

SCOTT GO. P.C.C. PAVEMENT-GRADE AND REPLACE IM-074-1(207)5--13-82

LETTING DATE 01/22/2020

INDEX OF SHEETS		105-3 10-18-05
No.	Description	
<b>A Sheets</b>	<b>Title Sheets</b>	
A.1	Title Sheet	
A.2	Project Location Map	
<b>B Sheets</b>	<b>Typical Cross Sections and Details</b>	
B.1	Typical Sections	
<b>C Sheets</b>	<b>Quantities and General Information</b>	
C.1	Project Description	
C.2 - C.3	Estimated Project Quantities	
C.3 - C.4	Estimate Reference Information	
C.5	Index of Tabulations	
C.5	Standard Road Plans	
C.6	Pollution Prevention Plan	
C.7	Standard Notes	
C.8 - C.15	Tabulations	
<b>D Sheets</b>	<b>Mainline Plan and Profile Sheets</b>	
*D.1 - D.3	Plan and Profile Sheets - Mainline	
<b>E Sheets</b>	<b>Side Road Plan and Profile Sheets</b>	
*E.1 - E.2	Plan and Profile Sheets - Sideroads	
<b>G Sheets</b>	<b>Survey Sheets</b>	
G.1 - G.9	Bench Mark and Reference Information Sheets	
G.10 - G.20	Alignments	
G.21 - G.25	Horizontal Control Tabulations	
<b>J Sheets</b>	<b>Traffic Control and Staging Sheets</b>	
*J.1 - J.8	Staging Detail Sheets	
<b>L Sheets</b>	<b>Geometric, Staking and Jointing Sheets</b>	
L.1 - L.5	Sideroad Geometrics and Staking Detail Sheets	
<b>M Sheets</b>	<b>Storm Sewer Sheets</b>	
M.1 - M.11	Storm Sewer Detail Sheets	
<b>Q Sheets</b>	<b>Soils Sheets</b>	
*Q.1 - Q.4	Soil Sheets	
<b>SPS Sheets</b>	<b>Bridge Plan Soils Sheets</b>	
SPS.1	Retaining Wall Soils Sheet	
<b>S Sheets</b>	<b>Sidewalk Layout Sheets</b>	
*S.1 - S.2	Sidewalk Details	
S.3	Sidewalk Tabulations	
<b>T Sheets</b>	<b>Earthwork Quantity Sheets</b>	
T.1	Earthwork Quantity Sheets	
<b>U Sheets</b>	<b>500 Series, Modified Standards and Detail Sheets</b>	
U.1 - U.2	Removal Plans	
U.3 - U.4	Pavement Marking Detail Sheet	
U.5	Parking Lot Details	
U.6 - U.7	Contaminated Soil Areas Site Details	
U.8-U.9	Detail Sheets	
<b>V Sheets</b>	<b>Bridge and Culvert Situation Plans</b>	
V.1 - V.6	Retaining Wall Sheets	
<b>W Sheets</b>	<b>Cross Section Plans</b>	
W.1 - W.16	Cross Section Sheets - 14th St.	
<b>X Sheets</b>	<b>Cross Section Plans</b>	
X.1 - X.4	Cross Section Sheets - Mississippi Blvd.	

\* COLOR PLANS

ALL WORKING DRAWINGS, INCLUDING SHOP DRAWINGS AND FALSEWORK DRAWINGS, SHALL BE SUBMITTED ACCORDING TO ARTICLE 1105.03 OF THE STANDARD SPECIFICATIONS. THESE DRAWINGS SHALL BE SUBMITTED TO AND CHECKED BY:

HANSON PROFESSIONAL SERVICES INC. (WALL 175)  
1525 S. SIXTH ST.  
SPRINGFIELD, IL 62703-2886  
217-747-9256



PLANS OF PROPOSED IMPROVEMENT ON THE  
**PRIMARY ROAD SYSTEM**  
**SCOTT COUNTY**  
**P.C.C. PAVEMENT - GRADE AND REPLACE**  
**14TH ST AND MISSISSIPPI BLVD 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.

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

REVISIONS	TOTAL
	116
PROJECT IDENTIFICATION NUMBER	
03-82-074-010-03	
PROJECT NUMBER	
IM-074-1(207)5--13-82	
R.O.W. PROJECT NUMBER	
IM-074-1(144)5--13-82	



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: Steven Scott Sweet Date: \_\_\_\_\_  
Printed or Typed Name: Steven Scott Sweet  
My license renewal date is December 31, 17

Pages or sheets covered by this seal: B.1, C.1-C.15, D.1-D.3, E.1-E.2, G.2-G.9, G.18, G.23-G.24, J.1-J.8, L.1-L.4, M.1-M.11, S.1-S.3, T.1, U.1-U.5, W.1-W.16, X.1-X.4



DESIGN DATA URBAN	
2015 AADT	-- V.P.D.
2035 AADT	9000 V.P.D.
2035 DHV	-- V.P.H.
TRUCKS	-- %
Total Design ESALs	--

INDEX OF SEALS		
SHEET NO.	NAME	TYPE
A.1	Steven S. Sweet	Primary Signature Block
G.1	Coventine Fidis	Reference Ties/Benchmarks
G.10	Jeffrey J. Tardy	Alignments
Q.1	Kipkoeh K. Chepkoiat	Geotechnical Design
V.1	Robert Chantome	Retaining Wall Design

**U04 SUBMITTAL (NOT FOR BID)**

Date: 03-01-2019



PRIORITY I ACCESS

ROCK ISLAND COUNTY, ILLINOIS

SCOTT COUNTY, IOWA

CITY OF DAVENPORT

STA. 26+25.00  
END CONSTRUCTION

US 67 NB  
STATE ST  
13TH ST

US 67 SB  
BROWN ST  
KIMBERLY RD

MISSISSIPPI RIVER

STA. 14+40.00  
BEGIN CONSTRUCTION

US 67 INTERCHANGE

MIDDLE RD

SPRUCE HILLS DRIVE

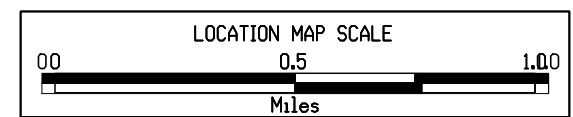
EXISTING 67TH ST

CITY OF BETTENDORF

T-78 N

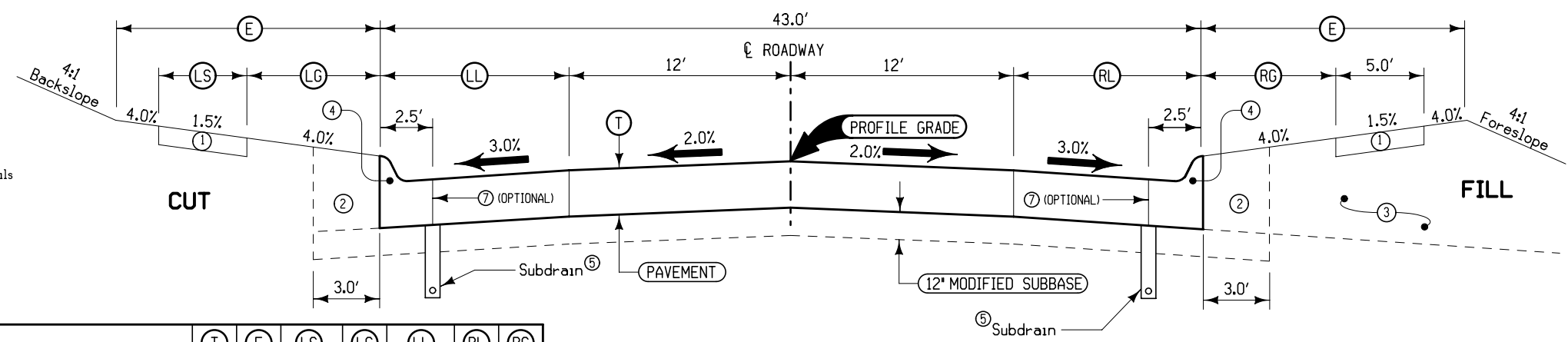
R-4 E

CITY OF DAVENPORT



# PROJECT LOCATION

Notes:  
Normal section shown may be appropriately modified for areas specifically designated by the engineer such as intersections or superelevated curves.  
Refer to G sheets for superelevation details  
Refer to other drawings for details of shoulder design and construction



- ① Refer to other drawings for details of shoulder and possible sidewalk construction
- ② Excavate and backfill 3.0'
- ③ Backfill
- ④ 6" Standard Curb (PV-102)  
Left side of 14th St. - Construct 1 1/2" drop curb from Sta 14+40 to 15+40
- ⑤ Refer to Standard Road Plan DR-303
- ⑥ Refer to other drawings for limits of construction for this project.
- ⑦ "KT-2" or "L-2" Joint

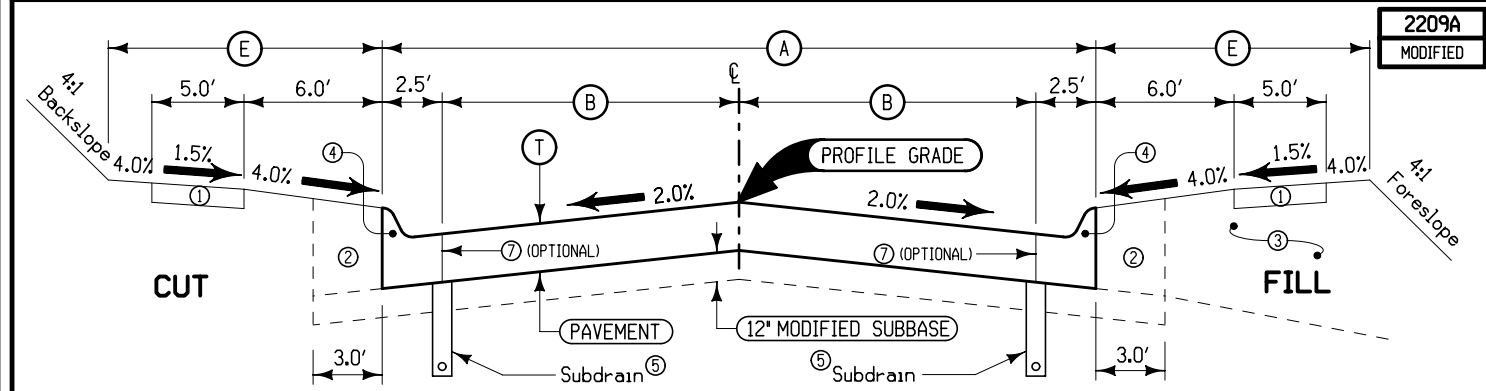
**TYPICAL CROSS SECTION  
2 LANE 43' B-B  
WITH PARKING AND  
2.5' CURB SECTION**

LOCATION ⑥			T	E	LS	LG	LL	RL	RG
ROAD IDENTIFICATION	STATION TO STATION		Inches	Feet	Feet	Feet	Feet	Feet	Feet
MISSISSIPPI BLVD	16+88.68	19+30.00	8	13	5	6	9.5	9.5	0
14TH STREET	14+40.00	15+45.40	8	11	4.0-4.4	0	6.5-7.0	10	4

Mainline Jointing:  
Transverse joints: CD at 20' spacing  
Longitudinal joint: KT-2

Shoulder Jointing:  
Longitudinal joint not required when distance from back of curb to nearest joint is less than 15'

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



2209A  
MODIFIED

Notes:  
Normal section shown may be appropriately modified for areas specifically designated by the engineer such as intersections or superelevated curves.  
Refer to G sheets for superelevation details  
Refer to other drawings for details of shoulder design and construction

**TYPICAL CROSS SECTION  
2 LANE ROADWAY WITH 2.5' CURB SECTION**

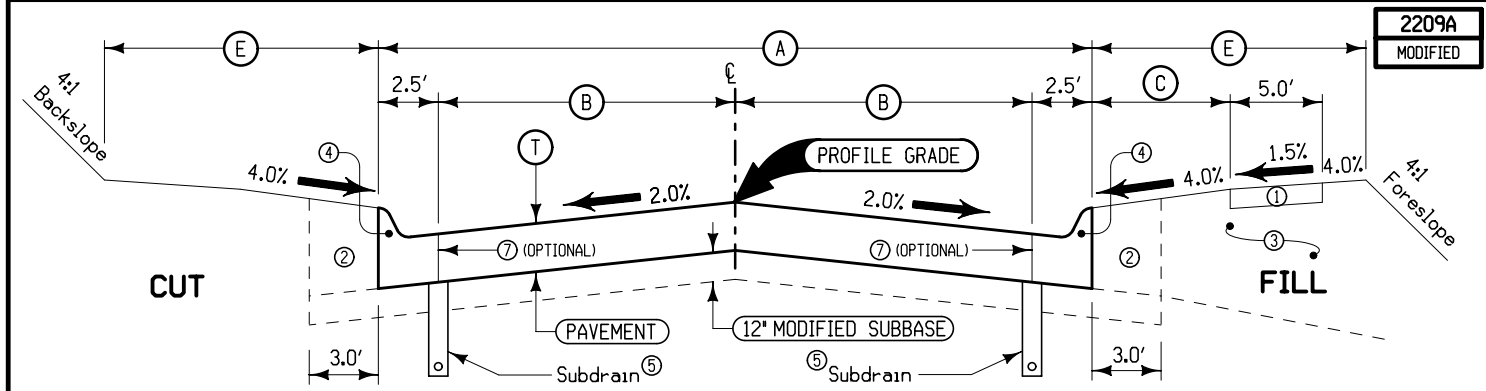
LOCATION ⑥			A	B	E	T
ROAD IDENTIFICATION	STATION TO STATION		Feet	Feet	Feet	Inches
14TH ST.	20+06.00	24+92.00	29	12	13	8
MISSISSIPPI BLVD	16+06.69	16+64.67	29	12	13	8

- ① Refer to other drawings for details of shoulder and possible sidewalk construction
- ② Excavate and backfill 3.0'
- ③ Backfill
- ④ 6" Standard Curb (PV-102)
- ⑤ Refer to Standard Road Plan DR-303
- ⑥ Refer to other drawings for limits of construction for this project.
- ⑦ "KT-2" or "L-2" Joint

Mainline Jointing:  
Transverse joints: CD at 20' spacing  
Longitudinal joint: KT-2

Shoulder Jointing:  
Longitudinal joint not required when distance from back of curb to nearest joint is less than 15'

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



2209A  
MODIFIED

Notes:  
Normal section shown may be appropriately modified for areas specifically designated by the engineer such as intersections or superelevated curves.  
Refer to G sheets for superelevation details  
Refer to other drawings for details of shoulder design and construction

**TYPICAL CROSS SECTION  
2 LANE ROADWAY WITH 2.5' CURB SECTION**

LOCATION ⑥			A	B	C	E	T
ROAD IDENTIFICATION	STATION TO STATION		Feet	Feet	Feet	Feet	Inches
14TH ST.	15+45.40	20+06.00	29	12	11.5-4.0	VARIES	8
14TH ST.	24+92.00	26+25.00	29	12	6.0	13	8

Shoulder Jointing:  
Longitudinal joint not required when distance from back of curb to nearest joint is less than 15'

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

- ① Refer to other drawings for details of shoulder and possible sidewalk construction
- ② Excavate and backfill 3.0'
- ③ Backfill
- ④ 6" Standard Curb (PV-102)  
Build 4" Sloped Curb from 16+74 to 18+83 on the left side of the road only (Standard 6" curb on right side)  
Transition from 16+69 to 16+74 and 18+83 to 18+88 per PV-102
- ⑤ Refer to Standard Road Plan DR-303
- ⑥ Refer to other drawings for limits of construction for this project.
- ⑦ "KT-2" or "L-2" Joint

100-1D  
10-18-05

### PROJECT DESCRIPTION

This project is for the grading and paving of 14th Street and Mississippi Boulevard in Bettendorf in Scott County. The project includes storm sewers and Retaining Wall 175.

This project is being constructed as part of the new I-74 Bridge over the Mississippi River and I-74 Corridor reconstruction.

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

Division 1: 100% IOWA DOT COST  
 Division 2: 100% CITY OF BETTENDORF COST (NON-PARTICIPATING)  
 Division 3: 22% DOT AND 78% CITY OF BETTENDORF COST  
 Division 4: 100% IOWA DOT (NON-PARTICIPATING)

Item No.	Item Code	Item	Unit	Estimated					As Built					
				Division 1	Division 2	Division 3	Division 4	Division 5	Division 1	Division 2	Division 3	Division 4	Division 5	
				Total					Total					
74	2602-0010010	MOBILIZATION, EROSION CONTROL	EACH	1					1					
75	2602-0010020	MOBILIZATION, EMERGENCY EROSION CONTROL	EACH	1					1					

**ESTIMATE REFERENCE INFORMATION** 100-4A  
10-29-02

Item No.	Item Code	Description
1	2101-0850002	CLEARING AND GRUBBING Individual trees shall be marked by the Engineer prior to removal. See Tab 110-17 for Quantities.
2	2102-0425071	SPECIAL BACKFILL Item is for placing under new pavement behind Retaining Wall. See Sheet U.5 for additional information.
3	2102-2625000	EMBANKMENT-IN-PLACE Nominal Quantity provided to replace additional potentially contaminated soil at sites as described in the Estimate Reference information for: 2537-8900000 REMEDIATION OF PETRO CONTAMINATED SOIL
4	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW Class 10 Bid quantity of 3,213 CY includes: 1,046 CY Fill 2,167 CY Suitable Excavation Overhaul will not be measured or paid for, but shall be considered incidental to roadway excavation. Contractor is to stockpile excess cut to be used as I-74 mainline fill.
5	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. Overhaul will not be measured or paid for, but shall be considered incidental to roadway excavation. Blasting is Not allowed.
6	2105-8425005	TOPSOIL, FURNISH AND SPREAD See Tab 103-4 on C Sheets for locations and details.
7	2107-0875100	COMPACTION WITH MOISTURE CONTROL See Tab 103-6 on C Sheets Cubic Yards shown on the contract documents as determined by the template volume See T-sheets for template quantities of Total Fill Compaction with moisture control is not required for class 12 excavation used as fill
8	2109-8225100	SPECIAL COMPACTION OF SUBGRADE See the Q Sheets for locations and details
9	2115-0100000	MODIFIED SUBBASE Refer to Typical on the B Sheets. See Tab 100-24 on the C Sheets for locations and details.
10	2123-7450020	SHOULDER FINISHING, EARTH The shoulder material is included in the Class 10 excavation bid item. No separate measurement or payment will be made for excavation or overhaul. Refer to Typical on B Sheets.
11	2301-1032080	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 2 DURABILITY, 8 IN. Refer to Typical on B Sheets and Tab. 100-24 on C Sheets for locations and details. Water valve adjustments as shown on Tab. 104-10 on C Sheets shall be included in the bid price.
12	2301-6911722	PORTLAND CEMENT CONCRETE PAVEMENT SAMPLES Refer to Tab 100-24 on the C Sheets
13	2303-0122500	HOT MIX ASPHALT MIXTURE (300,000 ESAL), INTERMEDIATE OR SURFACE COURSE, 1/2 IN. MIX, NO SPECIAL FRICTION REQUIREMENTS Item is for new pavement behind Retaining Wall. See Sheet U.5 for additional information.
14	2303-9093010	HOT MIX ASPHALT, DRIVEWAY See Tab 102-3 on the C Sheets
15	2401-6750001	REMOVALS, AS PER PLAN See V sheets for details
16	2402-2720000	EXCAVATION, CLASS 20 For Retaining wall 175. Refer to V Sheets

**ESTIMATE REFERENCE INFORMATION** 100-4A  
10-29-02

Item No.	Item Code	Description
17	2403-0100000	STRUCTURAL CONCRETE (MISCELLANEOUS) For Retaining wall 175. Refer to V Sheets
18	2404-7775005	REINFORCING STEEL, EPOXY COATED For Retaining wall 175. Refer to V Sheets
19	2435-0130148	MANHOLE, SANITARY SEWER, SW-301, 48 IN.
20	2435-0140148	MANHOLE, STORM SEWER, SW-401, 48 IN.
21	2435-0140160	MANHOLE, STORM SEWER, SW-401, 60 IN.
22	2435-0140172	MANHOLE, STORM SEWER, SW-401, 72 IN.
23	2435-0140196	MANHOLE, STORM SEWER, SW-401, 96 IN.
24	2435-0250248	INTAKE, SW-502, 48 IN.
25	2435-0250700	INTAKE, SW-507
26	2435-0250800	INTAKE, SW-508
27	2435-0251100	INTAKE, SW-511
28	2435-0254100	INTAKE, SW-541 See Tab. 104-5B on the M Sheets for locations and details. For any connections to existing pipes, the existing flowlines shall be field verified by the contractor prior to ordering the structures
29	2435-0600010	MANHOLE ADJUSTMENT, MINOR See Tab. 104-10 on C Sheets for locations and details.
30	2435-0700010	CONNECTION TO EXISTING MANHOLE See Tab 104-5B on the M Sheets for locations and details. Contractor to field verify the locations and elevations of the existing structures prior to installing pipes to be connected
31	2502-8212034	SUBDRAIN, LONGITUDINAL, (SHOULDER) 4 IN. DIA.
32	2502-8221303	SUBDRAIN OUTLET, DR-303 See Tab 104-9 on C Sheets for locations and details.
33	2503-0114212	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 12 IN.
34	2503-0114215	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 15 IN.
35	2503-0114218	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 18 IN.
36	2503-0114224	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 24 IN.
37	2503-0114254	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 54 IN. Refer to Tab. 104-5B on M sheets for locations and details.
38	2503-0200036	REMOVE STORM SEWER PIPE LESS THAN OR EQUAL TO 36 IN.
39	2503-0200136	REMOVE STORM SEWER PIPE GREATER THAN 36 IN.
40	2503-0200341	STORM SEWER ABANDONMENT, FILL AND PLUG, LESS THAN OR EQUAL TO 36 IN. DIA. See Tab 110-14 on the C Sheets
41	2504-0116008	SANITARY SEWER GRAVITY MAIN, TRENCHED, DUCTILE IRON PIPE (DIP), 8 IN.
42	2504-0116010	SANITARY SEWER GRAVITY MAIN, TRENCHED, DUCTILE IRON PIPE (DIP), 10 IN.
43	2504-0116010	SANITARY SEWER GRAVITY MAIN, TRENCHED, DUCTILE IRON PIPE (DIP), 10 IN. See Tab 104-5B on the M Sheets for locations and details.
44	2504-0200206	SANITARY SEWER SERVICE STUB, DUCTILE IRON, 6 IN. Refer to Tab. WHKS-1 on C Sheet for locations and details.
45	2504-0240036	REMOVE SANITARY SEWER PIPE LESS THAN OR EQUAL TO 36 IN.
46	2504-0240236	SANITARY SEWER ABANDONMENT, FILL AND PLUG, LESS THAN OR EQUAL TO 36 IN. DIA. See Tab 110-14 on the C Sheets
47	2506-4984000	FLOWABLE MORTAR Item is for anti-seep collars around storm sewer pipes. Refer to M sheets.

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

Division 1: 100% IOWA DOT COST  
 Division 2: 100% CITY OF BETTENDORF COST (NON-PARTICIPATING)  
 Division 3: 22% DOT AND 78% CITY OF BETTENDORF COST  
 Division 4: 100% IOWA DOT (NON-PARTICIPATING)

Item No.	Item Code	Item	Unit	Estimated						As Built				
				Quantities						Quantities				
				Division 1	Division 2	Division 3	Division 4	Division 5	Total	Division 1	Division 2	Division 3	Division 4	Division 5
1	2101-0850002	CLEARING AND GRUBBING	UNIT	TBD						TBD				
2	2102-0425071	SPECIAL BACKFILL	CY	148.3						148.3				
3	2102-2625000	EMBANKMENT-IN-PLACE	CY	100						100				
4	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW	CY	3213						3213				
5	2102-2712015	EXCAVATION, CLASS 12, BOULDERS OR ROCK FRAGMENTS	CY	50						50				
6	2105-8425005	TOPSOIL, FURNISH AND SPREAD	CY	2394.6						2394.6				
7	2107-0875100	COMPACTION WITH MOISTURE CONTROL	CY	1046						1046				
8	2109-8225100	SPECIAL COMPACTION OF SUBGRADE	STA	14.84						14.84				
9	2115-0100000	MODIFIED SUBBASE	CY	2100.2						2100.2				
10	2123-7450020	SHOULDER FINISHING, EARTH	STA	28.52						28.52				
11	2301-1032080	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 2 DURABILITY, 8 IN.	SY	5351.3						5351.3				
12	2301-6911722	PORTLAND CEMENT CONCRETE PAVEMENT SAMPLES	LS	1						1				
13	2303-0122500	HOT MIX ASPHALT MIXTURE (300,000 ESAL), INTERMEDIATE OR SURFACE COURSE, 1/2 IN. MIX, NO SPECIAL FRICTION REQUIREMENTS	SY	470.6						470.6				
14	2303-9093010	HOT MIX ASPHALT, DRIVEWAY	SY	81.4						81.4				
15	2401-6750001	REMOVALS, AS PER PLAN	LS	1						1				
16	2402-2720000	EXCAVATION, CLASS 20	CY	874						874				
17	2403-0100000	STRUCTURAL CONCRETE (MISCELLANEOUS)	CY	195.7						195.7				
18	2404-7775005	REINFORCING STEEL, EPOXY COATED	LB	12870						12870				
19	2435-0130148	MANHOLE, SANITARY SEWER, SW-301, 48 IN.	EACH		6					6				
20	2435-0140148	MANHOLE, STORM SEWER, SW-401, 48 IN.	EACH		2					2				
21	2435-0140160	MANHOLE, STORM SEWER, SW-401, 60 IN.	EACH		1	1				2				
22	2435-0140172	MANHOLE, STORM SEWER, SW-401, 72 IN.	EACH		1					1				
23	2435-0140196	MANHOLE, STORM SEWER, SW-401, 96 IN.	EACH			2				2				
24	2435-0250248	INTAKE, SW-502, 48 IN.	EACH	1	1					2				
25	2435-0250700	INTAKE, SW-507	EACH	3	2					5				
26	2435-0250800	INTAKE, SW-508	EACH		2					2				
27	2435-0251100	INTAKE, SW-511	EACH	1	1					2				
28	2435-0254100	INTAKE, SW-541	EACH		1					1				
29	2435-0600010	MANHOLE ADJUSTMENT, MINOR	EACH	2						2				
30	2435-0700010	CONNECTION TO EXISTING MANHOLE	EACH	1	3	1				5				
31	2502-8212034	SUBDRAIN, LONGITUDINAL, (SHOULDER) 4 IN. DIA.	LF	3617						3617				
32	2502-8221303	SUBDRAIN OUTLET, DR-303	EACH	27						27				
33	2503-0114212	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 12 IN.	LF	25						25				
34	2503-0114215	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 15 IN.	LF	45	649					694				
35	2503-0114218	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 18 IN.	LF	41	155					196				
36	2503-0114224	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 24 IN.	LF	85	114	89				288				
37	2503-0114254	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 54 IN.	LF			191				191				
38	2503-0200036	REMOVE STORM SEWER PIPE LESS THAN OR EQUAL TO 36 IN.	LF	767						767				
39	2503-0200136	REMOVE STORM SEWER PIPE GREATER THAN 36 IN.	LF	192						192				
40	2503-0200341	STORM SEWER ABANDONMENT, FILL AND PLUG, LESS THAN OR EQUAL TO 36 IN. DIA.	LF	44						44				
41	2504-0116006	SANITARY SEWER GRAVITY MAIN, TRENCHED, DUCTILE IRON PIPE (DIP), 6 IN.	LF		41					41				
42	2504-0116008	SANITARY SEWER GRAVITY MAIN, TRENCHED, DUCTILE IRON PIPE (DIP), 8 IN.	LF		1036					1036				
43	2504-0116010	SANITARY SEWER GRAVITY MAIN, TRENCHED, DUCTILE IRON PIPE (DIP), 10 IN.	LF		302					302				
44	2504-0200206	SANITARY SEWER SERVICE STUB, DUCTILE IRON, 6 IN.	LF		214					214				
45	2504-0240036	REMOVE SANITARY SEWER PIPE LESS THAN OR EQUAL TO 36 IN.	LF		1385					1385				
46	2504-0240236	SANITARY SEWER ABANDONMENT, FILL AND PLUG, LESS THAN OR EQUAL TO 36 IN. DIA.	LF		448					448				
47	2506-4984000	FLOWABLE MORTAR	CY	11						11				
48	2510-6745850	REMOVAL OF PAVEMENT	SY	8661.2						8661.2				
49	2510-6750600	REMOVAL OF INTAKES AND UTILITY ACCESSES	EACH	15	6					21				
50	2511-6745900	REMOVAL OF SIDEWALK	SY	642.5						642.5				
51	2511-7526004	SIDEWALK, P.C. CONCRETE, 4 IN.	SY	993.9						993.9				
52	2511-7526006	SIDEWALK, P.C. CONCRETE, 6 IN.	SY	230.3						230.3				
53	2511-7528101	DETECTABLE WARNINGS	SF	60						60				
54	2515-2475006	DRIVEWAY, P.C. CONCRETE, 6 IN.	SY	791.1						791.1				
55	2515-6745600	REMOVAL OF PAVED DRIVEWAY	SY	1067.9						1067.9				
56	2518-6910000	SAFETY CLOSURE	EACH	6						6				
57	2519-1001000	FENCE, CHAIN LINK, VINYL COATED	LF	261						261				
58	2519-3300700	FENCE, TEMPORARY	LF	386						386				
59	2520-3350015	FIELD OFFICE	EACH	1						1				
60	2526-8285000	CONSTRUCTION SURVEY	LS	1						1				
61	2527-9263109	PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED	STA	49.05						49.05				
62	2527-9263180	PAVEMENT MARKINGS REMOVED	STA	27.58						27.58				
63	2528-8445110	TRAFFIC CONTROL	LS	1						1				
64	2528-8445113	FLAGGERS	EACH	See Proposal						See Proposal				
65	2533-4980005	MOBILIZATION	LS	1						1				
66	2537-8900000	REMEDATION OF PETROLEUM CONTAMINATED SOIL	CY	100						100				
67	2537-8900100	SAMPLE+TEST-PETRO CONTAM (REMEDICATION)	EACH	3						3				
68	2552-0000140	ROCK EXCAVATION	CY	60	480.5	255.7				796.2				
69	2601-2634105	MULCHING, BONDED FIBER MATRIX	ACRE	1.5						1.5				
70	2601-2636044	SEEDING AND FERTILIZING (URBAN)	ACRE	1.5						1.5				
71	2601-2642120	STABILIZING CROP - SEEDING AND FERTILIZING (URBAN)	ACRE	1.5						1.5				
72	2602-0000020	SILT FENCE	LF	1875						1875				
73	2602-0000312	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 12 IN. DIA.	LF	528						528				

**ESTIMATE REFERENCE INFORMATION**

Item No.	Item Code	Description
48	2510-6745850	REMOVAL OF PAVEMENT See Tab. 110-1 on C Sheets and U Sheets for locations and details. See B Sheets and Tab. 102-5 on the C Sheets for available existing pavement information.
49	2510-6750600	REMOVAL OF INTAKES AND UTILITY ACCESSES See Tab 110-15 on the C Sheets.
50	2511-6745900	REMOVAL OF SIDEWALK See Tab 110-5 on C Sheets for locations and details.
51	2511-7526004	SIDEWALK, P.C. CONCRETE, 4 IN.
52	2511-7526006	SIDEWALK, P.C. CONCRETE, 6 IN.
53	2511-7528100	DETECTABLE WARNINGS See Tab 113-1 on C Sheets for locations and details.
54	2515-2475006	DRIVEWAY, P.C. CONCRETE, 6 IN. See Tab 102-3 on C Sheets for locations and details.
55	2515-6745600	REMOVAL OF PAVED DRIVEWAY See Tab 110-8 on C Sheets for locations and details.
56	2518-6910000	SAFETY CLOSURE See Tab 108-13A on C Sheets for locations and details.
57	2519-1001000	FENCE, CHAIN LINK, VINYL COATED For Retaining wall 175. Refer to V Sheets
58	2519-3300700	FENCE, TEMPORARY Item is for constructing fence at Our Lady of Lourdes parking lot. Refer to U Sheets. Provide temporary fence as necessary to secure site. Temporary fence shall be installed at the Temporary Easement line. Temporary Fence shall be constructed as shown on the U Sheets. Method of Measurement: Measurement for Fence, Temporary will be in linear feet. Basis of Payment: Payment for Fence, Temporary will be at the contract unit price per linear foot. Payment is full compensation for: <ul style="list-style-type: none"> <li>Furnishing and placing concrete bases and steel posts</li> <li>Furnishing and placing orange plastic fence fabric and ties</li> <li>Furnishing and placing wooden 2x4 top and bottom rails</li> <li>Maintenance of fence</li> <li>Removal of fence</li> <li>Site clean up after work is complete</li> </ul>
59	2520-3350015	FIELD OFFICE
60	2526-8285000	CONSTRUCTION SURVEY
61	2527-9263109	PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED See Tab 108-22 on C Sheets for locations and details. See U Sheets for locations and details.
62	2527-9263180	PAVEMENT MARKINGS REMOVED See Tab 108-22 on C Sheets for locations and details.
63	2528-8445110	TRAFFIC CONTROL See Traffic Control Plan on J Sheets for locations and details.
64	2528-8445113	FLAGGERS
65	2533-4980005	MOBILIZATION
66	2537-8900000	REMEDIATION OF PETRO CONTAMINATED SOIL See the U Sheets for potentially contaminated sites. All petroleum contaminated soil shall be disposed at a permitted sanitary landfill. Copies of the landfill receipts shall be submitted to the Engineer  If testing indicates no contamination present, excavated volumes will not be paid for as item 2537-8900000. Quantity estimate of 100 CY is a nominal quantity for excavation at the location described below. Parcel 355 Parcel 386
67	2537-8900100	SAMPLE+TEST-PETRO CONTAM (REMEDIATION) A. See the U Sheets for potentially contaminated sites. B. The Contractor shall have an Iowa Groundwater Professional, certified in accordance with 567 IAC Chapter 134, on site during excavation activities on parcels 355 and 386. 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

**ESTIMATE REFERENCE INFORMATION**

Item No.	Item Code	Description
		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 properties shown on sheets U.7 to U.9. Parcel 355: 2 Samples Parcel 386: 1 Samples TOTAL=3 Samples
68	2552-0000140	ROCK EXCAVATION Item is for estimated rock excavation encountered while excavating for Storm Sewer and Sanitary Sewer. Blasting is not allowed. Refer to the U sheet "Rock Excavation Trench for Sewers" for the maximum allowable payment area.  Quantities are estimated as follows based on approximate rock layer Division 1: Structure 443= 4.33 CY Structure 445= 0.74 CY Structure 446= 2.22 CY Structure 768= 1.30 CY P443= 21.49CY P444= 1.85 CY P445= 2.96 CY P446= 5.11 CY Total= 40.00 CY + 50% Contingency=60.00 CY  Division 2: Structure 205= 2.67 CY Structure 207= 6.00 CY Structure 206= 5.33CY Structure 203= 3.33 CY Structure 442= 0.67 CY P204= 2.45 CY P208= 61.00 CY P207= 64.27 CY P206= 5.92 CY P205= 93.57 CY P203= 53.99 CY P202= 13.43 CY 442= 4.67 CY 447= 3.04 CY Total= 320.34 CY + 50% Contingency = 480.51 CY  Division 3: Structure 463= 9.26 CY Structure 745= 3.70 CY Structure 909= 5.44 CY Structure 745= 24.07 CY 745= 86.71 CY 909= 41.30CY Total= 170.49 CY +50% Contingency= 255.73 CY
69	2601-2634105	MULCHING, BONDED FIBER MATRIX A Bonded Fiber Matrix shall be applied as the mulch for all areas designated as Seeding and Fertilizing (Urban). The seed and fertilizer for the area to be covered shall be applied before the Bonded Fiber Matrix Hydraulic Mulch application. Application rate shall be a minimum of 3000 lbs per acre.
70	2601-2636044	SEEDING AND FERTILIZING (URBAN)
71	2601-2642120	STABILIZING CROP - SEEDING AND FERTILIZING (URBAN) Included for all urban disturbed areas following the final construction as designated by the engineer.
72	2602-0000020	SILT FENCE Refer to Tab. 100-17 on C Sheets
73	2602-0000312	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 12 IN. DIA. To be placed around intakes during construction. See Tab 100-19 on C Sheets for locations and details.
74	2602-0010010	MOBILIZATION, EROSION CONTROL Refer to Standard Specifications
75	2602-0010020	MOBILIZATION, EMERGENCY EROSION CONTROL Refer to Standard Specifications





**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 52 acres with an estimated 38 acres being disturbed. The portion of the PPP covered by this contract has 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 86.
- 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 \*List Outlets For Runoff\*.

**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.

**POLLUTION PREVENTION PLAN**

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

**CERTIFICATION STATEMENT**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

\_\_\_\_\_  
Consultant Signature

\_\_\_\_\_  
Printed or Typed Name

\_\_\_\_\_  
Contracting Authority Signature

\_\_\_\_\_  
Printed or Typed Name

232-6 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.

232-10 10-21-14
<b>EMERALD ASH BORER</b>
Dispose of all wood material generated as a result of clearing and/or grubbing according to the Iowa Department of Agriculture and Land Stewardship's Emerald Ash Borer (EAB) Quarantine Order. For more information refer to <a href="http://www.iowatreepests.com/eab_regulations.html">http://www.iowatreepests.com/eab_regulations.html</a> .

252-1 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.

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

262-5 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.

281-1 10-18-16
<b>SECTION 404 PERMIT AND CONDITIONS</b>
Construct this project according to the requirements of U.S. Army Corps of Engineers Individual Permit, Permit No. 2016-1217. A copy of this permit is available from the Iowa DOT website ( <a href="http://www.envpermits.iowadot.gov/">http://www.envpermits.iowadot.gov/</a> ). The U.S. Army Corps of Engineers reserves the right to visit the site without prior notice.

290-01 04-15-14
<b>SIDEWALK CONSTRAINTS</b>
1. Widths: Widths listed in the S sheets are minimums.
2. Cross Slopes: Construct all sidewalks, curb ramps, and landings/turning spaces at a target cross slope of 1.5%. Cross slopes exceeding 2.0% will not be allowed, except for areas tying into existing pavement. In these areas, transition from existing pavement cross slope to a cross slope of less than 2.0% within one panel at a rate not to exceed 1.0% per foot.
3. Longitudinal Slopes: a. Sidewalk: i. Roadway slope exceeds 5.0%: Sidewalk longitudinal slope exceeding the roadway slope by more than 2.0% will not be allowed. ii. Roadway slope 5.0% or less: Sidewalk longitudinal slope exceeding 5.0% will not be allowed. b. Ramps: i. Ramps 15.0' in length or less: Longitudinal slope exceeding 8.3% will not be allowed. ii. Ramps greater than 15.0' in length: Construct with the longitudinal slope necessary to conform to the design.
4. Landing/Turning Spaces: Longitudinal slopes exceeding 2.0% will not be allowed.

100-17  
04-20-10

### TABULATION OF SILT FENCES

Refer to EC-201

Location			Length LF	Remarks
Begin Station	End Station	Side		
15+40.00	16+70.00	Lt.	130.0	Div. (1)
17+70.00	19+70.00	Lt.	200.0	Div. (1)
20+40.00	26+25.00	Lt.	585.0	Div. (1)
20+40.00	26+25.00	Rt.	585.0	Div. (1)
			1500.0	
			1875.0	Additional 25% for additional areas identified by the engineer

100-19  
10-16-12

### PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE

Refer to EC-204

Location			Length of Installation				Remarks
Begin Station	End Station	Side	6 inch Dia	9 inch Dia	12 inch Dia	20 inch Dia	
			LF	LF	LF	LF	
Mississippi	Blvd						
17+16.80		Lt			38.0		21.5 Lt - Curb Intake Div. (1)
17+16.80		Rt			38.0		21.5 Rt - Curb Intake Div. (1)
17+16.80		Rt			32.0		33.0 Rt - Utility Access Div. (1)
17+75.00		Rt			32.0		25.1 Rt - Utility Access Div. (1)
14th St.							
15+33.00		Rt			32.0		21.4 Rt - Curb Intake Div. (1)
16+99.00		Rt			32.0		13.9 Rt - Curb Intake Div. (1)
16+84.20		Rt			32.0		31.3 Rt - Curb Intake Div. (1)
20+54.90		Lt			32.0		29.8 Lt - Utility Access Div. (1)
20+55.00		Lt			38.0		14.5 Lt - Curb Intake Div. (1)
20+55.00		Rt			38.0		14.5 Rt - Curb Intake Div. (1)
23+25.00		Lt			38.0		14.5 Lt - Curb Intake Div. (1)
23+25.00		Rt			38.0		14.5 Rt - Curb Intake Div. (1)
25+60.00		Lt			32.0		22.8 Lt - Utility Access Div. (1)
25+60.00		Lt			38.0		14.5 Lt - Curb Intake Div. (1)
25+68.00		Rt			38.0		14.5 Rt - Curb Intake Div. (1)
				Total	528.0		

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	
Mississippi Blvd	16+06.19	16+64.67	X			12' Lane Div. (1)
Mississippi Blvd	16+06.19	16+64.67	X			12' Lane Div. (1)
Mississippi Blvd	16+88.68	19+30.00	X			12' Lane Div. (1)
Mississippi Blvd	16+88.68	19+30.00	X			12' Lane Div. (1)
14th St.	14+40.00	26+25.00	X			12' Lane Div. (1)
14th St.	14+40.00	26+25.00	X			12' Lane Div. (1)

WHKS-1  
MODIFIED

### SANITARY SEWER SERVICES

Number	Address	Approximate Station	Length	Size	Remarks
			LF	Inches	
1	1423 Brown St.	14+82, Lt.	40.0	6.0	Measured to ROW line Div. (2)
2	1414 Mississippi Blvd.	Unknown	38.0	6.0	Measured to end of driveway construction Div. (2)
3	701 14th St.	24+63, Rt.	50.0	6.0	Measured to ROW line Div. (2)
4	711 14th St.	23+22, Rt.	68.0	6.0	Measured to Temp. Easement line Div. (2)
5	710 14th St.	24+51, Lt.	18.0	6.0	Measured to ROW line Div. (2)
		Total	214.0		Notes: 1. All Service stubs are connections to existing services 2. Contractor is to verify location of service to buildings prior to the construction of Service Stubs 3. Any fittings that may be necessary to connect Service Stubs to existing private services shall be considered incidental to the Sanitary Sewer Service bid item 4. Location of service to 1414 Mississippi Blvd. is unknown. Contractor to locate prior to construction.

### LONGITUDINAL SUBDRAIN SHOULDER AND BACKSLOPE

Refer to Soils Sheets

① Refer to EW-203, EW-204, or EW-211.  
\*Not a bid item

Line No.	Location		Side	Longitudinal Subdrain (DR-303)								Subdrain Outlet		Porous* Backfill	Class "A"*** Crushed Stone	Remarks	
	Road or Lane Ident.	Station to Station		Shoulder		Backslope		Bridge Berm ①			DR-303, DR-304, or DR-305	Station	Standard Road Plan and Type				
				Depth	Size	Length	Size	Length	Size	Type							Length
1	MISS.	16+06.69	17+16.83	RT	30.0	4.0	150.1						16+06.69	DR-303	9.3		
2	MISS.	17+16.83	19+30.00	RT	30.0	4.0	253.2						17+16.83	DR-303	15.6	CAP @ 19+30	
3	MISS.	16+06.69	19+30.00	LT	30.0	4.0	363.3						16+06.69	DR-303	22.4	TIE INTO EXISTING INTAKE	
4	14TH ST	14+40.00	15+33.00	RT	24.0	4.0	133.0						19+30.00	DR-303			
5	14TH ST	15+33.00	16+99.00	RT	30.0	4.0	206.0						14+40.00	DR-303	6.2	CAP @ 14+40	
6	14TH ST	16+99.00	20+55.00	RT	24.0	4.0	396.0						15+33.00	DR-303	12.7		
7	14TH ST	20+55.00	23+25.00	RT	24.0	4.0	310.0						16+99.00	DR-303	18.3		
8	14TH ST	23+25.00	25+68.00	RT	24.0	4.0	283.0						16+99.00	DR-303	14.4		
9	14TH ST	25+68.00	26+25.00	RT	24.0	4.0	97.0						20+55.00	DR-303	13.1		
10	14TH ST	14+40.00	15+12.00	LT	30.0	4.0	112.0						23+25.00	DR-303	4.5	CAP @ 26+25	
11	14TH ST	15+12.00	18+25.00	LT	24.0	4.0	353.0						25+68.00	DR-303	6.9	CAP @ 14+40	
12	14TH ST	18+25.00	20+55.00	LT	24.0	4.0	270.0						14+40.00	DR-303	16.3		
13	14TH ST	20+55.00	23+25.00	LT	24.0	4.0	310.0						15+12.00	DR-303	12.5		
14	14TH ST	23+25.00	25+60.00	LT	24.0	4.0	275.0						18+25.00	DR-303	14.4		
15	14TH ST	25+60.00	26+25.00	LT	24.0	4.0	105.0						20+55.00	DR-303	12.7		
													23+25.00	DR-303	4.9	CAP @ 26+25	
													25+60.00	DR-303		TIE INTO EXISTING SUBDRAIN	
							3616.6						26+25.00	DR-303			

NOTE: ALL ITEMS ARE DIVISION #1.

NOTE: ALL LOCAL ROAD SUBDRAINS ARE DR-303 TYPE 7A INSTALLATION.

ALL OUTLETS ARE DR-303 "INTAKE OUTLET" WITH THE OUTLET INTO STORM SEWER INTAKES.

NOTE: ANY EXISTING LONGITUDINAL SUBDRAINS, IF ENCOUNTERED, SHALL BE REMOVED IN THEIR ENTIRETY.

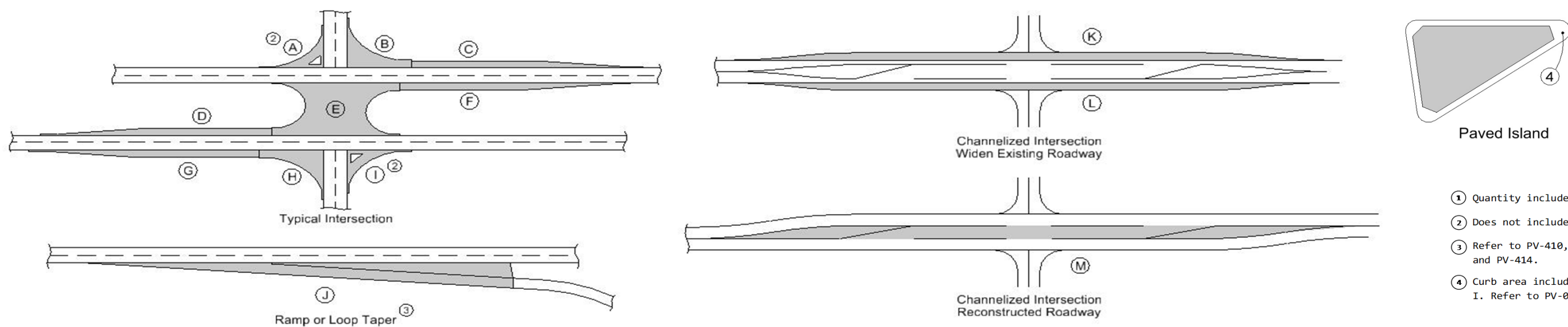
NOTE: ADJUST ALL SUBDRAINS AND OUTLETS IN FIELD AS NECESSARY AND APPROVED BY ENGINEER.

NOTE: WORK TO TIE PROPOSED SUBDRAIN TO EXISTING SUBDRAIN SHALL BE CONSIDERED INCIDENTAL TO LONGITUDINAL SUBDRAIN.

**EXISTING PAVEMENT**

No.	Location					Year	Type	Project Number	Surface		Base		Subbase		Removal		Coarse Aggregate			Reinforcement	Remarks	
	County	Route	Dir. of Travel	Begin Milepost	End Milepost				Type	Depth IN	Type	Depth IN	Type	Depth IN	Type	Depth IN	Source	Type	Durability Class	Type		
	Scott	Miss. B	Both																			
	Scott	14th St	Both			1972	PCC	UN-67-1(13)--41-82	PCC	9			Granular	4								

**TABULATION OF PAVEMENT**



- ① Quantity includes Pavement Header.
- ② Does not include Island area.
- ③ Refer to PV-410, PV-411, PV-412, and PV-414.
- ④ Curb area included in areas A and I. Refer to PV-020.

Road Identification	Location		Width FT	Length FT	Area SY	Area ①											Total Area By Pavement Thickness		Paved Island		Modified Subbase CY	Remarks		
	Station to Station	Station to Station				A	B	C	D	E	F	G	H	I	J	K	L	M	SY				Area SY	Curb TYPE
																			8 IN	11 IN				
<b>Stage 1</b>																								
14th St.	14+40.00	15+46.84	43.0	106.8	508.0												508.0				194.1	Includes 219.4 LF of C&G		
14th St.	15+46.84	20+06.00	29.0	459.2	1456.6												1456.6				578.3	Includes 833.7 LF of C&G		
Mississippi Blvd.	16+06.69	16+65.00	14.5	58.3	115.6												115.6				46.1	Includes 69.9 LF of C&G		
Mississippi Blvd.	16+89.07	19+30.00	21.5	240.9	597.3												597.3				227.1	Includes 253.9 LF of C&G		
<b>Stage 2</b>																								
14th St.	20+06.00	26+25.00	14.5	619.0	986.4												986.4				393.5	Includes 582.2LF of C&G		
Mississippi Blvd.	16+06.69	16+65.00	14.5	58.3	112.3												112.3				44.8	Includes 68.4 LF of C&G		
<b>Stage 3</b>																								
14th St.	20+06.00	26+25.00	14.5	619.0	985.2												985.2				392.1	Includes 573.4 LF of C&G		
Mississippi Blvd.	16+89.07	19+30.00	20.5	240.9	589.9												589.9				224.2	Includes 250.8 LF of C&G		
																	<b>Total</b>	<b>5351.3</b>				<b>2100.2</b>		

### ACCESS POINTS AND SAFETY RAMPS

Refer to Cross-Sections

Length of unclassified pipe calculated is based on using Reinforced Concrete Pipe.

- ① Refer to MI-210
- ② Refer to RL-8.
- ③ Refer to RL-7 or RL-8.

\*Predetermined for access point not constructed with this project.

Location		Type	Length of Opening ①			Pipe Culvert ③			Aprons	Driveway Surface Area		Driveway Surfacing Material	Remarks					
Station	Side	A, B, C, Safety Ramp, or Predetermined*	Case	1 1/2" Dropped Curb	3" Dropped Curb	W	PR	SR		H	Size			Pipe Length	Lt.	Rt.	HMA	PCC
			1 or 2	LF	LF	FT	FT	FT			FT			IN	LF	LF		
Mississippi 18+18.00	Blvd LT	B	1		167.0	158.0	6.0								197.4	Div. (1)		
14th St 14+54.94	LT	B	2	13.1		13.0									20.7	Div. (1)		
15+12.59	LT	B	2	29.8		3.0									9.8	Div. (1)		
21+53.00	RT	B	1		50.0	38.0	6.0								38.0	Div. (1)		
22+36.00	RT	B	1		46.0	34.0	6.0							43.4	24.8	Div. (1)		
23+90.00	RT	B	1	48.0		36.0	6.0								152.1	Div. (1)		
24+38.00	RT	B	1	19.0		14.0	6.0								18.9	Div. (1)		
24+54.00	RT	B	1	28.0		22.0	6.0								48.2	Div. (1)		
24+77.00	LT	B	1	42.0		30.0	6.0								97.1	Div. (1)		
25+40.00	RT	B	1	42.0		30.0	6.0								130.9	Div. (1)		
25+40.77	LT																	
26+05.00	RT	B	1		50.0	40.0	6.0								37.9	Area for Parking Lot Div. (1)		
Total														53.0	Div. (1)			
													81.4	791.1				

### SHRINKAGE DATA

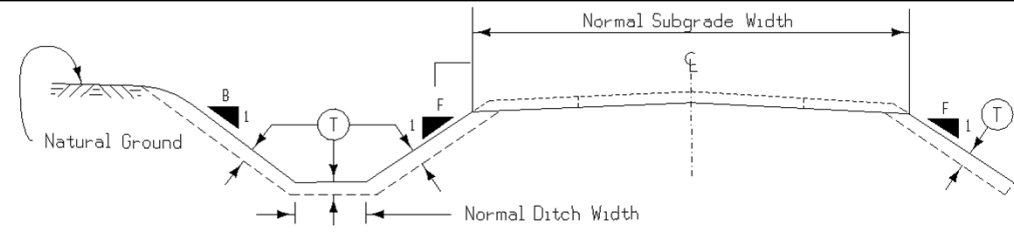
Material	%	Remarks
TOPSOIL	50%	
CLASS 10	30%	
ROCK	0%	
		BOULDERS 50 Cu. Yds. excluding Class 12 Rock Excavation

### 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.

**TABULATION OF SPREADING TOPSOIL**



Perform this work according to Section 2105. Prior to placing topsoil on any cohesive soil, scarify the area to be covered to a minimum depth of 3 inches.

Appropriate adjustments have been made in the template quantities to reflect the placement of topsoil on foreslope, backslope and ditch bottom as detailed hereon.

Area No.	Quantity CY	Placement Description				T	Remarks	Topsoil Excavation Available From		Remarks
		Location Station to Station	Side L. or R.	Slope B. or F.	IN			Amount Reserved CY	Station to Station	
	4.2	4495+87.17	4495+91.85	R.	F	8.0	US 67 Ramp D	Div. (1)		
	27.9	4495+99.68	4496+34.48	R.	F	8.0	US 67 Ramp D	Div. (1)		
	13.6	16+06.46	16+44.66	R.	F	8.0	Mississippi Blvd	Div. (1)		
	8.4	16+06.46	16+44.66	R.	F	8.0	Mississippi Blvd	Div. (1)		
	10.6	16+06.46	16+39.89	L.	F	8.0	Mississippi Blvd	Div. (1)		
	8.5	16+06.46	16+39.89	L.	F	8.0	Mississippi Blvd	Div. (1)		
	56.6	17+07.93	19+29.84	R.	F	8.0	Mississippi Blvd	Div. (1)		
	4.6	17+09.15	17+30.34	L.	F	8.0	Mississippi Blvd	Div. (1)		
	5.8	17+09.15	17+29.96	L.	F	8.0	Mississippi Blvd	Div. (1)		
	6.2	18+88.60	19+30.00	L.	F	8.0	Mississippi Blvd	Div. (1)		
	4.9	18+89.01	19+30.00	L.	F	8.0	Mississippi Blvd	Div. (1)		
	314.7	14+40.00	19+72.87	L.	F	8.0	14th St.	Div. (1)		
	91.4	14+40.00	19+73.14	R.	F	8.0	14th St.	Div. (1)		
	53.5	17+32.59	14+43.23	R.	F	8.0	14th St.	Div. (1)		
	4.7	19+77.72	19+90.85	L.	F	8.0	14th St.	Div. (1)		
	6.7	20+20.28	20+33.35	L.	F	8.0	14th St.	Div. (1)		
	93.8	20+38.38	24+62.00	L.	F	8.0	14th St.	Div. (1)		
	100.0	20+38.38	24+62.00	L.	F	8.0	14th St.	Div. (1)		
	12.1	20+39.79	21+34.25	R.	F	8.0	14th St.	Div. (1)		
	22.5	20+39.58	21+34.25	R.	F	8.0	14th St.	Div. (1)		
	9.6	21+72.25	22+18.85	R.	F	8.0	14th St.	Div. (1)		
	13.9	21+72.25	22+18.85	R.	F	8.0	14th St.	Div. (1)		
	25.7	22+85.85	23+71.62	R.	F	8.0	14th St.	Div. (1)		
	28.4	22+85.85	23+71.62	R.	F	8.0	14th St.	Div. (1)		
	4.4	24+07.62	24+30.81	R.	F	8.0	14th St.	Div. (1)		
	11.1	24+07.62	24+30.81	R.	F	8.0	14th St.	Div. (1)		
	12.4	24+65.61	25+24.64	R.	F	8.0	14th St.	Div. (1)		
	29.8	24+65.61	25+24.64	R.	F	8.0	14th St.	Div. (1)		
	84.4	24+92.00	26+25.00	L.	F	8.0	14th St.	Div. (1)		
	5.2	25+54.64	25+85.23	R.	F	8.0	14th St.	Div. (1)		
	12.6	25+54.64	25+85.23	R.	F	8.0	14th St.	Div. (1)		
	382.1				F	8.0	Area for Pavement Removal	Div. (1)		
	924.3				F	8.0	Area for Pavement Removal	Div. (1)		
<b>Total</b>	<b>2394.6</b>									

**ADJUSTMENT OF FIXTURES**

No.	Location Station	Type of Fixture	Adjustment
1	16+05.25	Sanitary Manhole	Adjust up approx. 0.45' up
2	17+24.21	Sanitary Manhole	No adjustment anticipated
3	19+72.13	Water Valve	Adjust down approx. 0.29' (incidental)
4	20+00.01	Water Valve	Adjust up approx. 0.34' (incidental)
5	20+31.21	Water Valve	Adjust up approx. 0.28' (incidental)
6	25+97.54	Water Valve	Adjust up approx. 0.70' (incidental)
7	16+68.65	Storm Sewer Manhole	Adjust up approx. 0.53'
		<b>Total</b>	<b>2</b>

**PAVEMENT MARKING LINE TYPES**

See PM-110

\*\*\*MNY4 - Factor of 1.00 as value includes number of 4-inch passes to cover median nose area.

\*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      DCY4: Double Centerline (Yellow) @ 2.00      NPY4: No Passing Zone Line (Yellow) @ 1.25      BLW4: Broken Lane Line (White) @ 0.25      ELW4: Edge Line Right (White) @ 1.00  
ELY4: Edge Line Left (Yellow) @ 1.00      CLW6: Crosswalk Line (White) @ 3.00      SLW2: Stop Line (White) @ 6.00

Road ID	Station to Station	Dir. of Travel	Marking Type	Location			Length by Line Type (Unfactored)														Remarks
				L	C	R	BCY4*	DCY4	NPY4**	BLW4	ELW4	ELY4	CLW6	SLW2							
							STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	
Stage 2A																					
Mississippi	12+25.00	16+47.47	BOTH	Removal of Paint		X	4.23														
Mississippi	12+25.00	19+26.00	BOTH	Waterborne/Solvent Paint	X								7.01								
14th St.	14+40.00	19+77.87	BOTH	Waterborne/Solvent Paint		X	5.38														
14th St.	19+67.90		NB	Waterborne/Solvent Paint													0.16				
14th St.	19+75.25		BOTH	Waterborne/Solvent Paint		X							0.36								
Stage 2B																					
Mississippi	12+24.00	19+26.00	BOTH	Removal of Paint	X								7.02								
Mississippi	12+24.00	19+26.00	BOTH	Waterborne/Solvent Paint		X							7.02								
14th St.	20+05.30	26+29.00	NB	Waterborne/Solvent Paint	X								6.24								
Stage 2C																					
14th St.	20+05.30	26+29.00	NB	Removal of Paint	X								6.24								
14th St.	20+05.30	26+29.00	NB	Waterborne/Solvent Paint	X								6.24								
Final																					
Mississippi	12+24.00	19+26.00	BOTH	Removal of Paint		X							7.02								
14th St.	20+05.30	26+29.00	NB	Removal of Paint	X								6.24								
Mississippi	12+24.00	16+47.47	BOTH	Waterborne/Solvent Paint		X	4.24														
Mississippi	16+47.47		EB	Waterborne/Solvent Paint													0.16				
Mississippi	17+02.41	19+30.00	BOTH	Waterborne/Solvent Paint		X	2.28														
Mississippi	17+04.81		BOTH	Waterborne/Solvent Paint		X							0.48								
Mississippi	17+14.87		NB	Waterborne/Solvent Paint													0.22				
14th St.	20+33.85	26+25.00	BOTH	Waterborne/Solvent Paint		X				5.91											
14th St.	20+36.15		BOTH	Waterborne/Solvent Paint		X							0.36								
14th St.	20+43.79		SB	Waterborne/Solvent Paint													0.15				
				Factored Total: Waterborne/Solvent Paint			2.98	11.82	-	-	-	26.51	3.60	4.14	-	-	-	-	-	-	-
				Factored Total: Removal of Paint			1.06	-	-	-	26.52	-	-	-	-	-	-	-	-	-	-
				Bid Quantity: Painted Pavement Markings, Waterborne or Solvent-Based							49.05										
				Bid Quantity: Pavement Markings Removed							27.58										

108-13A 08-01-08			
<b>SAFETY CLOSURES</b>			
Refer to Section 2518 of the Standard Specifications			
Station	Closure Type		Remarks
	Road Qty.	Hazard Qty.	
14th St.			
14+40.00	1		Stage 1 Div. (1)
20+05.00	1		Stage 1 Div. (1)
26+25.00	1		Stage 2 Div. (1)
20+05.00	1		Stage 3 Div. (1)
Mississippi			
12+20.00	1		Stage 1 Div. (1)
19+30.00	1		Stage 3 Div. (1)



REMOVAL OF PAVEMENT							110-1 04-16-13
Refer to Tabulation 102-5							
* Not a Bid Item							
Begin Station	End Station	Side	Pavement Type	Area	Saw Cut*	Remarks	
				SY	LF		
14+40.00	16+60.92	Both	PCC	1074.5	43.9	Stage 1, Ex. Brown St.	Div. (1)
16+41.54	20+06.00	Both	PCC	1327.9	82.9	Stage 1, Ex. 14th St.	Div. (1)
NE Quad. Of	14th/Miss.	Right	PCC	187.8	0.0	Stage 1, Ex. Temp. Connection	Div. (1)
Area behind	Prop. Retain.	Wall	HMA	415.0	220.9	Stage 1, Our Lady of Lourdes Parking Lot	Div. (1)
16+06.69	16+35.00	Right	PCC	47.6	42.1	Stage 1, Ex. Mississippi Blvd.	Div. (1)
17+25.04	19+30.00	Right	PCC	484.5	234.4	Stage 1, Ex. Mississippi Blvd.	Div. (1)
20+06.00	26+25.00	Left	PCC	1238.6	14.6	Stage 2, Ex. 14th St.	Div. (1)
Kimberly Rd	NW of 14th St	and Miss.	PCC	1863.7	0.0	Stage 2, to I-74 Ent. Ramp	Div. (1)
Between Kimb.	and 14th St.		PCC	264.7	0.0	Stage 2	Div. (1)
24+62.00	24+92.00	Left	HMA	26.2	45.8	Stage 2, Parking Lot Pavement	Div. (1)
16+06.69	16+35.00	Left	PCC	46.0	13.9	Stage 2, Ex. Mississippi Blvd.	Div. (1)
20+06.00	26+25.00	Right	PCC	1219.6	14.5	Stage 3, Ex. 14th St.	Div. (1)
17+18.27	19+30.00	Left	PCC	465.1	20.5	Stage 3, Ex. Mississippi Blvd.	Div. (1)
Total				8661.2			

SIDEWALK REMOVAL				110-5 08-01-08
Begin Station	End Station	Area	Remarks	
		SY		
14th St.				
14+40.00	Brown St.Int.	92.2	Div. (1)	
14+40.00	Brown St.Int.	102.4	Div. (1)	
16+57.56	19+64.23	164.1	Div. (1)	
16+70.22	17+98.73	69.6	Div. (1)	
18+26.01	18+49.67	11.0	Div. (1)	
18+97.25	19+24.95	19.6	Div. (1)	
19+55.22	19+69.73	9.8	Div. (1)	
Mississippi				
16+06.70	16+56.40	26.4	Div. (1)	
16+24.70	16+44.70	18.3	Div. (1)	
16+99.10	19+30.00	111.5	Div. (1)	
18+89.30	19+30.00	17.6	Div. (1)	
Total		642.5		

REMOVAL OF CONCRETE DRIVES				110-8 08-01-08
Location Station	Side	Area	Remarks	
		SY		
14th St.				
14+54.94	Lt.	20.7	Div. (1)	
15+12.60	Lt.	9.8	Div. (1)	
18+11.34	Lt.	26.6	Div. (1)	
18+64.51	Lt.	55.7	Div. (1)	
19+40.03	Lt.	42.3	Div. (1)	
21+53.00	Rt.	51.6	Div. (1)	
22+36.00	Rt.	84.7	Div. (1)	
23+90.00	Rt.	52.7	Div. (1)	
24+38.00	Rt.	28.3	Div. (1)	
24+55.00	Rt.	64.8	Div. (1)	
25+40.00	Rt.	143.6	Div. (1)	
25+41.00	Lt.	117.3	Div. (1)	
26+05.00	Rt.	51.1	Div. (1)	
Brown St.				
15+13.00	Lt.	20.4	14th St. Stationing Div. (1)	
Mississippi				
18+76.00	Lt.	298.3	Div. (1)	
Total		1067.9		

**110-14**  
**04-16-13**

**SANITARY OR STORM SEWER ABANDONMENT OR REMOVAL**

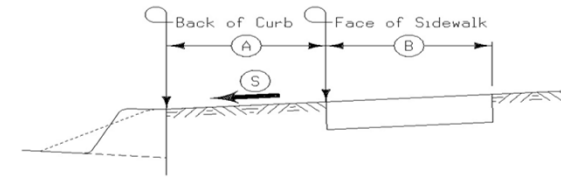
* Not a bid item						
Location/Description	Sanitary or Storm Sewer	Abandonment, Plug Only or Abandonment, Plug and Fill or Removal	Length of Pipe		Fill Material*	Remarks
			≤ 36 inch diameter	> 36 inch diameter	Flowable Mortar or CLSM	
			LF	LF	CY	
<b>14th St.</b>						
P10186, 26+07.71, 26.51 Lt to 24+72.72, 28.22 Lt	Sanitary Sewer	Removal	135			8" Dia., approx. 5' deep Div. (2)
P10185, 24+72.72, 28.22 Lt to 21+44.84, 9.55 Lt	Sanitary Sewer	Removal	329			8" Dia., approx. 8' deep Div. (2)
P10184, 21+44.84, 9.55 Lt to 20+04.16, 2.92 Rt	Sanitary Sewer	Removal	142			8" Dia., approx. 8' deep Div. (2)
P10181, 20+04.16, 2.92 Rt to 18+13.28, 12.95 Rt	Sanitary Sewer	Removal	192			10" Dia., approx. 6' deep Div. (2)
P10377, 18+13.28, 12.95 Rt to 18+13.69, 0.67 Lt	Sanitary Sewer	Removal	10			10" Dia., approx. 7' deep Div. (2)
P10176, 18+13.69, 0.67 Lt to 17+17.06, 8.73' Lt	Sanitary Sewer	Removal	99			10" Dia., approx. 7' deep Div. (2)
P10407, 14+40.00, 1.92 Rt to 16+09.83, 12.65 Lt	Sanitary Sewer	Removal	173			8" Dia., approx. 7' deep Div. (2)
<b>Mississippi Blvd.</b>						
P10380, 19+30.00, 1.33 Rt to 16+79.55, 1.91 Rt	Sanitary Sewer	Removal	250			8" Dia., approx. 6' deep Div. (2)
P10182, 16+25.00, 1.64 Rt to 16+79.55, 1.91 Rt	Sanitary Sewer	Removal	55			8" Dia., approx. 6' deep Div. (2)
P10174, 12+30.05, 191.06 Rt to 16+76.67, 192.31 Rt	Sanitary Sewer	Abandonment, Plug and Fill	448		5.8	8" Dia., approx. 8' deep Div. (2)
<b>14th St.</b>						
P25880, 25+73.66, 17.92 Lt to 25+61.68, 17.95 Lt	Storm Sewer	Removal	12			15" Dia., approx. 5' deep Div. (1)
P25529, 25+63.45, 16.23 Rt to 25+61.68, 17.95 Lt	Storm Sewer	Removal	34			12" Dia., approx. 3' deep Div. (1)
P25847, 25+61.68, 17.95 Lt to 23+61.21, 58.58 Lt	Storm Sewer	Removal	210			15" Dia., approx. 4' deep Div. (1)
P25167, 23+61.21, 58.58 Lt to 23+14.10, 35.77 Lt	Storm Sewer	Removal	52			15" Dia., approx. 4' deep Div. (1)
P25703, 21+84.51, 20.06 Lt to 20+93.42, 42.86 Lt	Storm Sewer	Removal	94			18" Dia., approx. 4' deep Div. (1)
P28164, 20+93.42, 42.86 Lt to 20+21.33, 51.27 Lt	Storm Sewer	Removal	73			18" Dia., approx. 4' deep Div. (1)
P26051, 19+67.38, 22.73 Lt to 18+13.21, 16.77 Lt	Storm Sewer	Removal		154		40" Dia., approx. 9' deep Div. (1)
P26264, 18+13.21, 16.77 Lt to 17+74.86, 17.31 Lt	Storm Sewer	Removal		38		40" Dia., approx. 9' deep Div. (1)
P24536, 16+18.96, 41.12 Lt to 16+35.53, 11.19 Lt	Storm Sewer	Removal	36			15" Dia., approx. 6' deep Div. (1)
P24781, 16+35.53, 11.19 Lt to 16+69.30, 11.13 Lt	Storm Sewer	Removal	36			15" Dia., approx. 5' deep Div. (1)
P26452, 16+69.30, 11.13 Lt to 16+74.20, 24.25 Lt	Storm Sewer	Removal	14			15" Dia., approx. 4' deep Div. (1)
<b>Mississippi Blvd</b>						
P25984, 16+25.49, 15.64 Lt to 16+05.82, 15.68 Rt	Storm Sewer	Removal	37			18" Dia., approx. 4' deep Div. (1)
P25335, 17+29.88, 20.89 Lt to 17+29.57, 3.43 Rt	Storm Sewer	Removal	24			24" Dia., approx. 4' deep Div. (1)
P25335, 17+29.57, 3.43 Rt to 17+29.24, 24.96 Rt	Storm Sewer	Abandonment, Plug and Fill	22		2.6	24" Dia., approx. 4' deep Div. (1)
TP400, 17+29.57, 3.43 Rt to 17+16.83, 17.92 Rt	Storm Sewer	Abandonment, Plug and Fill	22		2.6	24" Dia., approx. 4' deep Div. (1)
P26444, 17+92.27, 24.11 Lt to 17+29.24, 24.96 Rt	Storm Sewer	Removal	63			12" Dia., approx. 7' deep Div. (1)
P26443, 17+29.24, 24.96 Rt to 17+01.85, 30.29 Rt	Storm Sewer	Removal	33			24" Dia., approx. 7' deep Div. (1)
P25656, 17+01.85, 30.29 Rt to 16+54.39, 38.88 Rt	Storm Sewer	Removal	49			36" Dia., approx. 7' deep Div. (1)
Total			2644	192		

**REMOVAL OF INTAKES AND UTILITY ACCESSES**

No.	Location/Description	Type	Remarks
14th St.			
10377	Sta 18+13.28, 13.0 Rt	Utilities	Sanitary Sewer Div. (2)
10176	Sta 18+13.69, 0.7 Lt	Utilities	Sanitary Sewer Div. (2)
10181	Sta 20+04.16, 2.9 Rt	Utilities	Sanitary Sewer Div. (2)
10184	Sta 21+44.84, 9.55 Lt	Utilities	Sanitary Sewer Div. (2)
10185	Sta 24+72.78, 28.2 Lt	Utilities	Sanitary Sewer Div. (2)
10186	Sta 26+07.65, 26.5 Lt	Utilities	Sanitary Sewer Div. (2)
14th St.			
25529	Sta 25+63.45, 16.2 Rt	Intakes	Storm Sewer Div. (1)
25847	Sta 25+61.68, 18.0 Lt	Intakes	Storm Sewer Div. (1)
25167	Sta 23+61.21, 58.6 Lt	Intakes	Storm Sewer Div. (1)
25703	Sta 21+84.51, 20.1 Lt	Intakes	Storm Sewer Div. (1)
28164	Sta 20+93.42, 42.9 Lt	Intakes	Storm Sewer Div. (1)
26051	Sta 19+67.38, 22.7 Lt	Utilities	Storm Sewer Div. (1)
26264	Sta 18+13.21, 16.8 Lt	Utilities	Storm Sewer Div. (1)
26452	Sta 16+69.30, 11.1 Lt	Intakes	Storm Sewer Div. (1)
24781	Sta 16+35.42, 10.8 Lt	Intakes	Storm Sewer Div. (1)
24536	Sta 16+18.89, 41.0 Lt	Intakes	Storm Sewer Div. (1)
Mississippi Blvd			
26488	Sta 16+05.82, 15.7 Rt	Intakes	Storm Sewer Div. (1)
25984	Sta 16+25.49, 15.6 Lt	Intakes	Storm Sewer Div. (1)
25656	Sta 17+01.85, 30.3 Rt	Utilities	Storm Sewer Div. (1)
26443	Sta 17+29.24, 25.0 Rt	Intakes	Storm Sewer Div. (1)
25335	Sta 17+29.88, 20.9 Lt	Intakes	Storm Sewer Div. (1)

**SIDEWALKS**

See MI-220 and S Sheets



Road Identification	Station to Station		Side	A	B	S	4" PCC Sidewalk SY	6" PCC Sidewalk SY	_" PCC Sidewalk SY	Detectable Warnings SF	Remarks
				FT	FT	%					
Mississippi	16+06.69	16+47.06	Rt.	6.00	5.00	4.00%	22.9				Div. (1)
Mississippi	16+06.69	16+54.37	Lt.	6.00	5.00	4.00%	24.8				Div. (1)
Mississippi	16+47.06	16+61.88	Rt.	6.00	5.00	4.00%		7.8		10	Div. (1)
Mississippi	16+51.37	16+61.94	Lt.	6.00	5.00	4.00%		5.5		10	Div. (1)
Mississippi	16+93.75	17+01.38	Rt.	0.00	5.00	N/A				3.3	Div. (1)
Mississippi	16+96.18	17+03.53	Lt.	6.00	5.00	4.00%		3.0		10	Div. (1)
Mississippi	17+06.39	19+30.00	Rt.	0.00	5.00	N/A	137.2				Div. (1)
Mississippi	17+08.53	17+30.34	Lt.	6.00	5.00	4.00%	12.0				Div. (1)
Mississippi	17+30.34	18+88.70	Lt.	6.00	5.00	4.00%		88.1			Div. (1)
Mississippi	18+88.70	19+30.00	Lt.	3.35	4.00	4.00%	21.3				Div. (1)
14th St.	14+40.00	15+39.35	Lt.	0.00	4.00	N/A	46.2				Div. (1)
14th St.	14+40.00	19+73.26	Rt.	4.00	5.00	4.00%	276.6				Div. (1)
14th St.	14+69.82	14+84.85	Lt.	0.00	6.50	N/A	10.8				Div. (1)
14th St.	19+73.26	19+83.72	Rt.	4.00	5.00	4.00%		5.2		10	Div. (1)
14th St.	20+30.02	20+39.79	Rt.	6.00	5.00	4.00%		4.8		10	Div. (1)
14th St.	20+38.35	24+62.00	Lt.	6.00	5.00	4.00%	235.4				Div. (1)
14th St.	20+39.79	24+34.25	Rt.	6.00	5.00	4.00%	52.8				Div. (1)
14th St.	21+34.25	24+72.25	Rt.	6.00	5.00	4.00%		21.1			Div. (1)
14th St.	21+72.25	22+18.85	Rt.	6.00	5.00	4.00%	25.9				Div. (1)
14th St.	22+18.85	22+52.85	Rt.	6.00	5.00	4.00%		18.9			Div. (1)
14th St.	22+52.85	23+72.62	Rt.	6.00	5.00	4.00%	66.0				Div. (1)
14th St.	23+72.62	24+07.62	Rt.	6.00	5.00	4.00%		20.0			Div. (1)
14th St.	24+07.62	24+30.81	Rt.	6.00	5.00	4.00%	12.9				Div. (1)
14th St.	24+30.81	24+65.61	Rt.	6.00	5.00	4.00%		19.3			Div. (1)
14th St.	24+62.00	24+92.00	Lt.	6.00	5.00	4.00%		16.7			Div. (1)
14th St.	24+64.61	25+24.64	Rt.	6.00	5.00	4.00%	32.8				Div. (1)
14th St.	25+24.61	25+54.64	Rt.	6.00	5.00	4.00%		16.7			Div. (1)
14th St.	25+54.64	25+85.22	Rt.	6.00	5.00	4.00%	16.3				Div. (1)
						Total	993.9	230.3		60	

**CLEARING AND GRUBBING**

Location		Work and Material Type	Trees, Stumps, and Logs and Down Timber Material Diameters													All Other Materials		Estimated Quantities			Remarks
Station to Station or Milepost to Milepost or Description	Direction of Travel		3"-6"	>6"-9"	>9"-12"	>12"-15"	>15"-18"	>18"-24"	>24"-30"	>30"-36"	>36"-42"	>42"-48"	>48"-60"	>60"-72"	>72"	Length	Width	Units	Area	Herbicide Application	
			FT	FT	Units	Acres	Each	FT	FT	Units	Acres	Each									
TO BE DETERMINED	TBD BY OLE																				

## SURVEY SYMBOLS

## UTILITY LEGEND

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

	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		Electrical Highline Tower (Metal or Concrete)
	Grave		Power Pole
	Cave		Power Pole (Second Company)
	Sink Hole		Power Pole (Third Company)
	Board Fence		Power Pole (Fourth Company)
	Chain Link or Security Fence		Power Pole (Fifth Company)
	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

	Existing Fiber Optics (Central Scott)
	Existing Fiber Optics (Windstream)
	Existing Fiber Optics (Centurylink)
	Existing Fiber Optics (ATT)
	Existing Fiber Optics (MediaCom)
	Existing Fiber Optics (Bettendorf)
	Existing Fiber Optics (IowaDOT)
	Existing Power Line (MidAmerican)
	Existing Power Line (MidAmerican)
	Existing Power Line (MidAmerican)
	Existing Power Line (MidAmerican)
	Existing Power Line (IowaDOT)
	Existing Gas Line (MidAmerican)
	Existing High Pressure Gas Line (MidAmerican)
	Existing Sanitary Sewer Line (Bettendorf)
	Existing Sanitary Sewer Line (Davenport)
	Existing Telephone Line (Qwest)
	Existing Cable Television Line (MediaCom)
	Existing Cable Television Line (MediaCom)
	Existing Water Line (IA American)

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
Blue, Light	(230)		Previously Constructed Storm Sewer*
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
Gray, Med	(80)		Proposed Granular Shading
Gray, Dark	(112)		Proposed Pavement Shading
Brown, Light	(236)		Grading Shading
Brown, Dark	(237)		Previously Constructed Pavement*
Tan	(8)		Proposed Sidewalk Shading
Pink	(11)		Proposed Sidewalk Ramp Shading

## TABULATION OF UTILITIES

102-13A  
10-29-02

MidAmerican Energy (Electrical Distribution) Karl Derrick 2811 5th Avenue Rock Island, IL 61201 309-793-3696 kjderick@midamerican.com	MidAmerican Energy (Electrical Transmission) Tom Albertson 106 East 2nd Street Davenport, IA 52801 563-338-8155 ktalbertson@midamerican.com
Centurylink (formerly Qwest) Antonio (Tony) Glessner 3908 Utica Ridge Road Bettendorf, IA 52722 563-355-6402 antonio.glessner@centurylink.com	MidAmerican Energy (Gas) Rod Hawk 2811 5th Avenue Rock Island, IL 61201 309-793-3760 rlhawk@midamerican.com
Central Scott Telephone Company Rick Billups P.O. Box 260 Eldridge, IA 52748 563-285-9611 rick@csstech.com	Iowa American Water David Kull 5201 Grand Ave. Davenport, IA 52807 563-468-9225 david.kull@amwater.com
MediaCom Communications Dennis Jarding 3900 26th Avenue Moline, IL 61265 309-743-4750 djarding@mediacomcc.com	City of Bettendorf Dennis Snyder 4403 Devils Glen Road Bettendorf, IA 52722 563-344-4055 dsnyder@bettendorf.org
Windstream (formerly PAETEC & McLeod USA) Dale Graff 614 West Street South Grinnel, IA 50112 641-269-7725 (Office) dale.a.graff@windstream.com	IADOT Davenport Maintenance Garage Clyde Tobey 8721 N.W. Blvd. (P.O. Box 2646) Davenport, IA 52809 563-391-3920 clyde.tobey@dot.iowa.gov

## 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

	Station		Reference Point		Survey Line
	Section Corner		Ground Line Intercept		Saw Cut
	Guardrail		Properties Assumed Cleared (By Others) Prior to Construction		

## RIGHT OF WAY LEGEND

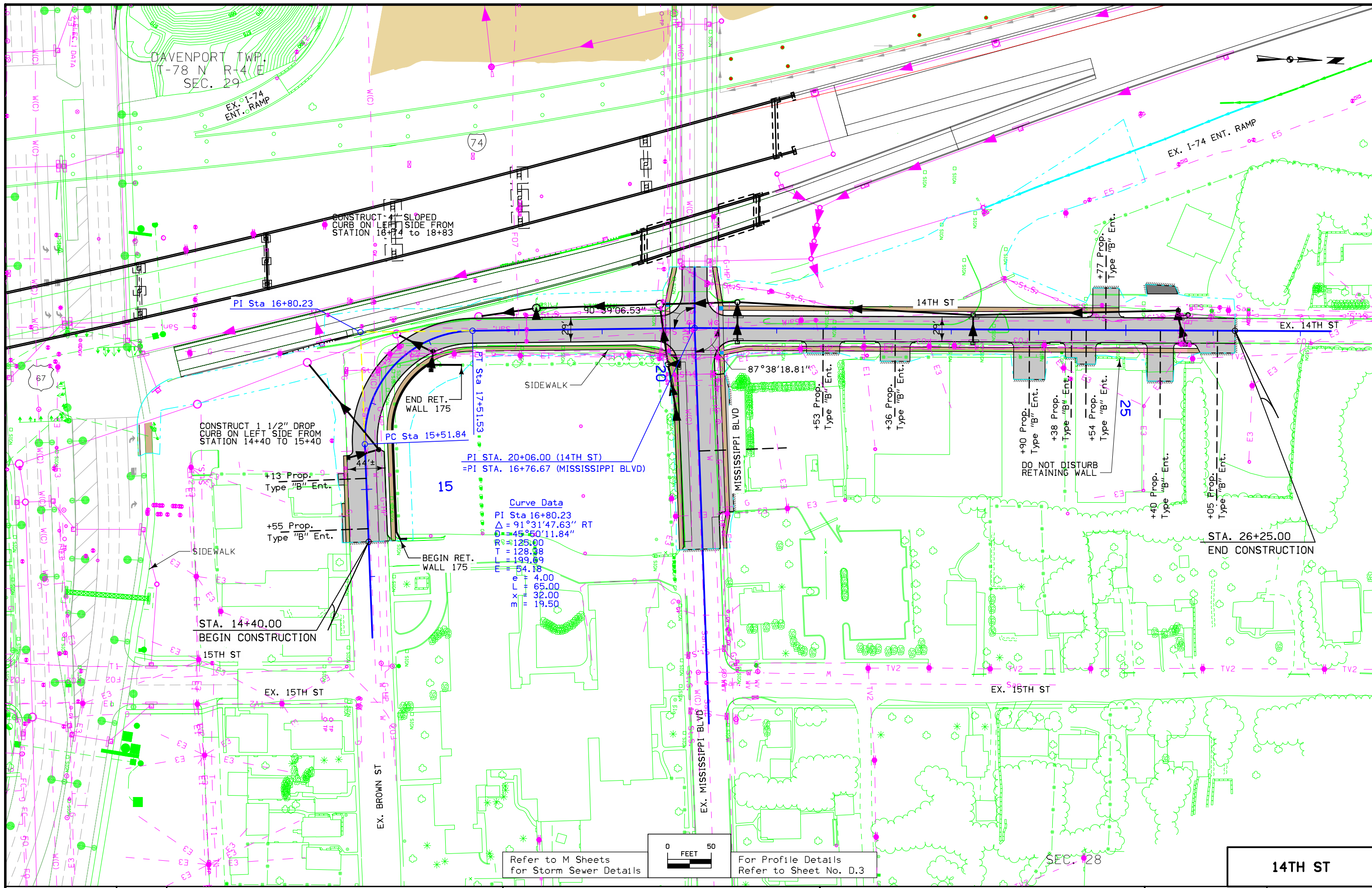
	Proposed Right of Way
	Existing and Proposed Right of Way
	Easement and Existing Right of Way
	Borrow
	Easement (Temporary)
	Easement
	Excess
	Access Control

## TABULATION OF UTILITIES

102-13A  
10-29-02

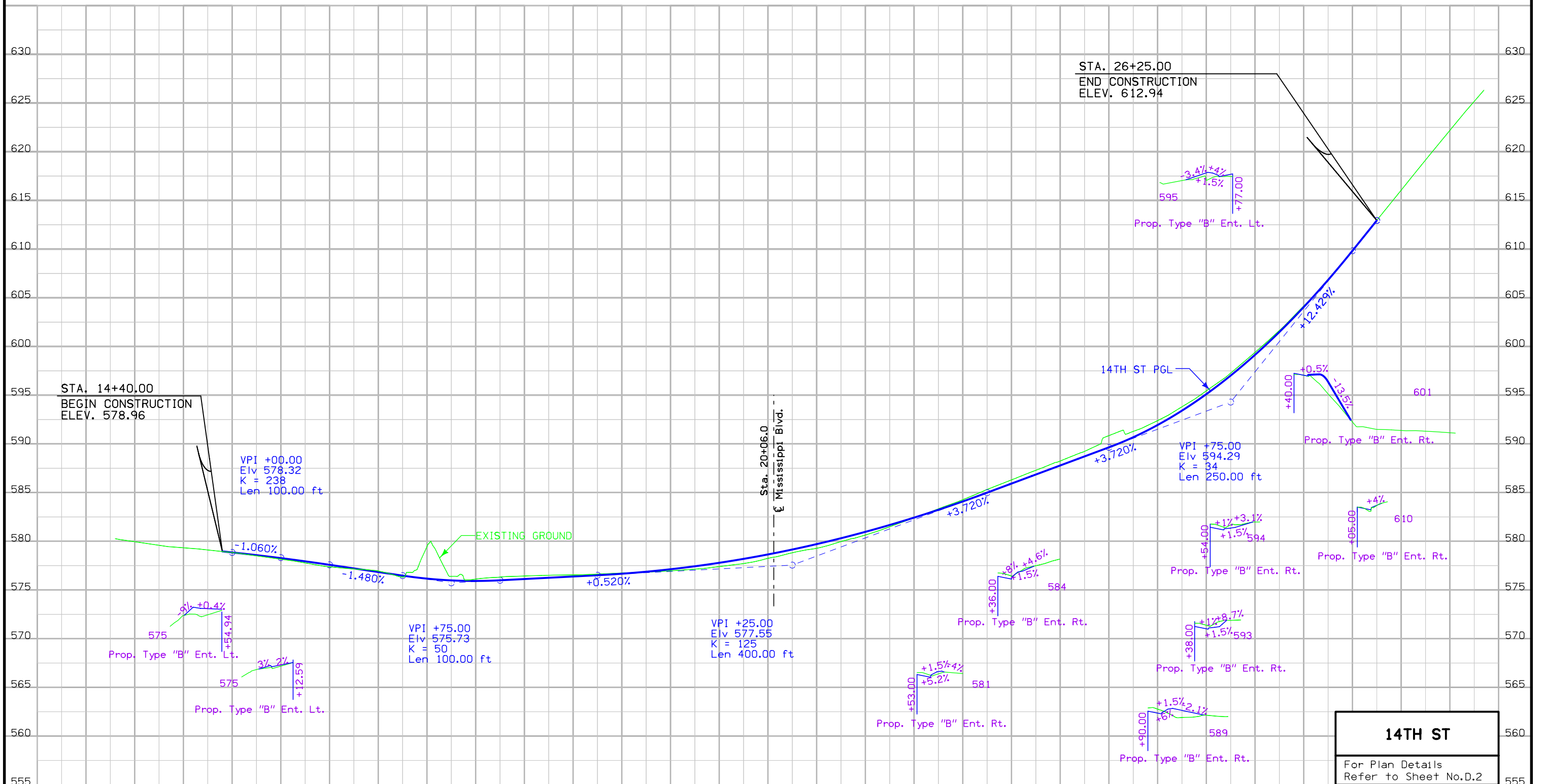
AT&T Lennie Vohs 1425 Oak Street Kansas City, MO 64106 816-275-4014 lv2121@att.com	Iowa Network Services Jeff Klocko 4201 Corporate Drive West Des Moines, IA 50266 515-830-0445 jeff@netins.com
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# Legend And Symbol Information Sheet D, E, F, AND K SHEETS (Symbols are Typical Only)



Fill+30% = 925 CY  
 To Stockpile =  $\frac{1,795}{2,720}$  CY

Cut = 2,720 CY



Sta. 20+06.0  
 Mississippi Blvd.

STA. 26+25.00  
 END CONSTRUCTION  
 ELEV. 612.94

STA. 14+40.00  
 BEGIN CONSTRUCTION  
 ELEV. 578.96

VPI +00.00  
 Elev 578.32  
 K = 238  
 Len 100.00 ft

575  
 +0.4%  
 +54.94  
 Prop. Type "B" Ent. Lt.

VPI +75.00  
 Elev 575.73  
 K = 50  
 Len 100.00 ft

VPI +25.00  
 Elev 577.55  
 K = 125  
 Len 400.00 ft

VPI +75.00  
 Elev 594.29  
 K = 34  
 Len 250.00 ft

584  
 +8.1%  
 +4.6%  
 +1.5%  
 Prop. Type "B" Ent. Rt.

594  
 +1.5%  
 +3.1%  
 +1.5%  
 Prop. Type "B" Ent. Rt.

610  
 +4%  
 +5.00  
 Prop. Type "B" Ent. Rt.

593  
 +1.5%  
 +8.7%  
 +1.5%  
 Prop. Type "B" Ent. Rt.

589  
 +90.00  
 +6'  
 +1.5%  
 +2.1%  
 Prop. Type "B" Ent. Rt.

**14TH ST**  
 For Plan Details  
 Refer to Sheet No.D.2



578.85	578.58	578.27	577.94	577.58	577.21	576.84	576.47	576.17	575.98	575.93	575.99	576.12	576.25	576.38	576.51	576.67	576.87	577.13	577.43	577.79	578.19	578.65	579.15	579.71	580.31	580.97	581.67	582.43	583.23	584.09	584.99	585.92	586.85	587.78	588.71	589.64	590.68	591.94	593.41	595.11	597.02	599.14	601.49	604.05	606.83	609.83	612.94
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Refer to M Sheets  
for Storm Sewer Details

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

EX. JONES ST

EX. 15TH ST

MISSISSIPPI BLVD

EX. HOLMES ST

EX. MISSISSIPPI BLVD

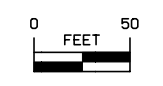
BROWN ST

EX. BROWN ST

KIMBERLY RD

EX. BROWN ST

For Profile Details  
Refer to Sheet No. E.2



SEC. 28

MISSISSIPPI BLVD

STA. 16+06.69  
BEGIN CONSTRUCTION

STA. 19+30.00  
END CONSTRUCTION

STA. 16+64.67  
TIE INTO 14TH ST

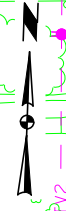
STA. 16+88.68  
TIE INTO 14TH ST

PI STA. 16+76.67 (MISSISSIPPI BLVD)  
=PI STA. 20+06.00 (14TH ST)

90°20'53.48"

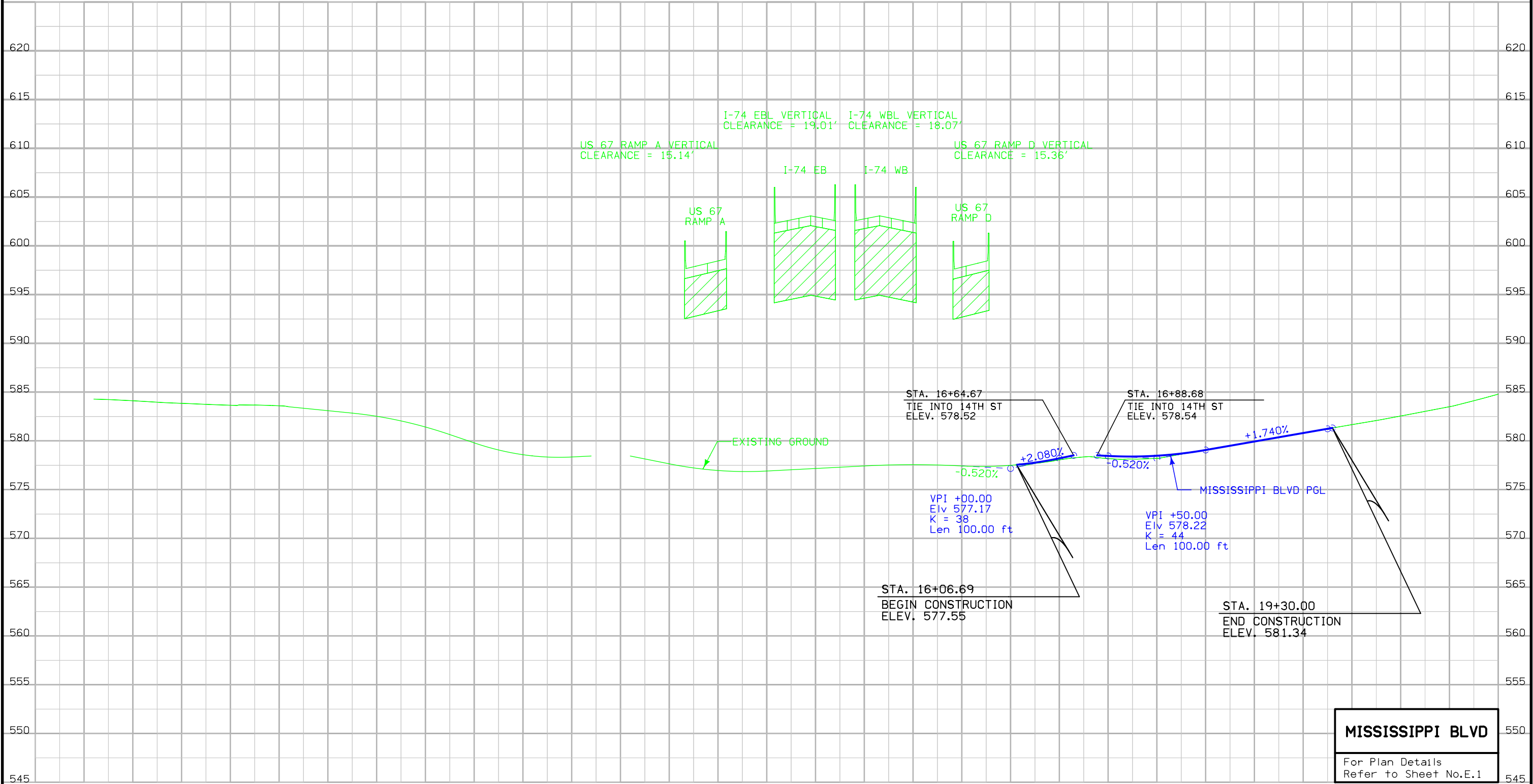
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20

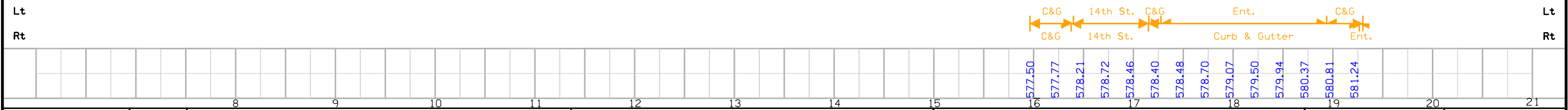


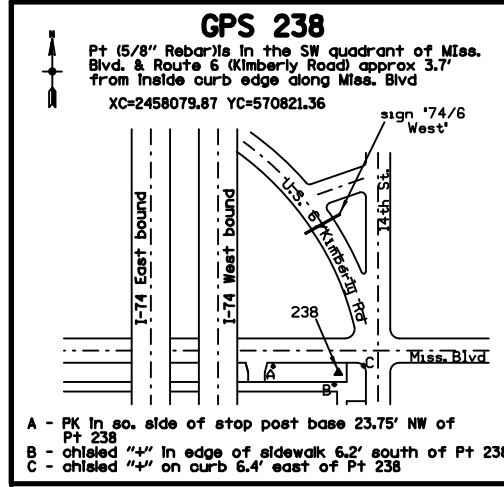
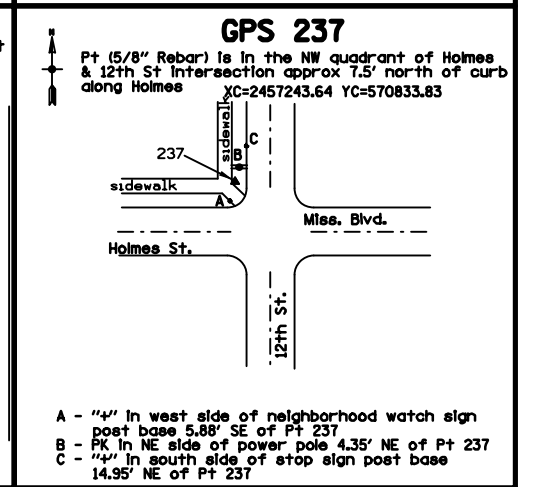
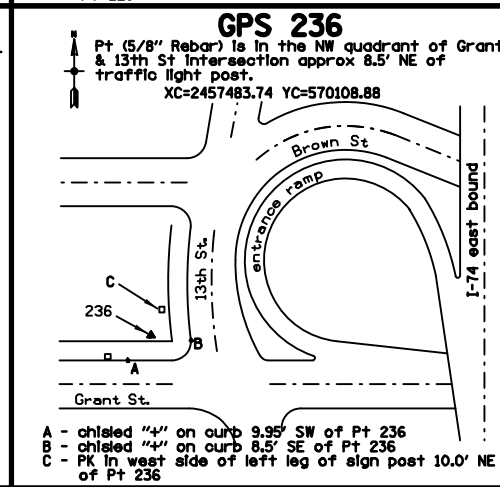
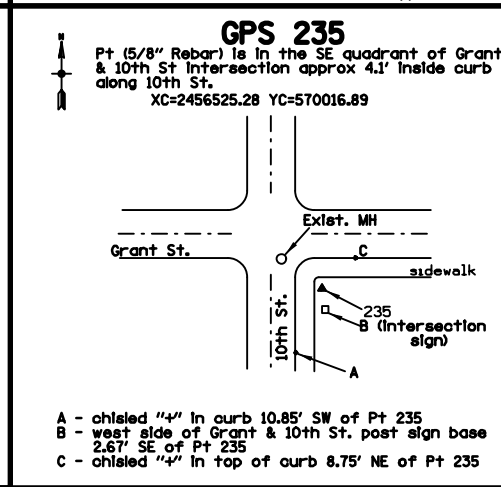
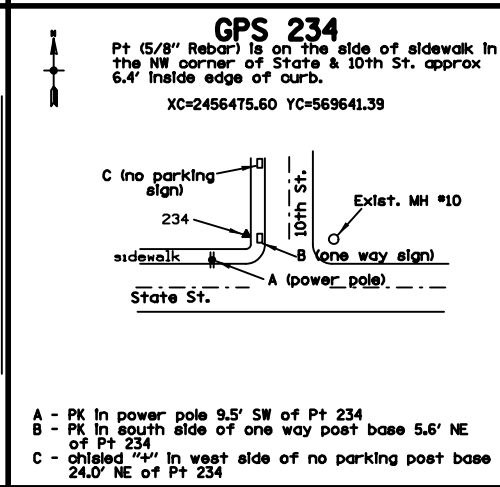
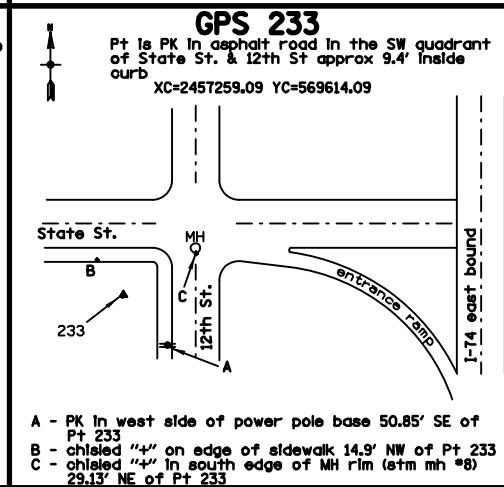
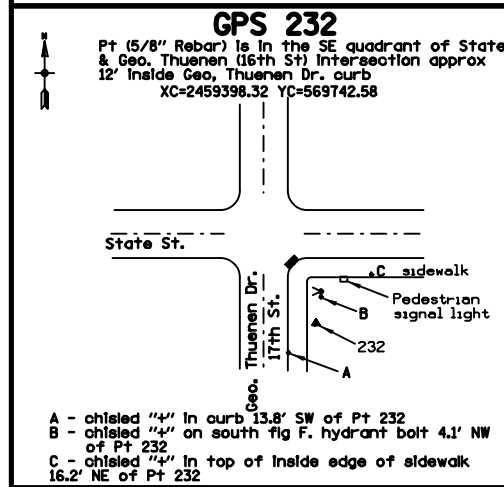
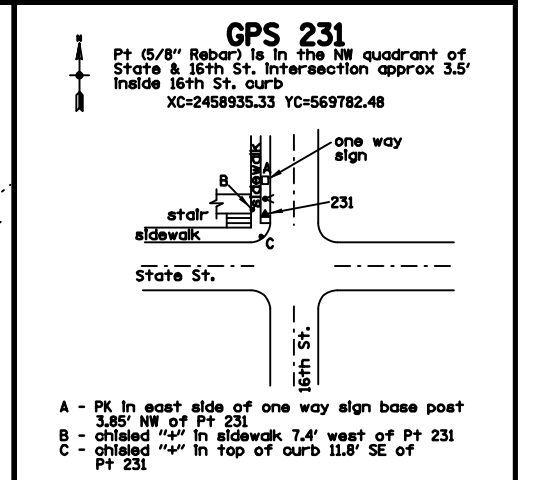
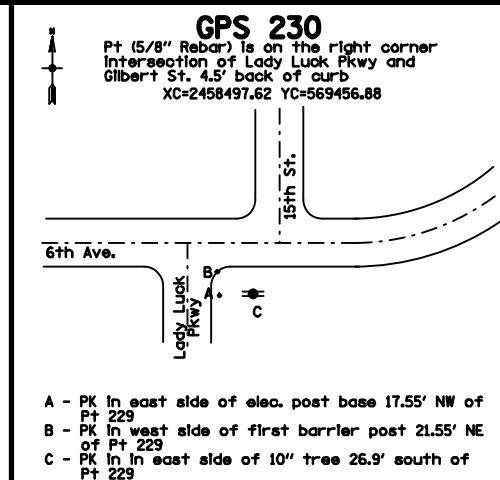
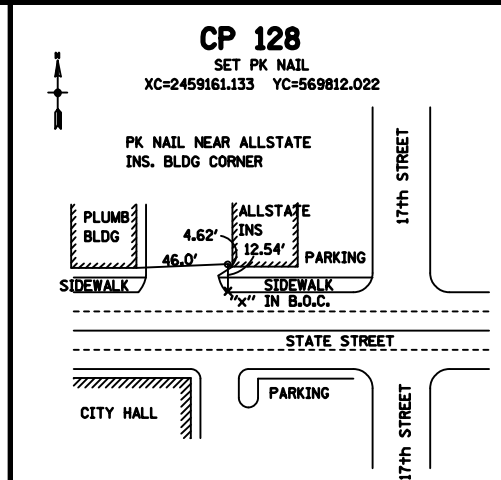
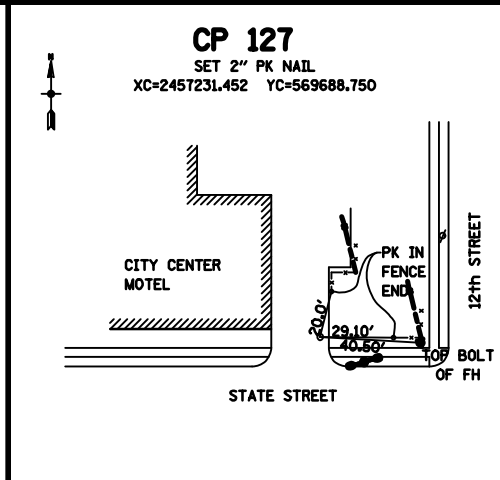
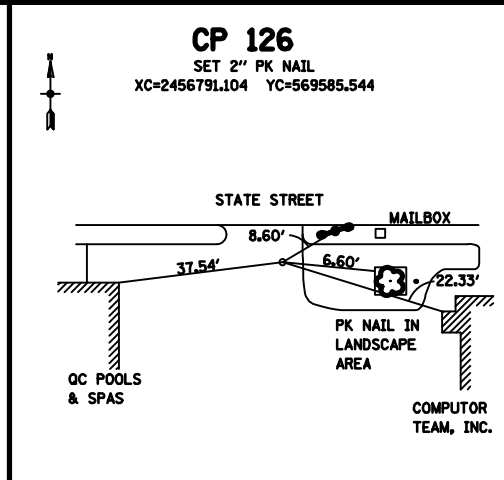
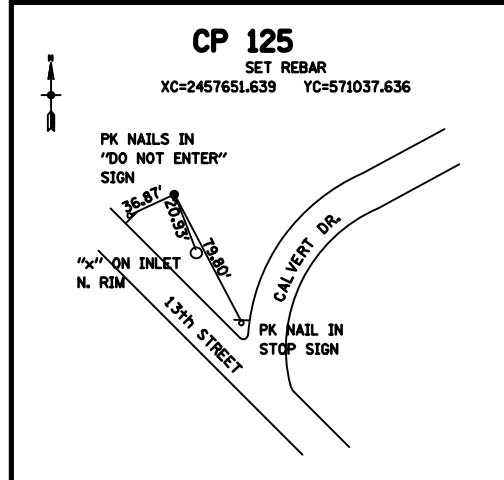
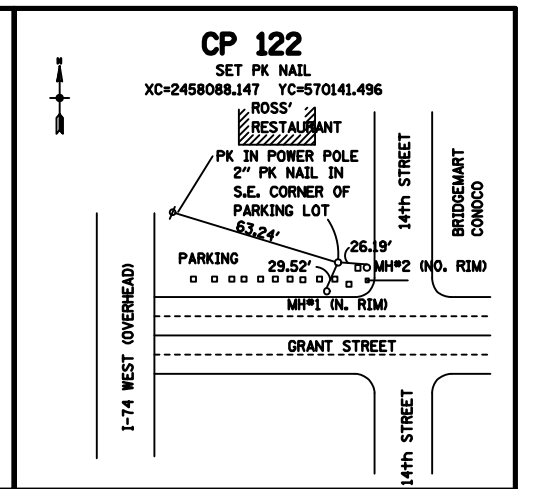
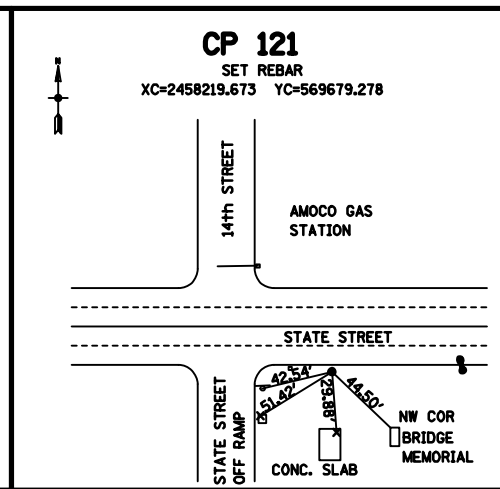
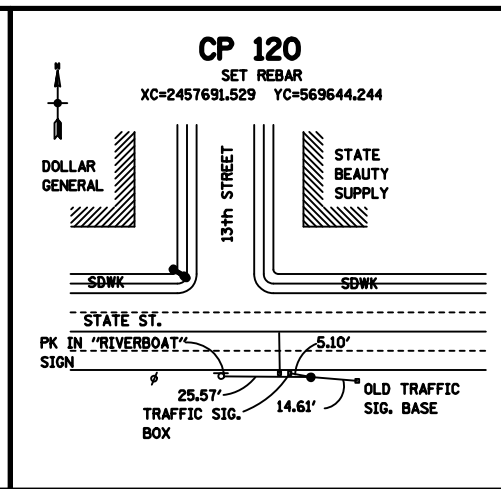
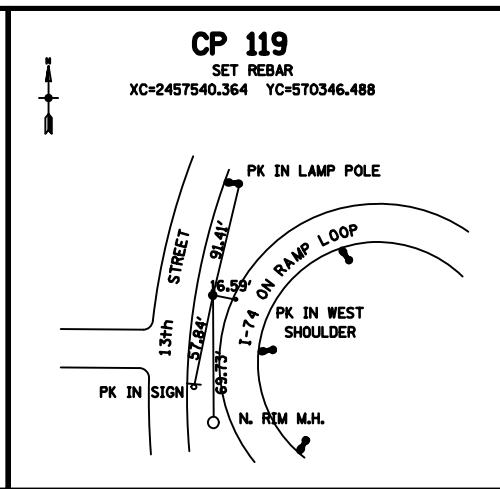
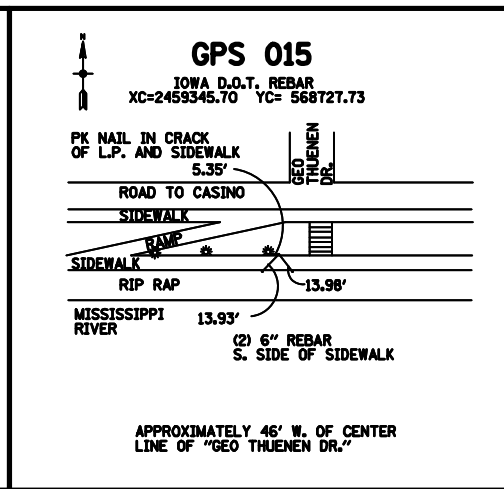
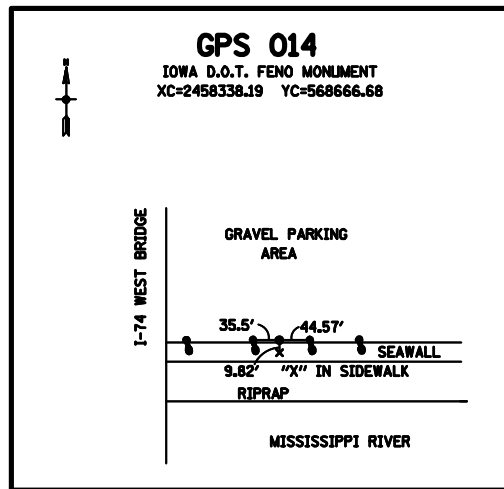
Fill+30% = 121 CY  
 To Stockpile = 372 CY  
 493 CY

Cut = 493 CY



**MISSISSIPPI BLVD**  
 For Plan Details Refer to Sheet No.E.1





**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 70 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	245535.37	0.999936506	1.000063498

**BENCH MARKS**

IOWA BENCHMARKS:

No.	Sta.	Description	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.

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.

COVENTINE FIDIS DATE: \_\_\_\_\_  
License number: 09174

My license renewal date is December, 2016  
Pages or sheets covered by this seal: G.1



Scott County  
 IM-074-1(162)2--13-82  
 I-74 From South of Lincoln Rd to North of 67th Street  
 Pin 03-82-074-010-04  
 SAP 0337.4

General Information

This survey is in English Units. The purpose of this survey was to re-observe and re-level all control. All Bench Marks on the Iowa side of the Mississippi River were re-leveled. All control on the Iowa side of the Mississippi River North of CP123 was re-observed. One new GPS calibration was generated using re-observed control, new supplemental project control, and re-leveled benchmarks along existing I-74. The purpose of this survey was to update old information, confirm the accuracy of old information then collect and verify information along I-74.

The IDOT GPS network control along I-74 was held fixed in the RTK calibration.  
 Calibration points held fixed Horizontally and Vertically 5,6,10,17,20,25,100,101,102,103,111,153,243,560,612,  
 Calibration points held fixed Vertically 7,21,106,108,109,110,116,157,250,252,254,255,556,563  
 Calibration points held fixed Horizontally 12, 13,15.

The project coordinates are projected to the ground.

Vertical Datum

This survey is relative to NAVD 88 vertical datum. A new level loop originated and terminated on the original I-74 mark BM 503. The new level loop ran north to I-80 then returned to BM 503. Loops were also run on Lincoln, Middle road, Spruce Hills & 53rd Street.

Benchmarks were re-established on the new Lincoln Rd overpass bridge. Vertical differences between the 2003 CH2MHill marks and the newly established elevations are as follows, At the Middle Road intersection a vertical difference of 0.062 was found (SEE BM509 equation below). At the Spruce Hills intersection a vertical difference of 0.078 was found (SEE BM514 equation below). All elevations along 53rd street were originally leveled from BM 522, BM 522 has been destroyed in recent construction. Just West of the 53rd Street intersection a vertical difference of 0.066 was found (SEE BM560 equation below).

Vertical Equations;

BM # 503 this survey =BM # 503	Elev. = 580.282 (NAVD 88 English) 2011 Datum BM Elev. = 580.282 (NAVD 88 English) I-74 Consultant survey
BM # 509 this survey =BM # 509	Elev. = 677.516 (NAVD 88 English) 2011 Re-Leveled Elev. = 677.578 (NAVD 88 English) I-74 Consultant survey
BM # 514 this survey =BM # 514 =BM # 514	Elev. = 680.944 (NAVD 88 English) 2011 Re-Leveled Elev. = 681.022 (NAVD 88 English) I-74 Consultant survey Elev. = 681.022 (NAVD 88 English) 2009 WHKS Kimberly Road Survey
BM # 560 this survey =BM # 560	Elev. = 686.934 (NAVD 88 English) 2011 Re-Leveled Elev. = 687.000 (NAVD 88 English) 2008 WHKS 53rd St Survey
BM # 564 this survey =BM # 564	Elev. = 710.632 (NAVD 88 English) 2011 Re-Leveled Elev. = 710.688 (NAVD 88 English) 2008 WHKS 53rd St Survey
BM # 556 this survey =BM # 556	Elev. = 707.691 (NAVD 88 English) 2011 Re-Leveled Elev. = 707.745 (NAVD 88 English) 2008 WHKS 53rd St Survey
BM # 573 this survey =BM # 317 Scott Co Plan (I-74-1(5)2**01--82	Elev. = 624.321 (NAVD 88 English) 2011 Re-Leveled Elev. = 625.21 Datum Unknown
BM # 574 this survey =BM 320"A" Scott Co Plan (I-74-1(5)2--01--82	Elev. = 649.518 (NAVD 88 English) 2011 Re-Leveled Elev. = 649.36 Datum Unknown
BM # 575 this survey =BM 423"A" Scott Co Plan (I-74-1(5)2--01--82	Elev. = 653.550 (NAVD 88 English) 2011 Re-Leveled Elev. = 654.42 Datum Unknown
BM # 576 this survey =BM 328"A" Scott Co Plan (I-74-1(6)3**01-82	Elev. = 646.600 (NAVD 88 English) 2011 Re-Leveled Elev. = 647.61 Datum Unknown

Alignments

Alignments were provided from previous surveys.

Horizontal Datum & Project Coordinate Transformation

The IDOT observed a GPS Static control network for the I-74 Mississippi River Bridge.

GENERAL INFORMATION FOR GPS PROJECT : Sap 0337 IMN-74-1(123)0-0e-82

STATE PLANE COORDINATE ZONE 1402 ( IOWA SOUTH LAMBERT )

STATE PLANE COORDINATES HELD AT POINT G021

AVERAGE PROJECT LATITUDE = 41 33 2.13112

RESULTING RADIUS = 6363530.832 (METERS)

MEAN PROJECT ELEVATION = 195.000 (METERS)

SEA LEVEL FACTOR = 0.999969358

AVERAGE PROJECT SCALE FACTOR = 0.999967147

COMBINED FACTOR (GRID) = 0.999936506

1 / GRID = 1.000063498

VERTICAL DATUM = NAVD 88 <> HORIZONTAL DATUM = NAD 83 (1996)

Local Project Plane Coordinate Conversion Equation:

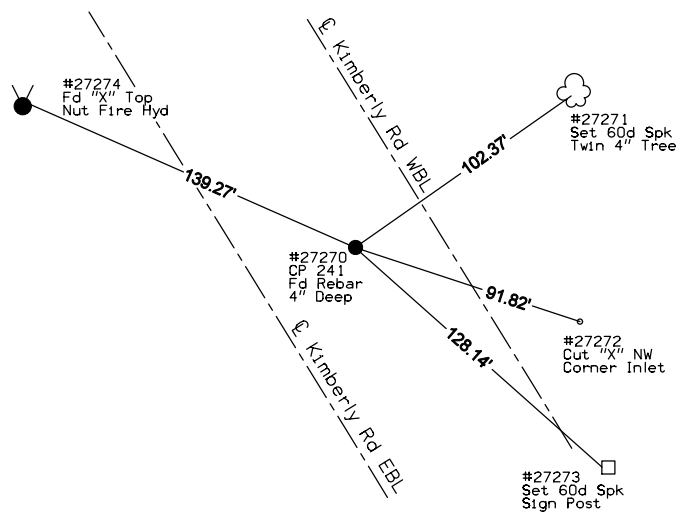
- a. Local Project Coord y = [(State Plane y - hold point y) 1/grid factor] + hold point y
- b. Local Project Coord x = [(State Plane x - hold point x) 1/grid factor] + hold point x

ALL COORDINATES CONVERTED TO ENGLISH UNITS

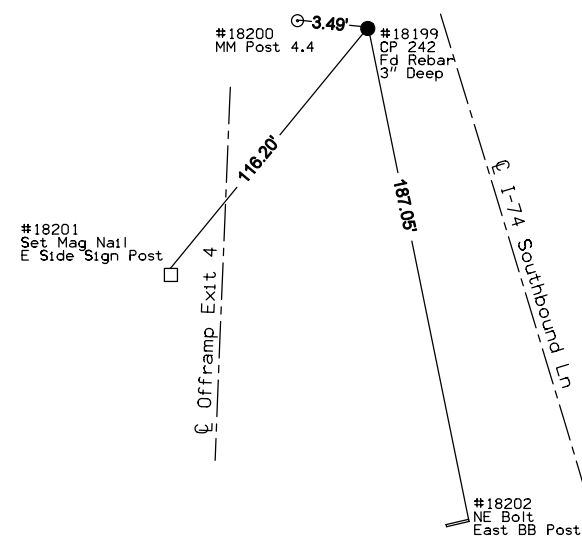
POINT	STATE PLANE COORD(Y)	STATE PLANE COORD(X)	POINT SCALE FACTOR	LOCAL PROJECT PLANE COORD(Y)	LOCAL PROJECT PLANE COORD(X)	Leveled Elevation
2	575101.117	2456247.982	0.99996155	575100.785	2456248.039	671.710
3	575305.685	2456670.142	0.99995733	575305.366	2456670.226	677.231
4	587761.953	2454890.061	0.99995075	587762.425	2454890.032	699.736
5	579548.598	2465909.733	0.99996337	579548.549	2465910.403	-----
6	592312.279	2465381.409	0.99996316	592313.040	2465382.046	-----
7	570852.050	2449647.188	0.99996322	570851.449	2449646.826	-----
10	566360.220	2467519.750	0.99996337	566359.333	2467520.523	-----
11	565294.190	2460631.000	0.99996316	565293.236	2460631.335	-----
12	564685.560	2459258.240	0.99996301	564684.567	2459258.488	-----
13	565480.250	2459044.560	0.99996322	565479.308	2459044.794	-----
14	568667.420	2458338.000	0.99996407	568666.680	2458338.190	575.724
15	568728.460	2459345.450	0.99996408	568727.724	2459345.703	576.878
16	571682.620	2457637.330	0.99996489	571682.071	2457637.475	625.186
17	572958.520	2457220.200	0.99996525	572958.052	2457220.319	658.505
Original Cp 18	has been destroyed		-----	-----	-----	-----
19	576053.260	2456566.470	0.99996613	576052.989	2456566.547	659.900
20	577880.740	2455743.660	0.99996666	577880.585	2455743.685	626.865
21	580322.540	2455353.370	0.99996738	580322.540	2455353.370	677.568
22	582952.070	2455193.020	0.99996817	582952.237	2455193.010	688.928
Original Cp 23	has been destroyed		-----	-----	-----	-----
24	590858.430	2455023.020	0.99997062	590859.099	2455022.999	727.114
25	593042.580	2454447.940	0.99997133	593043.388	2454447.883	748.901
26	595178.440	2454058.310	0.99997203	595179.383	2454058.228	732.221

BENCHMARKS		ELEVATION	
No. 500 Sta. 6781+18.803	161.128 Lt. Y: 568688.781 X:2458216.869	Fd "X" on bolt East side conc structure =CH2MHill BM500 EL=575.797	575.796
No. 501 Sta. 6787+97.906	311.471 Rt. Y: 569456.791 X:2458524.591	Fd CHISELED "X" IN S.W. FLANGE BOLT IN Fire Hyd (FD Good Cond) =CH2MHill BM501 EL 568.923	568.926
No. 502 Sta. 6791+49.022	38.344 Rt. Y: 569737.468 X:2458179.480	FD CHISELED "X" IN FLANGE BOLT IN WORD "MUELLER" FHYD (Leaning) =CH2MHill BM502 EL 575.247	575.247
No. 503 Sta. 6801+93.632	255.412 Rt. Y: 570811.071 X:2458144.197	FD CHISELED "X" IN FLANGE BOLT IN WORD "MUELLER" FHYD (Leaning) =CH2MHill BM503 EL 580.282	580.282
No. 504 Sta. 6809+00.595	189.731 Rt. Y: 571477.720 X:2457880.301	Fd "X" IN West side conc Luminaire Base =CH2MHill BM504 EL 602.945	602.920
No. 505 Sta. 6810+90.128	75.269 Rt. Y: 571625.939 X:2457715.814	Fd Square on NE Barrier Rail of NBL I-74 Bridge over Kimberly Rd =CH2MHill BM505 EL 621.93	621.906
No. 506 Sta. 6822+67.473	84.778 Rt. Y: 572755.496 X:2457383.651	Fd "X" on West side Cir conc Lum Pole Base =CH2MHill BM506 EL 655.749	655.710
No. 507 Sta. 6834+05.076	68.762 Rt. Y: 573843.513 X:2457063.995	Not Found at given coordinates presumed destroyed CH2M Hill BM	668.133
No. 508 Sta. 6842+55.549	62.831 Rt. Y: 574668.276 X:2456866.038	Fd "X" on East side conc Lum Pole Base =CH2MHill BM508 EL 671.518	671.448
No. 509 Sta. 6851+85.690	59.105 Rt. Y: 575576.663 X:2456666.015	Fd IDOT BM Button on NE Barrier Rail of NBL Brg over Middle Rd =CH2MHill BM509 EL 677.578	677.516
No. 510 Sta. 6861+43.895	80.14 Rt. Y: 576518.994 X:2456482.513	Fd "X" on E Side conc Luminaire Base at AB Sta 2170+00+/- =CH2MHill BM510 EL 645.087	645.044
No. 511 Sta. 6868+67.531	100.64 Rt. Y: 577225.907 X:2456261.874	Fd DOT BM Button on NE Barrier Rail of NBL Brg over Duck Creek =CH2MHill BM511 EL 638.647	638.614
No. 512 Sta. 6882+39.229	73.974 Rt. Y: 578444.501 X:2455659.981	Fd "X" on Conc Base of W post of sign "exit 2" =CH2MHill BM512 EL 631.703	631.676
No. 513 Sta. 6892+34.511	84.403 Rt. Y: 579410.375 X:2455508.787	Fd "X" on top east end 48" RCP =CH2MHill BM513 EL 649.572 125' +/- N. of MM 3.1	649.537
No. 514 Sta. 6901+57.825	60.026 Rt. Y: 580327.480 X:2455399.144	Fd DOT BM Button on SE Barrier Rail of NBL Brg over Spruce Hills Rd =CH2MHill BM514 EL 781.022	680.944
No. 515 Sta. 6912+23.757	330.731 Rt. Y: 581413.875 X:2455570.133	Fd CHISELED "X" IN FLANGE BOLT IN WORD "MUELLER" =CH2MHill BM515 EL 683.991	683.924
No. 516 Sta. 6923+17.968	89.277 Lt. Y: 582468.666 X:2455061.538	Fd "X" on E side conc Lum Pole Base =CH2MHill BM516 EL 686.241	686.161
No. 518 Sta. 6934+40.127	101.985 Rt. Y: 583597.470 X:2455218.010	Fd "T" IN HDWL R.C.B. 2' from WHKS BM (#16589 Fd IHC inlet hdwl 4x5x175.9RCB)	668.280
No. 519 Sta. 6946+33.160	100.75 Lt. Y: 584785.834 X:2454989.491	Not Found at given coordinates presumed destroyed CH2M Hill BM	667.743
No. 520 Sta. 6956+41.991	87.183 Rt. Y: 585798.497 X:2455155.537	Fd "X" in Sign Base =CH2MHill BM520 EL 746.765	646.698
No. 521 Sta. 6963+09.707	63.203 Rt. Y: 586465.537 X:2455117.105	Fd "X" on Lum Base =CH2MHill BM521 EL 660.130	660.059
No. 522 Sta. 6974+87.011	80.483 Rt. Y: 587642.940 X:2455108.891	Not Found at given coordinates presumed destroyed CH2M Hill BM	679.620
No. 523 Sta. 6988+24.965	63.13 Rt. Y: 588980.204 X:2455062.572	Fd "X" on Lum Base =CH2MHill BM523 EL 700.669	700.594
No. 524 Sta. 7000+10.296	63.463 Rt. Y: 590165.265 X:2455037.241	Fd "X" on Lum Base =CH2MHill BM524 EL 719.358	719.265
No. 525 Sta. 7010+07.602	91.313 Lt. Y: 591158.986 X:2454860.908	Fd "X" in Sign Base =CH2MHill BM525 EL 727.605	727.494
No. 526 Sta. 7019+95.564	98.784 Lt. Y: 592123.621 X:2454768.643	FD "X" on east side sign base =CH2MHill BM526 EL 731.873	731.766
No. 527 Sta. 7033+00.191	150.317 Rt. Y: 593441.396 X:2454656.773	Fd RR Spk in w. side fence post =CH2MHill BM527 EL 738.163	738.026
No. 528 Sta. 7039+00.326	82.286 Rt. Y: 593998.080 X:2454422.481	Fd "X" in Sign Base =CH2MHill BM528 EL 733.087	732.973
No. 529 Sta. 7028+71.801	105.188 Rt. Y: 593017.636 X:2454734.117	Fd IHC BM on SE Cor 67th St. Bridge =CH2MHill BM529 EL 751.48	751.346
No. 533 Sta. 6975+42.730	2347.104 Rt. Y: 587747.722 X:2457373.774	Not Found at given coordinates presumed destroyed CH2M Hill BM City of Davenport B.M. BRASS Monu	711.250
No. 556 Sta. 6975+74.064	2934.409 Lt. Y: 587664.694 X:2452092.820	Fd City of Davenport conc pad with disk (Good Cond)-Previous El=707.745	707.691
No. 558 Sta. 6976+23.550	1683.44 Lt. Y: 587741.254 X:2453342.425	Not Found at given coordinates presumed destroyed BM from 53rd St Survey	709.391
No. 564 Sta. 6976+24.653	431.761 Rt. Y: 587788.155 X:2455457.106	Fd "X" on S side Lum Pole Base	710.632
No. 565 Sta. 6934+41.901	101.993 Rt. Y: 583599.244 X:2455217.979	Fd IHC BM on inlet hdwl 4x5x175.9 RCB Note:This BM is 2' from CH2MHill #518	668.319
No. 568 Sta. 6976+08.417	131.511 Rt. Y: 587765.422 X:2455157.278	Fd IDOT Brass Button on NE BRG/SWK Barrier Rail	708.326
No. 569 Sta. 6976+03.140	118.937 Lt. Y: 587754.724 X:2454907.003	Fd IDOT Brass Button on NW BRG/SWK Barrier Rail	703.120
No. 570 Sta. 6975+27.062	133.539 Rt. Y: 587684.130 X:2455161.067		
No. 571 Sta. 6848+78.456	59.872 Lt. Y: 575251.235 X:2456614.586		
No. 572 Sta. 6865+94.623	31.589 Lt. Y: 576920.853 X:2456245.148		
No. 573 Sta. 6875+20.239	245.376 Rt. Y: 577875.339 X:2456080.499		
No. 574 Sta. 6893+06.470	271.761 Rt. Y: 579499.349 X:2455688.689		
No. 575 Sta. 6904+13.118	741.405 Lt. Y: 580507.579 X:2454577.542		
No. 576 Sta. 6955+96.514	74.251 Rt. Y: 585752.751 X:2455143.593		
No. 577 Sta. 6833+94.859	132.343 Rt. Y: 573849.206 X:2457128.132		
No. 578 Sta. 6835+04.164	126.319 Lt. Y: 573892.486 X:2456850.685		
No. 600 Sta. 6904+02.998	796.519 Lt. Y: 580492.406 X:2454523.600		
MISCELLANEOUS LOCATIONS			
BENCHMARKS along Kimberly Rd		ELEVATION	
No. 566 Sta. 7293+72.752	85.356 Lt. Y: 580808.174 X:2452917.397	IHC BM on Inlet Hdwl of Twin 14 x 14 RCB equals SAP 0576 BM505 ZC=632.189	632.115
No. 567 Sta. 7294+25.010	66.073 Rt. Y: 580650.413 X:2452889.591	"X" on Outlet Hdwl 30 x 15 Conc Arch equals SAP 0576 BM506 equals ZC=634.892	634.811
No. 601 Sta. 7296+53.544	145.968 Lt. Y: 580724.974 X:2453192.177	Fd x on East bolt of lum base (Good Cond) equals SAP 0576 BM601 ZC=637.567	637.475
BENCHMARKS along Spruce Hills		ELEVATION	
No. 600 Sta. 7310+89.997	68.872 Lt. Y: 580492.406 X:2454523.600	Fd x on NE Bolt of lum pole base (Good Cond) equals SAP 0576 BM601 ZC=657.159	657.067
No. 575 Sta. 7311+44.092	83.488 Lt. Y: 580507.579 X:2454577.542	BM Established in 2011 IHC BM on inlet Hdwl 4x4 RCB Plan Elev =654.42 =Plan BM 423"A" (I-74-1(5)2--01--82 Fd on sheet 47A	653.550
BENCHMARKS along 53rd Street		ELEVATION	
No. 556 Sta. 5101+39.040	46.77 Lt. Y: 587664.694 X:2452092.820	Fd City of Davenport conc pad with disk (Good Cond)-Previous El=707.745	707.691
No. 557 Sta. 5109+03.090	61.092 Rt. Y: 587591.784 X:2452860.855	Fd RR spk N side PP 53rd & Ent to Wendys -Previous El=700.401	700.342
No. 559 Sta. 5119+68.333	62.324 Lt. Y: 587757.826 X:2453921.509	Fd "X" SW Bolt F Hyd-Previous El=697.692	697.643
No. 560 Sta. 5125+32.940	112.763 Rt. Y: 587587.849 X:2454490.316	Fd "X" on E side Lum Pole Base @ SW Quad 53rd & SBL on Ramp to I-74 Previous El=687.000	686.934
No. 564 Sta. 5135+05.67	47.436 Lt. Y: 587788.155 X:2455457.106	Fd "X" on S side Lum Pole Base Previous El=710.688	710.632
No. 563 Sta. 5141+77.716	50.554 Rt. Y: 587718.639 X:2456132.692	Fd RR spk S side PP-Previous El=714.911	714.865
No. 561 Sta. 5144+84.792	67.902 Lt. Y: 587849.961 X:2456434.490	Fd "X" on S Traffic Signal Base Previous El=710.934	710.882
No. 562 Sta. 5147+11.075	49.497 Rt. Y: 587742.225 X:2456665.530	Fd RR spk N side PP-Previous El=707.554	707.513
BENCHMARKS Outside Project Limits		ELEVATION	
No. 612 Sta. 6923+98.048	12492.508 Lt. Y: 581906.735 X:2442670.591	Fd "X" NE Cor Coc Base(=BM612 J Krieger 2007 Rd Survey ZC=680.814)=(BM612 2009 Kimberly Rd Survey ZC=680.884)	680.800
No. 999 Sta. 6826+44.943	15993.986 Lt. Y: 568672.694 X:2441824.208	Fd 60 spk in SWK crack near electrical access lid approx 500' NE of station "Davenport" the swk is along west side of Perry Street just north of E 4th St.	584.737

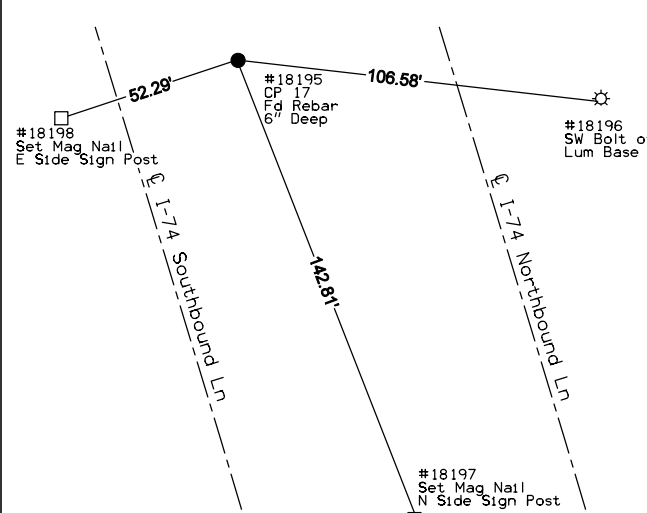
C.P. STA 6817+24.44 LEFT 676.03  
 C.P. 241, Fd 5/8" Rebar 4" Deep  
 N=572015.245 E=2456812.909



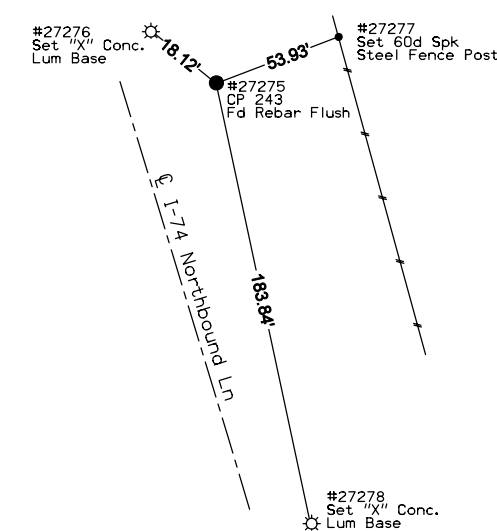
C.P. STA 6822+23.18 LEFT 63.92  
 C.P. 242, Fd 5/8" Rebar 3" Deep  
 N=572670.004 E=2457254.178



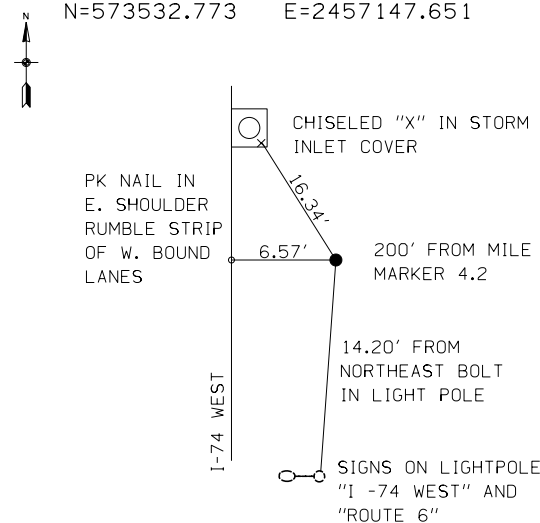
C.P. STA 6825+08.57 LEFT 13.59  
 C.P. 17, Fd 5/8" Rebar 6" Deep  
 N=572958.052 E=2457220.319



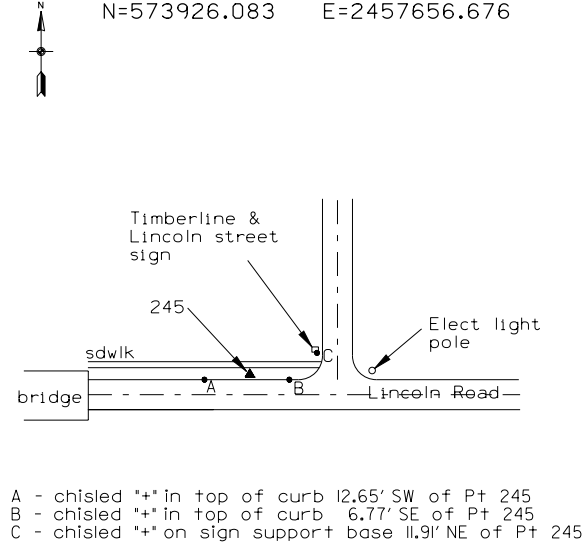
C.P. STA 6830+52.74 RIGHT 84.80  
 C.P. 243, Fd 5/8" Rebar Flush  
 N=573507.713 E=2457167.961



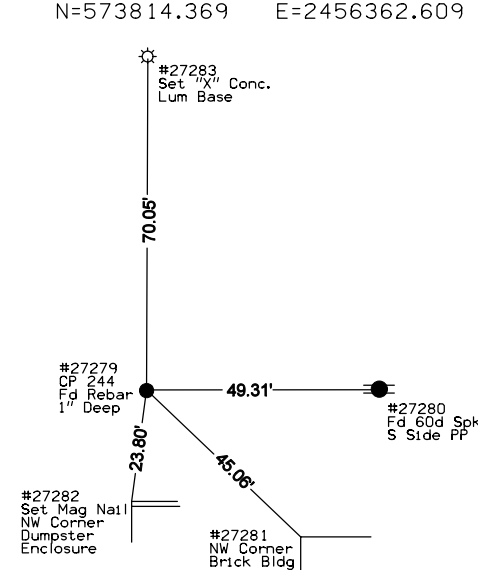
C.P. STA 6830+82.30 RIGHT 71.66  
 C.P. 117, Fd 5/8" Rebar Flush  
 N=573532.773 E=2457147.651



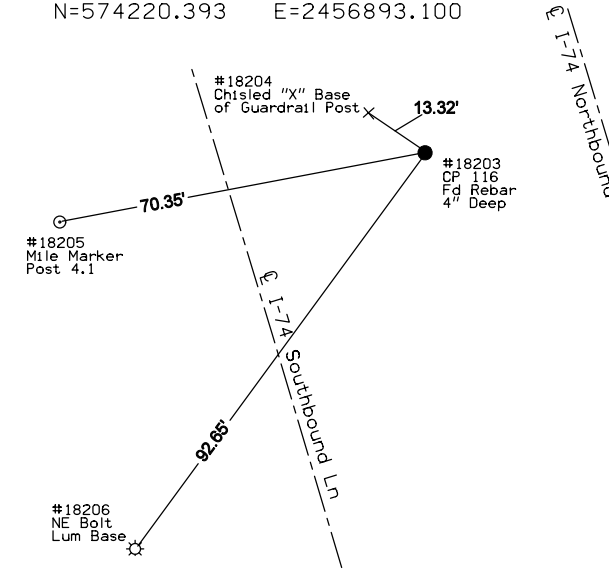
C.P. STA 6833+38.33 RIGHT 663.55  
 C.P. 245, Fd 5/8" Rebar Flush  
 N=573926.083 E=2457656.676



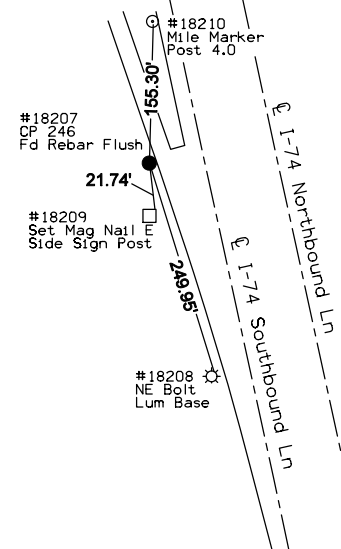
C.P. STA 6835+44.52 LEFT 618.90  
 C.P. 244, Fd 5/8" Rebar 1" Deep  
 N=573814.369 E=2456362.609



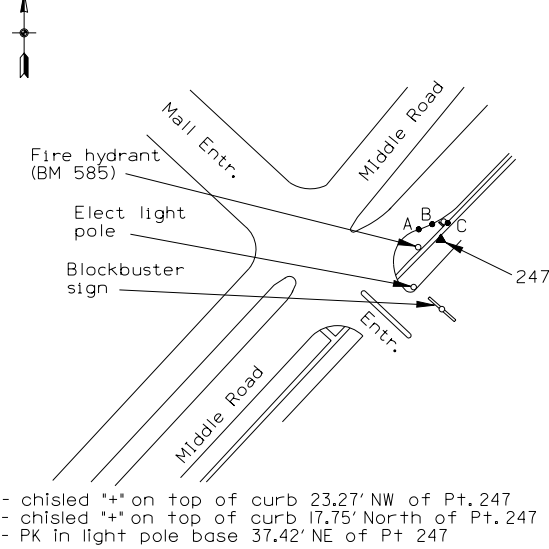
C.P. STA 6838+12.17 LEFT 8.42  
 C.P. 116, Fd 5/8" Rebar 4" Deep  
 N=574220.393 E=2456893.100



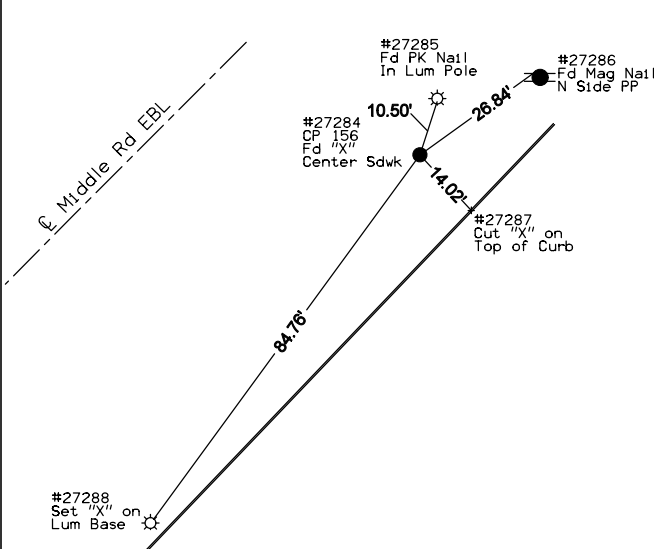
C.P. STA 6841+97.00 LEFT 102.14  
 C.P. 246, Fd 5/8" Rebar Flush  
 N=574576.214 E=2456717.144



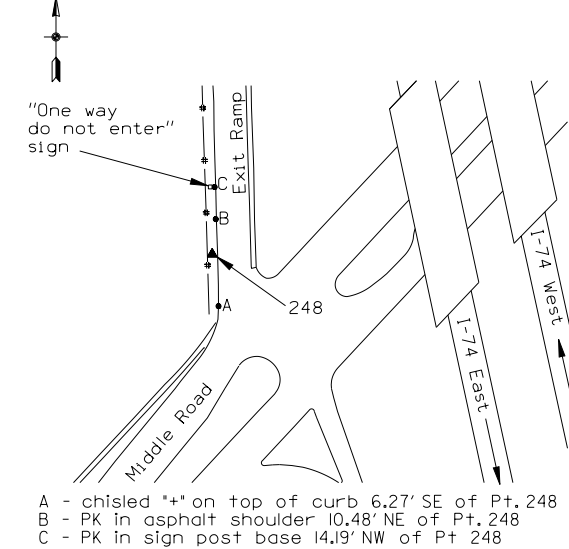
C.P. STA 6843+81.85 LEFT 829.78  
 C.P. 247, Fd 5/8" Rebar Flush  
 N=574603.267 E=2455966.880

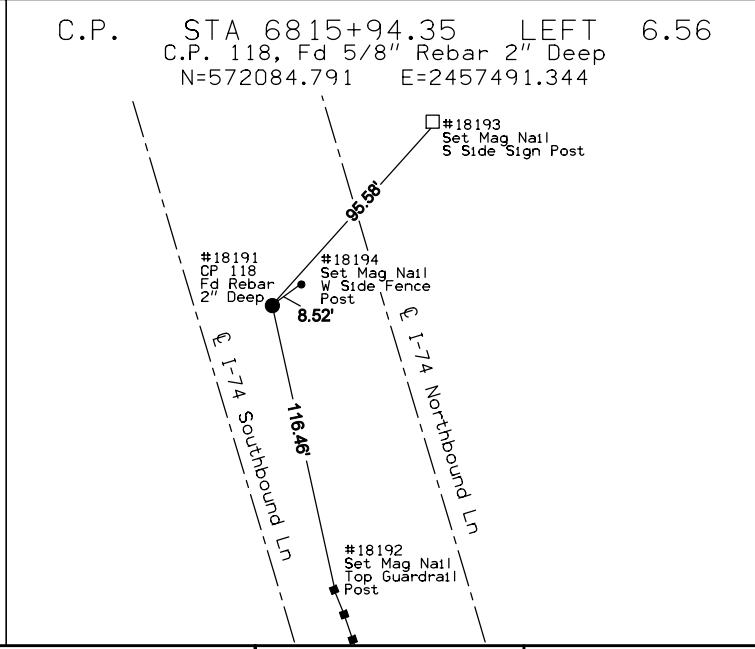
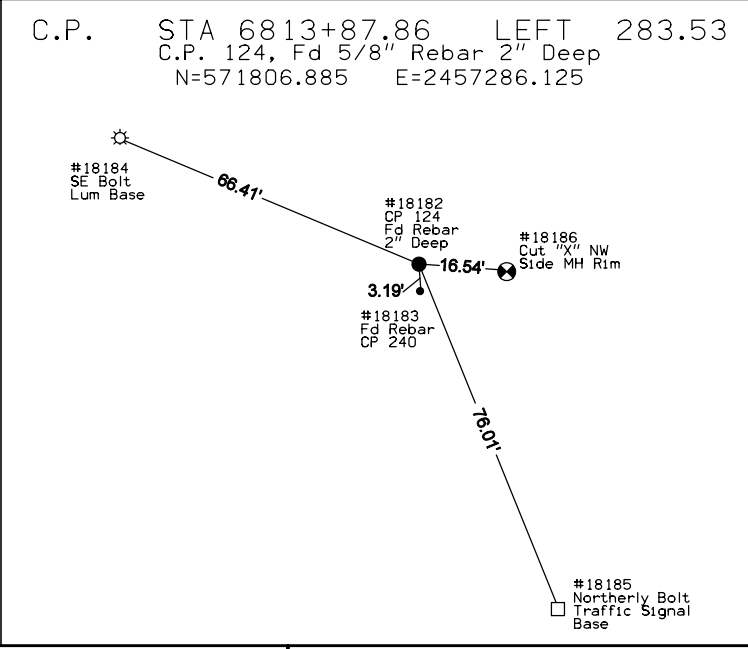
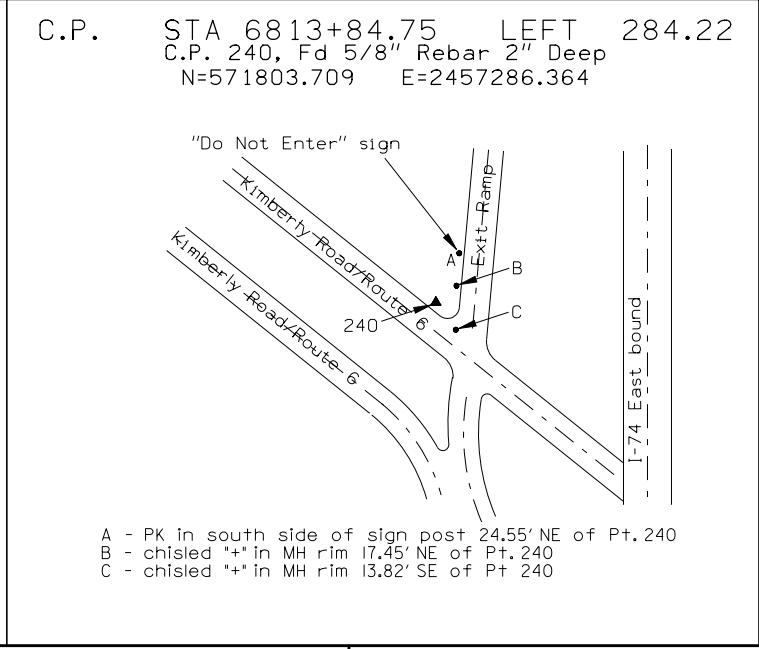
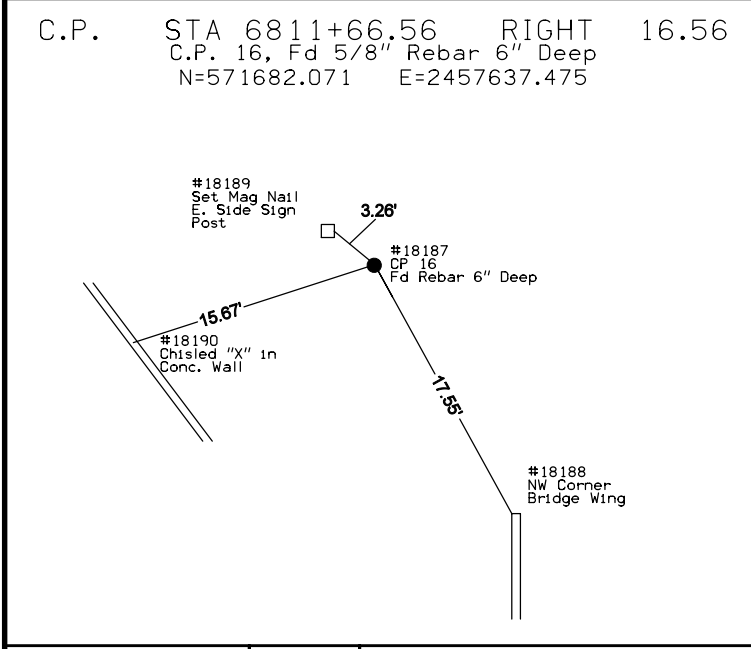
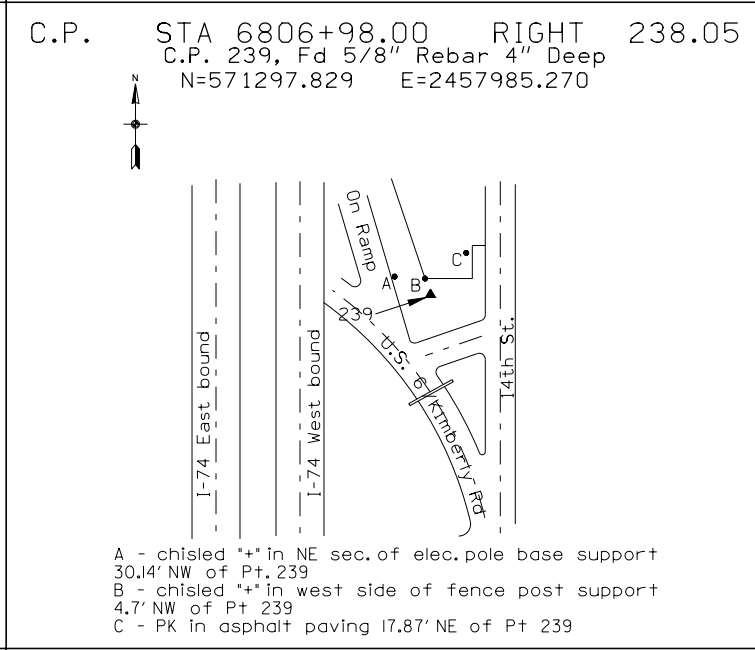
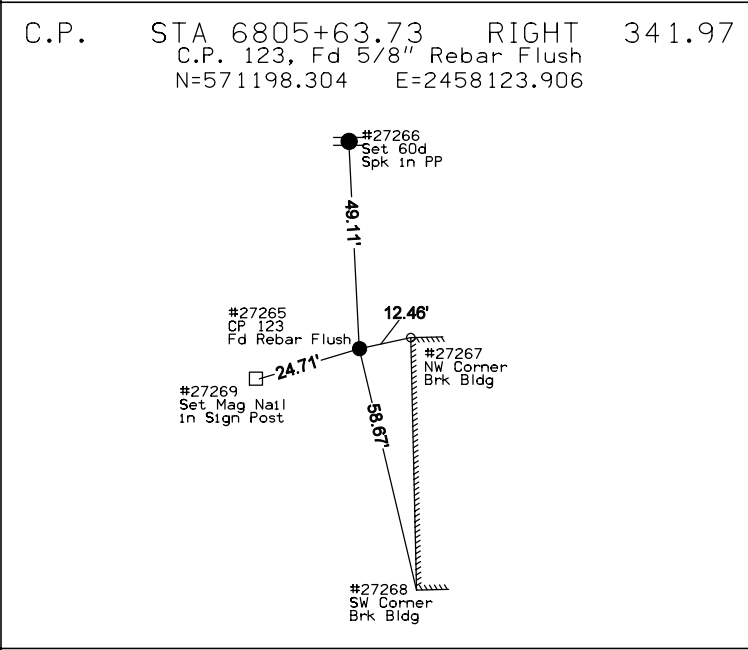


C.P. STA 6845+55.04 LEFT 586.64  
 C.P. 156, Fd "X" On Sidewalk  
 N=574823.895 E=2456167.973

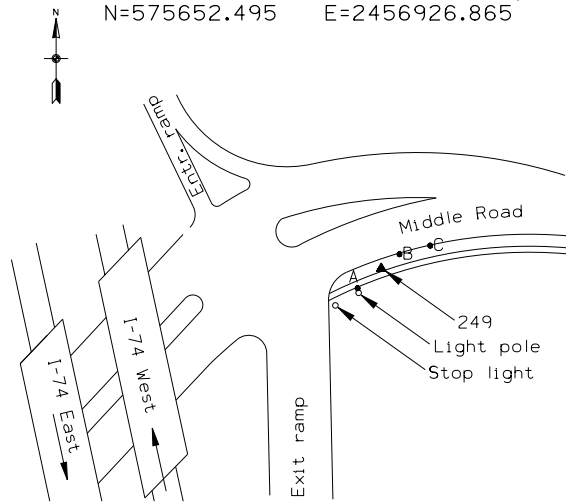


C.P. STA 6849+55.35 LEFT 237.03  
 C.P. 248, Fd 5/8" Rebar 6" Deep  
 N=575288.988 E=2456425.184



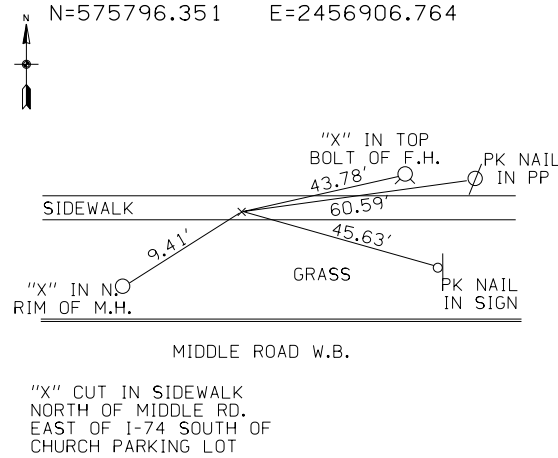


C.P. STA 6852+04.74 RIGHT 330.09  
 C.P. 249, Fd 5/8" Rebar 2" Deep  
 N=575652.495 E=2456926.865



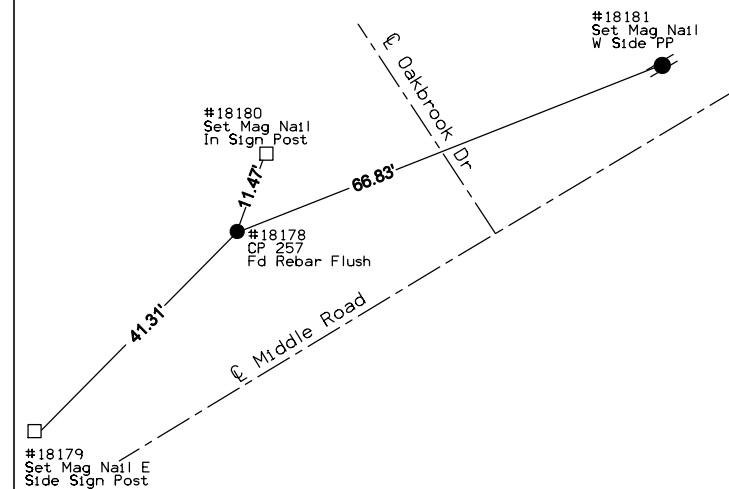
A - PK in light pole support base 16.23' SW of Pt. 249  
 B - chisled "+" on top of curb 6.0' NE of Pt. 249  
 C - chisled "+" on top of curb 10.45' NE of Pt. 249

C.P. STA 6853+49.60 RIGHT 340.81  
 C.P. 157, Fd "X" On Sidewalk  
 N=575796.351 E=2456906.764

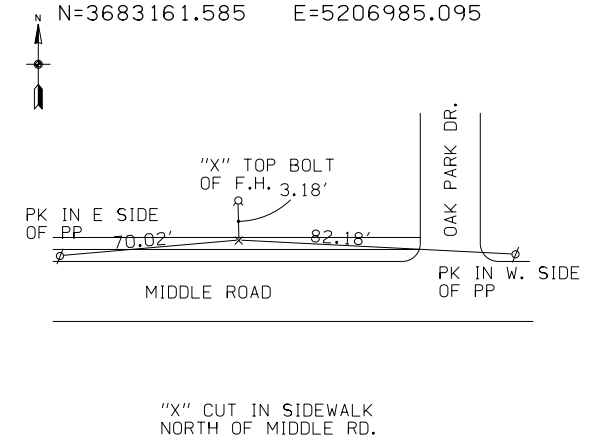


"X" CUT IN SIDEWALK  
 NORTH OF MIDDLE RD.  
 EAST OF I-74 SOUTH OF  
 CHURCH PARKING LOT

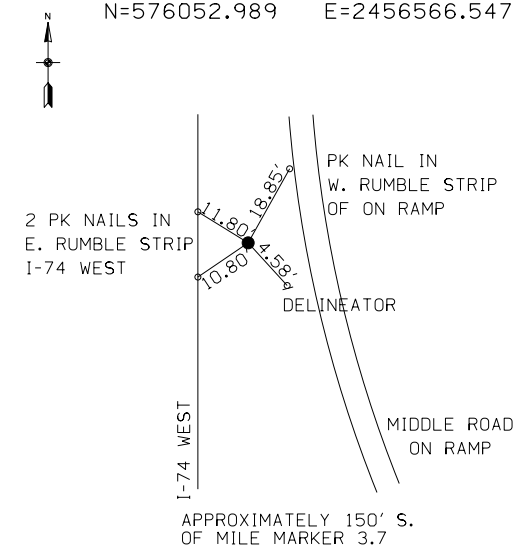
C.P. STA 6855+70.34 RIGHT 980.42  
 C.P. 257, Fd 5/8" Rebar Flush  
 N=576147.162 E=2457485.347



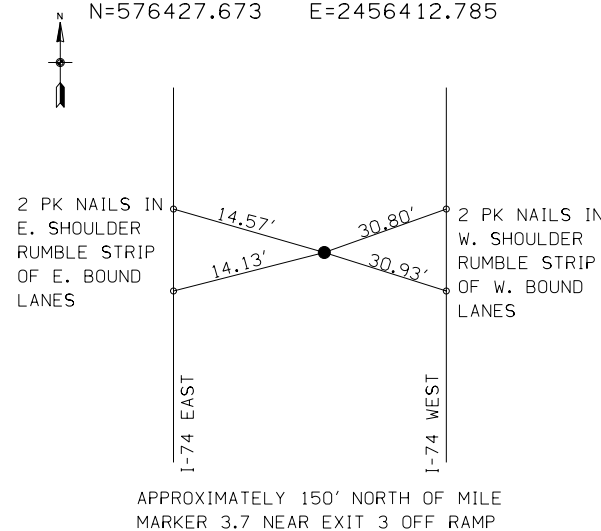
C.P. STA 6856+35.60 RIGHT 1511.93  
 C.P. 158, Fd "X" On Sidewalk  
 N=3683161.585 E=5206985.095



C.P. STA 6856+72.28 RIGHT 62.45  
 C.P. 19, Fd 5/8" Rebar Flush  
 N=576052.989 E=2456566.547

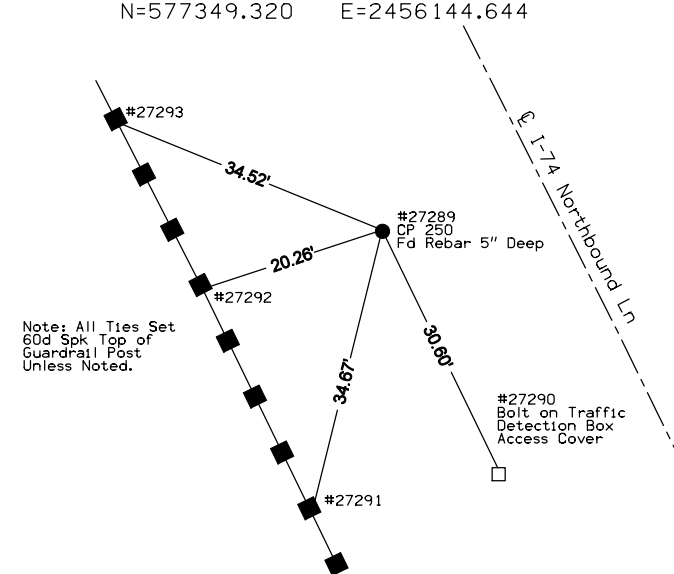


C.P. STA 6860+71.06 LEFT 8.34  
 C.P. 115, Fd 5/8" Rebar Flush  
 N=576427.673 E=2456412.785



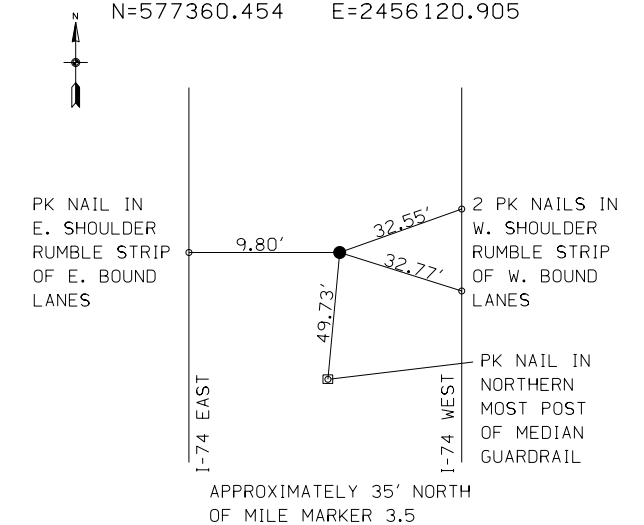
APPROXIMATELY 150' NORTH OF MILE  
 MARKER 3.7 NEAR EXIT 3 OFF RAMP

C.P. STA 6870+26.49 RIGHT 49.15  
 C.P. 250, Fd 5/8" Rebar 5" Deep  
 N=577349.320 E=2456144.644



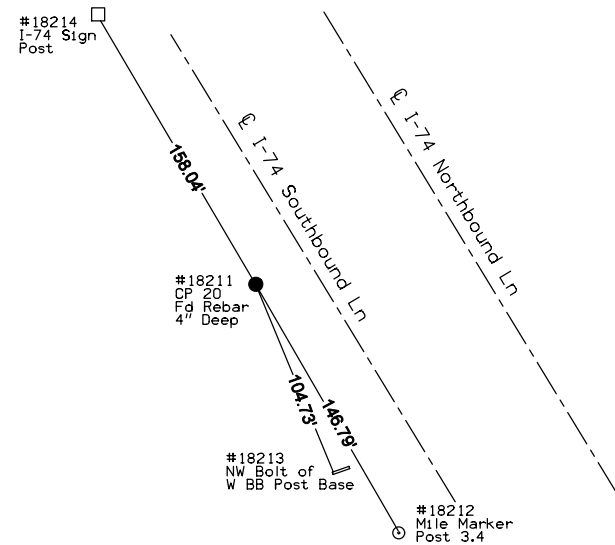
Note: All Ties Set  
 60d Spk Top of  
 Guardrail Post  
 Unless Noted.

C.P. STA 6870+47.07 RIGHT 33.17  
 C.P. 114, Fd 5/8" Rebar 6" Deep  
 N=577360.454 E=2456120.905

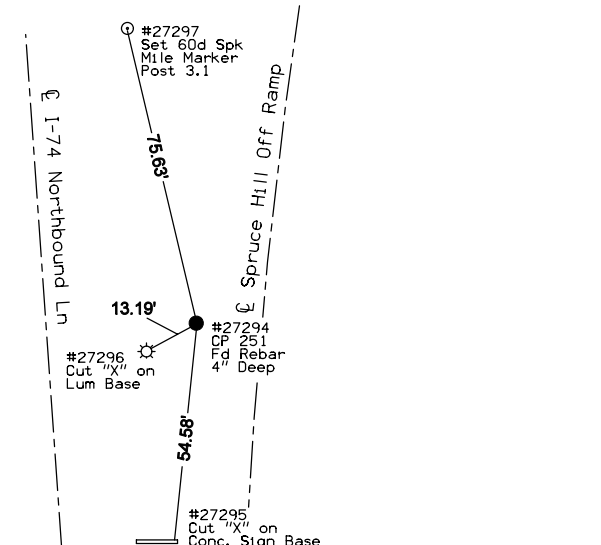


APPROXIMATELY 35' NORTH  
 OF MILE MARKER 3.5

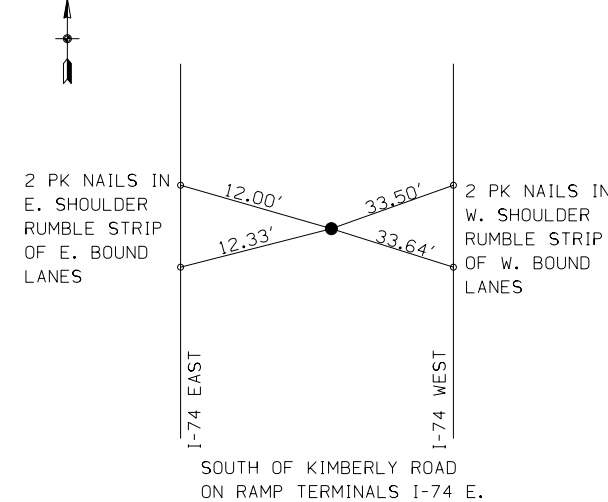
C.P. STA 6876+81.07 LEFT 52.62  
 C.P. 20, Fd 5/8" Rebar 4" Deep  
 N=577880.585 E=2455743.685



C.P. STA 6890+20.99 RIGHT 78.88  
 C.P. 251, Fd 5/8" Rebar 4" Deep  
 N=579197.558 E=2455523.116

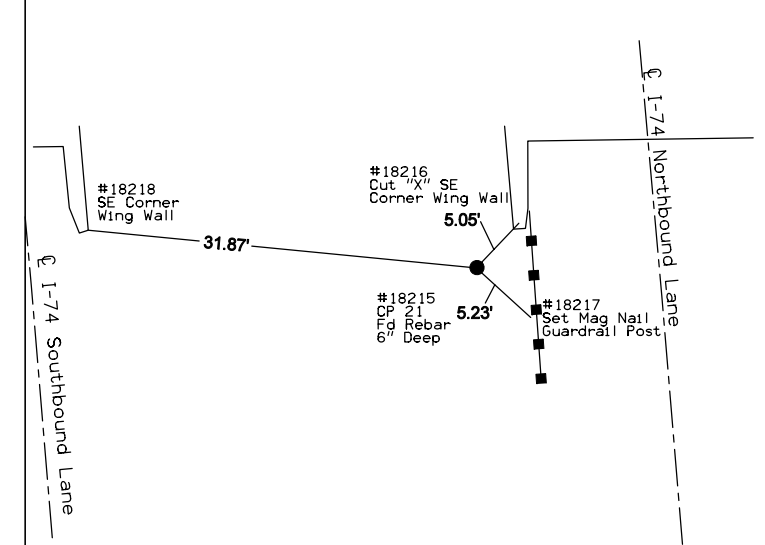


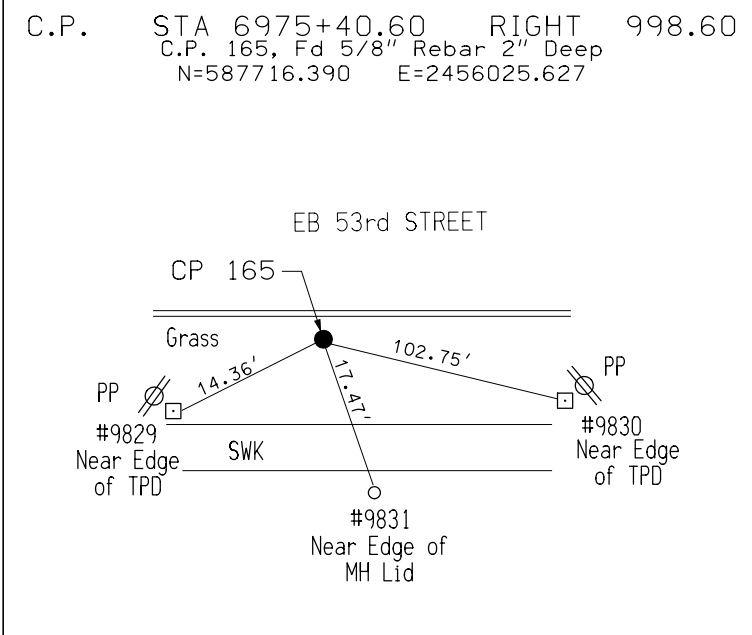
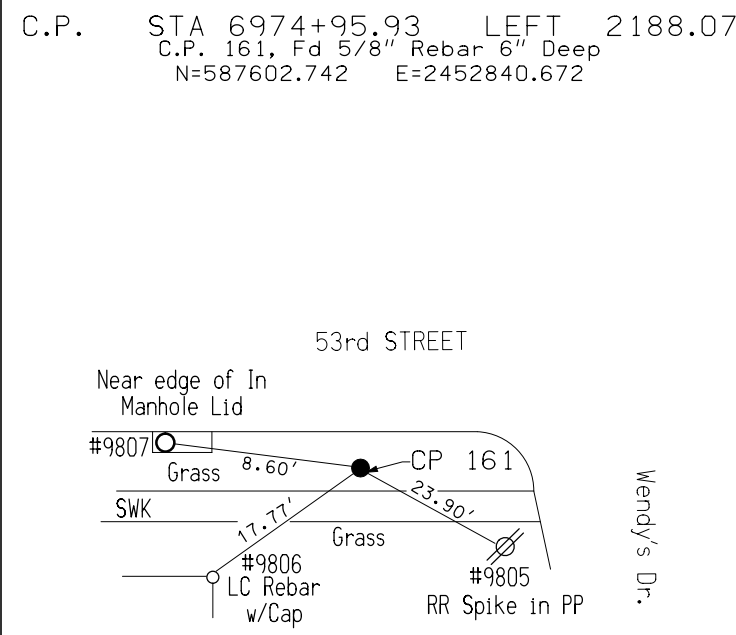
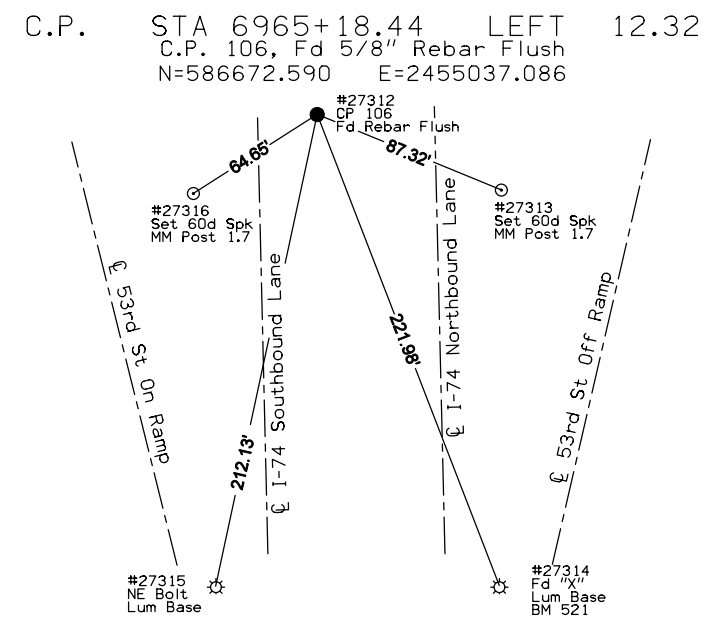
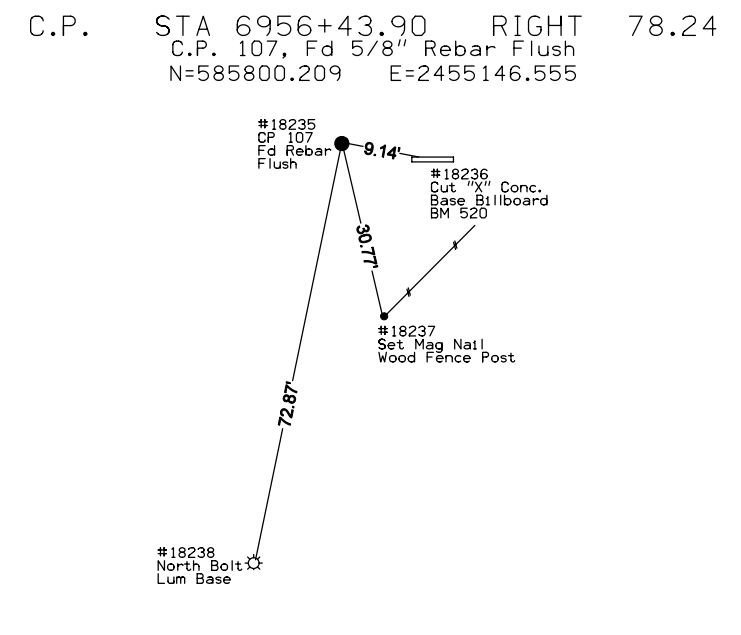
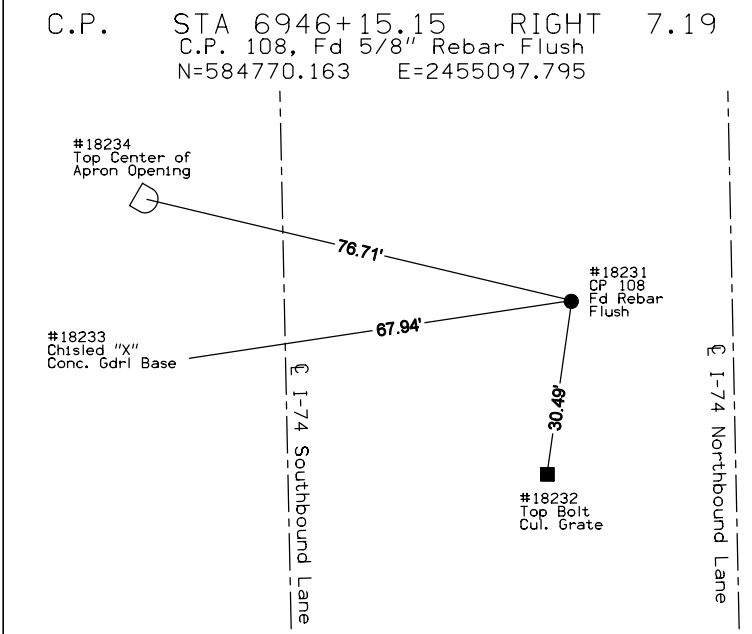
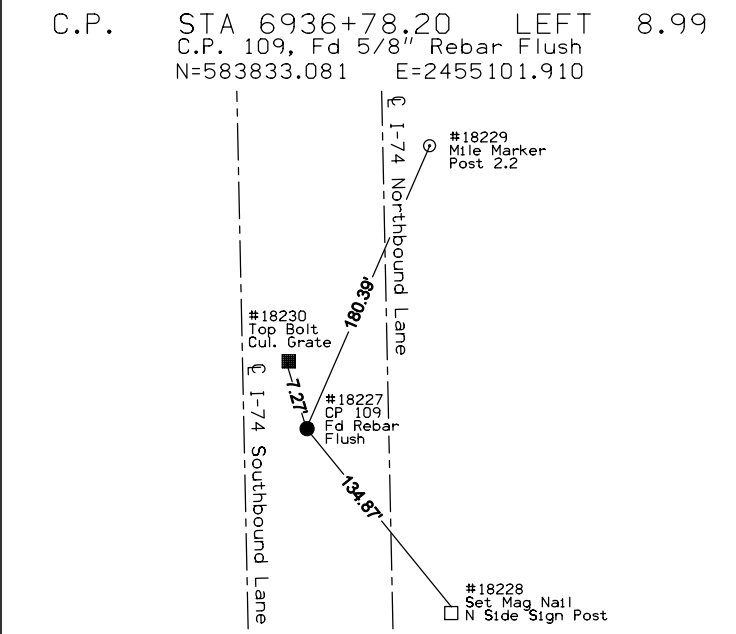
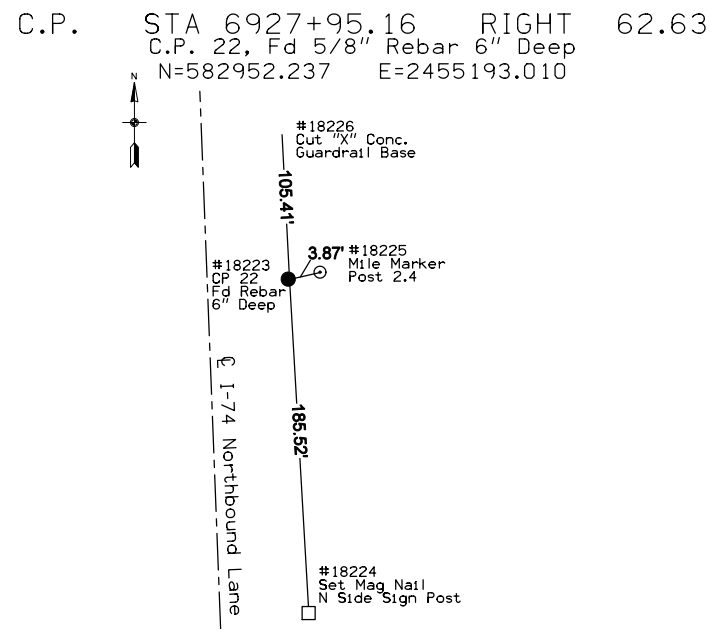
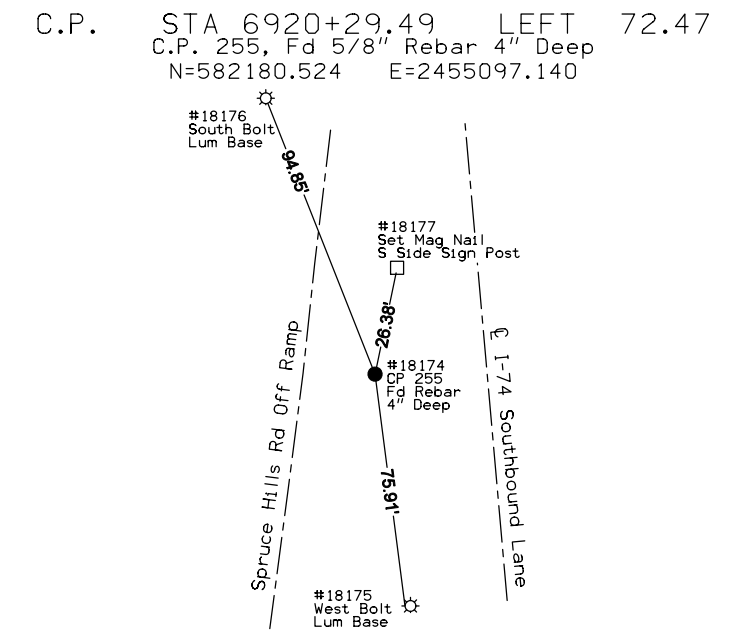
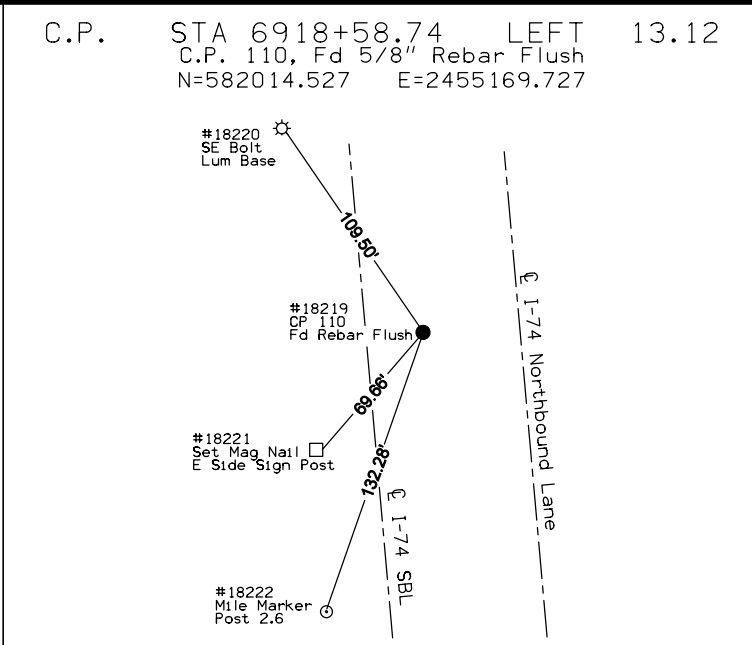
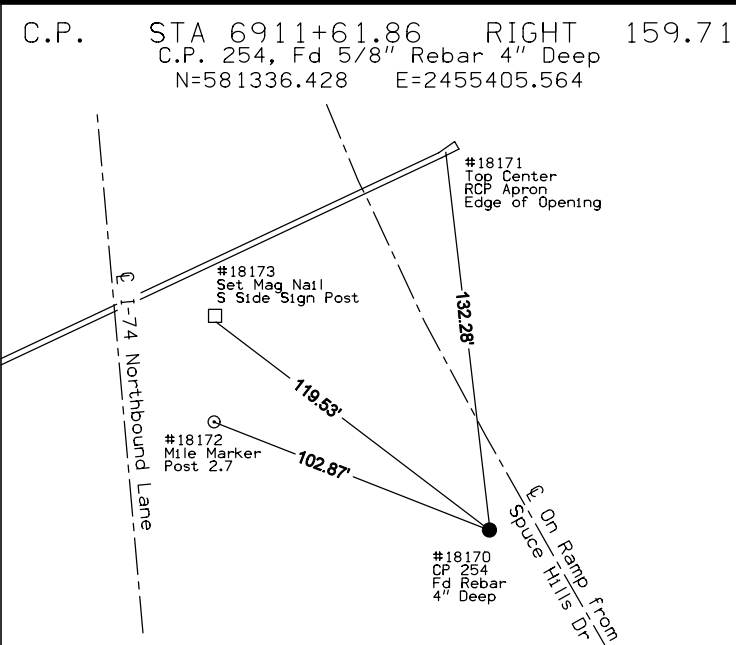
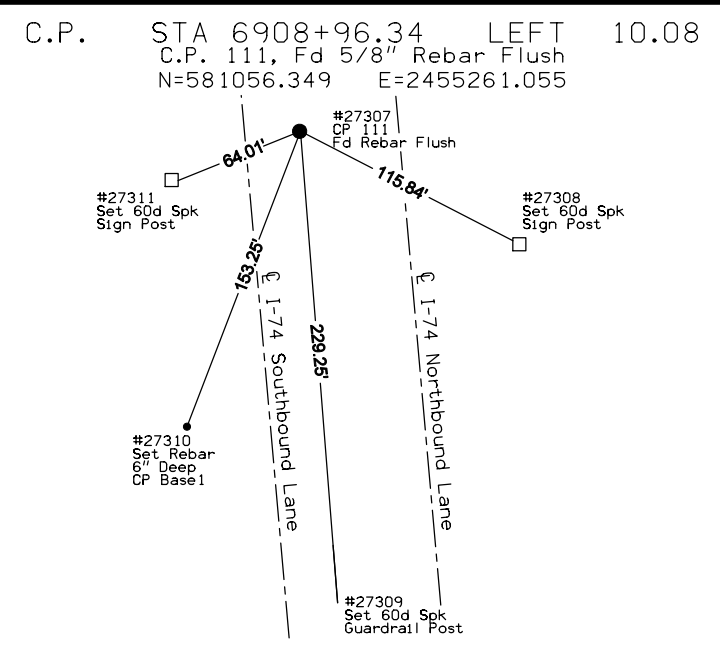
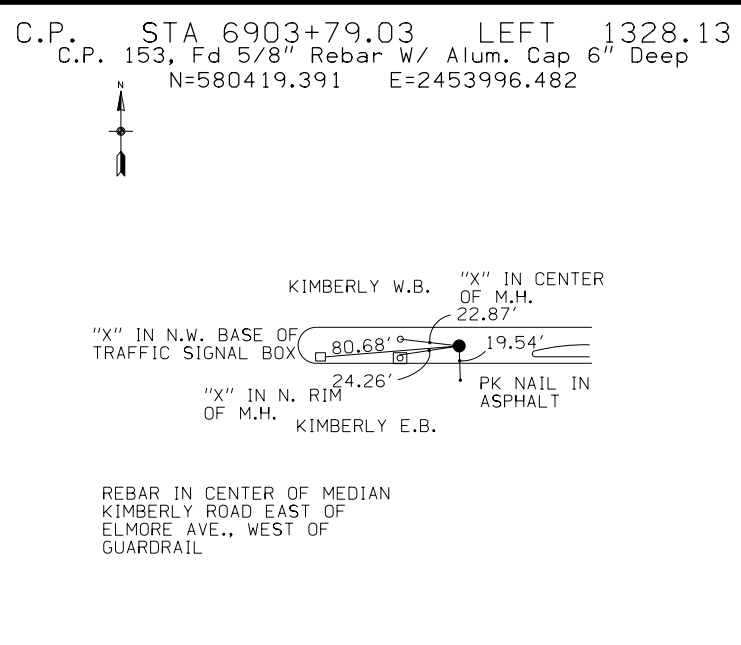
C.P. STA 6891+37.42 LEFT 11.03  
 C.P. 112, Fd 5/8" Rebar Flush  
 N=579304.873 E=2455422.742

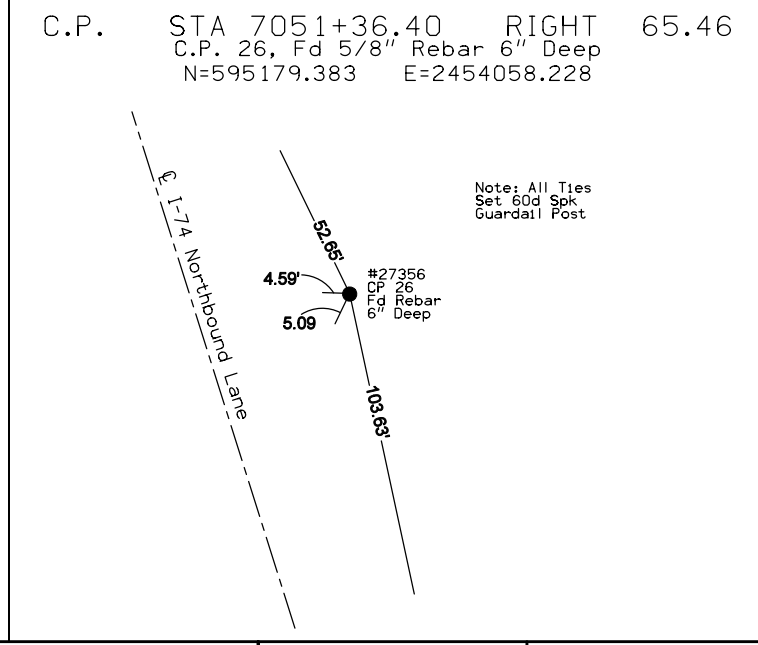
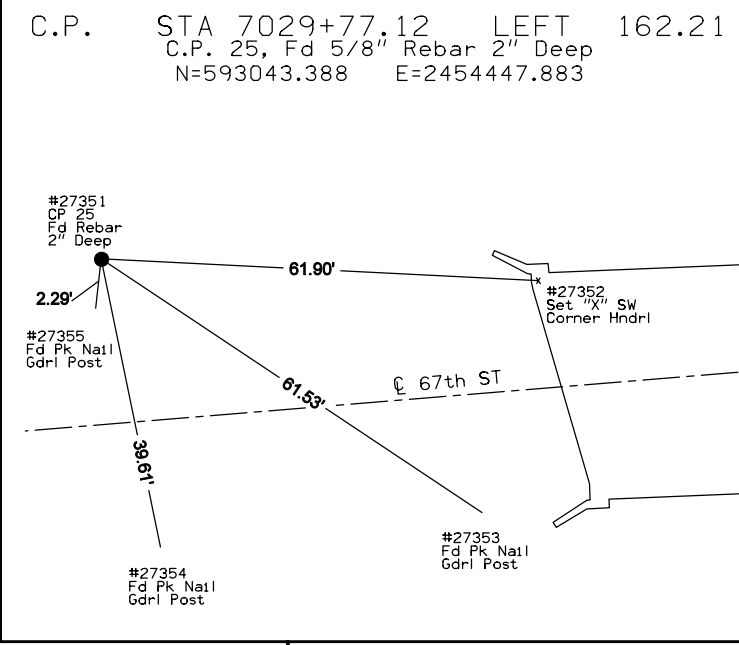
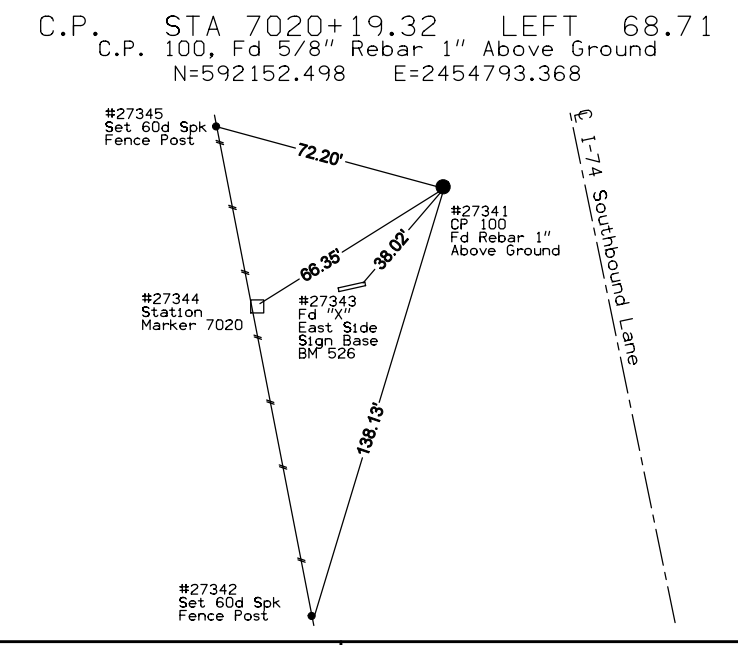
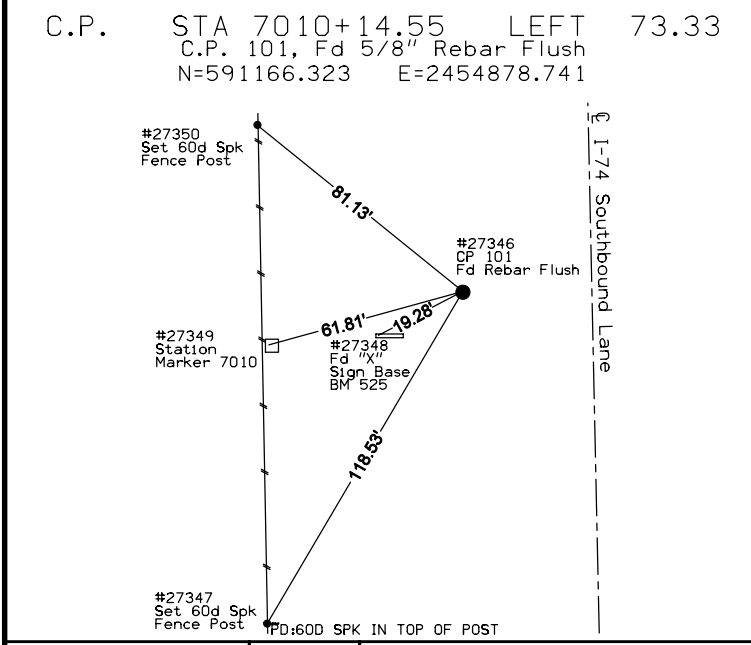
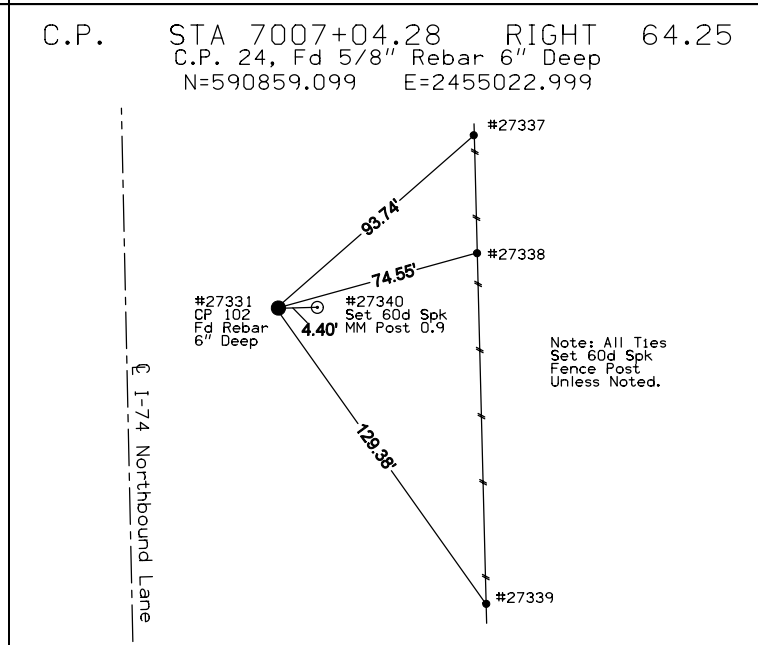
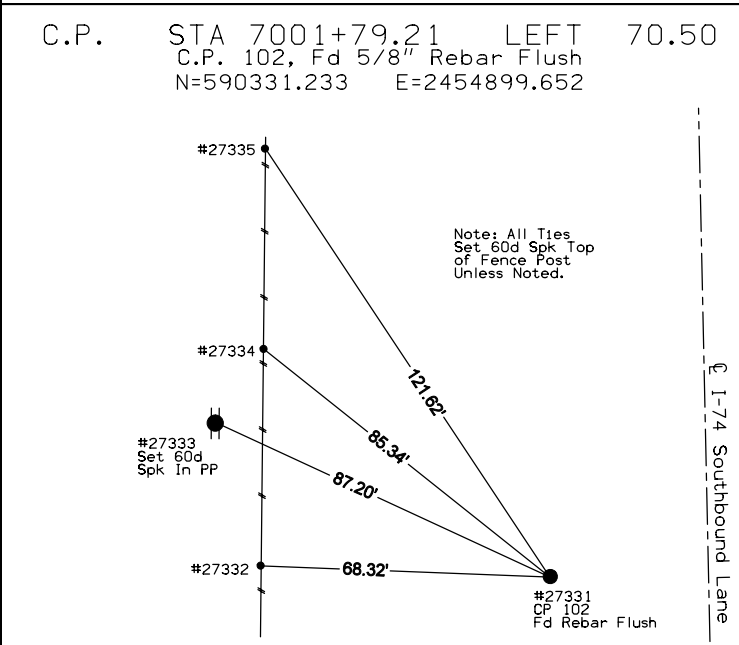
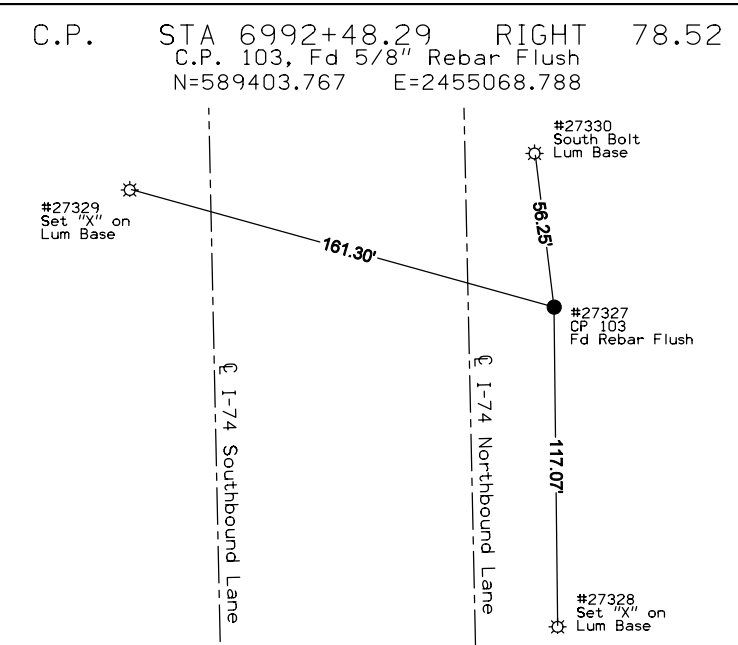
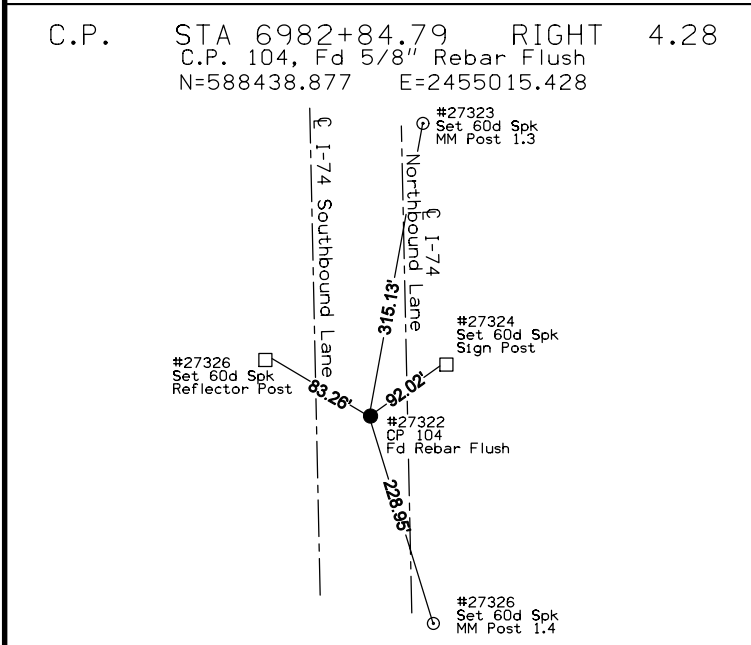
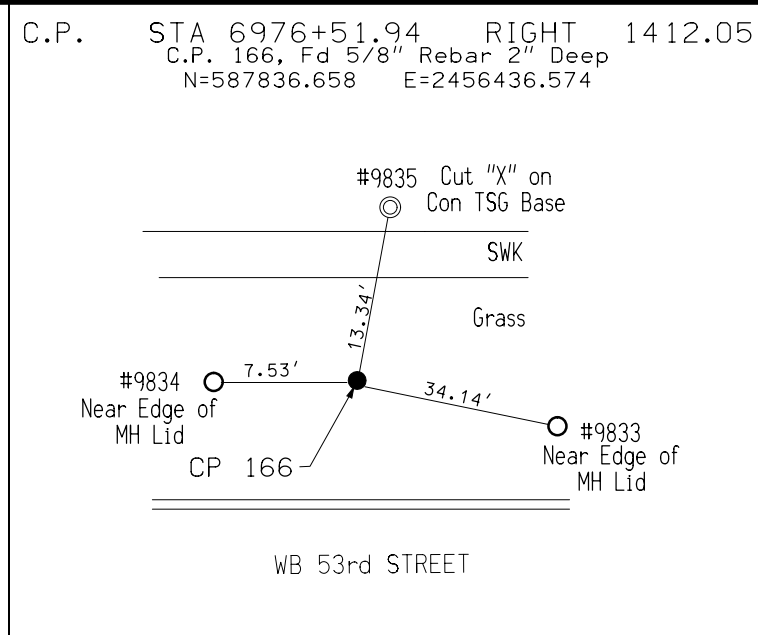
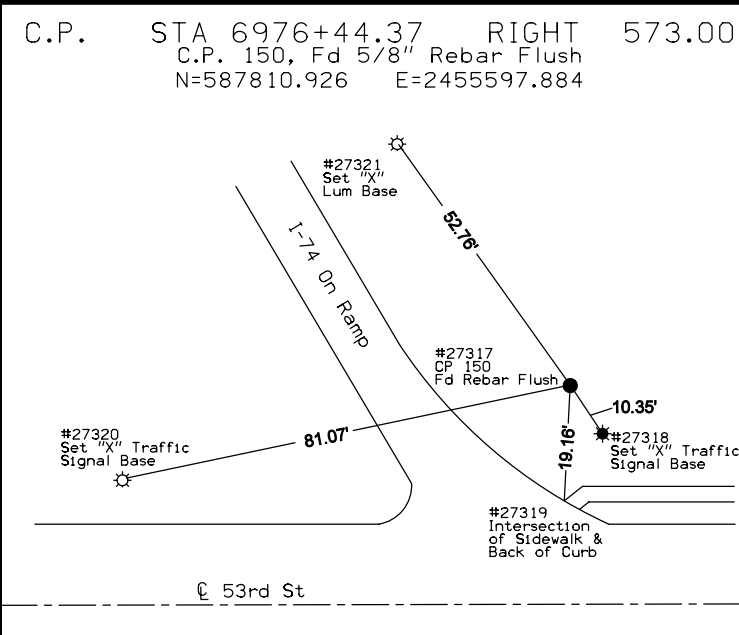
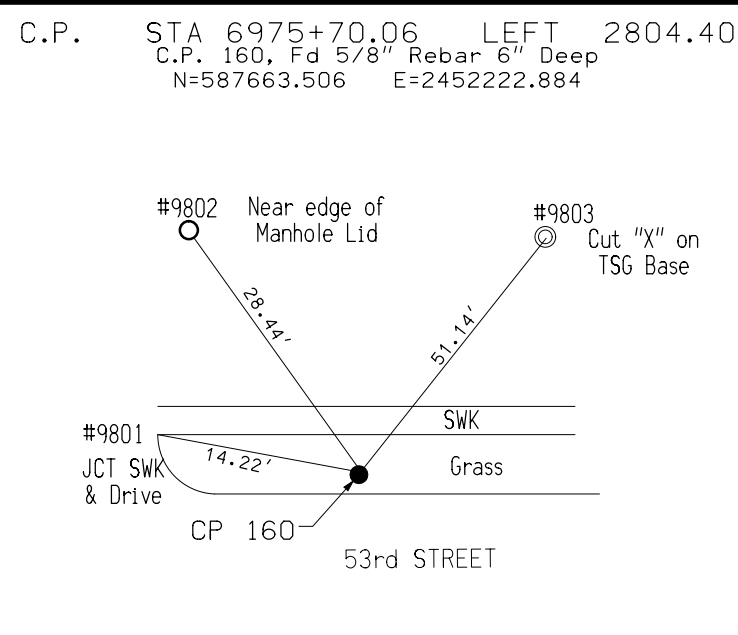
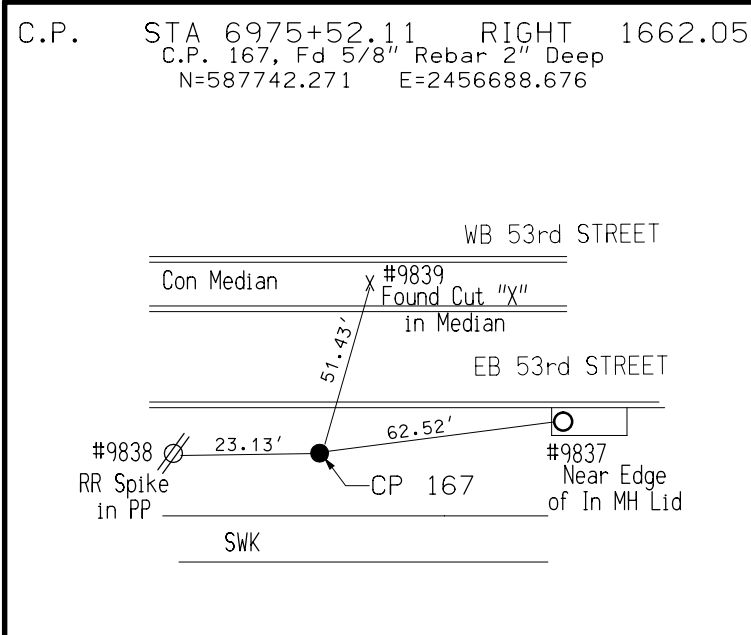


SOUTH OF KIMBERLY ROAD  
 ON RAMP TERMINALS I-74 E.

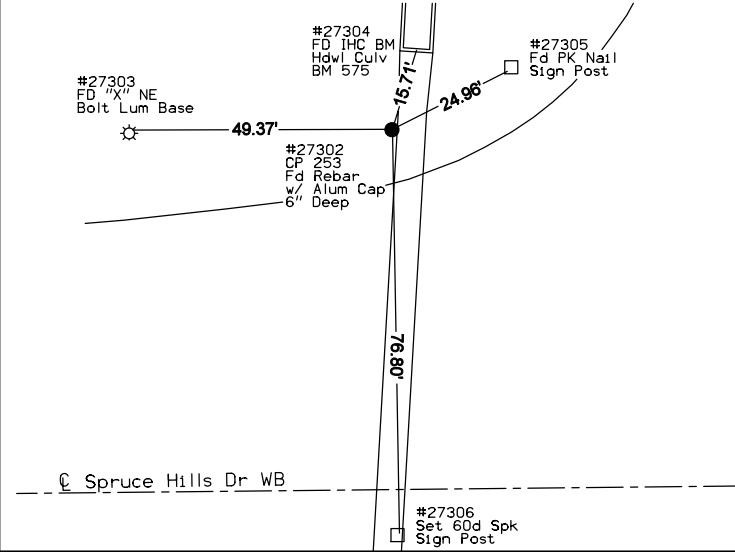
C.P. STA 6901+57.14 RIGHT 13.99  
 C.P. 21, Fd 5/8" Rebar 6" Deep  
 N=580322.540 E=2455353.370



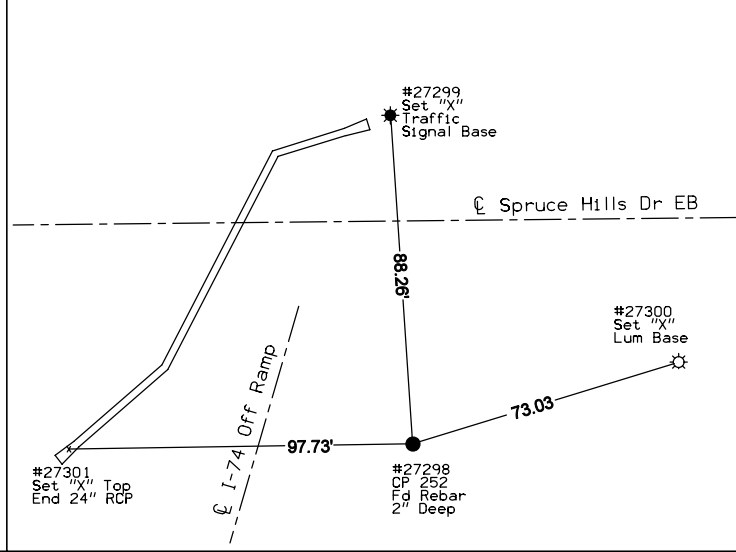




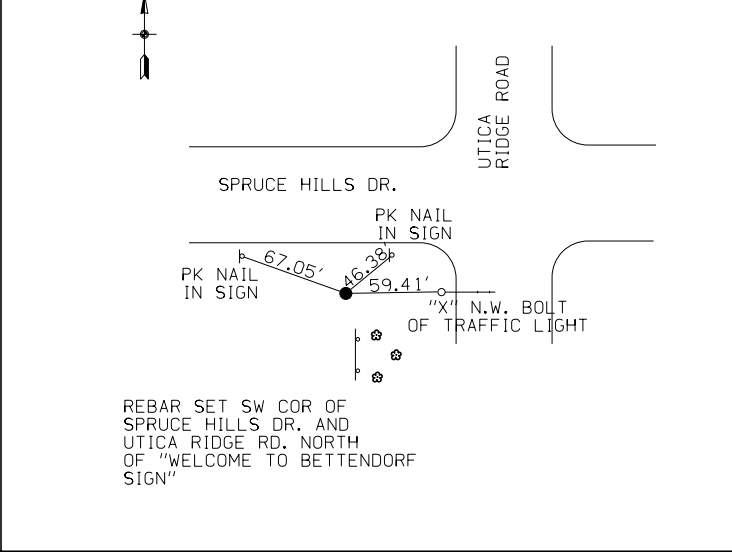
C.P. STA 7311+39.37 LEFT 68.51  
 C.P. 253, Fd 5/8" Rebar W/ Alum Cap 6" Deep  
 N=580492.550 E=2454572.971



C.P. STA 7324+99.56 RIGHT 87.97  
 C.P. 252, Fd 5/8" Rebar 2" Deep  
 N=580350.094 E=2455934.705



C.P. STA 7329+18.19 RIGHT 82.06  
 C.P. 154, Fd 5/8" Rebar Flush  
 N=580360.047 E=2456350.758



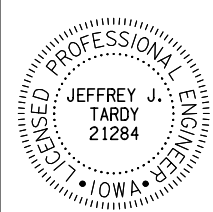
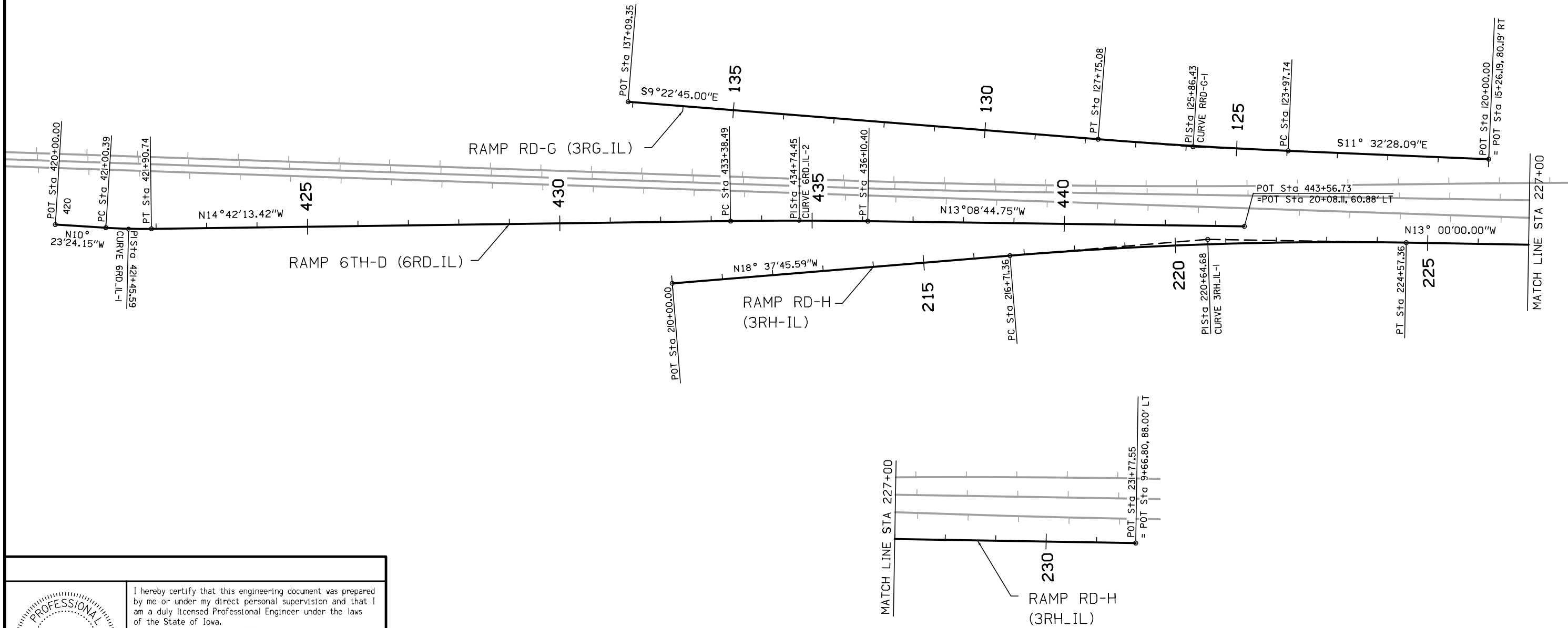
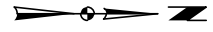


Curve 6RD\_IL-1 (6TH-D)  
 PISTA. = 421+45.59  
 $\Delta = 4^\circ 18' 49.27''$  (LT)  
 $D = 4^\circ 46' 28.73''$   
 $R = 1,200.00'$   
 $T = 45.19'$   
 $L = 90.35'$   
 $E = 0.85'$

Curve 6RD\_IL-2 (6TH-D)  
 PISTA. = 434+74.45  
 $\Delta = 1^\circ 33' 28.68''$  (RT)  
 $D = 0^\circ 34' 22.65''$   
 $R = 10,000.00'$   
 $T = 135.97'$   
 $L = 271.92'$   
 $E = 0.92'$

Curve RRD-G-1 (RD-G)  
 PISTA. = 125+86.43  
 $\Delta = 2^\circ 09' 43.09''$  (RT)  
 $D = 0^\circ 34' 22.65''$   
 $R = 10,000.00'$   
 $T = 188.69'$   
 $L = 377.33'$   
 $E = 1.78'$

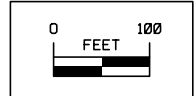
Curve 3RH\_IL-1 (RD-H)  
 PISTA. = 220+64.68  
 $\Delta = 5^\circ 37' 45.59''$  (RT)  
 $D = 0^\circ 42' 58.31''$   
 $R = 8,000.00'$   
 $T = 393.32'$   
 $L = 786.00'$   
 $E = 9.66'$



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: *Jeffrey J. Tardy* Date: 3-1-2019  
 Printed or Typed Name: Jeffrey J. Tardy  
 My license renewal date is December 31, 19\_\_

Pages or sheets covered by this seal: A.1-A-2, G.10-G.17, G.19-G.22, G.24, U.6-U.9



**ALIGNMENTS**  
**Illinois Ramps**

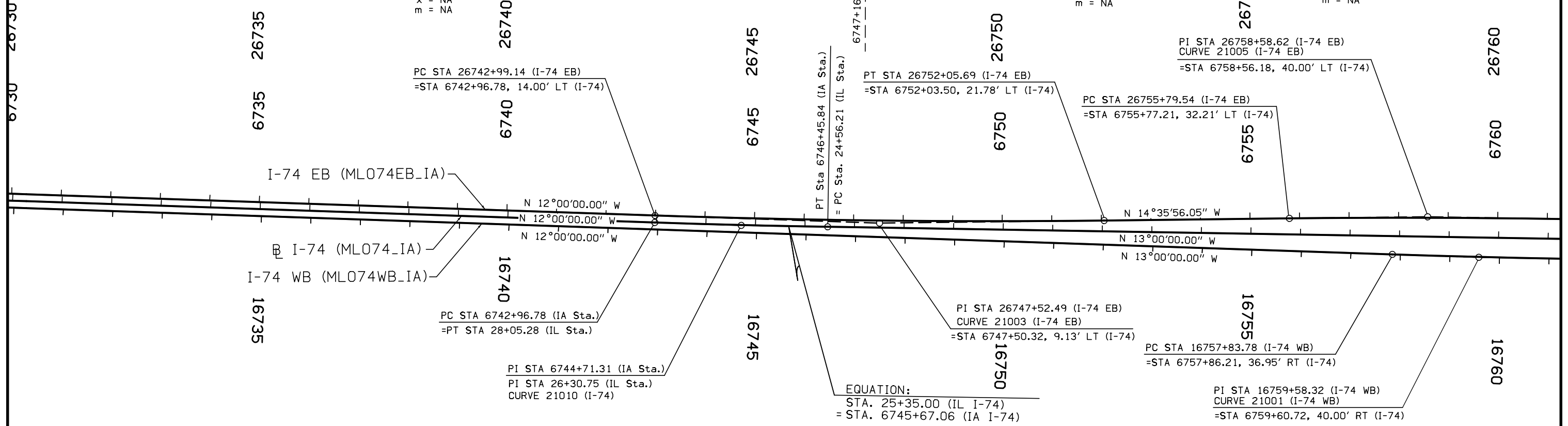


Curve 21010 (I-74)  
 PI Sta 6744+71.31 (IA Sta.)  
 PI Sta 26+30.75 (IL Sta.)  
 $\Delta = 01^{\circ}00'00.00''$  LT  
 $D = 0^{\circ}17'11.32''$   
 $R = 20000.00'$   
 $T = 174.54'$   
 $L = 349.07'$   
 $E = 0.76'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

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)  
 $D = 0^{\circ}17'11.32''$   
 $R = 20,000.00'$   
 $T = 279.08'$   
 $L = 558.12'$   
 $E = 1.95'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

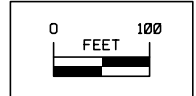
ILLINOIS JURISDICTION | IOWA JURISDICTION

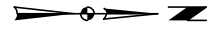


Curve 21001 (I-74 WB)  
 PI Sta 16759+58.32  
 $\Delta = 1^{\circ}00'00.00''$  (LT)  
 $D = 0^{\circ}17'11.32''$   
 $R = 20,000.00'$   
 $T = 174.54'$   
 $L = 349.07'$   
 $E = 0.76'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

FOR RAMP RD-H, RD-G  
 6TH-C, AND 6TH-D,  
 REFER TO ILLINOIS  
 CONTRACT 64E26

ALIGNMENTS  
 I-74 Mainline

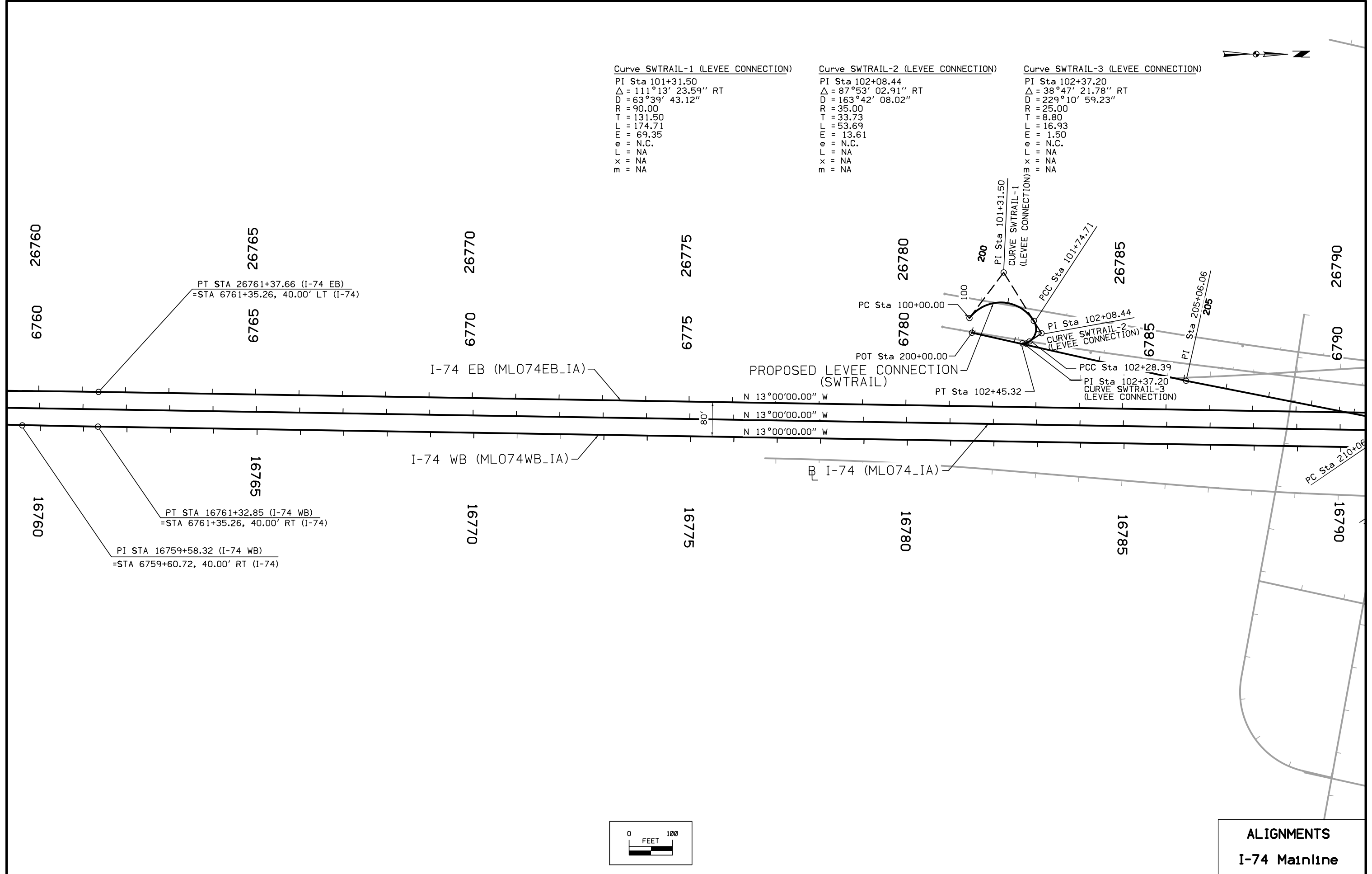




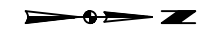
Curve SWTRAIL-1 (LEVEE CONNECTION)  
 PI Sta 101+31.50  
 $\Delta = 111^\circ 13' 23.59''$  RT  
 $D = 63^\circ 39' 43.12''$   
 $R = 90.00$   
 $T = 131.50$   
 $L = 174.71$   
 $E = 69.35$   
 $e =$  N.C.  
 $L =$  NA  
 $x =$  NA  
 $m =$  NA

Curve SWTRAIL-2 (LEVEE CONNECTION)  
 PI Sta 102+08.44  
 $\Delta = 87^\circ 53' 02.91''$  RT  
 $D = 163^\circ 42' 08.02''$   
 $R = 35.00$   
 $T = 33.73$   
 $L = 53.69$   
 $E = 13.61$   
 $e =$  N.C.  
 $L =$  NA  
 $x =$  NA  
 $m =$  NA

Curve SWTRAIL-3 (LEVEE CONNECTION)  
 PI Sta 102+37.20  
 $\Delta = 38^\circ 47' 21.78''$  RT  
 $D = 229^\circ 10' 59.23''$   
 $R = 25.00$   
 $T = 8.80$   
 $L = 16.93$   
 $E = 1.50$   
 $e =$  N.C.  
 $L =$  NA  
 $x =$  NA  
 $m =$  NA



**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)  
 CURVE 21017 (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)

N  $16^{\circ}50'58.23''$  W  
 N  $16^{\circ}50'58.23''$  W  
 N  $16^{\circ}50'58.23''$  W

PI STA. 16797+67.87 (I-74 WB)  
 CURVE 21016 (I-74 WB)  
 =STA. 6797+70.00, 40.35 RT (I-74)

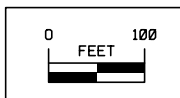
PC STA. 16792+97.39 (I-74 WB)  
 =POC STA. 6792+99.80, 40.00 RT (I-74)

I-74 (MLO74\_IA)

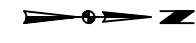
Curve RAMPFI4-1  
 PI Sta 210+91.66  
 $\Delta = 46^{\circ}03'11.72''$  (RT)  
 $D = 28^{\circ}38'52.40''$   
 $R = 200.00$   
 $T = 85.00$   
 $L = 160.76$   
 $E = 17.31$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

Curve RAMPFI4-2  
 PI Sta 212+40.24  
 $\Delta = 51^{\circ}47'52.03''$  (LT)  
 $D = 38^{\circ}11'49.87''$   
 $R = 150.00$   
 $T = 72.83$   
 $L = 135.61$   
 $E = 16.75$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

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



ALIGNMENTS  
 I-74 Mainline



Curve 21020 (I-74)  
 PI Sta 6832+57.30  
 $\Delta = 4^\circ 39' 39.15''$  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  
 $\Delta = 4^\circ 39' 39.15''$  (RT)  
 $D = 0^\circ 14' 56.22''$   
 $R = 23015.00'$   
 $T = 936.62'$   
 $L = 1872.22'$   
 $E = 19.05'$   
 $e =$  N.C.  
 $L =$  NA  
 $x =$  NA  
 $m =$  NA

Curve 21021 (I-74 WB)  
 PI STA. = 16832+56.13  
 $\Delta = 4^\circ 39' 39.15''$  (RT)  
 $D = 0^\circ 14' 57.39''$   
 $R = 22985.00'$   
 $T = 935.40'$   
 $L = 1869.78'$   
 $E = 19.03'$   
 $e =$  N.C.  
 $L =$  NA  
 $x =$  NA  
 $m =$  NA

PI STA. 26832+58.47 (I-74 EB)  
 CURVE 21022 (I-74 EB)  
 =STA. 6832+56.79, 34.05' LT (I-74)

PI STA. 16832+56.13 (I-74 WB)  
 CURVE 21021 (I-74 WB)  
 =STA. 6832+56.79, 4.03' LT (I-74)

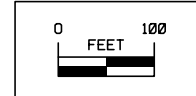
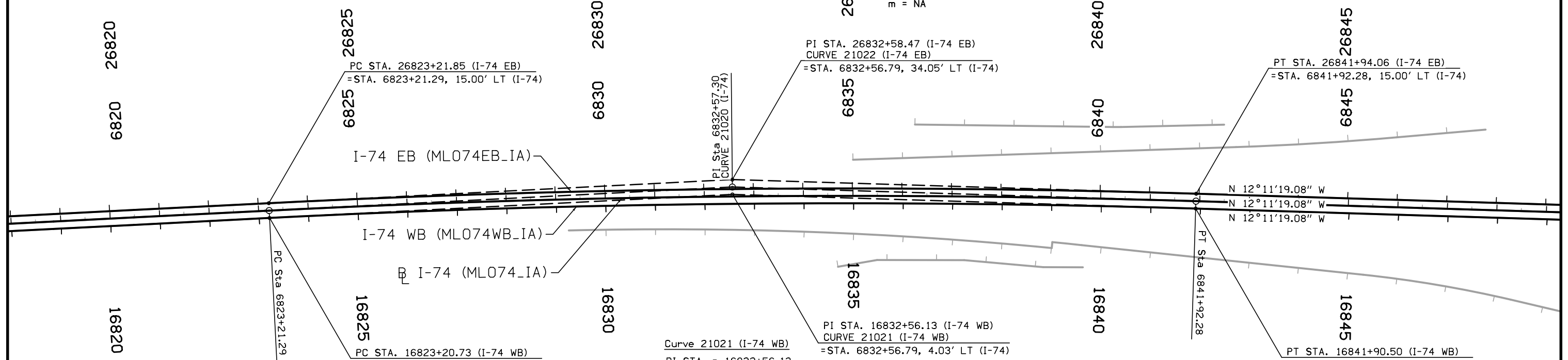
PC STA. 26823+21.85 (I-74 EB)  
 =STA. 6823+21.29, 15.00' LT (I-74)

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

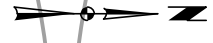
PT STA. 26841+94.06 (I-74 EB)  
 =STA. 6841+92.28, 15.00' LT (I-74)

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

N 12°11'19.08" W  
 N 12°11'19.08" W  
 N 12°11'19.08" W



**ALIGNMENTS**  
 I-74 Mainline



Curve 20110 (RAMP C)  
 PI Sta 3586+05.19  
 $\Delta = 3^\circ 17' 46.82''$  (LT)  
 $D = 0^\circ 42' 58.31''$   
 $R = 8000.00'$   
 $T = 230.19'$   
 $L = 460.26'$   
 $E = 3.31'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

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

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)

PI Sta 2579+42.72  
 CURVE 20060 (RAMP B)

PI Sta 3586+05.19  
 CURVE 20110 (RAMP C)

PT Sta 3588+35.26

PC Sta 2586+35.44

PT Sta 2589+74.70

STA. 6776+75.00, 88.00 RT (I-74)  
 = PC STA. 2576+75.00 (RAMP B)

PT Sta 2582+10.23

PI Sta 2588+05.10  
 CURVE 20065 (RAMP B)

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

$N 9^\circ 10' 00.00'' W$

$N 11^\circ 35' 47.23'' W$

$N 15^\circ 15' 47.26'' W$

2580

2585

US 67 RAMP B  
(671B)

2590

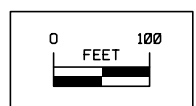
2595

US 67 RAMP D

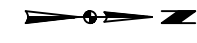
POT Sta 14498+50.00

Curve 20060 (RAMP B)  
 PI Sta 2579+42.72  
 $\Delta = 3^\circ 50' 00.00''$  RT  
 $D = 0^\circ 42' 58.31''$   
 $R = 8000.00'$   
 $T = 267.72'$   
 $L = 535.23'$   
 $E = 4.48'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

Curve 20065 (RAMP B)  
 PI Sta 2588+05.10  
 $\Delta = 2^\circ 25' 47.23''$  LT  
 $D = 0^\circ 42' 58.31''$   
 $R = 8000.00'$   
 $T = 169.66'$   
 $L = 339.26'$   
 $E = 1.80'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$



**ALIGNMENTS**  
**US 67 Ramps**



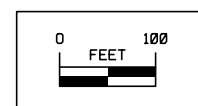
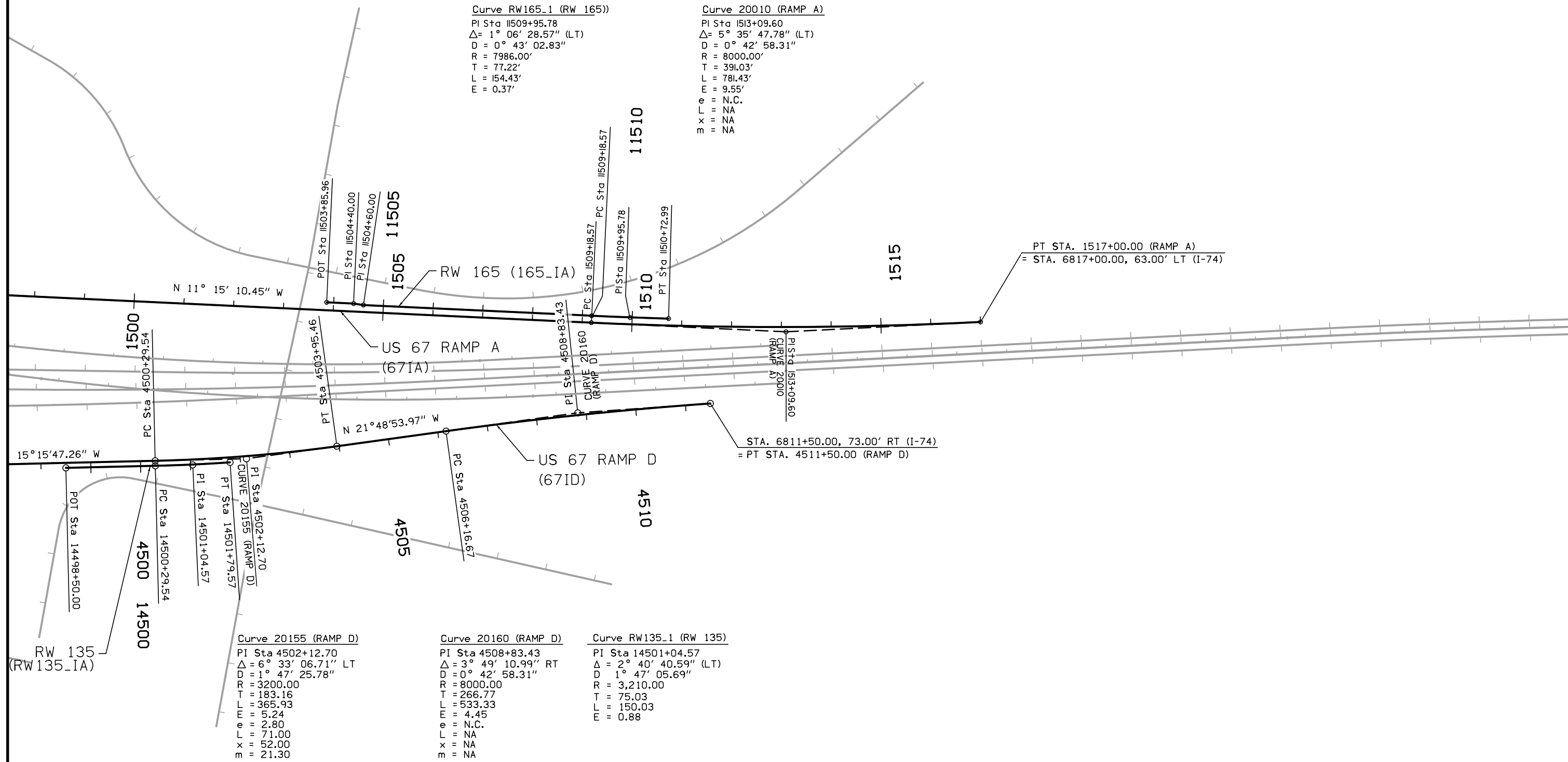
Curve RW165\_1 (RW 165))  
 PI Sta 11509+95.78  
 $\Delta = 1^\circ 06' 28.57''$  (LT)  
 $D = 0^\circ 43' 02.83''$   
 $R = 7986.00'$   
 $T = 77.22'$   
 $L = 154.43'$   
 $E = 0.37'$

Curve 20010 (RAMP A)  
 PI Sta 1513+09.60  
 $\Delta = 5^\circ 35' 47.78''$  (LT)  
 $D = 0^\circ 42' 58.31''$   
 $R = 8000.00'$   
 $T = 391.03'$   
 $L = 781.43'$   
 $E = 9.55'$   
 $\phi =$  N.C.  
 $L =$  NA  
 $X =$  NA  
 $B =$  NA

Curve 20155 (RAMP D)  
 PI Sta 4502+12.70  
 $\Delta = 6^\circ 33' 06.71''$  LT  
 $D = 1^\circ 47' 25.78''$   
 $R = 3200.00'$   
 $T = 183.16'$   
 $L = 365.93'$   
 $E = 5.24'$   
 $\phi =$  2.80  
 $L =$  71.00  
 $X =$  52.00  
 $B =$  21.30

Curve 20160 (RAMP D)  
 PI Sta 4508+83.43  
 $\Delta = 3^\circ 49' 10.99''$  RT  
 $D = 0^\circ 42' 58.31''$   
 $R = 8000.00'$   
 $T = 266.77'$   
 $L = 533.33'$   
 $E = 4.45'$   
 $\phi =$  N.C.  
 $L =$  NA  
 $X =$  NA  
 $B =$  NA

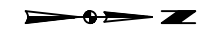
Curve RW135\_1 (RW 135)  
 PI Sta 14501+04.57  
 $\Delta = 2^\circ 40' 40.59''$  (LT)  
 $D = 1^\circ 47' 05.69''$   
 $R = 3,210.00'$   
 $T = 75.03'$   
 $L = 150.03'$   
 $E = 0.88'$



**ALIGNMENTS**  
**US 67 Ramps**

Curve MDIC\_01-1 (INTERIM RAMP C)

PI Sta. = 3544+35.84  
 $\Delta = 3^\circ 06' 08.24''$  (LT)  
 $D = 0^\circ 57' 17.75''$   
 $R = 6,000.00'$   
 $T = 162.48'$   
 $L = 324.87'$   
 $E = 2.20'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$



POT Sta 3535+00.00 (INTERIM RAMP C)  
 Sta 6835+00.00, 73.00' LT (I-74)

MIDDLE ROAD INTERIM RAMP C  
 (MDIC\_01)

$N15^\circ 50' 21.39'' W$

PC Sta 3542+73.36

PT Sta 3545+98.23

POT Sta 3547+78.45

PI Sta 2534+13.55  
 CURVE MDIB\_01-1

PC Sta 2529+25.00 (INTERIM RAMP B)  
 Sta. 6829+25.00, 63.00' RT (I-74)

PT Sta 2539+00.89

PT Sta 2539+60.65  
 PI Sta 2539+30.77  
 CURVE MDIB\_01-2  
 PC Sta 2539+00.89

$N7^\circ 55' 44.15'' W$

PI Sta 3544+35.84  
 CURVE MDIC\_01-1

PI Sta 2546+82.88  
 CURVE MDIB\_01-3

$N0^\circ 43' 03.31'' W$

POT Sta 2550+66.79

PC Sta 2545+31.65

PT Sta 2548+33.71

MIDDLE ROAD INTERIM RAMP B  
 (MDIB\_01)

Curve MDIB\_01-1 (INTERIM RAMP B)

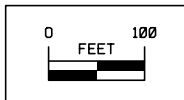
PI Sta. = 2534+13.55  
 $\Delta = 6^\circ 59' 21.45''$  (RT)  
 $D = 0^\circ 42' 58.31''$   
 $R = 8,000.00'$   
 $T = 488.55'$   
 $L = 975.89'$   
 $E = 14.90'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

Curve MDIB\_01-2 (INTERIM RAMP B)

PI Sta. = 2539+30.77  
 $\Delta = 0^\circ 25' 38.55''$  (RT)  
 $D = 0^\circ 42' 54.45''$   
 $R = 8,012.00'$   
 $T = 29.88'$   
 $L = 59.76'$   
 $E = 0.06'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

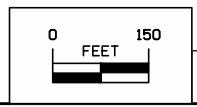
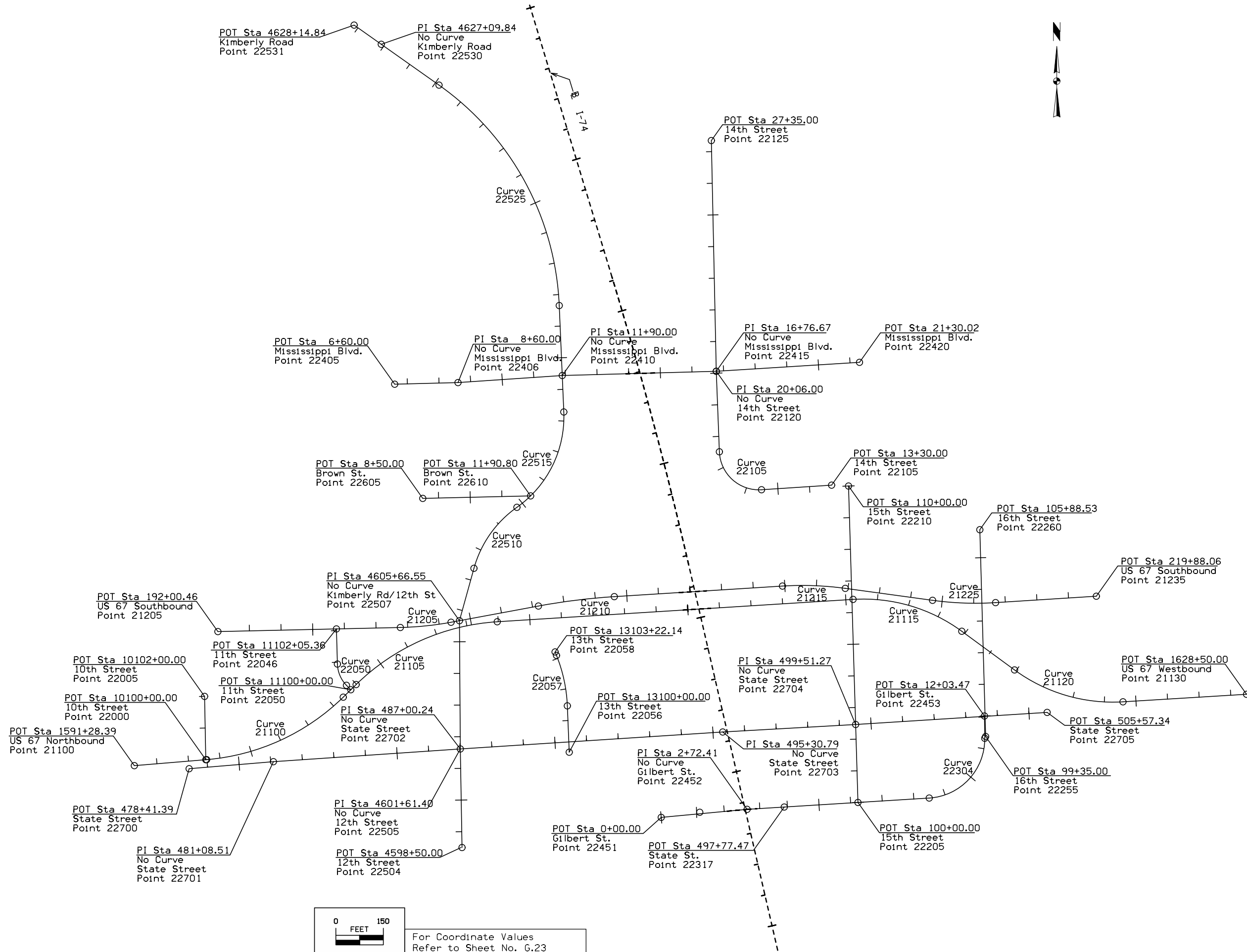
Curve MDIB\_01-3 (INTERIM RAMP B)

PI Sta. = 2546+82.88  
 $\Delta = 7^\circ 12' 40.84''$  (RT)  
 $D = 2^\circ 23' 14.37''$   
 $R = 2,400.00'$   
 $T = 151.23'$   
 $L = 302.07'$   
 $E = 4.76'$   
 $e = \text{N.C.}$   
 $L = \text{NA}$   
 $x = \text{NA}$   
 $m = \text{NA}$

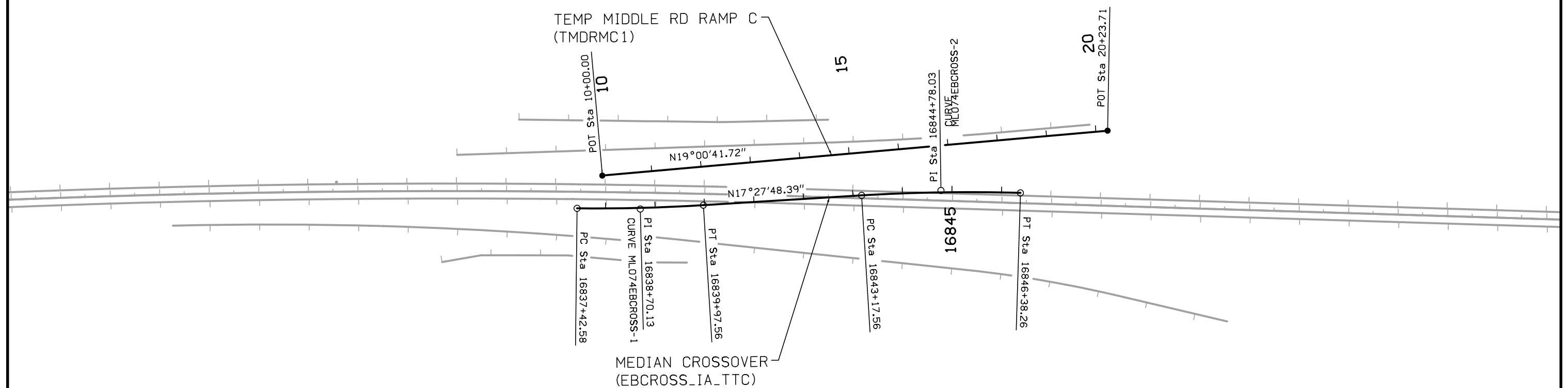
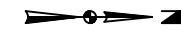


ALIGNMENTS  
 Middle Rd Ramps



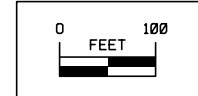


For Coordinate Values  
Refer to Sheet No. G.23

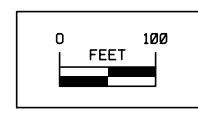
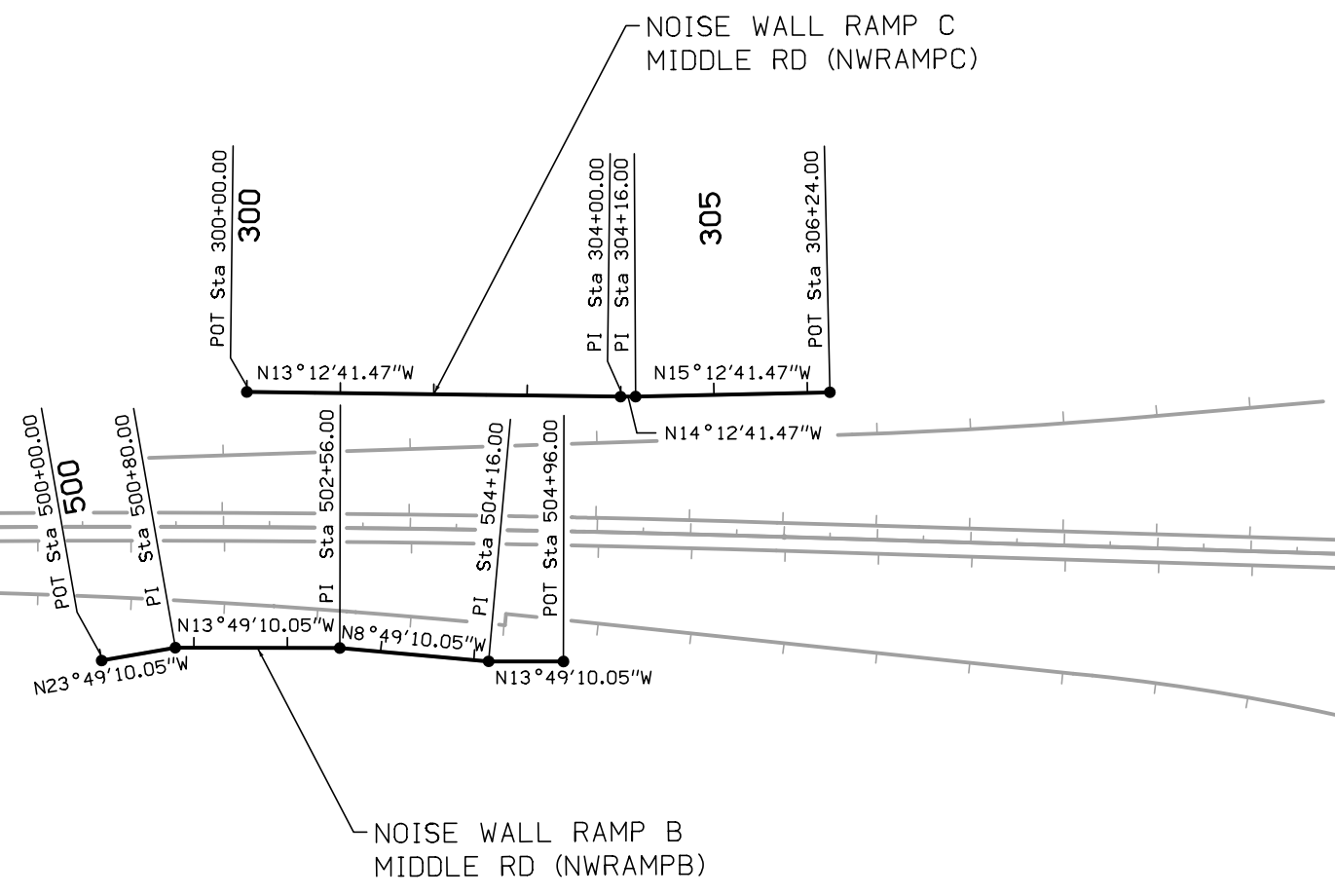
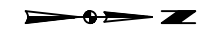


Curve ML074EBCROSS-1  
 PI Sta. = 16838+70.13  
 $\Delta = 4^{\circ}09' 16.35''$  (LT)  
 $D = 1^{\circ}37' 45.63''$   
 $R = 3,516.5'$   
 $T = 127.55'$   
 $L = 254.98'$   
 $E = 2.31'$   
 $e =$  N.C.  
 $L =$  NA  
 $x =$  NA  
 $m =$  NA

Curve ML074EBCROSS-2  
 PI Sta. = 16844+78.03  
 $\Delta = 5^{\circ} 16' 29.32''$  (RT)  
 $D = 1^{\circ} 38' 41.19''$   
 $R = 3,483.5'$   
 $T = 160.46'$   
 $L = 320.70'$   
 $E = 3.69'$   
 $e =$  N.C.  
 $L =$  NA  
 $x =$  NA  
 $m =$  NA



ALIGNMENTS  
 DETOUR



ALIGNMENTS  
Noise Walls



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)
SWTRAIL-1	PROPOSED LEVEE						100+00.00	568692.07	2458131.98	101+31.50	568743.30	2458010.87	101+74.71	568837.65	2458102.47				
SWTRAIL-2	CONNECTION						101+74.71	568837.65	2458102.47	102+08.44	568861.85	2458125.97	102+28.39	568839.27	2458151.02				
SWTRAIL-3							102+28.39	568839.27	2458151.02	102+37.20	568833.37	2458157.56	102+45.32	568824.69	2458158.96				
NWRAMPB	NOISEWALL RAMP B																		
NW30	MIDDLE RD	500+00.00	573923.91	2457120.59															
NW31		500+80.00	573997.10	2457088.28															
NW32		502+56.00	574168.01	2457046.24															
NW33		504+16.00	574326.11	2457021.71															
NW34		504+96.00	574403.80	2457002.60															
NWRAMP C	NOISEWALL RAMP C																		
NW10	MIDDLE RD	300+00.00	574005.49	2456804.27															
NW11		304+00.00	574394.90	2456712.85															
NW12		304+16.00	574410.42	2456708.92															
NW13		306+24.00	574611.13	2456654.35															
RW135-IA	RET WALL 135																		
RW100		14498+50.00	570458.52	2458133.23															
RW135_1							14500+29.54	570631.73	2458085.97	14501+04.57	570704.11	2458066.22	14501+79.57	570775.49	2458043.10				
RF154	TEMP RAMP B	200+00.00	568705.76	2458163.39															
RF155	TEMP RAMP B	205+06.06	569211.69	2458151.94															
RAMP RF14-1	TEMP RAMP B						210+06.65	569711.68	2458127.46	210+91.66	569796.58	2458123.30	211+67.41	569858.50	2458181.55				
RAMP RF14-2	TEMP RAMP B						211+67.41	569858.50	2458181.55	212+40.24	569911.55	2458231.45	213+03.02	569983.57	2458220.63				
RF156	TEMP RAMP B	213+70.54	570050.35	2458210.59															



**SPIRAL OR CIRCULAR CURVE DATA**

101-17  
04-19-11

Name	Location	Δ <sub>s</sub> <sub>cs</sub>	Horizontal Alignment Data													Remarks	
			Spiral Data					Curve Data									
			θs	Ls	Ts	Es	Xc	Yc	L.T.	S.T.	Δ <sub>c</sub>	T	L	R	E		
ML074_IA 21010	I-74 MAINLINE										1°00'00.00" LT	174.54'	349.07'	20,000.00'	0.76'		
21015											3°50'58.23" LT	470.48'	940.61'	14,000.00'	7.90'		
21020												4°39'39.15" RT	936.01'	1,871.00'	23,000.00'	19.04'	
ML074EB_IA 21003	I-74 EB										2°35'56.05" LT	453.35'	906.55'	19,986.00'	5.14'		
21005											1°35'56.05" RT	279.08'	558.12'	20,000.00'	1.95'		
21017												3°50'58.22" LT	470.48'	940.61'	14,000.00'	7.90'	
21022												4°39'39.15" RT	936.62'	1,872.22'	23,015.00'	19.05'	
ML074WB_IA 21001	I-74 WB										1°00'00.00" LT	174.54'	349.07'	20,000.00'	0.76'		
21016											3°50'58.24" LT	470.48'	940.61'	14,000.00'	7.90'		
21021												4°39'39.15" RT	935.40'	1,869.78'	22,985.00'	19.03'	
671A 20010	RAMP A										5°35'47.78" LT	391.03'	781.43'	8,000.00'	9.55'		
671B 20060 20065	RAMP B										3°50'00.00" RT	267.72'	535.23'	8,000.00'	4.48'		
												2°25'47.23" LT	169.66'	339.26'	8,000.00'	1.80'	
671C 20110	RAMP C										3°17'46.82" LT	230.19'	460.26'	8,000.00'	3.31'		
671D 20155 20160	RAMP D										6°33'06.71" LT	183.16'	365.93'	3,200.00'	5.24'		
												3°49'10.99" RT	266.77'	533.33'	8,000.00'	4.45'	
3RG_IL RRD-G-1	RAMP RD-G										2°09'43.09" RT	188.69'	377.33'	10,000.00'	1.78'		
3RH_IL 3RHIL-1	RAMP RD-H										5°37'45.59" RT	393.32'	786.00'	8,000.00'	9.66'		
6RD_IL 6RDIL-1 6RDIL-2	RAMP 6TH-D										4°18'49.27" LT	45.19'	90.35'	1,200.00'	0.85'		
												1°33'28.68" RT	135.97'	271.92'	10,000.00'	0.92'	
RW165_IA RW165 1	RET WALL 165										1°06'28.57" LT	77.22'	154.43'	7,986.00'	0.37'		
MDIB 01 MDIB 01-1 MDIB 01-2 MDIB 01-3	MIDDLE RD RAMP B										6°59'21.45" RT	488.55'	975.89'	8000.00'	14.9'		
												0°25'38.55" RT	29.88'	59.76'	8012.00'	0.06'	
												7°12'40.84" RT	151.23'	302.07'	2400.00'	4.76'	
MDIC 01 MDIC 01-1	MIDDLE RD RAMP C										3°06'08.24" LT	162.48'	324.87'	6000.00'	2.20'		
EBCROSS_IA_TTC ML074EBCROSS-1 ML074EBCROSS-2	TEMP MEDIAN CROSS OVER										4°09'16.35" LT	127.55'	254.98'	3516.50'	2.31'		
												5°16'29.32" RT	160.46'	320.70'	3483.50'	3.69'	
SWTRAIL-1 SWTRAIL-2 SWTRAIL-3	PROPOSED LEVEE CONNECTION										111°13'23.59" RT	131.50'	174.71'	90.00'	69.35'		
												87°53'02.91" RT	33.73'	53.69'	35.00'	13.61'	
												38°47'21.78" RT	8.80'	16.93'	25.00'	1.50'	
RW135_IA RW135 1	RET WALL 135										2°40'40.59" LT	75.03'	150.03'	3,210.00'	0.88'		
RAMPRF14-1 RAMPRF14-2	TEMP RAMP B										46°03'11.72" RT	85.00'	160.76'	200.00'	17.31'		
	TEMP RAMP B										51°47'52.03" LT	72.83'	135.61'	150.00'	16.75'		

**SUPERELEVATION DATA**

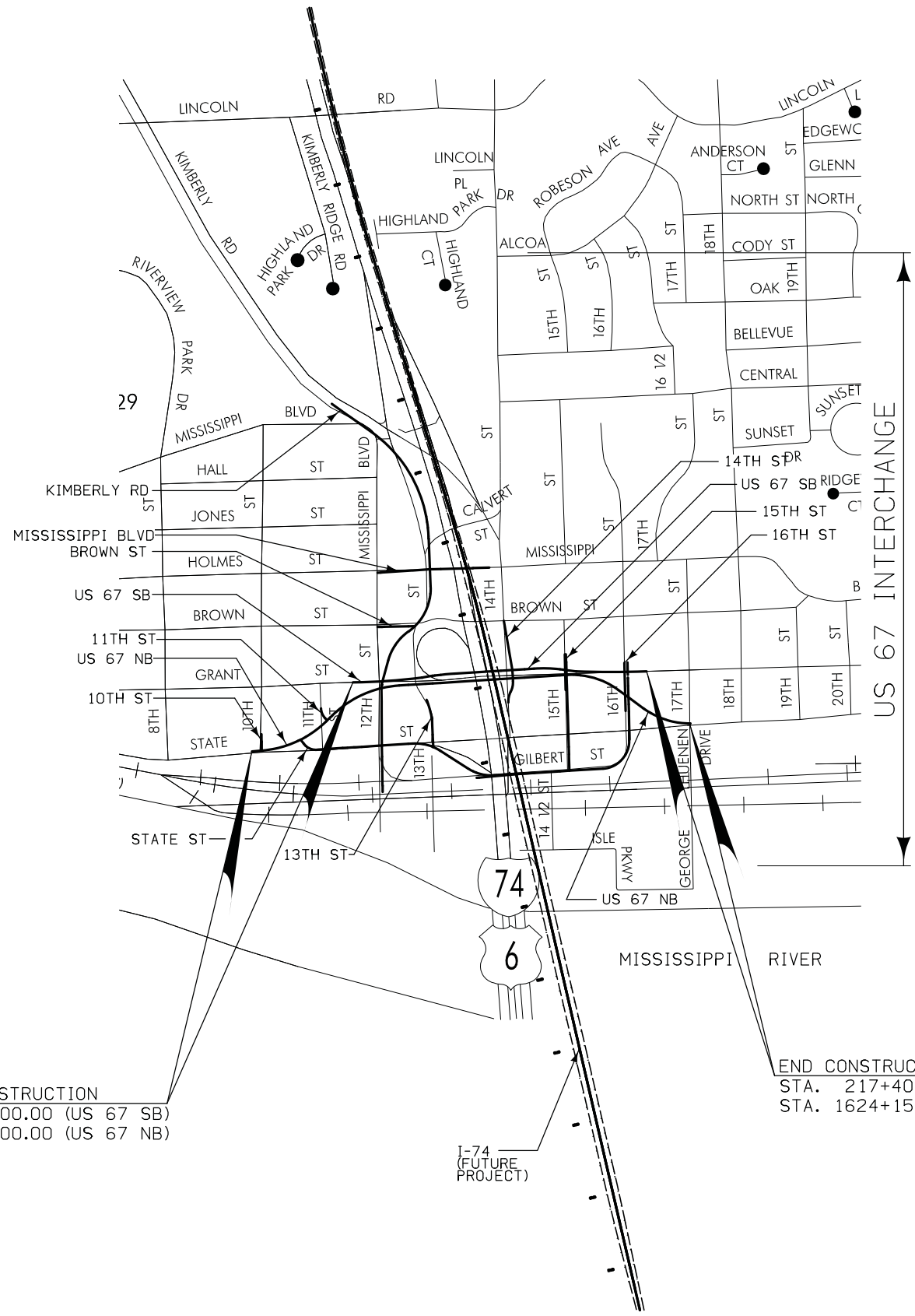
See PV-300 Series

Road Identification	Circular Curve or Spiral Curve Name	Radius	Superelevation Data			Standard Road Plan	Section A-A	Section B-B	Section C-C	Section D-D	Section E-E	Section F-F	Case A	Case B	Case C	Case S	Case T	Case U	Remarks	
			e %	L FT	x FT															
14th St.	Curve 22105	125	4.0	65	32	PV-301	14+74.34 18+29.03	15+06.34 17+97.03	15+38.34 17+65.03	15+71.34 17+32.03			15+51.84 17+51.53			15+06.34 17+97.03				





CITY OF BETTENDORF SCOTT COUNTY, IA



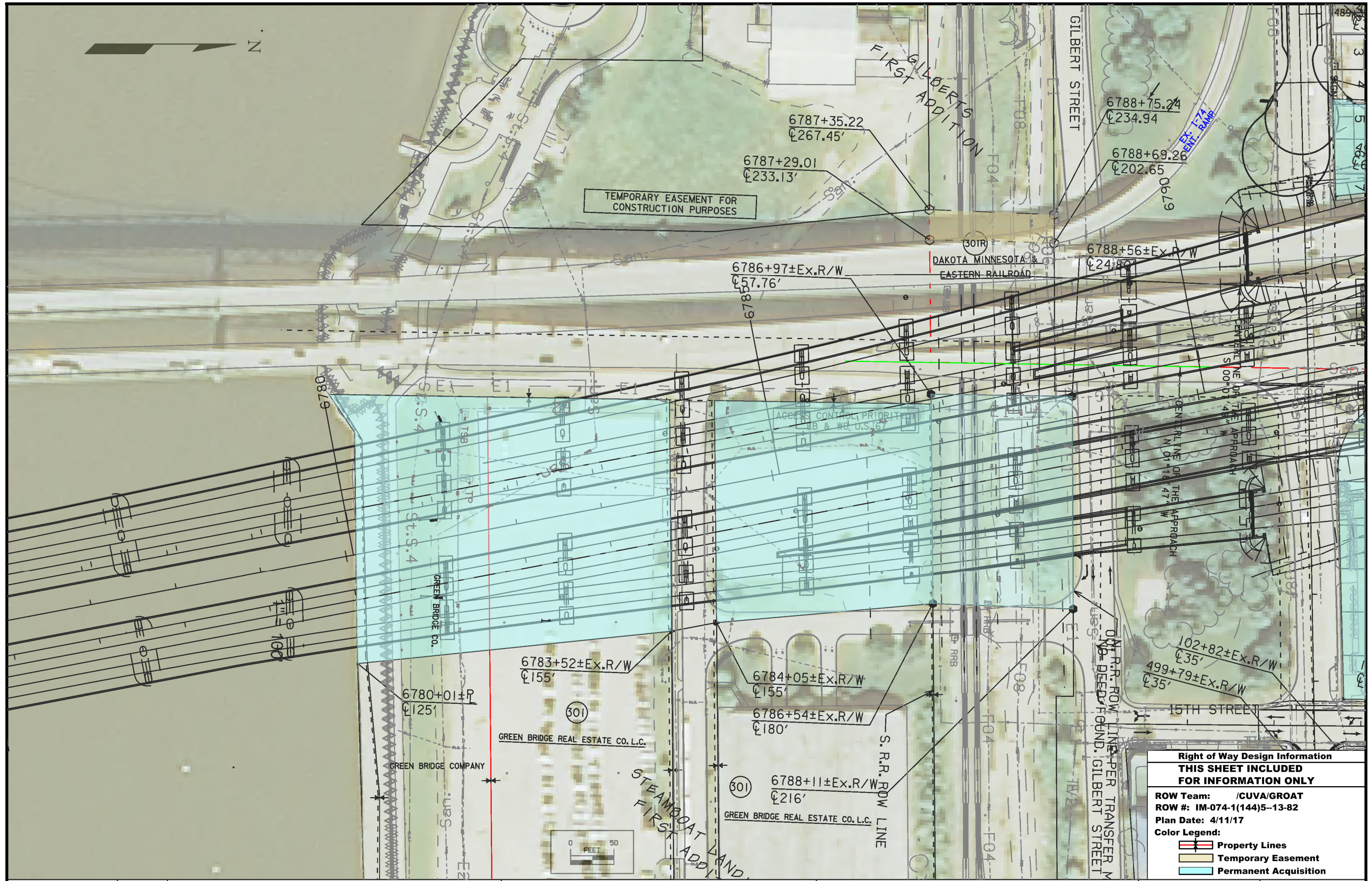
BEGIN CONSTRUCTION  
STA 197+00.00 (US 67 SB)  
STA 1593+00.00 (US 67 NB)

END CONSTRUCTION  
STA. 217+40.00 (US 67 SB)  
STA. 1624+15.00 (US 67 NB)

I-74  
(FUTURE PROJECT)

PROJECT LOCATION



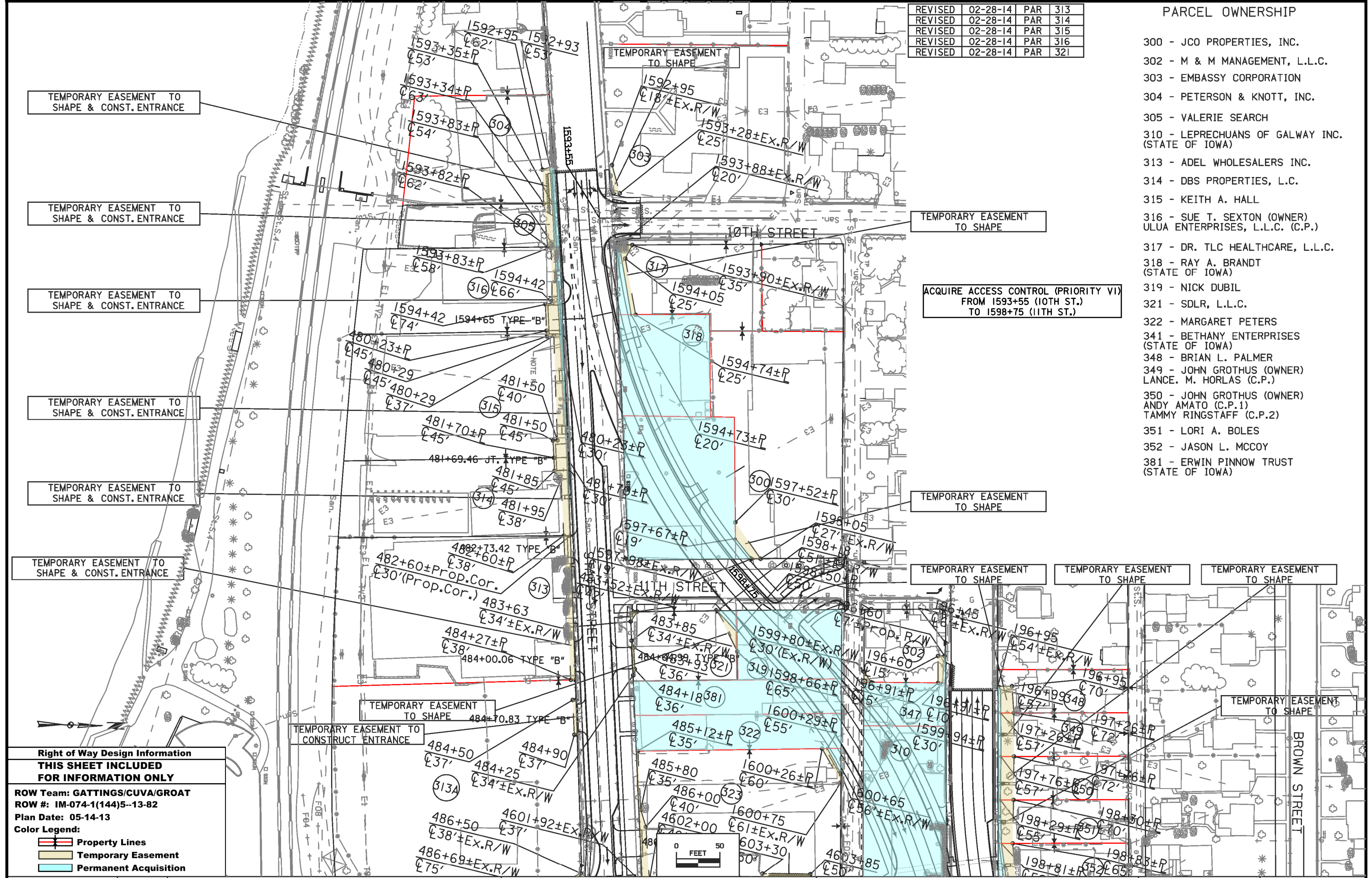


Right of Way Design Information	
<b>THIS SHEET INCLUDED FOR INFORMATION ONLY</b>	
ROW Team:	/CUVA/GROAT
ROW #:	IM-074-1(144)5--13-82
Plan Date:	4/11/17
<b>Color Legend:</b>	
	Property Lines
	Temporary Easement
	Permanent Acquisition

REVISED	02-28-14	PAR	313
REVISED	02-28-14	PAR	314
REVISED	02-28-14	PAR	315
REVISED	02-28-14	PAR	316
REVISED	02-28-14	PAR	321

PARCEL OWNERSHIP

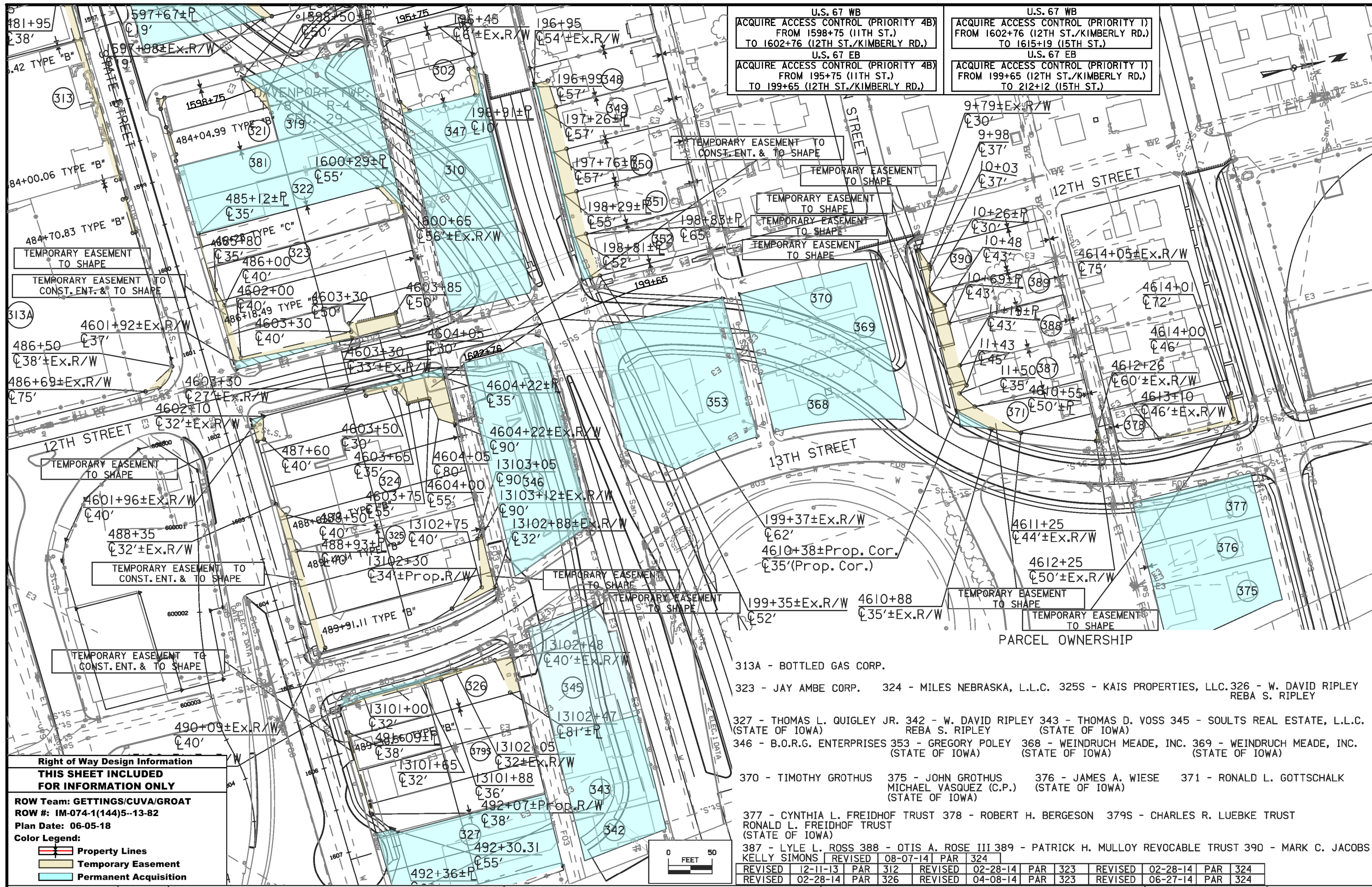
- 300 - JCO PROPERTIES, INC.
- 302 - M & M MANAGEMENT, L.L.C.
- 303 - EMBASSY CORPORATION
- 304 - PETERSON & KNOTT, INC.
- 305 - VALERIE SEARCH
- 310 - LEPRECHUANS OF GALWAY INC. (STATE OF IOWA)
- 313 - ADEL WHOLESALERS INC.
- 314 - DBS PROPERTIES, L.C.
- 315 - KEITH A. HALL
- 316 - SUE T. SEXTON (OWNER) 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
- 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
  - Temporary Easement
  - Permanent Acquisition





U.S. 67 WB  
 ACQUIRE ACCESS CONTROL (PRIORITY 4B)  
 FROM 1598+75 (11TH ST.)  
 TO 1602+76 (12TH ST./KIMBERLY RD.)  
 U.S. 67 EB  
 ACQUIRE ACCESS CONTROL (PRIORITY 4B)  
 FROM 195+75 (11TH ST.)  
 TO 199+65 (12TH ST./KIMBERLY RD.)

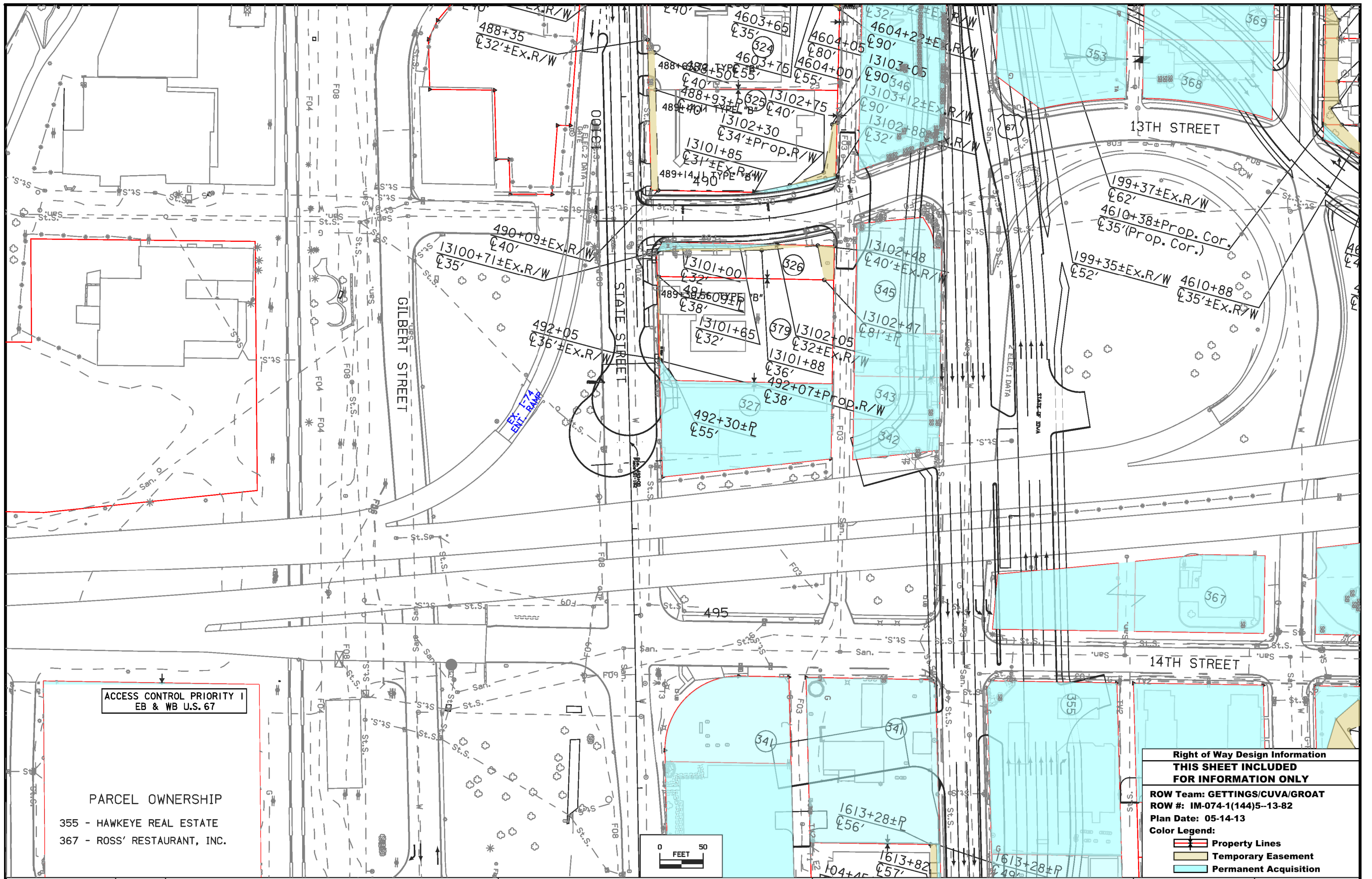
U.S. 67 WB  
 ACQUIRE ACCESS CONTROL (PRIORITY 1)  
 FROM 1602+76 (12TH ST./KIMBERLY RD.)  
 TO 1615+19 (15TH ST.)  
 U.S. 67 EB  
 ACQUIRE ACCESS CONTROL (PRIORITY 1)  
 FROM 199+65 (12TH ST./KIMBERLY RD.)  
 TO 212+12 (15TH ST.)

**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: 06-05-18  
 Color Legend:  
 Property Lines  
 Temporary Easement  
 Permanent Acquisition

- 313A - BOTTLED GAS CORP.  
 323 - JAY AMBE CORP. 324 - MILES NEBRASKA, L.L.C. 325S - KAIS PROPERTIES, LLC. 326 - W. DAVID RIPLEY REBA S. RIPLEY  
 327 - THOMAS L. QUIGLEY JR. 342 - W. DAVID RIPLEY 343 - THOMAS D. VOSS 345 - SOULTS REAL ESTATE, L.L.C. (STATE OF IOWA) REBA S. RIPLEY (STATE OF IOWA)  
 346 - B.O.R.G. ENTERPRISES 353 - GREGORY POLEY 368 - WEINDRUCH MEADE, INC. 369 - WEINDRUCH MEADE, INC. (STATE OF IOWA) (STATE OF IOWA)  
 370 - TIMOTHY GROTHUS 375 - JOHN GROTHUS 376 - JAMES A. WIESE 371 - RONALD L. GOTTSCHALK (STATE OF IOWA) MICHAEL VASQUEZ (C.P.) (STATE OF IOWA)  
 377 - CYNTHIA L. FREIDHOF TRUST 378 - ROBERT H. BERGESON 379S - CHARLES R. LUEBKE TRUST RONALD L. FREIDHOF TRUST (STATE OF IOWA)  
 387 - LYLE L. ROSS 388 - OTIS A. ROSE III 389 - PATRICK H. MULLOY REVOCABLE TRUST 390 - MARK C. JACOBS KELLY SIMONS [REVISED 08-07-14] PAR 324

REVISED 12-11-13	PAR 312	REVISED 02-28-14	PAR 323	REVISED 02-28-14	PAR 324
REVISED 02-28-14	PAR 326	REVISED 04-08-14	PAR 323	REVISED 06-27-14	PAR 324



ACCESS CONTROL PRIORITY I  
EB & WB U.S. 67

PARCEL OWNERSHIP

355 - HAWKEYE REAL ESTATE  
367 - ROSS' RESTAURANT, INC.

**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:**

-  Property Lines
-  Temporary Easement
-  Permanent Acquisition

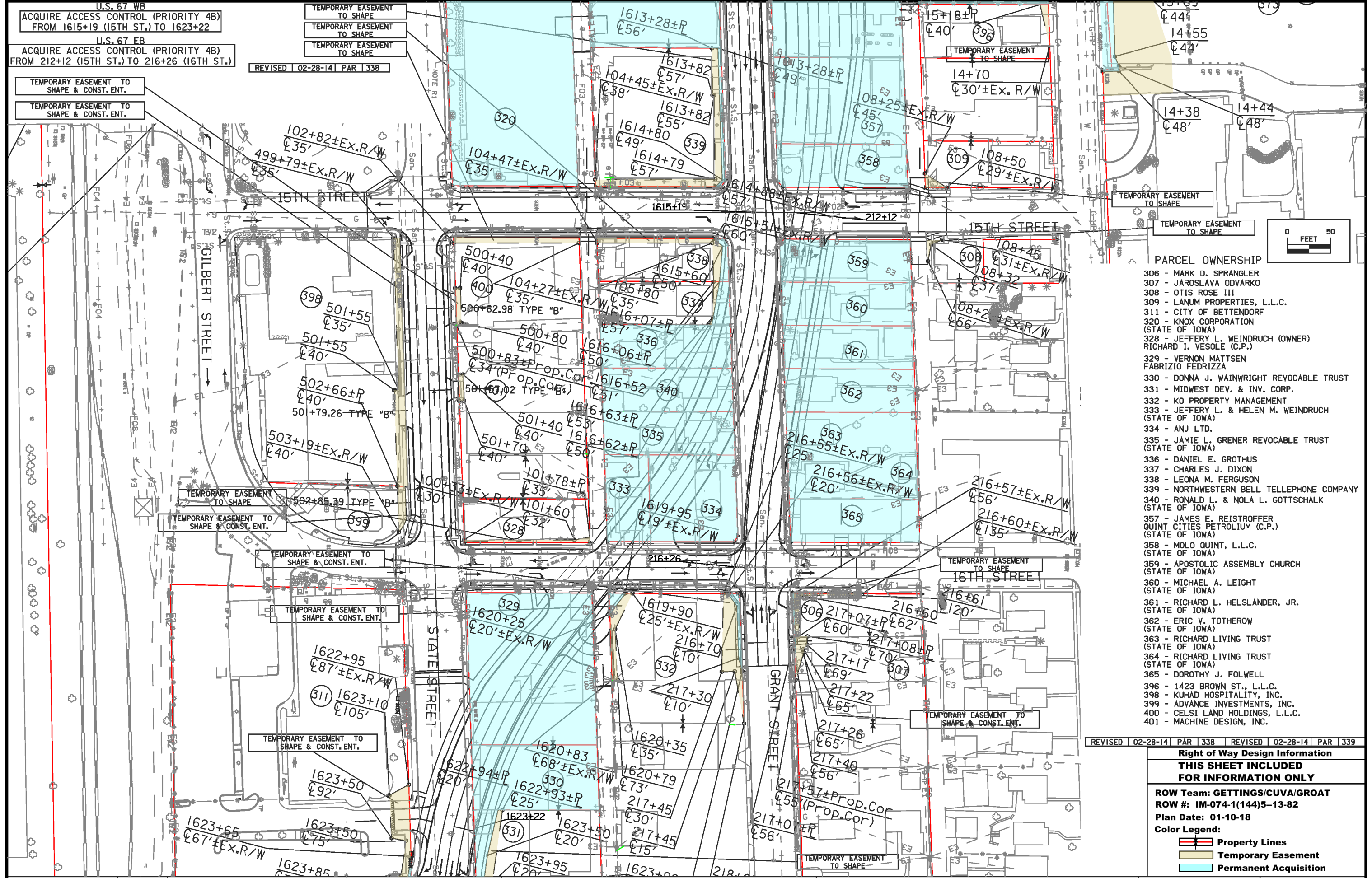


U.S. 67 WB  
ACQUIRE ACCESS CONTROL (PRIORITY 4B)  
FROM 1615+19 (15TH ST.) TO 1623+22

U.S. 67 EB  
ACQUIRE ACCESS CONTROL (PRIORITY 4B)  
FROM 212+12 (15TH ST.) TO 216+26 (16TH ST.)

TEMPORARY EASEMENT TO SHAPE  
TEMPORARY EASEMENT TO SHAPE  
TEMPORARY EASEMENT TO SHAPE  
REVISD 02-28-14 PAR 338

TEMPORARY EASEMENT TO SHAPE & CONST. ENT.  
TEMPORARY EASEMENT TO SHAPE & CONST. ENT.



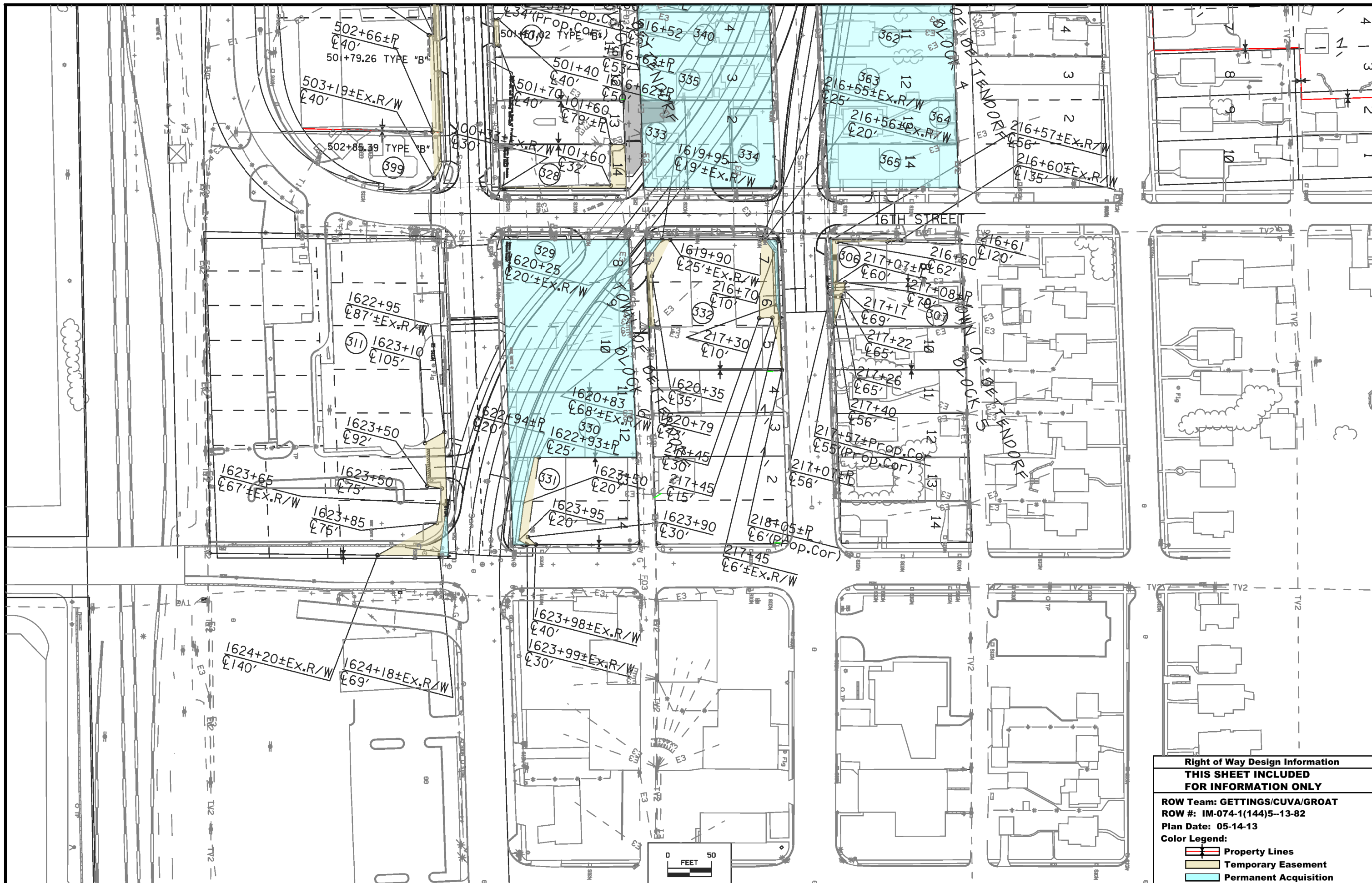
- PARCEL OWNERSHIP
- 306 - MARK D. SPRANGLER
  - 307 - JAROSLAVA ODVAROKO
  - 308 - OTIS ROSE III
  - 309 - LANUM PROPERTIES, L.L.C.
  - 311 - CITY OF BETTENDORF
  - 320 - KNOX CORPORATION (STATE OF IOWA)
  - 328 - JEFFERY L. WEINDRUCH (OWNER) RICHARD I. VESOLE (C.P.)
  - 329 - VERNON MATTSSEN FABRIZIO 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 TELEPHONE COMPANY
  - 340 - RONALD L. & NOLA L. GOTTSCHALK (STATE OF IOWA)
  - 357 - JAMES E. REISTROFFER QUINT CITIES PETROLEUM (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
  - 396 - 1423 BROWN ST., L.L.C.
  - 398 - KUHAD HOSPITALITY, INC.
  - 399 - ADVANCE INVESTMENTS, INC.
  - 400 - CELSI LAND HOLDINGS, L.L.C.
  - 401 - MACHINE DESIGN, INC.

REVISD 02-28-14 PAR 338 REVISD 02-28-14 PAR 338

**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: 01-10-18

Color Legend:  
Property Lines  
Temporary Easement  
Permanent Acquisition

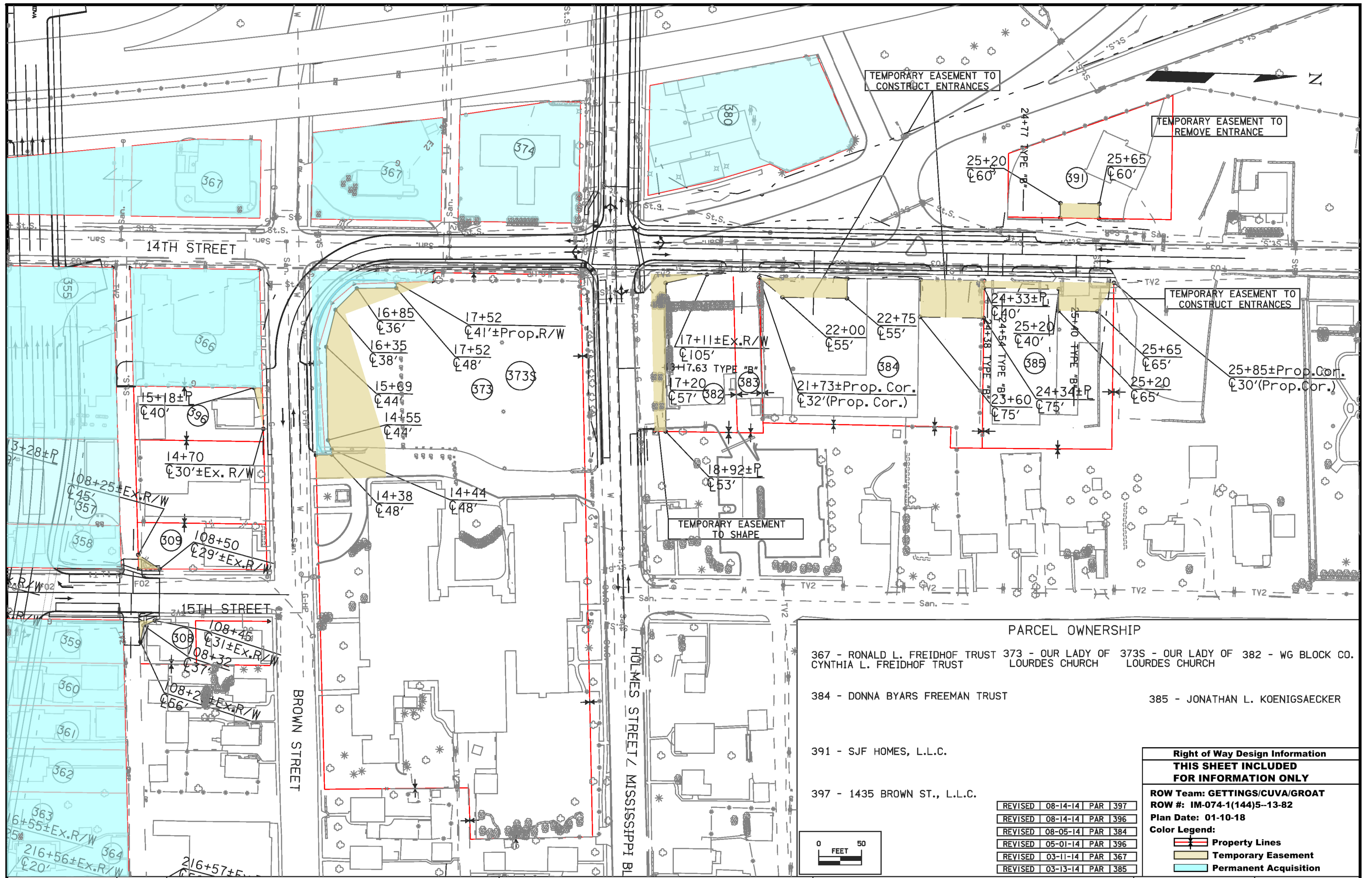


**Right of Way Design Information  
THIS SHEET INCLUDED  
FOR INFORMATION ONLY**

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

**Color Legend:**

- Property Lines
- Temporary Easement
- Permanent Acquisition

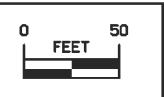


PARCEL OWNERSHIP

367 - RONALD L. FREIDHOF TRUST CYNTHIA L. FREIDHOF TRUST	373 - OUR LADY OF LOURDES CHURCH	373S - OUR LADY OF LOURDES CHURCH	382 - WG BLOCK CO.
384 - DONNA BYARS FREEMAN TRUST	385 - JONATHAN L. KOENIGSAECKER		
391 - SJF HOMES, L.L.C.			
397 - 1435 BROWN ST., L.L.C.			

<b>Right of Way Design Information</b>	
<b>THIS SHEET INCLUDED FOR INFORMATION ONLY</b>	
ROW Team: GETTINGS/CUVA/GROAT	
ROW #: IM-074-1(144)5--13-82	
Plan Date: 01-10-18	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition

REVISED	08-14-14	PAR	397
REVISED	08-14-14	PAR	396
REVISED	08-05-14	PAR	384
REVISED	05-01-14	PAR	396
REVISED	03-11-14	PAR	367
REVISED	03-13-14	PAR	385





**STAGING NOTES**

**STAGE 1**

**Construction**  
Construct 14th St. south of Mississippi Blvd. and the South lane of Mississippi Blvd.

**Traffic Control**  
14th St., South of Mississippi Blvd., to be closed to through traffic. Access to residences, business and adjacent properties to be maintained by the Contractor.  
Mississippi Blvd. will be reduced to one lane of traffic. Access to residences, business and adjacent properties to be maintained by the Contractor.  
I-74 Entrance loop will be closed and traffic will be routed to 10th St. to use I-74 SB entrance ramp off State St.

**STAGE 2**

**Construction**  
Construct Left side of 14th St. and left lane of Mississippi Blvd. west of 14th St.

**Traffic Control**  
Mississippi Blvd. and 14th St. will be reduced to one lane of traffic. Access to residences, business and adjacent properties to be maintained by the Contractor.  
I-74 Entrance loop will be closed and traffic will be routed to 10th St.

**STAGE 3**

**Construction**  
Construct the Right lane of 14th St. and the Left lane of Mississippi Blvd. east of 14th St.

**Traffic Control**  
Mississippi Blvd. and 14th St. will be reduced to one lane of traffic. Access to residences, business and adjacent properties to be maintained by the Contractor.  
I-74 Entrance loop will be closed and traffic will be routed to 12th St. to use I-74 SB entrance ramp off State St.

**TRAFFIC CONTROL PLAN**

Refer to Sheet Nos. J.3 to J.8 for additional details of each individual stage.

Drop-offs adjacent to the traveled way shall be limited to a nominal depth of 10 inches during nonworking hours in Stages 2 and 3.

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

**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(197)5--05-82	EB & WB Approach Spans - River Bridge
BRFIM-074-1(198)5--05-82	EB & WB Main Arch Spans - River Bridge
BRFIM-074-1(199)5--05-82	WB IA Viaduct, Ramps B & D
BRFIM-074-1(200)5--05-82	EB IA Viaduct, Ramps A & C
IM-74-1(220)5--13-82	Signing
ITS-074-1(222)5--25-82	Fiber Optics
ITS-074-1(221)5--25-82	ITS Deployment and Integretion
IMN-74-1(241)5-0E-82	Structural Health Monitoring
IMN-074-1(208)5-0E-82	Light Pole Supply
IMN-074-1(209)5-0E-82	Luminaire Supply
IMN-74-1(235)5-0E-82	Aesthetic Lighting Supply

### CROSS SECTION VIEW COLOR LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

SHADING	Design Color No.	
Green, Light	(225)	Existing Pavement Shading
Gray, Light	(48)	Previously Constructed Pavement Shading
Gray, Med	(80)	Previously Constructed Granular Surface Shading
Blue, Light	(230)	Proposed Pavement Shading
Lavender	(9)	Temporary Pavement Shading
Brown, Med		Future Proposed Pavement Shading

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

	Pavement Removal		Proposed Granular Shoulder
	Proposed Granular Subbase		Temporary Shoulder
	Proposed Special Backfill		Existing Shoulder Strengthening
	Temporary Barrier Rail		Permanent Barrier Rail
			Channelizing Device

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

LINEWORK	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		Pavement Markings, White

SHADING	Design Color No.	
Green, Light	(225)	Existing Pavement Shading
Gray, Light	(48)	Previously Constructed Pavement Shading
Gray, Med	(80)	Proposed Granular Surface Shading
Gray, Med	(80)	Previously Constructed Granular Surface Shading
Blue, Light	(230)	Proposed Pavement Shading
Lavender	(9)	Temporary Pavement Shading
Brown, Light	(236)	Proposed Grading Limits Shading
Pink, Dark	(13)	Proposed MSE or CIP Wall Shading
Red	(3)	Proposed Bridge Shading and Sign Trusses
Black w/Gray, Light Fill	(0,48)	Previously Constructed Structure

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

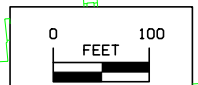
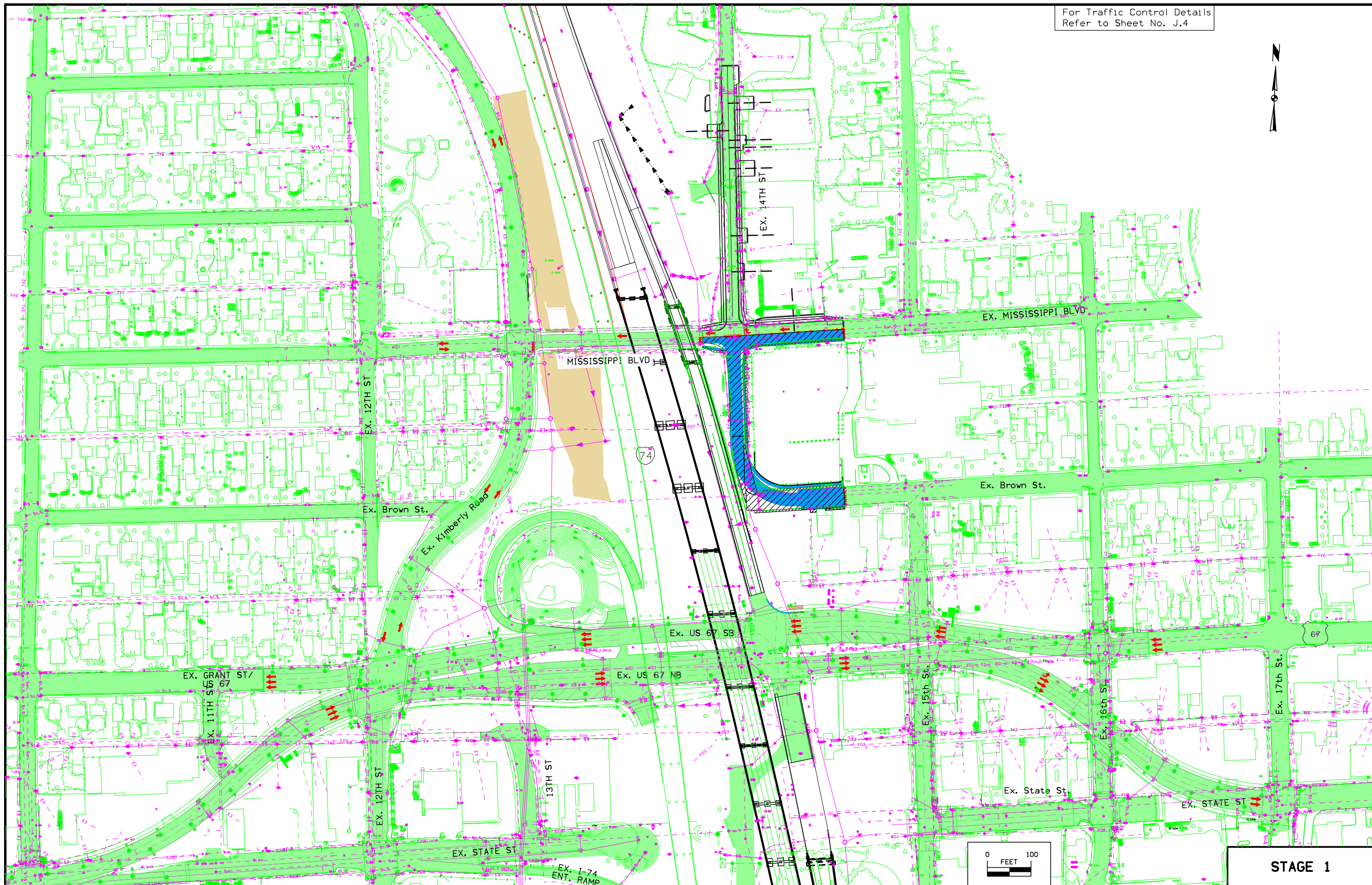
	Channelizing Device		Crash Cushion
	Drum		Traffic Signal
	Temporary Lane Separator		Flagger
	Tubular Marker		Temporary Floodlighting
	Channelizer Marker		Traffic Sign
	Concrete Barrier Marker		Type III Barricade
	Delineator		Type A Warning Light
	Temporary Barrier Rail		Direction of Traffic
	Pavement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

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

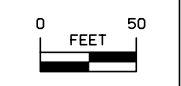
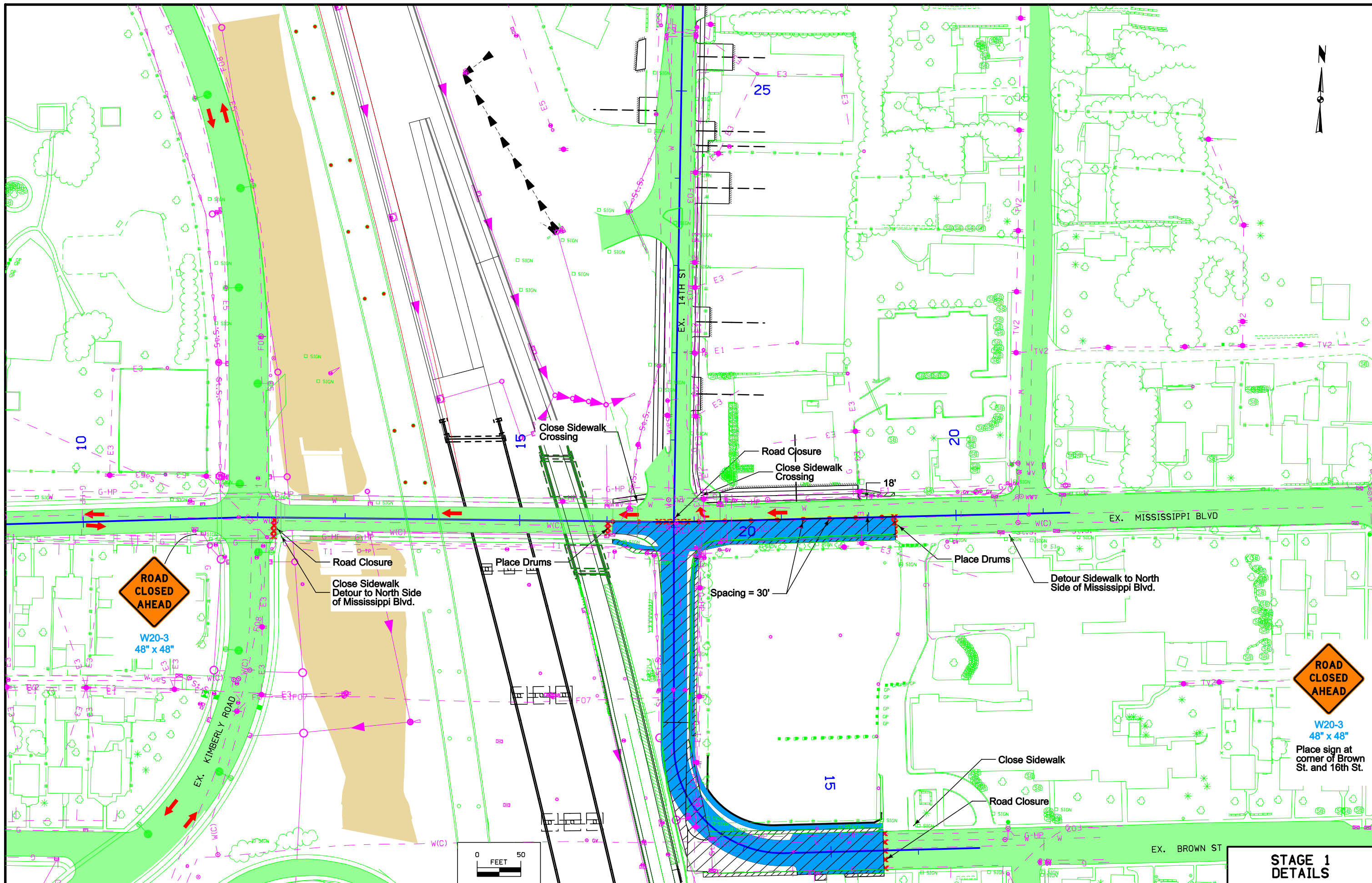
## TRAFFIC CONTROL AND STAGING LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES J)

For Traffic Control Details  
Refer to Sheet No. J.4

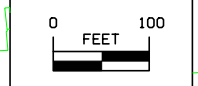
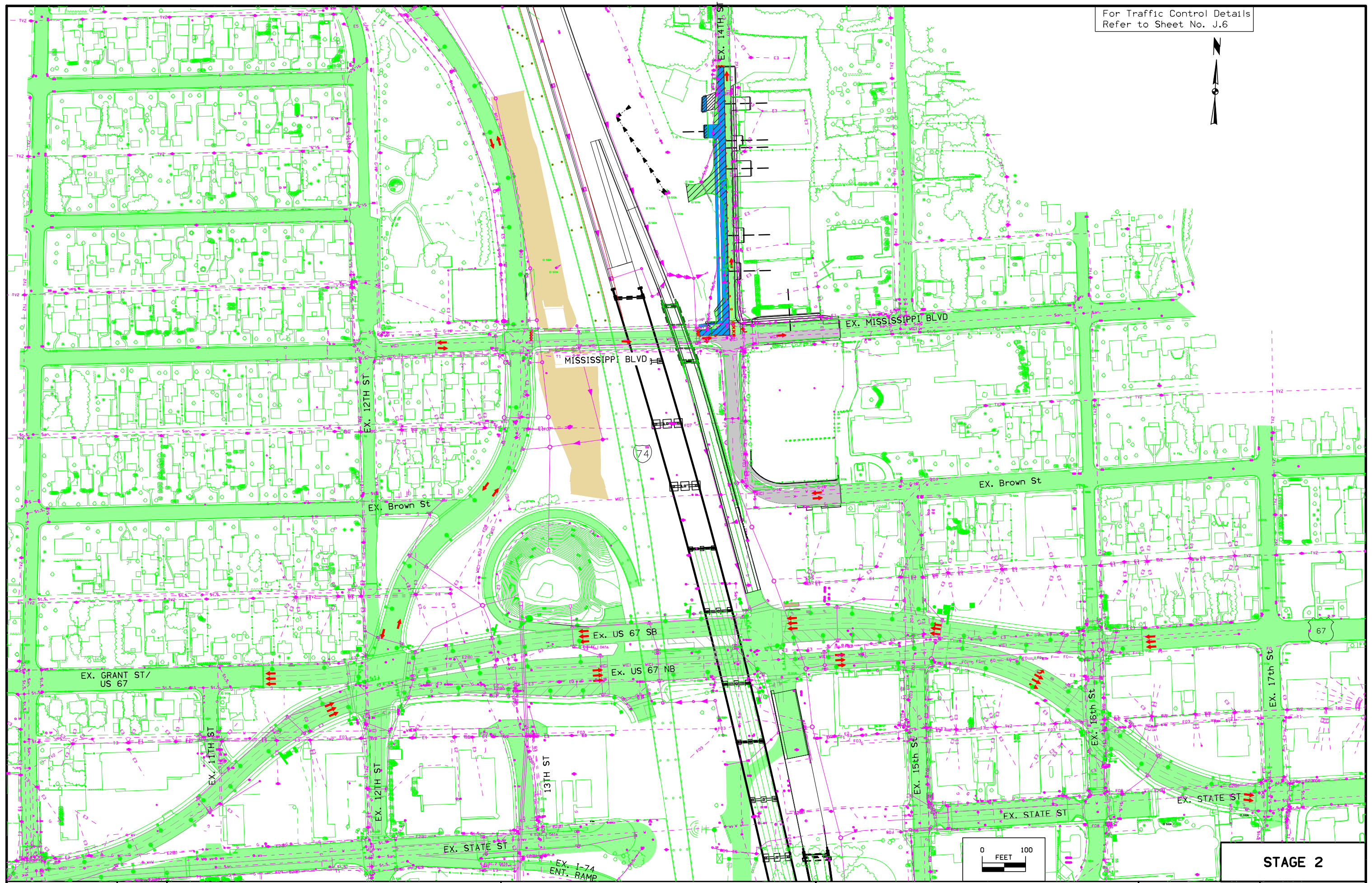


**STAGE 1**

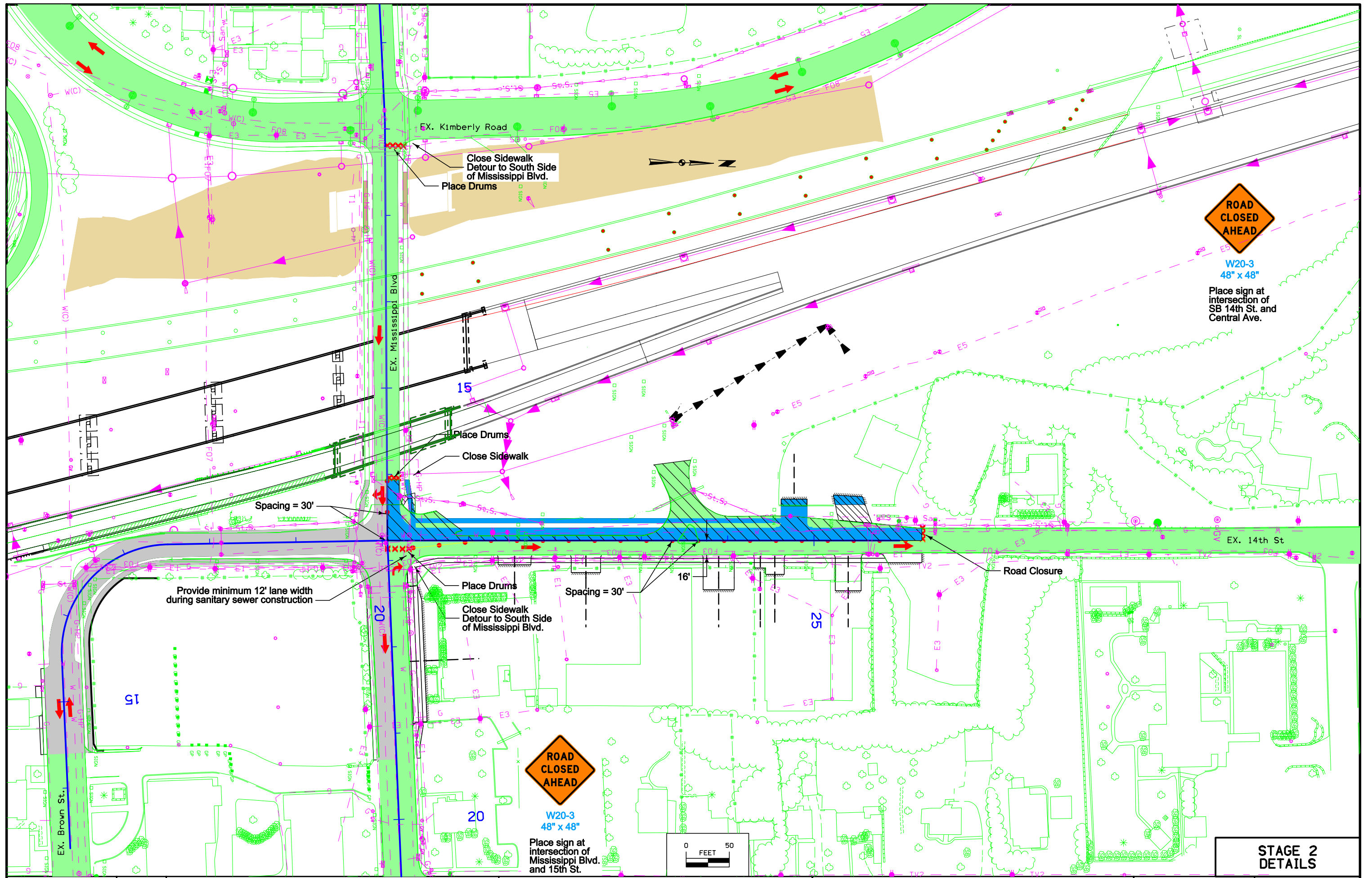


**STAGE 1  
DETAILS**

For Traffic Control Details  
Refer to Sheet No. J.6



**STAGE 2**



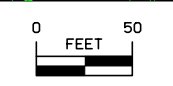
W20-3  
48" x 48"

Place sign at  
intersection of  
SB 14th St. and  
Central Ave.



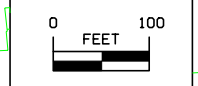
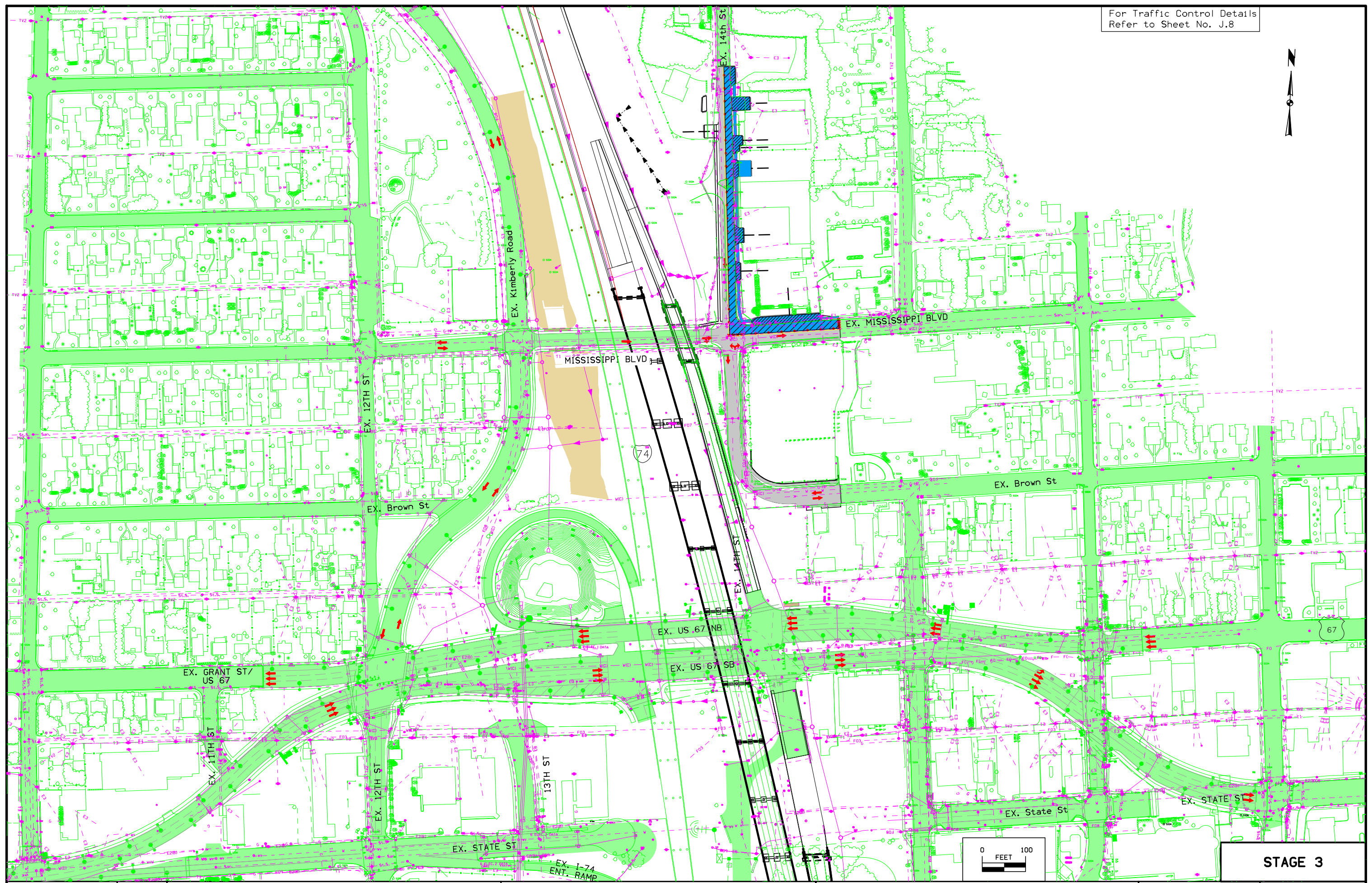
W20-3  
48" x 48"

Place sign at  
intersection of  
Mississippi Blvd.  
and 15th St.

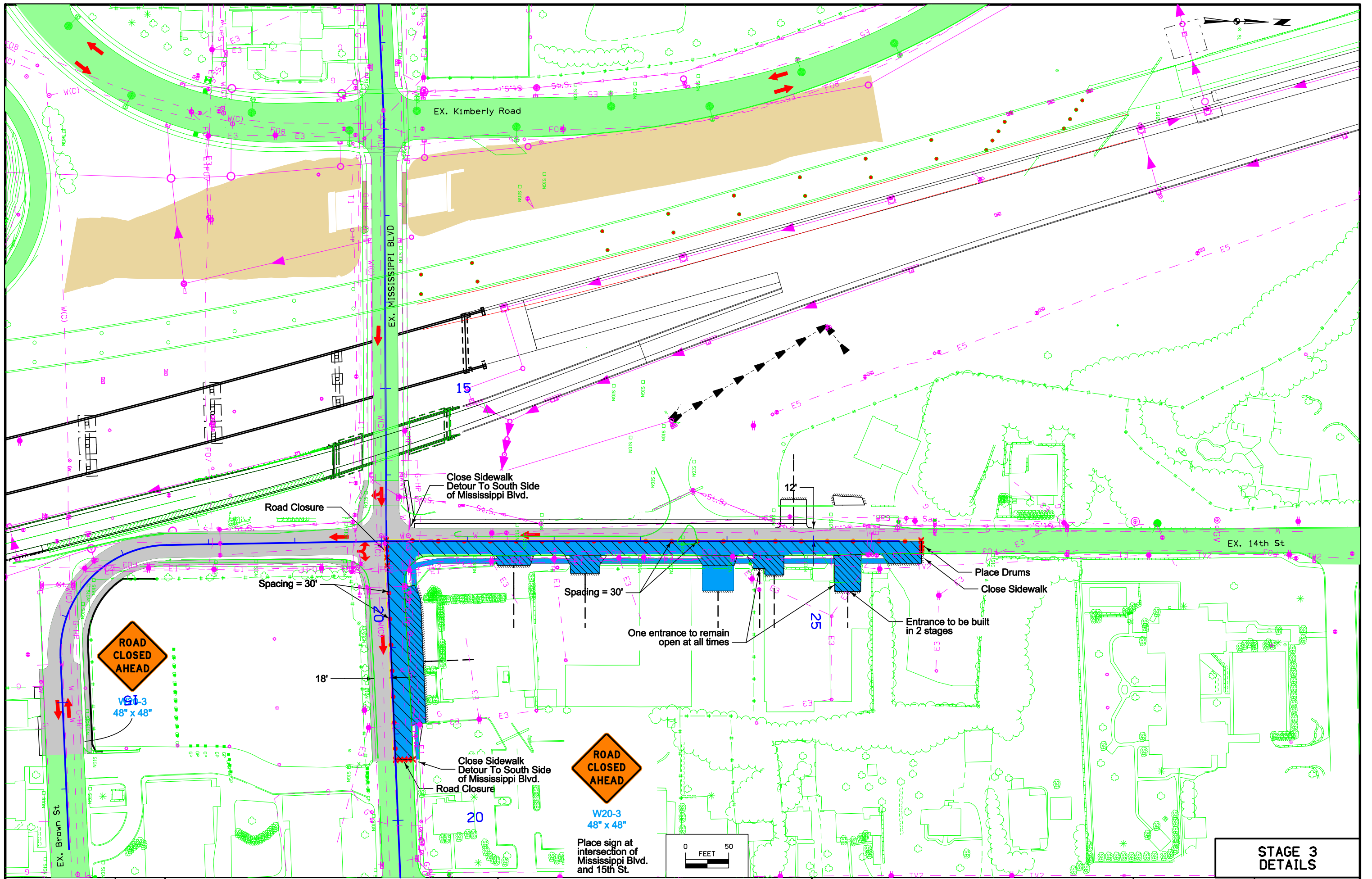


**STAGE 2  
DETAILS**

For Traffic Control Details  
Refer to Sheet No. J.8



**STAGE 3**



**STAGE 3  
DETAILS**



**INTERSECTION CURVE COORDINATES**

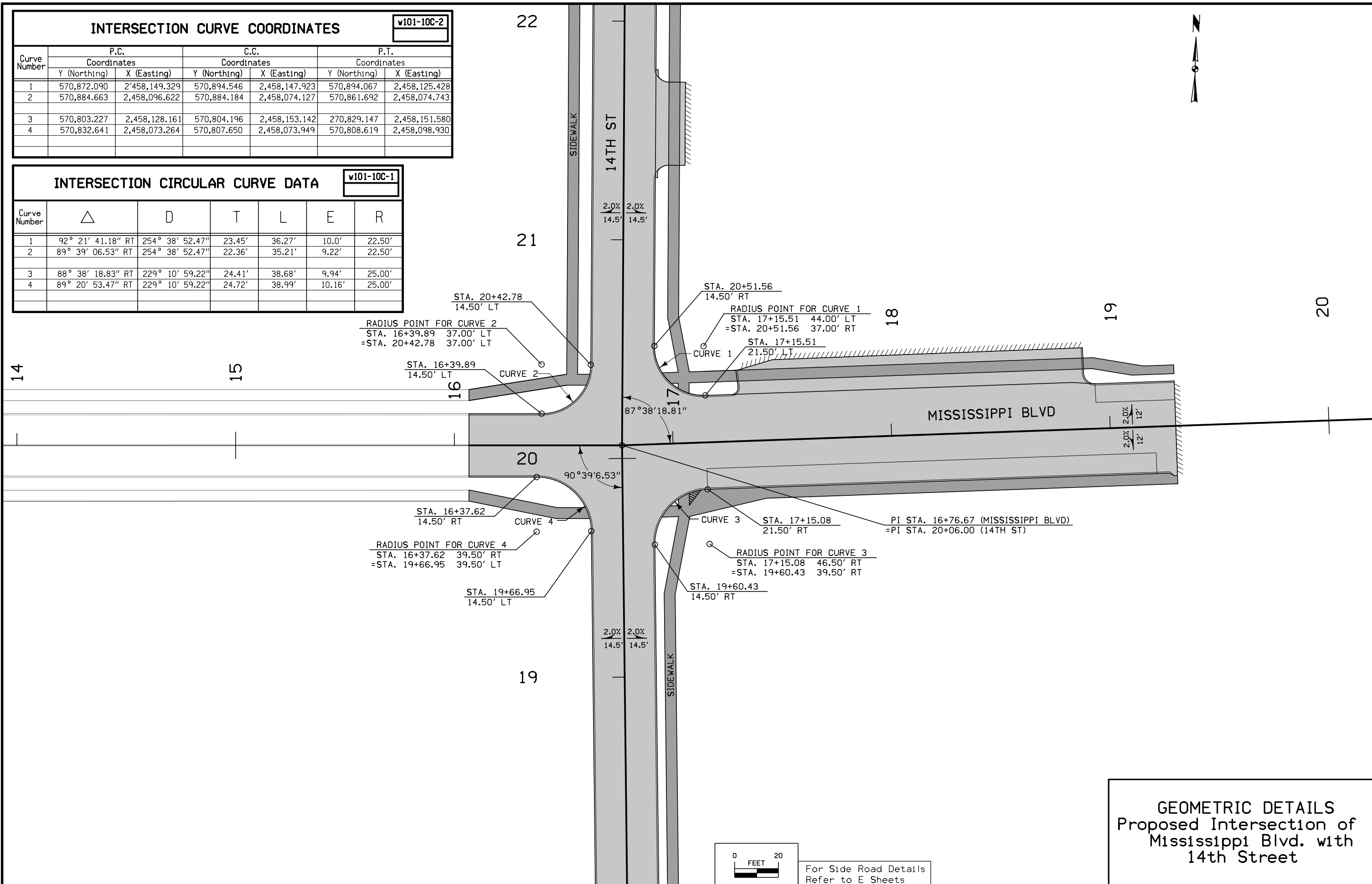
W101-10C-2

Curve Number	P.C. Coordinates		C.C. Coordinates		P.T. Coordinates	
	Y (Northing)	X (Easting)	Y (Northing)	X (Easting)	Y (Northing)	X (Easting)
	1	570,872.090	2,458,149.329	570,894.546	2,458,147.923	570,894.067
2	570,884.663	2,458,096.622	570,884.184	2,458,074.127	570,861.692	2,458,074.743
3	570,803.227	2,458,128.161	570,804.196	2,458,153.142	270,829.147	2,458,151.580
4	570,832.641	2,458,073.264	570,807.650	2,458,073.949	570,808.619	2,458,098.930

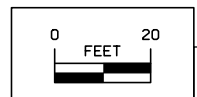
**INTERSECTION CIRCULAR CURVE DATA**

W101-10C-1

Curve Number	Δ	D	T	L	E	R
1	92° 21' 41.18" RT	254° 38' 52.47"	23.45'	36.27'	10.0'	22.50'
2	89° 39' 06.53" RT	254° 38' 52.47"	22.36'	35.21'	9.22'	22.50'
3	88° 38' 18.83" RT	229° 10' 59.22"	24.41'	38.68'	9.94'	25.00'
4	89° 20' 53.47" RT	229° 10' 59.22"	24.72'	38.99'	10.16'	25.00'



**GEOMETRIC DETAILS**  
Proposed Intersection of  
Mississippi Blvd. with  
14th Street



For Side Road Details  
Refer to E Sheets

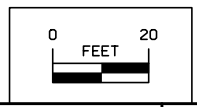
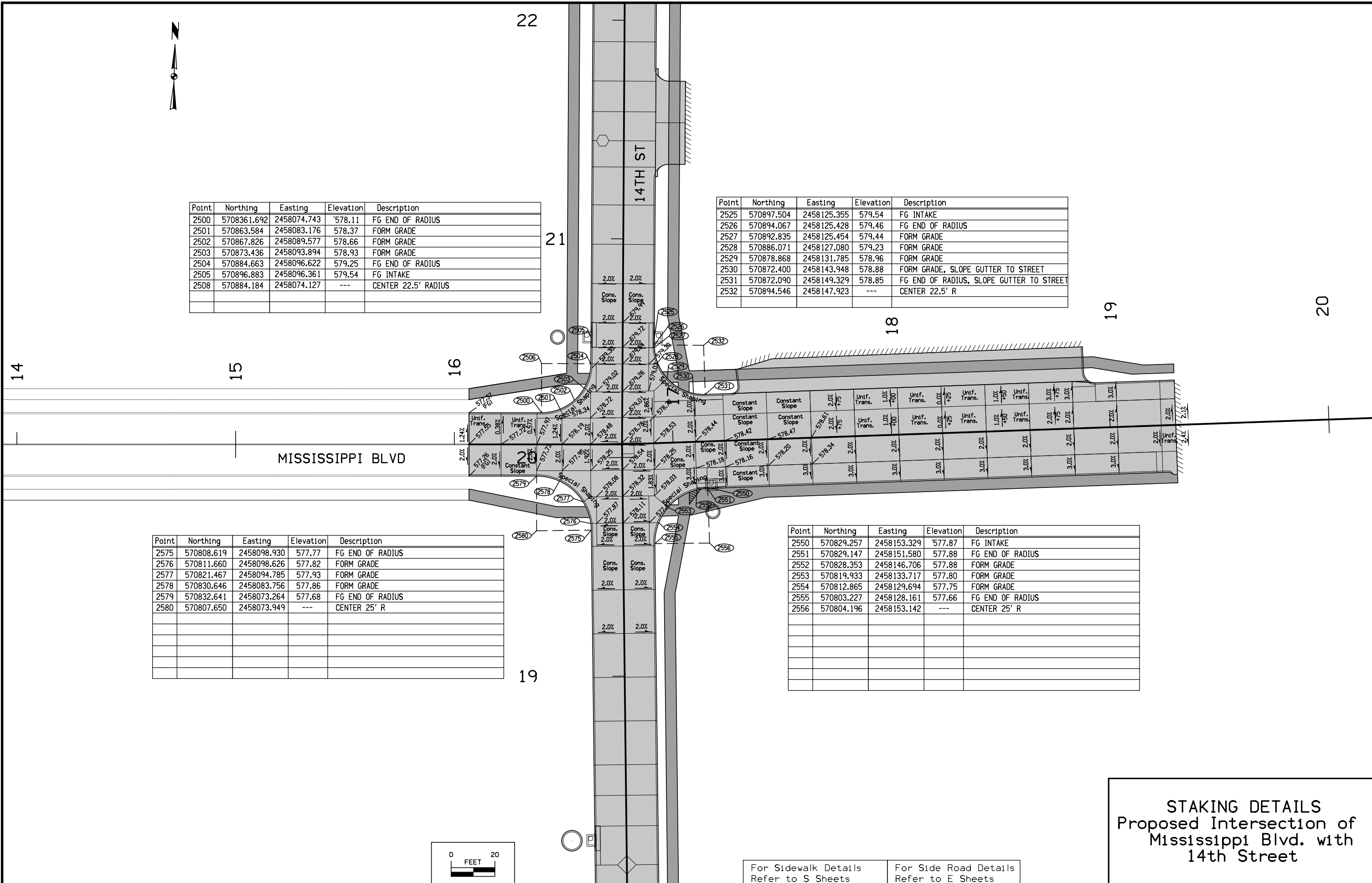


Point	Northing	Easting	Elevation	Description
2500	5708361.692	2458074.743	578.11	FG END OF RADIUS
2501	570863.584	2458083.176	578.37	FORM GRADE
2502	570867.826	2458089.577	578.66	FORM GRADE
2503	570873.436	2458093.894	578.93	FORM GRADE
2504	570884.663	2458096.622	579.25	FG END OF RADIUS
2505	570896.883	2458096.361	579.54	FG INTAKE
2508	570884.184	2458074.127	---	CENTER 22.5' RADIUS

Point	Northing	Easting	Elevation	Description
2525	570897.504	2458125.355	579.54	FG INTAKE
2526	570894.067	2458125.428	579.46	FG END OF RADIUS
2527	570892.835	2458125.454	579.44	FORM GRADE
2528	570886.071	2458127.080	579.23	FORM GRADE
2529	570878.868	2458131.785	578.96	FORM GRADE
2530	570872.400	2458143.948	578.88	FORM GRADE, SLOPE GUTTER TO STREET
2531	570872.090	2458149.329	578.85	FG END OF RADIUS, SLOPE GUTTER TO STREET
2532	570894.546	2458147.923	---	CENTER 22.5' R

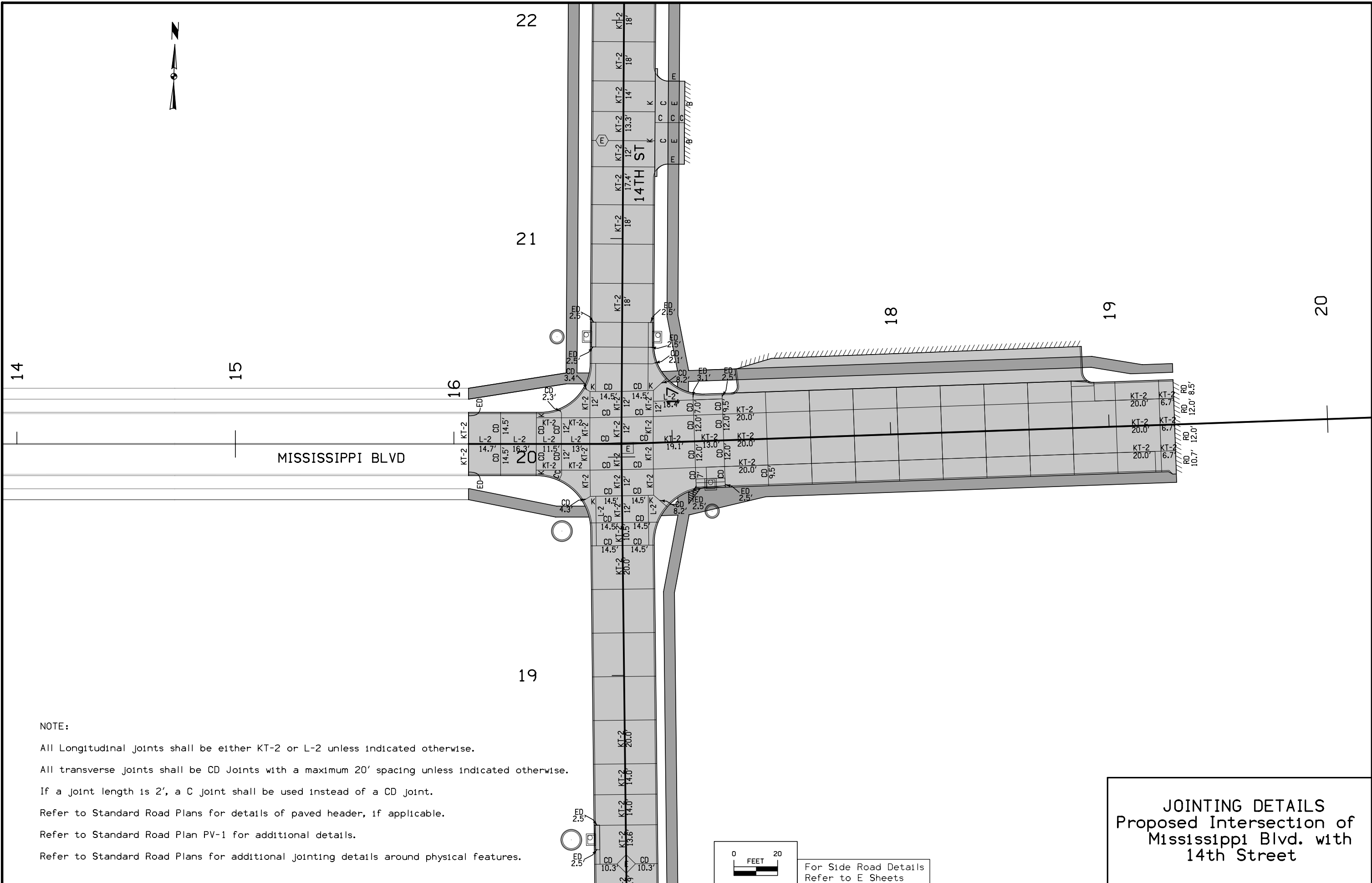
Point	Northing	Easting	Elevation	Description
2575	570808.619	2458098.930	577.77	FG END OF RADIUS
2576	570811.660	2458098.626	577.82	FORM GRADE
2577	570821.467	2458094.785	577.93	FORM GRADE
2578	570830.646	2458083.756	577.86	FORM GRADE
2579	570832.641	2458073.264	577.68	FG END OF RADIUS
2580	570807.650	2458073.949	---	CENTER 25' R

Point	Northing	Easting	Elevation	Description
2550	570829.257	2458153.329	577.87	FG INTAKE
2551	570829.147	2458151.580	577.88	FG END OF RADIUS
2552	570828.353	2458146.706	577.88	FORM GRADE
2553	570819.933	2458133.717	577.80	FORM GRADE
2554	570812.865	2458129.694	577.75	FORM GRADE
2555	570803.227	2458128.161	577.66	FG END OF RADIUS
2556	570804.196	2458153.142	---	CENTER 25' R



STAKING DETAILS  
Proposed Intersection of  
Mississippi Blvd. with  
14th Street

For Sidewalk Details Refer to S Sheets  
For Side Road Details Refer to E Sheets



NOTE:

All Longitudinal joints shall be either KT-2 or L-2 unless indicated otherwise.

All transverse joints shall be CD Joints with a maximum 20' spacing unless indicated otherwise.

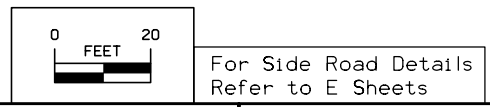
If a joint length is 2', a C joint shall be used instead of a CD joint.

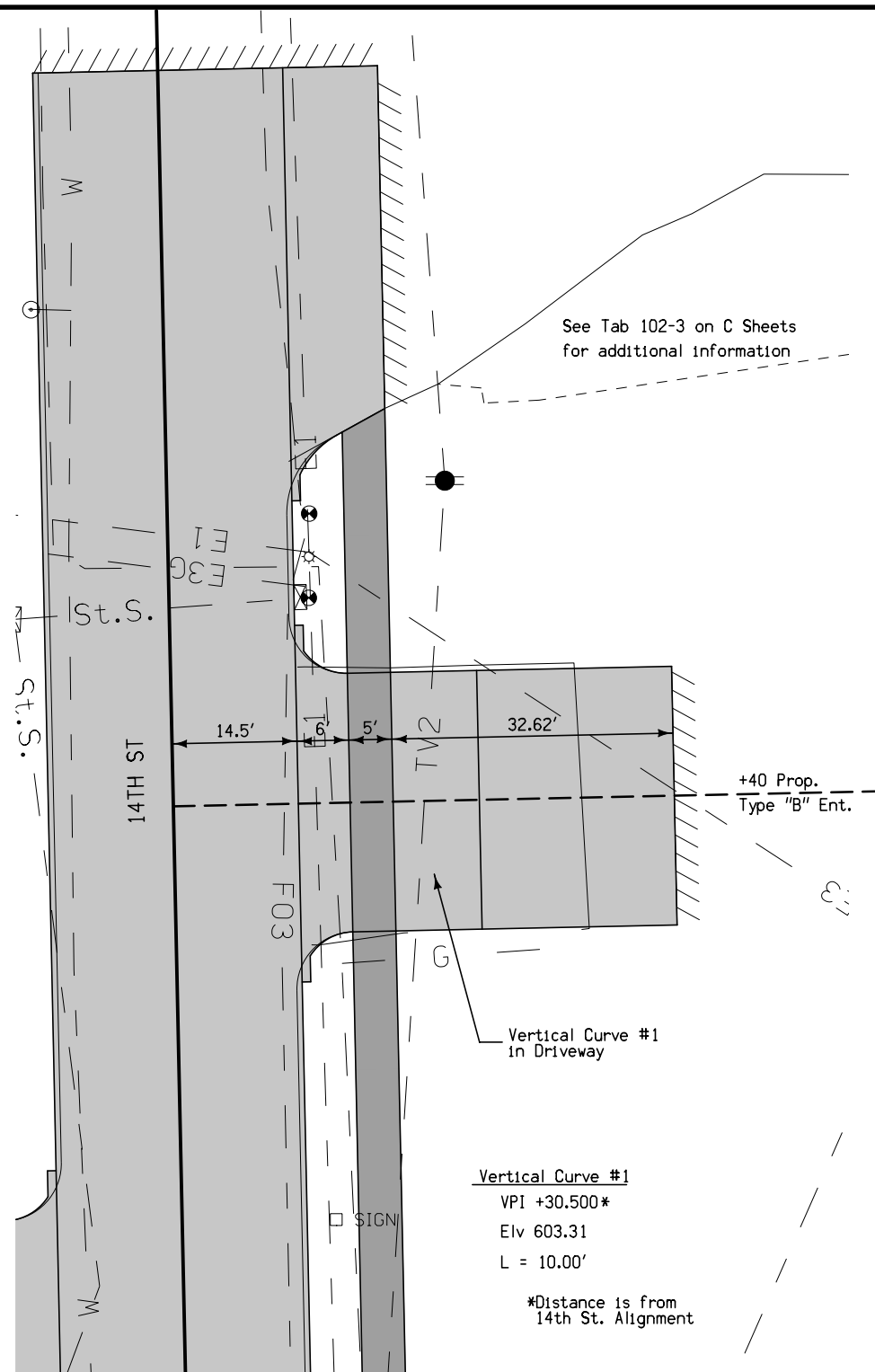
Refer to Standard Road Plans for details of paved header, if applicable.

Refer to Standard Road Plan PV-1 for additional details.

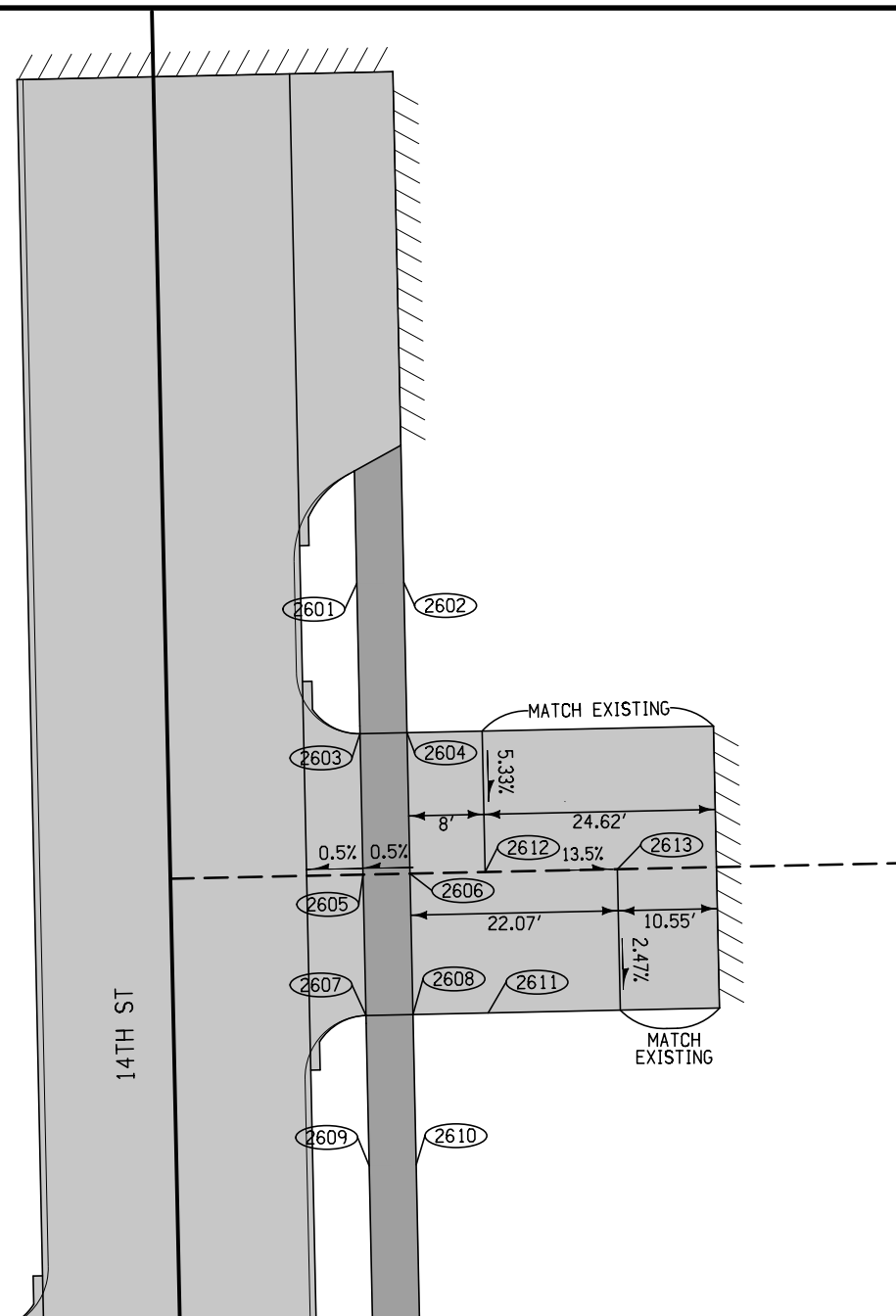
Refer to Standard Road Plans for additional jointing details around physical features.

**JOINTING DETAILS**  
 Proposed Intersection of  
 Mississippi Blvd. with  
 14th Street



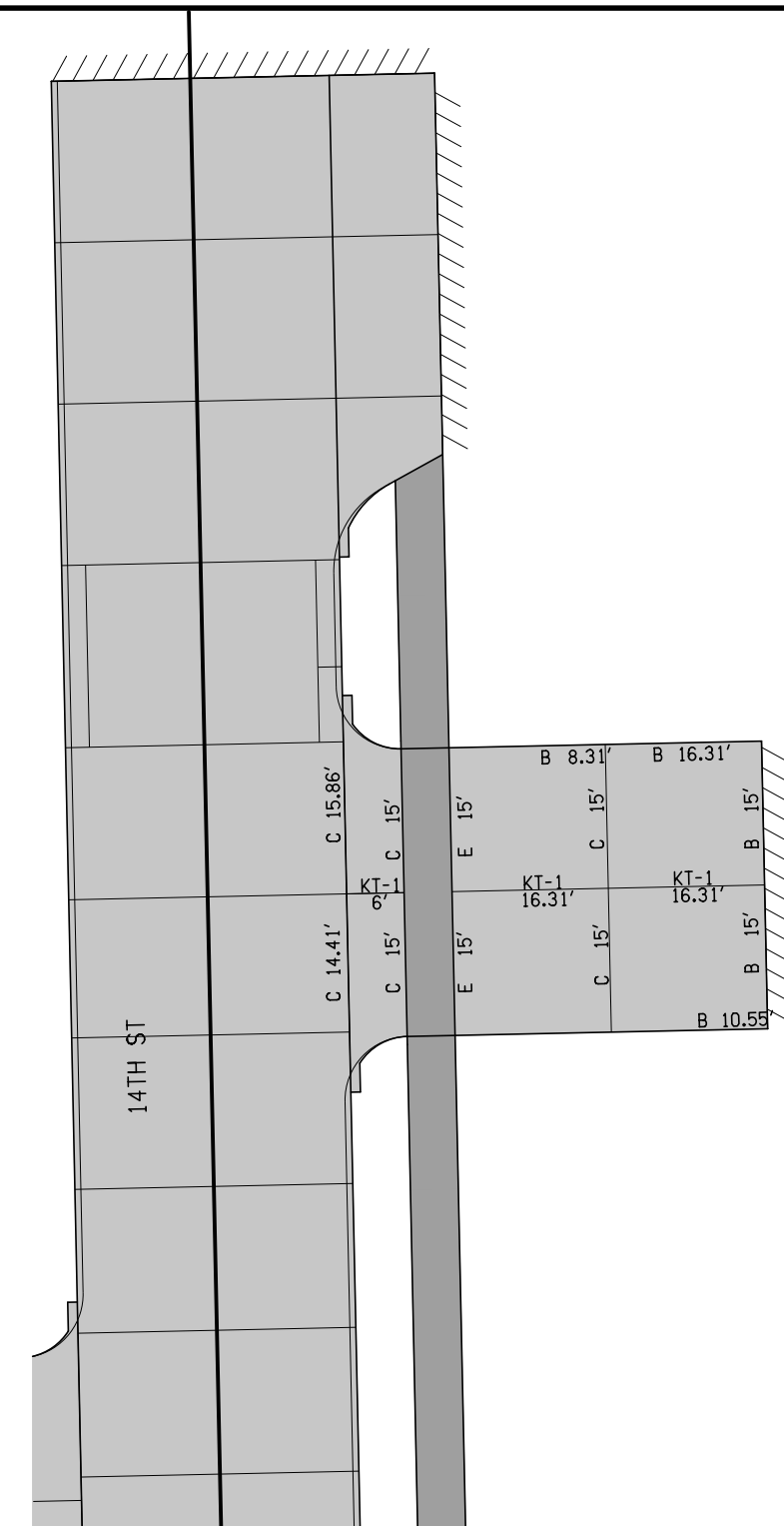
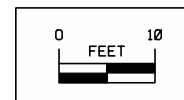


**GEOMETRICS**



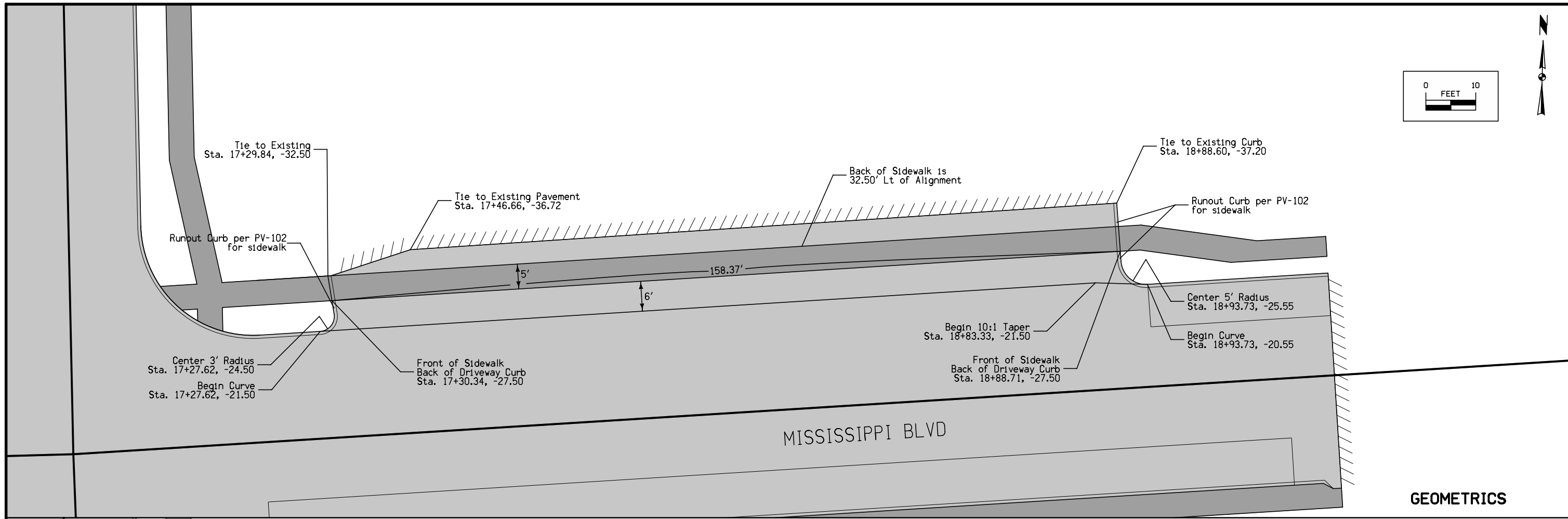
Point	Northing	Easting	Elevation	Description
2601	571413.152	2458120.362	607.06	FRONT OF SIDEWALK
2602	571413.258	2458125.361	607.14	BACK OF SIDEWALK
2603	571397.155	2458120.703	604.78	FRONT OF SIDEWALK
2604	571397.262	2458125.702	604.80	BACK OF SIDEWALK
2605	571382.159	2458121.023	602.83	FRONT OF SIDEWALK
2606	571382.265	2458126.022	602.86	BACK OF SIDEWALK
2607	571367.162	2458121.343	601.80	FRONT OF SIDEWALK
2608	571367.269	2458126.342	601.82	BACK OF SIDEWALK
2609	571351.166	2458121.684	600.89	FRONT OF SIDEWALK
2610	571351.272	2458126.683	600.97	BACK OF SIDEWALK
2611	571367.439	2458134.340	601.52	EDGE OF DRIVEWAY
2612	571382.436	2458134.020	601.78	CENTERLINE OF DRIVEWAY
2613	571382.736	2458148.087	599.88	CENTERLINE OF DRIVEWAY

**STAKING**

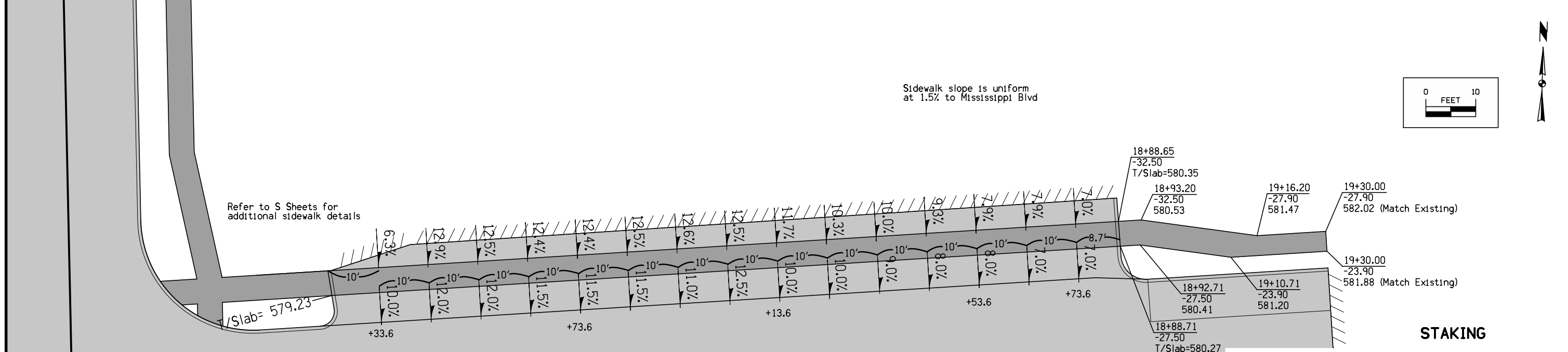


**JOINTING**

**GEOMETRIC, STAKING AND JOINTING DETAILS**  
Entrance on 14th Street at Sta 25+40



**GEOMETRICS**



**STAKING**

**GEOMETRIC AND STAKING DETAILS**  
 Entrance on Mississippi Blvd. East of 14th St.

STORM SEWER

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

INTAKES AND UTILITY ACCESSES								PIPES																
Design Length, Slope, and Flowlines are calculated from inside wall to inside wall along CL of pipe. An additional 6 ft length is added to Design Length to account for estimated length to center of structures.																								
No.	Location Station and Offset	*Type or Standard Road Plan	Form Grade	Bottom Well	Extension Length**	Notes	Line Number	Intake/Utility Access No.		Class 'D'	Pipe Diameter	Bid* Length	Design Length	Slope %	Flow Lines			Pipe Profile Sheet No.	Notes					
			Elev.	Elev.	FT			From	To		IN	FT	FT		Inlet Elevation	Outlet Elevation	Other Elevation							
693	25+68.00, 14.50' Rt.	SW-507L	605.74	599.65		14TH STREET	Div. (2)	P693	693	694	2000D	15	36	30	0.96	600.15	599.86		M.6	Div. (2)				
694	25+60.00, 14.50' Lt.	SW-508R	604.85	599.26		14TH STREET	Div. (2)	P694	694	460	2000D	15	8	2	2.60	599.76	599.70		M.6	Div. (2)				
695	25+71.16, 17.93' Lt.	48" SW-401	606.74	599.61		14TH STREET	Div. (2)	P695	695	694	2000D	15	13	7	3.44	600.11	599.86		M.6	Div. (2)				
460	25+60.00, 22.81' Lt.	48" SW-401	605.68	599.10		14TH STREET	Div. (2)	P460	460	447	2000D	15	237	231	6.69	599.60	584.15		M.6	Div. (2)				
448	23+25.00, 14.50' Rt.	SW-507L	588.42	583.94		14TH STREET	Div. (2)	P448	448	447	2000D	15	35	29	1.00	584.44	584.15		M.6	Div. (2)				
447	23+25.00, 14.50' Lt.	SW-508R	588.42	583.55		14TH STREET	Div. (2)	P447	447	909	2000D	15	272	266	4.00	584.05	573.39		M.6	Div. (2)				
445	20+55.00, 14.50' Rt.	SW-507L	579.54	574.25		14TH STREET	Div. (1)	P445	445	446	2000D	15	35	29	3.72	574.75	573.67		M.6	Div. (1)				
446	20+55.00, 14.50' Lt.	SW-507R	579.54	572.36		14TH STREET	Div. (1)	P446	446	909	2000D	24	16	10	1.75	572.86	572.68		M.6	Div. (1)				
909	20+54.88, 29.77' Lt.	60" SW-401	579.86	572.08		14TH STREET	Div. (3)	P909	909	463	2000D	24	89	83	2.39	572.58	570.60		M.6	Div. (3)				
744	17+75.08, 30.64' Rt.	72" SW-401	579.41	573.90		MISSISSIPPI BLVD	Div. (2)	P743	eP-2	744	2000D	24	34	28	3.42	575.27	574.30		M.4	Div. (2) Note 1				
								P744	eP-2	459	2000D	24	65	59	2.16	574.87	573.60		M.4	Div. (2) Note 1				
455	17+16.83, 21.50' Rt.	SW-541S	577.92	573.60		MISSISSIPPI BLVD	Div. (2)	TP400	eP-3	455	2000D	24	22	19	0.78	574.25	574.10		M.4	Div. (2) Note 5				
459	17+17.10, 32.20' Rt.	60" SW-401	578.20	573.00		MISSISSIPPI BLVD	Div. (2)	P455	455	459	2000D	18	14	8	1.28	574.10	574.00		M.4	Div. (2)				
463	19+66.43, 27.68' Lt.	96" SW-401	578.80	567.60		14TH STREET	Div. (3)	P459	459	463	2000D	24	69	63	2.00	573.50	572.24		M.4	Div. (1)				
768	18+25.00, 14.50' Lt.	SW-507R	576.26	572.26		14TH STREET	Div. (1)	P463##	463	745	2000D	54	139	133	0.40	568.10	567.57		M.6	Div. (3)				
745	18+25.00, 25.00' Lt.	96" SW-401	577.18	566.97		14TH STREET	Div. (3)	P768	768	745	2000D	15	10	4	1.71	572.78	572.72		M.6	Div. (1)				
444	16+84.23, 31.30' Rt.	SW-511	580.94	574.70		14TH STREET	Div. (1)	P745##	745	e10	2000D	54	65	59	0.22	567.47	567.34		M.6	Div. (3)				
443	16+99.00, 14.50' Rt.	48" SW-502	575.35	570.60		14TH STREET	Div. (1)	P444	444	443	2000D	12	25	19	20.79	575.20	571.35		M.6	Div. (1) Note 2				
								P443	443	e11	2000D	18	46	40	0.91	571.10	570.73		M.6	Div. (1)				
441	15+37.18, 19.48' Lt.	SW-511	577.67	573.09		14TH STREET, Note 3	Div. (2)	P441	441	442	2000D	15	39	33	1.73	573.59	573.02		M.6	Div. (2)				
442	15+45.88, 16.16' Rt.	48" SW-502	577.30	572.27		14TH STREET	Div. (2)	P442	442	e12	2000D	18	129	123	1.08	572.77	571.44		M.6	Div. (2)				
Existing Structures (For Information Only)								# Gasketed/Sealed sewer pipes required																
e10	17+58.78, 16.16' Lt.					UAC, connect P745 to Structure		Existing Pipes (For Information Only)																
e11	16+74.19, 25.16' Lt.					UAC, connect P443 to Structure		eP-1	Ex.	Ex.		15		232	11.2	628.01	601.95			Tie-in to Proposed Manhole 695 (Elev. at 695 = 603.24)				
e12	16+11.08, 85.45' Lt.					UAC, connect P442 to Structure		eP-2	Ex.	Ex.		24		322	1.43	578.77	574.18			Tie-in to Pipe P743 at 17+92, 24.12				
								eP-3	25335	26443		24		42.6	1.76	574.63	573.88			Note 1 Note 5				
Notes:								<p>1 Provide 2 "D" Sections per Standard Road Plan DR-141 to tie into existing storm sewer pipe</p> <p>2 Pipe extends through retaining wall, refer to U sheets for add't details &amp; locations of hole in retaining wall</p> <p>3 Structure 441 is to include an SW-603, Type Q casting for driveways</p> <p>4 Storm Sewer staging is to follow general order of roadway construction. Stage 1 - Build storm sewer south of Mississippi Bld. Stage 2 - Build storm sewer along the west side of 14th St. and stubs across 14th St. Stage 3 - Build storm sewer along east side of 14th St. connecting stubs to prop. intakes on east side of 14th</p> <p>5 Pipe TP400 is a temporary pipe built in Stage 1 and plugged in Stage 3. Refer to Sheet No. M.3 for details.</p> <p>6 Contractor is to field verify all existing pipe sizes and elevations prior to construction.</p>																

### 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		TP 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

### UTILITY LEGEND

— 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

LINEWORK	Design Color No.	Description
Gray, Dark	(112)	Existing Topographic Features, Utilities, and Labels
Black	(17)	Proposed Storm Sewer Details, Alignment, Stationing, Tic Marks, and Alignment Annotation
SHADING	Design Color No.	Description
Gray, Light	(48)	Proposed Pavement Shading

### PROFILE VIEW COLOR LEGEND OF STORM SEWER SHEETS

LINEWORK	Design Color No.	Description
Gray, Dark	(112)	Existing Ground Line Profile and Existing Utilities Information
Black	(17)	Proposed Pipes and Intakes

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

	Plug and Abandon Existing Pipe or Structure
	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

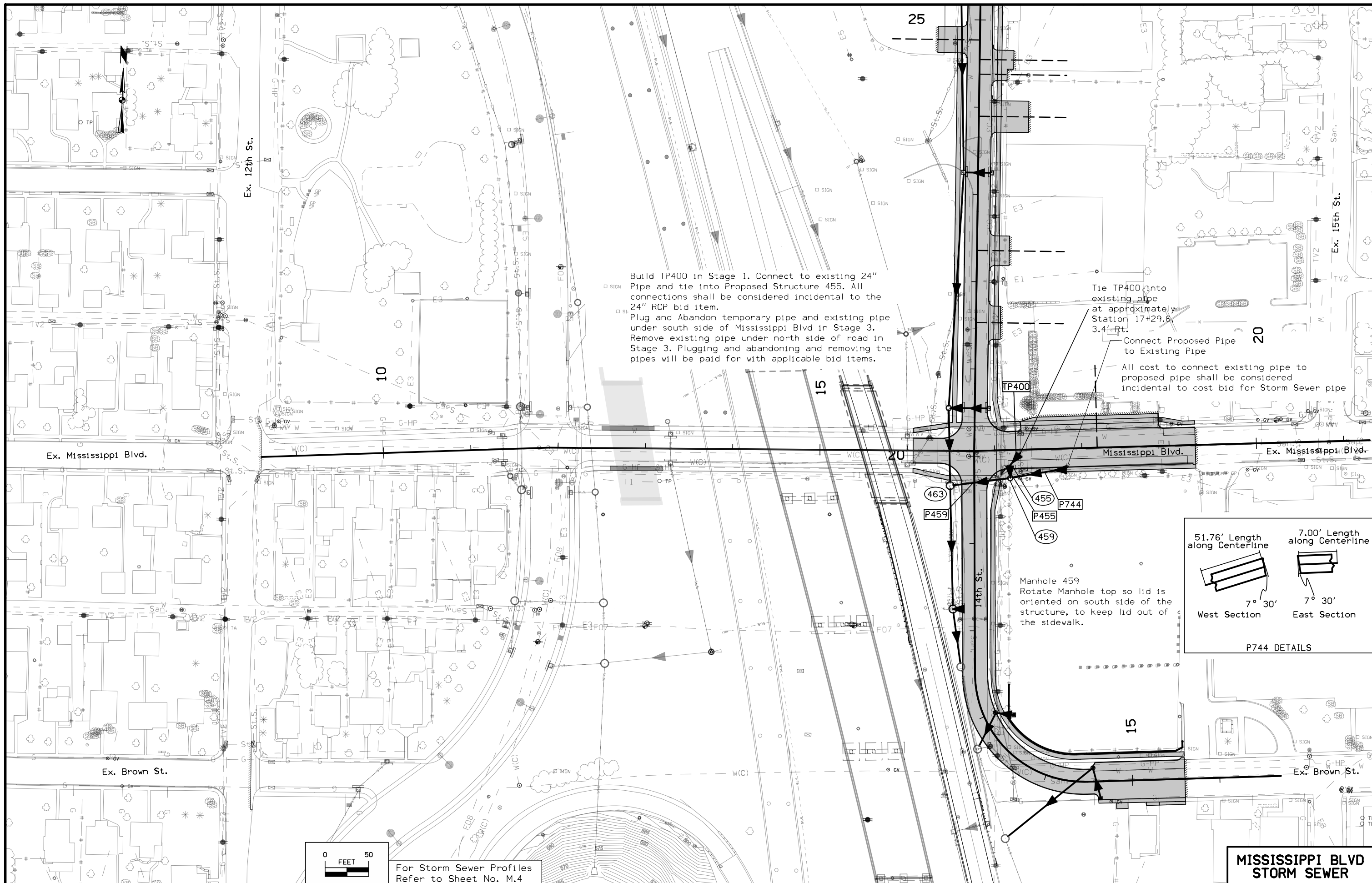
	Reference Point
	Station
	Survey Line
	Section Corner
	Ground Line Intercept
	Saw Cut
	Guardrail
	Clearing & Grubbing Area
	Pavement Removal

### 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

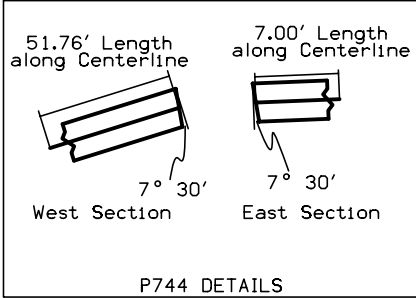
# STORM SEWER LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES M)



Build TP400 in Stage 1. Connect to existing 24" Pipe and tie into Proposed Structure 455. All connections shall be considered incidental to the 24" RCP bid item.  
 Plug and Abandon temporary pipe and existing pipe under south side of Mississippi Blvd in Stage 3. Remove existing pipe under north side of road in Stage 3. Plugging and abandoning and removing the pipes will be paid for with applicable bid items.

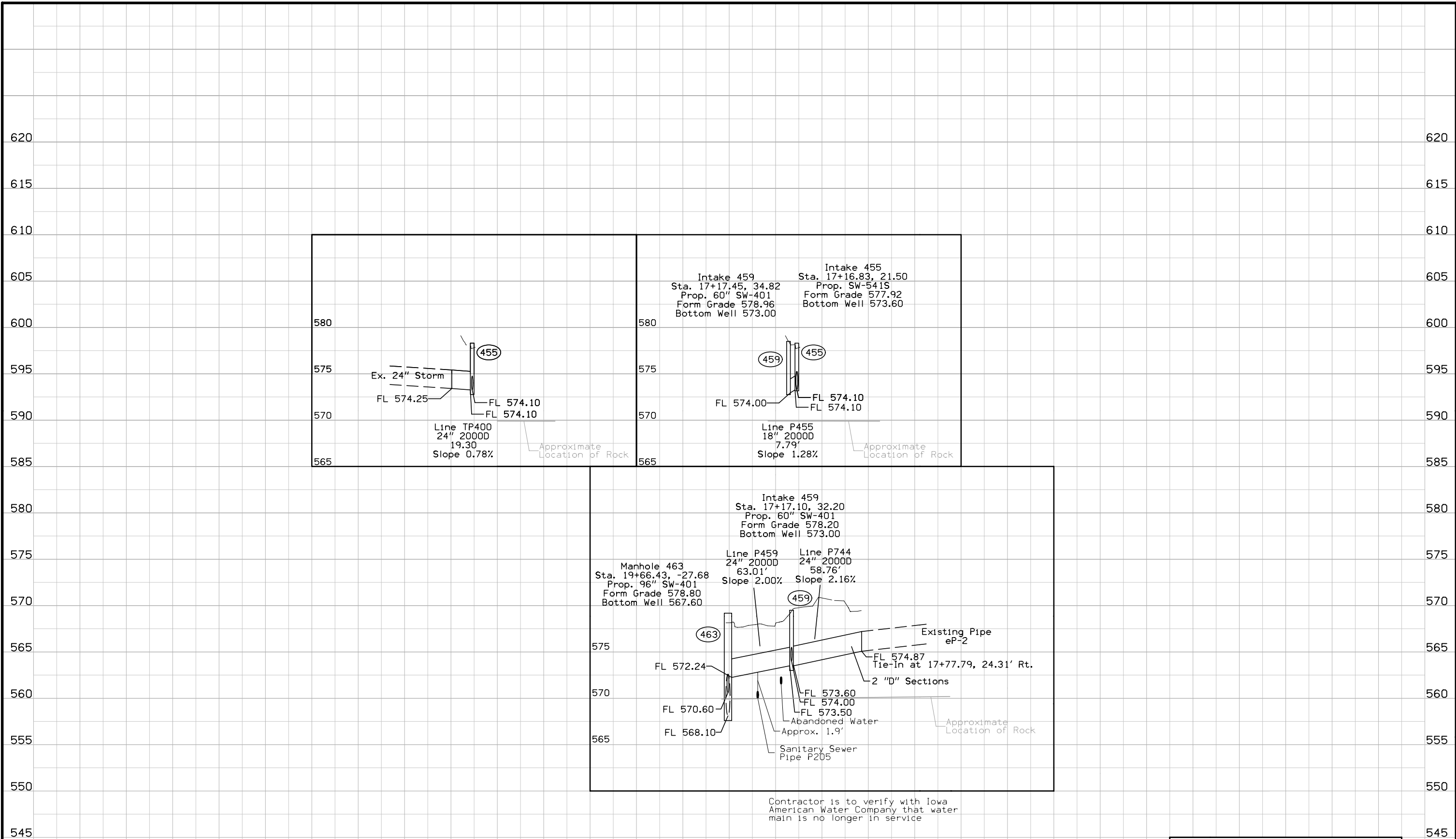
Tie TP400 into existing pipe at approximately Station 17+29.6, 3.4' Rt.  
 Connect Proposed Pipe to Existing Pipe  
 All cost to connect existing pipe to proposed pipe shall be considered incidental to cost bid for Storm Sewer pipe



**MISSISSIPPI BLVD  
STORM SEWER**

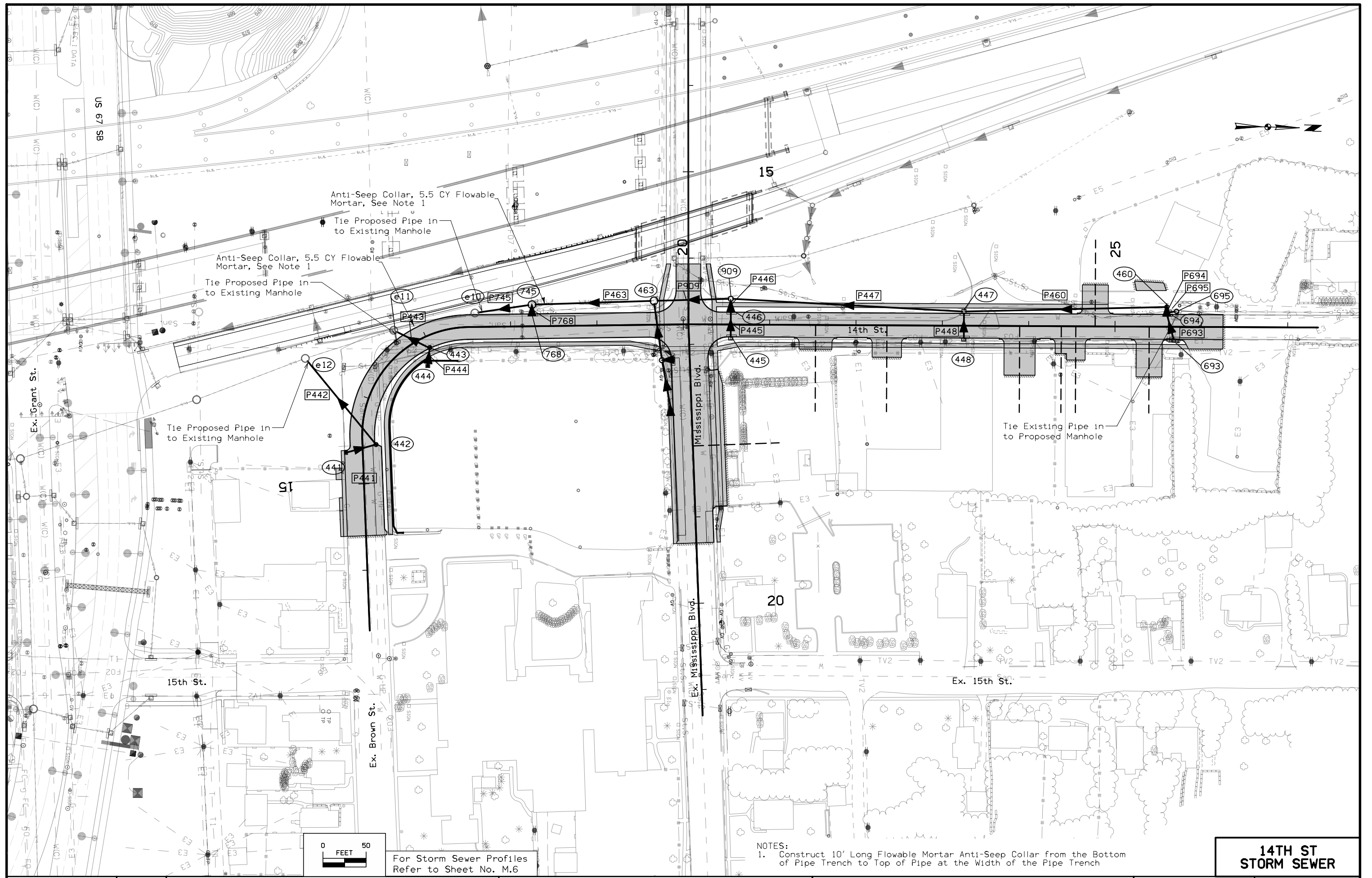
For Storm Sewer Profiles Refer to Sheet No. M.4





**NOT TO SCALE**

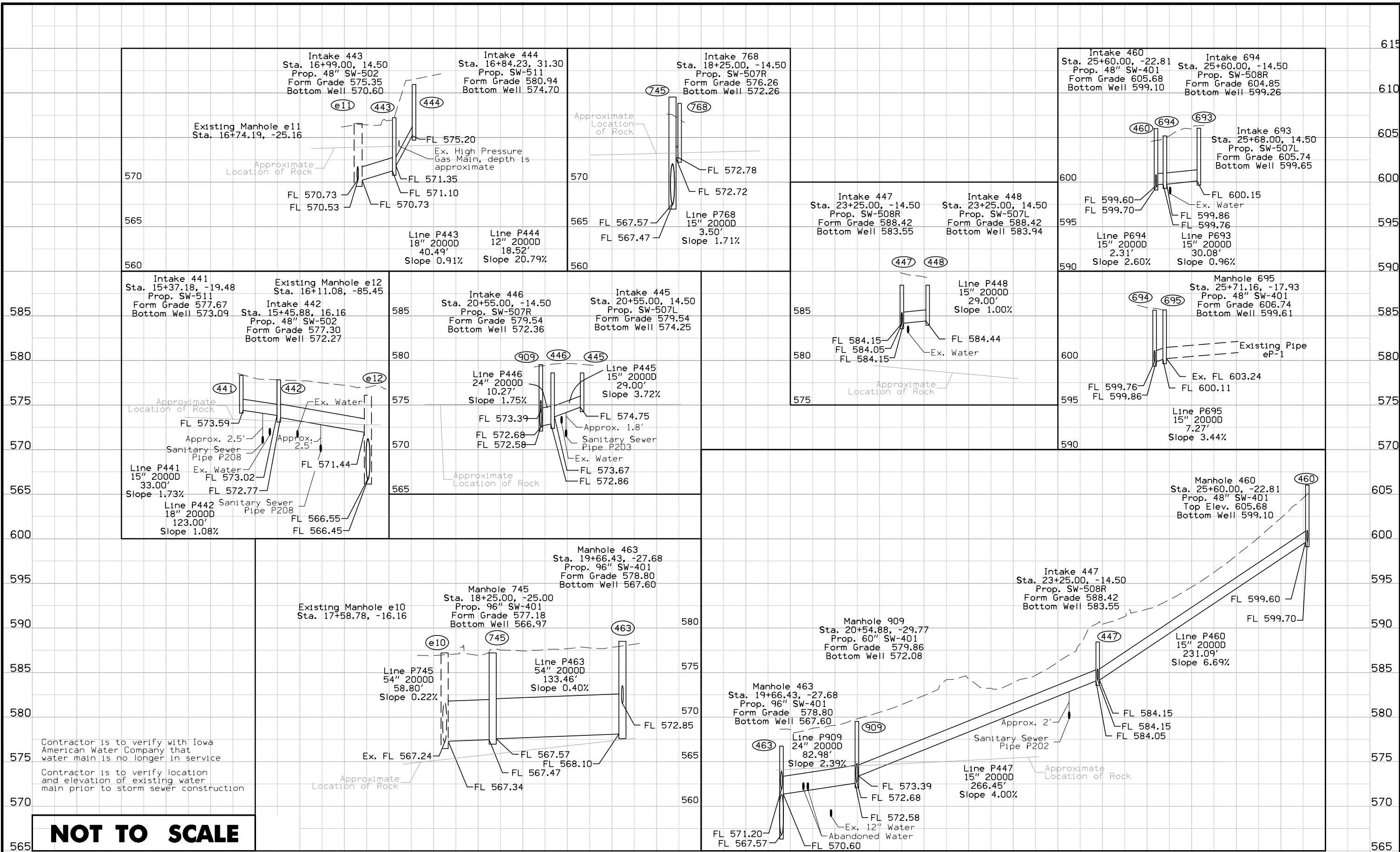
**MISSISSIPPI BLVD  
STORM SEWER**



For Storm Sewer Profiles  
Refer to Sheet No. M.6

NOTES:  
1. Construct 10' Long Flowable Mortar Anti-Seep Collar from the Bottom of Pipe Trench to Top of Pipe at the Width of the Pipe Trench

**14TH ST  
STORM SEWER**



**NOT TO SCALE**

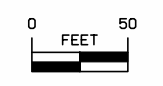
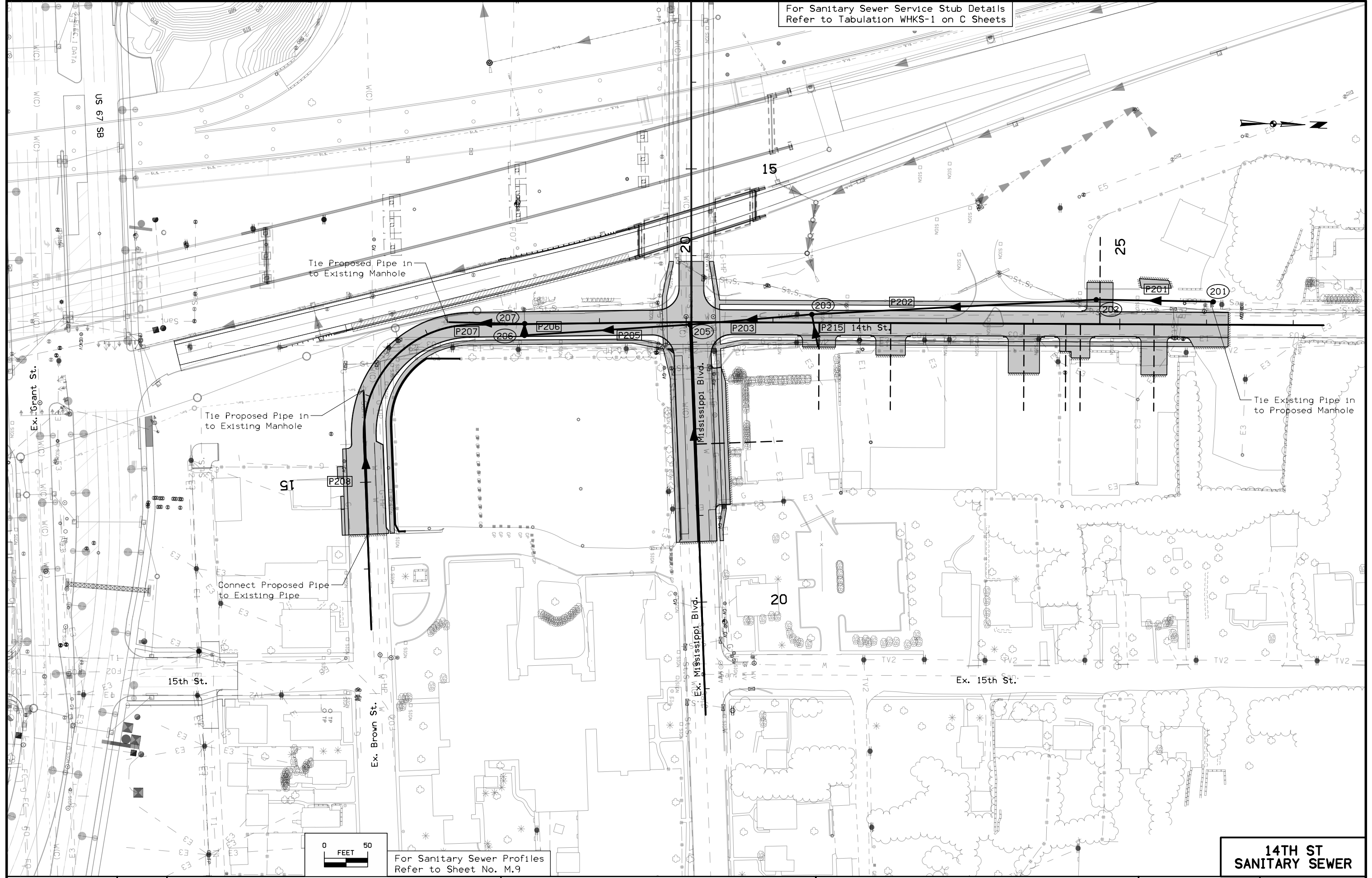
**14TH ST  
STORM SEWER**

### SANITARY SEWER

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

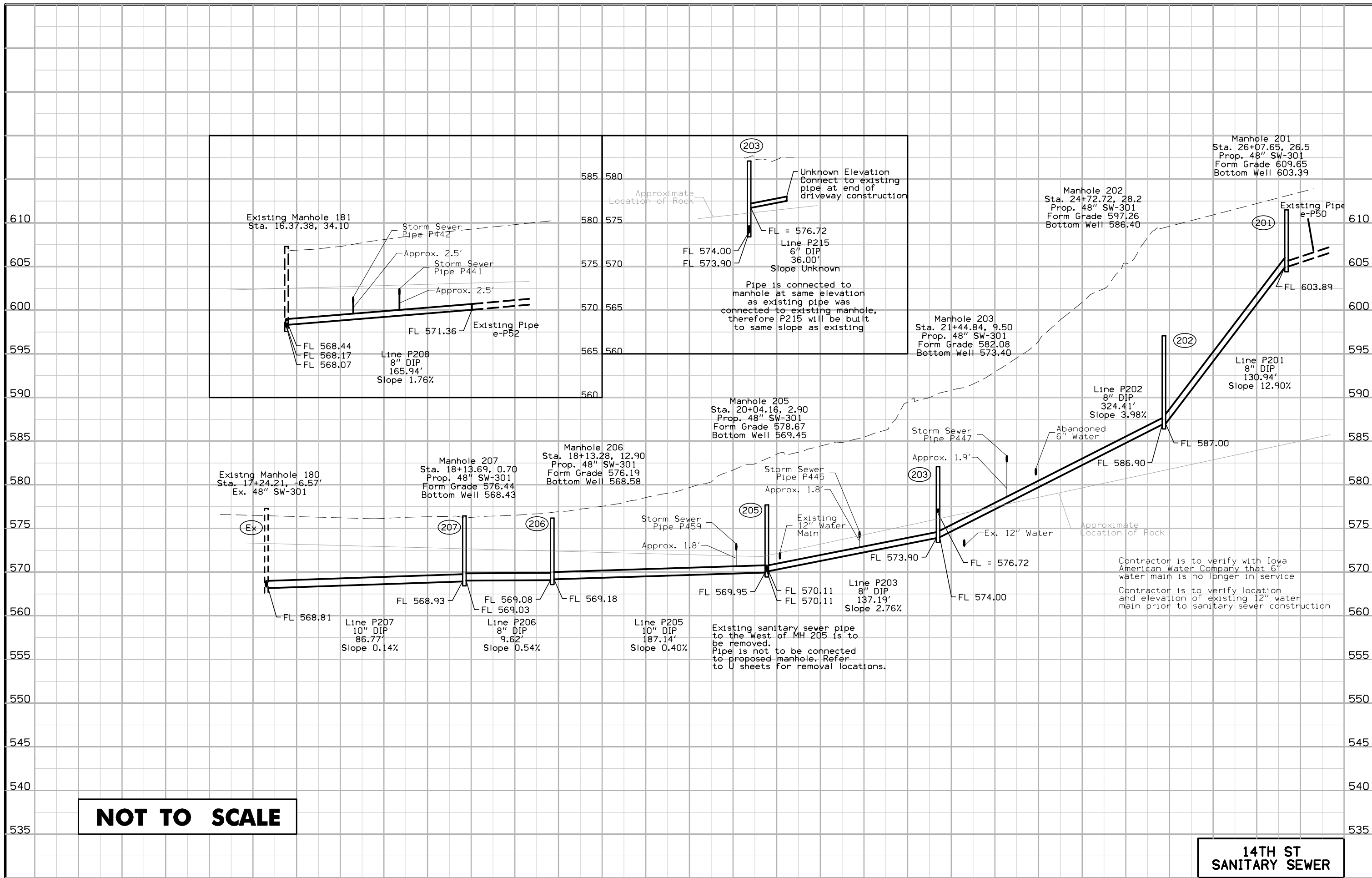
UTILITY ACCESSES							PIPES												
							Design Length, Slope, and Flowlines are calculated from inside wall to inside wall along CL of pipe. An additional 6 ft length is added to Design Length to account for estimated length to center of structures.												
No.	Location Station and Offset	*Type or Standard Road Plan	Form Grade	Bottom Well	Extension Length**	Notes	Line Number	Intake/Utility Access No.		Class 'D'	Pipe Diameter	Bid* Length	Design Length	Slope %	Flow Lines			Pipe Profile Sheet No.	Notes
			Elev.	Elev.	FT			From	To						Inlet Elevation	Outlet Elevation	Other Elevation		
201	26+07.65, 26.50' Lt	48" SW-301	609.65	603.4		14th STREET	P201	201	202	DIP	8	137	131	12.90	603.89	587.00		M.9	Div. (2)
202	24+72.72, 28.20' Lt	48" SW-301	597.26	568.4		14th STREET	P202	202	203	DIP	8	330	324	3.98	586.90	574.00		M.9	Div. (2)
203	21+44.84, 9.50' Lt	48" SW-301	582.08	573.4		14th STREET	P215	Ex.	203	DIP	6	41	36	Unk.	Unknown	576.72		M.9	Div. (2), Note 1
							P203	203	205	DIP	8	143	137	2.76	573.90	570.11		M.9	Div. (2)
205	20+04.16, 2.90' Rt	48" SW-301	578.67	569.4		14th STREET	P204	Ex.	205	DIP	8	254	248	2.10	575.34	570.11		M.11	Div. (2)
206	18+13.28, 12.90' Rt	48" SW-301	576.19	568.6		14th STREET, Note 2	P205	205	206	DIP	10	193	187	0.40	569.94	569.18		M.9	Div. (2)
207	18+13.69, 0.70' Lt	48" SW-301	576.44	568.4		14th STREET	P206	206	207	DIP	10	16	10	0.54	569.08	569.03		M.9	Div. (2)
							P207	207	e180	DIP	10	93	87	0.14	568.93	568.81		M.9	Div. (2)
							P208	Ex.	e181	DIP	8	171.94	165.94	1.7579	571.357	568.44		M.9	Div. (2)
Existing Structures (For Information Only)							Existing Pipes (For Information Only)												
e180	17+24.21, 6.57' Lt.	SW-301				UAC, connect P208 to Structure	e-P50	Ex.	Ex.		8		281		632.28	604.94			Tie-in to Proposed Manhole 201
e181	16+37.38, 34.10' Rt.	SW-301				UAC, connect P207 to Structure	e-P51	Ex.	Ex.		8		404		577.9	571.8			Tie-in to Pipe P204 at 19+30, 1.33 (Mississippi Blvd.)
							e-P52	Ex.	Ex.		8		410		573.43	565.15			Tie-in to Pipe P208 at 14+40, 0.69 (14th St.)
Notes:							<p>1 6" pipe acts as service to 619 14th St. SE. Build P215 from MH 203 to the end of driveway construction (36 LF). All fittings required to connect P215 to existing sanitary sewer pipe shall be considered incidental to sanitary sewer pipe bid item.</p> <p>2 A portion of Manhole 206 is built outside of the curb and gutter. Orient the manhole casting on the west side of the manhole to keep casting out of curb.</p> <p>3 Contractor is to field verify all pipe sizes and inverts prior to construction.</p> <p>4 Sanitary sewer staging is to follow general work staging. Stage 1 work is to include P204 and all work south of and including manhole 205. Stage 2 work is to include the remaining sanitary sewer work. By pass pumping will be required during construction and shall be considered incidental to sanitary sewer pipe construction.</p>												

For Sanitary Sewer Service Stub Details  
Refer to Tabulation WHKS-1 on C Sheets



For Sanitary Sewer Profiles  
Refer to Sheet No. M.9

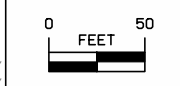
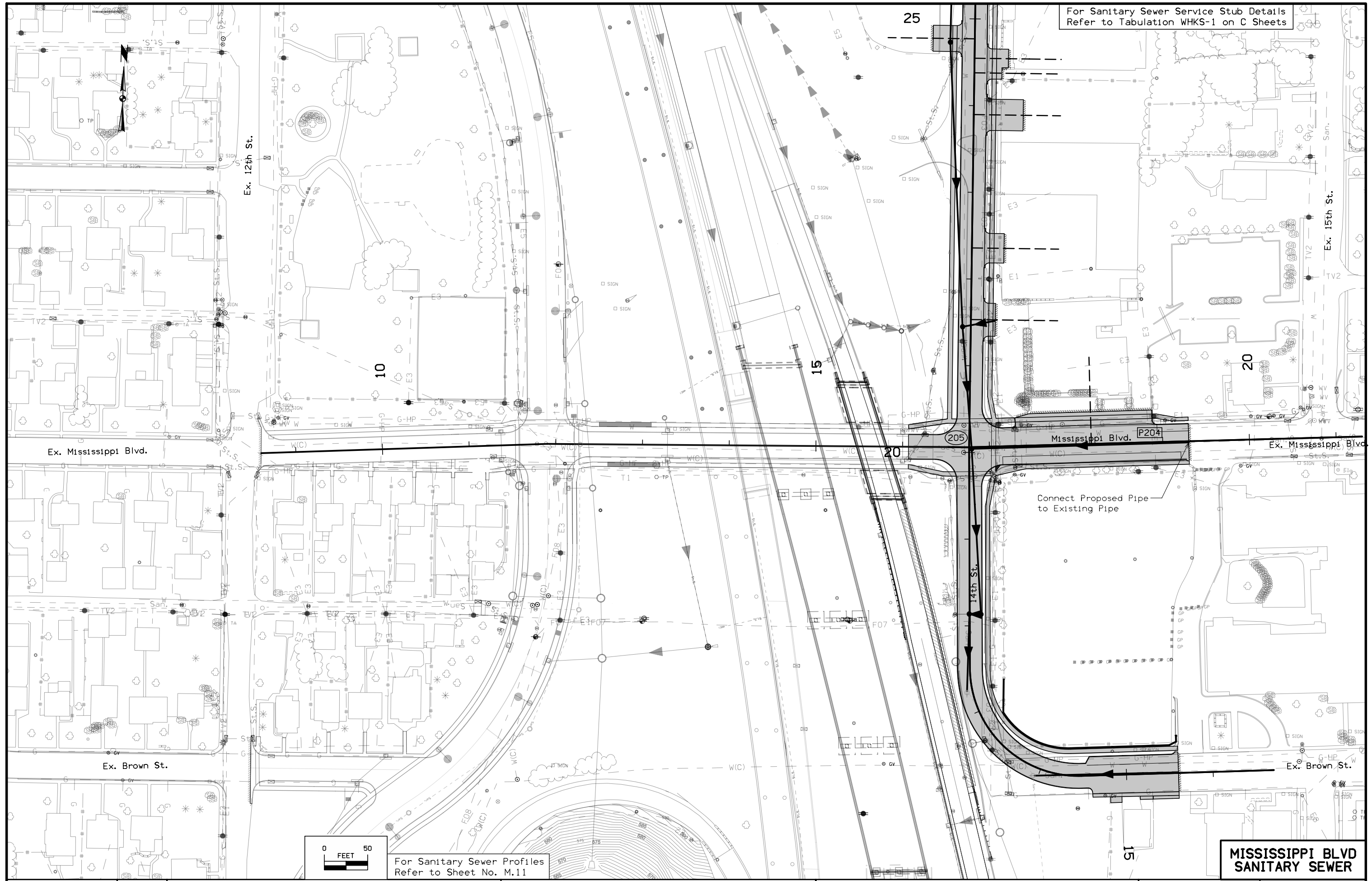
**14TH ST  
SANITARY SEWER**



**NOT TO SCALE**

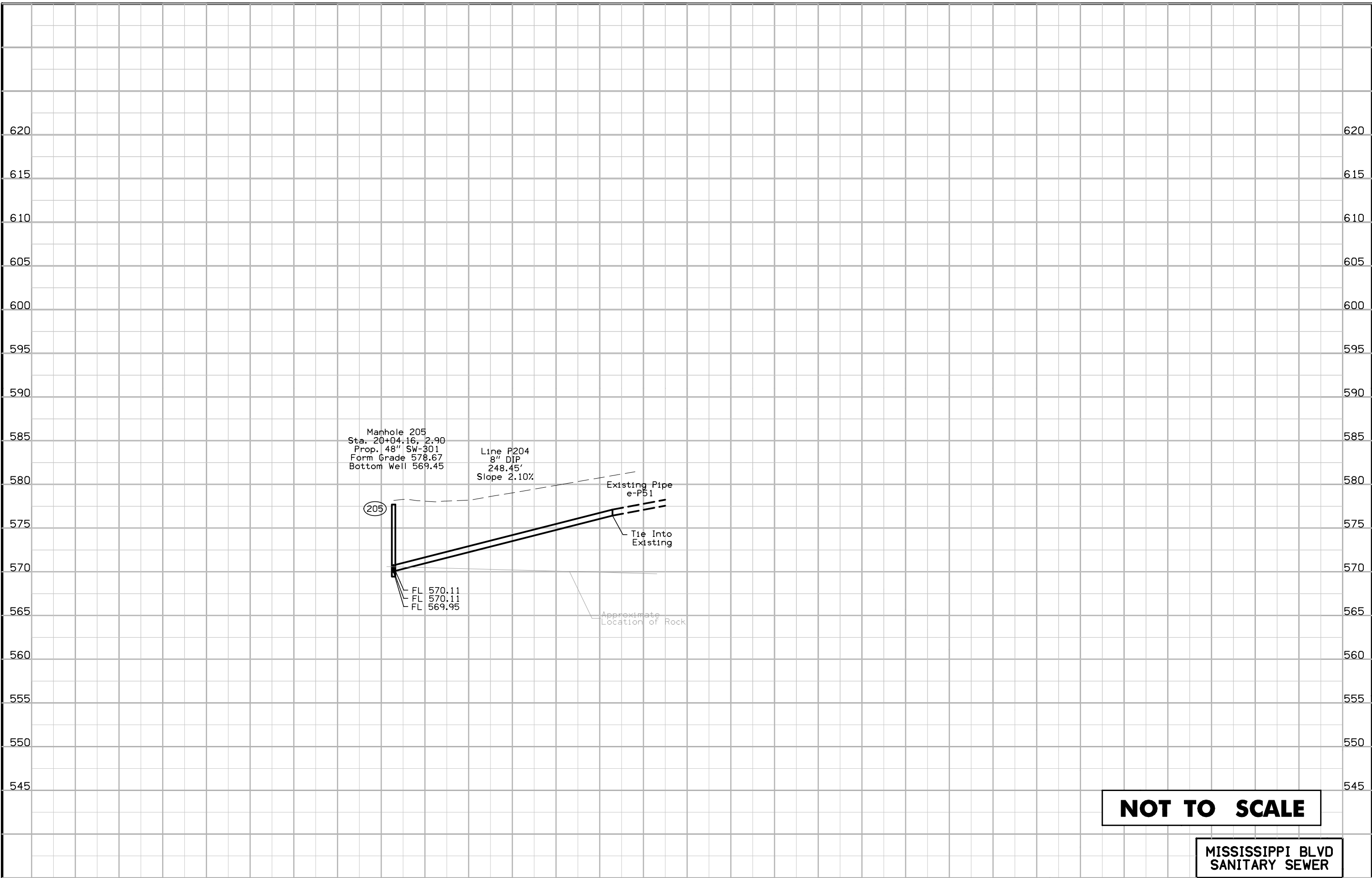
**14TH ST  
SANITARY SEWER**

For Sanitary Sewer Service Stub Details  
Refer to Tabulation WHKS-1 on C Sheets

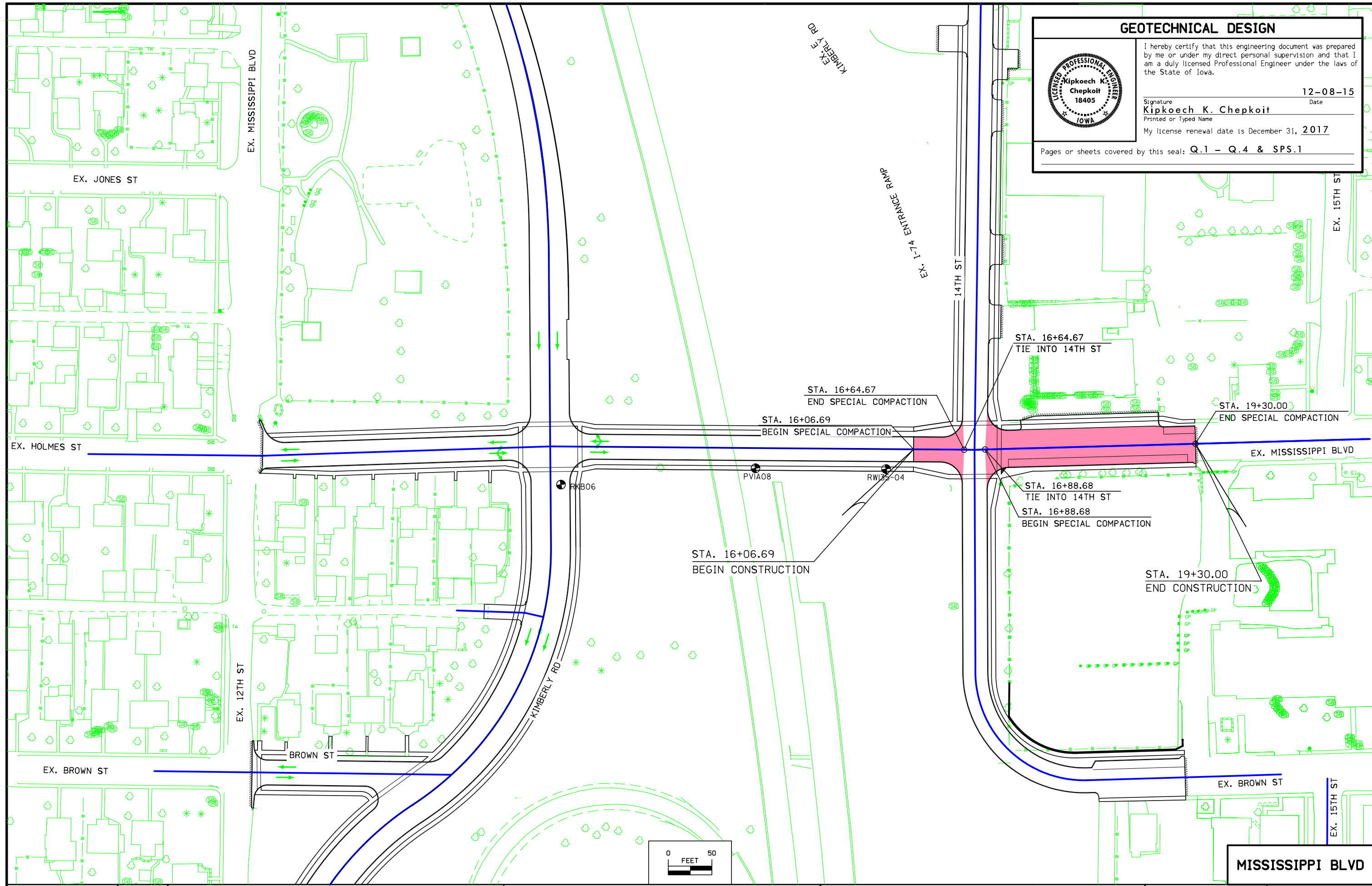


For Sanitary Sewer Profiles  
Refer to Sheet No. M.11

**MISSISSIPPI BLVD  
SANITARY SEWER**







**GEOTECHNICAL DESIGN**

**LICENSED PROFESSIONAL ENGINEER**  
Kipkoech K. Chepkait  
18405  
IOWA

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.

12-08-15  
Date

Signature  
**Kipkoech K. Chepkait**  
Printed or Typed Name

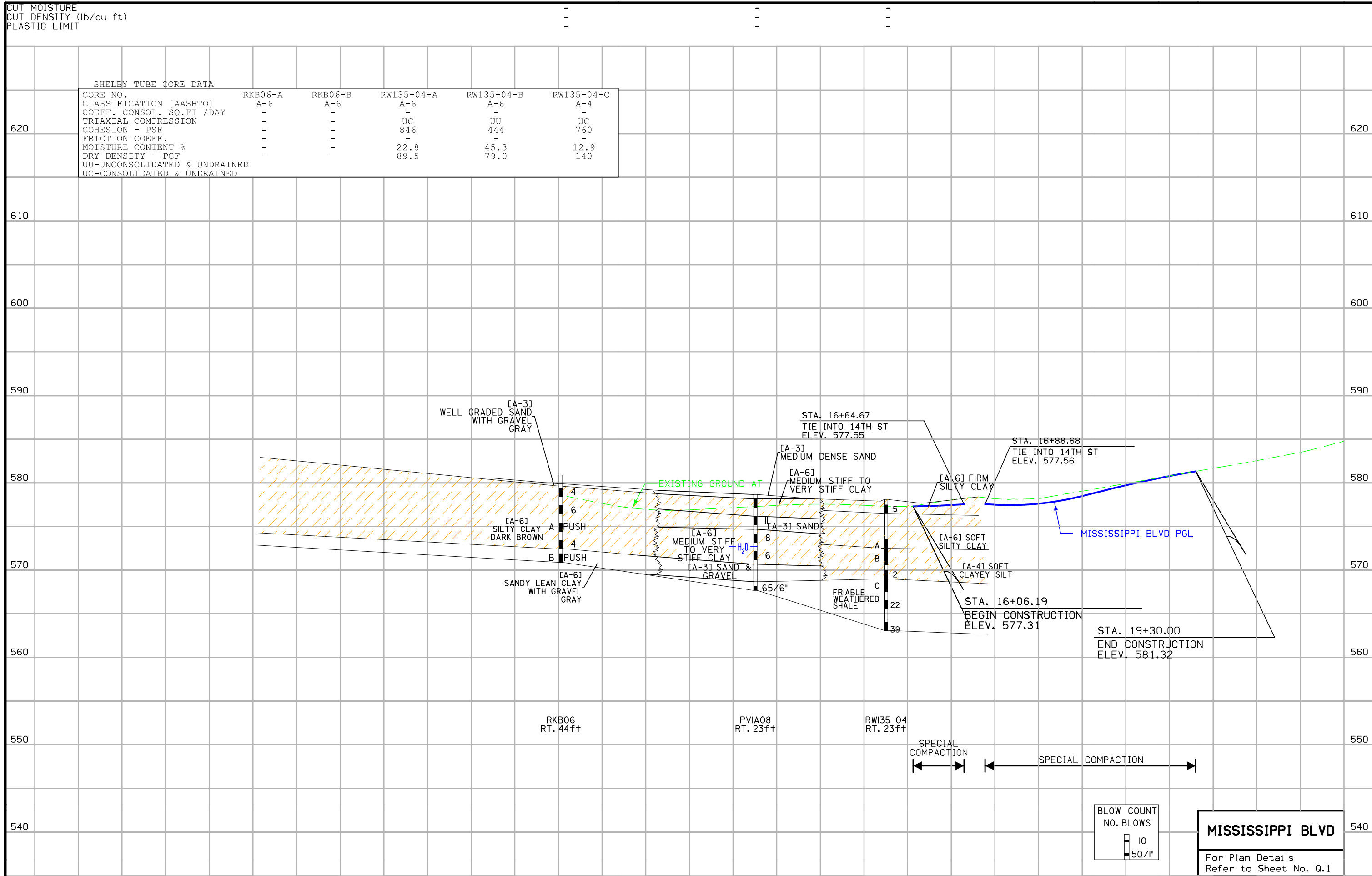
My license renewal date is December 31, 2017

Pages or sheets covered by this seal: **Q.1 - Q.4 & SPS.1**

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

SHELBY TUBE CORE DATA

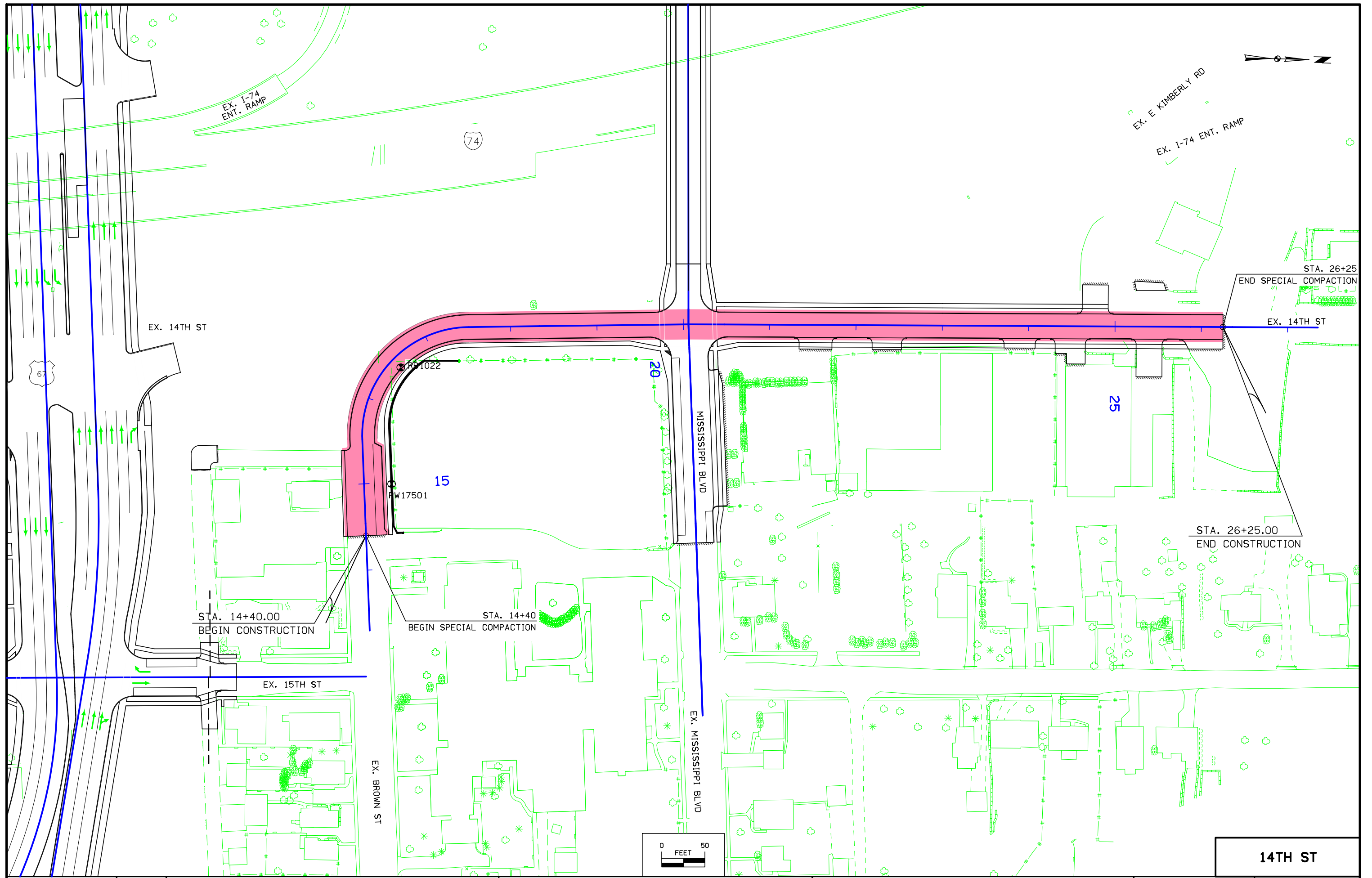
CORE NO.	RKB06-A	RKB06-B	RW135-04-A	RW135-04-B	RW135-04-C
CLASSIFICATION [AASHTO]	A-6	A-6	A-6	A-6	A-4
COEFF. CONSOL. SQ.FT /DAY	-	-	-	-	-
TRIAxIAL COMPRESSION	-	-	UC	UU	UC
COHESION - PSF	-	-	846	444	760
FRICITION COEFF.	-	-	-	-	-
MOISTURE CONTENT %	-	-	22.8	45.3	12.9
DRY DENSITY - PCF	-	-	89.5	79.0	140
UU-UNCONSOLIDATED & UNDRAINED	-	-	-	-	-
UC-CONSOLIDATED & UNDRAINED	-	-	-	-	-



BLOW COUNT  
 NO. BLOWS

10
50/1'

**MISSISSIPPI BLVD**  
 For Plan Details  
 Refer to Sheet No. Q.1



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

SHELBY TUBE CORE DATA

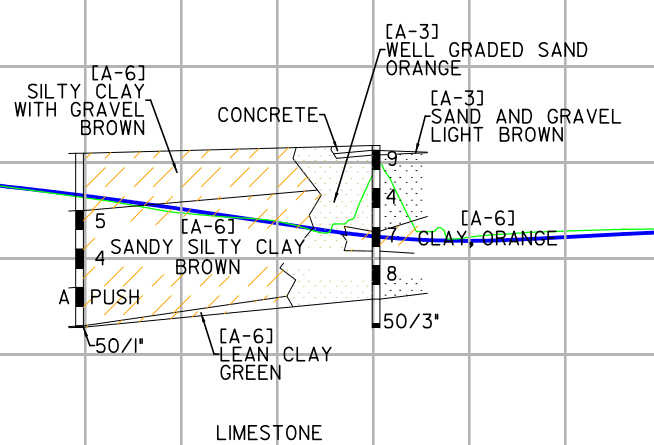
CORE NO.	RW17501-A
CLASSIFICATION [AASHTO]	A-6
COEFF. CONSOL. SQ.FT /DAY	-
TRIAxIAL COMPRESSION	-
COHESION - PSF	-
FRICITION COEFF.	-
MOISTURE CONTENT %	-
DRY DENSITY - PCF	-
UU-UNCONSOLIDATED & UNDRAINED	-
CU-CONSOLIDATED & UNDRAINED	-

STA. 26+25.00  
 END CONSTRUCTION  
 ELEV. 612.94

STA. 14+40.00  
 BEGIN CONSTRUCTION  
 ELEV. 578.96

14TH ST PGL

EXISTING GROUND AT C



RW17501  
 RT. 32ft

RB1022  
 RT. 13ft

SPECIAL COMPACTION

BLOW COUNT  
 NO. BLOWS

10
50/1'

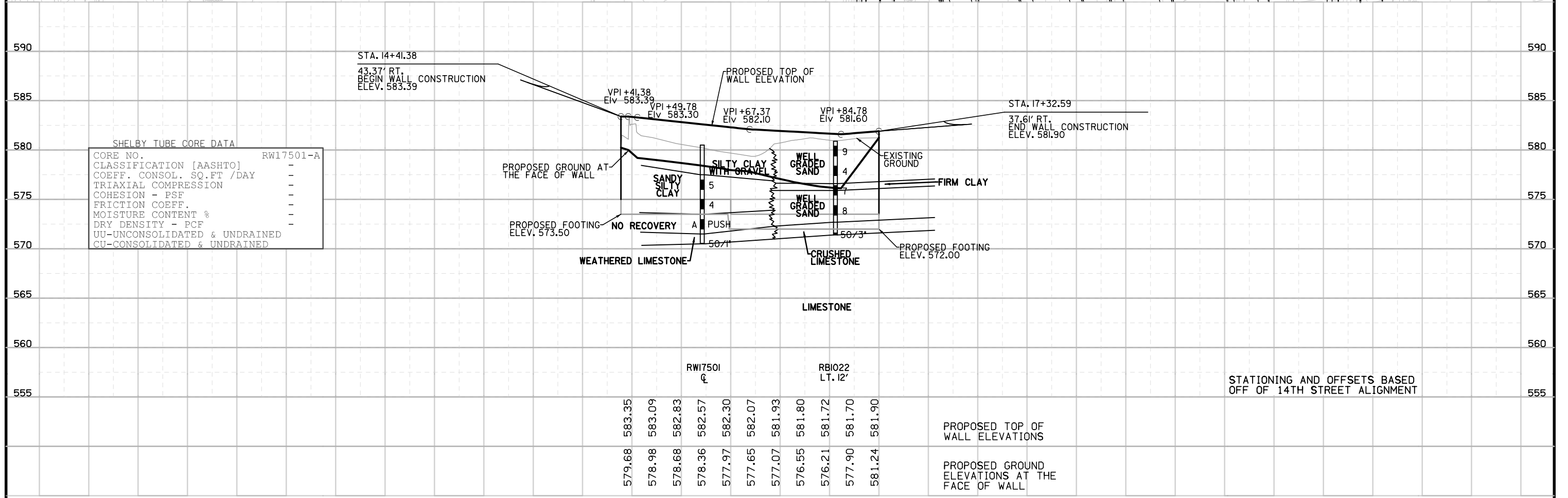
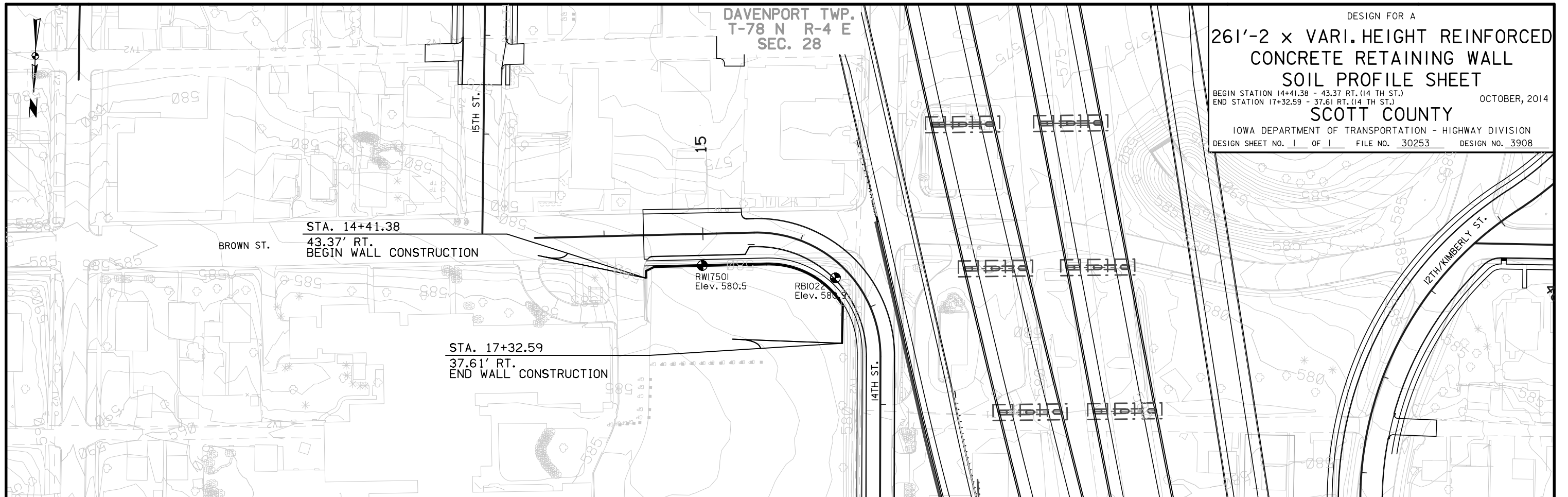
**14TH ST**  
 For Plan Details  
 Refer to Sheet No. Q.3

- UNSATURABLE
- SUBGRADE TREATMENT
- SHALE
- ROCK
- SELECT SOIL
- SANDY SOIL
- DENS. CORE
- SELECT SAND
- SHELBY
- BLOW
- SAMPLE
- PLUGGED
- WATER
- MOISTURE

DAVENPORT TWP.  
T-78 N R-4 E  
SEC. 28

DESIGN FOR A  
**261'-2 x VARI. HEIGHT REINFORCED  
CONCRETE RETAINING WALL  
SOIL PROFILE SHEET**

BEGIN STATION 14+41.38 - 43.37 RT. (14 TH ST.)  
END STATION 17+32.59 - 37.61 RT. (14 TH ST.)  
**SCOTT COUNTY**  
OCTOBER, 2014  
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
DESIGN SHEET NO. 1 OF 1 FILE NO. 30253 DESIGN NO. 3908



SHELBY TUBE CORE DATA

Core No.	Classification [AASHTO]
RW17501-A	-
Coeff. Consol. SQ.FT / DAY	-
Triaxial Compression	-
Cohesion - PSF	-
Friction Coeff.	-
Moisture Content %	-
Dry Density - PCF	-
UU-UNCONSOLIDATED & UNDRAINED	-
CU-CONSOLIDATED & UNDRAINED	-

STATIONING AND OFFSETS BASED  
OFF OF 14TH STREET ALIGNMENT

### 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)		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

### UTILITY LEGEND

	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 PLAN AND PROFILE SHEETS

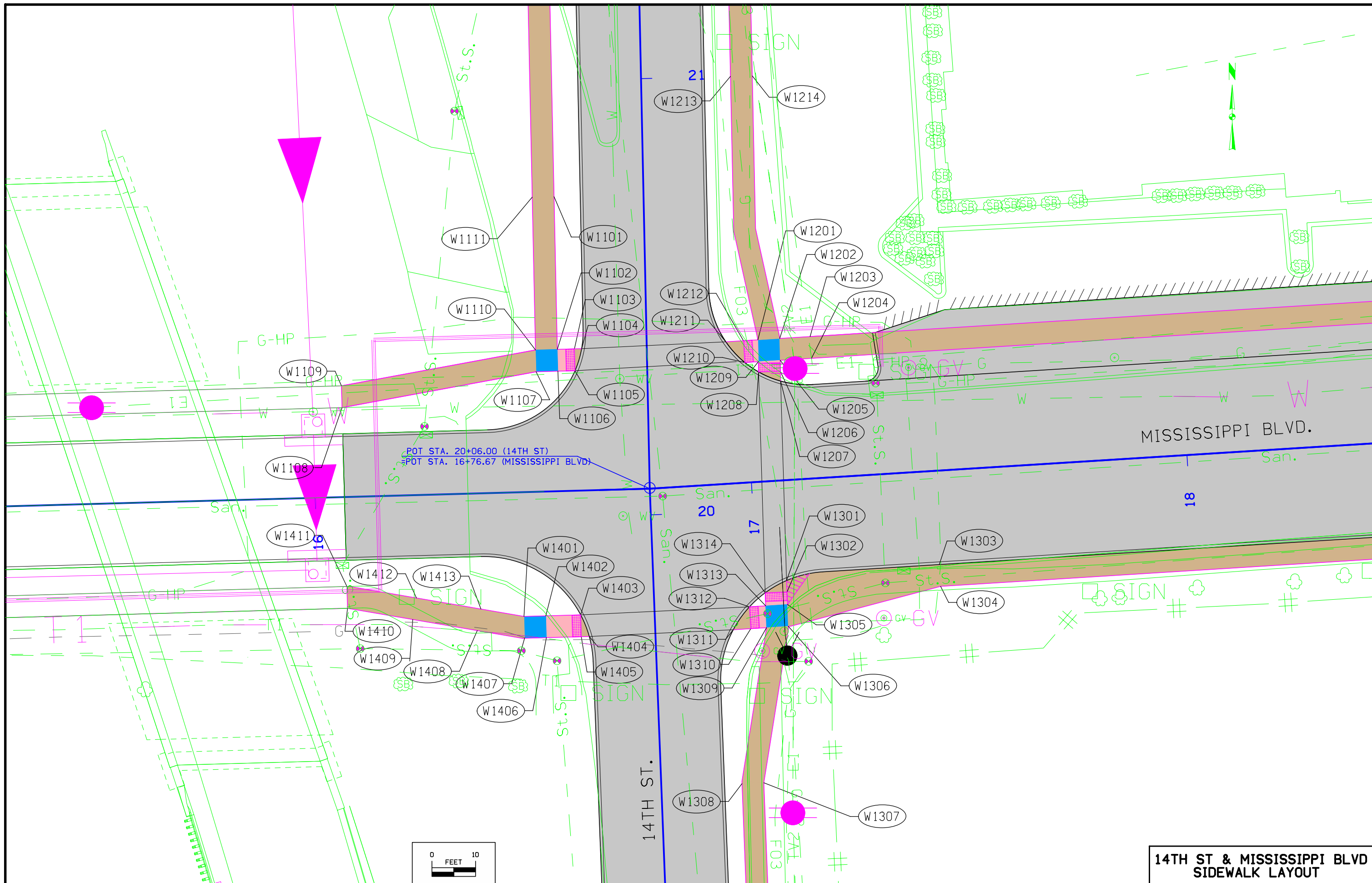
LINEWORK	Design Color No.	Description
Green	(2)	Existing Topographic Features and Labels
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)	Existing Utilities
SHADING	Design Color No.	Description
Tan	(8)	Proposed Sidewalk Shading
Blue, Light	(230)	Proposed Sidewalk Landing Shading
Pink	(11)	Proposed Sidewalk Ramp Shading
Yellow	(4)	Highlight for Critical Notes or Features
Red	(3)	Delineates Restricted Areas
Lavender	(9)	Temporary Pavement Shading
Gray, Light	(48)	Proposed Pavement Shading
Gray, Med	(80)	Proposed Granular Shading
Gray, Dark	(112)	Proposed Grade and Pave Shading
Brown, Light	(236)	Grading Shading

Symbol	Description
	Reference Point
	Station
	Survey Line
	Section Corner
	Ground Line Intercept
	Saw Cut
	Guardrail
	Clearing & Grubbing Area
	Pavement Removal

Symbol	Description
	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

## SIDEWALK LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES S)



**14TH ST & MISSISSIPPI BLVD  
SIDEWALK LAYOUT**

SHEET NUMBER **S.2**

SCOTT COUNTY PROJECT NUMBER **IM-NHS-074-1(207)5--03-82**

DESIGN TEAM **WHKS & Co.**









ENGLISH IOWA DOT





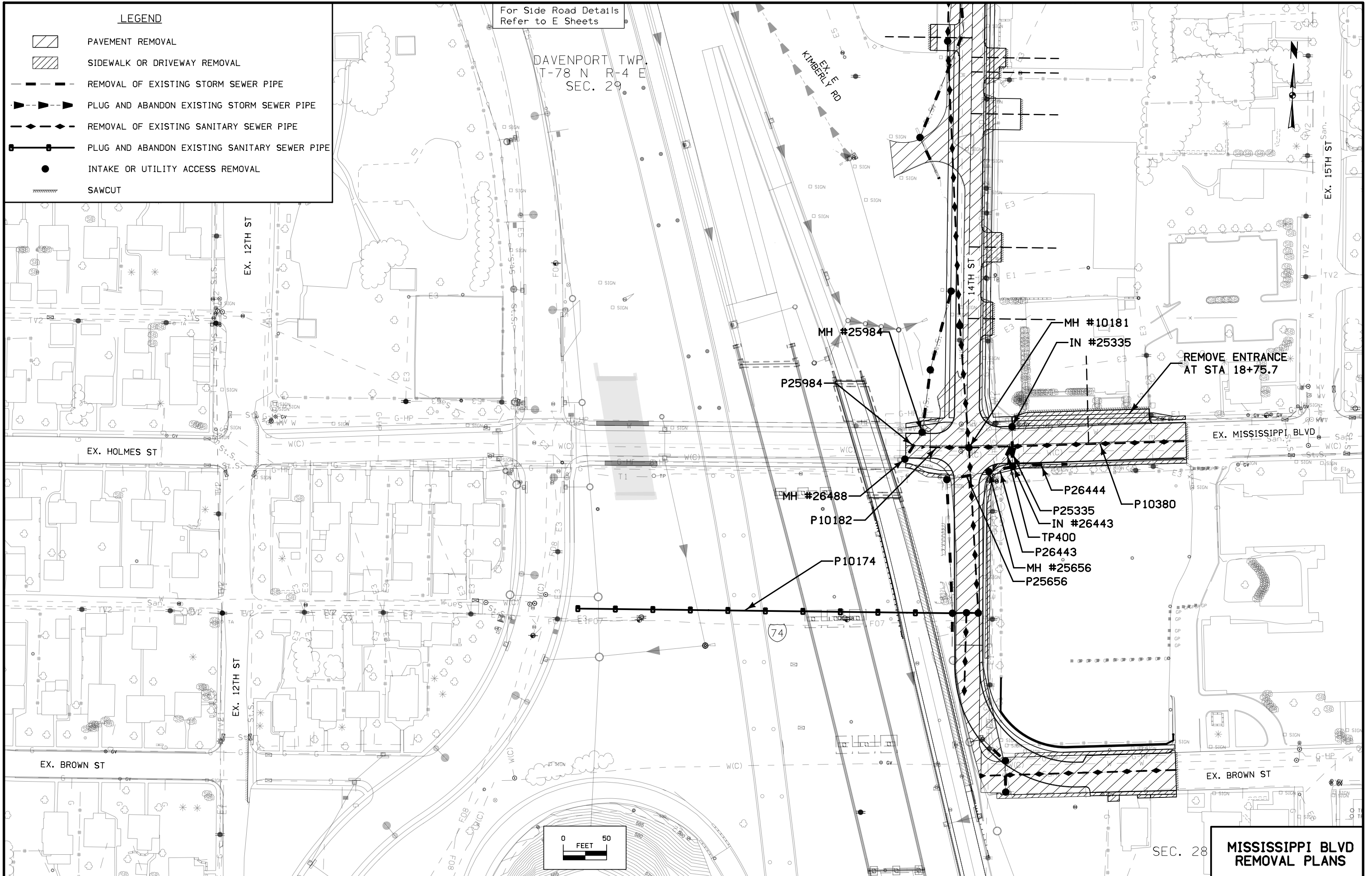


**LEGEND**

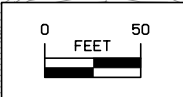
-  PAVEMENT REMOVAL
-  SIDEWALK OR DRIVEWAY REMOVAL
-  REMOVAL OF EXISTING STORM SEWER PIPE
-  PLUG AND ABANDON EXISTING STORM SEWER PIPE
-  REMOVAL OF EXISTING SANITARY SEWER PIPE
-  PLUG AND ABANDON EXISTING SANITARY SEWER PIPE
-  INTAKE OR UTILITY ACCESS REMOVAL
-  SAWCUT

For Side Road Details Refer to E Sheets

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











REMOVE ENTRANCE  
AT STA 18+75.7



**MISSISSIPPI BLVD  
REMOVAL PLANS**

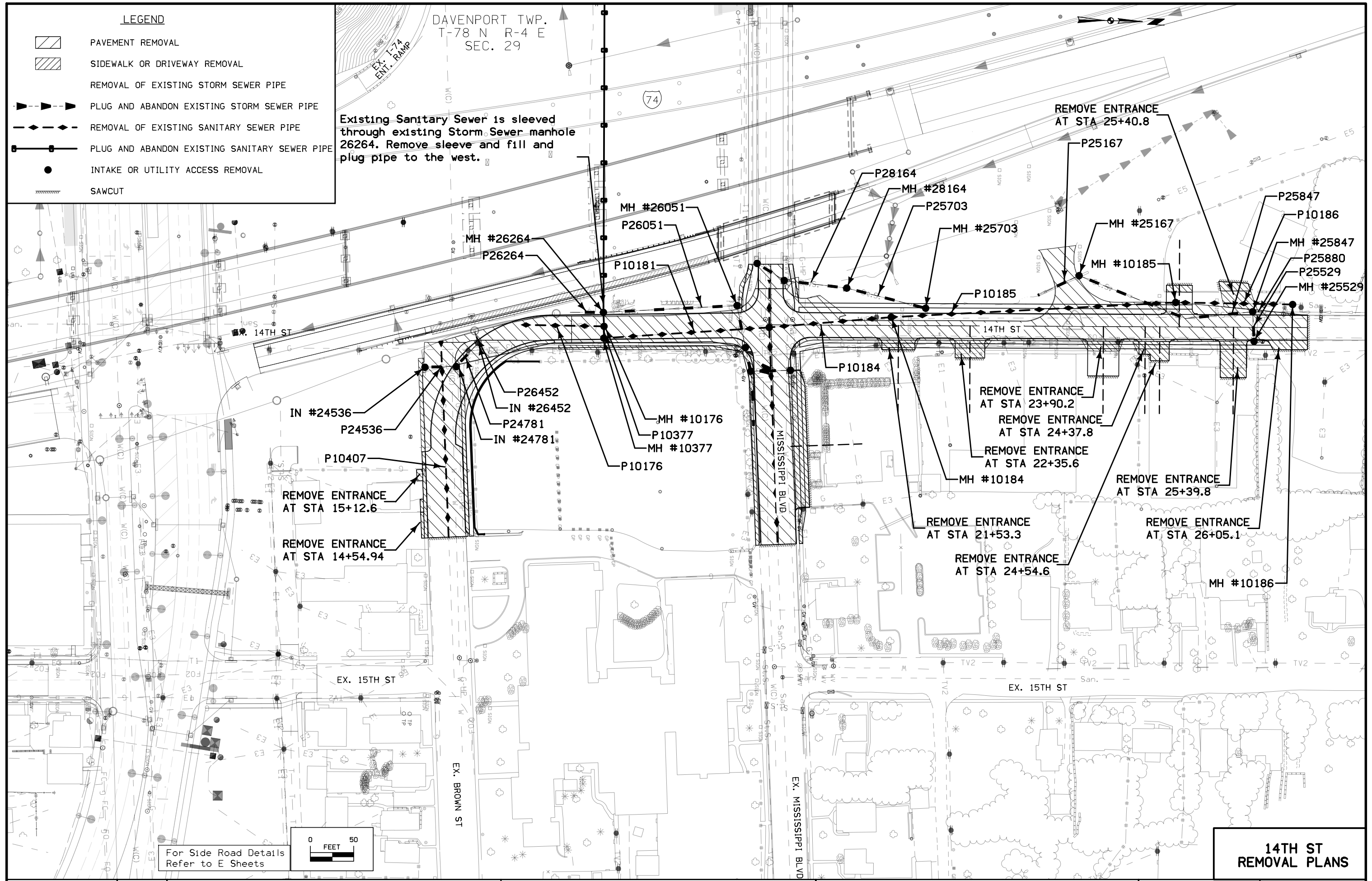
SEC. 28

**LEGEND**

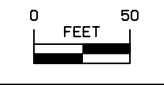
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-  SIDEWALK OR DRIVEWAY REMOVAL
-  REMOVAL OF EXISTING STORM SEWER PIPE
-  PLUG AND ABANDON EXISTING STORM SEWER PIPE
-  REMOVAL OF EXISTING SANITARY SEWER PIPE
-  PLUG AND ABANDON EXISTING SANITARY SEWER PIPE
-  INTAKE OR UTILITY ACCESS REMOVAL
-  SAWCUT

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

Existing Sanitary Sewer is sleeved through existing Storm Sewer manhole 26264. Remove sleeve and fill and plug pipe to the west.



For Side Road Details Refer to E Sheets



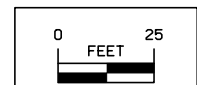
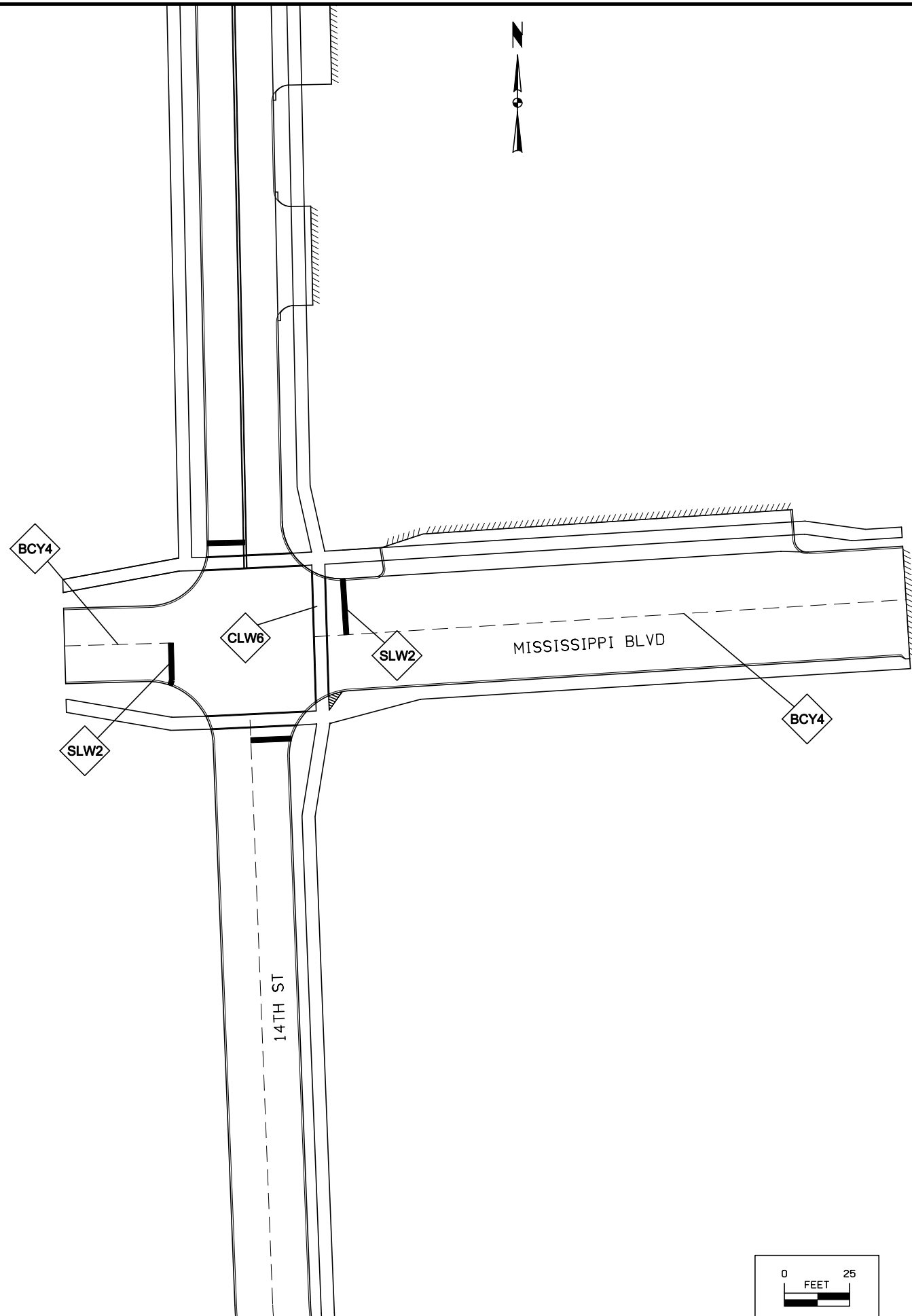
**14TH ST  
REMOVAL PLANS**

BCY4 BROKEN CENTERLINE (YELLOW)\*

CLW6 CROSSWALK LINE (WHITE)\*

SLW2 STOP LINE (WHITE)\*

\*SEE PM-110 FOR PAVEMENT MARKING DETAILS



MISSISSIPPI BLVD  
FINAL PAVEMENT MARKINGS

ENGLISH

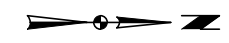
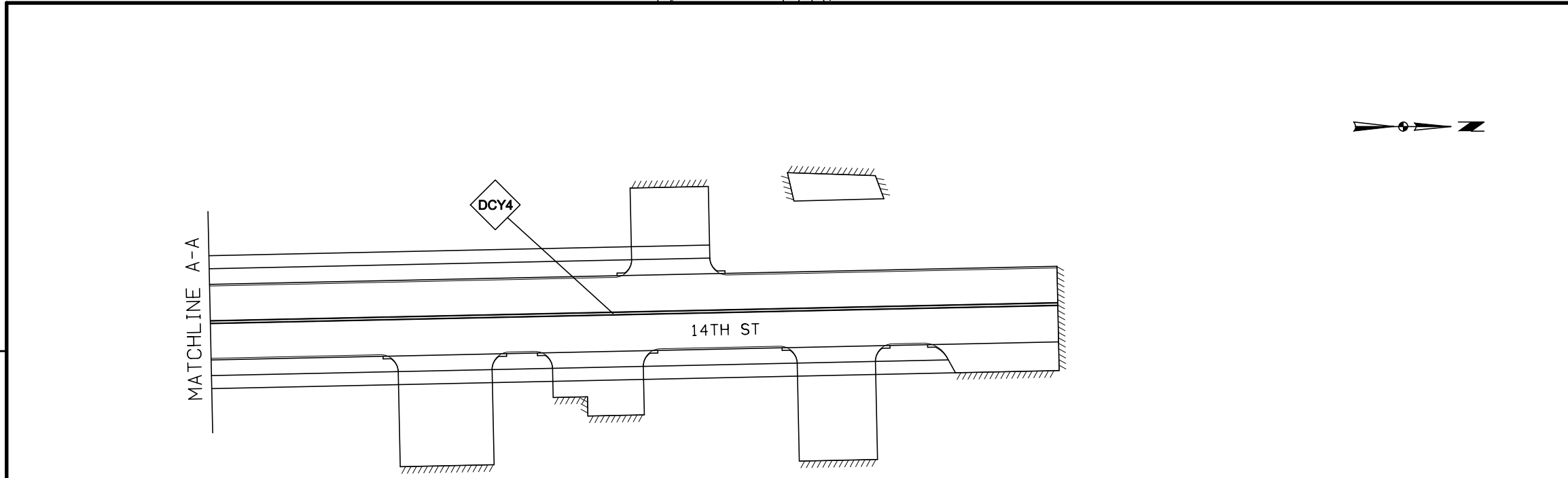
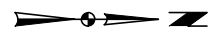
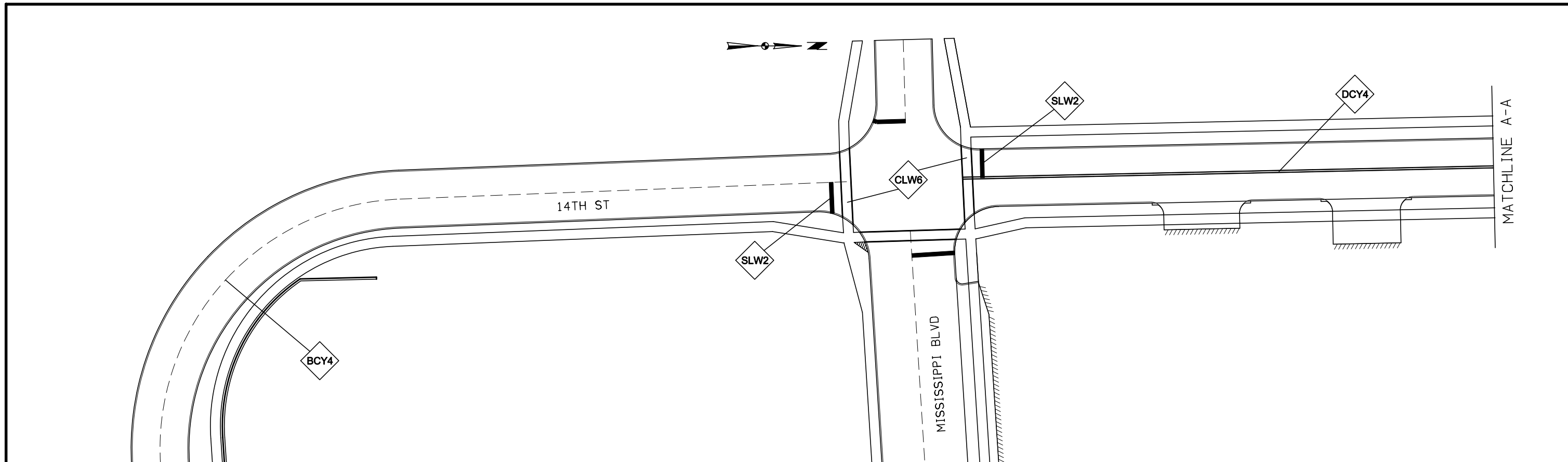
IOWA DOT

DESIGN TEAM **WHKS & Co.**





SCOTT COUNTY

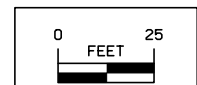
PROJECT NUMBER **IM-NHS-074-1(207)5--03-82**

SHEET NUMBER **U.3**

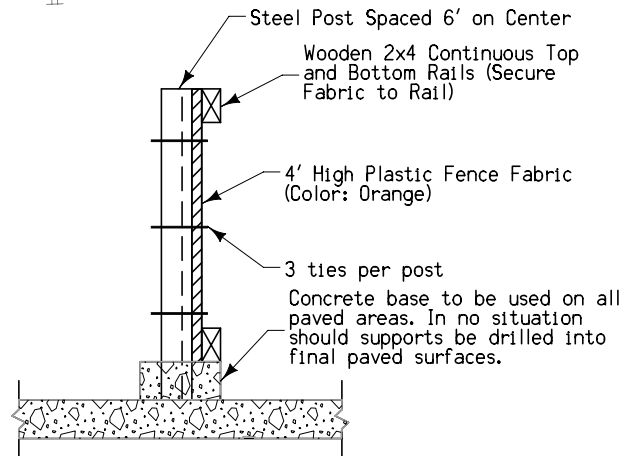


\*SEE PM-110 FOR PAVEMENT MARKING DETAILS

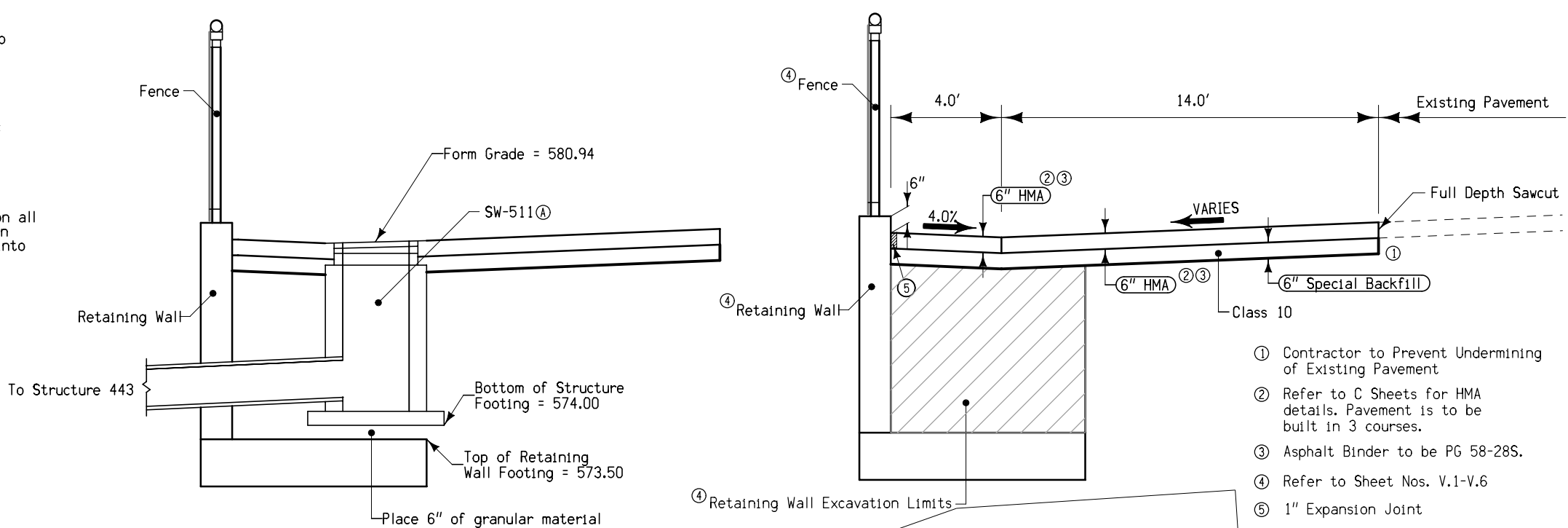
-  BROKEN CENTERLINE (YELLOW)\*
-  DOUBLE CENTERLINE (YELLOW)\*
-  CROSSWALK LINE (WHITE)\*
-  STOP LINE (WHITE)\*



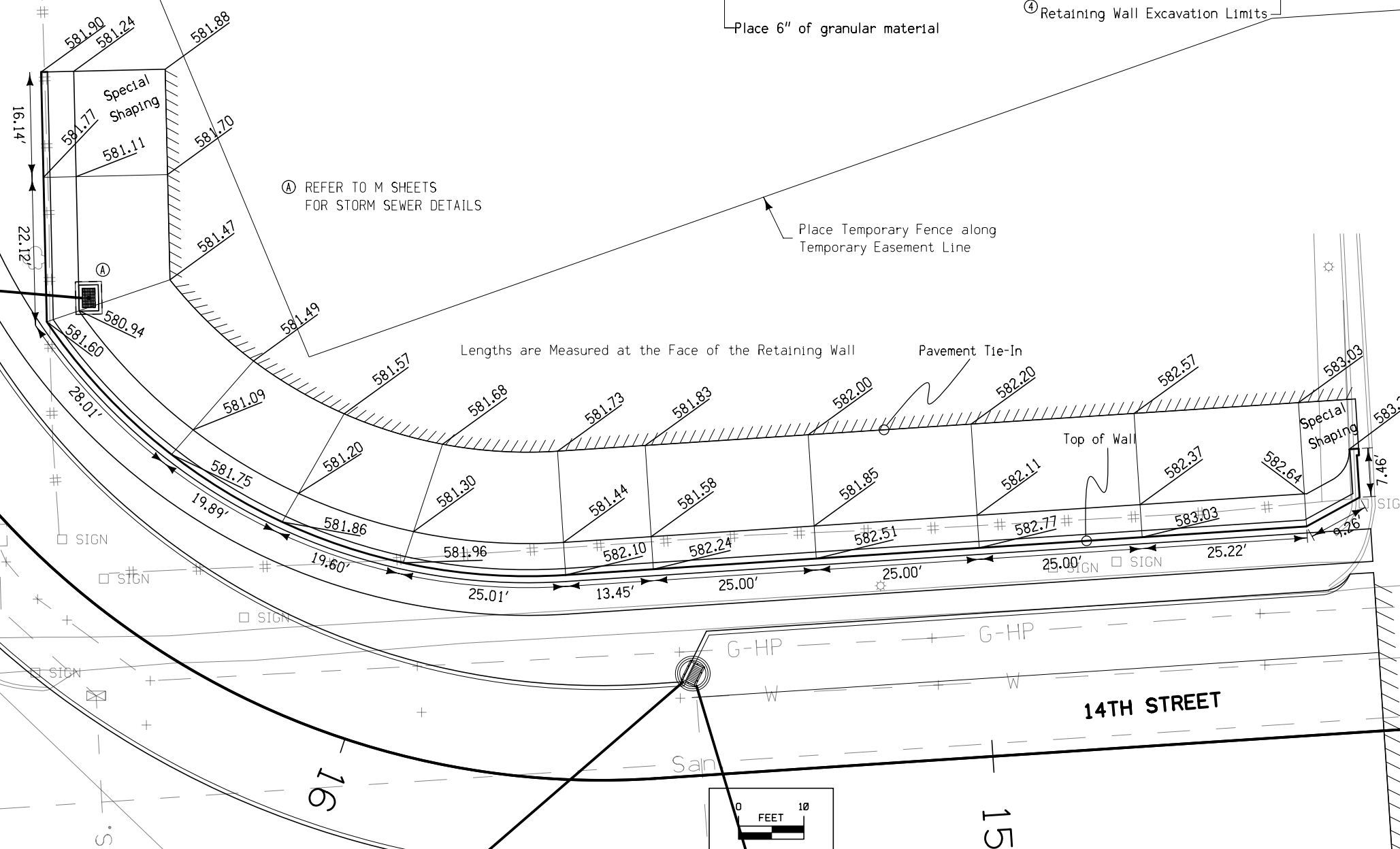
**14TH ST  
FINAL PAVEMENT MARKINGS**



Note: Fence must be secured in an upright position at all times

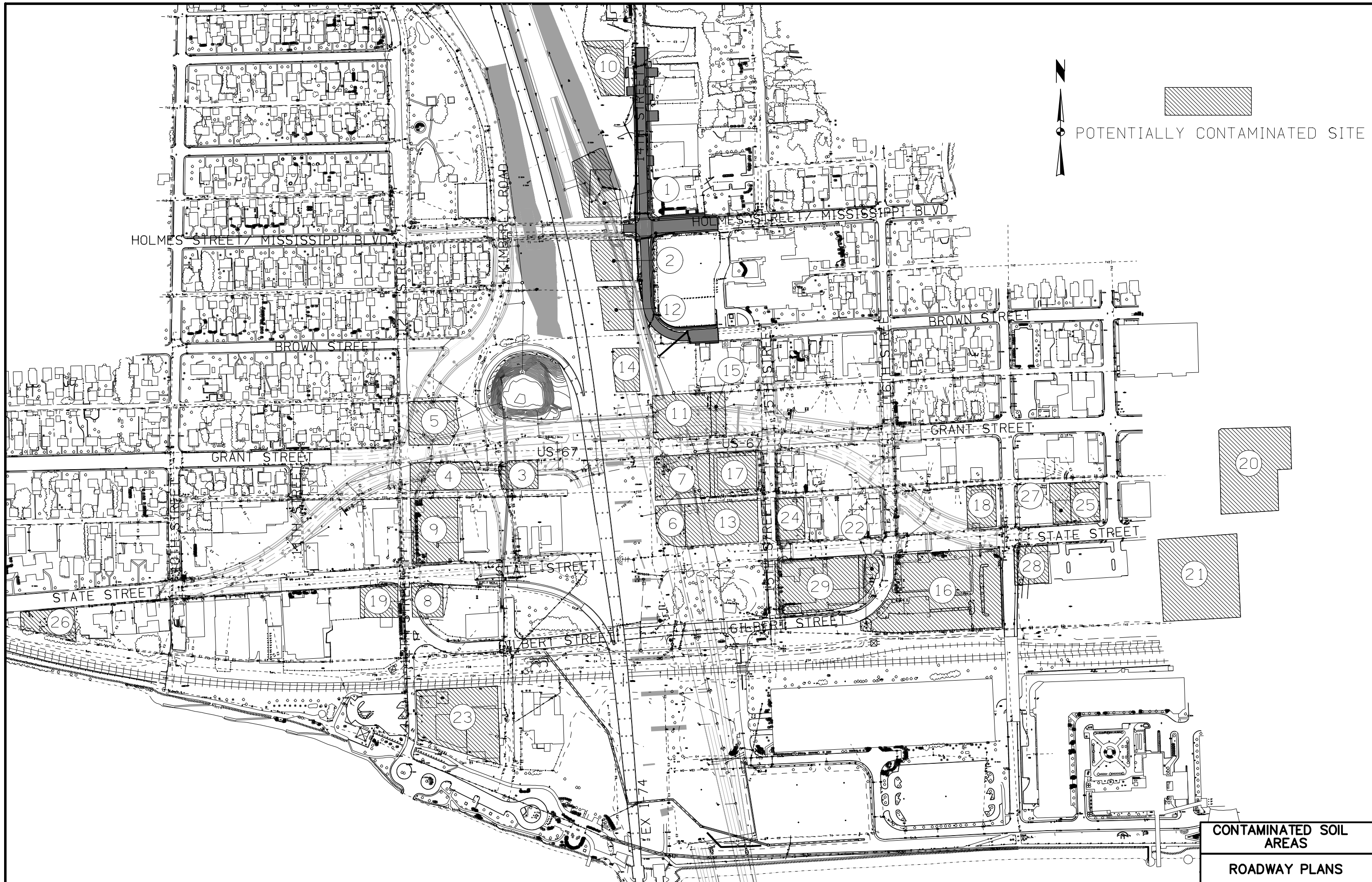


- ① Contractor to Prevent Undermining of Existing Pavement
- ② Refer to C Sheets for HMA details. Pavement is to be built in 3 courses.
- ③ Asphalt Binder to be PG 58-28S.
- ④ Refer to Sheet Nos. V.1-V.6
- ⑤ 1" Expansion Joint



(A) REFER TO M SHEETS FOR STORM SEWER DETAILS

**OUR LADY OF LOURDES  
PARKING LOT MODIFICATIONS**

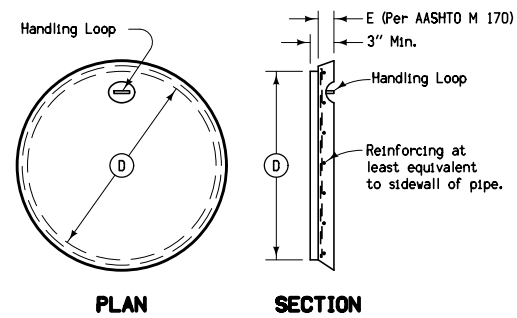
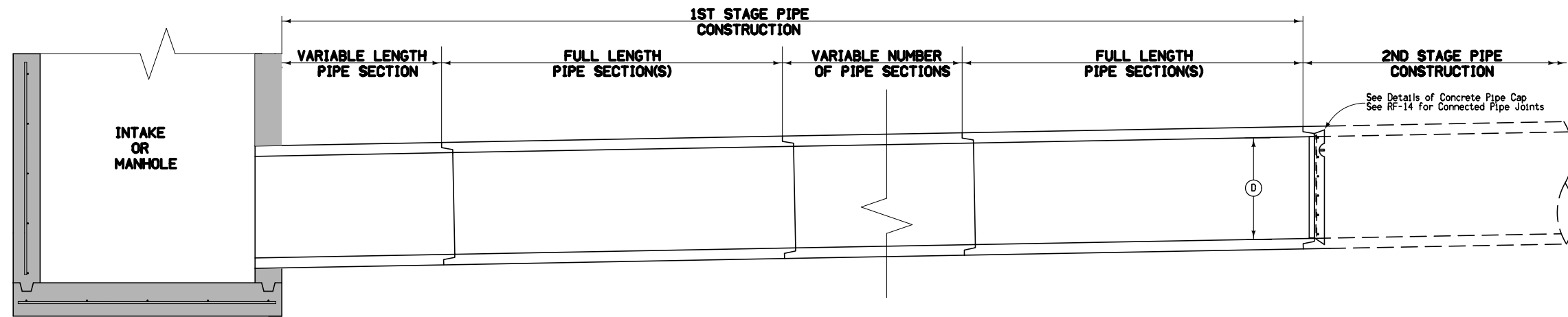


**CONTAMINATED SOIL AREAS**  
**ROADWAY PLANS**

Contaminated Soil Summary				PCSS-1
				SPECIAL
Location	Parcel # See H Sheets	Description and Address	Site Impacted by this Contract Yes/No	Remarks
1	380	H & H Car Care Center	No	4 UST removed 1990.
		612 14th Street		DNR - "No Action Req'd" Feb. 2005. Petroleum contamination in soil boring.
2	374	Dale Snapp Co.	No	2 UST removed 1998.
		536 14th Street		Petroleum contamination in recent soil boring.
3	345	Crescent Economy Inc. 1303 Grant Street	No	No tanks. Dry cleaning chemicals present. DNR statewide standards exceeded (Oct. 2005).
4	346	Showboat Car Wash 1215 Grant Street	No	3 UST removed 1992. DNR - "No Action Req'd" Aug. 2003.
5	353	Hoyt & Son Automotive 1210 Grant Street	No	5 UST removed 1996. Previous soil removal project DNR - "No Action Req'd" July 2003.
6	341		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 soil boring.
		Johnny's Amoco BP/QC Mart 1402 State Street		
7	341A	Twin Bridges 66/Shell Oil	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.
		333 14th Street		
8	312	Adel Parking Lot 1207 State Street	No	Former gas station. Now part of QCA Spa. Petroleum contamination in ground water from monitoring wells.
9	324	Village Inn 1210 State Street	No	Petroleum contamination in recent soil borings.
10	386	Great American Window Co 710 14th Street	Yes	Petroleum contamination in ground water from monitoring wells.
11	355	Dart Mart/Big 10 Mart	Yes	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.
		411 14th Street		Contamination documented in monitoring wells.

Contaminated Soil Summary				PCSS-1
				SPECIAL
Location	Parcel # See HE Sheets	Description and Address	Site Impacted by this Contract Yes/No	Remarks
12	372	Ross' Drive Through 512 14th Street	No	No action necessary. No contamination identified.
13	320	Knox Corporation 1416 State Street	No	No action necessary. No contamination identified.
14	367	Ross' Restaurant Inc 430 14th Street	No	Contamination documented in monitoring wells.
15	357	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	311	City Hall 1609 State Street	No	Total of 5 UST: 3 UST removed 1988 and one active. Petroleum contamination in recent soil boring.
17	339	US West 1437 Grant Street	No	1 UST removed 1993. No contamination identified.
18	331	Car Quest 312 17th Street	No	Contamination documented in monitoring wells.
19	NA	Adel Parking Lot 1159 State Street	No	Owner denied access to property. Potential UST.
20	NA	Lindquist Ford 1910 State Street	No	8 UST removed 1997. DNR "No Action Req'd" Nov. 1998.
21	NA	Plaza Building 1823 State Street	No	Petroleum contamination identified.
22	NA	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	NA	Twin Bridges Truck City 131 12th Street	No	2 UST removed 1990. DNR "No Action Req'd" Jan. 1996.
24	NA	Nextel Phone 1504 State Street	No	Former gas station. No documented information.
25	NA	Rapid Lube and Oil 1740 State Street	No	Former gas station. 6 UST removed 1981 to 1987.
26	NA	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	NA	Hans Body Shop 1720 State Street	No	Former gas station. No documented information.
28	NA	Bettendorf Auto 1705-1719 State Street	No	No contamination identified.
29	NA	Twin Bridges Motor Inn 221 15th Street	No	No contamination identified.





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.

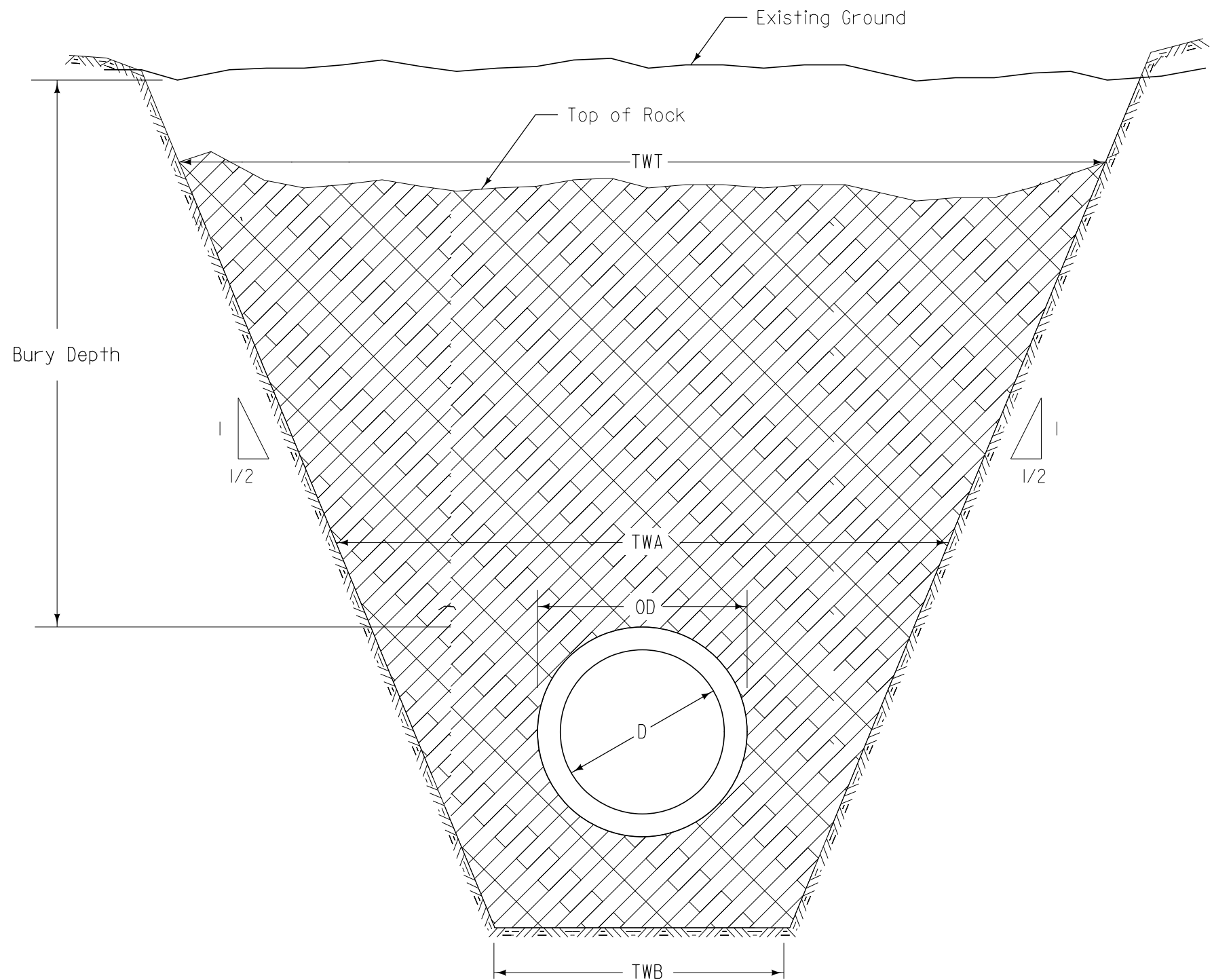
The cap must be precast and an approved bituminous joint material shall be placed between the cap and the pipe.

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



Legend



Maximum allowable payment area for Rock Excavation

Key

- OD = Outside diameter of pipe
- D = Inside diameter of pipe
- TWT = Trench width at top of rock
- TWB = Trench width at bottom (Max= $1.25 \times OD + 12$  inches or 54 inches (whichever is greater))
- TWA = Average trench width

Rock Excavation Trench  
for Sewers

**GENERAL NOTES:**

IT IS THE INTENT OF THESE PLANS TO CONSTRUCT A 261'-2 x VARIABLE HEIGHT REINFORCED CONCRETE RETAINING WALL WHICH TIES INTO AN EXISTING RETAINING WALL.

FAINT LINES ON PLANS INDICATE THE EXISTING STRUCTURE.

THE CITY AND 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 CONSTRUCTION STARTING DATE.

ALL EXPOSED CORNERS 90 DEGREES OR SHARPER SHALL BE FILLETED WITH A 3/4" DRESSED AND BEVELED STRIP.

THE REINFORCEMENT SUPPLIED FOR THIS STRUCTURE SHALL BE GRADE 60. REINFORCING BAR CLEARANCES WILL BE AS FOLLOWS:  
 CAST AGAINST EARTH 3"  
 CONCRETE AGAINST FORMS 2"

CLASS 20 EXCAVATION MATERIAL UNSUITABLE FOR BACKFILLING SHALL BE DISPOSED OF IN A MANNER THAT WILL LEAVE THE SITE IN A NEAT CONDITION.

KEYWAY DIMENSIONS SHOWN ON THE PLANS ARE BASED ON NOMINAL DIMENSIONS UNLESS STATED OTHERWISE. IN ADDITION, THE BEVEL USED ON THE KEYWAY SHALL BE LIMITED TO A MAXIMUM OF 10 DEGREES FROM VERTICAL.

SEE TRAFFIC CONTROL PLAN ELSEWHERE IN THESE PLANS.

STRUCTURAL CONCRETE FOR THE FOOTING AND WALL SHALL BE CLASS "C".

ALL COSTS ASSOCIATED WITH EXPANSION AND CONSTRUCTION JOINTS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "STRUCTURAL CONCRETE (MISCELLANEOUS)."

BACKFILLING OPERATIONS SHALL BE IN ACCORDANCE WITH ARTICLE 2402.03, H OF THE STANDARD SPECIFICATIONS. ARTICLE 2403.03, N, OF THE STANDARD SPECIFICATIONS, SHALL BE FOLLOWED WITH RESPECT TO SUBJECTING WALLS AND FOOTINGS TO EXTERIOR LOADS.

ALL REINFORCING BARS AND BARS NOTED AS DOWELS SUPPLIED FOR THIS STRUCTURE SHALL BE DEFORMED REINFORCEMENT UNLESS OTHERWISE NOTED OR SHOWN.

THESE BRIDGE PLANS LABEL ALL REINFORCING STEEL WITH ENGLISH NOTATION (5G1 IS 5/8 INCH DIAMETER BAR). ENGLISH REINFORCING STEEL RECEIVED IN THE FIELD MAY DISPLAY THE FOLLOWING "BAR DESIGNATION". THE "BAR DESIGNATION" IS THE STAMPED IMPRESSION ON THE REINFORCING BARS, AND IS EQUIVALENT TO THE BAR DIAMETER IN MILLIMETERS.

ENGLISH SIZE	3	4	5	6	7	8	9	10	11
BAR DESIGNATION	10	13	16	19	22	25	29	32	36

**SPECIFICATIONS:**

DESIGN: AASHTO SERIES OF 2002.  
 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.

**DESIGN STRESSES:**

DESIGN STRESSES FOR THE FOLLOWING MATERIALS ARE IN ACCORDANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SERIES OF 2002. REINFORCING STEEL IN ACCORDANCE WITH SECTION 8, GRADE 60. CONCRETE IN ACCORDANCE WITH SECTION 8, f'c = 3,500 PSI.

WALLS AND FOOTINGS WERE DESIGNED BASED ON THE FOLLOWING REQUIREMENTS:

MAXIMUM ALLOWABLE BEARING PRESSURE = 3,000 PSF  
 SOIL UNIT WEIGHT = 120 PCF  
 SOIL EQUIVALENT ACTIVE EARTH FLUID PRESSURE W/O WATER = 36 PCF  
 COEFFICIENT OF SLIDING FRICTION (FOOTING) = 0.4



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DESIGN TEAM HANSON PROFESSIONAL SERVICES

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8239085001

BENCH MARK NO. 503: US 67 RAMP D STA. 4501+81.78, RT. 117.13', ELEV. 580.28', CHISELED "X" IN FLANGE BOLT IN WORD "MUELLER" FHYD.

**ESTIMATED STRUCTURE QUANTITIES**

ITEM NO.	ITEM CODE	ITEM	UNIT	TOTAL	AS BUILT QUANTITY
1	2401-6750001	REMOVAL, AS PER PLAN	LS	1	
2	2402-2720000	EXCAVATION, CLASS 20	CY	874	
3	2403-0100000	STRUCTURAL CONCRETE (MISCELLANEOUS)	CY	195.7	
4	2404-7775005	REINFORCING STEEL, EPOXY COATED	LB	12870	
5	2519-1001000	FENCE, CHAIN LINK, VINYL COATED	LF	261	

ITEM NO.	ESTIMATE REFERENCE INFORMATION
1	INCLUDES ALL WORK FOR REMOVAL AND OFF-SITE DISPOSAL OF PART OF THE EXISTING MODULAR BLOCK RETAINING WALL TO THE LIMITS SHOWN ON THE PLANS. REMOVAL OF SCHEDULED ITEMS SHALL BE IN ACCORDANCE WITH SECTION 2401, OF THE STANDARD SPECIFICATIONS. ANY DAMAGE TO MATERIAL NOT TO BE REMOVED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND REPAIRED AT NO EXTRA COST TO THE STATE. IT ALSO INCLUDES ANY TEMPORARY REMOVAL, STOCKPILING, AND REASSEMBLING OF OTHER PORTIONS OF THE EXISTING WALL THAT MAY INTERFERE WITH CONSTRUCTION OF THE PROPOSED REINFORCED CONCRETE WALL.
3	INCLUDES PERFORATED PIPE, POROUS BACKFILL, FILTER FABRIC, GRANULAR BACKFILL, PREFORMED JOINT FILLER AND WATER SEAL.  INCLUDES ALL COSTS ASSOCIATED WITH FURNISHING AND INSTALLING EXPANSION AND CONSTRUCTION JOINTS. INCLUDES DOWEL BAR ASSEMBLIES FOR FOOTINGS, AND PREFORMED JOINT FILLER.  INCLUDES ALL COSTS ASSOCIATED WITH FURNISHING AND INSTALLING NEOPRENE WATERSTOPS.  INCLUDES ALL COSTS ASSOCIATED WITH FORM LINER PANELS FOR WALLS.
5	INCLUDES BASE PLATES AND ANCHOR BOLTS.

**CAST IN PLACE CONCRETE WALL PANEL FINISH NOTES:**

- 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 SAMPLE OF PATTERN INDICATED. SAMPLE MAY BE EITHER ACTUAL FORM LINER MATERIALS OR FOAM CASTINGS FROM LINER PROPOSED FOR USE ON THE PROJECT.
- PROVIDE 4'x4'x6 INCH (MIN.) FULL SCALE SAMPLE PANEL 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. THE TOP 1 FOOT OF THE SAMPLE SHALL DEPICT THE 4-INCH PROJECTED UPPER WALL SURFACE. THE SAMPLE PANEL SHALL BE CAST VERTICALLY. 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 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 2 -  
 FITZGERALD FORMLINERS PATTERN I6991 -  
 MEDIUM SANDBLAST

FITZGERALD FORMLINERS, INC.  
 1500 EAST CHESTNUT AVENUE  
 SANTA ANA, CA 92701  
 800-547-7760  
 WWW.FORMLINERS.COM

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.

**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 **Robert Chantome** Date \_\_\_\_\_

Printed or Typed Name

My license renewal date is December 31, 2017

Pages or sheets covered by this seal: **V.1 - V.6**

DESIGN FOR A

**261'-2 x VARI. HEIGHT REINFORCED CONCRETE RETAINING WALL**  
**GENERAL NOTES AND QUANTITIES**

BEGIN STATION 14+41.38 - 43.37 RT. (14 TH ST.)  
 END STATION 17+32.59 - 37.61 RT. (14 TH ST.)

**SCOTT COUNTY**

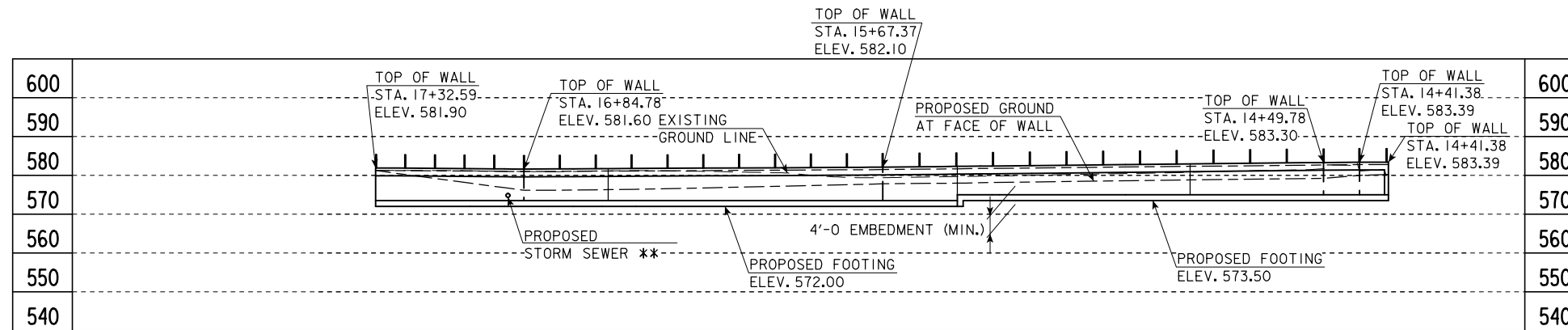
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
 DESIGN SHEET NO. 1 OF 6 FILE NO. 30253 DESIGN NO. 3908

SCOTT COUNTY

PROJECT NUMBER IM-074-I(207)5--13-82

SHEET NUMBER V,1

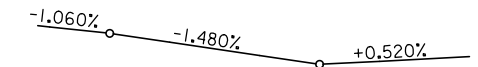
BENCH MARK NO. 503: US 67 RAMP D STA. 4501+81.78, RT. 117.13',  
ELEV. 580.28', CHISELED "X" IN FLANGE BOLT IN WORD "MUELLER" FHYD.



ELEVATION ALONG FRONT FACE OF RETAINING WALL 175

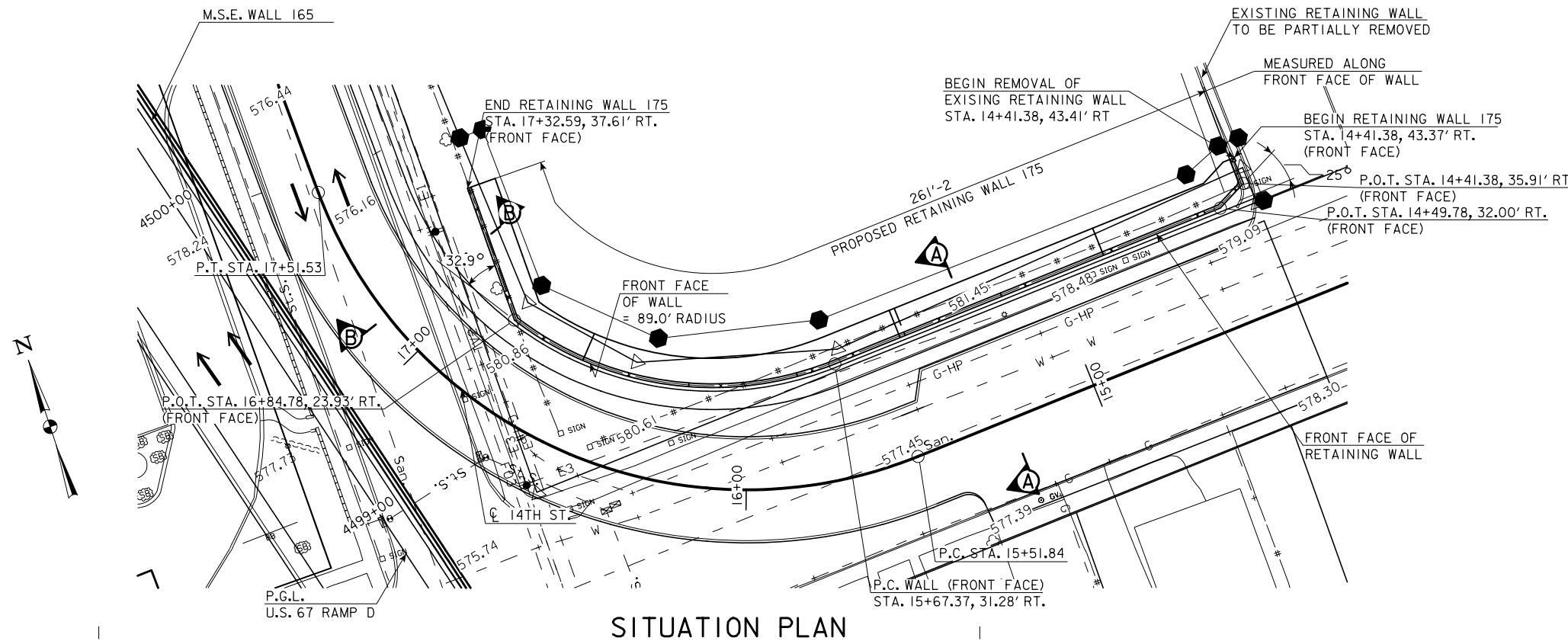
\*\* SEE M SHEETS FOR PROPOSED STORM SEWER DETAILS.

PROPOSED PROFILE GRADE  
14TH STREET



VPI STA = 15+00.00 VPI STA = 16+75.00  
VPI ELEV = 578.32 VPI ELEV = 575.73  
VC = 100' VC = 100'

NOTES:  
ALL DIMENSIONS ARE SHOWN IN FEET UNLESS NOTED OTHERWISE.  
PROPOSED RETAINING WALL TO TIE INTO EXISTING RETAINING WALL AT NORTHEAST END.



14TH STREET CURVE DATA

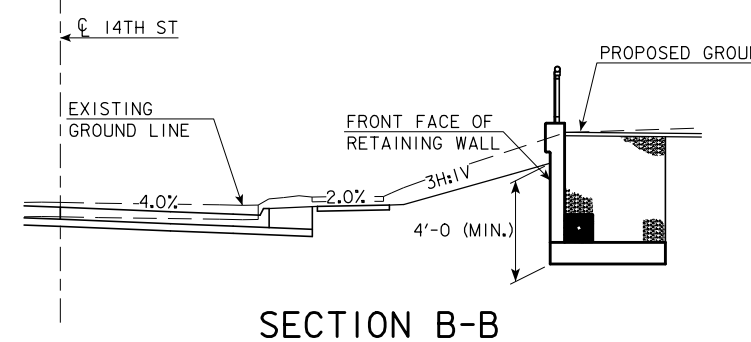
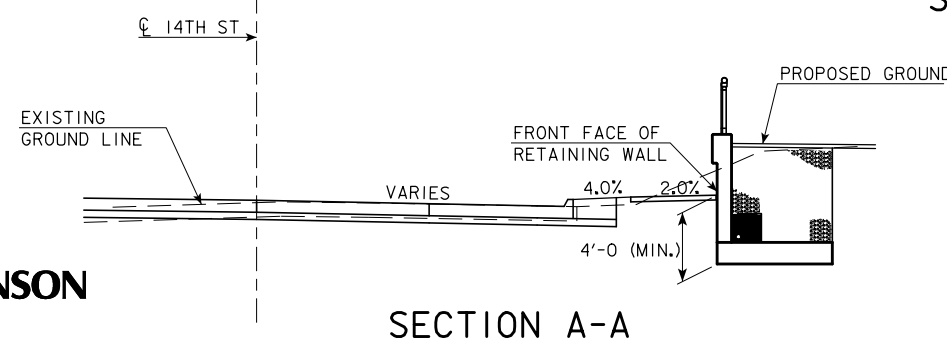
PI STA 16+80.23  
Δ = 91°31'47.63" (RT)  
D = 45°50'11.84"  
R = 125.00'  
T = 128.38'  
L = 199.69'  
E = 54.18'  
e = 4.00  
I = 65.00  
x = 32.00  
m = 19.50

LOCATION

14TH STREET  
T 78 N R 4 E  
SECTION 28  
DAVENPORT TOWNSHIP  
CITY OF BETTENDORF  
SCOTT COUNTY  
LATITUDE: 41.527332  
LONGITUDE: -90.512189

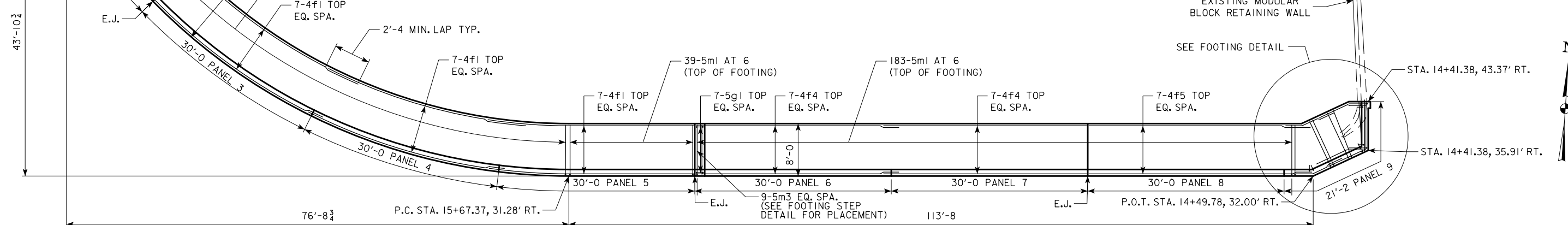
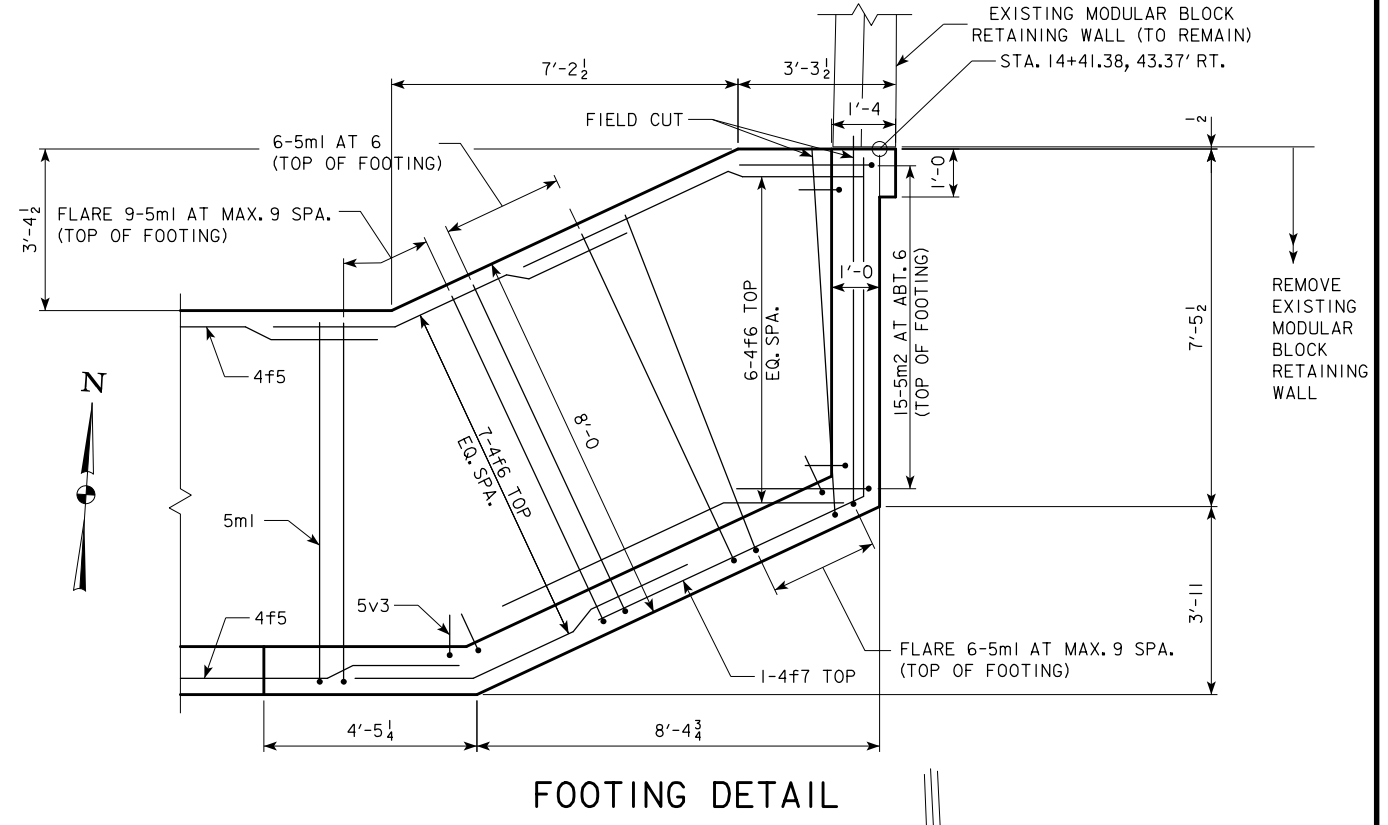
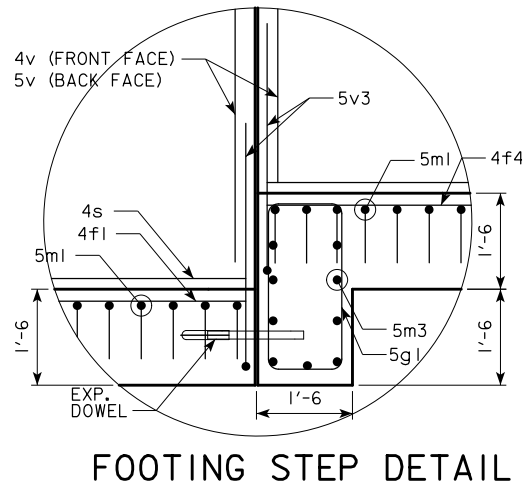
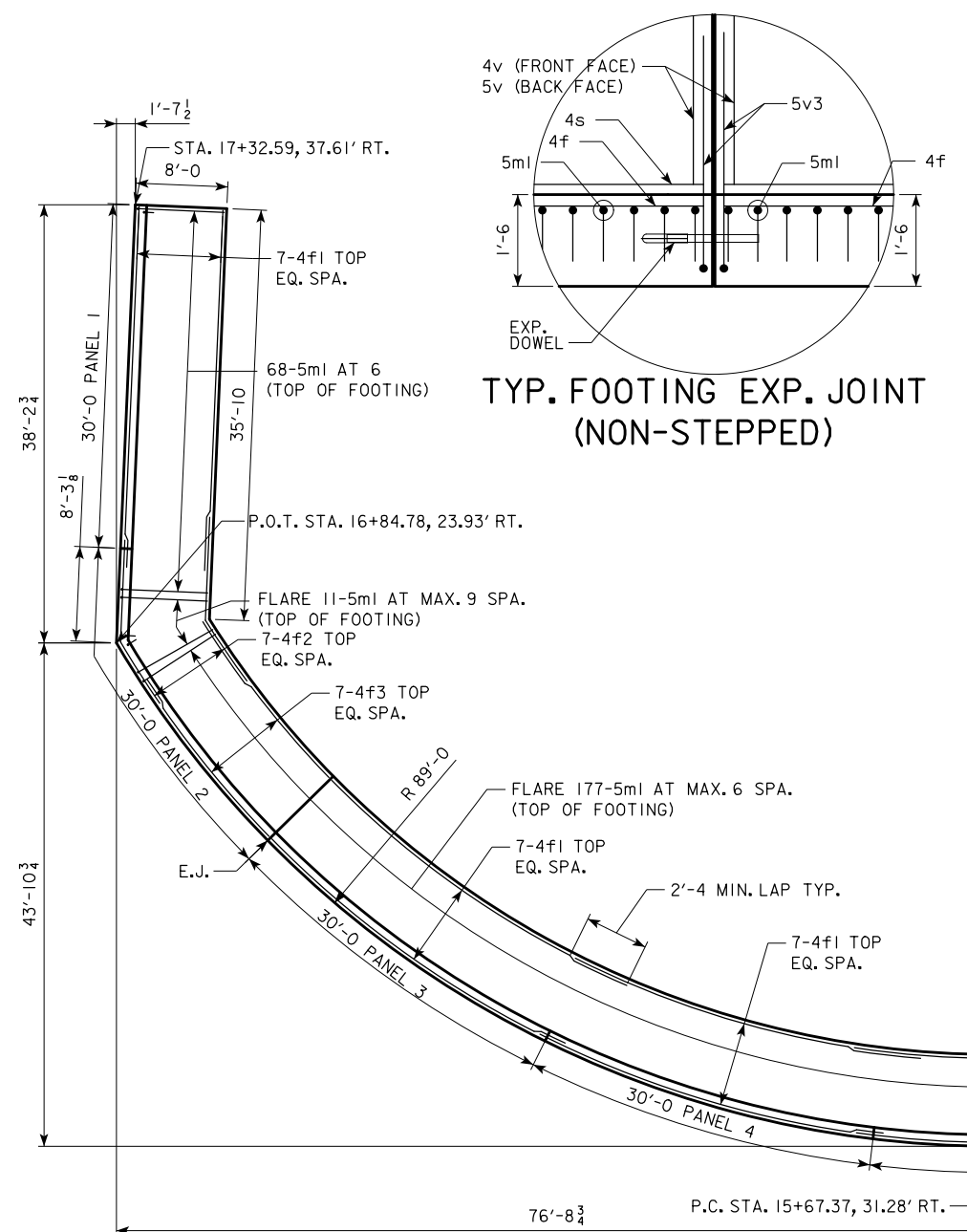
TRAFFIC ESTIMATE

14TH ST.  
A.A.D.T. = 8800 VPD (2002)  
A.A.D.T. = 9000 VPD (2035)

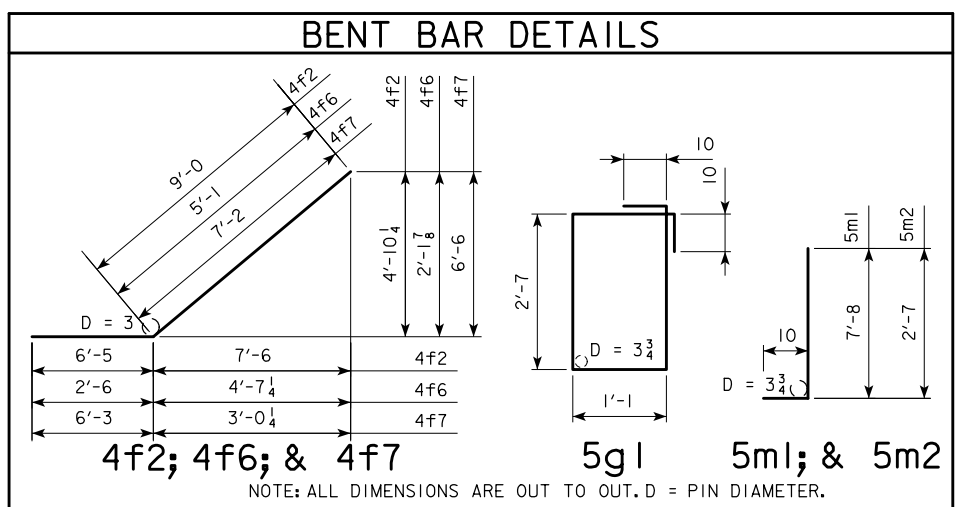


DESIGN FOR A  
**261'-2 x VARI. HEIGHT REINFORCED CONCRETE RETAINING WALL**  
SITUATION PLAN  
BEGIN STATION 14+41.38 - 43.37 RT. (14 TH ST.)  
END STATION 17+32.59 - 37.61 RT. (14 TH ST.)  
OCTOBER, 2014  
SCOTT COUNTY  
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
DESIGN SHEET NO. 2 OF 6 FILE NO. 30253 DESIGN NO. 3908





WALL OFFSETS ARE MEASURED FROM  $\phi$  14TH ST. TO THE FRONT FACE OF THE WALL



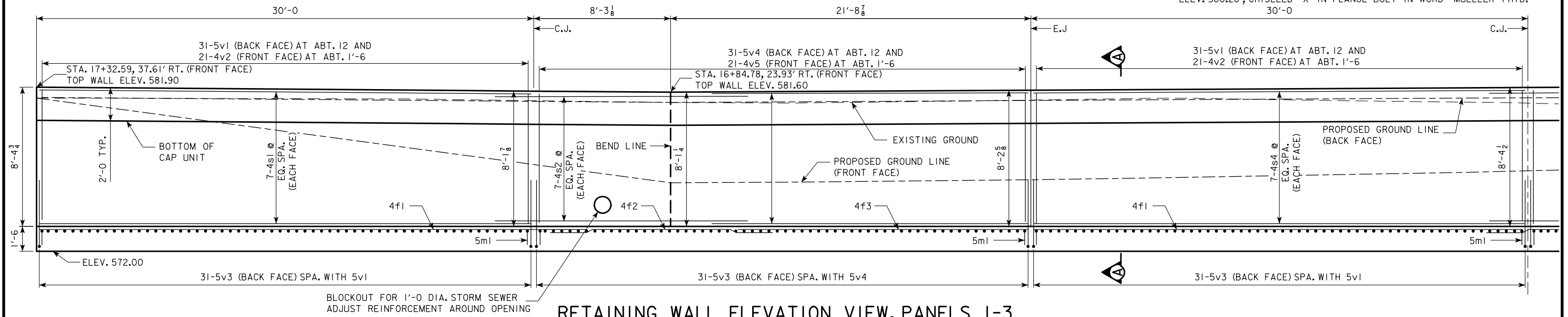
REINFORCING BAR LIST - WALL FOOTING						
BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGHT	
4f1	LONG. FOOTING	—	28	31'-6	589	
4f2	LONG. FOOTING	∩	7	15'-5	72	
4f3	LONG. FOOTING	—	7	17'-5	81	
4f4	LONG. FOOTING	—	14	31'-0	290	
4f5	LONG. FOOTING	—	7	34'-2	160	
4f6	LONG. FOOTING	∩	13	7'-7	66	
4f7	LONG. FOOTING	∩	1	13'-5	9	
5g1	TRANS. FOOTING STEP	□	7	9'-0	66	
5m1	TRANS. FOOTING TOP	—	499	8'-6	4424	
5m2	TRANS. FOOTING TOP	—	15	3'-5	53	
5m3	TRANS. FOOTING STEP	—	9	7'-8	72	
EPOXY COATED REINFORCING STEEL - TOTAL (LBS.)					5890	

NOTE: SAW CUT OR NEATLY SPLIT EXISTING WALL BLOCKS ALONG REMOVAL LINE. ATTACH 2' WIDE STRIP OF GEOTEXTILE FABRIC TO BACK OF WALL CENTERED ACROSS JOINT.

DESIGN FOR A  
**261'-2 x VARI. HEIGHT REINFORCED CONCRETE RETAINING WALL**  
**FOOTING PLAN**  
 BEGIN STATION 14+41.38 - 43.37 RT. (14 TH ST.)  
 END STATION 17+32.59 - 37.61 RT. (14 TH ST.)  
**SCOTT COUNTY**  
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
 DESIGN SHEET NO. 3 OF 6 FILE NO. 30253 DESIGN NO. 3908  
 OCTOBER, 2014

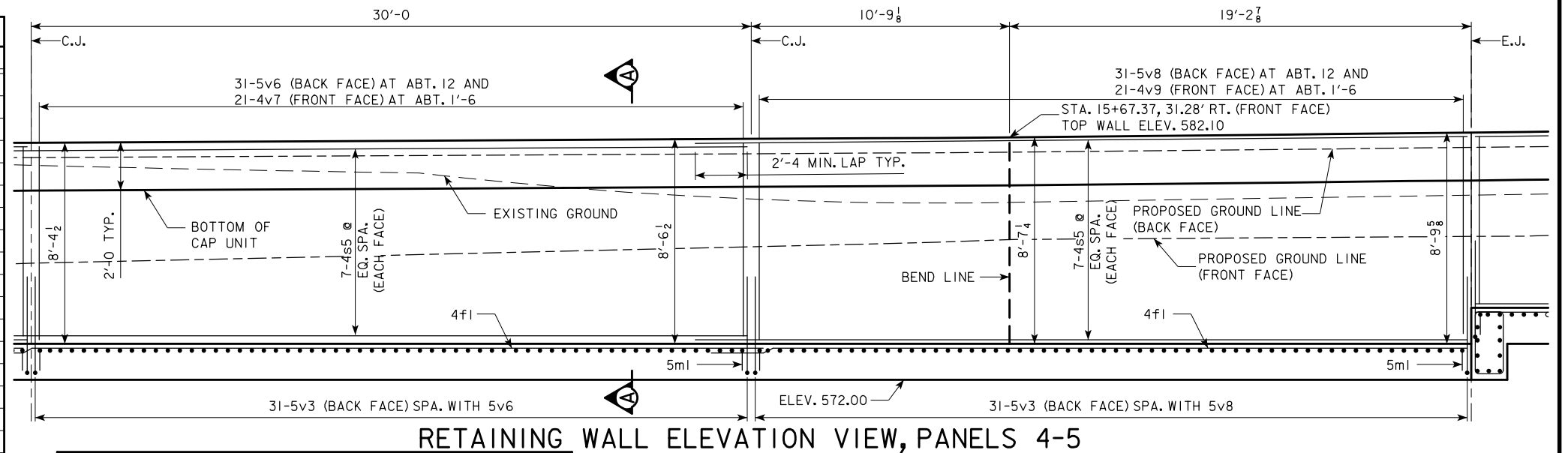


BENCH MARK NO. 503: US 67 RAMP D STA. 4501+81.78, RT. 117.13',  
ELEV. 580.28', CHISELED "X" IN FLANGE BOLT IN WORD "MUELLER" FHVD.  
30'-0

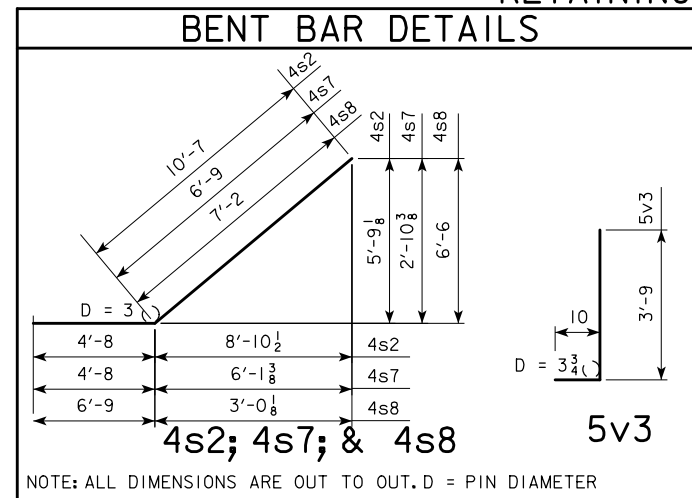


RETAINING WALL ELEVATION VIEW, PANELS 1-3

REINFORCING BAR LIST - WALL STEM						
BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGHT	
4s1	WALL HORIZONTAL	—	40	29'-8	793	
4s2	WALL HORIZONTAL	—	14	15'-3	143	
4s3	WALL HORIZONTAL	—	14	19'-0	178	
4s4	WALL HORIZONTAL	—	14	29'-4	274	
4s5	WALL HORIZONTAL	—	28	32'-6	608	
4s6	WALL HORIZONTAL	—	12	32'-2	258	
4s7	WALL HORIZONTAL	—	14	11'-5	107	
4s8	WALL HORIZONTAL	—	14	13'-11	130	
5v1	WALL VERTICAL, BACK FACE	—	62	7'-10	507	
4v2	WALL VERTICAL, FRONT FACE	—	42	7'-10	220	
5v3	WALL VERTICAL, BACK FACE	—	270	4'-7	1361	
5v4	WALL VERTICAL, BACK FACE	—	31	7'-9	251	
4v5	WALL VERTICAL, FRONT FACE	—	21	7'-9	109	
5v6	WALL VERTICAL, BACK FACE	—	31	8'-0	259	
4v7	WALL VERTICAL, FRONT FACE	—	21	8'-0	112	
5v8	WALL VERTICAL, BACK FACE	—	31	8'-2	264	
4v9	WALL VERTICAL, FRONT FACE	—	21	8'-2	115	
5v10	WALL VERTICAL, BACK FACE	—	31	6'-11	224	
4v11	WALL VERTICAL, FRONT FACE	—	21	6'-11	97	
5v12	WALL VERTICAL, BACK FACE	—	31	7'-3	234	
4v13	WALL VERTICAL, FRONT FACE	—	21	7'-3	102	
5v14	WALL VERTICAL, BACK FACE	—	31	7'-7	245	
4v15	WALL VERTICAL, FRONT FACE	—	21	7'-7	106	
5v16	WALL VERTICAL, BACK FACE	—	22	7'-11	182	
4v17	WALL VERTICAL, FRONT FACE	—	15	7'-11	79	
EPOXY COATED REINFORCING STEEL - TOTAL (LBS.)					6980	



RETAINING WALL ELEVATION VIEW, PANELS 4-5



NOTE: ALL DIMENSIONS ARE OUT TO OUT. D = PIN DIAMETER

NOTE: FRONT FACE OF WALL BELOW 4-INCH PROJECTION INCLUDES CONCRETE FORM LINER TEXTURE. SEE NOTES ON DESIGN SHEET 1.

DESIGN FOR A  
**261'-2 x VARI. HEIGHT REINFORCED CONCRETE RETAINING WALL ELEVATIONS**  
BEGIN STATION 14+41.38 - 43.37 RT. (14 TH ST.)  
END STATION 17+32.59 - 37.61 RT. (14 TH ST.)  
**SCOTT COUNTY**  
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
DESIGN SHEET NO. 4 OF 6 FILE NO. 30253 DESIGN NO. 3908



NOTE:  
C.J. = CONSTRUCTION JOINT  
E.J. = EXPANSION JOINT

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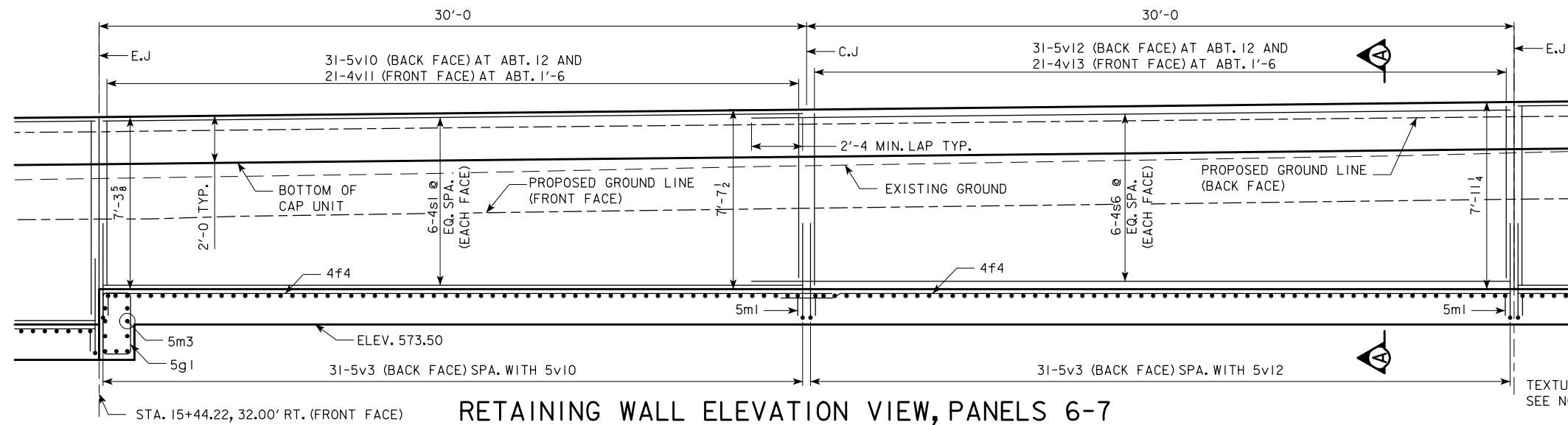
DESIGN TEAM HANSON PROFESSIONAL SERVICES

SCOTT COUNTY

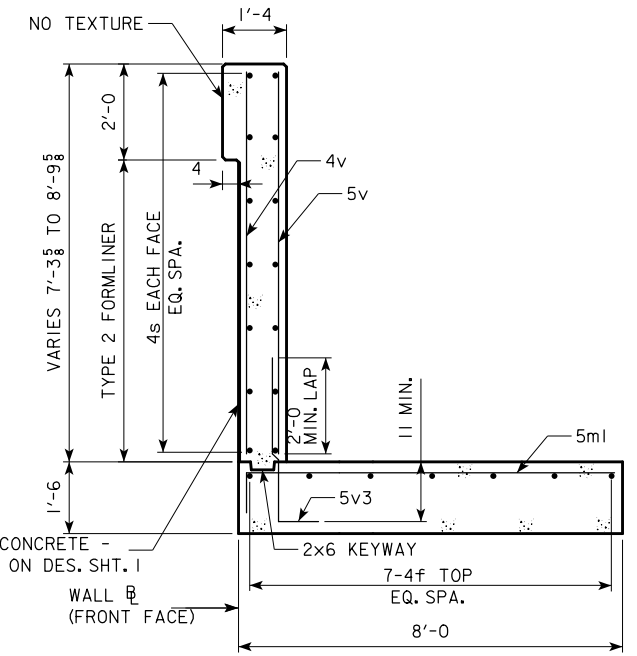
PROJECT NUMBER IM-074-1(207)5--13-82

SHEET NUMBER V.4

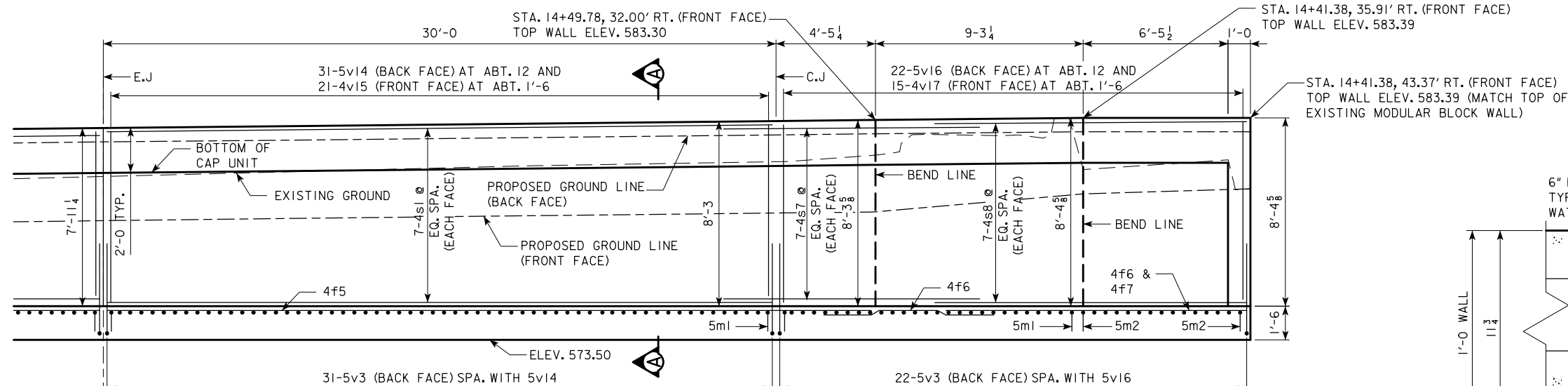
BENCH MARK NO. 503: US 67 RAMP D STA. 4501+81.78, RT. 117.13',  
ELEV. 580.28', CHISELED "X" IN FLANGE BOLT IN WORD "MUELLER" FHVD.



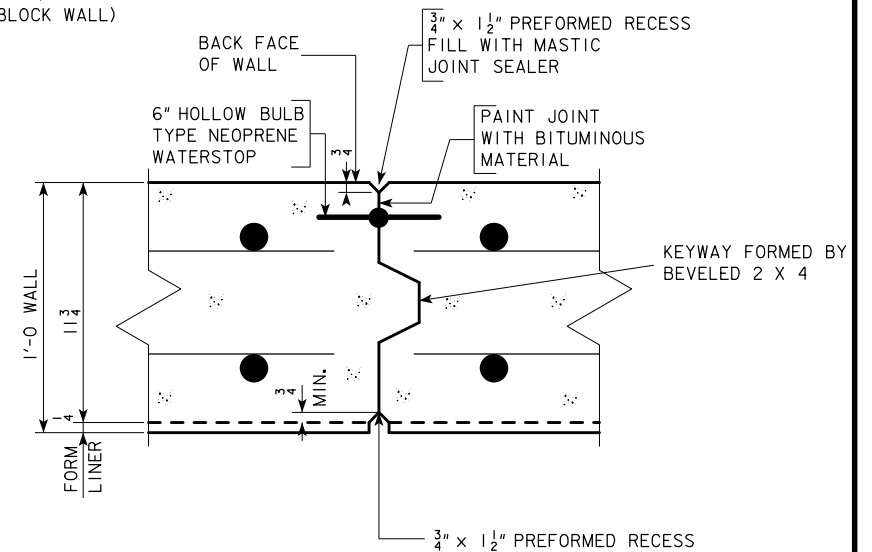
RETAINING WALL ELEVATION VIEW, PANELS 6-7



SECTION A-A



RETAINING WALL ELEVATION VIEW, PANELS 8-9



WALL CONSTRUCTION JOINT

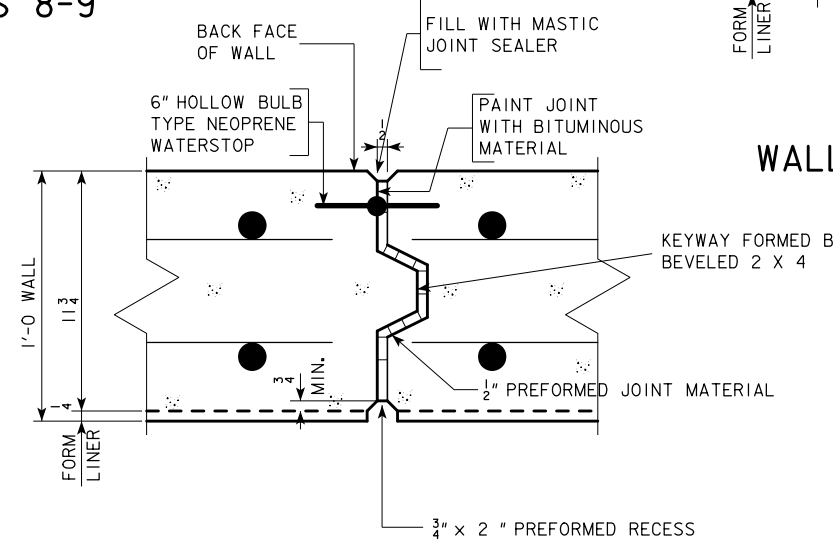
**NOTES :**

WATERSTOP TO BE CENTER BULB TYPE AS MANUFACTURED BY AFCO, BURKE, WILLIAMS PRODUCTS OR APPROVED EQUAL.

WATERSTOPS ARE TO EXTEND FROM TOP OF FOOTINGS TO 6" BELOW TOP OF WALLS.

WALL EXPANSION JOINTS AND WALL CONSTRUCTION JOINTS EXTEND FROM TOP OF FOOTING TO TOP OF WALL.

WALL EXPANSION JOINTS ARE LOCATED DIRECTLY OVER FOOTING EXPANSION JOINTS.



WALL EXPANSION JOINT

NOTE: FRONT FACE OF WALL BELOW 4-INCH PROJECTION INCLUDES CONCRETE FORM LINER TEXTURE. SEE NOTES ON DESIGN SHEET 1.

DESIGN FOR A  
**261'-2 x VARI. HEIGHT REINFORCED CONCRETE RETAINING WALL ELEVATIONS**  
 BEGIN STATION 14+41.38 - 43.37 RT. (14 TH ST.)  
 END STATION 17+32.59 - 37.61 RT. (14 TH ST.)  
**SCOTT COUNTY**  
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
 DESIGN SHEET NO. 5 OF 6 FILE NO. 30253 DESIGN NO. 3908



NOTE:  
 C.J. = CONSTRUCTION JOINT  
 E.J. = EXPANSION JOINT

# FENCE NOTES :

CONSTRUCTION OF CHAIN LINK FENCE ON CONCRETE RETAINING WALL SHALL BE IN CONFORMANCE WITH CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS. DETAILS SHOWN ON THE SHEET ARE TYPICAL. ALTERNATE DETAILS MAY BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.

ANCHOR BOLTS (5/8" DIAMETER) SHALL HAVE A MINIMUM PULL OUT STRENGTH OF 9000 POUNDS BASED ON 3500 PSI CONCRETE, SHALL MEET THE REQUIREMENTS OF I.D.O.T. MATERIALS I.M. 453.09, AND SHALL BE GALVANIZED AND INSTALLED ACCORDING TO RECOMMENDATIONS OF THE MANUFACTURER.

BASE PLATES SHALL BE GALVANIZED AFTER WELDING AND PRIOR TO INSTALLATION.

POST SIZE AND SPACING SHALL BE AS SHOWN ON MI-102.

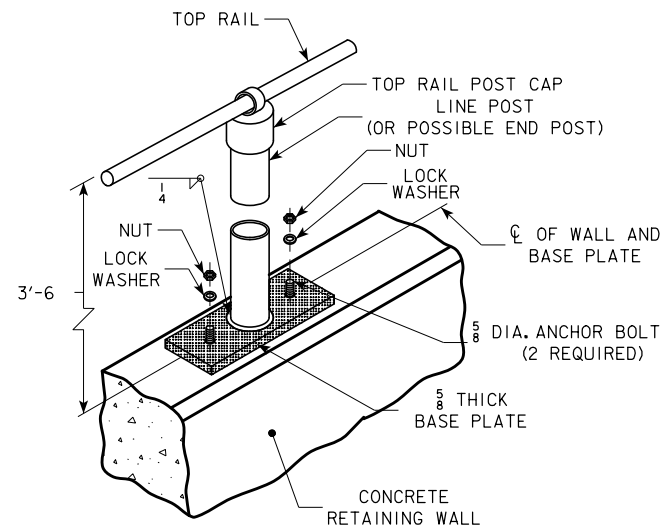
BOTTOM TENSION WIRE, PLACEMENT OF STRETCHER BAR CLAMPS, FASTENING OF CHAIN LINK FABRIC TO POSTS, TOP RAIL SLEEVE, ETC., SHALL BE AS INDICATED ON MI-102.

GROUNDING REQUIREMENTS SHALL BE AS DETERMINED BY SECTION 2519 OF THE STANDARD SPECIFICATIONS.

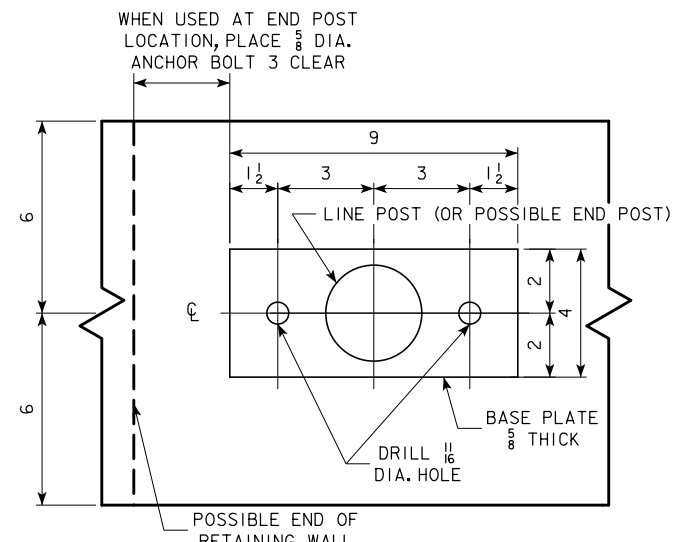
CHAIN LINK FABRIC SHALL BE KNUCKLED SELVAGE AT TOP AND BOTTOM OF FENCE.

PRICE BID FOR "FENCE, CHAIN LINK, VINYL COATED" SHALL BE CONSIDERED FULL COMPENSATION FOR FABRICATION AND CONSTRUCTION OF FENCING AS DETAILED HEREON, AS REQUIRED BY PROJECT PLANS, AND AS PER SECTION 2519 OF THE STANDARD SPECIFICATIONS.

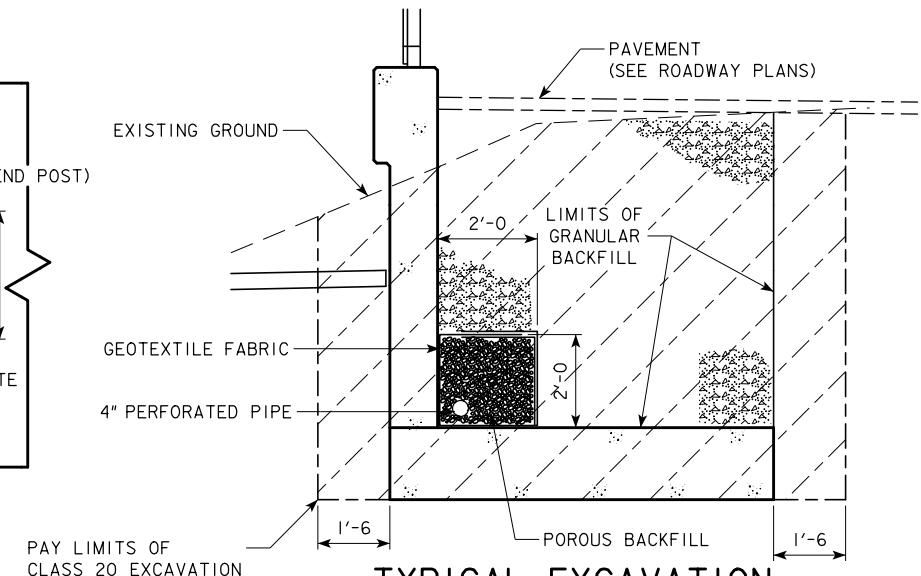
CHAIN LINK FABRIC IS TO BE PVC COATED BLACK IN ACCORDANCE WITH ASTM F668, CLASS 2B.



TYPICAL INSTALLATION BASE PLATE

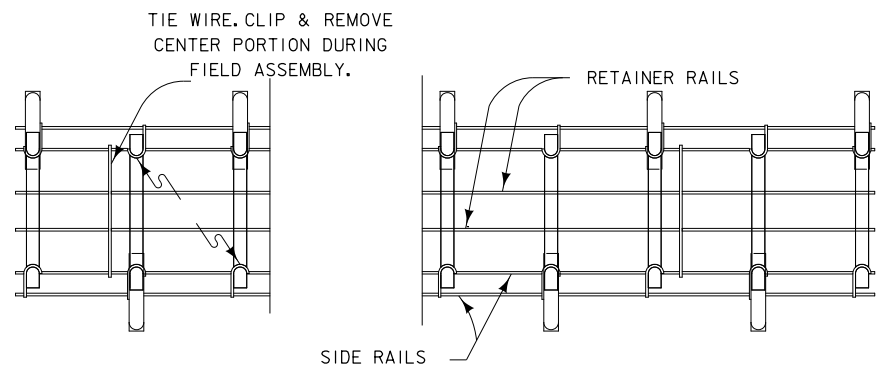


PLAN OF BASE PLATE

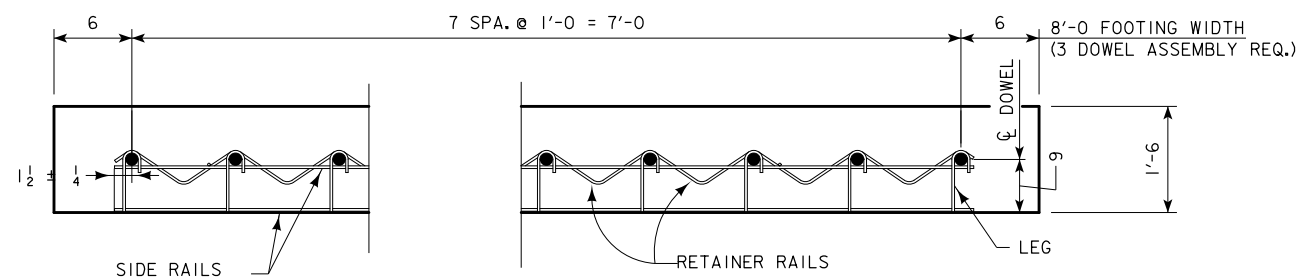


TYPICAL EXCAVATION, BACKFILL, AND DRAINAGE

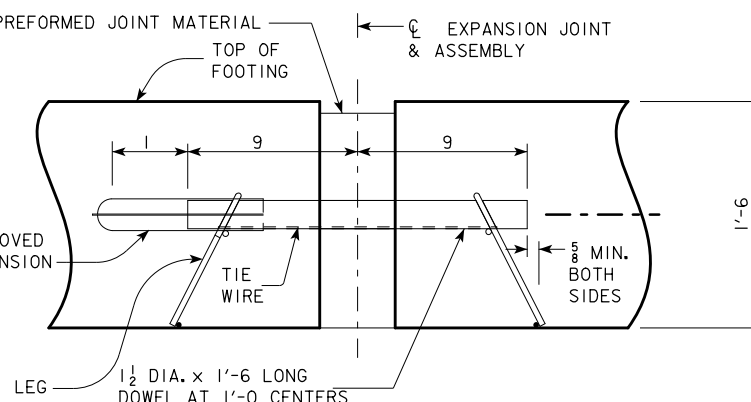
PERFORATED PIPE DRAIN SHALL BE CONNECTED TO STORM SEWER INLET AT STA. 16+81 WITH 4" SOLID PIPE. PROVIDE TWO SEPARATE CONNECTIONS.



DOWEL ASSEMBLY PLAN



DOWEL ASSEMBLY ELEVATION



SECTION THROUGH FOOTING EXPANSION JOINT

## EXPANSION DOWEL NOTES:

EXPANSION DOWEL ARE REQUIRED AT EACH FOOTING EXPANSION JOINT.

ALL COST ASSOCIATED WITH EXPANSION DOWELS AND DOWEL SUPPORT ASSEMBLIES SHALL BE INCIDENTAL TO THE PRICE BID FOR "STRUCTURAL CONCRETE (MISCELLANEOUS)".

EXPANSION DOWEL BARS SHALL BE 1 1/2" DIAMETER, 18" LONG. CENTER TO CENTER SPACING OF DOWELS SHALL BE PARALLEL TO THE OTHER DOWELS IN THE ASSEMBLY WITHIN 1/8". WHEN EXPANSION JOINT IS LOCATED BETWEEN FOOTINGS OF DIFFERENT SIZE, THE DOWEL SUPPORT ASSEMBLY SHALL BE SIZED FOR THE SMALLER FOOTING.

EACH DOWEL BAR SHALL BE FITTED WITH APPROVED 6" LONG EXPANSION TUBE AT ONE END. EXPANSION TUBE SHALL BE POSITIONED TO PROVIDE 1" CLEAR SPACE FOR DOWEL MOVEMENT. THE EXPANSION SIDE OF THE DOWEL SHALL BE COATED TO PREVENT BOND WITH THE FOOTING. THE OPPOSITE SIDE OF THE DOWEL SHALL BE WELDED TO THE WIRE DOWEL SUPPORT ASSEMBLY. DOWEL BARS SHALL BE PLACED TO ALTERNATE FIXED ENDS AND EXPANSION TUBE ENDS ALONG THE LENGTH OF THE SUPPORT ASSEMBLY.

WIRE SIZES SHOWN ARE THE MINIMUM REQUIRED. WIRES SHALL HAVE A MINIMUM TENSILE STRENGTH OF 50 KSI. WELD ALTERNATELY THROUGHOUT.

DOWEL ASSEMBLY	
LABEL	MINIMUM WIRE SIZE
SIDE RAILS	#1/0 GAUGE (0.306 INCH DIA.)
LEG	#1/0 GAUGE (0.306 INCH DIA.)
TIE WIRE	#10 GAUGE (0.135 INCH DIA.)
RETAINER RAILS	0.250 INCH DIA.

CLIP AND REMOVE CENTER PORTION OF TIE WIRE DURING FIELD ASSEMBLY.

A MINIMUM OF 8 ANCHOR PINS (4 PER SIDE, EVENLY SPACED) ARE REQUIRED AT EACH EXPANSION JOINT TO PREVENT MOVEMENT OF EXPANSION DOWEL ASSEMBLY. SEE ROAD STANDARD PV-101 FOR TYPICAL ANCHOR PIN DETAIL.

DESIGN FOR A  
**261'-2 x VARI. HEIGHT REINFORCED CONCRETE RETAINING WALL DETAILS**  
 BEGIN STATION 14+41.38 - 43.37 RT. (14 TH ST.)  
 END STATION 17+32.59 - 37.61 RT. (14 TH ST.)  
**SCOTT COUNTY**  
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
 DESIGN SHEET NO. 6 OF 6 FILE NO. 30253 DESIGN NO. 3908





### LINE STYLE LEGEND OF CROSS SECTION SHEETS (ROAD)

- Existing Ground Line
- ===== Proposed Template
- ===== Proposed Topsoil Placement
- Additional Topsoil Removal
- Subgrade Treatment
- Granular Shoulder
- ===== Pavement
- Existing Pipe\RCB
- ===== Proposed Pipe\RCB
- ===== Proposed Dike
- ===== All Elements Associated with Proposed Entrances

### LINE STYLE LEGEND OF CROSS SECTION SHEETS (SOILS)

- TS----- Topsoil (Class 10)
- TS A----- Topsoil (Type A Disposal)
- TS B----- Topsoil (Type B Disposal)
- TS C----- Topsoil (Type C Disposal)
- CL 10----- Class 10 Materials
- SEL LO----- Select Loams And Clay-Loams
- SEL SA----- Select Sand
- UNS A----- Unsuitable Type A Disposal
- UNS B----- Unsuitable Type B Disposal
- UNS C----- Unsuitable Type C Disposal
- SHALE----- Shale
- WASTE----- Waste
- B&W LS----- Broken and Weathered Rock
- ROCK----- Solid Rock
- BLDRS----- Boulders

Note: All layer lines and descriptions identify layers above the line.

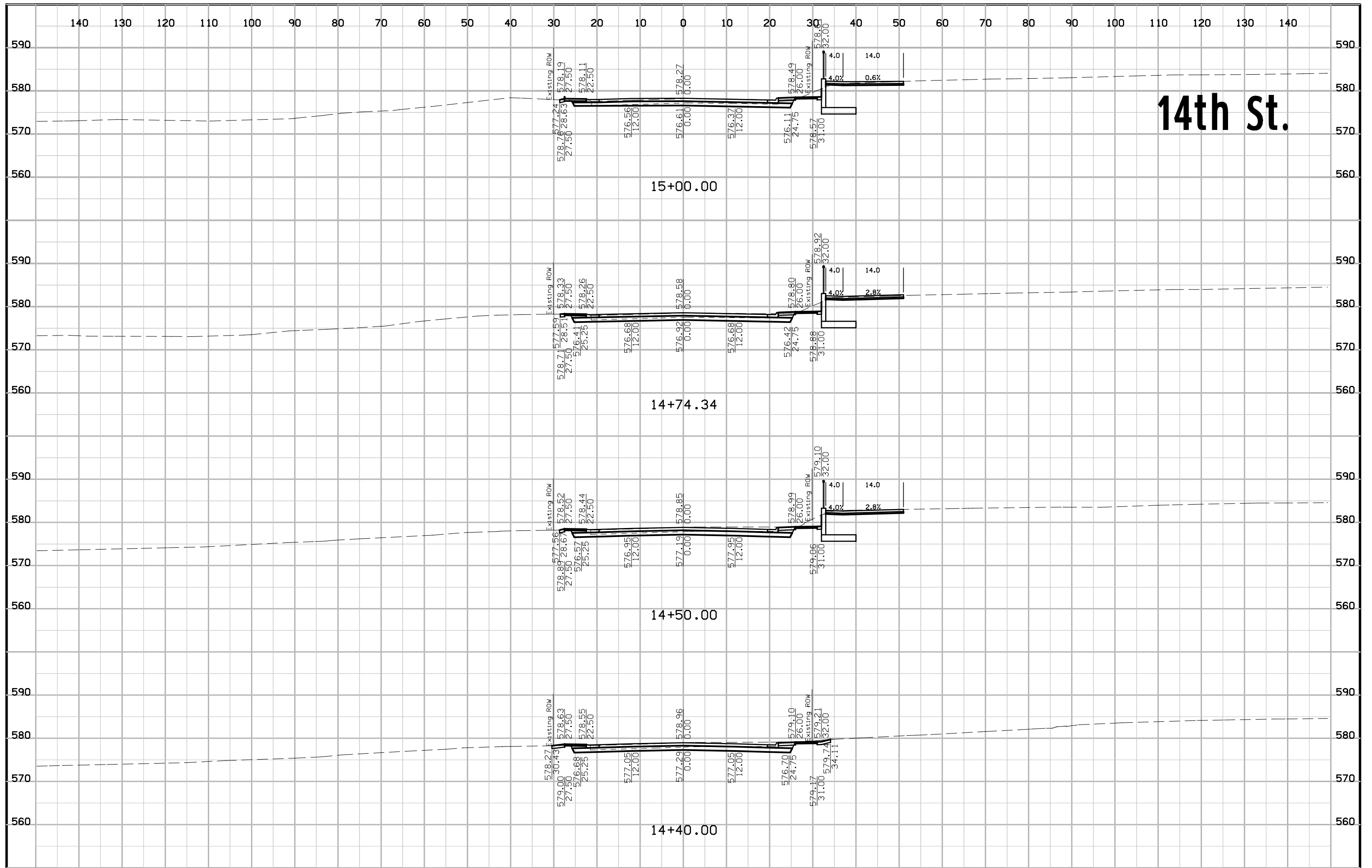
Note: Vertical or near vertical lines connecting soil layers at edges of cross sections are only for the purpose of calculating template quantities and do not depict soil stratification.

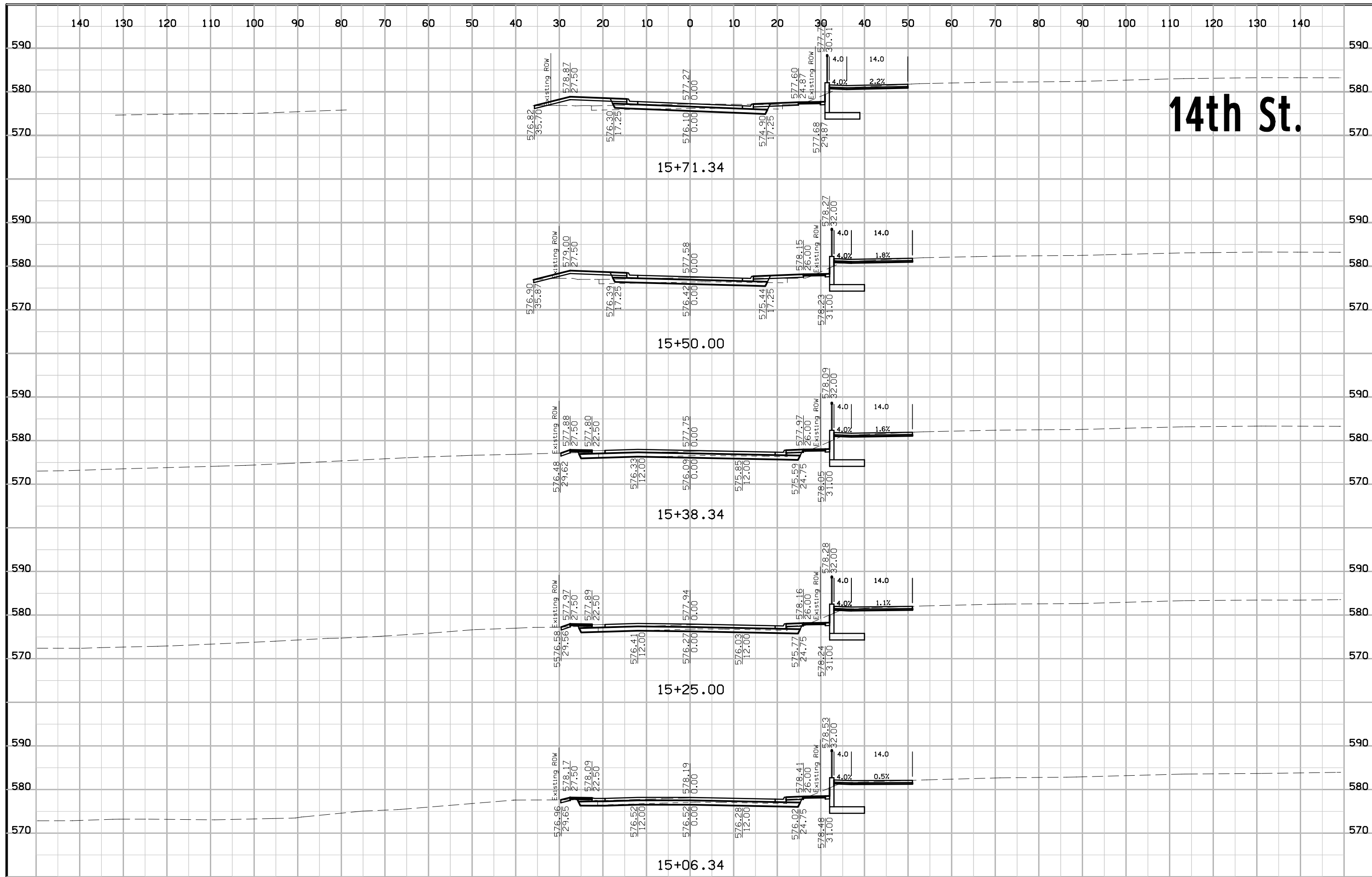
### SYMBOL LEGEND OF CROSS SECTION SHEETS

- Existing ROW  
----- Existing Right-of-Way Limit
- Proposed ROW  
----- Proposed Right-of-Way Limit
- Temporary ROW  
----- Temporary Right-of-Way Limit

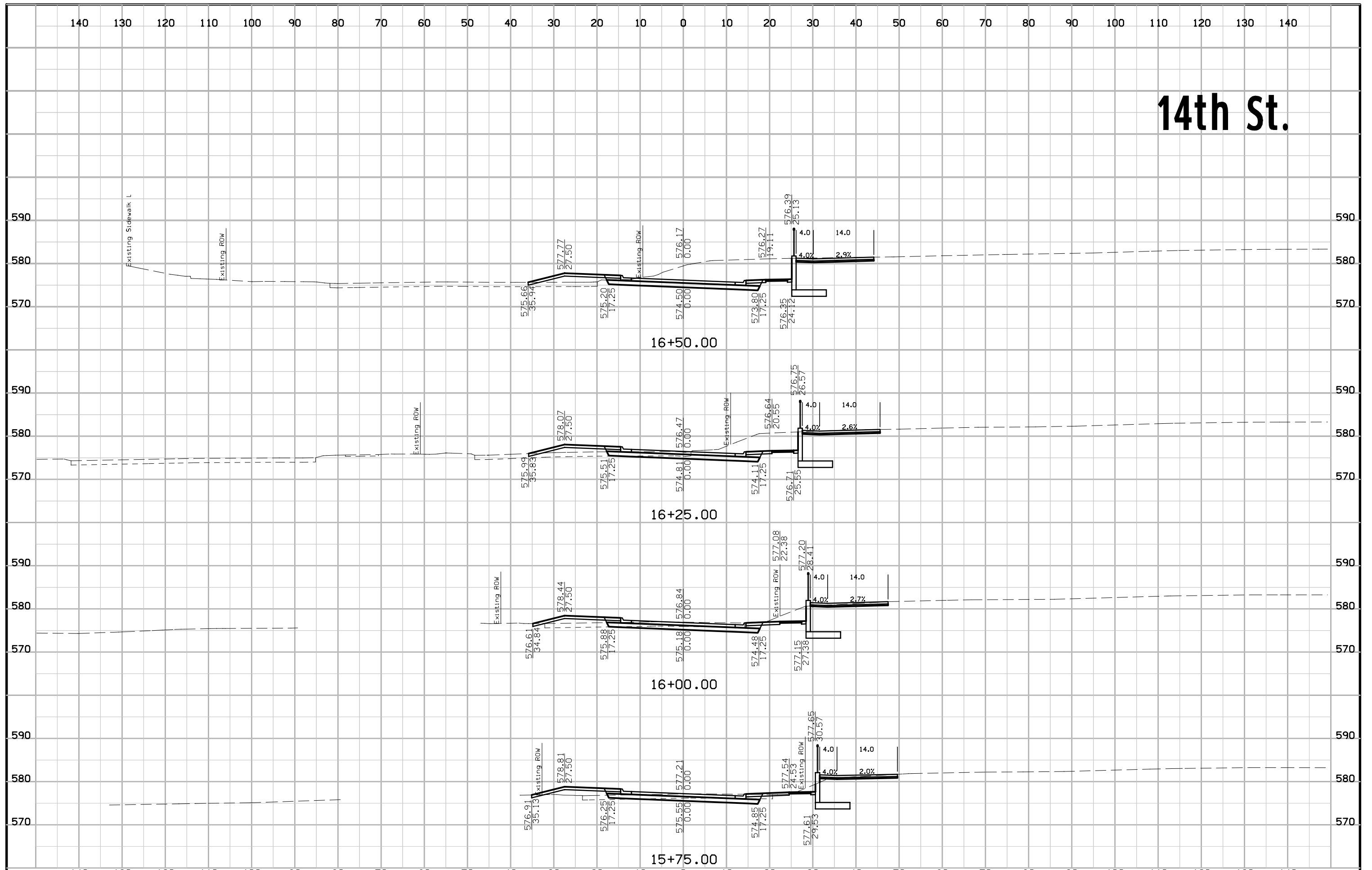
## CROSS SECTION LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES W & X)

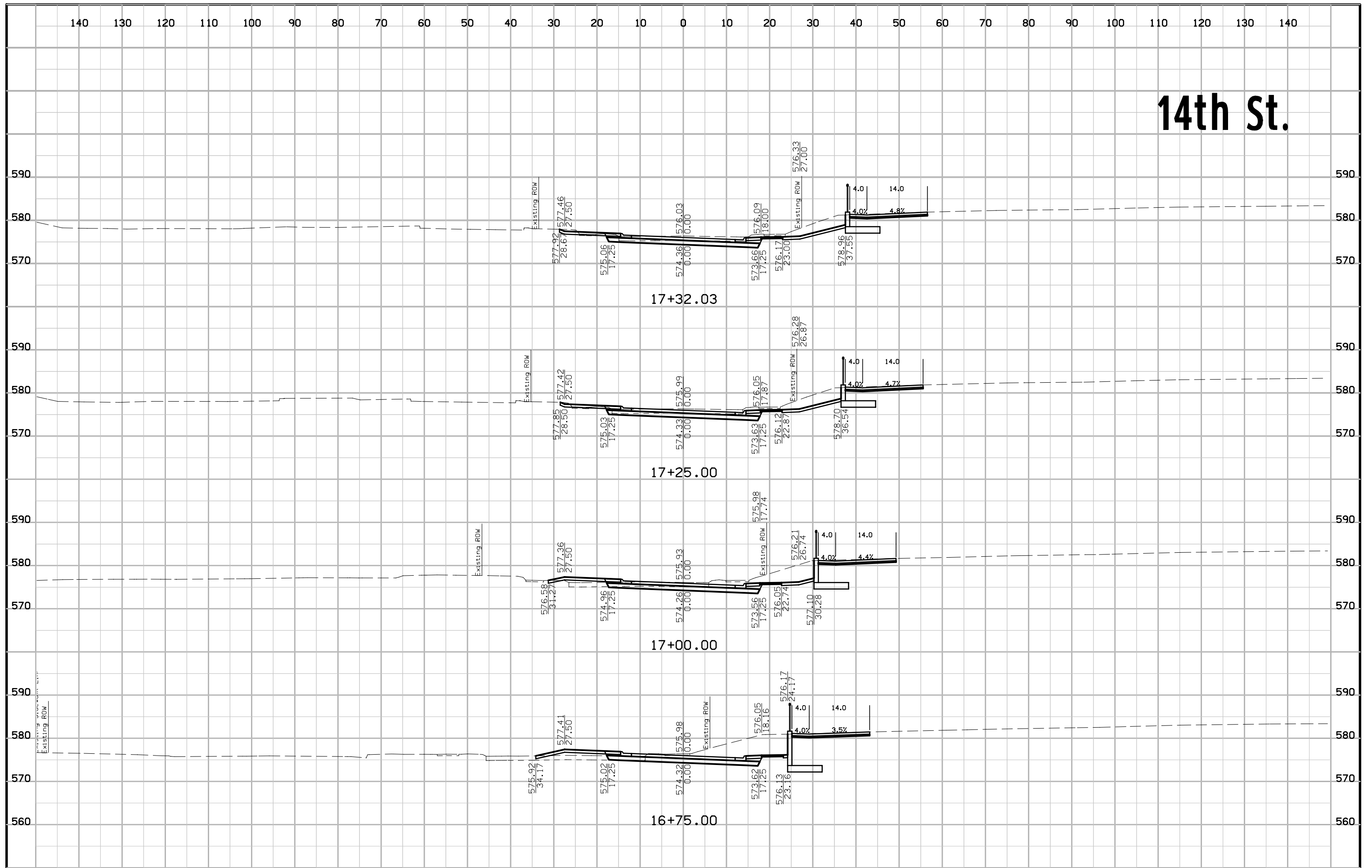




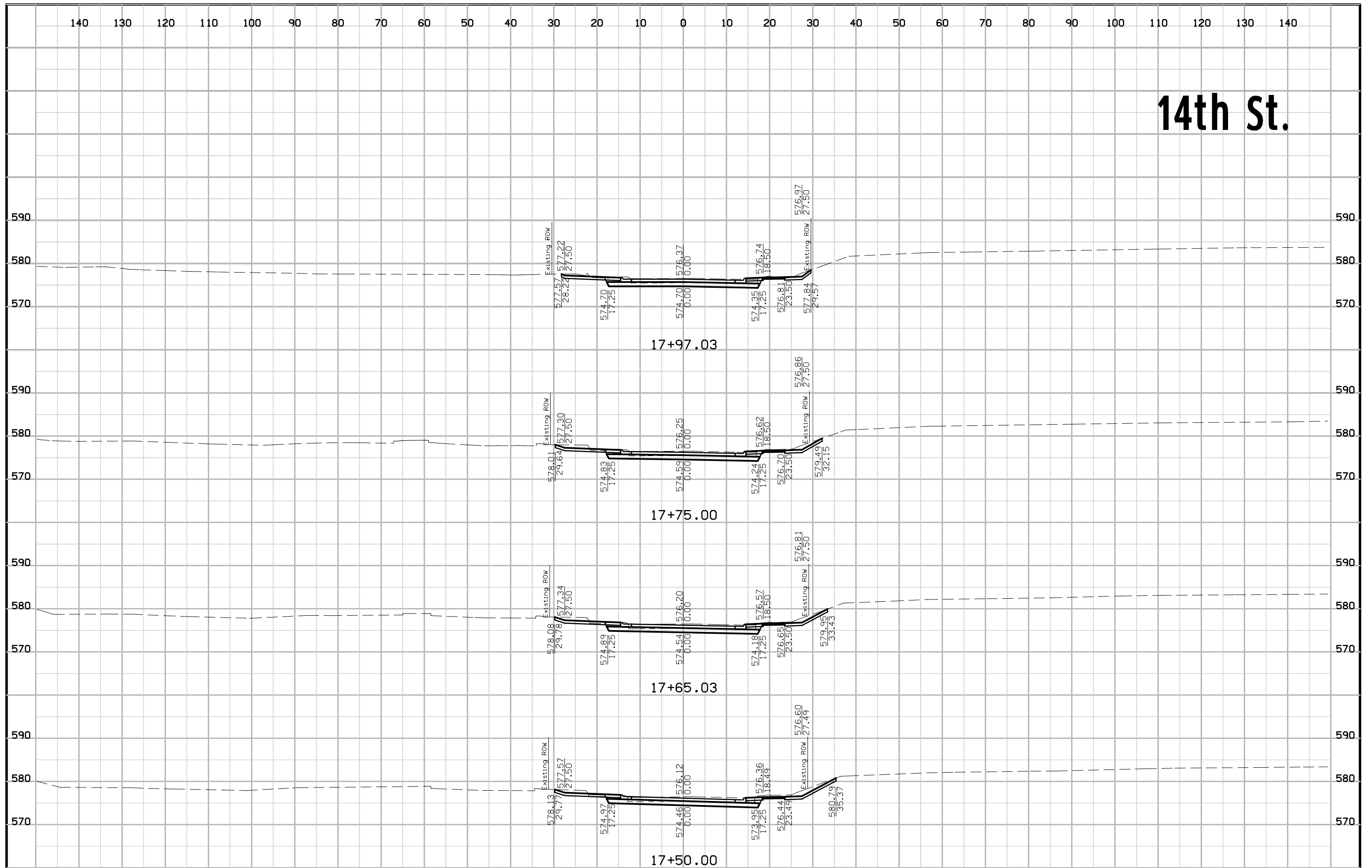
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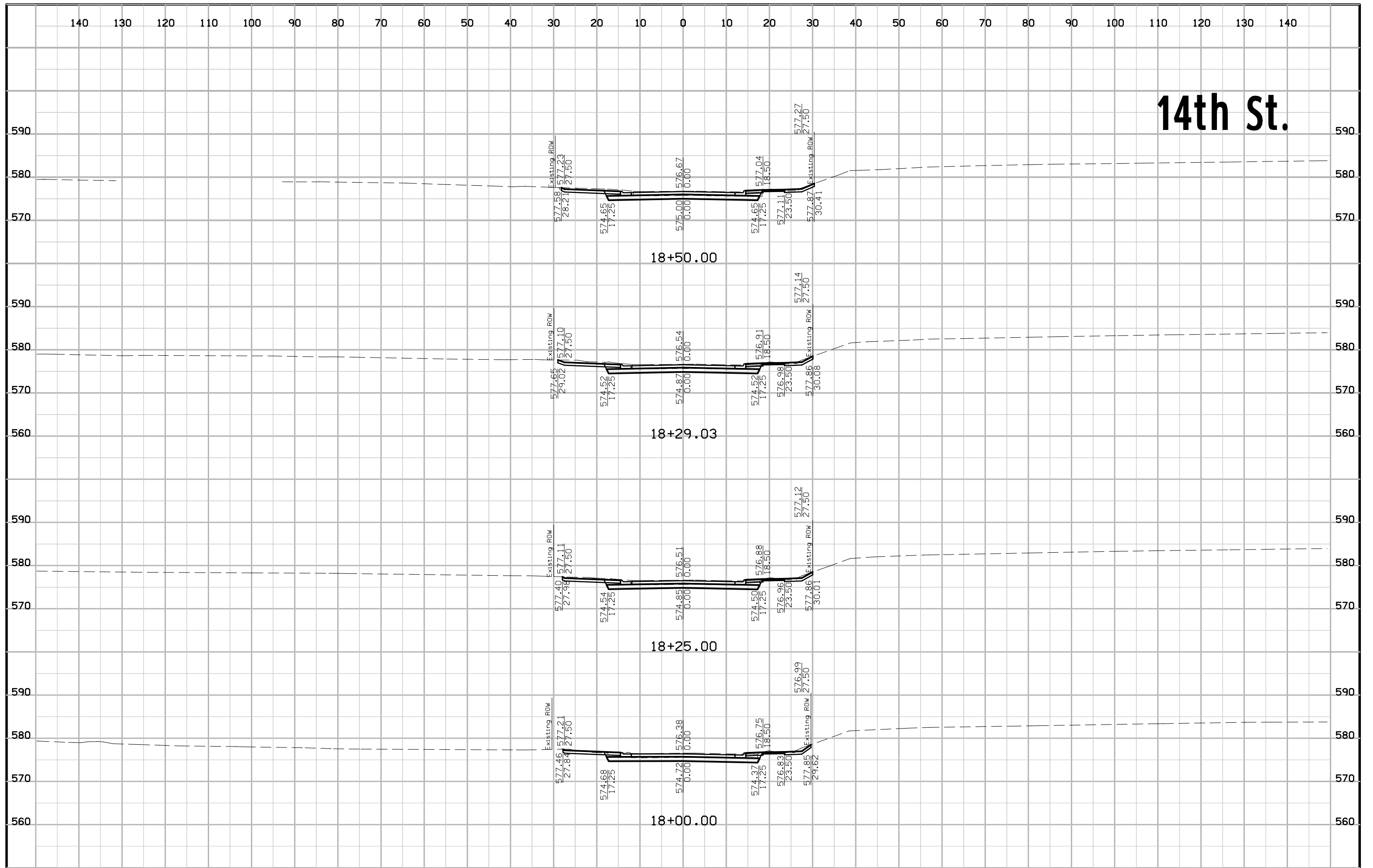
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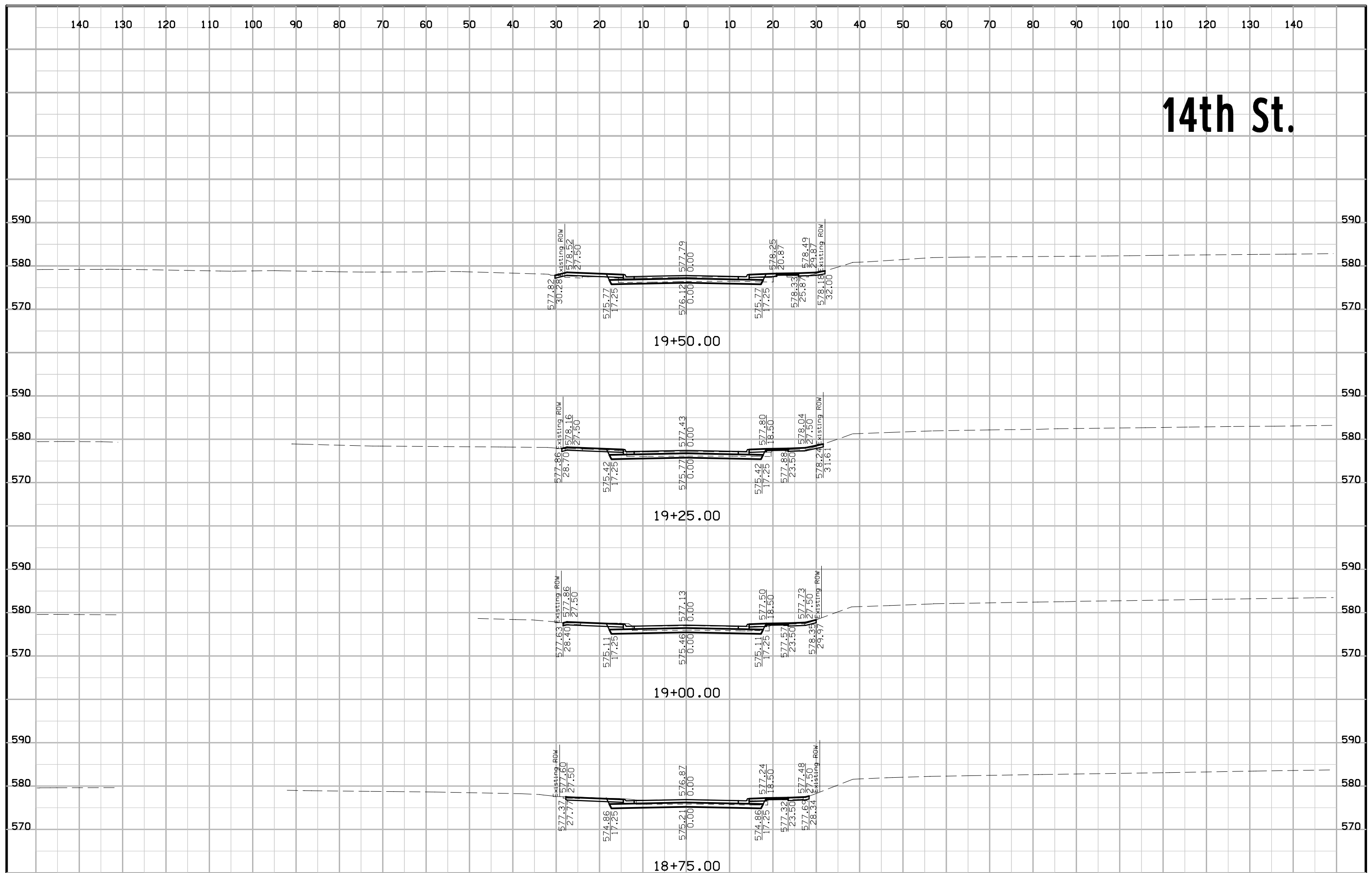
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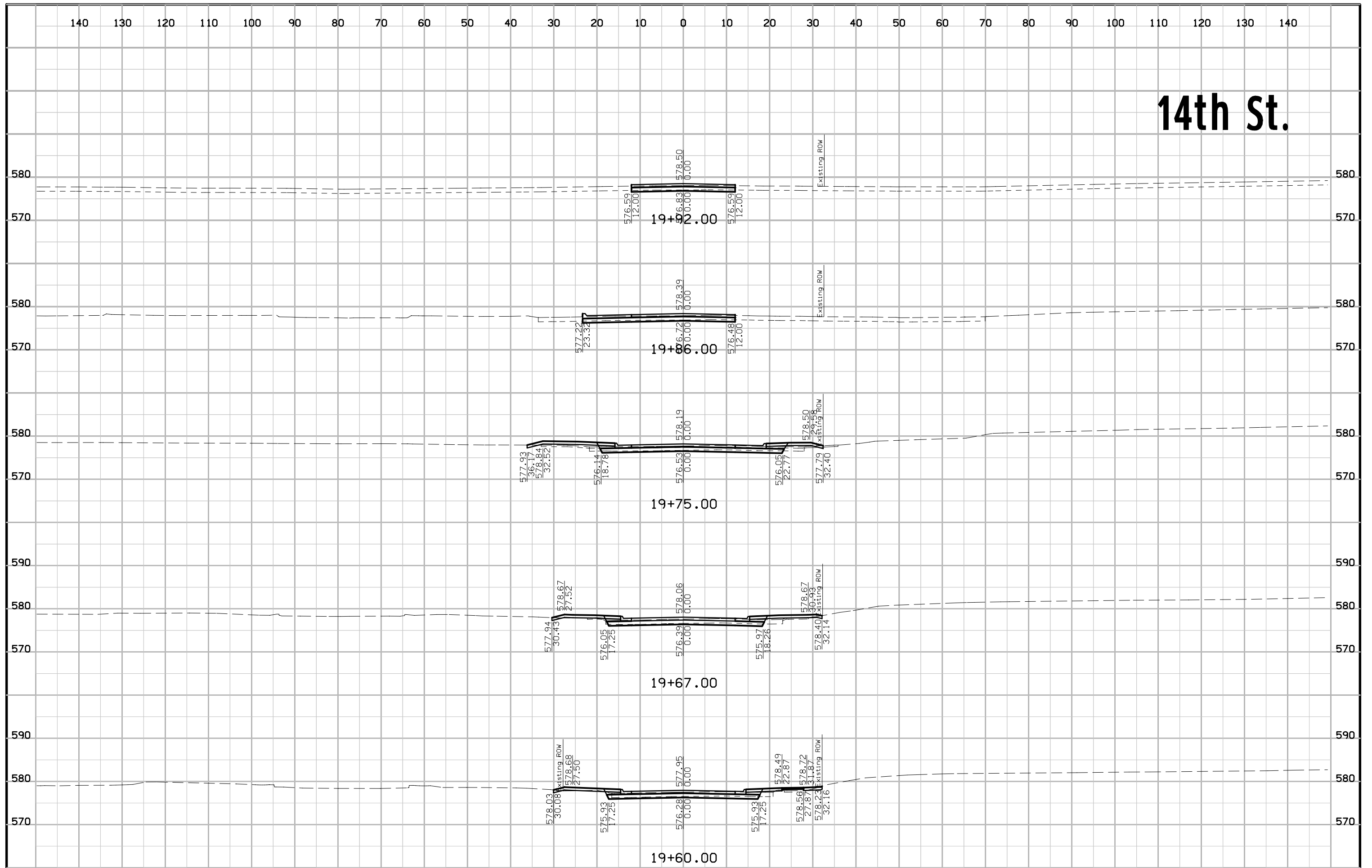


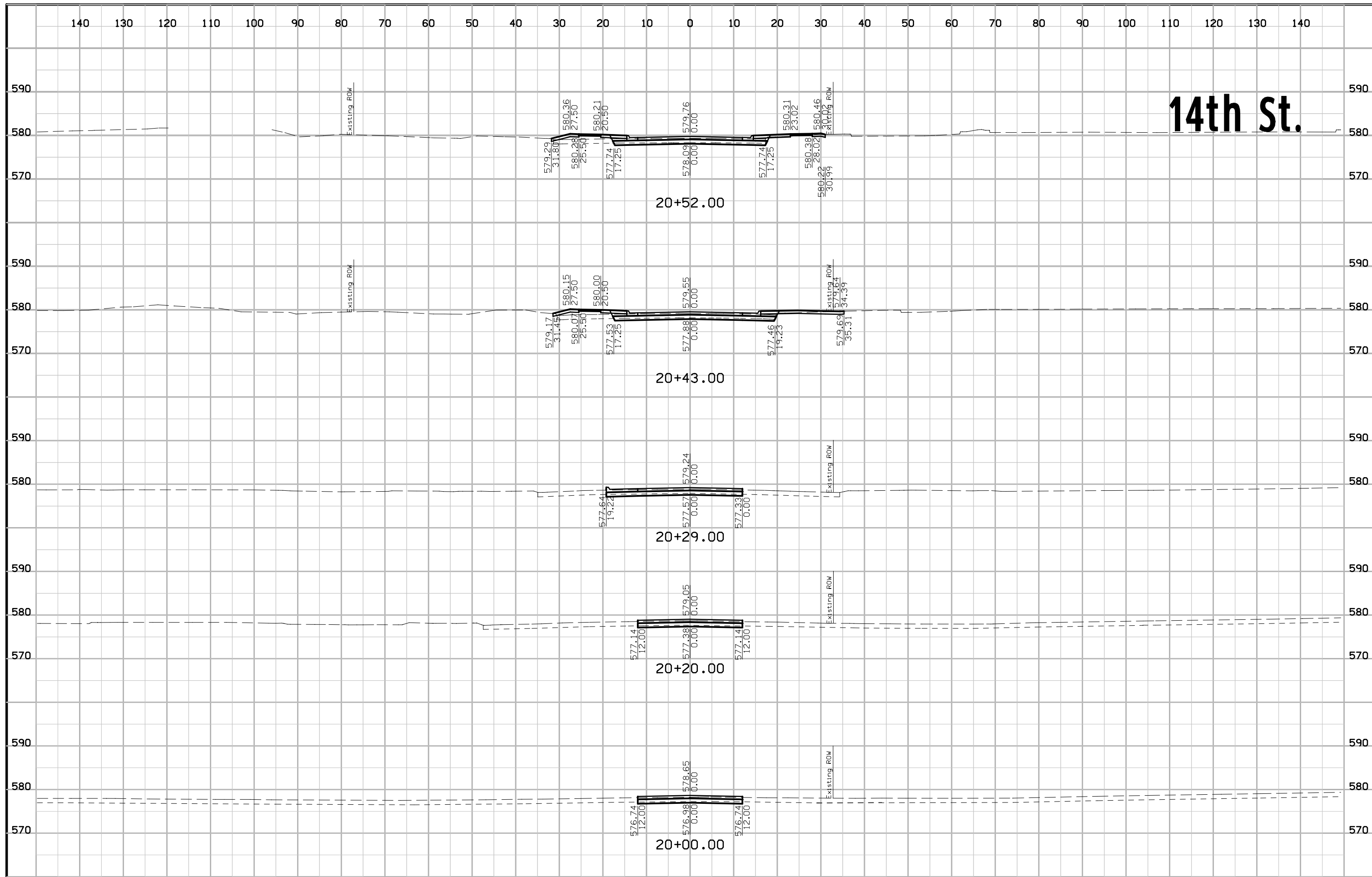
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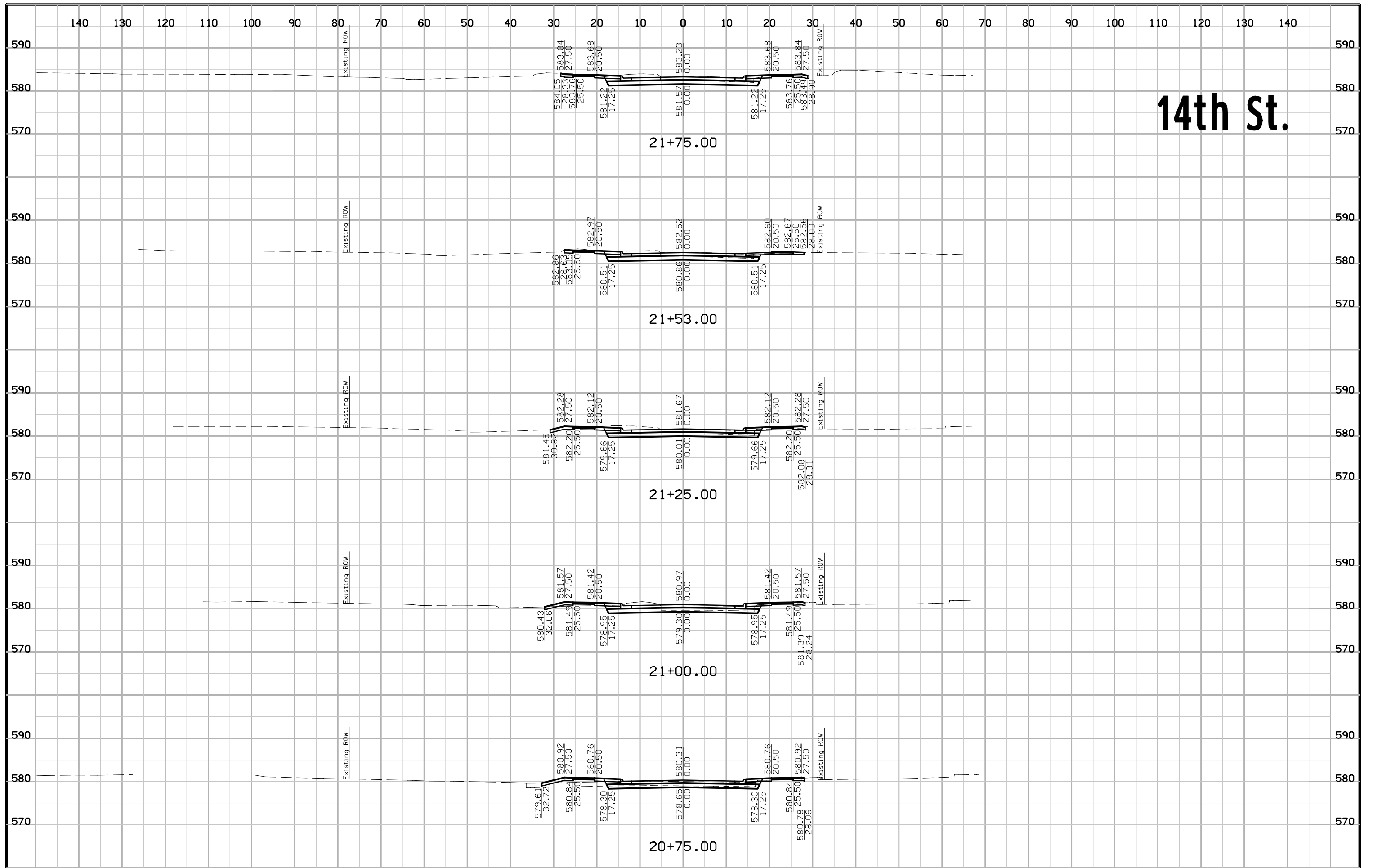


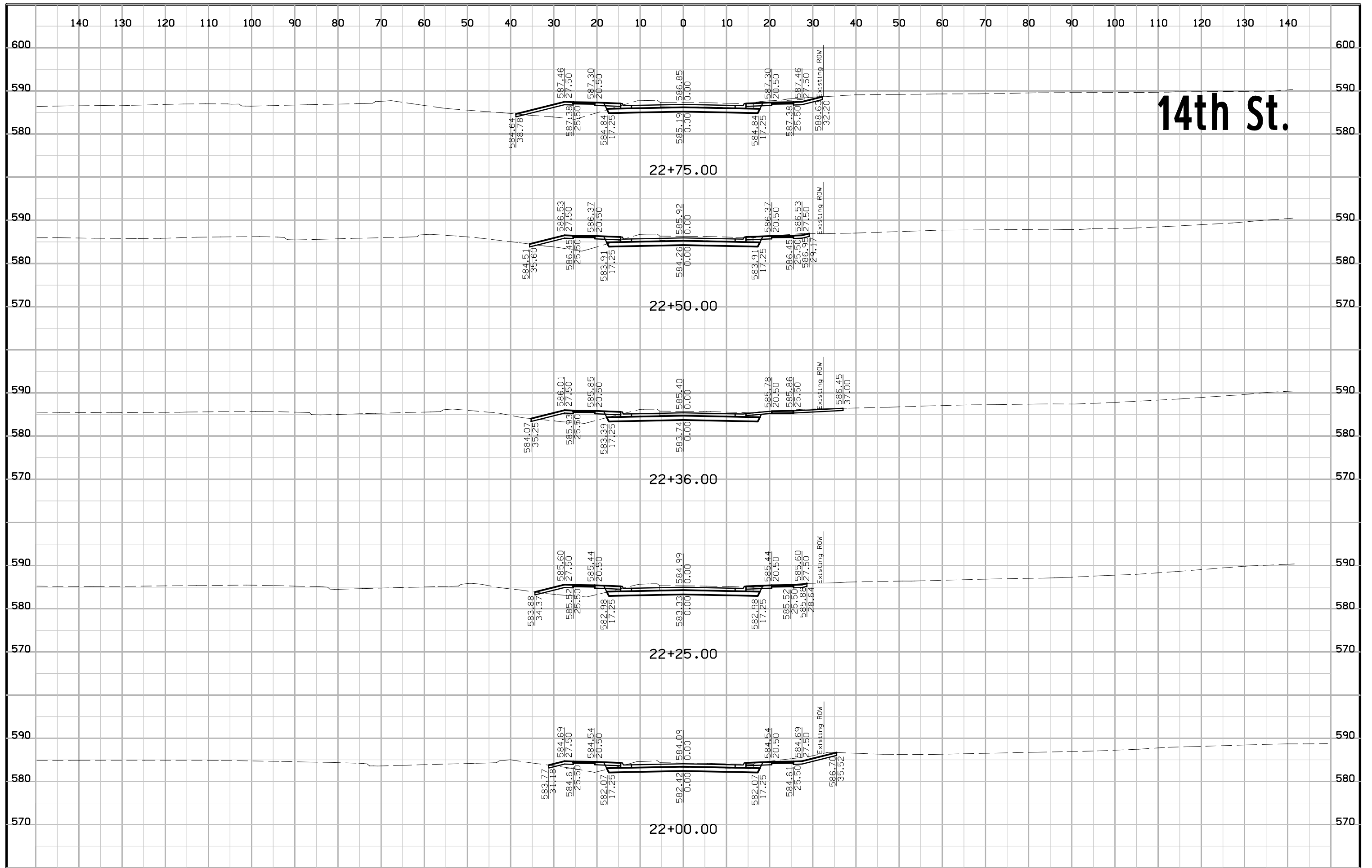
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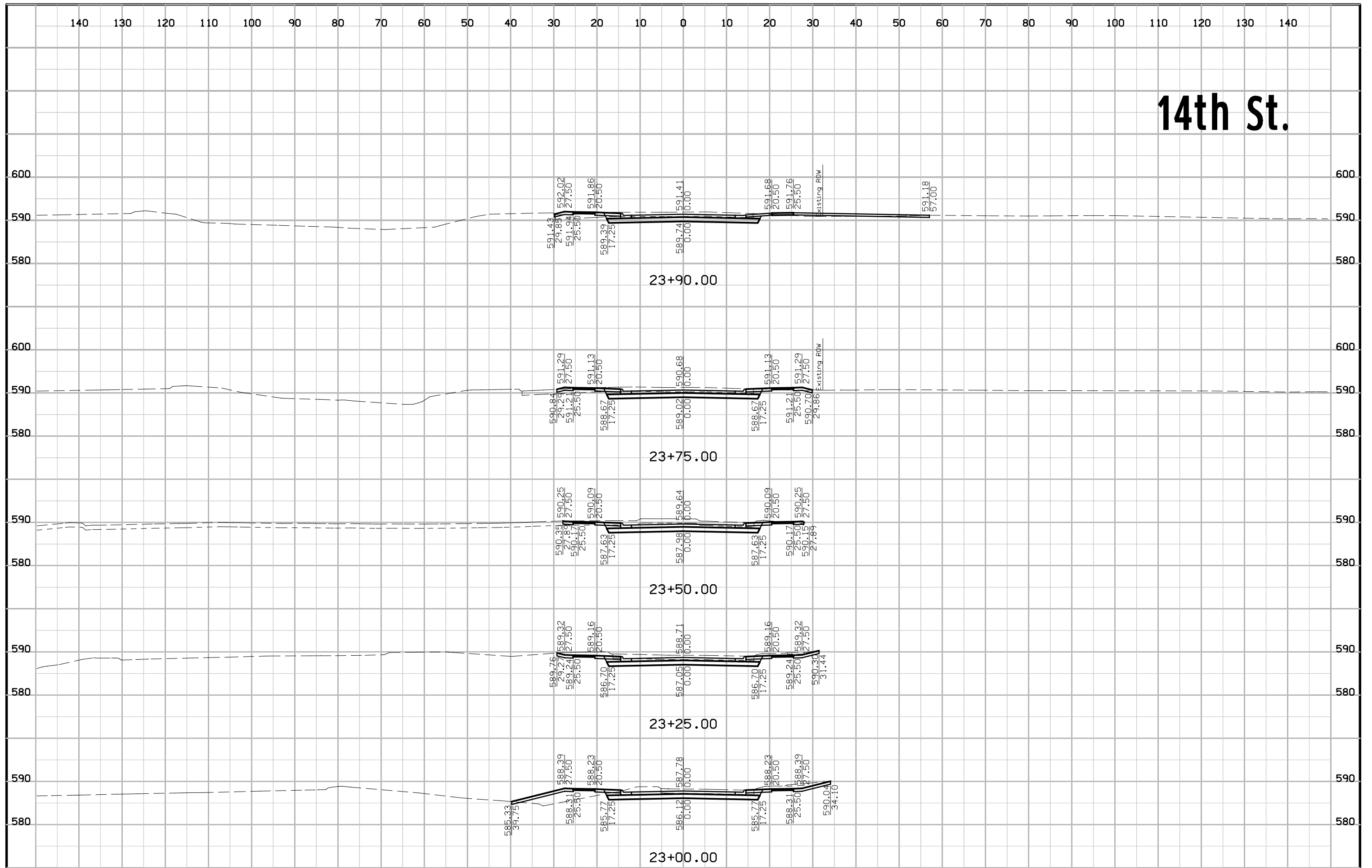


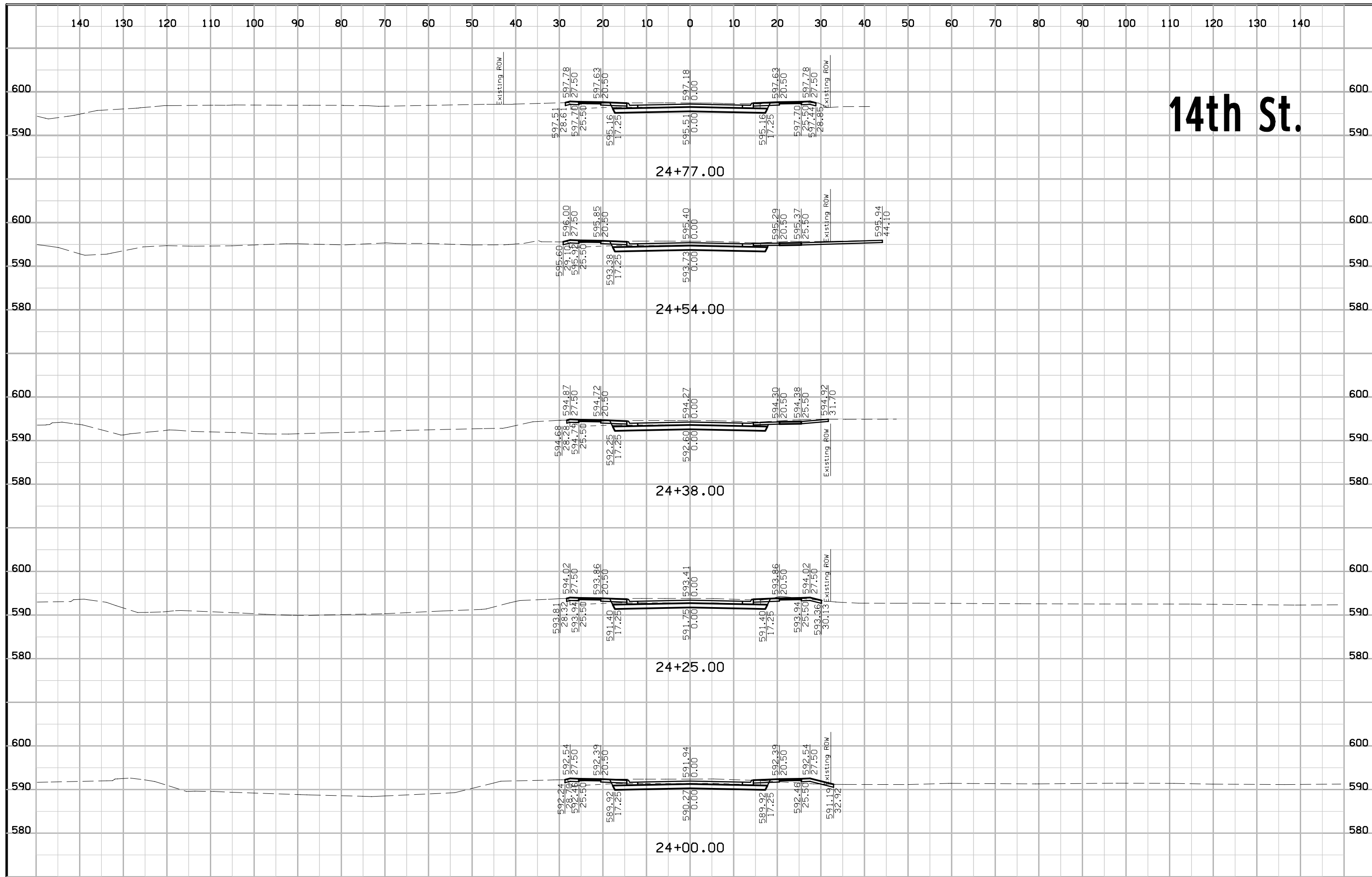
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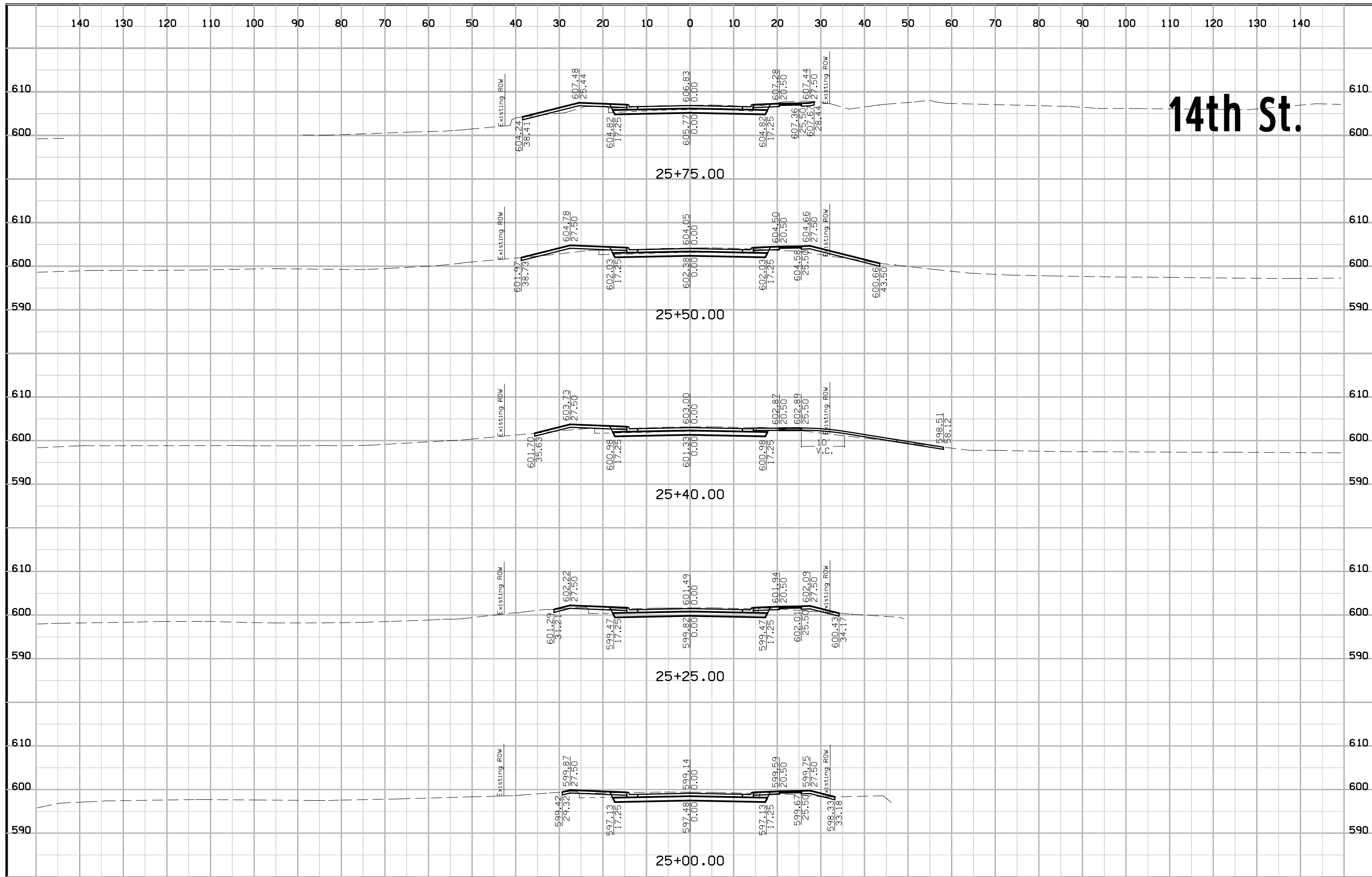




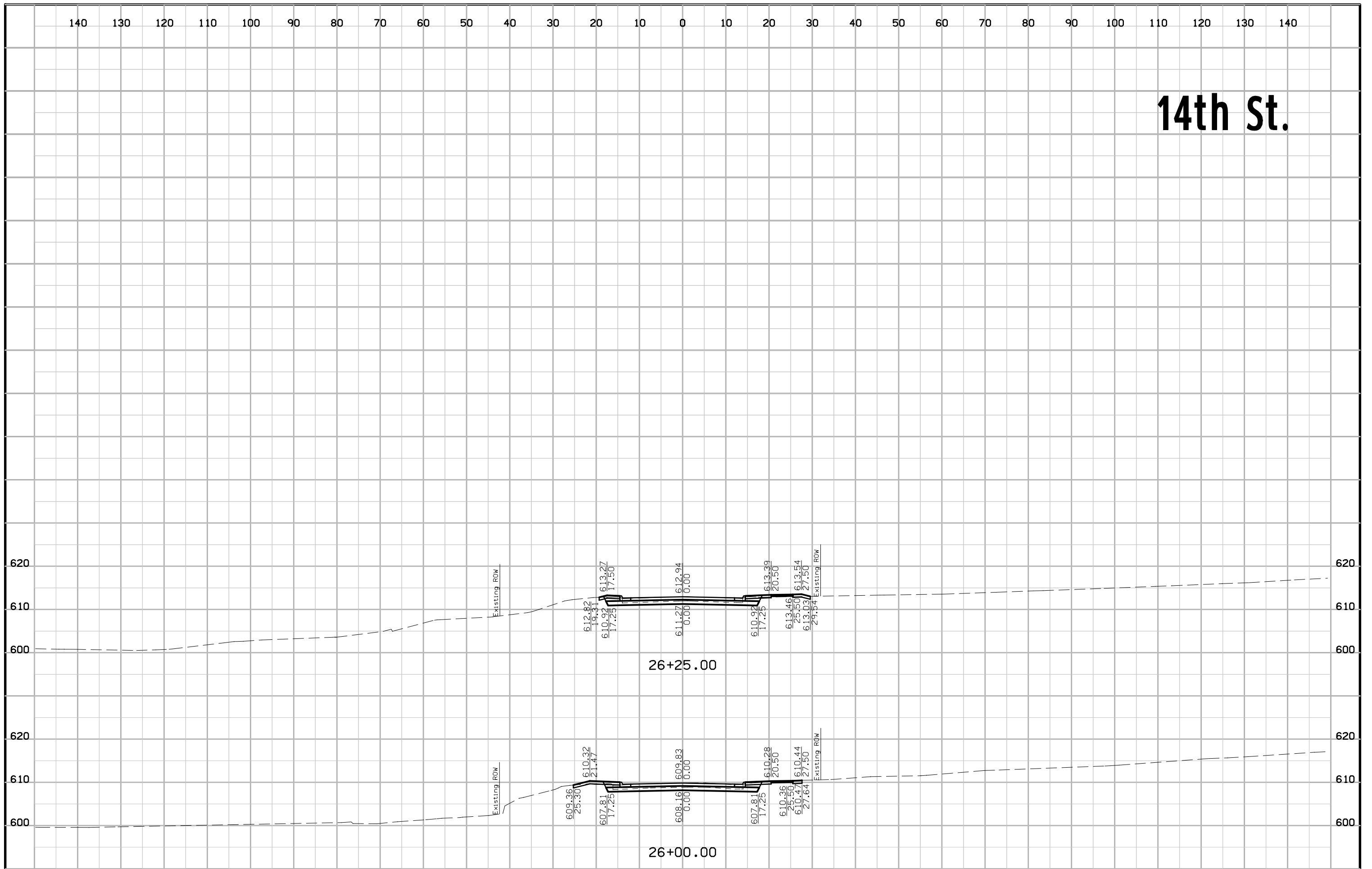
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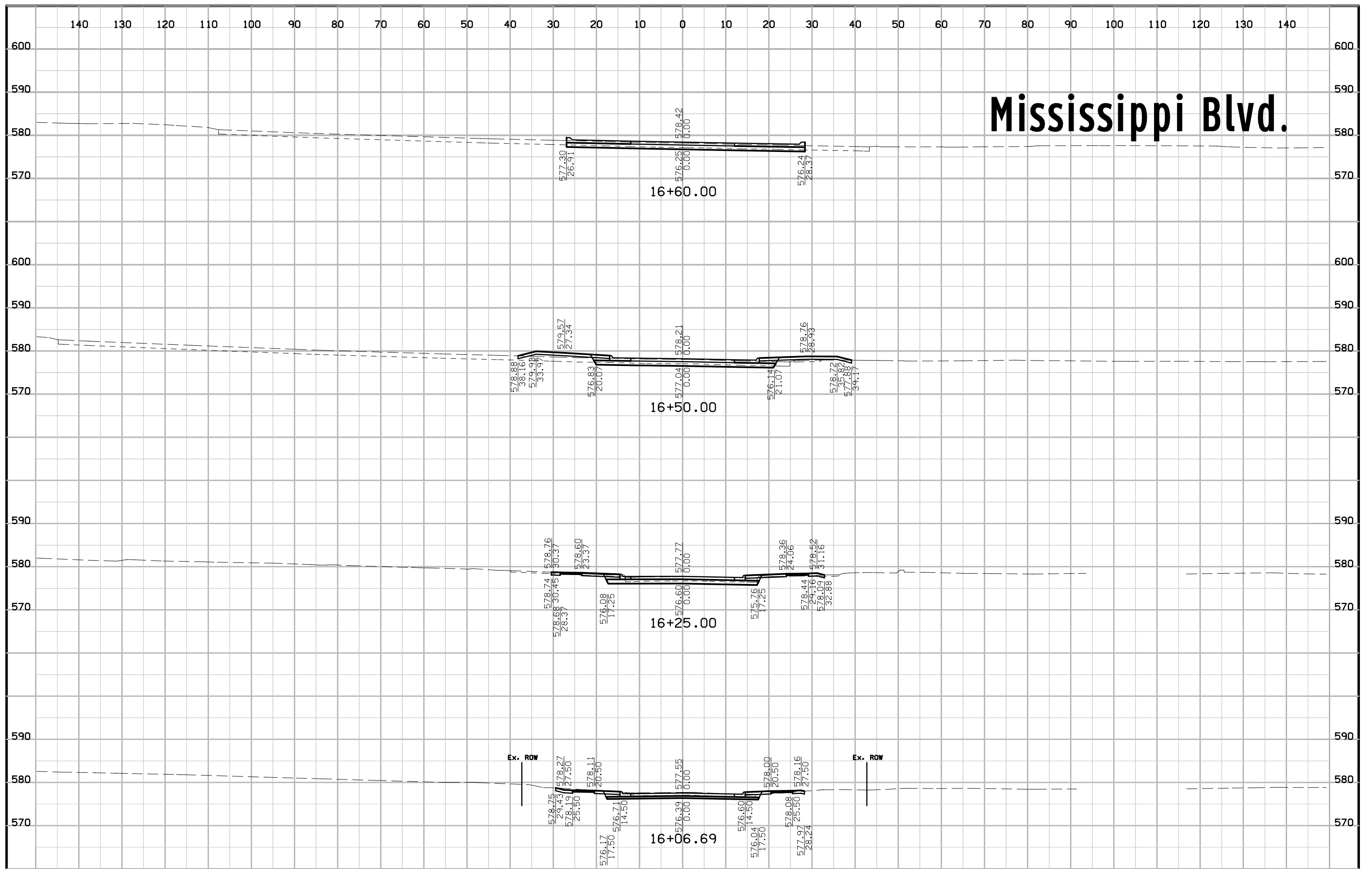


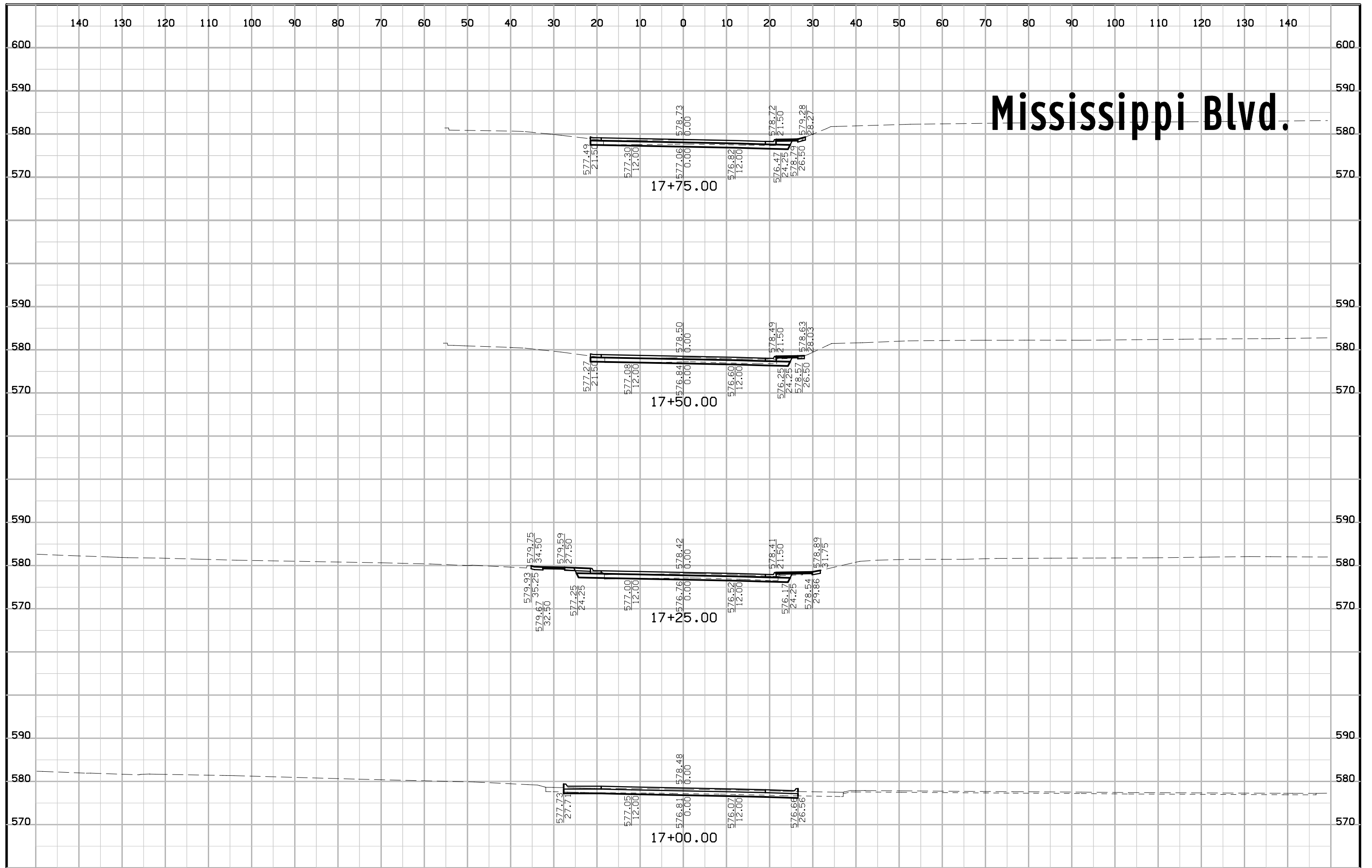
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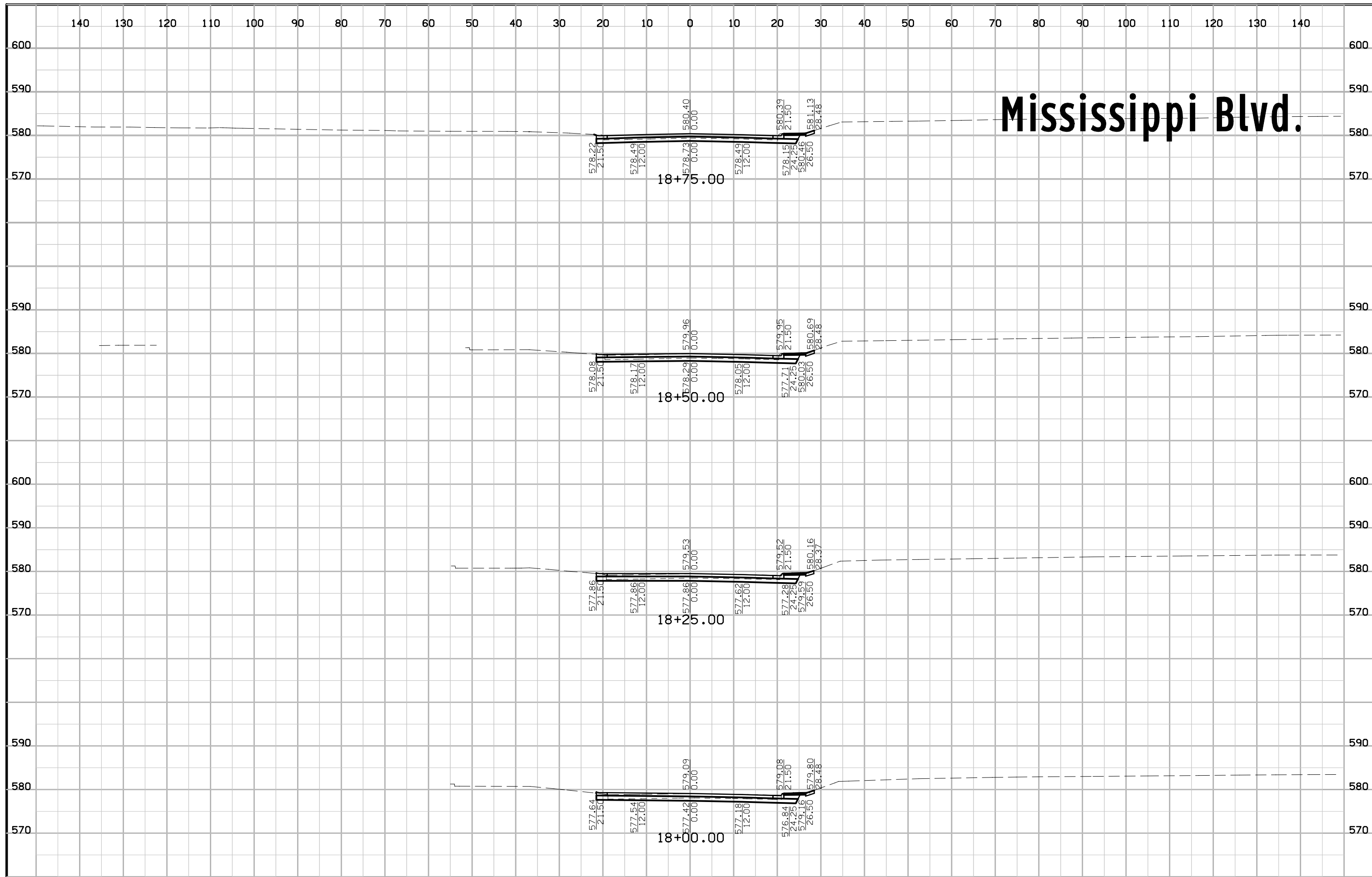


# Mississippi Blvd.





# Mississippi Blvd.



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