

p:\1\Project\WISAMER\jacobs.com\NAIDocuments\C0220600_194_U.S. 41\C090306001700cad713ra062V17 (ITS Cabinet Replacement)010_001_D162V17-shi-SOQ.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE					
				90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE		
				COOK	LAKE	COOK	LAKE		
				005	005	044	044		
				ROADWAY	ROADWAY	ITS	ITS		
21101645	TOPSOIL FURNISH AND PLACE, 12"	SQ YD	111	106.00	5.00	-	-		
25000210	SEEDING, CLASS 2A	ACRE	0.13	0.11	0.02	-	-		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	2.88	2.40	0.48	-	-		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	2.88	2.40	0.48	-	-		
25100630	EROSION CONTROL BLANKET	SQ YD	300	300	-	-	-		
28000510	INLET FILTERS	EACH	12	12.00	-	-	-		
31102000	SUBBASE GRANULAR MATERIAL, TYPE C	CU YD	5.60	5.60	-	-	-		
44001980	CONCRETE BARRIER REMOVAL	FOOT	214	214	-	-	-		
44004250	PAVED SHOULDER REMOVAL	SQ YD	164	164.00	-	-	-		
44200990	CLASS B PATCHES, TYPE I, 12 INCH	SQ YD	9	9.00	-	-	-		
44200994	CLASS B PATCHES, TYPE II, 12 INCH	SQ YD	81	81.00	-	-	-		
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	260	260.00	-	-	-		
* 63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	2	2.00	-	-	-		
63100089	TRAFFIC BARRIER TERMINAL, TYPE 6B	EACH	1	1	-	-	-		
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1, (SPECIAL) TANGENT	EACH	1	1	-	-	-		
63700805	CONCRETE BARRIER TRANSITION	FOOT	40	40.00	-	-	-		

* SPECIALTY ITEM

REVISED SHEET 9/10/2024

SOQ-01



USER NAME = korabmp	DESIGNED - MPK	REVISED -
	DRAWN - MPK	REVISED -
PLOT SCALE =	CHECKED - CRH	REVISED -
PLOT DATE = 6/28/2024	DATE - 2/9/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US41	FAP 0346 23 SIGN	COOK/LAKE	208	4
CONTRACT NO. 62V17			ILLINOIS FED. AID PROJECT	

REV-SEP

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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE					
				90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE		
				COOK	LAKE	COOK	LAKE		
				005	005	044	044		
				ROADWAY	ROADWAY	ITS	ITS		
* 72900200	METAL POST - TYPE B	FOOT	70	70	-	-	-		
* 73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	189	189	△	-	-	-	
* 73300200	OVERHEAD SIGN STRUCTURE - SPAN, TYPE II-A (4'-6" X 5'-3")	FOOT	210	210	-	-	-		
* 73300300	OVERHEAD SIGN STRUCTURE - SPAN, TYPE III-A (5'-0" X 7'-0")	FOOT	186	186	-	-	-		
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	224	224	-	-	-		
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	20,400	20400	-	-	-		
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	120	120	-	-	-		
* 78004625	PREFORMED PLASTIC PAVEMENT MARKING, TYPE D - STANDARD - LINE 5"	FOOT	5,400	5400	-	-	-		
78011030	GROOVING FOR RECESSED PAVEMENT MARKING 6"	FOOT	5,400	5400	-	-	-		
* 78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	96	96	-	-	-		
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	24,650	24650	-	-	-		
80400100	ELECTRIC SERVICE INSTALLATION	EACH	8	7	-	-	1		
80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1	-	-	1			
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	4,288	-	-	4,288	-		
81028750	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.	FOOT	14,950	-	-	14,635	315.00		

* SPECIALTY ITEM

△ REVISED SHEET 9/10/2024 SOQ-03



USER NAME = korabmp	DESIGNED - MPK	REVISED -
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PLOT DATE = 6/28/2024	DATE - 2/9/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US41	FAP 0346 23 SIGN	COOK/LAKE	208	6
CONTRACT NO. 62V17			ILLINOIS FED. AID PROJECT	

DRAWING NUMBER	CABINET	EXTENSION UNIT	PROCESSING UNIT	RADIO	CONTROLLER ATC INTERFACE	REPEATERS			WIRELESS DETECTION			
						STANDARD	STANDARD ANTENNA	LONG RANGE ANTENNA	ON RAMP (RAMP METER)	RAMP (SURVEILLANCE)	MAINLINE (SURVEILLANCE)	TOTAL
RMP-01	CAB-ED-B2	1	1		1	2	0	1	4	2	12	18
RMP-02	CAB-ED-B3	1	1	1	1	7	2	1	4	8	12	24
RMP-03	CAB-ED-B4	1	1	1	1	3	1	0	4	0	12	16
RMP-04	CAB-ED-B5	1	1	1	1	3	1	1	4	2	12	18
ITS-10	CAB-ED-001	1	1	1	0	0	0	0	0	0	12	12
ITS-11	CAB-ED-001A	1	1	1	0	1	0	1	0	2	12	14
ITS-12	CAB-ED-001B	1	1	1	0	0	0	0	0	0	12	12
RMP-05	CAB-ED-C8	1	1	1	1	1	0	1	4	0	0	4
ITS-13	CAB-ED-002	1	1	2	0	4	0	1	0	4	18	22
RMP-07	CAB-ED-C9	1	1	1	1	3	0	0	4	2	0	6
RMP-06	CAB-ED-C10	1	1	1	1	1	1	0	4	0	0	4
ITS-15	CAB-ED-002A	1	1	1	0	0	0	0	0	0	12	12
ITS-16	CAB-ED-002B	1	1	1	0	0	0	0	0	0	12	12
ITS-17	CAB-ED-003	1	1	1	0	3	0	0	0	2	12	14
RMP-11	CAB-ED-E14	1	1	1	1	3	0	0	4	2	0	6
RMP-10	CAB-ED-E15	1	1	1	1	5	1	0	4	0	12	16
RMP-09	CAB-ED-E16	1	1	1	1	4	1	0	4	2	6	12
RMP-08	CAB-ED-E17	1	1	1	1	4	0	0	4	2	6	12
ITS-22	CAB-ED-004	1	1	1	0	0	0	0	0	0	12	12
ITS-23	CAB-ED-004A	1	1	1	0	0	0	0	0	0	12	12
ITS-26	CAB-ED-005A	1	1	1	0	2	0	0	0	0	12	12
RMP-14	CAB-ED-H21	1	1	1	1	2	0	0	4	0	0	4
RMP-12	CAB-ED-H22	1	1	1	1	3	1	1	4	2	6	12
RMP-15	CAB-ED-H23	1	1	1	1	2	0	0	4	2	0	6
RMP-13	CAB-ED-H24	1	1	1	1	3	0	0	4	2	0	6
ITS-29	CAB-ED-006	1	1	2	0	4	0	1	0	2	18	20
ITS-31	CAB-ED-006A	1	1	1	0	0	0	0	0	0	12	12
ITS-33	CAB-ED-007	1	1	1	0	0	0	0	0	0	12	12
ITS-35	CAB-ED-007B	1	1	2	0	6	0	0	0	10	12	22
ITS-37	CAB-ED-008A	1	1	1	0	0	0	0	0	0	12	12
ITS-39	CAB-ED-008B	1	1	2	0	4	1	0	0	8	12	20
ITS-41	CAB-ED-009	1	1	1	0	4	0	0	0	4	12	16
ITS-43	CAB-ED-009A	1	1	1	0	0	0	0	0	0	12	12
ITS-45	CAB-ED-010	1	1	2	0	4	0	1	0	8	12	20
ITS-47	CAB-ED-011	1	1	1	0	0	0	0	0	0	12	12
ITS-49	CAB-ED-011B	1	1	1	0	4	1	0	0	4	12	16
ITS-51	CAB-ED-012	1	1	1	0	0	0	0	0	0	12	12
ITS-52	CAB-ED-012A	1	1	1	0	2	0	0	0	0	12	12
ITS-54	CAB-ED-013	1	1	2	0	7	1	0	0	8	12	20
ITS-56	CAB-ED-013A	1	1	1	0	0	0	0	0	0	12	12
ITS-58	CAB-ED-014	1	1	2	0	5	1	1	0	8	12	20
ITS-61	CAB-ED-014A	1	1	2	0	5	1	1	0	8	16	24
ITS-64	CAB-ED-015	1	1	1	0	0	0	0	0	0	8	8
ITS-66	CAB-ED-016	1	1	1	0	1	0	0	0	0	8	8
ITS-68	CAB-ED-017	1	1	1	0	0	0	0	0	0	8	8
TOTALS:		45	45	53	15	102	13	11	60	94	442	596

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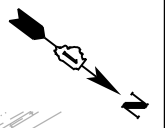
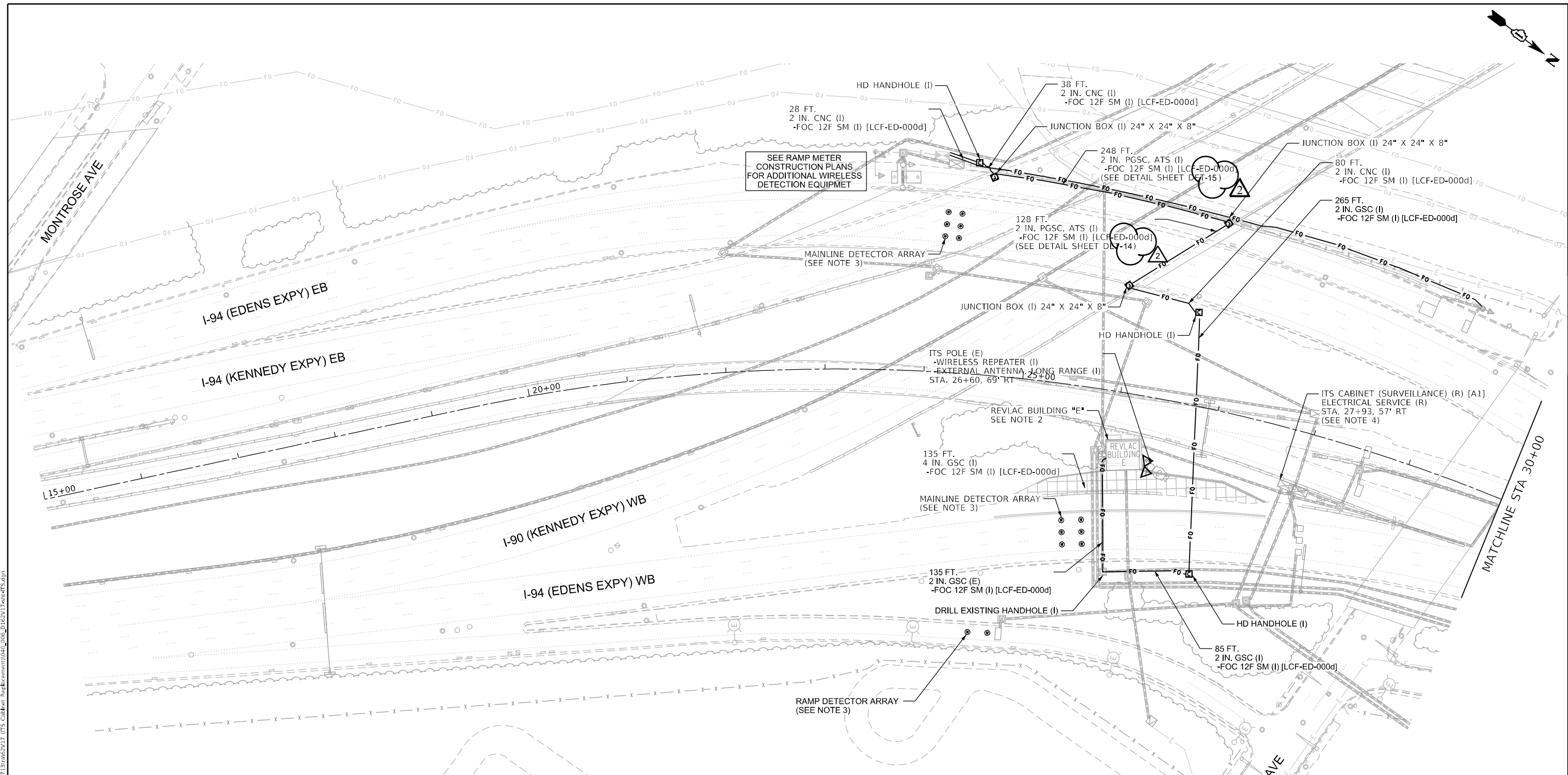


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PLOT DATE = 9/5/2024	CHECKED - CRH	REVISED -
	DATE - 2/9/2024	REVISED -

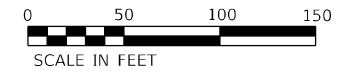
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

INTELLIGENT TRANSPORTATION SYSTEMS			
DEVICE SCHEDULE			
SCALE: 1" = 50'	SHEET 2 OF 69 SHEETS	STA.	TO STA.

REVISED SHEET 9/10/2024 ITS-02				
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/41	FAP 0346 23 SIGN	COOK/LAKE	208	26
CONTRACT NO. 62V17				
ILLINOIS FED. AID PROJECT				



- NOTES:
- DISCONNECTION OF TELEPHONE SERVICE SHALL BE COMPLETED AFTER PROPOSED SURVEILLANCE AND RAMP METER SYSTEMS HAVE BEEN COMMISSIONED. DISCONNECTION REQUIRES COORDINATING WITH IDOT TO END SERVICE WITH TELEPHONE COMPANY.
 - SEE DET-02 FOR WORK AT REVLAC BUILDING "E".
 - DETECTOR ARRAYS TO BE READ BY ACCESS POINT AT CABINET CAB-ED-B2.
 - RESTORATION PAID FOR AS TOPSOIL FURNISH AND PLACE, 12"SEEDING, CLASS 2A NITROGEN FERTILIZER NUTRIENT POTASSIUM FERTILIZER NUTRIENT.



2 REVISED SHEET 9/11/2024 ITS-06



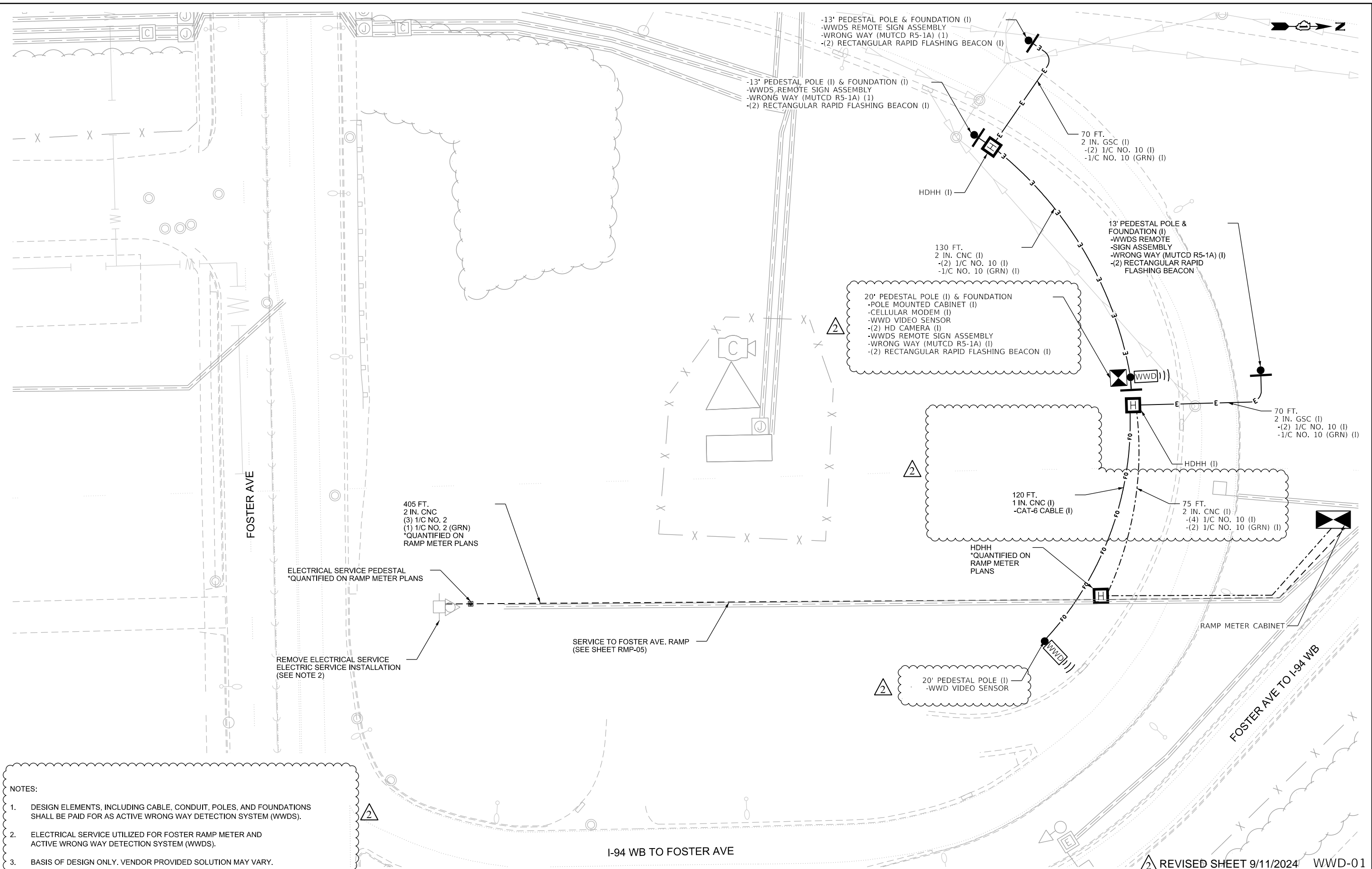
USER NAME - korabmp	DESIGNED - MPK	REVISED - 9/10/2024
PLOT SCALE -	DRAWN - MPK	REVISED -
PLOT DATE - 6/28/2024	CHECKED - CRH	REVISED -
	DATE - 2/9/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTELLIGENT TRANSPORTATION SYSTEMS SURVEILLANCE LOCATION 1		
SCALE: 1" = 50'	SHEET 6 OF 69 SHEETS	STA. 15+00 TO STA. 30+00

F.A.I. R/E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/41	FAP 0346 23 SIGN	COOK/LAKE	208	30
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62V17	

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- NOTES:**
- DESIGN ELEMENTS, INCLUDING CABLE, CONDUIT, POLES, AND FOUNDATIONS SHALL BE PAID FOR AS ACTIVE WRONG WAY DETECTION SYSTEM (WWDS).
 - ELECTRICAL SERVICE UTILIZED FOR FOSTER RAMP METER AND ACTIVE WRONG WAY DETECTION SYSTEM (WWDS).
 - BASIS OF DESIGN ONLY. VENDOR PROVIDED SOLUTION MAY VARY.



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	DATE - 2/9/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WRONG WAY DETECTION PLAN
FOSTER AVE OFF RAMP

SCALE: 1" = 20'	SHEET 1 OF 1 SHEETS	STA. _____	TO STA. _____
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F.A.I. RTE. 94/41	SECTION FAP 0346 23 SIGN	COUNTY COOK	TOTAL SHEETS 208	SHEET NO. 109
CONTRACT NO. 62V17			ILLINOIS FED. AID PROJECT	

REVISED SHEET 9/11/2024 WWD-01

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 Specifications.

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) of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

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

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

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

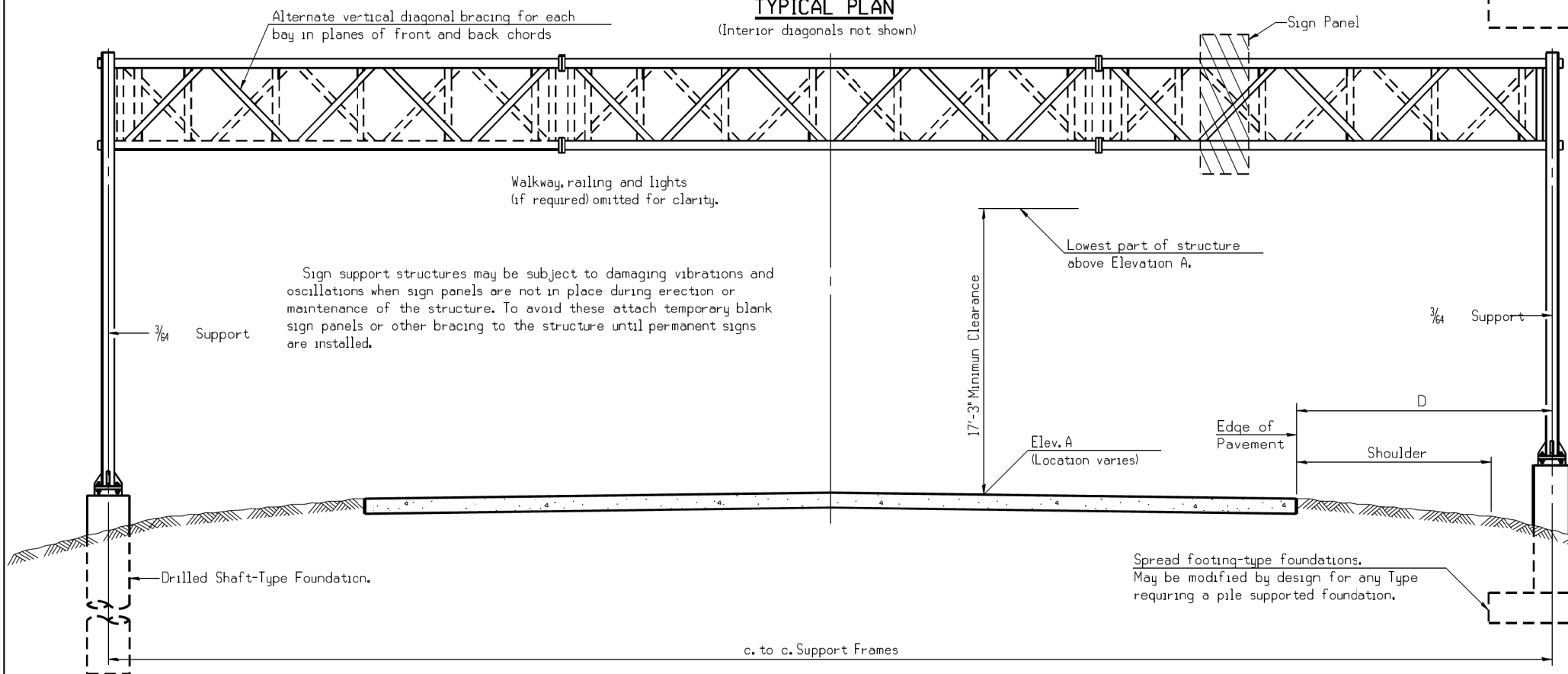
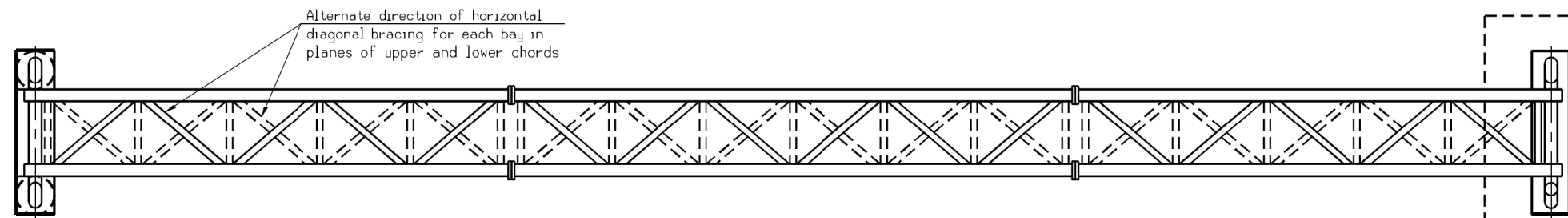
CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Concrete Sealer in accordance with the Standard Specifications.

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

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

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE SPAN TYPE I-A	Foot	189
OVERHEAD SIGN STRUCTURE SPAN TYPE II-A	Foot	210
OVERHEAD SIGN STRUCTURE SPAN TYPE III-A	Foot	186
OVERHEAD SIGN STRUCTURE WALKWAY TYPE A	Foot	-
CONCRETE FOUNDATIONS	Cu. Yds.	-
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	224.2



TYPICAL ELEVATION

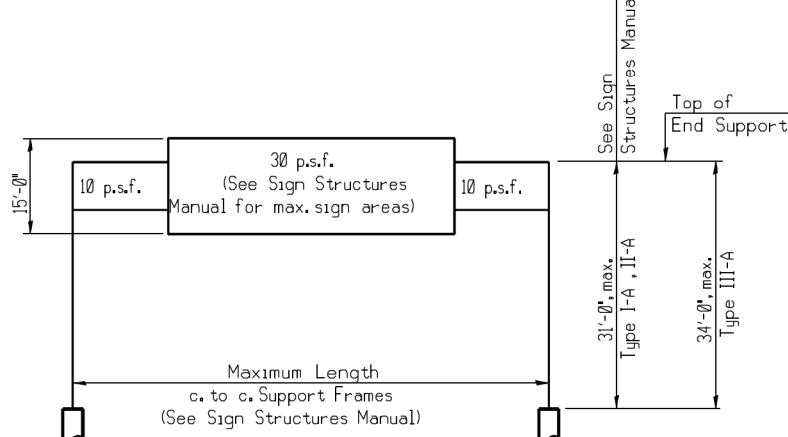
(Looking at Face of Signs**)

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

Structure Number	Location	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
IS0161094L037.5-000	1	II-A	106'	628.93'	28	12.5'	586.5 SF
IS0161094L066.0-000	2	I-A	69'	506.30'	11	11.0'	301.0 SF
IS0161094B065.7-000	3	I-A	70'	587.50'	15	8.5'	152.0 SF
IS0221290L000.0-001	4	I-A	90'	712.00'	12.9	15.0'	490.0 SF
IS0221055L271.0-000	5	I-A	60'	700.21'	7	10.5'	204.0 SF
IS0161290L029.0-000	6	I-A	62'	610.03'	10.75	14.0'	275.0 SF
IS0161094L041.5-000	7	III-A	100'	618.12'	41.3	12.5'	535.25 SF
IS0161094L034.6-000	8	I-A	99'	619.40'	31.67	11.0'	392.50 SF
IS0161094L030.0-000	9	III-A	86'	633.68'	26.5	15.0'	448.50 SF
IS0160041R000.0-000	10	I-A	90'	637.51'	26.5	6.0'	180.0 SF
IS0161094L030.3-000	11	II-A	104'	633.52'	39.0	12.5'	479.5 SF
IS0161057L045.0-000	12	II-A	115'	714.55'	34.0	13.5'	532.25 SF
IS0221290L014.3-000	13	I-A	64.0'	605.03'	20.0	12.5'	306.25 SF

**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.



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.

THIS SHEET WAS COPIED FROM CONTRACT 46539 PER THE DIRECTION OF IDOT TRAFFIC OPERATIONS EXPRESSWAY SECTION.

REVISOR'S MARK: REVISED SHEET 9/10/2024

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES - GENERAL PLAN & ELEVATION - ALUMINUM TRUSS & STEEL SUPPORTS

SCALE: SHEET OF SHEETS STA. TO STA.

FA. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAP 0346 23 SIGN	COOK/LAKE	208	114
ILLINOIS			CONTRACT NO. 62V17	
FED. AID PROJECT				

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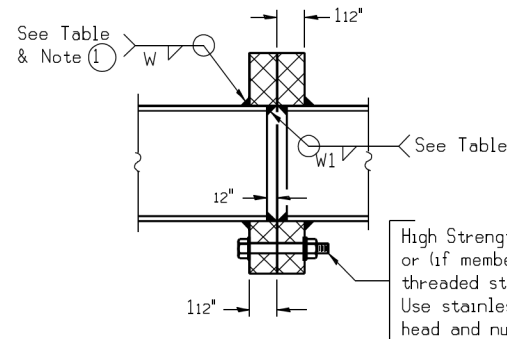
OS-A-1 2-17-2017

USER NAME	DESIGNED	REVISION
mezo	IDOT	9/5/2024
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	IDOT	

SGN-05

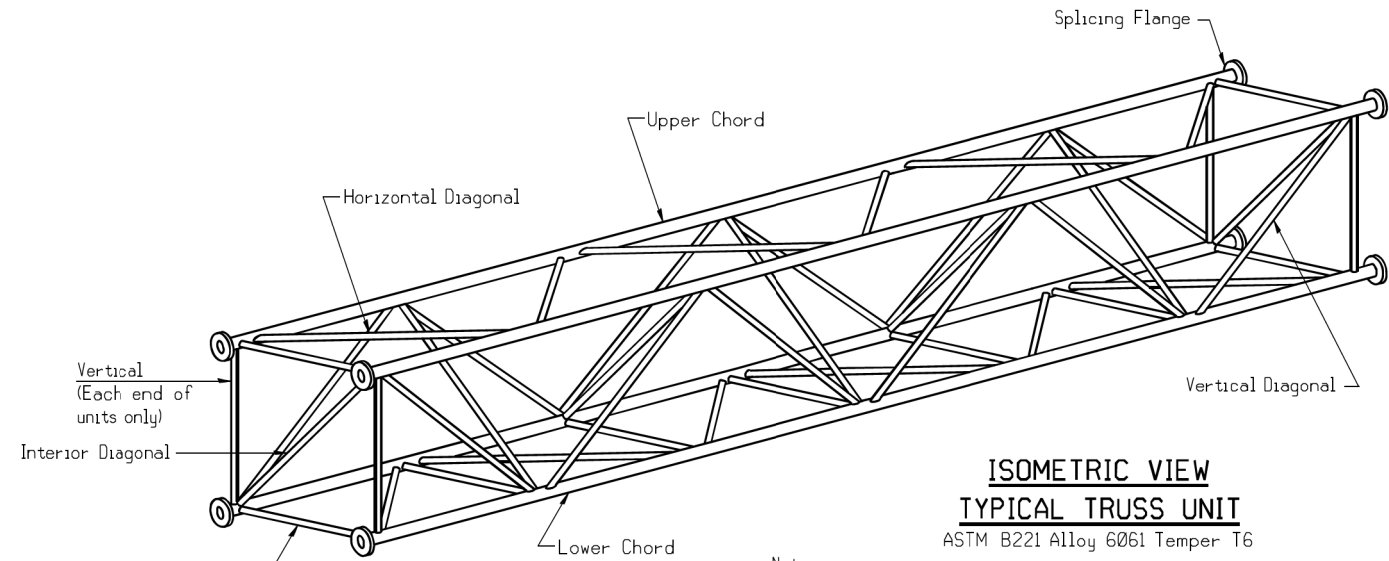
TRUSS UNIT TABLE

Structure Number	Location	Design Truss Type	Exterior Units (2)			Interior Unit			Upper & Lower Chord		Verticals; 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.(L)	Panel Lgth.(P)	O.D.	Wall	O.D.		Wall	Bolts		Weld Sizes		A	B
															No./Splice	Dia.	W	W1		
IS0161094L037.5-000	1	II-A	7	37'-9"	5'-1 1/2"	1	6	32' 0"	5' 1 1/2"	6 1/2"	5/16"	3'	5/16"	3 3/8"	6	1"	3/8"	1/4"	11"	14 1/2"
IS0161094L036.0-000	2	I-A	7	35'-3 1/4"	4'-0 1/4"	0				5"	1/4"	2 1/2"	1/4"	3 1/4"	6	7/8"	5/8"	1/4"	8 3/4"	11 3/4"
IS0161094R005.7-000	3	I-A	7	35'-0 1/2"	4'-10"	0				5"	1/4"	2 1/2"	1/4"	3 1/4"	6	7/8"	5/8"	1/4"	8 3/4"	11 3/4"
IS0221290L000.0-001	4	I-A	7	34'-3"	4'-7 1/2"	1	6	29' 0"	4'-7 1/2"	5 1/2"	5/16"	2 1/2"	5/16"	3"	6	7/8"	3/8"	1/4"	9 1/4"	12 1/4"
IS0221055L274.0-000	5	I-A	6	30'-10 1/2"	4'-10"	0				5"	1/4"	2 1/2"	1/4"	3 1/4"	6	7/8"	5/8"	1/4"	8 3/4"	11 3/4"
IS0161290L023.0-000	6	I-A	5	36'-5 1/2"	4'-11"	1	6	30'-0"	4'-11"	5"	5/16"	2 1/2"	5/16"	2 3/4"	6	7/8"	5/8"	1/4"	8 3/4"	11 3/4"
IS0161094L041.5-000	7	III-A	6	34'-1 1/2"	5'-4 1/2"	1	6	33'-6"	5'-4 1/2"	8 1/2"	1/2"	3 1/2"	5/16"	2 1/4"	8	1 1/4"	9/16"	7/16"	13"	16 1/2"
IS0161094L034.6-000	8	I-A	7	35'-3 1/4"	4'-9 1/4"	1	6	29'-10 1/2"	4'-9 1/4"	5 1/2"	5/16"	2 1/2"	5/16"	3 1/4"	6	7/8"	3/8"	1/4"	9 1/4"	12 1/4"
IS0161094L030.0-000	9	III-A	5	27'-0 1/2"	5'-2"	1	6	32'-3"	5'-2"	7"	5/16"	3 1/4"	5/16"	1"	6	1"	7/16"	5/16"	11 1/2"	15"
IS0161041R000.0-000	10	I-A	6	30'-9"	4'-9 3/4"	1	6	30'-1 1/2"	4'-9 3/4"	5"	5/16"	2 1/2"	5/16"	2 3/4"	6	7/8"	5/8"	1/4"	8 3/4"	11 3/4"
IS0161094L030.3-000	11	II-A	7	37'-0 1/4"	5'-0 1/4"	1	6	31'-4 1/2"	5'-0 1/4"	6 1/2"	5/16"	3"	5/16"	3 3/8"	6	1"	3/8"	1/4"	11"	14 1/2"
IS0161057L345.0-000	12	I-A	0	0'	4'-7 3/4"	1	0	30'-5"	4'-7 3/4"	7"	5/16"	3"	5/16"	3 7/8"	6	1"	3/8"	1/4"	11 1/2"	15"
IS0221290L014.3-000	13	I-A	7	32'-0 1/2"	4'-5"	0				5"	1/4"	2 1/2"	1/4"	3 1/2"	6	7/8"	5/8"	1/4"	8 3/4"	11 3/4"



SECTION B-B

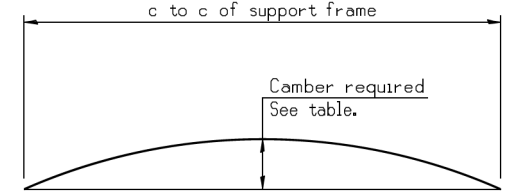
1 Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining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



ISOMETRIC VIEW TYPICAL TRUSS UNIT

ASTM B221 Alloy 6061 Temper T6

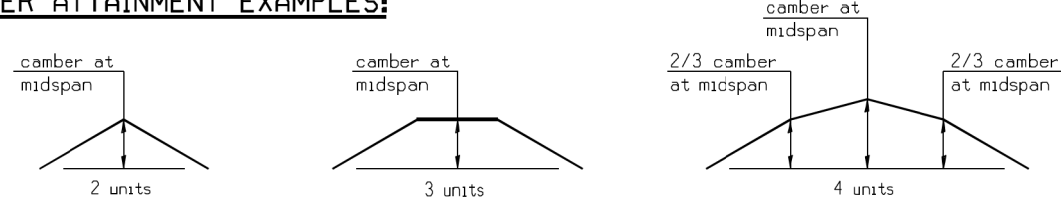
Notes:
Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection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



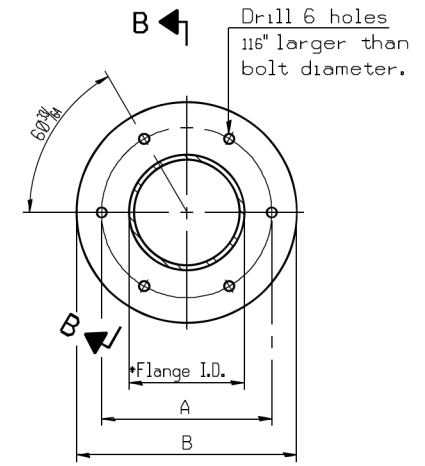
CAMBER DIAGRAM

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

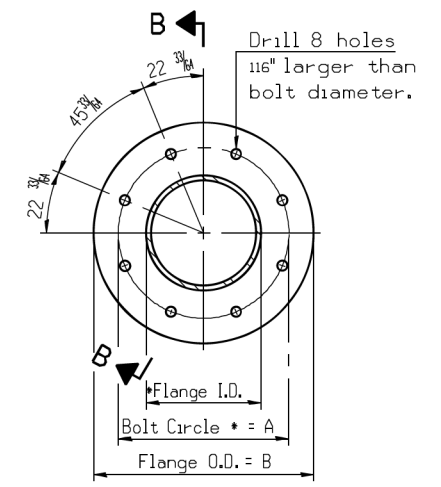
CAMBER ATTAINMENT EXAMPLES:



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



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



TRUSS TYPES II-A & III-A

SPLICING FLANGES

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

THIS SHEET WAS COPIED FROM CONTRACT 46539 PER THE DIRECTION OF IDOT TRAFFIC OPERATIONS EXPRESSWAY SECTION.

OS4-A-2

2-17-2017

REVISID SHEET 9/10/2024 SGN-07

USER NAME = mezag	DESIGNED - IDOT	REVISED - 9/5/2024
DRAWN - IDOT	REVISED -	
PLOT SCALE = 100.0000 sf / sq.	CHECKED - IDOT	REVISED -
PLOT DATE = 9/29/2021	DATE -	REVISED -

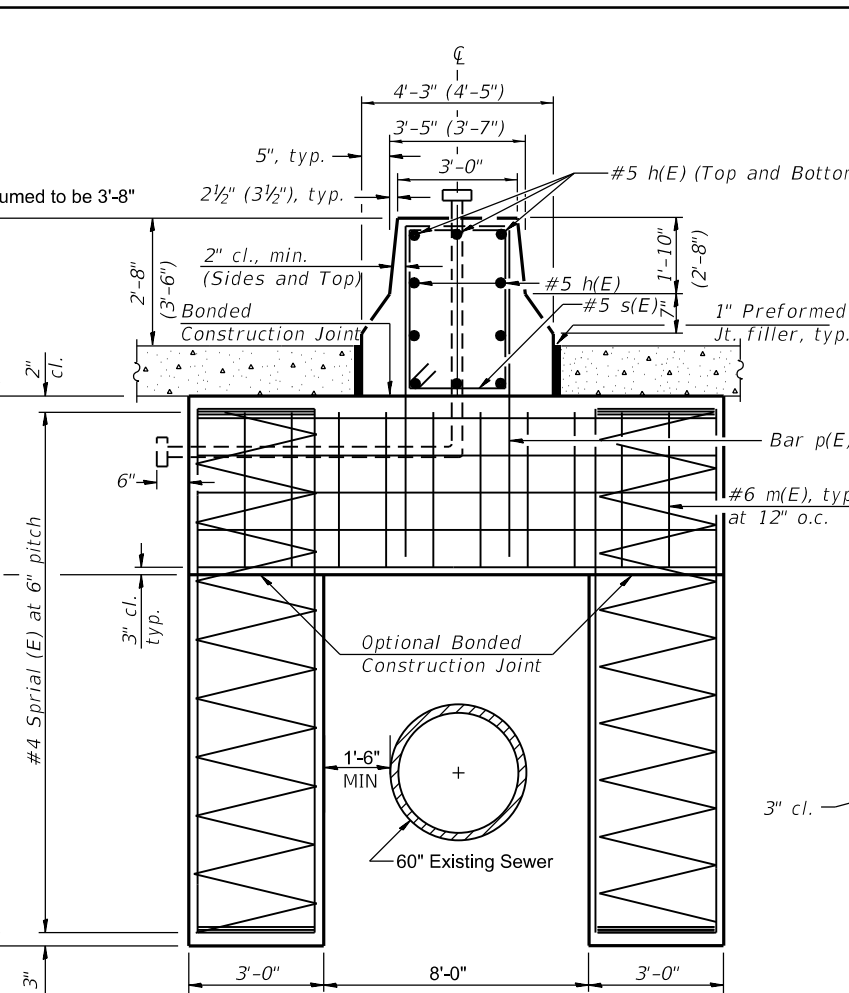
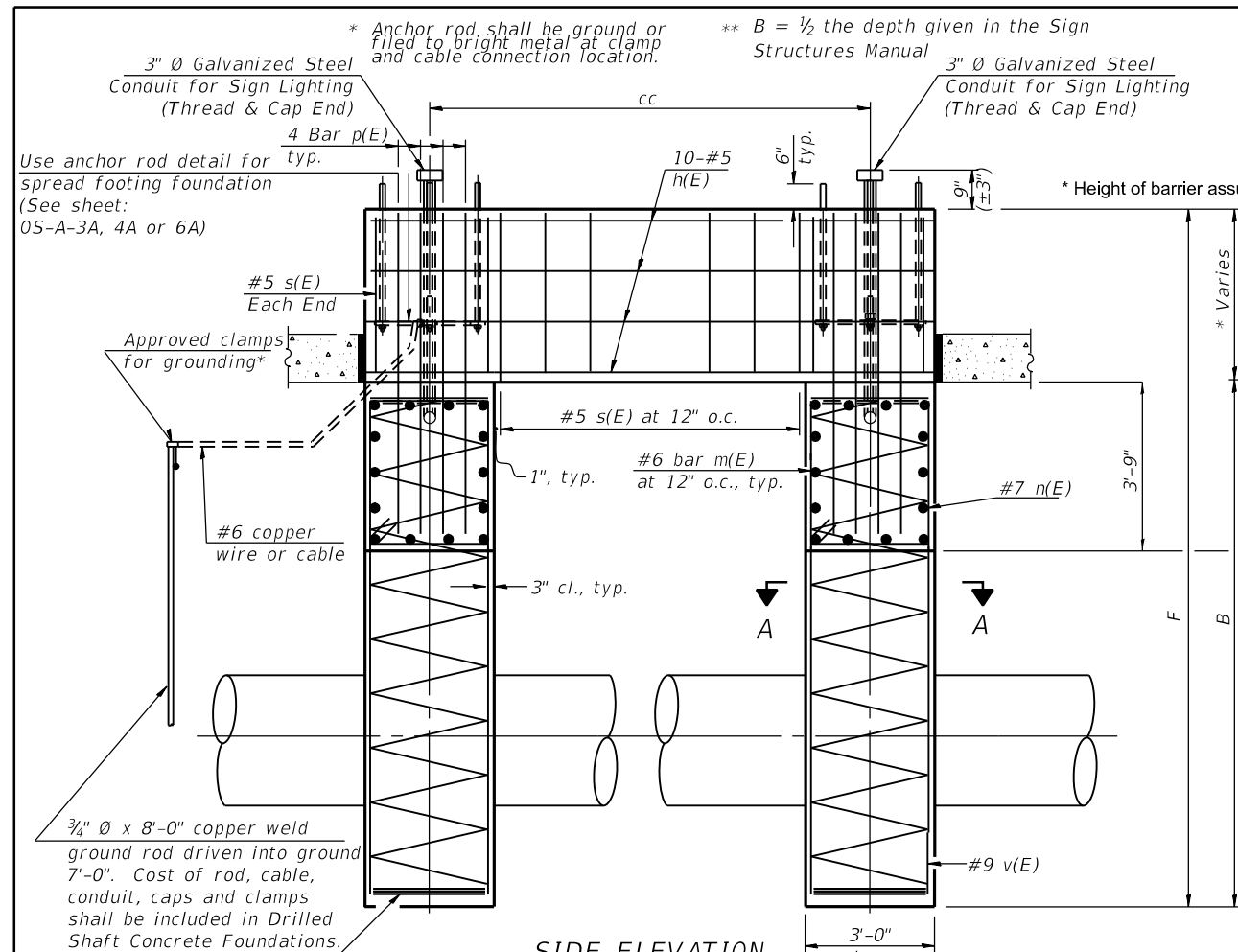
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES - ALUMINUM TRUSS DETAILS FOR TRUSS TYPES I-A, II-A AND III-A

FA. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FAP 0346 23 SIGN	COOK/LAKE	208	116
			CONTRACT NO. 62V17	
		ILLINOIS	FED. AID PROJECT	

SCALE: SHEET OF SHEETS STA. TO STA.

MODEL: D:\projects\truss\truss.dwg FILE NAME: C:\Users\paul\Documents\DOT\Office\46539\Truss\Truss Design.dgn



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.

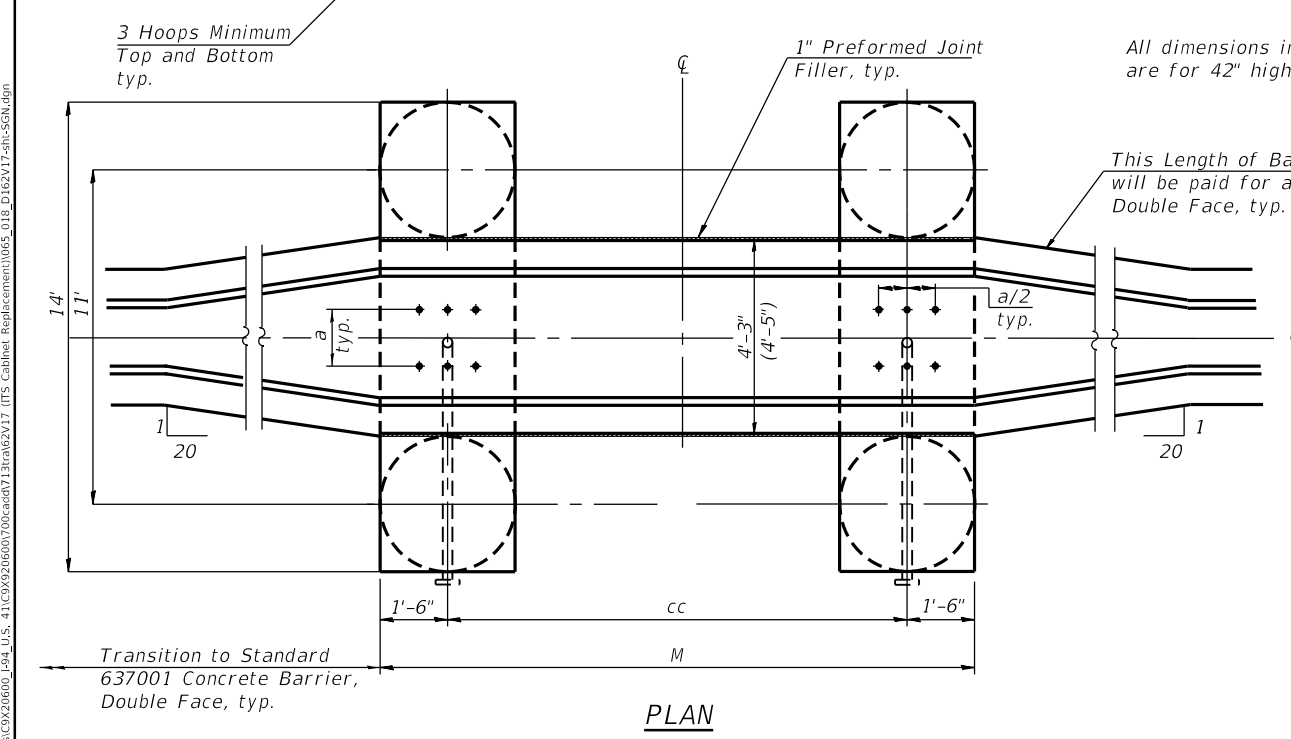
A normal surface finish followed by a Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.

BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
h(E)	10	#5	M less 4"	—
s(E)	Varies	#5	Varies	□
v(E)	48	#9	B less 0'-5"	—
m(E)	30	#6	12'-0"	□
n(E)	28	#7	13'-6"	—
p(E)	8	#5	Varies	□

#4 Bar Spiral - See Side Elevation

Pipe Support Frames	cc	M	a	a/2
6"Ø	7'-0"	9'-6"	0'-11"	5 1/2"
8"Ø	7'-6"	10'-0"	1'-1 1/2"	6 3/4"
10"Ø	8'-3"	11'-3"	1'-3"	7 1/2"
12"Ø	9'-0"	12'-0"	1'-6"	9"



Structure Number	Location	Left Foundation				Right Foundation				Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	B	F	Elevation Top	Elevation Bottom	B	F	
1S016I094L037.5-000	1	629.75	613.08	13'-0"	16'-8"					24.1
1S016I094L041.5-000	7	620.79	592.12	25'-0"	28'-8"					39.9
1S016U041R000.0-000	10	639.87	624.20	12'-0"	15'-8"					23.0
1S016I094L030.3-000	11	634.55	616.88	14'-0"	17'-8"					25.1

THIS SHEET WAS DESIGNED BY JACOBS



USER NAME = korabmp	DESIGNED - CRH	REVISED - 9/5/2024
PLOT SCALE =	DRAWN - CRH	REVISED -
PLOT DATE = 9/5/2024	CHECKED - CRH	REVISED -
	DATE - 2/9/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
MEDIAN SUPPORT FOUNDATION DETAILS II

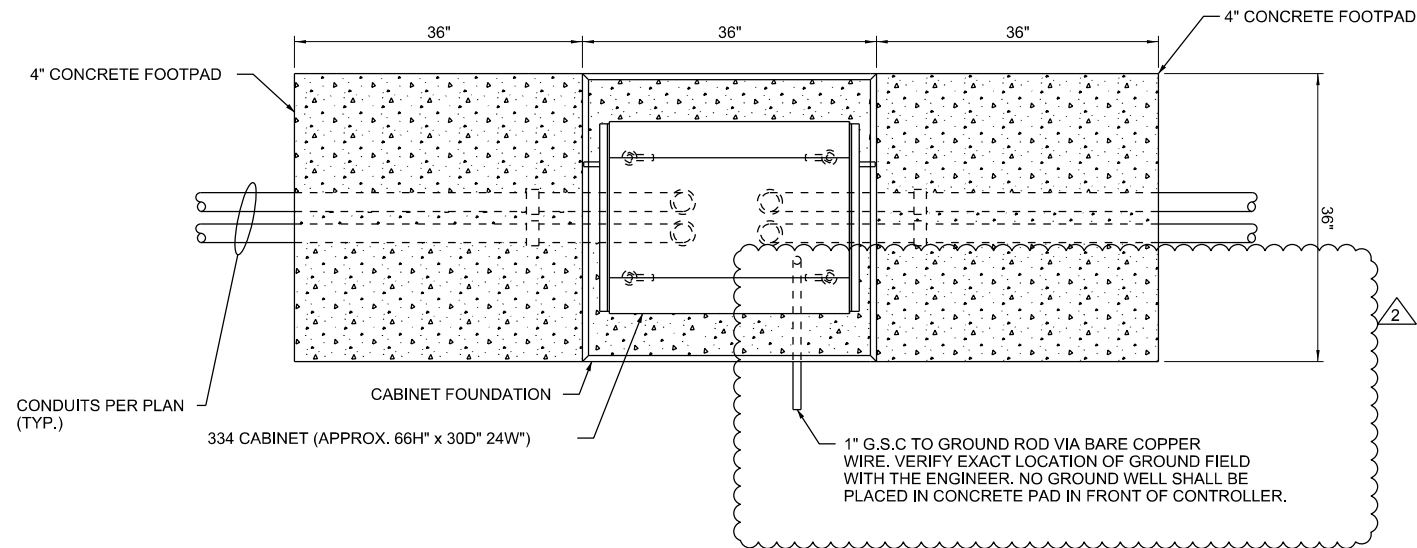
SCALE: NTS SHEET 18 OF XX SHEETS STA. TO STA.

REVISED SHEET 9/10/2024 SGN-18

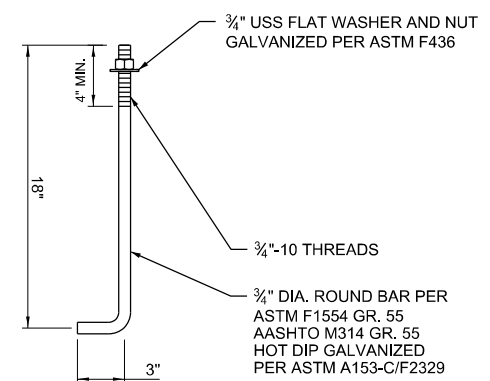
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94		COOK/LAKE	208	127
CONTRACT NO. 62V17				
ILLINOIS FED. AID PROJECT				

NOTES:

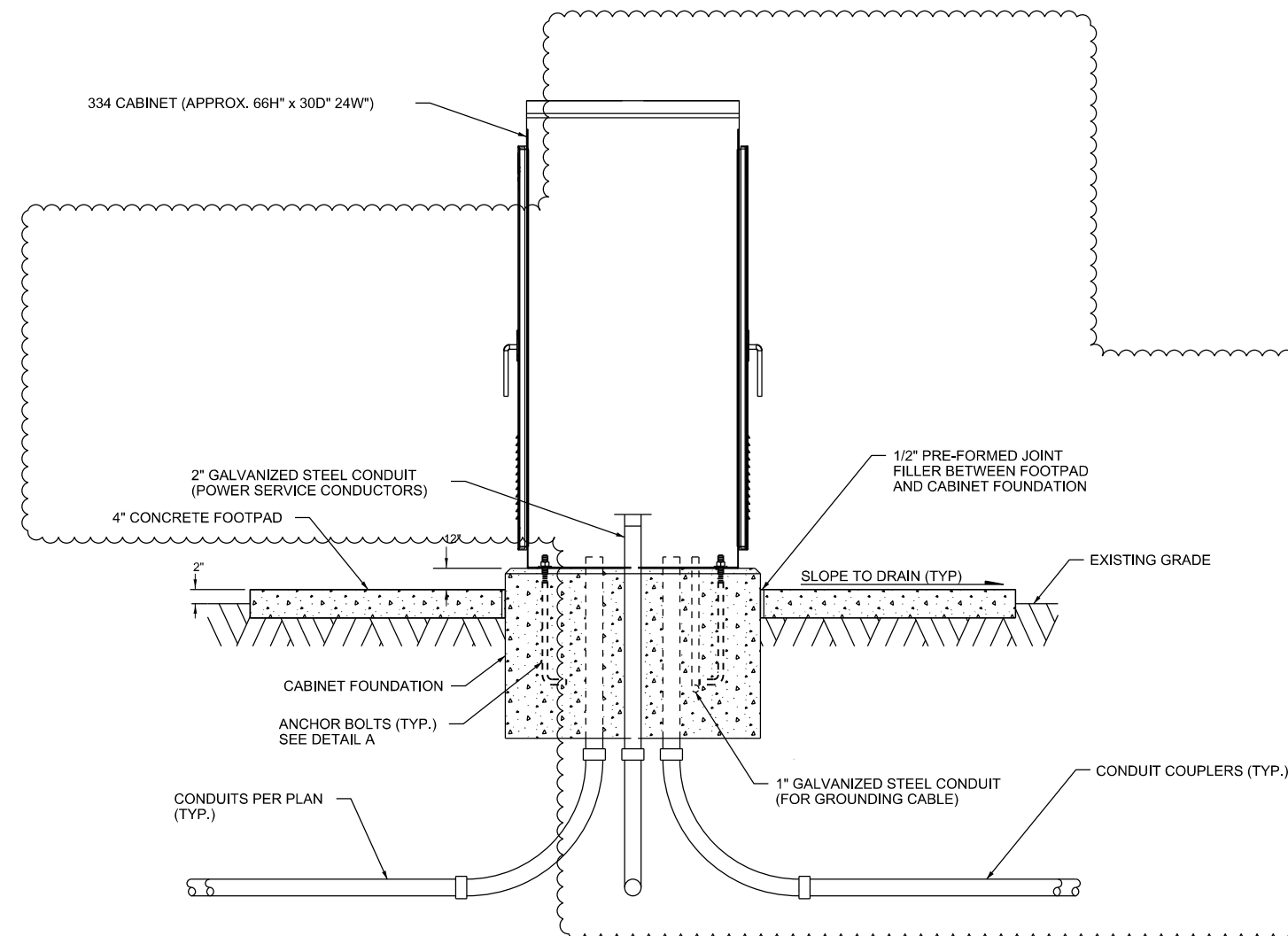
1. ADJUST THE ELEVATIONS AND DEPTH OF CONCRETE FOOTPADS AND FOUNDATION TO MEET THE SITE CONDITIONS. FOUNDATIONS DEPTH SHALL BE A MINIMUM OF 24" BELOW GRADE.
2. COMPACT THE SOIL BENEATH THE CONCRETE FOOTPAD WITH A PLATE COMPACTOR OR OTHER COMPACTION METHOD APPROVED BY THE ENGINEER.
3. INSTALL THE NUMBER, SIZE, AND TYPE OF CONDUIT(S) FOR COMMUNICATIONS AND POWER AS SHOWN IN THE PLANS. DETERMINE THE APPROACH/ENTRY ANGLE TO FOUNDATION BASED ON SITE CONDITIONS. THE NUMBER AND LOCATION OF CONDUIT SWEEPS SHOWN IN THIS DRAWING ARE DIAGRAMMATIC.
4. INSTALL A 3/4" X 10 FT. COPPER CLAD GROUNDING ROD IN THE CABINET FOUNDATION. INSTALL AN INSULATED #2 GROUND WIRE FROM THE CABINET GROUND BUS TO THE GROUND ROD AND EXOTHERMICALLY BOND THE GROUND WIRE AND BAR.
5. ANCHOR BOLT PLACEMENT SHALL BE COORDINATED WITH CABINET MANUFACTURER.
6. SIDE MOUNTED ACCESS POINT AIMED TOWARD IN PAVEMENT WIRELESS DETECTORS. CABINET PENETRATION MUST BE WEATHER TIGHT.
7. NAMEPLATE TO READ "IDOT ITS" FOR CCTV/SURVEILLANCE CABINET. NAMEPLATE TO READ "IDOT RAMP METER" FOR RAMP METER CABINETS.



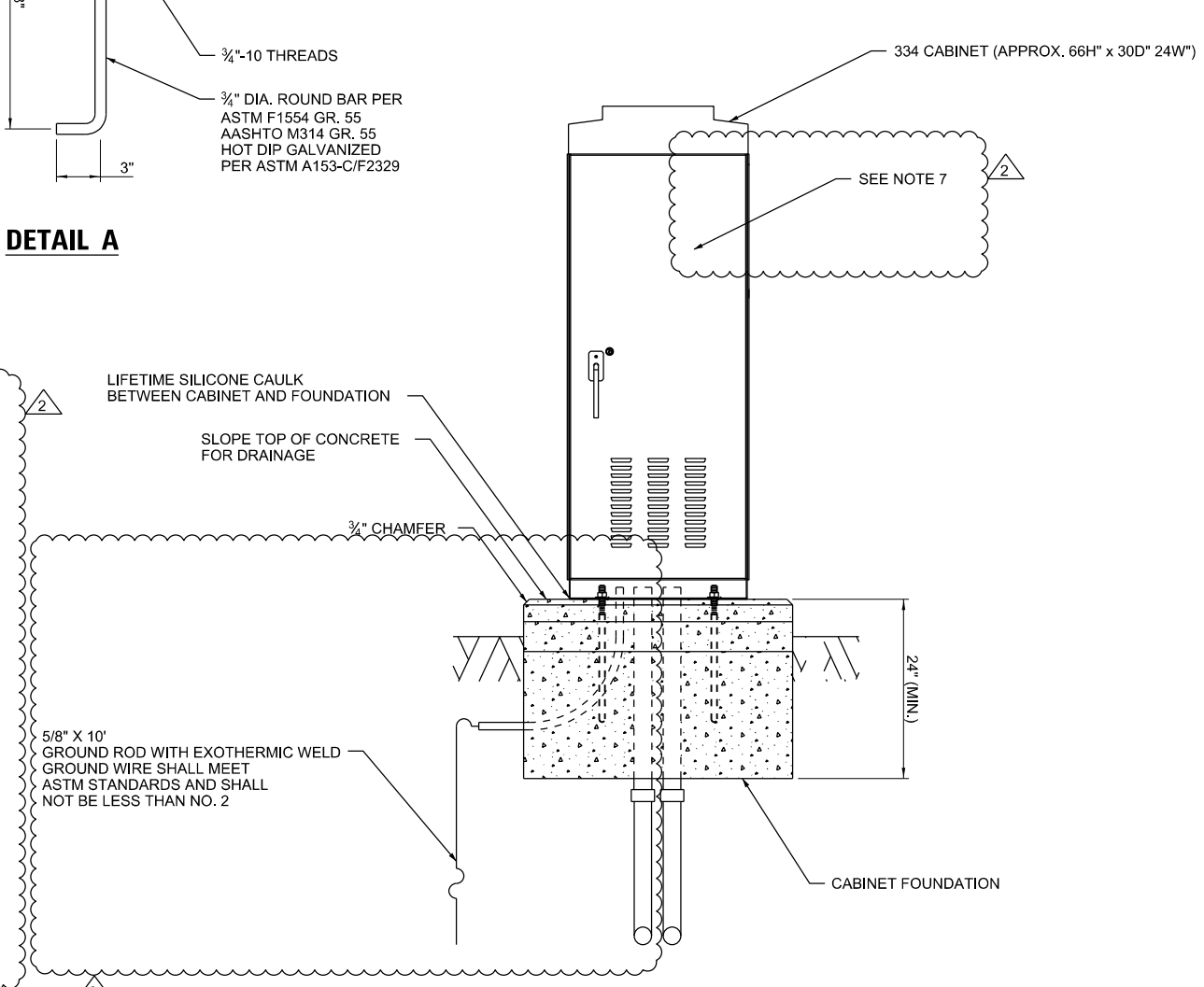
PLAN VIEW



DETAIL A



ELEVATION VIEW (SIDE)



ELEVATION VIEW (FRONT)

P:\Projects\Illinois\MER_jacobus.com\NAIDocuments\03X20600_04_US_41\03X20600\0700cad7131ra62x17 (ITS Cabinet Replacement)\070_003_D162V17-01.dwg



USER NAME = chammerl	DESIGNED - MPK -	REVISED - 9/5/2024
PLOT SCALE =	DRAWN - CJR -	REVISED -
PLOT DATE = 9/6/2024	CHECKED - CRH -	REVISED -
	DATE - 2/9/2024	REVISED -

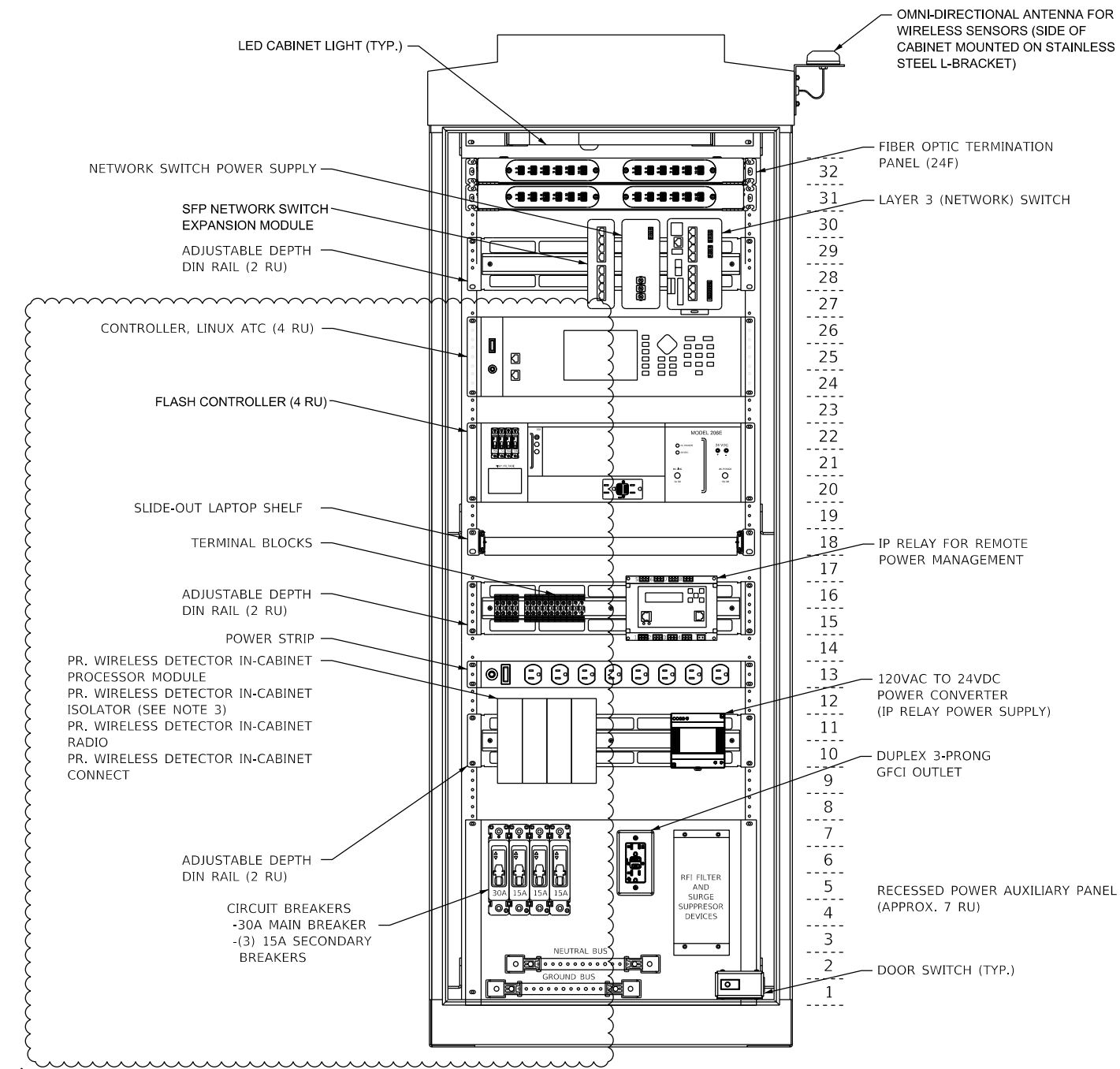
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EQUIPMENT CABINET AND FOUNDATION DETAIL	
SURVEILLANCE AND/OR RAMP METER SITE	
SCALE: NTS	SHEET 5 OF 18 SHEETS STA. TO STA.

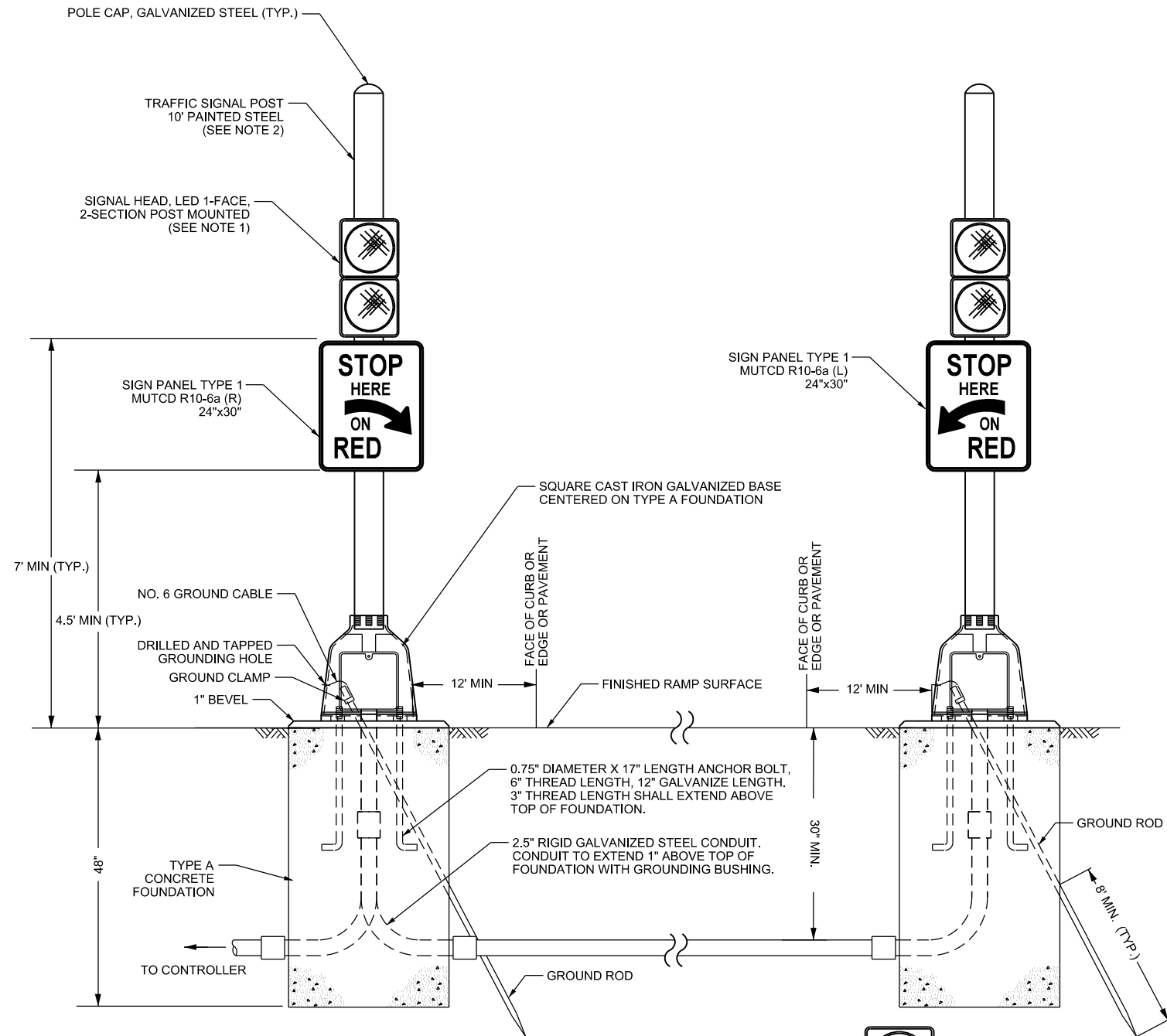
F.A.I. RTE. 94	SECTION FAP 0346 23 SIGN	COUNTY COOK/LAKE	TOTAL SHEETS 208	SHEET NO. 155
CONTRACT NO. 62V17				
ILLINOIS FED. AID PROJECT				

REVISION 2 REVISED SHEET 9/10/2024 DET-05

TYPICAL RAMP METERING PEDESTAL POLE LAYOUT

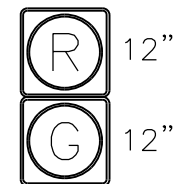


PROPOSED RAMP METER CABINET LAYOUT



NOTES:

1. THE LEFT SIDE SIGNAL HEAD SHALL BE MOUNTED TO FACE DRIVER. THE RIGHT SIDE SIGNAL HEAD SHALL BE MOUNTED TO FACE APPROACHING TRAFFIC.
2. TRAFFIC SIGNAL POST SHALL BE PAINTED YELLOW PER SECTION 851 OF THE STANDARD SPECIFICATIONS.



SIGNAL HEAD

REVISD SHEET 9/10/2024 DET-13



USER NAME = korabmp	DESIGNED - MMK	REVISED - 9/5/2024
PLOT SCALE =	DRAWN - MMK	REVISED -
PLOT DATE = 9/5/2024	CHECKED - JZ	REVISED -
	DATE - 2/9/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CCTV CAMERA CABINET RACK LAYOUT DETAIL

SCALE: NTS SHEET 13 OF 18 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	FAP 0346 23 SIGN	COOK/LAKE	208	163
CONTRACT NO. 62V17				

ILLINOIS FED. AID PROJECT