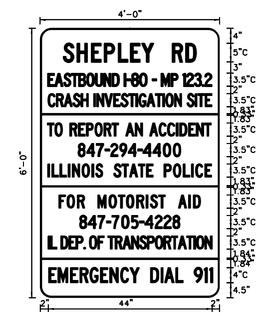
SIGN DETAIL
1:30



SIGN NUMBER	3-EB-026-G
WIDTH x HGHT.	4'-0" x 6'-0"
BORDER WIDTH	0.33"
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: AP
	COLOR: Blue
LEGEND/BORDER	TYPE: ZZ
	COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT

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

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

																									LENGTH	SERIES/SIZE
S	H	E	P	L	E	Y		R	D																	C 2000
6.2	9.8	13.7	17.1	20.9	24.2	27.2	30.4	35.4	39																44	5
E	A	S	T	B	O	U	N	D		I	-	8	0		-		M	P		1	2	3	.	2		C 2000
2	3.9	6.3	8.3	10.3	12.4	14.8	17	19.2	21.2	24.6	23.1	24.5	26.6	28.7	29.9	31.2	32.4	35	37	38.2	39.2	41.3	43.4	44	44	3.5
C	R	A	S	H		I	N	V	E	S	T	I	G	A	T	I	O	N		S	I	T	E			C 2000
2.1	4.3	6.4	8.8	11	13	14.4	15.2	17.3	19.7	21.7	23.8	25.7	26.5	28.6	31	32.9	33.7	36.1	38	39.4	41.6	42.3	44.3		44.1	3.5
T	O		R	E	P	O	R	T		A	N		A	C	C	I	D	E	N	T						C 2000
2	4	6	8	10.3	12.4	14.7	17.2	19.3	21.1	23	25.5	27.5	29.4	31.9	34.2	36.6	37.5	39.8	41.9	44.2					44	3.5
8	4	7	-	2	9	4	-	4	4	0	0															C 2000
10.2	12.5	15.1	17.4	19	21.4	23.6	26.2	27.7	30.3	33.1	35.8														27.7	3.5
I	L	L	I	N	O	I	S		S	T	A	T	E		P	O	L	I	C	E						C 2000
2	3.2	5.4	7.6	8.7	11.2	13.9	14.9	16.8	19.8	22	24	26.4	28.6	30.4	33.3	35.8	38.4	40.6	41.7	44.3					44.1	3.5
F	O	R		M	O	T	O	R	I	S	T		A	I	D											C 2000
5	7.3	10	12	15.5	18.5	21	23.2	25.9	28.5	29.6	31.9	33.6	37.1	39.9	41.1										38.1	3.5
8	4	7	-	7	0	5	-	4	2	2	8															C 2000
10.6	12.9	15.5	17.8	19.3	21.9	24.5	26.7	28.2	30.9	33.2	35.6														27	3.5
I	L		D	E	P	.		O	F		T	R	A	N	S	P	O	R	T	A	T	I	O	N		C 2000
2.1	2.8	4.6	5.5	7.7	9.6	11.7	12.3	13.2	15.5	17.3	18.2	20.1	22.2	24.6	26.7	28.8	30.9	33.2	35.2	37.1	39.4	41.3	42	44.2	44.1	3.5
E	M	E	R	G	E	N	C	Y		D	I	A	L		9	1	1									C 2000
2.3	4.9	8.1	10.7	13.4	16.2	18.7	21.6	24.1	26.7	29.6	32.5	33.4	36.4	38.4	41.4	44.1	45.5								44.1	4

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401118002/01-Stantec/CAD/ML-01_62P71/04-Sheets/09-Signing/D162P71-sht-sign-006.dgn

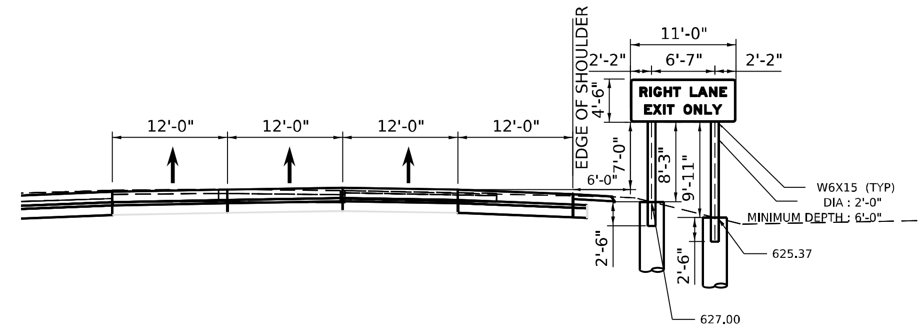
Stantec

USER NAME = dbook	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/16/2023	DATE -	REVISED -	

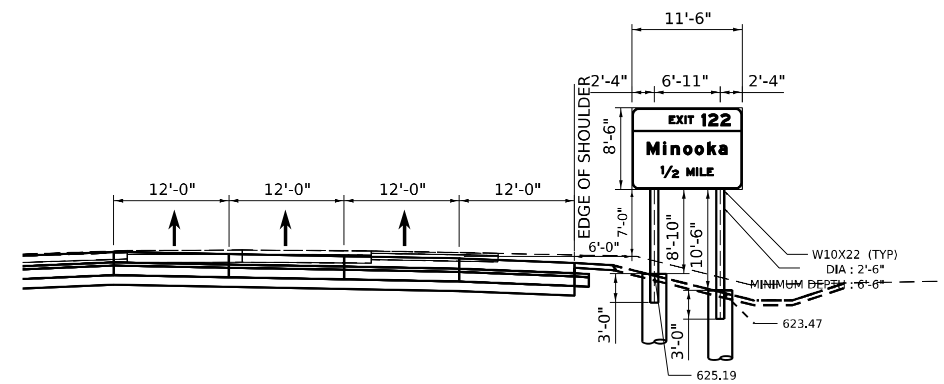
SIGNING DETAIL

SCALE: SHEET 7 OF 11 SHEETS STA. TO STA.

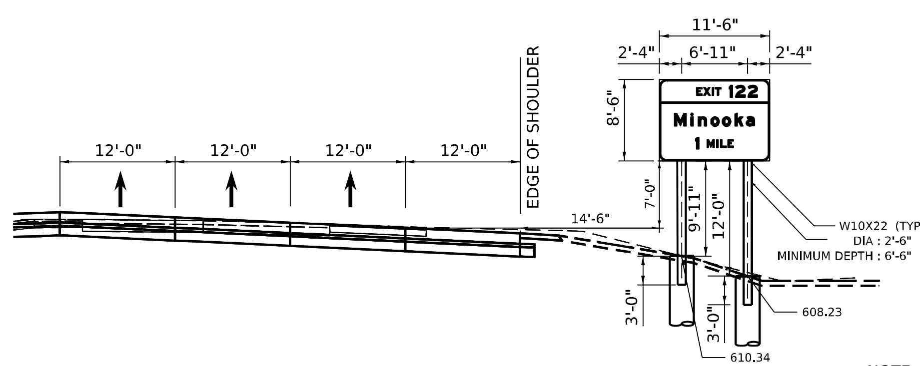
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	201
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT		



PROPOSED BREAKAWAY SIGN SUPPORT
WB I–80 STA. 157+00
(LOOKING WEST)

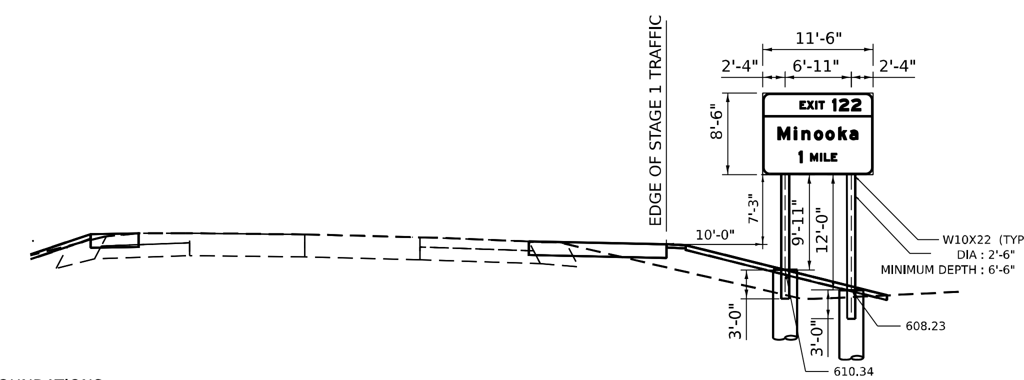


PROPOSED BREAKAWAY SIGN SUPPORT
WB I–80 STA. 161+00
(LOOKING WEST)



NOTE: PROPOSED SIGN PANEL, SIGN SUPPORTS, AND SIGN FOUNDATIONS FOR SIGN AT STA. 186+00 TO BE PLACED PRIOR TO STAGE 1.

PROPOSED BREAKAWAY SIGN SUPPORT
LOCATION FOR FINAL CONDITION
WB I–80 STA. 186+00
(LOOKING WEST)



FOR REFERENCE
PROPOSED BREAKAWAY SIGN SUPPORT
LOCATION FOR STAGE 1 TRAFFIC
WB I–80 STA. 186+00
(LOOKING WEST)

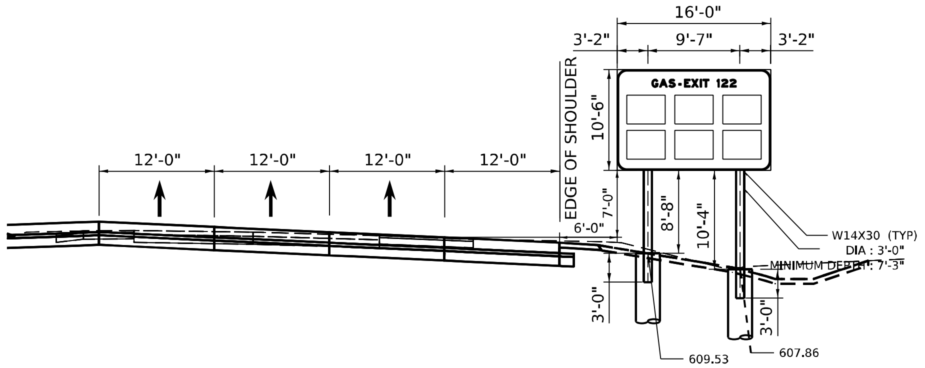
MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401118002/01-Stantec/CADD/ML-01_62P71/04-Sheets/09-Signing/D162P71-sht-sign-007.dgn

Stantec	USER NAME = dbook	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN -	REVISED -	
	PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -	
	PLOT DATE = 3/16/2023	DATE -	REVISED -	

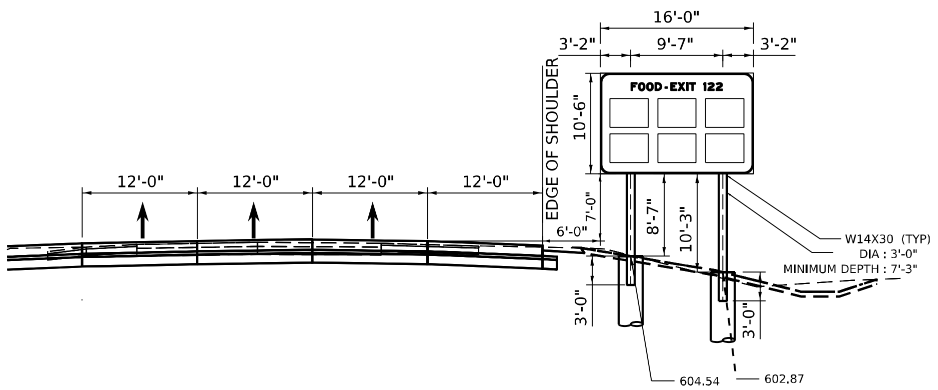
SIGN STRUCTURES
SIGN PLACEMENT DETAILS

SCALE: SHEET 8 OF 11 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	202
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT		



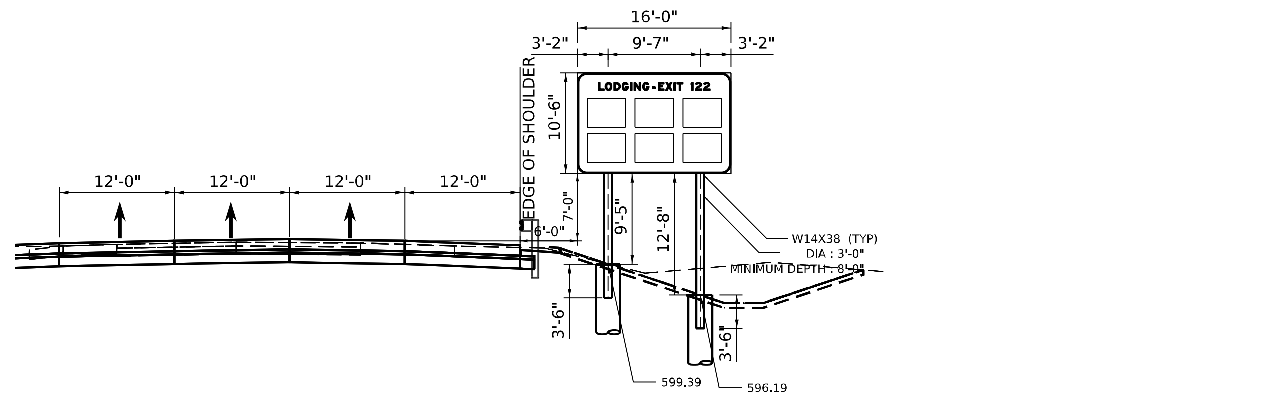
PROPOSED BREAKAWAY SIGN SUPPORT
WB I–80 STA. 190 + 00
(LOOKING WEST)



PROPOSED BREAKAWAY SIGN SUPPORT
WB I–80 STA. 200 + 00
(LOOKING WEST)

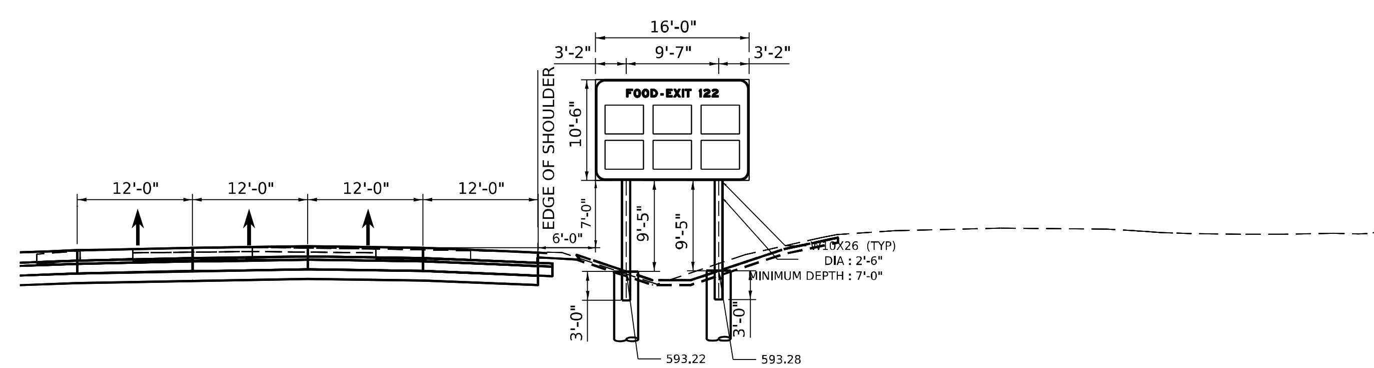
Stantec	USER NAME = dbook	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SIGN STRUCTURES SIGN PLACEMENT DETAILS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			I-80	2021-154-R	WILL	477	203
	PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -			CONTRACT NO. 62P71				
	PLOT DATE = 3/16/2023	DATE -	REVISED -		SCALE: SHEET 9 OF 11 SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT				

MODEL: Default
FILE NAME: pw:\\transystems-pw.bentley.com:transyscorp-pw1-hosted\Documents\Projects_2018\CH4011401180022\01-Stantec\CAD\ML-01_62P71\04-Sheets\09-Signing\D162P71-sht-sign-008.dgn



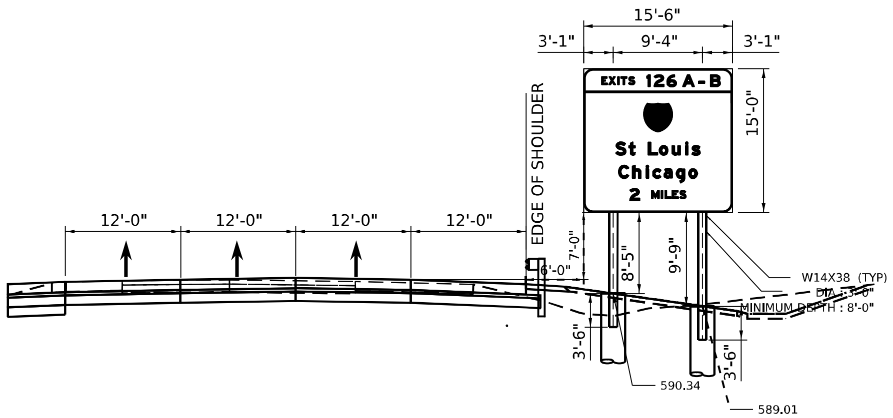
PROPOSED BREAKAWAY SIGN SUPPORT
WB I–80 STA. 206 + 00
(LOOKING WEST)

NOTE: EXISTING SIGN PANEL, SIGN SUPPORTS, AND SIGN FOUNDATIONS FOR EXISTING SIGN AT STA. 206+26 TO BE REMOVED PRIOR TO STAGE 1.

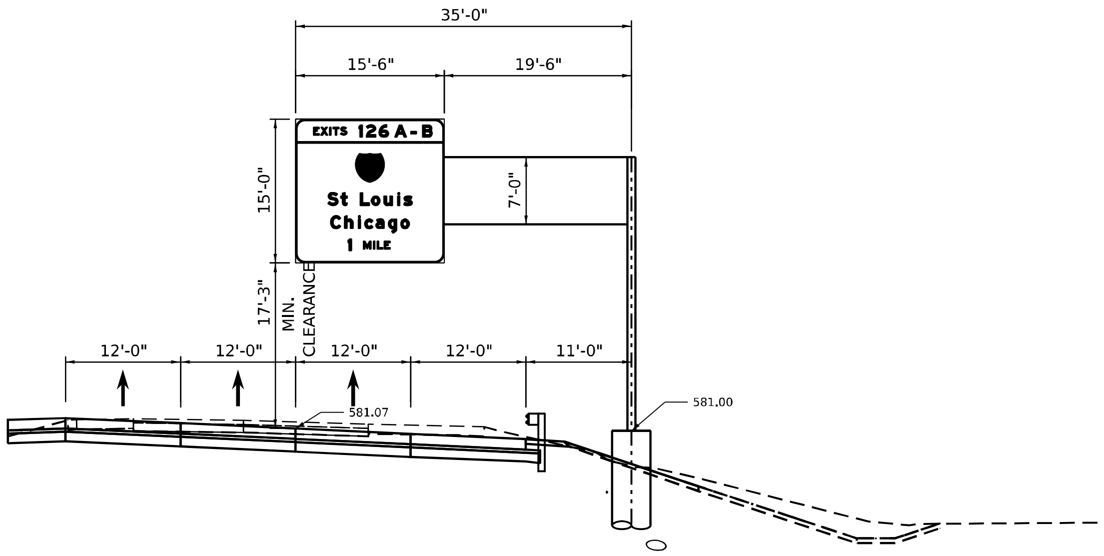


PROPOSED BREAKAWAY SIGN SUPPORT
WB I–80 STA. 216 + 00
(LOOKING WEST)

Stantec	USER NAME = dbook	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SIGN STRUCTURES SIGN PLACEMENT DETAILS	F.A.I. RTE.: I-80 / SECTION: 2021-154-R / COUNTY: WILL / TOTAL SHEETS: 477 / SHEET NO.: 204
		DRAWN -	REVISED -			CONTRACT NO. 62P71
	PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -		SCALE: SHEET 10 OF 11 SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT
	PLOT DATE = 3/16/2023	DATE -	REVISED -			

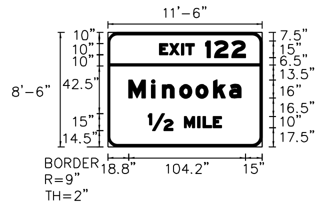


PROPOSED BREAKAWAY SIGN SUPPORT
EB I–80 STA. 225 + 50
(LOOKING EAST)



PROPOSED CANTILEVER SIGN SUPPORT
S.N. 1C099I080R124.9
EB I–80 STA. 285 + 35
(LOOKING EAST)

SIGN DETAIL
1:100



SIGN NUMBER	MOT-1-G	
WIDTH x HGHT.	11'-6" x 8'-6"	
BORDER WIDTH	2"	
CORNER RADIUS	9"	
MOUNTING	Ground	
BACKGROUND	TYPE:	ZZ
	COLOR:	Green
LEGEND/BORDER	TYPE:	ZZ
	COLOR:	White/White

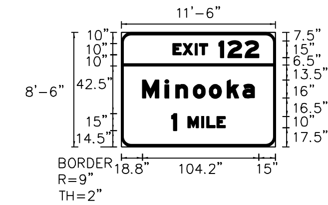
SYMBOL	ROT	X	Y	WID	HT

Panel Style: guide_fwy_intermediate_IDOT.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	1	2	2		EM 2000
46.4	55.2	66	69.8	87.2	95.4	110.9	76.7	10,15
M	i	n	o	o	k	a		EM 2000
18.8	39.2	48.8	64.3	78.7	94.5	108.6	100.3	16/12
1/2	M	I	L	E				EM 2000
36.4	68.3	80.4	85.2	94.2			65.3	15,10

SIGN DETAIL
1:100



SIGN NUMBER	MOT-2-G	
WIDTH x HGHT.	11'-6" x 8'-6"	
BORDER WIDTH	2"	
CORNER RADIUS	9"	
MOUNTING	Ground	
BACKGROUND	TYPE:	ZZ
	COLOR:	Green
LEGEND/BORDER	TYPE:	ZZ
	COLOR:	White/White

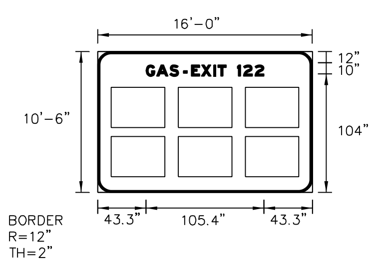
SYMBOL	ROT	X	Y	WID	HT

Panel Style: guide_fwy_intermediate_IDOT.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	1	2	2		EM 2000
46.4	55.2	66	69.8	87.2	95.4	110.9	76.7	10,15
M	i	n	o	o	k	a		EM 2000
18.8	39.2	48.8	64.3	78.7	94.5	108.6	100.3	16/12
1	M	I	L	E				EM 2000
45.1	59.6	71.7	76.5	85.5			47.8	15,10

SIGN DETAIL
1:100



SIGN NUMBER	MOT-3-G	
WIDTH x HGHT.	16'-0" x 10'-6"	
BORDER WIDTH	2"	
CORNER RADIUS	12"	
MOUNTING	Ground	
BACKGROUND	TYPE:	AP
	COLOR:	Blue
LEGEND/BORDER	TYPE:	ZZ
	COLOR:	White/White

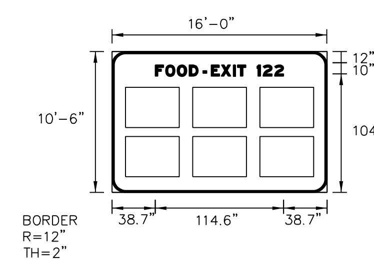
SYMBOL	ROT	X	Y	WID	HT

Panel Style: guide_fwy_specific-services-IDOT.ssi
Dimensions are in inches.tenths
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

														LENGTH	SERIES/SIZE
G	A	S		–		E	X	I	T		1	2	2		EM 2000
43.3	52.8	64.4		76.5		84	92.8	103.6	107.4		124.8	130.3	140.6	105.4	10

SIGN DETAIL
1:100



SIGN NUMBER	MOT-4-G / MOT-6-G	
WIDTH x HGHT.	16'-0" x 10'-6"	
BORDER WIDTH	2"	
CORNER RADIUS	12"	
MOUNTING	Ground	
BACKGROUND	TYPE:	AP
	COLOR:	Blue
LEGEND/BORDER	TYPE:	ZZ
	COLOR:	White/White

SYMBOL	ROT	X	Y	WID	HT

Panel Style: guide_fwy_specific-services-IDOT.ssi
Dimensions are in inches.tenths
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

															LENGTH	SERIES/SIZE
F	O	O	D		–		E	X	I	T		1	2	2		EM 2000
38.7	47.8	58.2	69		81.1		88.6	97.4	108.2	112		129.4	134.9	145.2	114.6	10

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/ML-01_62P71/04-Sheets/09-Signing/D162P71-sht-sign-011.dgn

Stantec

USER NAME = dbook	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / In.	CHECKED -	REVISED -
PLOT DATE = 3/16/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

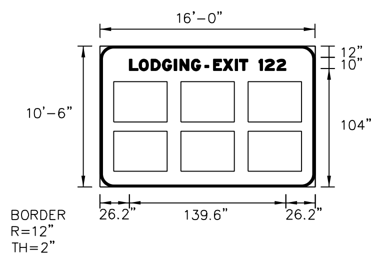
TEMPORARY INFORMATION
SIGNING DETAIL

SCALE: | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	206

CONTRACT NO. 62P71
ILLINOIS | FED. AID PROJECT

SIGN DETAIL
1:100



BORDER
R=12"
TH=2"

Panel Style: guide_fwy_specific-services-IDOT.ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

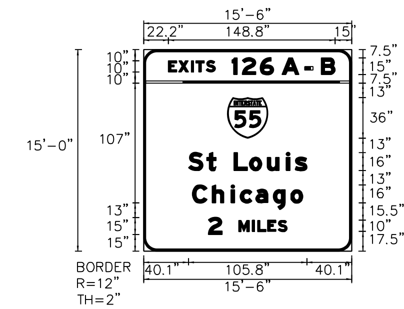
SIGN NUMBER	MOT-5-G
WIDTH x HGHT.	16'-0" x 10'-6"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Ground
BACKGROUND	TYPE: AP
	COLOR: Blue
LEGEND/BORDER	TYPE: ZZ
	COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT

LETTER POSITIONS (X)

L	O	D	G	I	N	G		–		E	X	I	T		1	2	2				LENGTH	SERIES/SIZE
26.2	34.8	45.6	55.7	66.2	71	81.5		93.6		101.1	109.9	120.7	124.5		141.9	147.4	157.7				139.6	EM 2000 10

SIGN DETAIL
1:100



BORDER
R=12"
TH=2"

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

Letter locations are panel edge to lower left corner

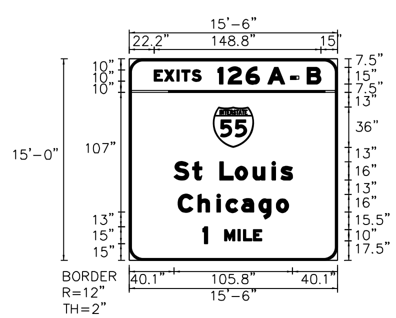
SIGN NUMBER	MOT-7-G
WIDTH x HGHT.	15'-6" x 15'-0"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Ground
BACKGROUND	TYPE: ZZ
	COLOR: Green
LEGEND/BORDER	TYPE: ZZ
	COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT
M1_1	0	75	101	36	36

LETTER POSITIONS (X)

											LENGTH	SERIES/SIZE
E	X	I	T	S	1	2	6	A	–	B		EM 2000
22.2	31.3	42.6	46.8	56	79.1	88.1	104.1	123.7	143.9	158.9	148.8	10,15
S	t		L	o	u	i	s					EM 2000
40.1	56.4	64.8	80.8	94.7	110.5	127.5	135.3				105.8	16/12
C	h	i	c	a	g	o						EM 2000
43.7	61.2	78.1	86.3	100.4	115.9	131.4					98.6	16/12
2	M	I	L	E	S							EM 2000
57.8	85	97.1	101.9	110.9	120.1						70.4	15,10

SIGN DETAIL
1:100



BORDER
R=12"
TH=2"

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

Letter locations are panel edge to lower left corner

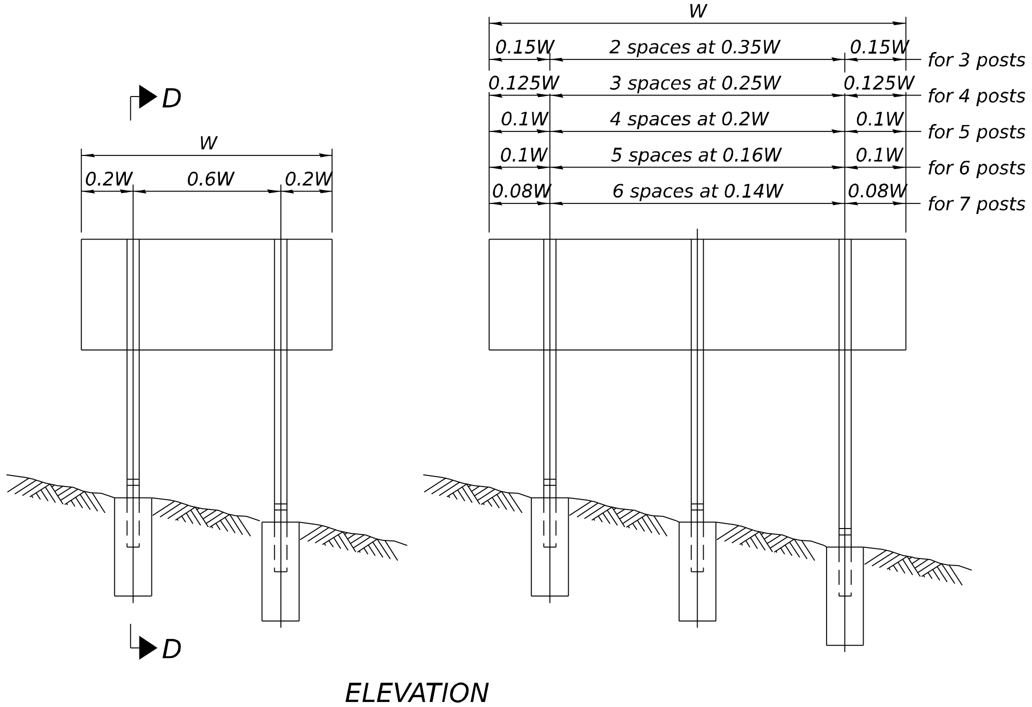
SIGN NUMBER	MOT-8-G
WIDTH x HGHT.	15'-6" x 15'-0"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Overhead
BACKGROUND	TYPE: ZZ
	COLOR: Green
LEGEND/BORDER	TYPE: ZZ
	COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT
M1_1	0	75	101	36	36

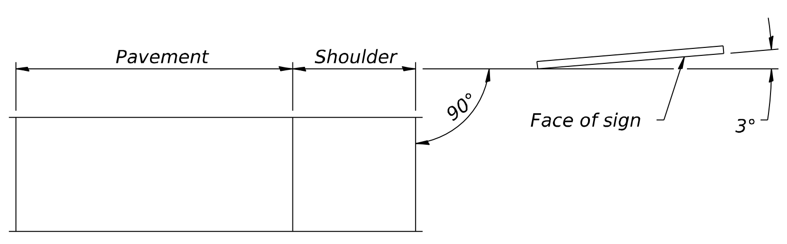
LETTER POSITIONS (X)

											LENGTH	SERIES/SIZE
E	X	I	T	S	1	2	6	A	–	B		EM 2000
22.2	31.3	42.6	46.8	56	79.1	88.1	104.1	123.7	143.9	158.9	148.8	10,15
S	t		L	o	u	i	s					EM 2000
40.1	56.4	64.8	80.8	94.7	110.5	127.5	135.3				105.8	16/12
C	h	i	c	o	g	o						EM 2000
43.7	61.2	78.1	86.3	100.4	115.9	131.4					98.6	16/12
1	M	I	L	E								EM 2000
65.5	85	97.1	101.9	110.9							52.8	15,10

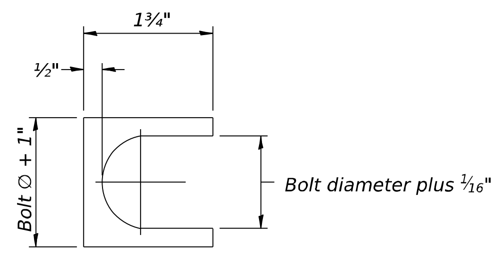
SIGN NAME	PROPOSED LOCATION STATION	PROPOSED LOCATION OFFSET	TYPE	DESCRIPTION	PROPOSED PANEL DIMENSIONS WIDTH (FT)	PROPOSED PANEL DIMENSIONS HEIGHT (FT)	TEMPORARY INFORMATION SIGNING (SQ FT)
MOT-1-G	161+00	LT	PANEL	GUIDE SIGN (EXIT 122 1/2 MILE)	11.5	8.5	97.75
MOT-2-G	186+00	LT	PANEL	GUIDE SIGN (EXIT 122 1 MILE)	11.5	8.5	97.75
MOT-3-G	190+00	LT	PANEL	GENERAL SERVICE SIGN (GAS EXIT 122)	16.0	10.5	168
MOT-4-G	200+00	LT	PANEL	GENERAL SERVICE SIGN (FOOD EXIT 122)	16.0	10.5	168
MOT-5-G	206+00	LT	PANEL	GENERAL SERVICE SIGN (LODGING EXIT 122)	16.0	10.5	168
MOT-6-G	216+00	LT	PANEL	GENERAL SERVICE SIGN (FOOD EXIT 122)	16.0	10.5	168
MOT-7-G	225+50	RT	PANEL	GUIDE SIGN (EXIT 126 A-B 2 MILES)	15.5	15.0	232.5
MOT-8-G	285+35	RT	PANEL	GUIDE SIGN (EXIT 126 A 1 MILE)	15.5	15.0	232.5



ELEVATION

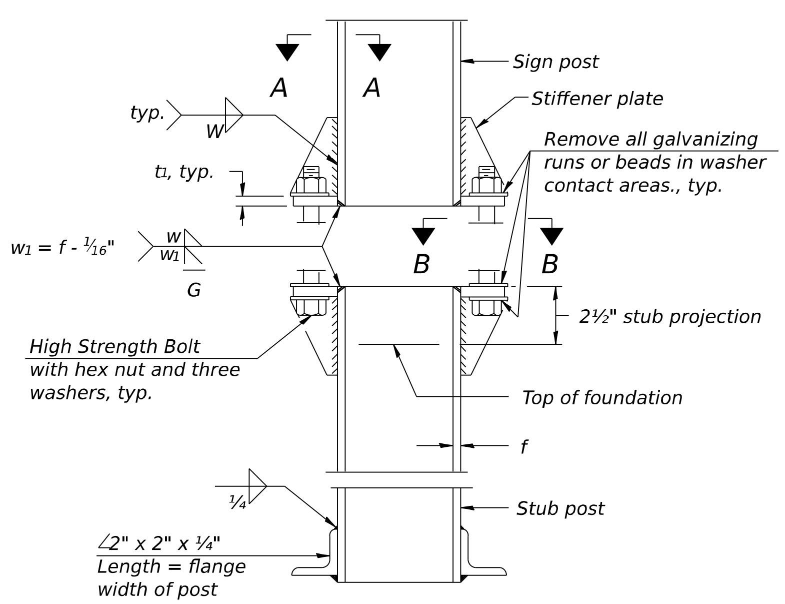


LOCATION SKETCH

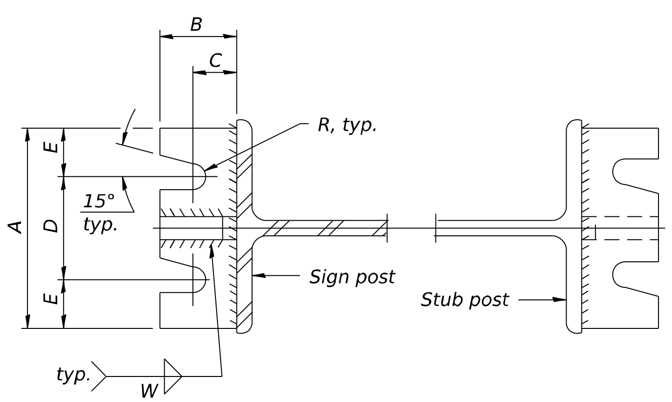


SHIM DETAIL

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

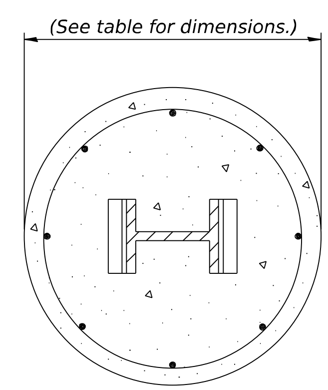


ELEVATION
SIGN POST & STUB POST

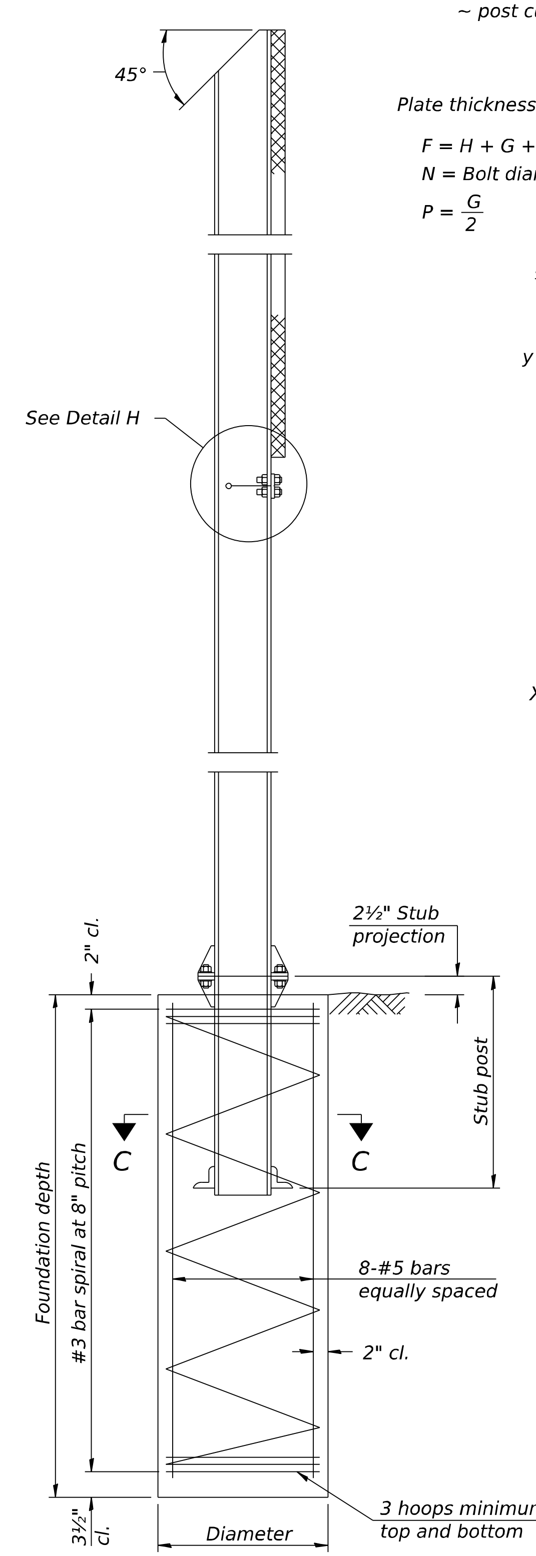


SECTION A-A

SECTION B-B



SECTION C-C



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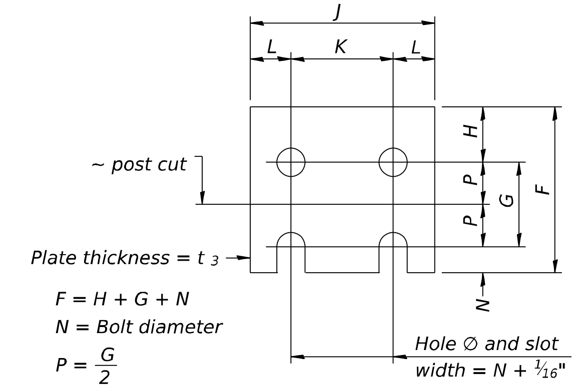
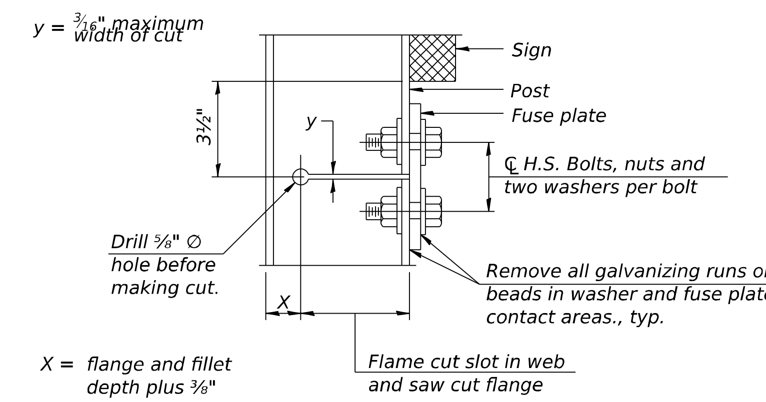


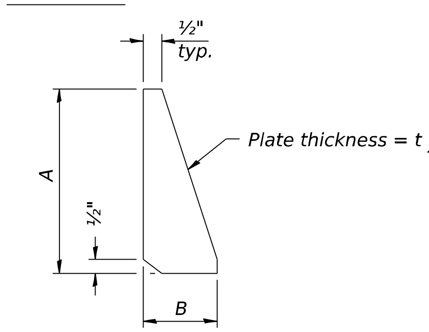
FUSE PLATE DETAIL
(Install with notches down.)

FUSE PLATE DATA

N = Bolt Diameter	G	H
½"	2"	1⅛"
⅝"	2¼"	1¼"
¾"	2½"	1⅜"
⅞"	2¾"	1½"
1"	3"	1⅝"
1⅛"	3¼"	1¾"
1¼"	3½"	1⅞"



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)

USER NAME = dbook	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/18/2023	DATE -	REVISED -	

Stantec

BREAK-AWAY WIDE FLANGE
STEEL SIGN POST DETAILS

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

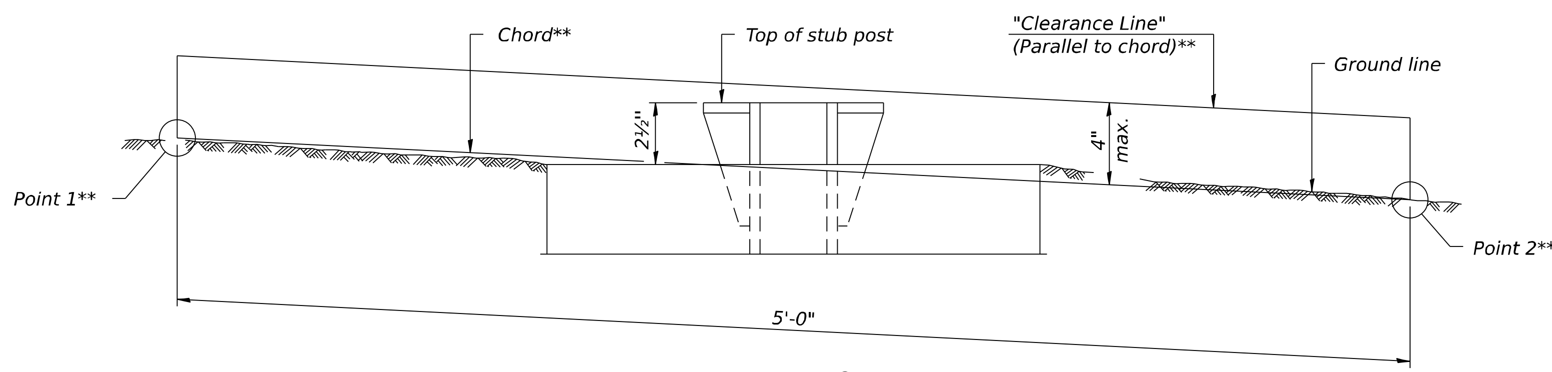
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	208
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT		

MODEL: Default

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'-8½"	79'-0"	78	2'-3"	⅝" x 3¼"	6"	2¼"	1¼"	3½"	1¼"	¾"	½"	11/32"	¼"	4"	2¼"	⅞"	¼"
W6x15	2'-0"	6'-0"	0.70	5'-9"	1'-8½"	79'-0"	78	2'-6"	⅝" x 3¼"	6"	2¼"	1¼"	3½"	1¼"	¾"	½"	11/32"	¼"	6"	3½"	1¼"	⅜"
W8x18	2'-0"	6'-0"	0.70	5'-9"	1'-8½"	79'-0"	78	2'-6"	¾" x 3¾"	6"	2½"	1⅜"	3¼"	1⅜"	1"	½"	13/32"	5/16"	5¼"	2¾"	1¼"	⅜"
W10x22	2'-6"	6'-6"	1.18	6'-3"	2'-2½"	105'-0"	92	3'-0"	¾" x 3¾"	6"	2½"	1⅜"	3¼"	1⅜"	1"	½"	13/32"	5/16"	5¾"	2¾"	1½"	½"
W10x26	2'-6"	7'-0"	1.27	6'-9"	2'-2½"	112'-0"	98	3'-0"	⅞" x 4"	7"	2¾"	1½"	4"	1½"	1"	¾"	15/32"	⅜"	5¾"	2¾"	1½"	⅝"
W12x26	2'-6"	7'-9"	1.41	7'-6"	2'-2½"	119'-0"	107	3'-0"	⅞" x 4"	7"	2¾"	1½"	4"	1½"	1"	¾"	15/32"	⅜"	6½"	3½"	1½"	⅝"
W14x30	3'-0"	7'-3"	1.90	7'-0"	2'-8½"	145'-0"	113	3'-0"	⅞" x 4"	7"	2¾"	1½"	4"	1½"	1"	¾"	15/32"	⅜"	6¾"	3½"	1⅝"	½"
W14x38	3'-0"	8'-0"	2.09	7'-9"	2'-8½"	153'-0"	122	3'-6"	1" x 4½"	7½"	3"	1¾"	4"	1¾"	1¼"	¾"	17/32"	⅜"	6¾"	3½"	1⅝"	½"
W16x45	3'-0"	8'-6"	2.23	8'-3"	2'-8½"	162'-0"	130	3'-6"	1" x 4½"	7½"	3"	1¾"	4"	1¾"	1¼"	¾"	17/32"	⅜"	7"	3½"	1¾"	½"

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

POST	FUSE PLATE BOLT SIZE																				
	Sign Height																				
	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0''	18'-0''	19'-0''	20'-0''	21'-0''	22'-0''	23'-0''	24'-0''
W6x9	½" x 1½"	½" x 1½"	½" x 1½"	½" x 1½"	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
W6x15	½" x 1¾"	½" x 1¾"	½" x 1¾"	⅝" x 2"	⅝" x 2"	¾" x 2"	¾" x 2"	¾" x 2"	¾" x 2"	—	—	—	—	—	—	—	—	—	—	—	—
W8x18	½" x 1¾"	½" x 1¾"	½" x 1¾"	½" x 1¾"	⅝" x 2"	⅝" x 2"	¾" x 2"	¾" x 2"	¾" x 2"	¾" x 2"	—	—	—	—	—	—	—	—	—	—	—
W10x22	½" x 2"	½" x 2"	½" x 2"	½" x 2"	½" x 2"	⅝" x 2"	⅝" x 2"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	—	—	—	—	—	—	—	—
W10x26	½" x 2"	½" x 2"	½" x 2"	½" x 2"	½" x 2"	⅝" x 2¼"	⅝" x 2¼"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	—	—	—	—	—	—	—
W12x26	½" x 2"	½" x 2"	½" x 2"	½" x 2"	½" x 2"	⅝" x 2¼"	⅝" x 2¼"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	—	—	—	—	—	—
W14x30	½" x 2"	½" x 2"	½" x 2"	½" x 2"	½" x 2"	⅝" x 2"	⅝" x 2"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	—	—	—	—
W14x38	½" x 2"	½" x 2"	½" x 2"	½" x 2"	½" x 2"	⅝" x 2¼"	⅝" x 2¼"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	⅞" x 2½"	⅞" x 2½"	1" x 2¾"	1" x 2¾"	1" x 2¾"	1" x 2¾"	1" x 2¾"	1" x 2¾"	1" x 2¾"	1" x 2¾"
W16x45	—	½" x 2"	½" x 2"	½" x 2"	½" x 2"	½" x 2"	½" x 2"	⅝" x 2¼"	⅝" x 2¼"	⅝" x 2¼"	¾" x 2½"	¾" x 2½"	⅞" x 2½"	⅞" x 2½"	⅞" x 2½"	1" x 2¾"	1" x 2¾"	1" x 2¾"	1" x 2¾"	1" x 2¾"	1" x 2¾"



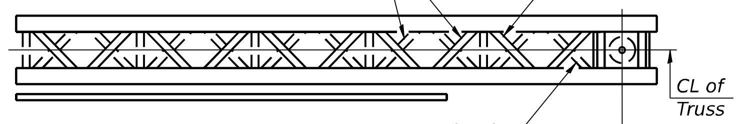
ELEVATION

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.

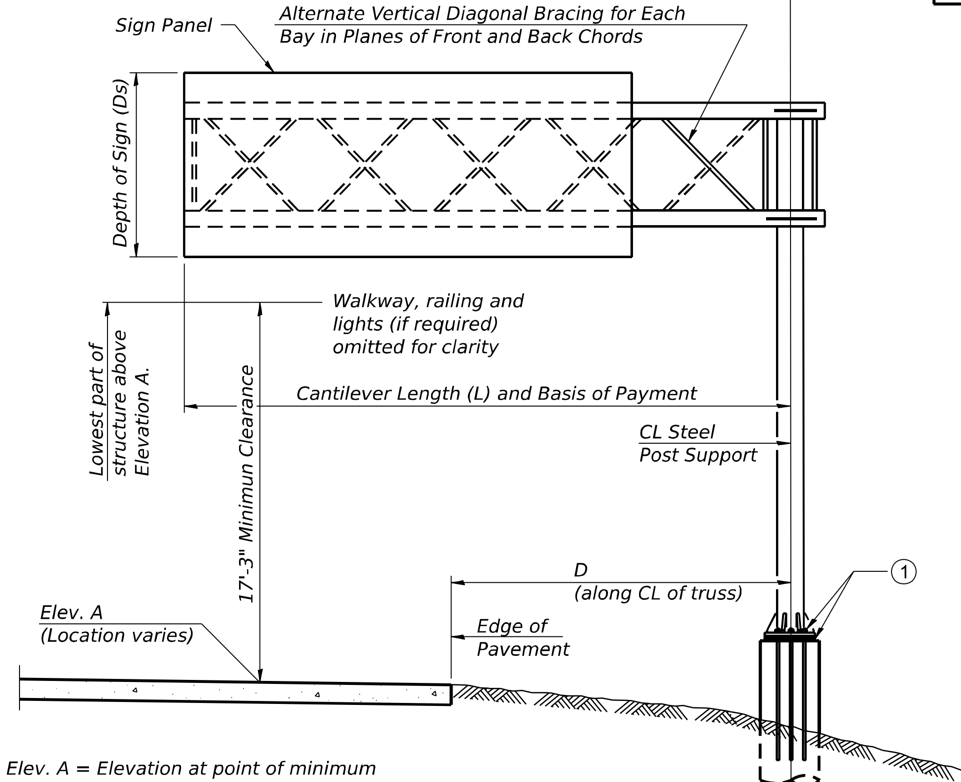
(2) Includes reinforcement bars and spiral hooping for one foundation.



TYPICAL PLAN

(Walkway not shown)

Structure Number	Station	Design Truss Type	Cantilever Length (L)	Elev. A	Dim. D	Ds	Total Sign Area
1C099I080R124.9	285+35.00	III-C-A	35'-0"	581.07	23'-0"	15'-6"	232 Sq. Ft.

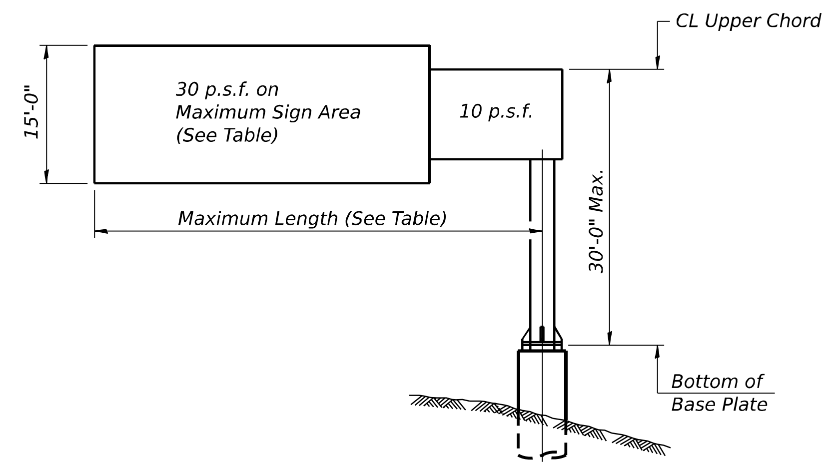


Elev. A = Elevation at point of minimum clearance to sign, walkway support or truss.

TYPICAL ELEVATION

Looking in Direction of Traffic

Truss Type	Maximum Sign Area	Maximum Length
I-C-A	170 Sq. Ft.	25 Ft.
II-C-A	340 Sq. Ft.	30 Ft.
III-C-A	400 Sq. Ft.	40 Ft.



DESIGN WIND LOADING DIAGRAM

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

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 vibrations and oscillations, consideration should be given to attaching temporary blank sign panels to the structure.

Note:
Trusses 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 trusses.

(1) After adjustments to level truss and insure adequate vertical clearance, all top and leveling nuts shall be tightened against the base plate with a minimum torque of 200 lb.-ft. Stainless steel mesh shall then be placed around the perimeter of the base plate. Secure to base plate with stainless steel banding.

* 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.

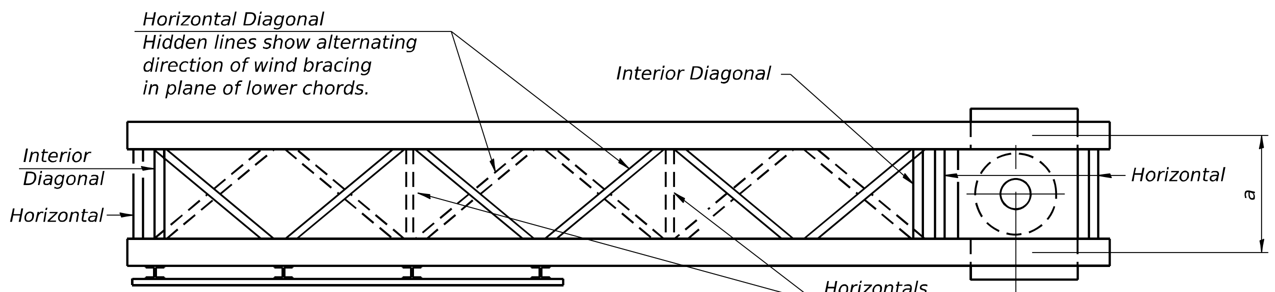
REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

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

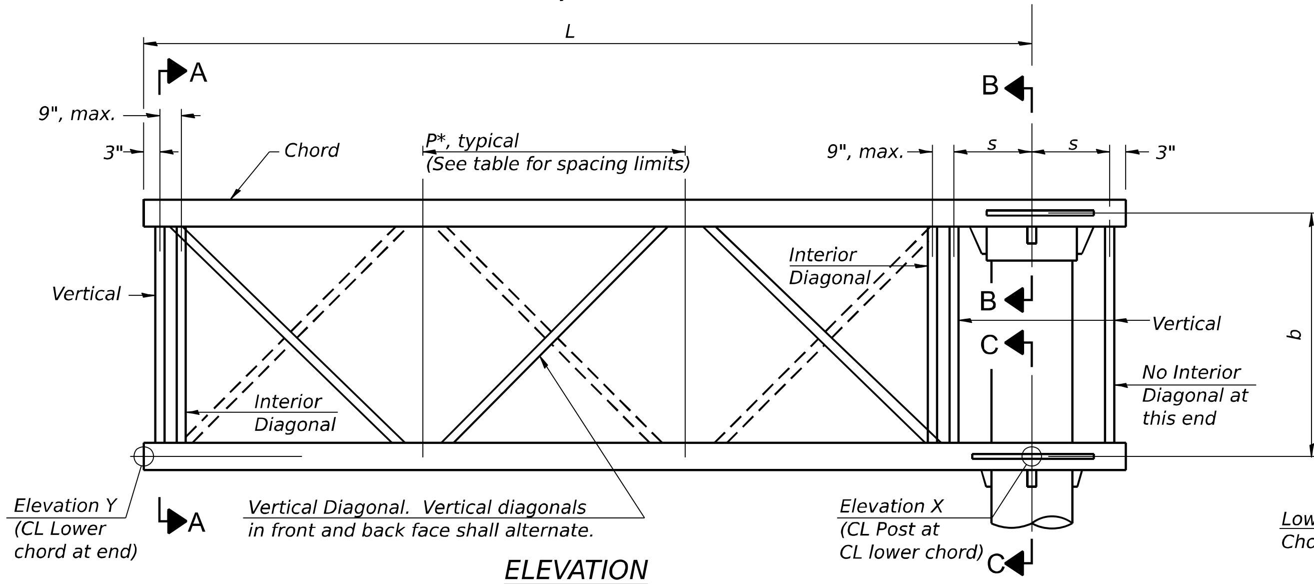
TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE III-C-A	Foot	35
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	8.3
DRILLED SHAFT IN ROCK	Cu. Yds.	1.3
REMOVE OVERHEAD SIGN STRUCTURE - CANTILEVER	Each	1
REMOVE CONCRETE FOUNDATION - OVERHEAD	Each	1

OSC-A-1 2-17-2017



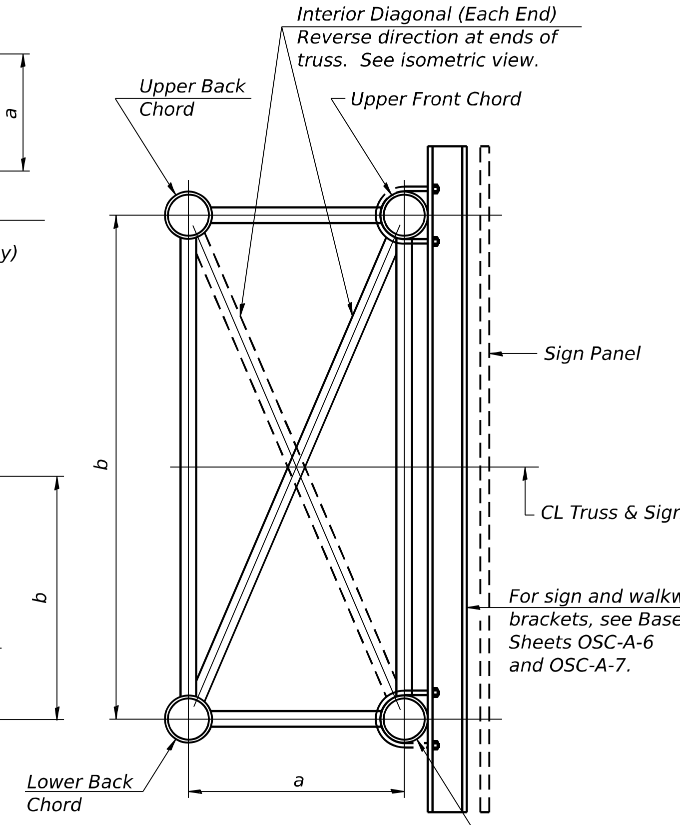
PLAN
(Walkway not shown)



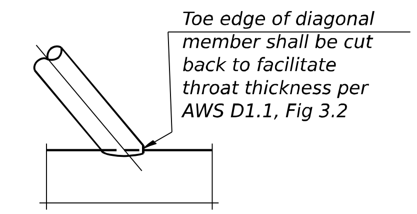
ELEVATION
(Sign and walkway omitted for clarity)

TYPICAL TRUSS UNIT
For Section B-B and Section C-C, see Base Sheet OSC-A-3.

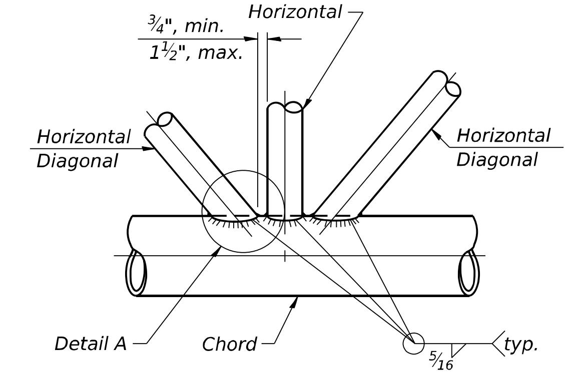
Note:
There are twice as many horizontal diagonals as there are vertical diagonals.



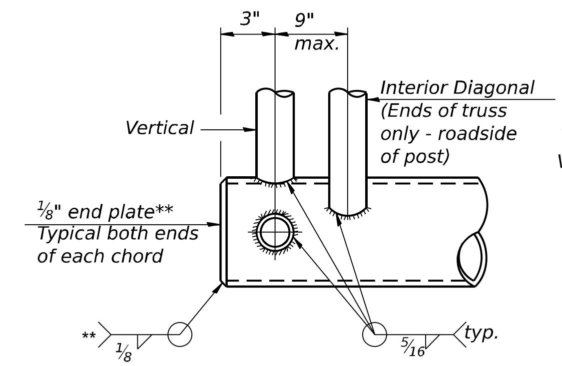
SECTION A-A



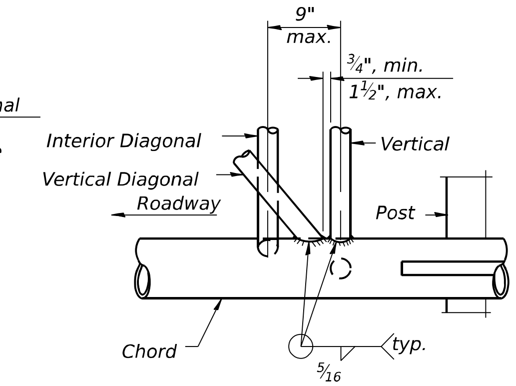
DETAIL A



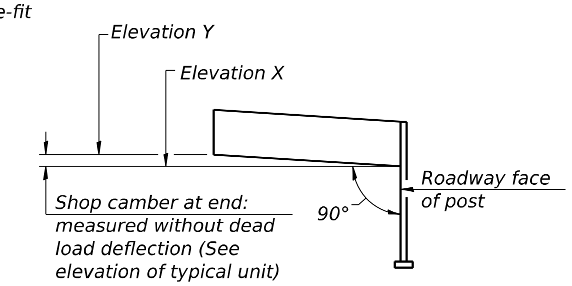
TRUSS INTERIOR JOINT DETAIL



CANTILEVER END JOINT DETAIL
** Contractor may alternatively use standard aluminum drive-fit cap to close ends.
1/2" Ø Drain hole in end plate / drive-fit cap.



POST END JOINT DETAIL



CAMBER DIAGRAM
(For Fabrication Only)

TRUSS UNIT TABLE

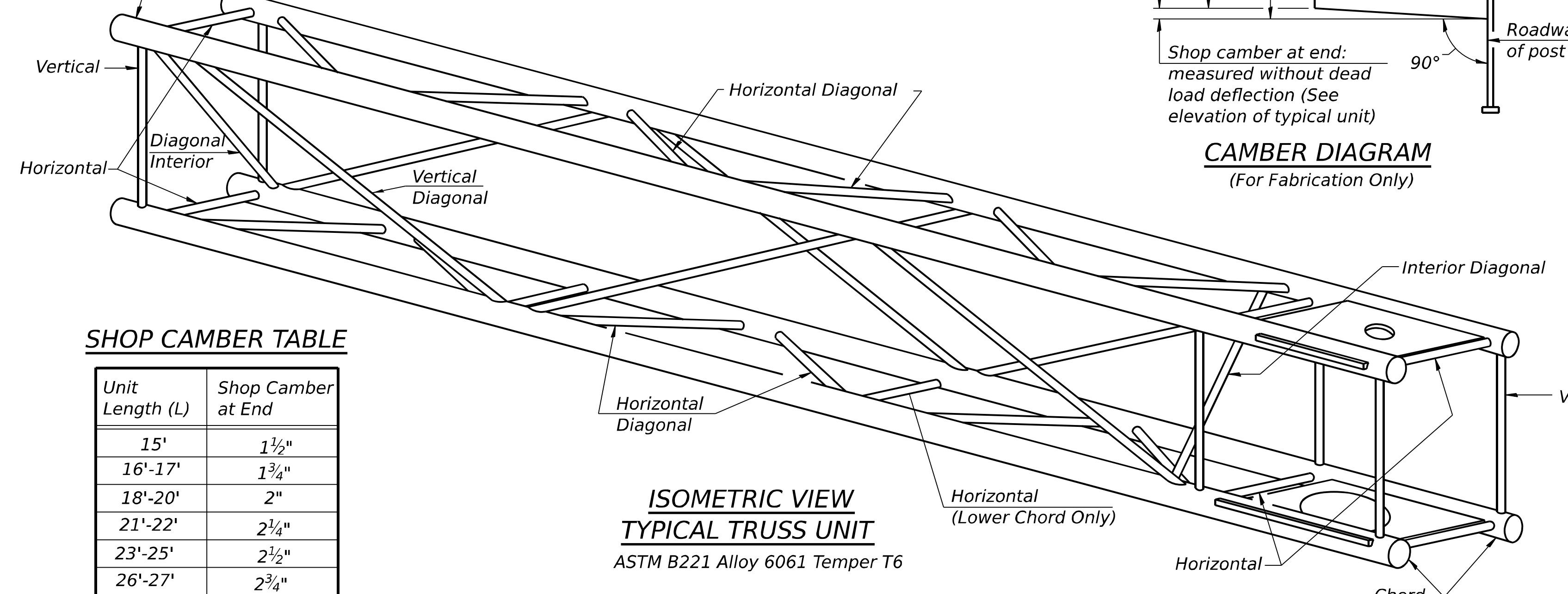
Truss Type	Dimension "a"	Dimension "b"	Dimension "s"	Limits for Panel Spacing (P)*	Up. & Low. Chord O.D.	Up. & Low. Chord Wall	Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals O.D.	Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals Wall
I-C-A	24"	54"	16"	36" min. to 48" max.	5"	5/16"	2 1/2"	5/16"
II-C-A	36"	66"	21"	42" min. to 54" max.	6 1/2"	5/16"	3 1/4"	5/16"
III-C-A (35' Max.)	36"	84"	21"	48" min. to 66" max.	7"	3/8"	3 1/2"	3/8"
III-C-A (>35' to 40')	36"	84"	21"	48" min. to 66" max.	8"	3/8"	3 1/2"	3/8"

$*P = \frac{L\text{-}s\text{-}3"}{\#\ Panels}$

Structure Number	Station	Truss Type	Design Length (L)	Number of Panels Per Unit	Panel Length (P)*
1C099I080R124.9	285+35.00	III-C-A	35'-0"	6	66"

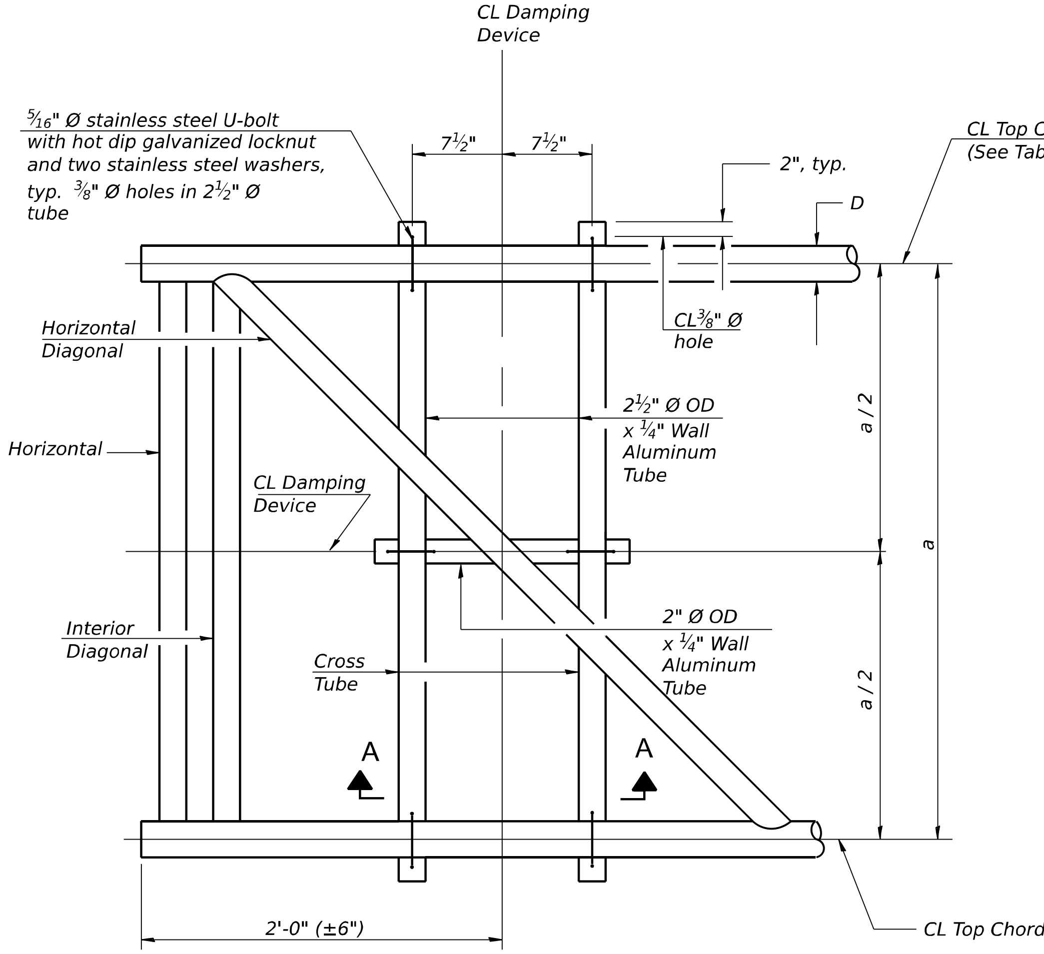
SHOP CAMBER TABLE

Unit Length (L)	Shop Camber at End
15'	1 1/2"
16'-17'	1 3/4"
18'-20'	2"
21'-22'	2 1/4"
23'-25'	2 1/2"
26'-27'	2 3/4"
28'-30'	3"
31'-32'	3 1/4"
33'-35'	3 1/2"
36'-37'	4"
38'-40'	4 1/2"

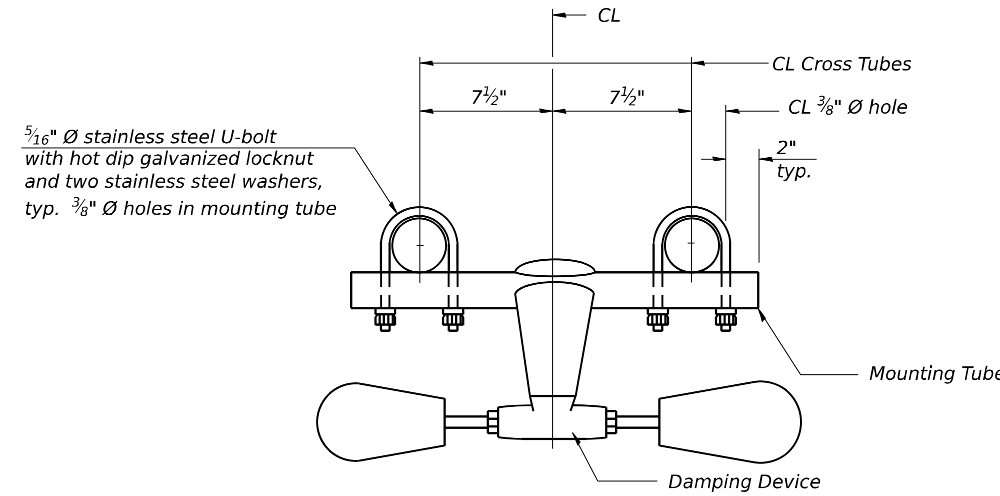


ISOMETRIC VIEW
TYPICAL TRUSS UNIT
ASTM B221 Alloy 6061 Temper T6

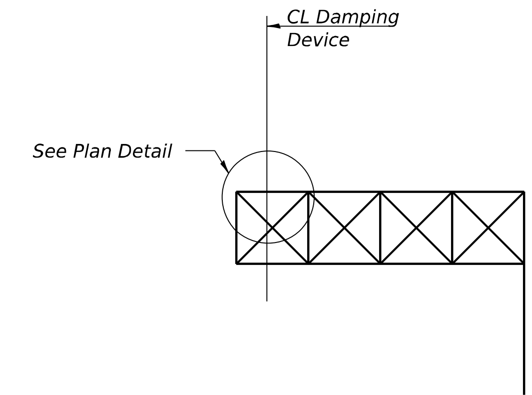
OSC-A-2 2-17-2017



PLAN DETAIL



TRUSS DAMPING DEVICE CONNECTION DETAIL



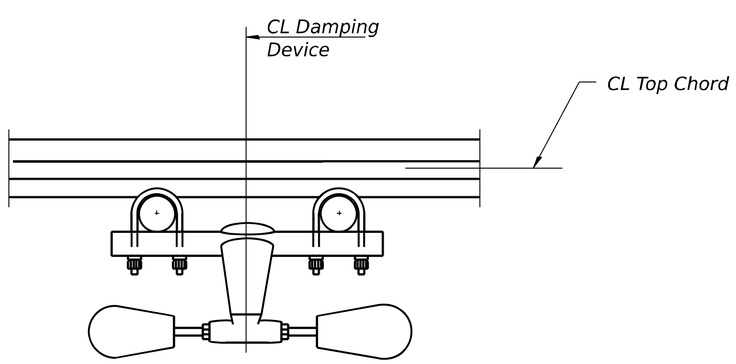
ELEVATION

Aluminum Cantilever Sign Structure

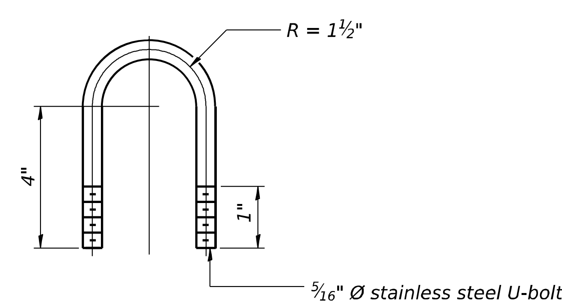
GENERAL NOTES

Damper: One damper per truss. (31 lbs. Stockbridge-Type Aluminum- 29" minimum between ends of weights)

Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6

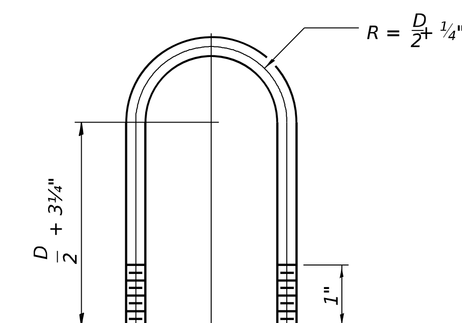


SECTION A-A



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL

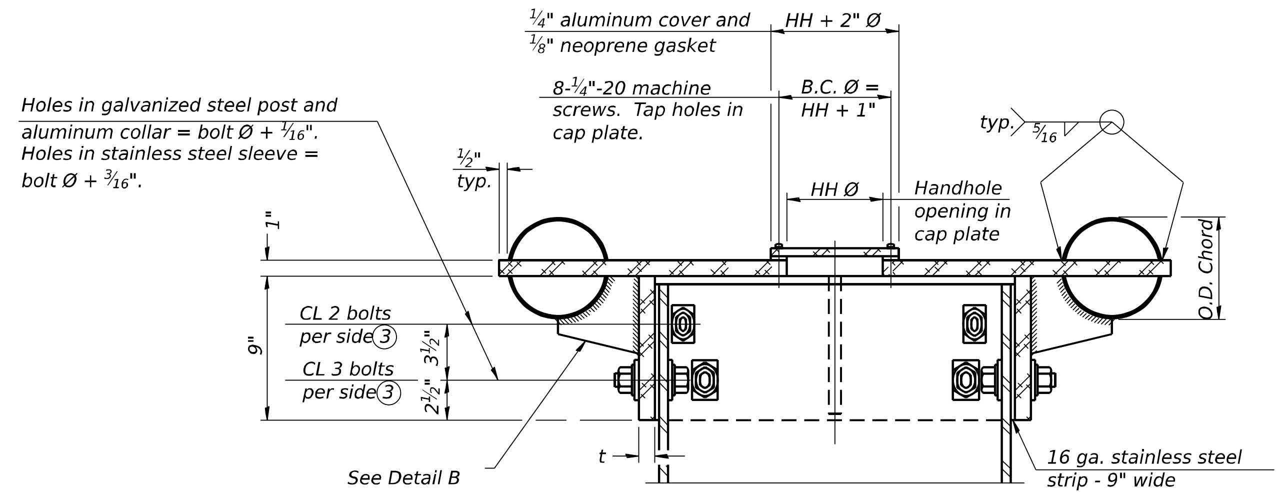
(Typical)



TOP CHORD TO CROSS TUBE U-BOLT DETAIL

(Typical)

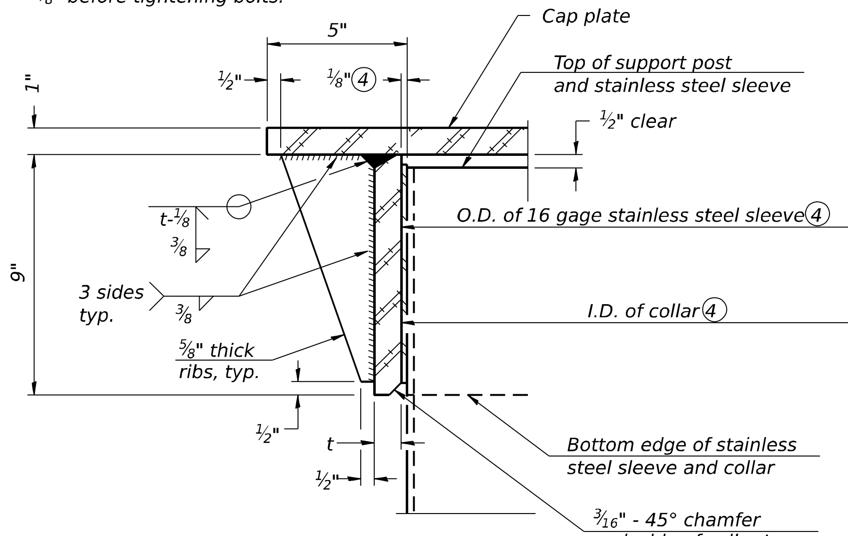
OSC-A-D 2-17-2017



SECTION B-B

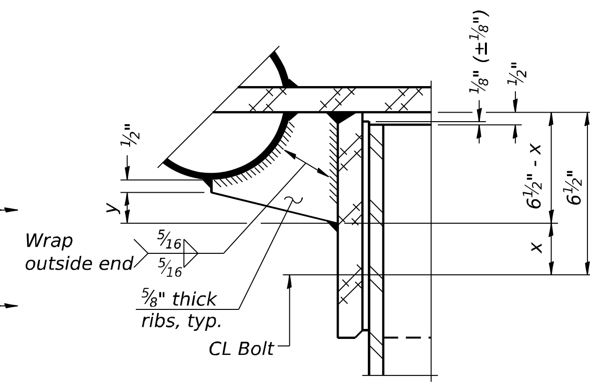
Bolts, washers (including contoured washers), and locknuts shall be stainless steel.

(4) Collar I.D. shall be manufactured to correspond to O.D. of actual galvanized post and stainless steel sleeve plus 1/8" (±1/16"). Maximum gap between post and collar at any location equals 1/8" before tightening bolts.

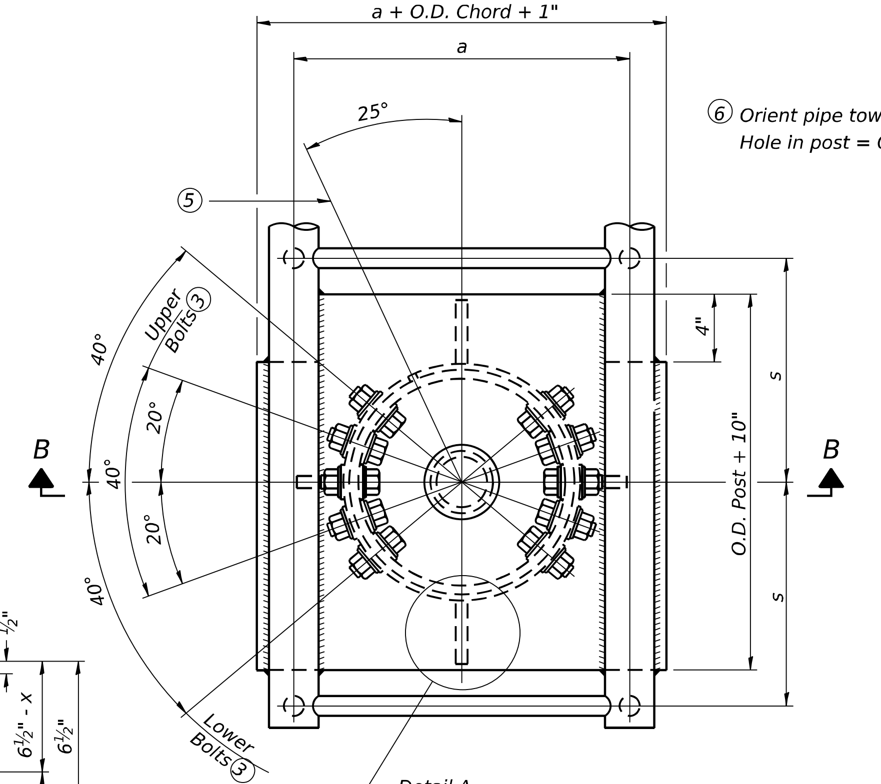


DETAIL A

(Two locations)



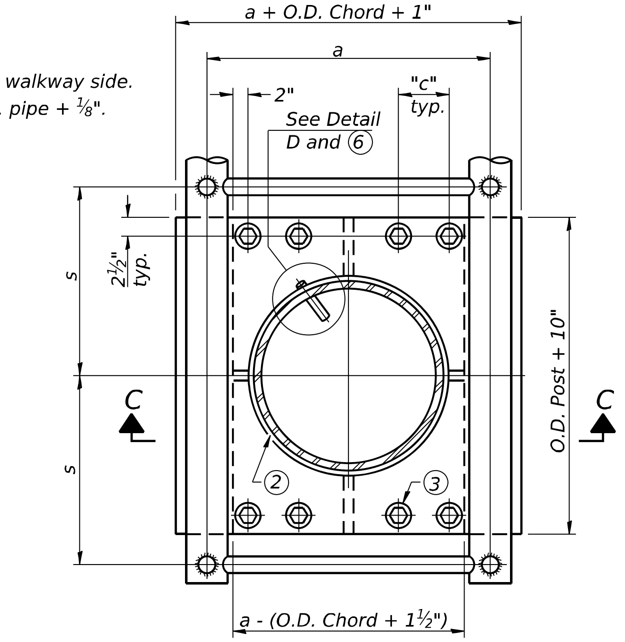
DETAIL B



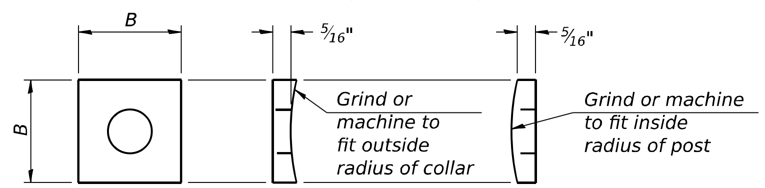
PLAN VIEW - TOP OF COLUMN

(5) Optional full penetration weld in collar. (Two locations maximum....(180° apart)....X-ray or UT 100%)

(6) Orient pipe toward walkway side. Hole in post = O.D. pipe + 1/8".

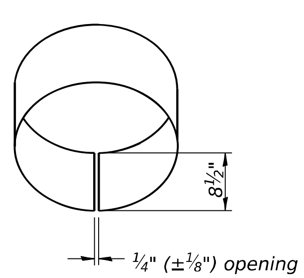


SECTION THRU POST ABOVE LOWER CHORDS



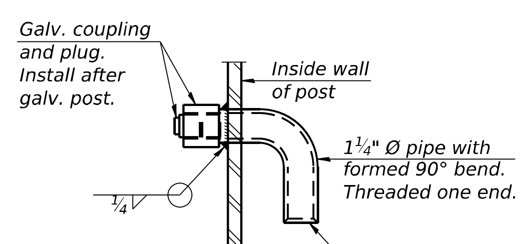
CONTOURED WASHERS

Bolt Size	Contoured Washers Hole Dia.	Contoured Washers B
7/8"	1"	2 1/2"
1"	1 1/8"	3"
1 1/4"	1 3/8"	3 1/4"

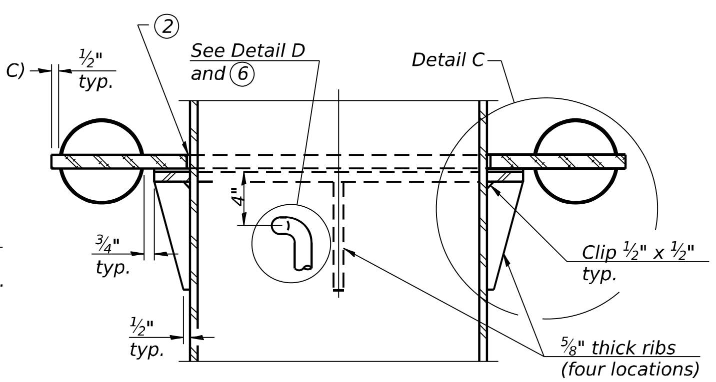


DETAIL OF STAINLESS STEEL SLEEVE

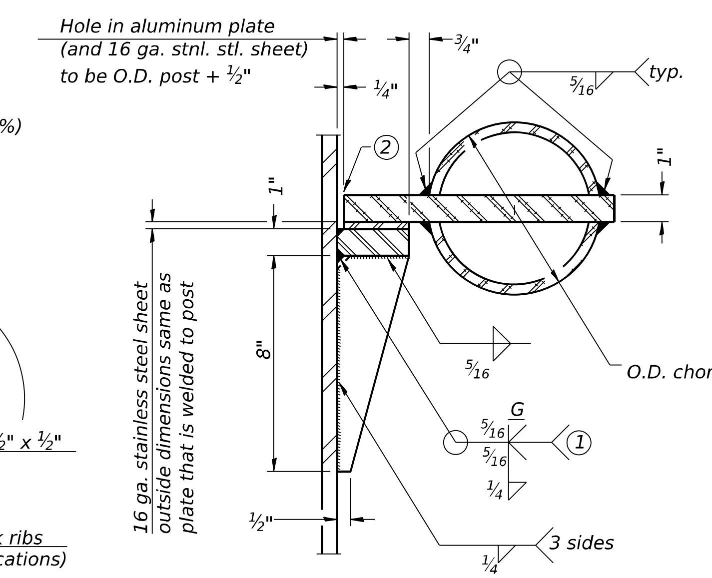
Weld to post after galvanizing. (Prepare post surface to insure tight, uniform fit and allow welding.) Welds to be 1 1/2" long at 6" cts. along top edge and at 1/4" opening.



DETAIL D



SECTION C-C



DETAIL C

Truss Type	Post Size	Upper & Lower Connection Bolt Diameter (3)	Lower Juncture Bolt Spacing Dimension "c" (3)	Opening in Cap Plate "HH"	Collar Thickness (t)	Side Ribs x	Side Ribs y
I-C-A	16" Ø (83#/')	7/8"	3 1/4"	8"	5/8"	1 3/4"	2 1/4"
II-C-A	24" Ø (125#/')	1"	3 1/2"	12"	7/8"	2"	1 1/4"
III-C-A (35' max.)	24" Ø (125#/')	1 1/4"	3 1/2"	12"	7/8"	2"	1"
III-C-A (>35' to 40')	24" Ø (171#/')	1 1/4"	3 1/2"	12"	7/8"	2"	1"

(1) Grind top if required to fully seat aluminum plate and stainless steel sheet.

(2) After tightening lower connection bolts, fill gap with non-hardening, silicone caulk suitable for exterior exposure and acceptable to the Engineer. Cost is included in Overhead Sign Structure Cantilever.

(3) Upper and lower connection bolts in collar and bolts at lower chord connection shall be high strength with matching locknuts. Connection bolts shall have 2 stainless steel flat washers each.

OSC-A-3 2-17-2017

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Stantec

USER NAME = hahassan	DESIGNED - HMH	REVISED -
	CHECKED - DTS	REVISED -
PLOT SCALE = 32.0000 ' / in.	DRAWN - HMH	REVISED -
PLOT DATE = 03/18/2022	CHECKED - DTS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES – JUNCTURE DETAILS
ALUMINUM TRUSS & STEEL POST

SHEET 4 OF 8 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	213

CONTRACT NO. 62P71

ILLINOIS FED. AID PROJECT I4WJ(714)

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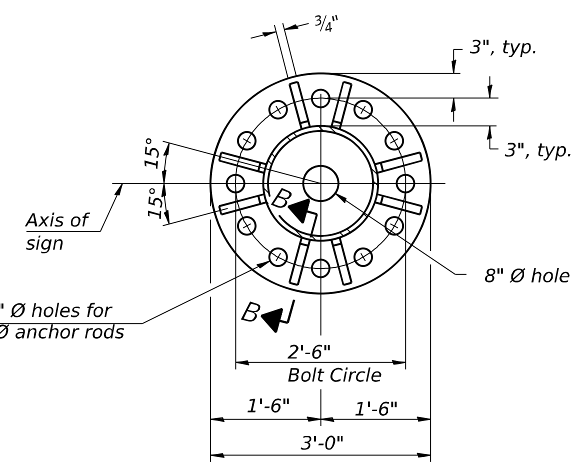
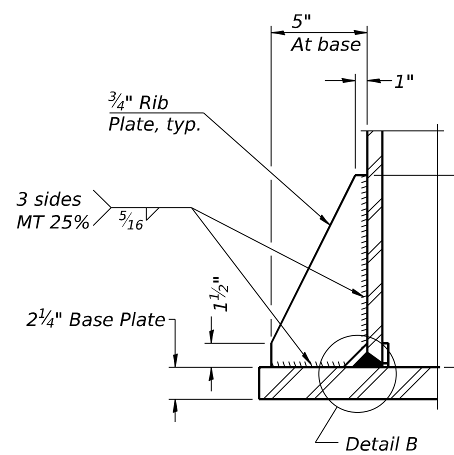
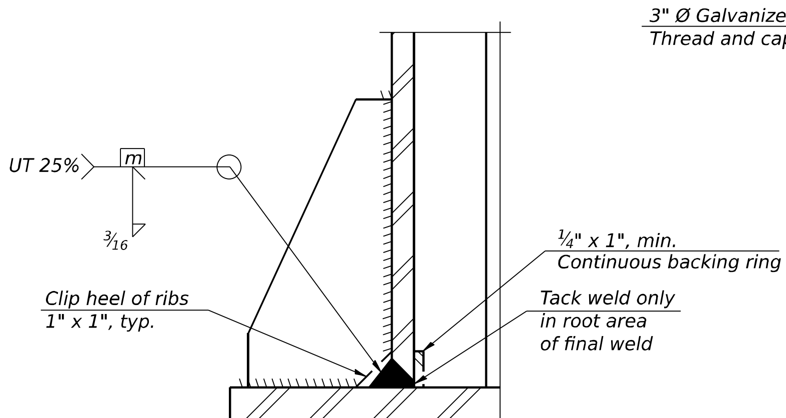


SECTION A-A

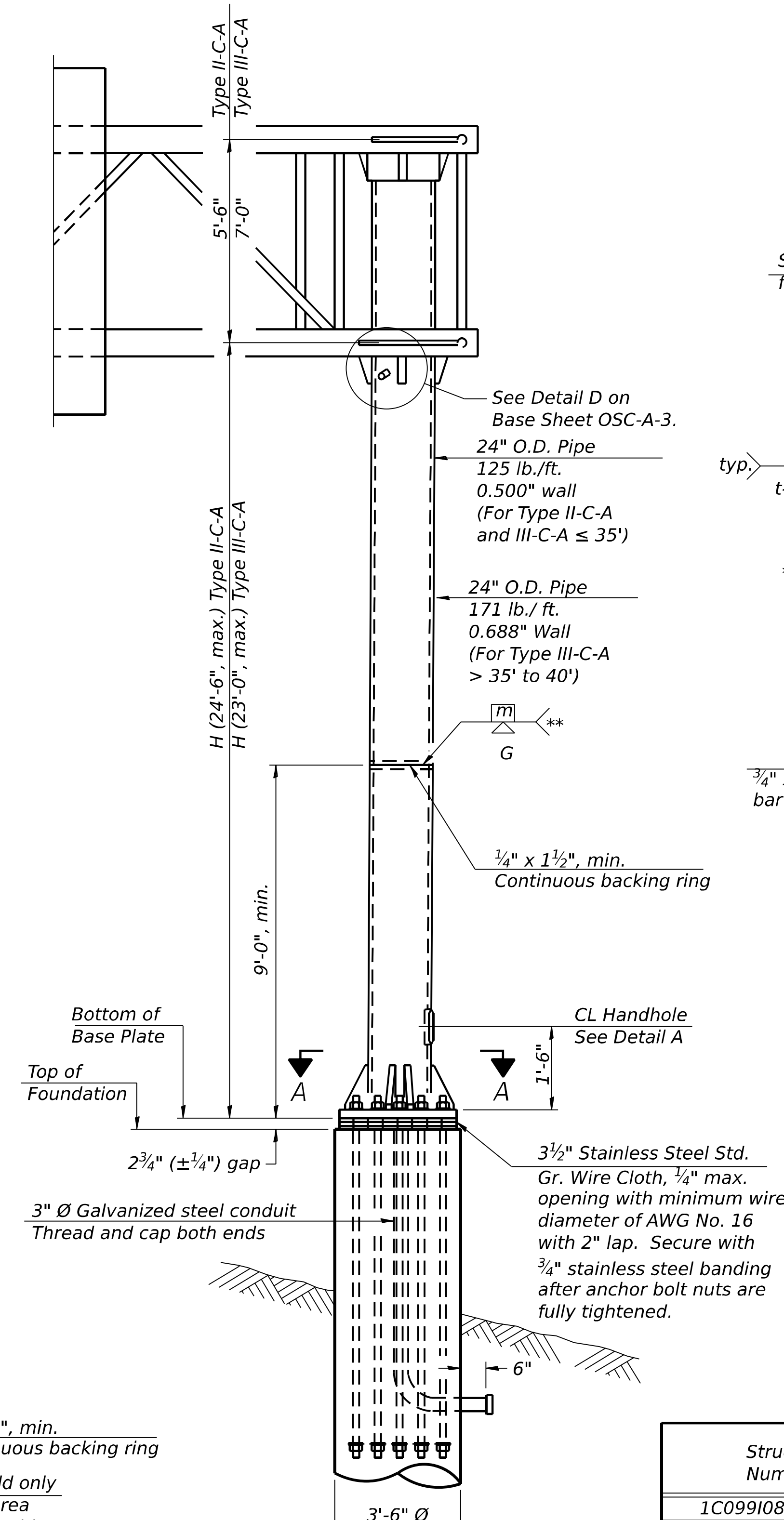


SECTION B-B



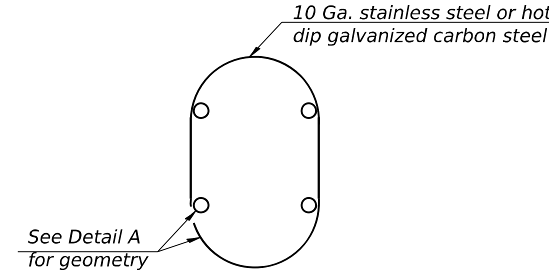
DETAIL B

(Typical rib)

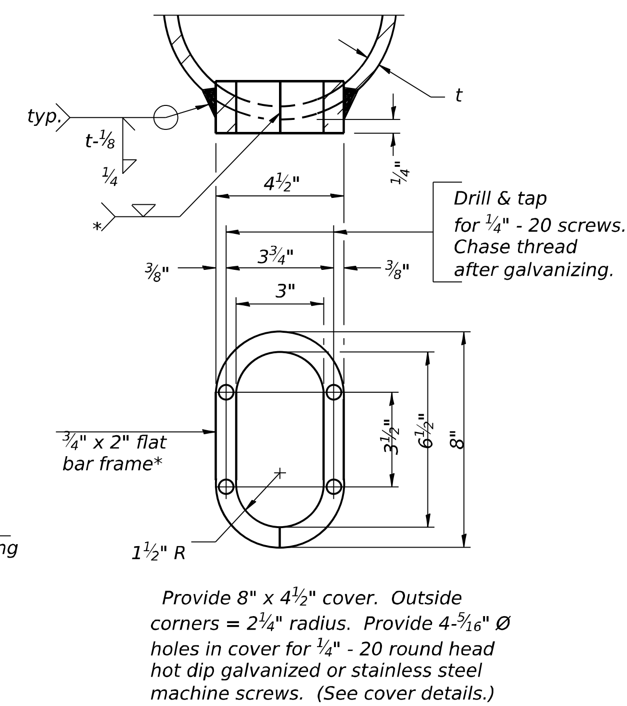


FRONT ELEVATION

For Foundation Details see Base Sheet OSC-A-9.



HANDHOLE COVER

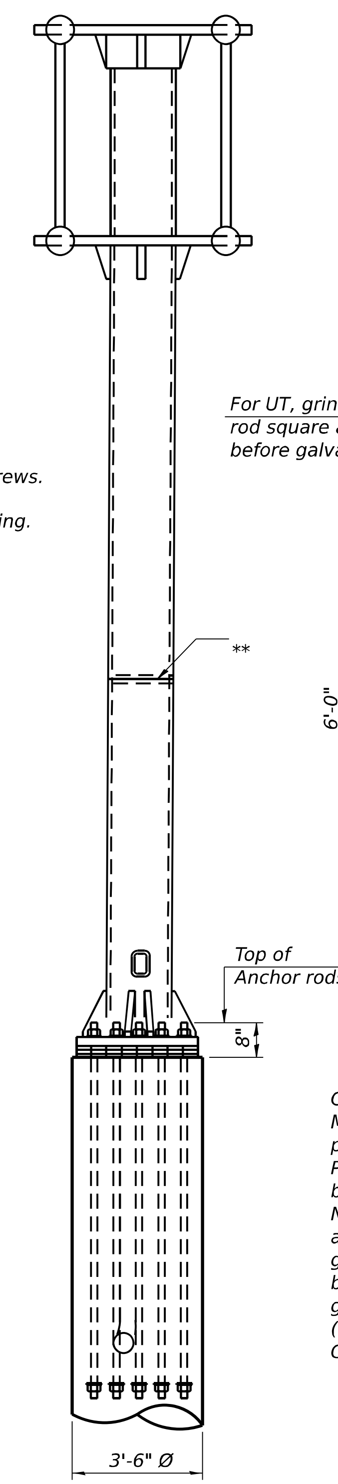


Provide 8" x 4½" cover. Outside corners = 2¼" radius. Provide 4-5/16" Ø holes in cover for 1/4" - 20 round head hot dip galvanized or stainless steel machine screws. (See cover details.)

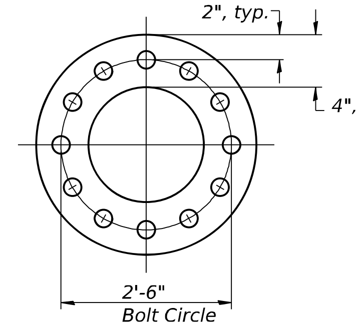
DETAIL A

* Bent bars may be butt welded top and bottom or bottom only. 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.

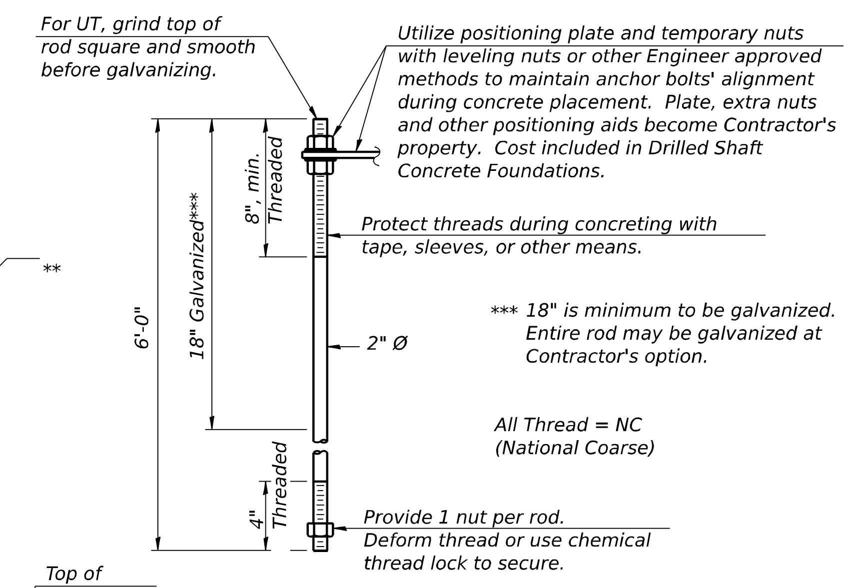
** Butt welded joint in post is only allowed for post heights (H) over 20 ft. in length. If used, weld procedure must be preapproved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.



SIDE ELEVATION



SUGGESTED POSITIONING PLATE



ANCHOR ROD DETAIL

Anchor rods shall conform to ASTM F1554 Grade 105. Galvanize the upper 18" (minimum***) and associated AASHTO M291, Grade A, C or DH heavy hex nuts and hardened washers per AASHTO M232. No welding shall be permitted on rods. Provide a nut at bottom, a hexagon locknut and washer above base plate and a leveling nut and washer below base plate. Nuts shall each be tightened with 200 lb.-ft. minimum torque against base plate. Before or after threading, but before galvanizing, each anchor rod shall be ultrasonically tested (UT) by a Level II or III inspector, qualified in accord with ANSI guidelines, to insure no rejectable flaws exist in the upper 18" (tension criteria). Cost of testing included in Drilled Shaft Concrete Foundations.

Structure Number	Station	H
1C099I080R124.9	285+35.00	23'-0"

Note: "H" based on 15'-0" or actual sign height, whichever is greater.

OSC-A-5 2-17-2017

MODEL: Default
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Stantec

USER NAME = dschriks	DESIGNED - HMH	REVISED -
	CHECKED - DTS	REVISED -
PLOT SCALE = 32.0000 ' / in.	DRAWN - HMH	REVISED -
PLOT DATE = 03/18/2022	CHECKED - DTS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES – TYPE II–C–A & III–C–A
TRUSS SUPPORT POST – ALUMINUM TRUSS & STEEL POST

SHEET 5 OF 8 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	214
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT I4WJ(714)		

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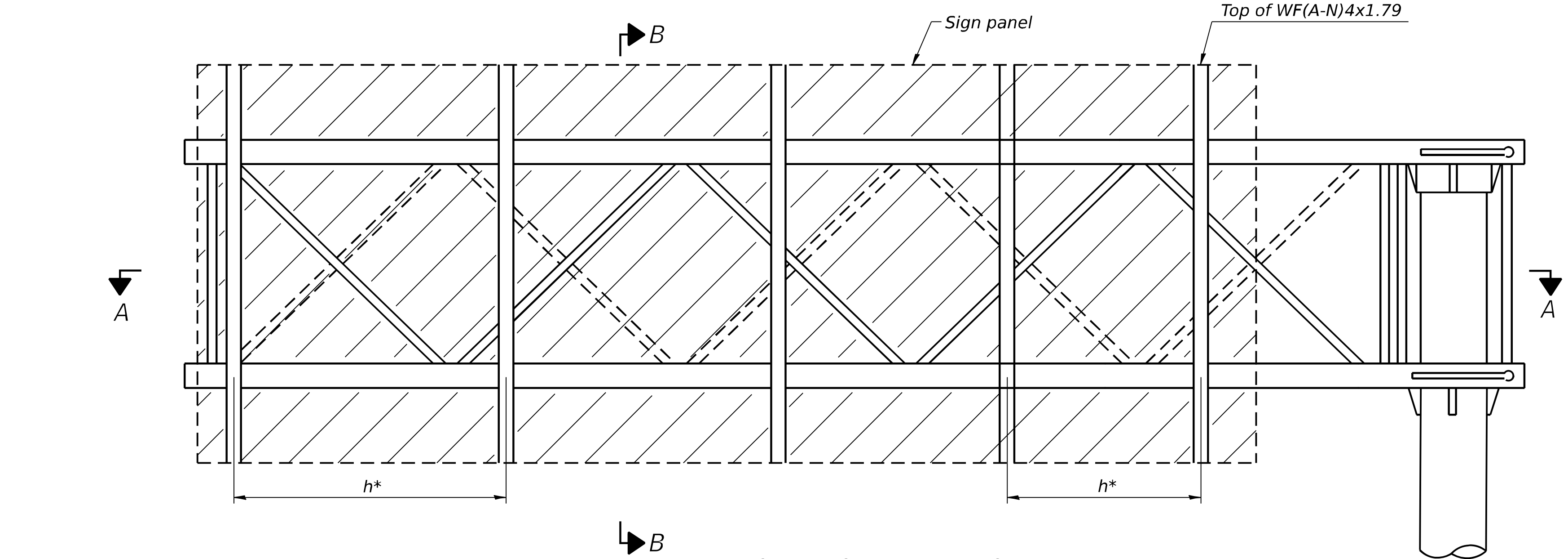
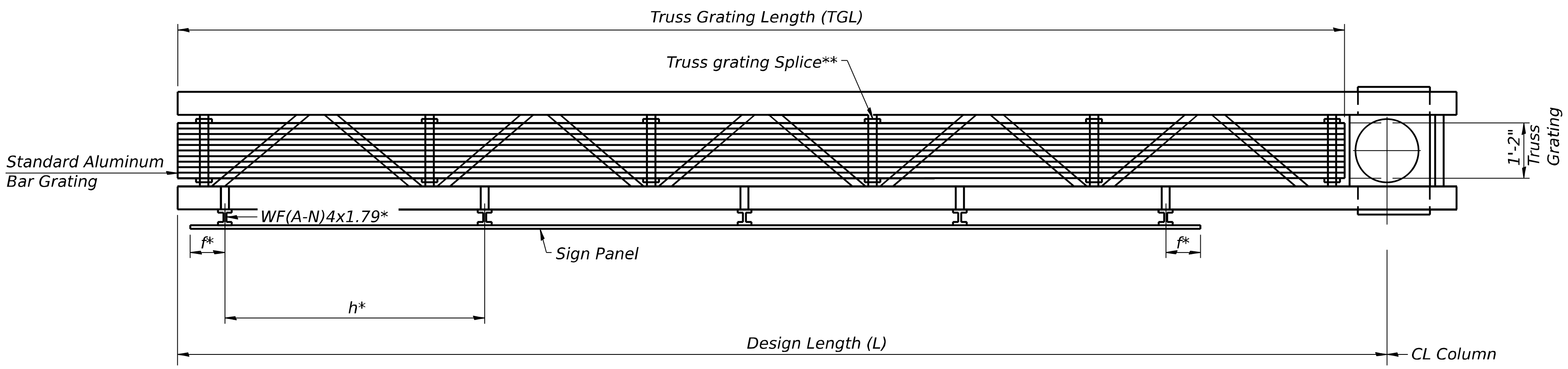


TYPICAL FRONT ELEVATION

BRACKET TABLE

WF(A-N)4x1.79 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

Structure Number	Station	TGL
1C099I080R124.9	285+35.00	33'-0"



SECTION A-A

$$TGL = L - \left(\frac{\text{Post O.D.}}{2} + 6"\right)$$

Notes:

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

f = 12" maximum, 4" minimum (End of sign to CL of nearest bracket)
h = 6'-0" maximum (CL to CL sign and/or walkway support brackets, WF(A-N)4x1.79

** Use and location of grating splices are optional, based on lengths needed and material availability.

NOTES:

For details of sign placement, sign brackets, truss gratings, grating splices, and section B-B, see Base Sheet OSC-A-7-NW

Truss grating to facilitate inspection shall run full length of cantilevers. Cost of truss grating is included in Overhead Sign Structure Cantilever.

Truss grating dimensions are nominal and may vary (width $\pm\frac{1}{2}$", depth $\pm\frac{1}{2}$") based on available standard widths.

OSC-A-6-NW

4-1-2020

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Stantec

USER NAME = dschriks	DESIGNED - HMH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CANTILEVER SIGN STRUCTURES – ALUMINUM WALKWAY DETAILS – ALUMINUM TRUSS & STEEL POST
	CHECKED - DTS	REVISED -		
PLOT SCALE = 32.0000 ' / in.	DRAWN - HMH	REVISED -		
PLOT DATE = 03/18/2022	CHECKED - DTS	REVISED -		SHEET 5a OF 8 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	214A
		CONTRACT NO. 62P71		
	ILLINOIS	FED. AID PROJECT	I4WJ(714)	

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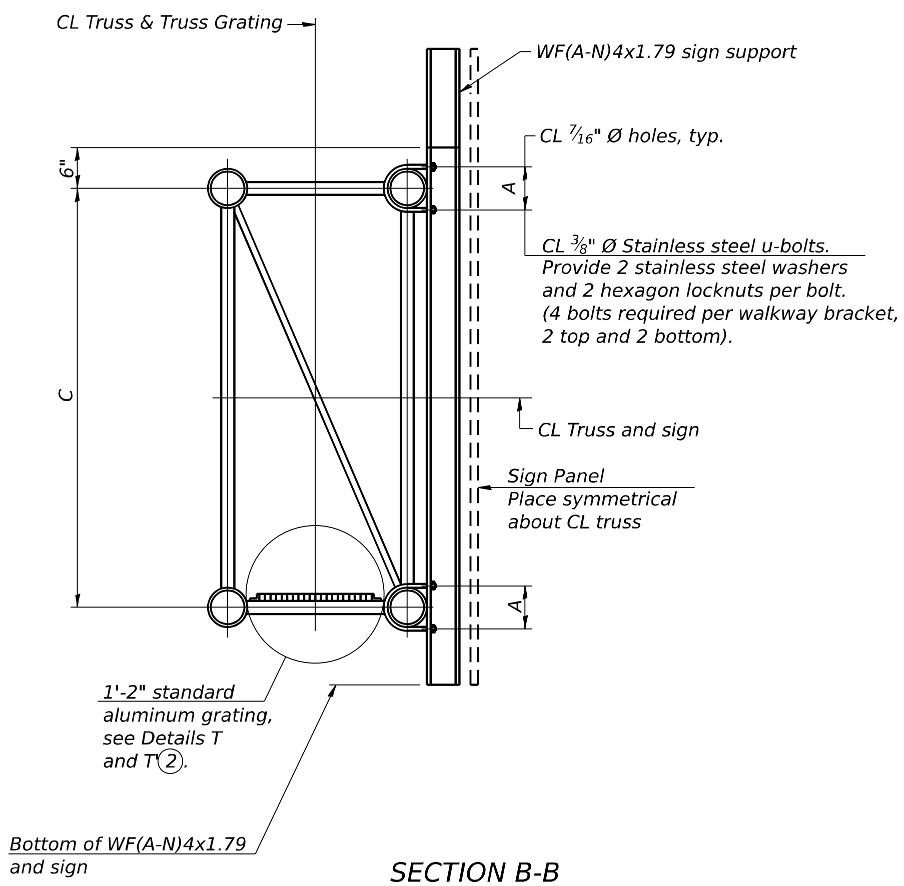
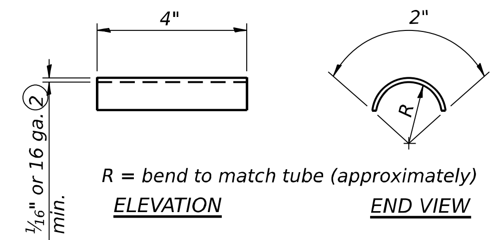
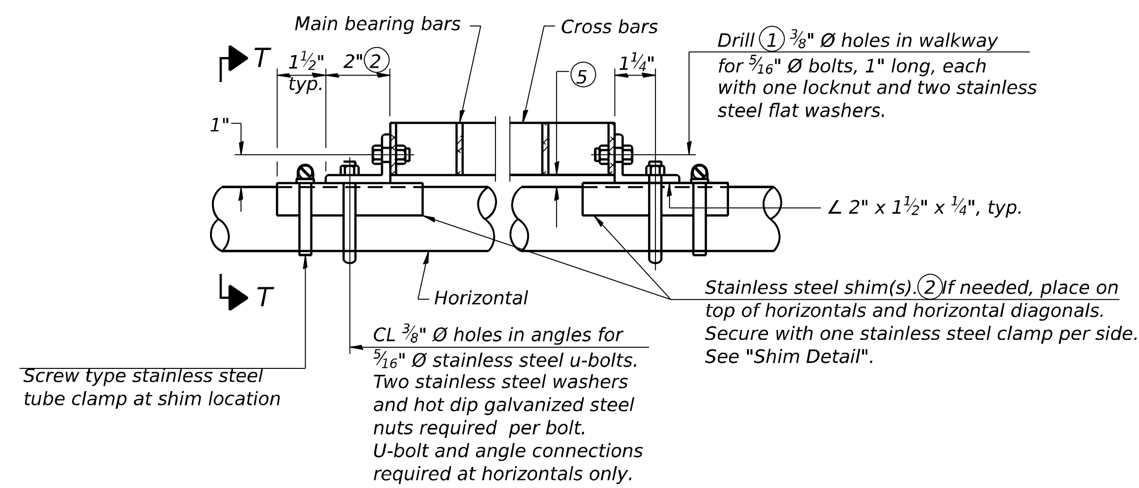


SECTION B-B



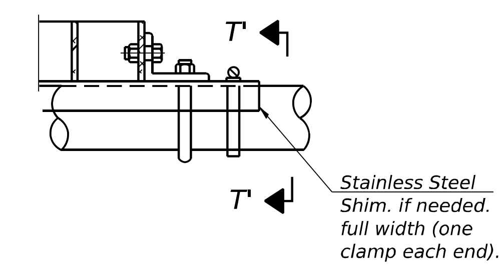
SHIM DETAIL

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. Tube to grating gap may vary from 0 to 1/2", max. to align walkway, allow for camber, etc.



DETAIL T

(Continuous Truss grating)



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.

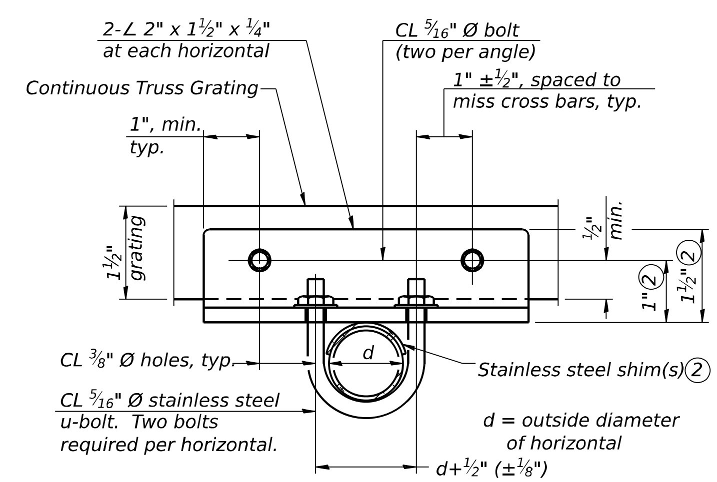
SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars (MBB) shall be 3/16" x 1 1/2" on 1 3/16" centers and conform to ASTM B211 Alloy 6061-T6.
Cross bars (CB) shall be 3/16" x 1 1/2" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

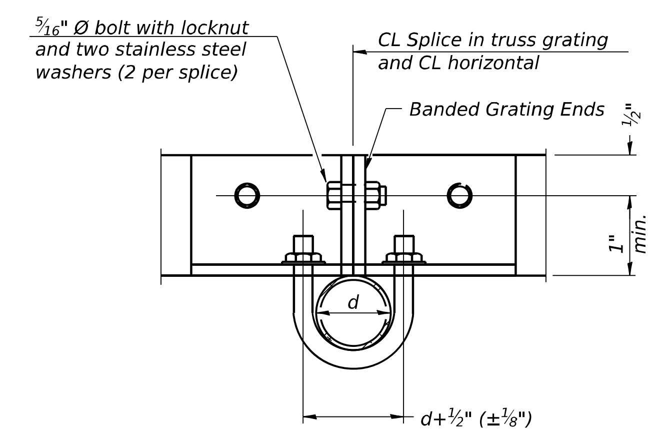
OR

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 1 1/2", 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	C
1C099I080R124.9	285+35.00	7 3/8"	7'-0"



SECTION T-T



SECTION T'-T'

OSC-A-7-NW 4-1-2020

FILE NAME:

Stantec

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	CHECKED - DTS	REVISED -		
PLOT SCALE =	DRAWN - HMH	REVISED -		
PLOT DATE =	CHECKED - DTS	REVISED -		SHEET 6 OF 8 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	215
		CONTRACT NO. 62P71		
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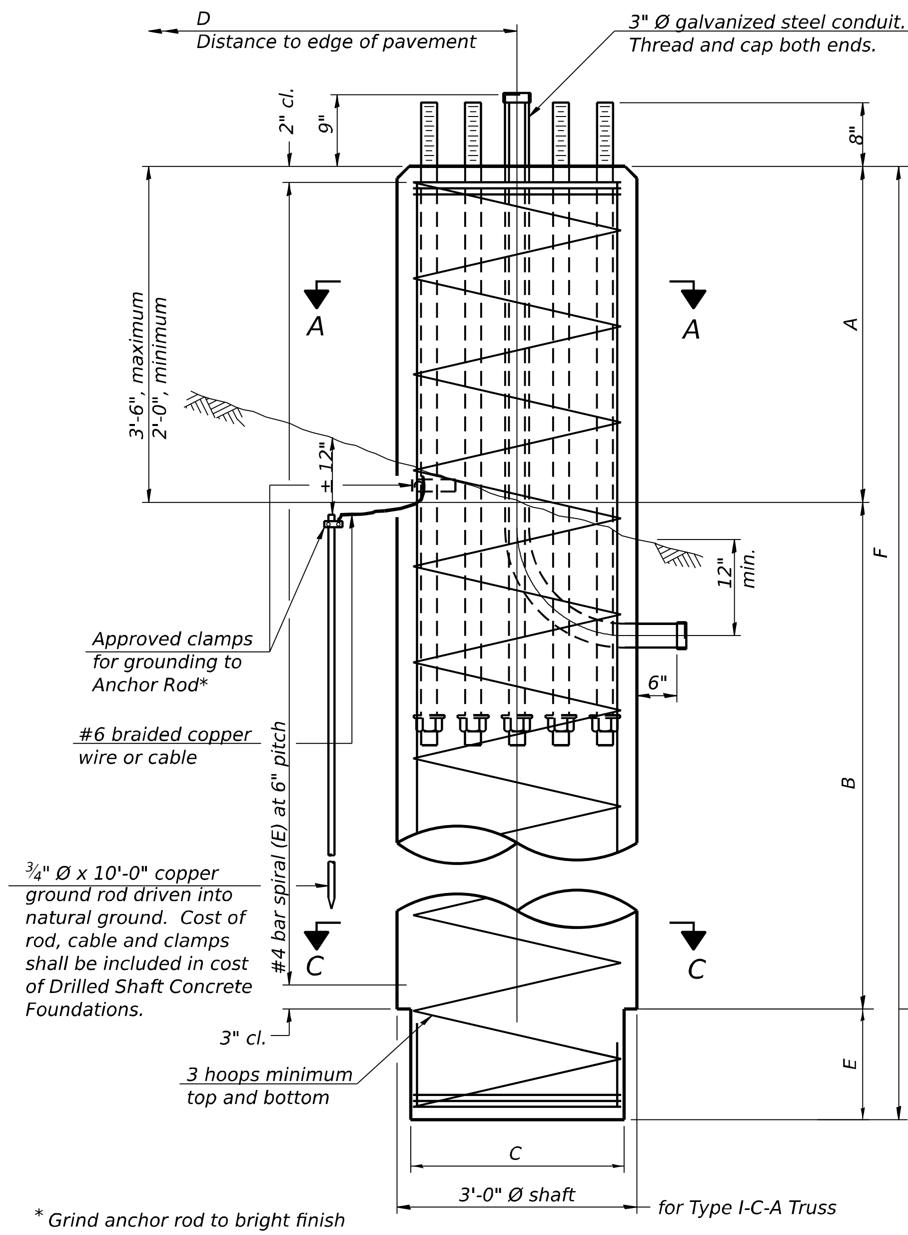
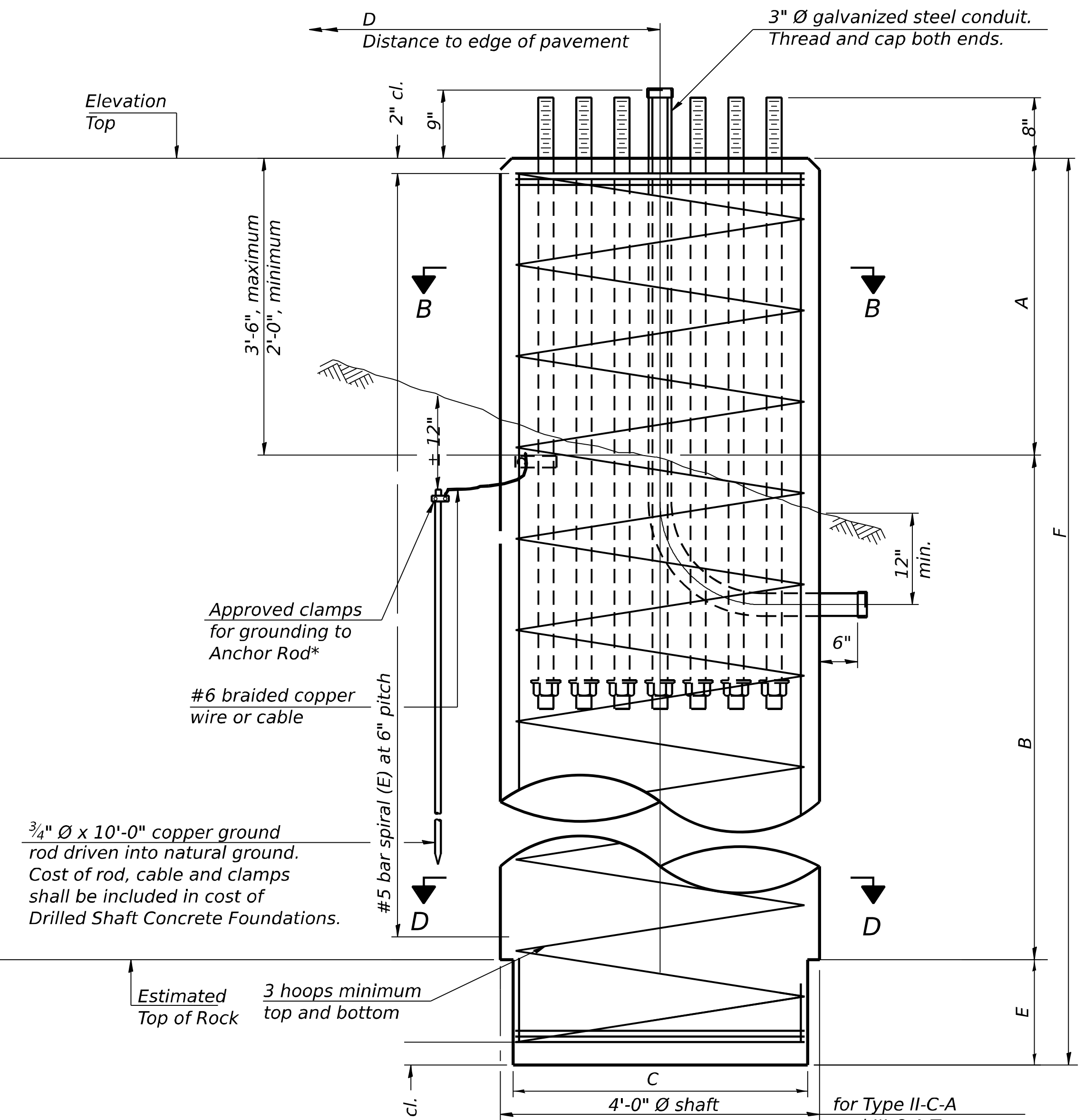


ELEVATION



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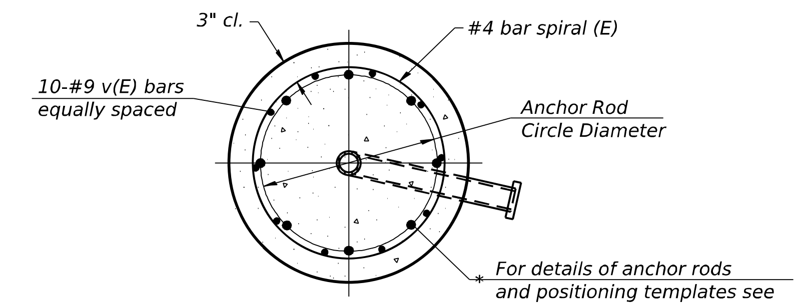
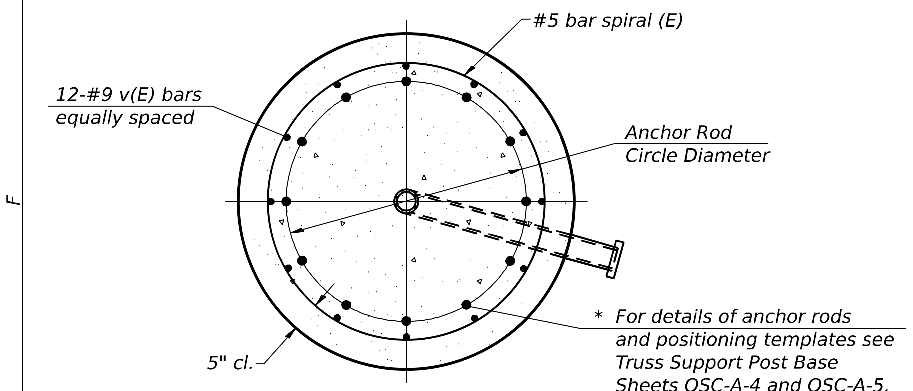


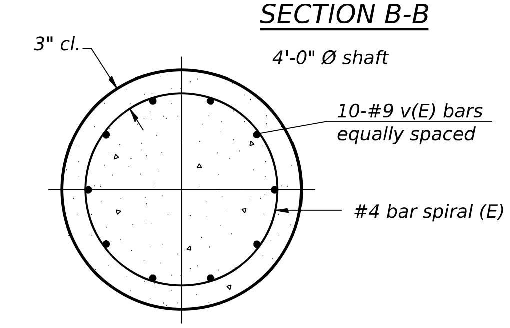
SECTION A-A

3'-0" Ø shaft



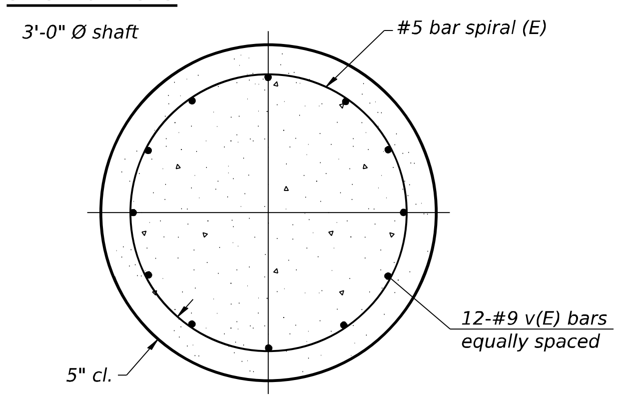
SECTION B-B

4'-0" Ø shaft



SECTION C-C

3'-0" Ø shaft



SECTION D-D

4'-0" Ø shaft

NOTES:

The foundation dimensions shown in the Foundation Design Table 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 in the Foundation Data Table 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".

If rock is encountered at a lower elevation, shaft need only extend 3.5 feet into rock or a total of 26.0 feet from the Elevation Top in the "Foundation Data Table" .

FOUNDATION DESIGN TABLE

Truss Type	Post Base Sheet	Maximum Cantilever Length (ft)	Maximum Total Sign Area (sq ft)	Shaft Diameter (ft)	"B" Depth (ft)	Anchor Rods No.	Anchor Rods Diameter (in)	Anchor Rod Circle Diameter (in)
I-C-A	OSC-A-4	25	170	3.0	16.0	8	2	22
II-C-A	OSC-A-5	30	170	4.0	17.0	12	2	30
II-C-A	OSC-A-5	30	340	4.0	21.5	12	2	30
III-C-A	OSC-A-5	35	170	4.0	19.0	12	2	30
III-C-A	OSC-A-5	35	250	4.0	22.5	12	2	30
III-C-A	OSC-A-5	35	400	4.0	26.5	12	2	30
III-C-A	OSC-A-5	40	400	4.0	32.0	12	2	30

FOUNDATION DATA TABLE

Structure Number	Station	Truss Type	Shaft Diameter	Elevation Top	Estimated Top of Rock	Qu	A	B	F	Class DS Concrete Cubic Yards	Elevation Bottom	E	c	Drilled Shaft in Rock
1C099I080R124.9	285+35.00	III-C-A	4'-0"	581.00	562.8	1.58 tsf	3'-6"	14'-8⅜"	21'-7⅜"	8.3	559.3	3'-6"	3'-6"	1.3

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Stantec

USER NAME = hahassan	DESIGNED - HMH	REVISED -
	CHECKED - DTS	REVISED -
PLOT SCALE = 32.0000 ' / in.	DRAWN - HMH	REVISED -
PLOT DATE = 03/18/2022	CHECKED - DTS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES – DRILLED SHAFT
ALUMINUM TRUSS & STEEL POST

SHEET 7 OF 8 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	216
		CONTRACT NO. 62P71		
	ILLINOIS	FED. AID PROJECT	I4WJ(714)	

3/15/2023 1:09:29 PM

Wang Engineering
wangeng@wangeng.com
Telephone:
Fax:

BORING LOG SS-OSB-03

WEI Job No.: 255-39-01

Client: **Stantec**
Project: **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 581.29 ft
North: 1754967.45 ft
East: 1014423.38 ft
Station: 285+73.02
Offset: 53.00 RT

Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
580.5	10-inch thick ASPHALT --PAVEMENT--					
580.0	6-inch thick, black RECLAIMED ASPHALT PAVEMENT --AGGREGATE--		1	6 3 5	3.00 P	14
	Stiff to very stiff, brown SILTY CLAY LOAM, trace gravel; moist --FILL-- --RDR 2--	5	2	4 4 4	1.72 B	12
575.8	Stiff to very stiff, brown to gray SILTY CLAY to CLAY, trace gravel; moist --RDR 2--		3	4 4 7	1.23 B	17
		10	4	6 5 4	1.48 B	17
			5	3 2 5	1.23 B	25
		15	6	3 2 3	2.21 B	29
565.8	Very dense, gray SILT, trace gravel; damp --RDR 2--		7	24 50/1"	NP	13
564.3	WEATHERED BEDROCK					
562.8	Medium strong, dark grayish gray, very poor quality, shaly DOLOSTONE interbedded with dolomitic mudstone; closely spaced, slightly weathered, horizontal, oblique, and vertical JOINTS, with 0 inch opening, slightly rough walls, and no infill. --RUN 1: 18.5 to 28.5 feet-- --RECOVERY: 98%-- --RQD: 8%--	20	8	CORE		
	--Qu at 24.5 feet= 8,707psi--	25				
552.8	Boring terminated at 28.50 ft	30, 35, 40				

GENERAL NOTES

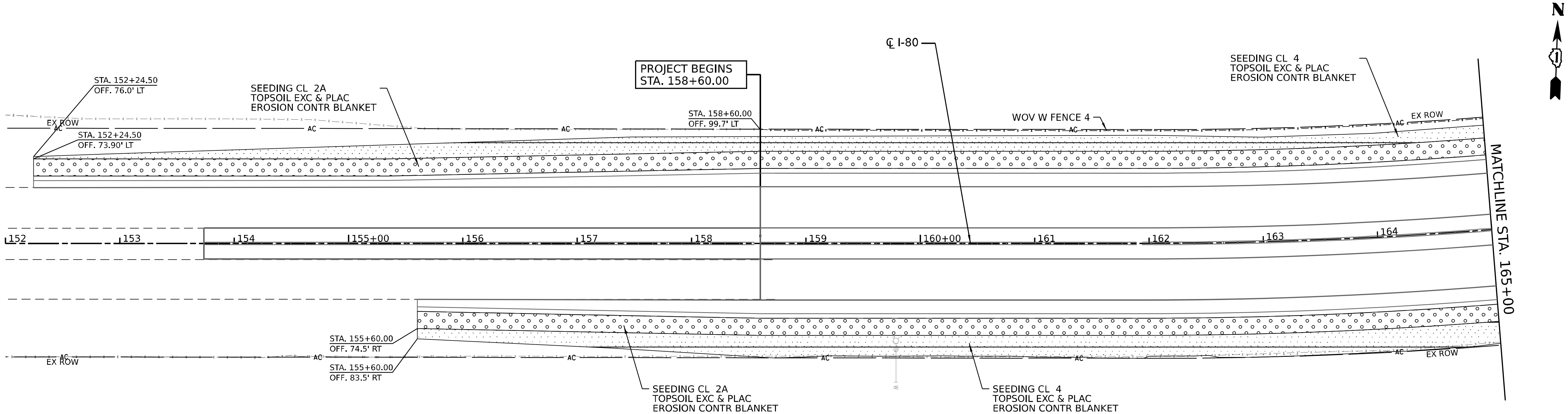
Begin Drilling **05-03-2022** Complete Drilling **05-03-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **JS&AG** Logger **A. Scifers** Checked by **J. Bensen**
Drilling Method **2.25" ID HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion**

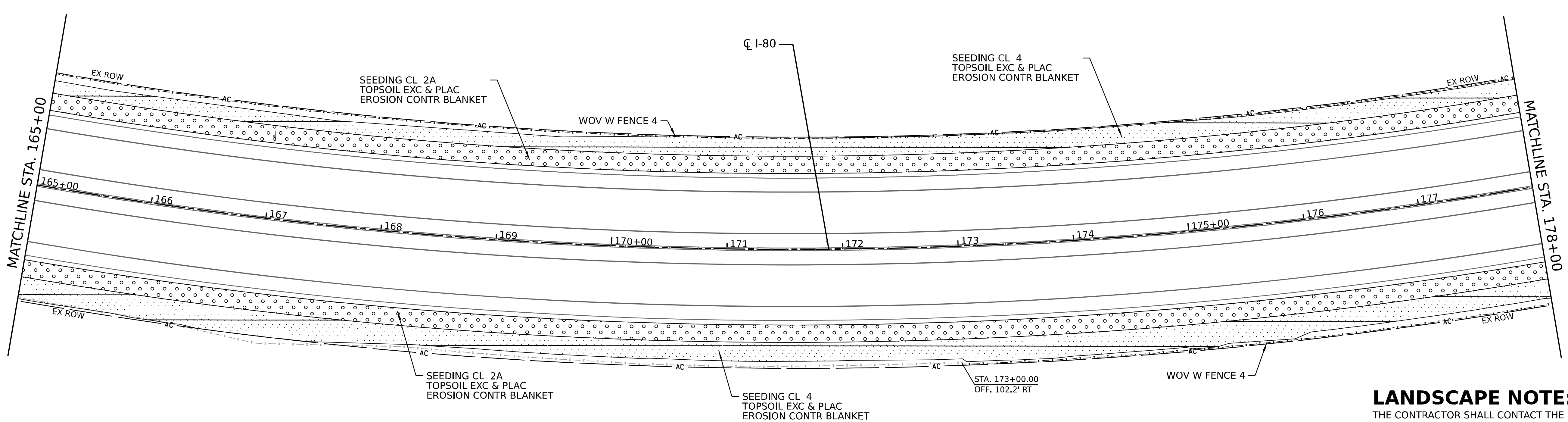
WATER LEVEL DATA

While Drilling **DRY**
At Completion of Drilling **Mud in the borehole**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 2553901.GPJ WANGENG.GDT 6/8/22





LANDSCAPE NOTE:

THE CONTRACTOR SHALL CONTACT THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-41714 AT LEAST 2 WEEKS PRIOR TO FORESTRY WORK TO IDENTIFY AND MARK TREES TO BE SAVED WITHIN THE TREE REMOVAL AREAS.

LEGEND

- SEEDING CLASS 2A / TOPSOIL EXC & PLAC / EROSION CONTROL BLANKET
- SEEDING CLASS 4 / TOPSOIL EXC & PLAC / EROSION CONTROL BLANKET

Stantec

USER NAME = dbook	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.0009 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/16/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LANDSCAPE PLAN

SCALE: SHEET 1 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	218
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT		

MODEL: Default
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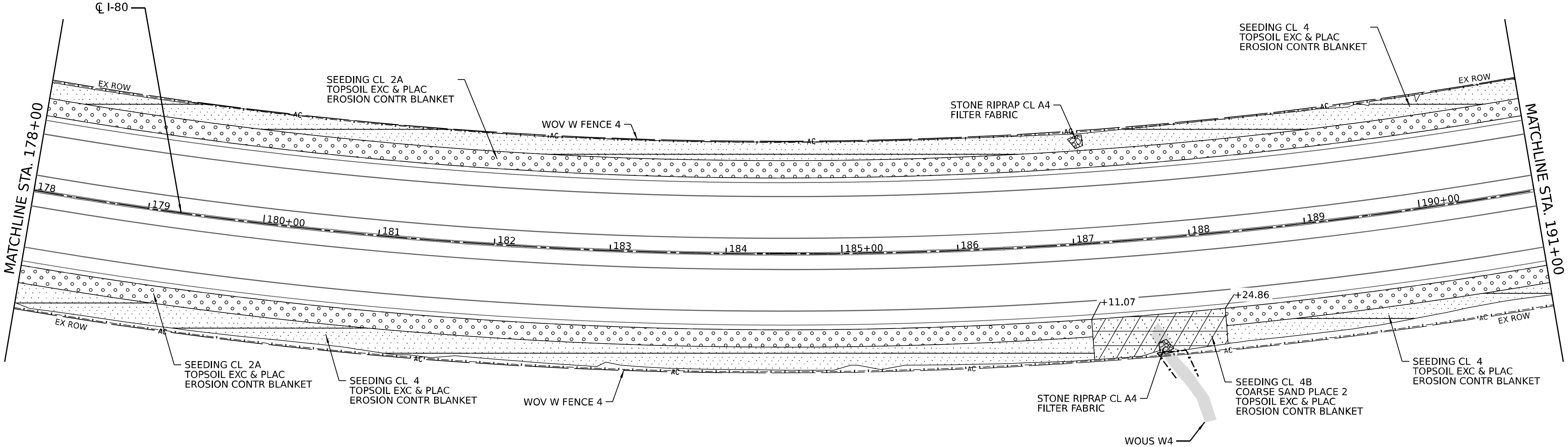
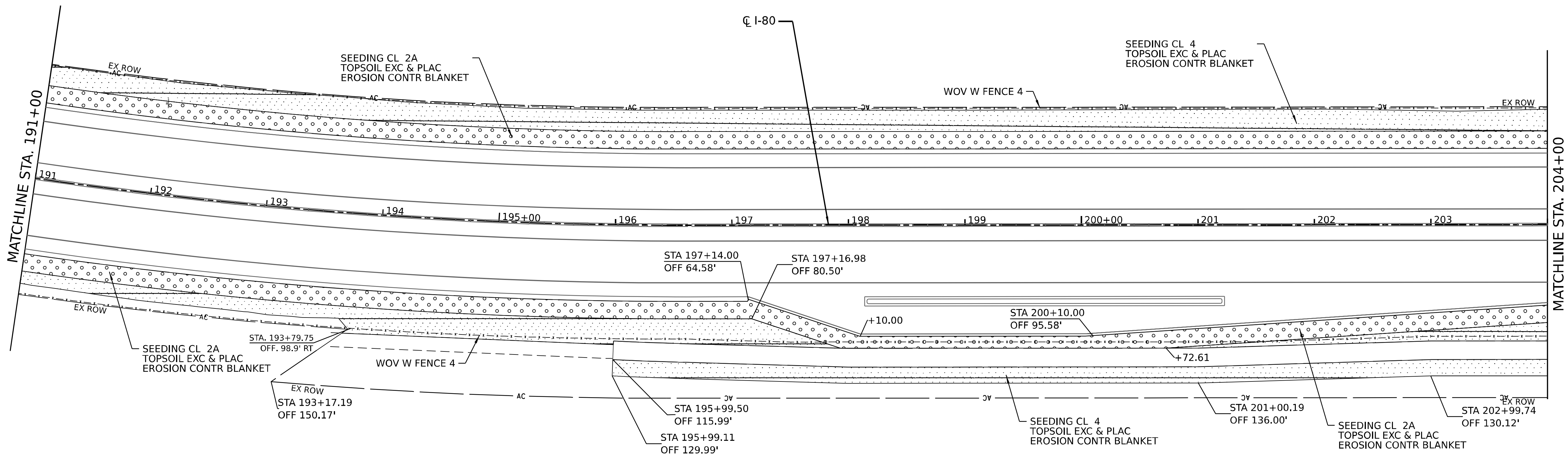




LEGEND

SEEDING CLASS 2A TOPSOIL EXC & PLAC EROSION CONTROL BLANKET	SEEDING CLASS 4 TOPSOIL EXC & PLAC EROSION CONTROL BLANKET

Stantec

USER NAME = dbook	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.0009 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/16/2023	DATE -	REVISED -	

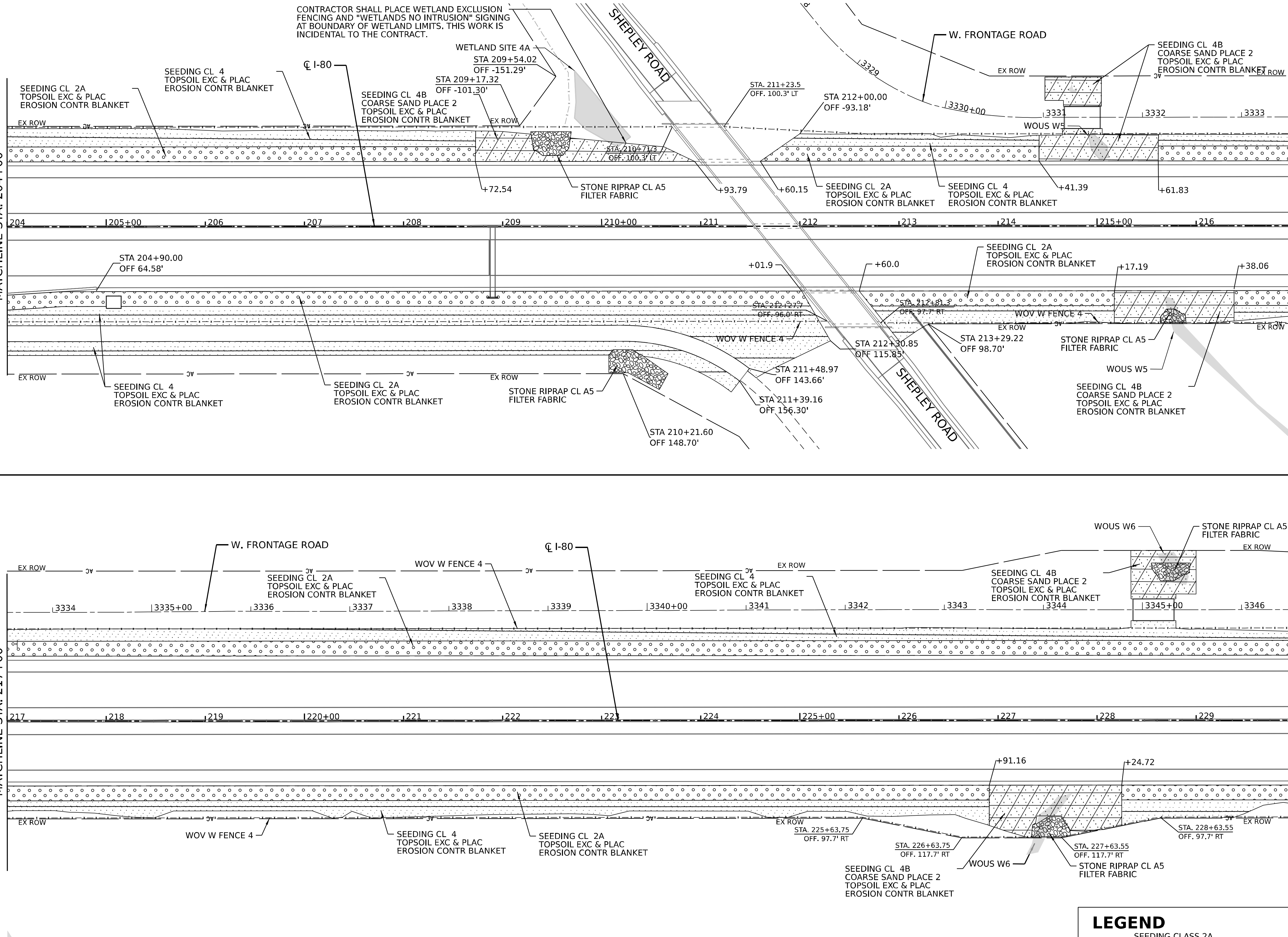
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LANDSCAPE PLAN

SCALE: SHEET 2 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	219
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT		

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/ML-01_62P71/04-Sheets/11-Landscape/D162P71-sht-lndscp-002.dgn



LEGEND

SEEDING CLASS 2A TOPSOIL EXC & PLAC EROSION CONTROL BLANKET

SEEDING CLASS 4 TOPSOIL EXC & PLAC EROSION CONTROL BLANKET

Stantec	USER NAME = dbook	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0009 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/16/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LANDSCAPE PLAN

SCALE: SHEET 3 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	220
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT		

MODEL: Default
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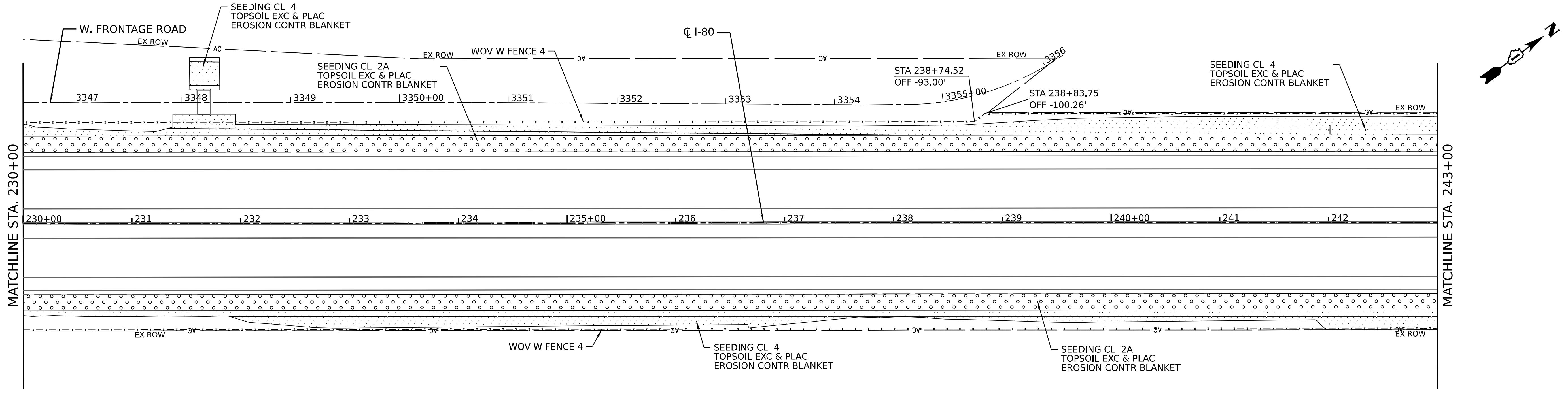

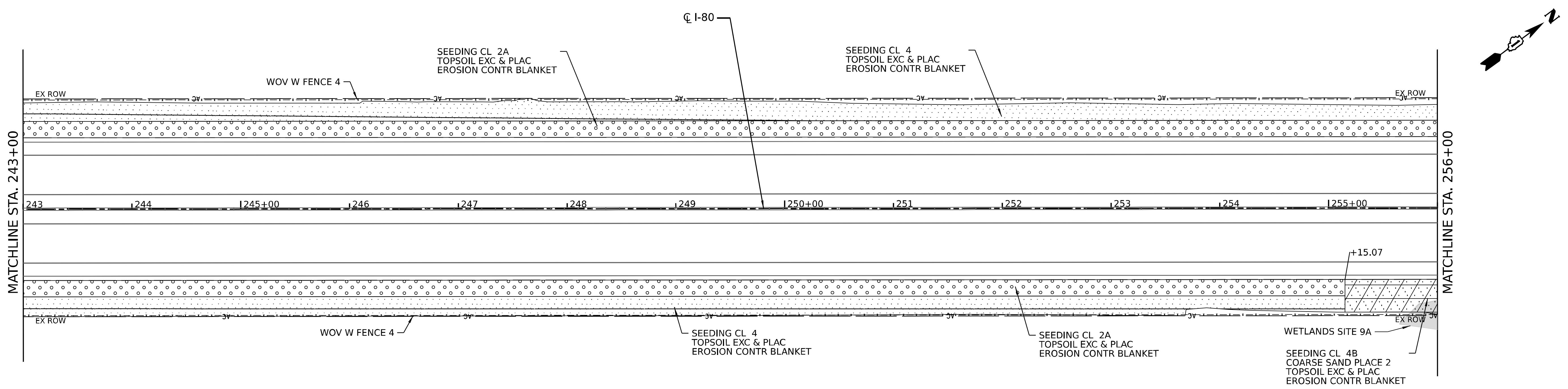

LEGEND

SEEDING CLASS 2A
TOPSOIL EXC & PLAC
EROSION CONTROL BLANKET

SEEDING CLASS 4
TOPSOIL EXC & PLAC
EROSION CONTROL BLANKET

MODEL: Default
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Stantec

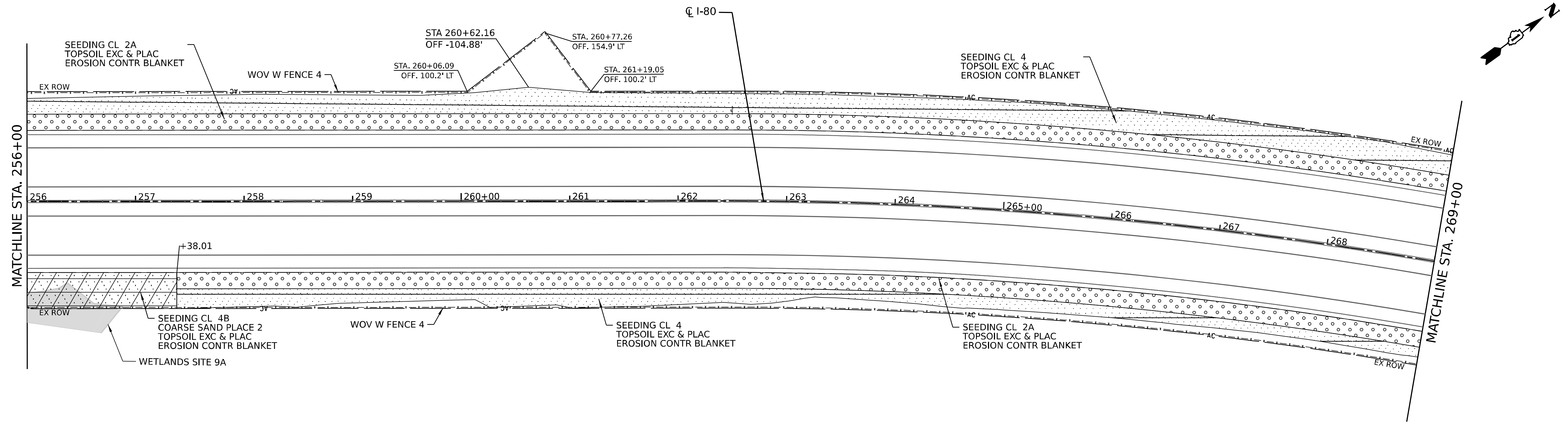
USER NAME = dbook	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.0009 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/16/2023	DATE -	REVISED -	

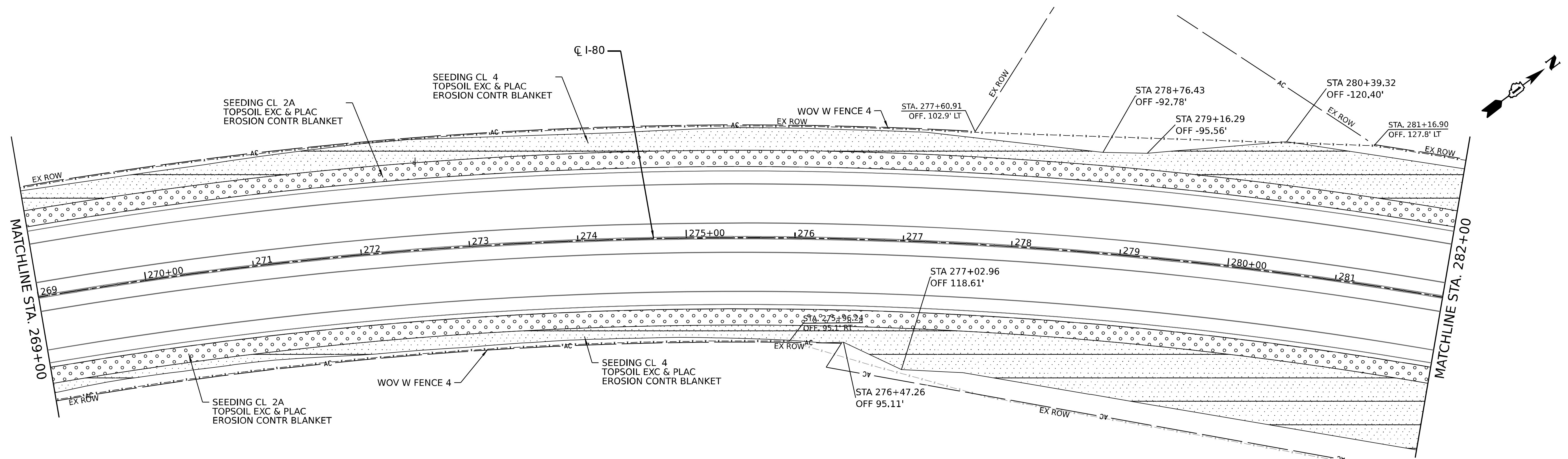
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LANDSCAPE PLAN

SCALE: SHEET 4 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	221
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT		





LEGEND

SEEDING CLASS 2A
TOPSOIL EXC & PLAC
EROSION CONTROL BLANKET

SEEDING CLASS 4
TOPSOIL EXC & PLAC
EROSION CONTROL BLANKET

MODEL: Default
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Stantec

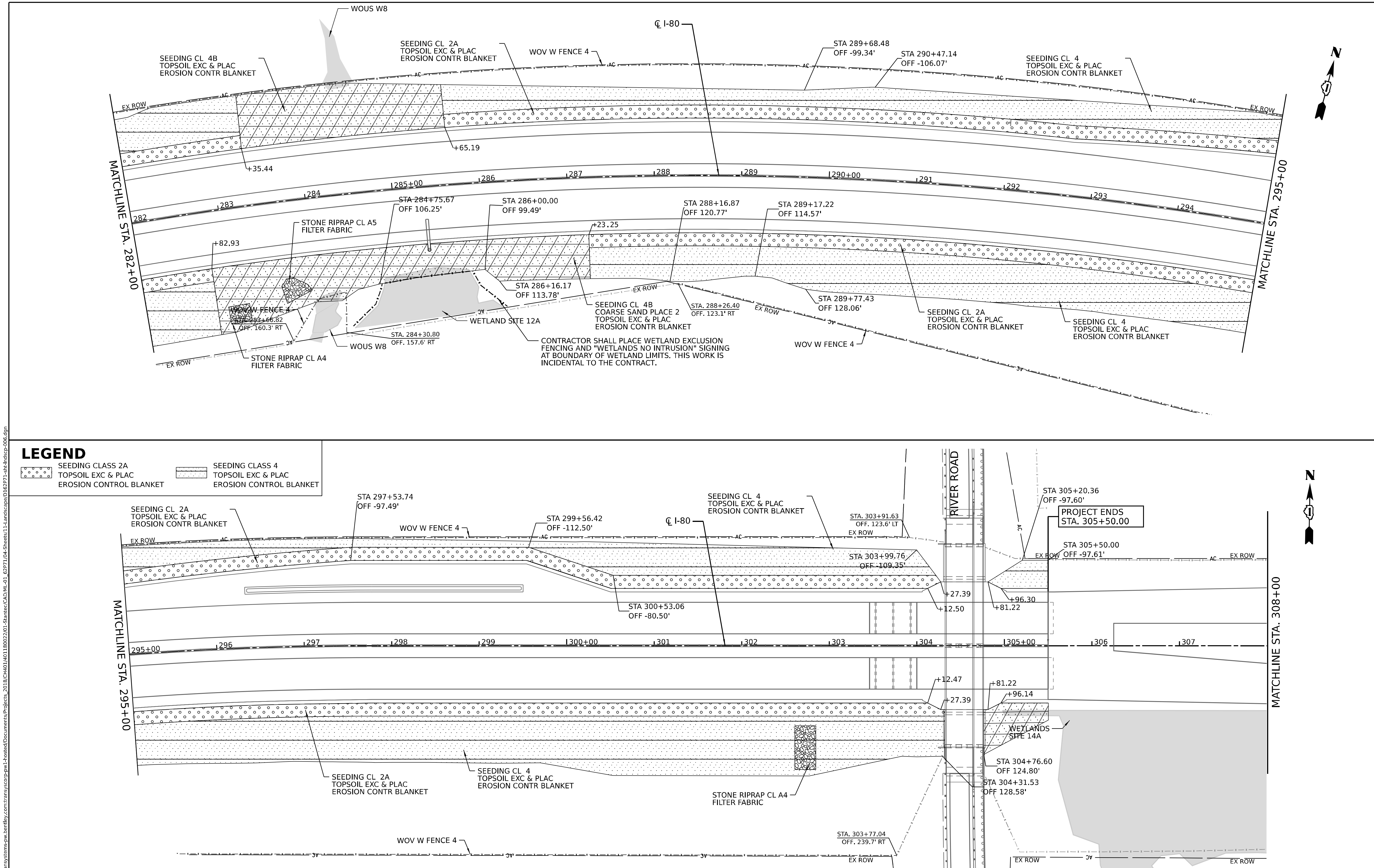
USER NAME = dbook	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.0009 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/16/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LANDSCAPE PLAN

SCALE: SHEET 5 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	222
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT		



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	DRAWN -	REVISED -	
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PLOT DATE = 3/16/2023	DATE -	REVISED -	

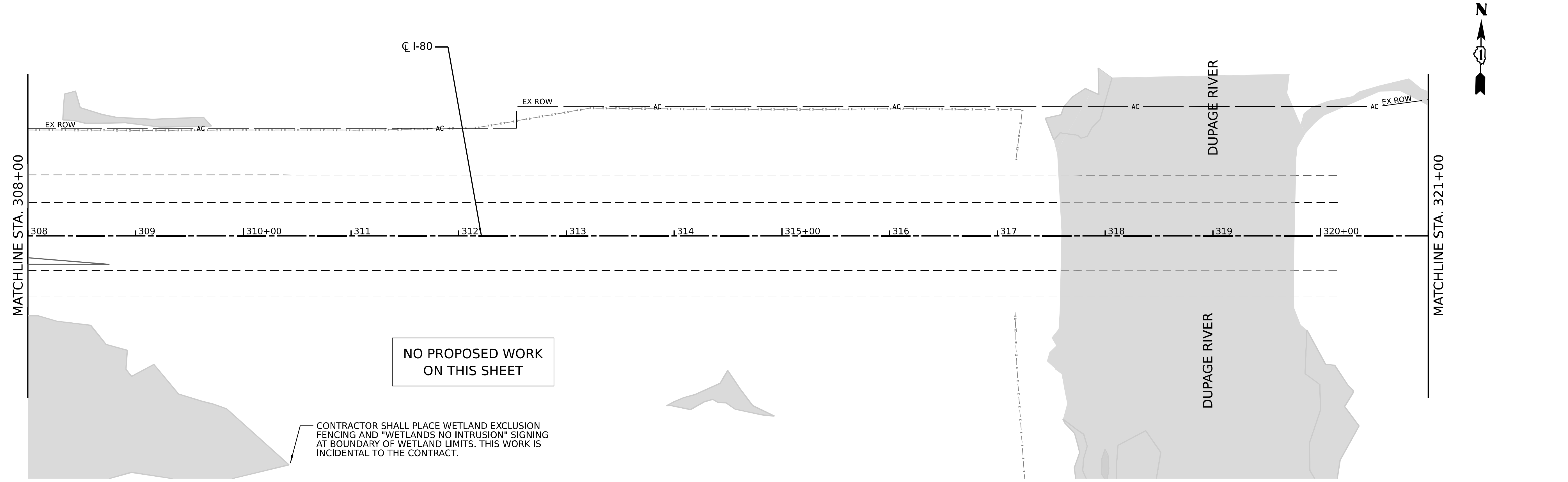
Stantec

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LANDSCAPE PLAN

SCALE: SHEET 6 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	223
		CONTRACT NO. 62P71		
	ILLINOIS	FED. AID PROJECT		



LEGEND

- SEEDING CLASS 2A, TOPSOIL EXC & PLAC, EROSION CONTROL BLANKET
- SEEDING CLASS 4, TOPSOIL EXC & PLAC, EROSION CONTROL BLANKET

MODEL: Default
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		DRAWN -	REVISED -
	PLOT SCALE = 100.0009 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/16/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LANDSCAPE PLAN

SCALE: SHEET 7 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	224
		CONTRACT NO. 62P71		
		ILLINOIS	FED. AID PROJECT	

LIGHTING AND ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	TEMPORARY LIGHTING UNIT (INCLUDES 80 FT WOOD POLE, 15 FT MAST ARM AND TEMPORARY LUMINAIRE AT 60 FT MOUNTINING HEIGHT)
E	EXISTING HIGH MAST LIGHTING UNIT TO REMAIN
	TEMPORARY WOOD POLE, 40FT
	TEMPORARY WOOD POLE MOUNTED IDOT LIGHTING CONTROLLER
	TEMPORARY ELECTRIC UTILITY SERVICE
E	EXISTING UNDERGROUND UNIT DUCT TO REMAIN
	EXISTING UNIT DUCT (INSTALLED IN CONTRACT 62N31)
A	EXISTING AERIAL LIGHTING CABLE WITH MESSENGER WIRE (INSTALLED IN CONTRACT 62N31)
	EXISTING UNIT DUCT IN UNDERGROUND CONDUIT (INSTALLED IN CONTRACT 62N31)
	REMOVE TEMPORARY LIGHTING UNITES, SALVAGE
	REMOVE TEMPORARY WOOD POLE

ABBREVIATIONS

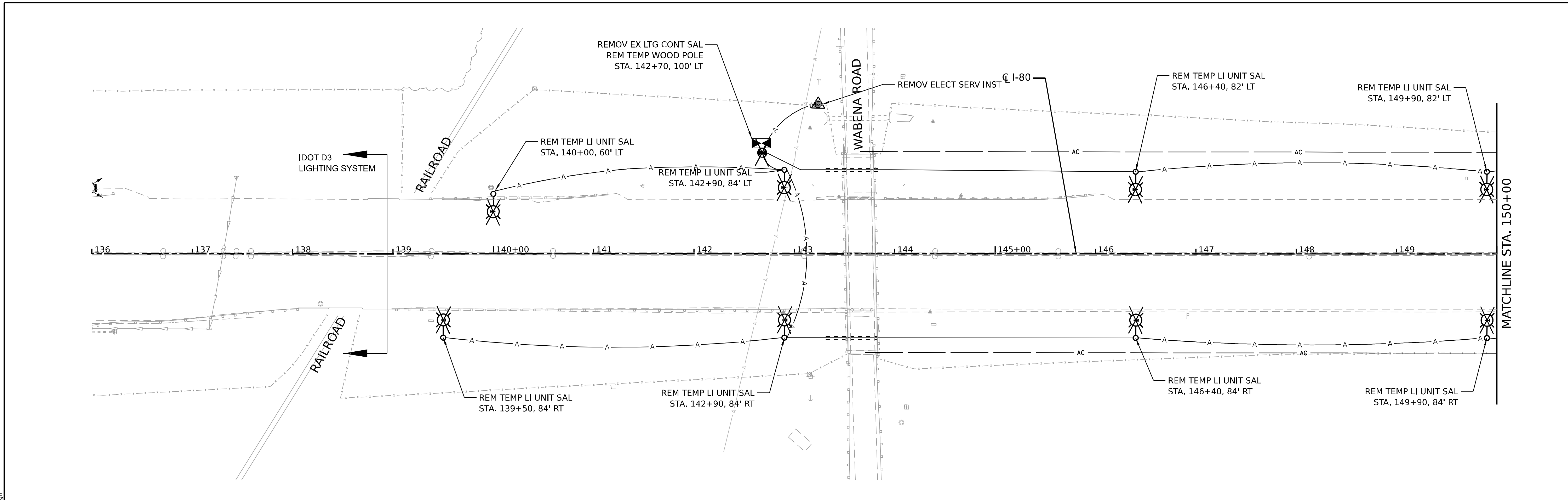
ABBREVIATION	DESCRIPTION
AC	ALTERNATING CURRENT
A	AERIAL CABLE
F.O.C.	FACE OF CURB
CKT	CIRCUIT
E	EXISTING UNIT TO REMAIN
ECA	ELECTRIC CABLE ASSEMBLY
E.O.P.	EDGE OF PAVEMENT
F	FEET OR FOOT
GND	GROUND
MA	MAST ARM
MC	MULTI-CONDUCTOR
MM	MILLIMETER
M.H.	MOUNTING HEIGHT
MW	MESSENGER WIRE
NO. #	NUMBER
N.T.S.	NOT TO SCALE
P	PROPOSED
R.O.W.	RIGHT-OF-WAY
STA	STATION
T/F	TOP OF FOUNDATION
UD	UNIT DUCT
U.N.O.	UNLESS NOTED OTHERWISE
WP	WOOD POLE

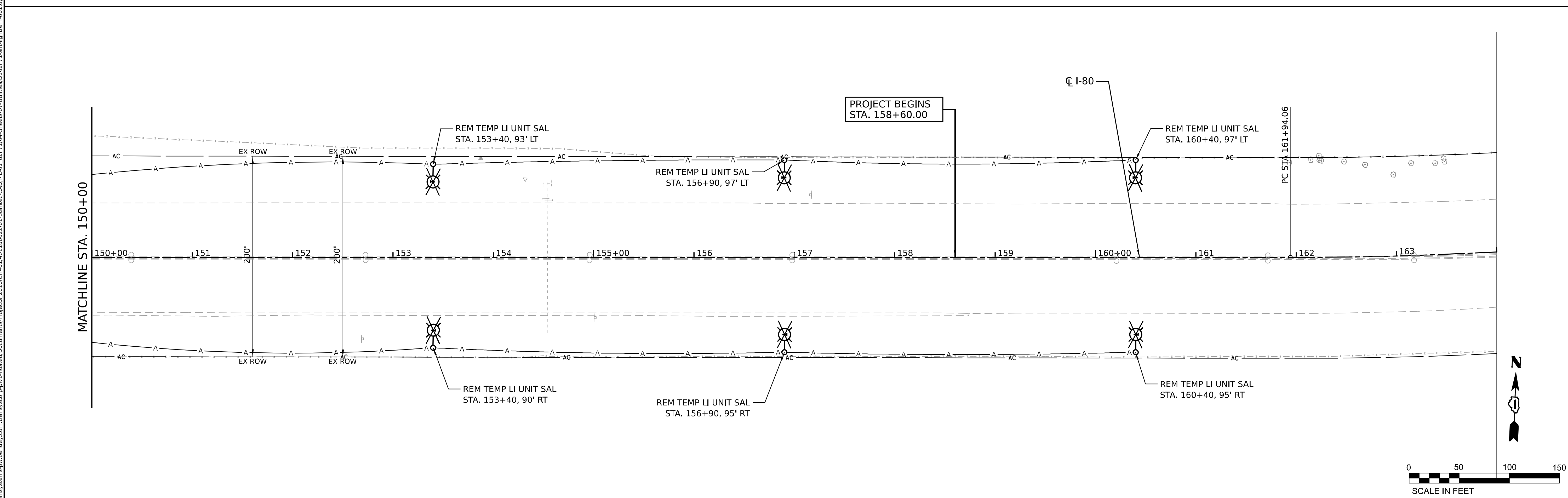
GENERAL NOTES

1. THE ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST CODES, STANDARDS AND THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 01, 2022, AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QTY
REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	1
REMOVE TEMPORARY WOOD POLE	EACH	1
REMOVE TEMPORARY LIGHTING UNITS, SALVAGE	EACH	14
REMOVE EXISTING LIGHTING CONTROLLER AND SALVAGE	EACH	1





Stantec	USER NAME = dbook	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHTING REMOVAL PLAN	F.A.I. RTE. I-80	SECTION 2021-154-R	COUNTY WILL
	PLOT SCALE = 100.000 ' / in.	DRAWN -	REVISED -			TOTAL SHEETS 477	SHEET NO. 226	
	PLOT DATE = 3/16/2023	CHECKED -	REVISED -		SCALE: SHEET 2 OF 12 SHEETS STA. TO STA.	CONTRACT NO. 62P71		
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT		

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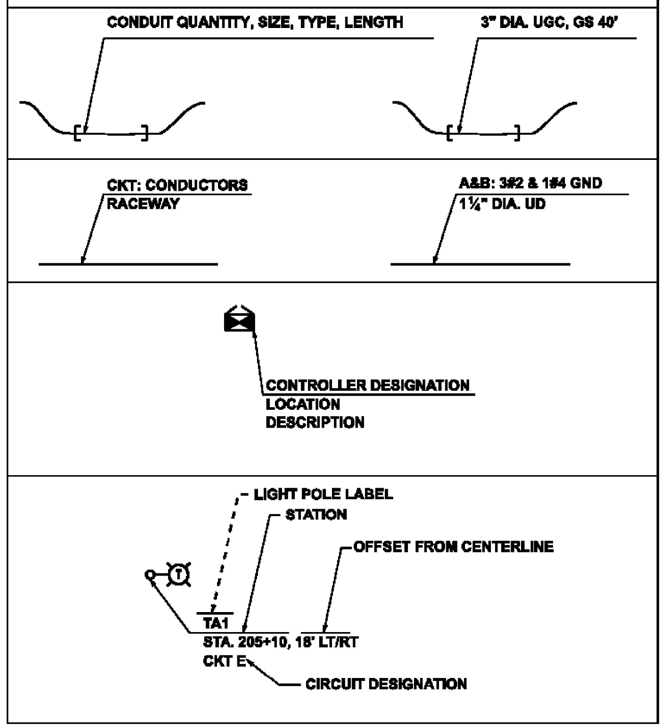
LIGHTING AND ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	TEMPORARY LIGHTING UNIT, 80FT WOOD POLE, CLASS 4, 15FT MAST ARM, TEMPORARY LUMINAIRE, LED, HIGHMAST, OUTPUT DESIGNATION I AT 60FT MOUNTING HEIGHT
	EXISTING HIGH MAST LIGHTING UNIT TO REMAIN
	TEMPORARY WOOD POLE, CLASS 4, 40FT
	TEMPORARY WOOD POLE MOUNTED IDOT LIGHTING CONTROLLER, 60A, 240/480V, 1-PHASE
	TEMPORARY ELECTRIC UTILITY SERVICE
——-E——	EXISTING UNDERGROUND UNIT DUCT TO REMAIN
	PROPOSED UNIT DUCT,SIZE AND TYPE AS NOTED
——A——	PROPOSED AERIAL LIGHTING CABLE WITH MESSENGER WIRE, SIZE AND TYPE AS NOTED
	PROPOSED UNIT DUCT IN UNDERGROUND CONDUIT, SIZE AND TYPE AS NOTED

CALL-OUT SAMPLE

DEFINITION AND EXAMPLE



SCHEDULE OF QUANTITIES

ITEM	UNIT	QTY
ELECTRIC SERVICE INSTALLATION	EACH	1
ELECTRIC UTILITY SERVICE CONNECTION	LSUM	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	110
UNIT DUCT, 600V, 3-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	810
AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE	FOOT	7,273
TEMPORARY WOOD POLE, 40 FT., CLASS 4	EACH	3
TEMPORARY WOOD POLE, 80 FT, CLASS 4, 15 FT. MAST ARM	EACH	25
TEMPORARY LUMINAIRE, LED, HIGHMAST, OUTPUT DESIGNATION I	EACH	25
TEMPORARY LIGHTING CONTROLLER	EACH	1
MAINTENANCE OF LIGHTING SYSTEM	CAL MO	5

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AC	ALTERNATING CURRENT
A	AERIAL CABLE
F.O.C.	FACE OF CURB
CKT	CIRCUIT
E	EXISTING UNIT TO REMAIN
ECA	ELECTRIC CABLE ASSEMBLY
E.O.P.	EDGE OF PAVEMENT
F	FEET OR FOOT
GND	GROUND
MA	MAST ARM
MC	MULTI-CONDUCTOR
MM	MILLIMETER
M.H.	MOUNTING HEIGHT
MW	MESSENGER WIRE
NO. #	NUMBER
N.T.S.	NOT TO SCALE
P	PROPOSED
R.O.W.	RIGHT-OF-WAY
STA	STATION
T/F	TOP OF FOUNDATION
UD	UNIT DUCT
U.N.O.	UNLESS NOTED OTHERWISE
WP	WOOD POLE

GENERAL NOTES

1. THE ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST CODES, STANDARDS AND THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 01, 2022, AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS.

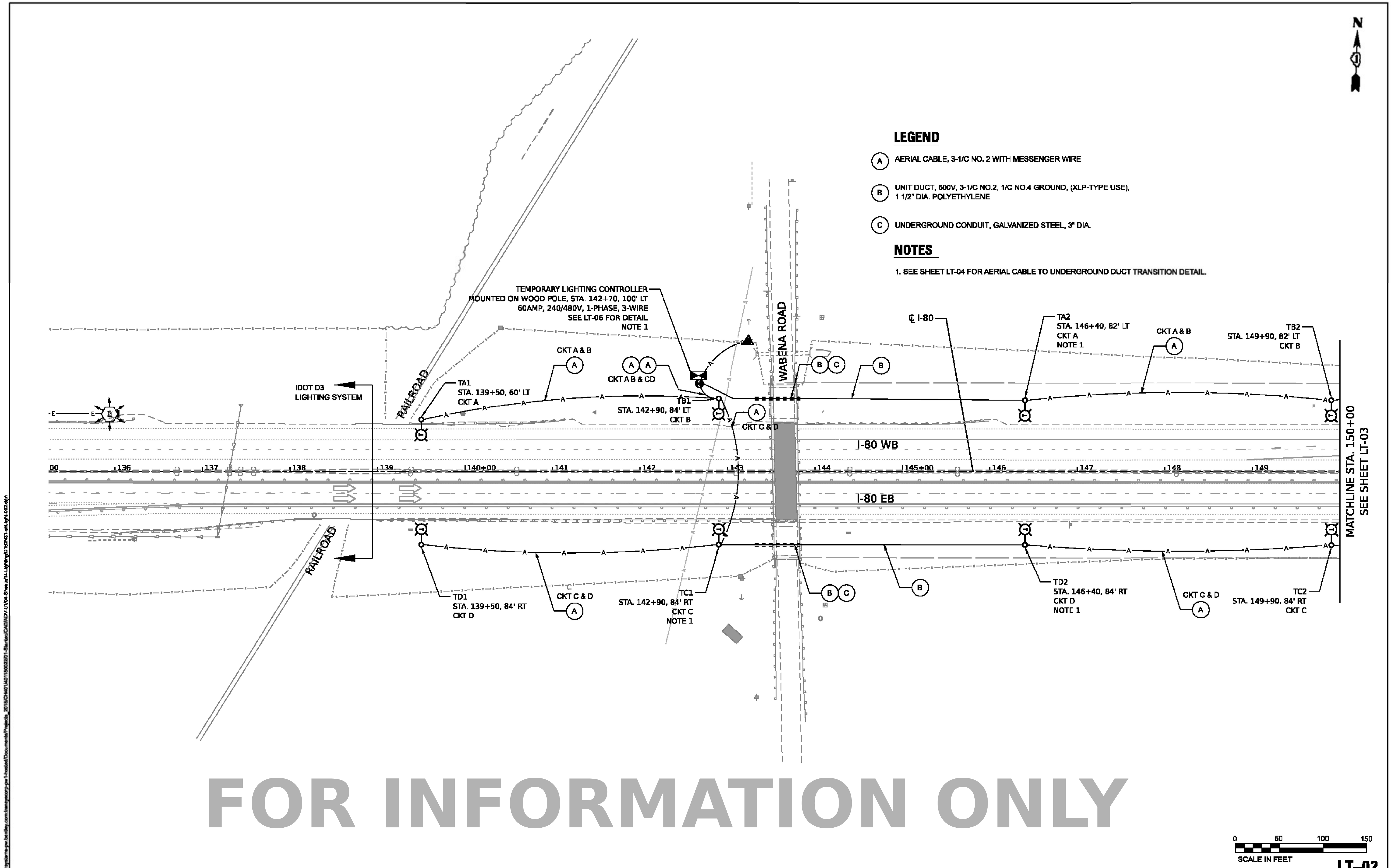
2. THE AERIAL CABLE INSTALLATION FOR TEMPORARY LIGHTING SHALL COMPLY WITH NEC (NATIONAL ELECTRICAL CODE) ARTICLE 225.18, NESC AND COMED STANDARDS FOR MINIMUM VERTICAL AND HORIZONTAL CLEARANCES.

INDEX OF DRAWINGS:

DRAWING NO.	TITLE
LT-01	LEGEND, ABBREVIATIONS, GENERAL NOTES, INDEX OF DRAWINGS, SCHEDULE OF QUANTITIES
LT-02 TO LT-03	I-80 FROM EAST OF RIDGE RD TO HOUBOLT RD EASTERN CROSS-OVER TEMPORARY LIGHTING PLANS
LT-04 TO LT-05	I-80 FROM EAST OF RIDGE RD TO HOUBOLT RD WESTERN CROSS-OVER TEMPORARY LIGHTING PLANS
LT-06	TEMPORARY LIGHTING CONTROLLER DETAILS
LT-07	LIGHTING RECORD DRAWING
LT-08 TO LT-10	STANDARD IDOT DETAILS

IDOT-D1 STANDARDS:

STANDARD NO.	TITLE
BE-702	MISC. ELECTRICAL DETAILS SHEET A
BE-800	TEMPORARY LIGHT POLE DETAILS
BE-801	TEMPORARY AERIAL CABLE INSTALLATION



SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS	USER NAME = mgarvida	DESIGNED - MG	REVISED - 11/17/2021	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-80 FROM EAST OF RIDGE RD TO HOUBOLT RD EASTERN CROSS-OVER TEMPORARY LIGHTING PLANS	F.A.I. RTE. I-80	SECTION 2021-008-SR	COUNTY WILL	TOTAL SHEETS 166	SHEET NO. 89
	PLOT SCALE = 100.0000 ' / in.	DRAWN - GS	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.		CONTRACT NO. 62N31			
	PLOT DATE = 11/17/2021	CHECKED - SG/RP	REVISED -			ILLINOIS	FED. AID PROJECT			
		DATE - 10/12/2021	REVISED -							

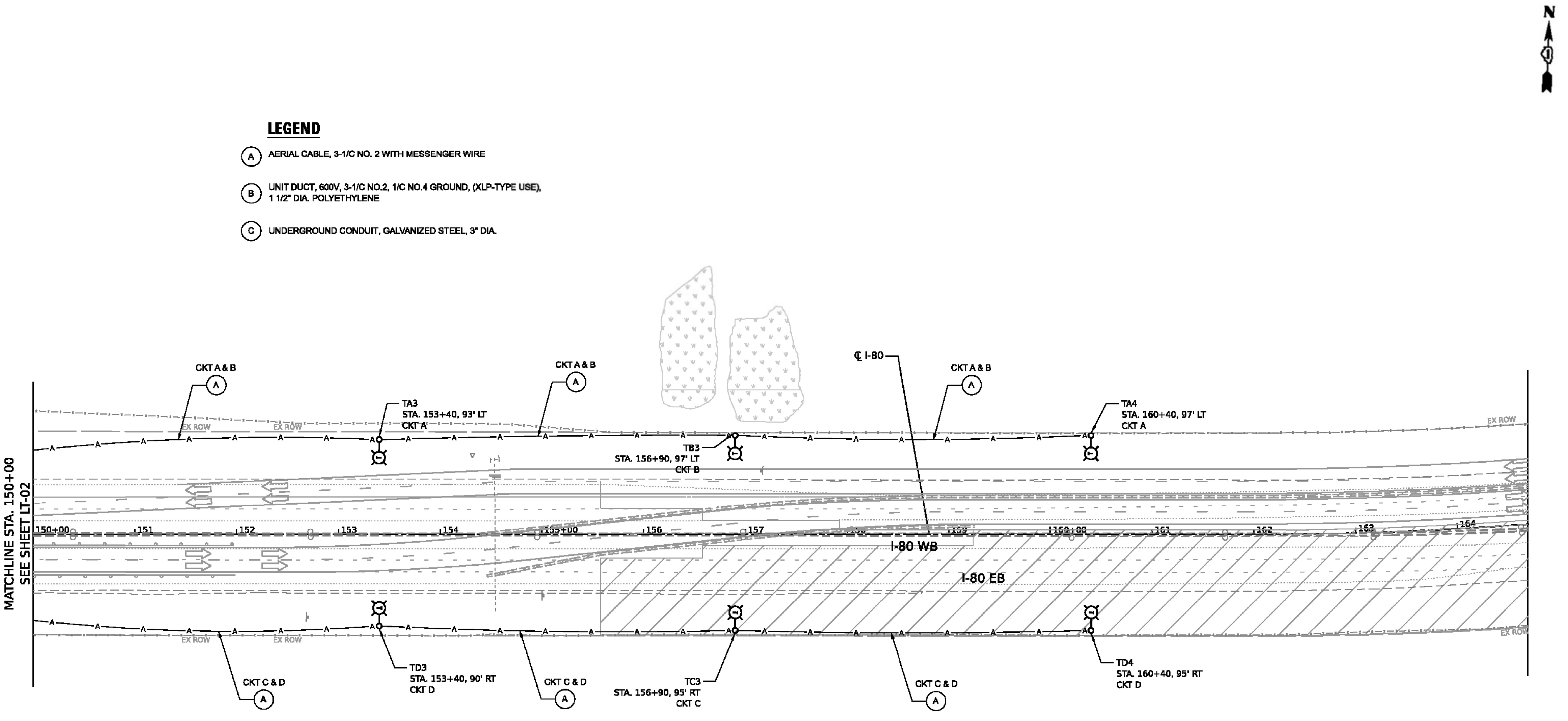
Stantec	USER NAME = dbook	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING LIGHTING PLANS (CONTRACT 62N31) FOR REFERENCE ONLY	F.A.I. RTE. I-80	SECTION 2021-154-R	COUNTY WILL	TOTAL SHEETS 477	SHEET NO. 228
	PLOT SCALE = 100.000 ' / in.	DRAWN -	REVISED -		SCALE: SHEET 4 OF 12 SHEETS STA. TO STA.		CONTRACT NO. 62P71			
	PLOT DATE = 3/16/2023	CHECKED -	REVISED -			ILLINOIS	FED. AID PROJECT			
		DATE -	REVISED -							

LEGEND

(A) AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE

(B) UNIT DUCT, 600V, 3-1/C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE

(C) UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.



0 50 100 150
SCALE IN FEET

LT-03

SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

USER NAME = mgarvida	DESIGNED - MG	REVISED -	
	DRAWN - GS	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - SG/RP	REVISED -	
PLOT DATE = 11/17/2021	DATE - 10/12/2021	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-80 FROM EAST OF RIDGE RD TO HOUBOLT RD
EASTERN CROSS-OVER TEMPORARY LIGHTING PLANS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-008-SR	WILL	166	90
CONTRACT NO. 62N31				
ILLINOIS	FED. AID PROJECT			

Stantec

USER NAME = dbook	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/16/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING PLANS (CONTRACT 62N31)
FOR REFERENCE ONLY

SCALE: SHEET 5 OF 12 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	229
CONTRACT NO. 62P71				
ILLINOIS	FED. AID PROJECT			

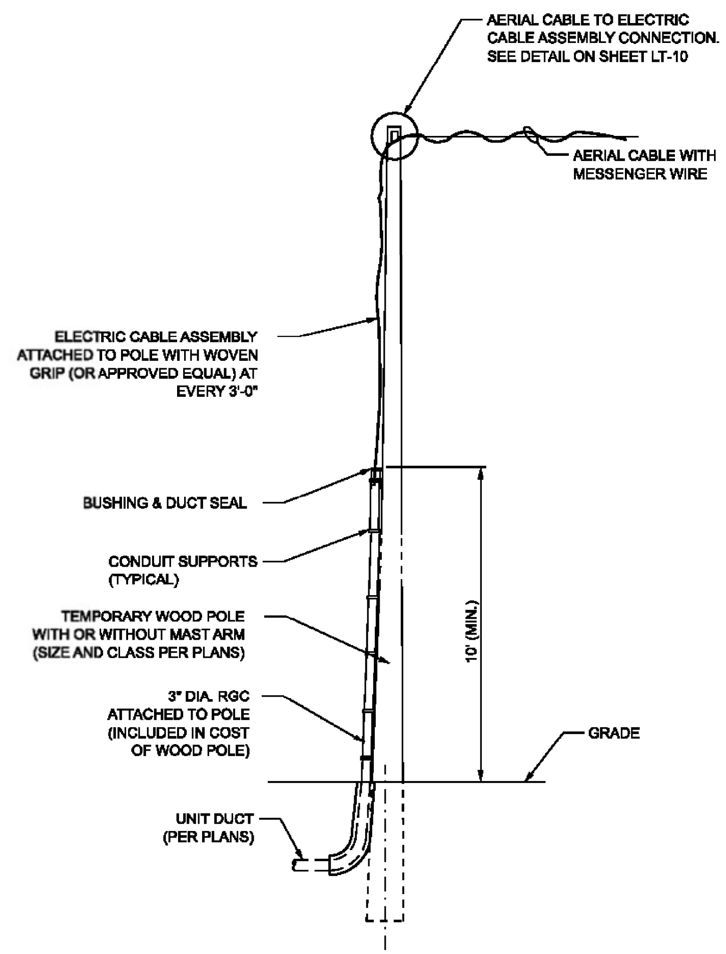
MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/ML-01_62P71/04-Sheets/07-Utilities/D162P71-sht-lightplan-ref-013.dgn

LEGEND

(A) AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE

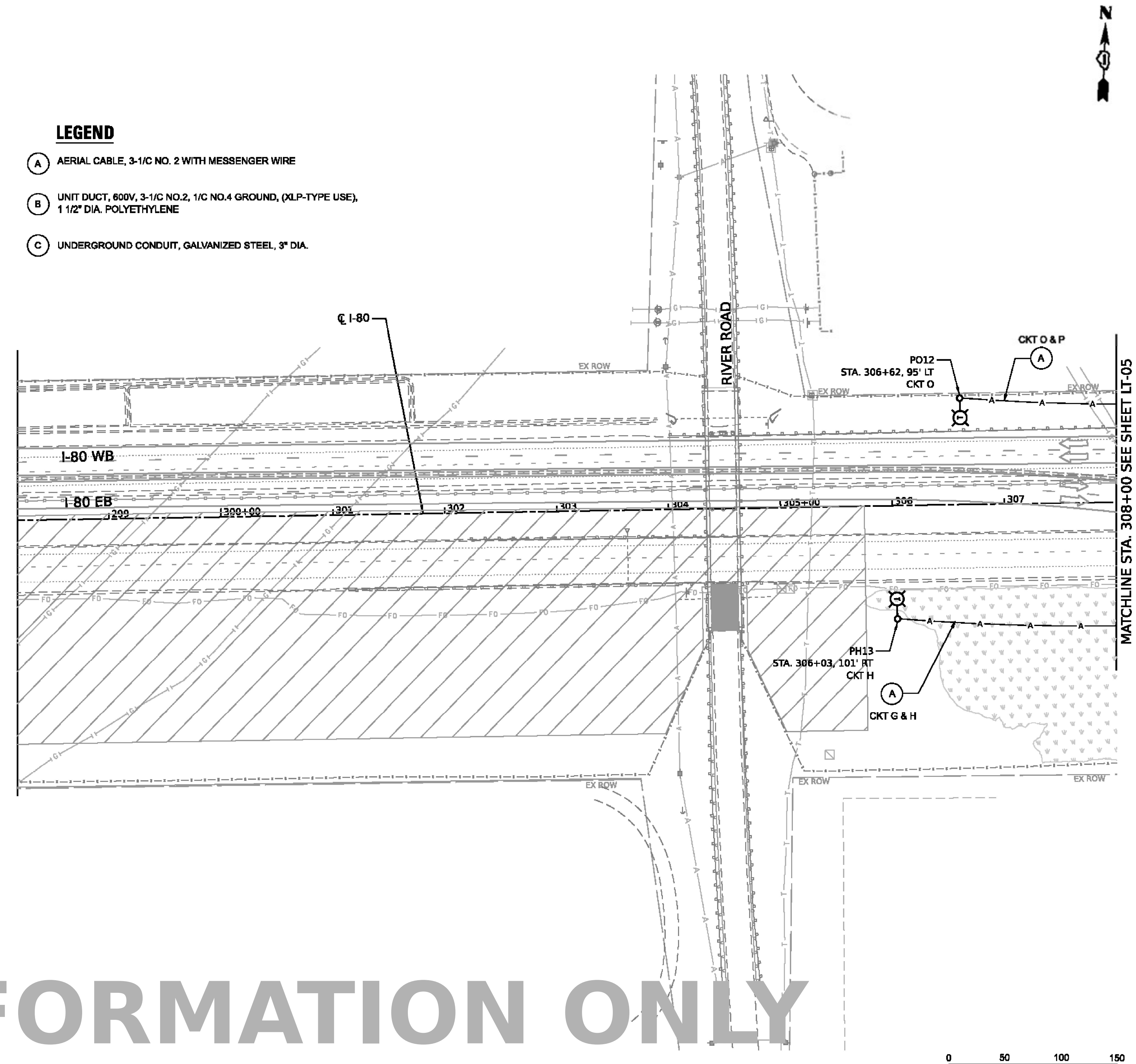
(B) UNIT DUCT, 600V, 3-1/C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE

(C) UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.



AERIAL CABLE TO UNDERGROUND DUCT TRANSITION DETAIL

N.T.S.



LT–04

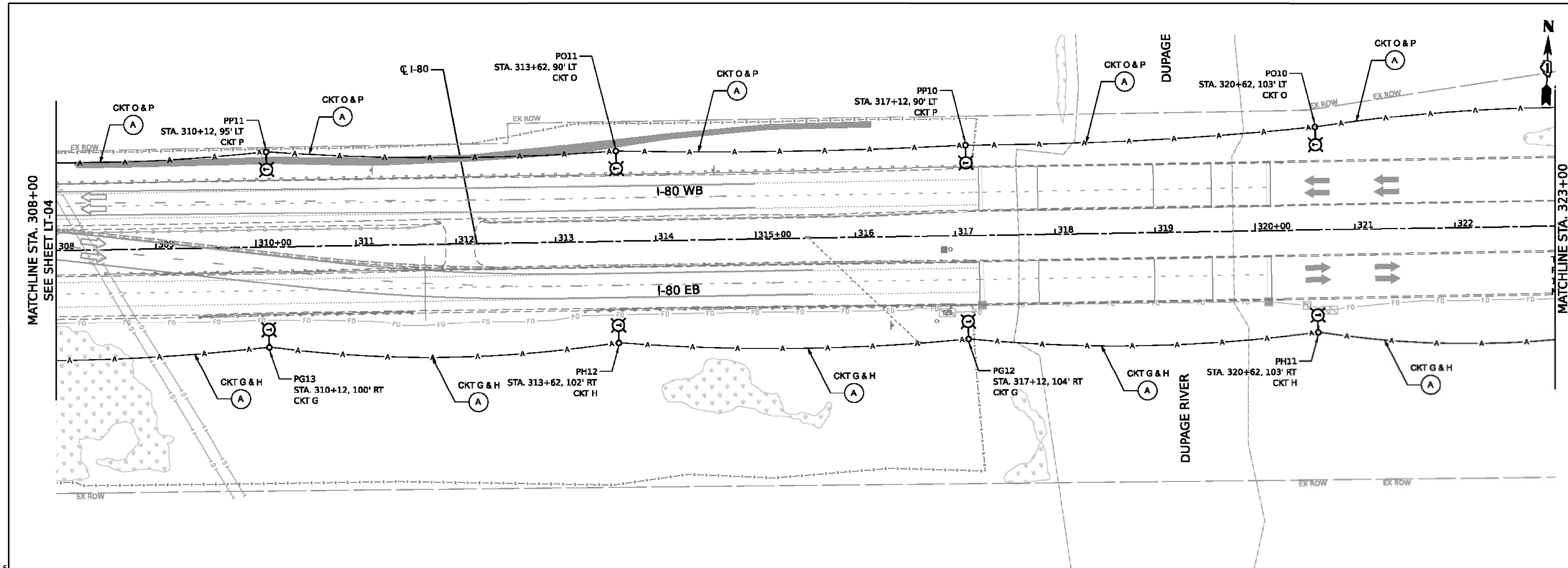
SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS	USER NAME = mgarvida	DESIGNED - MG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-80 FROM EAST OF RIDGE RD TO HOUBOLT RD WESTERN CROSS-OVER TEMPORARY LIGHTING PLANS
		DRAWN - GS	REVISED -		
	PLOT SCALE = 100.0000 ' / in.	CHECKED - SG/RP	REVISED -		
	PLOT DATE = 11/17/2021	DATE - 10/12/2021	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

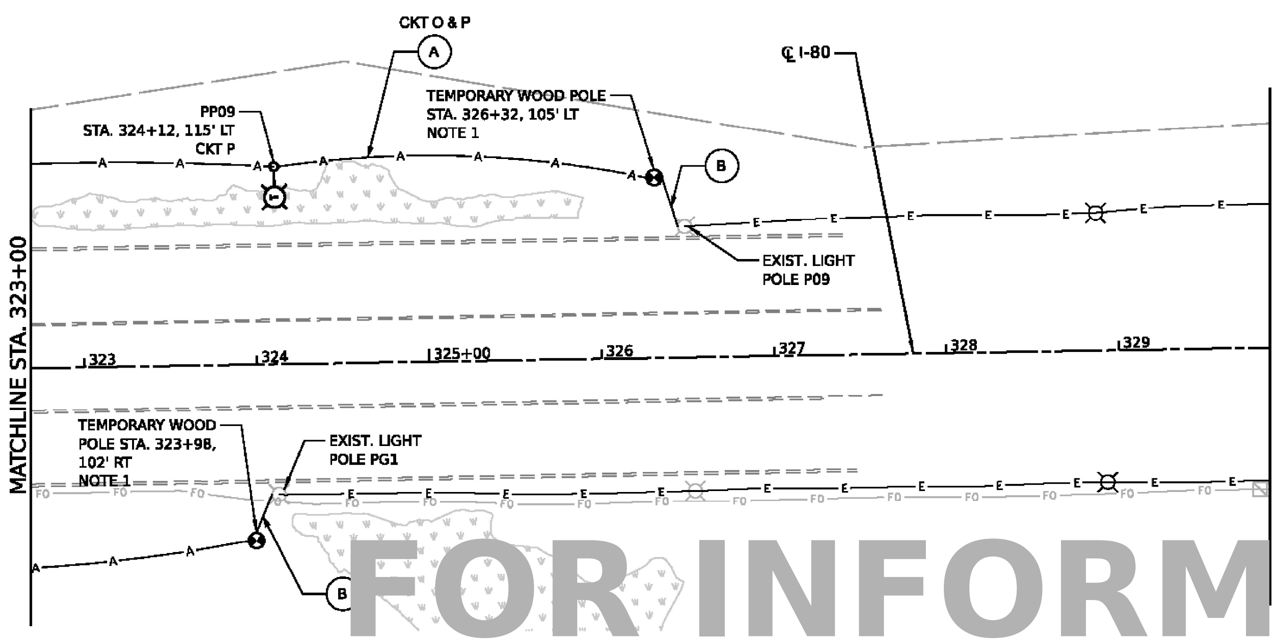
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-008-SR	WILL	166	91
		CONTRACT NO. 62N31		
	ILLINOIS	FED. AID PROJECT		

Stantec	USER NAME = dbook	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING LIGHTING PLANS (CONTRACT 62N31) FOR REFERENCE ONLY
		DRAWN -	REVISED -		
	PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -		
	PLOT DATE = 3/16/2023	DATE -	REVISED -		SCALE: SHEET 6 OF 12 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	230
		CONTRACT NO. 62P71		
	ILLINOIS	FED. AID PROJECT		

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/ML-01_62P71/04-Sheets/07-Utilities/D162P71-sht-lightplan-ref-014.dgn





LEGEND

(A) AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE

(B) UNIT DUCT, 600V, 3-1/C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE

(C) UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.

NOTES

1. SEE SHEET LT-04 FOR AERIAL CABLE TO UNDERGROUND DUCT TRANSITION DETAIL.

0 50 100 150
SCALE IN FEET

LT-05

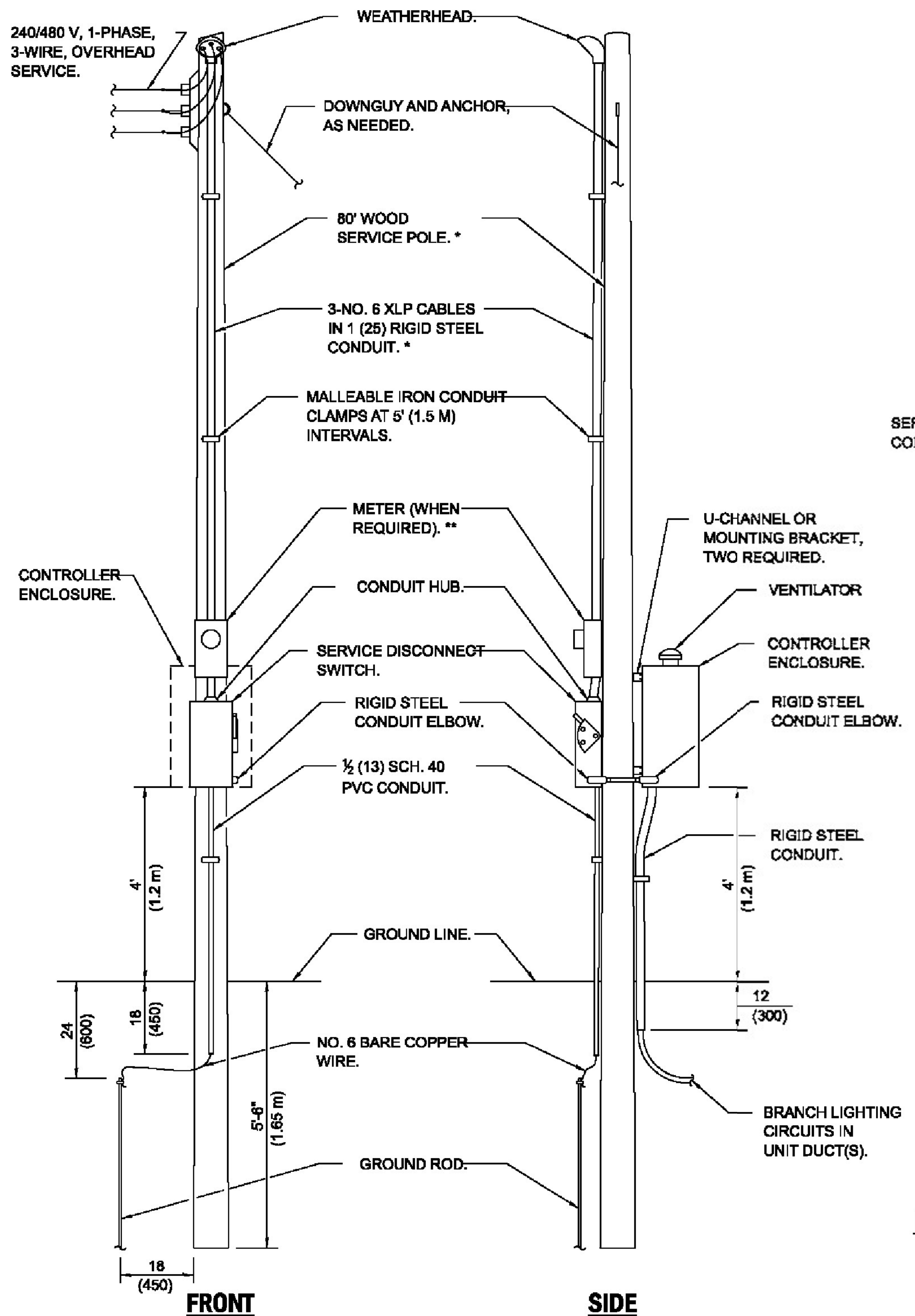
SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS	USER NAME = mgarvida	DESIGNED - MG	REVISED - 11/17/2021	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-80 FROM EAST OF RIDGE RD TO HOUBOLT RD WESTERN CROSS-OVER TEMPORARY LIGHTING PLANS
		DRAWN - GS	REVISED -		
	PLOT SCALE = 100.0000 ' / in.	CHECKED - SG/RP	REVISED -		
	PLOT DATE = 11/17/2021	DATE - 10/12/2021	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-008-SR	WILL	166	92
CONTRACT NO. 62N31				
ILLINOIS FED. AID PROJECT				

Stantec	USER NAME = dbook	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING LIGHTING PLANS (CONTRACT 62N31) FOR REFERENCE ONLY
		DRAWN -	REVISED -		
	PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -		
	PLOT DATE = 3/16/2023	DATE -	REVISED -		SCALE: SHEET 7 OF 12 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	231
CONTRACT NO. 62P71				
ILLINOIS FED. AID PROJECT				

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/ML-01_62P71/04-Sheets/07-Utilities/D162P71-sht-lightplan-ref-015.dgn

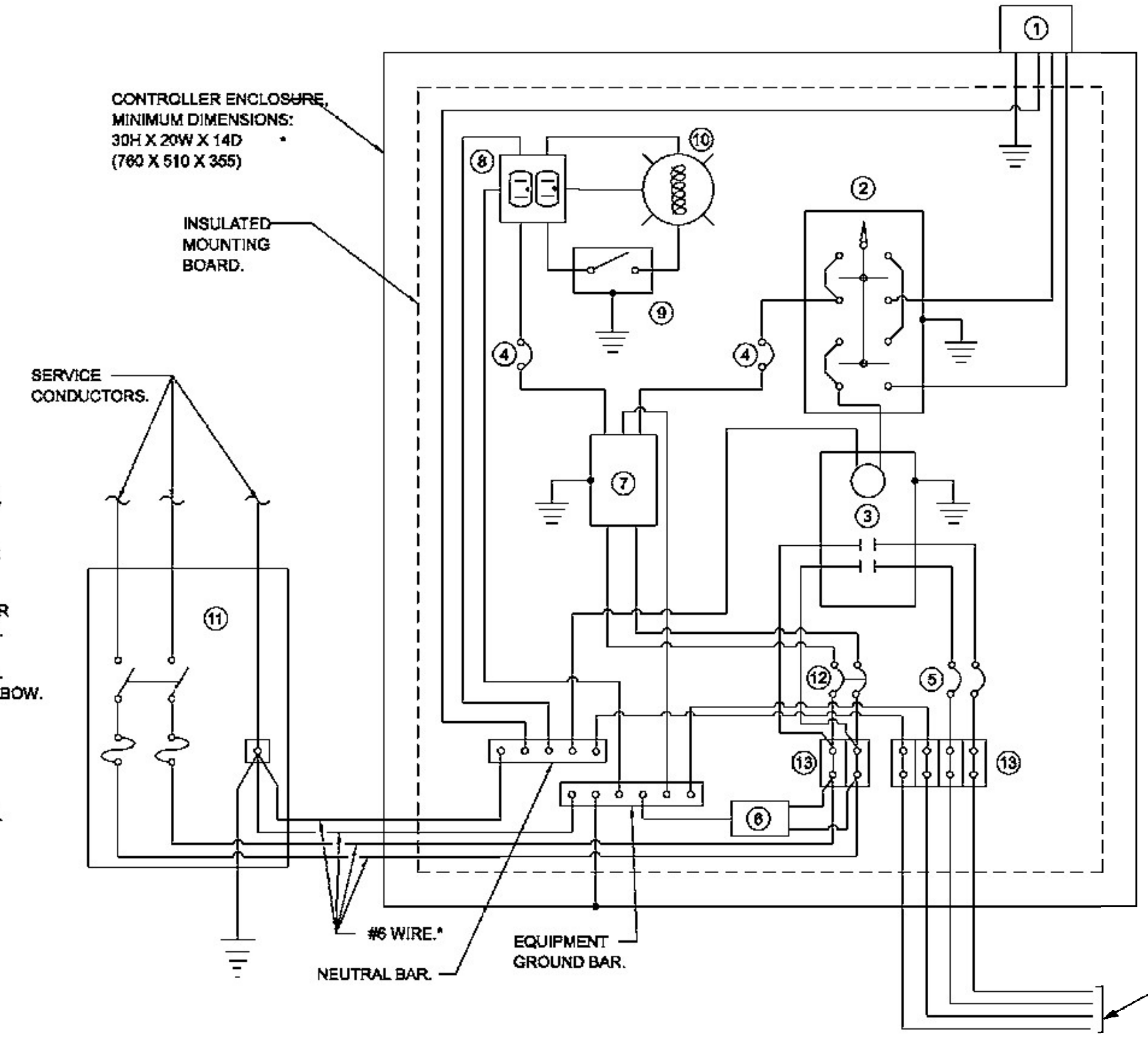


ELECTRIC SERVICE INSTALLATION

(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.

** WHEN COLD SEQUENCING IS REQUIRED, PROVIDE A METER DISCONNECT SWITCH AS DIRECTED BY UTILITY COMPANY.



CONTROL SCHEMATIC

1. PHOTOCELL WITH INTEGRAL SURGE ARRESTER.
2. HAND-OFF-AUTO SELECTOR SWITCH.
3. 100 AMP*, ELECTRICALLY HELD CONTACTOR.
4. 15 AMP, 1-POLE CIRCUIT BREAKER.
5. 20 AMP*, 1-POLE CIRCUIT BREAKER (FOUR REQUIRED BUT NOT SHOWN).
6. SURGE ARRESTER.
7. TRANSFORMER - 1KVA*, 480V PRIMARY, 120/240V SECONDARY, SINGLE-PHASE, 60HZ.
8. GFCI DUPLEX RECEPTACLE.
9. SINGLE-POLE, SINGLE-THROW SWITCH.
10. INCANDESCENT LUMINAIRE, ENCLOSED AND GASKETTED WITH 100 WATT LAMP.
11. SERVICE DISCONNECT SWITCH - 2-POLE, 3-WIRE, 60 AMP*, FUSED AT 60 AMP*, SOLID NEUTRAL IN NEMA 4X ENCLOSURE HAVING LOCKABLE EXTERNAL HANDLE.
12. 15 AMP, 2-POLE CIRCUIT BREAKER.
13. 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.

LT–06

SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

USER NAME = mgarvida	DESIGNED - MG	REVISED - 11/17/2021
	DRAWN - GS	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - SG/RP	REVISED -
PLOT DATE = 11/17/2021	DATE - 10/12/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

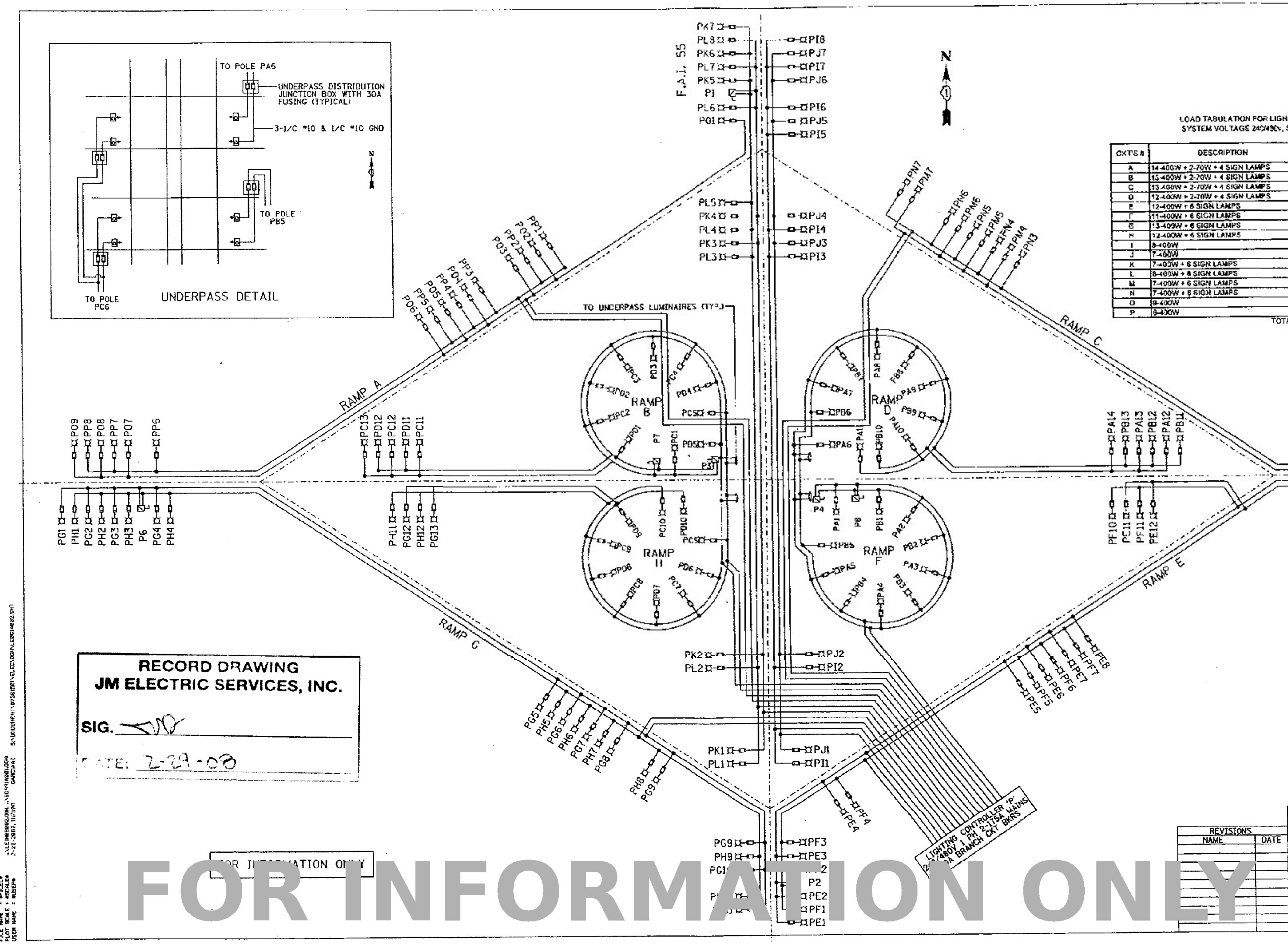
TEMPORARY LIGHTING CONTROLLER DETAIL

SCALE: NTS | SHEET 1 OF 6 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-008-SR	WILL	166	93

CONTRACT NO. 62N31

ILLINOIS | FED. AID PROJECT



CONTRACT NO. 62895

LOAD TABULATION FOR LIGHTING CONTROLLER "P"
SYSTEM VOLTAGE 240/480v, SINGLE PHASE, 3-WIRE

CKTS #	DESCRIPTION	PHASE A (RED) AMPS	PHASE B (BLACK) AMPS
A	14-400W + 2-70W + 4 SIGN LAMPS	34	
B	13-400W + 2-70W + 4 SIGN LAMPS		32
C	13-400W + 2-70W + 4 SIGN LAMPS	32	
D	12-400W + 2-70W + 4 SIGN LAMPS		30
E	12-400W + 6 SIGN LAMPS	30	
F	11-400W + 6 SIGN LAMPS		28
G	13-400W + 6 SIGN LAMPS	32	
H	12-400W + 6 SIGN LAMPS		30
I	8-400W	16	
J	7-400W		14
K	7-400W + 6 SIGN LAMPS	20	
L	8-400W + 8 SIGN LAMPS		22
M	7-400W + 6 SIGN LAMPS	20	
N	7-400W + 6 SIGN LAMPS		20
O	9-400W	18	
P	8-400W		16
	TOTAL	202	192

LEGEND

- LUMINAIRE, 400W HPS
- LUMINAIRE, 70W HPS
- FUSE, 6A, UNLESS OTHERWISE NOTED
- SOLID NEUTRAL
- FUSED DISCONNECT
- 3-1/C #2 & 1/C #4 GND

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAI ROUTE 55 (I-80 TO BLACK ROAD) WIDENING AND RESURFACING

ONE LINE DIAGRAM
I-55 @ I-80
(FOR INFORMATION ONLY)

SCALE: N.T.S. DRAWN BY MMP
DATE 02/23/07 CHECKED BY JWO

TENG — TENG & ASSOCIATES, INC. ENGINEERS/ARCHITECTS/PLANNERS CHICAGO, ILLINOIS

LT-07

SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

USER NAME = gshowers	DESIGNED - MG	REVISED -
	DRAWN - GS	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - SG/RP	REVISED -
PLOT DATE = 10/12/2021	DATE - 10/12/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING RECORD DRAWING

SCALE: NTS SHEET 1 OF 6 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-008-SR	WILL	166	94

CONTRACT NO. 62N31

Stantec

USER NAME = dbook	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/16/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

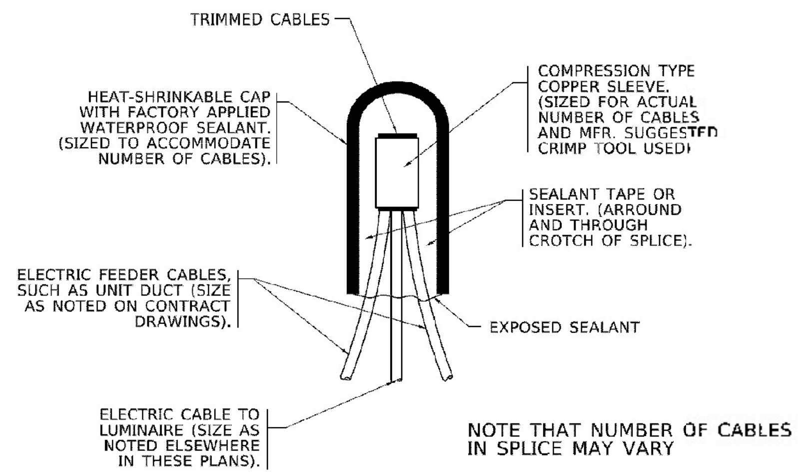
EXISTING LIGHTING PLANS (CONTRACT 62N31)
FOR REFERENCE ONLY

SCALE: SHEET 9 OF 12 SHEETS STA. TO STA.

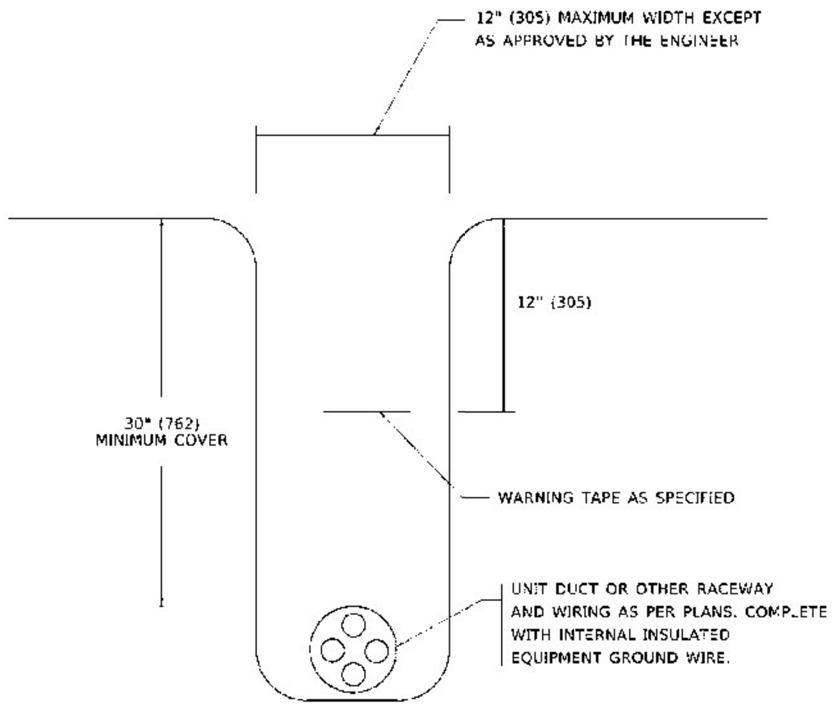
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	233

CONTRACT NO. 62P71

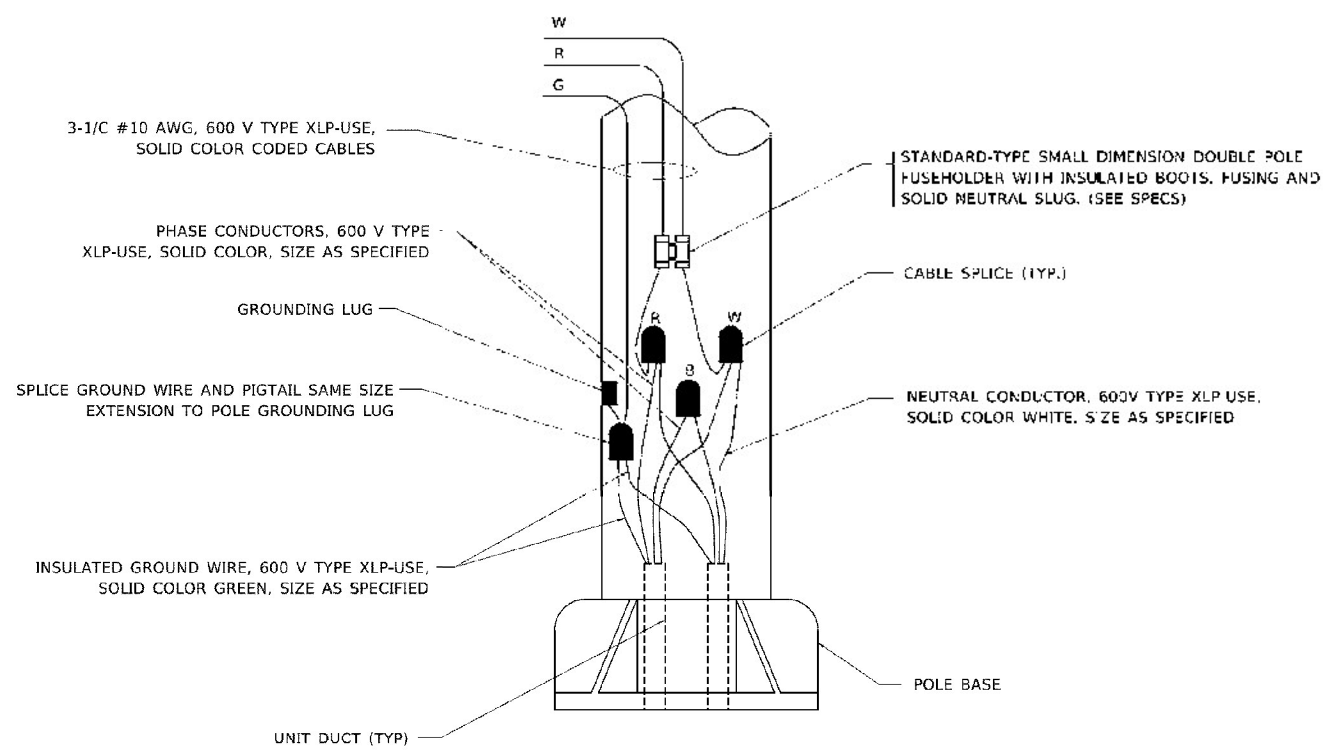
ILLINOIS FED. AID PROJECT



TYPICAL SPLICE DETAIL
N.T.S.



TYPICAL WIRING IN TRENCH DETAIL
N.T.S.



POLE WIRING DETAIL
N.T.S.

USER NAME = leyse	DESIGNED -	REVISED - 02/04/..	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. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO.
BE-702 | CONTRACT NO.
ILLINOIS | FED. AID PROJECT

LT–08

SINGH
SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

USER NAME = gshowers	DESIGNED - MG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN - GS	REVISED -	
PLOT SCALE = 2.0000 ' / in.	CHECKED - SG/RP	REVISED -	
PLOT DATE = 10/12/2021	DATE - 10/12/2021	REVISED -	

IDOT STANDARD DETAILS
SCALE: NTS | SHEET 1 OF 6 SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-008-SR	WILL	166	95

CONTRACT NO. 62N31
ILLINOIS | FED. AID PROJECT

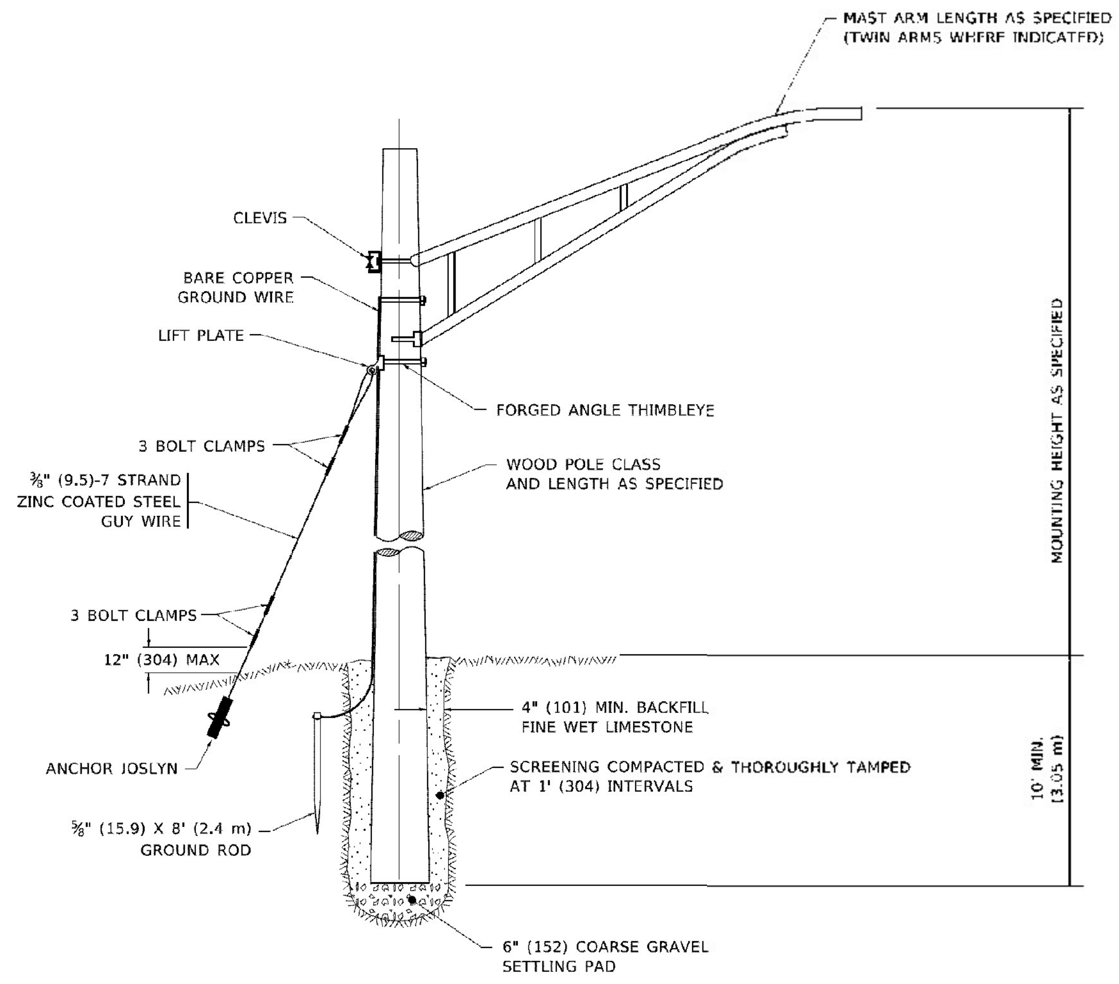
Stantec

USER NAME = dbook	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/16/2023	DATE -	REVISED -	

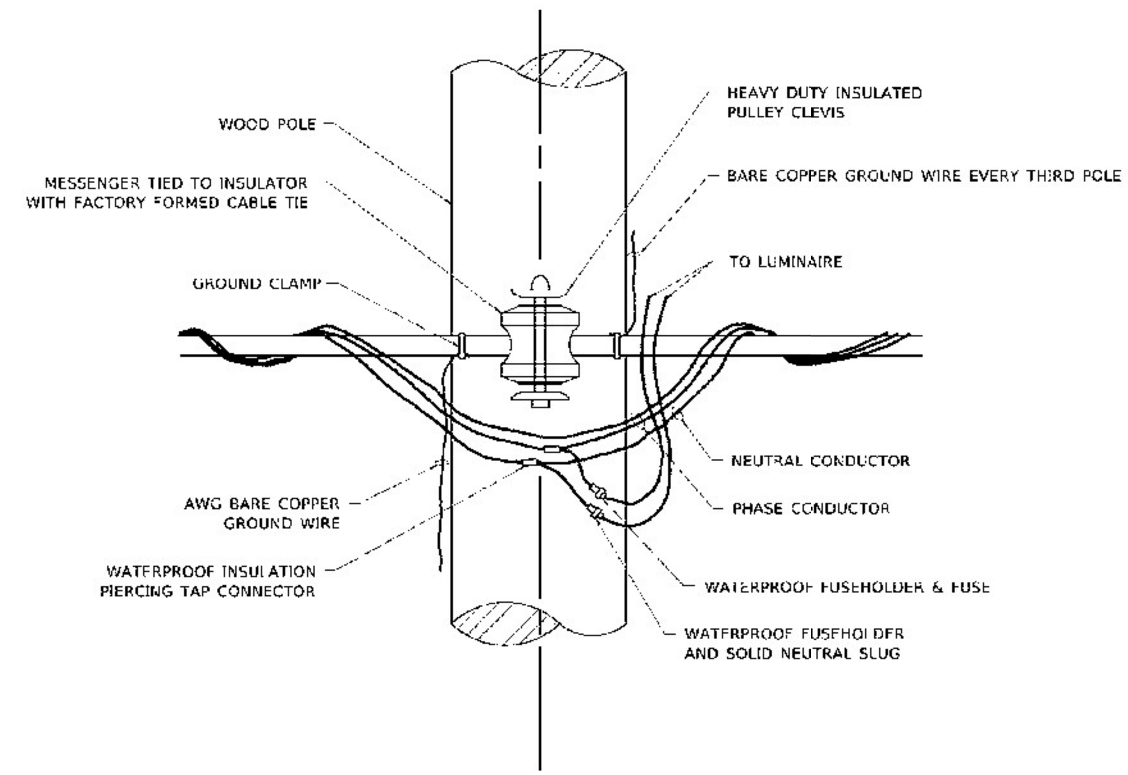
EXISTING LIGHTING PLANS (CONTRACT 62N31)
FOR REFERENCE ONLY
SCALE: | SHEET 10 OF 12 SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	234

CONTRACT NO. 62P71
ILLINOIS | FED. AID PROJECT



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.

FOR INFORMATION ONLY

USER NAME = footemj	DESIGNED -	REVISED - 08-08-03	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED - R.T. 07-26-16	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/19/2019	DATE -	REVISED -	

TEMPORARY LIGHT POLE DETAILS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
BE-800		CONTRACT NO.		

ILLINOIS | FED. AID PROJECT

LT-09

SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

USER NAME = gshowers	DESIGNED - MG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN - GS	REVISED -	
PLOT SCALE = 2.0000 ' / in.	CHECKED - SG/RP	REVISED -	
PLOT DATE = 10/12/2021	DATE - 10/12/2021	REVISED -	

IDOT STANDARD DETAILS

SCALE: NTS | SHEET 1 OF 6 SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-008-SR	WILL	166	96
		CONTRACT NO. 62N31		

ILLINOIS | FED. AID PROJECT

Stantec

USER NAME = dbook	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/16/2023	DATE -	REVISED -	

EXISTING LIGHTING PLANS (CONTRACT 62N31)
FOR REFERENCE ONLY

SCALE: | SHEET 11 OF 12 SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	235
		CONTRACT NO. 62P71		

ILLINOIS | FED. AID PROJECT

MODEL: Default
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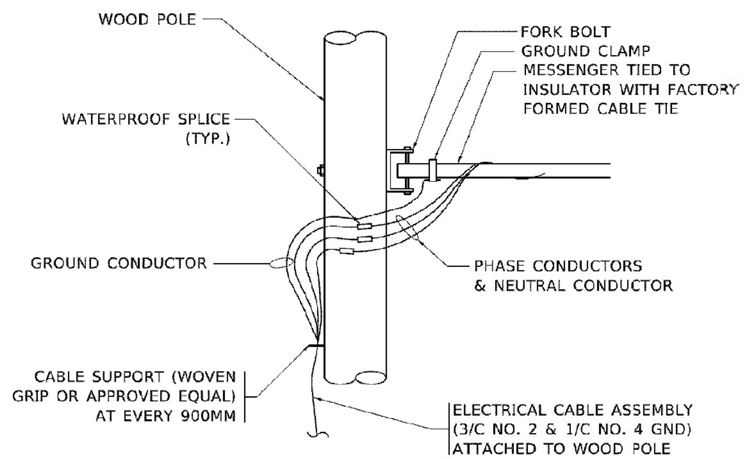
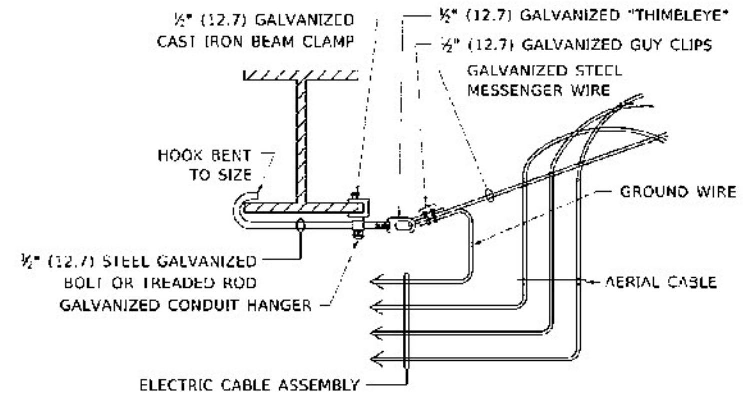


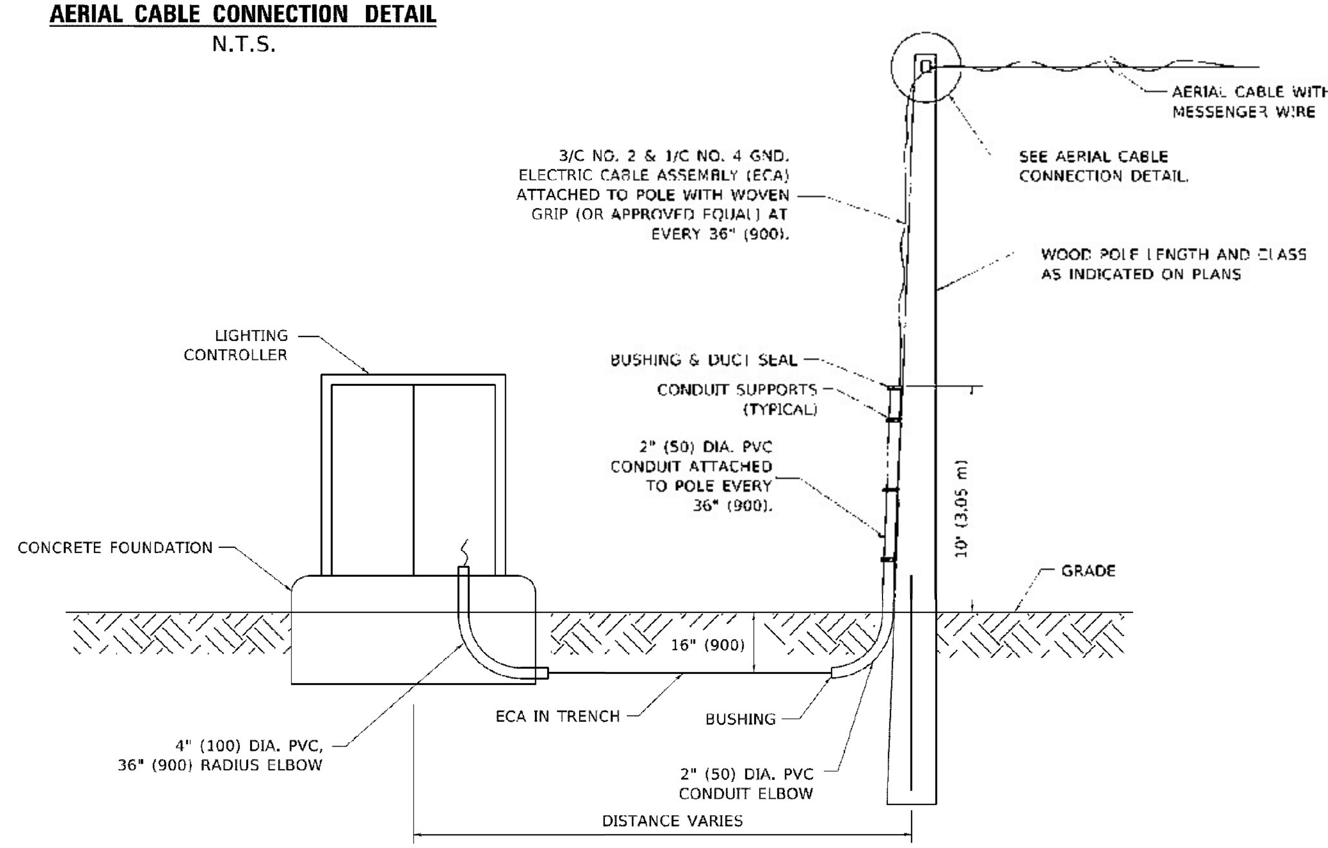
AERIAL CABLE CONNECTION DETAIL

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 CABLE ATTACHED TO STRUCTURE DETAIL.
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.

PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY AERIAL CABLE INSTALLATION
PLOT DATE = 4/19/2019	DATE -	REVISED -		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-801			
		CONTRACT NO.		

LT–10

USER NAME = gshowers	DESIGNED - MG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IDOT STANDARD DETAILS
	DRAWN - GS	REVISED -		
PLOT SCALE = 2.0000 ' / in.	CHECKED - SG/RP	REVISED -		
PLOT DATE = 10/12/2021	DATE - 10/12/2021	REVISED -		SCALE: NTS SHEET 1 OF 6 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-008-SR	WILL	166	97
	CONTRACT NO. 62N31			

SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

Stantec

USER NAME = dbook	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING LIGHTING PLANS (CONTRACT 62N31) FOR REFERENCE ONLY
	DRAWN -	REVISED -		
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -		
PLOT DATE = 3/16/2023	DATE -	REVISED -		SCALE: SHEET 12 OF 12 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	236
	CONTRACT NO. 62P71			

ILLINOIS FED. AID PROJECT

LIGHTING AND ELECTRICAL LEGEND

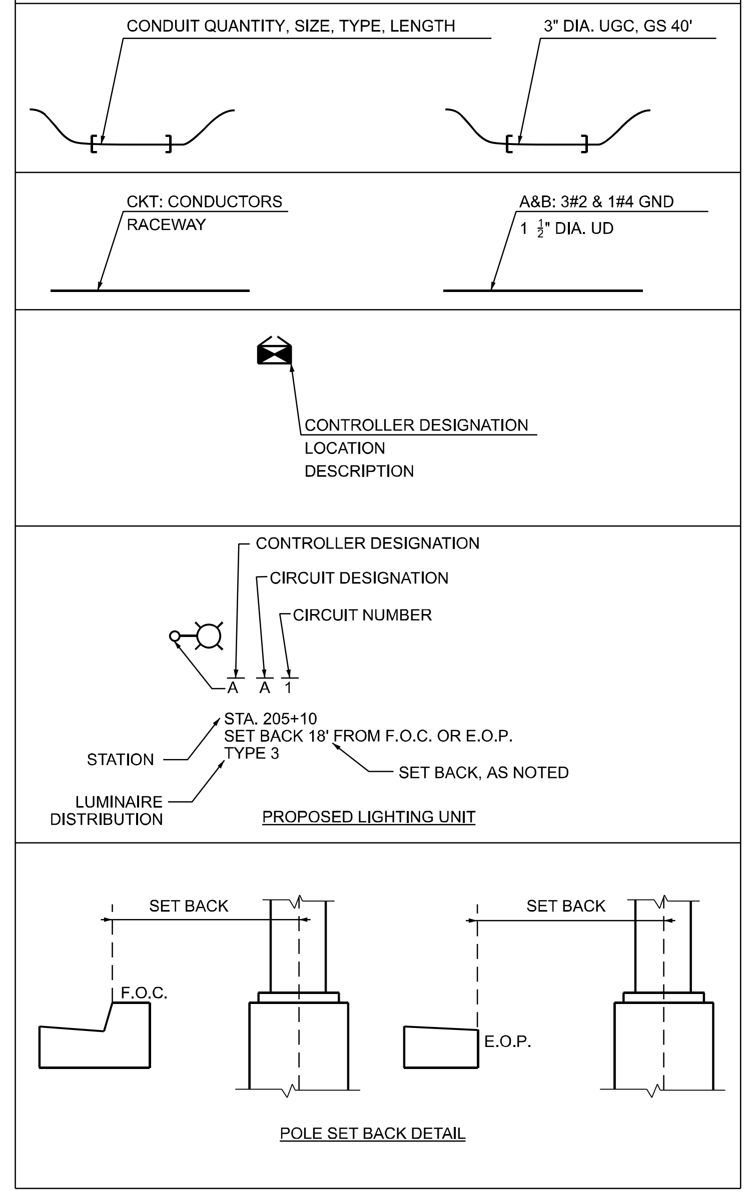
SYMBOL	DESCRIPTION
	PROPOSED LIGHTING UNIT MOUNTED ON BREAKAWAY DEVICE, METAL FOUNDATION, 47.5 FT M.H. U.N.O., 15 FT MAST ARM, LUMINAIRE TO BE LED, HORIZONTAL MOUNT, OUTPUT DESIGNATION H (240 VAC) U.N.O. (SHOWN FOR REFERENCE, TO BE INSTALLED UNDER FUTURE CONTRACT 62R28)
	PROPOSED MEDIAN FOUNDATION FOR FUTURE LIGHTING UNIT, 47.5 FT M.H. U.N.O., 6 FT TWIN ARM, LUMINAIRE TO BE LED, HORIZONTAL MOUNT, OUTPUT DESIGNATION I (240 VAC) U.N.O. (LIGHTING UNIT TO BE INSTALLED UNDER FUTURE CONTRACT 62R28)
J	PROPOSED JUNCTION BOX, SIZE AND TYPE AS NOTED
- - - - - - - - - - -	PROPOSED CONDUIT EMBEDDED IN STRUCTURE, 4" DIA, PVC
	UNDERGROUND CONDUIT, SCH 80, PVC, 4" DIA

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
A/C	AERIAL CABLE
ATS	ATTACHED TO STRUCTURE
B.O.C.	BACK OF CURB
CKT	CIRCUIT
COMED	COMMONWEALTH EDISON COMPANY
DIA	DIAMETER
E	EXISTING UNIT TO REMAIN
EIS	EMBEDDED IN STRUCTURE
E.O.P.	EDGE OF PAVEMENT
F.O.C.	FACE OF CURB
FT	FEET OR FOOT
GND	GROUND
JB	JUNCTION BOX
KVA	KILOVOLT-AMPERE
KW	KILOWATTS
LED	LIGHT EMITTING DIODE
MA	MAST ARM
M.H.	MOUNTING HEIGHT
NO. #	NUMBER
N.T.S.	NOT TO SCALE
P	PROPOSED
PVC	POLYVINYL CHLORIDE
PVCC RGC	PVC COATED RIGID GALVANIZED CONDUIT
R	EXISTING UNIT TO BE REMOVED (OWNER SALVAGED U.N.O.)
RR	EXISTING UNIT TO BE REMOVED AND REINSTALLED
RGC	RIGID GALVANIZED CONDUIT
SCH	SCHEDULE
SS	STAINLESS STEEL
STA	STATION
UD	UNIT DUCT
U.N.O.	UNLESS NOTED OTHERWISE
UGC, GS	UNDERGROUND CONDUCT, GALVANIZED STEEL
VAC	VOLTS, ALTERNATING CURRENT
W	WATTS

CALL–OUT SAMPLE

DEFINITION AND EXAMPLE



GENERAL NOTES

1. THE ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST CODES, STANDARDS AND THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2022, AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS.
2. THE CONTRACTOR SHALL CONTACT MEADE ELECTRIC CO. DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR TO LOCATE IDOT ELECTRICAL EQUIPMENT AND UNDERGROUND CABLES 773-287-7672.

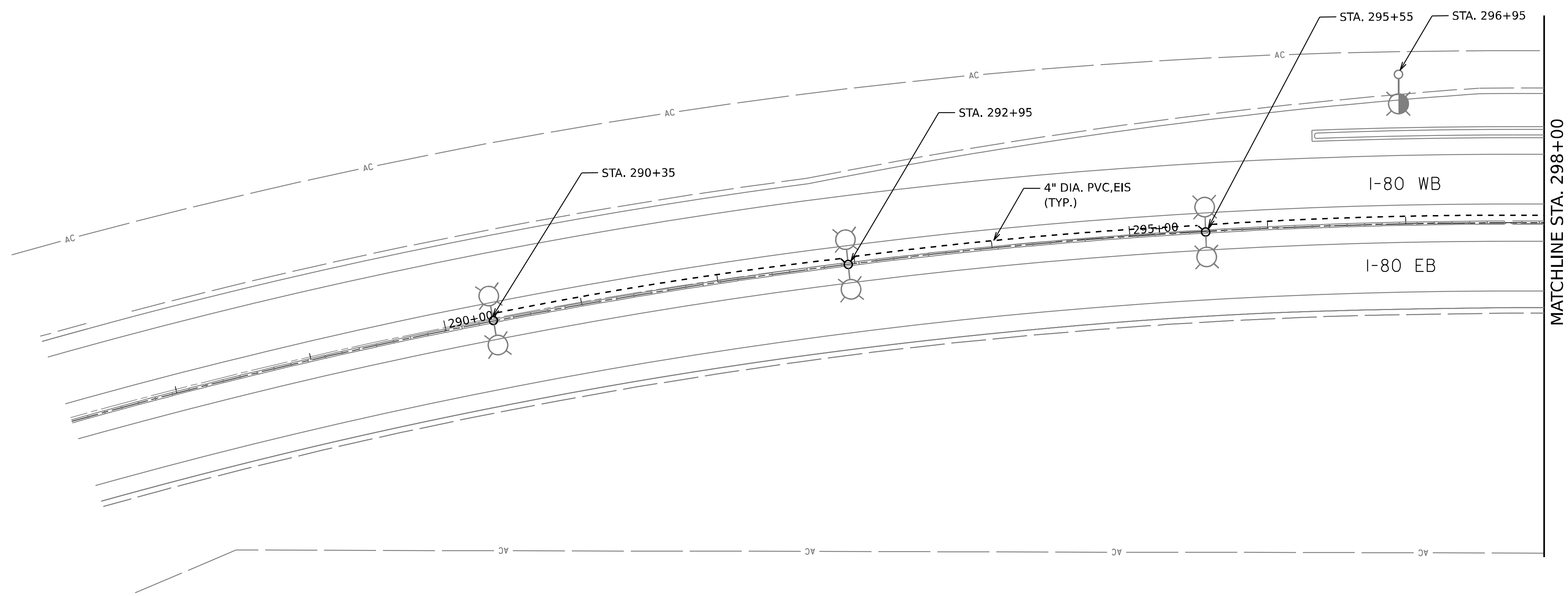
IDOT–D1 STANDARDS:

STANDARD NO.	TITLE
BE-703	MISC. ELECTRICAL DETAILS SHEET B

I–80 CORRIDOR LIGHTING DETAILS:

- 24" (610 mm) DIA. LIGHT POLE FOUNDATION INTEGRAL WITH DOUBLE FACE BARRIER WALL

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
81028390	UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	275
81200270	CONDUIT EMBEDDED IN STRUCTURE, 4" DIA., PVC	FOOT	1,315
X8130350	JUNCTION BOX EMBEDDED IN STRUCTURE, SPECIAL	EACH	2
X8360105	LIGHT POLE FOUNDATION, INTEGRAL WITH BARRIER WALL, 24" DIAMETER	FOOT	54
Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	26



N

0 50 100 150
SCALE IN FEET

NOTES:

1. SEE SHEET LT-01 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
2. SEE STRUCTURAL SHEETS FOR MEDIAN FOUNDATION DETAILS.

SINGH SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS	USER NAME = vgurskas	DESIGNED - VG	REVISED -
		DRAWN - VN/MAG	REVISED -
	PLOT SCALE = 100.000 ' / in.	CHECKED - RP	REVISED -
	PLOT DATE = 4/12/2023	DATE - 03/17/2023	REVISED -

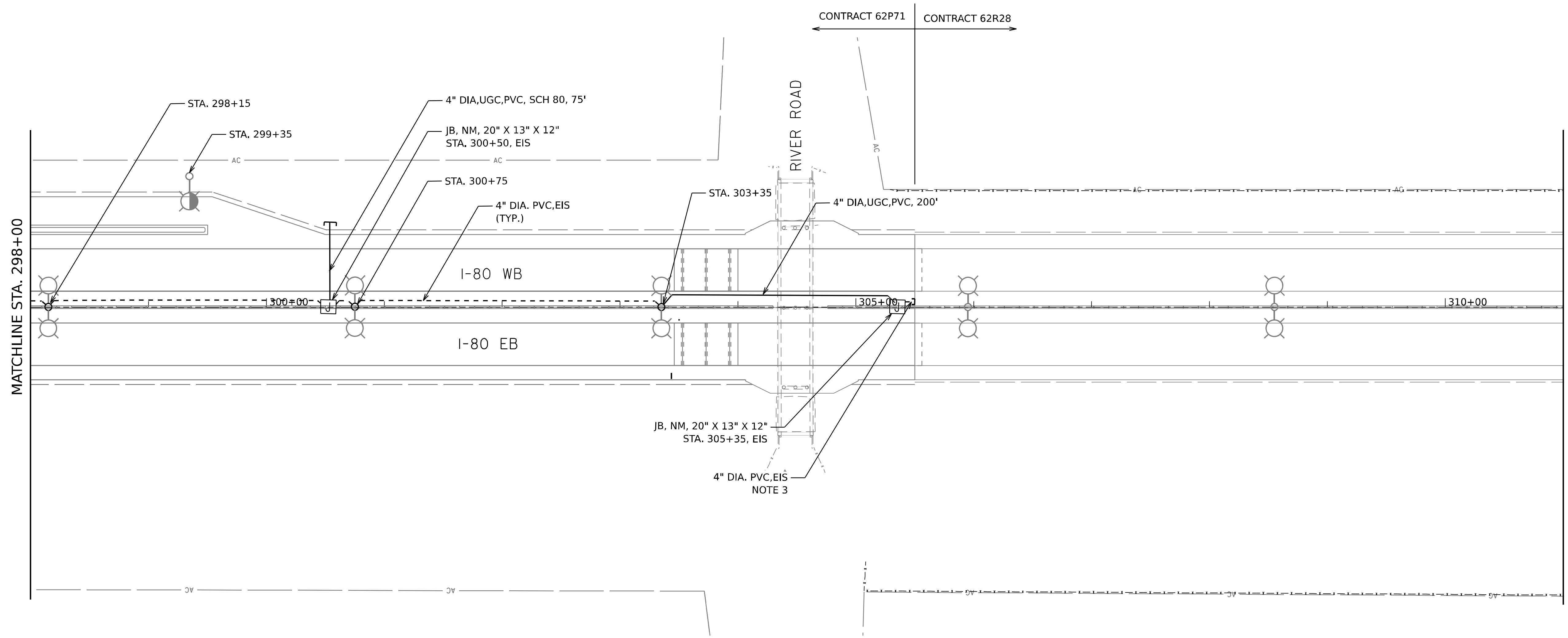
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

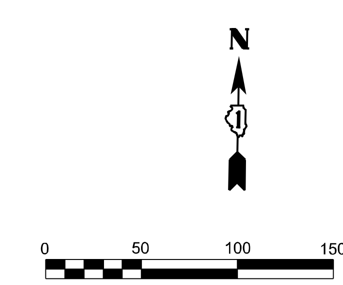
PROPOSED LIGHTING PLAN
I–80

SCALE: 1:50 | SHEET 2 OF 5 SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-154-R	WILL	477	238
		CONTRACT NO. 62P71		
		ILLINOIS	FED. AID PROJECT	

MODEL: Default





NOTES:

1. SEE SHEET LT-01 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
2. SEE STRUCTURAL SHEETS FOR MEDIAN FOUNDATION DETAILS.
3. STUB AND CAP 4" EMBEDDED CONDUIT FOR FUTURE CONNECTION.

SINGH
SINGH + ASSOCIATES, INC.
CONSULTING ENGINEERS

USER NAME = vgurskas	DESIGNED - VG	REVISED -	STATE OF ILLINOIS
	DRAWN - VN/MAG	REVISED -	DEPARTMENT OF TRANSPORTATION
PLOT SCALE = 100.000 ' / in.	CHECKED - RP	REVISED -	
PLOT DATE = 4/12/2023	DATE - 03/17/2023	REVISED -	

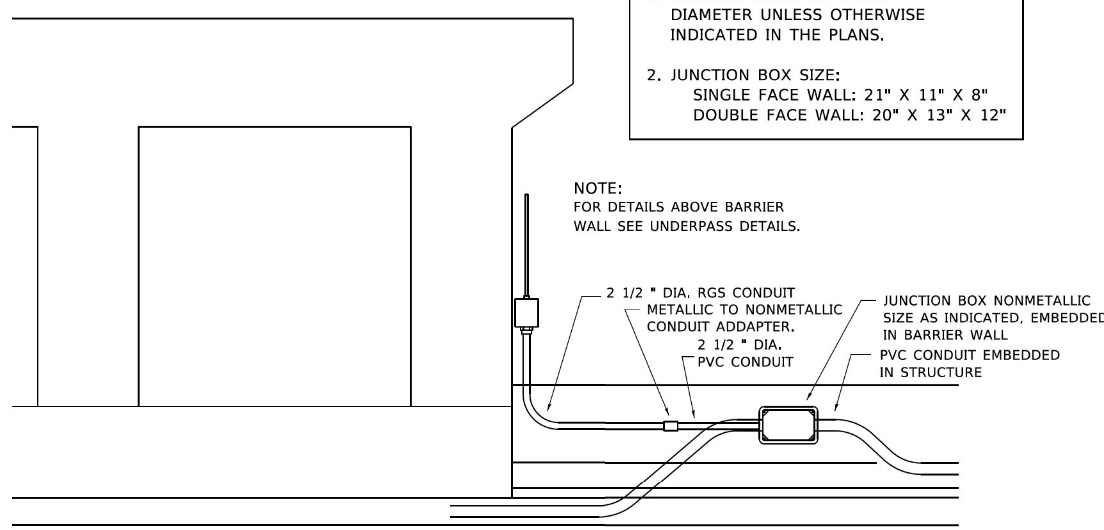
PROPOSED LIGHTING PLAN
I–80

SCALE: 1:50 | SHEET 3 OF 5 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-154-R	WILL	477	239
		CONTRACT NO. 62P71		
		ILLINOIS	FED. AID PROJECT	

NOTES

1. CONDUIT SHALL BE 4-INCH DIAMETER UNLESS OTHERWISE INDICATED IN THE PLANS.
2. JUNCTION BOX SIZE:
   SINGLE FACE WALL: 21" X 11" X 8"
   DOUBLE FACE WALL: 20" X 13" X 12"

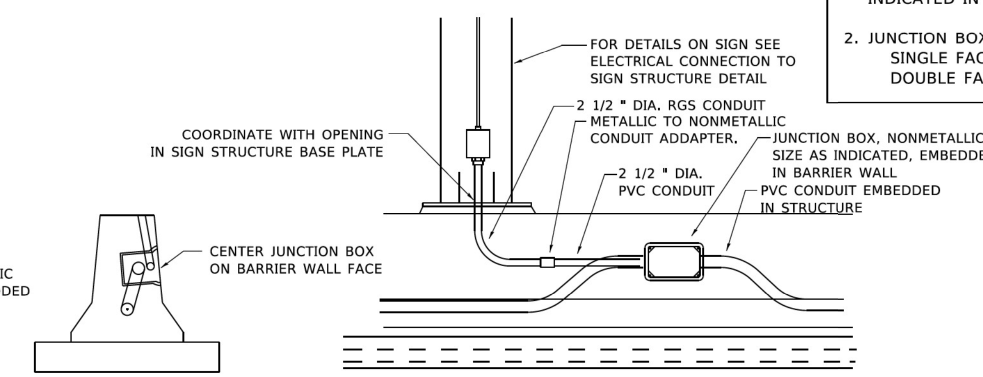


ED - BWD

ELECTRIC CONNECTION TO UNDERPASS LIGHTING

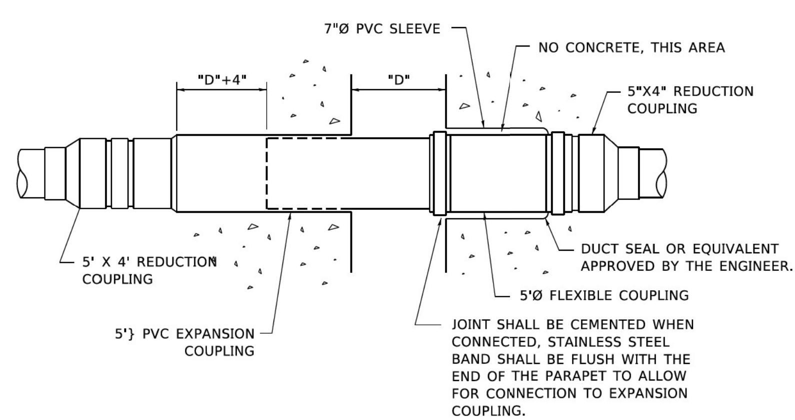
NOTES

1. CONDUIT SHALL BE 4-INCH DIAMETER UNLESS OTHERWISE INDICATED IN THE PLANS.
2. JUNCTION BOX SIZE:
   SINGLE FACE WALL: 21" X 11" X 8"
   DOUBLE FACE WALL: 20" X 13" X 12"



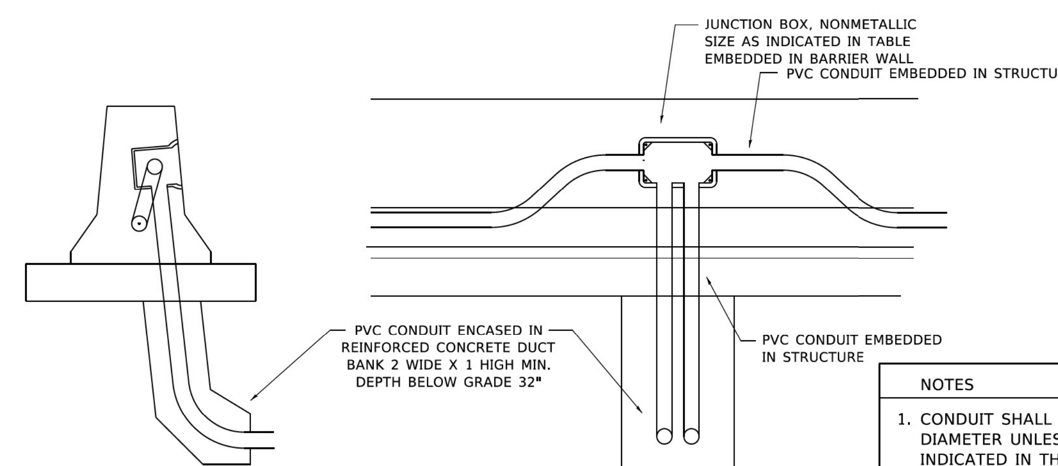
ED - SGN

JUNCTION BOX EMBEDDED IN BARRIER WALL FOR SIGN LIGHTING



INSTALLATION OF CONDUIT IN BRIDGE PARAPET EXPANSION JOINT

(N.T.S.)



NOTES

1. CONDUIT SHALL BE 4-INCH DIAMETER UNLESS OTHERWISE INDICATED IN THE PLANS.
2. JUNCTION BOX SIZE:
   SINGLE FACE WALL: 21" X 11" X 8"
   DOUBLE FACE WALL: 20" X 13" X 12"

ED - BW

JUNCTION BOX EMBEDDED IN BARRIER WALL

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

MISCELLANEOUS ELECTRICAL DETAILS, SHEET B
J BOX EMBEDDED IN BARRIER WALL – INSTALLATION OF CONDUIT IN BRIDGE PARAPET EXPANSION JOINT – ELECTRIC CONNECTION TO UNDERPASS LIGHTING

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.

BE-703 | CONTRACT NO. | ILLINOIS | FED. AID PROJECT

SINGH SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS	USER NAME = vgurskas	DESIGNED - VG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - VN/MAG	REVISED -	
	PLOT SCALE = 100.000 ' / in.	CHECKED - RP	REVISED -	
	PLOT DATE = 4/12/2023	DATE - 03/17/2023	REVISED -	

IDOT STANDARD – BE703

SCALE: | SHEET 4 OF 5 SHEETS | STA. | TO STA.

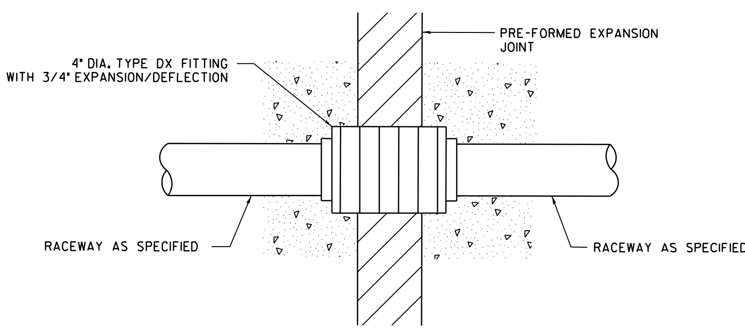
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-154-R	WILL	477	240

CONTRACT NO. 62P71

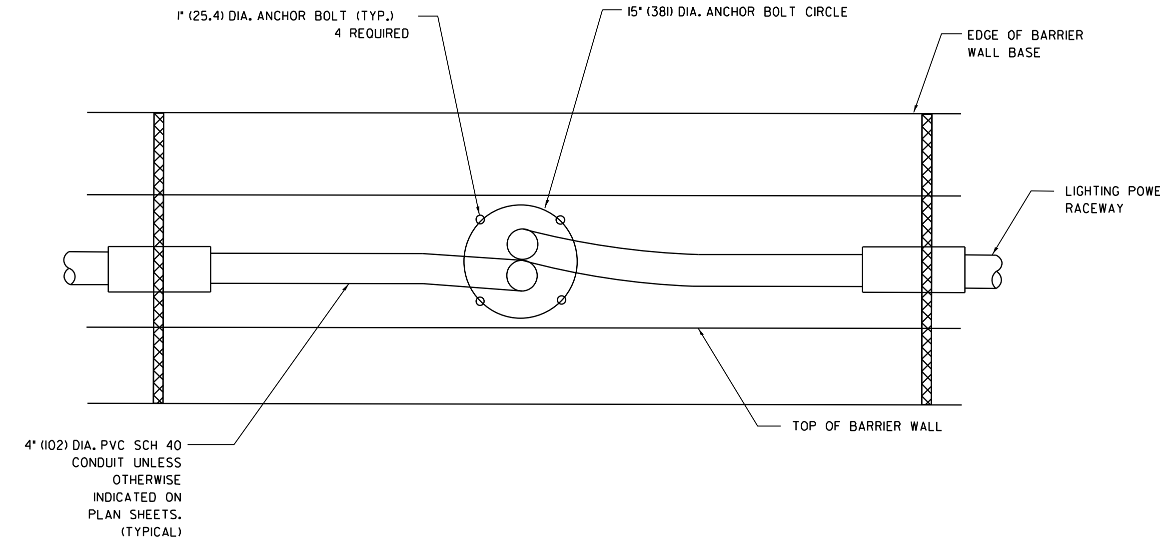
ILLINOIS | FED. AID PROJECT

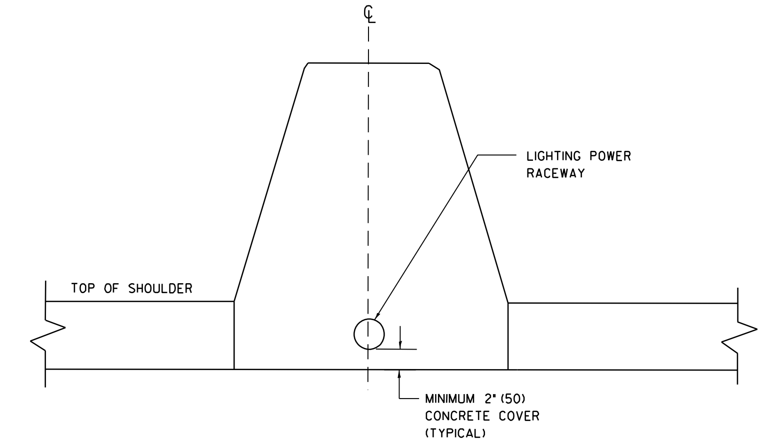
NOTES:

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORMS.
3. THE CONTRACTOR AT HIS OPTION MAY SUBSTITUTE #4 (15 m) TIES AT 12" (304.8 m) CTRS. FOR THE #3 (3 m) SPIRAL. TACKWELDED TYPE BOLT MAY BE SUBSTITUTED FOR THE HOOK TYPE BOLT.
4. COLD BENDING OF THE HOOK BOLT SHALL NOT BE ALLOWED.
5. EXCAVATION FOR THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER 24 INCHES (609.6 m) IN DIAMETER.
6. THE ENGINEER SHALL DETERMINE THE TYPE OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE USING THE DOMINANT CHARACTERISTIC OF THE SOIL ENCOUNTERED.
7. BARRIER WALL EXPANSION AND CONSTRUCTION JOINTS SHALL BE IN ACCORDANCE WITH STANDARD DETAIL 637006-05 AS APPLICABLE.
8. ANCHOR RODS, NUTS, AND WASHERS SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS ARTICLES 1070.02 AND 1006.09.

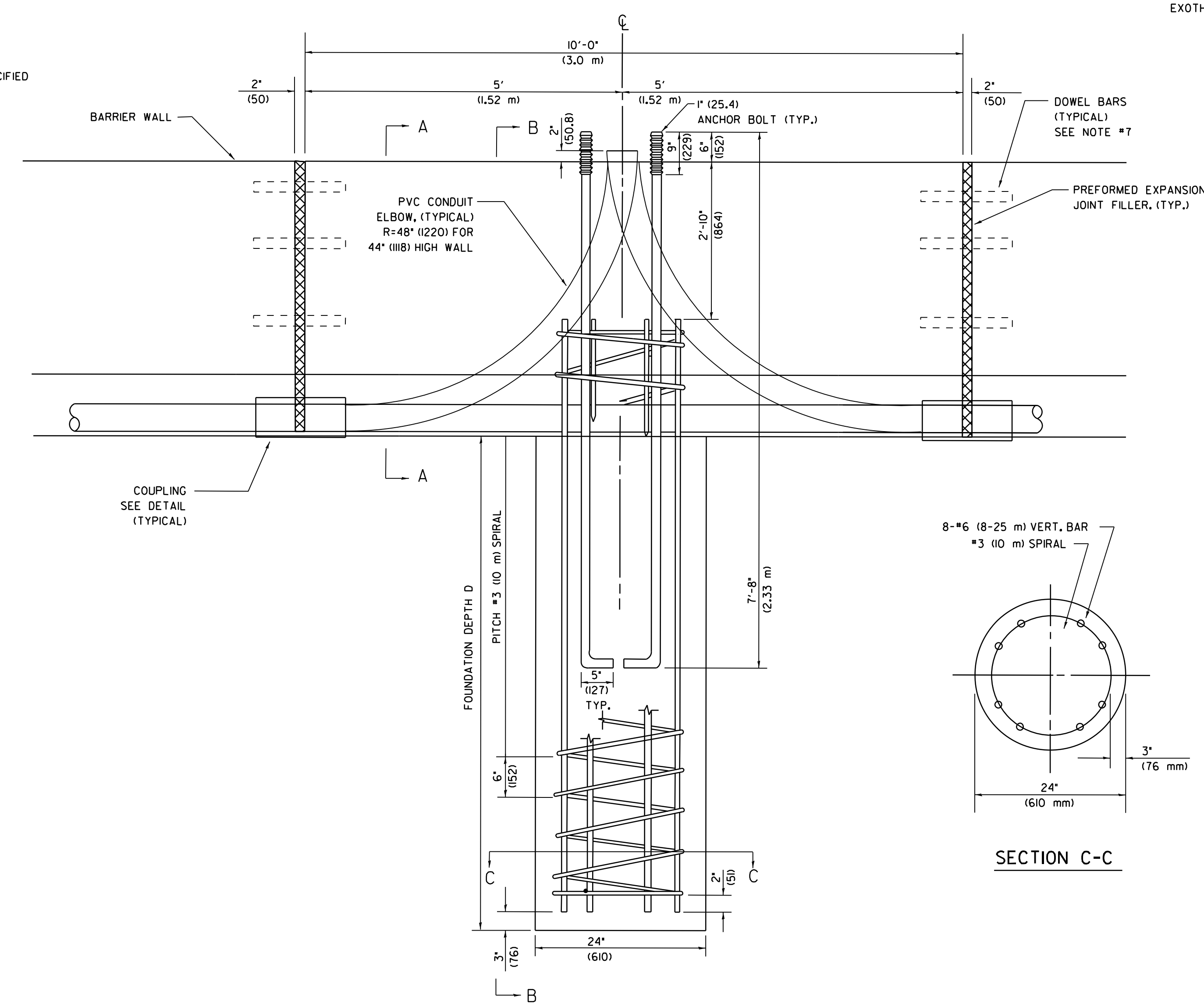


CONDUIT DEFLECTION FITTING DETAIL

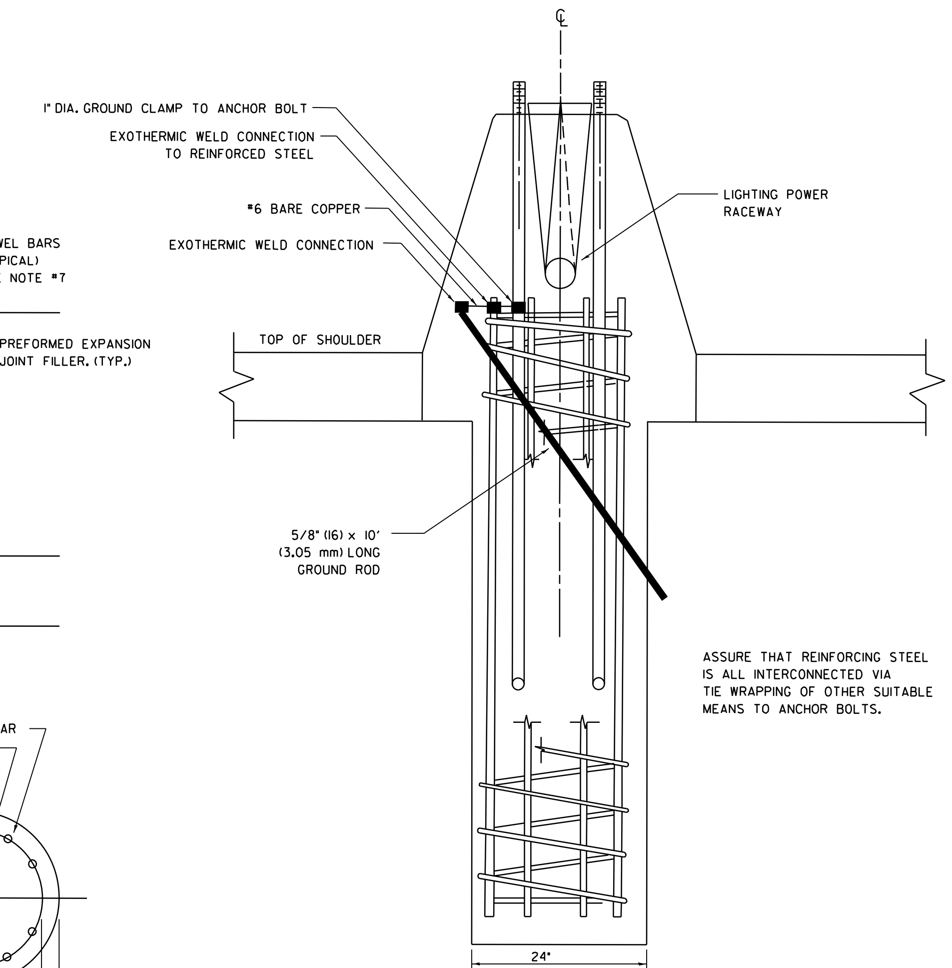




SECTION A-A



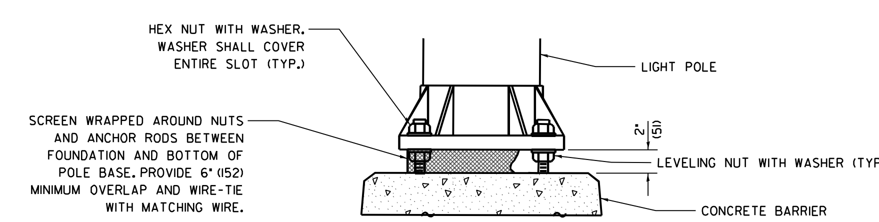
SECTION C-C



SECTION B-B

FOUNDATION DEPTH

TYPE OF SOIL	FOUND DEPTH D	REINFORCEMENT IN FOUNDATION	
		VERTICAL BARS	SPIRAL
ROCK OR SOLIDIFIED SLAG	5'-0" (1.52 m)	NONE	NONE
DENSE SAND	7'-9" (2.36 m)	8-#6 x 9'-0" (8-20 m x 2.74 m)	#3 x 90' (3 m x 27.43 m)
MEDIUM SAND	8'-3" (2.51 m)	8-#6 x 9'-5" (8-20 m x 2.87 m)	#3 x 94' (3 m x 28.65 m)
LOOSE SAND	9'-0" (2.74 m)	8-#6 x 10'-2" (8-20 m x 3.09 m)	#3 x 100' (3 m x 30.48 m)
STIFF CLAY	7'-0" (2.13 m)	8-#6 x 10'-8" (8-20 m x 2.48 m)	#3 x 80' (3 m x 24.38 m)
MEDIUM CLAY	9'-6" (2.89 m)	8-#6 x 10'-8" (8-20 m x 3.25 m)	#3 x 104' (3 m x 31.69 m)
SOFT CLAY	13'-0" (3.96 m)	8-#6 x 14'-2" (8-20 m x 4.32 m)	#3 x 144' (3 m x 43.89 m)



ELEVATION AT CONCRETE BARRIER

SINGH
SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

USER NAME = vgurskas	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 4/12/2023	DATE - 03/17/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-80 CORRIDOR LIGHTING DETAILS
24" (610 mm) DIA. LIGHT POLE FOUNDATION
INTEGRAL WITH DOUBLE FACE BARRIER WALL

SCALE: SHEET 5 OF 5 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-154-R	WILL	477	240A

CONTRACT NO. 62P71

ILLINOIS FED. AID PROJECT

SYMBOLS FOR EXISTING CONDITIONS

- AUTOMATIC TRAFFIC RECORDER (ATR) STATION
- BLUETOOTH DETECTION ASSEMBLY
- CLOSED CIRCUIT TELEVISION CAMERA
- DYNAMIC MESSAGE SIGN
- HEAVY DUTY HANDHOLE (ELECTRICAL)
- COMMUNICATIONS VAULT
- JUNCTION BOX ATTACHED TO STRUCTURE
- ITS POLE AND FOUNDATION
- GROUND MOUNTED CABINET
- POLE MOUNTED CABINET
- ELECTRIC UTILITY POLE
- POLE MOUNTED ELECTRIC UTILITY TRANSFORMER(S)
- PAD MOUNTED ELECTRIC UTILITY TRANSFORMER
- SERVICE METER PEDESTAL

SYMBOLS FOR PROPOSED WORK

- HEAVY DUTY HANDHOLE (ELECTRICAL)
- COMMUNICATIONS VAULT (IDOT)
- COMMUNICATIONS VAULT (THIRD PARTY)
- JUNCTION BOX ATTACHED TO STRUCTURE*
- CONCRETE FOUNDATION FOR FUTURE ITS POLE
- TYPE "A" FOUNDATION FOR FUTURE DISCONNECT
- FND FOUNDATION FOR FUTURE GROUND MOUNTED CABINET*
- FOUNDATION MOUNTED CABINET*
- ELECTRIC UTILITY POLE
- POLE MOUNTED ELECTRIC UTILITY TRANSFORMER(S)
- PAD MOUNTED ELECTRIC UTILITY TRANSFORMER
- SERVICE METER PEDESTAL

*TYPE AND/OR SIZE AS INDICATED ON PLANS

ABBREVIATIONS*

(A)	ABANDON IN PLACE
ATR	AUTOMATIC TRAFFIC RECORDER
ATS	ATTACHED TO STRUCTURE
CCTV	CLOSED CIRCUIT TELEVISION
CNC	COILABLE NONMETALLIC CONDUIT
COMM	COMMUNICATION
DCF	DISTRIBUTION CABLE FIBER
DMS	DYNAMIC MESSAGE SIGN
F	FIFBER
FT	FEET
GS	GALVANIZED STEEL
HDHH	HEAVY DUTY HANDHOLE
JB	JUNCTION BOX
NTS	NOT TO SCALE
OFF	OFFSET
SM	SINGLE MODE
TCF	TRUNK CABLE FIBER
TRNS	TRANSFORMER

*NOT LISTED IN IDOT STANDARD 000001-08

LINESTYLES FOR EXISTING CONDITIONS

E	ELECTRICAL CABLE IN CONDUIT*
FO	FIBER OPTIC CABLE IN CONDUIT*

*CABLE TO BE REMOVED;
CONDUIT TO BE ABANDONED

LINESTYLES FOR PROPOSED WORK

E	CONDUIT FOR FUTURE ELECTRICAL CABLE*
FO	MICRODUCT OR INNERDUCT FOR FUTURE FIBER OPTIC CABLE*
	CONDUIT SLEEVE*

*TYPE AND SIZE AS INDICATED ON PLANS

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/ML-01_62P71/04-Sheets/07-Utilities/D162P71-sht-its-001.dgn

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

USER NAME = dmeier	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/11/2023	DATE -	REVISED -	

ITS LEGEND & ABBREVIATIONS

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	241

CONTRACT NO. 62P71
ILLINOIS FED. AID PROJECT

GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL JULIE AT 811, OR (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. SEVENTY-TWO (72) HOUR NOTIFICATION IS REQUIRED.

2. IDOT FACILITIES ARE NOT LOCATED BY JULIE OR DIGGER. IDOT ELECTRICAL FACILITIES INCLUDING ROADWAY LIGHTING, FIBER OPTIC, ITS EQUIPMENT, TRAFFIC SIGNAL AND PUMP STATION FACILITIES ARE LOCATED BY THE DEPARTMENT'S ELECTRICAL MAINTENANCE CONTRACTOR. AS OF THE LETTING DATE, CONTACT THE MEADE ELECTRIC COMPANY AT 773-287-7672.

3. AFTER THE INITIAL LOCATE OF IDOT FACILITIES, THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES AT HIS/HER OWN EXPENSE. THE CONTRACTOR SHALL ALSO BE LIABLE FOR ANY DAMAGE TO IDOT FACILITIES RESULTING FROM INACCURATE LOCATING.

4. THE CONTRACTOR SHALL CONTACT DISTRICTS 1 AND 3 FOR LOCATING UTILITIES ADJACENT TO DISTRICT 3 IN KENDALL COUNTY (D3) , GRUNDY COUNTY (D3) AND WILL COUNTY (D1) TO ENSURE SYSTEM CONTINUITY BETWEEN BOTH DISTRICTS.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN IN THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER. THIS WORK WILL BE AT THE CONTRACTOR'S EXPENSE.

6. THE LOCATIONS OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THEIR ACCURACY IS NOT GUARANTEED. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES. THE CONTRACTOR SHALL REPORT ANY ENCOUNTERED DISCREPANCIES TO THE ENGINEER AT ONCE. THE CONTRACTOR SHALL TAKE DUE CARE.

7. POTHOLING TO LOCATE EXISTING UNDERGROUND UTILITIES SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE UNDERGROUND CONDUIT PAY ITEMS.

8. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THIS COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICES FOR THE CONDUITS.

9. THE CONTRACTOR SHALL VERIFY ADEQUATE CLEARANCE OVER EXISTING FACILITIES BEFORE INSTALLING DUCTS, CONDUIT AND CABLES.

10. CONDUIT CROSSING OVER/UNDER OTHER UTILITIES SHALL MAINTAIN A SEPERATION OF AT LEAST 12 INCHES OR AS SPECIFIED BY OWNING UTILITY.

11. ALL UNDERGROUND RACEWAYS SHALL BE INSTALLED AT A MINIMUM DEPTH OF 30-INCHES.

12. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN 30 INCHES MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES AND STRUCTURES OR TO ENTER COMMUNICATIONS VAULTS OR HANDHOLES.

13. THE CONTRACTOR SHALL AVOID TRENCHING THROUGH WETLAND AREA, ROADSIDE DITCHES AND RETENTION PONDS.

14. IDOT MICRODUCT SHALL ONLY ENTER IDOT COMMUNICATIONS VAULTS OR JUNCTION BOXES.

15. THIRD PARTY MICRODUCT SHALL ONLY ENTER THIRD PARTY COMMUNICATIONS VAULTS OR JUNCTION BOXES.

16. THE COMMUNICATION VAULT SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE SURFACE OF THE MEDIAN, SIDEWALK, OR GROUND LINE.

17. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.

18. ITS REMOVAL PLAN SHEETS DEPICT EXISTING CONDITIONS AND WORK TO BE PERFORMED TO MAINTAIN, REMOVE, SALVAGE, OR ABANDON EXISTING ITS INFRASTRUCTURE. PROPOSED ITS PLAN SHEETS DEPICT NEW ITS INFRASTRUCTURE TO BE INSTALLED.

19. ALL EXCAVATED MATERIAL, WHICH INCLUDES DIGGING OR GRADING OF ANY SOIL OR FILL MATERIAL, WITH THE EXCEPTION OF AGGREGATE FILLS, MUST BE INCORPORATED WITHIN THE IDOT RIGHT OF WAY DUE TO ENVIRONMENTAL DOCUMENTATION REQUIREMENTS. EXCAVATED MATERIALS SHALL BE DISPOSED OF AT LOCATIONS DESIGNATED BY THE ENGINEER. ANY SUCH DISPOSAL SHALL BE COMPLETED IN SUCH A MANNER THAT PUBLIC OR PRIVATE PROPERTY WILL NOT BE DAMAGED OR ENDANGERED AND SHALL NOT CREATE AN UNSIGHTLY OR OBJECTIONABLE APPEARANCE OR DETRACT FORM THE NATURAL TOPOGRAPHIC FEATURES WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

20. ALL SURPLUS MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS.

21. ELECTRICAL WORK SHALL CONFORM WITH NATIONAL, STATE, AND LOCAL CODES.

22. ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

23. ELECTRICAL HANDHOLE COVER LEGEND SHALL BE "IDOT ITS".

24. WHERE SHOWN ON THE PLANS, CONDUIT SLEEVES ARE DESIGNATED AT LOCATIONS WHERE THE PROPOSED CONDUIT WILL BE BELOW OTHER ELEMENT (ROADWAY, BRIDGE SLOPEWALL, BOX CULVERT).

BILL OF MATERIALS

ITEM	DESCRIPTION	UNIT	QTY	IDOT QTY*	THIRD PARTY QTY*
80400100	ELECTRIC SERVICE INSTALLATION	EACH	3	-	-
80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1	-	-
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	57	-	-
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	4,719	-	-
81028750	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.	FOOT	16,839	-	-
81028770	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 3" DIA.	FOOT	280	-	-
81400200	HEAVY-DUTY HANDHOLE	EACH	28	-	-
81702150	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	FOOT	441	-	-
84200804	REMOVAL OF POLE FOUNDATION	EACH	6	-	-
84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	1	-	-
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	24	-	-
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	108	-	-
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	844	-	-
89502380	REMOVE EXISTING HANDHOLE	EACH	14	-	-
X0326944	ATMS INTEGRATION	L SUM	1	-	-
X0326964	FIBER OPTIC INTERCONNECT CABINET	EACH	1	-	-
X0327186	PORTABLE VIDEO TOWER STATIONS	CAL MO	18	-	-
X7010238	CHANGEABLE MESSAGE SIGN (SPECIAL)	CAL MO	18	-	-
X8710318	FIBER OPTIC UTILITY MARKER	EACH	72	46	26
X8710402	FIBER OPTIC INNERDUCT 1 1/4" DIA.	FOOT	418	-	-
X8780200	CONCRETE FOUNDATION, SURVEILLANCE CABINET MODEL 334	EACH	1	-	-
X8950425	REMOVE EXISTING TRAFFIC SURVEILLANCE EQUIPMENT	L SUM	1	-	-
X8950510	REMOVE FIBER OPTIC CABLE FROM CONDUIT	FOOT	23,640	-	-
Z0033052	COMMUNICATIONS VAULT	EACH	24	18	6
	UNDERGROUND CONDUIT, MULTI-DUCT, 7-18MM MICRODUCTS	FOOT	41,798	27,166	14,632

*THESE COLUMNS ARE NOT ADDITIONAL QUANTITY. THEY PROVIDE THE QUANTITY SPLIT BETWEEN IDOT AND THIRD PARTY FOR THE ITEMS LISTED.

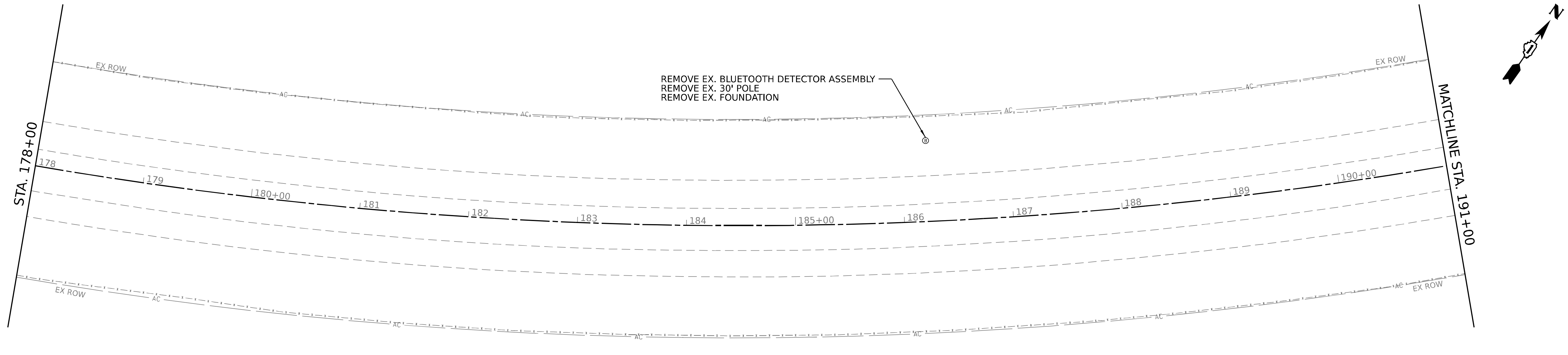
62R28 SITE REMOVALS SCHEDULE

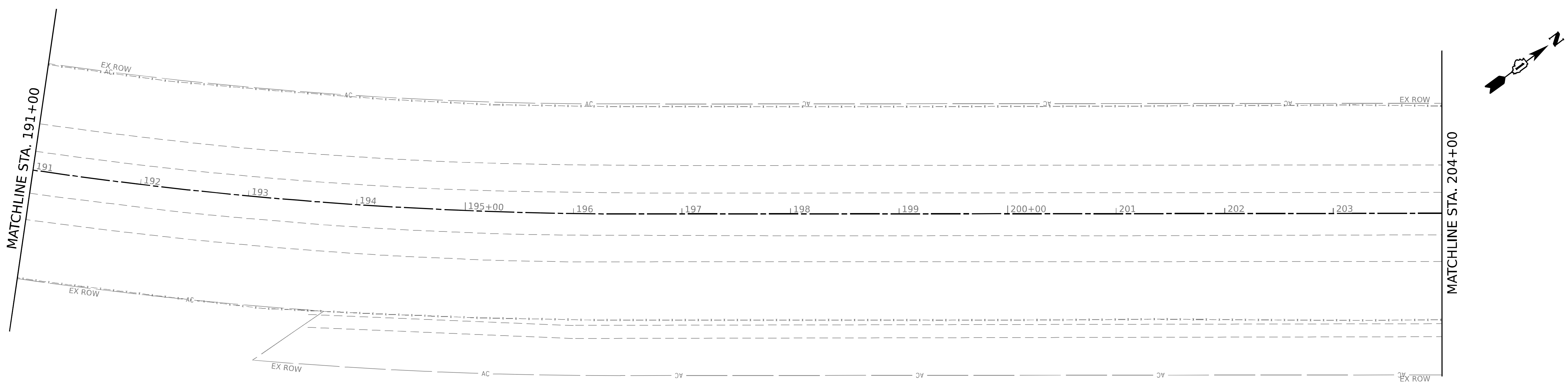
SITE TYPE	STATION	OFFSET	ASSOCIATED PAY ITEM	SHEET
BLUETOOTH	186+52	75' LT	X8950425, 84200804	244
CCTV CAMERA	206+13	88' RT	X8950425, 84200804	250
DMS*	208+85	95' RT	X8950425	250
ELECTRIC SERVICE	210+99	103' RT	84500120	250
BLUETOOTH	213+17	74' RT	X8950425, 84200804	245
ATR**	217+90	84' LT	X8950425	245
BLUETOOTH	237+86	89' LT	X8950425, 84200804	246
BLUETOOTH	265+63	78' RT	X8950425, 84200804	247
BLUETOOTH	291+64	95' LT	X8950425, 84200804	248

*STATION/OFFSET OF THE CONTROLLER CABINET ARE LISTED
**STATION/OFFSET OF THE EQUIPMENT CABINET IS LISTED

PROPOSED SITE SCHEDULE

ITEM	STATION	OFFSET	ASSOCIATED PAY ITEM	SHEET
30" DIA. CONCRETE FOUNDATION	171+00	81' RT	87800400	251
30" DIA. CONCRETE FOUNDATION	187+00	73' RT	87800400	252
FIBER INTERCONNECT FOUNDATION/CABINET	205+07	76.25' RT	X0326964	257
30" DIA. CONCRETE FOUNDATION	205+35	73' RT	87800400	257
334 CABINET FOUNDATION	207+50	71.5' RT	X8780200	257
ELECTRIC SERVICE	210+99	100' RT	80400100, 80400200	253
30" DIA. CONCRETE FOUNDATION	223+00	81' RT	87800400	253
ATR SITE	225+00	LT/RT	SEE ATR PLANS	270
ELECTRIC SERVICE	233+09	154' LT	80400100, 80400200	254
30" DIA. CONCRETE FOUNDATION	241+81	73' RT	87800400	254
30" DIA. CONCRETE FOUNDATION	260+04	81' LT	87800400	255
30" DIA. CONCRETE FOUNDATION	278+25	81' LT	87800400	255
30" DIA. CONCRETE FOUNDATION	296+50	98' LT	87800400	256
ELECTRIC SERVICE	303+99	130' LT	80400100, 80400200	256





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SCALE IN FEET

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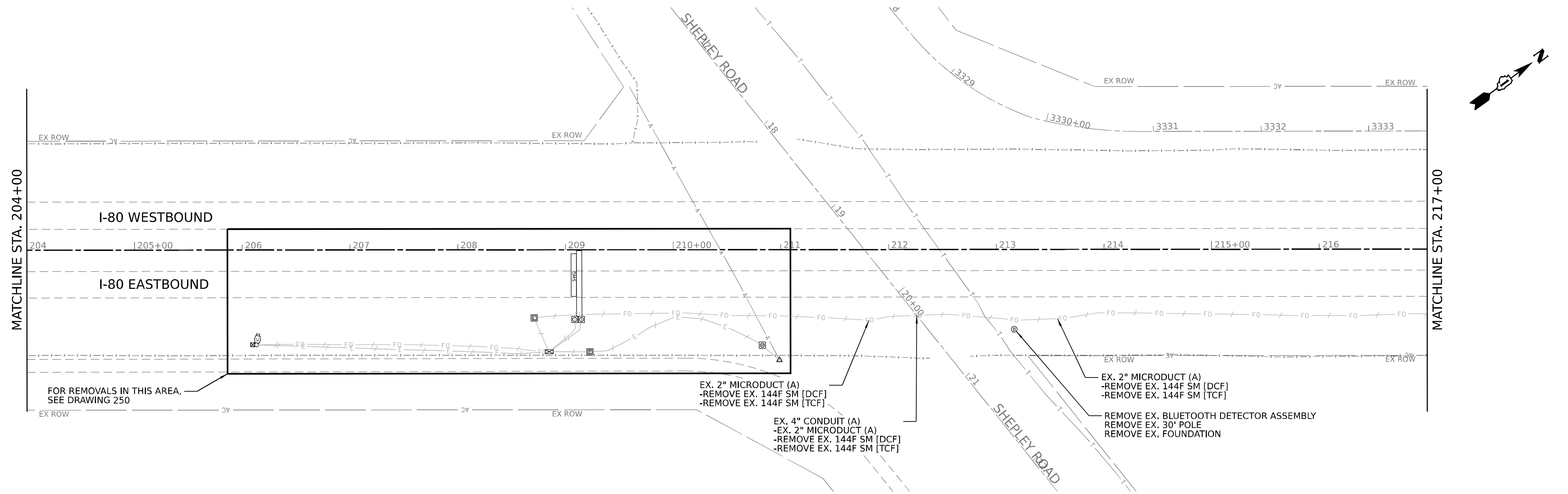
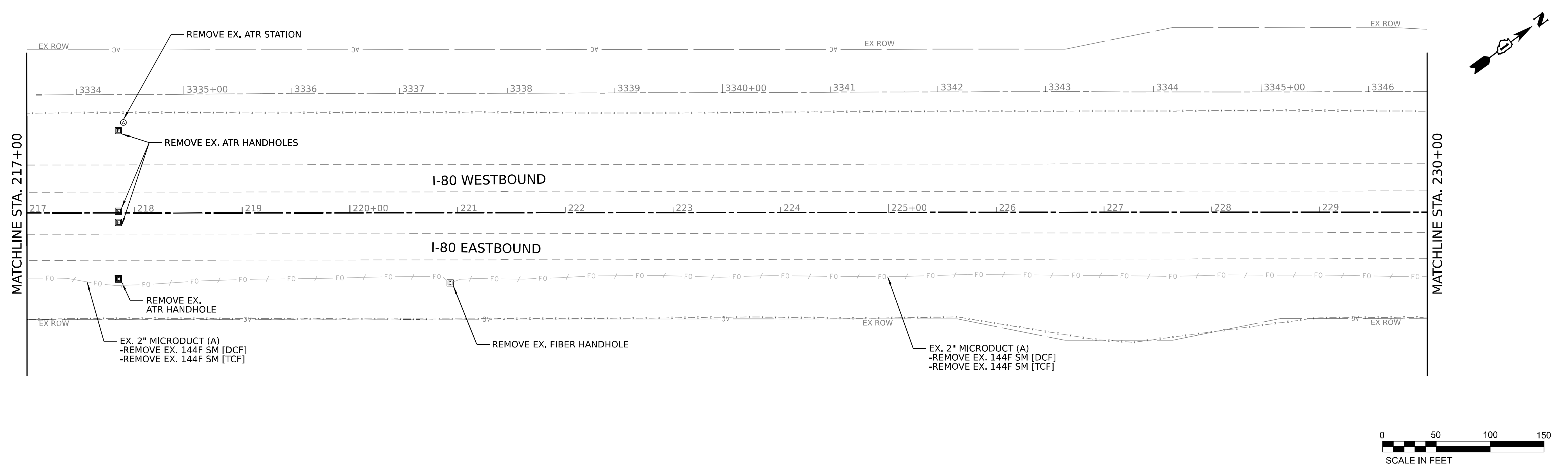
TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = dmeier	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ITS REMOVAL PLANS	F.A.I. RTE.: I-80	SECTION: 2021-154-R
		DRAWN -	REVISED -			COUNTY: WILL	TOTAL SHEETS: 477
	PLOT SCALE = 100.0000 ' / In.	CHECKED -	REVISED -			SHEET NO.: 244	CONTRACT NO. 62P71
	PLOT DATE = 3/16/2023	DATE -	REVISED -		SCALE: SHEET 1 OF 7 SHEETS STA. 178+00 TO STA. 204+00	ILLINOIS	FED. AID PROJECT





MODEL: Default

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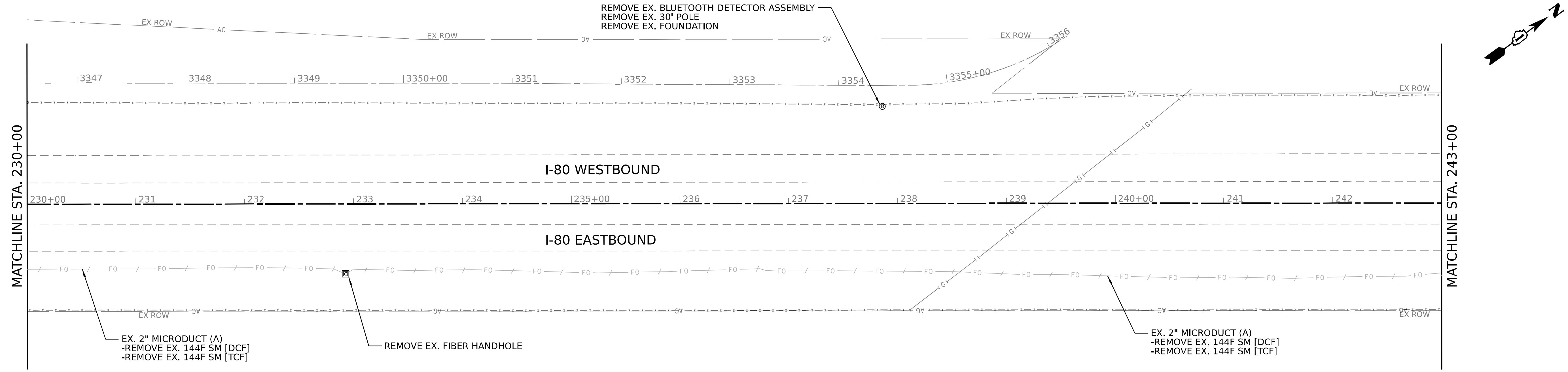
USER NAME = dmeier	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/12/2023	DATE -	REVISED -	

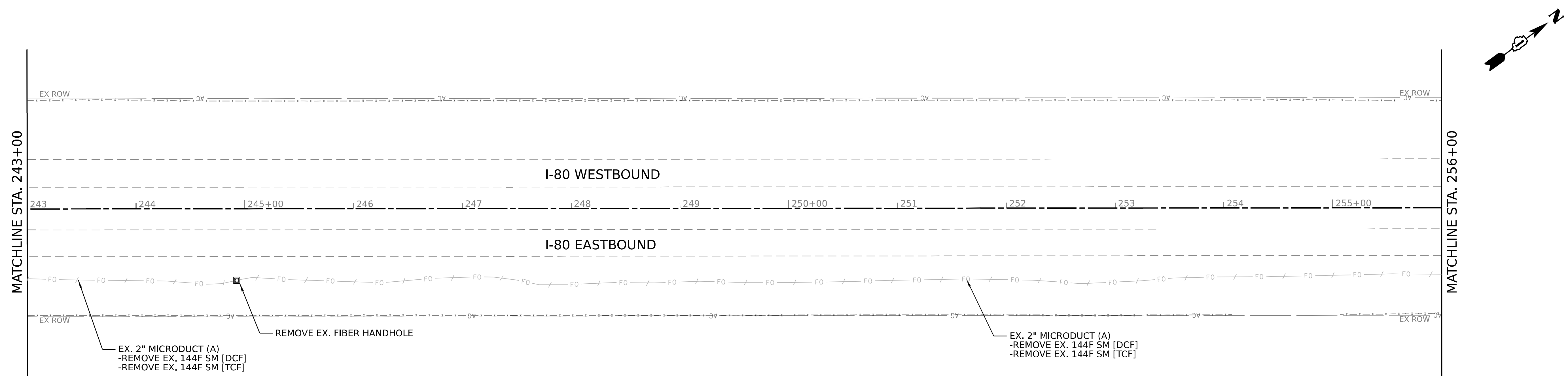
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS REMOVAL PLANS

SCALE: | SHEET 2 OF 7 SHEETS | STA. 204+00 | TO STA. 230+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	245
		CONTRACT NO. 62P71		
		ILLINOIS	FED. AID PROJECT	





0 50 100 150

SCALE IN FEET

MODEL: Default

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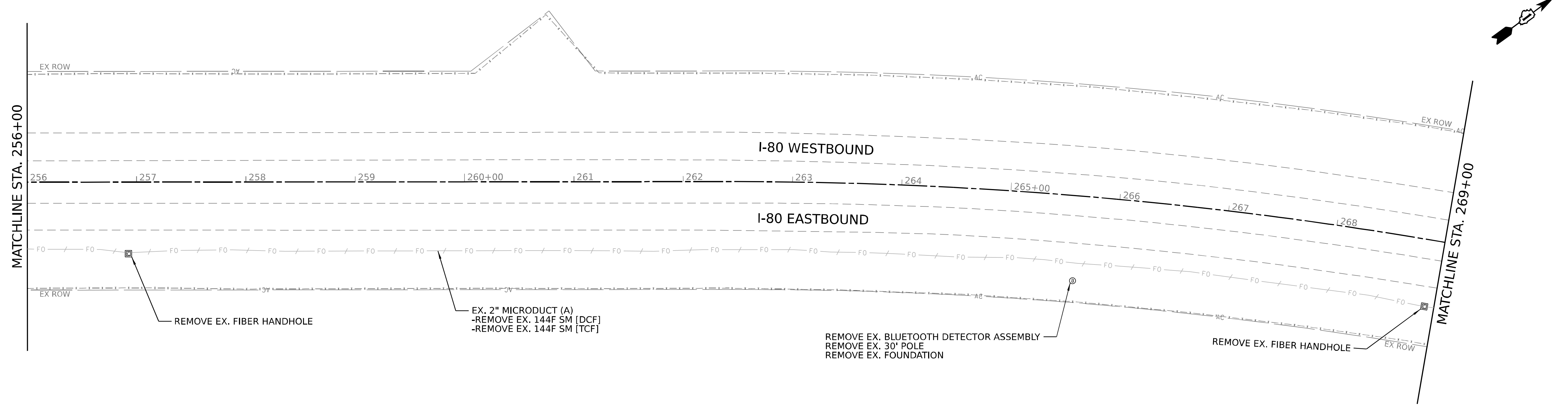
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

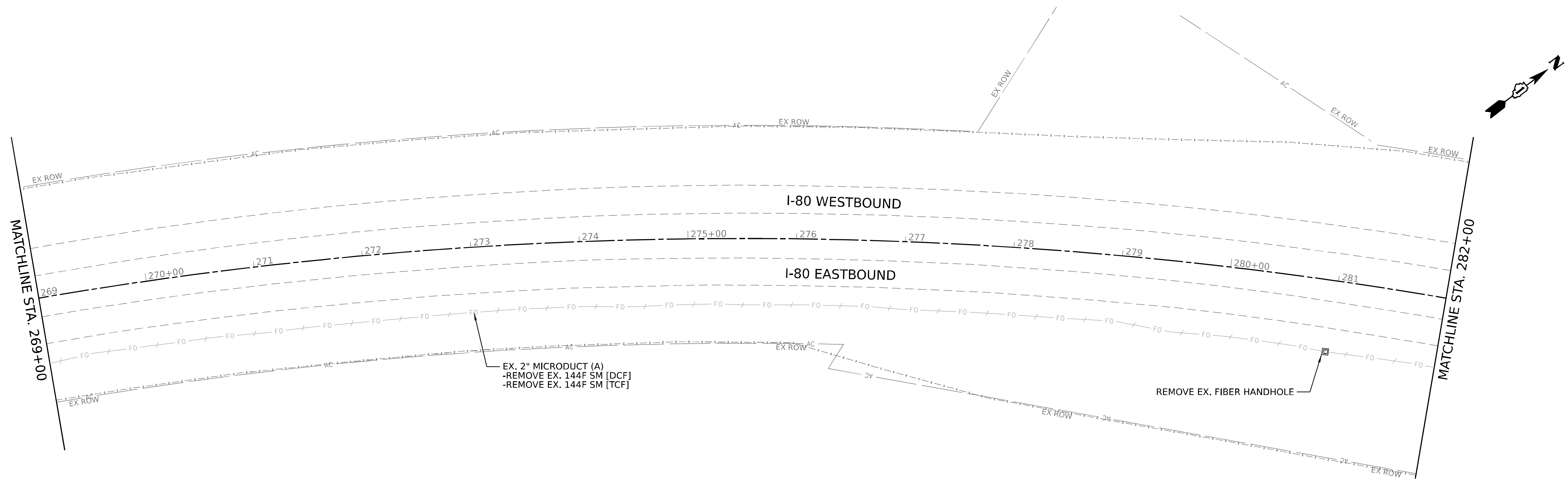
USER NAME = dmeier	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/16/2023	DATE -	REVISED -	

ITS REMOVAL PLANS

SCALE: SHEET 3 OF 7 SHEETS STA. 230+00 TO STA. 256+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	246
		CONTRACT NO. 62P71		
		ILLINOIS	FED. AID PROJECT	





MODEL: Default

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Chicago, Illinois 60606

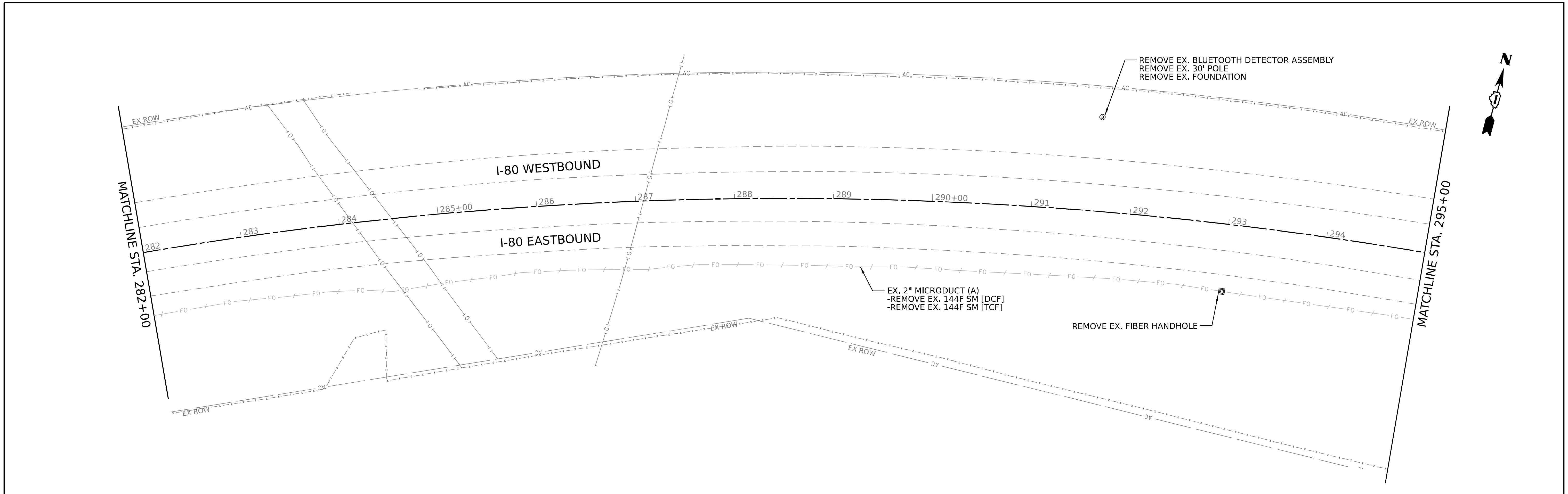
USER NAME = dmeier	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / In.	CHECKED -	REVISED -
PLOT DATE = 3/16/2023	DATE -	REVISED -

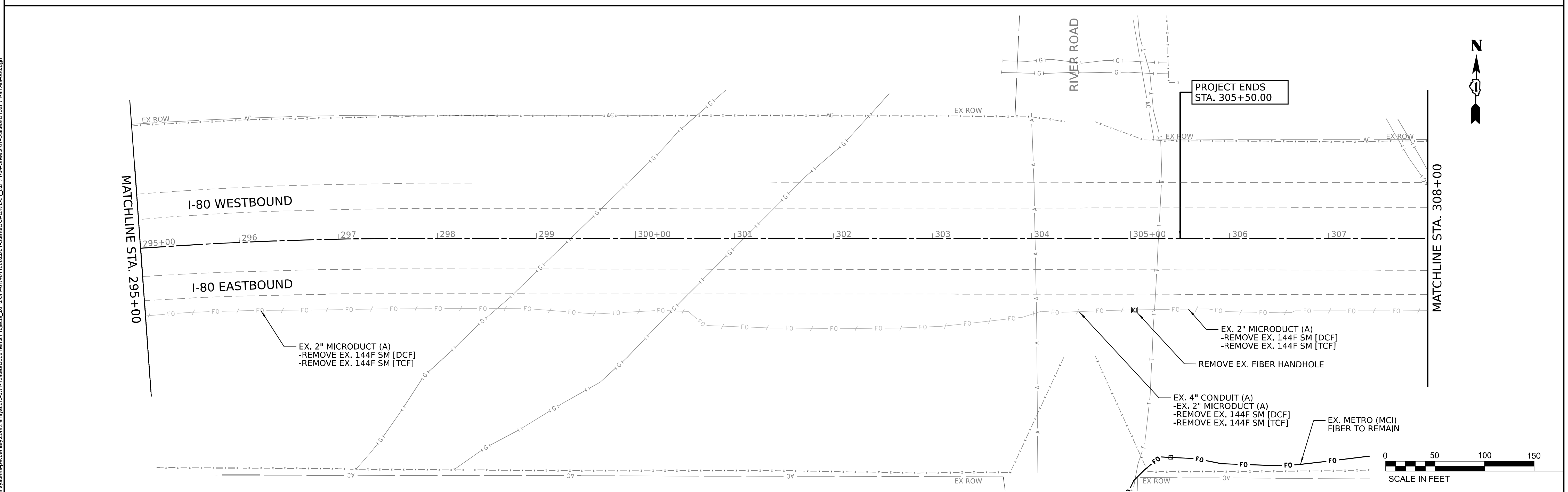
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS REMOVAL PLANS

SCALE: | SHEET 4 OF 7 SHEETS | STA. 256+00 TO STA. 282+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	247
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT		





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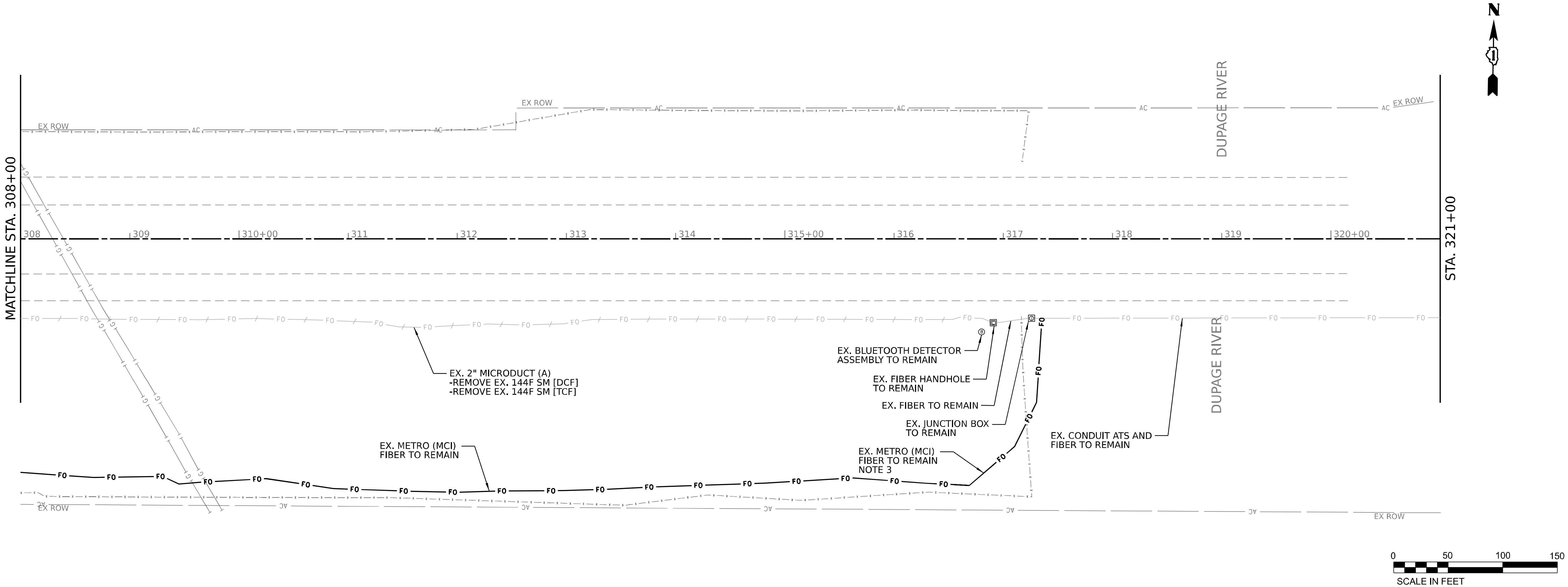
USER NAME = dmeier	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/12/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS REMOVAL PLANS

SCALE: | SHEET 5 OF 7 SHEETS | STA. 282+00 | TO STA. 308+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	248
		CONTRACT NO. 62P71		
		ILLINOIS	FED. AID PROJECT	



NOTES

1. IDOT FIBER OPTIC CABLE WITHIN THE COMMUNICATIONS VAULT AT STA 316+90, RT TO BE CUT AND REMOVED TO THE WEST. FIBER SHALL NOT BE CUT WITHOUT APPROVAL FROM THE ENGINEER AND REMOVAL SHALL NOT BE ALLOWED TO START UNTIL THE SMART TRAFFIC MONITORING SYSTEM, CHANGEABLE MESSAGE SIGN (SPECIAL), AND PORTABLE VIDEO TOWER STATIONS ARE INSTALLED, INTEGRATED, AND PLACED INTO APPROVED OPERATION BY THE DEPARTMENT.

2. FIBER OPTIC CABLE TO THE EAST OVER THE DU PAGE RIVER SHALL REMAIN IN PLACE AND WILL BE REMOVED BY OTHERS IN A FUTURE CONTRACT.

3. THE CONTRACTOR IS ADVISED THAT LIVE METRO COMMUNICATIONS COMPANY, INC. (MCI) MAY ROUTE TO/NEAR THE EXISTING IDOT HANDHOLE AND JUNCTION BOX AND BE ATTACHED TO THE EXISTING IDOT CONDUIT ATTACHED TO STRUCTURE ACROSS THE DUPAGE RIVER. MCI FIBER IS TO BE MAINTAINED DURING CONSTRUCTION.

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		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 4/12/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS REMOVAL PLANS

SCALE: | SHEET 6 OF 7 SHEETS | STA. 308+00 TO STA. 321+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	249
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT		

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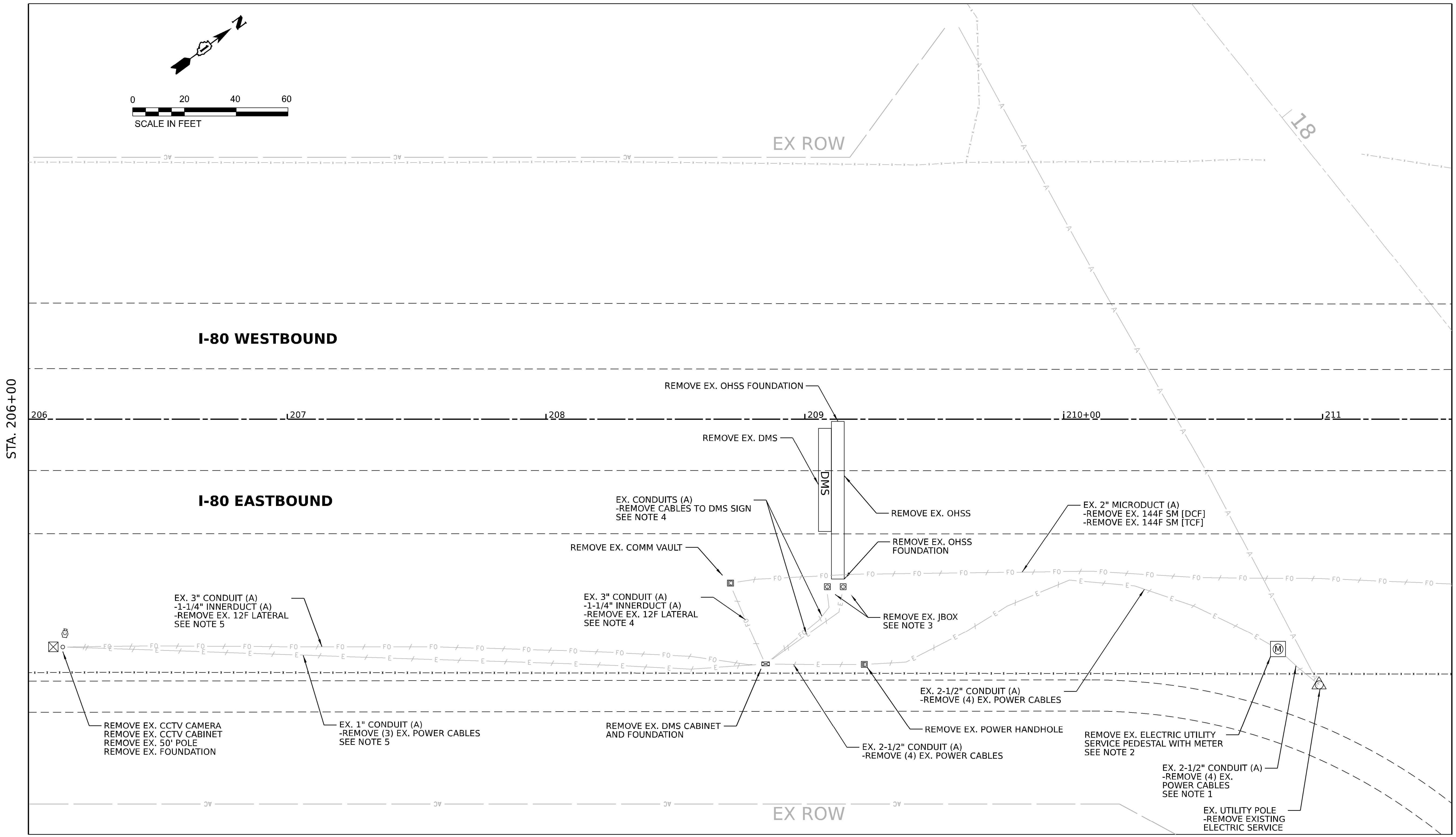

NOTES

1. REMOVAL OF THE CABLES IS INCLUDED AS PART OF THE ELECTRIC SERVICE REMOVAL (PAY ITEM 84500120).
2. REMOVAL OF THE SERVICE PEDESTAL WITH METER IS INCLUDED AS PART OF THE ELECTRIC SERVICE REMOVAL (PAY ITEM 84500120).
3. REMOVAL OF THE JUNCTION BOXES AND ANY OTHER ATTACHMENTS TO BE INCLUDED IN THE COST OF THE OVERHEAD SIGN STRUCTURE REMOVAL.
4. REMOVAL OF THE CABLES IS INCLUDED AS PART OF THE DMS SITE REMOVAL (PAY ITEM X8950425).
5. REMOVAL OF THE CABLES IS INCLUDED AS PART OF THE CCTV SITE REMOVAL (PAY ITEM X8950425).
6. ELECTRIC SERVICE ACCOUNT SHALL NOT BE CANCELED BY THE CONTRACTOR; NEW ELECTRIC SERVICE TO BE INSTALLED AT THIS LOCATION UNDER THE SAME ACCOUNT NUMBER.

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Chicago, Illinois 60606

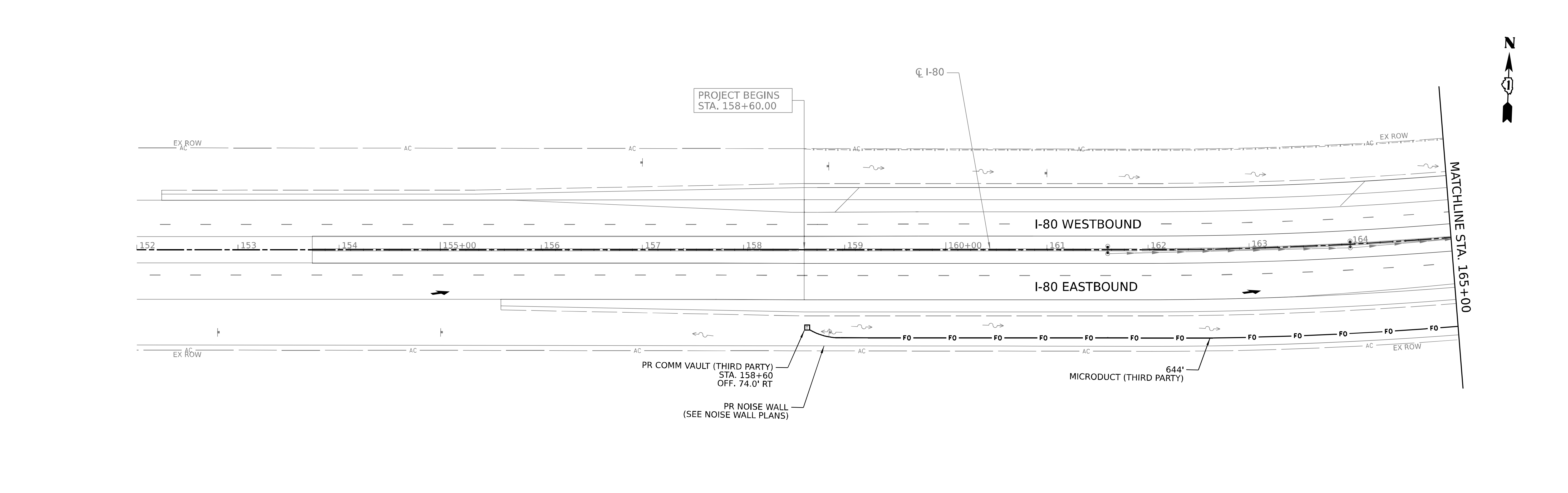
USER NAME = dmeier	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/16/2023	DATE -	REVISED -

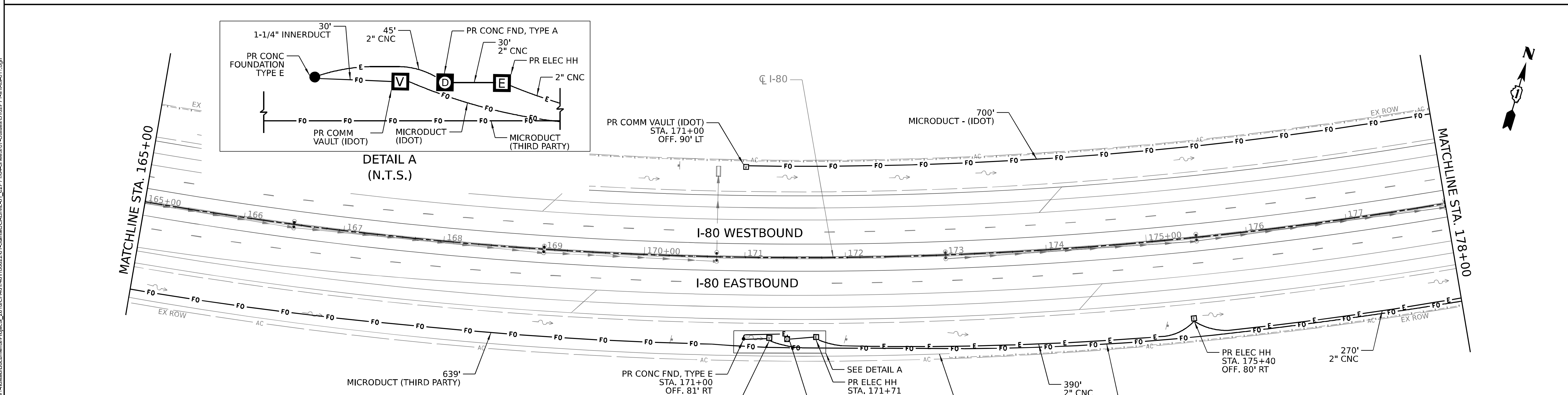
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS REMOVAL PLANS

SCALE: | SHEET 7 OF 7 SHEETS | STA. 206+00 TO STA. 211+50

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	250
CONTRACT NO. 62P71				
ILLINOIS	FED. AID PROJECT			





NOTES
1. IDOT MICRODUCT SHALL ONLY ENTER IDOT COMMUNICATIONS VAULTS.
2. THIRD PARTY MICRODUCT SHALL ONLY ENTER THIRD PARTY COMMUNICATIONS VAULTS.
3. 2" CNC CONDUIT SHALL BE COUPLED TO 2" CONCRETE FOUNDATION STUB OUT. 1-1/4" INNERDUCT SHALL BE INSTALLED IN THE OTHER 2" CONCRETE FOUNDATION STUB OUT UP THROUGH THE TOP OF THE FOUNDATION.
4. THE 2" CNC CONDUITS SHALL BE COUPLED TO 2" CONCRETE FOUNDATION STUB OUTS.

0 50 100 150
SCALE IN FEET

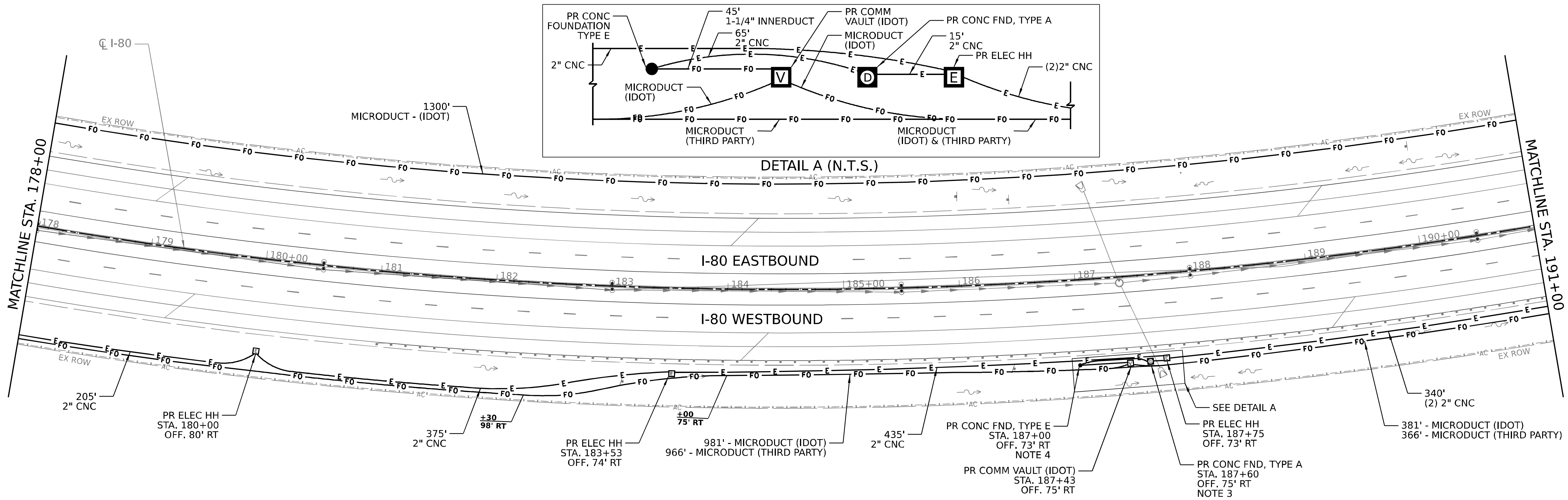
TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = dmeler	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 4/12/2023	DATE -	REVISED -

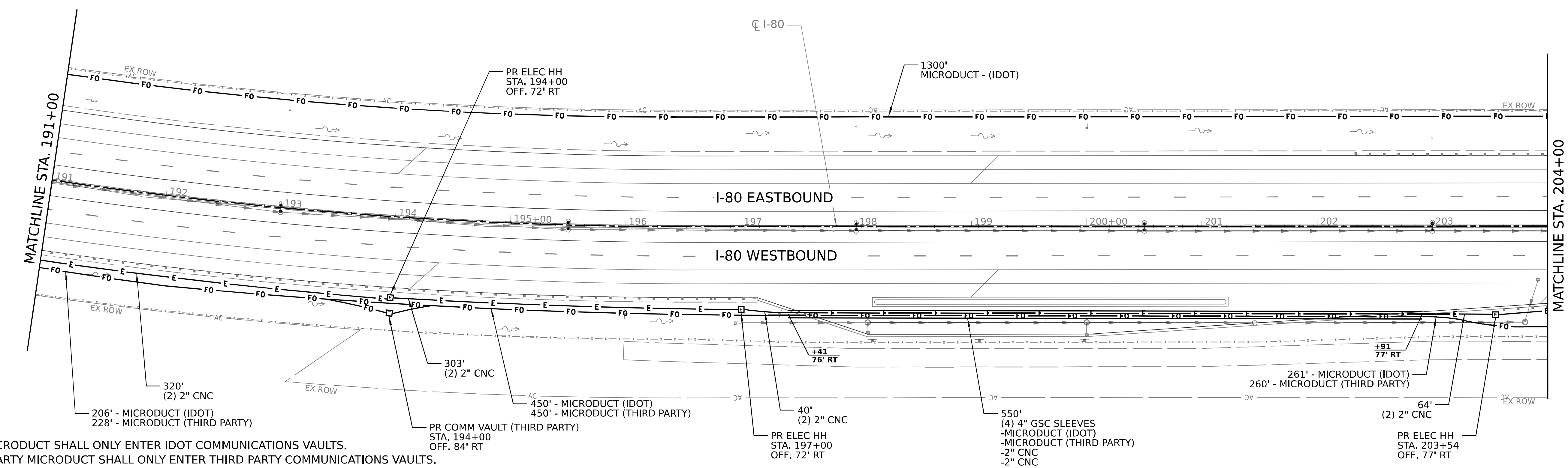
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS INFRASTRUCTURE PLANS

SCALE: | SHEET 1 OF 7 SHEETS | STA. 158+60 TO STA. 178+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	251
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT		





NOTES

1. IDOT MICRODUCT SHALL ONLY ENTER IDOT COMMUNICATIONS VAULTS.
2. THIRD PARTY MICRODUCT SHALL ONLY ENTER THIRD PARTY COMMUNICATIONS VAULTS.
3. 2" CNC CONDUIT SHALL BE COUPLED TO 2" CONCRETE FOUNDATION STUB OUT. 1-1/4" INNERDUCT SHALL BE INSTALLED IN THE OTHER 2" CONCRETE FOUNDATION STUB OUT UP THROUGH THE TOP OF THE FOUNDATION.
4. THE 2" CNC CONDUITS SHALL BE COUPLED TO 2" CONCRETE FOUNDATION STUB OUTS.

0 50 100 150
SCALE IN FEET

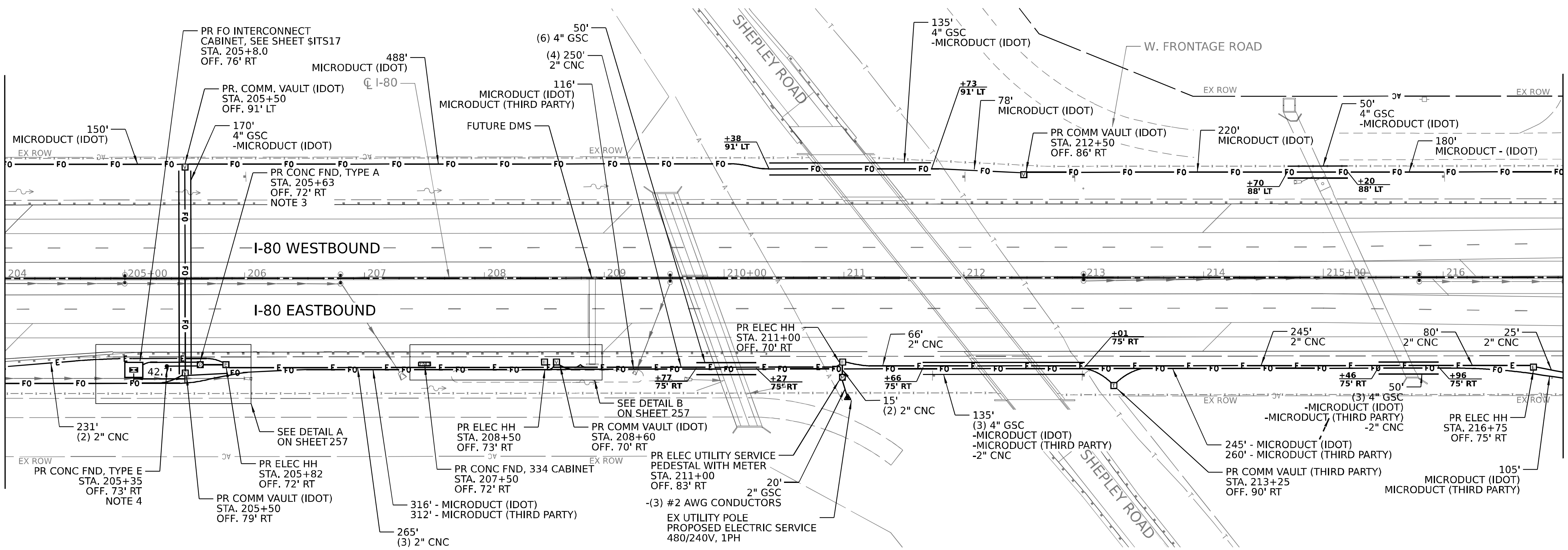
TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = dmeler	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 4/12/2023	DATE -	REVISED -

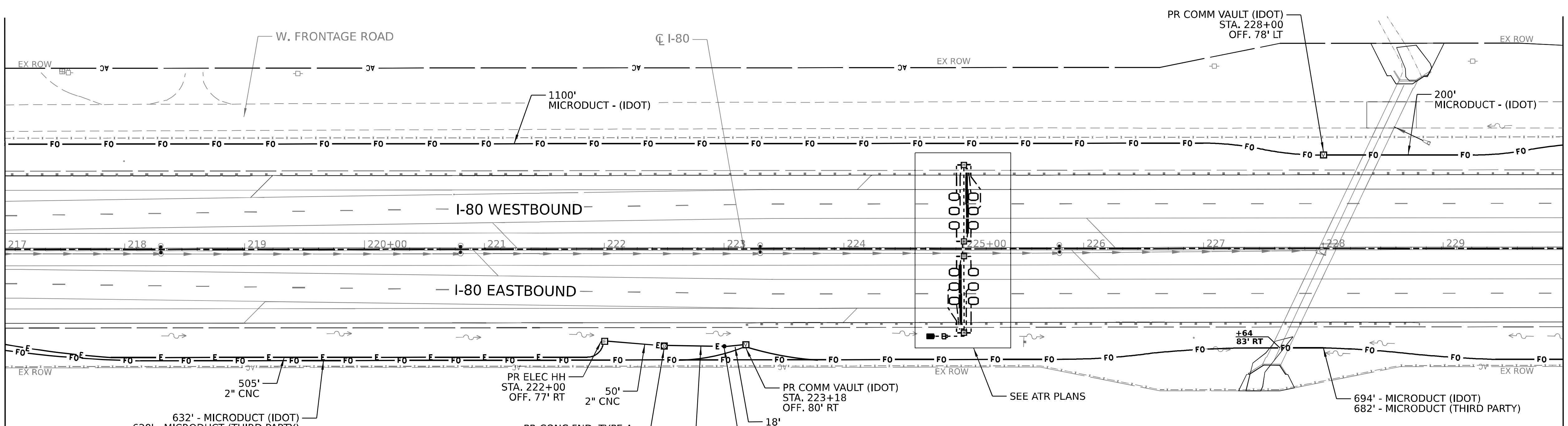
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS INFRASTRUCTURE PLANS

SCALE: SHEET 2 OF 7 SHEETS STA. 178+00 TO STA. 204+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	252
		CONTRACT NO. 62P71		
	ILLINOIS	FED. AID PROJECT		





NOTES
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2. THIRD PARTY MICRODUCT SHALL ONLY ENTER THIRD PARTY COMMUNICATIONS VAULTS.
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4. THE 2" CNC CONDUITS SHALL BE COUPLED TO 2" CONCRETE FOUNDATION STUB OUTS.

0 50 100 150
SCALE IN FEET

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100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

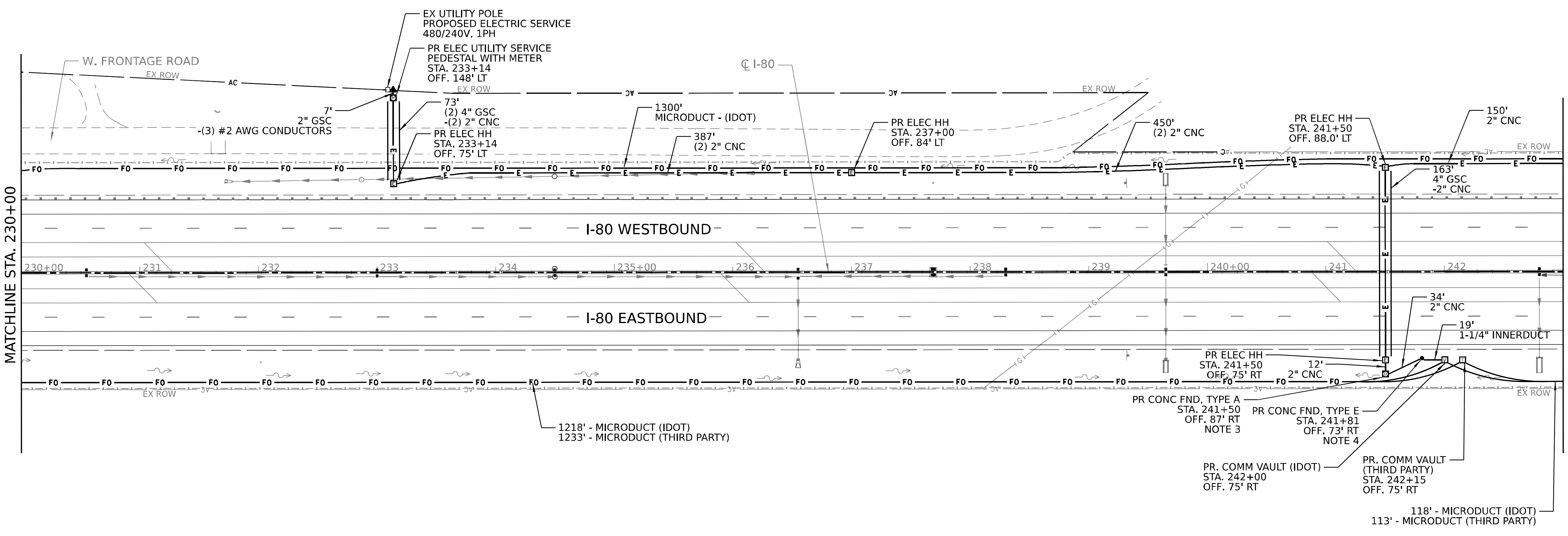
USER NAME = dmeier	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/12/2023	DATE -	REVISED -	

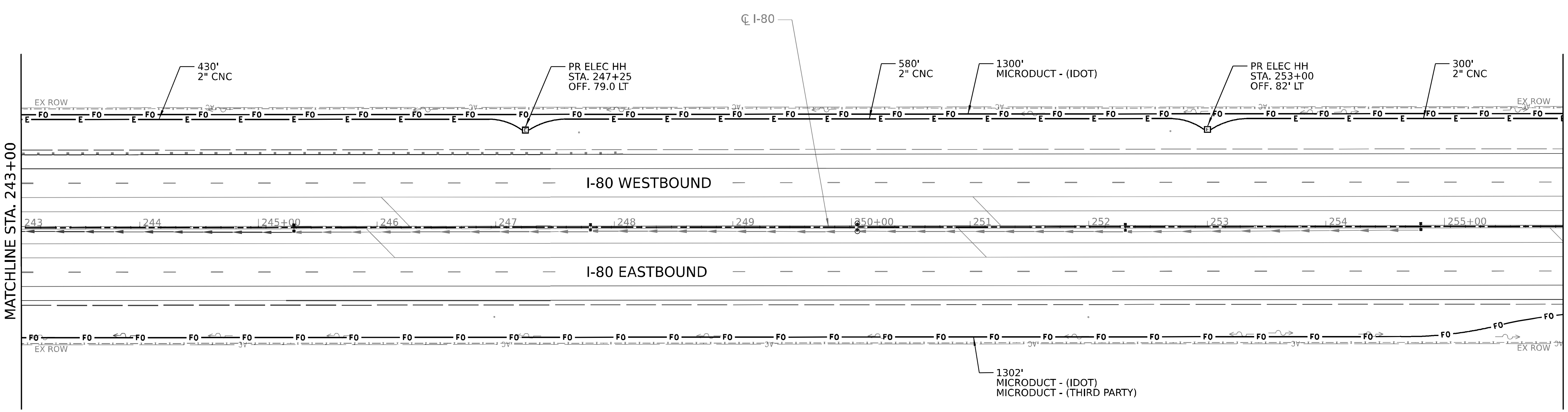
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS INFRASTRUCTURE PLANS

SCALE: SHEET 3 OF 7 SHEETS STA. 204+00 TO STA. 230+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	253
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT		





NOTES

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2. THIRD PARTY MICRODUCT SHALL ONLY ENTER THIRD PARTY COMMUNICATIONS VAULTS.
3. 2" CNC CONDUIT SHALL BE COUPLED TO 2" CONCRETE FOUNDATION STUB OUT. 1-1/4" INNERDUCT SHALL BE INSTALLED IN THE OTHER 2" CONCRETE FOUNDATION STUB OUT UP THROUGH THE TOP OF THE FOUNDATION.
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0 50 100 150
SCALE IN FEET

TranSmart
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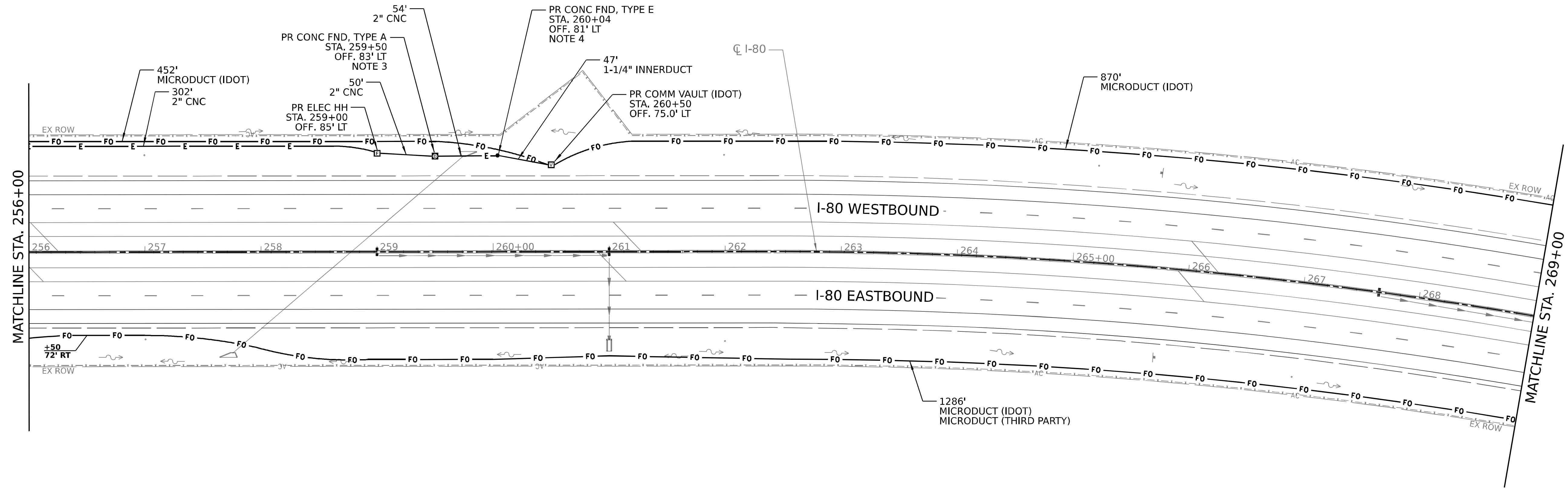
USER NAME = dmeier	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/16/2023	DATE -	REVISED -

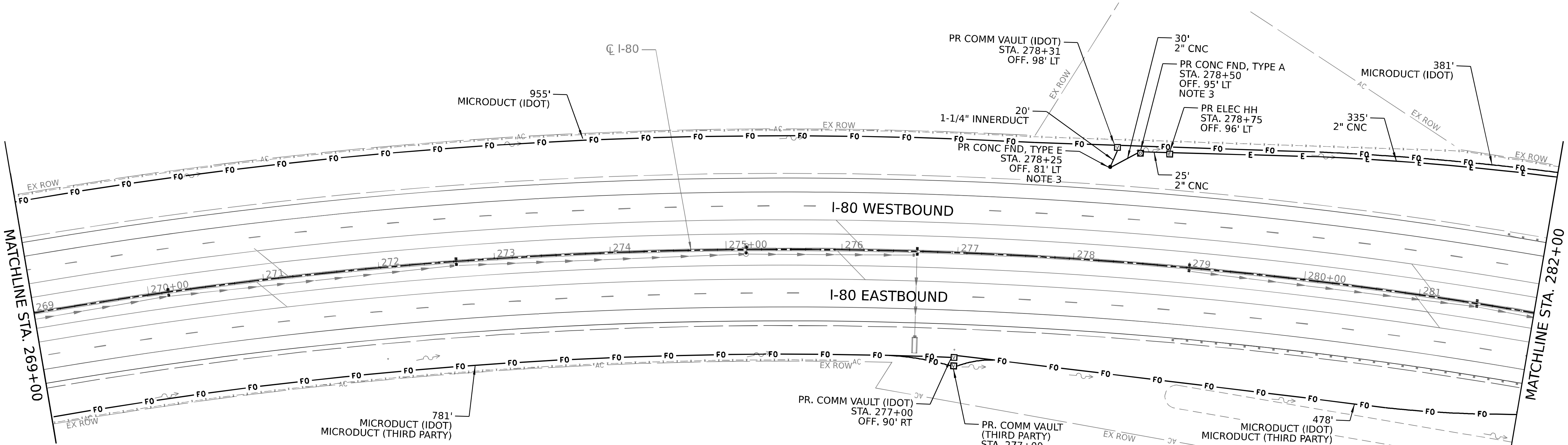
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS INFRASTRUCTURE PLANS

SCALE: SHEET 4 OF 7 SHEETS STA. 230+00 TO STA. 256+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	254
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT		





NOTES
1. IDOT MICRODUCT SHALL ONLY ENTER IDOT COMMUNICATIONS VAULTS.
2. THIRD PARTY MICRODUCT SHALL ONLY ENTER THIRD PARTY COMMUNICATIONS VAULTS.
3. 2" CNC CONDUIT SHALL BE COUPLED TO 2" CONCRETE FOUNDATION STUB OUT.
   1-1/4" INNERDUCT SHALL BE INSTALLED IN THE OTHER 2" CONCRETE FOUNDATION STUB OUT UP THROUGH THE TOP OF THE FOUNDATION.
4. THE 2" CNC CONDUITS SHALL BE COUPLED TO 2" CONCRETE FOUNDATION STUB OUTS.

0 50 100 150
SCALE IN FEET

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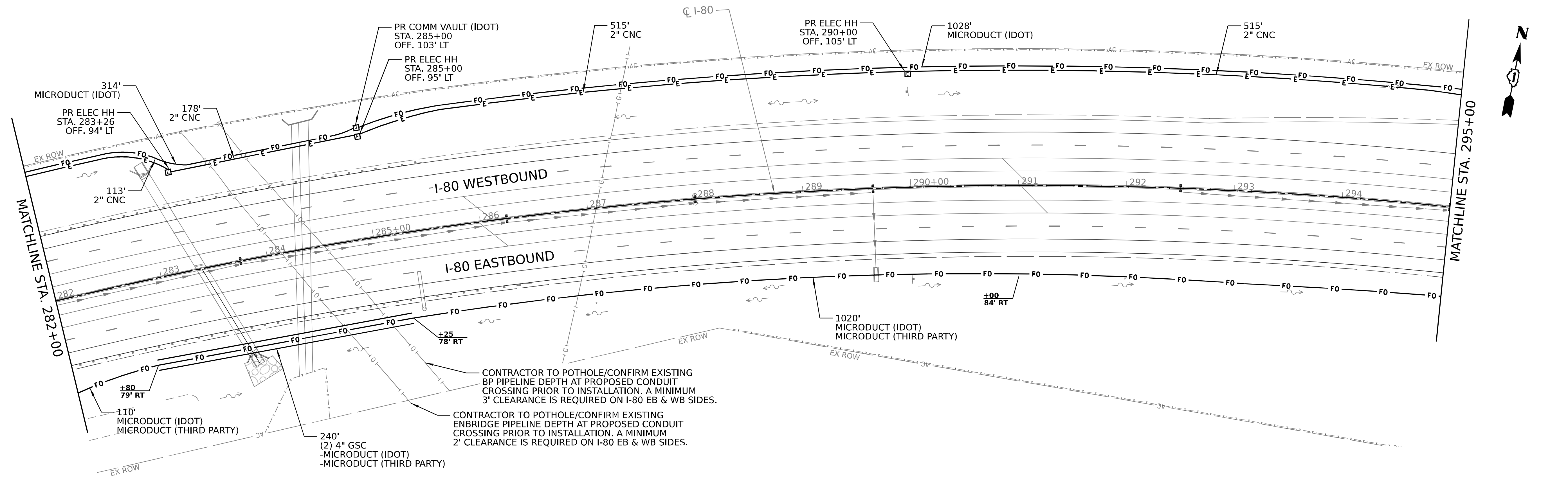
USER NAME = dmeier	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/16/2023	DATE -	REVISED -

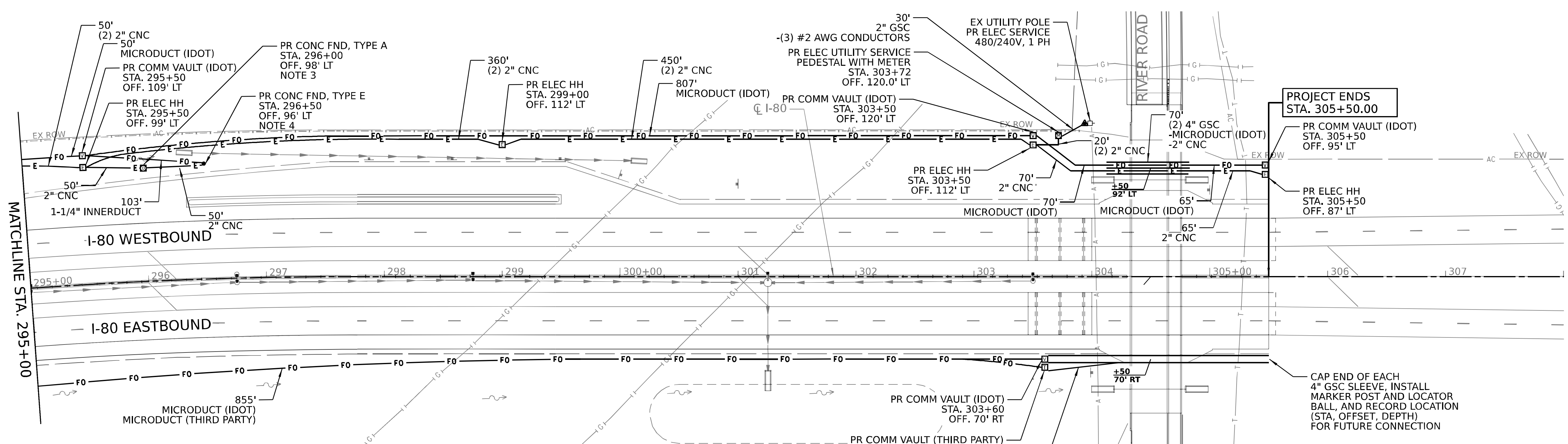
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS INFRASTRUCTURE PLANS

SCALE: SHEET 5 OF 7 SHEETS STA. 256+00 TO STA. 282+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	255
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT		





NOTES
1. IDOT MICRODUCT SHALL ONLY ENTER IDOT COMMUNICATIONS VAULTS.
2. THIRD PARTY MICRODUCT SHALL ONLY ENTER THIRD PARTY COMMUNICATIONS VAULTS.
3. 2" CNC CONDUIT SHALL BE COUPLED TO 2" CONCRETE FOUNDATION STUB OUT.
   1-1/4" INNERDUCT SHALL BE INSTALLED IN THE OTHER 2" CONCRETE FOUNDATION
   STUB OUT UP THROUGH THE TOP OF THE FOUNDATION.
4. THE 2" CNC CONDUITS SHALL BE COUPLED TO 2" CONCRETE FOUNDATION STUB OUTS.

0 50 100 150
SCALE IN FEET

MODEL: Default
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100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

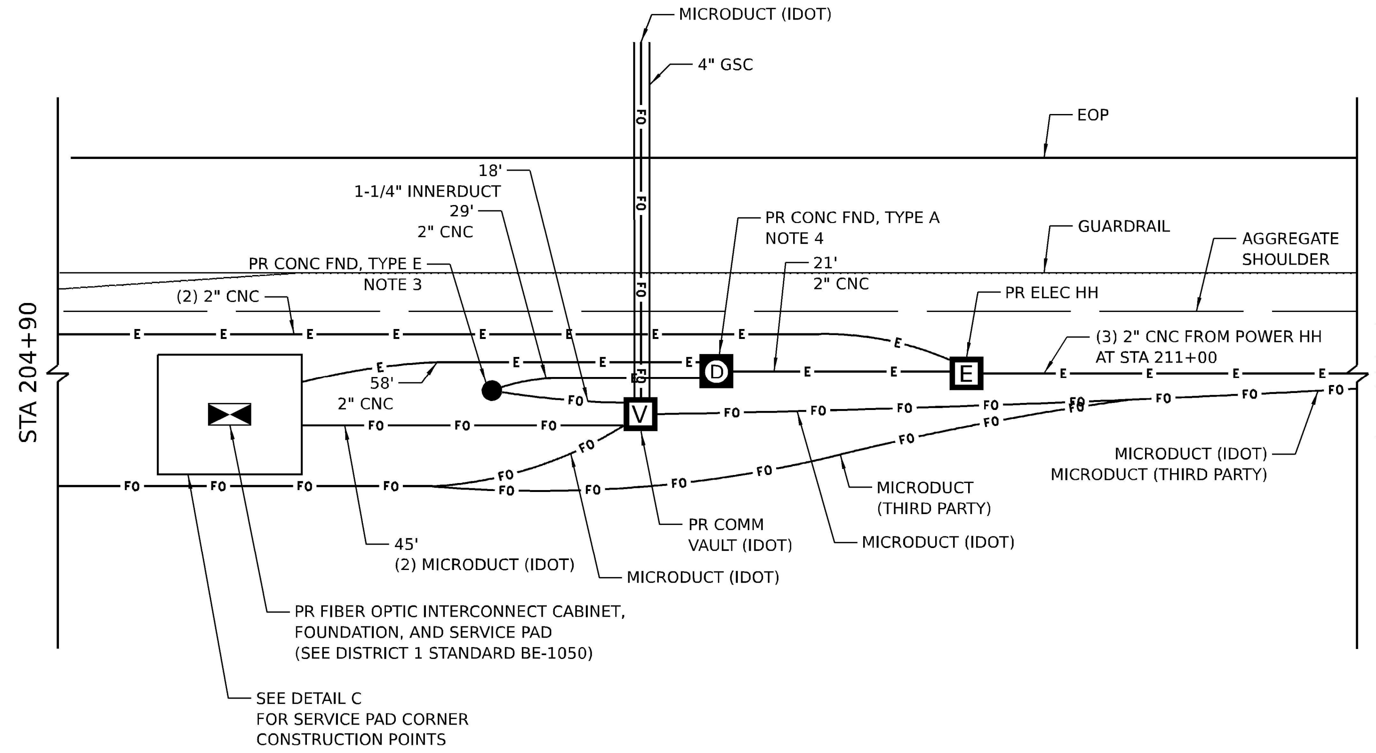
USER NAME = dmeier	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 4/25/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

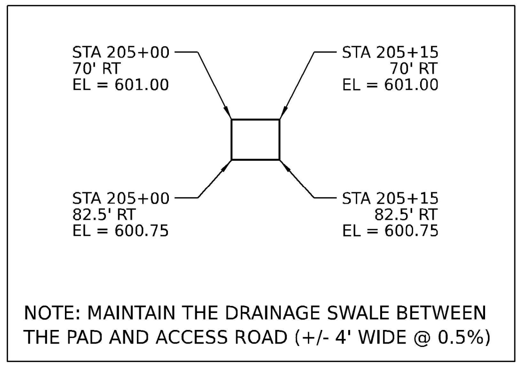
ITS INFRASTRUCTURE PLANS

SCALE: | SHEET 6 OF 7 SHEETS | STA. 282+00 | TO STA. 305+50

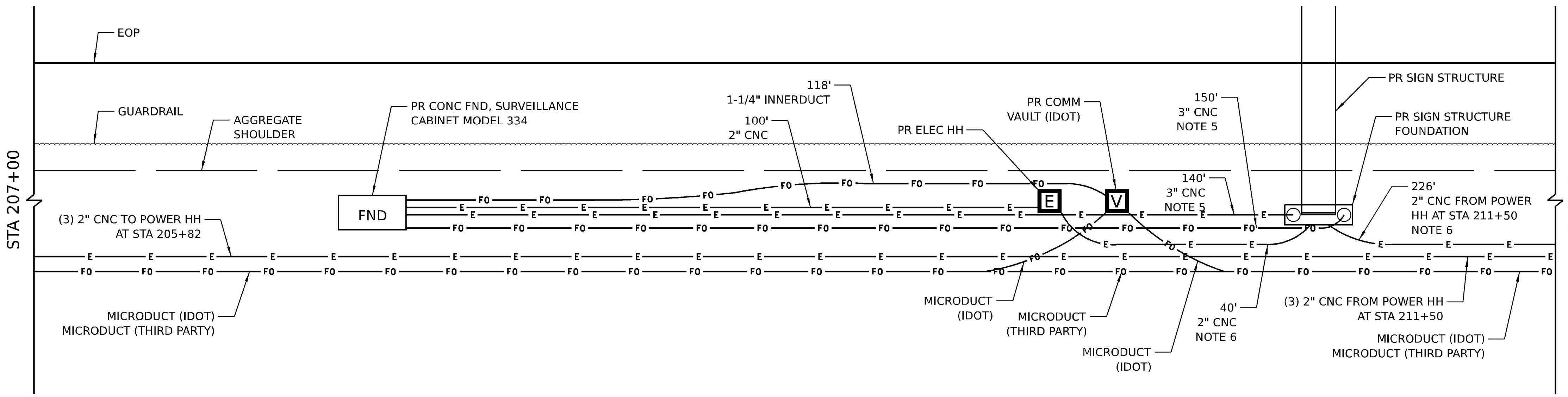
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	256
		CONTRACT NO. 62P71		
		ILLINOIS	FED. AID PROJECT	



DETAIL A



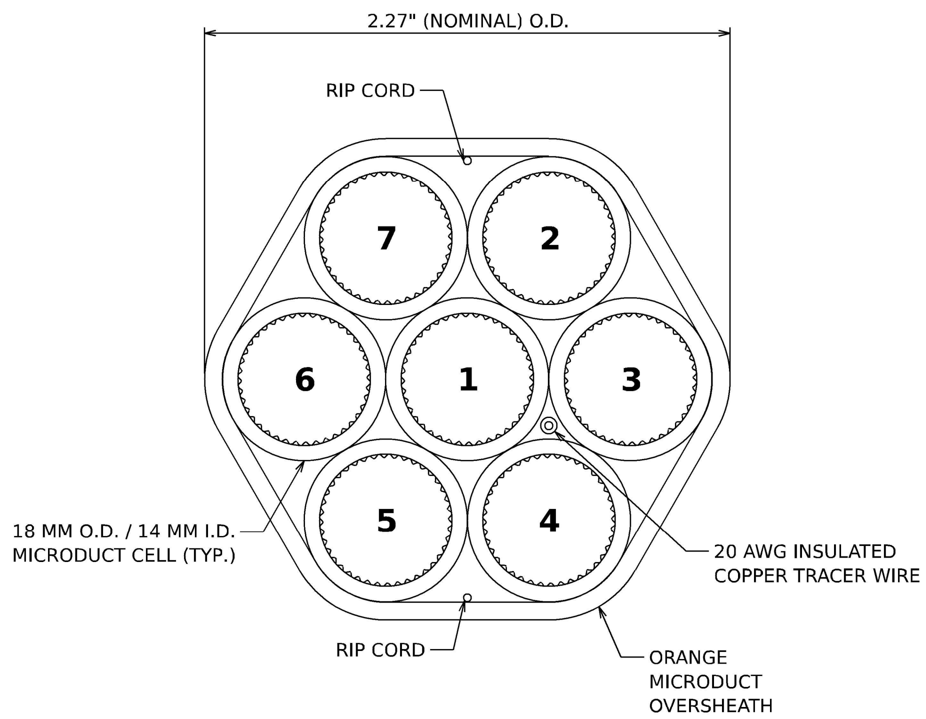
DETAIL C



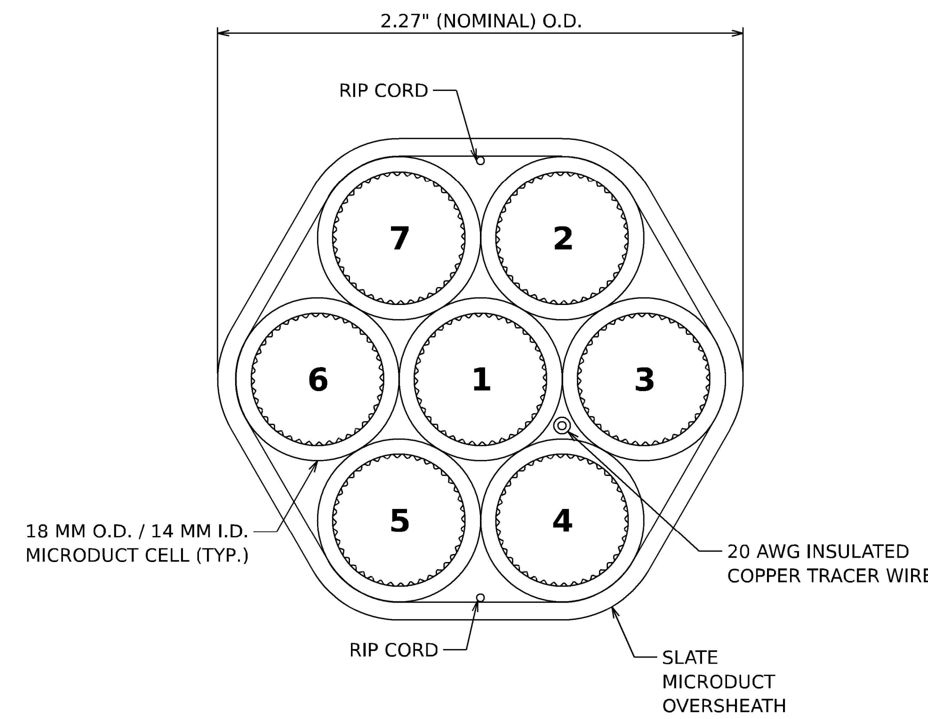
DETAIL B

NOTES

1. IDOT MICRODUCT SHALL ONLY ENTER IDOT COMMUNICATIONS VAULTS.
2. THIRD PARTY MICRODUCT SHALL ONLY ENTER THIRD PARTY COMMUNICATIONS VAULTS.
3. 2" CNC CONDUIT SHALL BE COUPLED TO 2" CONCRETE FOUNDATION STUB OUT. 1-1/4" INNERDUCT SHALL BE INSTALLED IN THE OTHER 2" CONCRETE FOUNDATION STUB OUT UP THROUGH THE TOP OF THE FOUNDATION.
4. THE 2" CNC CONDUITS SHALL BE COUPLED TO 2" CONCRETE FOUNDATION STUB OUTS.
5. COUPLE 3" CNC TO CONDUIT STUBOUTS AT 334 CABINET FOUNDATION AND SIGN STRUCTURE FOUNDATION.
6. STUB UP 2" CNC ABOVE FINISHED GRADE FOR FUTURE CONNECTION. SECURE STUB-UP TO SIGN STRUCTURE FOUNDATION.



IDOT MICRODUCT DETAIL



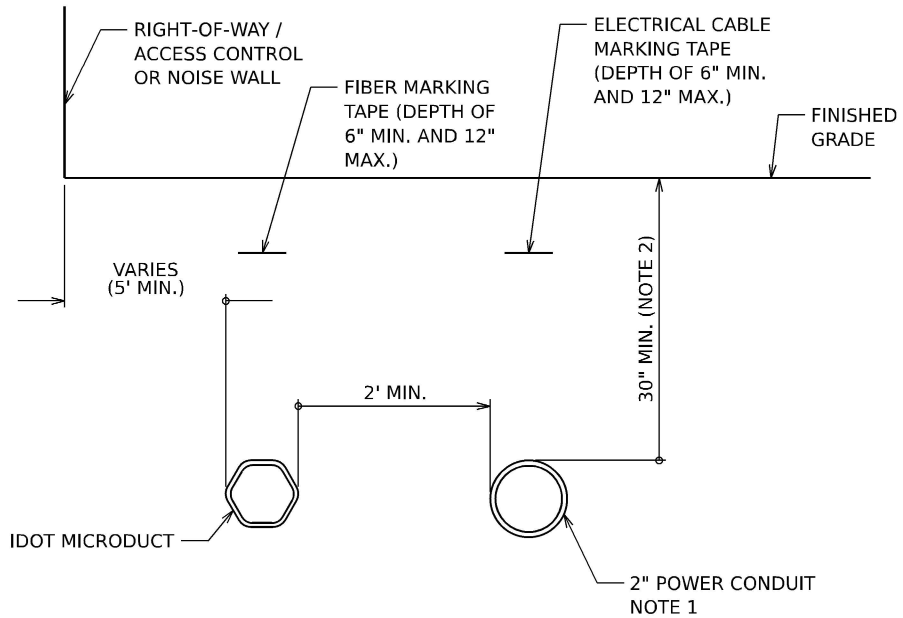
THIRD PARTY MICRODUCT DETAIL

CELL NO.	CELL COLOR	CELL ALLOCATION
1	BLUE	FUTURE 144 IDOT (TCF)
2	ORANGE	FUTURE 144 IDOT (DCF)
3	GREEN	SPARE
4	BROWN	SPARE
5	GREY	SPARE
6	WHITE	SPARE
7	RED	SPARE

IDOT MICRODUCT CELL INFORMATION

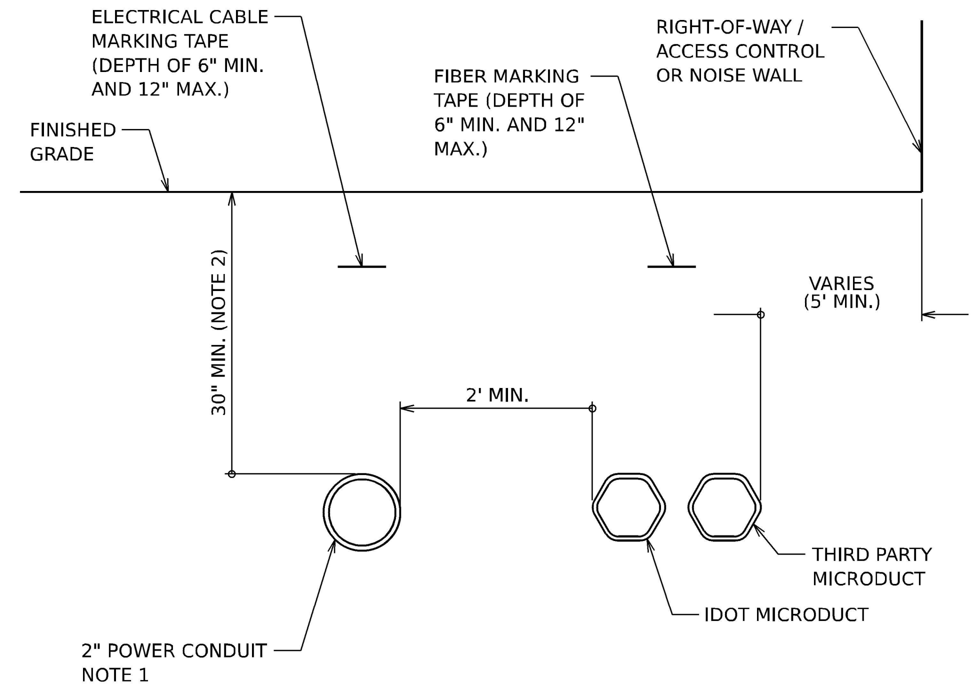
CELL NO.	CELL COLOR	CELL ALLOCATION
1	BLUE	FUTURE 144 THIRD PARTY
2	ORANGE	SPARE
3	GREEN	SPARE
4	BROWN	SPARE
5	GREY	SPARE
6	WHITE	SPARE
7	RED	SPARE

THIRD PARTY MICRODUCT CELL INFORMATION



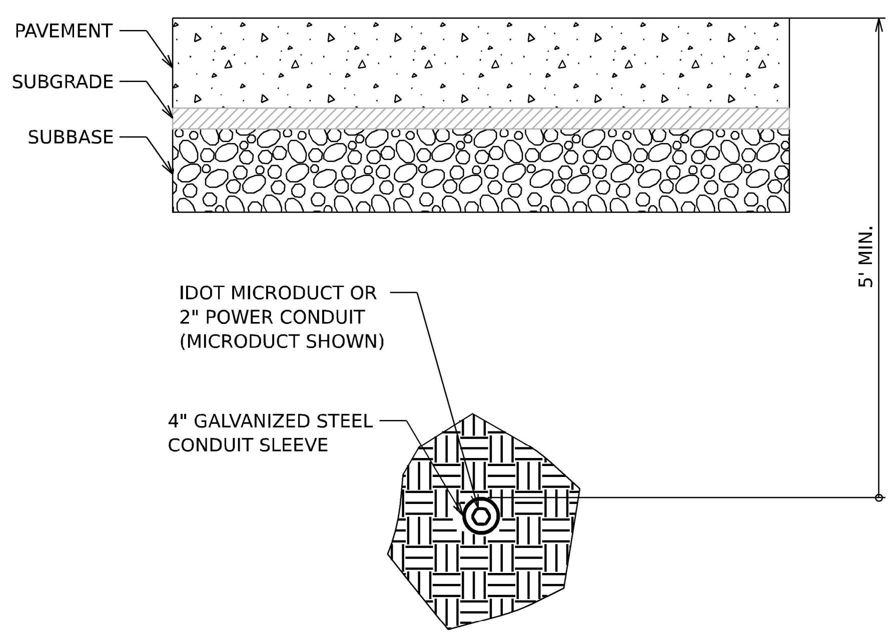
I-80 WESTBOUND TYPICAL CONDUIT SECTION

NOTES
1. INSTALLATION CONFIGURATION/QUANTITY OF POWER CONDUITS VARIES BY LOCATION.
2. GREATER DEPTH MAY BE REQUIRED IN CERTAIN SITUATIONS, INCLUDING, BUT NOT LIMITED TO: ENTERING HANDHOLES/VAULTS, UTILITY AVOIDANCE, CROSSING BENEATH BOX CULVERTS.

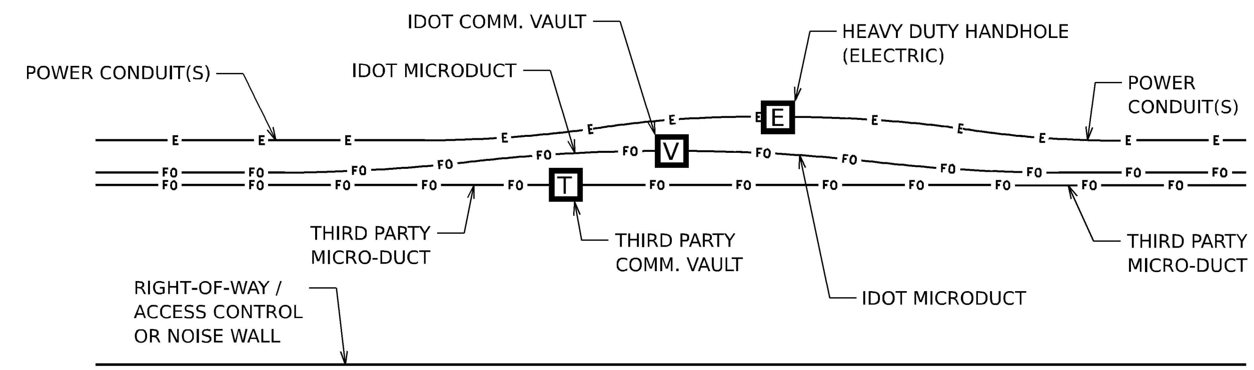


I-80 EASTBOUND TYPICAL CONDUIT SECTION

NOTES
1. INSTALLATION CONFIGURATION/QUANTITY OF POWER CONDUITS VARIES BY LOCATION.
2. GREATER DEPTH MAY BE REQUIRED IN CERTAIN SITUATIONS, INCLUDING, BUT NOT LIMITED TO: ENTERING HANDHOLES/VAULTS, UTILITY AVOIDANCE, CROSSING BENEATH BOX CULVERTS.



BORED CONDUIT UNDER ROADWAY



TYPICAL CONDUIT ROUTING AT HANDHOLES

NOTES
1. INSTALLATION CONFIGURATION/QUANTITY OF POWER CONDUITS VARIES BY LOCATION AND ROADWAY DIRECTION. EASTBOUND DIRECTION SHOWN ABOVE WITH POWER CONDUIT, IDOT MICRODUCT, AND THIRD PARTY MICRODUCT.
2. IDOT MICRODUCT SHALL ENTER IDOT COMMUNICATIONS VAULTS ONLY.
3. THIRD PARTY MICRODUCT SHALL ENTER THIRD PARTY COMMUNICATIONS VAULTS ONLY.

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TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = dmeier	DESIGNED -	REVISED -
		DRAWN -	REVISED -
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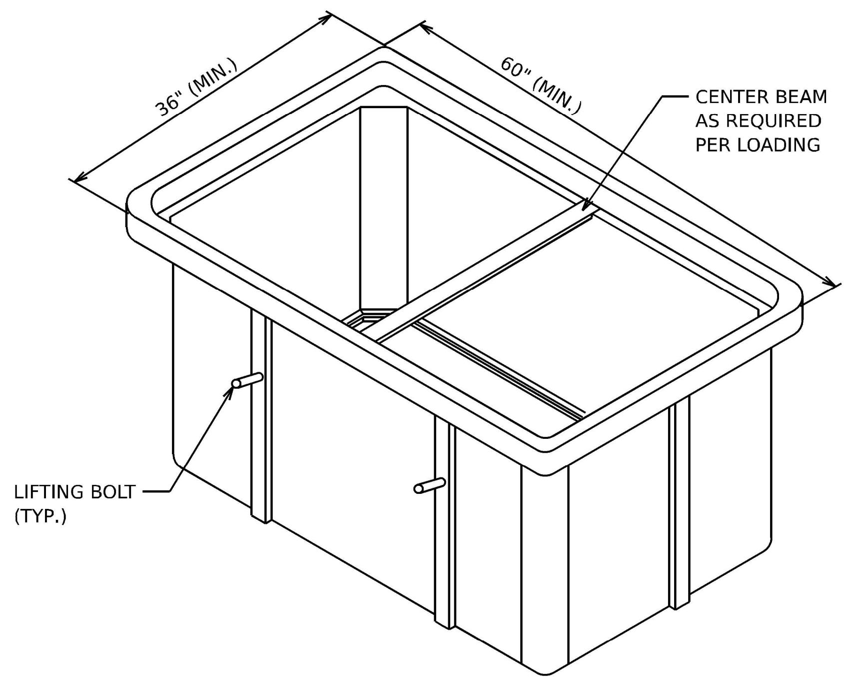
	PLOT DATE = 4/11/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

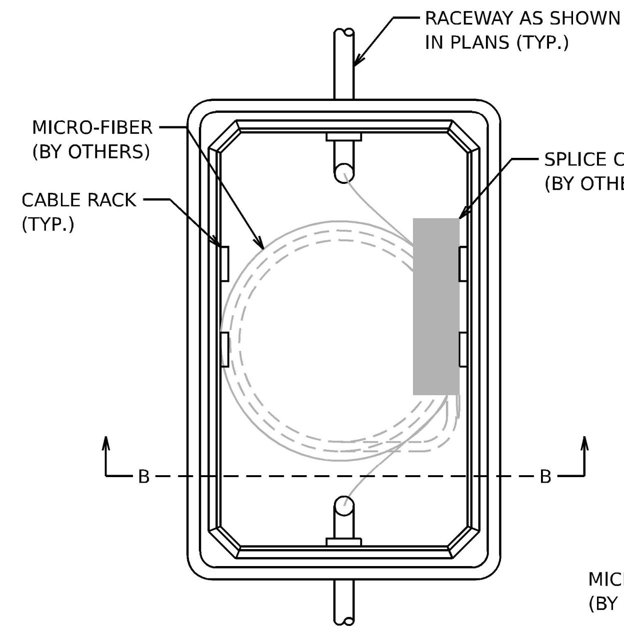
ITS INFRASTRUCTURE DETAILS
CONDUIT ROUTING

SCALE: N.T.S. | SHEET 2 OF 8 SHEETS | STA. | TO STA.

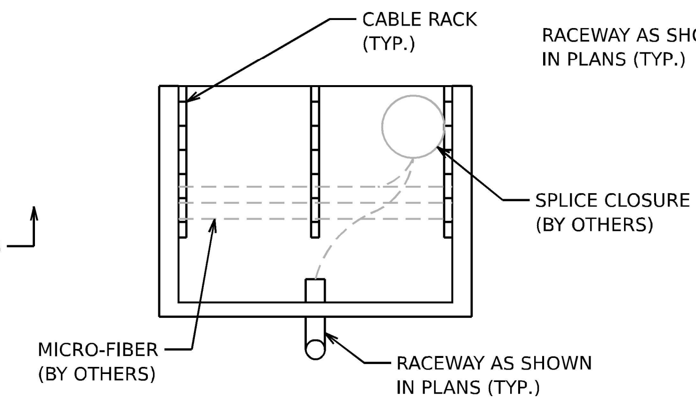
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	259
		CONTRACT NO. 62P71		
		ILLINOIS	FED. AID PROJECT	



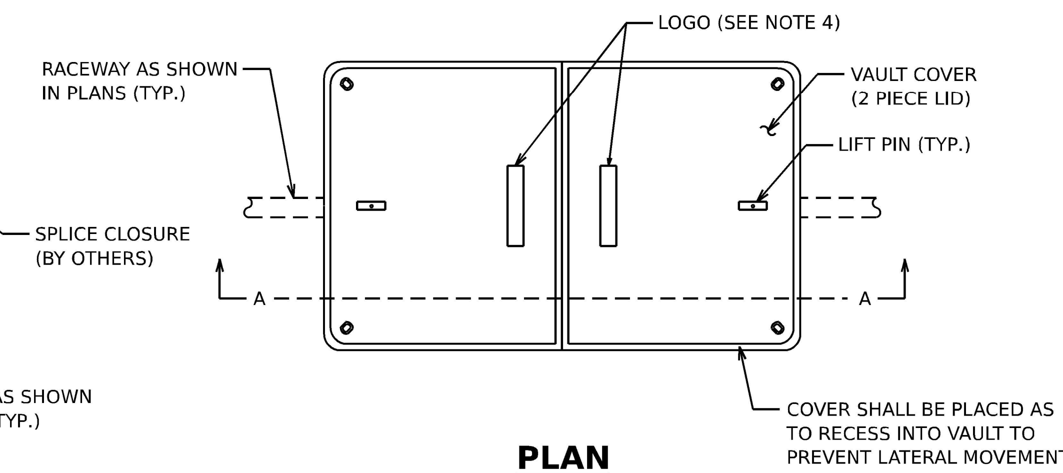
VAULT BOX ISOMETRIC VIEW



TOP VIEW



SECTION B-B



PLAN

NOTES:

1. GROUND ROD, 1-1/2" CONDUIT, #6 AWG GROUND WIRE, LOCATE POST AND ASSOCIATED WORK ARE INCLUDED AS PART OF COMMUNICATIONS VAULT AND WILL NOT BE PAID FOR SEPARATELY. ALL MATERIALS FOR MECHANICAL CONNECTION SHALL BE UL LISTED AND INSTALLED PER NEC ARTICLE 250.

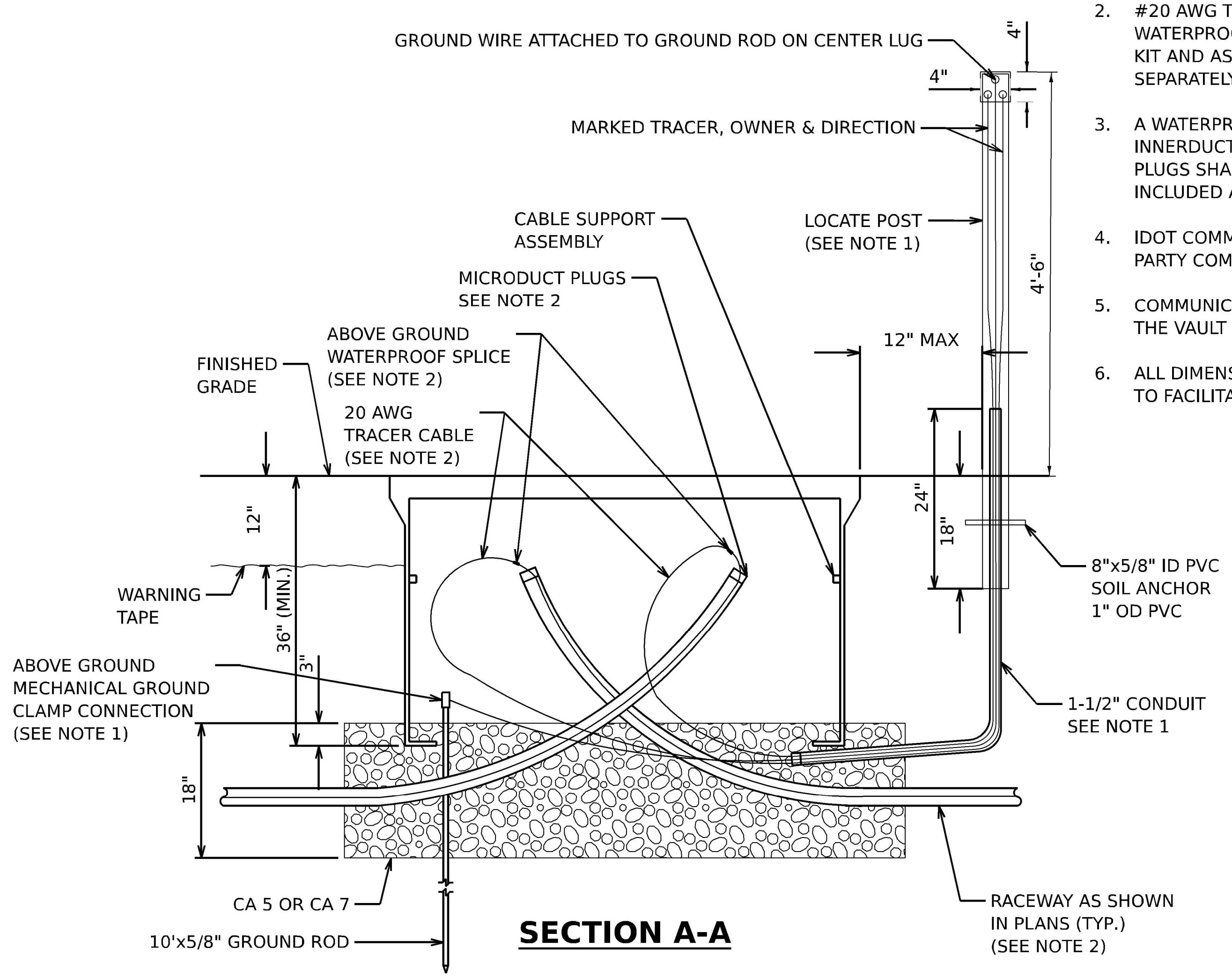
2. #20 AWG TRACER CABLE SHALL BE SPLICED TO THE #20 AWG TRACER CABLE IN THE MICRODUCT USING A WATERPROOF SPLICE KIT AS RECOMENDED BY THE MICRODUCT MANUFACTURER. THE #20 AWG WIRE, SPLICE KIT AND ASSOCIATED WORK ARE INCLUDED AS PART OF COMMUNICATIONS VAULT AND WILL NOT BE PAID FOR SEPARATELY.

3. A WATERPROOF MICRODUCT PLUG(S) OR INNERDUCT PLUG SHALL BE INSTALLED AROUND EACH MICRODUCT OR INNERDUCT TO SEAL AROUND THE DUCT FOR ALL MICRODUCTS OR INNERDUCTS COMING INTO THE VAULT. THE PLUGS SHALL BE APPROPRIATELY SIZED AND INSTALLED AS RECOMMENDED BY THE MANUFACTURER AND IS INCLUDED AS PART OF THE MICRODUCT OR INNERDUCT PAY ITEM AND WILL NOT BE PAID SEPARATELY.

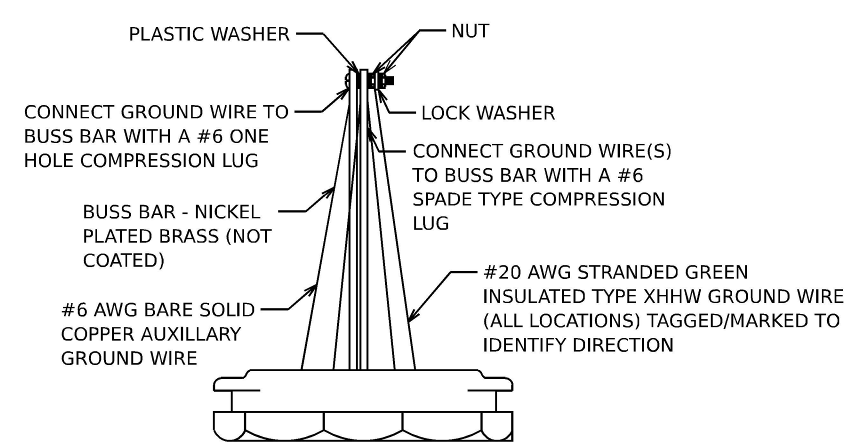
4. IDOT COMMUNICATIONS VAULTS SHALL HAVE A PERMANENTLY RECESSED LOGO THAT READS "IDOT" AND THIRD PARTY COMMUNICATIONS VAULTS SHALL HAVE A PERMANENTLY RECESSED LOGO THAT READS "IDOT - BB".

5. COMMUNICATIONS VAULT SHALL HAVE AN OPEN BASE. ALL CONDUITS AS SHOWN ON THE PLANS SHALL ENTER THE VAULT VIA THE OPEN BASE.

6. ALL DIMENSIONS ARE MINIMUM AND A LARGER SIZE VAULT MAY BE USED, WITH THE APPROVAL OF THE ENGINEER, TO FACILITATE USING A MANUFACTURER'S STANDARD PRODUCT.

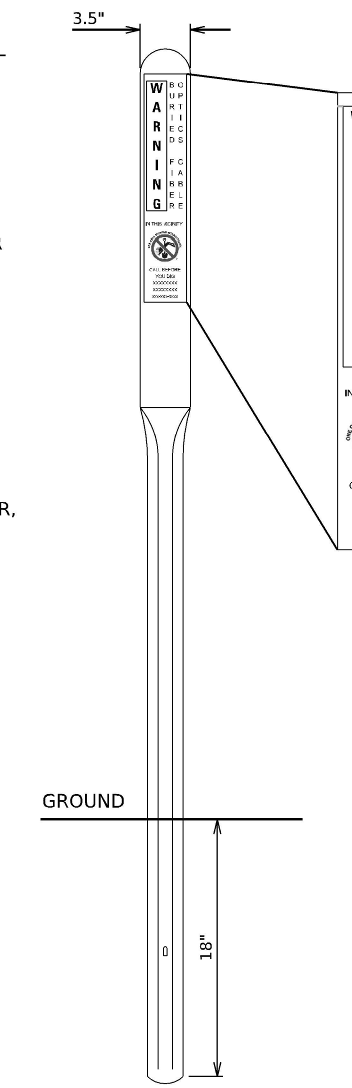


SECTION A-A

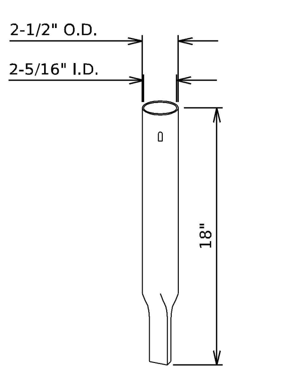


LOCATE POST TOP HAT BOND PLATE

N.T.S.



POST



SOIL ANCHOR

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

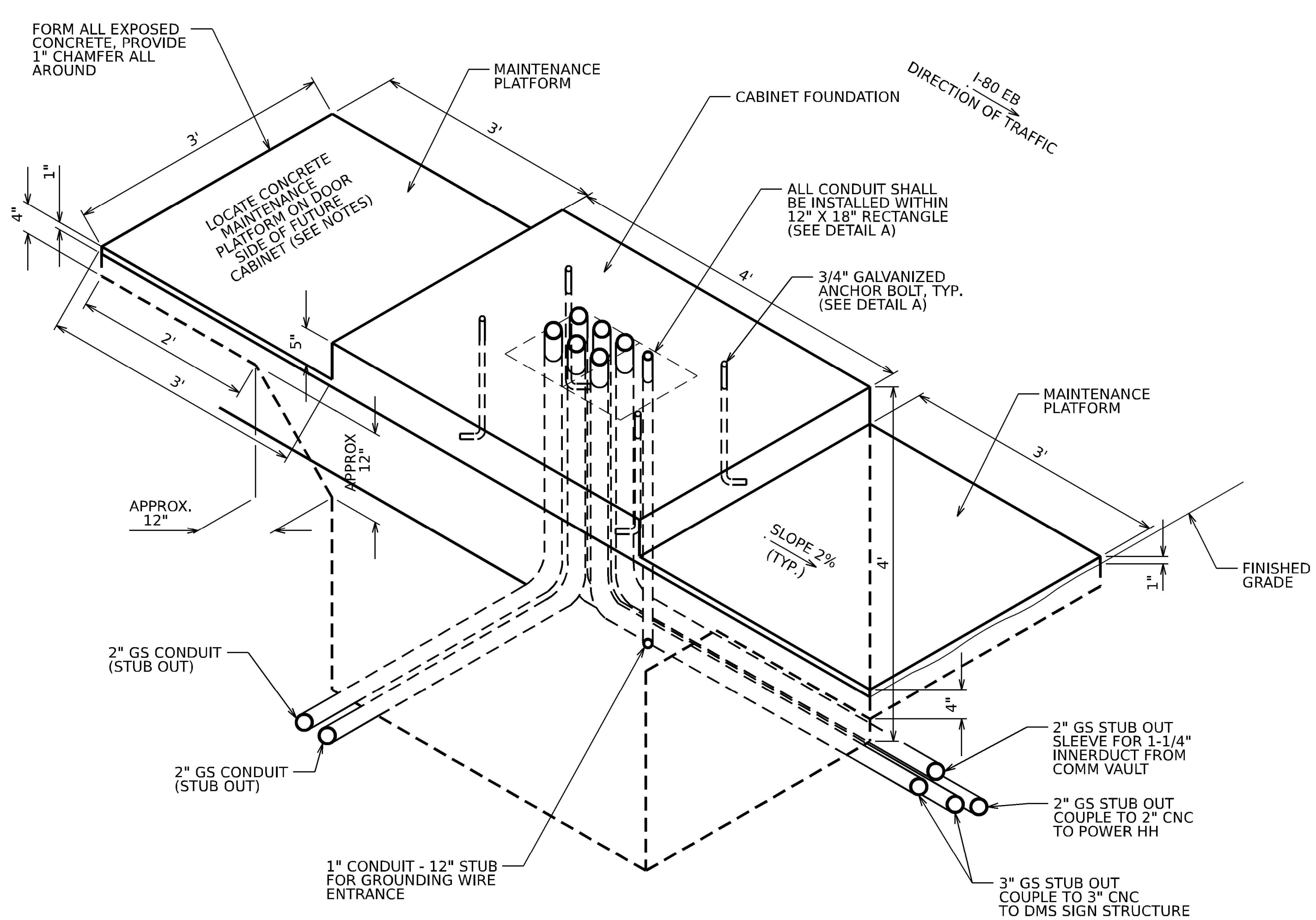
ITS INFRASTRUCTURE DETAILS
COMMUNICATION VAULT

SCALE: N.T.S. | SHEET 3 OF 8 SHEETS | STA. | TO STA.

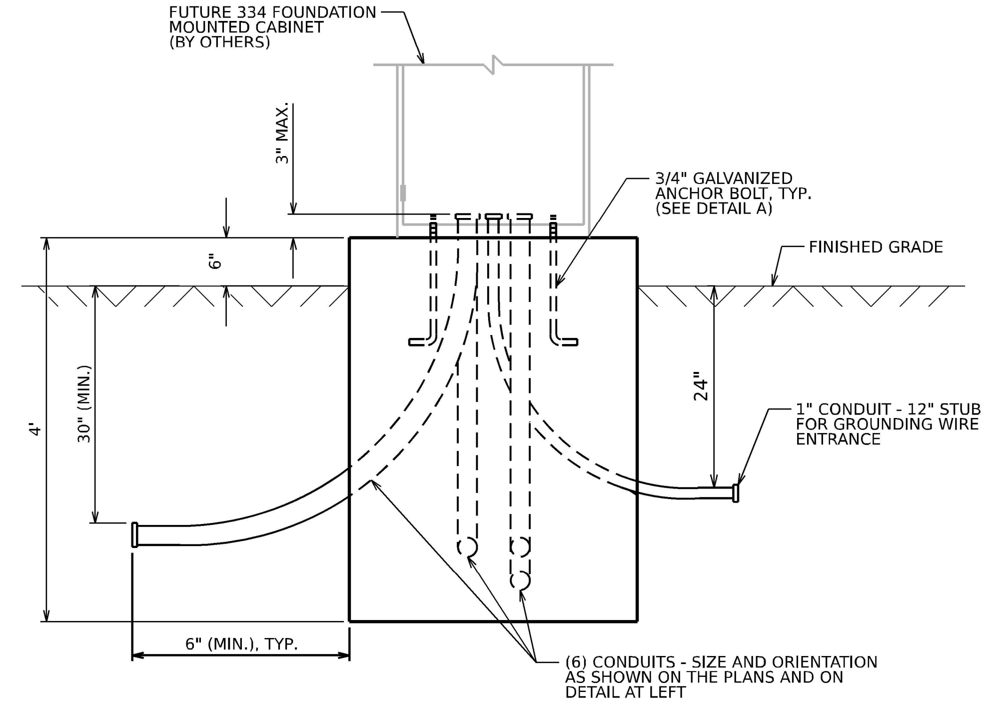
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	260

CONTRACT NO. 62P71

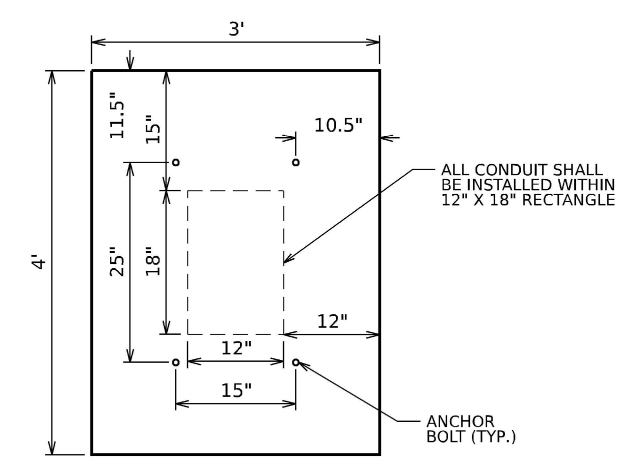
ILLINOIS | FED. AID PROJECT



CONCRETE FOUNDATION FOR SURVEILLANCE CABINET MODEL 334 ELEVATION VIEW



CONCRETE FOUNDATION FOR SURVEILLANCE CABINET MODEL 334 ELEVATION VIEW



DETAIL A CABINET FOUNDATION ANCHOR BOLT AND CONDUIT LAYOUT

NOTES

1. INSTALL FOUR 3/4 INCH DIAMERTER X 12 INCH MINIMUM LENGTH APPROVED J-BOLTS TO ANCHOR THE FUTURE CABINET BASES. THE ANCHOR BOLTS SHALL BE HOT-DIPPED GALVANIZED STEEL AND LOCATED AS SHOWN IN DETAIL A.
2. CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED AND LEVEL. LEVELING OF TOP SURFACES AFTER CONCRETE BASE HAS CURED SHALL ONLY BE ACCOMPLISHED BY GRINDING.
3. MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.
4. CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.
5. CONCRETE MAINTENANCE PLATFORM AND CABINET FOUNDATION FOR CABINET SHALL BE MONOLITHIC POUR.
6. WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.
7. CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 3 INCHES.
8. MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER
9. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.
10. CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.
11. PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.
12. ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.
13. ALL METALLIC CONDUIT ENDS AT TOP OF CONCRETE BASES SHALL BUSHINGS AND ALL NONMETALLIC CONDUIT ENDS AT TOP OF CONCRETE BASES SHALL HAVE END BELLS.
14. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.
15. THE CONTRACTOR SHALL INSTALL INSULATED BUSHINGS AND DUCT SEALANT AT ALL CONDUIT BEND TERMINATIONS IN FOUNDATIONS.
16. CONCRETE BASE TO BE FORMED AT LEAST 6" ABOVE THE GROUND SURFACE.

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PLOT DATE = 4/11/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS INFRASTRUCTURE DETAILS
CONCRETE FOUNDATION, SURVEILLANCE CABINET MODEL 334

SCALE: N.T.S. | SHEET 4 OF 8 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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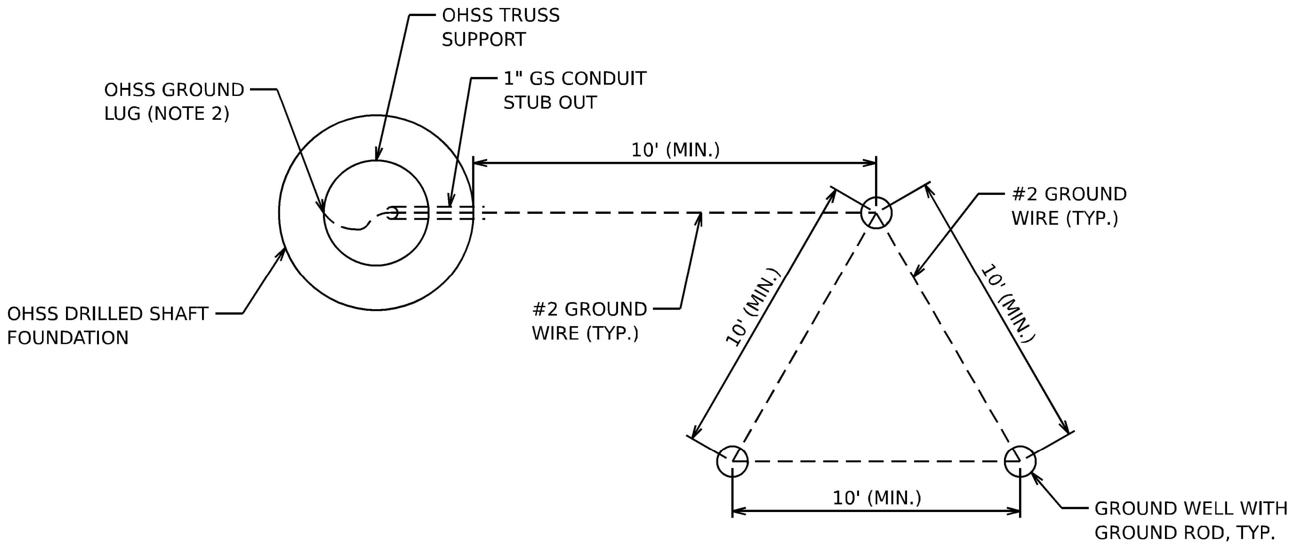
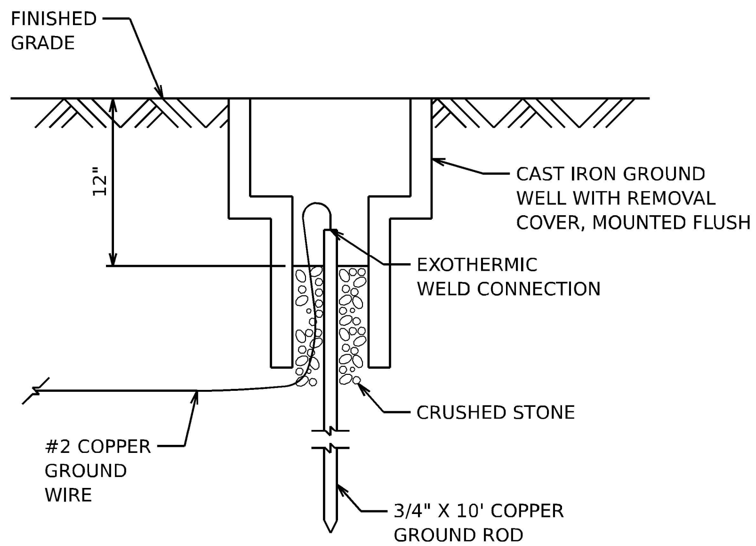
		CONTRACT NO. 62P71		
		ILLINOIS	FED. AID PROJECT	



DMS SIGN STRUCTURE GROUNDING DETAIL



GROUND WELL DETAIL

NOTES

1. THE COST FOR GROUNDING OF THE DMS SIGN STRUCTURE SHALL BE INCLUDED AND PAID AS PART OF THE OVERHEAD SIGN STRUCTURE PAY ITEM.
2. CONTRACTOR SHALL TERMINATE THE GROUND COPPER WIRE TO OHSS GROUND LUG USING APPROVED CLAMPS FOR GROUNDING.
3. ONLY STUB OUT CONDUITS FOR GROUNDING SHOWN. OTHER CONDUITS FOR POWER OR COMMUNICATIONS ARE NOT SHOWN FOR CLARITY.

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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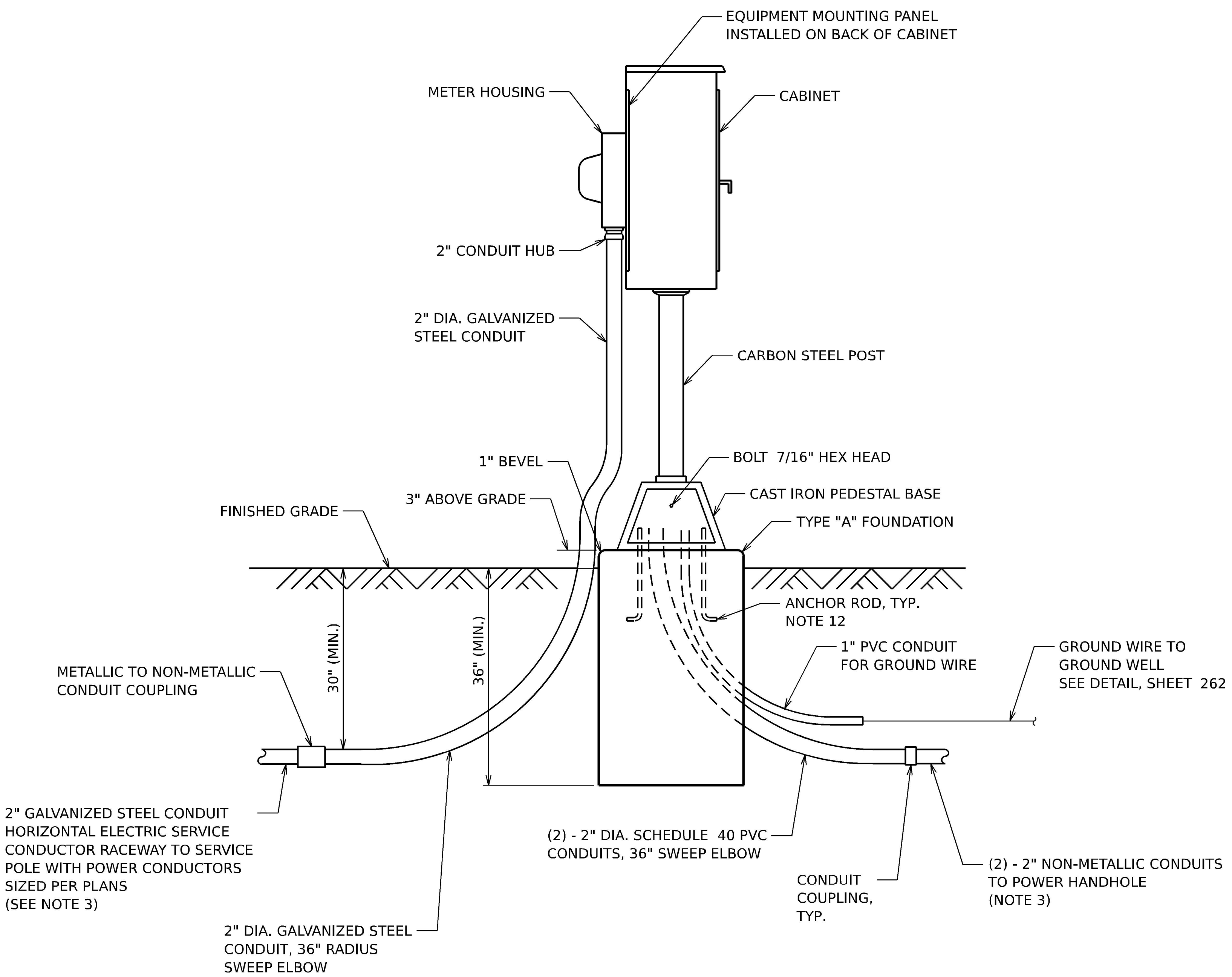
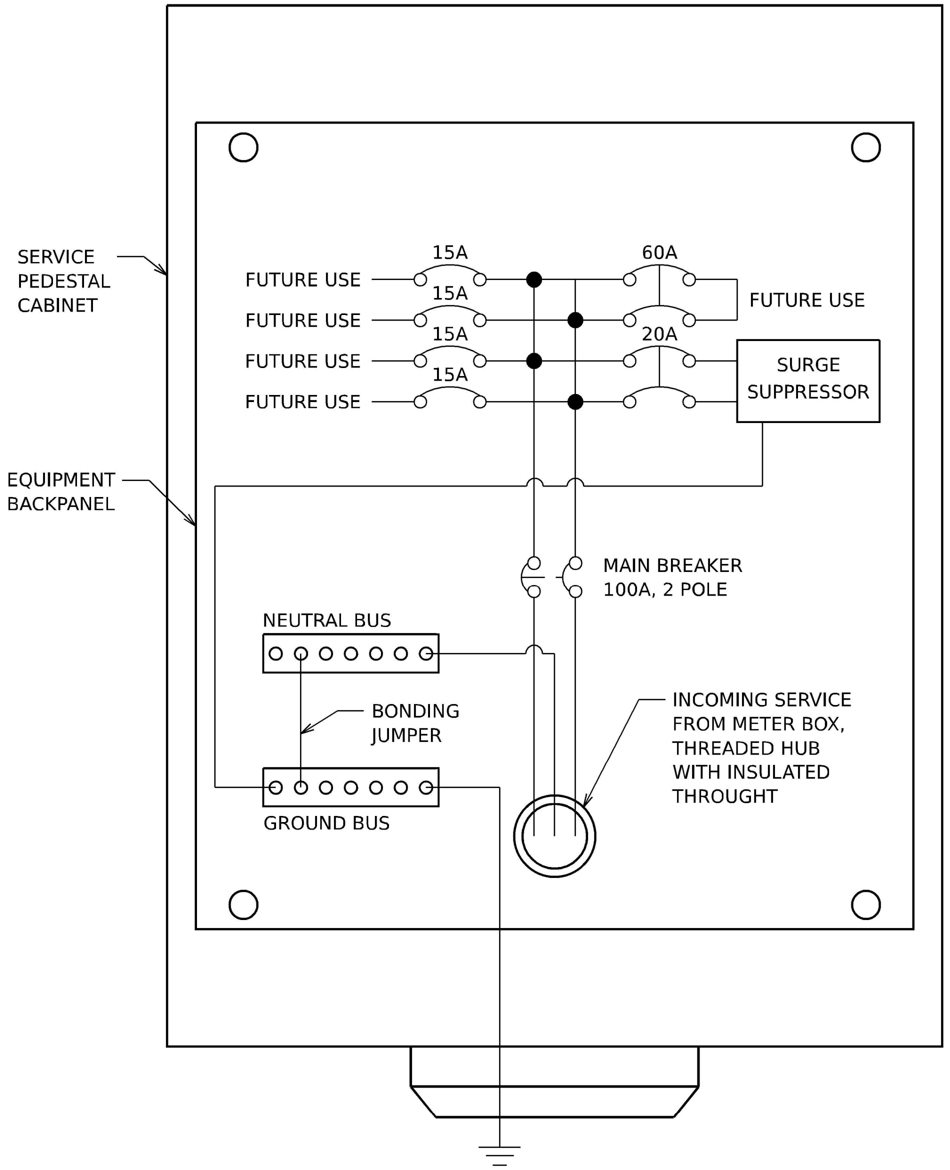
		CONTRACT NO. 62P71		
	ILLINOIS	FED. AID PROJECT		



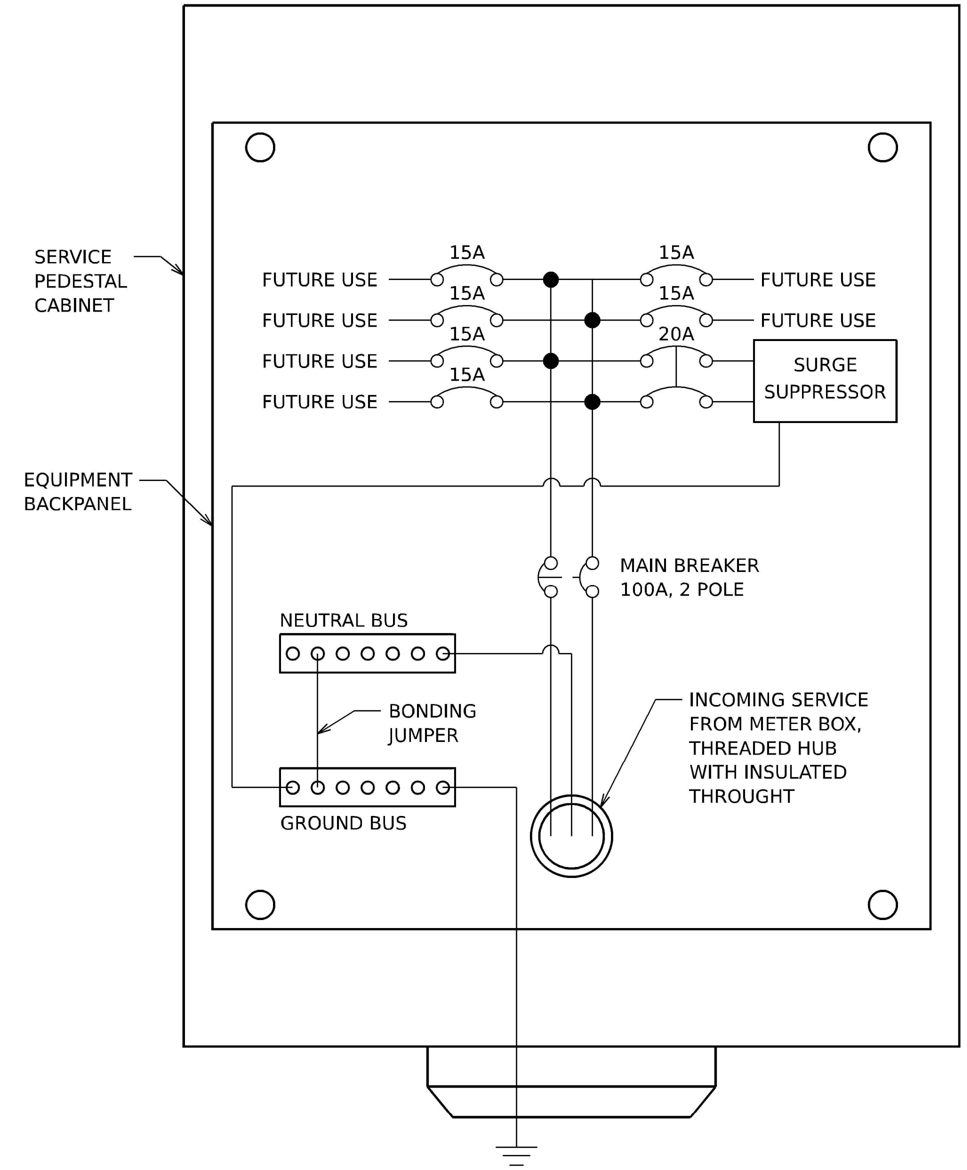
SERVICE PEDESTAL WITH METER

NOTES

1. SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
2. UNLESS OTHERWISE INDICATED, ALL ITEMS AND WORK SHOWN SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILTIY SERVICE INSTALLATION PAY ITEM.
3. THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY/CONDUCTORS AND NON-METALLIC CONDUITS TO POWER HANDHOLE SHALL BE MEASURED SEPARATELY FOR PAYMENT.
4. CABINETS, CABINET POSTS AND CABINET PEDESTALS SHALL BE PRIMED AND PAINTED. THE EXTERIOR SHALL HAVE TWO EPOXY FINISH COATS OF ANSI-61 GRAY. THE INTERIOR SHALL BE PAINTED WHITE.
5. METER HOUSING SHALL BE MOUNTED TO BACK WALL OF CABINET. PROVIDE A GATE IN ROW FENCE TO ALLOW UTILITY ACCESS TO READ THE METER.
6. CABLES FROM METER HOUSING SHALL PASS THROUGH BACK WALL OF CABINET.
7. METER HOUSING SHALL BE AS REQUIRED BY THE UTILITY.
8. THE CABINET SHALL BE 36"H X 20"W X 15"D, FABRICATED FROM ALUMINUM WITH A MINIMUM THICKNESS OF .125", RATED NEMA TYPE 3R AND HAVE A MOUNTING BACK PLATE.
9. THE CABINET DOOR SHALL HAVE A CONTINUOUS HINGE THAT IS BOLTED TO THE CABINET AND DOOR WITH 1/4-20 STAINLESS STEEL CARRIAGE BOLTS AND NY-LOCK NUTS. THE HINGE SHALL BE INSTALLED ON THE RIGHT SIDE WHEN FACING THE CABINET AND BE MADE OF STAINLESS STEEL WITH A 0.25 INCH DIAMETER STAINLESS STEEL HINGE PIN. THE HINGE PIN SHALL BE CAPPED TOP AND BOTTOM BY WELD TO RENDER IT TAMPER-PROOF. THE CABINET SHALL HAVE A GASKET THAT FORMS A WEATHER-TIGHT SEAL BETWEEN THE CABINET AND DOOR. THE DOOR LATCHING MECHANISM SHALL BE THE 3-POINT DRAW ROLLER TYPE. WHEN THE DOOR IS CLOSED AND LATCHED, IT WILL BE LOCKED. THE LATCHING HANDLE SHALL BE FABRICATED FROM A 0.75" STAINLESS STEEL ROUND BAR AND SHALL HAVE A PROVISION FOR PADLOCKING IN THE CLOSED POSITION.
10. THE ENCLOSURE SHALL BE EQUIPPED WITH TWO ADJUSTABLE "C" MOUNTING CHANNELS WELDED ON BOTH SIDE WALLS AND BACK WALL OF THE ENCLOSURE, ALLOWING VERSATILE POSITIONING OF SHELVES OR PANELS. MOUNTING CHANNELS SHALL BE FACTORY PAINTED SAME COLOR AS INTERIOR OF CABINET.
11. CABINET DOOR SHALL NOT HAVE COMPARTMENT DOORS OR LOUVERS. INTERIOR OF CABINET DOOR SHALL HAVE A PLASTIC POCKET FOR WIRING SCHEMATIC.
12. CONTRACTOR MUST COORDINATE WITH PEDESTAL BASE SUPPLIER AND FURNISH THE NECESSARY ANCHOR RODS.
13. THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE ASSEMBLED BY A UL 508A INDUSTRIAL CONTROL PANEL FABRICATOR. THE PANEL ASSEMBLY SHALL BE UL LABELED AND SUITABLE FOR USE AS SERVICE EQUIPMENT.
14. ALL EQUIPMENT SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND THE NATIONAL ELECTRICAL SAFETY CODE.
15. PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRCTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY. FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



SERVICE PEDESTAL CABINET WIRING AND EQUIPMENT LAYOUT STA 210+99



SERVICE PEDESTAL CABINET WIRING AND EQUIPMENT LAYOUT STA 233+14 & STA 303+72

NOTES

1. THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LABELED, SUITABLE FOR USE AS SERVICE EQUIPMENT.

2. CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 15,000 SYMETRICAL AMPERES AT 240 VOLTS MINIMUM. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/TAG-OUT REQUIREMENTS. HANDLES SHALL BE TRIP FREE.

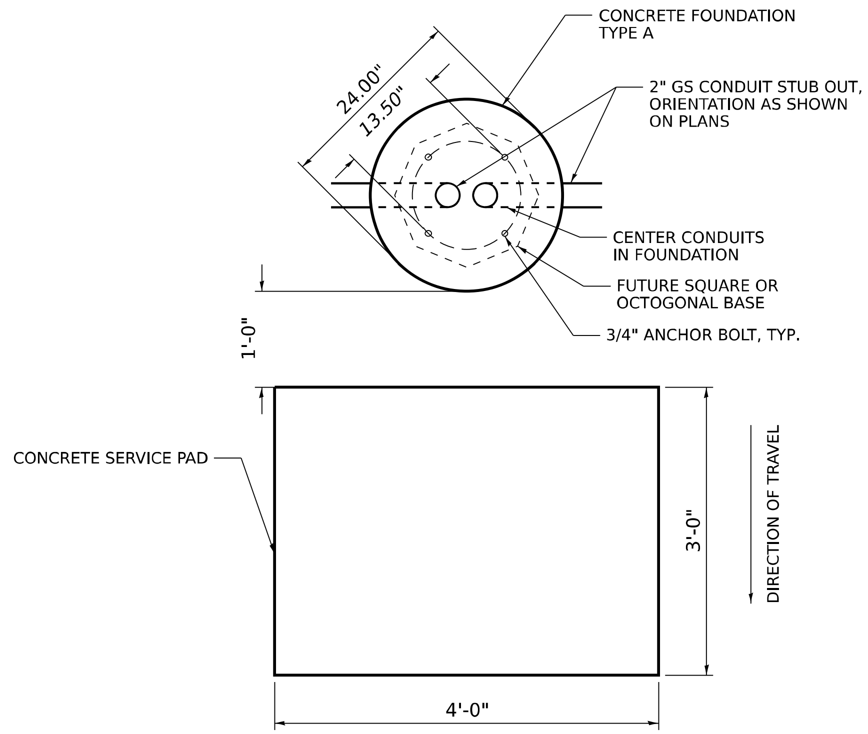
3. THE SURGE PROTECTOR SHALL BE SUITABLE FOR 240 / 480 VOLT SINGLE PHASE 60HZ AC ELECTRICAL SERVICE, WITH A SURGE CURRENT RATING OF 50,00 AMPS OR BETTER, RATED -40 TO 65 DEGREES C., WITH LED OPERATING IDICATORS, AND SHALL BE UL LISTED PER UL 1449. SURGE PROTECTOR SHALL BE WIRED FOR 240/480 V SERVICE. FOLLOW MANUFACTURER RECOMMENDED WIRING SPECIFICATIONS.

4. BUS BARS, CONNECTORS AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO CONNECTIONS.

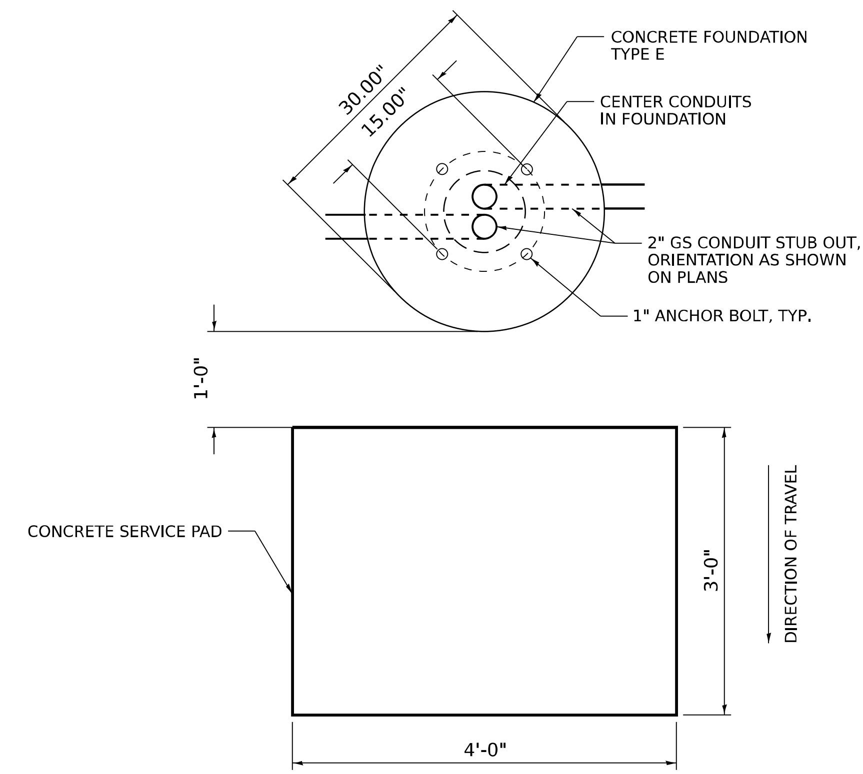
5. THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED WHITE.

6. A PLASTIC LAMINATED CABINET LAYOUT DIAGRAM, CIRCUIT SCHEMATIC, AND BILL OF MATERIALS WITH CATALOG NUMBERS USED SHALL BE AFFIXED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.

7. A 2-COLOR ENGRAVED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS, AND ENGRAVED AS INDICATED, SHALL BE PROVIDED FOR EACH MAIN BREAKER.



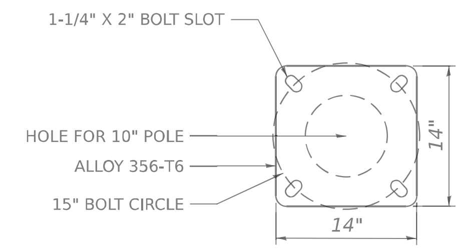
TOP VIEW
TYPE A FOUNDATION FOR FUTURE SERVICE DISCONNECT



TOP VIEW
TYPE E FOUNDATION FOR FUTURE CCTV POLE

NOTES

1. TOP VIEW FOR CONCRETE FOUNDATIONS, TYPE A AND E SHOWN ON THIS SHEET ARE FOR INFORMATION ONLY ON CONDUITS ENERTING FOUNDATION AND ANOCHOR BOLT CIRCLE DIMENSIONS REQUIRED FOR FUTURE EQUIPMENT INSTALLATION. FOR FURTHER FOUNDATION DETAILS, SEE HIGHWAY STANDARD 878001-11 (CONCRETE FOUNDATION DETAILS).



FUTURE CCTV POLE BASE PLATE DETAIL
15" BOLT CIRCLE
(SHOWN FOR REFERENCE ONLY)

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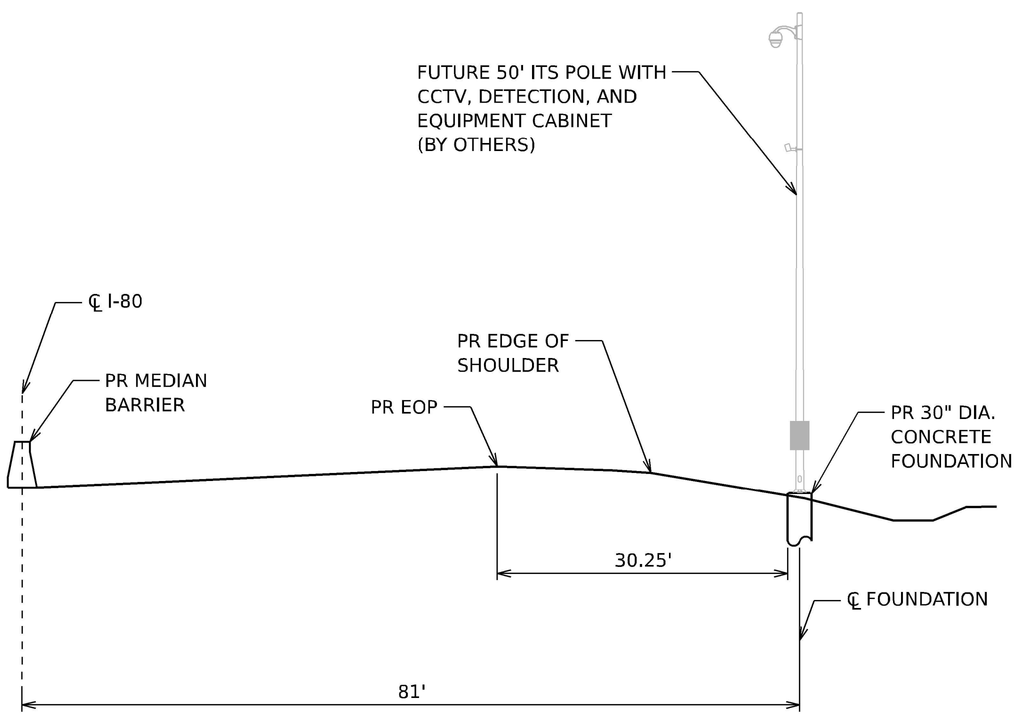
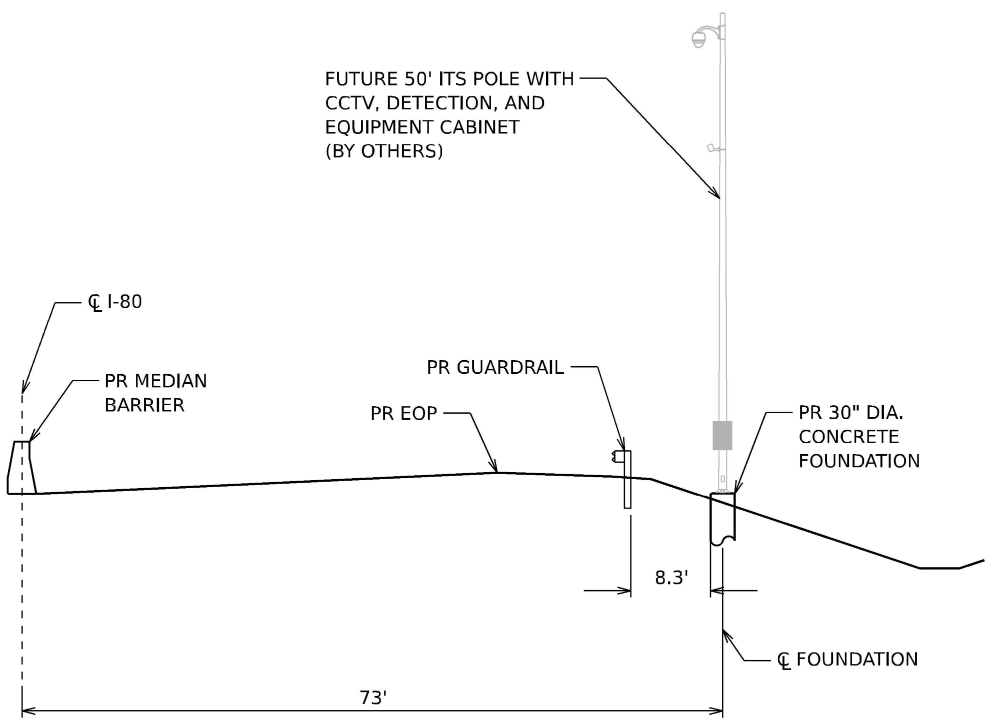
		DRAWN -	REVISED -			CONTRACT NO. 62P71	
	PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -		SCALE: N.T.S. SHEET 8 OF 8 SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT	
	PLOT DATE = 4/12/2023	DATE -	REVISED -				



STA 171+00
(LOOKING EAST)
30" DIA. CONCRETE FOUNDATION



STA 187+00
(LOOKING EAST)
30" DIA. CONCRETE FOUNDATION

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

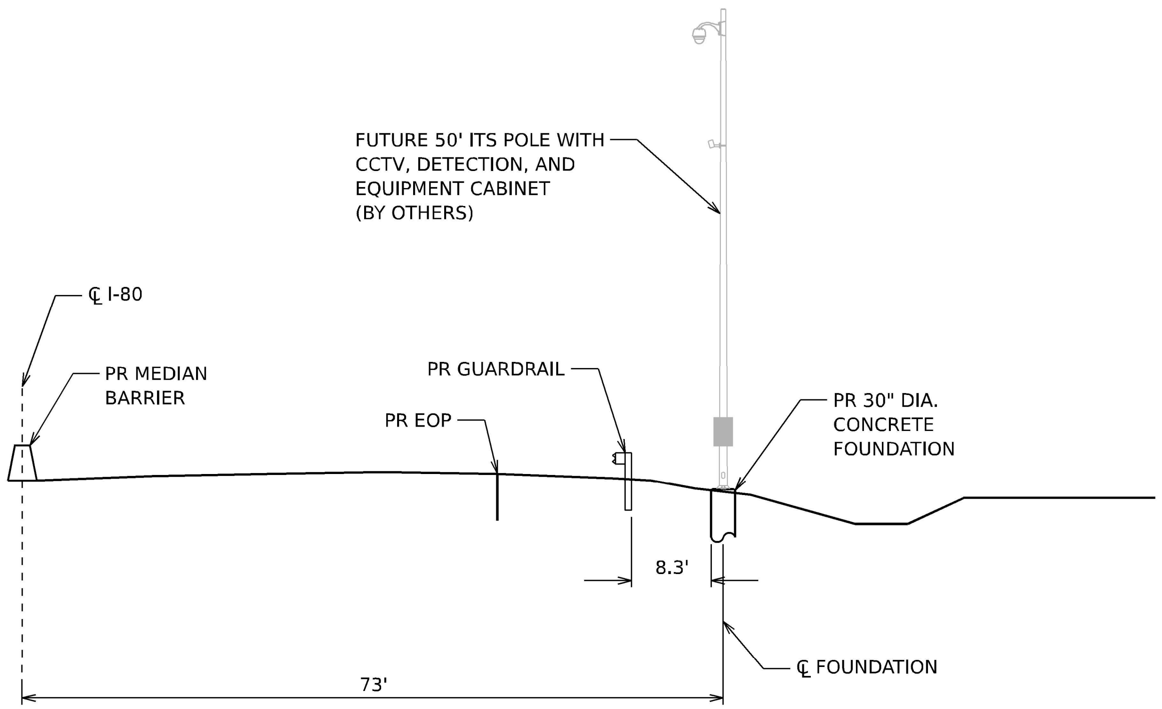
USER NAME = dmeier	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 20.000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/16/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS CROSS SECTIONS

SCALE: N.T.S. | SHEET 1 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	266
		CONTRACT NO. 62P71		
		ILLINOIS	FED. AID PROJECT	



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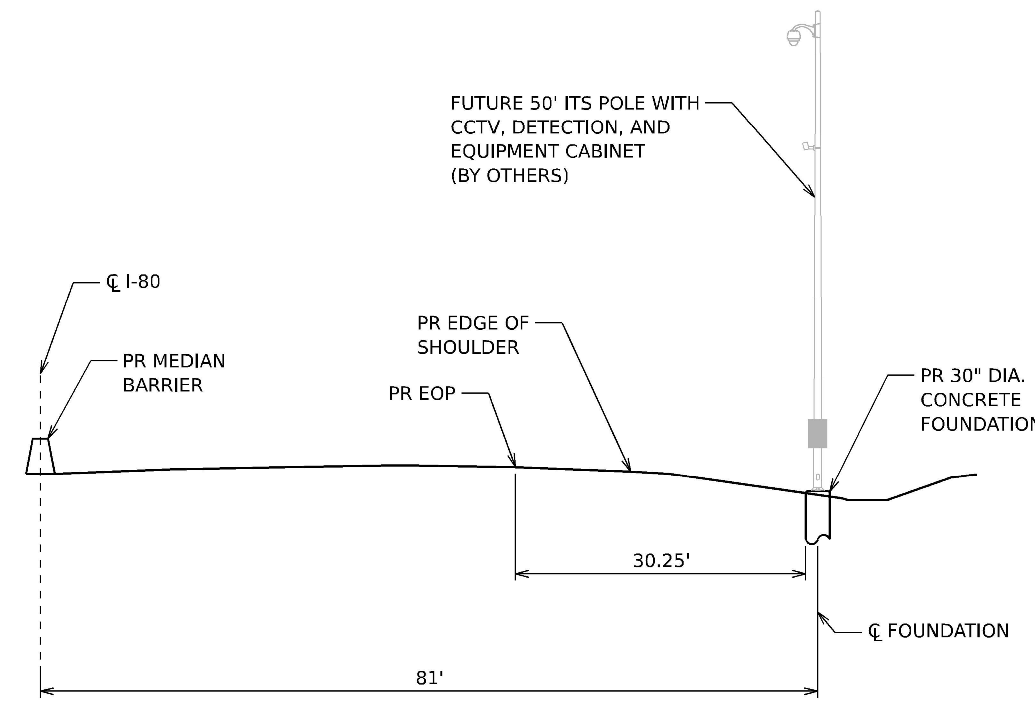

STA 223+00
(LOOKING EAST)
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Chicago, Illinois 60606

USER NAME = dmeier	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 20.000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/16/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS CROSS SECTIONS

SCALE: N.T.S. | SHEET 2 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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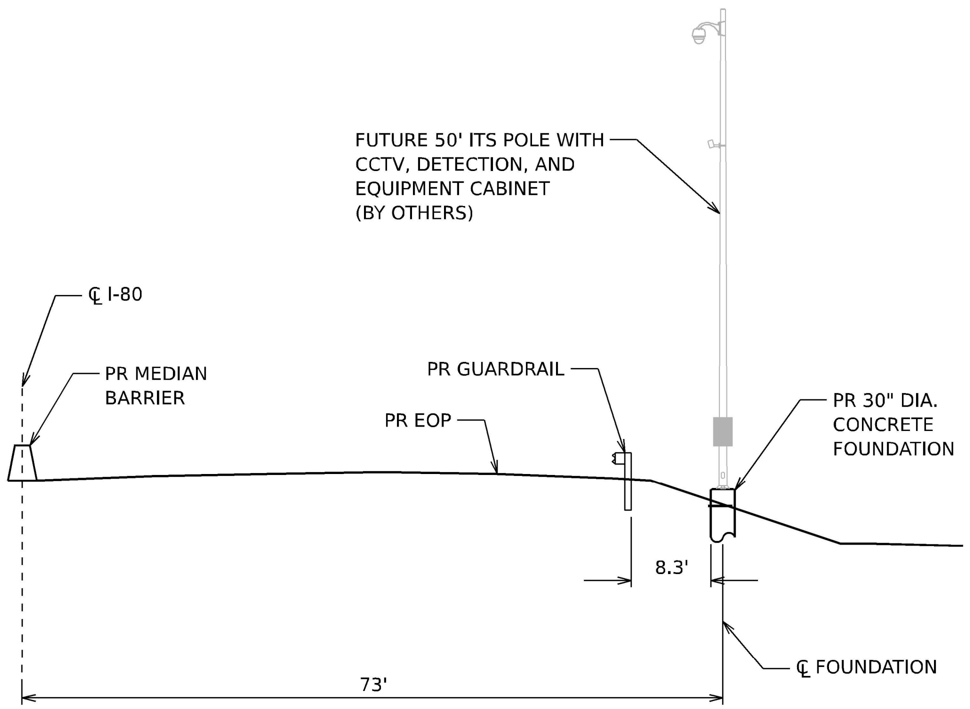
		CONTRACT NO. 62P71		
		ILLINOIS	FED. AID PROJECT	



STA 241+81
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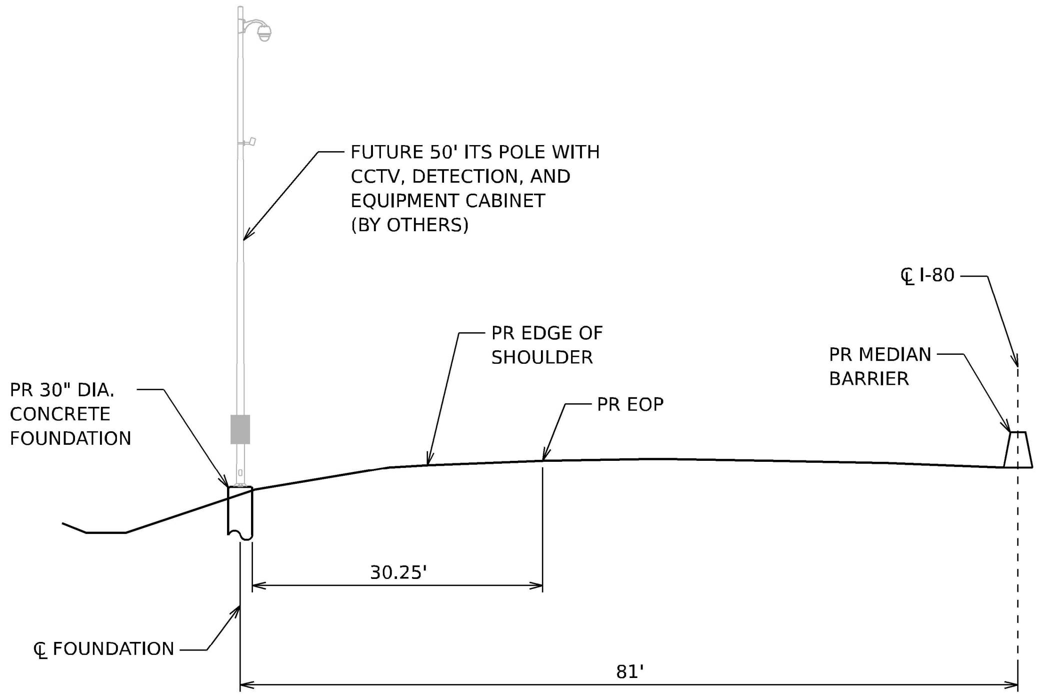

STA 260+04
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30" DIA. CONCRETE FOUNDATION

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Chicago, Illinois 60606

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PLOT DATE = 3/16/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS CROSS SECTIONS

SCALE: N.T.S. | SHEET 3 OF 4 SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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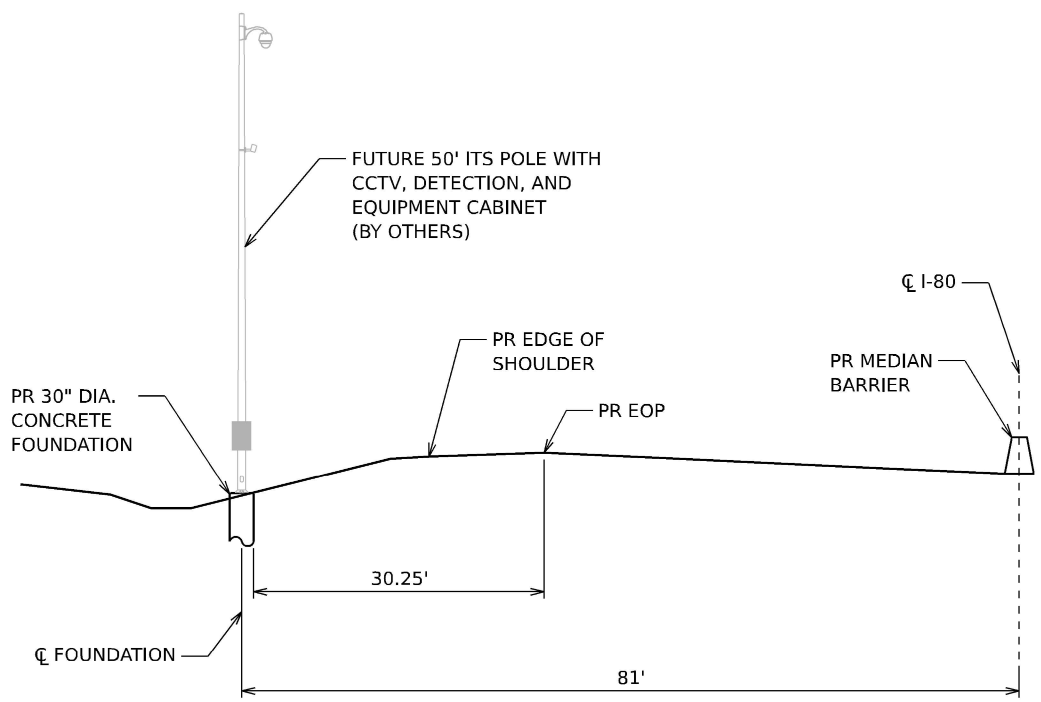
		CONTRACT NO. 62P71		
	ILLINOIS	FED. AID PROJECT		



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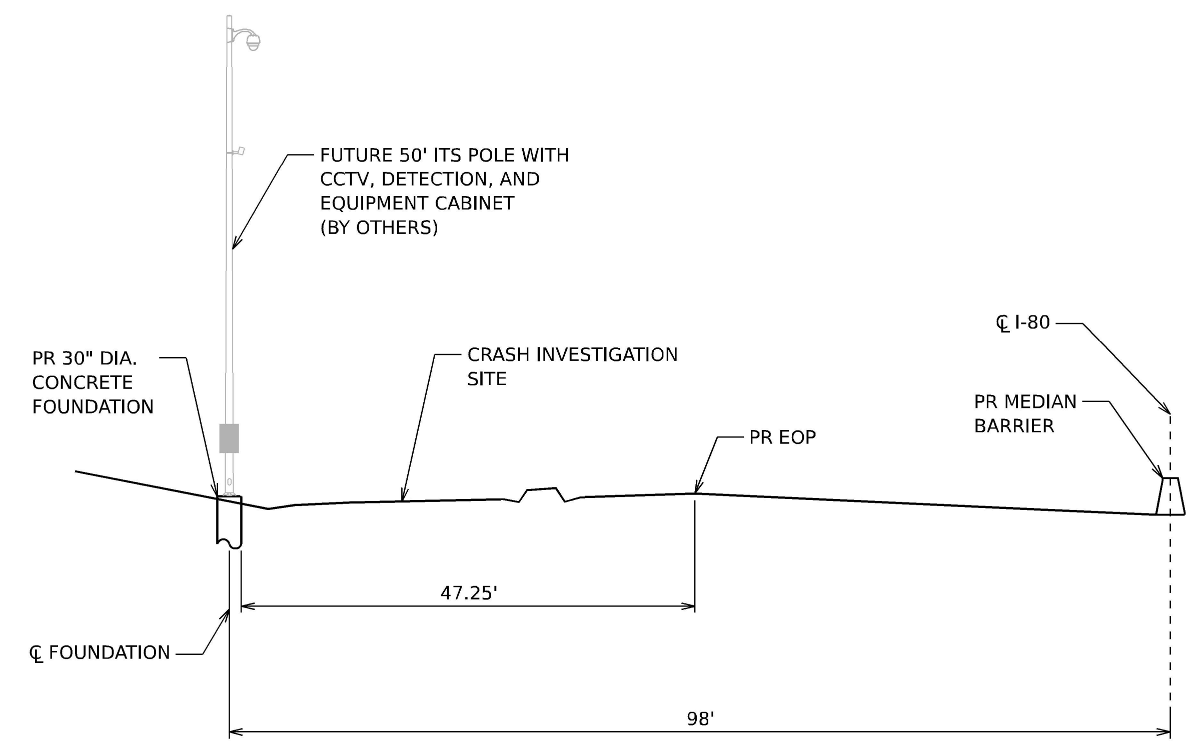

STA 296+50
(LOOKING EAST)
30" DIA. CONCRETE FOUNDATION

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TranSmart 100 S. Wacker Drive Suite 400 Chicago, Illinois 60606	USER NAME = dmeier	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 20.000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/16/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ITS CROSS SECTIONS

SCALE: N.T.S. | SHEET 4 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	269
		CONTRACT NO. 62P71		
	ILLINOIS	FED. AID PROJECT		

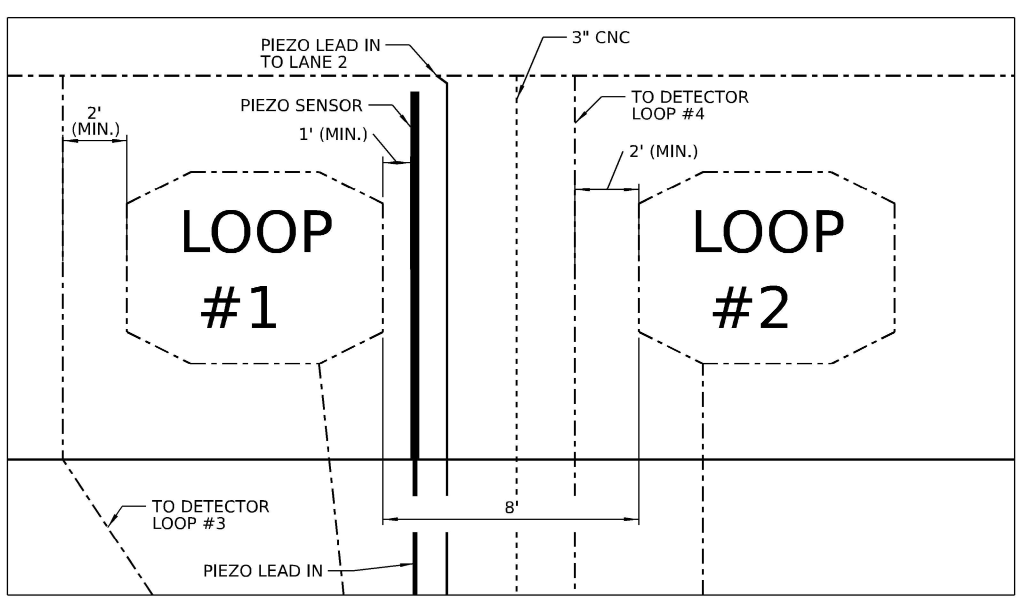
NOTES
1. ALL HANDHOLE LIDS SHALL READ: "IDOT OPP"
2. COORDINATE EMBEDDED LOOP INSTALLATION WITH ROADWAY PAVEMENT INSTALLATION.
3. CONTRACTOR SHALL DOCUMENT LOCATION OF EMBEDDED LOOPS DURING INSTALLATION IN ORDER TO ACHIEVE PROPER OFFSET OF PIEZO SENSORS DURING THEIR SUBSEQUENT INSTALLATION.
4. DETAIL A SHOWS TYPICAL DIMENSIONS APPLICABLE TO WHOLE SITE.
5. CONTRACTOR SHALL COORDINATE WITH IDOT FOR THE REMOVAL OF THE EXISTING TRAFFIC COUNTER AND BATTERY WITHIN THE EXISTING ATR STATION CABINET. IDOT SHALL INSTALL THE EXISTING TRAFFIC COUNTER WITHIN THE NEW ATR STATION CABINET.
6. IDOT REPRESENTATIVE SHALL BE PRESENT DURING INSTALLATION OF THE ATR SITE.

BILL OF MATERIALS

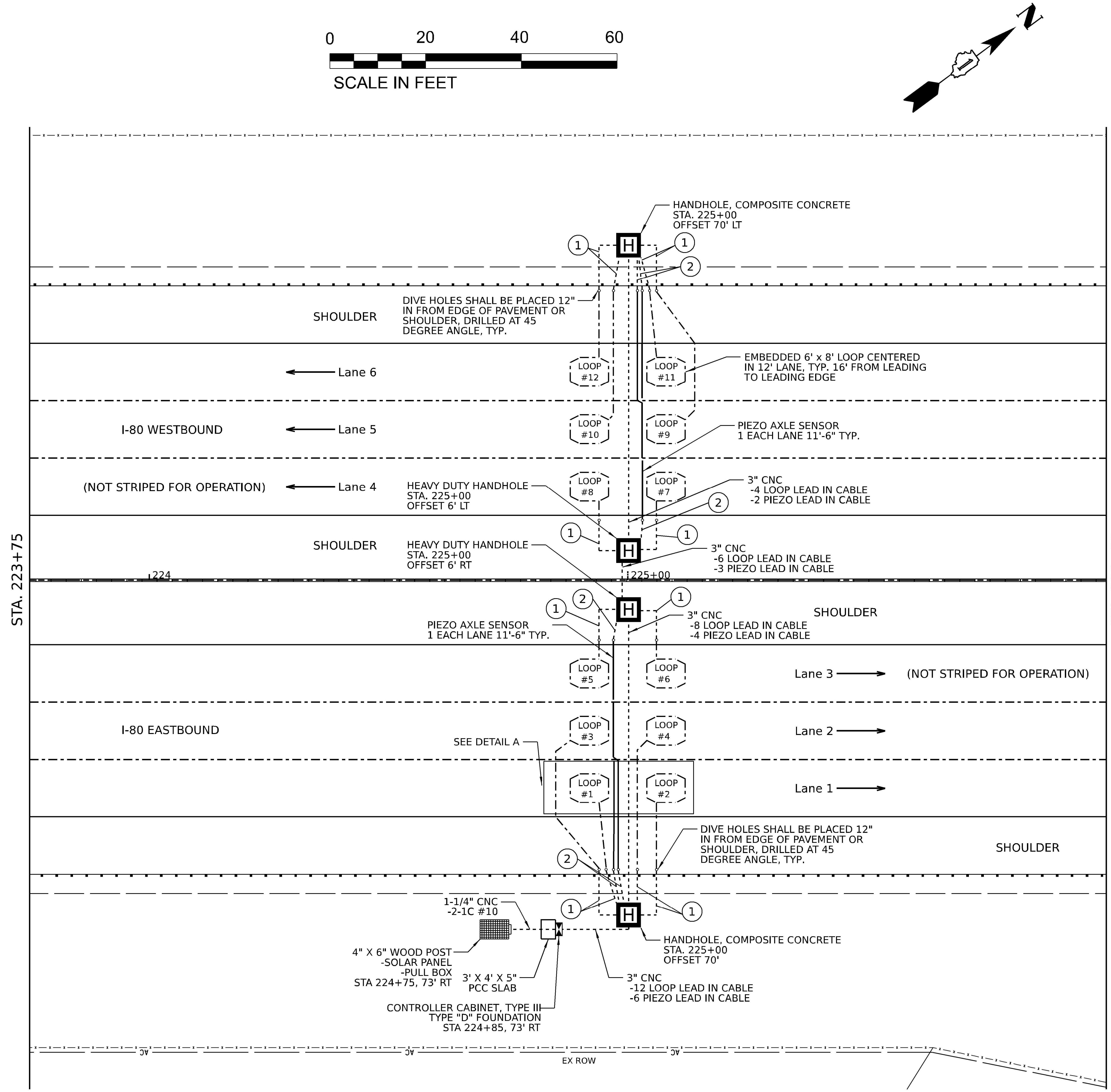
ITEM	DESCRIPTION	UNIT	QTY
81028730	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/4" DIA.	FOOT	192
81028770	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 3" DIA.	FOOT	159
81400200	HEAVY-DUTY HANDHOLE	EACH	2
81400730	HANDHOLE, COMPOSITE CONCRETE	EACH	2
86300300	CONTROLLER CABINET TYPE III	EACH	1
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	4
88600300	DETECTOR LOOP, TYPE III	FOOT	592
X0301242	PIEZO AXLE SENSOR, CLASS II	FOOT	69
X0327116	SOLAR POWER ASSEMBLY	EACH	1
X8730810	ELECTRIC CABLE IN CONDUIT, CONOGA-30003	FOOT	128

LEGEND

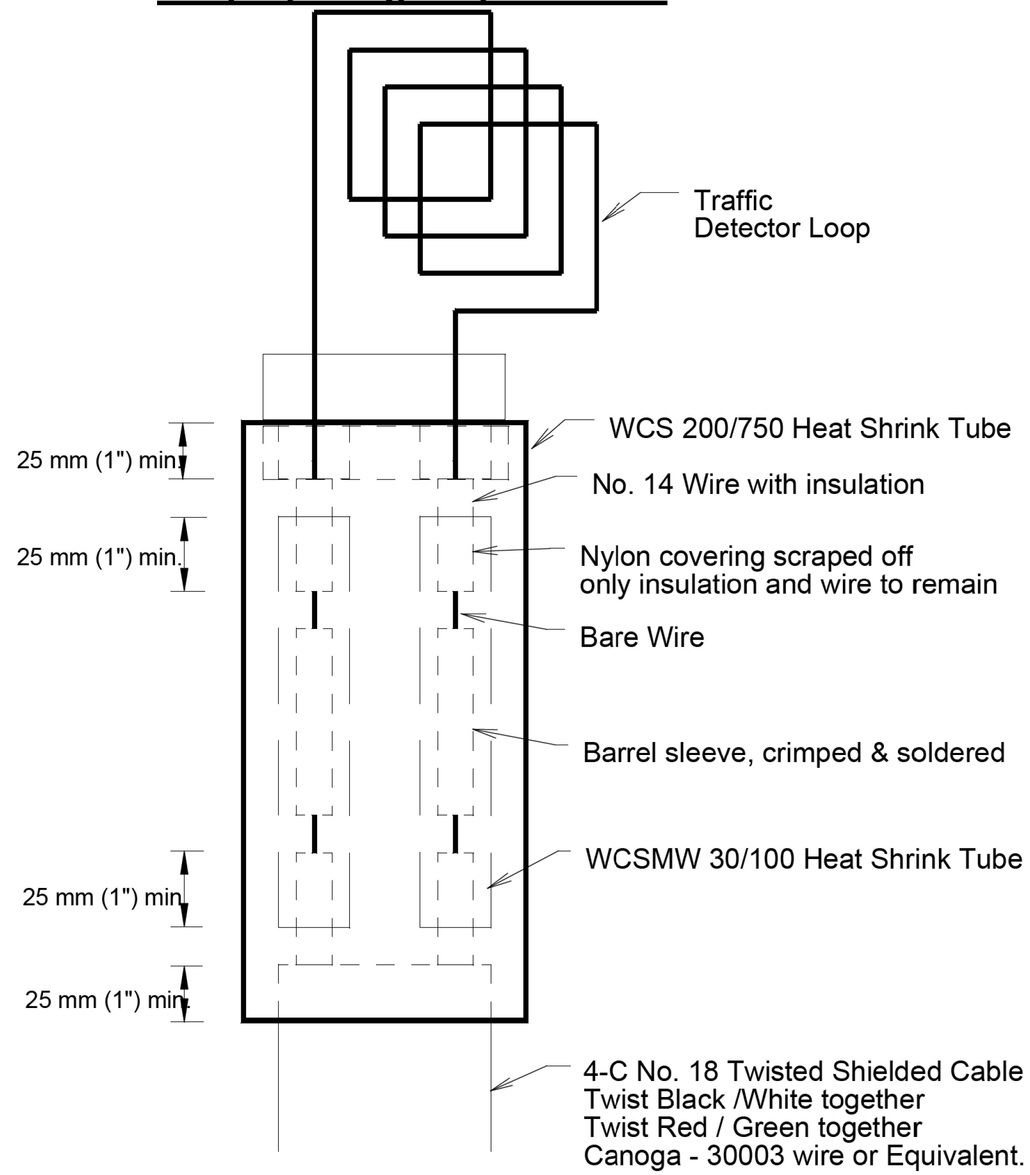
- CONDUIT (TYPE AND SIZE AS NOTED)
- PIEZO SENSOR
- DETECTOR LOOP, TYPE III
- 1 — 1-1/4 CNC W/LOOP LEAD IN
- 2 — 1-1/4" CNC W/PIEZO LEAD IN (MANUFACTURER SUPPLIED)



DETAIL A
N.T.S.



Loop Splicing Requirements



Minimum 25 mm (1") Heat Shrink Tube overlap on wire.
PVC & Shielded cable to form water tight seal.

Note: Not to Scale

REVISIONS	
Name	Date

Illinois Department of Transportation
Office of Planning and Programming

Drawn By:	Checked By:	Date:	Scale:
R. Taylor	R. Taylor	01/20/00	NONE

MODEL: Default
FILE NAME: pw://transsystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/ML-01_62P71/04-Sheets/07-Utilities/D162P71-sht-atr-002.dgn

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

USER NAME = dmeier	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/16/2023	DATE -	REVISED -

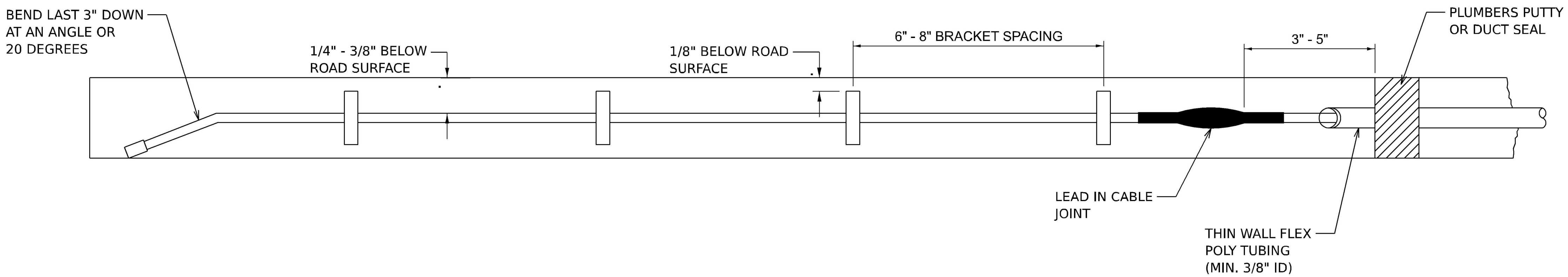
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ATR PLANS

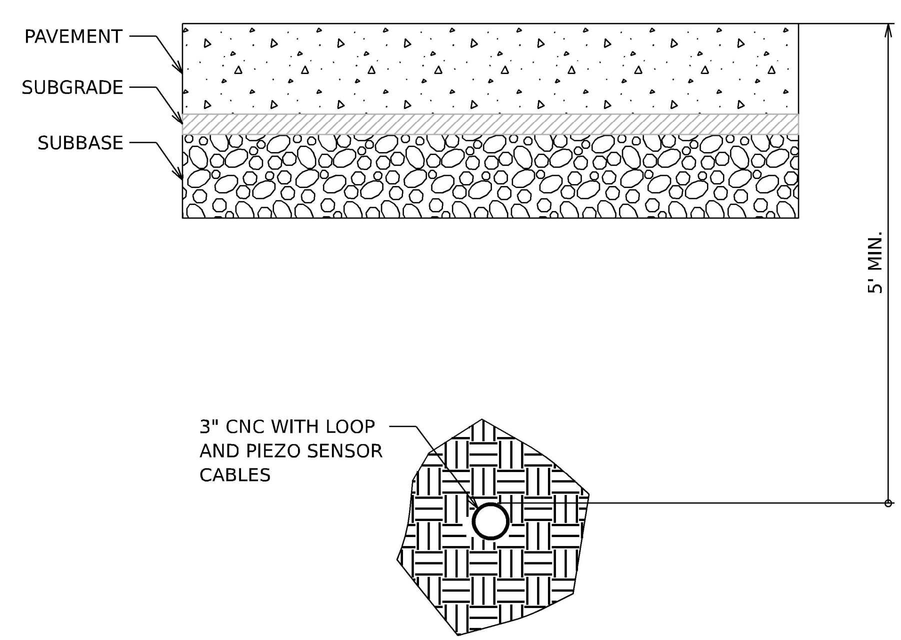
SCALE: N.T.S. | SHEET 2 OF 3 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	271
		CONTRACT NO. 62P71		

ILLINOIS | FED. AID PROJECT



PIEZO DETAIL



BORED CONDUIT UNDER ROADWAY

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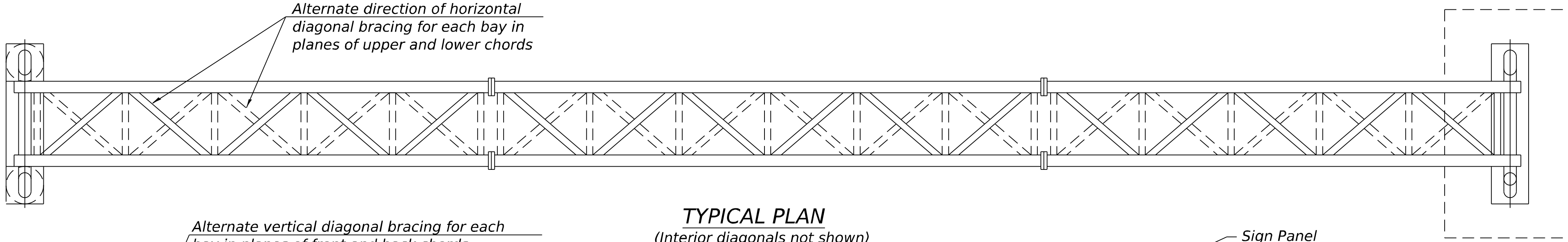
TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = dmeier	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/16/2023	DATE -	REVISED -	

ATR PLANS

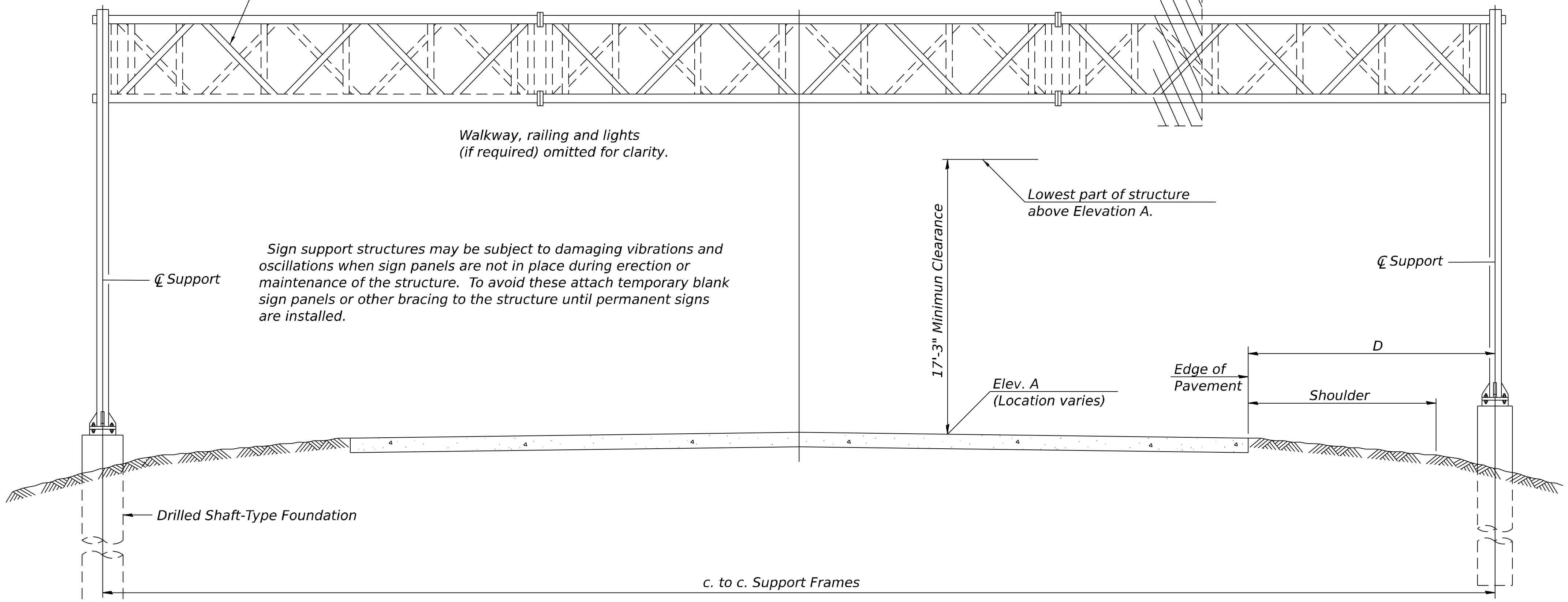
SCALE: N.T.S. | SHEET 3 OF 3 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	272
		CONTRACT NO. 62P71		
	ILLINOIS	FED. AID PROJECT		



TYPICAL PLAN

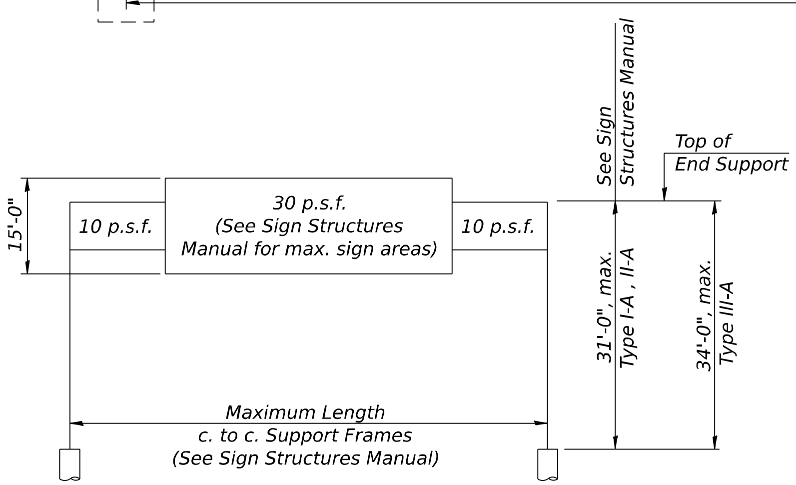
(Interior diagonals not shown)



TYPICAL ELEVATION

(Looking at Face of Signs**)

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



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.

Structure Number	Station	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
1S099I080R123.5	208+90	III-A	72'-0"	600.03	22'-6"	8'-0"	240 sqft

**Looking upstation for structures with signs both sides.

* 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 Artie 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 eaned and coated with Concrete Sealer in accordance with the Standard Specifications.

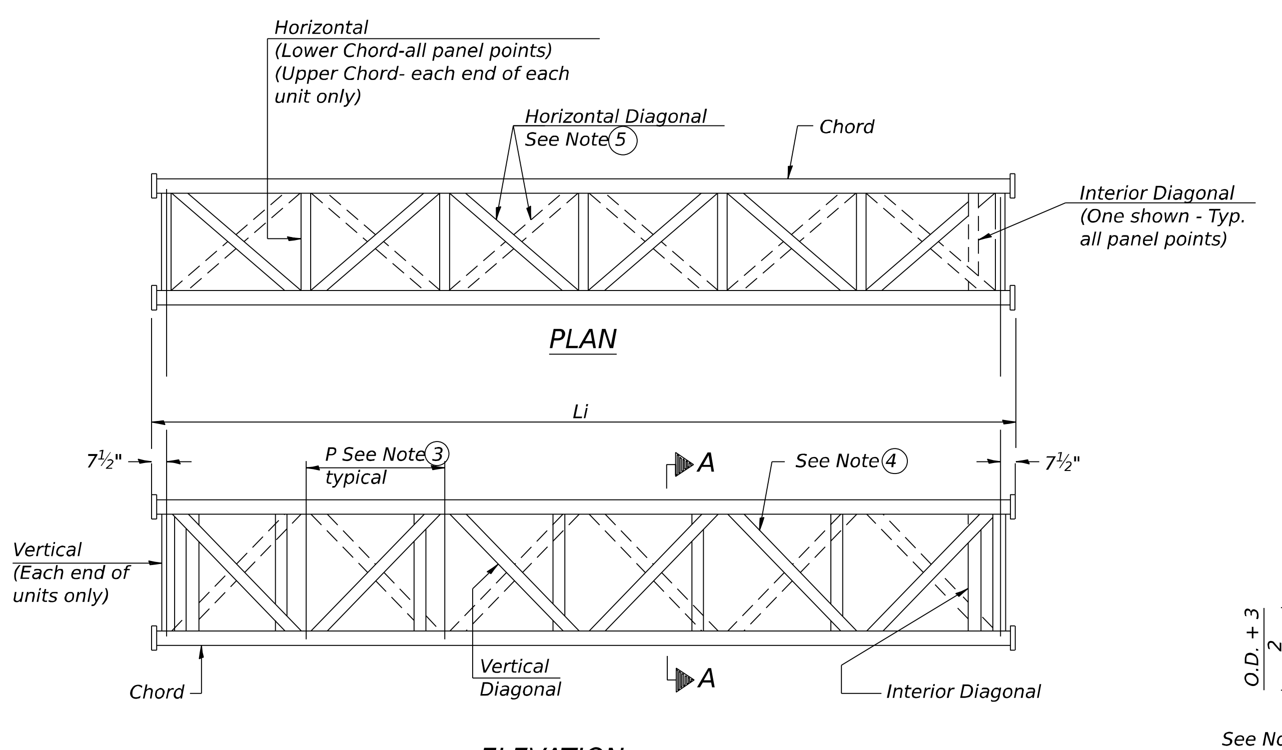
REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

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

FOUNDATION REMOVAL: Existing foundation removal shall be at least 3 feet below existing ground.

TOTAL BILL OF MATERIAL

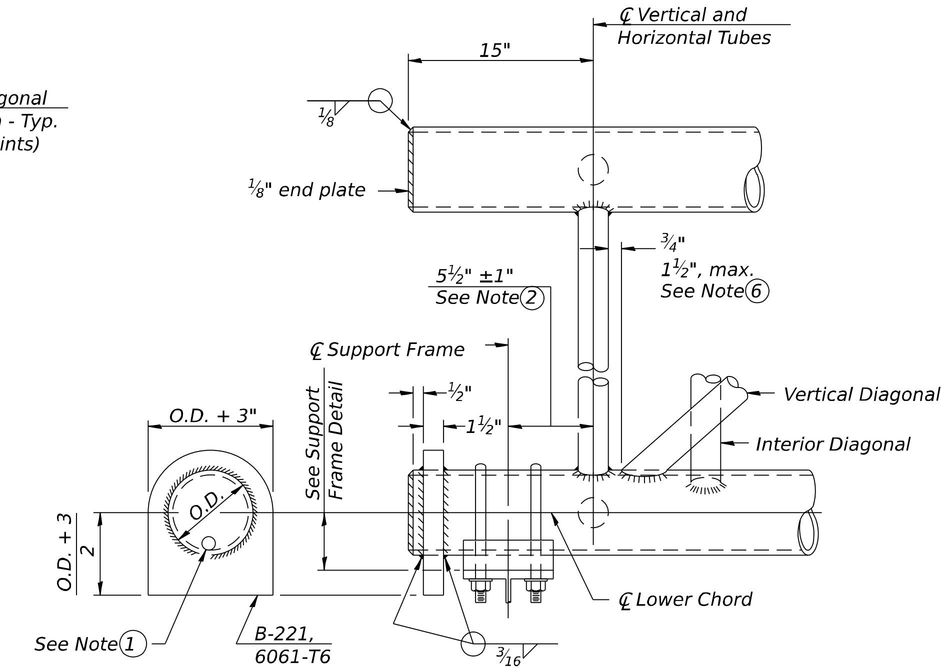
ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE - SPAN, TYPE III-A (5'-0'' X 7'-0'')	Foot	72
OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	Foot	39
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu Yd	20.1
REMOVE OVERHEAD SIGN STRUCTURE - SPAN	Each	1
REMOVE CONCRETE FOUNDATION - OVERHEAD	Each	4



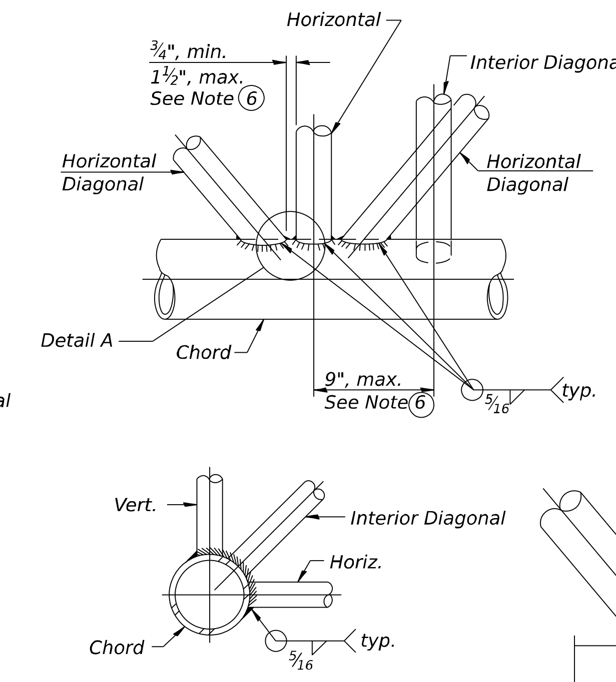
ELEVATION

TYPICAL INTERIOR UNIT

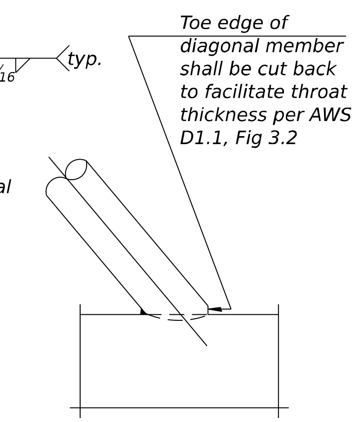
Even number of panels/interior unit required.



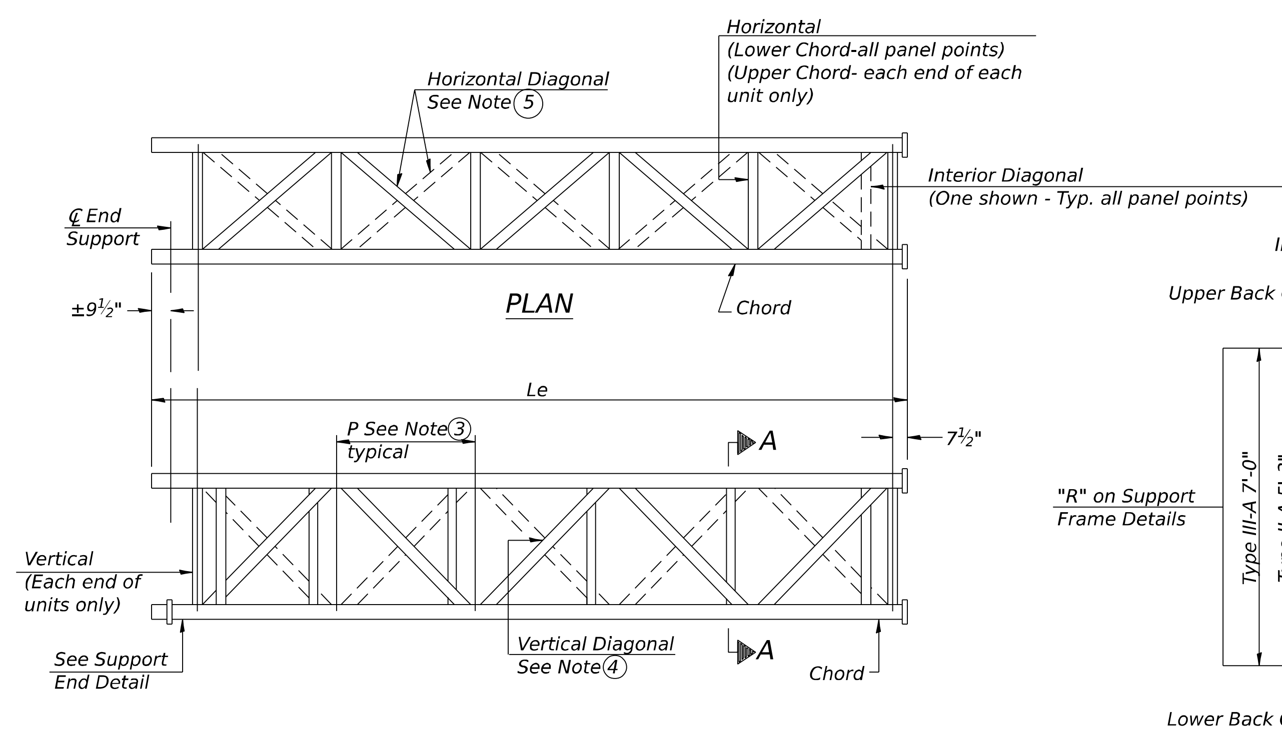
SUPPORT END DETAIL FOR EXTERIOR UNIT



TYPICAL JOINT DETAILS



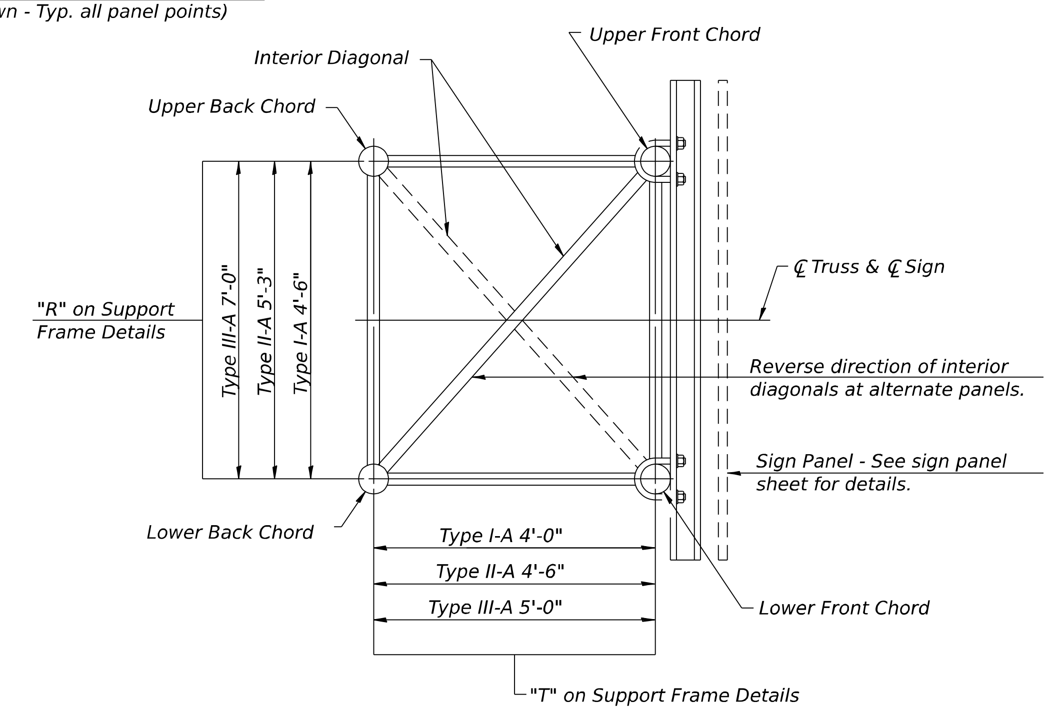
DETAIL A



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

exp.	USER NAME = RussellBr	DESIGNED - CS	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.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - BAR	REVISED -			I-80	2021-154-R	WILL	477	274
	PLOT SCALE = 32.0000 ' / in.	DRAWN - CS	REVISED -			CONTRACT NO. 62P71				
	PLOT DATE = 03/18/2022	CHECKED - BAR	REVISED -		SHEET 2 OF 12 SHEETS	ILLINOIS FED. AID PROJECT I4WJ(714)				

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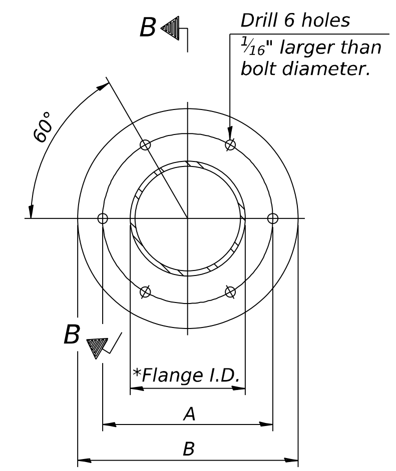
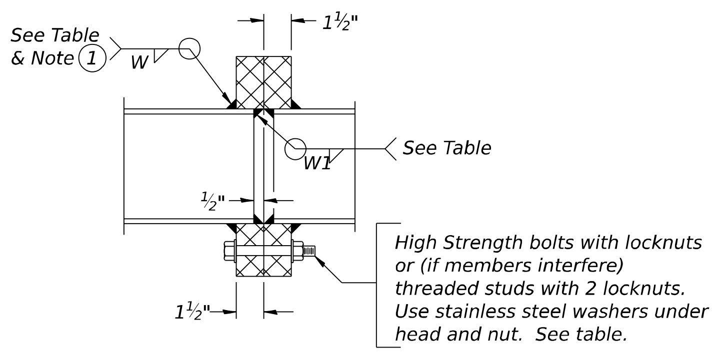
TRUSS UNIT TABLE

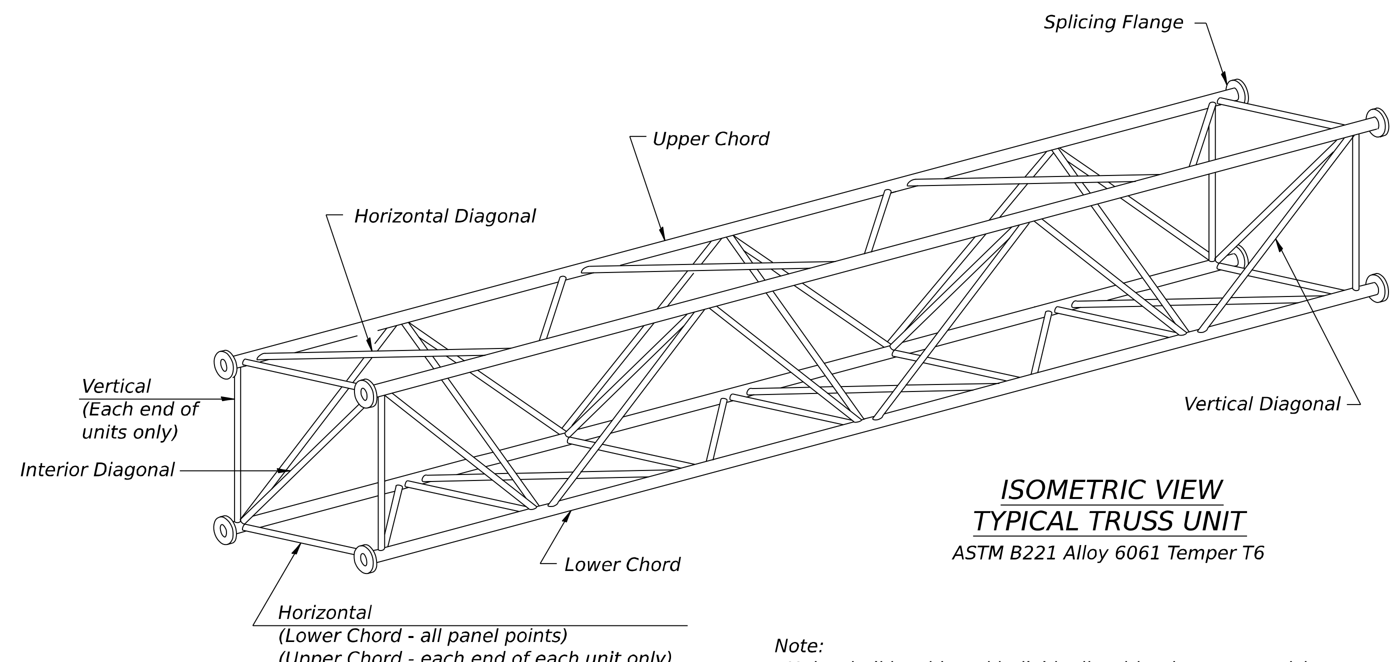
Structure Number	Station	Design Truss Type	Exterior Units (2)			Interior Unit				Upper & Lower Chord		Verticals; Horizontals; Vertical,Horizontal, and Interior Diagonals		Camber at Midspan	Splicing Flange					
			No. Panels per Unit	Unit Lgth.(Le)	Panel Lgth.(P)	No. Req'd.	No. Panels per Unit	Unit Lgth.(Li)	Panel Lgth.(P)	O.D.	Wall	O.D.	Wall		Bolts No./Splice	Bolts Dia.	Weld Sizes W	Weld Sizes W1	A	B
1S099I080R123.5	208+90	III-A	7	36'-10½"	5'-0"	0	——	——	——	7"	5/16"	3¼"	5/16"	7/8"	6	1"	7/16"	5/16"	11½"	15"



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

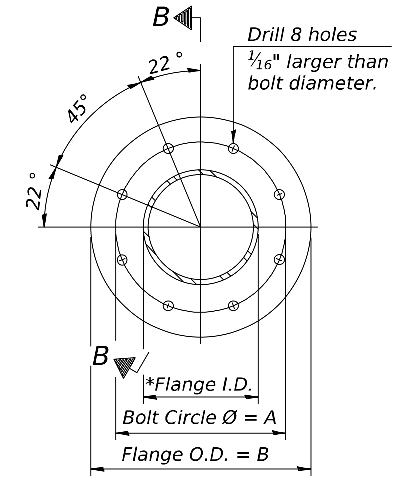


SECTION B-B



ISOMETRIC VIEW
TYPICAL TRUSS UNIT

ASTM B221 Alloy 6061 Temper T6



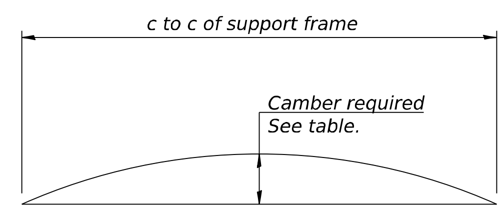
TRUSS TYPES II-A & III-A

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".

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.

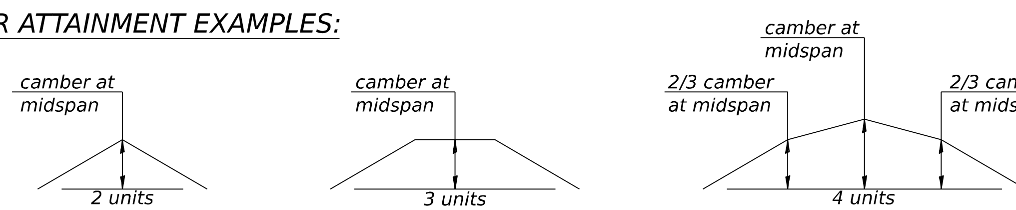
Note:
Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection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



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

exp.	USER NAME = RussellBr	DESIGNED - CS	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.: I-80	SECTION: 2021-154-R
		CHECKED - BAR	REVISED -			COUNTY: WILL	TOTAL SHEETS: 477 / SHEET NO.: 275
	PLOT SCALE = 32.0000 ' / in.	DRAWN - CS	REVISED -			CONTRACT NO. 62P71	
	PLOT DATE = 03/18/2022	CHECKED - BAR	REVISED -		SHEET 3 OF 12 SHEETS	ILLINOIS FED. AID PROJECT	I4WJ(714)

MODEL: Default
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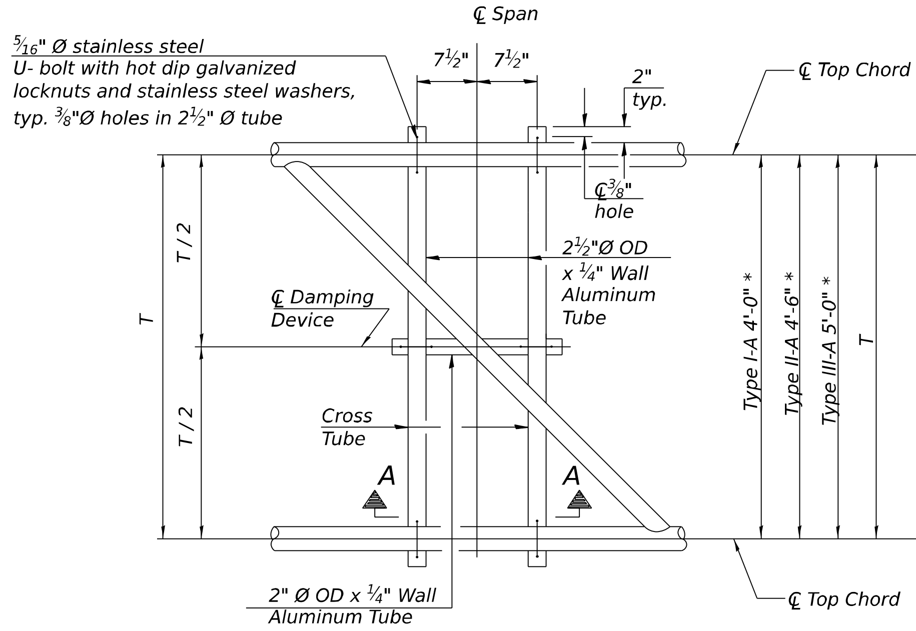
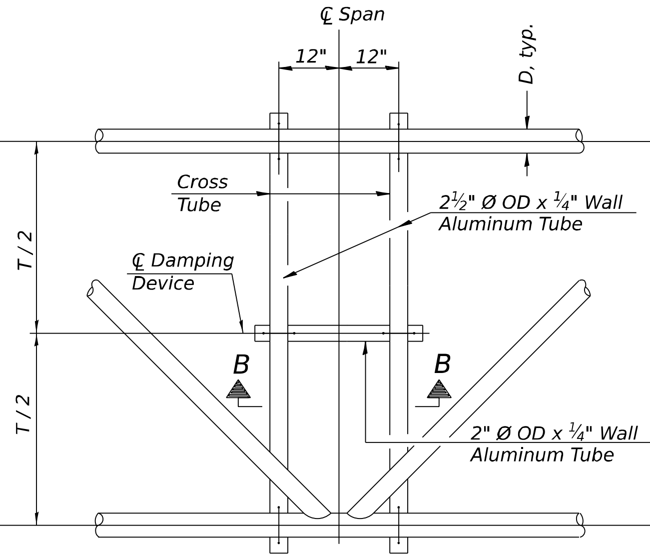


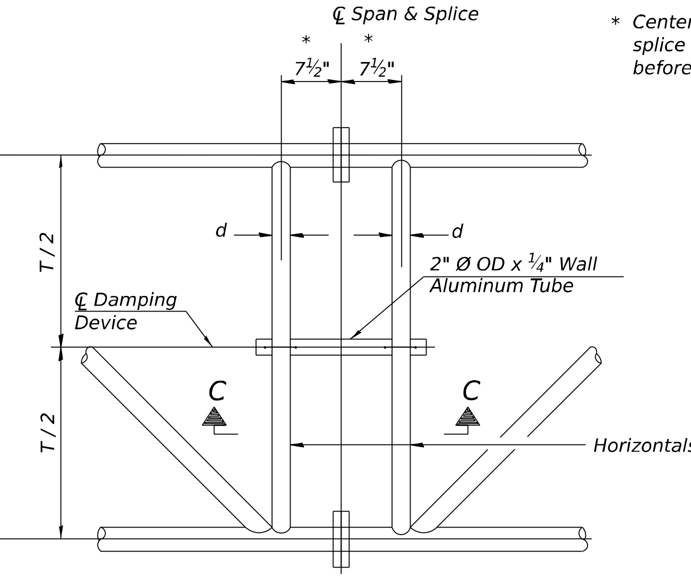
PLAN DETAIL "A"

℄ Span between Panel Points



PLAN DETAIL "B"

℄ Span at Panel Point



PLAN DETAIL "C"

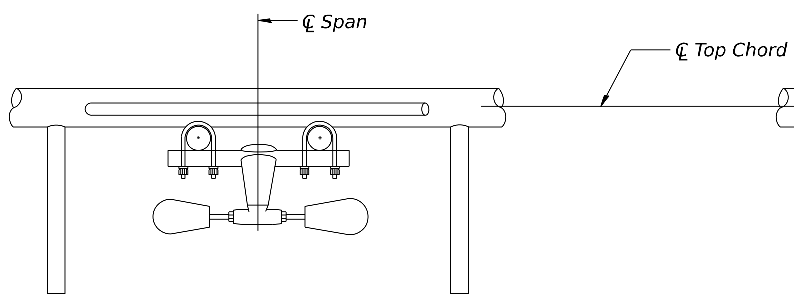
℄ Span at ℄ Chord Splice

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

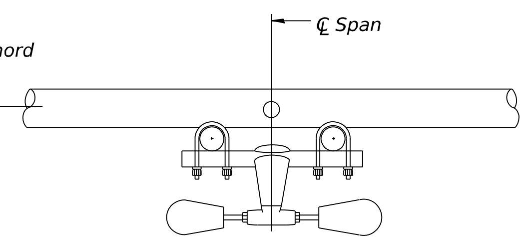
NOTES

Damper: One damper per truss. (31 lbs. minimum Stockbridge-Type Aluminum - 29"minimum between ends of weights) Cost included in Overhead Sign Structure - Span Type III-A (5'-0" X 7'-0")

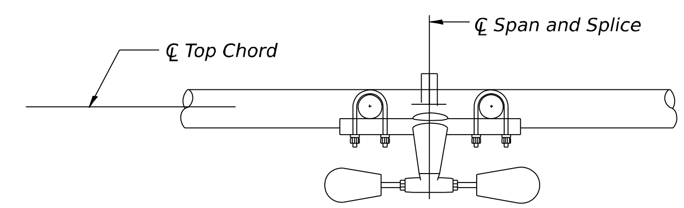
Materials: Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure - Span Type III-A (5'-0" X 7'-0")



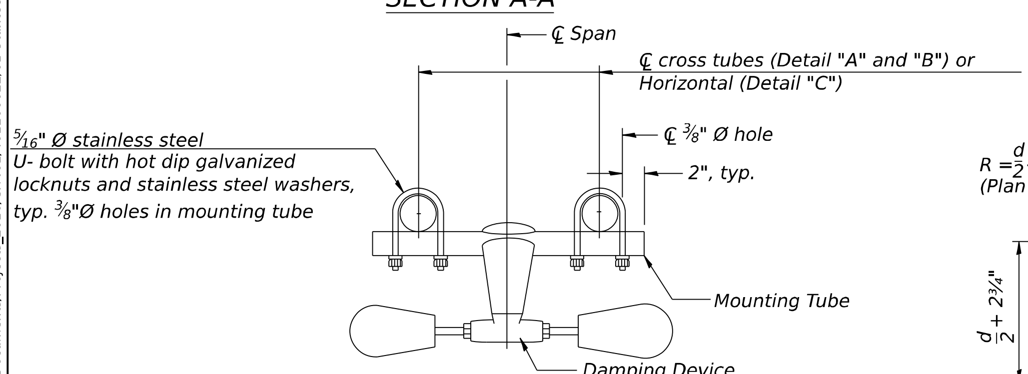
SECTION A-A



SECTION B-B

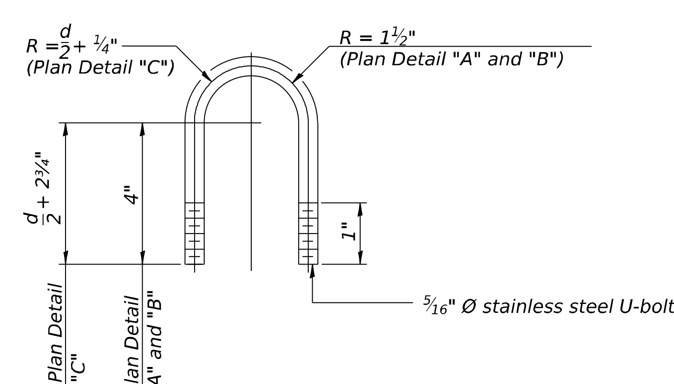


SECTION C-C



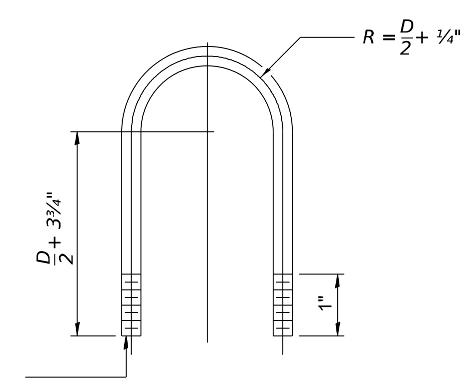
TRUSS DAMPING
DEVICE CONNECTION DETAIL

(Typical)



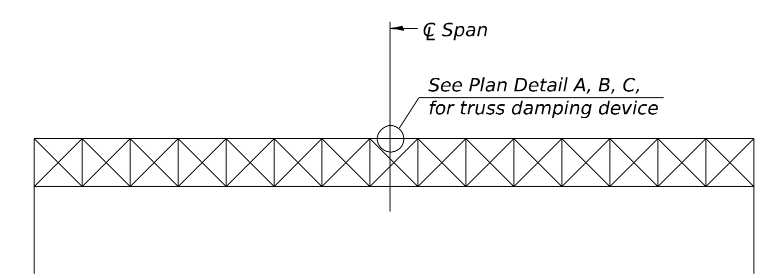
DAMPING DEVICE MOUNTING
TUBE U-BOLT DETAIL

(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

MODEL: Default
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exp.

USER NAME = RussellBr	DESIGNED - CS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	CHECKED - BAR	REVISED -	
PLOT SCALE = 32.0000 ' / in.	DRAWN - CS	REVISED -	
PLOT DATE = 03/18/2022	CHECKED - BAR	REVISED -	

OVERHEAD SIGN STRUCTURE
DAMPING DEVICE

SHEET 4 OF 12 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	276
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT	I4WJ(714)	

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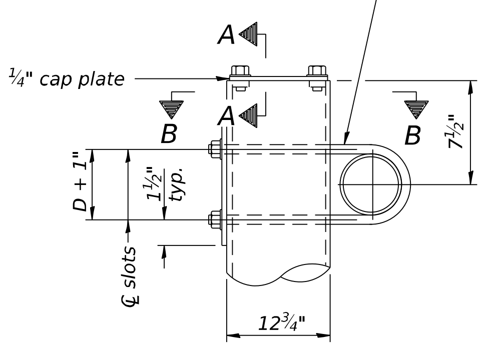
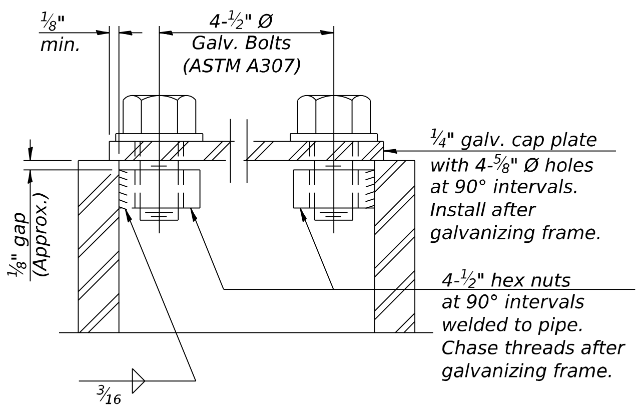
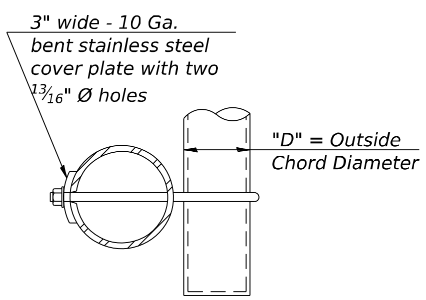


DETAIL A

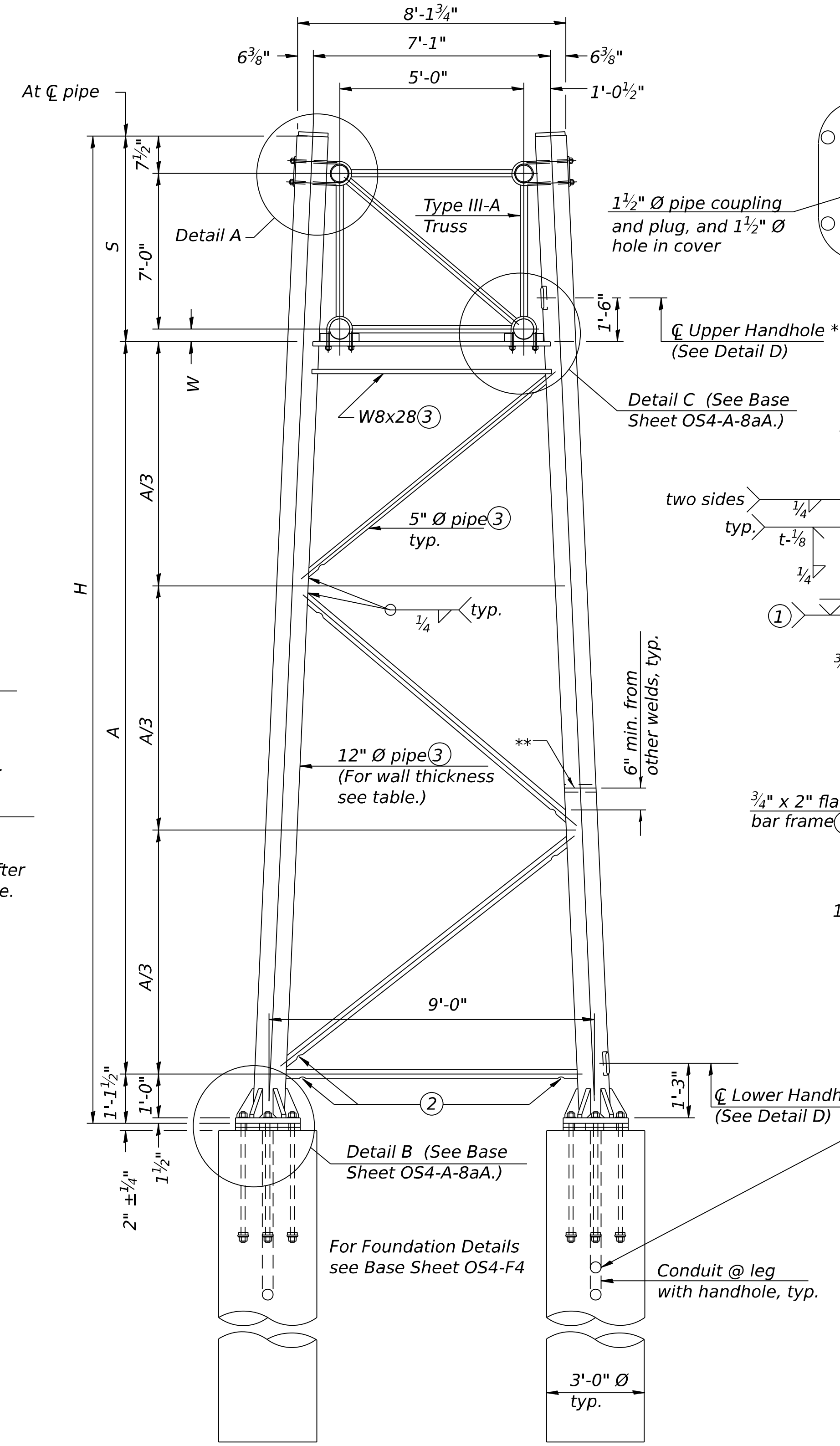


SECTION A-A

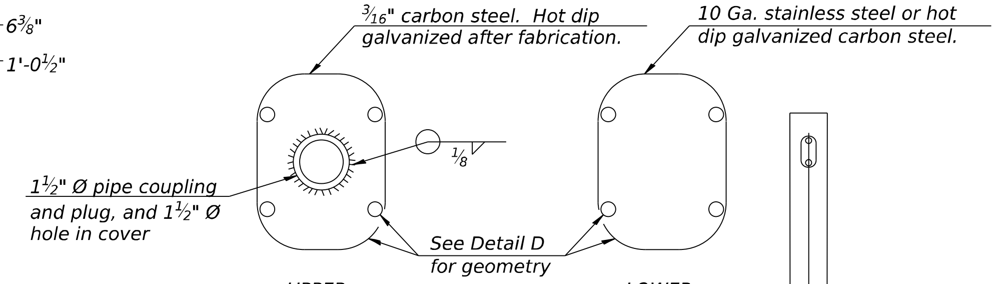
As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.



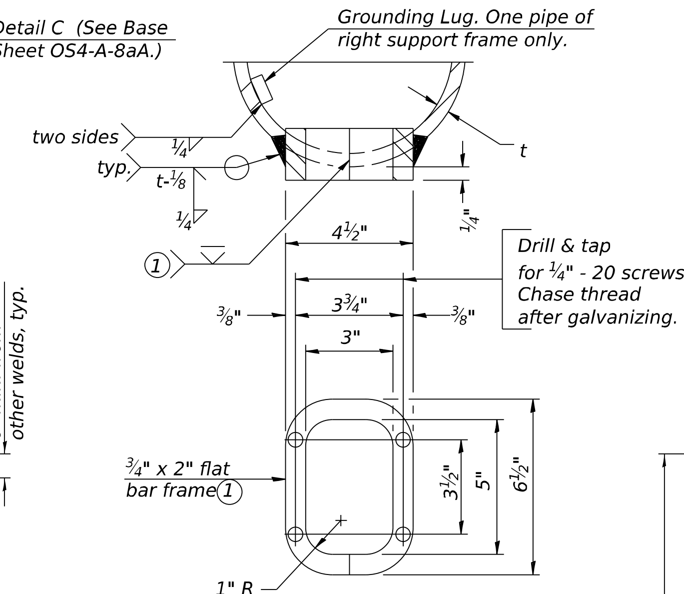
SECTION B-B



SIDE ELEVATION



HANDHOLE COVERS



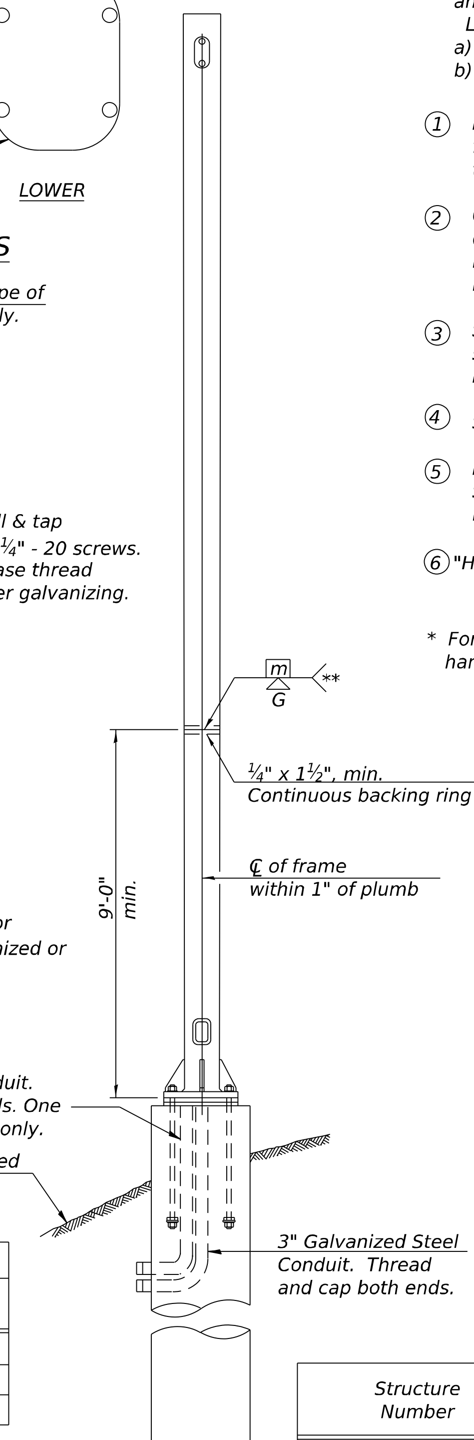
Provide 6½" x 4½" cover.
Provide 4-5⁄16" Ø holes in cover for ¼"-20 round head hot dip galvanized or stainless steel machine screws.
(See cover details)

DETAIL D

1" Galvanized Steel Conduit. Thread and cap both ends. One shaft of right foundation only.

Backfill shall be placed prior to erection of support frame

Dimensions		
Truss Chord Nominal Dia.	W	S
7"	4¾"	8'-0¼"
8½"	5½"	8'-1"
9"	5¾"	8'-1¼"



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 500 µin 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.

* For dynamic message sign installations, provide upper and lower handholes in both legs of each support frame.

Structure Number	Station	Support Left	Support Right	Pipe Wall Thickness	H ⑥	A
1S099I080R123.5	208+90	-	X	0.33"	30'-1¾"	21'-0"
1S099I080R123.5	208+90	X	-	0.33"	26'-9¾"	17'-8"

TRUSS SUPPORT DETAILS

(12" Ø Pipe-Type III-A Truss)

** 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.

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/ML-01_62P71/04-Sheets/07-Utilities/D162P71-sht-itsohs-005.dgn

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USER NAME = RussellBr	DESIGNED - CS	REVISED -	
	CHECKED - BAR	REVISED -	
PLOT SCALE = 32.0000 ' / in.	DRAWN - CS	REVISED -	
PLOT DATE = 03/18/2022	CHECKED - BAR	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES – SUPPORT FRAME
FOR TYPE III–A ALUMINUM TRUSS

SHEET 5 OF 12 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	277
		CONTRACT NO. 62P71		
	ILLINOIS	FED. AID PROJECT	I4WJ(714)	

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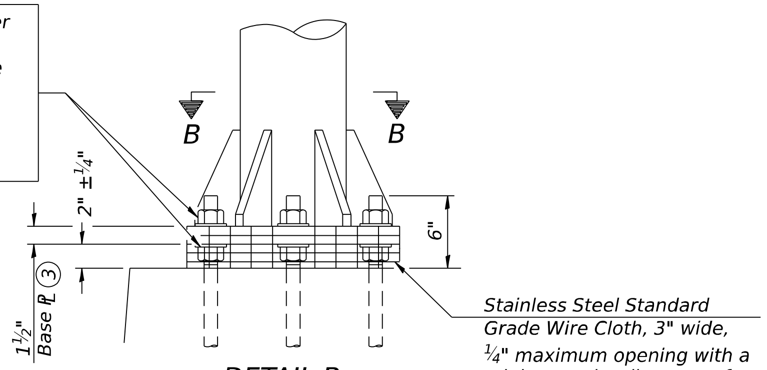
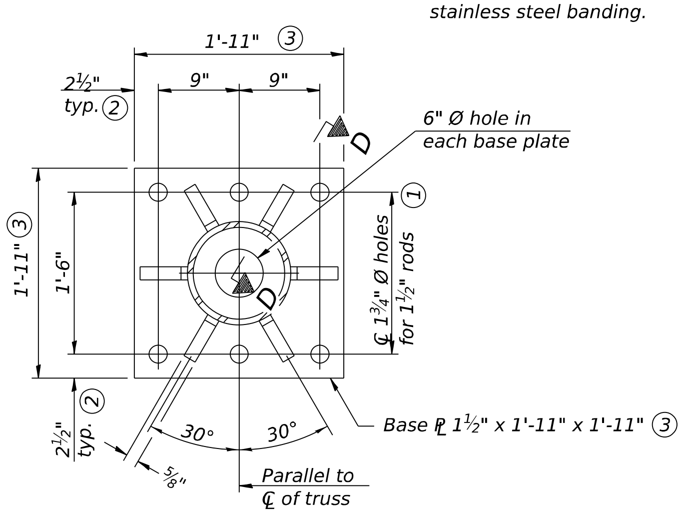
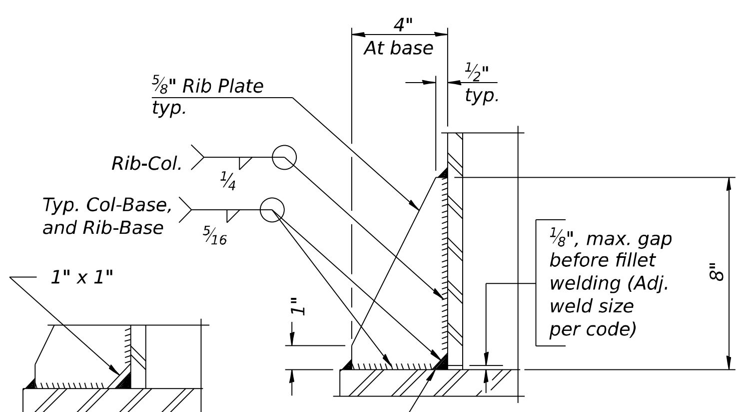


DETAIL B

Ribs shall be cut to fit slope of pipe.

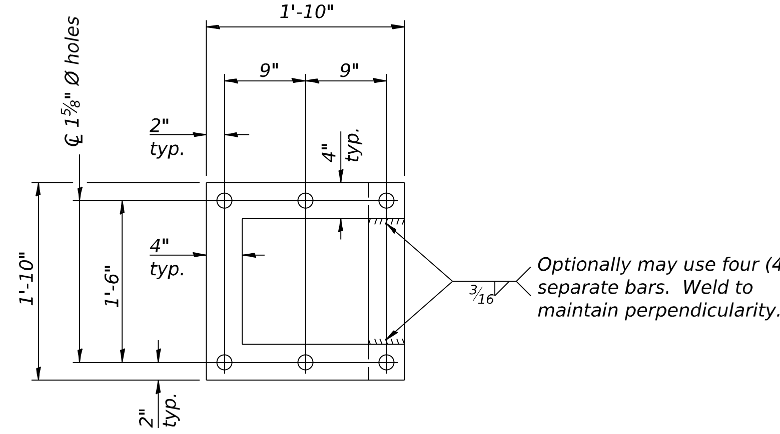


SECTION B-B

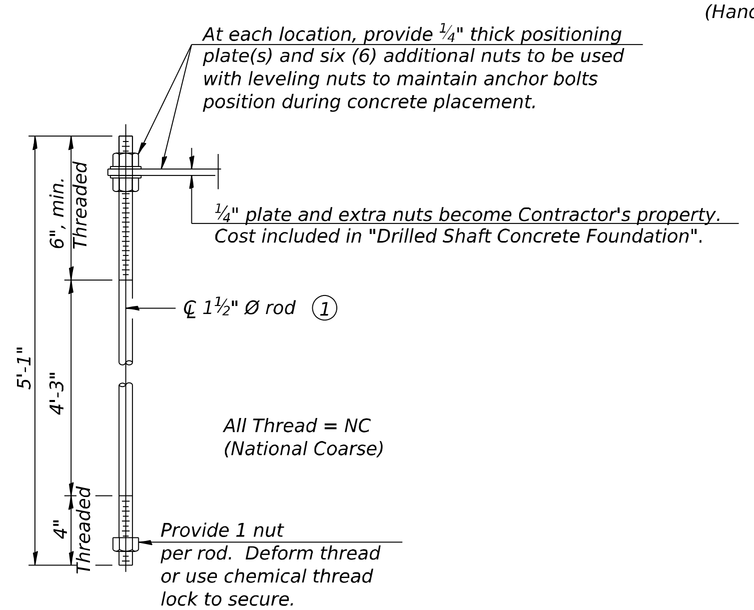


** Alternate detail if welding col. to base plate first, then snip inside corner of ribs. Terminate weld on rib 1/4" from snip.

SECTION D-D

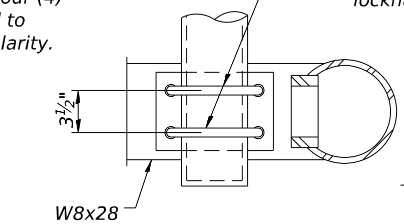


POSITIONING PLATE(S)



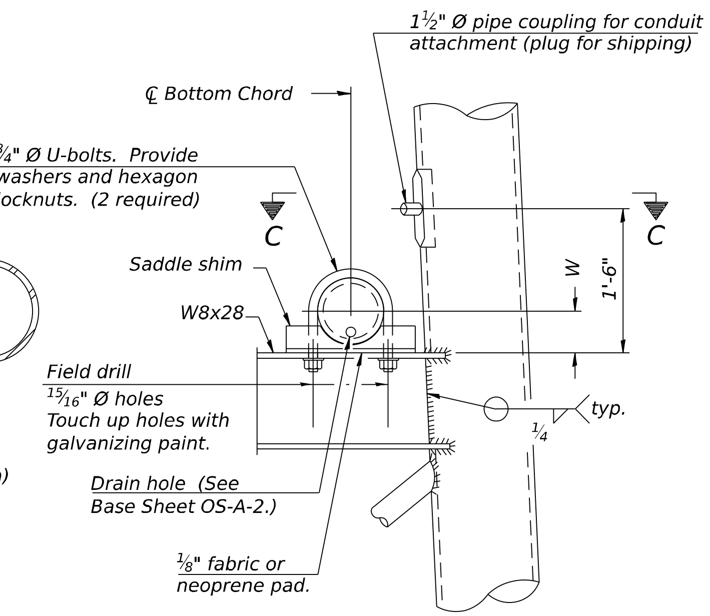
ANCHOR ROD DETAIL

Anchor rods shall conform to ASTM F1554 Grade 105 Galvanize upper 12" minimum per AASHTO M232. No welding shall be permitted on rods.

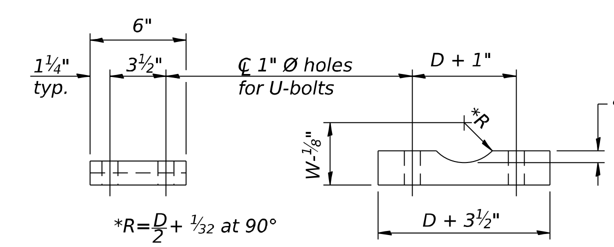


SECTION C-C

(Handhole cover not shown)



DETAIL C



D = Outside Diameter of Chord.
For W, see Base Sheet OS-A-6.

Truss Chord Nominal Dia.	a
7"	1"
8 1/2"	1 1/4"
9"	1 3/8"

SADDLE SHIM DETAIL

ASTM B26 Alloy 356-F
or
ASTM B209 Alloy 6061-T651
(4 required per sign truss)

TYPE III-A TRUSS
12" Ø PIPE SUPPORT FRAME DETAILS

Notes:
For Type III-A Truss spans greater than 150 ft, and up to 160 ft.:

1. 1 3/4" Ø rod, 2" Ø holes
2. 2 3/4" edge distance
3. Base ℙ 1 5/8" x 1'-11 1/2" x 1'-11 1/2"

OS4-A-8aA 2-17-2017

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/ML-01_62P71/04-Sheets/07-Utilities/D162P71-sht-itsohs-006.dgn

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	CHECKED - BAR	REVISED -	
PLOT SCALE = 32.0000 ' / in.	DRAWN - CS	REVISED -	
PLOT DATE = 03/18/2022	CHECKED - BAR	REVISED -	

exp.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME FOR TYPE III–A ALUMINUM TRUSS
SHEET 6 OF 12 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	278
		CONTRACT NO. 62P71		
	ILLINOIS	FED. AID PROJECT	I4WJ(714)	

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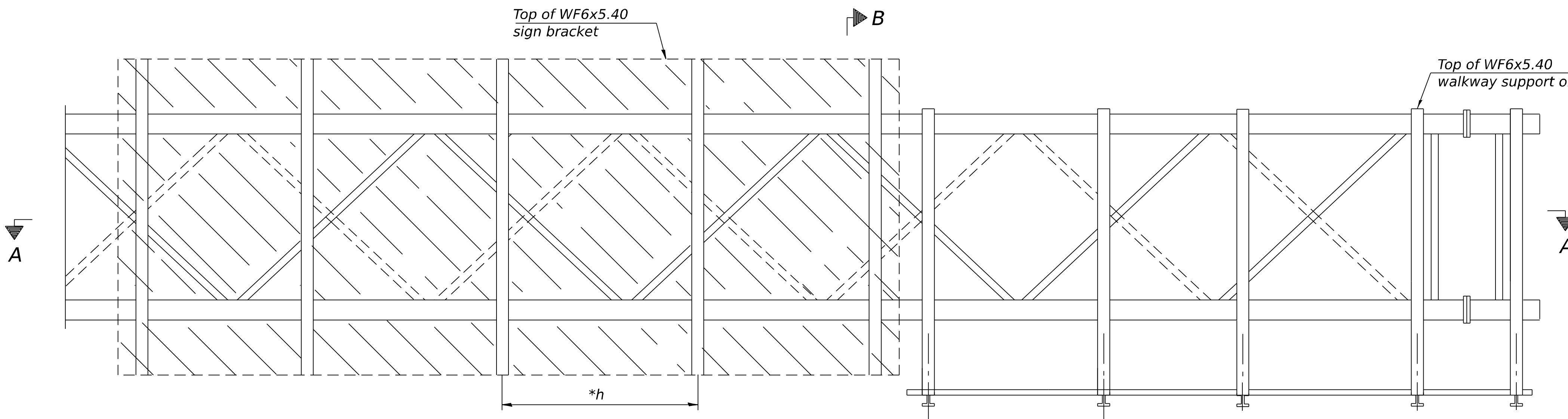
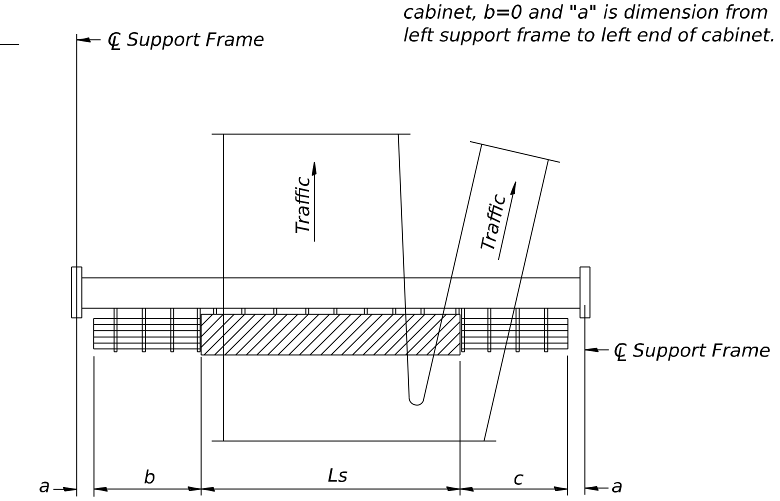
① If walkway is required left of the DMS cabinet, a=1'-6" and b=walkway lengths. If walkway is not required left of the DMS cabinet, b=0 and "a" is dimension from left support frame to left end of cabinet.



Bracket and grating dimensions are nominal and will vary based on actual DMS cabinet dimensions plus manufacturer's mounting devices.

TYPICAL FRONT ELEVATION

With handrail omitted for clarity.

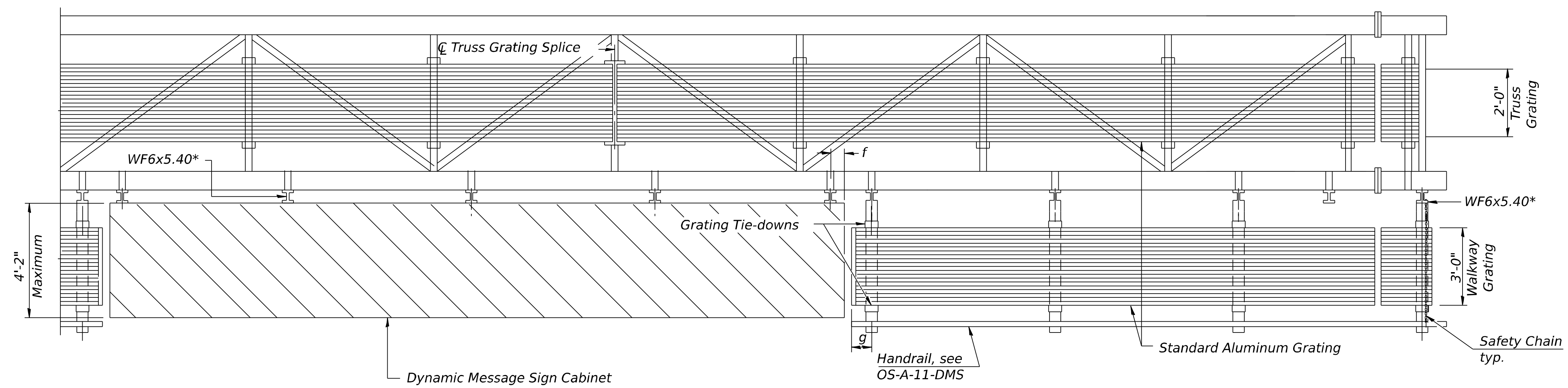


PLAN
WALKWAY AND HANDRAIL SKETCH

(Road plan beneath truss varies)

BRACKET TABLE

WF6x5.40 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



Walkway and Truss Grating width dimensions are nominal and may vary $\pm\frac{1}{2}$" based on available standard widths.

SECTION A-A

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".

Handrail and 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.
Grating and handrail splices placed as needed.

Structure Number	Station	a	b	c	Ls	Walkway Grating and Handrail Lengths
1S099I080R123.5	208+90	1'-6"	15'-0"	24'-0"	30'-0"	39'-0"

Notes:
* Space walkway brackets WF6x5.40 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 and/or walkway support brackets, WF6x5.40)

Maximum DMS weight = 5000 lbs. 4'-2" maximum cabinet depth includes depth of cabinet plus connection to WF6x5.40.
For Section B-B and Grating Splice Details, see Base Sheet OS-A-10-DMS.
For Handrail Splice Details, see Base Sheet OS-A-11-DMS.

OS-A-9-DMS 2-17-2017

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exp.	USER NAME = RussellBr	DESIGNED - CS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES ALTERNATE ALUMINUM WALKWAY DETAILS FOR DMS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - BAR	REVISED -			I-80	2021-154-R	WILL	477	279
	PLOT SCALE = 32.0000 ' / in.	DRAWN - CS	REVISED -			CONTRACT NO. 62P71				
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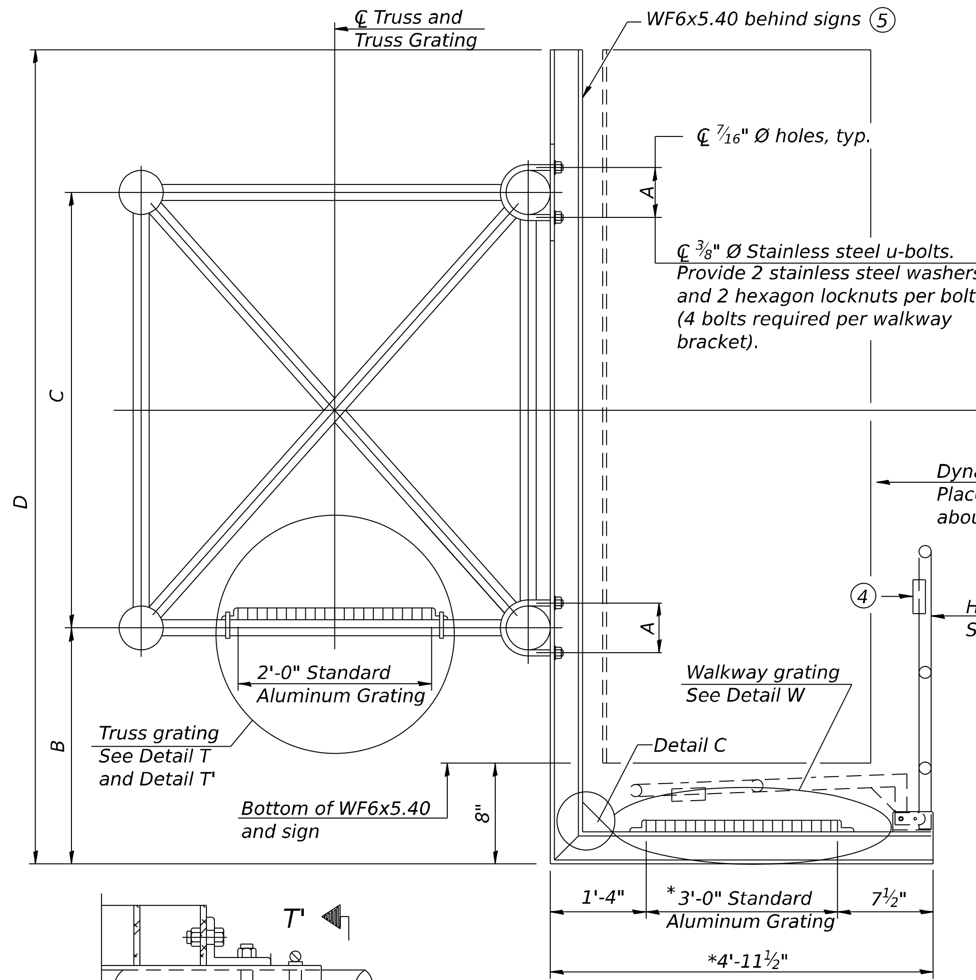
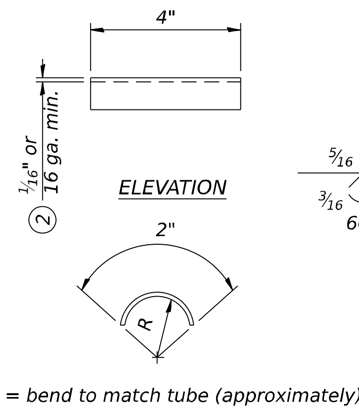
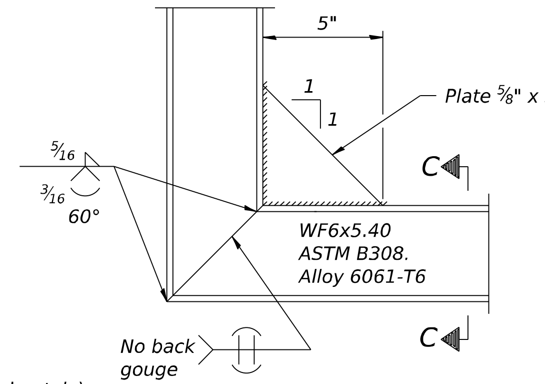
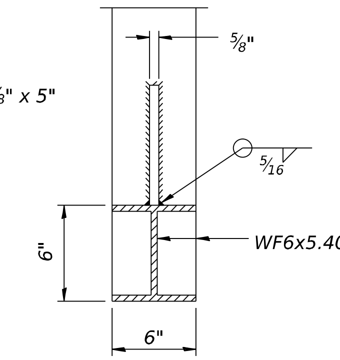
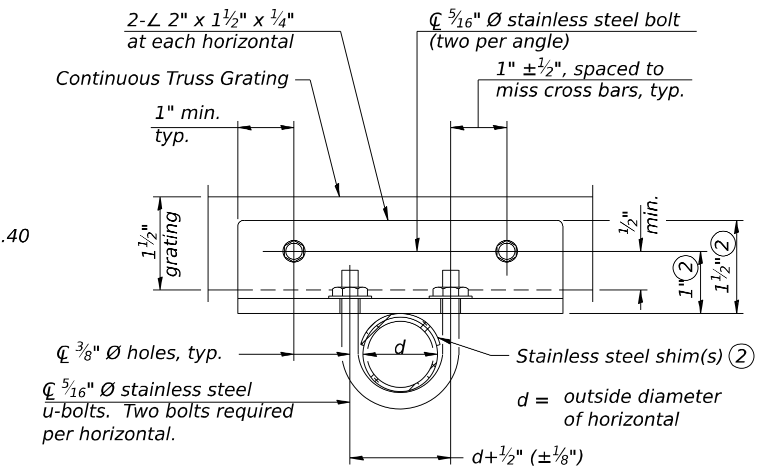
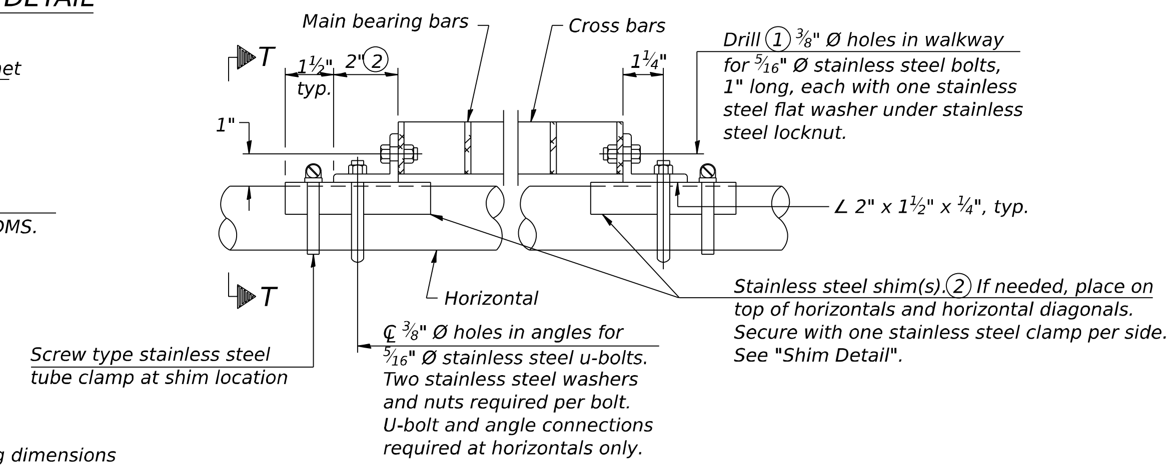


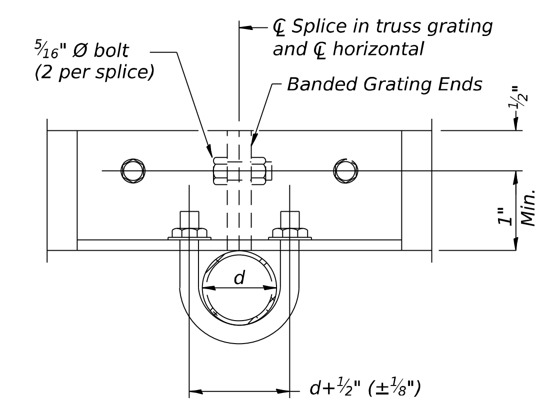




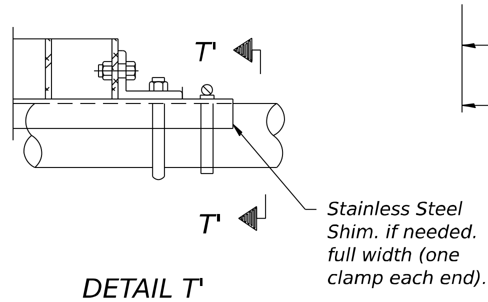






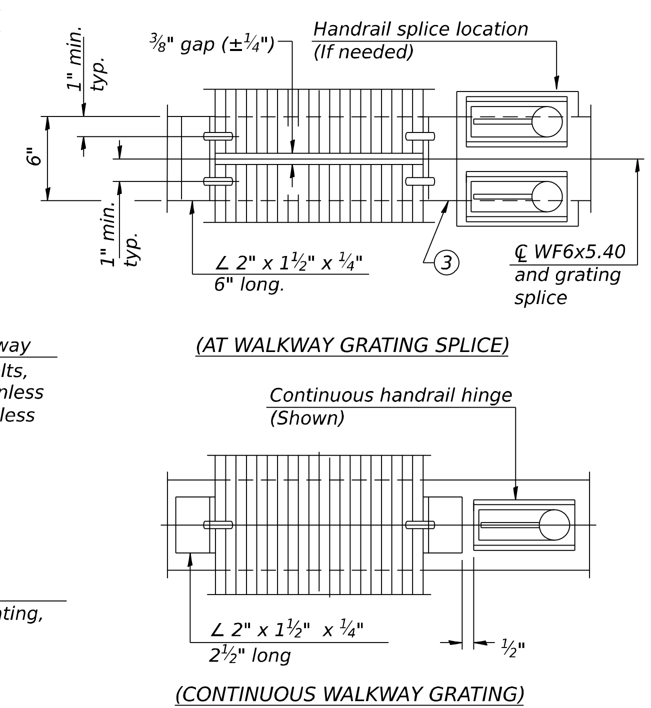


* Bracket and grating dimensions are nominal and will vary based on actual DMS cabinet dimensions plus manufacturer's mounting devices.

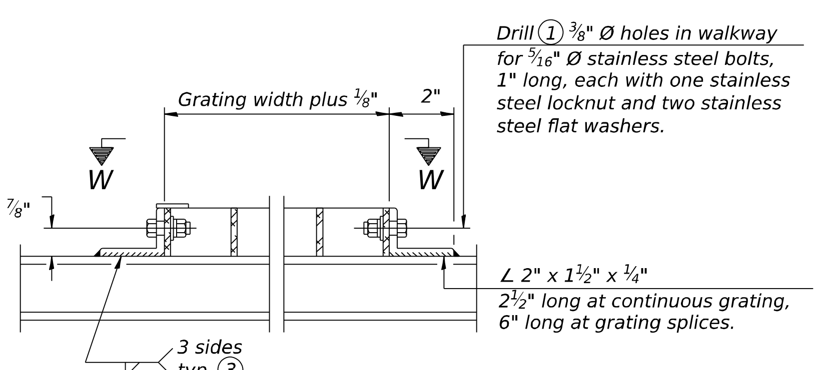


DETAIL T'

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



SECTION W-W



DETAIL W

(Walkway grating)

SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars shall be 3/16" x 1½" on 1 3/16" centers and conform to ASTM B211 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
1S099I080R123.5	208+90	7½"	1'-2"	7'-0"	8'-8"

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-DMS.)
4. ℙ ⅛" x ½" x 2" welded to handrail posts to protect locations that contact grating.
5. Cabinet manufacturer must design and supply hardware for connection of cabinet to WF6's. Bolts must be stainless steel or hot dip galvanized high strength per IDOT specifications.
6. Based on actual height of tallest sign given on OS-A-1.

OS-A-10-DMS 2-17-2017

MODEL: Default
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3/15/2023 10:42:45 AM

exp.

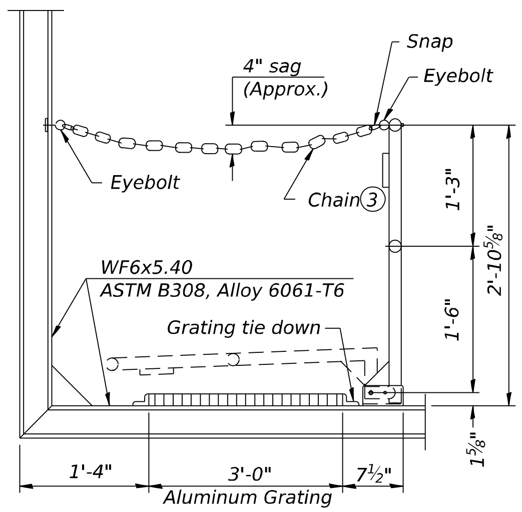
USER NAME = RussellBr	DESIGNED - CS	REVISED -
	CHECKED - BAR	REVISED -
PLOT SCALE = 32.0000 ' / in.	DRAWN - CS	REVISED -
PLOT DATE = 03/18/2022	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

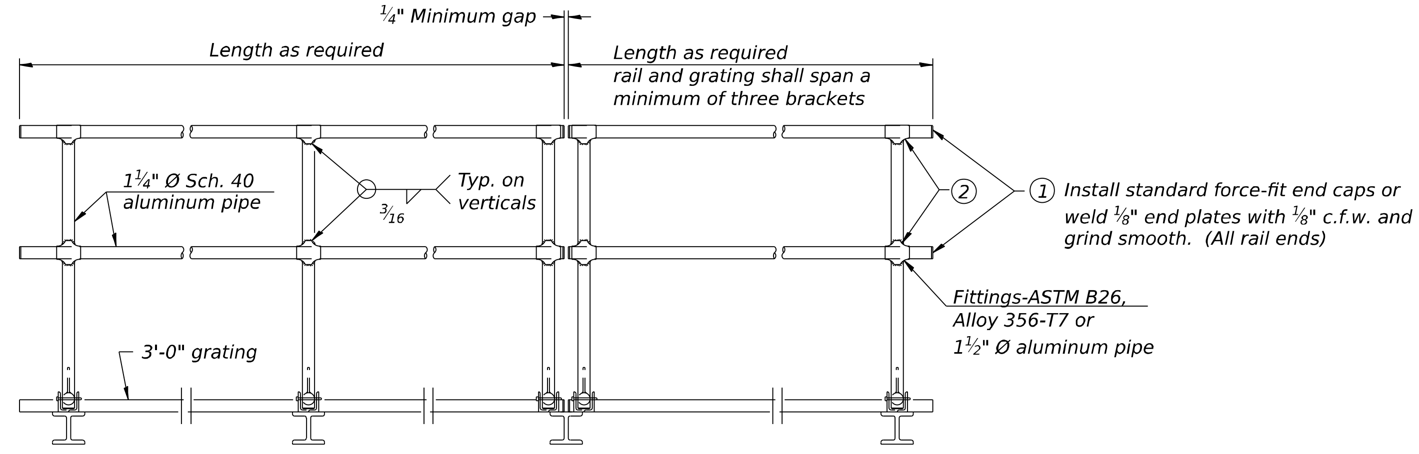
OVERHEAD SIGN STRUCTURES
ALTERNATE ALUMINUM WALKWAY DETAILS FOR DMS
SHEET 8 OF 12 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	2021-154-R	WILL	477	280

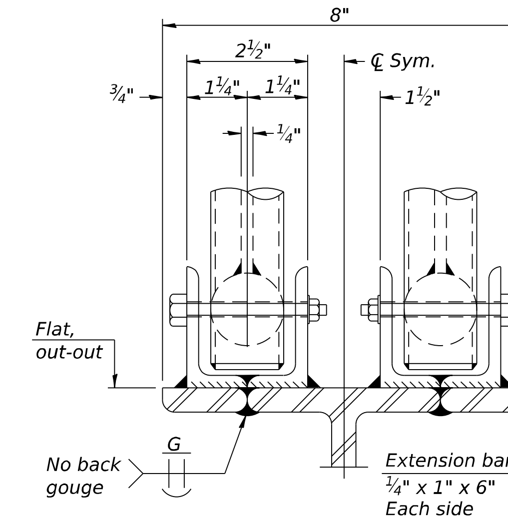
CONTRACT NO. 62P71
ILLINOIS FED. AID PROJECT I4WJ(714)



SIDE ELEVATION
(Showing safety chain w/o sign)



FRONT ELEVATION



ELEVATION AT HANDRAIL JOINT (4)

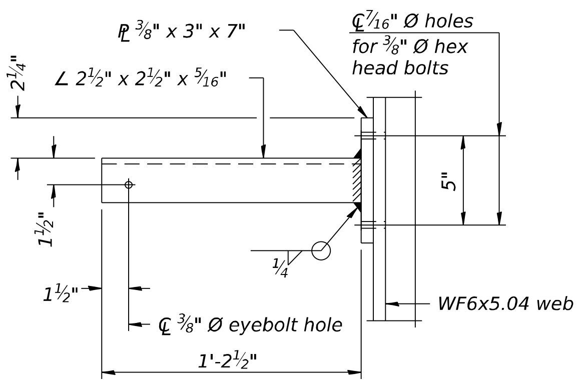
HANDRAIL DETAILS

Handrail pipe shall be ASTM B241, Alloy 6063-T6 or Alloy 6061-T6.

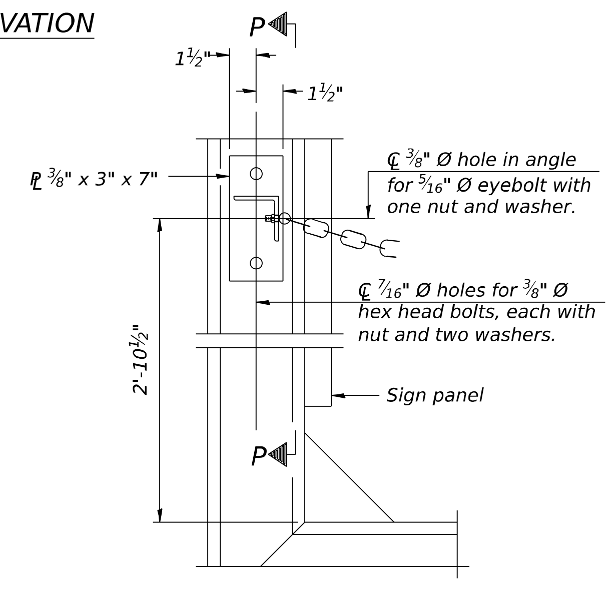
(2) Horizontal handrail member shall be continuous thru fitting. Provide 7/16" Ø hole in fitting for 3/8" Ø bolt. Field drill 7/16" Ø hole in horizontal rail member. Provide washer and locknut for bolt. (Use 5/16" eyebolts in 7/16" Ø holes on top rail at ends only.)

(3) 3/16" type 304L stainless steel chain, approximately 12 links per foot.

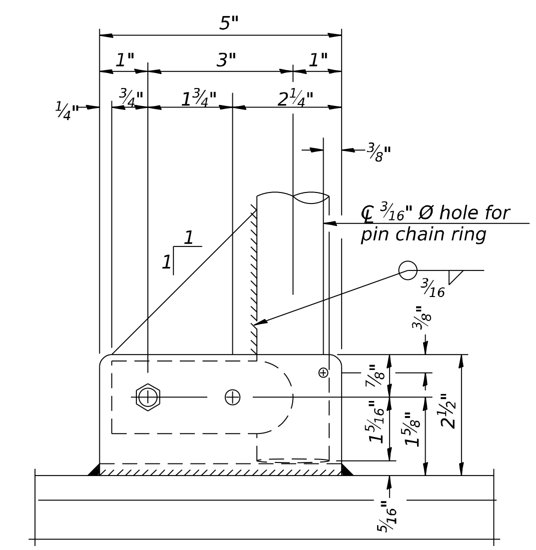
(4) Extrusions may be used in lieu of the details shown, with approval of the Engineer.



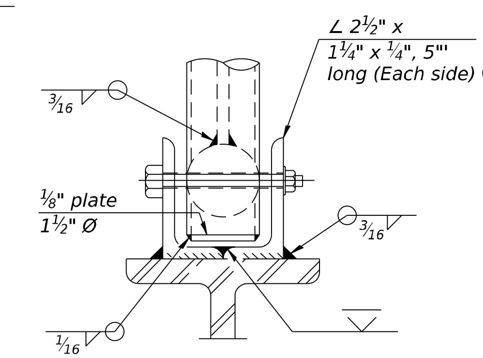
SECTION P-P



ALTERNATE SAFETY CHAIN ATTACHMENT

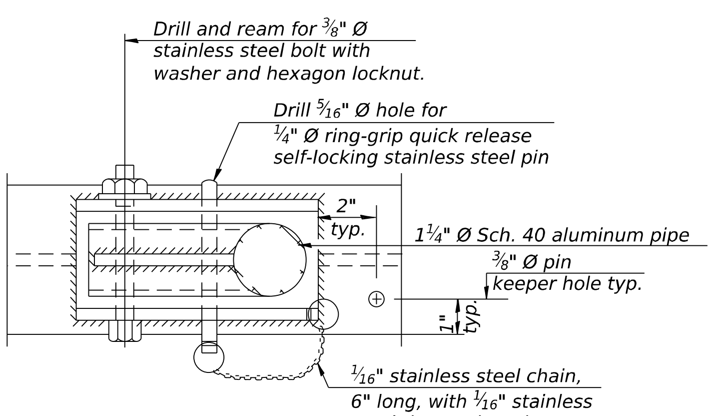


SIDE ELEVATION

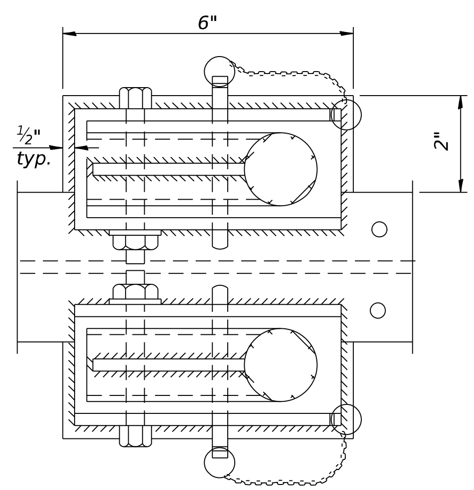


FRONT ELEVATION
See "ELEVATION" at right for dimensions.

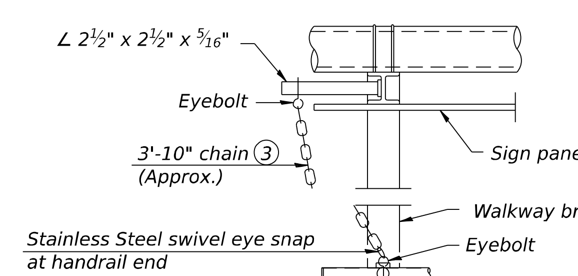
(With Sign Present)
Items not shown same as "Side Elevation" of "Handrail Details"



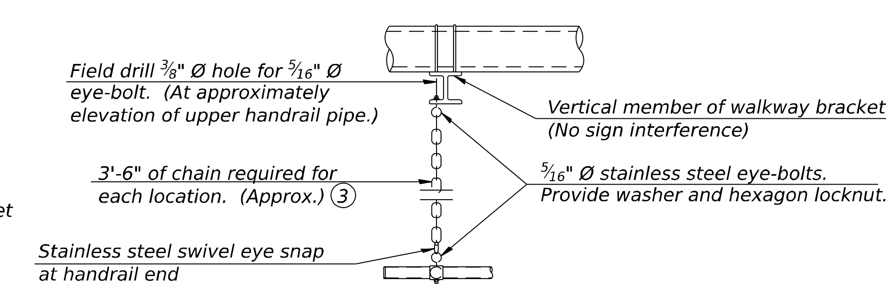
PLAN
DETAIL E HANDRAIL HINGE



PLAN AT HANDRAIL JOINT
Details not shown same as "PLAN"



ALTERNATE SAFETY CHAIN ATTACHMENT
Details not shown similar to "Safety Chain" Details
(Walkway omitted for clarity)



SAFETY CHAIN
One required for each end of each walkway.

OS-A-11-DMS 2-17-2017

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exp.	USER NAME = RussellBr	DESIGNED - CS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES ALTERNATE ALUMINUM HANDRAIL DETAILS FOR DMS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - BAR	REVISED -			I-80	2021-154-R	WILL	477	281
	PLOT SCALE = 32.0000 ' / in.	DRAWN - CS	REVISED -					CONTRACT NO. 62P71		
	PLOT DATE = 03/18/2022	CHECKED - BAR	REVISED -		SHEET 9 OF 12 SHEETS		ILLINOIS FED. AID PROJECT	I4WJ(714)		

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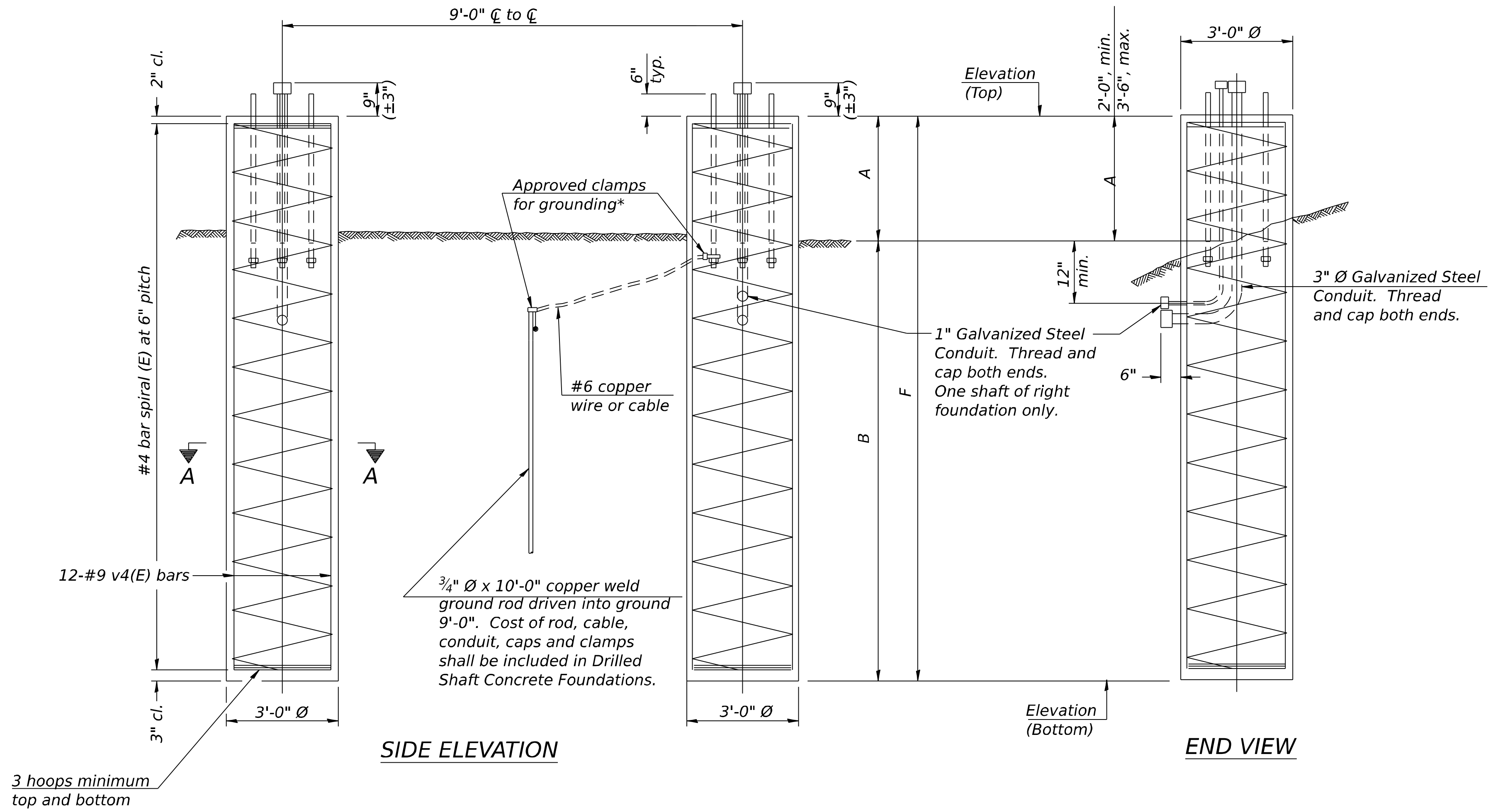


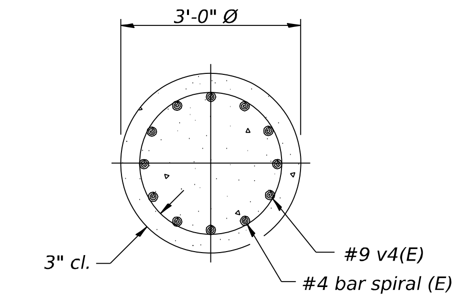
SIDE ELEVATION

END VIEW

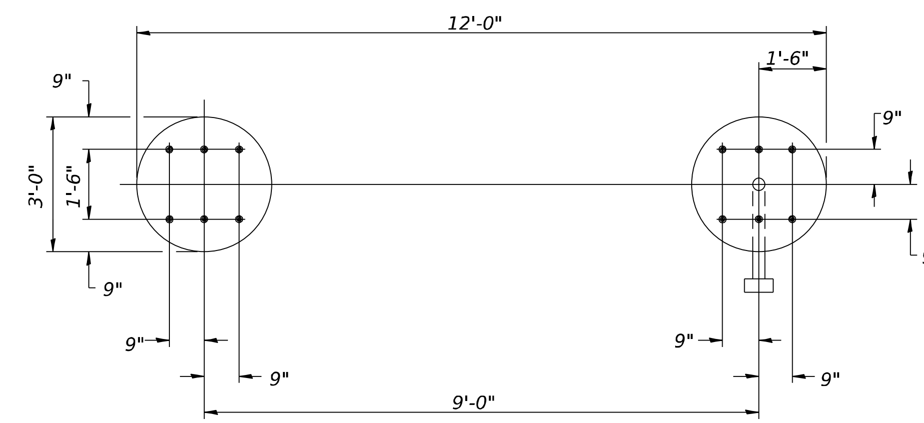
BAR LIST - EACH FOUNDATION

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

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



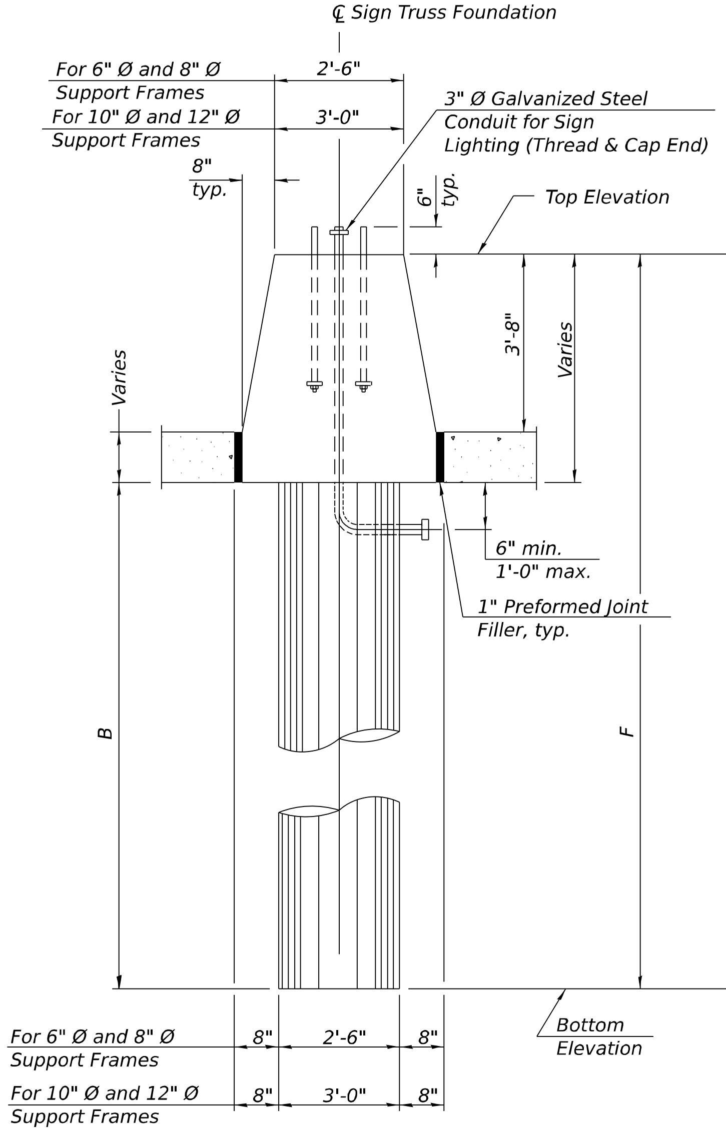
PLAN

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

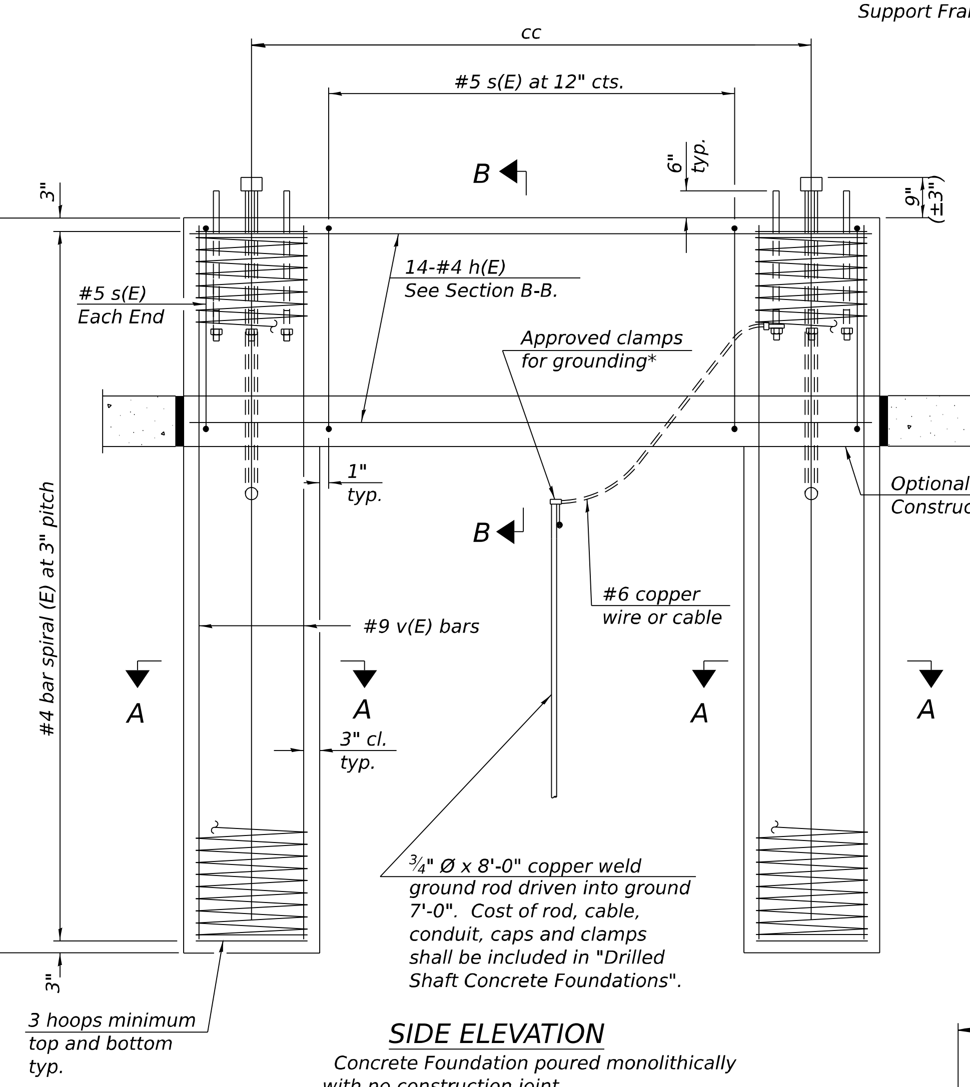
* Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.

DETAILS FOR 12" Ø SUPPORT FRAME
TYPE III-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	
1S099I080R123.5	208+90	-	-	-	-	-	599.49	578.99	2'-6"	18'-0"	20'-6"	10.7

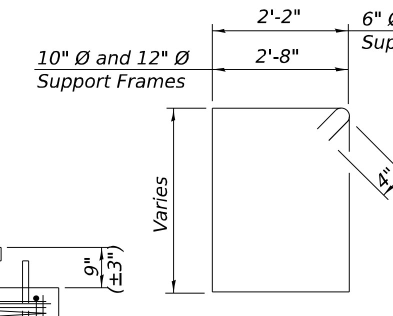


END VIEW



SIDE ELEVATION

Concrete Foundation poured monolithically with no construction joint.



BAR s(E)

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.

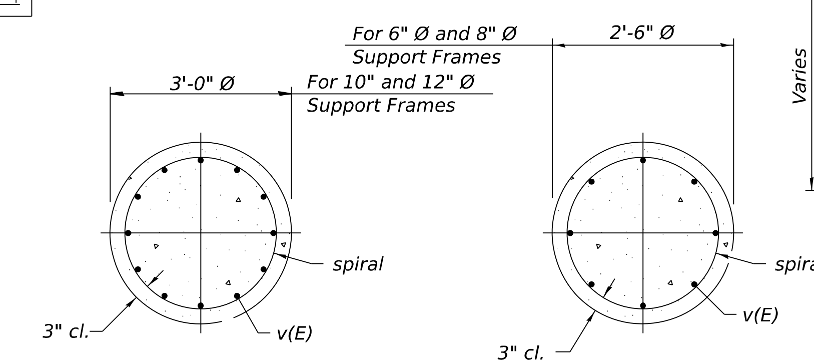
Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

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.

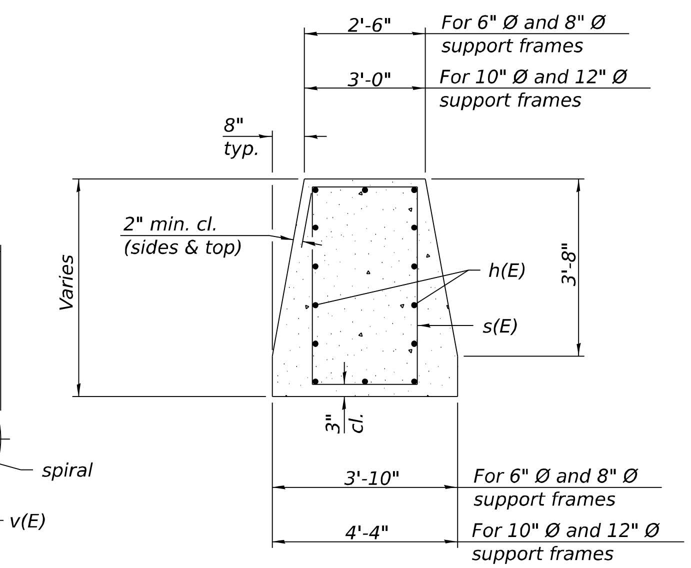
BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
h(E)	14	#4	M less 4"	
s(E)	Varies	#5	Varies	
v(E)	16	#9	F less 0'-5"	6" Ø and 8" Ø Support Frame
v(E)	24	#9	F less 0'-5"	10" Ø and 12" Ø Support Frame
#4(E) bar spiral. See Side Elevation				

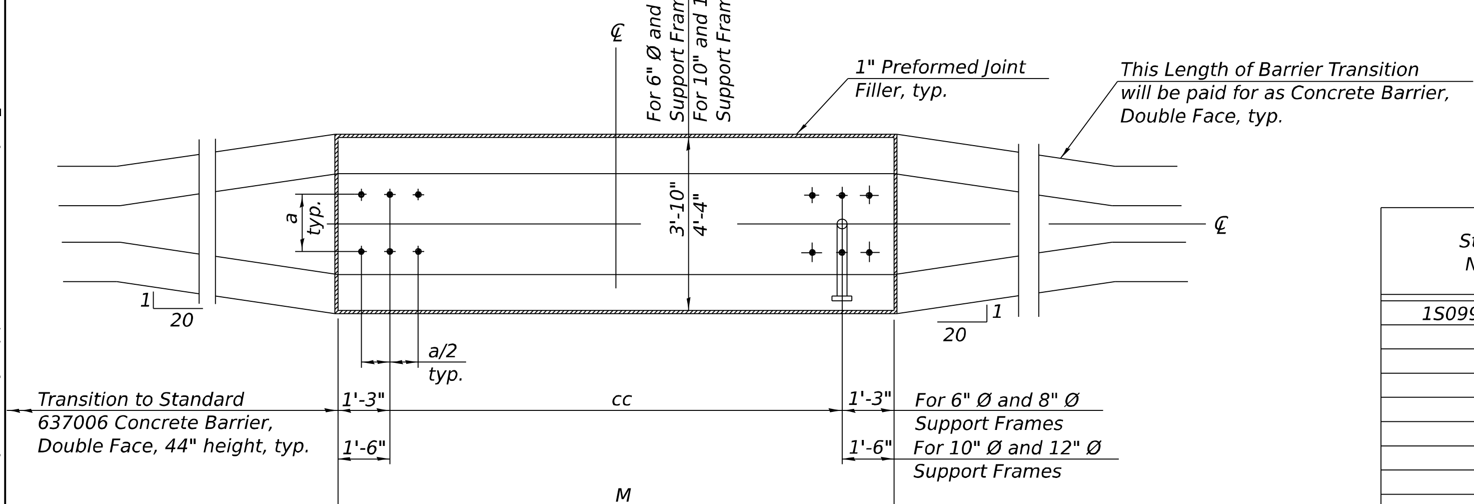
Pipe Support Frames	cc	M	a	a/2
6" Ø	7'-0"	9'-6"	0'-11"	5½"
8" Ø	7'-6"	10'-0"	1'-1½"	6¾"
10" Ø	8'-3"	11'-3"	1'-3"	7½"
12" Ø	9'-0"	12'-0"	1'-6"	9"



SECTION A-A



SECTION B-B



PLAN

Structure Number	Station	Left Foundation				Right Foundation				Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	B	F	Elevation Top	Elevation Bottom	B	F	
1S099I080R123.5	208+90	602.82	580.07	18'-0"	22'-9"	-	-	-	-	9.4

BORING LOG SS-OSB-01

Wang Engineering
wangeng@wangeng.com
Telephone:
Fax:

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD 88
Elevation: 599.08 ft
North: 1749402.80 ft
East: 1009437.48 ft
Station: 209+64.84
Offset: 22.00 RT

SOIL AND ROCK DESCRIPTION

Elevation (ft)	Description
	11-inch thick ASPHALT --PAVEMENT--
598.2	Stiff to very stiff, brown, gray and black SILTY CLAY LOAM, trace gravel; moist --FILL-- --RDR 2--
590.3	Black SILTY CLAY LOAM --BURIED TOPSOIL--
588.6	Very stiff to hard, gray SILTY CLAY, trace gravel; moist --RDR 2--
569.1	Boring terminated at 30.00 ft

Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
1	2 2 4	2.38 B	17
2	5 3 3	3.28 B	15
3	6 7 5	3.28 B	17
4	4 3 5	1.39 B	16
5	2 2 4	3.50 P	15
6	4 3 5	3.77 B	17
7	4 6 6	5.90 B	20
8	6 6 7	5.33 B	16
9	5 5 6	3.69 B	16
10	6 8 8	4.00 P	15
11	5 7 8	2.50 P	16
12	10 10 8	2.38 B	17

GENERAL NOTES

Begin Drilling: 05-19-2022 Complete Drilling: 05-19-2022
Drilling Contractor: Wang Testing Services Drill Rig: 17B57T [91%]
Driller: KG&TC Logger: A. Scifers Checked by: J. Bensen
Drilling Method: 2.25" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: DRY
At Completion of Drilling: DRY
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 2553901.GPJ WANGENG.GDT 6/9/22

BORING LOG SS-OSB-02

Wang Engineering
wangeng@wangeng.com
Telephone:
Fax:

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD 88
Elevation: 599.00 ft
North: 1749382.01 ft
East: 1009457.75 ft
Station: 209+60.15
Offset: 50.66 RT

SOIL AND ROCK DESCRIPTION

Elevation (ft)	Description
	9-inch thick ASPHALT --PAVEMENT--
598.3	Stiff to hard, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist --FILL-- --RDR 2--
588.5	Soft, gray CLAY LOAM, little gravel; moist --FILL-- --RDR 2--
587.0	Hard (>4.50P), gray SILTY CLAY, trace gravel; moist --FILL--
586.0	Medium stiff, black and gray SILTY CLAY, trace gravel; moist --RDR 2--
584.0	Stiff to hard, gray SILTY CLAY, trace gravel; moist --RDR 2--
	--L_L(%)=29, P_L(%)=14-- --%Gravel=2.2-- --%Sand=4.7-- --%Silt=55.2-- --%Clay=37.8-- --A-6 (12)--
569.0	Boring terminated at 30.00 ft

Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
1	3 8 7	>4.50 P	18
2	5 5 7	1.97 B	16
3	6 7 8	NA	17
4	4 4 4	NA	14
5	8 11 6	0.33 S	13
6	10 10 8	0.50 P	19
7	6 6 7	3.69 B	16
8	4 5 6	5.17 B	17
9	5 4 5	1.56 B	17
10	3 6 8	1.64 B	16
11	3 4 5	1.72 B	17
12	6 8 10	2.46 B	17

GENERAL NOTES

Begin Drilling: 05-19-2022 Complete Drilling: 05-19-2022
Drilling Contractor: Wang Testing Services Drill Rig: 17B57T [91%]
Driller: KG&TC Logger: A. Scifers Checked by: J. Bensen
Drilling Method: 2.25" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: DRY
At Completion of Drilling: DRY
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 2553901.GPJ WANGENG.GDT 6/9/22

Bench Mark: Set 2" CWA aluminum disc in concrete pier seat in southerly pier of Shepley Road bridge on south side of eastbound I-80. Elev. 599.980.

Existing Structure: The existing culvert was originally constructed in 1960 as a 6'-0" x 3'-6" (WxH) reinforced concrete single-cell box culvert with 20° skew carrying a roadside ditch beneath eastbound/westbound I-80 and a local Frontage Road (FAI Route 80; Section 99-1; Project I-80-4(12)124). The culvert consists of a 7" thick top slab, 8" bottom slab, 6" sidewalls with horizontal cantilever wingwalls and maximum fill height of approximately 6'. The overall length of the culvert is approximately 198'-6" (out-to-out headwalls) at right angles to the center line of roadway and 206'-2" (out-to-out headwalls) of culvert. The structure will be removed and replaced.

Salvage: No Salvage.
Traffic will be maintained utilizing Staged Construction.

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

LOADING HL-93

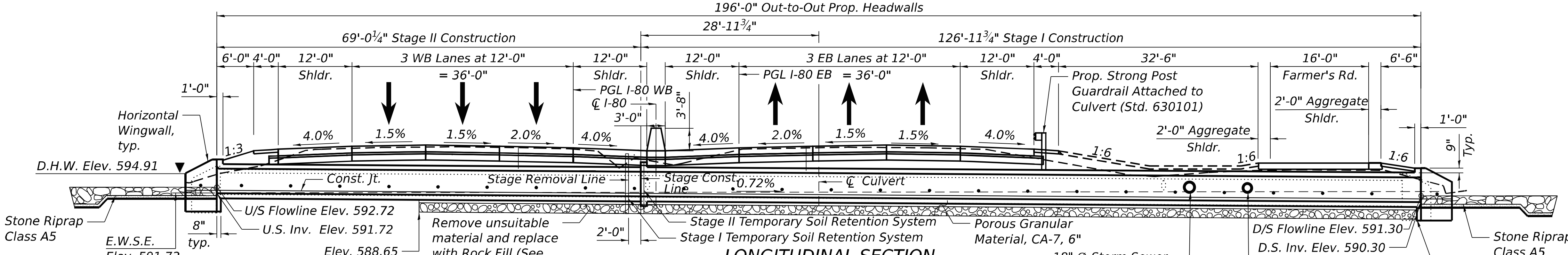
Allow 50 lb/sq.ft. for future wearing surface

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition.

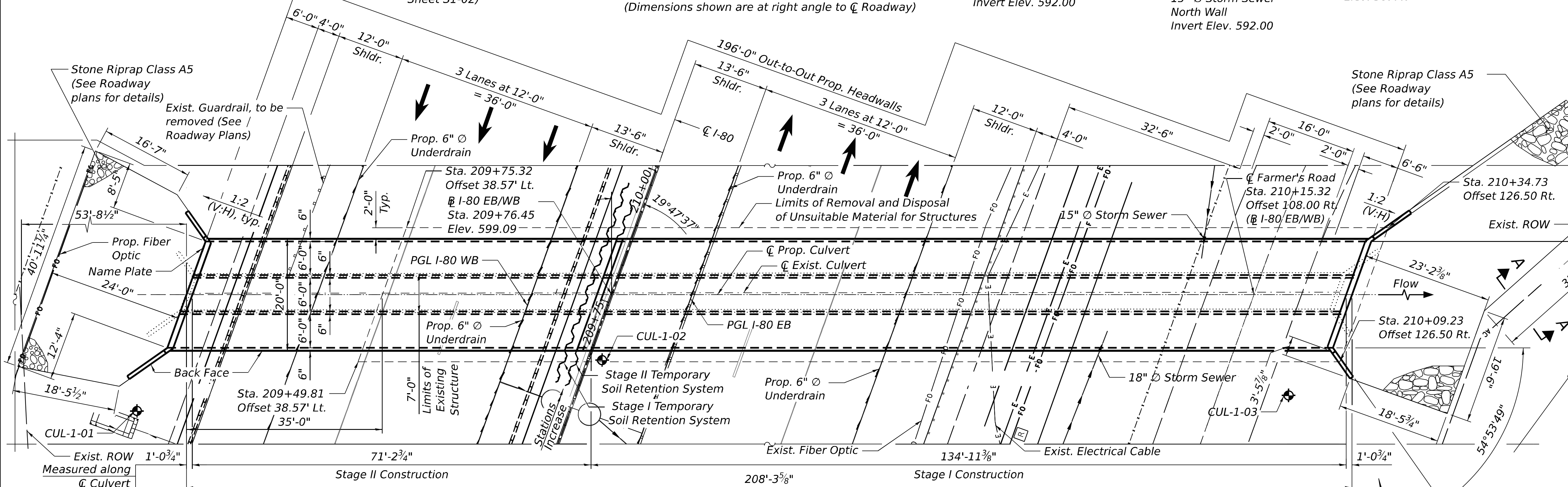
NOTES:

1. Upstream and downstream channels are to be regraded to align with new culvert.
2. For Section A-A, General Notes, Index of sheets and Name Plate, see Sheet S1-02.

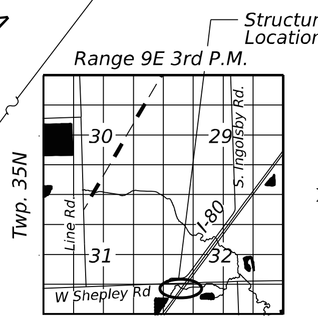


LONGITUDINAL SECTION

Looking North (Upstation)
(Dimensions shown are at right angle to ℄ Roadway)



PLAN



LOCATION SKETCH

WATERWAY INFORMATION

Drainage Area = 0.6 Sq. Mi.			Exist. Overtopping Elev. = 598.57 at Sta. 211+00 Prop. Overtopping Elev. = 598.85 at Sta. 211+00						
Flood	Freq. Yr.	Q C.F.S.	Opening Ft² Exist.	Opening Ft² Prop.	Nat. H.W.E.	Head - Ft Exist.	Head - Ft Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	117	21	52	594.28	0.99	0.34	595.27	594.62
Design	50	196	21	66	594.91	2.49	0.47	597.40	595.38
Base	100	234	21	72	595.16	3.46	0.55	598.62	596.48
Overtopping	<500	300	21		595.54	3.03		598.57	
Max. Calc.	500	331	21	72	595.70	3.32	0.78	599.02	596.48

Existing 10-year outlet Velocity = 11.0 ft/s
Proposed 10-year outlet Velocity = 5.9 ft/s

LEGEND:

- Soil Boring
- Limit of Rock Fill
- Exist. Fiber Optic
- Exist. Electrical Cable
- Exist. Guardrail
- Prop. Guardrail
- Prop. Storm Sewer
- Stone Riprap
- Rock Fill

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

STATE OF ILLINOIS
MOUSSA A. ISSA
081-005738
CHICAGO, ILLINOIS
LICENSED STRUCTURAL ENGINEER

Signed Moussa A. Issa
Dr. Moussa A. Issa, S.E. IL. Lic. No. 081-005738
Expires 11-30-2024
Date 3/17/2023 For Sheets S1-01 Thru S1-11

GENERAL PLAN & ELEVATION
I-80 EB/WB OVER ROADWAY DITCH
F.A.I. RTE. I-80
SEC. 2021-151-B
WILL COUNTY
STATION 209+76.45
STRUCTURE NO. 099-8342

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - JJS, EBK, AMS	REVISED -
	CHECKED - MI, SK	REVISED -
PLOT SCALE =	DRAWN - EBK, AMS	REVISED -
PLOT DATE =	CHECKED - MI, SK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 099-8342
SHEET S1-01 OF S1-11 SHEETS

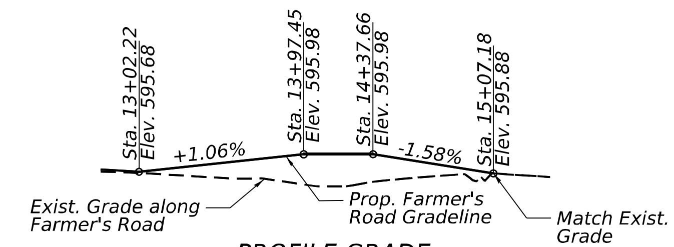
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	477	285

CONTRACT NO. 62P71
ILLINOIS FED. AID PROJECT

GENERAL NOTES

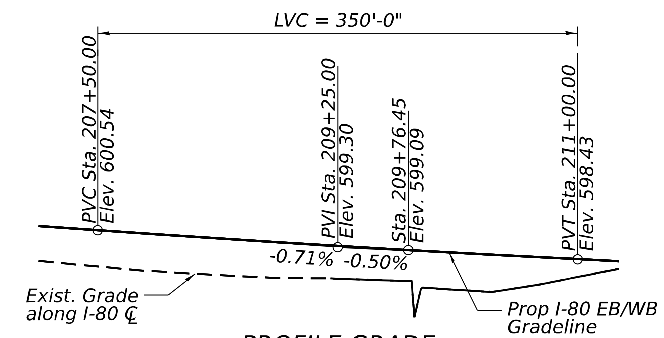
1. A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
2. It will be the responsibility of the Contractor to direct the stream flow during construction in order to keep the construction areas free of water. The method of water diversion shall be subject to the approval of the Engineer and cost shall be included with the cost of the Concrete Box Culverts.
3. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
4. The limits and quantities of removal and replacement shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.
5. The Rock Fill shall be capped with 6 inches of CA-7 and satisfy the Standard Specifications unless otherwise indicated in the Special Provisions. The cost of the capping material shall be included in the pay item for Rock Fill.
6. Precast culvert alternate is not allowed.
7. A cantilever sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
8. Geocomposite Wall Drain shall be according to Section 591 of the Standard Specifications, except that concrete nails shall not be used in areas where it overlaps Membrane Waterproofing System for Buried Structures.

INDEX OF SHEETS



PROFILE GRADE

(Farmer's Road)

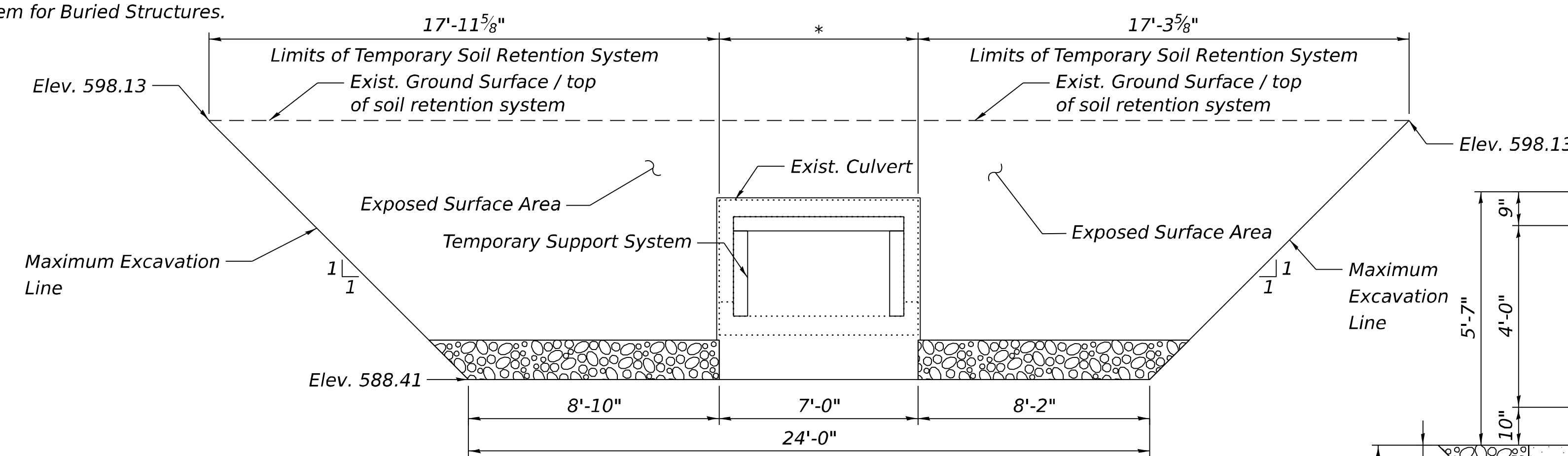


PROFILE GRADE

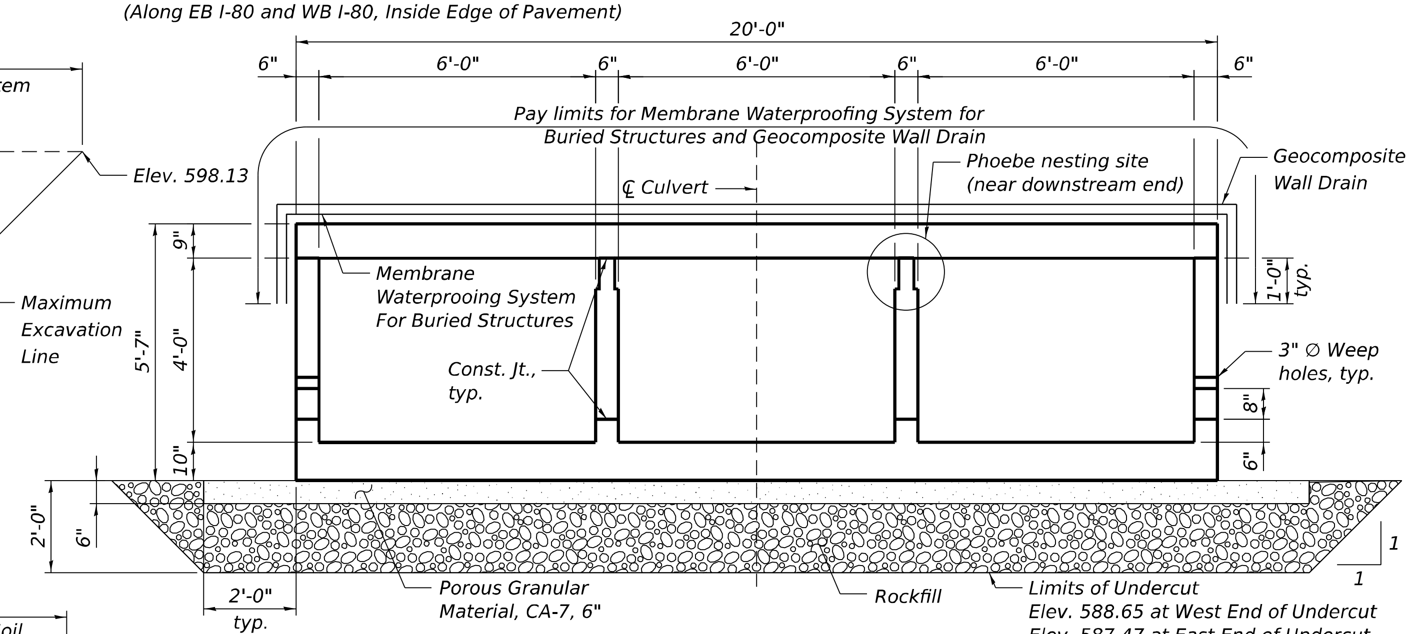
(Along EB I-80 and WB I-80, Inside Edge of Pavement)

TOTAL BILL OF MATERIAL

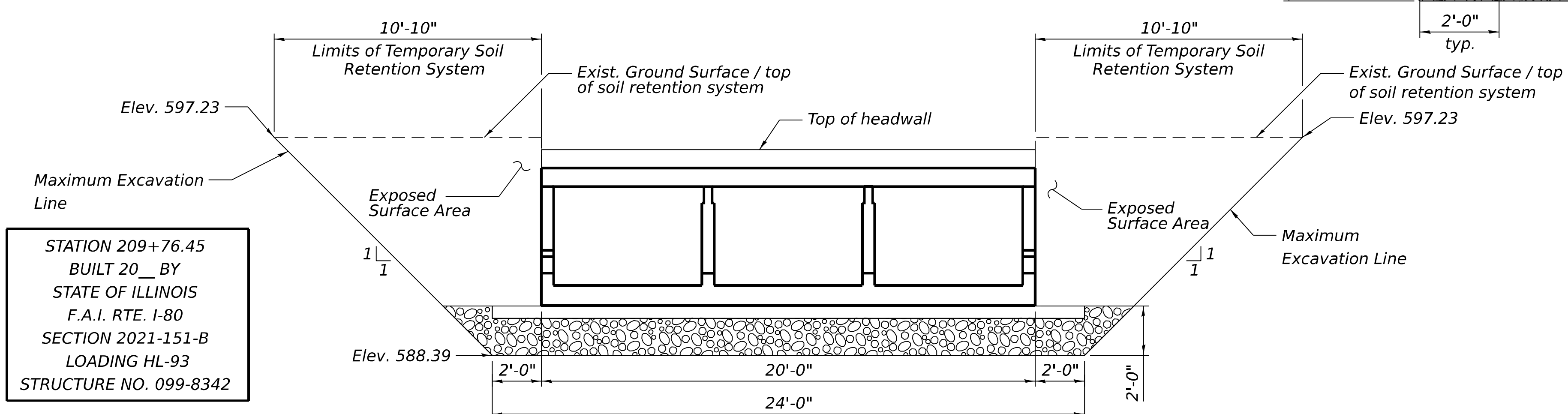
Item	Unit	Total
Removal Of Existing Structures No. 1	Each	1
Removal And Disposal Of Unsuitable Material For Structures	Cu Yd	309
Reinforcement Bars	Pound	74,830
Bar Splicers	Each	104
Name Plates	Each	1
Temporary Soil Retention System	Sq Ft	384
Concrete Box Culverts	Cu Yd	315.8
Geocomposite Wall Drain	Sq Yd	544
Strong Post Guardrail Attached To Culvert	Foot	75
Membrane Waterproofing System For Buried Structures	Sq Yd	544
Rock Fill	Cu Yd	336
Temporary Support System	Each	1



STAGE I - TEMPORARY SOIL RETENTION SYSTEM



SECTION THRU BARREL



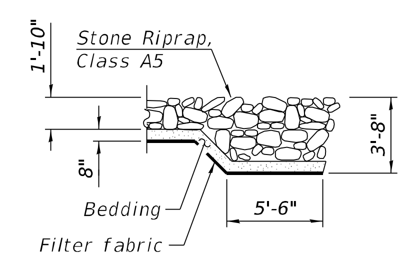
STAGE II - TEMPORARY SOIL RETENTION SYSTEM

STATION 209+76.45
BUILT 20__ BY
STATE OF ILLINOIS
F.A.I. RTE. I-80
SECTION 2021-151-B
LOADING HL-93
STRUCTURE NO. 099-8342

NAME PLATE

See Std. 515001

*Temporary Soil Retention System only above the culvert.

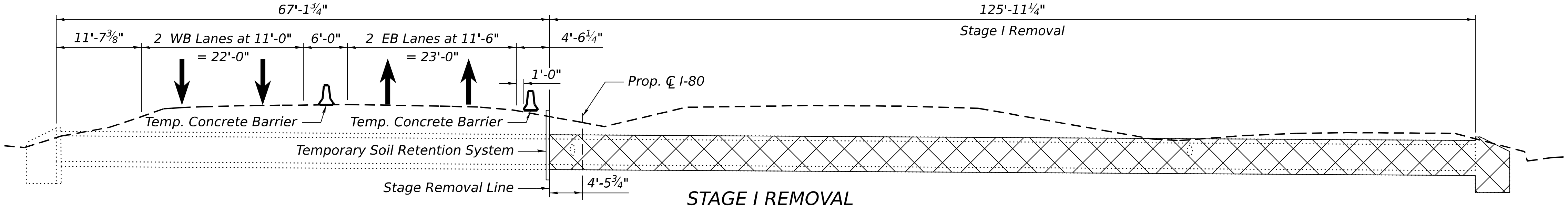


SECTION A–A

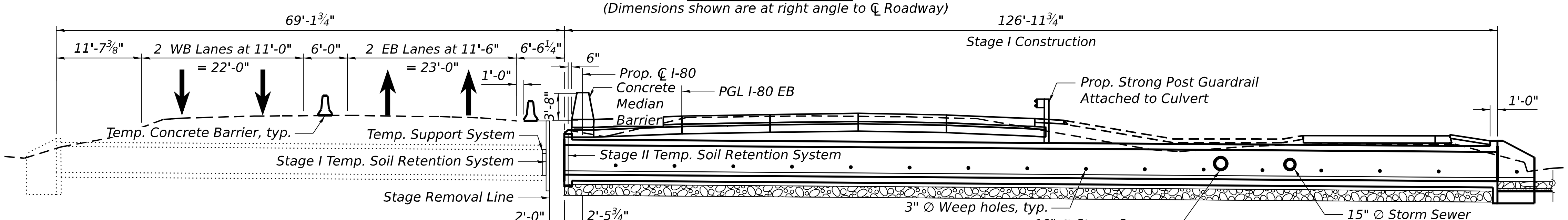
(See Note 2)

NOTES:

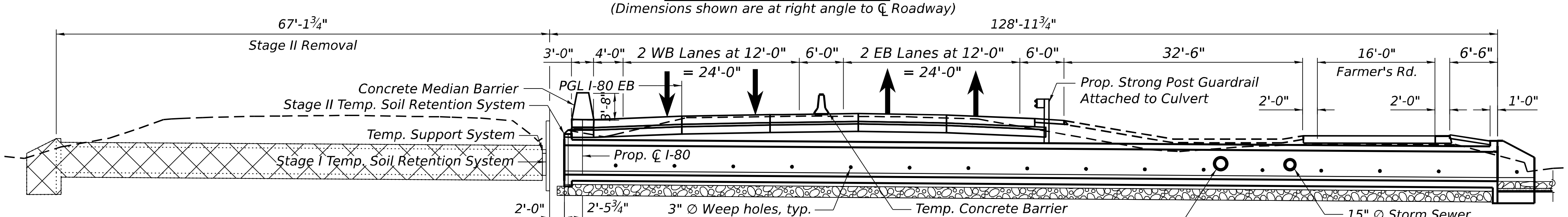
1. For Temporary Support System, see Special Provision.
2. For Stone Riprap, Class A5 and Filter Fabric pay items, see Roadway Plans.



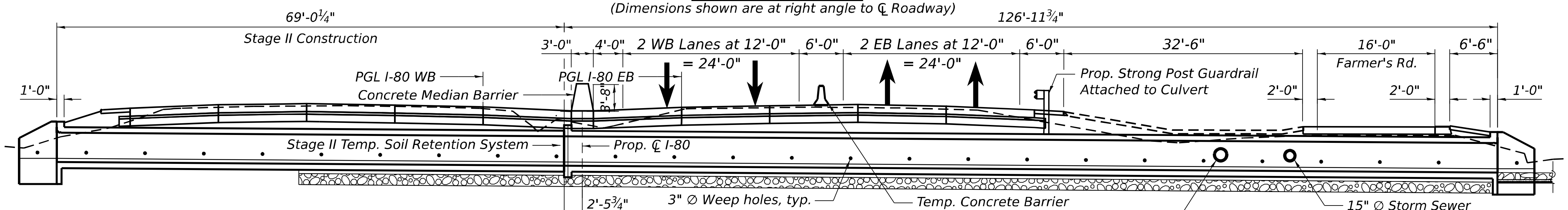
STAGE I REMOVAL
(Dimensions shown are at right angle to ℄ Roadway)



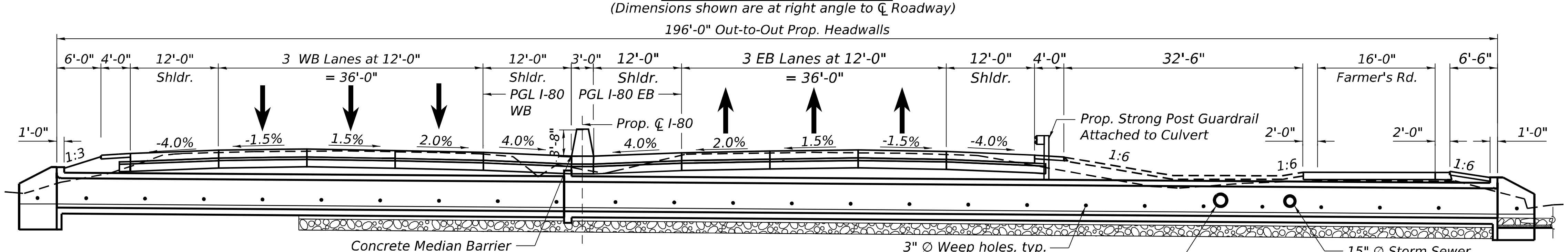
STAGE I CONSTRUCTION
(Dimensions shown are at right angle to ℄ Roadway)



STAGE II REMOVAL
(Dimensions shown are at right angle to ℄ Roadway)



STAGE II CONSTRUCTION
(Dimensions shown are at right angle to ℄ Roadway)



FINAL CROSS SECTION
(Dimensions shown are at right angle to ℄ Roadway)

STAGE I REMOVAL

1. Install temporary concrete barrier as shown to locate construction work areas on the east side of existing structure.
2. Install Temporary Soil Retention System as shown.
3. Remove portions of existing pavement on east side of the roadway.
4. Remove the 134'-10⅜" portion of the east culvert barrel and remove the east headwall and wingwalls.

STAGE I CONSTRUCTION

1. Install Temporary Support System as shown.
2. Construct 134'-11⅜" portion of the east culvert barrel and construct the east headwall and wingwalls.
3. Construct the pavement and shoulder on the east side on the roadway.

STAGE II REMOVAL

1. Locate construction work area on the west side of existing structure.
2. Install Temporary Soil Retention System as shown.
3. Remove portions of existing pavement on west side of the roadway.
4. Remove the 71'-3⅞" portion of the west culvert barrel and remove the east headwall and wingwalls.

STAGE II CONSTRUCTION

1. Construct 73'-4¼" portion of the west culvert barrel and construct the west headwall and wingwalls.
2. Construct the pavement and shoulder on the west side on the roadway.

LEGEND

- Removal Of Existing Structures No. 1
- Stone Riprap
- Rock fill

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE REMOVAL AND CONSTRUCTION
STRUCTURE NO. 099-8342

SHEET S1-03 OF S1-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	477	287
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT		

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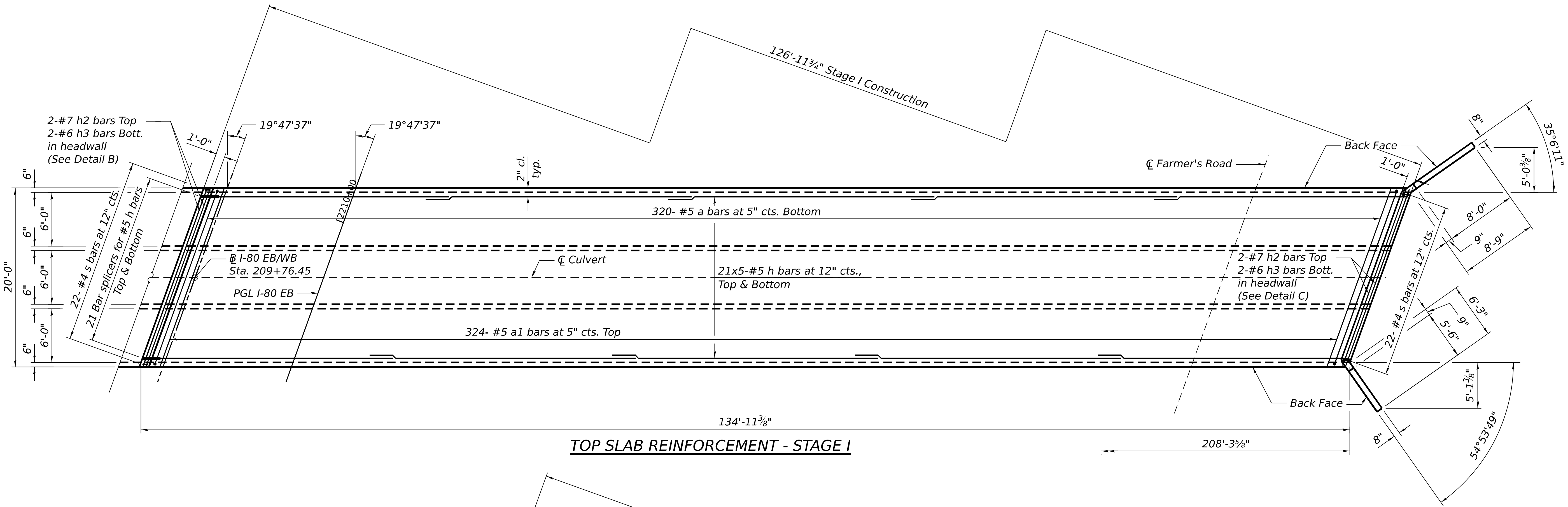
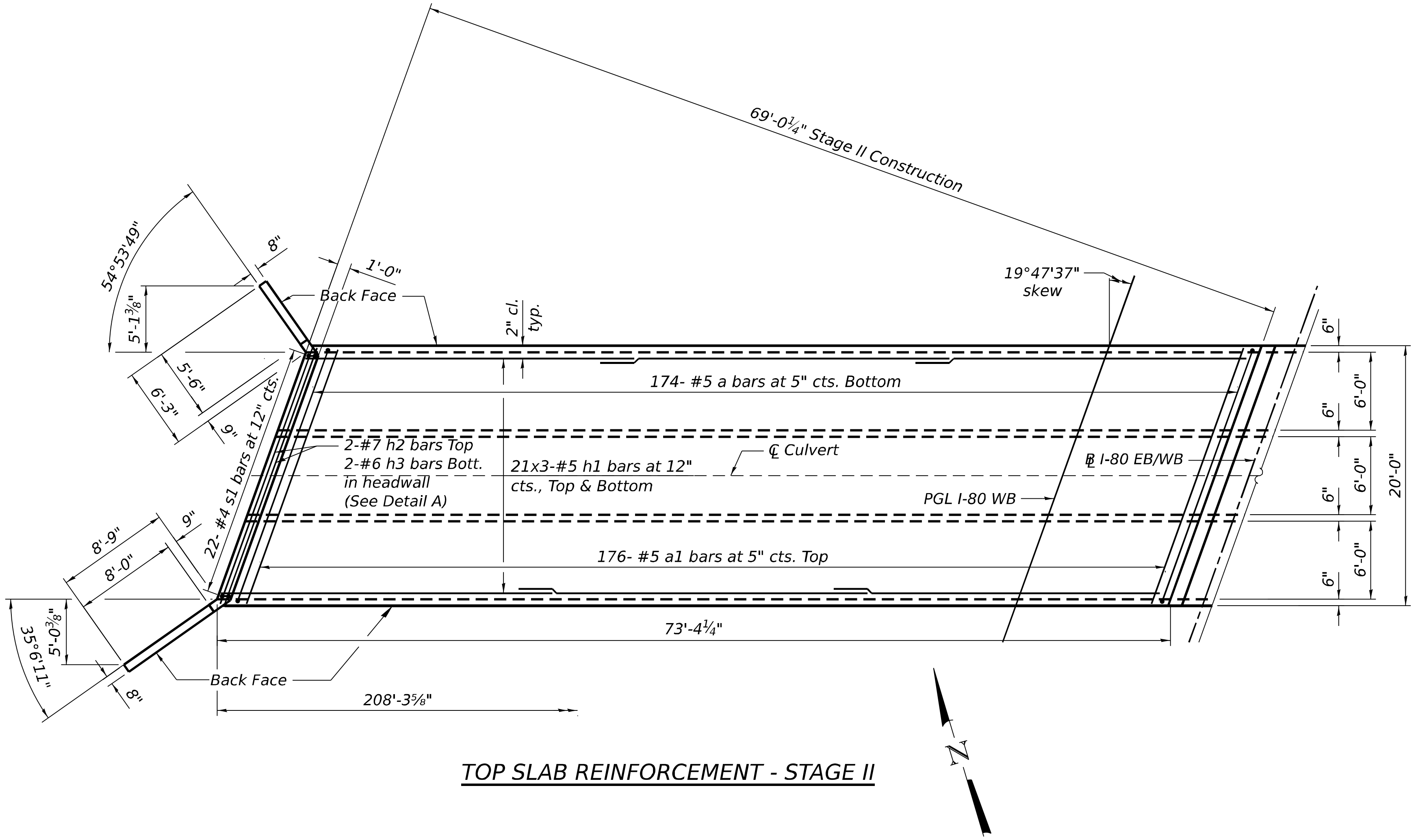


TOP SLAB REINFORCEMENT - STAGE I



TOP SLAB REINFORCEMENT - STAGE II

NOTES:

1. Bar indicated thus 21x5-#5 etc. indicates 21 lines of bars with 5 lengths per line.
2. For Section thru Barrel, Phoebe nesting site, Drain Detail, Bar diagrams, Min Bar Laps and Bill of Material, see Sheet S1-08.
3. For Bottom Slab reinforcement, see Sheet S1-05.
4. For culvert longitudinal sections, see Sheet S1-06.
5. For wingwall sections, and Details A thru C, see Sheet S1-07.

MODEL: Default
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	PLOT DATE =	CHECKED - MI, SK	REVISED -

STATE OF ILLINOIS
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CULVERT PLAN TOP SLAB DETAILS
STRUCTURE NO. 099-8342

SHEET S1-04 OF S1-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	477	288

CONTRACT NO. 62P71

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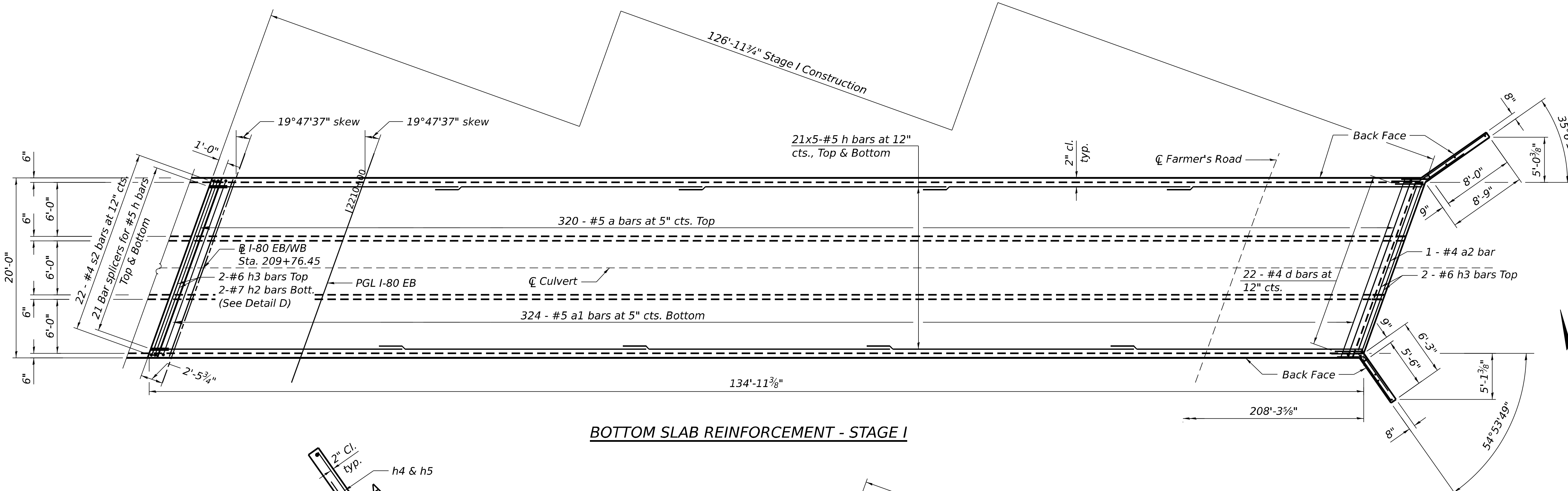
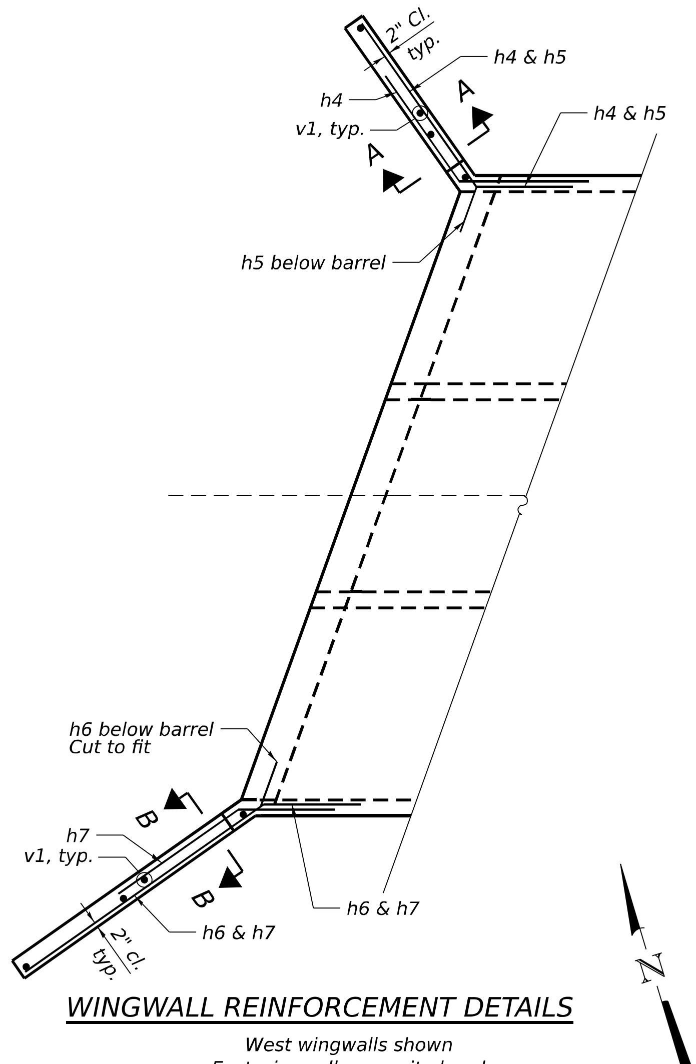
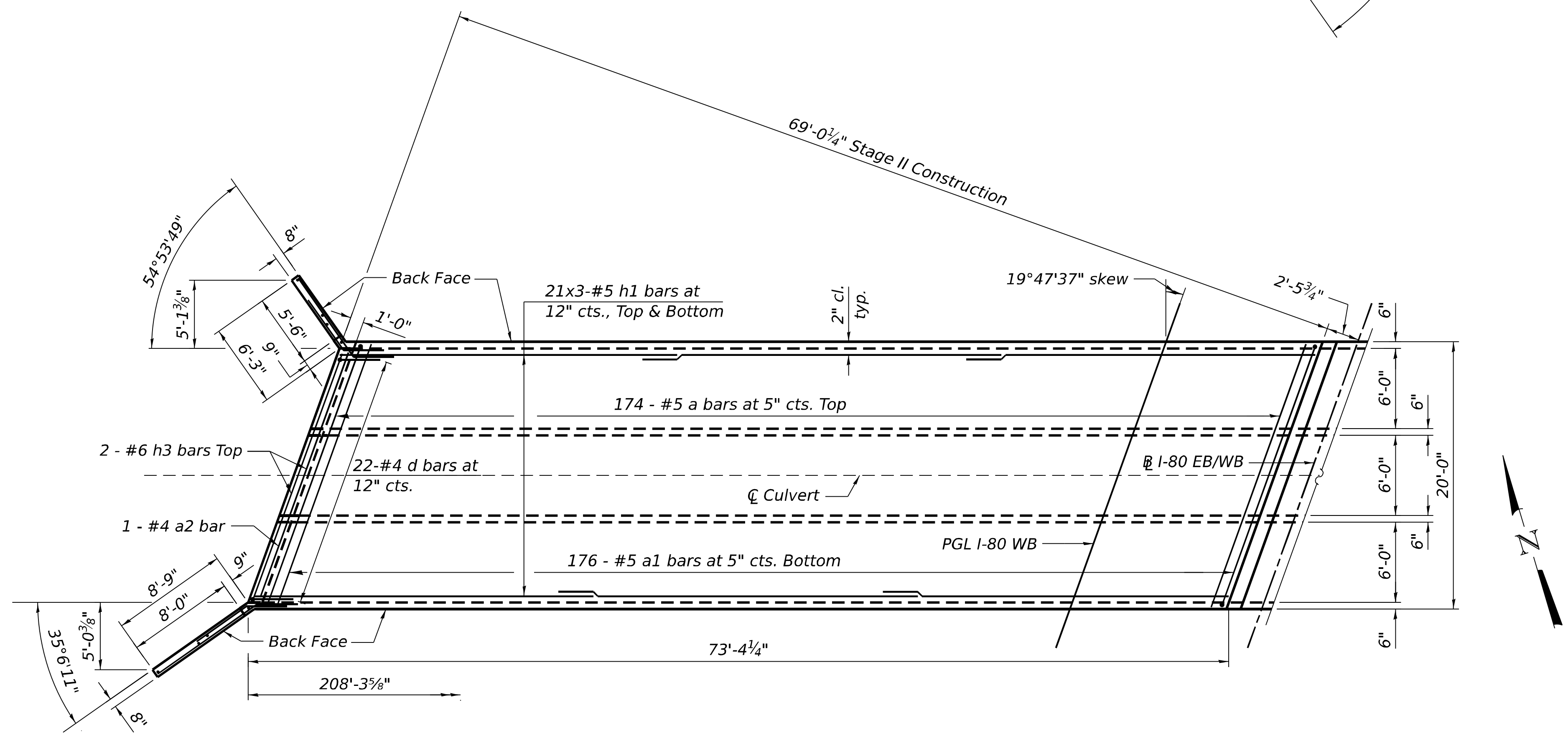


BOTTOM SLAB REINFORCEMENT - STAGE I



WINGWALL REINFORCEMENT DETAILS

West wingwalls shown
East wingwalls opposite hand
Reinforcement in bottom slab not shown for clarity



BOTTOM SLAB REINFORCEMENT - STAGE II

NOTE:
1. For Notes, see Sheet S1-04.
2. For Sections A-A and B-B, and Detail D, see Sheet S1-07.

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STATE OF ILLINOIS
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CULVERT PLAN BOTTOM SLAB DETAILS
STRUCTURE NO. 099-8342

SHEET S1-05 OF S1-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	477	289

CONTRACT NO. 62P71

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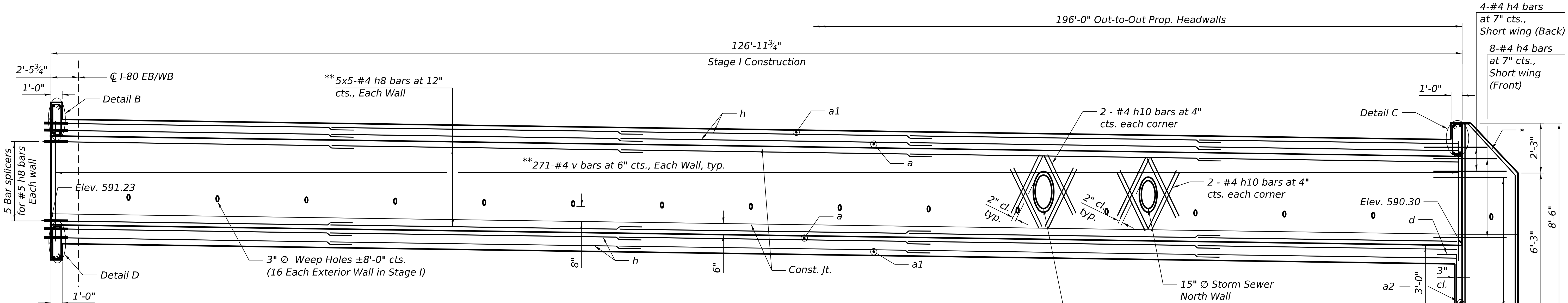
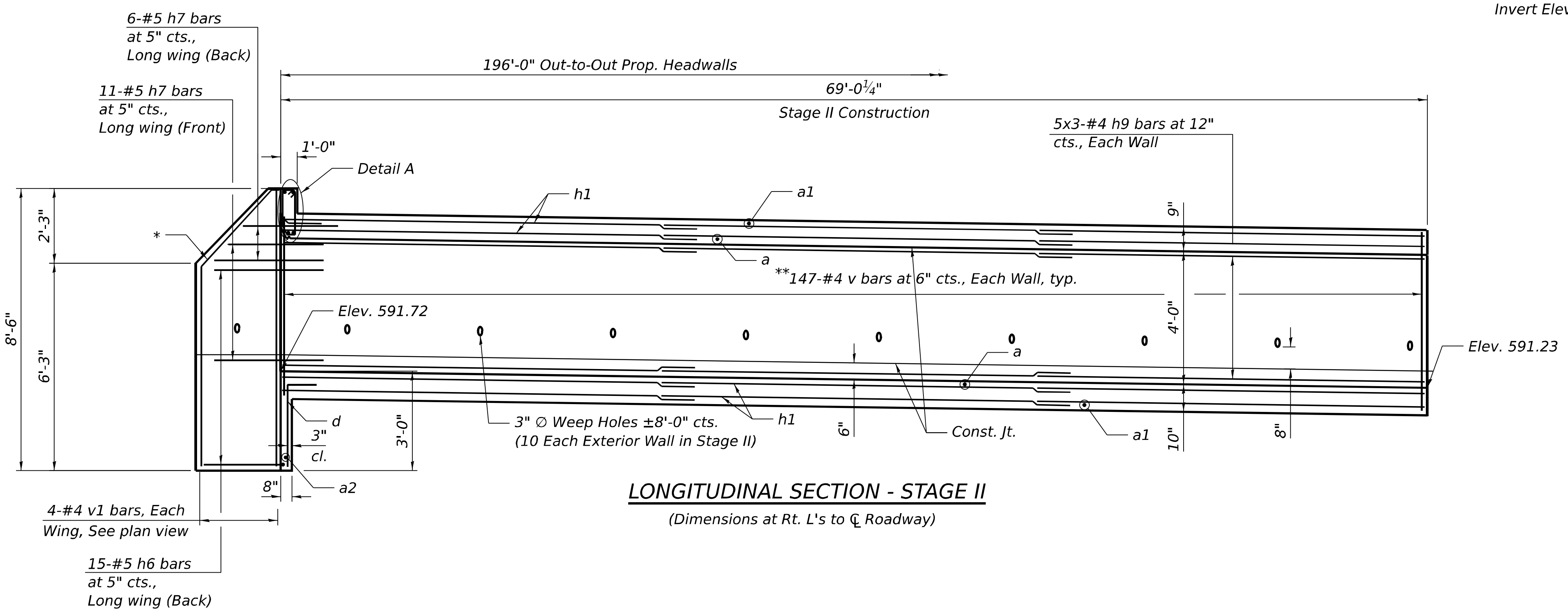


LONGITUDINAL SECTION - STAGE I

(Dimensions at Rt. L's to ℄ Roadway)



LONGITUDINAL SECTION - STAGE II

(Dimensions at Rt. L's to ℄ Roadway)

* Bend in field

** Cut in field to fit at storm sewer penetrations in exterior walls

NOTES:

1. For Notes, see Sheet S1-04.
2. For Details A thru D, See Sheet S1-07.

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STATE OF ILLINOIS
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CULVERT SECTIONS AND DETAILS (SHEET 1 OF 3)
STRUCTURE NO. 099-8342

SHEET S1-06 OF S1-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	477	290

CONTRACT NO. 62P71

ILLINOIS FED. AID PROJECT

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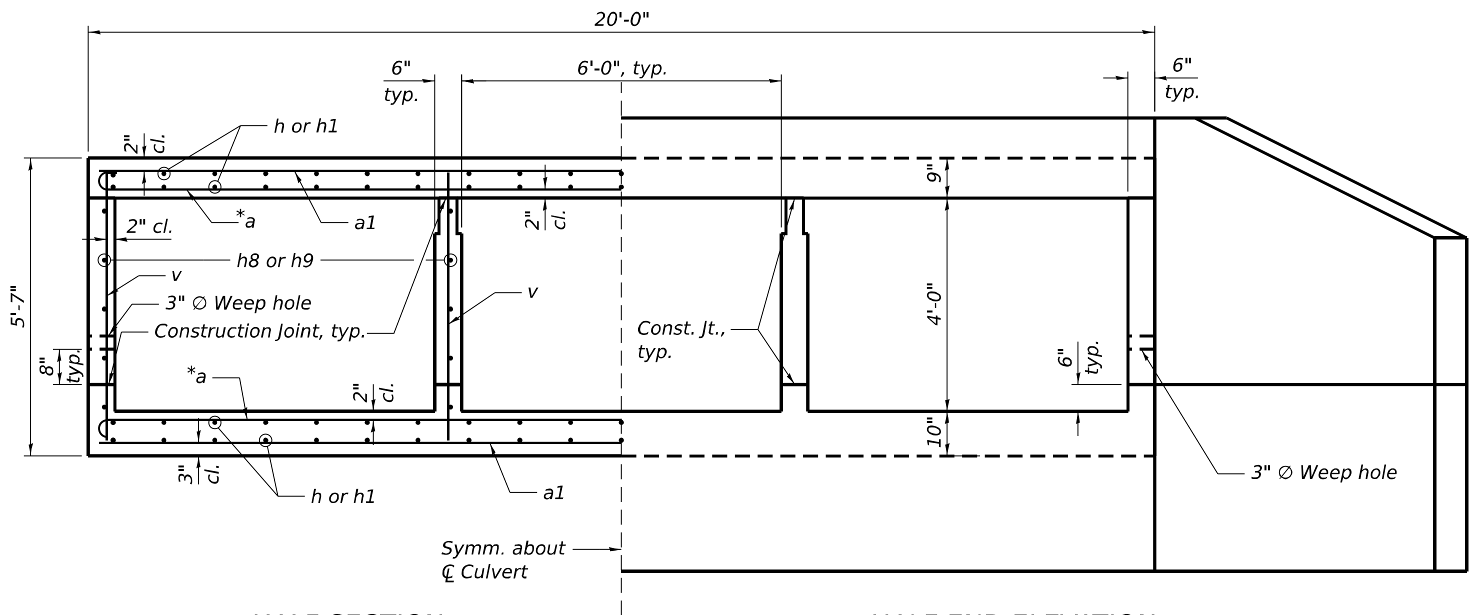
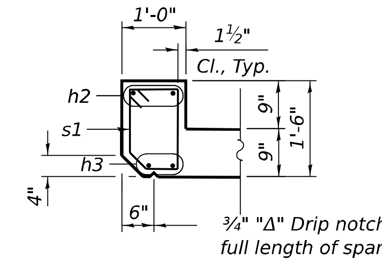


HALF SECTION THRU BARREL

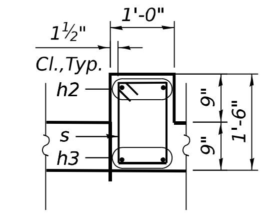
HALF END ELEVATION

*Tilt hook of a bars if necessary for 2" min. cl.



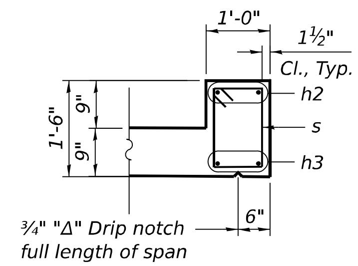
DETAIL A

Upstream
(Reinforcement in top slab omitted for clarity)



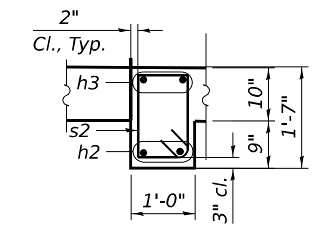
DETAIL B

(Reinforcement in top slab omitted for clarity)



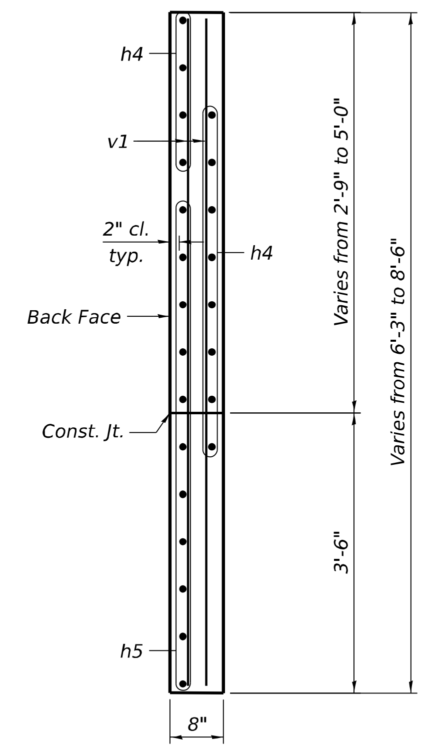
DETAIL C

Downstream
(Reinforcement in top slab omitted for clarity)

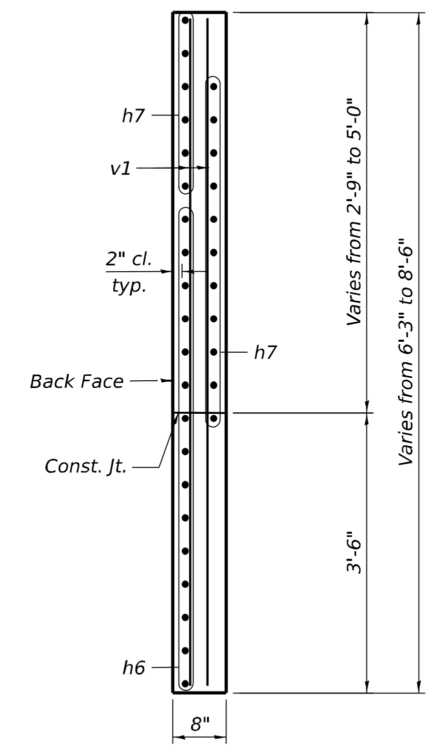


DETAIL D

(Reinforcement in bottom slab omitted for clarity)



SECTION A-A



SECTION B-B

NOTE:

1. For Notes, see Sheet S1-04.

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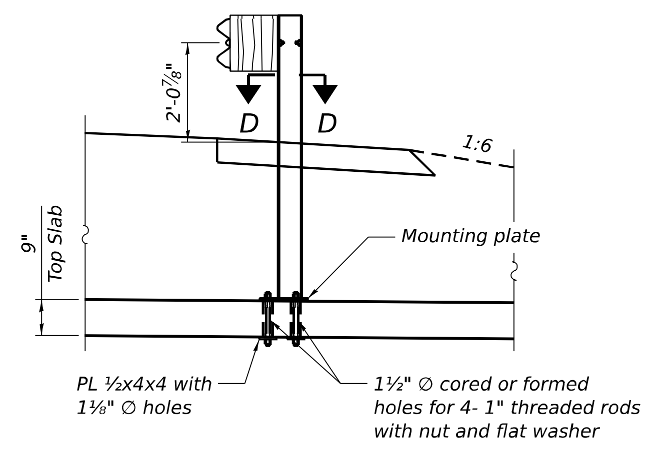
CULVERT SECTIONS AND DETAILS (SHEET 2 OF 3)
STRUCTURE NO. 099-8342

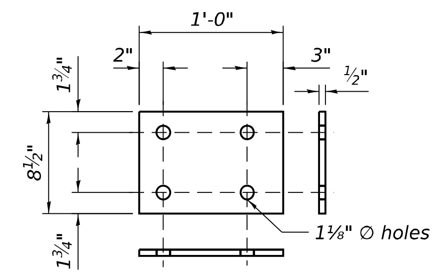
SHEET S1-07 OF S1-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	477	291
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT		

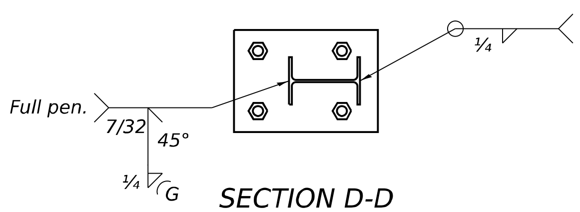


STRONG POST GUARDRAIL ATTACHED TO CULVERT

(Cost for Strong Post Guardrail connection to the top slab modification shall not be paid separately and will be paid under Strong Post Guardrail Attached to Culvert pay item)



MOUNTING PLATE



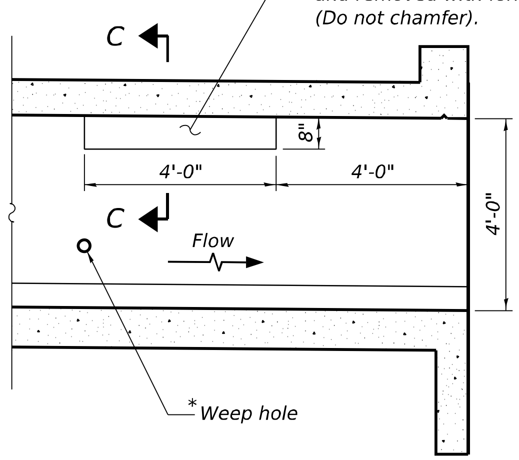
SECTION D-D

BILL OF MATERIAL

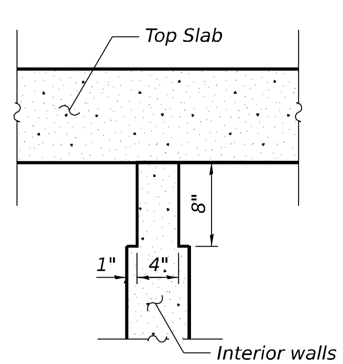
Bar	No.	Size	Length	Shape
a	988	#5	22'-1"	
a1	1000	#5	20'-11"	
a2	2	#4	20'-11"	
d	44	#4	4'-5"	
h	420	#5	28'-9"	
h1	252	#5	25'-10"	
h2	8	#7	20'-11"	
h3	12	#6	20'-11"	
h4	24	#4	8'-0"	
h5	22	#4	9'-3"	
h6	30	#5	11'-9"	
h7	34	#5	8'-0"	
h8	100	#4	28'-4"	
h9	60	#4	25'-6"	
h10	16	#4	3'-0"	
s	44	#4	4'-9"	
s1	22	#4	4'-7"	
s2	22	#4	4'-5"	
v	1672	#4	5'-2"	
v1	16	#4	8'-1"	
Reinforcement Bars			Pound	74,830
Concrete Box Culverts			Cu Yd	315.8
Strong Post Guardrail Attached To Culvert			Foot	75

NOTE:

1. For Notes, see Sheet S1-04.



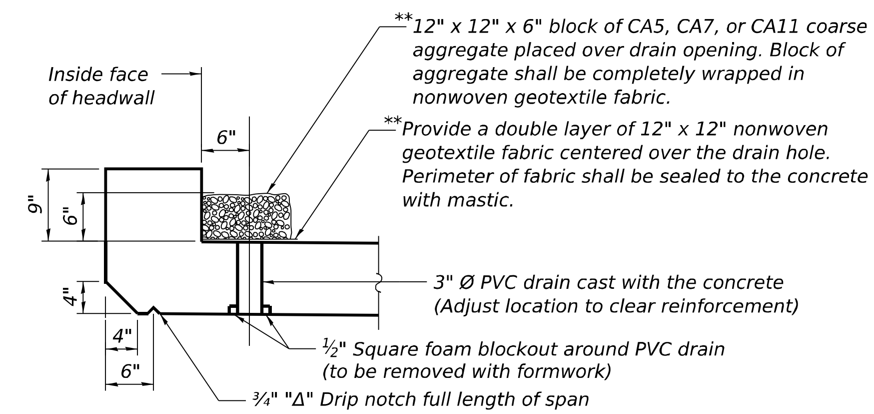
LONGITUDINAL SECTION



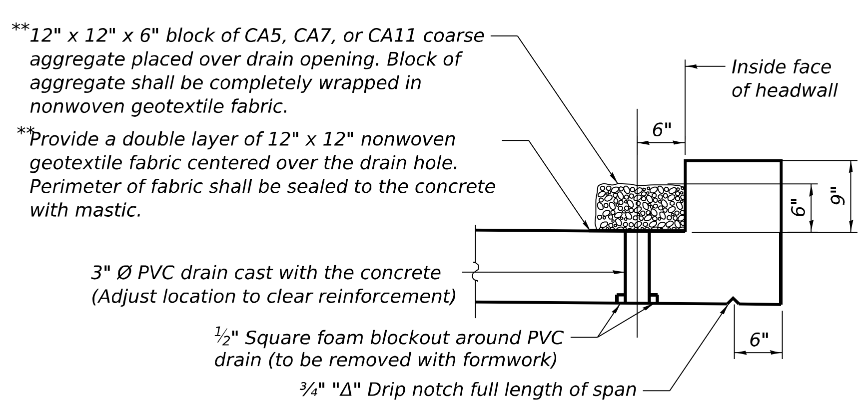
SECTION C-C

PHOEBE NESTING SITE DETAILS

(Downstream end only)



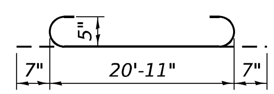
AT UPSTREAM END



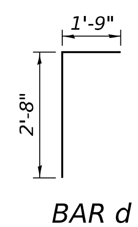
AT DOWNSTREAM END

DRAIN DETAIL

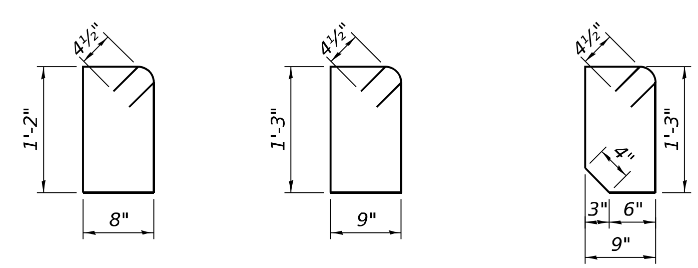
(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)



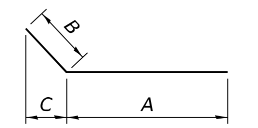
BAR a



BAR d



BARS s2 BARS s BAR s1



Bar	A	B	C
h4	5'-0"	3'-0"	1'-9"
h5	6'-3"	3'-0"	1'-9"
h6	8'-9"	3'-0"	2'-5½"
h7	5'-0"	3'-0"	2'-5½"

MIN. BAR LAP

#4 = 1'-9"

#5 = 2'-2"

* Cost included in Concrete Box Culvert.

** Nonwoven geotextile fabric shall conform to the requirements of Article 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.

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PLOT DATE =	CHECKED - MI, SK	REVISED -	

STATE OF ILLINOIS
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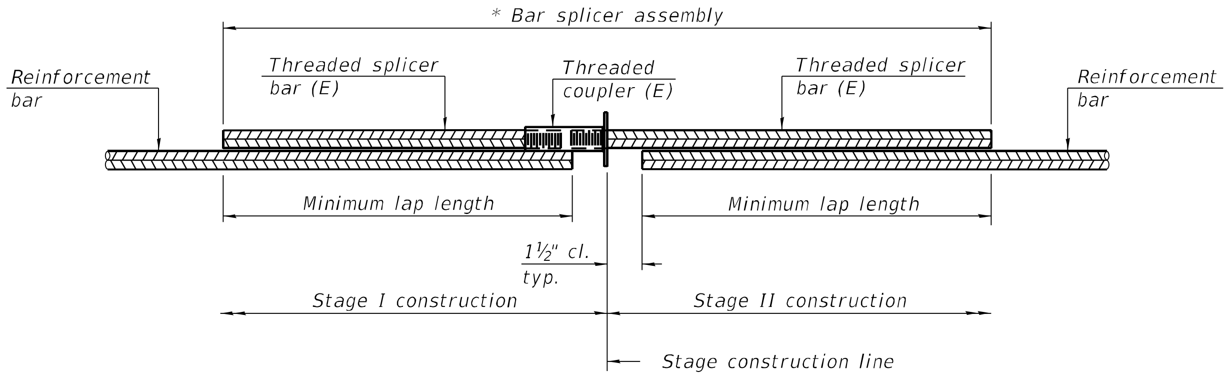
CULVERT SECTIONS AND DETAILS (SHEET 3 OF 3)
STRUCTURE NO. 099-8342

SHEET S1-08 OF S1-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	477	292
		CONTRACT NO. 62P71		
		ILLINOIS	FED. AID PROJECT	



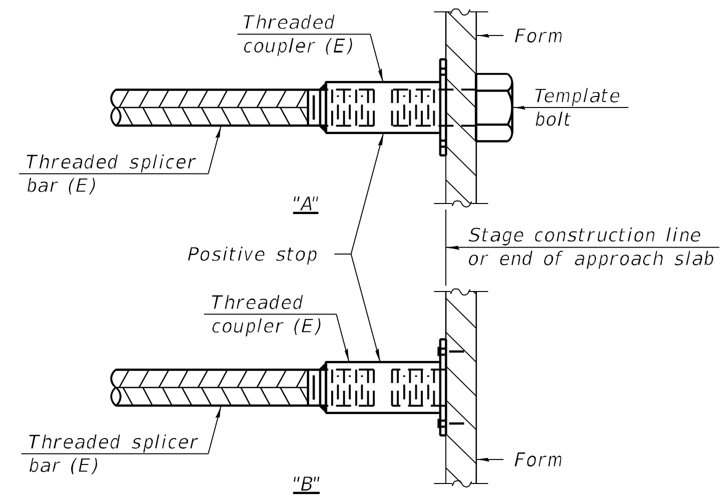
STANDARD BAR SPLICER ASSEMBLY PLAN

Only bar splicer assemblies as presented on the approved QPL list may be used.

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

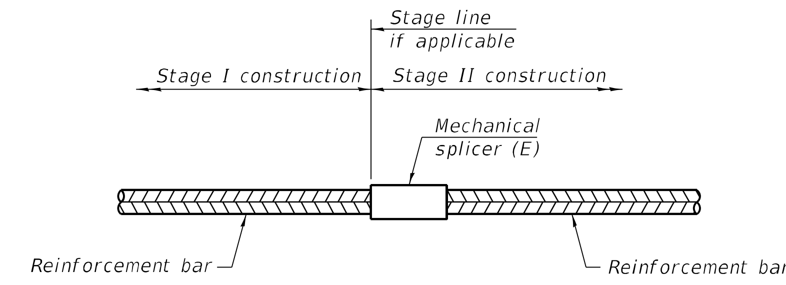
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Top Slab	#5	42	2'-2"
Bottom Slab	#5	42	2'-2"
Side Walls	#4	20	1'-9"



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

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 Speci cations.

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

BSD-1 2-1-2023

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/ML-01_62P71/04-Sheets/04-Structures/Culverts/0998342-D162P71-012-Soil Borings

WANGENGINC 2553801 GPJ WANGENG.GDT 6/3/22

Wang Engineering

wangeng@wangeng.com

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Fax:

Page 1 of 1

BORING LOG I-80-CUL-1-01

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 594.15 ft
North: 1749429.60 ft
East: 1009339.46 ft
Station: 209+28.18
Offset: 72.77 LT

Elevation (ft)	Soil and Rock Description	Depth (ft)
593.7	5-inch thick, black SILTY CLAY --TOPSOIL--	
	Stiff, gray SILTY CLAY, trace gravel; damp --RDR 2--	
589.7	Brown GRAVEL; damp --RDR 2--	
588.7	Medium stiff to hard, brown to gray SILTY CLAY, trace gravel; damp to moist --RDR 2-- --gray-- --moist--	
564.2	Boring terminated at 30.00 ft	30

Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
1	2, 2, 3	1.39 B	25
2	2, 5, 7	1.50 P	23
3	4, 7, 6	2.54 B	19
4	2, 5, 7	4.10 B	19
5	2, 7, 10	7.13 B	16
6	3, 7, 8	2.13 B	16
7	6, 10, 11	2.50 P	20
8	6, 6, 7	2.79 B	17
9	6, 6, 6	2.00 P	17
10	4, 6, 7	0.90 B	18
11	8, 4, 5	0.90 B	18
12	6, 5, 7	1.48 B	18

GENERAL NOTES

Begin Drilling **04-22-2022** Complete Drilling **04-22-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20D25A [83%]**
Driller **KG&TC** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **DRY**
At Completion of Drilling **DRY**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Wang Engineering

wangeng@wangeng.com

Telephone:
Fax:

Page 1 of 1

BORING LOG I-80-CUL-1-02

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 596.44 ft
North: 1749414.49 ft
East: 1009421.68 ft
Station: 209+64.87
Offset: 2.35 RT

Elevation (ft)	Soil and Rock Description	Depth (ft)
595.9	6-inch thick, black SILTY CLAY --TOPSOIL--	
	Stiff to hard, gray CLAY LOAM, trace to little gravel; moist --FILL-- --RDR 2--	
592.4	Black SILTY CLAY, trace organic matter --Buried TOPSOIL--	
590.2	Very stif, gray CLAY to SILTY CLAY, trace organic matter; damp --RDR 2--	
588.4	Medium stiff to very stiff, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist --RDR 2-- --L_L(%)=34, P_L(%)=17-- --%Gravel=2.0-- --%Sand=6.4-- --%Silt=59.1-- --%Clay=32.4-- --slow hard drilling-- --possible cobbles-- --RDR 3--	
561.4	Boring terminated at 35.00 ft	35

Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
1	6, 6, 6	4.67 B	14
2	5, 4, 5	1.50 P	18
3	2, 3, 3	2.21 B	33
4	4, 7, 8	3.00 P	19
5	7, 8, 14	1.39 B	17
6	9, 19, 12	2.79 B	15
7	10, 9, 10	1.50 P	17
8	4, 5, 7	3.53 B	17
9	3, 5, 6	1.89 B	17
10	3, 5, 6	1.80 B	18
11	3, 4, 6	0.90 B	18
12	2, 4, 6	0.57 B	17
13	5, 6, 8	0.82 B	18
14	4, 4, 6	1.39 B	16

GENERAL NOTES

Begin Drilling **04-24-2022** Complete Drilling **04-24-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **PA&TC** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **DRY**
At Completion of Drilling **DRY**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - JJS, EBK, AMS	REVISED -	
	CHECKED - MI, SK	REVISED -	
PLOT SCALE =	DRAWN - EBK, AMS	REVISED -	
PLOT DATE =	CHECKED - MI, SK	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS (SHEET 1 OF 2)
STRUCTURE NO. 099-8342

SHEET S1-10 OF S1-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	477	294

CONTRACT NO. 62P71

ILLINOIS FED. AID PROJECT

5/8/2023 12:04:18 PM

Wang Engineering
wangeng@wangeng.com
Telephone:
Fax:

BORING LOG I-80-CUL-1-03

WEI Job No.: 255-39-01

Client: **Stantec**
Project: **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 595.08 ft
North: 1749373.32 ft
East: 1009537.42 ft
Station: 210+00.49
Offset: 119.91 RT

Elevation (ft)	Soil and Rock Description	Depth (ft)	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
594.7	5-inch thick, black SILTY CLAY --TOPSOIL--					
	Very stiff to hard, brown and gray SILTY CLAY LOAM to CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--		1	4, 6, 4	2.79 S	15
590.6			2	4, 4, 7	4.00 P	17
	Very stiff (2.00P), black SILTY CLAY LOAM; damp --Buried TOPSOIL--	5				
589.6	Stiff to hard, brown to gray SILTY CLAY, trace to some gravel; damp --RDR 2--		3	2, 3, 6	2.00 P	17
	--L_L(%)=35, P_L(%)=18-- --%Gravel=1.4-- --%Sand=6.6-- --%Silt=59.8-- --%Clay=32.3--		4	4, 5, 8	3.03 B	18
		10	5	3, 9, 10	5.58 B	14
			6	4, 6, 8	5.49 B	15
		15	7	6, 7, 7	3.28 B	15
			8	4, 6, 6	3.77 B	18
		20	9	4, 4, 7	2.13 B	17
			10	3, 6, 6	1.80 B	16
		25	11	4, 5, 7	1.72 B	16
			12	3, 5, 6	1.97 B	17
565.1	Boring terminated at 30.00 ft	30				
		35				
		40				

GENERAL NOTES

Begin Drilling **04-11-2022** Complete Drilling **04-11-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **DRY**
At Completion of Drilling **DRY**
Time After Drilling **NA**
Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 2553901.GPJ WANGENG.GDT 6/3/22

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/MI-01_62P71/04-Sheets/04-Structures/Culverts/0998342-D162P71-013-Soil Borings 2

HBM ENGINEERING GROUP, LLC	USER NAME =	DESIGNED - JJS, EBK, AMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS (SHEET 2 OF 2) STRUCTURE NO. 099-8342	F.A.I. RTE. 80	SECTION 2021-151-B	COUNTY WILL	TOTAL SHEETS 477	SHEET NO. 295
		CHECKED - MI, SK	REVISED -					CONTRACT NO. 62P71		
	PLOT SCALE =	DRAWN - EBK, AMS	REVISED -							
	PLOT DATE =	CHECKED - MI, SK	REVISED -		SHEET S1-11 OF S1-11 SHEETS		ILLINOIS	FED. AID PROJECT		

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Bench Mark: Set 2" CWA aluminum disc in concrete pier seat in southerly pier of Shepley Road bridge on south side of eastbound I-80. Elev. 599.98

Existing Structure: The existing structure consists of two 4'x3' (WxH) reinforced concrete box culvert with 48" RCP underneath I-80 and Frontage road (Ingolsby Road). The original 4'x3' structures was constructed in 1959 under FAI Rte. 80, Section 99-1, Project I-80-4(12)124. The box culvert underneath I-80 is approaximately 150' long and the box culvert underneath Frontage Road is 44' long both with 25° Skew. The culvert consists of a 6" thick top slab, 7" bottom slab, 6" sidewalls with horizontal cantilever wingwalls with maximum fill height of approximately 6'. The existing structure to be removed and replaced.

Salvage: No salvage.
Traffic to be maintained utilizing Stage Construction.

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

DESIGN SPECIFICATIONS

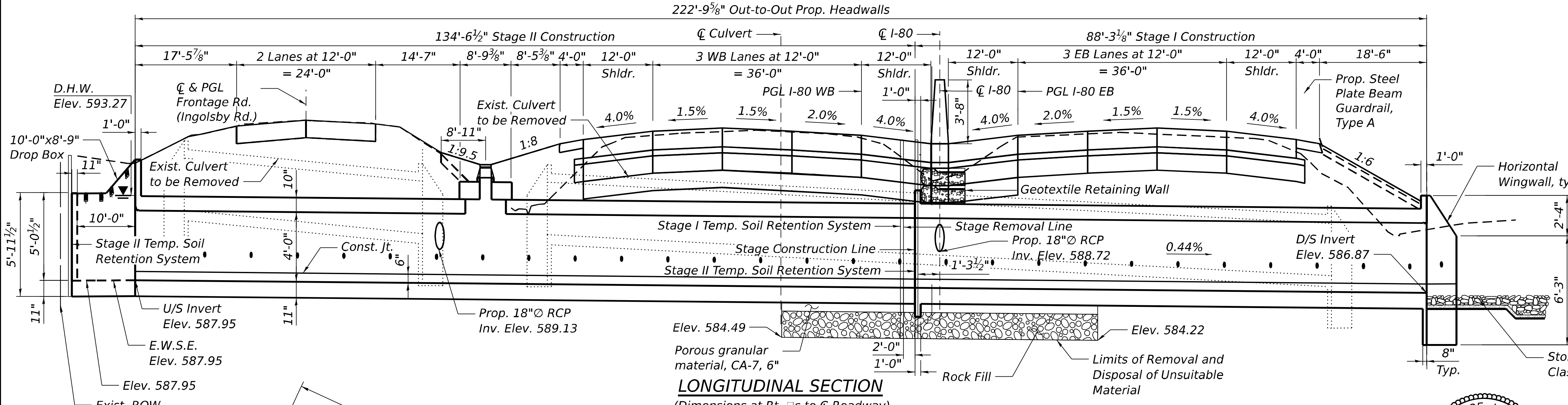
2020 AASHTO LRFD Bridge Design Specifications, 9th Edition.
IDOT Culvert Manual, 2017.

LOADING HL-93

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

LEGEND:

- Soil Boring
- Rock Fill
- Stone Riprap
- Limits of Rock Fill
- Exist. Fiber Optic
- Exist. Fence
- Exist. ROW
- Prop. Storm Sewer
- Prop. Pipe Underdrain
- Prop. TSRS

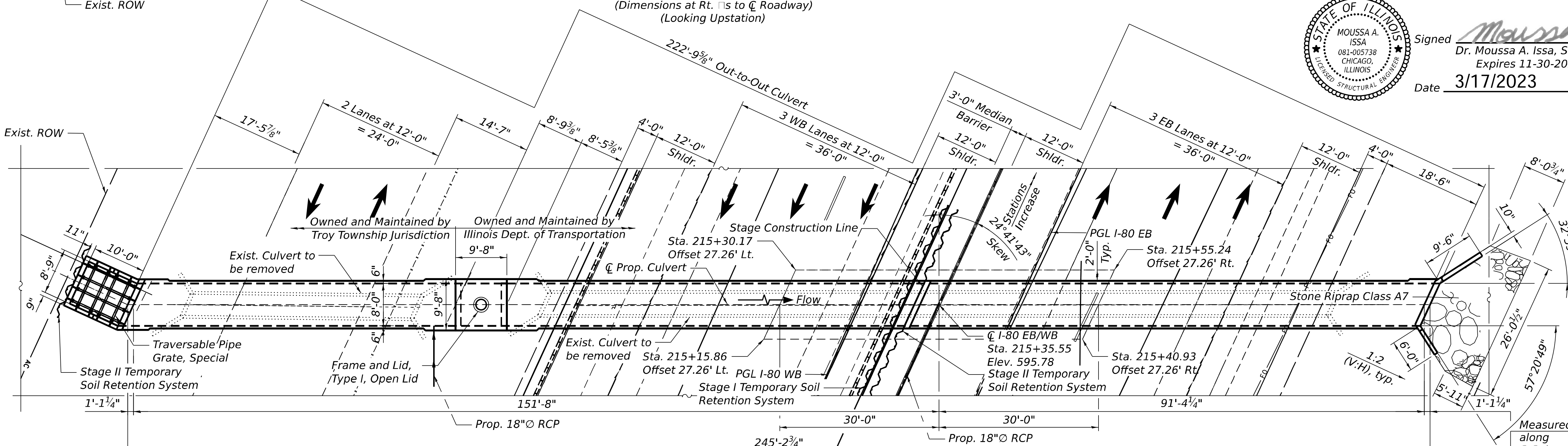


LONGITUDINAL SECTION

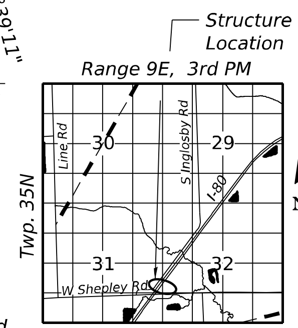
(Dimensions at Rt. ∠s to ℄ Roadway)
(Looking Upstation)

STATE OF ILLINOIS — MOUSSA A. ISSA — 081-005738 — CHICAGO, ILLINOIS — LICENSED STRUCTURAL ENGINEER

Signed Moussa A. Issa
Dr. Moussa A. Issa, S.E. IL. Lic. No. 081-005738
Expires 11-30-2024
Date 3/17/2023 For Sheets S2-01 Thru S2-16



PLAN



LOCATION SKETCH

WATERWAY INFORMATION - INGOLSBY CULVERT

Drainage Area = 0.2 Sq. Mi.
Exist. Overtopping Elev. = 596.91 at Sta. 215+50
Prop. Overtopping Elev. = 596.91 at Sta. 215+50

Flood	Freq. Yr.	Q C.F.S.	Opening Ft² Exist.	Opening Ft² Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	82	2.0	24.0	592.95	2.88	0.0	595.83	592.95
Design	50	167	4.0	24.0	593.27	3.40	0.2	596.67	593.47
Base	100	218	4.0	24.0	593.41	3.40	2.88	596.81	596.29
Overtopping	>500								
Max. Calc.	500	302	5.0	24.0	593.64	3.35	3.12	596.99	596.76

10-Year Velocity through Exist. Culvert = 6.8 ft/s
10-Year Velocity through Prop. Culvert = 4.8 ft/s

WATERWAY INFORMATION - I-80 CULVERT

Drainage Area = 0.2 Sq. Mi.
Exist. Overtopping Elev. = 596.46 at Sta. 215+50
Prop. Overtopping Elev. = 596.61 at Sta. 215+50

Flood	Freq. Yr.	Q C.F.S.	Opening Ft² Exist.	Opening Ft² Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	86	12.0	32.0	N/A			594.76	590.76
Design	50	167	12.0	32.0	N/A			595.67	592.77
Base	100	218	12.0	32.0	N/A			595.67	594.58
Overtopping	>500								
Max. Calc.	500	302	12.0	32.0	N/A			596.10	595.67

10-Year Velocity through Exist. Culvert = 14.0 ft/s
10-Year Velocity through Prop. Culvert = 7.0 ft/s

GENERAL PLAN & ELEVATION
EB&WB I-80 OVER RIVER ROAD ZONE A
F.A.I. ROUTE 180
SEC - 2021-151-B
WILL COUNTY
STA. 215+35.55
S.N. 099-8343

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - JJS, EBK, HI	REVISED -
	CHECKED - MI, LAB	REVISED -
PLOT SCALE =	DRAWN - EBK, HI	REVISED -
PLOT DATE =	CHECKED - MI, LAB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 099-8343
SHEET S2-01 OF S2-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	477	296

CONTRACT NO. 62P71
ILLINOIS FED. AID PROJECT

GENERAL NOTES:

1. A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.

2. It will be the responsibility of the Contractor to direct the stream flow during construction in order to keep the construction areas free of water. The method of water diversion shall be subject to the approval of the Engineer and cost shall be included with the cost of the Concrete Box Culverts.

3. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

4. The limits and quantities of removal and replacement shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.

5. The Rock fill shall be capped with 6 inches of CA-7 and satisfy the Standard Specifications unless otherwise indicated in the Special Provisions. The cost of the capping material shall be included in the pay item for Rock fill.

6. A cantilever sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

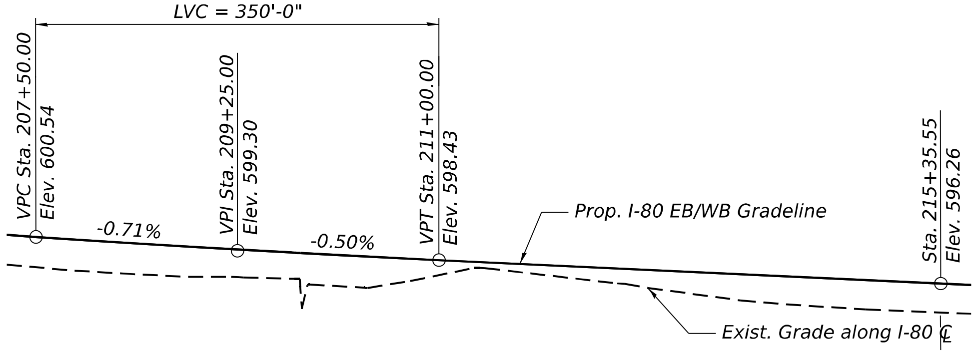
INDEX OF SHEETS

STATION 215+35.55
BUILT 20__ BY
STATE OF ILLINOIS
F.A.I. RTE. I-80
SECTION 2021-151-B
LOADING HL-93
STRUCTURE NO. 099-8343

NAME PLATE
See Std. 515001

TOTAL BILL OF MATERIAL

Item	Unit	Total
Removal Of Existing Structures No. 2	Each	1
Removal And Disposal Of Unsuitable Material For Structures	Cu Yd	122
Reinforcement Bars	Pound	51,440
Bar Splicers	Each	50
Name Plates	Each	1
Temporary Soil Retention System	Sq Ft	471
Geotextile Retaining Wall	Sq Ft	70
Concrete Box Culverts	Cu Yd	197.2
Frames And Lids, Type 1, Open Lid	Each	1
Traversable Pipe Grate, Special	Foot	75
Rock Fill	Cu Yd	67
Temporary Support System	Each	1



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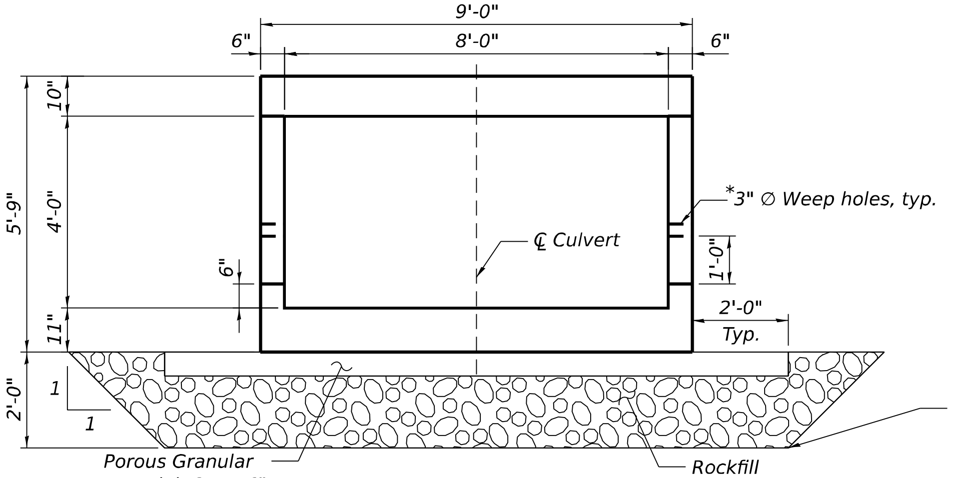
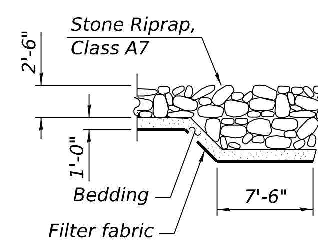
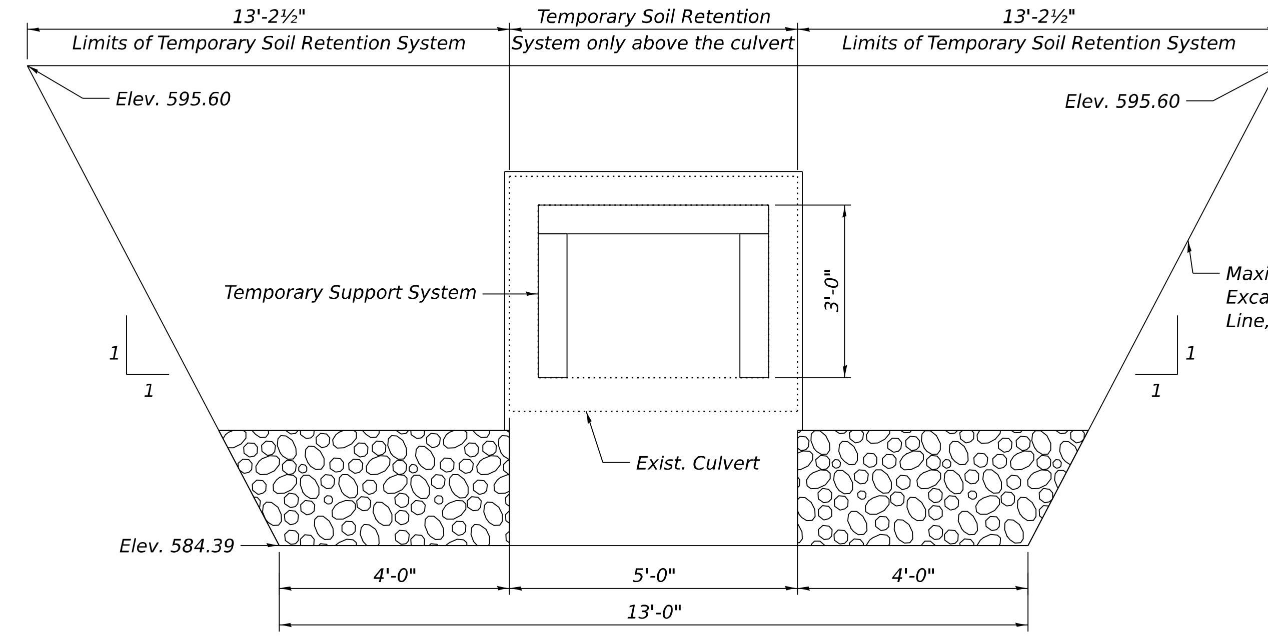


SECTION THRU BARREL

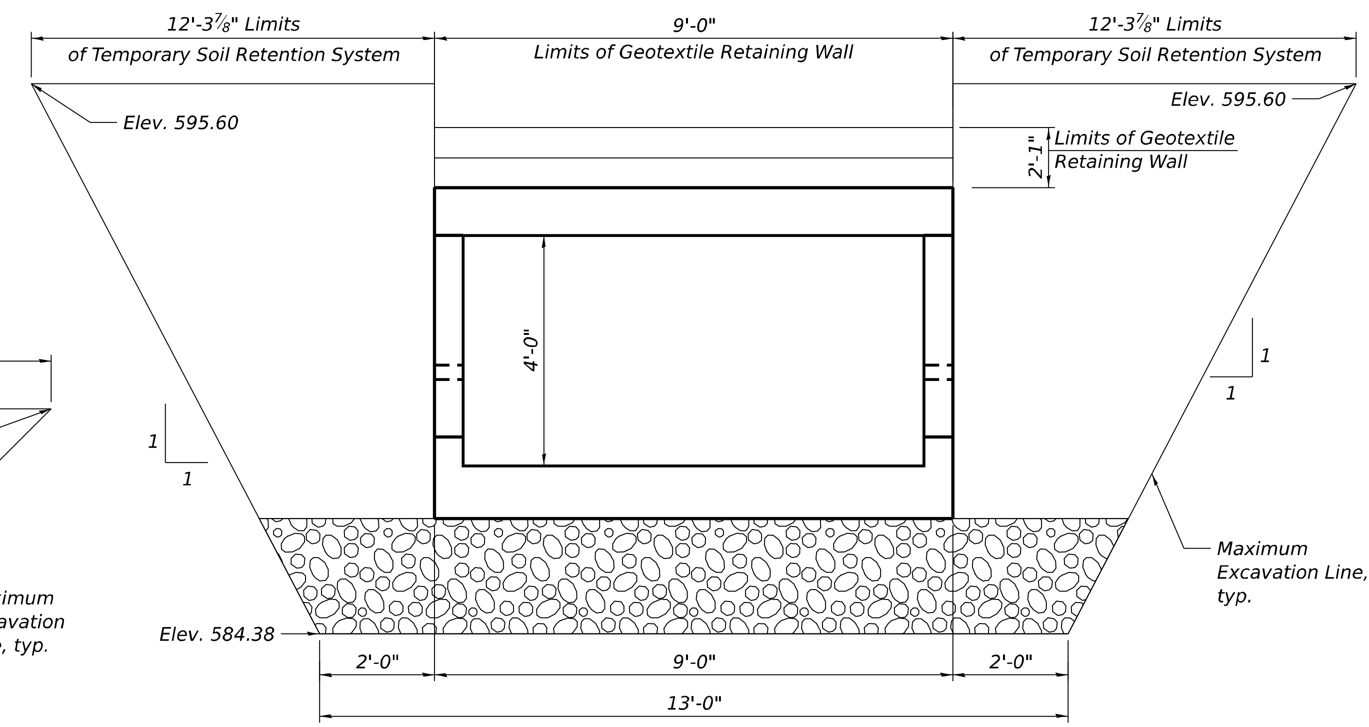


SECTION A-A
(See Note 2)

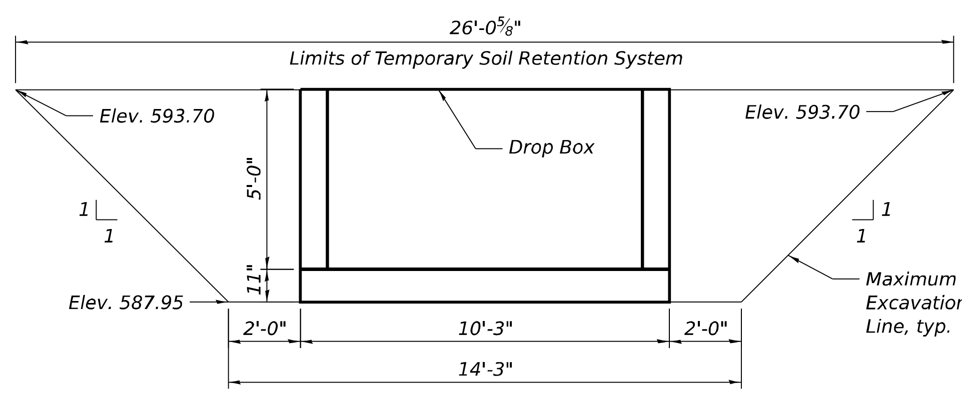
*Cost included in Concrete Box Culverts.



STAGE I - TEMPORARY SOIL RETENTION SYSTEM



STAGE II - TEMPORARY SOIL RETENTION SYSTEM
(At Stage Construction Line)



STAGE II - TEMPORARY SOIL RETENTION SYSTEM
(Behind Drop Box)

NOTES:

1. For Temporary Support System, see Special Provision.

2. For Stone Riprap, Class A7 and Filter Fabric pay items, see Roadway Plans.

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HBM ENGINEERING GROUP, LLC	USER NAME =	DESIGNED - JJS, EBK, HI	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED - MI, LAB	REVISED -	
	PLOT SCALE =	DRAWN - EBK, HI	REVISED -	
	PLOT DATE =	CHECKED - MI, LAB	REVISED -	

GENERAL NOTES, INDEX OF SHEETS & TOTAL BILL OF MATERIAL
STRUCTURE NO. 099-8343
SHEET S2-02 OF S2-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	477	297

CONTRACT NO. 62P71
ILLINOIS FED. AID PROJECT

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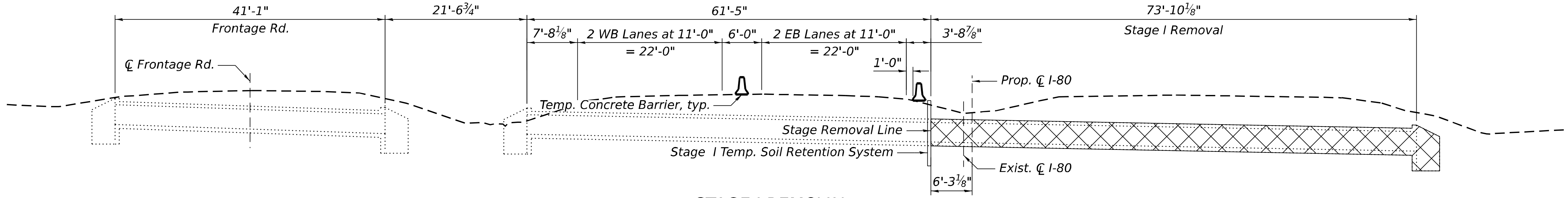
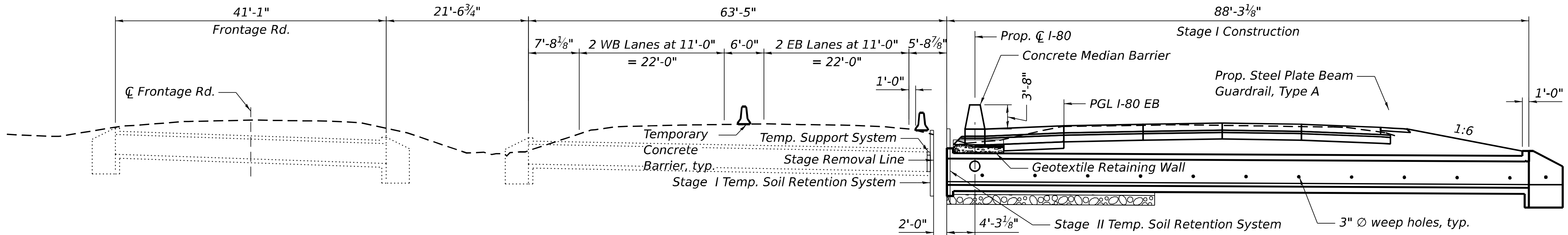
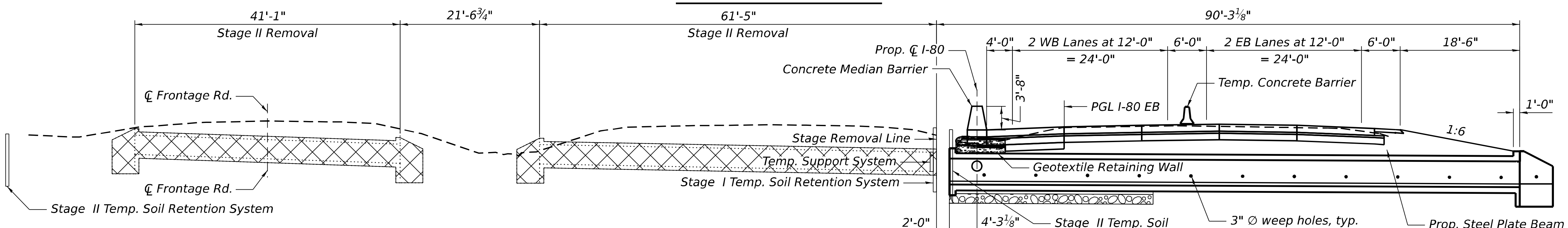


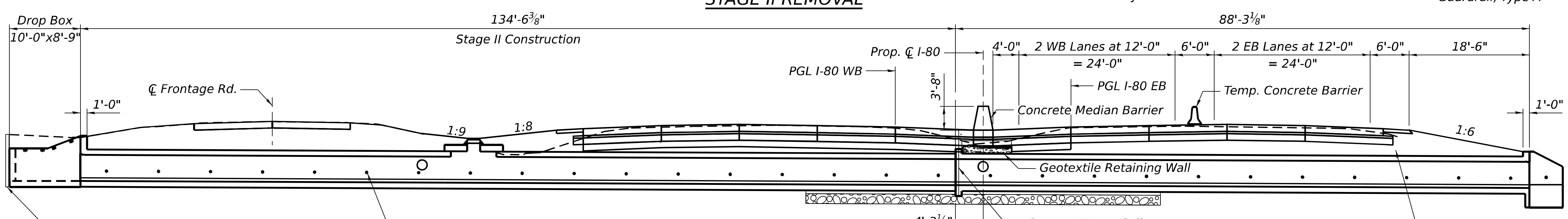
STAGE I REMOVAL



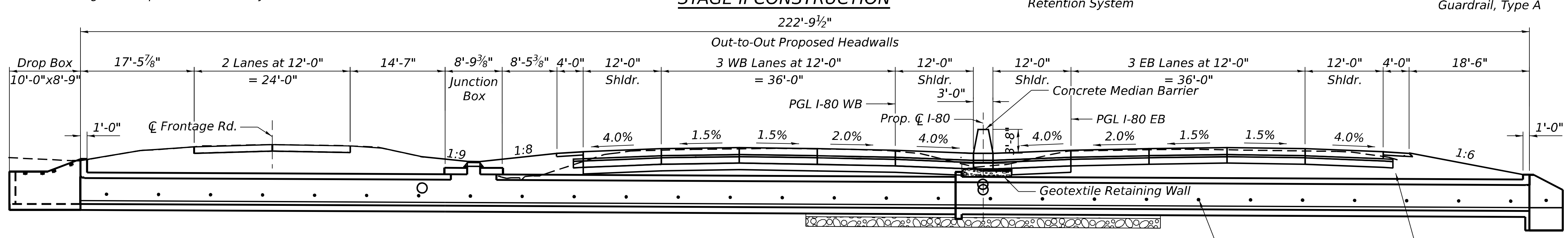
STAGE I CONSTRUCTION



STAGE II REMOVAL



STAGE II CONSTRUCTION



FINAL CROSS SECTION

STAGE I REMOVAL

1. Install temporary concrete barrier as shown to locate construction work areas on the east side of the existing structure.
2. Install Temporary Soil Retention System as shown.
3. Remove portions of existing pavement on east side of the roadway.
4. Remove the 81'-3⅜" portion of the east culvert barrel, and remove the east headwall and wingwalls.

STAGE I CONSTRUCTION

1. Install Temporary Support System as shown.
2. Construct 97'-1¾" portion of the east culvert barrel and construct the east headwall and wingwalls.
3. Install Geotextile Retaining Wall.
4. Construct the pavement and shoulder on the east side of the roadway.

STAGE II REMOVAL

1. Install temporary concrete barrier as shown to locate construction work areas on the west side of the existing structure.
2. Install Temporary Soil Retention System at the Stage Construction Line as shown.
3. Install Temporary Soil Retention System at West End of the Culvert (Close to the ROW)
4. Remove portions of existing pavement on west side of the I-80 roadway and Frontage road.
5. Remove the remaining portions of the East Culvert under I-80 and the West Culvert under the Frontage Road.

STAGE II CONSTRUCTION

1. Construct 148'-1" portion of the west culvert barrel and Junction Box attached.
2. Construct the 10'-0"x8'-9" Drop box at the west of the culvert barrel.
3. Construct the pavement and shoulders on the west side of the I-80 roadway and Frontage road.

LEGEND

Removal Of Existing Structures No. 2

RockFill

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - JJS, EBK, HI	REVISED -
	CHECKED - MI, LAB	REVISED -
PLOT SCALE =	DRAWN - EBK, HI	REVISED -
PLOT DATE =	CHECKED - MI, LAB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE REMOVAL AND CONSTRUCTION
STRUCTURE NO. 099-8343

SHEET S2-03 OF S2-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	477	298
		CONTRACT NO. 62P71		
		ILLINOIS FED. AID PROJECT		

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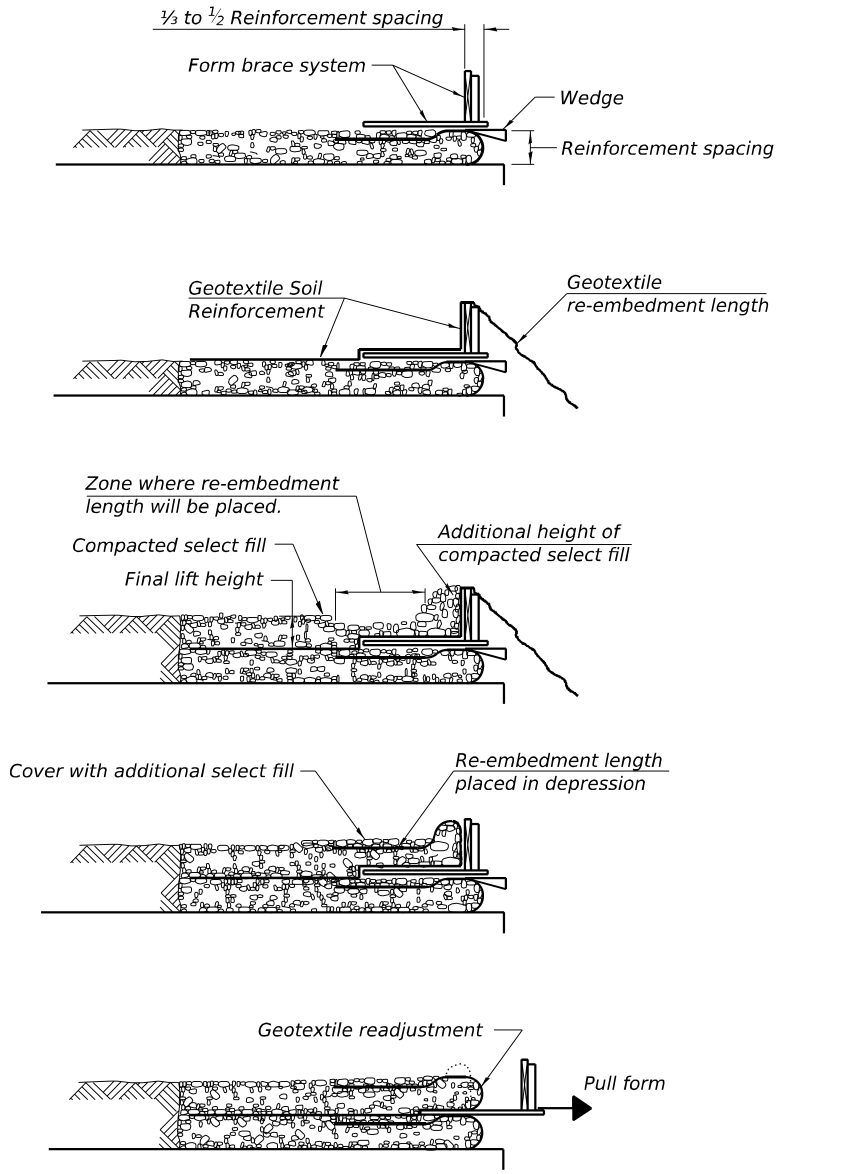
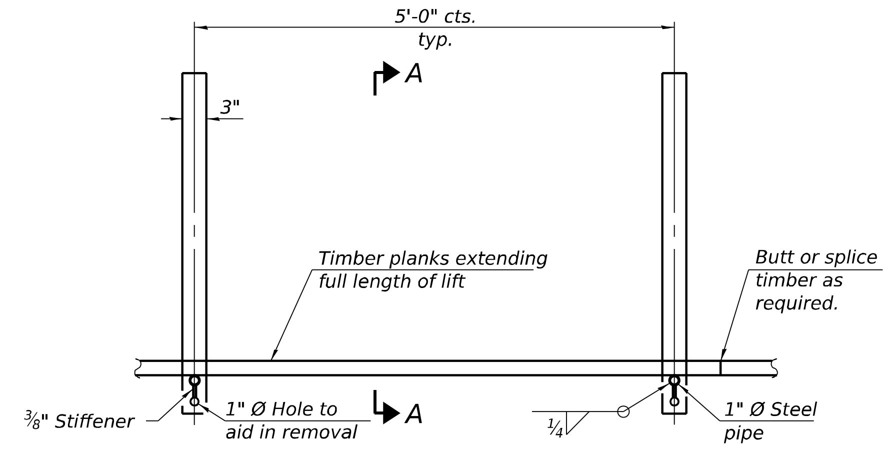


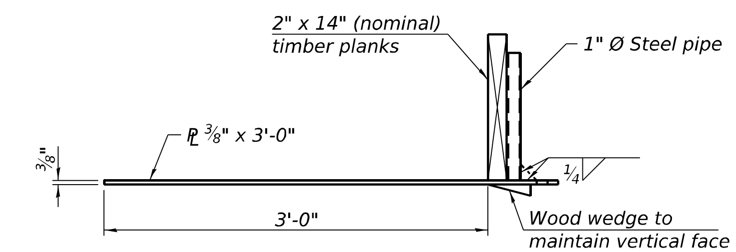
1. Place form brace system on completed reinforcement level; back from the finished fabric face a distance of ⅓ to ½ the geotextile reinforcement spacing.
2. Position fabric so that the required geotextile re-embedment length extends over the top of the form brace and the design reinforcement width is placed with no slack against the previous level.
3. Compact select fill material in lifts to final lift height, create (±3") depression in zone where re-embedment length will be located and place additional height of compacted select fill against form brace.
4. Fold geotextile re-embedment length back over form brace into zone where depression was made in select fill and place additional select fill (±3") to embed geotextile and bring to final lift height.
5. Pull form brace outward allowing geotextile face to slightly readjust to form tight round face level with plan reinforcement spacing.

GEOTEXTILE WALL CONSTRUCTION SEQUENCE

Note:
The geotextile soil reinforcement shall have a minimum allowable tensile strength (T min.) of 25 lb./in. as determined by the procedure described in the Special Provision. The computations supporting the determination of (T min.) shall be submitted to the engineer for approval.



PLAN



SECTION A-A

Note:
This is a suggested detail, the Contractor is responsible for the design of the form brace system to be used.

GEOTEXTILE FORM BRACE DETAIL

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:TRANSYSCORP-PW1-HOSTED/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/ML-01_62P71/04-Sheets/04-Structures/Culverts/0998343-D162P71-023-Geotextile wall

HBM ENGINEERING GROUP, LLC	USER NAME =	DESIGNED - JJS, EBK, HI	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GEOTEXTILE WALL DETAILS STRUCTURE NO. 099-8343
		CHECKED - MI, LAB	REVISED -		
	PLOT SCALE =	DRAWN - EBK, HI	REVISED -		
	PLOT DATE =	CHECKED - MI, LAB	REVISED -		SHEET S2-04 OF S2-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	477	299
		CONTRACT NO. 62P71		
	ILLINOIS	FED. AID PROJECT		

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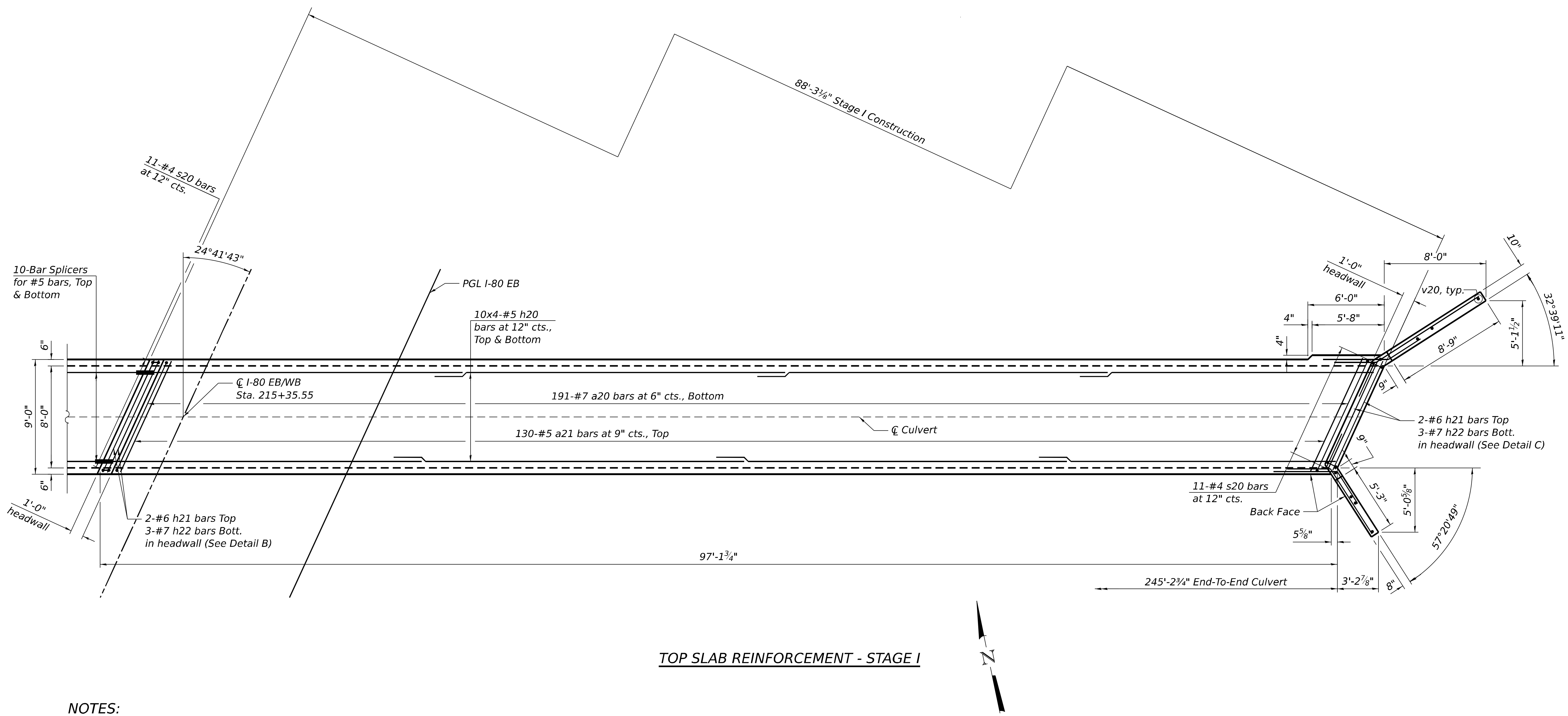

TOP SLAB REINFORCEMENT - STAGE I

NOTES:

1. Bar indicated thus 10x4-#5 etc. indicates 10 lines of bars with 4 lengths per line.
2. For Section thru Barrel, Wingwall Sections, Drain Detail, Bar diagrams and Bill of Material, see Sheet S2-13.
3. For Bottom Slab reinforcement, see Sheets S2-07 and S2-08.
4. For culvert longitudinal sections and Details A thru C, see Sheet S2-09.

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:TRANSYSCORP-PW1-HOSTED/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/ML-01_62P71/04-Sheets/04-Structures/Culverts/0998343-D162P71-024-Top Slab 1

HBM ENGINEERING GROUP, LLC	USER NAME =	DESIGNED - JJS, SK, HI	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CULVERT PLAN TOP SLAB DETAILS (SHEET 1 OF 2) STRUCTURE NO. 099-8343	F.A.I. RTE. 80	SECTION 2021-151-B
		CHECKED - MI, LAB	REVISED -				
	PLOT SCALE =	DRAWN - EBK, HI	REVISED -				
	PLOT DATE =	CHECKED - MI, LAB	REVISED -		SHEET S2-05 OF S2-16 SHEETS		

COUNTY	TOTAL SHEETS	SHEET NO.
WILL	477	300

CONTRACT NO. 62P71

ILLINOIS FED. AID PROJECT

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