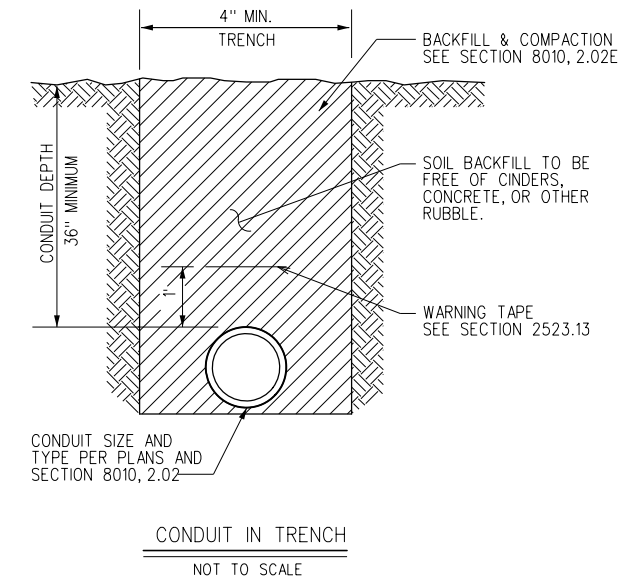




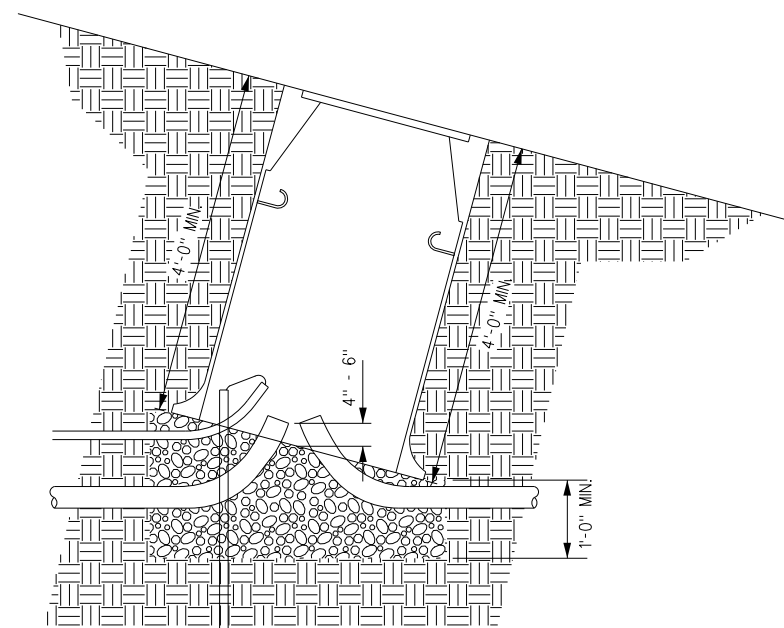
TYPICAL ROADWAY TRANSVERSE SECTION WITH HANDHOLE ON SLOPE  
NOT TO SCALE



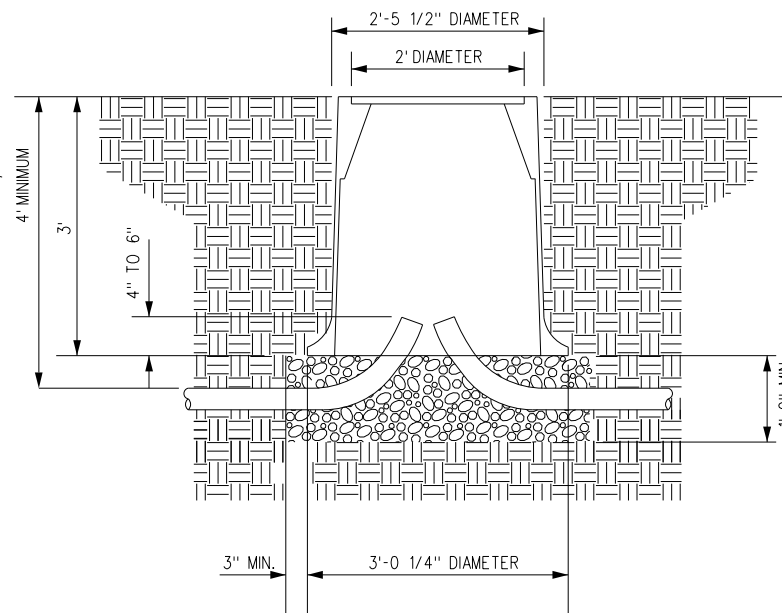
TYPE I HANDHOLE  
FOR NON-DELIBERATE TRAFFIC  
NOT TO SCALE



CONDUIT IN TRENCH  
NOT TO SCALE



HANDHOLE ON SLOPE  
NOT TO SCALE



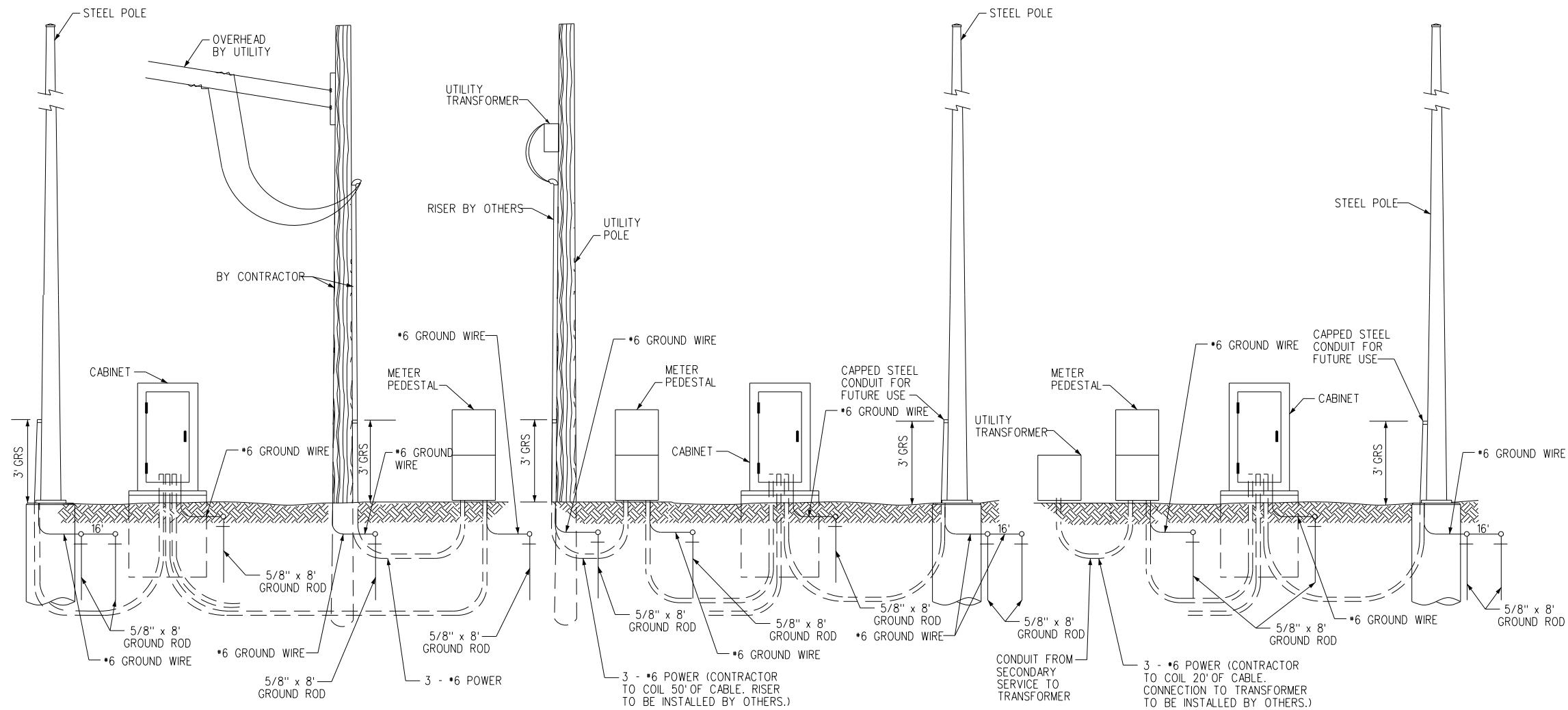
TYPE II HANDHOLE  
FOR NON-DELIBERATE TRAFFIC  
NOT TO SCALE

GENERAL NOTES

1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT STANDARDS AND SUPPLEMENTAL SPECIFICATIONS.
2. REFER TO APPROPRIATE STANDARD ROAD PLANS AND PROJECT PLANS FOR ADDITIONAL DETAILS.
3. PULL BOXES SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND AS INDICATED HEREIN.
4. COVERS OF PULL BOXES INSTALLED IN LOCATIONS SUBJECT TO PEDESTRIAN TRAFFIC SHALL HAVE AN APPROVED ANTI-SKID PATTERN.
5. CONDUIT SIZES FOR ALL DETAILS SHALL MATCH THOSE INDICATED ON THE PLANS.
6. PULL BOXES MENTIONED SHALL REST FIRMLY ON A BED OF 3/4" WASHED CRUSHED LIMESTONE ROCK WITH A MINIMUM DEPTH OF 12" BELOW THE BOTTOM OF THE PULL BOX, EXTENDING AT LEAST 3" BEYOND THE OUTSIDE EDGES OF THE PULL BOX.
7. AVOID PLACING THESE PULL BOXES IN CONCRETE. THE PULL BOX EDGES, LID, AND LIFTING EYE SHALL BE KEPT CLEAR OF CONCRETE AND FOREIGN MATERIAL.
8. DO NOT INSTALL LID BOLTS.
9. AFTER CABLE IS INSTALLED, ALL DUCT TERMINALS ENDS IN HANDHOLES, TRANSFORMER BASES, LIGHT POLE SHAFTS, OR SIMILAR LOCATIONS AS DIRECTED BY THE ENGINEER SHALL BE SEALED AGAINST ENTRY OF MOISTURE. SEALANTS SHALL BE EITHER APPROVED SEALING BUSHINGS OR A NON-HARDENING SEALING COMPOUND.
10. ALL LIDS FOR TYPE II HANDHOLES SHALL BE LABELED "FIBER OPTICS".
11. THE DETAILS INDICATED HEREIN ARE FOR THE INSTALLATION OF A PRECAST HANDHOLE WITH COVER FOR ELECTRICAL WIRING AND CONDUIT.
12. REFER TO APPROPRIATE STANDARD ROAD PLANS AND PROJECT PLANS FOR LOCATIONS AND ADDITIONAL DETAILS.
13. BODY OF RM-42 HANDHOLE SHALL COMPLY WITH THE REQUIREMENTS OF STANDARD ROAD PLAN RF-1 FOR CLASS 1500 D CONCRETE PIPE INsofar AS APPLICABLE. THE PIPE SECTION SHALL BE PLACED WITH TONGUE END AT TOP OF HANDHOLE.
14. SLOTS FOR CONDUIT ACCESS MAY BE CAST AT 90 DEGREE SPACING, AS SHOWN, OR CAST ONLY AS NECESSARY FOR CONDUIT INSTALLATION AS PROJECT PLANS REQUIRES. SLOTS SHALL BE GROUTED WITH MORTAR AFTER NECESSARY CONDUITS ARE INSTALLED. CABLE HOOKS MAY BE PRECAST WITH HANDHOLE OR MAY BE INSTALLED AS NECESSARY BY A METHOD APPROVED BY THE ENGINEER.
15. CABLE HOOKS AND HANDLING LOOPS SHALL BE GALVANIZED IN ACCORDANCE WITH CURRENT SPECIFICATIONS.
16. ACCESS CONDUIT SHALL BE THE SAME AS REQUIRED FOR THE CIRCUIT DUCTS UNLESS OTHERWISE SPECIFIED.
17. DIRECT BURY CABLE INSTALLATIONS ARE NOT ALLOWED UNLESS DIRECTED BY THE ENGINEER.
18. DIMENSIONS SHOWN ARE APPROXIMATE. APPROVED PRODUCT MANUFACTURER'S DIMENSION SHALL PREVAIL IF DIFFERENT FROM THOSE SHOWN.
19. THE CONTRACT ITEM IS "HANDHOLE AND JUNCTION BOXES"
  - (A) 3/8" DIAMETER GALVANIZED STEEL ROD OR APPROVED EQUIVALENT
  - (B) GRANULAR MATERIAL MEETING REQUIREMENTS FOR GRADATION NUMBER 3 OR 5. (SHOWN IN THE AGGREGATE GRADATION TABLE FROM THE CURRENT GENERAL SUPPLEMENTAL SPECIFICATIONS).

ITS DETAILS

SECONDARY SERVICE OPTIONS  
NOT TO SCALE



GENERAL NOTES

1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT STANDARDS AND SUPPLEMENTAL SPECIFICATIONS.
2. REFER TO APPROPRIATE STANDARD ROAD PLANS AND PROJECT PLANS FOR ADDITIONAL DETAILS.
3. ALL CONDUITS SHALL ENTER FOUNDATIONS FROM BOTTOM. SIDE PENETRATIONS WILL NOT BE PERMITTED UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER.
4. FOUNDATION DIMENSIONS SHOWN ARE MINIMUM DIMENSIONS AND SHALL BE INCREASED WHEN NECESSARY AS DETERMINED BY POLE OR CABINET MANUFACTURER.
5. CONDUIT SIZES FOR ALL DETAILS SHALL MATCH THOSE INDICATED ON THE PLANS.
6. MINIMUM TWO GROUND RODS PER STEEL POLE, MAXIMUM GROUND RESISTANCE SHALL BE 20 OHMS OR LESS ALL GROUND CONNECTIONS SHALL BE CADWELD.

ITS DETAILS

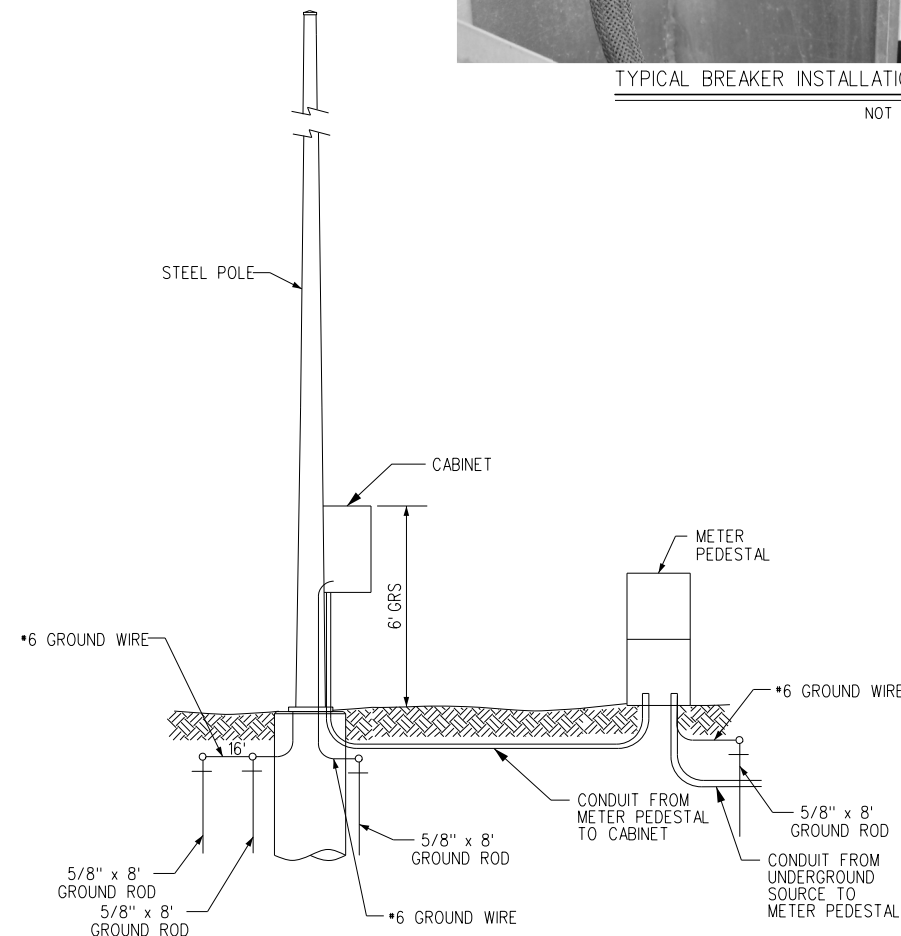


TYPICAL BREAKER INSTALLATION IN SIGNAL/CONTROLLER CABINET

NOT TO SCALE

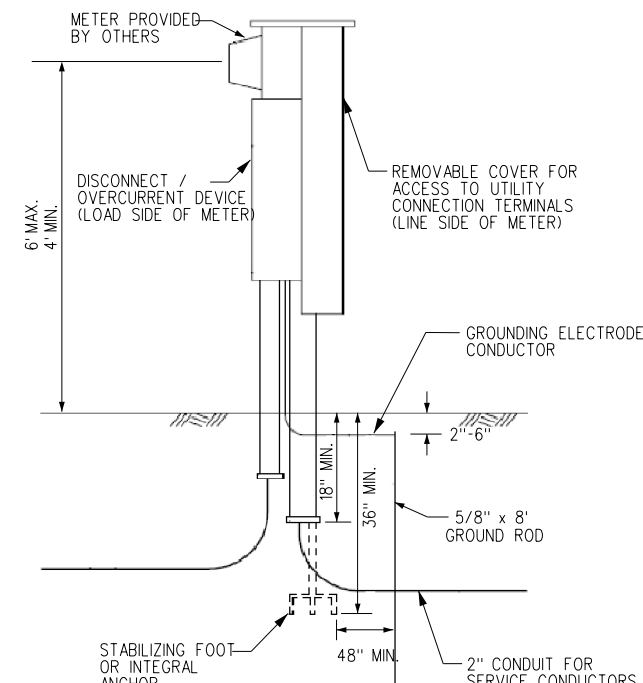
GENERAL NOTES

1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT STANDARDS AND SUPPLEMENTAL SPECIFICATIONS.
2. REFER TO APPROPRIATE STANDARD ROAD PLANS AND PROJECT PLANS FOR ADDITIONAL DETAILS.
3. INSTALL VIBRATION DAMPER IN ALL STEEL MONOTUBEPOLES INSTALLED ON THIS PROJECT. THIS SHALL BE SUBSIDIARY TO ITEMS FOR WHICH THE CONTRACT PROVIDES DIRECT PAYMENT.
4. MOUNTING HEIGHTS SHALL BE AS INDICATED OR AT MINIMUM REQUIREMENT ALLOWED UNDER CURRENT APPLICABLE ELECTRICAL CODES, WHICHEVER IS GREATER. NOTIFY ENGINEER IF MOUNTING HEIGHT IS GREATER THAN SHOWN.
5. CONDUIT SIZES FOR ALL DETAILS SHALL MATCH THOSE INDICATED ON THE PLANS.
6. MINIMUM TWO GROUND RODS PER STEEL POLE, MAXIMUM GROUND RESISTANCE SHALL BE 20 OHMS OR LESS ALL GROUND CONNECTIONS SHALL BE CADWELD



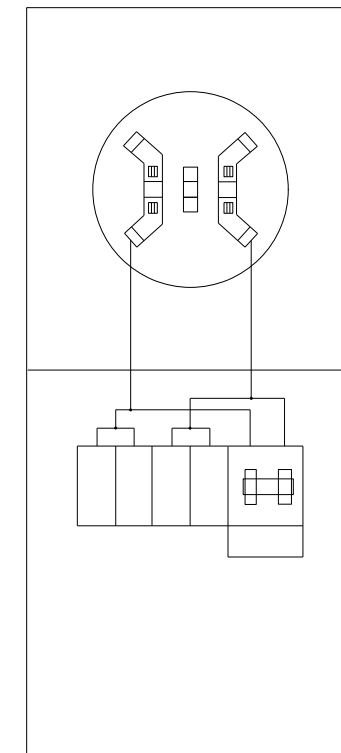
STEEL POLE DEVICE ASSEMBLY

NOT TO SCALE



METER PEDESTAL INSTALLATION

NOT TO SCALE



OPTION B

- Features:
- 6 circuit interior to accept standard plug-in type circuit breakers
  - 100 amp, 120/240 volt circuit breaker

**HIGHWAY LIGHTING DATA**

108-11A  
10-29-02

ELECTRICAL SERVICE:  
MIDAMERICAN ENERGY IS PROVIDING THE PROPOSED SECONDARY SERVICE (120/240 VOLTS SINGLE PHASE) TO THE PROPOSED CONTROL STATIONS. THE EXACT LOCATION OF THE CONTROL STATION SHALL BE DETERMINED BY THE ENGINEER AND APPROVED BY THE UTILITY COMPANY. THE UTILITY WILL FURNISH THE METER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE THE NECESSARY CONTACTS WITH THE UTILITY COMPANY WITH REGARD TO CONNECTIONS TO THE SERVICE DROP. THE MIDAMERICAN ENERGY CONTACT IS: LINDA WILSON. (563) 333-8776.

- NO. 4 AWG - CIRCUIT E1 FROM LIGHTING CONTROLLER E TO E0108
- NO. 6 AWG - CIRCUIT E2 FROM LIGHTING CONTROLLER E TO E0207
- NO. 6 AWG - CIRCUIT E3 FROM EXISTING HANDHOLE TO E0308
- NO. 4 AWG - CIRCUIT E4 FROM EXISTING E0301 TO E0408
- NO. 2 AWG - CIRCUIT E5 FROM EXISTING E1009 TO E0501
- NO. 2 AWG - CIRCUIT E6 FROM EXISTING E1009 TO E0601
- NO. 2 AWG - CIRCUIT E7 FROM EXISTING E0911 TO E0701
- NO. 2 AWG - CIRCUIT E8 FROM EXISTING E0911 TO E0801
- NO. 4 AWG - CIRCUIT E9 FROM EXISTING E1009 TO E0901
- NO. 4 AWG - CIRCUIT E10 FROM EXISTING E1009 TO E1001
- NO. 8 AWG - CIRCUIT F5 FROM EXISTING F0606 TO F0508
- NO. 8 AWG - CIRCUIT F6 FROM EXISTING F0606 TO F0607
- NO. 8 AWG - CIRCUIT G5 FROM EXISTING G0603 TO G0504
- NO. 8 AWG - CIRCUIT G6 FROM EXISTING G0603 TO G0605

**TABULATION OF LIGHTING REMOVALS**

LOCATION		
STATION	OFFSET	ALIGNMENT
6790+65.2	340.7' LT	I-74
6791+38.4	510.5' LT	I-74
6791+93.1	707.6' LT	I-74
6796+43.5	335.4' LT	I-74
6797+17.2	419.9' LT	I-74
6798+32.4	424.0' LT	I-74
6799+11.2	344.5' LT	I-74
6799+07.8	231.3' LT	I-74
6823+53.6	125.4' LT	I-74
6824+97.6	65.5' LT	I-74
6826+51.0	89.8' LT	I-74
6828+49.3	81.0' LT	I-74
6830+48.0	80.5' LT	I-74
6832+47.8	80.2' LT	I-74

**PROJECT NOTE**

- THE PAY ITEMS HAVE BEEN DIVIDED IN THE REMARKS AS FOLLOWS:
- (1) DIVISION 1 PAY ITEM (IOWA DOT COST)
  - (2) DIVISION 2 PAY ITEM (CITY OF BETTENDORF COST)
  - (3) DIVISION 3 PAY ITEM (72.23% IOWA/27.77% BETTENDORF COST)
  - (4) DIVISION 4 PAY ITEM (NON-PARTICIPATING)

**TABULATION OF ELECTRICAL DUCTS**

108-2  
08-20-85

Location	Conduit Type	No. Of Cond.	Dia. Inches	Length Feet	Remarks
E0108 TO E0207	SCH 40 PLASTIC	1	2	153	CIRCUIT E1 (1)
E0207 TO HANDHOLE	SCH 40 PLASTIC	1	2	290	CIRCUITS E1 & E2 (1)
HANDHOLE TO HANDHOLE	CONC. EMBEDDED	1	2	803	CIRCUITS E1 & E2 SEE PLAN NOTE 9 (1)
HANDHOLE TO E0109	SCH 40 PLASTIC	1	2	592	CIRCUITS E1 & E2 (1)
E0109 TO E0201	EXISTING CONDUIT	1	2	59	CIRCUITS E1 & E2 (1)
E0201 TO CONTROLLER E	SCH 40 PLASTIC	1	2	180	CIRCUITS E1 & E2 (1)
E0308 TO EXISTING HANDHOLE	SCH 40 PLASTIC	1	2	25	CIRCUIT E3 (1)
E0407 TO EXISTING E0301	SCH 40 PLASTIC	1	2	41	CIRCUIT E4 (1)
END OF BARRIER WALL TO E0501/E0601	CONC. EMBEDDED	1	3	140	EMPTY SEE PLAN NOTE 9 (1)
E0501/E0601 TO E0502/E0602	SCH 80 PLASTIC	1	3	891	CIRCUITS E5 & E6 SEE PLAN NOTE 9 (1)
E0502/E0602 TO E0701/E0801	CONC. EMBEDDED	1	3	891	CIRCUITS E5 & E6 SEE PLAN NOTE 9 (1)
E0701/E0801 TO E0901/E1001	CONC. EMBEDDED	1	3	1080	CIRCUITS E5, E6, E7 & E8 SEE PLAN NOTE 9 (1)
E0901/E1001 TO E0908/E1008	CONC. EMBEDDED	1	3	945	CIRCUITS E5, E6, E7, E8, E9 & E10 SEE PLAN NOTE 9 (1)
E0908/E1008 TO EXISTING E1009	EXISTING CONDUIT	1	2	161	CIRCUITS E5, E6, E9 & E10 (1)
E0908/E1008 TO EXISTING E0911	EXISTING CONDUIT	1	2	161	CIRCUITS E7 & E8 (1)
G0606 TO G0505	EXISTING CONDUIT	1	2	120	CIRCUIT G6 (1)
F0607 TO F0507	SCH 80 PLASTIC	1	2	85	CIRCUIT F6 (1)
F0508 TO F0507	SCH 80 PLASTIC	1	2	96	CIRCUIT F5 (1)
F0507 TO EXISTING F0606	SCH 40 PLASTIC	1	2	128	CIRCUITS F5 & F6 (1)
G0605 TO G0504	SCH 40 PLASTIC	1	2	121	CIRCUITS G5 & G6 (1)
G0504 TO EXISTING BRIDGE CONDUIT	SCH 40 PLASTIC	1	2	296	CIRCUITS G5 & G6 (1)
G0505 TO G0605	EXISTING CONDUIT	1	2	XX	CIRCUITS G5 & G6 (1)
K0705 TO IDENTITY ELEMENT	SCH 40 PLASTIC	1	2	115	CIRCUIT K7 (2)

**TABULATION OF WIRE, CABLE AND CONNECTORS**

108-12  
02-11-00

CIRCUIT NUMBER	RM-40 CONNECTORS								PHASE LINES								GROUND		REMARKS		
	TYPE	QUAN. NO.	TYPE	QUAN. NO.	TYPE	QUAN. NO.	TYPE	QUAN. NO.	SIZE A.W.G.	QUAN. L.F.	SIZE A.W.G.	QUAN. L.F.	SIZE A.W.G.	QUAN. L.F.	SIZE A.W.G.	QUAN. L.F.	SIZE A.W.G.	QUAN. L.F.			
E1	L-1	8	L-2	2	Y-1	7	Y-3	-	-	-	2	4154	-	-	-	-	10	0	-	-	(1)
E2	L-1	7	L-2	2	Y-1	6	Y-3	-	-	-	-	6	3848	-	-	-	10	0	-	-	(1)
E3	L-1	1	L-2	1	Y-1	-	Y-3	1	-	-	-	-	-	-	-	-	10	90	-	-	(1)
E4	L-1	1	L-2	1	Y-1	-	Y-3	1	-	-	4	122	-	-	-	-	10	90	-	-	(1)
E5	L-1	6	L-2	1	Y-1	5	Y-3	-	2	6154	-	-	-	-	-	-	10	0	-	-	(1)
E6	L-1	6	L-2	1	Y-1	5	Y-3	-	2	6154	-	-	-	-	-	-	10	0	-	-	(1)
E7	L-1	8	L-2	1	Y-1	7	Y-3	-	2	4372	-	-	-	-	-	-	10	0	-	-	(1)
E8	L-1	8	L-2	1	Y-1	7	Y-3	-	2	4372	-	-	-	-	-	-	10	0	-	-	(1)
E9	L-1	8	L-2	1	Y-1	7	Y-3	-	-	-	4	2212	-	-	-	-	10	0	-	-	(1)
E10	L-1	8	L-2	-	Y-1	8	Y-3	-	-	-	4	2212	-	-	-	-	10	0	-	-	(1)
F5	L-1	4	L-2	2	Y-1	3	Y-3	1	-	-	-	-	-	-	8	1184	10	0	-	-	(1)
F6	L-1	3	L-2	1	Y-1	2	Y-3	-	-	-	-	-	-	-	8	1232	10	0	-	-	(1)
G5	L-1	5	L-2	8	Y-1	3	Y-3	1	-	-	-	-	-	-	8	592	10	0	-	-	(1)
G6	L-1	6	L-2	7	Y-1	4	Y-3	1	-	-	-	-	-	-	8	834	10	0	-	-	(1)
K7	L-1	1	L-2	-	Y-1	1	Y-3	-	-	-	4	270	-	-	-	-	-	-	-	-	(2)
COMMON GROUND																			6	6690	(1)

**DELIVERY AND STOCKPILING**

110-13  
MODIFIED

ITEM DESCRIPTION	QUANTITY	UNITS	DELIVERY LOCATION	CONTACT NAME & NUMBER	REMARKS
LIGHTING POLE	14	EACH	IOWA DOT DAVENPORT MAINTENANCE SHOP 8721 NORTHWEST BLVD DAVENPORT, IA 52806	563-391-3920	ML LIGHTING REMOVAL (4)

**LIGHTING QUANTITIES**

**TABULATION OF LIGHTING INSTALLATIONS**

① RM-39

108-1  
MODIFIED

NO.	LOCATION			RM-31			FOOTING TYPE ①	REMARKS
	STATION	OFFSET	ALIGNMENT	TYPE	A	E		
E0101	205+83.5	41.5' LT	US-67 WB				RM-39	SEE PLAN NOTE 1 (1)
E0102	1497+28.0	14.0' LT	US-67 RAMP A				RM-39	SEE PLAN NOTE 1 (1)
E0103	1500+08.0	14.0' LT	US-67 RAMP A				RM-39	SEE PLAN NOTE 1 (1)
E0104	1502+88.0	BARRIER WALL	US-67 RAMP A	-	-	-	-	SEE PLAN NOTE 2 (1)
E0105	1505+88.0	RETAINING WALL	US-67 RAMP A	-	-	-	-	SEE PLAN NOTE 3 (1)
E0106	1508+88.0	RETAINING WALL	US-67 RAMP A	-	-	-	-	SEE PLAN NOTE 3 (1)
E0107	1511+88.0	14.0' LT	US-67 RAMP A				RM-39	SEE PLAN NOTE 1 (1)
E0108	1514+88.0	14.0' LT	US-67 RAMP A				RM-39	SEE PLAN NOTE 1 (1)
E0109	-	-	US-67 RAMP A	-	-	-	RM-39	SEE PLAN NOTE 1 (1)
E0201	-	-	US-67 RAMP A	-	-	-	RM-39	SEE PLAN NOTE 1 (1)
E0202	1498+68.0	14.0' LT	US-67 RAMP A				RM-39	SEE PLAN NOTE 1 (1)
E0203	1501+44.0	14.0' LT	US-67 RAMP A				RM-39	SEE PLAN NOTE 1 (1)
E0204	1504+38.0	RETAINING WALL	US-67 RAMP A	-	-	-	-	SEE PLAN NOTE 3 (1)
E0205	1507+38.0	RETAINING WALL	US-67 RAMP A	-	-	-	-	SEE PLAN NOTE 3 (1)
E0206	1510+38.0	RETAINING WALL	US-67 RAMP A	-	-	-	-	SEE PLAN NOTE 3 (1)
E0207	1513+38.0	14.0' LT	US-67 RAMP A				RM-39	SEE PLAN NOTE 1 (1)
E0308	-	-	US-67 WB	-	-	-	-	SEE PLAN NOTE 5 (1)
E0407	-	-	US-67 WB	-	-	-	RM-39	SEE PLAN NOTE 1 (1)
E0501/E0601	6835+60.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0502/E0602	6833+44.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0503/E0603	6831+99.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0504/E0604	6830+54.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0505/E0605	6829+09.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0506/E0606	6827+64.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0701/E0801	6826+19.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0702/E0802	6824+74.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0703/E0803	6823+29.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0704/E0804	6821+84.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0705/E0805	6820+39.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0706/E0806	6818+94.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0707/E0807	6817+49.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0708/E0808	6816+04.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0901/E1001	6814+59.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0902/E1002	6813+14.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0903/E1003	6811+69.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0904/E1004	6810+24.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0905/E1005	6808+79.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0906/E1006	6807+34.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0907/E1007	6805+89.0	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
E0908/E1008	6804+43.5	BARRIER WALL	1-74 ML	-	-	-	-	SEE PLAN NOTE 4 (1)
F0507	-	-	US-67 RAMP B	-	-	-	RM-39	SEE PLAN NOTE 1 (1)
G0505	-	-	US-67 EB	-	-	-	-	SEE PLAN NOTE 5 (1)
F0508	-	-	US-67 EB	-	-	-	-	SEE PLAN NOTE 5 (1)
F0607	-	-	US-67 EB	-	-	-	RM-39	SEE PLAN NOTE 1 (1)
G0606	-	-	US-67 EB	-	-	-	-	SEE PLAN NOTE 5 (1)
G0503	3591+08.5	28.4' LT	US-67 RAMP C				RM-39	SEE PLAN NOTE 1 (1)
G0504	3593+78.5	28.4' LT	US-67 RAMP C				RM-39	SEE PLAN NOTE 1 (1)
G0604	3592+43.5	28.4' LT	US-67 RAMP C				RM-39	SEE PLAN NOTE 1 (1)
G0605	-	-	US-67 EB	-	-	-	RM-39	SEE PLAN NOTE 1 (1)

**LIGHTING  
QUANTITIES**

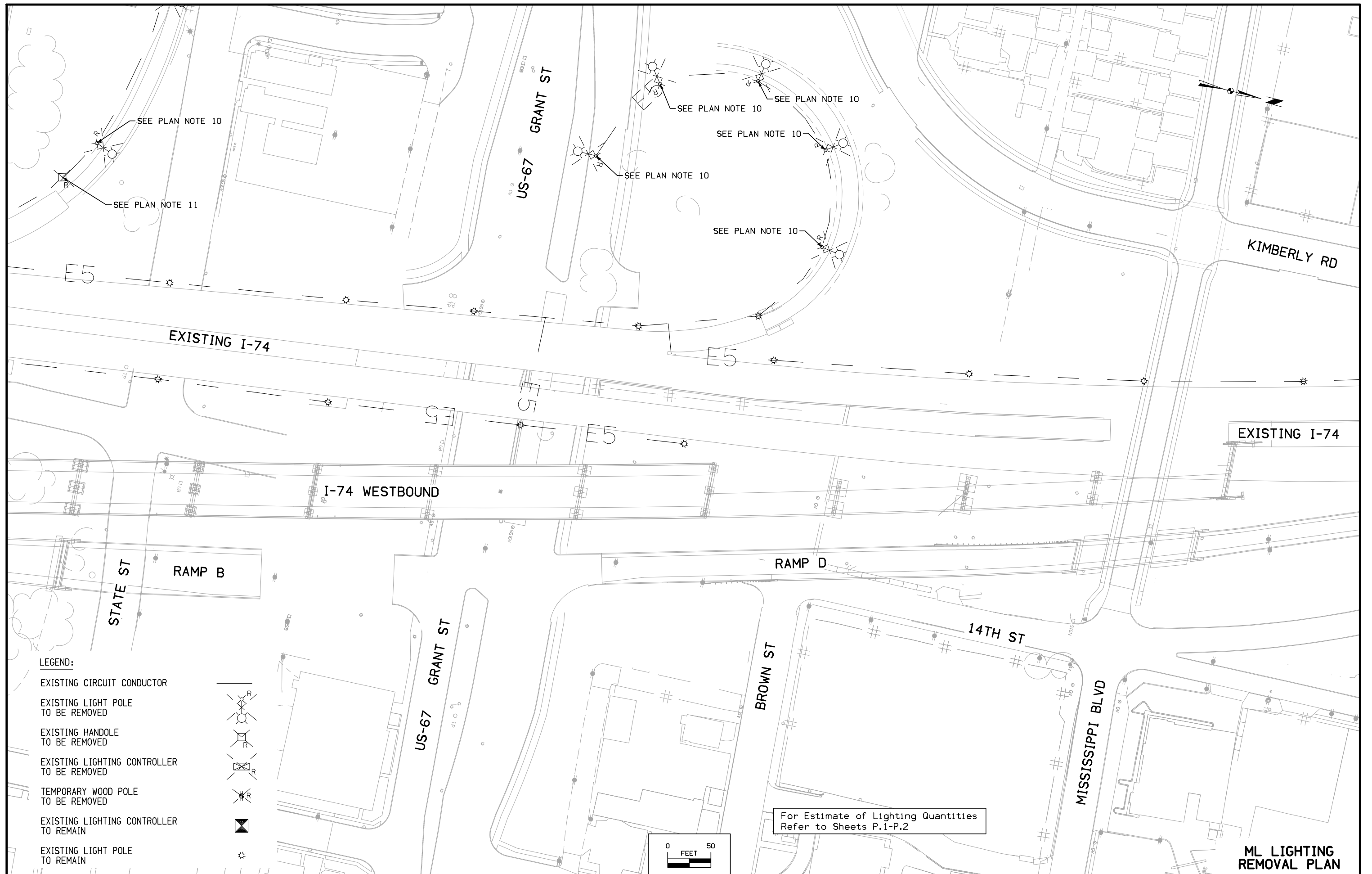
ROADWAY LIGHTING GENERAL NOTES:

- A. ALL ELECTRICAL WORK SHALL CONFORM TO NATIONAL, STATE, AND LOCAL CODES.
- B. IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS TO PROVIDE A COMPLETE AND PROPERLY OPERATING ELECTRICAL LIGHTING SYSTEM. THE EQUIPMENT SHALL BE FURNISHED AS SPECIFIED AND SHALL INCLUDE ALL INCIDENTAL ITEMS NECESSARY TO PROVIDE A COMPLETE WORKING SYSTEM. INCIDENTAL ITEMS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS: ANCHORAGES, MOUNTING HARDWARE, CONNECTORS, LUGS, FUSES, ETC.
- C. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS, QUANTITIES, AND TYPE OF UTILITIES IN AREAS TO BE EXCAVATED PRIOR TO THE COMMENCEMENT OF ANY WORK AND SHALL HAND EXCAVATE AS REQUIRED IN ORDER TO NOT INTERRUPT ANY EXISTING SERVICES. SEE CIVIL DRAWINGS FOR LOCATIONS OF EXISTING AND NEW UTILITIES. IF, IN PERFORMING WORK, DAMAGE TO EXISTING UTILITIES OCCURS, THE CONTRACTOR SHALL NOTIFY UTILITY IMMEDIATELY AND PAY ANY COST INCURRED FOR REPAIR OR REPLACEMENT.
- D. ELECTRICAL EQUIPMENT, RACEWAY, ETC. ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. CONTRACTOR SHALL INSTALL ELECTRICAL EQUIPMENT, RACEWAYS, ETC. WHERE DIRECTED BY THE ENGINEER IN ORDER TO BEST SUIT JOB CONDITIONS.
- E. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING STATE OWNED LIGHTING AND/OR TRAFFIC SIGNAL UTILITIES WITHIN THE PROJECT LIMITS.
- F. COMPLETELY REMOVE ALL ABANDONED LIGHT POLE FOOTINGS AND HANDHOLES, BACKFILL AND COMPACT.
- G. ALL REPLACEMENT AND TEMPORARY WIRING SHALL BE EQUAL TO OR GREATER THAN THE EXISTING WIRE GAUGE. ALL PERMANENTLY INSTALLED CURRENT CARRYING CONDUCTORS SHALL BE TYPE RHW.
- H. NO SPLICING OF EXISTING-TO-NEW WIRING IS ALLOWED INSIDE ELECTRICAL DUCTS. ALL WIRING INTERCONNECTIONS SHALL BE INSTALLED IN ACCESSIBLE AREAS AND SHALL BE MADE WITH IOWA DOT APPROVED RM-40 CONNECTORS.

ELECTRICAL PLAN NOTES:

- 1. STATE RAMP LIGHTS:  
INSTALL PROPOSED LIGHT POLE FOUNDATION, LIGHT POLE, MAST ARM AND LUMINAIRE. LIGHT POLE FOUNDATION SHALL BE PER RM-39. LIGHT POLE SHALL BE PER DETAIL SHOWN ON SHEET P.14. A TYPE 1 HANDHOLE SHALL BE INSTALLED AT EACH LIGHT POLE FOUNDATION.
- 2. STATE LIGHTS INSTALLED ON BRIDGE PARAPETS:  
INSTALL PROPOSED LIGHT POLE, MAST ARM AND LUMINAIRE. LIGHT POLE SHALL BE MOUNTED ON BRIDGE PARAPET WALL AS PER THE DETAIL ON SHEET P.14.
- 3. STATE LIGHTS INSTALLED ON RETAINING WALL:  
INSTALL PROPOSED LIGHT POLE, MAST ARM AND LUMINAIRE. LIGHT POLE SHALL BE MOUNTED ON THE RETAINING WALL AS PER THE DETAIL ON SHEET P.14.
- 4. STATE TWIN ROADWAY LIGHTS:  
INSTALL PROPOSED LIGHT POLE, MAST ARMS AND LUMINAIRES. LIGHT POLE SHALL BE MOUNTED BETWEEN THE BARRIER WALLS AS PER DETAIL SHOWN ON SHEET P.14.
- 5. LUMINAIRE AT COMBINATION POLE:  
INSTALL PROPOSED LUMINAIRE AND MAST ARM ON COMBINATION TRAFFIC SIGNAL POLE. SEE TRAFFIC SIGNAL PLANS FOR EXACT POLE LOCATION. A TYPE 1 HANDHOLE SHALL BE INSTALLED AT EACH COMBINATION POLE FOUNDATION.
- 6. INSTALL PRECAST HANDHOLE, TYPE 2, PER RM-42.
- 7. INSTALL MALE CONNECTORS ON PROPOSED CONDUCTORS AND CONNECT TO EXISTING FEMALE CONNECTORS ON THE EXISTING CONDUCTORS.
- 8. CAP AND SEAL CONDUIT FOR FUTURE CONNECTION.
- 9. EMBEDDED CONDUIT SHALL BE INCIDENTAL TO CONCRETE BARRIER RAILING.
- 10. REMOVE EXISTING LIGHT POLE, MAST ARM, AND LUMINAIRE. SALVAGE LIGHT POLE AND MAST ARM TO OWNER. REMOVE FOOTING AND DISPOSE, AS NECESSARY, OR BREAK DOWN TO A POINT THREE FEET BELOW GRADE AND DISPOSE. BACKFILL AND COMPACT.
- 11. REMOVE EXISTING HANDHOLE AND DISPOSE. BACKFILL AND COMPACT.
- 12. REMOVE EXISTING CIRCUIT CONDUCTORS FROM CONDUIT. CAP AND ABANDON CONDUIT IN PLACE.
- 13. REMOVE EXISTING LIGHTING CONTROLLER AND FOUNDATION AND DISPOSE. BACKFILL AND COMPACT.
- 14. CONDUIT MUST BE PUSHED UNDER ROADWAYS, DRIVEWAYS, AND SIDEWALKS. ALL OTHER CONDUIT MAY BE INSTALLED BY ANY METHOD APPROVED BY THE ENGINEER.

LIGHTING GENERAL  
& PLAN NOTES



**LEGEND:**

EXISTING CIRCUIT CONDUCTOR

EXISTING LIGHT POLE TO BE REMOVED

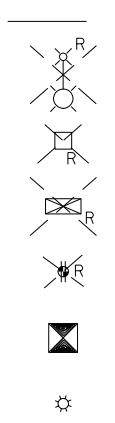
EXISTING HANDLE TO BE REMOVED

EXISTING LIGHTING CONTROLLER TO BE REMOVED

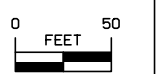
TEMPORARY WOOD POLE TO BE REMOVED

EXISTING LIGHTING CONTROLLER TO REMAIN

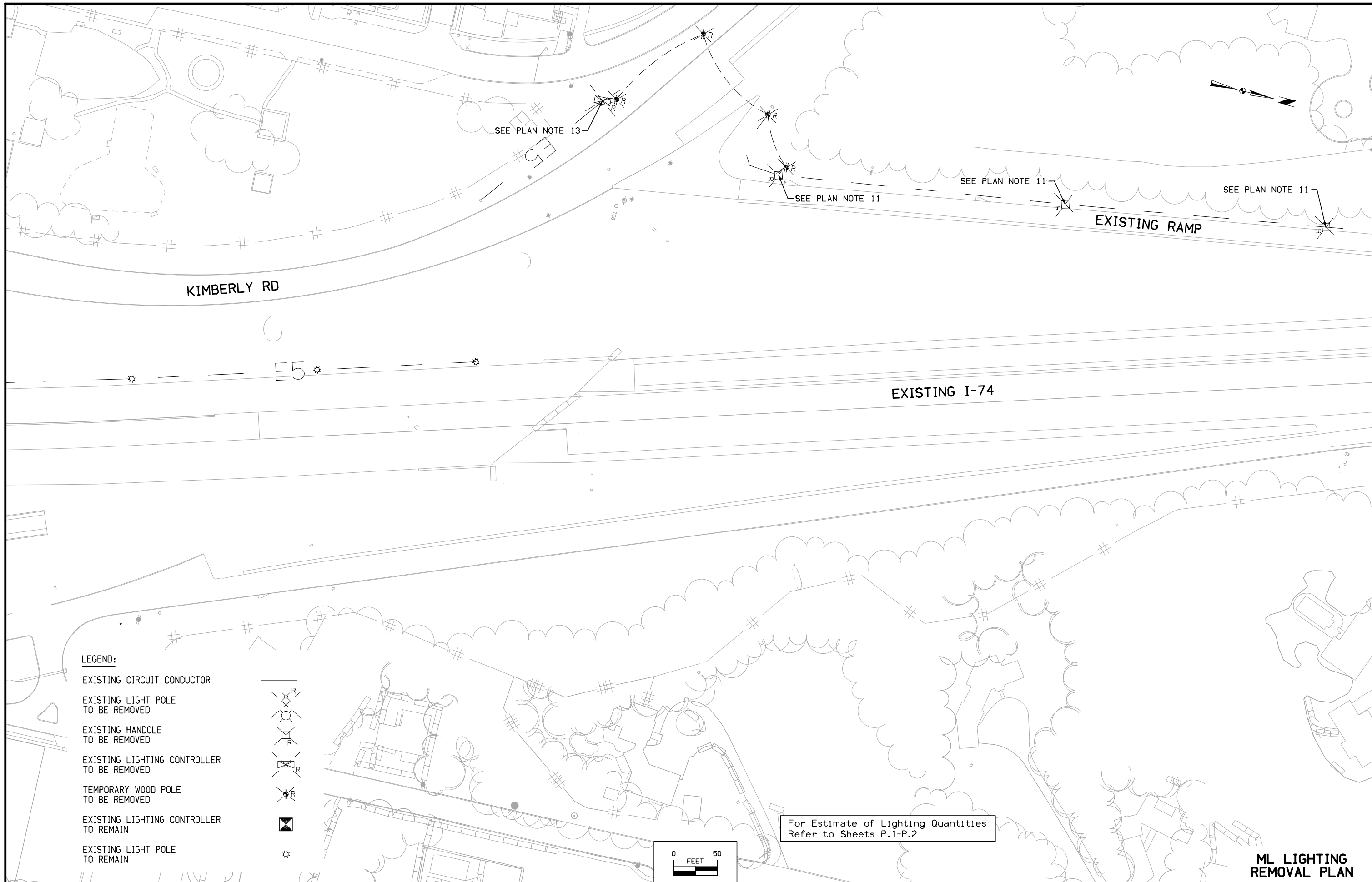
EXISTING LIGHT POLE TO REMAIN



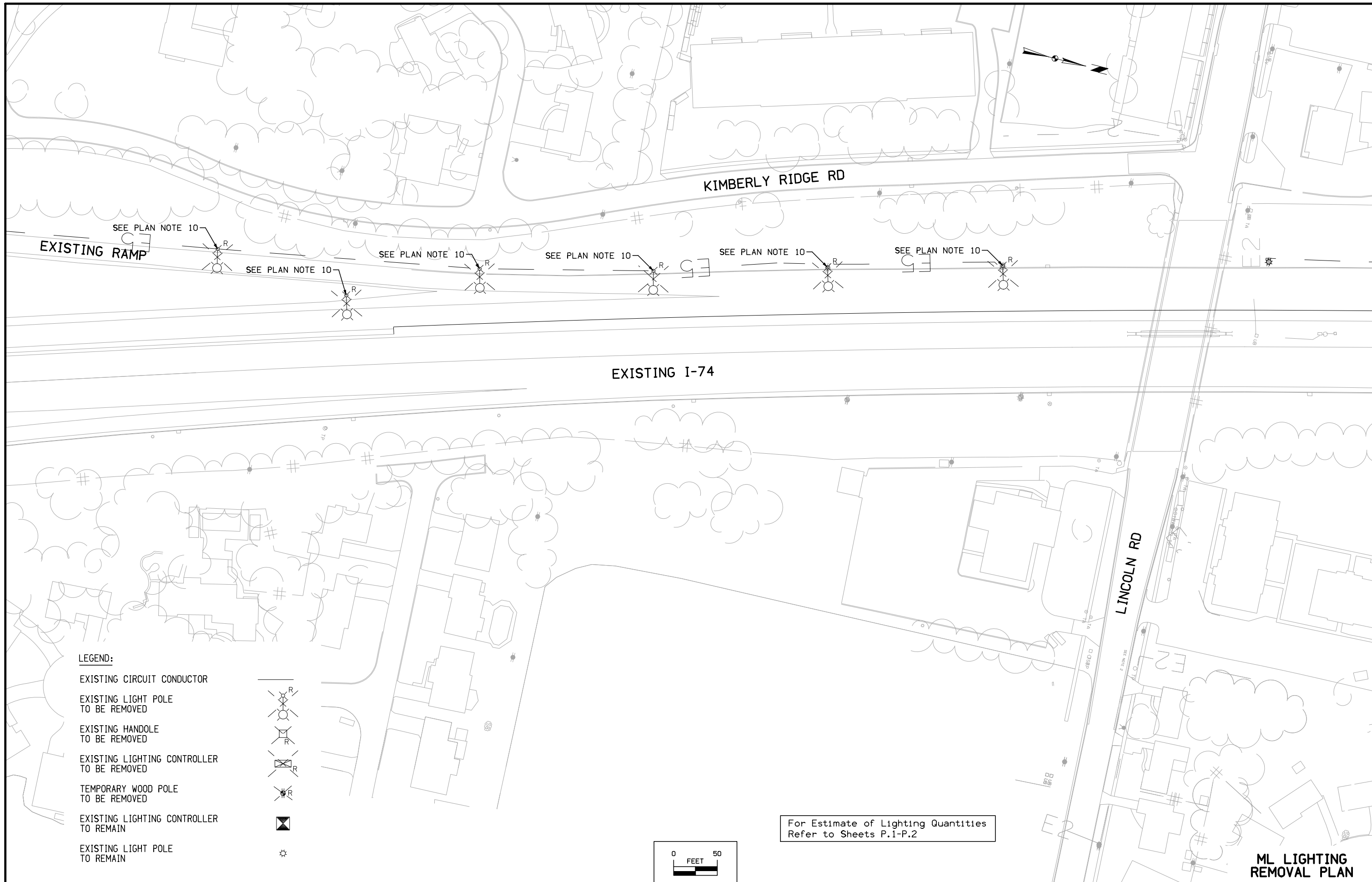
For Estimate of Lighting Quantities Refer to Sheets P.1-P.2



**ML LIGHTING REMOVAL PLAN**







**LEGEND:**

EXISTING CIRCUIT CONDUCTOR

EXISTING LIGHT POLE TO BE REMOVED

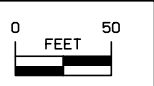
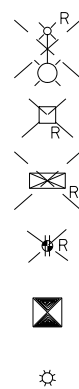
EXISTING HANDLE TO BE REMOVED

EXISTING LIGHTING CONTROLLER TO BE REMOVED

TEMPORARY WOOD POLE TO BE REMOVED

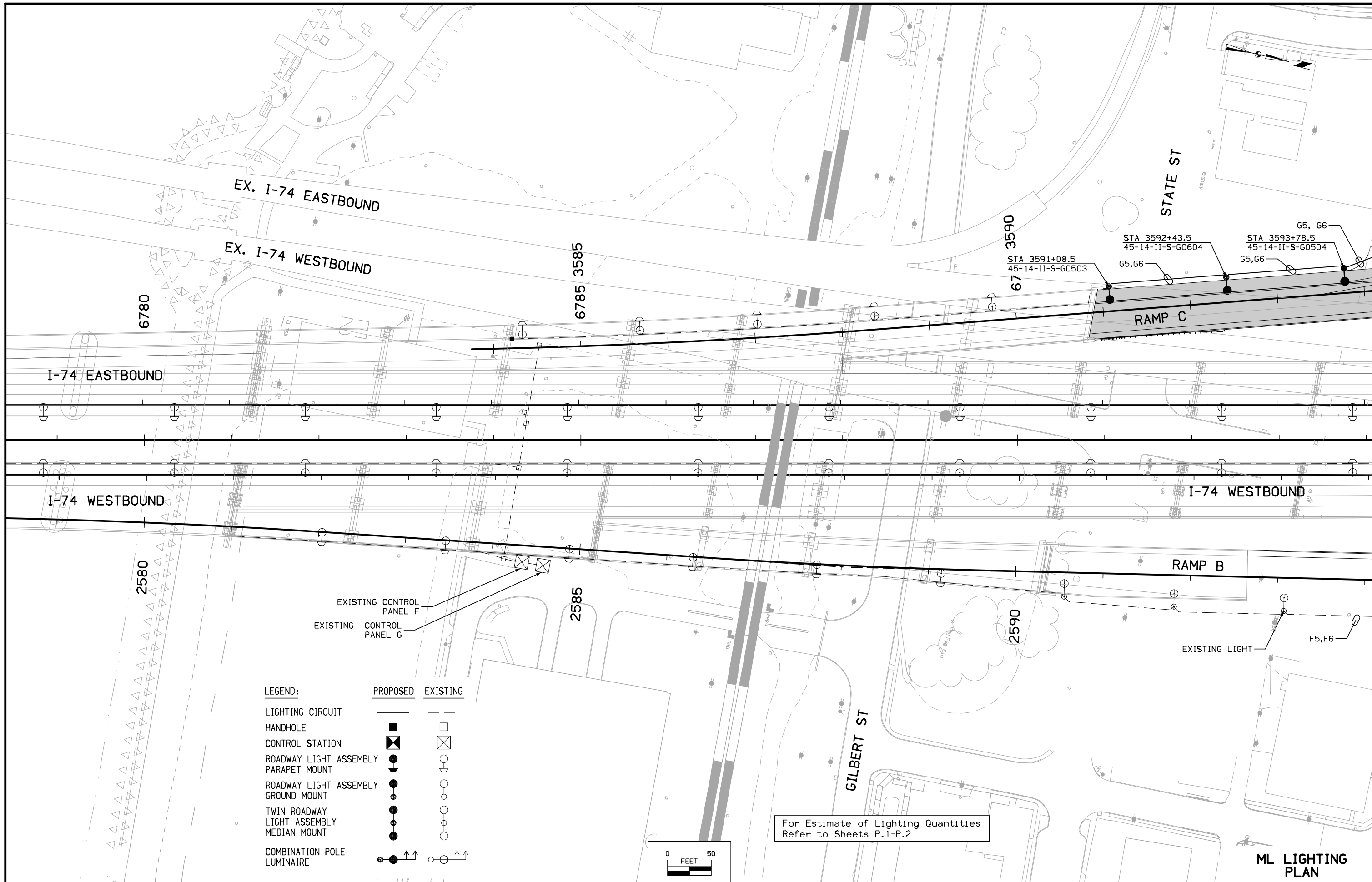
EXISTING LIGHTING CONTROLLER TO REMAIN

EXISTING LIGHT POLE TO REMAIN



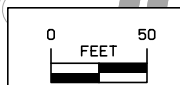
For Estimate of Lighting Quantities Refer to Sheets P.1-P.2

**ML LIGHTING REMOVAL PLAN**



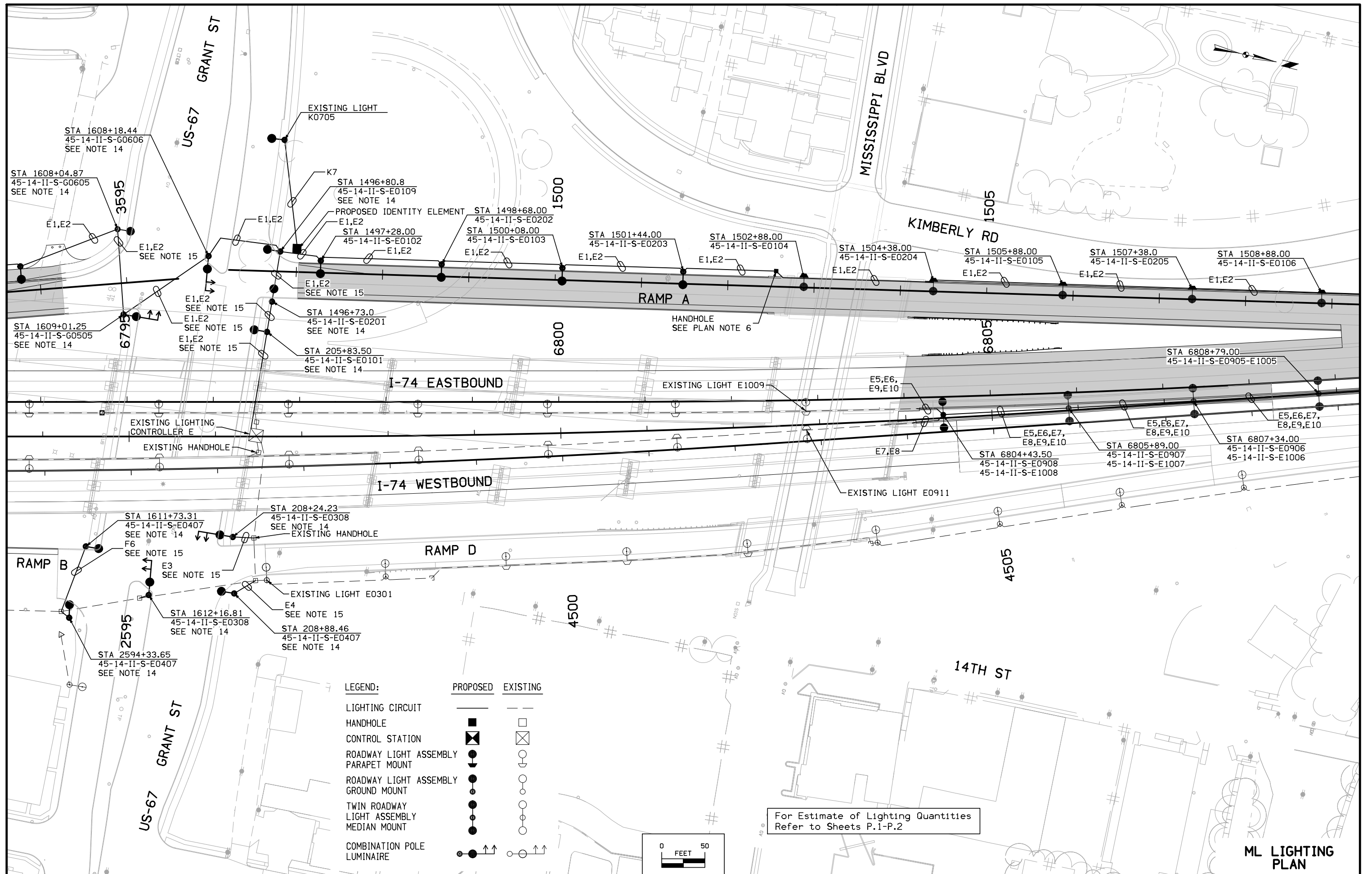
**LEGEND:**

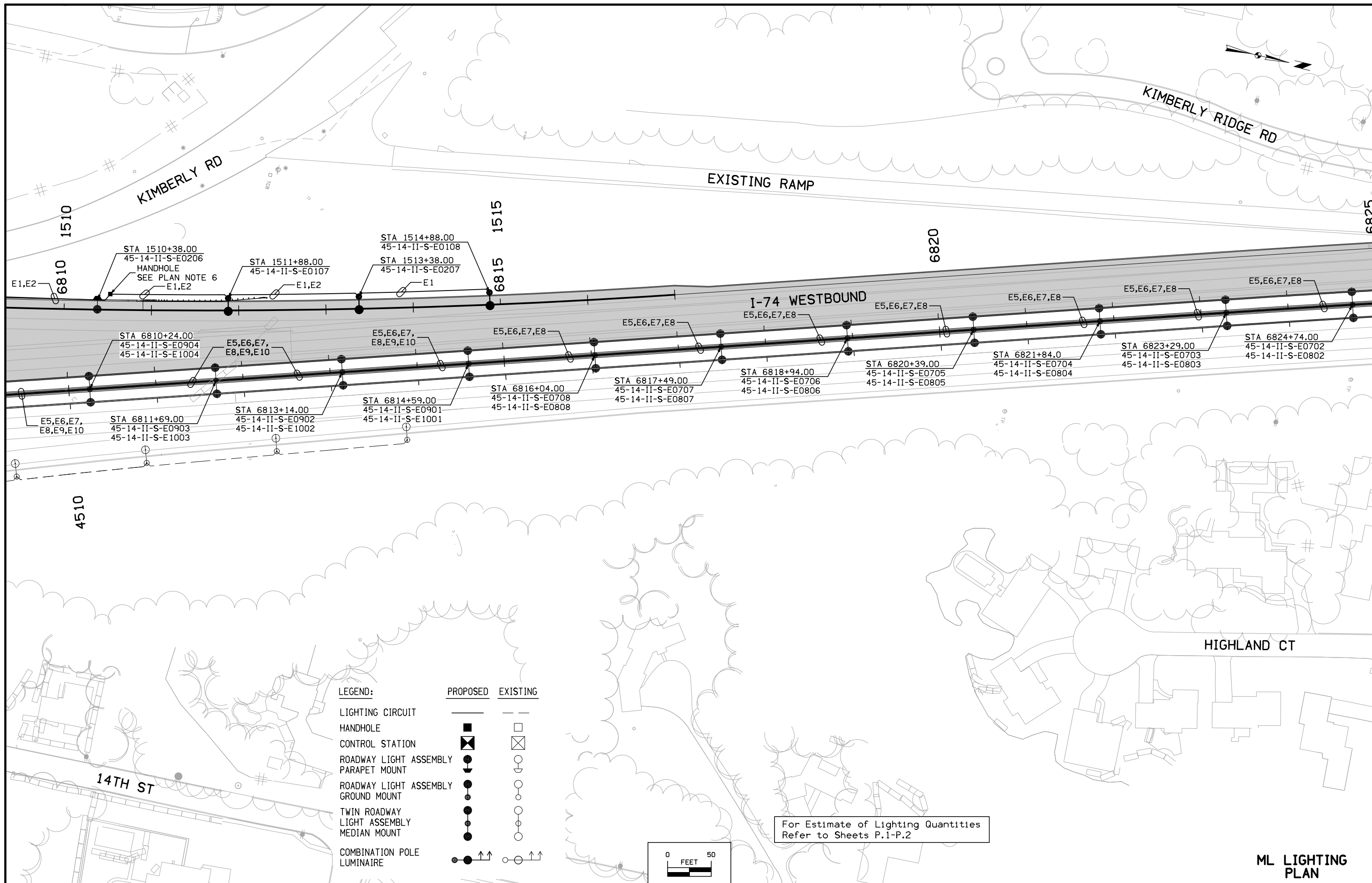
	PROPOSED	EXISTING
LIGHTING CIRCUIT	—	—
HANDHOLE	■	□
CONTROL STATION	⊠	⊠
ROADWAY LIGHT ASSEMBLY PARAPET MOUNT	●	○
ROADWAY LIGHT ASSEMBLY GROUND MOUNT	●	○
TWIN ROADWAY LIGHT ASSEMBLY MEDIAN MOUNT	●	○
COMBINATION POLE LUMINAIRE	● ↑↑	○ ↑↑



For Estimate of Lighting Quantities  
Refer to Sheets P.1-P.2

**ML LIGHTING PLAN**





KIMBERLY RIDGE RD

KIMBERLY RD

EXISTING RAMP

I-74 WESTBOUND

HIGHLAND CT

4510

1510

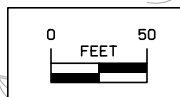
1515

6820

6825

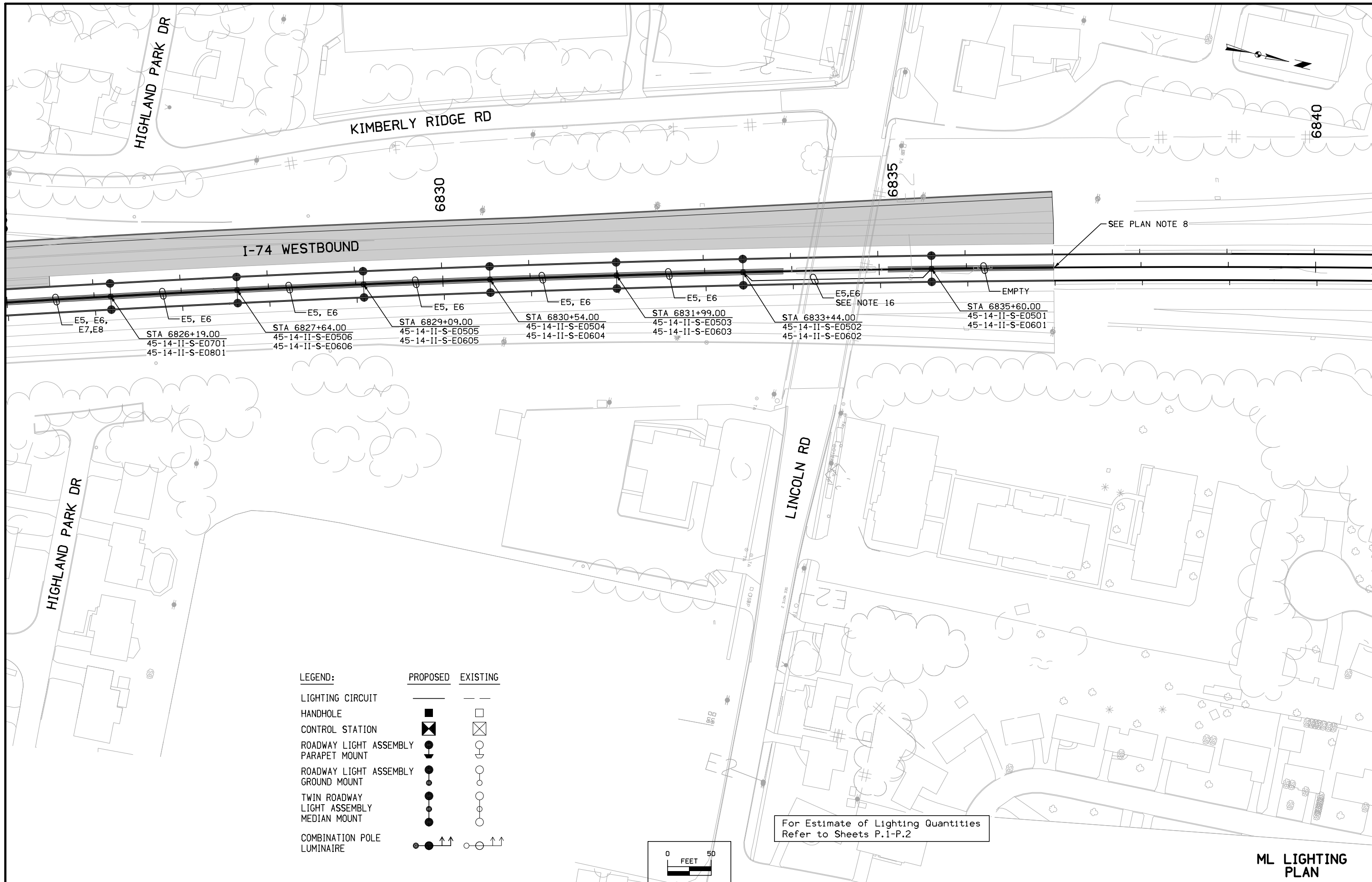
**LEGEND:**

	PROPOSED	EXISTING
LIGHTING CIRCUIT	—	—
HANDHOLE	⊠	⊠
CONTROL STATION	⊠	⊠
ROADWAY LIGHT ASSEMBLY PARAPET MOUNT	●	○
ROADWAY LIGHT ASSEMBLY GROUND MOUNT	●	○
TWIN ROADWAY LIGHT ASSEMBLY MEDIAN MOUNT	●	○
COMBINATION POLE LUMINAIRE	●	○



For Estimate of Lighting Quantities Refer to Sheets P.1-P.2

**ML LIGHTING PLAN**



SEE PLAN NOTE 8

E5,E6  
SEE NOTE 16

EMPTY

E5, E6,  
E7,E8

STA 6826+19.00  
45-14-II-S-E0701  
45-14-II-S-E0801

E5, E6  
STA 6827+64.00  
45-14-II-S-E0506  
45-14-II-S-E0606

E5, E6  
STA 6829+09.00  
45-14-II-S-E0505  
45-14-II-S-E0605

E5, E6  
STA 6830+54.00  
45-14-II-S-E0504  
45-14-II-S-E0604

E5, E6  
STA 6831+99.00  
45-14-II-S-E0503  
45-14-II-S-E0603

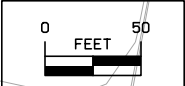
E5,E6  
STA 6833+44.00  
45-14-II-S-E0502  
45-14-II-S-E0602

STA 6835+60.00  
45-14-II-S-E0501  
45-14-II-S-E0601

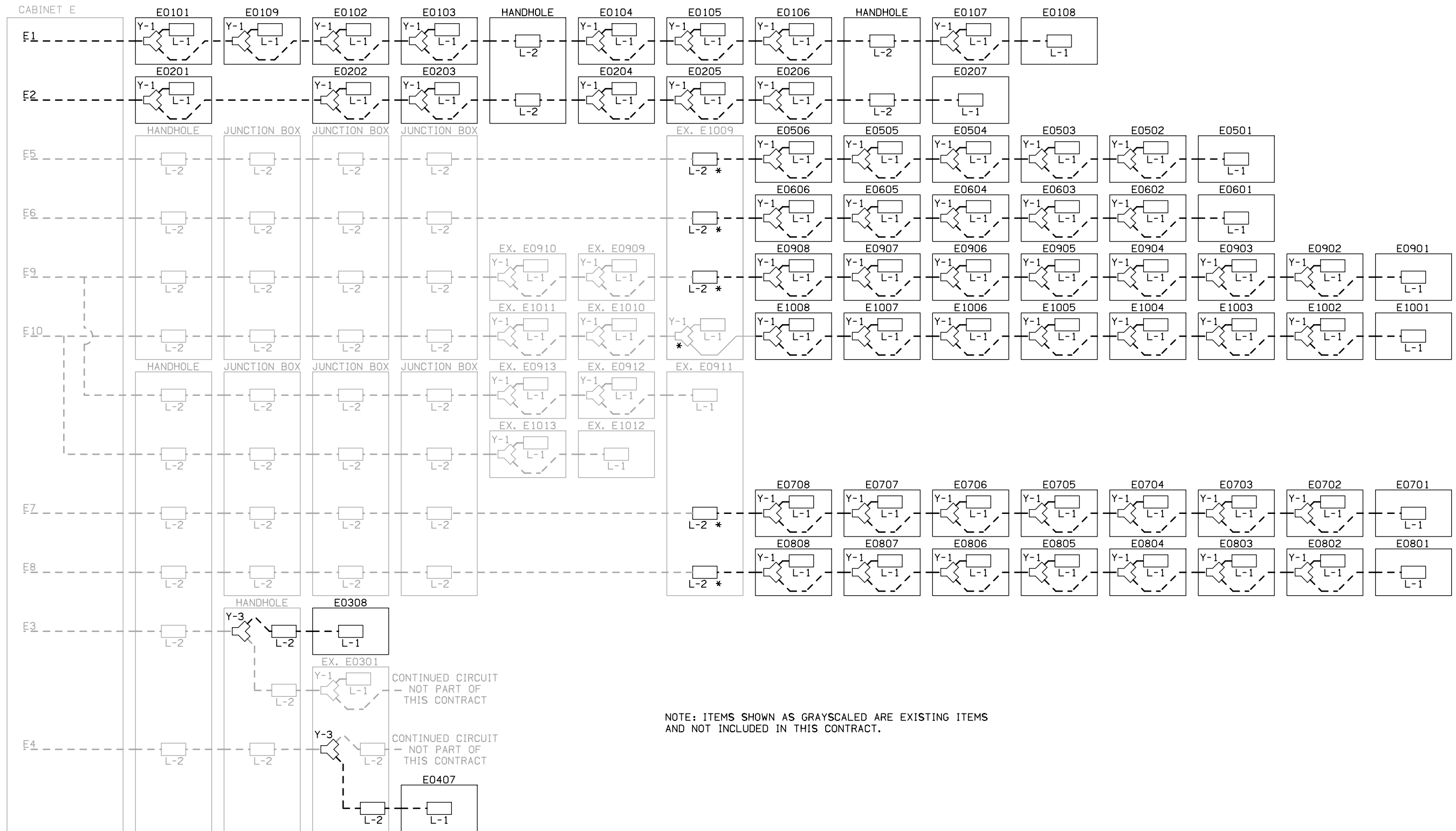
**LEGEND:**

	PROPOSED	EXISTING
LIGHTING CIRCUIT	—	—
HANDHOLE	■	□
CONTROL STATION	⊠	⊠
ROADWAY LIGHT ASSEMBLY PARAPET MOUNT	●	○
ROADWAY LIGHT ASSEMBLY GROUND MOUNT	●	○
TWIN ROADWAY LIGHT ASSEMBLY MEDIAN MOUNT	●	○
COMBINATION POLE LUMINAIRE	● ↑↑	○ ↑↑

For Estimate of Lighting Quantities  
Refer to Sheets P.1-P.2



**ML LIGHTING PLAN**

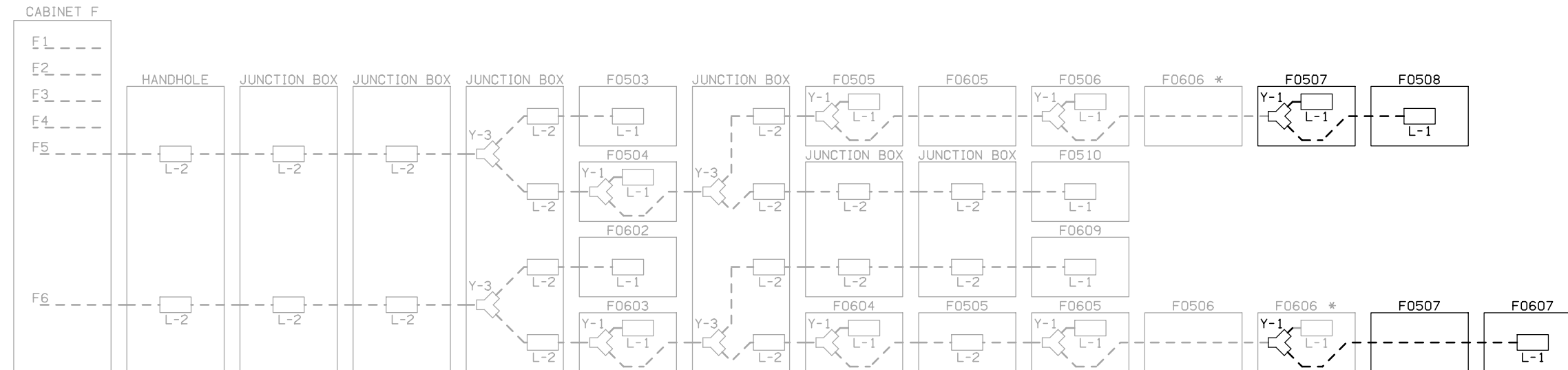


NOTE: ITEMS SHOWN AS GRAYSCALED ARE EXISTING ITEMS AND NOT INCLUDED IN THIS CONTRACT.

CABINET E WIRING DETAIL - 200 AMP MAIN

\* SEE PLAN NOTE 7

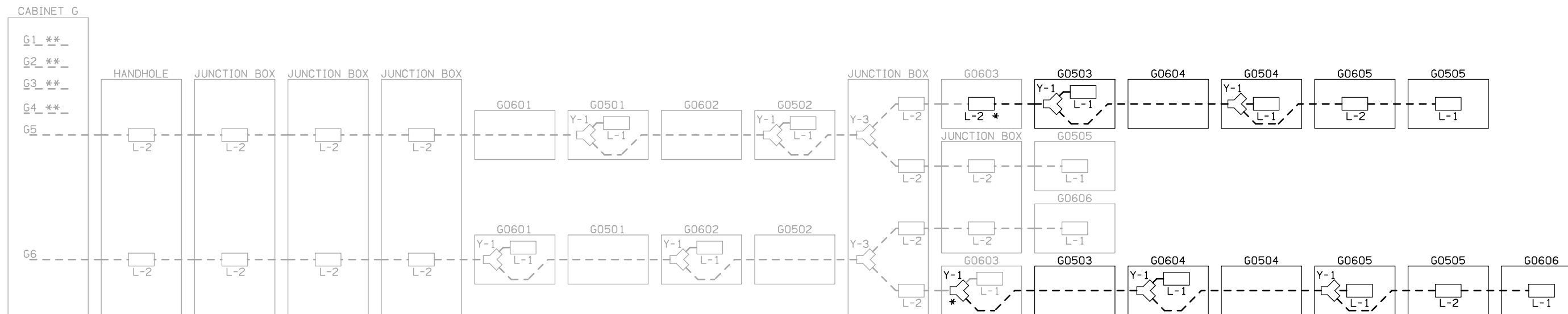
LIGHTING DETAILS



NOTE: ITEMS SHOWN AS GRAYSCALED ARE EXISTING ITEMS AND NOT INCLUDED IN THIS CONTRACT.

CABINET F WIRING DETAIL - 200 AMP MAIN

\* SEE PLAN NOTE 8



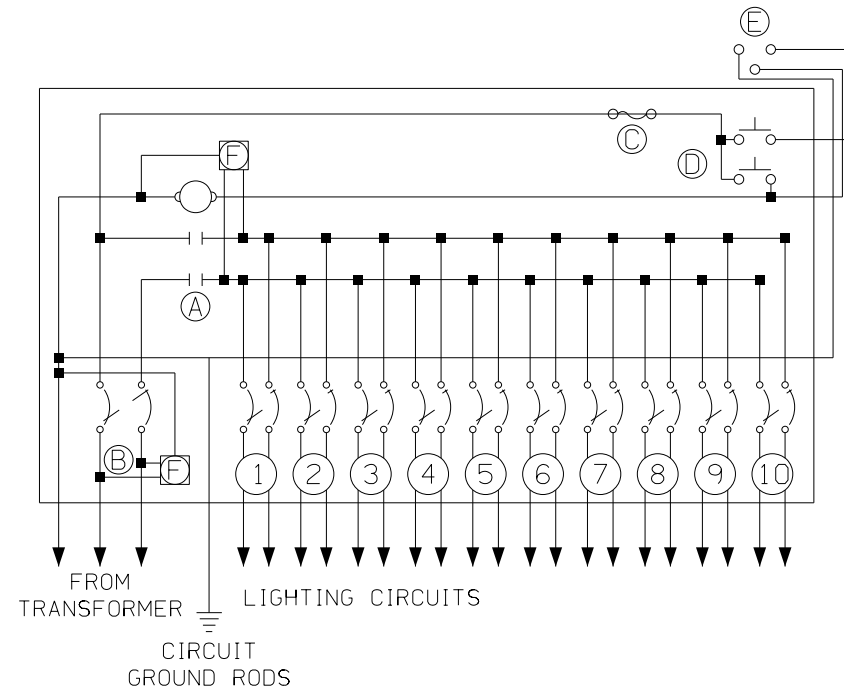
NOTE: ITEMS SHOWN AS GRAYSCALED ARE EXISTING ITEMS AND NOT INCLUDED IN THIS CONTRACT.

CABINET G WIRING DETAIL - 200 AMP MAIN

\* SEE PLAN NOTE 7

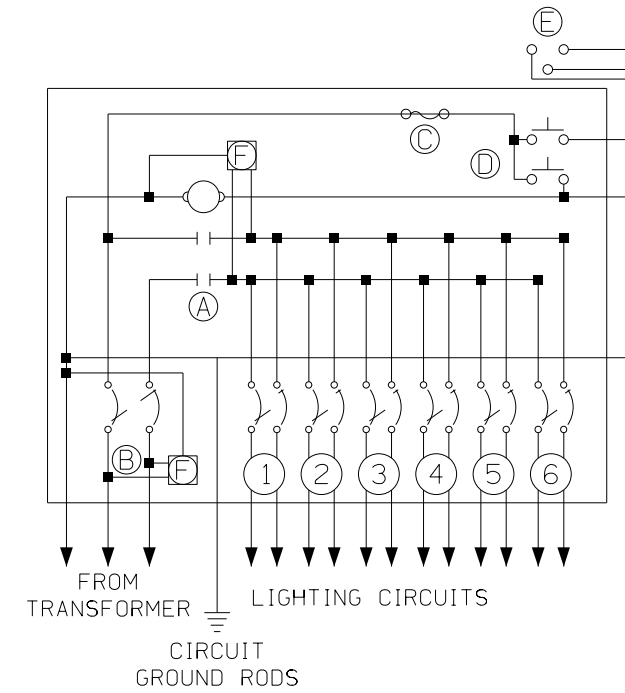
\*\* CIRCUIT NOT INCLUDED IN THIS CONTRACT

LIGHTING  
DETAILS



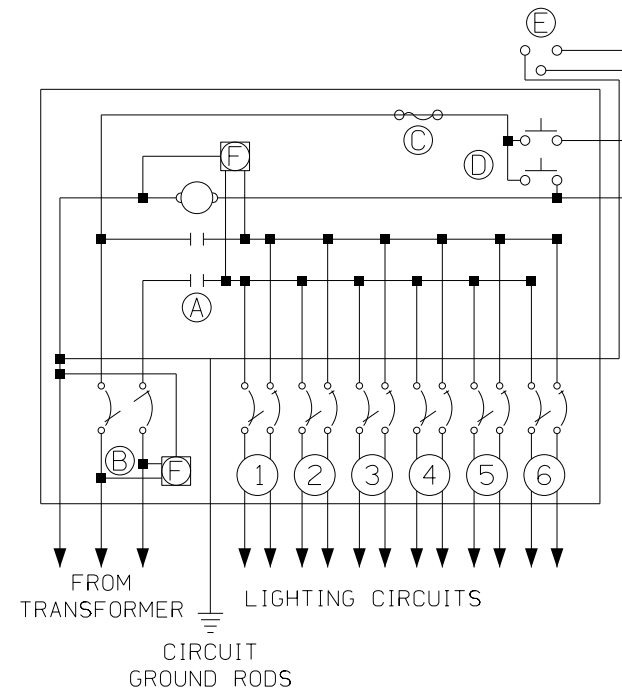
- A. CONTACTOR (2P.)
- B. LINE BREAKER (2P.) - 200 AMP
- C. CONTROL FUSE
- D. TEST SWITCH
- E. PHOTOCELL
- F. SURGE SUPPRESSOR
- 1 THRU 10. BRANCH CIRCUIT BREAKERS (2P.)
- 1. ROADWAY LIGHTS US-67 RAMP A
- 2. ROADWAY LIGHTS US-67 RAMP A
- 3. ROADWAY LIGHTS US-67 RAMP D
- 4. ROADWAY LIGHTS US-67 RAMP D
- 5. ROADWAY LIGHTS I-74 MAINLINE
- 6. ROADWAY LIGHTS I-74 MAINLINE
- 7. ROADWAY LIGHTS I-74 MAINLINE
- 8. ROADWAY LIGHTS I-74 MAINLINE
- 9. ROADWAY LIGHTS I-74 MAINLINE
- 10. ROADWAY LIGHTS I-74 MAINLINE

EXISTING CIRCUIT E SCHEMATIC DIAGRAM



- A. CONTACTOR (2P.)
- B. LINE BREAKER (2P.) - 200 AMP
- C. CONTROL FUSE
- D. TEST SWITCH
- E. PHOTOCELL
- F. SURGE SUPPRESSOR
- 1 THRU 6. BRANCH CIRCUIT BREAKERS (2P.)
- 1. ROADWAY LIGHTS I-74 MAINLINE (WB)
- 2. ROADWAY LIGHTS I-74 MAINLINE (WB)
- 3. ROADWAY LIGHTS I-74 MAINLINE (WB)
- 4. ROADWAY LIGHTS I-74 MAINLINE (WB)
- 5. ROADWAY LIGHTS US-67 RAMP B
- 6. ROADWAY LIGHTS US-67 RAMP B

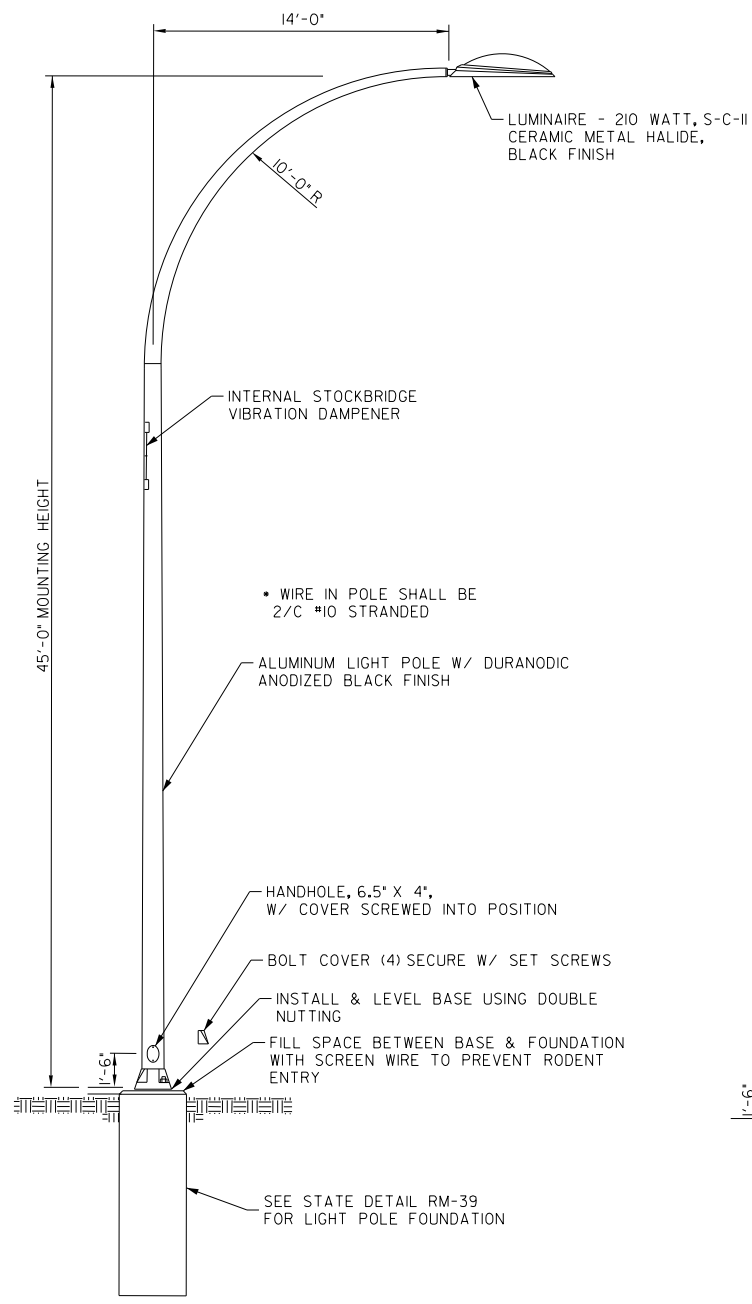
EXISTING CIRCUIT F SCHEMATIC DIAGRAM



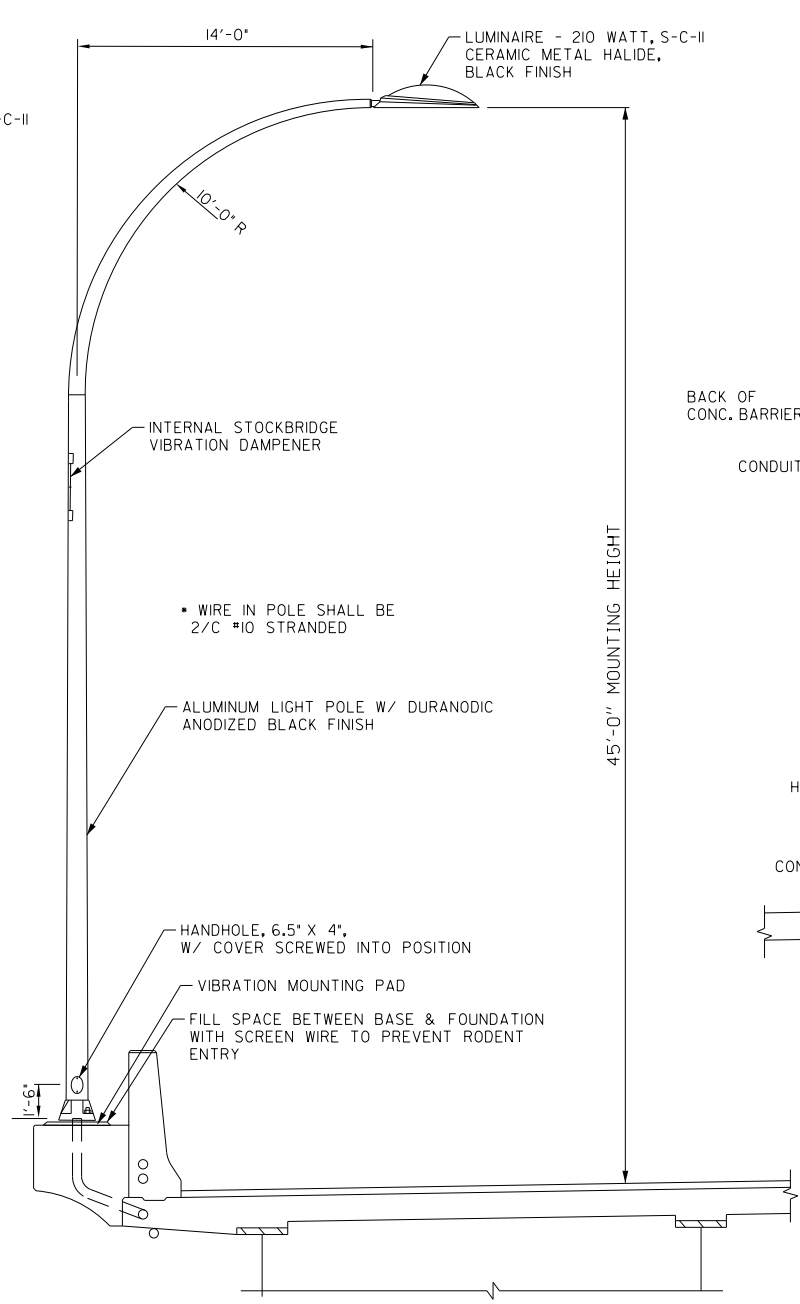
- A. CONTACTOR (2P.)
- B. LINE BREAKER (2P.) - 200 AMP
- C. CONTROL FUSE
- D. TEST SWITCH
- E. PHOTOCELL
- F. SURGE SUPPRESSOR
- 1 THRU 6. BRANCH CIRCUIT BREAKERS (2P.)
- 1. ROADWAY LIGHTS I-74 MAINLINE (EB)
- 2. ROADWAY LIGHTS I-74 MAINLINE (EB)
- 3. ROADWAY LIGHTS I-74 MAINLINE (EB)
- 4. ROADWAY LIGHTS I-74 MAINLINE (EB)
- 5. ROADWAY LIGHTS US-67 RAMP C
- 6. ROADWAY LIGHTS US-67 RAMP C

EXISTING CIRCUIT G SCHEMATIC DIAGRAM

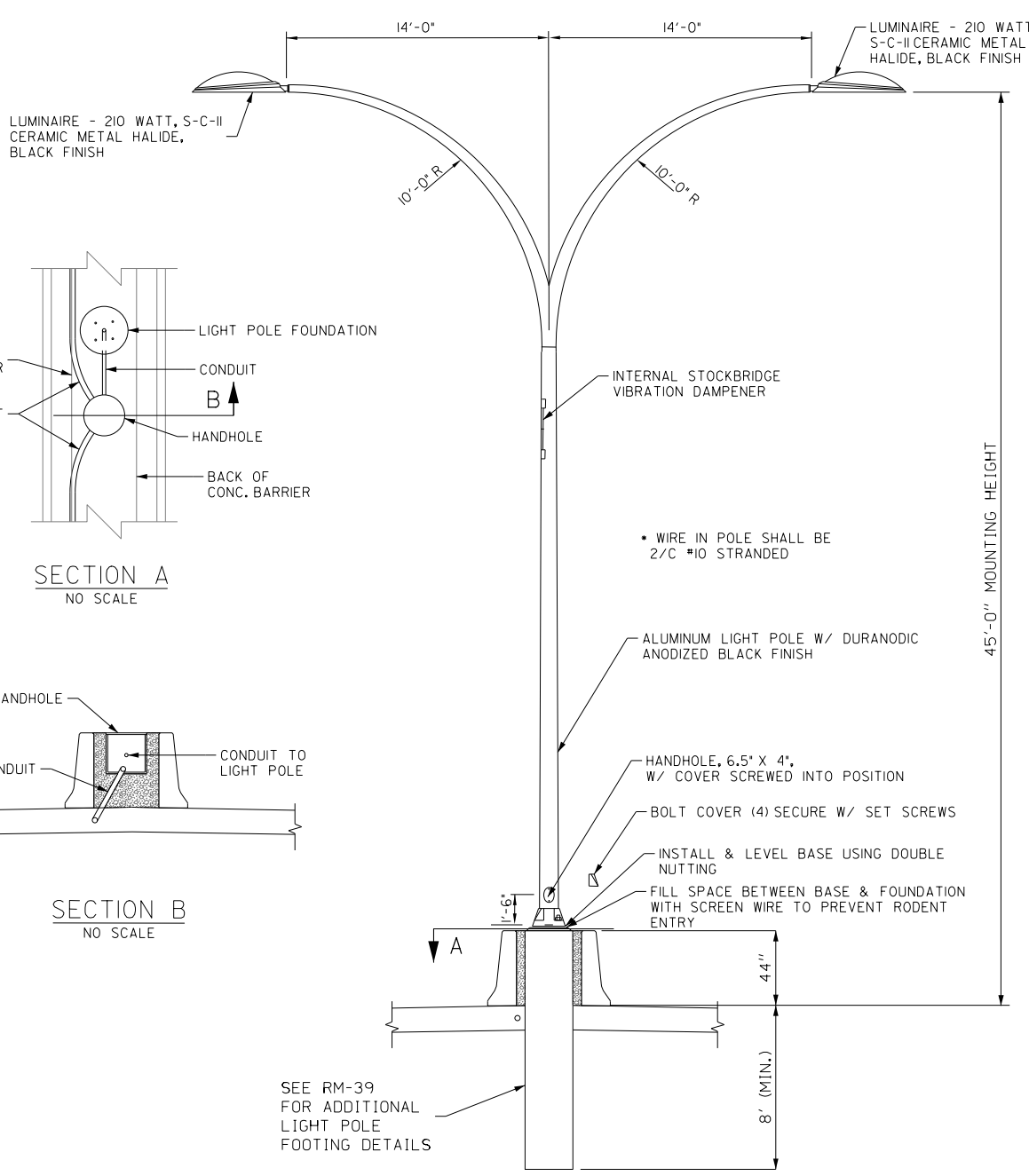




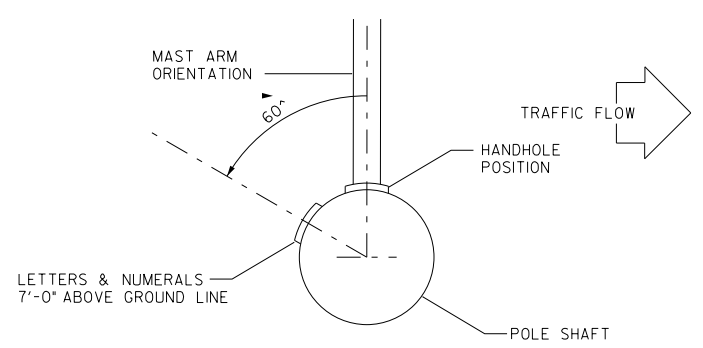
DAVIT POLE - STATE RAMP POLE  
NO SCALE



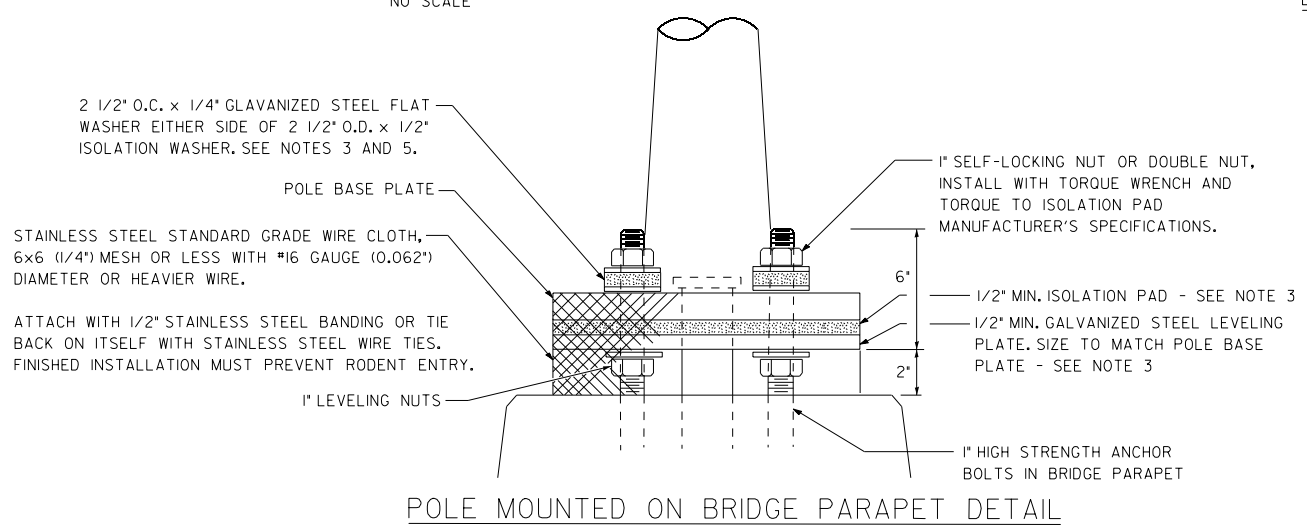
DAVIT POLE AT BRIDGE / RETAINING WALL  
NO SCALE



DAVIT POLE AT CONCRETE MEDIAN BARRIER  
NO SCALE



POSITION OF HANDHOLE AND POLE NUMBER  
FOR SINGLE MAST ARM POLES

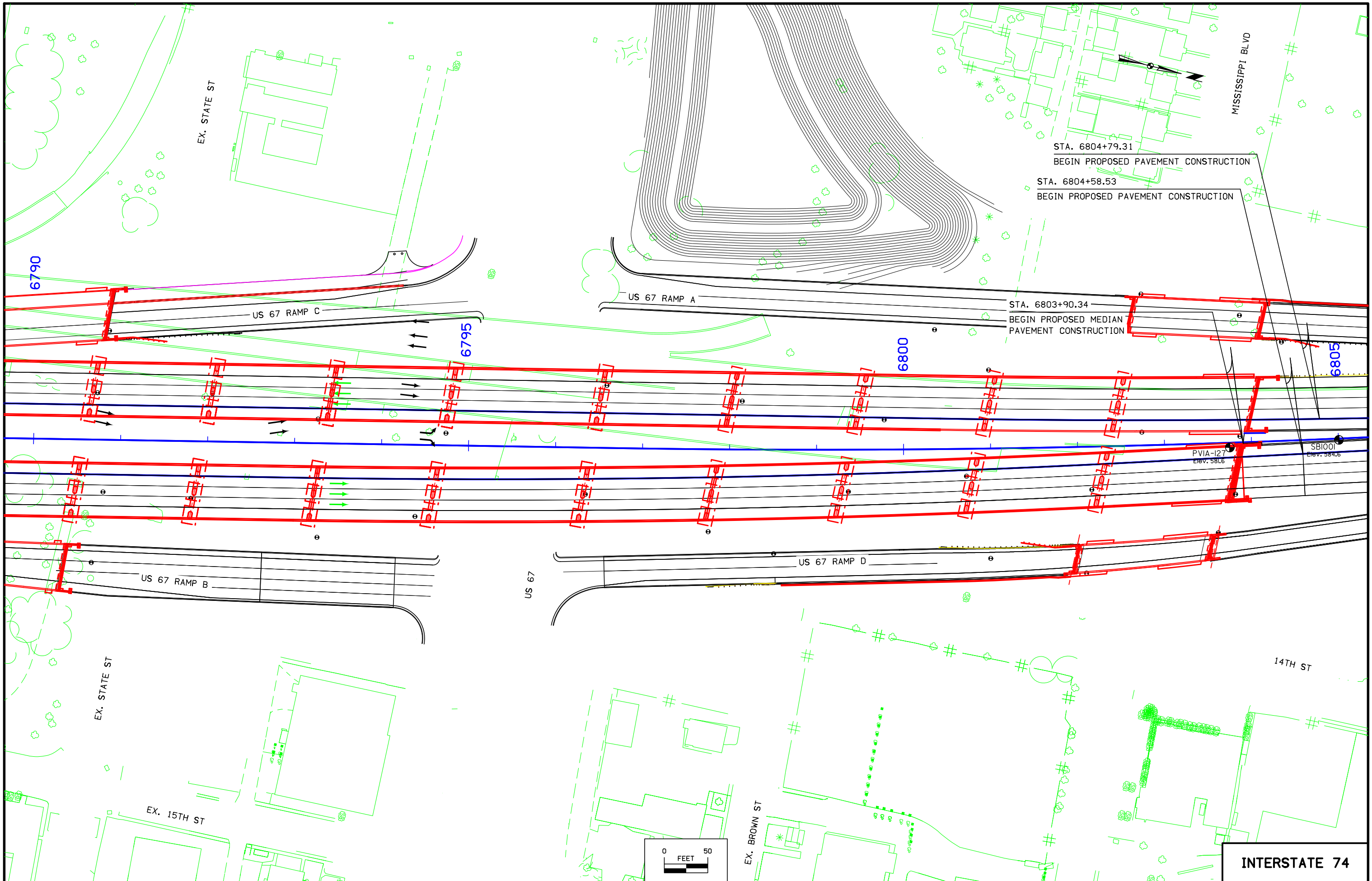


POLE MOUNTED ON BRIDGE PARAPET DETAIL

GENERAL NOTES

1. LOCATE POLES OVER BRIDGE PIERS WHERE POSSIBLE.
2. THE VIBRATION ISOLATION PAD AND LEVELING PLATE SHALL MATCH THE FOOTPRINT OF THE POLE BASE PLATE.
3. THICKNESS OF ISOLATION PAD AND WASHERS SHALL BE ACCORDING TO THE ISOLATION PAD MANUFACTURER'S RECOMMENDATIONS BASED UPON POLE HEIGHT AND LOADING.
4. SHOULD THE LENGTH OF THE EXPOSED ANCHOR BOLTS BE TOO SHORT ON AN EXISTING BRIDGE TO MOUNT THE POLES AS SHOWN, THEN THE LEVELING PLATE SHALL BE MOUNTED DIRECTLY ON THE CONCRETE AND LEVELLED WITH STAINLESS STEEL WASHERS. REMOVE CONCRETE AS DIRECTED BY THE ENGINEER TO FULLY THREAT THE TOP NUT.
5. THE DIAMETER OF THE FLAT WASHER ON EITHER SIDE OF THE ISOLATION WASHER SHALL BE AT LEAST THE SAME AS THE DIAMETER OF THE ISOLATION WASHER.

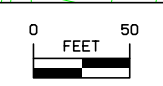
LIGHTING  
DETAILS



STA. 6804+79.31  
 BEGIN PROPOSED PAVEMENT CONSTRUCTION  
 STA. 6804+58.53  
 BEGIN PROPOSED PAVEMENT CONSTRUCTION

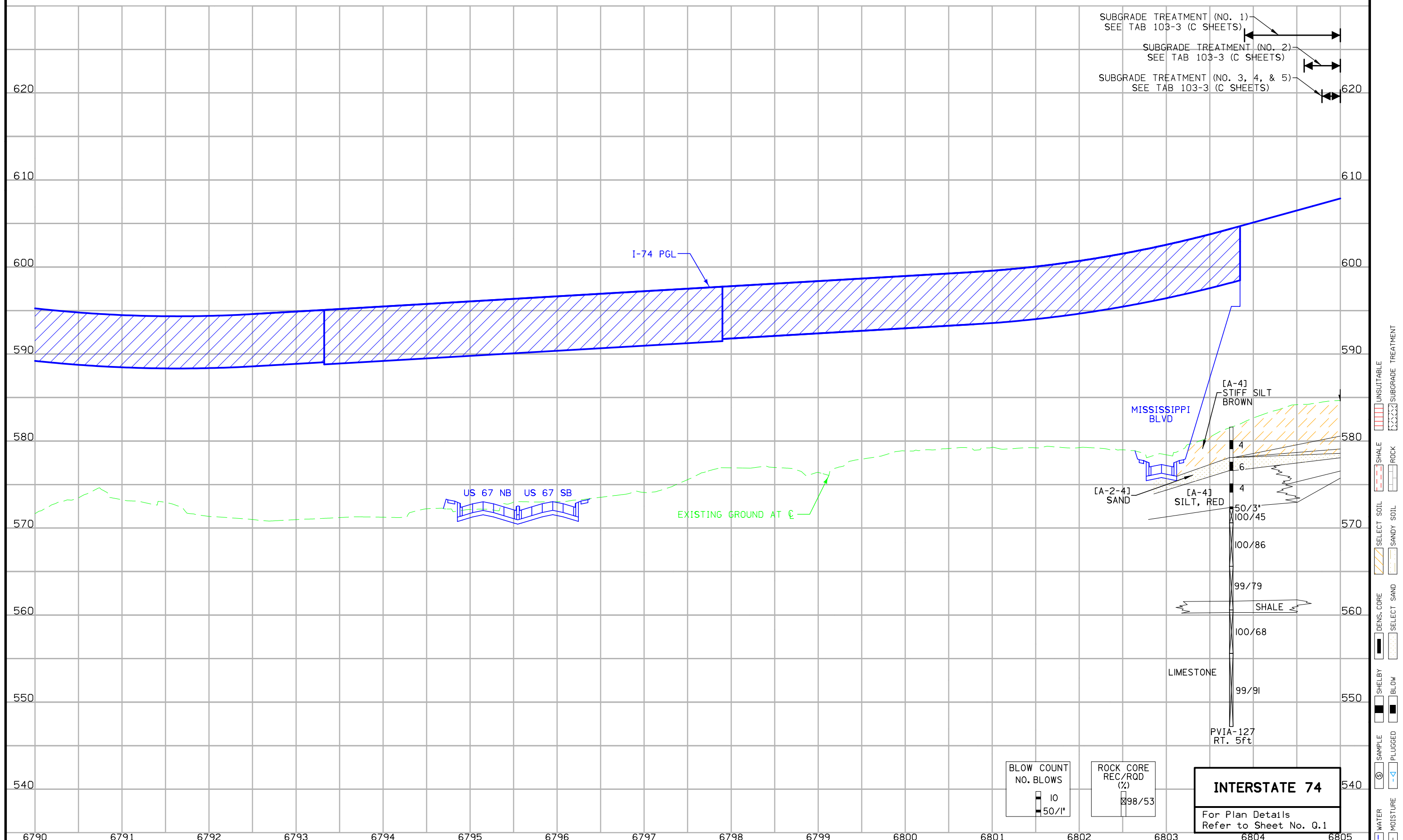
STA. 6803+90.34  
 BEGIN PROPOSED MEDIAN  
 PAVEMENT CONSTRUCTION

PVIA-127  
 Elev. 581.6  
 SBI001  
 Elev. 584.6

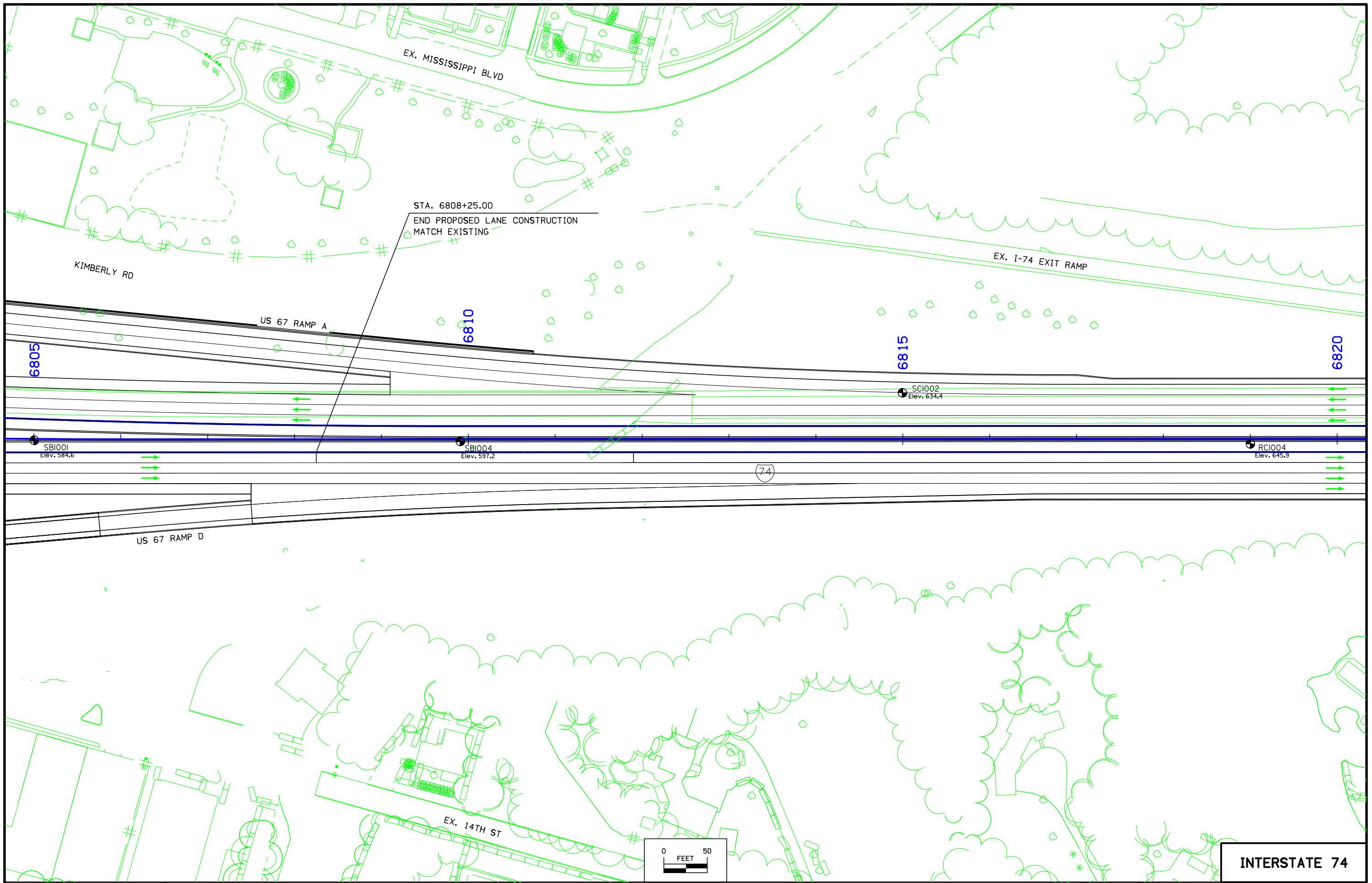


**INTERSTATE 74**

CUT MOISTURE  
 CUT DENSITY (lb/cu ft)  
 PLASTIC LIMIT

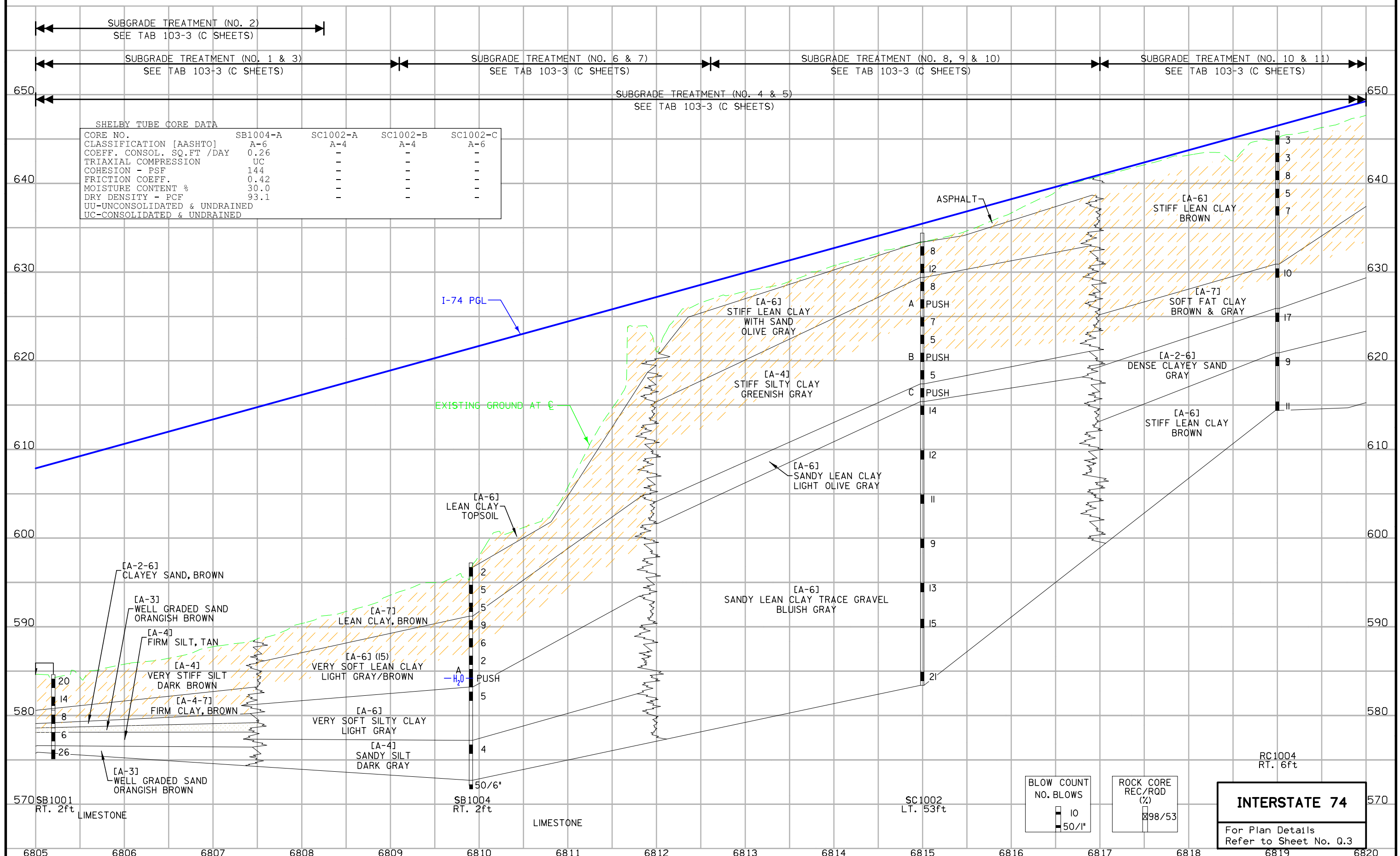


**INTERSTATE 74**  
 For Plan Details  
 Refer to Sheet No. Q.1

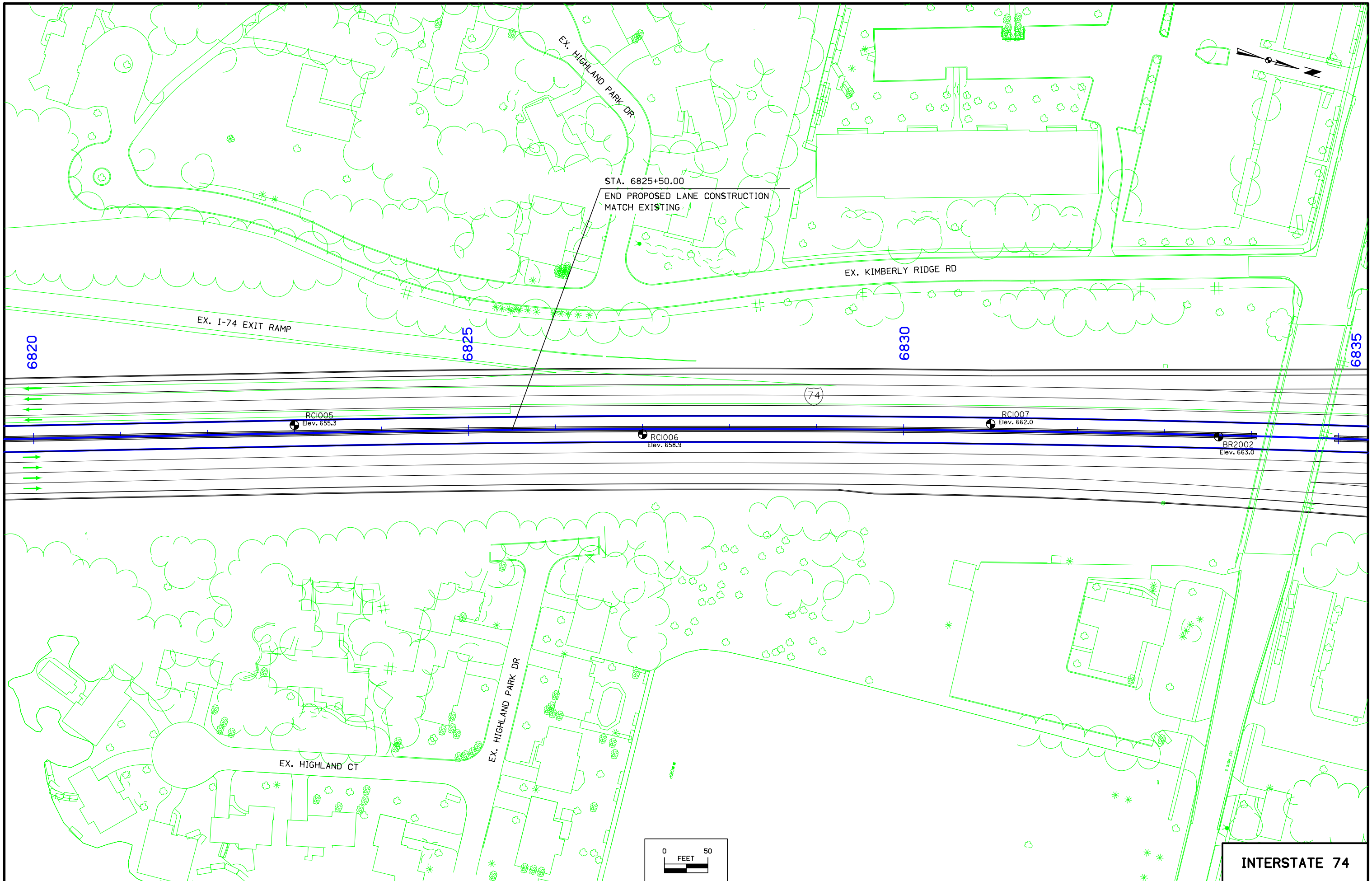


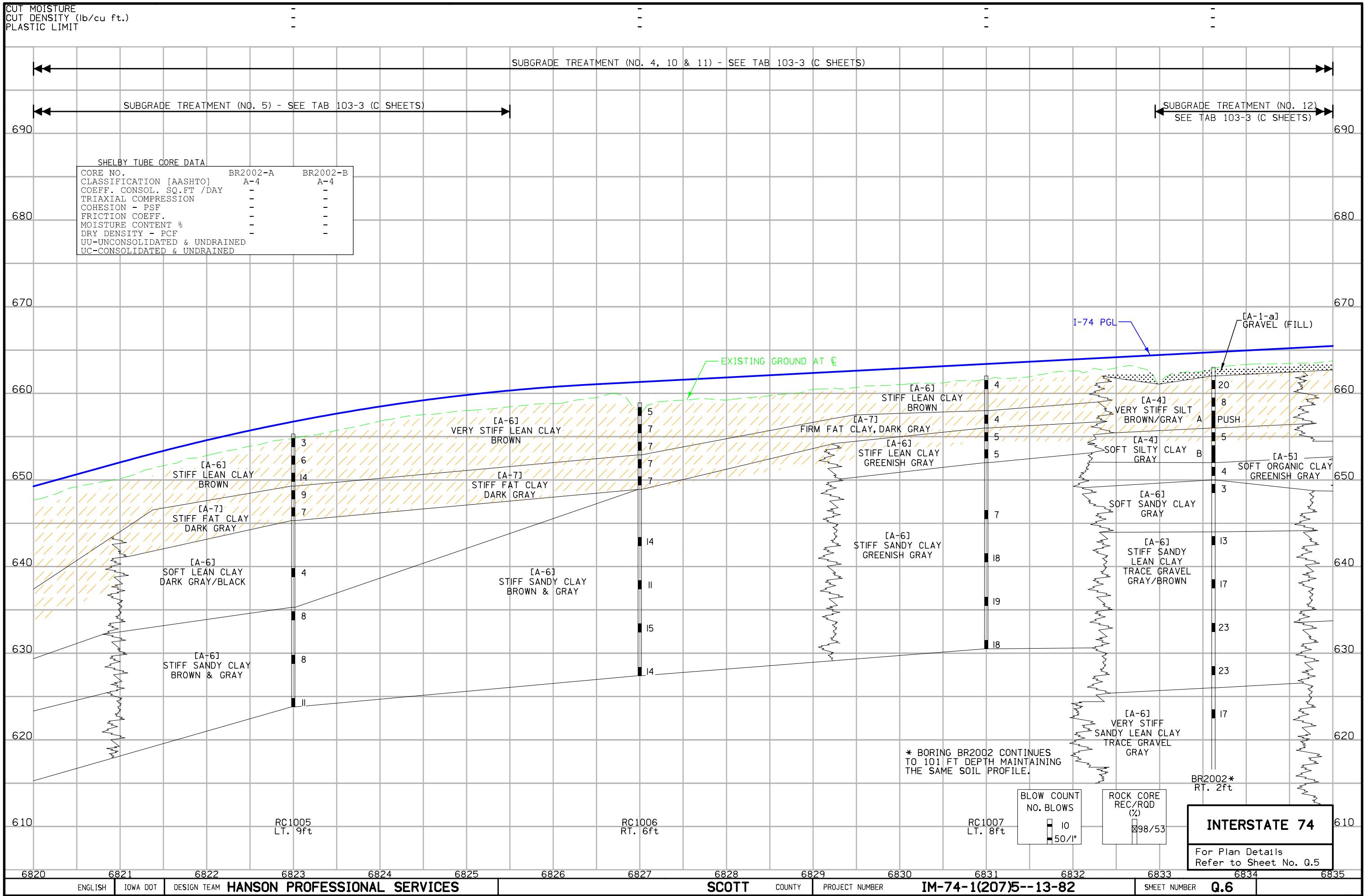
**INTERSTATE 74**

CUT MOISTURE  
CUT DENSITY (lb/cu ft)  
PLASTIC LIMIT



**INTERSTATE 74**  
For Plan Details  
Refer to Sheet No. Q.3





CUT MOISTURE  
 CUT DENSITY (lb/cu ft.)  
 PLASTIC LIMIT

SHELBY TUBE CORE DATA

CORE NO.	BR2002-A	BR2002-B
CLASSIFICATION [AASHTO]	A-4	A-4
COEFF. CONSOL. SQ.FT /DAY	-	-
TRIAxIAL COMPRESSION	-	-
COHESION - PSF	-	-
FRICTION COEFF.	-	-
MOISTURE CONTENT %	-	-
DRY DENSITY - PCF	-	-
UU-UNCONSOLIDATED & UNDRAINED	-	-
UC-CONSOLIDATED & UNDRAINED	-	-

SUBGRADE TREATMENT (NO. 4, 10 & 11) - SEE TAB 103-3 (C SHEETS)

SUBGRADE TREATMENT (NO. 5) - SEE TAB 103-3 (C SHEETS)

SUBGRADE TREATMENT (NO. 12) - SEE TAB 103-3 (C SHEETS)

I-74 PGL

[A-1-a] GRAVEL (FILL)

EXISTING GROUND AT C

\* BORING BR2002 CONTINUES TO 101 FT DEPTH MAINTAINING THE SAME SOIL PROFILE.

**INTERSTATE 74**  
 For Plan Details Refer to Sheet No. Q.5

BLOW COUNT NO. BLOWS  
 10  
 50/1'

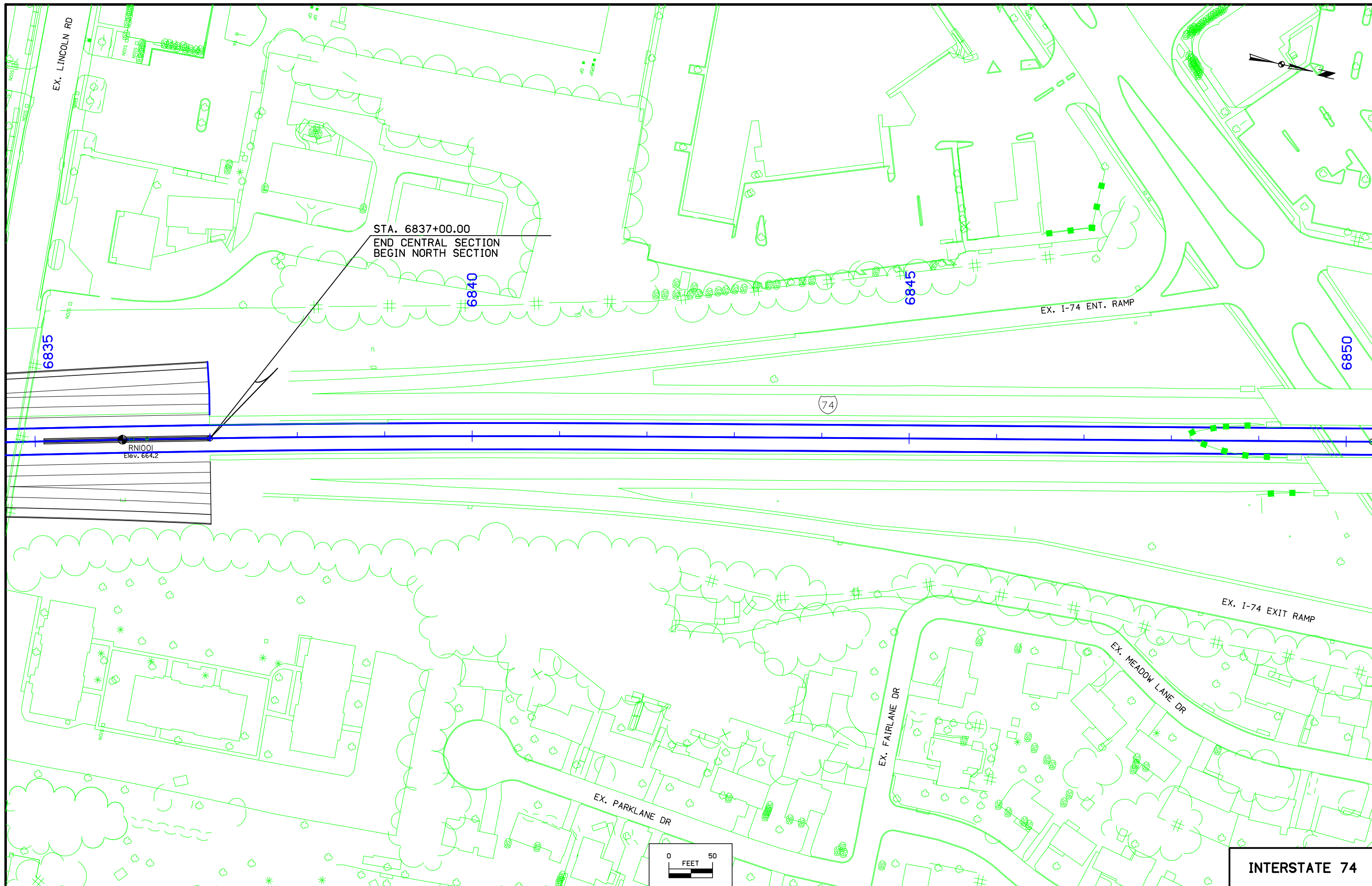
ROCK CORE REC/RQD (%)  
 98/53

RC1005 LT. 9ft

RC1006 RT. 6ft

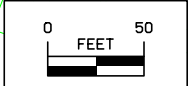
RC1007 LT. 8ft

BR2002\* RT. 2ft



STA. 6837+00.00  
 END CENTRAL SECTION  
 BEGIN NORTH SECTION

RN1001  
 Elev. 664.2

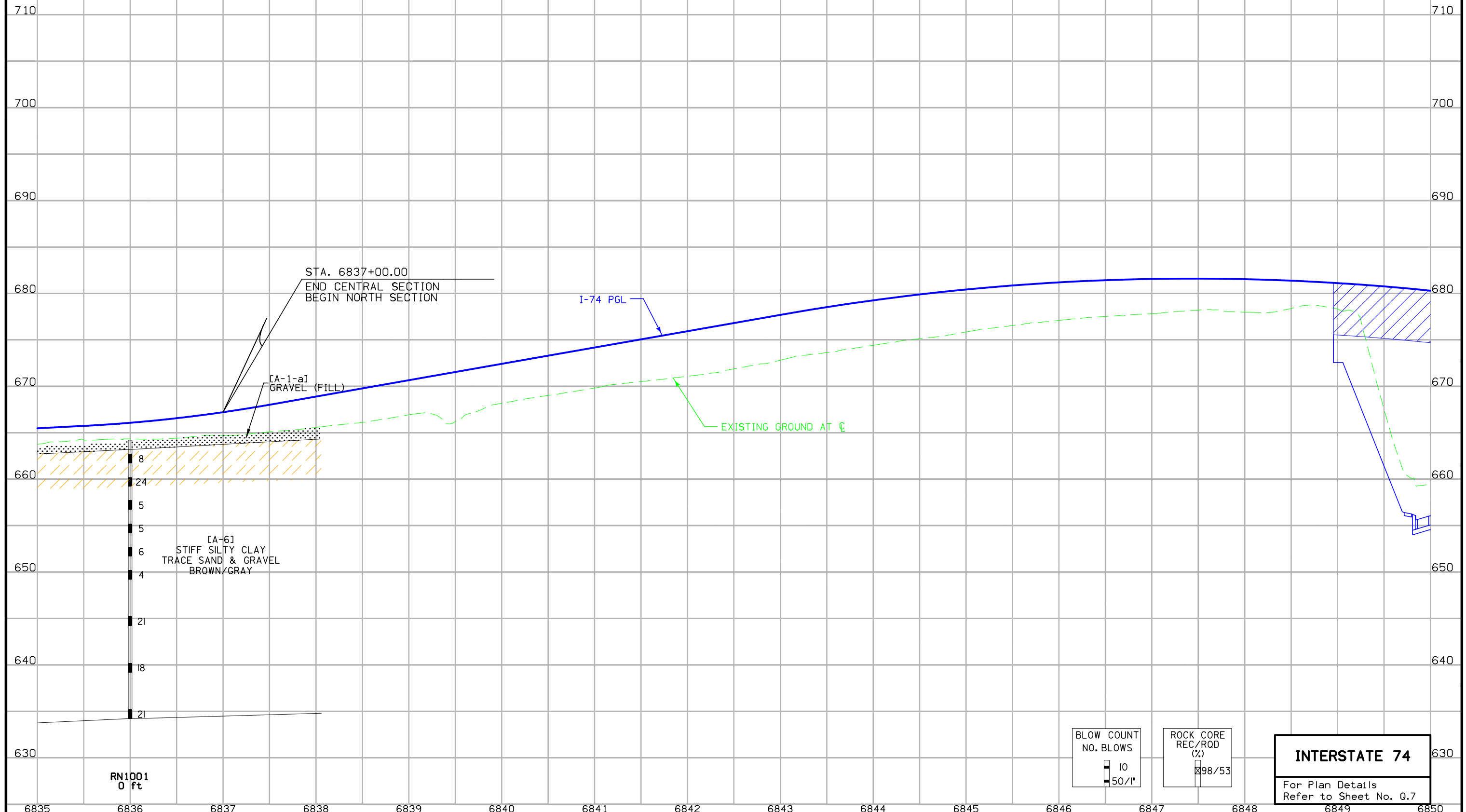


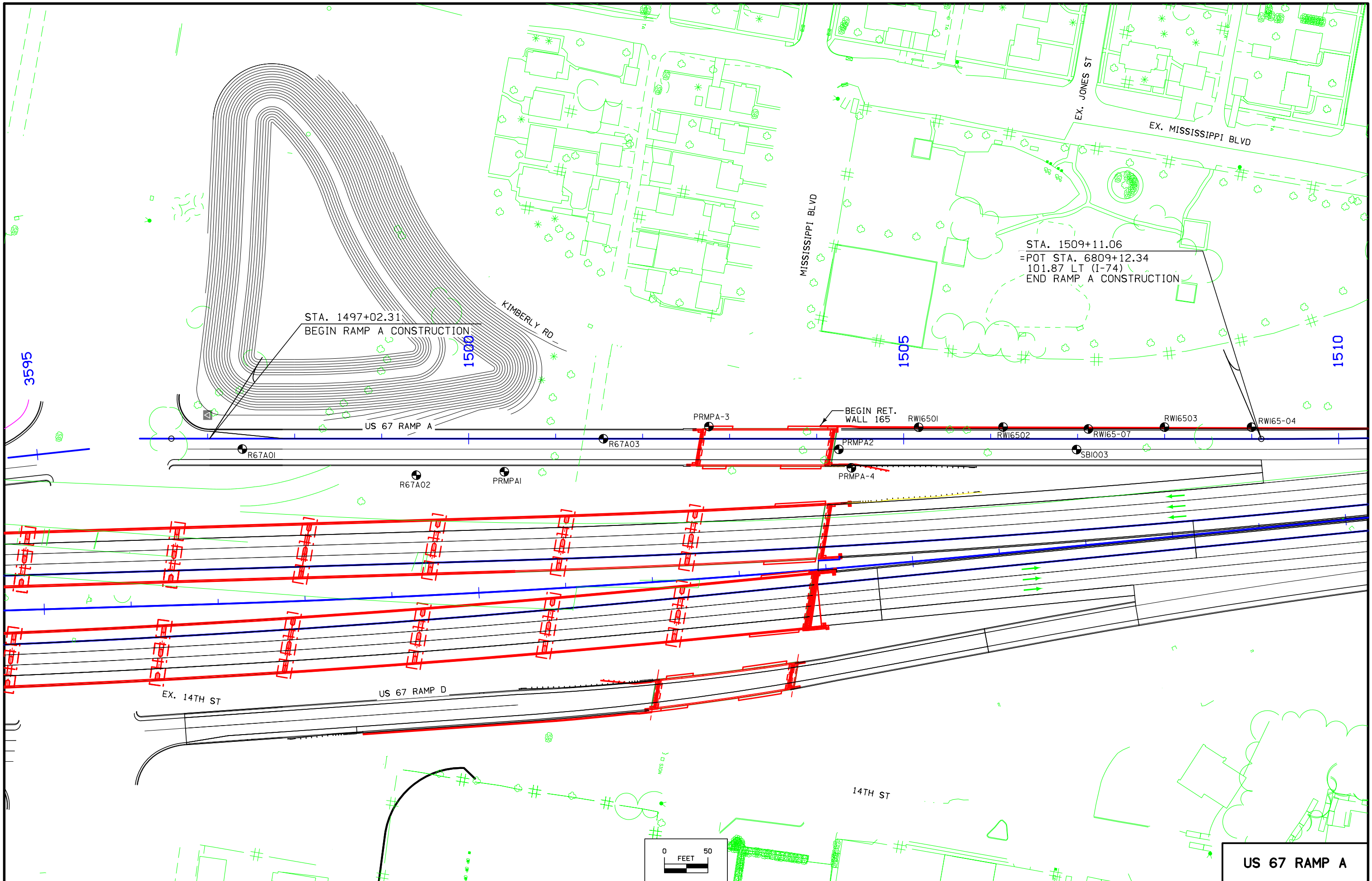
**INTERSTATE 74**



CUT MOISTURE -  
 CUT DENSITY (lb/cu ft.) -  
 PLASTIC LIMIT -

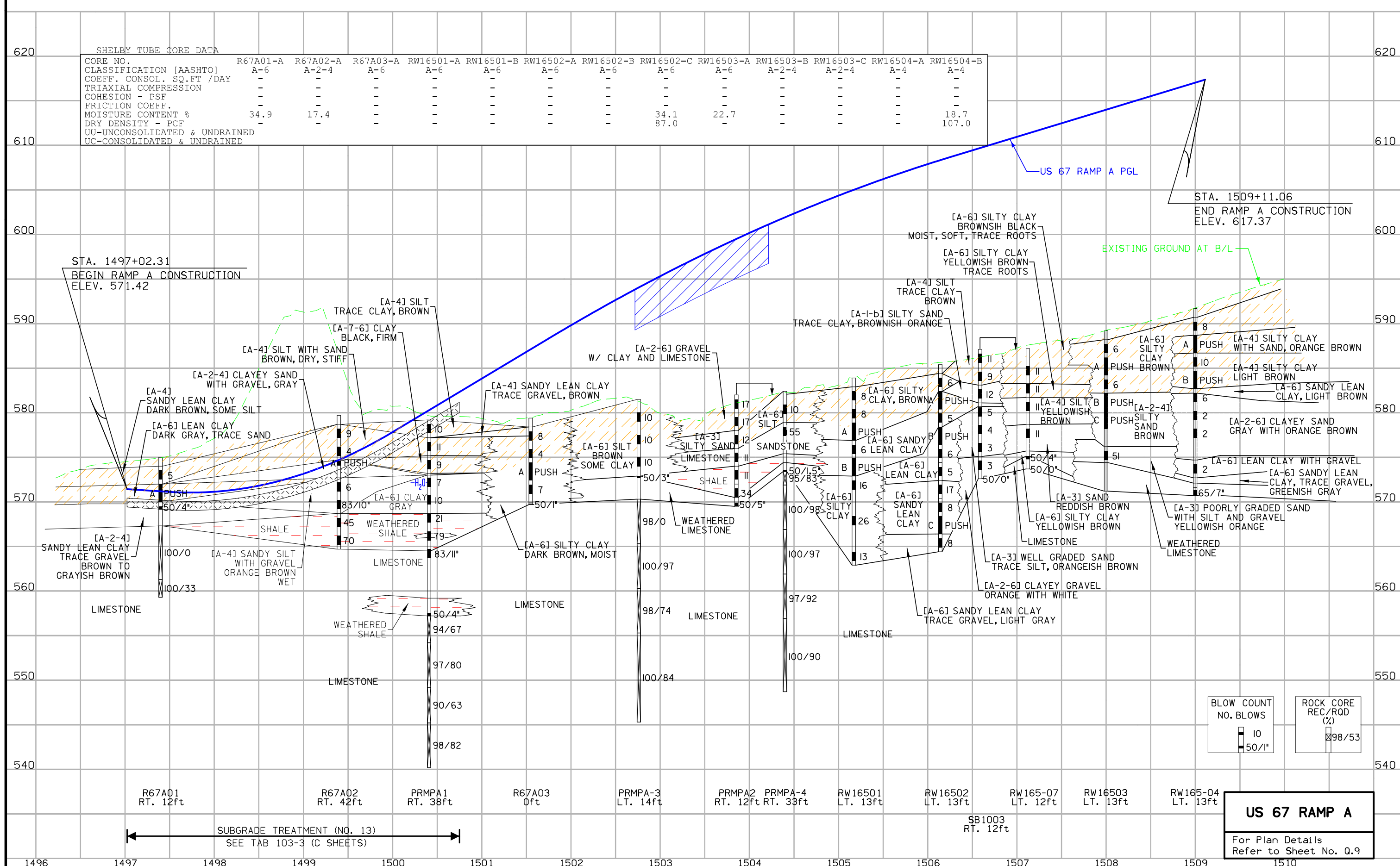
SUBGRADE TREATMENT (NO. 4, 10, 11 & 12)  
 SEE TAB 103-3 (C SHEETS)

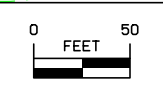
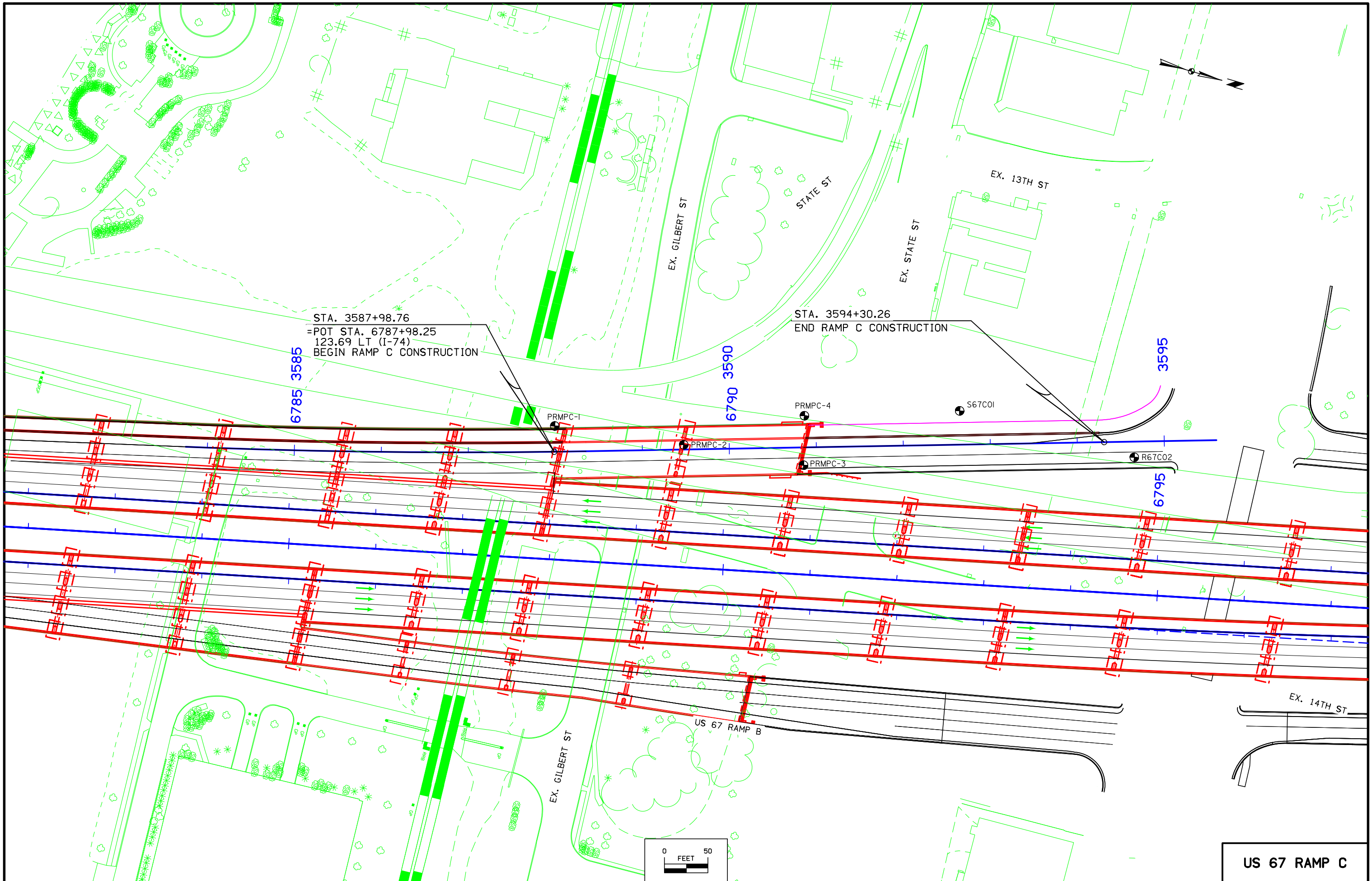




**US 67 RAMP A**

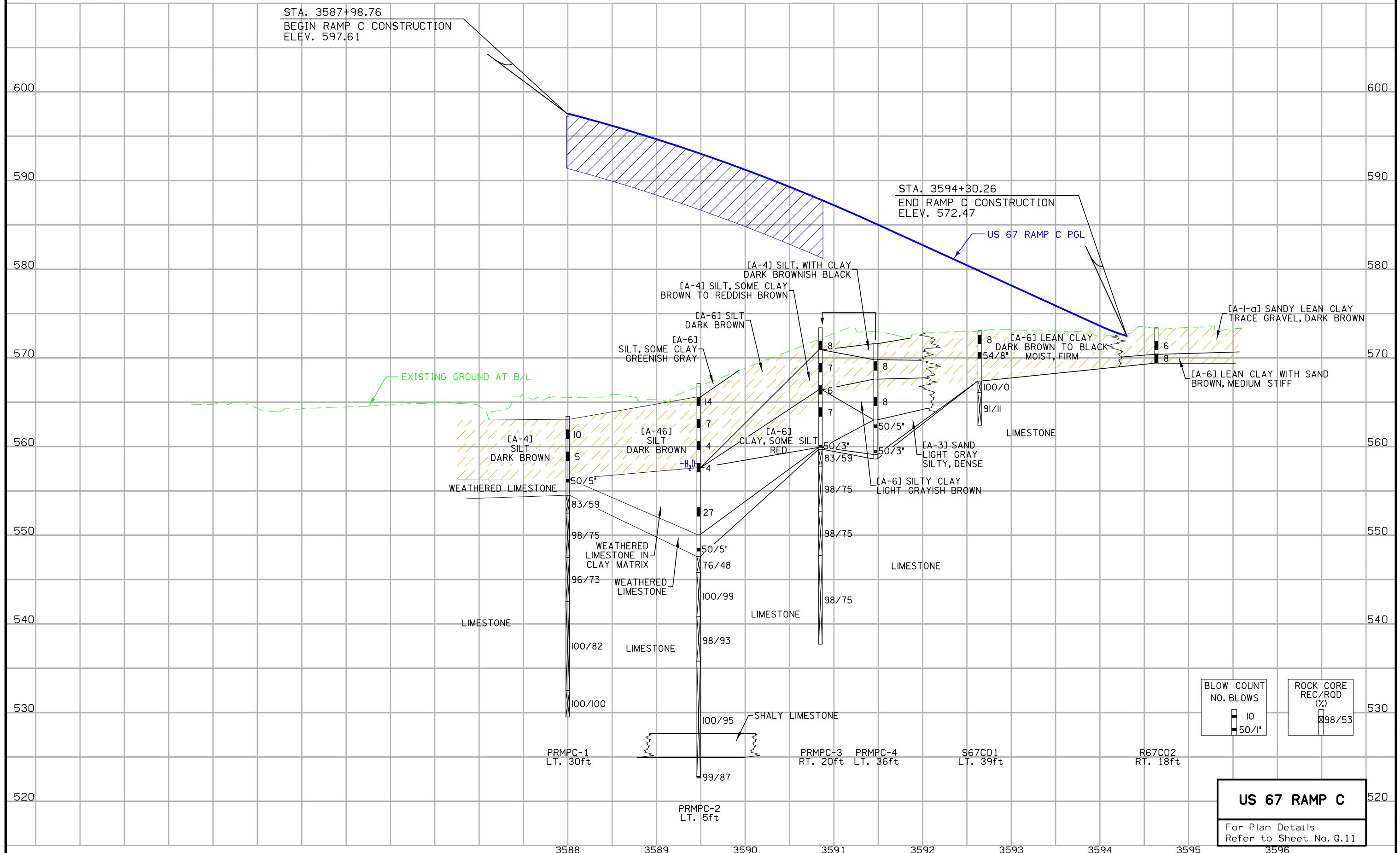
CUT MOISTURE (%) -  
 CUT DENSITY (lb/cu ft) -  
 PLASTIC LIMIT -





**US 67 RAMP C**

CUT MOISTURE  
 CUT DENSITY (lb/cu ft.)  
 PLASTIC LIMIT



STA. 3587+98.76  
 BEGIN RAMP C CONSTRUCTION  
 ELEV. 597.61

STA. 3594+30.26  
 END RAMP C CONSTRUCTION  
 ELEV. 572.47

US 67 RAMP C PGL

EXISTING GROUND AT B/L

BLOW COUNT  
 NO. BLOWS  
 10  
 50/1'

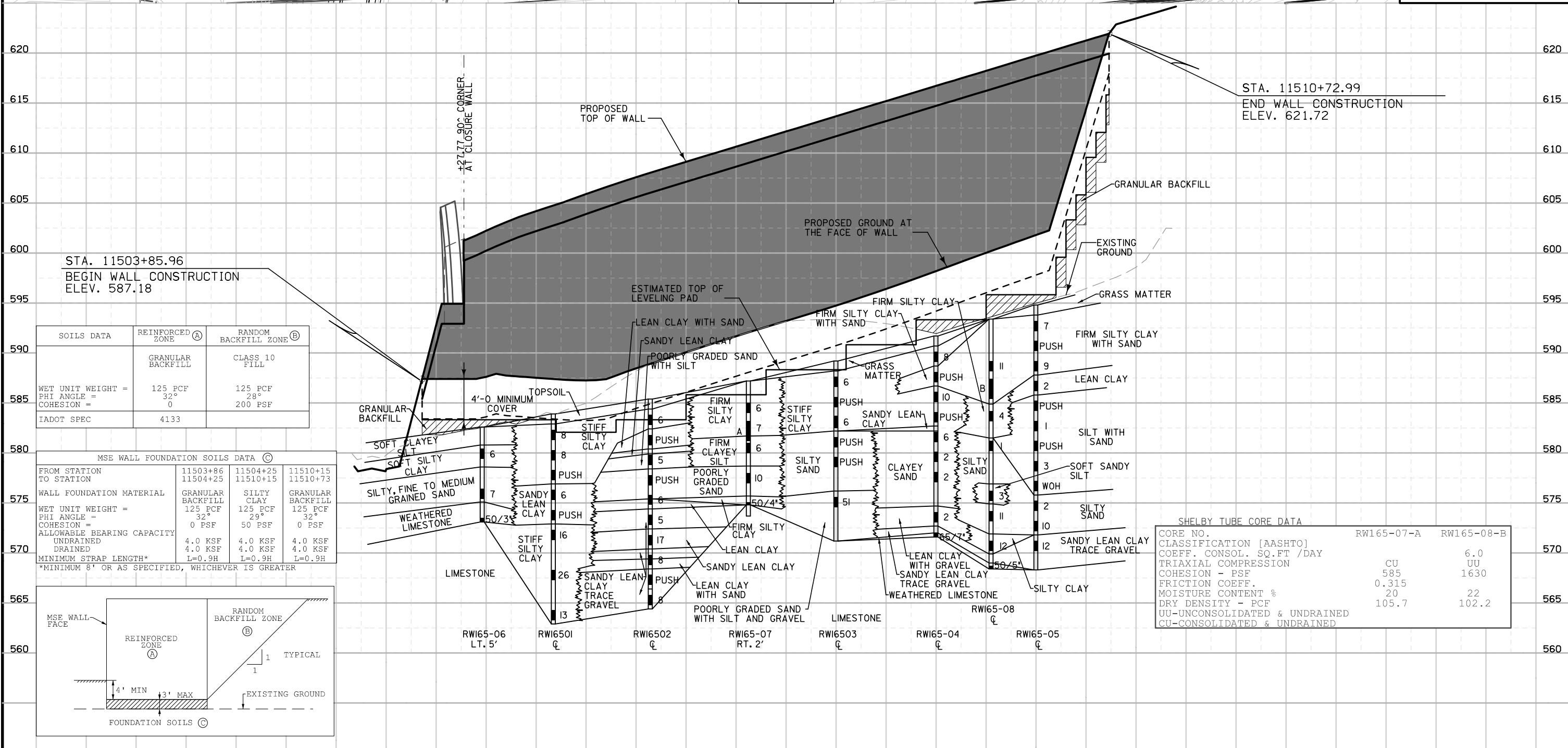
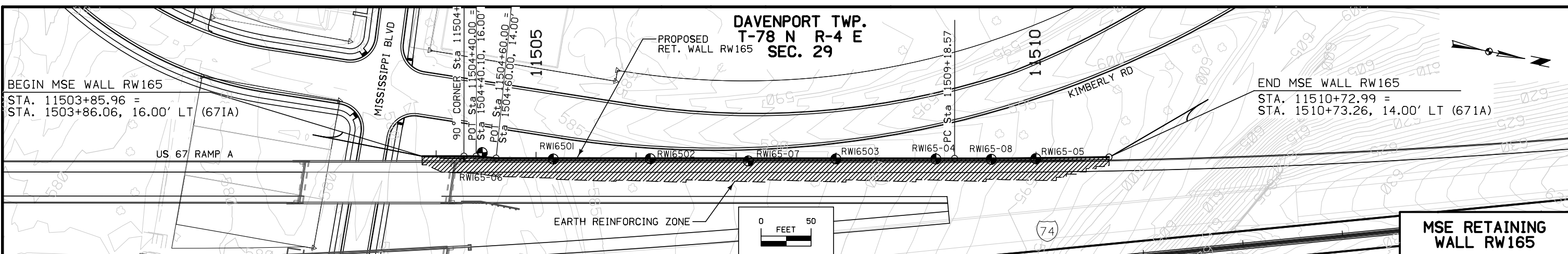
ROCK CORE  
 REC/RQD (%)  
 98/53

**US 67 RAMP C**  
 For Plan Details  
 Refer to Sheet No. Q.11

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29

BEGIN MSE WALL RW165  
STA. 11503+85.96 =  
STA. 1503+86.06, 16.00' LT (671A)

END MSE WALL RW165  
STA. 11510+72.99 =  
STA. 1510+73.26, 14.00' LT (671A)

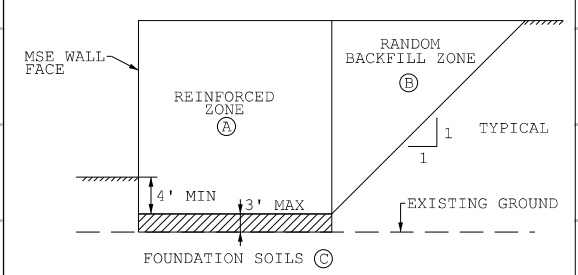


SOILS DATA	REINFORCED ZONE (A)	RANDOM BACKFILL ZONE (B)
WET UNIT WEIGHT =	125 PCF	125 PCF
PHI ANGLE =	32°	28°
COHESION =	0	200 PSF
IADOT SPEC	4133	

MSE WALL FOUNDATION SOILS DATA (C)			
FROM STATION TO STATION	11503+86 TO 11504+25	11504+25 TO 11510+15	11510+15 TO 11510+73
WALL FOUNDATION MATERIAL	GRANULAR BACKFILL	SILTY CLAY	GRANULAR BACKFILL
WET UNIT WEIGHT =	125 PCF	125 PCF	125 PCF
PHI ANGLE =	32°	29°	32°
COHESION =	0 PSF	50 PSF	0 PSF
ALLOWABLE BEARING CAPACITY UNDRAINED	4.0 KSF	4.0 KSF	4.0 KSF
DRAINED	4.0 KSF	4.0 KSF	4.0 KSF
MINIMUM STRAP LENGTH*	L=0.9H	L=0.9H	L=0.9H

\*MINIMUM 8' OR AS SPECIFIED, WHICHEVER IS GREATER

SHELBY TUBE CORE DATA		
CORE NO.	RW165-07-A	RW165-08-B
CLASSIFICATION [AASHTO]		6.0
COEFF. CONSOL. SQ.FT / DAY	CU	UU
TRIAxIAL COMPRESSION	585	1630
COHESION - PSF	0.315	
FRICTION COEFF.	20	22
MOISTURE CONTENT %	105.7	102.2
DRY DENSITY - PCF		
UU-UNCONSOLIDATED & UNDRAINED		
CU-CONSOLIDATED & UNDRAINED		

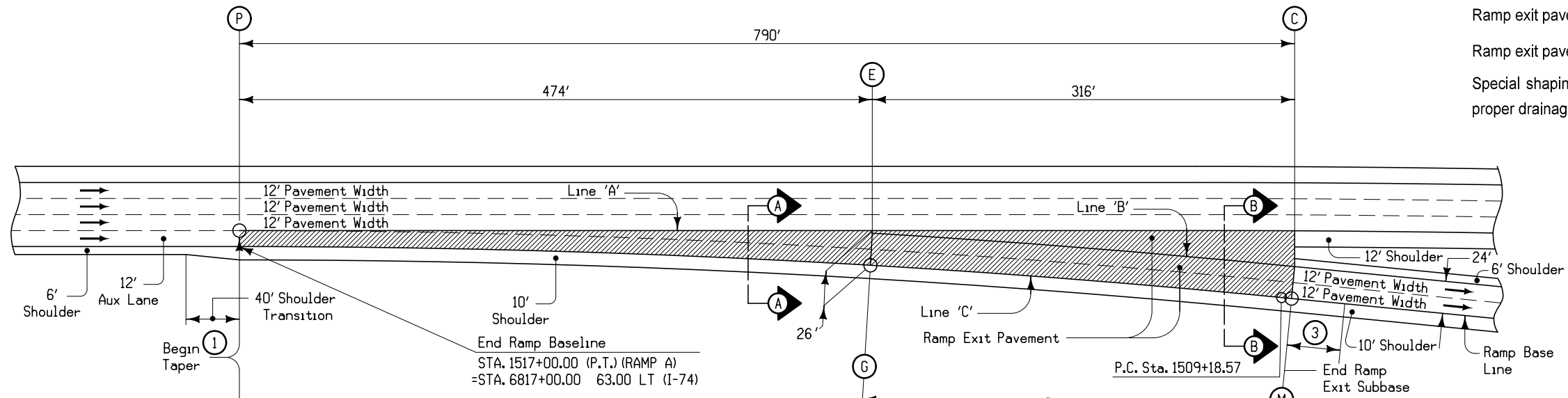




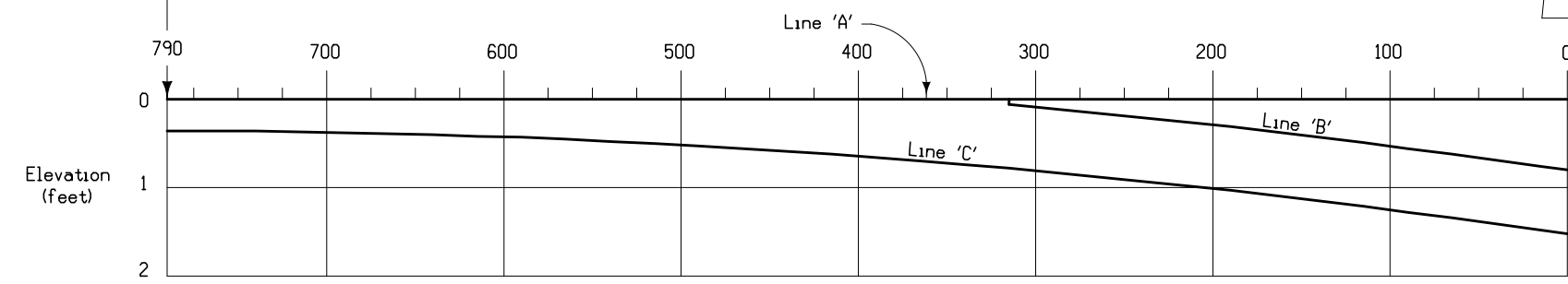




Ramp exit pavement shall be the same thickness as mainline pavement.  
 Ramp exit pavement shown by shaded area is 2184 square yards.  
 Special shaping of area between lines A and B may be required to assure proper drainage.



PLAN VIEW



NOTE: The algebraic difference between profile grade for Ramp Base Line at (M) and relative profile grade of Mainline at (C) is 0.28%.

PROFILE

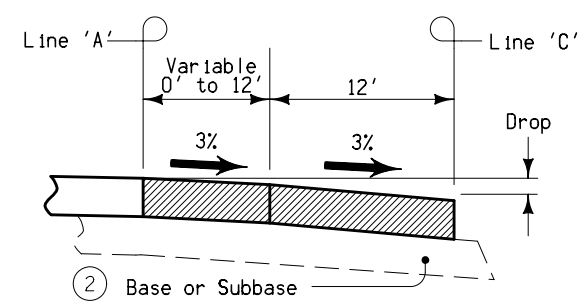
Taper Curve Data	
Δ	= 5°35'47.78"
D	= 0°42'58.31"
T	= 391.03'
L	= 781.43'
E	= 9.55'
R	= 8000.00'

This design is based on 60 mph design speed at e max = 6%.

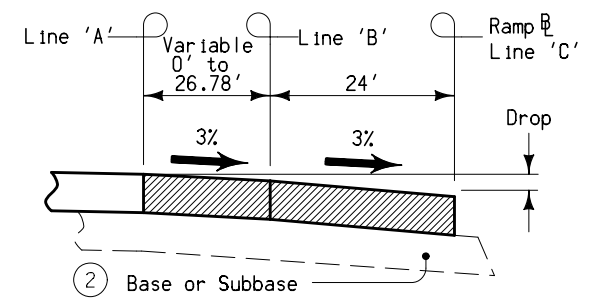
- ① For header construction details at the beginning of taper, refer to the appropriate Typical 7101 or 7102.
- ② Ramp exit subbase shall be the same thickness as mainline subbase.
- ③ Transition from 3% cross-slope to 2% cross-slope over 40 feet.

TABLE OF OFFSETS AND DROPS FOR 24' RAMP TAPER

Distance From Point (C) Along Line 'A' (Ft.)	790	765	740	715	690	665	640	615	590	565	540	515	490	465	440	415	390	365	340	315	290	265	240	215	190	165	140	115	90	65	40	15	0																			
From Line 'A' To Line 'B'	Offset (Ft.)																			2.07	3.59	5.19	6.87	8.63	10.46	12.38	14.37	16.44	18.59	20.82	23.09	25.39	26.78																			
	Slope (%)																			← Constant 3.0% Slope →																																
	Drop (Ft.)																			0.06	0.11	0.16	0.21	0.26	0.31	0.37	0.43	0.49	0.56	0.62	0.69	0.76	0.80																			
From Line 'B' To Line 'C'	Offset (Ft.)																			← Constant 24.0' Offset →																																
	Slope (%)																			← Constant 3.0% Slope →																																
	Drop (Ft.)																			← Constant 0.72' Drop →																																
From Line 'A' To Line 'C'	Offset (Ft.)																			12.00	12.04	12.16	12.35	12.62	12.98	13.40	13.91	14.50	15.16	15.90	16.72	17.61	18.59	19.64	20.77	21.98	23.26	24.63														
	Slope (%)																			← Constant 3.0% Slope →																																
	Drop (Ft.)																			0.36	0.36	0.36	0.37	0.38	0.39	0.40	0.42	0.43	0.45	0.48	0.50	0.53	0.56	0.59	0.62	0.66	0.70	0.74	0.78	0.83	0.88	0.93	0.98	1.03	1.09	1.15	1.21	1.28	1.34	1.41	1.48	1.52
Distance Along Line 'C' (Ft.)	788.94	763.98	739.02	714.06	689.10	664.14	639.18	614.23	589.28	564.34	539.40	514.46	489.53	464.61	439.69	414.78	389.87	364.98	340.05	315.08	290.11	265.14	240.16	215.17	190.18	165.18	140.17	115.16	90.15	65.12	40.09	15.05	0.00																			

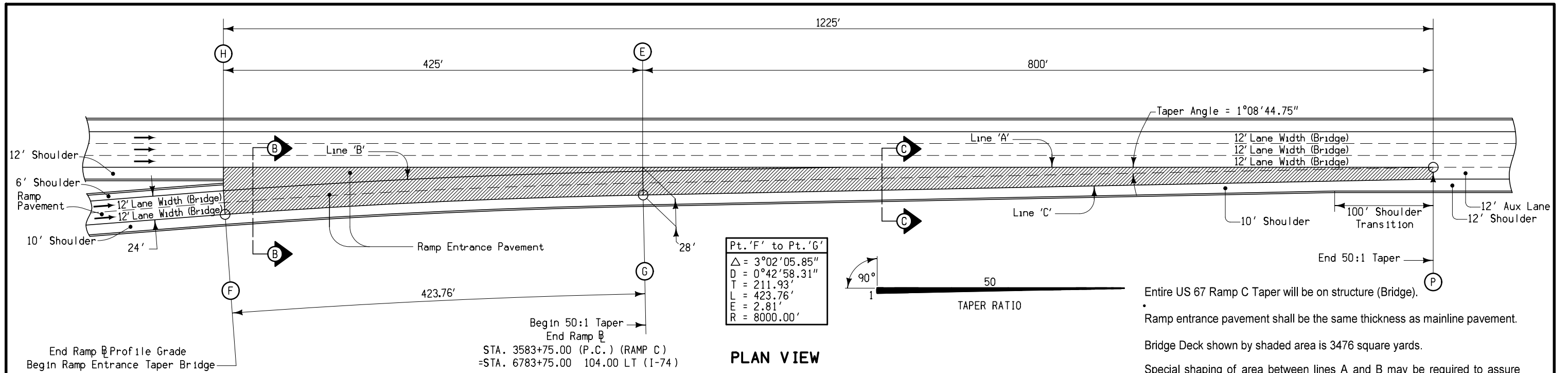


SECTION A-A

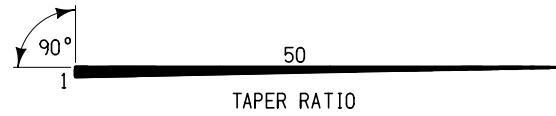


SECTION B-B

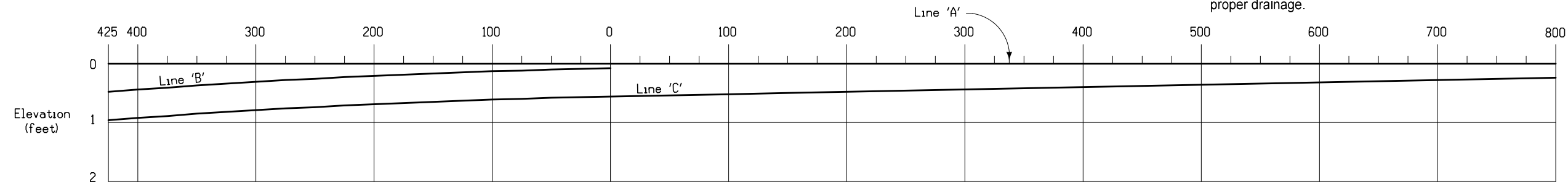
US 67 RAMP A  
 DECELERATION TAPER  
 FOR 24' EXIT RAMP



Pt. 'F' to Pt. 'G'	
Δ =	3°02'05.85"
D =	0°42'58.31"
T =	211.93'
L =	423.76'
E =	2.81'
R =	8000.00'



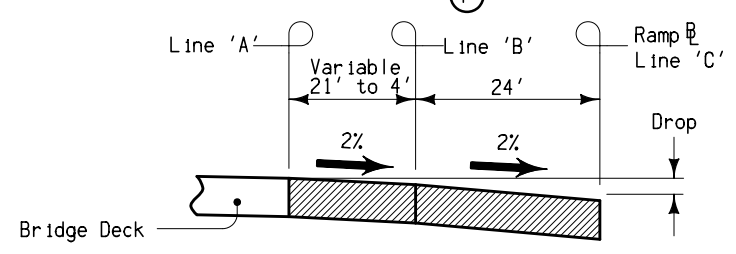
Entire US 67 Ramp C Taper will be on structure (Bridge).  
 Ramp entrance pavement shall be the same thickness as mainline pavement.  
 Bridge Deck shown by shaded area is 3476 square yards.  
 Special shaping of area between lines A and B may be required to assure proper drainage.



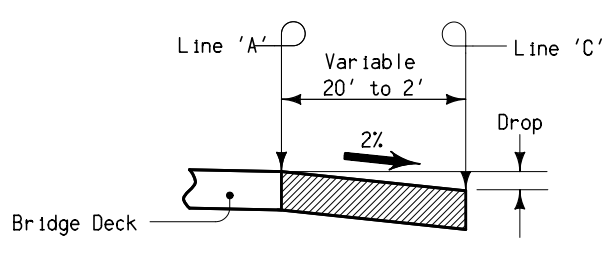
NOTE: The algebraic difference between profile grade for Ramp Base Line at (F) and relative profile grade of Mainline at (H) is -0.15%.

**PROFILE**

TABLE OF OFFSETS AND DROPS FOR 24' RAMP TAPER																																																		
Distance From Point (E) Along Line 'A' (Ft.)		425	400	375	350	325	300	275	250	225	200	175	150	125	100	75	50	25	0	25	50	75	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800													
From Line 'A' To Line 'B'	Offset (Ft.)	23.75	21.96	20.25	18.62	17.07	15.60	14.20	12.88	11.64	10.48	9.40	8.39	7.46	6.61	5.84	5.15	4.53	4.00																															
	Slope (%)	← Constant 2.0% Slope →																																																
	Drop (Ft.)	0.48	0.44	0.41	0.37	0.34	0.31	0.28	0.26	0.23	0.21	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08																															
From Line 'B' To Line 'C'	Offset (Ft.)	← Constant 24.0' Offset →																																																
	Slope (%)	← Constant 2.0% Slope →																																																
	Drop (Ft.)	← Constant 0.48' Drop →																																																
From Line 'A' To Line 'C'	Offset (Ft.)																				27.50	27.00	26.50	26.00	25.00	24.00	23.00	22.00	21.00	20.00	19.00	18.00	17.00	16.00	15.00	14.00	13.00	12.00												
	Slope (%)																				← Constant 2.0% Slope →																													
	Drop (Ft.)	0.96	0.92	0.89	0.85	0.82	0.79	0.76	0.74	0.71	0.69	0.67	0.65	0.63	0.61	0.60	0.58	0.57	0.56	0.55	0.54	0.53	0.52	0.50	0.48	0.46	0.44	0.42	0.40	0.38	0.36	0.34	0.32	0.30	0.28	0.26	0.24													
Distance From Point (G) Along Line 'C' (Ft.)		423.76	398.77	373.79	348.81	323.83	298.87	273.90	248.94	223.99	199.03	174.08	149.14	124.20	99.26	74.32	49.39	24.45	0.00																															



**SECTION B-B**



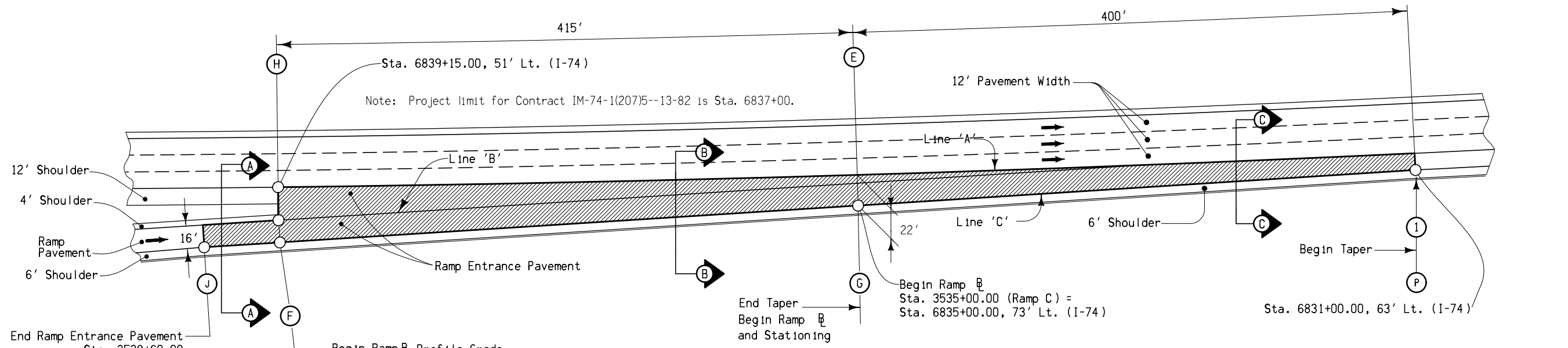
**SECTION C-C**

For jointing layout, see Standard Road Plan RV-10.

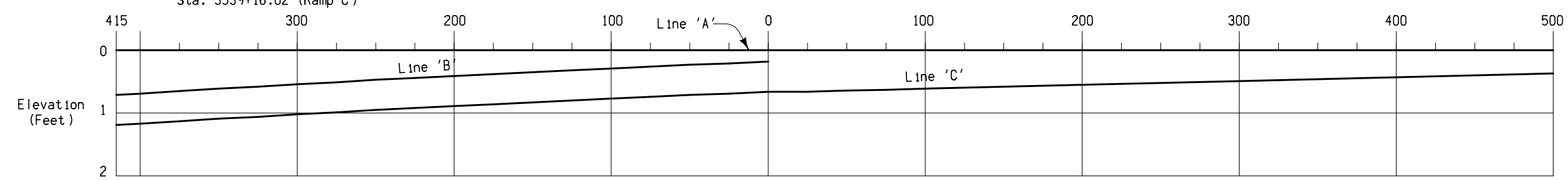
This design is based on 60 mph design speed at e max = 6%.

For Pavement Marking Layout, see Typical 9301A on Sheet B.06

**US 67 RAMP C  
 ACCELERATION TAPER  
 FOR 24' ENTRANCE RAMP**



PLAN VIEW



NOTE: The algebraic difference between profile grade for Ramp Base Line at (F) and relative profile grade of Mainline at (H) is 0.15%.

PROFILE

TABLE OF OFFSETS AND DROPS FOR 16' RAMP TAPER

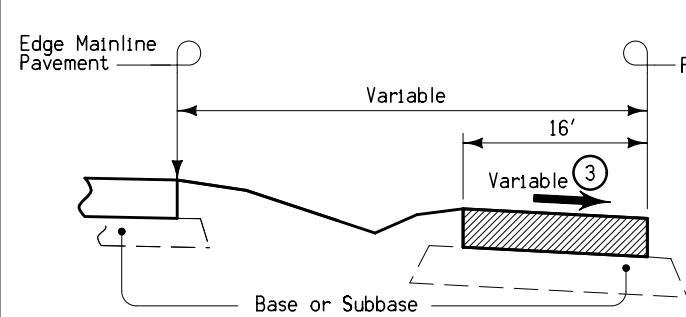
Distance From Point (E) Along CL I-74 (Ft.)	415	400	375	350	325	300	275	250	225	200	175	150	125	100	75	50	25	0	25	50	75	100	200	300	400							
From Line 'A' To Line 'B'	Offset (Ft.)	23.75	22.98	21.71	20.47	19.26	18.07	16.91	15.79	14.68	13.61	12.56	11.54	10.55	9.58	8.64	7.73	6.85	6.00													
	Slope (%)	Constant 3.0% Slope																														
	Drop (Ft.)	0.71	0.69	0.65	0.61	0.58	0.54	0.51	0.47	0.44	0.41	0.38	0.35	0.32	0.29	0.26	0.23	0.21	0.18													
From Line 'B' To Line 'C'	Offset (Ft.)	Constant 16.0' Offset																														
	Slope (%)	Constant 3.0% Slope																														
	Drop (Ft.)	Constant 0.48' Drop																														
From Line 'A' To Line 'C'	Offset (Ft.)																			21.38	20.75	20.13	19.50	17.00	14.50	12.00						
	Slope (%)																			Constant 3.0% Slope												
	Drop (Ft.)	1.19	1.17	1.13	1.09	1.06	1.02	0.99	0.95	0.92	0.89	0.86	0.83	0.80	0.77	0.74	0.71	0.69	0.66	0.64	0.62	0.60	0.59	0.51	0.44	0.36						
Distance From Point (G) Along Line 'C' (Ft.)		416.02	401.77	376.64	351.52	326.39	301.27	276.15	251.04	225.92	200.81	175.70	150.60	125.49	100.39	75.29	50.19	25.09	0.00													

- ① For header construction details at the beginning of taper, refer to the appropriate Typical 7101 or 7102.
- ② Ramp exit subbase shall be the same thickness as mainline subbase.
- ③ The ramp pavement cross slope between ① and ② is determined by superelevation rotated about line C. Refer to Standard Road Plan RP-3 and plans for superelevation transition requirements.

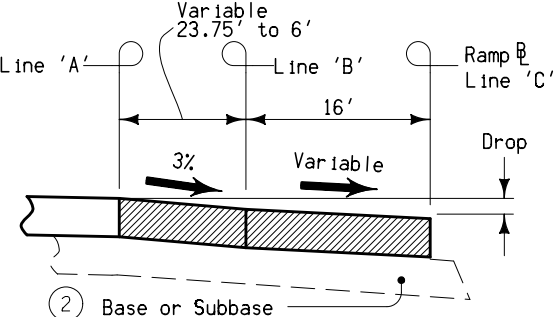
For jointing layout, see Standard Road Plan RV-10.

This design is based on 60 mph design speed at e max = 6%.

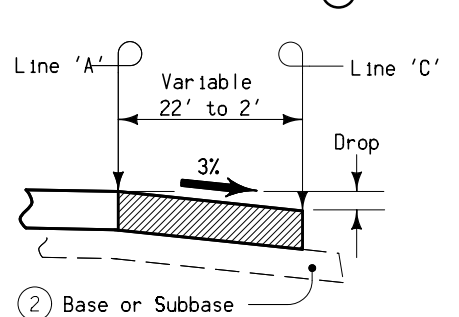
For location equivalent stations, see Tabulation 101-15. Equate Point 'G' (Ramp Stationing) to Point 'E' (Mainline Stationing).



SECTION A-A



SECTION B-B



SECTION C-C

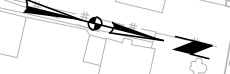
Ramp entrance pavement shall be the same thickness as mainline pavement.

Ramp entrance pavement shown by shaded area is 2208 square yards.

Special shaping of area between lines A and B may be required to assure proper drainage.

**MIDDLE ROAD INTERCHANGE  
RAMP C  
ACCELERATION TAPER  
FOR 16' ENTRANCE RAMP  
TO AUXILLIARY LANE**

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29



CLEARING & GRUBBING  
0.92 Acres

REMOVE EXISTING STORM SEWER

CLEARING & GRUBBING  
3.75 Acres

VIADUCT AND TEMPORARY  
MEDIAN BYPASS REMOVAL  
BY OTHERS

REMOVE INTAKE

REMOVE EXISTING  
STORM SEWER

6790

6795

6800

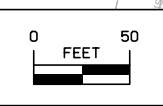
6805

REMOVE INTAKE

REMOVE EXISTING  
STORM SEWER

REMOVE INTAKE

+75.00'

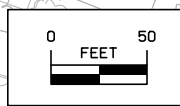
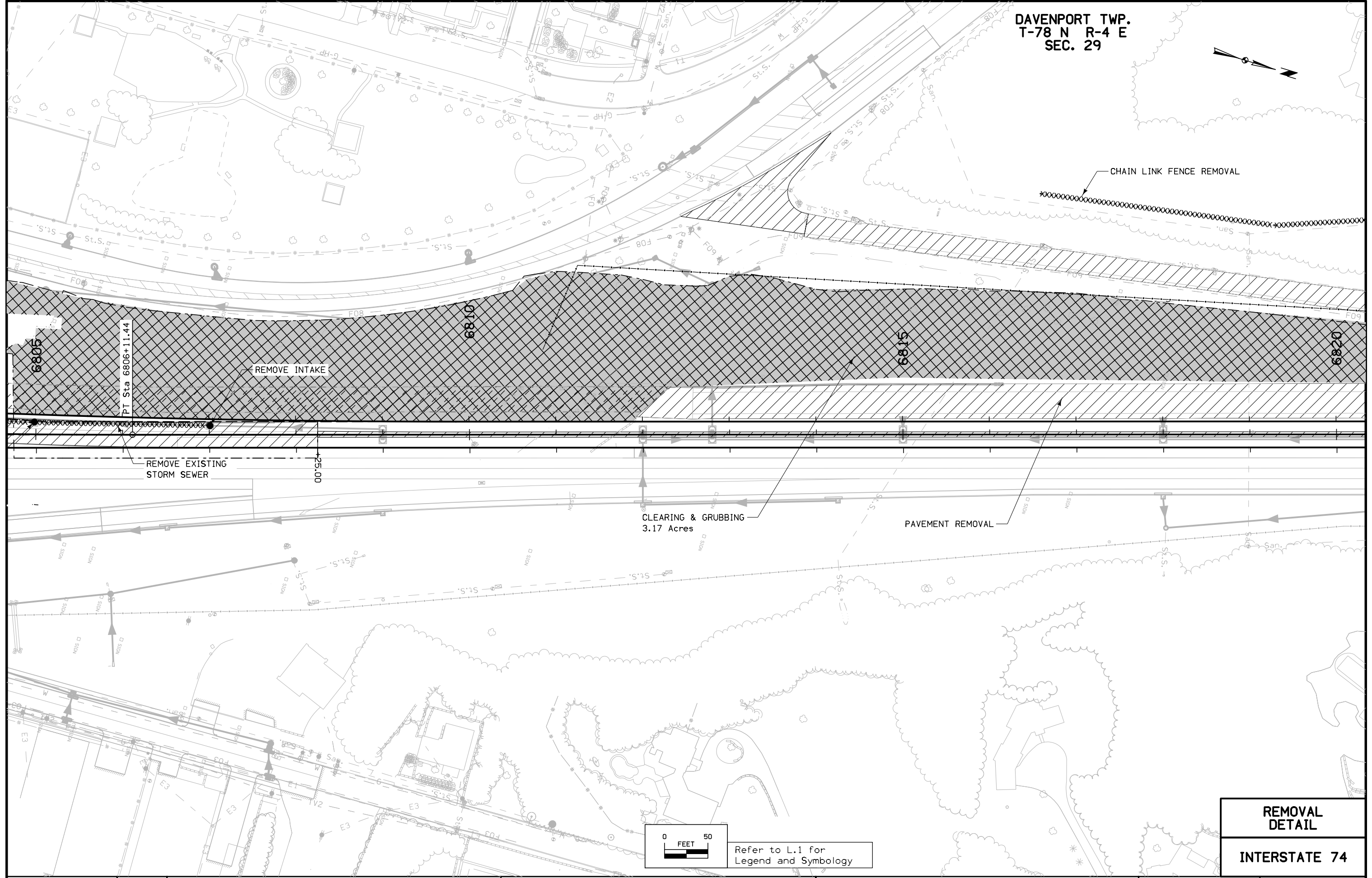
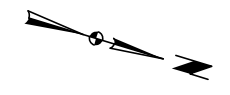


Refer to L.1 for  
Legend and Symbolry

REMOVAL  
DETAIL

INTERSTATE 74

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29



Refer to L.1 for  
Legend and Symbology

**REMOVAL  
DETAIL**  
**INTERSTATE 74**

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29

Curve 21020 (I-74)

PI Sta 6832+57.30  
 $\Delta = 04^{\circ}39'39.15''$  RT  
 $D = 0^{\circ}14'56.80''$   
 $R = 23000.00'$   
 $T = 936.01'$   
 $L = 1871.00'$   
 $E = 19.04'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

Curve 21022 (I-74 EB)

PI STA. = 26832+58.47  
 $\Delta = 4^{\circ}39'39''$  (RT)  
 $D = 0^{\circ}14'56''$   
 $R = 23,015.00'$   
 $T = 936.62'$   
 $L = 1,872.22'$   
 $E = 19.05'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

EX. KIMBERLY RIDGE RD

CHAIN LINK FENCE REMOVAL

PAVEMENT REMOVAL

EX. I-74 EXIT RAMP

PI Sta 6832+57.30

PAVEMENT REMOVAL REMOVE EXISTING STORM SEWER

CLEARING & GRUBBING

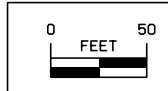
PC Sta 6823+21.29

EX. HIGHLAND PARK DR

EX. HIGHLAND CT

Curve 21021 (I-74 WB)

PI STA. = 16832+56.13  
 $\Delta = 4^{\circ}39'39''$  (RT)  
 $D = 0^{\circ}14'57''$   
 $R = 22,985.00'$   
 $T = 935.40'$   
 $L = 1,869.78'$   
 $E = 19.03'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

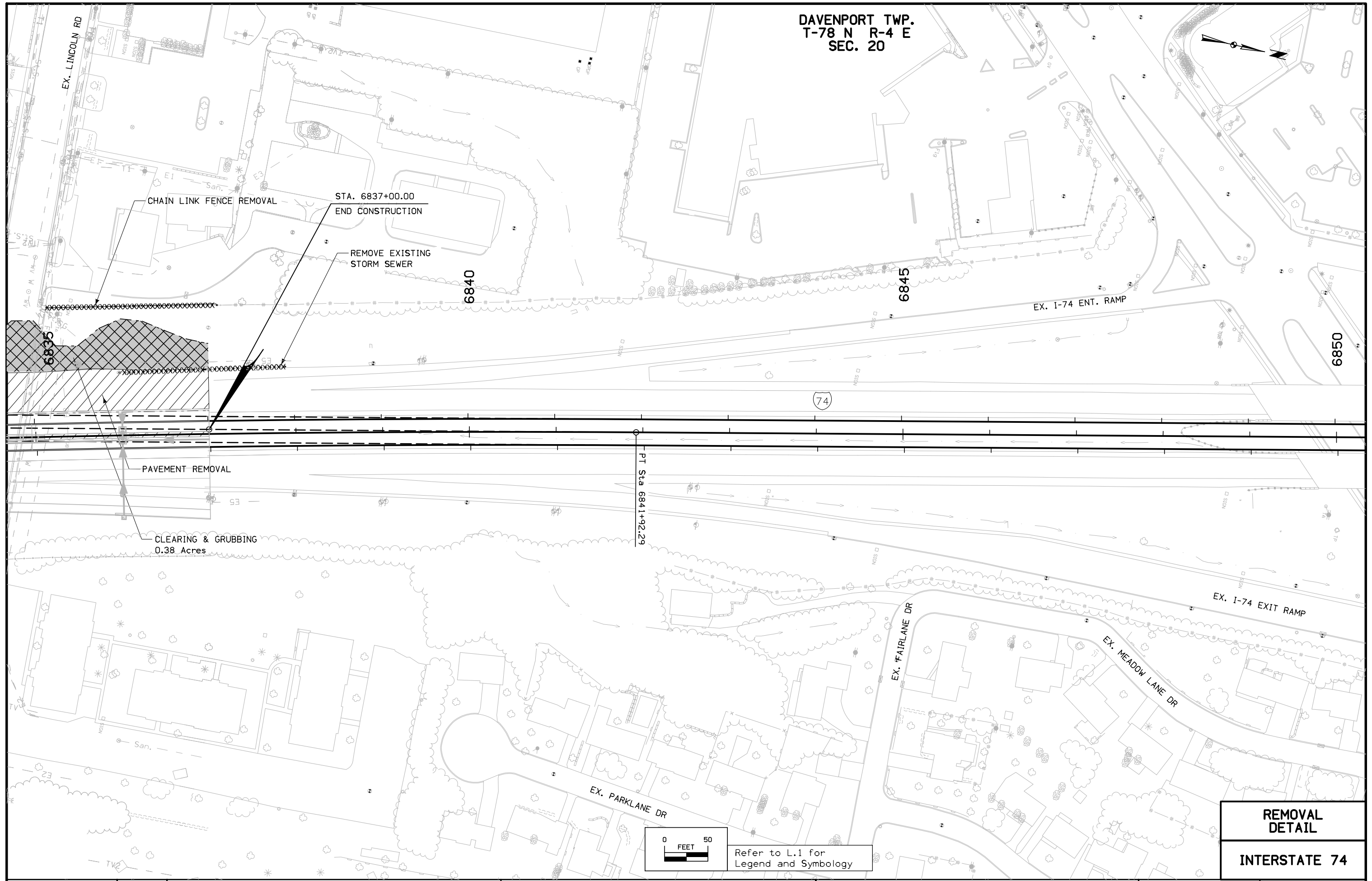


Refer to L.1 for Legend and Symbology

REMOVAL  
DETAIL

INTERSTATE 74

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 20



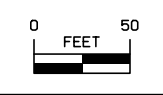
CHAIN LINK FENCE REMOVAL  
STA. 6837+00.00  
END CONSTRUCTION

REMOVE EXISTING  
STORM SEWER

PAVEMENT REMOVAL

CLEARING & GRUBBING  
0.38 Acres

PT Sta 6841+92.29



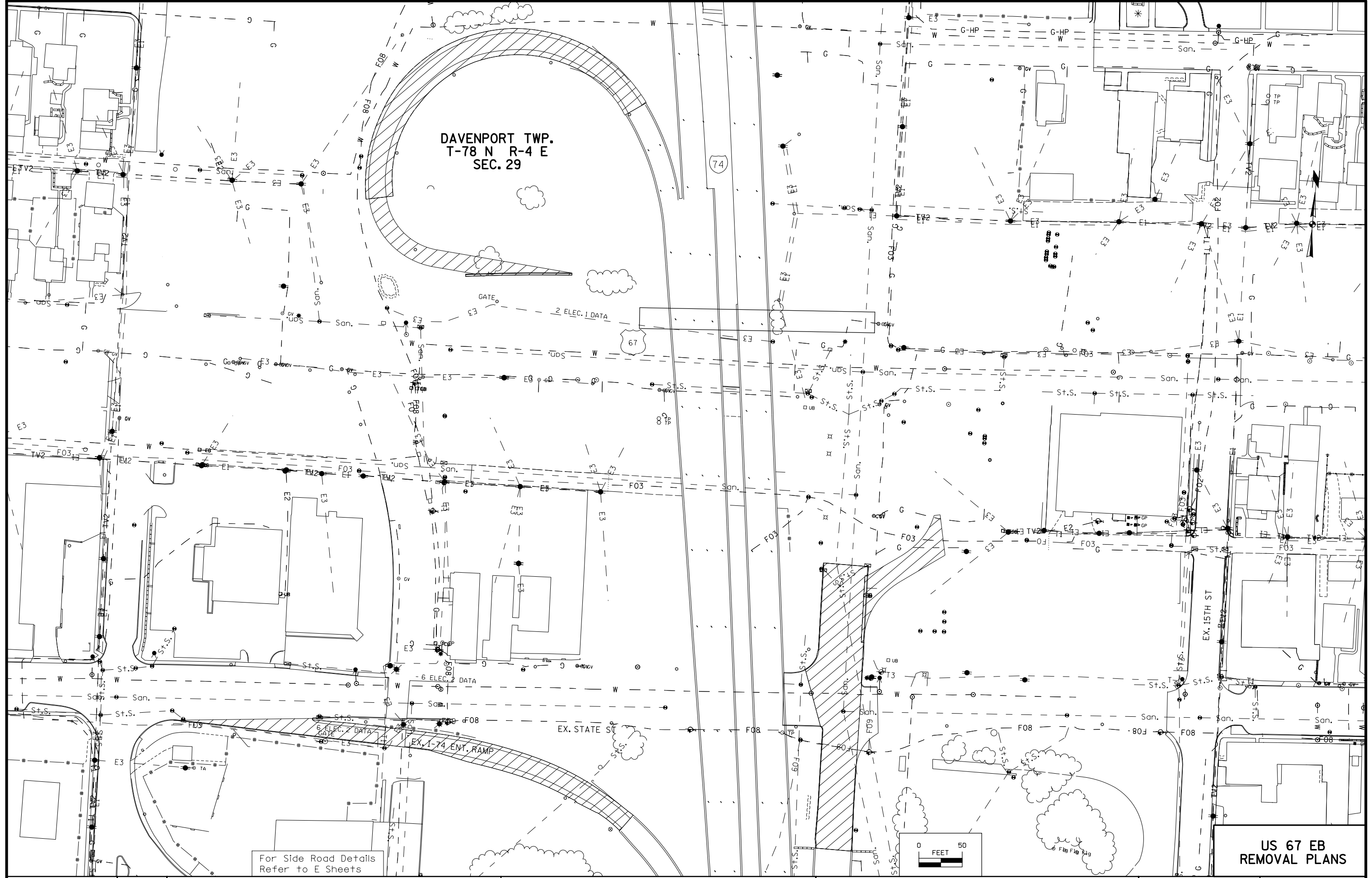
Refer to L.1 for  
Legend and Symbology

**REMOVAL  
DETAIL**  
**INTERSTATE 74**

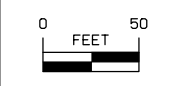
DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29

74

67



For Side Road Details  
Refer to E Sheets



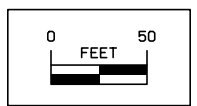
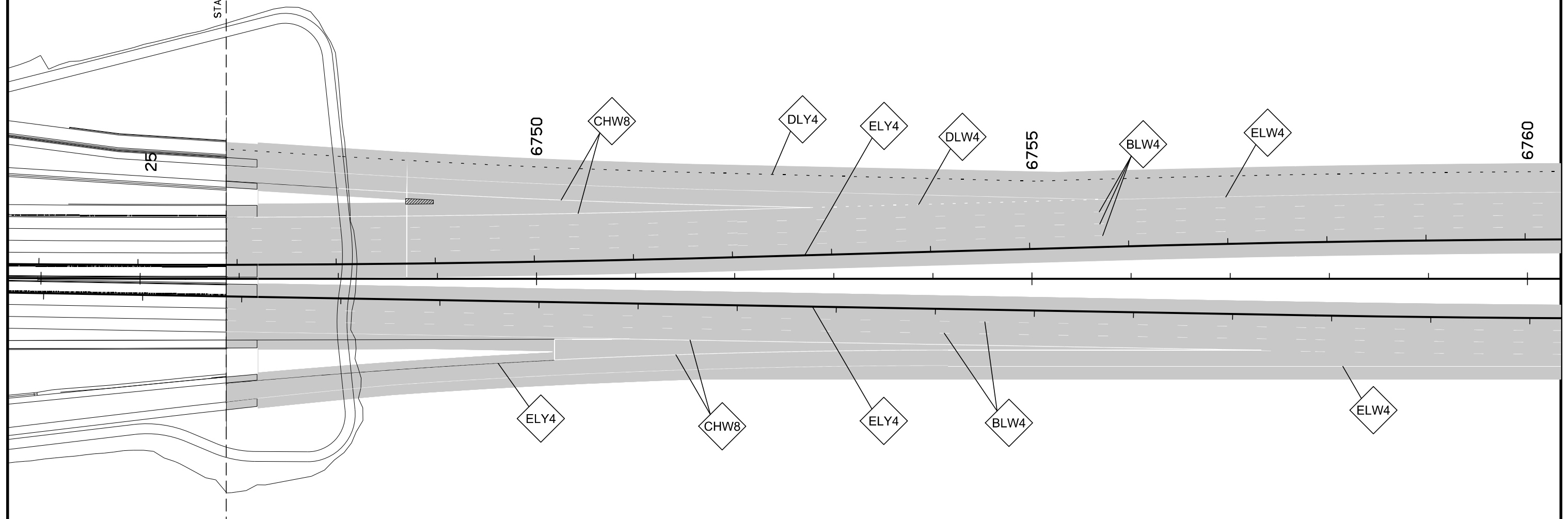
US 67 EB  
REMOVAL PLANS



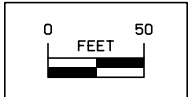
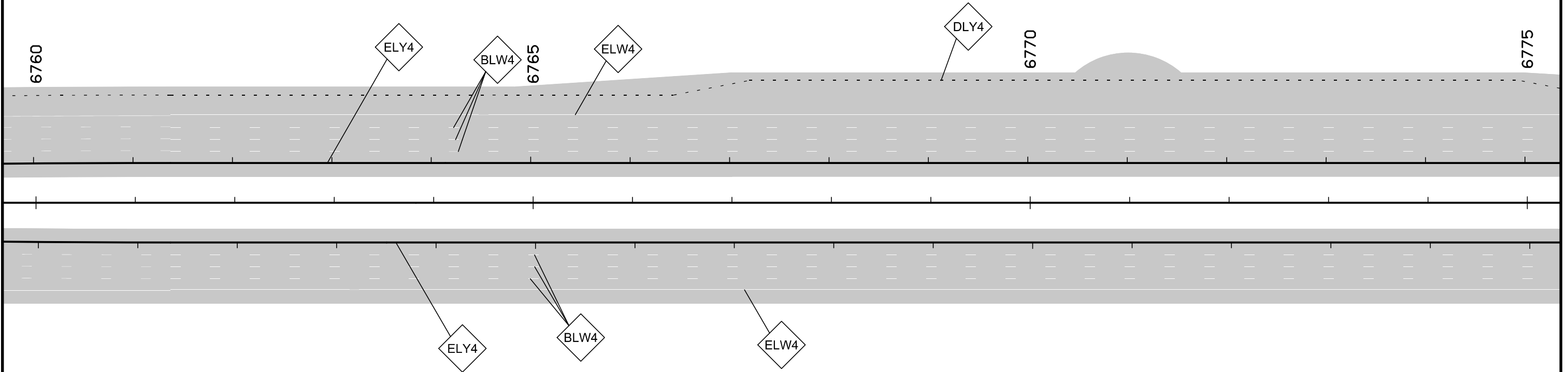


ILLINOIS JURISDICTION | IOWA JURISDICTION

STA. 6746+86.92



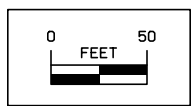
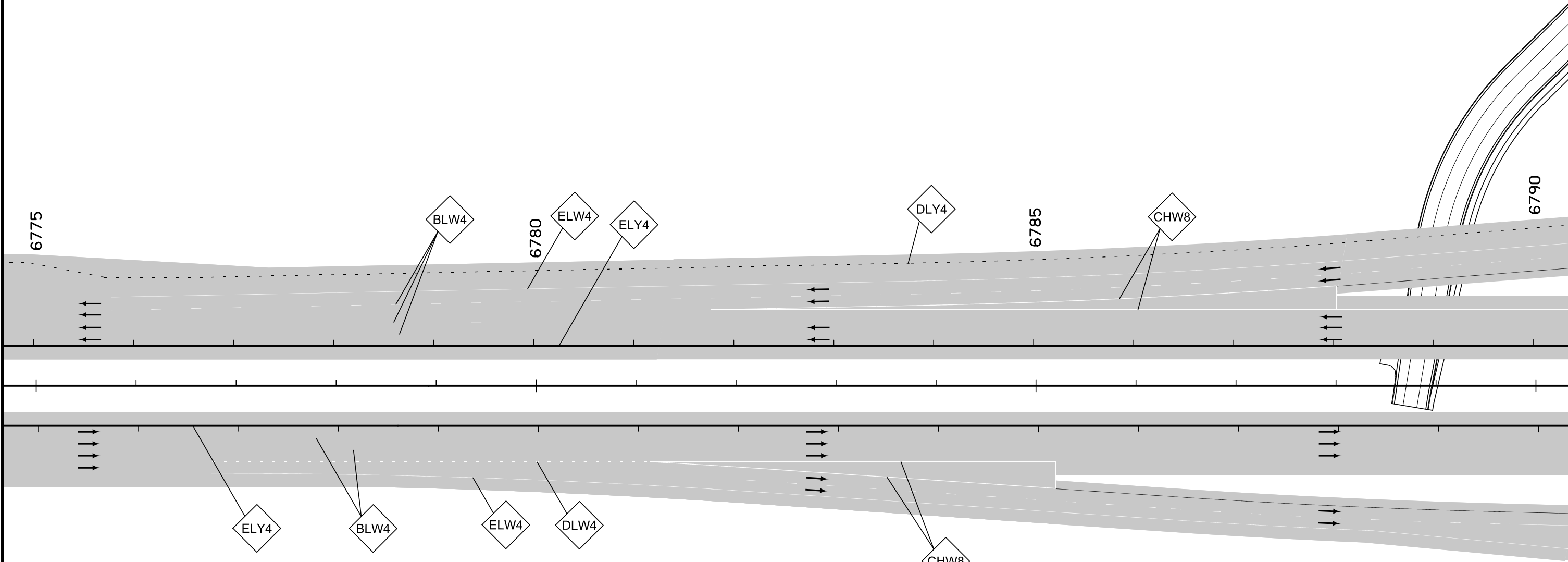
FINAL PAVEMENT MARKING PLAN  
INTERSTATE 74



**FINAL PAVEMENT  
MARKING PLAN**

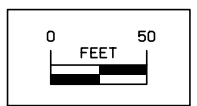
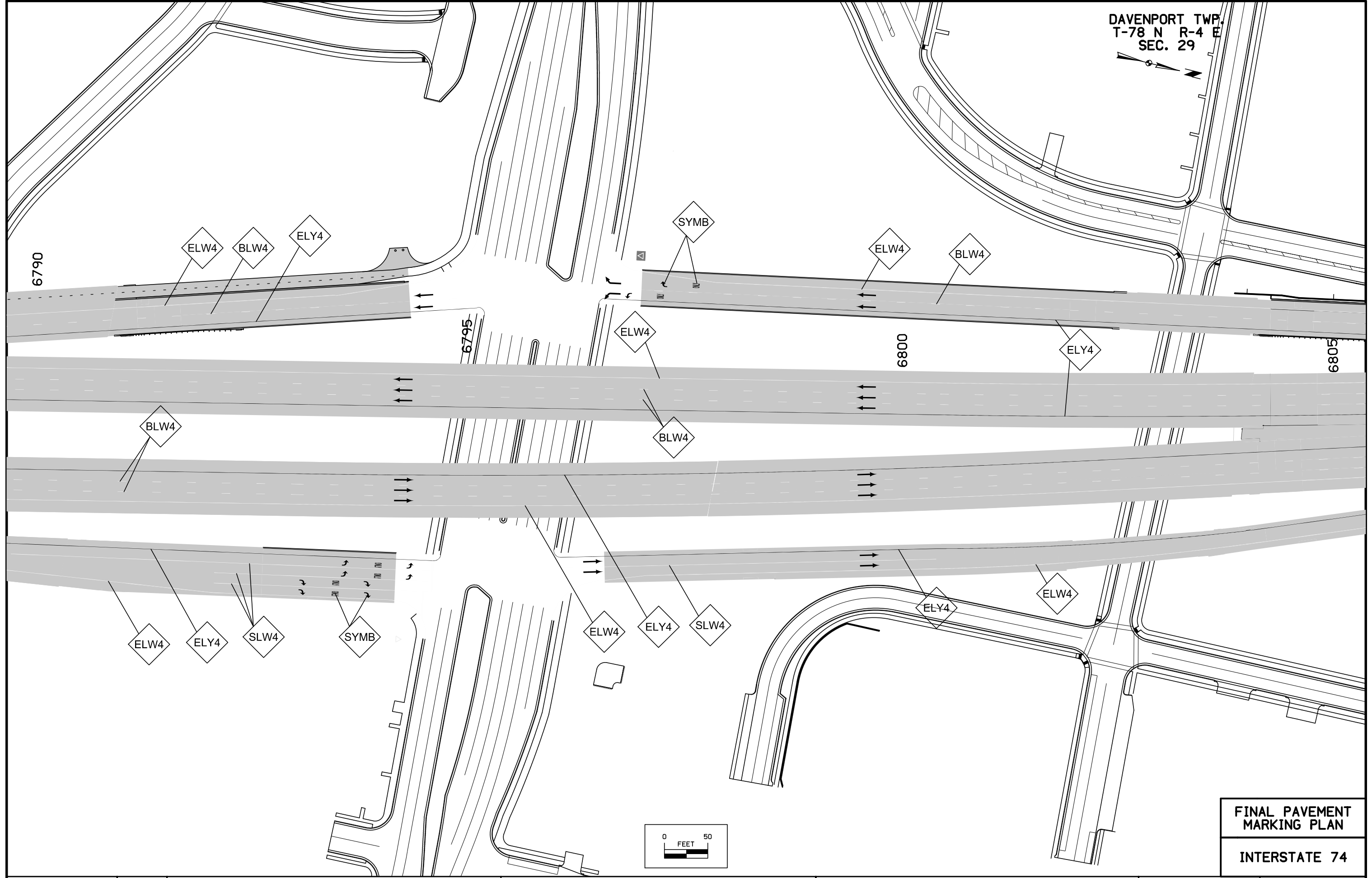
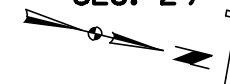
**INTERSTATE 74**

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 32



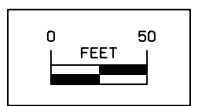
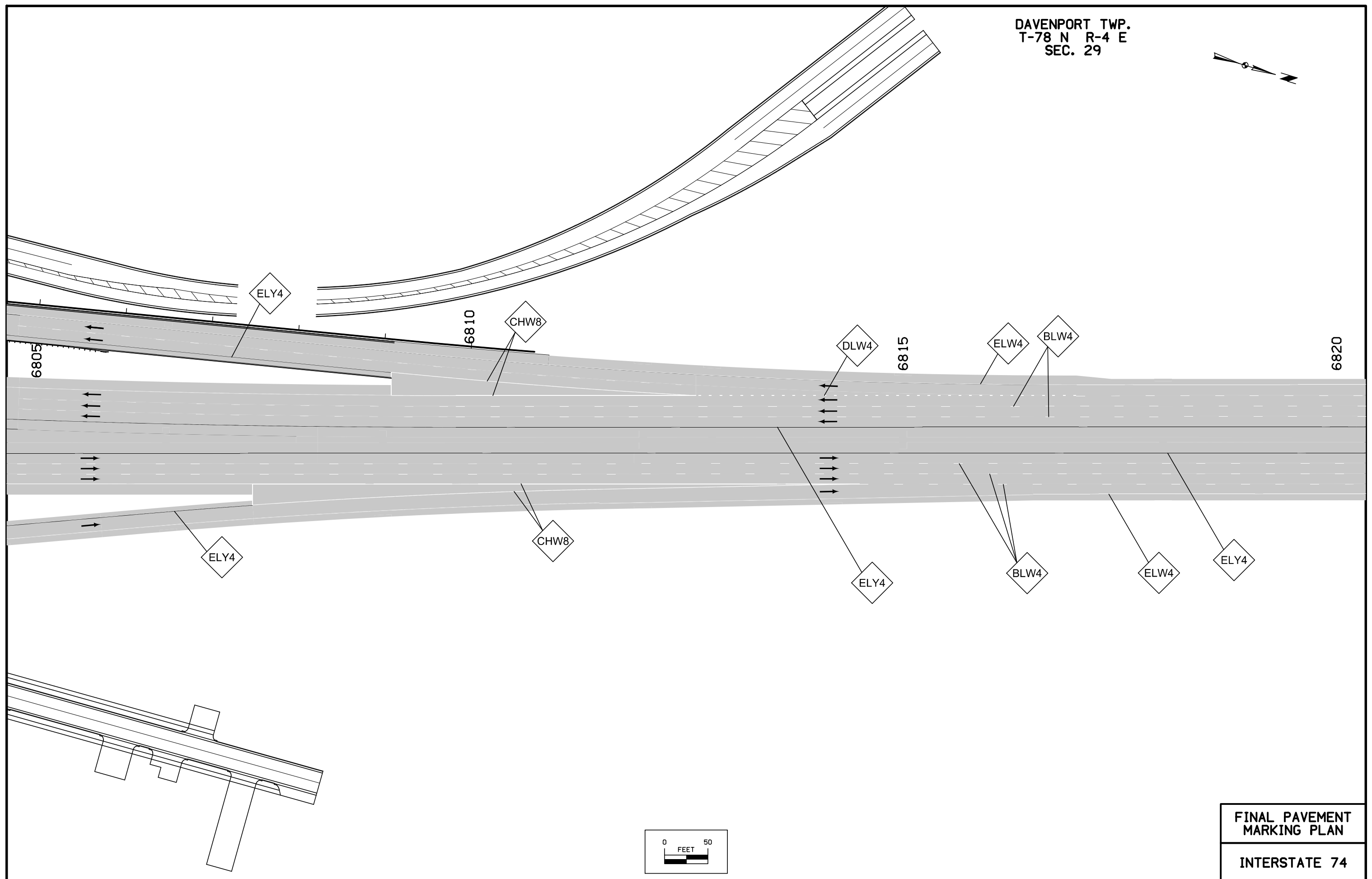
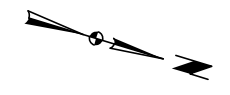
FINAL PAVEMENT  
MARKING PLAN  
INTERSTATE 74

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29



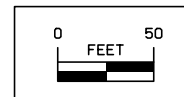
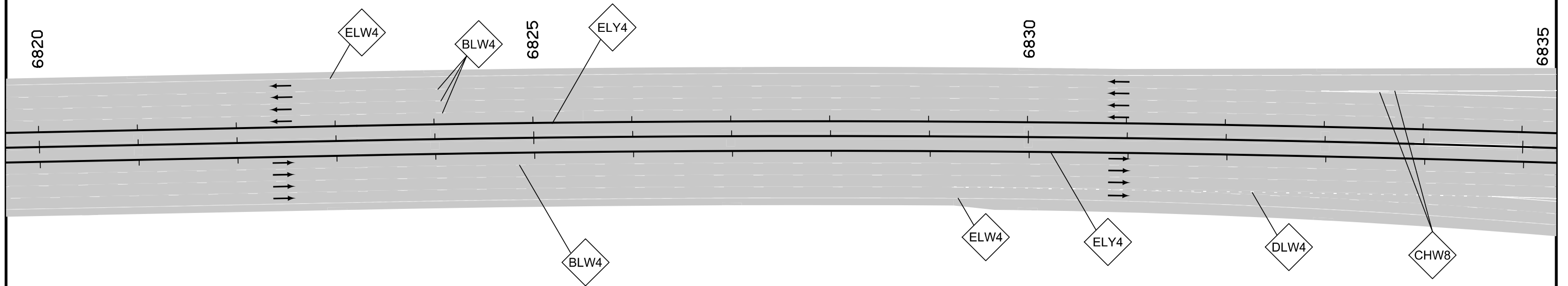
**FINAL PAVEMENT  
MARKING PLAN**  
**INTERSTATE 74**

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29



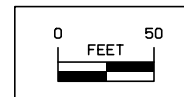
**FINAL PAVEMENT  
MARKING PLAN**  
**INTERSTATE 74**

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 29

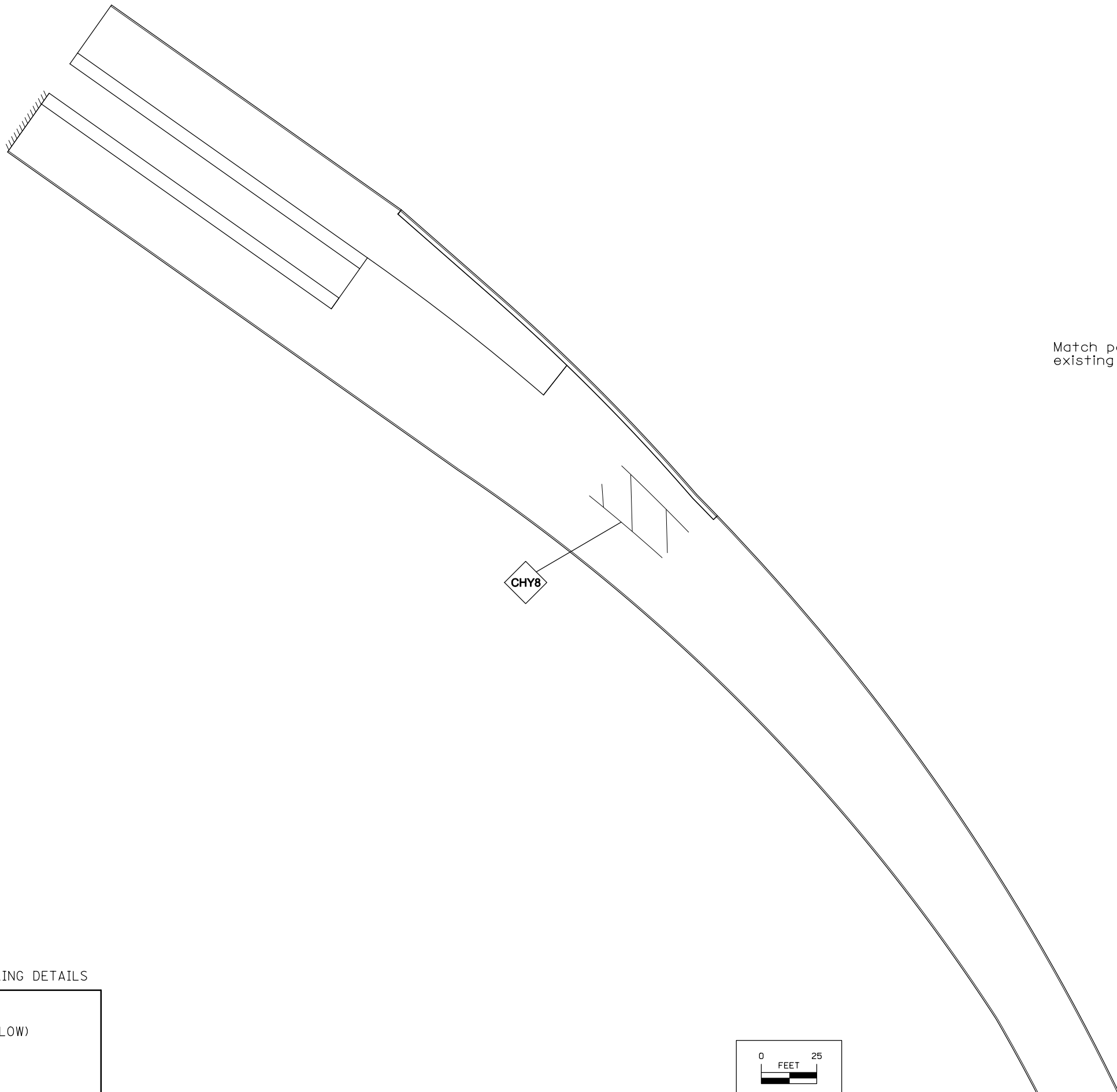


FINAL PAVEMENT MARKING PLAN
INTERSTATE 74

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 20



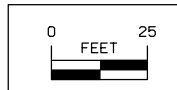
FINAL PAVEMENT MARKING PLAN
INTERSTATE 74



Match pavement markings to existing pavement markings

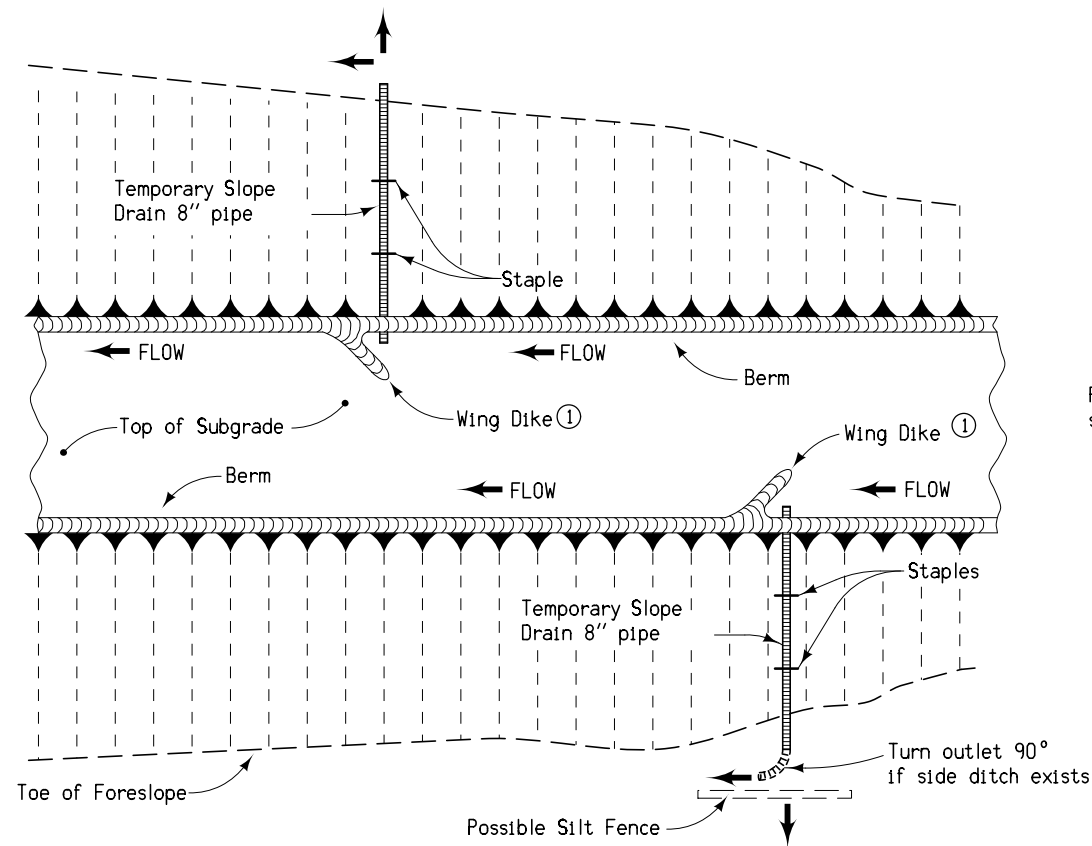
SEE PM-101 FOR PAVEMENT MARKING DETAILS

 CHANNELIZING LINE (YELLOW)

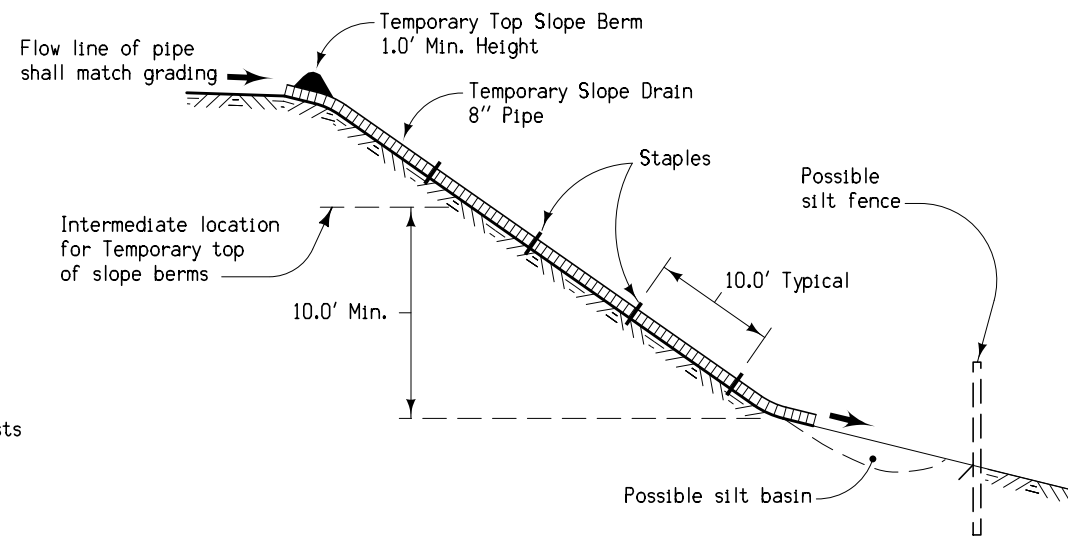


**KIMBERLY ROAD  
PAVEMENT MARKINGS**

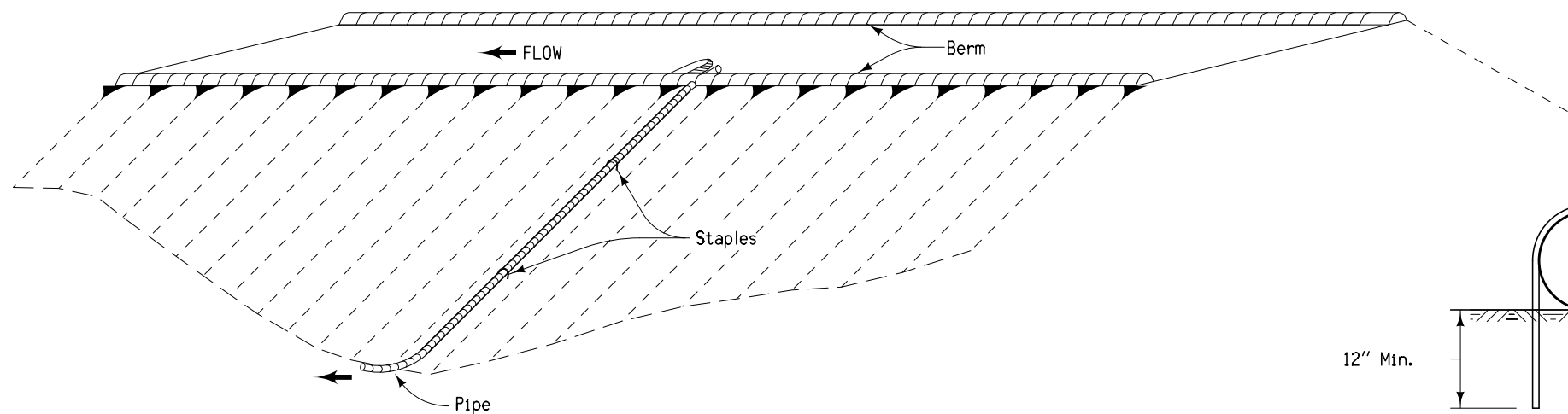




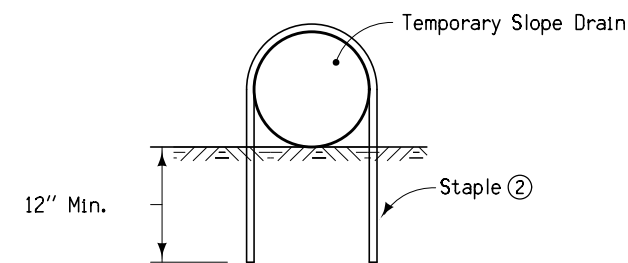
PLAN



TYPICAL SECTION



PERSPECTIVE



STAPLE DETAIL

GENERAL NOTES:

Details indicated hereon are for the installation of a temporary slope drain on the foreslope of the roadway fill. The intent of the temporary slope drain is to prevent foreslope erosion during construction and to minimize the water pollution which might be caused by soil erosion from the project.

At the completion of each day's grading, a temporary berm will be constructed on both sides of the subgrade. At points a maximum of 500' apart, at low points of vertical curves, and as determined by the Engineer, temporary intercepting wing dikes shall be graded and slope drains installed. All special grading work shall be considered incidental to other grading work on the project.

Foreslopes with a vertical height of ten feet or less shall not have temporary slope drains installed.

The temporary slope drain shall consist of a length of pipe capable of extending to the top of foreslope when all grading has been completed. The pipe shall be moved up the foreslope to the new temporary top of slope berm at the completion of each day's work. The pipe shall be Solid Tubing complying with all requirements of ASTM F 405, Standard Duty Tubing.

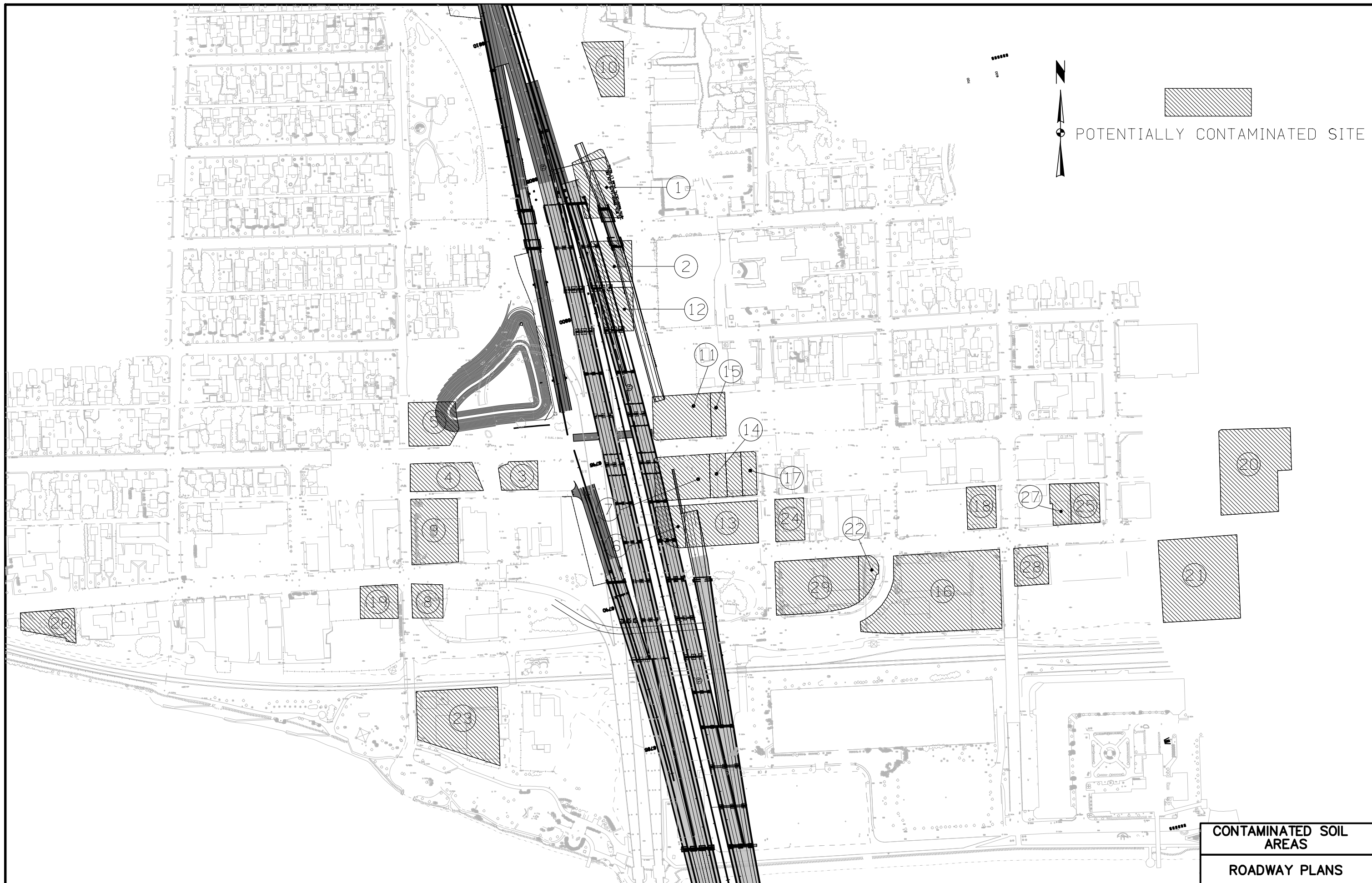
Method of measurement shall be along the centerline of pipe in its final position.

The price bid for "Temporary Slope Drain, As Per Plan", measured in lineal feet, shall be considered full compensation for the construction of all required temporary top of slope berms, for installing and maintaining the slope drain for the duration of the contract, and for removal of all material upon completion of the embankment.

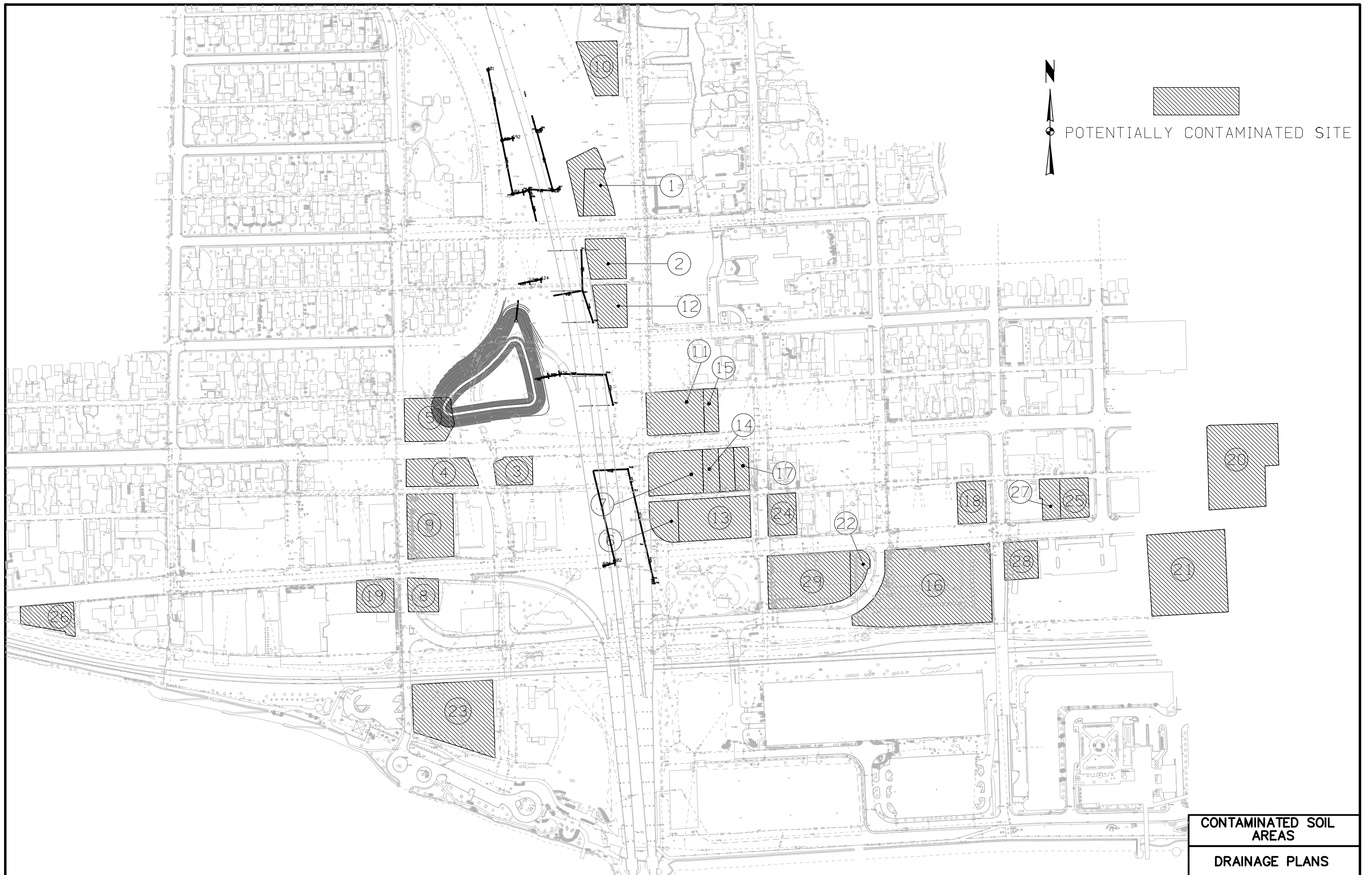
① Typical length of 10.0', 1.0' minimum height

② Staple may be bent reinforcing bar No. 4 minimum, or alternate approved by the Engineer.

Project Development Division		
<b>DETAIL SHEET</b>	<b>510-2</b>	
REVISION: Place in CADD	REVISION NO.	REVISION DATE
	1	03-28-95
<b>DETAILS OF TEMPORARY SLOPE DRAIN</b>		



**CONTAMINATED SOIL  
AREAS**  
**ROADWAY PLANS**



**CONTAMINATED SOIL  
AREAS**  
**DRAINAGE PLANS**

Contaminated Soil Summary			PCSS-1 SPECIAL
Location	Description and Address	Site Impacted by this Contract Yes/No	Remarks
1	H & H Car Care Center 612 14th Street	No	4 UST removed 1990. DNR - "No Action Req'd" Feb. 2005. Petroleum contamination in recent soil boring.
	Dale Snapp Co. 536 14th Street		2 UST removed 1998.  Petroleum contamination in recent soil boring.
3	Crescent Economy Inc. 1303 Grant Street	No	No tanks. Dry cleaning chemicals present. DNR statewide standards exceeded (Oct. 2005).
4	Showboat Car Wash 1215 Grant Street	No	3 UST removed 1992. DNR - "No Action Req'd" Aug. 2003.
5	Hoyt & Son Automotive 1210 Grant Street	No	5 UST removed 1996. Previous soil removal project DNR - "No Action Req'd" July 2003.
6	Johnny's Amoco BP/QC Mart 1402 State Street	No	Total of 9 UST: 5 removed 1989 and 4 active; DOT to request owners to remove tanks. DNR - "No Action Req'd" Sep. 2004. Petroleum contamination in recent soil boring.
7	Twin Bridges 66/Shell Oil 333 14th Street	No	Total of 4 UST: 1 removed 1993 and 3 active; DOT to request owners to remove tanks; if not removed then Iowa DOT OLE to remove prior to letting.  Petroleum contamination in recent soil boring.
8	Adel Parking Lot 1207 State Street	No	Former gas station. Now part of QCA Spa. Petroleum contamination in ground water from monitoring wells.
9	Village Inn 1210 State Street	No	Petroleum contamination in recent soil borings.
10	Great American Window Co 710 14th Street	No	Petroleum contamination in ground water from monitoring wells.
11	Dart Mart/Big 10 Mart 411 14th Street	No	Total of 5 UST: 1 removed 1990 and 4 active; DOT to request owners to remove tanks; if not removed then Iowa DOT OLE to remove prior to letting.  Contamination documented in monitoring wells.

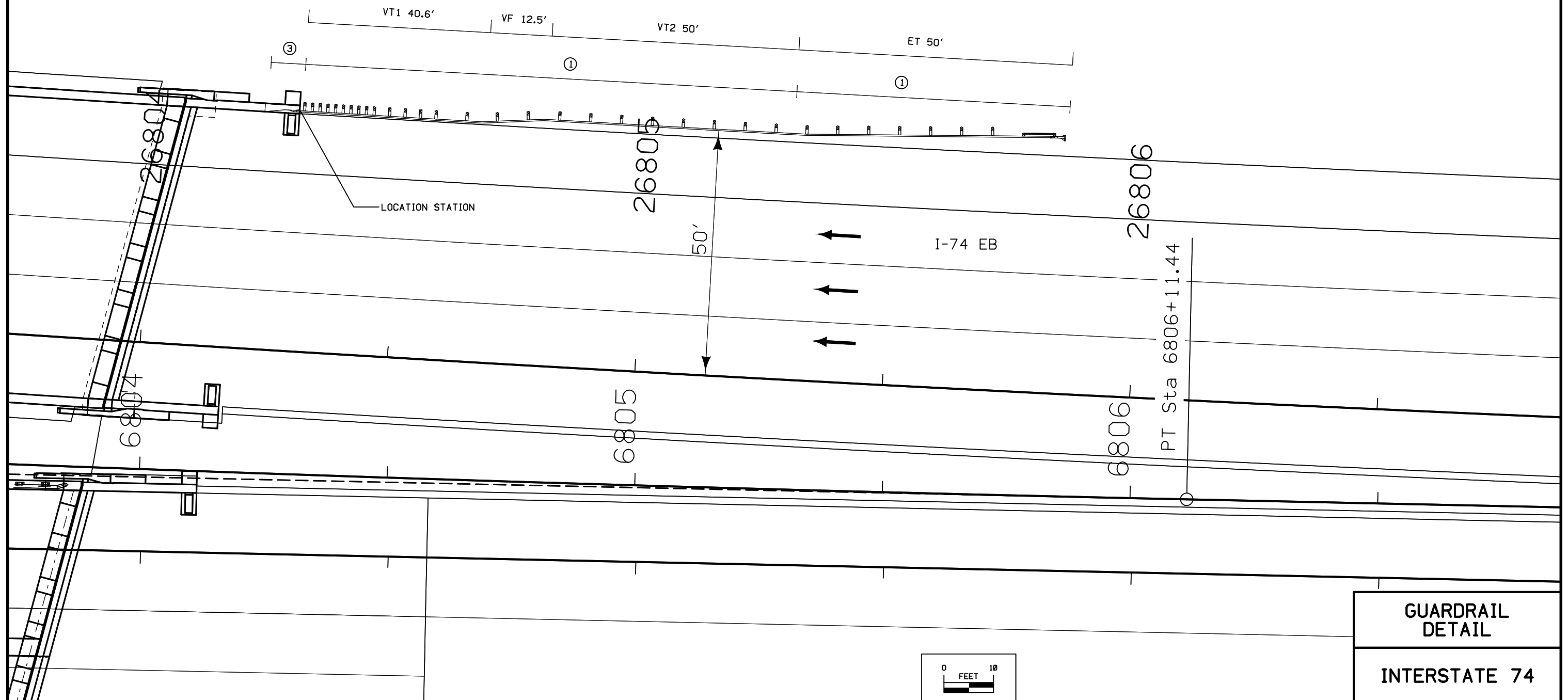
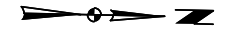
Contaminated Soil Summary			PCSS-1 SPECIAL
Location	Description and Address	Site Impacted by this Contract Yes/No	Remarks
12	Ross' Drive Through 512 14th Street	No	No action necessary. No contamination identified.
	Knox Corporation 1416 State Street		No action necessary. No contamination identified.
14	Ross' Restaurant Inc 430 14th Street	No	Contamination documented in monitoring wells.
15	Handy Shop 1430 Grant Street	No\	3 UST removed 1992, 2005. Increasing contamination levels in monitoring wells. DNR "No Action Req'd" March 2001.
16	City Hall 1609 State Street	No	Total of 5 UST: 3 UST removed 1988 and one active. Petroleum contamination in recent soil boring.
	US West 1437 Grant Street		1 UST removed 1993. No contamination identified.
18	Car Quest 312 17th Street	No	Contamination documented in monitoring wells.
19	Adel Parking Lot 1159 State Street	No	Owner denied access to property. Potential UST.
20	Lindquist Ford 1910 State Street	No	8 UST removed 1997. DNR "No Action Req'd" Nov. 1998.
21	Plaza Building 1823 State Street	No	Petroleum contamination identified.
22	Kelley's Gas 1543 State Street	No	Total of 5 UST: 2 removed 2000 and 3 active (2 - 6000 gal and 1- 8200 gal); Contamination documented in monitoring wells.
23	Twin Bridges Truck City 131 12th Street	No	2 UST removed 1990. DNR "No Action Req'd" Jan. 1996.
24	Nextel Phone 1504 State Street	No	Former gas station. No documented information.
25	Rapid Lube and Oil 1740 State Street	No	Former gas station. 6 UST removed 1981 to 1987.
26	US Petro Mart 845 State Street	No	Operating gas station identified as LUST site. 4 UST (3-10,000 gal and 1-8,000)
27	Hans Body Shop 1720 State Street	No	Former gas station. No documented information.
28	Bettendorf Auto 1705-1719 State Street	No	No contamination identified.
29	Twin Bridges Motor Inn 221 15th Street	No	No contamination identified.

**CONTAMINATED SOIL  
AREAS**

**SUMMARY**

NOTES:

- ① SEE TAB 108-8A FOR DETAILS
- ② CONCRETE BARRIER END SECTION (BA-107) INCLUDED IN CONTRACT (IM-74-1(207)5--13-82), REFER TO TAB 108-18B
- ③ CONCRETE BARRIER END SECTION (BA-107) INCLUDED IN CONTRACT BRFIM-074-1(200)5--05-82

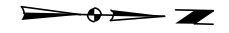


GUARDRAIL  
DETAIL

INTERSTATE 74

NOTES:

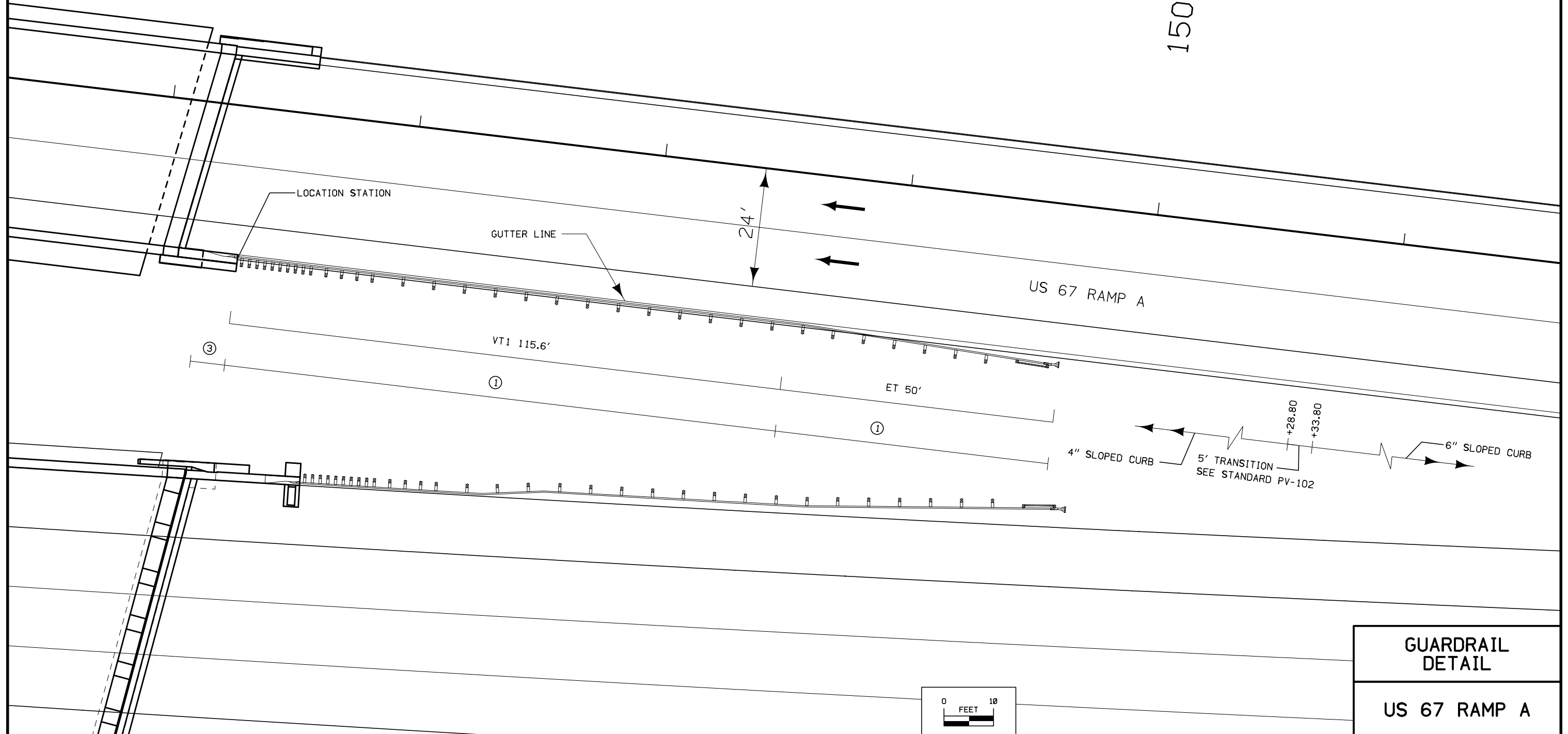
- ① SEE TAB 108-8A FOR DETAILS
- ② CONCRETE BARRIER END SECTION (BA-107) INCLUDED IN CONTRACT (IM-74-1(207)5--13-82), REFER TO TAB 108-18B
- ③ CONCRETE BARRIER END SECTION INCLUDED IN CONTRACT BRFIM-074-1(200)5--05-82)



1504

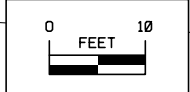
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1506



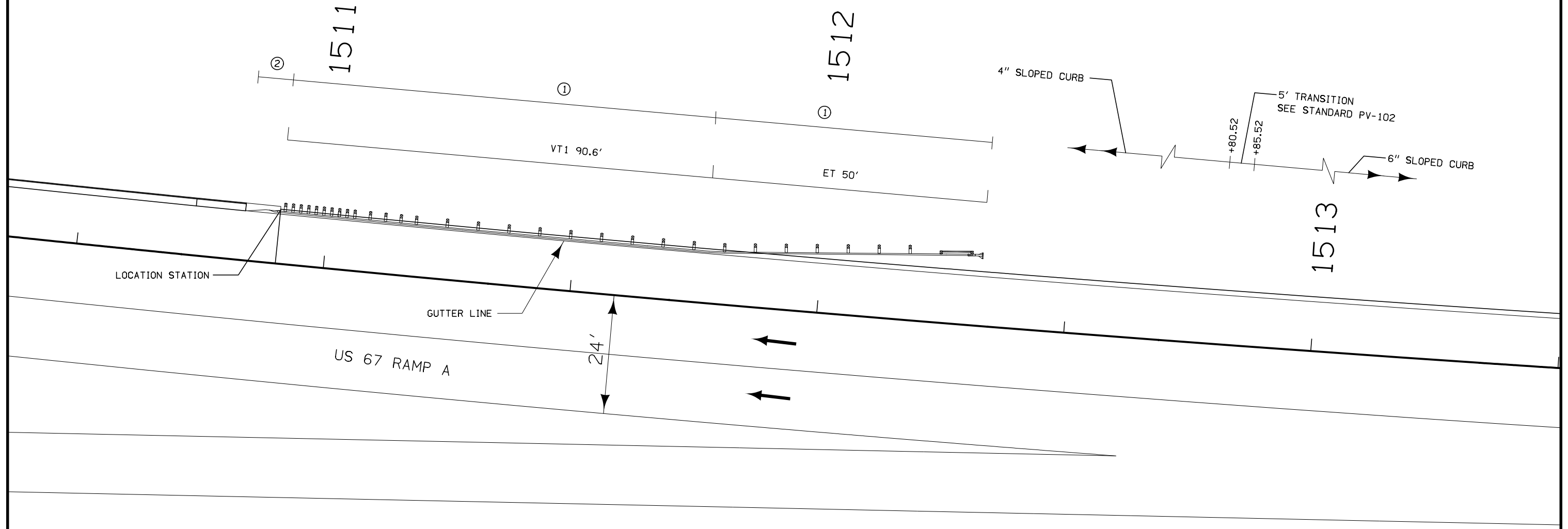
GUARDRAIL  
DETAIL

US 67 RAMP A



NOTES:

- ① SEE TAB 108-8A FOR DETAILS
- ② CONCRETE BARRIER END SECTION (BA-107) INCLUDED IN CONTRACT (IM-74-1(207)5--13-82), REFER TO TAB 108-18B
- ③ CONCRETE BARRIER END SECTION INCLUDED IN CONTRACT BRFIM-074-1(200)5--05-82)

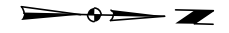


GUARDRAIL  
DETAIL

US 67 RAMP A

NOTES:

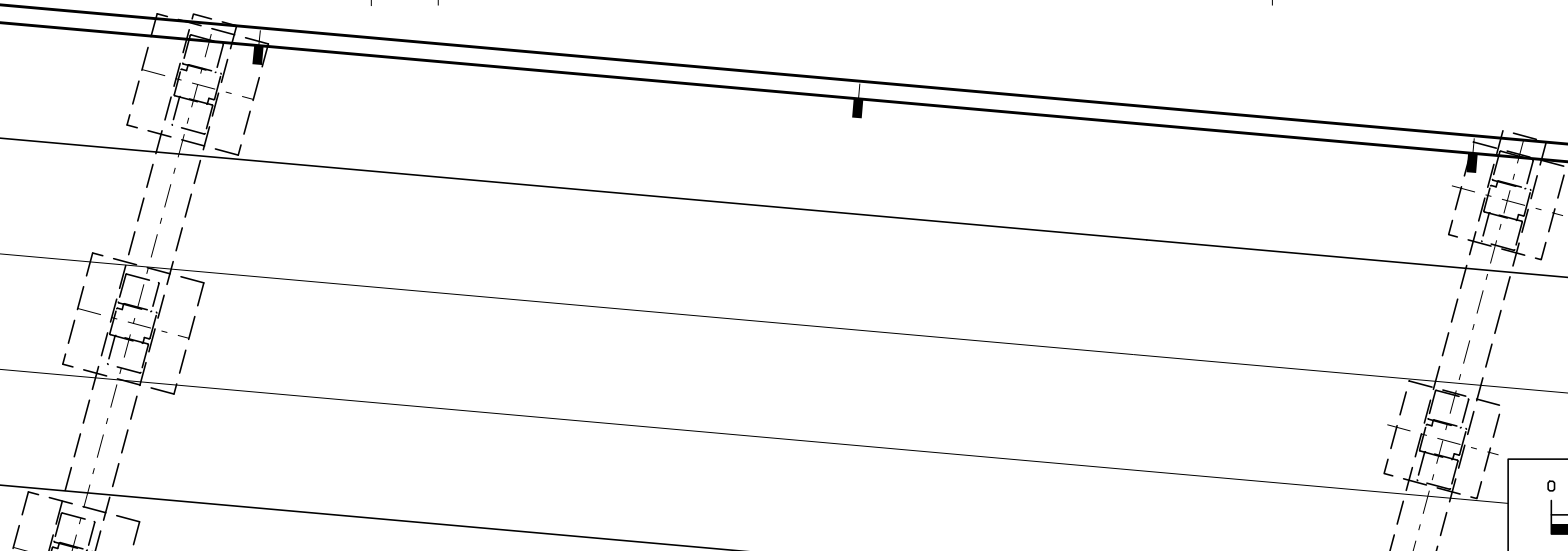
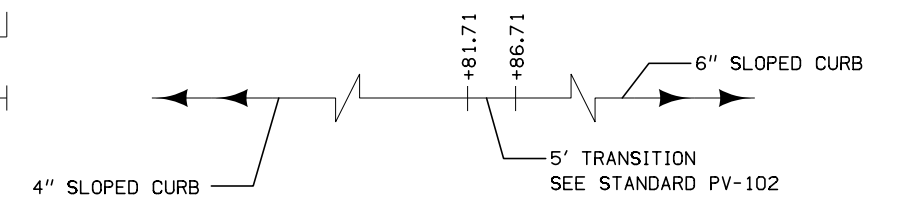
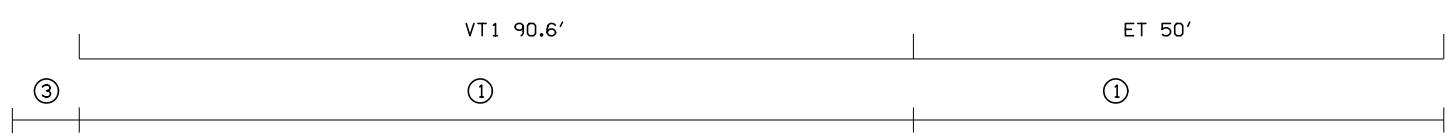
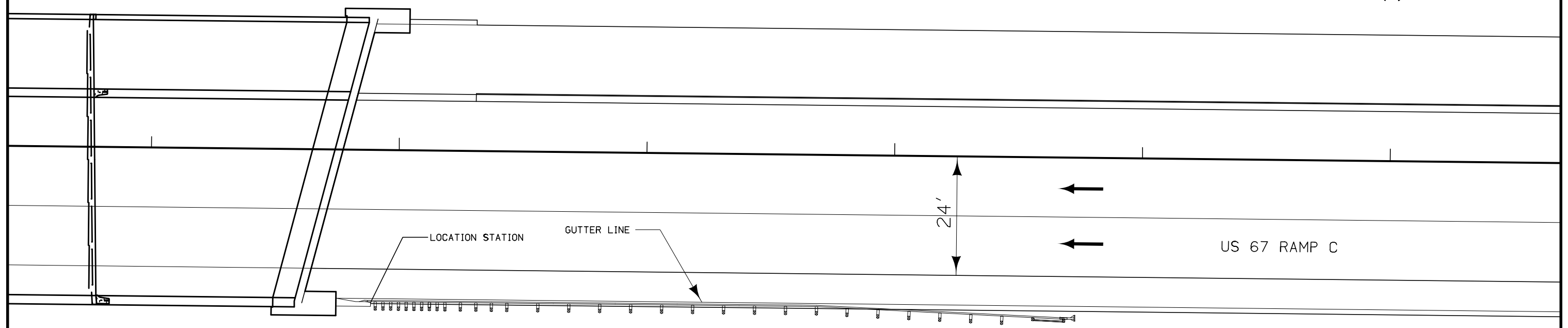
- ① SEE TAB 108-8A FOR DETAILS
- ② CONCRETE BARRIER END SECTION (BA-107) INCLUDED IN CONTRACT (IM-74-1(207)5--13-82), REFER TO TAB 108-18B
- ③ CONCRETE BARRIER END SECTION INCLUDED IN CONTRACT BRFIM-074-1(200)5--05-82)



3591

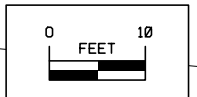
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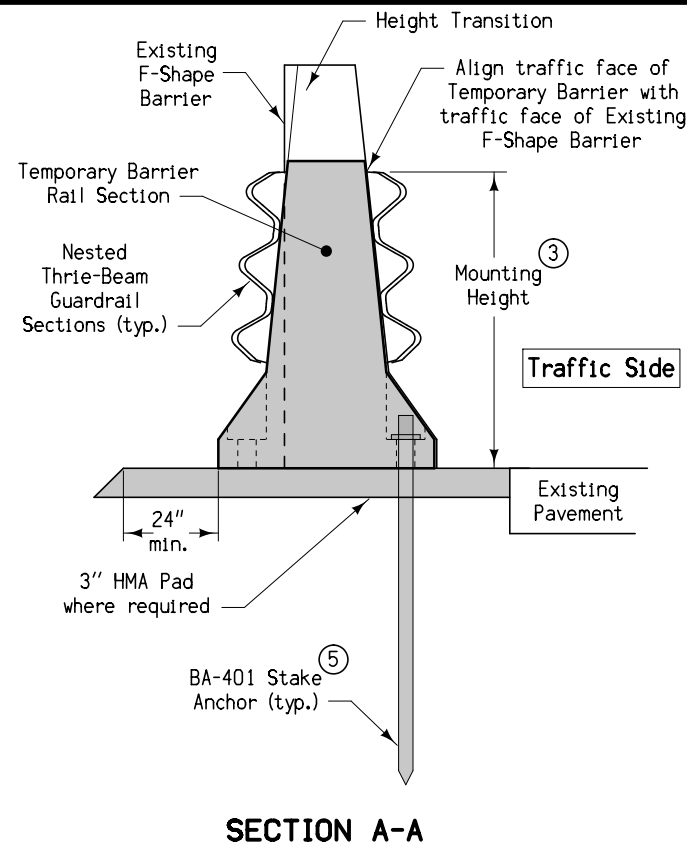


**GUARDRAIL  
DETAIL**

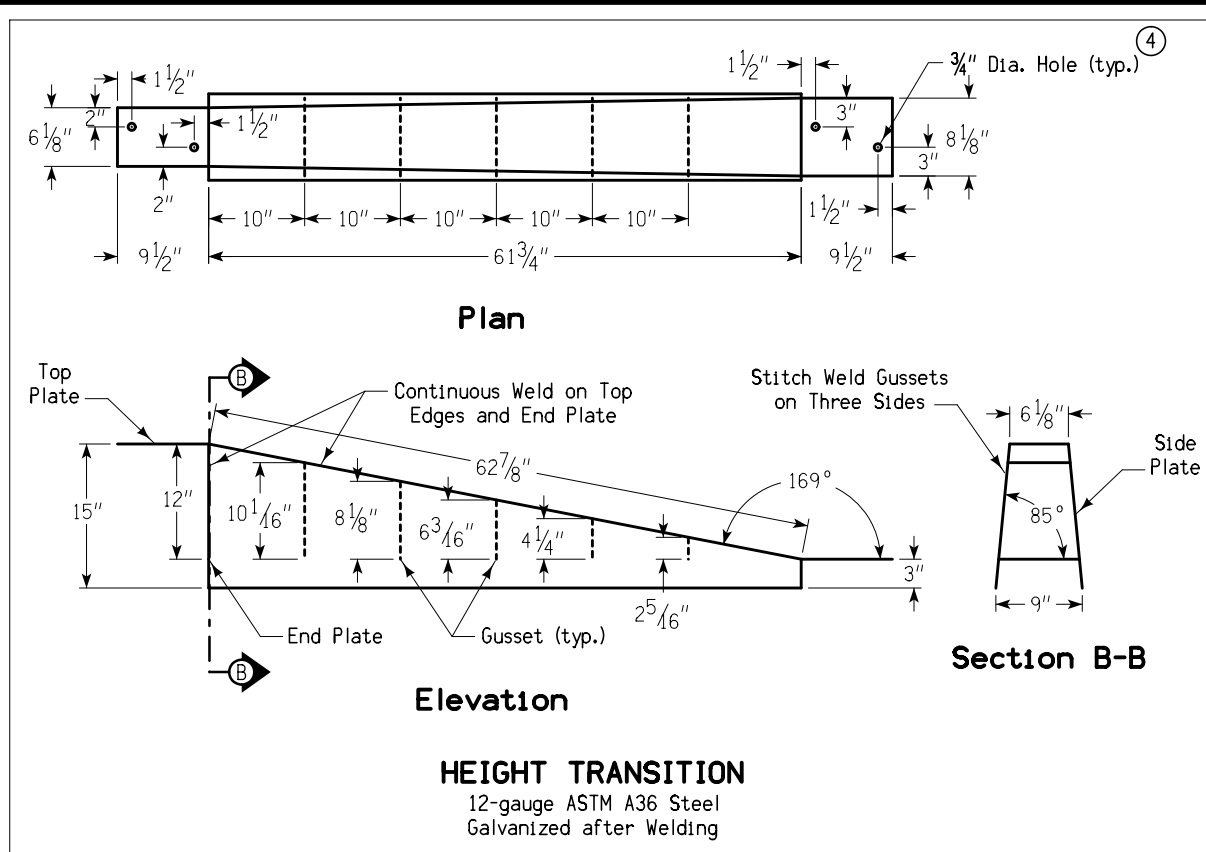
**US 67 RAMP C**







**SECTION A-A**



**HEIGHT TRANSITION**  
12-gauge ASTM A36 Steel  
Galvanized after Welding

Install temporary barrier rail on a flat, level surface. Removal of curb adjacent to bridge end posts may be necessary. Where anchored TBR sections are not located on existing pavement, construct a 3" minimum thickness HMA pad as shown. When required, removal of curb and construction of HMA pad shall be considered incidental to this contract item.

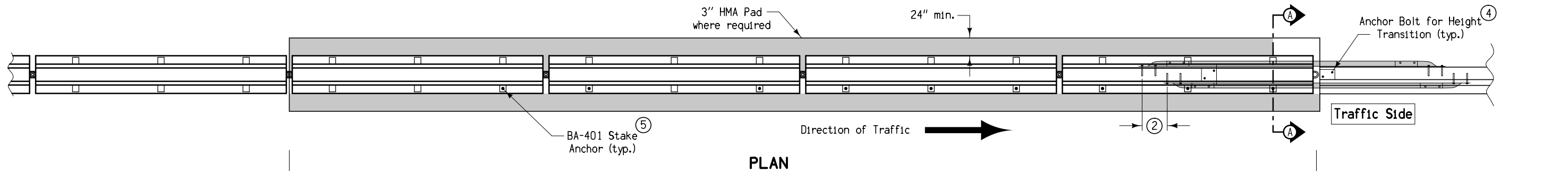
Upon removal of Temporary to Permanent Barrier Connection, use non-shrink grout complying with Materials I.M. 491.13 to fill any holes that were drilled for attachment of Terminal Connectors to median barrier.

Contract Item: Temporary to Permanent Barrier Connection

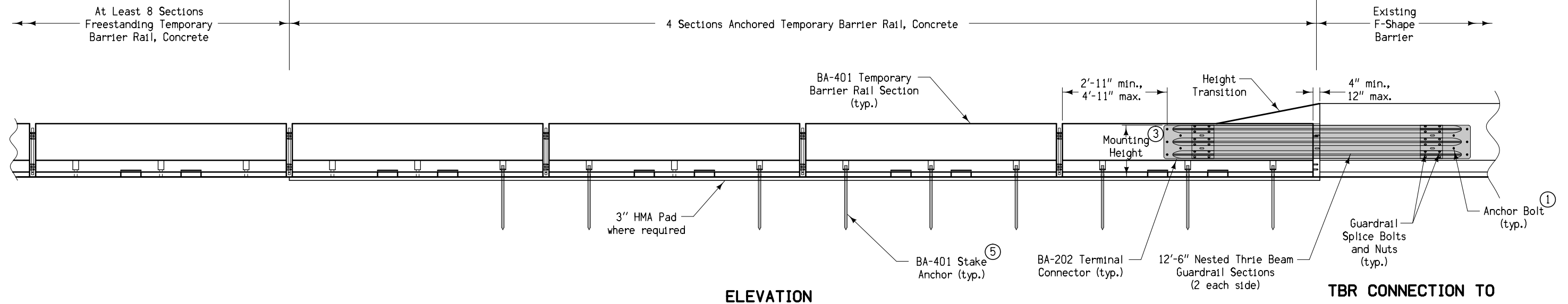
- Item includes:
- 4 - 12'-6" Thrie Beam Guardrail Sections
  - 4 - BA-202 Terminal Connectors
  - 1 - Height Transition
  - 48 - 5/8" dia. Guardrail Splice Bolts and Nuts
  - 20 - 3/4" dia. Rail Anchor Bolts: Powers Fasteners Wedge-Bolt Anchor OR Red Head Large Diameter Tapcon OR Simpson Titen HD Screw Anchor
  - 4 - 5/8" dia. Height Transition Anchor Bolts: Powers Fasteners Wedge-Bolt Anchor OR Red Head Large Diameter Tapcon OR Simpson Titen HD Screw Anchor

The number of Temporary to Permanent Barrier Connections will be counted. The Contractor will be paid the contract unit price for each Temporary to Permanent Barrier Connection measured as provided above.

- ① Install five (5) Rail Anchor Bolts in each Terminal Connector as shown. Ensure a minimum embedment depth of 6". Drill pilot holes with a core bit. Avoid drilling or cutting through reinforcing steel within temporary or permanent barriers.
- ② Shift opposite side thrie-beam sections 16" upstream in order to prevent anchor bolt interference.
- ③ 32" mounting height preferred. 30" minimum.
- ④ Install anchor bolts to secure Height Transition to barriers. Ensure a minimum embedment depth of 2".
- ⑤ Each connection requires nine (9) BA-401 stake anchors as shown. Use of the strap anchor is not allowed.

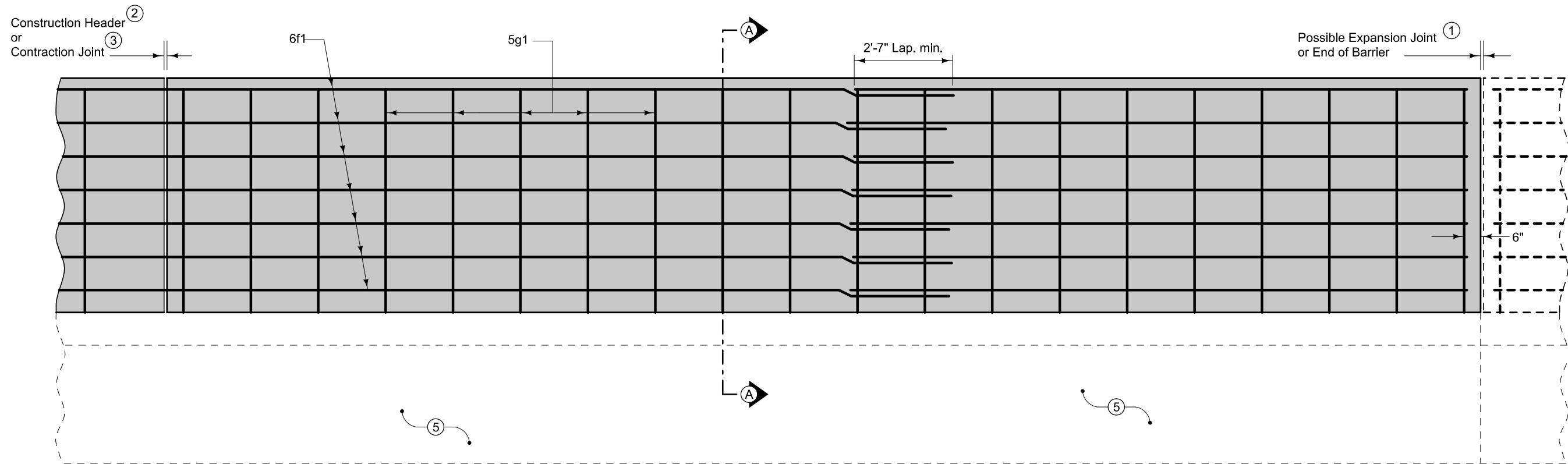


**PLAN**



**ELEVATION**

**TBR CONNECTION TO 44-INCH F-SHAPE BARRIER**



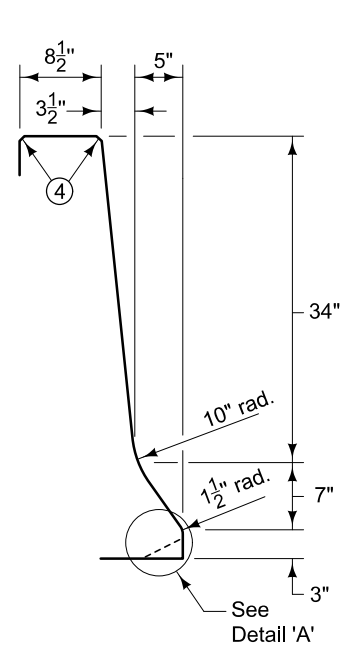
**ELEVATION**

Use Grade 60 epoxy-coated reinforcing bars. Provide 2 inches minimum cover. Anchor all reinforcement to prevent movement. Secure each section at the front, back, and at 3'-6" intervals using a method approved by the Engineer.

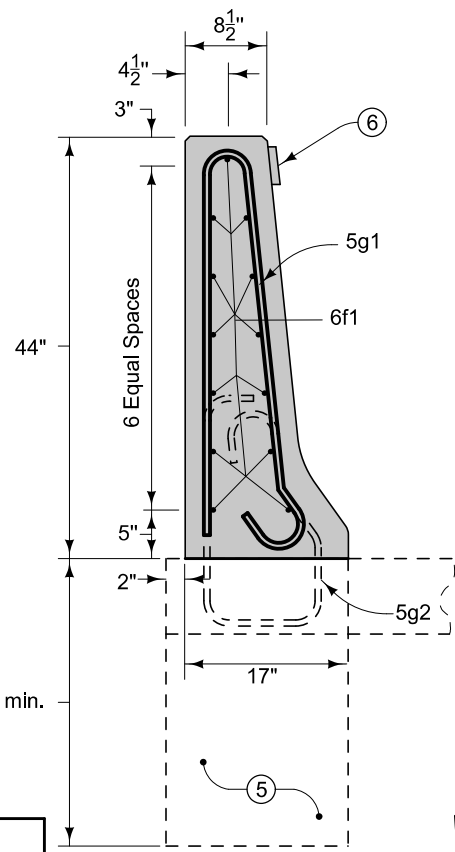
- ① Expansion joints are necessary only where specifically required by project plans. Conform expansion material to the shape of the barrier. No sealer is required.
- ② Where abutting sections are placed as separate pours, a butt joint may be used. Extend longitudinal reinforcement into the abutting section a minimum of 2'-7".
- ③ For free-standing barrier with integral footings, use 20 foot maximum, 15 foot minimum joint spacing.

- ④ Fillet all exposed corners with a  $\frac{3}{4}$  inch dressed and beveled strip.
- ⑤ Construct concrete footing when barrier is not placed on concrete slab. Apply Section 2403.03, but the use of forms is optional. If forms are used, place backfill around the completed footing.
- ⑥ Place barrier markers at 100 foot increments in areas with non-continuous lighting, or 250 foot increments in areas with continuous lighting. Marker color to be the same as adjacent edge line.

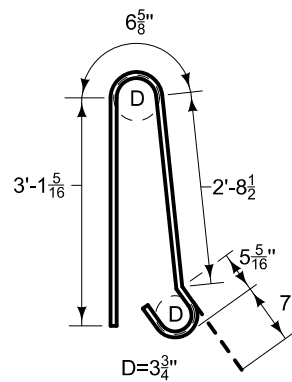
Possible Contract Item:  
Concrete Barrier, BA-102 (MODIFIED)  
Possible Tabulation:  
108-18B



**BARRIER FACE**

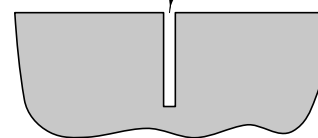


**SECTION A-A**



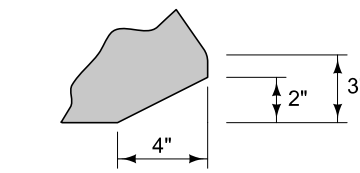
**5g1 BENT BAR**

$\frac{1}{8}$ " min. wide x 1" deep saw cut. No sealing required.



**SAWED CONTRACTION JOINT**

Saw cut top and front face. Saw cut back if exposed.



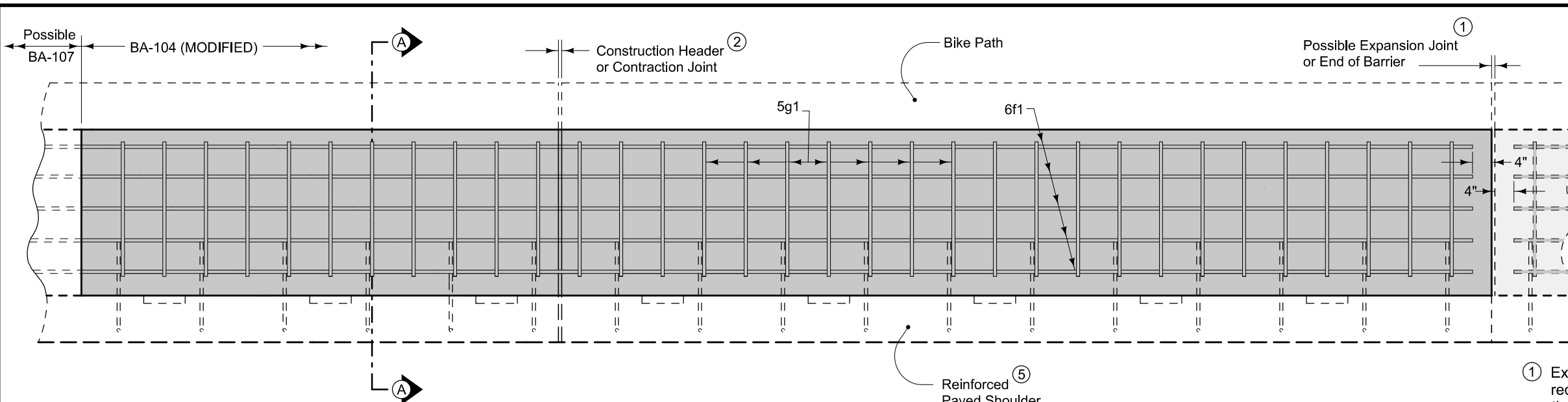
**DETAIL 'A'**

Special Shaping for Barrier over Intake

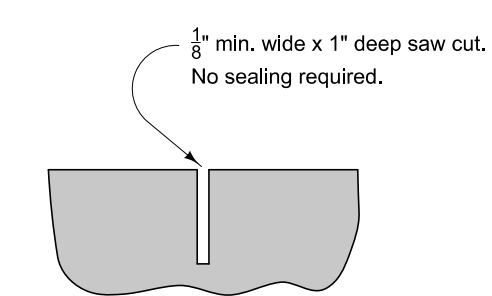
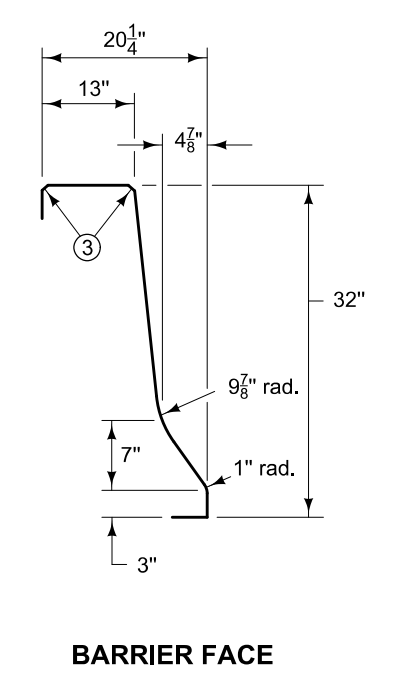
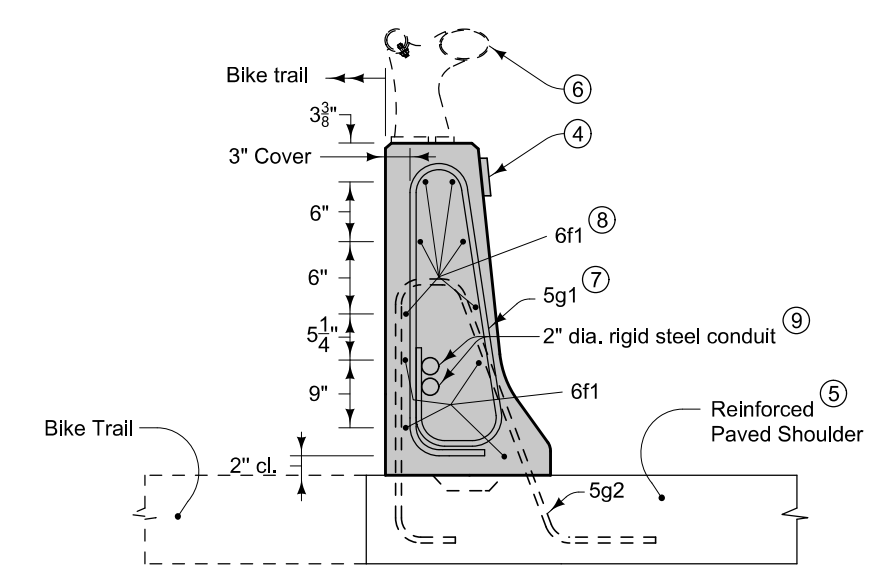
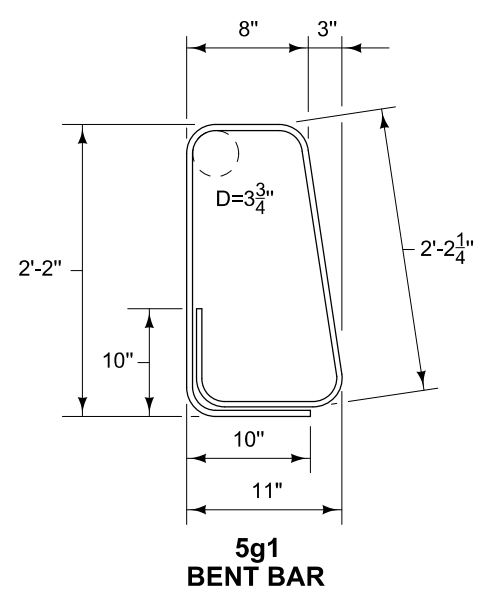
<b>CONCRETE QUANTITIES</b>
Per foot
0.11 cy

REINFORCING BAR LIST					
Per Section (Approx. 20 feet)					
Bar	Size	Number of Bars	Length	Weight (lbs.)	Spacing
5g1	5	20	7'-5"	155	1'-0"
6f1	6	13	19'-6"	381	—

<h1>MODIFIED</h1> <h2>STANDARD ROAD PLAN</h2>	REVISION
	1   04-19-11
	<b>BA-102</b>
SHEET 1 of 1	
MODIFICATIONS: Changed 5g1 bar, changed 5g1 spacing, changed f1 size and spacing, removed dowels.	
<b>44" CONCRETE BARRIER</b> <b>(HALF SECTION)</b> <b>FOR USE WITH</b> <b>REINFORCED PAVED SHOULDER</b>	



- ① Expansion joints are necessary only where specifically required by project plans. Conform expansion material to the shape of the barrier. No sealer is required.
- ② Where abutting sections are placed as separate pours, a butt joint may be used. Extend longitudinal reinforcement into the abutting section a minimum of 1'-6". Contraction joint locations shall match pavement joint locations.
- ③ Fillet all exposed corners with a  $\frac{3}{4}$  inch dressed and beveled strip.
- ④ Place barrier markers at 100 foot increments in areas with non-continuous lighting, or 250 foot increments in areas with continuous lighting. Marker color to be the same as adjacent edge line.
- ⑤ Refer to BA-106 (MODIFIED) for details of 5g2 bars and reinforced paved shoulder.
- ⑥ Refer to "STEEL SEPARATION RAILING DETAILS".
- ⑦ On the non-traffic side of the barrier railing, place the 5g1 bars with a 3" clearance and the 5g2 bars with a  $1\frac{1}{2}$ " clearance to provide adequate space between the steel conduit and the stainless steel 5g2 bars to meet the requirements of I.M. 451.02.
- ⑧ Note that some of the 6f1 bars are to be placed outside of the 5g1 bars, between the 5g1 bars and the 5g2 bars, as shown in Section A-A.
- ⑨ The steel conduit shall be securely tied at every 3'-0" intersection with the 5g1 bars to avoid contact with the stainless steel 5g2 bars.



**SAWED CONTRACTION JOINT**

Saw cut top and front face. Saw cut back if exposed.

Use Grade 60 epoxy-coated reinforcing bars. Provide 2 inches minimum cover, unless noted otherwise. Anchor all reinforcement to prevent movement. Secure each section at the front, back, and at 3'-6" intervals using a method approved by the Engineer.

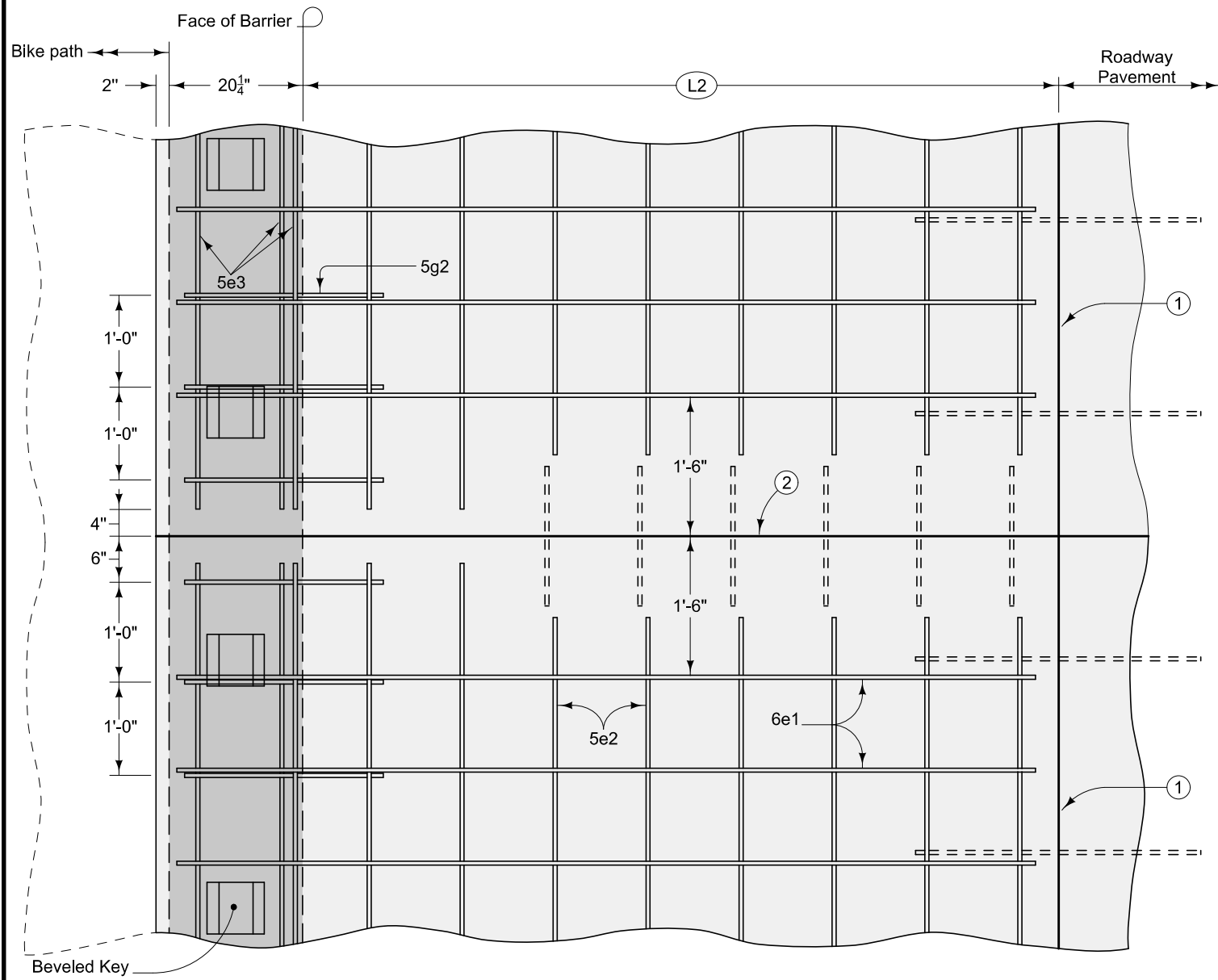
Possible Contract Item:  
Concrete Barrier, BA-104 (MODIFIED)

Possible Tabulation:  
108-18B

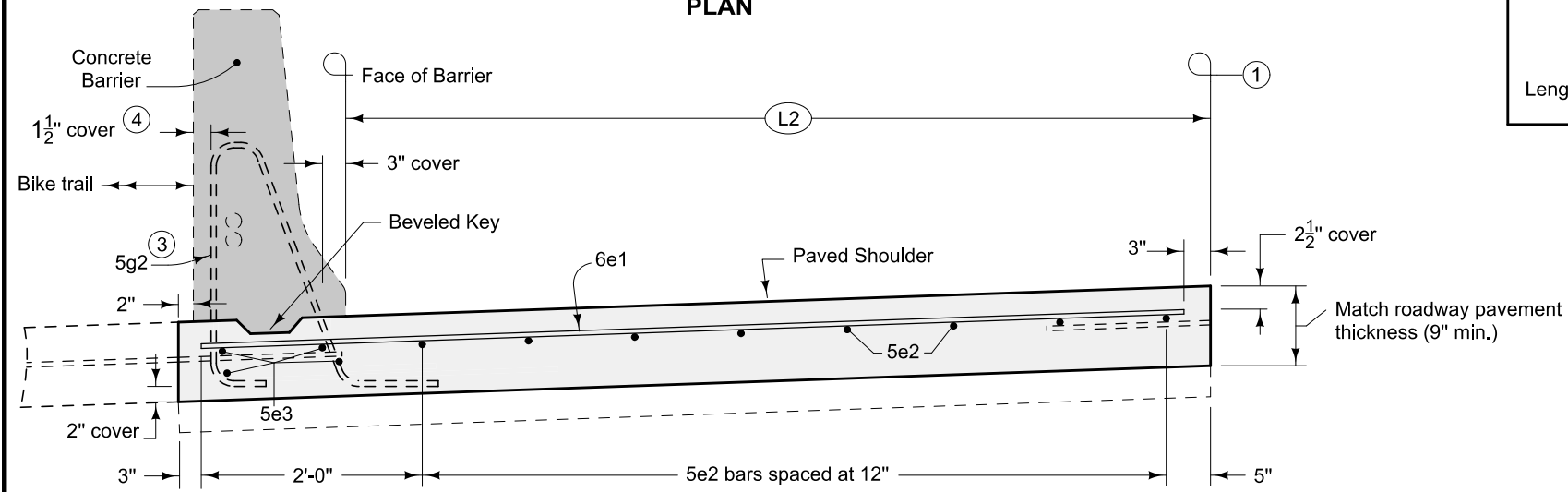
ESTIMATED QUANTITIES FOR BARRIER Per Linear Foot	
Concrete - Cu. Yds.	0.13
Reinforcing Steel - Lbs.	30.4

REINFORCING BAR LIST Per Section (Approximately 20')			
Bar	Number of Bars	Length	Spacing
5g1	40	7'-7 1/4"	0'-6"
6f1	10	19'-4"	—

<b>MODIFIED STANDARD ROAD PLAN</b>	REVISION
	New 04-20-10
	<b>BA-104</b>
SHEET 1 of 1	
MODIFICATIONS: Changed size and shape of concrete barrier and reinforcement.	
<b>32" CONCRETE BARRIER FOR USE WITH REINFORCED PAVED SHOULDER</b>	



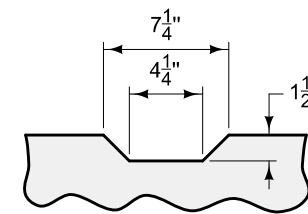
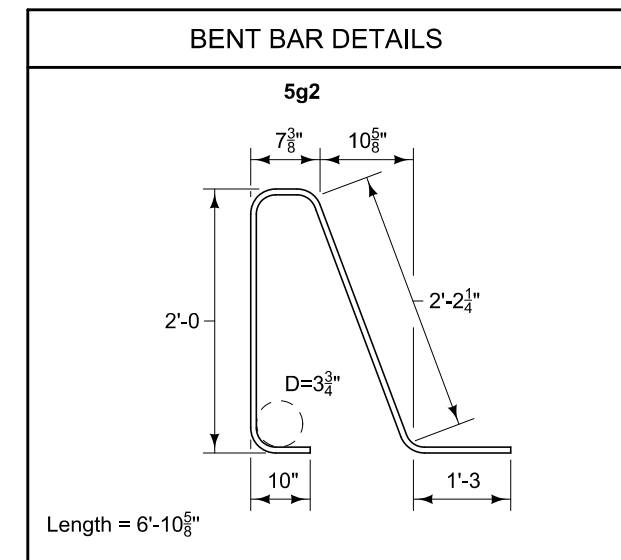
PLAN



TYPICAL SECTION

REINFORCING BAR LIST				
Per Shoulder Panel (Approximately 20 Linear Feet)				
(L2)	Bar	Number of Bars	Length	Spacing
4'	6e1	18	5'-1"	12"
	5e2	4	18'-0"	12"
6'	6e1	18	7'-1"	12"
	5e2	6	18'-0"	12"
8'	6e1	18	9'-1"	12"
	5e2	8	18'-0"	12"
10'	6e1	18	11'-1"	12"
	5e2	10	18'-0"	12"
12'	6e1	18	13'-1"	12"
	5e2	12	18'-0"	12"
Applies to all Shoulder Widths	5e3	4	18'-8"	See Drawing
	5g2 (3)	20	6'-11"	1'-0"

ESTIMATED SHOULDER QUANTITIES					
Per Linear Foot					
	(L2)				
	4'	6'	8'	10'	12'
Concrete Sq. Yds.	0.65	0.87	1.09	1.32	1.54



BEVELED KEY

Use 2 x 8 lumber 8" long to make keys. Place keys at 2'-8" centers.

- ① 'L-2' or 'KT-2' joint. When roadway pavement is existing, use 'BT-3' joint. See PV-101.
- ② 'CD' joint. Match roadway joint locations. See PV-101. No 'CD' joint baskets required within 4' of outside edge of shoulder.
- ③ When shoulder will be located under a concrete barrier end section, replace 5g2 bars with reinforcement as shown on BA-107.
- ④ On the non-traffic side of the barrier railing, place the 5g1 bars, as specified on BA-104 modified, with a 3 inch clearance and the 5g2 bars with a 1 1/2 inch clearance to provide adequate space between the steel conduit and the stainless steel 5g2 bars to meet the requirements of I.M. 451.02.

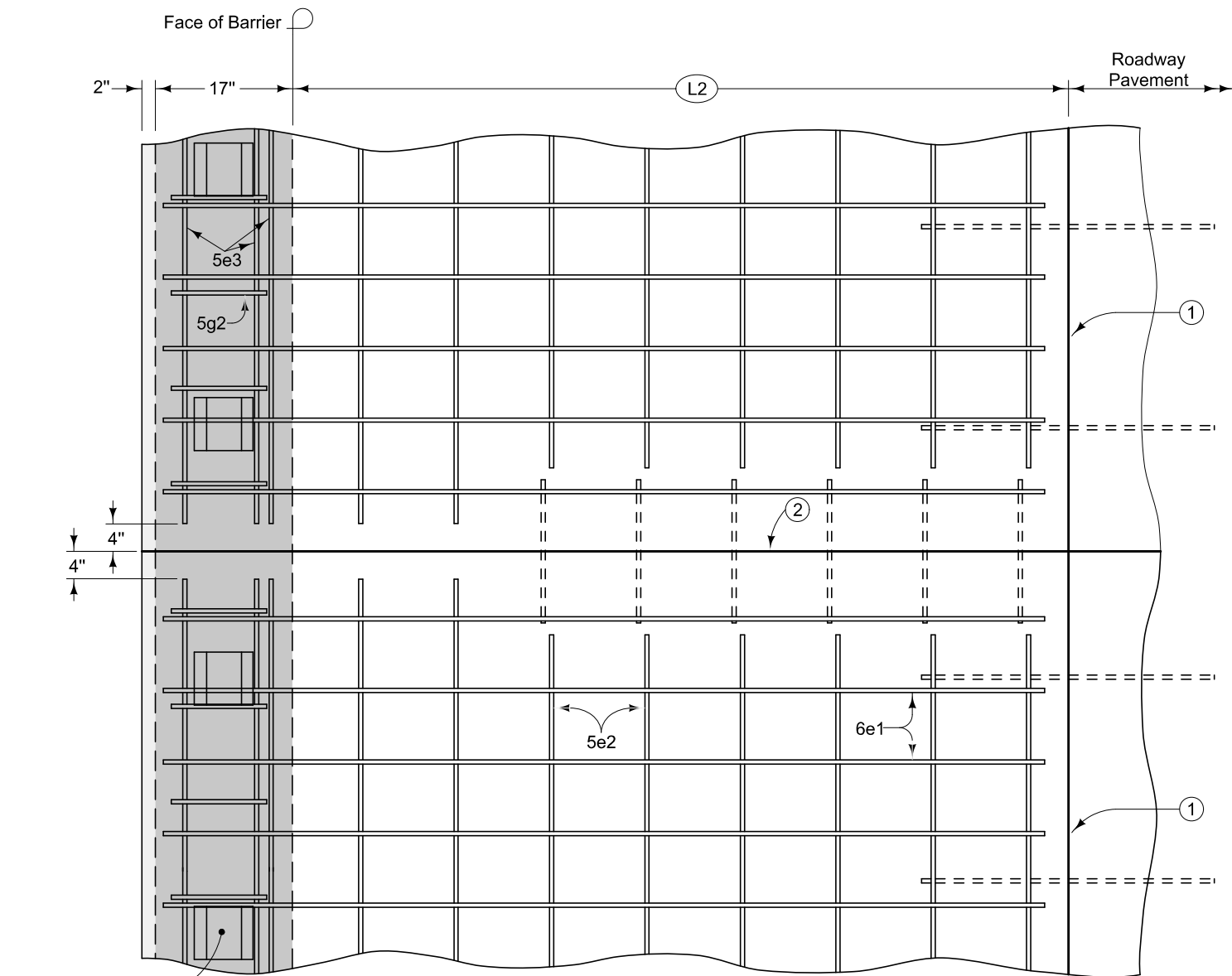
Possible Contract Item:  
Reinforced Paved Shoulder (MODIFIED)

Possible Tabulation:  
108-18B

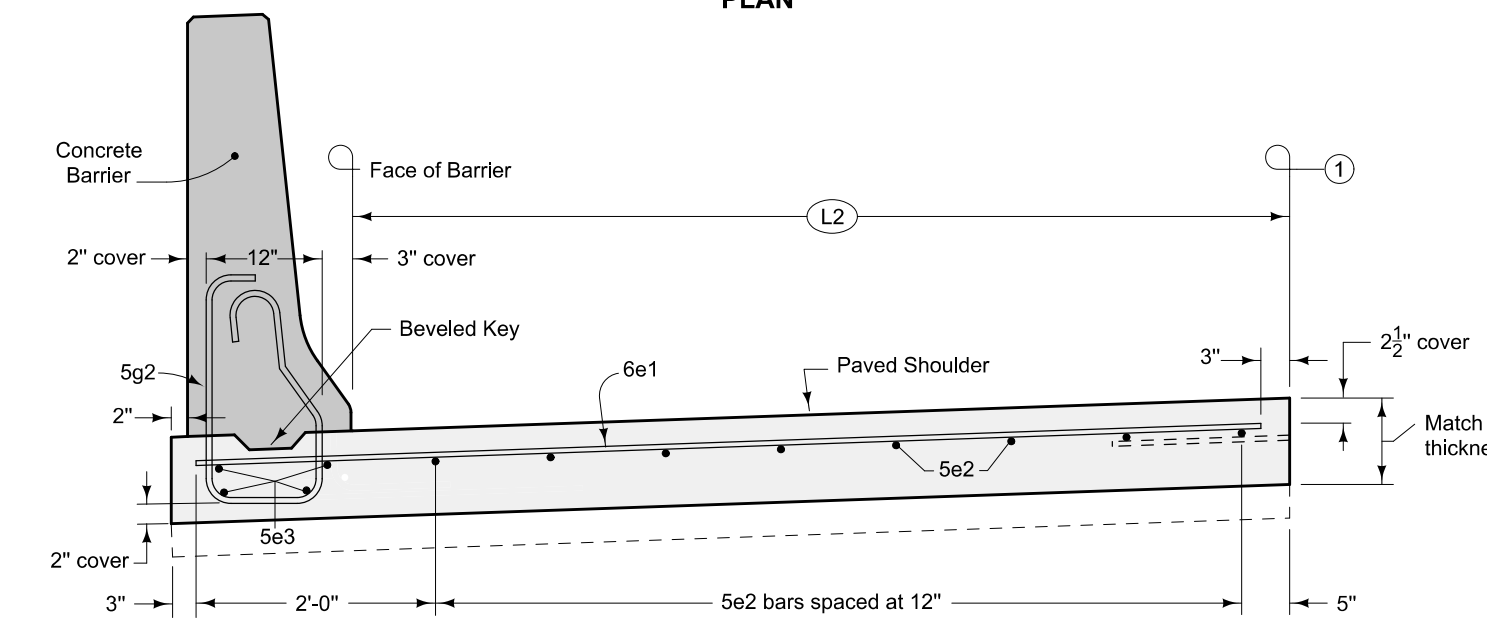
<b>MODIFIED STANDARD ROAD PLAN</b>	REVISION	
	2	10-18-11
	<b>BA-106</b>	
SHEET 1 of 1		

MODIFICATIONS: Changed concrete barrier width and changed 5g2 bar size and spacing and removed 5g3 bar for use with 32" barrier

**REINFORCED PAVED SHOULDER  
FOR CONCRETE BARRIER**



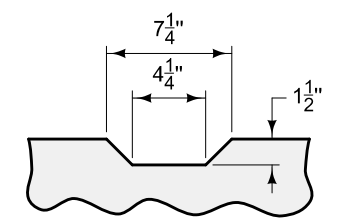
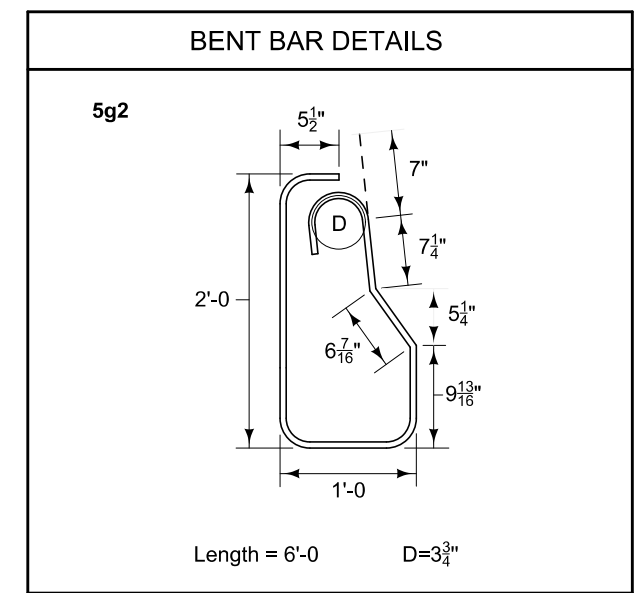
PLAN



TYPICAL SECTION

REINFORCING BAR LIST				
Per Shoulder Panel (Approximately 20 Linear Feet)				
(L2)	Bar	Number of Bars	Length	Spacing
4'	6e1	24	5'-1"	9"
	5e2	4	18'-0"	12"
6'	6e1	24	7'-1"	9"
	5e2	6	18'-0"	12"
8'	6e1	24	9'-1"	9"
	5e2	8	18'-0"	12"
10'	6e1	24	11'-1"	9"
	5e2	10	18'-0"	12"
12'	6e1	24	13'-1"	9"
	5e2	12	18'-0"	12"
Applies to all Shoulder Widths	5e3	4	18'-8"	See Drawing
	5g2	varies	varies	1'-0"

ESTIMATED SHOULDER QUANTITIES					
Per Linear Foot					
	(L2)				
	4'	6'	8'	10'	12'
Concrete Sq. Yds.	0.62	0.84	1.06	1.29	1.51



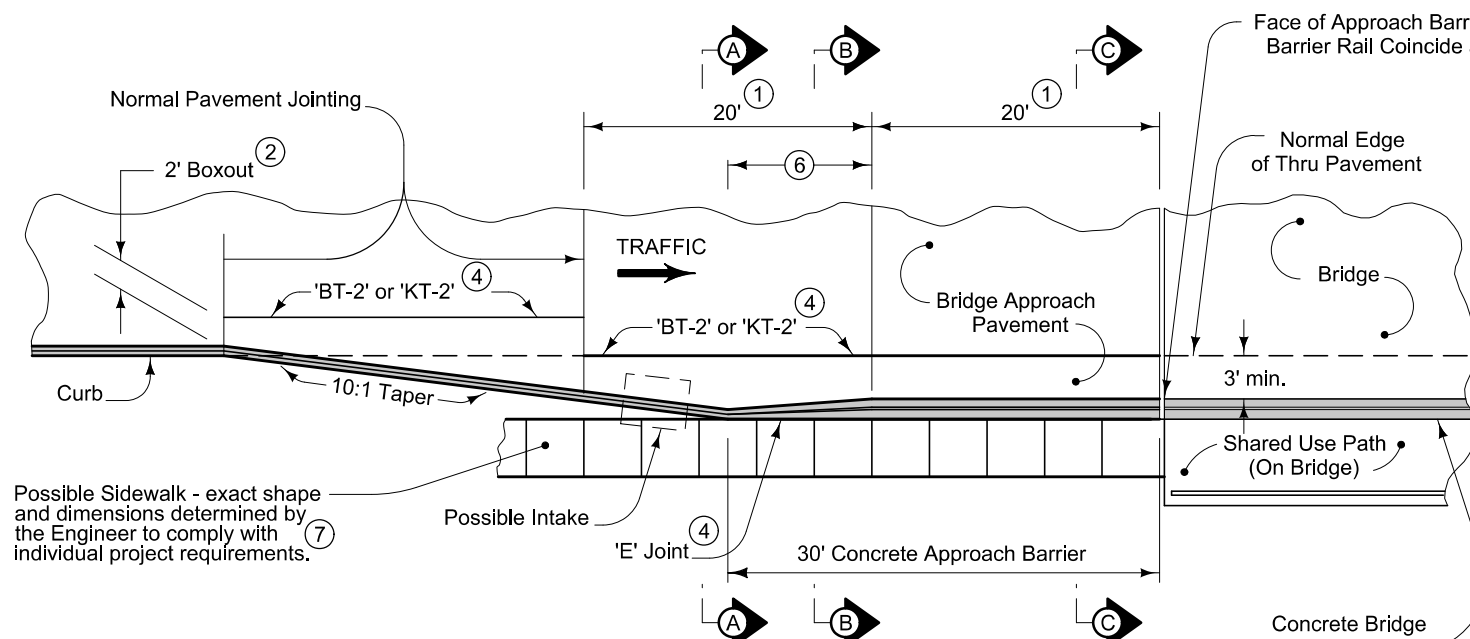
BEVELED KEY  
Use 2 x 8 lumber 8" long to make keys.  
Place keys at 2'-8" centers.

- ① 'L-2' or 'KT-2' joint. When roadway pavement is existing, use 'BT-3' joint. See PV-101.
- ② 'CD' joint. Match roadway joint locations. See PV-101. No 'CD' joint baskets required within 4' of outside edge of shoulder.

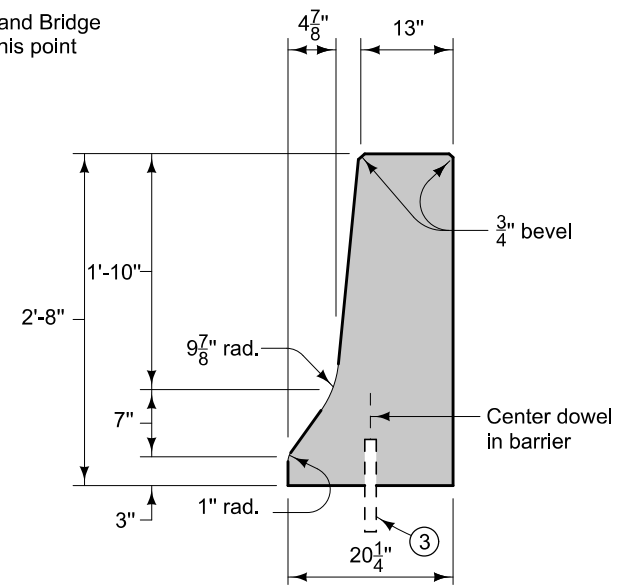
Possible Contract Item:  
Reinforced Paved Shoulder for 44" Concrete Barrier

Possible Tabulation:  
108-18B

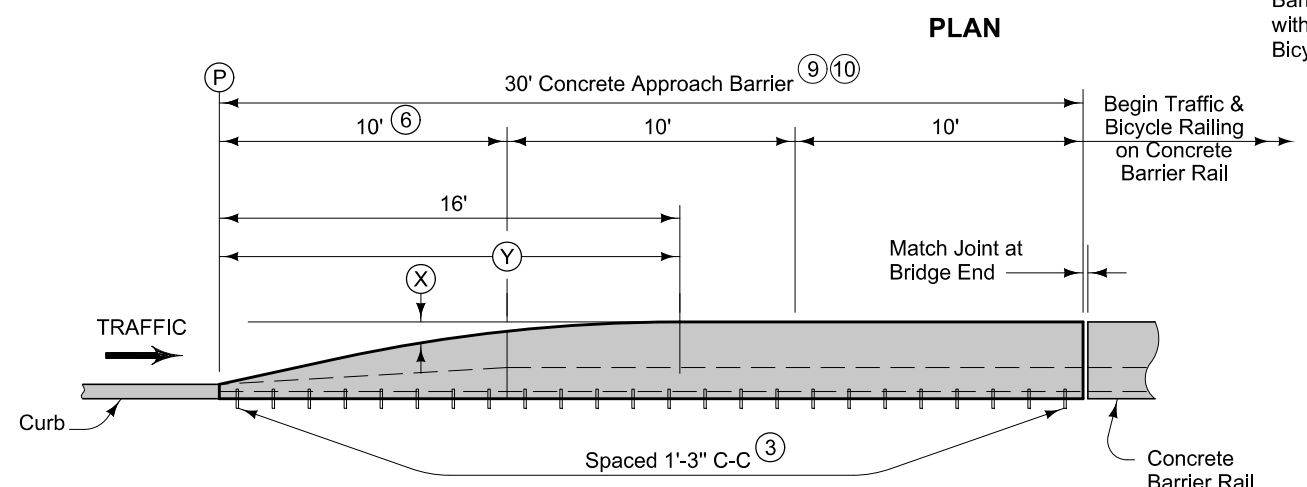
<h1>MODIFIED</h1> <h2>STANDARD ROAD PLAN</h2>	REVISION
	3   04-17-12
	<b>BA-106</b>
SHEET 1 of 1	
MODIFICATIONS: Changed 5g2 bar, 5g2 spacing, 6e1 spacing, removed 5g3 bar.	
<h3>REINFORCED PAVED SHOULDER FOR 44" CONCRETE BARRIER</h3>	



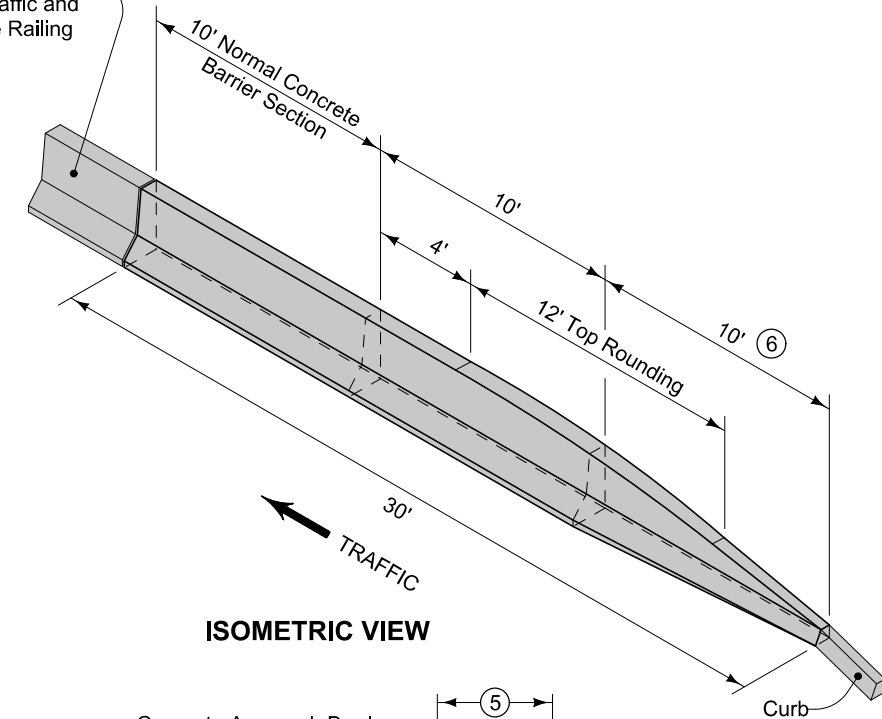
Possible Sidewalk - exact shape and dimensions determined by the Engineer to comply with individual project requirements. (7)



FULL BARRIER RAIL SECTION

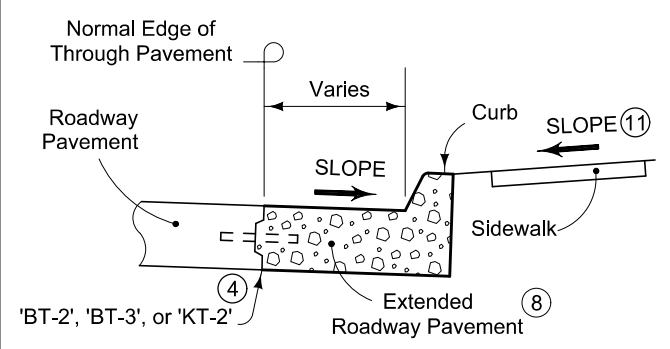


ELEVATION

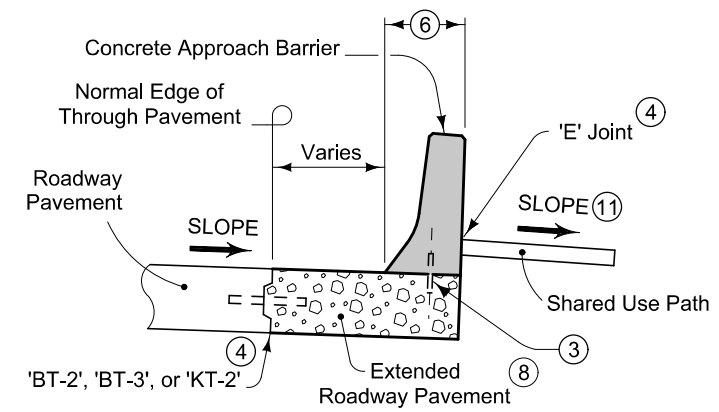


ISOMETRIC VIEW

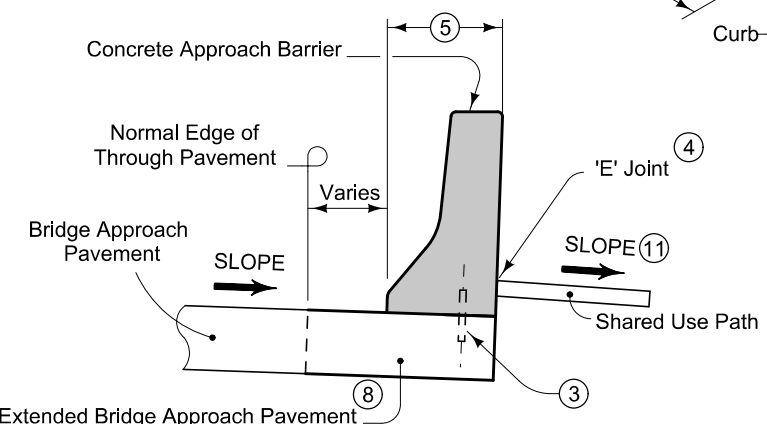
OFFSETS FOR ROUNDED BARRIER TOP																	
Y = Distance from (P)	ft.	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0
X = Offset to Rounded Top	ft.	1.97	1.76	1.57	1.37	1.16	0.98	0.80	0.65	.50	0.39	0.28	0.18	0.11	0.06	0.02	0.00



SECTION A-A



SECTION B-B



SECTION C-C

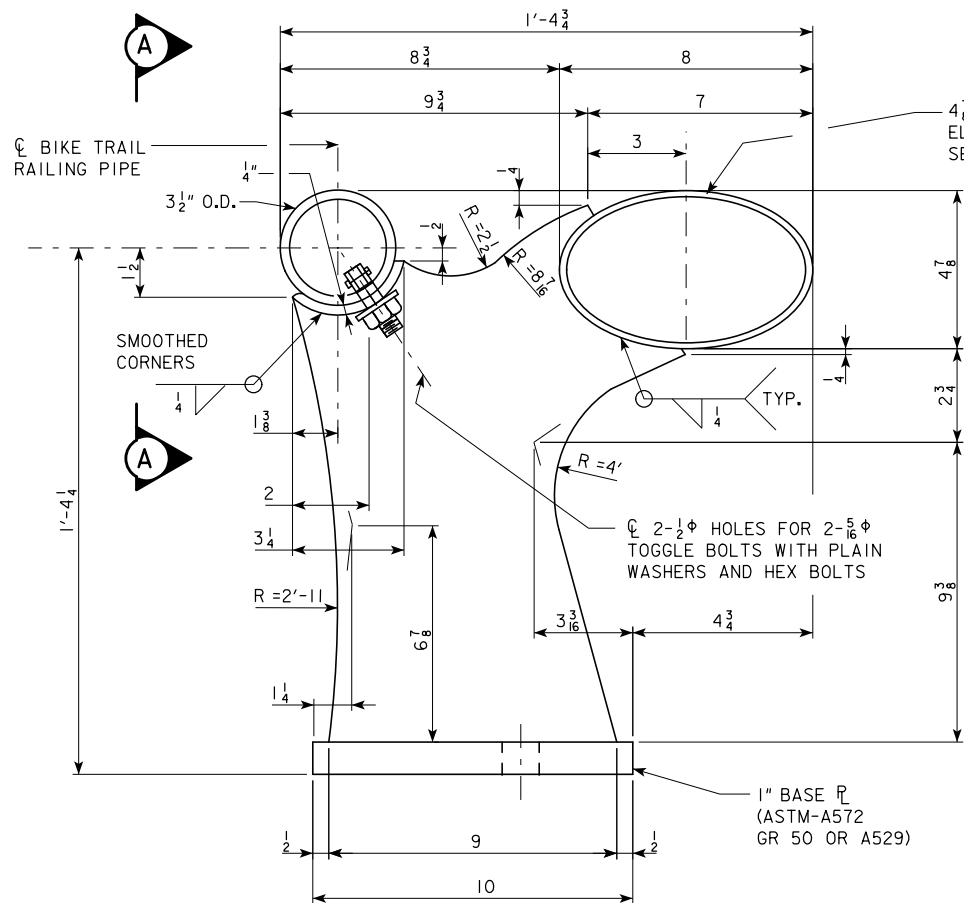
Install a 'C' joint in concrete approach barrier to match the location of each joint in both roadway and bridge approach pavement.

- ① Typical joint spacing and location. Specific project requirements shall be as directed by the Engineer.
- ② Match boxout width to existing curb and gutter joint. Use 2 foot wide boxout where curb and gutter are not constructed.
- ③ #8 x 8 inch deformed bars or 1 inch diameter smooth.
- ④ For joint detail, see PV-101.
- ⑤ Bottom width of barrier is maintained at 17 inches.
- ⑥ Bottom width of barrier transitions from 8 to 17 inches.
- ⑦ Required sidewalk will be measured and paid for separately.
- ⑧ Additional concrete quantity required for extended roadway pavement will be included in roadway paving quantity.
- ⑨ Place no delineator or object marker in front of, or on, the barrier.
- ⑩ Approximately 2.0 cubic yards of concrete are required to construct barrier as shown. Amount may vary depending on individual site requirements.
- ⑪ See K Sheets for Details of slope transition.

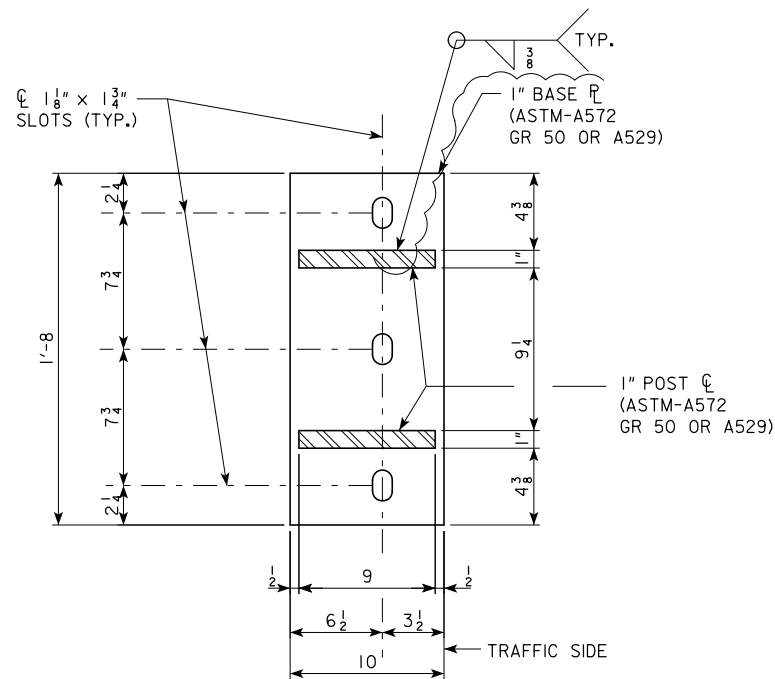
Possible Contract Item:  
Concrete Barrier, Tapered End, BA-108

Possible Tabulation:  
108-18B

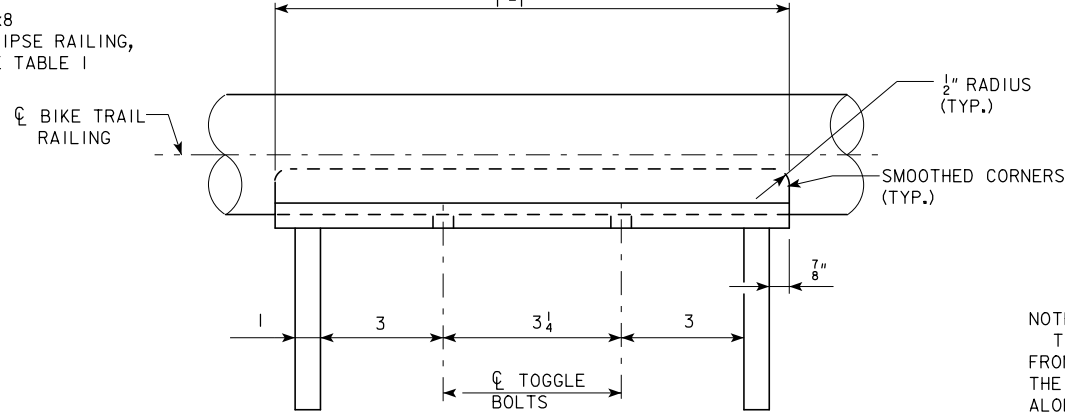
<h1>MODIFIED</h1> <h2>STANDARD ROAD PLAN</h2>	REVISION	
	1	04-19-11
	<b>BA-108</b>	
SHEET 1 of 1		
REVISIONS: Changed title to remove reference to speed. MODIFICATIONS: Changed barrier height from 34" to 32". Noted Railing		
<h3>CONCRETE BARRIER</h3> <h3>TAPERED END SECTION</h3>		



ELEVATION-RAISED TRAFFIC AND BICYCLE RAILING POST



BASE PLATE DETAIL



SECTION A-A

TESTING NOTE FOR TUBE STEEL:

THE RESULTS OF THE FOLLOWING TEST SHALL BE SUBMITTED AS A CERTIFIED TEST REPORT TO THE CENTRAL MATERIALS OFFICE IN AMES ALONG WITH A CERTIFIED MILL TEST REPORT. IN ADDITION, A 1 FOOT LONG TUBE SAMPLE FROM THE FABRICATING SHOP SHALL ALSO BE SUBMITTED TO THE CENTRAL MATERIALS OFFICE IN AMES FOR VERIFICATION TESTING.

TESTING IS NOT REQUIRED FOR HOT ROLLED TUBE STEEL CONFORMING TO ASTM A501.

ALL COLD FORMED TUBE STEEL SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM E436 - "DROP-WEIGHT TEAR TESTS OF FERRITIC STEELS", EXCEPT WITH THE FOLLOWING MODIFICATIONS:

ALL TESTS SHALL BE PERFORMED BY THE PRODUCING MILL PRIOR TO FABRICATION. MATERIAL SAMPLES SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123 PRIOR TO TESTING.

THE TESTING SHALL BE CONDUCTED AT A TEMPERATURE OF 0 DEGREES FAHRENHEIT ON A 3" x 1'-0 SPECIMEN.

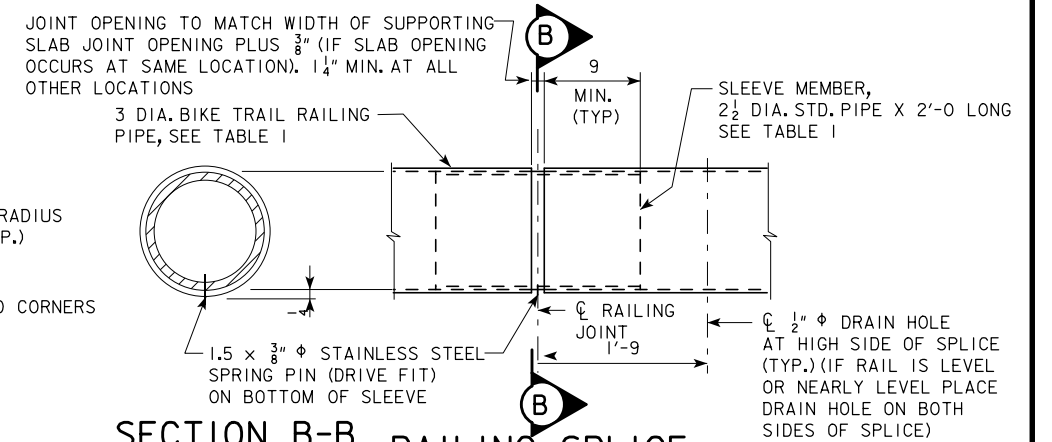
IF THE AVERAGE PERCENT SHEAR AREA FALLS BELOW 50 PERCENT THE MATERIAL REPRESENTED BY THESE TESTS SHALL BE REJECTED.

ALL MATERIALS SHALL BE ACCEPTED ON THE BASIS OF COMPLYING TEST RESULTS AND CERTIFIED MILL TEST REPORT.

TO FACILITATE ACCEPTANCE AND REJECTION OF MATERIAL, THE MANUFACTURER OF THE STRUCTURAL STEEL SHAPE SHALL IDENTIFY THE PRODUCT WITH THE STEEL HEAT NUMBER THAT IS TRACEABLE AT THE TIME OF ACCEPTANCE. THE HEAT NUMBER SHALL BE PLACED AT INTERVALS NOT TO EXCEED 4'-0.

TESTING OF STEEL BIKE TRAIL RAILING PIPE IS NOT REQUIRED.

TABLE I		
APPROVED RAILING MATERIAL		
4 7/8 x 8 ELLIPSE RAILING MATERIAL	SLEEVE MEMBER (AT RAILING SPLICE)	
	MATERIAL	THICKNESS
6" DIA. STD. PIPE ASTM-A53 E OR S GRADE B	ASTM-A53-B	0.353"
	A36 OR A500 GR. B	0.339"
	API-5LX52	0.224"
6" DIA., 0.280" WALL THICKNESS ASTM-A501	ASTM-A53-B	0.353"
	A36 OR A500 GR. B	0.339"
	API-5LX52	0.224"
6 5/8" O.D. x 0.188" TUBE API-5LX52	ASTM-A53-B	0.339"
	A36 OR A500 GR. B	0.325"
3 1/2 DIA. BIKE TRAIL RAILING PIPE MATERIAL	SLEEVE MEMBER (AT RAILING SPLICE)	
	MATERIAL	
3" DIA. STD. PIPE ASTM-A53 E OR S GRADE B	2 1/2" DIA. STD. PIPE	
	ASTM-A53 E OR S	GRADE B



SECTION B-B RAILING SPLICE

NOTE: THE MAJOR AND MINOR DIAMETERS OF THE RAIL MEMBER MAY VARY +/- 0.1875 INCHES FROM PLAN DIMENSIONS. HOWEVER, THE DIFFERENCE BETWEEN THE OUTSIDE DIAMETERS OF THE SLEEVE AND THE INSIDE DIAMETERS OF THE RAIL SHALL NOT EXCEED 0.125 INCHES ALONG THE MAJOR OR MINOR AXIS. THE MAXIMUM GAP ALONG THE 45° AXIS OF THE SLEEVE MAY BE 1/4" MAX.

STRUCTURAL STEEL RAILING, TRAFFIC & BICYCLE NOTES:

STRUCTURAL STEEL BARRIER JOINTS ARE TO BE LOCATED AS SHOWN.

THE STRUCTURAL STEEL RAILING IS TO BE BID ON A PER LINEAR FOOT BASIS MEASURED FROM END TO END OF STEEL RAILING.

THE NUMBER OF LINEAR FOOT OF STRUCTURAL STEEL RAILING INSTALLED WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT BASED ON PLAN QUANTITIES.

PRICE BID FOR "STRUCTURAL STEEL RAILING, TRAFFIC & BICYCLE" SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIAL, AND ALL THE EQUIPMENT AND LABOR REQUIRED TO ERECT THE RAILING IN ACCORDANCE WITH THESE PLANS AND CURRENT SPECIFICATIONS.

ALL RAILINGS, POSTS, SLEEVES, BASE PLATES, AND SHIMS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A123.

OPTIONAL CAST-IN-PLACE ANCHOR BOLTS TO COMPLY WITH ASTM F1554 GRADE 105. HEX NUTS TO COMPLY WITH ASTM A563 GRADE DH. WASHERS TO COMPLY WITH ASTM F436. GALVANIZING IN ACCORDANCE WITH ASTM F2329.

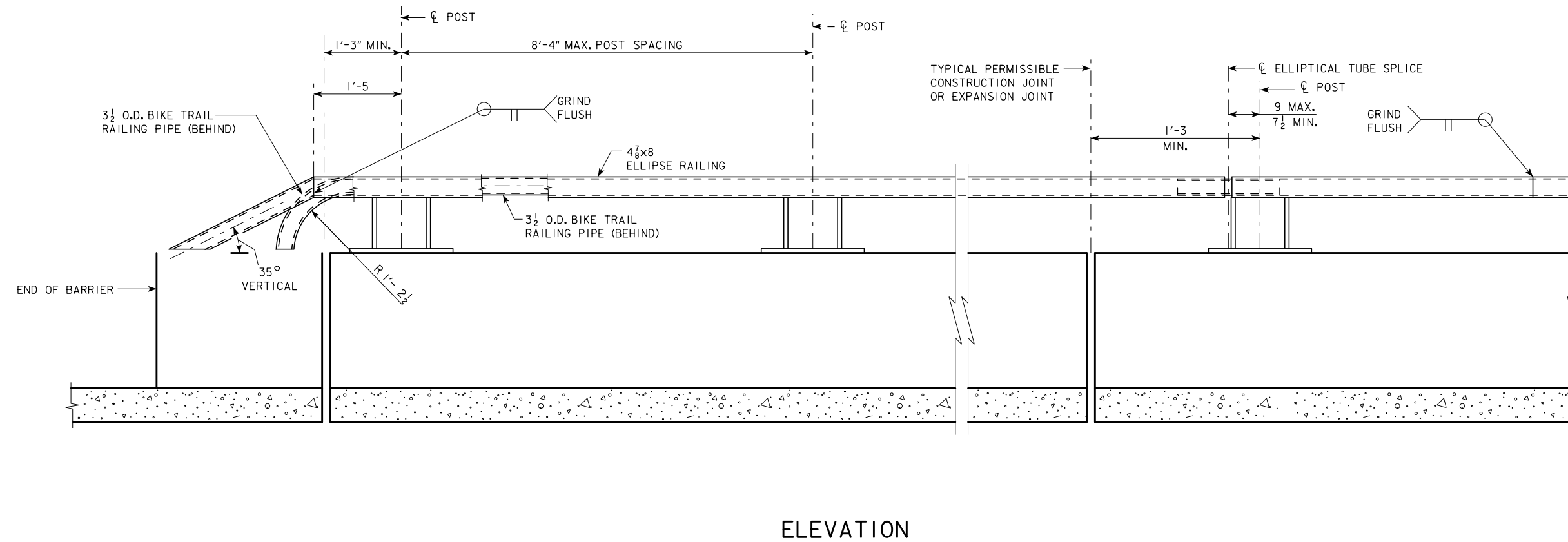
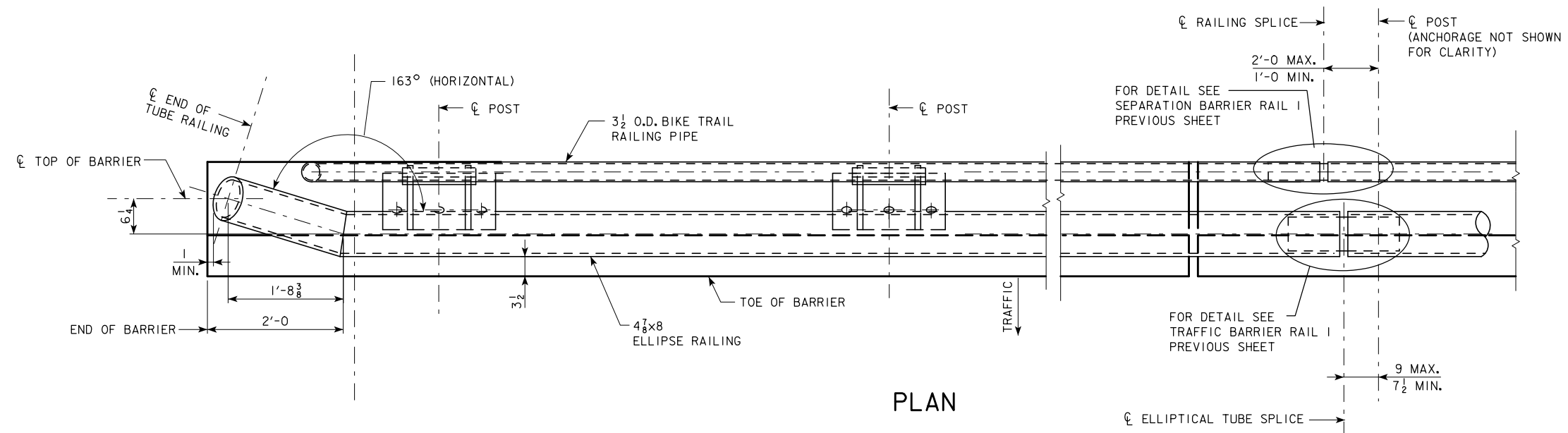
ANCHOR BOLTS SHALL BE 7/8" DIA., A193 GR. B7, BE FULLY THREADED WITH HEAVY HEX NUTS AND ONE HARDENED WASHER AND ONE 2 1/4" O.D. WASHER EACH. EMBED THREADED RODS 10 1/2" MIN. INTO CONCRETE PARAPET. ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM F2329. ADHESIVE BONDING MATERIAL SYSTEM SHALL BE IN ACCORDANCE WITH MATERIALS I.M. 491.11. INSTALLED ANCHORS SHALL BE CAPABLE OF OBTAINING AN ULTIMATE LOAD PER THREADED ROD OF 36 KIPS IN TENSION FOR THE SPACING AND EDGE DISTANCE SHOWN IN THE PLANS. INSTALL AND FIELD TEST ANCHORS IN ACCORDANCE WITH THE DEVELOPMENTAL SPECIFICATION, "INSTALLING ADHESIVE-BONDED ANCHORS AND DOWELS FOR TRAFFIC RAILINGS".

TOGGLE BOLTS SHALL BE A TYPE OF STUD AND/OR SCREW STYLE CAPABLE OF SUPPORTING A 1,000 POUND LOAD IN TENSION WHEN TESTED THROUGH A 1/2" ROUND HOLE. TOGGLE BOLTS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM F2329. TOGGLE BOLTS MAY BE CADMIUM-PLATED TO MEET THE REQUIREMENTS OF ASTM B766 "ELECTRODEPOSITED COATINGS OF CADMIUM" IN PLACE OF GALVANIZING.

THE TESTING OF THE TOGGLE BOLTS SHALL FOLLOW THE GUIDELINES SET FORTH IN ASTM A370 WITH THE FOLLOWING MODIFICATIONS. THE BOTTOM FIXTURE USED TO GRIP THE BOLT SHALL ALLOW THE END PIECES TO SPREAD PRIOR TO GRIPPING IT. THE FIXTURE AT THE TOP SHOULD ALLOW CENTERING OF THE BOLT ALLOWING THE BOLT TO PULLED AXIALLY. THE SPEED OF THE TEST SHOULD BE APPROXIMATELY 1/4" PER MINUTE. THE RESULTS OF THE TEST SHALL BE SUBMITTED AS A CERTIFIED TEST REPORT TO THE CENTRAL MATERIALS OFFICE IN AMES ALONG WITH A CERTIFIED MILL TEST REPORT. IN ADDITION, THREE SAMPLE TOGGLE BOLTS SHALL ALSO BE SUBMITTED TO THE CENTRAL MATERIALS OFFICE IN AMES FOR VERIFICATION TESTING. THE SAMPLES SHALL HAVE THE SAME HEAT NUMBER AS THE TOGGLE BOLTS SUPPLIED.

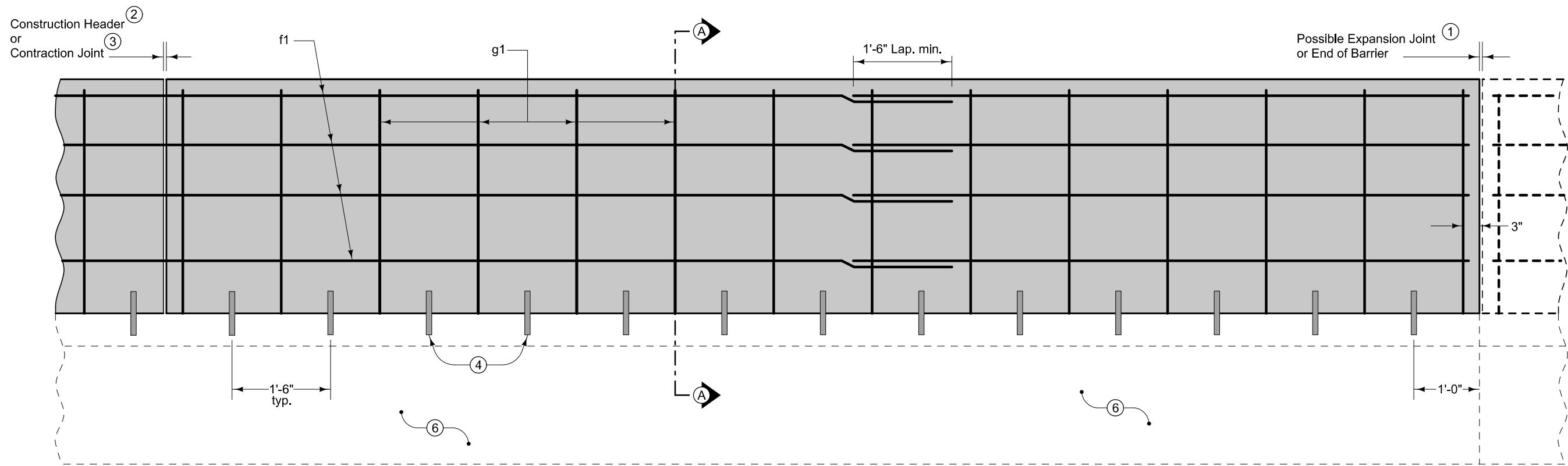
SEE NEXT SHEET FOR ELLIPSE RAILING SPLICE, RAILING SHOP SPLICE AND CAST IN PLACE ANCHOR BOLT OPTIONS DETAILS.

TRAFFIC AND BICYCLE RAILING  
SCOTT COUNTY



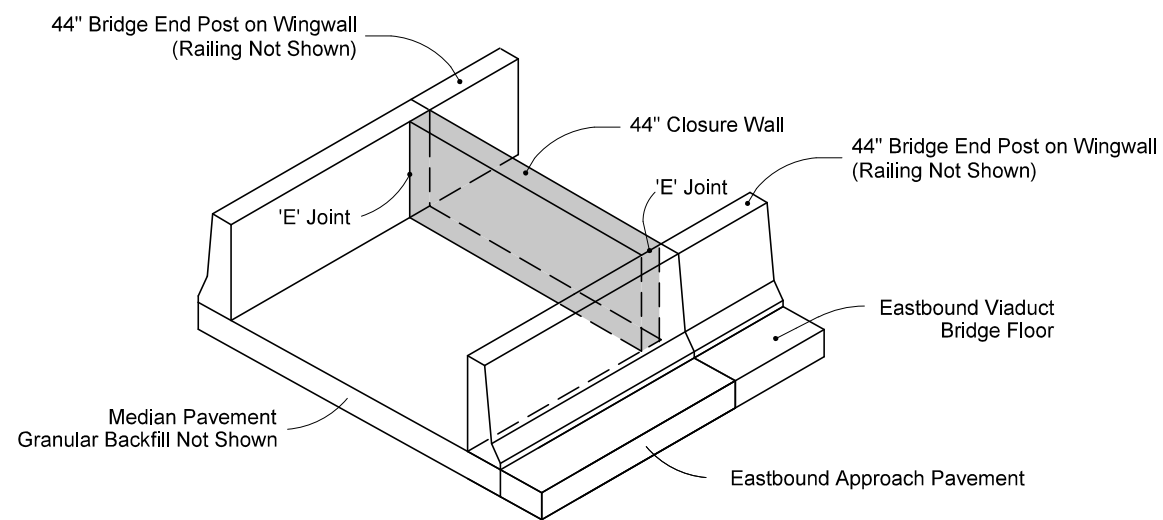
TRAFFIC AND BICYCLE RAILING  
SCOTT COUNTY





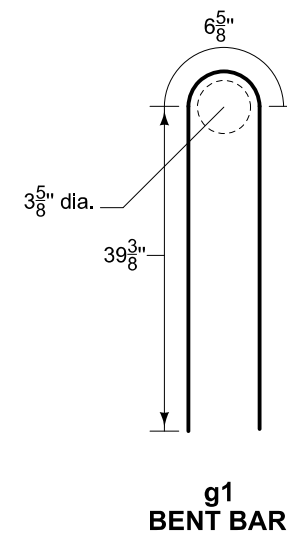
ELEVATION

- ① Expansion joints are necessary only where specifically required by project plans. Conform expansion material to the shape of the barrier. No sealer is required.
- ② Where abutting sections are placed as separate pours, a butt joint may be used. Extend longitudinal reinforcement into the abutting section a minimum of 1'-6".
- ③ For barrier dowelled to pavement, match pavement joints. For free-standing barrier with integral footings, use 20 foot maximum, 15 foot minimum joint spacing.
- ④ Use 1 inch diameter deformed dowel bars of sufficient length to ensure 6 inch minimum embedment in barrier and supporting surface. Install dowels either in supporting surface when placed, or in drilled holes using polymer grout complying with Materials I.M. 491.11 or hydraulic cement grout complying with Materials I.M. 491.13.
- ⑤ Fillet all exposed corners with a  $\frac{3}{4}$  inch dressed and beveled strip.
- ⑥ Construct concrete footing when barrier is not placed on concrete slab. Apply Section 2403.03, but the use of forms is optional. If forms are used, place backfill around the completed footing.
- ⑦ Place barrier markers at 100 foot increments in areas with non-continuous lighting, or 250 foot increments in areas with continuous lighting. Marker color to be the same as adjacent edge line.
- ⑧ Fillet all exposed corners with a  $\frac{3}{4}$  inch dressed and beveled strip.
- ⑨ Approximately 1.61 CY of concrete are required to construct closure wall as shown.

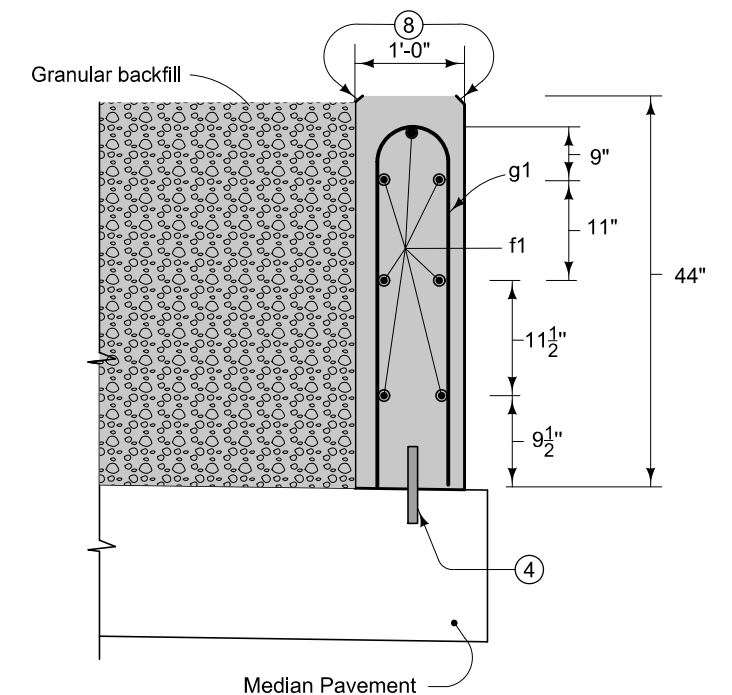


LOOKING SOUTHEAST  
STA. 6803+90.34

CONCRETE QUANTITIES  
Per foot  
0.14 cy



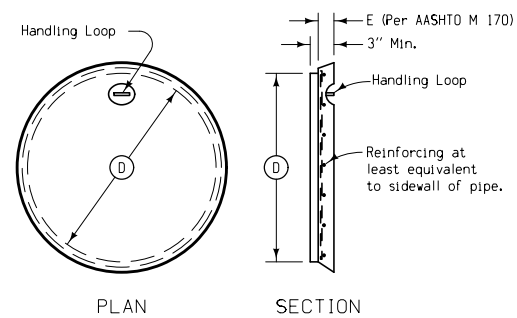
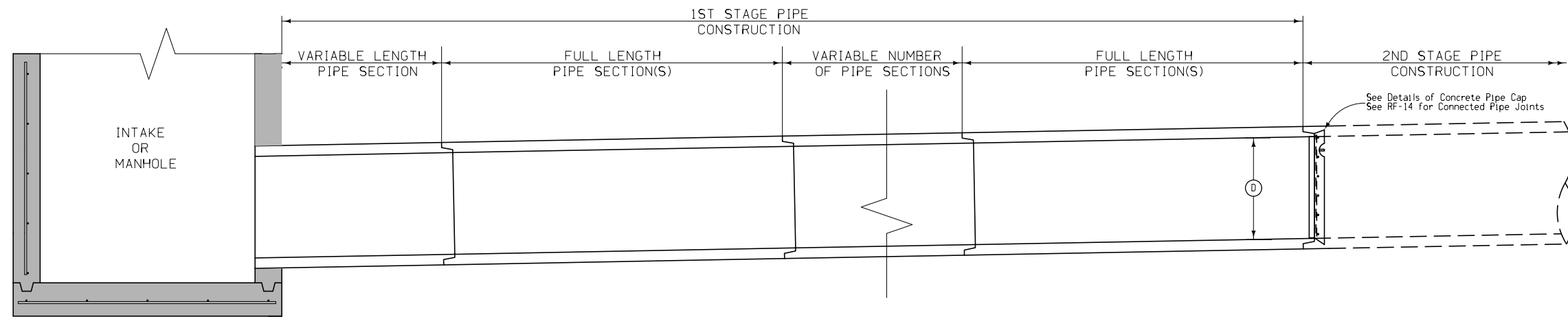
g1  
BENT BAR



SECTION A-A

Contract Item: P.C. CONCRETE RETAINING WALL

CONCRETE CLOSURE WALL DETAIL



DETAILS OF CONCRETE PIPE CAP

**CONCRETE PIPE CAP:**

The use of an approved pipe cap is required when so indicated on the detail project plans. The dimensions of the pipe cap shall be such as to neatly fit the groove end of the appropriate size of pipe.

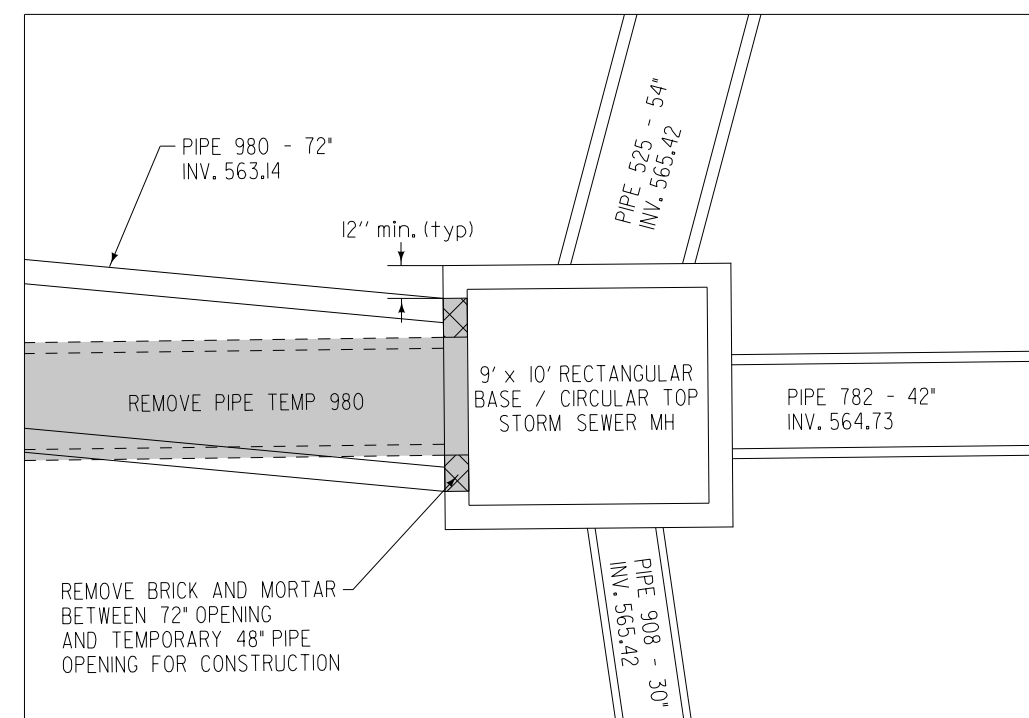
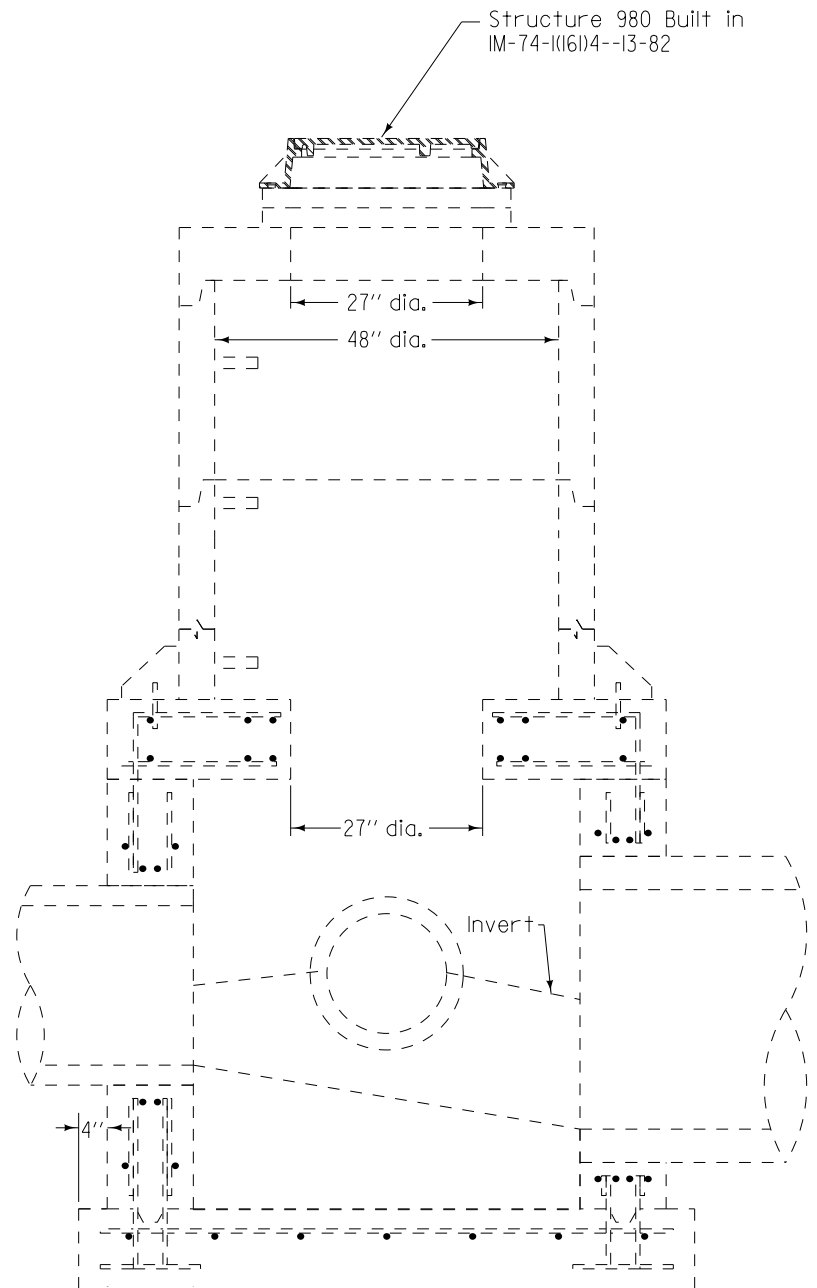
The cap must be precast and an approved bituminous joint material shall be placed between the cap and the pipe.

The Pipe Cap placement or removal shall not be paid for directly, but when specified, shall be considered to be incidental to other pipe work on the project.

1st Stage: Install Concrete Pipe Cap where specified.

2nd Stage: Remove Concrete Pipe Cap prior to connecting to existing pipes.

**DETAIL OF STAGED STORM SEWER  
PIPE CONSTRUCTION  
AND CONCRETE PIPE CAP**



STRUCTURE 980 DETAIL

STRUCTURE 980 CONSTRUCTION DETAILS

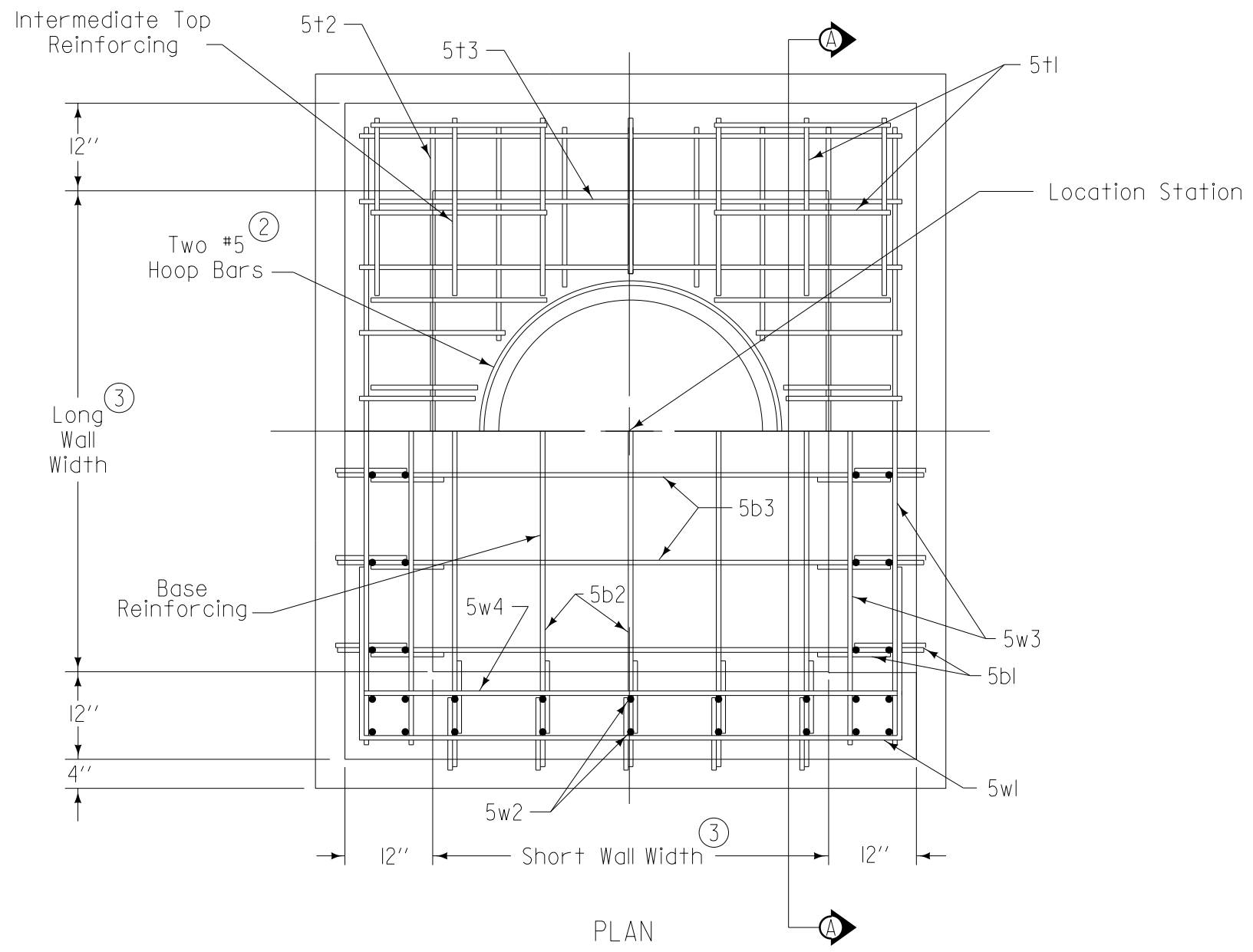
PIPE ID	PIPE SIZE	UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	UPSTREAM LOCATION	DOWNSTREAM LOCATION	UPSTREAM INVERT	DOWNSTREAM INVERT	CONSTRUCTION CONTRACT	NOTES
525	54"	525	980	4612+19.65, 25.33' Lt	6800+96.02, 233.10' Lt.	566.45	565.42	226	
782	42"	782	980	1501+50.00, 50.00' Lt.	6800+96.02, 233.10' Lt.	565.32	564.73	226	
908	30"	908	980	6800+81.20, 111.14' Lt.	6800+96.02, 233.10' Lt.	567.26	565.42	161	
980	72"	980	981	6800+96.02, 233.10' Lt.	6800+56.93, 247.08' Lt.	563.14	562.90	207	Remove brick and mortar plug
TEMP 980	48"	980	-	6800+96.02, 233.10' Lt.	6798+54.30, 292.20' Lt.	563.14	562.90	226	Remove temporary pipe

<b>MODIFIED STANDARD ROAD PLAN</b>	REVISION	
	NEW	04-21-09
	SW-404	
SHEET 1 of 2		

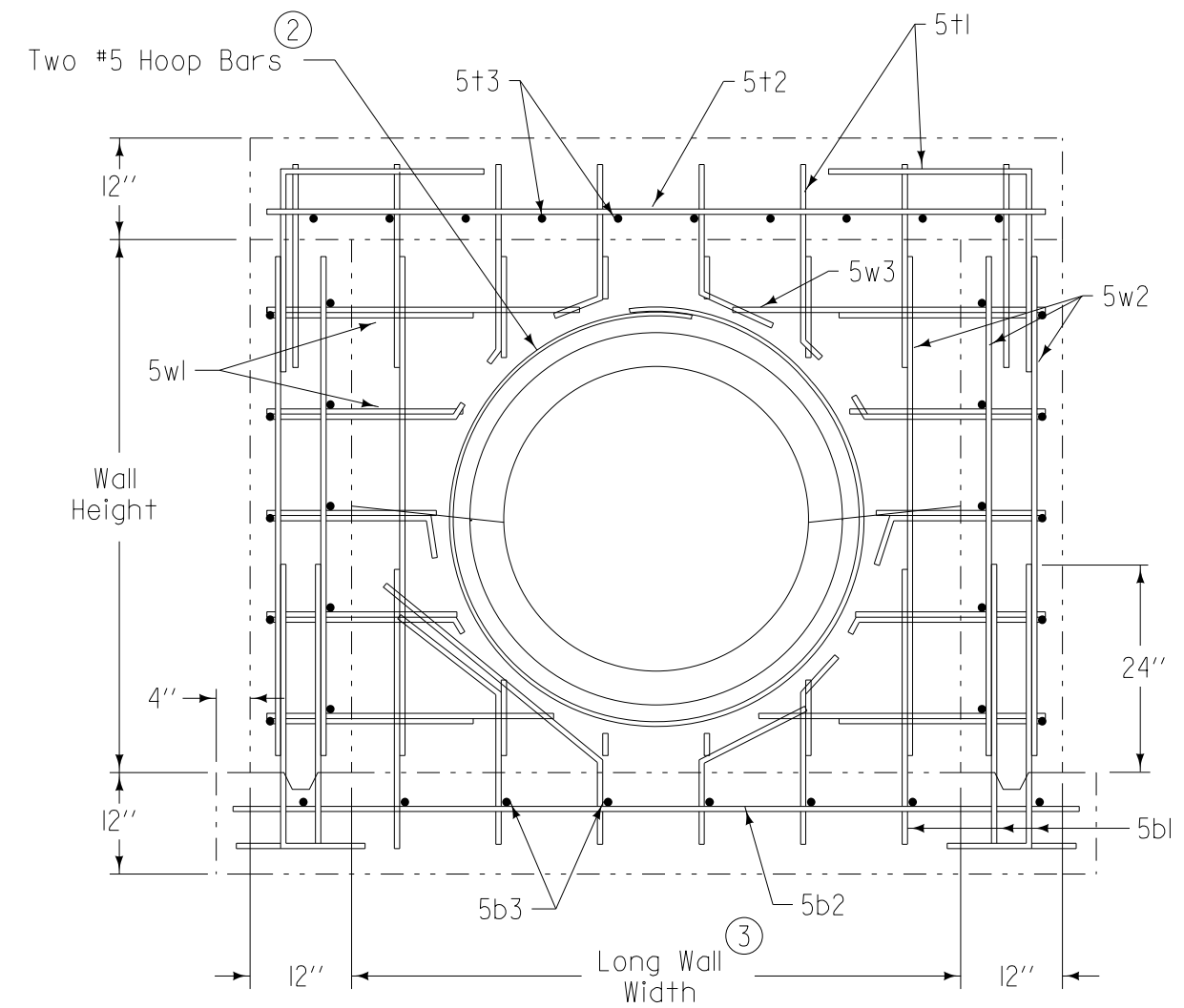
MODIFICATIONS: Added Details to clarify staged storm sewer construction.

RECTANGULAR BASE/  
CIRCULAR TOP  
STORM SEWER MANHOLE

FIGURE 6010.404 SHEET 1 OF 2

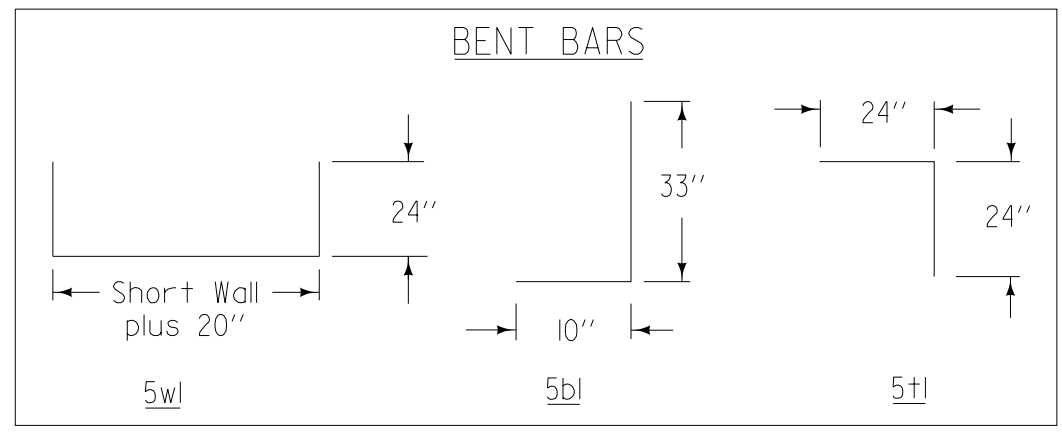


- ② Provide two #5 hoop bars at intermediate top opening and at all pipe openings.
- ③ Wall widths vary with pipe diameter and range from 4 feet minimum to 10 feet maximum. Provide 12 inches of wall width (minimum) each side of pipe opening.



SECTION A-A

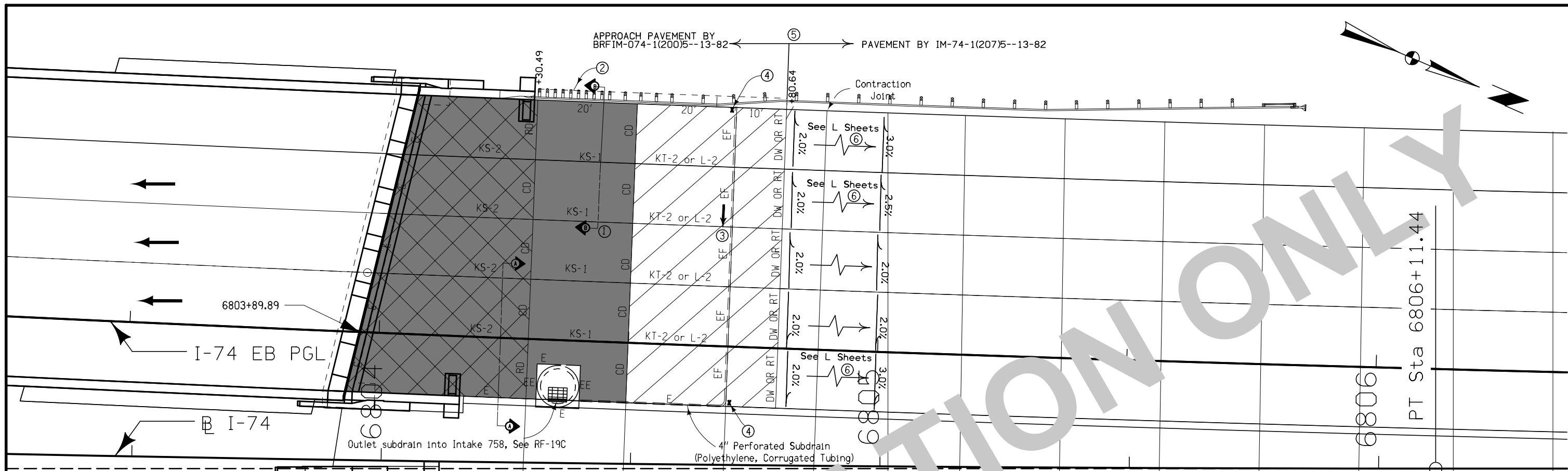
REINFORCING BAR LIST					
Mark	Size	Location	Shape	Length	Spacing
5+1	5	Top	L	48"	12"
5+2	5	Top	—	Long Wall plus 20"	9"
5+3	5	Top	—	Short Wall plus 20"	9"
5+4	5	Top	—	8"	12"
5b1	5	Base	L	43"	12"
5b2	5	Base	—	Long Wall plus 26"	12"
5b3	5	Base	—	Short Wall plus 26"	12"
5w1	5	Wall	□	Short Wall plus 68"	12"
5w2	5	Wall	—	Wall Height minus 4"	12"
5w3	5	Wall	—	Long Wall plus 20"	12"
5w4	5	Wall	—	Short Wall plus 20"	12"



		REVISION
		NEW 04-21-09
<b>FIGURE 6010.404</b>	<b>MODIFIED</b>	<b>SW-404</b>
REVISIONS: New. Replaces SUDAS Type "M-D" Manhole		
SUDAS DIRECTOR		DESIGN METHODS ENGINEER
<b>RECTANGULAR BASE/ CIRCULAR TOP STORM SEWER MANHOLE</b>		

FIGURE 6010.404 SHEET 2 OF 2





**BRIDGE APPROACH PAVEMENT**

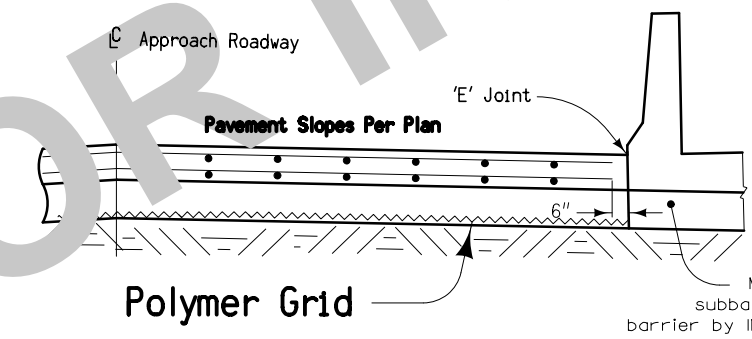
\* Not a bid item

Location		Approach Pavement														Remarks
Bridge Station	End	T Thickness Inches	Pay Length FT	Non-Reinf. Pavement Area SY	Single- Reinf. Pavement Area SY	Double- Reinf. Pavement Area SY	Fixed or Mobile Outlet M	Perforated Subdrain LF	Subdrain Outlet STA	Side	Porous Backfill CY	Class 'A' Crushed Stone Backfill CY	Modified Subbase TON	Polymer Grid SY		
															This Data Entered from Sheet 2-6 effective 10-21-08	
6803+89.89	North	12	83.9	200	126	201	E	92	6804+35	RT	2.54	0	488	551.7	BARRIER INTAKE, SW-548, TOP ONLY deducted from pavement area. See IM-74-1(207)5--13-82 for Intake Schedule	

Contract Item:  
Bridge Approach Pavement, As Per Plan

Pay Limits for contract Item include the following areas:

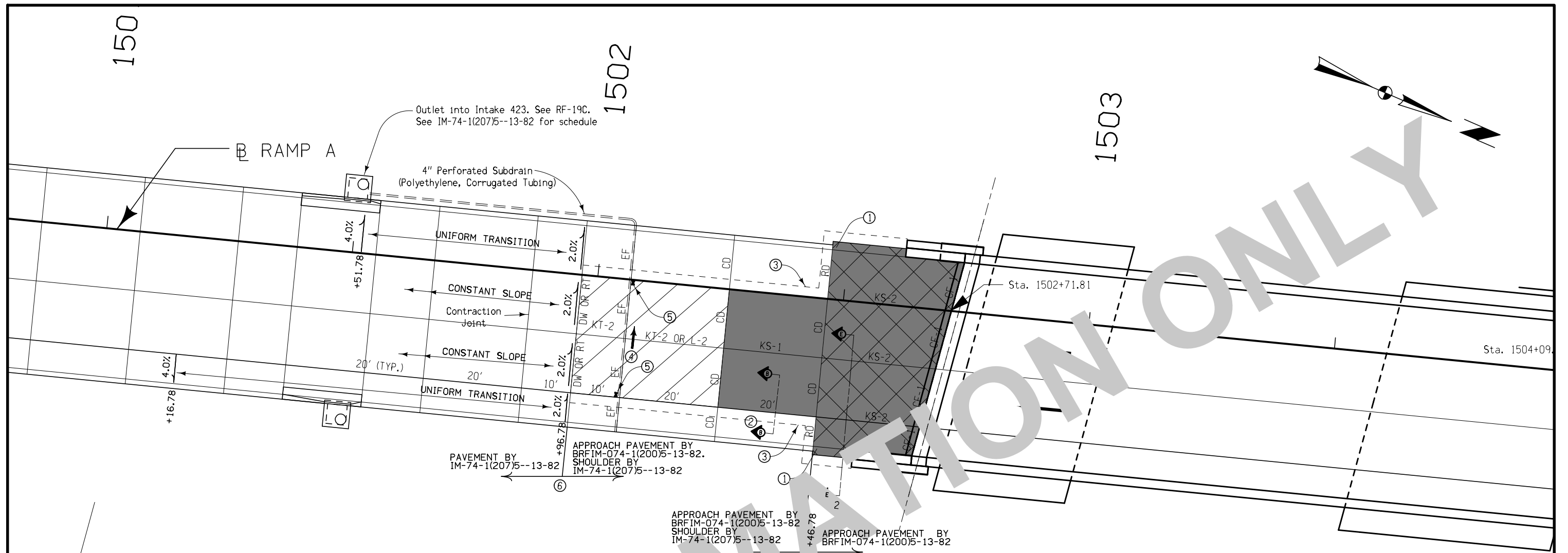
- Double Reinforced Section
- Single Reinforced Section
- Non-Reinforced Section



**Section A-A**  
Pay Limits for contract item include the above areas unless otherwise noted.

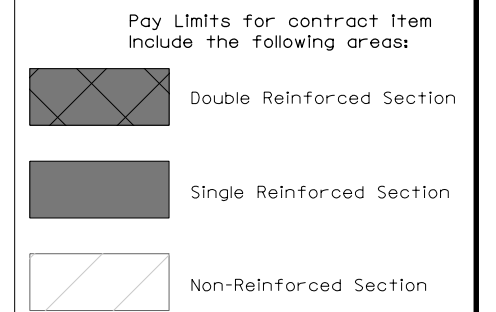
- See Modified RK-20.
- Polymer grid and excavation limits of Modified Subbase 2' outside of pavement edge. See RK-20
- Slope Subdrain to Drain
- An "X" shall be placed in the plastic concrete near the 'EF' joint at the outside edge of pavement.
- If abutting pavement is not in place when bridge approach pavement is constructed, follow procedure on Standard RK-30
- Pavement cross slope transitions in Contract IM-74-1(207)5--13-82

<b>MODIFIED</b>	REVISION	
	7	04-19-11
<b>STANDARD ROAD PLAN</b>	<b>RK-23</b>	
SHEET 1 of 1		
MODIFICATIONS: Changed to represent EB I-74 bridge approach		
<b>EASTBOUND I-74 BRIDGE APPROACH (ABUTTING PCC OR COMPOSITE PAVEMENT)</b>		



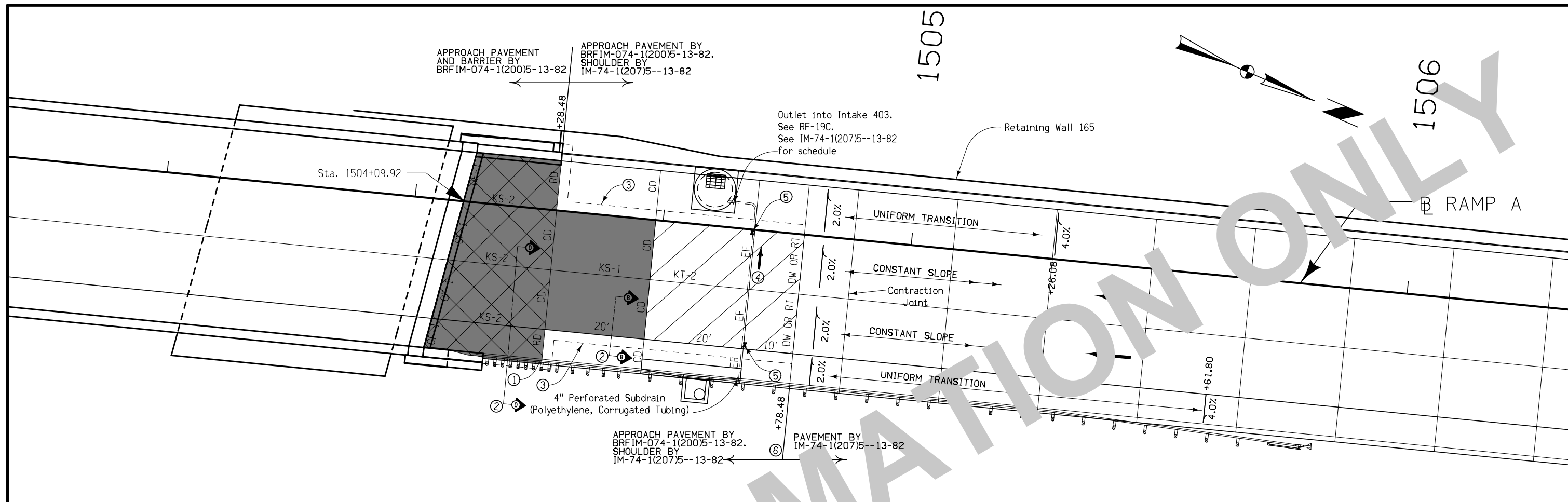
BRIDGE APPROACH SECTION															
* Not a bid item															
Reference to the K-Series.															
This Data Entry Sheet is in accordance with the 112-6 effective 10-21-08															
Location		Approach Pavement						Subdrain						Remarks	
Bridge Station	End	(T) Thickness	Pay Length	Non-Reinf. Pavement Area	Single-Reinf. Pavement Area	Double-Reinf. Pavement Area	For or Abutment	Perforated Subdrain 4"	Subdrain Outlet	Porous Backfill	Class 'A'*	Modified Subbase	Polymer Grid		
		Inches	FT				or M	LF	STA	Side	CY	CY	TON		SY
1502+71.81	South	12	75.1				M	96.7	1501+50	LT	2.67	0	243.5	277.69	"Pay Length" measured along Baseline

Contract Item:  
Bridge Approach Pavement, As Per Plan



- ① Build Modified 6 inch Sloped Curb to end of Double Reinforced Section. See Detail G on Modified Standard Road Plan RK-20
- ② See Modified Standard Road Plan RK-20
- ③ Polymer grid and excavation limits of Modified Subbase 2' outside of pavement edge. See Modified Standard Road Plan RK-20
- ④ Slope Subdrain to Drain
- ⑤ An "X" shall be placed in the plastic concrete near the 'EF' joint at the outside edge of pavement.
- ⑥ If abutting pavement is not in place when bridge approach pavement is constructed, follow procedure on Standard RK-30

<b>MODIFIED STANDARD ROAD PLAN</b>	REVISION	
	7	04-19-11
<b>RK-21</b>		
SHEET 1 of 1		
MODIFICATIONS: Changed to represent Ramp A south bridge approach		
<b>RAMP A BRIDGE APPROACH (ABUTTING PCC OR COMPOSITE PAVEMENT)</b>		



**BRIDGE APPROACH SECTION**

Refer to the RK-21 series.

\* Not a bid item

This Data Entry Sheet is effective 10-21-08

Location		Approach Pavement					Fixed or Movable Abutment	Perforated Subdrain	Subdrain Outlet	Porous Backfill	Class 'A' Crushed Stone Backfill	Modified Subbase	Polymer Grid	Remarks
Bridge Station	End	T Thickness	Pay Length	Non-Reinf. Pavement Area	Single-Reinf. Pavement Area	Double-Reinf. Pavement Area								
		Inches	FT	SY	SY	SY	LF	STA	Side	CY	CY	TON	SY	
1504+09.92	North	12	68.6	80	53.3	92	1.34	1504+62.38	LT	1.14	0	223.8	256.7	"Pay Length" measured along Baseline

Contract Item:  
Bridge Approach Pavement, As Per Plan

Pay Limits for contract item include the following areas:

- Double Reinforced Section
- Single Reinforced Section
- Non-Reinforced Section

- ① Build 4 inch Sloped Curb to end of Double Reinforced Section
- ② See Modified Standard Road Plan RK-20
- ③ Polymer grid and excavation limits of Modified Subbase 2' outside of pavement edge. See Modified Standard Road Plan RK-20
- ④ Slope Subdrain to Drain
- ⑤ An "X" shall be placed in the plastic concrete near the 'EF' joint at the outside edge of pavement.
- ⑥ If abutting pavement is not in place when bridge approach pavement is constructed, follow procedure on Standard RK-30

<b>MODIFIED</b>	REVISION	
	7	04-19-11
<b>STANDARD ROAD PLAN</b>	<b>RK-21</b>	
SHEET 1 of 1		
MODIFICATIONS: Changed to represent Ramp A north bridge approach		
<b>RAMP A BRIDGE APPROACH (ABUTTING PCC OR COMPOSITE PAVEMENT)</b>		

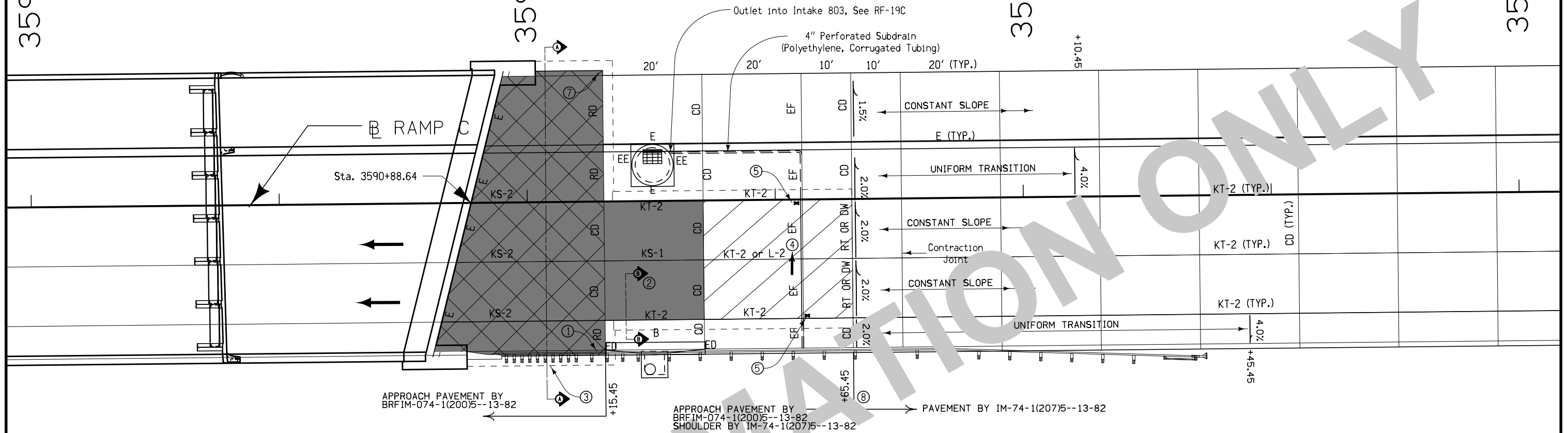


3590

3591

3592

3593



**BRIDGE APPROACH SECTION**  
Refer to the **RK-Series**.

\* Not a bid item

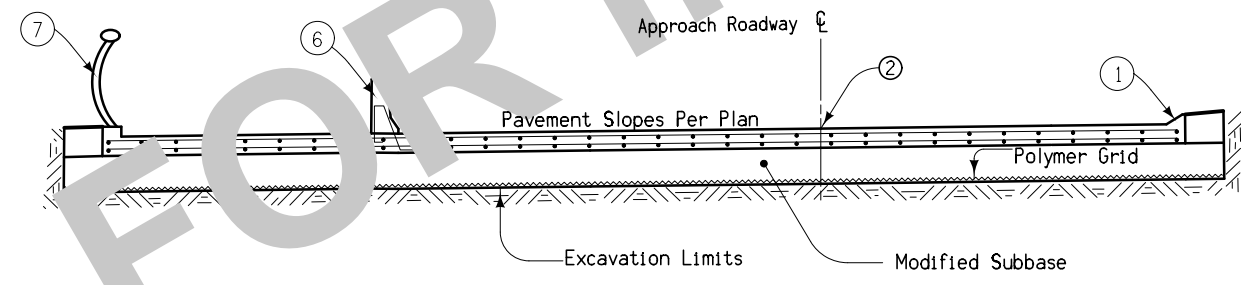
This Data Entry Sheet fills out the following table:

Location		Approach Pavement					Fixed or Movable Abutment	Perforated Subdrain 4"	Subdrain Outlet	Porous Backfill	* Class 'A'*	* Crushed Stone Backfill	* Modified Subbase	* Polymer Grid	Remarks
Bridge Station	End	(T) Thickness	Pay Length	Non-Reinf. Pavement Area	Single-Reinf. Pavement Area	Double-Reinf. Pavement Area									
		Inches	FT	SY	SY	SY	LF	STA	Side	CY	CY	TON	SY		
3590+88.64	North	12	76.81	80	53.3	1	66.5	3591+28.96	LT	1.84	0	310.45	352.8	"Pay Length" measured along Baseline	

Contract Item:  
Bridge Approach Pavement, As Per Plan

Pay Limits for contract item include the following areas:

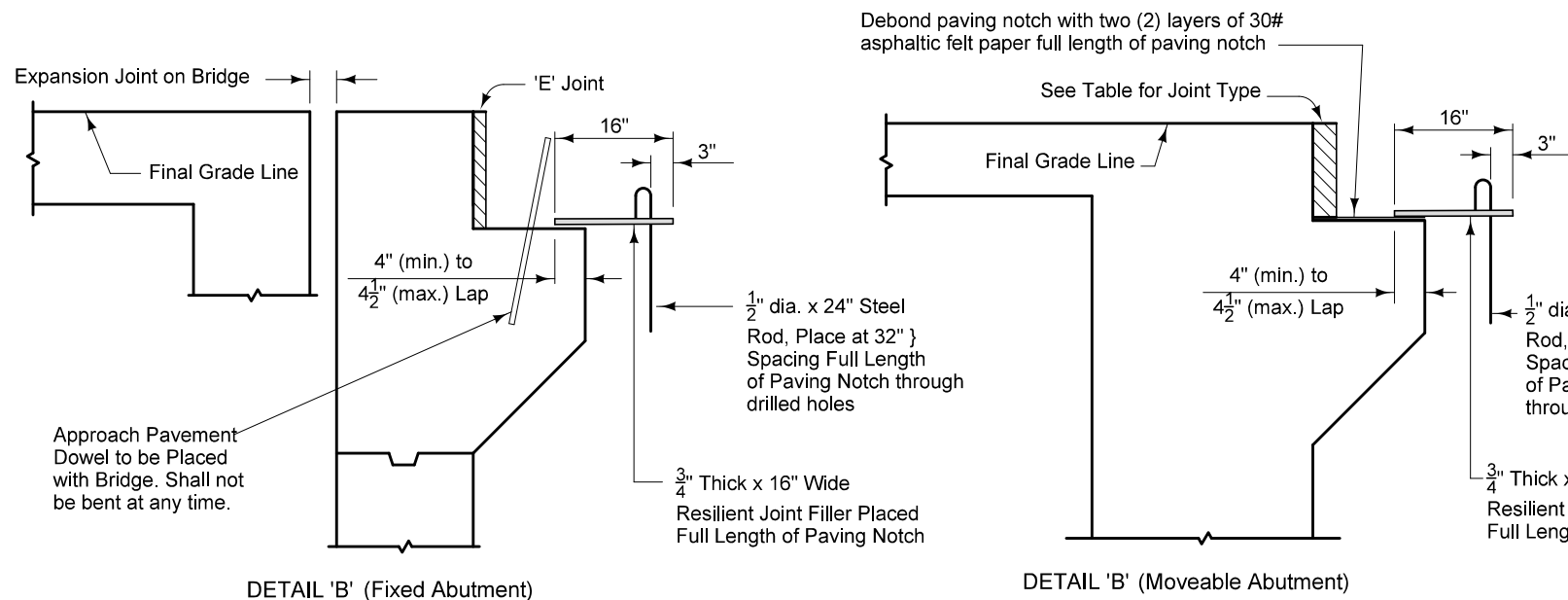
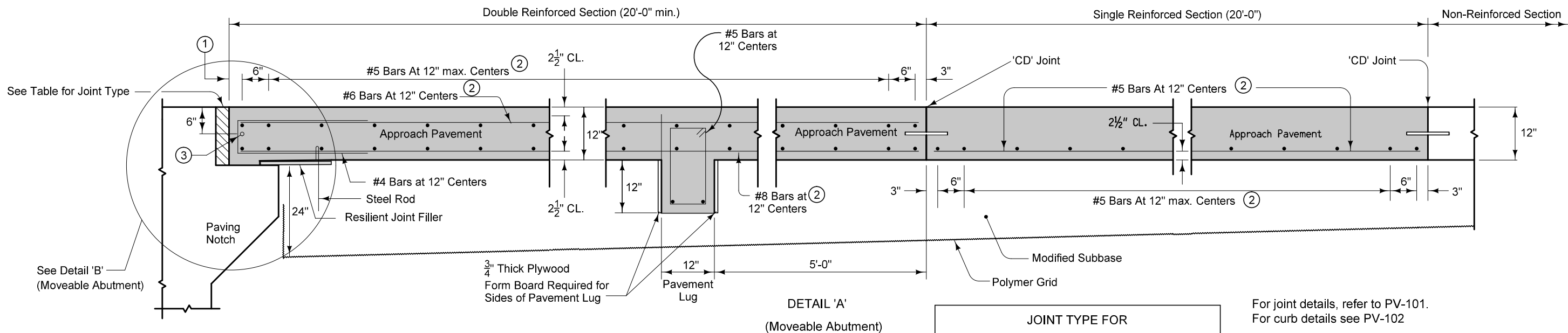
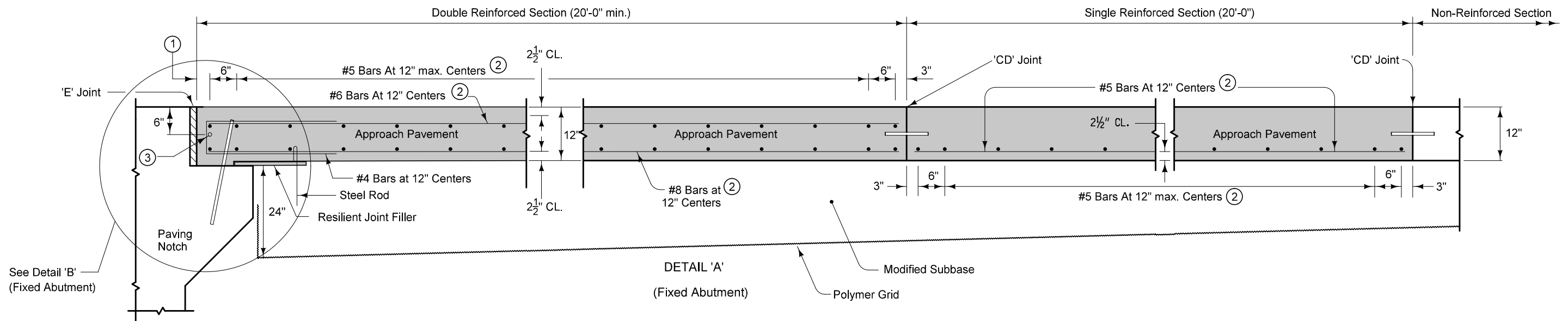
- Double Reinforced Section
- Single Reinforced Section
- Non-Reinforced Section



**Section A-A**  
Pay Limits for contract item include the above areas unless otherwise noted.

- Build 4 inch Sloped Curb to end of Double Reinforced Section
- See Standard Road Plan RK-20
- Polymer grid and excavation limits of Modified Subbase 2' outside of pavement edge. See RK-20
- Slope Subdrain to Drain
- An "X" shall be placed in the plastic concrete near the 'EF' joint at the outside edge of pavement.
- See Modified Standard Road Plan BA-104. Include 5g2 bars from Modified Standard BA-106 for Barrier Construct Modified BA-104 and railing to end of double reinforced section.
- Construct to end of double reinforced section.
- If abutting pavement is not in place when bridge approach pavement is constructed, follow procedure on Standard RK-30

<b>MODIFIED</b>	REVISION	
	7	04-19-11
<b>STANDARD ROAD PLAN</b>		<b>RK-21</b>
		SHEET 1 of 1
MODIFICATIONS: Changed to represent Ramp C bridge approach		
<b>RAMP C BRIDGE APPROACH (ABUTTING PCC OR COMPOSITE PAVEMENT)</b>		



JOINT TYPE FOR MOVEABLE ABUTMENT BRIDGES		
Joint	Maximum Bridge Length	
	Concrete Beam or Slab	Steel Girder
CF-1	370'	250'
CF-2	465'	320'
CF-3	575'	400'

For joint details, refer to PV-101.  
For curb details see PV-102

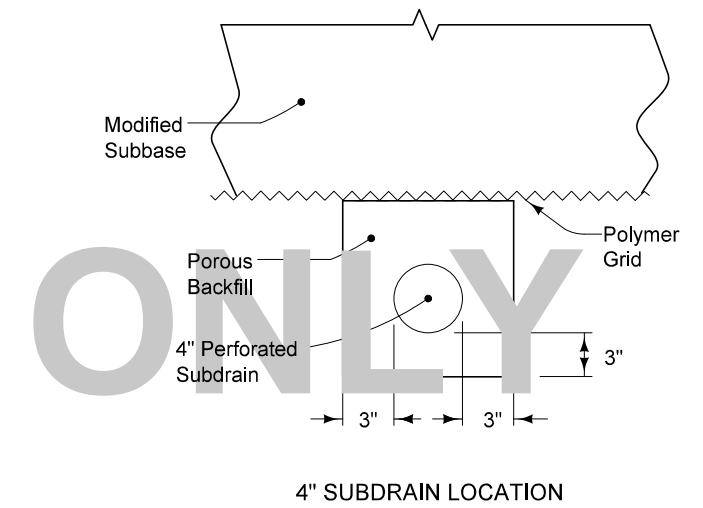
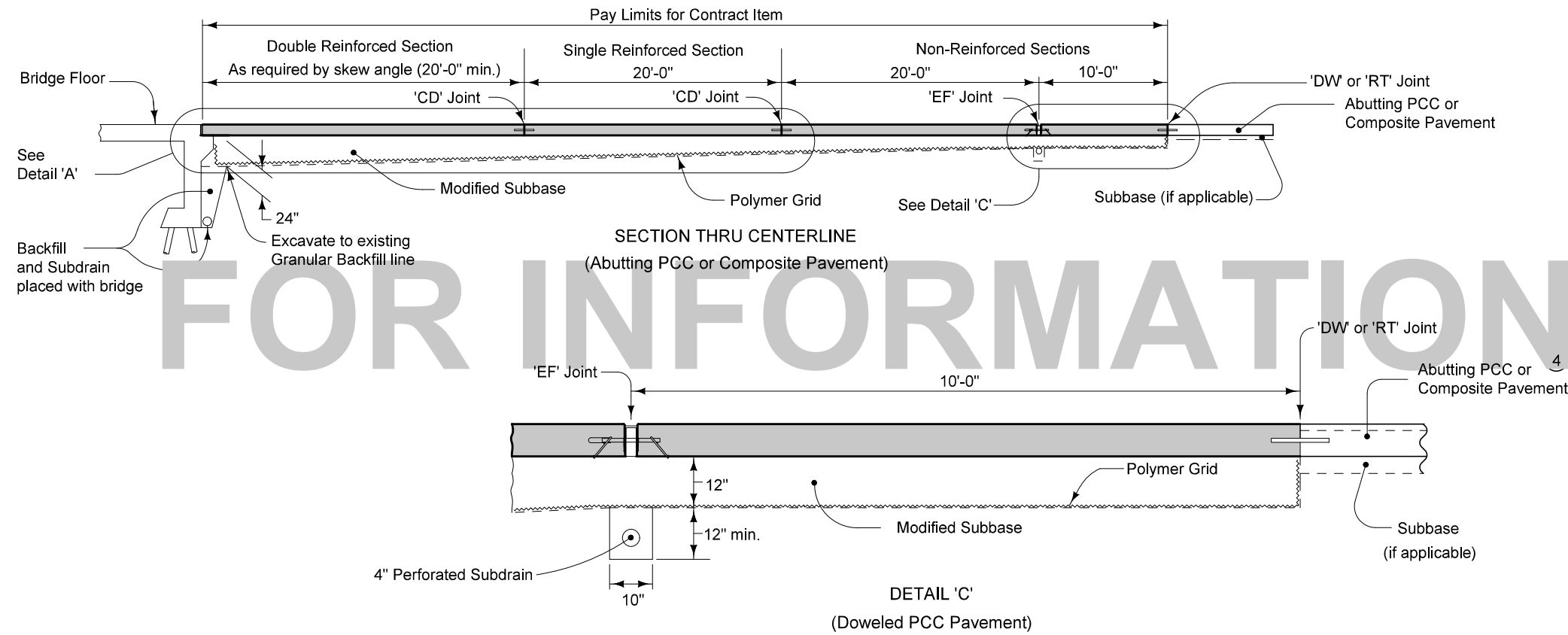
All transverse bars are #5.

Possible Contract Item:  
Bridge Approach, RK-20

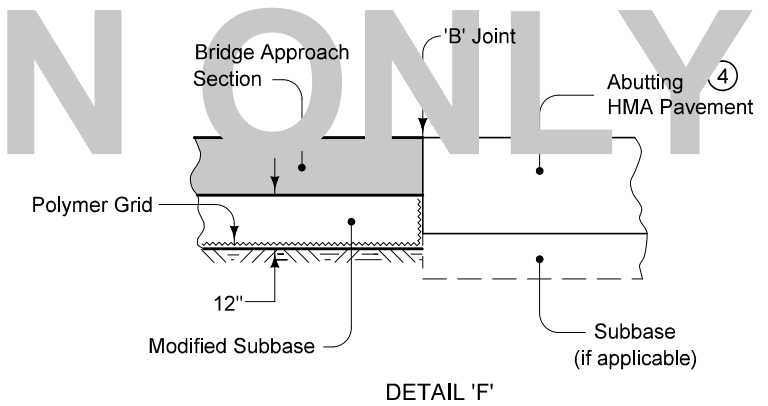
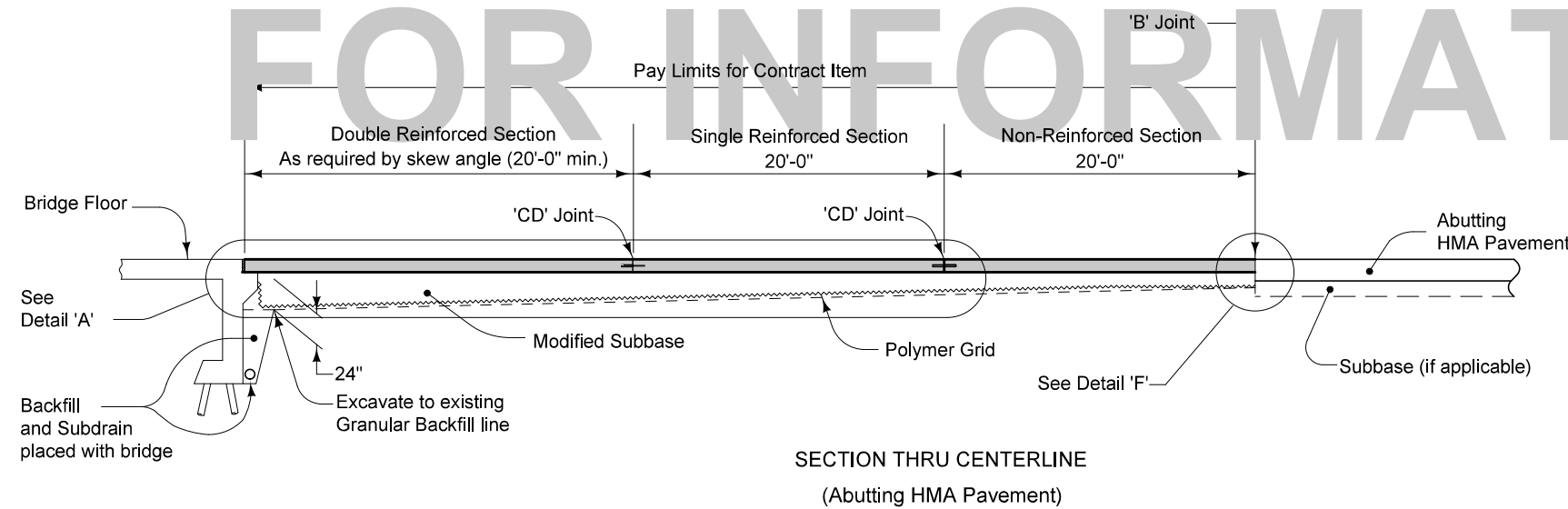
Possible Tabulation: 112-6

<b>MODIFIED</b> <b>STANDARD ROAD PLAN</b>	REVISION 9 04-17-12
	<b>RK-20</b>
SHEET 1 of 4	
MODIFICATIONS: Changed Details to match I-74 and US 67 Ramp Bridges	
DOUBLE REINFORCED 12" APPROACH	

- ① 2" min. to 2 1/2" max. clear to bent bar.
- ② Minimum lap length: #5 Bars - 18"  
#6 Bars - 27"  
#8 Bars - 48"
- ③ If bridge is skewed, place additional #5 bar parallel to skewed face.



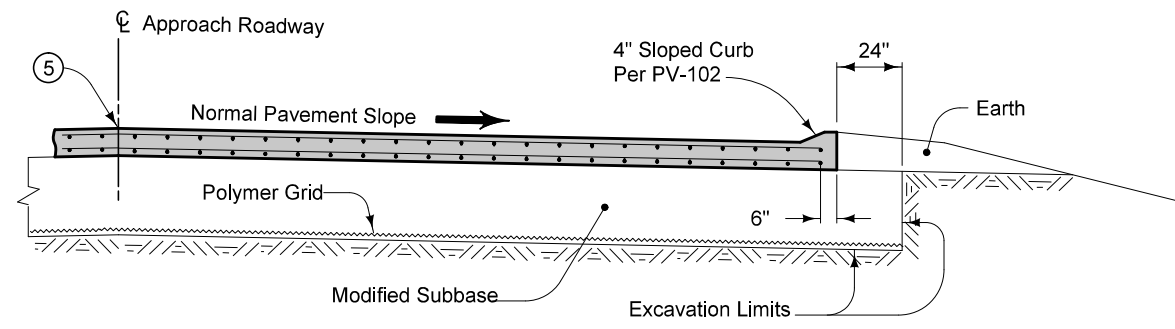
FOR INFORMATION ONLY



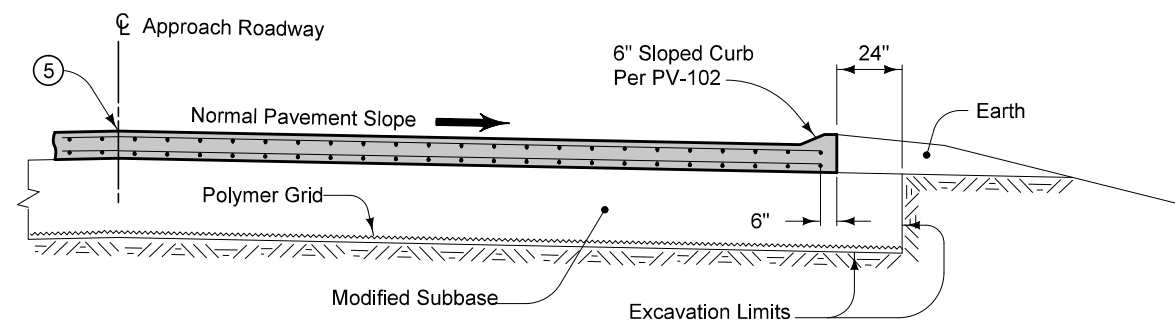
FOR INFORMATION ONLY

<b>MODIFIED</b>	REVISION	
	9	04-17-12
<b>STANDARD ROAD PLAN</b>	<b>RK-20</b>	
SHEET 2 of 4		
MODIFICATIONS: Changed Details to match I-74 and US 67 Ramp bridges.		
<b>DOUBLE REINFORCED 12" APPROACH</b>		

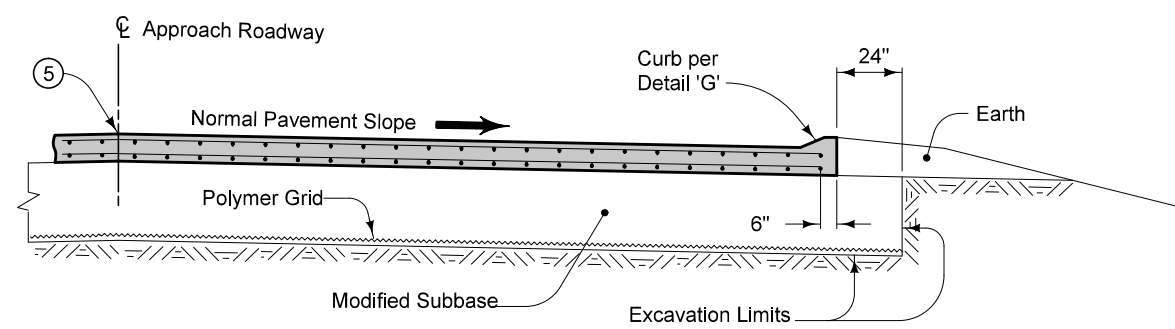
④ If abutting pavement (PCC or HMA) is not in place, refer to RK-30.



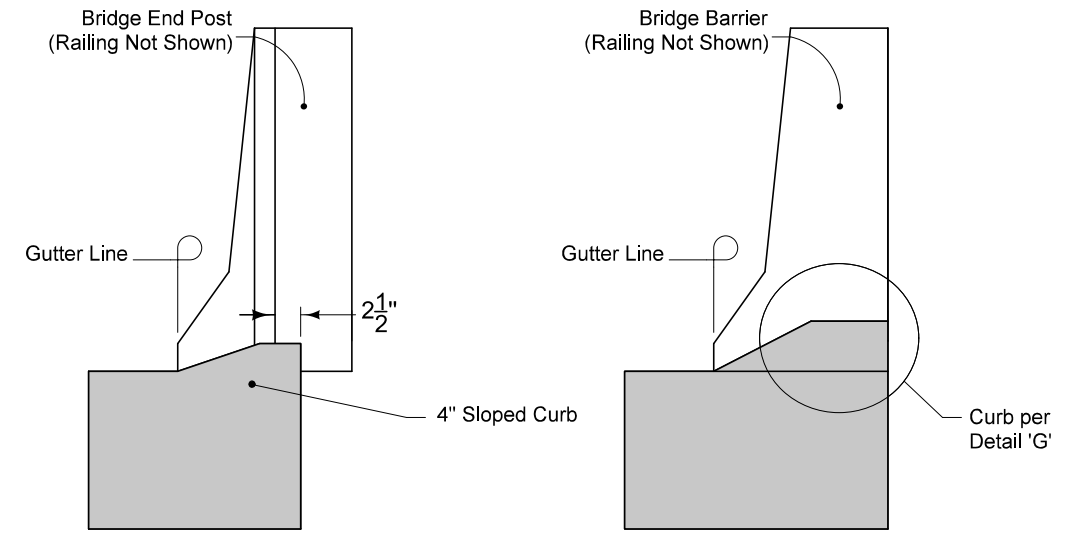
SECTION A-A



SECTION D-D

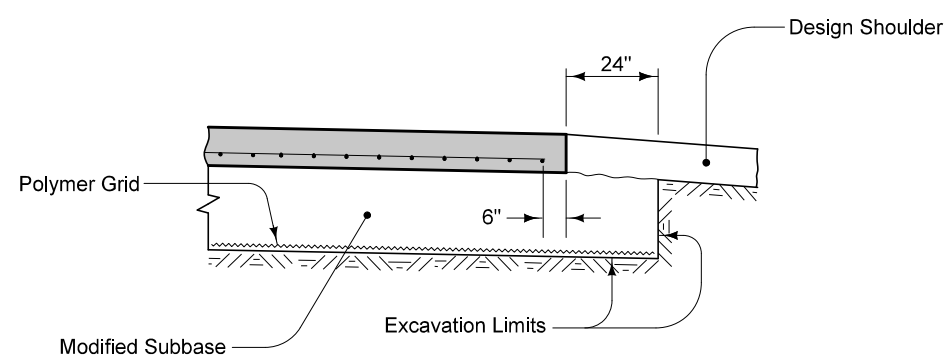


SECTION E-E

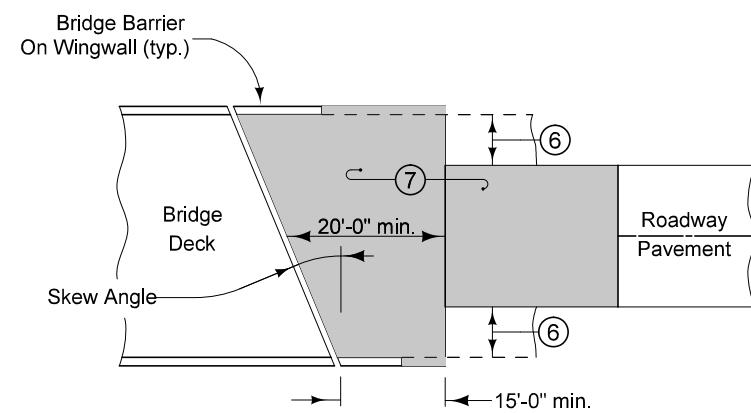


DETAIL 'I'  
(Back of Curb Placement)

DETAIL 'E'  
(Back of Curb Placement)



SECTION B-B

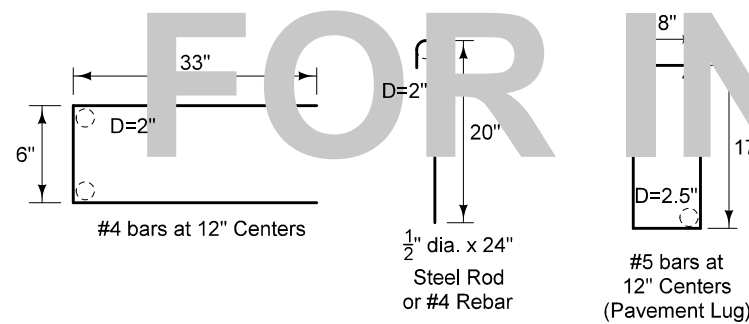


APPROACH PAVEMENT  
LAYOUT AT A SKEW

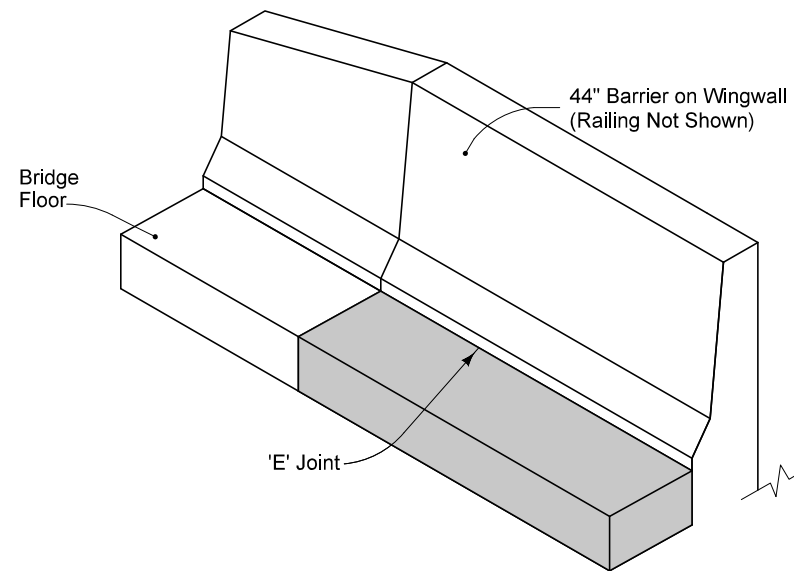
- ⑤ Longitudinal Joint: (PV-101)  
Single pour - Saw cut joint per Detail B.  
Two pours - Use 'KS-2' Joint
- ⑥ Design shoulder width.
- ⑦ Reinforced bridge approach section.
- ⑧ Limit of Wingwall  
Barrier overlaps on Approach Pavement

<b>MODIFIED STANDARD ROAD PLAN</b>	REVISION	
	9	04-17-12
<b>RK-20</b>		SHEET 3 of 4
MODIFICATIONS: Changed details to match I-74 and US 67 Ramp bridges.		
<b>DOUBLE REINFORCED 12" APPROACH</b>		

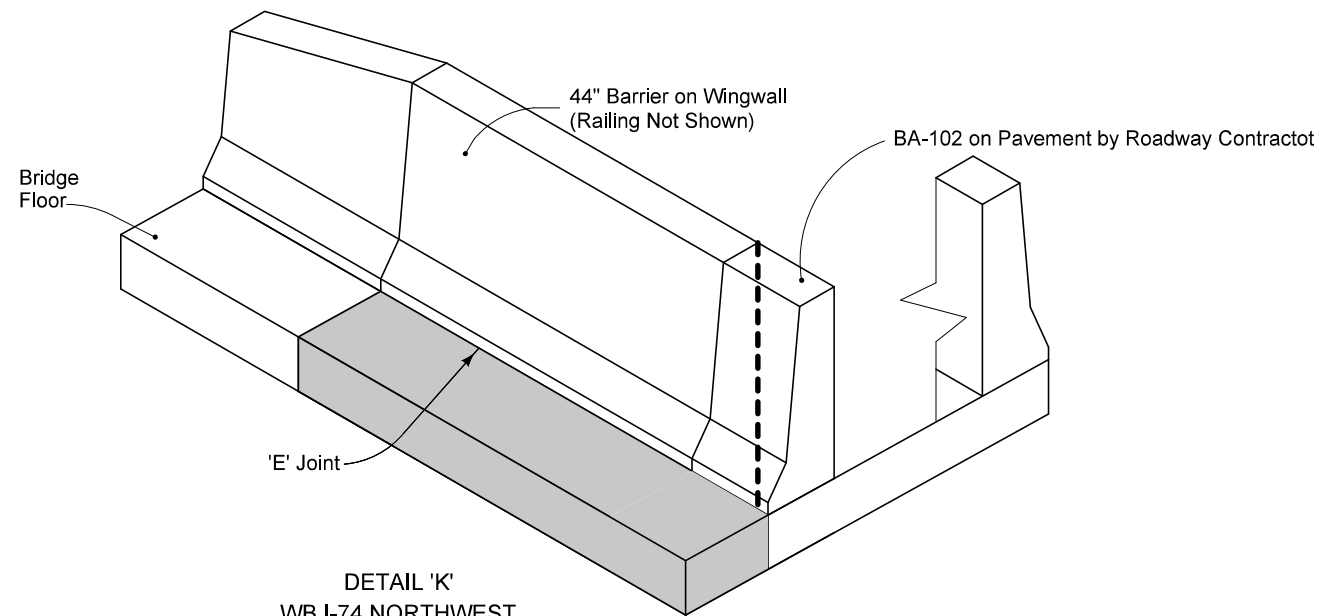
# FOR INFORMATION ONLY



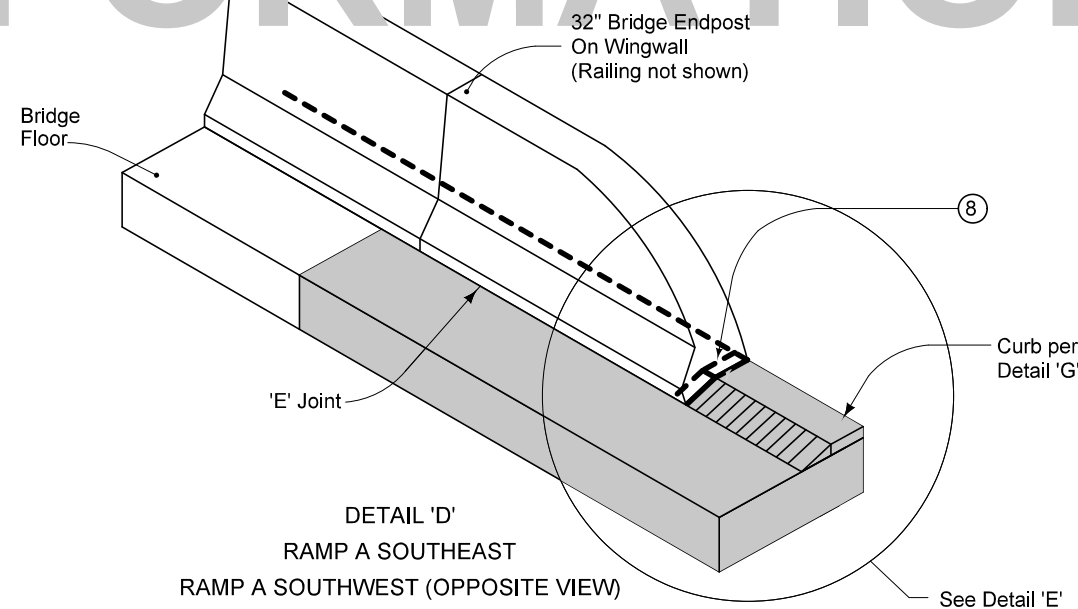
BENT BAR SHAPES



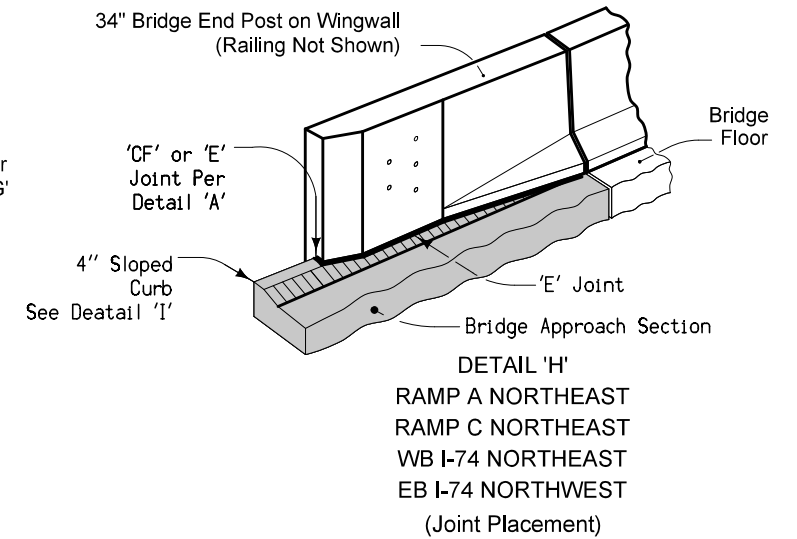
DETAIL 'J'  
RAMP A NORTHWEST  
(Joint Placement)



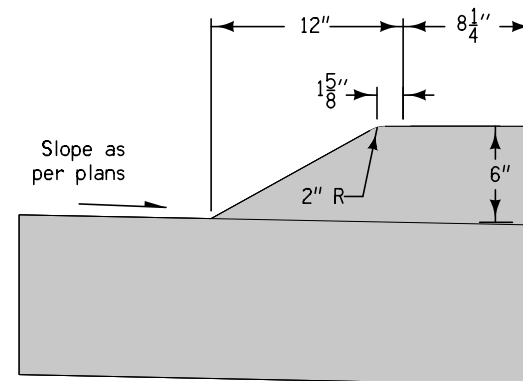
DETAIL 'K'  
WB I-74 NORTHWEST  
EB I-74 NORTHEAST (OPPOSITE VIEW)  
(Joint Placement)



DETAIL 'D'  
RAMP A SOUTHEAST  
RAMP A SOUTHWEST (OPPOSITE VIEW)



- ⑤ Longitudinal Joint: (PV-101)  
Single pour - Saw cut joint per Detail B.  
Two pours - Use 'KS-2' Joint
- ⑥ Design shoulder width.
- ⑦ Reinforced bridge approach section.
- ⑧ Limit of Wingwall  
Barrier overlaps on Approach Pavement



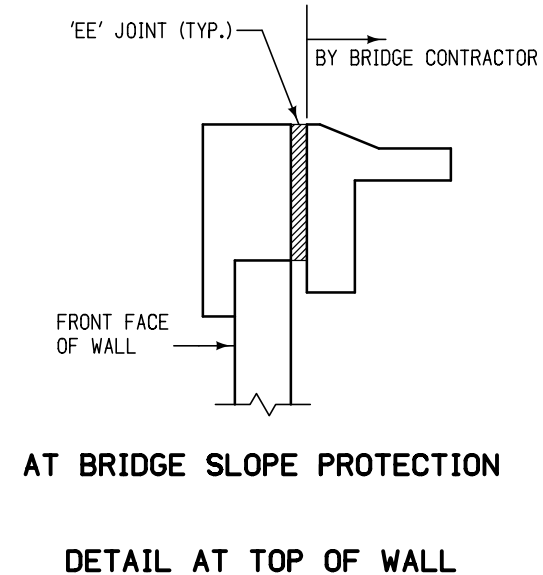
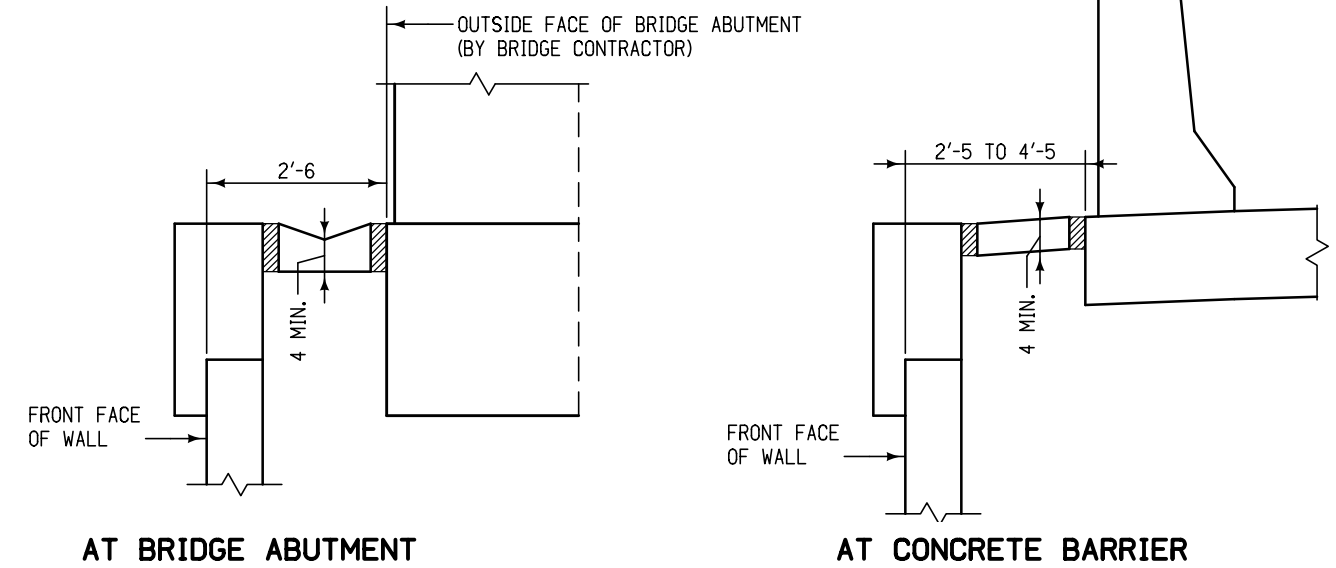
DETAIL 'G'  
MODIFIED 6" SLOPED CURB  
RAMP A SOUTH

<b>MODIFIED</b>	REVISION	
	9	04-17-12
<b>STANDARD ROAD PLAN</b>	<b>RK-20</b>	
SHEET 4 of 4		
MODIFICATIONS: Changed details to match I-74 and US 67 Ramp bridges.		
<b>DOUBLE REINFORCED 12" APPROACH</b>		

# MSE RETAINING WALL CONSTRUCTION NOTES

RW165  
SPECIAL

- (1) The design of the MSE Wall shall meet the design criteria as provided in Section 2432 of the Standard Specifications.
- (2) Where appropriate, the MSE Wall shall be designed for an equivalent earth surcharge Height of 2 feet to account for vertical live loads behind the wall.
- (3) The Allowable Soil Bearing Pressure for both undrained and drained conditions of the MSE Wall is 4.0 ksf. Embankment fill material beneath the MSE Reinforced Zone should be Granular Backfill as shown on Sheet SPS.1.
- (4) See Soil Profile Sheet for soil types.
- (5) Total settlement due to foundation loads is estimated to be approximately 2 inches.
- (6) The panels for the MSE Wall and the coping shall be cast as per the MSE Wall Details on Sheets V.3 to V.8.
- (7) The east end of the Closure Wall butts up to the outside face of the bridge abutment. Provide and install appropriate joint materials at this interface.
- (8) The area behind the coping shall be covered with Portland Cement Concrete slope protection as shown in the DETAIL AT TOP OF WALL. Shape to drain.
- (9) The design shall account for the drainage structures shown on Sheet M.11 and the bridge foundations constructed by others.
- (10) Two MSE Wall Subdrains are required: one directly behind the wall panels and one at the back of the Reinforced Zone. Route Subdrains to nearest down-gradient storm sewer structure as shown on Plan Sheet M.11.
- (11) For estimating purposes only, the following assumptions were used:
  - (a) The length of the reinforcement strips or mesh is based on the following formula:  
Reinforcement length = (0.9) x (wall ht.)
  - (b) The wall height is the distance between the Proposed Top of Wall Elevation and the Proposed Top of Leveling Pad Elevation.
  - (c) Both the Granular Backfill and the Excavation behind the wall were calculated based on the average end area between cross sections. The average end area was computed with the estimated wall heights and reinforcement lengths. These quantities may need to be adjusted if the required reinforcement length is greater than the estimated length, and/or if the Leveling Pad Elevation is adjusted.
- (12) The MSE Wall Supplier shall provide to the Office of Design, Soil Design Section, preliminary (non-structural) design calculations, which include estimated maximum applied (required) MSE Wall bearing pressures, reinforcing strip or mesh lengths, and random backfill material requirements (if other than Class 10 Backfill Material), prior to preparation of their Final MSE Wall Plans.
- (13) The Contractor shall submit the design calculations, shop drawings, and field construction drawings in accordance to Article 1105.03.



STRUCTURAL DESIGN	
	I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.
	Signature _____ Date _____ <b>Robert Chantome</b> Printed or Typed Name
	My license renewal date is December 31, <b>2013</b>
	Pages or sheets covered by this seal: <b>V.1 - V.2</b>

**MSE WALL DESIGN  
& CONSTRUCTION  
INFORMATION**

LAYOUT KMS 12/06/11  
DRAWN KMS/EJM 11/20/12  
REVIEWED RC 11/20/12



# PRECAST CONCRETE MSE WALL PANEL FINISH NOTES

REFER TO SECTION 2432. MECHANICALLY STABILIZED EARTH (MSE) RETAINING WALL WITH THE FOLLOWING ADDITIONS.

- SUBMIT SHOP DRAWINGS INDICATING FORM LINER LAYOUT AND TERMINATION DETAILS FOR ALL PANELS. INDICATE BACKUP, RUSTICATION, REVEAL, AND CHAMFER STRIP LOCATIONS. INCLUDE JOINTING, PATTERN PLACEMENT AND ORIENTATION. CONTRACTOR RESPONSIBLE FOR DESIGN OF FORMWORK AND BACK-UP OF FORM LINER FOR STRUCTURAL STABILITY AND SUFFICIENCY.
- SUBMIT 12 INCH BY 12 INCH SAMPLES OF EACH PATTERN INDICATED. SAMPLES MAY BE EITHER ACTUAL FORM LINER MATERIALS OR FOAM CASTINGS FROM LINERS PROPOSED FOR USE ON THE PROJECT.
- PROVIDE FULL SCALE SAMPLE OF EACH PANEL TYPE USING ACTUAL JOB SPECIFIC MATERIALS, METHODS AND WORKMANSHIP. THESE INCLUDE CONCRETE MIX [CEMENT TYPE, AGGREGATE GRADATION, SLUMP, WATER/CEMENT RATIOS, PLASTICIZERS AND ADDITIVES], FORMING SYSTEM [LINER AND FORMWORK], FORM RELEASE AGENTS, PLACEMENT RATE, FORM PRESSURES, FORMWORK AND JOINT SEALING, VIBRATING AND STRIPPING PRACTICES. IN ADDITION, DEMONSTRATE PATCHING AND REPAIR PROCEDURES FOR SPALLED CONCRETE, AND VOIDS CAUSED BY HONEYCOMBING OR BUGHOLES. ACCEPTED SAMPLE PANELS WILL BE STANDARD BY WHICH REMAINING WORK WILL BE EVALUATED FOR TECHNICAL AND AESTHETIC MERIT. CONTRACTOR SHALL STORE ACCEPTED SAMPLE PANELS ON SITE FOR REFERENCE UNTIL SUBSTANTIAL COMPLETION. ACCEPTED SAMPLE PANELS ARE A PREREQUISITE TO BEGINNING JOB FORMWORK. SUBMIT VARIATIONS FROM SAMPLE PANEL MATERIALS OR TECHNIQUES FOR APPROVAL PRIOR TO USE.
- COVER FORM LINERS TO PROTECT FROM OIL, DIRT AND UV EXPOSURE.
- HANDLE RIGID FORM LINER PANELS WITH CARE AT TEMPERATURES BELOW 25°F.
- APPROVED MANUFACTURERS OF FORM LINERS MATERIALS AND ACCESSORIES

### BASIS OF DESIGN:

TYPE 1 - SCOTT SYSTEM PATTERN 122 - STRIATED

TYPE 2 - SCOTT SYSTEM PATTERN 120 - SANDBLAST #2

SCOTT SYSTEM, INC.  
10777 EAST 45TH AVENUE  
DENVER, CO 80239  
333-373-2500  
WWW.SCOTTSYSTEM.COM

### ALLOWABLE ALTERNATES:

TYPE 1 - FITZGERALD FORMLINERS PATTERN 17934 - DC WAVE

TYPE 2 - FITZGERALD FORMLINERS PATTERN 16991 - MEDIUM SANDBLAST

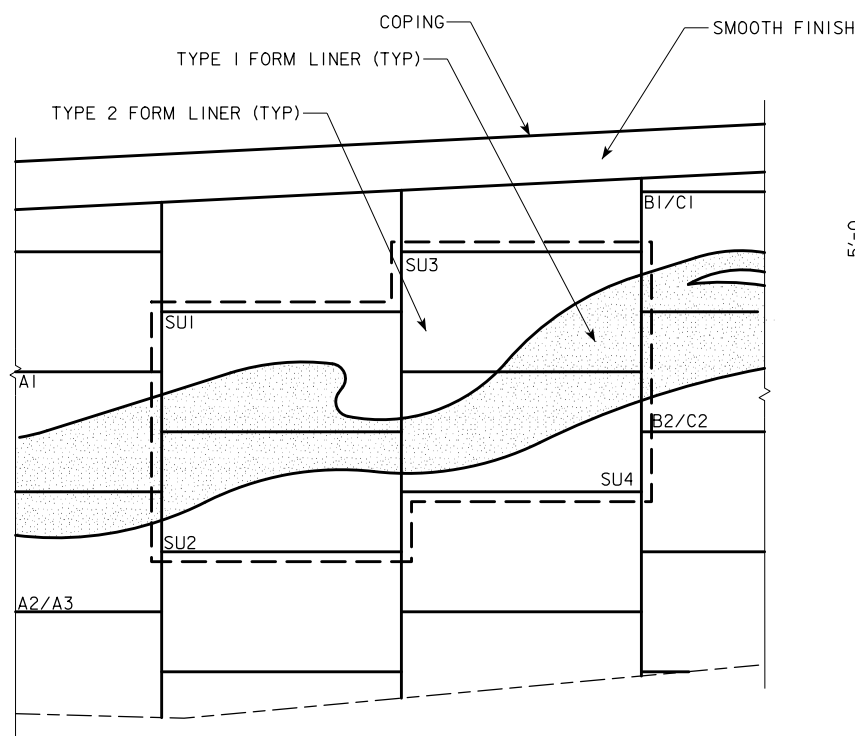
FITZGERALD FORMLINERS, INC.  
1500 EAST CHESTNUT AVENUE  
SANTA ANA, CA 92701  
800-547-7760  
WWW.FORMLINERS.COM

TYPE 1 - AMERICAN FORMLINERS PATTERN 1122 - RANDOM STRIATIONS

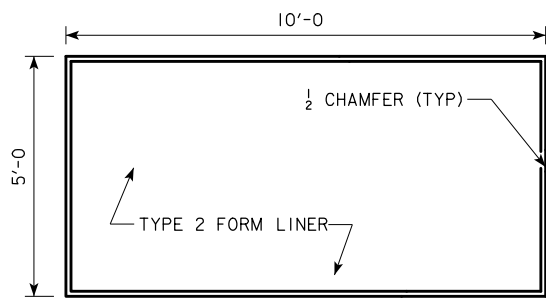
TYPE 2 - AMERICAN FORMLINERS PATTERN 1200 - LIGHT/MEDIUM SANDBLAST

AMERICAN FORMLINERS, INC.  
1567 FRONTENAC ROAD  
NAPERVILLE, IL 60563  
630-615-2170  
WWW.AMERICANFORMLINERS.COM

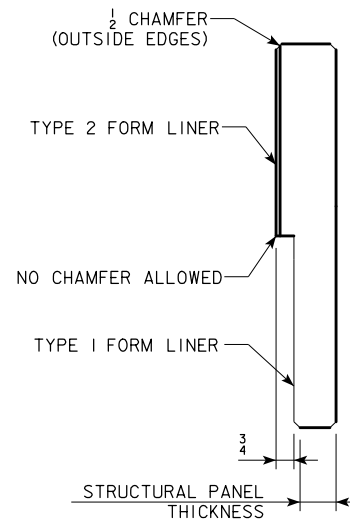
- ON MULTIPLE USE LINERS, CLEAN LINER BEFORE EACH USE. REPLACE DAMAGED LINER WHOSE CONTINUED USE OR REPAIR WOULD NEGATIVELY IMPACT THE AESTHETICS OF THE CONCRETE FINISH
- APPLY FORM LINER COMPATIBLE RELEASE AGENT AT RATE RECOMMENDED BY MANUFACTURER. ATTEMPT TO SCHEDULE CONCRETE POUR SOON AFTER APPLICATION OF RELEASE AGENT TO AVOID PRECIPITATION, DUST, AND DEBRIS. PROTECT REINFORCING STEEL FROM EXPOSURE TO RELEASE AGENTS.
- SEAL FORM LINER JOINTS TO PREVENT MORTAR LEAKAGE.
- PROVIDE SOLID BACKING AT FORM LINER BUTT JOINTS TO PREVENT DEFLECTION.
- CONSTRUCT FORM LINER AND ACCESSORIES TO SIZES, SHAPES, LINES AND DIMENSIONS SHOWN.
- INSTALL BACKUP STRIPS AS REQUIRED TO PREVENT DEFLECTION OF THE LINER DUE TO FORM PRESSURES.
- ALL REQUIRED PRECAST PANELS AND THE ASSOCIATED FORM LINERS AND AESTHETIC CONSIDERATIONS AS SHOWN ON THE PLANS ARE TO BE INCLUDED IN THE CONTRACT UNIT PRICE FOR ITEM 2432-0000100 MECHANICALLY STABILIZE EARTH RETAIN WALL SF.
- WAVE PATTERN NOT REQUIRED ON EXPOSED WALL SECTIONS LESS THAN 4'-0" IN HEIGHT.



TYPICAL PATTERN STEP UP CONFIGURATION

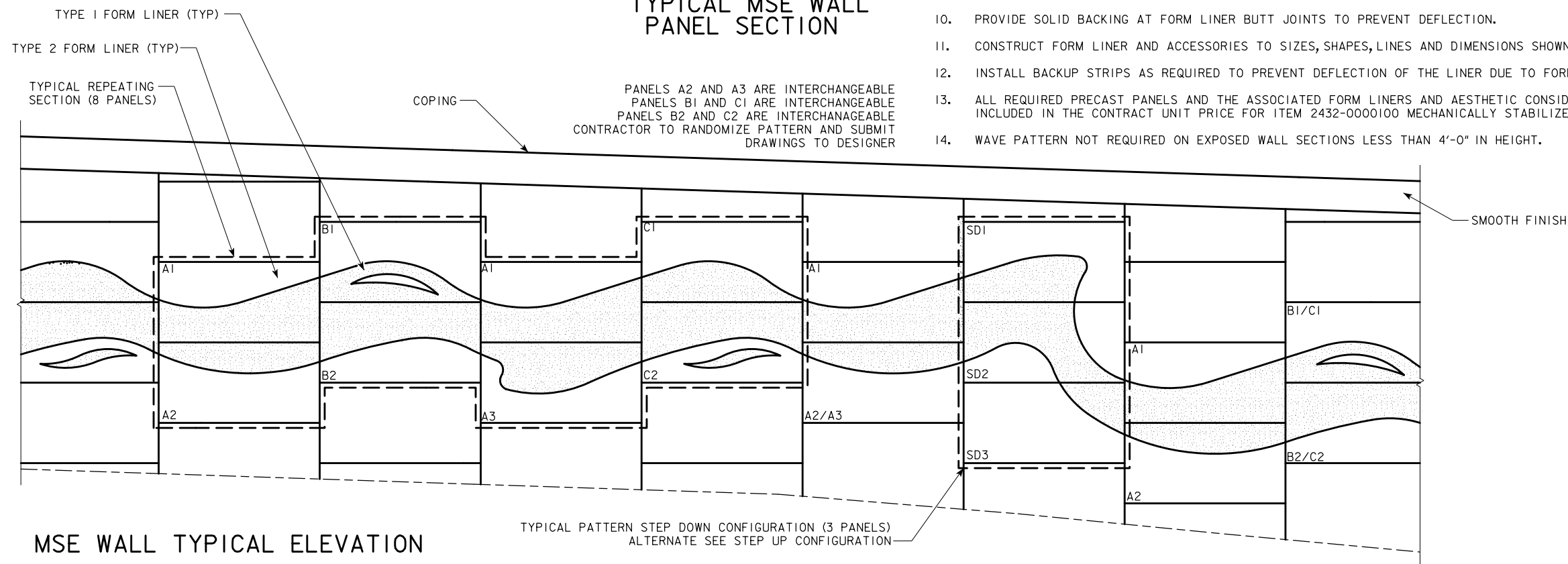


TYPICAL MSE WALL PANEL



TYPICAL MSE WALL PANEL SECTION

PANELS A2 AND A3 ARE INTERCHANGEABLE  
PANELS B1 AND C1 ARE INTERCHANGEABLE  
PANELS B2 AND C2 ARE INTERCHANGEABLE  
CONTRACTOR TO RANDOMIZE PATTERN AND SUBMIT DRAWINGS TO DESIGNER

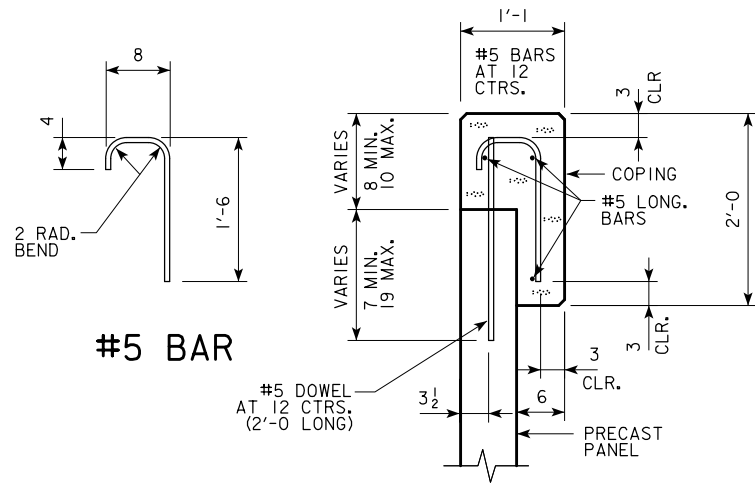


MSE WALL TYPICAL ELEVATION

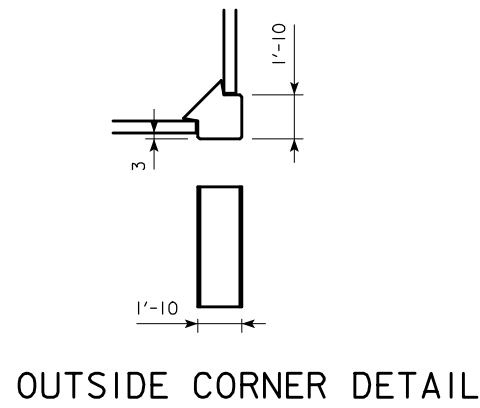
TYPICAL PATTERN STEP DOWN CONFIGURATION (3 PANELS)  
ALTERNATE SEE STEP UP CONFIGURATION

MSE WALL  
AESTHETIC DETAILS  
MSE WALL ELEVATION



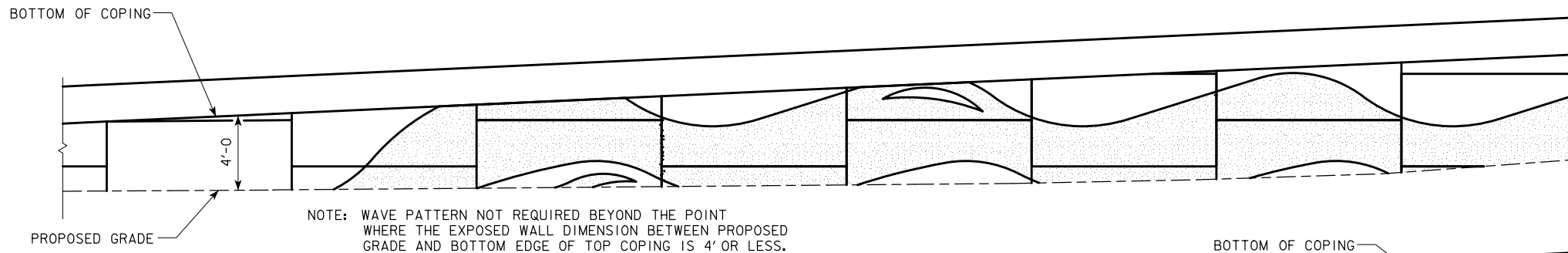


COPING DETAILS



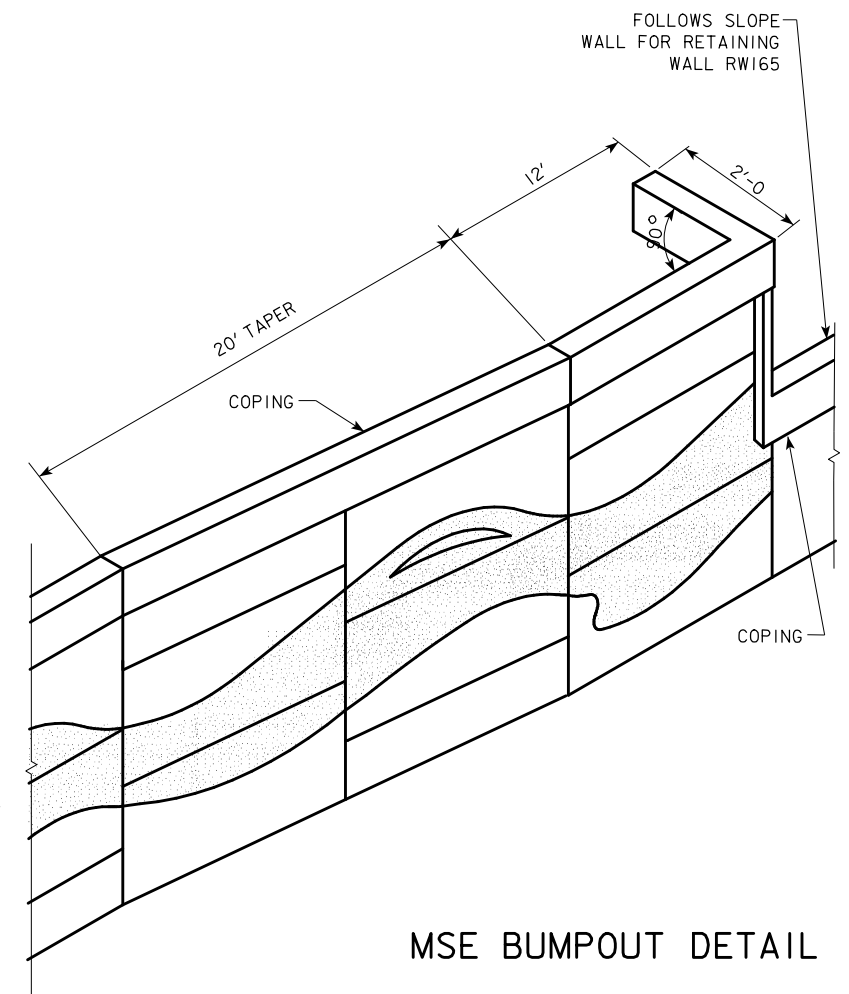
OUTSIDE CORNER DETAIL

- NOTES  
 1. #5 LONGITUDINAL BARS SHALL BE LAPPED 1'-9 MIN.  
 2. COPING SHALL BE CAST IN PLACE CONCRETE.

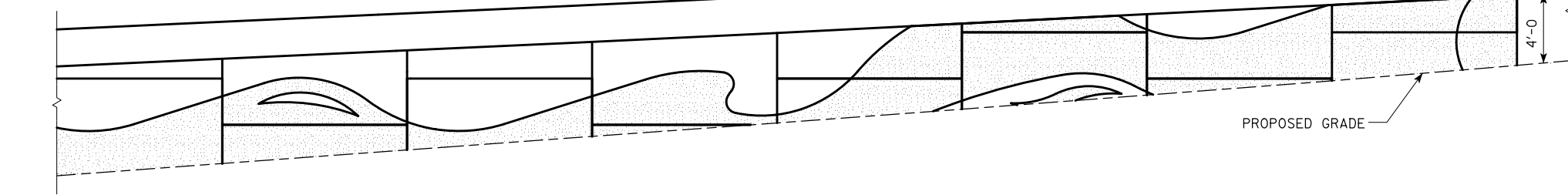


PROPOSED GRADE

BOTTOM OF COPING

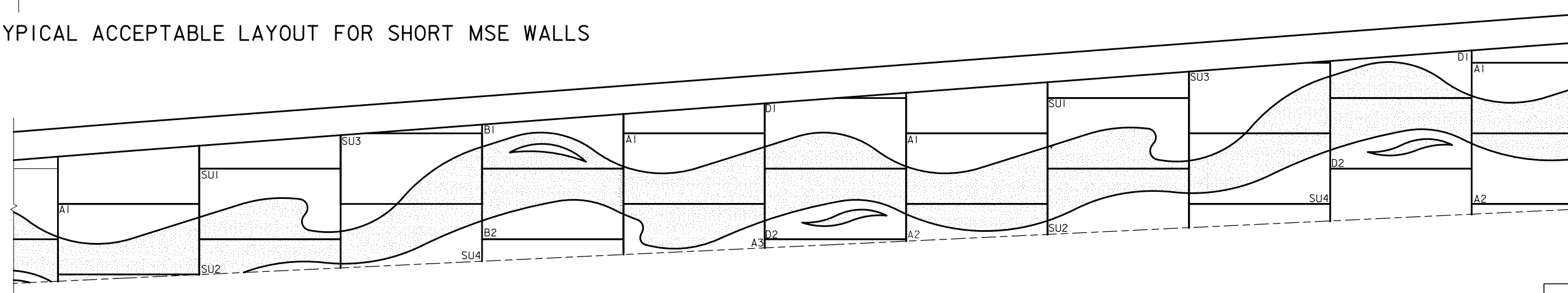


MSE BUMPOUT DETAIL



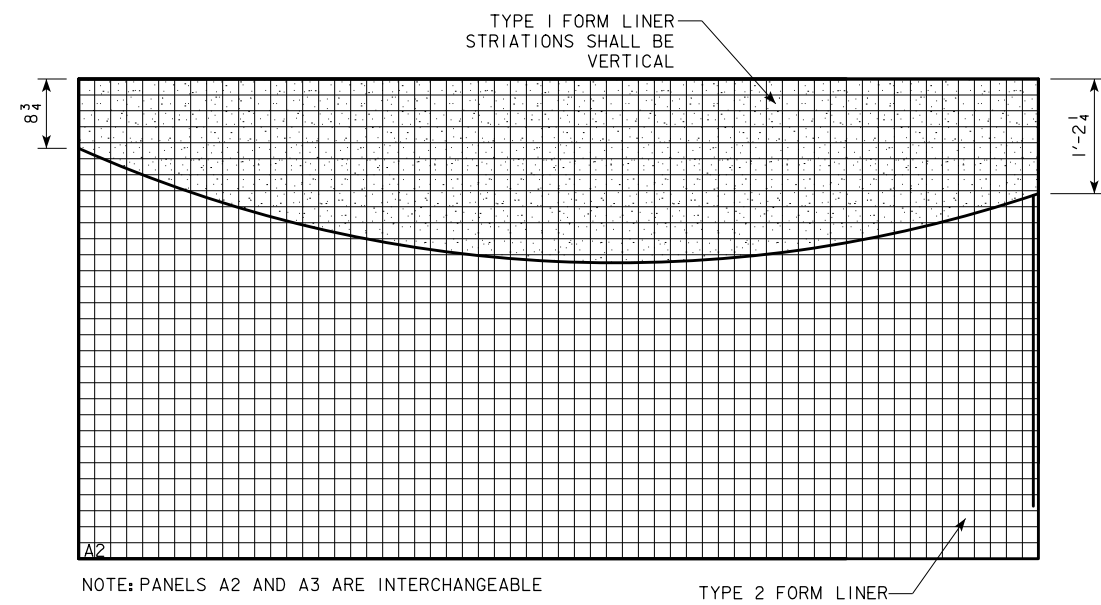
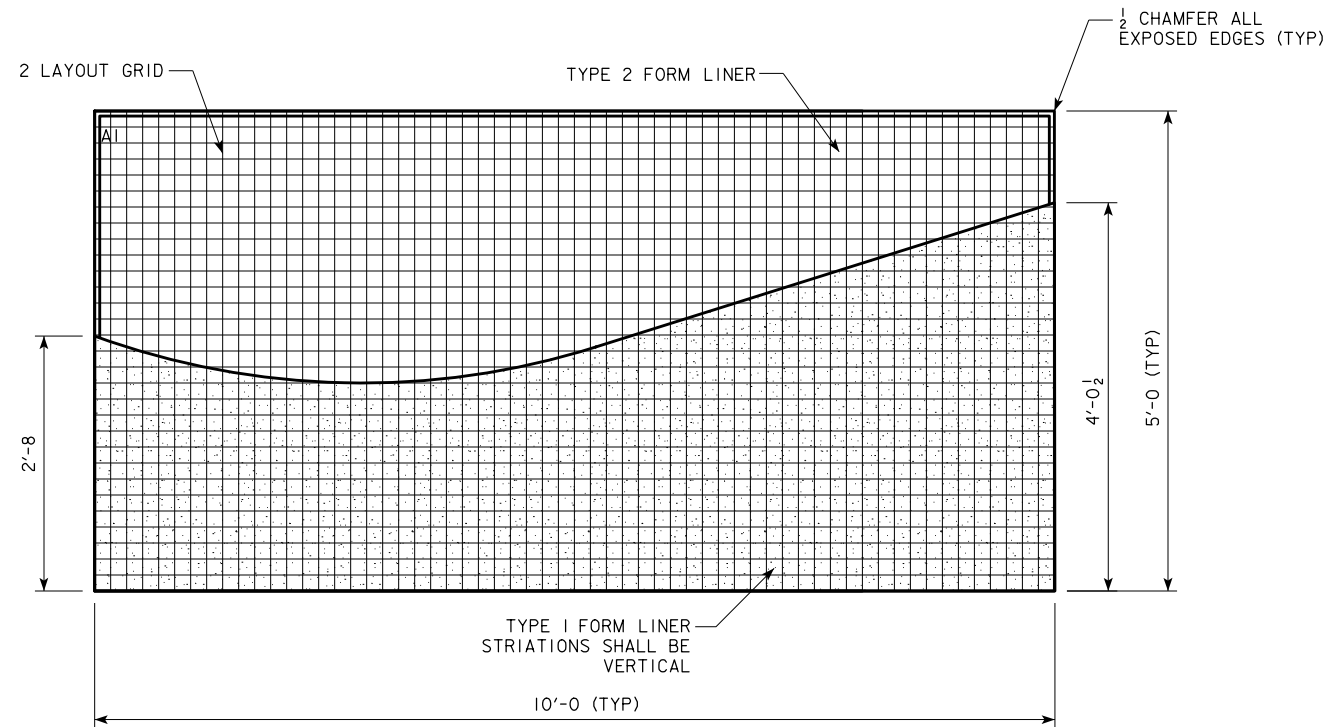
PROPOSED GRADE

TYPICAL ACCEPTABLE LAYOUT FOR SHORT MSE WALLS

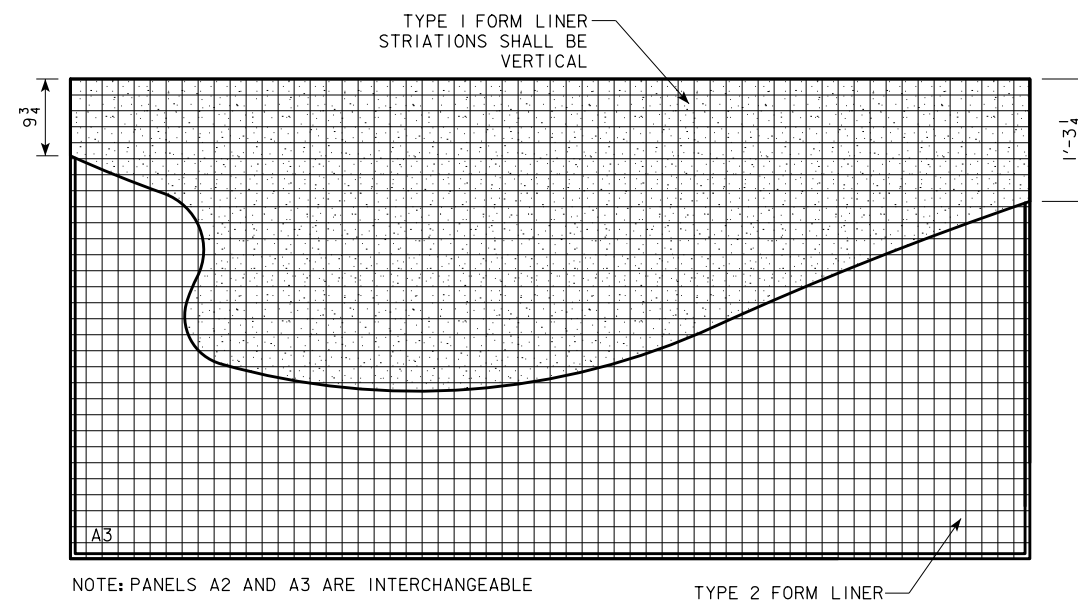


ADDITIONAL PANEL LAYOUT EXAMPLE

MSE WALL  
 AESTHETIC DETAILS  
 MSE WALL ELEVATION



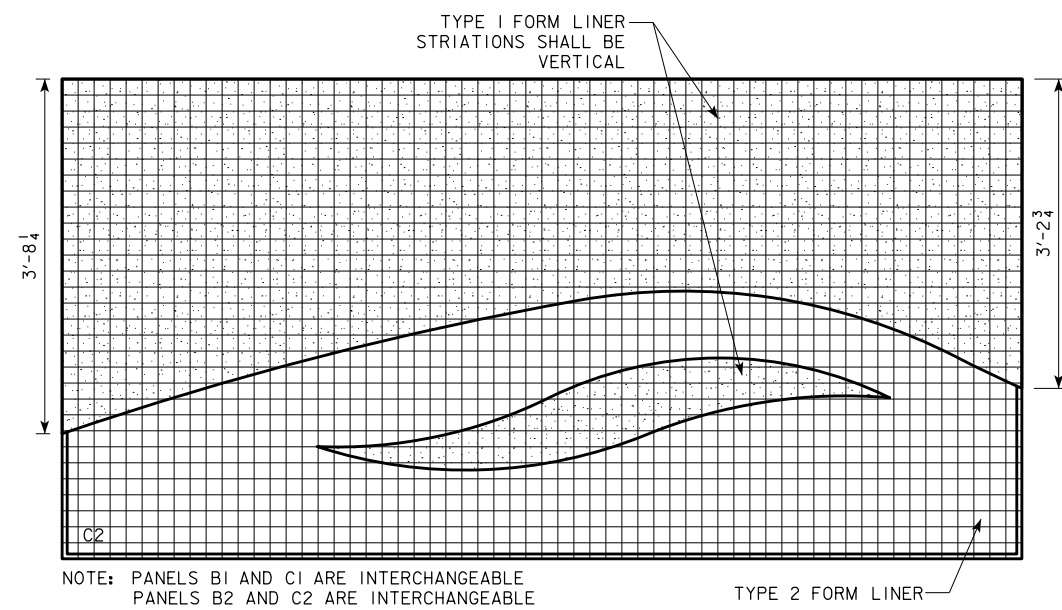
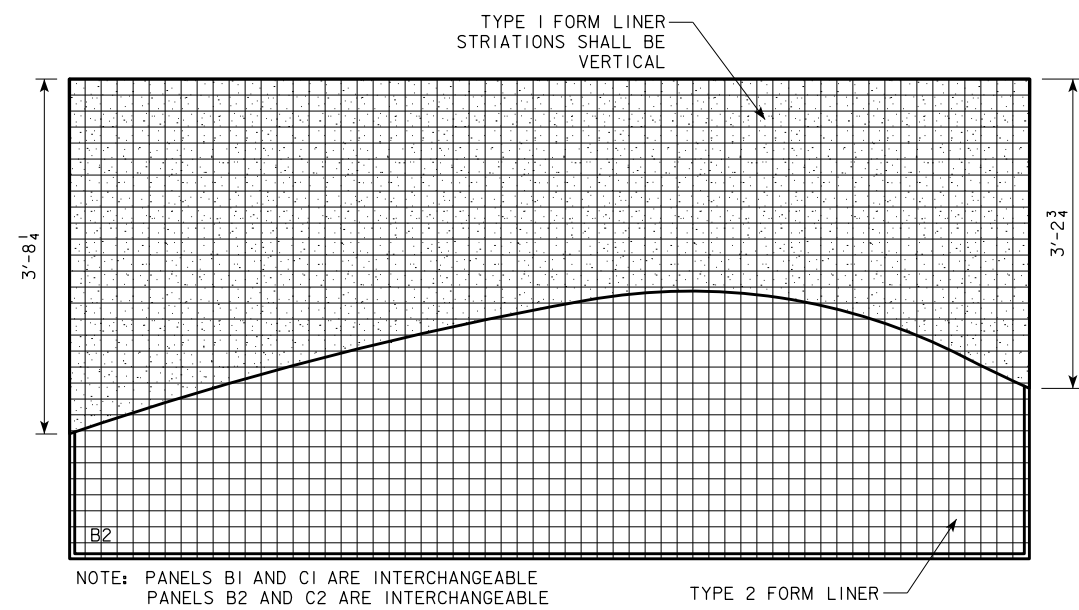
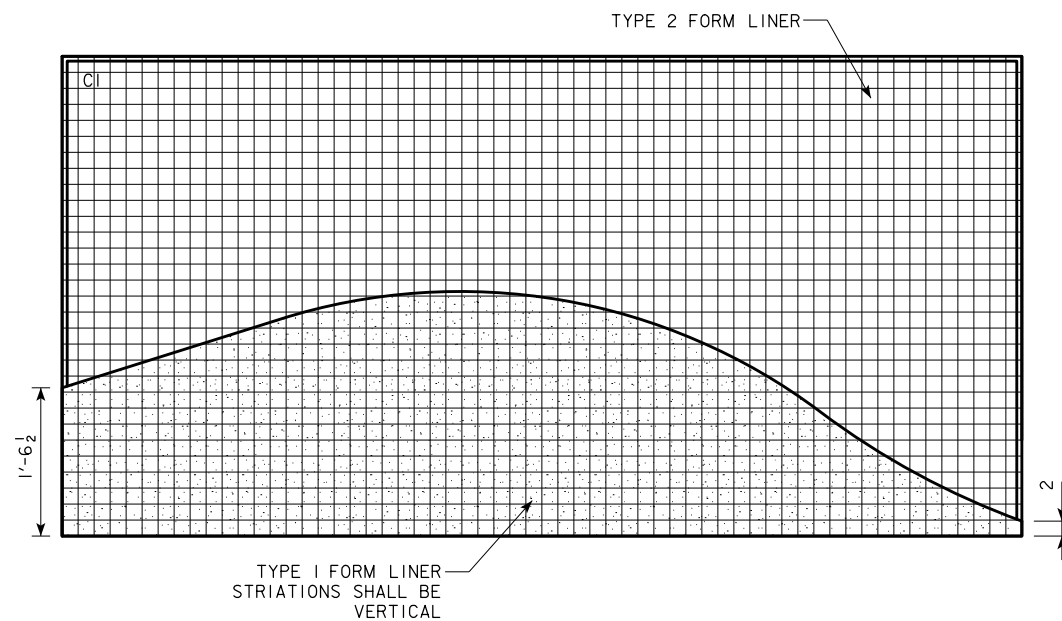
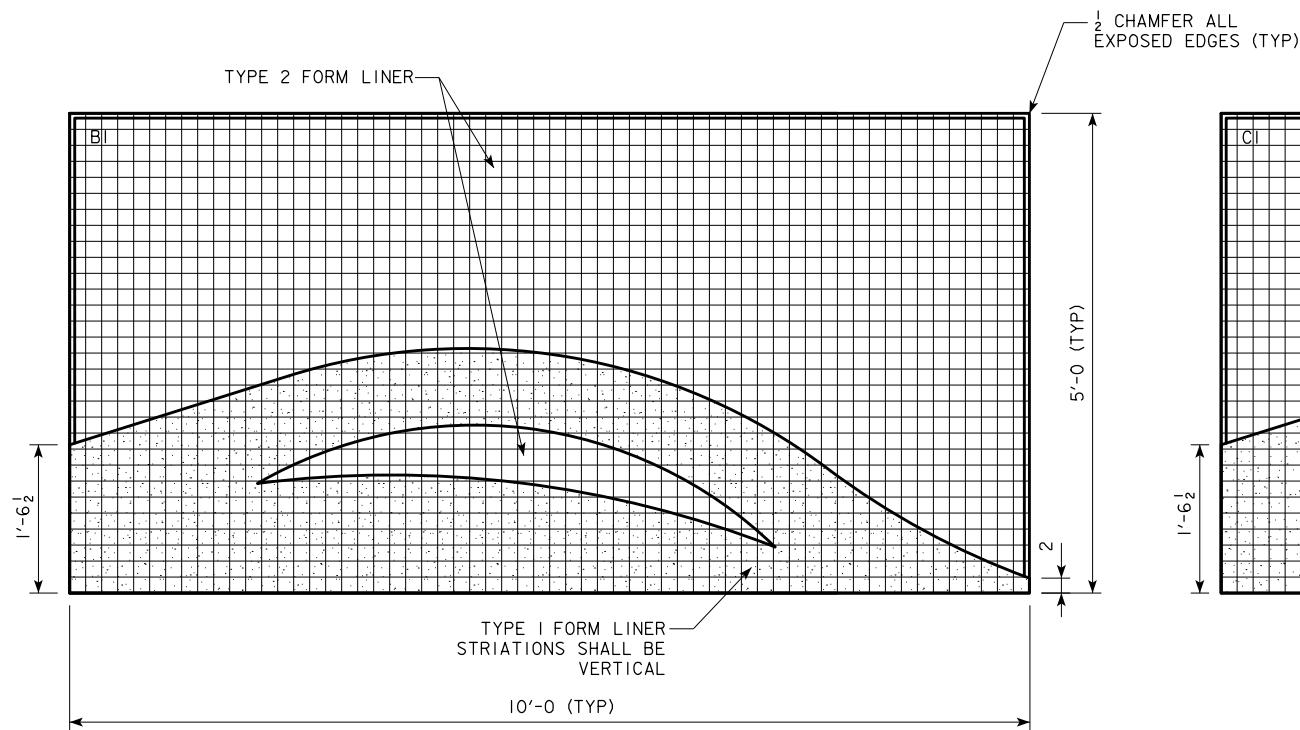
NOTE: PANELS A2 AND A3 ARE INTERCHANGEABLE



NOTE: PANELS A2 AND A3 ARE INTERCHANGEABLE

### MSE WALL PANEL ELEVATIONS (PATTERNS A1, A2 AND A3)

MSE WALL  
AESTHETIC DETAILS  
MSE WALL PANEL ELEVATION

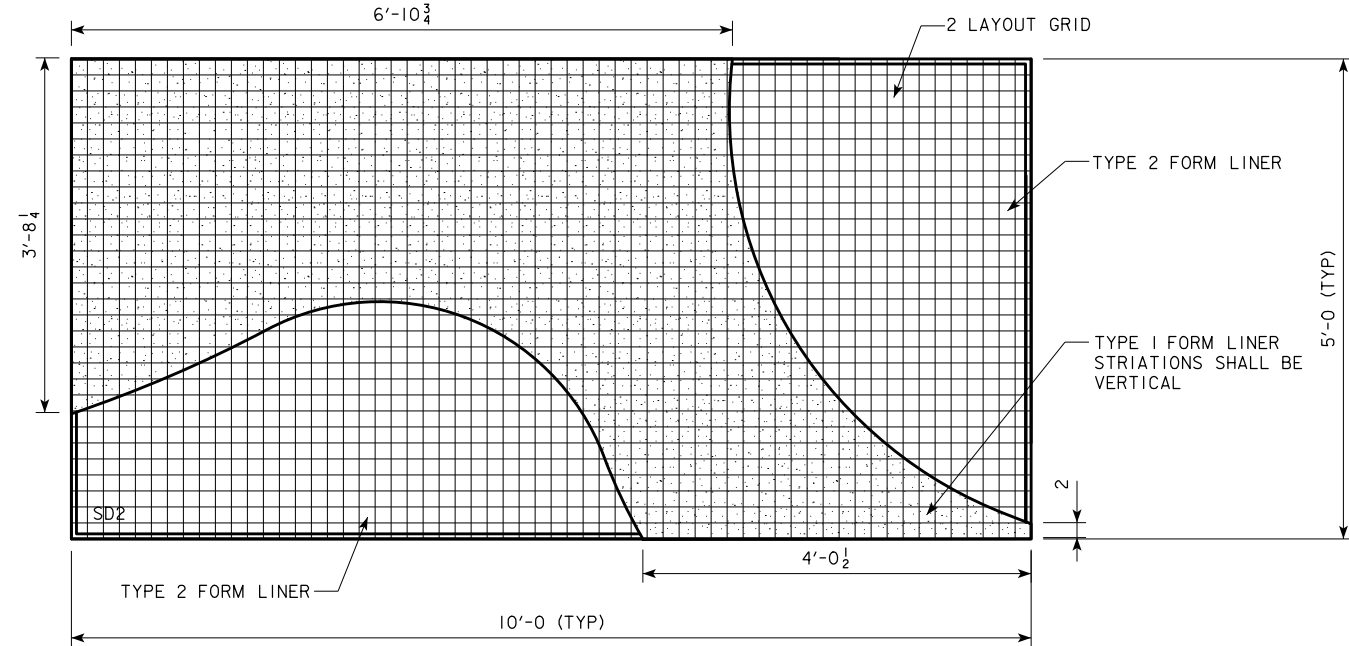
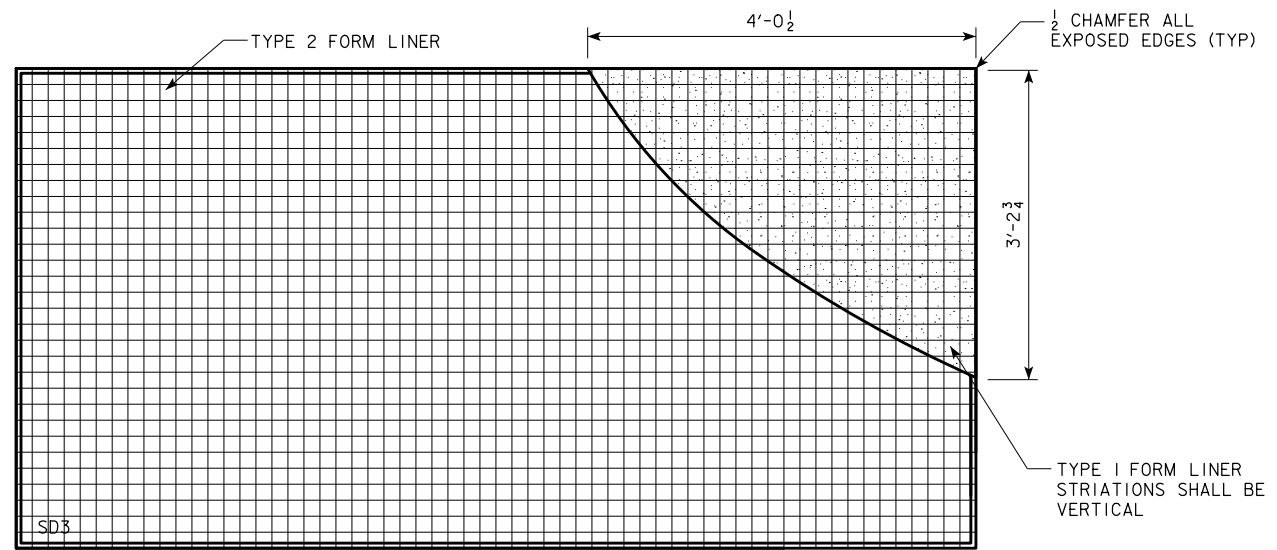
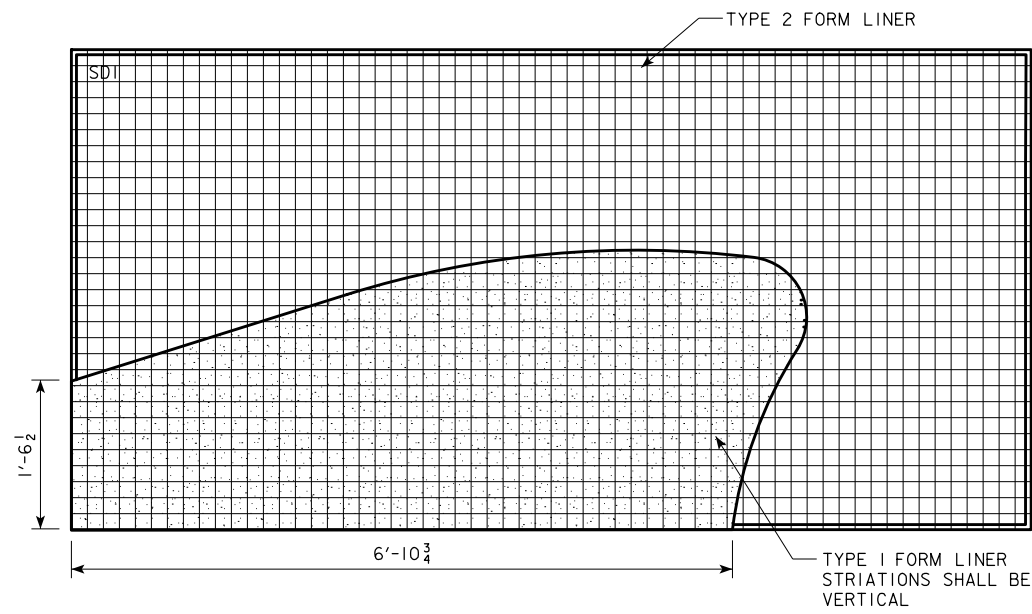


NOTE: PANELS B1 AND C1 ARE INTERCHANGEABLE  
PANELS B2 AND C2 ARE INTERCHANGEABLE

NOTE: PANELS B1 AND C1 ARE INTERCHANGEABLE  
PANELS B2 AND C2 ARE INTERCHANGEABLE

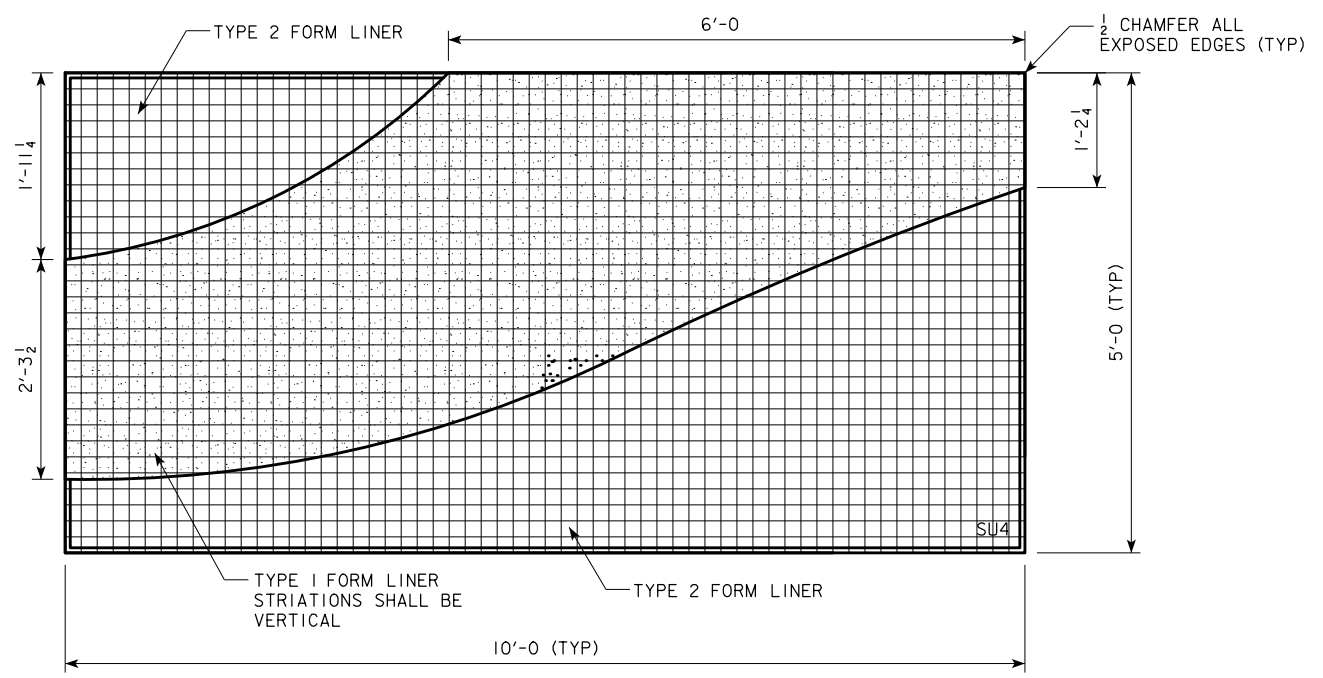
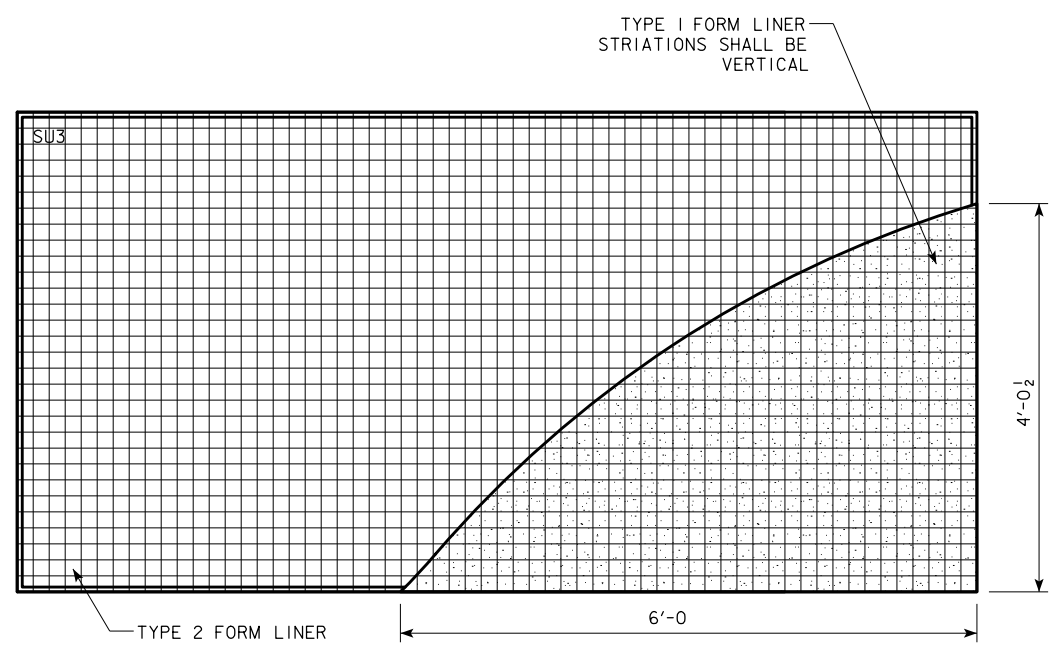
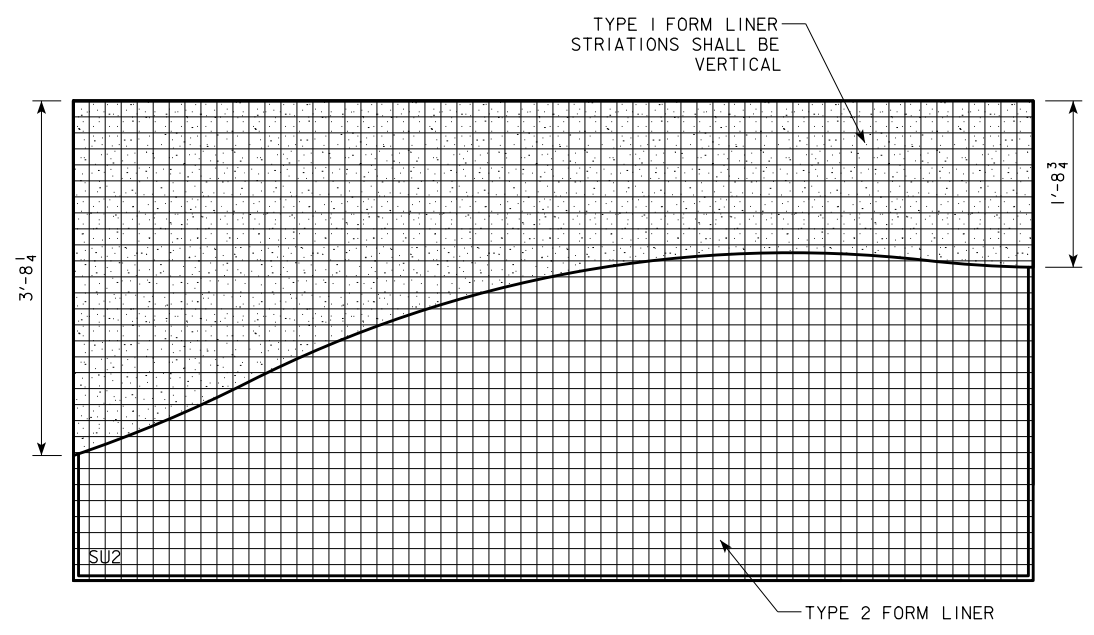
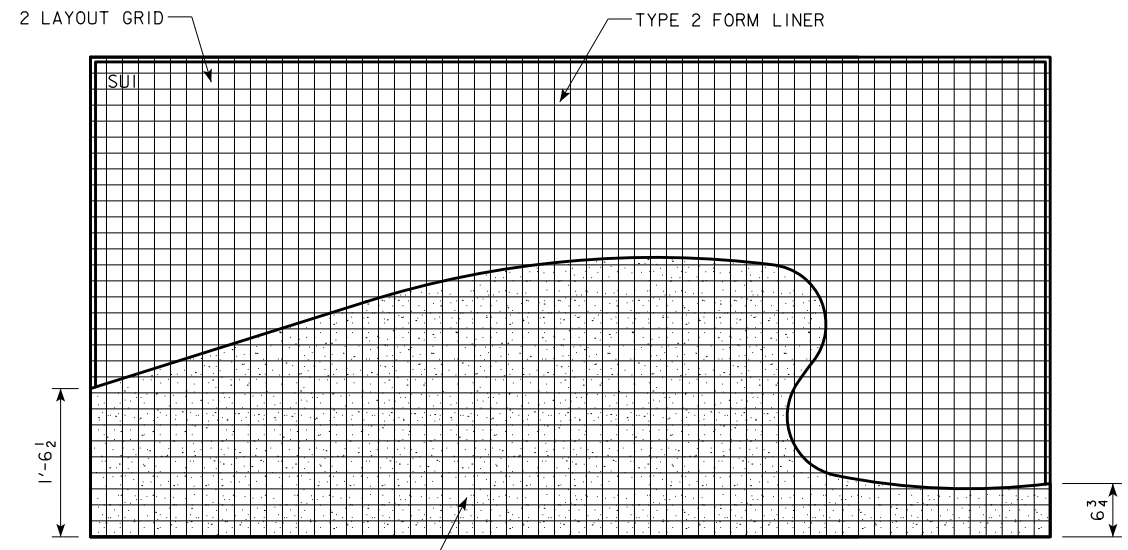
MSE WALL PANEL ELEVATIONS  
(PATTERNS B1, B2, C1 AND C2)

MSE WALL  
AESTHETIC DETAILS  
MSE WALL PANEL ELEVATION



MSE WALL PANEL ELEVATIONS  
(PATTERNS SD1, SD2 AND SD3)

MSE WALL  
AESTHETIC DETAILS  
MSE WALL PANEL ELEVATION



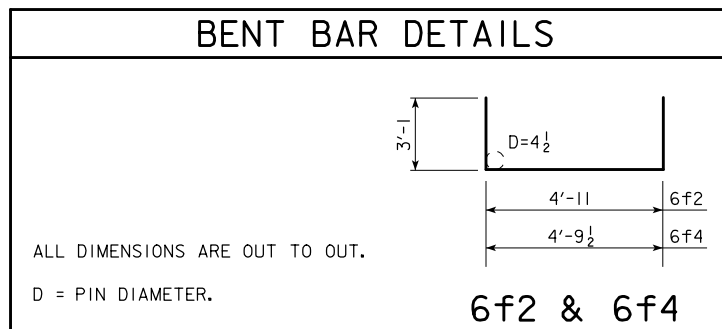
MSE WALL PANEL ELEVATIONS  
(PATTERNS SUI, SU2, SU3 AND SU4)

MSE WALL  
AESTHETIC DETAILS  
MSE WALL PANEL ELEVATION

### NON-COATED REINFORCING STEEL IDENTITY ELEMENT FOOTING

BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGHT
6f1	FOOTING, TOP,BOTTOM, SIDES	—	30	9'-3	417
6f2	FOOTING,SIDES	└┘	22	11'-1	367
6f3	FOOTING, TOP,BOTTOM, SIDES	—	30	10'-0	451
6f4	FOOTING,SIDES	└┘	18	11'-0	298
REINFORCING STEEL - TOTAL (LBS.)					1533

### BENT BAR DETAILS



### ESTIMATED QUANTITIES

ITEM	UNIT	IDENTITY ELEMENT FOOTING
EXCAVATION, CLASS 20	CY	39
EXCAVATION, CLASS 22	CY	4
STRUCTURAL CONCRETE (BRIDGE)	CY	20.2
REINFORCING STEEL	LB	1533

### CONCRETE PLACEMENT QUANTITIES

LOCATION	TYPE	IDENTITY ELEMENT FOOTING
FOOTING	STRUCTURAL CONCRETE (BRIDGE)	20.2

### IDENTITY ELEMENT FOOTINGS

#### SPECIFICATIONS:

DESIGN: AASHTO LRFD 5th Ed, SERIES OF 2010, EXCEPT AS NOTED IN THE CURRENT IOWA BRIDGE DESIGN MANUAL.

CONSTRUCTION: IOWA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, SERIES 2012, PLUS APPLICABLE GENERAL SUPPLEMENTAL SPECIFICATIONS, DEVELOPMENTAL SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS SHALL APPLY TO CONSTRUCTION WORK ON THIS PROJECT.

THE DEVELOPMENTAL SPECIFICATION, DS-12019, FOR MASS CONCRETE-CONTROL OF HEAT OF HYDRATION SHALL APPLY TO WORK ON THIS PROJECT.

#### DESIGN STRESSES:

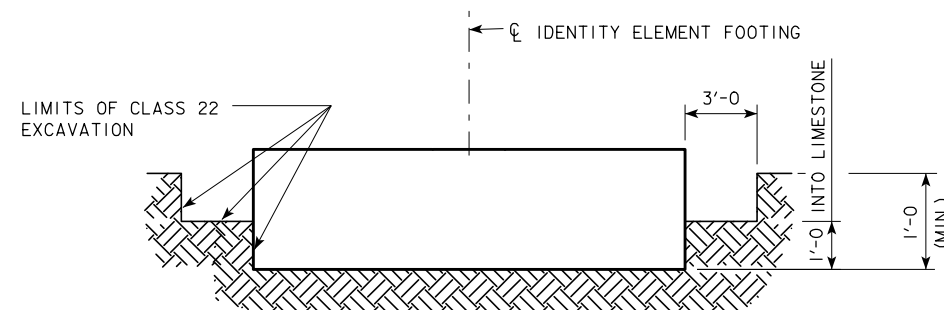
DESIGN STRESSES FOR THE FOLLOWING MATERIALS ARE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 5th Ed, SERIES OF 2010, EXCEPT AS NOTED IN THE CURRENT IOWA BRIDGE DESIGN MANUAL.

REINFORCING STEEL IN ACCORDANCE WITH LRFD AASHTO SECTION 5, GRADE 60.

CONCRETE IN ACCORDANCE WITH LRFD AASHTO SECTION 5,  $f'c = 3,500$  PSI.

#### NOTES:

1. THE DESIGN BEARING PRESSURE FOR FOOTINGS ON LIMESTONE IS 13.5 TONS PER SQ. FT. FOOTING TO EXTEND AT LEAST 12 INCHES INTO LIMESTONE WITH THE FINAL 12 INCHES OF EXCAVATION TO BE TO NEAT LINES OF THE FOOTING.
2. THE MINIMUM CLEAR DISTANCE FROM THE FACE OF CONCRETE TO NEAR REINFORCING BAR IS 2" UNLESS NOTED OTHERWISE OR SHOWN.
3. ALL EXPOSED CORNERS, 90 DEGREES OR SHARPER SHALL BE FILLETED WITH A  $\frac{3}{4}$ " DRESSED AND BEVELED STRIP UNLESS NOTED OTHERWISE.
4. REINFORCING BARS MUST BE PLACED TO CLEAR ANCHOR BOLTS. SHIFT REINFORCING BARS SLIGHTLY AS REQUIRED.
5. ELEVATIONS BASED ON NAVD 88 DATUM, UNLESS NOTED.
6. SEE SPECIFICATIONS FOR MASS CONCRETE APPLIED TO FOOTING.
7. WELDING OF ANCHOR BOLTS SHALL NOT BE ALLOWED. THE CONTRACTOR SHALL OBTAIN A TEMPLATE FROM THE MANUFACTURER/FABRICATOR FOR PROPER PLACEMENT OF THE ANCHOR BOLTS.



### IDENTITY ELEMENT FOOTING EXCAVATION LIMITS AND ROCK KEY

NOTE:  
FOOTINGS TO EXTEND AT LEAST 12 INCHES INTO COMPETENT LIMESTONE WITH THE FINAL 12 INCHES OF EXCAVATION TO BE TO THE NEAT LINES OF THE FOOTING.

### LOCATION

1-74 EASTBOUND RAMP A  
BETTENDORF  
T-78N R-4E  
SECTION 29  
DAVENPORT TOWNSHIP  
SCOTT COUNTY  
LATITUDE 41.526557  
LONGITUDE -90.514225

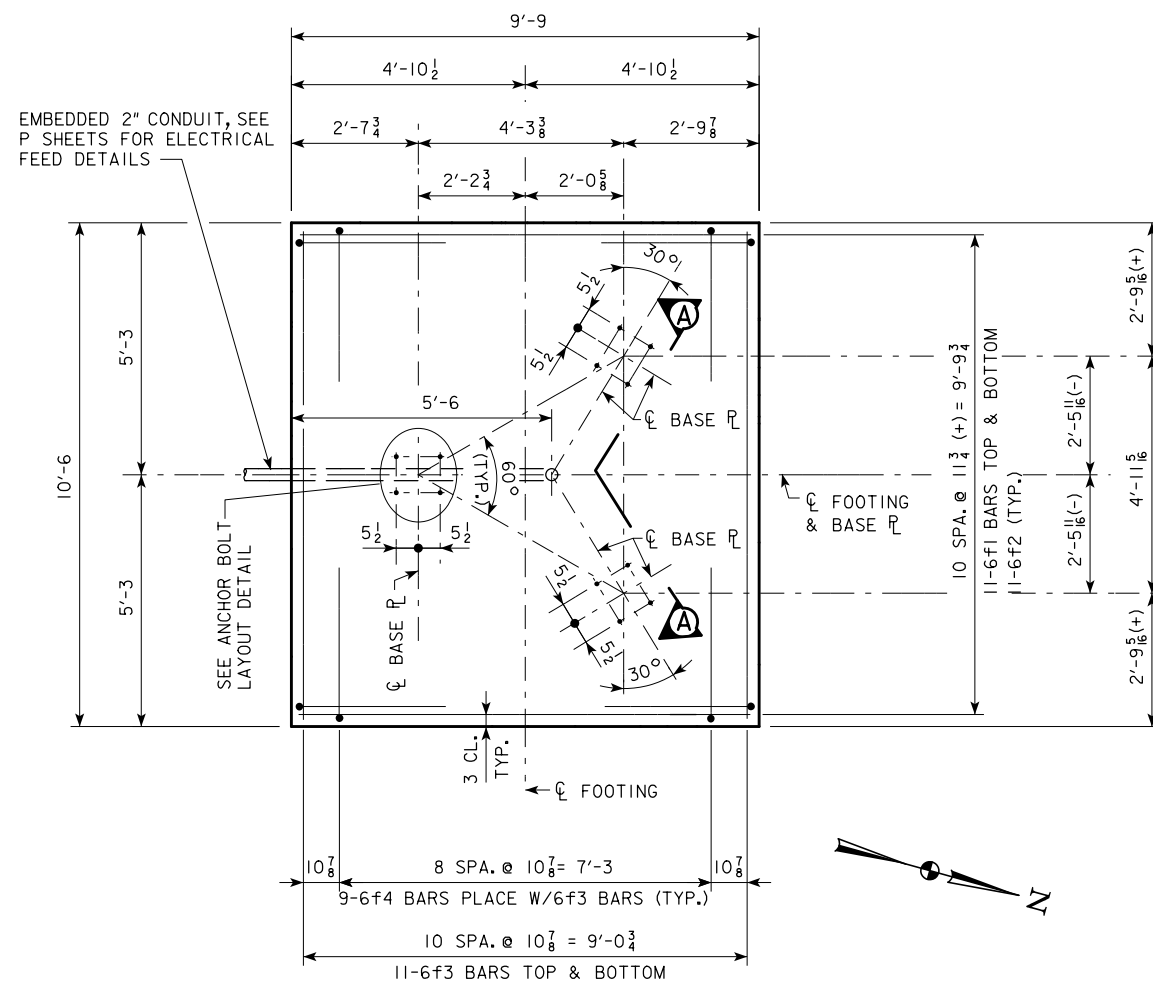
### DESIGN FOR AN IDENTITY ELEMENT FOOTING US 67 RAMP A NOTES & QUANTITIES

STA. 1497+00.00 - 27.5' RT. - BASELINE RAMP A

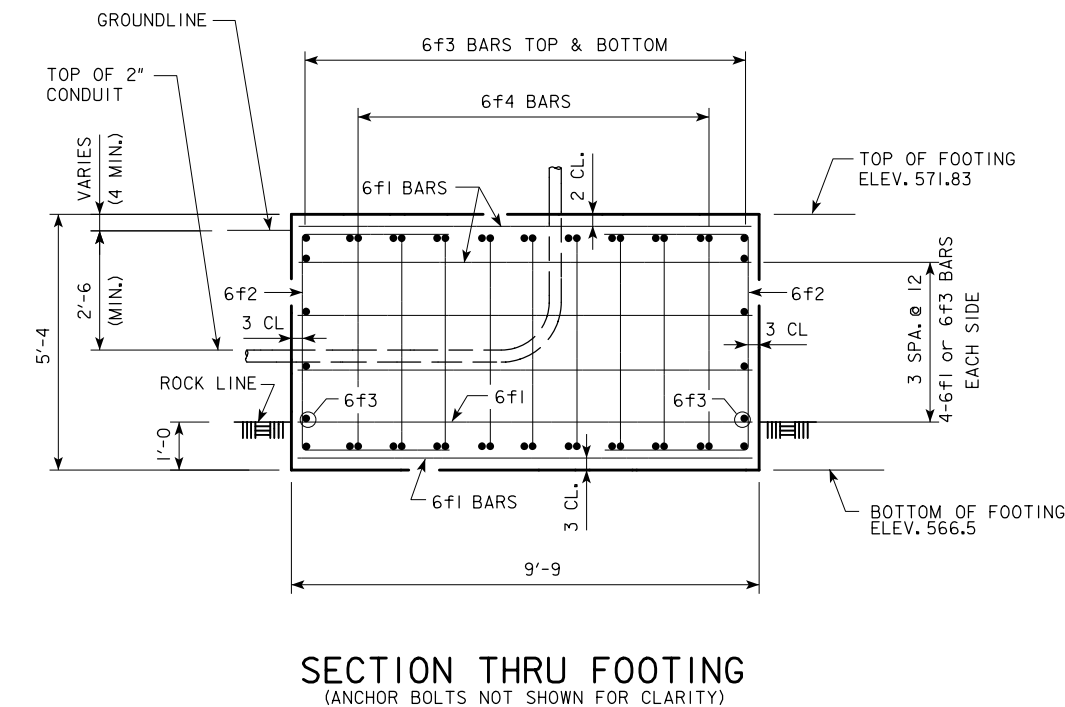
### SCOTT COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
DESIGN SHEET NO. 1 OF 2 FILE NO. 30253 DESIGN NO. 217

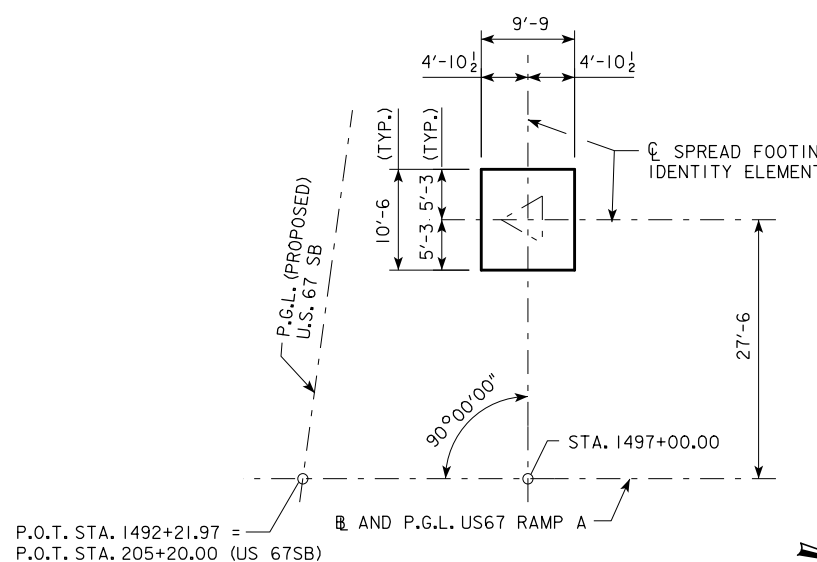
BENCH MARK NO. 500: STA. 6781+18.95 LT. 161.23'  
 ELEV. 575.797, CHISELED "X" IN BOLT E. SIDE  
 CONCRETE STRUCTURE.



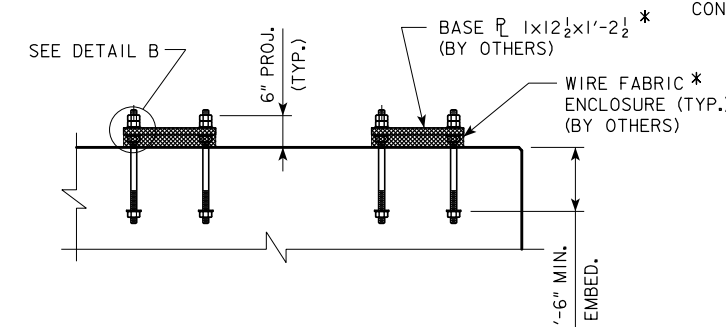
**FOOTING PLAN**



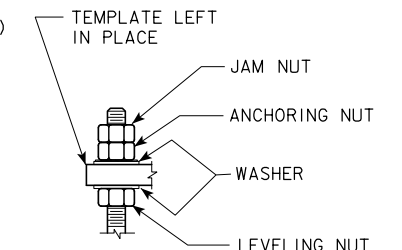
**SECTION THRU FOOTING**  
 (ANCHOR BOLTS NOT SHOWN FOR CLARITY)



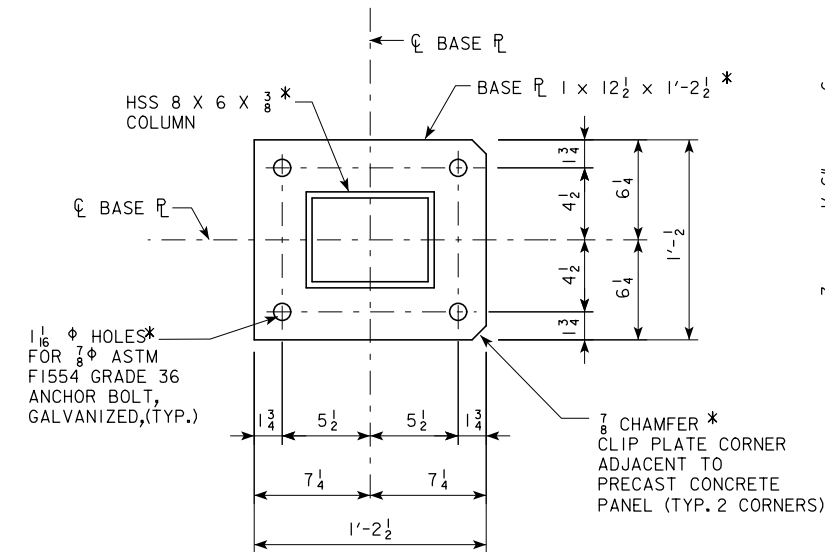
**STAKING DIAGRAM - RAMP A  
 IDENTITY ELEMENT**



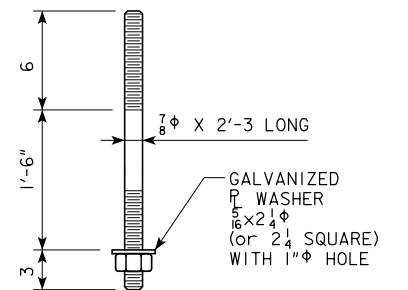
**PART SECTION A-A**



**DETAIL B**



**ANCHOR BOLT LAYOUT DETAIL**



**ANCHOR BOLT  
 DETAIL**

**NOTES:**

ANCHOR BOLTS SHALL BE 7/8" ASTM F-1554 GRADE 55 AND SHALL CONFORM TO THE REQUIREMENTS OF I.M. 453.08.

GALVANIZING OF ANCHOR BOLTS, NUTS AND WASHERS SHALL BE IN ACCORDANCE WITH I.M. 453.08.

ALL COSTS ASSOCIATED WITH FURNISHING AND INSTALLING THE ANCHOR BOLTS, NUTS AND WASHERS FOR THE IDENTITY ELEMENT FOOTING SHALL BE INCLUDED IN THE PRICE BID FOR "STRUCTURAL CONCRETE".

\* BASE PLATES, COLUMN AND WIRE FABRIC ARE SHOWN FOR INFORMATION ONLY. BASE PLATES COLUMN AND WIRE FABRIC MATERIAL SHALL BE INCLUDED IN IDENTITY ELEMENT, TO BE CONSTRUCTED BY OTHERS.

NUTS AND WASHERS SHALL BE HAND-TIGHTENED ON ANCHOR BOLT PROJECTIONS, FOR FUTURE USE WHEN IDENTITY ELEMENTS ARE INSTALLED.

THE CONTRACTOR SHALL TAKE CARE TO SECURE ANCHOR BOLTS PLUMB AND IN THE CORRECT LOCATION. THE CONTRACTOR SHALL LEAVE THE TEMPLATE, USED TO SET THE ANCHOR BOLTS, IN PLACE TO PROTECT THE ANCHOR BOLTS UNTIL THE IDENTITY ELEMENT IS INSTALLED BY OTHERS.

DESIGN FOR AN  
**IDENTITY ELEMENT FOOTING  
 US 67 RAMP A  
 FOOTING DETAILS**

STA. 1497+00.00 - 27.5' RT. - BASELINE RAMP A

**SCOTT COUNTY**

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
 DESIGN SHEET NO. 2 OF 2 FILE NO. 30253 DESIGN NO. 217





































