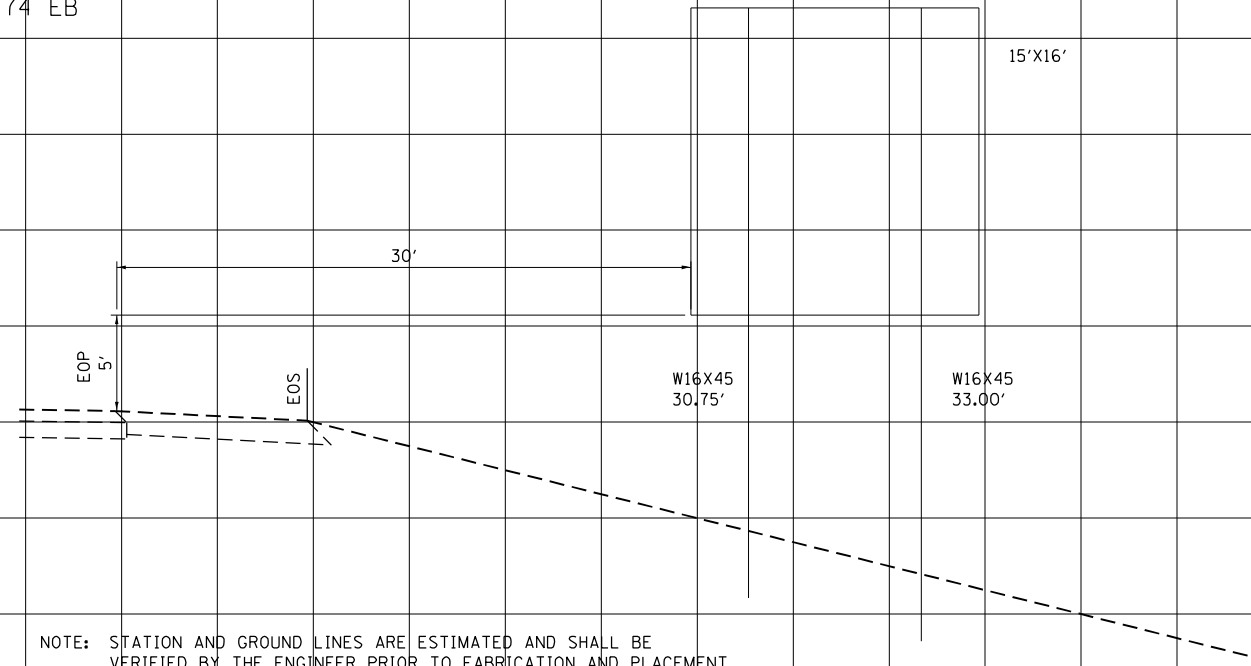


FINL	SURVEY	DATE
SURVEY	PLOTTED	BY
NOTE BOOK	TEMPLATE	
NO.	AREAS CHECKED	

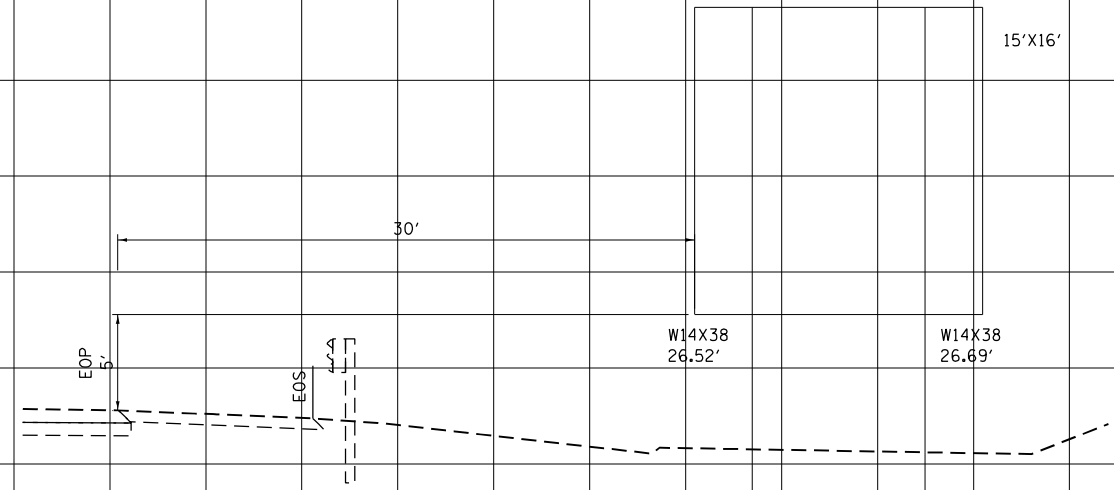
ORIGINAL	SURVEY	DATE
SURVEY	PLOTTED	BY
NOTE BOOK	TEMPLATE	
NO.	AREAS CHECKED	

STA. 1669+75, RT
I-74 EB

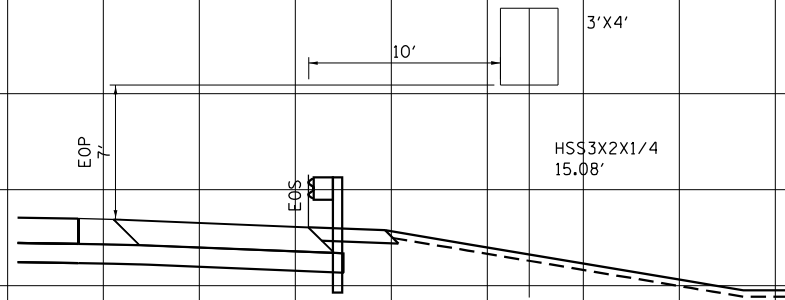


NOTE: STATION AND GROUND LINES ARE ESTIMATED AND SHALL BE VERIFIED BY THE ENGINEER PRIOR TO FABRICATION AND PLACEMENT.

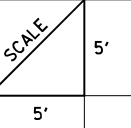
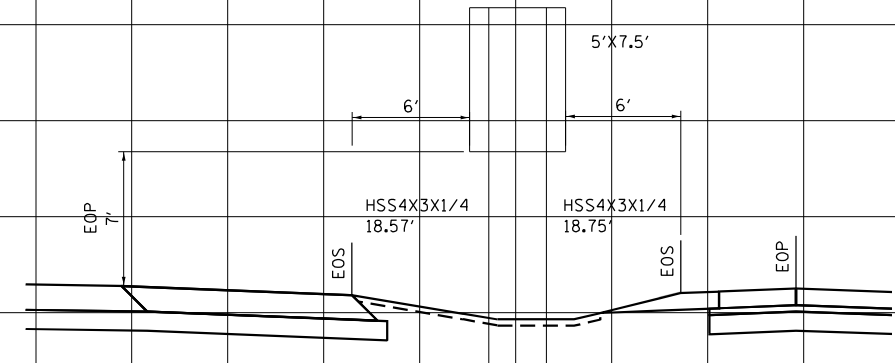
STA. 1837+00, RT
I-74 EB



STA. 1864+25, RT
I-74 EB



STA. 1038+00, RT
I-74 EB



FILE NAME = ...D570899-shr-XSC Signs Ground

USER NAME = Matt Overbey

DESIGNED - MRS

REVISED -

PLOT SCALE = 10.0005' / in.

DRAWN - MRS

REVISED -

PLOT DATE = 3/18/2021 - 4:04:06 PM

CHECKED - MJO

REVISED -

DATE - MARCH 2021

REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROUND MOUNT SIGN CROSS SECTIONS

SCALE: 1"V : 1" H

SHEET NO. 5 OF 16 SHEETS

STA.

TO STA.

F.A.U. RTE.

57

SECTION

(10-34-1)HMK

COUNTY

CHAMPAIGN

TOTAL SHEETS

1187

SHEET NO.

601

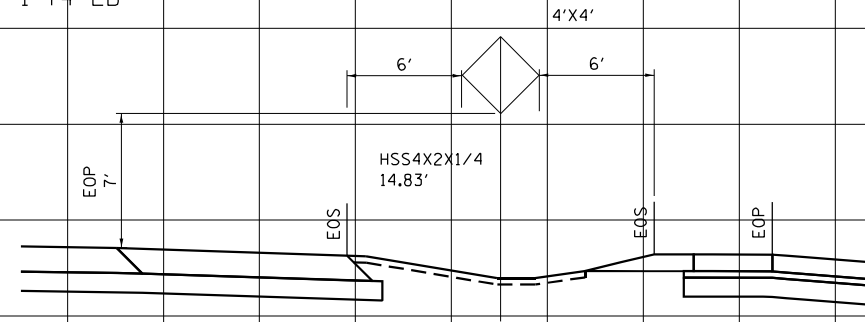
CONTRACT NO. 70B99

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

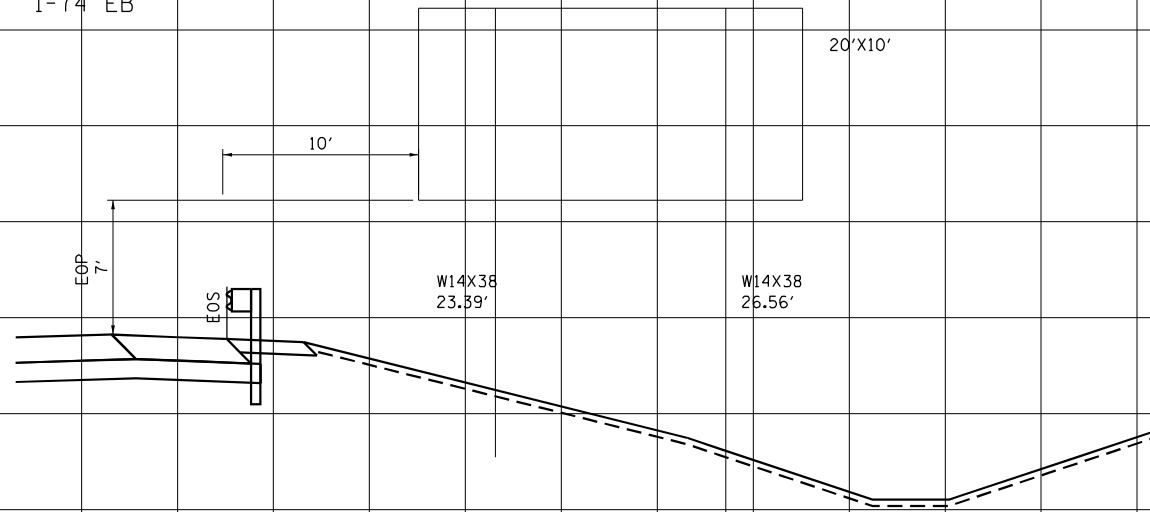
DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
FINL	
SURVY	
NOTE BOOK	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
ORIGINAL	
SURVEY	
NOTE BOOK	
NO.	

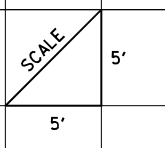
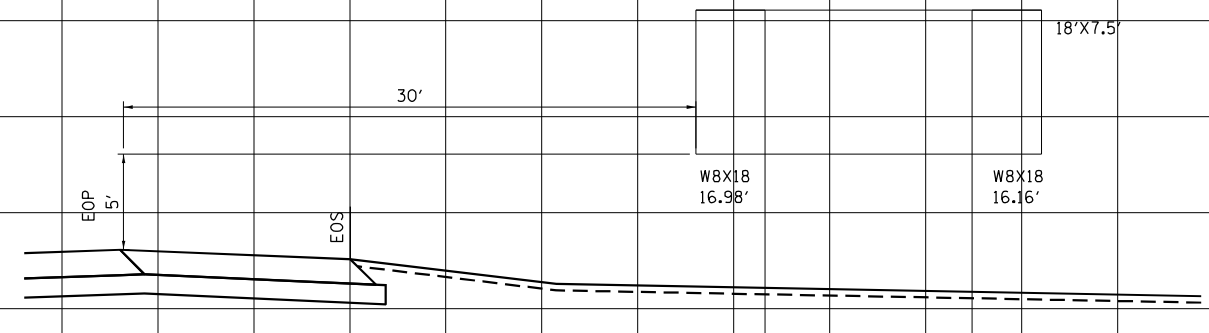
STA. 1054+85, RT
I-74 EB



STA. 1079+50, RT
I-74 EB



STA. 1087+50, RT
I-74 EB



FILE NAME = ...D570899-shr-XSC Signs Ground

USER NAME = Matt Overbey
PLOT SCALE = 10.0005' / in.
PLOT DATE = 3/18/2021 - 4:04:06 PM

DESIGNED - MRS
DRAWN - MRS
CHECKED - MJO
DATE - MARCH 2021

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROUND MOUNT SIGN CROSS SECTIONS

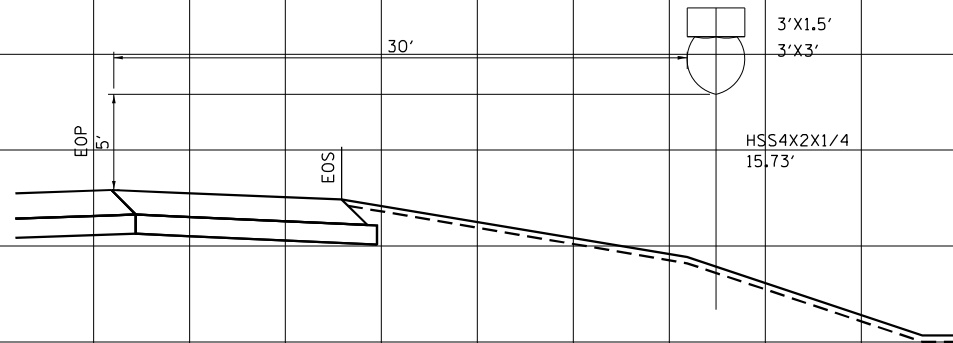
SCALE: 1"V : 1" H SHEET NO. 6 OF 16 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(10-34-1)HKB	CHAMPAIGN	1187	602
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70B99	

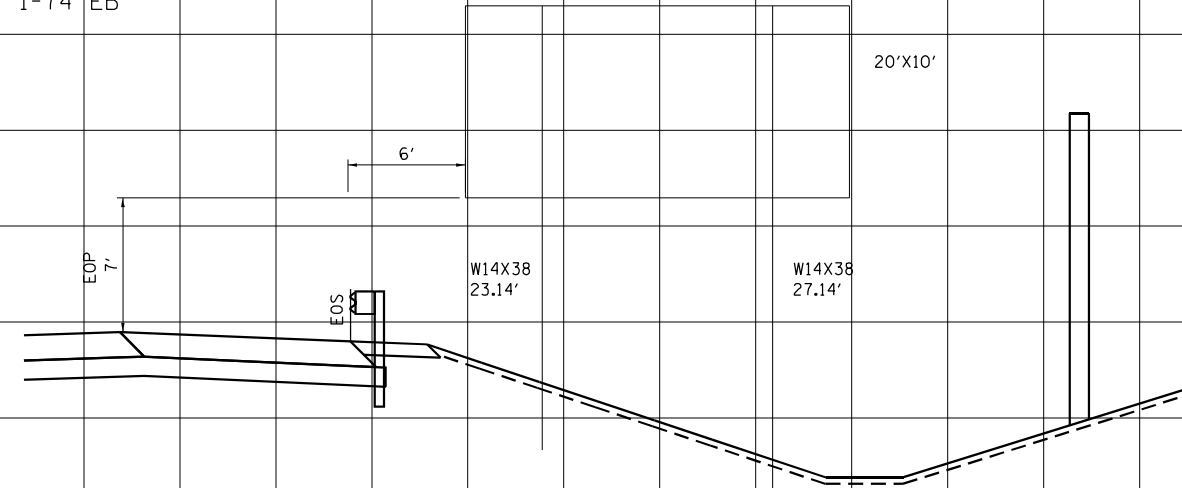
DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
FINISH	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
ORIGINAL	
NO.	

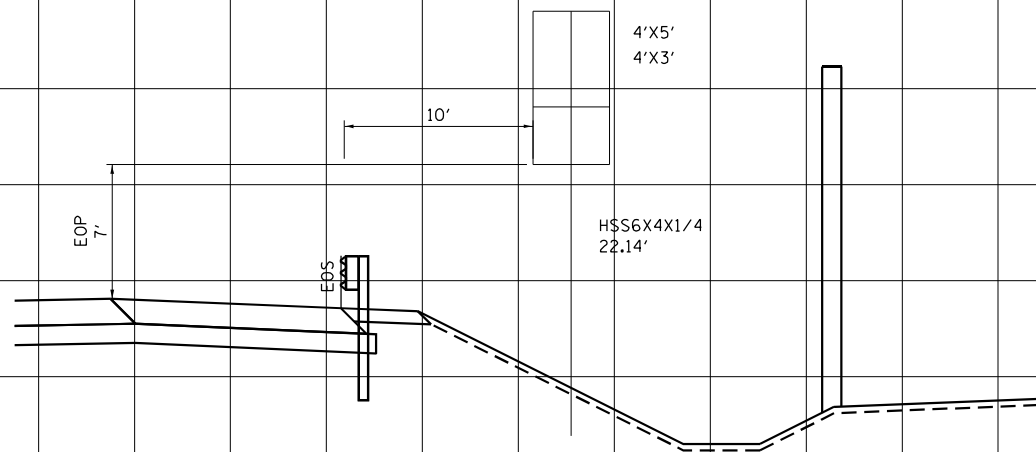
STA. 1091+50, RT
I-74 EB



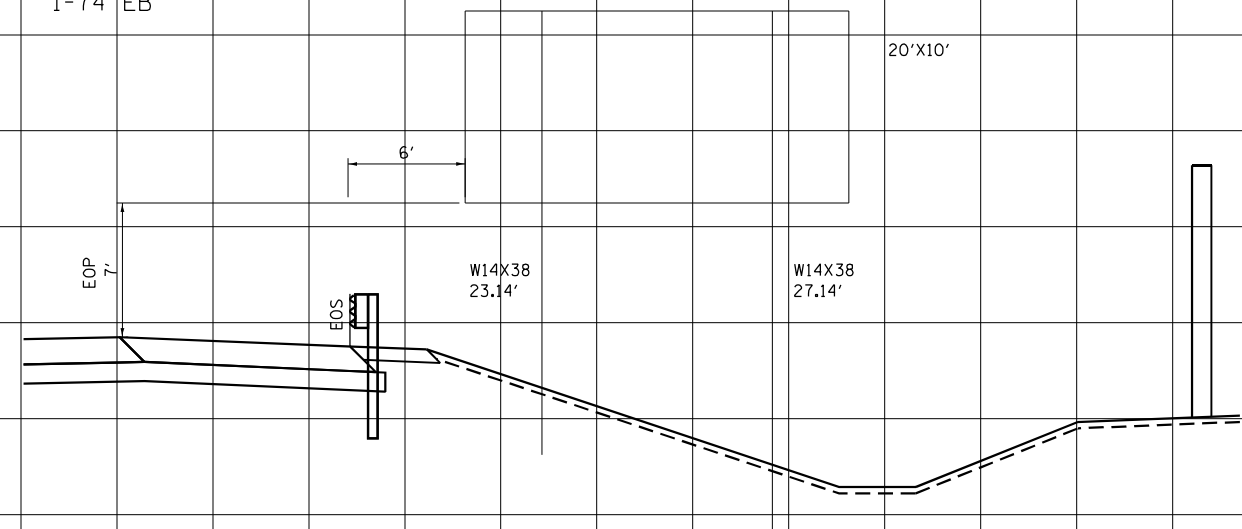
STA. 1096+00, RT
I-74 EB



STA. 1107+50, RT
I-74 EB



STA. 1114+50, RT
I-74 EB



SCALE
5'
5'

FILE NAME = ...D570899-shr-XSC Signs Ground

USER NAME = Matt Overbey

DESIGNED	-	MRS	REVISED	-
DRAWN	-	MRS	REVISED	-
CHECKED	-	MJO	REVISED	-
DATE	-	MARCH 2021	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROUND MOUNT SIGN CROSS SECTIONS

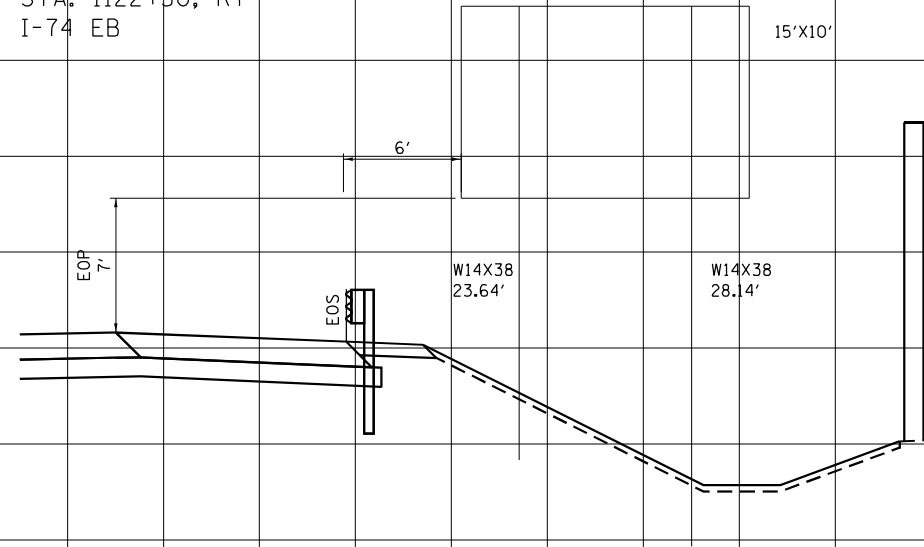
SCALE: 1"V : 1" H SHEET NO. 7 OF 16 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(10-34-1)HMK	CHAMPAIGN	1187	603
CONTRACT NO. 70B99				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

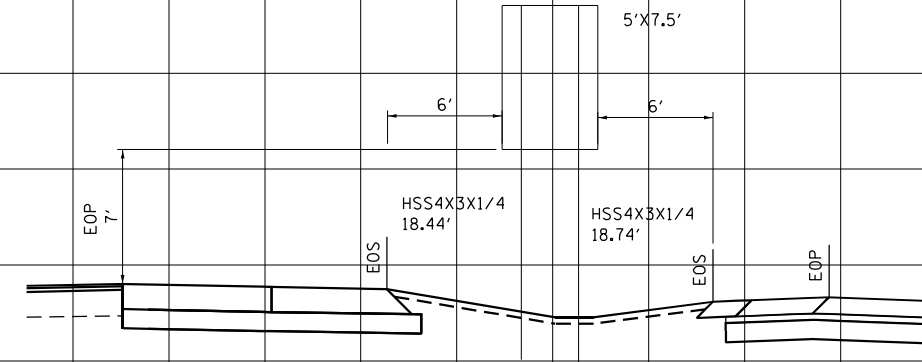
DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
FINISH	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
ORIGINAL	
NO.	

STA. 1122+50, RT
I-74 EB



STA. 1137+40, RT
I-74 EB



SCALE
5'
5'

FILE NAME =
...D570899-shd-XSC Signs Ground

USER NAME = Matt Overbey

DESIGNED - MRS

REVISED -

DRAWN - MRS

CHECKED - MJO

REVISED -

PLOT SCALE = 10.0005' / in.

DATE - MARCH 2021

REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROUND MOUNT SIGN CROSS SECTIONS

SCALE: 1"V : 1" H

SHEET NO. 8 OF 16 SHEETS

STA.

TO STA.

F.A.U.
RTE.

57

SECTION

(10-34-1)HBK

COUNTY

CHAMPAIGN

TOTAL
SHEETS

1187

SHEET
NO.

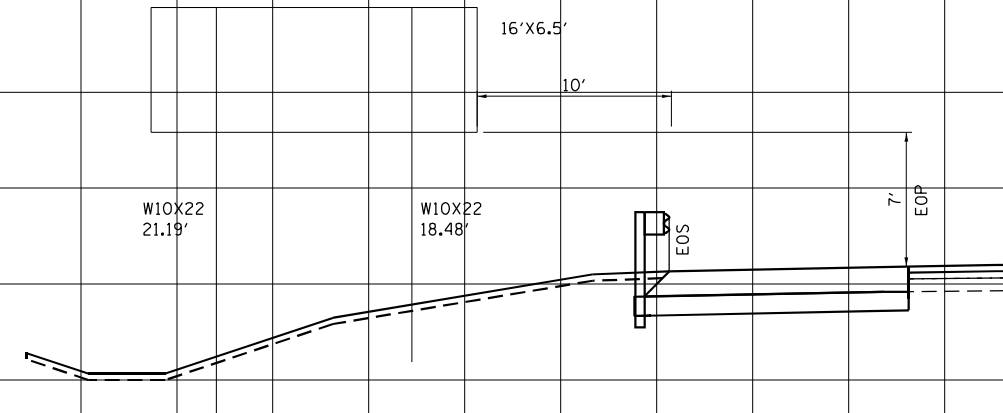
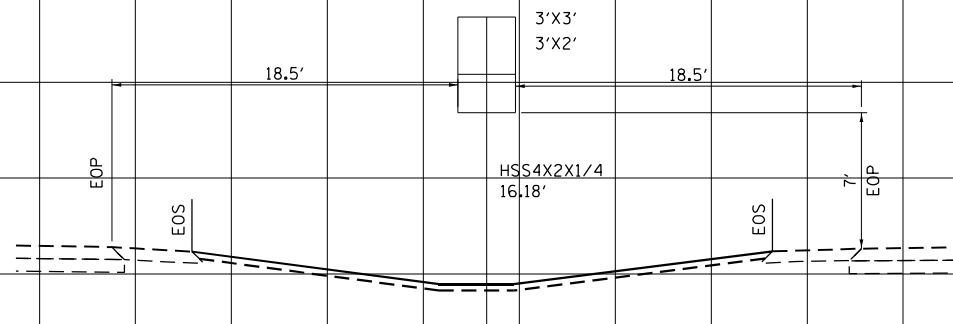
604

CONTRACT NO. 70B99

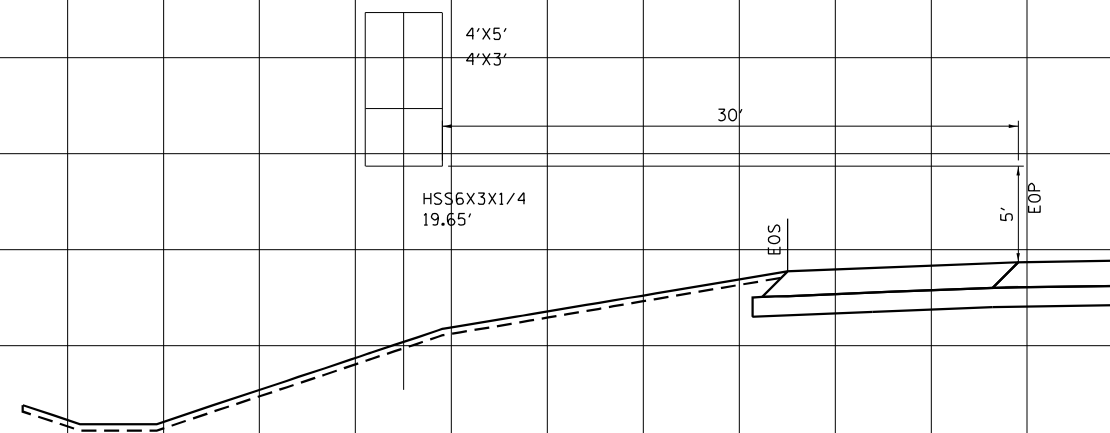
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

STA. 1823+75, C.L.
I-74 MEDIAN

STA. 1838+25, LT
I-74 WB



STA. 1858+25, LT
I-74 WB



SCALE
5'

DATE	BY
FINISHED SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

DATE	BY
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

FILE NAME =	USER NAME = Matt Overbey	DESIGNED - MRS	REVISED -
...D570899-sh-t-XSC Signs Ground		DRAWN - MRS	REVISED -
	PLOT SCALE = 10.0005' / in.	CHECKED - MJO	REVISED -
	PLOT DATE = 3/18/2021 - 4:04:07 PM	DATE - MARCH 2021	REVISED -

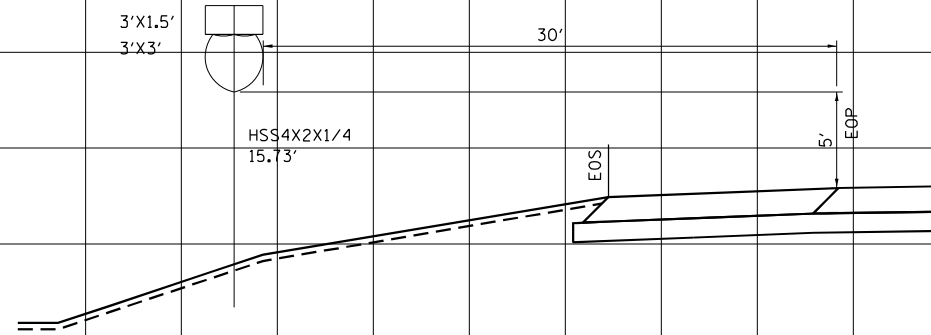
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROUND MOUNT SIGN CROSS SECTIONS			
SCALE: 1"V : 1" H	SHEET NO. 9 OF 16 SHEETS	STA.	TO STA.

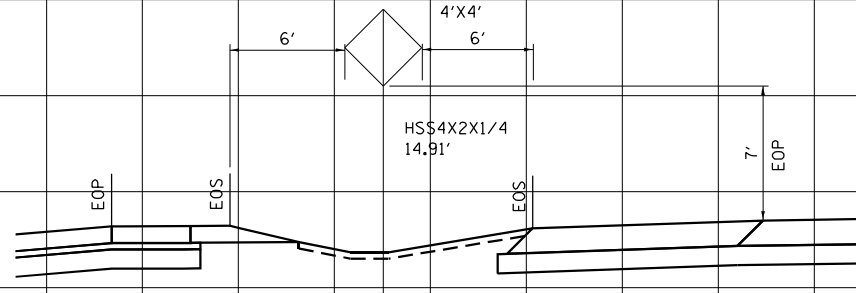
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(10-34-1)HMK	CHAMPAIGN	1187	605
CONTRACT NO. 70B99				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
FINISH	
NO.	

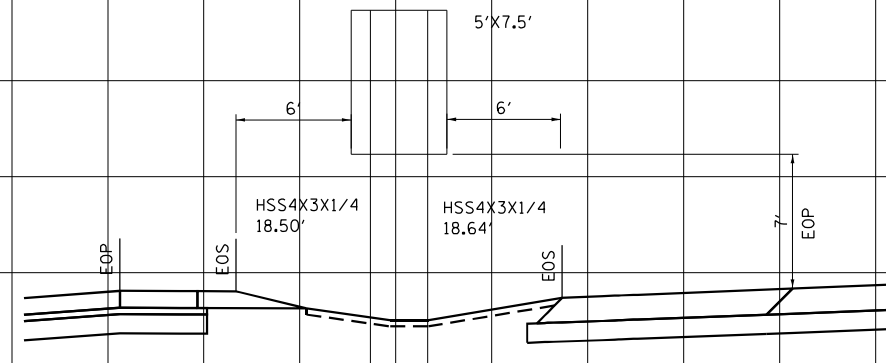
STA. 1868+25, LT
I-74 WB



STA. 1067+95, LT
I-74 WB



STA. 1086+20, LT
I-74 WB



DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
ORIGINAL	
NO.	

SCALE
5'
5'

FILE NAME = ...\\D570899-shr-XSC Signs Ground

USER NAME = Matt Overbey
PLOT SCALE = 10.0005' / in.
PLOT DATE = 3/18/2021 - 4:04:07 PM

DESIGNED - MRS
DRAWN - MRS
CHECKED - MJO
DATE - MARCH 2021

REVISED -
REVISED -
REVISED -
REVISED -

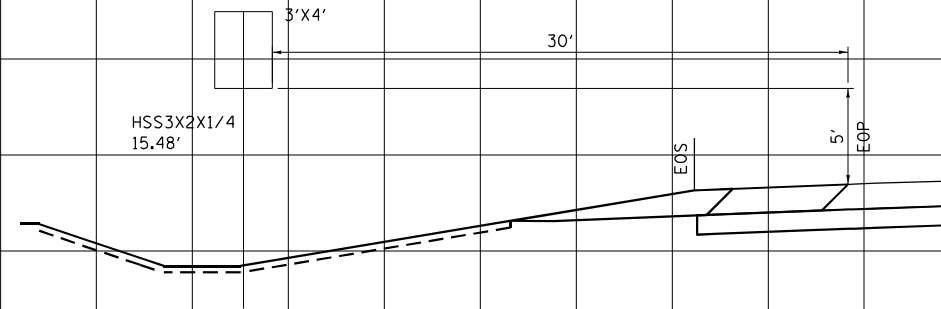
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROUND MOUNT SIGN CROSS SECTIONS

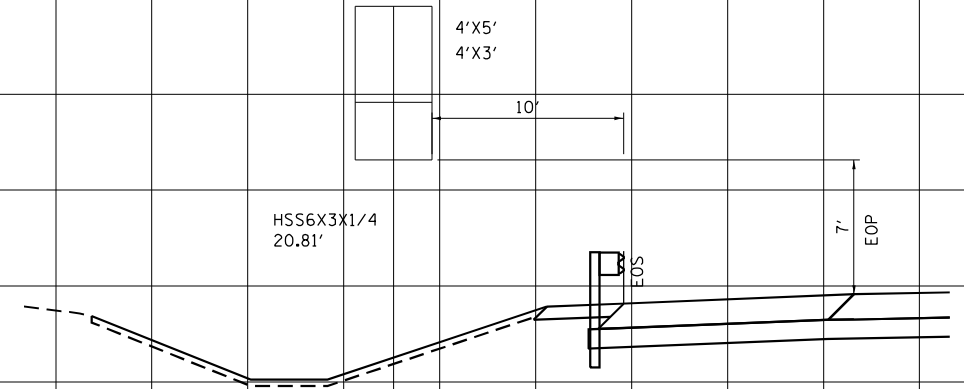
SCALE: 1"V : 1'H SHEET NO. 10 OF 16 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(10-34-1)HMK	CHAMPAIGN	1187	606
CONTRACT NO. 70B99				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

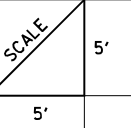
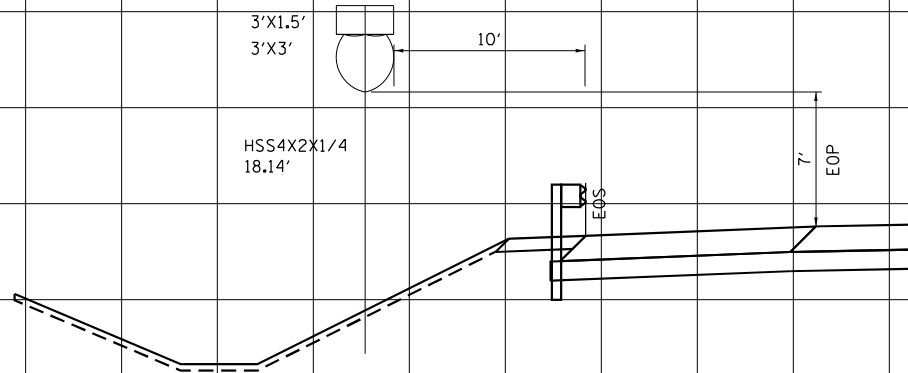
STA. 1095+50, LT
I-74 WB



STA. 1111+50, LT
I-74 WB



STA. 1123+25, LT
I-74 WB



DATE	BY	SURVEYED	PLOTTED	AREAS CHECKED
NO.				

DATE	BY	ORIGINAL SURVEY	PLOTTED	AREAS CHECKED
NO.				

FILE NAME = ...\\D570899-shr-XSC Signs Ground

USER NAME = Matt Overbey

DESIGNED - MRS	REVISED -
DRAWN - MRS	REVISED -
CHECKED - MJO	REVISED -
DATE - MARCH 2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROUND MOUNT SIGN CROSS SECTIONS

SCALE: 1"V : 1" H SHEET NO. 11 OF 16 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(10-34-1)HBK	CHAMPAIGN	1187	607
CONTRACT NO. 70B99				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

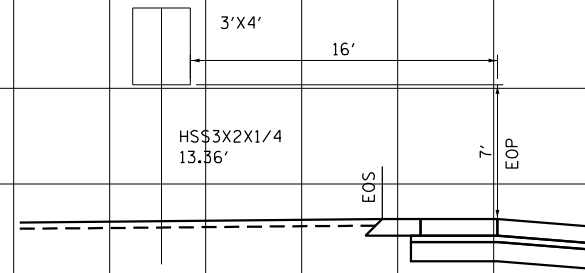
DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
FINISH	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
ORIGINAL	
NO.	

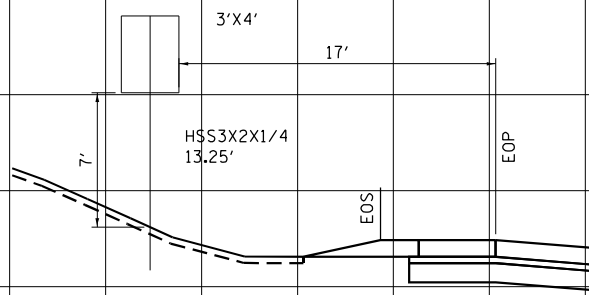
STA. 310+70, LT
RAMP C



STA. 313+10, LT
RAMP C

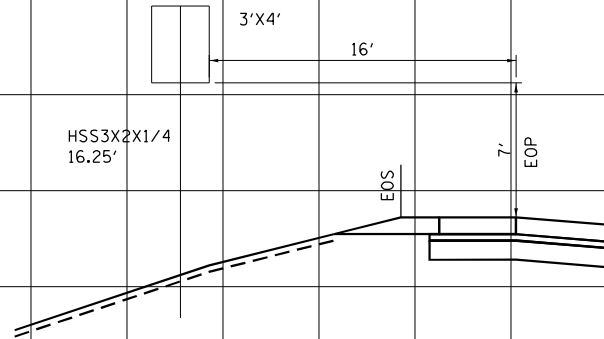


STA. 314+30, LT
RAMP C

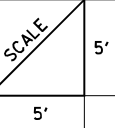
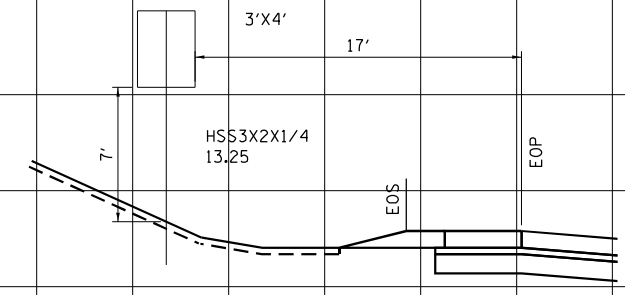


STA. 311+90, RAMP C, LT

315+50
316+70
316+90
319+10
320+30
321+50
322+70
323+90
325+10
326+30
327+50
330+50



STA. 329+30, LT
RAMP C



FILE NAME = ...D570899-shr-XSC Signs Ground

USER NAME = Matt Overbey
PLOT SCALE = 10.0005' / in.
PLOT DATE = 3/18/2021 - 4:04:07 PM

DESIGNED - MRS
DRAWN - MRS
CHECKED - MJO
DATE - MARCH 2021

REVISED -
REVISED -
REVISED -
REVISED -

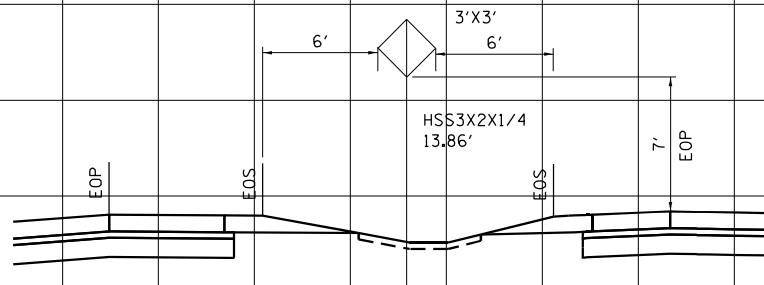
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROUND MOUNT SIGN CROSS SECTIONS

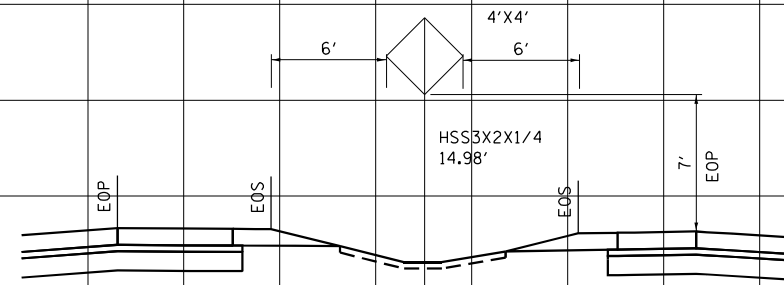
SCALE: 1" = 10' SHEET NO. 12 OF 16 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(10-34-1)HMK	CHAMPAIGN	1187	608
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70B99	

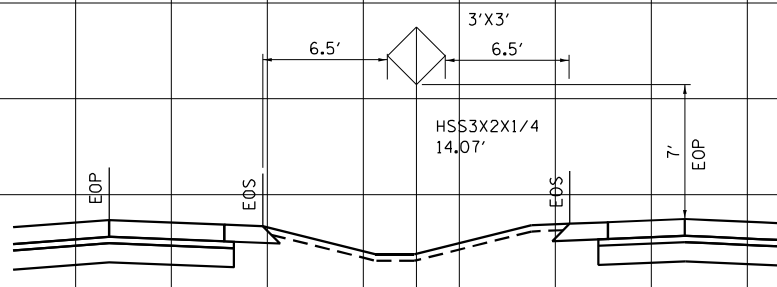
STA. 404+50, RT
RAMP D



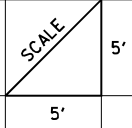
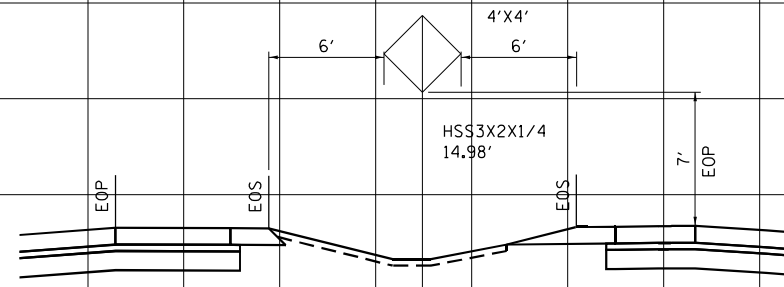
STA. 427+15, RT
RAMP D



STA. 504+50, RT
RAMP E



STA. 525+75, RT
RAMP E



DATE	BY
SURVEYED	PLOTTED
NOTE BOOK	AREAS CHECKED
NO.	

DATE	BY
SURVEYED	PLOTTED
NOTE BOOK	AREAS CHECKED
NO.	

FILE NAME = ...D570899-shr-XSC Signs Ground

USER NAME = Matt Overbey
PLOT SCALE = 10.0005' / in.
PLOT DATE = 3/18/2021 - 4:04:07 PM

DESIGNED - MRS
DRAWN - MRS
CHECKED - MJO
DATE - MARCH 2021

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

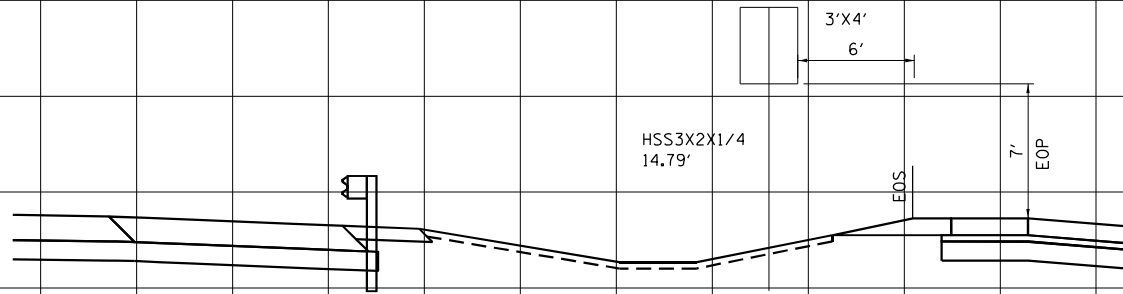
GROUND MOUNT SIGN CROSS SECTIONS
SCALE: 1"V : 1" H SHEET NO. 13 OF 16 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(10-34-1)HMK	CHAMPAIGN	1187	609
CONTRACT NO. 70B99				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

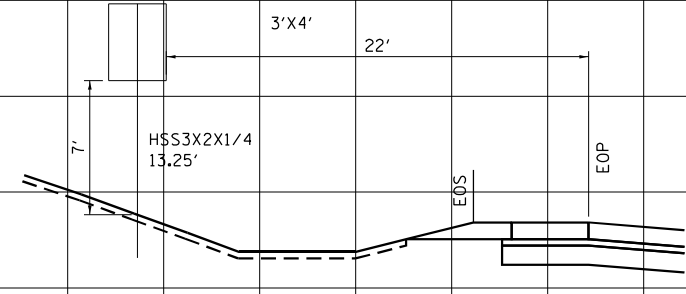
DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
FINISH	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
ORIGINAL	
NO.	

STA. 610+50, LT
RAMP F

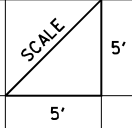
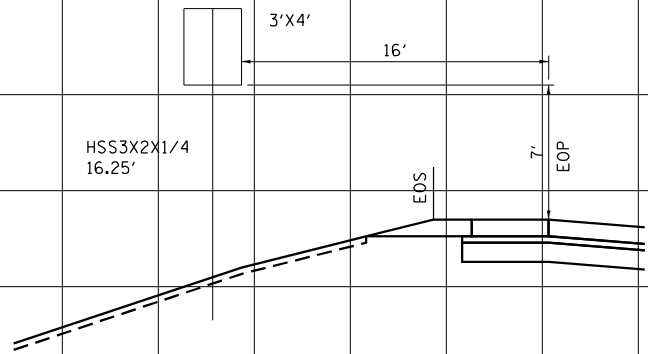


STA. 615+30, LT
RAMP F



STA. 611+70, RAMP F, LT

- 612+90
- 614+10
- 616+50
- 616+70
- 618+90
- 620+10
- 621+30
- 622+50
- 623+70
- 624+90
- 626+10
- 628+00
- 629+70
- 630+90



FILE NAME = ...V0570899-sh-t-XSC Signs Ground

USER NAME = Matt Overbey

DESIGNED - MRS

REVISED -

DRAWN - MRS

REVISED -

PLLOT SCALE = 10.0005' / in.

PLLOT DATE = 3/18/2021 - 4:04:08 PM

CHECKED - MJO

REVISED -

DATE - MARCH 2021

REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROUND MOUNT SIGN CROSS SECTIONS

SCALE: 1'V : 1'H

SHEET NO. 14 OF 16 SHEETS

STA.

TO STA.

F.A.U. RTE.

57

SECTION

(10-34-1)HBK

COUNTY

CHAMPAIGN

TOTAL SHEETS

1187

SHEET NO.

610

CONTRACT NO. 70B99

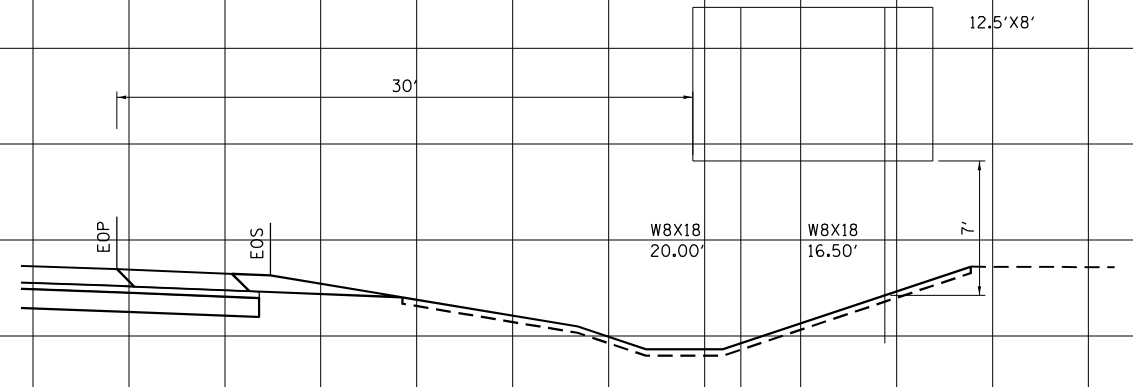
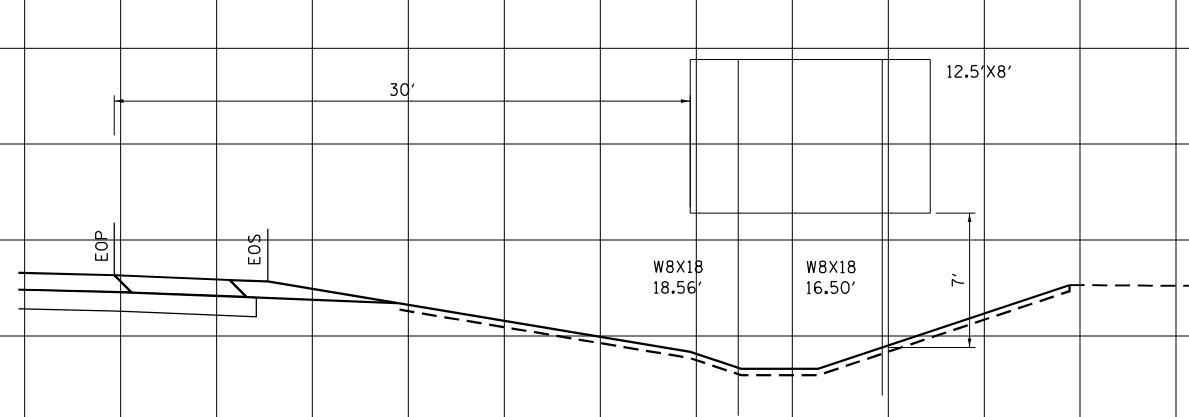
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
FINN	
SURVY	
NOTE BOOK	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
ORIGINAL	
SURVEY	
NOTE BOOK	
NO.	

STA. 28+50, RT
PROSPECT RAMP C

STA. 30+50, RT
PROSPECT RAMP C



SCALE
5'
5'

FILE NAME =
...D570899-shr-XSC Signs Ground

USER NAME = Matt Overbey
PLOT SCALE = 10.0005' / in.
PLOT DATE = 3/18/2021 - 4:04:08 PM

DESIGNED - MRS
DRAWN - MRS
CHECKED - MJO
DATE - MARCH 2021

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GROUND MOUNT SIGN CROSS SECTIONS

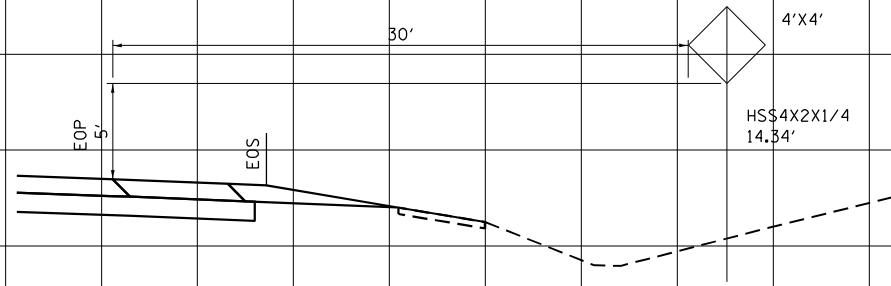
SCALE: 1"V : 1" H SHEET NO. 15 OF 16 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(10-34-1)HMK	CHAMPAIGN	1187	611
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70B99	

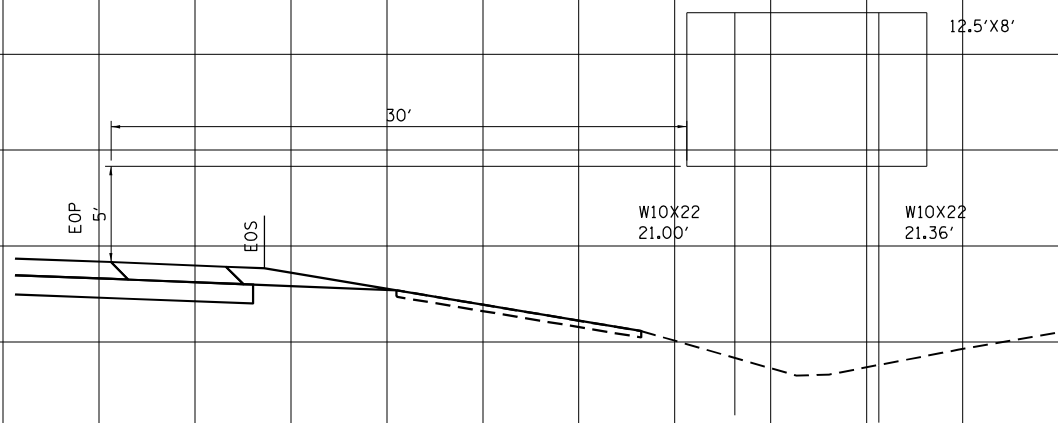
DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
FINISH	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
ORIGINAL	
NO.	

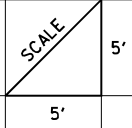
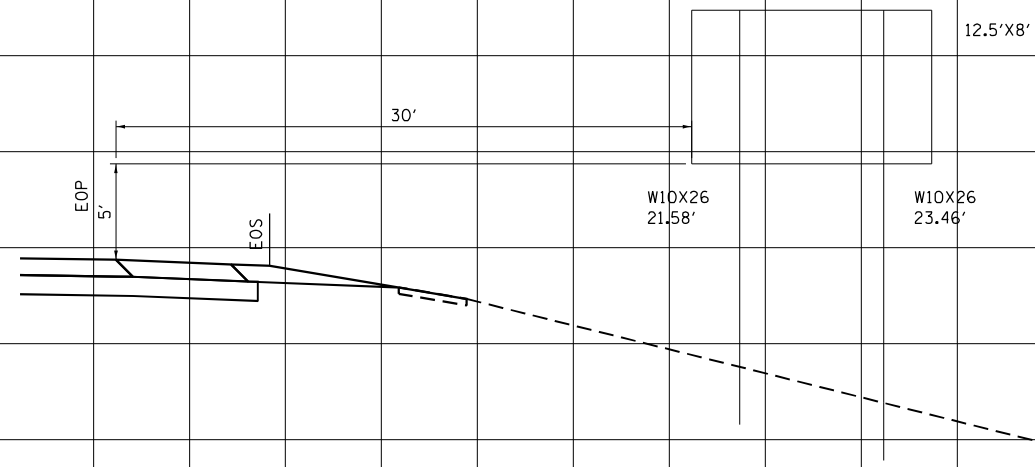
STA. 31+50, RT
PROSPECT RAMP C



STA. 32+50, RT
PROSPECT RAMP C



STA. 34+50, RT
PROSPECT RAMP C



FILE NAME = ...D570899-sh-t-XSC Signs Ground

USER NAME = Matt Overbey

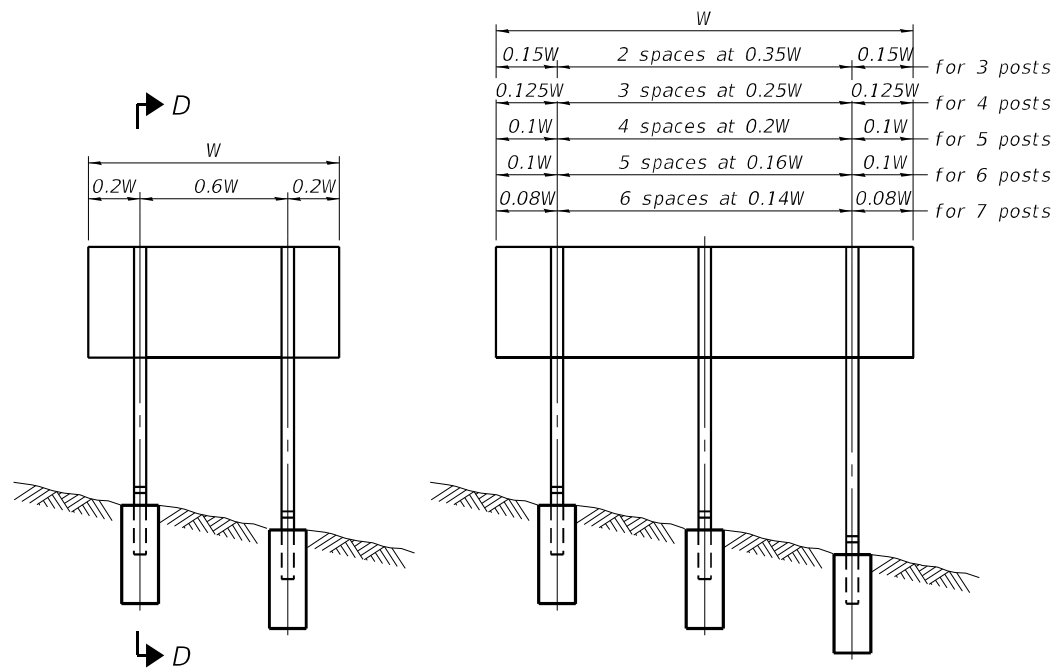
DESIGNED -	MRS	REVISED -	
DRAWN -	MRS	REVISED -	
CHECKED -	MJO	REVISED -	
DATE -	MARCH 2021	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROUND MOUNT SIGN CROSS SECTIONS

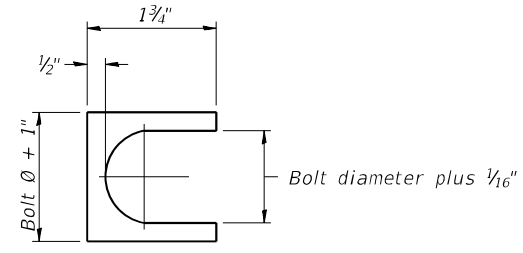
SCALE: 1"V : 1" H SHEET NO. 16 OF 16 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(10-34-1)HMK	CHAMPAIGN	1187	612
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 70B99	



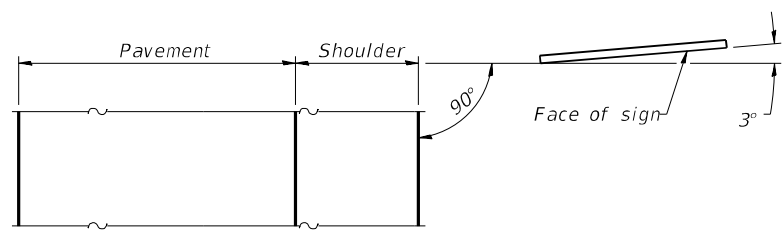
0.15W	2 spaces at 0.35W	0.15W	for 3 posts
0.125W	3 spaces at 0.25W	0.125W	for 4 posts
0.1W	4 spaces at 0.2W	0.1W	for 5 posts
0.1W	5 spaces at 0.16W	0.1W	for 6 posts
0.08W	6 spaces at 0.14W	0.08W	for 7 posts

ELEVATION

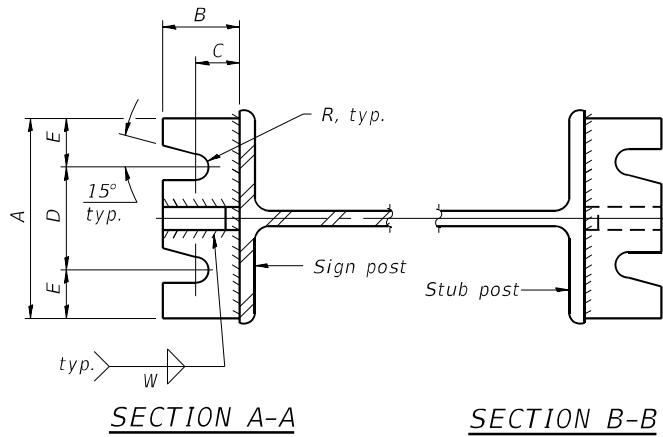


SHIM DETAIL

Furnish two 0.01" thick and two 0.03" thick stainless steel or brass (ASTM B36) shims per post.

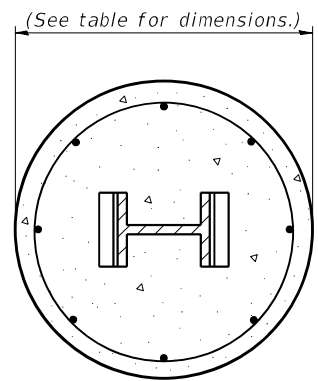


LOCATION SKETCH

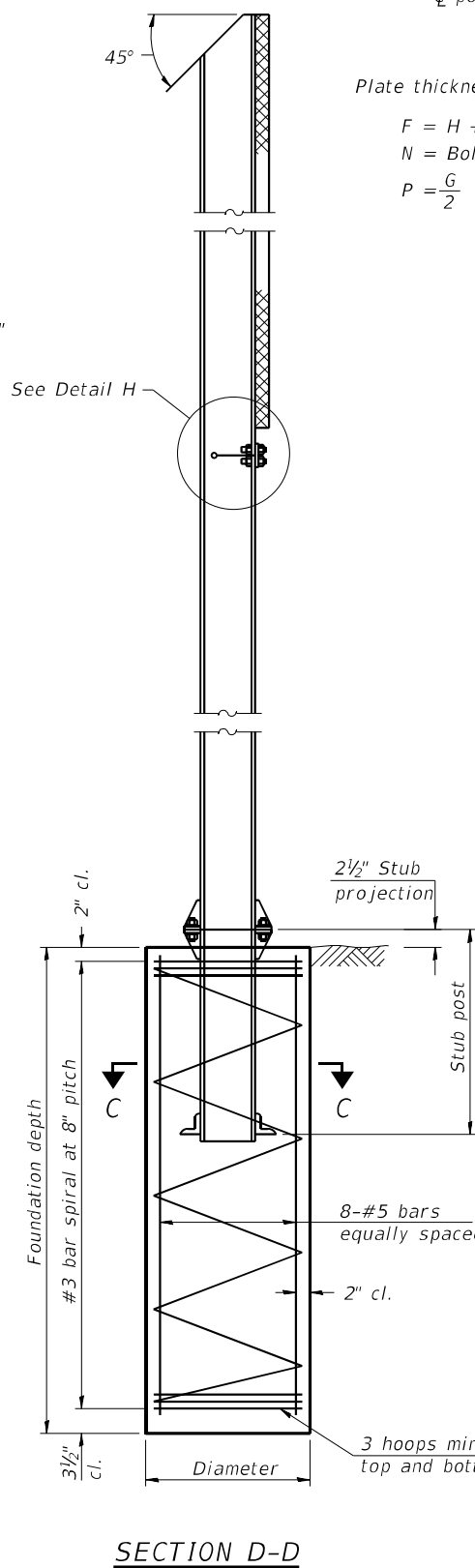


SECTION A-A

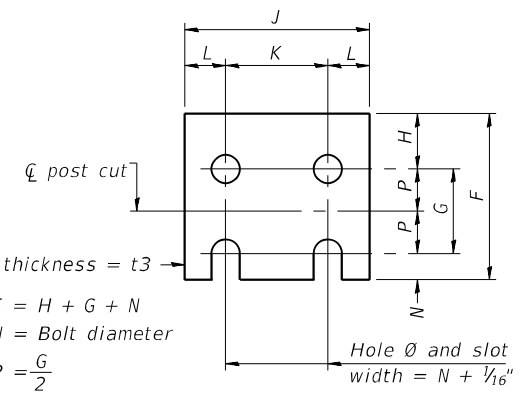
SECTION B-B



SECTION C-C

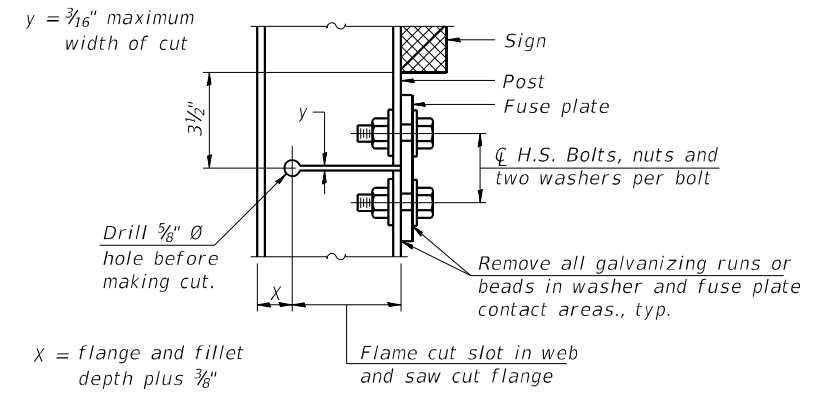


SECTION D-D

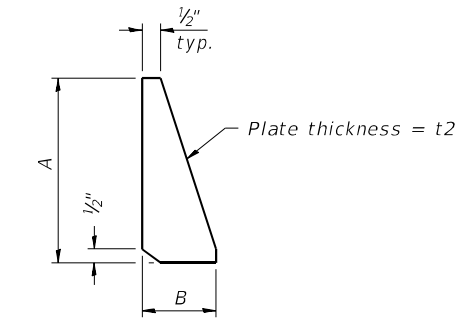


FUSE PLATE DETAIL
(Install with notches down.)

N = Bolt Diameter	G	H
1/2"	2"	1 1/8"
5/8"	2 1/4"	1 1/4"
3/4"	2 1/2"	1 3/8"
7/8"	2 3/4"	1 1/2"
1"	3"	1 5/8"
1 1/8"	3 1/4"	1 3/4"
1 1/4"	3 1/2"	1 7/8"



DETAIL H



STIFFENER PLATE DETAIL
Diameter

GENERAL NOTES

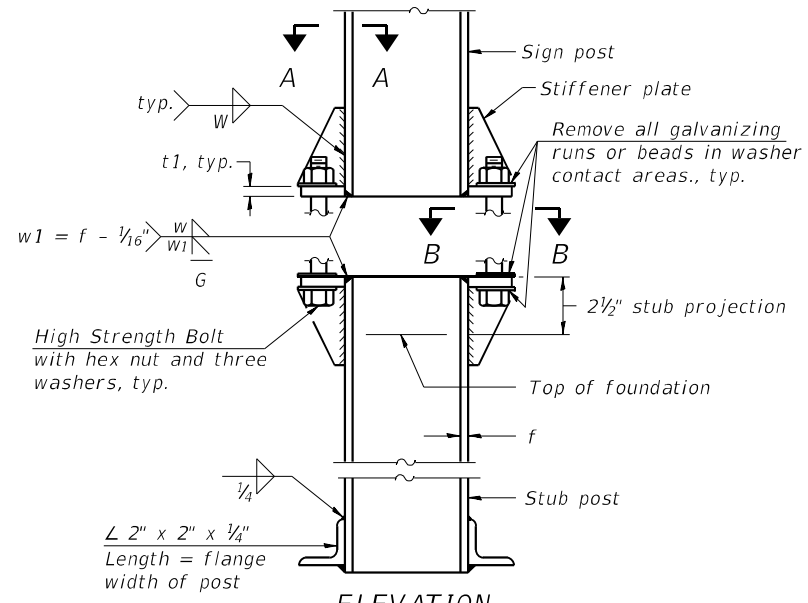
Posts shall be plumbed by using shims with post-to-stub post connection bolts snug tight only. Final tightening of all High Strength Bolts shall be in accordance with Article 727.05 and threads at the junction of the bolt and nut shall be burred or center punched to prevent the nut from loosening.

LOADING: 80 m.p.h. wind with 30% gust factor, normal to sign.

DESIGN STRESSES:
Structural steel - 20,000 p.s.i.
Reinforcing steel - 20,000 p.s.i.
Concrete - 1,400 p.s.i.
Footing soil pressure - 2,000 p.s.f.

After fabrication, the post, fuse plate and upper 6", min. of the stub post shall be hot-dip galvanized in accordance with AASHTO M111. All bolts, nuts and washers shall be hot-dip galvanized in accordance with AASHTO M232.

Work this sheet with Base Sheet BAW-A-2.



ELEVATION
SIGN POST & STUB POST

MODEL: PNP-174
FILE NAME: ...C:\D570B99-shl-SGN_BAW-A-1

BAW-A-1

2-17-2017

USER NAME = Matt Overbey	DESIGNED -	REVISED -
PLOT SCALE = 2.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 3/18/2021 - 4:04:09 PM	CHECKED -	REVISED -
	DATE - MARCH 2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BREAK-AWAY WIDE FLANGE
STEEL SIGN POST DETAILS

SCALE: SHEET OF SHEETS STA. TO STA.

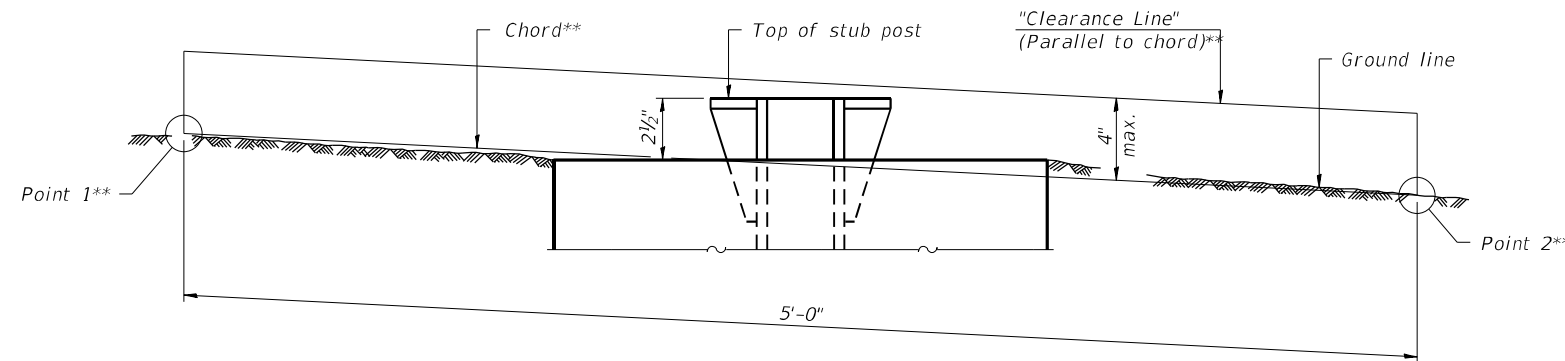
F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(10-34-1)HBK	CHAMPAIGN	1187	613
CONTRACT NO. 70B99			ILLINOIS FED. AID PROJECT	

(Sheet 1 of 2)

POST	CONCRETE FOUNDATION TABLE							POST TO STUB POST CONNECTION DATA								FUSE PLATE DATA						
	Foundation			Reinforcement			Stub Post Length	Bolt Size	A	B	C	D	E	t1	t2	R	W	J	K	L	t3	
	Diameter*	Minimum Depth	Concrete ⁽¹⁾ (cu. yds.)	Vertical Bars Length	Bar Spirals Diameter	Bar Spirals Length																lbs. ⁽²⁾
W6x9	2'-0"	6'-0"	0.70	5'-9"	1'-8 1/2"	79'-0"	78	2'-3"	5/8" x 3 1/4"	6"	2 1/4"	1 1/4"	3 1/2"	1 1/4"	3/4"	1/2"	1 1/32"	1/4"	4"	2 1/4"	7/8"	1/4"
W6x15	2'-0"	6'-0"	0.70	5'-9"	1'-8 1/2"	79'-0"	78	2'-6"	5/8" x 3 1/4"	6"	2 1/4"	1 1/4"	3 1/2"	1 1/4"	3/4"	1/2"	1 1/32"	1/4"	6"	3 1/2"	1 1/4"	3/8"
W8x18	2'-0"	6'-0"	0.70	5'-9"	1'-8 1/2"	79'-0"	78	2'-6"	3/4" x 3 3/4"	6"	2 1/2"	1 3/8"	3 1/4"	1 3/8"	1"	1/2"	1 3/32"	5/16"	5 1/4"	2 3/4"	1 1/4"	3/8"
W10x22	2'-6"	6'-6"	1.18	6'-3"	2'-2 1/2"	105'-0"	92	3'-0"	3/4" x 3 3/4"	6"	2 1/2"	1 3/8"	3 1/4"	1 3/8"	1"	1/2"	1 3/32"	5/16"	5 3/4"	2 3/4"	1 1/2"	1/2"
W10x26	2'-6"	7'-0"	1.27	6'-9"	2'-2 1/2"	112'-0"	98	3'-0"	7/8" x 4"	7"	2 3/4"	1 1/2"	4"	1 1/2"	1"	3/4"	1 5/32"	3/8"	5 3/4"	2 3/4"	1 1/2"	5/8"
W12x26	2'-6"	7'-9"	1.41	7'-6"	2'-2 1/2"	119'-0"	107	3'-0"	7/8" x 4"	7"	2 3/4"	1 1/2"	4"	1 1/2"	1"	3/4"	1 5/32"	3/8"	6 1/2"	3 1/2"	1 1/2"	5/8"
W14x30	3'-0"	7'-3"	1.90	7'-0"	2'-8 1/2"	145'-0"	113	3'-0"	7/8" x 4"	7"	2 3/4"	1 1/2"	4"	1 1/2"	1"	3/4"	1 5/32"	3/8"	6 3/4"	3 1/2"	1 5/8"	1/2"
W14x38	3'-0"	8'-0"	2.09	7'-9"	2'-8 1/2"	153'-0"	122	3'-6"	1" x 4 1/2"	7 1/2"	3"	1 3/4"	4"	1 3/4"	1 1/4"	3/4"	1 7/32"	3/8"	6 3/4"	3 1/2"	1 5/8"	1/2"
W16x45	3'-0"	8'-6"	2.23	8'-3"	2'-8 1/2"	162'-0"	130	3'-6"	1" x 4 1/2"	7 1/2"	3"	1 3/4"	4"	1 3/4"	1 1/4"	3/4"	1 7/32"	3/8"	7"	3 1/2"	1 3/4"	1/2"

*Dimensional changes required for varying site conditions shall be approved by the Engineer.

POST	FUSE PLATE BOLT SIZE																				
	Sign Height																				
	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	21'-0"	22'-0"	23'-0"	24'-0"
W6x9	1/2" x 1 1/2"	1/2" x 1 1/2"	1/2" x 1 1/2"	1/2" x 1 1/2"	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
W6x15	1/2" x 1 3/4"	1/2" x 1 3/4"	1/2" x 1 3/4"	5/8" x 2"	5/8" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	—	—	—	—	—	—	—	—	—	—	—
W8x18	1/2" x 1 3/4"	1/2" x 1 3/4"	1/2" x 1 3/4"	1/2" x 1 3/4"	5/8" x 2"	5/8" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	3/4" x 2"	—	—	—	—	—	—	—	—	—	—	—
W10x22	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2"	5/8" x 2"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	—	—	—	—	—	—	—	—
W10x26	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	—	—	—	—	—	—	—
W12x26	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	—	—	—	—	—	—
W14x30	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2"	5/8" x 2"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	—	—	—	—	—
W14x38	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"
W16x45	—	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	1/2" x 2"	5/8" x 2 1/4"	5/8" x 2 1/4"	5/8" x 2 1/4"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"	3/4" x 2 1/2"



**ELEVATION
GROUND LINE & STUB POST**
** For all "Point 1" and "Point 2" locations, "Clearance Line" must be at or above top of stub post.

- ① Quantity includes all concrete necessary for one foundation.
- ② Includes reinforcement bars and spiral hooping for one foundation.

MODEL: PNP-174
FILE NAME: ...C:\D570B99-SHG-SGN_BAW-A-2

BAW-A-2

2-17-2017

(Sheet 2 of 2)

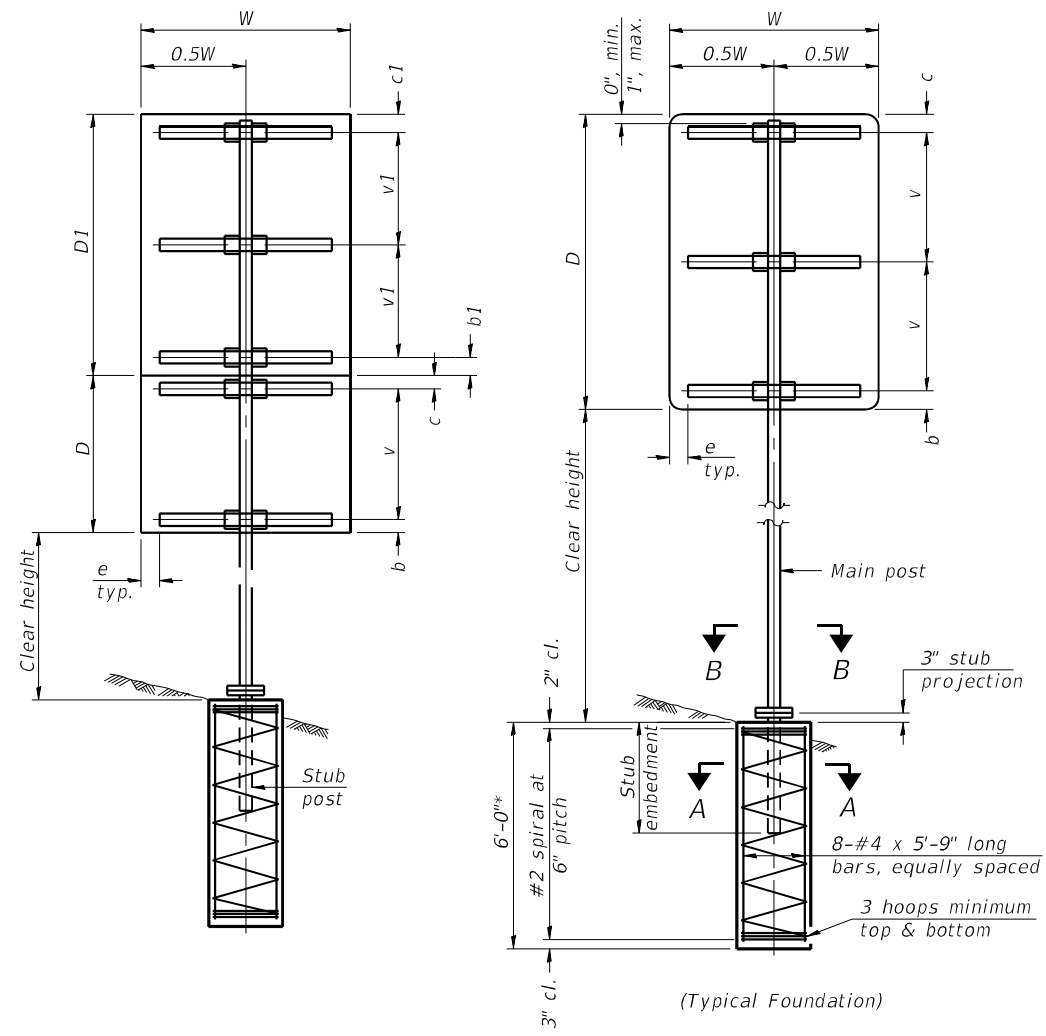
USER NAME = Matt Overbey	DESIGNED -	REVISED -
PLOT SCALE = 2.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 3/18/2021 - 4:04:10 PM	CHECKED -	REVISED -
	DATE - MARCH 2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BREAK-AWAY WIDE FLANGE
STEEL SIGN POST TABLES**

SCALE: SHEET OF SHEETS STA. TO STA.

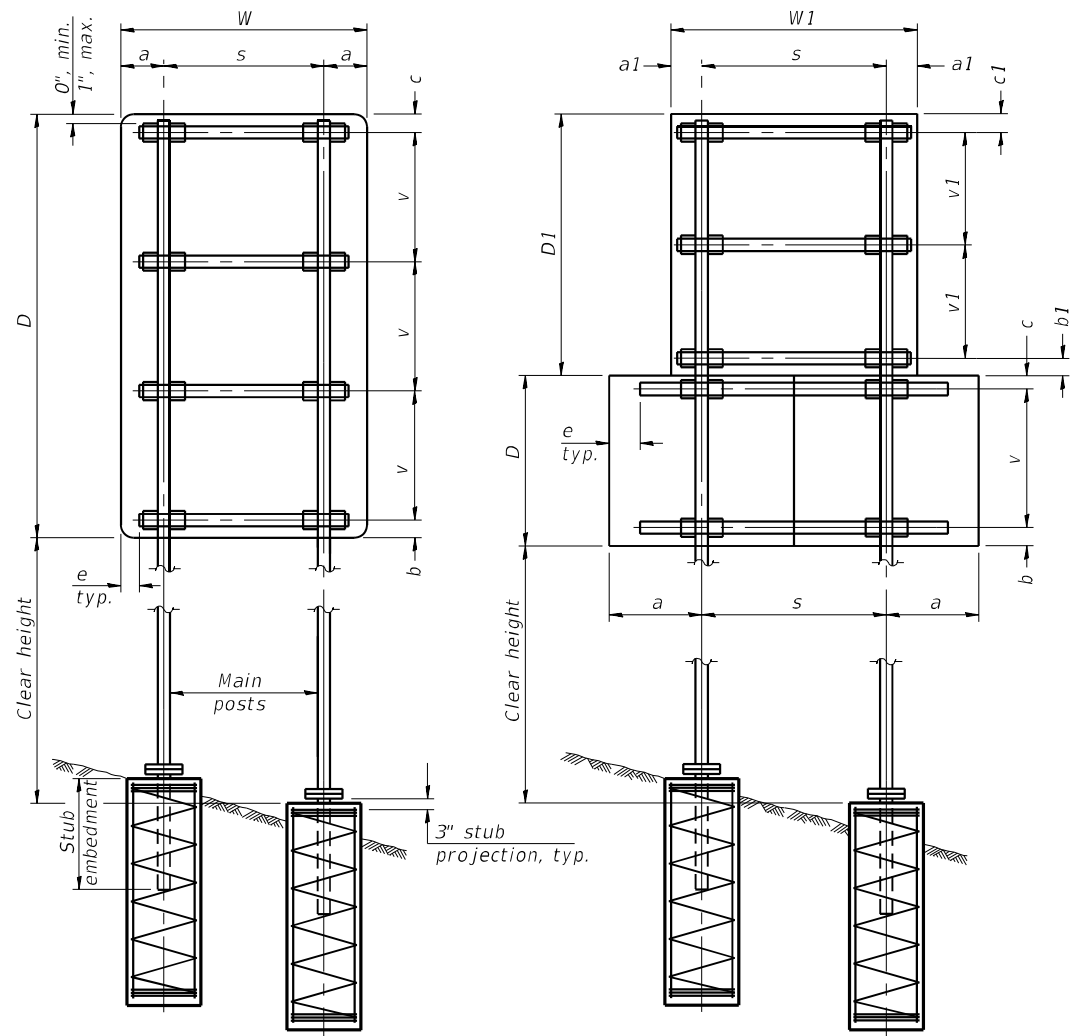
F.A.I. RTE. 57	SECTION (10-34-1)HBK	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 614
CONTRACT NO. 70B99			ILLINOIS FED. AID PROJECT	



SINGLE POST ASSEMBLY EXAMPLES

* Dimensional changes required for varying site conditions shall be approved by the Engineer.

a or a1 = 6" min. to 2'-0" max. (Approximately 0.2W or 0.2W)
 b or b1 = 3" min. to 4" max
 c or c1 = 3" min. to 4" max
 e = 0" min. to 6" max
 s = 3'-0" min. to 6'-0" max. (Approximately 0.6W or 0.6W)
 v or v1 = 2'-0" min. to 2'-11" max.



DUAL POST ASSEMBLY EXAMPLES

MAIN POST STEEL TUBING	WEIGHT PER FOOT (POUND)	STUB POST TABLE		MAIN POST TABLE				
		Stub Embedment	Stub Post Length	Bolt Size	A	t	R	Bolt Circle
3" x 2" x 1/4"	7.11	2'-0"	2'-3"	1/2" x 2 3/4"	8 1/4"	5/8"	9/32"	6 1/2"
4" x 2" x 1/4"	8.81	2'-0"	2'-3"	1/2" x 2 3/4"	8 1/4"	5/8"	9/32"	6 1/2"
4" x 3" x 1/4"	10.51	2'-3"	2'-6"	5/8" x 3 1/4"	10"	3/4"	1 1/32"	8"
5" x 3" x 1/4"	12.21	2'-3"	2'-6"	5/8" x 3 1/4"	10"	3/4"	1 1/32"	8"
6" x 3" x 1/4"	13.91	2'-3"	2'-6"	5/8" x 3 1/4"	11 1/2"	3/4"	1 1/32"	9 1/2"
6" x 4" x 1/4"	15.62	2'-3"	2'-6"	3/4" x 3 1/2"	11 1/2"	3/4"	1 3/32"	9 1/2"
6" x 4" x 5/16"	19.08	2'-3"	2'-6"	3/4" x 3 1/2"	11 1/2"	3/4"	1 3/32"	9 1/2"
7" x 5" x 1/4"	19.02	2'-6"	2'-9"	3/4" x 3 1/2"	1'-2"	3/4"	1 3/32"	1'-0"
8" x 4" x 1/4"	19.02	2'-6"	2'-9"	3/4" x 3 1/2"	1'-2"	3/4"	1 3/32"	1'-0"
8" x 6" x 1/4"	22.42	2'-6"	2'-9"	1/2" x 3 1/2"	1'-2"	3/4"	1 5/32"	1'-0"

GENERAL NOTES

Posts shall be plumbed by using shims with post-to-stub post connection bolts snug tight only. Final tightening of all High Strength Bolts shall be in accordance with Article 727.05 and threads at the junction of the bolt and nut shall be burred or center punched to prevent the nut from loosening.

One foundation requires 0.7 cubic yards of concrete and 46 pounds of reinforcement bars and spiral hoops.

LOADING: 80 mph wind with 30% gust factor, normal to sign.

DESIGN STRESSES:
 Structural steel - 20,000 psi
 Reinforcing steel - 20,000 psi
 Concrete - 1,400 psi
 Footing soil pressure - 2,000 psf

After fabrication, the post, fuse plate, base plate and upper 6", min. of the stub post shall be hot-dip galvanized in accordance with AASHTO M111. All bolts, nuts and washers shall be hot-dip galvanized in accordance with AASHTO M232.

For Sections A-A and B-B, see Base Sheet BAT-A-2.

FOUNDATIONS:
 All necessary excavation or drilling (except in rock); backfilling with excavated material; disposal of unsuitable or surplus material; formwork; and furnishing and placing the Class SI Concrete and reinforcement bars, shall be included in the pay item used for foundations.

The measurement of the tubular steel shall be computed on the basis of the weight per foot of the support, multiplied by the combined length of the main posts and stub posts.

MODEL: PNP-174
 FILE NAME: ...C:\D570B99-SHG-SGN_BAT-A-1

BAT-A-1

2-17-2017

(Sheet 1 of 2)

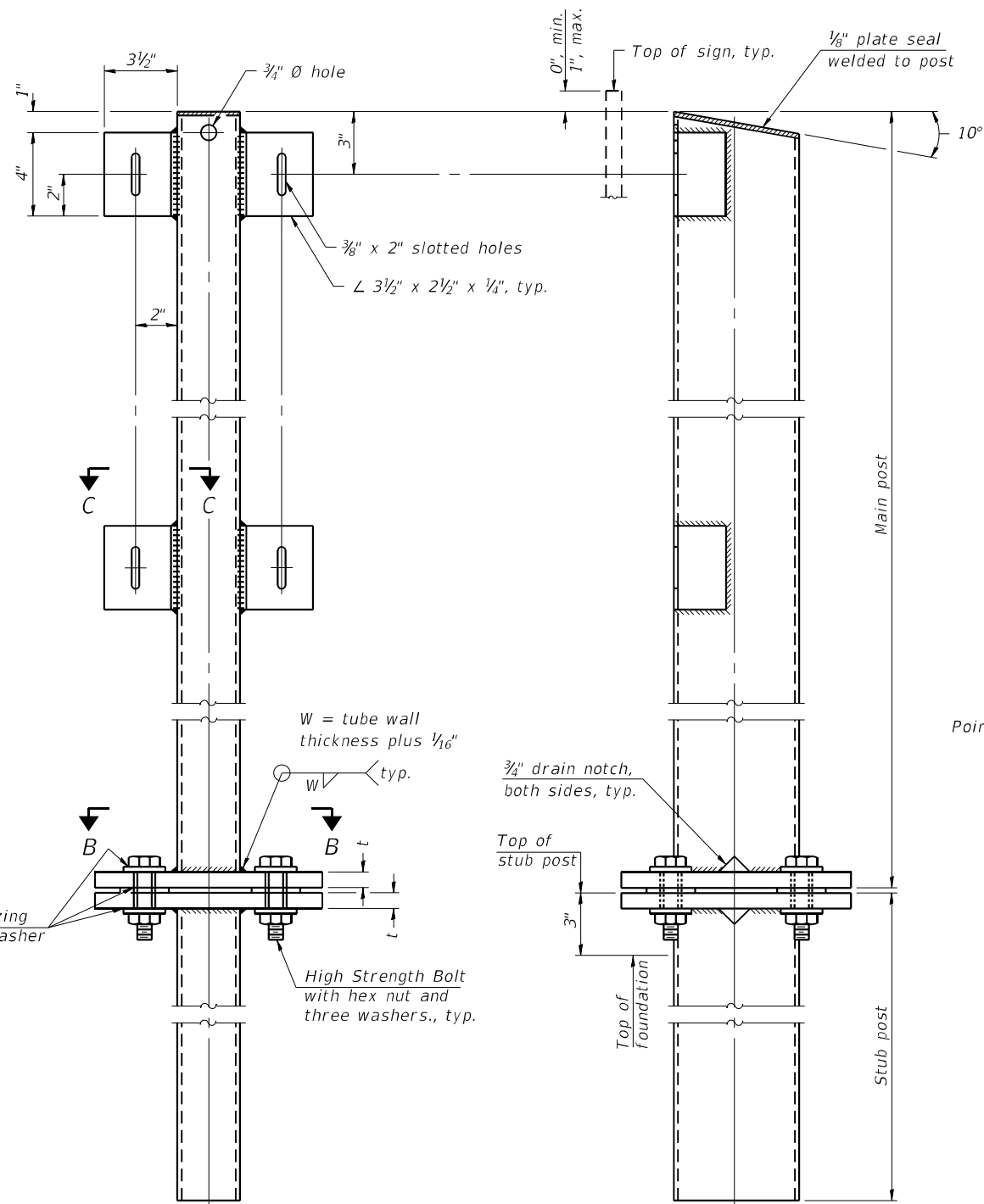
USER NAME = Matt Overbey	DESIGNED -	REVISED -
PLOT SCALE = 2.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 3/18/2021 - 4:04:12 PM	CHECKED -	REVISED -
	DATE - MARCH 2021	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BREAK-AWAY TUBULAR STEEL
 SIGN POSTS AND FOUNDATIONS

SCALE: SHEET OF SHEETS STA. TO STA.

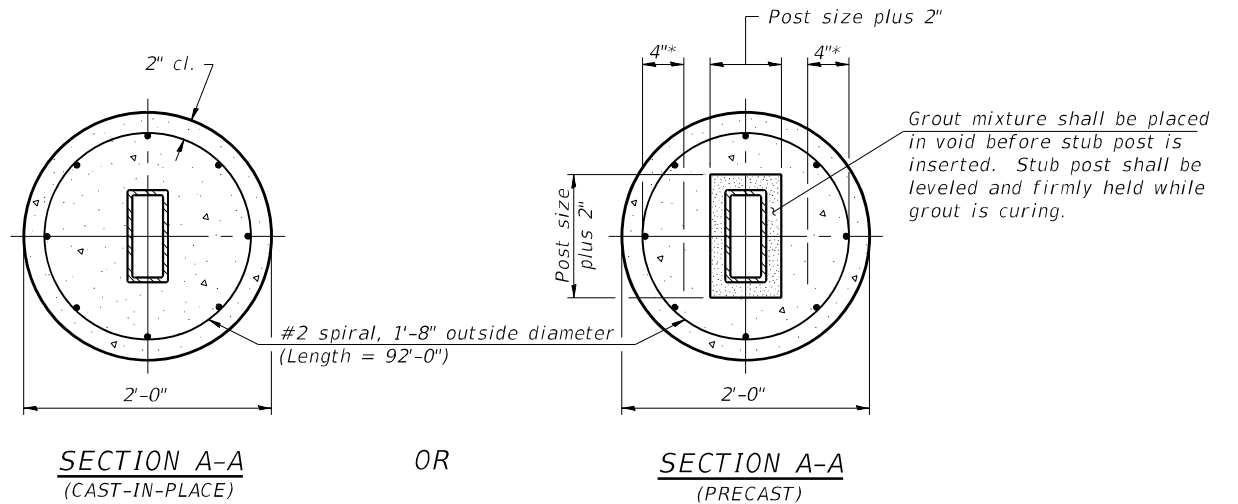
F.A.I. RTE. 57	SECTION (10-34-1)HKB	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 615
CONTRACT NO. 70B99			ILLINOIS FED. AID PROJECT	



FRONT ELEVATION

SIDE ELEVATION

MAIN POST & STUB POST

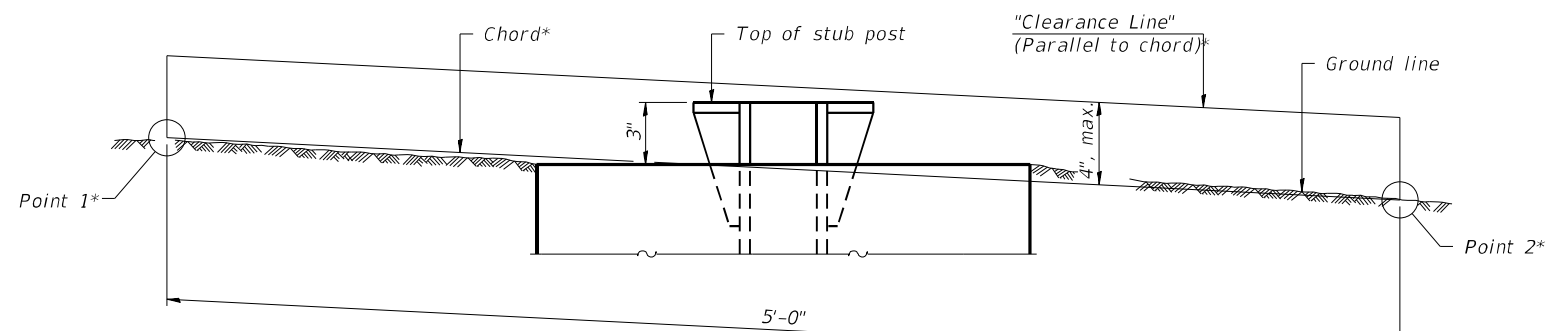


SECTION A-A
(CAST-IN-PLACE)

OR

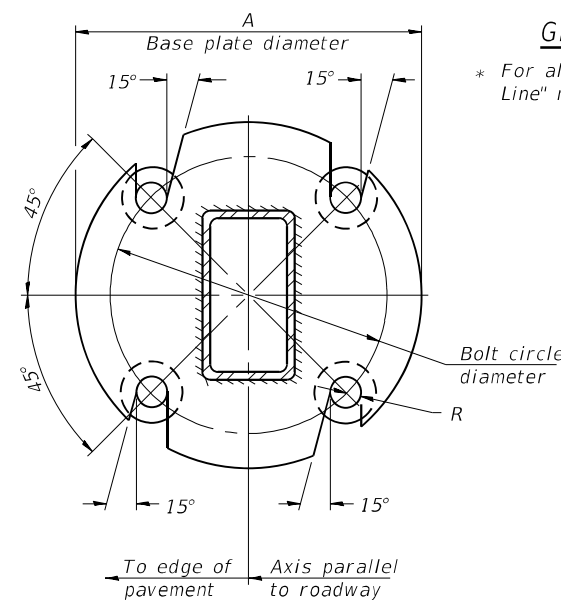
SECTION A-A
(PRECAST)

* Hot dip galvanized lifting loops or inserts may be placed in precast foundation inside the spiral reinforcement but not within 6" of the long axis of the post. Inserts must be adequate for safely lifting a total of 3,000 pounds and must not interfere with installation of the stub post or proper functioning of the slip base.

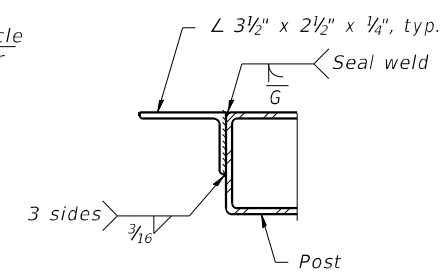


ELEVATION
GROUND LINE & STUB POST

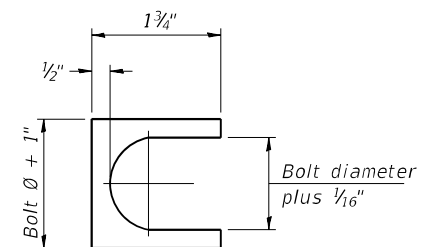
* For all "Point 1" and "Point 2" locations, "Clearance Line" must be at or above top of stub post.



SECTION B-B



SECTION C-C
Weld continuously around corners.



SHIM DETAIL

Furnish two 0.01" thick and two 0.03" thick stainless steel or brass (ASTM B36) shims per post.

MODEL: PNP-174
FILE NAME: ...C:\D570B99-SHG-SGN_BAT-A-2

BAT-A-2

2-17-2017

USER NAME = Matt Overbey	DESIGNED -	REVISED -
PLOT SCALE = 2.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 3/18/2021 - 4:04:13 PM	CHECKED -	REVISED -
	DATE - MARCH 2021	REVISED -







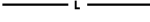





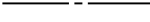





STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

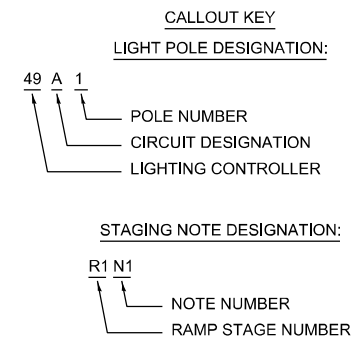
BREAK-AWAY TUBULAR STEEL
SIGN POSTS AND DETAILS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE. 57	SECTION (10-34-1)HKB	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 616
CONTRACT NO. 70B99			ILLINOIS FED. AID PROJECT	

(Sheet 2 of 2)

LIGHTING LEGEND	
	PROPOSED GROUND MOUNTED LIGHTING UNIT ALUMINUM, 50' M.H., 15' D.A., LED LUMINAIRE WITH 15" B.C. ON CONCRETE FOUNDATION
	PROPOSED BRIDGE MOUNTED LIGHTING UNIT ALUMINUM, 50' M.H., 8' D.A., LED LUMINAIRE
	PROPOSED JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6", UNLESS NOTED OTHERWISE
	PROPOSED LIGHTING CONTROLLER, BASE MOUNTED, SINGLE PHASE, 3-WIRE, SIZE AS NOTED ON PLAN
	PROPOSED ELECTRIC SERVICE INSTALLATION, SINGLE PHASE, 3-WIRE, SIZE AS NOTED ON PLAN
	PROPOSED UNDERGROUND CONDUIT CASING, CNC, 2" DIA.
	PROPOSED UNIT DUCT OR CABLE IN CONDUIT, SIZE AS NOTED ON PLAN
	EXISTING LIGHTING UNIT TO BE REMOVED
	EXISTING LIGHTING CONTROLLER TO BE REMOVED
	EXISTING ELECTRIC SERVICE TO BE REMOVED
	TEMPORARY WOOD POLE, 60' CLASS 3, 50' M.H., 15' M.A., LED LUMINAIRE (SEE NOTES 2 & 5)
	TEMPORARY WOOD POLE, 60' CLASS 3 (SEE NOTES 2 & 5)
	TEMPORARY UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE (SEE NOTE 5)
	TEMPORARY AERIAL CABLE, 2-1/C NO. 6 WITH MESSENGER WIRE, UNLESS NOTED OTHERWISE (SEE NOTE 5)
	TEMPORARY LIGHTING CONTROLLER, POLE MOUNTED, 240/480 VOLT, 200 AMP, SINGLE PHASE, 3-WIRE (SEE NOTE 5)
	ELECTRIC CABLE TO BE REMOVED
	ELECTRIC CABLE TO BE REMOVED UNDER FUTURE CONTRACT
	EXISTING LIGHTING UNIT TO BE REMOVED UNDER FUTURE CONTRACT



- GENERAL NOTES:
- ELECTRIC CABLES IN EXISTING UNIT DUCT OR CONDUIT SHALL BE REMOVED AND PAID FOR AS "REMOVE ELECTRIC CABLE FROM CONDUIT".
 - TEMPORARY LIGHT POLES SHALL BE INSTALLED OUTSIDE THE CLEARZONE.
 - THE CONTRACTOR SHALL STAGE INSTALLATION OF CONDUIT AND PROVIDE STUB-UP, AS NECESSARY. NO UNDERGROUND SPLICING OF CABLING WILL BE PERMITTED.
 - THE CONTRACTOR SHALL ENSURE CONTINUITY OF THE CIRCUITS VIA UNDERGROUND OR AERIAL CABLE INSTALLATION, AS NECESSARY, DURING CONSTRUCTION STAGES. THIS WORK SHALL BE PAID FOR AS "MAINTAIN EXISTING LIGHTING SYSTEM".
 - THE TEMPORARY LIGHTING EQUIPMENT SHOWN TO REMAIN IN PLACE AT THE CONCLUSION OF THIS CONTRACT SHALL BECOME THE PROPERTY OF THE STATE OF ILLINOIS AND WILL BE REMOVED UNDER FUTURE CONSTRUCTION CONTRACT.

HIGHWAY STANDARDS

812001-01	RACEWAY EMBEDDED IN STRUCTURE
821101-02	LUMINAIRE WIRING IN POLE
* 825006-03	LIGHTING CONTROLLER, POLE MOUNTED, 480V
825026-04	LIGHTING CONTROLLER BASE MOUNTED, 480V
830006-05	LIGHT POLE ALUMINUM DAVIT ARM
830026-01	TEMPORARY ROADWAY LIGHTING
836001-04	LIGHT POLE FOUNDATION
838001-01	BREAKAWAY DEVICES

* THIS LIGHTING CONTROLLER IS TO BE USED FOR THE TEMPORARY LIGHTING CONTROLLER.

LIGHTING SUMMARY OF QUANTITIES

S.P.	PAY ITEM	DESCRIPTION	UNIT	QUANTITY
BDE	80400100	ELECTRIC SERVICE INSTALLATION	EACH	4
	81028750	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.	FOOT	665
	81104580	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., STAINLESS STEEL	FOOT	55
	81200230	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	4,230
	81300550	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6"	EACH	11
	81603010	UNIT DUCT, 600V, 2-1C NO.10, 1/C NO.10 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE	FOOT	4,805
	81603040	UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	19,810
	81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	11,100
	81702120	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	660
	81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	1,320
	81800230	AERIAL CABLE, 2-1/C NO. 6 WITH MESSENGER WIRE	FOOT	15,180
BDE	82110008	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	91
	82500380	LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 200AMP	EACH	2
	83004300	LIGHT POLE, ALUMINUM, 50 FT. M.H., 8 FT. DAVIT ARM	EACH	16
	83004600	LIGHT POLE, ALUMINUM, 50 FT. M.H., 15 FT. DAVIT ARM	EACH	75
	83600300	LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	525
	83800205	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	75
*	84100110	REMOVAL OF TEMPORARY LIGHTING UNIT	EACH	13
	84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	22
	84200600	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	72
	84200804	REMOVAL OF POLE FOUNDATION	EACH	94
	84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	2
	84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	2
	84500130	REMOVAL OF LIGHTING CONTROLLER FOUNDATION	EACH	2
	89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	87,360
*	X0326148	TEMPORARY WOOD POLE, 60 FT., CLASS 4, 15 FT. MAST ARM	EACH	79
*	X0327004	TEMPORARY WOOD POLE, 60 FT., CLASS 4	EACH	3
*	X1400400	INDEPENDENT LUMINAIRE TESTING	L SUM	1
*	X1400441	TEMPORARY LIGHTING CONTROLLER, POLE MOUNTED, 480VOLT, 200AMP	EACH	2
*	Z0033024	MAINTAIN EXISTING LIGHTING SYSTEM	L SUM	1
*		TEMPORARY LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION I	EACH	79

- CABLE TAGS
- * (A) UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
 - * (B) UNIT DUCT, 600V, 2-1C NO.8, 1/C NO.8 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE
 - * (C) UNIT DUCT, 600V, 2-1C NO.10, 1/C NO.10 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE
 - (D) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1C NO.6, 1/C NO.8 GROUND, IN CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC
 - (E) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1C NO.8, 1/C NO.8 GROUND, IN CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC
 - (F) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1C NO.10, 1/C NO.10 GROUND, IN CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC
- * = CNC AND ELECTRIC CABLE IN CONDUIT MAY BE USED IN LIEU OF UNIT DUCT, AS NECESSARY, AT NO ADDITIONAL COST. SIZE SHALL BE AS NOTED.

INDEX OF SHEETS

L-1	LIGHTING LEGEND, INDEX OF SHEETS, NOTES, AND SUMMARY OF QUANTITIES
L-2	LIGHTING STAGING NOTES
L-3 TO L-4	PROPOSED LIGHTING UNIT SCHEDULE
L-5 TO L-9	TEMPORARY LIGHTING AND REMOVAL PLAN RAMP STAGE 1
L-10 TO L-11	TEMPORARY LIGHTING AND REMOVAL PLAN RAMP STAGE 2
L-12 TO L-16	TEMPORARY LIGHTING AND REMOVAL PLAN RAMP STAGE 3
L-17	TEMPORARY LIGHTING AND REMOVAL PLAN RAMP STAGE 4
L-18 TO L-22	PROPOSED LIGHTING PLAN RAMP STAGE 3
L-23	PROPOSED LIGHTING PLAN RAMP STAGE 4
L-24	LUMINAIRE PERFORMANCE TABLES
L-25	TEMPORARY LIGHTING WIRING DIAGRAMS - RAMP STAGE 1
L-26	PROPOSED LIGHTING WIRING DIAGRAMS - RAMP STAGE 4

EXISTING LIGHTING EQUIPMENT TO BE SALVAGED*

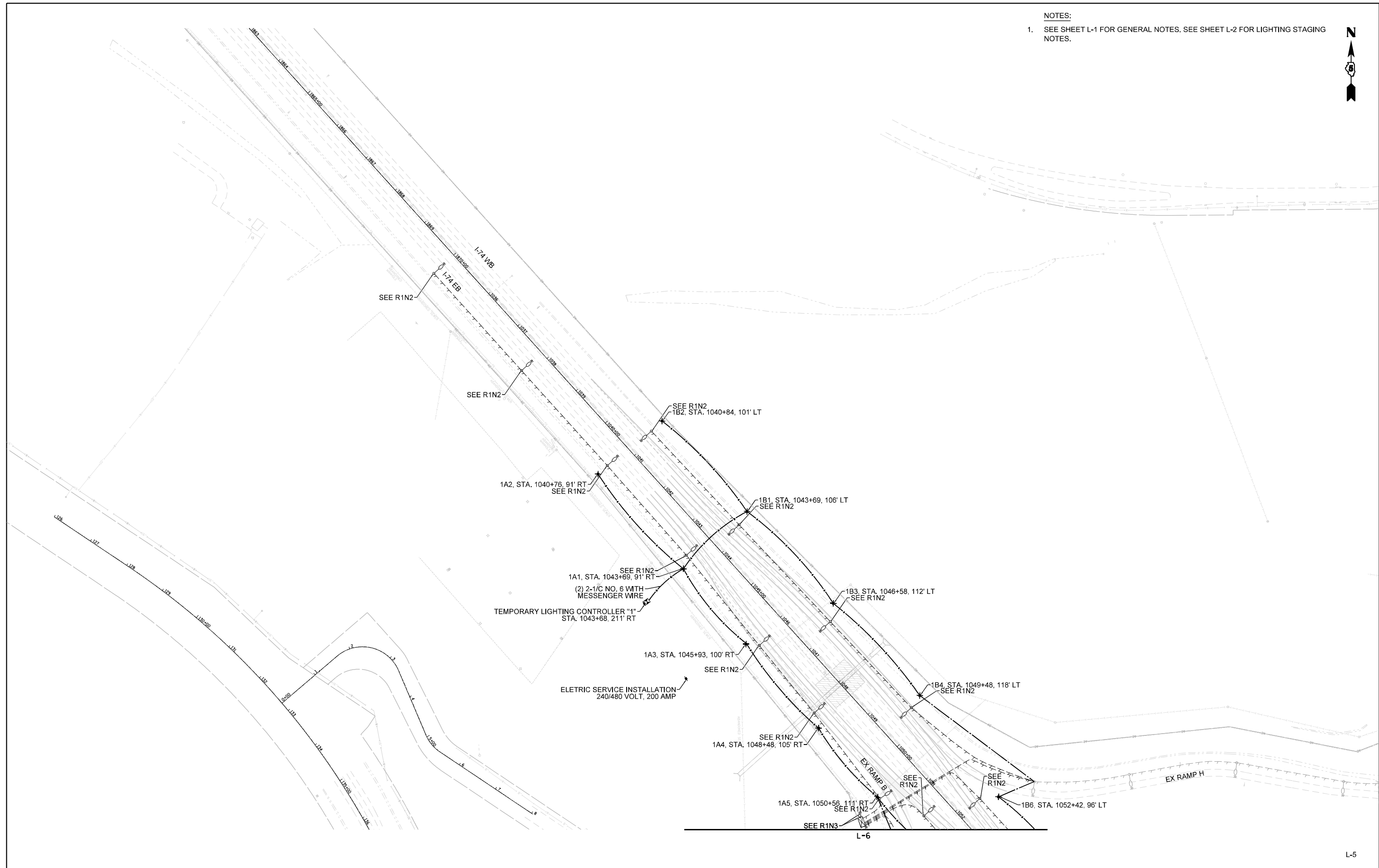
PAY ITEM	LIGHTING CONTROLLER 49 RELATED EQUIPMENT/POLES	LIGHTING CONTROLLER 50 RELATED EQUIPMENT/POLES
REMOVAL OF LIGHTING UNIT, SALVAGE (84200500)	101, 104, 106, 111, 114, 116, 117, 124, 127, 140, 152, 154	109, 115, 118, 124, 127, 133, 144, 148, 151, 156
REMOVAL OF LIGHTING CONTROLLER (84500110)	CONTROLLER CABINET	CONTROLLER CABINET
REMOVAL OF ELECTRIC SERVICE INSTALLATION (84500120)	DISCONNECT SWITCH	-

LEGEND FOR S.P. COLUMN:

* INDICATES SPECIAL PROVISION
BDE INDICATES IDOT BDE SPECIAL PROVISION

* SALVAGED BACK TO THE STATE OF ILLINOIS

NOTES:
 1. SEE SHEET L-1 FOR GENERAL NOTES. SEE SHEET L-2 FOR LIGHTING STAGING NOTES.



FILE NAME = D570899-remLightStageRamps1-1.dgn	USER NAME = bbarr	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 200.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/23/2021	DATE -	REVISED -

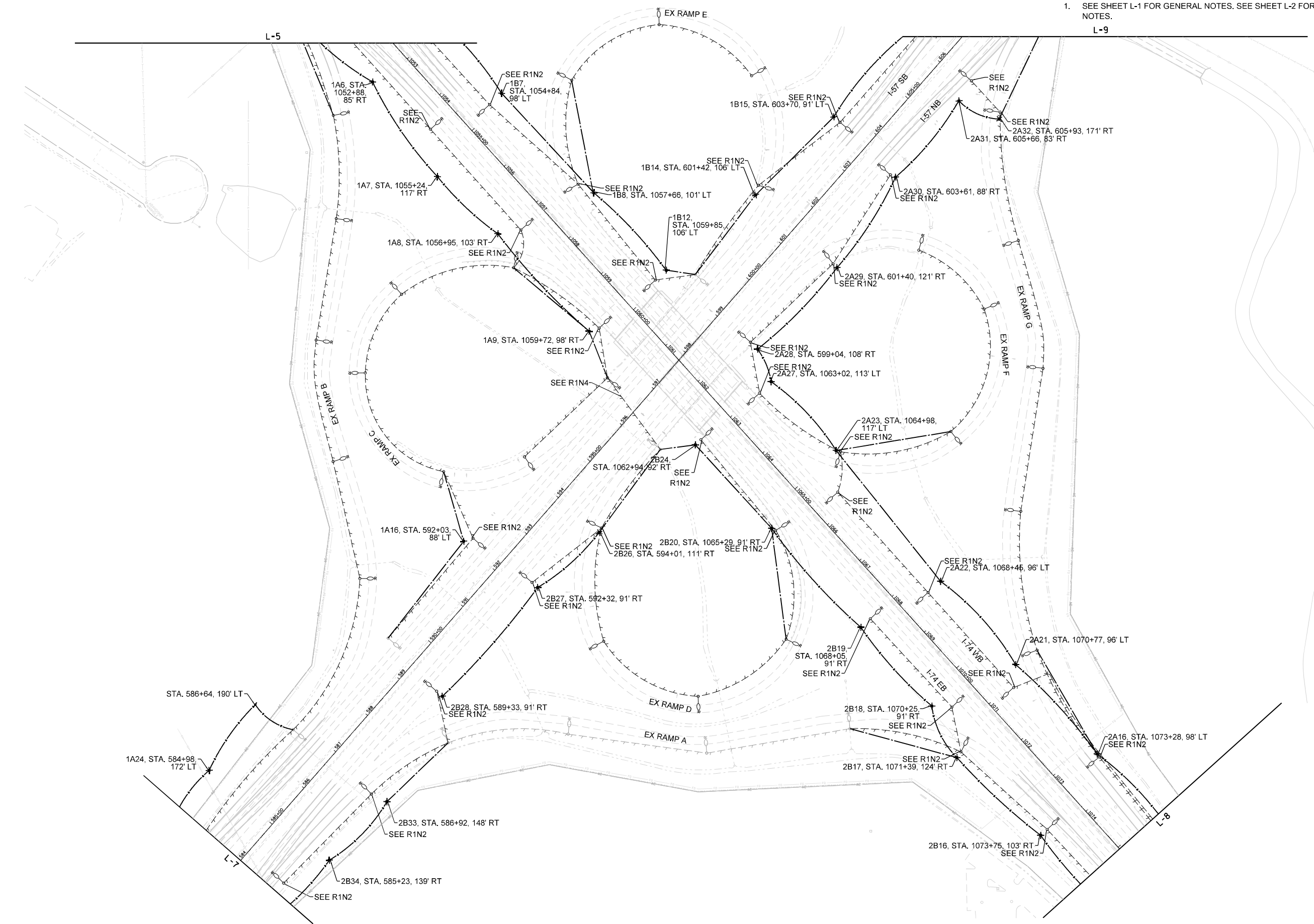
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TEMPORARY LIGHTING AND REMOVAL PLAN
 RAMP STAGE 1**

F.A.I. RTE. 57&74	SECTION (10-34-1) HBK	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 621
ILLINOIS			CONTRACT NO. 70B99	

SCALE: 1"=100' SHEET OF SHEETS STA. TO STA.

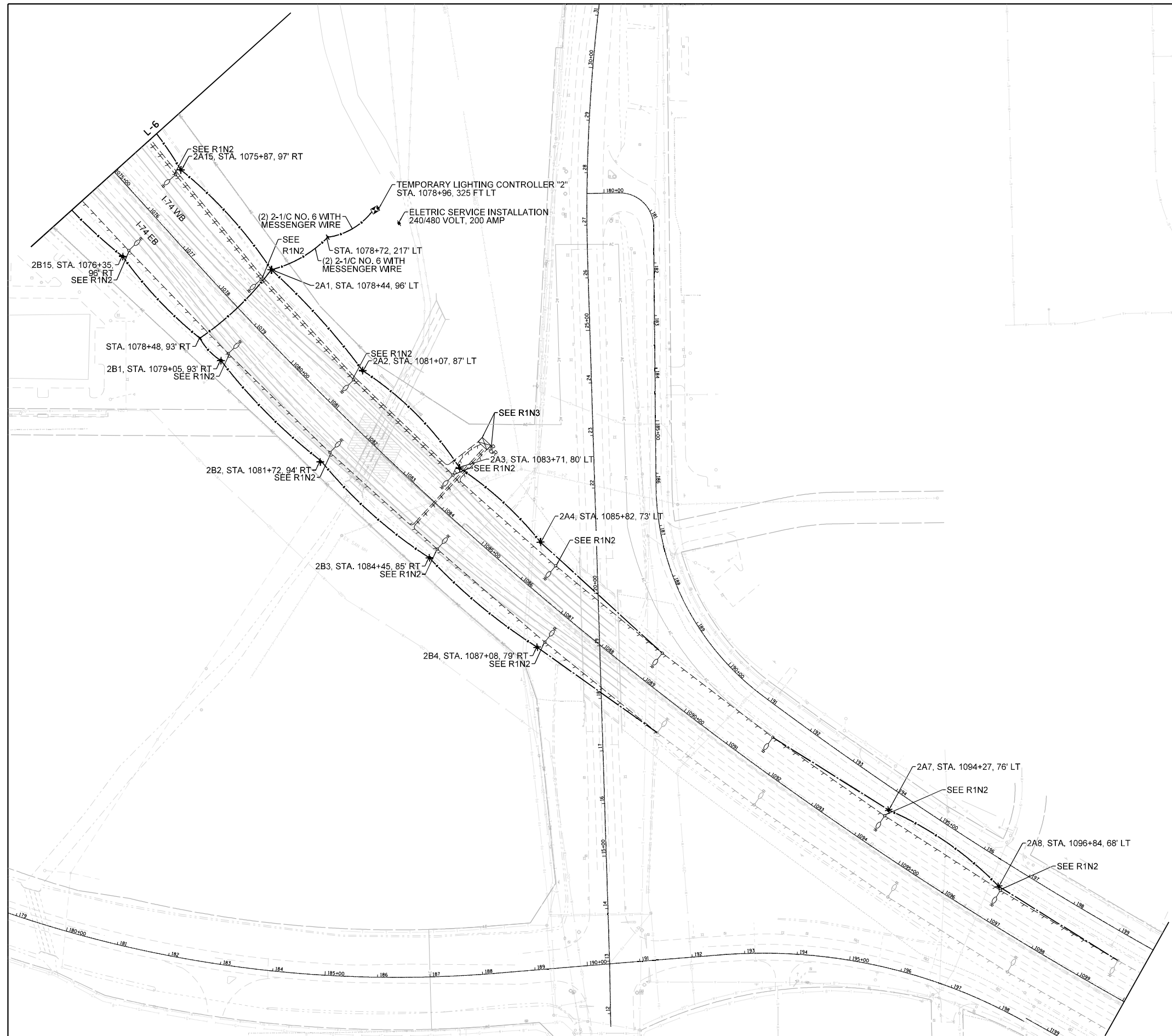
NOTES:
 1. SEE SHEET L-1 FOR GENERAL NOTES. SEE SHEET L-2 FOR LIGHTING STAGING NOTES.
 L-9



L-6

FILE NAME = D570899-remLightStageRamps1-2.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHTING AND REMOVAL PLAN RAMP STAGE 1			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 200.0000' / in.	CHECKED -	REVISED -					57&74	(10-34-1) HBK	CHAMPAIGN	1187	622
PLOT DATE = 2/23/2021	DATE -	REVISED -	REVISED -	SCALE: 1"=100'	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS	CONTRACT NO. 70B99

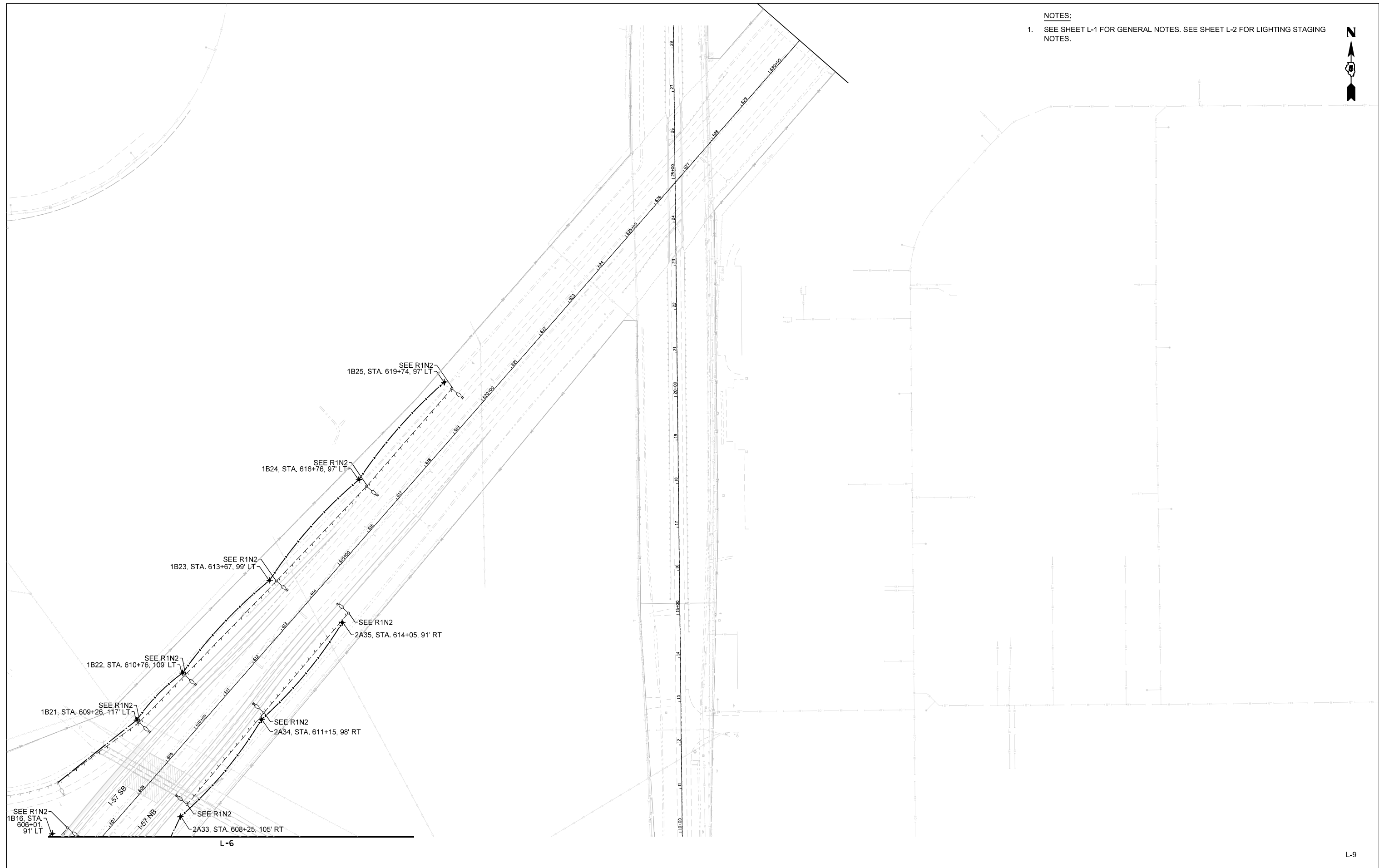
NOTES:
 1. SEE SHEET L-1 FOR GENERAL NOTES. SEE SHEET L-2 FOR LIGHTING STAGING NOTES.



L-8

FILE NAME = D570899-remLightStageRamps1-4.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHTING AND REMOVAL PLAN RAMP STAGE 1			F.A.I. RTE. = 57&74	SECTION = (10-34-1) HBK	COUNTY = CHAMPAIGN	TOTAL SHEETS = 1187	SHEET NO. = 624
	PLOT SCALE = 200.0000' / in.	CHECKED -	REVISED -					CONTRACT NO. 70B99				
PLOT DATE = 2/23/2021	DATE -	REVISED -	REVISED -	SCALE: 1"=100'	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS	

NOTES:
 1. SEE SHEET L-1 FOR GENERAL NOTES. SEE SHEET L-2 FOR LIGHTING STAGING NOTES.



FILE NAME = D570899-remLightStageRamps1-5.dgn	USER NAME = bbarr	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 200.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/23/2021	DATE -	REVISED -

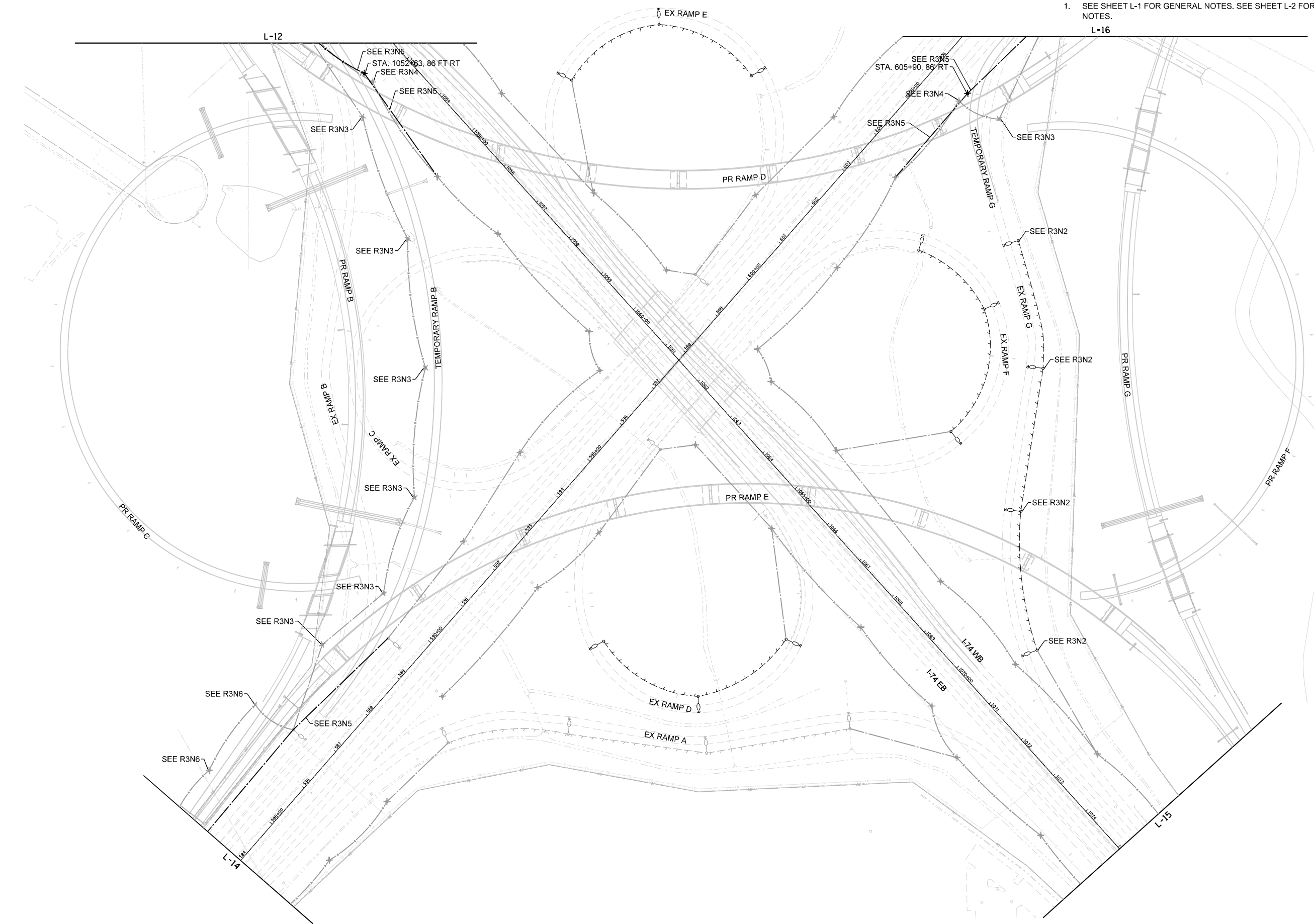
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TEMPORARY LIGHTING AND REMOVAL PLAN
 RAMP STAGE 1**

SCALE: 1"=100' SHEET OF SHEETS STA. TO STA.

F.A.I. RTE. 57&74	SECTION (10-34-1) HBK	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 625
ILLINOIS			CONTRACT NO. 70B99	

NOTES:
 1. SEE SHEET L-1 FOR GENERAL NOTES. SEE SHEET L-2 FOR LIGHTING STAGING NOTES.
 L-16



L-13

FILE NAME = D570899-remLightStageRamps3-2.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHTING AND REMOVAL PLAN RAMP STAGE 3			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.				
	PLOT SCALE = 200.0000' / in.	CHECKED -	REVISED -		SCALE: 1"=100'	SHEET	OF	SHEETS	STA.	TO	STA.	57&74	(10-34-1) HBK	CHAMPAIGN	1187	629
	PLOT DATE = 2/23/2021	DATE -	REVISED -		ILLINOIS	CONTRACT NO. 70B99										

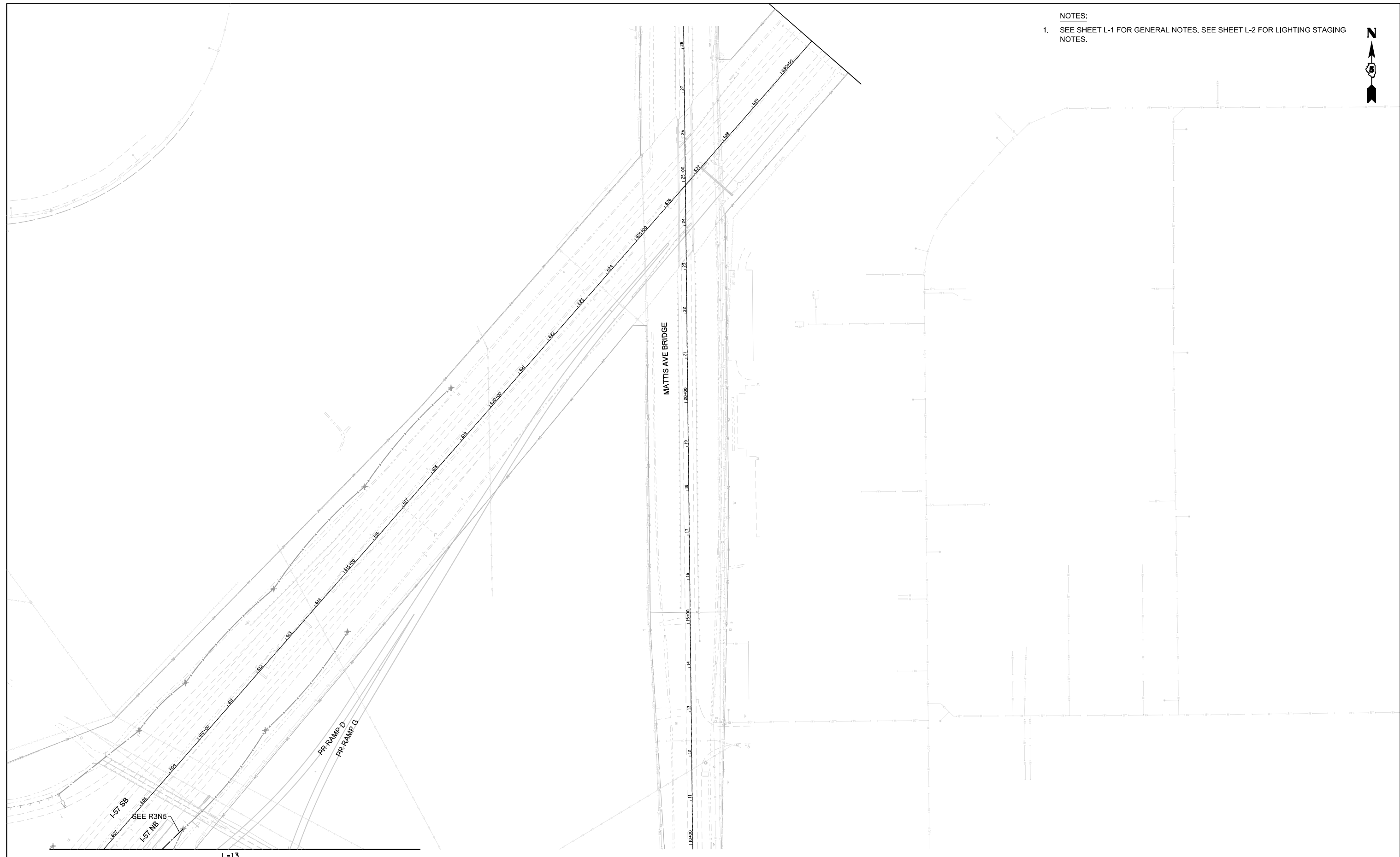
NOTES:
 1. SEE SHEET L-1 FOR GENERAL NOTES. SEE SHEET L-2 FOR LIGHTING STAGING NOTES.



L-15

FILE NAME = D570899-remLightStageRamps3-4.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHTING AND REMOVAL PLAN RAMP STAGE 3			F.A.I. RTE. = 57&74	SECTION = (10-34-1) HBK	COUNTY = CHAMPAIGN	TOTAL SHEETS = 1187	SHEET NO. = 631
	PLOT SCALE = 200.0000' / in.	CHECKED -	REVISED -					CONTRACT NO. 70B99				
PLOT DATE = 2/23/2021	DATE -	REVISED -	REVISED -	SCALE: 1"=100'	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS	

NOTES:
 1. SEE SHEET L-1 FOR GENERAL NOTES. SEE SHEET L-2 FOR LIGHTING STAGING NOTES.



L-13

L-16

FILE NAME = D570B99-remLightStageRamps3-5.dgn	USER NAME = bbarr	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 200.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/23/2021	DATE -	REVISED -

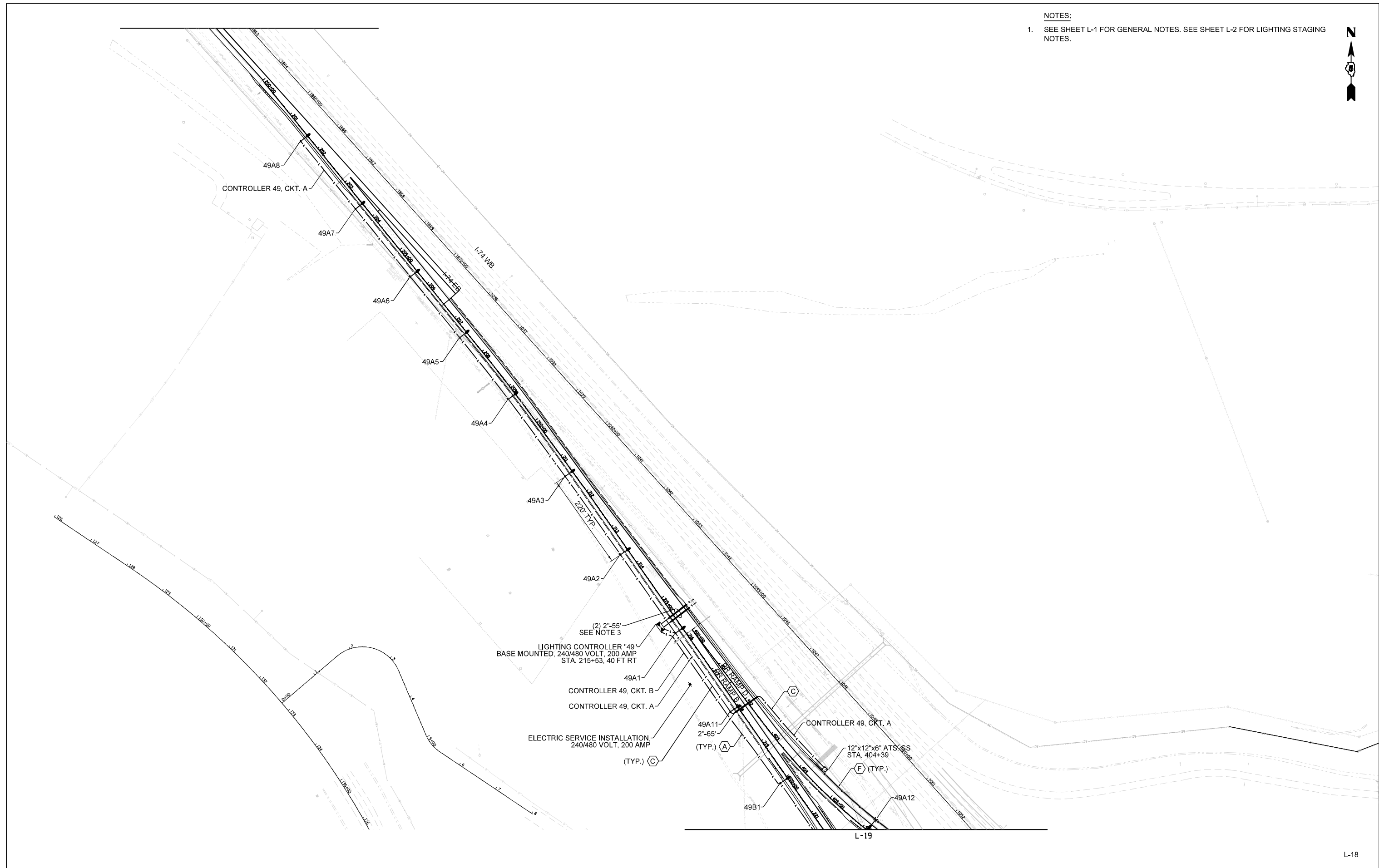
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TEMPORARY LIGHTING AND REMOVAL PLAN
 RAMP STAGE 3**

SCALE: 1"=100' SHEET OF SHEETS STA. TO STA.

F.A.I. RTE. 57&74	SECTION (10-34-1) HBK	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 632
ILLINOIS			CONTRACT NO. 70B99	

NOTES:
 1. SEE SHEET L-1 FOR GENERAL NOTES. SEE SHEET L-2 FOR LIGHTING STAGING NOTES.



FILE NAME = D570B99-1ightStageRamps3-1.dgn	USER NAME = bbarr	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 200.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/23/2021	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

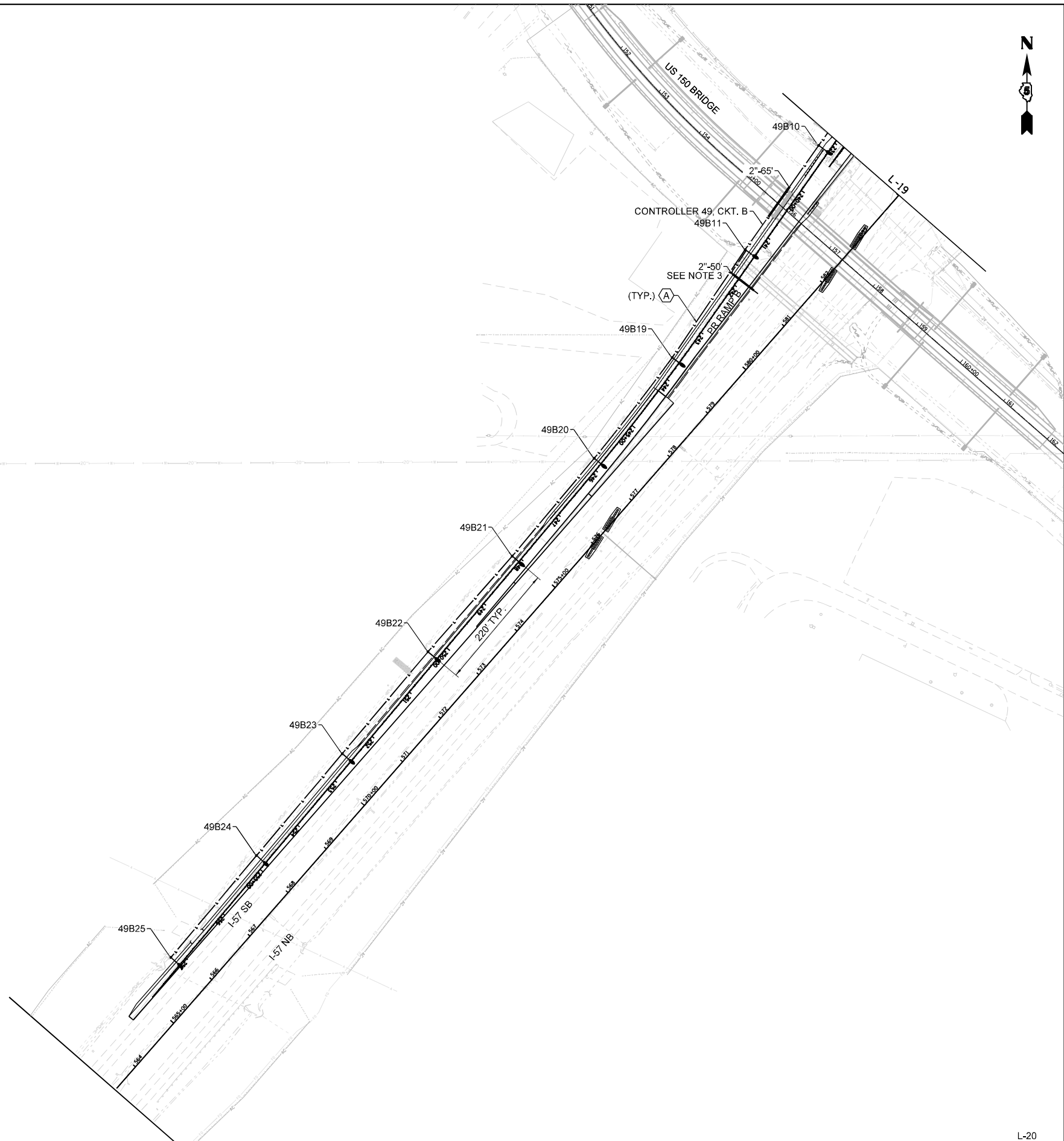
**PROPOSED LIGHTING PLAN
 RAMP STAGE 3**

SCALE: 1"=100' SHEET OF SHEETS STA. TO STA.

F.A.I. RTE. 57&74	SECTION (10-34-1) HBK	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 634
CONTRACT NO. 70B99				
ILLINOIS				

NOTES:

- 1. SEE SHEET L-1 FOR GENERAL NOTES. SEE SHEET L-2 FOR LIGHTING STAGING NOTES.



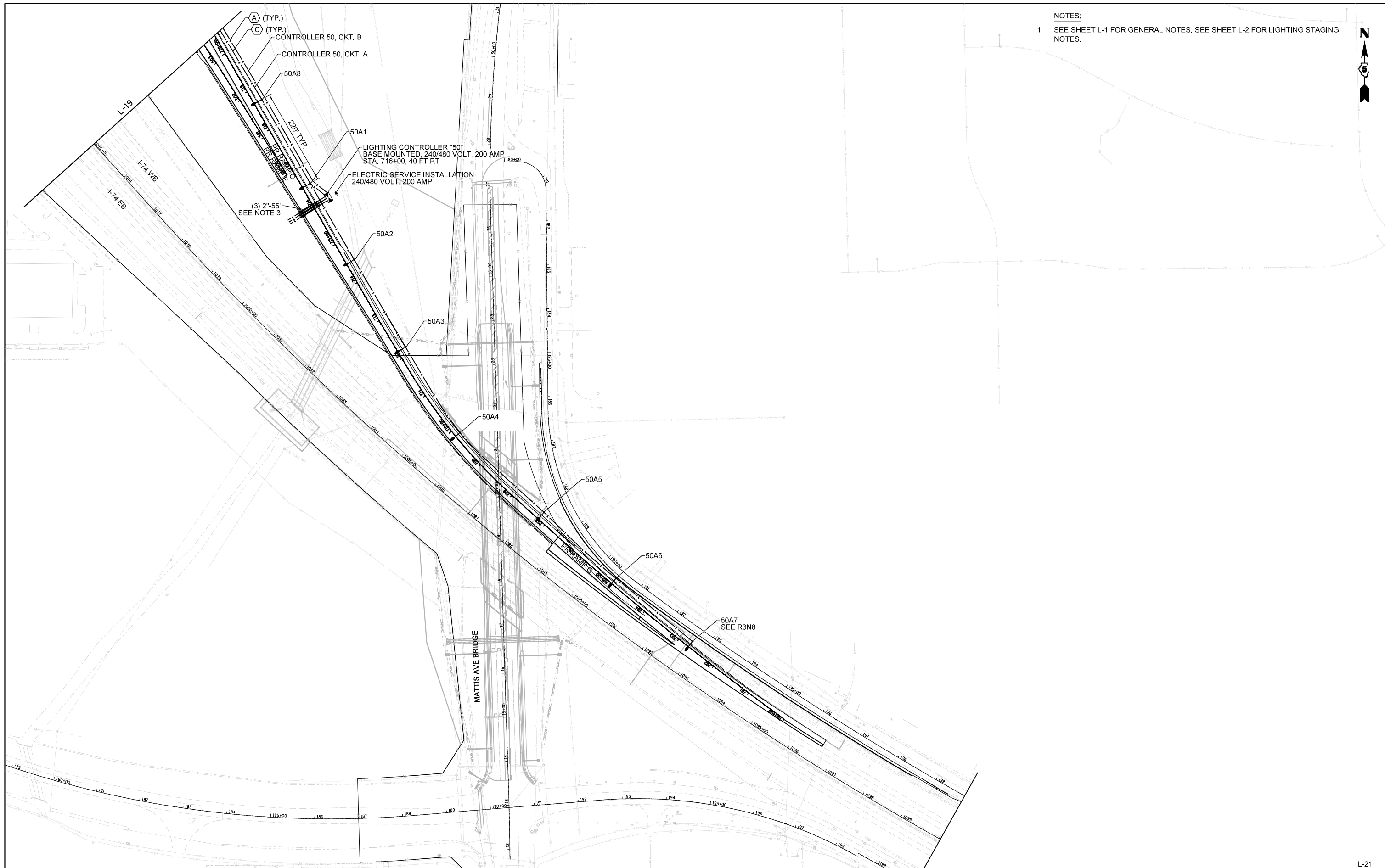
L-20

FILE NAME =	USER NAME = bbarr	DESIGNED -	REVISED -
D570B99-1ightStageRamps3-3.dgn		DRAWN -	REVISED -
	PLOT SCALE = 200.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/23/2021	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PROPOSED LIGHTING PLAN RAMP STAGE 3			
SCALE: 1"=100'	SHEET	OF	SHEETS
	STA.		TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57&74	(10-34-1) HBK	CHAMPAIGN	1187	636
			CONTRACT NO. 70B99	
ILLINOIS				



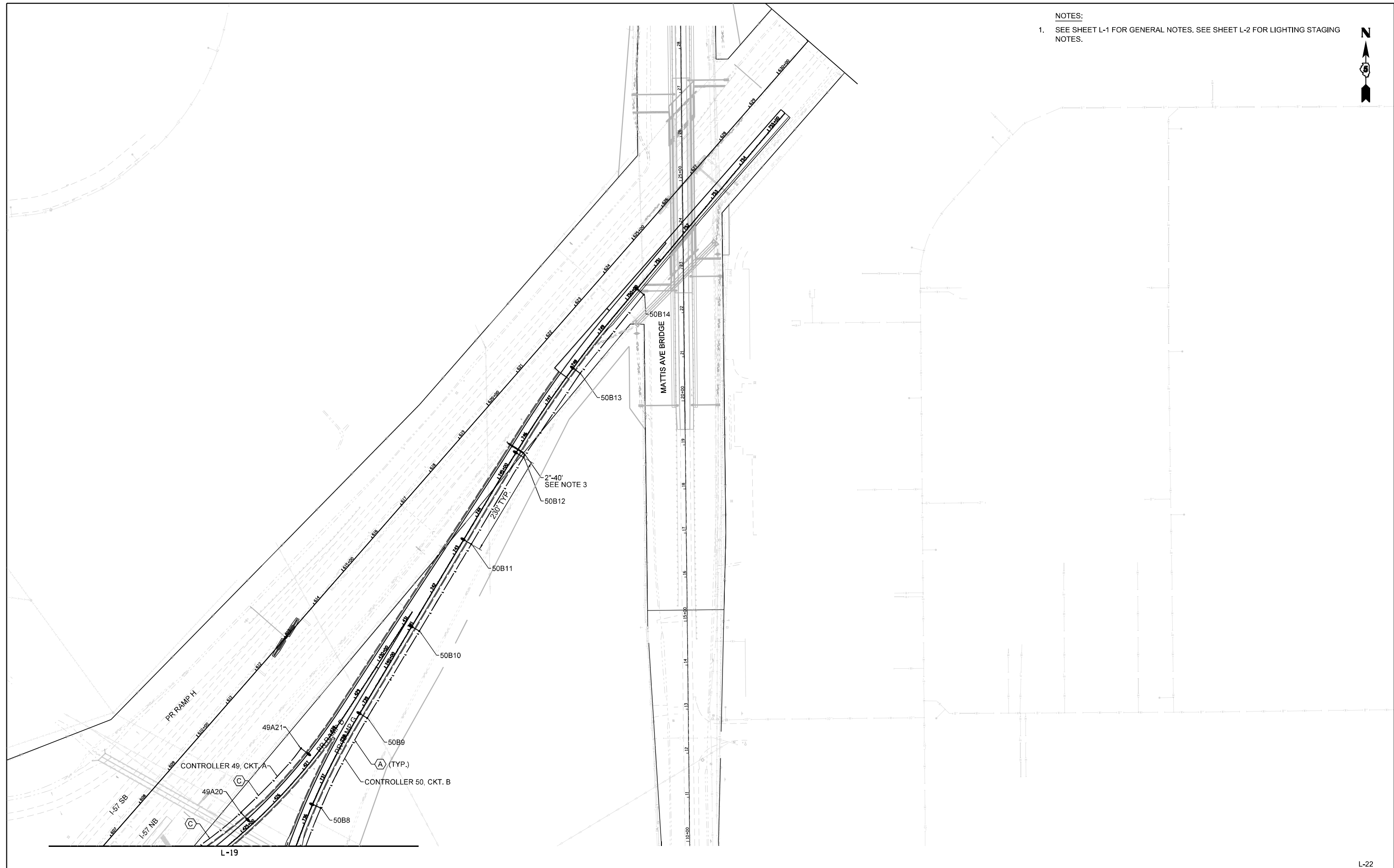
NOTES:
 1. SEE SHEET L-1 FOR GENERAL NOTES. SEE SHEET L-2 FOR LIGHTING STAGING NOTES.



L-21

FILE NAME = D570B99-1ightStageRamps3-4.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED LIGHTING PLAN RAMP STAGE 3			F.A.I. RTE. = 57&74	SECTION = (10-34-1) HBK	COUNTY = CHAMPAIGN	TOTAL SHEETS = 1187	SHEET NO. = 637
	PLOT SCALE = 200.0000' / in.	CHECKED -	REVISED -					SCALE: 1"=100'	SHEET OF SHEETS	STA. TO STA.	CONTRACT NO. 70B99	
PLOT DATE = 2/23/2021	DATE -	REVISED -	REVISED -	ILLINOIS								

NOTES:
 1. SEE SHEET L-1 FOR GENERAL NOTES. SEE SHEET L-2 FOR LIGHTING STAGING NOTES.



FILE NAME = D570B99-1.rghtStageRamps3-5.dgn	USER NAME = bbarr	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 200.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/23/2021	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

PROPOSED LIGHTING PLAN RAMP STAGE 3			
SCALE: 1"=100'	SHEET	OF	SHEETS
	STA.	TO	STA.




F.A.I. RTE. 57&74	SECTION (10-34-1) HBK	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 638
ILLINOIS			CONTRACT NO. 70B99	

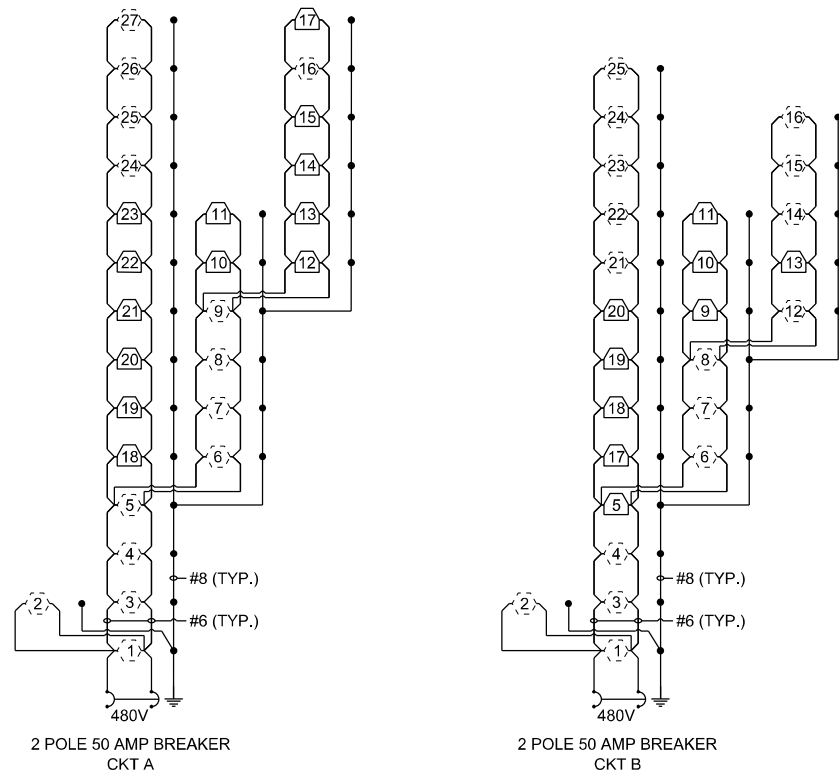
L-19

L-22

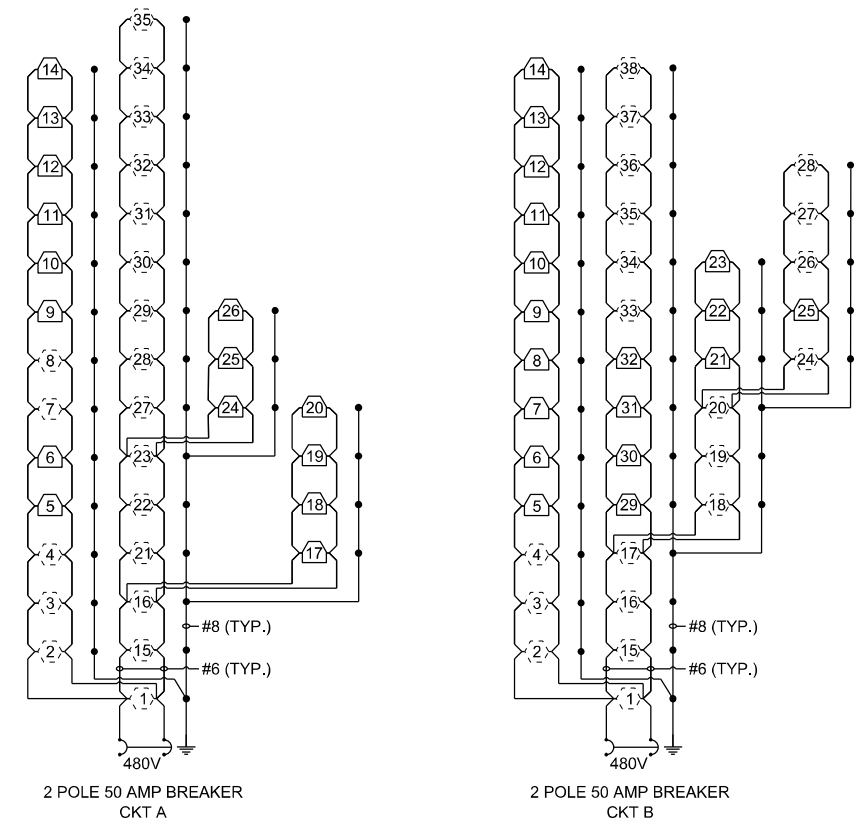
NOTES:

- ALL NECESSARY REVISIONS TO THE WIRING SHOWN ON THIS SHEET SHALL BE MADE AT NO ADDITIONAL COST TO THE DEPARTMENT AND TO THE SATISFACTION OF THE ENGINEER.

-  TEMPORARY ROADWAY LUMINAIRE, LED
-  EXISTING ROADWAY LUMINAIRE, HPS
-  GROUND ROD



TEMPORARY LIGHTING CONTROLLER "1"
POLE MOUNTED, 480V



TEMPORARY LIGHTING CONTROLLER "2"
POLE MOUNTED, 480V

FILE NAME =
D570B99-1.ghdt1-2.dgn

USER NAME = bbarr

DESIGNED -

REVISED -

DRAWN -

REVISED -

PLOT SCALE = 100.0000' / in.

CHECKED -

REVISED -

PLOT DATE = 2/23/2021

DATE -

REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHTING - RAMP STAGE 1
WIRING DIAGRAMS

SCALE: NONE

SHEET OF SHEETS STA. TO STA.

F.A.I.
RTE.
57&74

SECTION
(10-34-1) HBK

COUNTY
CHAMPAIGN

TOTAL SHEETS
1187





SHEET NO.
641

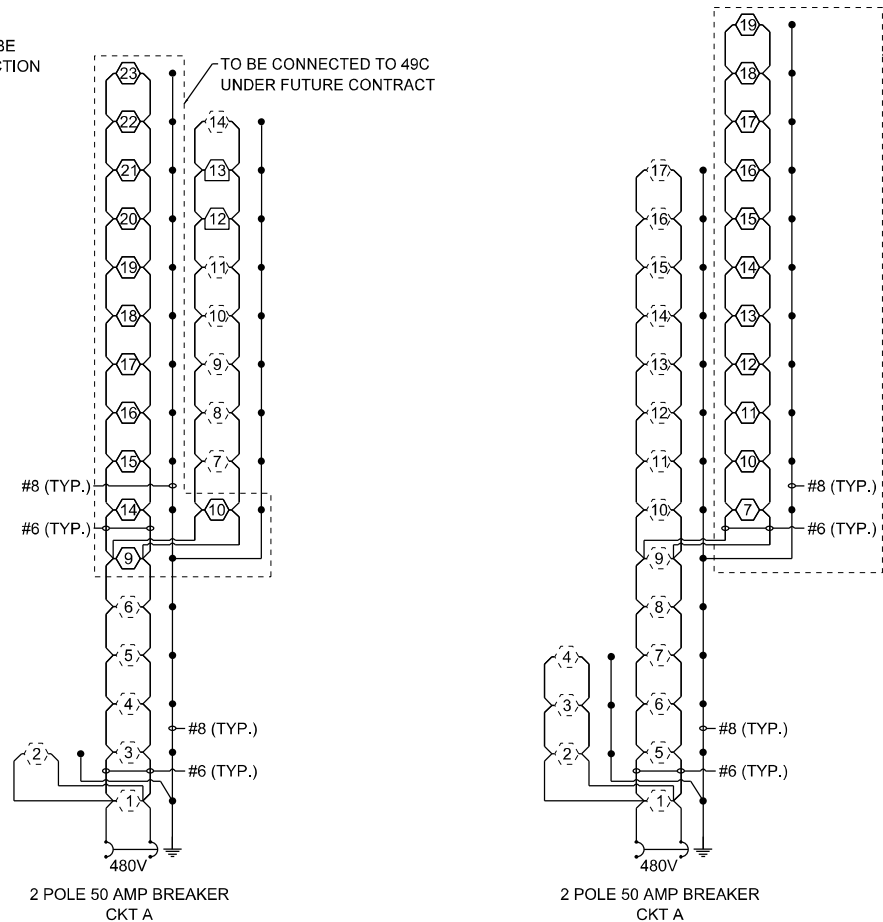
CONTRACT NO. 70B99

ILLINOIS

NOTES:

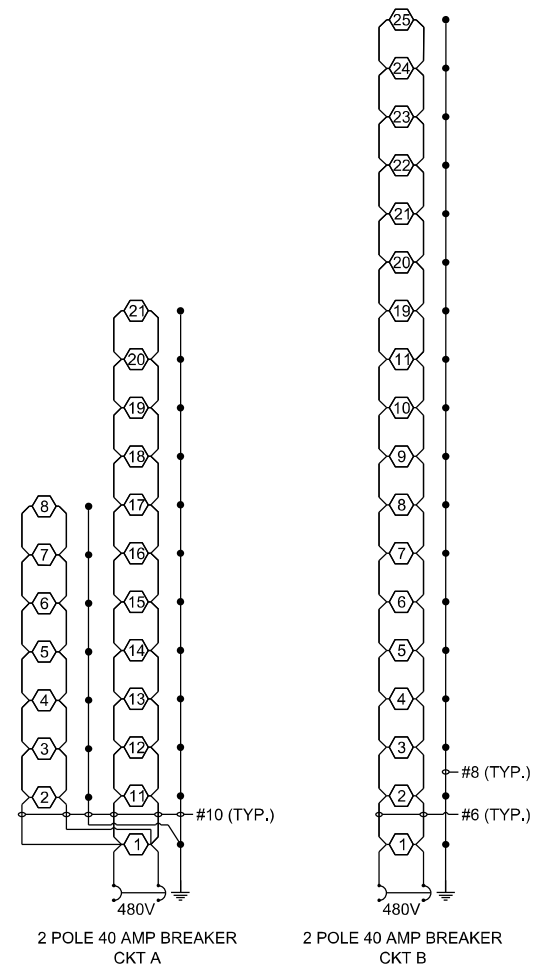
- ALL NECESSARY REVISIONS TO THE WIRING SHOWN ON THIS SHEET SHALL BE MADE AT NO ADDITIONAL COST TO THE DEPARTMENT AND TO THE SATISFACTION OF THE ENGINEER.

-  PROPOSED ROADWAY LUMINAIRE, LED
-  TEMPORARY ROADWAY LUMINAIRE, LED
-  EXISTING ROADWAY LUMINAIRE, HPS
-  GROUND ROD



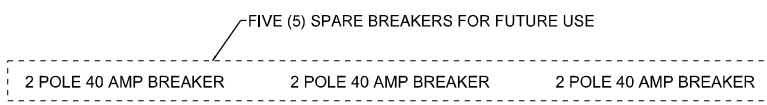
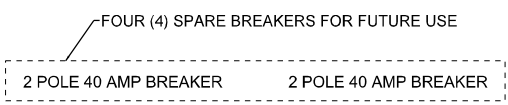
TEMPORARY LIGHTING CONTROLLER "1"
POLE MOUNTED, 480V

TEMPORARY LIGHTING CONTROLLER "2"
POLE MOUNTED, 480V



PROPOSED LIGHTING CONTROLLER "49"
BASE MOUNTED, 480V

PROPOSED LIGHTING CONTROLLER "50"
BASE MOUNTED, 480V



FILE NAME =
D570899-1.ghdt1-3.dgn

USER NAME = bbarr
PLOT SCALE = 100.0000' / in.
PLOT DATE = 2/23/2021

DESIGNED -
DRAWN -
CHECKED -
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

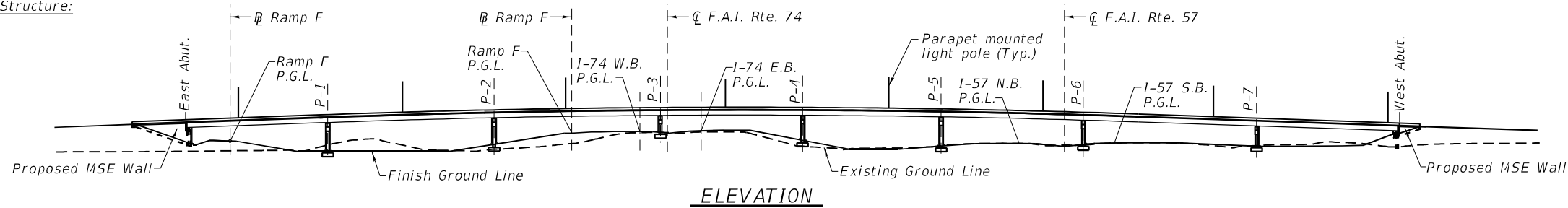
**PROPOSED LIGHTING - RAMP STAGE 4
WIRING DIAGRAMS**

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57&74	(10-34-1) HBK	CHAMPAIGN	1187	642
CONTRACT NO. 70B99			ILLINOIS	

Bench Mark:
Chiseled "□" on top of N.W. corner of light pole foundation #50-107 on Exist. Ramp G, Sta. 1068+46.46. Elev. 769.173

Existing Structure:
None



DESIGN SPECIFICATIONS
2017 AASHTO LRFD 8th Edition,
Bridge Design Specifications

LOADING HL-93
Allow 50 psf for future wearing surface

DESIGN STRESSES
FIELD UNITS

$f'_c = 3,500$ psi
 $f'_c = 4,000$ psi (Superstructure Concrete)
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (M270 Grade 50W)
 $f_y = 70,000$ psi (M270 Grade HPS 70W)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design spectral Acceleration at 1.0 sec (SD1) = 0.135g
Design Spectral Acceleration at 2.0 sec (SDS) = 0.233g
Soil Site Class = D

Leonardo Marcатели
Leonardo Marcатели
3-12-2021
3-12-2021
11-30-2022
11-30-2022

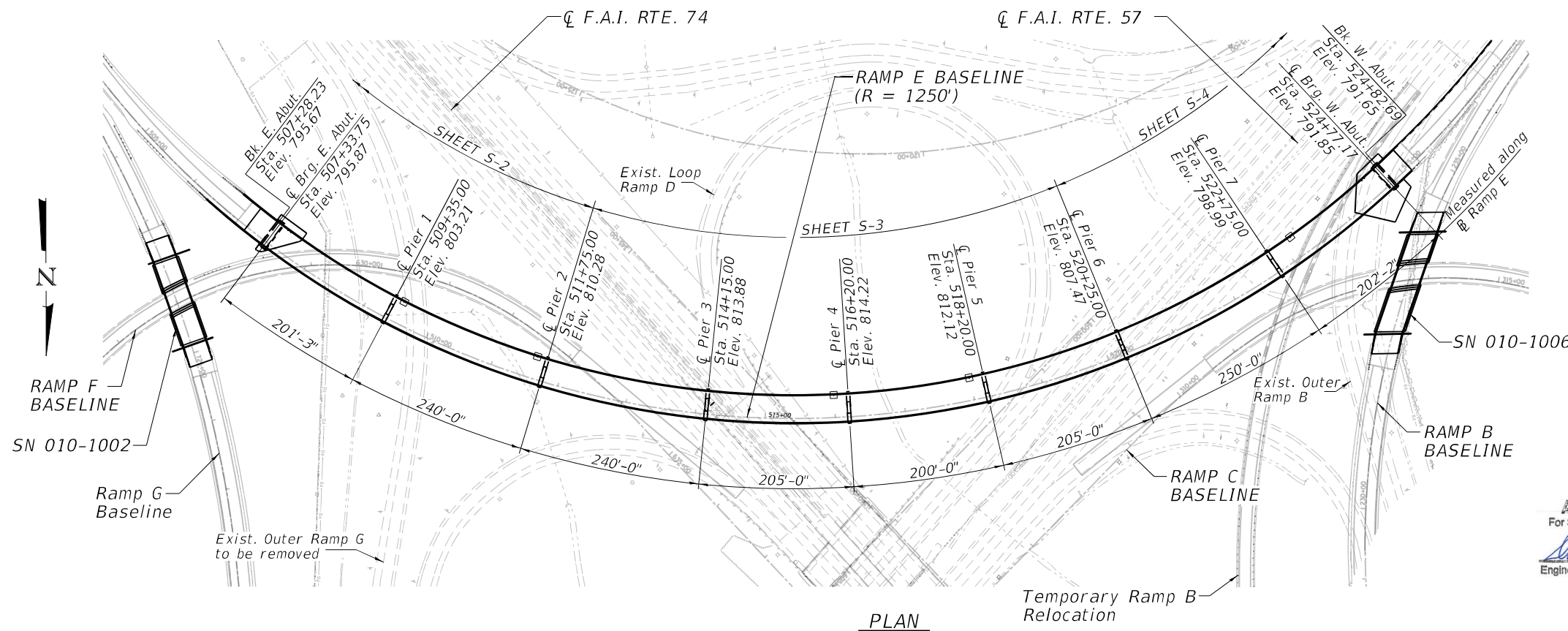


Applies to Sheets S-1 thru S-54 and Sheets S-71 thru S-106

Keith W. Benting
Keith W. Benting
3-12-2021
3-12-2021
11-30-2022
11-30-2022



Applies to Sheets S-55 thru S-70



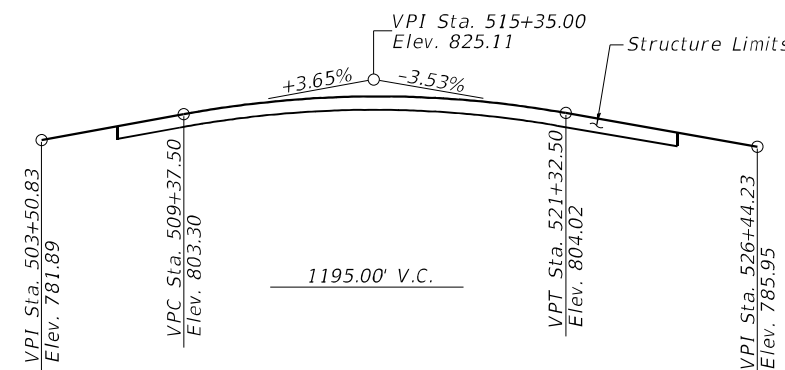
PLAN

Note:
Up to 1/4" may be ground off the bridge deck and the bridge approach slabs.

PROPOSED RAMP F-3 CURVE DATA
PI Sta. = 630+93.16
 $\Delta = 124^\circ 20' 18''$ (Rt.)
 $D = 11^\circ 56' 12''$
 $R = 480.00'$
 $T = 909.21'$
 $L = 1,041.65'$
 $E = 548.14'$
 $e = 8.0\%$
P.C. Sta. = 621+83.95
P.T. Sta. = 632+25.60

PROPOSED RAMP F-4 CURVE DATA
PI Sta. = 633+25.97
 $\Delta = 11^\circ 56' 12''$ (Rt.)
 $D = 5^\circ 58' 06''$
 $R = 960.00'$
 $T = 100.36'$
 $L = 200.00'$
 $E = 5.23'$
 $e = 8.0\%$
S.E. RUN = 275'
P.C. Sta. = 632+25.60
P.T. Sta. = 634+25.60

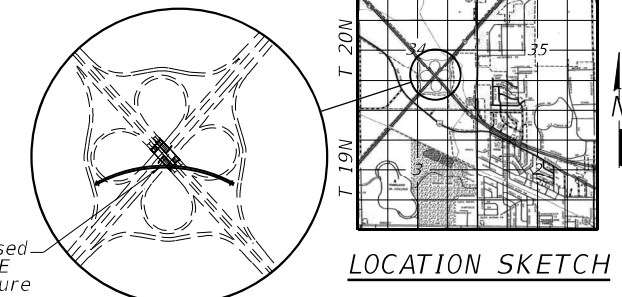
PROPOSED RAMP E CURVE DATA
PI Sta. = 520+74.57
 $\Delta = 110^\circ 15' 02''$ (Lt.)
 $D = 4^\circ 35' 01''$
 $R = 1,250.00'$
 $T = 1,793.52'$
 $L = 2,405.30'$
 $E = 936.14'$
 $e = 7.6\%$
P.C. Sta. = 502+81.04
P.T. Sta. = 526+86.34



PROPOSED RAMP E PROFILE

Note:
The profile grade shows the final elevations after grinding.

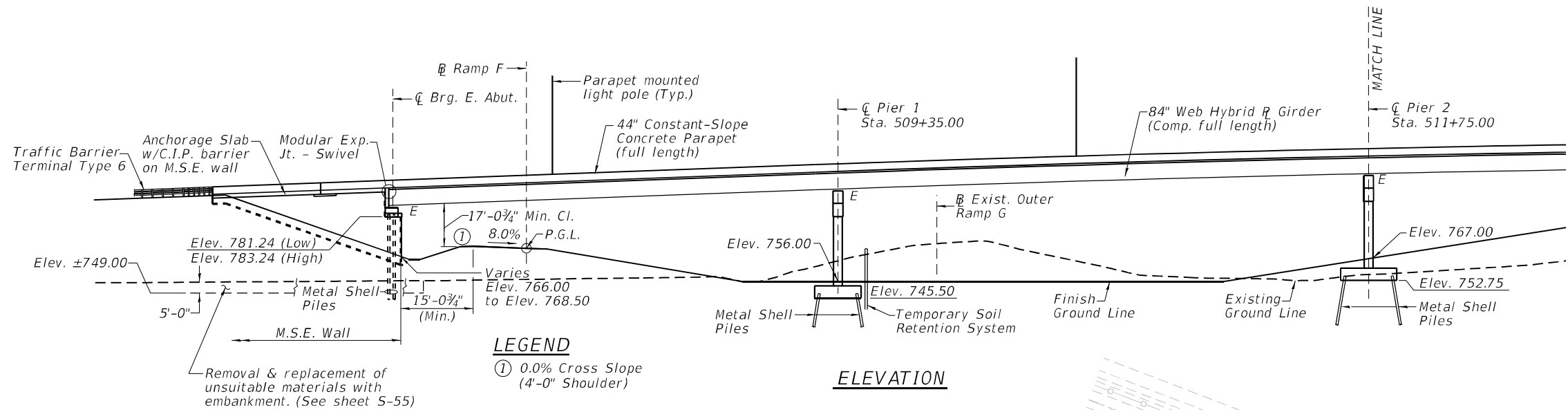
APPROVED
For Structural Adequacy Only
Dr. Carl Kasper
Engineer of Bridges & Structures



LOCATION SKETCH

GENERAL PLAN & ELEVATION
RAMP E OVER
RAMP F AND
F.A.I. RTE. 74 AND F.A.I. RTE. 57
SECTION (10-34-1) HBK
CHAMPAIGN COUNTY
STATION 516+05.45
STRUCTURE NO. 010-1001

FILE NAME = CMT	USER NAME = Denise Herrera	DESIGNED - LM	REVISD -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN & ELEVATION STRUCTURE NO. 010-1001	F.A.I. RTE. = 74 & 57	SECTION = (10-34-1) HBK	COUNTY = CHAMPAIGN	TOTAL SHEETS = 1187	SHEET NO. = 643
	PLOT SCALE = NA	DRAWN - GLD	REVISD -			SHEET NO. = S-1 OF S-106 SHEETS	CONTRACT NO. = 70B99			
PLOT DATE = 05/03/2021	CHECKED - LM	REVISD -	REVISD -			ILLINOIS FED. AID PROJECT				



LIGHT POLE LOCATIONS

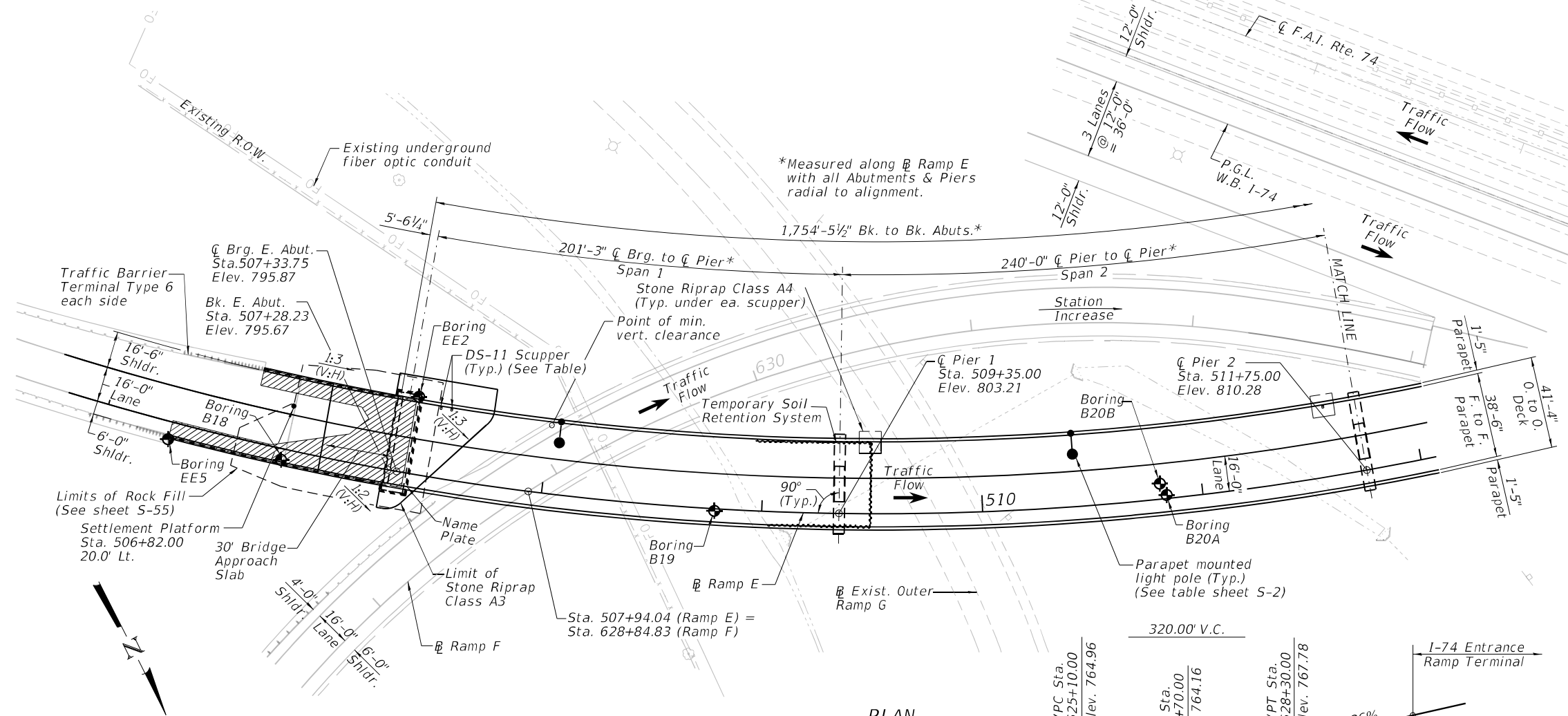
STATION	**OFFSET
508+05.26	34.17' Lt.
510+43.48	34.17' Lt.
512+77.12	34.17' Lt.
515+07.47	34.17' Lt.
517+43.29	34.17' Lt.
519+67.07	34.17' Lt.
522+15.36	34.17' Lt.
524+64.68	34.17' Lt.

**From B Ramp E
 10" Light pole has height of 45 ft. with an 8 ft. mast arm. Bolt circle diameter is 15 in.

LEGEND
 ① 0.0% Cross Slope (4'-0" Shoulder)

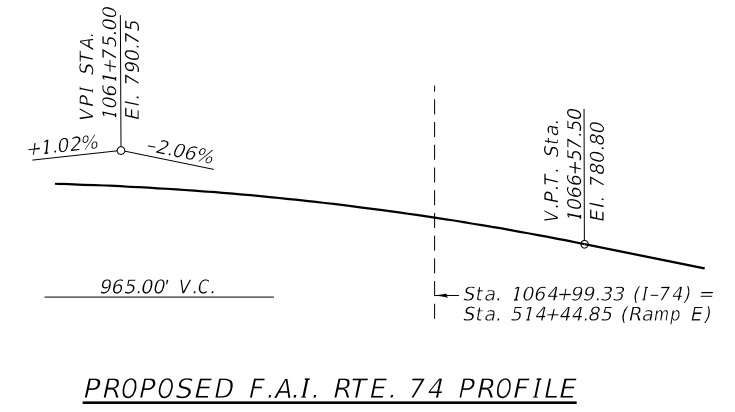
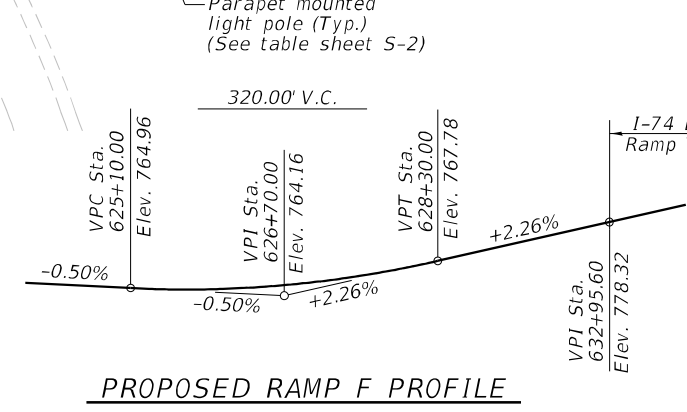
DS-11 SCUPPER LOCATIONS

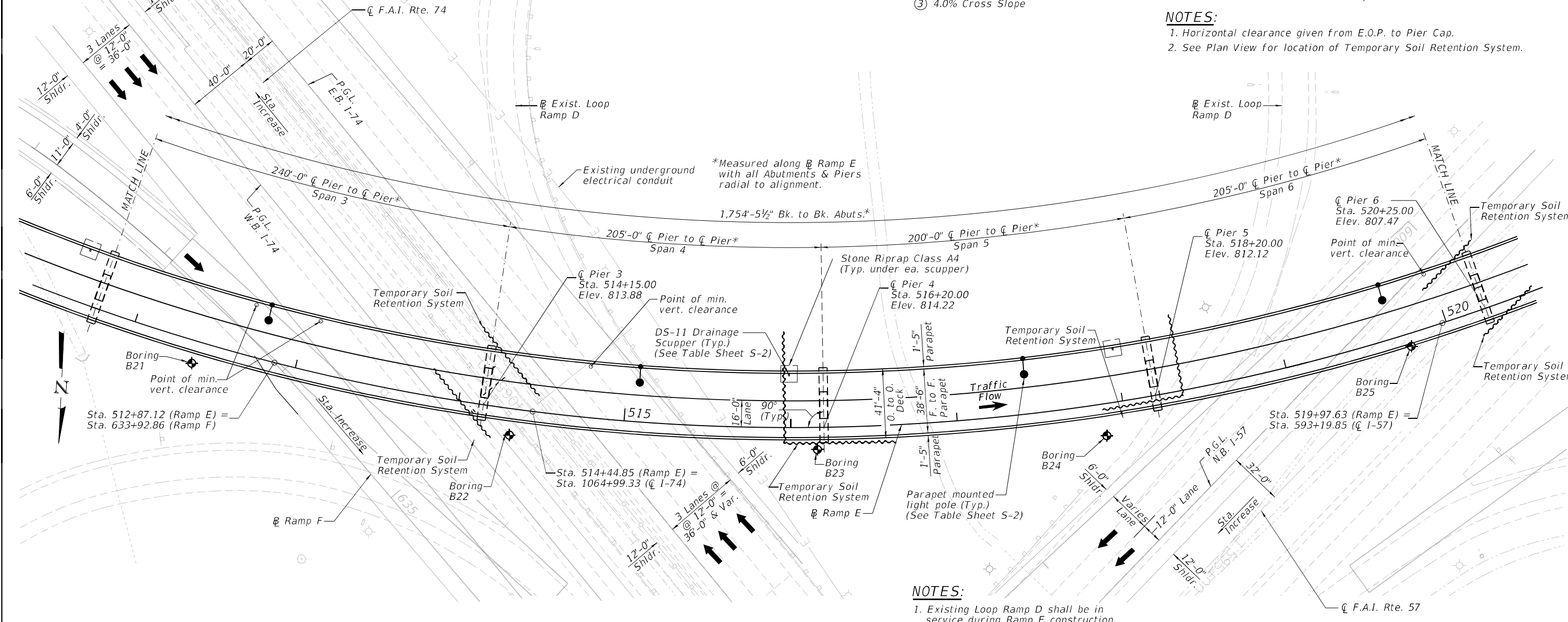
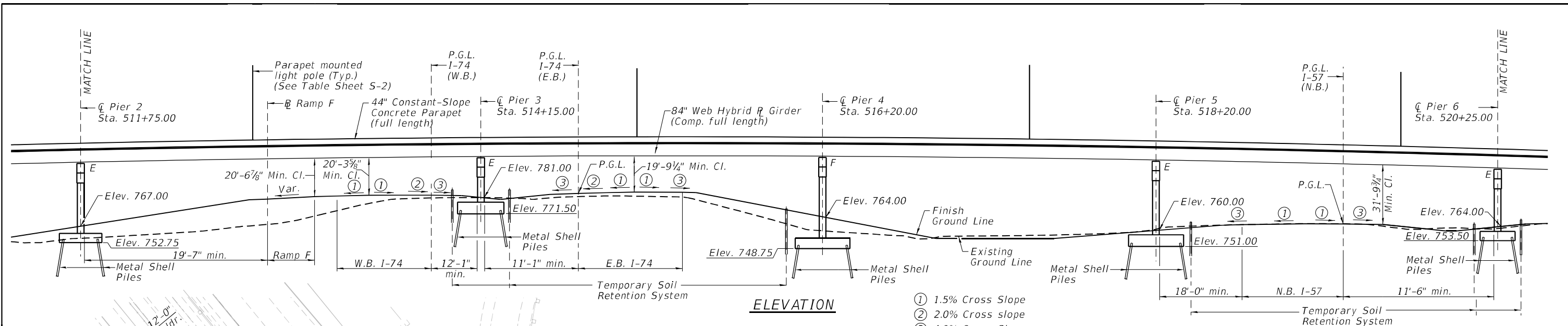
STATION	OFFSET	STATION	OFFSET
507+49.00	32.5' Lt.	523+15.50	32.5' Lt.
507+54.00	32.5' Lt.	524+49.00	32.5' Lt.
509+49.00	32.5' Lt.	524+54.00	32.5' Lt.
511+60.00	32.5' Lt.		
515+99.00	32.5' Lt.		
517+99.00	32.5' Lt.		



NOTES:
 1. Profile grade elevations shown are after grinding.
 2. See Roadway drawings for location of Temporary Concrete Barrier.

LEGEND
 [Hatched Box] Approximate limits of Reinforced Soil Mass





- ELEVATION**
- ① 1.5% Cross Slope
 - ② 2.0% Cross slope
 - ③ 4.0% Cross Slope

- NOTES:**
1. Horizontal clearance given from E.O.P. to Pier Cap.
 2. See Plan View for location of Temporary Soil Retention System.

- NOTES:**
1. Existing Loop Ramp D shall be in service during Ramp E construction.
 2. Profile grade elevations shown are after grinding.
 3. See Roadway drawings for location of Temporary Concrete Barrier.

FILE NAME =
 CMT

USER NAME = Denise Herrera
 DESIGNED - LM
 CHECKED - RJK
 PLOT SCALE = NA
 DRAWN - GLD
 PLOT DATE = 05/03/2021
 CHECKED - LM

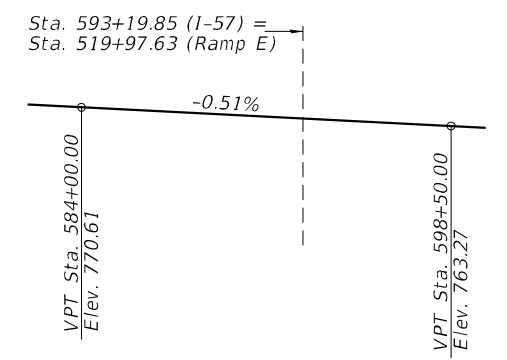
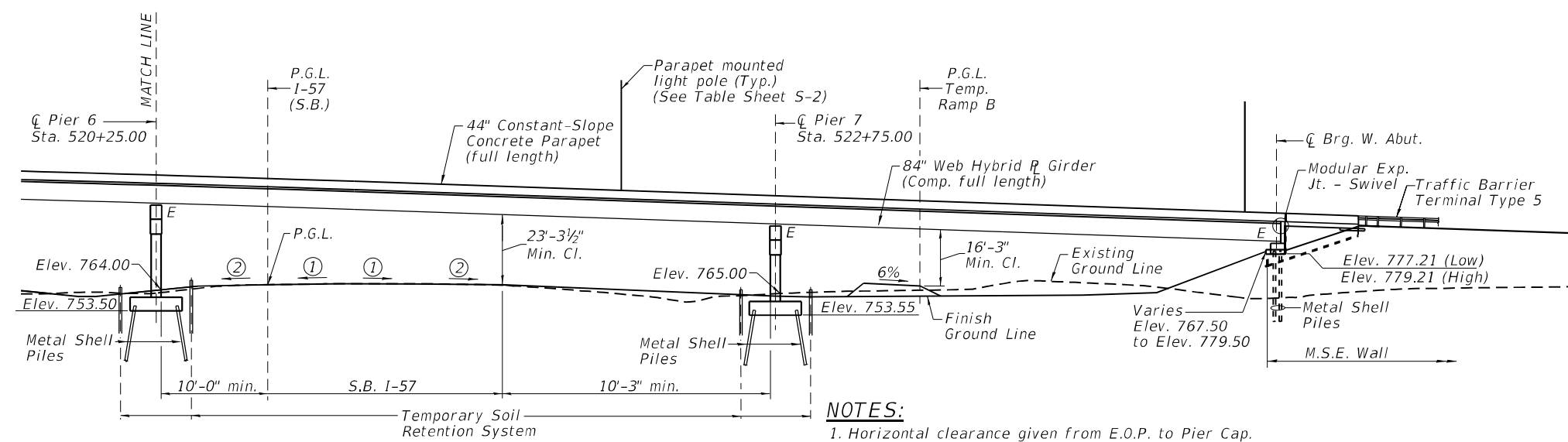
REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN & ELEVATION - 2
 STRUCTURE NO. 010-1001**

F.A.I. RTE. 74 & 57	SECTION (10-34-1) HBK	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 645
CONTRACT NO. 70B99			ILLINOIS FED. AID PROJECT	

SHEET NO. S-3 OF S-106 SHEETS

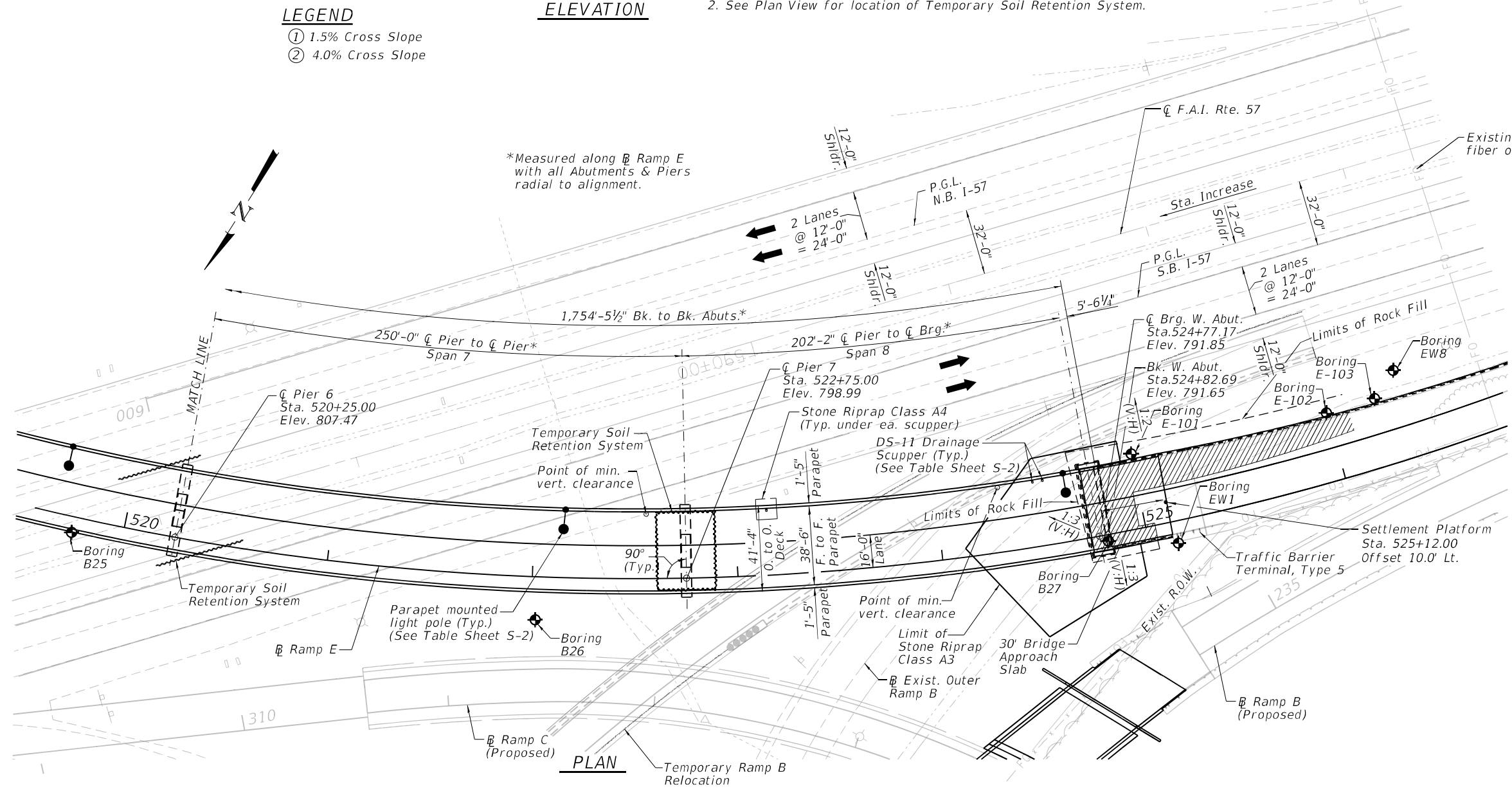


PROPOSED F.A.I. RTE. 57 PROFILE

LEGEND
 ① 1.5% Cross Slope
 ② 4.0% Cross Slope

ELEVATION

NOTES:
 1. Horizontal clearance given from E.O.P. to Pier Cap.
 2. See Plan View for location of Temporary Soil Retention System.



PLAN

LEGEND
 [Hatched Area] Approximate limits of Reinforced Soil Mass

NOTES:
 1. Existing Outer Ramp B shall be temporarily relocated to not impede West abutment construction.
 2. Profile grade elevations shown are after grinding.
 3. See Roadway drawings for location of Temporary Concrete Barrier.

FILE NAME = 	USER NAME = Denise Herrera	DESIGNED - LM CHECKED - RJK	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN & ELEVATION - 3 STRUCTURE NO. 010-1001	F.A.I. RTE. 74 & 57	SECTION (10-34-1) HBK	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 646
	PLOT SCALE = NA PLOT DATE = 05/03/2021	DRAWN - GLD CHECKED - LM	REVISED - REVISED -			SHEET NO. S-4 OF S-106 SHEETS	CONTRACT NO. 70B99	ILLINOIS FED. AID PROJECT		

INDEX OF SHEETS

<u>SHEET NO.</u>	<u>SHEET TITLE</u>	<u>SHEET NO.</u>	<u>SHEET TITLE</u>
S-1	GENERAL PLAN & ELEVATION	S-54	WEST ABUTMENT COPING DETAILS
S-2	GENERAL PLAN & ELEVATION-1	S-55	EAST ABUTMENT MSE WALL GP&E
S-3	GENERAL PLAN & ELEVATION-2	S-56	EAST ABUTMENT MSE WALL SECTIONS
S-4	GENERAL PLAN & ELEVATION-3	S-57	WEST ABUTMENT MSE WALL GENERAL PLAN
S-5	GENERAL DATA	S-58	WEST ABUTMENT MSE WALL DEVELOPED ELEVATION
S-6	BILL OF MATERIAL	S-59	WEST ABUTMENT MSE WALL SECTIONS
S-7	OFFSET SKETCH AND FOOTING LAYOUT	S-60	EAST PARAPET AND ANCHORAGE SLAB
S-8	TEMPORARY SOIL RETENTION SYSTEM DETAILS	S-61	EAST ANCHORAGE SLAB AND WALL DETAILS
S-9	DECK ELEVATIONS-1	S-62	WEST PARAPET AND ANCHORAGE SLAB (1 of 6)
S-10	DECK ELEVATIONS-2	S-63	WEST PARAPET AND ANCHORAGE SLAB (2 of 6)
S-11	DECK ELEVATIONS-3	S-64	WEST PARAPET AND ANCHORAGE SLAB (3 of 6)
S-12	DECK ELEVATIONS-4	S-65	WEST PARAPET AND ANCHORAGE SLAB (4 of 6)
S-13	DECK ELEVATIONS-5	S-66	WEST PARAPET AND ANCHORAGE SLAB (5 of 6)
S-14	DECK ELEVATIONS-6	S-67	WEST PARAPET AND ANCHORAGE SLAB (6 of 6)
S-15	DECK ELEVATIONS-7	S-68	WEST ANCHORAGE SLAB AND WALL DETAILS
S-16	DECK ELEVATIONS-8	S-69	ANCHORAGE SLAB & MSE WALL DETAILS
S-17	DECK ELEVATIONS-9	S-70	CONCRETE PARAPET SLIP FORMING OPTIONS
S-18	TOP OF EAST & WEST APPROACH SLAB ELEVATIONS	S-71	PIER 1 PLAN AND ELEVATION
S-19	SUPERSTRUCTURE-1	S-72	PIER 1 DETAILS
S-20	SUPERSTRUCTURE-2	S-73	PIER 2 PLAN AND ELEVATION
S-21	SUPERSTRUCTURE-3	S-74	PIER 2 DETAILS
S-22	SUPERSTRUCTURE-4	S-75	PIER 3 PLAN AND ELEVATION
S-23	SUPERSTRUCTURE DETAILS-1	S-76	PIER 3 DETAILS
S-24	SUPERSTRUCTURE DETAILS-2	S-77	PIER 4 PLAN AND ELEVATION
S-25	SUPERSTRUCTURE DETAILS-3	S-78	PIER 4 DETAILS
S-26	SUPERSTRUCTURE DETAILS-4	S-79	PIER 5 PLAN AND ELEVATION
S-27	MODULAR EXPANSION SWIVEL JOINT	S-80	PIER 5 DETAILS
S-28	MODULAR EXPANSION SWIVEL JOINT DETAILS	S-81	PIER 6 PLAN AND ELEVATION
S-29	DRAINAGE SCUPPER DS-11	S-82	PIER 6 DETAILS
S-30	BRIDGE APPROACH SLAB DETAILS-1	S-83	PIER 7 PLAN AND ELEVATION
S-31	BRIDGE APPROACH SLAB DETAILS-2	S-84	PIER 7 DETAILS
S-32	FRAMING PLAN-1	S-85	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
S-33	FRAMING PLAN-2	S-86	METAL SHELL PILE DETAILS
S-34	FRAMING PLAN-3	S-87	CONCRETE PARAPET SLIP FORMING OPTION (BRIDGE)
S-35	FRAMING PLAN-4	S-88	SETTLEMENT PLATFORM
S-36	GIRDER ELEVATIONS-1	S-89	BORING LOGS - 1
S-37	GIRDER ELEVATIONS-2	S-90	BORING LOGS - 2
S-38	STRUCTURAL STEEL DETAILS-1	S-91	BORING LOGS - 3
S-39	STRUCTURAL STEEL DETAILS-2	S-92	BORING LOGS - 4
S-40	STRUCTURAL STEEL DETAILS-3	S-93	BORING LOGS - 5
S-41	STRUCTURAL STEEL DETAILS-4	S-94	BORING LOGS - 6
S-42	STRUCTURAL STEEL DETAILS-5	S-95	BORING LOGS - 7
S-43	STRUCTURAL STEEL DETAILS-6	S-96	BORING LOGS - 8
S-44	BEARING LAYOUT AND ORIENTATION	S-97	BORING LOGS - 9
S-45	EXPANSION POT BEARING DETAIL-I	S-98	BORING LOGS - 10
S-46	EXPANSION POT BEARING DETAIL-II	S-99	BORING LOGS - 11
S-47	FIXED POT BEARING DETAIL-I	S-100	BORING LOGS - 12
S-48	FIXED POT BEARING DETAIL-II	S-101	BORING LOGS - 13
S-49	EAST ABUTMENT	S-102	BORING LOGS - 14
S-50	EAST ABUTMENT DETAILS	S-103	BORING LOGS - 15
S-51	EAST ABUTMENT COPING DETAILS	S-104	BORING LOGS - 16
S-52	WEST ABUTMENT	S-105	BORING LOGS - 17
S-53	WEST ABUTMENT DETAILS	S-106	BORING LOGS - 18

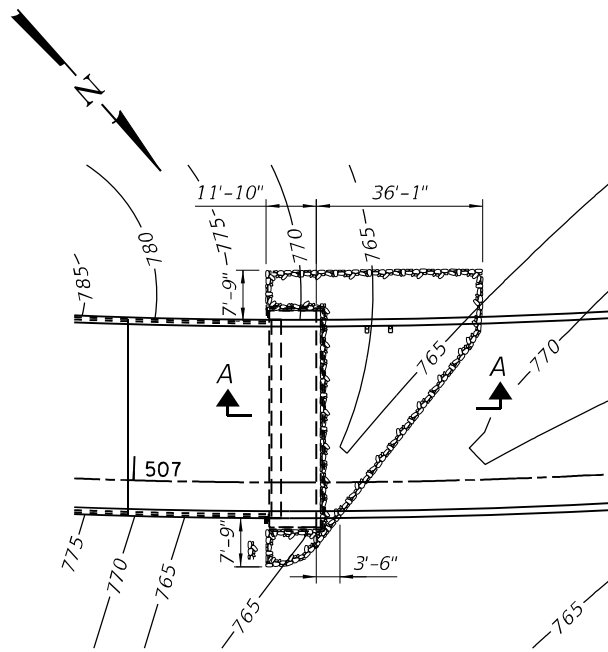
GENERAL NOTES:

- Fasteners shall be ASTM F3125, Grade A325 Type 1, hot dip galvanized bolts. Bolts 1/2"Ø, holes 5/8"Ø, unless otherwise noted.
- Calculated weight of Structural Steel AASHTO M270 Gr. 50W 4,296,080 lbs. AASHTO M270 HPS 70W 1,137,270 lbs.
- All structural steel shall be AASHTO M270 Grade 50W, except at flanges over the piers which shall be AASHTO M270 Grade HPS 70W, as shown in the plans.
- All new structural steel shall be metallized according to the Special Provision for Metallizing of Structural Steel except for End Cross Frames (Type 1) and the steel for fixed and expansion HLMR bearing assemblies which shall be hot dip galvanized according to the Special Provision for Hot Dip Galvanizing for Structural Steel. The metallizing shall meet a Class A AASHTO slip coefficient (0.30 or greater) for bolted connection faying surfaces. The metallized area shall be painted with System 1. See Special Provision for Metallizing of Structural Steel and for Hot Dip Galvanizing for Structural Steel.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated, (S) shall be stainless steel.
- All bearing anchor rods shall be set before permanently bolting diaphragms or cross frames over supports.
- Prior to placement of joint block-out, the Contractor shall coordinate with the Modular Joint Manufacturer to ensure that the joint will be properly supported and that the reinforcement bars will not interfere with the joint components. Any necessary adjustments to the reinforcement layout shall be submitted to the Engineer for approval.
- No construction joints except those shown on the plans will be allowed unless approved by the Engineer.
- It shall be the Contractor's responsibility to verify the location of utilities prior to starting construction. Contact J.U.L.I.E., 800-892-0123.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- Concrete Sealer shall be applied to all exposed surfaces of the abutments and piers 3, 6 and 7.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- Up to 1/4" may be ground off the bridge deck and the bridge approach slabs.

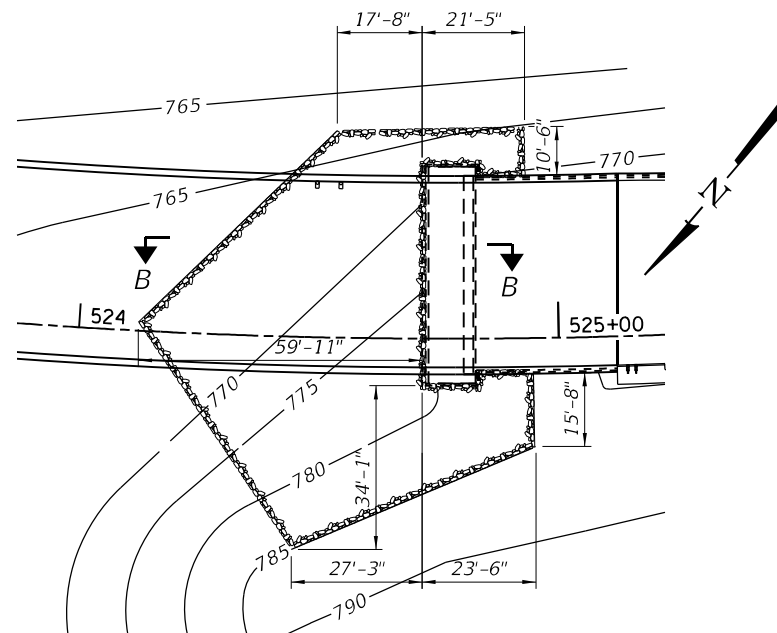
STATION 516+05.45
BUILT BY
STATE OF ILLINOIS
RAMP E F.A.I. RTE. 74
SEC. (10-34-1) HBK
LOADING HL-93
STRUCTURE NO. 010-1001

NAME PLATE
See Std. 515001

FILE NAME = 	USER NAME = Denise Herrera	DESIGNED - LM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL DATA STRUCTURE NO. 010-1001	F.A.I. RTE. 74 & 57	SECTION (10-34-1) HBK	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 647
	PLOT SCALE = NA	DRAWN - GLD	REVISED -			CONTRACT NO. 70B99	SHEET NO. S-5 OF S-106 SHEETS	ILLINOIS FED. AID PROJECT		
PLOT DATE = 05/03/2021	CHECKED - LM	REVISED -								



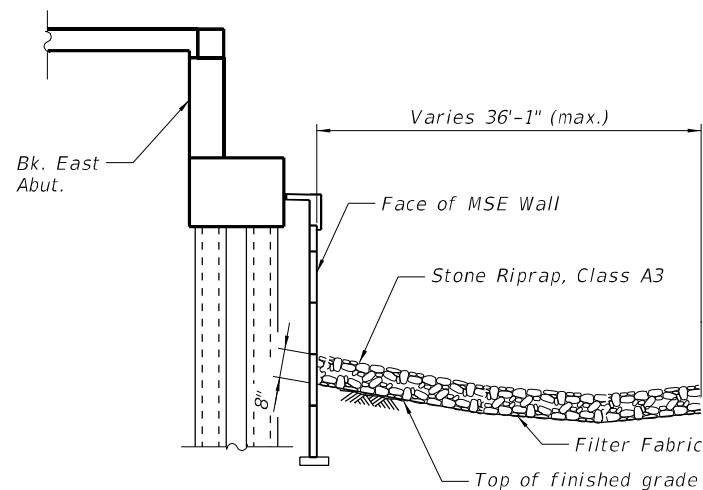
SLOPE PROTECTION AT EAST ABUTMENT



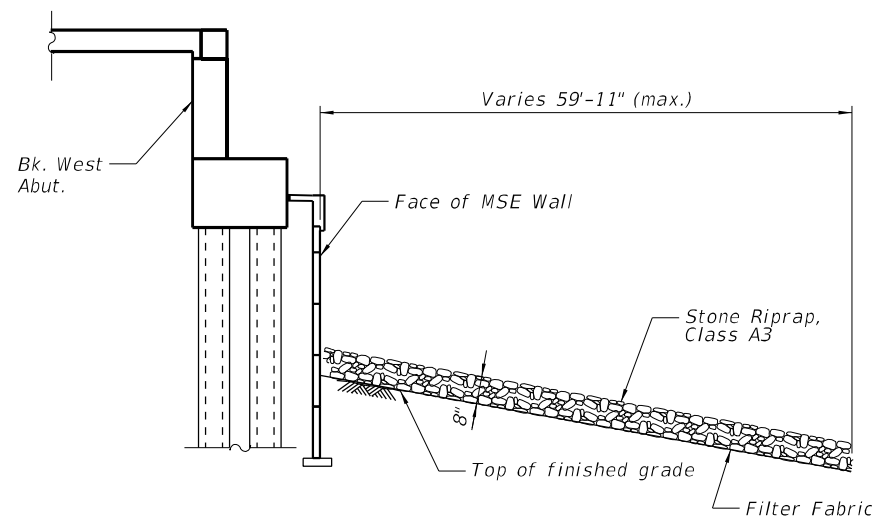
SLOPE PROTECTION AT WEST ABUTMENT

TOTAL BILL OF MATERIAL

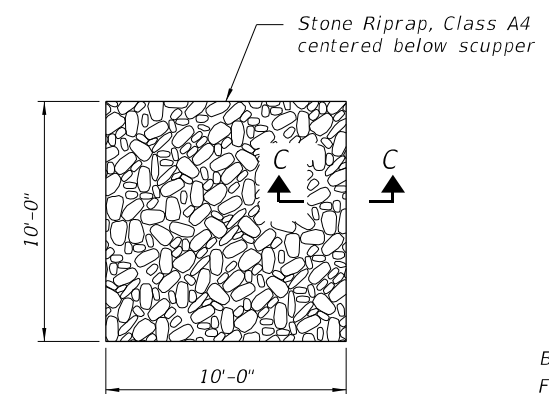
ITEM	UNIT	SUPER	SUB	MSE WALLS	TOTAL (BRIDGE)	GRAND TOTAL
Stone Riprap, Class A3	Sq Yd		662		662	662
Stone Riprap, Class A4	Sq Yd		56		56	56
Filter Fabric	Sq Yd		718		718	718
Structure Excavation	Sq Yd		2,864	26	2,864	2,890
Removal and Disposal of Unsuitable Material for Structures	Cu Yd			1,552	0	1,552
Concrete Structures	Cu Yd		2,442.1		2,442.1	2,442.1
Concrete Superstructure	Cu Yd	2,444.5		377.7	2,444.5	2,822.2
Protective Coat	Sq Yd	9,448		623	9,448	10,071
Concrete Superstructure (Approach Slab)	Cu Yd	116.7			116.7	116.7
Furnishing and Erecting Structural Steel	L Sum	0.6			0.6	0.6
Stud Shear Connectors	Each	25,116			25,116	25,116
Reinforcement Bars, Epoxy Coated	Pound	51,890	436,020	52,400	487,910	540,310
Bar Splicers	Each		82		82	82
Furnishing Metal Shell Piles 14" x 0.25"	Foot		1,859		1,859	1,859
Driving Piles	Foot		17,391		17,391	17,391
Test Pile Metal Shells	Each		9		9	9
Pile Shoes	Each		275		275	275
Name Plates	Each	1			1	1
Anchor Bolts, 3/4"	Each	48			48	48
Anchor Bolts, 1 1/4"	Each	144			144	144
Anchor Bolts, 2 1/2"	Each	24			24	24
Temporary Soil Retention System	Sq Ft		7,410		7,410	7,410
Mechanically Stabilized Earth Retaining Wall	Sq Ft			9,484	0	9,484
Concrete Sealer	Sq Ft		8,825		8,825	8,825
Furnishing Metal Shell Piles 16" x 0.312"	Foot		15,532		15,532	15,532
Rock Fill	Cu Yd			5,370	0	5,370
Bridge Deck Grooving (Longitudinal)	Sq Yd	3,204			3,204	3,204
High Load Multi-Rotational Bearings, Guided Expansion, 300k	Each	12			12	12
High Load Multi-Rotational Bearings, Guided Expansion, 600k	Each	6			6	6
High Load Multi-Rotational Bearings, Guided Expansion, 650k	Each	6			6	6
High Load Multi-Rotational Bearings, Guided Expansion, 700k	Each	6			6	6
High Load Multi-Rotational Bearings, Guided Expansion, 750k	Each	18			18	18
High Load Multi-Rotational Bearings, Fixed - 600k	Each	6			6	6
Reinforcement Bars, Stainless Steel	Pound	651,190			651,190	651,190
Drainage Scuppers, DS-11	Each	9			9	9
Diamond Grinding (Bridge Section)	Sq Yd	6,182			6,182	6,182
Modular Expansion Joint-Swivel 15"	Foot	83			83	83



SECTION A-A



SECTION B-B

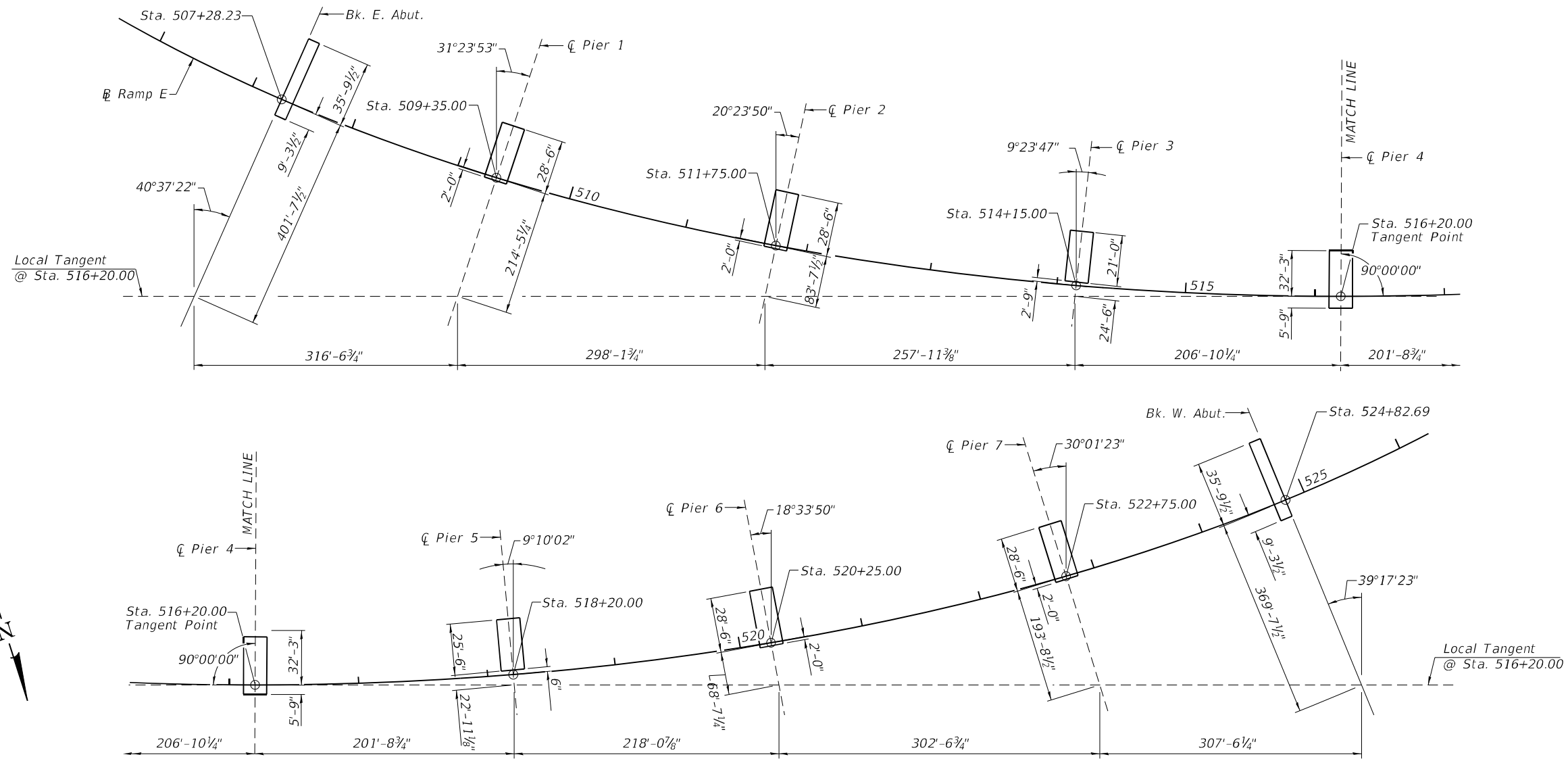


RIPRAP DETAIL BELOW SCUPPERS

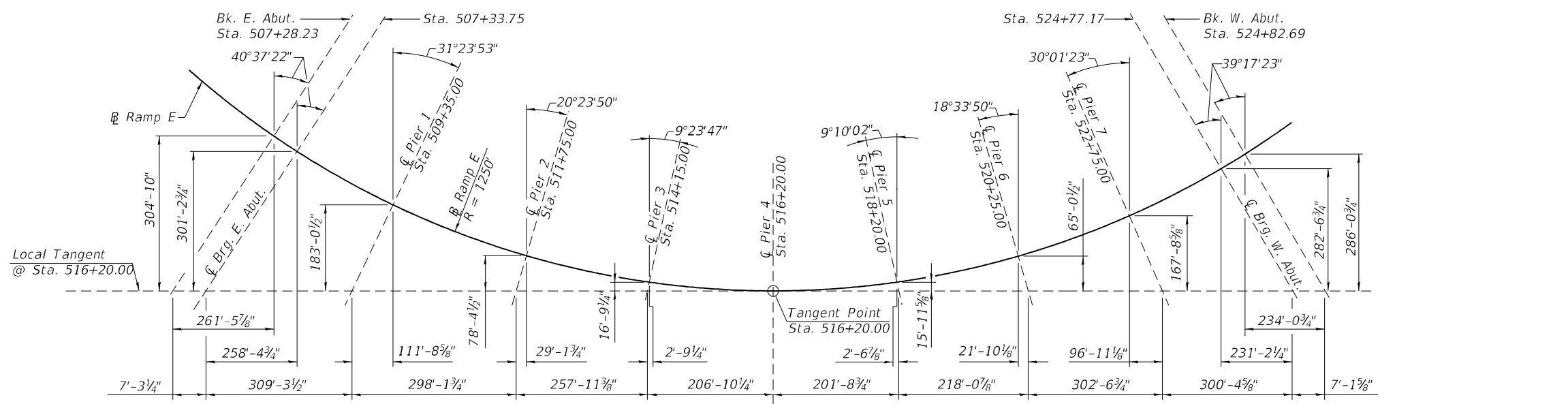
Applies to scuppers at Stations 509+49, 517+99, 511+60, 523+15.50 and 515+99. Does not apply to two scuppers at abutments.

SECTION C-C

Note:
Refer to MSE Wall sheet and grading sheets for "Top of finished grade" slope before placing Riprap Class A3. Riprap placement to follow finished grade slopes.

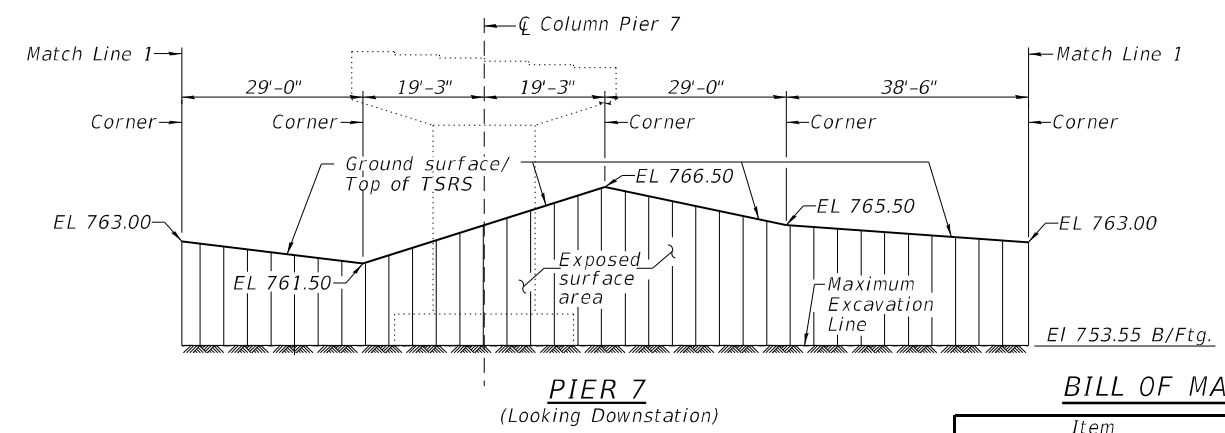
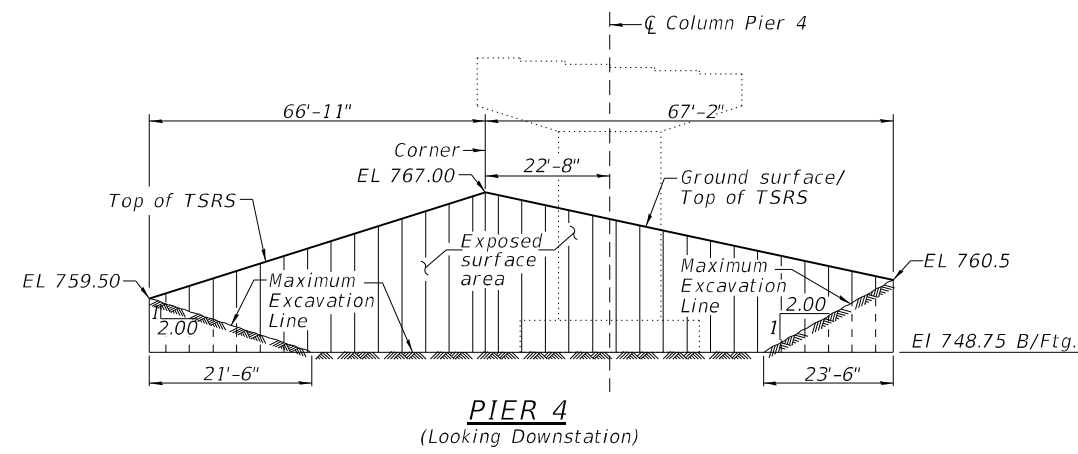
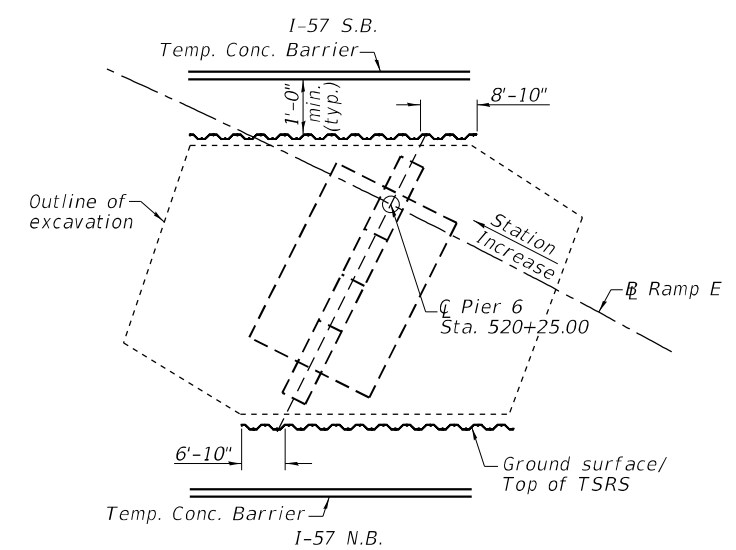
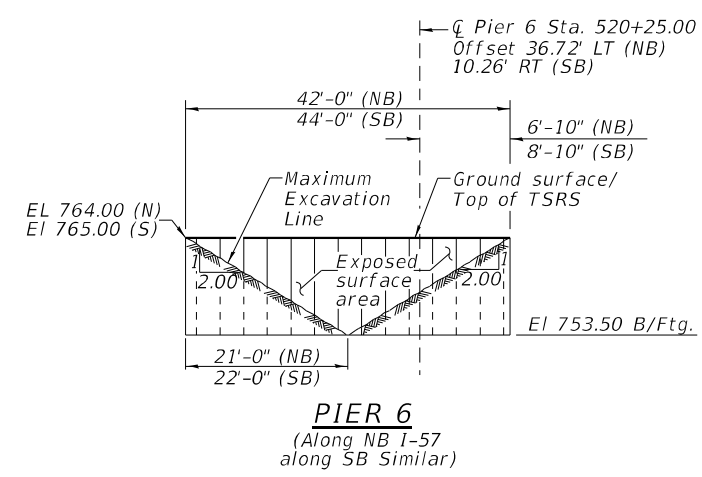
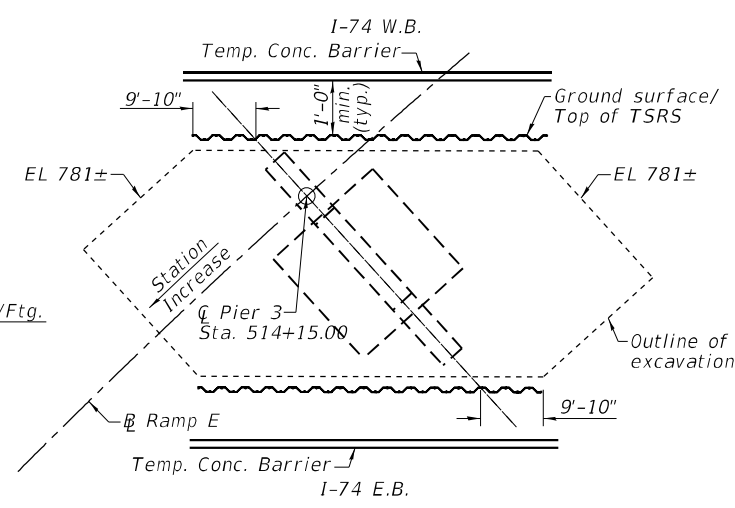
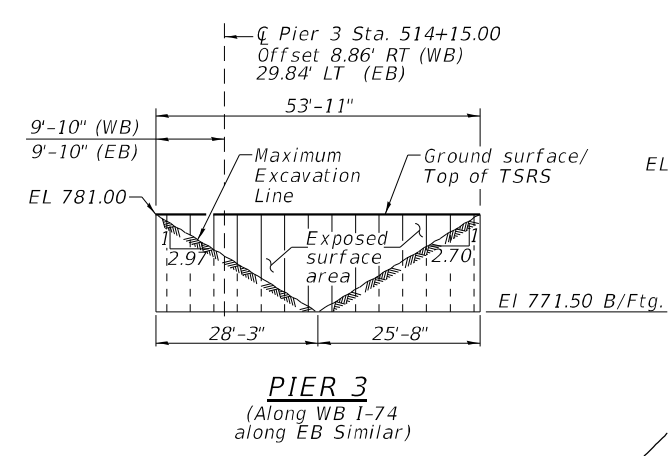
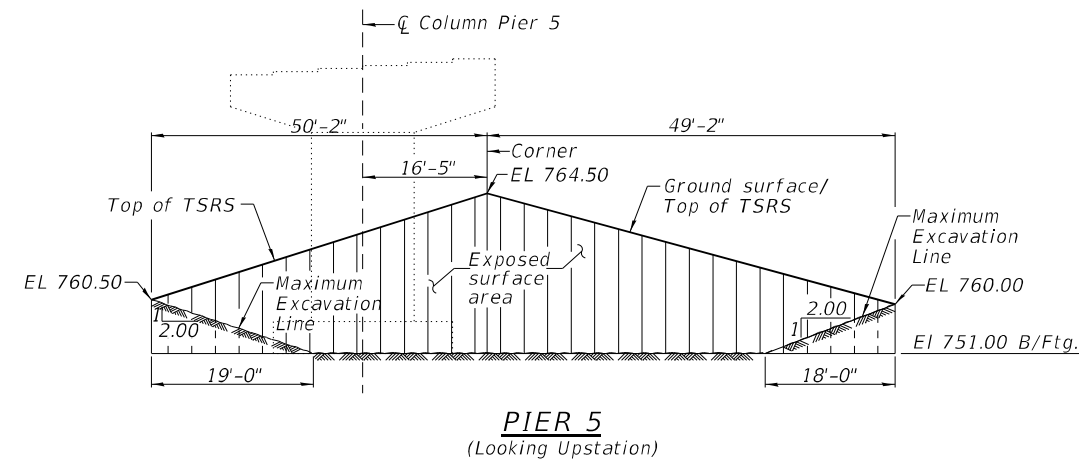
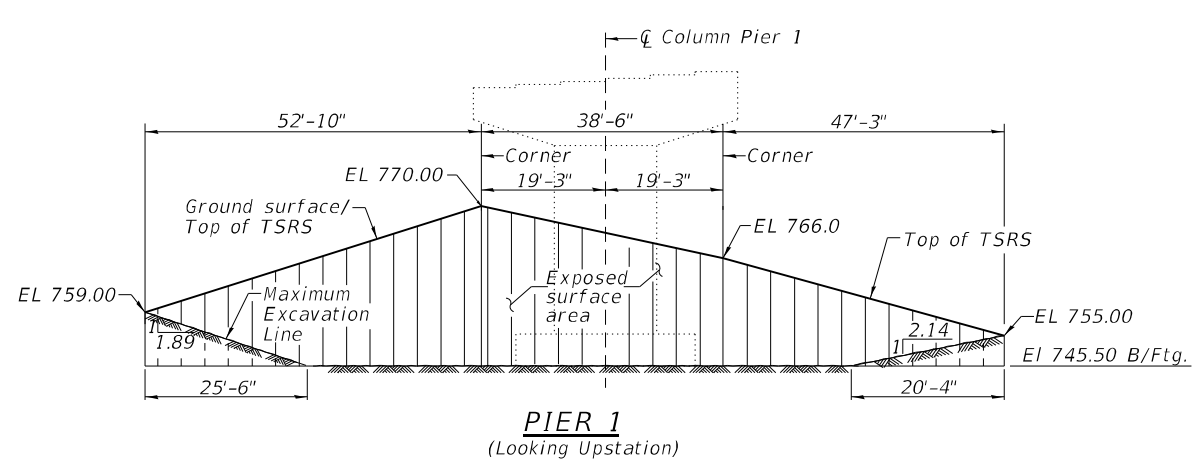


FOOTING LAYOUT



OFFSET SKETCH

FILE NAME = 	USER NAME = Denise Herrera	DESIGNED - LM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OFFSET SKETCH AND FOOTING LAYOUT STRUCTURE NO. 010-1001	F.A.I. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = NA	DRAWN - GLD	REVISED -			74 & 57	(10-34-1) HBK	CHAMPAIGN	1187	649
	PLOT DATE = 05/03/2021	CHECKED - LM	REVISED -			CONTRACT NO. 70B99		ILLINOIS FED. AID PROJECT		

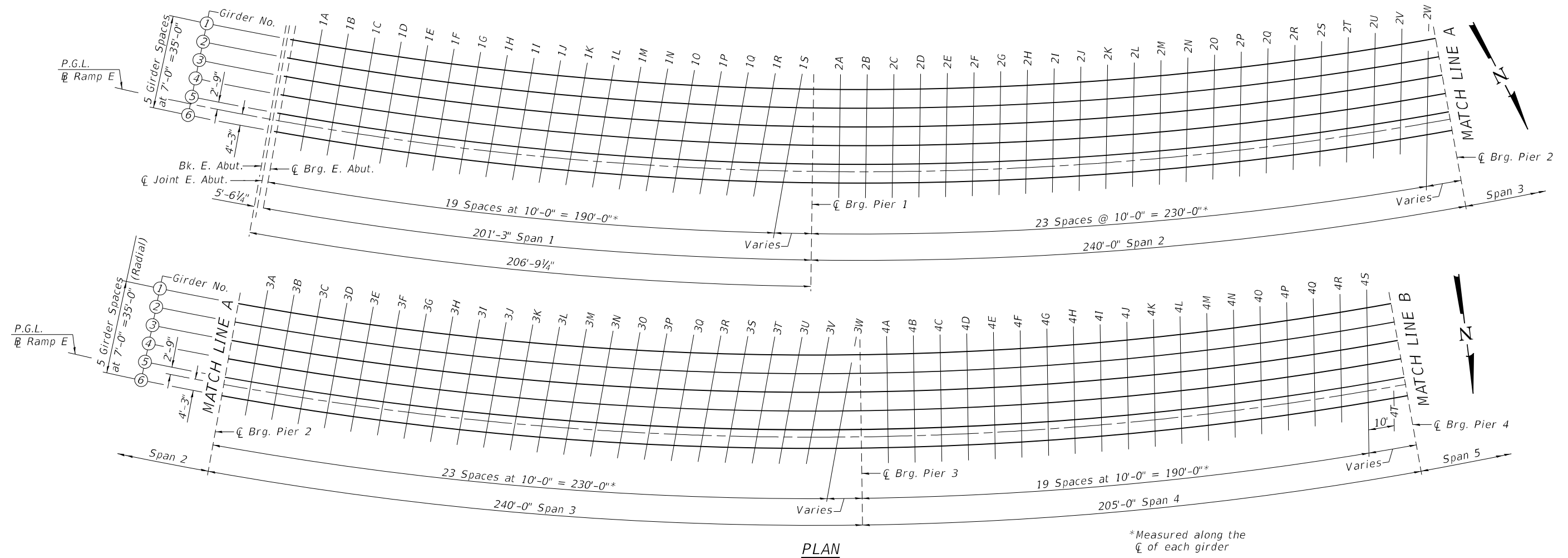


BILL OF MATERIAL

Item	Unit	Total
Temporary Soil Retention System	Sq. Ft.	7,410

NOTE:
A cantilevered sheet piling design does not appear feasible and additional members may be necessary. The contractor shall submit a Temporary Soil Retention System design including plan details and calculations for review and acceptance by the Engineer. The Contractor is responsible for retaining a licensed structural engineer to design and detail Temporary Soil Retention System(s).

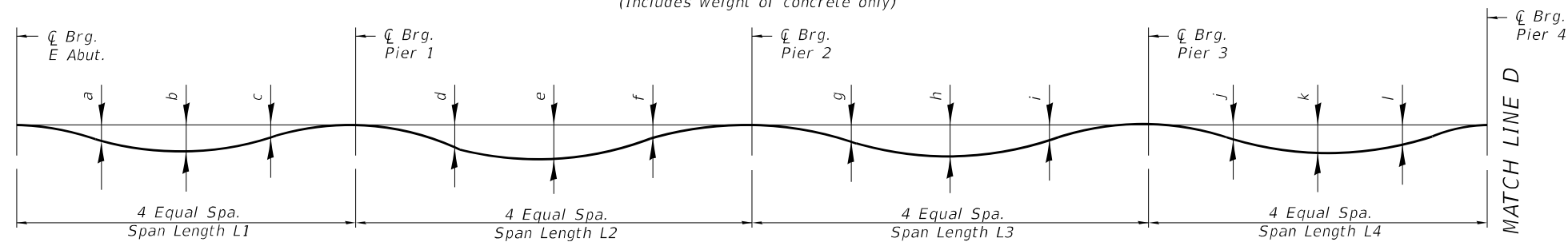
UNFOLDED TEMPORARY SOIL RETENTION SYSTEM ELEVATIONS



*Measured along the ζ of each girder

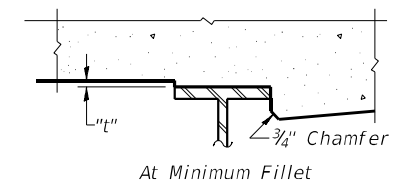
Deflection Girder No.	Span 1				Span 2				Span 3				Span 4			
	L1	a	b	c	L2	d	e	f	L3	g	h	i	L4	j	k	l
1	196'-3 $\frac{7}{8}$ "	2 $\frac{7}{8}$ "	2 $\frac{3}{4}$ "	1 $\frac{1}{4}$ "	234'-1 $\frac{1}{8}$ "	1 $\frac{1}{8}$ "	2 $\frac{1}{8}$ "	1 $\frac{1}{8}$ "	234'-1 $\frac{1}{8}$ "	1 $\frac{3}{8}$ "	2 $\frac{5}{8}$ "	1 $\frac{1}{2}$ "	199'-11 $\frac{1}{2}$ "	0 $\frac{3}{4}$ "	1 $\frac{1}{2}$ "	0 $\frac{7}{8}$ "
2	197'-5 $\frac{1}{8}$ "	2 $\frac{1}{2}$ "	2 $\frac{1}{8}$ "	1 $\frac{3}{8}$ "	235'-5 $\frac{1}{4}$ "	1 $\frac{1}{8}$ "	2 $\frac{1}{8}$ "	1 $\frac{1}{8}$ "	235'-5 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "	2 $\frac{3}{4}$ "	1 $\frac{3}{4}$ "	201'-1 $\frac{1}{4}$ "	0 $\frac{5}{8}$ "	1 $\frac{3}{8}$ "	0 $\frac{1}{8}$ "
3	198'-6 $\frac{3}{8}$ "	2 $\frac{5}{8}$ "	3 $\frac{1}{8}$ "	1 $\frac{1}{2}$ "	236'-9 $\frac{3}{8}$ "	1 $\frac{1}{8}$ "	2 $\frac{1}{8}$ "	1 $\frac{1}{8}$ "	236'-9 $\frac{3}{8}$ "	1 $\frac{5}{8}$ "	3"	1 $\frac{1}{8}$ "	202'-3"	0 $\frac{1}{2}$ "	1 $\frac{3}{8}$ "	0 $\frac{3}{4}$ "
4	199'-8 $\frac{1}{8}$ "	2 $\frac{3}{4}$ "	3 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "	238'-1 $\frac{1}{2}$ "	1 $\frac{1}{8}$ "	2 $\frac{1}{8}$ "	1 $\frac{1}{8}$ "	238'-1 $\frac{1}{2}$ "	1 $\frac{3}{4}$ "	3 $\frac{1}{4}$ "	2"	203'-4 $\frac{3}{4}$ "	0 $\frac{1}{2}$ "	1 $\frac{1}{4}$ "	0 $\frac{3}{4}$ "
5	200'-9 $\frac{3}{8}$ "	2 $\frac{7}{8}$ "	3 $\frac{3}{8}$ "	1 $\frac{5}{8}$ "	239'-5 $\frac{3}{8}$ "	1 $\frac{1}{8}$ "	2 $\frac{1}{4}$ "	1 $\frac{1}{8}$ "	239'-5 $\frac{3}{8}$ "	1 $\frac{1}{8}$ "	3 $\frac{1}{2}$ "	2 $\frac{1}{8}$ "	204'-6 $\frac{5}{8}$ "	0 $\frac{3}{8}$ "	1 $\frac{1}{4}$ "	0 $\frac{3}{4}$ "
6	201'-11 $\frac{1}{4}$ "	3"	3 $\frac{5}{8}$ "	1 $\frac{3}{4}$ "	240'-9 $\frac{3}{4}$ "	1 $\frac{1}{8}$ "	2 $\frac{1}{4}$ "	1 $\frac{1}{8}$ "	240'-9 $\frac{3}{4}$ "	2"	3 $\frac{3}{4}$ "	2 $\frac{1}{4}$ "	205'-8 $\frac{3}{8}$ "	0 $\frac{3}{8}$ "	1 $\frac{1}{4}$ "	0 $\frac{5}{8}$ "

DEAD LOAD DEFLECTION TABLE
(Includes weight of concrete only)

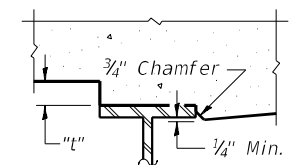


DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections and grinding as shown on S-11 thru S-17 of S-106.



At Minimum Fillet

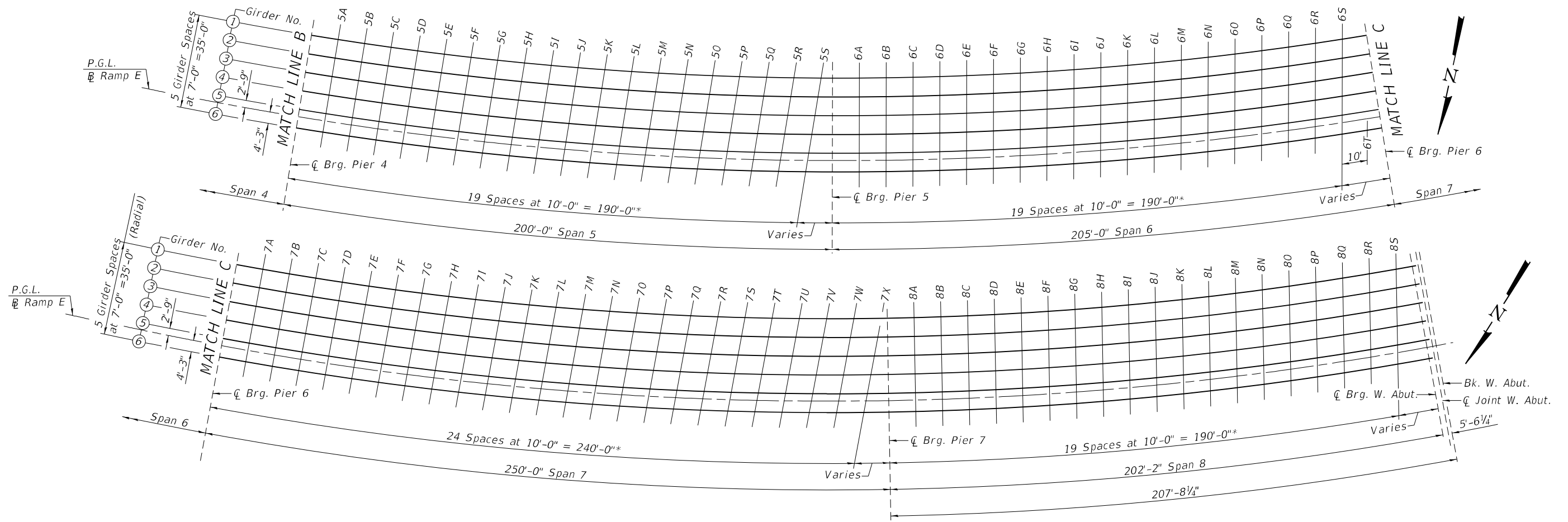


At Maximum Fillet

FILLET HEIGHTS

To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on this sheet. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding" shown on sheets S-11 thru S-17 of S-106, minus 8 $\frac{1}{4}$ " deck thickness, equals the fillet heights "t" above top flange of beams.

The slab is to be ground after curing to achieve smoothness but the slab is not to be ground to elevations below the "Theoretical Grade Elevations" shown on sheets S-11 thru S-17 of S-106. For grinding the deck, see Special Provisions.

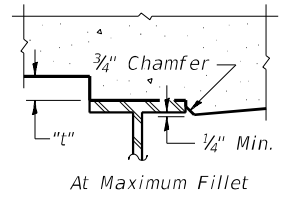
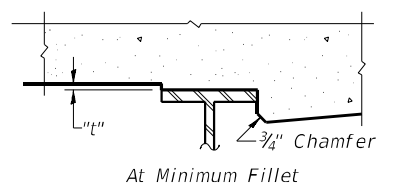


PLAN

*Measured along the ζ of each girder

Deflection Girder No.	Span 5				Span 6				Span 7				Span 8			
	L5	a	b	c	L6	d	e	f	L7	g	h	i	L8	j	k	l
1	195'-1"	1"	1 $\frac{5}{8}$ "	1"	199'-11 $\frac{1}{2}$ "	0 $\frac{7}{8}$ "	1 $\frac{3}{8}$ "	0 $\frac{5}{8}$ "	243'-10 $\frac{1}{4}$ "	1 $\frac{7}{8}$ "	3"	1 $\frac{1}{2}$ "	197'-2 $\frac{3}{8}$ "	1 $\frac{1}{8}$ "	2 $\frac{1}{2}$ "	2 $\frac{1}{4}$ "
2	196'-2 $\frac{3}{8}$ "	1"	1 $\frac{3}{4}$ "	1"	201'-1 $\frac{1}{4}$ "	0 $\frac{3}{4}$ "	1 $\frac{3}{8}$ "	0 $\frac{1}{2}$ "	245'-3"	2"	3 $\frac{1}{8}$ "	1 $\frac{5}{8}$ "	198'-4"	1 $\frac{1}{8}$ "	2 $\frac{5}{8}$ "	2 $\frac{1}{4}$ "
3	197'-3 $\frac{7}{8}$ "	1 $\frac{1}{8}$ "	1 $\frac{7}{8}$ "	1 $\frac{1}{8}$ "	202'-3"	0 $\frac{3}{4}$ "	1 $\frac{1}{4}$ "	0 $\frac{1}{2}$ "	246'-7 $\frac{3}{4}$ "	2 $\frac{1}{8}$ "	3 $\frac{3}{8}$ "	1 $\frac{3}{4}$ "	199'-5 $\frac{1}{2}$ "	1 $\frac{1}{8}$ "	2 $\frac{5}{8}$ "	2 $\frac{1}{4}$ "
4	198'-5 $\frac{1}{4}$ "	1 $\frac{1}{8}$ "	2"	1 $\frac{1}{8}$ "	203'-4 $\frac{3}{4}$ "	0 $\frac{5}{8}$ "	1 $\frac{1}{8}$ "	0 $\frac{3}{8}$ "	248'-0 $\frac{3}{8}$ "	2 $\frac{1}{4}$ "	3 $\frac{3}{8}$ "	1 $\frac{7}{8}$ "	200'-7 $\frac{1}{8}$ "	1 $\frac{1}{8}$ "	2 $\frac{3}{4}$ "	2 $\frac{3}{8}$ "
5	199'-6 $\frac{3}{4}$ "	1 $\frac{1}{4}$ "	2 $\frac{1}{8}$ "	1 $\frac{1}{4}$ "	204'-6 $\frac{5}{8}$ "	0 $\frac{5}{8}$ "	1 $\frac{1}{8}$ "	0 $\frac{3}{8}$ "	249'-5 $\frac{5}{8}$ "	2 $\frac{3}{8}$ "	3 $\frac{3}{4}$ "	2"	201'-8 $\frac{3}{4}$ "	1 $\frac{1}{8}$ "	2 $\frac{3}{4}$ "	2 $\frac{1}{2}$ "
6	200'-8 $\frac{1}{8}$ "	1 $\frac{3}{8}$ "	2 $\frac{1}{4}$ "	1 $\frac{3}{8}$ "	205'-8 $\frac{3}{8}$ "	0 $\frac{1}{2}$ "	1"	0 $\frac{1}{4}$ "	250'-10 $\frac{1}{4}$ "	2 $\frac{5}{8}$ "	4"	2 $\frac{1}{8}$ "	202'-10 $\frac{1}{4}$ "	1 $\frac{1}{8}$ "	2 $\frac{7}{8}$ "	2 $\frac{1}{2}$ "

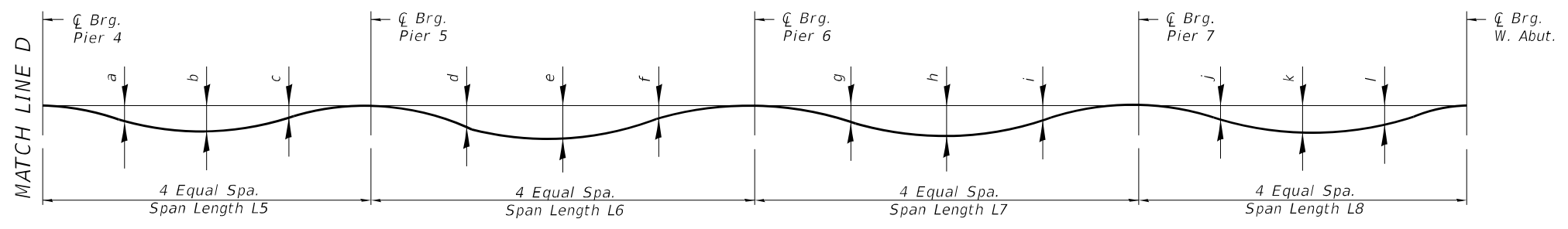
DEAD LOAD DEFLECTION TABLE
(Includes weight of concrete only)



FILLET HEIGHTS

To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on this sheet. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding" shown on sheets S-11 thru S-17 of S-106, minus 8 $\frac{1}{4}$ " deck thickness, equals the fillet heights "t" above top flange of beams.

The slab is to be ground after curing to achieve smoothness but the slab is not to be ground to elevations below the "Theoretical Grade Elevations" shown on sheets S-11 thru S-17 of S-106. For grinding the deck, see Special Provisions.



DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections and grinding as shown on Sheets S-11 thru S-17 of S-106.

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. E. Abut.	507+28.09	-30.75	793.32	793.34
☒ Joint E. Abut.	507+31.69	-30.75	793.45	793.48
☒ Brg. E. Abut.	507+33.75	-30.75	793.53	793.55
1 A	507+44.00	-30.75	793.90	793.97
1 B	507+54.25	-30.75	794.28	794.39
1 C	507+64.51	-30.75	794.65	794.80
1 D	507+74.76	-30.75	795.03	795.22
1 E	507+85.01	-30.75	795.40	795.62
1 F	507+95.26	-30.75	795.78	796.02
1 G	508+05.52	-30.75	796.15	796.40
1 H	508+15.77	-30.75	796.52	796.78
1 I	508+26.02	-30.75	796.90	797.15
1 J	508+36.27	-30.75	797.27	797.52
1 K	508+46.52	-30.75	797.65	797.87
1 L	508+56.78	-30.75	798.02	798.23
1 M	508+67.03	-30.75	798.39	798.57
1 N	508+77.28	-30.75	798.77	798.92
1 O	508+87.53	-30.75	799.14	799.26
1 P	508+97.79	-30.75	799.52	799.61
1 Q	509+08.04	-30.75	799.89	799.95
1 R	509+18.29	-30.75	800.27	800.31
1 S	509+28.54	-30.75	800.64	800.67
☒ Brg. Pier 1	509+35.00	-30.75	800.88	800.90
2 A	509+45.25	-30.75	801.25	801.28
2 B	509+55.50	-30.75	801.61	801.65
2 C	509+65.76	-30.75	801.97	802.03
2 D	509+76.01	-30.75	802.33	802.40
2 E	509+86.26	-30.75	802.67	802.77
2 F	509+96.51	-30.75	803.02	803.13
2 G	510+06.77	-30.75	803.35	803.49
2 H	510+17.02	-30.75	803.68	803.84
2 I	510+27.27	-30.75	804.00	804.18
2 J	510+37.52	-30.75	804.32	804.50
2 K	510+47.77	-30.75	804.63	804.82
2 L	510+58.03	-30.75	804.93	805.12
2 M	510+68.28	-30.75	805.23	805.41
2 N	510+78.53	-30.75	805.52	805.70
2 O	510+88.78	-30.75	805.80	805.97
2 P	510+99.04	-30.75	806.08	806.23
2 Q	511+09.29	-30.75	806.35	806.48
2 R	511+19.54	-30.75	806.62	806.72
2 S	511+29.79	-30.75	806.87	806.96
2 T	511+40.04	-30.75	807.13	807.19
2 U	511+50.30	-30.75	807.37	807.41
2 V	511+60.55	-30.75	807.61	807.64
☒ Brg. Pier 2	511+75.00	-30.75	807.94	807.96
3 A	511+85.25	-30.75	808.17	808.20
3 B	511+95.50	-30.75	808.38	808.43
3 C	512+05.76	-30.75	808.60	808.66
3 D	512+16.01	-30.75	808.80	808.89
3 E	512+26.26	-30.75	809.00	809.12
3 F	512+36.51	-30.75	809.19	809.34
3 G	512+46.77	-30.75	809.38	809.55
3 H	512+57.02	-30.75	809.56	809.75
3 I	512+67.27	-30.75	809.74	809.95
3 J	512+77.52	-30.75	809.90	810.13
3 K	512+87.77	-30.75	810.07	810.30
3 L	512+98.03	-30.75	810.22	810.45
3 M	513+08.28	-30.75	810.37	810.60
3 N	513+18.53	-30.75	810.51	810.73
3 O	513+28.78	-30.75	810.65	810.85

GIRDER 1 (CONT.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
3 P	513+39.04	-30.75	810.78	810.97
3 Q	513+49.29	-30.75	810.90	811.07
3 R	513+59.54	-30.75	811.02	811.16
3 S	513+69.79	-30.75	811.13	811.24
3 T	513+80.04	-30.75	811.24	811.32
3 U	513+90.30	-30.75	811.33	811.39
3 V	514+00.55	-30.75	811.43	811.47
☒ Brg. Pier 3	514+15.00	-30.75	811.55	811.57
4 A	514+25.25	-30.75	811.62	811.65
4 B	514+35.50	-30.75	811.69	811.72
4 C	514+45.76	-30.75	811.76	811.80
4 D	514+56.01	-30.75	811.81	811.87
4 E	514+66.26	-30.75	811.87	811.95
4 F	514+76.51	-30.75	811.91	812.01
4 G	514+86.77	-30.75	811.95	812.07
4 H	514+97.02	-30.75	811.98	812.11
4 I	515+07.27	-30.75	812.01	812.15
4 J	515+17.52	-30.75	812.03	812.18
4 K	515+27.77	-30.75	812.04	812.19
4 L	515+38.03	-30.75	812.05	812.19
4 M	515+48.28	-30.75	812.05	812.18
4 N	515+58.53	-30.75	812.05	812.16
4 O	515+68.78	-30.75	812.04	812.13
4 P	515+79.04	-30.75	812.02	812.09
4 Q	515+89.29	-30.75	811.99	812.05
4 R	515+99.54	-30.75	811.96	812.00
4 S	516+09.79	-30.75	811.93	811.96
☒ Brg. Pier 4	516+20.00	-30.75	811.88	811.90
5 A	516+30.25	-30.75	811.83	811.86
5 B	516+40.50	-30.75	811.78	811.82
5 C	516+50.76	-30.75	811.72	811.78
5 D	516+61.01	-30.75	811.65	811.73
5 E	516+71.26	-30.75	811.57	811.67
5 F	516+81.51	-30.75	811.49	811.61
5 G	516+91.77	-30.75	811.40	811.54
5 H	517+02.02	-30.75	811.31	811.46
5 I	517+12.27	-30.75	811.21	811.37
5 J	517+22.52	-30.75	811.11	811.26
5 K	517+32.77	-30.75	810.99	811.15
5 L	517+43.03	-30.75	810.87	811.02
5 M	517+53.28	-30.75	810.75	810.88
5 N	517+63.53	-30.75	810.62	810.73
5 O	517+73.78	-30.75	810.48	810.57
5 P	517+84.04	-30.75	810.34	810.41
5 Q	517+94.29	-30.75	810.18	810.24
5 R	518+04.54	-30.75	810.03	810.06
5 S	518+14.79	-30.75	809.86	809.89
☒ Brg. Pier 5	518+20.00	-30.75	809.78	809.80
6 A	518+30.25	-30.75	809.61	809.64
6 B	518+40.50	-30.75	809.43	809.46
6 C	518+50.76	-30.75	809.24	809.30
6 D	518+61.01	-30.75	809.05	809.12
6 E	518+71.26	-30.75	808.85	808.94
6 F	518+81.51	-30.75	808.65	808.76
6 G	518+91.77	-30.75	808.44	808.56
6 H	519+02.02	-30.75	808.22	808.36
6 I	519+12.27	-30.75	808.00	808.14
6 J	519+22.52	-30.75	807.77	807.91
6 K	519+32.77	-30.75	807.53	807.67
6 L	519+43.03	-30.75	807.29	807.42

GIRDER 1 (CONT.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
6 M	519+53.28	-30.75	807.04	807.15
6 N	519+63.53	-30.75	806.79	806.88
6 O	519+73.78	-30.75	806.53	806.60
6 P	519+84.04	-30.75	806.26	806.31
6 Q	519+94.29	-30.75	805.99	806.02
6 R	520+04.54	-30.75	805.71	805.73
6 S	520+14.79	-30.75	805.42	805.44
☒ Brg. Pier 6	520+25.00	-30.75	805.13	805.15
7 A	520+35.25	-30.75	804.83	804.87
7 B	520+45.50	-30.75	804.52	804.58
7 C	520+55.76	-30.75	804.21	804.30
7 D	520+66.01	-30.75	803.90	804.01
7 E	520+76.26	-30.75	803.57	803.71
7 F	520+86.51	-30.75	803.24	803.41
7 G	520+96.77	-30.75	802.90	803.10
7 H	521+07.02	-30.75	802.56	802.78
7 I	521+17.27	-30.75	802.21	802.45
7 J	521+27.52	-30.75	801.86	802.11
7 K	521+37.77	-30.75	801.49	801.75
7 L	521+48.03	-30.75	801.13	801.40
7 M	521+58.28	-30.75	800.77	801.03
7 N	521+68.53	-30.75	800.41	800.66
7 O	521+78.78	-30.75	800.05	800.28
7 P	521+89.04	-30.75	799.68	799.89
7 Q	521+99.29	-30.75	799.32	799.51
7 R	522+09.54	-30.75	798.96	799.12
7 S	522+19.79	-30.75	798.60	798.73
7 T	522+30.04	-30.75	798.24	798.34
7 U	522+40.30	-30.75	797.88	797.95
7 V	522+50.55	-30.75	797.51	797.56
7 W	522+60.80	-30.75	797.15	797.19
☒ Brg. Pier 7	522+75.00	-30.75	796.65	796.67
8 A	522+85.25	-30.75	796.29	796.32
8 B	522+95.50	-30.75	795.93	795.96
8 C	523+05.76	-30.75	795.56	795.63
8 D	523+16.01	-30.75	795.20	795.29
8 E	523+26.26	-30.75	794.84	794.95
8 F	523+36.51	-30.75	794.48	794.62
8 G	523+46.77	-30.75	794.12	794.29
8 H	523+57.02	-30.75	793.75	793.95
8 I	523+67.27	-30.75	793.39	793.61
8 J	523+77.52	-30.75	793.03	793.26
8 K	523+87.77	-30.75	792.67	792.91
8 L	523+98.03	-30.75	792.31	792.55
8 M	524+08.28	-30.75	791.94	792.18
8 N	524+18.53	-30.75	791.58	791.81
8 O	524+28.78	-30.75	791.22	791.42
8 P	524+39.04	-30.75	790.86	791.03
8 Q	524+49.29	-30.75	790.50	790.63
8 R	524+59.54	-30.75	790.13	790.23
8 S	524+69.79	-30.75	789.77	789.83
☒ Brg. W. Abut.	524+77.17	-30.75	789.51	789.53
☒ Joint W. Abut.	524+79.23	-30.75	789.44	789.46
Bk. W. Abut.	524+82.83	-30.75	789.31	789.33

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. E. Abut.	507+28.12	-23.75	793.86	793.88
☒ Joint E. Abut.	507+31.70	-23.75	793.99	794.01
☒ Brg. E. Abut.	507+33.75	-23.75	794.06	794.08
1 A	507+43.94	-23.75	794.43	794.50
1 B	507+54.14	-23.75	794.81	794.92
1 C	507+64.33	-23.75	795.18	795.34
1 D	507+74.52	-23.75	795.55	795.75
1 E	507+84.72	-23.75	795.92	796.15
1 F	507+94.91	-23.75	796.29	796.55
1 G	508+05.11	-23.75	796.67	796.93
1 H	508+15.30	-23.75	797.04	797.31
1 I	508+25.49	-23.75	797.41	797.68
1 J	508+35.69	-23.75	797.78	798.04
1 K	508+45.88	-23.75	798.15	798.40
1 L	508+56.07	-23.75	798.53	798.75
1 M	508+66.27	-23.75	798.90	799.09
1 N	508+76.46	-23.75	799.27	799.43
1 O	508+86.66	-23.75	799.64	799.77
1 P	508+96.85	-23.75	800.01	800.11
1 Q	509+07.04	-23.75	800.39	800.46
1 R	509+17.24	-23.75	800.76	800.80
1 S	509+27.43	-23.75	801.13	801.16
☒ Brg. Pier 1	509+35.00	-23.75	801.41	801.43
2 A	509+45.19	-23.75	801.78	801.81
2 B	509+55.39	-23.75	802.14	802.18
2 C	509+65.58	-23.75	802.50	802.55
2 D	509+75.77	-23.75	802.85	802.92
2 E	509+85.97	-23.75	803.20	803.29
2 F	509+96.16	-23.75	803.54	803.65
2 G	510+06.36	-23.75	803.87	804.01
2 H	510+16.55	-23.75	804.20	804.35
2 I	510+26.74	-23.75	804.52	804.69
2 J	510+36.94	-23.75	804.83	805.02
2 K	510+47.13	-23.75	805.14	805.33
2 L	510+57.32	-23.75	805.44	805.64
2 M	510+67.52	-23.75	805.74	805.93
2 N	510+77.71	-23.75	806.03	806.21
2 O	510+87.91	-23.75	806.31	806.48
2 P	510+98.10	-23.75	806.59	806.74
2 Q	511+08.29	-23.75	806.86	806.99
2 R	511+18.49	-23.75	807.12	807.23
2 S	511+28.68	-23.75	807.38	807.46
2 T	511+38.87	-23.75	807.63	807.69
2 U	511+49.07	-23.75	807.88	807.92
2 V	511+59.26	-23.75	808.12	808.15
2 W	511+69.45	-23.75	808.35	808.37
☒ Brg. Pier 2	511+75.00	-23.75	808.47	808.49
3 A	511+85.19	-23.75	808.70	808.73
3 B	511+95.39	-23.75	808.91	808.96
3 C	512+05.58	-23.75	809.12	809.20
3 D	512+15.77	-23.75	809.33	809.43
3 E	512+25.97	-23.75	809.53	809.65
3 F	512+36.16	-23.75	809.72	809.87
3 G	512+46.36	-23.75	809.91	810.09
3 H	512+56.55	-23.75	810.09	810.29
3 I	512+66.74	-23.75	810.26	810.48
3 J	512+76.94	-23.75	810.43	810.66
3 K	512+87.13	-23.75	810.59	810.83
3 L	512+97.32	-23.75	810.74	810.99
3 M	513+07.52	-23.75	810.89	811.14
3 N	513+17.71	-23.75	811.03	811.27

GIRDER 2 (CONT.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
3 O	513+27.91	-23.75	811.17	811.39
3 P	513+38.10	-23.75	811.30	811.50
3 Q	513+48.29	-23.75	811.42	811.60
3 R	513+58.49	-23.75	811.54	811.69
3 S	513+68.68	-23.75	811.65	811.78
3 T	513+78.87	-23.75	811.76	811.85
3 U	513+89.07	-23.75	811.85	811.92
3 V	513+99.26	-23.75	811.95	811.99
3 W	514+09.45	-23.75	812.03	812.06
☒ Brg. Pier 3	514+15.00	-23.75	812.08	812.10
4 A	514+25.19	-23.75	812.15	812.18
4 B	514+35.39	-23.75	812.22	812.25
4 C	514+45.58	-23.75	812.29	812.33
4 D	514+55.77	-23.75	812.35	812.40
4 E	514+65.97	-23.75	812.40	812.47
4 F	514+76.16	-23.75	812.44	812.53
4 G	514+86.36	-23.75	812.48	812.59
4 H	514+96.55	-23.75	812.51	812.64
4 I	515+06.74	-23.75	812.54	812.67
4 J	515+16.94	-23.75	812.56	812.70
4 K	515+27.13	-23.75	812.57	812.71
4 L	515+37.32	-23.75	812.58	812.72
4 M	515+47.52	-23.75	812.58	812.71
4 N	515+57.71	-23.75	812.58	812.69
4 O	515+67.91	-23.75	812.57	812.66
4 P	515+78.10	-23.75	812.55	812.62
4 Q	515+88.29	-23.75	812.53	812.58
4 R	515+98.49	-23.75	812.50	812.53
4 S	516+08.68	-23.75	812.46	812.49
☒ Brg. Pier 4	516+20.00	-23.75	812.42	812.44
5 A	516+30.19	-23.75	812.37	812.40
5 B	516+40.39	-23.75	812.31	812.35
5 C	516+50.58	-23.75	812.25	812.31
5 D	516+60.77	-23.75	812.18	812.27
5 E	516+70.97	-23.75	812.11	812.21
5 F	516+81.16	-23.75	812.03	812.16
5 G	516+91.36	-23.75	811.94	812.08
5 H	517+01.55	-23.75	811.85	812.01
5 I	517+11.74	-23.75	811.75	811.91
5 J	517+21.94	-23.75	811.64	811.81
5 K	517+32.13	-23.75	811.53	811.69
5 L	517+42.32	-23.75	811.41	811.57
5 M	517+52.52	-23.75	811.29	811.43
5 N	517+62.71	-23.75	811.16	811.28
5 O	517+72.91	-23.75	811.02	811.12
5 P	517+83.10	-23.75	810.88	810.96
5 Q	517+93.29	-23.75	810.73	810.79
5 R	518+03.49	-23.75	810.58	810.61
5 S	518+13.68	-23.75	810.41	810.44
☒ Brg. Pier 5	518+20.00	-23.75	810.31	810.33
6 A	518+30.19	-23.75	810.14	810.17
6 B	518+40.39	-23.75	809.96	810.00
6 C	518+50.58	-23.75	809.78	809.83
6 D	518+60.77	-23.75	809.59	809.65
6 E	518+70.97	-23.75	809.39	809.48
6 F	518+81.16	-23.75	809.19	809.29
6 G	518+91.36	-23.75	808.98	809.09
6 H	519+01.55	-23.75	808.76	808.89
6 I	519+11.74	-23.75	808.54	808.67
6 J	519+21.94	-23.75	808.31	808.45

GIRDER 2 (CONT.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
6 K	519+32.13	-23.75	808.08	808.21
6 L	519+42.32	-23.75	807.84	807.96
6 M	519+52.52	-23.75	807.59	807.70
6 N	519+62.71	-23.75	807.34	807.43
6 O	519+72.91	-23.75	807.08	807.15
6 P	519+83.10	-23.75	806.82	806.87
6 Q	519+93.29	-23.75	806.55	806.58
6 R	520+03.49	-23.75	806.27	806.29
6 S	520+13.68	-23.75	805.98	806.00
☒ Brg. Pier 6	520+25.00	-23.75	805.66	805.68
7 A	520+35.19	-23.75	805.36	805.41
7 B	520+45.39	-23.75	805.06	805.12
7 C	520+55.58	-23.75	804.75	804.84
7 D	520+65.77	-23.75	804.43	804.55
7 E	520+75.97	-23.75	804.11	804.26
7 F	520+86.16	-23.75	803.78	803.97
7 G	520+96.36	-23.75	803.45	803.66
7 H	521+06.55	-23.75	803.11	803.34
7 I	521+16.74	-23.75	802.76	803.02
7 J	521+26.94	-23.75	802.41	802.68
7 K	521+37.13	-23.75	802.05	802.33
7 L	521+47.32	-23.75	801.69	801.97
7 M	521+57.52	-23.75	801.33	801.60
7 N	521+67.71	-23.75	800.97	801.23
7 O	521+77.91	-23.75	800.61	800.86
7 P	521+88.10	-23.75	800.25	800.48
7 Q	521+98.29	-23.75	799.89	800.09
7 R	522+08.49	-23.75	799.53	799.70
7 S	522+18.68	-23.75	799.17	799.31
7 T	522+28.87	-23.75	798.81	798.92
7 U	522+39.07	-23.75	798.45	798.53
7 V	522+49.26	-23.75	798.09	798.14
7 W	522+59.45	-23.75	797.73	797.77
7 X	522+69.65	-23.75	797.37	797.40
☒ Brg. Pier 7	522+75.00	-23.75	797.18	797.20
8 A	522+85.19	-23.75	796.82	796.85
8 B	522+95.39	-23.75	796.46	796.50
8 C	523+05.58	-23.75	796.10	796.16
8 D	523+15.77	-23.75	795.74	795.83
8 E	523+25.97	-23.75	795.38	795.50
8 F	523+36.16	-23.75	795.02	795.17
8 G	523+46.36	-23.75	794.66	794.83
8 H	523+56.55	-23.75	794.30	794.50
8 I	523+66.74	-23.75	793.94	794.16
8 J	523+76.94	-23.75	793.58	793.82
8 K	523+87.13	-23.75	793.22	793.47
8 L	523+97.32	-23.75	792.86	793.11
8 M	524+07.52	-23.75	792.50	792.74
8 N	524+17.71	-23.75	792.14	792.37
8 O	524+27.91	-23.75	791.78	791.99
8 P	524+38.10	-23.75	791.42	791.60
8 Q	524+48.29	-23.75	791.06	791.21
8 R	524+58.49	-23.75	790.70	790.81
8 S	524+68.68	-23.75	790.34	790.40
☒ Brg. W. Abut.	524+77.17	-23.75	790.04	790.07
☒ Joint W. Abut.	524+79.22	-23.75	789.97	789.99
Bk. W. Abut.	524+82.80	-23.75	789.85	789.87

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. E. Abut.	507+28.15	-16.75	794.39	794.41
☉ Joint E. Abut.	507+31.71	-16.75	794.52	794.54
☉ Brg. E. Abut.	507+33.75	-16.75	794.59	794.61
1 A	507+43.89	-16.75	794.96	795.04
1 B	507+54.02	-16.75	795.33	795.46
1 C	507+64.16	-16.75	795.70	795.87
1 D	507+74.29	-16.75	796.07	796.28
1 E	507+84.43	-16.75	796.44	796.68
1 F	507+94.56	-16.75	796.81	797.08
1 G	508+04.70	-16.75	797.18	797.46
1 H	508+14.84	-16.75	797.55	797.84
1 I	508+24.97	-16.75	797.92	798.21
1 J	508+35.11	-16.75	798.29	798.57
1 K	508+45.24	-16.75	798.66	798.92
1 L	508+55.38	-16.75	799.03	799.27
1 M	508+65.52	-16.75	799.40	799.61
1 N	508+75.65	-16.75	799.77	799.95
1 O	508+85.79	-16.75	800.14	800.28
1 P	508+95.92	-16.75	800.51	800.62
1 Q	509+06.06	-16.75	800.88	800.96
1 R	509+16.19	-16.75	801.25	801.30
1 S	509+26.33	-16.75	801.62	801.66
☉ Brg. Pier 1	509+35.00	-16.75	801.94	801.96
2 A	509+45.14	-16.75	802.31	802.34
2 B	509+55.27	-16.75	802.67	802.70
2 C	509+65.41	-16.75	803.03	803.08
2 D	509+75.54	-16.75	803.38	803.45
2 E	509+85.68	-16.75	803.72	803.81
2 F	509+95.81	-16.75	804.06	804.17
2 G	510+05.95	-16.75	804.39	804.53
2 H	510+16.09	-16.75	804.71	804.87
2 I	510+26.22	-16.75	805.03	805.21
2 J	510+36.36	-16.75	805.35	805.53
2 K	510+46.49	-16.75	805.65	805.85
2 L	510+56.63	-16.75	805.95	806.15
2 M	510+66.77	-16.75	806.25	806.44
2 N	510+76.90	-16.75	806.53	806.72
2 O	510+87.04	-16.75	806.82	806.99
2 P	510+97.17	-16.75	807.09	807.24
2 Q	511+07.31	-16.75	807.36	807.49
2 R	511+17.44	-16.75	807.63	807.73
2 S	511+27.58	-16.75	807.88	807.97
2 T	511+37.72	-16.75	808.13	808.20
2 U	511+47.85	-16.75	808.38	808.42
2 V	511+57.99	-16.75	808.62	808.65
2 W	511+68.12	-16.75	808.85	808.88
☉ Brg. Pier 2	511+75.00	-16.75	809.00	809.03
3 A	511+85.14	-16.75	809.23	809.26
3 B	511+95.27	-16.75	809.44	809.49
3 C	512+05.41	-16.75	809.65	809.73
3 D	512+15.54	-16.75	809.86	809.96
3 E	512+25.68	-16.75	810.05	810.19
3 F	512+35.81	-16.75	810.25	810.41
3 G	512+45.95	-16.75	810.43	810.62
3 H	512+56.09	-16.75	810.61	810.83
3 I	512+66.22	-16.75	810.78	811.02
3 J	512+76.36	-16.75	810.95	811.20
3 K	512+86.49	-16.75	811.11	811.37
3 L	512+96.63	-16.75	811.26	811.53
3 M	513+06.77	-16.75	811.41	811.68
3 N	513+16.90	-16.75	811.55	811.81

GIRDER 3 (CONT.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
3 O	513+27.04	-16.75	811.69	811.93
3 P	513+37.17	-16.75	811.82	812.04
3 Q	513+47.31	-16.75	811.94	812.14
3 R	513+57.44	-16.75	812.06	812.23
3 S	513+67.58	-16.75	812.17	812.31
3 T	513+77.72	-16.75	812.28	812.38
3 U	513+87.85	-16.75	812.38	812.45
3 V	513+97.99	-16.75	812.47	812.52
3 W	514+08.12	-16.75	812.55	812.59
☉ Brg. Pier 3	514+15.00	-16.75	812.61	812.63
4 A	514+25.14	-16.75	812.69	812.71
4 B	514+35.27	-16.75	812.76	812.78
4 C	514+45.41	-16.75	812.82	812.85
4 D	514+55.54	-16.75	812.88	812.92
4 E	514+65.68	-16.75	812.93	812.99
4 F	514+75.81	-16.75	812.97	813.06
4 G	514+85.95	-16.75	813.01	813.11
4 H	514+96.09	-16.75	813.04	813.16
4 I	515+06.22	-16.75	813.07	813.20
4 J	515+16.36	-16.75	813.09	813.23
4 K	515+26.49	-16.75	813.11	813.24
4 L	515+36.63	-16.75	813.11	813.24
4 M	515+46.77	-16.75	813.12	813.23
4 N	515+56.90	-16.75	813.11	813.22
4 O	515+67.04	-16.75	813.10	813.19
4 P	515+77.17	-16.75	813.09	813.16
4 Q	515+87.31	-16.75	813.06	813.12
4 R	515+97.44	-16.75	813.03	813.07
4 S	516+07.58	-16.75	813.00	813.03
☉ Brg. Pier 4	516+20.00	-16.75	812.95	812.97
5 A	516+30.14	-16.75	812.90	812.93
5 B	516+40.27	-16.75	812.84	812.89
5 C	516+50.41	-16.75	812.78	812.85
5 D	516+60.54	-16.75	812.72	812.80
5 E	516+70.68	-16.75	812.64	812.75
5 F	516+80.81	-16.75	812.56	812.70
5 G	516+90.95	-16.75	812.48	812.63
5 H	517+01.09	-16.75	812.38	812.55
5 I	517+11.22	-16.75	812.29	812.46
5 J	517+21.36	-16.75	812.18	812.36
5 K	517+31.49	-16.75	812.07	812.24
5 L	517+41.63	-16.75	811.95	812.12
5 M	517+51.77	-16.75	811.83	811.98
5 N	517+61.90	-16.75	811.70	811.83
5 O	517+72.04	-16.75	811.57	811.67
5 P	517+82.17	-16.75	811.43	811.51
5 Q	517+92.31	-16.75	811.28	811.34
5 R	518+02.44	-16.75	811.12	811.17
5 S	518+12.58	-16.75	810.96	810.99
☉ Brg. Pier 5	518+20.00	-16.75	810.84	810.86
6 A	518+30.14	-16.75	810.67	810.70
6 B	518+40.27	-16.75	810.50	810.53
6 C	518+50.41	-16.75	810.31	810.36
6 D	518+60.54	-16.75	810.12	810.19
6 E	518+70.68	-16.75	809.93	810.01
6 F	518+80.81	-16.75	809.73	809.82
6 G	518+90.95	-16.75	809.52	809.63
6 H	519+01.09	-16.75	809.31	809.43
6 I	519+11.22	-16.75	809.09	809.21
6 J	519+21.36	-16.75	808.86	808.99

GIRDER 3 (CONT.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
6 K	519+31.49	-16.75	808.63	808.75
6 L	519+41.63	-16.75	808.39	808.50
6 M	519+51.77	-16.75	808.14	808.24
6 N	519+61.90	-16.75	807.89	807.97
6 O	519+72.04	-16.75	807.64	807.70
6 P	519+82.17	-16.75	807.37	807.42
6 Q	519+92.31	-16.75	807.10	807.14
6 R	520+02.44	-16.75	806.83	806.85
6 S	520+12.58	-16.75	806.55	806.56
☉ Brg. Pier 6	520+25.00	-16.75	806.19	806.21
7 A	520+35.14	-16.75	805.90	805.94
7 B	520+45.27	-16.75	805.60	805.66
7 C	520+55.41	-16.75	805.29	805.38
7 D	520+65.54	-16.75	804.97	805.10
7 E	520+75.68	-16.75	804.65	804.81
7 F	520+85.81	-16.75	804.33	804.52
7 G	520+95.95	-16.75	803.99	804.22
7 H	521+06.09	-16.75	803.66	803.90
7 I	521+16.22	-16.75	803.31	803.58
7 J	521+26.36	-16.75	802.96	803.25
7 K	521+36.49	-16.75	802.60	802.90
7 L	521+46.63	-16.75	802.25	802.54
7 M	521+56.77	-16.75	801.89	802.18
7 N	521+66.90	-16.75	801.53	801.81
7 O	521+77.04	-16.75	801.17	801.44
7 P	521+87.17	-16.75	800.81	801.06
7 Q	521+97.31	-16.75	800.46	800.67
7 R	522+07.44	-16.75	800.10	800.28
7 S	522+17.58	-16.75	799.74	799.89
7 T	522+27.72	-16.75	799.38	799.50
7 U	522+37.85	-16.75	799.03	799.12
7 V	522+47.99	-16.75	798.67	798.73
7 W	522+58.12	-16.75	798.31	798.35
7 X	522+68.26	-16.75	797.95	797.98
☉ Brg. Pier 7	522+75.00	-16.75	797.71	797.73
8 A	522+85.14	-16.75	797.36	797.38
8 B	522+95.27	-16.75	797.00	797.03
8 C	523+05.41	-16.75	796.64	796.70
8 D	523+15.54	-16.75	796.28	796.37
8 E	523+25.68	-16.75	795.92	796.04
8 F	523+35.81	-16.75	795.57	795.71
8 G	523+45.95	-16.75	795.21	795.38
8 H	523+56.09	-16.75	794.85	795.05
8 I	523+66.22	-16.75	794.49	794.72
8 J	523+76.36	-16.75	794.14	794.38
8 K	523+86.49	-16.75	793.78	794.03
8 L	523+96.63	-16.75	793.42	793.68
8 M	524+06.77	-16.75	793.06	793.31
8 N	524+16.90	-16.75	792.70	792.94
8 O	524+27.04	-16.75	792.35	792.56
8 P	524+37.17	-16.75	791.99	792.18
8 Q	524+47.31	-16.75	791.63	791.78
8 R	524+57.44	-16.75	791.27	791.38
8 S	524+67.58	-16.75	790.91	790.98
☉ Brg. W. Abut.	524+77.17	-16.75	790.58	790.60
☉ Joint W. Abut.	524+79.21	-16.75	790.50	790.53
Bk. W. Abut.	524+82.77	-16.75	790.38	790.40

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. E. Abut.	507+28.19	-9.75	794.92	794.94
☒ Joint E. Abut.	507+31.72	-9.75	795.05	795.07
☒ Brg. E. Abut.	507+33.75	-9.75	795.13	795.15
1 A	507+43.83	-9.75	795.49	795.57
1 B	507+53.91	-9.75	795.86	795.99
1 C	507+63.99	-9.75	796.23	796.40
1 D	507+74.06	-9.75	796.60	796.81
1 E	507+84.14	-9.75	796.97	797.21
1 F	507+94.22	-9.75	797.33	797.61
1 G	508+04.30	-9.75	797.70	797.99
1 H	508+14.38	-9.75	798.07	798.37
1 I	508+24.46	-9.75	798.44	798.73
1 J	508+34.54	-9.75	798.80	799.10
1 K	508+44.61	-9.75	799.17	799.44
1 L	508+54.69	-9.75	799.54	799.79
1 M	508+64.77	-9.75	799.91	800.13
1 N	508+74.85	-9.75	800.28	800.46
1 O	508+84.93	-9.75	800.64	800.79
1 P	508+95.01	-9.75	801.01	801.13
1 Q	509+05.09	-9.75	801.38	801.46
1 R	509+15.17	-9.75	801.75	801.80
1 S	509+25.24	-9.75	802.12	802.15
☒ Brg. Pier 1	509+35.00	-9.75	802.47	802.49
2 A	509+45.08	-9.75	802.84	802.86
2 B	509+55.16	-9.75	803.20	803.23
2 C	509+65.24	-9.75	803.55	803.60
2 D	509+75.31	-9.75	803.90	803.97
2 E	509+85.39	-9.75	804.24	804.33
2 F	509+95.47	-9.75	804.58	804.69
2 G	510+05.55	-9.75	804.91	805.05
2 H	510+15.63	-9.75	805.23	805.39
2 I	510+25.71	-9.75	805.55	805.72
2 J	510+35.79	-9.75	805.86	806.05
2 K	510+45.86	-9.75	806.17	806.36
2 L	510+55.94	-9.75	806.46	806.67
2 M	510+66.02	-9.75	806.76	806.95
2 N	510+76.10	-9.75	807.04	807.23
2 O	510+86.18	-9.75	807.33	807.50
2 P	510+96.26	-9.75	807.60	807.75
2 Q	511+06.34	-9.75	807.87	808.00
2 R	511+16.42	-9.75	808.13	808.24
2 S	511+26.49	-9.75	808.39	808.47
2 T	511+36.57	-9.75	808.64	808.70
2 U	511+46.65	-9.75	808.88	808.93
2 V	511+56.73	-9.75	809.12	809.15
2 W	511+66.81	-9.75	809.35	809.38
☒ Brg. Pier 2	511+75.00	-9.75	809.54	809.56
3 A	511+85.08	-9.75	809.76	809.80
3 B	511+95.16	-9.75	809.97	810.03
3 C	512+05.24	-9.75	810.18	810.26
3 D	512+15.31	-9.75	810.38	810.49
3 E	512+25.39	-9.75	810.58	810.72
3 F	512+35.47	-9.75	810.77	810.94
3 G	512+45.55	-9.75	810.96	811.16
3 H	512+55.63	-9.75	811.13	811.36
3 I	512+65.71	-9.75	811.31	811.56
3 J	512+75.79	-9.75	811.47	811.74
3 K	512+85.86	-9.75	811.63	811.91
3 L	512+95.94	-9.75	811.79	812.08
3 M	513+06.02	-9.75	811.93	812.22
3 N	513+16.10	-9.75	812.08	812.35

GIRDER 4 (CONT.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
3 O	513+26.18	-9.75	812.21	812.47
3 P	513+36.26	-9.75	812.34	812.58
3 Q	513+46.34	-9.75	812.46	812.68
3 R	513+56.42	-9.75	812.58	812.76
3 S	513+66.49	-9.75	812.69	812.84
3 T	513+76.57	-9.75	812.80	812.91
3 U	513+86.65	-9.75	812.90	812.98
3 V	513+96.73	-9.75	812.99	813.05
3 W	514+06.81	-9.75	813.08	813.11
☒ Brg. Pier 3	514+15.00	-9.75	813.14	813.16
4 A	514+25.08	-9.75	813.22	813.24
4 B	514+35.16	-9.75	813.29	813.30
4 C	514+45.24	-9.75	813.35	813.38
4 D	514+55.31	-9.75	813.41	813.45
4 E	514+65.39	-9.75	813.46	813.52
4 F	514+75.47	-9.75	813.50	813.58
4 G	514+85.55	-9.75	813.54	813.64
4 H	514+95.63	-9.75	813.58	813.69
4 I	515+05.71	-9.75	813.60	813.72
4 J	515+15.79	-9.75	813.62	813.75
4 K	515+25.86	-9.75	813.64	813.76
4 L	515+35.94	-9.75	813.65	813.77
4 M	515+46.02	-9.75	813.65	813.76
4 N	515+56.10	-9.75	813.64	813.75
4 O	515+66.18	-9.75	813.63	813.72
4 P	515+76.26	-9.75	813.62	813.69
4 Q	515+86.34	-9.75	813.60	813.65
4 R	515+96.42	-9.75	813.57	813.60
4 S	516+06.49	-9.75	813.53	813.56
☒ Brg. Pier 4	516+20.00	-9.75	813.48	813.50
5 A	516+30.08	-9.75	813.43	813.46
5 B	516+40.16	-9.75	813.38	813.42
5 C	516+50.24	-9.75	813.32	813.39
5 D	516+60.31	-9.75	813.25	813.34
5 E	516+70.39	-9.75	813.18	813.29
5 F	516+80.47	-9.75	813.10	813.24
5 G	516+90.55	-9.75	813.01	813.17
5 H	517+00.63	-9.75	812.92	813.10
5 I	517+10.71	-9.75	812.82	813.01
5 J	517+20.79	-9.75	812.72	812.91
5 K	517+30.86	-9.75	812.61	812.79
5 L	517+40.94	-9.75	812.49	812.67
5 M	517+51.02	-9.75	812.37	812.53
5 N	517+61.10	-9.75	812.24	812.38
5 O	517+71.18	-9.75	812.11	812.23
5 P	517+81.26	-9.75	811.97	812.06
5 Q	517+91.34	-9.75	811.82	811.89
5 R	518+01.42	-9.75	811.67	811.72
5 S	518+11.49	-9.75	811.51	811.55
☒ Brg. Pier 5	518+20.00	-9.75	811.38	811.40
6 A	518+30.08	-9.75	811.21	811.23
6 B	518+40.16	-9.75	811.03	811.06
6 C	518+50.24	-9.75	810.85	810.89
6 D	518+60.31	-9.75	810.66	810.72
6 E	518+70.39	-9.75	810.47	810.54
6 F	518+80.47	-9.75	810.27	810.36
6 G	518+90.55	-9.75	810.06	810.16
6 H	519+00.63	-9.75	809.85	809.96
6 I	519+10.71	-9.75	809.63	809.75
6 J	519+20.79	-9.75	809.40	809.52

GIRDER 4 (CONT.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
6 K	519+30.86	-9.75	809.17	809.29
6 L	519+40.94	-9.75	808.94	809.04
6 M	519+51.02	-9.75	808.69	808.79
6 N	519+61.10	-9.75	808.45	808.52
6 O	519+71.18	-9.75	808.19	808.25
6 P	519+81.26	-9.75	807.93	807.97
6 Q	519+91.34	-9.75	807.66	807.69
6 R	520+01.42	-9.75	807.39	807.40
6 S	520+11.49	-9.75	807.11	807.12
☒ Brg. Pier 6	520+25.00	-9.75	806.72	806.75
7 A	520+35.08	-9.75	806.43	806.48
7 B	520+45.16	-9.75	806.13	806.20
7 C	520+55.24	-9.75	805.83	805.92
7 D	520+65.31	-9.75	805.51	805.65
7 E	520+75.39	-9.75	805.19	805.36
7 F	520+85.47	-9.75	804.87	805.07
7 G	520+95.55	-9.75	804.54	804.78
7 H	521+05.63	-9.75	804.20	804.47
7 I	521+15.71	-9.75	803.86	804.15
7 J	521+25.79	-9.75	803.51	803.82
7 K	521+35.86	-9.75	803.16	803.47
7 L	521+45.94	-9.75	802.80	803.12
7 M	521+56.02	-9.75	802.45	802.76
7 N	521+66.10	-9.75	802.09	802.39
7 O	521+76.18	-9.75	801.73	802.02
7 P	521+86.26	-9.75	801.38	801.64
7 Q	521+96.34	-9.75	801.02	801.25
7 R	522+06.42	-9.75	800.67	800.87
7 S	522+16.49	-9.75	800.31	800.48
7 T	522+26.57	-9.75	799.96	800.09
7 U	522+36.65	-9.75	799.60	799.70
7 V	522+46.73	-9.75	799.24	799.31
7 W	522+56.81	-9.75	798.89	798.94
7 X	522+66.89	-9.75	798.53	798.56
☒ Brg. Pier 7	522+75.00	-9.75	798.25	798.27
8 A	522+85.08	-9.75	797.89	797.92
8 B	522+95.16	-9.75	797.53	797.57
8 C	523+05.24	-9.75	797.18	797.24
8 D	523+15.31	-9.75	796.82	796.91
8 E	523+25.39	-9.75	796.47	796.58
8 F	523+35.47	-9.75	796.11	796.26
8 G	523+45.55	-9.75	795.76	795.93
8 H	523+55.63	-9.75	795.40	795.60
8 I	523+65.71	-9.75	795.04	795.27
8 J	523+75.79	-9.75	794.69	794.93
8 K	523+85.86	-9.75	794.33	794.59
8 L	523+95.94	-9.75	793.98	794.24
8 M	524+06.02	-9.75	793.62	793.87
8 N	524+16.10	-9.75	793.26	793.51
8 O	524+26.18	-9.75	792.91	793.13
8 P	524+36.26	-9.75	792.55	792.75
8 Q	524+46.34	-9.75	792.20	792.35
8 R	524+56.42	-9.75	791.84	791.96
8 S	524+66.49	-9.75	791.49	791.56
☒ Brg. W. Abut.	524+77.17	-9.75	791.11	791.13
☒ Joint W. Abut.	524+79.20	-9.75	791.04	791.06
Bk. W. Abut.	524+82.73	-9.75	790.91	790.93

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. E. Abut.	507+28.22	-2.75	795.46	795.48
☒ Joint E. Abut.	507+31.74	-2.75	795.58	795.61
☒ Brg. E. Abut.	507+33.75	-2.75	795.66	795.68
1 A	507+43.77	-2.75	796.02	796.10
1 B	507+53.79	-2.75	796.39	796.52
1 C	507+63.82	-2.75	796.76	796.93
1 D	507+73.84	-2.75	797.12	797.35
1 E	507+83.86	-2.75	797.49	797.74
1 F	507+93.88	-2.75	797.85	798.14
1 G	508+03.90	-2.75	798.22	798.52
1 H	508+13.93	-2.75	798.58	798.90
1 I	508+23.95	-2.75	798.95	799.26
1 J	508+33.97	-2.75	799.32	799.62
1 K	508+43.99	-2.75	799.68	799.97
1 L	508+54.01	-2.75	800.05	800.31
1 M	508+64.04	-2.75	800.41	800.64
1 N	508+74.06	-2.75	800.78	800.98
1 O	508+84.08	-2.75	801.14	801.31
1 P	508+94.10	-2.75	801.51	801.63
1 Q	509+04.12	-2.75	801.88	801.97
1 R	509+14.15	-2.75	802.24	802.30
1 S	509+24.17	-2.75	802.61	802.65
☒ Brg. Pier 1	509+35.00	-2.75	803.00	803.02
2 A	509+45.02	-2.75	803.37	803.39
2 B	509+55.04	-2.75	803.73	803.76
2 C	509+65.07	-2.75	804.08	804.12
2 D	509+75.09	-2.75	804.42	804.49
2 E	509+85.11	-2.75	804.76	804.85
2 F	509+95.13	-2.75	805.10	805.21
2 G	510+05.15	-2.75	805.43	805.56
2 H	510+15.18	-2.75	805.75	805.91
2 I	510+25.20	-2.75	806.06	806.24
2 J	510+35.22	-2.75	806.37	806.57
2 K	510+45.24	-2.75	806.68	806.88
2 L	510+55.26	-2.75	806.98	807.18
2 M	510+65.29	-2.75	807.27	807.47
2 N	510+75.31	-2.75	807.55	807.75
2 O	510+85.33	-2.75	807.83	808.01
2 P	510+95.35	-2.75	808.11	808.26
2 Q	511+05.37	-2.75	808.38	808.51
2 R	511+15.40	-2.75	808.64	808.75
2 S	511+25.42	-2.75	808.89	808.98
2 T	511+35.44	-2.75	809.14	809.21
2 U	511+45.46	-2.75	809.39	809.43
2 V	511+55.49	-2.75	809.62	809.65
2 W	511+65.51	-2.75	809.86	809.88
☒ Brg. Pier 2	511+75.00	-2.75	810.07	810.09
3 A	511+85.02	-2.75	810.29	810.33
3 B	511+95.04	-2.75	810.50	810.56
3 C	512+05.07	-2.75	810.71	810.79
3 D	512+15.09	-2.75	810.91	811.03
3 E	512+25.11	-2.75	811.11	811.25
3 F	512+35.13	-2.75	811.30	811.48
3 G	512+45.15	-2.75	811.48	811.70
3 H	512+55.18	-2.75	811.66	811.90
3 I	512+65.20	-2.75	811.83	812.10
3 J	512+75.22	-2.75	811.99	812.28
3 K	512+85.24	-2.75	812.15	812.45
3 L	512+95.26	-2.75	812.31	812.62
3 M	513+05.29	-2.75	812.45	812.76
3 N	513+15.31	-2.75	812.60	812.89

GIRDER 5 (CONT.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
3 O	513+25.33	-2.75	812.73	813.01
3 P	513+35.35	-2.75	812.86	813.12
3 Q	513+45.37	-2.75	812.98	813.21
3 R	513+55.40	-2.75	813.10	813.30
3 S	513+65.42	-2.75	813.21	813.38
3 T	513+75.44	-2.75	813.32	813.45
3 U	513+85.46	-2.75	813.42	813.51
3 V	513+95.49	-2.75	813.51	813.58
3 W	514+05.51	-2.75	813.60	813.64
☒ Brg. Pier 3	514+15.00	-2.75	813.67	813.69
4 A	514+25.02	-2.75	813.75	813.77
4 B	514+35.04	-2.75	813.82	813.83
4 C	514+45.07	-2.75	813.88	813.91
4 D	514+55.09	-2.75	813.94	813.97
4 E	514+65.11	-2.75	813.99	814.04
4 F	514+75.13	-2.75	814.03	814.11
4 G	514+85.15	-2.75	814.07	814.16
4 H	514+95.18	-2.75	814.11	814.21
4 I	515+05.20	-2.75	814.13	814.25
4 J	515+15.22	-2.75	814.15	814.28
4 K	515+25.24	-2.75	814.17	814.29
4 L	515+35.26	-2.75	814.18	814.30
4 M	515+45.29	-2.75	814.18	814.29
4 N	515+55.31	-2.75	814.18	814.28
4 O	515+65.33	-2.75	814.17	814.25
4 P	515+75.35	-2.75	814.15	814.22
4 Q	515+85.37	-2.75	814.13	814.18
4 R	515+95.40	-2.75	814.10	814.14
4 S	516+05.42	-2.75	814.07	814.10
☒ Brg. Pier 4	516+20.00	-2.75	814.01	814.03
5 A	516+30.02	-2.75	813.96	814.00
5 B	516+40.04	-2.75	813.91	813.96
5 C	516+50.07	-2.75	813.85	813.92
5 D	516+60.09	-2.75	813.78	813.88
5 E	516+70.11	-2.75	813.71	813.83
5 F	516+80.13	-2.75	813.63	813.78
5 G	516+90.15	-2.75	813.55	813.72
5 H	517+00.18	-2.75	813.46	813.64
5 I	517+10.20	-2.75	813.36	813.55
5 J	517+20.22	-2.75	813.26	813.46
5 K	517+30.24	-2.75	813.15	813.34
5 L	517+40.26	-2.75	813.03	813.22
5 M	517+50.29	-2.75	812.91	813.08
5 N	517+60.31	-2.75	812.79	812.94
5 O	517+70.33	-2.75	812.65	812.78
5 P	517+80.35	-2.75	812.52	812.61
5 Q	517+90.37	-2.75	812.37	812.44
5 R	518+00.40	-2.75	812.22	812.27
5 S	518+10.42	-2.75	812.06	812.10
☒ Brg. Pier 5	518+20.00	-2.75	811.91	811.93
6 A	518+30.02	-2.75	811.74	811.76
6 B	518+40.04	-2.75	811.56	811.59
6 C	518+50.07	-2.75	811.38	811.42
6 D	518+60.09	-2.75	811.20	811.25
6 E	518+70.11	-2.75	811.00	811.07
6 F	518+80.13	-2.75	810.81	810.89
6 G	518+90.15	-2.75	810.60	810.70
6 H	519+00.18	-2.75	810.39	810.50
6 I	519+10.20	-2.75	810.17	810.28
6 J	519+20.22	-2.75	809.95	810.06

GIRDER 5 (CONT.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
6 K	519+30.24	-2.75	809.72	809.83
6 L	519+40.26	-2.75	809.49	809.58
6 M	519+50.29	-2.75	809.24	809.33
6 N	519+60.31	-2.75	809.00	809.07
6 O	519+70.33	-2.75	808.74	808.80
6 P	519+80.35	-2.75	808.48	808.52
6 Q	519+90.37	-2.75	808.22	808.24
6 R	520+00.40	-2.75	807.95	807.96
6 S	520+10.42	-2.75	807.67	807.68
☒ Brg. Pier 6	520+25.00	-2.75	807.26	807.28
7 A	520+35.02	-2.75	806.96	807.01
7 B	520+45.04	-2.75	806.67	806.74
7 C	520+55.07	-2.75	806.36	806.47
7 D	520+65.09	-2.75	806.05	806.19
7 E	520+75.11	-2.75	805.74	805.91
7 F	520+85.13	-2.75	805.41	805.63
7 G	520+95.15	-2.75	805.09	805.33
7 H	521+05.18	-2.75	804.75	805.03
7 I	521+15.20	-2.75	804.41	804.71
7 J	521+25.22	-2.75	804.06	804.39
7 K	521+35.24	-2.75	803.71	804.04
7 L	521+45.26	-2.75	803.36	803.69
7 M	521+55.29	-2.75	803.00	803.33
7 N	521+65.31	-2.75	802.65	802.97
7 O	521+75.33	-2.75	802.30	802.60
7 P	521+85.35	-2.75	801.94	802.22
7 Q	521+95.37	-2.75	801.59	801.83
7 R	522+05.40	-2.75	801.24	801.45
7 S	522+15.42	-2.75	800.88	801.06
7 T	522+25.44	-2.75	800.53	800.67
7 U	522+35.46	-2.75	800.17	800.28
7 V	522+45.49	-2.75	799.82	799.90
7 W	522+55.51	-2.75	799.47	799.52
7 X	522+65.53	-2.75	799.11	799.15
☒ Brg. Pier 7	522+75.00	-2.75	798.78	798.80
8 A	522+85.02	-2.75	798.42	798.45
8 B	522+95.04	-2.75	798.07	798.11
8 C	523+05.07	-2.75	797.72	797.78
8 D	523+15.09	-2.75	797.36	797.45
8 E	523+25.11	-2.75	797.01	797.12
8 F	523+35.13	-2.75	796.65	796.80
8 G	523+45.15	-2.75	796.30	796.48
8 H	523+55.18	-2.75	795.95	796.15
8 I	523+65.20	-2.75	795.59	795.82
8 J	523+75.22	-2.75	795.24	795.49
8 K	523+85.24	-2.75	794.89	795.15
8 L	523+95.26	-2.75	794.53	794.80
8 M	524+05.29	-2.75	794.18	794.44
8 N	524+15.31	-2.75	793.82	794.08
8 O	524+25.33	-2.75	793.47	793.70
8 P	524+35.35	-2.75	793.12	793.32
8 Q	524+45.37	-2.75	792.76	792.93
8 R	524+55.40	-2.75	792.41	792.53
8 S	524+65.42	-2.75	792.06	792.13
☒ Brg. W. Abut.	524+77.17	-2.75	791.64	791.66
☒ Joint W. Abut.	524+79.18	-2.75	791.57	791.59
Bk. W. Abut.	524+82.70	-2.75	791.44	791.47

PGL, RAMP E

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. E. Abut.	507+28.23	0.00	795.67	795.69
Joint E. Abut.	507+31.74	0.00	795.79	795.81
Brg. E. Abut.	507+33.75	0.00	795.87	795.89
1 A	507+43.75	0.00	796.23	796.31
1 B	507+53.75	0.00	796.60	796.73
1 C	507+63.75	0.00	796.96	797.14
1 D	507+73.75	0.00	797.33	797.55
1 E	507+83.75	0.00	797.69	797.95
1 F	507+93.75	0.00	798.06	798.35
1 G	508+03.75	0.00	798.42	798.72
1 H	508+13.75	0.00	798.79	799.10
1 I	508+23.75	0.00	799.15	799.46
1 J	508+33.75	0.00	799.52	799.82
1 K	508+43.75	0.00	799.88	800.17
1 L	508+53.75	0.00	800.25	800.51
1 M	508+63.75	0.00	800.61	800.84
1 N	508+73.75	0.00	800.98	801.17
1 O	508+83.75	0.00	801.34	801.50
1 P	508+93.75	0.00	801.71	801.83
1 Q	509+03.75	0.00	802.07	802.16
1 R	509+13.75	0.00	802.44	802.49
1 S	509+23.75	0.00	802.80	802.84
Brg. Pier 1	509+35.00	0.00	803.21	803.23
2 A	509+45.00	0.00	803.58	803.60
2 B	509+55.00	0.00	803.93	803.97
2 C	509+65.00	0.00	804.28	804.33
2 D	509+75.00	0.00	804.63	804.70
2 E	509+85.00	0.00	804.97	805.06
2 F	509+95.00	0.00	805.30	805.42
2 G	510+05.00	0.00	805.63	805.77
2 H	510+15.00	0.00	805.95	806.11
2 I	510+25.00	0.00	806.27	806.44
2 J	510+35.00	0.00	806.58	806.77
2 K	510+45.00	0.00	806.88	807.08
2 L	510+55.00	0.00	807.18	807.38
2 M	510+65.00	0.00	807.47	807.67
2 N	510+75.00	0.00	807.75	807.95
2 O	510+85.00	0.00	808.03	808.21
2 P	510+95.00	0.00	808.31	808.46
2 Q	511+05.00	0.00	808.57	808.71
2 R	511+15.00	0.00	808.84	808.95
2 S	511+25.00	0.00	809.09	809.18
2 T	511+35.00	0.00	809.34	809.41
2 U	511+45.00	0.00	809.58	809.63
2 V	511+55.00	0.00	809.82	809.85
2 W	511+65.00	0.00	810.05	810.08
Brg. Pier 2	511+75.00	0.00	810.28	810.30
3 A	511+85.00	0.00	810.50	810.54
3 B	511+95.00	0.00	810.71	810.77
3 C	512+05.00	0.00	810.92	811.00
3 D	512+15.00	0.00	811.12	811.23
3 E	512+25.00	0.00	811.31	811.46
3 F	512+35.00	0.00	811.50	811.68
3 G	512+45.00	0.00	811.69	811.90
3 H	512+55.00	0.00	811.86	812.11
3 I	512+65.00	0.00	812.04	812.30
3 J	512+75.00	0.00	812.20	812.49
3 K	512+85.00	0.00	812.36	812.66
3 L	512+95.00	0.00	812.51	812.82
3 M	513+05.00	0.00	812.66	812.96
3 N	513+15.00	0.00	812.80	813.10

PGL, RAMP E (CONT.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
3 O	513+25.00	0.00	812.94	813.22
3 P	513+35.00	0.00	813.07	813.32
3 Q	513+45.00	0.00	813.19	813.42
3 R	513+55.00	0.00	813.31	813.50
3 S	513+65.00	0.00	813.42	813.58
3 T	513+75.00	0.00	813.52	813.65
3 U	513+85.00	0.00	813.62	813.72
3 V	513+95.00	0.00	813.71	813.78
3 W	514+05.00	0.00	813.80	813.84
Brg. Pier 3	514+15.00	0.00	813.88	813.90
4 A	514+25.00	0.00	813.96	813.97
4 B	514+35.00	0.00	814.03	814.04
4 C	514+45.00	0.00	814.09	814.11
4 D	514+55.00	0.00	814.15	814.18
4 E	514+65.00	0.00	814.20	814.25
4 F	514+75.00	0.00	814.24	814.31
4 G	514+85.00	0.00	814.28	814.37
4 H	514+95.00	0.00	814.31	814.42
4 I	515+05.00	0.00	814.34	814.46
4 J	515+15.00	0.00	814.36	814.49
4 K	515+25.00	0.00	814.38	814.50
4 L	515+35.00	0.00	814.39	814.51
4 M	515+45.00	0.00	814.39	814.50
4 N	515+55.00	0.00	814.39	814.49
4 O	515+65.00	0.00	814.38	814.46
4 P	515+75.00	0.00	814.36	814.43
4 Q	515+85.00	0.00	814.34	814.39
4 R	515+95.00	0.00	814.31	814.35
4 S	516+05.00	0.00	814.28	814.31
Brg. Pier 4	516+20.00	0.00	814.22	814.24
5 A	516+30.00	0.00	814.17	814.21
5 B	516+40.00	0.00	814.12	814.17
5 C	516+50.00	0.00	814.06	814.13
5 D	516+60.00	0.00	813.99	814.09
5 E	516+70.00	0.00	813.92	814.04
5 F	516+80.00	0.00	813.84	813.99
5 G	516+90.00	0.00	813.76	813.93
5 H	517+00.00	0.00	813.67	813.85
5 I	517+10.00	0.00	813.57	813.76
5 J	517+20.00	0.00	813.47	813.67
5 K	517+30.00	0.00	813.36	813.55
5 L	517+40.00	0.00	813.25	813.43
5 M	517+50.00	0.00	813.13	813.29
5 N	517+60.00	0.00	813.00	813.15
5 O	517+70.00	0.00	812.87	812.99
5 P	517+80.00	0.00	812.73	812.83
5 Q	517+90.00	0.00	812.59	812.66
5 R	518+00.00	0.00	812.44	812.48
5 S	518+10.00	0.00	812.28	812.31
Brg. Pier 5	518+20.00	0.00	812.12	812.14
6 A	518+30.00	0.00	811.95	811.97
6 B	518+40.00	0.00	811.77	811.80
6 C	518+50.00	0.00	811.59	811.63
6 D	518+60.00	0.00	811.41	811.46
6 E	518+70.00	0.00	811.22	811.28
6 F	518+80.00	0.00	811.02	811.10
6 G	518+90.00	0.00	810.81	810.91
6 H	519+00.00	0.00	810.60	810.71
6 I	519+10.00	0.00	810.39	810.50
6 J	519+20.00	0.00	810.16	810.28

PGL, RAMP E (CONT.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
6 K	519+30.00	0.00	809.93	810.04
6 L	519+40.00	0.00	809.70	809.80
6 M	519+50.00	0.00	809.46	809.55
6 N	519+60.00	0.00	809.21	809.28
6 O	519+70.00	0.00	808.96	809.01
6 P	519+80.00	0.00	808.70	808.74
6 Q	519+90.00	0.00	808.44	808.46
6 R	520+00.00	0.00	808.17	808.18
6 S	520+10.00	0.00	807.89	807.90
Brg. Pier 6	520+25.00	0.00	807.47	807.49
7 A	520+35.00	0.00	807.17	807.22
7 B	520+45.00	0.00	806.88	806.95
7 C	520+55.00	0.00	806.57	806.68
7 D	520+65.00	0.00	806.26	806.41
7 E	520+75.00	0.00	805.95	806.13
7 F	520+85.00	0.00	805.63	805.84
7 G	520+95.00	0.00	805.30	805.55
7 H	521+05.00	0.00	804.97	805.24
7 I	521+15.00	0.00	804.63	804.93
7 J	521+25.00	0.00	804.28	804.60
7 K	521+35.00	0.00	803.93	804.26
7 L	521+45.00	0.00	803.58	803.91
7 M	521+55.00	0.00	803.22	803.55
7 N	521+65.00	0.00	802.87	803.19
7 O	521+75.00	0.00	802.52	802.82
7 P	521+85.00	0.00	802.16	802.44
7 Q	521+95.00	0.00	801.81	802.06
7 R	522+05.00	0.00	801.46	801.67
7 S	522+15.00	0.00	801.11	801.28
7 T	522+25.00	0.00	800.75	800.89
7 U	522+35.00	0.00	800.40	800.51
7 V	522+45.00	0.00	800.05	800.12
7 W	522+55.00	0.00	799.69	799.74
7 X	522+65.00	0.00	799.34	799.38
Brg. Pier 7	522+75.00	0.00	798.99	799.01
8 A	522+85.00	0.00	798.63	798.66
8 B	522+95.00	0.00	798.28	798.32
8 C	523+05.00	0.00	797.93	797.99
8 D	523+15.00	0.00	797.57	797.66
8 E	523+25.00	0.00	797.22	797.34
8 F	523+35.00	0.00	796.87	797.01
8 G	523+45.00	0.00	796.52	796.69
8 H	523+55.00	0.00	796.16	796.37
8 I	523+65.00	0.00	795.81	796.04
8 J	523+75.00	0.00	795.46	795.71
8 K	523+85.00	0.00	795.10	795.36
8 L	523+95.00	0.00	794.75	795.02
8 M	524+05.00	0.00	794.40	794.66
8 N	524+15.00	0.00	794.04	794.30
8 O	524+25.00	0.00	793.69	793.92
8 P	524+35.00	0.00	793.34	793.54
8 Q	524+45.00	0.00	792.98	793.15
8 R	524+55.00	0.00	792.63	792.76
8 S	524+65.00	0.00	792.28	792.36
Brg. W. Abut.	524+77.17	0.00	791.85	791.87
Joint W. Abut.	524+79.18	0.00	791.78	791.80
Bk. W. Abut.	524+82.69	0.00	791.65	791.68

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. E. Abut.	507+28.25	4.25	795.99	796.01
⌒ Joint E. Abut.	507+31.75	4.25	796.12	796.14
⌒ Brg. E. Abut.	507+33.75	4.25	796.19	796.21
1 A	507+43.72	4.25	796.55	796.63
1 B	507+53.68	4.25	796.92	797.05
1 C	507+63.65	4.25	797.28	797.47
1 D	507+73.61	4.25	797.64	797.88
1 E	507+83.58	4.25	798.01	798.28
1 F	507+93.55	4.25	798.37	798.67
1 G	508+03.51	4.25	798.74	799.05
1 H	508+13.48	4.25	799.10	799.43
1 I	508+23.45	4.25	799.46	799.79
1 J	508+33.41	4.25	799.83	800.15
1 K	508+43.38	4.25	800.19	800.49
1 L	508+53.34	4.25	800.55	800.83
1 M	508+63.31	4.25	800.92	801.16
1 N	508+73.28	4.25	801.28	801.49
1 O	508+83.24	4.25	801.65	801.82
1 P	508+93.21	4.25	802.01	802.14
1 Q	509+03.17	4.25	802.37	802.47
1 R	509+13.14	4.25	802.74	802.80
1 S	509+23.11	4.25	803.10	803.14
⌒ Brg. Pier 1	509+35.00	4.25	803.54	803.56
2 A	509+44.97	4.25	803.90	803.92
2 B	509+54.93	4.25	804.25	804.28
2 C	509+64.90	4.25	804.60	804.65
2 D	509+74.86	4.25	804.95	805.01
2 E	509+84.83	4.25	805.29	805.37
2 F	509+94.80	4.25	805.62	805.73
2 G	510+04.76	4.25	805.95	806.08
2 H	510+14.73	4.25	806.27	806.43
2 I	510+24.70	4.25	806.58	806.76
2 J	510+34.66	4.25	806.89	807.08
2 K	510+44.63	4.25	807.19	807.39
2 L	510+54.59	4.25	807.49	807.70
2 M	510+64.56	4.25	807.78	807.98
2 N	510+74.53	4.25	808.06	808.26
2 O	510+84.49	4.25	808.34	808.52
2 P	510+94.46	4.25	808.62	808.78
2 Q	511+04.42	4.25	808.88	809.02
2 R	511+14.39	4.25	809.14	809.26
2 S	511+24.36	4.25	809.40	809.49
2 T	511+34.32	4.25	809.65	809.71
2 U	511+44.29	4.25	809.89	809.94
2 V	511+54.25	4.25	810.13	810.16
2 W	511+64.22	4.25	810.36	810.38
⌒ Brg. Pier 2	511+75.00	4.25	810.60	810.62
3 A	511+84.97	4.25	810.82	810.86
3 B	511+94.93	4.25	811.03	811.09
3 C	512+04.90	4.25	811.24	811.33
3 D	512+14.86	4.25	811.44	811.56
3 E	512+24.83	4.25	811.63	811.79
3 F	512+34.80	4.25	811.82	812.01
3 G	512+44.76	4.25	812.01	812.23
3 H	512+54.73	4.25	812.18	812.44
3 I	512+64.70	4.25	812.35	812.64
3 J	512+74.66	4.25	812.52	812.82
3 K	512+84.63	4.25	812.68	812.99
3 L	512+94.59	4.25	812.83	813.16
3 M	513+04.56	4.25	812.98	813.30
3 N	513+14.53	4.25	813.12	813.43

GIRDER 6 (CONT.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
3 O	513+24.49	4.25	813.25	813.55
3 P	513+34.46	4.25	813.38	813.66
3 Q	513+44.42	4.25	813.50	813.75
3 R	513+54.39	4.25	813.62	813.84
3 S	513+64.36	4.25	813.73	813.91
3 T	513+74.32	4.25	813.84	813.98
3 U	513+84.29	4.25	813.94	814.04
3 V	513+94.25	4.25	814.03	814.10
3 W	514+04.22	4.25	814.12	814.17
⌒ Brg. Pier 3	514+15.00	4.25	814.21	814.23
4 A	514+24.97	4.25	814.28	814.30
4 B	514+34.93	4.25	814.35	814.36
4 C	514+44.90	4.25	814.41	814.43
4 D	514+54.86	4.25	814.47	814.50
4 E	514+64.83	4.25	814.52	814.57
4 F	514+74.80	4.25	814.56	814.63
4 G	514+84.76	4.25	814.60	814.69
4 H	514+94.73	4.25	814.64	814.73
4 I	515+04.70	4.25	814.66	814.77
4 J	515+14.66	4.25	814.68	814.80
4 K	515+24.63	4.25	814.70	814.82
4 L	515+34.59	4.25	814.71	814.83
4 M	515+44.56	4.25	814.71	814.82
4 N	515+54.53	4.25	814.71	814.81
4 O	515+64.49	4.25	814.70	814.78
4 P	515+74.46	4.25	814.69	814.75
4 Q	515+84.42	4.25	814.67	814.72
4 R	515+94.39	4.25	814.64	814.67
4 S	516+04.36	4.25	814.61	814.63
4 T	516+14.32	4.25	814.57	814.59
⌒ Brg. Pier 4	516+20.00	4.25	814.54	814.56
5 A	516+29.97	4.25	814.50	814.53
5 B	516+39.93	4.25	814.44	814.49
5 C	516+49.90	4.25	814.38	814.46
5 D	516+59.86	4.25	814.32	814.42
5 E	516+69.83	4.25	814.24	814.37
5 F	516+79.80	4.25	814.17	814.32
5 G	516+89.76	4.25	814.08	814.26
5 H	516+99.73	4.25	813.99	814.19
5 I	517+09.70	4.25	813.90	814.10
5 J	517+19.66	4.25	813.80	814.01
5 K	517+29.63	4.25	813.69	813.89
5 L	517+39.59	4.25	813.57	813.77
5 M	517+49.56	4.25	813.45	813.63
5 N	517+59.53	4.25	813.33	813.49
5 O	517+69.49	4.25	813.20	813.33
5 P	517+79.46	4.25	813.06	813.17
5 Q	517+89.42	4.25	812.92	813.00
5 R	517+99.39	4.25	812.77	812.82
5 S	518+09.36	4.25	812.61	812.65
⌒ Brg. Pier 5	518+20.00	4.25	812.44	812.46
6 A	518+29.97	4.25	812.27	812.29
6 B	518+39.93	4.25	812.10	812.12
6 C	518+49.90	4.25	811.92	811.95
6 D	518+59.86	4.25	811.73	811.78
6 E	518+69.83	4.25	811.54	811.61
6 F	518+79.80	4.25	811.34	811.42
6 G	518+89.76	4.25	811.14	811.23
6 H	518+99.73	4.25	810.93	811.03
6 I	519+09.70	4.25	810.72	810.82

GIRDER 6 (CONT.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
6 J	519+19.66	4.25	810.49	810.60
6 K	519+29.63	4.25	810.27	810.37
6 L	519+39.59	4.25	810.03	810.13
6 M	519+49.56	4.25	809.79	809.87
6 N	519+59.53	4.25	809.55	809.61
6 O	519+69.49	4.25	809.30	809.34
6 P	519+79.46	4.25	809.04	809.07
6 Q	519+89.42	4.25	808.78	808.80
6 R	519+99.39	4.25	808.51	808.52
6 S	520+09.36	4.25	808.23	808.24
6 T	520+19.32	4.25	807.95	807.97
⌒ Brg. Pier 6	520+25.00	4.25	807.79	807.81
7 A	520+34.97	4.25	807.50	807.55
7 B	520+44.93	4.25	807.20	807.28
7 C	520+54.90	4.25	806.90	807.01
7 D	520+64.86	4.25	806.59	806.74
7 E	520+74.83	4.25	806.28	806.46
7 F	520+84.80	4.25	805.96	806.18
7 G	520+94.76	4.25	805.63	805.89
7 H	521+04.73	4.25	805.30	805.59
7 I	521+14.70	4.25	804.96	805.28
7 J	521+24.66	4.25	804.62	804.96
7 K	521+34.63	4.25	804.27	804.61
7 L	521+44.59	4.25	803.91	804.27
7 M	521+54.56	4.25	803.56	803.91
7 N	521+64.53	4.25	803.21	803.55
7 O	521+74.49	4.25	802.86	803.18
7 P	521+84.46	4.25	802.51	802.80
7 Q	521+94.42	4.25	802.15	802.42
7 R	522+04.39	4.25	801.80	802.03
7 S	522+14.36	4.25	801.45	801.64
7 T	522+24.32	4.25	801.10	801.25
7 U	522+34.29	4.25	800.75	800.86
7 V	522+44.25	4.25	800.40	800.48
7 W	522+54.22	4.25	800.04	800.10
7 X	522+64.19	4.25	799.69	799.73
⌒ Brg. Pier 7	522+75.00	4.25	799.31	799.33
8 A	522+84.97	4.25	798.96	798.99
8 B	522+94.93	4.25	798.61	798.64
8 C	523+04.90	4.25	798.25	798.31
8 D	523+14.86	4.25	797.90	797.98
8 E	523+24.83	4.25	797.55	797.66
8 F	523+34.80	4.25	797.20	797.35
8 G	523+44.76	4.25	796.85	797.03
8 H	523+54.73	4.25	796.49	796.70
8 I	523+64.70	4.25	796.14	796.38
8 J	523+74.66	4.25	795.79	796.05
8 K	523+84.63	4.25	795.44	795.71
8 L	523+94.59	4.25	795.09	795.36
8 M	524+04.56	4.25	794.74	795.00
8 N	524+14.53	4.25	794.38	794.64
8 O	524+24.49	4.25	794.03	794.27
8 P	524+34.46	4.25	793.68	793.89
8 Q	524+44.42	4.25	793.33	793.50
8 R	524+54.39	4.25	792.98	793.11
8 S	524+64.36	4.25	792.62	792.71
⌒ Brg. W. Abut.	524+77.17	4.25	792.17	792.19
⌒ Joint W. Abut.	524+79.17	4.25	792.10	792.12
Bk. W. Abut.	524+82.67	4.25	791.98	792.00



PLAN

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
E. End of E. Appr.	506+97.79	-32.50	792.08	792.11
A1	507+08.06	-32.50	792.48	792.48
A2	507+18.33	-32.50	792.83	792.85
W. End of E. Appr.	507+28.60	-32.50	793.21	793.23

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
E. End of W. Appr.	524+82.32	-32.50	789.20	789.22
A3	524+92.59	-32.50	788.83	788.86
A4	525+02.86	-32.50	788.47	788.49
W. End of W. Appr.	525+13.13	-32.50	788.11	788.13

SOUTH EDGE OF LANE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
E. End of E. Appr.	506+98.28	-16.00	793.36	793.38
A1	507+08.40	-16.00	793.73	793.75
A2	507+18.53	-16.00	794.10	794.12
W. End of E. Appr.	507+28.66	-16.00	794.46	794.49

SOUTH EDGE OF LANE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
E. End of W. Appr.	524+82.26	-16.00	790.45	790.47
A3	524+92.39	-16.00	790.10	790.12
A4	525+02.52	-16.00	789.74	789.76
W. End of W. Appr.	525+12.64	-16.00	789.38	789.40

PGL, Ramp E & North Edge of Lane

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
E. End of E. Appr.	506+98.73	0.00	794.59	794.61
A1	507+08.73	0.00	794.95	794.97
A2	507+18.73	0.00	795.32	795.34
W. End of E. Appr.	507+28.73	0.00	795.68	795.70

PGL, Ramp E & North Edge of Lane

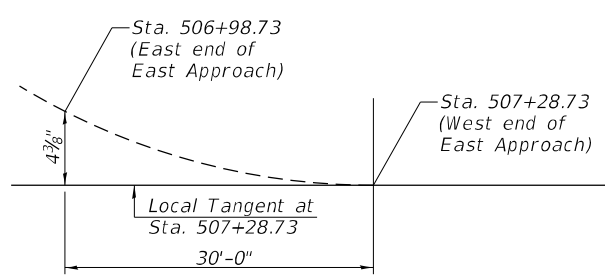
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
E. End of W. Appr.	524+82.19	0.00	791.67	791.69
A3	524+92.19	0.00	791.32	791.34
A4	525+02.19	0.00	790.97	790.99
W. End of W. Appr.	525+12.19	0.00	790.61	790.63

NORTH EDGE OF SHOULDER

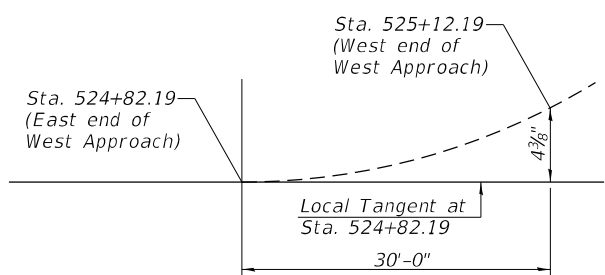
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
E. End of E. Appr.	506+98.89	6.00	795.05	795.07
A1	507+08.85	6.00	795.41	795.43
A2	507+18.80	6.00	795.78	795.80
W. End of E. Appr.	507+28.75	6.00	796.14	796.16

NORTH EDGE OF SHOULDER

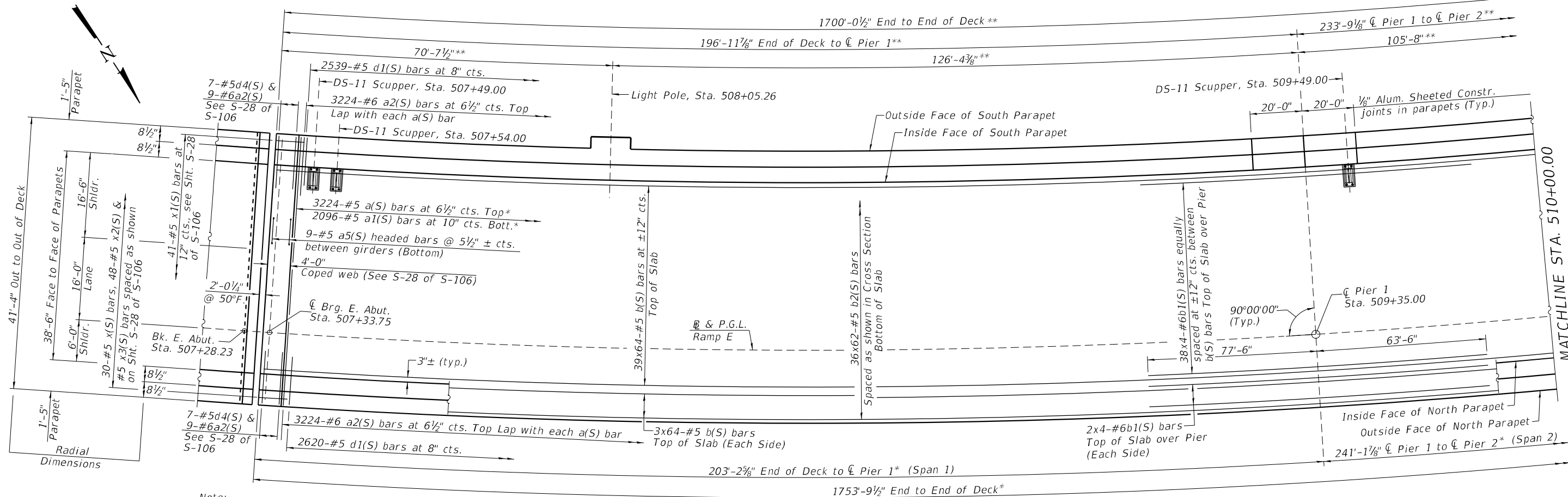
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
E. End of W. Appr.	524+82.17	6.00	792.13	792.15
A3	524+92.12	6.00	791.78	791.80
A4	525+02.07	6.00	791.43	791.45
W. End of W. Appr.	525+12.03	6.00	791.07	791.10



EAST APPROACH OFFSET SKETCH

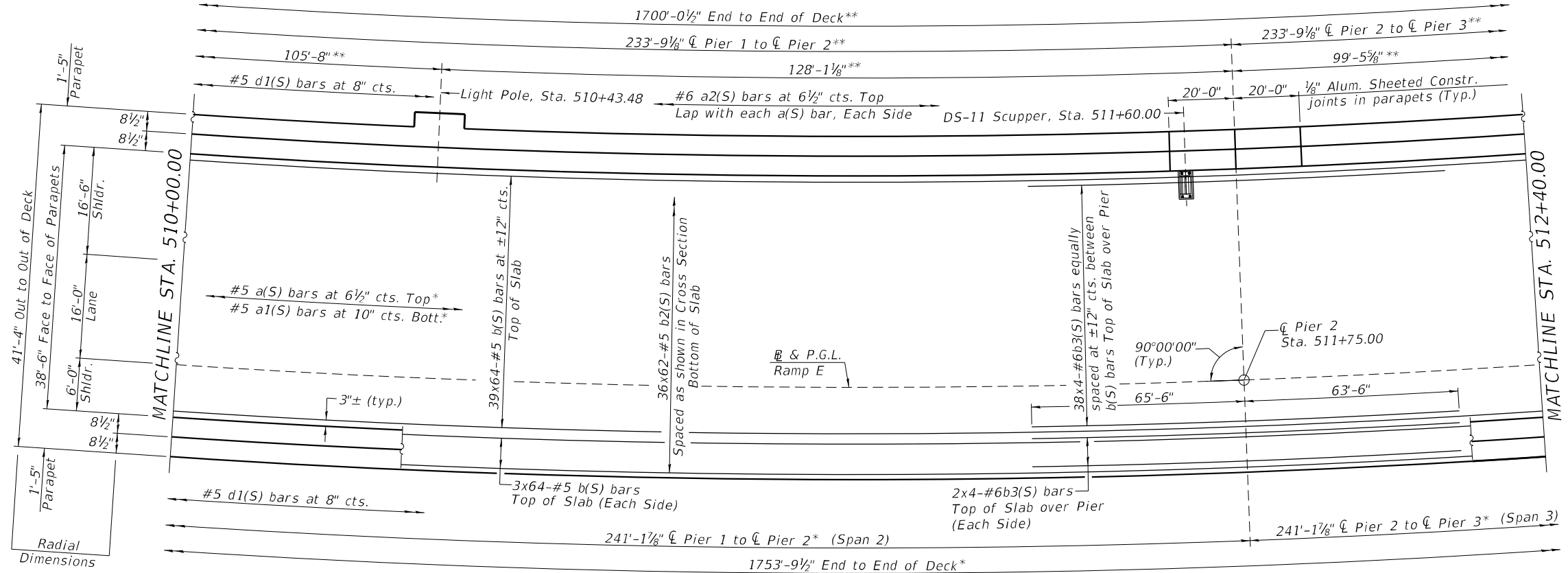


WEST APPROACH OFFSET SKETCH



Note:
See Sht. S-28 of S-106 for Expansion Joint Details

DECK PLAN - 1



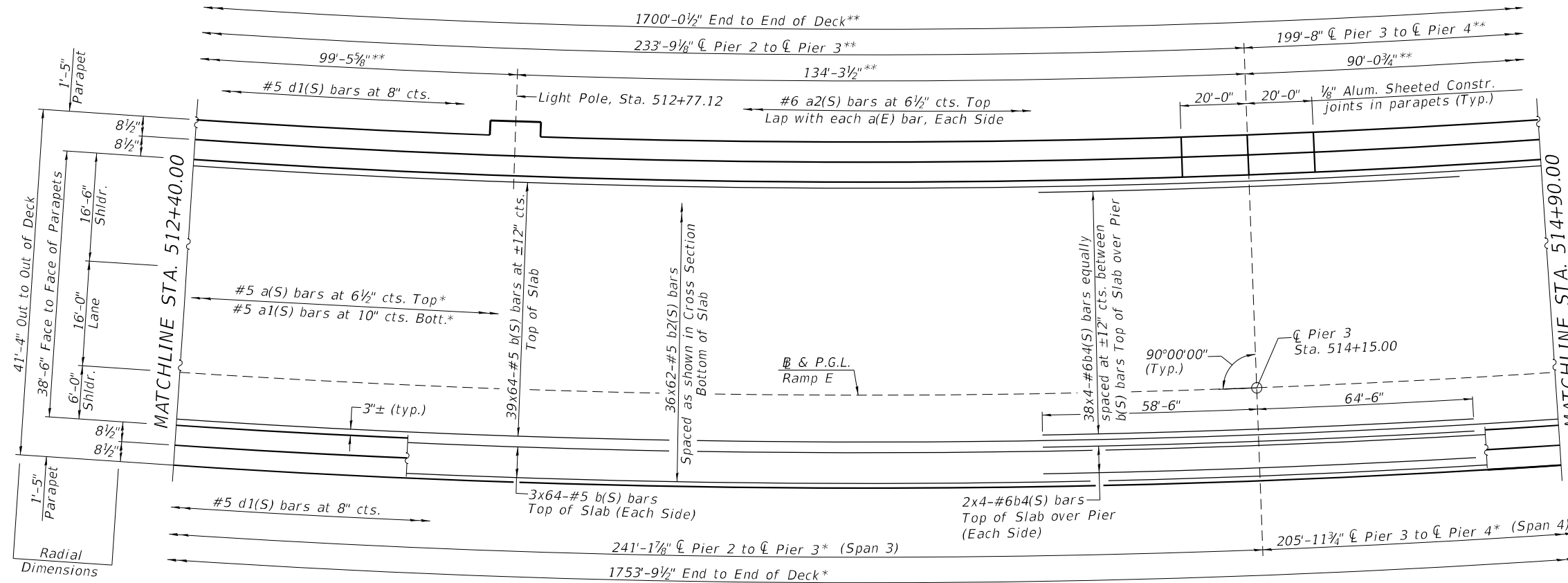
DECK PLAN - 2

MINIMUM BAR LAP

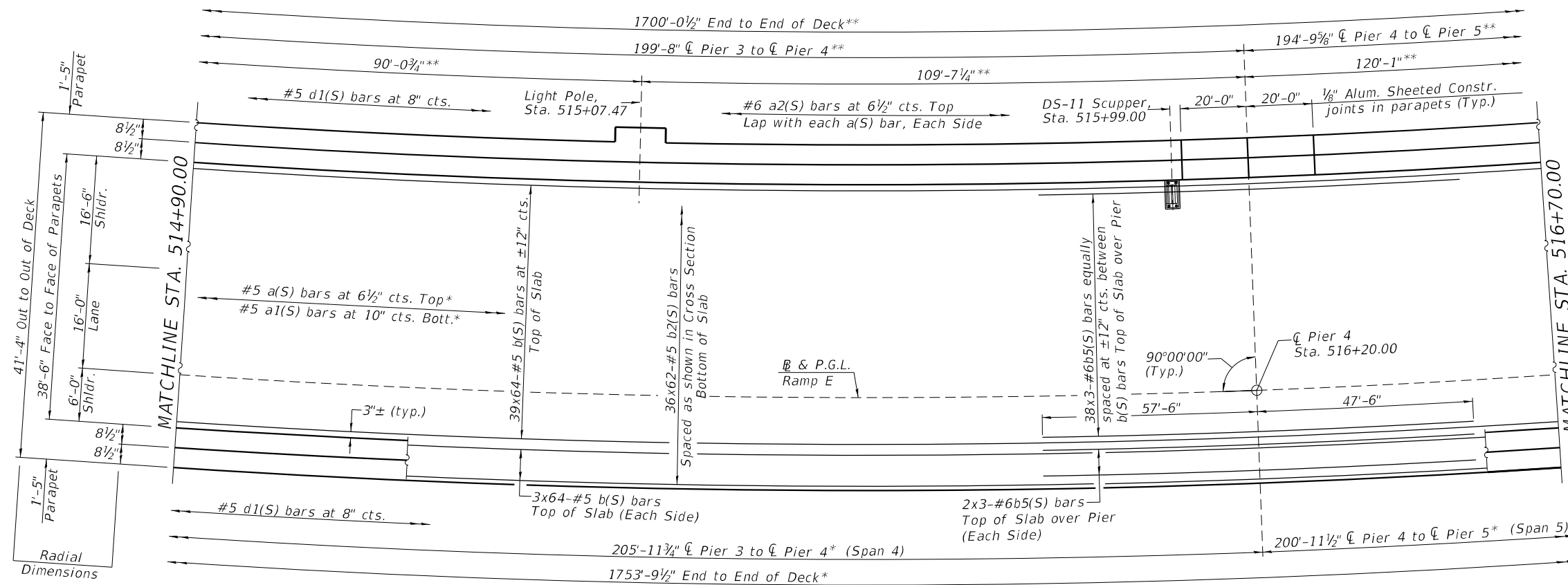
- #5 Bar = 2'-0"
- #6 Bar = 2'-5"

NOTES:

1. Bend longitudinal reinforcement as required to fit in the field.
 2. See Sheet S-26 of S-106 for superstructure details and Bill of Material.
 3. Bars indicated thus 3x40-#5 etc. indicates 3 lines of bars with 40 lengths per line.
- *Along Inside Face of North Parapet
**Along Inside Face of South Parapet



DECK PLAN - 3



DECK PLAN - 4

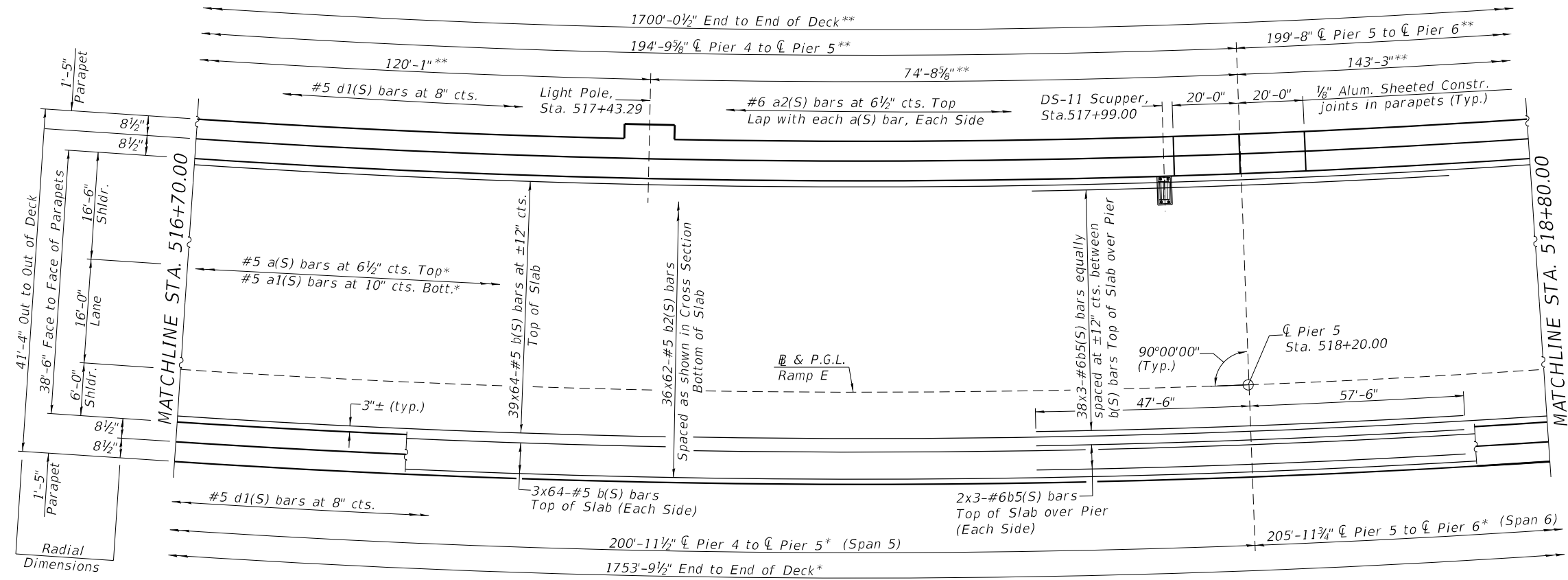
MINIMUM BAR LAP

- #5 Bar = 2'-0"
- #6 Bar = 2'-5"

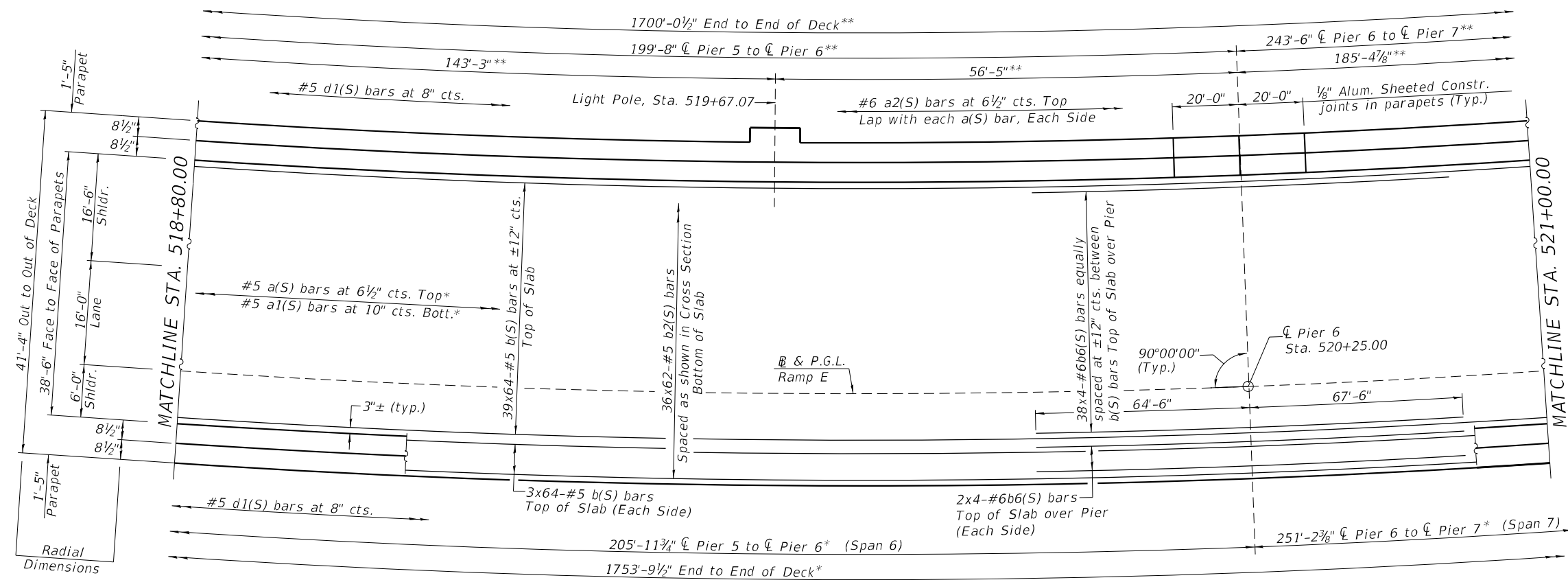
NOTES:

1. Bend longitudinal reinforcement as required to fit in the field.
 2. See Sheet S-26 of S-106 for superstructure details and Bill of Material.
 3. Bars indicated thus 3x40-#5 etc. indicates 3 lines of bars with 40 lengths per line.
- *Along Inside Face of North Parapet
 **Along Inside Face of South Parapet

FILE NAME = 	USER NAME = Denise Herrera	DESIGNED - LM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE - 2 STRUCTURE NO. 010-1001	F.A.I. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = NA	DRAWN - GLD	REVISED -			74 & 57	(10-34-1) HBK	CHAMPAIGN	1187	662
	PLOT DATE = 05/03/2021	CHECKED - LM	REVISED -			CONTRACT NO. 70B99				
	SHEET NO. S-20 OF S-106 SHEETS						ILLINOIS FED. AID PROJECT			



DECK PLAN - 5



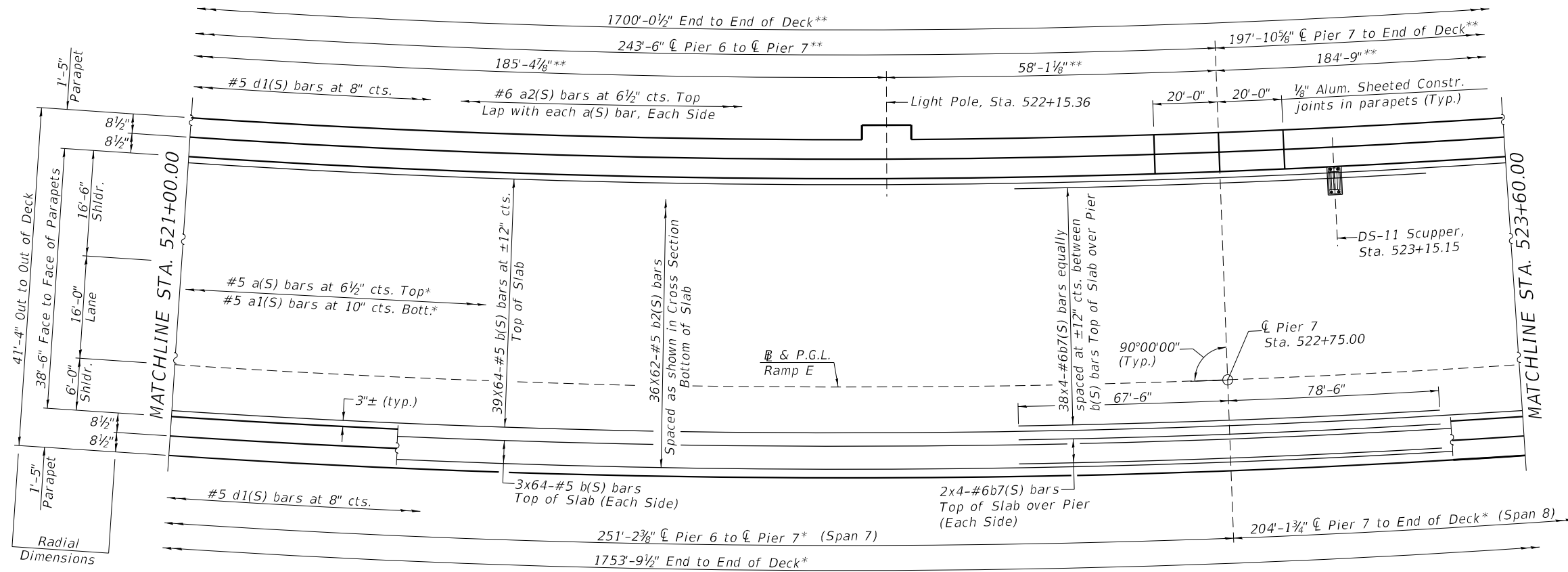
DECK PLAN - 6

MINIMUM BAR LAP

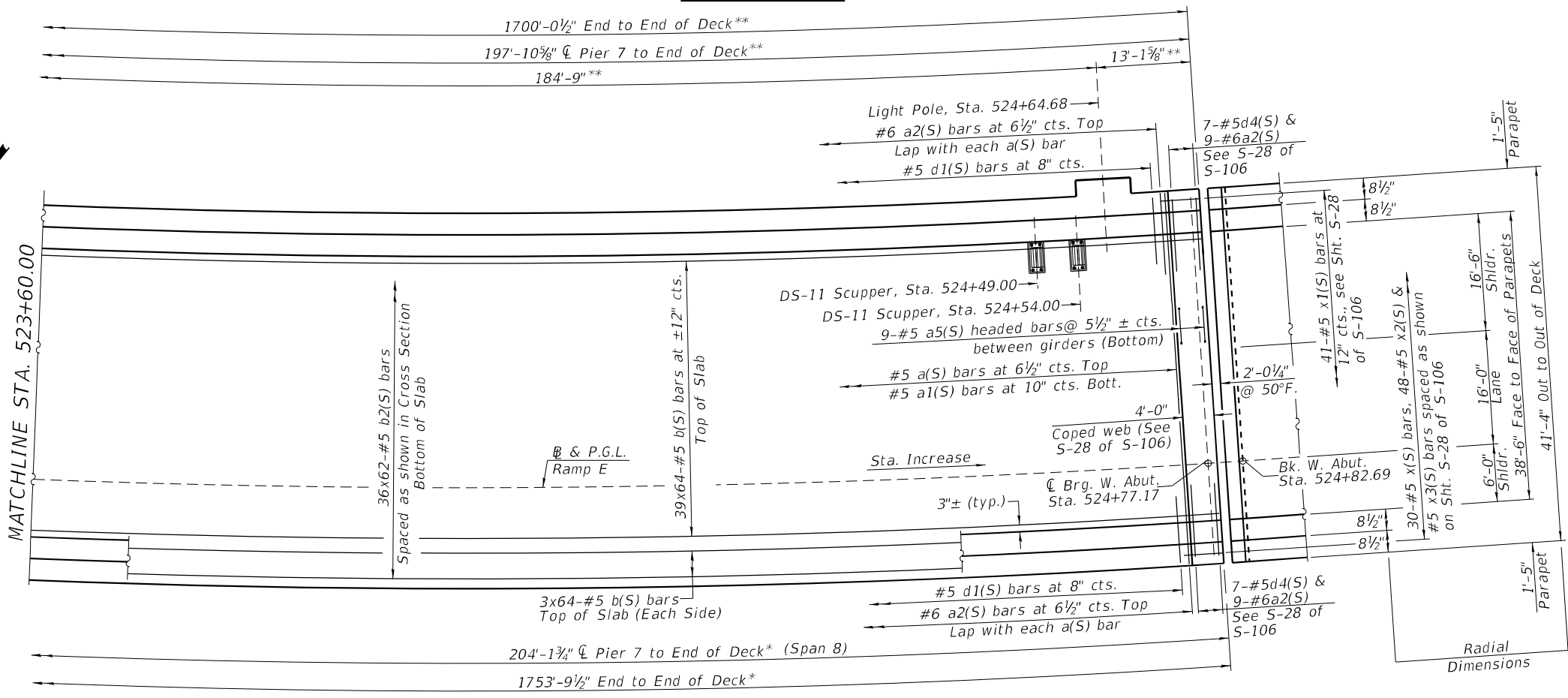
- #5 Bar = 2'-0"
- #6 Bar = 2'-5"

NOTES:

1. Bend longitudinal reinforcement as required to fit in the field.
 2. See Sheet S-26 of S-106 for superstructure details and Bill of Material.
 3. Bars indicated thus 3x40-#5 etc. indicates 3 lines of bars with 40 lengths per line.
- *Along Inside Face of North Parapet
 **Along Inside Face of South Parapet



DECK PLAN - 7



DECK PLAN - 8

Note: See Sht. S-28 of S-106 for Expansion Joint Details

MINIMUM BAR LAP

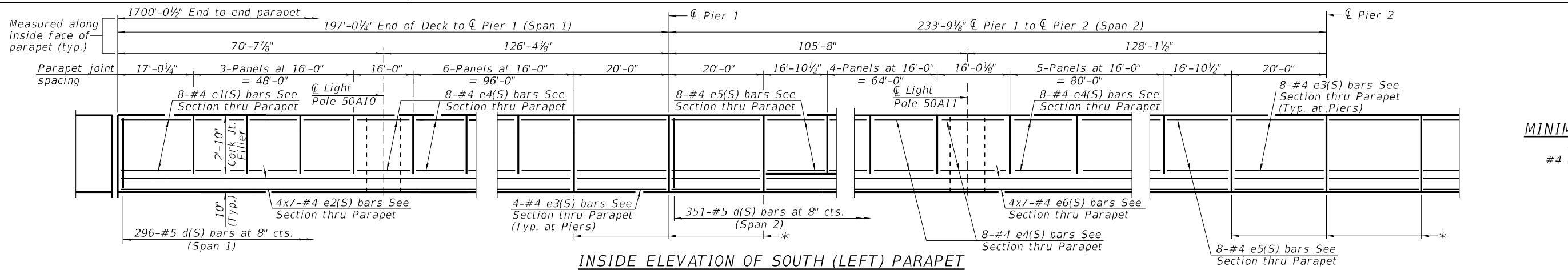
- #5 Bar = 2'-0"
- #6 Bar = 2'-5"

NOTES:

1. Bend longitudinal reinforcement as required to fit in the field.
2. See Sheet S-26 of S-106 for superstructure details and Bill of Material.
3. Bars indicated thus 3x40-#5 etc. indicates 3 lines of bars with 40 lengths per line.

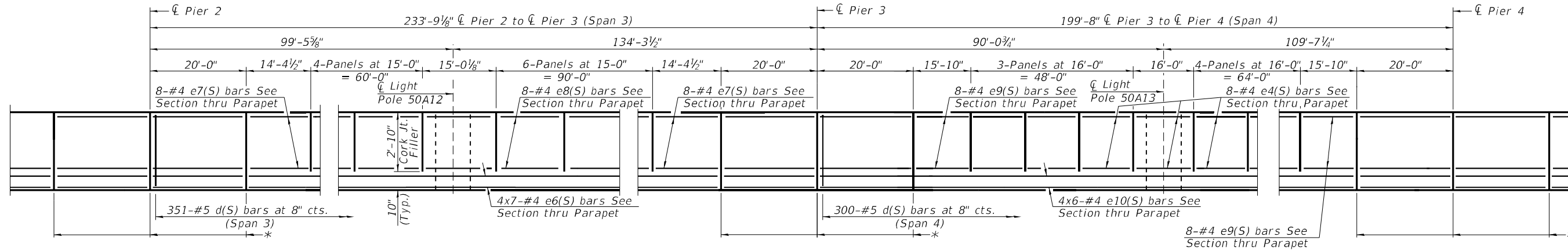
*Along Inside Face of North Parapet
 **Along Inside Face of South Parapet

FILE NAME = 	USER NAME = Denise Herrera	DESIGNED - LM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE - 4 STRUCTURE NO. 010-1001	F.A.I. R.E. 74 & 57	SECTION (10-34-1) HBK	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 664
	PLOT SCALE = NA	DRAWN - GLD	CHECKED - LM			REVISED -	SHEET NO. S-22 OF S-106 SHEETS	CONTRACT NO. 70B99	ILLINOIS FED. AID PROJECT	
PLOT DATE = 05/03/2021	CHECKED - LM	REVISED -	REVISED -							

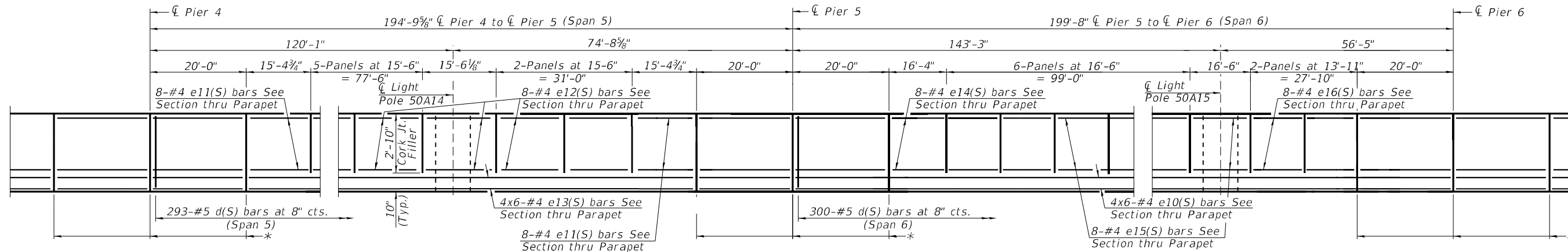


INSIDE ELEVATION OF SOUTH (LEFT) PARAPET

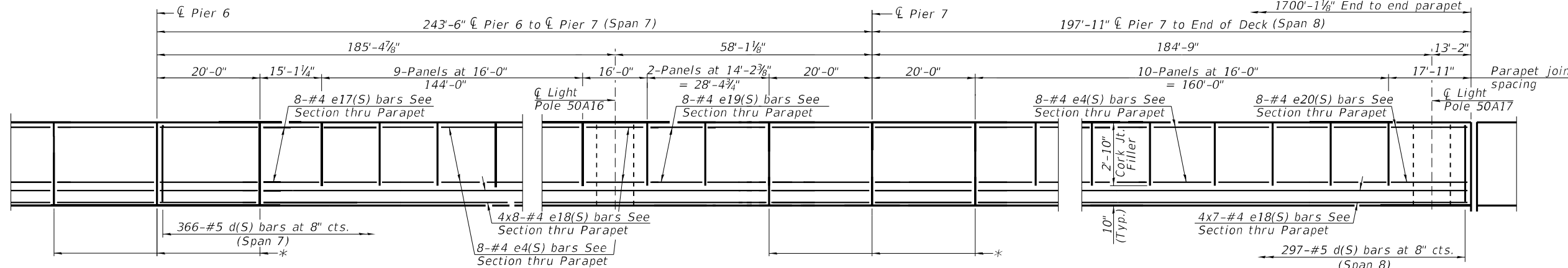
MINIMUM BAR LAP
(PARAPET)
#4 Bar = 2'-1"



INSIDE ELEVATION OF SOUTH (LEFT) PARAPET



INSIDE ELEVATION OF SOUTH (LEFT) PARAPET



INSIDE ELEVATION OF SOUTH (LEFT) PARAPET

LIGHT POLE LOCATIONS

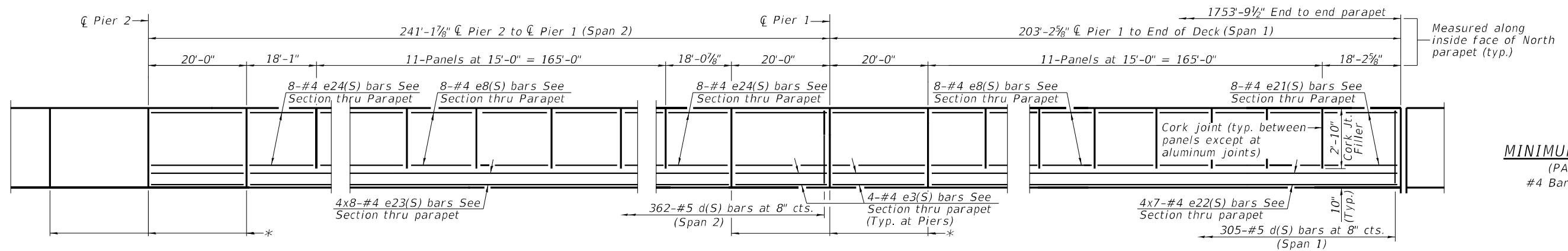
- Light Pole 50A10-Sta. 508+05.26
- Light Pole 50A11-Sta. 510+43.48
- Light Pole 50A12-Sta. 512+77.12
- Light Pole 50A13-Sta. 515+07.47
- Light Pole 50A14-Sta. 517+43.29
- Light Pole 50A15-Sta. 519+67.07
- Light Pole 50A16-Sta. 522+15.36
- Light Pole 50A17-Sta. 524+64.68

NOTES:

1. Bars indicated thus 3x40-#5 etc. indicates 3 lines of bars with 40 lengths per line.
2. See Sheet S-25 of S-106 for Section Thru Parapet

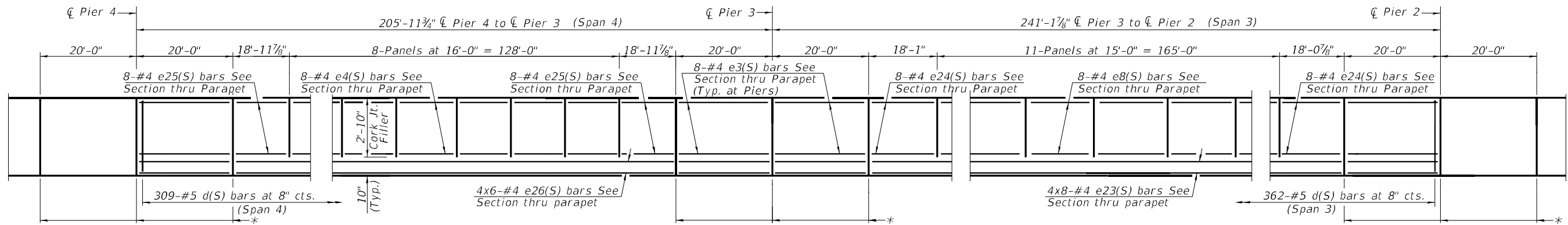
*1/8" Aluminum sheeted joints full height of parapet

FILE NAME = 	USER NAME = Denise Herrera	DESIGNED - LM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE DETAILS - 1 STRUCTURE NO. 010-1001	F.A.I. RTÉ. 74 & 57	SECTION (10-34-1) HBK	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 665
	PLOT SCALE = NA	DRAWN - GLD	CHECKED - LM			PLOT DATE = 05/03/2021	SHEET NO. S-23 OF S-106 SHEETS	CONTRACT NO. 70B99	ILLINOIS FED. AID PROJECT	

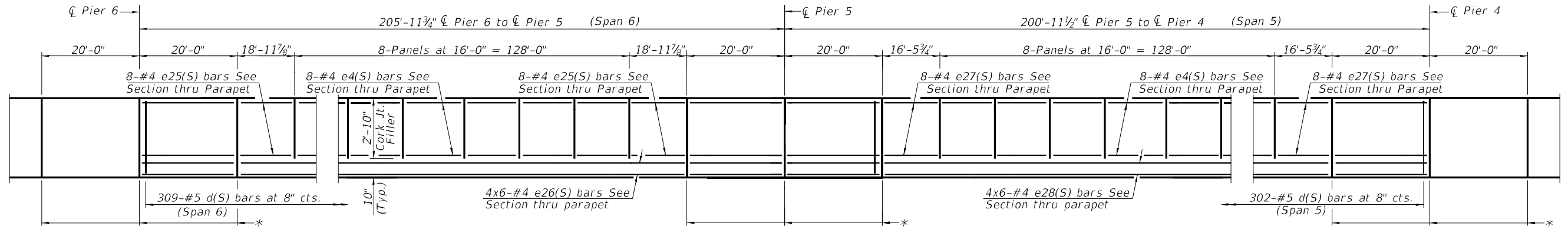


INSIDE ELEVATION OF NORTH (RIGHT) PARAPET

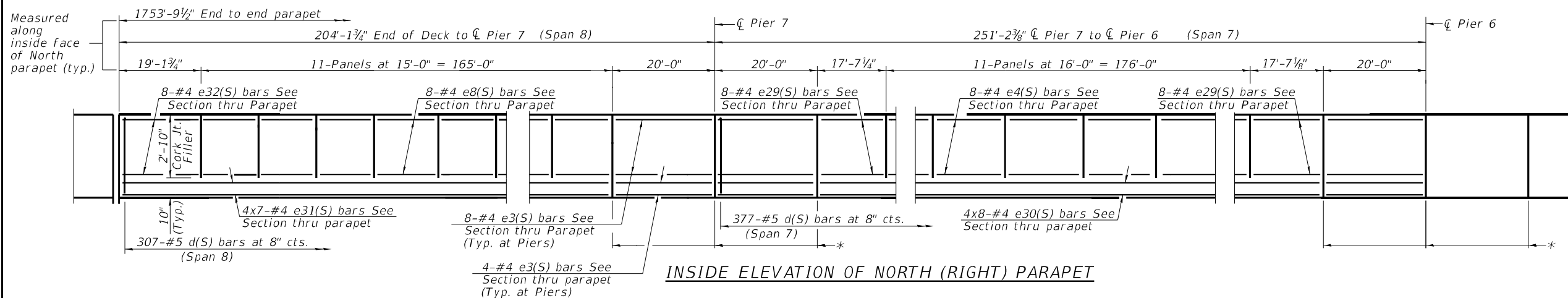
MINIMUM BAR LAP
(PARAPET)
#4 Bar = 2'-1"



INSIDE ELEVATION OF NORTH (RIGHT) PARAPET



INSIDE ELEVATION OF NORTH (RIGHT) PARAPET



INSIDE ELEVATION OF NORTH (RIGHT) PARAPET

NOTES:
1. Bars indicated thus 3x40-#5 etc. indicates 3 lines of bars with 40 lengths per line.
2. See Sheet S-25 of S-106 for Section Thru Parapet
* 1/8" Aluminum sheeted joints full height of parapet

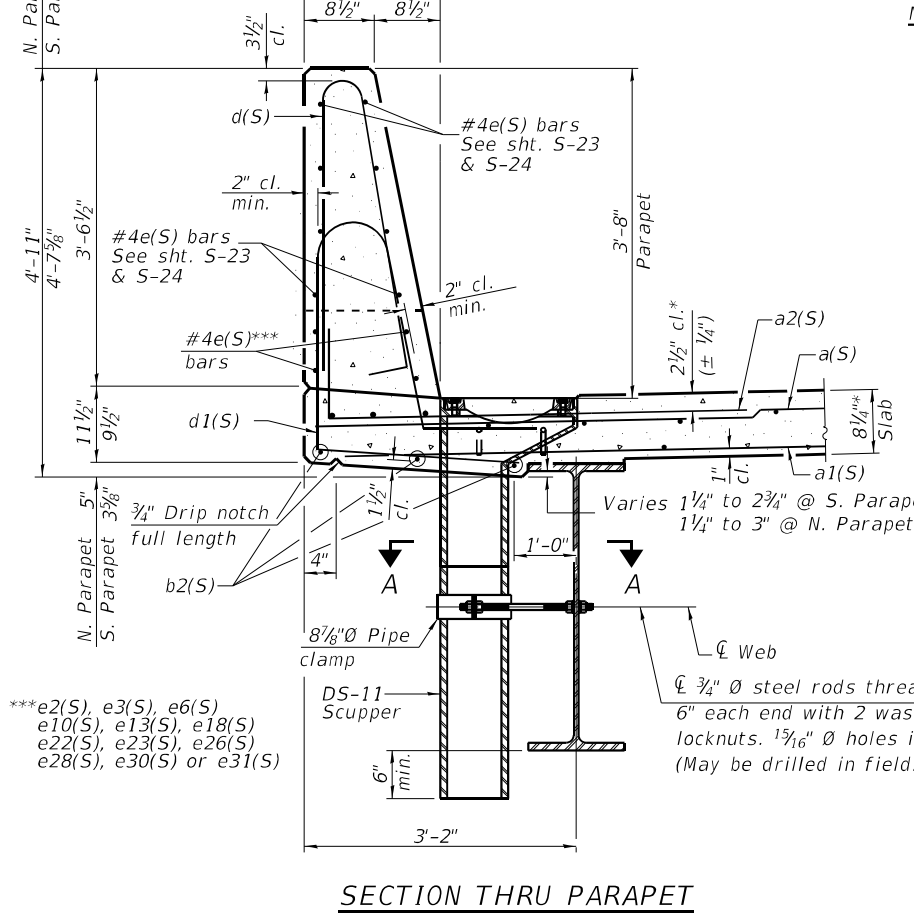
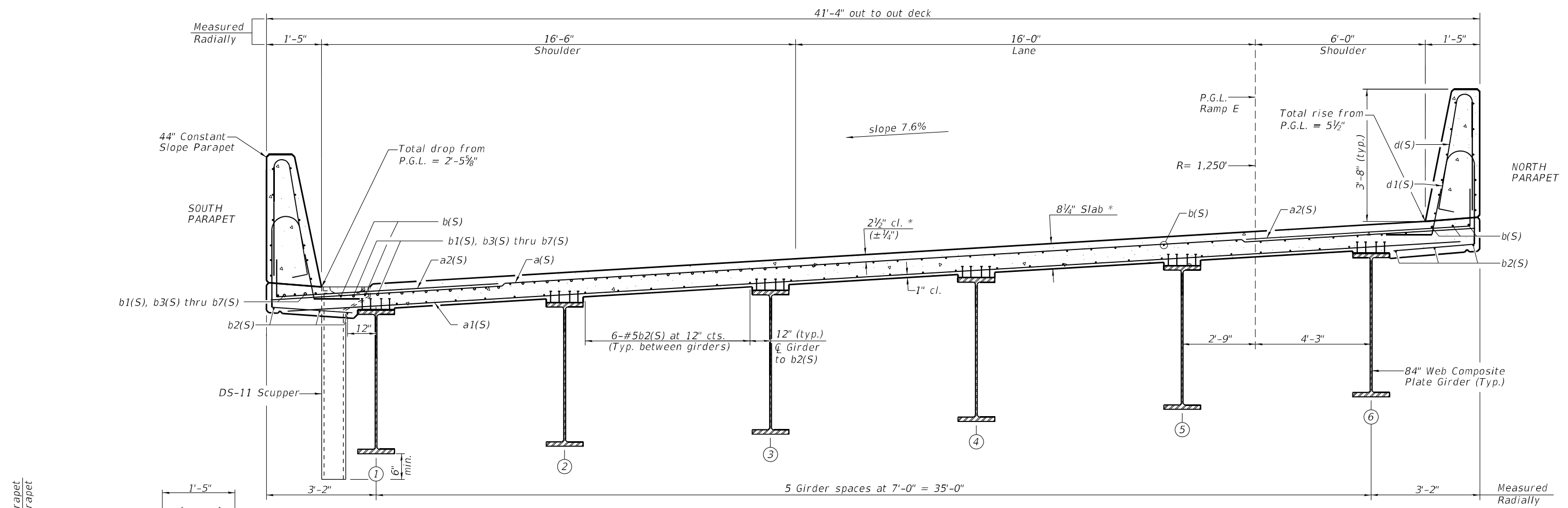
FILE NAME =
CMT
License No. 184-C00613 © Copyright CMT, Inc.

USER NAME = Denise Herrera	DESIGNED - LM	REVISD -
PLOT SCALE = NA	CHECKED - DH	REVISD -
PLOT DATE = 05/03/2021	DRAWN - GLD	REVISD -
	CHECKED - LM	REVISD -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

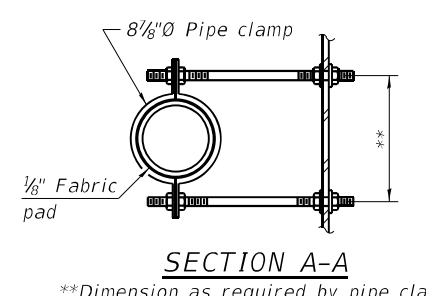
SUPERSTRUCTURE DETAILS - 2
STRUCTURE NO. 010-1001
SHEET NO. S-24 OF S-106 SHEETS

F.A.I. RTÉ. 74 & 57	SECTION (10-34-1) HBK	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 666
CONTRACT NO. 70B99			ILLINOIS FED. AID PROJECT	

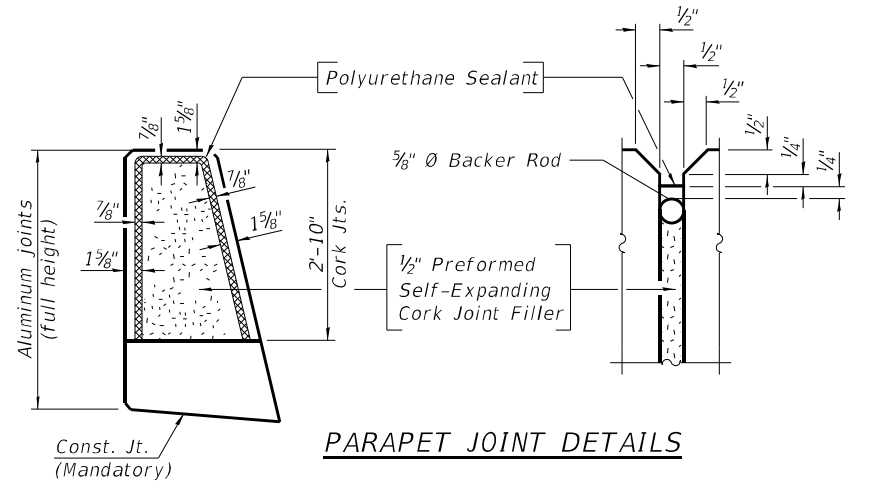


CROSS SECTION
(Looking Upstation)

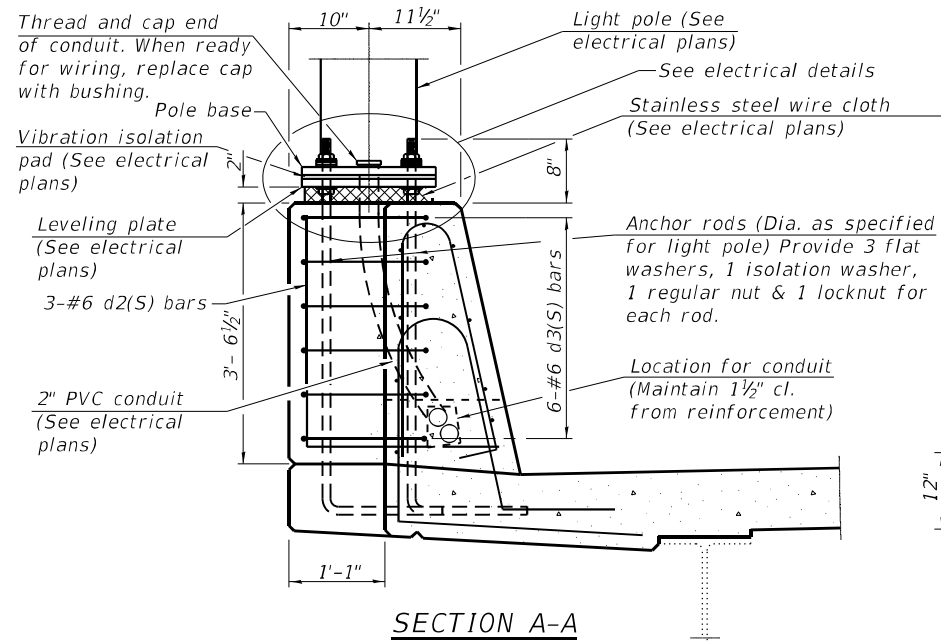
*Prior to Grinding



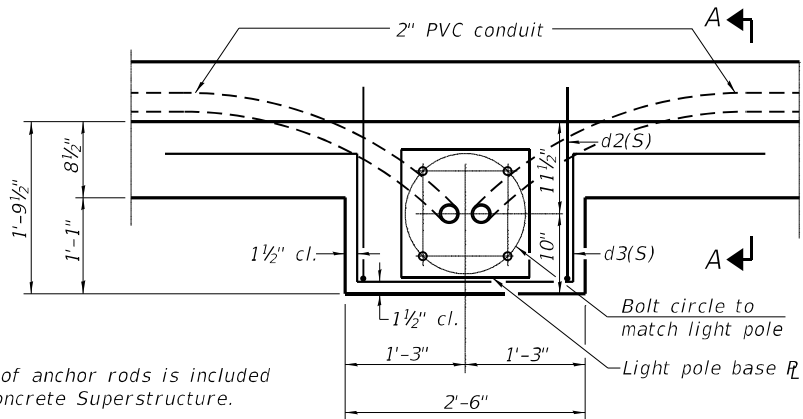
- MINIMUM BAR LAPS**
- PARAPET
 - #4 Bar = 2'-1"
 - DECK
 - #5 Bar = 2'-0"
 - #6 Bar = 2'-5"



Notes:
 The clamping device shall be galvanized according to AASHTO M 232. Cost of clamping device included with DS-11 Scuppers.
 The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
 The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.
 Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A955. Cost included with Reinforcement Bars, Stainless Steel.



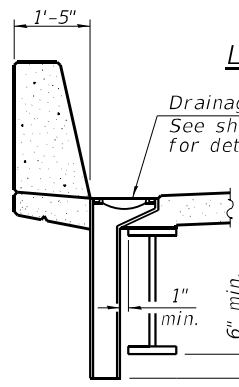
SECTION A-A



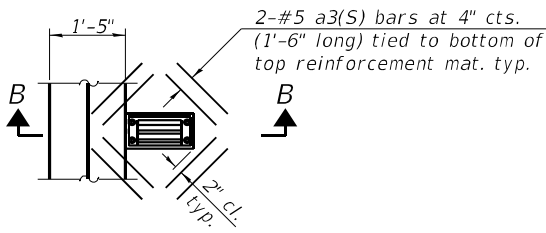
PLAN

LIGHT POLE MOUNTED ON CONCRETE PARAPET

Note: Cost of anchor rods is included with Concrete Superstructure.



SECTION B-B



PLAN

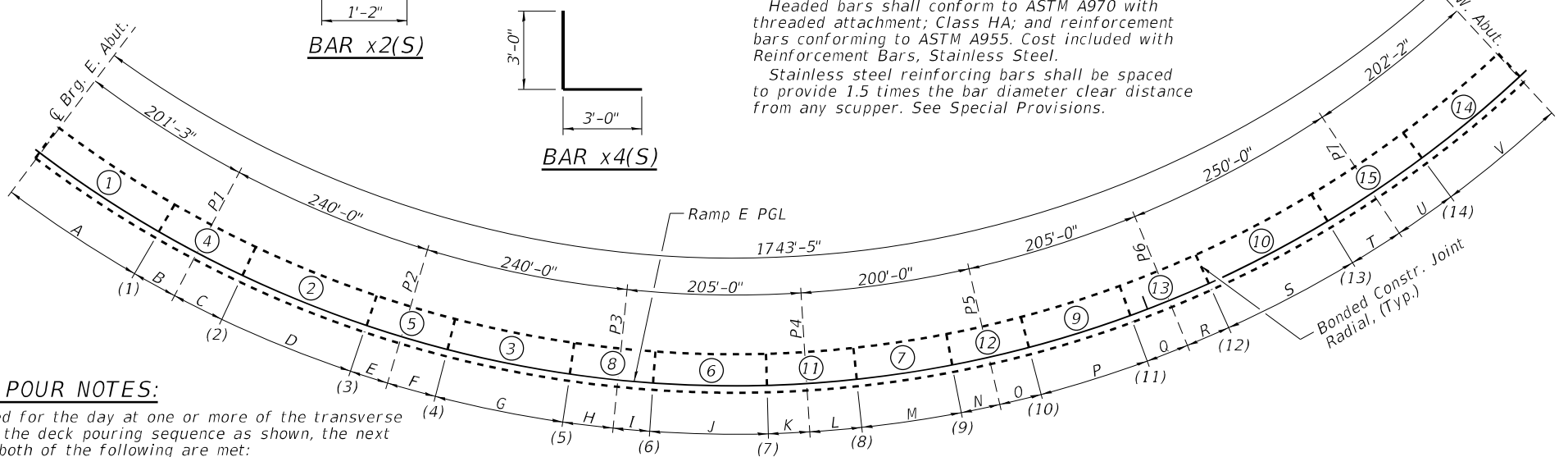
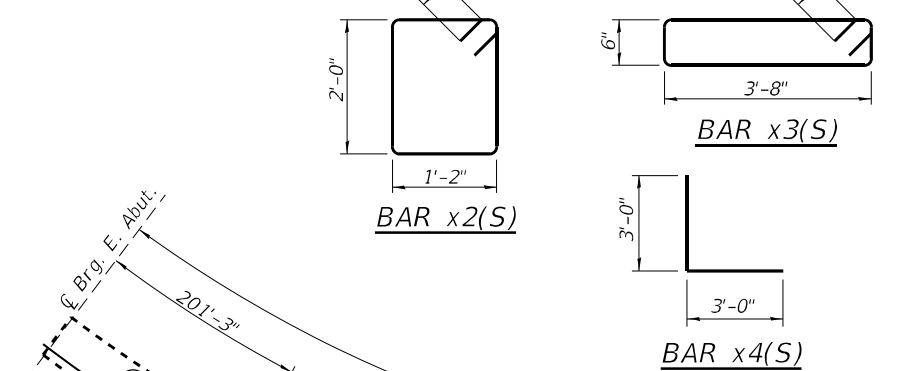
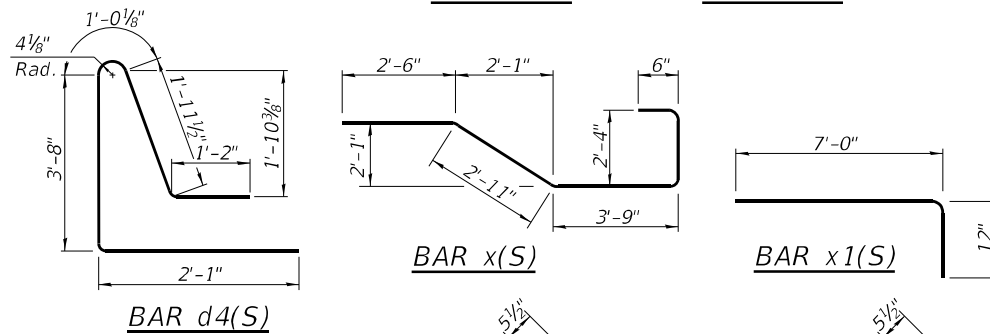
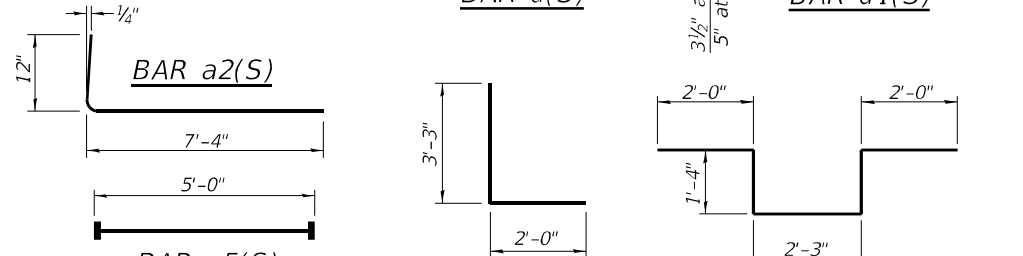
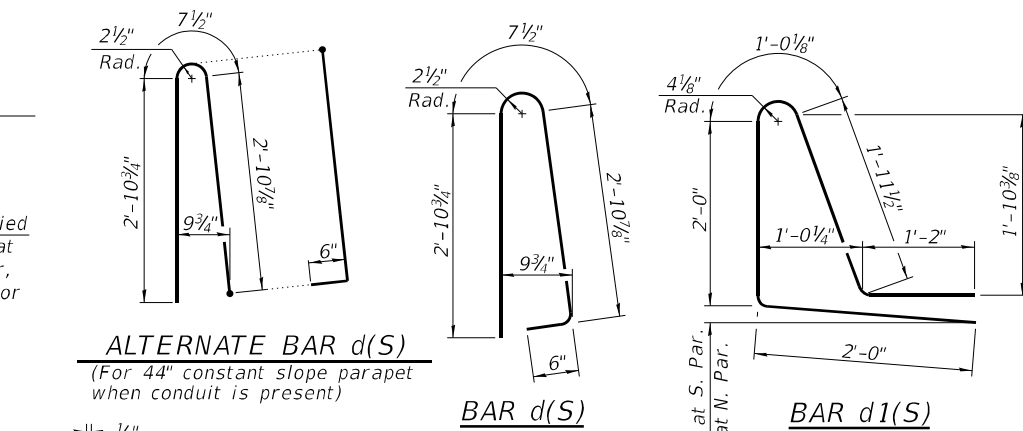
Note: Cut longitudinal reinforcement to clear drainage scuppers.

POURING SEQUENCE TABLE

Lengths	Stations
A = 129'-6 3/4"	(1) = 508+63.31
B = 71'-8 1/4"	(2) = 509+92.71
C = 57'-8 3/8"	(3) = 511+15.29
D = 122'-7"	(4) = 512+32.71
E = 59'-8 1/2"	(5) = 513+62.27
F = 57'-8 5/8"	(6) = 514+73.72
G = 129'-6 3/4"	(7) = 515+68.25
H = 52'-8 3/4"	(8) = 516+61.77
I = 58'-8 5/8"	(9) = 517+78.22
J = 94'-6 3/8"	(10) = 518+71.74
K = 51'-8 1/8"	(11) = 519+66.28
L = 41'-9 3/8"	(12) = 520+86.72
M = 116'-5 3/8"	(13) = 522+13.29
N = 41'-9 3/8"	(14) = 523+47.61
O = 51'-8 7/8"	
P = 94'-6 1/2"	
Q = 58'-8 3/8"	
R = 61'-8 3/8"	
S = 126'-6 7/8"	
T = 61'-8 3/8"	
U = 72'-7 1/4"	
V = 129'-6 3/4"	

DECK POUR NOTES:

- When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:
- 1) At least 72 hours shall have elapsed from the end of the previous pour.
 - 2) The concrete strength shall have attained a minimum flexural strength of 675 psi or a minimum compressive strength of 4,000 psi.



RAMP E POURING SEQUENCE
(All Distances Measured along Ramp E PGL)

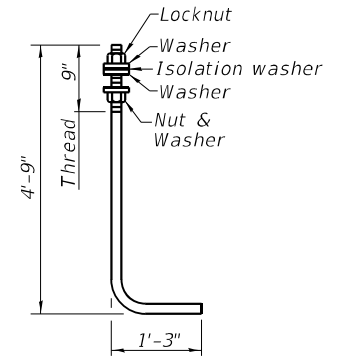
NOTE: 1. Reinforcement bar bending dimensions are out to out.

SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(S)	3278	#5	41'-1"	—
a1(S)	2106	#5	40'-5"	—
a2(S)	6484	#6	8'-4"	—
a3(S)	72	#5	1'-6"	—
a5(S)	90	#6	5'-0"	—
b(S)	2880	#5	29'-5"	—
b1(S)	168	#6	37'-3"	—
b2(S)	2232	#5	30'-4"	—
b3(S)	168	#6	34'-3"	—
b4(S)	168	#6	32'-9"	—
b5(S)	252	#6	36'-9"	—
b6(S)	168	#6	35'-0"	—
b7(S)	168	#6	38'-6"	—
d(S)	5187	#5	7'-0"	—
d1(S)	5159	#5	8'-2"	—
d2(S)	24	#6	5'-3"	—
d3(S)	48	#6	8'-11"	—
d4(S)	28	#5	9'-11"	—
e1(S)	8	#4	16'-8"	—
e2(S)	28	#4	27'-0"	—
e3(S)	336	#4	19'-8"	—
e4(S)	664	#4	15'-8"	—
e5(S)	16	#4	16'-6"	—
e6(S)	56	#4	29'-5"	—
e7(S)	16	#4	14'-0"	—
e8(S)	440	#4	14'-8"	—
e9(S)	16	#4	15'-6"	—
e10(S)	48	#4	28'-4"	—
e11(S)	16	#4	15'-0"	—
e12(S)	64	#4	15'-2"	—
e13(S)	24	#4	27'-6"	—
e14(S)	8	#4	16'-0"	—
e15(S)	56	#4	16'-2"	—
e16(S)	16	#4	13'-7"	—
e17(S)	8	#4	14'-9"	—
e18(S)	60	#4	27'-3"	—
e19(S)	16	#4	13'-10"	—
e20(S)	8	#4	17'-7"	—
e21(S)	8	#4	17'-10"	—
e22(S)	28	#4	27'-11"	—

SUPERSTRUCTURE
BILL OF MATERIAL (CONT.)

Bar	No.	Size	Length	Shape
e23(S)	64	#4	27'-0"	—
e24(S)	32	#4	17'-9"	—
e25(S)	32	#4	18'-8"	—
e26(S)	48	#4	29'-4"	—
e27(S)	16	#4	16'-1"	—
e28(S)	24	#4	28'-6"	—
e29(S)	16	#4	17'-3"	—
e30(S)	32	#4	28'-3"	—
e31(S)	28	#4	28'-1"	—
e32(S)	8	#4	18'-9"	—
x(S)	60	#5	12'-0"	—
x1(S)	82	#5	8'-0"	—
x2(S)	96	#5	7'-3"	—
x3(S)	96	#5	9'-3"	—
x4(S)	8	#4	6'-0"	—
Reinforcement Bars, Stainless Steel		Pound	651,190	
Concrete Superstructure		Cu. Yd.	2,426.5	

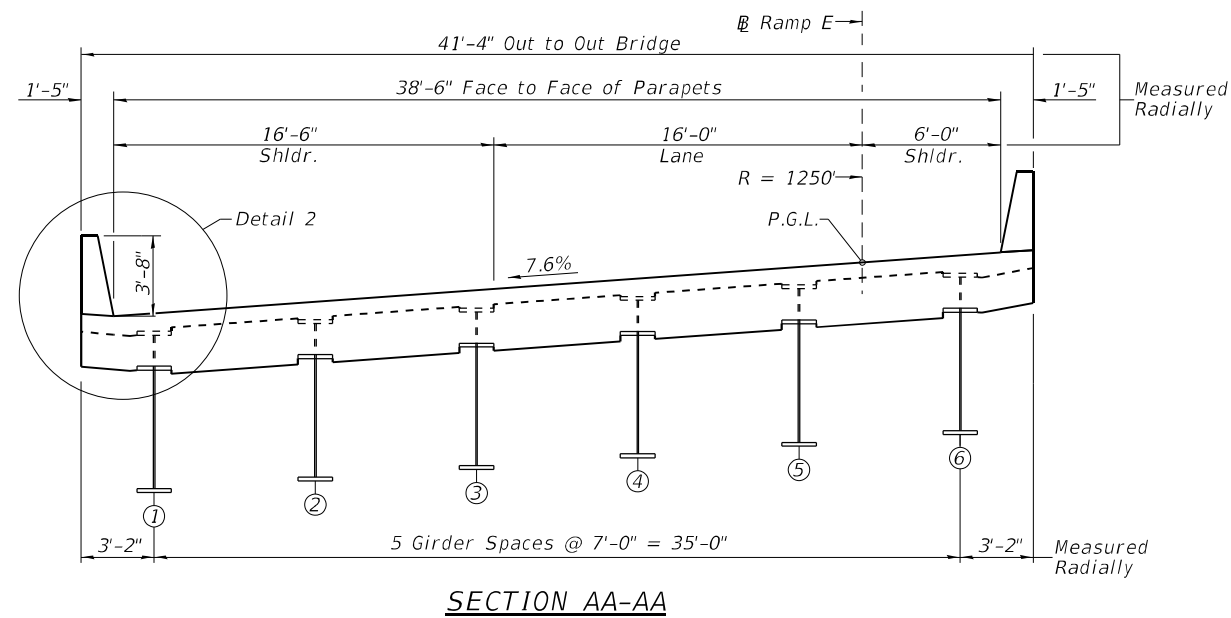


ANCHOR ROD

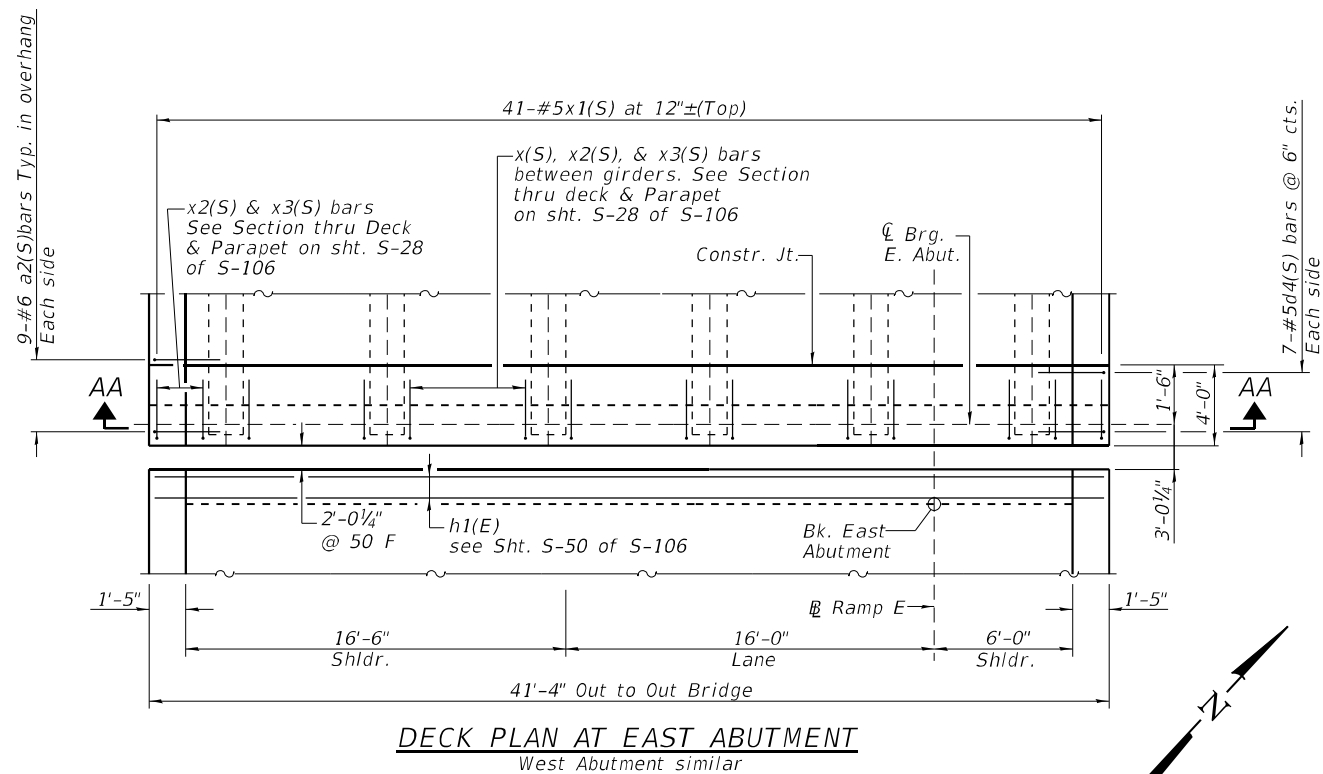
Diameter as specified by light pole mfg. (ASTM F 1554 Grade 105) Full length hot dipped galvanized.

NOTE: Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A955. Cost included with Reinforcement Bars, Stainless Steel.

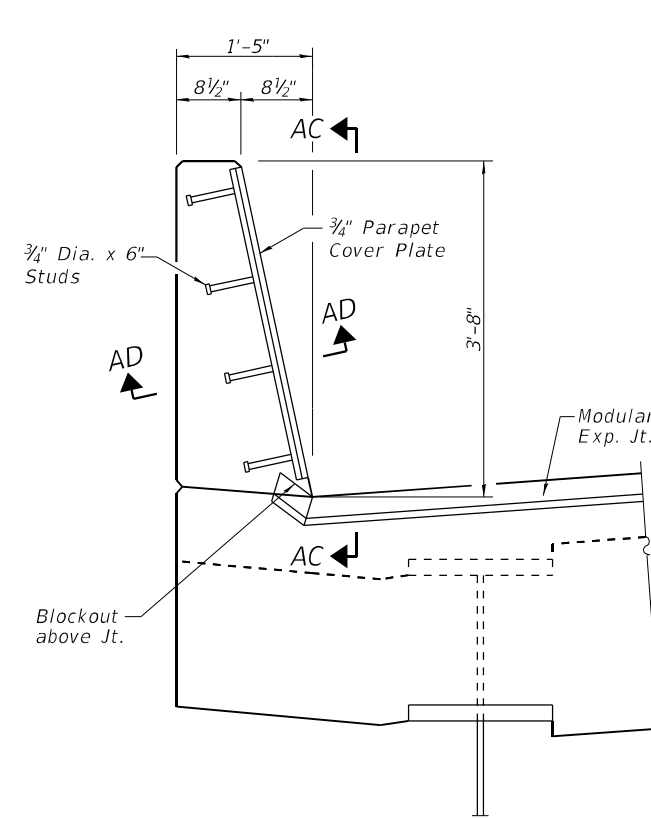
Stainless steel reinforcing bars shall be spaced to provide 1.5 times the bar diameter clear distance from any scupper. See Special Provisions.



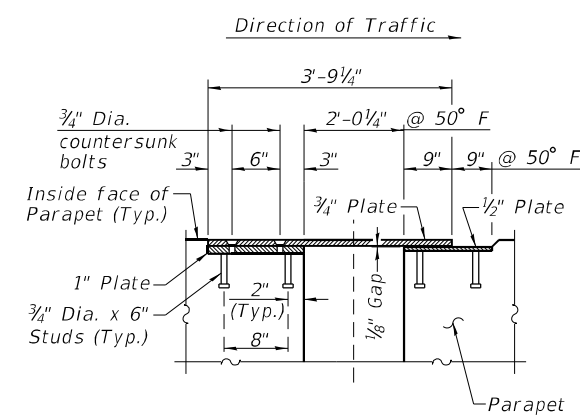
SECTION AA-AA



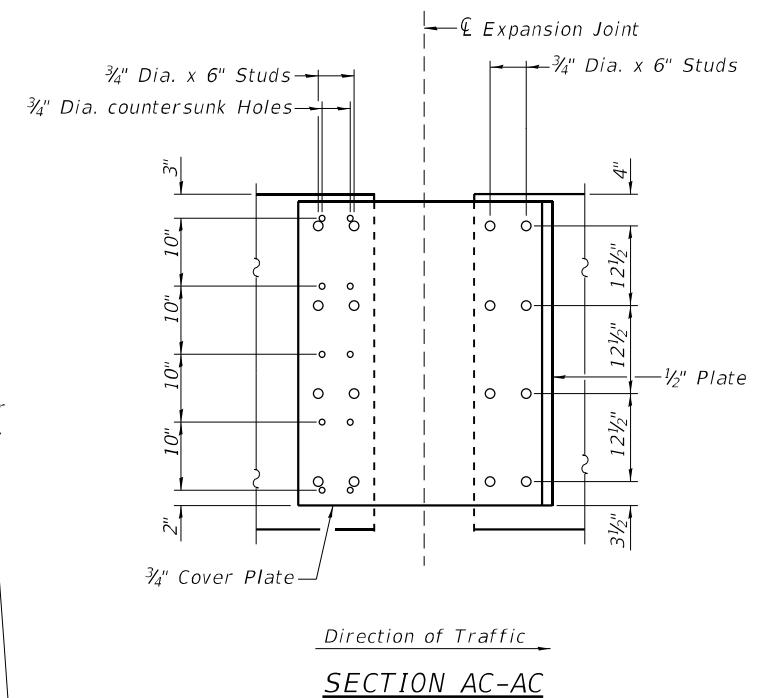
DECK PLAN AT EAST ABUTMENT
West Abutment similar



DETAIL 2



SECTION AD-AD



SECTION AC-AC

REQUIRED MOVEMENT
(AASHTO Load Combination Service I)

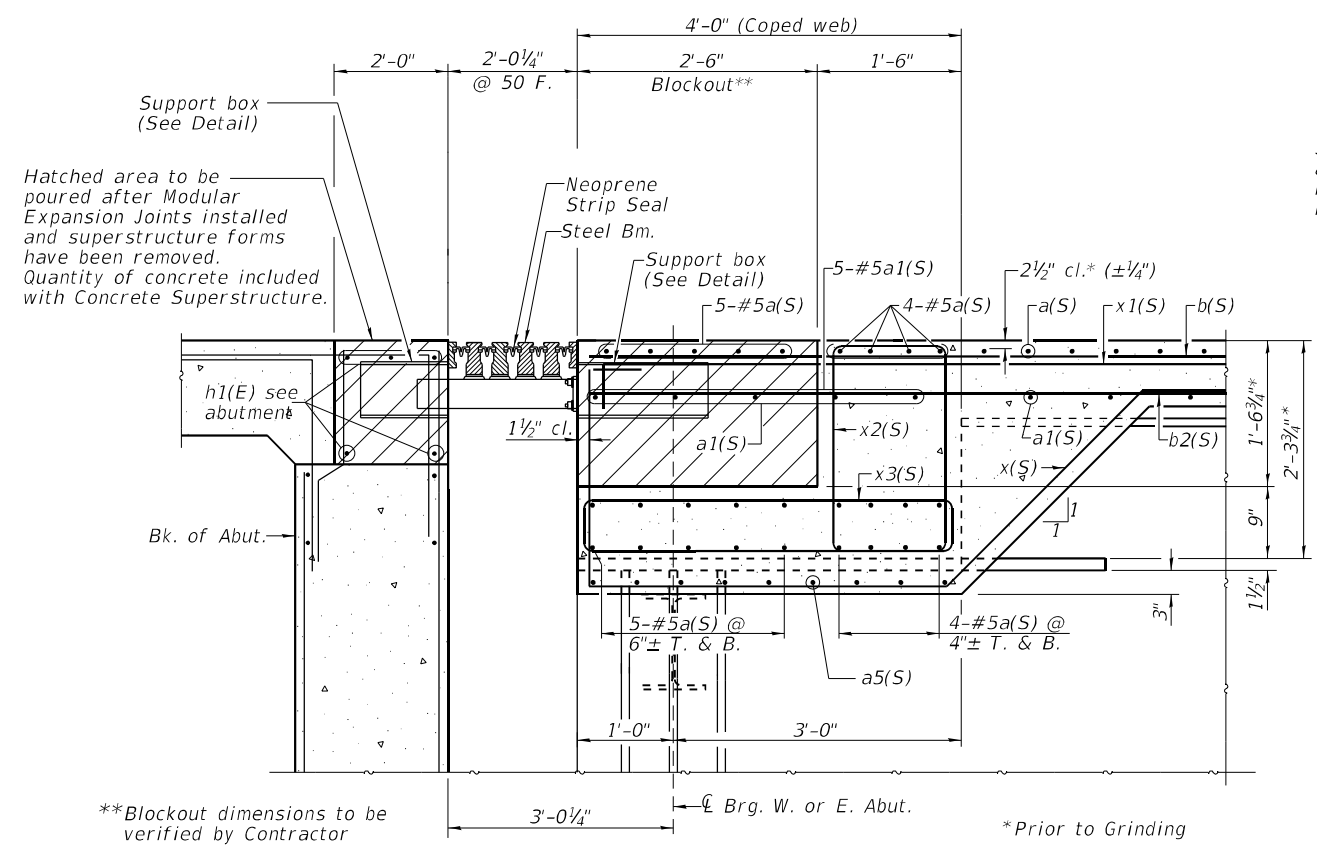
	W. Abut.	E. Abut.
Total longitudinal (open/close) movement	6.1"	6.2"
Total lateral movement	2.2"	2.3"

BILL OF MATERIAL

Item	Unit	Total
Modular Expansion Joint - Swivel 15"	Foot	83

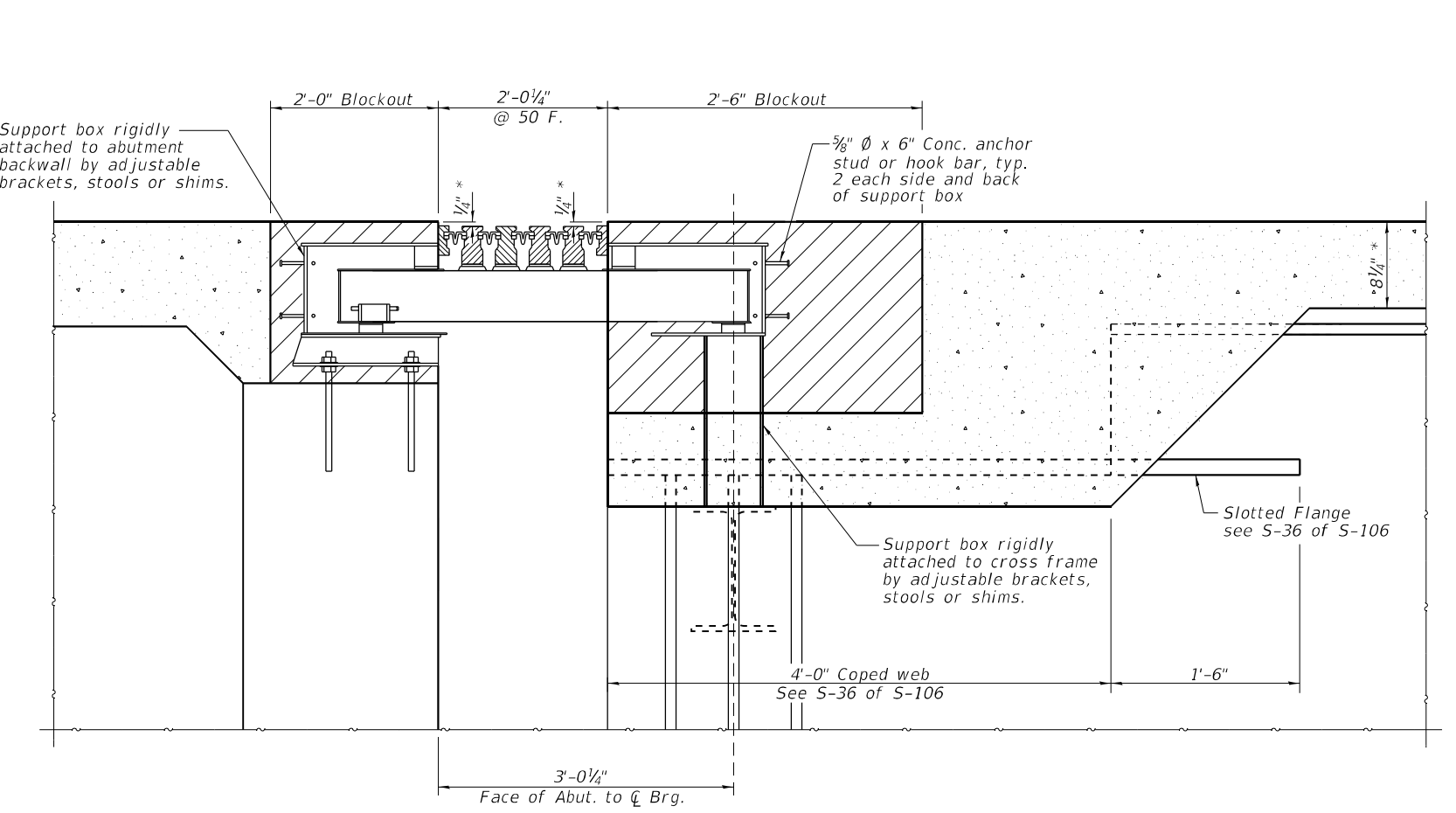
NOTES:

1. Parapet sliding plates, embedded plates, and anchorage studs shall be hot dip galvanized according to AASHTO M 111.
2. On steel surfaces of the modular expansion joint that are to be painted, the surfaces shall be shop painted with an inorganic zinc rich primer per AASHTO M 300, Type 1. No field painting required.
3. For bar details, bar list, and Bill of Material see Sheet S-26 of S-106.
4. Modular expansion joints shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.

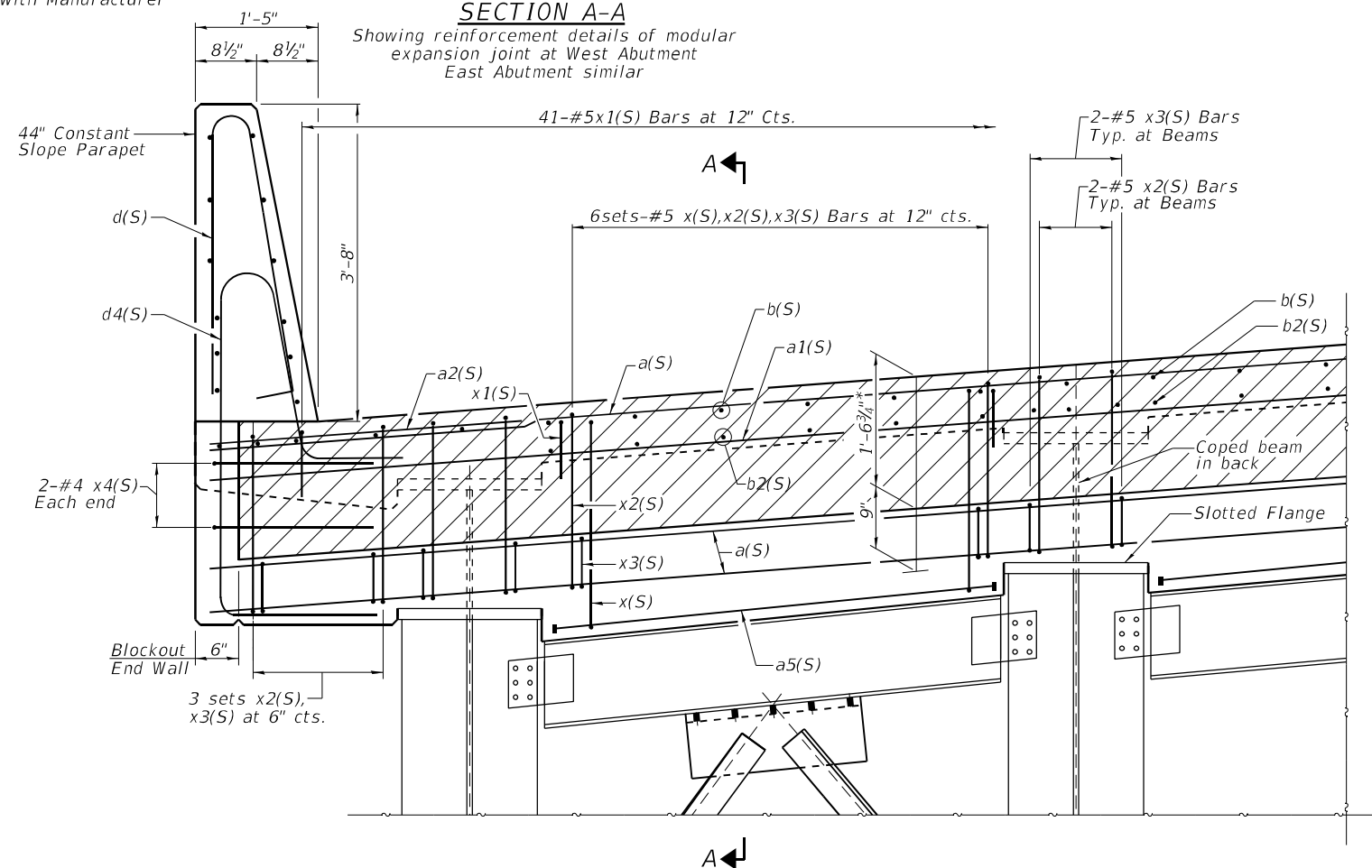


SECTION A-A

Showing reinforcement details of modular expansion joint at West Abutment East Abutment similar



SUPPORT BOX DETAIL

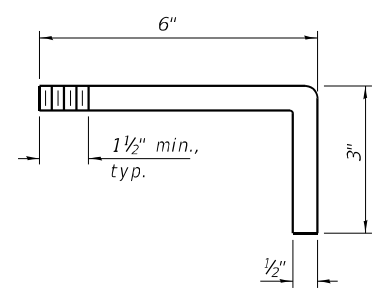
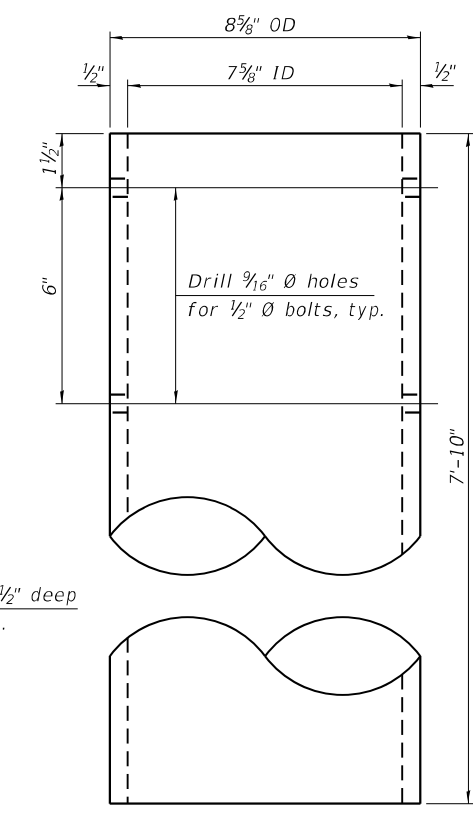
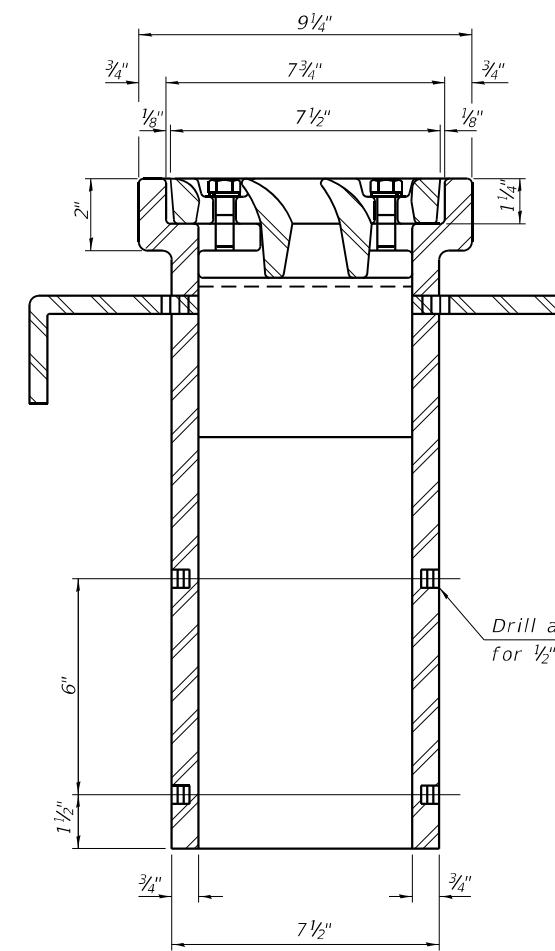
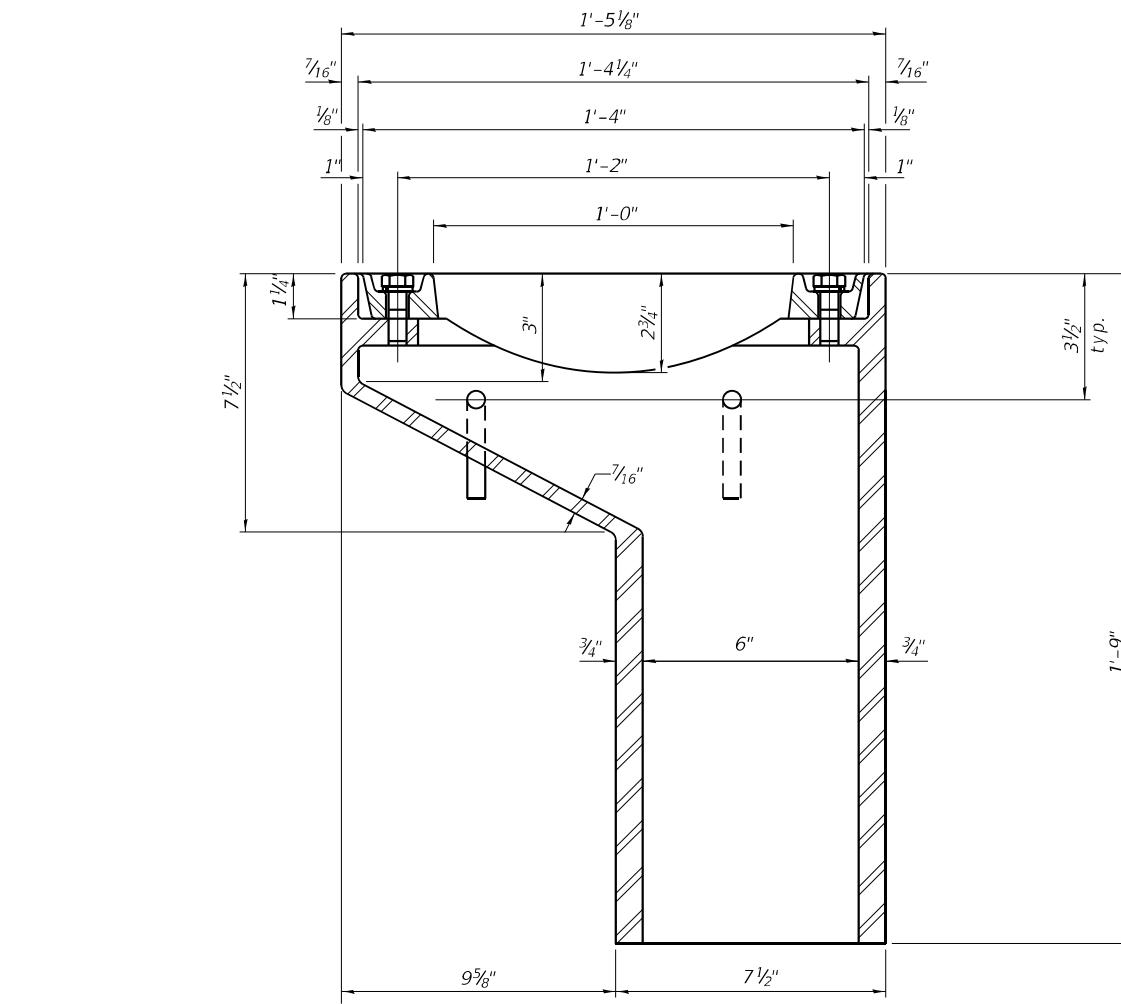
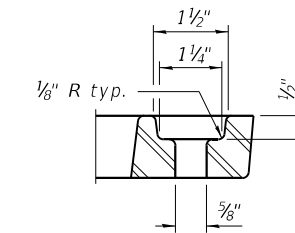
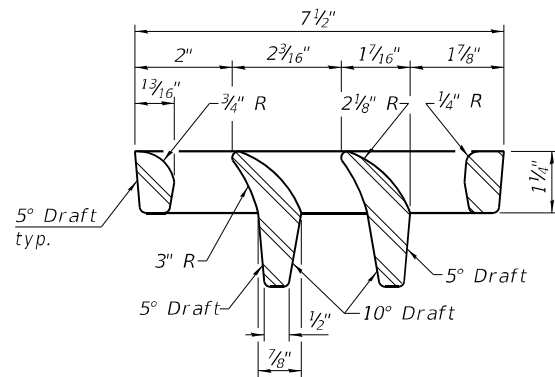
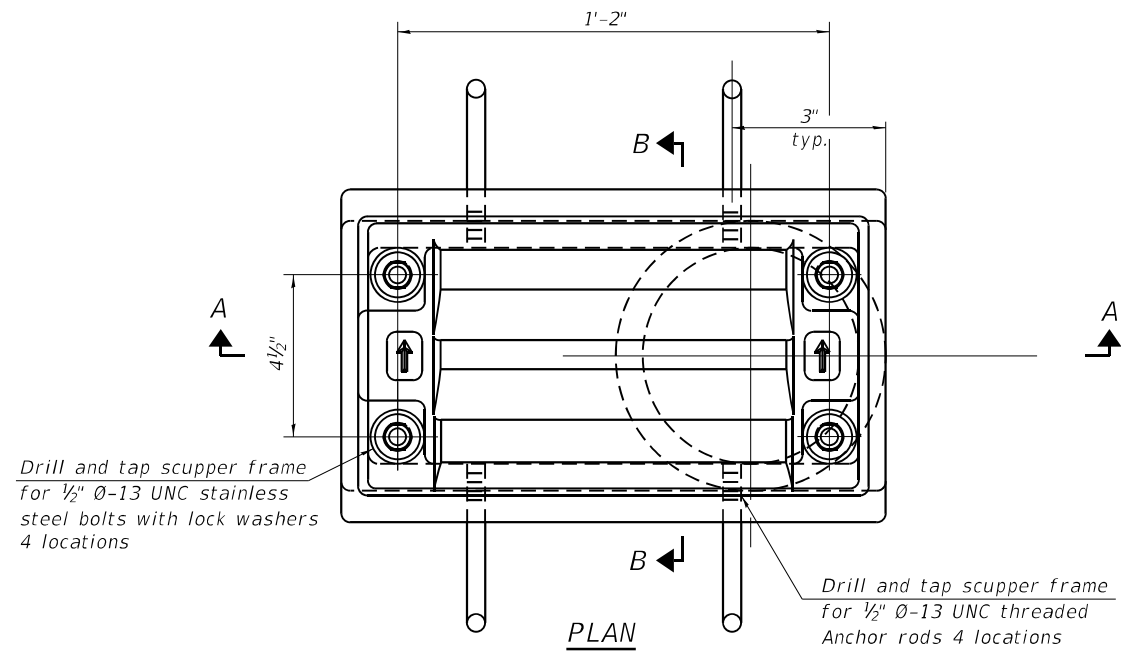


SECTION THRU DECK AND PARAPET

NOTES:

1. Modular joint assemblies shall be installed with forming and reinforcement bars in place prior to pouring the adjoining concrete deck span.
2. Modular joint assembly shall be adjusted for temperature prior to pouring blockout area.
3. Bars in blockout may be adjusted in the field if necessary to miss joint support boxes as approved by the Engineer. See shop drawings for Modular Expansion Joint. See Special Provisions.

FILE NAME = 	USER NAME = Denise Herrera	DESIGNED - LM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MODULAR EXPANSION SWIVEL JOINT DETAILS STRUCTURE NO. 010-1001	F.A.I. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = NA	DRAWN - GLD	REVISED -			74 & 57	(10-34-1) HBK	CHAMPAIGN	1187	670
PLOT DATE = 05/03/2021	CHECKED - LM	REVISED -	REVISED -	SHEET NO. S-28 OF S-106 SHEETS		CONTRACT NO. 70B99			ILLINOIS FED. AID PROJECT	



Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M105, Class 35B and AASHTO M306.

Bolts, anchor rods, nuts and washers shall be according to ASTM A307 and shall be galvanized according to AASHTO M232. As an alternate stainless steel may be used.

Stainless steel hardware shall be according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frames and downspouts; however, the scupper grates shall remain cast iron. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval.

Structural steel scupper frames and downspouts, when utilized, shall be galvanized according to AASHTO M111.

As an alternate, fiberglass may be used for downspouts according to ASTM D2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. in lieu of the cast iron or structural steel.

Exterior surfaces of downspouts and exterior exposed surfaces of the scupper frame below deck shall be treated as specified on sheet S-25 of S-106.

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

Cost of the grate, frame, downspout, anchor rods, nuts and washers including complete installation of the scupper shall be paid for at the contract unit price for Drainage Scupper, DS-11.

See sheet S-25 of S-106 for scupper location relative to parapet.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	9

DS-11

1-1-2020

FILE NAME =

License No. 184-C00613 © Copyright CMT, Inc.

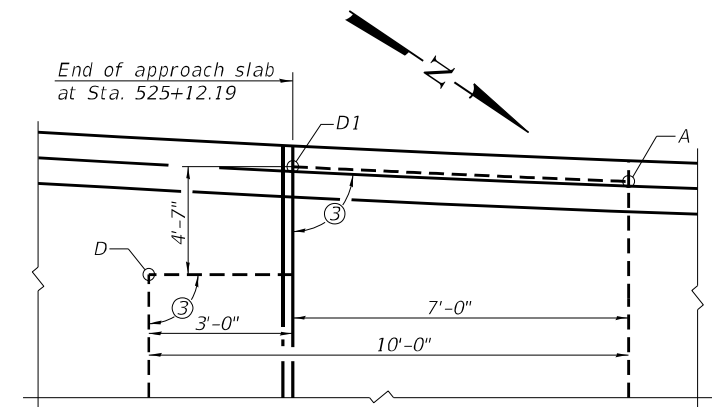
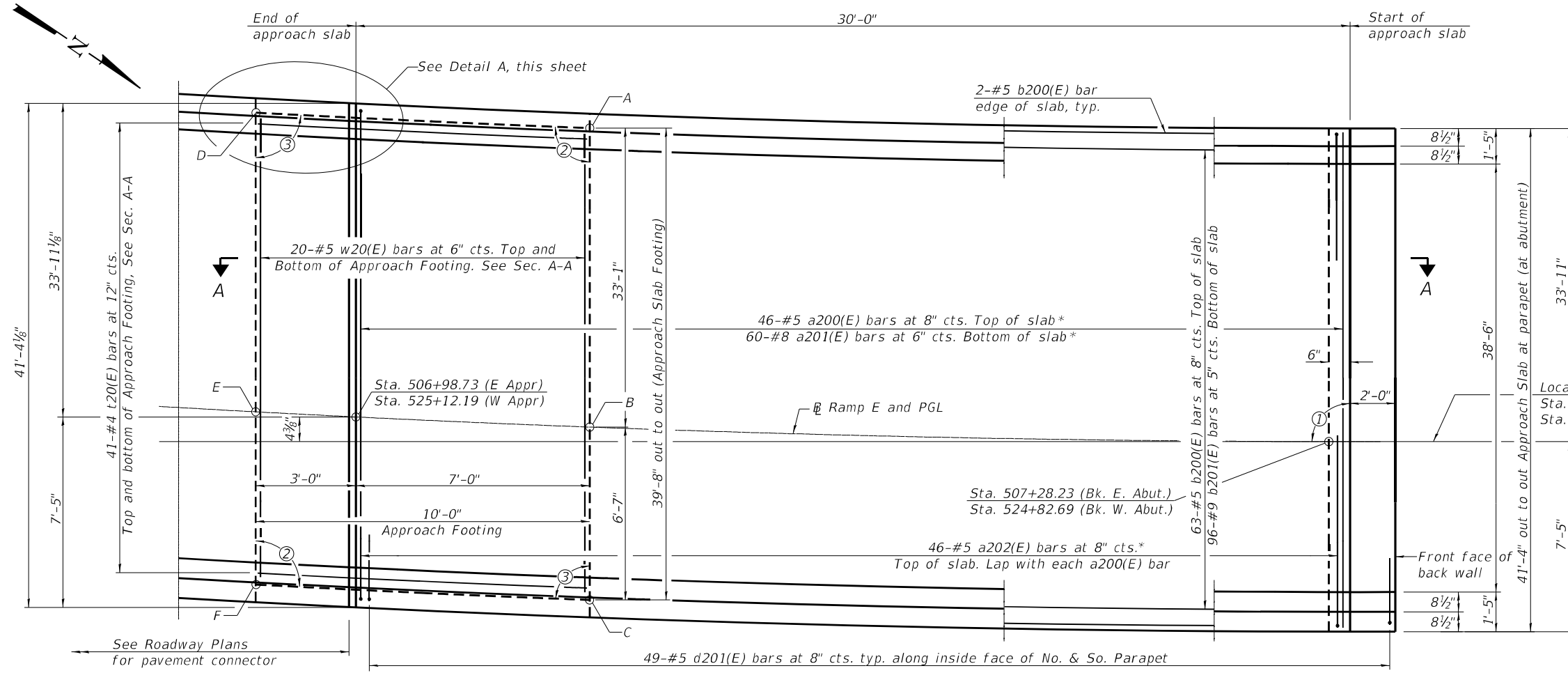
USER NAME = Denise Herrera	DESIGNED - LM	REVISED -
PLOT SCALE = NA	CHECKED - RJK	REVISED -
PLOT DATE = 05/03/2021	DRAWN - GLD	REVISED -
	CHECKED - LM	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DRAINAGE SCUPPER DS-11
STRUCTURE NO. 010-1001**

SHEET NO. S-29 OF S-106 SHEETS

F.A.I. R.T.E. 74 & 57	SECTION (10-34-1) HBK	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 671
CONTRACT NO. 70B99			ILLINOIS FED. AID PROJECT	

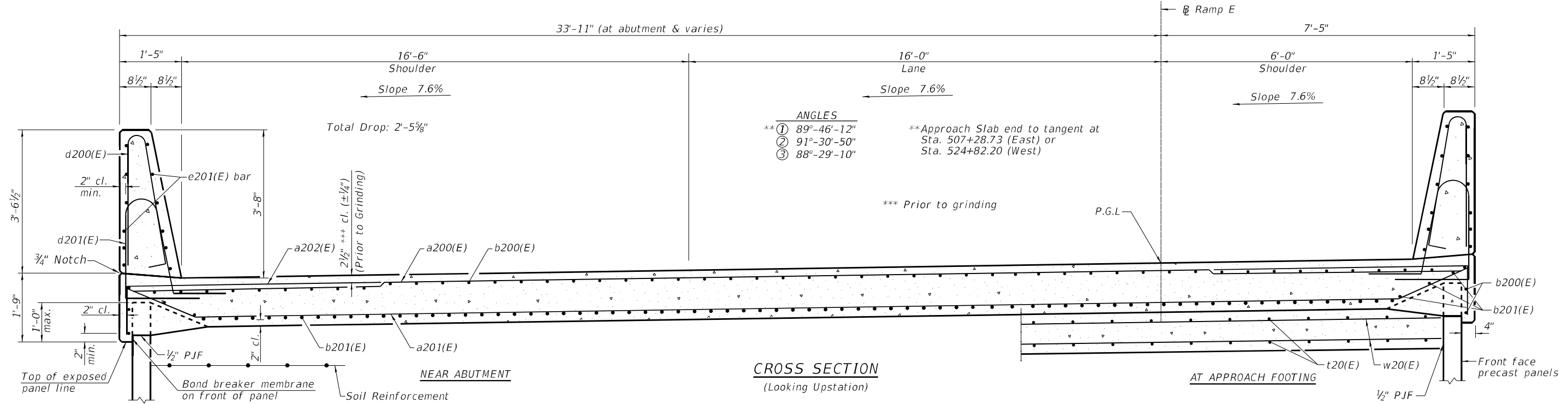


DETAIL A
 (Showing Appr. Slab Footing Notch at W. Abut., South side)
 Note: Cut bars in field to fit
 Notch required to accommodate moment slab, W. Abut. only.
 See sheet S-67 of S-106.

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

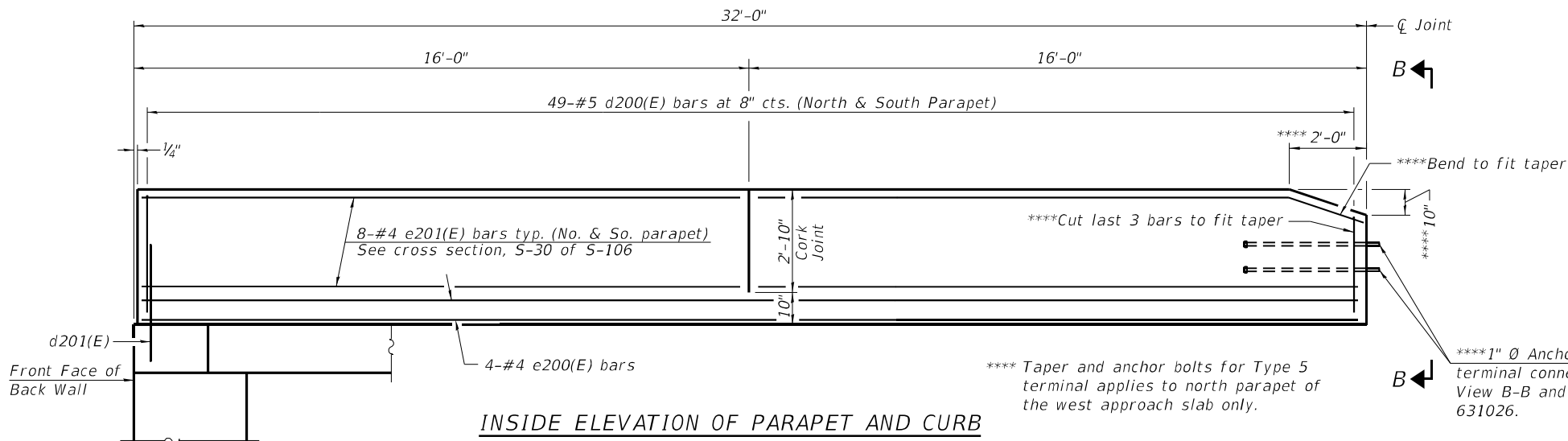
Point	East Approach		West Approach	
	Top	Bottom	Top	Bottom
A	791.05	790.22	787.07	786.24
B	793.59	792.76	789.61	788.78
C	794.10	793.27	790.12	789.28
D	790.68	789.84	787.05	786.22
D1	—	—	786.81	785.98
E	793.23	792.40	789.26	788.42
F	793.74	792.90	789.76	788.93

PLAN
 (E. Approach shown, W. Approach opposite, except for Detail A)
 (For Section A-A see Sheet S-31 of S-106)

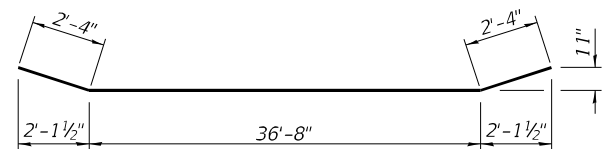
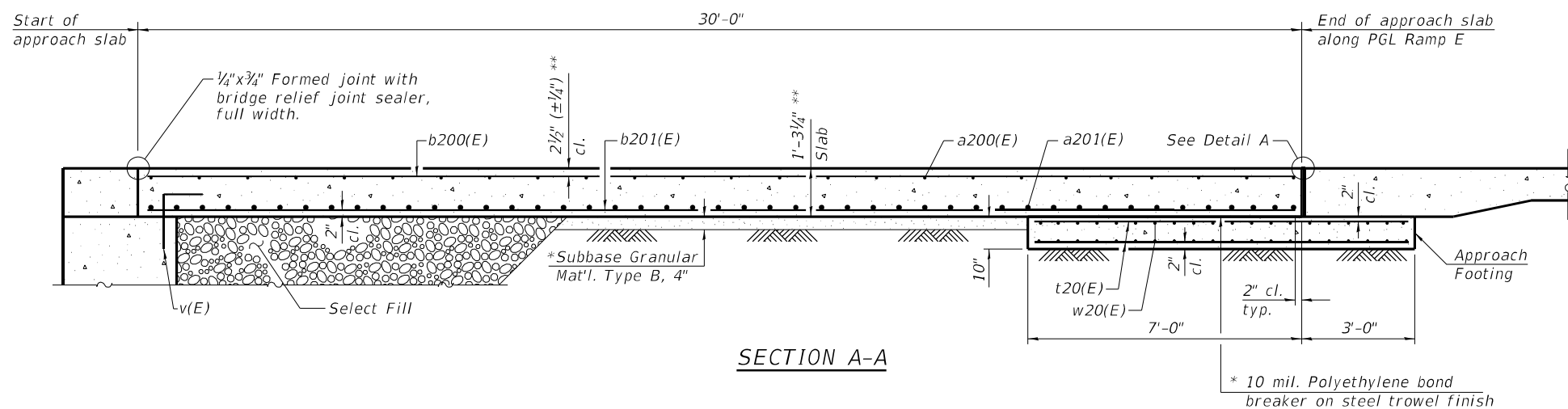
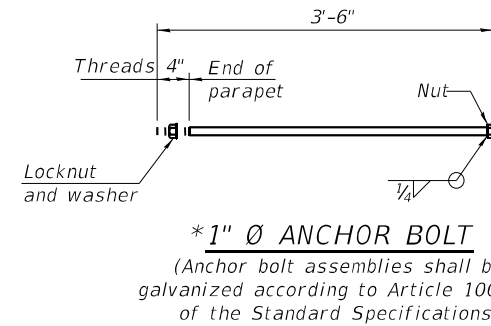


ANGLES
 ** ① 89°-46'-12"
 ② 91°-30'-50"
 ③ 88°-29'-10"
 ** Approach Slab end to tangent at Sta. 507+28.73 (East) or Sta. 524+82.20 (West)

CROSS SECTION
 (Looking Upstation)

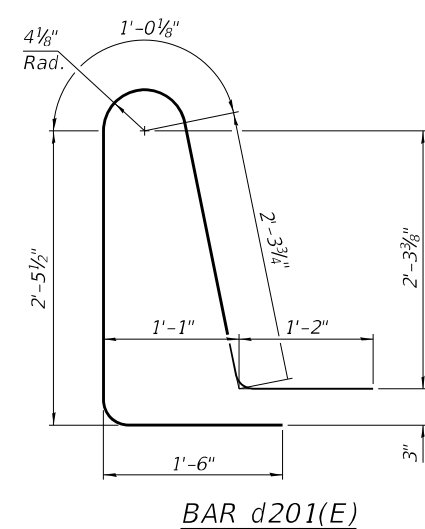
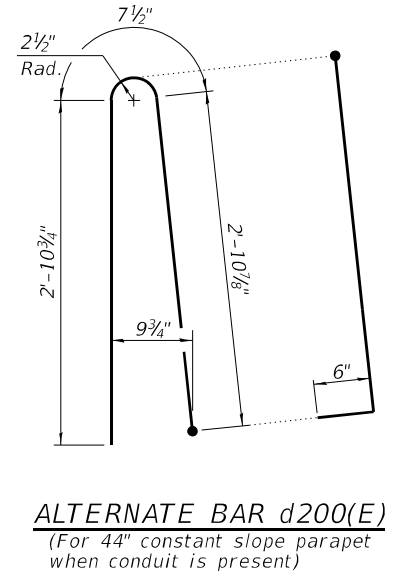
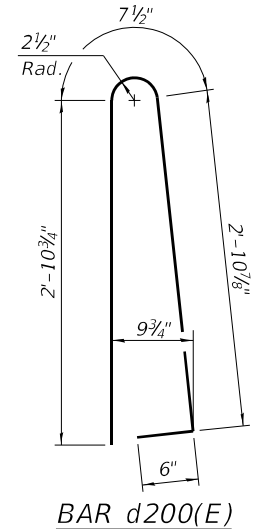
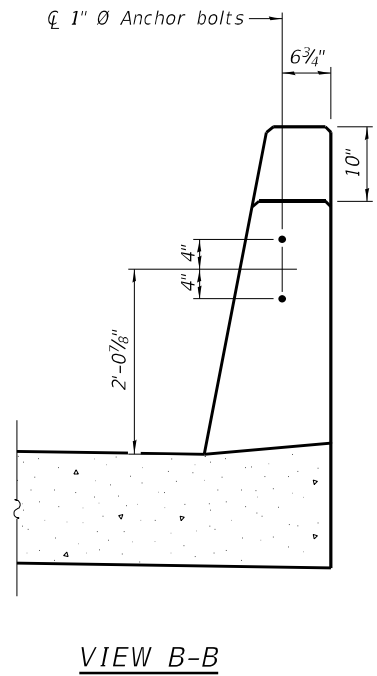
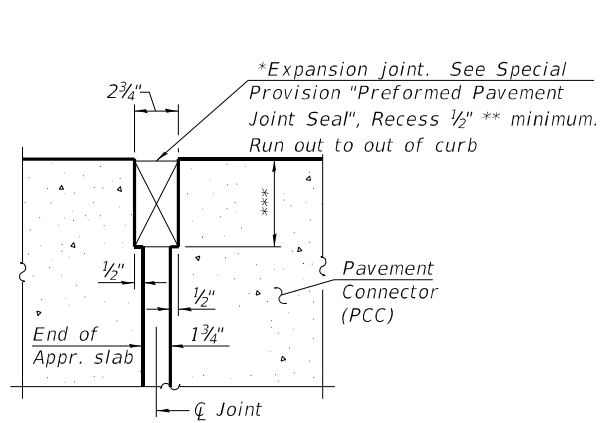


- Notes:
1. Parapet concrete shall be paid for as Concrete Superstructure.
 2. Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
 3. Approach footing concrete shall be paid for as Concrete Structures.
 4. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 5. Cost of excavation for approach footing included with Concrete Structures.
 6. For cork joint see Sheet S-25 of S-106.
 7. Reinforcement bar bending dimensions are out to out.

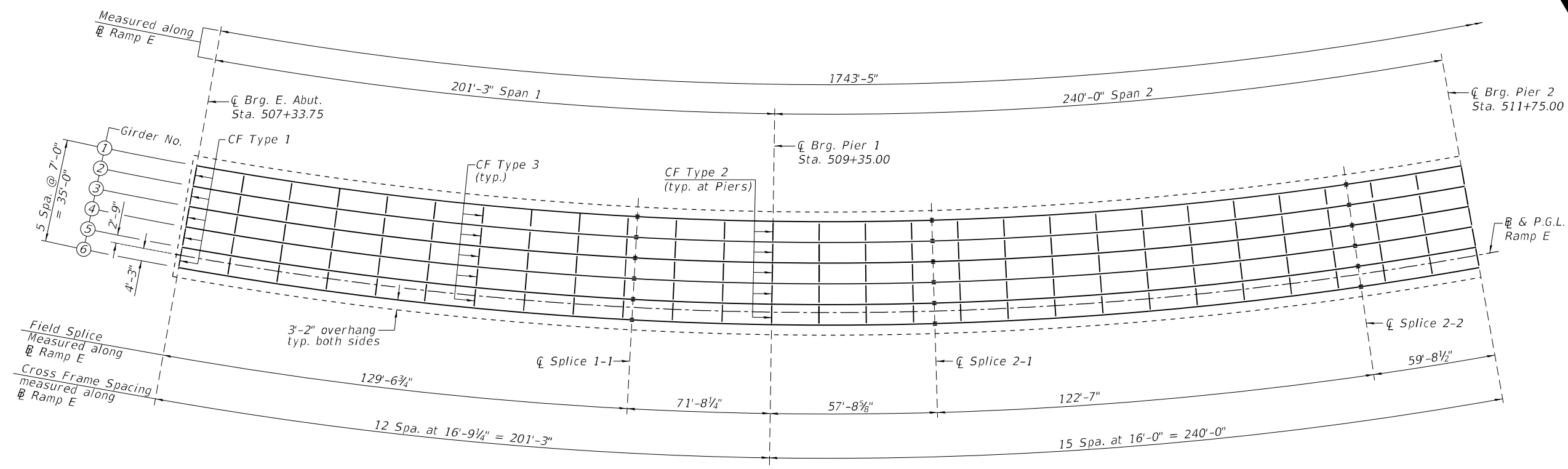


**TWO APPROACHES
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a200(E)	92	#5	41'-0"	—
a201(E)	120	#8	41'-4"	—
a202(E)	184	#5	7'-9"	—
b200(E)	134	#5	29'-8"	—
b201(E)	204	#9	29'-8"	—
d200(E)	196	#5	6'-11"	—
d201(E)	196	#5	8'-6"	—
e200(E)	16	#4	31'-8"	—
e201(E)	64	#4	15'-8"	—
t20(E)	164	#4	9'-8"	—
w20(E)	80	#5	39'-4"	—
Concrete Superstructure		Cu. Yd.	18.0	
Concrete Superstructure (Approach Slab)		Cu. Yd.	116.7	
Concrete Structures		Cu. Yd.	24.0	
Reinforcement Bars, Epoxy Coated		Pound	51,890	



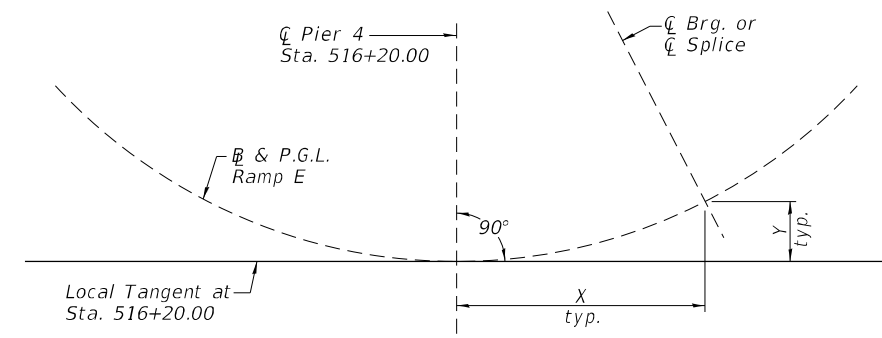
* Cost included with Concrete Superstructure (Approach Slab).
 ** Prior to grinding
 *** Per manufacturer recommendations



GIRDER FRAMING PLAN - 1

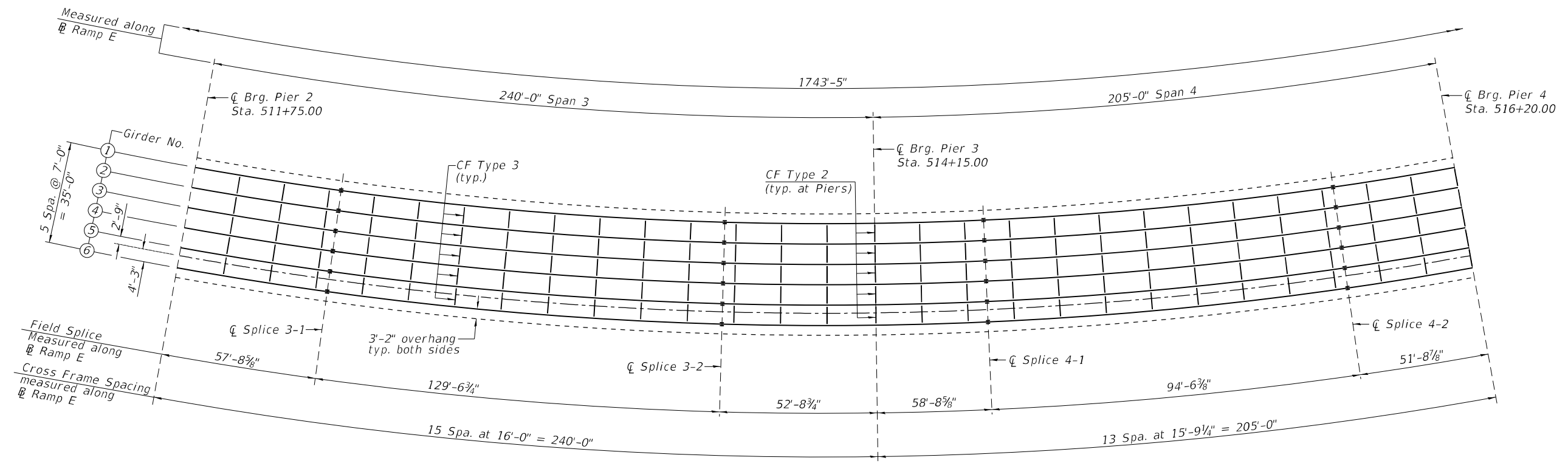
GIRDER COORDINATES
(All Dimensions in Feet)

Girder	C Brg. E. Abut.		C Splice 1-1		C Brg. Pier 1		C Splice 2-1		C Splice 2-2		C Brg. Pier 2	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
1	-793.824	324.573	-693.817	247.409	-635.206	209.287	-586.496	181.078	-479.020	128.791	-424.943	107.199
2	-798.381	319.260	-697.800	241.653	-638.853	203.312	-589.863	174.942	-481.770	122.354	-427.382	100.638
3	-802.939	313.947	-701.783	235.897	-642.500	197.337	-593.230	168.805	-484.521	115.917	-429.822	94.077
4	-807.496	308.634	-705.767	230.141	-646.147	191.362	-596.597	162.668	-487.271	109.479	-432.262	87.516
5	-812.054	303.321	-709.750	224.384	-649.794	185.387	-599.965	156.531	-490.021	103.042	-434.701	80.955
6	-816.611	298.008	-713.734	218.628	-653.441	179.412	-603.332	150.394	-492.771	96.605	-437.141	74.394



CURVED GIRDER LAYOUT
(X Measured along Local Tangent)

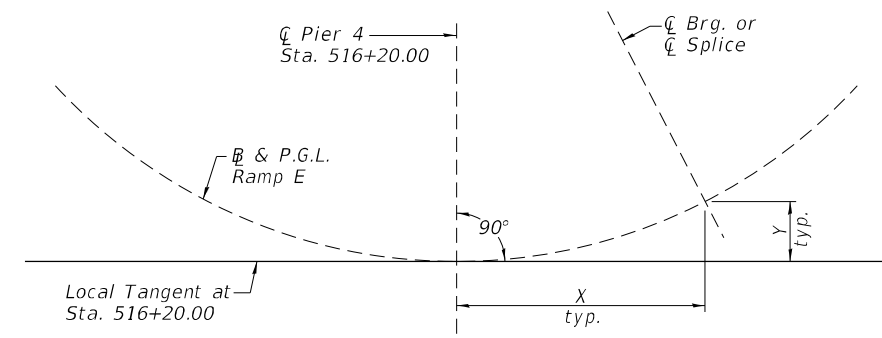
- NOTES:**
1. See Sheets S-36 and S-37 for Girder Elevation.
 2. See Sheet S-43 for Camber and Top of Web Elevations.
 3. See Sheets S-40, S-41, & S-42 for Moment and Reaction Tables.
 4. See Sheet S-39 for Girder bolted Field Splice Details.
 5. See Sheet S-38 for Girder Cross Frame Details.
 6. Girder Spacing and Cross Frame Orientations are Radial to the B of Ramp E.
 7. C.F. denotes Cross Frame



GIRDER FRAMING PLAN - 2

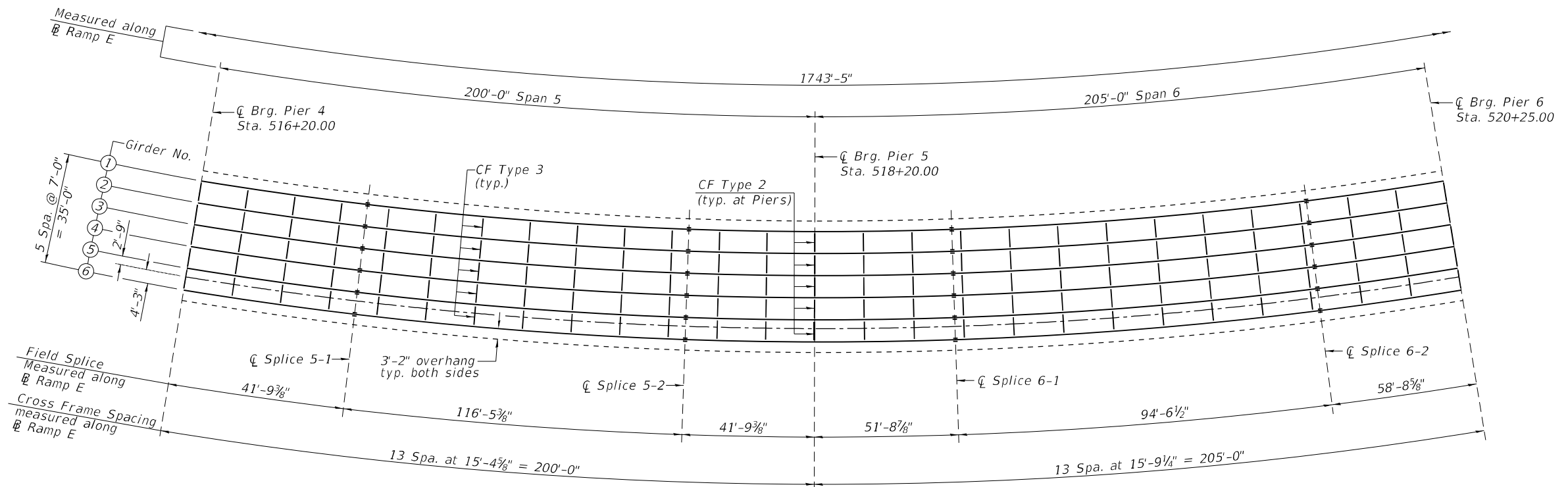
GIRDER COORDINATES
(All Dimensions in Feet)

Girder	C Brg. Pier 2		C Splice 3-1		C Splice 3-2		C Brg. Pier 3		C Splice 4-1		C Splice 4-2		C Brg. Pier 4	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
1	-424.943	107.199	-371.744	88.804	-249.609	56.574	-199.062	47.110	-142.356	39.089	-50.464	31.795	0.000	30.750
2	-427.382	100.638	-373.879	82.137	-251.042	49.722	-200.205	40.204	-143.173	32.137	-50.753	24.801	0.000	23.750
3	-429.822	94.077	-376.013	75.470	-252.476	42.870	-201.348	33.298	-143.990	25.185	-51.043	17.807	0.000	16.750
4	-432.262	87.516	-378.147	68.804	-253.909	36.019	-202.491	26.392	-144.808	18.233	-51.333	10.813	0.000	9.750
5	-434.701	80.955	-380.281	62.137	-255.342	29.167	-203.633	19.485	-145.625	11.281	-51.622	3.819	0.000	2.750
6	-437.141	74.394	-382.416	55.470	-256.775	22.315	-204.776	12.579	-146.442	4.328	-51.912	-3.175	0.000	-4.250



CURVED GIRDER LAYOUT
(X Measured along Local Tangent)

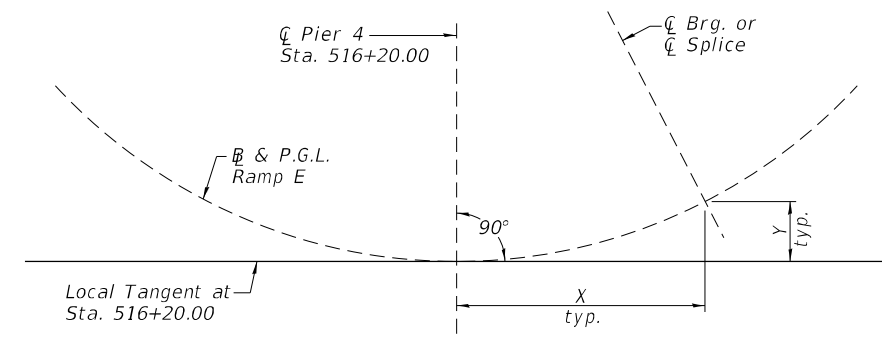
- NOTES:**
1. See Sheets S-36 and S-37 for Girder Elevation.
 2. See Sheet S-43 for Camber and Top of Web Elevations.
 3. See Sheets S-40, S-41, & S-42 for Moment and Reaction Tables.
 4. See Sheet S-39 for Girder bolted Field Splice Details.
 5. See Sheet S-38 for Girder Cross Frame Details.
 6. Girder Spacing and Cross Frame Orientations are Radial to the C of Ramp E.
 7. C.F. denotes Cross Frame



GIRDER FRAMING PLAN - 3

GIRDER COORDINATES
(All Dimensions in Feet)

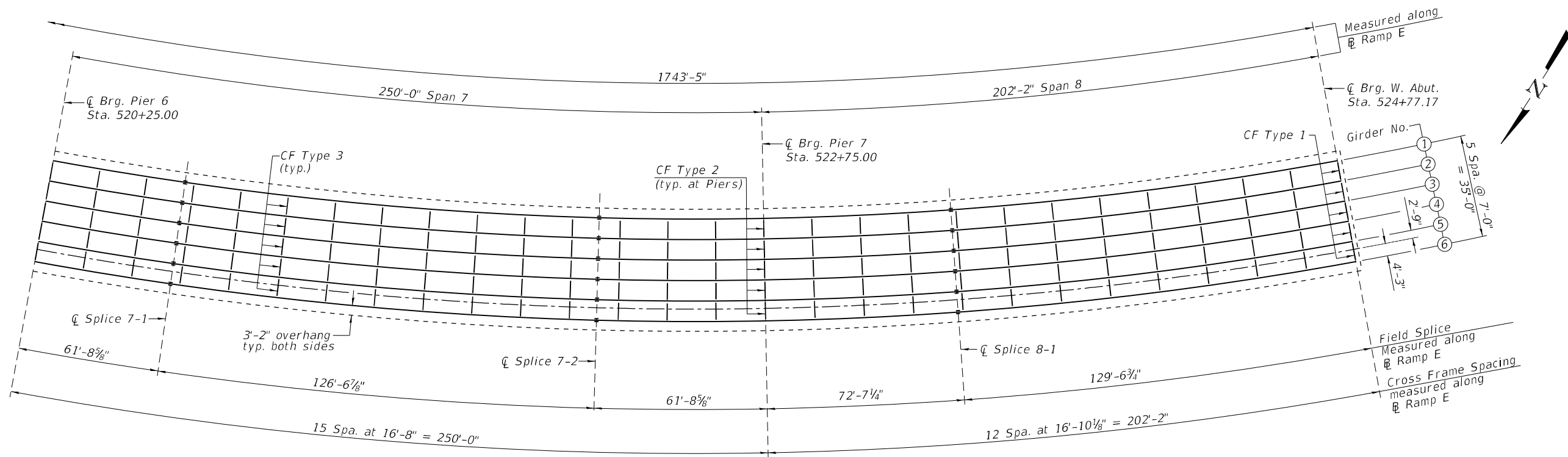
Girder	C Brg. Pier 4		C Splice 5-1		C Splice 5-2		C Brg. Pier 5		C Splice 6-1		C Splice 6-2		C Brg. Pier 6	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
1	0.000	30.750	40.743	31.431	153.918	40.504	194.249	46.323	243.895	55.393	333.461	77.236	388.162	94.188
2	0.000	23.750	40.977	24.435	154.802	33.560	195.364	39.413	245.295	48.534	335.375	70.503	390.390	87.552
3	0.000	16.750	41.210	17.439	155.685	26.616	196.479	32.502	246.695	41.676	337.290	63.770	392.619	80.917
4	0.000	9.750	41.444	10.443	156.569	19.672	197.594	25.591	248.095	34.817	339.204	57.037	394.847	74.281
5	0.000	2.750	41.678	3.447	157.453	12.728	198.710	18.681	249.496	27.959	341.118	50.304	397.076	67.645
6	0.000	-4.250	41.912	-3.550	158.336	5.784	199.825	11.770	250.896	21.100	343.033	43.571	399.304	61.009



CURVED GIRDER LAYOUT
(X Measured along Local Tangent)

NOTES:

1. See Sheets S-36 and S-37 for Girder Elevation.
2. See Sheet S-43 for Camber and Top of Web Elevations.
3. See Sheets S-40, S-41, & S-42 for Moment and Reaction Tables.
4. See Sheet S-39 for Girder bolted Field Splice Details.
5. See Sheet S-38 for Girder Cross Frame Details.
6. Girder Spacing and Cross Frame Orientations are Radial to the C of Ramp E.
7. C.F. denotes Cross Frame

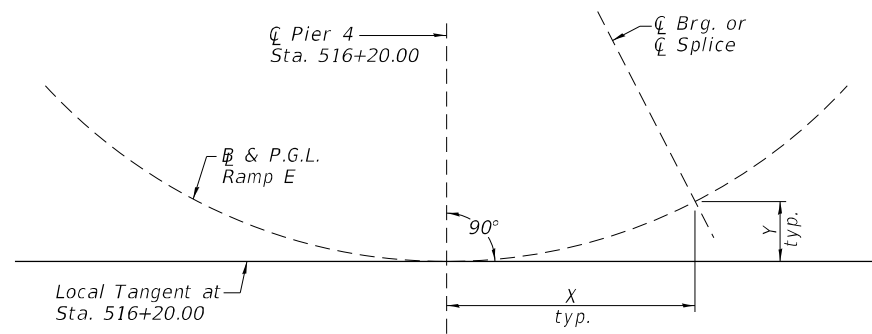


GIRDER FRAMING PLAN - 4

GIRDER COORDINATES

(All Dimensions in Feet)

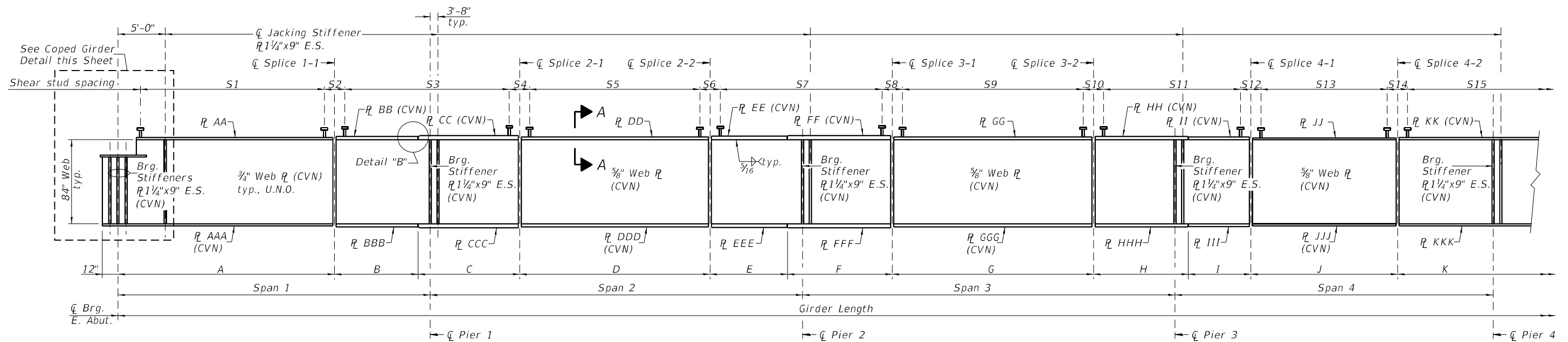
Girder	☐ Brg. Pier 6		☐ Splice 7-1		☐ Splice 7-2		☐ Brg. Pier 7		☐ Splice 8-1		☐ Brg. W. Abut.	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
1	388.162	94.188	444.735	114.755	557.211	165.525	610.049	194.343	670.301	231.537	772.082	306.358
2	390.390	87.552	447.288	108.237	560.410	159.299	613.551	188.283	674.149	225.690	776.514	300.940
3	392.619	80.917	449.842	101.720	563.609	153.072	617.054	182.222	677.998	219.842	780.947	295.522
4	394.847	74.281	452.395	95.202	566.808	146.846	620.556	176.161	681.846	213.995	785.380	290.105
5	397.076	67.645	454.948	88.684	570.007	140.620	624.059	170.100	685.694	208.148	789.812	284.687
6	399.304	61.009	457.502	82.166	573.206	134.394	627.561	164.039	689.543	202.301	794.245	279.269



CURVED GIRDER LAYOUT
(X Measured along Local Tangent)

NOTES:

1. See Sheets S-36 and S-37 for Girder Elevation.
2. See Sheet S-43 for Camber and Top of Web Elevations.
3. See Sheets S-40, S-41, & S-42 for Moment and Reaction Tables.
4. See Sheet S-39 for Girder bolted Field Splice Details.
5. See Sheet S-38 for Girder Cross Frame Details.
6. Girder Spacing and Cross Frame Orientations are Radial to the ☐ of Ramp E.
7. C.F. denotes Cross Frame



GIRDER ELEVATION

GIRDER DIMENSIONS

Girder	Radius	Length	Span 1	Span 2	Span 3	Span 4	A	B	C	D	E	F	G	H	I	J	K
G1	1219.250	1700'-6 ⁵ / ₁₆ "	196'-3 ⁹ / ₁₆ "	234'-1 ¹ / ₈ "	234'-1 ¹ / ₈ "	199'-11 ¹ / ₂ "	126'-4 ⁷ / ₁₆ "	60'-2 ⁷ / ₁₆ "	66'-0 ³ / ₁₆ "	119'-6 ³ / ₁₆ "	48'-6 ³ / ₁₆ "	66'-0 ³ / ₁₆ "	126'-4 ⁷ / ₁₆ "	61'-1 ³ / ₁₆ "	47'-6 ¹ / ₁₆ "	92'-2 ³ / ₈ "	91'-2 ⁵ / ₈ "
G2	1226.250	1710'-3 ¹ / ₂ "	197'-5 ¹ / ₈ "	235'-5 ⁵ / ₁₆ "	235'-5 ⁵ / ₁₆ "	201'-1 ¹ / ₄ "	127'-1 ¹ / ₁₆ "	60'-6 ⁵ / ₁₆ "	66'-4 ³ / ₁₆ "	120'-3 ¹ / ₁₆ "	48'-9 ⁹ / ₁₆ "	66'-4 ³ / ₁₆ "	127'-1 ³ / ₁₆ "	61'-6 ¹ / ₁₆ "	47'-9 ¹ / ₁₆ "	92'-8 ³ / ₄ "	91'-8 ⁷ / ₁₆ "
G3	1233.250	1720'-0 ¹ / ₁₆ "	198'-6 ³ / ₁₆ "	236'-9 ⁹ / ₁₆ "	236'-9 ⁹ / ₁₆ "	202'-3"	127'-9 ⁹ / ₁₆ "	60'-10 ¹ / ₁₆ "	66'-9 ¹ / ₄ "	120'-11 ⁷ / ₁₆ "	48'-0 ⁷ / ₈ "	66'-9 ¹ / ₄ "	127'-9 ⁹ / ₁₆ "	61'-10 ¹ / ₄ "	48'-1 ³ / ₁₆ "	93'-3 ¹ / ₈ "	92'-3 ¹ / ₄ "
G4	1240.250	1729'-9 ¹ / ₁₆ "	199'-8 ³ / ₁₆ "	238'-1 ¹ / ₁₆ "	238'-1 ¹ / ₁₆ "	203'-4 ³ / ₄ "	128'-6 ³ / ₁₆ "	61'-2 ⁷ / ₈ "	67'-11 ³ / ₁₆ "	121'-7 ¹ / ₂ "	49'-4 ¹ / ₄ "	67'-1 ³ / ₁₆ "	128'-6 ³ / ₁₆ "	62'-2 ¹ / ₂ "	48'-4 ¹ / ₂ "	93'-9 ¹ / ₂ "	92'-9 ¹ / ₂ "
G5	1247.250	1739'-7"	200'-9 ¹ / ₁₆ "	239'-5 ¹ / ₁₆ "	239'-5 ¹ / ₁₆ "	204'-6 ³ / ₁₆ "	129'-3 ³ / ₁₆ "	61'-7"	67'-6 ³ / ₈ "	122'-3 ³ / ₄ "	49'-7 ⁹ / ₁₆ "	67'-6 ³ / ₈ "	129'-3 ³ / ₁₆ "	62'-6 ¹ / ₁₆ "	48'-7 ³ / ₄ "	94'-3 ³ / ₈ "	93'-3 ³ / ₁₆ "
G6	1254.250	1749'-4 ¹ / ₈ "	201'-11 ³ / ₁₆ "	240'-9 ³ / ₁₆ "	240'-9 ³ / ₁₆ "	205'-8 ³ / ₁₆ "	130'-0"	61'-11 ³ / ₁₆ "	67'-10 ¹ / ₁₆ "	123'-0"	49'-10 ¹ / ₁₆ "	67'-10 ¹ / ₁₆ "	130'-0"	62'-10 ⁷ / ₈ "	48'-11 ¹ / ₁₆ "	94'-10 ¹ / ₈ "	93'-10 ¹ / ₁₆ "

GIRDER TOP FLANGE PLATE THICKNESSES

Girder	AA	BB	CC	DD	EE	FF	GG	HH	II	JJ	KK
G1	1 ¹ / ₄ "	1 ³ / ₄ "	2 ¹ / ₂ "	1 ¹ / ₂ "	2"	2 ¹ / ₄ "	1 ¹ / ₂ "	1 ³ / ₄ "	1 ¹ / ₂ "	1"	1 ¹ / ₂ "
G2	1 ¹ / ₄ "	1 ³ / ₄ "	2 ¹ / ₂ "	1 ¹ / ₂ "	2"	2 ¹ / ₄ "	1 ¹ / ₂ "	1 ³ / ₄ "	1 ¹ / ₂ "	1"	1 ¹ / ₂ "
G3	1 ¹ / ₄ "	1 ¹ / ₄ "	1 ¹ / ₂ "	1 ¹ / ₂ "	1 ¹ / ₂ "	1 ³ / ₄ "	1 ³ / ₄ "	1 ³ / ₄ "	1 ¹ / ₄ "	1 ¹ / ₄ "	1 ¹ / ₄ "
G4	1 ¹ / ₄ "	1 ¹ / ₄ "	1 ¹ / ₂ "	1 ¹ / ₂ "	1 ¹ / ₂ "	1 ³ / ₄ "	1 ³ / ₄ "	1 ³ / ₄ "	1 ¹ / ₄ "	1 ¹ / ₄ "	1 ¹ / ₄ "
G5	1 ¹ / ₂ "	2"	2 ¹ / ₂ "	1 ³ / ₄ "	2 ¹ / ₄ "	2 ¹ / ₂ "	1 ³ / ₄ "	2 ¹ / ₄ "	1 ³ / ₄ "	1 ¹ / ₄ "	1 ¹ / ₂ "
G6	1 ¹ / ₂ "	2"	2 ¹ / ₂ "	1 ³ / ₄ "	2 ¹ / ₄ "	2 ¹ / ₂ "	1 ³ / ₄ "	2 ¹ / ₄ "	1 ³ / ₄ "	1 ¹ / ₄ "	1 ¹ / ₂ "
Steel Gr.	(2)	(1)	(1)	(2)	(1)	(1)	(2)	(1)	(1)	(2)	(1)

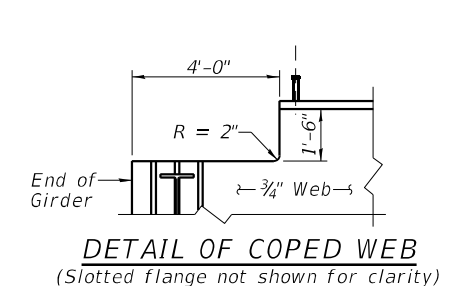
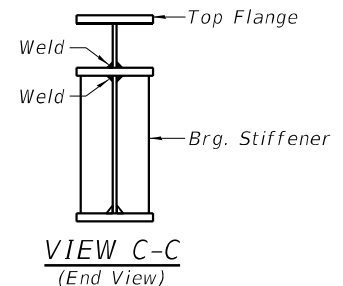
GIRDER BOTTOM FLANGE PLATE THICKNESSES

Girder	AAA	BBB	CCC	DDD	EEE	FFF	GGG	HHH	III	JJJ	KKK
G1	1 ¹ / ₄ "	1 ³ / ₄ "	2 ¹ / ₄ "	1 ³ / ₄ "	2"	2 ¹ / ₄ "	1 ³ / ₄ "	1 ³ / ₄ "	1 ¹ / ₂ "	1 ¹ / ₄ "	1 ¹ / ₄ "
G2	1 ¹ / ₄ "	1 ³ / ₄ "	2 ¹ / ₄ "	1 ³ / ₄ "	2"	2 ¹ / ₄ "	1 ³ / ₄ "	1 ³ / ₄ "	1 ¹ / ₂ "	1 ¹ / ₄ "	1 ¹ / ₄ "
G3	1 ¹ / ₄ "	1 ¹ / ₄ "	1 ³ / ₄ "	1 ³ / ₄ "	1 ³ / ₄ "	1 ³ / ₄ "	1 ³ / ₄ "	1 ³ / ₄ "	1 ¹ / ₄ "	1 ¹ / ₄ "	1 ¹ / ₄ "
G4	1 ¹ / ₄ "	1 ¹ / ₄ "	1 ³ / ₄ "	1 ³ / ₄ "	1 ³ / ₄ "	1 ³ / ₄ "	1 ³ / ₄ "	1 ³ / ₄ "	1 ¹ / ₄ "	1 ¹ / ₄ "	1 ¹ / ₄ "
G5	2"	2"	2 ¹ / ₂ "	1 ³ / ₄ "	2 ¹ / ₄ "	2 ¹ / ₂ "	2"	2 ¹ / ₄ "	1 ³ / ₄ "	1 ¹ / ₄ "	1 ¹ / ₂ "
G6	2"	2"	2 ¹ / ₂ "	1 ³ / ₄ "	2 ¹ / ₄ "	2 ¹ / ₂ "	2"	2 ¹ / ₄ "	1 ³ / ₄ "	1 ¹ / ₄ "	1 ¹ / ₂ "
Steel Gr.	(2)	(1)	(1)	(2)	(1)	(1)	(2)	(1)	(1)	(2)	(1)

(1) Grade HPS 70W
(2) Grade 50W

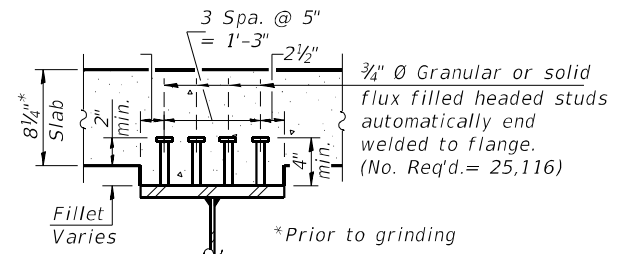
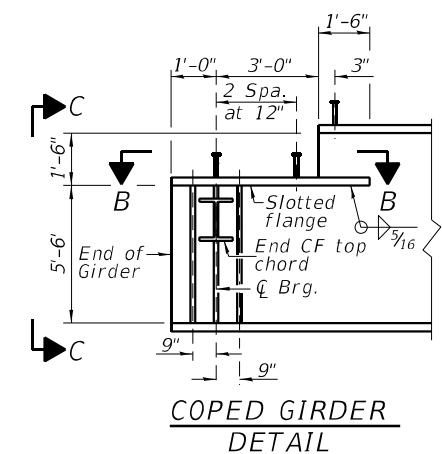
SHEAR STUD SPACING

Girder	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15
G1	89 Spa. @ 16" ±	8'-7 ³ / ₄ "	78 Spa. @ 18" ±	9'-7 ³ / ₄ "	66 Spa. @ 20" ±	9'-7 ³ / ₄ "	63 Spa. @ 20" ±	9'-7 ³ / ₄ "	70 Spa. @ 20" ±	9'-7 ³ / ₄ "	66 Spa. @ 18" ±	8'-7 ³ / ₄ "	50 Spa. @ 20" ±	8'-7 ³ / ₄ "	62 Spa. @ 16" ±
G2	80 Spa. @ 18" ±	8'-7 ³ / ₄ "	64 Spa. @ 22" ±	9'-7 ³ / ₄ "	51 Spa. @ 26" ±	9'-7 ³ / ₄ "	53 Spa. @ 24" ±	9'-7 ³ / ₄ "	54 Spa. @ 26" ±	9'-7 ³ / ₄ "	60 Spa. @ 20" ±	8'-7 ³ / ₄ "	46 Spa. @ 22" ±	8'-7 ³ / ₄ "	55 Spa. @ 18" ±
G3	60 Spa. @ 24" ±	8'-7 ³ / ₄ "	59 Spa. @ 24" ±	9'-7 ³ / ₄ "	56 Spa. @ 24" ±	9'-7 ³ / ₄ "	53 Spa. @ 24" ±	10'-1 ³ / ₄ "	59 Spa. @ 24" ±	10'-1 ³ / ₄ "	55 Spa. @ 22" ±	8'-7 ³ / ₄ "	36 Spa. @ 28" ±	8'-7 ³ / ₄ "	42 Spa. @ 24" ±
G4	66 Spa. @ 22" ±	8'-7 ³ / ₄ "	65 Spa. @ 22" ±	9'-7 ³ / ₄ "	52 Spa. @ 26" ±	9'-7 ³ / ₄ "	58 Spa. @ 22" ±	10'-1 ³ / ₄ "	55 Spa. @ 26" ±	10'-1 ³ / ₄ "	55 Spa. @ 22" ±	8'-7 ³ / ₄ "	39 Spa. @ 26" ±	8'-7 ³ / ₄ "	50 Spa. @ 20" ±
G5	73 Spa. @ 20" ±	9'-7 ³ / ₄ "	65 Spa. @ 22" ±	10'-1 ³ / ₄ "	56 Spa. @ 24" ±	10'-1 ³ / ₄ "	58 Spa. @ 22" ±	10'-1 ³ / ₄ "	60 Spa. @ 24" ±	10'-1 ³ / ₄ "	56 Spa. @ 22" ±	8'-7 ³ / ₄ "	43 Spa. @ 24" ±	8'-7 ³ / ₄ "	56 Spa. @ 18" ±
G6	91 Spa. @ 16" ±	9'-7 ³ / ₄ "	90 Spa. @ 16" ±	10'-1 ³ / ₄ "	85 Spa. @ 16" ±	10'-1 ³ / ₄ "	72 Spa. @ 18" ±	10'-1 ³ / ₄ "	80 Spa. @ 18" ±	10'-1 ³ / ₄ "	77 Spa. @ 16" ±	8'-7 ³ / ₄ "	65 Spa. @ 16" ±	8'-7 ³ / ₄ "	73 Spa. @ 14" ±

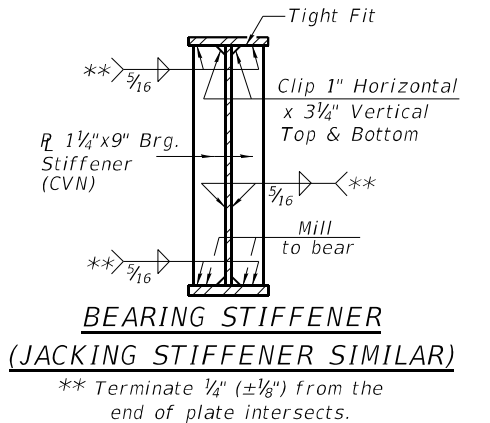
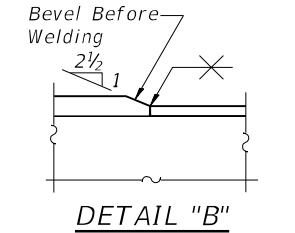
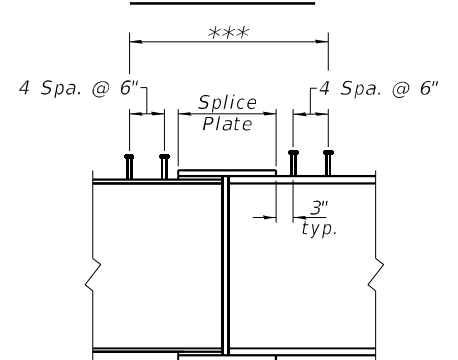


TYP. AT ALL FIELD SPLICES

Applies to S2, S4, S6, S8, S10, S12 & S14

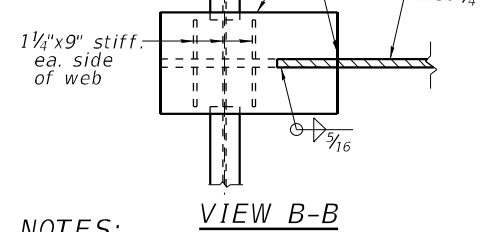


SECTION A-A

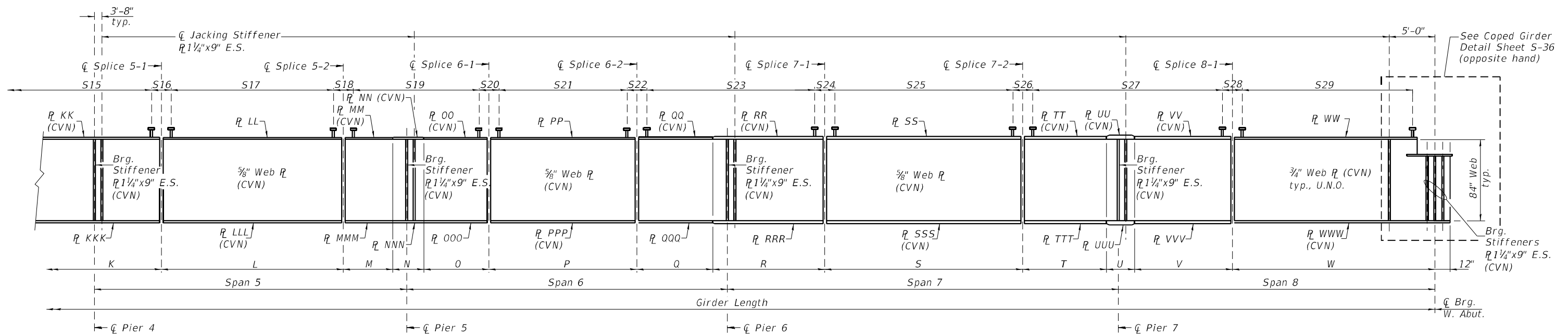


BEARING STIFFENER (JACKING STIFFENER SIMILAR)

** Terminate 1/4" (± 1/8") from the end of plate intersects.



- NOTES:**
- All web steel M270, Grade 50W.
 - All flange steel M270, see "Girder Top/Bott. Flange Plate Thicknesses" table for Grade.
 - All flanges are 20" wide.
 - "CVN" denotes Charpy-V-Notch Impact energy requirements, Zone 2.
 - Girder dimensions, stiffener spacings and stud spacings are given along centerline of girder.



GIRDER ELEVATION

GIRDER DIMENSIONS

Girder	Radius	Length	Span 5	Span 6	Span 7	Span 8	L	M	N	O	P	Q	R	S	T	U	V	W
G1	1219.250	1700'-6 3/16"	195'-0 15/16"	199'-11 1/2"	243'-10 1/4"	197'-2 3/16"	113'-6 15/16"	31'-0 3/8"	19'-5 5/16"	40'-9"	92'-2 9/16"	47'-6 1 1/16"	69'-11 1/16"	123'-5 1/2"	52'-5 1/8"	17'-6"	61'-1 1/8"	126'-4 7/16"
G2	1226.250	1710'-3 1/2"	196'-2 3/8"	201'-1 1/4"	245'-3"	198'-3 7/8"	114'-2 3/4"	31'-2 1/2"	19'-6 3/8"	40'-11 3/4"	92'-8 7/8"	47'-9 1 5/16"	70'-3 3/8"	124'-2"	52'-8 1 1/16"	17'-7 3/16"	61'-5 3/8"	127'-1 3/16"
G3	1233.250	1720'-0 1 1/16"	197'-3 1 3/16"	202'-3 1/16"	246'-7 1 3/16"	199'-5 1/2"	114'-10 3/8"	31'-4 3/8"	19'-8"	41'-2 1 1/16"	93'-3 3/16"	48'-1 3/16"	70'-8 1 1/16"	124'-10 1/2"	53'-0 3/16"	17'-8 3/8"	61'-9 9/16"	127'-9 1/8"
G4	1240.250	1729'-9 1 3/16"	198'-5 1/4"	203'-4 1 3/16"	248'-0 3/8"	200'-7 1/16"	115'-6 1/16"	31'-6 3/4"	19'-9 5/16"	41'-5 1/16"	93'-9 5/8"	48'-4 1/2"	71'-1 1/2"	125'-7"	53'-3 1 3/16"	17'-9 9/16"	62'-1 3/16"	128'-6 9/16"
G5	1247.250	1739'-7"	199'-6 3/4"	204'-6 3/16"	249'-5 3/8"	201'-8 1 1/16"	116'-2 1/4"	31'-8 1/8"	19'-10 1 1/16"	41'-8 3/8"	94'-3 1 3/16"	48'-7 3/4"	71'-6 3/16"	126'-3 1/2"	53'-7 3/16"	17'-10 1 3/16"	62'-6"	129'-3 3/16"
G6	1254.250	1749'-4 1/8"	200'-8 3/16"	205'-8 3/8"	250'-10 3/16"	202'-10 1/4"	116'-10 1/16"	31'-11 1/16"	20'-0"	41'-11"	94'-10 1/4"	48'-11 1/16"	71'-11 1/16"	127'-0"	53'-11 1/16"	18'-0"	62'-10 3/16"	130'-0"

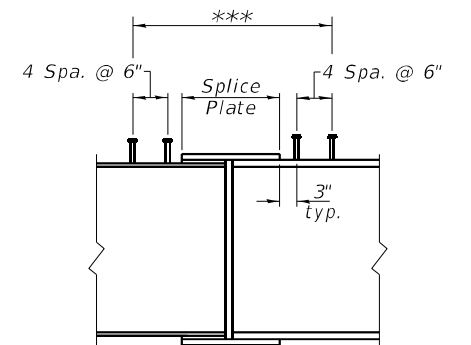
GIRDER TOP FLANGE PLATE THICKNESSES

Girder	LL	MM	NN	OO	PP	QQ	RR	SS	TT	UU	VV	WW
G1	1"	1"	1 1/4"	1"	1"	1 1/4"	1 3/4"	1 3/4"	1 3/4"	2 1/2"	1 3/4"	1 1/4"
G2	1"	1"	1 1/4"	1"	1"	1 1/4"	1 3/4"	1 3/4"	1 3/4"	2 1/2"	1 3/4"	1 1/4"
G3	1 1/4"	1 1/4"	1 1/2"	1 1/4"	1 1/4"	1 1/4"	1 3/4"	1 3/4"	1 3/4"	2 1/4"	1 3/4"	1 1/4"
G4	1 1/4"	1 1/4"	1 1/2"	1 1/4"	1 1/4"	1 1/4"	1 3/4"	1 3/4"	1 3/4"	2 1/4"	1 3/4"	1 1/4"
G5	1 1/4"	1 1/4"	1 3/4"	1 1/4"	1 1/4"	1 3/4"	2 1/4"	2"	2 1/2"	2 3/4"	2 1/4"	1 1/2"
G6	1 1/4"	1 1/4"	1 3/4"	1 1/4"	1 1/4"	1 3/4"	2 1/4"	2"	2 1/2"	2 3/4"	2 1/4"	1 1/2"
Steel Gr.	(2)	(1)	(1)	(1)	(2)	(1)	(1)	(2)	(1)	(1)	(1)	(2)

GIRDER BOTTOM FLANGE PLATE THICKNESSES

Girder	LLL	MMM	NNN	OOO	PPP	QQQ	RRR	SSS	TTT	UUU	VVV	WWW
G1	1 1/4"	1 1/4"	1 1/2"	1 1/4"	1 1/4"	1 1/4"	1 3/4"	1 3/4"	1 3/4"	2 1/2"	1 3/4"	1 1/4"
G2	1 1/4"	1 1/4"	1 1/2"	1 1/4"	1 1/4"	1 1/4"	1 3/4"	1 3/4"	1 3/4"	2 1/2"	1 3/4"	1 1/4"
G3	1 1/4"	1 1/4"	1 1/2"	1 1/4"	1 1/4"	1 1/4"	1 3/4"	1 3/4"	1 3/4"	2 1/4"	1 3/4"	1 1/4"
G4	1 1/4"	1 1/4"	1 1/2"	1 1/4"	1 1/4"	1 1/4"	1 3/4"	1 3/4"	1 3/4"	2 1/4"	1 3/4"	1 1/4"
G5	1 1/4"	1 1/4"	1 3/4"	1 1/4"	1 1/4"	1 3/4"	2 1/4"	2 1/4"	2 1/2"	2 3/4"	2 1/4"	2"
G6	1 1/4"	1 1/4"	1 3/4"	1 1/4"	1 1/4"	1 3/4"	2 1/4"	2 1/4"	2 1/2"	2 3/4"	2 1/4"	2"
Steel Gr.	(2)	(1)	(1)	(1)	(2)	(1)	(1)	(2)	(1)	(1)	(1)	(2)

(1) Grade HPS 70W
(2) Grade 50W



TYP. AT ALL FIELD SPLICES

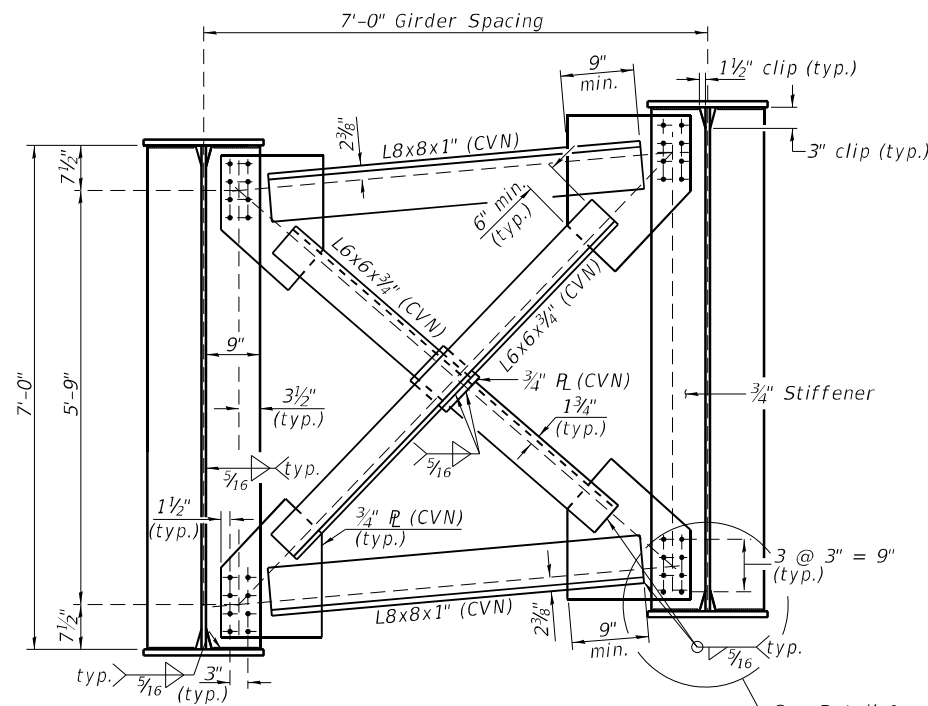
***Applies to S16, S18, S20, S22, S24, S26 & S28

SHEAR STUD SPACING

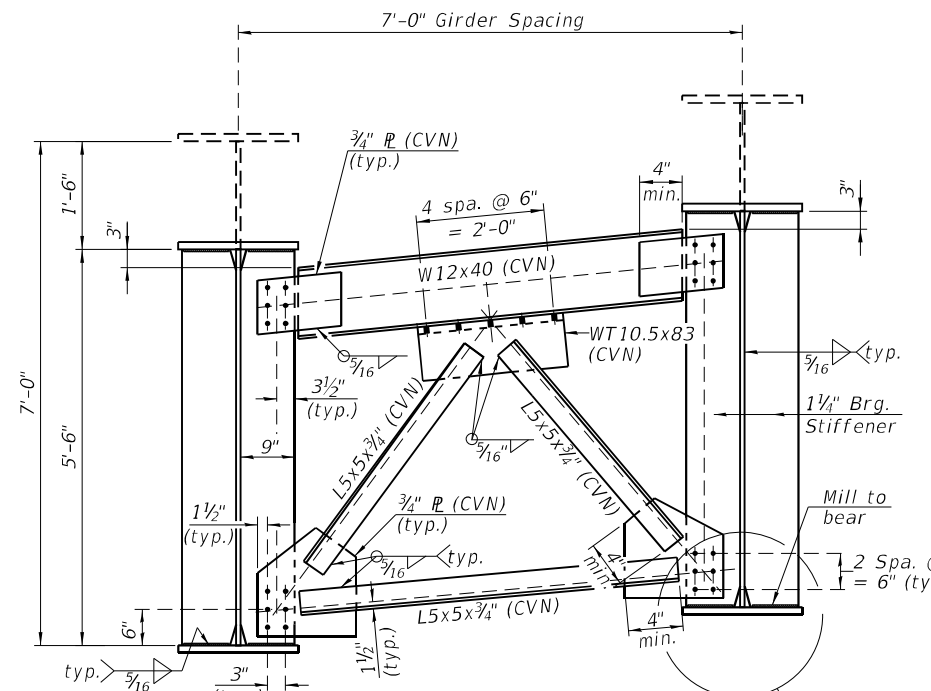
Girder	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	S29
G1	8'-7 3/4"	63 Spa. @ 20"±	8'-7 3/4"	62 Spa. @ 16"±	8'-7 3/4"	50 Spa. @ 20"±	8'-7 3/4"	72 Spa. @ 18"±	10'-1 3/4"	57 Spa. @ 24"±	10'-1 3/4"	73 Spa. @ 20"±	8'-7 3/4"	79 Spa. @ 18"±
G2	8'-7 3/4"	53 Spa. @ 24"	8'-7 3/4"	55 Spa. @ 18"±	8'-7 3/4"	46 Spa. @ 22"±	8'-7 3/4"	65 Spa. @ 20"±	10'-1 3/4"	49 Spa. @ 28"±	10'-1 3/4"	61 Spa. @ 24"±	8'-7 3/4"	72 Spa. @ 20"±
G3	8'-7 3/4"	46 Spa. @ 28"±	8'-7 3/4"	46 Spa. @ 22"±	8'-7 3/4"	36 Spa. @ 28"±	8'-7 3/4"	55 Spa. @ 24"±	10'-1 3/4"	46 Spa. @ 30"±	10'-1 3/4"	53 Spa. @ 28"±	8'-7 3/4"	55 Spa. @ 26"±
G4	8'-7 3/4"	49 Spa. @ 26"	8'-7 3/4"	50 Spa. @ 20"±	8'-7 3/4"	39 Spa. @ 26"±	8'-7 3/4"	60 Spa. @ 22"±	10'-1 3/4"	43 Spa. @ 32"±	10'-1 3/4"	62 Spa. @ 24"±	8'-7 3/4"	66 Spa. @ 22"±
G5	8'-7 3/4"	50 Spa. @ 26"±	8'-7 3/4"	51 Spa. @ 20"±	8'-7 3/4"	43 Spa. @ 24"±	8'-7 3/4"	66 Spa. @ 20"±	10'-7 3/4"	46 Spa. @ 30"±	10'-7 3/4"	62 Spa. @ 24"±	9'-7 3/4"	73 Spa. @ 20"±
G6	8'-7 3/4"	81 Spa. @ 16"	8'-7 3/4"	73 Spa. @ 14"±	8'-7 3/4"	65 Spa. @ 16"±	8'-7 3/4"	83 Spa. @ 16"±	10'-7 3/4"	70 Spa. @ 20"±	10'-7 3/4"	83 Spa. @ 18"±	9'-7 3/4"	105 Spa. @ 14"±

NOTES:

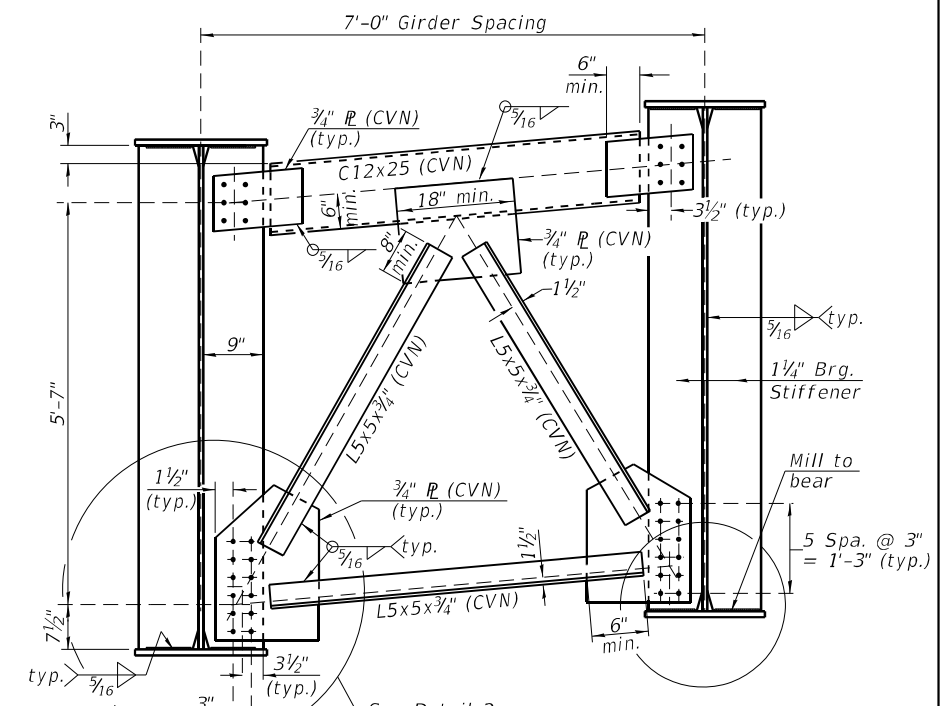
1. Work this Sheet with Sheet S-36 of S-106.



INTERMEDIATE CROSS FRAME - (TYPE 3)
(500 Required) See Detail 1



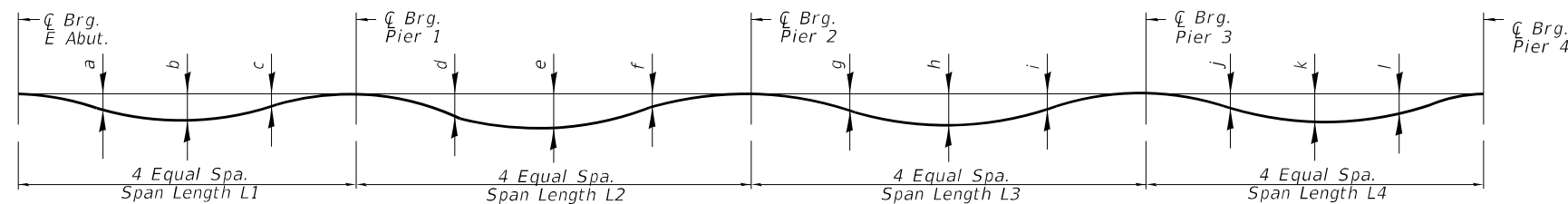
END CROSS FRAME (TYPE 1)
(10 Required) See Detail 1



PIER CROSS FRAME (TYPE 2)
(35 Required) See Detail 2

GIRDER DEFLECTION TABLE FOR CROSS FRAMES

GIRDER NO.	SPAN 1				SPAN 2				SPAN 3				SPAN 4			
	L1	a	b	c	L2	d	e	f	L3	g	h	i	L4	j	k	l
1	196'-3 5/8"	1 1/4"	1 1/2"	5/8"	234'-1 1/8"	3/4"	1 1/4"	5/8"	234'-1 1/8"	7/8"	1 5/8"	1"	199'-11 1/2"	1/4"	3/4"	3/8"
2	197'-5 1/8"	1 3/8"	1 5/8"	3/4"	235'-5 1/4"	3/4"	1 1/4"	5/8"	235'-5 1/4"	1"	1 3/4"	1 1/8"	201'-1 1/4"	1/4"	5/8"	3/8"
3	198'-6 5/8"	1 1/2"	1 7/8"	7/8"	236'-9 3/8"	5/8"	1 1/4"	5/8"	236'-9 3/8"	1 1/8"	2"	1 1/4"	202'-3"	1/8"	5/8"	3/8"
4	199'-8 1/8"	1 5/8"	2"	1"	238'-1 1/2"	5/8"	1 1/4"	5/8"	238'-1 1/2"	1 1/4"	2 1/4"	1 3/8"	203'-4 3/4"	1/8"	1/2"	1/4"
5	200'-9 3/8"	1 3/4"	2 1/8"	1"	239'-5 5/8"	5/8"	1 1/4"	5/8"	239'-5 5/8"	1 3/8"	2 1/2"	1 5/8"	204'-6 3/8"	0"	3/8"	1/4"
6	201'-11 1/4"	1 7/8"	2 3/8"	1 1/8"	240'-9 3/4"	5/8"	1 1/4"	1/2"	240'-9 3/4"	1 1/2"	2 5/8"	1 3/4"	205'-8 3/8"	1/8"	3/8"	1/8"

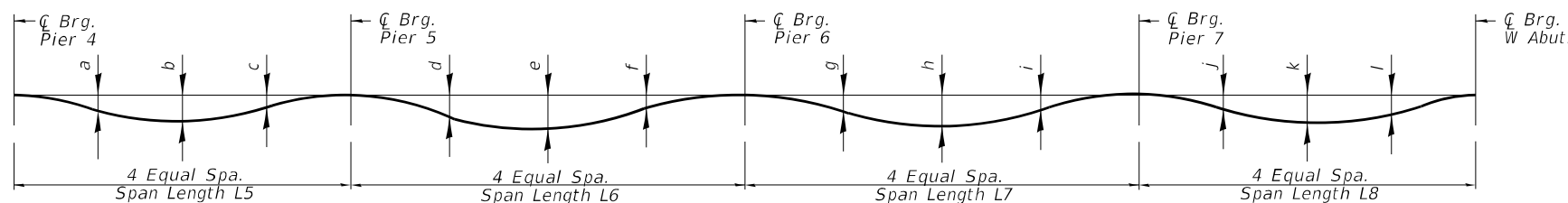


DEFLECTION DIAGRAM

(Steel self weight only)

GIRDER DEFLECTION TABLE FOR CROSS FRAMES

GIRDER NO.	SPAN 5			SPAN 6			SPAN 7			SPAN 8						
	L5	a	b	c	L6	d	e	f	L7	g	h	i	L8	j	k	l
1	195'-1"	1/2"	7/8"	1/2"	199'-11 1/2"	3/8"	5/8"	1/4"	243'-10 1/4"	1 1/4"	1 7/8"	1"	197'-2 3/8"	5/8"	1 3/8"	1 1/4"
2	196'-2 3/8"	5/8"	1"	5/8"	201'-1 1/4"	3/8"	5/8"	1/8"	245'-3"	1 3/8"	2 1/8"	1 1/8"	198'-4"	5/8"	1 1/2"	1 1/4"
3	197'-3 7/8"	5/8"	1 1/8"	5/8"	202'-3"	1/4"	1/2"	1/8"	246'-7 3/4"	1 1/2"	2 3/8"	1 1/4"	199'-5 1/2"	5/8"	1 1/2"	1 3/8"
4	198'-5 1/4"	3/4"	1 1/4"	3/4"	203'-4 3/4"	1/4"	3/8"	0"	248'-0 5/8"	1 5/8"	2 1/2"	1 3/8"	200'-7 1/8"	5/8"	1 1/2"	1 3/8"
5	199'-6 3/4"	3/4"	1 3/8"	3/4"	204'-6 5/8"	1/8"	1/4"	1/8"	249'-5 5/8"	1 7/8"	2 3/4"	1 1/2"	201'-8 3/4"	5/8"	1 5/8"	1 3/8"
6	200'-8 1/8"	7/8"	1 1/2"	7/8"	205'-8 3/8"	1/8"	1/8"	1/4"	250'-10 1/4"	2"	3"	1 5/8"	202'-10 1/4"	5/8"	1 5/8"	1 1/2"



DEFLECTION DIAGRAM

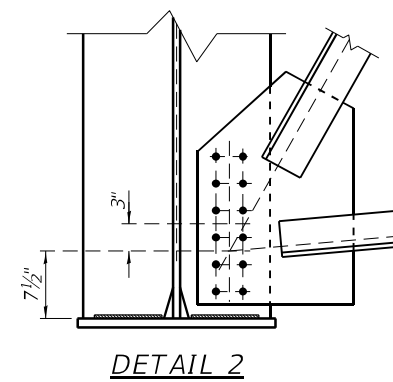
(Steel self weight only)

NOTE:

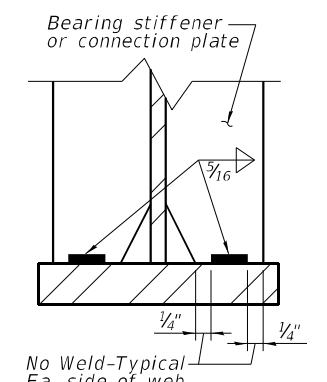
The calculated deflections of the primary girders/beams under steel self-weight shall be used to detail the diagram, cross frame and lateral bracing connections, and to erect the structural steel such that the girders/beams will be plumb within a tolerance of ± 1/8 in. per vertical ft. throughout when supporting their own weight.

NOTES:

- 1 1/16" Ø holes for 7/8" bolts.
- See Sheets S-32 thru S-35 of S-106 for location of girder cross frames.
- AASHTO M270 Grade 50W steel shall be used for all cross frames, connection plates, and bearing stiffeners, unless otherwise noted.
- "CVN" denotes Charpy-V-Notch Impact energy requirements, Zone 2.
- Bolt spacing shall be 3" min. & edge distances shall be 1 1/2" min.
- Erection shall be accomplished by a steel erection contractor or sub-contractor certified as an Advanced Certified Steel Erector (ACSE) by the American Institute of Steel Construction (AISC). See special provision for "Erection of Curved Steel Structures".
- All cross frames between girders shall be installed with erection pins and bolts in accordance with erection plan submitted to and approved by the Engineer. Individual cross frames at supports may be temporarily disconnected to install bearing anchor rods.
- The Contractor shall either:
 - a. Ream cross frame connection holes during shop assembly, or
 - b. Provide detailing and fabrication controls acceptable to the Engineer which ensures accuracy such that field reaming will not exceed the amount permitted in Article 505.08(1) of the Standard Specifications.



DETAIL 2



DETAIL 1
(Applies to Top & Bott. Flange)

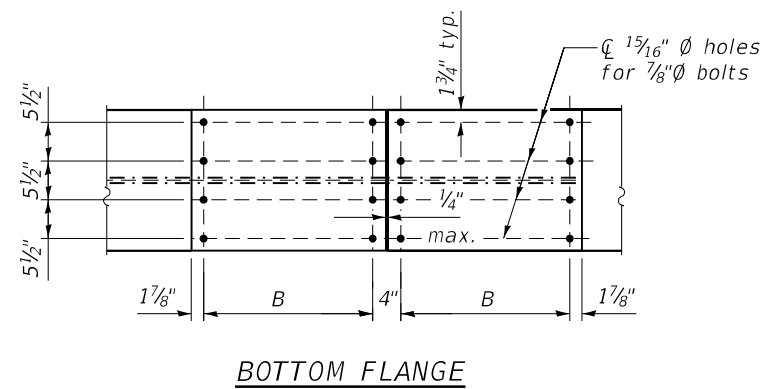
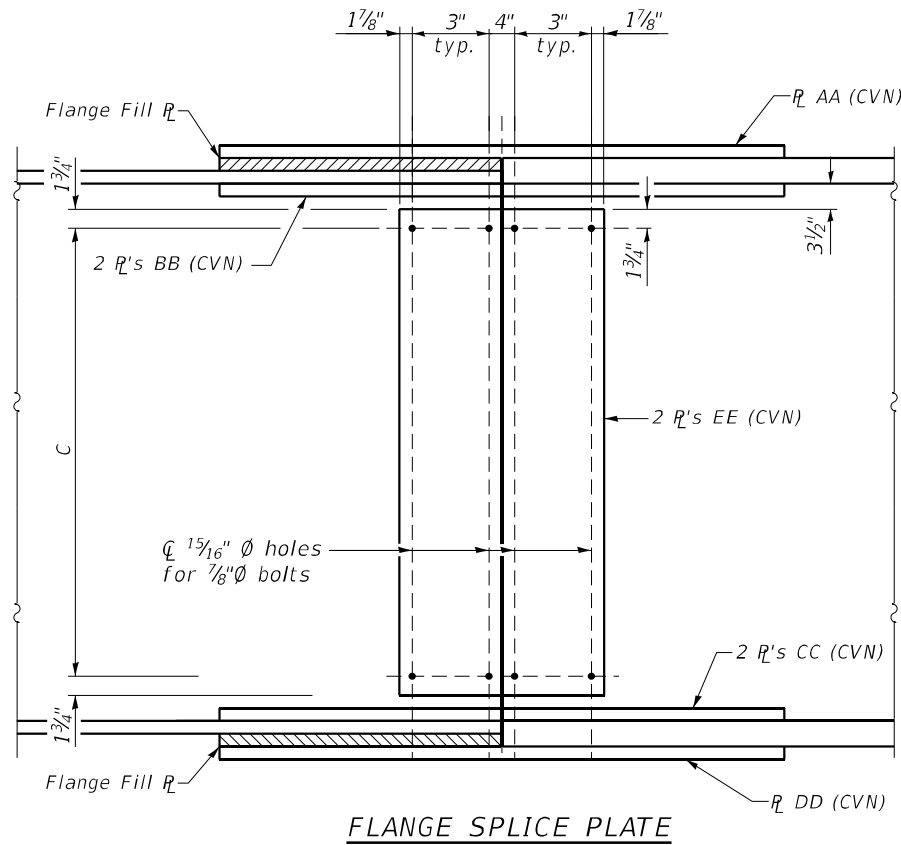
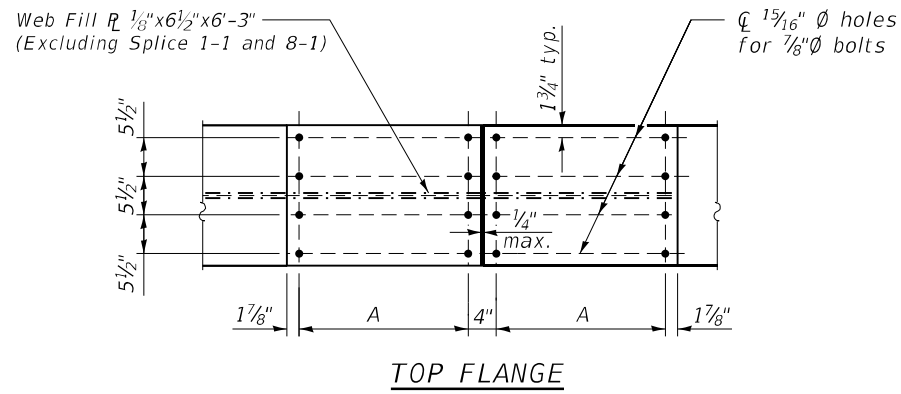


TABLE OF FIELD SPLICE TYPE DETAILS

Splice Type	SPLICE BOLT SPACING			SPLICE PLATE SIZES				
	A	B	C	AA-TOP OUTSIDE	BB-TOP INSIDE	CC-BOTT INSIDE	DD-BOTT OUTSIDE	EE-WEB
1	9 Spa @ 3"=2'-3"	10 Spa @ 3"=2'-6"	14 Spa @ 5 1/4"=6'-1 1/2"	7/8"x1'-8"x5'-1 3/4"	1"x9"x5'-1 3/4"	1 1/4"x9"x5'-7 3/4"	1 1/8"x1'-8"x5'-7 3/4"	3/8"x1'-1 3/4"x6'-5"
2	10 Spa @ 3"=2'-6"	10 Spa @ 3"=2'-6"	14 Spa @ 5 1/4"=6'-1 1/2"	1"x1'-8"x5'-7 3/4"	1 1/8"x9"x5'-7 3/4"	1 1/4"x9"x5'-7 3/4"	1 1/8"x1'-8"x5'-7 3/4"	3/8"x1'-1 3/4"x6'-5"
3	10 Spa @ 3"=2'-6"	11 Spa @ 3"=2'-9"	14 Spa @ 5 1/4"=6'-1 1/2"	1"x1'-8"x5'-7 3/4"	1 1/8"x9"x5'-7 3/4"	1 1/4"x9"x6'-1 3/4"	1 1/8"x1'-8"x6'-1 3/4"	3/8"x1'-1 3/4"x6'-5"
4	7 Spa @ 3"=1'-9"	7 Spa @ 3"=1'-9"	14 Spa @ 5 1/4"=6'-1 1/2"	3/4"x1'-8"x4'-1 3/4"	7/8"x9"x4'-1 3/4"	7/8"x9"x4'-1 3/4"	3/4"x1'-8"x4'-1 3/4"	3/8"x1'-1 3/4"x6'-5"
5	11 Spa @ 3"=2'-9"	11 Spa @ 3"=2'-9"	14 Spa @ 5 1/4"=6'-1 1/2"	1 3/8"x1'-8"x6'-1 3/4"	1 1/2"x9"x6'-1 3/4"	1 1/2"x9"x6'-1 3/4"	1 3/8"x1'-8"x6'-1 3/4"	3/8"x1'-1 3/4"x6'-5"
6	9 Spa @ 3"=2'-3"	9 Spa @ 3"=2'-3"	14 Spa @ 5 1/4"=6'-1 1/2"	7/8"x1'-8"x5'-1 3/4"	1"x9"x5'-1 3/4"	1 1/8"x9"x5'-1 3/4"	1"x1'-8"x5'-1 3/4"	3/8"x1'-1 3/4"x6'-5"

TABLE OF FILL PLATES

GIRDER	FS 1-1		FS 2-1		FS 2-2		FS 3-1		FS 3-2	
	TOP	BOTT	TOP	BOTT	TOP	BOTT	TOP	BOTT	TOP	BOTT
1 & 2	1/2"x1'-8"x2'-0 3/4"	1/2"x1'-8"x2'-0 3/4"	3/4"x1'-8"x2'-6 3/4"	1/2"x1'-8"x2'-6 3/4"	1/2"x1'-8"x2'-6 3/4"	1/4"x1'-8"x2'-6 3/4"	3/4"x1'-8"x2'-6 3/4"	1/2"x1'-8"x2'-6 3/4"	1/4"x1'-8"x2'-6 3/4"	-
3 & 4	-	-	-	-	-	-	-	-	-	-
5 & 6	1/2"x1'-8"x2'-6 3/4"	-	3/4"x1'-8"x2'-9 3/4"	3/4"x1'-8"x2'-9 3/4"	1/2"x1'-8"x2'-9 3/4"	1/2"x1'-8"x2'-9 3/4"	3/4"x1'-8"x2'-9 3/4"	1/2"x1'-8"x3'-0 3/4"	1/2"x1'-8"x2'-9 3/4"	1/4"x1'-8"x3'-0 3/4"

(CONT.)

GIRDER	FS 4-1		FS 4-2		FS 5-1		FS 5-2		FS 6-1	
	TOP	BOTT	TOP	BOTT	TOP	BOTT	TOP	BOTT	TOP	BOTT
1 & 2	1/2"x1'-8"x2'-0 3/4"	1/4"x1'-8"x2'-0 3/4"	1/4"x1'-8"x2'-0 3/4"	-	1/4"x1'-8"x2'-0 3/4"	-	-	-	-	-
3 & 4	-	-	-	-	-	-	-	-	-	-
5 & 6	1/2"x1'-8"x2'-0 3/4"	1/2"x1'-8"x2'-0 3/4"	1/4"x1'-8"x2'-0 3/4"	1/4"x1'-8"x2'-0 3/4"	1/4"x1'-8"x2'-0 3/4"	1/4"x1'-8"x2'-0 3/4"	-	-	-	-

(CONT.)

GIRDER	FS 6-2		FS 7-1		FS 7-2		FS 8-1	
	TOP	BOTT	TOP	BOTT	TOP	BOTT	TOP	BOTT
1 & 2	1/4"x1'-8"x2'-0 3/4"	-	-	-	-	-	1/2"x1'-8"x2'-0 3/4"	1/2"x1'-8"x2'-0 3/4"
3 & 4	-	-	-	-	-	-	1/2"x1'-8"x2'-0 3/4"	1/2"x1'-8"x2'-0 3/4"
5 & 6	1/2"x1'-8"x2'-0 3/4"	1/2"x1'-8"x2'-0 3/4"	1/4"x1'-8"x3'-0 3/4"	-	1/2"x1'-8"x3'-0 3/4"	1/4"x1'-8"x3'-0 3/4"	3/4"x1'-8"x2'-6 3/4"	1/4"x1'-8"x2'-9 3/4"

TABLE OF FIELD SPLICE TYPES

GIRDER	FS 1-1	FS 2-1	FS 2-2	FS 3-1	FS 3-2	FS 4-1	FS 4-2	FS 5-1	FS 5-2	FS 6-1	FS 6-2	FS 7-1	FS 7-2	FS 8-1
1 & 2	4	6	6	6	6	4	4	4	4	4	4	2	2	4
3 & 4	4	6	6	2	2	4	4	4	4	4	4	2	2	4
5 & 6	1	2	2	3	3	4	4	4	4	4	4	5	5	1

NOTES:

1. CVN Denotes Charpy-V-Notch Impact energy requirements, Zone 2.
2. Use 7/8" dia bolts with 1 5/16" dia holes for all splice connections.
3. All Splice Plate shall be AASHTO M270, Gr50W.

EXTERIOR GIRDER MOMENT TABLE (GIRDER 1)															
	0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.5 Sp. 4	Pier 4	0.5 Sp. 5	Pier 5	0.5 Sp. 6	Pier 6	0.5 Sp. 7	Pier 7	0.6 Sp. 8
Is	(in ⁴)	127895	204461	149646	204461	149646	165740	111945	127895	111945	127895	165740	159566	224152	127895
Ic(n)	(in ⁴)	239638	334908	273171	334908	273171	287331	225380	239638	225380	239638	287331	277378	358735	239638
Ic(3n)	(in ⁴)	179312	260809	206000	260809	206000	219762	165937	179312	165937	179312	219762	212827	281588	179312
Ic(cr)	(in ⁴)	142587	219972	165654	219972	165654	180854	127696	142587	127696	142587	127696	180854	174620	239857
Ss	(in ³)	2957	4621	3572	4621	3572	3788	2728	2957	2728	2957	2728	3788	3647	5037
Sc(n)	(in ³)	3776	5461	4371	5461	4371	4616	3528	3776	3528	3776	3528	4616	4388	5885
Sc(3n)	(in ³)	3412	5052	4016	5052	4016	4228	3195	3412	3195	3412	3195	4228	4050	5465
Sc(cr)	(in ³)	3107	4754	3718	4754	3718	3929	2890	3107	2890	3107	2890	3929	3778	5168
Sxc	(in ³)	3514	4666	4177	4674	4164	3849	3348	3034	3347	3037	3350	3850	4172	5071
DC1	(k/')	1.16	1.30	1.18	1.30	1.18	1.23	1.11	1.16	1.11	1.16	1.11	1.23	1.20	1.33
MDC1	(k)	2656	6366	2313	6269	2412	4995	1593	3792	1657	3635	1607	5029	2686	6631
DC2	(k/')	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
MDC2	(k)	462	1020	387	999	404	839	298	663	291	651	272	852	424	1063
DW	(k/')	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
MDW	(k)	702	1533	586	1501	622	1246	435	973	443	954	430	1276	685	1623
M _{t+IM}	(k)	3253	4175	3278	4328	3342	3831	2777	3331	2760	3303	2777	3852	3463	4267
fl (Strength I)	(ksi)	0.17	3.59	1.16	3.44	1.19	3.66	1.24	4.01	1.19	3.92	1.23	3.86	1.38	3.49
Mu + 1/2 fl Sxc	(k)	10660	19304	10125	19357	10439	16257	7991	13195	8040	12899	7968	16419	11135	20011
Øf Mn	(k)	*	**	*	**	*	**	*	**	*	**	*	**	*	**
fs DC1	(ksi)	10.78	16.53	7.77	16.28	8.10	15.82	7.01	15.39	7.29	14.75	7.07	15.93	8.84	15.80
fs DC2	(ksi)	1.6	2.6	1.2	2.5	1.2	2.6	1.1	2.3	1.1	2.3	1.0	2.6	1.3	2.5
fs DW	(ksi)	2.5	3.9	1.8	3.8	1.9	3.8	1.6	3.4	1.7	3.4	1.6	3.9	2.0	3.8
fs (L+IM)	(ksi)	10.3	10.5	9.0	10.9	9.2	11.7	9.4	10.6	9.4	10.5	9.4	11.8	9.5	9.9
fl (Service II)	(ksi)	0.12	2.71	0.86	2.59	0.90	2.75	0.93	3.01	0.88	2.94	0.92	2.90	1.04	2.63
fs + 1/2 fl (Service II)	(ksi)	28.37	38.03	22.81	38.09	23.54	38.78	22.51	36.41	22.69	35.51	22.45	39.17	24.95	36.23
0.95Rh Fyf	(ksi)	47.50	64.66	47.50	64.67	47.50	64.28	47.50	63.67	47.50	63.69	47.50	64.25	47.50	64.81
fs + 1/3 (Total)(Strength I)	(ksi)	37.35	49.33	29.92	49.45	30.88	50.39	29.55	47.14	29.80	46.01	29.48	50.89	32.69	46.99
Øf Fn	(ksi)	50.0	63.7	50.0	64.3	50.0	62.2	50.0	66.5	50.0	61.4	50.0	61.7	50.0	62.5
Vf	(k)	73.2	77.0	65.2	75.4	63.9	74.3	66.3	72.1	64.9	74.8	65.8	72.7	64.8	74.4

Is, Ss: Non-composite moment of inertia and section modulus of the steel section used for computing fs(Total-Strength I, and Service II) due to non-composite dead loads (in.⁴ and in.³).

Ic(n), Sc(n): Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing fs(Total-Strength I, and Service II) in uncracked sections due to short term composite live loads (in.⁴ and in.³).

Ic(3n), Sc(3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing fs(Total-Strength I, and Service II) in uncracked sections due to long-term composite (superimposed) dead loads (in.⁴ and in.³).

Ic(cr), Sc(cr): Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing fs(Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in.⁴ and in.³).

Sxc: Section modulus about the major axis of section to the controlling flange, tension or compression, taken as yield moment with respect to the controlling flange over the yield strength of the controlling flange (in.³).

DC1: Un-factored non-composite dead load (kips/ft.).

MDC1: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

M_{t+IM}: Un-factored live load moment plus dynamic load allowance (impact)(kip-ft.).

Mu (Strength I): Factored design moment (kip-ft.).

1.25 (MDC1+ MDC2) + 1.5 MDW + 1.75 M_{t+IM}

fl: Factored calculated normal stress at edge of flange for controlling flange plate due to lateral bending, Strength I or Service II as applicable (ksi).

Øf Mn: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).

fs DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).

MDC1 / Snc

fs DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).

MDC2 / Sc(3n) or MDC2 / Sc(cr) as applicable.

fs DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).

MDW / Sc(3n) or MDW / Sc(cr) as applicable.

fs (L+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).

M_{t+IM} / Sc(n) or M_{t+IM} / Sc(cr) as applicable.

fs + 1/2 (Service II): Sum of stresses as computed below (ksi).

fsDC1 + fsDC2 + fsDW + 1.3 fs(L+IM) + 1/2

0.95RhFyf: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

fs + 1/3 (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).

1.25 (fsDC1 + fsDC2) + 1.5 fsDW + 1.75 fs(L+IM) + 1/3

Øf Fn: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

Vf: Maximum factored shear range in span computed according to Article 6.10.10.

Note:
M_t and R_t include the effects of centrifugal force and superelevation.

* Per Article 6.10.6.2.2 Curved Sections in Positive flexure are evaluated as non-compact sections per Article 6.10.7.2
 ** Per Article 6.10.6.2.3 Curved Sections in Negative flexure are evaluated as non-compact sections per Article 6.10.8

EXTERIOR GIRDER REACTION TABLE (GIRDER 1)									
	E. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	Pier 6	Pier 7	W. Abut.
RDC1 (k)	76.47	348.67	345.32	299.28	246.47	245.59	295.63	347.16	76.26
RDC2 (k)	14.32	60.29	59.39	54.16	47.26	47.31	54.63	61.2	16
RDW (k)	19.92	84.74	83.21	75.19	64.82	64.76	75.86	86.27	19.8
R _t (k)	74.08	189.19	183.89	181.55	169.32	169.3	183.91	190.38	74.07
R _{IM} (k)	13.9	27.84	27.92	26.74	26.04	26.09	27.5	27.72	13.89
RTotal (k)	198.69	710.73	709.73	636.92	553.91	553.05	637.53	712.73	200.02

INTERIOR GIRDER REACTION TABLE (GIRDER 2)									
	E. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	Pier 6	Pier 7	W. Abut.
RDC1 (k)	83.27	311.43	308.51	251.39	228.08	210.51	271.81	326.52	83.6
RDC2 (k)	13.92	47.64	47.3	41.3	38.05	36.28	42.7	49.58	13.14
RDW (k)	21.37	76.07	75.66	64.96	59.79	56.54	67.46	78.98	21.34
R _t (k)	71.85	154.6	157.45	142.89	137.87	137.87	149.33	155.52	72.27
R _{IM} (k)	14.9	26.34	26.31	24.99	25.03	24.42	25.62	26.05	14.94
RTotal (k)	205.31	616.08	615.23	528.63	493.84	465.62	556.92	636.65	205.29

INTERIOR GIRDER REACTION TABLE (GIRDER 4)									
	E. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	Pier 6	Pier 7	W. Abut.
RDC1 (k)	87.71	269.91	276.97	274.42	223.23	226.19	281.65	331.11	88.08
RDC2 (k)	11.25	33.19	33.21	32.11	28.22	27.59	33	39.07	10.92
RDW (k)	22.56	70.15	70.07	68.4	61.25	60.32	69.92	80.87	22.44
R _t (k)	71.89	140.01	142.41	143.61	135.6	134.8	144.62	149.72	72.96
R _{IM} (k)	15.1	23.97	24.08	24.36	23.35	23.47	24.66	25.11	15.23
RTotal (k)	208.51	537.23	546.74	542.9	471.65	472.37	553.85	625.88	209.63

INTERIOR GIRDER REACTION TABLE (GIRDER 5)									
	E. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	Pier 6	Pier 7	W. Abut.
RDC1 (k)	114	384.75	382.51	318.76	275.88	276.32	333.19	395.65	106.34
RDC2 (k)	17.51	58.09	57.09	50.64	43.81	43.89	51.56	59.14	16.46
RDW (k)	28.27	93.58	92.15	81.03	69.68	69.93	82.86	94.79	26.53
R _t (k)	81.5	185.52	190.25	179.35	168.57	169.93	181.75	183.44	80.19
R _{IM} (k)	15.31	28.61	28.61	27.41	26.79	26.94	28.33	28.06	15.24
RTotal (k)	256.59	750.55	750.61	657.19	584.73	587.01	677.69	761.08	244.76

EXTERIOR GIRDER REACTION TABLE (GIRDER 6)									
	E. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	Pier 6	Pier 7	W. Abut.
RDC1 (k)	118.87	315.46	305.62	276.21	226.9	215.74	278.89	328.9	110.56
RDC2 (k)	19.29	52.72	51.29	47.77	42.71	41.84	48.58	54.5	18.6
RDW (k)	29.17	75.18	72.71	67.25	59.49	57.95	68.34	77.55	27.64
R _t (k)	101.73	169.53	172.05	168.74	161.75	160.29	171.65	171.28	101.54
R _{IM} (k)	18.13	26.86	26.98	26.62	26.05	26.01	27.78	27.1	18.17
RTotal (k)	287.19	639.75	628.65	586.59	516.9	501.83	595.24	659.33	276.51

NOTE:
 DC2 includes weight of concrete barrier and light post.

INTERIOR GIRDER MOMENT TABLE (GIRDER 2)																
	0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.5 Sp. 4	Pier 4	0.5 Sp. 5	Pier 5	0.5 Sp. 6	Pier 6	0.5 Sp. 7	Pier 7	0.6 Sp. 8	
Is	(in ⁴)	127895	204461	149646	204461	149646	165740	111945	127895	111945	127895	111945	165740	159566	224152	127895
Ic(n)	(in ⁴)	242852	339126	276781	339126	276781	291066	228437	242852	228437	242852	228437	291066	280882	363183	242852
Ic(3n)	(in ⁴)	181374	263191	208277	263191	208277	221994	168036	181374	168036	181374	168036	221994	214996	284040	181374
Ic(cr)	(in ⁴)	143280	220715	166411	220715	166411	181573	128433	143280	128433	143280	128433	181573	175334	240612	143280
Ss	(in ³)	2957	4621	3572	4621	3572	3788	2728	2957	2728	2957	2728	3788	3647	5037	2957
Sc(n)	(in ³)	3792	5480	4387	5480	4387	4634	3541	3792	3541	3792	3541	4634	4404	5905	3792
Sc(3n)	(in ³)	3427	5066	4030	5066	4030	4243	3210	3427	3210	3427	3210	4243	4063	5480	3427
Sc(cr)	(in ³)	3114	4761	3725	4761	3725	3935	2897	3114	2897	3114	2897	3935	3784	5174	3114
Sxc	(in ³)	3511	4672	4181	4668	4155	3854	3358	3040	3343	3045	3369	3847	4171	5077	3522
DC1	(k/')	1.20	1.33	1.21	1.33	1.21	1.27	1.14	1.20	1.14	1.20	1.14	1.27	1.23	1.37	1.20
MDC1	(k)	2841	6564	2368	6493	2578	4943	1575	3573	1763	3479	1541	5040	2955	6941	2706
DC2	(k/')	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
MDC2	(k)	477	978	391	963	429	777	285	608	307	585	271	790	458	1027	434
DW	(k/')	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
MDW	(k)	751	1596	613	1573	676	1258	441	984	480	945	432	1292	742	1693	720
M _t + I _M	(k)	2721	3270	2796	3401	2842	2960	2354	2591	2337	2536	2352	2982	2945	3334	2733
fl (Strength I)	(ksi)	0.15	3.36	1.08	3.22	1.13	3.31	1.13	3.53	1.11	3.43	1.11	3.51	1.34	3.31	0.15
Mu + 1/2 fl Sxc	(k)	10050	17980	9387	18049	9877	14571	7211	11535	7500	11226	7133	14819	10688	18801	9802
Øf Mn	(k)	*	**	*	**	*	**	*	**	*	**	*	**	*	**	*
fs DC1	(ksi)	11.53	17.05	7.95	16.86	8.66	15.66	6.93	14.50	7.76	14.12	6.78	15.96	9.72	16.54	10.98
fs DC2	(ksi)	1.7	2.3	1.2	2.3	1.3	2.2	1.1	2.1	1.1	2.0	1.0	2.2	1.4	2.2	1.5
fs DW	(ksi)	2.6	3.8	1.8	3.7	2.0	3.6	1.6	3.4	1.8	3.3	1.6	3.7	2.2	3.7	2.5
fs (L+IM)	(ksi)	8.6	7.2	7.6	7.4	7.8	7.7	8.0	8.2	7.9	8.0	8.0	7.7	8.0	6.8	8.6
fl (Service II)	(ksi)	0.12	2.54	0.81	2.44	0.86	2.49	0.84	2.65	0.84	2.58	0.83	2.65	1.00	2.49	0.11
fs + 1/2 (Service II)	(ksi)	27.08	33.72	21.29	33.77	22.49	32.62	20.43	32.06	21.41	31.20	20.18	33.22	24.20	32.54	26.32
0.95Rh Fyf	(ksi)	47.50	64.65	47.50	64.66	47.50	64.26	47.50	63.66	47.50	64.22	47.50	64.23	47.50	64.79	47.50
fs + 1/3 (Total)(Strength I)	(ksi)	35.56	43.53	27.88	43.62	29.42	42.17	26.80	41.48	28.05	40.36	26.48	42.91	31.62	42.00	34.59
Øf Fn	(ksi)	50.0	63.6	50.0	64.2	50.0	63.8	50.0	68.8	50.0	63.4	50.0	61.6	50.0	62.4	50.0
Vf	(k)	66.1	66.6	50.1	62.5	50.0	61.2	53.7	67.3	52.3	65.7	53.5	67.0	48.7	60.0	60.5

Is, Ss: Non-composite moment of inertia and section modulus of the steel section used for computing fs(Total-Strength I, and Service II) due to non-composite dead loads (in.⁴ and in.³).

Ic(n), Sc(n): Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing fs(Total-Strength I, and Service II) in uncracked sections due to short term composite live loads (in.⁴ and in.³).

Ic(3n), Sc(3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing fs(Total-Strength I, and Service II) in uncracked sections due to long-term composite (superimposed) dead loads (in.⁴ and in.³).

Ic(cr), Sc(cr): Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing fs(Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in.⁴ and in.³).

Sxc: Section modulus about the major axis of section to the controlling flange, tension or compression, taken as yield moment with respect to the controlling flange over the yield strength of the controlling flange (in.³).

DC1: Un-factored non-composite dead load (kips/ft.).

MDC1: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

M_t + I_M: Un-factored live load moment plus dynamic load allowance (impact)(kip-ft.).

Mu (Strength I): Factored design moment (kip-ft.).
1.25 (MDC1+ MDC2) + 1.5 MDW + 1.75 M_t + I_M

fl: Factored calculated normal stress at edge of flange for controlling flange plate due to lateral bending, Strength I or Service II as applicable (ksi).

Øf Mn: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).

fs DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).

MDC1 / Snc

fs DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).

MDC2 / Sc(3n) or MDC2 / Sc(cr) as applicable.

fs DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).

MDW / Sc(3n) or MDW / Sc(cr) as applicable.

fs (L+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).

M_t + I_M / Sc(n) or M_t + I_M / Sc(cr) as applicable.

fs + 1/2 (Service II): Sum of stresses as computed below (ksi).
fsDC1 + fsDC2 + fsDW + 1.3 fs(L+IM) + 1/2

0.95RhFyf: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

fs + 1/3 (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
1.25 (fsDC1 + fsDC2) + 1.5 fsDW + 1.75 fs(L+IM) + 1/3

Øf Fn: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

Vf: Maximum factored shear range in span computed according to Article 6.10.10.

Note:
M_t and R_t include the effects of centrifugal force and superelevation.

INTERIOR GIRDER MOMENT TABLE (GIRDER 4)																
	0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.5 Sp. 4	Pier 4	0.5 Sp. 5	Pier 5	0.5 Sp. 6	Pier 6	0.5 Sp. 7	Pier 7	0.6 Sp. 8	
Is	(in ⁴)	127895	155853	149646	165740	159566	165740	121721	127895	121721	146709	121721	165740	159566	204461	127895
Ic(n)	(in ⁴)	242852	286690	276781	291066	280882	291066	231886	242852	231886	266998	231886	291066	280882	339126	242852
Ic(3n)	(in ⁴)	181374	215067	208277	221994	214996	221994	174136	181374	174136	201620	174136	221994	214996	263191	181374
Ic(cr)	(in ⁴)	143280	172593	166411	181573	175334	181573	137018	143280	137018	162322	137018	181573	175334	220715	143280
Ss	(in ³)	2957	3706	3572	3788	3647	3788	2814	2957	2814	3373	2814	3788	3647	4621	2957
Sc(n)	(in ³)	3792	4614	4387	4634	4404	4634	3556	3792	3556	4213	3556	4634	4404	5480	3792
Sc(3n)	(in ³)	3427	4205	4030	4243	4063	4243	3242	3427	3242	3834	3242	4243	4063	5066	3427
Sc(cr)	(in ³)	3114	3870	3725	3935	3784	3935	2961	3114	2961	3524	2961	3935	3784	4761	3114
Sxc	(in ³)	3476	3773	4174	3844	4143	3851	3385	3036	3339	3385	3396	3847	4137	4656	3498
DC1	(k/')	1.20	1.25	1.21	1.27	1.23	1.27	1.16	1.20	1.16	1.23	1.16	1.27	1.23	1.33	1.20
MDC1	(k)	3160	5383	2458	5686	3210	5015	1664	3824	2160	3857	1590	5188	3303	7055	2918
DC2	(k/')	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MDC2	(k)	503	799	397	815	482	725	273	565	334	569	263	748	502	980	461
DW	(k/')	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
MDW	(k)	831	1415	660	1441	799	1295	458	1022	558	1031	442	1336	835	1731	770
M _t + I _M	(k)	2599	2722	2856	2918	2910	2818	2399	2514	2385	2560	2388	2836	2878	3048	2600
fl (Strength I)	(ksi)	0.17	3.66	1.12	3.68	1.28	3.31	1.17	3.64	1.24	3.06	1.14	3.53	1.42	3.65	0.15
Mu + 1/2 fl Sxc	(k)	10390	14997	9687	15787	11053	14403	7416	11726	8243	11847	7266	14764	11208	18446	9943
Øf Mn	(k)	*	**	*	**	*	**	*	**	*	**	*	**	*	**	*
fs DC1	(ksi)	12.82	17.43	8.26	18.01	10.56	15.89	7.10	15.52	9.21	13.72	6.78	16.43	10.87	18.32	11.84
fs DC2	(ksi)	1.8	2.3	1.2	2.3	1.4	2.1	1.0	2.0	1.2	1.8	1.0	2.1	1.5	2.3	1.6
fs DW	(ksi)	2.9	4.0	2.0	4.1	2.4	3.7	1.7	3.6	2.1	3.2	1.6	3.8	2.5	4.1	2.7
fs (L+IM)	(ksi)	8.2	7.1	7.8	7.6	7.9	7.3	8.1	8.0	8.0	7.3	8.1	7.3	7.8	6.7	8.2
fl (Service II)	(ksi)	0.13	2.76	0.84	2.78	0.97	2.49	0.88	2.73	0.94	2.30	0.85	2.66	1.06	2.76	0.12
fs + 1/2 (Service II)	(ksi)	28.25	34.33	21.98	35.60	25.14	32.33	20.76	32.78	23.44	29.36	20.29	33.20	25.54	34.80	26.91
0.95Rh Fyf	(ksi)	47.50	64.23	47.50	64.28	47.50	64.26	47.50	52.69	47.50	64.50	47.50	64.23	47.50	64.65	47.50
fs + 1/3 (Total)(Strength I)	(ksi)	37.05	44.30	28.79	45.96	32.82	41.79	27.23	42.37	30.65	38.00	26.63	42.88	33.33	44.85	35.31
Øf Fn	(ksi)	50.0	63.3	50.0	63.7	50.0	63.7	50.0	68.8	50.0	63.6	50.0	61.5	50.0	62.0	50.0
Vf	(k)	52.9	54.0	44.3	55.7	44.3	55.6	44.7	59.9	44.8	63.1	45.5	58.8	40.6	55.1	55.1

* Per Article 6.10.6.2.2 Curved Sections in Positive flexure are evaluated as non-compact sections per Article 6.10.7.2
** Per Article 6.10.6.2.3 Curved Sections in Negative flexure are evaluated as non-compact sections per Article 6.10.8

NOTE:
DC2 includes weight of concrete barrier.
MDC2 includes weight of concrete barrier and light post.

INTERIOR GIRDER MOMENT TABLE (GIRDER 5)

	0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.5 Sp. 4	Pier 4	0.5 Sp. 5	Pier 5	0.5 Sp. 6	Pier 6	0.5 Sp. 7	Pier 7	0.6 Sp. 8	
Is	(in ⁴)	164411	224152	159566	224152	168814	204461	121721	146709	121721	165740	121721	204461	188198	244066	164411
Ic(n)	(in ⁴)	305625	363183	280882	363183	300820	339126	231886	266998	231886	291066	231886	339126	324830	387293	305625
Ic(3n)	(in ⁴)	227803	284040	214996	284040	228609	263191	174136	201620	174136	221994	174136	263191	249102	305068	227803
Ic(cr)	(in ⁴)	182237	240612	175334	240612	185726	220715	137018	162322	137018	181573	137018	220715	205259	260727	182237
Ss	(in ³)	4039	5037	3647	5037	3993	4621	2814	3373	2814	3788	2814	4621	4413	5454	4039
Sc(n)	(in ³)	5014	5905	4404	5905	4812	5480	3556	4213	3556	4634	3556	5480	5237	6331	5014
Sc(3n)	(in ³)	4574	5480	4063	5480	4442	5066	3242	3834	3242	4243	3242	5066	4857	5895	4574
Sc(cr)	(in ³)	4214	5174	3784	5174	4140	4761	2961	3524	2961	3935	2961	4761	4556	5589	4214
Sxc	(in ³)	4637	5067	4183	5071	4520	4670	3393	3447	3329	3867	3400	4665	4930	5481	4679
DC1	(k/ft)	1.27	1.37	1.23	1.37	1.25	1.33	1.16	1.23	1.16	1.27	1.16	1.33	1.28	1.40	1.27
MDC1	(k)	4391	7792	2709	7808	3713	6191	1590	4284	2282	4339	1531	6398	4283	8738	3875
DC2	(k/ft)	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
MDC2	(k)	657	1132	426	1122	545	927	275	685	353	678	265	956	619	1245	598
DW	(k/ft)	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
MDW	(k)	1098	1889	713	1873	909	1544	462	1139	591	1128	442	1593	1028	2066	995
Mt + IM	(k)	3827	4231	3507	4509	3743	4055	2916	3422	2912	3418	2899	4071	3904	4330	3807
fl (Strength I)	(ksi)	0.15	3.75	1.32	3.65	1.37	3.36	1.31	3.70	1.43	3.17	1.28	3.58	1.45	3.85	0.14
Mu + 1/2 fl Sxc	(k)	14674	21921	11279	22377	13408	18746	8251	14263	9408	14285	8102	19170	14700	23741	13764
Of Mn	(k)	*	**	*	**	*	**	*	**	*	**	*	**	*	**	*
fs DC1	(ksi)	13.05	18.56	8.91	18.60	11.16	16.08	6.78	15.24	9.73	13.74	6.53	16.62	11.65	19.23	11.51
fs DC2	(ksi)	1.7	2.6	1.3	2.6	1.5	2.3	1.0	2.1	1.3	1.9	1.0	2.4	1.5	2.7	1.6
fs DW	(ksi)	2.9	4.4	2.1	4.3	2.5	3.9	1.7	3.6	2.2	3.2	1.6	4.0	2.5	4.4	2.6
fs (L+IM)	(ksi)	9.2	9.8	9.6	10.5	9.3	10.2	9.8	9.7	9.8	9.8	9.8	10.3	8.9	9.3	9.1
fl (Service II)	(ksi)	0.11	2.83	0.99	2.76	1.03	2.53	0.98	2.78	1.07	2.39	0.95	2.70	1.08	2.91	0.10
fs + 1/2 fl (Service II)	(ksi)	29.61	39.74	25.19	40.52	27.74	36.86	22.79	35.01	26.53	31.55	22.34	37.73	27.89	39.88	27.59
0.95Rh Fyf	(ksi)	47.50	64.80	47.50	64.81	47.50	64.67	47.50	63.99	47.50	64.23	47.50	64.65	47.50	64.95	47.50
fs + 1/3 (Total)(Strength I)	(ksi)	38.86	51.48	33.04	52.54	36.27	47.86	29.97	45.37	34.75	40.91	29.39	48.96	36.42	51.58	36.26
Of Fn	(ksi)	50.0	62.2	50.0	62.8	50.0	64.0	50.0	69.8	50.0	63.8	50.0	62.1	50.0	62.4	50.0
Vf	(k)	65.1	65.2	54.1	64.3	52.9	64.1	55.8	68.0	53.9	63.9	56.6	67.2	53.2	62.2	65.2

Is, Ss: Non-composite moment of inertia and section modulus of the steel section used for computing fs(Total-Strength I, and Service II) due to non-composite dead loads (in.⁴ and in.³).

Ic(n), Sc(n): Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing fs(Total-Strength I, and Service II) in uncracked sections due to short term composite live loads (in.⁴ and in.³).

Ic(3n), Sc(3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing fs(Total-Strength I, and Service II) in uncracked sections due to long-term composite (superimposed) dead loads (in.⁴ and in.³).

Ic(cr), Sc(cr): Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing fs(Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in.⁴ and in.³).

Sxc: Section modulus about the major axis of section to the controlling flange, tension or compression, taken as yield moment with respect to the controlling flange over the yield strength of the controlling flange (in.³).

DC1: Un-factored non-composite dead load (kips/ft.).

MDC1: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

Mt + IM: Un-factored live load moment plus dynamic load allowance (impact)(kip-ft.).

Mu (Strength I): Factored design moment (kip-ft.).
1.25 (MDC1+ MDC2) + 1.5 MDW + 1.75 Mt + IM

fl: Factored calculated normal stress at edge of flange for controlling flange plate due to lateral bending, Strength I or Service II as applicable (ksi).

Of Mn: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).

fs DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).

MDC1 / Snc

fs DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).

MDC2 / Sc(3n) or MDC2 / Sc(cr) as applicable.

fs DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).

MDW / Sc(3n) or MDW / Sc(cr) as applicable.

fs (L+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).

Mt + IM / Sc(n) or Mt + IM / Sc(cr) as applicable.

fs + 1/2 (Service II): Sum of stresses as computed below (ksi).
fsDC1 + fsDC2 + fsDW + 1.3 fs(L+IM) + 1/2

0.95RhFyf: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

fs + 1/3 (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
1.25 (fsDC1 + fsDC2) + 1.5 fsDW + 1.75 fs(L+IM) + 1/3

Of Fn: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

Vf: Maximum factored shear range in span computed according to Article 6.10.10.

Note:
Mt and Rt include the effects of centrifugal force and superelevation.

EXTERIOR GIRDER MOMENT TABLE (GIRDER 6)

	0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.5 Sp. 4	Pier 4	0.5 Sp. 5	Pier 5	0.5 Sp. 6	Pier 6	0.5 Sp. 7	Pier 7	0.6 Sp. 8	
Is	(in ⁴)	164411	224152	159566	224152	168814	204461	121721	146709	121721	165740	121721	204461	188198	244066	164411
Ic(n)	(in ⁴)	301418	358735	277378	358735	296950	334908	228930	263519	228930	287331	228930	334908	320709	382623	301418
Ic(3n)	(in ⁴)	225287	281588	212827	281588	226253	260809	172154	199470	172154	219762	172154	260809	246672	302551	225287
Ic(cr)	(in ⁴)	181427	239857	174620	239857	184959	219972	136332	161615	136332	180854	136332	219972	204483	259962	181427
Ss	(in ³)	4039	5037	3647	5037	3993	4621	2814	3373	2814	3788	2814	4621	4413	5454	4039
Sc(n)	(in ³)	4994	5885	4388	5885	4795	5461	3543	4195	3543	4616	3543	5461	5220	6310	4994
Sc(3n)	(in ³)	4557	5465	4050	5465	4428	5052	3229	3819	3229	4228	3229	5052	4841	5879	4557
Sc(cr)	(in ³)	4207	5168	3778	5168	4134	4754	2955	3517	2955	3929	2955	4754	4550	5583	4089
Sxc	(in ³)	4605	5069	4168	5062	4489	4666	3381	3440	3307	3860	3395	4664	4892	5467	4659
DC1	(k/ft)	1.23	1.33	1.20	1.33	1.21	1.30	1.13	1.20	1.13	1.23	1.13	1.30	1.25	1.37	1.23
MDC1	(k)	4613	7780	2846	7694	3938	6155	1626	4300	2404	4060	1502	6315	4492	8817	3977
DC2	(k/ft)	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
MDC2	(k)	679	1177	441	1160	571	969	276	726	368	707	264	1000	644	1313	614
DW	(k/ft)	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
MDW	(k)	1140	1855	744	1827	960	1513	466	1120	617	1084	441	1555	1074	2056	1015
Mt + IM	(k)	4932	5190	4575	5478	4869	4994	3784	4258	3772	4194	3759	5004	5047	5359	4904
fl (Strength I)	(ksi)	0.17	4.06	1.57	3.93	1.62	3.67	1.57	4.11	1.69	3.41	1.53	3.89	1.69	4.20	0.16
Mu + 1/2 fl Sxc	(k)	16978	23633	13413	23947	15799	20390	9846	15807	11147	15290	9592	20737	17093	25763	15864
Of Mn	(k)	*	**	*	**	*	**	*	**	*	**	*	**	*	**	*
fs DC1	(ksi)	13.71	18.53	9.36	18.33	11.84	15.98	6.93	15.30	10.25	12.86	6.40	16.40	12.22	19.40	11.82
fs DC2	(ksi)	1.8	2.7	1.3	2.7	1.5	2.4	1.0	2.5	1.4	2.2	1.0	2.5	1.6	2.8	1.6
fs DW	(ksi)	3.0	4.3	2.2	4.2	2.6	3.8	1.7	3.8	2.3	3.3	1.6	3.9	2.7	4.4	2.7
fs (L+IM)	(ksi)	11.8	12.1	12.5	12.7	12.2	12.6	12.8	14.5	12.8	12.8	12.7	12.6	11.6	11.5	11.8
fl (Service II)	(ksi)	0.13	3.06	1.17	2.96	1.22	2.76	1.17	3.09	1.27	2.56	1.14	2.92	1.27	3.17	0.11
fs + 1/2 (Service II)	(ksi)	33.97	42.77	29.72	43.28	32.44	40.02	26.94	42.03	31.16	36.26	26.15	40.73	32.19	43.20	31.48
0.95Rh Fyf	(ksi)	47.50	64.82	47.50	64.83	47.50	64.68	47.50	64.01	47.50	64.25	47.50	64.66	47.50	64.96	47.50
fs + 1/3 (Total)(Strength I)	(ksi)	44.67	55.49	39.06	56.21	42.50	52.05	35.50	54.75	40.88	47.29	34.48	52.94	42.13	55.96	41.47
Of Fn	(ksi)	50.0	62.2	50.0	62.8	50.0	62.5	50.0	67.7	50.0	63.8	50.0	62.0	50.0	62.3	50.0
Vf	(k)	86.4	87.4	76.3	86.0	76.7	86.9	76.5	89.5	76.7	88.0	78.1	87.9	75.4	85.0	87.0

fs DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).

MDC1 / Snc

fs DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).

MDC2 / Sc(3n) or MDC2 / Sc(cr) as applicable.

fs DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).

MDW / Sc(3n) or MDW / Sc(cr) as applicable.

fs (L+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).

Mt + IM / Sc(n) or Mt + IM / Sc(cr) as applicable.

fs + 1/2 (Service II): Sum of stresses as computed below (ksi).
fsDC1 + fsDC2 + fsDW + 1.3 fs(L+IM) + 1/2

0.95RhFyf: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

fs + 1/3 (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
1.25 (fsDC1 + fsDC2) + 1.5 fsDW + 1.75 fs(L+IM) + 1/3

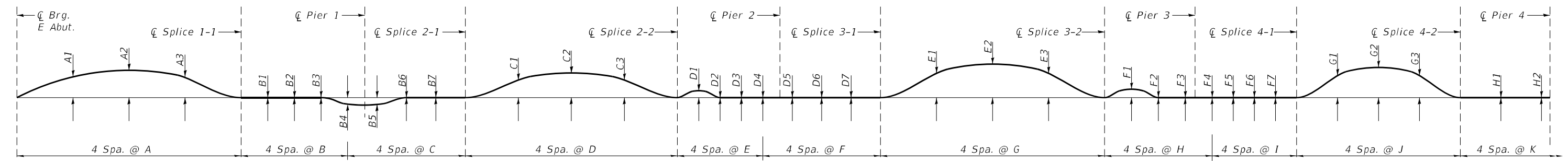
Of Fn: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

Vf: Maximum factored shear range in span computed according to Article 6.10.10.

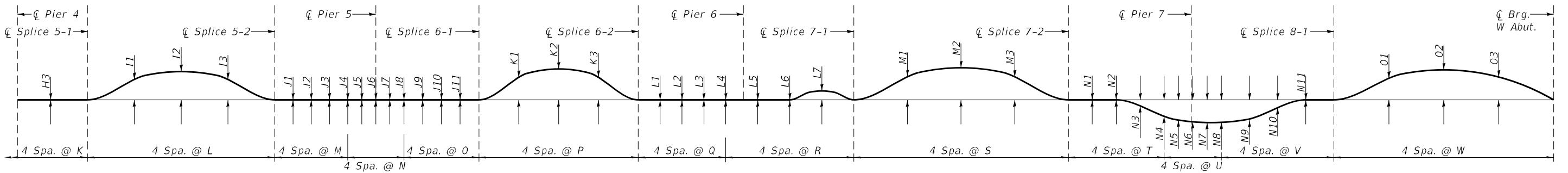
Note:
Mt and Rt include the effects of centrifugal force and superelevation.

* Per Article 6.10.6.2.2 Curved Sections in Positive flexure are evaluated as non-compact sections per Article 6.10.7.2
** Per Article 6.10.6.2.3 Curved Sections in Negative flexure are evaluated as non-compact sections per Article 6.10.8

NOTE:
DC2 includes weight of concrete barrier.
MDC2 includes weight of concrete barrier and light post.



CAMBER DIAGRAM



CAMBER DIAGRAM

CAMBER ORDINATES

Girder	A1	A2	A3	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	D1	D2	D3	D4	D5	D6	D7	E1	E2	E3	F1	F2	F3	F4	F5	F6	F7	G1	G2	G3	H1	H2	H3	I1	I2	I3	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11
1	2"	3"	2 3/4"	0"	0"	0"	1"	0"	0"	0"	3 1/2"	4 1/4"	3 1/2"	0 3/4"	0 3/4"	0"	0"	0"	0"	0 3/4"	4"	4 3/4"	3 3/4"	0 3/4"	0"	0"	0"	0"	0"	0 3/4"	2 1/2"	2 3/4"	2 1/4"	0"	0"	0"	2 3/4"	3 1/2"	2 1/2"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0 3/4"
2	2"	3"	2 3/4"	0"	0"	0"	1"	0"	0"	0"	3 1/2"	4 1/4"	3 1/2"	0 3/4"	0"	0"	0"	0"	0"	0"	4"	4 3/4"	3 3/4"	0 3/4"	0"	0"	0"	0"	0"	0"	2 1/2"	2 3/4"	2 1/4"	0"	0"	0"	2 3/4"	3 1/2"	2 3/4"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0 3/4"
3	2"	3"	2 1/2"	0"	0"	0"	1"	0"	0"	0"	3"	3 3/4"	3"	0 3/4"	0"	0"	0"	0"	0"	0 3/4"	3 1/2"	4 1/2"	3 1/2"	0 3/4"	0"	0"	0"	0"	0"	2"	2 1/4"	2"	0"	0"	0"	2 3/4"	3 1/2"	2 3/4"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0 3/4"	
4	2"	3 1/4"	2 3/4"	0"	0"	0"	1"	0 3/4"	0"	0"	3"	3 3/4"	3"	0 3/4"	0"	0"	0"	0"	0"	0 3/4"	3 3/4"	4 3/4"	3 3/4"	0 3/4"	0"	0"	0"	0"	0"	2"	2 1/4"	2"	0"	0"	0"	2 3/4"	3 1/2"	2 3/4"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	
5	2 1/2"	3 3/4"	3 1/4"	0"	0"	0"	1 1/4"	1"	0"	0"	3 3/4"	4 1/2"	3 3/4"	0 3/4"	0"	0"	0"	0"	0"	0"	4 1/2"	5 1/2"	4 1/2"	0 3/4"	0"	0"	0"	0"	0"	2 1/4"	2 3/4"	2 1/4"	0"	0"	0"	3"	3 3/4"	3"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	
6	2 1/2"	3 3/4"	3 1/2"	0"	0"	0"	1 1/4"	1"	0"	0"	3 3/4"	4 3/4"	3 3/4"	0 3/4"	0"	0"	0"	0"	0"	0"	4 3/4"	5 3/4"	4 1/2"	0 3/4"	0"	0"	0"	0"	0"	2 1/4"	2 3/4"	2 1/4"	0"	0"	0"	3"	4"	3"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	

CAMBER ORDINATES

Girder	K1	K2	K3	L1	L2	L3	L4	L5	L6	L7	M1	M2	M3	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	O1	O2	O3	
1	2"	2 1/2"	2 1/4"	0 3/4"	0"	0"	0"	0"	0"	1"	2 3/4"	3 1/4"	2 1/2"	0"	0"	1"	2"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	1 1/4"	0"	0"	2 3/4"	3"	1 3/4"
2	2"	2 1/2"	2"	0"	0"	0"	0"	0"	0"	1"	3"	3 1/2"	2 1/2"	0"	0"	1"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	1 1/4"	0"	0"	2 3/4"	3"	2"	
3	2"	2 1/4"	2"	0"	0"	0"	0"	0"	0"	1"	3"	3 1/2"	2 3/4"	0"	0"	1 1/4"	2"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	1 1/4"	0 3/4"	0"	2 3/4"	3"	2"	
4	2"	2 1/4"	2"	0"	0"	0"	0"	0"	0"	1"	3 1/4"	3 3/4"	2 3/4"	0"	0"	1 1/4"	2 1/4"	2 1/4"	2 1/2"	2 1/4"	2 1/4"	1 1/2"	0 3/4"	0"	2 3/4"	3 1/4"	2"	
5	2"	2 1/2"	2 1/4"	0"	0"	0"	0"	0"	0"	1 1/4"	4"	4 3/4"	3 3/4"	0"	0"	1 1/4"	2"	2"	2 1/4"	2"	2"	1 1/4"	0"	0"	3 1/4"	3 1/2"	2 1/4"	
6	2"	2 1/2"	2 1/4"	0"	0"	0"	0"	0"	0"	1 1/4"	4"	4 3/4"	3 3/4"	0"	0"	1 1/4"	2"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	1 1/2"	0 3/4"	0"	3 1/4"	3 1/2"	2 1/4"	

CAMBER ORDINATES SPACES

Girder	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	31'-7 1/8"	15'-0 5/8"	16'-6"	29'-10 3/4"	12'-1 1/2"	16'-6"	31'-7 1/8"	15'-3 1/2"	11'-10 5/8"	23'-0 5/8"	22'-9 5/8"	28'-4 3/4"	7'-9 1/8"	4'-10 3/8"	10'-2 1/4"	23'-0 5/8"	11'-10 5/8"	17'-5 3/4"	30'-10 3/8"	13'-1 1/4"	4'-4 1/2"	15'-3 1/4"	31'-7 1/8"
2	31'-9 1/4"	15'-1 5/8"	16'-7 1/8"	30'-0 3/4"	12'-2 3/8"	16'-7 1/8"	31'-9 1/4"	15'-4 1/2"	11'-11 1/2"	23'-2 1/4"	22'-11 1/4"	28'-6 3/4"	7'-9 5/8"	4'-10 5/8"	10'-3"	23'-2 1/4"	11'-11 1/2"	17'-7"	31'-0 1/2"	13'-2 1/8"	4'-4 3/4"	15'-4 3/8"	31'-9 1/4"
3	31'-11 1/2"	15'-2 5/8"	16'-8 3/8"	30'-2 7/8"	12'-3 1/4"	16'-8 3/8"	31'-11 1/2"	15'-5 5/8"	12'-0 1/4"	23'-3 3/4"	23'-0 3/4"	28'-8 3/8"	7'-10 1/8"	4'-11"	10'-3 5/8"	23'-3 7/8"	12'-0 1/4"	17'-8 1/8"	31'-2 3/8"	13'-3 1/8"	4'-5 1/8"	15'-5 3/8"	31'-11 1/2"
4	32'-1 5/8"	15'-3 3/4"	16'-9 1/2"	30'-4 7/8"	12'-4"	16'-9 1/2"	32'-1 5/8"	15'-6 5/8"	12'-1 1/8"	23'-5 5/8"	23'-2 3/8"	28'-10 5/8"	7'-10 3/4"	4'-11 3/8"	10'-4 3/8"	23'-5 3/8"	12'-1 1/8"	17'-9 3/8"	31'-4 3/4"	13'-4"	4'-5 3/8"	15'-6 1/2"	32'-1 5/8"
5	32'-3 7/8"	15'-4 3/4"	16'-10 5/8"	30'-7"	12'-4 7/8"	16'-10 5/8"	32'-3 7/8"	15'-7 5/8"	12'-2"	23'-7"	23'-4"	29'-0 5/8"	7'-11 1/4"	4'-11 5/8"	10'-5"	23'-7"	12'-2"	17'-10 5/8"	31'-6 7/8"	13'-4 7/8"	4'-5 3/4"	15'-7 1/2"	32'-3 7/8"
6	32'-6"	15'-5 3/4"	16'-11 3/4"	30'-9"	12'-5 3/4"	16'-11 3/4"	32'-6"	15'-8 3/4"	12'-2 3/4"	23'-8 1/2"	23'-5 1/2"	29'-2 1/2"	7'-11 3/4"	5'-0"	10'-5 3/4"	23'-8 5/8"	12'-2 3/4"	17'-11 3/4"	31'-9"	13'-5 3/4"	4'-6"	15'-8 1/2"	32'-6"

TOP OF WEB ELEVATIONS (For fabrication only)

Girder	☐ Brg. E. Abut.	FS 1-1	☐ Pier 1	FS 2-1	FS 2-2	☐ Pier 2	FS 3-1	FS 3-2	☐ Pier 3	FS 4-1	FS 4-2	☐ Pier 4	FS 5-1	FS 5-2	☐ Pier 5	FS 6-1	FS 6-2	☐ Pier 6	FS 7-1	FS 7-2	☐ Pier 7	FS 8-1	☐ Brg. W. Abut.
1	792.63	797.49	799.90	801.97	805.61	806.96	808.23	810.20	810.61	811.01	811.17	810.99	810.77	809.57	808.88	808.00	805.84	804.19	802.44	797.99	795.65	793.30	788.62
2	793.17	798.04	800.43	802.50	806.14	807.49	808.78	810.75	811.14	811.53	811.70	811.52	811.31	810.11	809.42	808.52	806.36	804.72	802.99	798.54	796.18	793.83	789.15
3	793.70	798.64	801.02	803.09	806.71	808.07	809.37	811.30	811.67	812.08	812.22	812.05	811.85	810.63	809.93	809.02	806.88	805.26	803.55	799.09	796.73	794.37	789.68
4	794.23	799.19	801.55	803.62	807.24	808.60	809.92	811.85	812.20	812.60	812.75	812.58	812.40	811.17	810.46	809.55	807.40	805.79	804.10	799.65	797.27	794.91	790.21
5	794.74	799.67	802.00	804.06	807.69	809.07	810.41	812.36	812.69	813.08	813.25	813.09	812.92	811.71	810.97	810.07	807.88	806.28	804.58	800.10	797.76	795.39	790.72
6	795.27	800.22	802.54	804.58	808.22	809.60	810.96	812.91	813.23	813.59	813.78	813.63	813.46	812.25	811.50	810.59	808.39	806.81	805.14	800.65	798.29	795.92	791.26



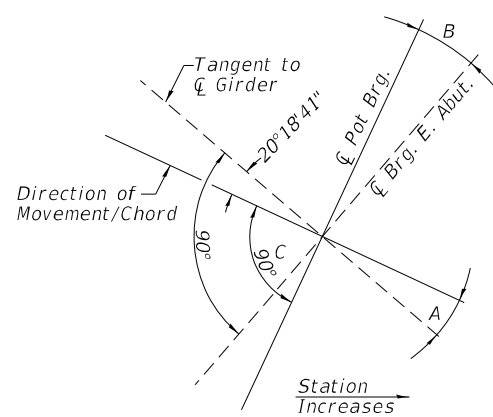
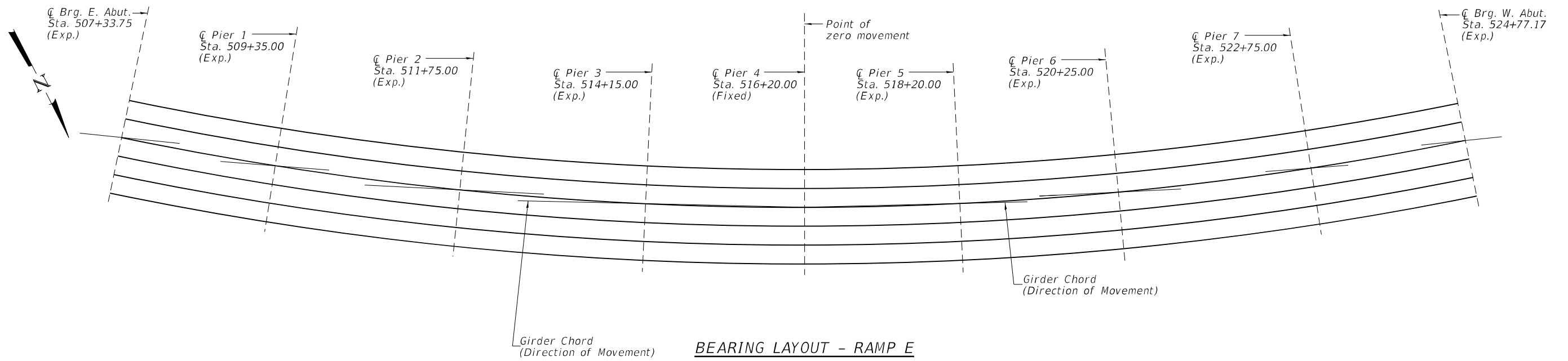
FILE NAME =
 USER NAME = Denise Herrera
 DESIGNED - LM
 CHECKED - JDJ
 PLOT SCALE = NA
 DRAWN - GLD
 PLOT DATE = 05/03/2021
 REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

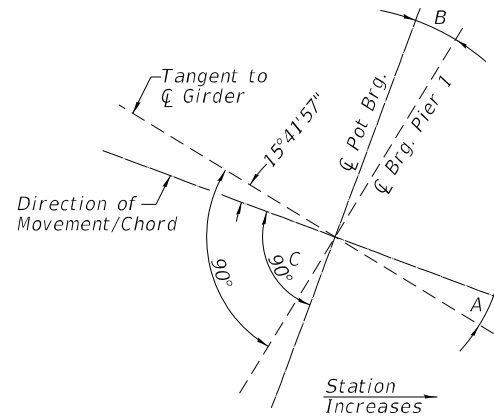
STRUCTURAL STEEL DETAILS - 6
 STRUCTURE NO. 010-1001

SHEET NO. 5-43 OF 5-106 SHEETS

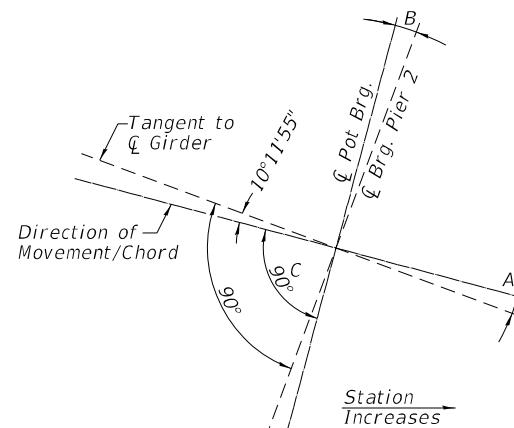
F.A.I. RTE. 74 & 57	SECTION (10-34-1) HBK	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 685
CONTRACT NO. 70B99			ILLINOIS FED. AID PROJECT	



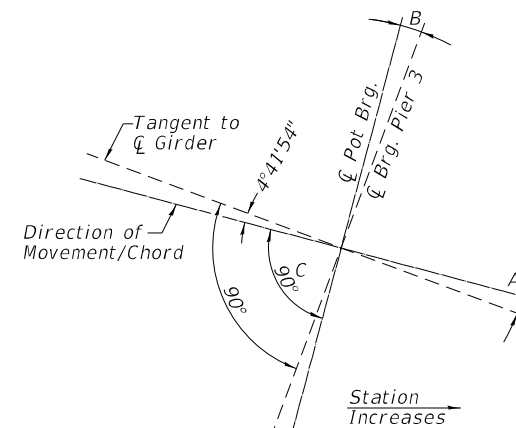
EAST ABUTMENT



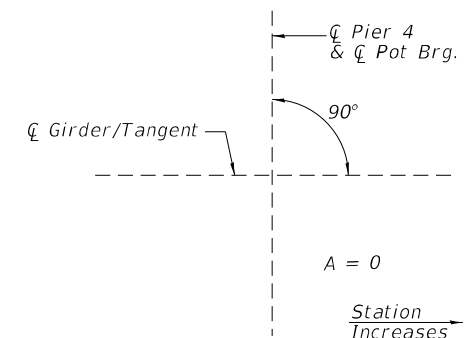
PIER 1



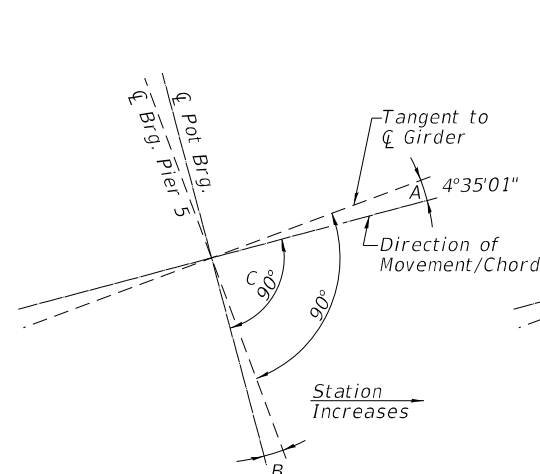
PIER 2



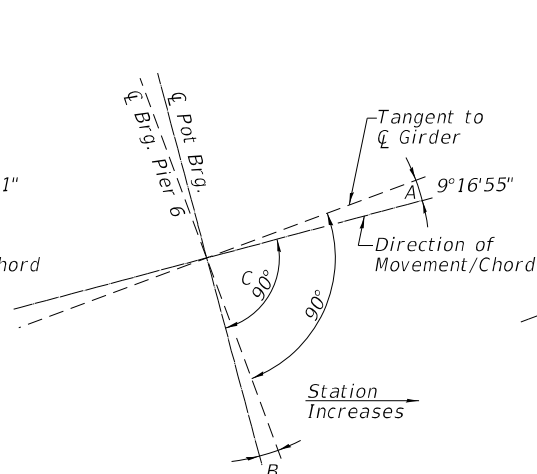
PIER 3



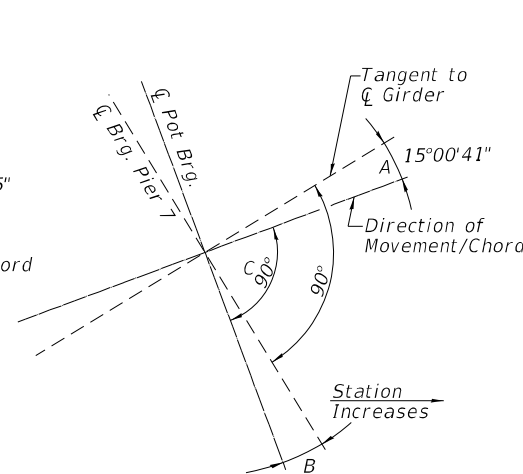
PIER 4



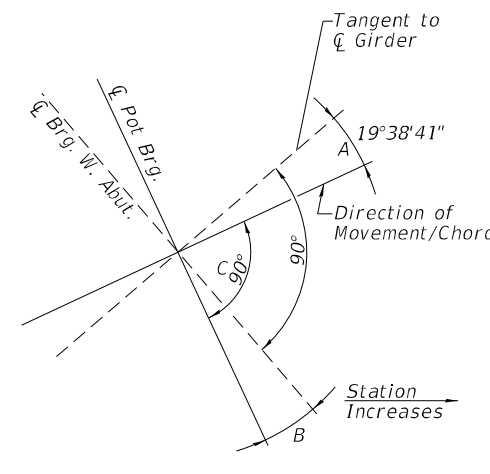
PIER 5



PIER 6



PIER 7

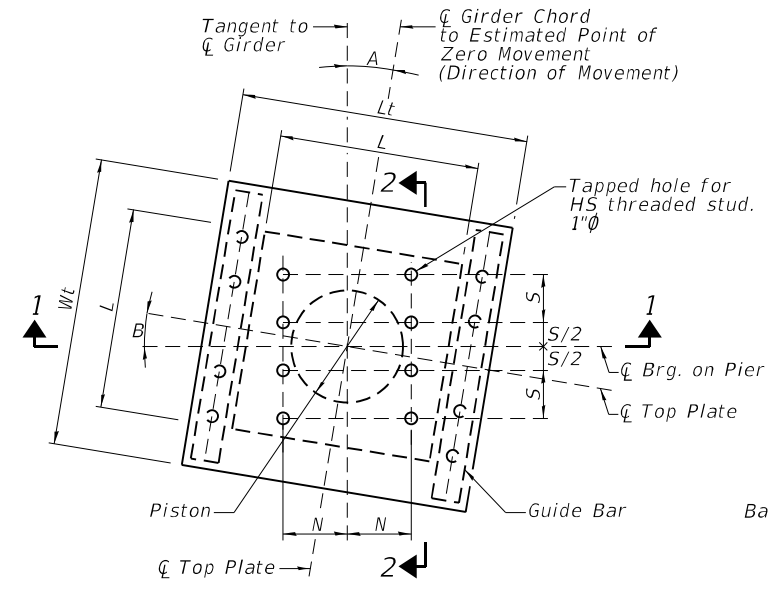


WEST ABUTMENT

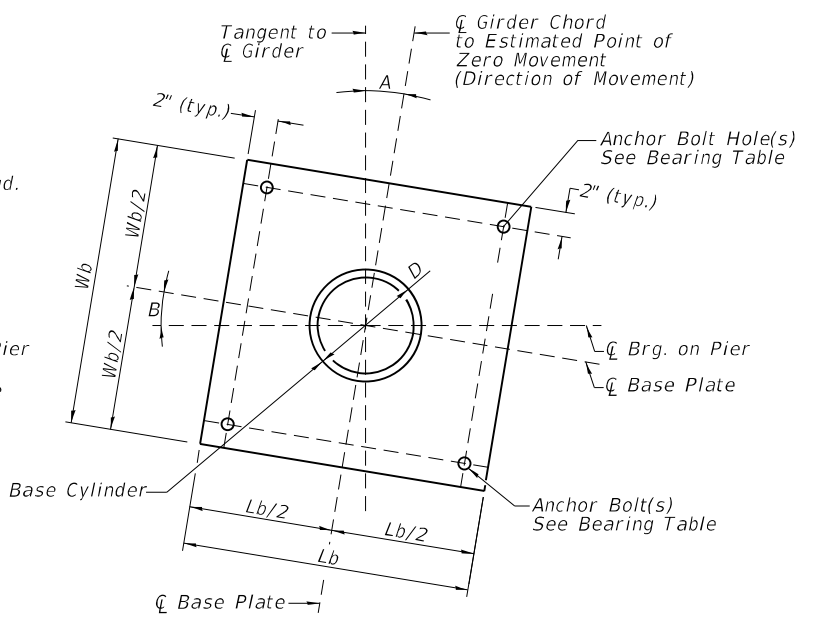
NOTES:

- A = Angle between Tangent to Girder and Direction of Movement.
- B = Setting angle between C of Bearing Base Plate and C of Pier or Abutment (B=A).
- C = Set Bearing Base Plates at right angles to the Direction of Movement/Chord.

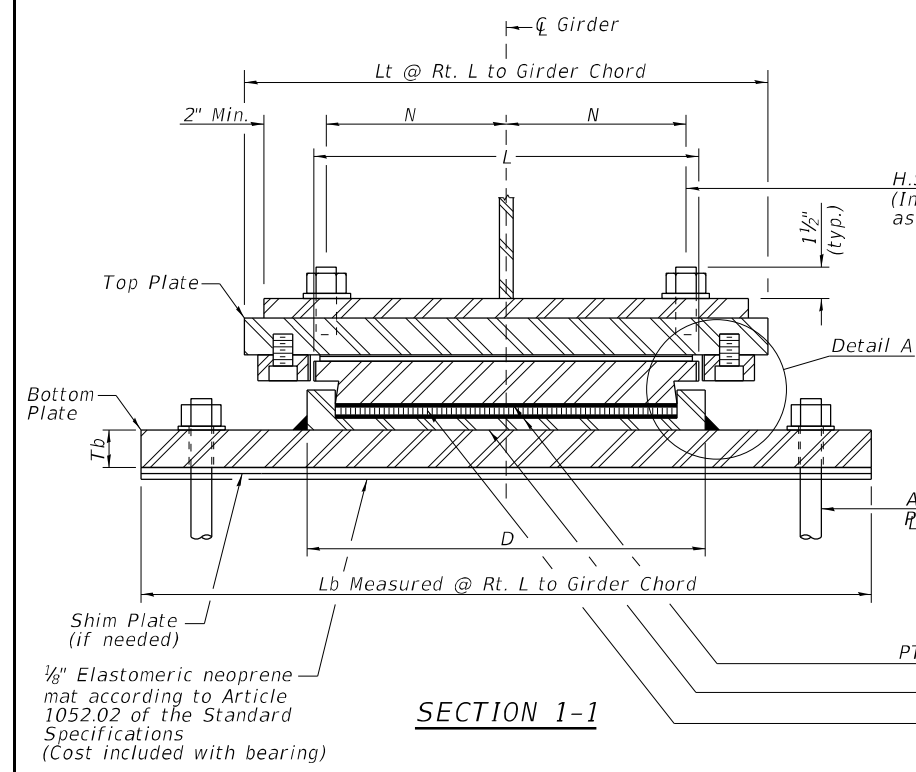
FILE NAME = 	USER NAME = Denise Herrera	DESIGNED - LM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BEARING LAYOUT AND ORIENTATION STRUCTURE NO. 010-1001	F.A.I. RT.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = NA	DRAWN - GLD	CHECKED - DRC			REVISED -	74 & 57	(10-34-1) HBK	CHAMPAIGN	1187
PLOT DATE = 05/03/2021	CHECKED - LM	DRAWN - GLD	REVISED -	SHEET NO. S-44 OF S-106 SHEETS		CONTRACT NO. 70B99			ILLINOIS FED. AID PROJECT	



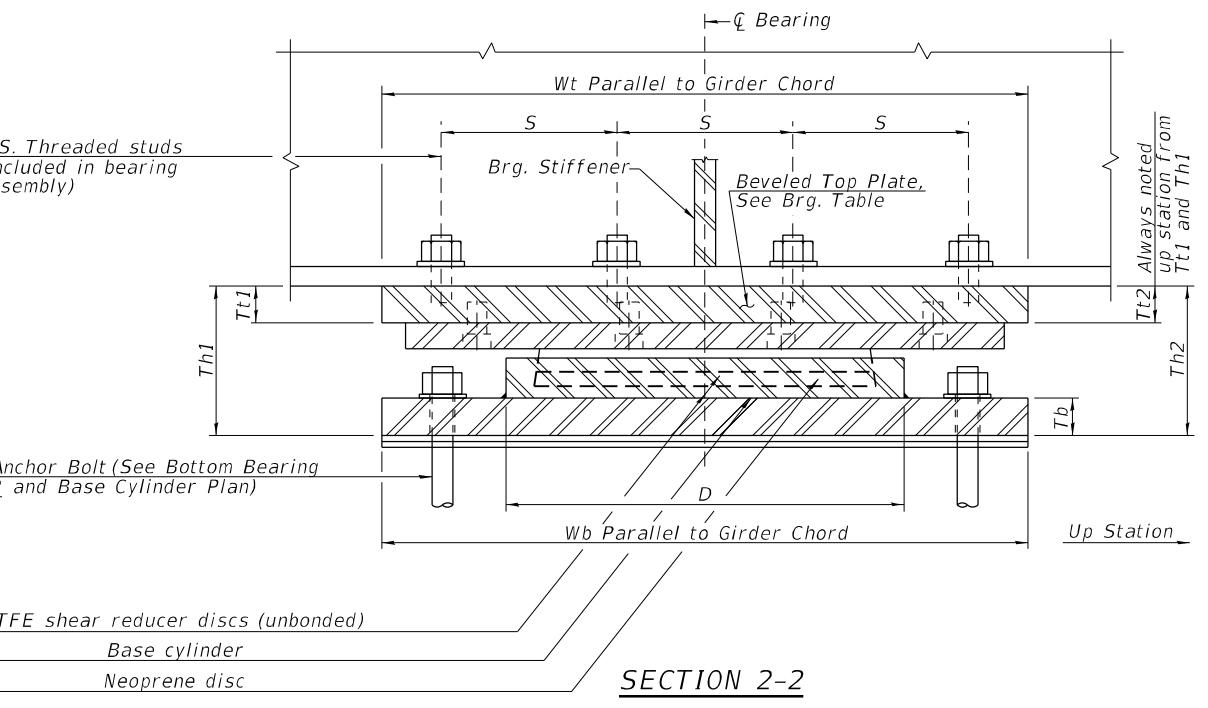
TOP BEARING PLATE AND PISTON PLAN



BOTTOM BEARING PLATE AND BASE CYLINDER PLAN



SECTION 1-1



SECTION 2-2

ANCHOR BOLT DETAILS

Bolt Dia. x Length **	Plate Washer
1 1/4" x 15"	2 3/4" x 2 3/4" x 3/16"
3/4" x 12"	2" x 2" x 5/16"

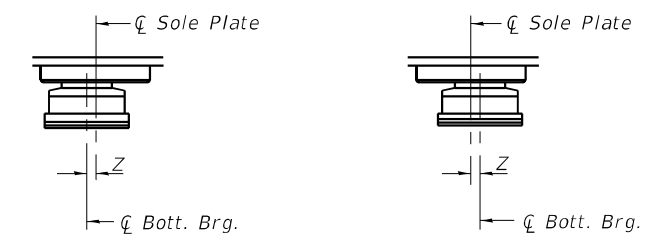
** Length shown is minimum required embedment length.

BASE PLATE HOLE TABLE

Anchor Bolt Ø	Max. Hole Ø
1 1/4"	1 3/4"
3/4"	1 1/4"

NOTES:

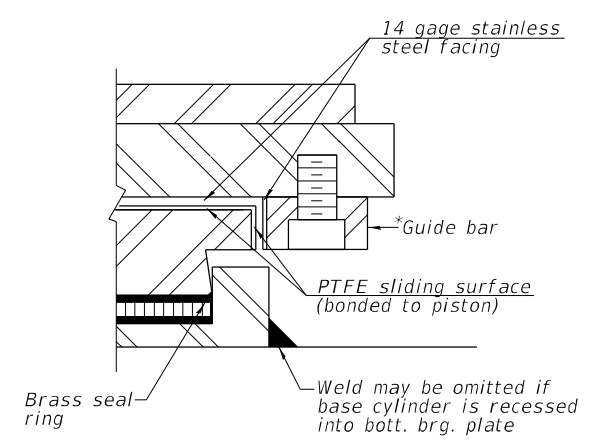
- The Structural Steel for the top & bottom bearing plates shall be AASHTO M270 Grade 50W.
- For anchor bolt type and details see Bearing dimensions Table.
- Top & bottom plates, threaded studs, washers and shim plates are included in the cost of the Bearings.
- Anchor bolts for bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place.
- Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
- Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
- Work this sheet with Sheet S-46 of S-106.
- If the base cylinder is recessed into the bottom bearing plate, the thickness of the bottom plate shall be Tb plus the depth of the recess.
- Total bearing height (Th) is estimated based on manufacturer data. Actual bearing height may differ from contract plans. The Contractor shall be responsible for verifying bearing heights and adjusting seat elevations with approval of engineer, if required, prior to placing pier concrete. Total bearing height is taken at the Ç of bearing for beveled top plates.



BELOW 50° F.
(Move bott. brg. away from fixed brg.)

ABOVE 50° F.
(Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.
Z=1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.



DETAIL A

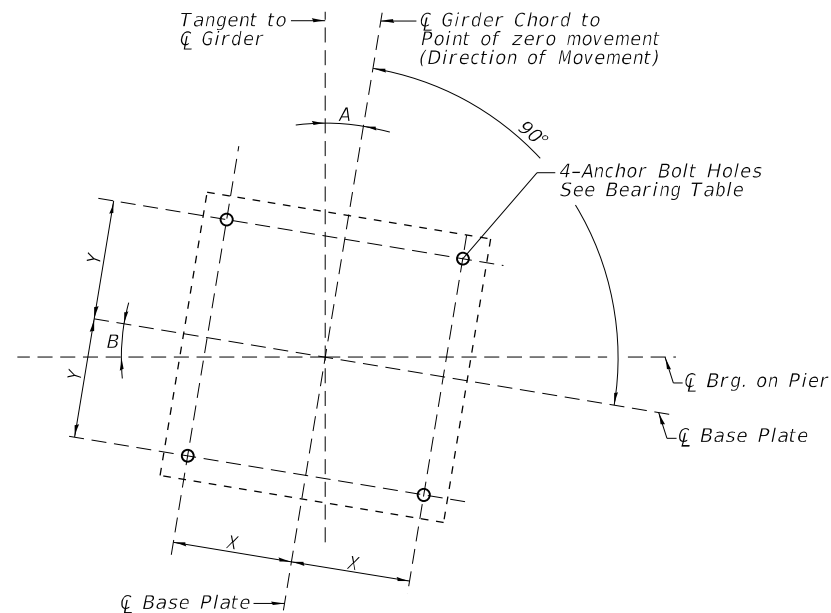
*As alternates to the bolted connection shown, the guide bars may be connected to the top bearing plate by groove welds or the guide bars and top bearing plate may be fabricated as a single piece.

GUIDED EXPANSION BEARING DIMENSIONS TABLE

Brg. Location	Vertical Design Load (kips)	Lateral Design Load (kips)	Bottom Bearing Plate			Top Bearing Plate				Th1	Th2	D	L	N	S	Anchor Bolt Dia.	Anchor Bolt Specification Grade	Total Required Movement (in.)
			Tb	Lb	Wb	Tt1	Tt2	Lt	Wt									
East Abutment	300.00	55.00	1 3/4"	3'-2"	2'-8"	1 1/2"	2 1/2"	1'-11"	2'-0"	9"	10"	1'-1 3/4"	1'-1 3/4"	5"	4"	3/4"	F1554 Gr. 105	6.66"
Pier 1	750.00	150.00	2 1/4"	3'-4"	3'-3"	2 3/4"	3 3/4"	2'-6"	2'-5"	1'-1 1/8"	1'-2 1/4"	1'-9 5/8"	1'-9 5/8"	8"	4"	1 1/4"	F1554 Gr. 105	5.15"
Pier 2	750.00	150.00	2 1/4"	3'-4"	3'-1"	2 3/4"	3 1/2"	2'-6"	2'-3"	1'-1 1/8"	1'-1 7/8"	1'-9 5/8"	1'-9 5/8"	8"	4"	1 1/4"	F1554 Gr. 105	3.34"
Pier 3	650.00	130.00	2 1/4"	3'-2"	2'-11 1/8"	2 1/2"	2 3/4"	2'-4"	2'-1 1/8"	1'-0 3/8"	1'-0 3/4"	1'-7 3/8"	1'-7 3/8"	8"	4"	1 1/4"	F1554 Gr. 105	1.54"
Pier 5	600.00	115.00	2"	3'-3"	2'-10 1/4"	3"	2 1/2"	2'-5"	2'-0 1/4"	1'-0 1/2"	1'-0"	1'-8 1/4"	1'-8 1/4"	8"	4"	1 1/4"	F1554 Gr. 105	1.50"
Pier 6	700.00	135.00	2"	3'-3"	3'-0"	3 1/2"	2 1/2"	2'-5"	2'-2"	1'-1 3/8"	1'-0 3/8"	1'-8 3/4"	1'-8 3/4"	8"	4"	1 1/4"	F1554 Gr. 105	3.04"
Pier 7	750.00	150.00	2 1/4"	3'-6"	3'-4"	4"	2 3/4"	2'-6"	2'-5"	1'-2 1/2"	1'-1 1/8"	1'-9 5/8"	1'-9 5/8"	8"	4"	1 1/4"	F1554 Gr. 105	4.92"
West Abutment	300.00	55.00	2"	3'-6"	2'-8"	2 1/2"	1 1/2"	2'-0"	2'-0"	10 1/4"	9 1/4"	1'-1 3/4"	1'-1 3/4"	5"	4"	3/4"	F1554 Gr. 105	6.44"

BILL OF MATERIAL

Item	Unit	Total
High Load Multi-Rotational Bearings, Guided Expansion 300K	Each	12
High Load Multi-Rotational Bearings, Guided Expansion 600K	Each	6
High Load Multi-Rotational Bearings, Guided Expansion 650K	Each	6
High Load Multi-Rotational Bearings, Guided Expansion 700K	Each	6
High Load Multi-Rotational Bearings, Guided Expansion 750K	Each	18
Anchor Bolts, 1 1/4"	Each	144
Anchor Bolts, 3/4"	Each	48

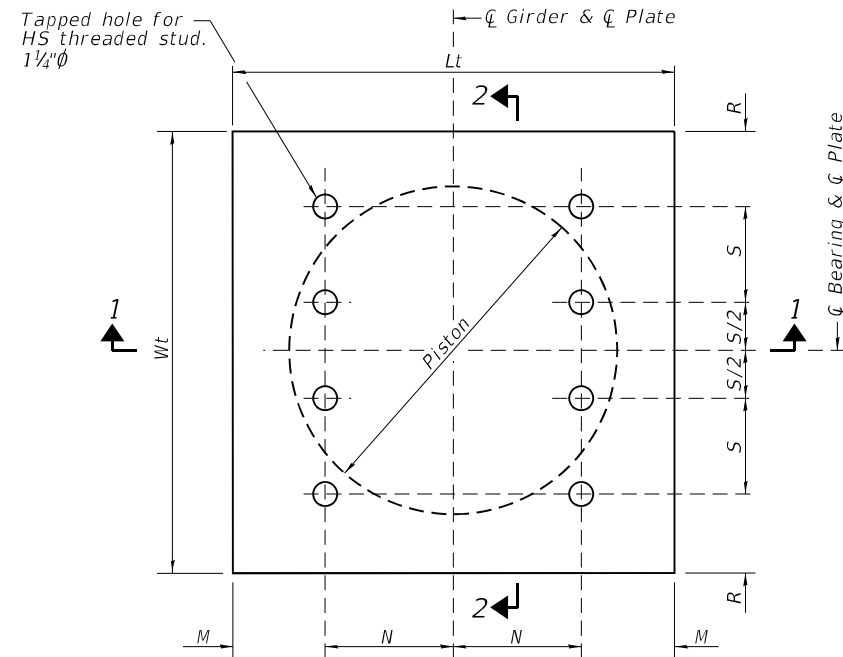


ANCHOR BOLT LOCATION DETAIL

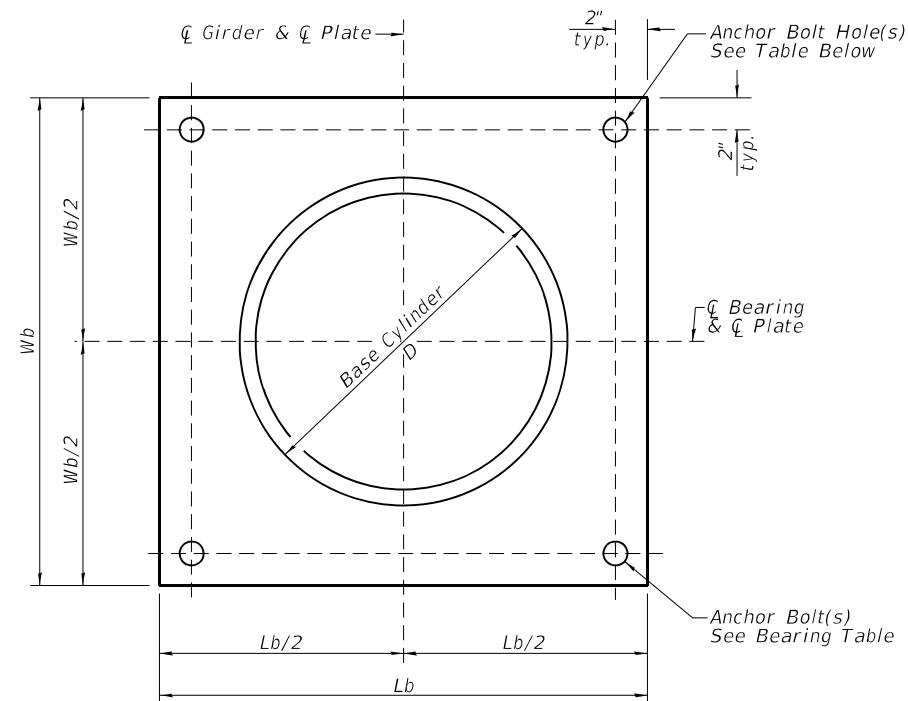
Brg. Location	X	Y	A	B
East Abutment	17"	14"	20°18'41"	20°18'41"
Pier 1	18"	17 1/2"	15°41'57"	15°41'57"
Pier 2	18"	16 1/2"	10°11'55"	10°11'55"
Pier 3	17"	15 9/16"	4°41'54"	4°41'54"
Pier 5	17 1/2"	15 1/8"	4°35'01"	4°35'01"
Pier 6	17 1/2"	16"	9°16'55"	9°16'55"
Pier 7	19"	18"	15°00'41"	15°00'41"
West Abutment	19"	14"	19°38'41"	19°38'41"

NOTES:

1. Work this sheet with Sheet S-45 of S-106.
2. See Sheet S-44 of S-106 for bearing layout & orientation.



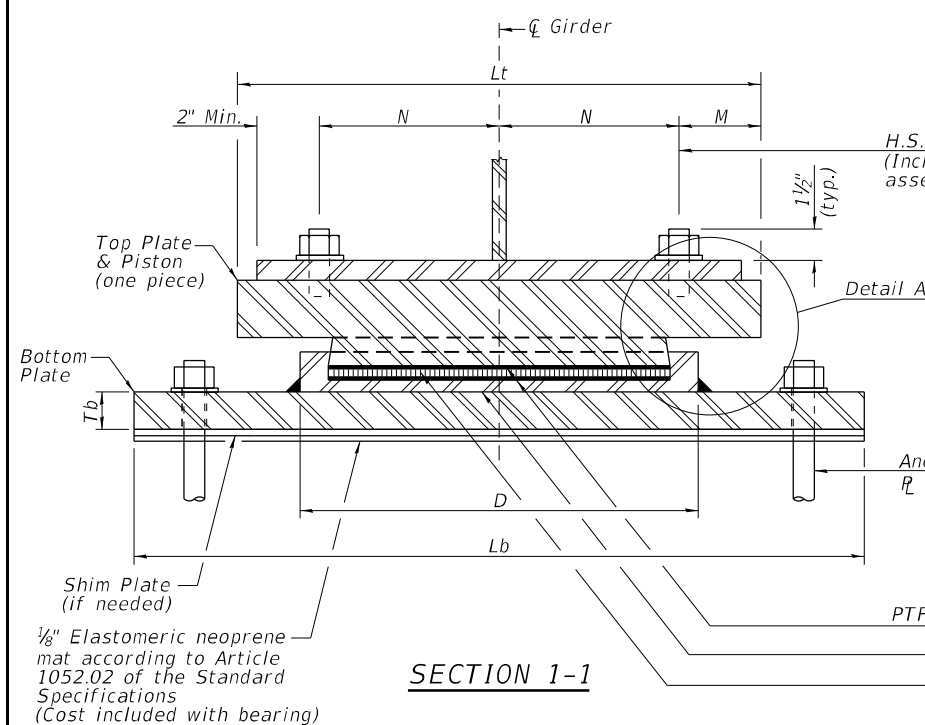
TOP BEARING PLATE AND PISTON PLAN



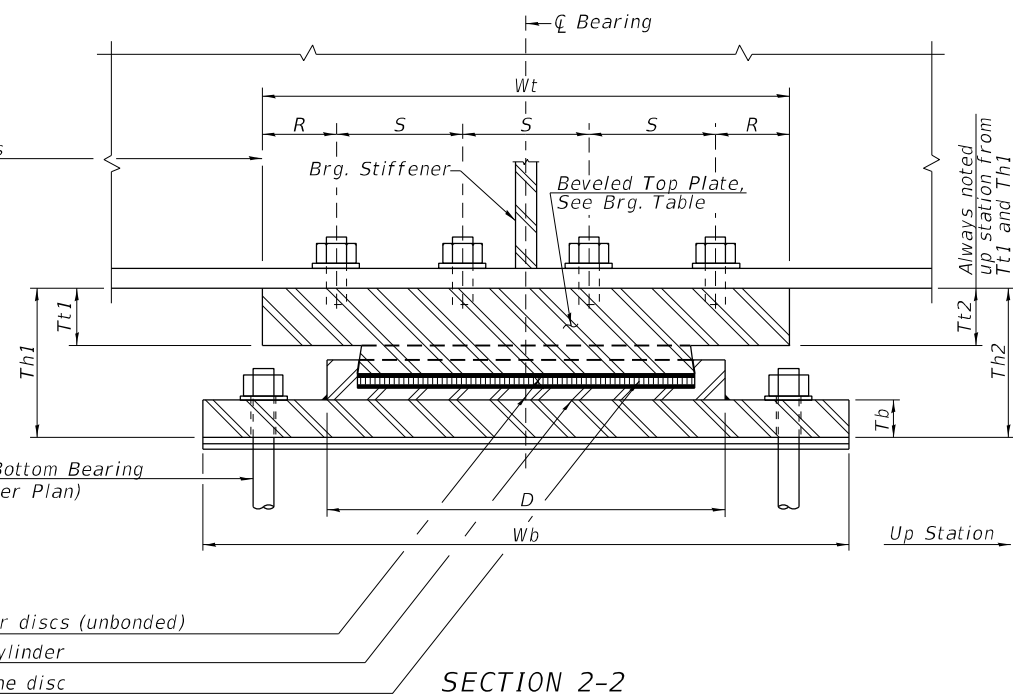
BOTTOM BEARING PLATE AND BASE CYLINDER PLAN

NOTES:

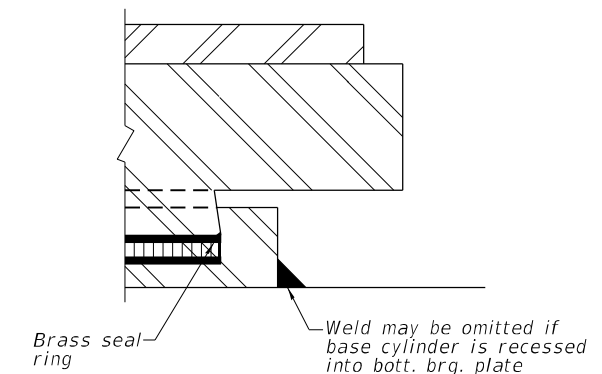
1. The Structural Steel for the top & bottom bearing plates shall be AASHTO M270 Grade 50W.
2. For anchor bolt type and details see Bearing dimensions Table.
3. Top & bottom plates, threaded studs, washers and shim plates are included in the cost of the Bearings.
4. Anchor bolts for bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place.
5. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
6. Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
7. Work this sheet with Sheet S-48 of S-106.
8. If the base cylinder is recessed into the bottom bearing plate, the thickness of the bottom plate shall be T_b plus the depth of the recess.
9. Total bearing height (Th) is estimated based on manufacturer data. Actual bearing height may differ from contract plans. The Contractor shall be responsible for verifying bearing heights and adjusting seat elevations with approval of engineer, if required, prior to placing pier concrete. Total bearing height is taken at the \bar{C} of bearing for beveled top plates.



SECTION 1-1



SECTION 2-2



DETAIL A

ANCHOR BOLT DETAILS

Bolt Dia. x Length **	Plate Washer
2 1/2" x 30"	4" x 4" x 5/16"

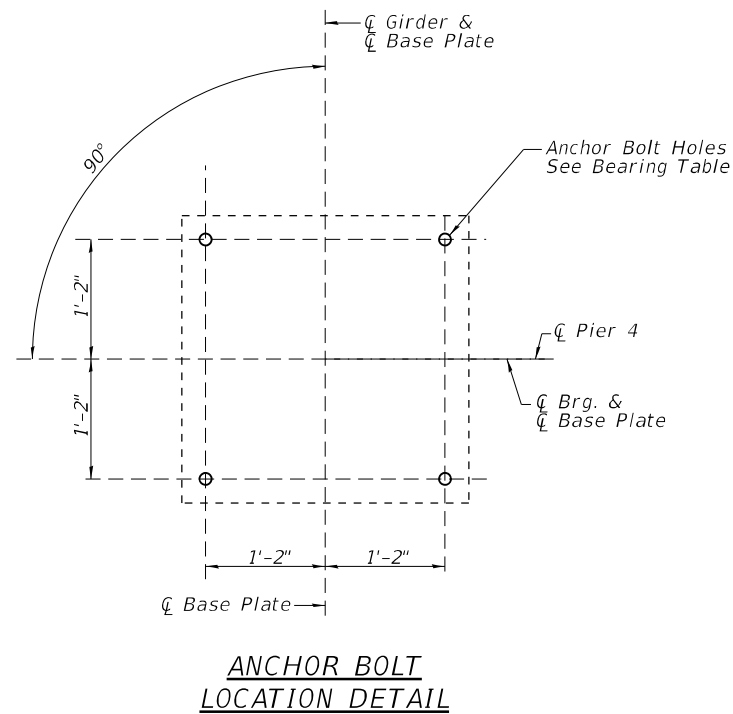
BASE PLATE HOLE TABLE

Anchor Bolt \bar{O}	Max. Hole \bar{O}
2 1/2"	3"

** Length shown is minimum required embedment length.

FIXED BEARING DIMENSIONS TABLE

Brg. Location	Vertical Design Load (kips)	Lateral Design Load (kips)	Bottom Bearing Plate			Top Bearing Plate				Th1	Th2	D	Bolts				Anchor Bolt Dia.	Anchor Bolt Specification Grade
			Tb	Lb	Wb	Tt1	Tt2	Lt	Wt				M	N	R	S		
Pier 4	600.00	115.00	2"	2'-8"	2'-8"	2 1/4"	2 1/4"	1'-10"	1'-10"	8 1/2"	8 1/2"	1'-7 3/8"	3"	8"	2 3/4"	5 1/2"	2 1/2"	F1554 Gr. 105

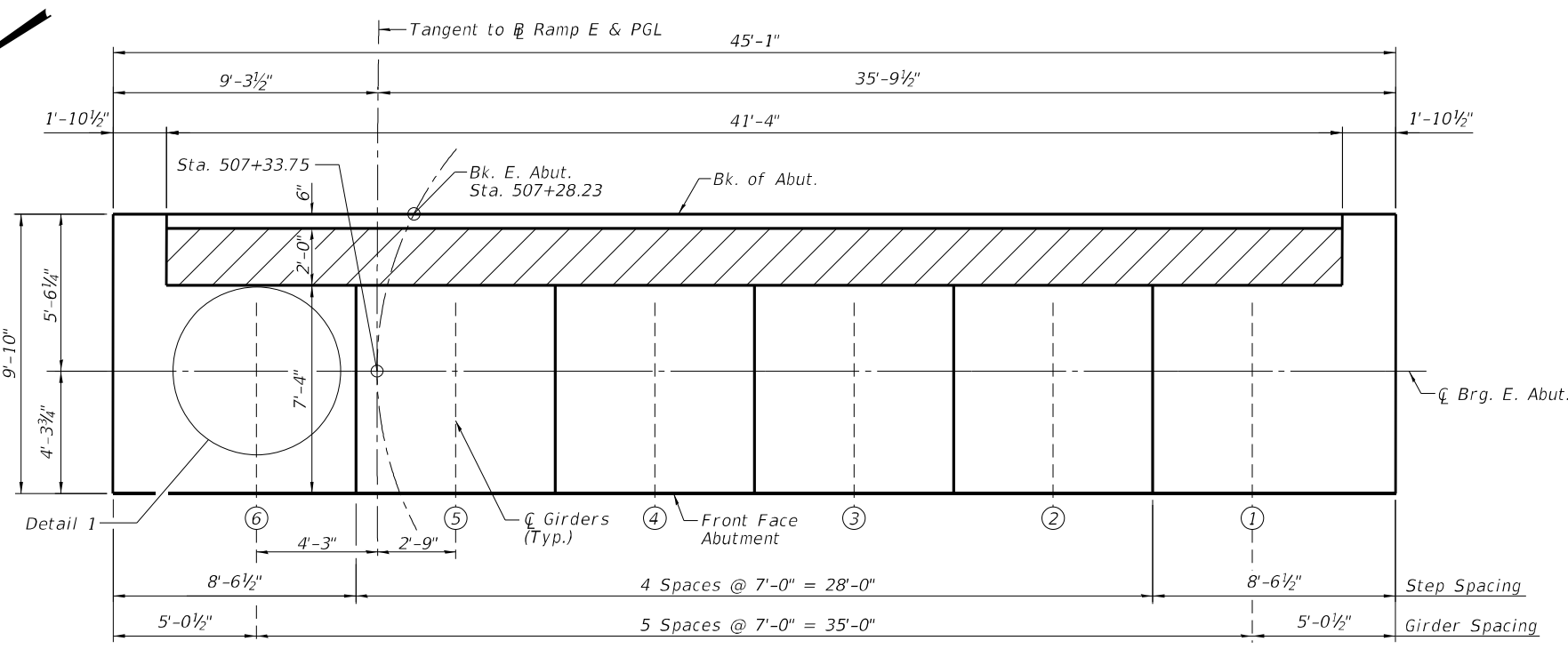
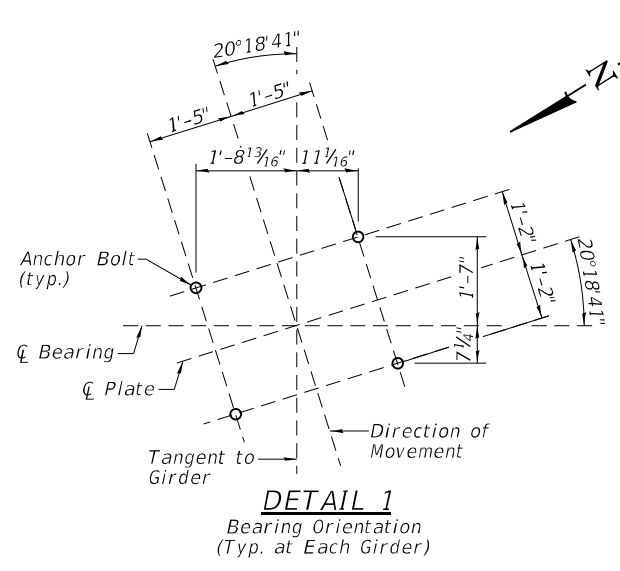


BILL OF MATERIAL

Item	Unit	Total
High Load Multi-Rotation Bearings, Fixed 600k	Each	6
Anchor Bolts, 2 1/2"	Each	24

NOTES:

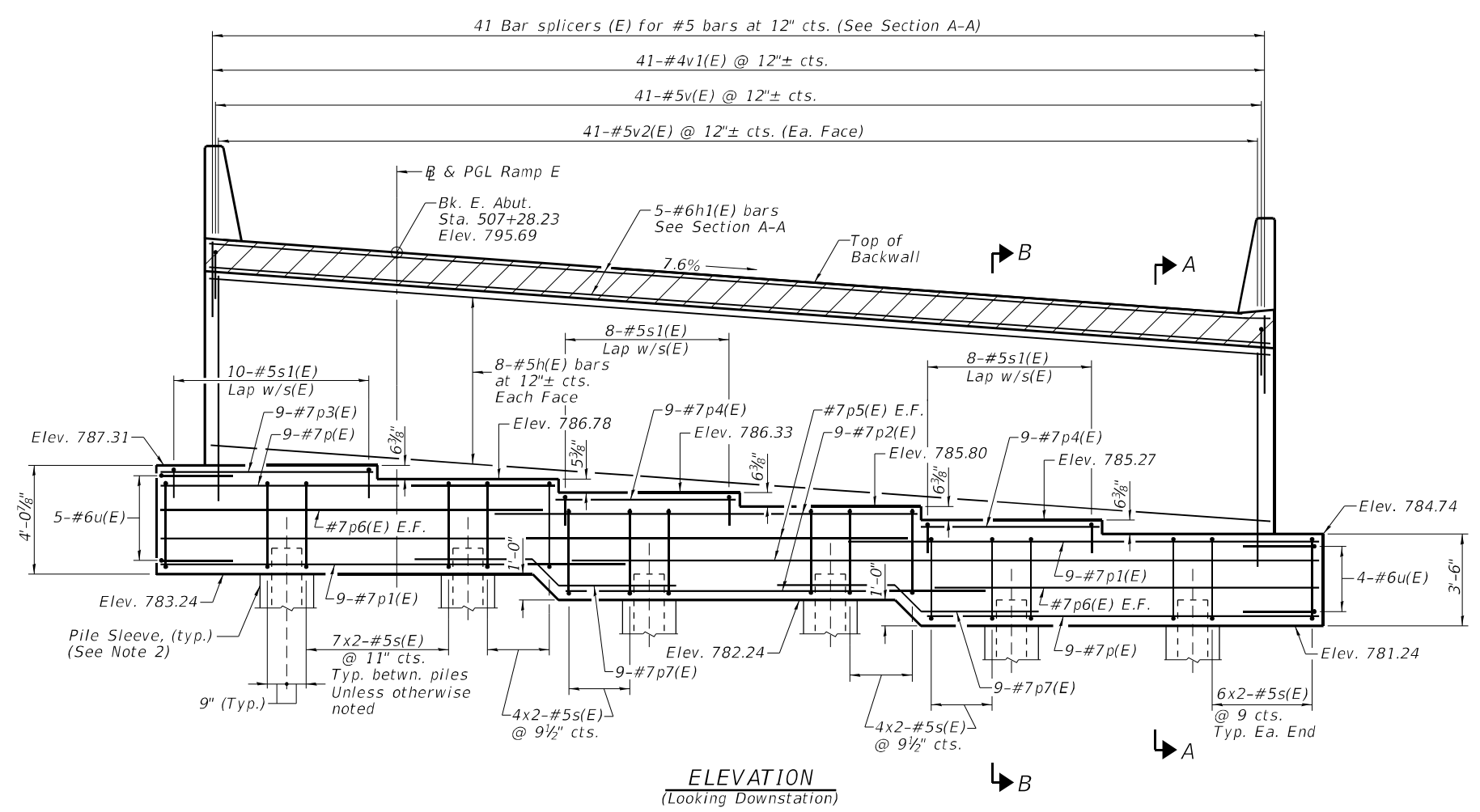
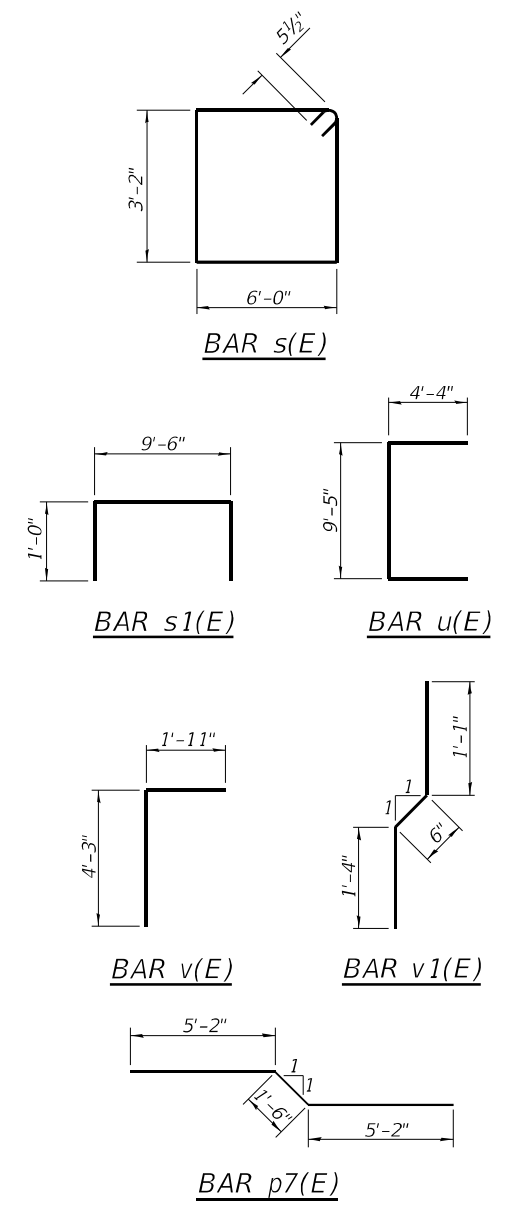
1. Work this sheet with Sheet S-47 of S-106.
2. See Sheet S-44 of S-106 for bearing layout & orientation.



PILE DATA
 Type: Metal Shell, 14" \varnothing w/.25" walls with pile shoes
 Nominal Required Bearing: 432k
 Factored Resistance Available: 238k
 Est. Length: 102'
 No. Production Piles: 11
 No. Test Piles: 1

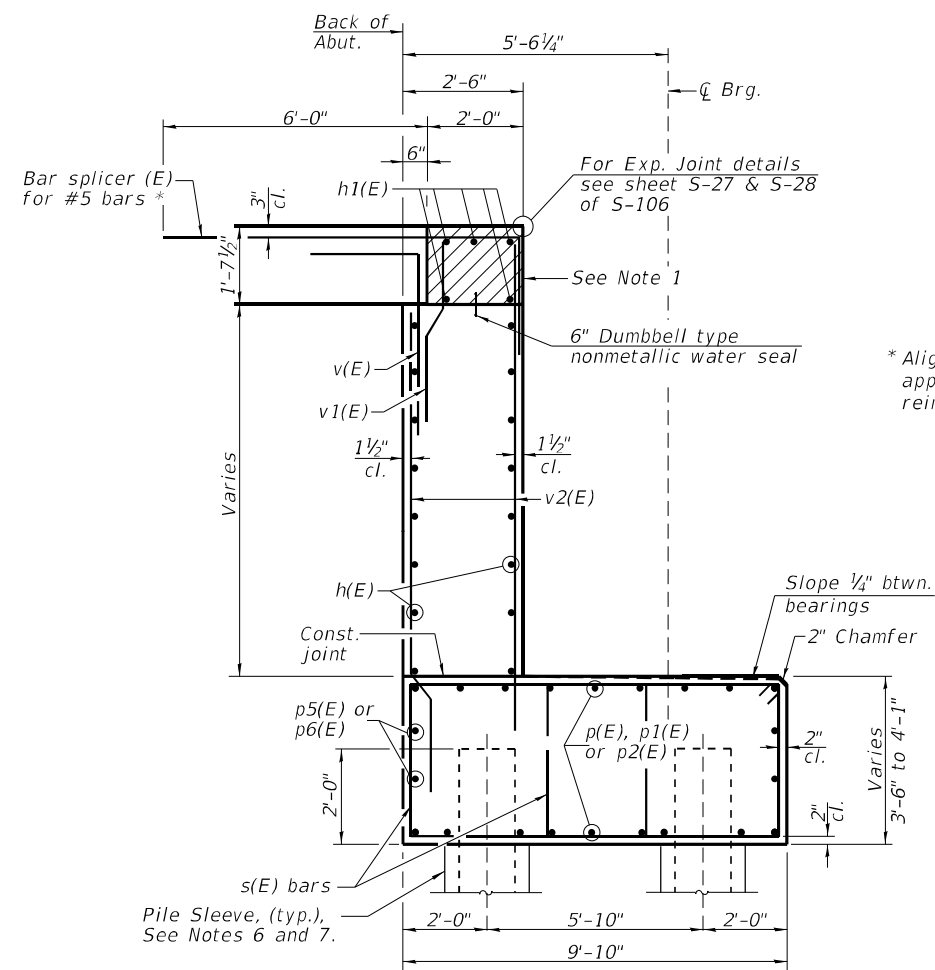
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	16	#5	41'-0"	—
h1(E)	5	#6	41'-0"	—
p(E)	18	#7	15'-2"	—
p1(E)	18	#7	21'-5"	—
p2(E)	18	#7	19'-0"	—
p3(E)	9	#7	8'-2"	—
p4(E)	18	#7	6'-10"	—
p5(E)	4	#7	28'-4"	—
p6(E)	4	#7	15'-2"	—
p7(E)	18	#7	11'-10"	—
s(E)	98	#5	19'-3"	□
s1(E)	26	#5	11'-6"	□
u(E)	9	#6	18'-1"	□
v(E)	41	#5	6'-2"	□
v1(E)	41	#4	2'-11"	□
v2(E)	82	#5	10'-11"	□
Concrete Structures	Cu. Yd.	90.0		
Reinforcement Bars, Epoxy Coated	Pound	8,030		
Furnishing Metal Shell Piles, 14"x.25"	Foot	1,122		
Driving Piles	Foot	1,122		
Test Pile, Metal Shell	Each	1		
Concrete Sealer	Sq. Ft.	976		
Pile Shoes	Each	12		

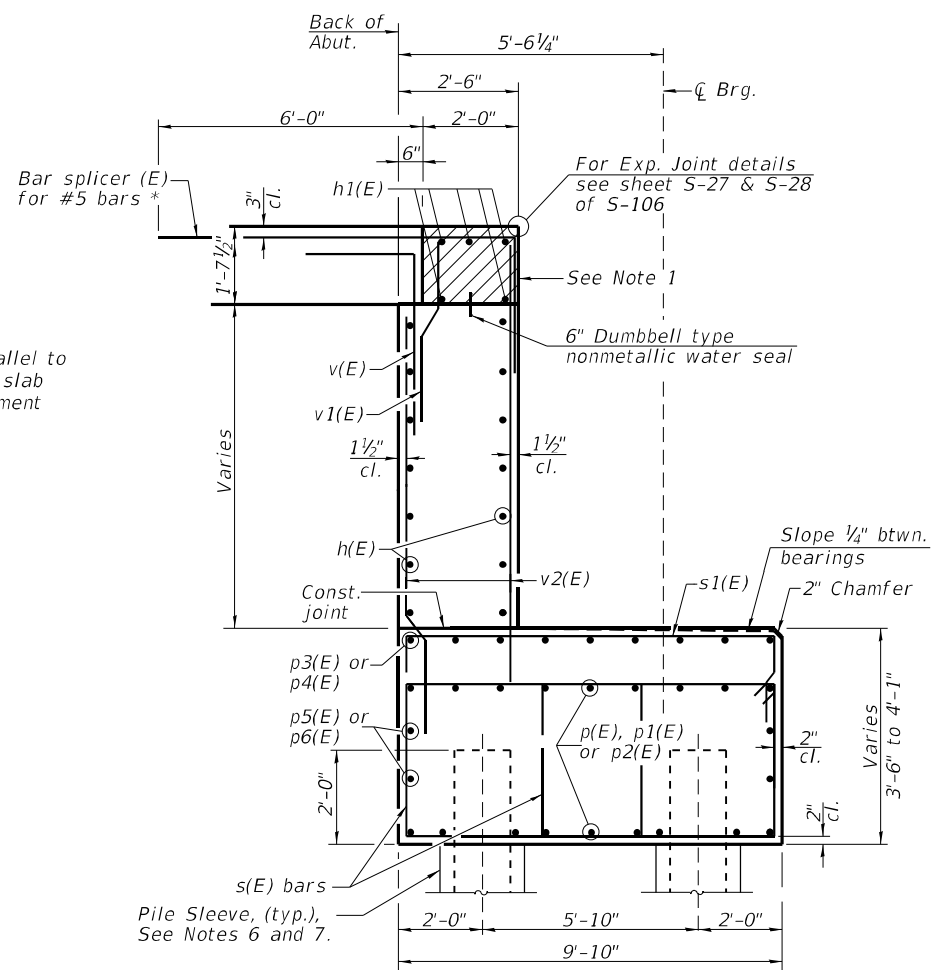


MIN. BAR LAP
 #5 Bar = 3'-7"
 #7 Bar = 5'-0"

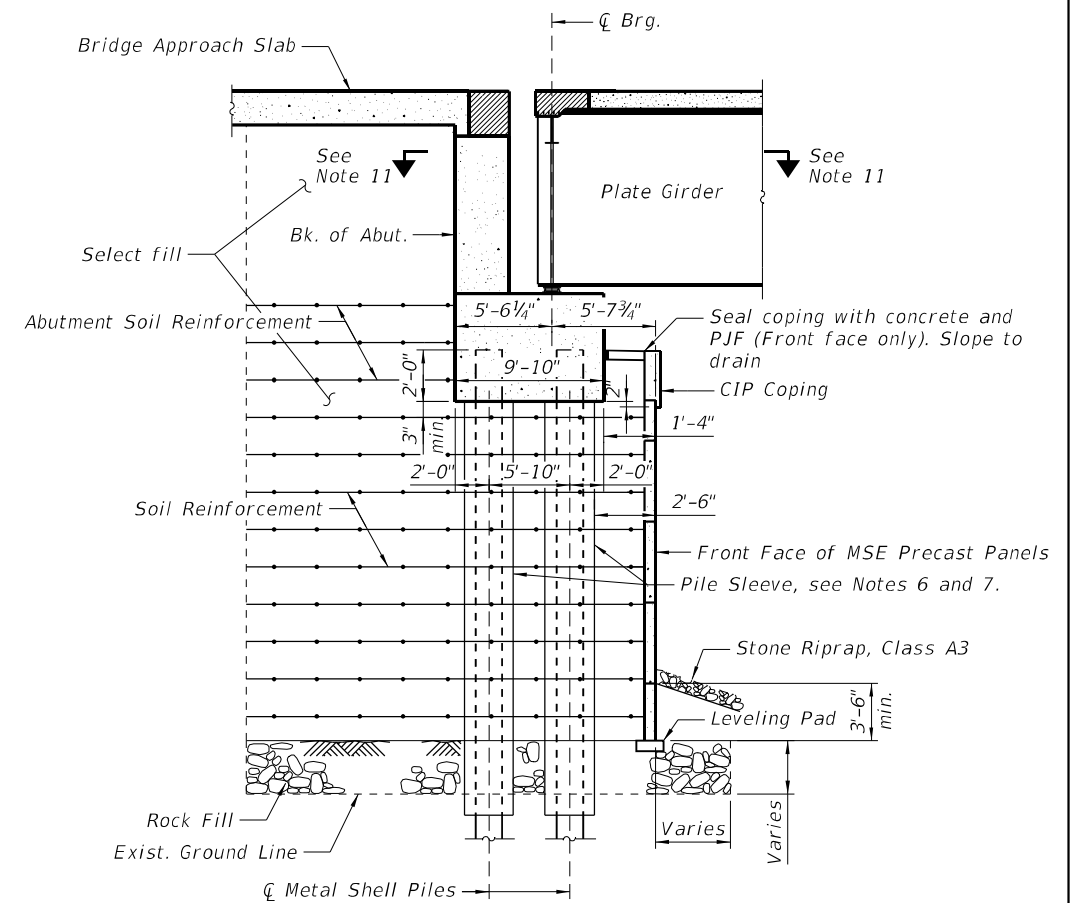
- NOTES:**
- See sheet S-50 of S-106 for Sections AA, & BB.
 - Reinforcement bar bending dimensions are out to out.
 - Bars noted thus, 3x2-#5 indicates 3 lines of bars with 2 lengths of bars per line.
 - Coping around abutment not shown for clarification purposes. See sheet S-51 of S-106 for coping details.



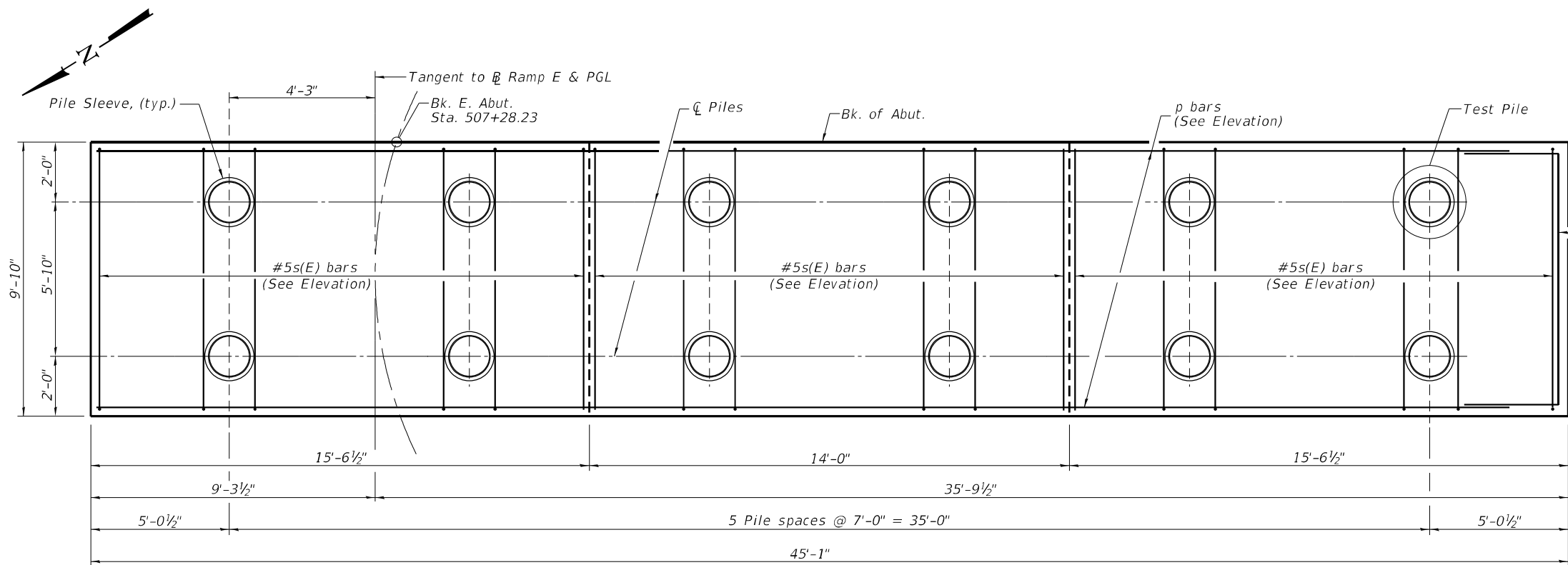
SECTION A-A



SECTION B-B



SECTION THRU ABUTMENT
(Showing pile sleeves)

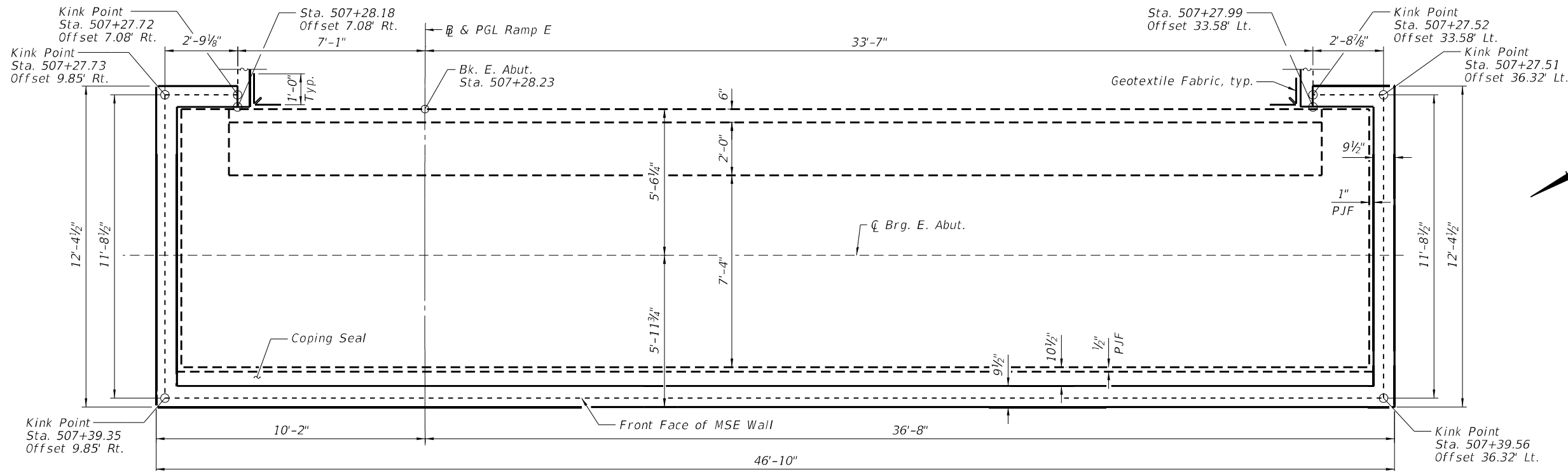


PILE CAP PLAN

NOTES:

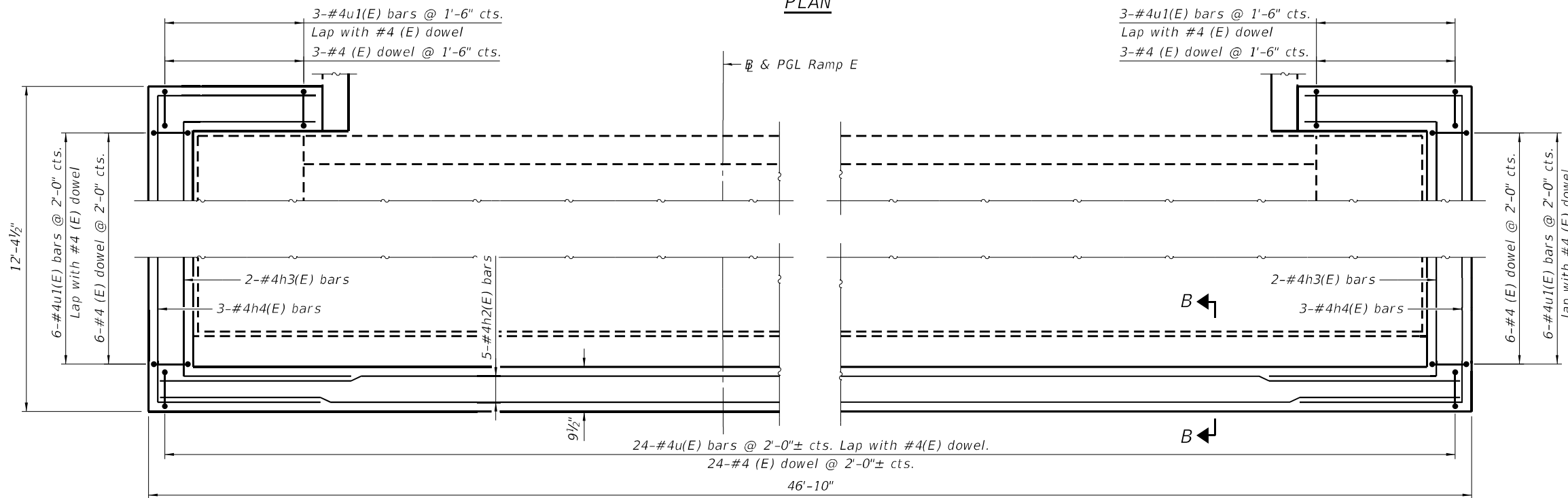
- Hatched area to be poured after superstructure falsework has been removed. Quantity of concrete included with Concrete Superstructure.
- Space reinforcement in cap to miss anchor bolts.
- See sheet S-49 of S-106 for location of Cross Section AA & BB.
- The MSE wall supplier shall design the abutment soil reinforcement to resist a horizontal service force of 4.0 k/ft. of abutment.
- See sheet S-86 of S-106 for pile reinforcement at abutment. Cost included with Furnishing Metal Shell Piles 14"x.25".
- The bottom of the sleeve should extend at least 1' below the bottom of the leveling pad and to the bottom of the Rock Fill layer, whichever is deeper. The pile sleeve should extend the entire height of the select fill, up to the bottom of the concrete pile cap. The sleeve size must have at least 3" between the pile and the sleeve. The sleeves shall be filled with dry sand after pile driving.
- Cost of pile sleeves and sand filler shall be included in the cost for Furnishing Metal Shell Piles 14"x.25".
- Work this sheet with MSE Wall sheets S-55 and S-56.
- MSE wall settlement is expected and shall be accounted for and monitored during construction. See Special Provisions.
- The abutment piles are located within MSE wall reinforced soil mass limits. Pile sleeves shall be installed and secured prior to the placement of the reinforced soil mass. See MSE wall sheets and Special Provisions.
- Coping around abutment not shown for clarification purposes. See Sheet S-51 of S-106 for coping details.

FILE NAME =	USER NAME = Denise Herrera	DESIGNED - LM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EAST ABUTMENT DETAILS STRUCTURE NO. 010-1001	F.A.I. R.T.E. =	SECTION =	COUNTY =	TOTAL SHEETS =	SHEET NO. =
	PLOT SCALE = NA	CHECKED - DRC	REVISED -			74 & 57	(10-34-1) HBK	CHAMPAIGN	1187	692
License No. 184-C00613	PLOT DATE = 05/03/2021	DRAWN - GLD	REVISED -			SHEET NO. S-50 OF S-106 SHEETS		CONTRACT NO. 70B99		
		CHECKED - LM	REVISED -			ILLINOIS FED. AID PROJECT				



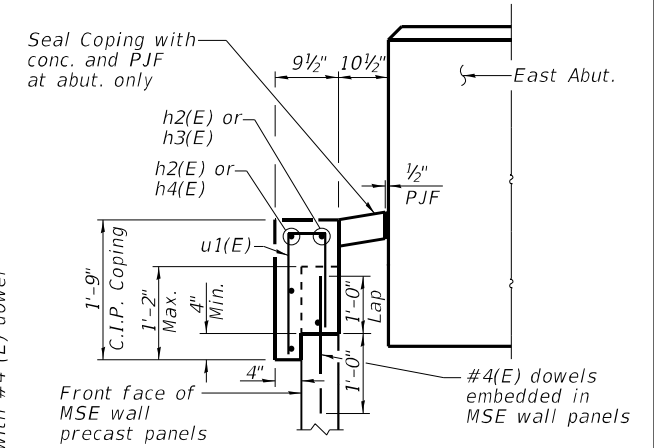
MIN. BAR LAP
#4 - 2'-11"

PLAN



PLAN

(Showing reinforcement)



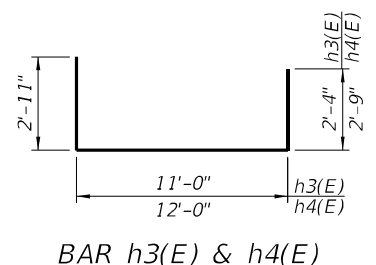
SECTION B-B

BAR LIST

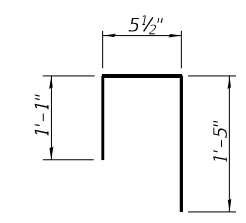
(for information only)

Bar	No.	Size	Length	Shape
h2(E)	5	#4	46'-6"	—
h3(E)	4	#4	16'-3"	U
h4(E)	6	#4	17'-8"	U
u1(E)	42	#4	3'-0"	┌

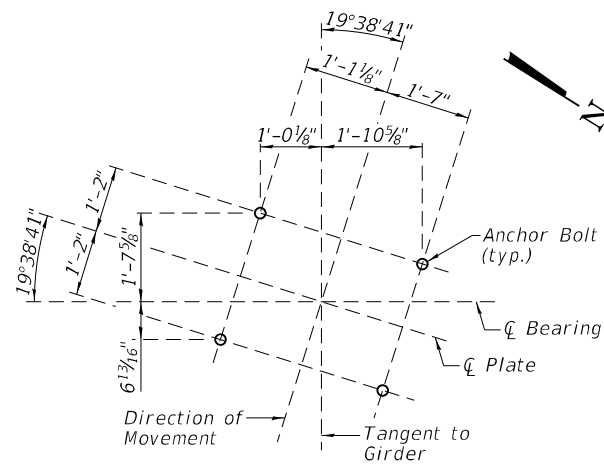
Note:
The cost of the cast-in-place concrete coping, reinforcement bars, preformed joint filler, and dowel bars will be included with the bid pay item "Mechanically Stabilized Earth Retaining Wall." The Contractor may substitute a precast coping, the details of which must be included in the shop plans and approved by the Engineer, at no additional cost to the Department.



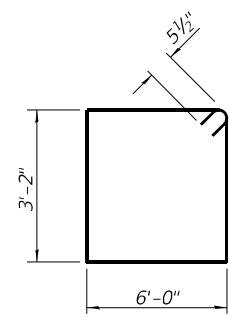
BAR h3(E) & h4(E)



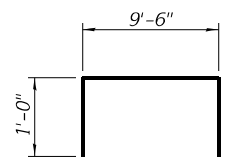
BAR u1(E)



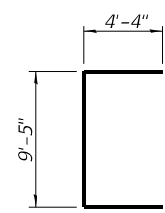
DETAIL 1
Bearing Orientation
(Typ. at Each Girder)



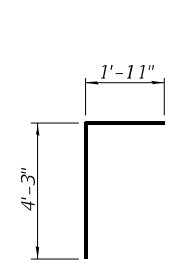
BAR s900(E)



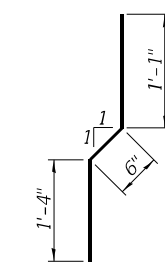
BAR s901(E)



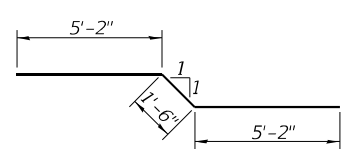
BAR u900(E)



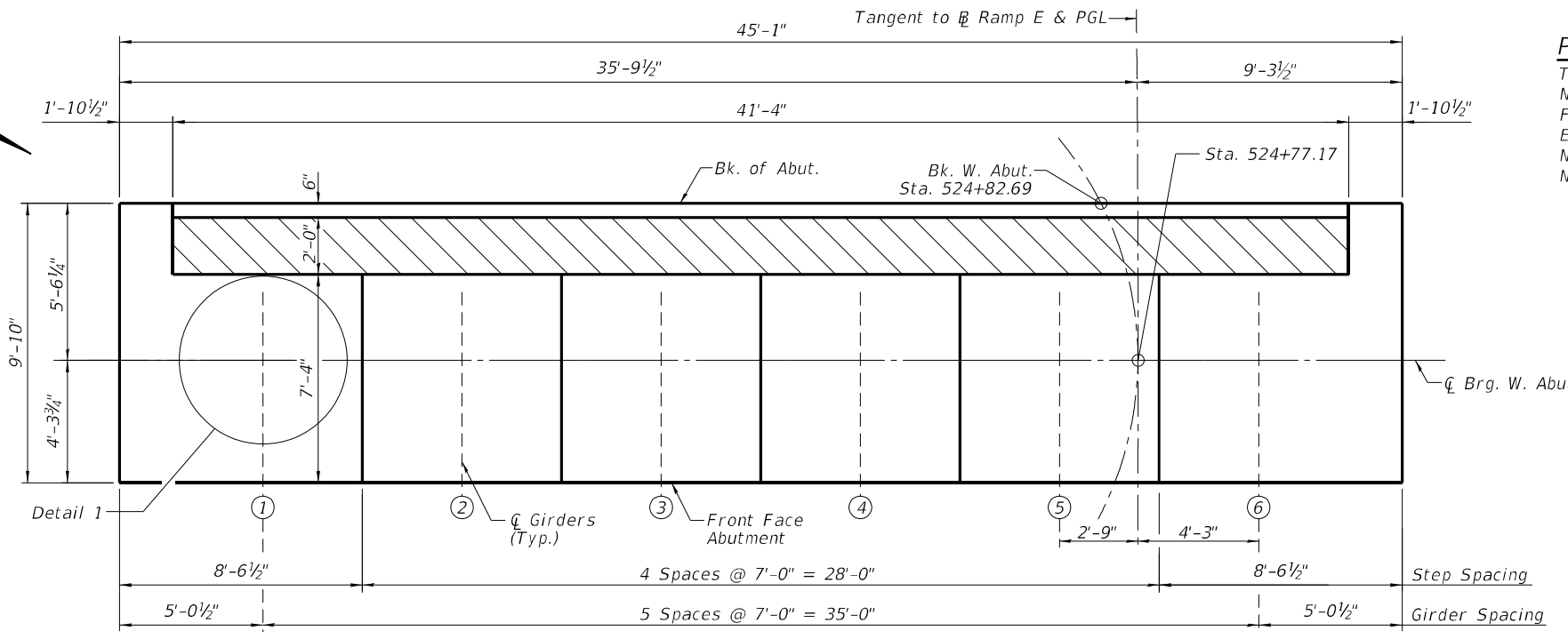
BAR v900(E)



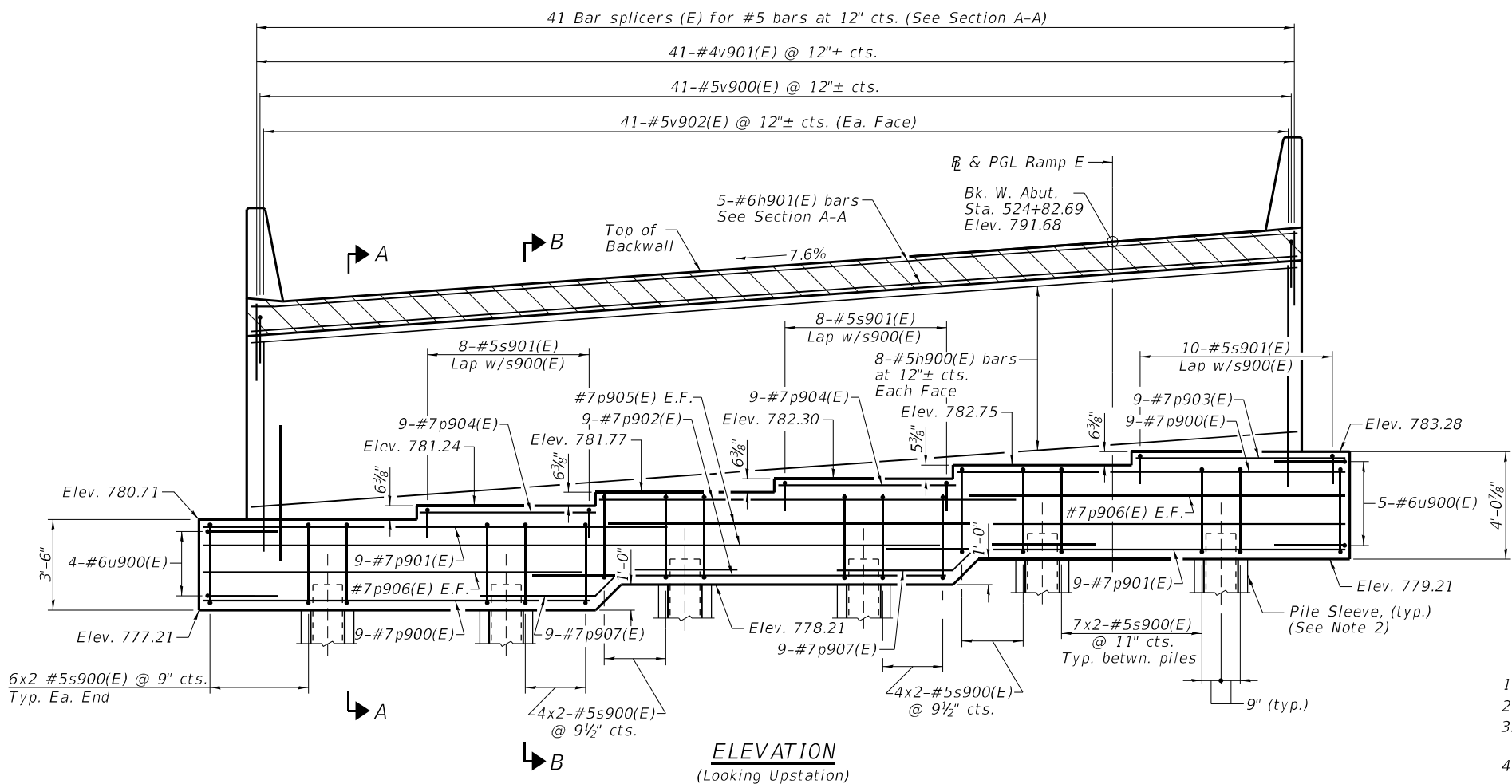
BAR v901(E)



BAR p907(E)



TOP PLAN



ELEVATION
(Looking Upstation)

PILE DATA

Type: Metal Shell, 14" \odot w/.25" walls with pile shoes
 Nominal Required Bearing: 425k
 Factored Resistance Available: 234k
 Est. Length: 67'
 No. Production Piles: 11
 No. Test Piles: 1

BILL OF MATERIAL

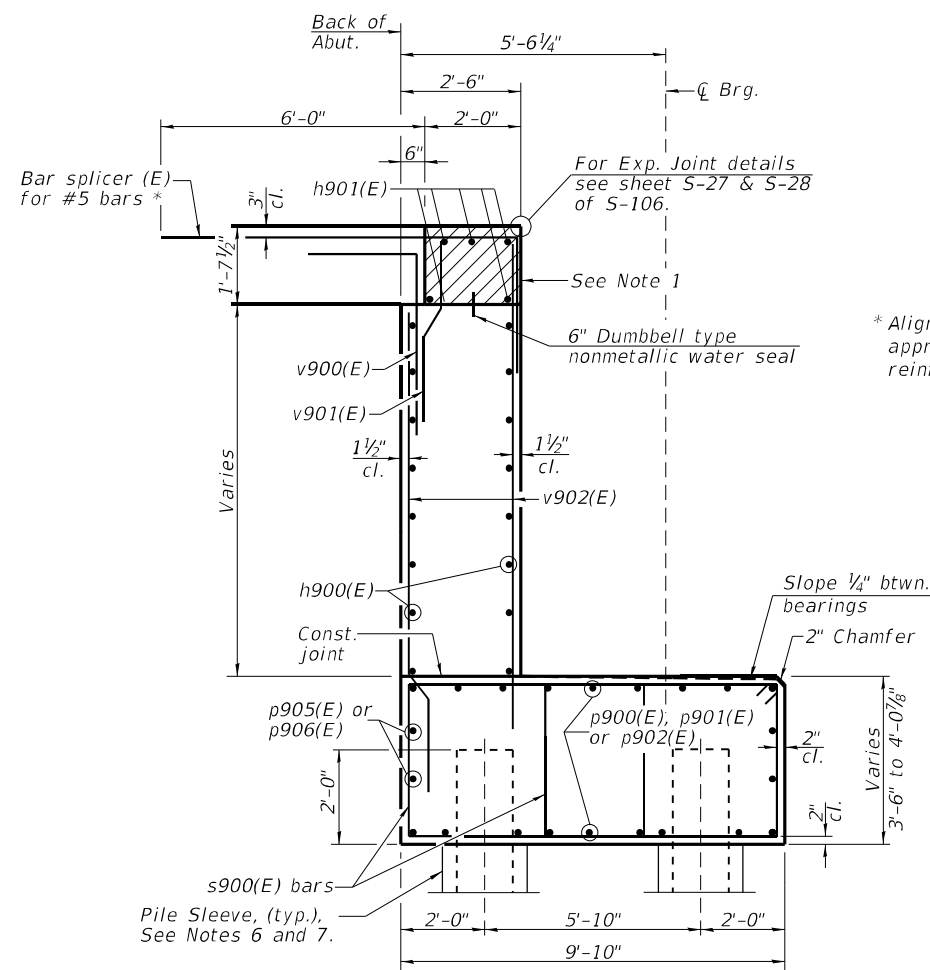
Bar	No.	Size	Length	Shape
h900(E)	16	#5	41'-0"	—
h901(E)	5	#6	41'-0"	—
p900(E)	18	#7	15'-2"	—
p901(E)	18	#7	21'-5"	—
p902(E)	18	#7	19'-0"	—
p903(E)	9	#7	8'-2"	—
p904(E)	18	#7	6'-10"	—
p905(E)	4	#7	28'-4"	—
p906(E)	4	#7	15'-2"	—
p907(E)	18	#7	11'-10"	—
s900(E)	98	#5	19'-3"	□
s901(E)	26	#5	11'-6"	□
u900(E)	9	#6	18'-1"	□
v900(E)	41	#5	6'-2"	┌
v901(E)	41	#4	2'-11"	┌
v902(E)	82	#5	10'-11"	┌
Concrete Structures		Cu. Yd.	89.9	
Reinforcement Bars, Epoxy Coated		Pound	8,030	
Furnishing Metal Shell Piles, 14"x.25"		Foot	737	
Driving Piles		Foot	737	
Test Pile, Metal Shell		Each	1	
Concrete Sealer		Sq. Ft.	977	
Pile Shoes		Each	12	

MIN. BAR LAP

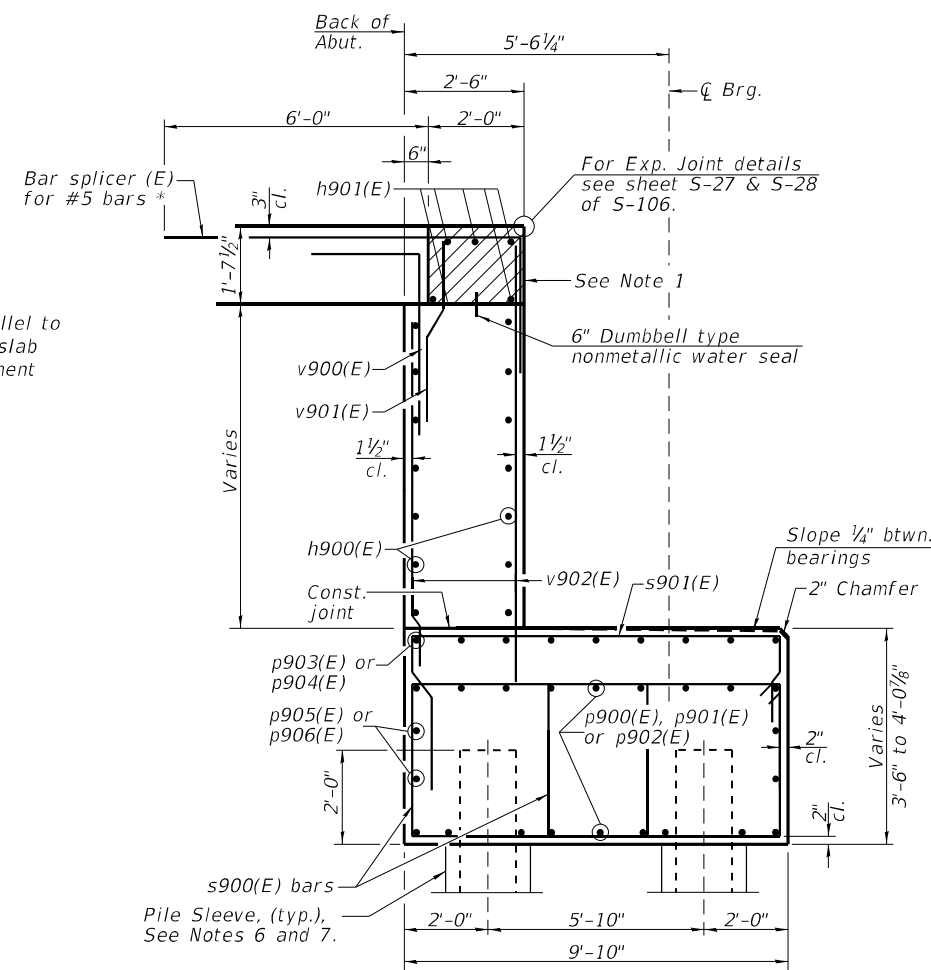
#5 Bar = 3'-7"
 #7 Bar = 5'-0"

NOTES:

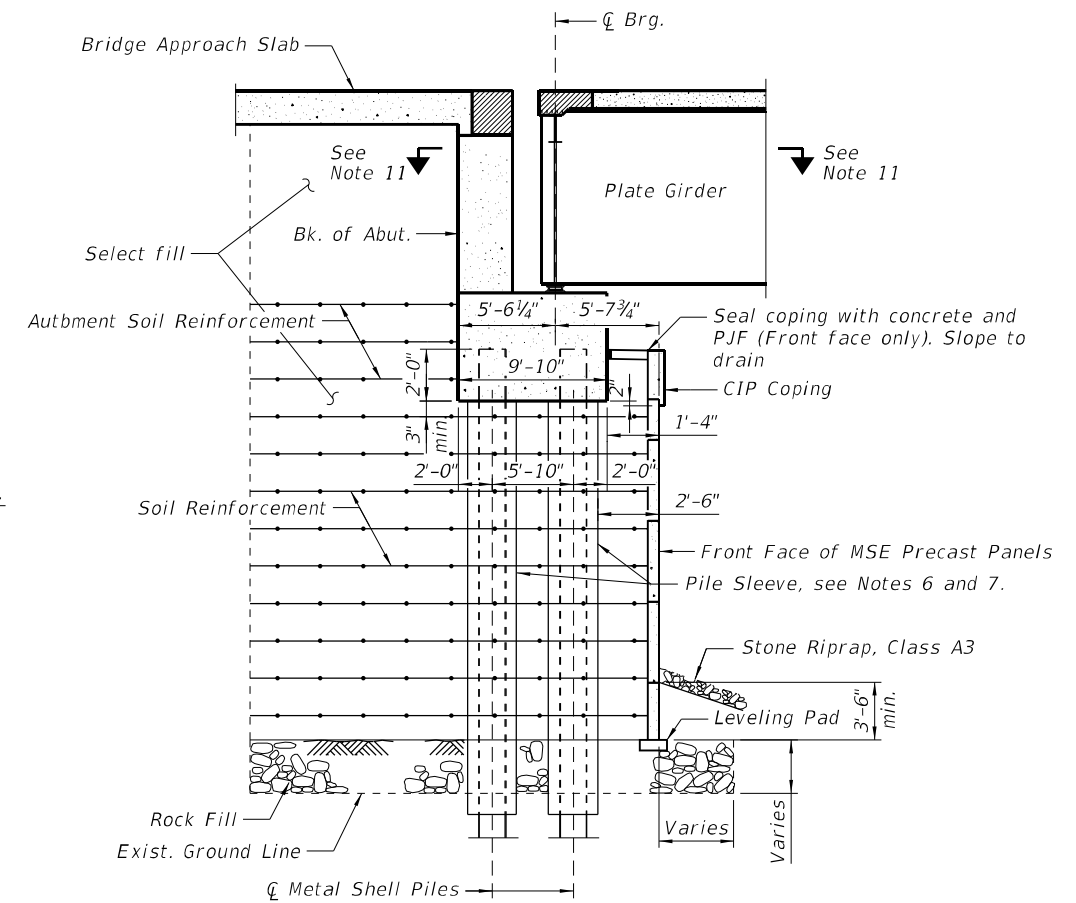
- See sheet S-53 of S-106 for Sections AA, & BB.
- Reinforcement bar bending dimensions are out to out.
- Bars noted thus, 3x2-#5 indicates 3 lines of bars with 2 lengths of bars per line.
- Coping around abutment not shown for clarification purposes. See sheet S-54 of S-106 for coping details.



SECTION A-A

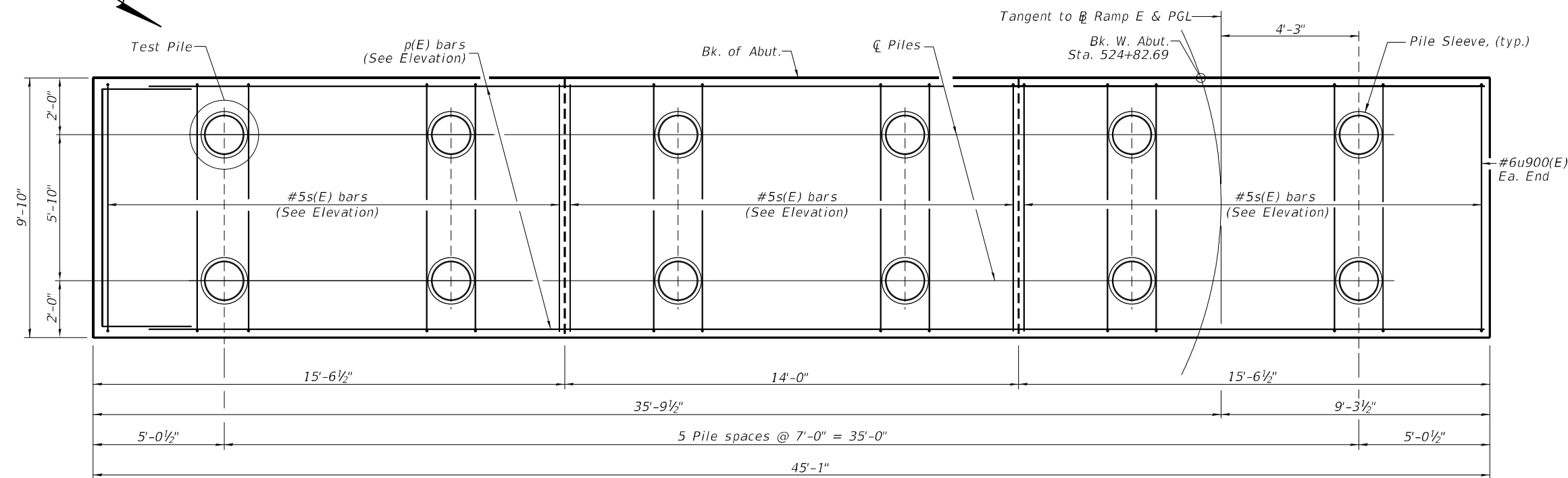


SECTION B-B



SECTION THRU ABUTMENT

(Showing pile sleeves)

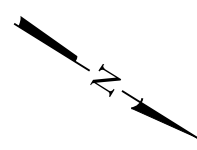
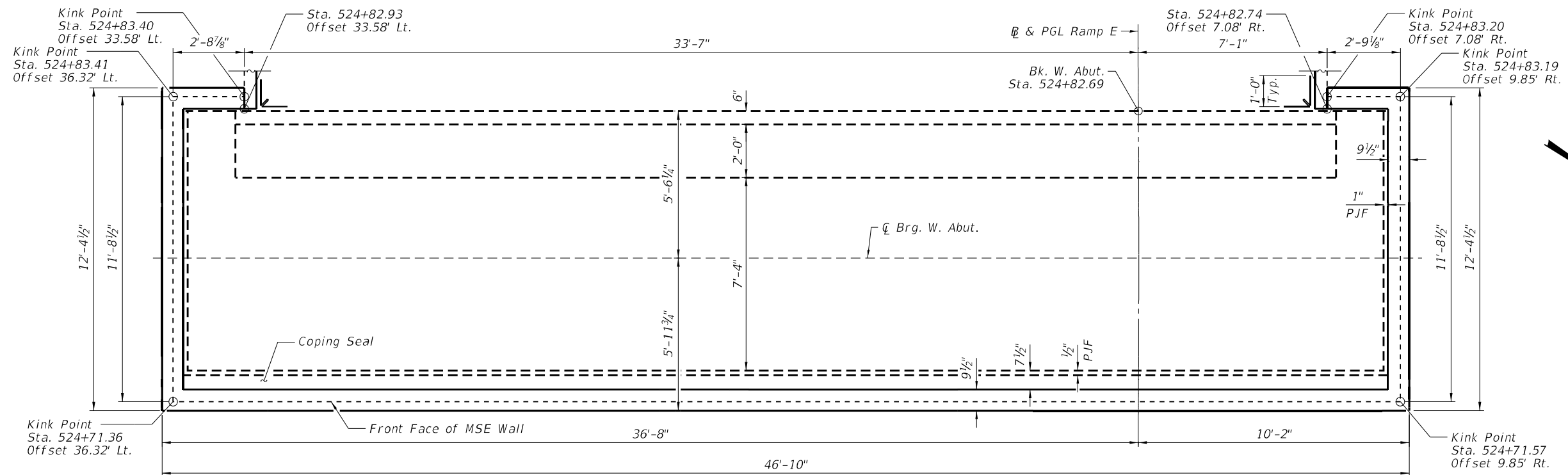


PILE CAP PLAN
(Looking Upstation)

NOTES:

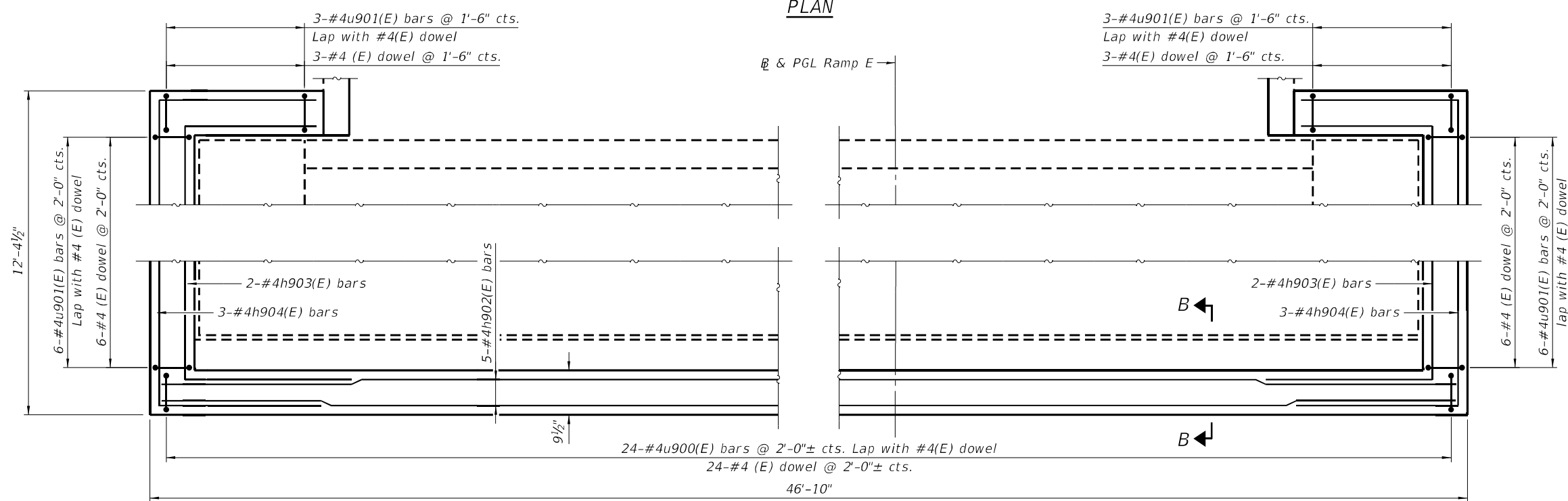
1. Hatched area to be poured after superstructure falsework has been removed. Quantity of concrete included with Concrete Superstructure.
2. Space reinforcement in cap to miss anchor bolts.
3. See sheet S-52 of S-106 for location of Cross Section AA & BB.
4. The MSE wall supplier shall design the abutment soil reinforcement to resist a horizontal service force of 4.0 k/ft. of abutment.
5. See sheet S-86 of S-106 for pile reinforcement at abutment. Cost included with Furnishing Metal Shell Piles 14"x.25".
6. The bottom of the sleeve should extend at least 1' below the bottom of the leveling pad and to the bottom of the Rock Fill layer, whichever is deeper. The pile sleeve should extend the entire height of the select fill, up to the bottom of the concrete pile cap. The sleeve size must have at least 3" between the pile and the sleeve. The sleeves shall be filled with dry sand after pile driving.
7. Cost of pile sleeves and sand filler shall be included in the cost for Furnishing Metal Shell Piles 14"x.25".
8. Work this sheet with MSE Wall sheets S-58 and S-59.
9. MSE wall settlement is expected and shall be accounted for and monitored during construction. See Special Provisions.
10. The abutment piles are located within MSE wall reinforced soil mass limits. Pile sleeves shall be installed and secured prior to the placement of the reinforced soil mass. See MSE wall sheets and Special Provisions.
11. Coping around abutment not shown for clarification purposes. See Sheet S-54 of S-106 for coping details.

CMT License No. 184-C00613 © Copyright CMT, Inc.	USER NAME = Denise Herrera PLOT SCALE = NA PLOT DATE = 05/03/2021	DESIGNED - LM CHECKED - DRC DRAWN - GLD CHECKED - LM	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WEST ABUTMENT DETAILS STRUCTURE NO. 010-1001	F.A.I. R.T.E. = 74 & 57 SECTION = (10-34-1) HBK	COUNTY = CHAMPAIGN CONTRACT NO. = 70B99	TOTAL SHEETS = 1187 SHEET NO. = 695	ILLINOIS FED. AID PROJECT
	SHEET NO. S-53 OF S-106 SHEETS								
	WEST ABUTMENT DETAILS STRUCTURE NO. 010-1001								



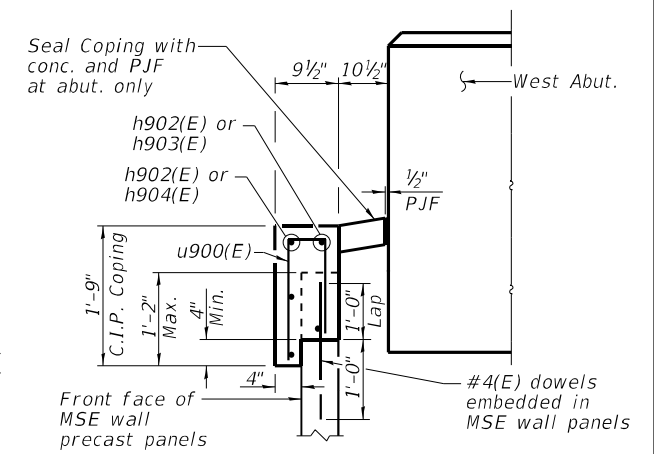
MIN. BAR LAP
#4 - 2'-11"

PLAN



PLAN

(Showing reinforcement)



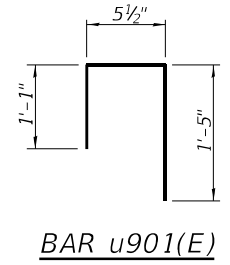
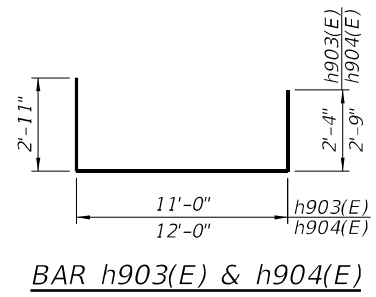
SECTION B-B

BAR LIST

(for information only)

Bar	No.	Size	Length	Shape
h902(E)	5	#4	46'-6"	—
h903(E)	4	#4	16'-3"	U
h904(E)	6	#4	17'-8"	U
u901(E)	42	#4	3'-0"	└

Note:
The cost of the cast-in-place concrete coping, reinforcement bars, preformed joint filler, and dowel bars will be included with the bid pay item "Mechanically Stabilized Earth Retaining Wall." The Contractor may substitute a precast coping, the details of which must be included in the shop plans and approved by the Engineer, at no additional cost to the Department.

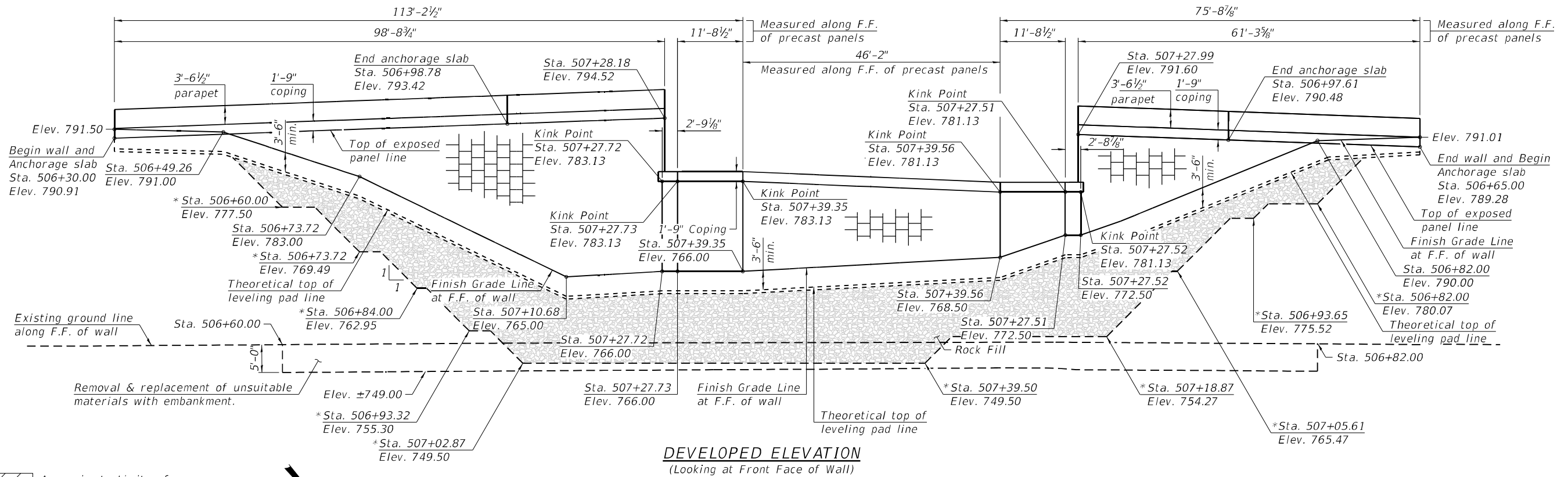


BAR h903(E) & h904(E)

BAR u901(E)

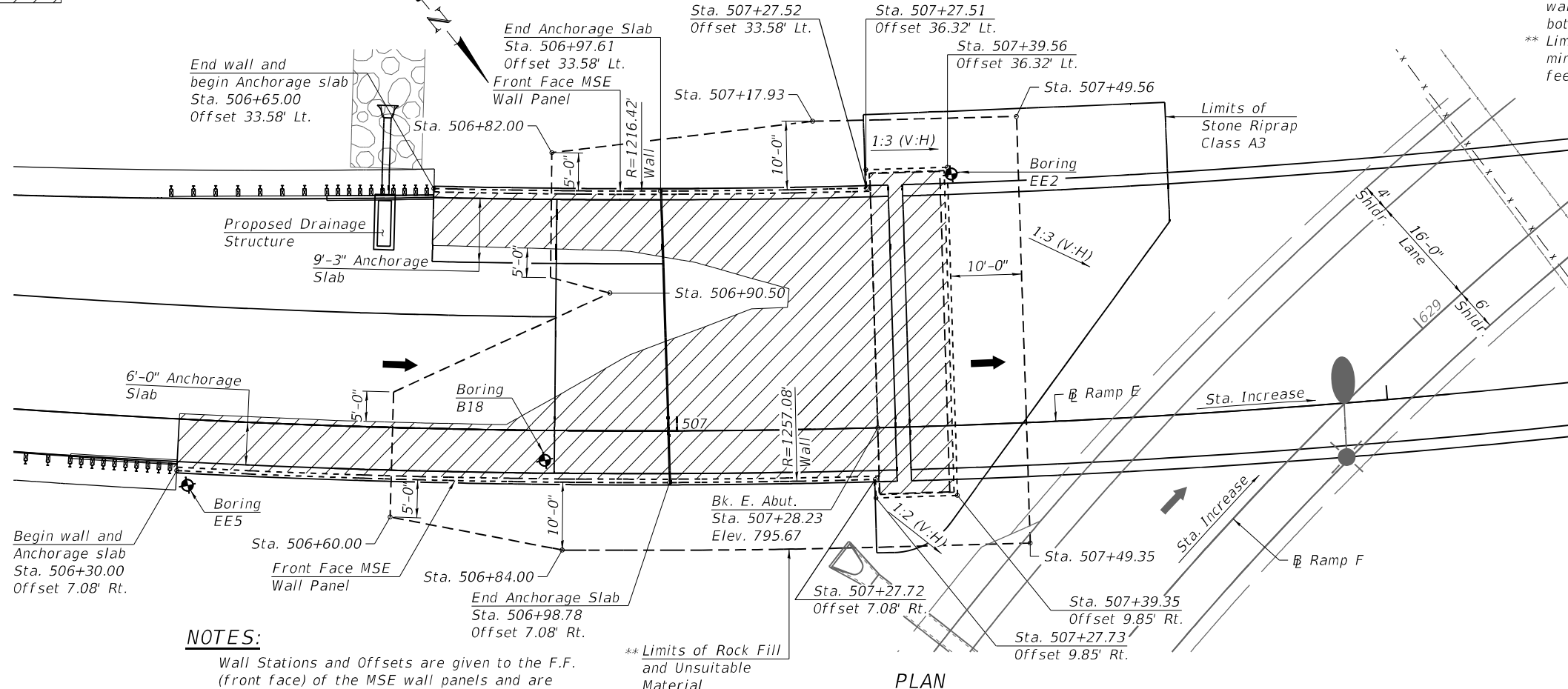
Bench Marks:
Chiseled "□" on top of N.W. corner of light pole
foundation #50-107 on Existing Ramp G,
Sta. 1068+46.46 Elev. 769.173

Existing Structure: None



Approximate Limits of Reinforced Soil Mass

* The stationings for the different depths of Rock Fill corresponding to different MSE wall height intervals are subject to change during construction based on how the bottom of the MSE wall will be stepped in the field.
** Limits shown at top of Rock Fill. The Rock Fill zones should extend horizontally a minimum of 5 feet out for MSE wall heights less than 20 feet and a minimum of 10 feet horizontally for wall heights above 20 feet.



ROCK FILL THICKNESS BELOW MSE REINFORCED MASS

MSE Wall Height Interval (ft.)	Min. Thickness of Rock Fill below MSE Reinforced Mass (ft.)
10-15	2
15-20	5
20-25	7
25-30	10
30-35	12

BILL OF MATERIAL

Item	Unit	Total
Removal and Disposal of Unsuitable Material for Structures	Cu. Yd.	920
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	3,670
Rock Fill	Cu. Yd.	2,955

NOTES:

Wall Stations and Offsets are given to the F.F. (front face) of the MSE wall panels and are measured from Ramp E baseline.

** Limits of Rock Fill and Unsuitable Material

MODEL: Sheet
FILE NAME: p:\v\cmengr-pw-bentley.com\projects\DOT115066-01\Draw\Structures\CADD_Sheets\RAMPE_EIRAMPE-70899-455-East_MSE_Wall_GPE-QE1.dgn



DESIGNED - KWB	REVISED -
CHECKED - RPW	REVISED -
DRAWN - LMC	REVISED -
CHECKED - MDC	REVISED -

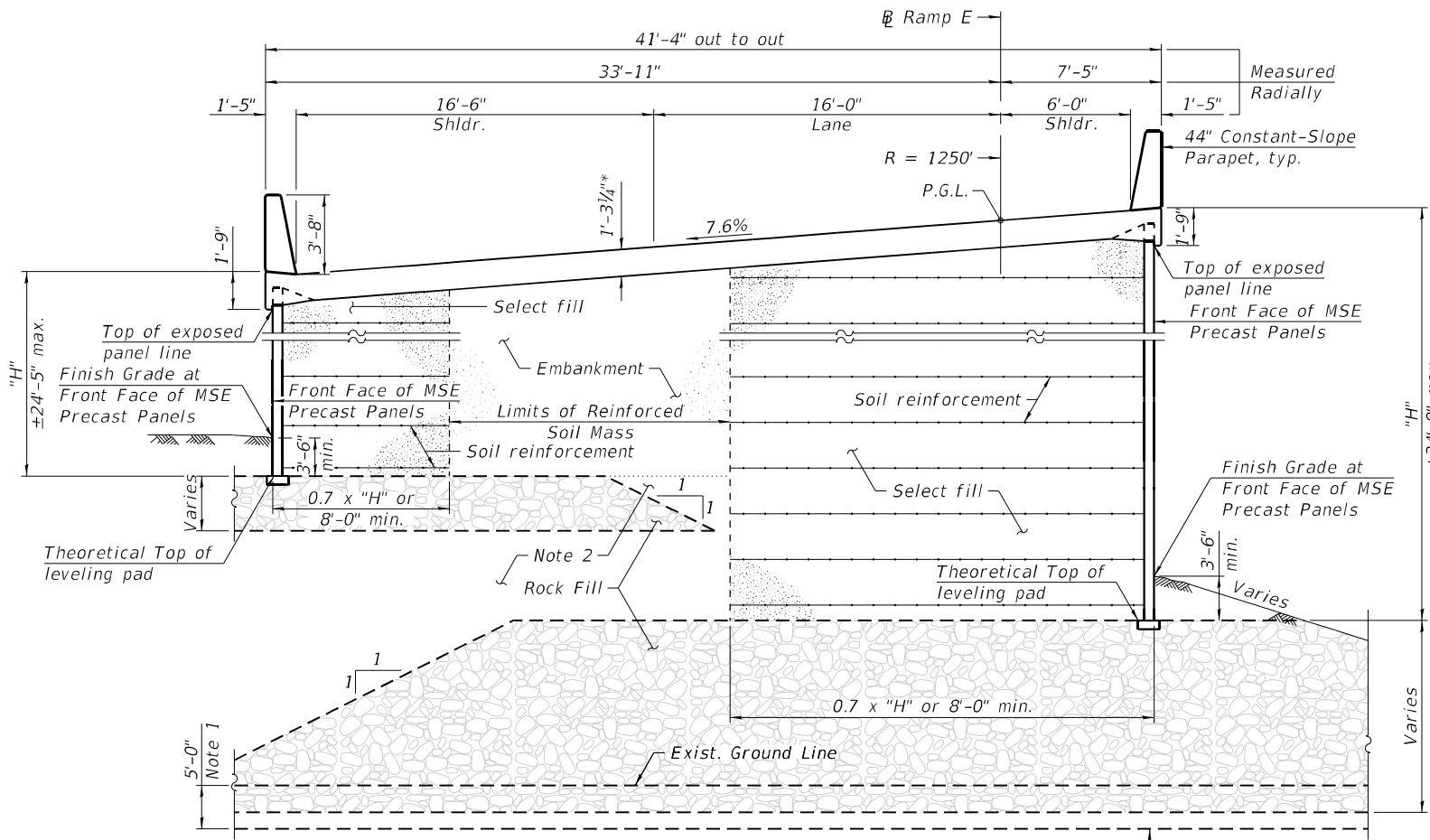
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT - MSE WALL - GENERAL PLAN AND ELEVATION
STRUCTURE NO. 010-1001

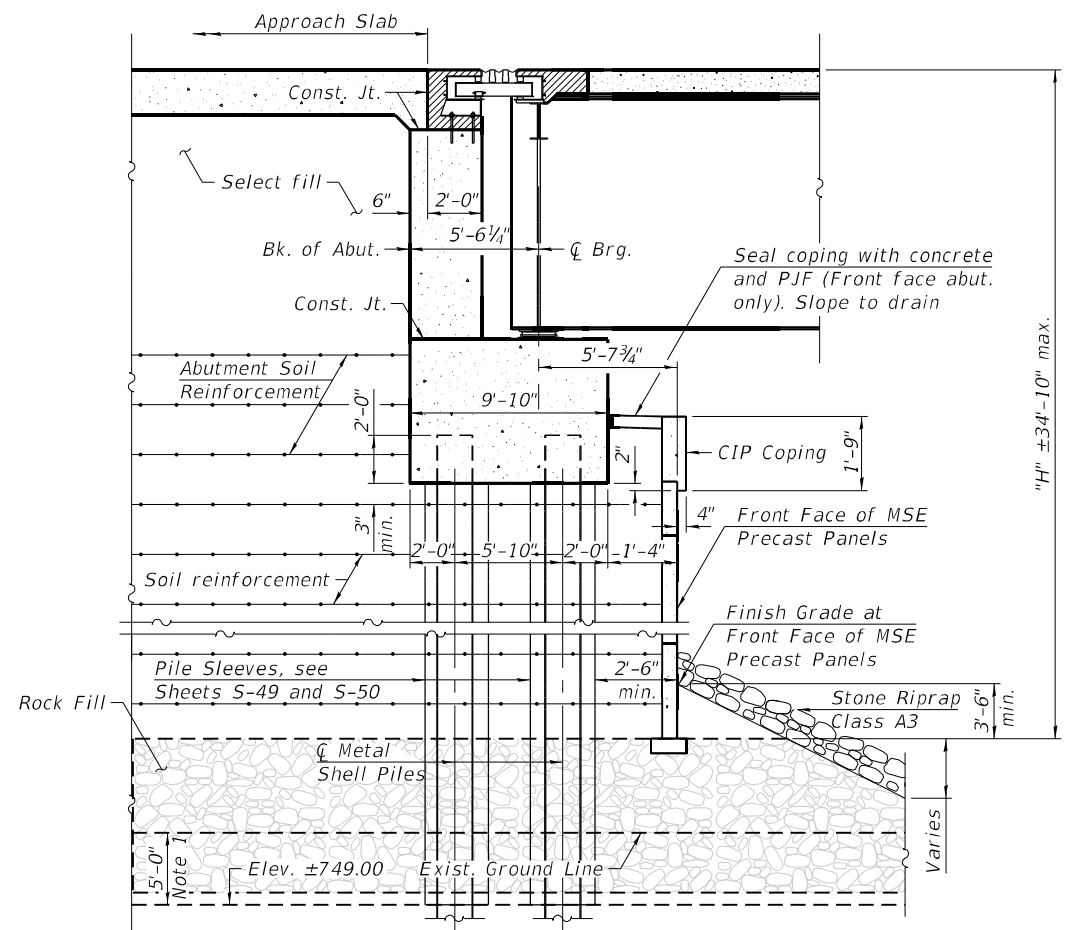
SHEET NO. S-55 OF S-106 SHEETS

F.A.I. RTE. 74 & 57	SECTION (10-34-1) HBK	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 697
CONTRACT NO. 70B99			ILLINOIS FED. AID PROJECT	

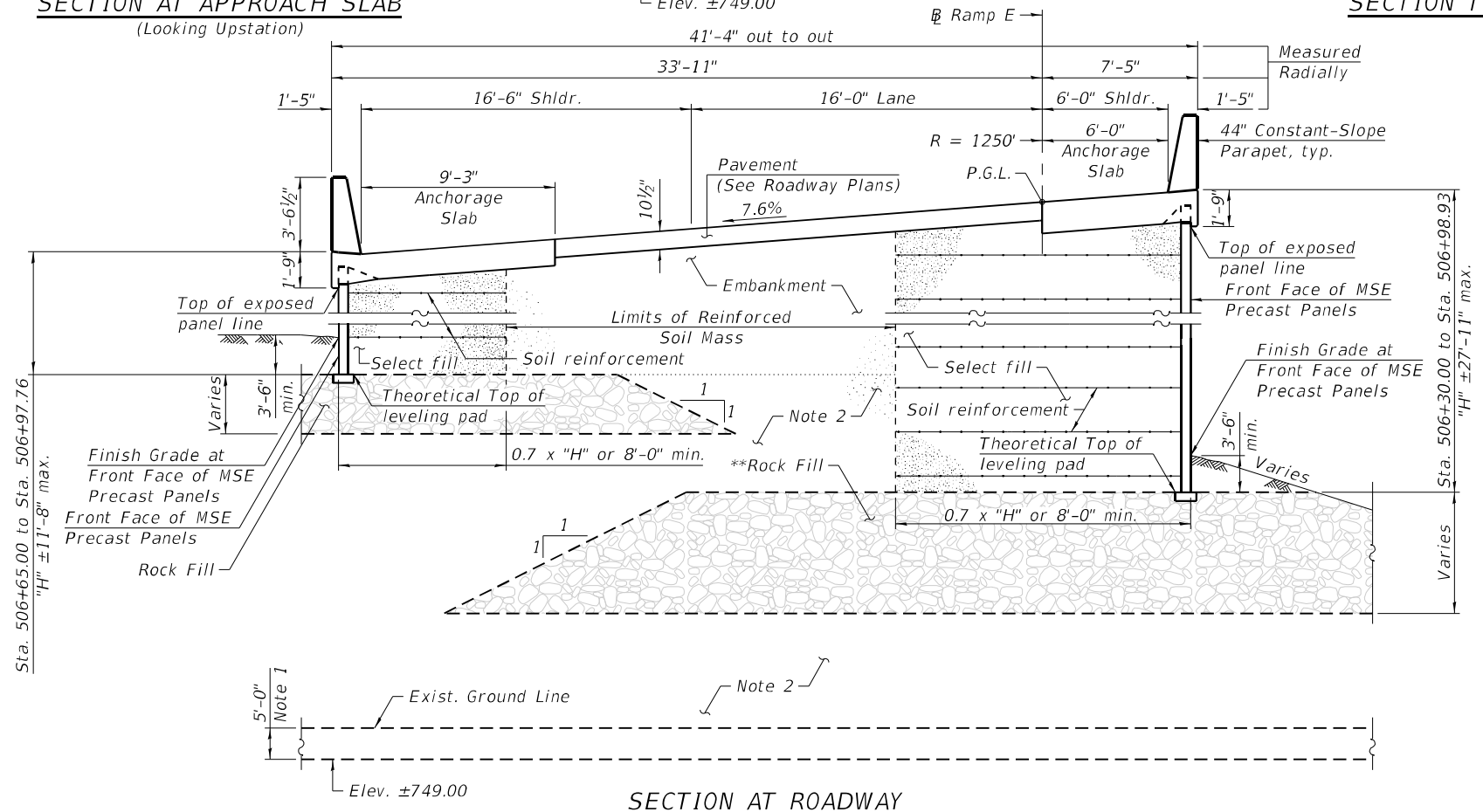
MODEL: Sheet
 FILE NAME: p:\v\m\engr-pw-bentley.com\cmt-projects\projects\DOT115066-01\Draw\Structures\CADD_Sheets\RAMPE_E\RAMPE-70899-056-East_MSE_Wall_Sections-QE1.dgn



SECTION AT APPROACH SLAB
 (Looking Upstation)



SECTION THRU ABUTMENT



SECTION AT ROADWAY
 (Looking Upstation)

*Prior to Grinding
 **Sta. 506+60.00 to 506+98.93 North wall
 Sta. 506+82.00 to 506+97.76 South wall

- NOTES:**
- Limits of Removal and Disposal of Unsuitable Material for Structures, replace with embankment except where Rock Fill is in removal area.
 - Embankment shall be placed from top of leveling pad at south wall to existing ground line except where Rock Fill is located.
 - Work this sheet with S-50 of S-106.
 - The MSE wall supplier shall design the abutment soil reinforcement to resist a horizontal service force of 4.0 k/ft of abutment.



DESIGNED - KWB	REVISED -
CHECKED - RPW	REVISED -
DRAWN - LMC	REVISED -
CHECKED - MDC	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

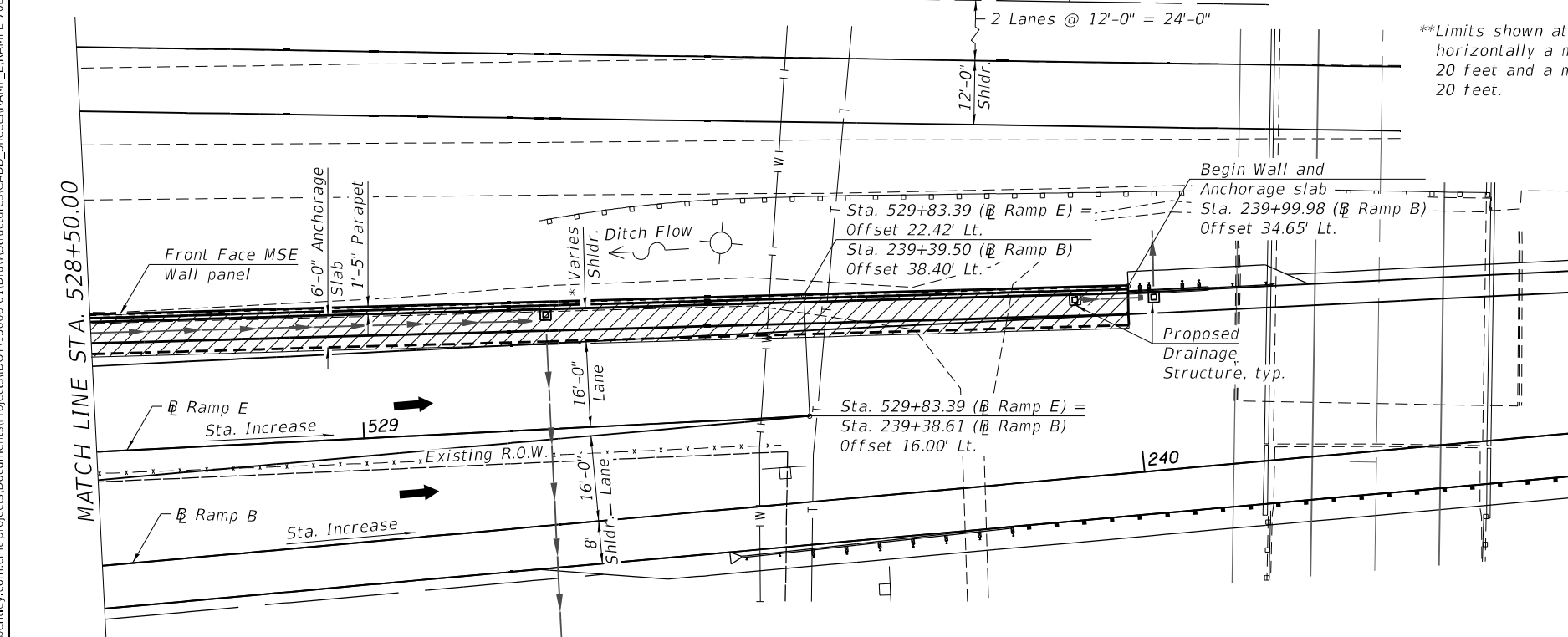
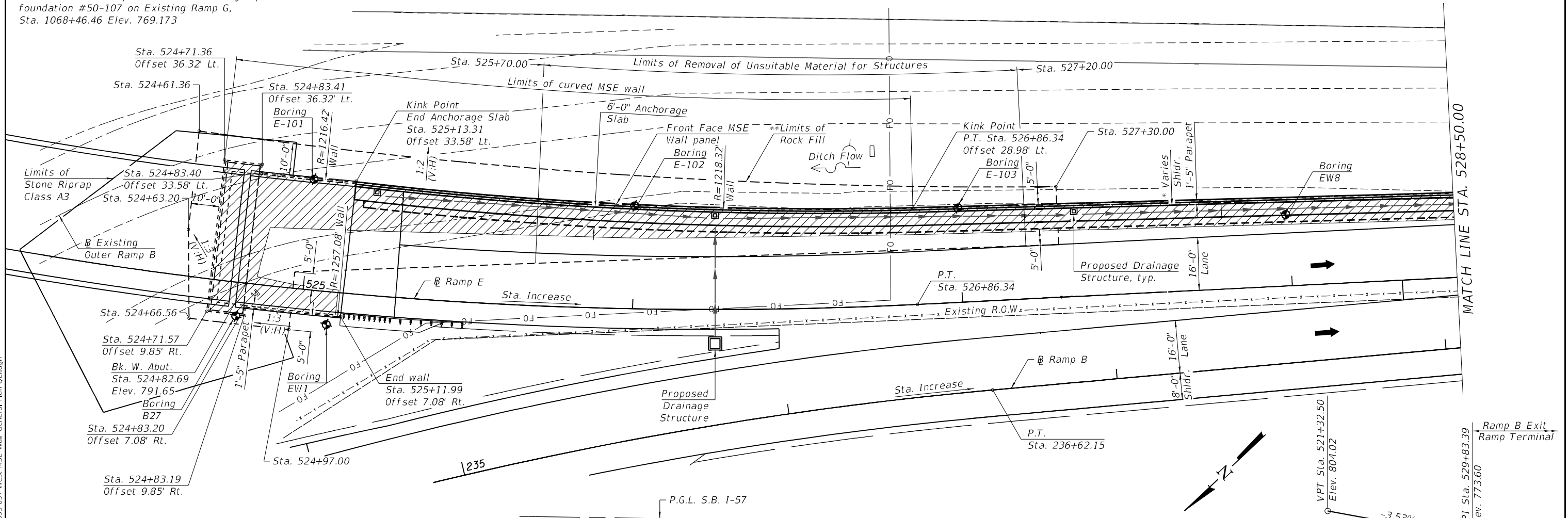
**EAST ABUTMENT - MSE WALL - SECTIONS
 STRUCTURE NO. 010-1001**

SHEET NO. S-56 OF S-106 SHEETS

F.A.I. RTE. 74 & 57	SECTION (10-34-1) HBK	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 698
CONTRACT NO. 70B99			ILLINOIS FED. AID PROJECT	

Bench Marks:
Chiseled "□" on top of N.W. corner of light pole
foundation #50-107 on Existing Ramp G,
Sta. 1068+46.46 Elev. 769.173

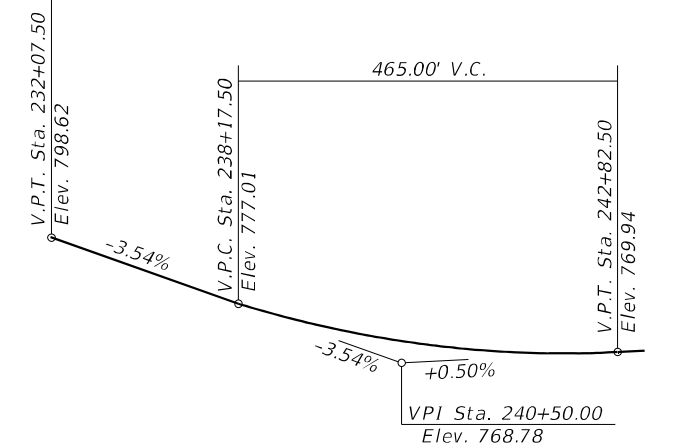
Existing Structure: None



PLAN

**Limits shown at top of Rock Fill. The Rock Fill zones should extend horizontally a minimum of 5 feet out for MSE wall heights less than 20 feet and a minimum of 10 feet horizontally for wall heights above 20 feet.

PROPOSED RAMP E PROFILE
Note: Profile grade indicates final elevations after grinding.



PROPOSED RAMP B PROFILE

*Shoulder Width Varies
Ramp E Sta. 525+12.19 16'-6"
to Ramp B 240+00.00 4'-0"

LEGEND
Approximate Limits of Reinforced Soil Mass

PROPOSED RAMP B CURVE DATA
PI Sta. = 230+56.25
 $\Delta = 70^\circ 10' 53''$ (Rt.)
 $D = 4^\circ 56' 21''$
 $R = 1,160,00'$
 $T = 814.98'$
 $L = 1,420.88'$
 $E = 257.67'$
 $e = 7.8\%$
P.C. Sta. = 222+41.27
P.T. Sta. = 236+62.15

- NOTES:**
- Existing Outer Ramp B shall be temporarily relocated during MSE Wall construction.
 - Wall Stations and Offsets are given to the F.F. (Front Face) of the MSE wall panels and are measured from Ramp E baseline, unless noted otherwise.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT - MSE WALL - GENERAL PLAN
STRUCTURE NO. 010-1001

SHEET NO. S-57 OF S-106 SHEETS

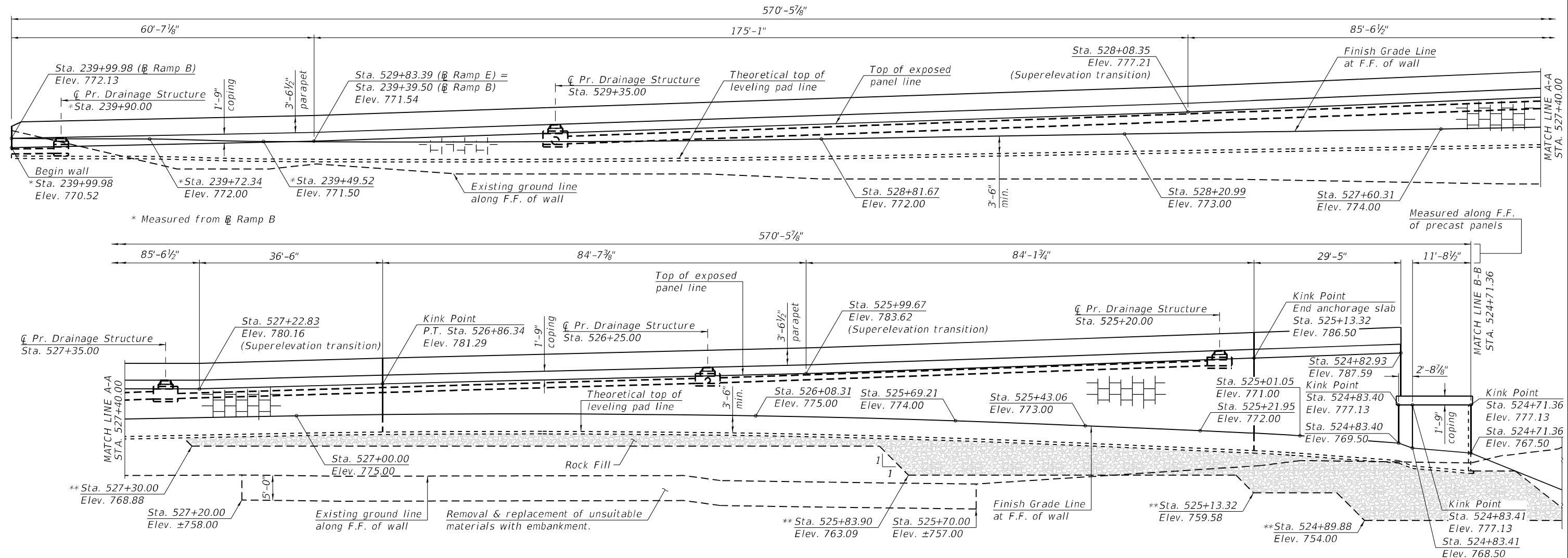
F.A.I. RT.E. 74 & 57	SECTION (10-34-1) HBK	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 699
CONTRACT NO. 70B99			ILLINOIS FED. AID PROJECT	

MODEL: Sheet
FILE NAME: p:\v\cmengr-pw-bentley.com\cmt-projects\Documents\Projects\DOT115066-01\Draw\Structures\CADD_Sheets\RAMPE-70B99-457-West MSE Wall General Plan-QEI.dgn
5/3/2021 1:46:09 PM



DESIGNED - KWB	REVISED -
CHECKED - RPW	REVISED -
DRAWN - LMC	REVISED -
CHECKED - MDC	REVISED -

MODEL: Sheet
 FILE NAME: p:\v\cmengr-pw-bentley.com\cmt-projects\projects\DOT115066-01\DrawStructures\CADD_Sheets\RAMPE_WALL_Elevation-QEIdgn



NOTES:
 For Drainage Structure information see Drainage Plans

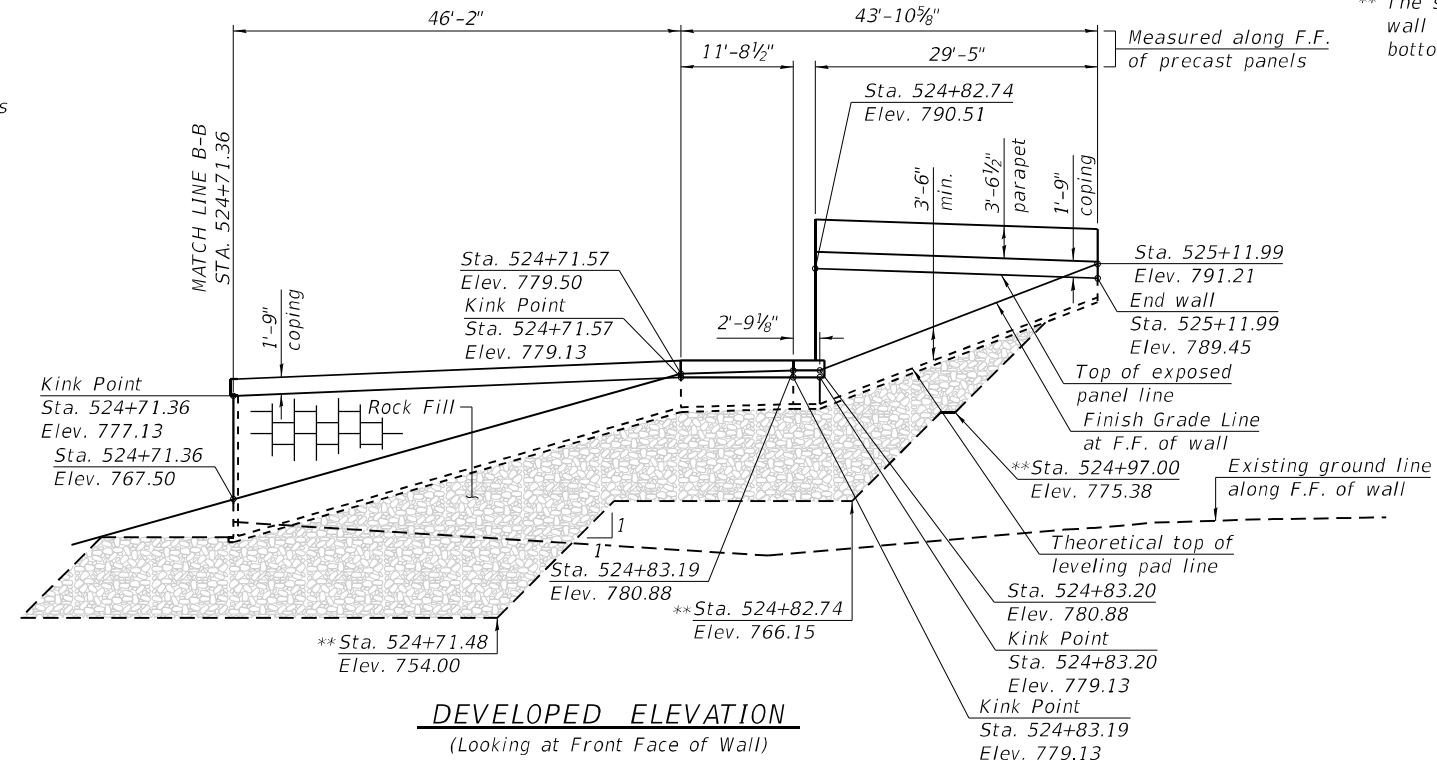
** The stationings for the different depths of Rock Fill corresponding to different MSE wall height intervals are subject to change during construction based on how the bottom of the MSE wall will be stepped in the field.

ROCK FILL THICKNESS BELOW MSE REINFORCED MASS

MSE Wall Height Interval (ft.)	Min. Thickness of Rock Fill below MSE Reinforced Mass (ft.)
10-15	2
15-20	5
20-25	7
25-30	10
30-35	12

BILL OF MATERIAL

Item	Unit	Total
Structure Excavation	Cu. Yd.	26
Removal and Disposal of Unsuitable Material for Structures	Cu. Yd.	632
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	5,814
Rock Fill	Cu. Yd.	2,415



DEVELOPED ELEVATION
 (Looking at Front Face of Wall)



DESIGNED - KWB	REVISED -
CHECKED - RPW	REVISED -
DRAWN - LMC	REVISED -
CHECKED - MDC	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WEST ABUTMENT - MSE WALL - DEVELOPED ELEVATION
 STRUCTURE NO. 010-1001**

SHEET NO. S-58 OF S-106 SHEETS

F.A.I. RTE. 74 & 57	SECTION (10-34-1) HBK	COUNTY CHAMPAIGN	TOTAL SHEETS 1187	SHEET NO. 700
CONTRACT NO. 70B99			ILLINOIS FED. AID PROJECT	