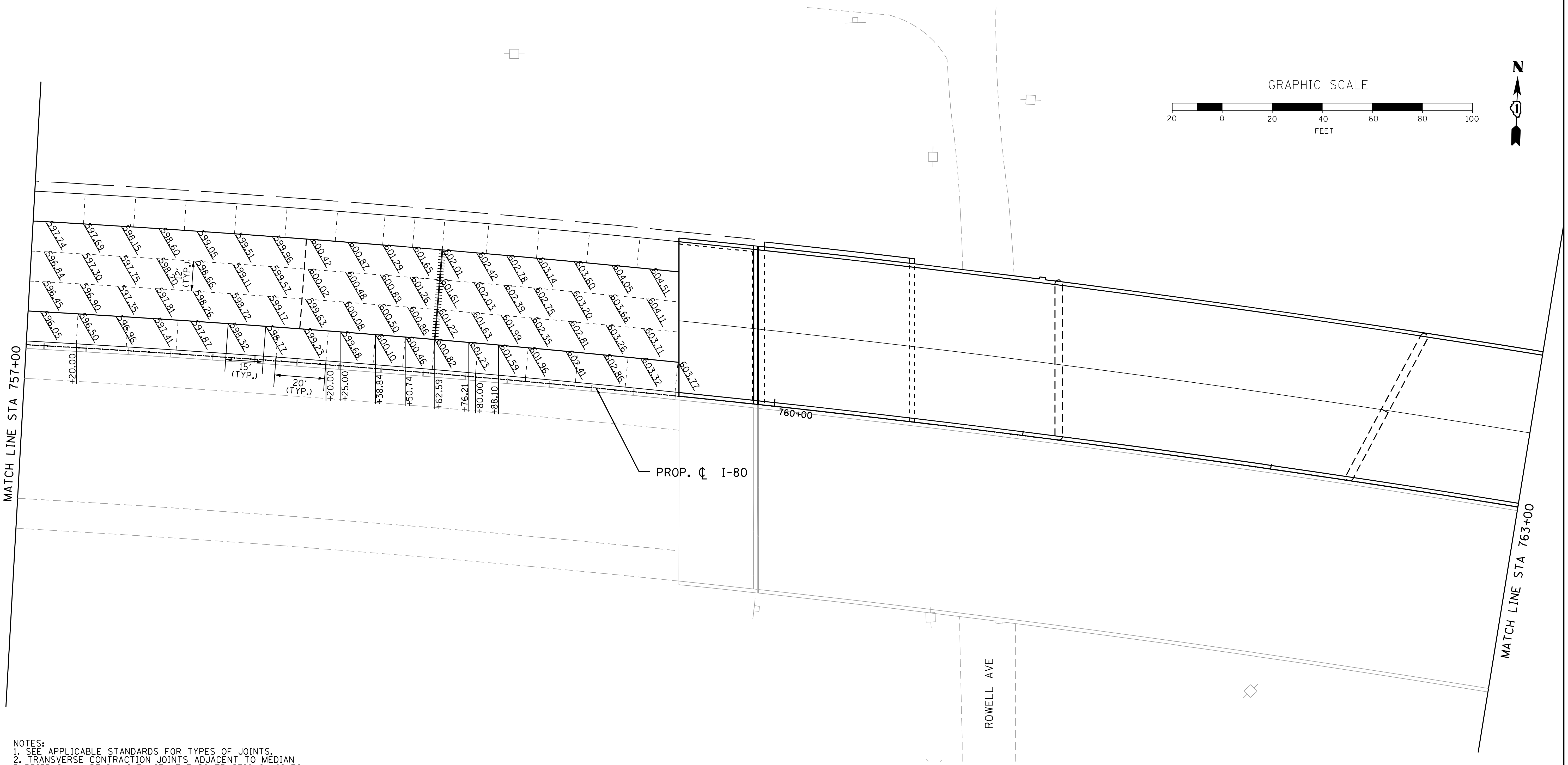
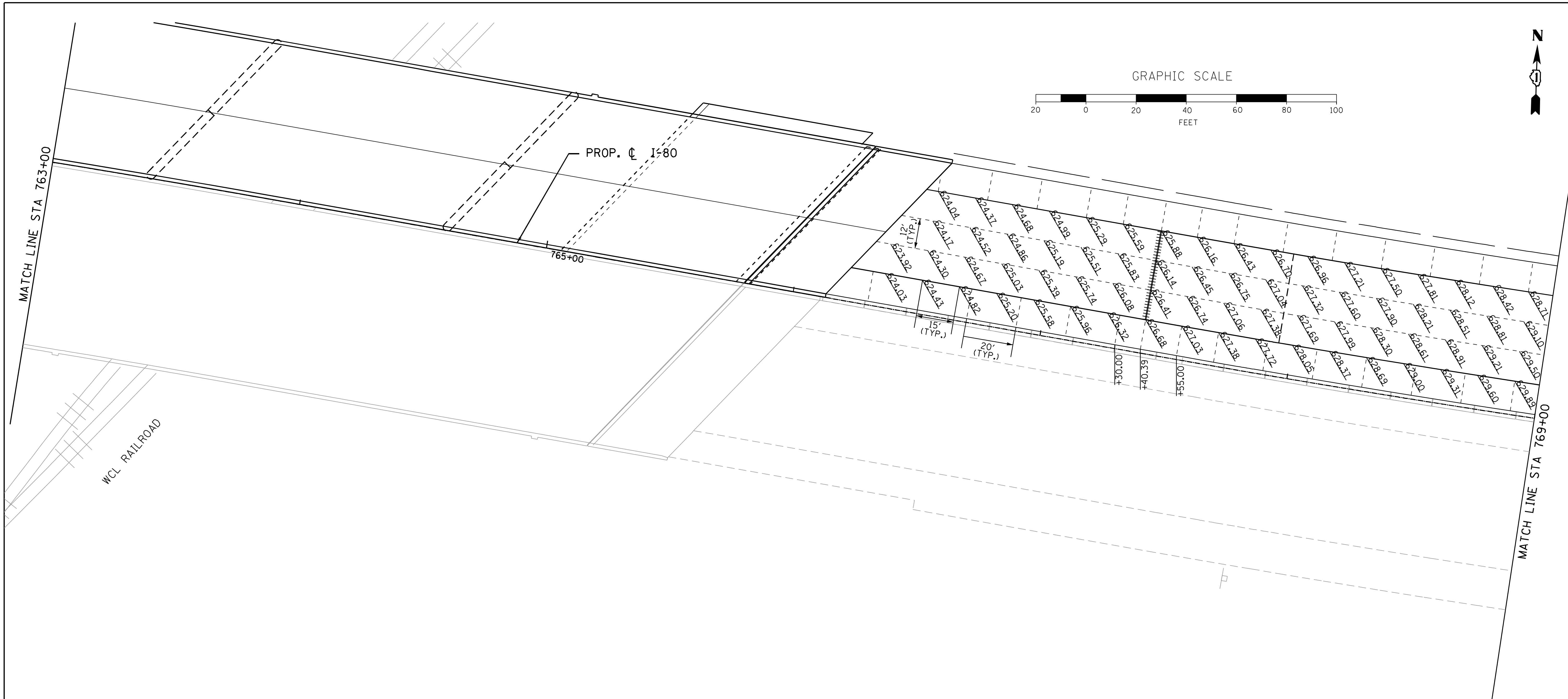


NOTES:
1. SEE APPLICABLE STANDARDS FOR TYPES OF JOINTS.
2. TRANSVERSE CONTRACTION JOINTS ADJACENT TO MEDIAN BARRIER SHALL BE IN LINE WITH THE CONTRACTIONS JOINTS IN THE BARRIER WHEN FEASIBLE.

HNTB	USER NAME = hregan	DESIGNED - HER	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WB I-80 FROM GARDNER STREET TO ROWELL AVENUE JOINTING AND ELEVATION PLAN	F.A.I. RTE. 80	SECTION 2013-009B	COUNTY WILL	TOTAL SHEETS 465	SHEET NO. 201
		DRAWN - HER	REVISED -					CONTRACT NO. 60W35		
	PLOT SCALE = 40.000 ' / in.	CHECKED - MAM	REVISED -		SCALE: 1" = 20' SHEET OF SHEETS STA. 757+00 TO STA. 763+00					
	PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -			ILLINOIS FED. AID PROJECT				

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-pvtjoint10.dgn

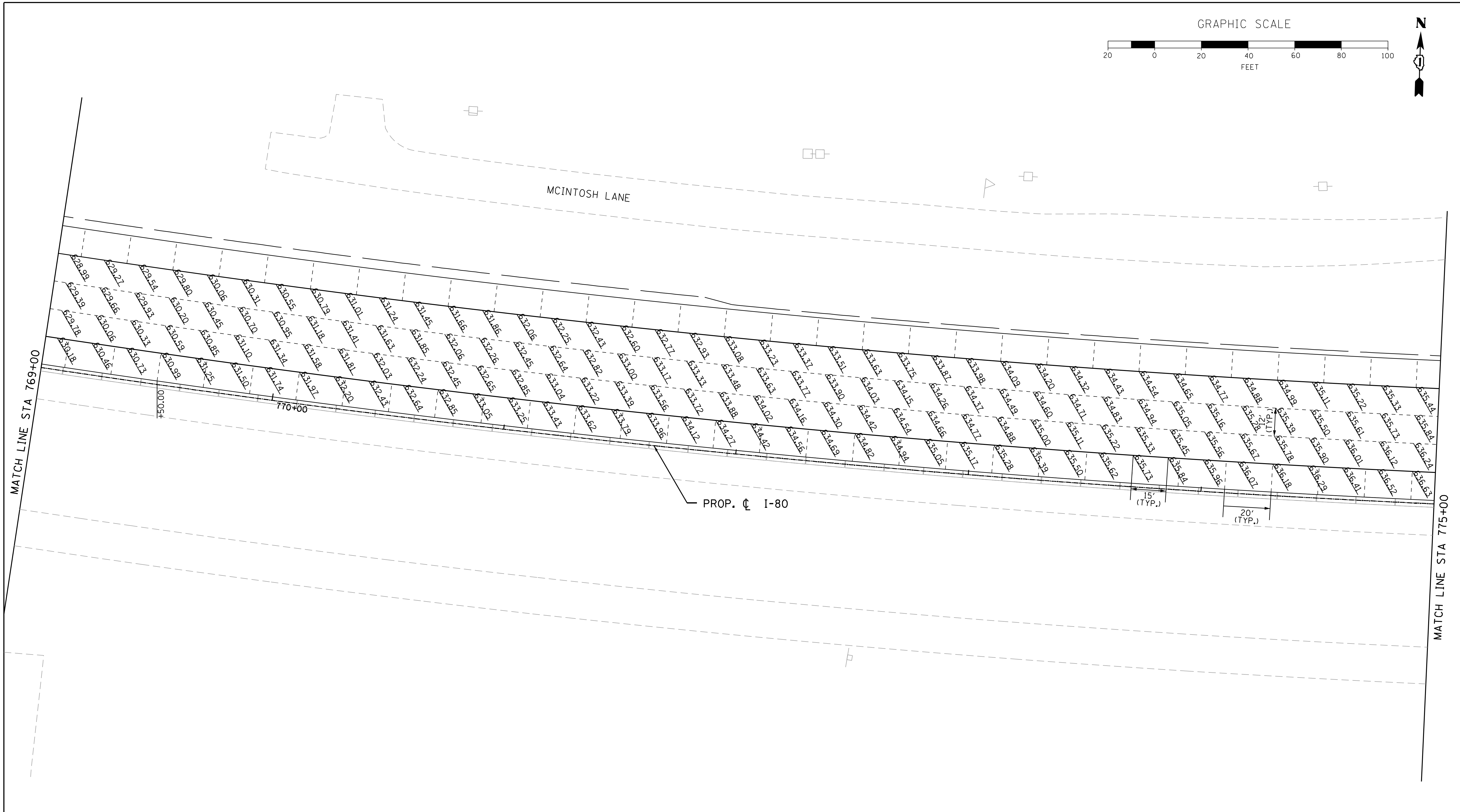


NOTES:
1. SEE APPLICABLE STANDARDS FOR TYPES OF JOINTS.
2. TRANSVERSE CONTRACTION JOINTS ADJACENT TO MEDIAN BARRIER SHALL BE IN LINE WITH THE CONTRACTIONS JOINTS IN THE BARRIER WHEN FEASIBLE.

HNTB	USER NAME : hregan	DESIGNED - HER	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WB I-80 FROM GARDNER STREET TO ROWELL AVENUE JOINTING AND ELEVATION PLAN
		DRAWN - HER	REVISED -		
	PLOT SCALE : 40.000 ' / in.	CHECKED - MAM	REVISED -		
	PLOT DATE : 3/11/2022	DATE - 3/11/2022	REVISED -		SCALE: 1" = 20' SHEET OF SHEETS STA. 763+00 TO STA. 769+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	202
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-pvtjoint11.dgn

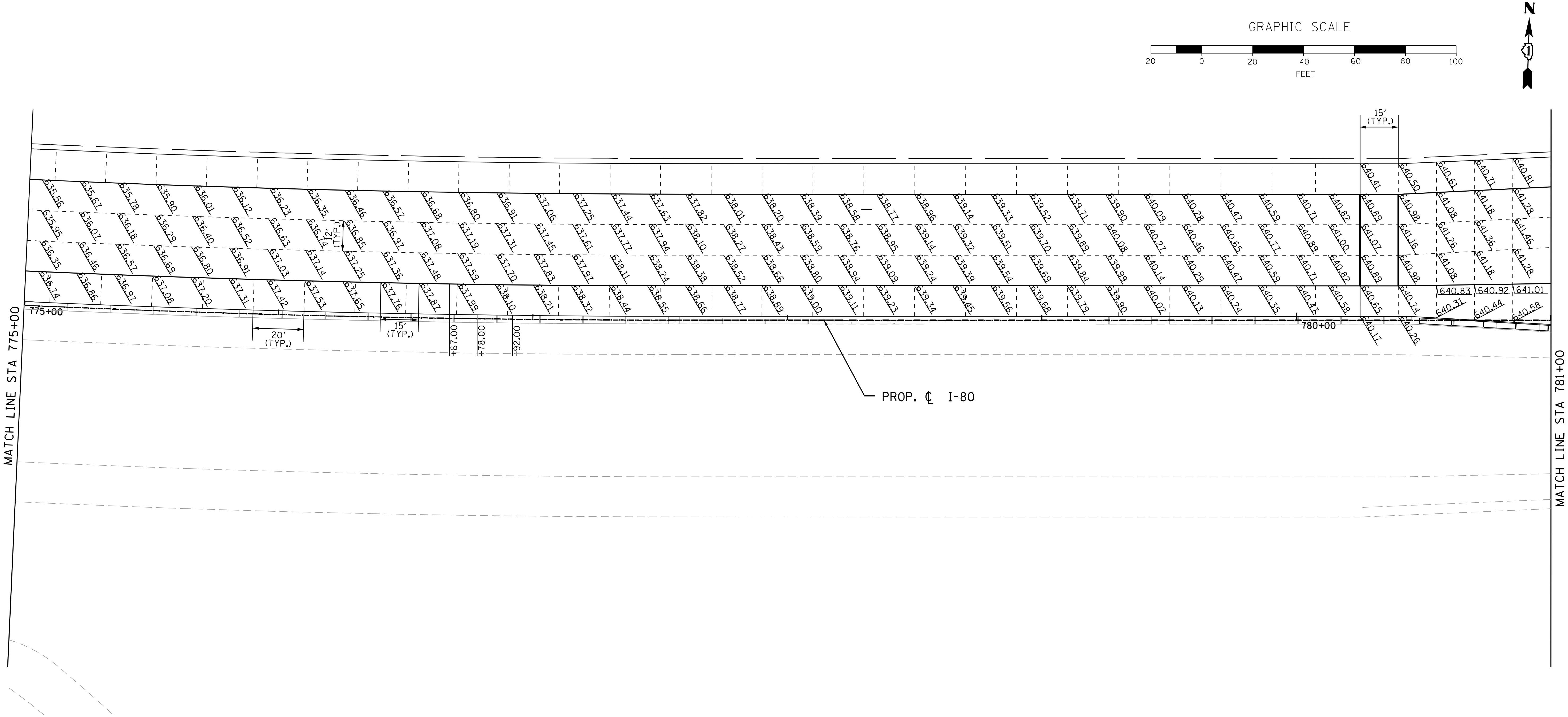


NOTES:
1. SEE APPLICABLE STANDARDS FOR TYPES OF JOINTS.
2. TRANSVERSE CONTRACTION JOINTS ADJACENT TO MEDIAN BARRIER SHALL BE IN LINE WITH THE CONTRACTIONS JOINTS IN THE BARRIER WHEN FEASIBLE.

HNTB	USER NAME = hregan	DESIGNED - HER	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WB I-80 FROM GARDNER STREET TO ROWELL AVENUE JOINTING AND ELEVATION PLAN
		DRAWN - HER	REVISED -		
	PLOT SCALE = 40.000 ' / in.	CHECKED - MAM	REVISED -		
	PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -		SCALE: 1" = 20' SHEET OF SHEETS STA. 769+00 TO STA. 775+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	203
		CONTRACT NO. 60W35		
	ILLINOIS FED. AID PROJECT			

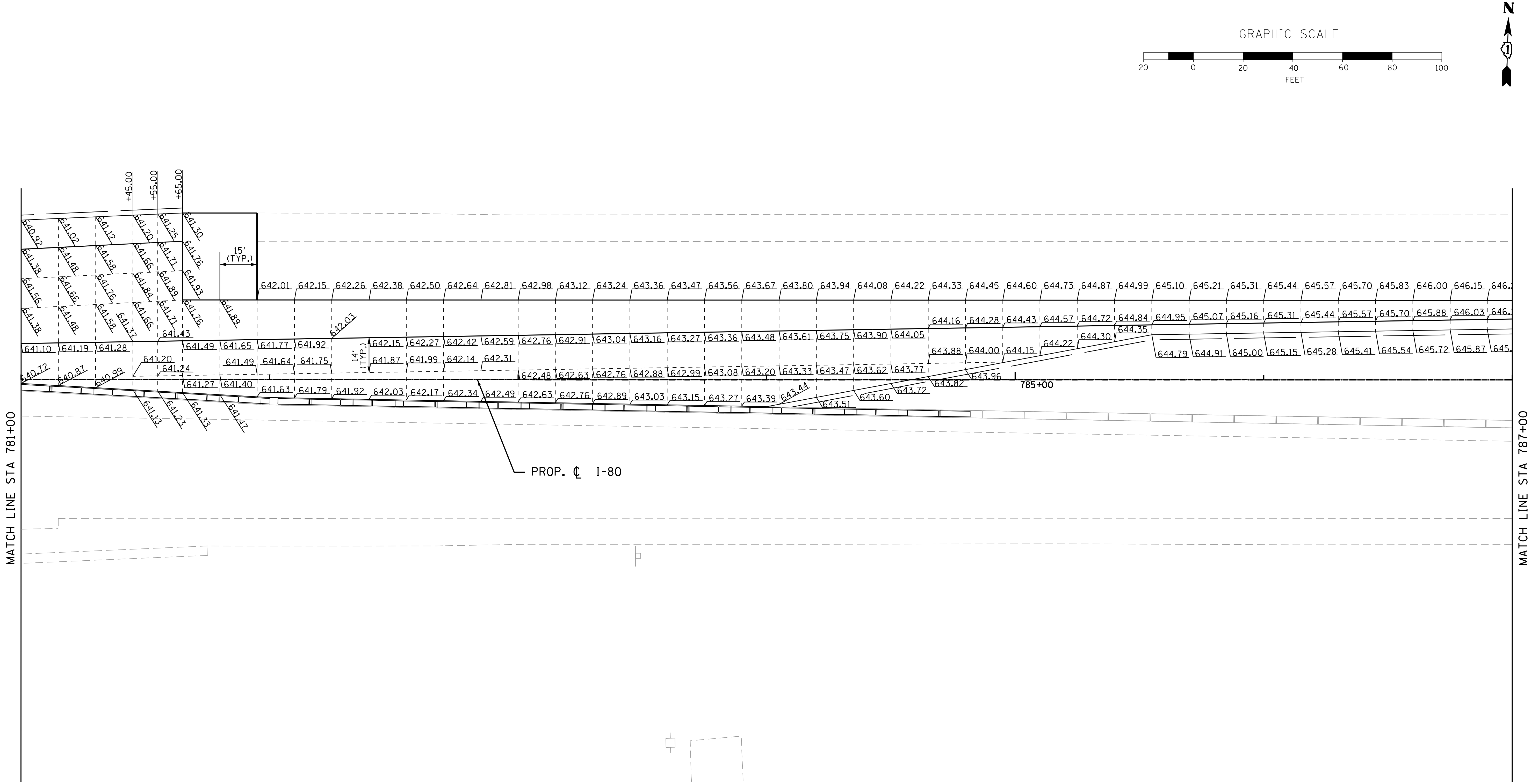
FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-pvtjoint12.dgn



NOTES:
1. SEE APPLICABLE STANDARDS FOR TYPES OF JOINTS.
2. TRANSVERSE CONTRACTION JOINTS ADJACENT TO MEDIAN BARRIER SHALL BE IN LINE WITH THE CONTRACTIONS JOINTS IN THE BARRIER WHEN FEASIBLE.

HNTB	USER NAME = hregan	DESIGNED - HER	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WB I-80 FROM GARDNER STREET TO ROWELL AVENUE JOINTING AND ELEVATION PLAN	F.A.I. RTE. 80	SECTION 2013-009B	COUNTY WILL	TOTAL SHEETS 465	SHEET NO. 204
		DRAWN - HER	REVISED -					CONTRACT NO. 60W35		
	PLOT SCALE = 40.000 ' / in.	CHECKED - MAM	REVISED -		SCALE: 1" = 20' SHEET OF SHEETS STA. 775+00 TO STA. 781+00					
	PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -			ILLINOIS FED. AID PROJECT				

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-pvtjoint13.dgn

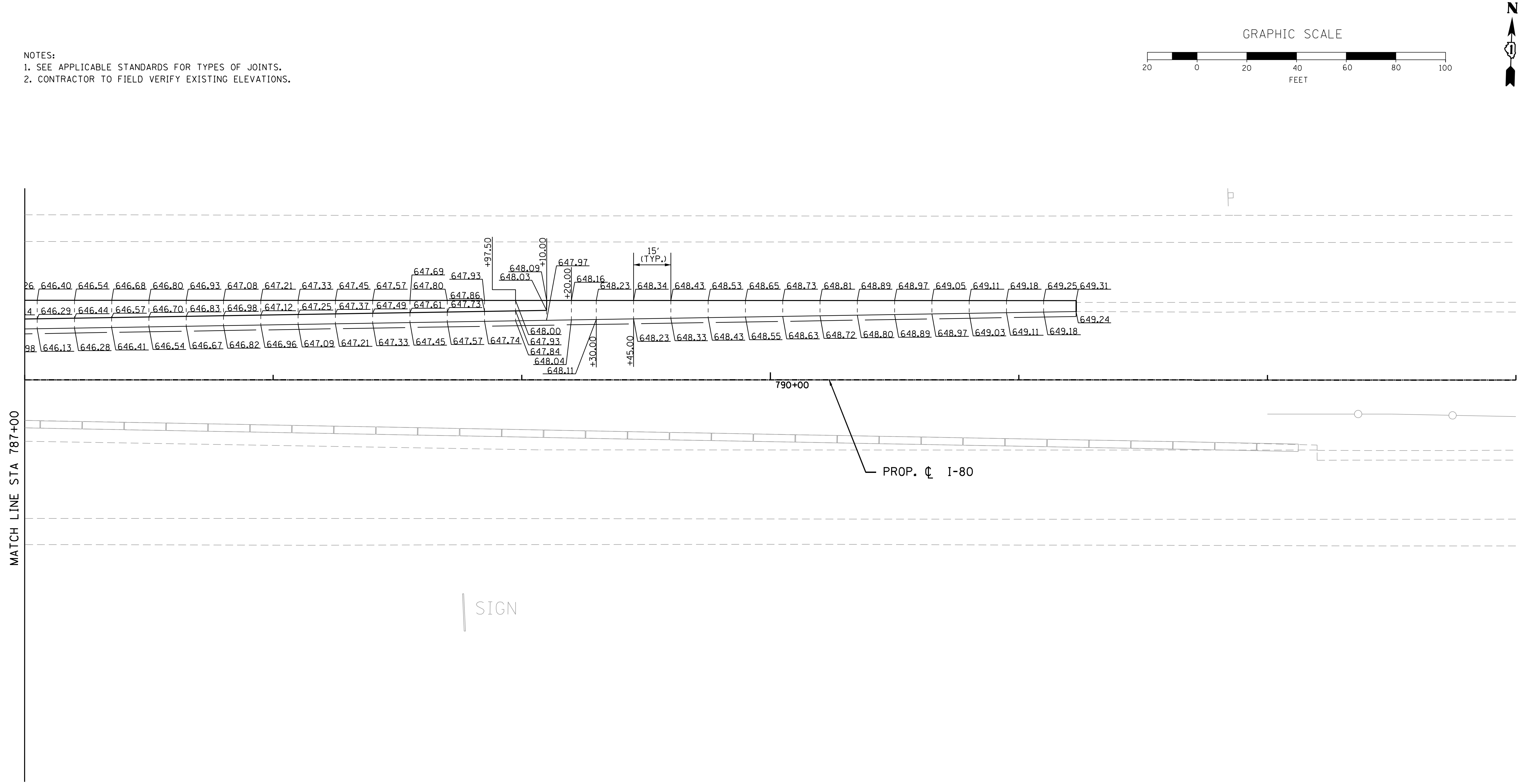


NOTE:
1. SEE APPLICABLE STANDARDS FOR TYPES OF JOINTS.
2. CONTRACTOR TO FIELD VERIFY EXISTING ELEVATIONS.

HNTB	USER NAME = hregan	DESIGNED - HER	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WB I-80 FROM GARDNER STREET TO ROWELL AVENUE JOINTING AND ELEVATION PLAN	F.A.I. RTE.: 80	SECTION: 2013-009B
		DRAWN - HER	REVISED -			COUNTY: WILL	TOTAL SHEETS: 465
	PLOT SCALE = 40.000 ' / in.	CHECKED - MAM	REVISED -		SCALE: 1" = 20' SHEET OF SHEETS STA. 781+00 TO STA. 787+00	SHEET NO.: 205	CONTRACT NO. 60W35
	PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -			ILLINOIS FED. AID PROJECT	

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-pvtjoint14.dgn

NOTES:
1. SEE APPLICABLE STANDARDS FOR TYPES OF JOINTS.
2. CONTRACTOR TO FIELD VERIFY EXISTING ELEVATIONS.



HNTB	USER NAME = hregan	DESIGNED - HER	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - HER	REVISED -	
	PLOT SCALE = 40.000 ' / in.	CHECKED - MAM	REVISED -	
	PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -	

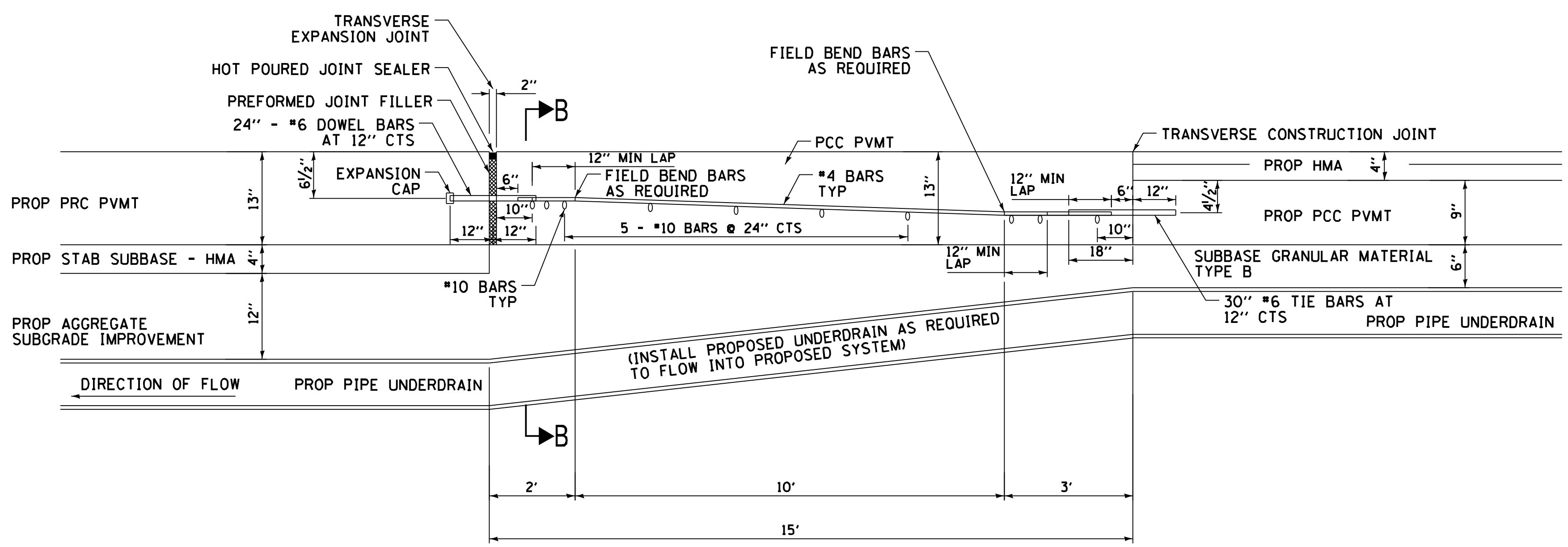
WB I-80 FROM GARDNER STREET TO ROWELL AVENUE JOINTING AND ELEVATION PLAN

SCALE: 1" = 20' | SHEET OF SHEETS | STA. 787+00 TO STA. 793+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	206

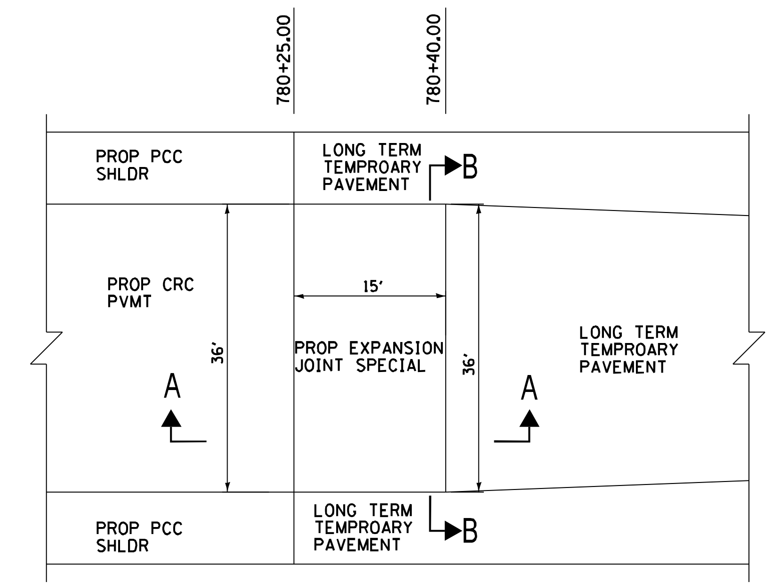
CONTRACT NO. 60W35
ILLINOIS FED. AID PROJECT

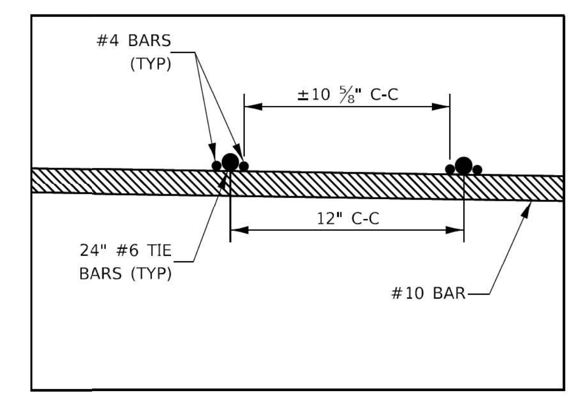
FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-pvtjoint15.dgn



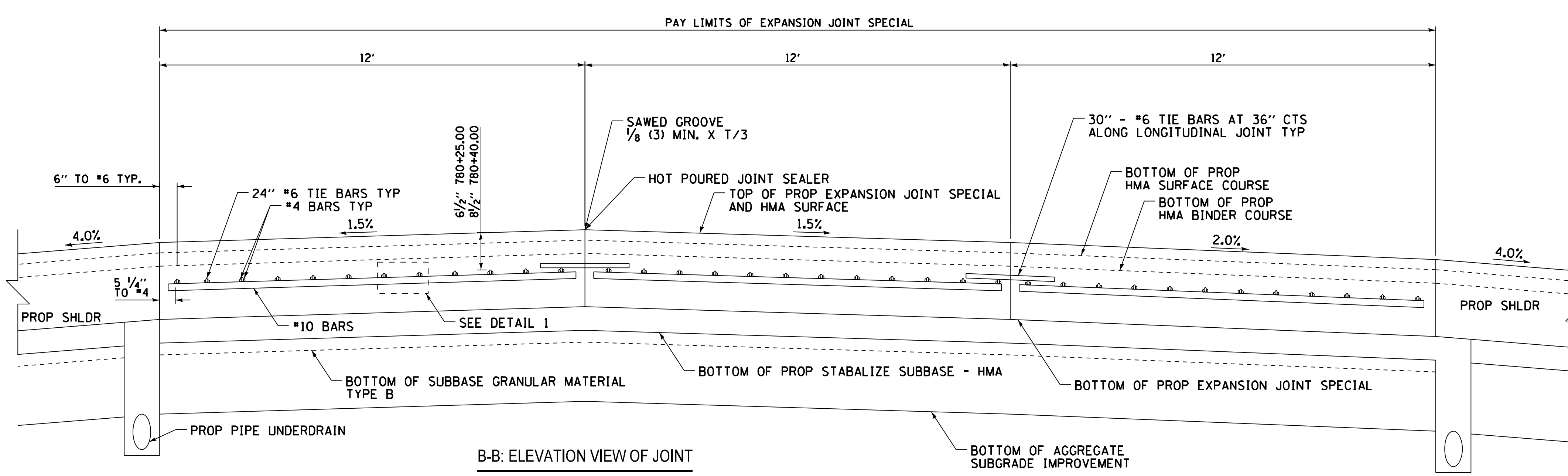
A-A CROSS SECTION OF EXPANSION JOINT SPECIAL

STA. 780+25.00 TO STA. 780+40.00





DETAIL 1: BAR SPACING DETAILS



B-B: ELEVATION VIEW OF JOINT

NOTES:
ALL BARS SHALL BE EPOXY COATED.

HNTB

USER NAME = hregan	DESIGNED - HER	REVISED -
	DRAWN - HER	REVISED -
PLOT SCALE = 4.000 ' / in.	CHECKED - MAM	REVISED -
PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB I-80 FROM GARDNER STREET TO ROWELL AVENUE
EXPANSION JOINT SPECIAL DETAILS

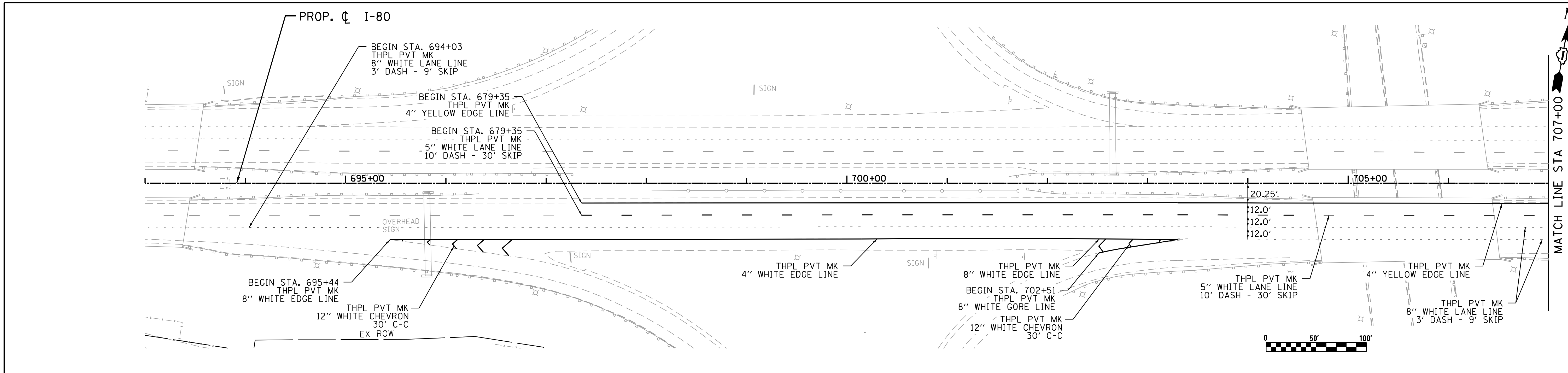
SCALE: N.T.S. | SHEET OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	207

CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-pvtdet01.dgn



GUIDE SIGN SEQUENCE NUMBERING CODE EXAMPLE

EB - TR - 100

SIGN PANEL NUMBER

DIRECTION OF TRAFFIC

EB - EASTBOUND I-80
WB - WESTBOUND I-80

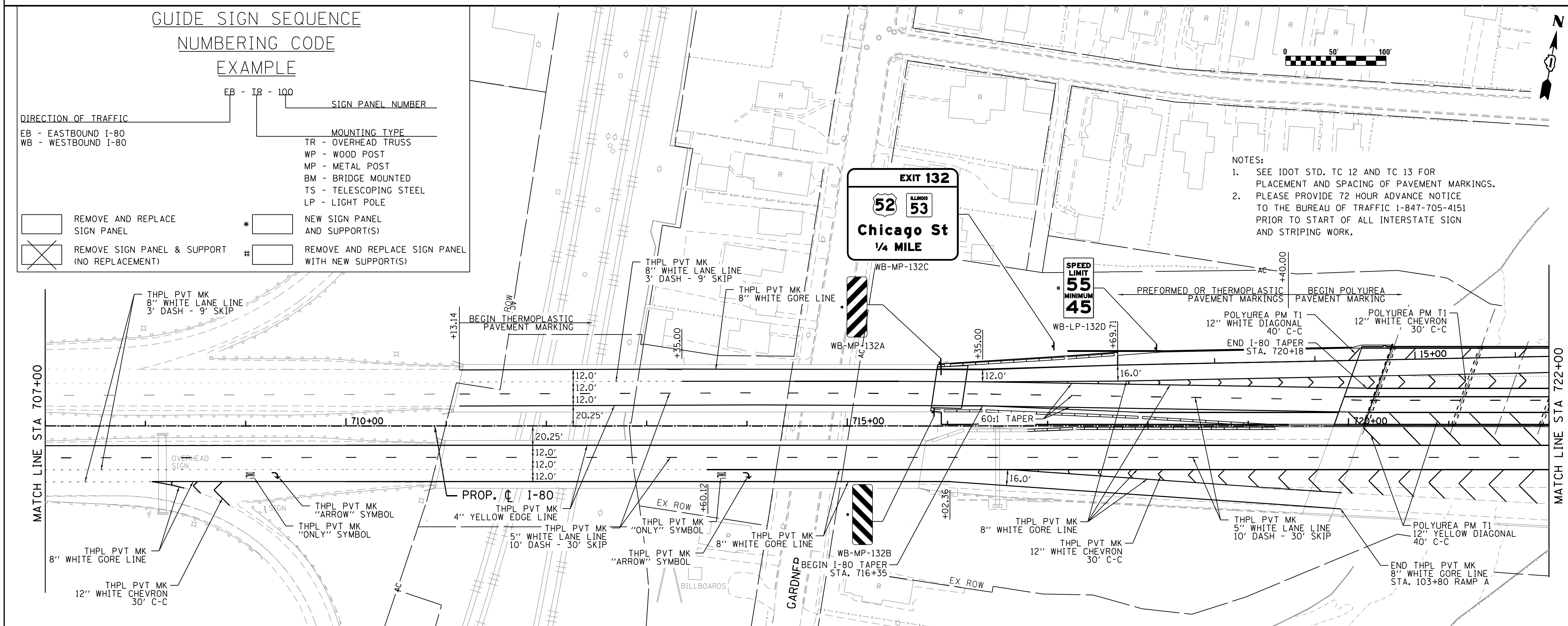
MOUNTING TYPE

TR - OVERHEAD TRUSS
WP - WOOD POST
MP - METAL POST
BM - BRIDGE MOUNTED
TS - TELESCOPING STEEL
LP - LIGHT POLE

REMOVE AND REPLACE SIGN PANEL	* NEW SIGN PANEL AND SUPPORT(S)
REMOVE SIGN PANEL & SUPPORT (NO REPLACEMENT)	# REMOVE AND REPLACE SIGN PANEL WITH NEW SUPPORT(S)

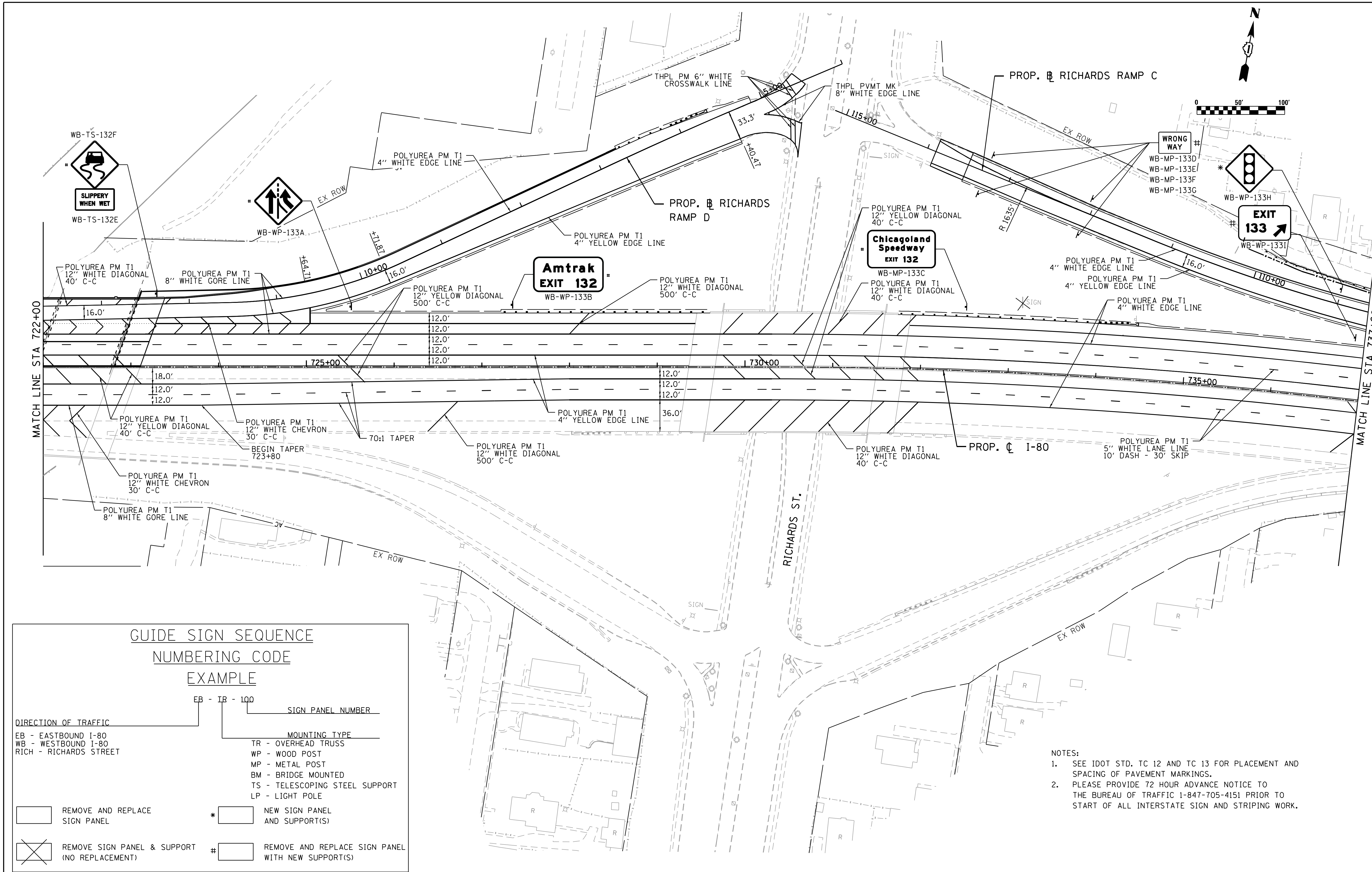
NOTES:

1. SEE IDOT STD. TC 12 AND TC 13 FOR PLACEMENT AND SPACING OF PAVEMENT MARKINGS.
2. PLEASE PROVIDE 72 HOUR ADVANCE NOTICE TO THE BUREAU OF TRAFFIC 1-847-705-4151 PRIOR TO START OF ALL INTERSTATE SIGN AND STRIPING WORK.



HNTB	USER NAME = hregan	DESIGNED - HER	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WB I-80 FROM GARDNER STREET TO ROWELL AVENUE PAVEMENT MARKING AND SIGNAGE PLAN	F.A.I. RTE. 80	SECTION 2013-009B	COUNTY WILL	TOTAL SHEETS 465	SHEET NO. 208
		DRAWN - HER	REVISED -							
	PLOT SCALE = 100.000 ' / in.	CHECKED - MAM	REVISED -			CONTRACT NO. 60W35				
	PLOT DATE = 3/24/2022	DATE - 3/11/2022	REVISED -		SCALE: 1" = 50' SHEET OF SHEETS STA. 693+00 TO STA. 722+00	ILLINOIS FED. AID PROJECT				

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-pmk03.dgn



GUIDE SIGN SEQUENCE NUMBERING CODE EXAMPLE

EB - TR - 100

SIGN PANEL NUMBER

DIRECTION OF TRAFFIC
EB - EASTBOUND I-80
WB - WESTBOUND I-80
RICH - RICHARDS STREET

MOUNTING TYPE
TR - OVERHEAD TRUSS
WP - WOOD POST
MP - METAL POST
BM - BRIDGE MOUNTED
TS - TELESCOPING STEEL SUPPORT
LP - LIGHT POLE

REMOVE AND REPLACE SIGN PANEL

* NEW SIGN PANEL AND SUPPORT(S)

REMOVE SIGN PANEL & SUPPORT (NO REPLACEMENT)

\# REMOVE AND REPLACE SIGN PANEL WITH NEW SUPPORT(S)

NOTES:
1. SEE IDOT STD. TC 12 AND TC 13 FOR PLACEMENT AND SPACING OF PAVEMENT MARKINGS.
2. PLEASE PROVIDE 72 HOUR ADVANCE NOTICE TO THE BUREAU OF TRAFFIC 1-847-705-4151 PRIOR TO START OF ALL INTERSTATE SIGN AND STRIPING WORK.

HNTB	USER NAME = hregan	DESIGNED - HER	REVISED -
		DRAWN - HER	REVISED -
	PLOT SCALE = 100.000 ' / in.	CHECKED - MAM	REVISED -
	PLOT DATE = 3/24/2022	DATE - 3/11/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB I-80 FROM GARDNER STREET TO ROWELL AVENUE
PAVEMENT MARKING AND SIGNAGE PLAN

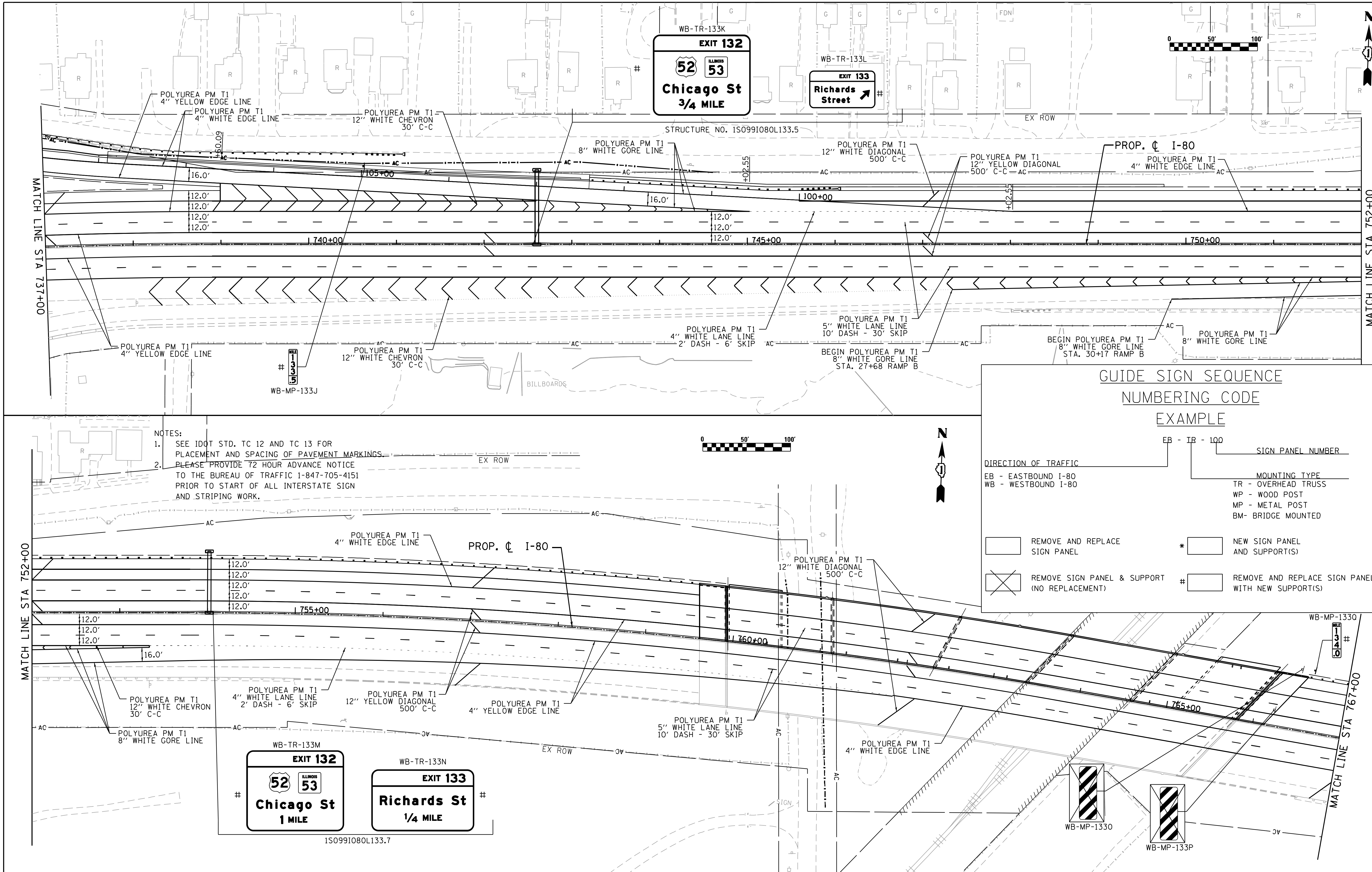
SCALE: 1" = 50' | SHEET OF SHEETS | STA. 722+00 TO STA. 737+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	209

CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

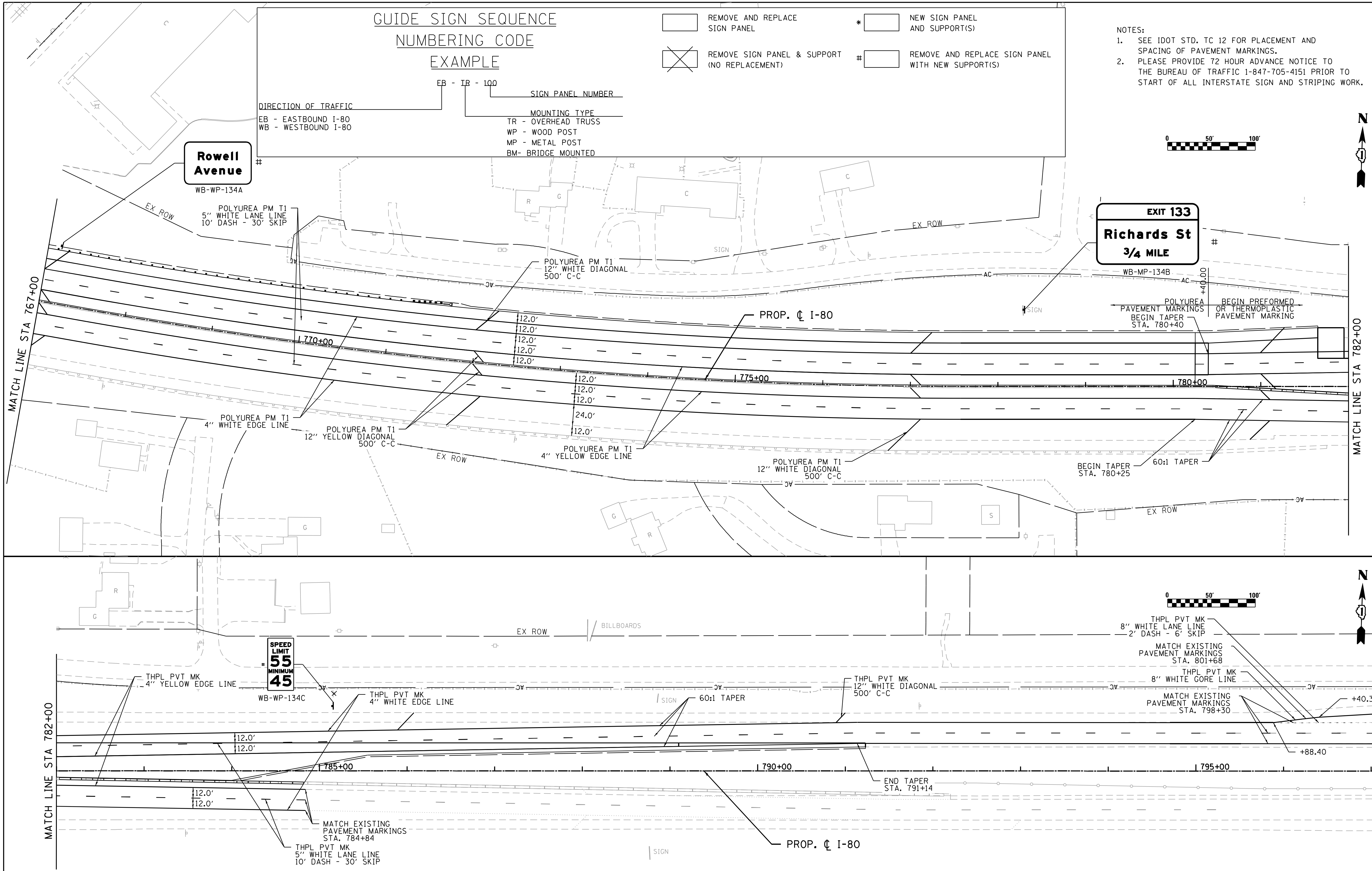
FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-pmk04.dgn



HNTB	USER NAME = hregan	DESIGNED - HER	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WB I-80 FROM GARDNER STREET TO ROWELL AVENUE PAVEMENT MARKING AND SIGNAGE PLAN
		DRAWN - HER	REVISED -		
	PLOT SCALE = 100.000 ' / in.	CHECKED - MAM	REVISED -		
	PLOT DATE = 3/24/2022	DATE - 3/11/2022	REVISED -		SCALE: 1" = 50' SHEET OF SHEETS STA. 737+00 TO STA. 767+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	210
CONTRACT NO. 60W35				
ILLINOIS FED. AID PROJECT				

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-pmk05.dgn



HNTB

USER NAME = hregan	DESIGNED - HER	REVISED -
	DRAWN - HER	REVISED -
PLOT SCALE = 100.000 ' / in.	CHECKED - MAM	REVISED -
PLOT DATE = 3/24/2022	DATE - 3/11/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

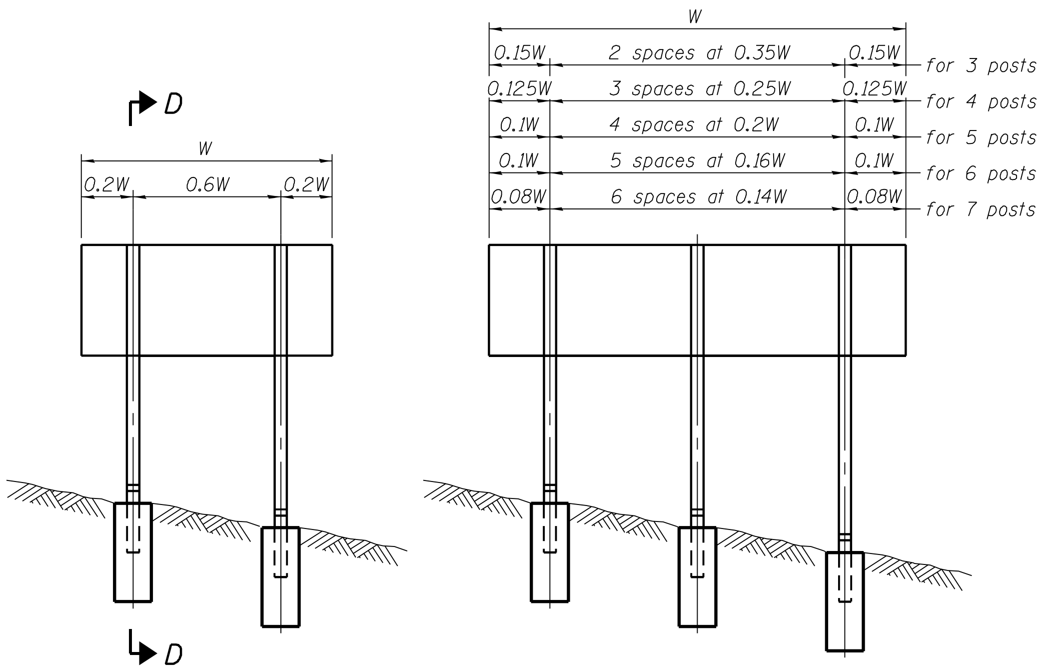
WB I-80 FROM GARDNER STREET TO ROWELL AVENUE
PAVEMENT MARKING AND SIGNAGE PLAN

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 767+00 TO STA. 797+00

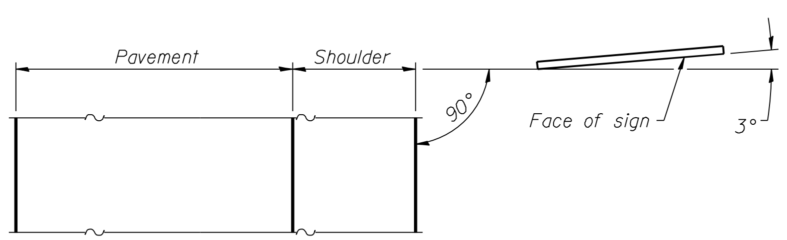
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	211

CONTRACT NO. 60W35
ILLINOIS FED. AID PROJECT

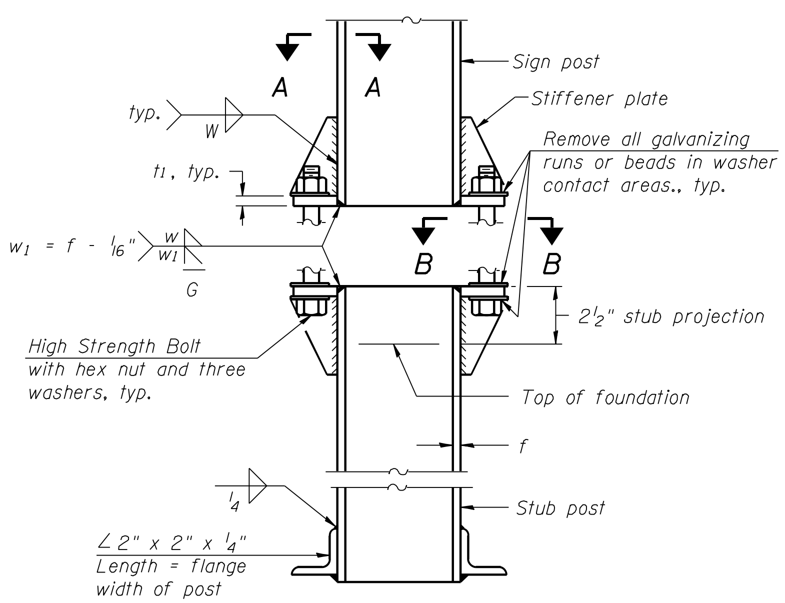
FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-pmk06.dgn



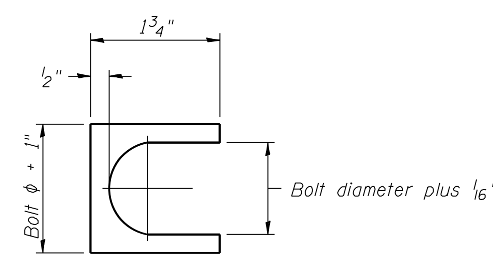
ELEVATION



LOCATION SKETCH

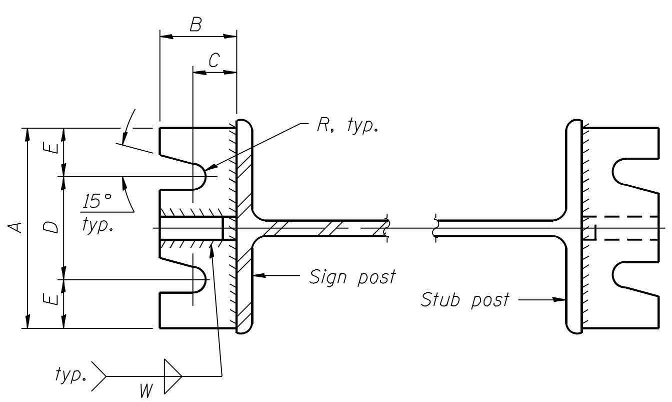


ELEVATION
SIGN POST & STUB POST



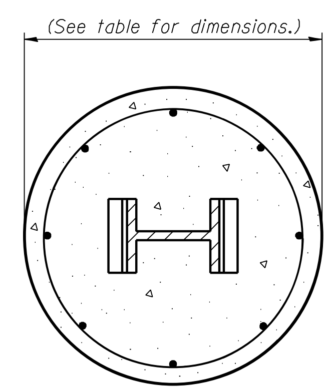
SHIM DETAIL

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

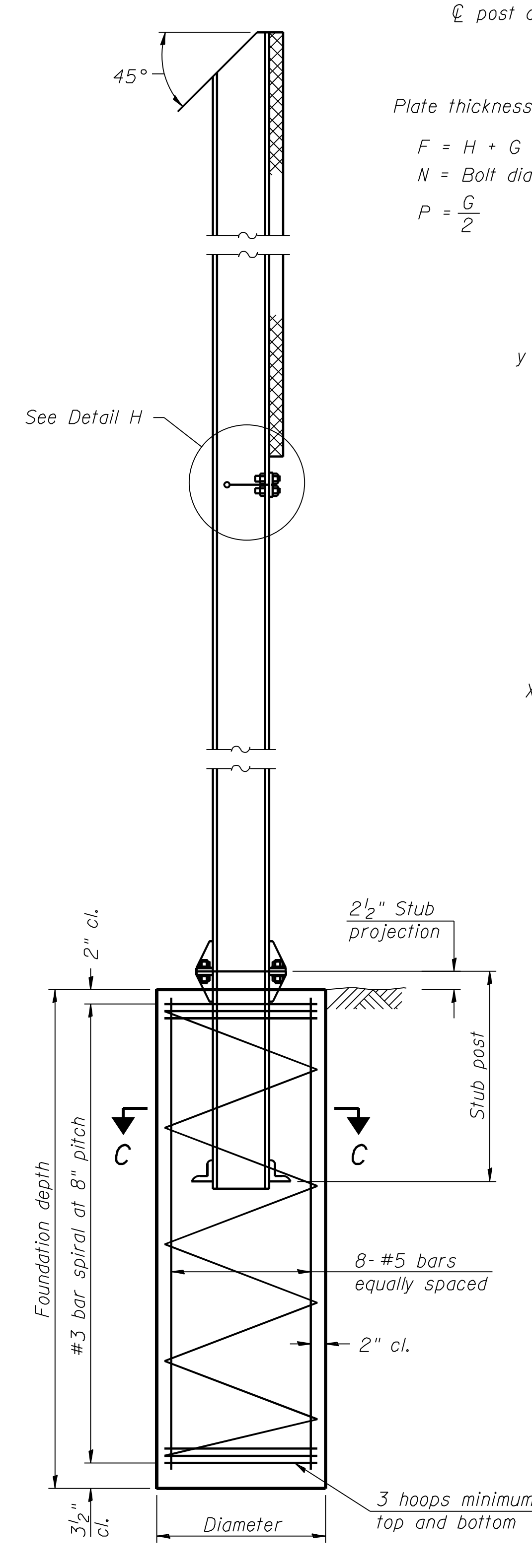


SECTION A-A

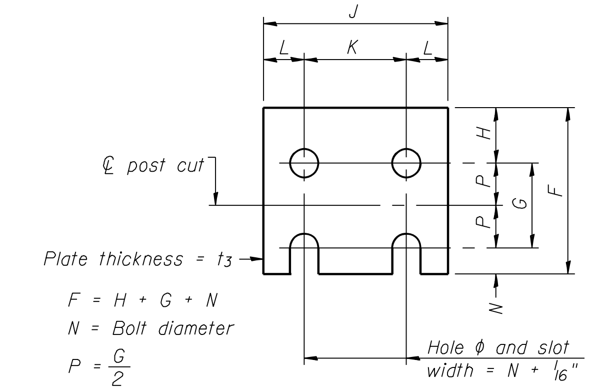
SECTION B-B



SECTION C-C



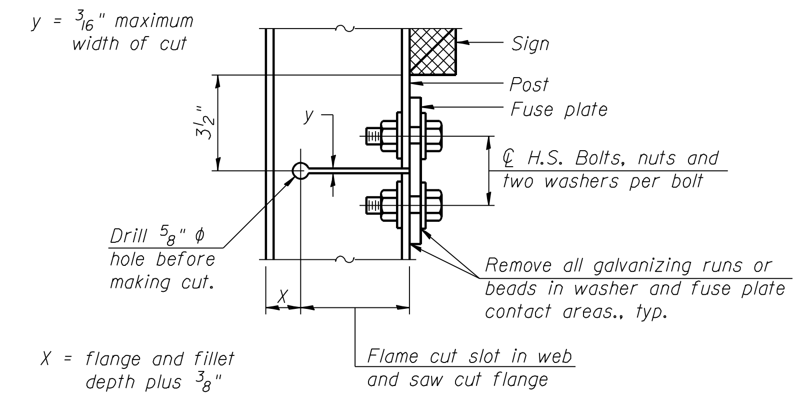
SECTION D-D



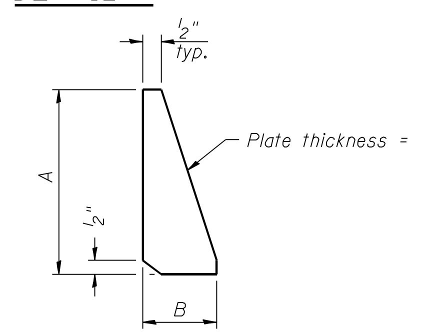
FUSE PLATE DETAIL

(Install with notches down.)

FUSE PLATE DATA		
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.

BAW-A-1 6-1-12

(Sheet 1 of 2)

HNTB

USER NAME = hregan	DESIGNED - HER	REVISED -
	DRAWN - HER	REVISED -
PLOT SCALE = 100.000 ' / in.	CHECKED - MAM	REVISED -
PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB I-80 FROM GARDNER STREET TO ROWELL AVENUE
BREAK-AWAY WIDE FLANGE STEEL SIGN POST DETAILS

SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	212

CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-pmk07.dgn

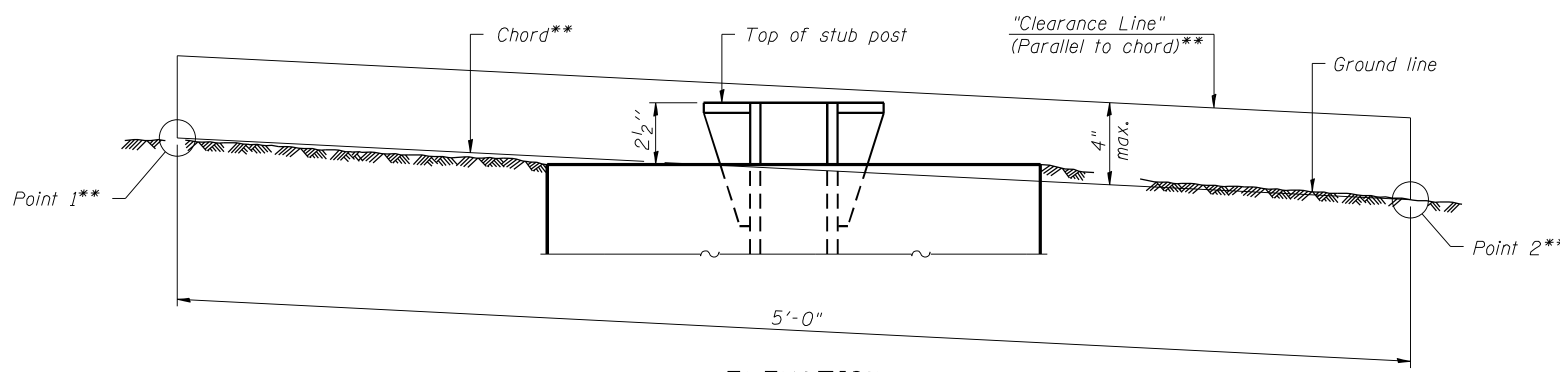
POST	CONCRETE FOUNDATION TABLE								POST TO STUB POST CONNECTION DATA										FUSE PLATE DATA			
	Foundation			Reinforcement				Stub Post														
	Diameter	* Minimum Depth	Concrete (1) cu. yds.)	Vertical Bars Length	Bar Spirals Diameter	Bar Spirals Length	lbs. (2)	Length	Bolt Size	A	B	C	D	E	t_1	t_2	R	W	J	K	L	t_3
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"	11/32"	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"	11/32"	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"	13/32"	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"	13/32"	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"	15/32"	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"	15/32"	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"	15/32"	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"	17/32"	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"	17/32"	3/8"	7"	3 1/2"	1 3/4"	1/2"

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

FUSE PLATE BOLT SIZE

POST	Sign Height 4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-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"	——
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"
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"
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"
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"
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"
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"

POST	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	21'-0"	22'-0"	23'-0"	24'-0"
W6x9	——	——	——	——	——	——	——	——	——	——	——
W6x15	——	——	——	——	——	——	——	——	——	——	——
W8x18	——	——	——	——	——	——	——	——	——	——	——
W10x22	3/4" x 2 1/4"	3/4" x 2 1/4"	3/4" x 2 1/4"	——	——	——	——	——	——	——	——
W10x26	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	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	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	3/4" x 2 1/2"	7/8" x 2 1/2"	7/8" x 2 1/2"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"
W16x45	3/4" x 2 1/2"	3/4" x 2 1/2"	7/8" x 2 1/2"	7/8" x 2 1/2"	7/8" x 2 1/2"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"	1" x 2 3/4"



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.

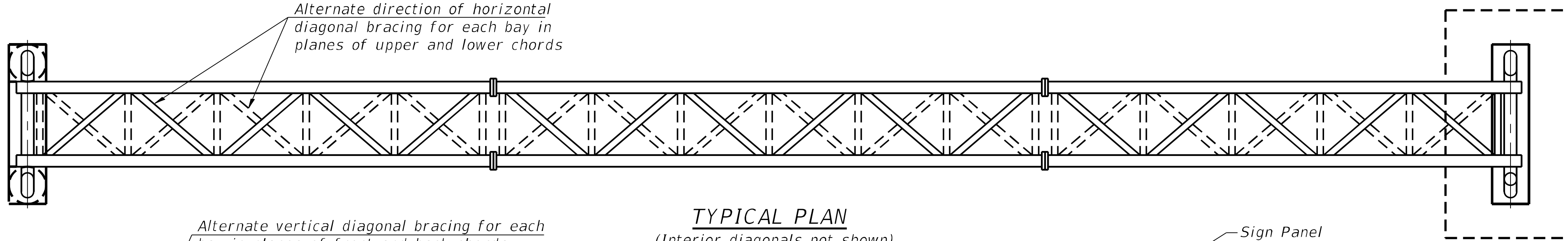
(2) Includes reinforcement bars and spiral hooping for one foundation.

BAW-A-2 6-1-12

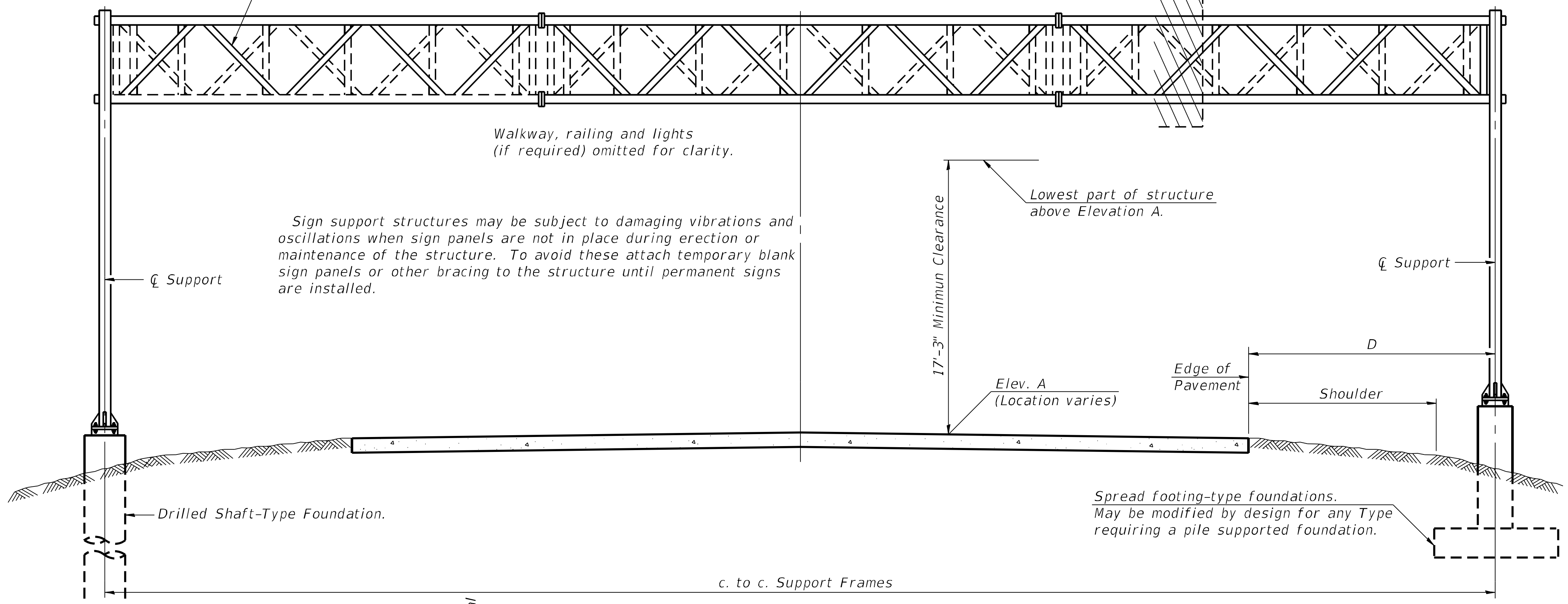
(Sheet 2 of 2)

HNTB	USER NAME = hregan	DESIGNED - HER	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WB I-80 FROM GARDNER STREET TO ROWELL AVENUE BREAK-AWAY WIDE FLANGE STEEL SIGN POST TABLES	F.A.I. RTE. 80	SECTION 2013-009B	COUNTY WILL	TOTAL SHEETS 465	SHEET NO. 213
		DRAWN - HER	REVISED -			CONTRACT NO. 60W35				
	PLOT SCALE = 100.000 ' / in.	CHECKED - MAM	REVISED -		SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT				
	PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -							

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-pmk08.dgn



TYPICAL PLAN
(Interior diagonals not shown)



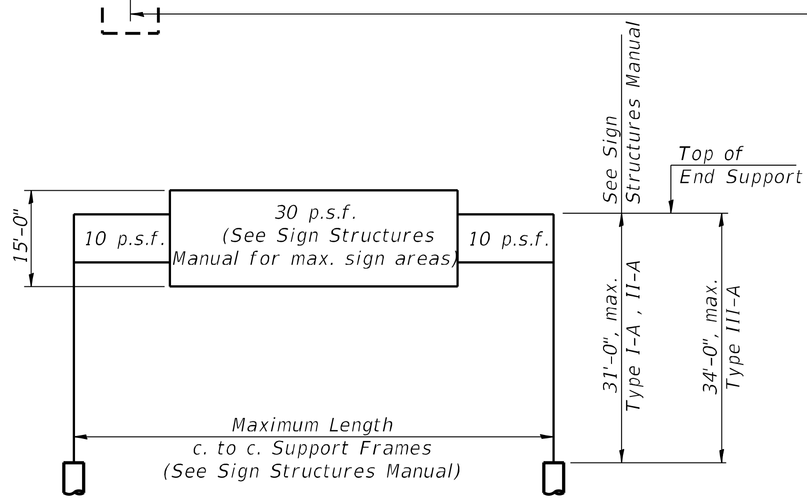
Sign support structures may be subject to damaging vibrations and oscillations when sign panels are not in place during erection or maintenance of the structure. To avoid these attach temporary blank sign panels or other bracing to the structure until permanent signs are installed.

TYPICAL ELEVATION
(Looking at Face of Signs**)

Elev. A = Elevation at point of minimum clearance to sign, walkway support or truss.

Structure Number	Station	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
1S099I080L133.5	742+60	I-A	85'-0"	563.70	18'-6"	12'-0"	301.5 SF
1S099I080L133.7	754+00	I-A	70'-0"	587.82	20'-6"	12'-0"	309 SF

**Looking upstation for structures with signs both sides.



DESIGN WIND LOADING DIAGRAM

Parameters shown are basis for I.D.O.T. Standards and Sign Manual Tables. Installations not within dimensional limits shown require special analysis for all components.

* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

GENERAL NOTES

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES:
Field Units
f'c = 3,500 p.s.i.
fy = 60,000 p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specificiations.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer.
The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to ASTM F1554 Gr. 105.

CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Concrete Sealer in accordance with the Standard Specifications.

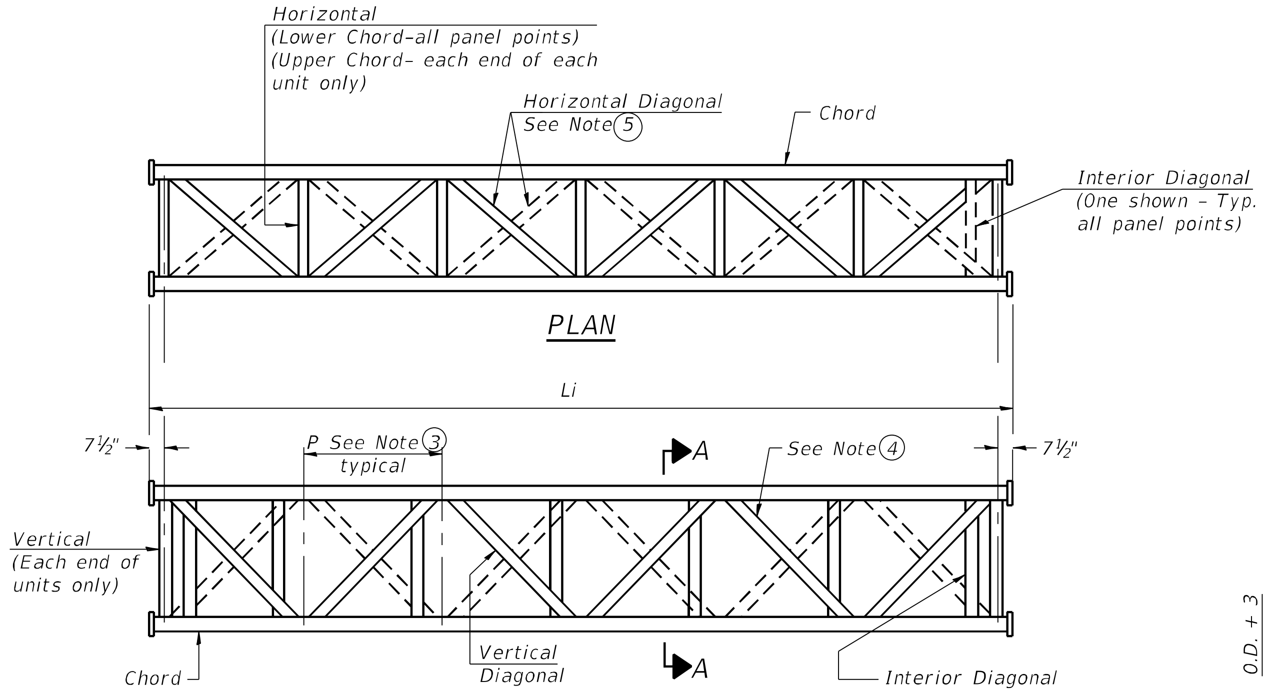
REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

FOUNDATIONS: The contract unit price for Concrete Foundations and Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

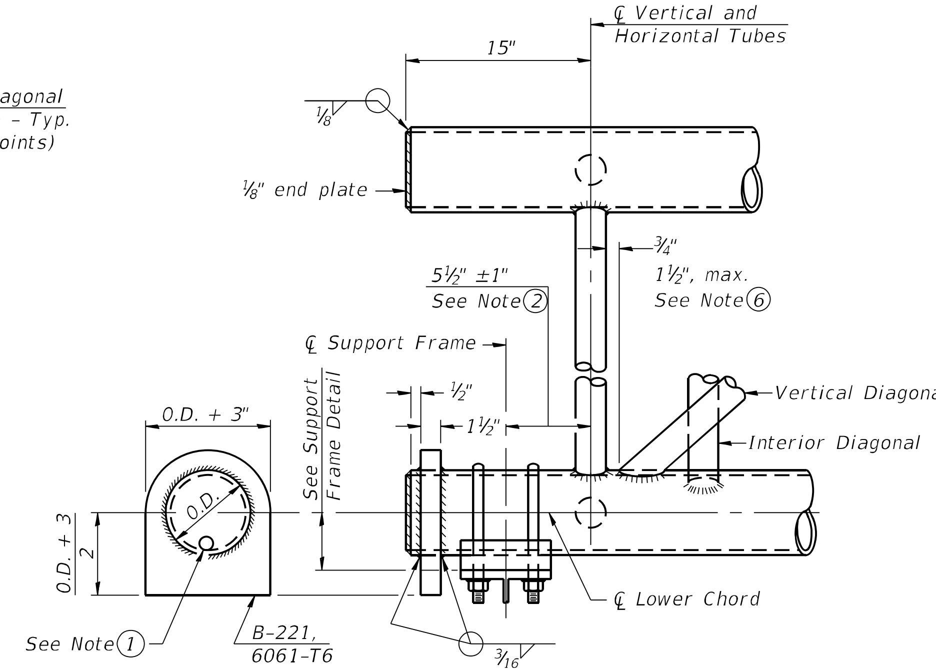
TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE SPAN TYPE I-A	Foot	155
OVERHEAD SIGN STRUCTURE SPAN TYPE II-A	Foot	-
OVERHEAD SIGN STRUCTURE SPAN TYPE III-A	Foot	-
CONCRETE FOUNDATIONS	Cu. Yds.	19.6
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	10.1
ROCK EXCAVATION FOR STRUCTURES	Cu. Yds.	17.9

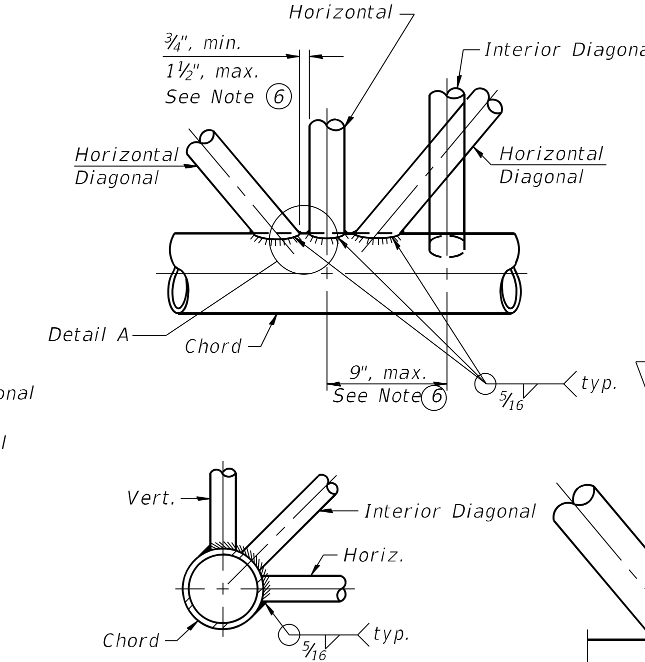
OS-A-1 2-17-2017



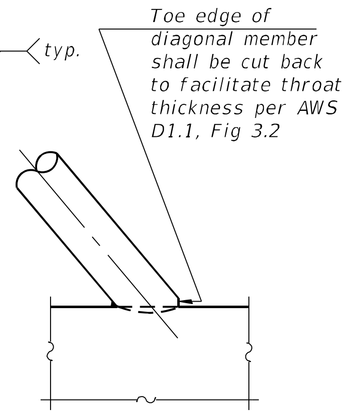
ELEVATION
TYPICAL INTERIOR UNIT
Even number of panels/interior unit required.



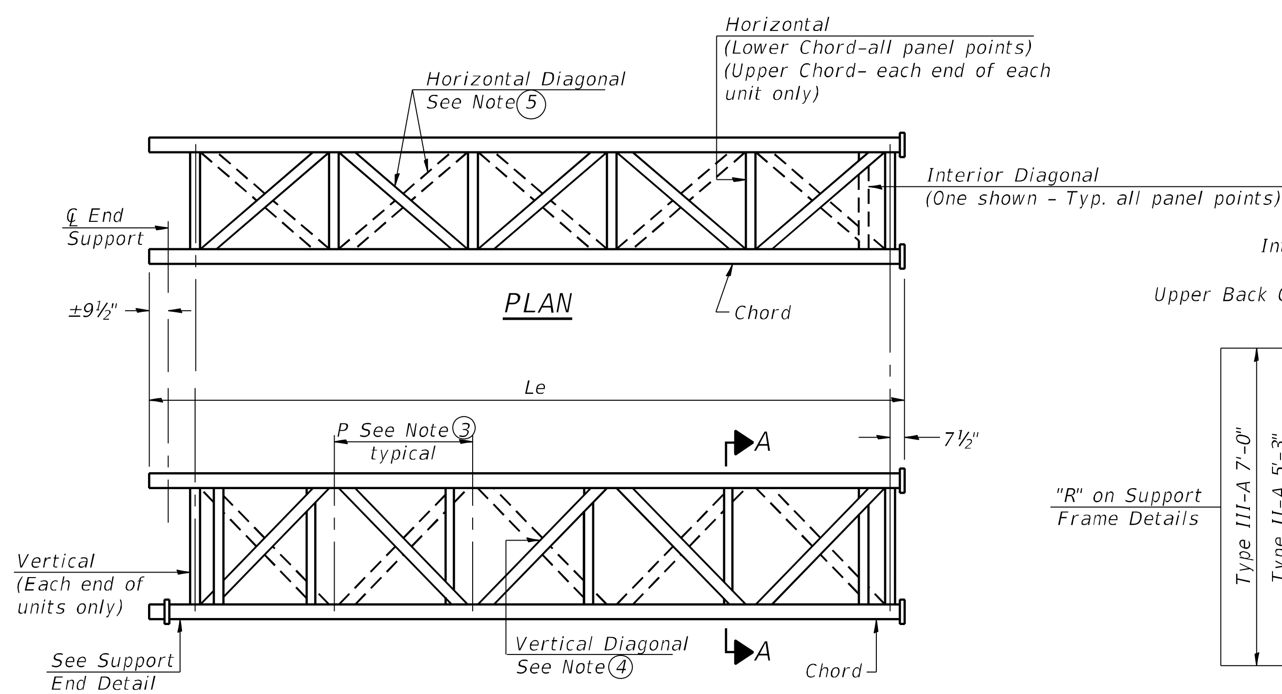
SUPPORT END DETAIL FOR EXTERIOR UNIT



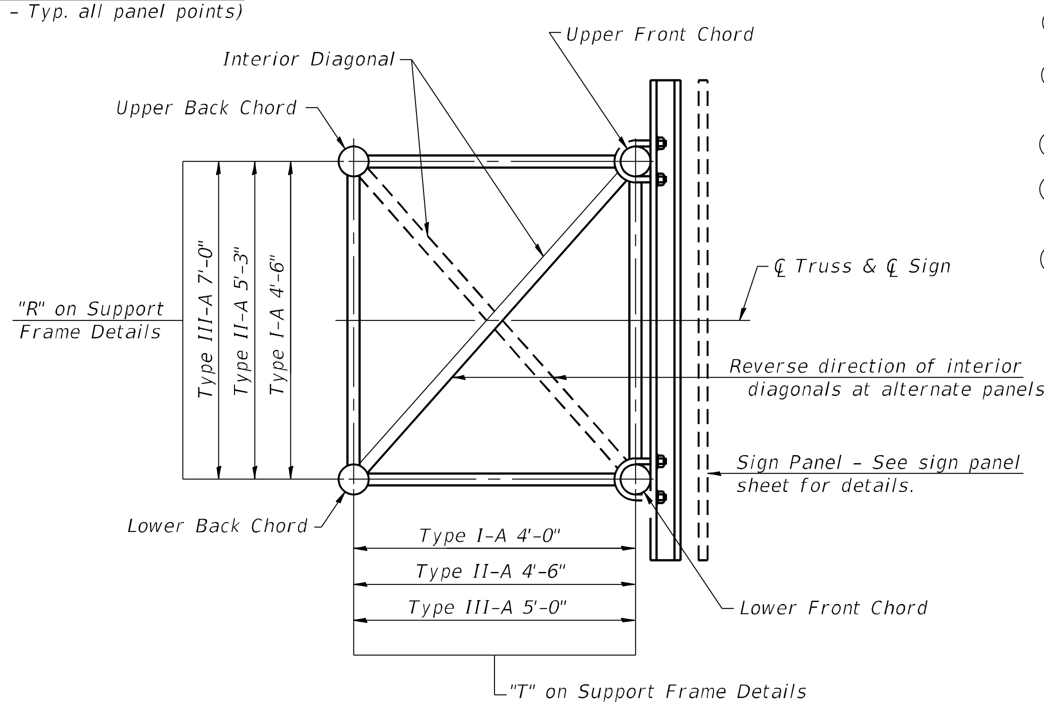
TYPICAL JOINT DETAILS



DETAIL A



ELEVATION
TYPICAL EXTERIOR UNIT
Even or odd number of panels/exterior units allowed.



SECTION A-A

1. Contractor may alternatively use standard aluminum drive-fit cap to close end. ½" Ø drain hole in end plate/drive-fit cap. (Typ. at ends of all chords)
2. 5½" end dimension may vary by ±1" to provide uniform panel spacing (P).
3. Panel spacing (P) shall be uniform for entire truss and between 4'-0" and 5'-0" for Type I-A or 4'-0" and 5'-6" for Types II-A and III-A.
4. Vertical Diagonals in front and back face shall alternate.
5. Hidden lines show wind bracing alternates direction between planes of top and bottom chords.
6. All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a ¾" minimum to 1½" maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.

OS-A-2 2-17-2017

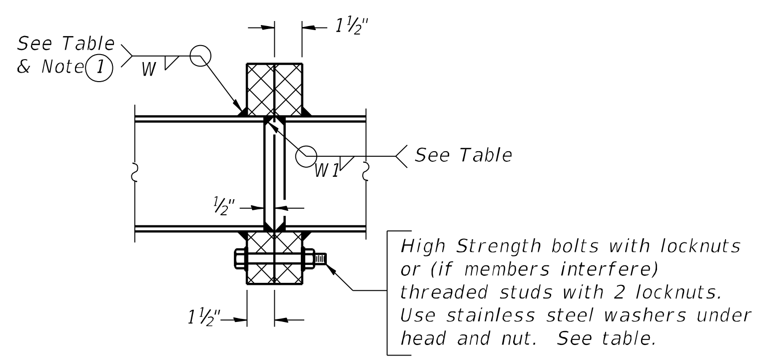
HNTB	USER NAME = hregan	DESIGNED - HER	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES - ALUMINUM TRUSS DETAILS FOR TRUSS TYPES I-A, II-A AND III-A
		DRAWN - HER	REVISED -		
	PLOT SCALE = 8.333 ' / in.	CHECKED - MAM	REVISED -		
	PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -		SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	215
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-signOS-02.dgn

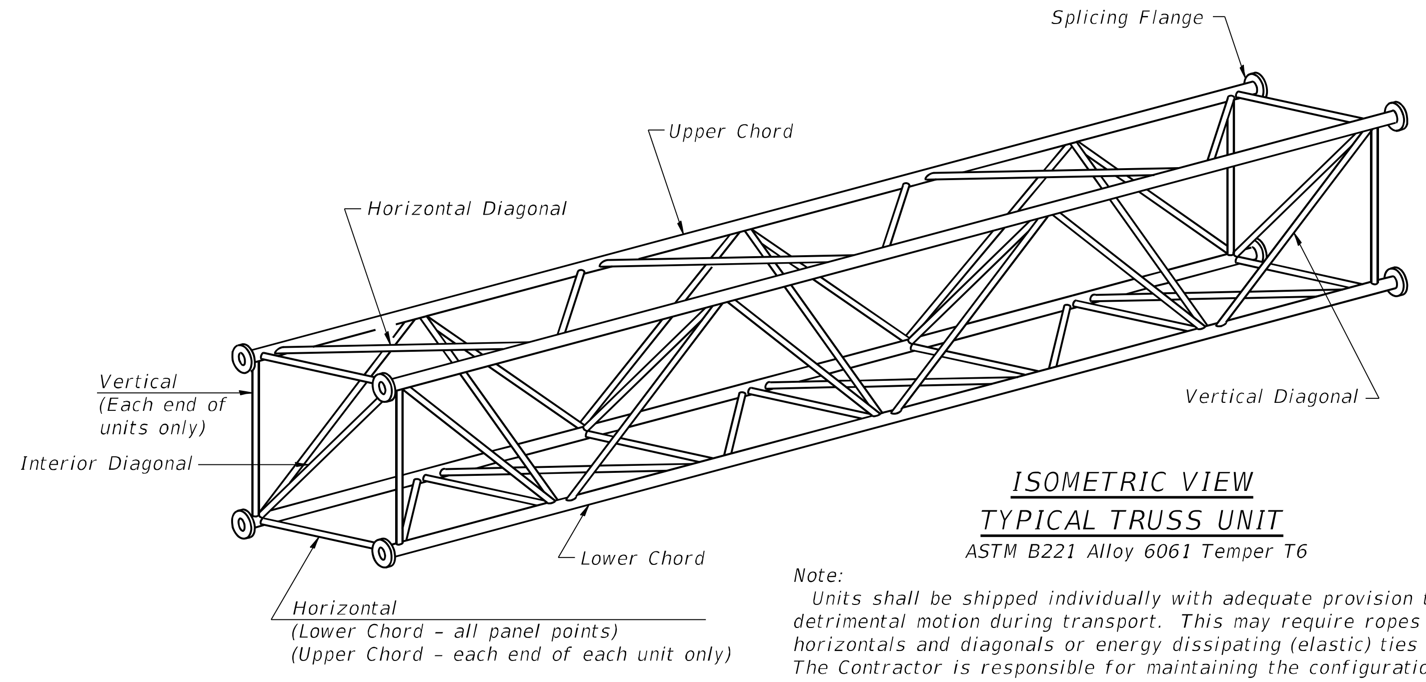
TRUSS UNIT TABLE

Structure Number	Station	Design Truss Type	Exterior Units (2) No. Panels per Unit	Exterior Units (2) Unit Lgth.(Le)	Exterior Units (2) Panel Lgth.(P)	Interior Unit No. Req'd.	Interior Unit No. Panels per Unit	Interior Unit Unit Lgth.(Li)	Interior Unit Panel Lgth.(P)	Upper & Lower Chord O.D.	Upper & Lower Chord Wall	Verticals; Horizontals; Vertical,Horizontal, and Interior Diagonals O.D.	Verticals; Horizontals; Vertical,Horizontal, and Interior Diagonals Wall	Camber at Midspan	Splicing Flange Bolts No./Splice	Splicing Flange Bolts Dia.	Splicing Flange Weld Sizes W	Splicing Flange Weld Sizes W1	Splicing Flange A	Splicing Flange B
1S099I080L133.5	742+60	I-A	6	29'-1 1/2"	4'-6 1/2"	1	6	28'-6"	4'-6 1/2"	5"	5/16"	2 1/2"	5/16"	2 1/2"	6	7/8"	5/16"	1/4"	8 3/4"	11 3/4"
1S099I080L133.7	754+00	I-A	7	35'-8 1/2"	4'-10"	-	-	-	-	5"	5/16"	2 1/2"	5/16"	1 3/4"	6	7/8"	5/16"	1/4"	8 3/4"	11 3/4"



SECTION B-B

(1) Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining welds are made after disassembly. Adjacent flanges shall be "match marked" to insure proper field assembly.

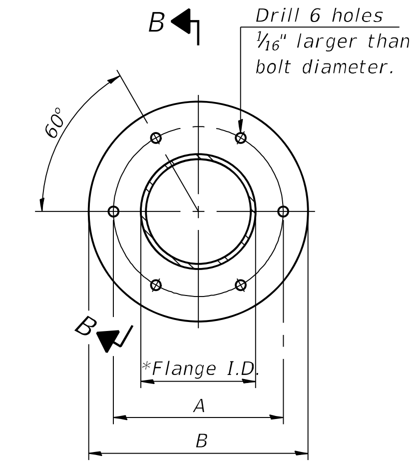


ISOMETRIC VIEW

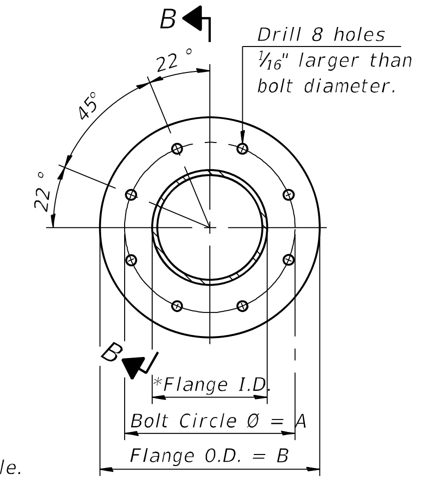
TYPICAL TRUSS UNIT

ASTM B221 Alloy 6061 Temper T6

Note:
Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection of the units.



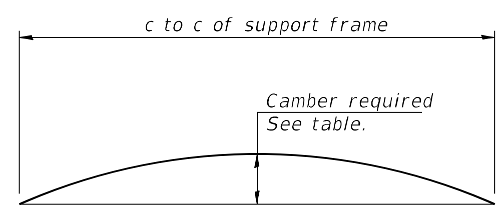
TRUSS TYPES I-A, II-A, & III-A



TRUSS TYPES II-A & III-A

SPLICING FLANGES

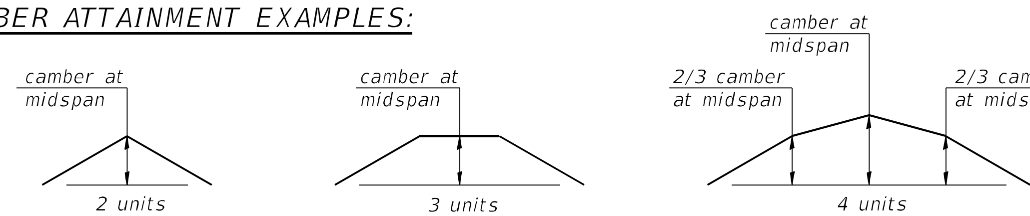
ASTM B221, Alloy 6061-T6
or ASTM B209, Alloy 6061-T651
*To fit O.D. of Chord with maximum gap of 1/16".



CAMBER DIAGRAM

Camber curve shown is theoretical. Actual camber attained by slope changes at splices between units.

CAMBER ATTAINMENT EXAMPLES:



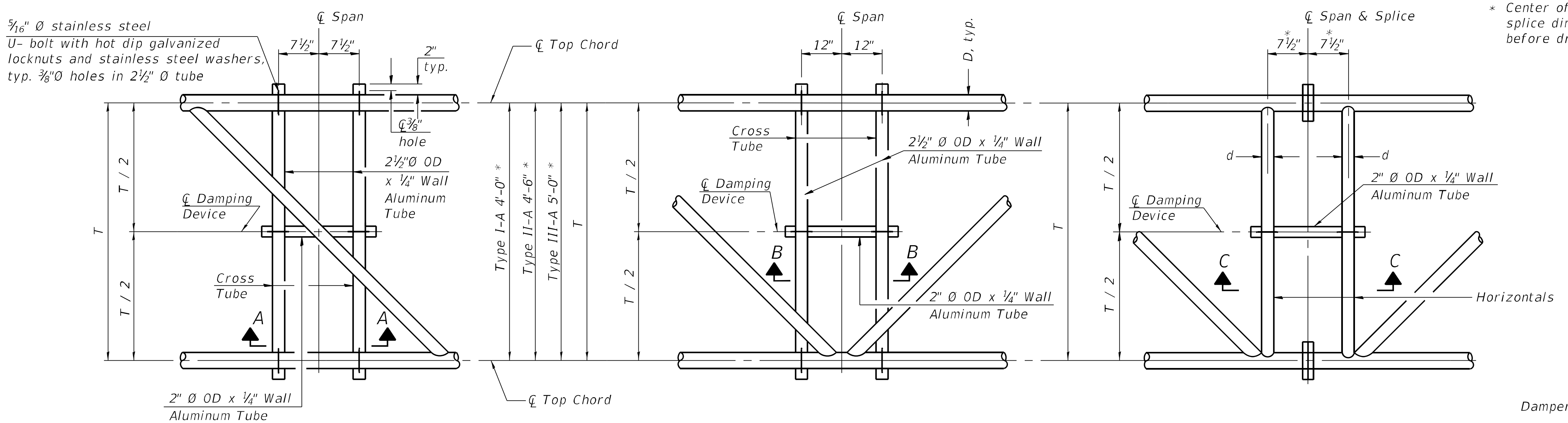
Camber shown is for fabrication only, measured with truss fully supported. (No-load condition)

OS4-A-2 2-17-2017

HNTB	USER NAME = hregan	DESIGNED - HER	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES – ALUMINUM TRUSS DETAILS FOR TRUSS TYPES I-A, II-A AND III-A	F.A.I. RTE. 80 / SECTION 2013-009B / COUNTY WILL / TOTAL SHEETS 465 / SHEET NO. 216
		DRAWN - HER	REVISED -			CONTRACT NO. 60W35
	PLOT SCALE = 8.333 ' / in.	CHECKED - MAM	REVISED -		SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT
	PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -			

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35.WB\811.02 Civil\Sheet\D160W35-sht-signOS-03.dgn

* Center of horizontal to center of splice dimension may vary. Verify before drilling holes in mounting tube.



PLAN DETAIL "A"
℄ Span between Panel Points

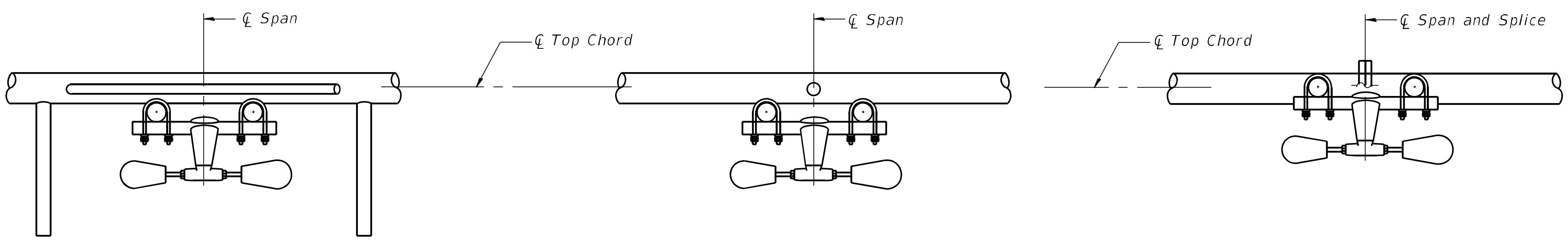
PLAN DETAIL "B"
℄ Span at Panel Point

PLAN DETAIL "C"
℄ Span at ℄ Chord Splice

NOTES

Damper: One damper per truss. (31 lbs. minimum Stockbridge-Type Aluminum - 29" minimum between ends of weights) Cost included in Overhead Sign Structure...

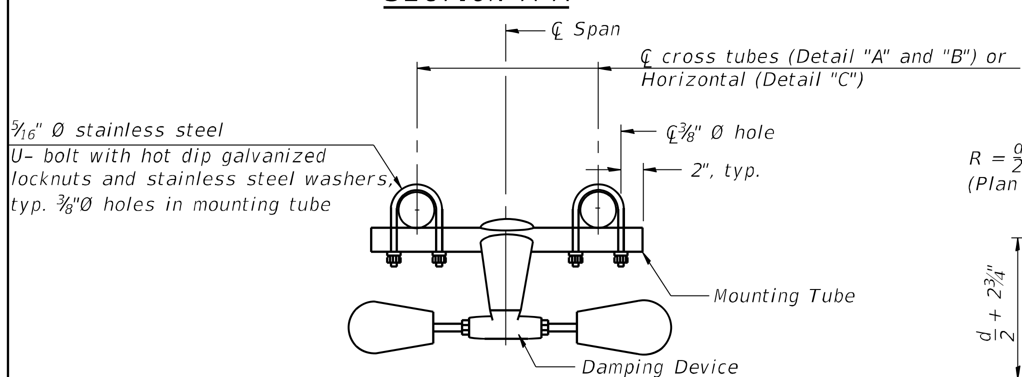
Materials: Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure...



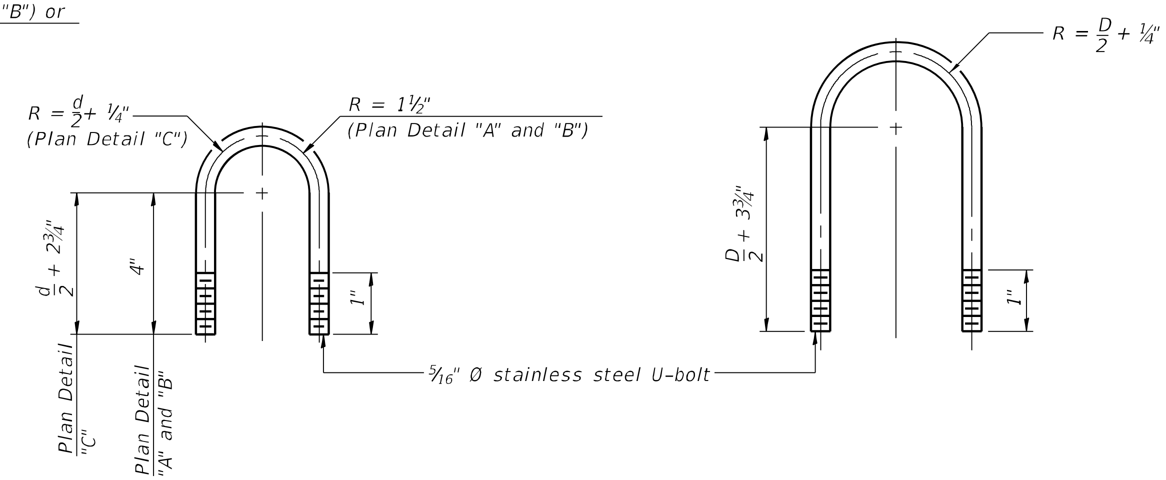
SECTION A-A

SECTION B-B

SECTION C-C

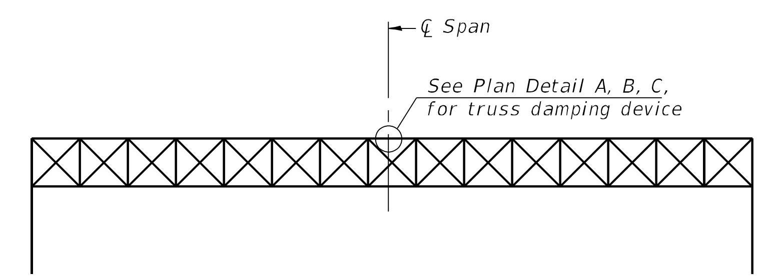


TRUSS DAMPING
DEVICE CONNECTION DETAIL
(Typical)



DAMPING DEVICE MOUNTING
TUBE U-BOLT DETAIL
(Typical)

TOP CHORD TO CROSS TUBE
U-BOLT DETAIL
(Typical - Detail "A" and "B")



ELEVATION
Aluminum Overhead
Sign Truss

OS-A-D 2-17-2017

HNTB

USER NAME = hregan	DESIGNED - HER	REVISED -
	DRAWN - HER	REVISED -
PLOT SCALE = 8.333 ' / in.	CHECKED - MAM	REVISED -
PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURE
DAMPING DEVICE

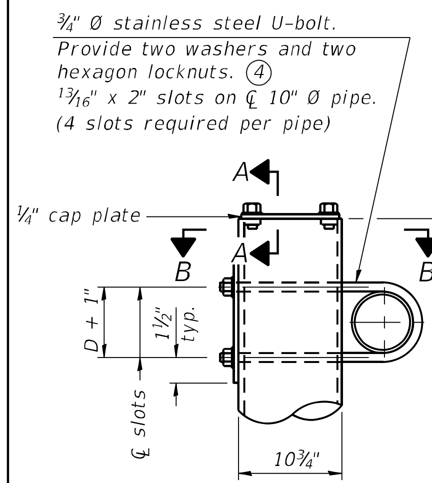
SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	217

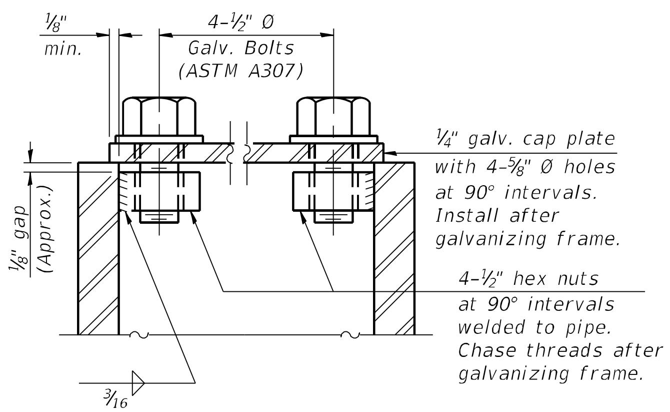
CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-signOS-04.dgn

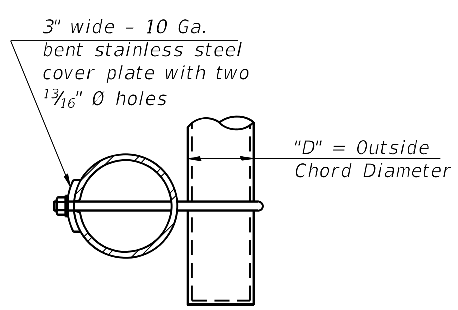


DETAIL A

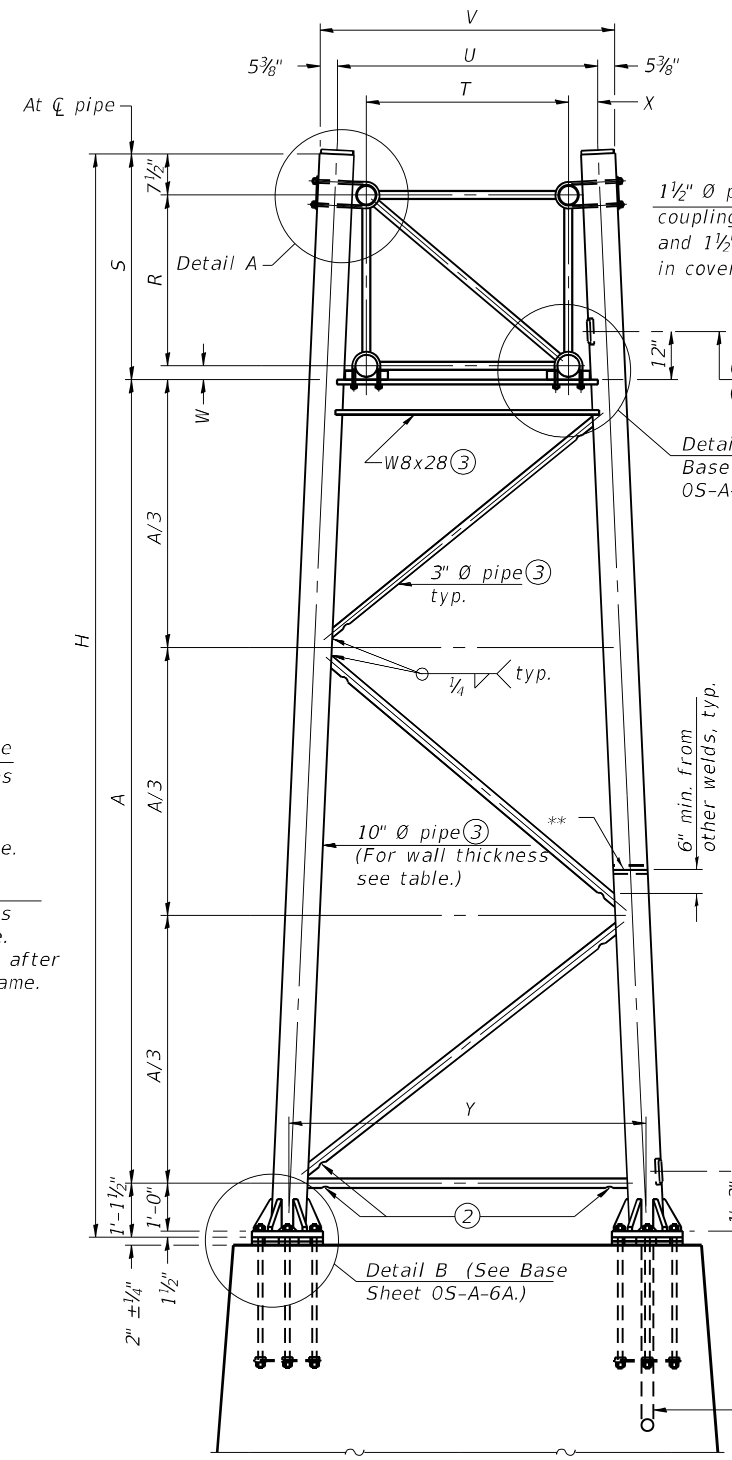


SECTION A-A

As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.

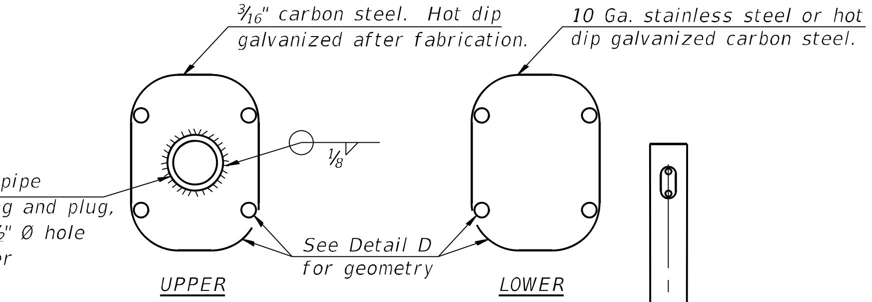


SECTION B-B

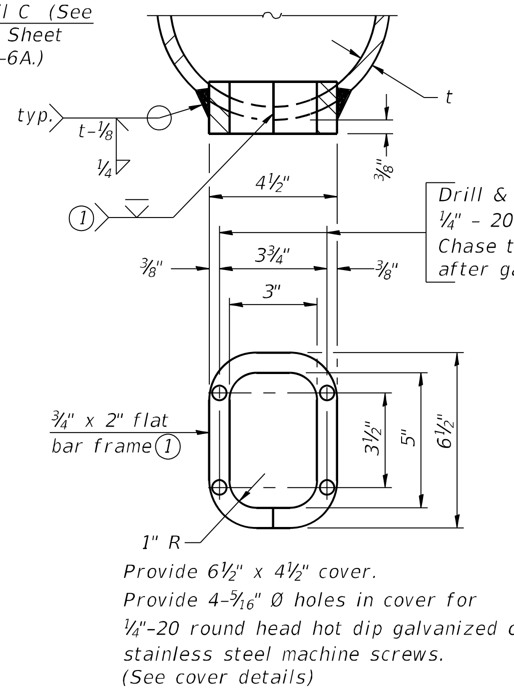


For Foundation Details, see base sheet OS-F3 (Spread Footing) or OS4-F3 (Drilled Shaft).

SIDE ELEVATION

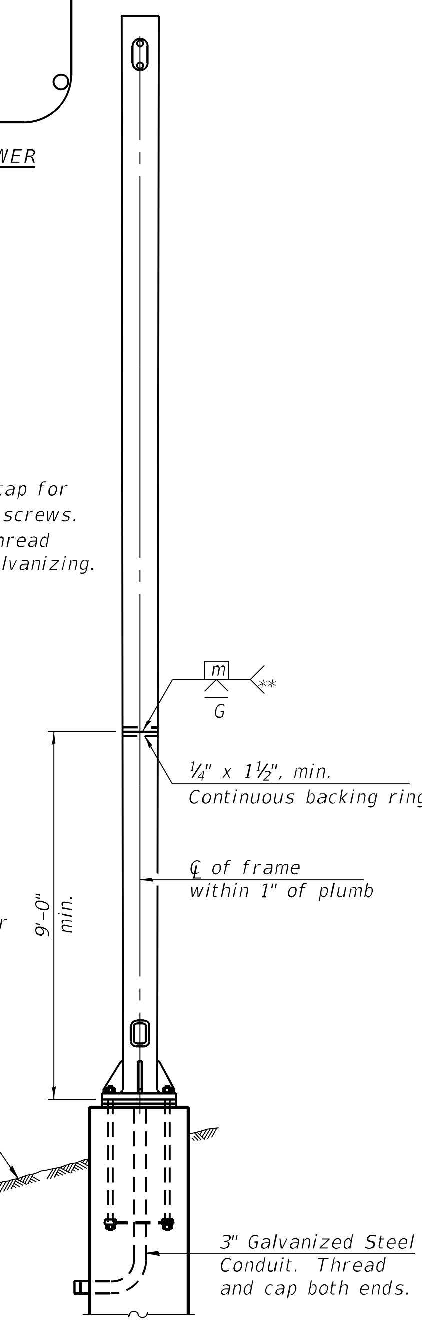


HANDHOLE COVERS



Provide 6½" x 4½" cover.
Provide 4-⁵⁄₁₆" Ø holes in cover for ¼"-20 round head hot dip galvanized or stainless steel machine screws.
(See cover details)

DETAIL D



END ELEVATION

Support Design Loads: See Base Sheet OS-A-1 for design and loading criteria.
Load combinations checked include deadload plus:
a) 100% wind normal to sign, 20% parallel to sign
b) 60% wind normal to sign, 30% parallel to sign

1. In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500μ in or less.
2. Galvanizing vent holes of adequate size shall be provided on underside at each end of bracing pipes. Alternately, holes may be provided in wall of pipe column. All vent holes shall be drilled and de-burred, typ.
3. Steel pipe, plate, carbon steel handhole covers and rolled sections shall be hot dip galvanized after fabrication. Painting is not permitted. See Base Sheet OS-A-1.
4. See General Notes for fasteners.
5. Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.
6. "H" based on 15'-0" or actual sign height, whichever is greater.

Structure Number	Station	Support		Truss Type	Pipe Wall Thickness	H (6)	A
		Left	Right				
1S099I080L133.5	742+60	X		I-A	0.279"	24'-3"	5'-10 2/3"
			X	I-A	0.279"	23'-9"	5'-8 2/3"
1S099I080L133.7	754+00	X		I-A	0.279"	23'-0"	5'-5 2/3"
			X	I-A	0.279"	28'-0"	7'-1 2/3"

Truss Type	Dimensions							
	R	S	T	U	V	W	X	Y
I-A	4'-6"	5'-5½"	4'-0"	5'-6"	6'-4¾"	4"	9"	8'-3"
II-A (5)	5'-3"	6'-3¼"	4'-6"	6'-1"	6'-11¾"	4¾"	9½"	8'-3"

10" Ø PIPE TRUSS SUPPORT FRAME

** One butt welded joint is allowed only on one post per support frame. If used, weld procedure must be pre-approved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

OS-A-6 2-17-2017

HNTB

USER NAME = hregan	DESIGNED - HER	REVISED -	
	DRAWN - HER	REVISED -	
PLOT SCALE = 8.333 ' / in.	CHECKED - MAM	REVISED -	
PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME FOR ALUMINUM TRUSS

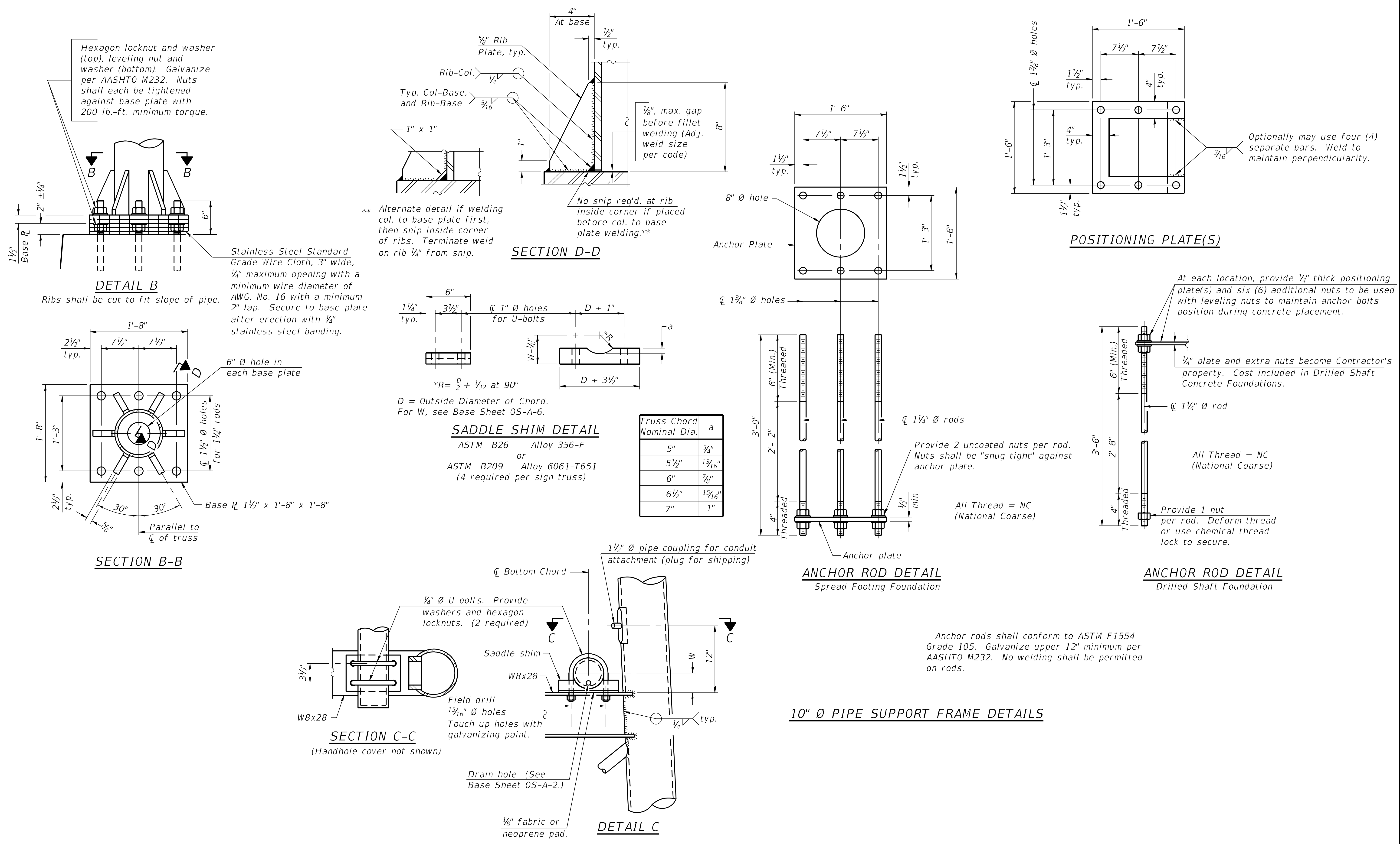
SCALE: N.T.S. | SHEET OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	218

CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-signOS-05 .dgn



Truss Chord Nominal Dia.	a
5"	3/4"
5 1/2"	13/16"
6"	7/8"
6 1/2"	15/16"
7"	1"

OS-A-6A 2-17-2017

HNTB

USER NAME = hregan	DESIGNED - HER	REVISED -
	DRAWN - HER	REVISED -
PLOT SCALE = 8.333 ' / in.	CHECKED - MAM	REVISED -
PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME DETAILS - ALUMINUM TRUSS

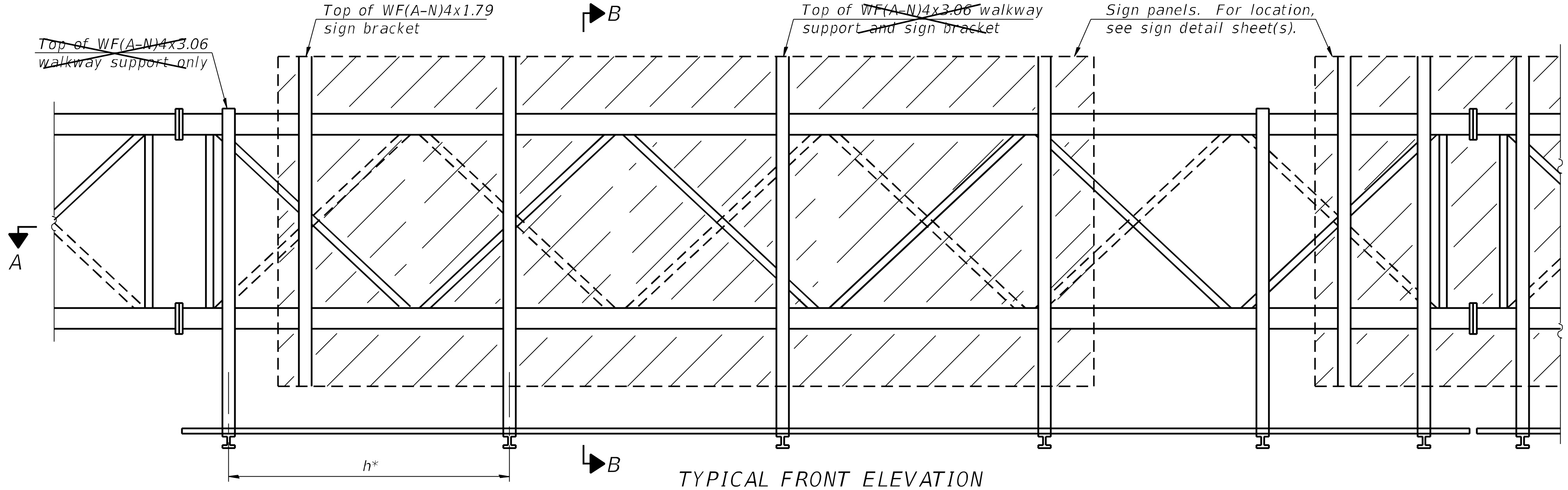
SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	219

CONTRACT NO. 60W35

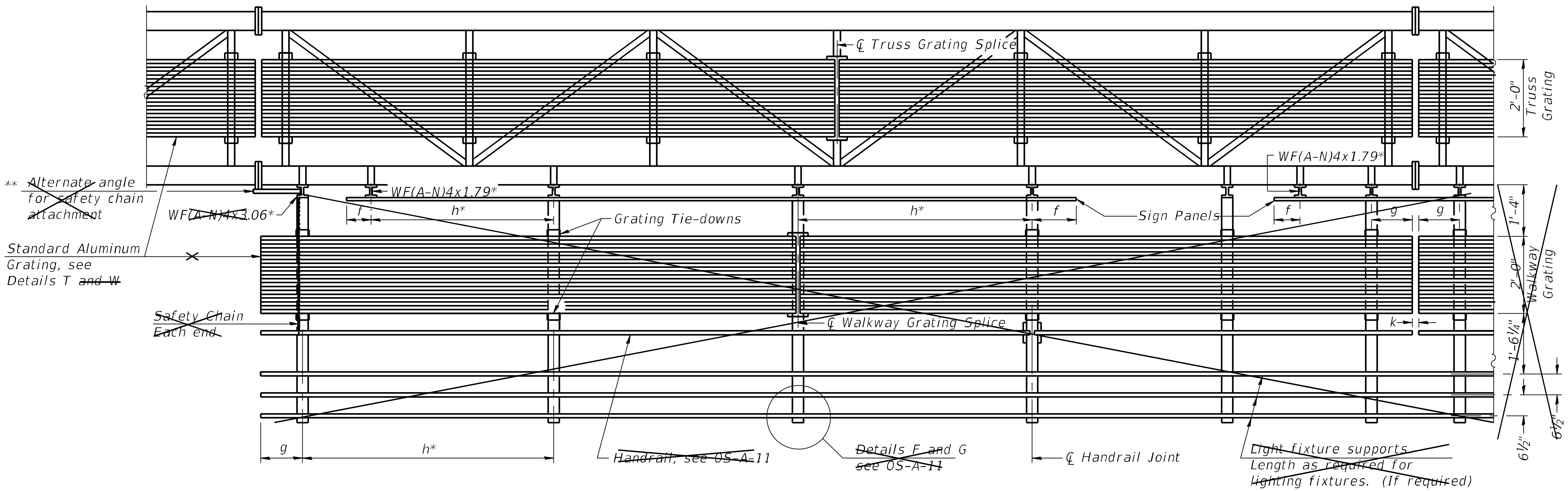
ILLINOIS FED. AID PROJECT

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-signOS-06.dgn



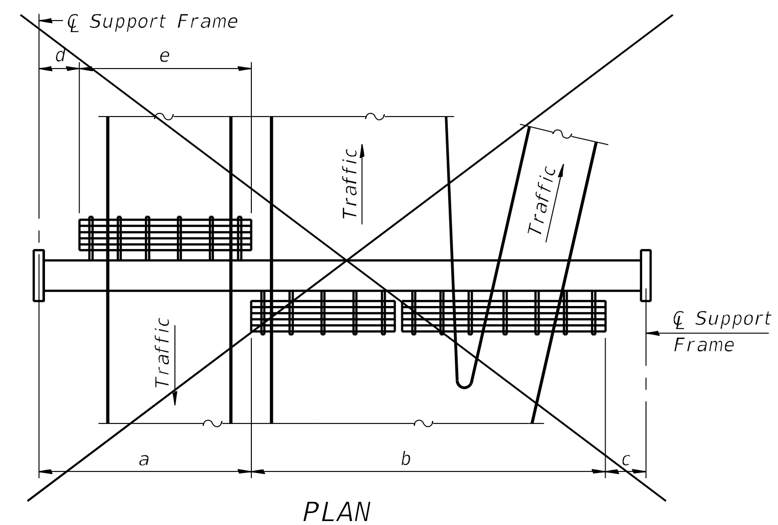
TYPICAL FRONT ELEVATION

~~With lights and handrail omitted for clarity.~~
For Section B-B, see Base Sheet OS-A-10.



SECTION A-A

~~Handrail an~~d walkway shall span a minimum of three brackets between splices and/or gap joints.
Place all sign and walkway brackets as close to panel points as practical.
~~Handrail joints, grating, and light support splices placed as needed.~~



PLAN
WALKWAY AND HANDRAIL SKETCH

(Road plan beneath truss varies)

BRACKET TABLE

WF(A-N)4x1.79 or WF(A-N)4x3.06
ASTM B308, Alloy 6061-T6

Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

Notes:

* Space ~~walkway brackets WF(A-N)4x3.06 and~~ sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:

f = 12" maximum, 4" minimum (End of sign to ℄ of nearest bracket)
g = 12" maximum, 4" minimum (End of walkway grating to ℄ of nearest support bracket)
h = 6'-0" maximum (℄ to ℄ sign an~~d/or walkway~~ support brackets, WF(A-N)4x1.79 o~~r WF(A-N)4x3.06)~~
k = 2" maximum gap between adjacent walkway grating sections ~~and handrail ends~~

** ~~If walkway bracket at safety chain location is behind sign, add angle to bracket, see Alternate Safety Chain Attachment on Base Sheet OS-A-11.~~

For Details T ~~and W,~~ Section B-B and Grating Splice Details see Base Sheet OS-A-10.
F~~or Handrail Details see Base Sheet OS-A-11~~.

Structure Number	Station	a	b	c	d	e	Walkway Grating ~~and Handrail~~ Lengths
1S099I080L133.5	742+60						85'
1S099I080L133.7	754+00						75'

Truss grating to facilitate inspection shall run full length (center to center of support frames) ±12" on overhead trusses. Cost of truss grating is included in "Overhead Sign Structure".

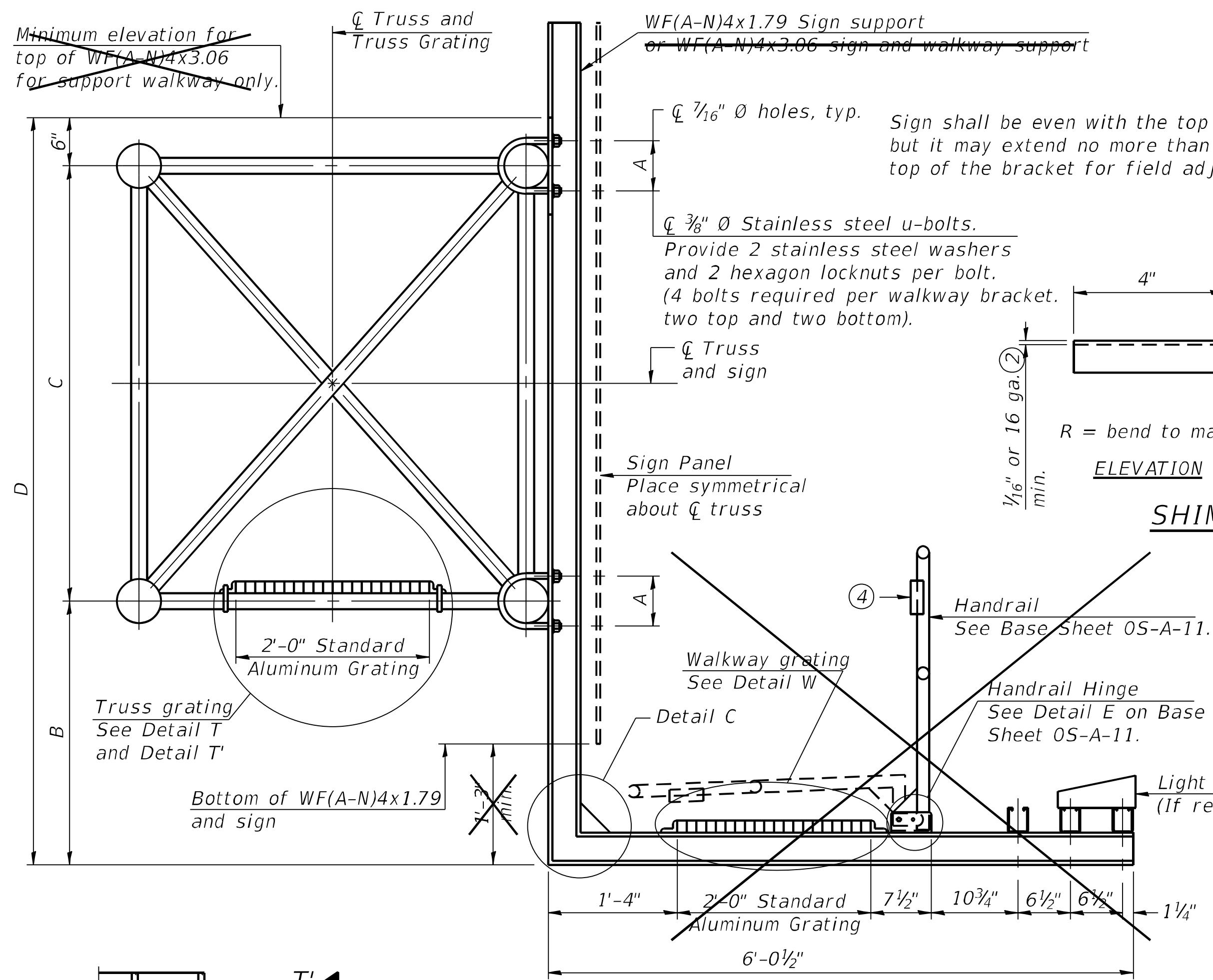
Walkway and Truss Grating width dimensions are nominal and may vary ±½" based on available standard widths.

OS-A-9 2-17-2017

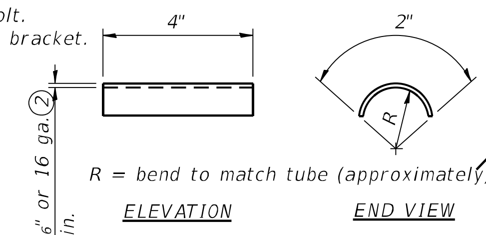
HNTB	USER NAME = hregan	DESIGNED - HER	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES ALUMINUM WALKWAY DETAILS
		DRAWN - HER	REVISED -		
	PLOT SCALE = 8.333 ' / in.	CHECKED - MAM	REVISED -		
	PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -		SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	220
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

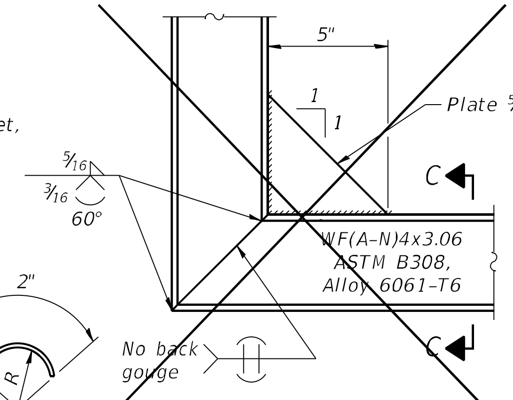
FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-signOS-07.dgn



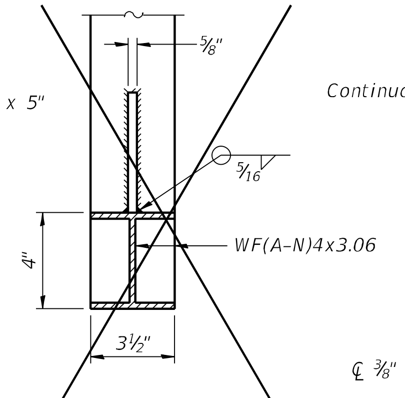
SECTION B-B



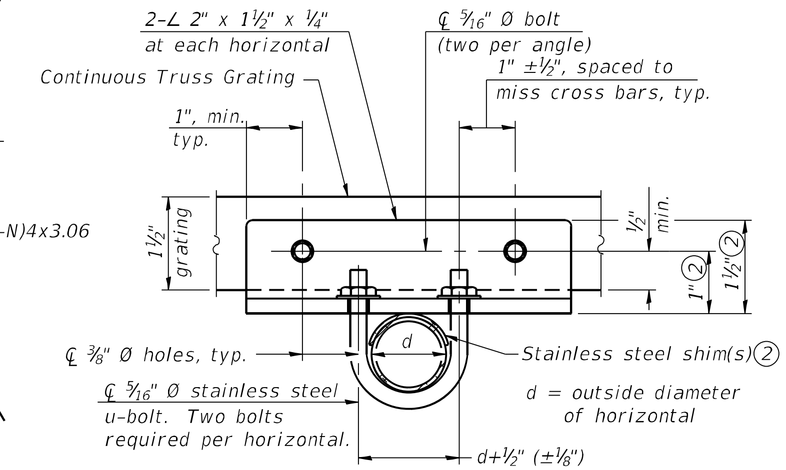
SHIM DETAIL



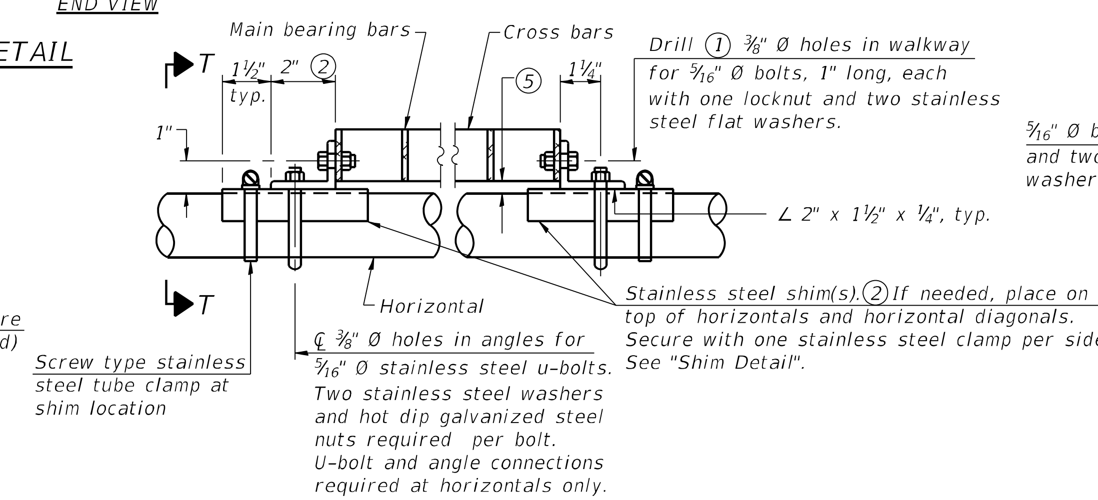
DETAIL C



SECTION C-C

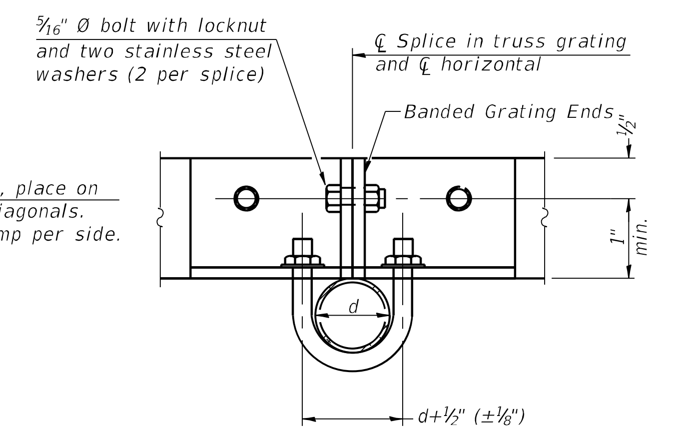


SECTION T-T

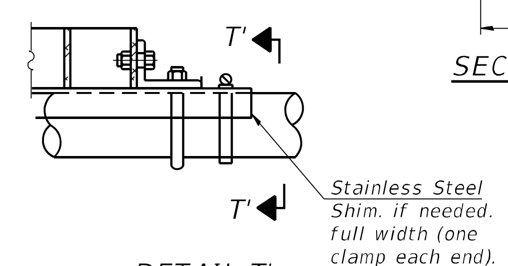


DETAIL T

(Continuous Truss grating)



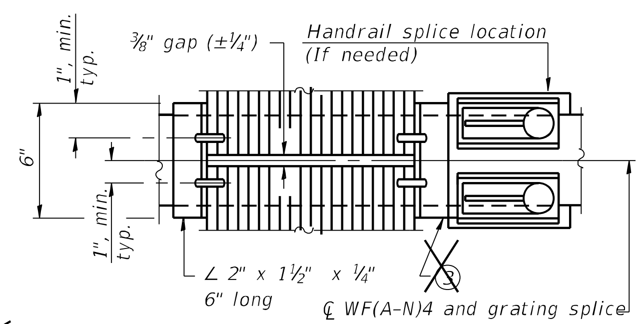
SECTION T'-T'



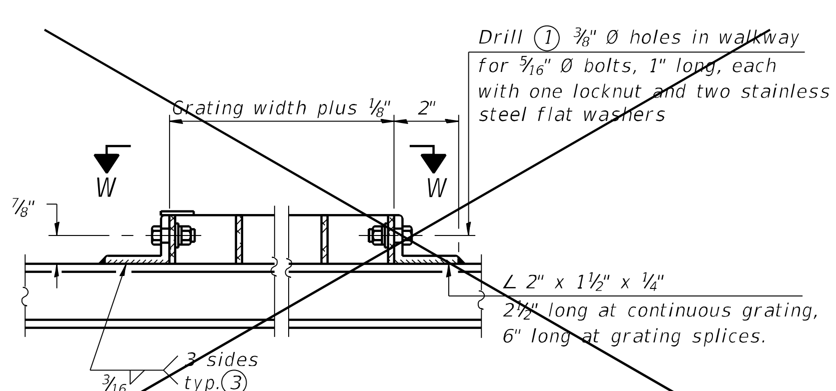
DETAIL T'

(Truss grating splice)

Details not shown same as Detail T.
Alternate materials may be used subject to the Engineer's review and approval.

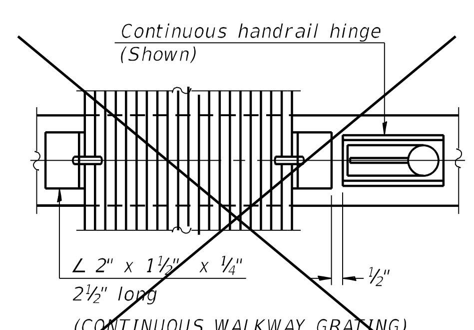


(AT WALKWAY GRATING SPLICE)



DETAIL W

(Walkway grating)



SECTION W-W

SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars shall be 3/16" x 1½" on 1 3/16" centers and conform to ASTM B221 Alloy 6061-T6.

Cross bars shall be 3/16" x 1½" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

OR

Aluminum Grating with modified "t" sections for main bearing bars shall meet the following requirements:

Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 $in.^3$ per bar, a depth of 1½", spaced on 1 3/16" centers.

Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.

Structure Number	Station	A	6 B	C	6 D
1S099I080L133.5	742+60	5 1/2"	5'-0"	4'-6"	10'-0"
1S099I080L133.7	754+00	5 1/2"	5'-0"	4'-6"	10'-0"

1 Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.

2 Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.

3 If ~~Handrail joint present, weld angle to~~ WF(A-N)4 and ¼" ~~extension bars. (See Base Sheet OS-A-11.)~~

4 ~~℞ ⅛" x ½" x 2" welded to handrail posts~~ to protect ~~locations that contact grating.~~

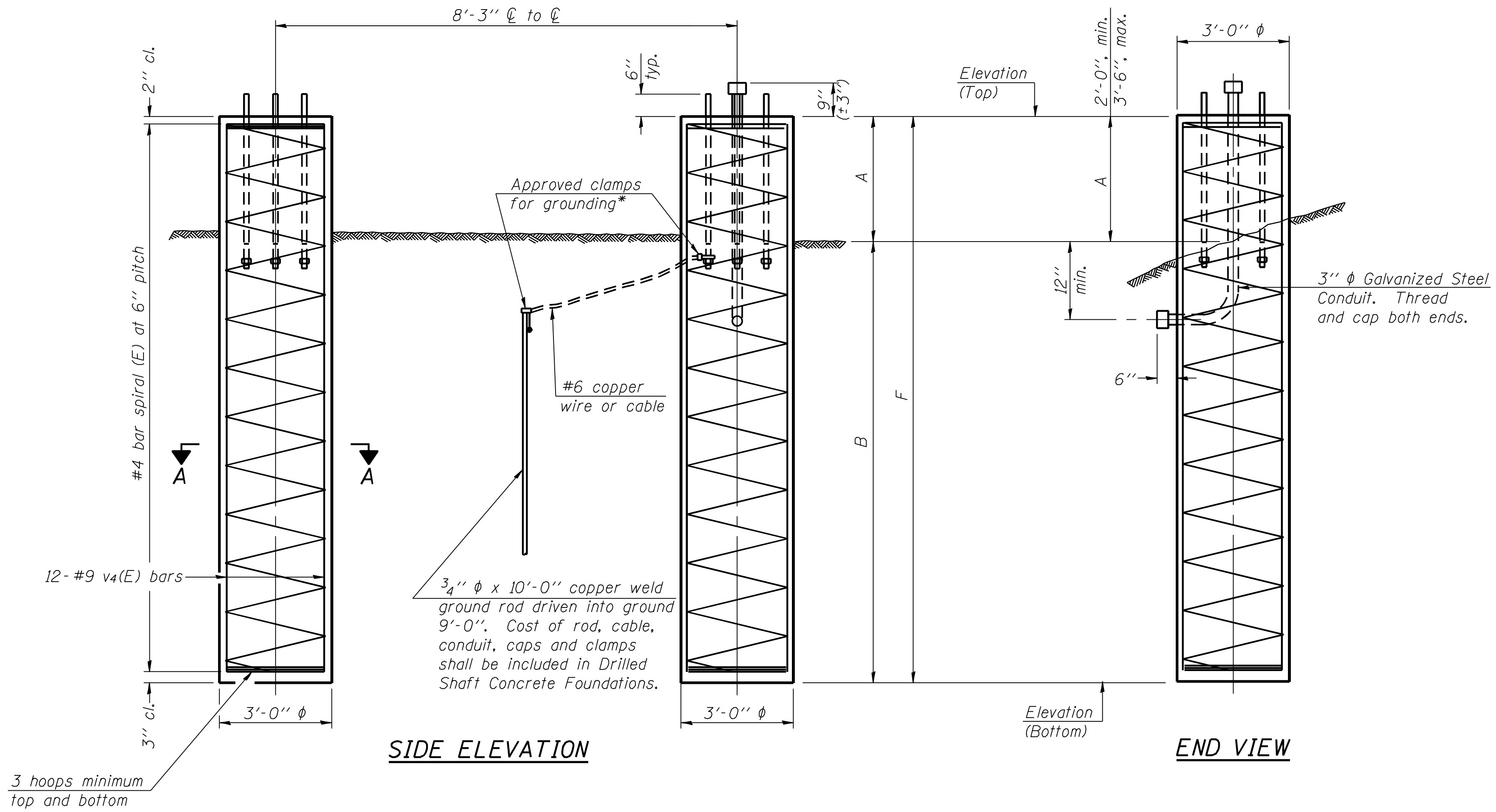
5 Tube to grating gap may vary from 0 to ½", max. to align walkway, allow for camber, etc.

6 Based on actual height of tallest sign given on OS-A-1.

OS-A-10 2-17-2017

BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
v4(E)	24	#9	F less 5''	——
#4 bar spiral (E) - see Side Elevation				



SIDE ELEVATION

END VIEW

NOTES:

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12'' by the Contractor, ''as-built'' plans shall be prepared and submitted to the District Bureau of Operations for future reference.

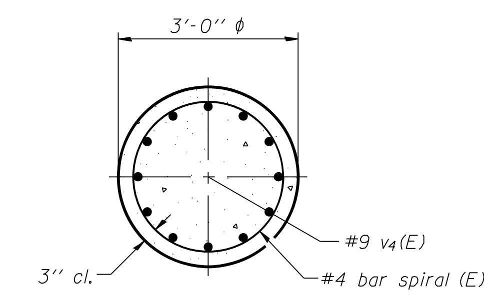
No sonotubes or decomposable forms shall be used below the lower conduit entrance.

Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

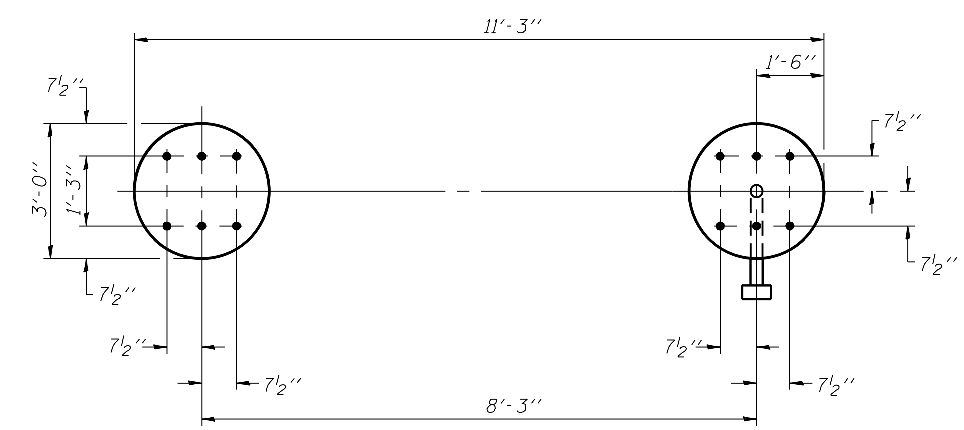
Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6'' below finished ground line. Cost included in Drilled Shaft Concrete Foundation.



SECTION A-A



PLAN

For anchor rod size and placement, see Support Frame Detail Sheet.

* Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.

DETAILS FOR 10'' ϕ SUPPORT FRAME
TYPE I-A or II-A TRUSS

Structure Number	Station	Left Foundation					Right Foundation					Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	A	B	F	Elevation Top	Elevation Bottom	A	B	F	
■ IS099I080L133.7	754+00						558.58	569.33	2'-9"	16'-6"	19'-3"	10.1

■ Left Foundation was previously constructed in Contract 60W34

OS4-F3 8-21-13

HNTB

USER NAME = hregan	DESIGNED - HER	REVISED -	
	DRAWN - HER	REVISED -	
PLOT SCALE = 8.333 ' / in.	CHECKED - MAM	REVISED -	
PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
DRILLED SHAFT DETAILS

SCALE: N.T.S. | SHEET OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	222

CONTRACT NO. 60W35

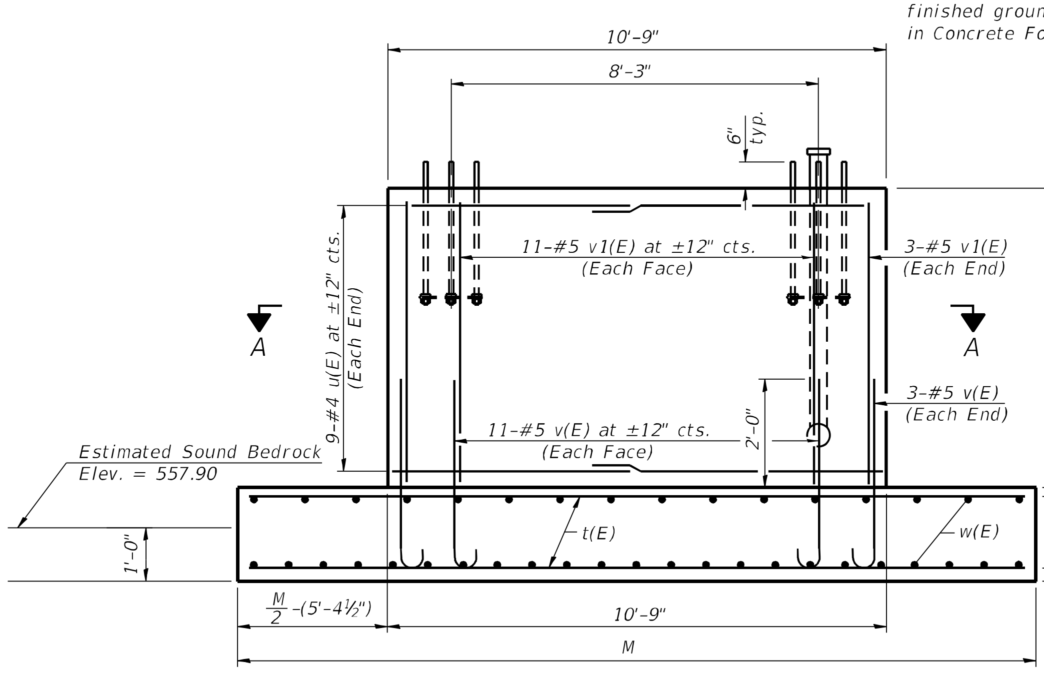
ILLINOIS FED. AID PROJECT

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-signOS-09.dgn

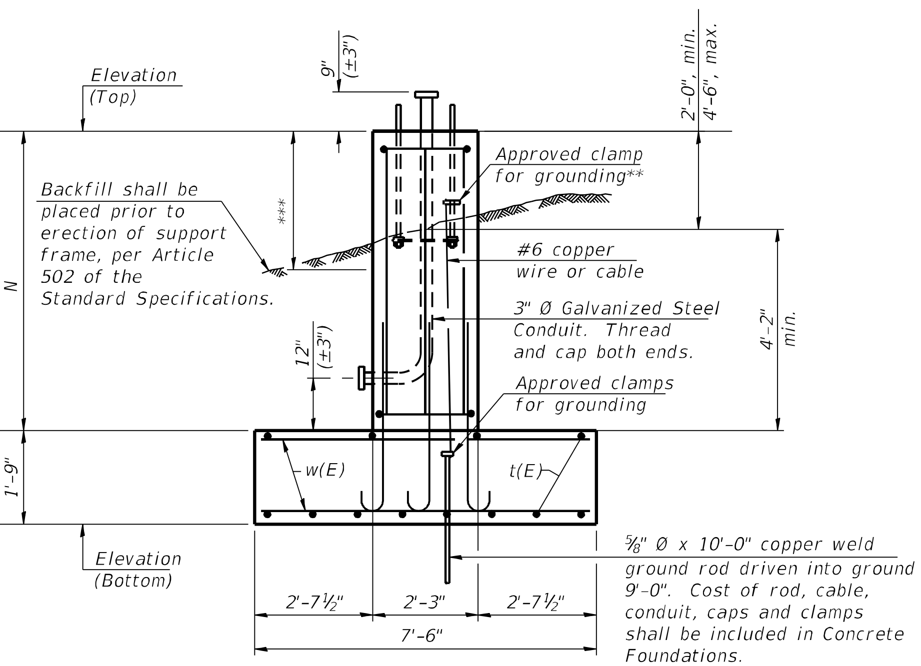
For anchor rod size and placement, see Support Frame Detail Sheet.

** Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.

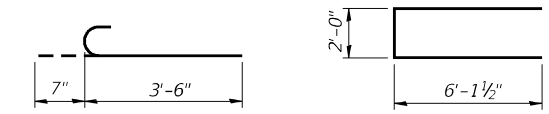
*** A normal surface finish followed by a Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Concrete Foundations.



SIDE ELEVATION



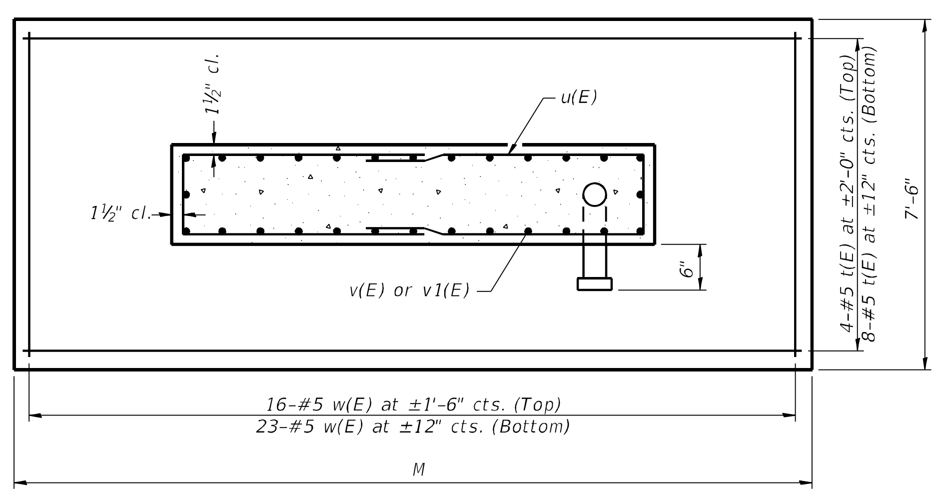
END ELEVATION



BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
t(E)	12	#5	*	
u(E)	18	#4	14'-3"	
v(E)	28	#5	4'-1"	
v1(E)	28	#5	*	
w(E)	39	#5	7'-3"	

*Length of t(E) bar = (Dim. M) - 6"
v1(E) bar = (Dim. N) - 3"



SECTION A-A

Structure Number	Station	Left Foundation				Right Foundation				Class SI Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	N	M	Elevation Top	Elevation Bottom	N	M	
■ 1S099I080L133.5	742+60					568.79	556.90	10.14'	21'-6"	19.6

■ Left Foundation was previously constructed in Contract 60W34

Note:
The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.0 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.
During construction, if footing length or width or wall height change by more than 12", or if reinforcement is changed, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

DETAILS FOR 10" Ø SUPPORT FRAME

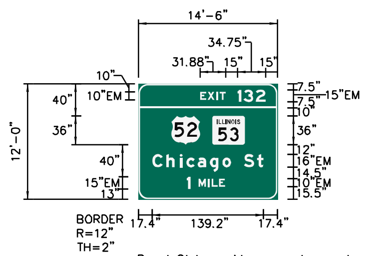
OS-F3 2-17-2017

HNTB	USER NAME = hregan	DESIGNED - HER	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES MEDIAN SUPPORT FOUNDATION DETAILS
		DRAWN - HER	REVISED -		
	PLOT SCALE = 8.792 ' / in.	CHECKED - MAM	REVISED -		
	PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -		SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	223
CONTRACT NO. 60W35				
ILLINOIS FED. AID PROJECT				

SIGN DETAIL

1:100



Panel Style: guide_exp_advance_b.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: guide_exp_advance_b.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

SIGN NUMBER	WB-TR-133M
WIDTH x HGHT.	14'-6" x 12'-0"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White

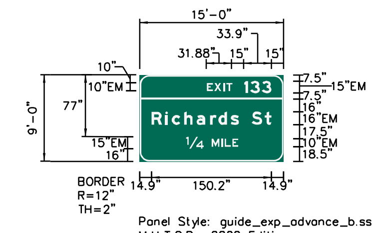
SYMBOL	ROT	X	Y	WID	HT
M1_4	0	41	68	36	36
M1-I100A-2-32-15D	0	92.5	68	36	36

LETTER POSITIONS (X)

										LENGTH	SERIES/SIZE
E	X	I	T								E 2000
78.2	87.5	98.7	102.6							31.9	10
1	3	2									EM 2000
125.1	132.5	147.8								34.8	15
C	h	i	c	a	g	o		S	t		EM 2000
17.4	34.8	51.8	60	74	89.6	105.1	116	132	148.3	139.2	16/12
1	M	I	L	E							EM 2000
60.5	75	87.1	91.9	100.9						47.8	15,10

SIGN DETAIL

1:100



Panel Style: guide_exp_advance_b.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: guide_exp_advance_b.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

SIGN NUMBER	WB-TR-133N
WIDTH x HGHT.	15'-0" x 9'-0"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White

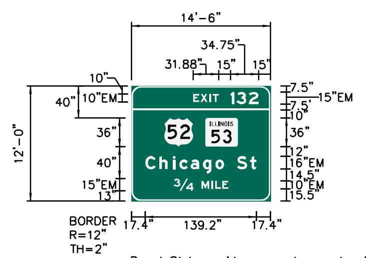
SYMBOL	ROT	X	Y	WID	HT

LETTER POSITIONS (X)

											LENGTH	SERIES/SIZE
E	X	I	T									EM 2000
84.2	93.3	104.5	108.7								31.9	10
1	3	3										EM 2000
131.1	138.5	152.9									33.9	15
R	i	c	h	a	r	d	s		S	t		EM 2000
14.9	32.2	40.3	55.9	71.4	88.3	98.7	113.9	124.5	140.5	156.8	150.2	16/12
1/4	M	I	L	E								EM 2000
58.3	90.3	102.4	107.2	116.2							65.3	15,10

SIGN DETAIL

1:100



Panel Style: guide_exp_advance_b.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: guide_exp_advance_b.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

SIGN NUMBER	WB-TR-133K
WIDTH x HGHT.	14'-6" x 12'-0"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White

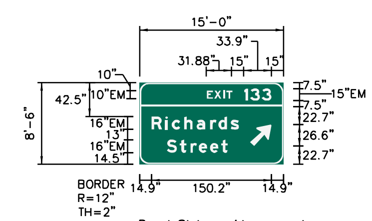
SYMBOL	ROT	X	Y	WID	HT
M1_4	0	41	68	36	36
M1-I100A-2-32-15D	0	92.5	68	36	36

LETTER POSITIONS (X)

										LENGTH	SERIES/SIZE
E	X	I	T								EM 2000
77.4	86.5	97.7	101.9							31.9	10
1	3	2									EM 2000
124.3	131.6	146.9								34.7	15
C	h	i	c	a	g	o		S	t		EM 2000
17.4	34.8	51.8	60	74	89.6	105.1	116	132	148.3	139.2	16/12
3/4	M	I	L	E							EM 2000
52.9	87.8	99.9	104.7	113.7						68.3	15,10

SIGN DETAIL

1:100



Panel Style: guide_exp_advance_a.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: guide_exp_advance_a.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

SIGN NUMBER	WB-TR-133L
WIDTH x HGHT.	15'-0" x 8'-6"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT
AR_Type A	315	138.5	22.7	21.5	33.8

LETTER POSITIONS (X)

								LENGTH	SERIES/SIZE
E	X	I	T						EM 2000
84.2	93.3	104.5	108.7					31.9	10
1	3	3							EM 2000
131.1	138.5	152.9						33.9	15
R	i	c	h	a	r	d	s		EM 2000
14.9	32.2	40.3	55.9	71.4	88.3	98.7	113.9	109.6	16/12
S	t	r	e	e	t				EM 2000
33.9	50.2	63.7	74.1	88.1	102.1			76.5	16/12

HNTB

USER NAME = hregan	DESIGNED - HER	REVISED -
	DRAWN - HER	REVISED -
PLOT SCALE = 20.000 ' / in.	CHECKED - MAM	REVISED -
PLOT DATE = 3/25/2022	DATE - 3/11/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB I-80 FROM GARDNER STREET TO ROWELL AVENUE
SIGNING DETAILS

SCALE: N.T.S. | SHEET OF SHEETS | STA. TO STA.

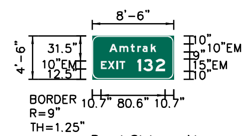
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	224

CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-signingdetail01.dgn

SIGN DETAIL
1:100



Panel Style: guide_exp_gore_minor.ssi
M.U.T.C.D.: 2009 Edition

SIGN NUMBER	WB-MP-133B
WIDTH x HGHT.	8'-6" x 4'-6"
BORDER WIDTH	1.25"
CORNER RADIUS	9"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT

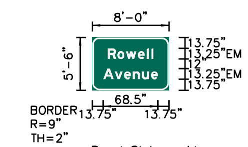
Panel Style: guide_exp_gore_minor.ssi
Dimensions are in Inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

							LENGTH	SERIES/SIZE
A	m	t	r	a	k			EM 2000
21.5	34	48	56.4	62.9	73.5		58.6	10/7.5
E	X	I	T	1	3	2		EM 2000
10.7	19.5	30.3	34.1	56.5	63.8	79.1	80.6	10,15

SIGN DETAIL
1:100



Panel Style: guide_exp_advance_b.ssi
M.U.T.C.D.: 2009 Edition

SIGN NUMBER	WB-WP-134A
WIDTH x HGHT.	8'-0" x 5'-6"
BORDER WIDTH	2"
CORNER RADIUS	9"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT

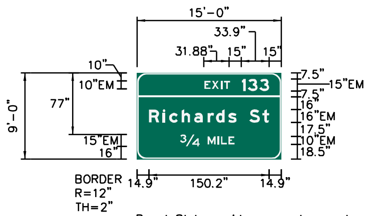
Panel Style: guide_exp_advance_b.ssi
Dimensions are in Inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

						LENGTH	SERIES/SIZE
R	o	w	e	l	l		EM 2000
19.3	31.4	42	57.1	68.3	74.1	57.5	13.3/9.9
A	v	e	n	u	e		EM 2000
13.7	28.1	39.8	50.8	62.5	73.5	68.5	13.3/9.9

SIGN DETAIL
1:100



Panel Style: guide_exp_advance_b.ssi
M.U.T.C.D.: 2009 Edition

SIGN NUMBER	WB-MP-134B
WIDTH x HGHT.	15'-0" x 9'-0"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT

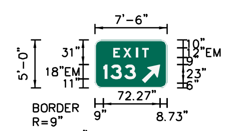
Panel Style: guide_exp_advance_b.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

											LENGTH	SERIES/SIZE
E	X	I	T									EM 2000
84.2	93.3	104.5	108.7								31.9	10
1	3	3										EM 2000
131.1	138.5	152.9									33.9	15
R	i	c	h	a	r	d	s		S	t		EM 2000
14.9	32.2	40.3	55.9	71.4	88.3	98.7	113.9	124.5	140.5	156.8	150.2	16/12
3/4	M	I	L	E								EM 2000
53.6	88.6	100.7	105.5	114.5							68.3	15,10

SIGN DETAIL
1:100



Panel Style: guide_fwy_gore.ssi
M.U.T.C.D.: 2009 Edition

SIGN NUMBER	WB-WB-133I
WIDTH x HGHT.	7'-6" x 5'-0"
BORDER WIDTH	1.25"
CORNER RADIUS	9"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT
Gore Arrow_2012	[illegible]	58.3	6	18.3	29.5

Panel Style: guide_fwy_gore.ssi
Dimensions are in Inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

				LENGTH	SERIES/SIZE
E	X	I	T		EM 2000
22.6	35.2	51.3	58.6	44.9	12
1	3	3			EM 2000
9	17.8	35.1		40.7	18

HNTB	USER NAME = hregan	DESIGNED - HER	REVISED -
		DRAWN - HER	REVISED -
	PLOT SCALE = 20.000 ' / in.	CHECKED - MAM	REVISED -
	PLOT DATE = 3/25/2022	DATE - 3/11/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB I-80 FROM GARDNER STREET TO ROWELL AVENUE
SIGNING DETAILS

SCALE: N.T.S. | SHEET OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	225

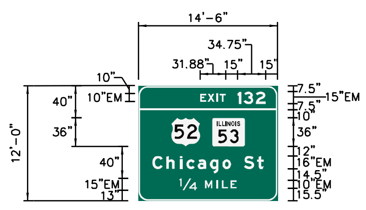
CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-signingdetail02.dgn

SIGN DETAIL

1:100



BORDER
R=12"
TH=2"

Panel Style: guide_exp_advance_b.ssi
M.U.T.C.D.: 2009 Edition

SIGN NUMBER	WB-MP-132C
WIDTH x HGHT.	14'-6" x 12'-0"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT
M1_4	0	41	68	36	36
M1-I100A-2-32-15D	0	92.5	68	36	36

Panel Style: guide_exp_advance_b.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

											LENGTH	SERIES/SIZE
E	X	I	T									EM 2000
77.4	86.4	97.7	101.9								31.9	10
1	3	2										EM 2000
124.3	131.6	146.9									34.7	15
C	h	i	c	a	g	o		S	t			EM 2000
17.4	34.8	51.8	60	74	89.6	105.1	116	132	148.3		139.2	16/12
1/4	M	I	L	E								EM 2000
51.2	83.2	97.7	105	115.4							71.6	15,10

SIGN DETAIL

1:100

BORDER
R=12"
TH=2"

Panel Style: guide_exp_recreational.ssi
M.U.T.C.D.: 2009 Edition

SIGN NUMBER	WB-MP-133C
WIDTH x HGHT.	12'-0" x 7'-0"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Brown
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT

Panel Style: guide_exp_recreational.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

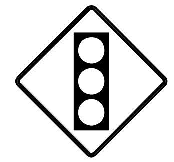
											LENGTH	SERIES/SIZE
C	h	i	c	a	g	o	l	a	n	d		EM 2000
14	27.1	39.8	45.9	56.5	68.1	79.7	91.6	97.7	110.5	122.1	116	12/9
S	p	e	e	d	w	a	y					EM 2000
27.6	41	51.6	62.2	72.7	84.1	98.8	110.2				92.8	12/9
E	X	I	T	2	2	3						EM 2000
30.9	39.7	50.5	54.3	76.7	92.1	106.7					88	10,15

W8-10P
24" X 18"

NAME	STATION
WB-TS-132E	723+30

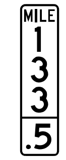
W8-5
48" X 48"

NAME	STATION
WB-TS-132F	723+30



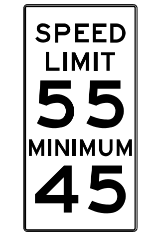
W3-3
48" X 48"

NAME	STATION
WB-WP-133H	109+00 RICH-C



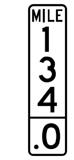
12" X 60"

NAME	STATION
WB-MP-133J	740+63



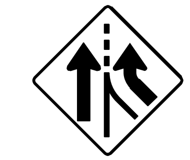
R2-4A
48" X 96"

NAME	STATION
WB-LP-132D	718+09
WB-WP-134C	785+16



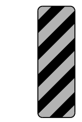
12" X 60"

NAME	STATION
WB-MP-133O	766+61



W4-3R
48" X 48"

NAME	STATION
WB-WP-133A	725+51



OM3-R
12" X 36"

NAME	STATION
WB-MP-132A	715+93

OM3-L
12" X 36"

NAME	STATION
WB-MP-132B	715+86

R5-1a
30" x 18"

NAME	STATION
WB-MP-133D	113+28 RICH-C
WB-MP-133E	113+28 RICH-C
WB-MP-133F	112+05 RICH-C
WB-MP-133G	112+05 RICH-C

HNTB

USER NAME = hregan	DESIGNED - HER	REVISED -
	DRAWN - HER	REVISED -
PLOT SCALE = 5.075 ' / in.	CHECKED - MAM	REVISED -
PLOT DATE = 3/24/2022	DATE - 3/11/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB I-80 FROM GARDNER STREET TO ROWELL AVENUE
SIGNING DETAILS

SCALE: N.T.S. | SHEET OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	227

CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35.WB\811.02 Civil\Sheet\D160W35-sht-signingdetail04.dgn

SIGN NAME	STATION	OFFSET	SIGN DESCRIPTION	EXISTING PANEL DIMENSIONS WIDTH (FT)	EXISTING PANEL DIMENSIONS HEIGHT (FT)	PROPOSED PANEL DIMENSIONS WIDTH (FT)	PROPOSED PANEL DIMENSIONS HEIGHT (FT)	REMOVE SIGN PANEL - TYPE 1 (SQ FT)	REMOVE SIGN PANEL - TYPE 2 (SQ FT)	REMOVE SIGN PANEL - TYPE 3 (SQ FT)	REMOVE SIGN PANEL ASSEMBLY - TYPE A (EACH)	REMOVE SIGN PANEL ASSEMBLY - TYPE B (EACH)	REMOVE GROUND MOUNTED SIGN SUPPORT (EACH)	REMOVE CONCRETE FOUNDATION - GROUND MOUNT (EACH)	MILE POST MARKER ASSEMBLY (EACH)	OBJECT MARKER - TYPE 3 (EACH)	SIGN PANEL TYPE 1 (SQ FT)	SIGN PANEL TYPE 2 (SQ FT)	SIGN PANEL TYPE 3 (SQ FT)	SIGN EDGE OFFSET FROM SHOULDER (FT)	WOOD SIGN SUPPORT (Post 1/2) (FT)	TELESCOPING STEEL SIGN SUPPORT (FT)	BASE FOR TELESCOPING STEEL SIGN SUPPORT (EACH)	WIDE FLANGE POST TYPE	WIDE FLANGE POST 1 LENGTH (FT)	WIDE FLANGE POST 2 LENGTH (FT)	STRUCTURAL STEEL SIGN SUPPORT - BREAKAWAY (POUND)	CONCRETE FOUNDATIONS (CU YD)
WB-MP-132A	715+93	LT	OBJECT MARKER			1.0	3.0									1												
WB-MP-132B	715+86	RT	OBJECT MARKER			1.0	3.0									1												
WB-MP-132C	717+06	LT	CHICAGO ST 1/4 MILE	18.0	12.0	14.5	12.0			216.00			2	2					174.00	6				W14x38	25.75	30.25	2,128	4.18
WB-LP-132D	718+09	LT	SPEED LIMIT	4.0	8.0	4.0	8.0			64.00		1							32.00									
WB-TS-132E	723+30	LT	SLIPPERY WHEN WET	2.0	1.5	2.0	1.5	6.00				2						3.00		4		15.0	1					
WB-TS-132F	723+30	LT	SLIPPERY ROAD	4.0	4.0	4.0	4.0		32.00									16.00										
WB-WP-133A	725+51	LT	ADDED LANE	4.0	4.0	4.0	4.0		16.00			1						16.00		6	19							
WB-MP-133B	727+35	LT	AMTRAK EXIT 132	9.5	6.0	9.5	5.0			57.00		1							38.25	6	19.5/21.5							
WB-WP-133C	733+12	LT	CHICAGOLAND SPEEDWAY	12.0	6.5	12.0	7.0			78.00			2	2					84.00	6				W8x18	18.50	21.00	711	1.4
WB-MP-133D	113+28 "C"	LT	WRONG WAY	2.5	1.5	2.5	1.5	8.75			1						8.75			6		16.0						
WB-MP-133E	113+28 "C"	RT	WRONG WAY	2.5	1.5	2.5	1.5	8.75			1						8.75			6		14.5						
WB-MP-133F	112+05 "C"	LT	WRONG WAY	2.5	1.5	2.5	1.5	8.75			1						8.75			6		16.0						
WB-MP-133G	112+05 "C"	RT	WRONG WAY	2.5	1.5	2.5	1.5	8.75			1						8.75			6		14.5						
WB-WP-133H	109+00 "C"	LT	SIGNAL AHEAD	3.0	4.0	4.0	4.0		12.00									16.00		4.00	16							
WB-WP-133I	736+90	LT	EXIT 133 GORE	7.5	5.0	7.5	5.0			37.50		1							37.50	6	19/20							
WB-MP-133J	740+63	LT	MILE MARKER 133.5	1.0	5.0	1.0	5.0	5.00			1				1													
WB-TR-133K	742+60	OH	CHICAGO STREET 3/4 MILE	15.0	10.0	14.5	12.0			150.00		1							174.00									
WB-TR-133L	742+60	OH	RICHARDS STREET ARROW	15.5	8.0	15.0	8.5			124.00			2	2					127.50									
WB-TR-133M	754+01	OH	CHICAGO ST 1 MILE	14.5	10.0	14.5	12.0			145.00		1							174.00									
WB-TR-133N	754+01	OH	RICHARDS ST 1/4 MILE	15.5	6.5	15.0	9.0			100.75		1							135.00									
WB-MP-133O	766+22	LT	OBJECT MARKER	1.0	3.0			3.00			1																	
WB-MP-133P	766+45	LT	OBJECT MARKER	1.0	3.0			3.00			1																	
WB-MP-133Q	766+61	LT	MILE MARKER 134	1.0	5.0	1.0	5.0	5.00			1				1													
WB-WP-134A	767+16	LT	ROWELL AVENUE	11.0	7.0	8.0	5.5			77.00		1							44.00	6	20.0/21.0							
WB-MP-134B	778+30	LT	RICHARDS ST 3/4 MILE	16.0	8.0	15.0	9.0			128.00			2	2					135.00	18				W10x26	22.75	26.75	1,287	2.54
WB-WP-134C	785+16	LT	SPEED LIMIT	4.0	8.0	4.0	8.0			32.00		1							32.00	6	23							

HNTB

USER NAME = hregan	DESIGNED - HER	REVISED -
	DRAWN - HER	REVISED -
PLOT SCALE = 2.000 ' / in.	CHECKED - MAM	REVISED -
PLOT DATE = 3/24/2022	DATE - 3/11/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB I-80 FROM GARDNER STREET TO ROWELL AVENUE
SIGNING SCHEDULE

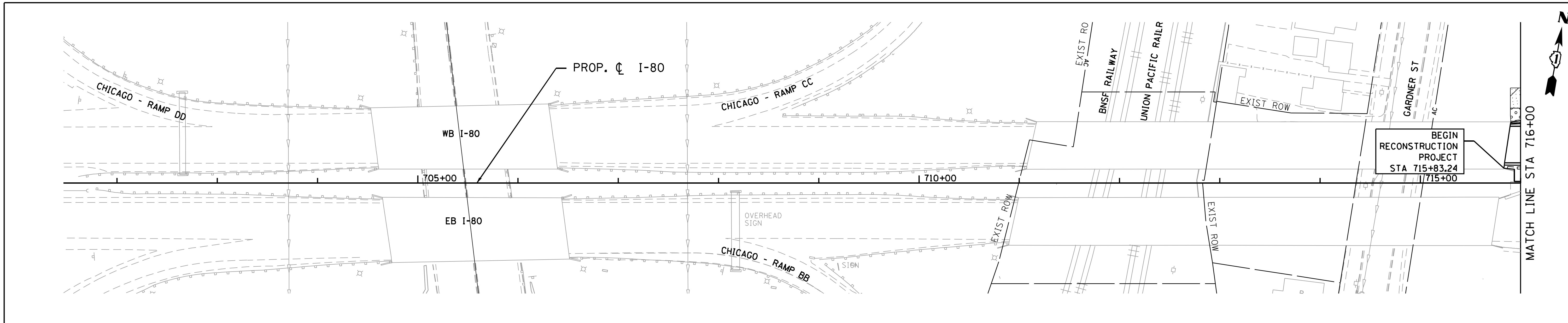
SCALE: N.T.S. | SHEET OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	228

CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

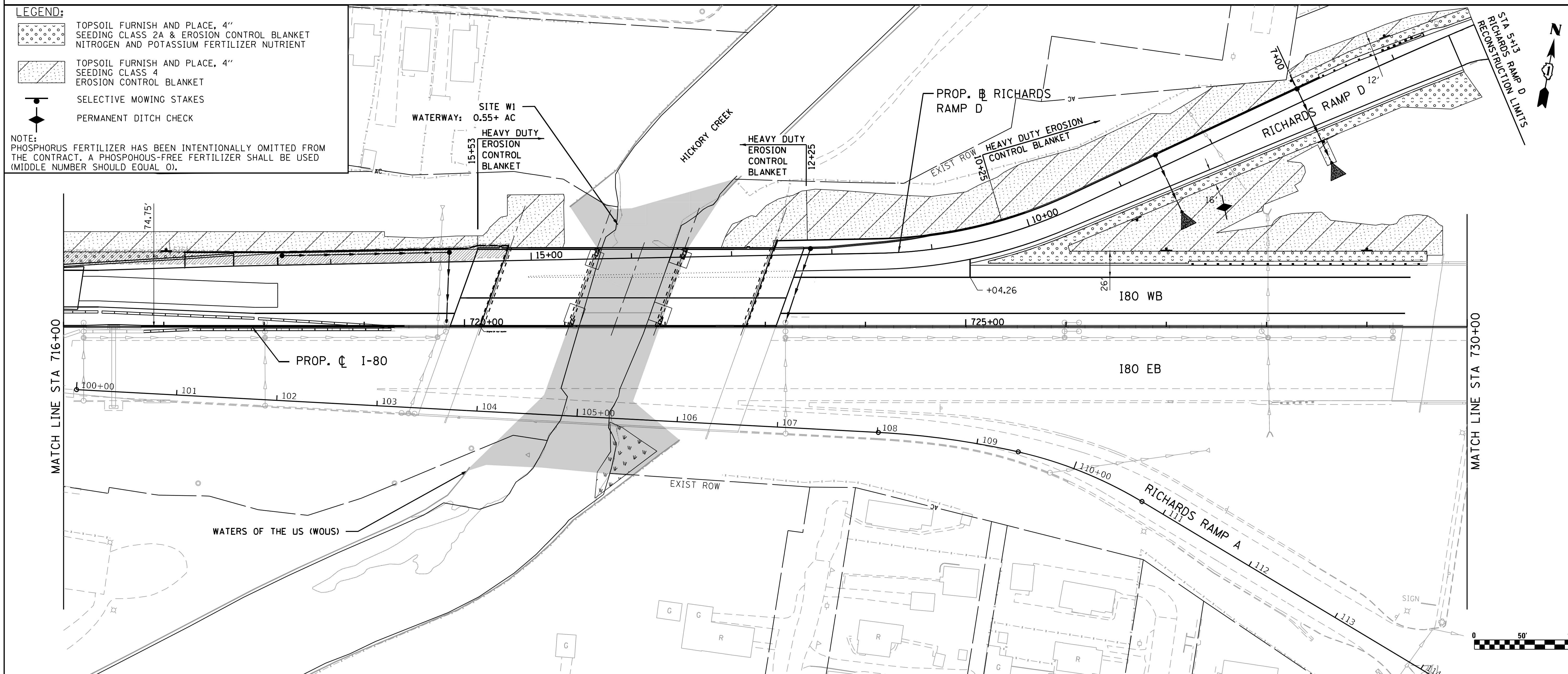
FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-sht-signingschedule.dgn



LEGEND:

- TOPSOIL FURNISH AND PLACE, 4" SEEDING CLASS 2A & EROSION CONTROL BLANKET NITROGEN AND POTASSIUM FERTILIZER NUTRIENT
- TOPSOIL FURNISH AND PLACE, 4" SEEDING CLASS 4 EROSION CONTROL BLANKET
- SELECTIVE MOWING STAKES
- PERMANENT DITCH CHECK

NOTE:
PHOSPHORUS FERTILIZER HAS BEEN INTENTIONALLY OMITTED FROM THE CONTRACT. A PHOSPOHOUS-FREE FERTILIZER SHALL BE USED (MIDDLE NUMBER SHOULD EQUAL 0).



HNTB

USER NAME = hregan	DESIGNED - HER	REVISED -	
	DRAWN - HER	REVISED -	
PLOT SCALE = 100.000 ' / in.	CHECKED - MAM	REVISED -	
PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB I-80 FROM GARDNER STREET TO ROWELL AVENUE
LANDSCAPING PLAN

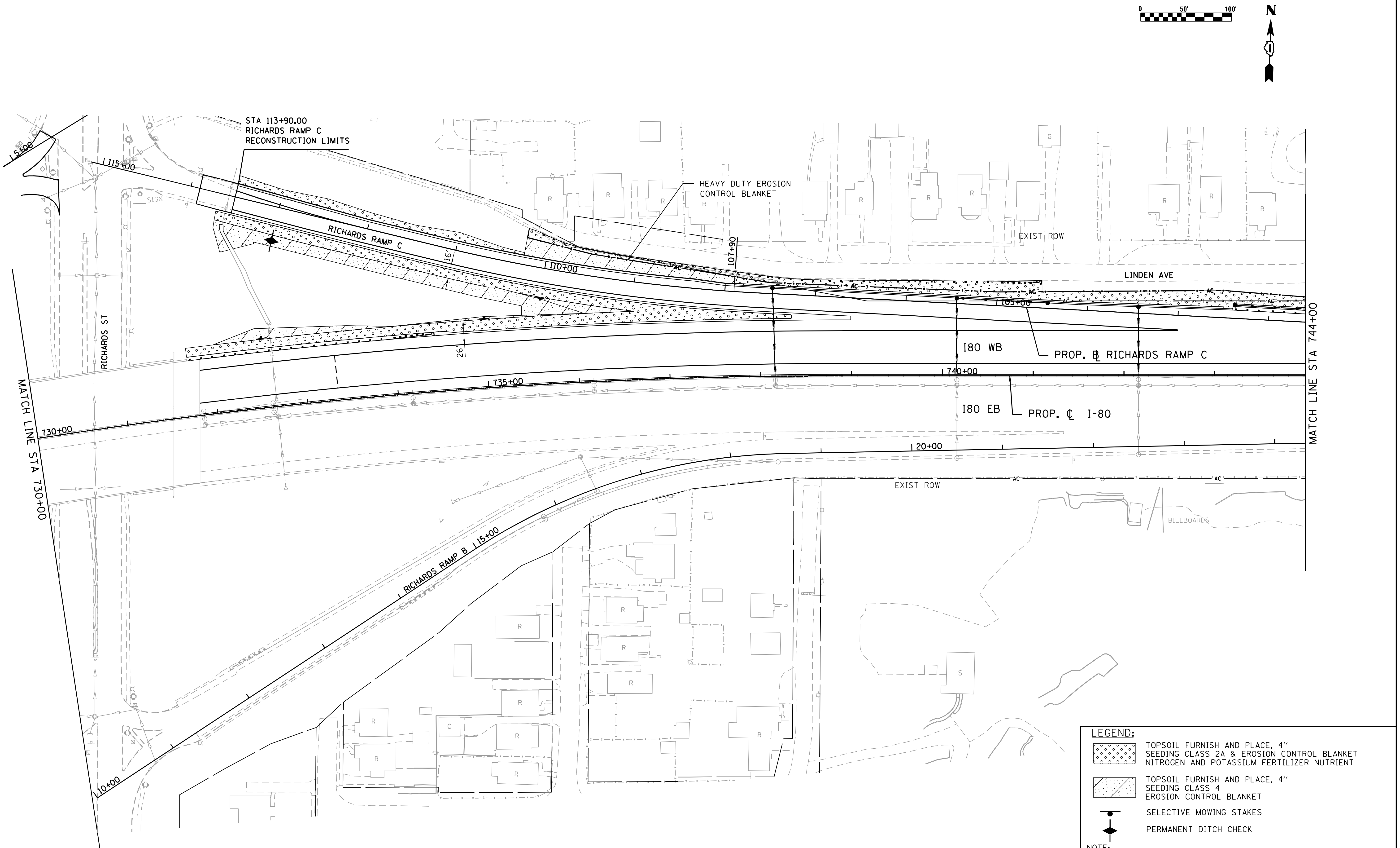
SCALE: 1" = 50' | SHEET OF SHEETS | STA. 701+00 TO STA. 730+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	229

CONTRACT NO. 60W35

ILLINOIS | FED. AID PROJECT

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-LNDSCP-01.dgn



LEGEND:

TOPSOIL FURNISH AND PLACE, 4''
SEEDING CLASS 2A & EROSION CONTROL BLANKET
NITROGEN AND POTASSIUM FERTILIZER NUTRIENT

TOPSOIL FURNISH AND PLACE, 4''
SEEDING CLASS 4
EROSION CONTROL BLANKET

SELECTIVE MOWING STAKES

PERMANENT DITCH CHECK

NOTE:
PHOSPHORUS FERTILIZER HAS BEEN INTENTIONALLY OMITTED FROM THE CONTRACT. A PHOSPOHOUS-FREE FERTILIZER SHALL BE USED (MIDDLE NUMBER SHOULD EQUAL 0).

HNTB

USER NAME = hregan	DESIGNED - HER	REVISED -	
	DRAWN - HER	REVISED -	
PLOT SCALE = 100.000 ' / in.	CHECKED - MAM	REVISED -	
PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB I-80 FROM GARDNER STREET TO ROWELL AVENUE
LANDSCAPING PLAN

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 730+00 TO STA. 744+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	230

CONTRACT NO. 60W35

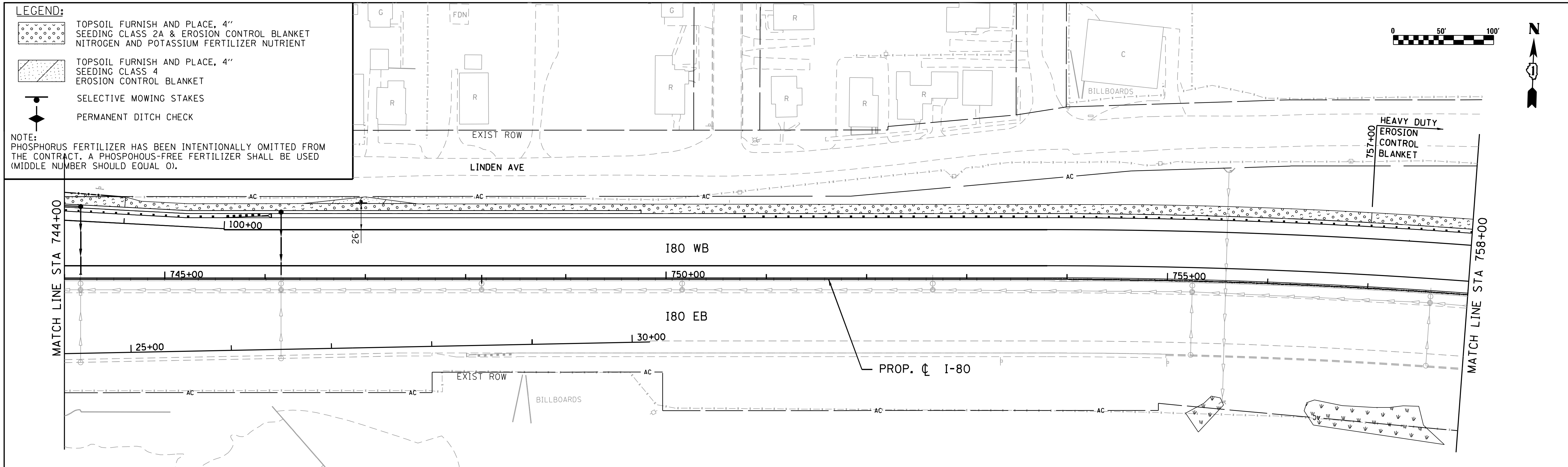
ILLINOIS FED. AID PROJECT

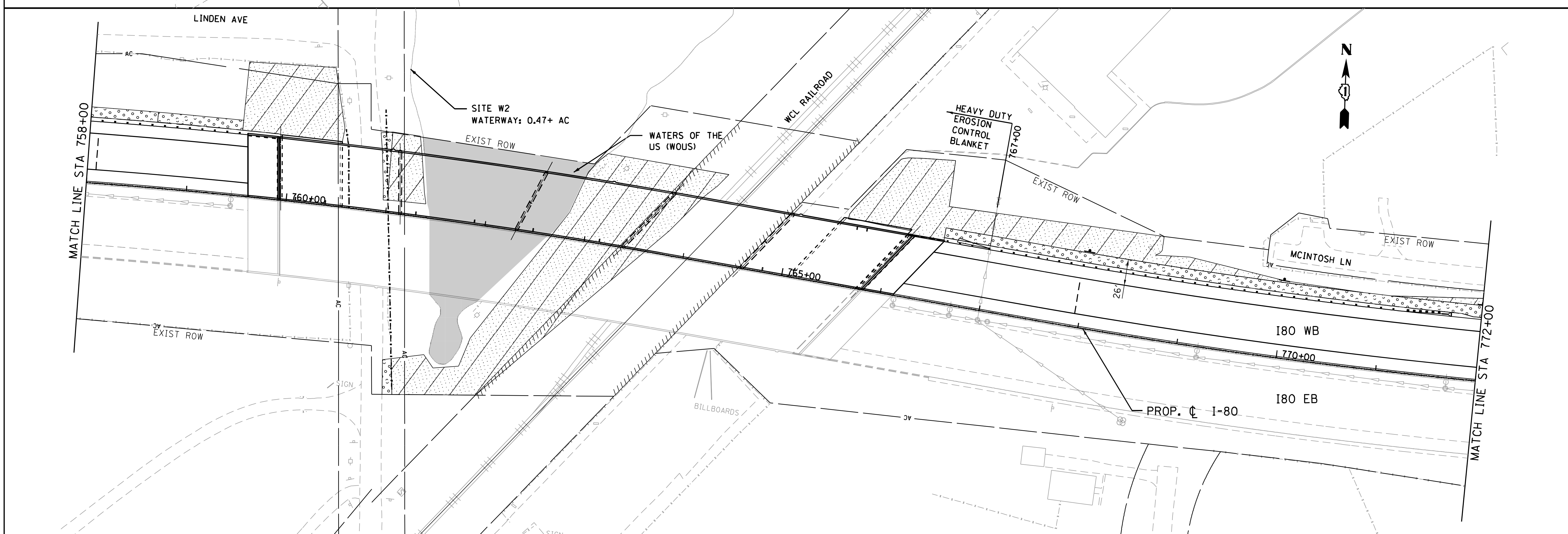
FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-LNDSCP-02.dgn

LEGEND:

- TOPSOIL FURNISH AND PLACE, 4″ / SEEDING CLASS 2A & EROSION CONTROL BLANKET / NITROGEN AND POTASSIUM FERTILIZER NUTRIENT
- TOPSOIL FURNISH AND PLACE, 4″ / SEEDING CLASS 4 / EROSION CONTROL BLANKET
- SELECTIVE MOWING STAKES
- PERMANENT DITCH CHECK

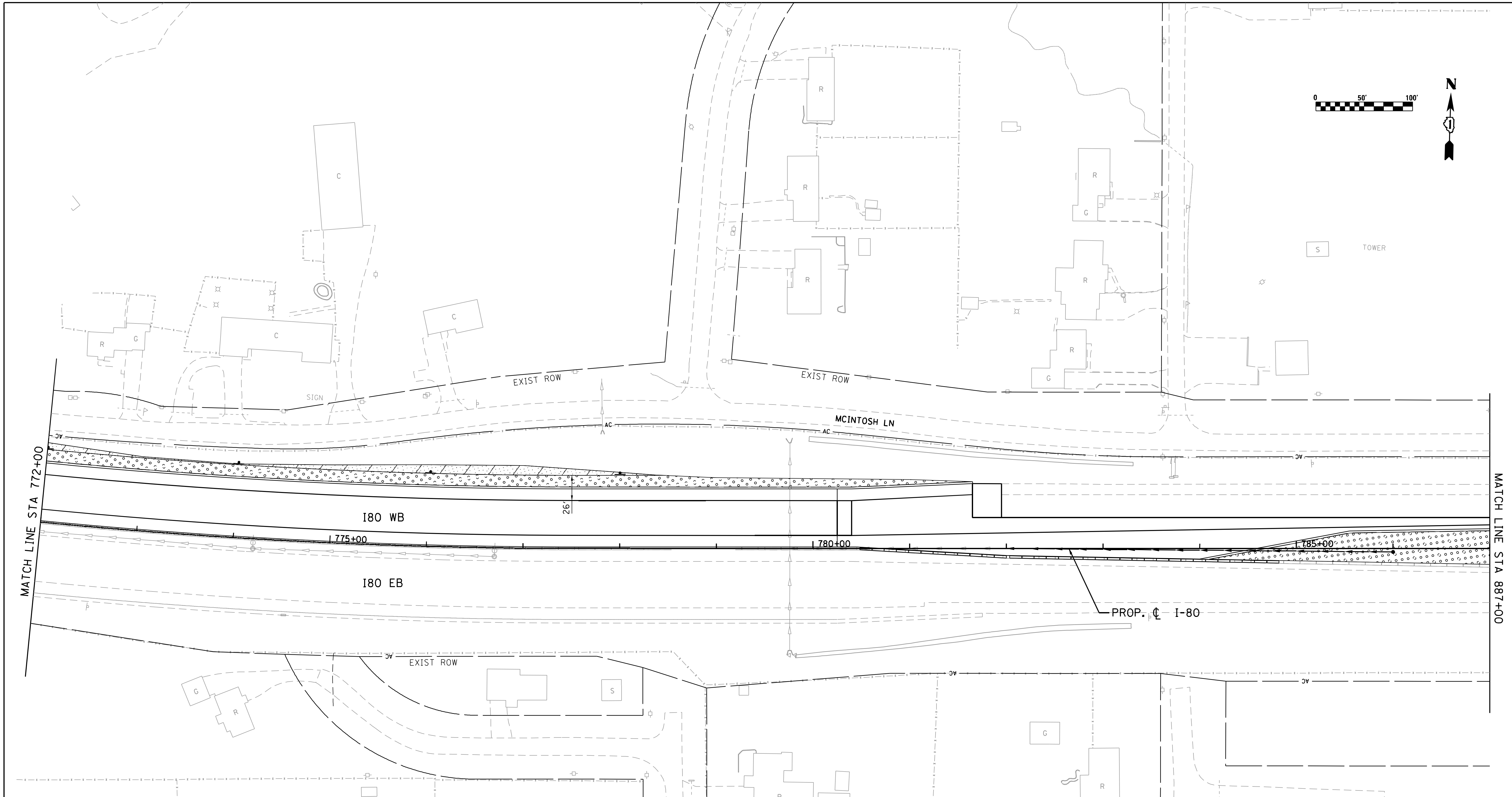
NOTE:
PHOSPHORUS FERTILIZER HAS BEEN INTENTIONALLY OMITTED FROM THE CONTRACT. A PHOSPOHOUS-FREE FERTILIZER SHALL BE USED (MIDDLE NUMBER SHOULD EQUAL 0).





HNTB	USER NAME = hregan	DESIGNED - HER	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WB I-80 FROM GARDNER STREET TO ROWELL AVENUE LANDSCAPING PLAN	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - HER	REVISED -			80	2013-009B	WILL	465	231
	PLOT SCALE = 100.000 ′ / in.	CHECKED - MAM	REVISED -			CONTRACT NO. 60W35				
	PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -		SCALE: 1″ = 50′ SHEET OF SHEETS STA. 744+00 TO STA. 772+00	ILLINOIS FED. AID PROJECT				

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-LNDSCP-03.dgn



LEGEND:

TOPSOIL FURNISH AND PLACE, 4"
SEEDING CLASS 2A & EROSION CONTROL BLANKET
NITROGEN AND POTASSIUM FERTILIZER NUTRIENT

TOPSOIL FURNISH AND PLACE, 4"
SEEDING CLASS 4
EROSION CONTROL BLANKET

SELECTIVE MOWING STAKES

PERMANENT DITCH CHECK

NOTE:
PHOSPHORUS FERTILIZER HAS BEEN INTENTIONALLY OMITTED FROM THE CONTRACT. A PHOSPOHOUS-FREE FERTILIZER SHALL BE USED (MIDDLE NUMBER SHOULD EQUAL 0).

HNTB	USER NAME = hregan	DESIGNED - HER	REVISED -
		DRAWN - HER	REVISED -
	PLOT SCALE = 100.000 ' / in.	CHECKED - MAM	REVISED -
	PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB I-80 FROM GARDNER STREET TO ROWELL AVENUE
LANDSCAPING PLAN

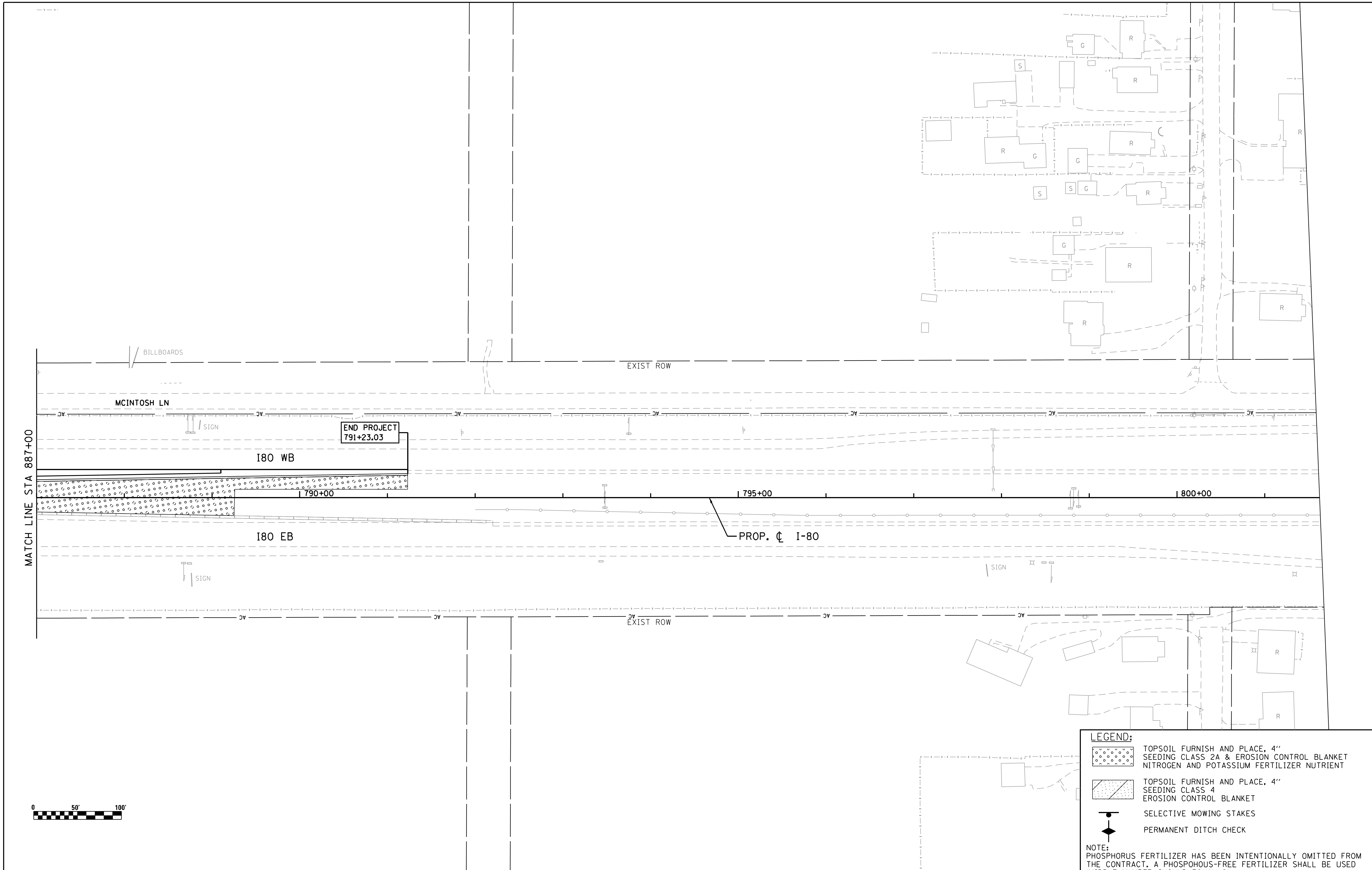
SCALE: 1" = 50' | SHEET OF SHEETS | STA. 772+00 TO STA. 787+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	232

CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-LNDSCP-04.dgn



LEGEND:

- TOPSOIL FURNISH AND PLACE, 4" SEEDING CLASS 2A & EROSION CONTROL BLANKET NITROGEN AND POTASSIUM FERTILIZER NUTRIENT
- TOPSOIL FURNISH AND PLACE, 4" SEEDING CLASS 4 EROSION CONTROL BLANKET
- SELECTIVE MOWING STAKES
- PERMANENT DITCH CHECK

NOTE:
PHOSPHORUS FERTILIZER HAS BEEN INTENTIONALLY OMITTED FROM THE CONTRACT. A PHOSPOHOUS-FREE FERTILIZER SHALL BE USED (MIDDLE NUMBER SHOULD EQUAL 0).

HNTB	USER NAME = hregan	DESIGNED - HER	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WB I-80 FROM GARDNER STREET TO ROWELL AVENUE LANDSCAPING PLAN
		DRAWN - HER	REVISED -		
	PLOT SCALE = 100.000 ' / in.	CHECKED - MAM	REVISED -		
	PLOT DATE = 3/11/2022	DATE - 3/11/2022	REVISED -		SCALE: 1" = 50' SHEET OF SHEETS STA. 787+00 TO STA. 802+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	233
CONTRACT NO. 60W35				
ILLINOIS FED. AID PROJECT				

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.02 Civil\Sheet\D160W35-LNDSCP-05.dgn

IDOT LIGHTING LEGEND

	PROPOSED SINGLE ARM LIGHTING UNIT 47.5' M.H., 15' M.A., WITH LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H, TYPE M-C-III WITH TRANSFORMER BASE BREAKAWAY DEVICE, 240V UNLESS NOTED OTHERWISE.
6	PROPOSED SINGLE ARM LIGHTING UNIT (PARAPET MOUNT) 47.5' M.H., 6' M.A., WITH LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H, TYPE M-C-III, 240V
T	TEMPORARY LIGHTING UNIT, 80' WOOD POLE, 70' M.H., 15' M.A., WITH, LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION I, TYPE M-C-II (UNLESS NOTED OTHERWISE), WIRED FOR 240V OR 480V PER PLANS
E RT	RETROFIT EXISTING SINGLE ARM LIGHTING UNIT TO REMAIN IN PLACE WITH LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H, TYPE M-C-III, 240V
TR	EXISTING TEMPORARY LIGHTING UNIT TO BE REMOVED
R	EXISTING SINGLE ARM LIGHTING UNIT TO BE REMOVED AND SALVAGED
E	EXISTING SINGLE ARM LIGHTING UNIT TO REMAIN IN PLACE
O E	EXISTING UNDERPASS LUMINAIRE TO REMAIN IN PLACE
	PROPOSED JUNCTION BOX SIZE AND TYPE PER PLANS
J	EXISTING JUNCTION BOX TO REMAIN
	UNDERGROUND RIGID GALVANIZED STEEL CONDUIT (RGC) SIZE AS INDICATED
	UNIT DUCT, AS SPECIFIED IN PLANS
	EXISTING CABLE AND CONDUIT TO REMAIN IN PLACE
— —A/C— —	AERIAL CABLE, AS SPECIFIED IN PLANS
– –A/C–E– –	EXISTING AERIAL CABLE
T	TEMPORARY LIGHTING CONTROLLER
	EXISTING LIGHTING CONTROLLER
	TEMPORARY ELECTRIC SERVICE LOCATION
	EXISTING ELECTRIC SERVICE LOCATION
	GROUND ROD, 5/8" X 10 FT
	WOOD POLE, 80 FT, CLASS 3 (UNLESS NOTED OTHERWISE)
	PROPOSED HANDHOLE
	EXISTING HANDHOLE

CALL-OUT SAMPLES

DEFINITION	EXAMPLE
CKT. NO. LOCATION SET BACK AS INDICATED IN GENERAL NOTES	MZA1 STA. 591+85 SET BACK 7 FT
HC A 1 POLE NUMBER CIRCUIT NUMBER LIGHTING CONTROL CABINET	
CONDUIT SIZE TYPE, LENGTH	3" DIA. RGC, 50 FT
CIRCUITS CONDUCTORS RACEWAY	CKT. MZAB 3-1/C#8, 1/C#10 GND. 1" DIA. UNIT DUCT
CONTROLLER DESIGNATION LOCATION DESCRIPTION	PROPOSED LIGHTING CONTROLLER "MZ" STA. 590+95, 51 FT LT 1-PHASE, 240/480V, 3 WIRE

ABBREVIATIONS

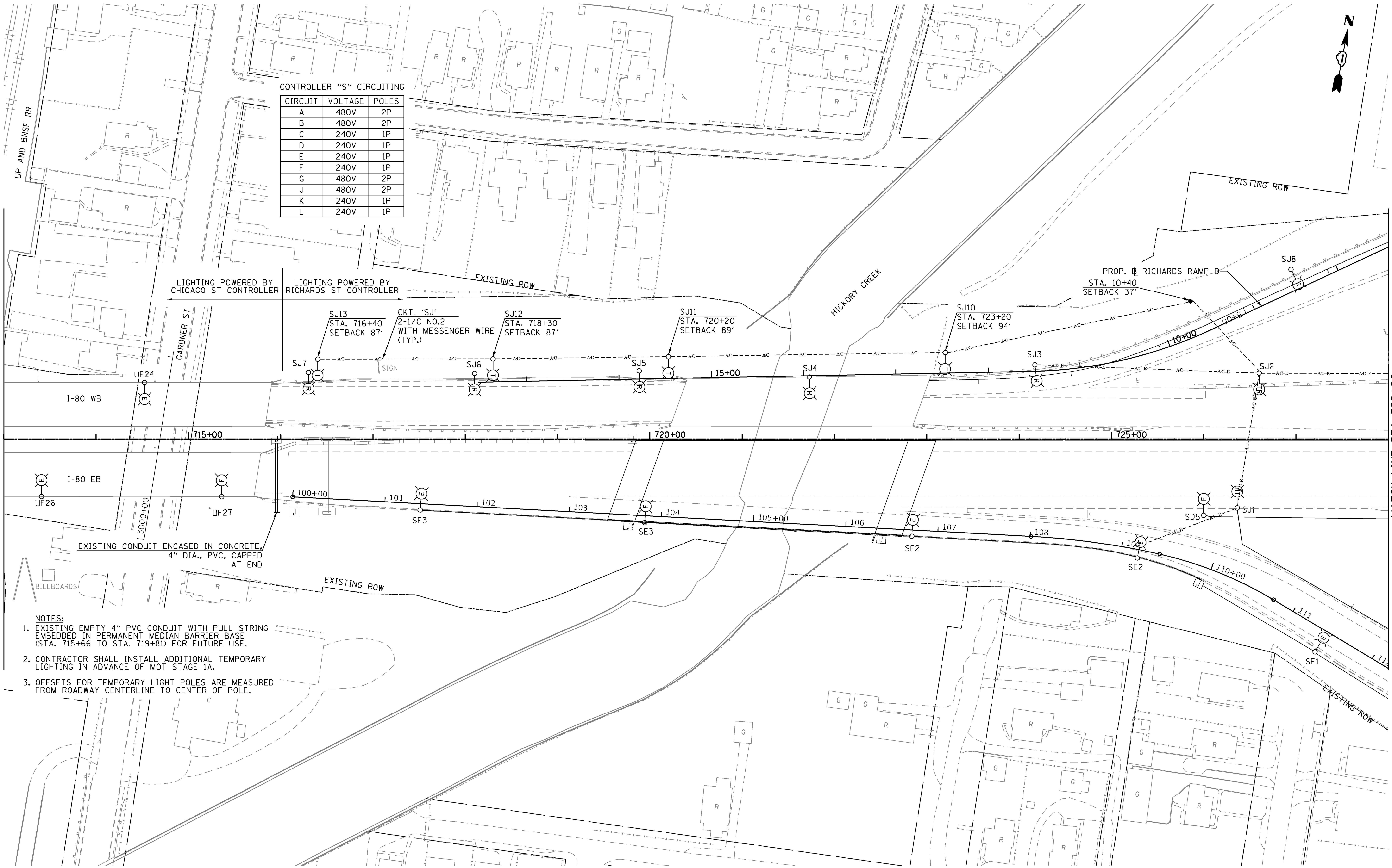
ABBREVIATION	DESCRIPTION
AC	ALTERNATING CURRENT
A/C	AERIAL CABLE
AFG	ABOVE FINISHED GRADE
AMP	AMPERE
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CNC	COILABLE NONMETALLIC CONDUIT
CP	CONTROL PANEL
DIA.	DIAMETER
E	EXISTING UNIT TO REMAIN
ECA	ELECTRIC CABLE ASSEMBLY
FT	FEET OR FOOT
FU	FUSE
GND	GROUND
HID	HIGH INTENSITY DISCHARGE
HMLT	HIGH MAST LIGHT TOWER
HPS	HIGH PRESSURE SODIUM
JB	JUNCTION BOX
KVA	KILOVOLT-AMPERE
KW	KILOWATTS
M.A.	MAST ARM
M.H.	MOUNTING HEIGHT
NO.	NUMBER
P	POLE
RGC	RIGID GALVANIZED CONDUIT
RGS	RIGID GALVANIZED STEEL
STA	STATION
T	TEMPORARY LIGHTING UNIT
TB	TRANSFORMER BASE
TMP	TEMPORARY
UD	UNIT DUCT
V	VOLT
W	WATT
WP	WOOD POLE
XFMR	TRANSFORMER

GENERAL NOTES:

1. LIGHT POLE SET BACKS ARE MEASURED FROM EDGE OF TRAVELED PAVEMENT TO CENTER OF POLE.
2. OFFSETS FOR TEMPORARY LIGHT POLES ARE MEASURED FROM ROADWAY CENTERLINE TO CENTER OF POLE.
3. NO LIGHT POLE SHALL BE ERECTED UNTIL THE FOUNDATION HAS CURED PER ARTICLE 1020.13 OF THE STANDARD SPECIFICATIONS.
4. WHEREVER TEMPORARY AERIAL CABLE IS REQUIRED TO CROSS AN EXISTING OR PROPOSED ROADWAY, THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 20 FEET OF VERTICAL CLEARANCE OVER THE ROADWAY AT ALL TIMES.
5. THE ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE IDOT DISTRICT 1 SPECIAL PROVISIONS, THE ELECTRICAL DETAILS, AND THE IDOT STANDARDSPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
6. THE ASSOCIATED POLES, ARMS, LUMINAIRES, AND BREAKAWAY DEVICES FROM EXISTING LIGHTING UNITS TO BE REMOVED SHALL BE SALVAGED TO IDOT. THIS WORK WILL BE PAID FOR AS "REMOVAL OF LIGHTING UNIT, SALVAGE".
7. ALL NEW UNIT DUCTS, CONDUITS, JUNCTION BOXES, AND APPURTENANCES ARE ILLUSTRATED DIAGRAMMATICALLY ON THE PLANS. THE ACTUAL LOCATIONS IN THE FIELD SHALL MEET WITH THE APPROVAL OF THE ENGINEER.
8. UNIT DUCT CASINGS UNDER PAVEMENT SHALL EXTEND 2 FT BEYOND THE EDGE OF SHOULDER OR BACK OF CURB, AS APPLICABLE.
9. REMOVAL OF EXISTING CONDUIT/CABLE ATTACHED TO STRUCTURES TO BE REMOVED IS INCLUDED IN THE PRICE OF STRUCTURE REMOVAL.

IDOT LIGHTING SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
ROCK EXCAVATION FOR STRUCTURES	CU YD	17
ELECTRIC SERVICE INSTALLATION	EACH	1
ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	420
CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	1746
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6"	EACH	5
UNIT DUCT, 600V, 3-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	8340
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	FOOT	2005
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	FOOT	6015
AERIAL CABLE, 2-1/C NO. 2 WITH MESSENGER WIRE	FOOT	2560
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	33
LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 6 FT. MAST ARM	EACH	5
LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 15 FT. MAST ARM	EACH	28
LIGHT POLE, WOOD, 80 FOOT, CLASS 3, WITH 15FT MAST ARM	EACH	11
LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 10" X 8'	EACH	25
BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	25
REMOVAL OF TEMPORARY LIGHTING UNIT	EACH	17
REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	9
REMOVAL OF POLE FOUNDATION	EACH	9
TEMPORARY LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION I	EACH	10
TEMPORARY LIGHTING CONTROLLER, 240 VOLT, POLE MOUNTED	EACH	1
LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	33
MAINTENANCE OF LIGHTING SYSTEM	CAL MO	24



CONTROLLER "S" CIRCUITING

CIRCUIT	VOLTAGE	POLES
A	480V	2P
B	480V	2P
C	240V	1P
D	240V	1P
E	240V	1P
F	240V	1P
G	480V	2P
J	480V	2P
K	240V	1P
L	240V	1P

NOTES:

1. EXISTING EMPTY 4" PVC CONDUIT WITH PULL STRING EMBEDDED IN PERMANENT MEDIAN BARRIER BASE (STA. 715+66 TO STA. 719+81) FOR FUTURE USE.
2. CONTRACTOR SHALL INSTALL ADDITIONAL TEMPORARY LIGHTING IN ADVANCE OF MOT STAGE 1A.
3. OFFSETS FOR TEMPORARY LIGHT POLES ARE MEASURED FROM ROADWAY CENTERLINE TO CENTER OF POLE.

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = hechtbr
PLOT SCALE = 1200.00 ' / ft.
PLOT DATE = 3/23/2022

DESIGNED	-	MEK
DRAWN	-	MRT
CHECKED	-	MKR
DATE	-	3/11/2022

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB I-80 FROM GARDNER STREET TO ROWELL AVENUE
TEMPORARY LIGHTING AND REMOVAL PLAN

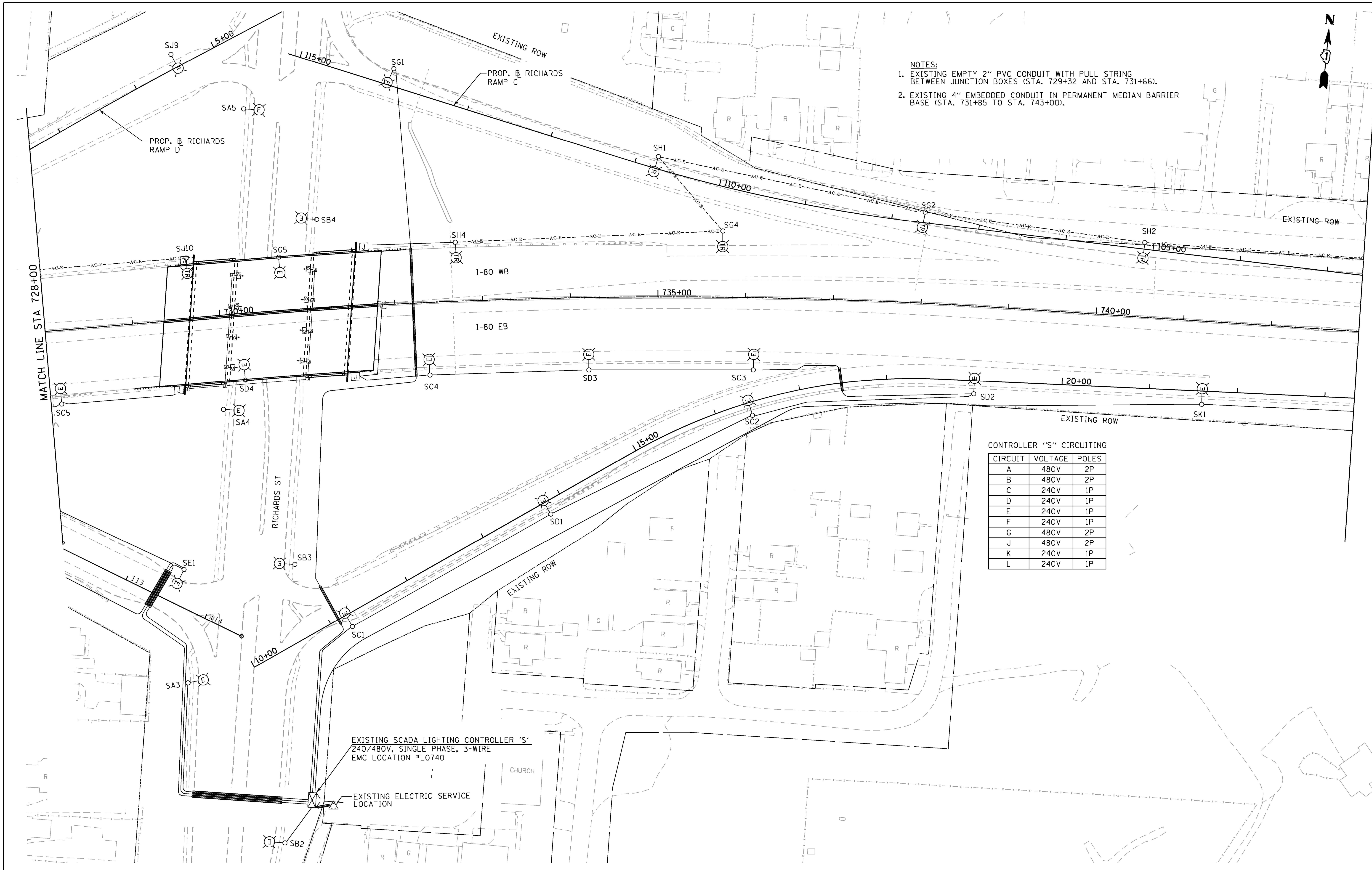
SCALE: 1" = 50' | SHEET OF SHEETS | STA. 713+00 TO STA. 728+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	235

CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.04 Electrical\Sheet\D160W35-sht-Exist-light03.dgn



NOTES:

1. EXISTING EMPTY 2" PVC CONDUIT WITH PULL STRING BETWEEN JUNCTION BOXES (STA. 729+32 AND STA. 731+66).
2. EXISTING 4" EMBEDDED CONDUIT IN PERMANENT MEDIAN BARRIER BASE (STA. 731+85 TO STA. 743+00).

CONTROLLER "S" CIRCUITING

CIRCUIT	VOLTAGE	POLES
A	480V	2P
B	480V	2P
C	240V	1P
D	240V	1P
E	240V	1P
F	240V	1P
G	480V	2P
J	480V	2P
K	240V	1P
L	240V	1P

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = HECHTBR	DESIGNED - MEK	REVISED -	
	DRAWN - MRT	REVISED -	
PLOT SCALE = 100.00 ' / in.	CHECKED - MKR	REVISED -	
PLOT DATE = 3/13/2022	DATE - 3/11/2022	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB I-80 FROM GARDNER STREET TO ROWELL AVENUE
TEMPORARY LIGHTING AND REMOVAL PLAN

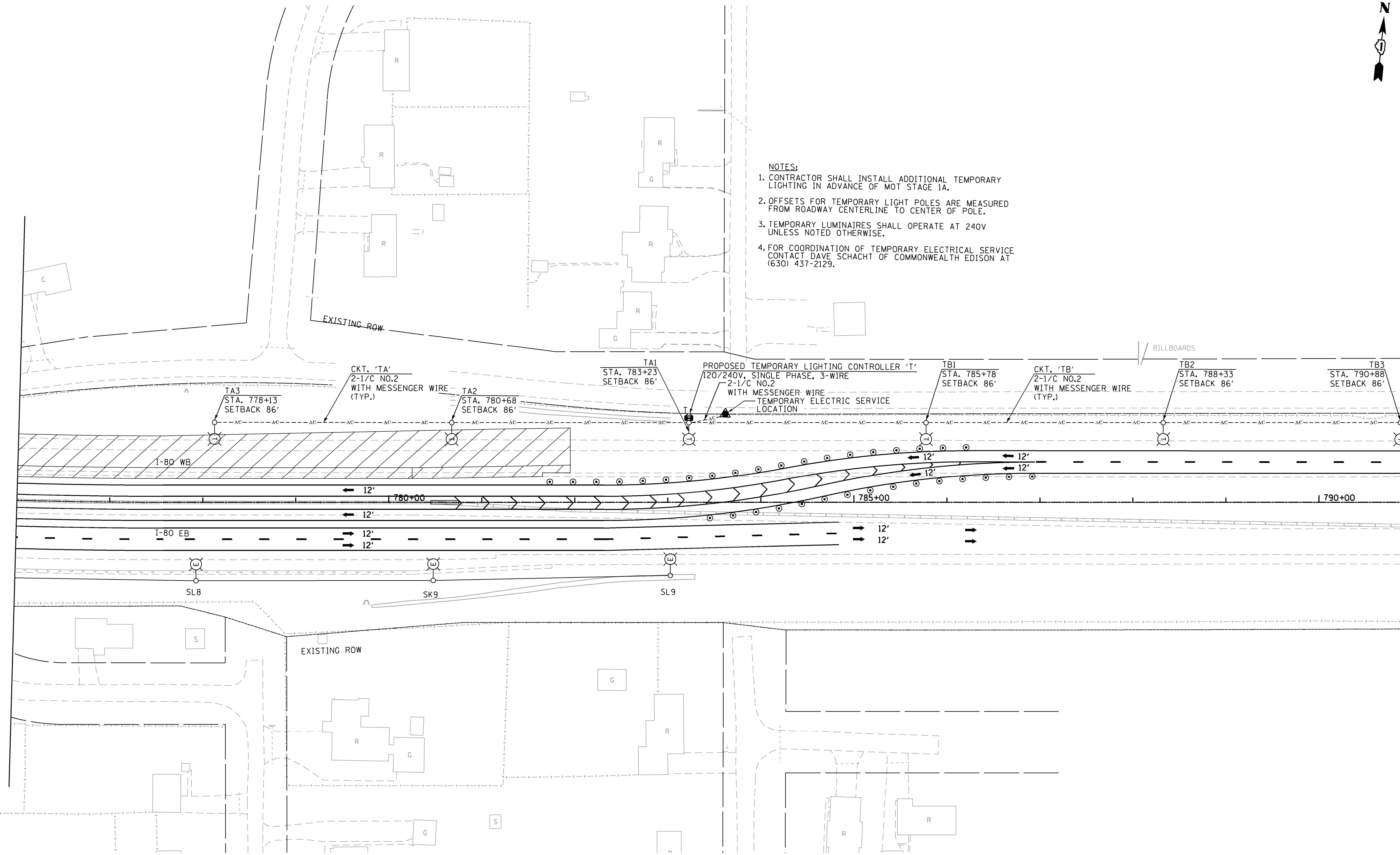
SCALE: 1" = 50' | SHEET | OF | SHEETS | STA. 728+00 | TO STA. 743+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	236

CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.04 Electrical\Sheet\D160W35-sht-Exist-light04.dgn



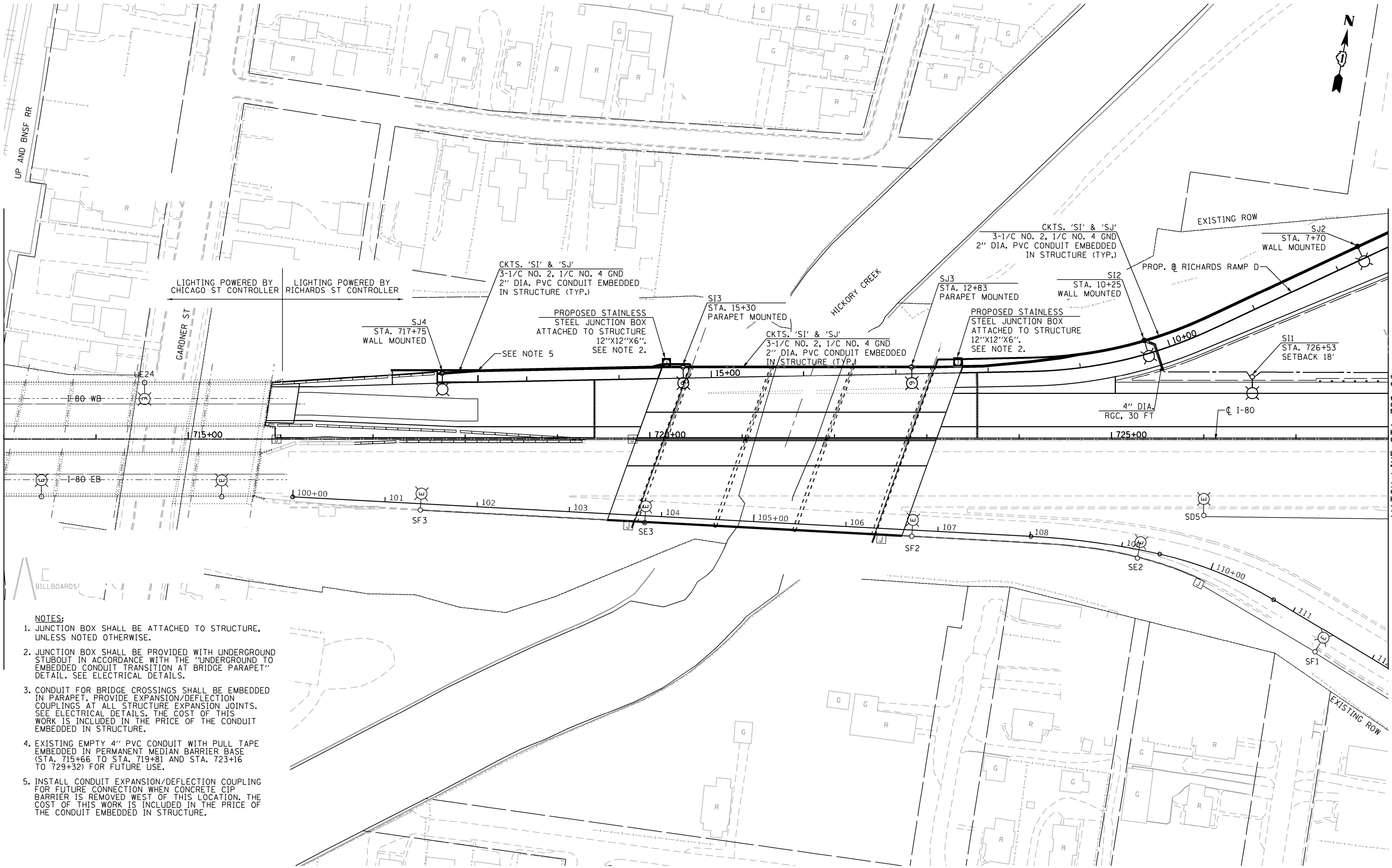
NOTES:

1. CONTRACTOR SHALL INSTALL ADDITIONAL TEMPORARY LIGHTING IN ADVANCE OF MOT STAGE 1A.
2. OFFSETS FOR TEMPORARY LIGHT POLES ARE MEASURED FROM ROADWAY CENTERLINE TO CENTER OF POLE.
3. TEMPORARY LUMINAIRES SHALL OPERATE AT 240V UNLESS NOTED OTHERWISE.
4. FOR COORDINATION OF TEMPORARY ELECTRICAL SERVICE CONTACT DAVE SCHACHT OF COMMONWEALTH EDISON AT (630) 437-2129.

TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = hechtbr	DESIGNED - MEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WB I-80 FROM GARDNER STREET TO ROWELL AVENUE TEMPORARY LIGHTING AND REMOVAL PLAN	
		DRAWN - MRT	REVISED -			
	PLOT SCALE = 100.00 '/ in.	CHECKED - MKR	REVISED -			
	PLOT DATE = 3/23/2022	DATE - 3/11/2022	REVISED -		SCALE: 1" = 50'	SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	237
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.04 Electrical\Sheet\D160W35-sht-Exist-light05.dgn



NOTES:

1. JUNCTION BOX SHALL BE ATTACHED TO STRUCTURE, UNLESS NOTED OTHERWISE.
2. JUNCTION BOX SHALL BE PROVIDED WITH UNDERGROUND STUBOUT IN ACCORDANCE WITH THE "UNDERGROUND TO EMBEDDED CONDUIT TRANSITION AT BRIDGE PARAPET" DETAIL. SEE ELECTRICAL DETAILS.
3. CONDUIT FOR BRIDGE CROSSINGS SHALL BE EMBEDDED IN PARAPET. PROVIDE EXPANSION/DEFLECTION COUPLINGS AT ALL STRUCTURE EXPANSION JOINTS. SEE ELECTRICAL DETAILS. THE COST OF THIS WORK IS INCLUDED IN THE PRICE OF THE CONDUIT EMBEDDED IN STRUCTURE.
4. EXISTING EMPTY 4" PVC CONDUIT WITH PULL TAPE EMBEDDED IN PERMANENT MEDIAN BARRIER BASE (STA. 715+66 TO STA. 719+81 AND STA. 723+16 TO 729+32) FOR FUTURE USE.
5. INSTALL CONDUIT EXPANSION/DEFLECTION COUPLING FOR FUTURE CONNECTION WHEN CONCRETE CIP BARRIER IS REMOVED WEST OF THIS LOCATION. THE COST OF THIS WORK IS INCLUDED IN THE PRICE OF THE CONDUIT EMBEDDED IN STRUCTURE.

TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = hechtbr	DESIGNED - MEK	REVISED -
		DRAWN - MRT	REVISED -
	PLOT SCALE = 100.00 ' / in.	CHECKED - MKR	REVISED -
	PLOT DATE = 3/23/2022	DATE - 3/11/2022	REVISED -

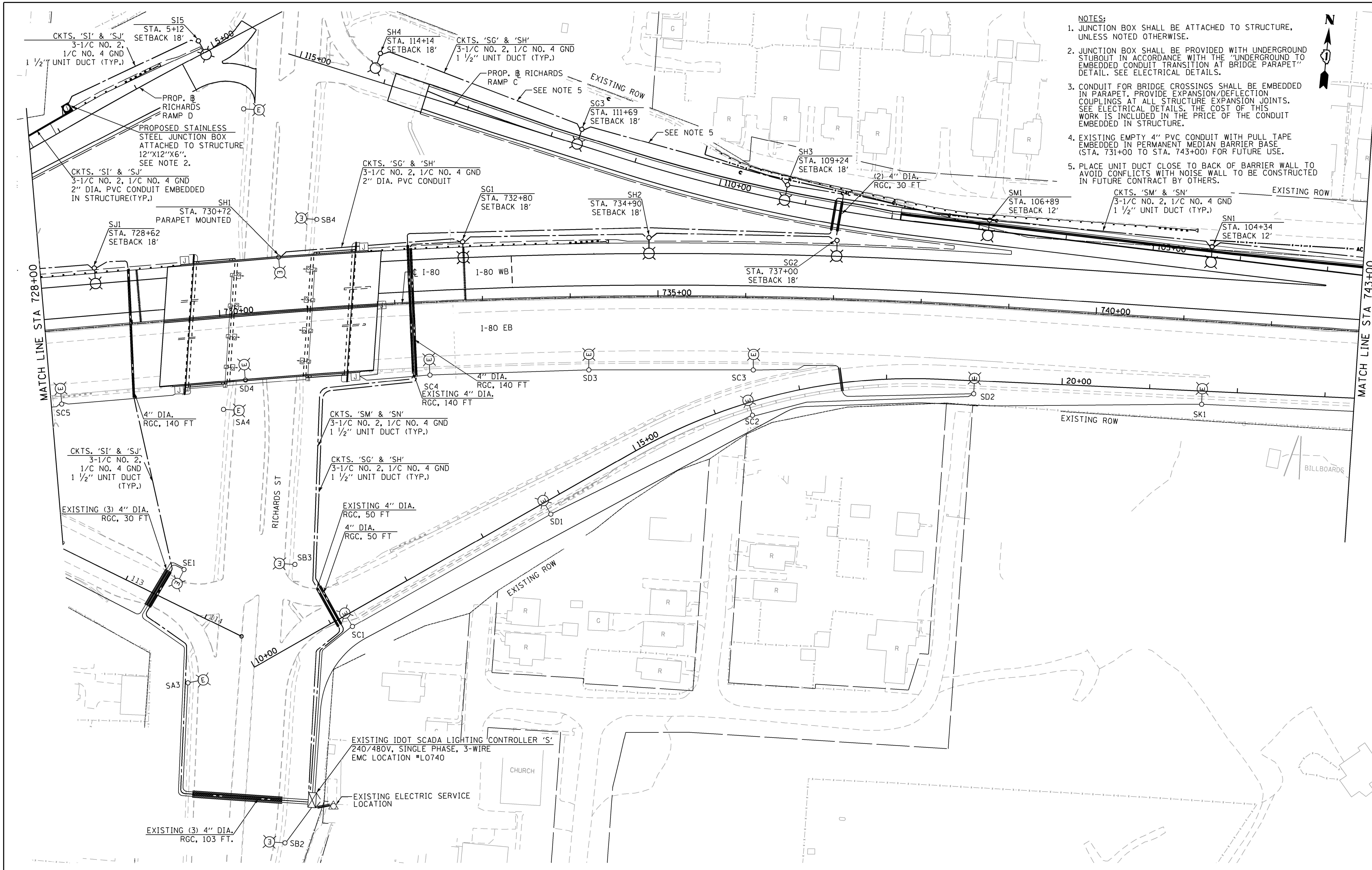
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB I-80 FROM GARDNER STREET TO ROWELL AVENUE
PROPOSED LIGHTING PLAN

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 713+00 TO STA. 728+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	238
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.04 Electrical\Sheet\D160W35-sht-Prop-light03.dgn

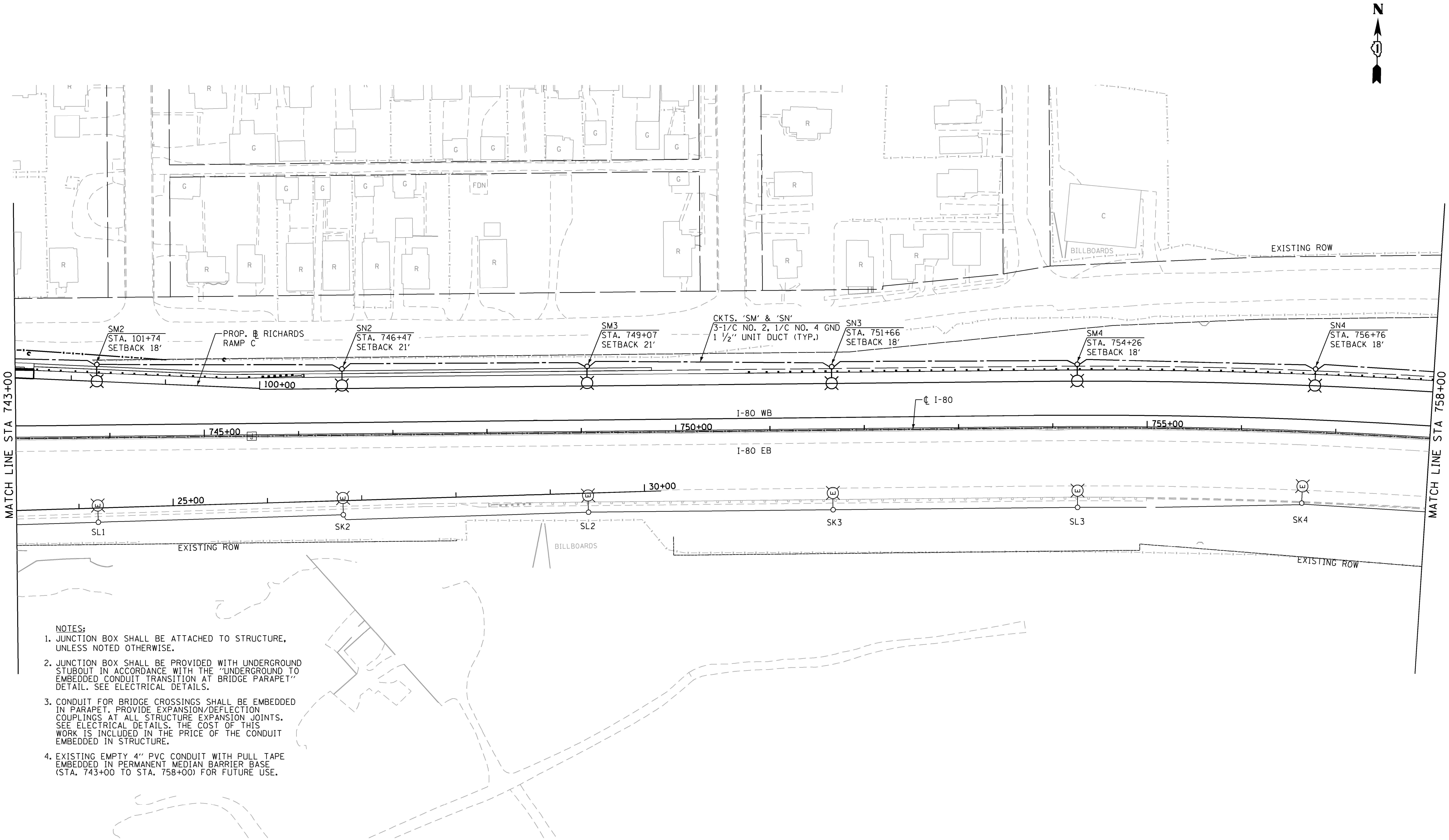


NOTES:

1. JUNCTION BOX SHALL BE ATTACHED TO STRUCTURE, UNLESS NOTED OTHERWISE.
2. JUNCTION BOX SHALL BE PROVIDED WITH UNDERGROUND STUBOUT IN ACCORDANCE WITH THE "UNDERGROUND TO EMBEDDED CONDUIT TRANSITION AT BRIDGE PARAPET" DETAIL. SEE ELECTRICAL DETAILS.
3. CONDUIT FOR BRIDGE CROSSINGS SHALL BE EMBEDDED IN PARAPET. PROVIDE EXPANSION/DEFLECTION COUPLINGS AT ALL STRUCTURE EXPANSION JOINTS. SEE ELECTRICAL DETAILS. THE COST OF THIS WORK IS INCLUDED IN THE PRICE OF THE CONDUIT EMBEDDED IN STRUCTURE.
4. EXISTING EMPTY 4" PVC CONDUIT WITH PULL TAPE EMBEDDED IN PERMANENT MEDIAN BARRIER BASE (STA. 731+00 TO STA. 743+00) FOR FUTURE USE.
5. PLACE UNIT DUCT CLOSE TO BACK OF BARRIER WALL TO AVOID CONFLICTS WITH NOISE WALL TO BE CONSTRUCTED IN FUTURE CONTRACT BY OTHERS.

TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = hechtbr	DESIGNED - MEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WB I-80 FROM GARDNER STREET TO ROWELL AVENUE PROPOSED LIGHTING PLAN	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - MRT	REVISED -			80	2013-009B	WILL	465	239
	PLOT SCALE = 100.00 ' / in.	CHECKED - MKR	REVISED -			CONTRACT NO. 60W35				
	PLOT DATE = 3/23/2022	DATE - 3/11/2022	REVISED -		SCALE: 1" = 50' SHEET OF SHEETS STA. 728+00 TO STA. 743+00	ILLINOIS FED. AID PROJECT				

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.04 Electrical\Sheet\D160W35-sht-Prop-light04.dgn



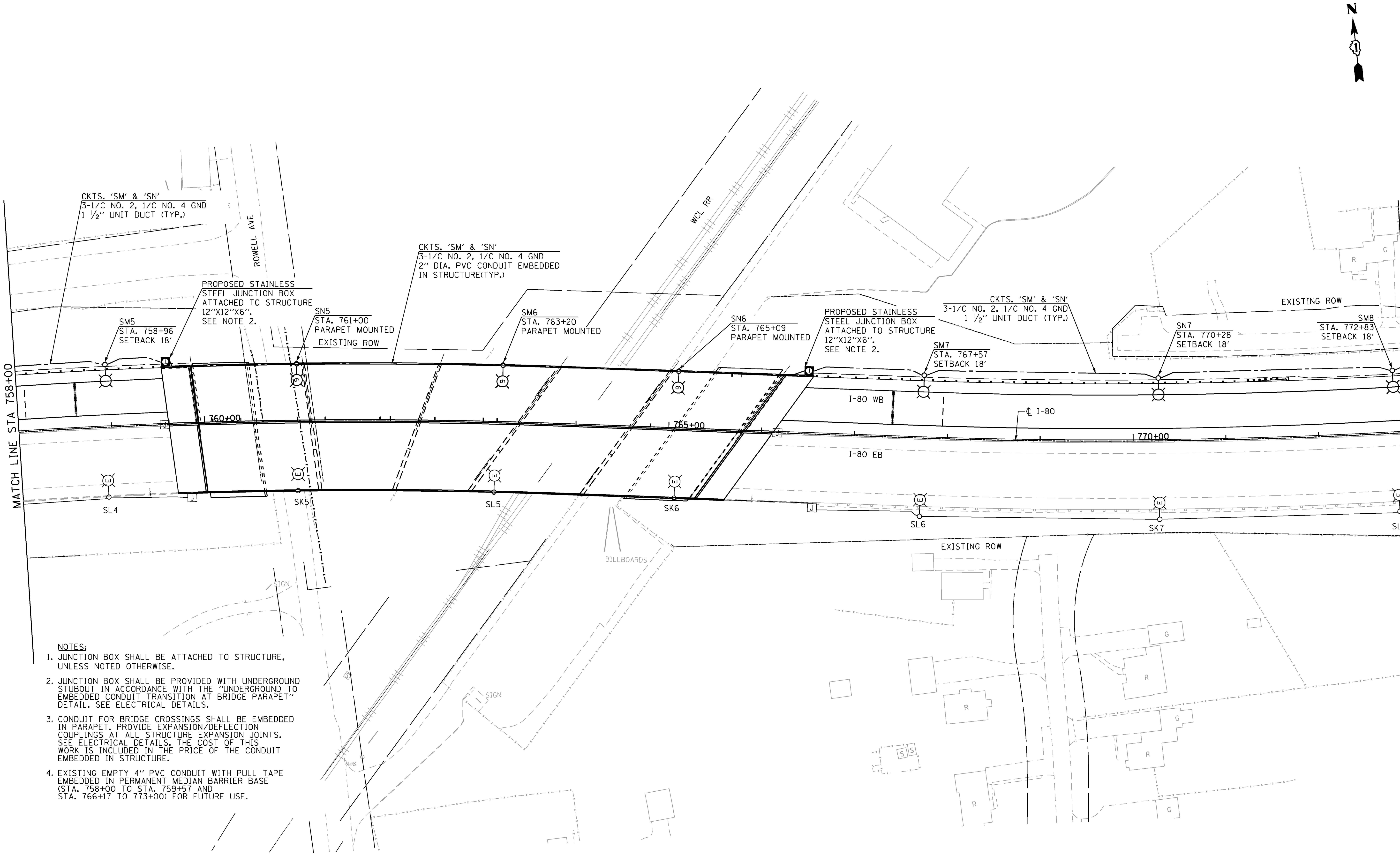
NOTES:

1. JUNCTION BOX SHALL BE ATTACHED TO STRUCTURE, UNLESS NOTED OTHERWISE.
2. JUNCTION BOX SHALL BE PROVIDED WITH UNDERGROUND STUBOUT IN ACCORDANCE WITH THE "UNDERGROUND TO EMBEDDED CONDUIT TRANSITION AT BRIDGE PARAPET" DETAIL. SEE ELECTRICAL DETAILS.
3. CONDUIT FOR BRIDGE CROSSINGS SHALL BE EMBEDDED IN PARAPET. PROVIDE EXPANSION/DEFLECTION COUPLINGS AT ALL STRUCTURE EXPANSION JOINTS. SEE ELECTRICAL DETAILS. THE COST OF THIS WORK IS INCLUDED IN THE PRICE OF THE CONDUIT EMBEDDED IN STRUCTURE.
4. EXISTING EMPTY 4" PVC CONDUIT WITH PULL TAPE EMBEDDED IN PERMANENT MEDIAN BARRIER BASE (STA. 743+00 TO STA. 758+00) FOR FUTURE USE.

TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = HECHTBR	DESIGNED - MEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WB I-80 FROM GARDNER STREET TO ROWELL AVENUE PROPOSED LIGHTING PLAN
		DRAWN - MRT	REVISED -		
	PLOT SCALE = 100.00 ' / in.	CHECKED - MKR	REVISED -		
	PLOT DATE = 3/13/2022	DATE - 3/11/2022	REVISED -		SCALE: 1" = 50' SHEET OF SHEETS STA. 743+00 TO STA. 758+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	240
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.04 Electrical\Sheet\D160W35-sht-Prop-light05.dgn



NOTES:

1. JUNCTION BOX SHALL BE ATTACHED TO STRUCTURE, UNLESS NOTED OTHERWISE.
2. JUNCTION BOX SHALL BE PROVIDED WITH UNDERGROUND STUBOUT IN ACCORDANCE WITH THE "UNDERGROUND TO EMBEDDED CONDUIT TRANSITION AT BRIDGE PARAPET" DETAIL. SEE ELECTRICAL DETAILS.
3. CONDUIT FOR BRIDGE CROSSINGS SHALL BE EMBEDDED IN PARAPET. PROVIDE EXPANSION/DEFLECTION COUPLINGS AT ALL STRUCTURE EXPANSION JOINTS. SEE ELECTRICAL DETAILS. THE COST OF THIS WORK IS INCLUDED IN THE PRICE OF THE CONDUIT EMBEDDED IN STRUCTURE.
4. EXISTING EMPTY 4" PVC CONDUIT WITH PULL TAPE EMBEDDED IN PERMANENT MEDIAN BARRIER BASE (STA. 758+00 TO STA. 759+57 AND STA. 766+17 TO 773+00) FOR FUTURE USE.

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = HECHTBR	DESIGNED - MEK	REVISED -	
	DRAWN - MRT	REVISED -	
PLOT SCALE = 100.00 ' / in.	CHECKED - MKR	REVISED -	
PLOT DATE = 3/13/2022	DATE - 3/11/2022	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB I-80 FROM GARDNER STREET TO ROWELL AVENUE
PROPOSED LIGHTING PLAN

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 758+00 TO STA. 773+15

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	241

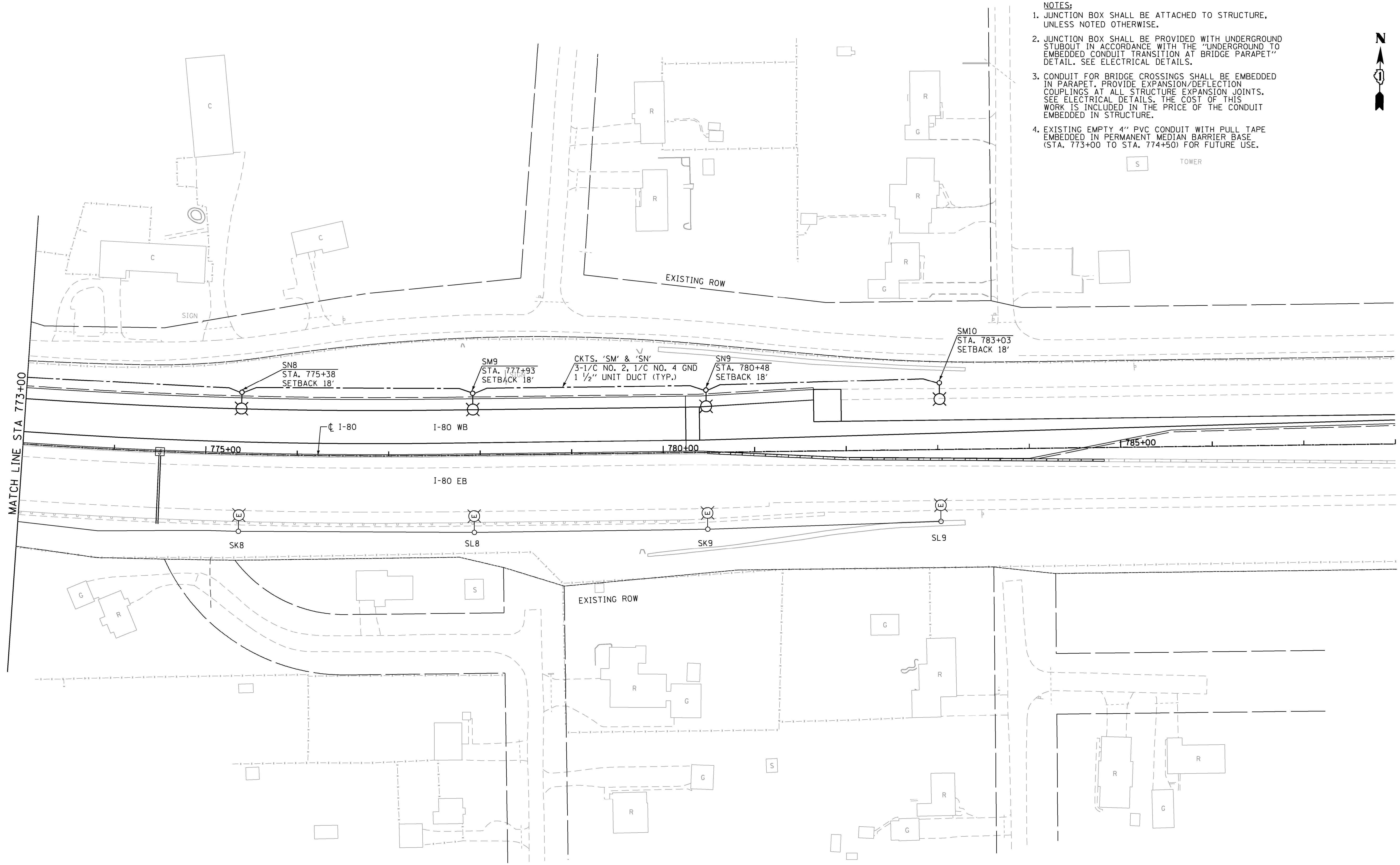
CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.04 Electrical\Sheet\D160W35-sht-Prop-light06.dgn

NOTES:

1. JUNCTION BOX SHALL BE ATTACHED TO STRUCTURE, UNLESS NOTED OTHERWISE.
2. JUNCTION BOX SHALL BE PROVIDED WITH UNDERGROUND STUBOUT IN ACCORDANCE WITH THE "UNDERGROUND TO EMBEDDED CONDUIT TRANSITION AT BRIDGE PARAPET" DETAIL. SEE ELECTRICAL DETAILS.
3. CONDUIT FOR BRIDGE CROSSINGS SHALL BE EMBEDDED IN PARAPET. PROVIDE EXPANSION/DEFLECTION COUPLINGS AT ALL STRUCTURE EXPANSION JOINTS. SEE ELECTRICAL DETAILS. THE COST OF THIS WORK IS INCLUDED IN THE PRICE OF THE CONDUIT EMBEDDED IN STRUCTURE.
4. EXISTING EMPTY 4" PVC CONDUIT WITH PULL TAPE EMBEDDED IN PERMANENT MEDIAN BARRIER BASE (STA. 773+00 TO STA. 774+50) FOR FUTURE USE.



TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = HECHTBR	DESIGNED - MEK	REVISED -
		DRAWN - MRT	REVISED -
	PLOT SCALE = 100.00 ' / in.	CHECKED - MKR	REVISED -
	PLOT DATE = 3/13/2022	DATE - 3/11/2022	REVISED -

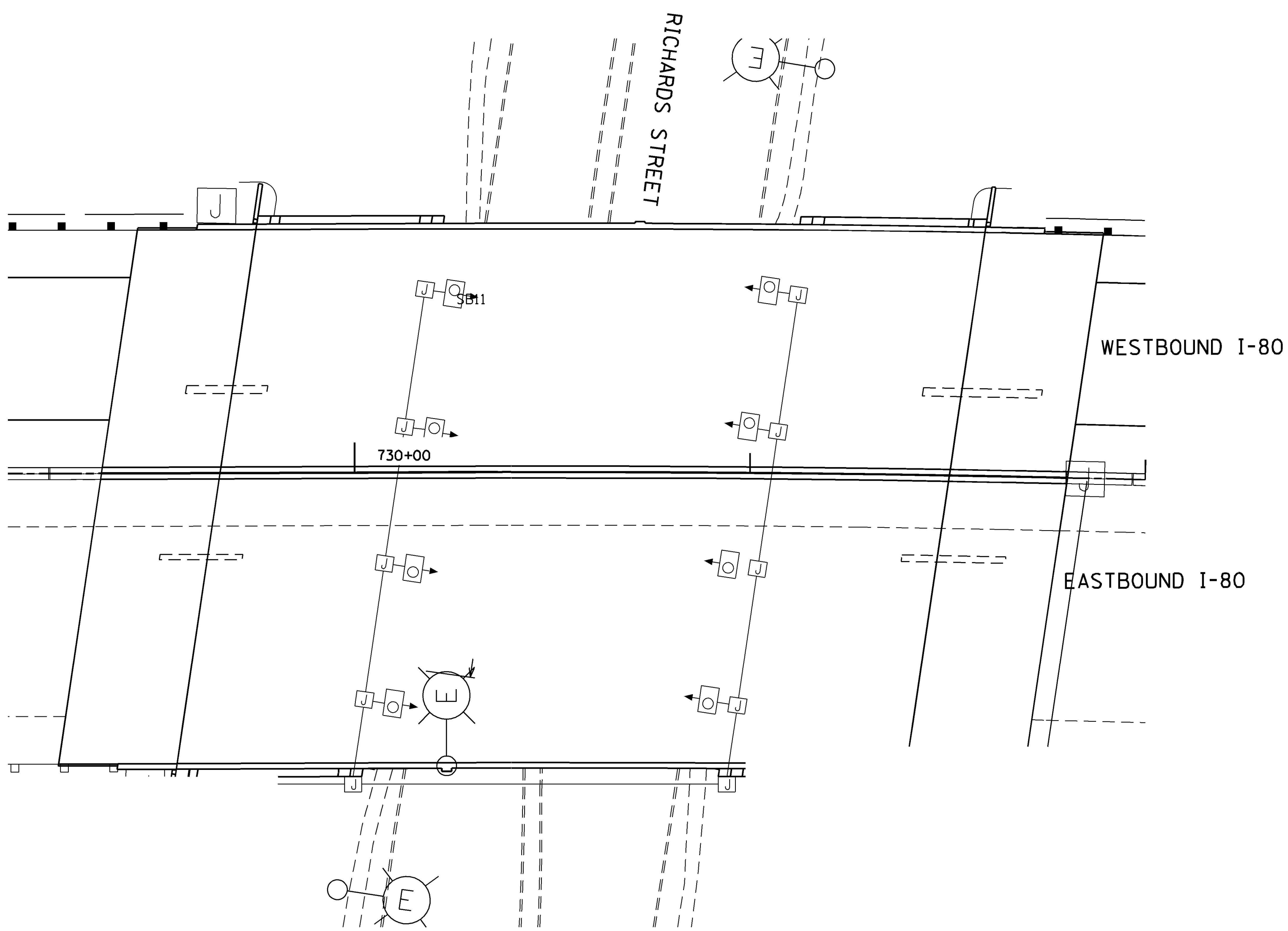
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB I-80 FROM GARDNER STREET TO ROWELL AVENUE
PROPOSED LIGHTING PLAN

SCALE: 1" = 50' | SHEET OF SHEETS | STA. 773+00 TO STA. 788+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	242
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.04 Electrical\Sheet\D160W35-sht-Prop-light07.dgn



LEGEND

EXISTING LED UNDERPASS LUMINAIRE INSTALLED IN CONTRACT 60W34

FOR INFORMATION ONLY

SCALE: 1" = 20'-0"

TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = HECHTBR	DESIGNED - MEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WB I-80 FROM GARDNER STREET TO ROWELL AVENUE RICHARDS STREET UNDERPASS LIGHTING EXISTING CONDITIONS	F.A.I. RTE. 80	SECTION 2013-009B	COUNTY WILL
		DRAWN - MRT	REVISED -			TOTAL SHEETS 465	SHEET NO. 243	
	PLOT SCALE = 40.00 ' / in.	CHECKED - MKR	REVISED -			CONTRACT NO. 60W35		
	PLOT DATE = 3/13/2022	DATE - 3/11/2022	REVISED -		SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT		

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.04 Electrical\Sheet\D160W35-sht-Underpass_Richards_Existing.dgn

LEGEND

- EXISTING LED ROADWAY LUMINAIRE, OUTPUT DESIGNATION H, 240V
- PROPOSED LED ROADWAY LUMINAIRE, OUTPUT DESIGNATION H, 240V
- EXISTING DUPLEX LIGHTING CONTROLLER
- EXISTING ELECTRIC SERVICE LOCATION
- EXISTING LED UNDERPASS LUMINAIRE, OUTPUT DESIGNATION E, 240V

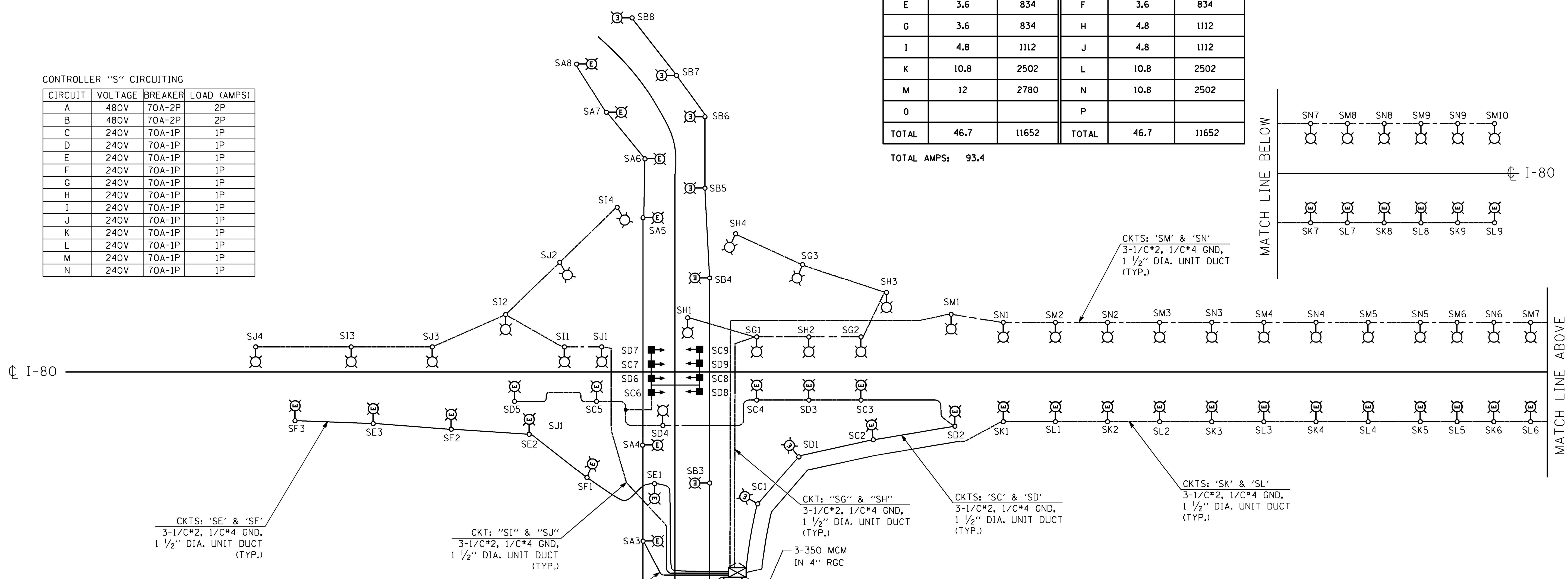
LOAD TABLE
PROPOSED IDOT LIGHTING CONTROLLER "S"

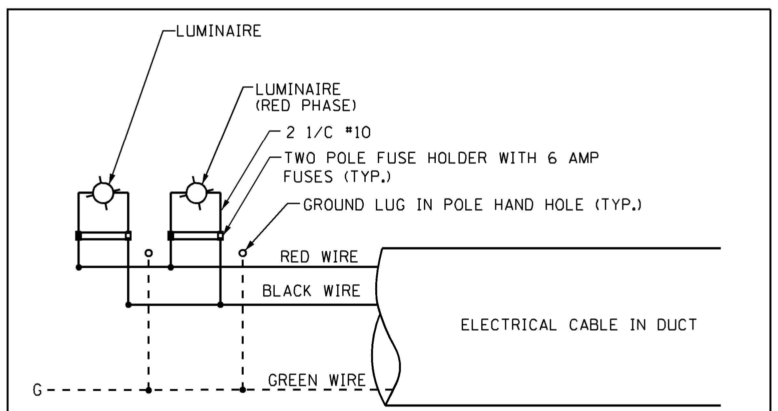
CIRCUIT	RED PHASE (RED CABLE)		CIRCUIT	BLACK PHASE (BLACK CABLE)	
	AMPS	WATTS		AMPS	WATTS
A	3.7	1600	B	3.7	1600
C	8.2	1990	D	8.2	1990
E	3.6	834	F	3.6	834
G	3.6	834	H	4.8	1112
I	4.8	1112	J	4.8	1112
K	10.8	2502	L	10.8	2502
M	12	2780	N	10.8	2502
O			P		
TOTAL	46.7	11652	TOTAL	46.7	11652

TOTAL AMPS: 93.4

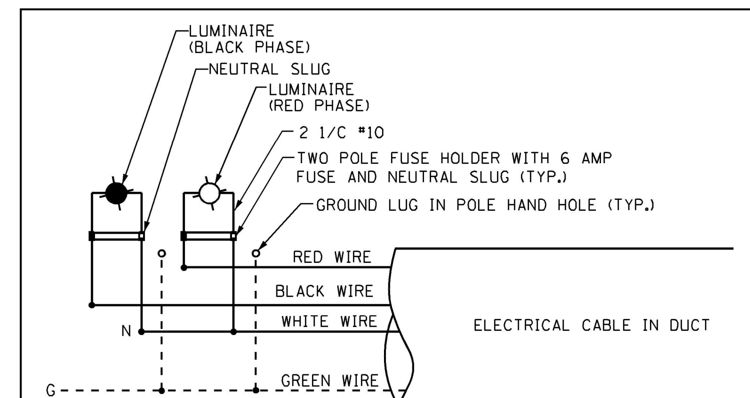
CONTROLLER "S" CIRCUITING

CIRCUIT	VOLTAGE	BREAKER	LOAD (AMPS)
A	480V	70A-2P	2P
B	480V	70A-2P	2P
C	240V	70A-1P	1P
D	240V	70A-1P	1P
E	240V	70A-1P	1P
F	240V	70A-1P	1P
G	240V	70A-1P	1P
H	240V	70A-1P	1P
I	240V	70A-1P	1P
J	240V	70A-1P	1P
K	240V	70A-1P	1P
L	240V	70A-1P	1P
M	240V	70A-1P	1P
N	240V	70A-1P	1P





LUMINAIRE WIRING CONNECTION DETAIL
(2-POLE BREAKER, 480V)



LUMINAIRE WIRING CONNECTION DETAIL
(1-POLE BREAKER, 240V)

TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = hechtbr	DESIGNED - MEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - MRT	REVISED -	
	PLOT SCALE = 100.00 ' / in.	CHECKED - MKR	REVISED -	
	PLOT DATE = 3/23/2022	DATE - 3/11/2022	REVISED -	

WB I-80 FROM GARDNER STREET TO ROWELL AVENUE
CONTROLLER "S" SINGLE LINE DIAGRAM

SCALE: N.T.S. | SHEET OF SHEETS | STA. TO STA.

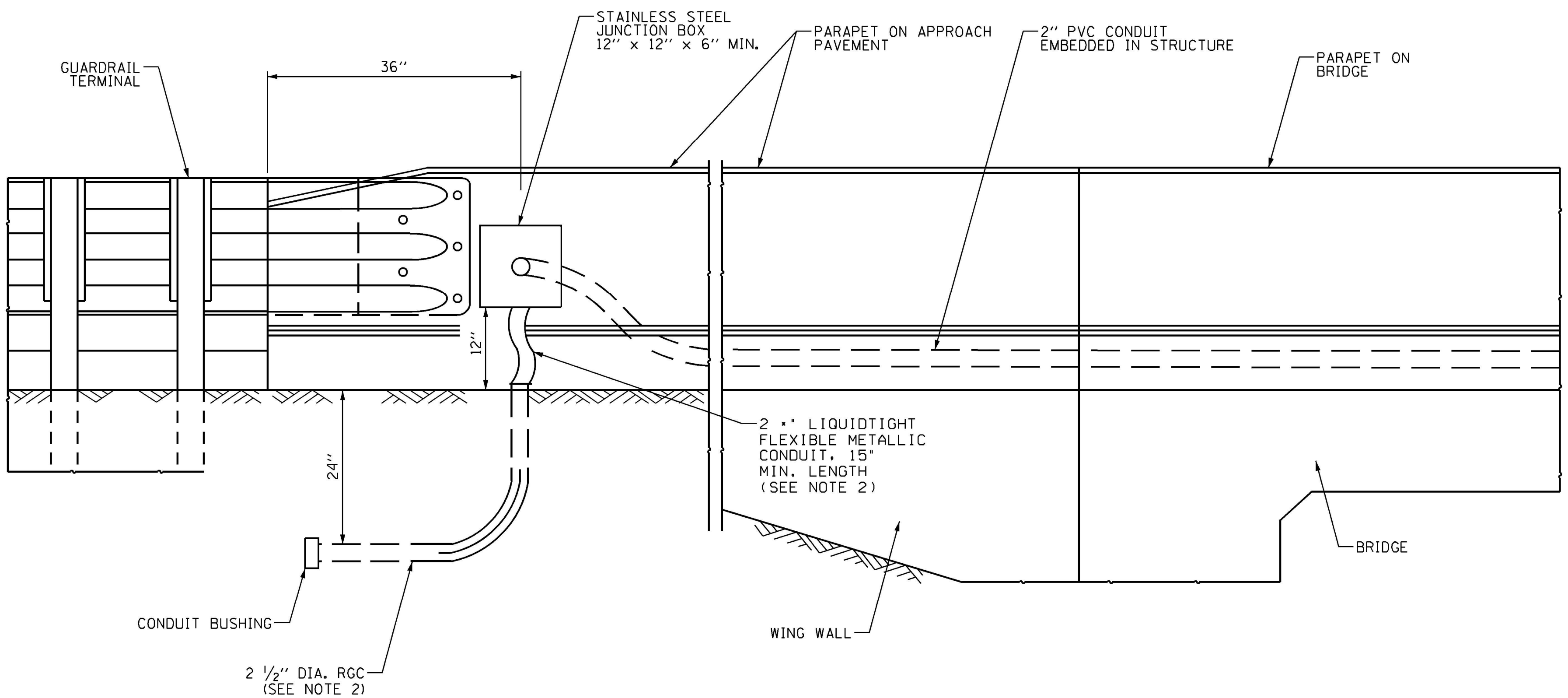
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	244

CONTRACT NO. 60W35
ILLINOIS | FED. AID PROJECT

FILE NAME = pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.04 Electrical\Sheet\D160W35-SLD-U.dgn

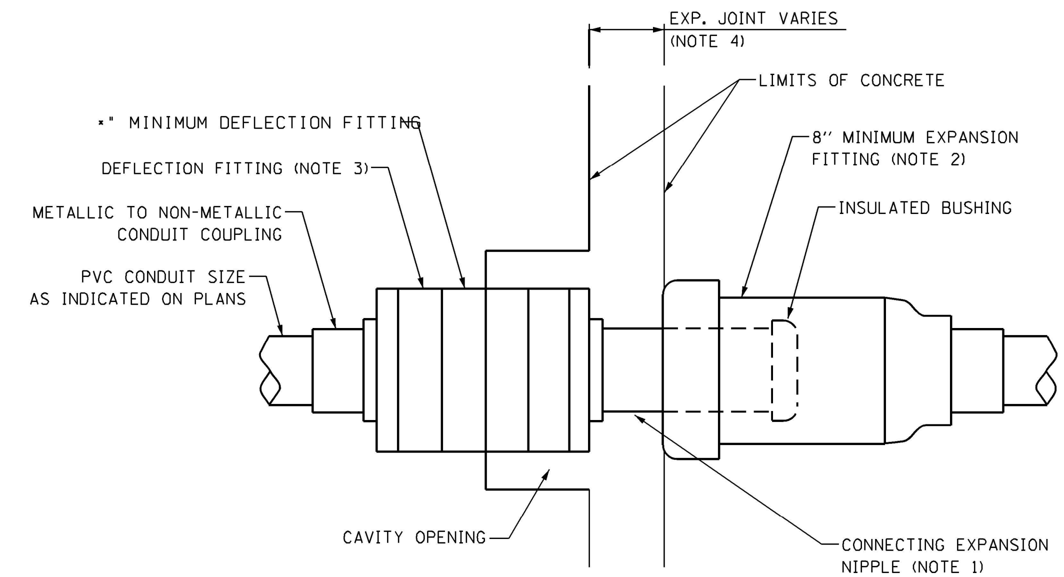
NOTES:

1. WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY SUBSTITUTE TWO 12" X 12" X 6" MIN. STAINLESS STEEL JUNCTION BOXES ATTACHED TO BACK OF WALL AND CONNECTED WITH LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT FOR ALL EXPANSION JOINTS.
2. THE COST OF THE 2 •" DIA. RGC, ELBOW AND LENGTH OF LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT ARE INCLUDED IN THE COST OF THE JUNCTION BOX.



UNDERGROUND TO EMBEDDED CONDUIT TRANSITION AT BRIDGE PARAPET

NOT TO SCALE

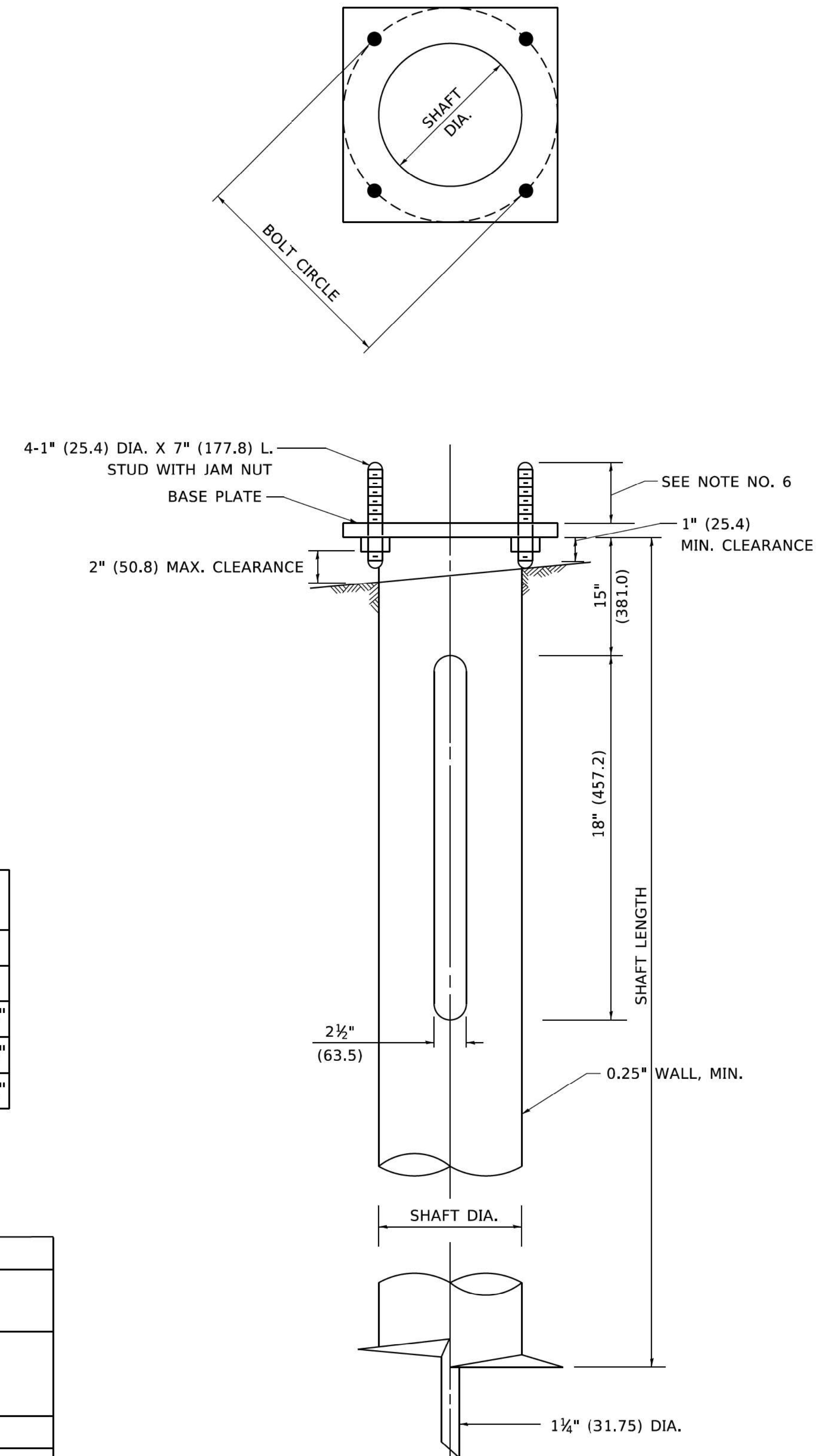


CONDUIT EXPANSION/DEFLECTING COUPLING

NOT TO SCALE

NOTES:

1. PROVIDE REQUIRED LENGTH OF CONNECTING EXPANSION NIPPLE. REFER TO STRUCTURAL DRAWINGS FOR THE EXPANSION JOINT CHARACTERISTICS.
2. THE BARREL OF THE FITTING SHALL BE FULLY EMBEDDED IN THE CONCRETE ON ONE SIDE OF THE EXPANSION JOINT.
3. A CAVITY OPENING, IF REQUIRED, SHALL BE 3" LARGER DIA. AND A MAX. DEPTH OF HALF OF THE DEFLECTION FITTING SHALL BE CENTERED IN THE OPENING AND EMBEDDED IN THE CONCRETE ONLY UP TO THE DEFLECTION FITTING CENTER.
4. REFER TO STRUCTURAL PLANS FOR EACH EXPANSION JOINT WIDTH, AND OTHER STRUCTURAL DETAILS.
5. THE COST OF INSTALLATION OF EXPANSION/DEFLECTION COUPLING DEVICES AND THE GALVANIZED CONDUIT CLAMPS AND SUPPORT/ATTACHMENT APPARATUS SHALL BE CONSIDERED INCLUDED IN THE PAY ITEM "CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC".
6. CONDUIT FOR BRIDGE CROSSINGS SHALL BE EMBEDDED IN PARAPET. PROVIDE EXPANSION/DEFLECTION COUPLINGS AT ALL STRUCTURE EXPANSION JOINTS.



NOTES

1. ALL DIMENSION IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. ALL MATERIAL SHALL BE GALVINIZED ACCORDING TO AASHTO M111, UNLESS OTHERWISE SPECIFIED.
3. ALL WELDS SHALL BE CONTINUOUS AND NOT LESS THAN 1#4" (6.35 mm) FILLET WELDS. THE WELDED FOUNDATION SHALL BE CAPABLE OF WITHSTANDING 10,000 FT/LBS (13558.18 n.m) OF INSTALLATION TORQUE APPLIED ABOUT THE AXIS OF THE FOUNDATION.
4. THE HELIX FOUNDATION SHAFT SHALL BE INSTALLED VERTICAL AND THE BASE PLATE SHALL BE IN LEVEL. THE BREAKAWAY COUPLINGS AND HARDWARE SHALL NOT BE USED TO ALIGN THE POLE INSTALLATION.
5. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE INSTALLATION OF THE LIGHT POLE.
6. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF THE BASE PLATE WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS.
7. ANY VOIDS WITHIN THE METAL FOUNDATION SHALL BE FILLED WITH FINE AGGREGATE.
8. METAL FOUNDATIONS SHALL BE INSTALLED IN UNDISTURBED SOIL. PREDRILLING A PILOT HOLE AND/OR BACKFILLING AROUND THE FOUNDTION IS NOT ALLOWED.
9. THE METAL FOUNDATION SHALL NOT BE INSTALLED TO A TORQUE WHICH EXCEEDS THE MANUFACTURER'S MAXIMUM TORQUE RATING NOR SHALL IT BE INSTALLED TO AN INSTALLATION TORQUE VALUE OF LESS THAN 3,500 FT LB (4,750 KNM). METAL FOUNDATIONS THAT ARE NOT INSTALLED TO FULL INSTALLATION DEPTH OR DO NOT ACHIEVE THE MINIMUM INSTALLATION TORQUE SHALL BE REMOVED AND REPLACED WITH A CONCRETE FOUNDATION AT NO ADDITIONAL COST.
10. THE BASEPLATE SHALL BE PERPENDICULAR TO THE SHAFT AXIS (± 1°) AND THE HOLE CENTERLINE SHALL BE CONCENTRIC (± 0.188) TO THE SHAFT AXIS.
11. THE PILOT POINT AND SHAFT AXIS SHALL BE CONCENTRIC (± 0.125) AND IN LINE (± 2°).
12. THE BASEPLATE SHALL BE STAMPED WITH THE MANUFACTURERS NAME AND DATE OF MANUFACTURE.

HELIX FOUNDATION SIZE

POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
30 FT.	11½"	8⅝"	6 FT.	12"x12"x1"
31 FT.-35 FT.	11½"	8⅝"	6 FT.	12"x12"x1"
36 FT.-40FT.	15"	8⅝"	6 FT.	15"x15"x1¼"
41 FT.-45 FT.	15"	8⅝"	6 FT.	15"x15"x1¼"
46 FT.-50 FT.	15"	10"	8 FT.	15"x15"x1¼"

METAL HELIX FOUNDATION MATERIALS

ITEM	MATERIAL REQUIREMENT
BASEPLATE	AASHTO M 270M, GRADE 36 (M270M, GRADE 250)
SHAFT	ASTM A 252, GRADE 2 (PHOSPHOROUS 0.04% MAXIMUM, SULFUR 0.05% MAXIMUM)
HELIX SCREW	AASHTO M 183 (ASTM A 635)
PILOT POINT	AASHTO M 270 (ASTM A 575)
ANCHOR RODS/STUDS	AASHTO M 314 (ASTM F 1554)
HEXAGON NUTS	AASHTO M 291M (ASTM A 563) GRADE DH, OR AASHTO M 292 (ASTM A 194) GRADE 2H
WASHERS	AASHTO M 293 (ASTM F 436)

MODEL: Default
FILE NAME: pw:\\planroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist5d22x34\CADData\CADsheets\be305.dgn

USER NAME = footemj	DESIGNED -	REVISED -	
	DRAWN - DLB	REVISED -	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/19/2019	DATE - 02-27-07	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

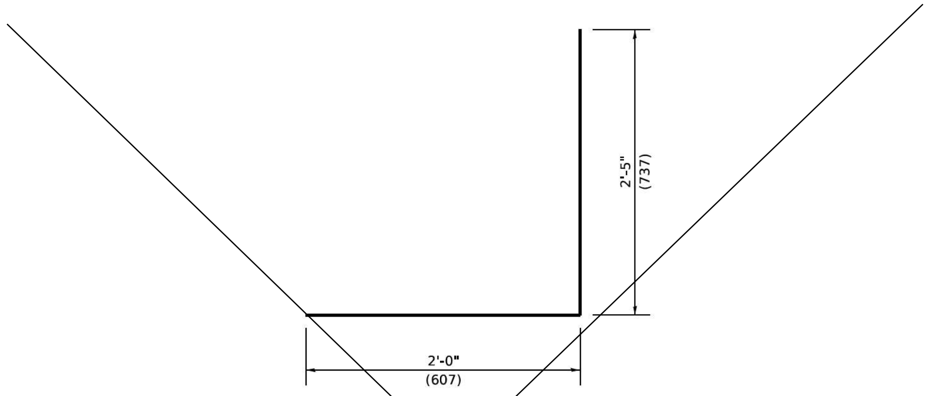
LIGHT POLE FOUNDATION, METAL

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

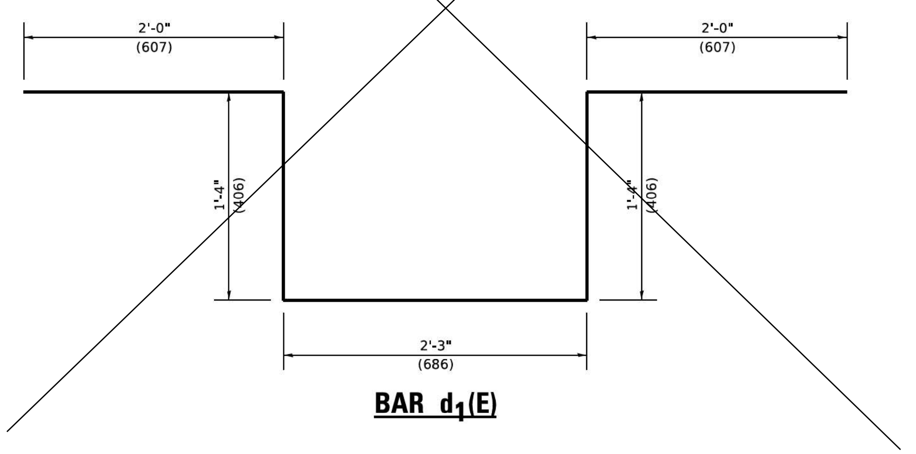
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	246

BE-305 CONTRACT NO. 60W35

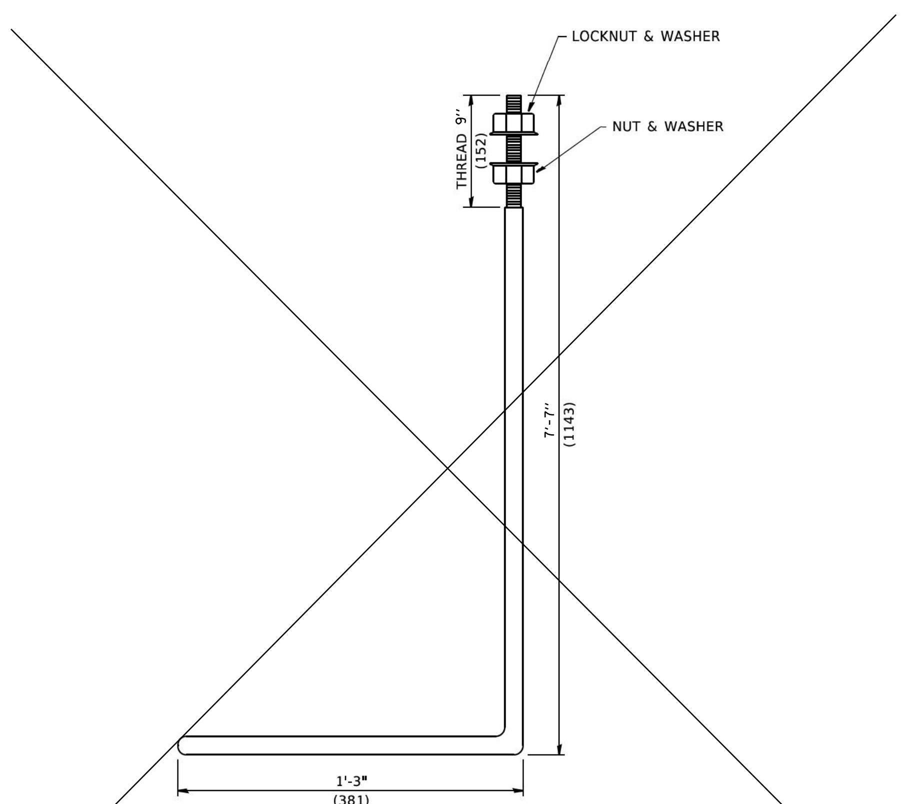
ILLINOIS | FED. AID PROJECT



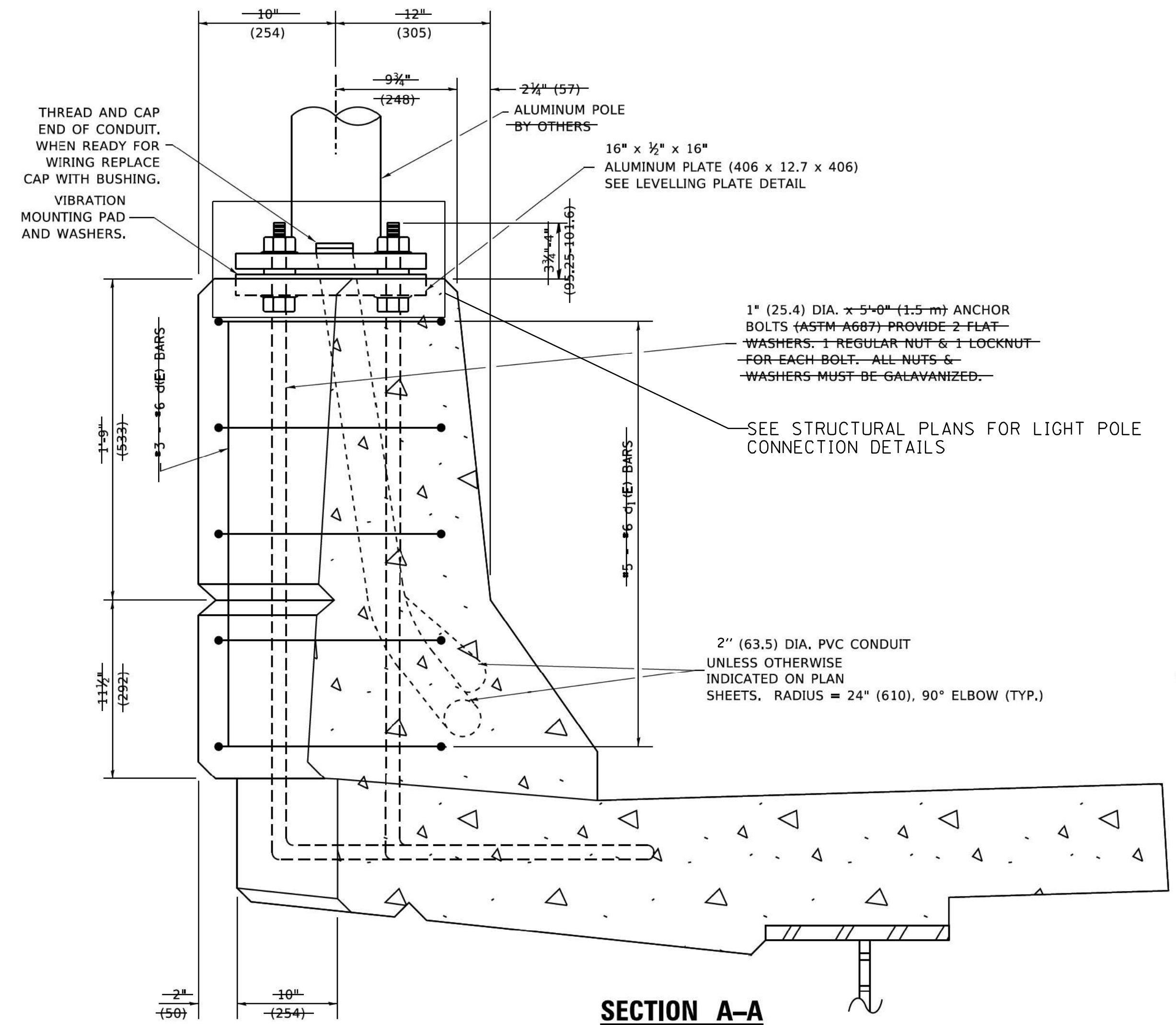
BAR d (E)



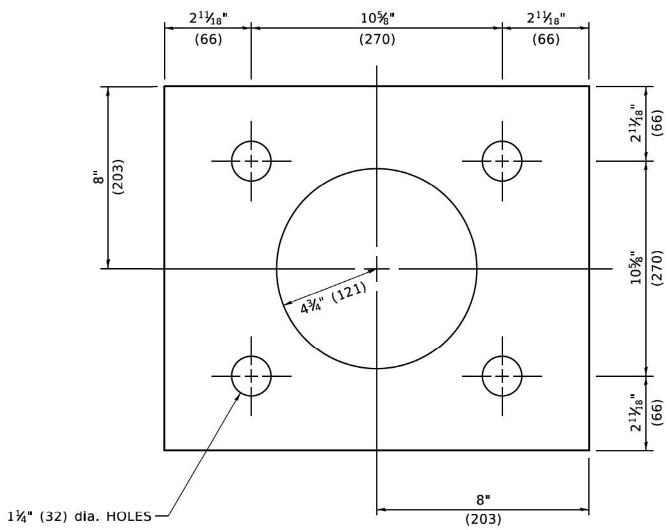
BAR d_1(E)



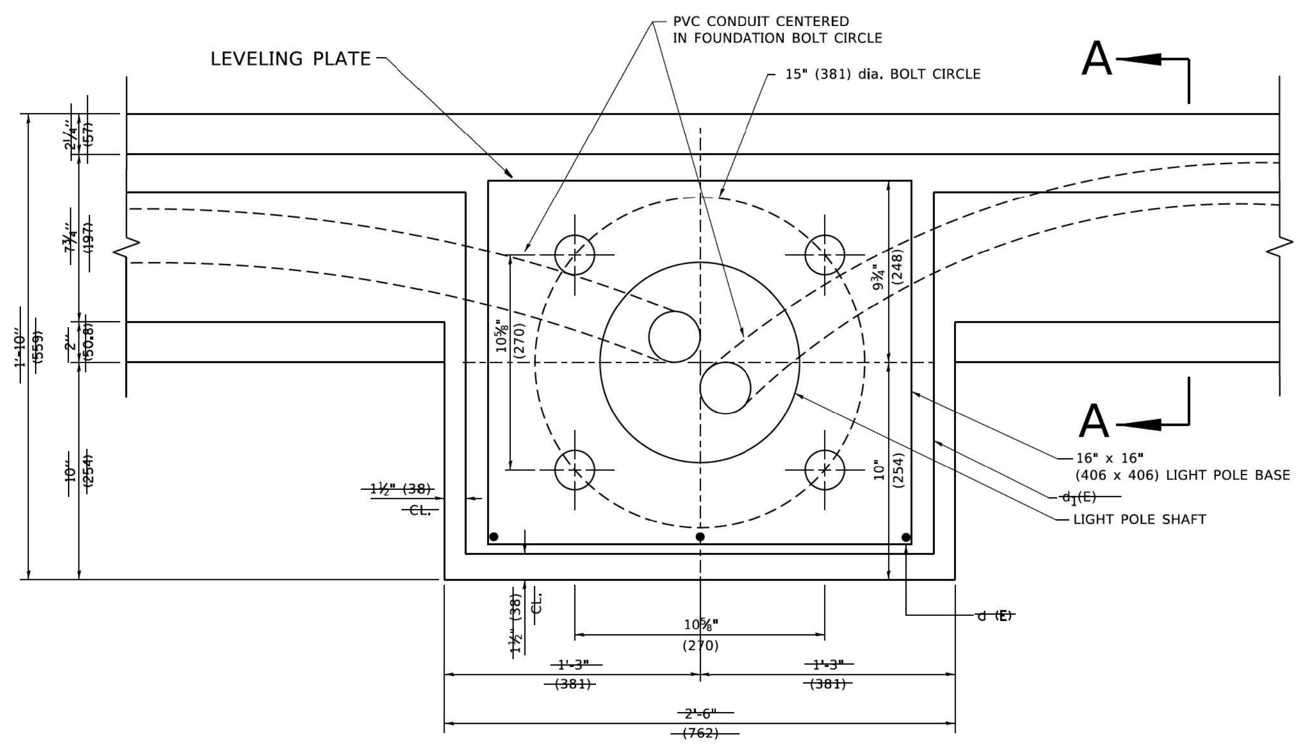
1" (25.4) dia. ANCHOR BOLT



SECTION A–A



LEVELING PLATE DETAIL



PLAN

NOTES

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. ~~LEVEL LIGHT POLE PLATES, USING THE FLANGE NUTS, PRIOR TO POURING THE PARAPET WALL. THE TOP OF THE PLATE SHALL BE AT THE SAME ELEVATION AS THE FINISHED CONCRETE PARAPET.~~
3. ~~THE COST OF ANCHOR BOLTS, CONDUIT, LEVELLING PLATE AND FOUNDATION IS INCLUDED IN THE COST OF THE BRIDGE STRUCTURE.~~

2. SEE STRUCTURAL PLANS FOR PARAPET, ANCHOR BOLT AND REINFORCEMENT DETAILS.

MODEL: Default
FILE NAME: pw:\\planroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist5d22x34\CADData\CADSheets\be330.dgn

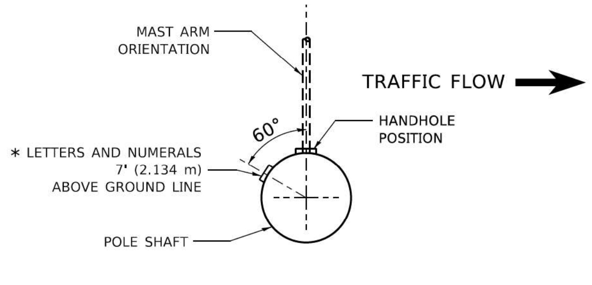
USER NAME = footemj	DESIGNED -	REVISED -	04-22-02
	DRAWN -	REVISED -	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/19/2019	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

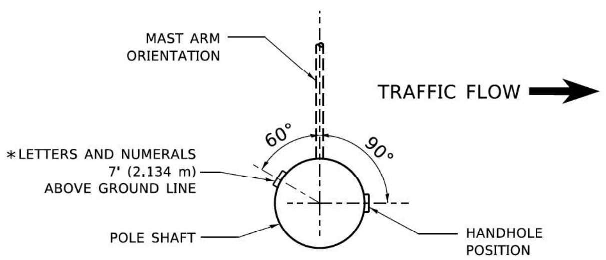
LIGHT POLE MOUNTED ON CONCRETE PARAPET WALL
15" (381 mm) BOLT CIRCLE

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

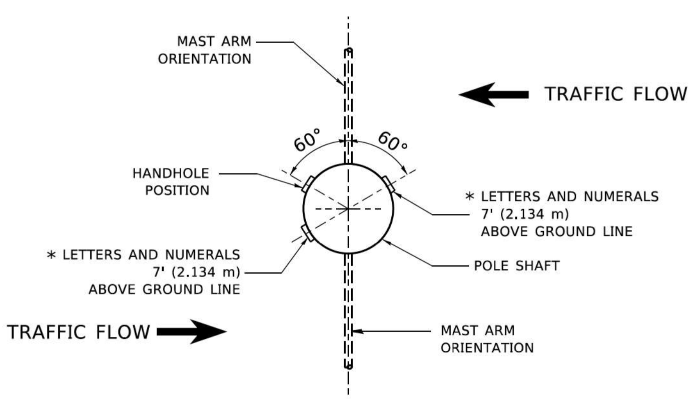
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	247
	BE-330	CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		



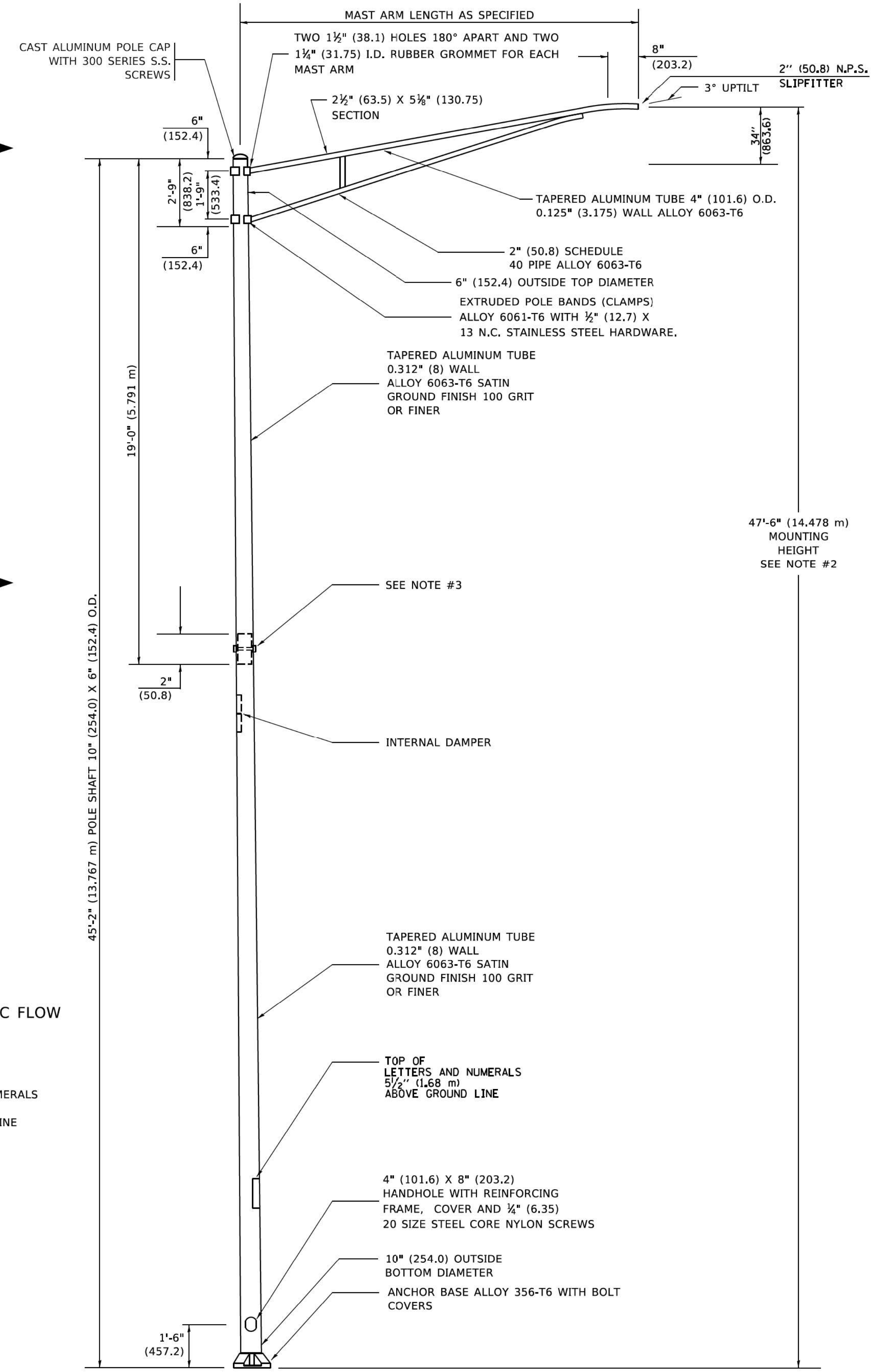
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL

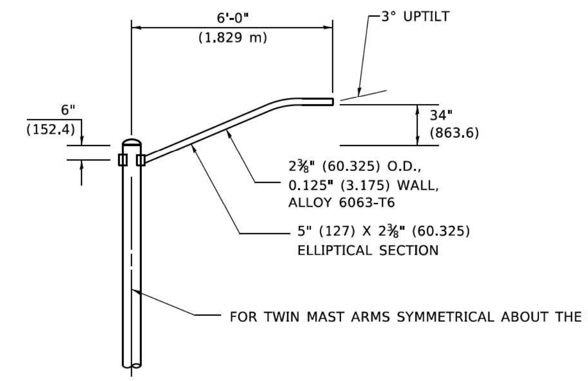


POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES



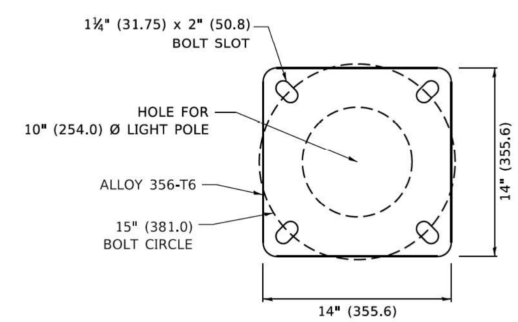
POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES





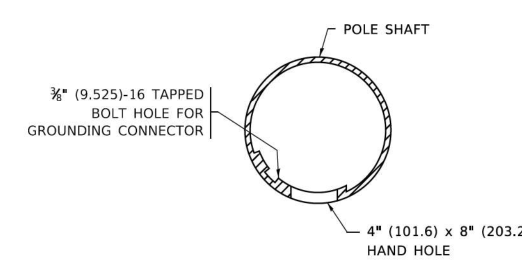
6' (1.8 m) SINGLE MEMBER MAST ARM

(N.T.S.)



LIGHT POLE BASE PLATE DETAIL

15 INCH (381.0) BOLT CIRCLE



HANDHOLE DETAIL

(N.T.S.)

NOTES

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
3. TWO PIECE SHAFT WILL BE MATCHED MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. FIELD DRILLING OF THE HOLES WILL NOT BE ALLOWED.
4. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
5. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR. BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
6. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
7. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
8. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.

MODEL: Default
FILE NAME: pw:\\plamroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist5\d22x34\CADData\CADSheets\be400.dgn

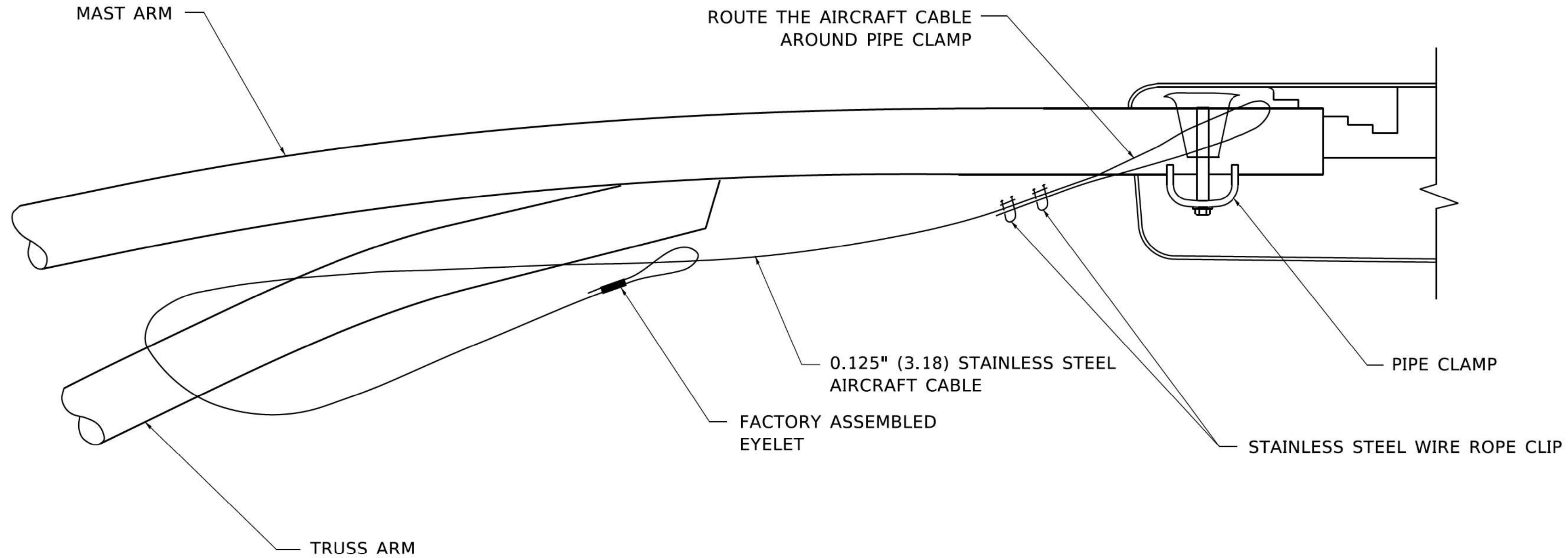
USER NAME = footemj	DESIGNED -	REVISED - R. TOMSONS 09-36-00	
	DRAWN -	REVISED - R. TOMSONS 09-03-03	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - R. TOMSONS 01-18-13	
PLOT DATE = 4/19/2019	DATE -	REVISED - R. TOMSONS 03-18-15	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

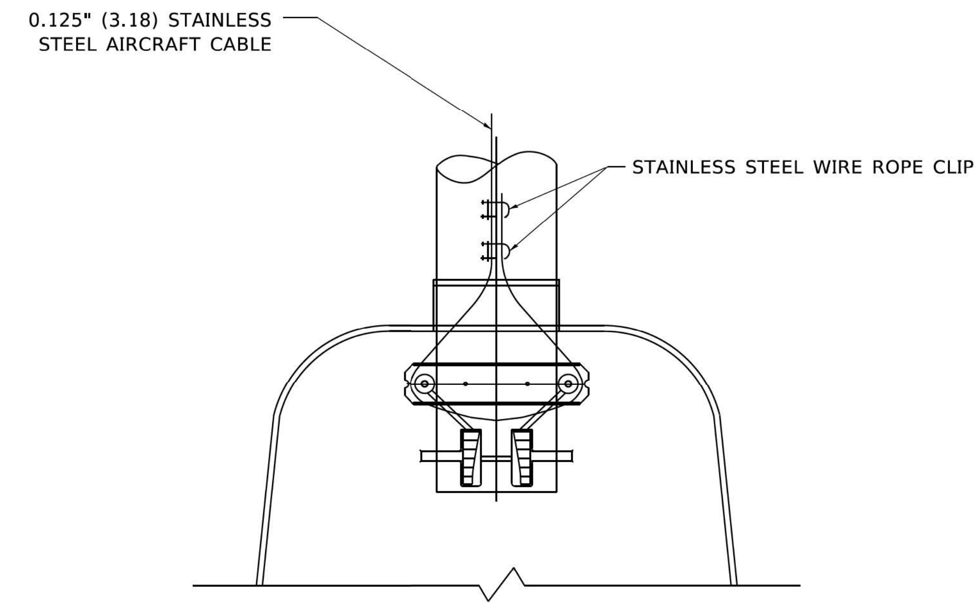
ALUMINUM LIGHT POLE
47'–6" (14.478 m) MOUNTING HEIGHT

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. TO STA.

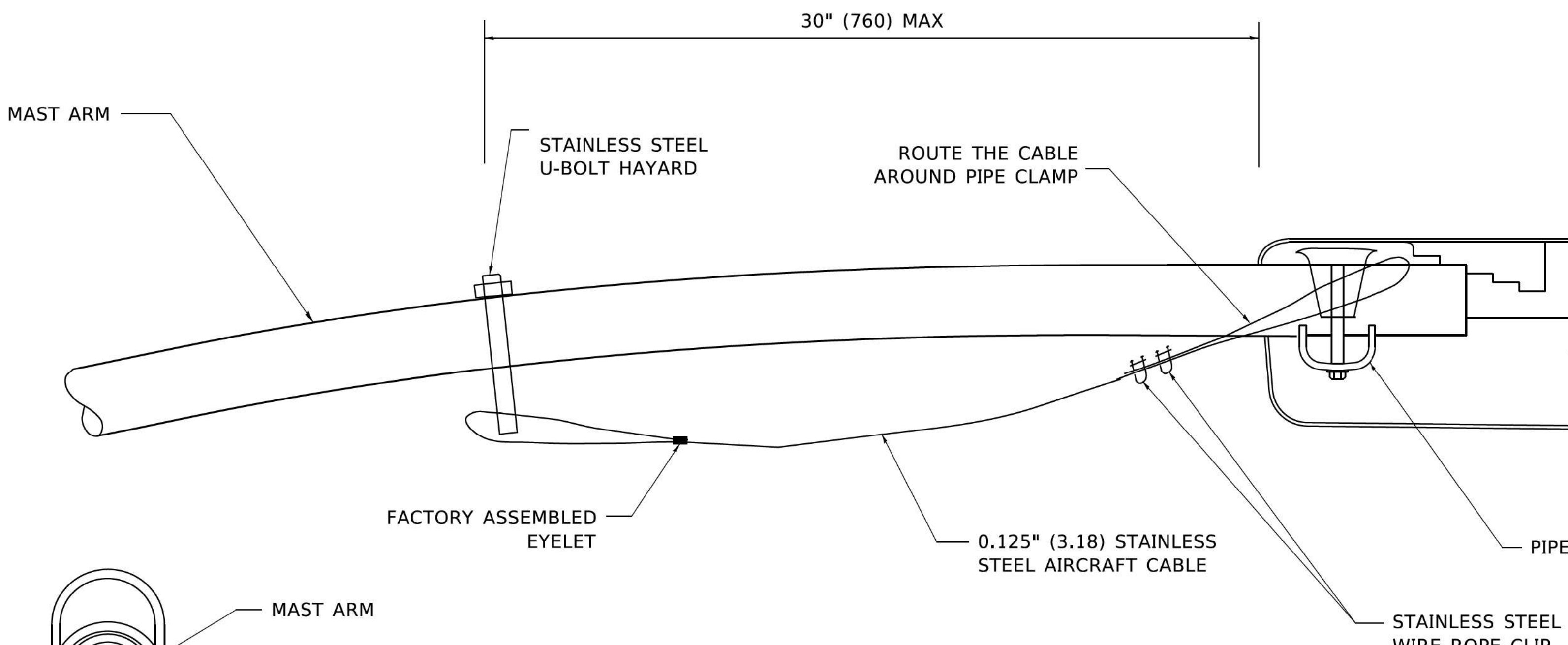
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	248
	BE-400	CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

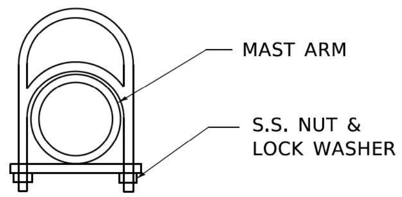


SIDE VIEW (TRUSS ARM)
N.T.S.



BOTTOM VIEW
N.T.S.





STAINLESS STEEL
U-BOLT HAYARD

SIDE VIEW (SINGLE MEMBER OR DAVIT ARM)
N.T.S.

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
2. CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL.
4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700 LBS. MIN.

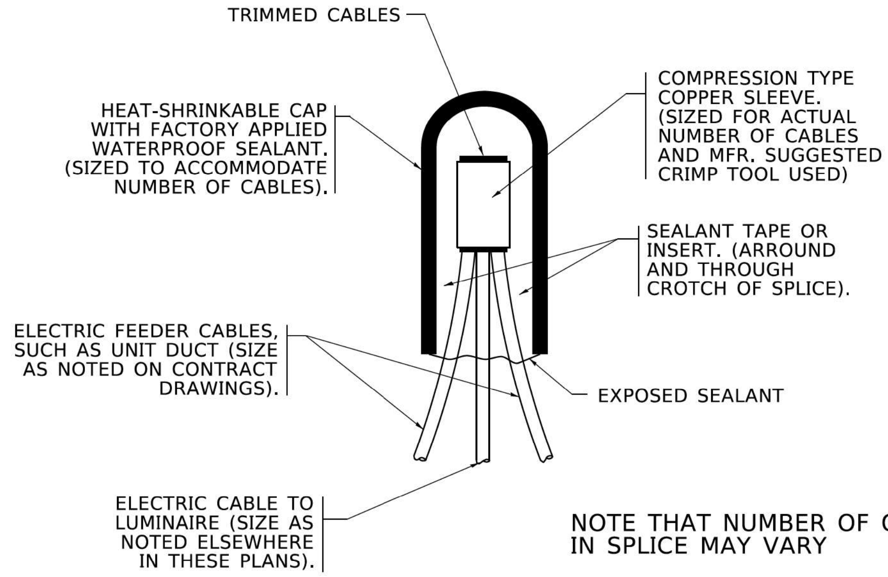
MODEL: Default
FILE NAME: pw:\\planroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\DistStd22x34\CADData\CADsheets\be701.dgn

USER NAME = footemj	DESIGNED -	REVISED - 08-08-03	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/19/2019	DATE -	REVISED -	

LUMINAIRE SAFETY CABLE ASSEMBLY

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

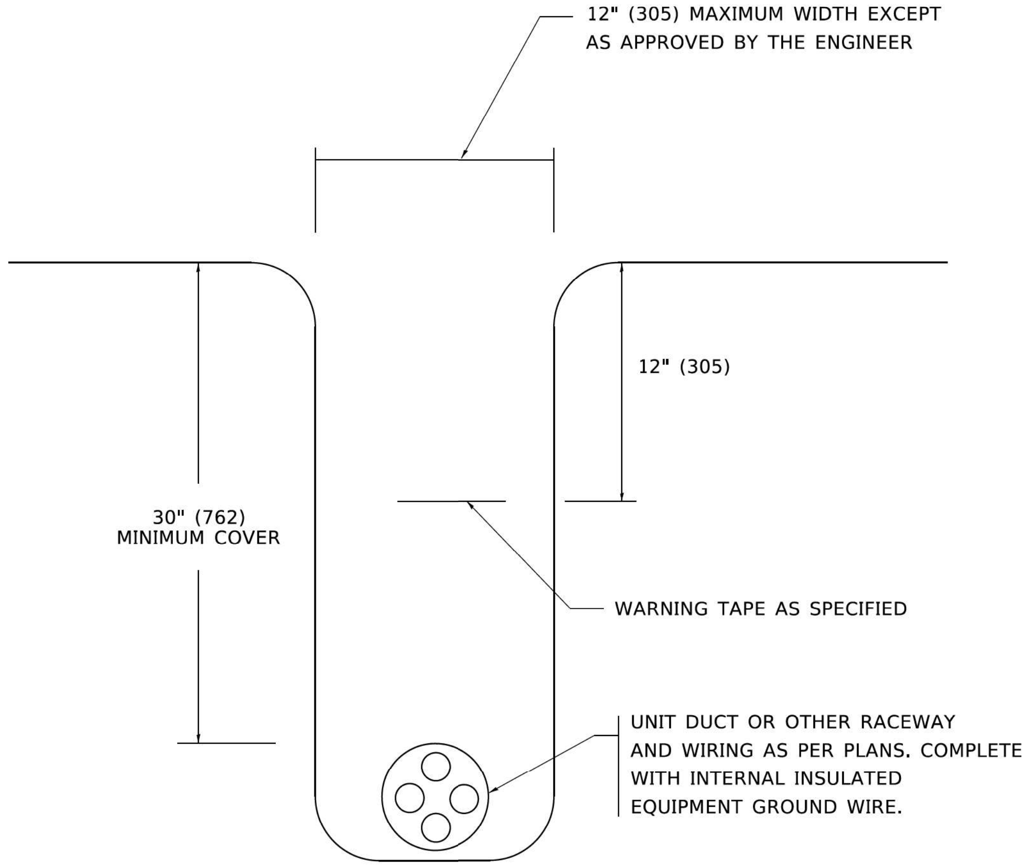
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	249
	BE-701	CONTRACT NO. 60W35		
	ILLINOIS	FED. AID PROJECT		



NOTE THAT NUMBER OF CABLES IN SPLICE MAY VARY

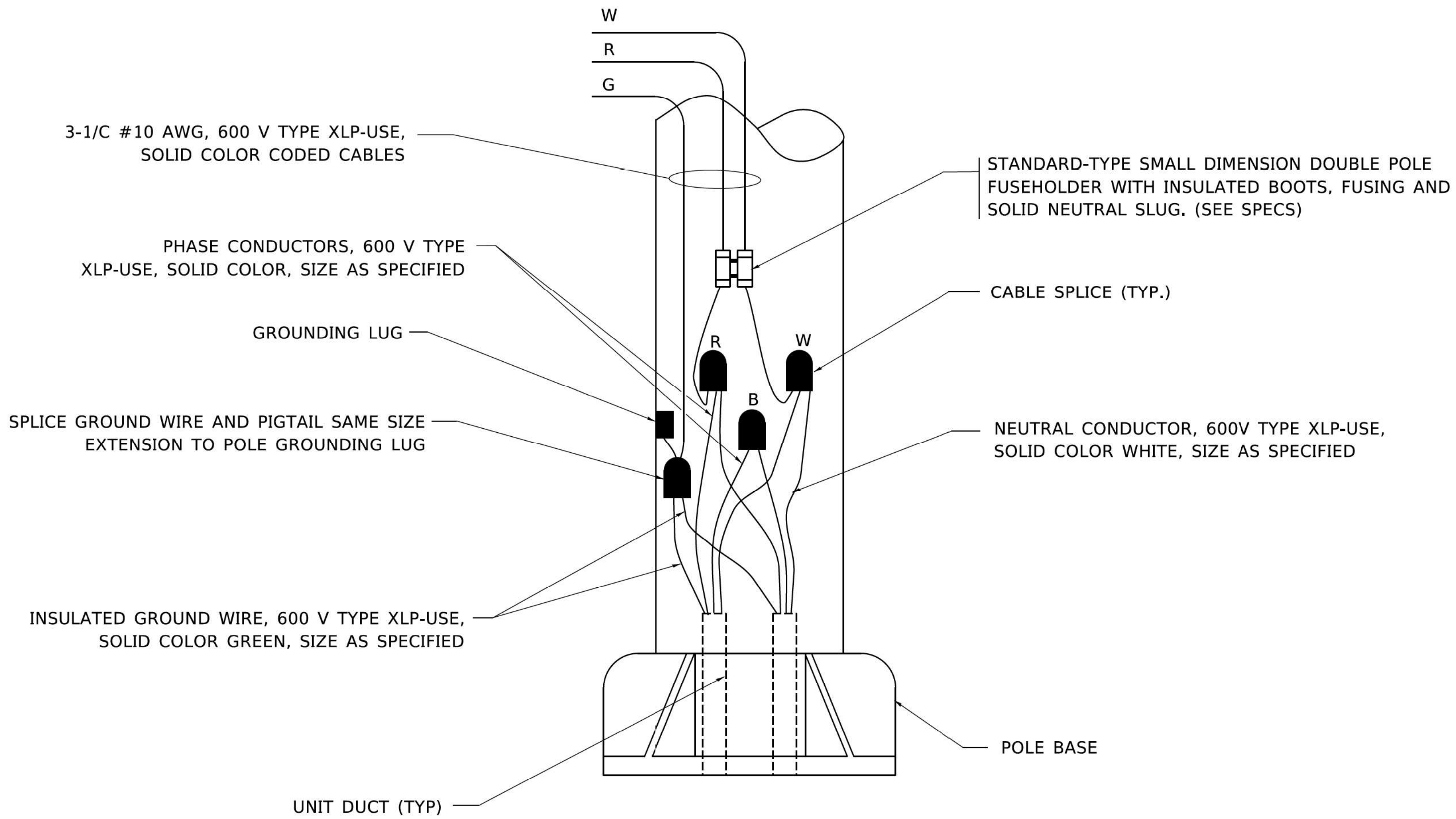
TYPICAL SPLICE DETAIL

N.T.S.



TYPICAL WIRING IN TRENCH DETAIL

N.T.S.



POLE WIRING DETAIL

N.T.S.

MODEL: Default
FILE NAME: pw:\\planroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\DistStd22x34\CADData\CADsheets\be702.dgn

USER NAME = leysa	DESIGNED -	REVISED - 02/04/2020	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/2/2020	DATE - 08/08/2003	REVISED -	

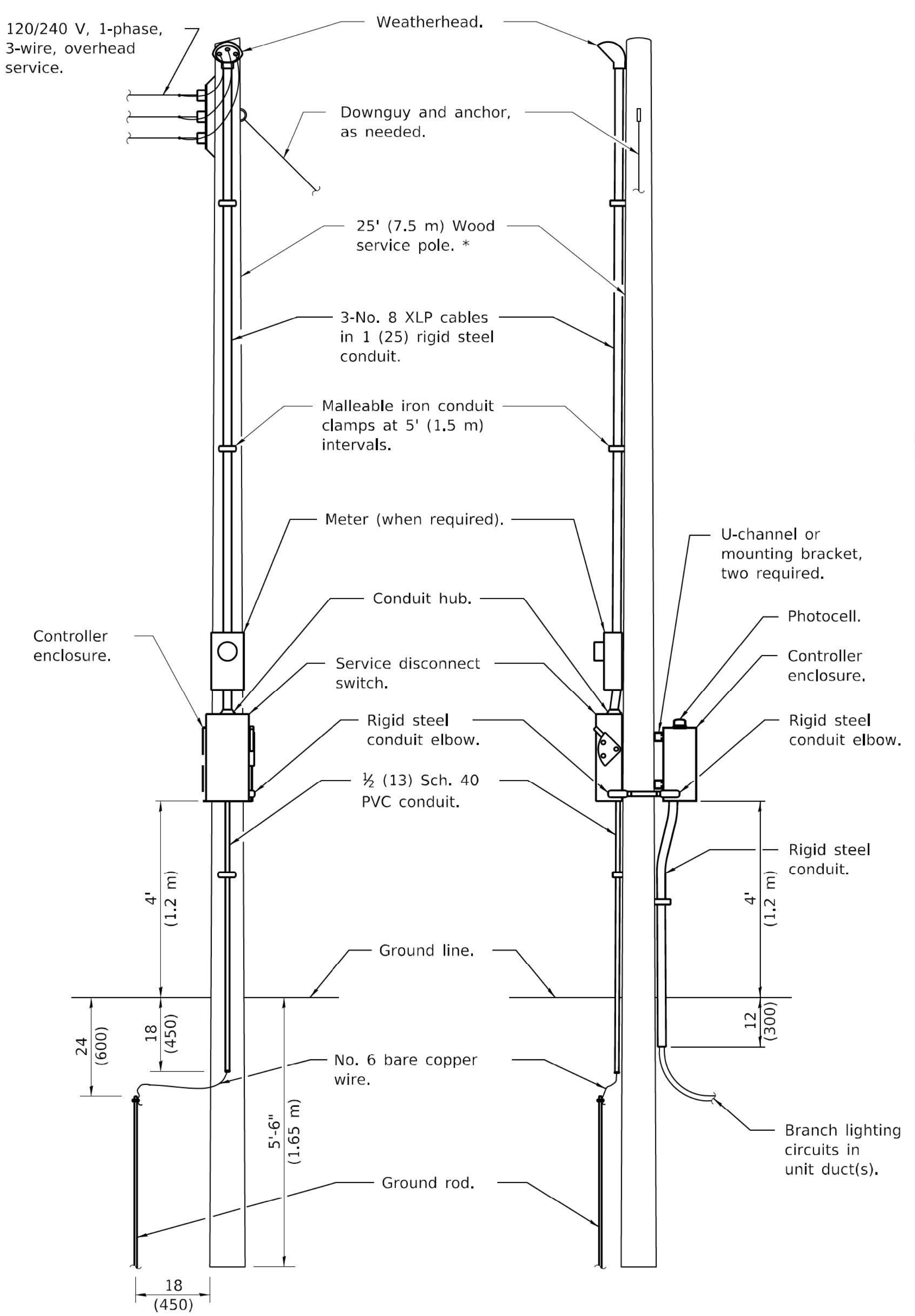
MISC. ELECTRICAL DETAILS
SHEET A

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	250
	BE-702	CONTRACT NO. 60W35		

ILLINOIS | FED. AID PROJECT

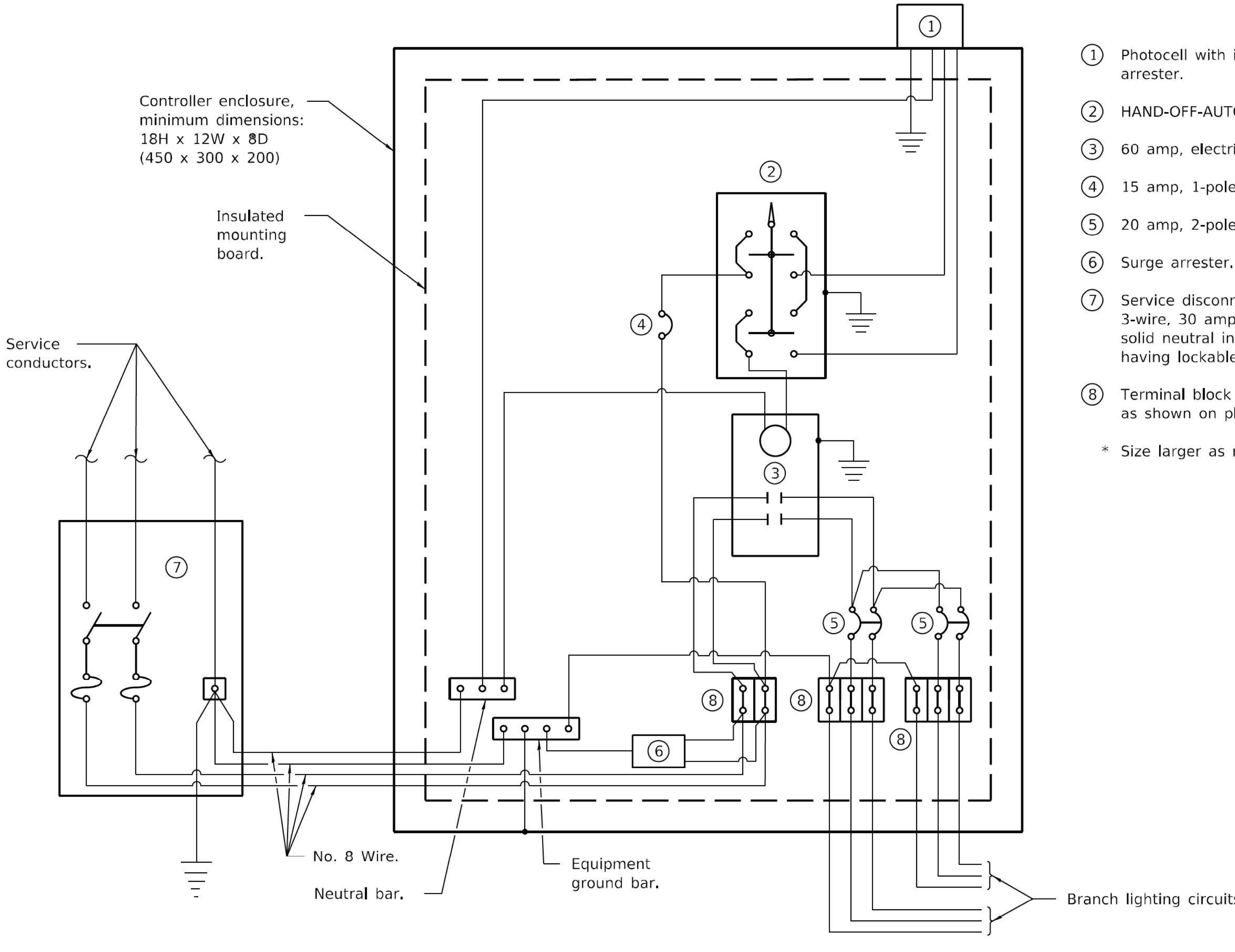
30 AMP



FRONT **SIDE**

ELECTRIC SERVICE INSTALLATION

(Typical overhead service shown. Cut pole off for underground service and treat cut surface with preservative. Consult utility company standards for exact requirements.)
* Size larger as needed.



CONTROL SCHEMATIC

1. Photocell with integral surge arrester.
2. HAND-OFF-AUTO selector switch.
3. 60 amp, electrically held contactor.
4. 15 amp, 1-pole circuit breaker.
5. 20 amp, 2-pole circuit breaker.
6. Surge arrester.
7. Service disconnect switch - 2-pole, 3-wire, 30 amp, fused at 30 amp, solid neutral in NEMA 4X enclosure having lockable external handle.
8. Terminal block sized for conductors as shown on plans.

* Size larger as needed.

GENERAL NOTES

Provide 12x9x1 (305x225x25) watertight pouch mounted inside controller door with as-built plans and schematics.

Provide engraved nameplate on front of enclosure reading "LIGHTING".

Enclosure shall be mounted to pole with pole-bands and lag-bolts.

Work pad not shown.

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-19	Replaced ** note with new note regarding consulting utility company standards for installation.
4-1-16	Corrected connection at terminal block.

LIGHTING CONTROLLER POLE MOUNTED, 240V

(Sheet 1 of 2)

STANDARD 825001-04

Illinois Department of Transportation

PASSED January 1, 2019
ELECTRICAL AND MECHANICAL UNIT CHIEF
APPROVED January 1, 2019
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-10

USER NAME = footemj	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/19/2019	DATE - 01-20-2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY POLE MOUNTED LIGHTING CONTROLLER, 240V

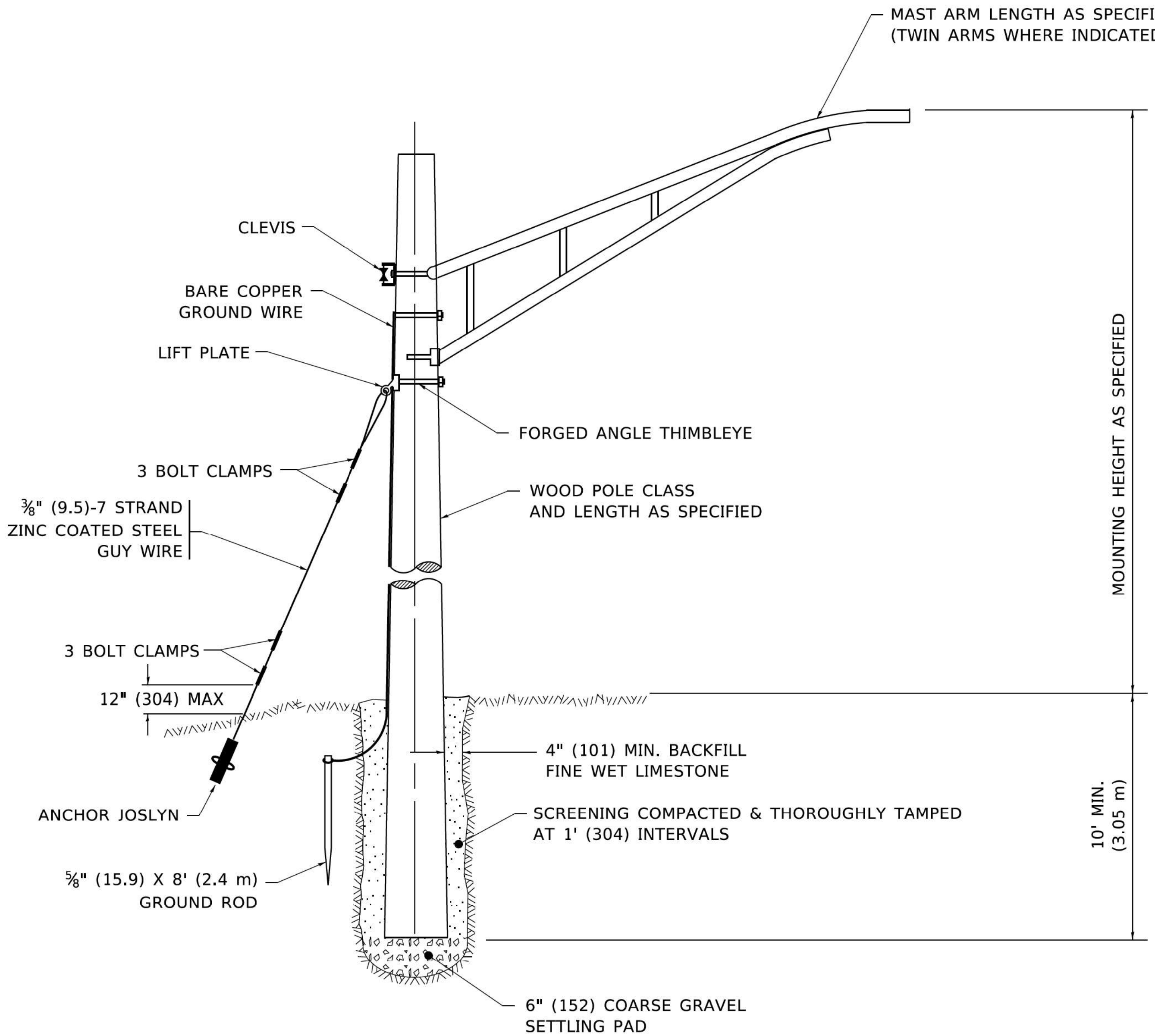
SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	251

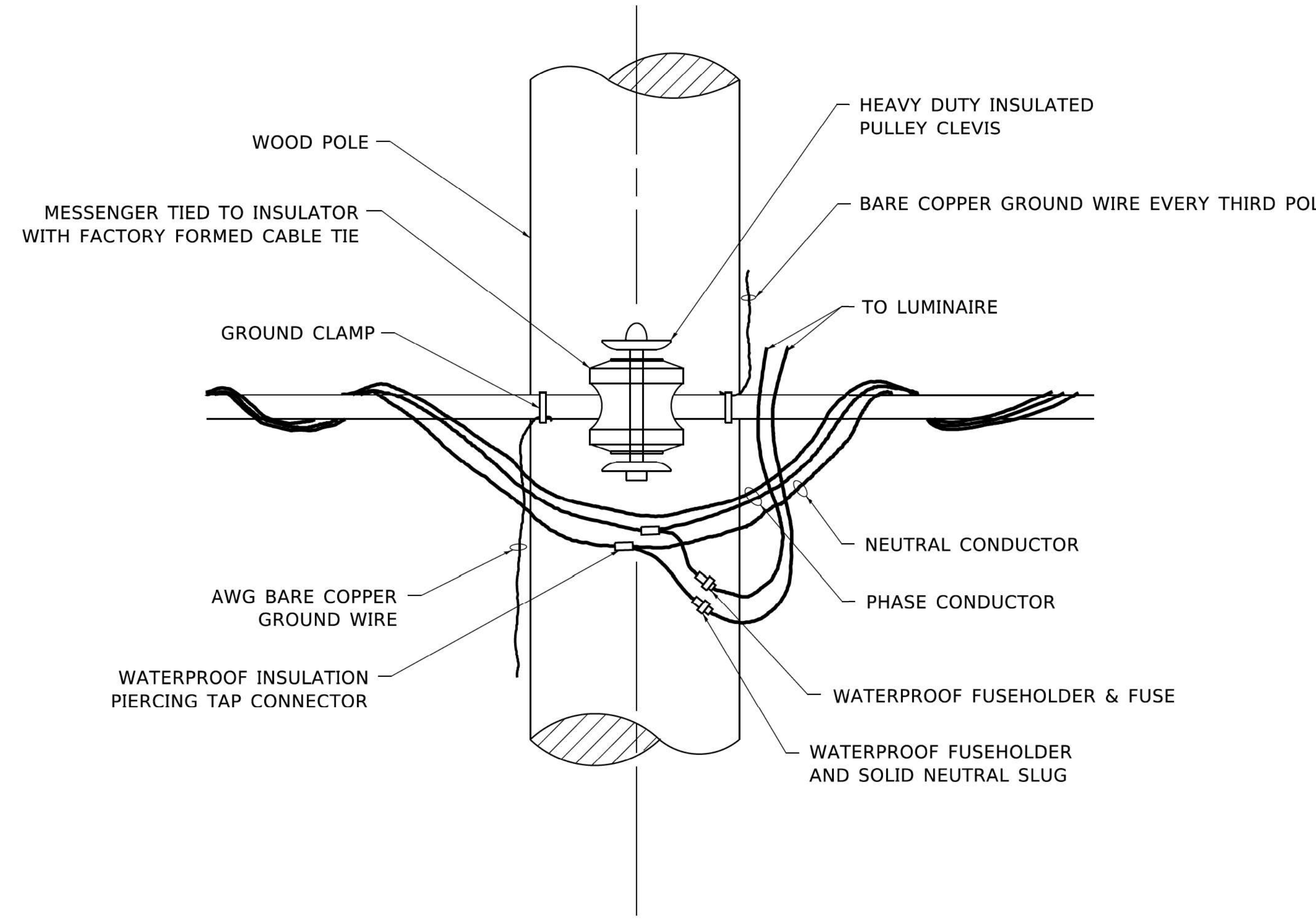
CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

MODEL: Default
FILE NAME: pw:\\plamroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\D15d22x34\CADData\CADSheets\be703.dgn



TEMPORARY LIGHT POLE DETAIL



TEMPORARY LIGHT POLE ATTACHMENT DETAIL

NOTE:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. MAST ARM SHALL BE RATED FOR THE SPECIFIED MOUNTING HEIGHT.

MODEL: Default
FILE NAME: pw:\\planroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist5td22x34\CADData\CADSheets\be800.dgn

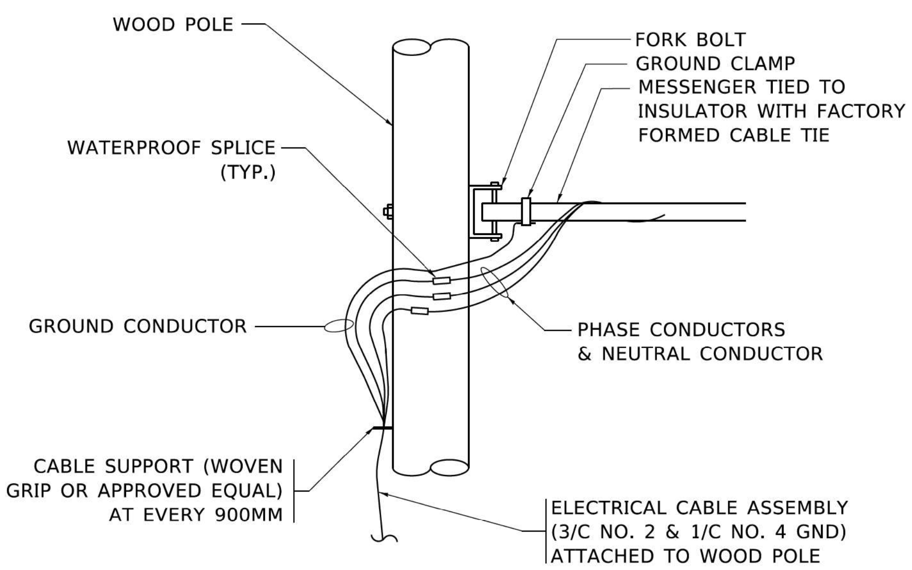
USER NAME = footemj	DESIGNED -	REVISED - 08-08-03
	DRAWN -	REVISED - R.T. 07-26-16
PLOT SCALE = 50.0010 ' / in.	CHECKED -	REVISED -
PLOT DATE = 4/19/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHT POLE DETAILS

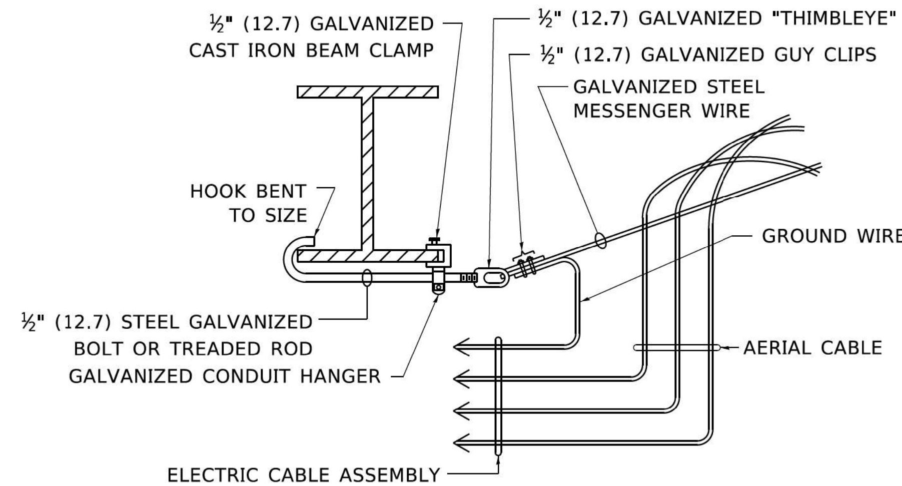
SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	252
BE–800		CONTRACT NO. 60W35		
	ILLINOIS	FED. AID PROJECT		



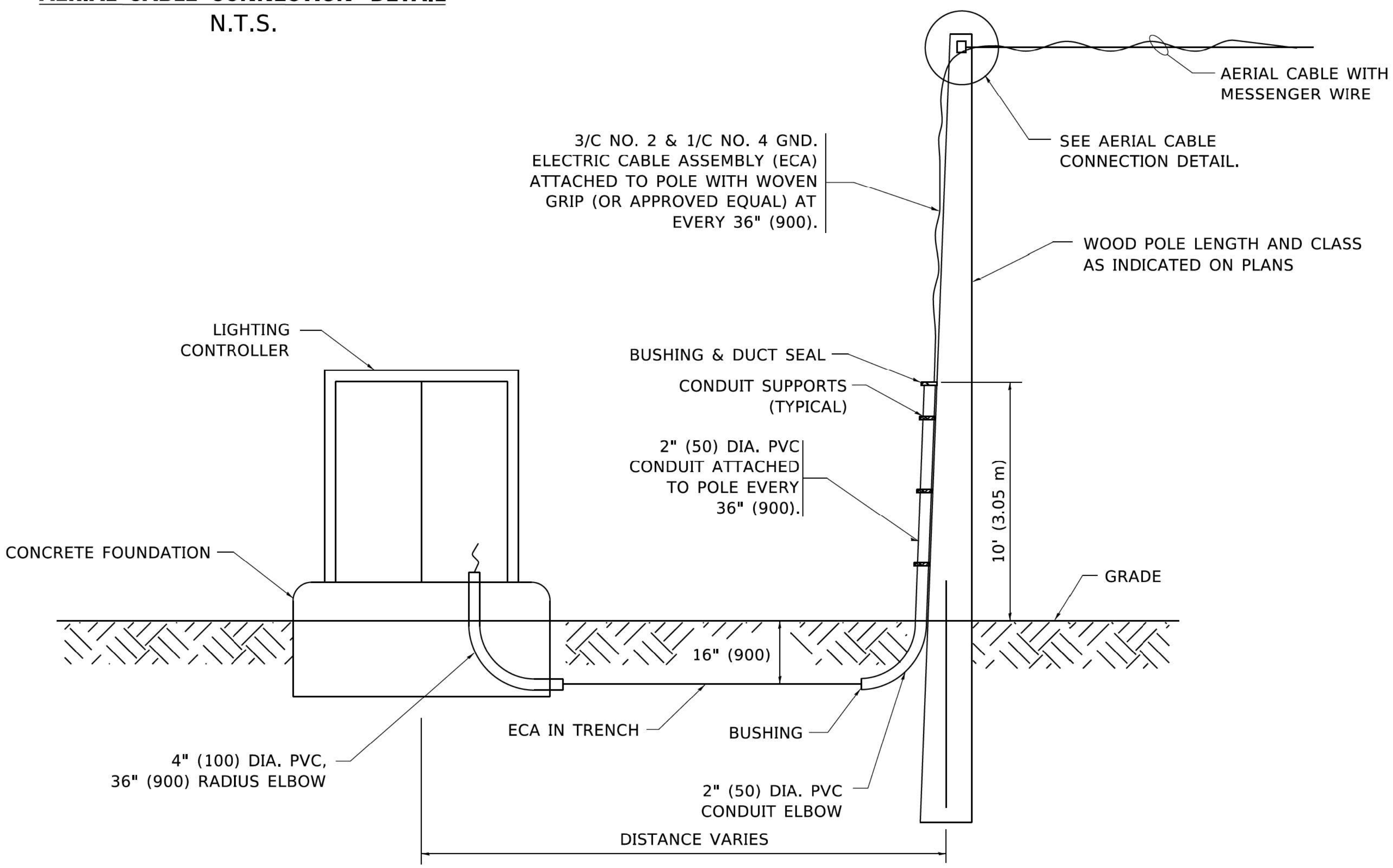
AERIAL CABLE CONNECTION DETAIL

N.T.S.



AERIAL CABLE ATTACHED TO STRUCTURE

NOT TO SCALE



WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL

N.T.S.

NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.

USER NAME = footemj	DESIGNED -	REVISED - 08-08-03
	DRAWN -	REVISED -
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 4/19/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY AERIAL CABLE INSTALLATION

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	253

BE-801 | CONTRACT NO. 60W35

ILLINOIS | FED. AID PROJECT

MODEL: Default
FILE NAME: pw:\\planroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist5\d22x34\CADData\CADSheets\be801.dgn

Bench Mark: Iron rod with yellow cap at Sta. 722+92.37, 4.19' Rt. ℄ I-80, Elev. 556.54.

Existing Structure: S.N. 099-0063 (WB) was built in 1964 under F.A.I. Route 80 Project I-80-4(36)134, Section 99-4B-1. The structure was repaired in 1990, 1998, 2001, and 2011. The work included repair of the concrete deck and substructure, and replacement of the expansion joints, waterproofing membrane and bituminous overlay. Existing structure consists of three single span reinforced concrete deck on composite W36 rolled steel beams supported by pile bent abutments and multi-column concrete piers founded on spread footings. The approach slabs are supported on timber piles. The structure measures 265'-5" back to back of abutments. The out to out deck width varies from 51'-1" to 54'-11¼". Existing superstructure, concrete slopewalls, pier caps and approach slabs are to be removed and replaced. The substructure will remain, except the pier caps and abutment stems will be rebuilt.

Stage Construction will be utilized to maintain traffic.

WATERWAY INFORMATION ***

Drainage Area = 109 sq.mi. Low Grade Elev. 557.62 @ Sta. 722+72

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	6,230	772	772	522.84	0.71	0.46	523.55	523.30
Design	50	10,660	1,163	1,163	526.31	0.52	0.45	526.83	526.76
Base	100	13,750	1,416	1,416	528.40	0.57	0.58	528.97	528.98
Overtopping	>500	-	-	-	-	-	-	-	-
Max. Calc.	500	23,203	2,197	2,197	534.02	1.00	1.00	535.02	535.02

*** Elevations from Hydraulic Report were converted to NAVD88.

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

NEW CONSTRUCTION:

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition, with 2013 Interims

EXISTING PIERS AND ABUTMENTS:

1995 FHWA Seismic Retrofitting Manual for Highway Bridges

DESIGN STRESSES

FIELD UNITS (NEW CONST.)

f'c = 3,500 psi
f'c = 4,000 psi (Superstructure)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)
fy = 36,000 psi (M270 Grade36)

FIELD UNITS (EXIST. CONST.)

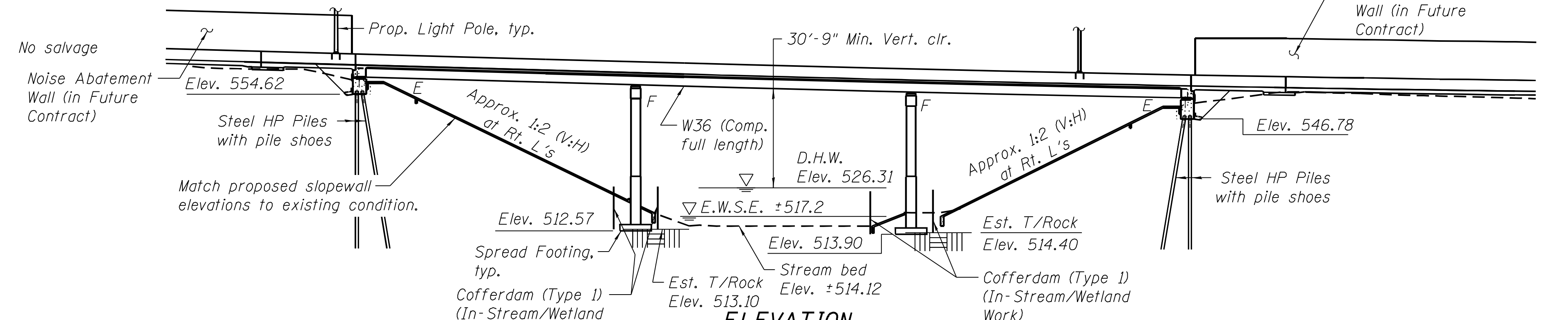
f'c = 3,500 psi
fy = 40,000 psi (Reinforcement)

SEISMIC DATA

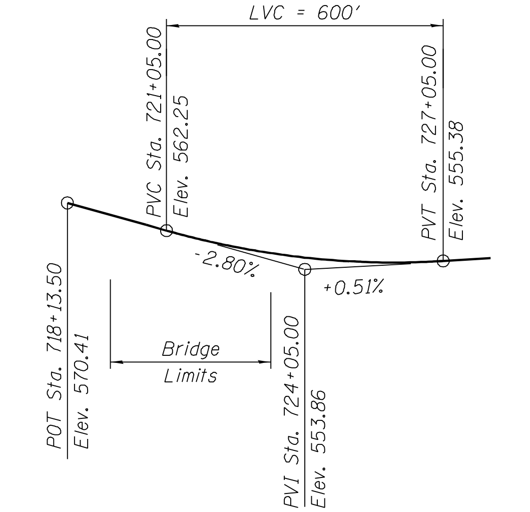
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.068g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.125g
Soil Site Class = C

ROADWAY TAPERS

Location	Sta.	Offset
1	720+32.13	49'-10⅜"
2	723+01.26	55'-3"



ELEVATION



PROFILE GRADE PROP. I-80 WB

(The profile grade shows the final elevations after grinding)

SCUPPERS

Sta.
721+19
722+45
722+60
722+75
722+90

DESIGN SCOUR ELEVATION TABLE

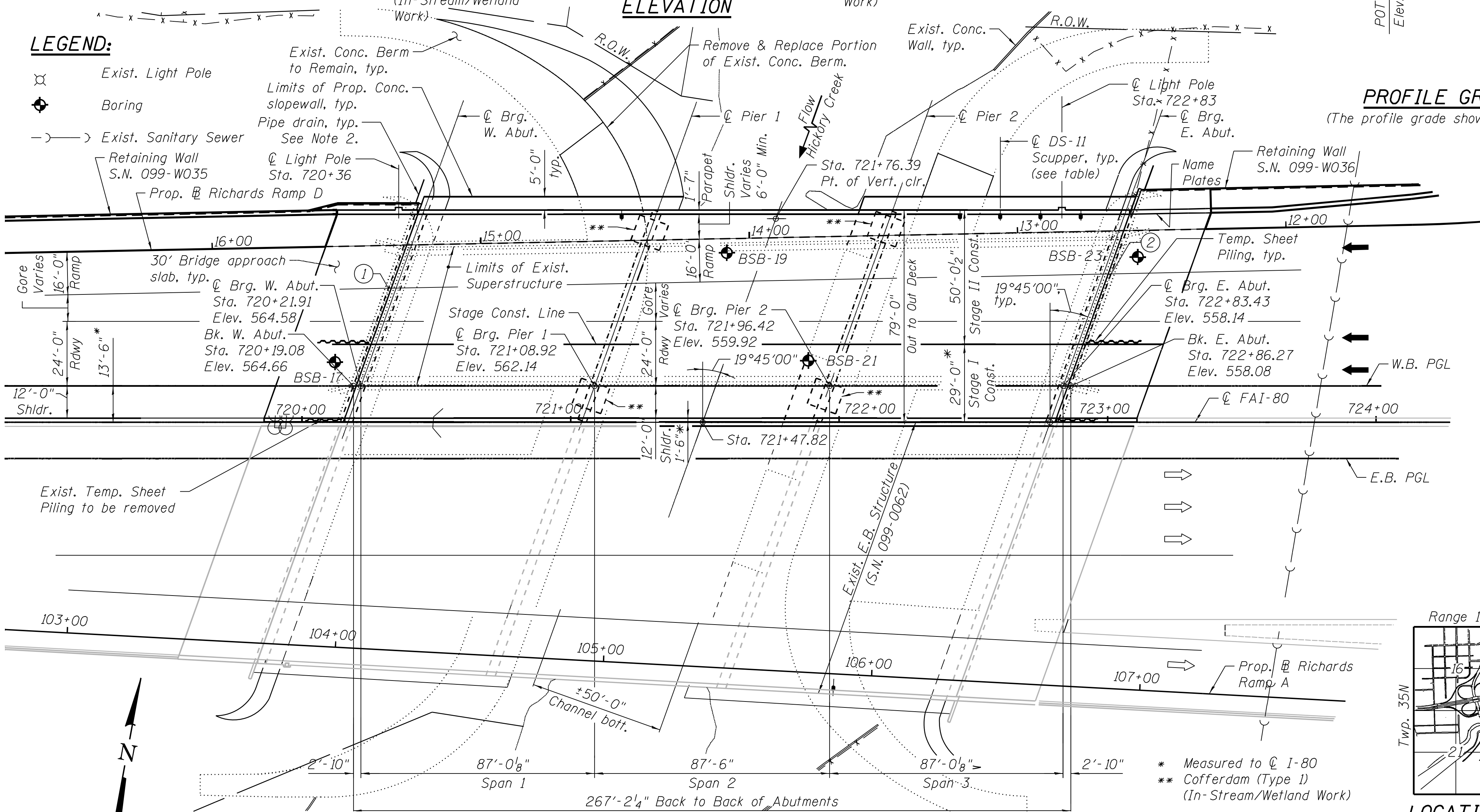
	W. Abut.	Pier 1	Pier 2	E. Abut.	Item 113
Q100	N/A	490.54	490.54	N/A	5
Q200	N/A	491.18	491.18	N/A	
Design	554.62	512.57	513.90	546.78	
Check	554.62	512.57	513.90	546.78	

Notes:

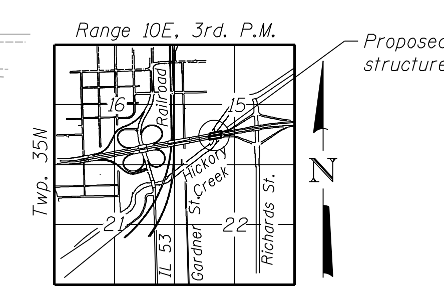
1. Up to ¼" maybe ground off the bridge deck and the bridge approach slabs.
2. Cost of perforated drain within limits of abutments and retaining walls is included with Pipe Underdrains for Structures 4". For pipe outlet and end treatment, see Drainage Plans.

LEGEND:

Exist. Light Pole
Boring
Exist. Sanitary Sewer



PLAN



LOCATION SKETCH

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

STATE OF ILLINOIS
VINOD C. PATEL
081-004528
CHICAGO, IL
LICENSED STRUCTURAL ENGINEER

Signed:
Date: 3/10/2022
Exp: 11/30/2022
Sheets: 1 thru 46

GENERAL PLAN & ELEVATION
I-80 OVER HICKORY CREEK
F.A.I. RTE. 80 - SEC. 2013-009B
WILL COUNTY
STATION 721+49.17
STRUCTURE NO. 099-0063 (WB)

USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - MTR	REVISED -	
PLOT DATE =	CHECKED - BAR	REVISED -	

SHEET SH-01 OF SH-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	254

CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.10 Structural\WB Hickory\Sheet\0990063-60W35-001-GPE.dgn

3/9/2022 11:29:50 AM

GENERAL NOTES

Fasteners shall be ASTM F 3125 Grade A325 Type 1, mechanically galvanized bolts. Bolts $^7/_8$ in. ϕ, holes $^{15}/_{16}$ in. ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 832,740 pounds (AASHTO M270 Grade 50)
41,040 pounds (AASHTO M270 Grade 36)

All structural steel shall be AASHTO M270 Grade 50, unless noted otherwise.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

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.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception of the exterior surface and the bottom of the bottom flange of fascia beams, masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4.

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

Slipforming of the parapets is not allowed.

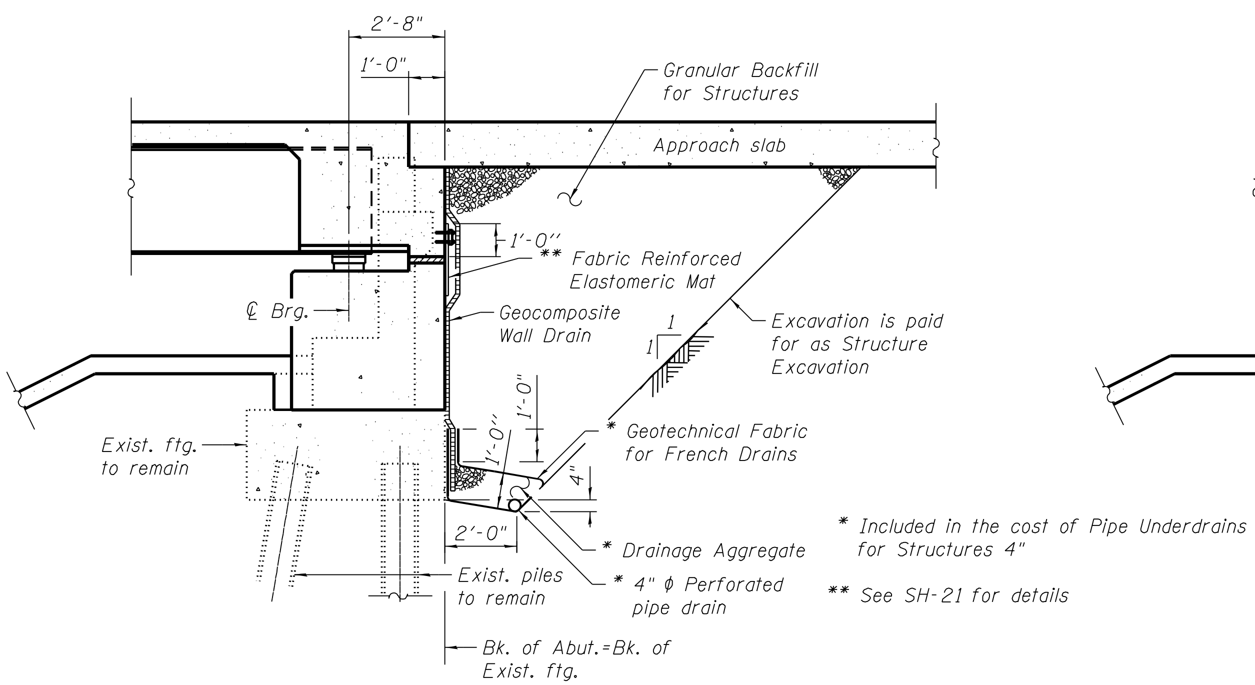
If the Contractor elects to use cantilever forming brackets on the exterior beams or griders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

This Project requires a US Army Corps of Engineers (USACE) 404 permit. See General Note 22 on roadway plan sheet 3. Instream work plan will be required depicting any work within the Waters of the US (WOUS) noted on the plans. The Contractor shall develop and submit work plan as described in General Note 4 on sheet no. 4. Instream work plan may be required for the construction of proposed Pier 1 and Pier 2.

INDEX OF SHEETS

TOTAL BILL OF MATERIAL

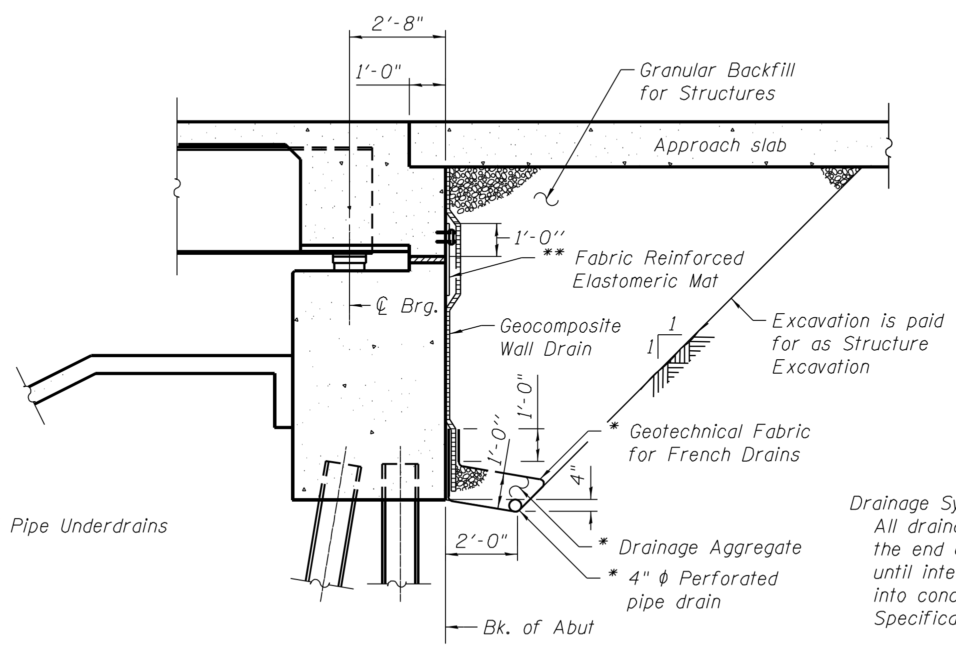
ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Sq Yd	-	1,244	1,244
Filter Fabric	Sq Yd	-	1,244	1,244
Removal Of Existing Superstructures	Each	1	-	1
Concrete Removal	Cu Yd	-	121.3	121.3
Slope Wall Removal	Sq Yd	-	1,386	1,386
Structure Excavation	Cu Yd	-	795	795
Cofferdam Excavation	Cu Yd	-	241	241
Rock Excavation For Structures	Cu Yd	-	183	183
Concrete Structures	Cu Yd	52.2	427.2	479.4
Concrete Superstructure	Cu Yd	758.4	-	758.4
Concrete Encasement	Cu Yd	-	9.8	9.8
Protective Coat	Sq Yd	3,160	-	3,160
Concrete Superstructure (Approach Slab)	Cu Yd	246.3	-	246.3
Furnishing And Erecting Structural Steel	L Sum	0.35	-	0.35
Stud Shear Connectors	Each	13,904	-	13,904
Reinforcement Bars, Epoxy Coated	Pound	322,450	57,640	380,090
Bar Splicers	Each	1,121	120	1,241
Mechanical Splicers	Each	-	20	20
Slope Wall 6 Inch	Sq Yd	-	639	639
Furnishing Steel Piles Hp12X53	Foot	-	512	512
Driving Piles	Foot	-	512	512
Pile Shoes	Each	-	14	14
Name Plates	Each	1	-	1
Preformed Joint Seal 2 1/2"	Foot	266	-	266
Elastomeric Bearing Assembly, Type I	Each	22	-	22
Anchor Bolts, 1"	Each	88	-	88
Temporary Sheet Piling	Sq Ft	-	765	765
Granular Backfill For Structures	Cu Yd	-	414	414
Geocomposite Wall Drain	Sq Yd	-	201	201
Pipe Underdrains For Structures 4"	Foot	-	198	198
Cofferdam (Type 1) (In-Stream/Wetland Work)	Each	-	4	4
Bridge Deck Grooving (Longitudinal)	Sq Yd	1,879	-	1,879
Structural Repair Of Concrete (Depth Equal To Or Less Than 5 Inches)	Sq Ft	-	210	210
Structural Repair Of Concrete (Depth Greater Than 5 Inches)	Sq Ft	-	40	40
Drainage Scuppers, DS-11	Each	5	-	5
Diamond Grinding (Bridge Section)	Sq Yd	2,600	-	2,600
Temporary Support System	L Sum	-	1	1



* Included in the cost of Pipe Underdrains for Structures 4"

** See SH-21 for details

SECTION THRU SEMI-INTEGRAL ABUTMENT AT EXIST. ABUT.
(Horiz. dim. at Rt. ∠'s to ℄ Brgs.)

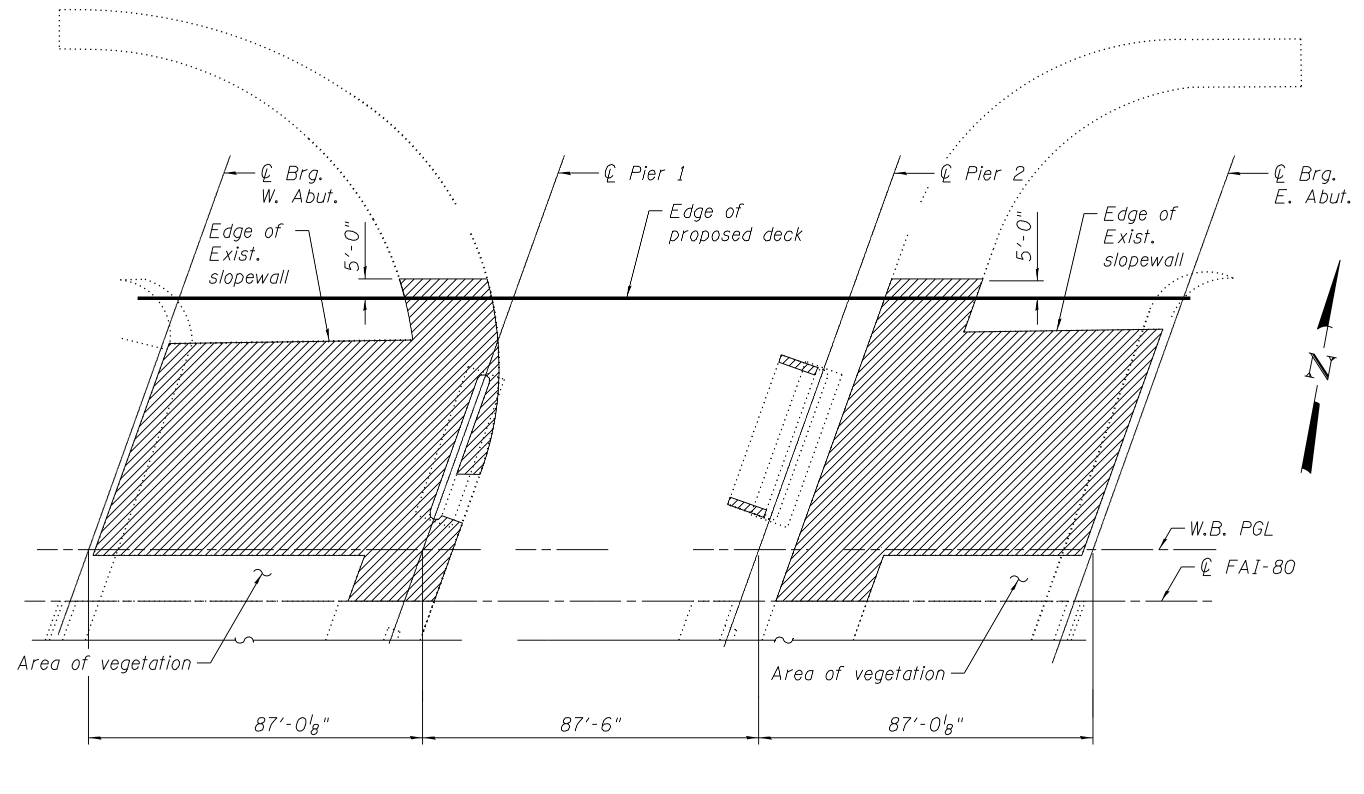


SECTION THRU SEMI-INTEGRAL ABUTMENT AT ABUT. EXTENSION
(Horiz. dim. at Rt. ∠'s to ℄ Brgs.)

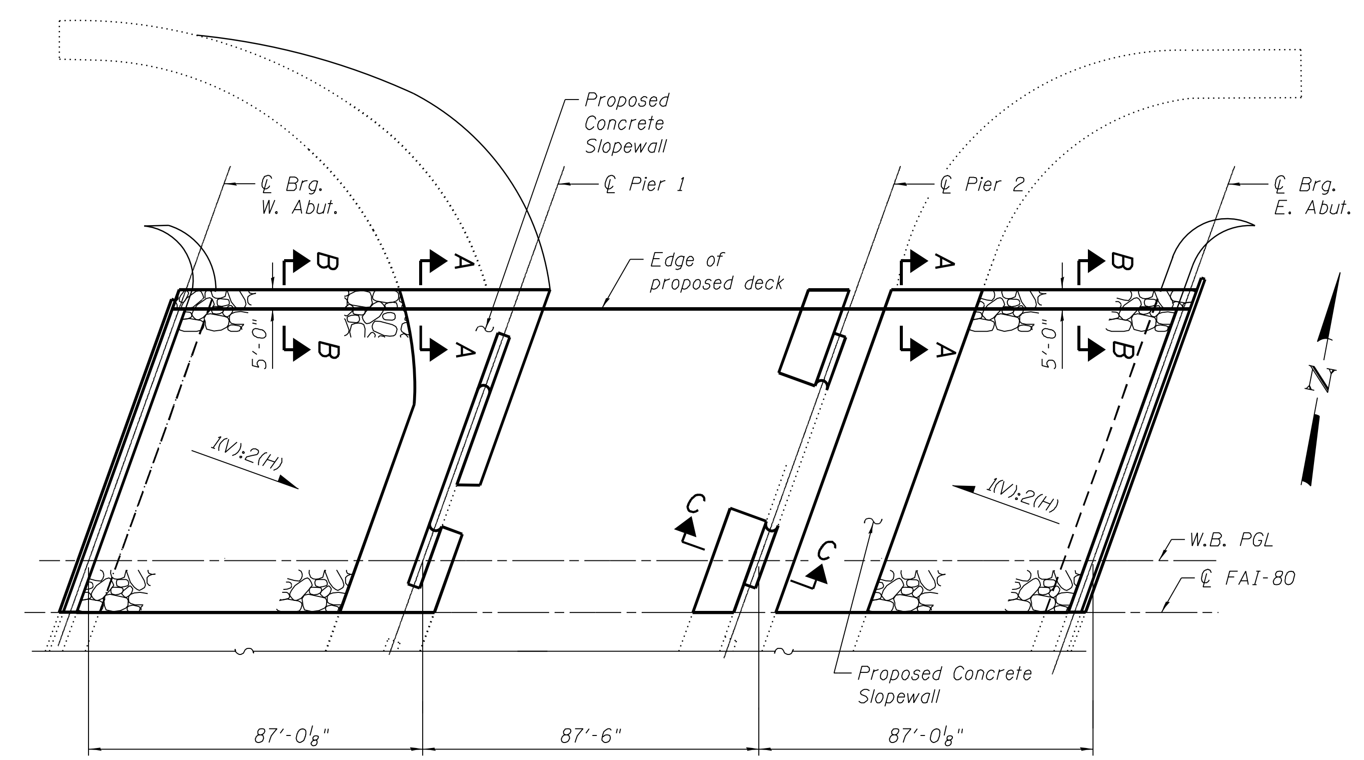
Drainage System Note:
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

STATION 721+47.82
RE-BUILT 20__ BY
STATE OF ILLINOIS
F.A.I. RTE. 80 SEC. 2013-009B
LOADING HL-93
STRUCTURE NO. 099-0063

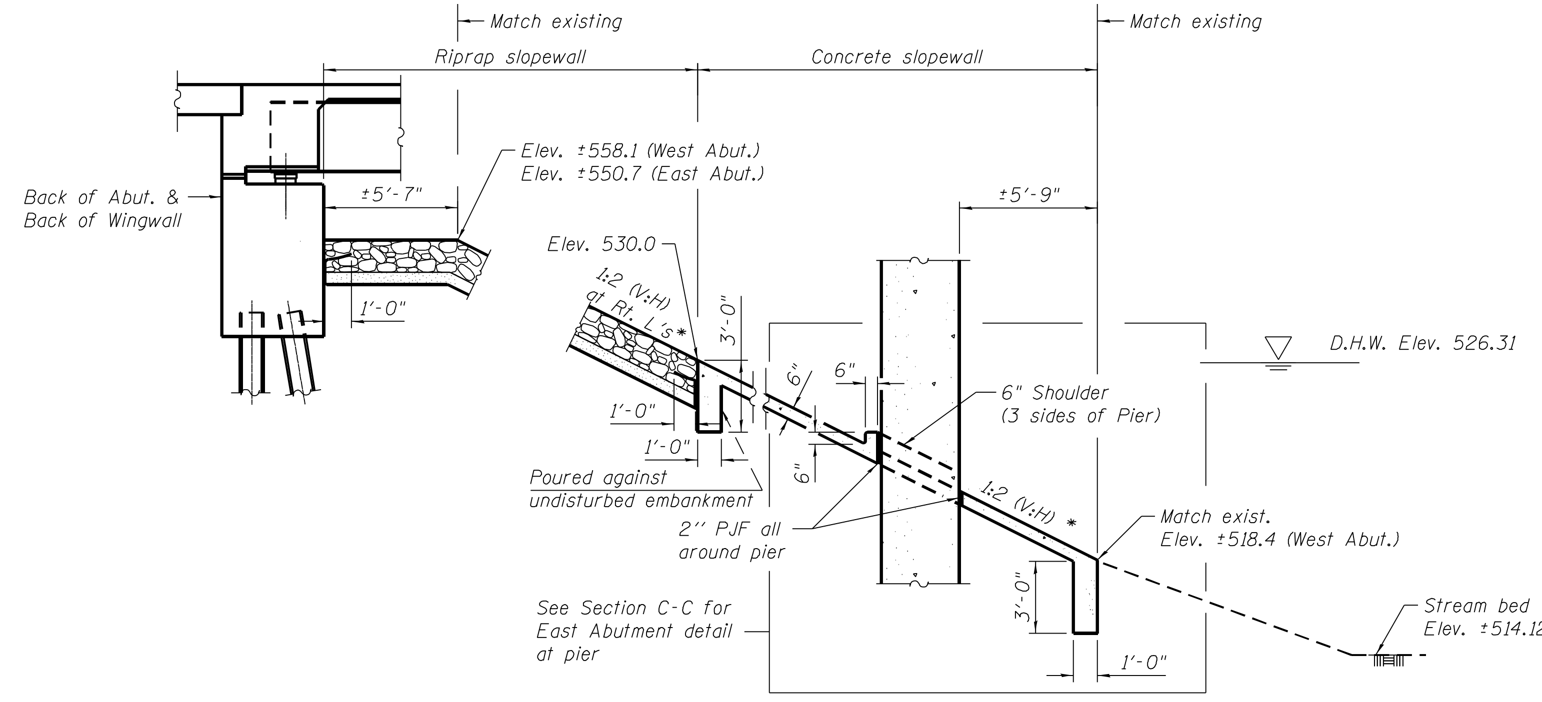
NAME PLATE
See Std. 515001
Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.



REMOVAL PLAN

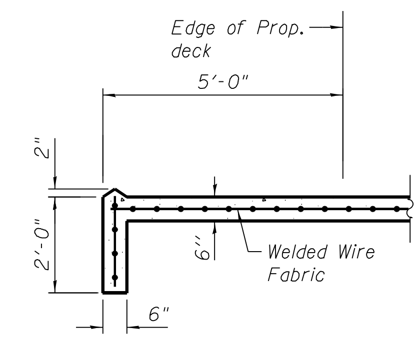


PROPOSED PLAN

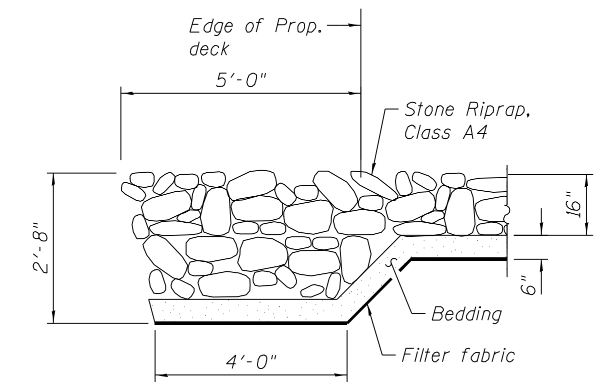


SECTION THRU SLOPEWALL

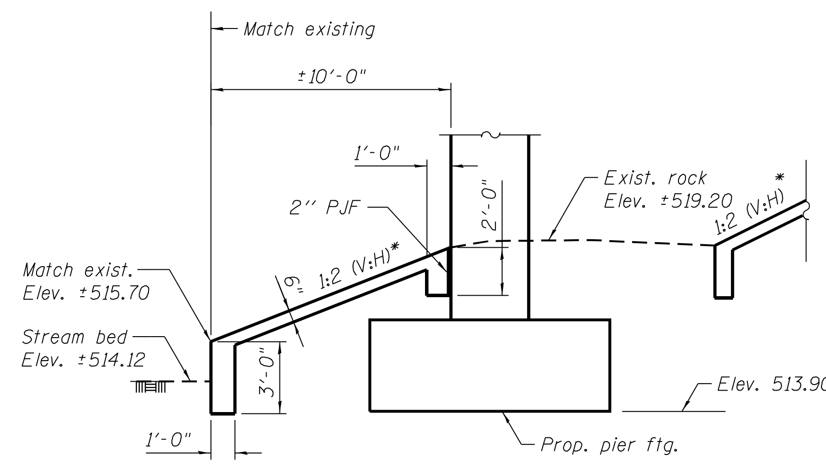
(West Slopewall Shown)



SECTION A-A



SECTION B-B



SECTION C-C

LEGEND:

Slopewall removal

BILL OF MATERIAL

Item	Unit	Quantity
Stone Riprap, Class A4	Sq Yd	1,244
Filter Fabric	Sq Yd	1,244
Slope Wall Removal	Sq Yd	1,386
Slope Wall 6 inch	Sq Yd	639

Notes:

1. Slopewall shall be reinforced with welded wire fabric 6 in. x 6 in.-W4.0x4.0, weighing 58 lb per 100 sq ft.
2. Layout of the slope proection system may be varied to suit ground conditions in the field as directed by the Engineer.

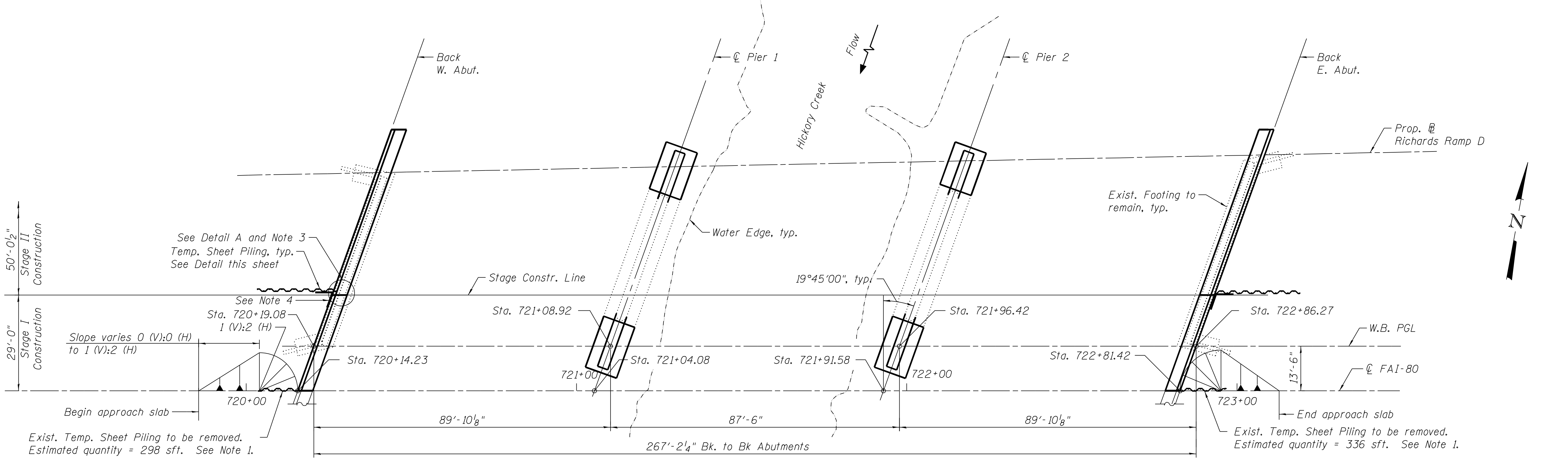
* Match existing slope.

exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SLOPE WALL DETAILS STRUCTURE NO. 099-0063
		CHECKED - VCP	REVISED -		
	PLOT SCALE =	DRAWN - MTR	REVISED -		
	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET SH-03 OF SH-46 SHEETS

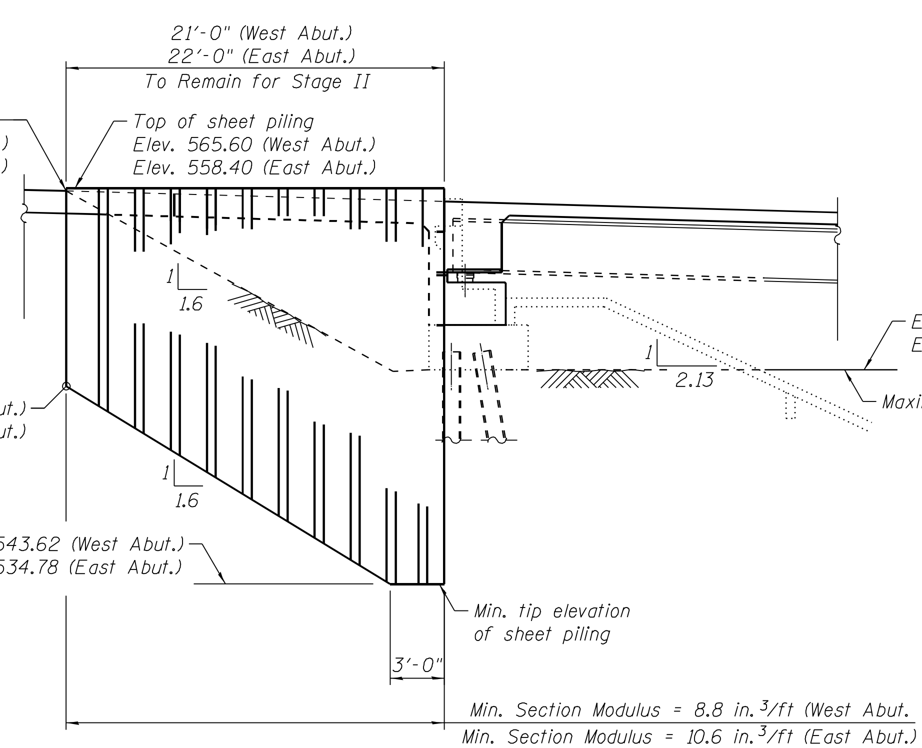
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	256
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-003-SLOPEW.dgn

3/9/2022 11:31:52 AM

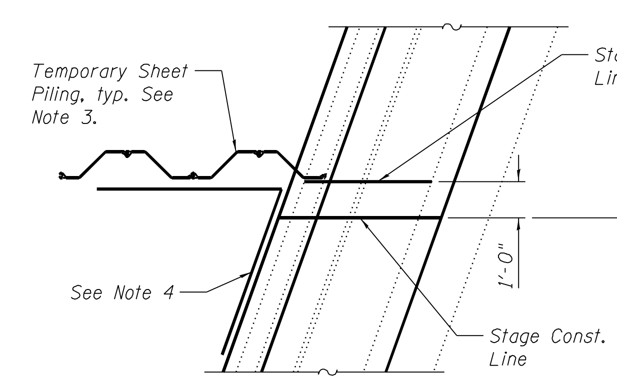


SUBSTRUCTURE & SHEET PILING LAYOUT PLAN



TEMPORARY SHEET PILING AT STAGE CONSTRUCTION LINE

(West Abutment shown looking North.
East Abutment similar except as noted)



DETAIL A

(West Abutment shown,
East Abutment similar)

Notes:

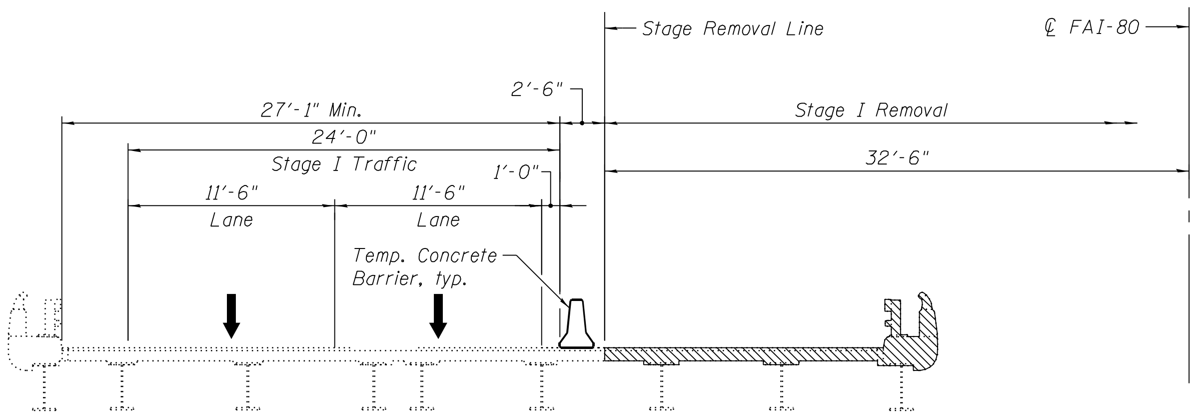
1. Cost for the removal of the Existing Temporary Sheet Piling is included with Removal of Existing Superstructures.
2. If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.
3. The Contractor shall connect the sheeting within the width of existing footing to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.
4. Contractor to design earth retention between Stage I proposed abutment and temporary sheet piling. Design shall be reviewed and accepted by the Engineer. Cost shall be included with Temporary Sheet Piling.

BILL OF MATERIAL

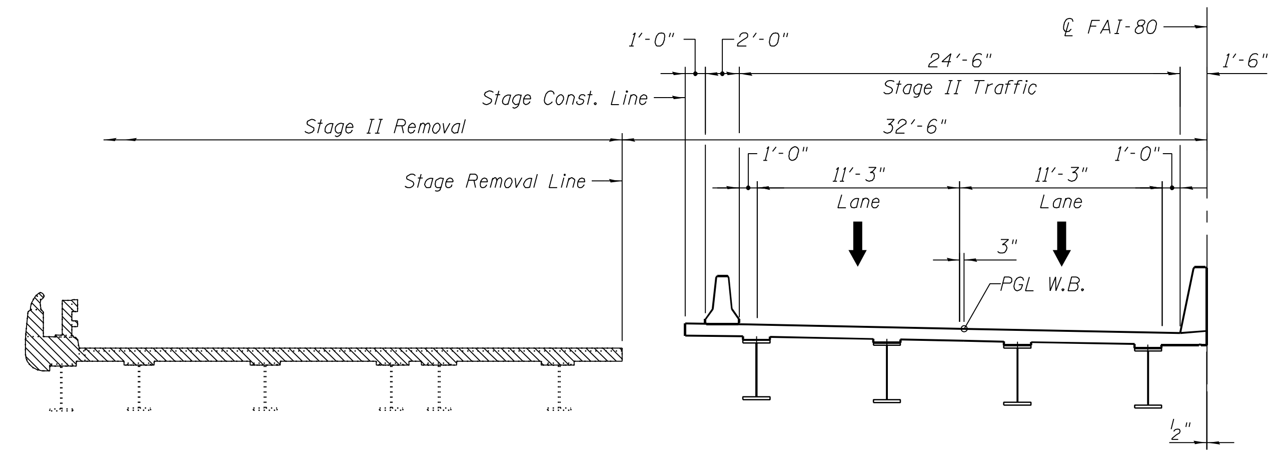
ITEM	UNIT	QUANTITY
Temporary Sheet Piling	Sq Ft	765

exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUBSTRUCTURE LAYOUT & SHEET PILING DETAILS STRUCTURE NO. 099-0063	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - VCP	REVISED -			80	2013-009B	WILL	465	257
	PLOT SCALE =	DRAWN - MTR	REVISED -					CONTRACT NO. 60W35		
	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET SH-04 OF SH-46 SHEETS			ILLINOIS FED. AID PROJECT		

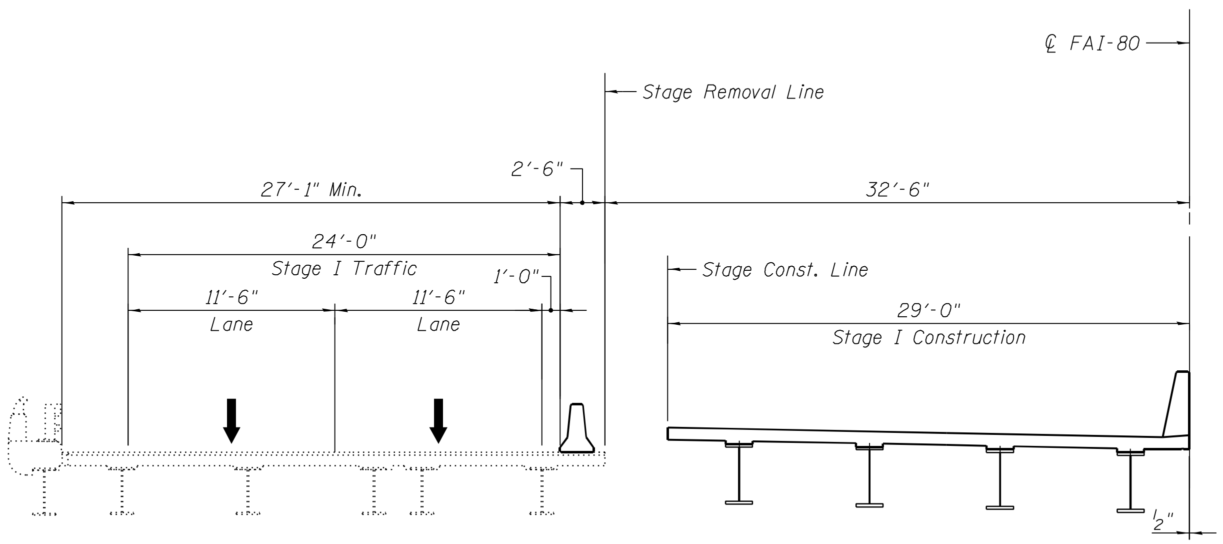
MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-004-FND.dgn
3/9/2022 11:32:34 AM



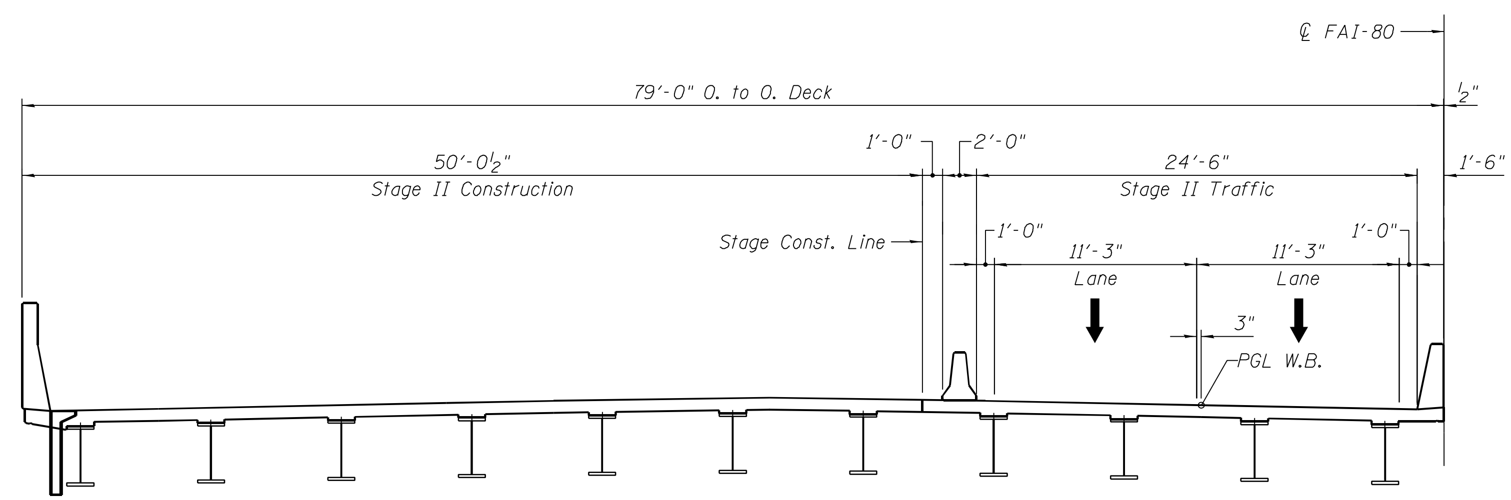
STAGE I REMOVAL



STAGE II REMOVAL

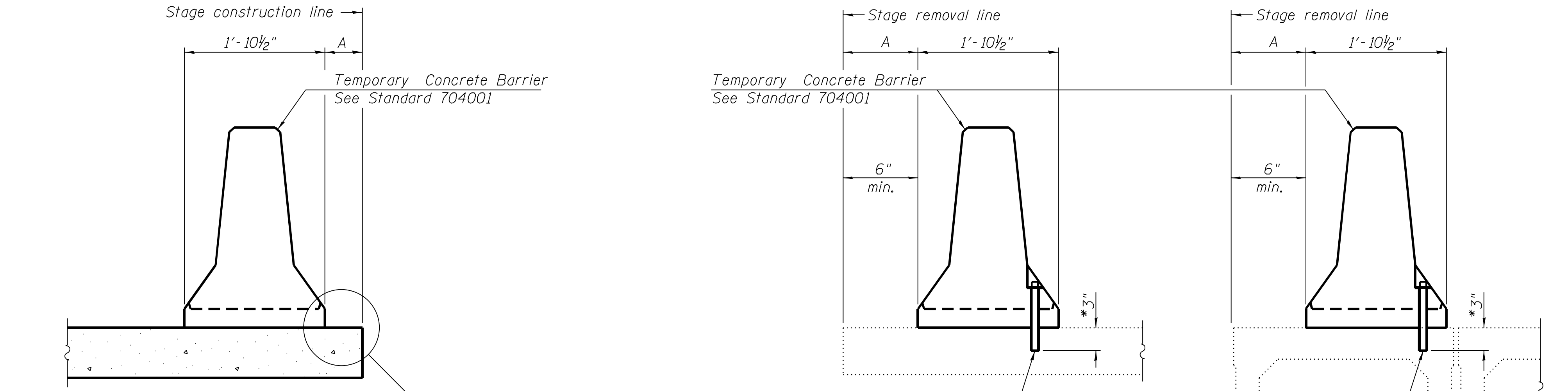


STAGE I CONSTRUCTION



STAGE II CONSTRUCTION

Notes:
1. All views are looking East.
2. Hatched areas indicates removal of existing structures.
3. All dimensions taken at Rt L's to ℄ I-80 except as noted.
4. For Temporary Concrete Barrier quantity, see Roadway Plans.
5. For Stage IA maintenance of traffic layout, see Roadway Plans.



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

See Detail I, II or III

Drill 3-1¼" ϕ Holes in existing slab for 1" ϕ restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

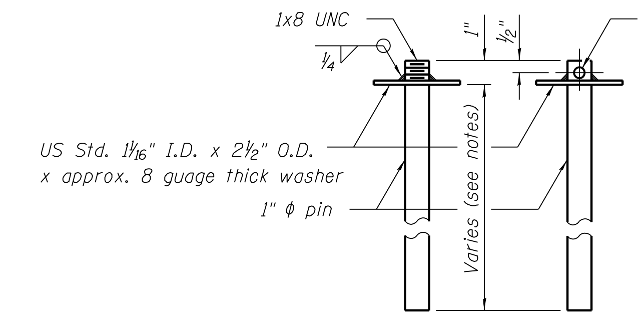
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

NEW SLAB OR NEW DECK BEAM

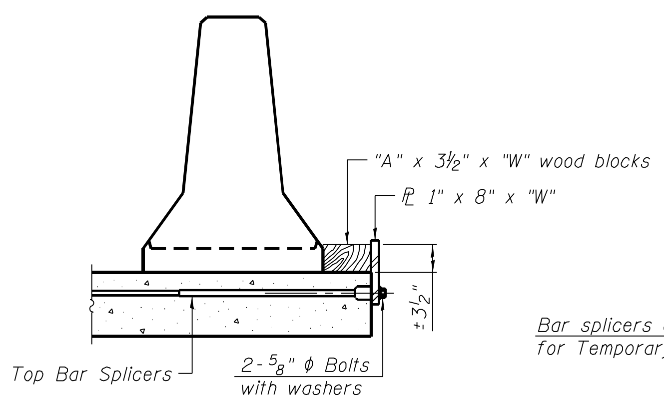
EXISTING SLAB

EXISTING DECK BEAM

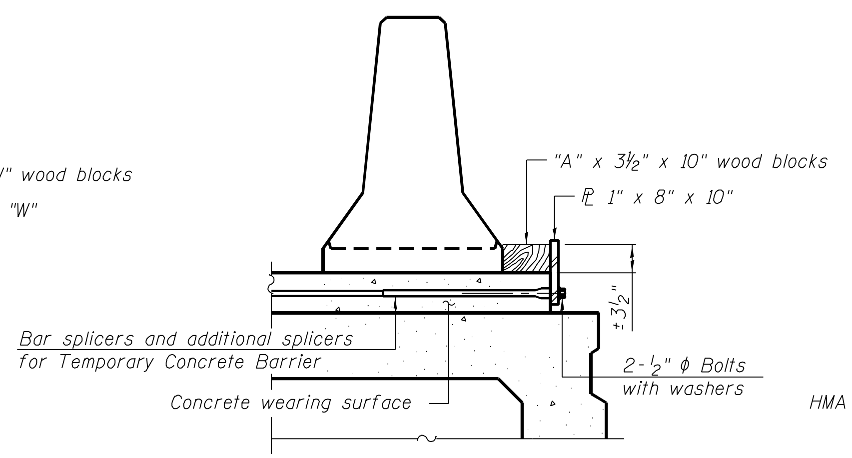
SECTIONS THRU SLAB OR DECK BEAM



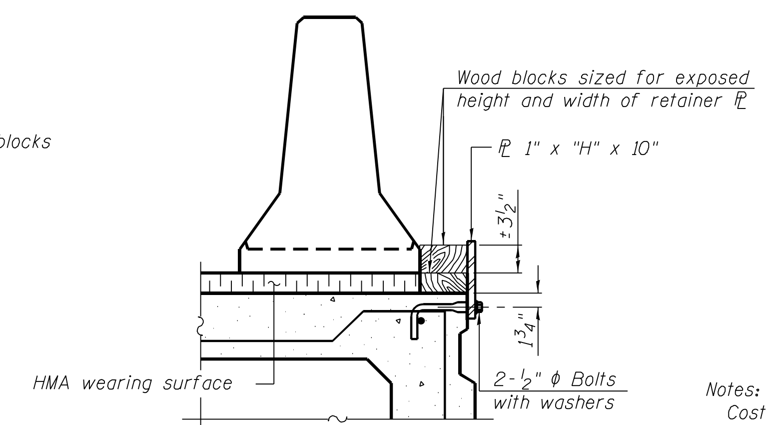
RESTRAINING PIN



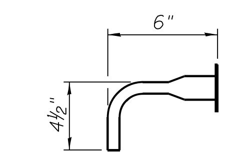
DETAIL I



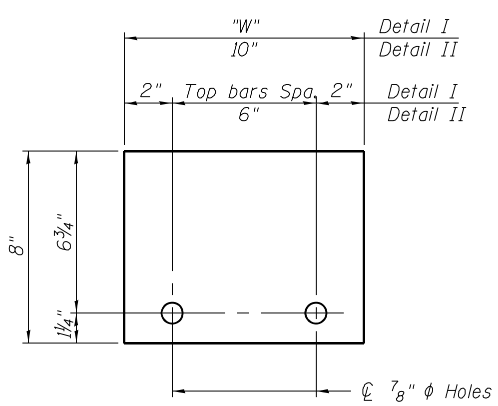
DETAIL II



DETAIL III

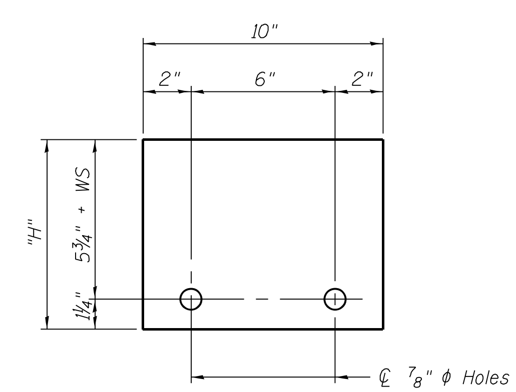


BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER ℄ 1" x 8" x "W"

(Detail I and II)



STEEL RETAINER ℄ 1" x "H" x 10"

(Detail III)

Notes:

Cost of retainer assembly is included with Temporary Concrete Barrier.

A retainer assembly shall be located at the approximate ℄ of each temporary concrete barrier.

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

When the 'A' dimension is less than 1½", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.

Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.

Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

R-27

2-17-2017

MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-006-TEMPB.dgn

exp.

USER NAME =	DESIGNED - BAR	REVISED -
	CHECKED - VCP	REVISED -
PLOT SCALE =	DRAWN - MTR	REVISED -
PLOT DATE =	CHECKED - BAR	REVISED -

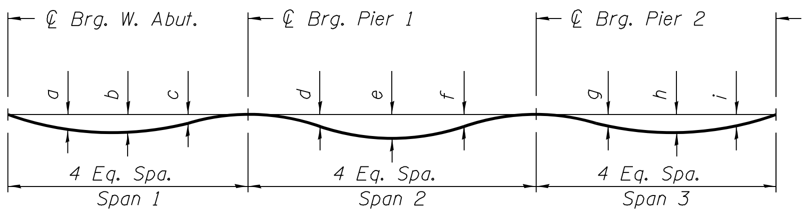
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 099-0063

SHEET SH-06 OF SH-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	259
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

3/9/2022 11:33:50 AM



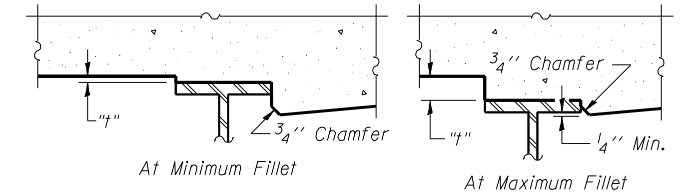
DEAD LOAD DEFLECTION DIAGRAM

(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 SH-08 thru SH-12.

DEAD LOAD DEFLECTION TABLE

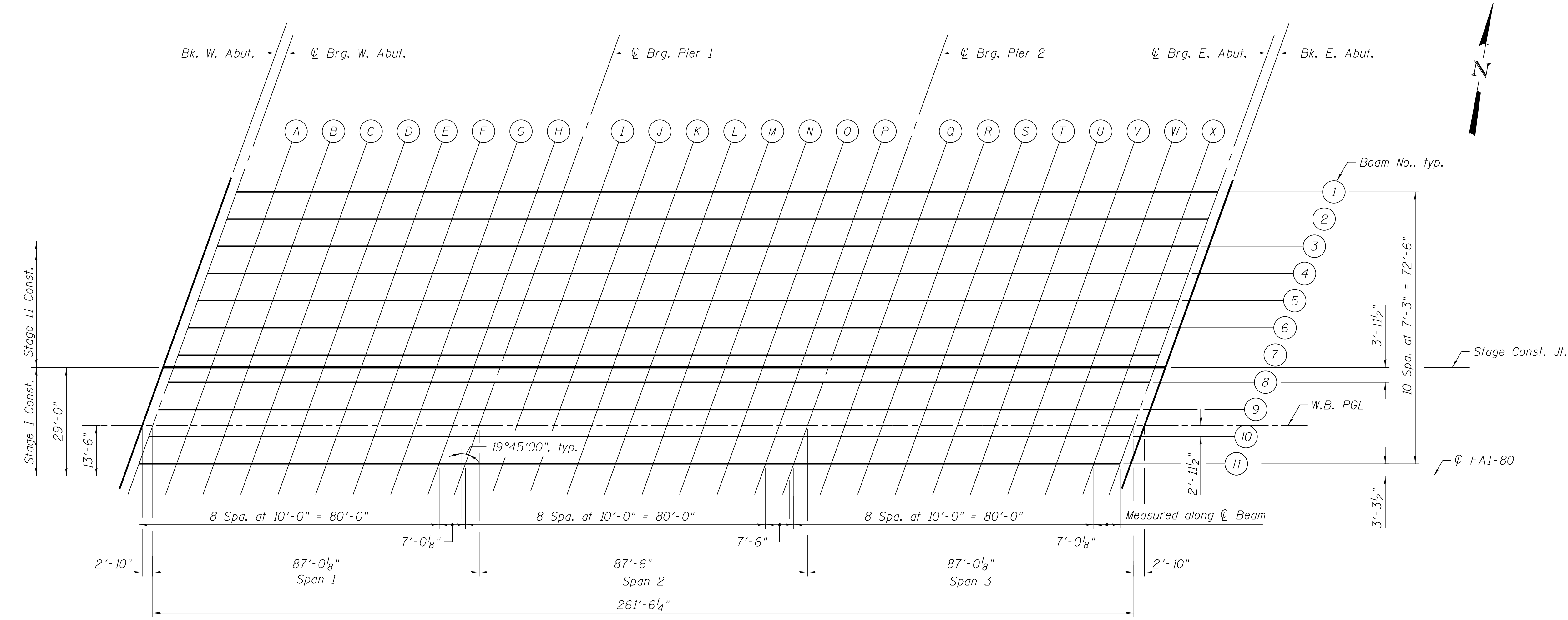
Beam No.	a	b	c	d	e	f	g	h	i
1	1 1/4"	1 1/2"	7/8"	-1/8"	0"	-1/8"	7/8"	1 1/2"	1 1/4"
2-3	1"	1 3/8"	3/4"	-1/8"	0"	-1/8"	3/4"	1 3/8"	1"
4-8	7/8"	1 1/8"	5/8"	-1/8"	0"	-1/8"	5/8"	1 1/8"	7/8"
9-10	1"	1 1/4"	5/8"	-1/8"	0"	-1/8"	5/8"	1 1/4"	1"
11	1"	1 1/4"	5/8"	-1/8"	0"	-1/8"	5/8"	1 1/4"	1"



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 Sheets SH-08 thru SH-12. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding" shown on sheets SH-08 thru SH-12, minus slab thickness prior to grinding, 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 below. For grinding the deck, see Special Provisions.

FILLET HEIGHTS



PLAN

Notes:
1. For beam layout, see Sheet SH-26.

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	720+41.44	-75.79	563.75	563.77
℄ Brg. W. Abut.	720+44.28	-75.79	563.67	563.69
A	720+54.28	-75.79	563.39	563.46
B	720+64.28	-75.79	563.11	563.22
C	720+74.28	-75.79	562.83	562.97
D	720+84.28	-75.79	562.55	562.69
E	720+94.28	-75.79	562.27	562.40
F	721+04.28	-75.79	561.99	562.10
G	721+14.28	-75.79	561.71	561.78
H	721+24.28	-75.79	561.44	561.48
℄ Brg. Pier 1	721+31.29	-75.79	561.25	561.27
I	721+41.29	-75.79	560.99	561.00
J	721+51.29	-75.79	560.73	560.74
K	721+61.29	-75.79	560.48	560.49
L	721+71.29	-75.79	560.23	560.25
M	721+81.29	-75.79	559.99	560.01
N	721+91.29	-75.79	559.76	559.77
O	722+01.29	-75.79	559.53	559.54
P	722+11.29	-75.79	559.30	559.32
℄ Brg. Pier 2	722+18.79	-75.79	559.14	559.16
Q	722+28.79	-75.79	558.92	558.97
R	722+38.79	-75.79	558.72	558.80
S	722+48.79	-75.79	558.51	558.63
T	722+58.79	-75.79	558.31	558.46
U	722+68.79	-75.79	558.12	558.27
V	722+78.79	-75.79	557.93	558.07
W	722+88.79	-75.79	557.75	557.86
X	722+98.79	-75.79	557.58	557.64
℄ Brg. E. Abut.	723+05.80	-75.79	557.46	557.48
Bk. E. Abut.	723+08.63	-75.79	557.41	557.43

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	720+38.84	-68.54	563.96	563.98
℄ Brg. W. Abut.	720+41.67	-68.54	563.88	563.90
A	720+51.67	-68.54	563.60	563.67
B	720+61.67	-68.54	563.32	563.43
C	720+71.67	-68.54	563.04	563.17
D	720+81.67	-68.54	562.76	562.90
E	720+91.67	-68.54	562.48	562.61
F	721+01.67	-68.54	562.20	562.30
G	721+11.67	-68.54	561.93	561.99
H	721+21.67	-68.54	561.65	561.69
℄ Brg. Pier 1	721+28.68	-68.54	561.46	561.49
I	721+38.68	-68.54	561.20	561.21
J	721+48.68	-68.54	560.94	560.95
K	721+58.68	-68.54	560.69	560.70
L	721+68.68	-68.54	560.44	560.46
M	721+78.68	-68.54	560.20	560.22
N	721+88.68	-68.54	559.96	559.98
O	721+98.68	-68.54	559.73	559.74
P	722+08.68	-68.54	559.51	559.52
℄ Brg. Pier 2	722+16.18	-68.54	559.34	559.36
Q	722+26.18	-68.54	559.12	559.17
R	722+36.18	-68.54	558.91	558.99
S	722+46.18	-68.54	558.71	558.82
T	722+56.18	-68.54	558.51	558.64
U	722+66.18	-68.54	558.32	558.45
V	722+76.18	-68.54	558.13	558.25
W	722+86.18	-68.54	557.95	558.04
X	722+96.18	-68.54	557.77	557.82
℄ Brg. E. Abut.	723+03.19	-68.54	557.65	557.67
Bk. E. Abut.	723+06.03	-68.54	557.60	557.62

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	720+36.24	-61.29	564.18	564.20
℄ Brg. W. Abut.	720+39.07	-61.29	564.10	564.12
A	720+49.07	-61.29	563.82	563.89
B	720+59.07	-61.29	563.54	563.65
C	720+69.07	-61.29	563.26	563.39
D	720+79.07	-61.29	562.98	563.12
E	720+89.07	-61.29	562.70	562.83
F	720+99.07	-61.29	562.42	562.52
G	721+09.07	-61.29	562.14	562.21
H	721+19.07	-61.29	561.87	561.91
℄ Brg. Pier 1	721+26.08	-61.29	561.68	561.70
I	721+36.08	-61.29	561.41	561.43
J	721+46.08	-61.29	561.15	561.17
K	721+56.08	-61.29	560.90	560.91
L	721+66.08	-61.29	560.65	560.67
M	721+76.08	-61.29	560.41	560.42
N	721+86.08	-61.29	560.17	560.18
O	721+96.08	-61.29	559.94	559.95
P	722+06.08	-61.29	559.71	559.72
℄ Brg. Pier 2	722+13.58	-61.29	559.54	559.56
Q	722+23.58	-61.29	559.33	559.37
R	722+33.58	-61.29	559.11	559.19
S	722+43.58	-61.29	558.91	559.01
T	722+53.58	-61.29	558.71	558.83
U	722+63.58	-61.29	558.51	558.64
V	722+73.58	-61.29	558.32	558.44
W	722+83.58	-61.29	558.14	558.23
X	722+93.58	-61.29	557.96	558.01
℄ Brg. E. Abut.	723+00.59	-61.29	557.84	557.86
Bk. E. Abut.	723+03.42	-61.29	557.79	557.81

Notes:
1. All Elevations and Offsets are in feet.

2. Offsets are measured with respect to ℄ FAI-80.

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	720+33.63	-54.04	564.40	564.42
℄ Brg. W. Abut.	720+36.47	-54.04	564.32	564.34
A	720+46.47	-54.04	564.04	564.10
B	720+56.47	-54.04	563.76	563.85
C	720+66.47	-54.04	563.48	563.59
D	720+76.47	-54.04	563.20	563.31
E	720+86.47	-54.04	562.92	563.02
F	720+96.47	-54.04	562.64	562.72
G	721+06.47	-54.04	562.36	562.42
H	721+16.47	-54.04	562.08	562.12
℄ Brg. Pier 1	721+23.48	-54.04	561.89	561.91
I	721+33.48	-54.04	561.63	561.64
J	721+43.48	-54.04	561.37	561.38
K	721+53.48	-54.04	561.11	561.13
L	721+63.48	-54.04	560.86	560.88
M	721+73.48	-54.04	560.61	560.63
N	721+83.48	-54.04	560.37	560.39
O	721+93.48	-54.04	560.14	560.15
P	722+03.48	-54.04	559.91	559.93
℄ Brg. Pier 2	722+10.98	-54.04	559.74	559.77
Q	722+20.98	-54.04	559.53	559.57
R	722+30.98	-54.04	559.31	559.38
S	722+40.98	-54.04	559.11	559.19
T	722+50.98	-54.04	558.90	559.01
U	722+60.98	-54.04	558.71	558.82
V	722+70.98	-54.04	558.52	558.62
W	722+80.98	-54.04	558.33	558.41
X	722+90.98	-54.04	558.15	558.20
℄ Brg. E. Abut.	722+97.99	-54.04	558.03	558.05
Bk. E. Abut.	723+00.82	-54.04	557.98	558.00

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	720+31.03	-46.79	564.60	564.62
℄ Brg. W. Abut.	720+33.86	-46.79	564.52	564.54
A	720+43.86	-46.79	564.24	564.30
B	720+53.86	-46.79	563.96	564.05
C	720+63.86	-46.79	563.68	563.79
D	720+73.86	-46.79	563.40	563.51
E	720+83.86	-46.79	563.12	563.23
F	720+93.86	-46.79	562.84	562.93
G	721+03.86	-46.79	562.56	562.62
H	721+13.86	-46.79	562.29	562.32
℄ Brg. Pier 1	721+20.87	-46.79	562.10	562.12
I	721+30.87	-46.79	561.83	561.84
J	721+40.87	-46.79	561.56	561.58
K	721+50.87	-46.79	561.31	561.32
L	721+60.87	-46.79	561.06	561.07
M	721+70.87	-46.79	560.81	560.83
N	721+80.87	-46.79	560.57	560.58
O	721+90.87	-46.79	560.33	560.35
P	722+00.87	-46.79	560.10	560.12
℄ Brg. Pier 2	722+08.37	-46.79	559.93	559.96
Q	722+18.37	-46.79	559.71	559.75
R	722+28.37	-46.79	559.50	559.56
S	722+38.37	-46.79	559.29	559.38
T	722+48.37	-46.79	559.09	559.19
U	722+58.37	-46.79	558.89	559.00
V	722+68.37	-46.79	558.70	558.80
W	722+78.37	-46.79	558.51	558.59
X	722+88.37	-46.79	558.33	558.37
℄ Brg. E. Abut.	722+95.38	-46.79	558.20	558.22
Bk. E. Abut.	722+98.22	-46.79	558.15	558.17

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	720+28.43	-39.54	564.78	564.81
℄ Brg. W. Abut.	720+31.26	-39.54	564.71	564.73
A	720+41.26	-39.54	564.43	564.48
B	720+51.26	-39.54	564.15	564.23
C	720+61.26	-39.54	563.87	563.97
D	720+71.26	-39.54	563.59	563.70
E	720+81.26	-39.54	563.31	563.41
F	720+91.26	-39.54	563.03	563.11
G	721+01.26	-39.54	562.75	562.80
H	721+11.26	-39.54	562.47	562.50
℄ Brg. Pier 1	721+18.27	-39.54	562.28	562.30
I	721+28.27	-39.54	562.01	562.02
J	721+38.27	-39.54	561.74	561.75
K	721+48.27	-39.54	561.48	561.50
L	721+58.27	-39.54	561.23	561.25
M	721+68.27	-39.54	560.98	561.00
N	721+78.27	-39.54	560.74	560.75
O	721+88.27	-39.54	560.50	560.52
P	721+98.27	-39.54	560.27	560.29
℄ Brg. Pier 2	722+05.77	-39.54	560.10	560.12
Q	722+15.77	-39.54	559.88	559.92
R	722+25.77	-39.54	559.66	559.73
S	722+35.77	-39.54	559.45	559.54
T	722+45.77	-39.54	559.25	559.35
U	722+55.77	-39.54	559.05	559.16
V	722+65.77	-39.54	558.85	558.96
W	722+75.77	-39.54	558.67	558.75
X	722+85.77	-39.54	558.48	558.53
℄ Brg. E. Abut.	722+92.78	-39.54	558.36	558.38
Bk. E. Abut.	722+95.61	-39.54	558.31	558.33

Notes:
1. All Elevations and Offsets are in feet.

2. Offsets are measured with respect to ℄ FAI-80.

BEAM 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	720+25.82	-32.29	564.81	564.83
℄ Brg. W. Abut.	720+28.66	-32.29	564.73	564.75
A	720+38.66	-32.29	564.45	564.51
B	720+48.66	-32.29	564.17	564.26
C	720+58.66	-32.29	563.89	564.00
D	720+68.66	-32.29	563.61	563.72
E	720+78.66	-32.29	563.33	563.43
F	720+88.66	-32.29	563.05	563.13
G	720+98.66	-32.29	562.77	562.83
H	721+08.66	-32.29	562.49	562.53
℄ Brg. Pier 1	721+15.67	-32.29	562.30	562.32
I	721+25.67	-32.29	562.03	562.04
J	721+35.67	-32.29	561.76	561.78
K	721+45.67	-32.29	561.50	561.52
L	721+55.67	-32.29	561.25	561.26
M	721+65.67	-32.29	561.00	561.02
N	721+75.67	-32.29	560.75	560.77
O	721+85.67	-32.29	560.52	560.53
P	721+95.67	-32.29	560.28	560.30
℄ Brg. Pier 2	722+03.17	-32.29	560.11	560.13
Q	722+13.17	-32.29	559.89	559.93
R	722+23.17	-32.29	559.67	559.74
S	722+33.17	-32.29	559.46	559.55
T	722+43.17	-32.29	559.25	559.36
U	722+53.17	-32.29	559.05	559.16
V	722+63.17	-32.29	558.86	558.96
W	722+73.17	-32.29	558.67	558.75
X	722+83.17	-32.29	558.48	558.53
℄ Brg. E. Abut.	722+90.18	-32.29	558.36	558.38
Bk. E. Abut.	722+93.01	-32.29	558.31	558.33

LONGITUDINAL STAGE CONST. JT.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	720+24.64	-29.00	564.79	564.81
℄ Brg. W. Abut.	720+27.48	-29.00	564.71	564.74
A	720+37.48	-29.00	564.43	564.49
B	720+47.48	-29.00	564.15	564.24
C	720+57.48	-29.00	563.87	563.98
D	720+67.48	-29.00	563.60	563.71
E	720+77.48	-29.00	563.32	563.42
F	720+87.48	-29.00	563.04	563.12
G	720+97.48	-29.00	562.76	562.81
H	721+07.48	-29.00	562.48	562.51
℄ Brg. Pier 1	721+14.49	-29.00	562.28	562.30
I	721+24.49	-29.00	562.01	562.02
J	721+34.49	-29.00	561.74	561.76
K	721+44.49	-29.00	561.48	561.50
L	721+54.49	-29.00	561.23	561.25
M	721+64.49	-29.00	560.98	561.00
N	721+74.49	-29.00	560.73	560.75
O	721+84.49	-29.00	560.49	560.51
P	721+94.49	-29.00	560.26	560.28
℄ Brg. Pier 2	722+01.99	-29.00	560.09	560.11
Q	722+11.99	-29.00	559.87	559.91
R	722+21.99	-29.00	559.65	559.71
S	722+31.99	-29.00	559.44	559.52
T	722+41.99	-29.00	559.23	559.33
U	722+51.99	-29.00	559.03	559.14
V	722+61.99	-29.00	558.83	558.93
W	722+71.99	-29.00	558.64	558.72
X	722+81.99	-29.00	558.45	558.50
℄ Brg. E. Abut.	722+89.00	-29.00	558.33	558.35
Bk. E. Abut.	722+91.83	-29.00	558.28	558.30

BEAM 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	720+23.22	-25.04	564.77	564.79
℄ Brg. W. Abut.	720+26.05	-25.04	564.69	564.71
A	720+36.05	-25.04	564.41	564.47
B	720+46.05	-25.04	564.13	564.22
C	720+56.05	-25.04	563.85	563.96
D	720+66.05	-25.04	563.57	563.68
E	720+76.05	-25.04	563.29	563.40
F	720+86.05	-25.04	563.01	563.10
G	720+96.05	-25.04	562.73	562.79
H	721+06.05	-25.04	562.45	562.49
℄ Brg. Pier 1	721+13.06	-25.04	562.26	562.28
I	721+23.06	-25.04	561.99	562.00
J	721+33.06	-25.04	561.72	561.73
K	721+43.06	-25.04	561.46	561.47
L	721+53.06	-25.04	561.20	561.22
M	721+63.06	-25.04	560.95	560.97
N	721+73.06	-25.04	560.71	560.72
O	721+83.06	-25.04	560.47	560.48
P	721+93.06	-25.04	560.23	560.25
℄ Brg. Pier 2	722+00.56	-25.04	560.06	560.08
Q	722+10.56	-25.04	559.84	559.88
R	722+20.56	-25.04	559.62	559.68
S	722+30.56	-25.04	559.40	559.49
T	722+40.56	-25.04	559.20	559.30
U	722+50.56	-25.04	558.99	559.10
V	722+60.56	-25.04	558.80	558.90
W	722+70.56	-25.04	558.60	558.68
X	722+80.56	-25.04	558.42	558.47
℄ Brg. E. Abut.	722+87.57	-25.04	558.29	558.31
Bk. E. Abut.	722+90.41	-25.04	558.24	558.26

Notes:
1. All Elevations and Offsets are in feet.

2. Offsets are measured with respect to ℄ FAI-80.

BEAM 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	720+20.62	-17.79	564.70	564.72
℄ Brg. W. Abut.	720+23.45	-17.79	564.62	564.64
A	720+33.45	-17.79	564.34	564.40
B	720+43.45	-17.79	564.06	564.15
C	720+53.45	-17.79	563.78	563.89
D	720+63.45	-17.79	563.50	563.61
E	720+73.45	-17.79	563.22	563.32
F	720+83.45	-17.79	562.94	563.02
G	720+93.45	-17.79	562.66	562.72
H	721+03.45	-17.79	562.38	562.42
℄ Brg. Pier 1	721+10.46	-17.79	562.19	562.21
I	721+20.46	-17.79	561.91	561.93
J	721+30.46	-17.79	561.64	561.66
K	721+40.46	-17.79	561.38	561.40
L	721+50.46	-17.79	561.12	561.14
M	721+60.46	-17.79	560.87	560.89
N	721+70.46	-17.79	560.62	560.64
O	721+80.46	-17.79	560.38	560.40
P	721+90.46	-17.79	560.15	560.16
℄ Brg. Pier 2	721+97.96	-17.79	559.97	560.00
Q	722+07.96	-17.79	559.75	559.79
R	722+17.96	-17.79	559.53	559.59
S	722+27.96	-17.79	559.31	559.40
T	722+37.96	-17.79	559.10	559.21
U	722+47.96	-17.79	558.90	559.01
V	722+57.96	-17.79	558.70	558.80
W	722+67.96	-17.79	558.51	558.59
X	722+77.96	-17.79	558.32	558.37
℄ Brg. E. Abut.	722+84.97	-17.79	558.19	558.21
Bk. E. Abut.	722+87.80	-17.79	558.14	558.16

W.B. PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	720+19.08	-13.50	564.66	564.68
℄ Brg. W. Abut.	720+21.91	-13.50	564.58	564.60
A	720+31.91	-13.50	564.30	564.36
B	720+41.91	-13.50	564.02	564.12
C	720+51.91	-13.50	563.74	563.86
D	720+61.91	-13.50	563.46	563.58
E	720+71.91	-13.50	563.18	563.29
F	720+81.91	-13.50	562.90	562.99
G	720+91.91	-13.50	562.62	562.68
H	721+01.91	-13.50	562.34	562.37
℄ Brg. Pier 1	721+08.92	-13.50	562.14	562.16
I	721+18.92	-13.50	561.87	561.88
J	721+28.92	-13.50	561.60	561.61
K	721+38.92	-13.50	561.33	561.35
L	721+48.92	-13.50	561.08	561.09
M	721+58.92	-13.50	560.82	560.84
N	721+68.92	-13.50	560.58	560.59
O	721+78.92	-13.50	560.33	560.35
P	721+88.92	-13.50	560.10	560.11
℄ Brg. Pier 2	721+96.42	-13.50	559.92	559.94
Q	722+06.42	-13.50	559.70	559.74
R	722+16.42	-13.50	559.48	559.55
S	722+26.42	-13.50	559.26	559.36
T	722+36.42	-13.50	559.05	559.17
U	722+46.42	-13.50	558.85	558.97
V	722+56.42	-13.50	558.65	558.76
W	722+66.42	-13.50	558.45	558.54
X	722+76.42	-13.50	558.26	558.32
℄ Brg. E. Abut.	722+83.43	-13.50	558.14	558.16
Bk. E. Abut.	722+86.26	-13.50	558.08	558.11

BEAM 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	720+18.01	-10.54	564.63	564.65
℄ Brg. W. Abut.	720+20.85	-10.54	564.55	564.57
A	720+30.85	-10.54	564.27	564.33
B	720+40.85	-10.54	563.99	564.09
C	720+50.85	-10.54	563.71	563.83
D	720+60.85	-10.54	563.43	563.55
E	720+70.85	-10.54	563.15	563.26
F	720+80.85	-10.54	562.87	562.96
G	720+90.85	-10.54	562.59	562.65
H	721+00.85	-10.54	562.31	562.35
℄ Brg. Pier 1	721+07.86	-10.54	562.11	562.13
I	721+17.86	-10.54	561.84	561.85
J	721+27.86	-10.54	561.57	561.58
K	721+37.86	-10.54	561.30	561.32
L	721+47.86	-10.54	561.04	561.06
M	721+57.86	-10.54	560.79	560.81
N	721+67.86	-10.54	560.54	560.56
O	721+77.86	-10.54	560.30	560.31
P	721+87.86	-10.54	560.06	560.08
℄ Brg. Pier 2	721+95.36	-10.54	559.89	559.91
Q	722+05.36	-10.54	559.66	559.71
R	722+15.36	-10.54	559.44	559.51
S	722+25.36	-10.54	559.22	559.32
T	722+35.36	-10.54	559.01	559.13
U	722+45.36	-10.54	558.81	558.93
V	722+55.36	-10.54	558.61	558.72
W	722+65.36	-10.54	558.41	558.50
X	722+75.36	-10.54	558.22	558.28
℄ Brg. E. Abut.	722+82.37	-10.54	558.10	558.12
Bk. E. Abut.	722+85.20	-10.54	558.04	558.07

Notes:
1. All Elevations and Offsets are in feet.

2. Offsets are measured with respect to ℄ FAI-80.

BEAM 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	720+15.41	-3.29	564.56	564.58
℄ Brg. W. Abut.	720+18.25	-3.29	564.48	564.50
A	720+28.25	-3.29	564.20	564.26
B	720+38.25	-3.29	563.92	564.01
C	720+48.25	-3.29	563.64	563.75
D	720+58.25	-3.29	563.36	563.48
E	720+68.25	-3.29	563.08	563.19
F	720+78.25	-3.29	562.80	562.89
G	720+88.25	-3.29	562.52	562.58
H	720+98.25	-3.29	562.24	562.27
℄ Brg. Pier 1	721+05.26	-3.29	562.04	562.06
I	721+15.26	-3.29	561.76	561.78
J	721+25.26	-3.29	561.49	561.51
K	721+35.26	-3.29	561.23	561.24
L	721+45.26	-3.29	560.97	560.98
M	721+55.26	-3.29	560.71	560.73
N	721+65.26	-3.29	560.46	560.48
O	721+75.26	-3.29	560.22	560.23
P	721+85.26	-3.29	559.98	559.99
℄ Brg. Pier 2	721+92.76	-3.29	559.80	559.83
Q	722+02.76	-3.29	559.58	559.62
R	722+12.76	-3.29	559.35	559.42
S	722+22.76	-3.29	559.13	559.23
T	722+32.76	-3.29	558.92	559.04
U	722+42.76	-3.29	558.72	558.84
V	722+52.76	-3.29	558.51	558.63
W	722+62.76	-3.29	558.32	558.41
X	722+72.76	-3.29	558.13	558.18
℄ Brg. E. Abut.	722+79.77	-3.29	558.00	558.02
Bk. E. Abut.	722+82.60	-3.29	557.95	557.97

Notes:
1. All Elevations and Offsets are in feet.

2. Offsets are measured with respect to ℄ FAI-80.

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End West Appr. Pav't.	720+13.10	-77.46	564.51	564.53
A1	720+23.10	-77.46	564.23	564.25
A2	720+33.10	-77.46	563.95	563.97
E. End West Appr. Pav't.	720+43.10	-77.46	563.67	563.69

CROSS SLOPE BREAK 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End West Appr. Pav't.	719+98.76	-37.50	565.65	565.67
A1	720+08.76	-37.50	565.37	565.39
A2	720+18.76	-37.50	565.09	565.11
E. End West Appr. Pav't.	720+28.76	-37.50	564.81	564.83

CROSS SLOPE BREAK 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End West Appr. Pav't.	719+94.45	-25.50	565.59	565.61
A1	720+04.45	-25.50	565.31	565.33
A2	720+14.45	-25.50	565.03	565.05
E. End West Appr. Pav't.	720+24.45	-25.50	564.75	564.77

CROSS SLOPE BREAK 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End West Appr. Pav't.	720+03.06	-49.50	565.35	565.37
A1	720+13.06	-49.50	565.07	565.09
A2	720+23.06	-49.50	564.79	564.81
E. End West Appr. Pav't.	720+33.06	-49.50	564.51	564.53

STAGE CONST. JT.

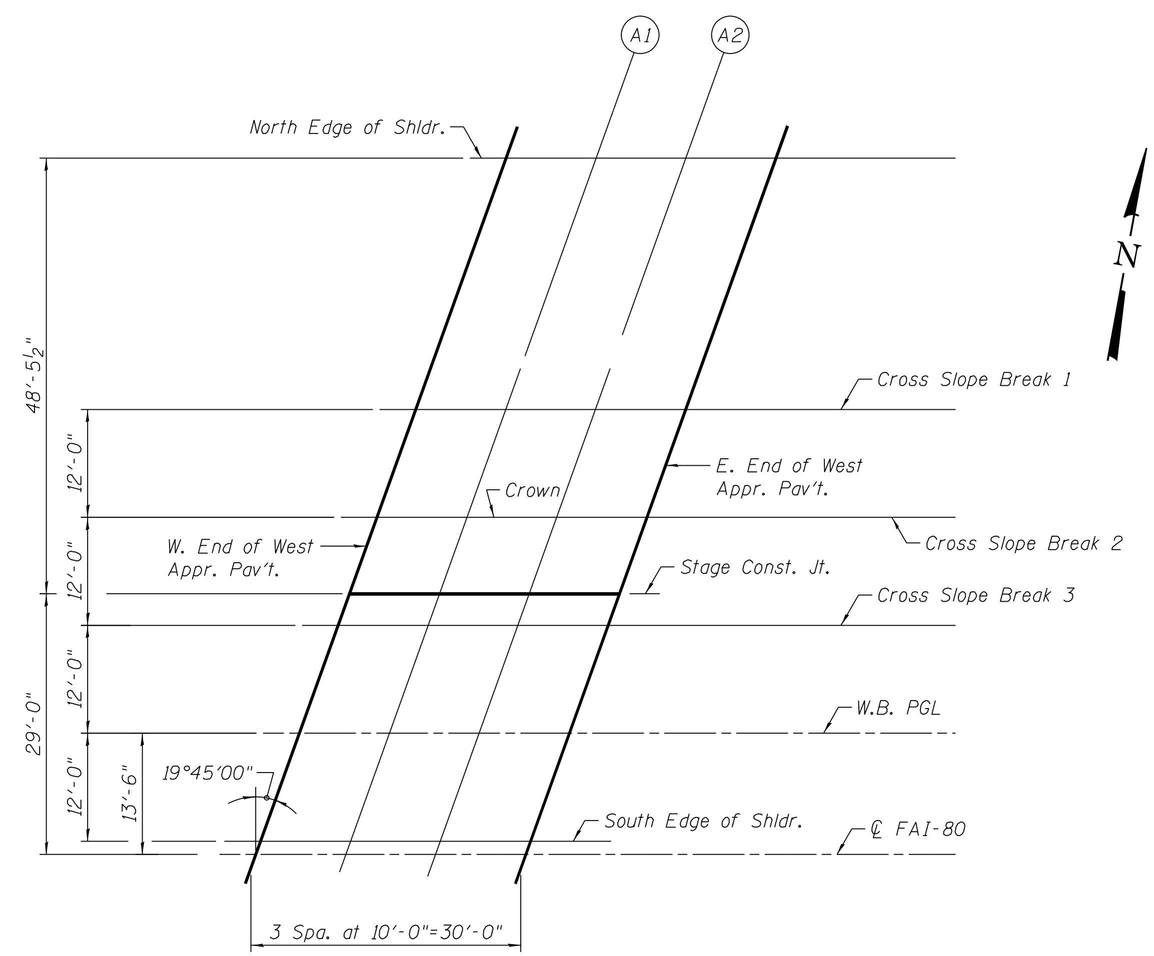
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End West Appr. Pav't.	719+95.70	-29.00	565.60	565.62
A1	720+05.70	-29.00	565.32	565.34
A2	720+15.70	-29.00	565.04	565.06
E. End West Appr. Pav't.	720+25.70	-29.00	564.76	564.79

W.B. PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End West Appr. Pav't.	719+90.14	-13.50	565.47	565.49
A1	720+00.14	-13.50	565.19	565.21
A2	720+10.14	-13.50	564.91	564.93
E. End West Appr. Pav't.	720+20.14	-13.50	564.63	564.65

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End West Appr. Pav't.	719+85.83	-1.50	565.35	565.37
A1	719+95.83	-1.50	565.07	565.09
A2	720+05.83	-1.50	564.79	564.81
E. End West Appr. Pav't.	720+15.83	-1.50	564.51	564.53



PLAN
West Approach (W.B.)

Notes:
1. All Elevations and Offsets are in feet.

2. Offsets are measured with respect to ℄ FAI-80.

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End East Appr. Pav't.	723+08.17	-77.46	557.38	557.41
A3	723+18.29	-77.64	557.21	557.23
A4	723+28.43	-77.82	557.05	557.07
E. End East Appr. Pav't.	723+38.55	-78.00	556.89	556.91

CROSS SLOPE BREAK 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End East Appr. Pav't.	722+93.82	-37.50	558.37	558.39
A3	723+03.82	-37.50	558.20	558.22
A4	723+13.82	-37.50	558.03	558.05
E. End East Appr. Pav't.	723+23.82	-37.50	557.87	557.89

CROSS SLOPE BREAK 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End East Appr. Pav't.	722+89.51	-25.50	558.27	558.29
A3	722+99.51	-25.50	558.09	558.11
A4	723+09.51	-25.50	557.92	557.94
E. End East Appr. Pav't.	723+19.51	-25.50	557.76	557.78

CROSS SLOPE BREAK 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End East Appr. Pav't.	722+98.13	-49.50	558.11	558.14
A3	723+08.13	-49.50	557.94	557.97
A4	723+18.13	-49.50	557.78	557.80
E. End East Appr. Pav't.	723+28.13	-49.50	557.62	557.64

STAGE CONST. JT.

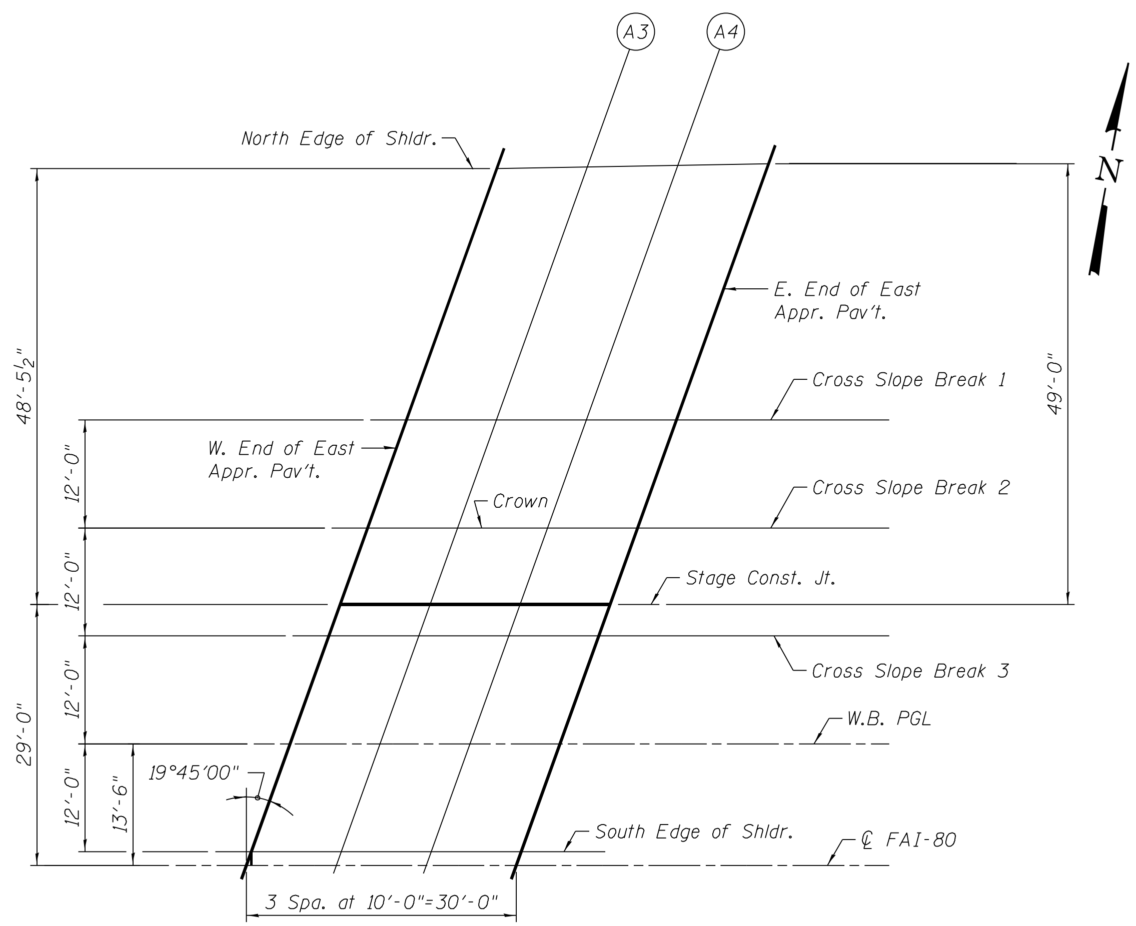
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End East Appr. Pav't.	722+90.77	-29.00	558.30	558.32
A3	723+00.77	-29.00	558.12	558.14
A4	723+10.77	-29.00	557.95	557.97
E. End East Appr. Pav't.	723+20.77	-29.00	557.79	557.81

W.B. PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End East Appr. Pav't.	722+85.20	-13.50	558.10	558.12
A3	722+95.20	-13.50	557.93	557.95
A4	723+05.20	-13.50	557.75	557.77
E. End East Appr. Pav't.	723+15.20	-13.50	557.59	557.61

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End East Appr. Pav't.	722+80.89	-1.50	557.94	557.96
A3	722+90.89	-1.50	557.76	557.78
A4	723+00.89	-1.50	557.59	557.61
E. End East Appr. Pav't.	723+10.89	-1.50	557.42	557.44



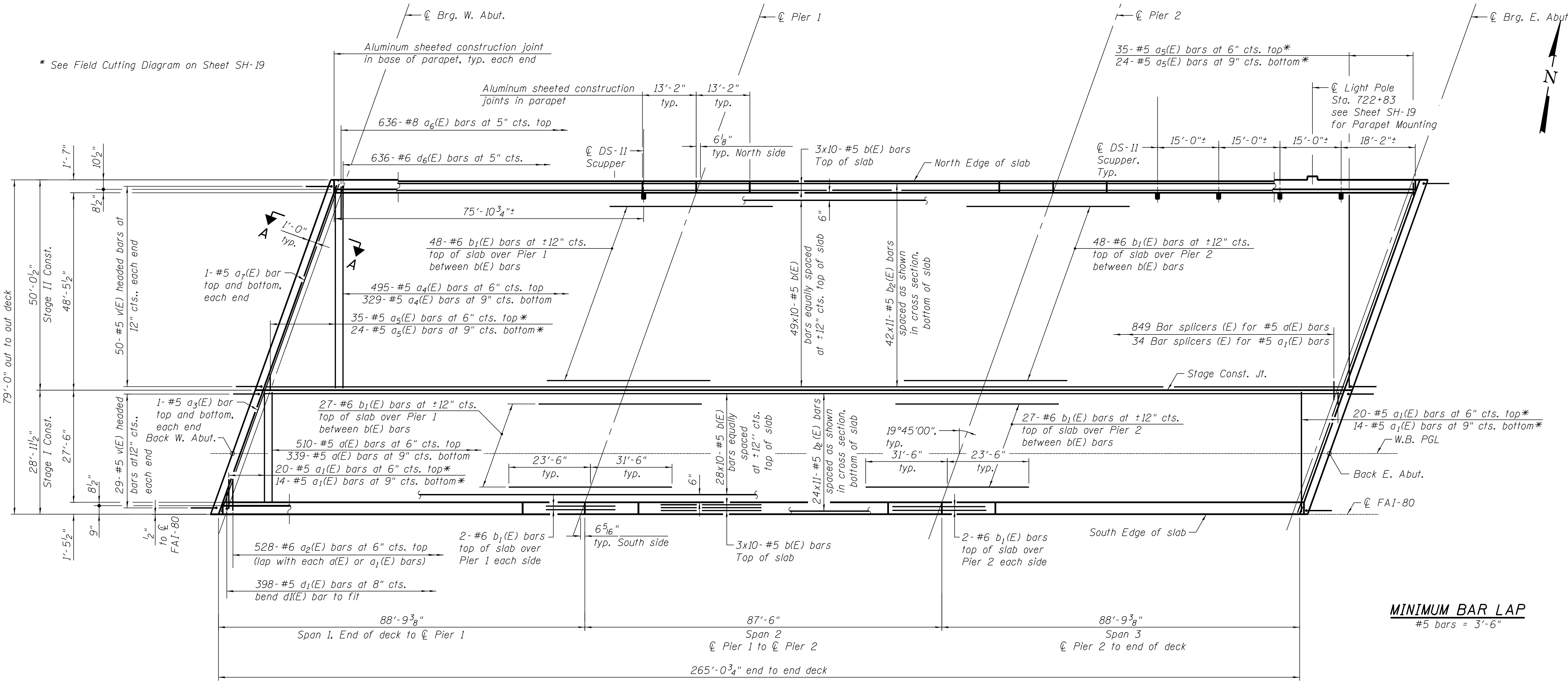
PLAN

East Approach (W.B.)

Notes:

1. All Elevations and Offsets are in feet.
2. Offsets are measured with respect to ℄ FAI-80.

* See Field Cutting Diagram on Sheet SH-19



MINIMUM BAR LAP
#5 bars = 3'-6"

PLAN

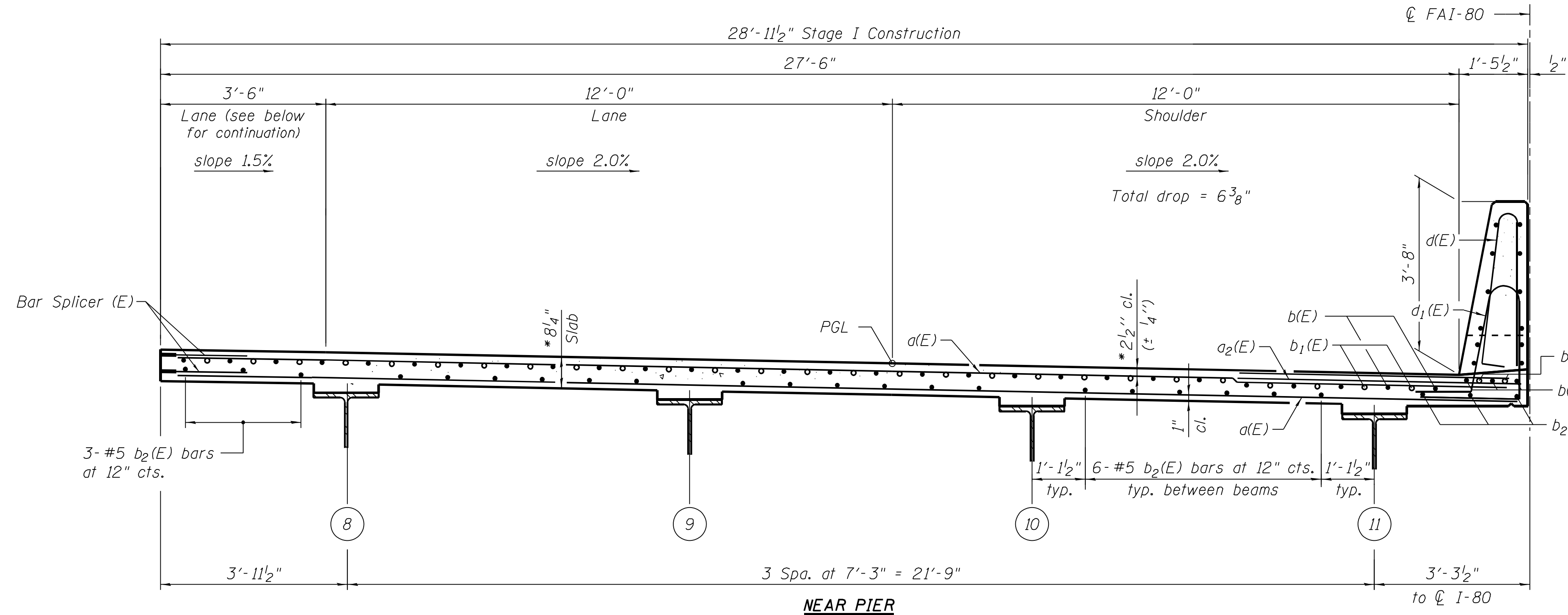
Notes:
1. For superstructure details and Bill of Material, see Sheet SH-19.
2. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
3. For parapet reinforcement, see Sheets SH-16 thru SH-19.
4. For deck cross section, see Sheet SH-16.
5. For Section A-A, see Sheet SH-20.
6. For Bar Splicer details, see Sheet SH-42.

USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - MTR	REVISED -	
PLOT DATE =	CHECKED - BAR	REVISED -	

DECK PLAN
STRUCTURE NO. 099-0063
SHEET SH-15 OF SH-46 SHEETS

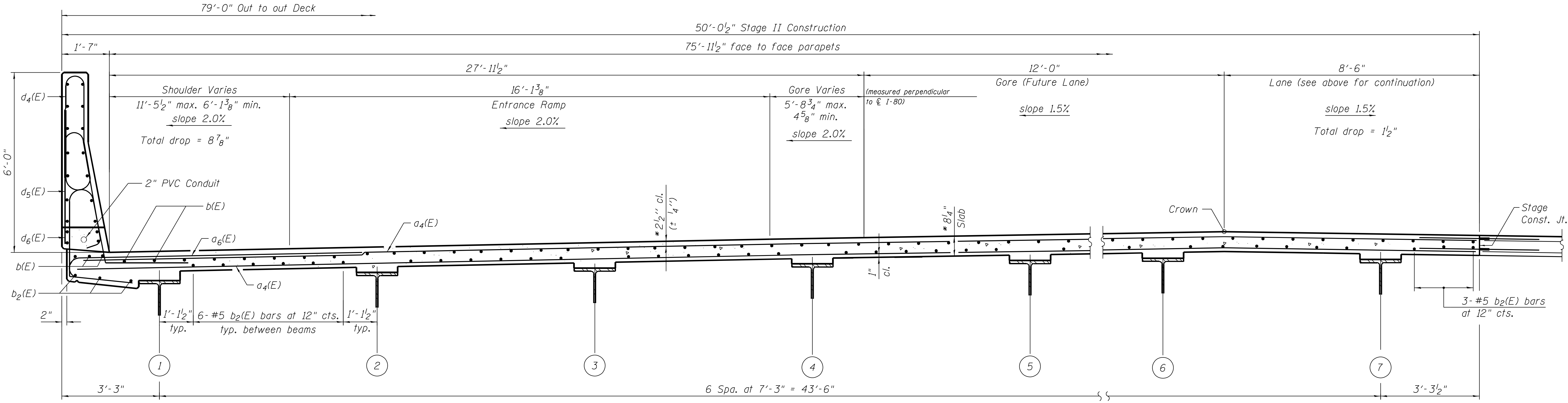
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	268
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-015-DCK.dgn
3/9/2022 11:40:20 AM



CROSS SECTION - STAGE I CONSTRUCTION

(Looking East)



NEAR MIDSPAN

CROSS SECTION - STAGE II CONSTRUCTION

(Looking East)

Notes:

1. For notes, see Sheet SH-15.
2. For Parapet details, see Sheet SH-17.
3. For scupper details, see Sheet SH-25.

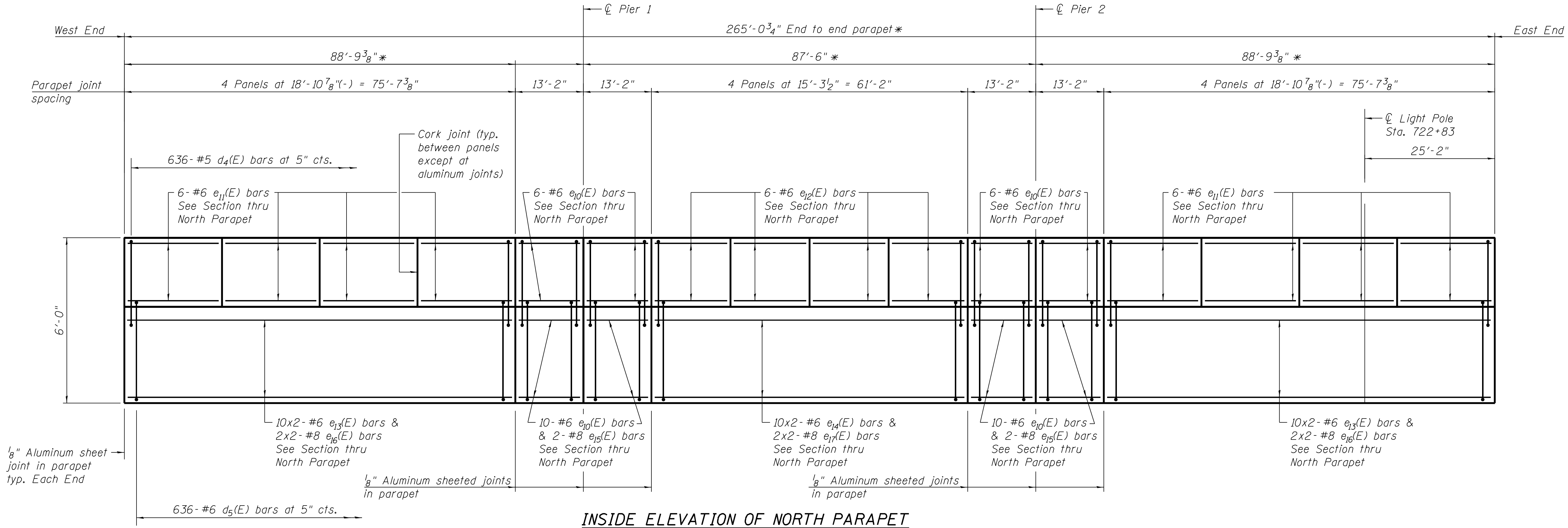
* Prior to grinding

MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-016-DCKSEC.dgn

3/9/2022 11:40:54 AM

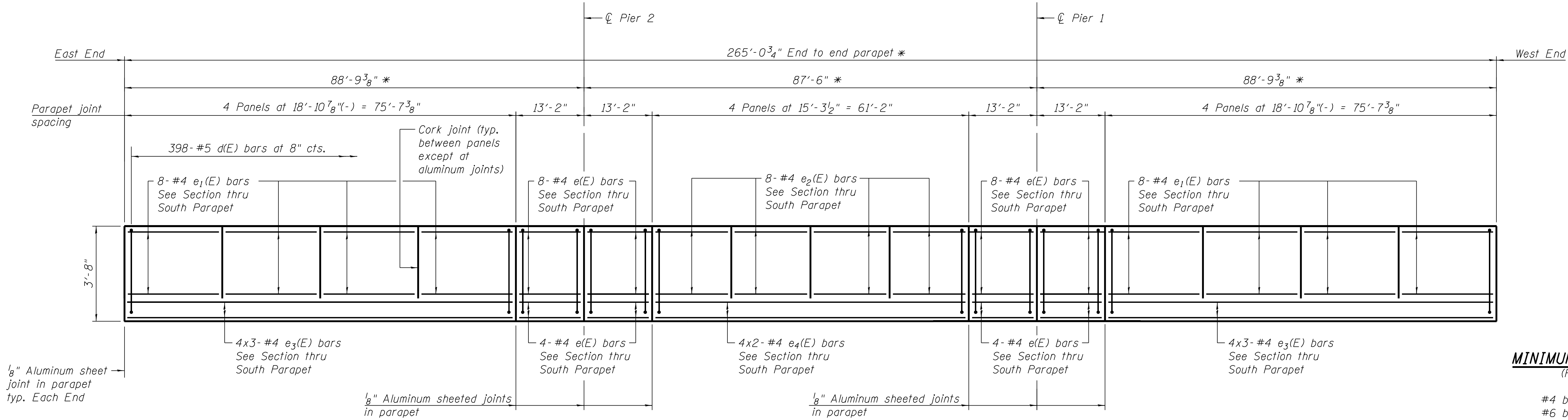
exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DECK SECTIONS STRUCTURE NO. 099-0063
		CHECKED - VCP	REVISED -		
	PLOT SCALE =	DRAWN - MTR	REVISED -		
	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET SH-16 OF SH-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	269
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		



INSIDE ELEVATION OF NORTH PARAPET

* Measured along inside face of parapet



INSIDE ELEVATION OF SOUTH PARAPET

MINIMUM BAR LAP
(Parapet)

#4 bar = 2'-8"
#6 bar = 4'-0"
#8 bar = 6'-8"

Notes:
1. Bars indicated thus "4x3-#4 etc." indicates 4 lines of bars with 3 lengths per line.

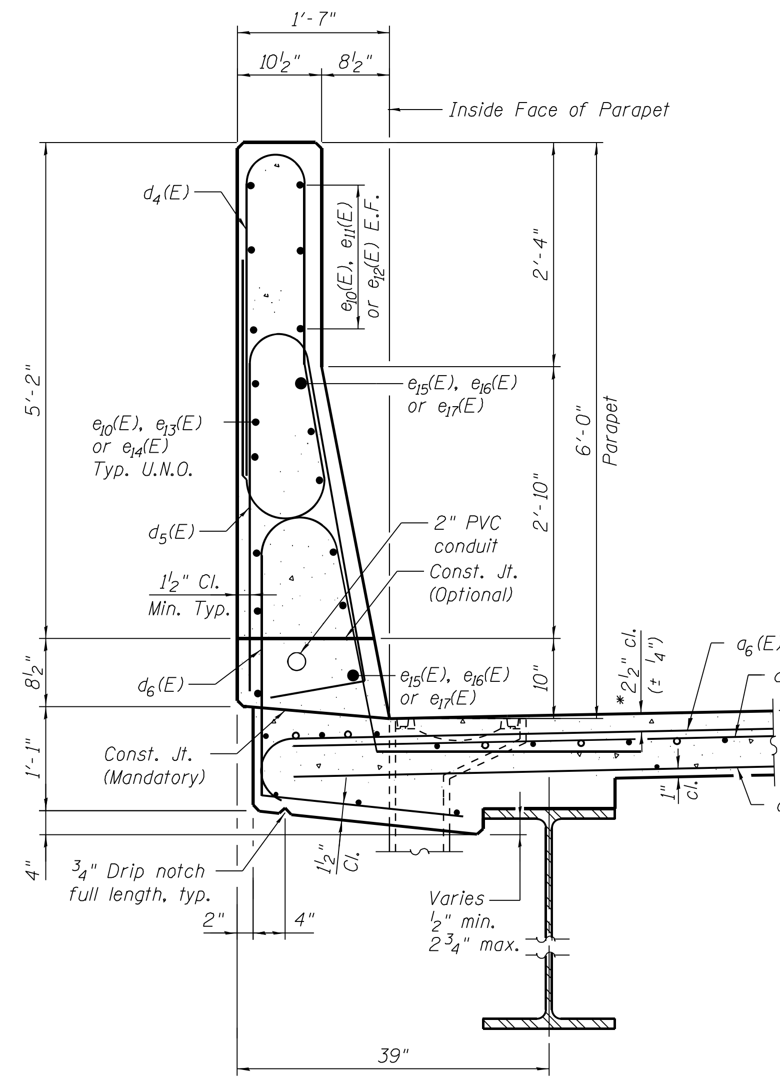
exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED - VCP	REVISED -	
	PLOT SCALE =	DRAWN - MTR	REVISED -	
	PLOT DATE =	CHECKED - BAR	REVISED -	

PARAPET ELEVATIONS
STRUCTURE NO. 099-0063

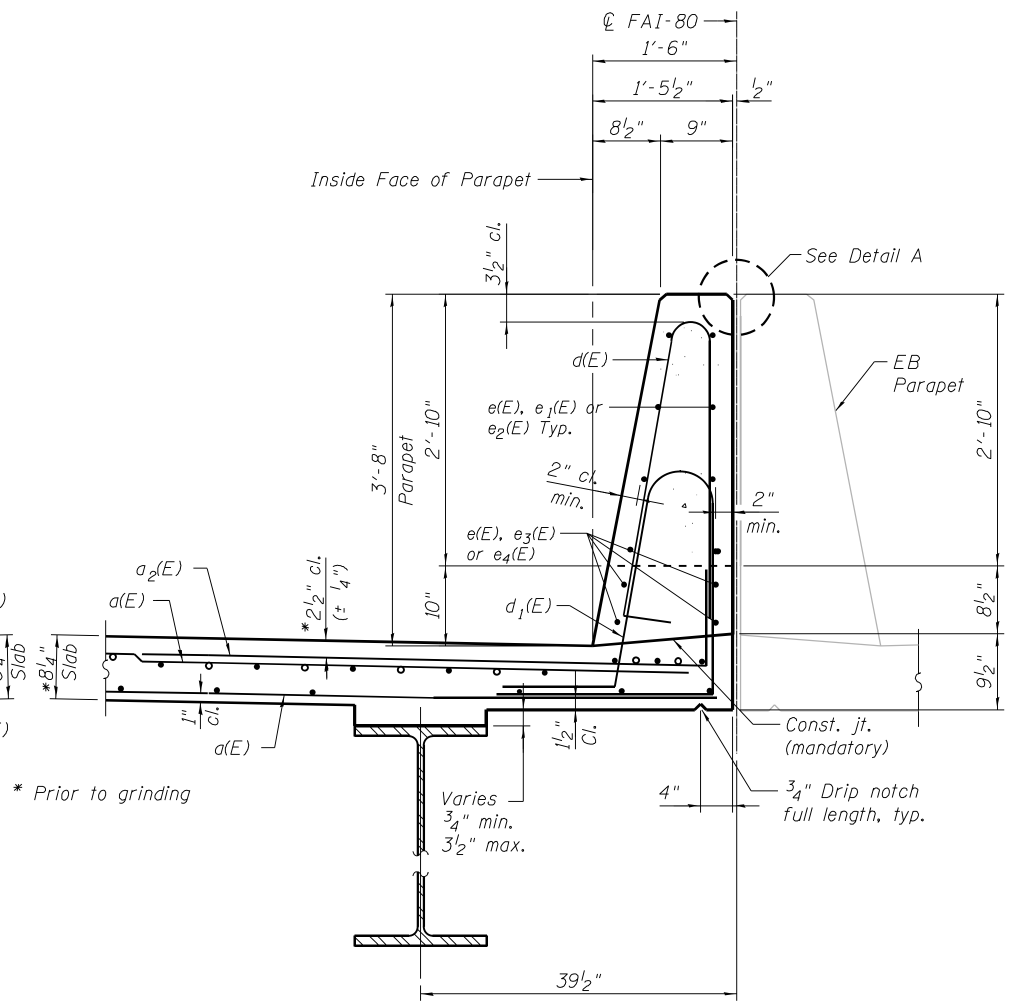
SHEET SH-17 OF SH-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	270
		CONTRACT NO. 60W35		
	ILLINOIS	FED. AID PROJECT		

3/9/2022 11:41:26 AM

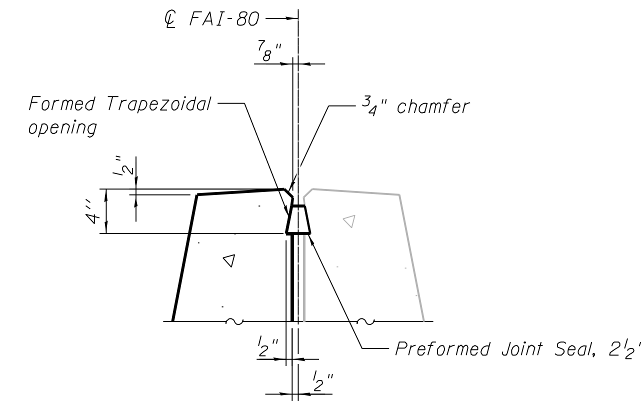


SECTION THRU NORTH PARAPET

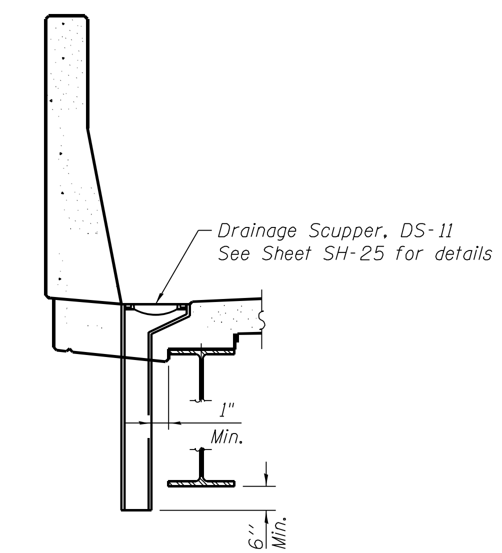


* Prior to grinding

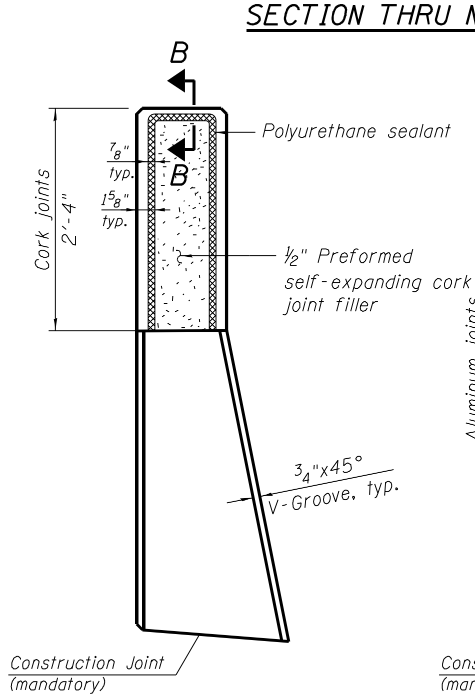
SECTION THRU SOUTH PARAPET



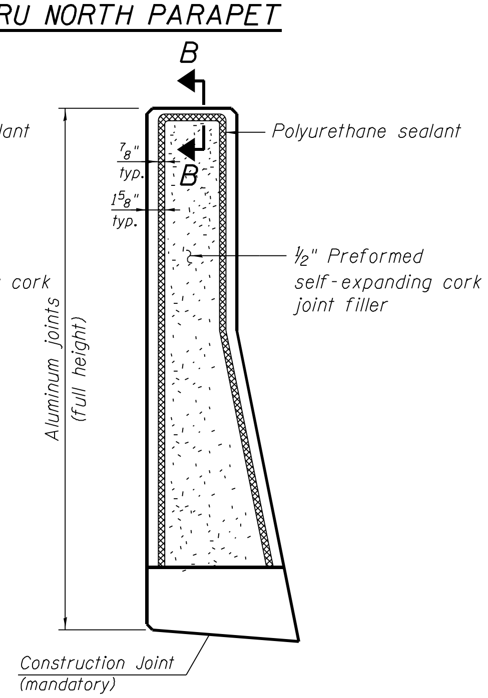
DETAIL A



SECTION A-A

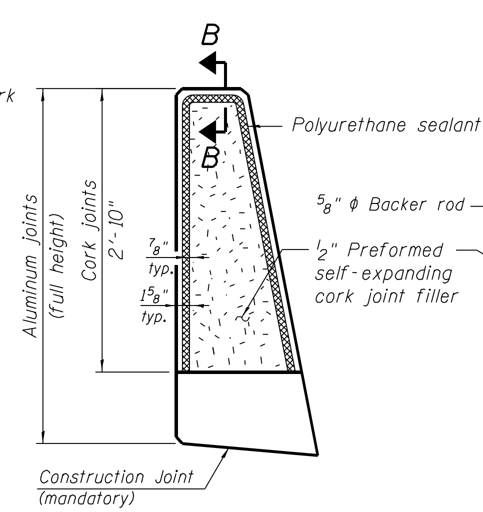


INTERIOR JOINT

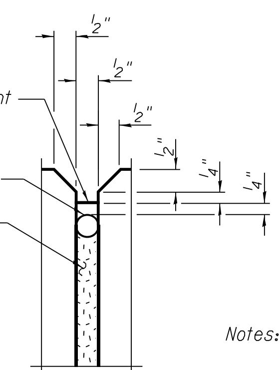


ALUMINUM JOINT

NORTH PARAPET



SOUTH PARAPET



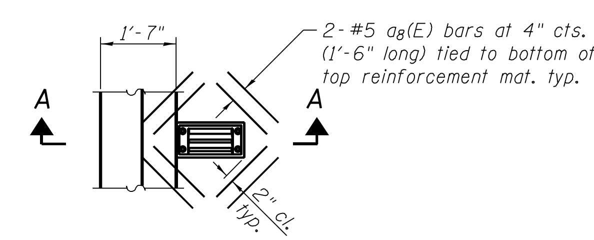
SECTION B-B

PARAPET JOINT DETAILS

Notes:

1. The ⅛" Aluminum sheet shall be ASTM B 209 alloy 3003-H14, coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.

2. The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Specs. and the color shall be gray.



PLAN

Note:
Cut longitudinal reinforcement to clear drainage scuppers.

DETAIL AT SCUPPER
(5 Thus)

exp.	USER NAME =	DESIGNED - BAR	REVISED -
		CHECKED - VCP	REVISED -
	PLOT SCALE =	DRAWN - MTR	REVISED -
	PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

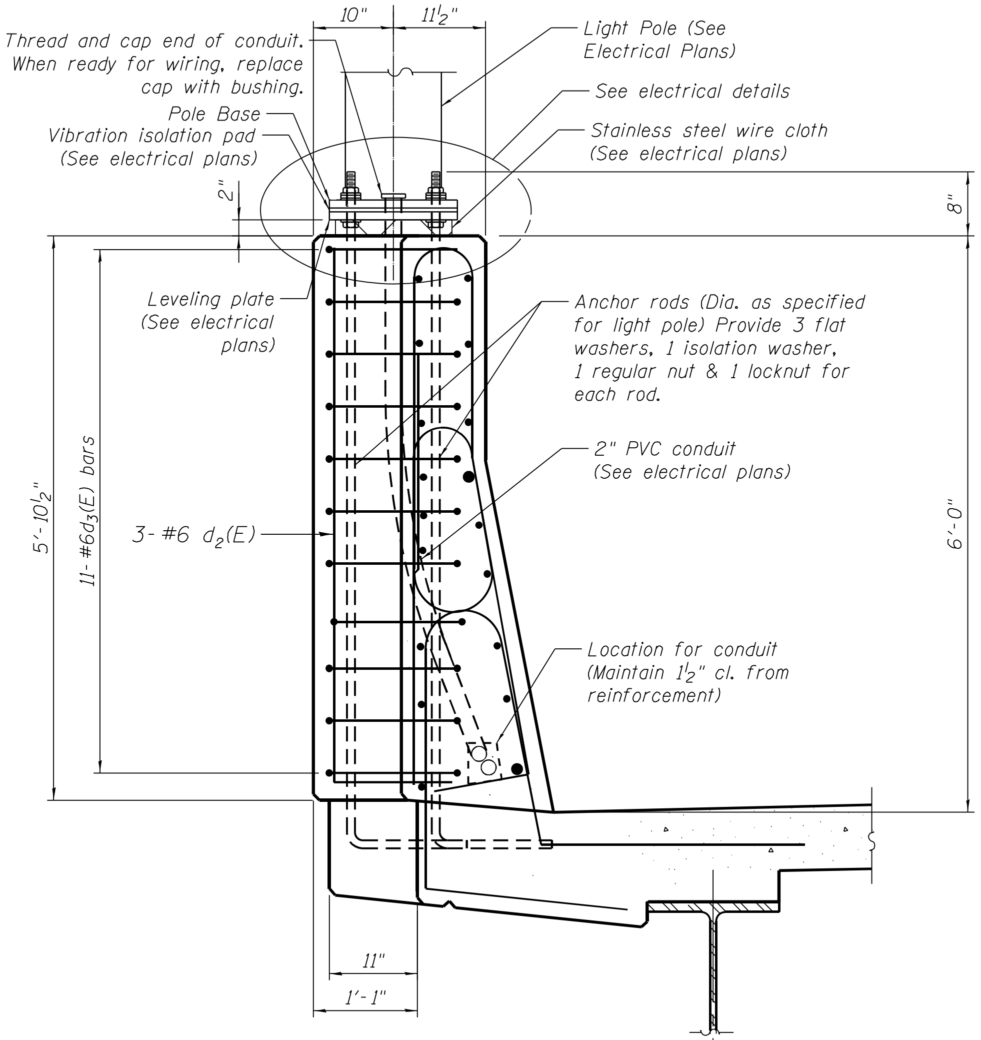
SUPERSTRUCTURE DETAILS - 1
STRUCTURE NO. 099-0063

SHEET SH-18 OF SH-46 SHEETS

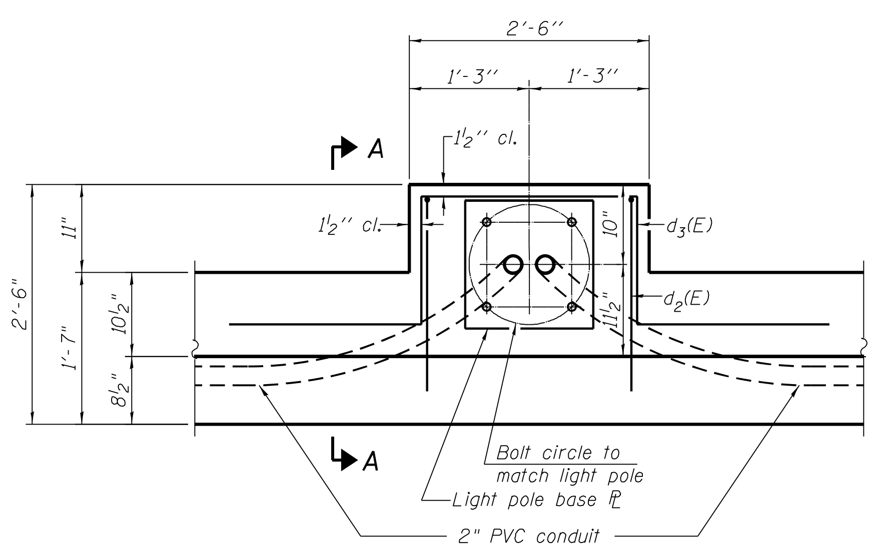
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	271
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-017A-DCKPA.dgn

3/9/2022 11:41:59 AM

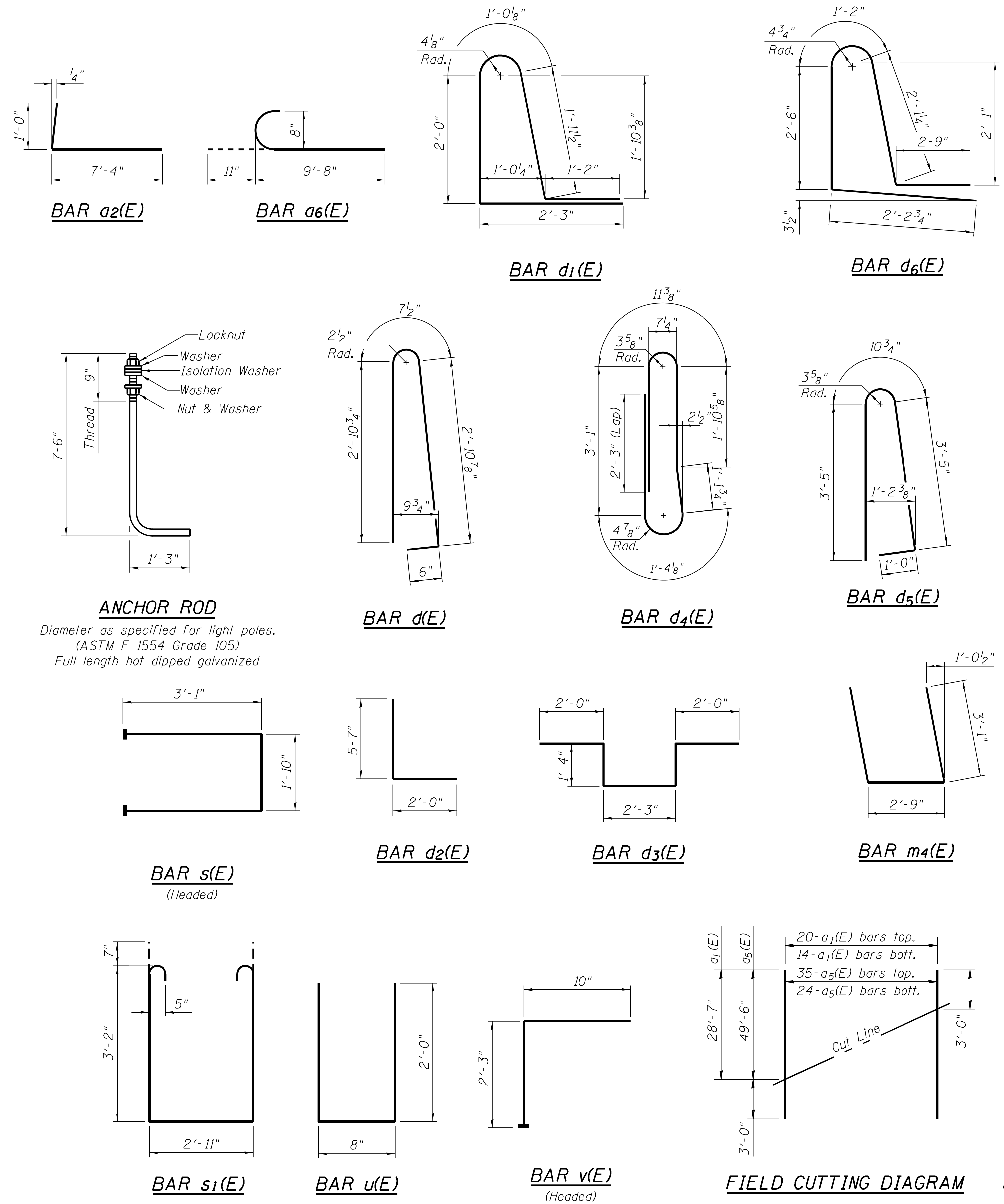


SECTION A-A



PLAN

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

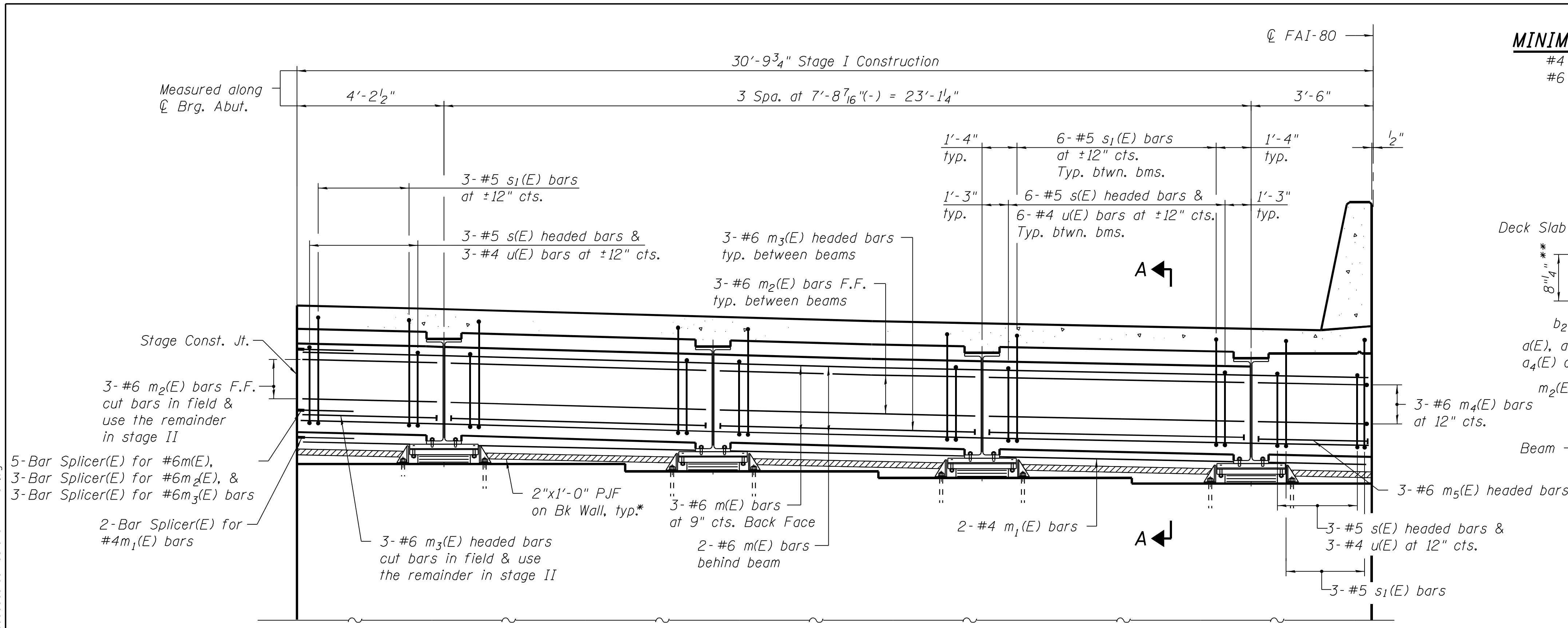


ANCHOR ROD
Diameter as specified for light poles.
(ASTM F 1554 Grade 105)
Full length hot dipped galvanized

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	849	#5	28'-7"	
a1(E)	34	#5	31'-7"	
a2(E)	528	#6	8'-4"	
a3(E)	4	#5	30'-5"	
a4(E)	824	#5	49'-6"	
a5(E)	59	#5	52'-6"	
a6(E)	636	#8	10'-7"	
a7(E)	4	#5	52'-7"	
a8(E)	80	#5	1'-6"	
b(E)	830	#5	29'-8"	
b1(E)	158	#6	55'-0"	
b2(E)	726	#5	27'-3"	
d(E)	398	#5	6'-11"	
d1(E)	398	#5	8'-5"	
d2(E)	3	#6	7'-7"	
d3(E)	11	#6	8'-11"	
d4(E)	636	#5	10'-8"	
d5(E)	636	#6	8'-9"	
d6(E)	636	#6	10'-7"	
e(E)	48	#4	12'-10"	
e1(E)	64	#4	18'-7"	
e2(E)	32	#4	14'-11"	
e3(E)	24	#4	26'-11"	
e4(E)	8	#4	31'-9"	
e10(E)	64	#6	12'-10"	
e11(E)	48	#6	18'-7"	
e12(E)	24	#6	14'-11"	
e13(E)	40	#6	39'-8"	
e14(E)	20	#6	32'-5"	
e15(E)	8	#8	12'-10"	
e16(E)	8	#8	41'-0"	
e17(E)	4	#8	33'-9"	
m(E)	10	#6	30'-5"	
m1(E)	4	#4	30'-5"	
m2(E)	60	#6	7'-4"	
m3(E)	60	#6	7'-4"	
m4(E)	12	#6	8'-11"	
m5(E)	12	#6	3'-2"	
m6(E)	20	#6	28'-5"	
m7(E)	8	#4	27'-9"	
s(E)	132	#5	8'-0"	
s1(E)	132	#5	10'-5"	
u(E)	132	#4	4'-8"	
v(E)	158	#5	3'-1"	

Item	Unit	Quantity
Concrete Superstructure	Cu Yd	735.1
Reinforcement Bars, Epoxy Coated	Pound	205,350

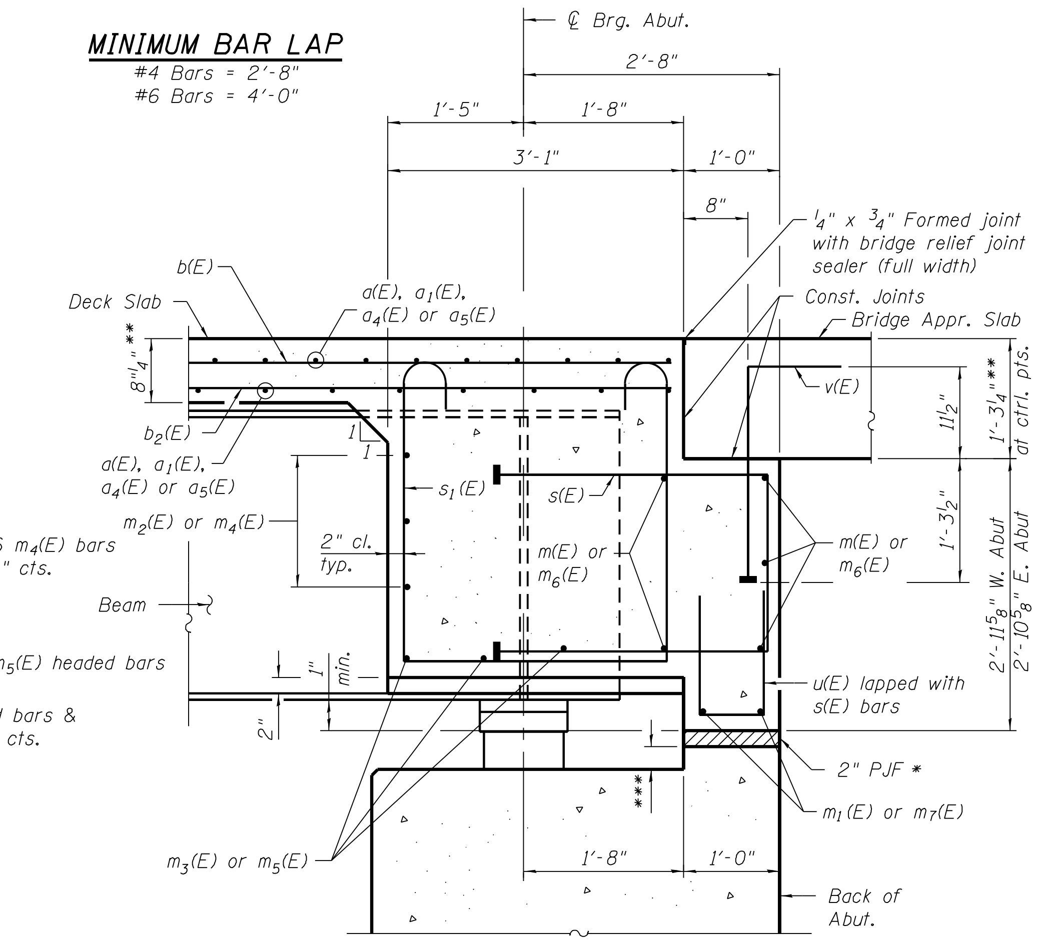


CONCRETE DIAPHRAGM ELEVATION AT EAST ABUTMENT - STAGE I CONSTRUCTION

West Abutment Diaphragm similar

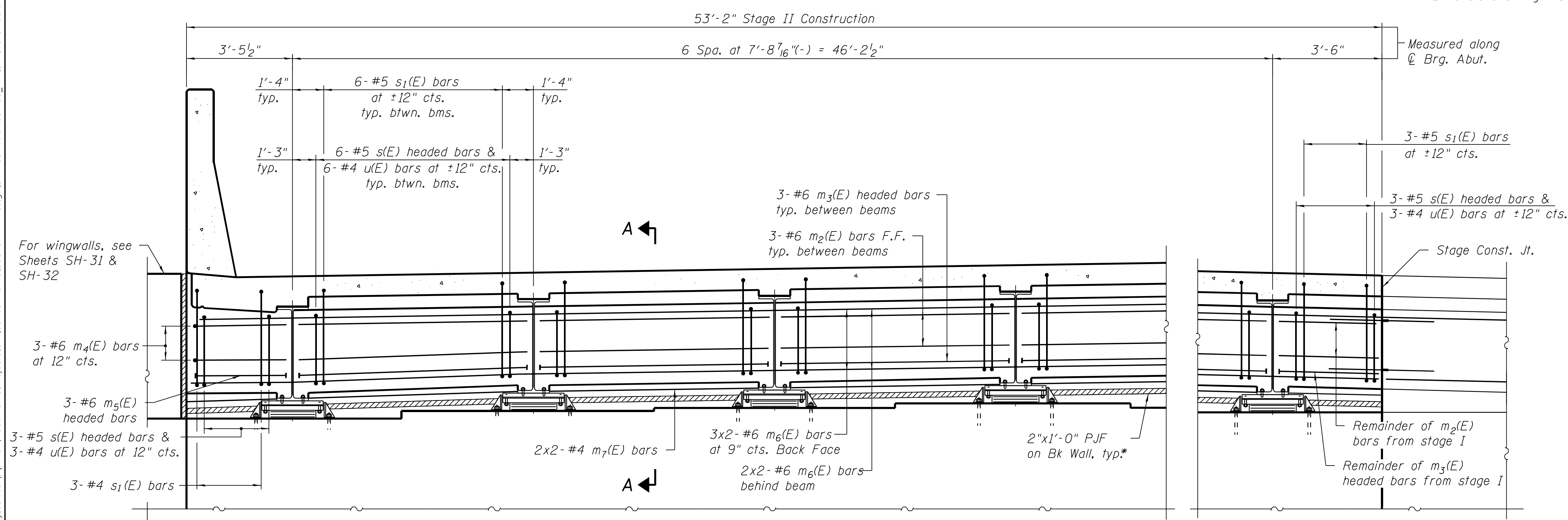
MINIMUM BAR LAP

#4 Bars = 2'-8"
#6 Bars = 4'-0"



SECTION A-A

Dimensions at right angles to abutment, except as shown.



CONCRETE DIAPHRAGM ELEVATION AT EAST ABUTMENT - STAGE II CONSTRUCTION

West Abutment Diaphragm similar

* Cost included with Concrete Superstructure
** Prior to grinding
*** Varies, see Sheet SH-34

Notes:

1. Reinforcement bars in diaphragm are billed with superstructure on Sheet SH-19.
2. Concrete in diaphragm is included with Concrete Superstructure on Sheet SH-19.
3. For details of bars s(E), s_1(E), u(E) & v(E) see Sheet SH-19.
4. The s(E), s_1(E), u(E) and v(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
5. Provide 2" PJF (per Article 1051.09 of the Standard Specifications) full width and vertically at edges bonded to abutment cap with suitable adhesive as recommended by supplier.
6. For Bar Splicer details, see Sheet SH-42.
7. Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
8. Bearing Stiffener shall be placed at right angles to beam web at cenerline of bearing.
9. Bars indicated thus 5x2-#6 etc. indicates 5 lines of bars with 2 lengths per line.
10. For abutment joint elevation and control point locations, see Sheet SH-21.

exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED - VCP	REVISED -	
	PLOT SCALE =	DRAWN - MTR	REVISED -	
	PLOT DATE =	CHECKED - BAR	REVISED -	

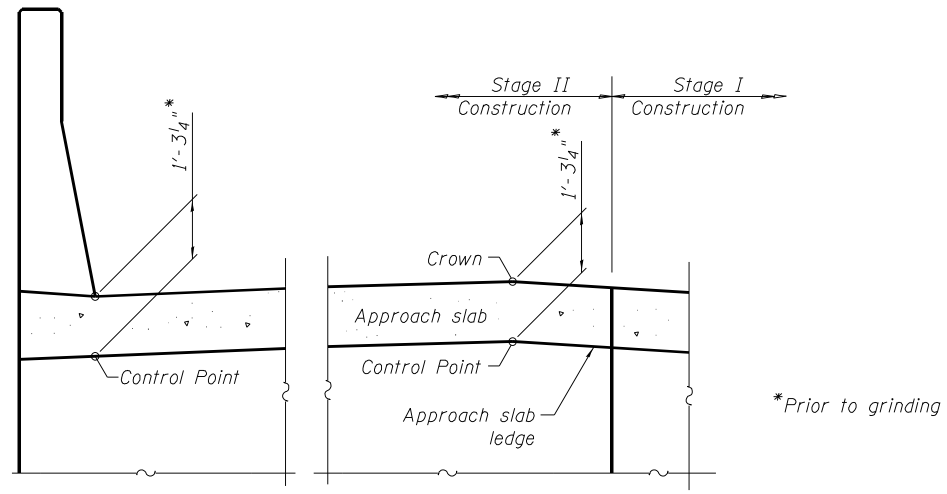
ABUTMENT DIAPHRAGM DETAILS - 1
STRUCTURE NO. 099-0063

SHEET SH-20 OF SH-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	273
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

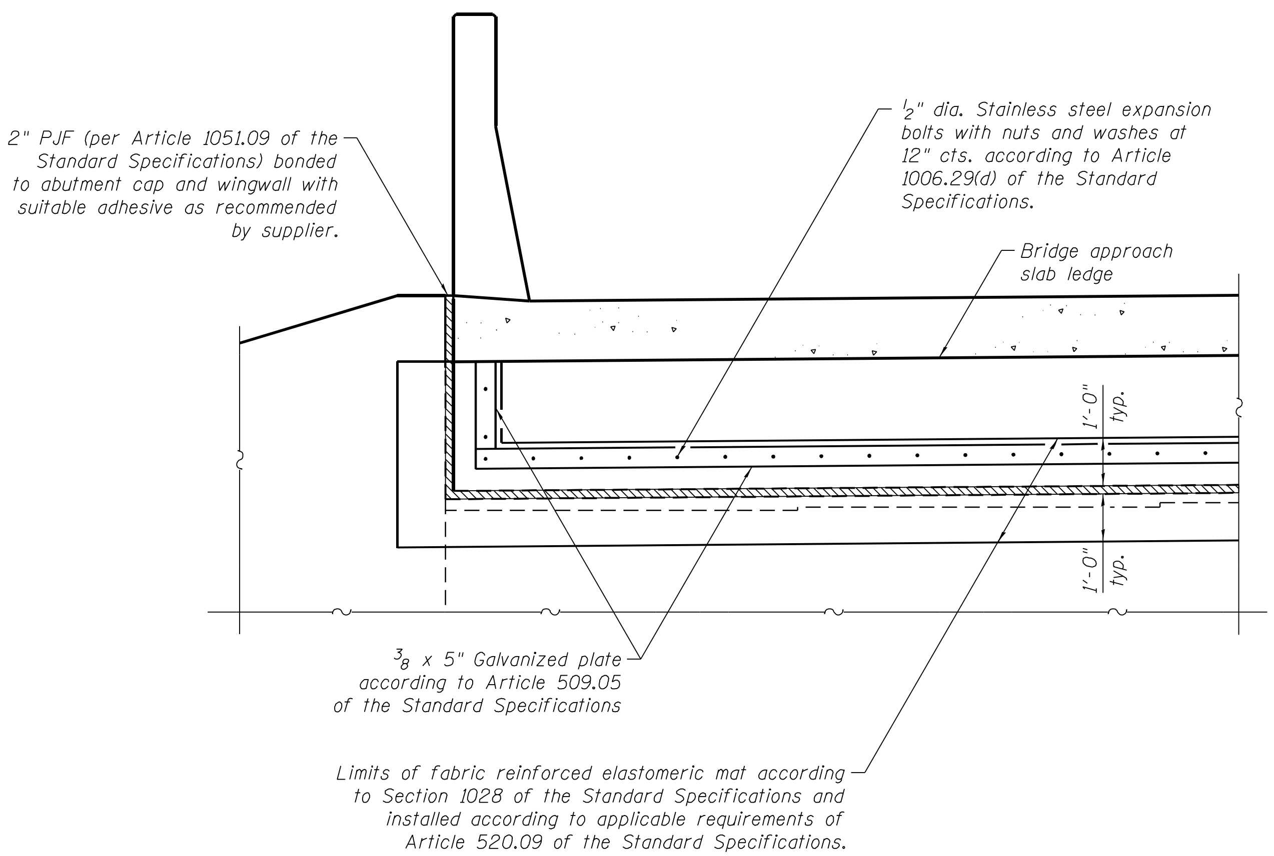
MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-019-DIAABUT.dgn

3/9/2022 11:43:13 AM



DETAIL OF APPROACH SLAB LEDGE

(Looking East at back of W. Abut.)



Note:
Cost of fabric reinforced elastomeric mat, galvanized plate, stainless steel expansion bolts with nuts and washers and installation are included in the cost of Concrete Superstructure.

ABUTMENT JOINT - ELEVATION

(Looking East at back of W. Abut.)

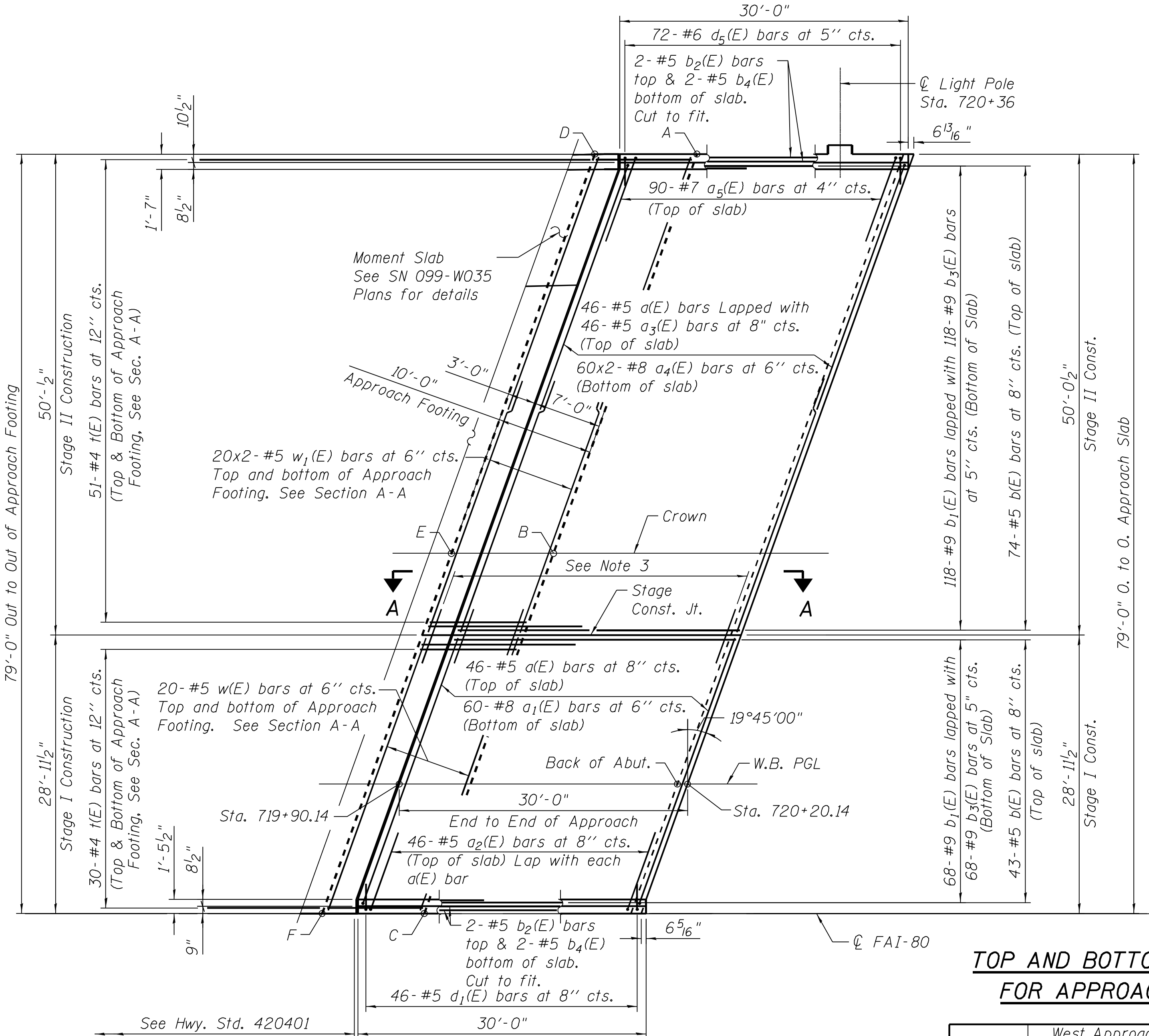
Notes:
1. For notes, see Sheet SH-20.
2. For sections through abutments, see Sheet SH-02.

exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ABUTMENT DIAPHRAGM DETAILS - 2 STRUCTURE NO. 099-0063
		CHECKED - VCP	REVISED -		
	PLOT SCALE =	DRAWN - MTR	REVISED -		
	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET SH-21 OF SH-46 SHEETS

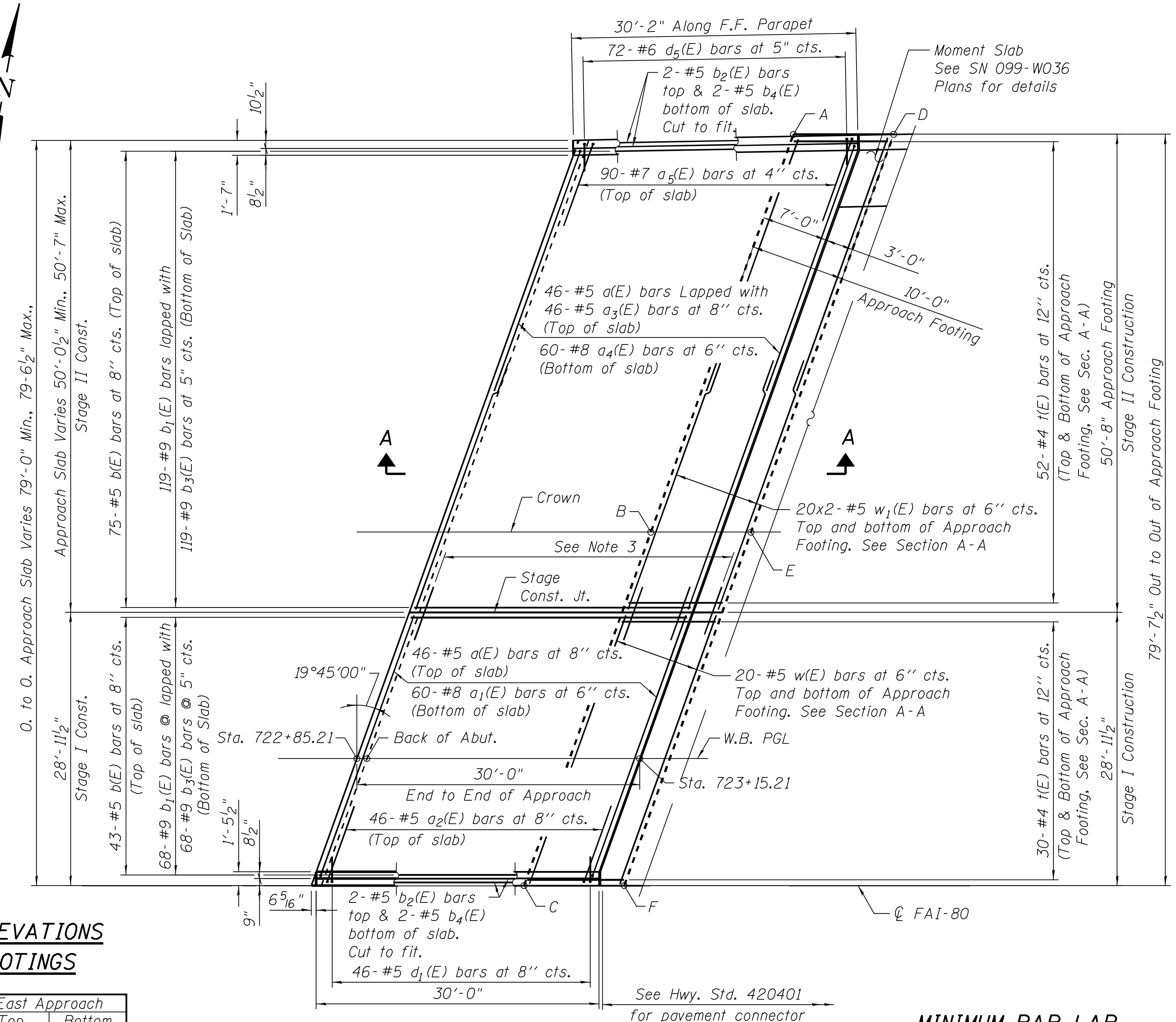
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	274
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB 811.10 Structural\WB Hickory\Sheet\0990063-60W35-019A-DIAABUT.dgn

3/9/2022 11:44:03 AM



PLAN - WEST APPROACH SLAB



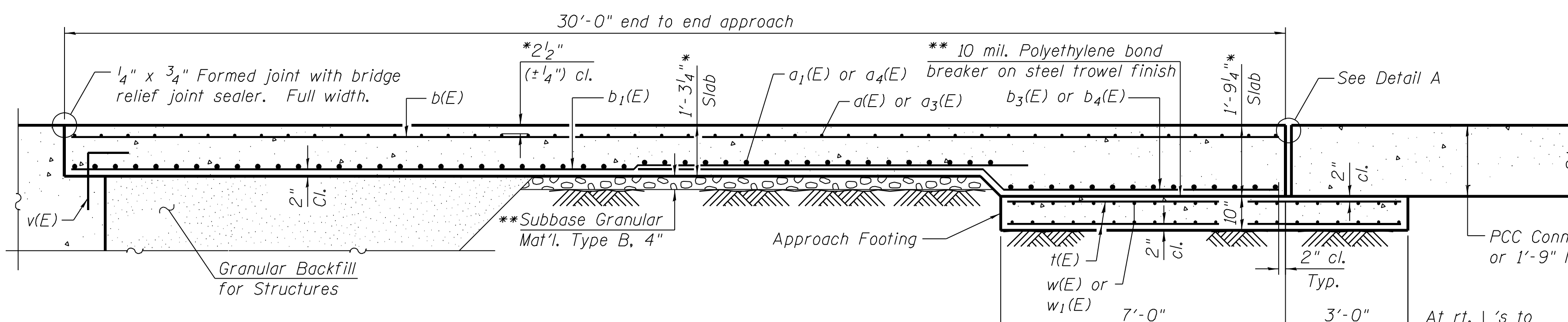
PLAN - EAST APPROACH SLAB

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTINGS

Point	West Approach Top	West Approach Bottom	East Approach Top	East Approach Bottom
A	562.50	561.67	555.23	554.40
B	563.69	562.86	556.24	555.41
C	563.38	562.54	555.78	554.94
D	562.80	561.97	555.07	554.23
E	563.99	563.15	556.07	555.24
F	563.67	562.84	555.60	554.76

MINIMUM BAR LAP

#4 bars = 2'-7"
#5 bars = 3'-4"
#8 bars = 4'-9"
#9 bars = 8'-7"



SECTION A-A

* Prior to grinding
** Cost included with Concrete Superstructure (Approach Slab)

Notes:
1. For parapet elevations, cross section and Detail A, see Sheet SH-23.
2. The a(E) series bar spacings are measured along ℄ Rdwy.
3. 40-Bar splicers (E) for #5 w(E) bars top and bottom in footing, 46-Bar splicers (E) for #5 a(E) bars top, and 60-Bar splicers (E) for #8 a_1(E) bars bottom. Total required for each Approach Slab. For Bar Splicer details, see Sheet SH-42.
4. Bars indicated thus 10x2 etc. indicates 10 lines of bars with 2 lengths per line.
5. Parapet concrete shall be paid for as Concrete Superstructure.
6. Approach slab concrete shall be paid for a Concrete Superstructure (Approach Slab).
7. Approach footing concrete shall be paid for as Concrete Structures.
8. Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
9. For v(E) bar details, see Sheet SH-19.
10. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
11. Cost of excavation for approach footing included with Concrete Structures.
12. For Granular Backfill for Structures and drainage treatment details, see Sheet SH-02.

exp.	USER NAME =	DESIGNED - BAR	REVISED -
		CHECKED - VCP	REVISED -
	PLOT SCALE =	DRAWN - MTR	REVISED -
	PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

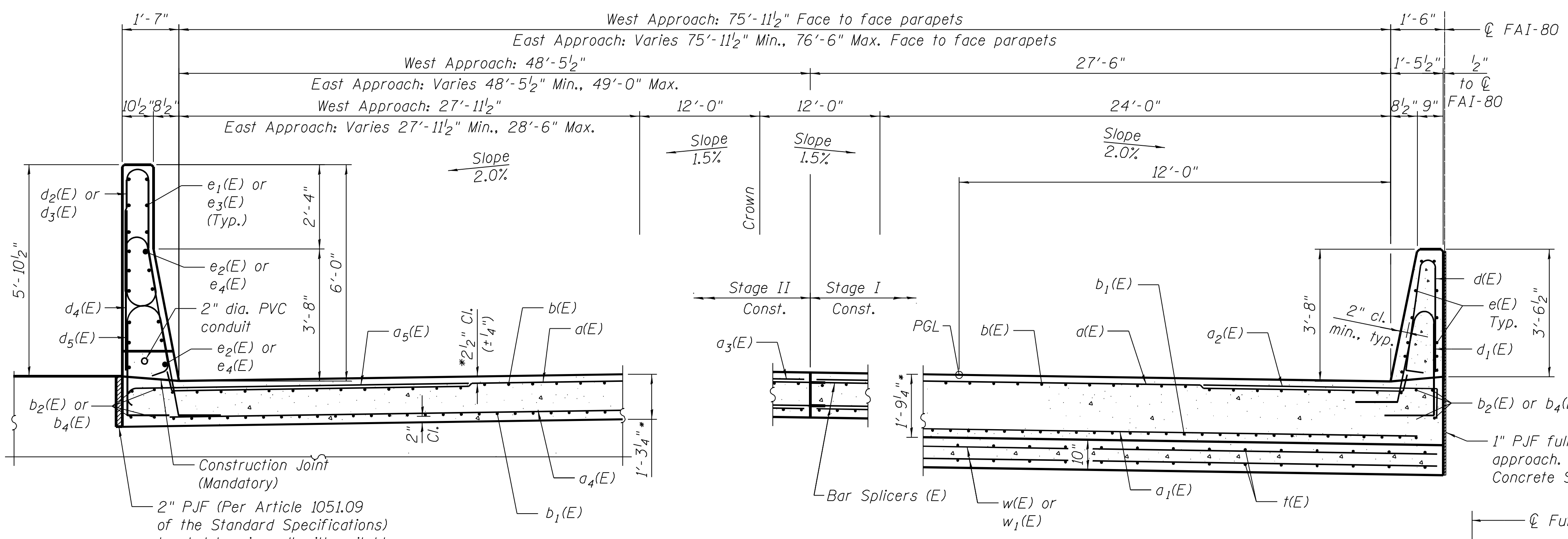
BRIDGE APPROACH SLAB DETAILS - 1
STRUCTURE NO. 099-0063

SHEET SH-22 OF SH-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	275

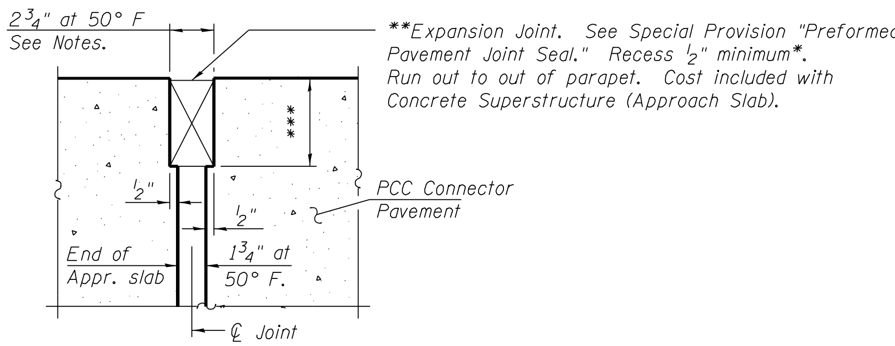
CONTRACT NO. 60W35
ILLINOIS FED. AID PROJECT

MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-020-APPR1.dgn
3/9/2022 11:44:36 AM



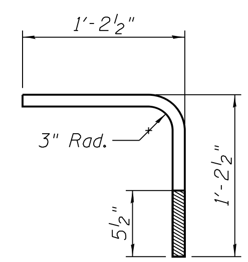
CROSS SECTION

(See Plan for dimensions not shown)



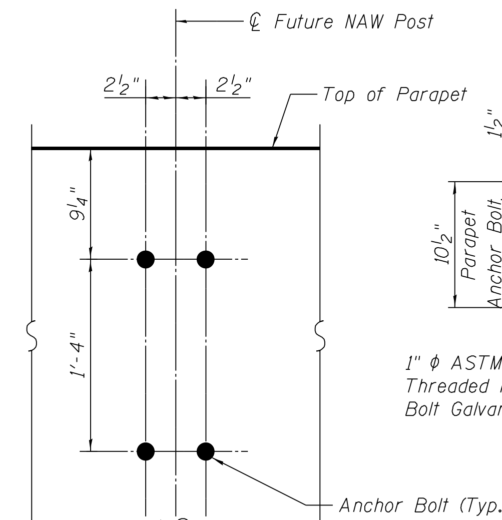
DETAIL A

(@ Rt. L's)



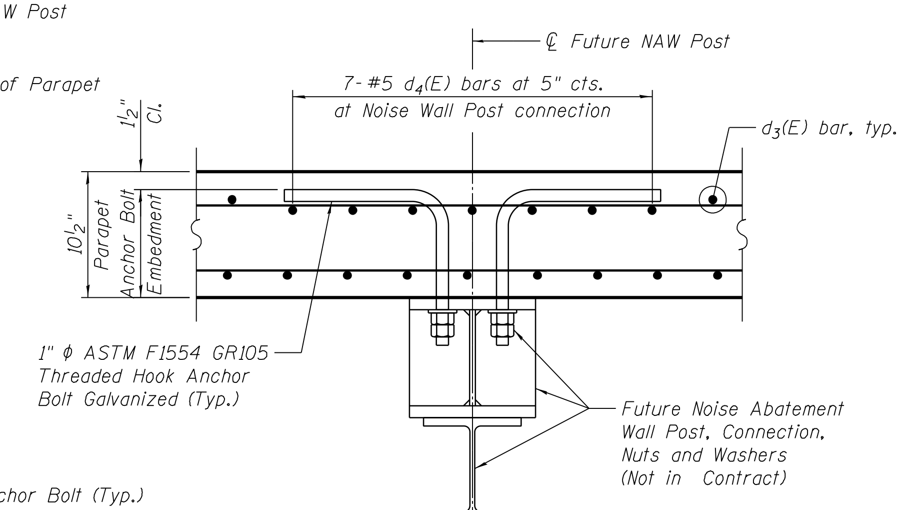
CUSTOM BENT ANCHOR BOLT

ASTM F1554 GR105
4 Thus for Each Post
Cost included with
Concrete Superstructure

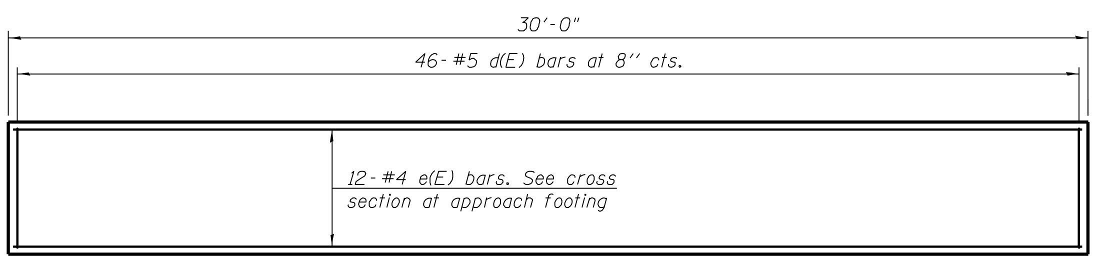


ANCHOR BOLT LAYOUT

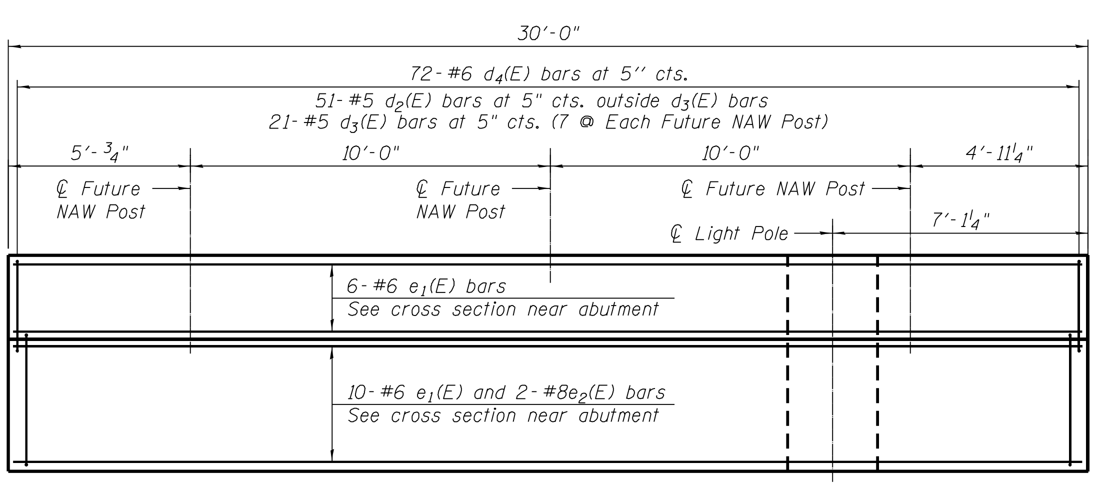
(Back of Parapet Elevation)



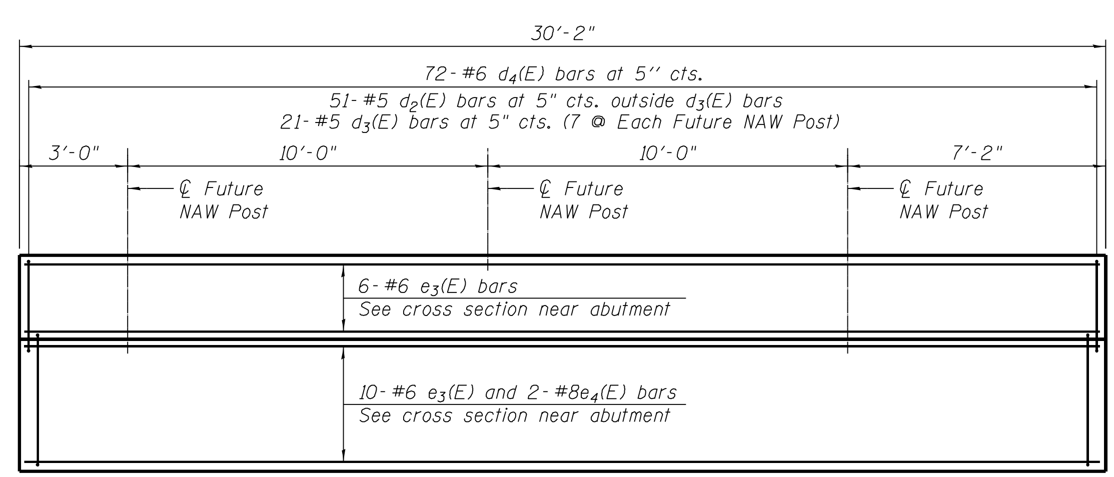
PLAN AT FUTURE NAW POST



INSIDE ELEVATION SOUTH PARAPET (TWO THUS)



INSIDE ELEVATION NORTH PARAPET (WEST APPROACH)



INSIDE ELEVATION NORTH PARAPET (EAST APPROACH)

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

Notes:
1. For Bar Splicer details, see Sheet SH-42.
2. The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.

MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-021-APPR2.dgn

exp.	USER NAME =	DESIGNED - BAR	REVISED -
		CHECKED - VCP	REVISED -
	PLOT SCALE =	DRAWN - MTR	REVISED -
	PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

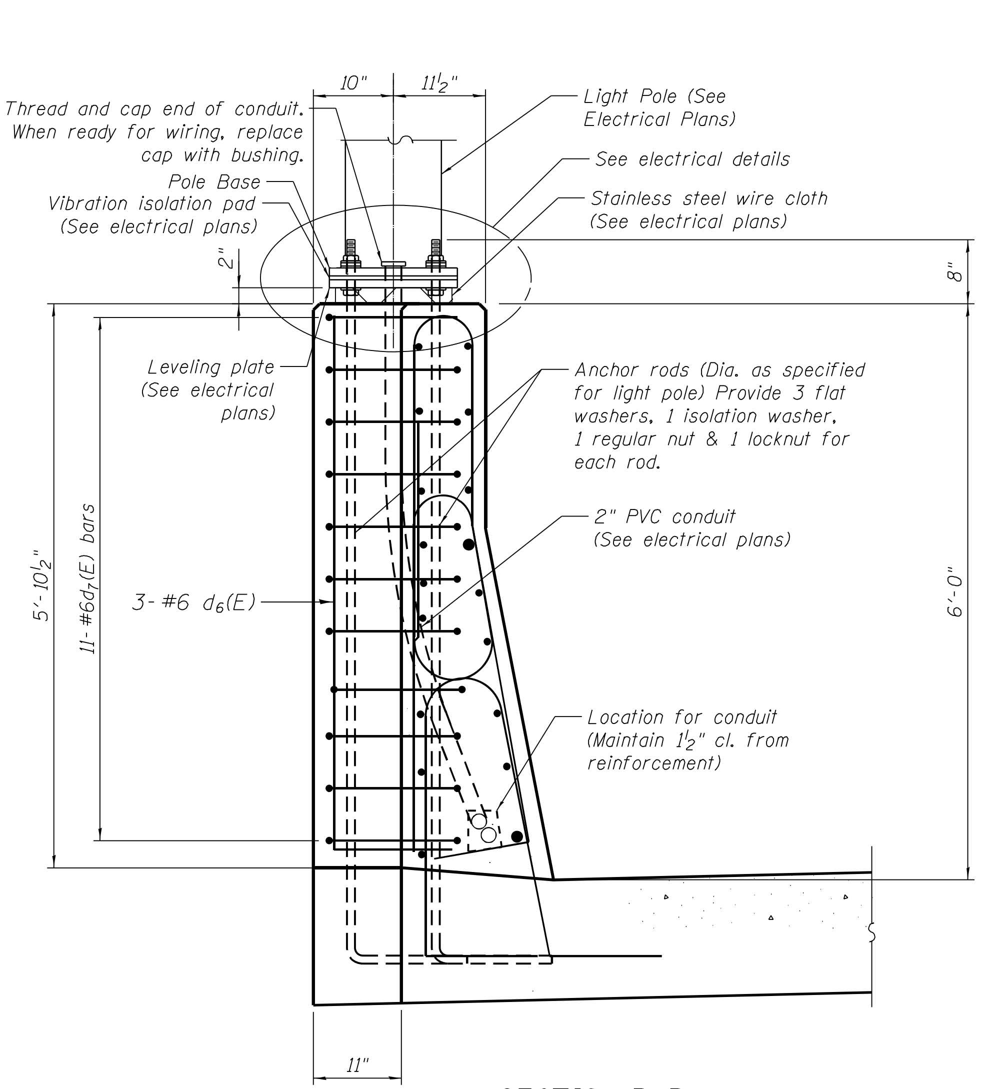
BRIDGE APPROACH SLAB DETAILS - 2
STRUCTURE NO. 099-0063

SHEET SH-23 OF SH-46 SHEETS

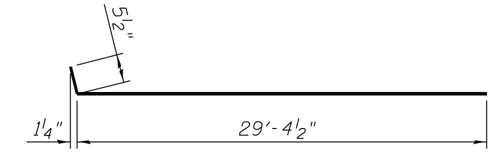
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	276
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

3/9/2022 11:45:16 AM

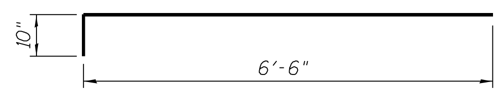
BAR
BAR



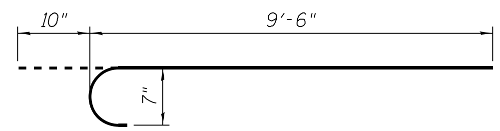
SECTION B-B



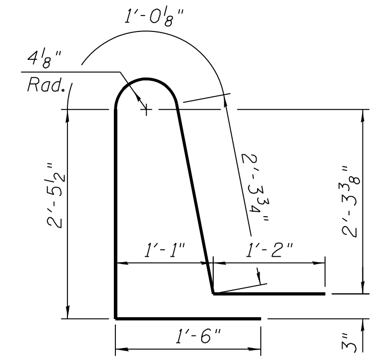
BAR a(E)



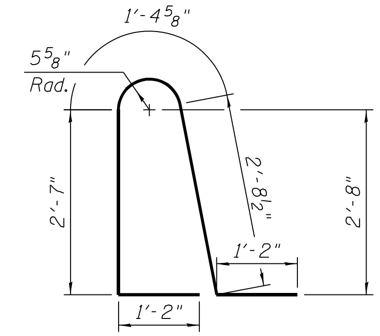
BAR a2(E)



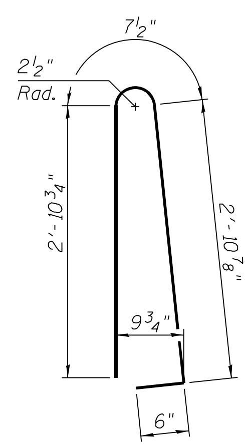
BAR a5(E)



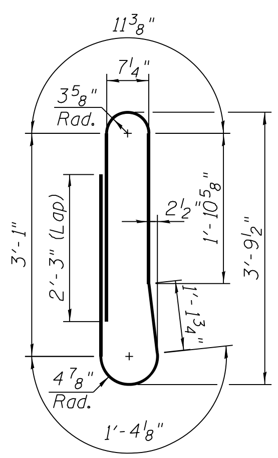
BAR d1(E)



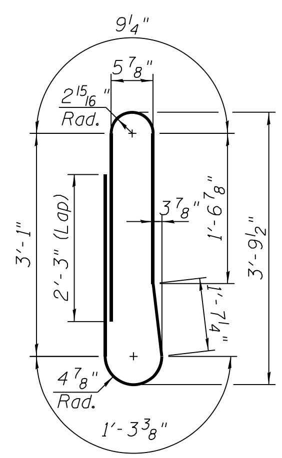
BAR d5(E)



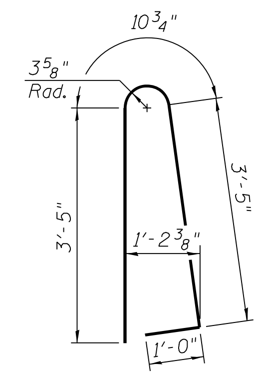
BAR d(E)



BAR d2(E)



BAR d3(E)

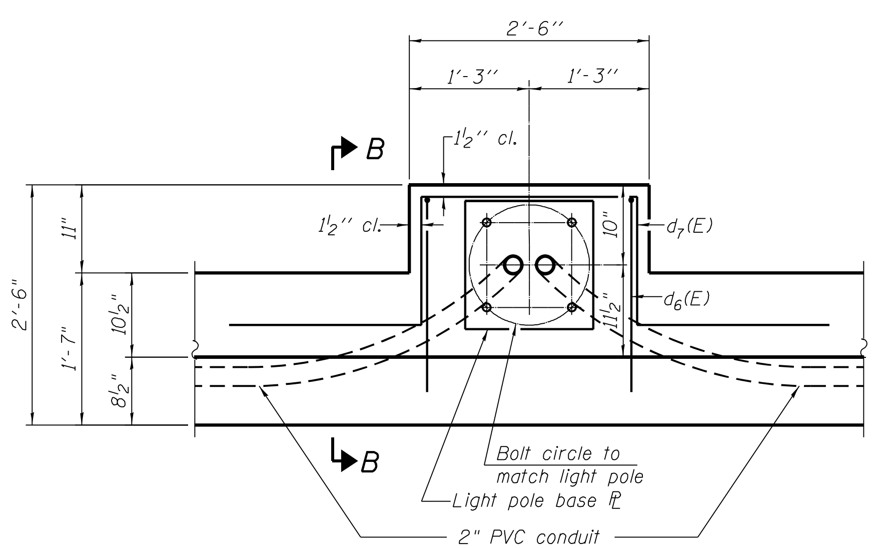


BAR d4(E)

TWO APPROACHES
BILL OF MATERIAL

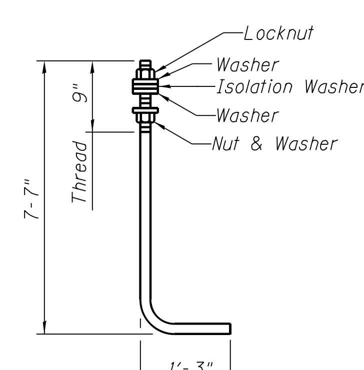
Bar	No.	Size	Length	Shape
a(E)	184	#5	29'-10"	
a1(E)	120	#8	29'-10"	
a2(E)	92	#5	7'-4"	
a3(E)	92	#5	26'-3"	
a4(E)	240	#8	28'-10"	
a5(E)	180	#7	10'-4"	
b(E)	243	#5	29'-8"	
b1(E)	373	#9	23'-6"	
b2(E)	8	#5	30'-3"	
b3(E)	373	#9	16'-6"	
b4(E)	8	#5	17'-0"	
d(E)	92	#5	7'-0"	
d1(E)	92	#5	8'-6"	
d2(E)	102	#5	10'-8"	
d3(E)	42	#5	10'-7"	
d4(E)	144	#6	8'-9"	
d5(E)	144	#6	9'-0"	
d6(E)	3	#6	7'-7"	
d7(E)	11	#6	8'-11"	
e(E)	24	#4	29'-8"	
e1(E)	16	#6	29'-8"	
e2(E)	2	#8	29'-8"	
e3(E)	16	#6	29'-10"	
e4(E)	2	#8	29'-10"	
t(E)	163	#4	10'-3"	
w(E)	80	#5	30'-5"	
w1(E)	160	#5	28'-1"	

Item	Unit	Quantity
Concrete Structures	Cu Yd	52.2
Concrete Superstructure	Cu Yd	23.3
Concrete Superstructure (Approach Slab)	Cu Yd	246.3
Reinforcement Bars, Epoxy Coated	Pound	117,100



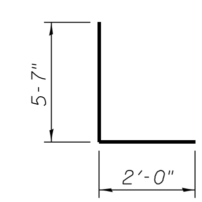
LIGHT POLE PLAN

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

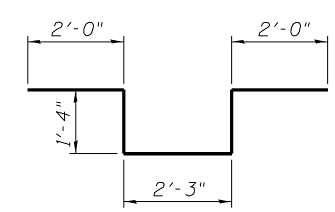


ANCHOR ROD

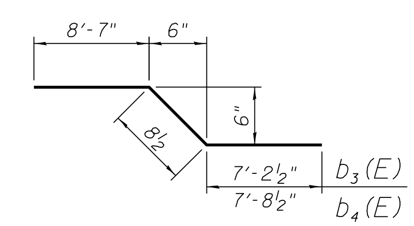
Diameter as specified for light poles.
(ASTM F 1554 Grade 105)
Full length hot dipped galvanized



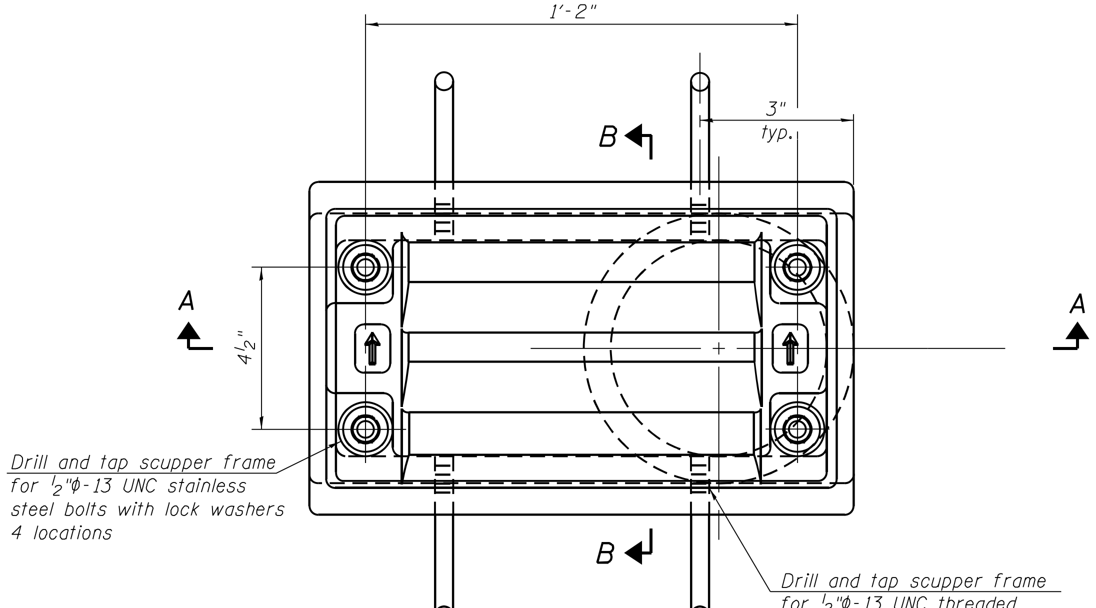
BAR d6(E)



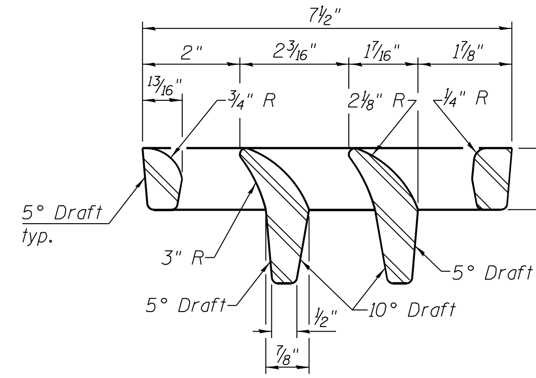
BAR d7(E)



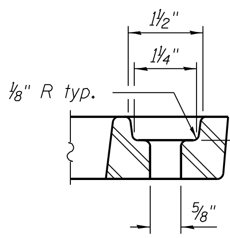
BARS b3(E) & b4(E)



PLAN

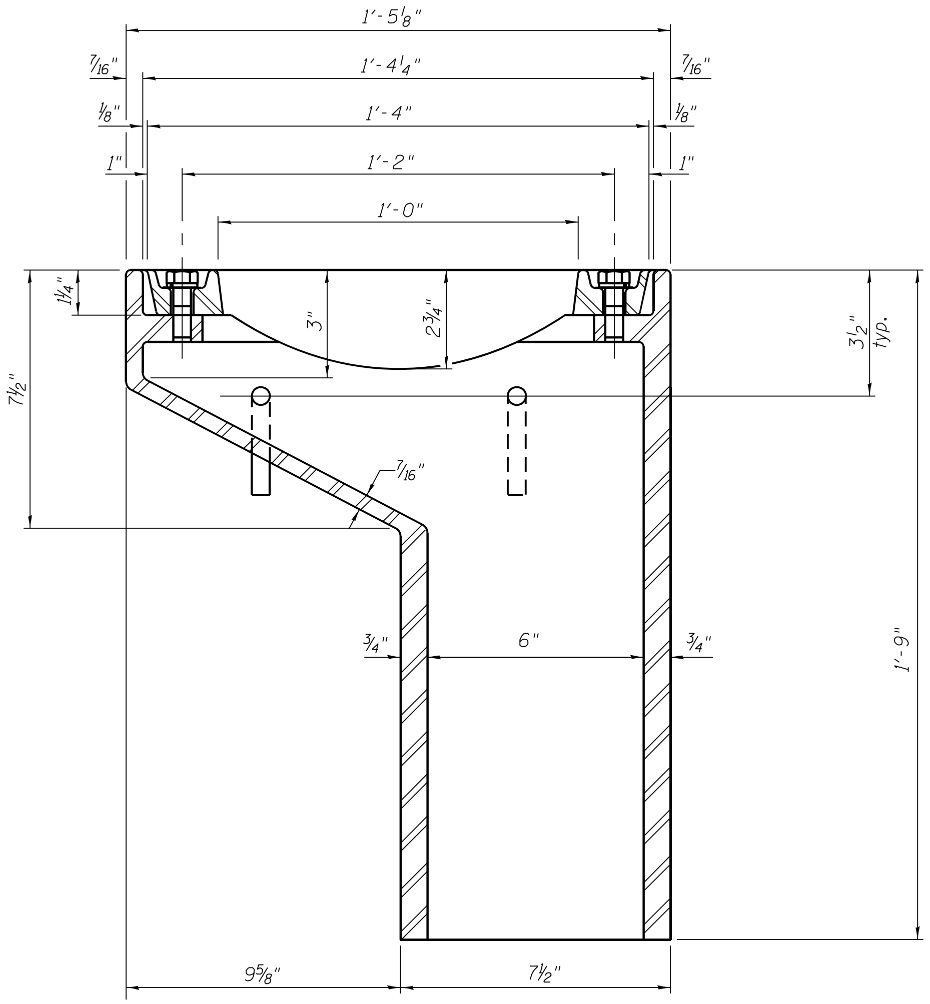


VANE GRATE DETAIL

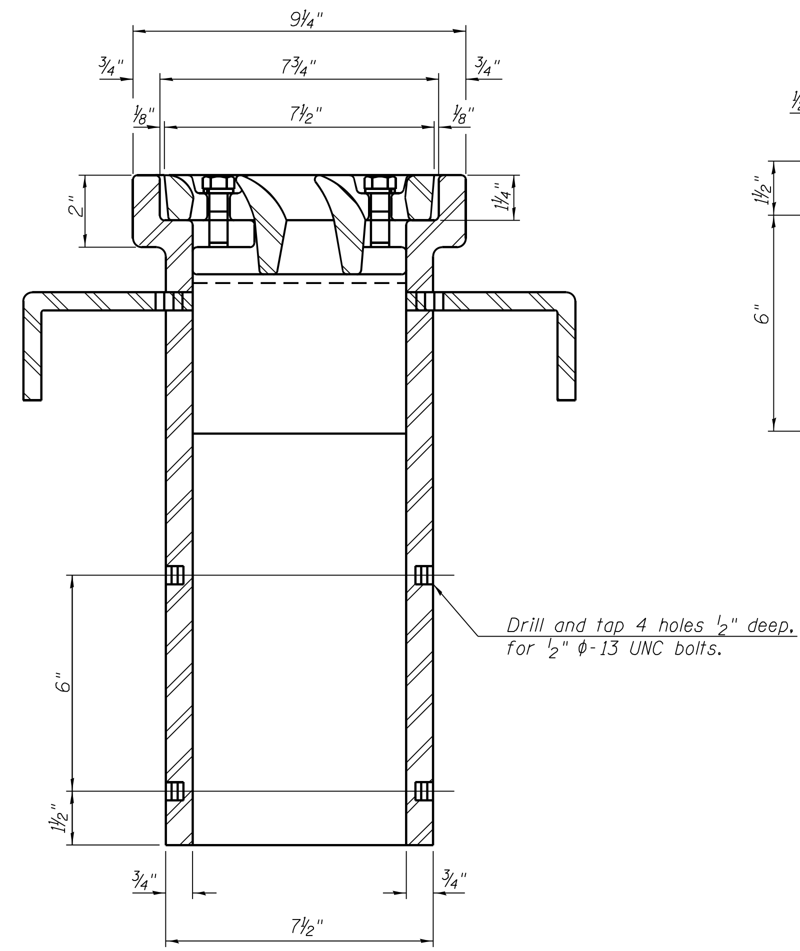


BOLT HOLE DETAIL

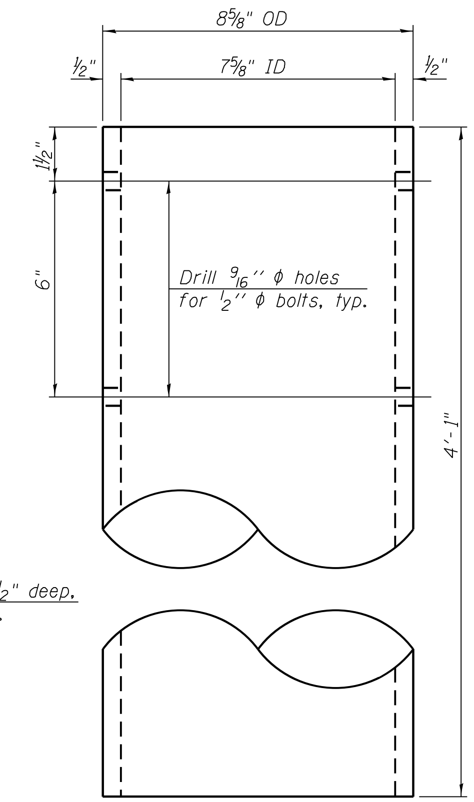
Notes:
All cast iron parts shall be gray iron conforming to the requirements of AASHTO M105, Class 35B and AASHTO M306.
Bolts, anchor rods, nuts and washers shall be according to ASTM A307 and shall be galvanized according to AASHTO M232. As an alternate stainless steel may be used.
Stainless steel hardware 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 pigmented or painted to match the color of the adjacent beam.
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.



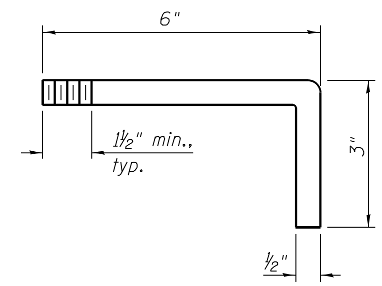
SECTION A-A
See Sheet SH-18 for scupper location relative to parapet.



SECTION B-B



DOWNSPOUT



ANCHOR STUD DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	5

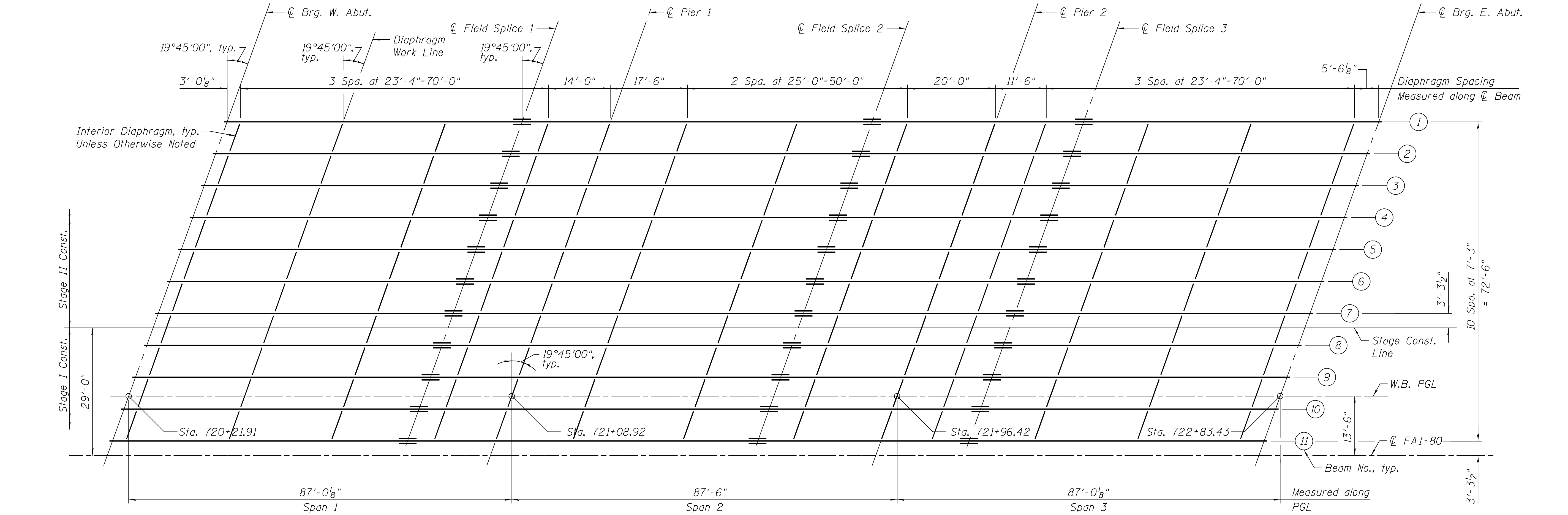
MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-022-SCUPPER.dgn

exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED - VCP	REVISED -	
	PLOT SCALE =	DRAWN - MTR	REVISED -	
	PLOT DATE =	CHECKED - BAR	REVISED -	

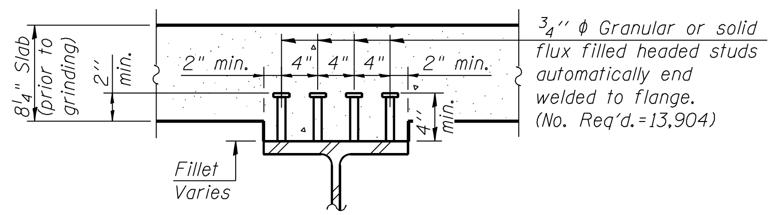
DRAINAGE SCUPPER DETAILS
STRUCTURE NO. 099-0063
SHEET SH-25 OF SH-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	278
		CONTRACT NO. 60W35		
	ILLINOIS	FED. AID PROJECT		

3/9/2022 11:46:21 AM



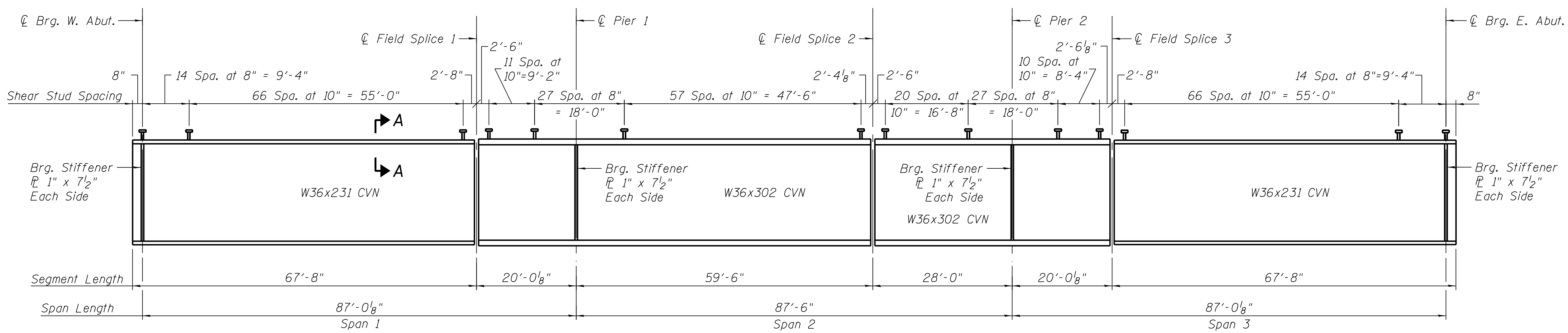
FRAMING PLAN



SECTION A-A

Notes:

1. Structural steel for beams and field splices shall be AASHTO M270 Grade 50.
2. All diaphragms shall be installed as steel is erected and secured erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
3. "CVN" denotes Charpy-V-Notch impact energy requirements, Zone 2.



BEAM ELEVATION

exp.

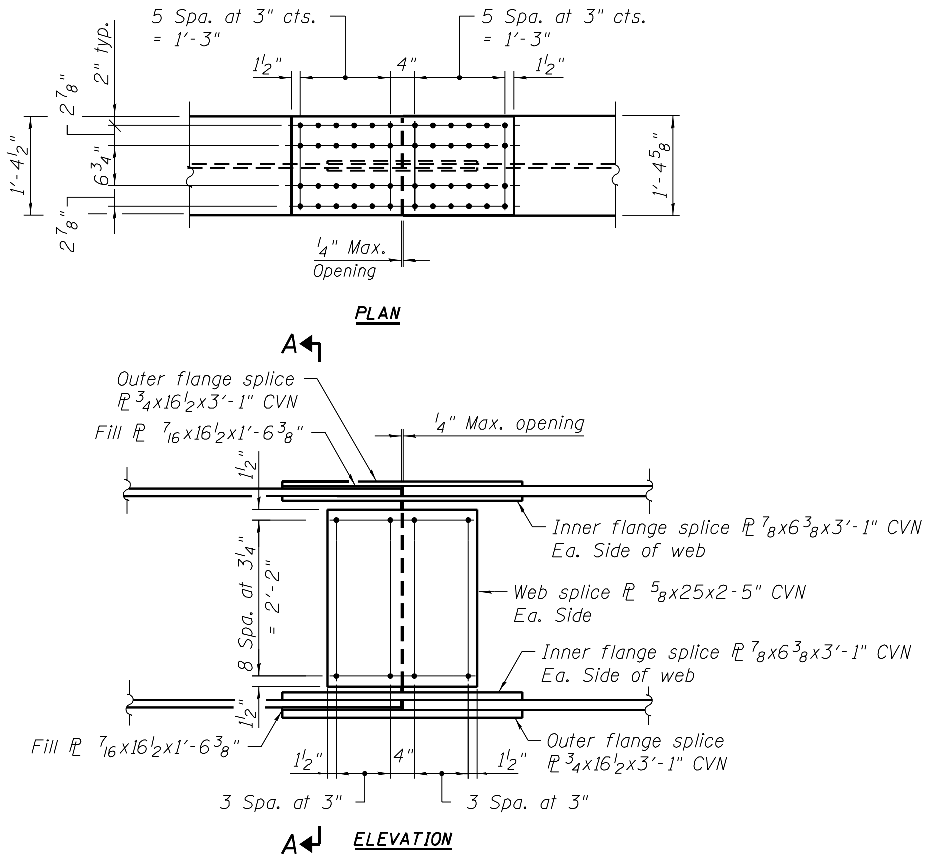
USER NAME =	DESIGNED - BAR	REVISED -
	CHECKED - BGR	REVISED -
PLOT SCALE =	DRAWN - MCR	REVISED -
PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

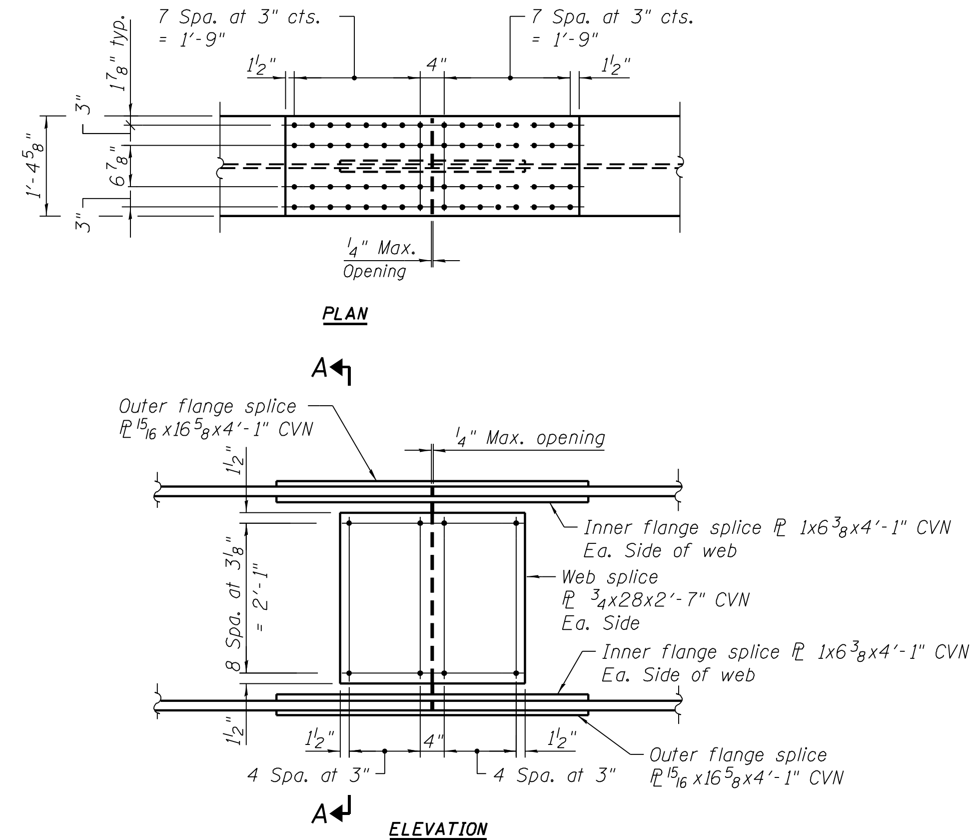
FRAMING PLAN & BEAM ELEVATION
STRUCTURE NO. 099-0063

SHEET SH-26 OF SH-46 SHEETS

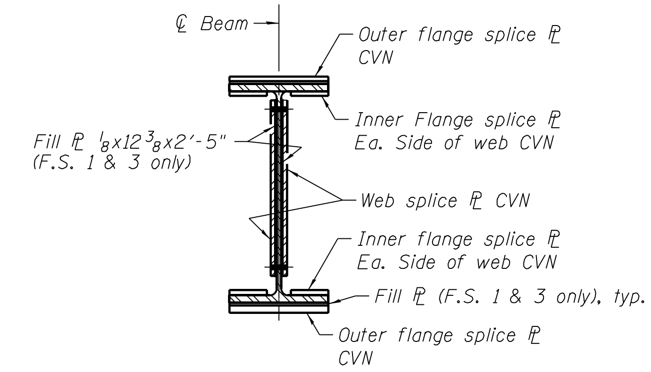
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	279
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		



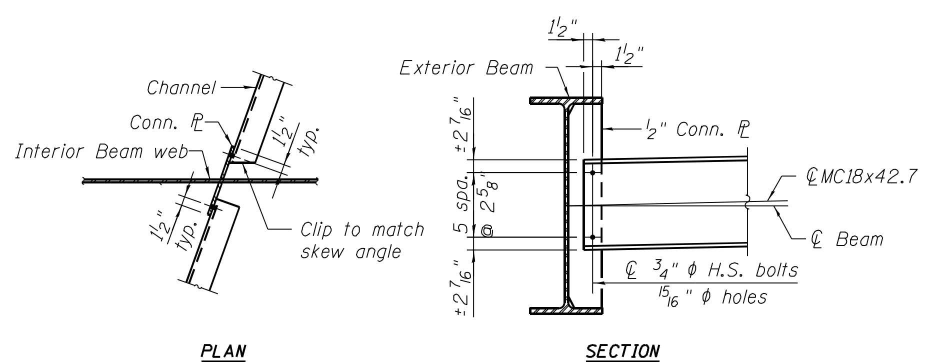
FIELD SPLICE 1 & 3 DETAIL



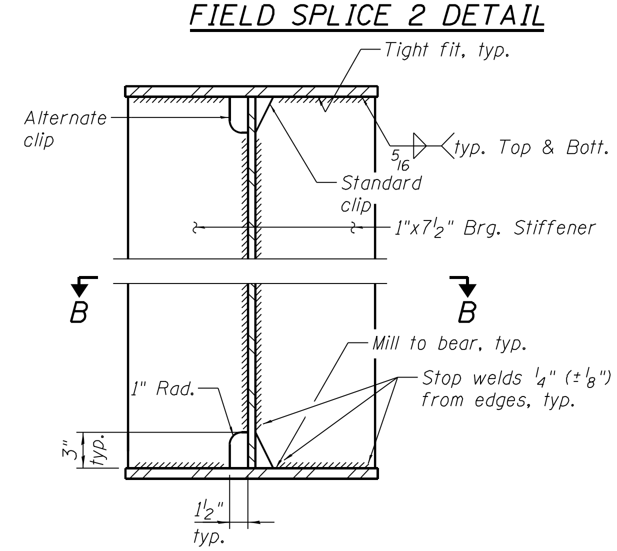
FIELD SPLICE 2 DETAIL



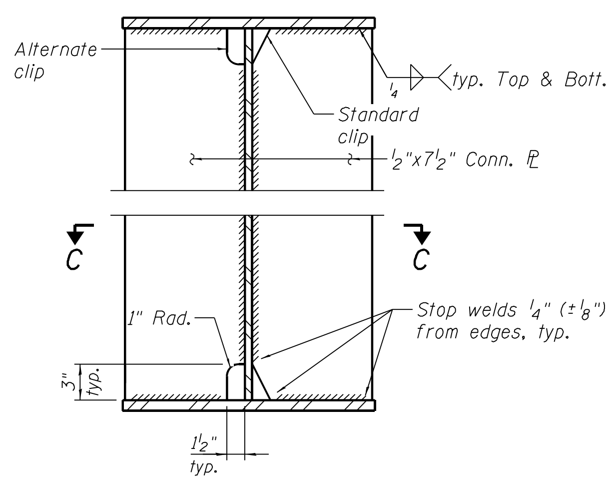
SECTION A-A



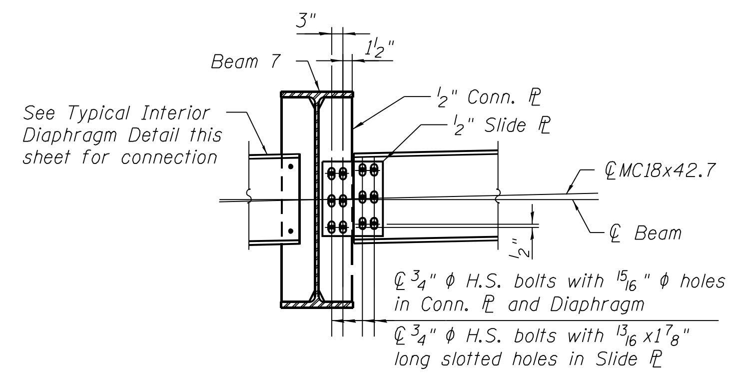
TYPICAL INTERIOR DIAPHRAGM



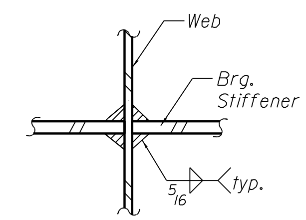
BEARING STIFFENERS



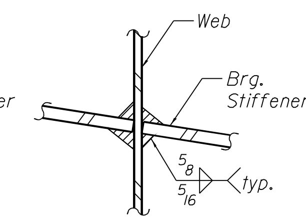
CONNECTION PLATES



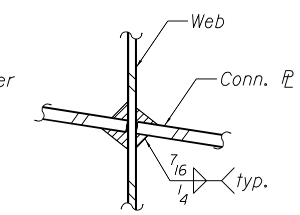
INTERIOR DIAPHRAGM AT STAGE CONST. JT.



SECTION B-B
AT ABUTMENTS



SECTION B-B
AT PIERS



SECTION C-C

Notes:
1. All structural steel for field splices shall be AASHTO M270 Grade 50, except for fill plates which shall be AASHTO M270 Grade 36.
2. All diaphragms between beams shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
3. For Diaphragm work line spacing, see Sheet SH-26.
4. Two hardened washers required for each set of oversized holes.
5. Alternate diaphragm channels of equal depth and larger weight are permitted to facilitate material acquisition. Alternate channels, if utilized, shall be provided at no additional cost to the Department.
6. "CVN" denotes Charpy-V-Notch impact energy requirements, Zone 2.

MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-025-STL.DET1.dgn

exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BEAM DETAILS - 1 STRUCTURE NO. 099-0063	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - VCP	REVISED -			80	2013-009B	WILL	465	280
	PLOT SCALE =	DRAWN - MTR	REVISED -					CONTRACT NO. 60W35		
	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET SH-27 OF SH-46 SHEETS			ILLINOIS FED. AID PROJECT		

3/9/2022 11:47:22 AM

EXTERIOR BEAM MOMENT TABLE						
		0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.6 Sp. 3
I_s	(in^4)	15,600	21,100	21,100	21,100	15,600
$I_c(n)$	(in^4)	34,778	-	43,884	-	34,778
$I_c(3n)$	(in^4)	25,665	-	32,300	-	25,665
$I_c(cr)$	(in^4)	-	24,322	-	24,322	-
S_s	(in^3)	855	1,130	1,130	1,130	855
$S_c(n)$	(in^3)	1,137	-	1,475	-	1,137
$S_c(3n)$	(in^3)	1,035	-	1,337	-	1,035
$S_c(cr)$	(in^3)	-	1,202	-	1,202	-
DC1	(k/')	1.15	1.22	1.22	1.22	1.15
M_{DC1}	('k)	672	955	216	955	672
DC2	(k/')	0.32	0.32	0.32	0.32	0.32
M_{DC2}	('k)	190	257	52	257	190
DW	(k/')	0.35	0.35	0.35	0.35	0.35
M_{DW}	('k)	203	275	55	275	203
LLDF		0.57	0.57	0.57	0.57	0.57
M_{LL+IM}	('k)	1,033	1,079	883	1,079	1,033
M_u (Strength I)	('k)	3,190	3,816	1,963	3,816	3,190
$\phi_f M_n$	('k)	5,457	5,927	6,949	5,927	5,457
f_s DC1	(ksi)	9.43	10.14	2.29	10.14	9.43
f_s DC2	(ksi)	2.20	2.57	0.47	2.57	2.20
f_s DW	(ksi)	2.35	2.74	0.49	2.74	2.35
f_s (LL+IM)	(ksi)	10.91	10.77	7.19	10.77	10.91
f_s (Service II)	(ksi)	28.17	29.45	12.59	29.45	28.17
$0.95R_hF_{yf}$	(ksi)	47.50	47.50	47.50	47.50	47.50
f_s (Total)(Strength I)	(ksi)	-	-	-	-	-
$\phi_f F_n$	(ksi)	-	-	-	-	-
V_f	(k)	61.71	70.87	63.26	70.87	61.71

INTERIOR BEAM MOMENT TABLE						
		0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.6 Sp. 3
I_s	(in^4)	15,600	21,100	21,100	21,100	15,600
$I_c(n)$	(in^4)	35,457	-	44,806	-	35,457
$I_c(3n)$	(in^4)	26,229	-	32,975	-	26,229
$I_c(cr)$	(in^4)	-	24,563	-	24,563	-
S_s	(in^3)	855	1,130	1,130	1,130	855
$S_c(n)$	(in^3)	1,143	-	1,484	-	1,143
$S_c(3n)$	(in^3)	1,043	-	1,347	-	1,043
$S_c(cr)$	(in^3)	-	1,207	-	1,207	-
DC1	(k/')	1.05	1.12	1.12	1.12	1.05
M_{DC1}	('k)	611	873	200	873	611
DC2	(k/')	0.32	0.32	0.32	0.32	0.32
M_{DC2}	('k)	190	257	52	257	190
DW	(k/')	0.35	0.35	0.35	0.35	0.35
M_{DW}	('k)	203	275	55	275	203
LLDF		0.60	0.60	0.60	0.60	0.60
M_{LL+IM}	('k)	1,079	1,128	923	1,128	1,079
M_u (Strength I)	('k)	3,194	3,799	2,013	3,799	3,194
$\phi_f M_n$	('k)	5,531	6,027	7,033	6,027	5,531
f_s DC1	(ksi)	8.58	9.27	2.12	9.27	8.58
f_s DC2	(ksi)	2.19	2.56	0.46	2.56	2.19
f_s DW	(ksi)	2.34	2.73	0.49	2.73	2.34
f_s (LL+IM)	(ksi)	11.33	11.21	7.47	11.21	11.33
f_s (Service II)	(ksi)	27.83	29.14	12.78	29.14	27.83
$0.95R_hF_{yf}$	(ksi)	47.50	47.50	47.50	47.50	47.50
f_s (Total)(Strength I)	(ksi)	-	-	-	-	-
$\phi_f F_n$	(ksi)	-	-	-	-	-
V_f	(k)	57.18	65.81	58.62	65.81	57.18

EXTERIOR BEAM REACTION TABLE					
		W. Abut.	Pier 1	Pier 2	E. Abut.
LLDF		0.63	0.63	0.63	0.63
OCF		1.07	-	-	1.07
R_{DC1}	(k)	79.9	116.0	116.0	79.9
R_{DC2}	(k)	11.1	31.1	31.1	11.1
R_{DW}	(k)	11.9	33.3	33.3	11.9
R_{LL}	(k)	54.3	95.9	95.9	54.3
R_{Im}	(k)	12.8	19.1	19.1	12.8
R_{Total}	(k)	169.9	295.3	295.3	169.9

Note: R_{DC1} includes an approach slab load of 27.8 kips at each abutment.

INTERIOR BEAM REACTION TABLE					
		W. Abut.	Pier 1	Pier 2	E. Abut.
LLDF		0.82	0.82	0.82	0.82
OCF		-	-	-	-
R_{DC1}	(k)	78.1	106.1	106.1	78.1
R_{DC2}	(k)	11.1	31.1	31.1	11.1
R_{DW}	(k)	11.9	33.3	33.3	11.9
R_{LL}	(k)	71.1	125.6	125.6	71.1
R_{Im}	(k)	16.8	24.9	24.9	16.8
R_{Total}	(k)	189.0	321.0	321.0	189.0

Note: R_{DC1} includes an approach slab load of 29.3 kips at each abutment.

TOP OF BEAM ELEVATION (FOR FABRICATION ONLY)

Beam No.	℄ Brg. W. Abut.	℄ Field Splice 1	℄ Pier 1	℄ Field Splice 2	℄ Pier 2	℄ Field Splice 3	℄ Brg. E. Abut.
1	562.67	560.82	560.27	558.65	558.13	557.72	556.49
2	563.13	561.17	560.64	559.06	558.54	558.13	556.93
3	563.35	561.39	560.85	559.24	558.74	558.35	557.11
4	563.56	561.60	561.06	559.47	558.95	558.54	557.30
5	563.78	561.80	561.26	559.65	559.11	558.70	557.47
6	563.96	562.00	561.45	559.80	559.28	558.87	557.62
7	563.98	561.99	561.46	559.89	559.30	558.84	557.61
8	563.95	561.96	561.42	559.82	559.25	558.81	557.55
9	563.86	561.89	561.35	559.74	559.16	558.71	557.45
10	563.83	561.83	561.30	559.72	559.11	558.64	557.38
11	563.73	561.75	561.20	559.58	558.99	558.53	557.26

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

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

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

$I_c(cr)$, $S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (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 $in.^3$).

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

M_{DC1}: 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.).

M_{DC2}: 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.).

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

LLDF: Live Load Distribution Factor for moment and shear computed according to Article 4.6.2.2 and further IDOT provisions.

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

M_u (Strength I): Factored design moment (kip-ft.).
$1.25\ (M_{DC1} + M_{DC2}) + 1.5\ M_{DW} + 1.75\ M_{LL+IM}$

$\phi_f M_n$: 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).

f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
$M_{DC1}\ /\ S_{nc}$

f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
$M_{DC2}\ /\ S_c(3n)$ or $M_{DC2}\ /\ S_c(cr)$ as applicable.

f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
$M_{DW}\ /\ S_c(3n)$ or $M_{DW}\ /\ S_c(cr)$ as applicable.

f_s (LL+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).
$M_{LL+IM}\ /\ S_c(n)$ or $M_{LL+IM}\ /\ S_c(cr)$ as applicable.

f_s (Service II): Sum of stresses as computed below (ksi).
$f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3\ f_s(_{LL+IM})$

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

f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25\ (f_{sDC1} + f_{sDC2}) + 1.5\ f_{sDW} + 1.75\ f_s(_{LL+IM})$

$\phi_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

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

OCF: Obtuse Correction Factor applied to non-continuous exterior beam ends and computed according to Article 4.6.2.2.3c-1.

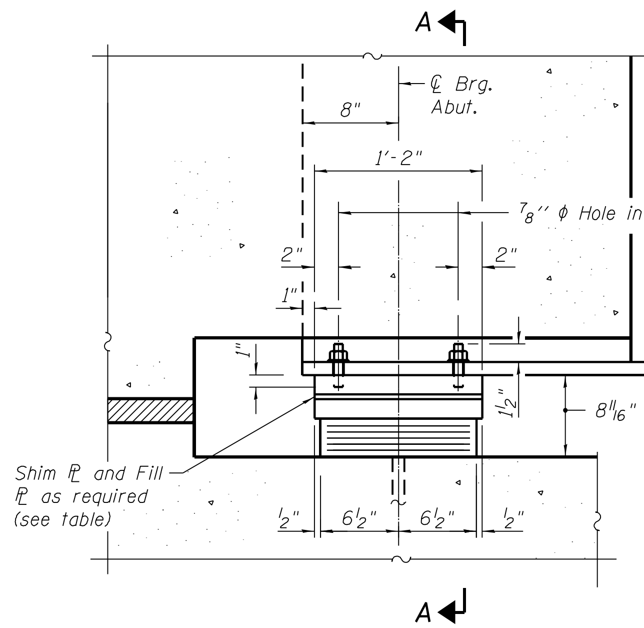
RDC1: Un-factored reaction due to non-composite dead load (kip).

RDC2: Un-factored reaction due to long-term composite (superimposed excluding future wearing surface) dead load (kip).

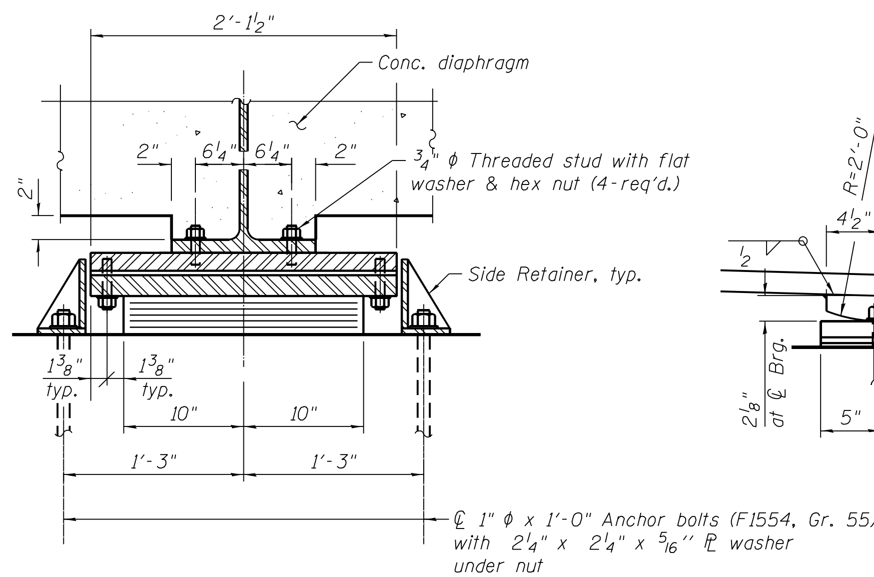
RDW: Un-factored reaction due to long-term composite (superimposed future wearing surface only) dead load (kip).

R_{LL}: Un-factored live load reaction (kip).

R_{Im}: Un-factored dynamic load allowance (impact) (kip).



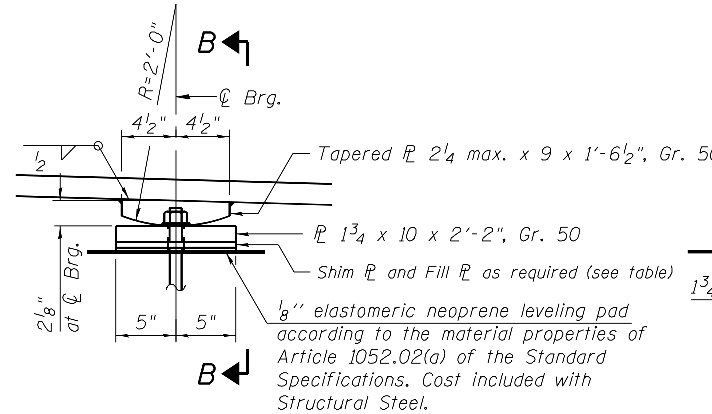
ELEVATION AT ABUT.



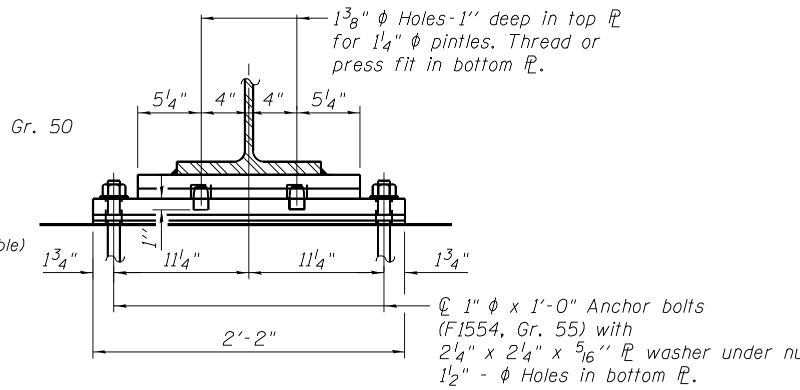
SECTION A-A

TYPE I ELASTOMERIC EXP. BRG. AT ABUTMENTS

(22 required)



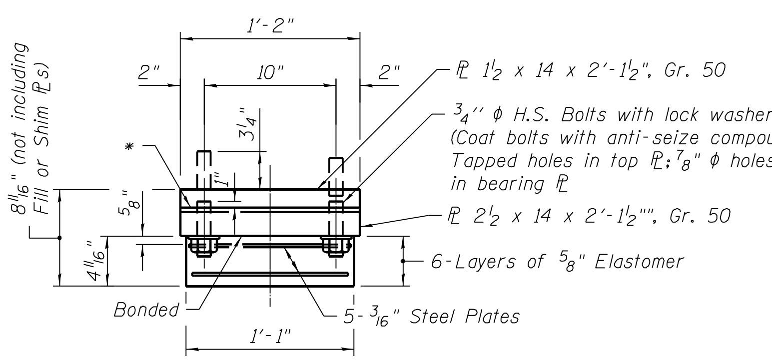
ELEVATION



SECTION B-B

FIXED BEARING AT PIERS

(22 required)

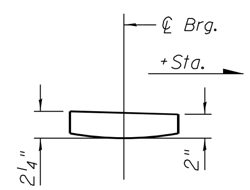


BEARING ASSEMBLY

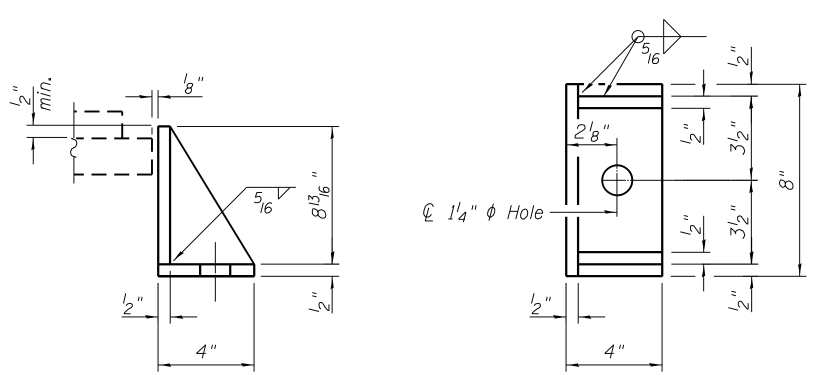
* Fill plate and adjusting shim plate if req'd (1/8" max.)

MANDATORY FILL PLATE THICKNESSES

Location	Beam	Thickness
West Abut.	6	1/8"
	10	1 1/4"
Pier 1	6	1/4"
	10	1 1/8"
Pier 2	6	1/4"
	10	1 1/2"
East Abut.	6	1/8"
	8	2"
	9	7/8"

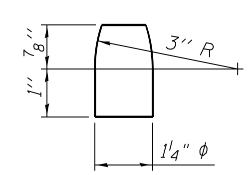


TAPERED TOP PLATE



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



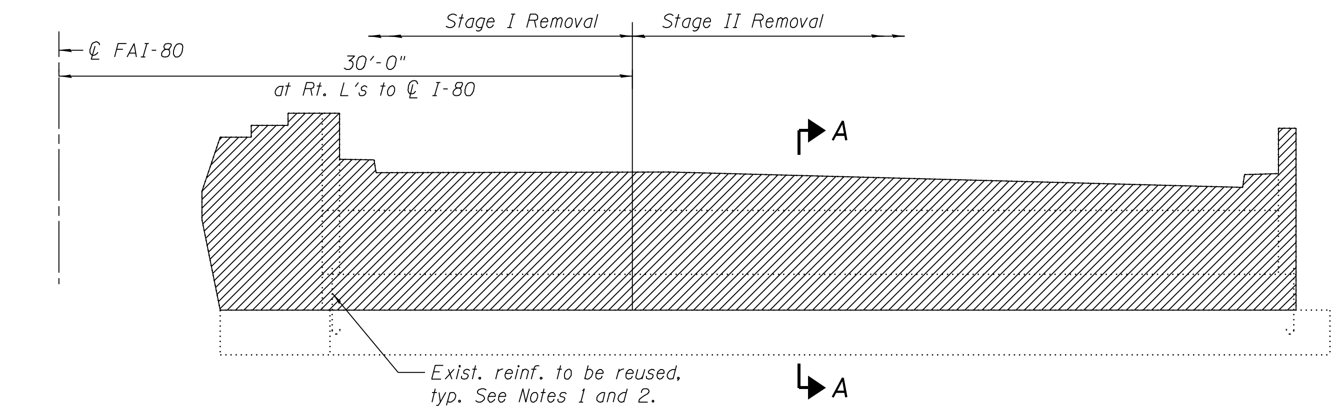
PINTLE

Notes:

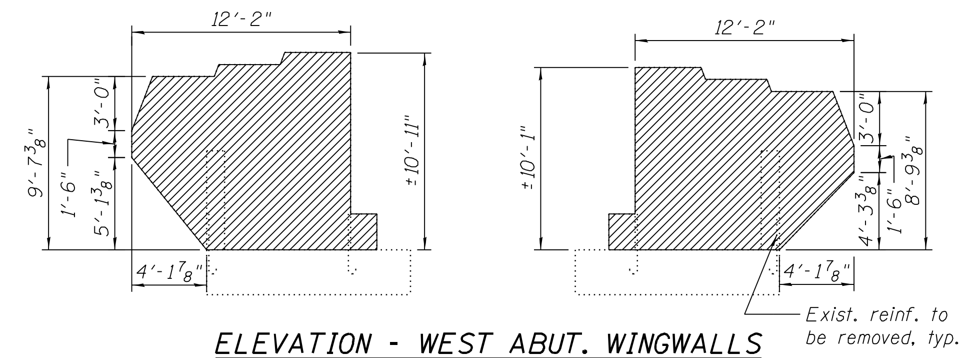
1. Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
2. Beams shall be braced for stability during erection and remain braced until deck is poured and cured.
3. Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equirvalent temporary means of lateral restrain is used.
4. Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
5. 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.
6. The structural steel plates of the Bearing Assembly and the plates and the pintles of the fixed bearing shall conform to the requirements of AASHTO M 270 Grade 50.

BILL OF MATERIAL

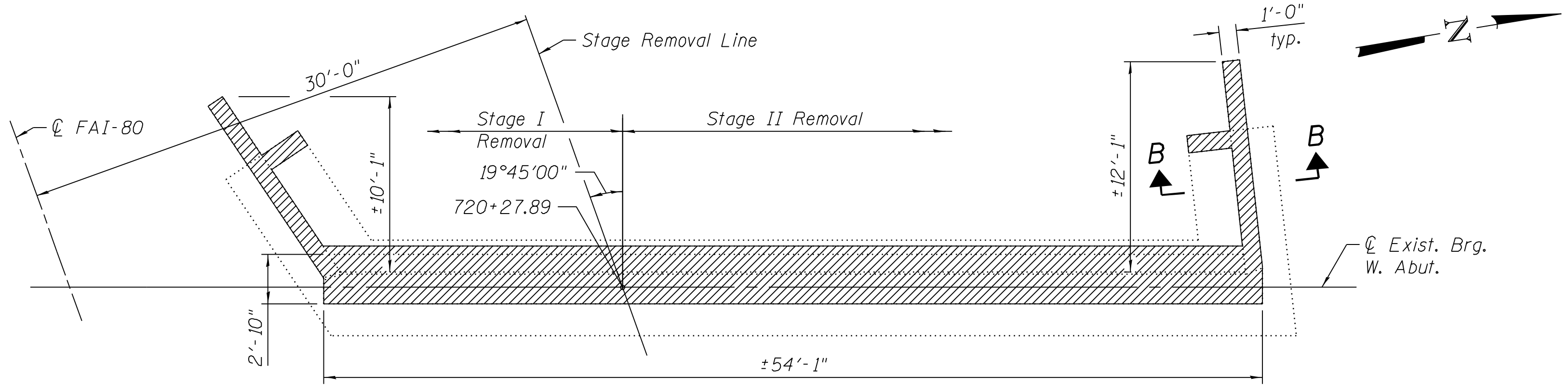
Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	22
Anchor Bolts, 1"	Each	88



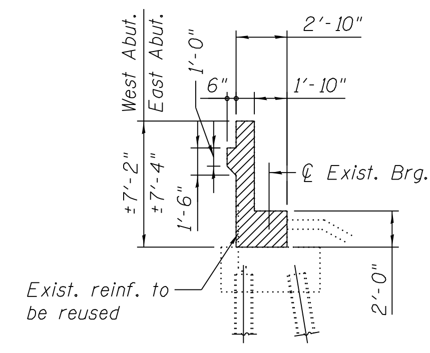
ELEVATION - WEST ABUTMENT
Looking West



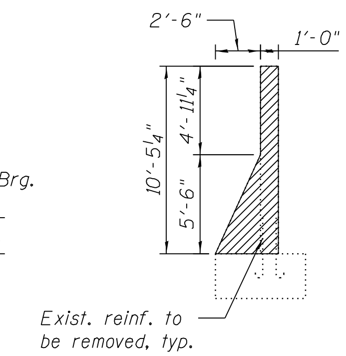
ELEVATION - WEST ABUT. WINGWALLS



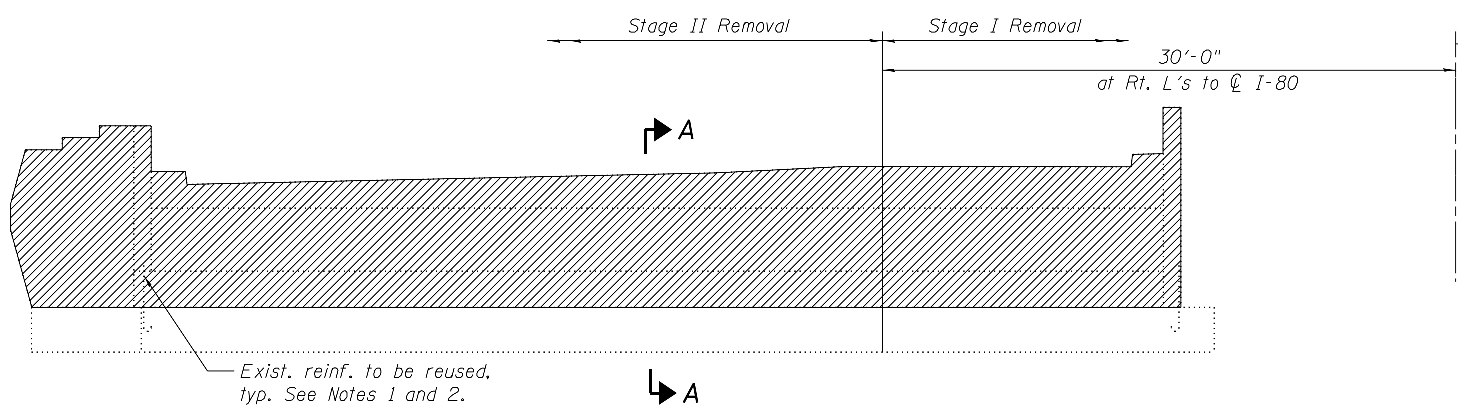
PLAN - WEST ABUTMENT



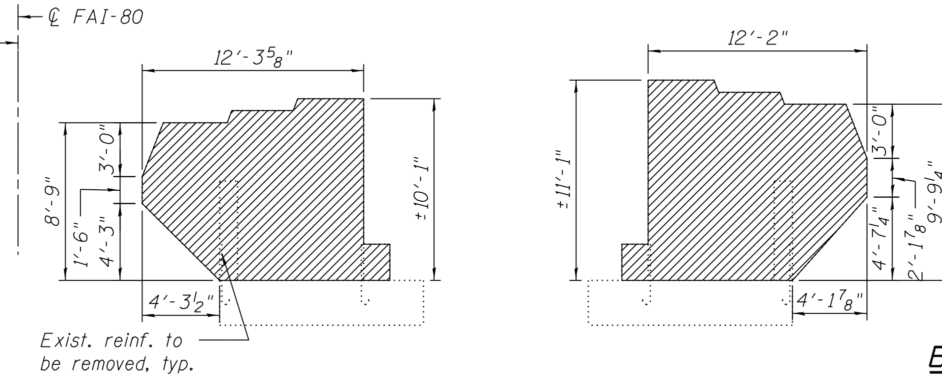
SECTION A-A



SECTION B-B



ELEVATION - EAST ABUTMENT
Looking East



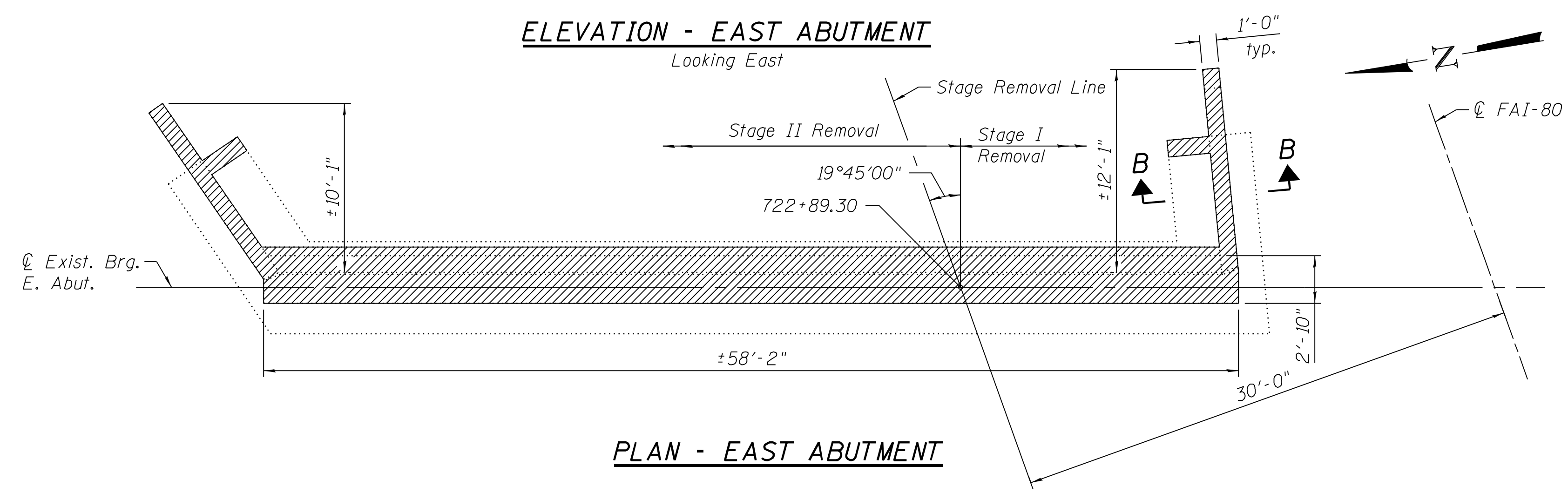
ELEVATION - EAST ABUT. WINGWALLS

LEGEND:

Concrete Removal

BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	Cu Yd	69.8



PLAN - EAST ABUTMENT

Notes:
1. Contractor shall not cut or remove existing reinforcement bars extending from the footing.
2. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
3. Existing piles not shown.
4. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
5. Any damage to portions of the existing structure to remain in service shall be repaired by the Contractor at no additional cost to the Department.

MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB 811.10 Structural\WB Hickory\Sheet\0990063-60W35-028-ABUTREM.dgn

exp.

USER NAME =	DESIGNED - BAR	REVISED -
	CHECKED - VCP	REVISED -
PLOT SCALE =	DRAWN - MTR	REVISED -
PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

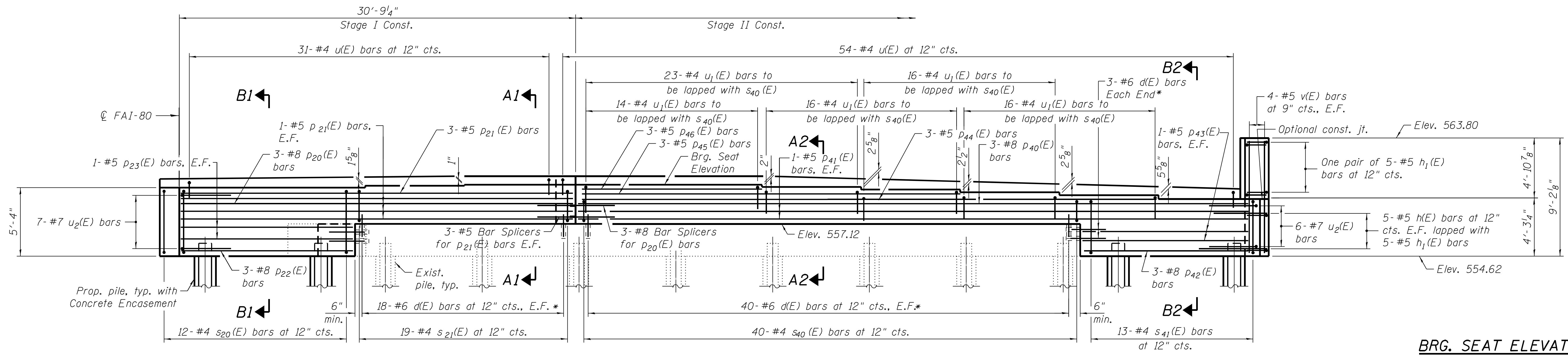
ABUTMENT REMOVAL DETAILS
STRUCTURE NO. 099-0063

SHEET SH-30 OF SH-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	283

CONTRACT NO. 60W35
ILLINOIS | FED. AID PROJECT

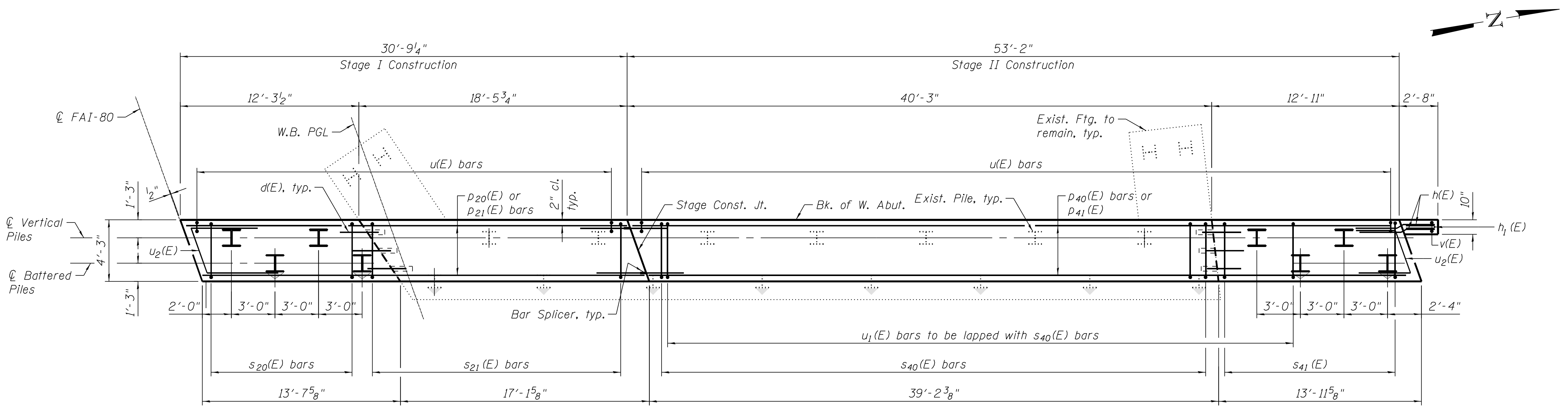
3/9/2022 11:48:54 AM



ELEVATION

BRG. SEAT ELEVATIONS

Beam	Elev.
1	558.89
2	559.36
3	559.58
4	559.79
5	560.00
6	560.17
7	560.17
8	560.17
9	560.09
10	559.95
11	559.95



PLAN - PILE CAP

Notes:
1. Place reinforcement to clear piles, dowel bars, and anchor bolt locations.
2. For sections, see Sheet SH-34.
3. For bearing spacing details, see Sheet SH-33.
4. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal
5. See Sheet SH-30 for Concrete Removal Details.
6. Order Bars p_{22}(E), p_{23}(E), p_{42}(E), p_{43}(E), p_{44}(E), p_{45}(E) and p_{46}(E) full length. Cut bars in field to fit as needed.
7. Piles shown as battered shall be battered at 3H:12V.
8. Space "s(E)" bars to miss piles. Keep 2" minimum clearance to nearest pile.

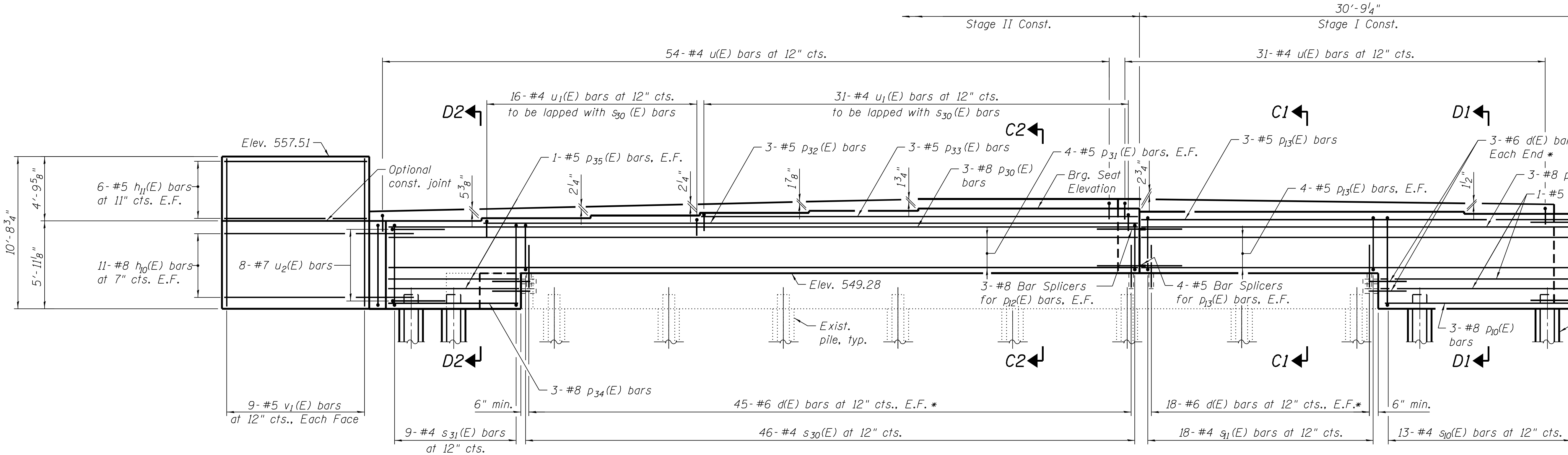
PILE DATA

Type: HP 12x53 with pile shoes
Nominal Required Bearing: 419 kips
Factored Resistance Available: 230 kips
Est. Length: 40 ft
No. Production Piles: 8

MIN. BAR LAPS

#5 - 3'-9"
#8 - 8'-2"

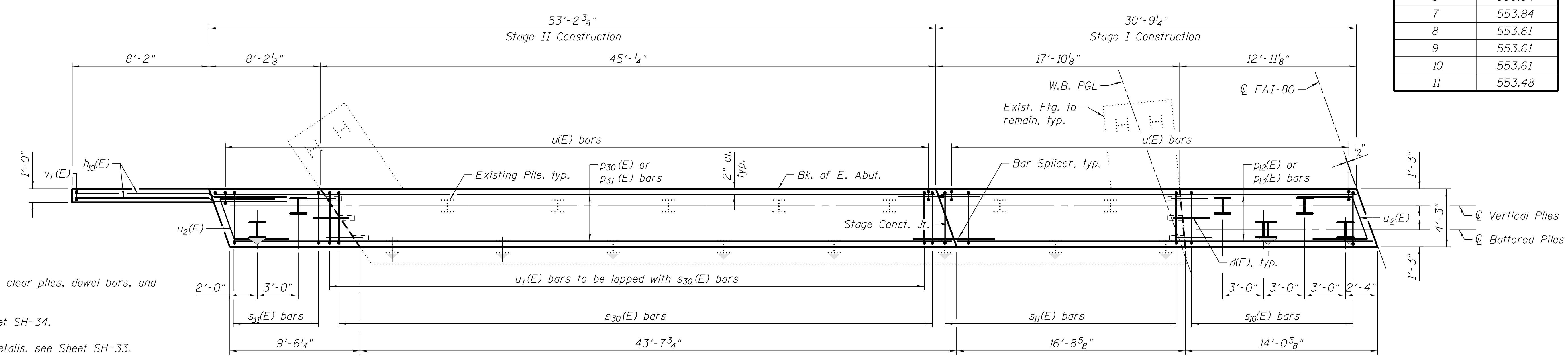
* Drill and grout bars according to Article 584 of the Standard Specifications with an embedment of 1'-0". Cost included with Reinforcement Bars, Epoxy Coated.



ELEVATION

BRG SEAT ELEVATIONS

Beam	Elev.
1	552.71
2	553.16
3	553.35
4	553.53
5	553.69
6	553.84
7	553.84
8	553.61
9	553.61
10	553.61
11	553.48



PLAN - PILE CAP

Notes:
1. Place reinforcement to clear piles, dowel bars, and anchor bolt locations.
2. For sections, see Sheet SH-34.
3. For bearing spacing details, see Sheet SH-33.
4. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal
5. See Sheet SH-30 for Concrete Removal Details.
6. Order Bars p_{10}(E), p_{11}(E), p_{32}(E), p_{33}(E), p_{34}(E), and p_{35}(E) full length. Cut bars in field to fit as needed.
7. Piles shown as battered shall be battered at 3H:12V.
8. Space "s(E)" bars to miss piles. Keep 2" minimum clearance to nearest pile.

PILE DATA

Type: HP 12x53 with pile shoes
Nominal Required Bearing: 419 kips
Factored Resistance Available: 230 kips
Est. Length: 32 ft
No. Production Piles: 6

∗ Drill and grout bars according to Article 584 of the Standard Specifications with an embedment of 1'-0". Cost included with Reinforcement Bars, Epoxy Coated.

MIN. BAR LAPS

#5 - 3'-9"
#8 - 8'-2"

MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-030-EABUT.dgn

exp.

USER NAME =	DESIGNED - BAR	REVISED -
	CHECKED - VCP	REVISED -
PLOT SCALE =	DRAWN - MTR	REVISED -
PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

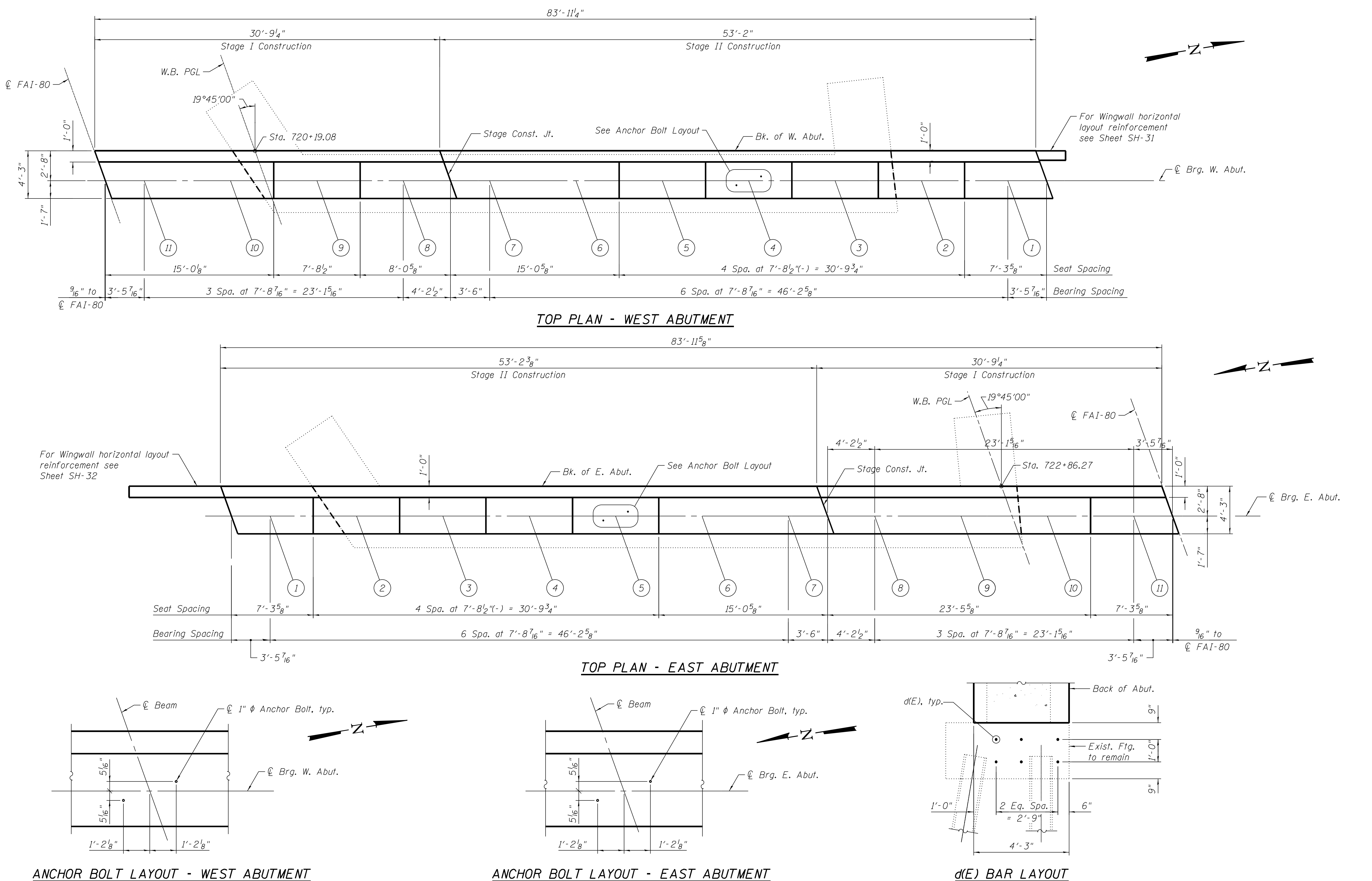
EAST ABUTMENT
STRUCTURE NO. 099-0063

SHEET SH-32 OF SH-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	285

CONTRACT NO. 60W35
ILLINOIS FED. AID PROJECT

3/9/2022 11:50:01 AM



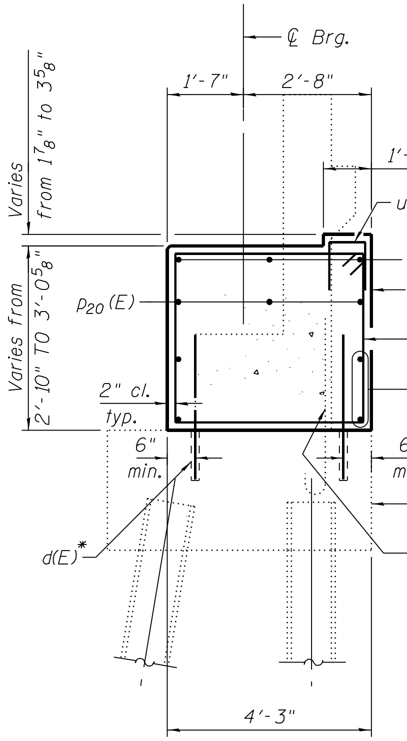
MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-031-ABUTDET1.dgn

3/9/2022 11:50:34 AM

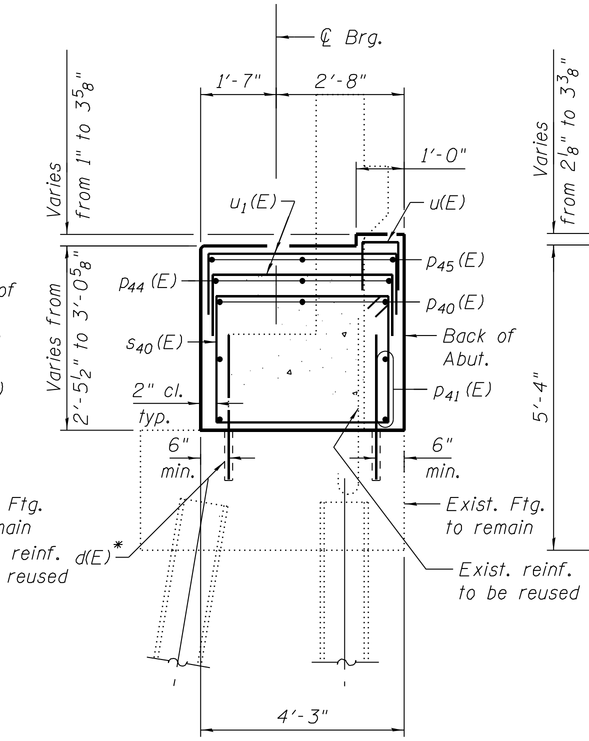
exp.

USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ABUTMENT DETAILS - 1 STRUCTURE NO. 099-0063
	CHECKED - VCP	REVISED -		
PLOT SCALE =	DRAWN - MTR	REVISED -		
PLOT DATE =	CHECKED - BAR	REVISED -		SHEET SH-33 OF SH-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	286
CONTRACT NO. 60W35				
ILLINOIS	FED. AID PROJECT			

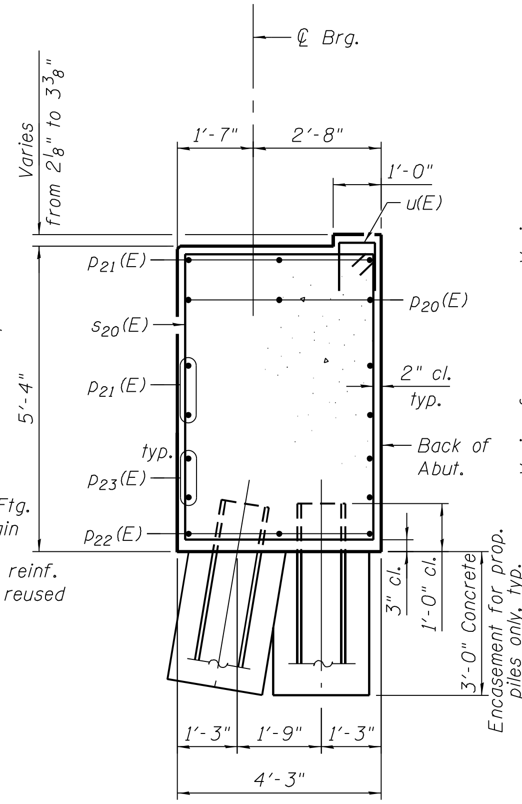


SECTION A1-A1

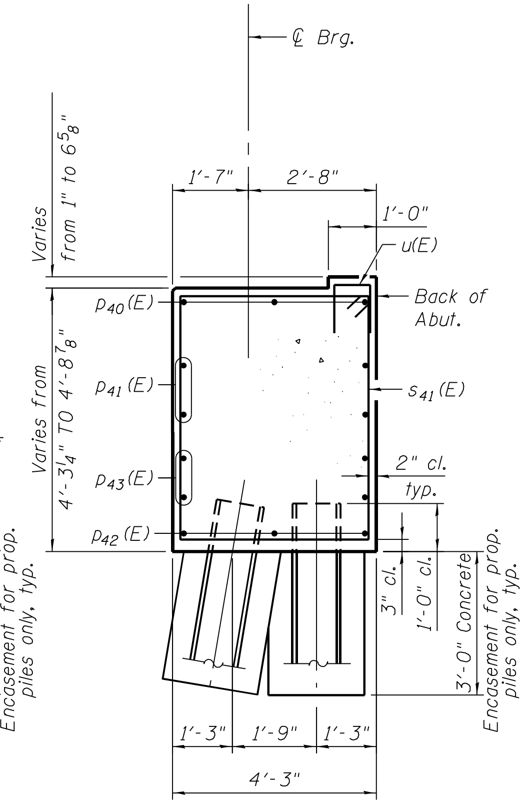


SECTION A2-A2

*Drill and grout bars according to Article 584 of the Standard Specifications with an embedment of 1'-0". Cost included with Reinforcement Bars, Epoxy Coated.



SECTION B1-B1



SECTION B2-B2

WEST ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	128	#6	4'-0"	
h(E)	10	#5	5'-5"	
h1(E)	15	#5	4'-5"	
p20(E)	3	#8	30'-6"	
p21(E)	9	#5	30'-6"	
p22(E)	3	#8	13'-4"	
p23(E)	4	#5	13'-4"	
p40(E)	3	#8	52'-11"	
p41(E)	4	#5	52'-11"	
p42(E)	3	#8	13'-8"	
p43(E)	4	#5	13'-8"	
p44(E)	3	#5	46'-2"	
p45(E)	3	#5	30'-9"	
p46(E)	3	#5	15'-4"	
s20(E)	12	#4	18'-5"	
s21(E)	19	#4	13'-7"	
s40(E)	40	#4	12'-5"	
s41(E)	13	#4	16'-3"	
u(E)	85	#4	3'-8"	
u1(E)	46	#4	7'-9"	
u2(E)	13	#7	13'-11"	
v(E)	8	#5	8'-9"	

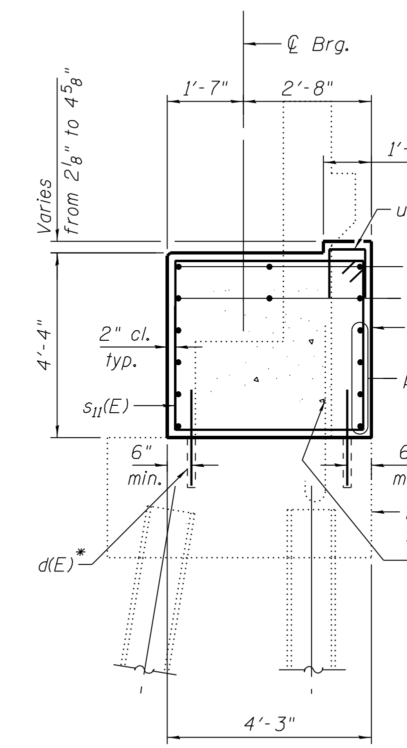
Item	Unit	Quantity
Structure Excavation	Cu Yd	429
Concrete Structures	Cu Yd	48.9
Concrete Encasement	Cu Yd	4.4
Reinforcement Bars, Epoxy Coated	Pound	4,370
Furnishing Steel Piles HP 12x53	Foot	320
Driving Piles	Foot	320
Pile Shoes	Each	8

For details of Bar Splicers, see Sheet SH-42.
For pile details, see Sheet SH-41.

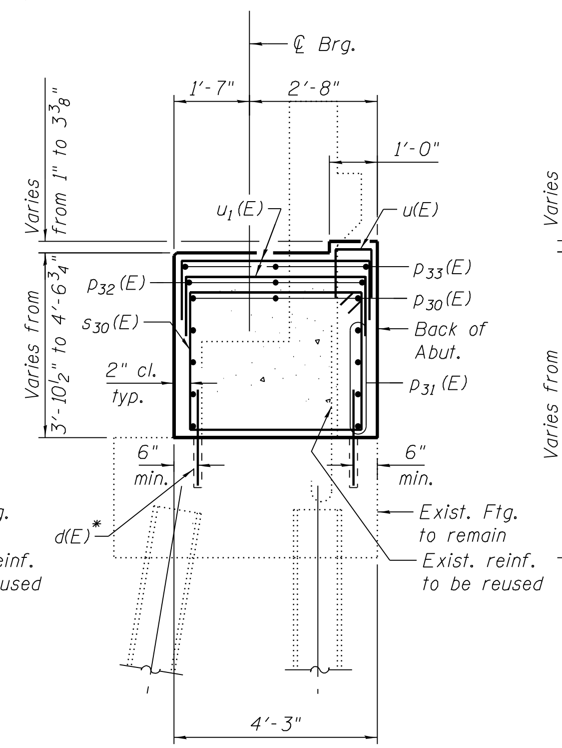
EAST ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	138	#6	4'-0"	
h10(E)	22	#8	16'-2"	
h11(E)	12	#5	7'-10"	
p10(E)	3	#8	13'-9"	
p11(E)	4	#5	13'-9"	
p12(E)	3	#8	30'-6"	
p13(E)	11	#5	30'-6"	
p30(E)	3	#8	52'-11"	
p31(E)	8	#5	52'-11"	
p32(E)	3	#5	46'-1"	
p33(E)	3	#5	30'-8"	
p34(E)	3	#8	9'-2"	
p35(E)	4	#5	9'-2"	
s10(E)	13	#4	21'-1"	
s11(E)	18	#4	16'-7"	
s30(E)	46	#4	15'-7"	
s31(E)	9	#4	19'-7"	
u(E)	85	#4	3'-8"	
u1(E)	47	#4	7'-9"	
u2(E)	17	#7	13'-11"	
v1(E)	11	#5	18'-3"	

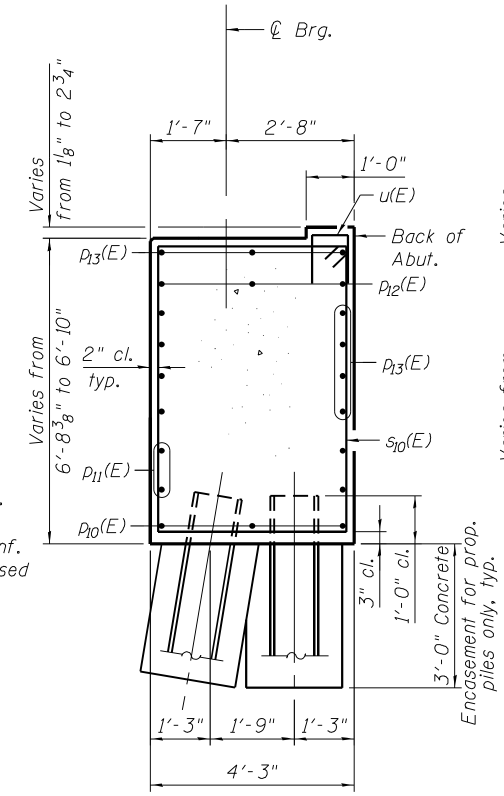
Item	Unit	Quantity
Structure Excavation	Cu Yd	366
Concrete Structures	Cu Yd	68.4
Concrete Encasement	Cu Yd	5.4
Reinforcement Bars, Epoxy Coated	Pound	5,980
Furnishing Steel Piles HP 12x53	Foot	192
Driving Piles	Foot	192
Pile Shoes	Each	6



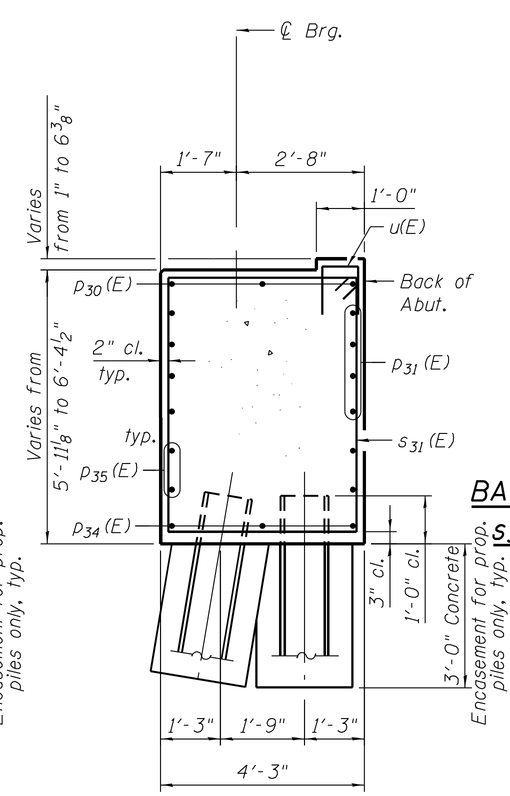
SECTION C1-C1



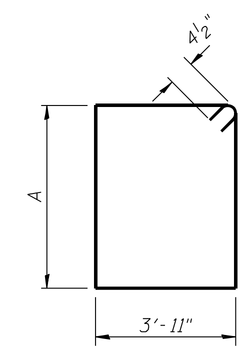
SECTION C2-C2



SECTION D1-D1



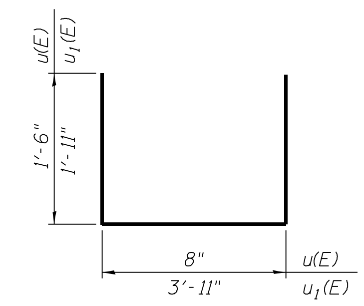
SECTION D2-D2



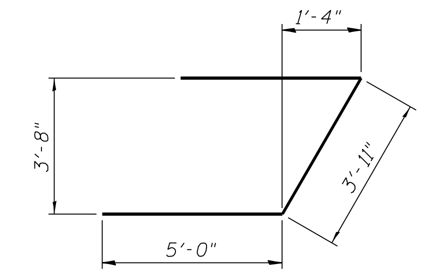
BARS s_{10}(E), s_{11}(E), s_{20}(E), s_{21}(E), s_{30}(E), s_{31}(E), s_{40}(E) & s_{41}(E)

SCHEDULE

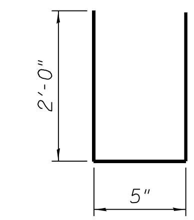
Bar	Dimension A
s_{10} (E)	6'-3"
s_{11}(E)	4'-0"
s_{20}(E)	4'-11"
s_{21} (E)	2'-6"
s_{30} (E)	3'-6"
s_{31} (E)	5'-6"
s_{40} (E)	1'-11"
s_{41} (E)	3'-10"



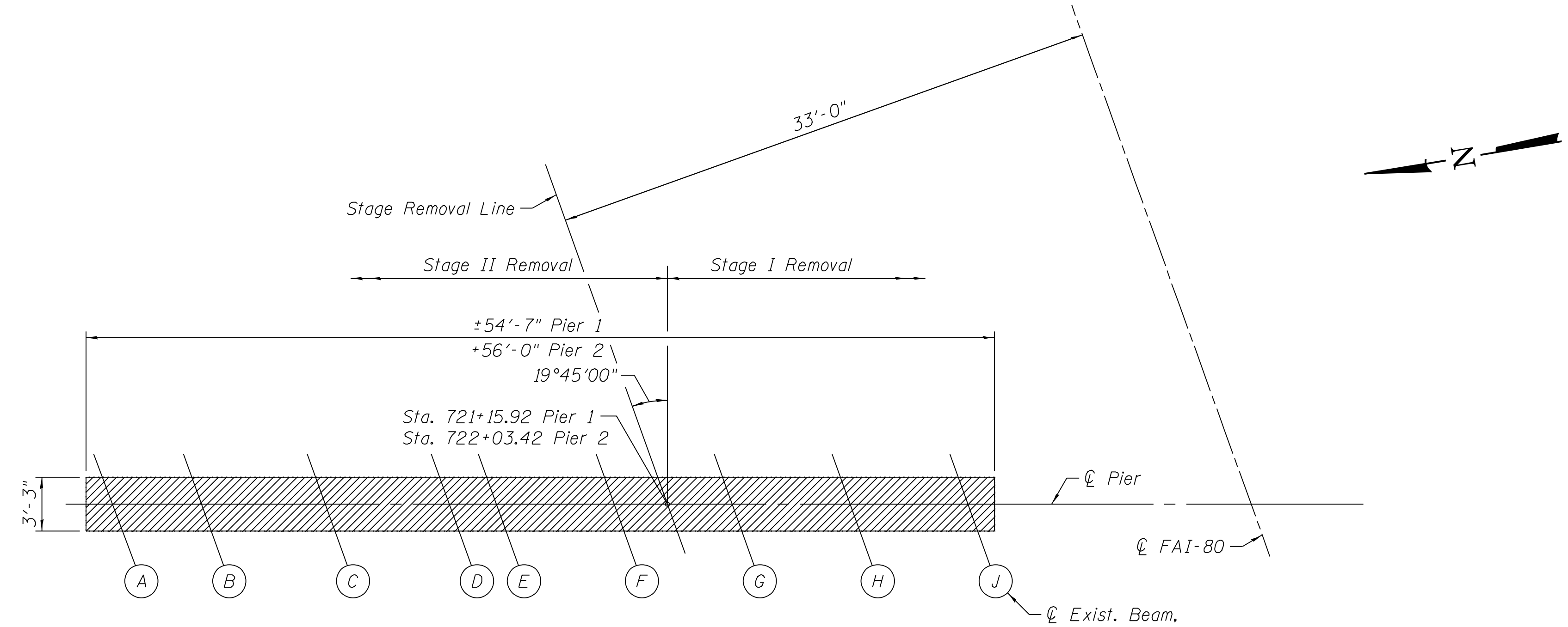
BAR u(E) & u_1(E)



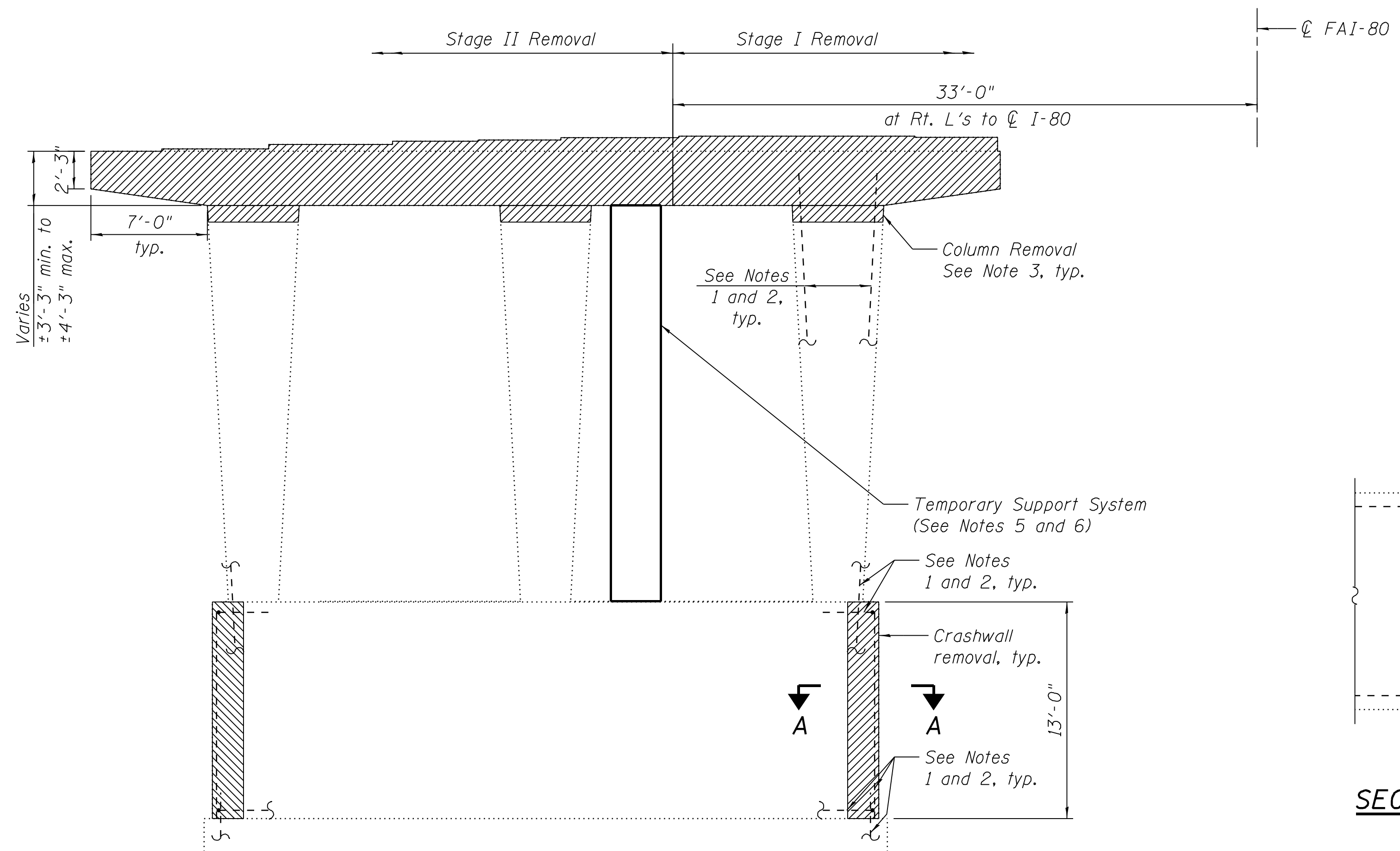
BAR u_2(E)



BAR h(E)

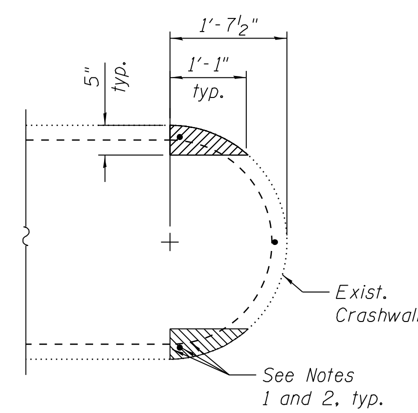


PIER CAP PLAN



ELEVATION - PIERS 1 AND 2

Looking East



SECTION A-A

BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	Cu Yd	51.5
Temporary Support System	L Sum	1
Structural Repair Of Concrete (Depth Equal To Or Less Than 5 Inches)	Sq Ft	210
Structural Repair Of Concrete (Depth Greater Than 5 Inches)	Sq Ft	40

LEGEND:

Concrete Removal

Notes:

1. Contractor shall not cut or remove existing reinforcement bars extending from the existing pier.
2. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
3. Remove portion of existing columns as required to the bottom of the new pier cap elevations as determined in the following sheets. Cost included with Concrete Removal.
4. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
5. The Temporary Support Plan shall be prepared and sealed by an Illinois Licensed Structural Engineer and shall be submitted to the Engineer for review and acceptance. See Special Provisions.
6. At each Pier, provide Temporary Support System prior to Stage I Removal. The Temporary Support System shall be designed for the following unfactored Service loads:
   Dead Load = 140 kips
   Live Load = 120 kips
7. Structural concrete repair for all EB and WB piers is included in this contract. Limits of repair will be as directed by the Engineer.

MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-033-PREM.dgn

exp.

USER NAME =	DESIGNED - BAR	REVISED -
	CHECKED - BGR	REVISED -
PLOT SCALE =	DRAWN - MCR	REVISED -
PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER REMOVAL DETAILS
STRUCTURE NO. 099-0063

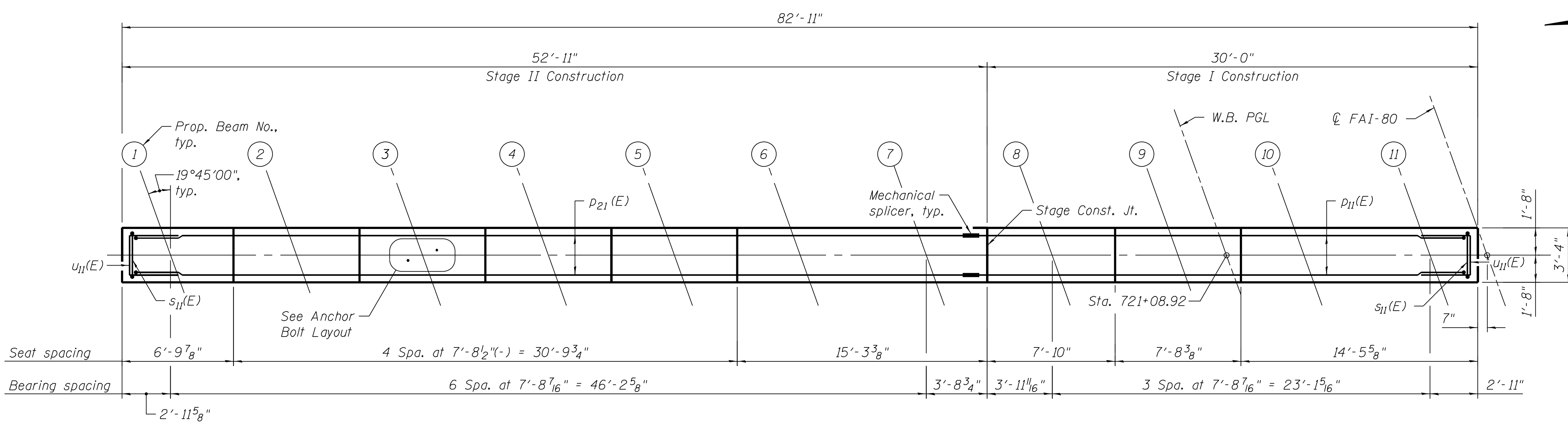
SHEET SH-35 OF SH-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	288

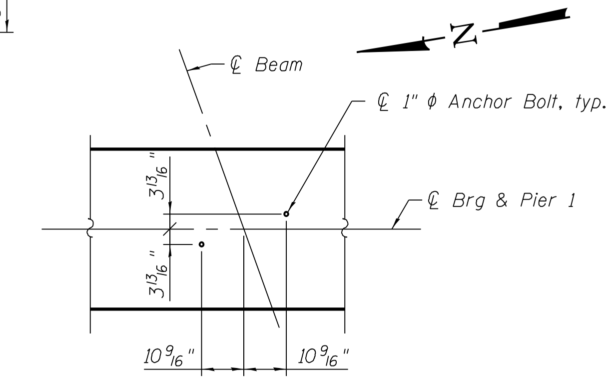
CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

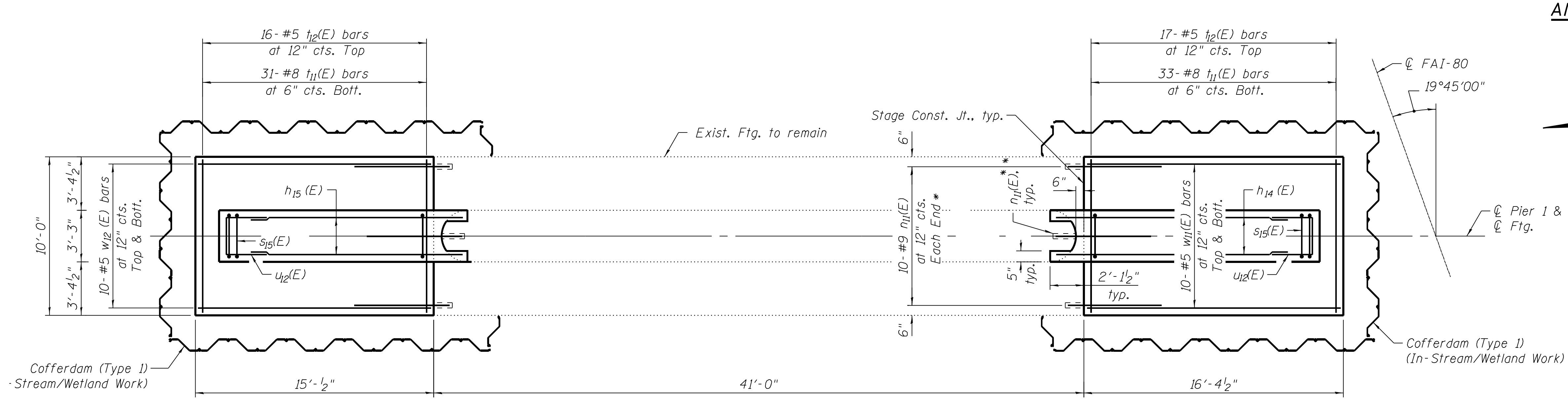
3/17/2022 5:33:24 PM



TOP PLAN



ANCHOR BOLT LAYOUT



FOOTING PLAN

* Drill and grout bars according to Section 584 of the Standard Specifications with an embedment of 1'-0". Cost included with Reinforcement Bars, Epoxy Coated.

Notes:
1. Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap.
2. For Pier elevation see Sheet SH-37.
3. For Bill of Material and bar bending diagram see Sheet SH-40.

MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-034-PIER1PL.dgn

exp.

USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - MTR	REVISED -	
PLOT DATE =	CHECKED - BAR	REVISED -	

PIER 1 DETAILS - 1
STRUCTURE NO. 099-0063
SHEET SH-36 OF SH-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	289
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

3/9/2022 11:52:10 AM

BRG. SEAT ELEVATIONS

Beam	Elev.
1	556.83
2	557.19
3	557.41
4	557.63
5	557.82
6	557.99
7	557.99
8	557.99
9	557.91
10	557.77
11	557.77

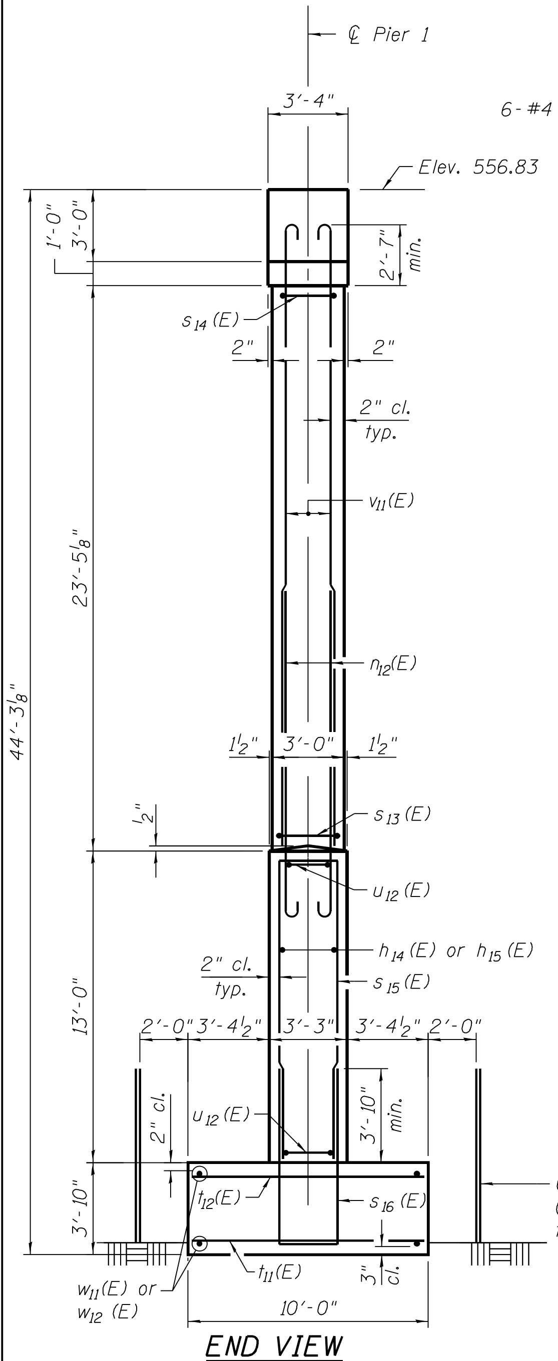
* Drill and grout bars according to Section 584 of the Standard Specifications with an embedment of 1'-0". Cost included with Reinforcement Bars, Epoxy Coated.

** The longitudinal bars in the pier cap are detailed with a 1 foot extension length beyond the stage construction joint to accommodate the mechanical couplers. Contractor shall adjust the extension length based on the selected mechanical splicer assembly.

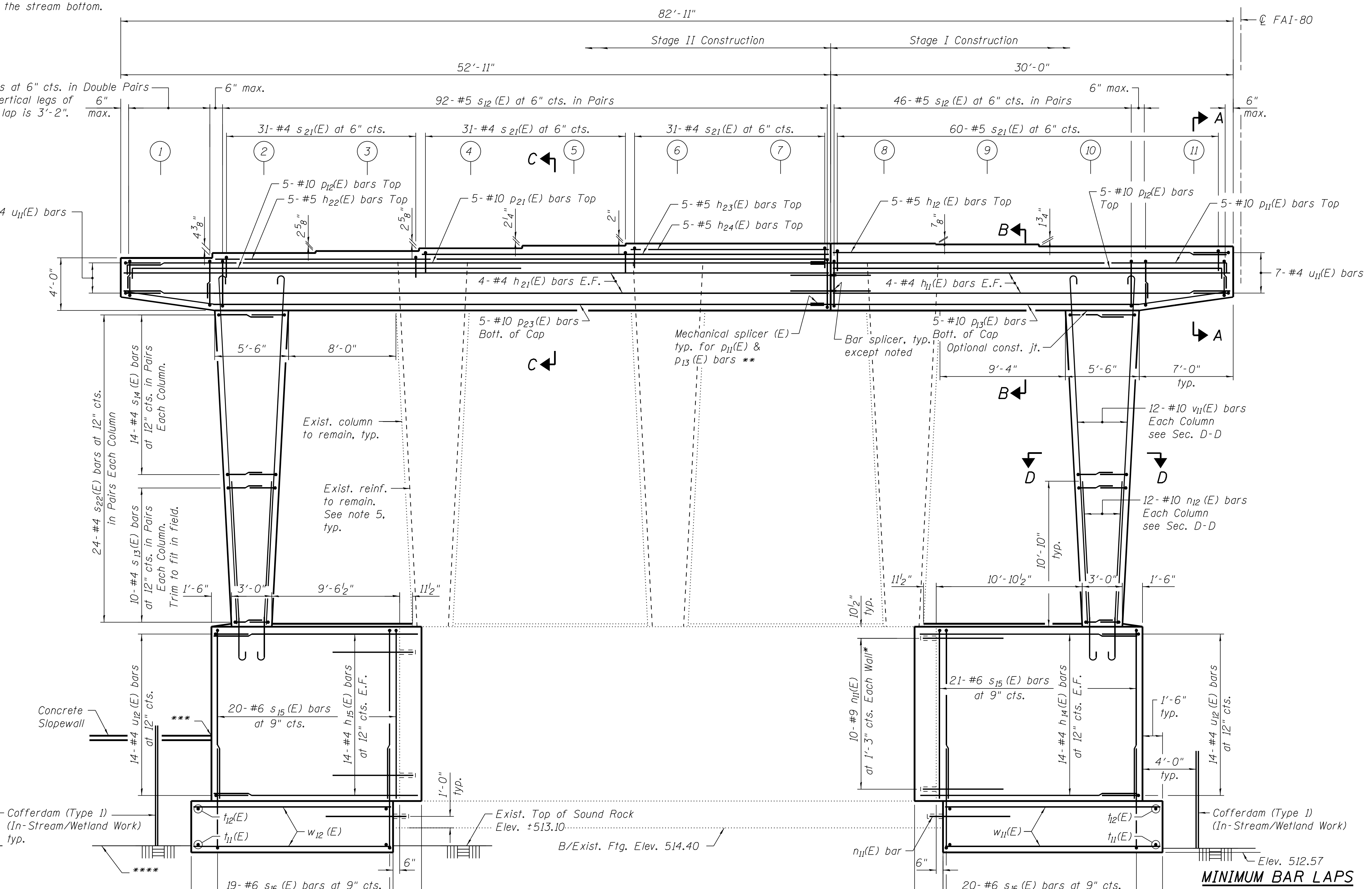
*** Elev. ±521.3 at North Face to match existing slope wall elevation.

**** Top of Rock and bott. of Cofferdam Exacvation is approximately ±513.1 and varies to meet the stream bottom.

Notes:
1. Space reinforcement in cap to miss anchor bolts.
2. Pour steps monolithically with cap.
3. The proposed footing elevations for all piers shall be located at the adjoining existing footing elevation or at least six inches below top of rock, whichever is lowest. The rock excavation shall be made with near-vertical sides at the plan dimensions to all the sides and based of the embedded portion of the footing to be cast against undisturbed rock surfaces.
4. For Bill of Material and bar bending diagrams, see Sheet SH-40.
5. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
6. The maximum applied service bearing pressure Qmax = 8.3 ksf.
7. Limits of rock excavation shall include the removal of rock for pier foundation and slope wall.



END VIEW



ELEVATION - PIER 1

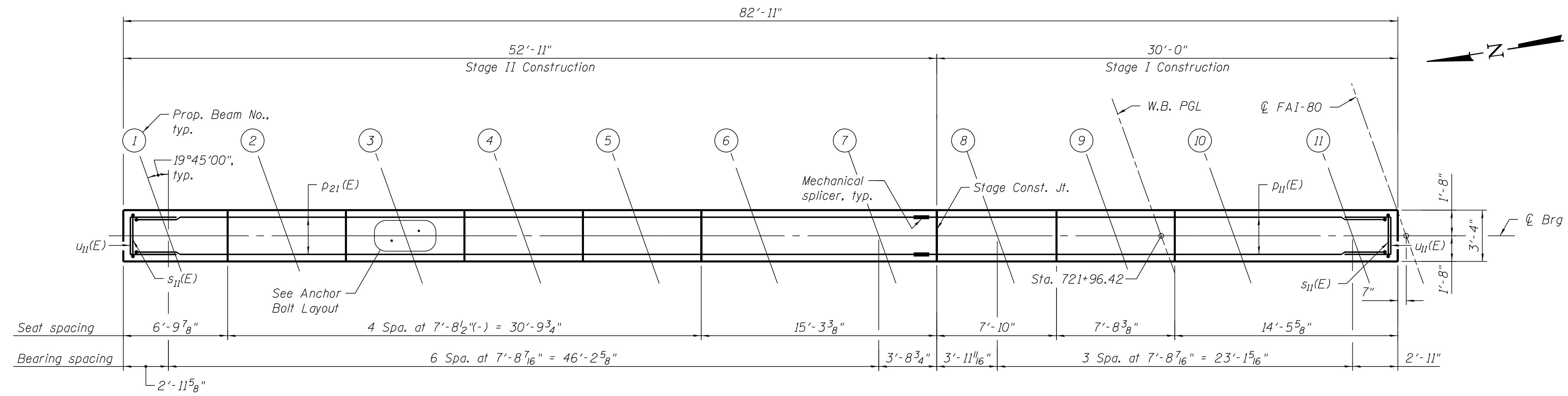
Looking East

MINIMUM BAR LAPS

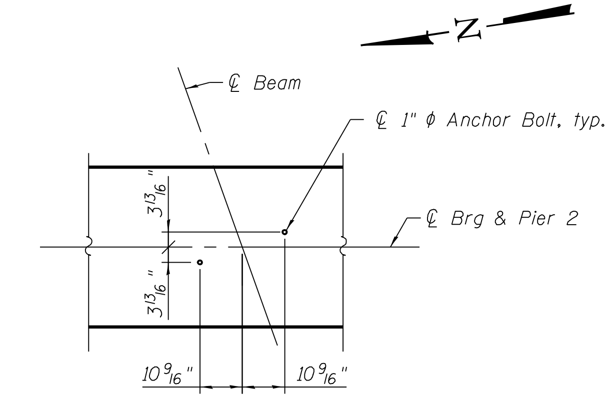
#4 bars = 2'-11"
#4 s13(E) & s14(E) bars = 3'-10"
#5 bars = 3'-9"
#10 bars = 11'-6"

USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PIER 1 DETAILS - 2 STRUCTURE NO. 099-0063
	CHECKED - VCP	REVISED -		
PLOT SCALE =	DRAWN - MTR	REVISED -		
PLOT DATE =	CHECKED - BAR	REVISED -		SHEET SH-37 OF SH-46 SHEETS

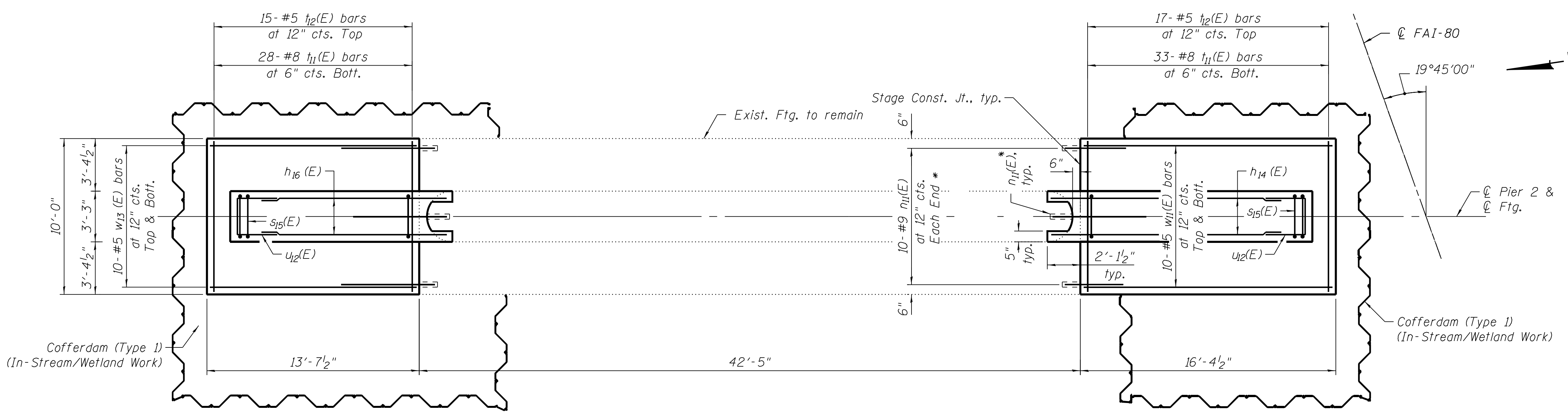
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	290
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	



TOP PLAN



ANCHOR BOLT LAYOUT



FOOTING PLAN

* Drill and grout bars according to Section 584 of the Standard Specifications with an embedment of 1'-0". Cost included with Reinforcement Bars, Epoxy Coated.

Notes:

1. Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap.
2. For Pier elevation see Sheet SH-39.
3. For Bill of Material and bar bending diagram see Sheet SH-40.

MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-036-PIER2PL.dgn

3/9/2022 11:53:13 AM

exp.

USER NAME =	DESIGNED - BAR	REVISED -
	CHECKED - VCP	REVISED -
PLOT SCALE =	DRAWN - MTR	REVISED -
PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS - 1
STRUCTURE NO. 099-0063

SHEET SH-38 OF SH-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	291
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

BRG. SEAT ELEVATIONS

Beam	Elev.
1	554.68
2	555.09
3	555.31
4	555.51
5	555.68
6	555.82
7	555.82
8	555.82
9	555.72
10	555.54
11	555.54

* Drill and grout bars according to Section 584 of the Standard Specifications with an embedment of 1'-0". Cost included with Reinforcement Bars, Epoxy Coated.

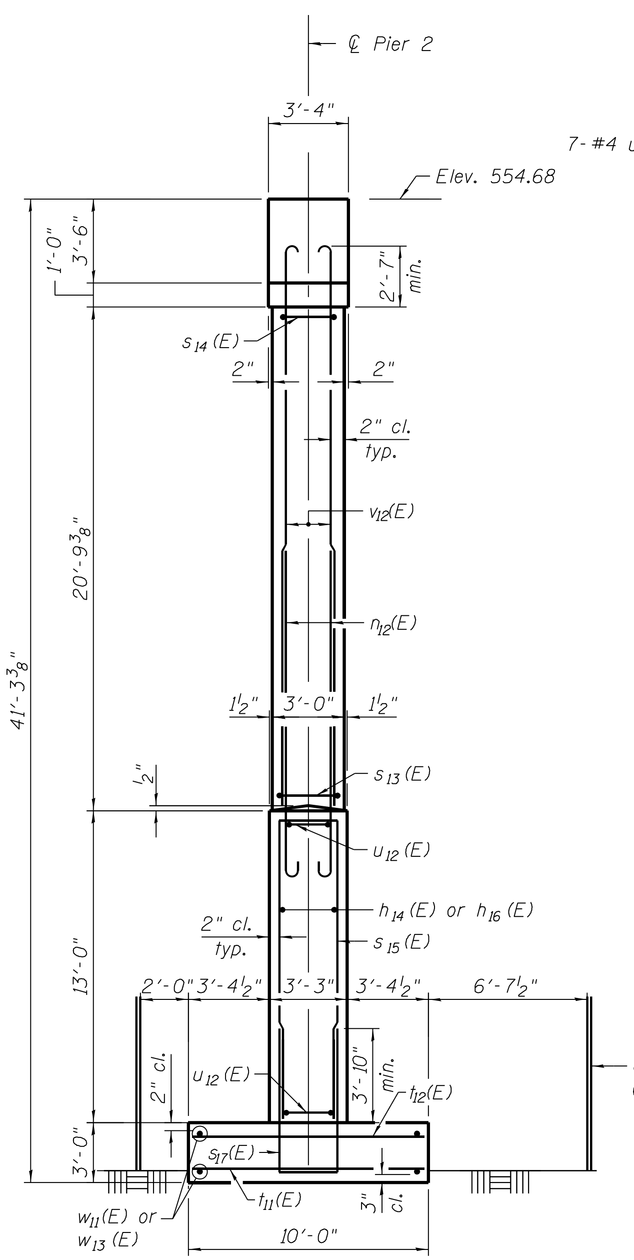
** The longitudinal bars in the pier cap are detailed with a 1 foot extension length beyond the stage construction joint to accommodate the mechanical couplers. Contractor shall adjust the extension length based on the selected mechanical splicer assembly.

*** Elev. at ±518.0 at North Face to match existing slope wall elevation.

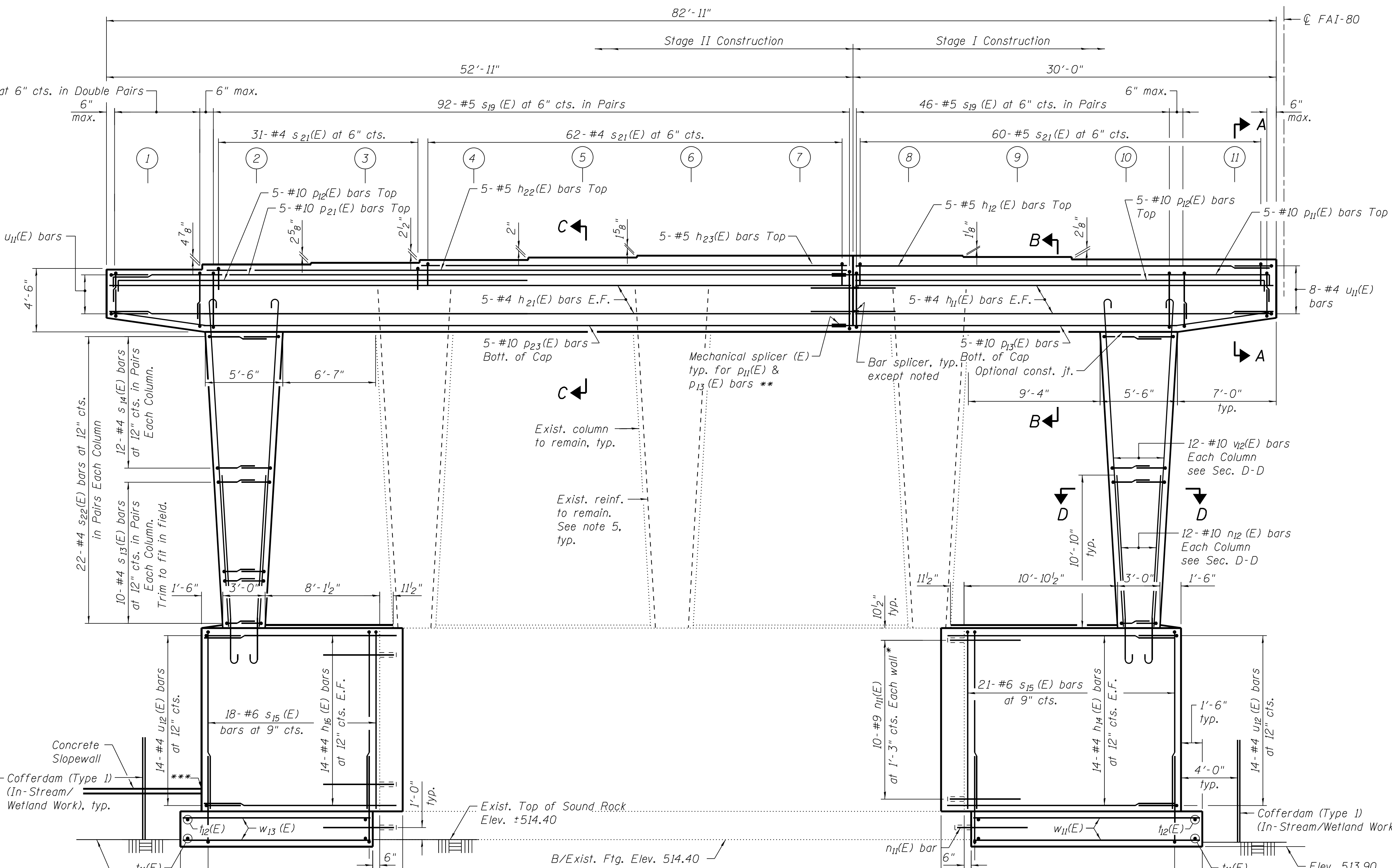
**** Top of Rock and bott. of Cofferdam Exacvation is approximately ±514.4 and varies to meet the stream bottom.

Notes:

1. Space reinforcement in cap to miss anchor bolts.
2. Pour steps monolithically with cap.
3. The proposed footing elevations for all piers shall be located at the adjoining existing footing elevation or at least six inches below top of rock, whichever is lowest. The rock excavation shall be made with near-vertical sides at the plan dimensions to all the sides and based of the embedded portion of the footing to be cast against undisturbed rock surfaces.
4. For Bill of Material and bar bending diagrams, see Sheet SH-40.
5. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
6. The maximum applied service bearing pressure Qmax = 8.3 ksf.
7. Limits of rock excavation shall include the removal of rock for pier foundation and slope wall.



END VIEW



ELEVATION - PIER 2

Looking East

MINIMUM BAR LAPS

#4 bars = 2'-11"
#4 s13(E) & s14(E) bars = 3'-10"
#5 bars = 3'-9"
#10 bars = 11'-6"

exp.

USER NAME =	DESIGNED - BAR	REVISED -
	CHECKED - VCP	REVISED -
PLOT SCALE =	DRAWN - MTR	REVISED -
PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS - 2
STRUCTURE NO. 099-0063

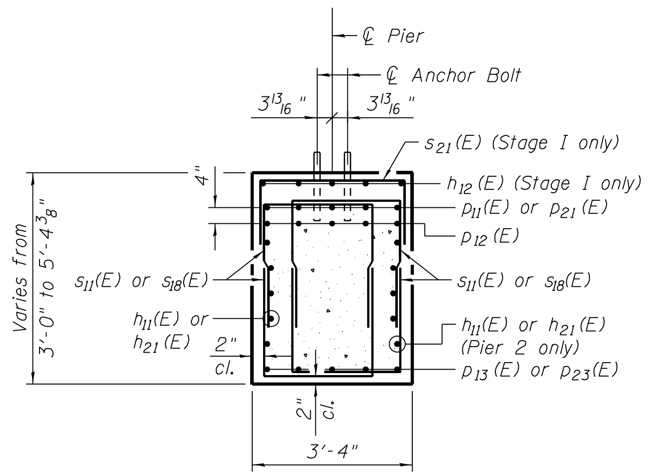
SHEET SH-39 OF SH-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	292

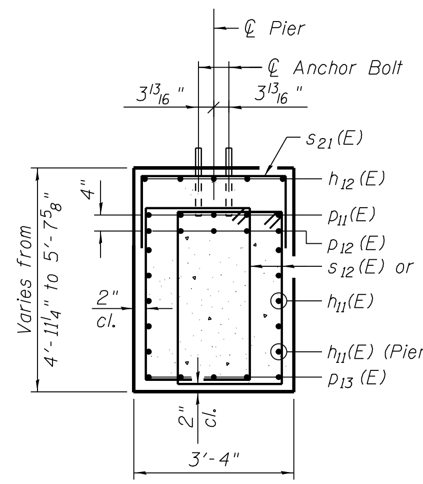
CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

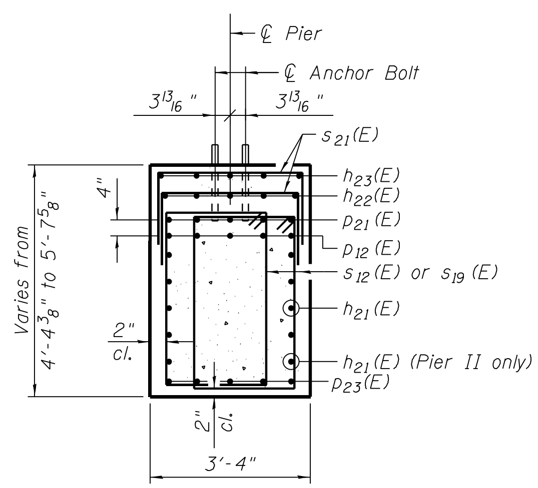
MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-037-PIER2EL.dgn
3/9/2022 11:53:44 AM



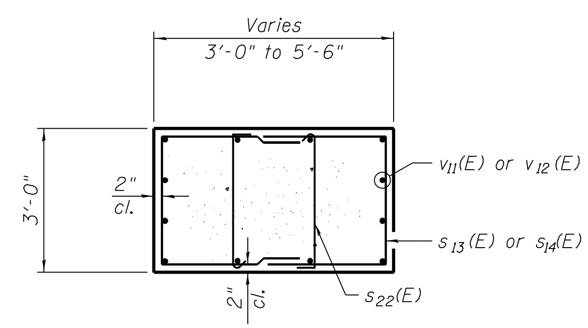
SECTION A-A



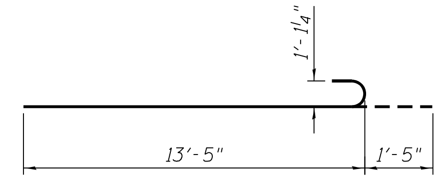
SECTION B-B



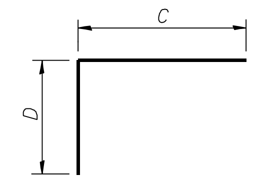
SECTION C-C



SECTION D-D



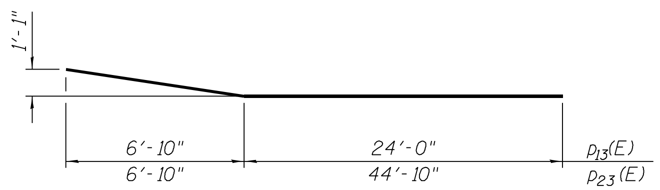
BAR n12(E)



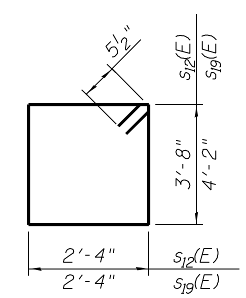
BARS p11(E), p12(E) & p21(E)

C & D DIMENSIONS

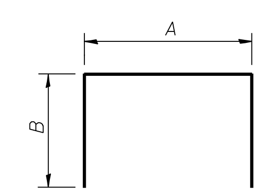
Bar	C	D
p_{11} (E)	30'-10"	1'-10"
p_{12} (E)	29'-5"	1'-10"
p_{21} (E)	51'-7"	1'-10"



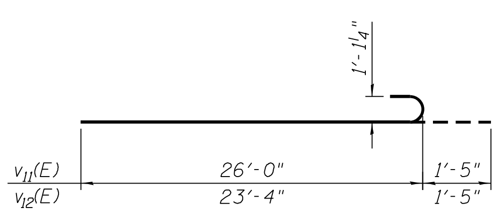
BAR p13(E) & p23(E)



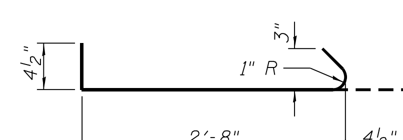
BARS s12(E) & s19(E)



BARS s11(E), s13(E), s14(E), s15(E), s16(E), s17(E), s18(E), s21(E), u11(E) & u12(E)



BARS v11(E) & v12(E)



BAR s22(E)

PIER 1 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h11(E)	8	#4	29'-9"	
h12(E)	5	#5	29'-8"	
h14(E)	28	#4	16'-8"	
h15(E)	28	#4	15'-4"	
h21(E)	8	#4	52'-8"	
h22(E)	5	#5	45'-9"	
h23(E)	5	#5	30'-5"	
h24(E)	5	#5	15'-0"	
n11(E)	40	#9	6'-0"	
n12(E)	24	#10	14'-10"	
p11(E)	5	#10	32'-8"	
p12(E)	10	#10	31'-3"	
p13(E)	5	#10	30'-11"	
p21(E)	5	#10	53'-7"	
p23(E)	5	#10	51'-10"	
s11(E)	104	#5	9'-2"	
s12(E)	276	#5	12'-11"	
s13(E)	40	#4	10'-4"	
s14(E)	56	#4	11'-8"	
s15(E)	41	#6	28'-7"	
s16(E)	39	#6	18'-5"	
s21(E)	153	#4	6'-0"	
s22(E)	96	#4	3'-5"	
t11(E)	64	#8	9'-8"	
t12(E)	33	#5	9'-8"	
u11(E)	13	#4	8'-10"	
u12(E)	28	#4	8'-9"	
v11(E)	24	#10	27'-5"	
w11(E)	20	#5	16'-0"	
w12(E)	20	#5	14'-8"	

Item	Unit	Quantity
Cofferdam Excavation	Cu Yd	145
Cofferdam (Type 1) (In-Stream/Wetland Work)	Each	2
Concrete Structures	Cu Yd	164.9
Reinforcement Bars, Epoxy Coated	Pound	23,790

PIER 2 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h11(E)	10	#4	29'-9"	
h12(E)	5	#5	29'-8"	
h14(E)	28	#4	16'-8"	
h16(E)	28	#4	13'-11"	
h21(E)	10	#4	52'-8"	
h22(E)	5	#5	45'-9"	
h23(E)	5	#5	30'-5"	
n11(E)	40	#9	6'-0"	
n12(E)	24	#10	14'-10"	
p11(E)	5	#10	32'-8"	
p12(E)	10	#10	31'-3"	
p13(E)	5	#10	30'-11"	
p21(E)	5	#10	53'-7"	
p23(E)	5	#10	51'-10"	
s13(E)	40	#4	10'-4"	
s14(E)	48	#4	11'-8"	
s15(E)	39	#6	28'-7"	
s17(E)	37	#6	16'-9"	
s18(E)	104	#5	10'-2"	
s19(E)	276	#5	13'-11"	
s21(E)	153	#4	6'-0"	
s22(E)	88	#4	3'-5"	
t11(E)	61	#8	9'-8"	
t12(E)	32	#5	9'-8"	
u11(E)	15	#4	8'-10"	
u12(E)	28	#4	8'-9"	
v12(E)	24	#10	24'-9"	
w11(E)	20	#5	16'-0"	
w13(E)	20	#5	13'-3"	

Item	Unit	Quantity
Cofferdam Excavation	Cu Yd	96
Cofferdam (Type 1) (In-Stream/Wetland Work)	Each	2
Concrete Structures	Cu Yd	145.0
Reinforcement Bars, Epoxy Coated	Pound	23,500

A & B DIMENSIONS

Bar	A	B
s_{11} (E)	2'-4"	3'-5"
s_{13} (E)	2'-8"	3'-10"
s_{14} (E)	2'-8"	4'-6"
s_{15} (E)	2'-11"	12'-10"
s_{16} (E)	2'-11"	7'-9"
s_{17} (E)	2'-11"	6'-11"
s_{18} (E)	2'-4"	3'-11"
s_{21} (E)	3'-0"	1'-6"
u_{11} (E)	2'-10"	3'-0"
u_{12} (E)	2'-9"	3'-0"

exp.

USER NAME =	DESIGNED - BAR	REVISED -	
	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - MTR	REVISED -	
PLOT DATE =	CHECKED - BAR	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER DETAILS
STRUCTURE NO. 099-0063

SHEET SH-40 OF SH-46 SHEETS

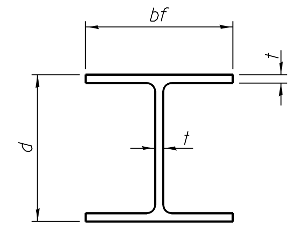
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	293

CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

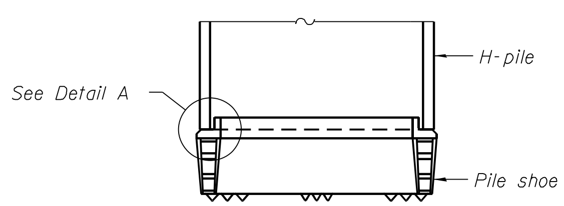
MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-038-PIERDET.dgn

3/9/2022 11:54:15 AM

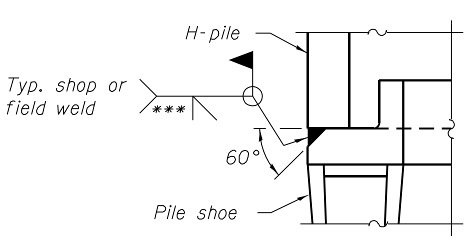


STEEL PILE TABLE

Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14¼"	14⅞"	13/16"	30"
x102	14"	14¾"	11/16"	30"
x89	13⅞"	14¾"	5/8"	30"
x73	13⅝"	14⅝"	1/2"	30"
HP 12x84	12¼"	12¼"	11/16"	24"
x74	12⅛"	12¼"	5/8"	24"
x63	12"	12⅛"	1/2"	24"
x53	11¾"	12"	7/16"	24"
HP 10x57	10"	10¼"	9/16"	24"
x42	9¾"	10⅛"	7/16"	24"
HP 8x36	8"	8⅛"	7/16"	18"



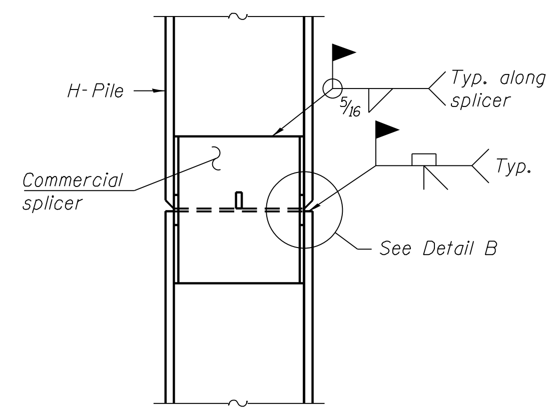
ELEVATION



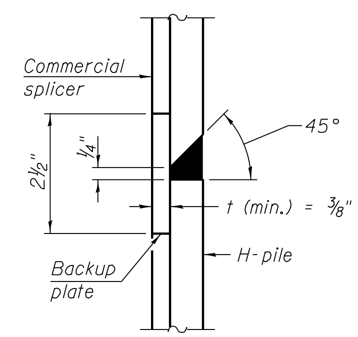
DETAIL A

SHOE ATTACHMENT

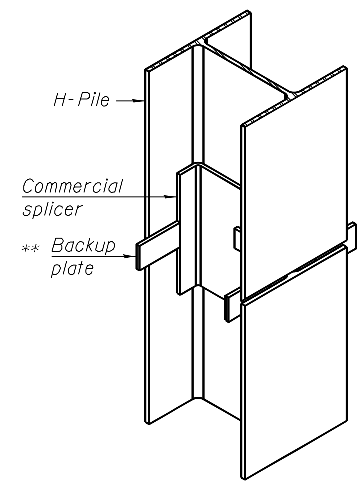
Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.



ELEVATION

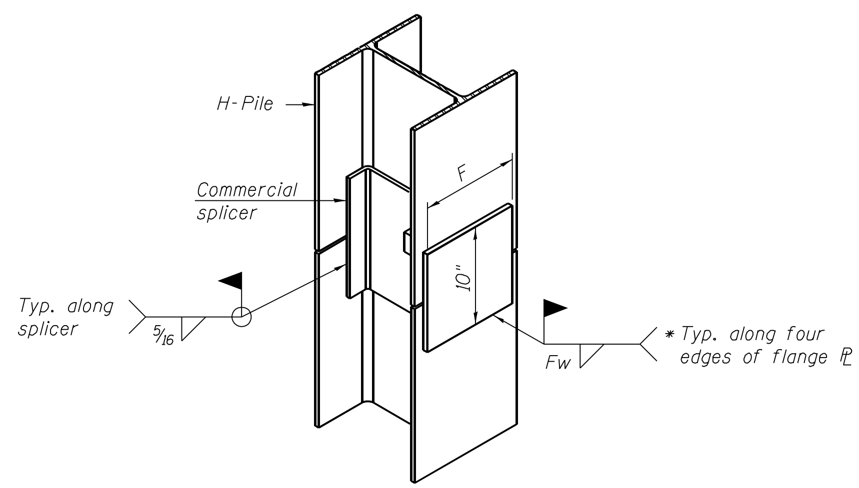


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



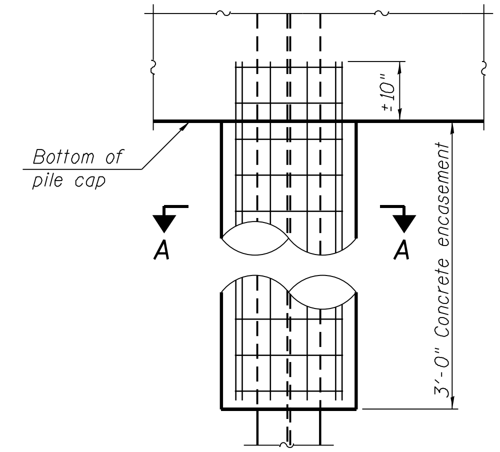
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

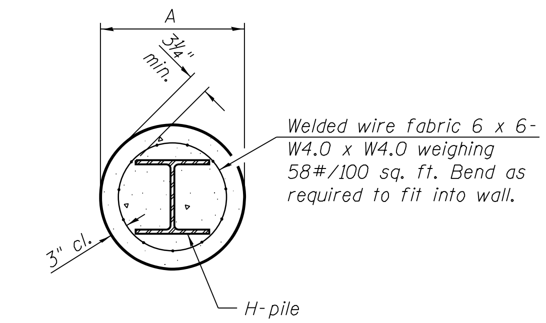
* Interrupt welds ¼" from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer (5/16" min.).



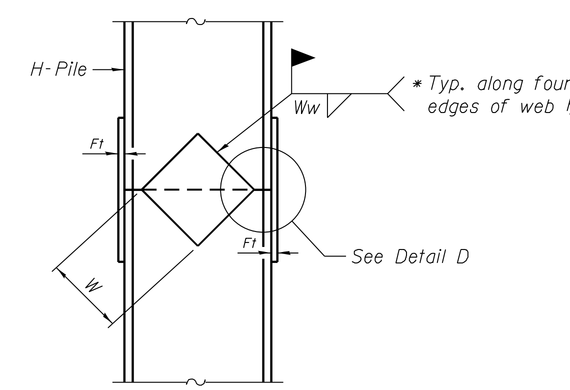
ELEVATION



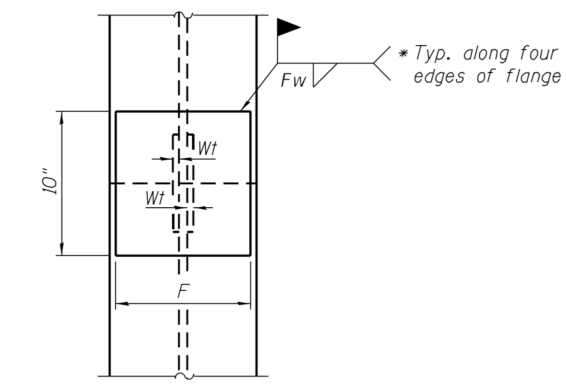
SECTION A-A

INDIVIDUAL PILE CONCRETE ENCASEMENT

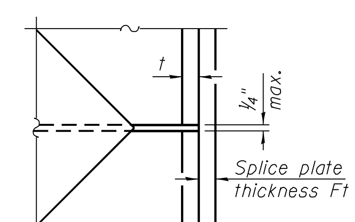
(Forms for encasement may be omitted when soil conditions permit).



ELEVATION



END VIEW



DETAIL D

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12½"	1"	7/8"	7¾"	5/8"	1/2"
x102	12½"	7/8"	3/4"	7¾"	5/8"	1/2"
x89	12½"	3/4"	11/16"	7¾"	5/8"	1/2"
x73	12½"	5/8"	9/16"	7¾"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6½"	5/8"	1/2"
x74	10"	7/8"	11/16"	6½"	5/8"	1/2"
x63	10"	5/8"	1/2"	6½"	1/2"	3/8"
x53	10"	5/8"	1/2"	6½"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5¼"	1/2"	3/8"
x42	8"	5/8"	9/16"	5¼"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4¼"	1/2"	3/8"

WELDED PLATE FIELD SPLICE

F-HP 8-11-2017

MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.10 Structural\WB Hickory\Sheet\0990063-60W35-039-PILE.dgn
3/9/2022 11:54:46 AM

exp.

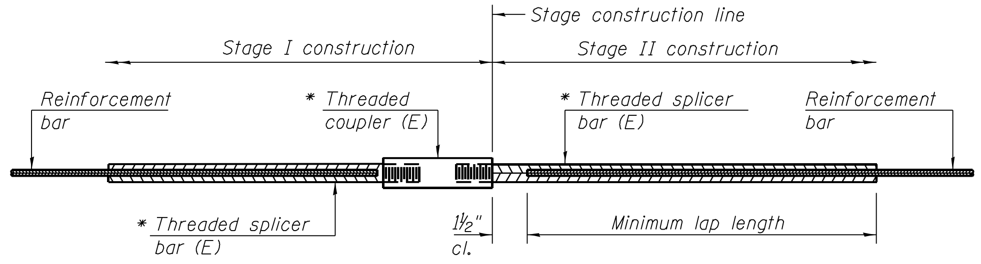
USER NAME =	DESIGNED - BAR	REVISED -
	CHECKED - VCP	REVISED -
PLOT SCALE =	DRAWN - MTR	REVISED -
PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAIL
STRUCTURE NO. 099-0063
SHEET SH-41 OF SH-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	294

CONTRACT NO. 60W35
ILLINOIS FED. AID PROJECT

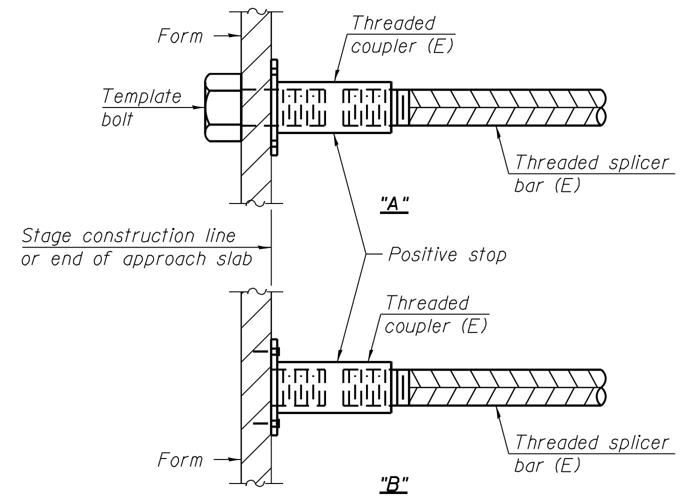


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1½" + thread length

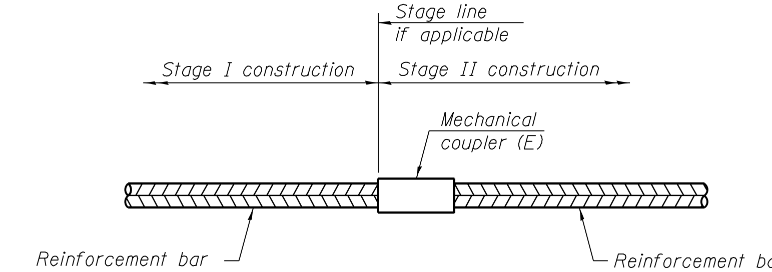
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Deck	#5	883	3'-6"
Approach slabs	#5	172	3'-4"
	#8	120	4'-9"
Abutments	#5	14	3'-9"
	#8	6	8'-2"
Piers	#4	20	2'-11"
Diaphragms	#4	4	2'-8"
	#6	22	4'-0"



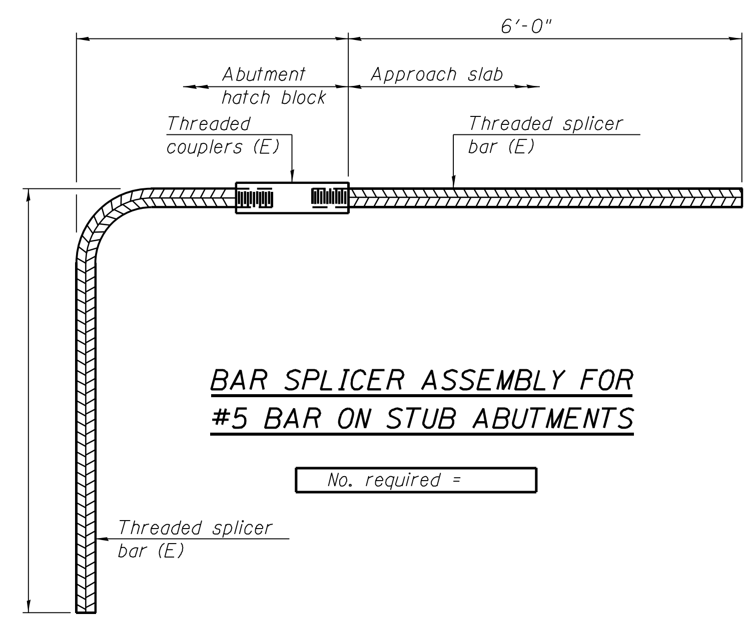
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required
Pier 1	#10	10
Pier 2	#10	10



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 2-17-2017

MODEL: Sheet
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.10 Structural\WB Hickory\Sheet\0990063-60W35-040-SPLDET.dgn

exp.

USER NAME =	DESIGNED - BAR	REVISED -
	CHECKED - VCP	REVISED -
PLOT SCALE =	DRAWN - MTR	REVISED -
PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY & MECHANICAL SPLICER DETAILS
STRUCTURE NO. 099-0063

SHEET SH-42 OF SH-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	295
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

3/9/2022 11:55:16 AM

SOIL BORING LOG (Page 1 of 2)

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

GSI Job No. 13125
Page 1 of 2
Date 3/17/14

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY JB

SECTION LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R10E, 3rd PM

COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. BSB-17
Station 720+12
Offset 22.30ft Left
Ground Surface Elev. 565.20 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry to 10.0' ft
Upon Completion n/a ft
After Hrs. ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
6.0" ASPHALT, 4.0" CONCRETE, 4.0" CRUSHED STONE	564.03				
CLAY to CLAY LOAM-brown & gray-stiff to hard (Fill)			3		
			3	2.5	21
			4	P	
			2		
			2	1.0	19
		-5	2	P	
			3		
			5	3.0	19
			6	P	
			2		
			2	2.0	31
		-10	3	P	
			3		
			8	1.3	14
			7	P	
			4		
			8	3.1	15
		-15	9	B	
			6		
			8	2.8	19
			11	P	
			5		
			11	4.5	19
		-20	11	P	

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY to CLAY LOAM-brown & gray-stiff to hard (Fill) *(continued)*			4		
			7	3.5	16
			13	P	
			6		
			7	4.0	19
		-25	11	P	
			6		
			9	3.8	17
			14	P	
			8		
			9	3.3	17
		-30	15	P	
			8		
			9	2.8	18
		-35	13	B	
	527.20				
SANDY LOAM-brown & gray-medium dense			5		
			6		29
		-40	15		

Z:\PROJECTS\2013\13125 HNTB, I-80 PHASE II (NEAR TERM)\13125 BORING LOGS\13125_LOG.GPJ 5/30/14

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

SOIL BORING LOG (Page 2 of 2)

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

GSI Job No. 13125
Page 2 of 2
Date 3/17/14

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY JB

SECTION LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R10E, 3rd PM

COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. BSB-17
Station 720+12
Offset 22.30ft Left
Ground Surface Elev. 565.20 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry to 10.0' ft
Upon Completion n/a ft
After Hrs. ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	524.70				
SILTY SAND-dark gray-medium dense			3		
			4		23
		-45	8		
	518.20				
Drillers Observation: Apparent Bedrock	517.20				
Borehole continued with rock coring.		-50			
		-55			
		-60			

Z:\PROJECTS\2013\13125 HNTB, I-80 PHASE II (NEAR TERM)\13125 BORING LOGS\13125_LOG.GPJ 5/30/14

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

ROCK CORE LOG

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

PAGE 1 of 1
DATE 3/18/2014
LOGGED BY JK
GSI JOB No. 13125

ROUTE ????
DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION @@@@
LOCATION SEC 15, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will
CORING METHOD Rotary Wash
STRUCT. NO. XX
Station XX
CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Core Diameter 2.0 in
Top of Rock Elev. 518.2
Begin Core Elev. 517.2
BORING NO. **BSB-17**
Station 720+12
Offset 22.3' Left
Ground Surface Elev. 565.2

Description	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE RUN 1 (-48.0' to -58.0') Light gray with horizontal to wavy bedding. Porous with some chert nodules. Numerous horizontal fractures throughout.		1	100.0	47.0	n/a	1299 @ -49.6'
	-53					
	-58					

Color pictures of the cores Yes Cores will be stored for examination for -
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

Notes:
1. For location of soil boring, see Sheet SH-01.

exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS - 1 STRUCTURE NO. 099-0063	F.A.I. RTE. 80 / SECTION 2013-009B / COUNTY WILL / TOTAL SHEETS 465 / SHEET NO. 296
		CHECKED - VCP	REVISED -			CONTRACT NO. 60W35
	PLOT SCALE =	DRAWN - MTR	REVISED -			ILLINOIS FED. AID PROJECT
	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET SH-43 OF SH-46 SHEETS	

MODEL: S-41
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-041-BOR1.dgn
3/9/2022 11:55:45 AM

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

GSI Job No. 13125
Page 1 of 2
Date 3/10/14

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY JZ
SECTION LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R10E, 3rd PM
COUNTY Will DRILLING METHOD Mud Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. BSB-19
Station 721+58
Offset 63.10ft Left
Ground Surface Elev. 560.10 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter n/a ft
Upon Completion n/a ft
After Hrs. ft

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
2.0" ASPHALT, 8.0" CONCRETE BRIDGE DECK 559.27				
VOID	-5			
	-10			
	-15			
	-20			

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
VOID *(continued)*	-25			
	-30			
	-35			
	-40			

Z:\PROJECTS\2013\13125 HNTB, I-80 PHASE II (NEAR TERM)\13125 BORING LOGS\13125_LOG.GPJ 5/30/14

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

GSI Job No. 13125
Page 2 of 2
Date 3/10/14

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY JZ
SECTION LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R10E, 3rd PM
COUNTY Will DRILLING METHOD Mud Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. BSB-19
Station 721+58
Offset 63.10ft Left
Ground Surface Elev. 560.10 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter n/a ft
Upon Completion n/a ft
After Hrs. ft

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
VOID *(continued)*	-45			
513.10				
Borehole continued with rock coring.	-50			
	-55			
	-60			

Z:\PROJECTS\2013\13125 HNTB, I-80 PHASE II (NEAR TERM)\13125 BORING LOGS\13125_LOG.GPJ 5/30/14

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

ROCK CORE LOG

PAGE 1 of 1
DATE 3/10/2014
LOGGED BY JK
GSI JOB No. 13125

ROUTE ???? DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION @@@@ LOCATION SEC 15, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will CORING METHOD Rotary Wash
STRUCT. NO. XX CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Station XX Core Diameter 2.0 in
BORING NO. BSB-19 Top of Rock Elev. 513.1
Station 721+58 Begin Core Elev. 513.1
Offset 63.1' Left
Ground Surface Elev. 560.1

Description	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE RUN 1 (-47.0' to -57.0') Light gray to gray, fine grained with horizontal to wavy bedding. Porous with some weathering. Highly fractured & cherty to -49.8'. Numerous horizontal fractures throughout.		1	100.0	43.0	n/a	1025 @ -54.7'
	-52					
	-57					

Color pictures of the cores Yes Cores will be stored for examination for –
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

Notes:
1. For location of soil boring, see Sheet SH-01.

exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED - VCP	REVISED -	
	PLOT SCALE =	DRAWN - MTR	REVISED -	
	PLOT DATE =	CHECKED - BAR	REVISED -	

SOIL BORING LOGS - 2
STRUCTURE NO. 099-0063
SHEET SH-44 OF SH-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	297
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

MODEL: S-42
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-042-BOR2.dgn
3/9/2022 11:56:29 AM

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

GSI Job No. 13125
Page 1 of 2
Date 3/14/14

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY JB

SECTION LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R10E, 3rd PM

COUNTY Will DRILLING METHOD Mud Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station

BORING NO. BSB-21
Station 721+88
Offset 23.00ft Left
Ground Surface Elev. 560.40 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter n/a ft
Upon Completion n/a ft
After Hrs. ft

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
2.0" ASPHALT, 8.0" CONCRETE BRIDGE DECK 559.57				
VOID				
	-5			
	-10			
	-15			
	-20			

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
VOID *(continued)*				
	-25			
	-30			
	-35			
	-40			

Z:\PROJECTS\2013\13125 HNTB, I-80 PHASE II (NEAR TERM)\13125 BORING LOGS\13125_LOG.GPJ 5/30/14

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

GSI Job No. 13125
Page 2 of 2
Date 3/14/14

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY JB

SECTION LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R10E, 3rd PM

COUNTY Will DRILLING METHOD Mud Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station

BORING NO. BSB-21
Station 721+88
Offset 23.00ft Left
Ground Surface Elev. 560.40 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter n/a ft
Upon Completion n/a ft
After Hrs. ft

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
VOID *(continued)*				
	-45			
514.40				
Borehole continued with rock coring.				
	-50			
	-55			
	-60			

Z:\PROJECTS\2013\13125 HNTB, I-80 PHASE II (NEAR TERM)\13125 BORING LOGS\13125_LOG.GPJ 5/30/14

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

ROCK CORE LOG

PAGE 1 of 1
DATE 3/15/20145
LOGGED BY JK
GSI JOB No. 13125

ROUTE ???? DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION @@@@ LOCATION SEC 15, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will CORING METHOD Rotary Wash
STRUCT. NO. XX CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Station XX Core Diameter 2.0 in
BORING NO. **BSB-21** Top of Rock Elev. *514.4*
Station 721+88 Begin Core Elev. *514.4*
Offset 23.0' Left
Ground Surface Elev. *560.4*

Description	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE RUN 1 (-46.0' to -56.0') Light gray to gary with some rust staining. Porous with horizontal to wavy bedding. Numerous horizontal fractures throughout with some intersecting vertical fractures.		1	98.0	48.0	n/a	1233 @ -48.7'
	-51					
	-56					

Color pictures of the cores Yes Cores will be stored for examination for –
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

Notes:
1. For location of soil boring, see Sheet SH-01.

MODEL: S-43
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-043-BOR3.dgn

exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS - 3 STRUCTURE NO. 099-0063	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - VCP	REVISED -			80	2013-009B	WILL	465	298
	PLOT SCALE =	DRAWN - MTR	REVISED -			CONTRACT NO. 60W35				
	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET SH-45 OF SH-46 SHEETS		ILLINOIS FED. AID PROJECT			

3/9/2022 11:57:07 AM

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

GSI Job No. 13125
Page 1 of 2
Date 1/15/14

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY NW
SECTION LOCATION SW 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R10E, 3rd **PM**
COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. BSB-23
Station 723+11
Offset 61.50ft Left
Ground Surface Elev. 556.40 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 554.4 ft ▼
Upon Completion n/a ft
After Hrs. ft

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4" ASPHALT, 12.0" CONCRETE				
555.07				
CLAY LOAM-brown & gray-stiff to hard (Fill) ▼		1		
		1		9
		1		
		2		
		2		15
	-5	3		
		3		
		5	2.8	14
		5	P	
		2		
		3	2.8	22
	-10	5	P	
		4		
		5	1.9	15
		7	B	
		4		
		6	2.7	16
	-15	9	B	
		5		
		5	2.2	20
		4	B	
		3		
		5		17
	-20	12		

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY LOAM-brown & gray-stiff to hard (Fill) *(continued)*				
		6		
		9	2.1	16
		12	B	
		4		
		7	2.8	17
	-25	10	B	
		9		
		10	1.8	15
		10	B	
		14		
		12	4.5	11
	-30	12	P	
524.40				
SILTY CLAY LOAM-dark brown & gray-loose				
		2		
		2	0.6	28
	-35	3	B	
517.90				
Drillers Observation: Fractured Rock		50/2"		
516.90				
	-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Z:\PROJECTS\2013\13125 HNTB, I-80 PHASE II (NEAR TERM)\13125 BORING LOGS\13125_LOG.GPJ 5/30/14

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

GSI Job No. 13125
Page 2 of 2
Date 1/15/14

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY NW
SECTION LOCATION SW 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R10E, 3rd **PM**
COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. BSB-23
Station 723+11
Offset 61.50ft Left
Ground Surface Elev. 556.40 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 554.4 ft ▼
Upon Completion n/a ft
After Hrs. ft

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Drillers Observation: Apparent Bedrock *(continued)*				
515.90				
Borehole continued with rock coring.				
	-45			
	-50			
	-55			
	-60			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Z:\PROJECTS\2013\13125 HNTB, I-80 PHASE II (NEAR TERM)\13125 BORING LOGS\13125_LOG.GPJ 5/30/14

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

ROCK CORE LOG

PAGE 1 of 1
DATE 1/16/2014
LOGGED BY JK
GSI JOB No. 13125

ROUTE ???? DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION @@@@ LOCATION SEC 15, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will CORING METHOD Rotary Wash
STRUCT. NO. XX CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Station XX
Core Diameter 2.0 in
BORING NO. **BSB-23**
Top of Rock Elev. 517.9
Begin Core Elev. 515.9
Station 723+11
Offset 61.5' Left
Ground Surface Elev. 556.4

Description	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE RUN 1 (-40.5' to -50.5') Light gray to gray with horizontal bedding. Weathered & porous. Highly fractured with numerous intersecting horizontal & vertical fractures.		1	100.0	12.0	n/a	831 @ -43.1'
	-45.5					
	-50.5					

Color pictures of the cores Yes Cores will be stored for examination for -
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

Notes:
1. For location of soil boring, see Sheet SH-01.

exp.	USER NAME =	DESIGNED - BAR	REVISED -
		CHECKED - VCP	REVISED -
	PLOT SCALE =	DRAWN - MTR	REVISED -
	PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS - 4
STRUCTURE NO. 099-0063
SHEET SH-46 OF SH-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	299
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

MODEL: S-44
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB-811.10 Structural\WB Hickory\Sheet\0990063-60W35-044-BOR4.dgn

3/9/2022 11:57:48 AM

Benchmark: Chiseled "□" on the east step of the southeast wingwall of WB I-80, Elev. 624.41.

Existing Structures: S.N. 099-0067 carrying I-80 Westbound over Rowell Avenue and WCL Railroad was originally constructed in 1965 as FAI Route 80, Section 99-4-1VB. The 9 span structure is approximately 634-ft bk to bk of abutment and consists of two continuous span units separated by a single span. Unit 1 consists of a four span continuous wide flange beam and reinforced concrete deck and the single span unit is similar. Unit 2 consists of a four span continuous plate girder and reinforced concrete deck. The existing bridge deck is 36-ft out to out and consists of $6\frac{1}{4}$" reinforced concrete composite slab with $2\frac{3}{4}$" latex concrete overlay. The superstructure is supported on concrete stub abutments on piles and 2-column piers on spread footings and piles. The skew is 10°04'00" forward right Unit 1 and 34°05'00" forward left Unit 2. The deck was repaired in 1999 and 2011. The existing structure shall be removed.

Stage construction shall be utilized to maintain traffic during construction.

Salvage: Existing inner railing (Standard 2399). See General Notes.

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition, with 2013 Interims

DESIGN STRESSES

f'c = 3,500 psi
f'c = 4,000 psi (Superstructure Concrete)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.068
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.125
Soil Site Class = C

NOTES

1. No free fall deck drain will be permitted in the span over the tracks or within 10 ft. of cross arms of a railroad light pole line.
2. Up to $\frac{1}{4}$ inch may be ground off the bridge deck and the bridge approach slabs.
3. For cofferdam and temporary soil retention system details, see Sheet SR-04.

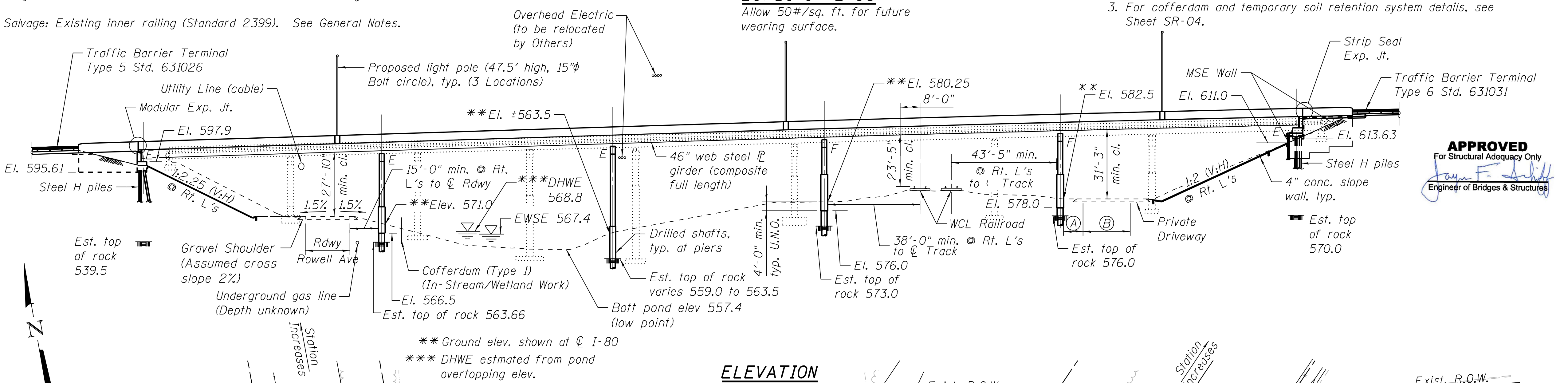
LIGHT POLE FOUNDATIONS

Sta. 761+00
Sta. 763+20
Sta. 765+8.5

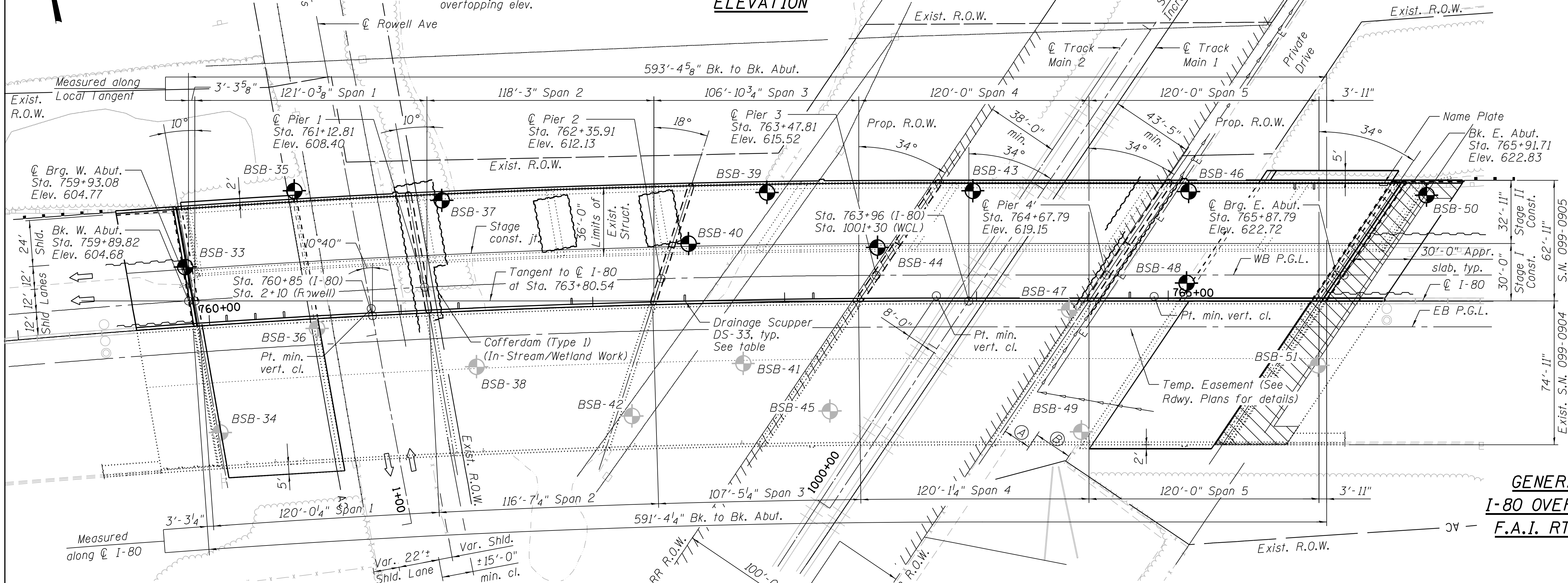
SCUPPER SPACING

Sta.	Outlet
760+09 R	Free Fall
760+24 R	Free Fall
760+39 R	Free Fall
761+30 R	Bridge Drainage System
761+89 R	Bridge Drainage System
762+48 R	Bridge Drainage System
763+15 R	Bridge Drainage System
764+80 R	Bridge Drainage System
765+66 L	Free Fall
765+76 L	Free Fall

R = scupper offset along right curb line
L = scupper offset along left curb line (when looking upstation)



ELEVATION



PLAN

Note Ⓐ: Min. 6'-2" clear from edge of 18' permanent access easement.
Note Ⓑ: 18'-0" wide permanent access easement.

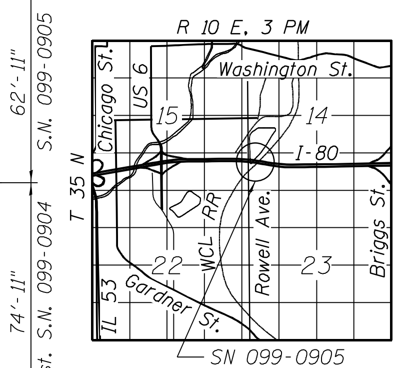
APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

STATE OF ILLINOIS
VINOD C. PATEL
081-004528
CHICAGO, IL
LICENSED STRUCTURAL ENGINEER

Signed:
Date: 3/10/2022
Exp: 11/30/2022
Sheets: 1 thru 64

LEGEND

- Soil Boring
- Temp. Easement
- Permanent Easement
- Approximate Limits of Reinforced Soil Mass
- Exist. R.O.W.
- Prop. R.O.W.
- Cofferdam or Temporary Soil Retention System



LOCATION SKETCH

GENERAL PLAN & ELEVATION
I-80 OVER ROWELL AVE. & WCL RR
F.A.I. RTE. 80 - SEC. 2013-009B
WILL COUNTY
STA. 760+85.00
STRUCTURE NO. 099-0905 (WB)

exp.

USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - HBJ	REVISED -	
PLOT DATE =	CHECKED - CCE	REVISED -	

SHEET SR-01 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	300

CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

FILE NAME:
3/9/2022 1:12:35 PM