



# BORING LOG LTB-08

wangeng@wangeng.com  
1145 North Main Street  
Lombard, IL 60148  
Telephone: 630-953-9928  
Fax: 630-953-9938

Client: **AECOM**  
Project: **Jane Byrne Interchange**  
Location: **Section 16, T39N, R14E of 3rd PM**

Datum: NAVD 88  
Elevation: 586.97 ft  
North: 1897093.86 ft  
East: 1171652.78 ft  
Station: 6217+75.04  
Offset: 122.29 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
586.3	8-inch, CONCRETE														
585.6	--PAVEMENT-- 6-inch, gray CRUSHED STONE --FILL--														
	Very stiff, gray SILTY CLAY LOAM, trace gravel; damp --RDR 1-- --FILL--	1	X	1	2 3 5	NP	17			11	X	11	0 0 2	0.16 B	25
		2	X	2	2 3 5	2.87 B	19			30	X	12	0 0 2	0.41 B	25
581.5	Soft, gray CLAY to SILTY CLAY, trace gravel; damp to moist --RDR 2--	3	X	3	1 2 2	0.57 B	24				X	13	1 1 2	0.66 B	25
		4	X	4	1 2 2	0.41 B	25				X	14	3 3 3	0.82 B	15
		5	X	5	0 1 1	0.33 B	25	550.0	Medium stiff, gray SILTY CLAY LOAM, trace gravel; damp --RDR 1--	40	X	14	3 3 3	0.82 B	15
		6	X	6	0 1 1	0.33 B	26				X	15	6 17 20	5.40 B	14
		7	X	7	0 0 1	0.25 B	26	545.3	Hard, gray SILTY CLAY LOAM to SILTY LOAM, trace gravel; damp --RDR-2	45	X	15	6 17 20	5.40 B	14
		8	X	8	0 0 0	0.16 B	27				X	16	11 30 44	5.99 B	19
		9	X	9	0 0 1	0.16 B	26	540.7	Hard, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --RDR 2--		X	16	11 30 44	5.99 B	19
		10	X	10	0 0 0	0.25 B	26			50	X	16	11 30 44	5.99 B	19

Boring terminated at 50.00 ft

### GENERAL NOTES

Begin Drilling: **07-05-2019** Complete Drilling: **07-05-2019**  
 Drilling Contractor: **Wang Testing Services** Drill Rig: \_\_\_\_\_  
 Driller: **R&J** Logger: **F. Bozga** Checked by: **C. Marin**  
 Drilling Method: **2.25" IDA HSA, 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.



# BORING LOG VST-01

wangeng@wangeng.com  
1145 North Main Street  
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Telephone: 630-953-9928  
Fax: 630-953-9938

Client: **AECOM**  
Project: **Jane Byrne Interchange**  
Location: **Section 16, T39N, R14E of 3rd PM**

Datum: NAVD 88  
Elevation: 593.55 ft  
North: 1897108.36 ft  
East: 1171435.63 ft  
Station: 7313+90.47  
Offset: 2.00 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	Very stiff, brown SILTY CLAY LOAM, trace gravel --FILL--														
		1	X	1	3 5 7	2.75 P	14		--S <sub>u undist</sub> = 578.8 psf-- --S <sub>u remold</sub> = 382.2 psf-- --Sensitivity = 1.5--	4	VS				
590.5	Medium dense, fine SAND	5	X	2	5 5 6	NP	7		--In-Situ Vane Shear, 27.0 feet-- --S <sub>u undist</sub> = 742.6 psf-- --S <sub>u remold</sub> = 415.0 psf-- --Sensitivity = 1.8--	5	VS				
		10	X	3	2 2 2	1.31 B	26		--In-Situ Vane Shear, 29.5 feet-- --S <sub>u undist</sub> = 589.7 psf-- --S <sub>u remold</sub> = 283.9 psf-- --Sensitivity = 2.1--	6	VS				
586.8	Medium stiff to stiff, gray SILTY CLAY	15	X	4	2 2 3	0.98 B	28		--In-Situ Vane Shear, 32.0 feet-- --S <sub>u undist</sub> = 1026.6 psf-- --S <sub>u remold</sub> = 447.8 psf-- --Sensitivity = 2.3--	7	VS				
		20	X	5	1 2 2	0.25 P	29		--In-Situ Vane Shear, 34.5 feet-- --S <sub>u undist</sub> = 764.5 psf-- --S <sub>u remold</sub> = 480.5 psf-- --Sensitivity = 1.6--	8	VS				
578.0	Soft, gray SILTY CLAY	25	X	6	1 2 2	0.25 P	29		--In-Situ Vane Shear, 37.0 feet-- --S <sub>u undist</sub> = 1026.6 psf-- --S <sub>u remold</sub> = 589.7 psf-- --Sensitivity = 1.7--	9	VS				
575.3		30	X	1					--Equipment Slipped--	10	VS				
		35	X	2					--In-Situ Vane Shear, 46.5 feet-- --S <sub>u undist</sub> = 1070.2 psf-- --S <sub>u remold</sub> = 633.4 psf-- --Sensitivity = 1.7--	11	VS				
		40	X	3					--In-Situ Vane Shear, 49.0 feet-- --S <sub>u undist</sub> = 1157.6 psf--	11	VS				

### GENERAL NOTES

Begin Drilling: **12-01-2015** Complete Drilling: **12-01-2015**  
 Drilling Contractor: **Wang Testing Services** Drill Rig: \_\_\_\_\_  
 Driller: **R&N** Logger: **F. Bozga** Checked by: **A. Kurnia**  
 Drilling Method: **2.25" HSA to 10', mud rotary thereafter, boring backfilled upon completion**

### WATER LEVEL DATA

While Drilling: **groundwater not observed**  
 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.

### SOIL BORINGS II

SHEET NO. SS22 OF SS83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	701
CONTRACT NO. 62A77				

ILLINOIS FED. AID PROJECT

## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



USER NAME = ali.jssa	DESIGNED - JJS, MAA	REVISED -
PLOT SCALE = N.T.S	CHECKED - MAI, JMG	REVISED -
PLOT DATE = 1/23/2020	DRAWN - FL	REVISED -
	CHECKED - MAI, JMG	REVISED -



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# BORING LOG VST-01

WEI Job No.: 1100-04-01

Client: **AECOM**  
 Project: **Jane Byrne Interchange**  
 Location: **Section 16, T39N, R14E of 3rd PM**

Datum: NAVD 88  
 Elevation: 593.55 ft  
 North: 1897108.36 ft  
 East: 1171435.63 ft  
 Station: 7313+90.47  
 Offset: 2.00 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		-- $S_{u\text{remold}} = 611.6 \text{ psf}$ -- --Sensitivity = 2.3-- Boring terminated at 49.50 ft															
			55														
			60														
			65														
			70														
			75														

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	12-01-2015	Complete Drilling	12-01-2015	While Drilling	groundwater not observed		
Drilling Contractor	Wang Testing Services	Drill Rig		At Completion of Drilling	mud in the borehole		
Driller	R&N	Logger	F. Bozga	Time After Drilling	NA		
Checked by	A. Kurnia			Depth to Water	NA		
Drilling Method	2.25" HSA to 10', mud rotary thereafter, boring backfilled upon completion			The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

FILE NAME: D:\V\AECOM-NA-AW51\_aecomonline\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_I\0000\_CAD\008\_Structural\Sign\_Structure\62A77\_Sign\_Structure\62A77-Span-SB1414-Sign\Struct.dgn



USER NAME =	all.jssa	DESIGNED -	JJS, MAA	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	FL	REVISED -	
PLOT DATE =	1/23/2020	CHECKED -	MAI, JMG	REVISED -	

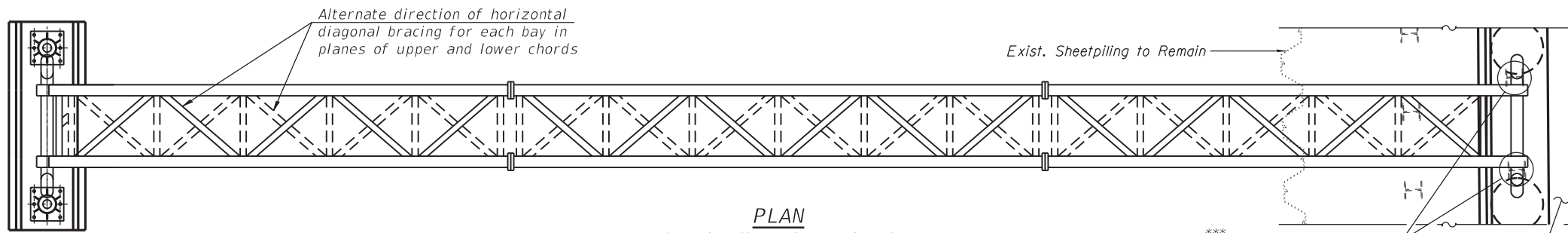
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SOIL BORINGS III

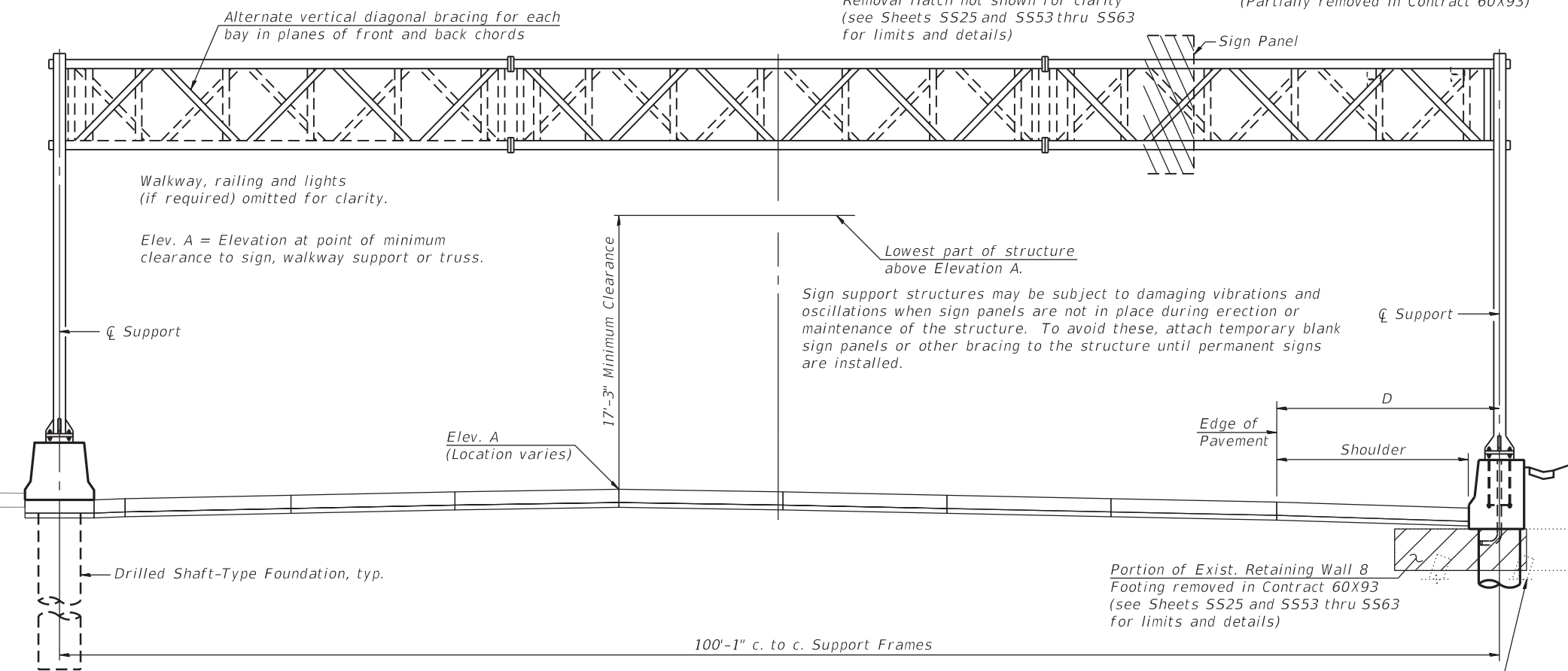
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	702
CONTRACT NO. 62A77				

SHEET NO. SS23 OF SS83 SHEETS

ILLINOIS FED. AID PROJECT



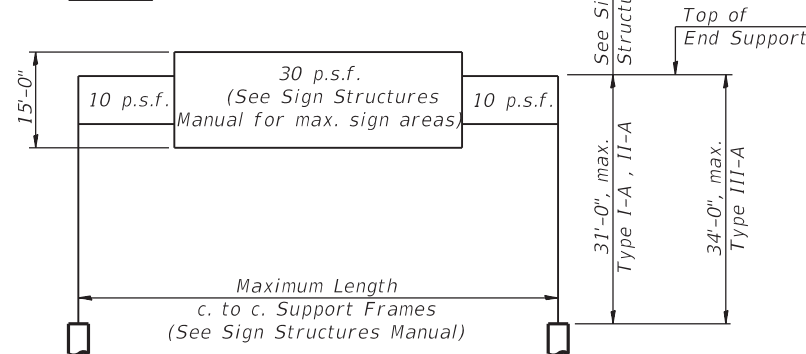
**PLAN**  
(Interior diagonals not shown)



**ELEVATION**  
(Looking at Face of Signs\*\*)

**LEGEND**

Portion of Exist. Footing previously removed in Contract 60X93



**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	<sup>t</sup> Station	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
1S0161094R052.1	6245+25.00	III-A	100'-1"	575.49	6'-3"	8'-0"	240.0 Sq. Ft.

\* 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.

\*\* Looking upstation for structures with signs both sides.

\*\*\* A portion of the Existing Retaining Wall 8 footing, at Proposed Retaining Wall 16 (S.N. 016-1805), was removed in Contract 60X93. The existing piles for this wall remain but were cut-off as required for construction of the wall. Potential conflict may exist between these existing piles and the proposed sign structure foundation. The Contractor shall verify existing conditions prior to drilling proposed drilled shafts and, if a conflict exists, remove existing piles interfering with construction. All associated work shall be paid for as Pile Extraction.

<sup>t</sup> Measured along Prop. § SB 1-90/94

**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.  
 $f_y = 60,000$  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)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

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

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

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

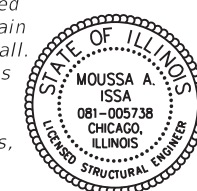
**CONCRETE SURFACES:** All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Concrete Sealer in accordance with the Standard Specifications.

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

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

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE SPAN TYPE III-A	Foot	101
OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	Foot	68
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	39.3
PILE EXTRACTION	Ea.	2
FOUNDATION CONSTRUCTION AT EXISTING OBSTRUCTIONS	Ea.	2



SIGNED: *Moussa A. Issa*  
DR. MOUSSA A. ISSA, S.E., IL. NO. 081-005738  
EXPIRES 11-30-2020  
DATE: 1/29/2020 FOR SHEETS SS24 THRU SS38 AND SS39 TO SS63 (TOTAL OF 40 SHEETS)



USER NAME = all.issa	DESIGNED - JJS, WM	REVISED -
PLOT SCALE = N.T.S	CHECKED - MAI, JMG	REVISED -
PLOT DATE = 1/23/2020	DRAWN - AMS	REVISED -
	CHECKED - MAI, JMG	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

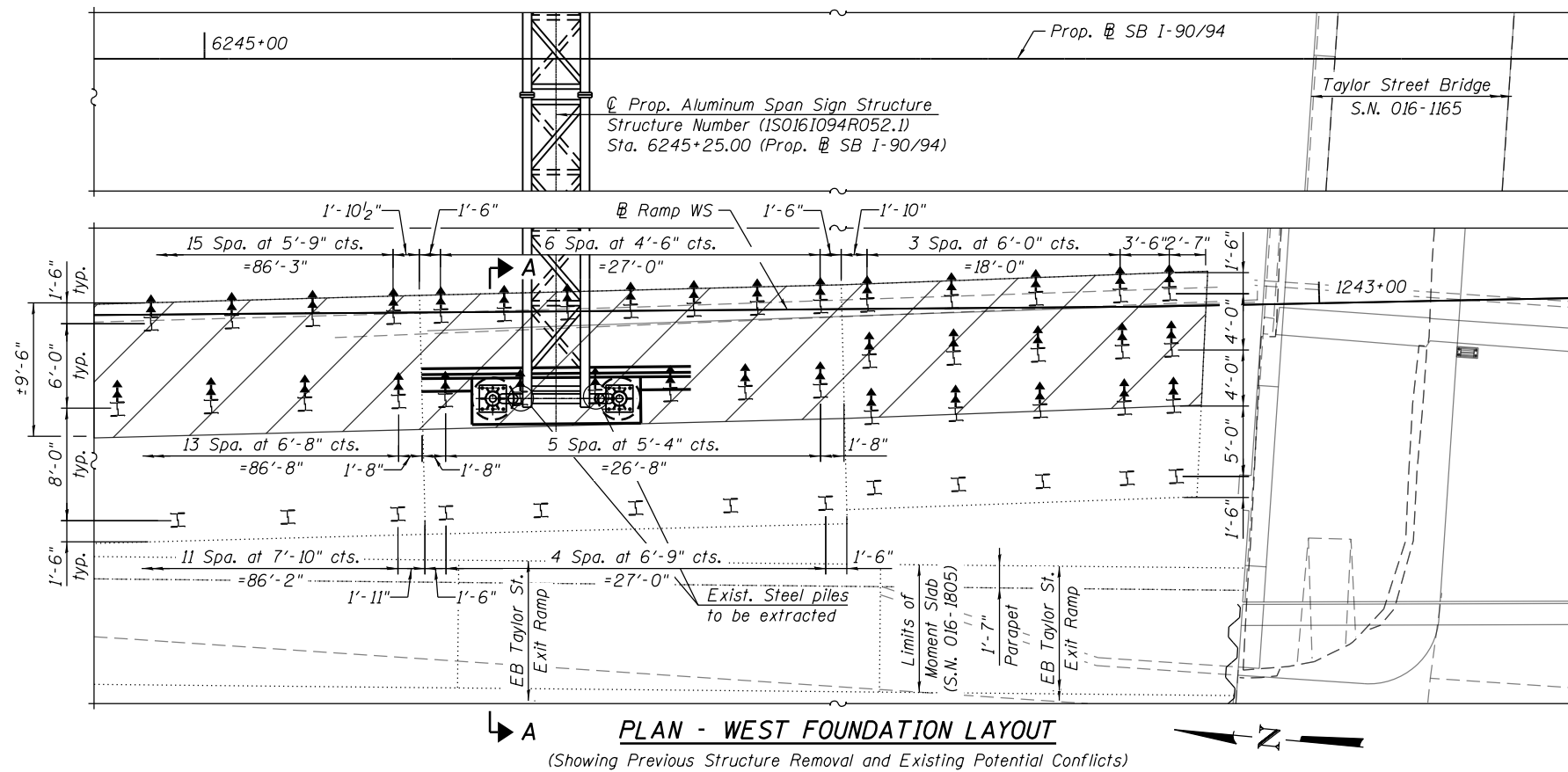
**OVERHEAD SIGN STRUCTURES - GENERAL PLAN & ELEVATION - ALUMINUM TRUSS & STEEL SUPPORTS**

F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 703
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

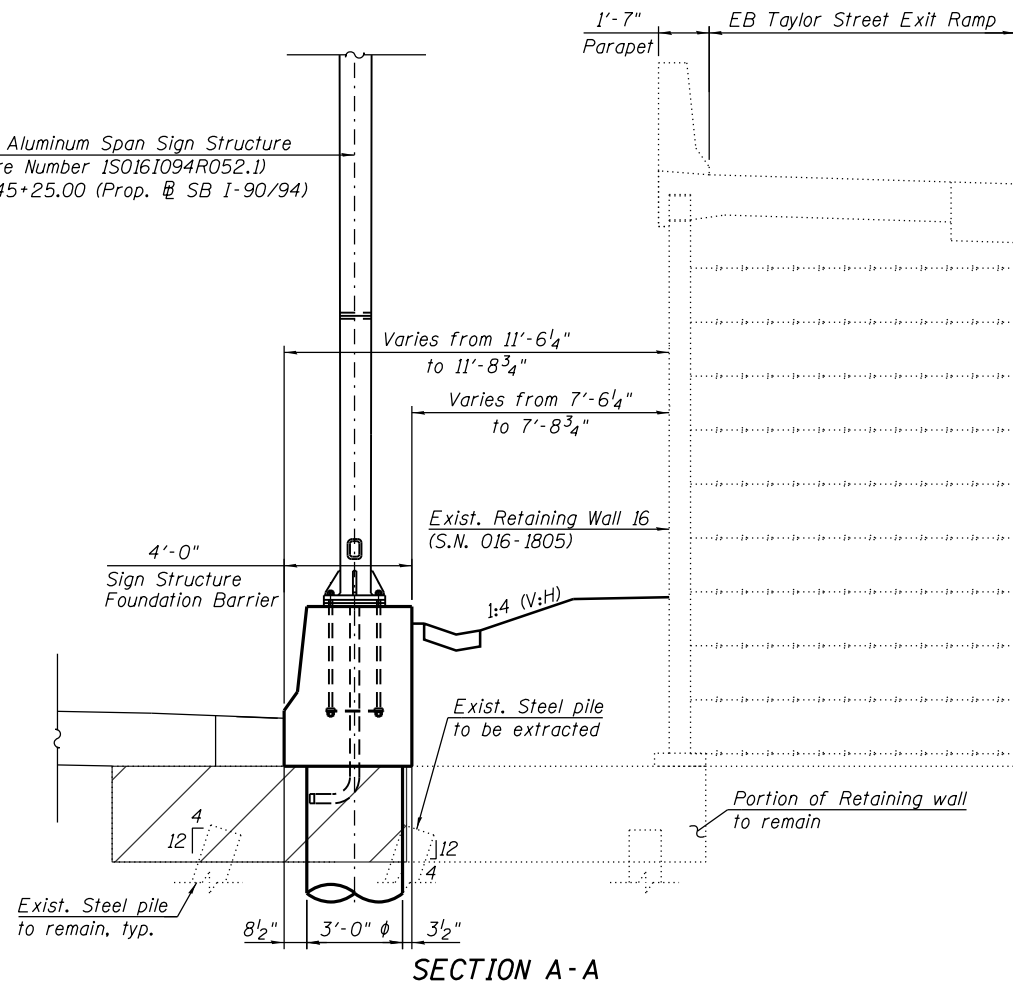
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**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
PILE EXTRACTION	Each	2
FOUNDATION CONSTRUCTION AT EXISTING OBSTRUCTIONS	Each	2



Prop. Aluminum Span Sign Structure  
 (Structure Number ISO161094R052.1)  
 Sta. 6245+25.00 (Prop. SB I-90/94)



**SECTION A-A**

**NOTES:**

1. A portion of the Existing Retaining Wall 8 footing, at Proposed Retaining Wall 16 (S.N. 016-1805), was removed in Contract 60X93. The existing piles for this wall remain but were cut-off as required for construction of the wall. Potential conflict may exist between these existing piles and the proposed sign structure foundation. The Contractor shall verify existing conditions prior to drilling proposed drilled shafts and, if a conflict exists, remove existing piles interfering with construction. All associated work shall be paid for as Pile Extraction.
2. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field-verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
3. The Contractor shall field-verify location of existing utilities prior to removal/construction activities.
4. The Contractor shall exercise extreme caution during removal/construction to ensure that removal/construction activities, pile extraction, structure excavation and all other work will not have detrimental affects on adjacent structures, buildings or utilities. See Contract Special Provisions for details. Any damage to existing elements during removal/construction shall be repaired by the Contractor, at his/her expense, and at no cost to the Department.
5. See Special Provision for Foundation Construction at Existing Obstructions if obstructions are identified at the locations of proposed drilled shafts.

**LEGEND:**

Portion of Exist. Footing previously removed in Contract 60X93



USER NAME = jana.jssa	DESIGNED - JJS, WM	REVISED -
PLOT SCALE = N.T.S	CHECKED - MAI, JMG	REVISED -
PLOT DATE = 03/04/2020	DRAWN - AMS	REVISED -
	CHECKED - MAI, JMG	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

WEST FOUNDATION LAYOUT PLAN AND SECTION

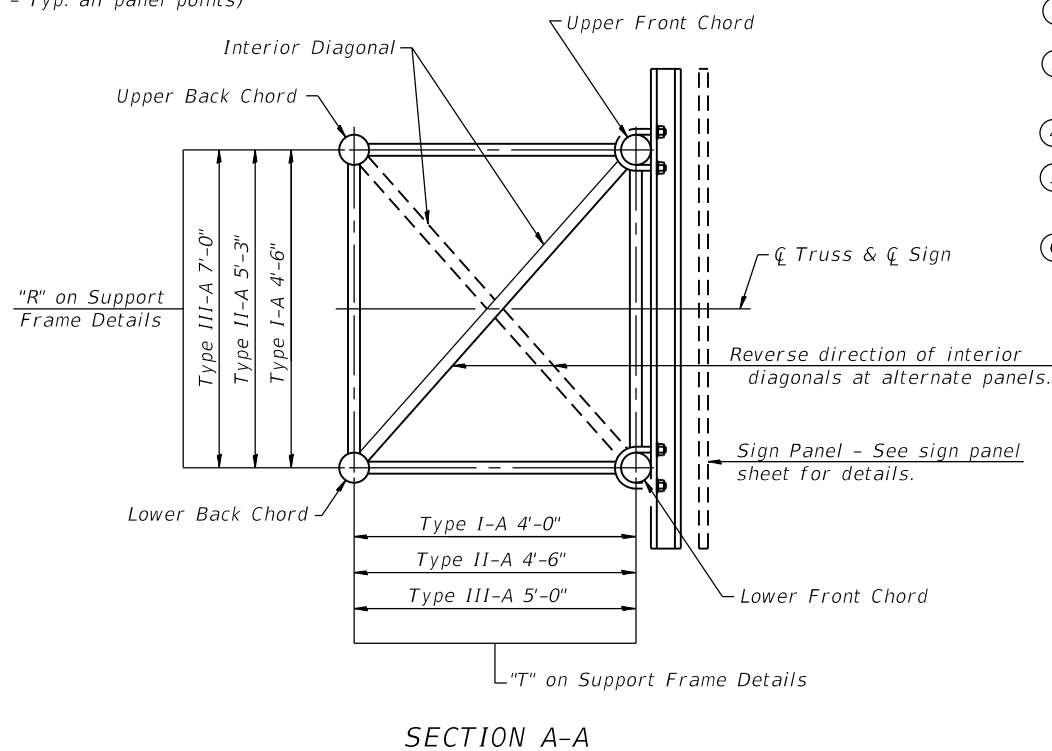
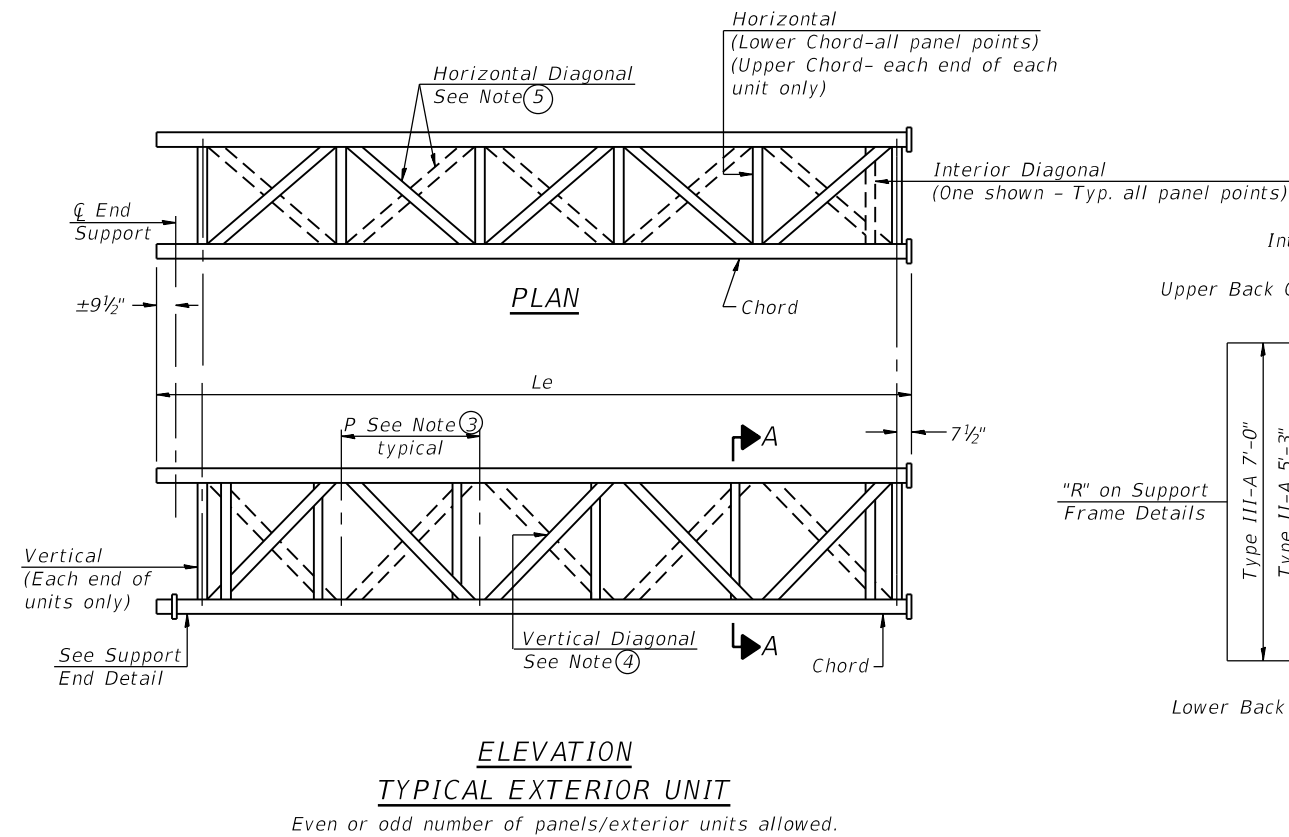
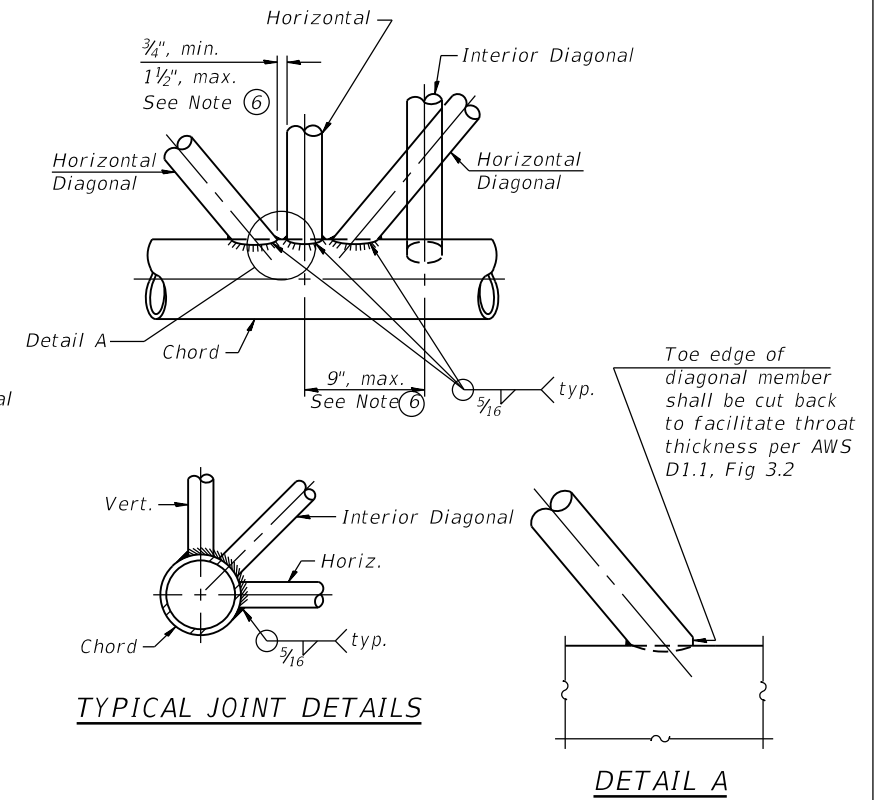
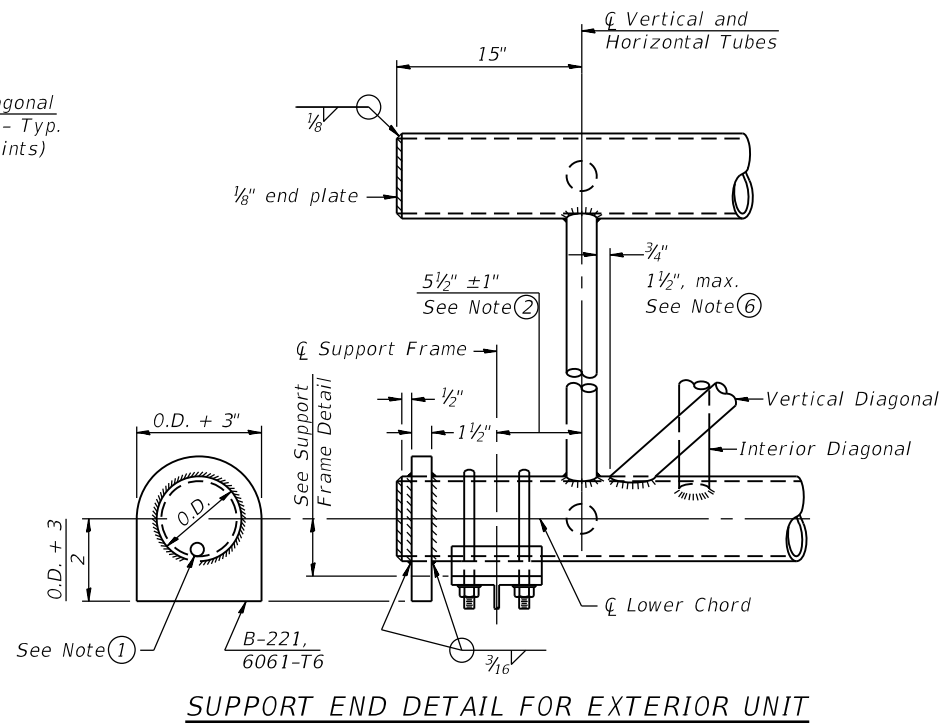
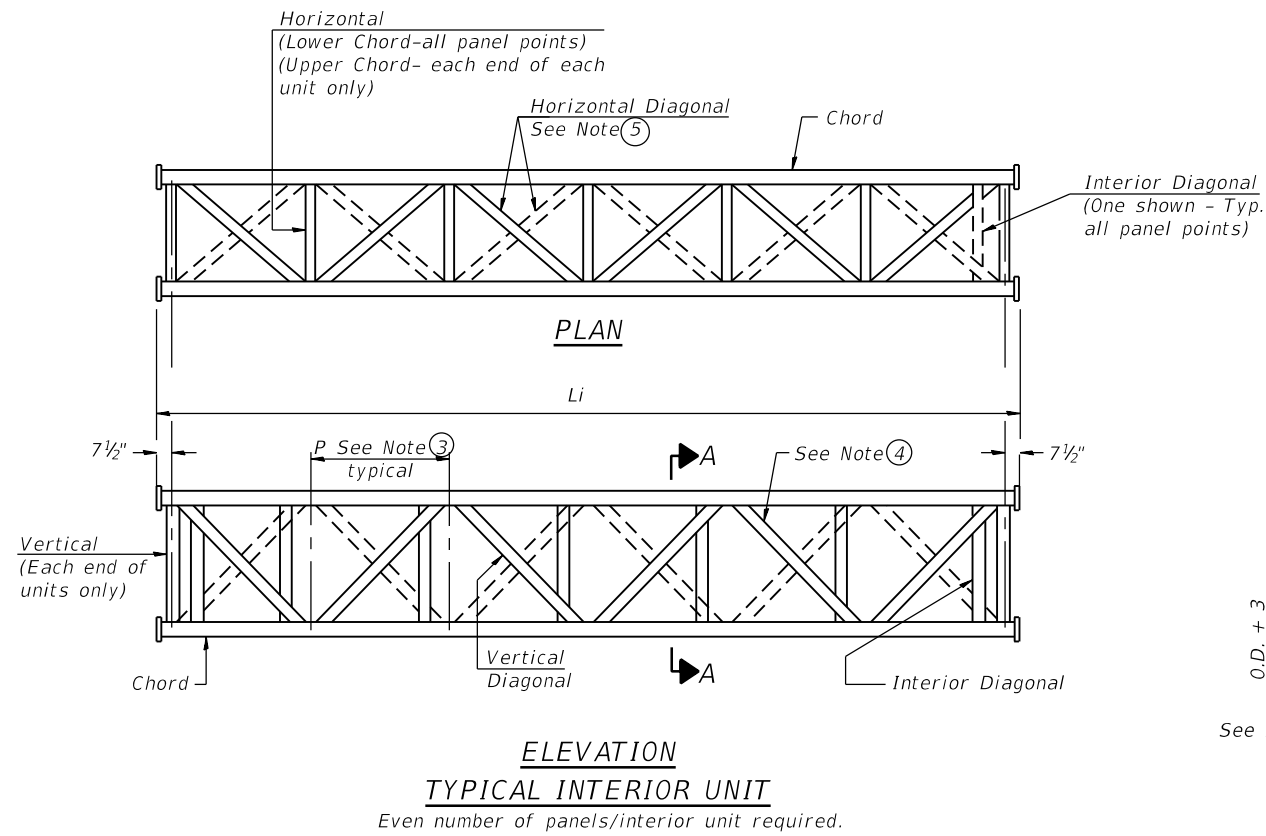
SHEET NO. SS25 OF SS83 SHEETS

F.A.I. RTE. 90/94/290	SECTION	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 704
CONTRACT NO. 62A77				

ILLINOIS FED. AID PROJECT

FILE NAME: P:\V\AE\COM-NA-AW51...recomonline\local\AE\COM\_D502\_NAD\Documents\01\_Americas\Transportation\62269938\_Circle\Phase\_I\000\_CAD\008\_Structural\Sign\_Structures\622A77\_Sign\_Structure\622A77-Span-SSDM5101A-SignStruct.dgn 11:41:51 AM

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- ① Contractor may alternatively use standard aluminum drive-fit cap to close end. 1/2" Ø drain hole in end plate/drive-fit cap. (Typ. at ends of all chords)
- ② 5 1/2" 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 3/4" minimum to 1 1/2" maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.

05-A-2

2-17-2017



USER NAME =	all.jssa	DESIGNED -	JJS, WM	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	AMS	REVISED -	
PLOT DATE =	1/23/2020	CHECKED -	MAI, JMG	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.
90/94/290	2015-018R	COOK	1360	705
CONTRACT NO. 62A77				

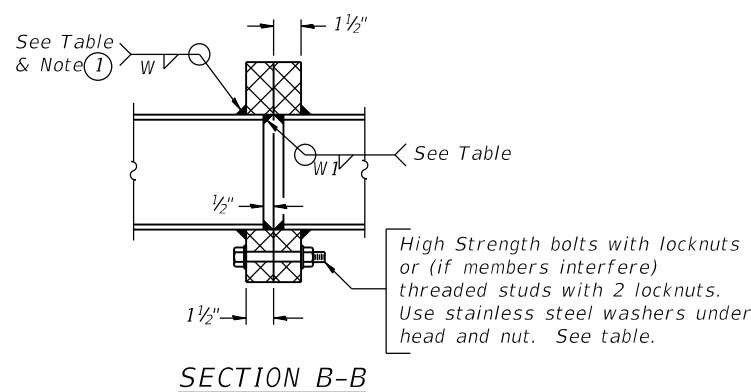
SHEET NO. SS26 OF SS83 SHEETS

ILLINOIS FED. AID PROJECT

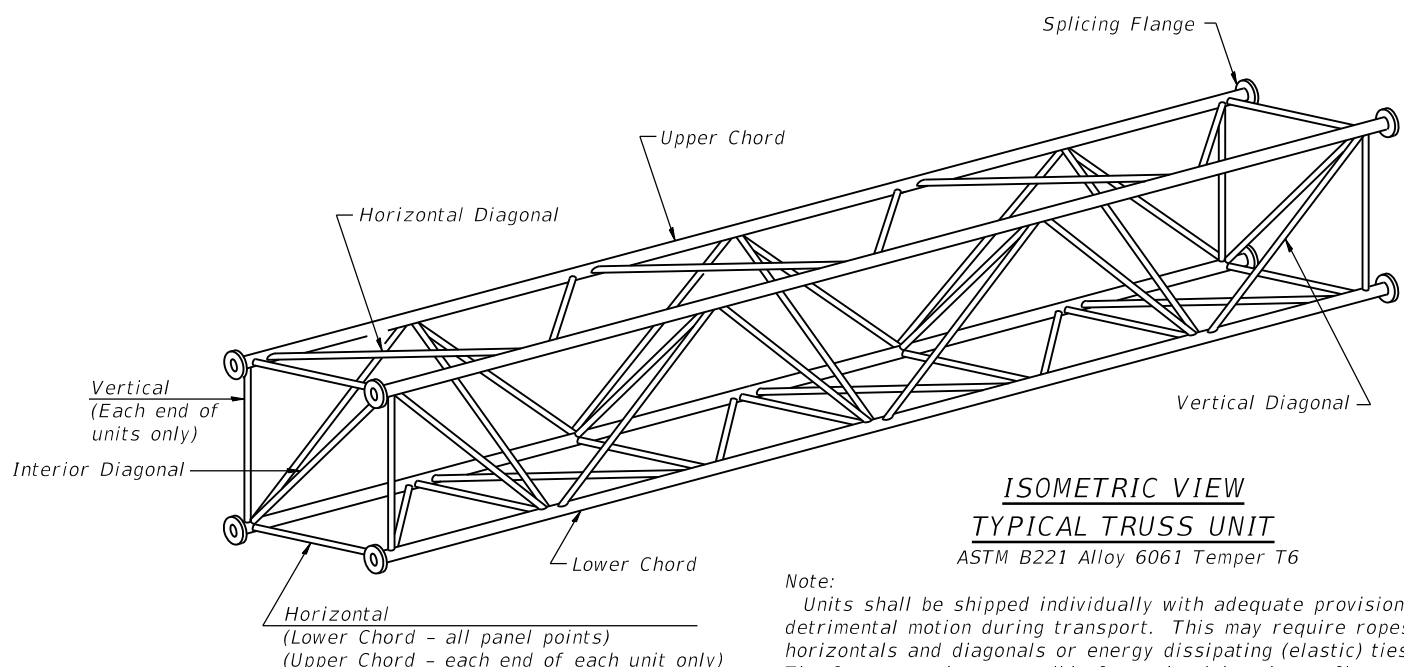
**TRUSS UNIT TABLE**

Structure Number	** Station	Design Truss Type	Exterior Units (2)			Interior Unit				Upper & Lower Chord		Verticals; Horizontal; 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		Weld Sizes		A	B
															No./Splice	Dia.	W	WI		
1S0161094R052.1	6245+25.00	III-A	6	34'-1 1/2"	5'-4 1/2"	1	6	33'-6"	5'-4 1/2"	7"	5/16"	3 1/4"	5/16"	2 1/2"	6	1"	7/16"	5/16"	11 1/2"	15"

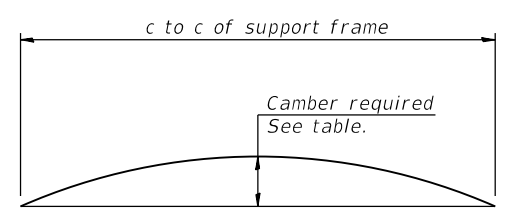
\*\*Measured along Prop. B SB 1-90/94



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 ensure proper field assembly.

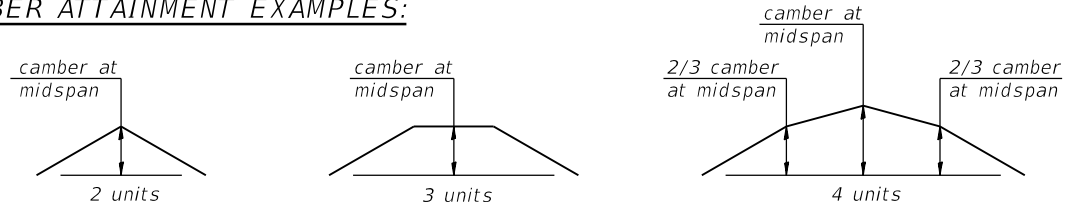


Note:  
Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection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

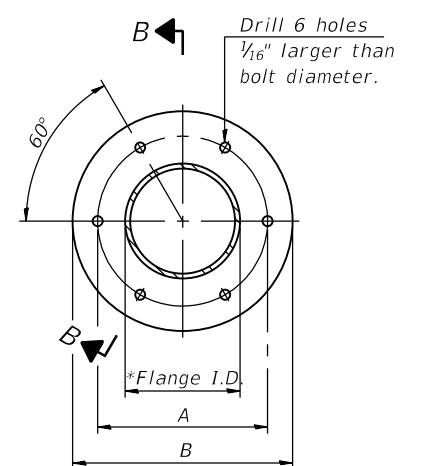


**CAMBER DIAGRAM**  
Camber curve shown is theoretical. Actual camber attained by slope changes at splices between units.

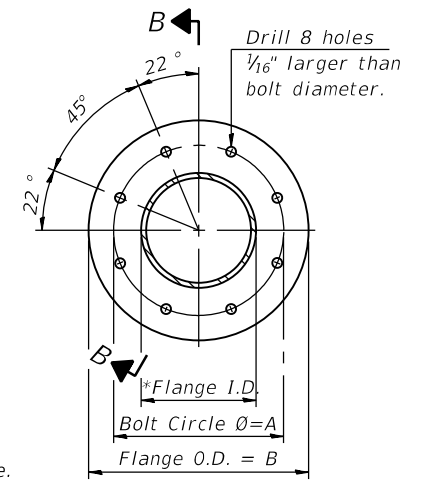
**CAMBER ATTAINMENT EXAMPLES:**



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



**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".

054-A-2

2-17-2017



USER NAME = ali.jssa	DESIGNED - JJS, WM	REVISED -
PLOT SCALE = N.T.S	CHECKED - MAI, JMG	REVISED -
PLOT DATE = 1/23/2020	DRAWN - AMS	REVISED -
	CHECKED - MAI, JMG	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

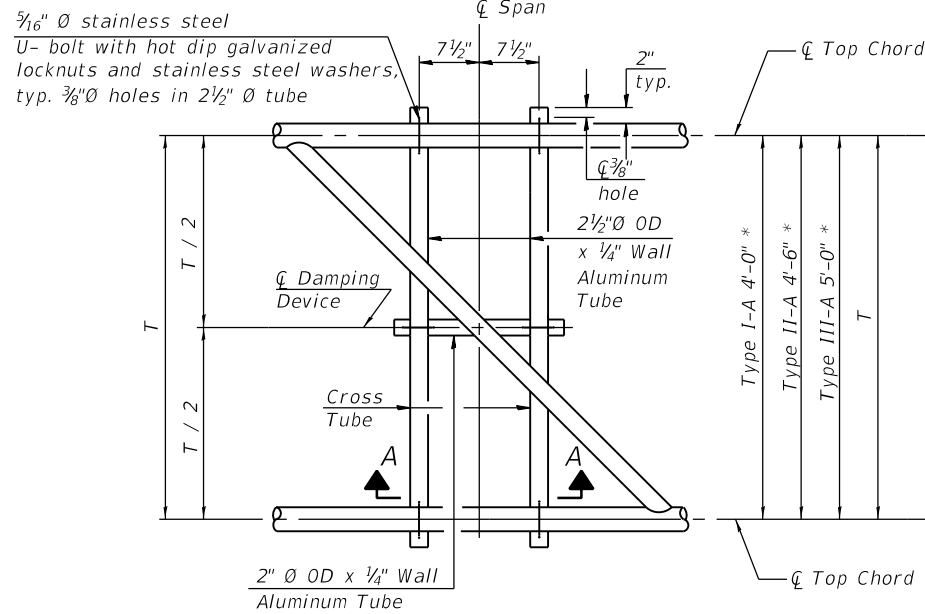
**OVERHEAD SIGN STRUCTURES - ALUMINUM TRUSS DETAILS  
FOR TRUSS TYPES I-A, II-A AND III-A**

SHEET NO. SS27 OF SS83 SHEETS

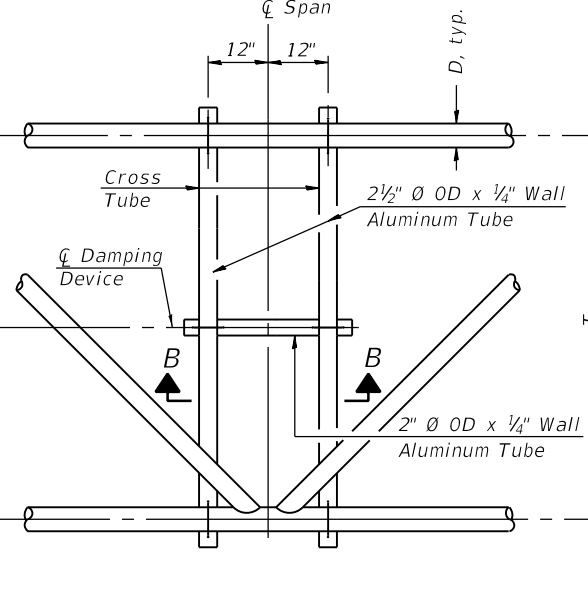
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	706
CONTRACT NO. 62A77				
		ILLINOIS	FED. AID PROJECT	

FILE NAME: P:\VAECOM-NA-AWS1\aeocomonline\aeocom\line\local\aeocom\_ID502\_NAIDocuments\01\_Americas\Transportation\620269938\_Circle\Phase\Sign\_Structures\62A77\_Sign\_Structure\62A77-Span-SSDM5103-SignStruct.dgn 11:05:51 AM

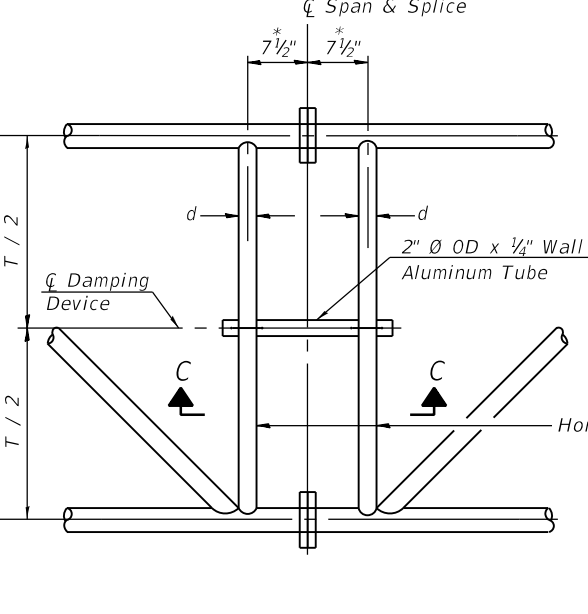
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**PLAN DETAIL "A"**  
 ☐ Span between Panel Points



**PLAN DETAIL "B"**  
 ☐ Span at Panel Point



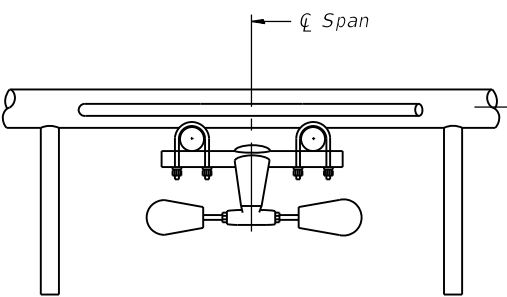
**PLAN DETAIL "C"**  
 ☐ Span at ☐ Chord Splice

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

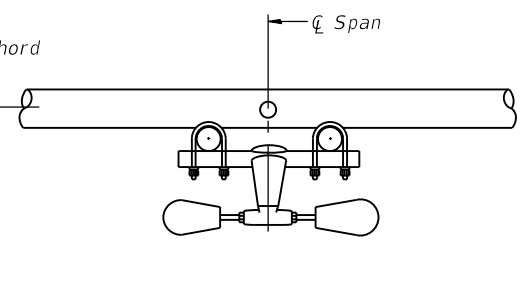
**NOTES**

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

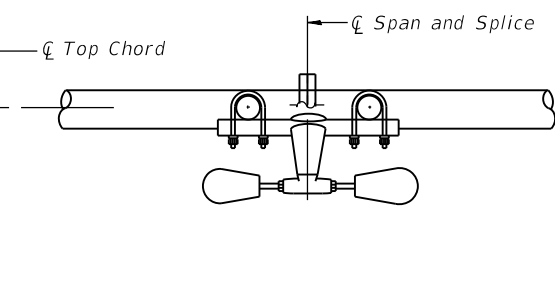
Materials: Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure...



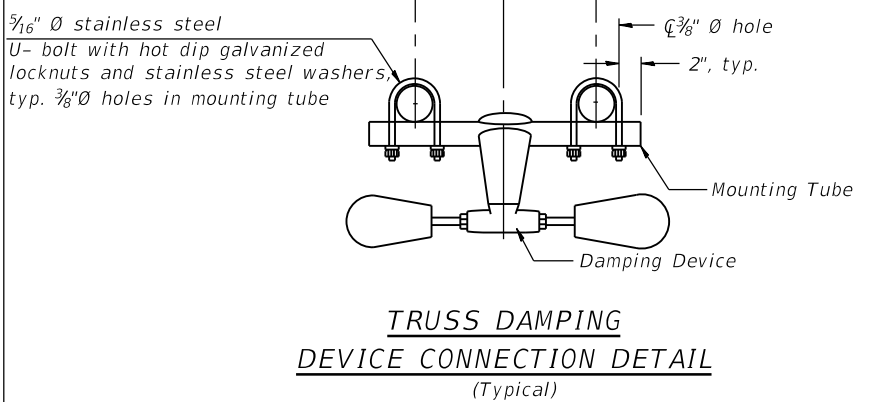
**SECTION A-A**



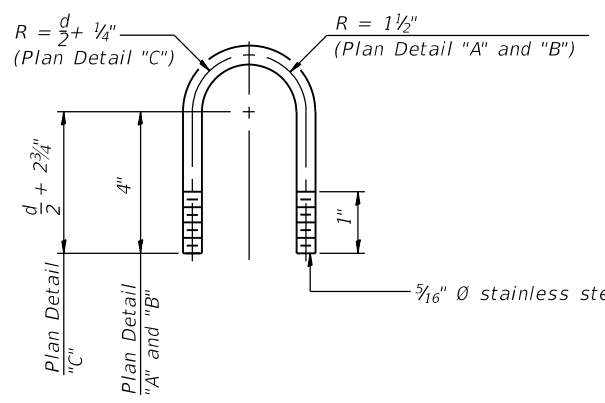
**SECTION B-B**



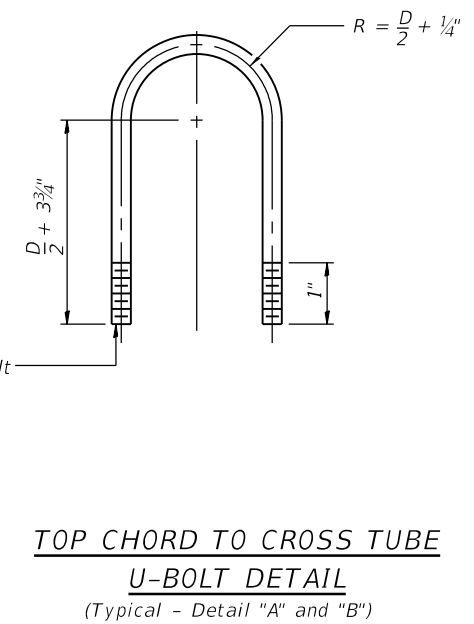
**SECTION C-C**



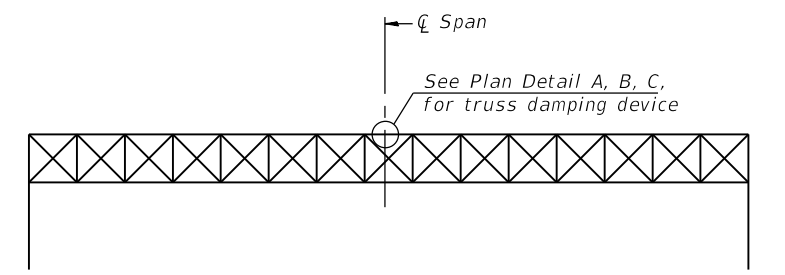
**TRUSS DAMPING DEVICE CONNECTION DETAIL**  
 (Typical)



**DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL**  
 (Typical)



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



**ELEVATION**  
 Aluminum Overhead Sign Truss

05-A-D

2-17-2017



USER NAME =	all.jssa	DESIGNED -	JJS, WM	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	AMS	REVISED -	
PLOT DATE =	1/23/2020	CHECKED -	MAI, JMG	REVISED -	

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 DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURE  
 DAMPING DEVICE

SHEET NO. SS28 OF SS83 SHEETS

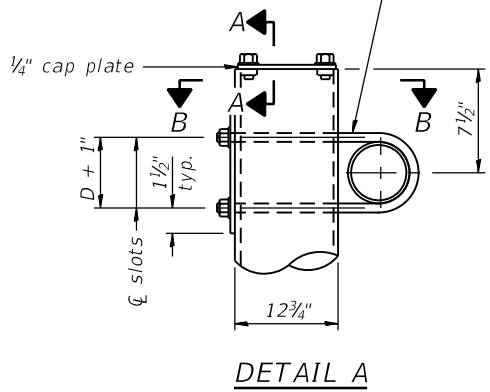
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	707
CONTRACT NO. 62A77				

ILLINOIS FED. AID PROJECT

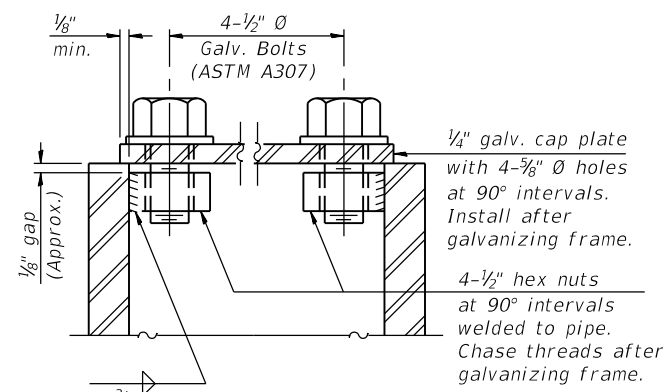
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3/4" Ø stainless steel U-bolt.  
Provide two washers and two hexagon locknuts. (4)  
1 3/16" x 2" slots on 1 1/2" Ø pipe.  
(4 slots required per pipe)

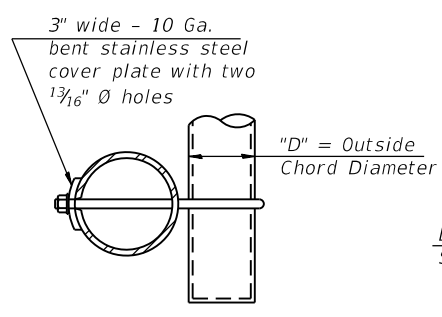


DETAIL A

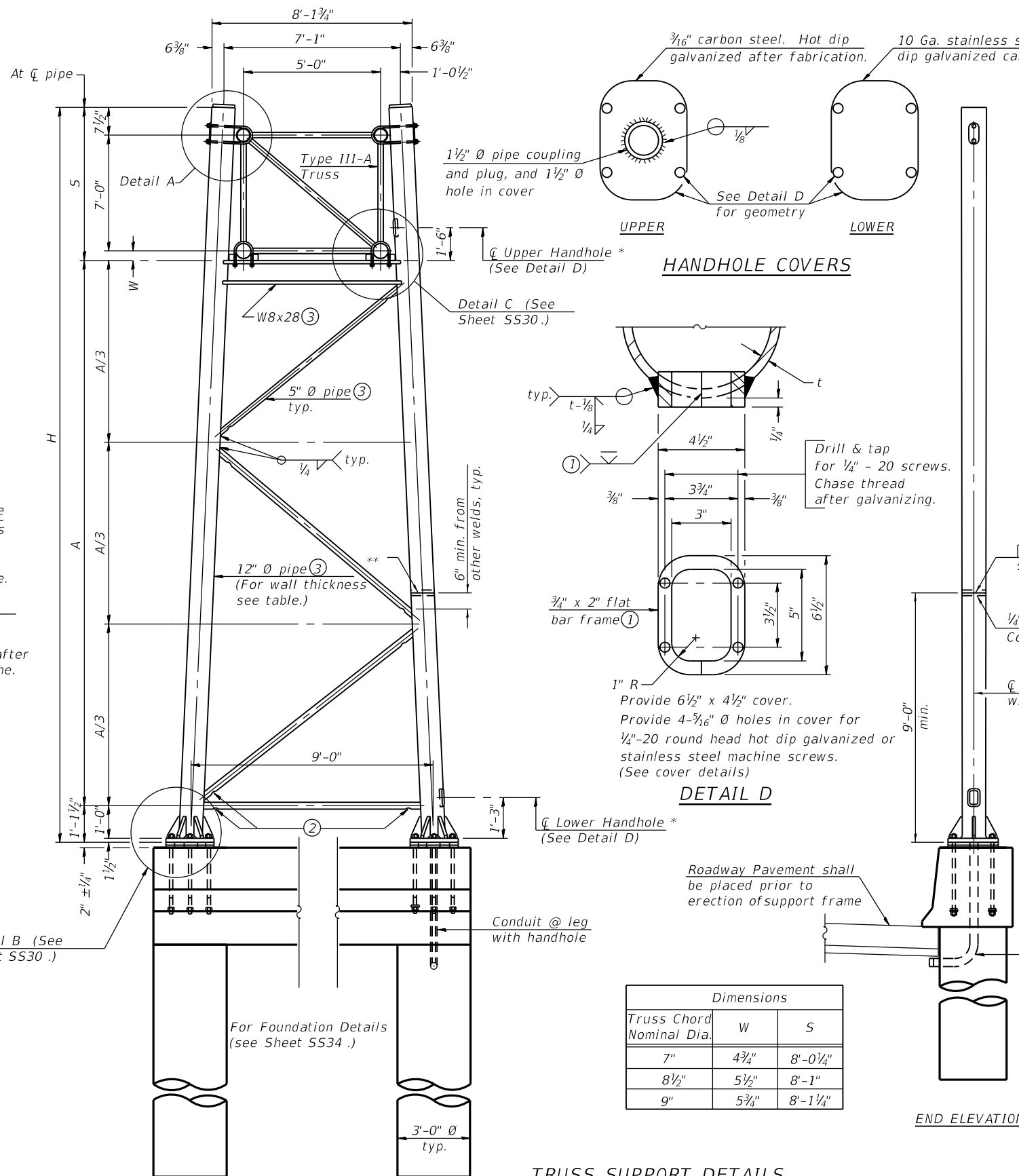


SECTION A-A

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



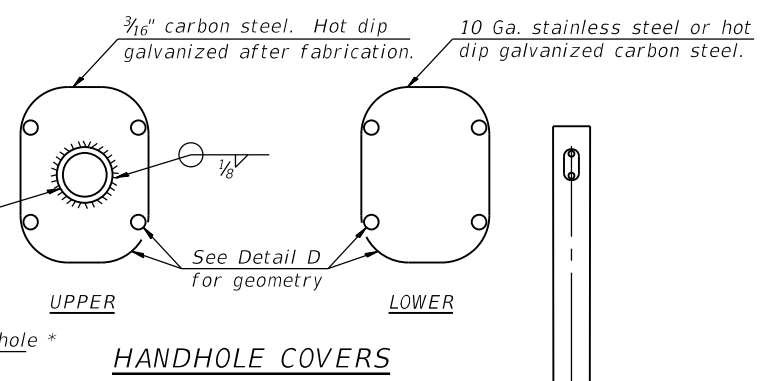
SECTION B-B



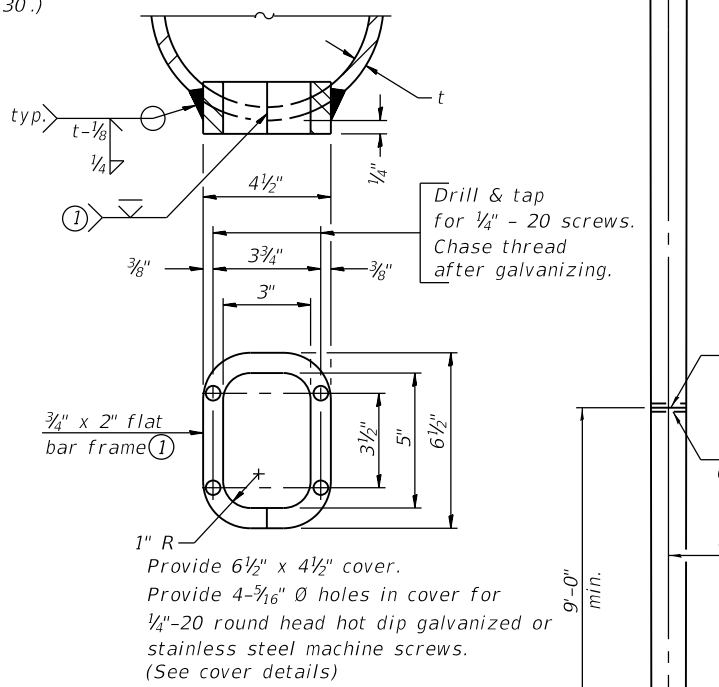
Dimensions		
Truss Chord Nominal Dia.	W	S
7"	4 3/4"	8'-0 1/4"
8 1/2"	5 1/2"	8'-1"
9"	5 3/4"	8'-1 1/4"

TRUSS SUPPORT DETAILS

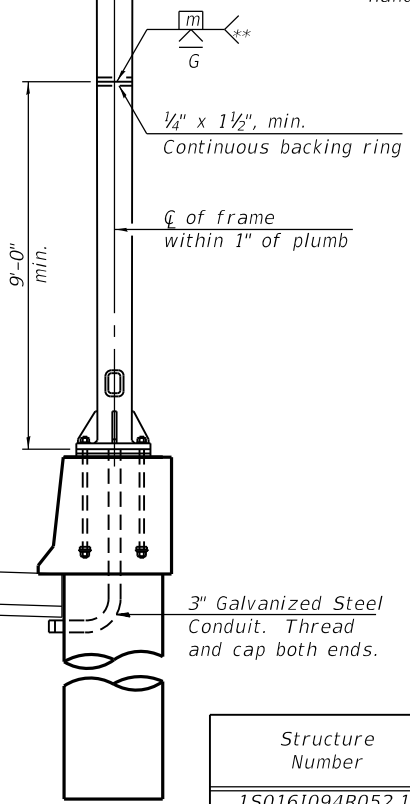
(12" Ø Pipe-Type III-A Truss)  
\*\*One butt welded joint is allowed only on one post per support frame. If used, weld procedure must be pre-approved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.



HANDHOLE COVERS



DETAIL D



END ELEVATION

Support Design Loads: See Sheet SS24 for design and loading criteria.  
Load combinations checked include dead load 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 µm 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 Sheet SS24.
- 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		Pipe Wall Thickness	H (6)	A
		Left	Right			
150161094R052.1	6245+25.00	X	X	0.33"	26'-3 3/4"	17'-2"
				0.33"	27'-1"	17'-11 1/4"

\*\*\* Measured along Prop. § SB 1-90/94



USER NAME =	all.jssa	DESIGNED -	JJS, WM	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	AMS	REVISED -	
PLOT DATE =	1/23/2020	CHECKED -	MAI, JMG	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

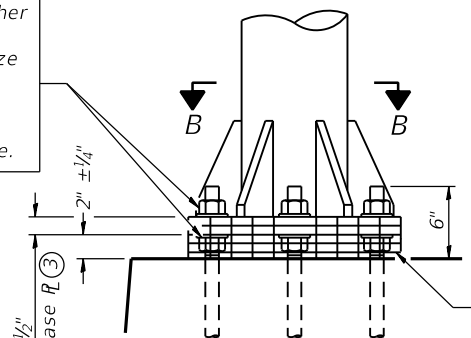
OVERHEAD SIGN STRUCTURES - SUPPORT FRAME  
FOR TYPE III-A ALUMINUM TRUSS

SHEET NO. SS29 OF SS83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	708
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				



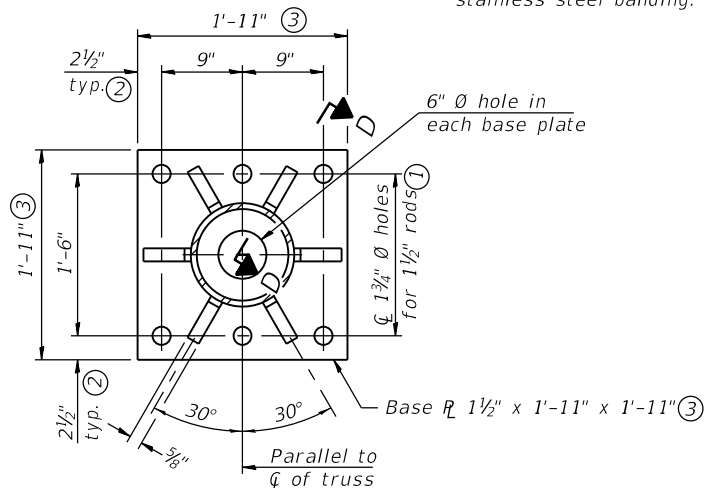
Hexagon locknut and washer (top), leveling nut and washer (bottom). Galvanize per AASHTO M232. Nuts shall each be tightened against base plate with 200 lb.-ft. minimum torque.



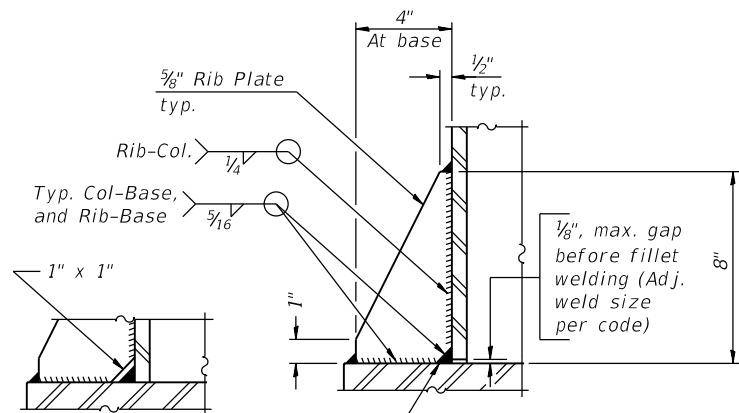
**DETAIL B**

Ribs shall be cut to fit slope of pipe.

Stainless Steel Standard Grade Wire Cloth, 3" wide, 1/4" maximum opening with a minimum wire diameter of AWG. No. 16 with a minimum 2" lap. Secure to base plate after erection with 3/4" stainless steel banding.



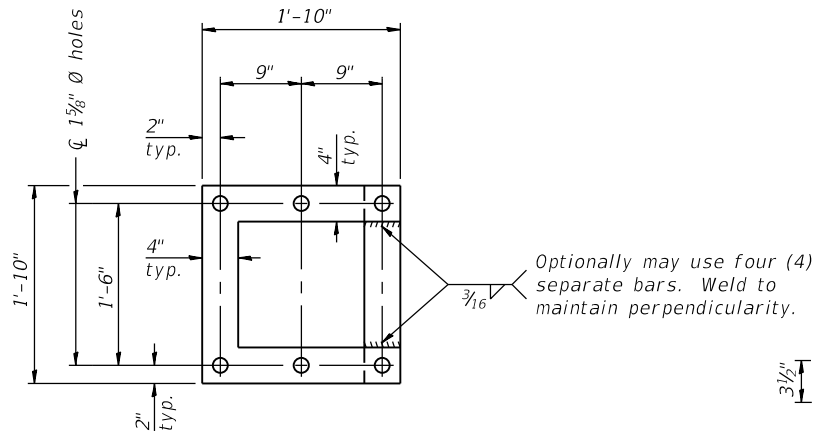
**SECTION B-B**



**SECTION D-D**

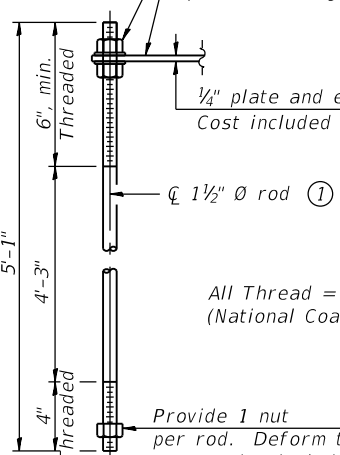
\*\* Alternate detail if welding col. to base plate first, then snip inside corner of ribs. Terminate weld on rib 1/4" from snip.

No snip req'd. at rib inside corner if placed before col. to base plate welding.\*\*



**POSITIONING PLATE(S)**

At each location, provide 1/4" thick positioning plate(s) and six (6) additional nuts to be used with leveling nuts to maintain anchor bolts position during concrete placement.



**ANCHOR ROD DETAIL**

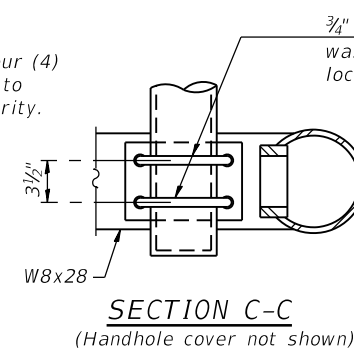
Anchor rods shall conform to ASTM F1554 Grade 105 Galvanize upper 12" minimum per AASHTO M232. No welding shall be permitted on rods.

**TYPE III-A TRUSS**

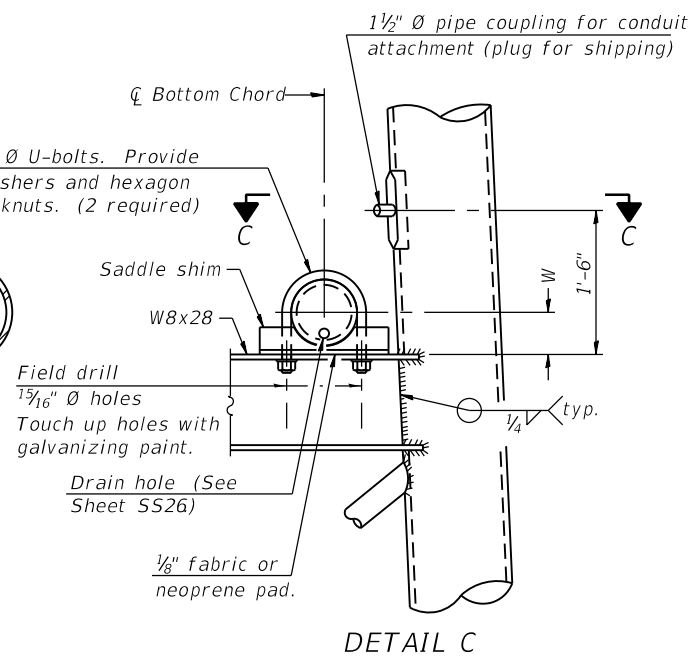
**12" Ø PIPE SUPPORT FRAME DETAILS**

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

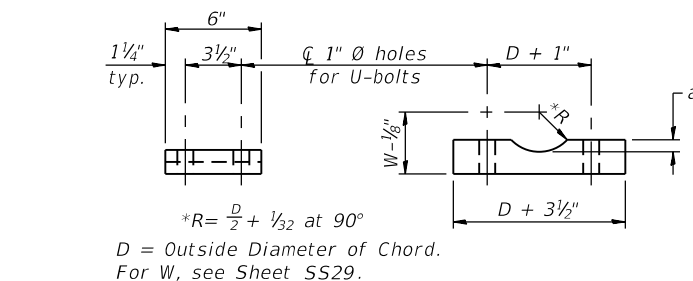
- ① 1 3/4" Ø rod, 2" Ø holes
- ② 2 3/4" edge distance
- ③ Base Pl 1 5/8" x 1'-11 1/2" x 1'-11 1/2"



**SECTION C-C**  
(Handhole cover not shown)



**DETAIL C**



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)

FILE NAME: P:\VAECOM-NA-AW51...aecomonline\local\VAECOM\_D502\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\Structural\Sign\_Structures\62A77\_Sign\_Structure\62A77-Span-SSDM5106-SignStruct.dgn

054-A-8aA

2-17-2017



USER NAME =	alljssa	DESIGNED -	JJS, WM	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	AMS	REVISED -	
PLOT DATE =	1/23/2020	CHECKED -	MAI, JMG	REVISED -	

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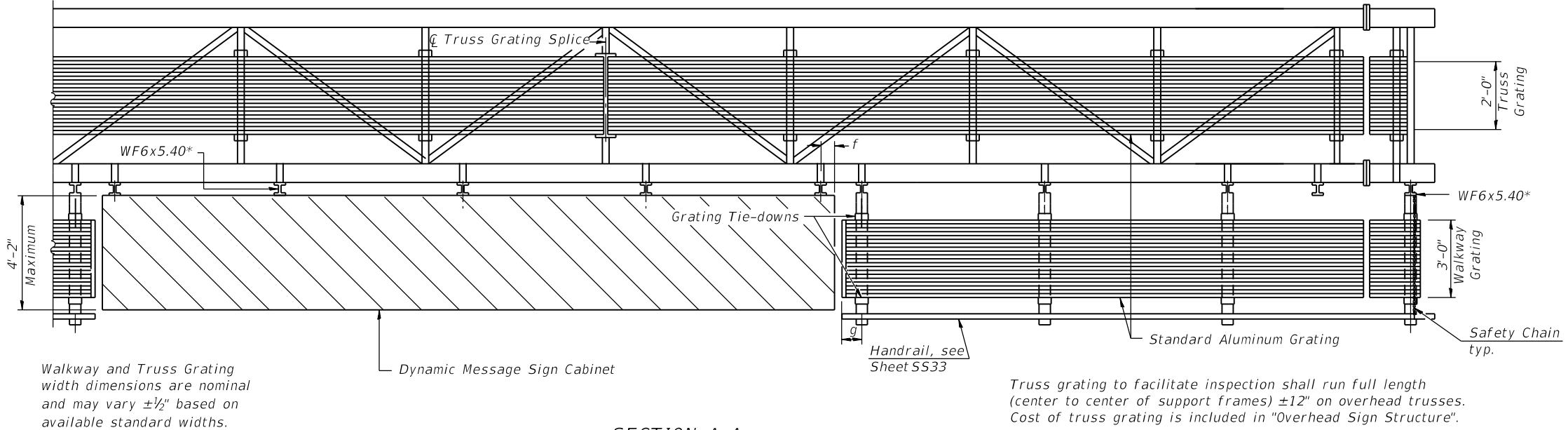
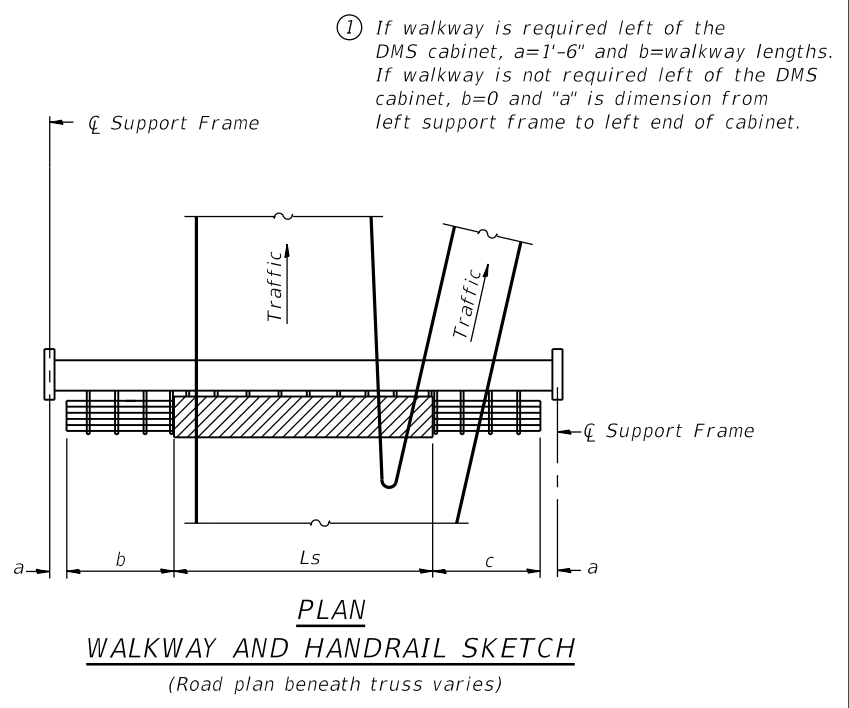
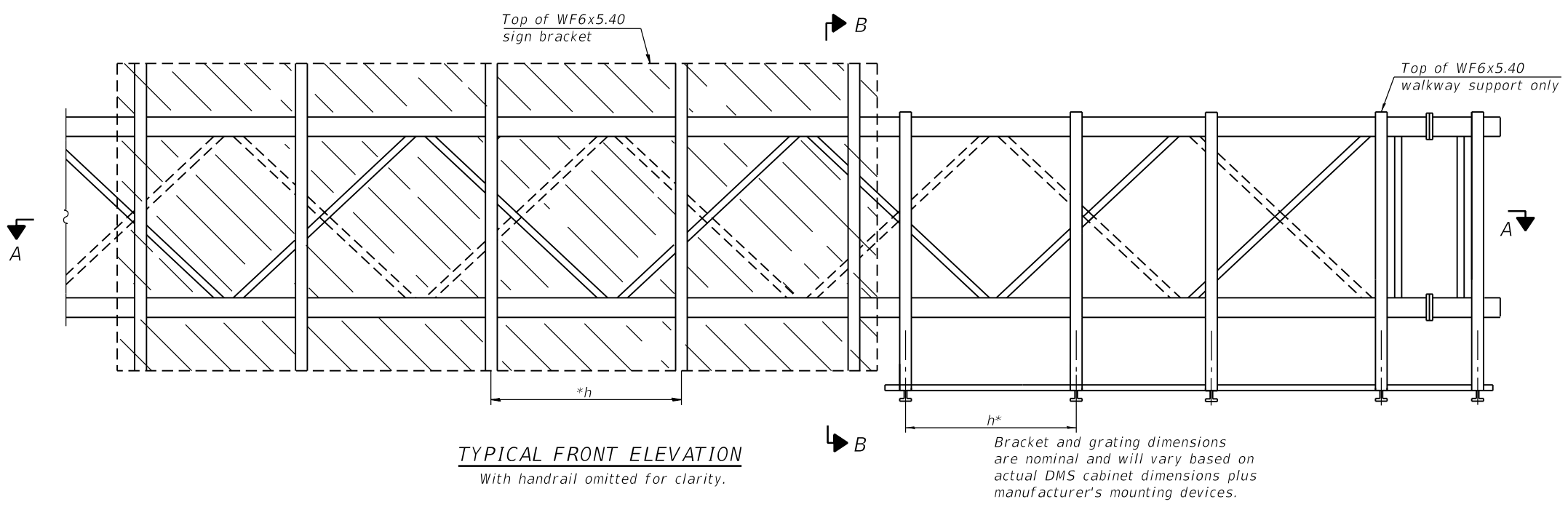
OVERHEAD SIGN STRUCTURES  
SUPPORT FRAME FOR TYPE III-A ALUMINUM TRUSS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	709
CONTRACT NO. 62A77				

SHEET NO. SS30 OF SS83 SHEETS

ILLINOIS FED. AID PROJECT

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**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

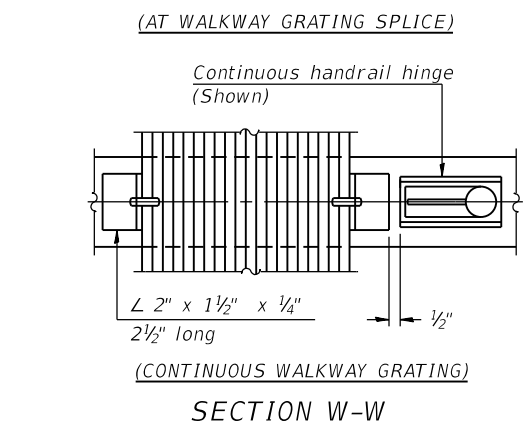
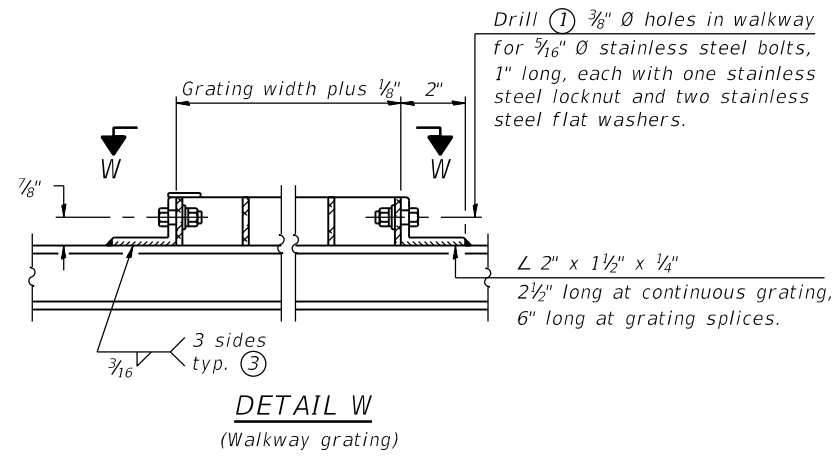
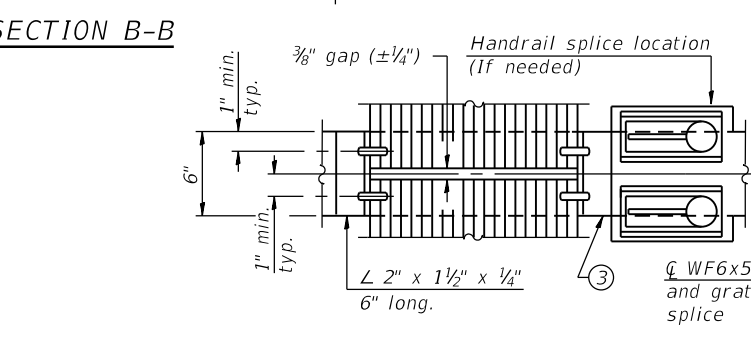
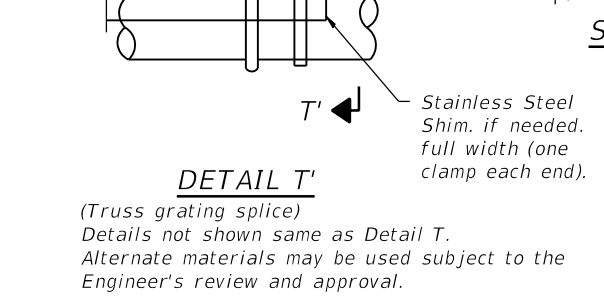
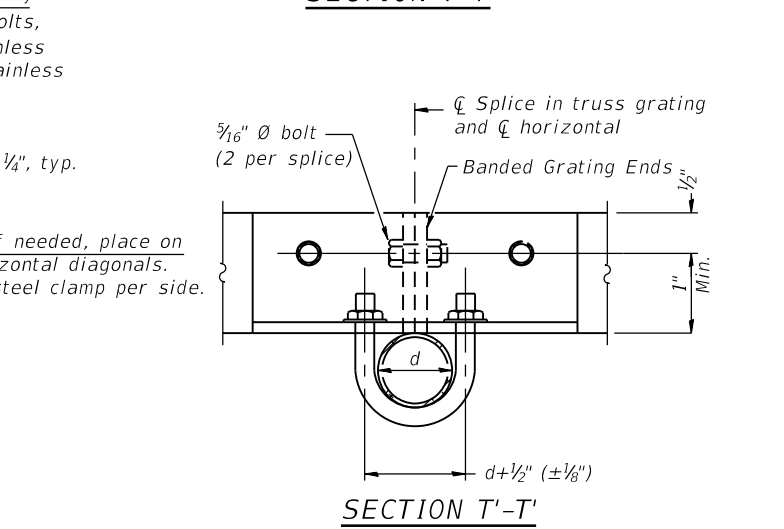
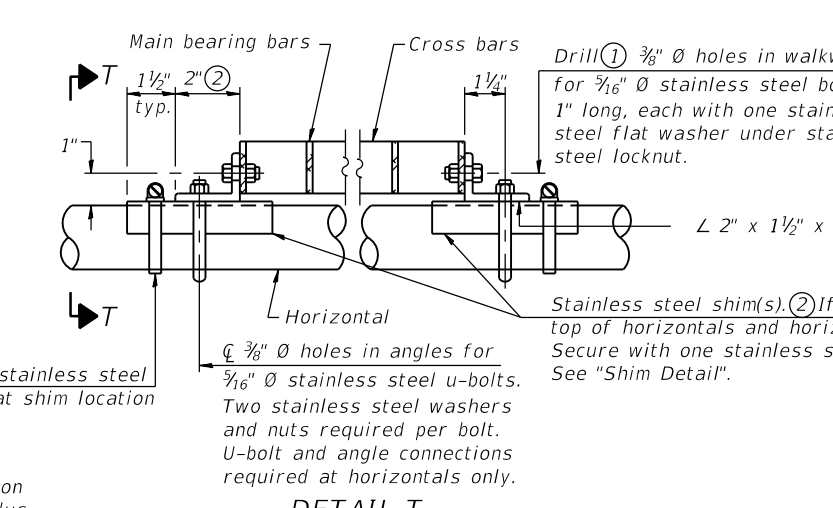
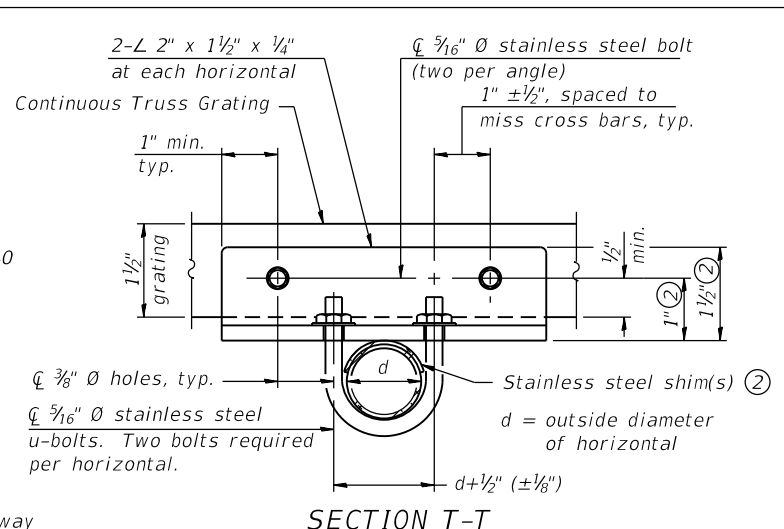
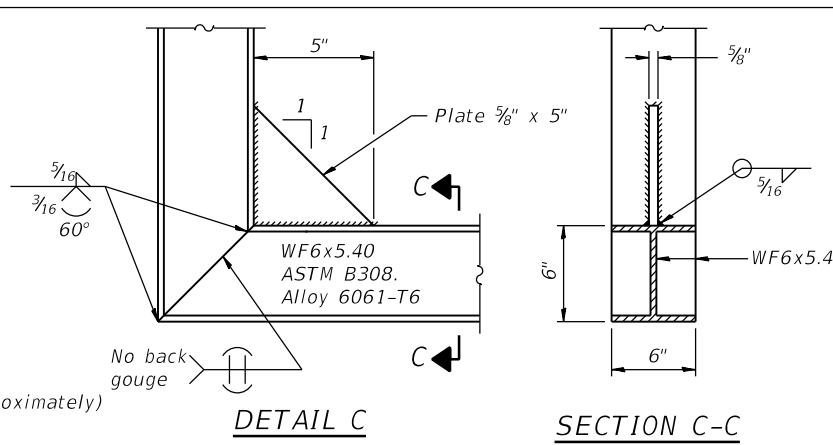
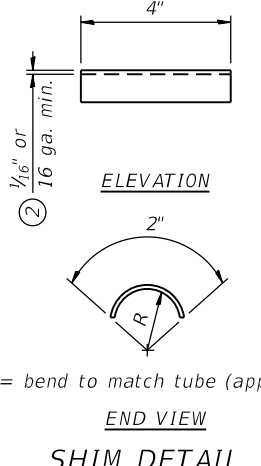
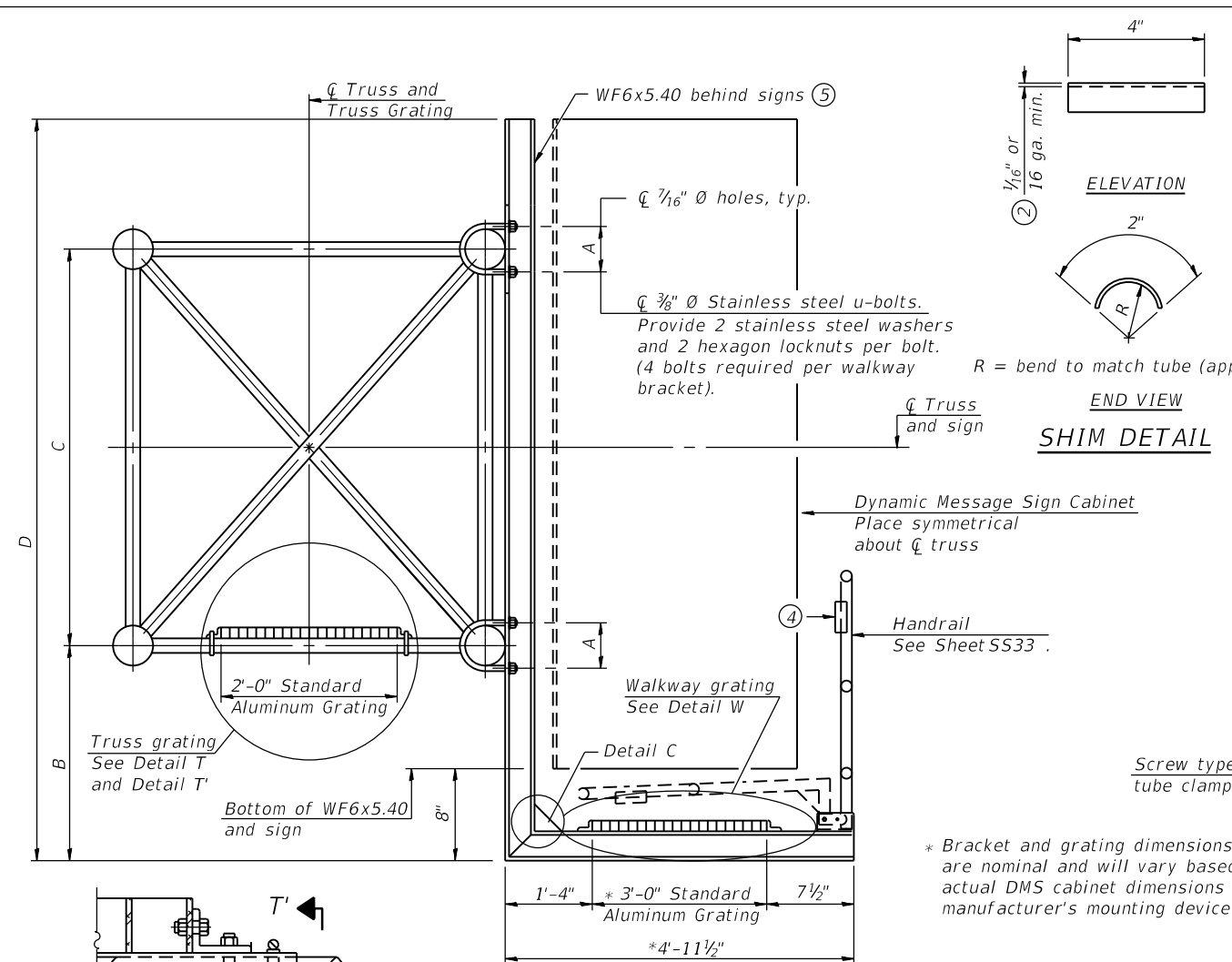
Handrail and walkway shall span a minimum of three brackets between splices and/or gap joints. Place all sign and walkway brackets as close to panel points as practical. Grating and handrail splices placed as needed.

Notes:  
 \* Space walkway brackets WF6x5.40 for efficiency and within limits shown:  
 f = 12" maximum, 4" minimum (End of sign to  $\text{\O}$  of nearest bracket)  
 g = 12" maximum, 4" minimum (End of walkway grating to  $\text{\O}$  of nearest support bracket)  
 h = 6'-0" maximum ( $\text{\O}$  to  $\text{\O}$  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 Sheet SS32.  
 For Handrail Splice Details, see Sheet SS33.

Structure Number	** Station	a	b	c	Ls	Walkway Grating and Handrail Lengths
1S0161094R052.1	6245+25.00	1'-6"	35'-4"	32'-8"	29'-1"	68'-0"

\*\*Measured along Prop.  $\text{\O}$  SB I-90/94

FILE NAME: D:\V\AECOM\NA-AWS1\recomonline\local\AECOM\_DS02\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\_II\000\_CAD\008\_Structural\Sign\_Structures\62A77\_Sign\_Structure\62A77-SSDMS108-SignStruct.dgn



**SPECIFICATIONS FOR STANDARD ALUMINUM GRATING**

Main Bearing Bars shall be 3/16" x 1 1/2" on 1 3/16" centers and conform to ASTM B211 Alloy 6061-T6.  
 Cross bars 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.<sup>3</sup> 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	⑥ B	C	⑥ D
1S0161094R052.1	6245+25.00	8"	1'-1 1/2"	7'-0"	8'-7"

\*\* Measured along Prop. § SB 1-90/94

- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- 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.
- If Handrail Joint present, weld angle to WF(A-N)4 and 1/4" extension bars. (See Sheet SS33)
- R 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
- 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.
- Based on actual height of tallest sign given on Sheet SS24.

OS-A-10-DMS

2-17-2017



USER NAME =	alljssa	DESIGNED -	JJS, WM	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MAI, JMG	REVISED -	
PLOT DATE =	1/23/2020	DRAWN -	AMS	REVISED -	
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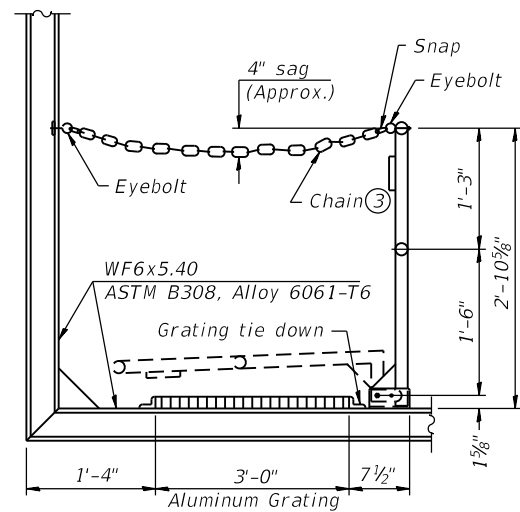
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**OVERHEAD SIGN STRUCTURES  
ALTERNATE ALUMINUM WALKWAY DETAILS FOR DMS**

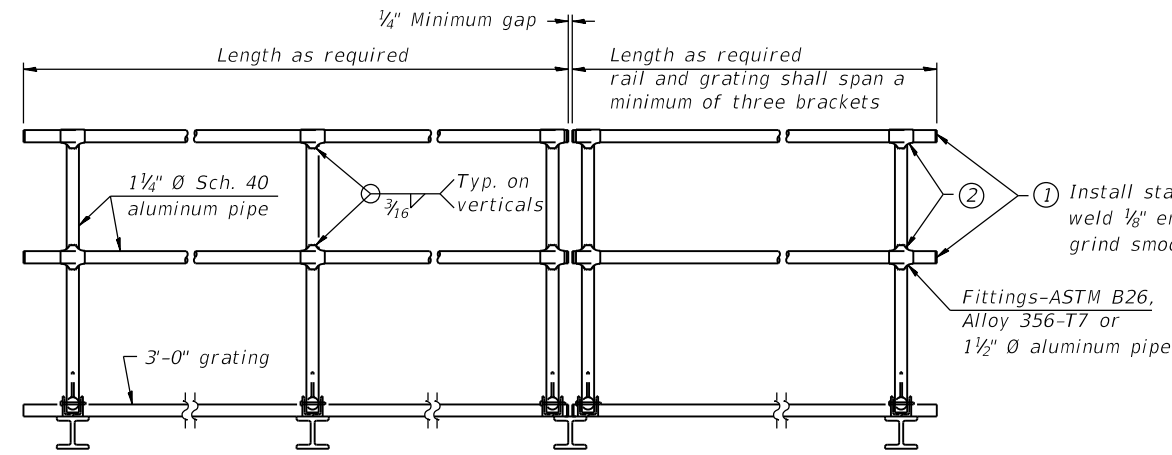
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	711
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

SHEET NO. SS32 OF SS83 SHEETS

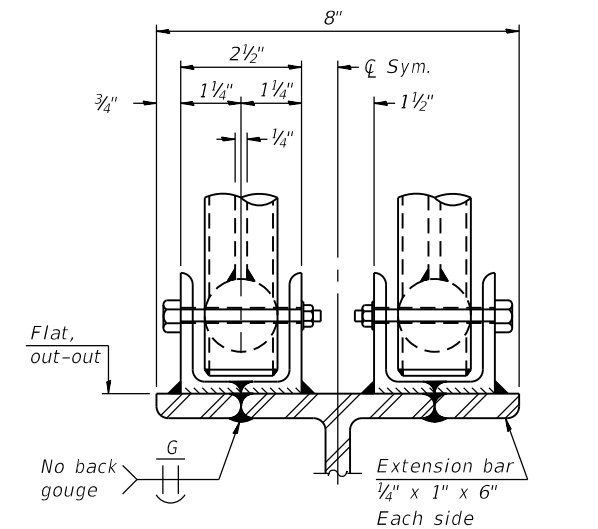
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**SIDE ELEVATION**  
(Showing safety chain w/o sign)



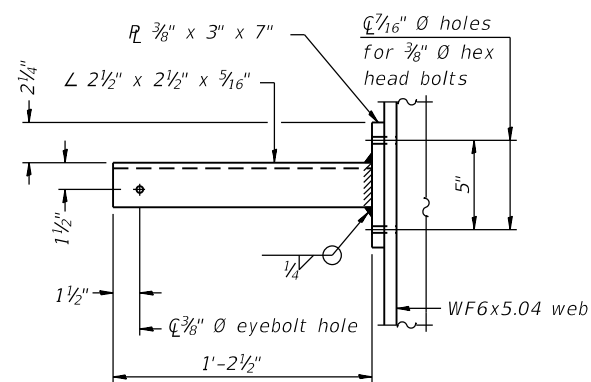
**FRONT ELEVATION**



**ELEVATION AT HANDRAIL JOINT**

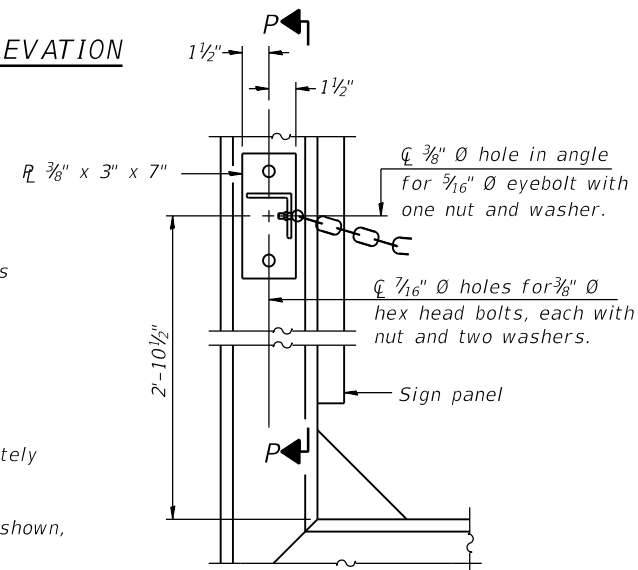
**HANDRAIL DETAILS**

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

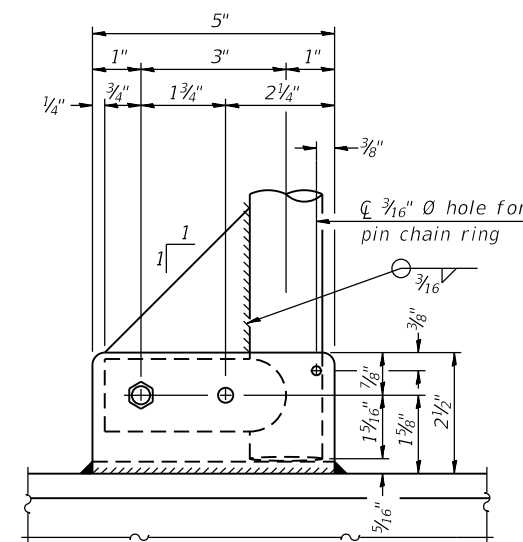


**SECTION P-P**

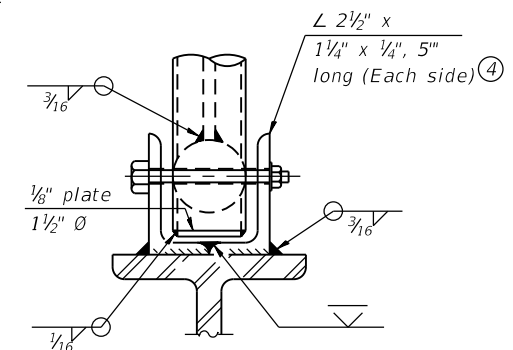
- ② Horizontal handrail member shall be continuous thru fitting. Provide 7/16" hole in fitting for 3/8" bolt. Field drill 7/16" hole in horizontal rail member. Provide washer and locknut for bolt. (Use 5/16" eyebolts in 7/16" holes on top rail at ends only.)
- ③ 3/16" type 304L stainless steel chain, approximately 12 links per foot.
- ④ Extrusions may be used in lieu of the details shown, with approval of the Engineer.



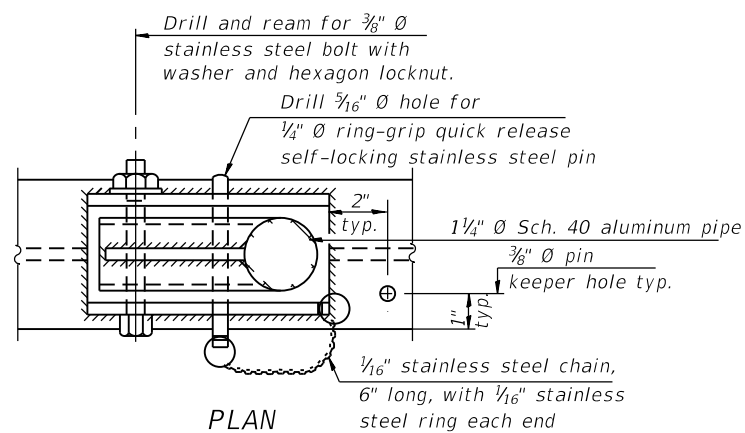
**ALTERNATE SAFETY CHAIN ATTACHMENT**  
(With Sign Present)  
Items not shown same as "Side Elevation" of "Handrail Details"



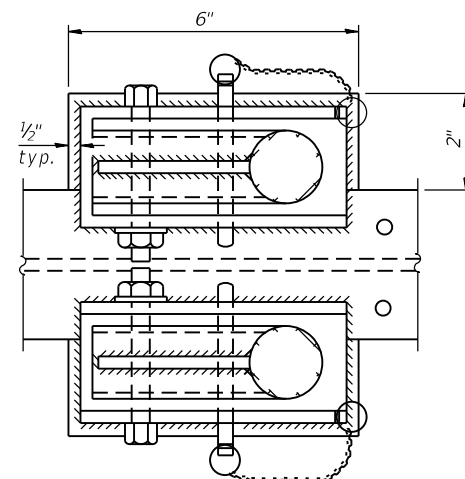
**SIDE ELEVATION**



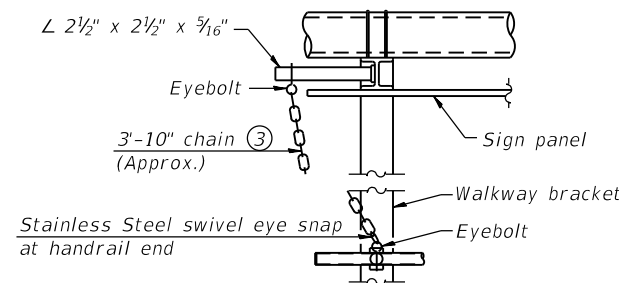
**FRONT ELEVATION**  
See "ELEVATION" at right for dimensions.



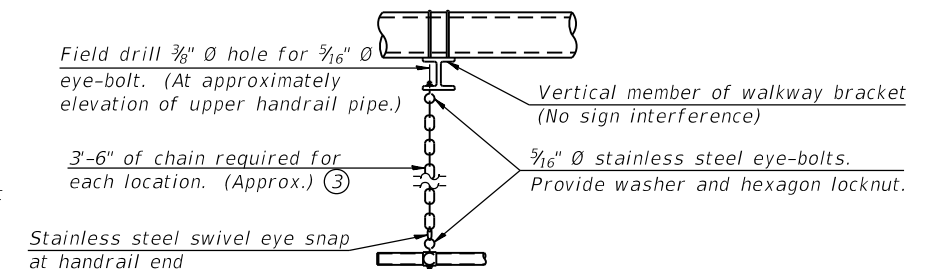
**PLAN**  
**DETAIL E HANDRAIL HINGE**



**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.

05-A-11-DMS

2-17-2017



USER NAME =	alljssa	DESIGNED -	JJS, WM	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	AMS	REVISED -	
PLOT DATE =	1/23/2020	CHECKED -	MAI, JMG	REVISED -	

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

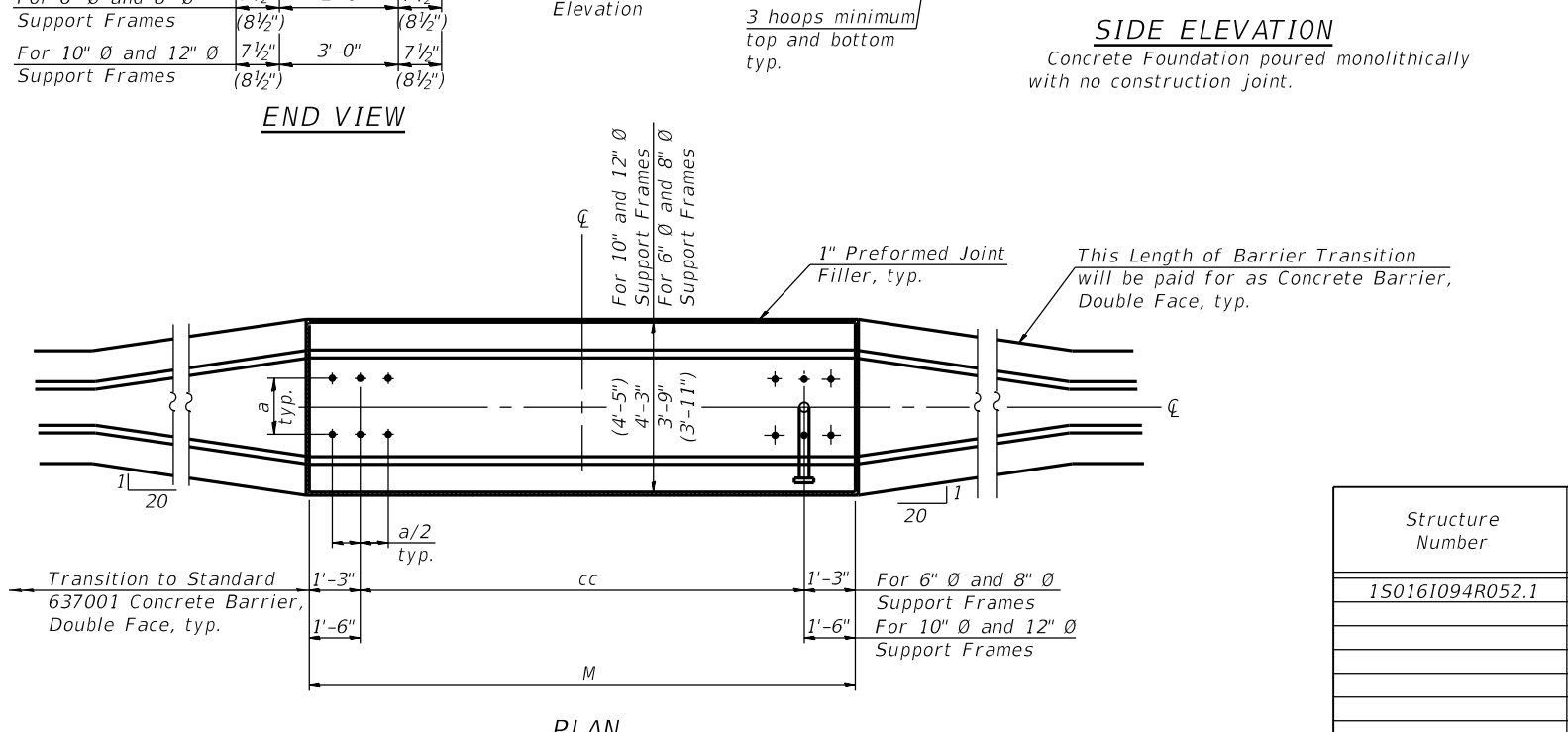
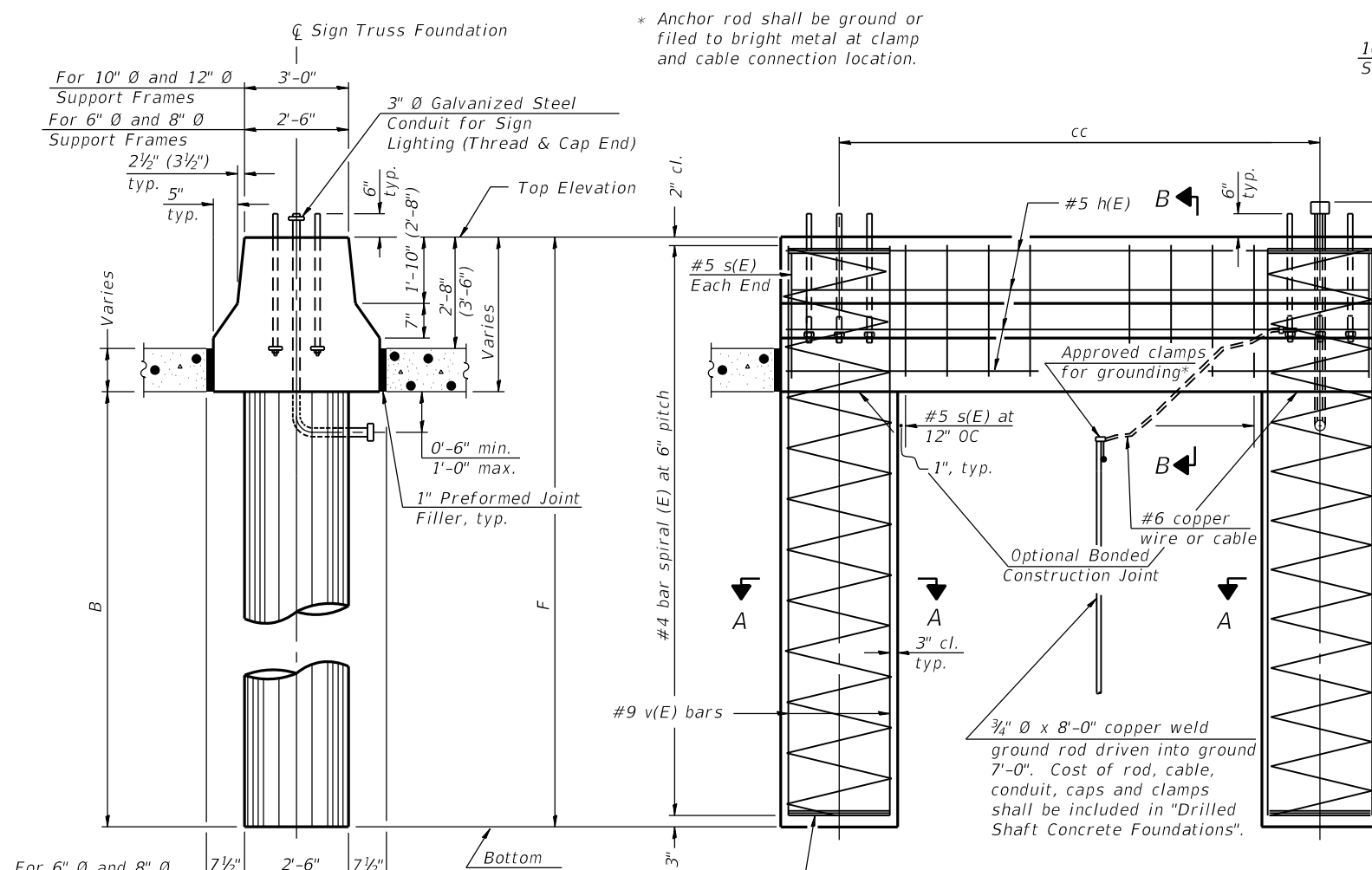
**OVERHEAD SIGN STRUCTURES**  
**ALTERNATE ALUMINUM HANDRAIL DETAILS FOR DMS**

SHEET NO. SS33 OF SS83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	712
CONTRACT NO. 62A77				

ILLINOIS FED. AID PROJECT

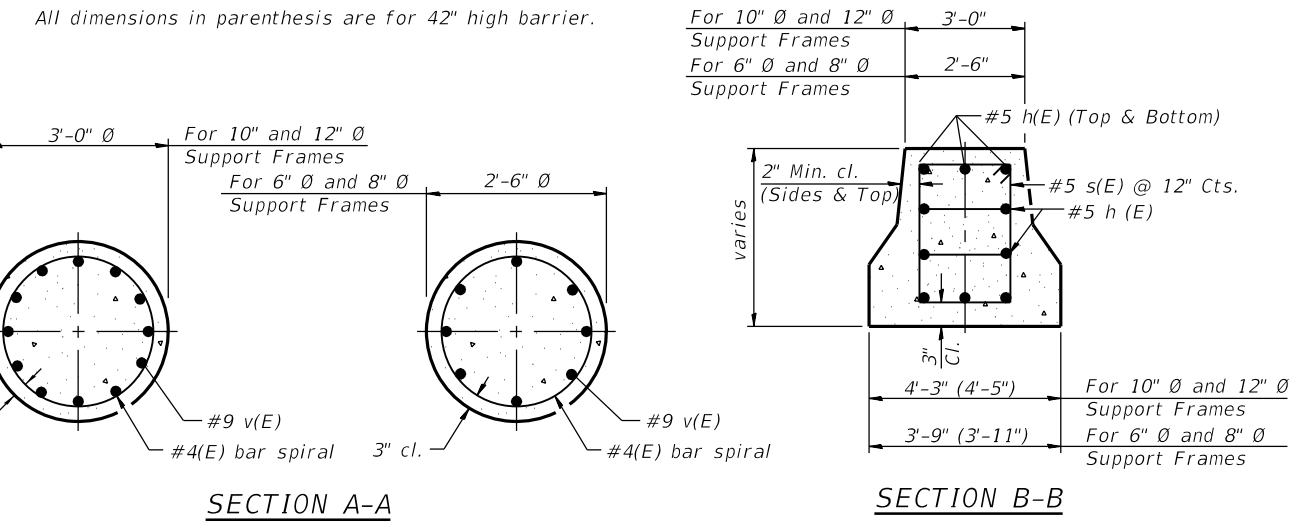
FILE NAME: P:\VAECOM-NA-AWS1\_aecomonline\local\VAECOM\_DS02\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\Structural\Sign\_Structures\62A77\_Sign\_Structure\62A77-Span-SSDM5109-SignStruct.dgn



**NOTES:**  
 The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength ( $Q_u$ ) 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.

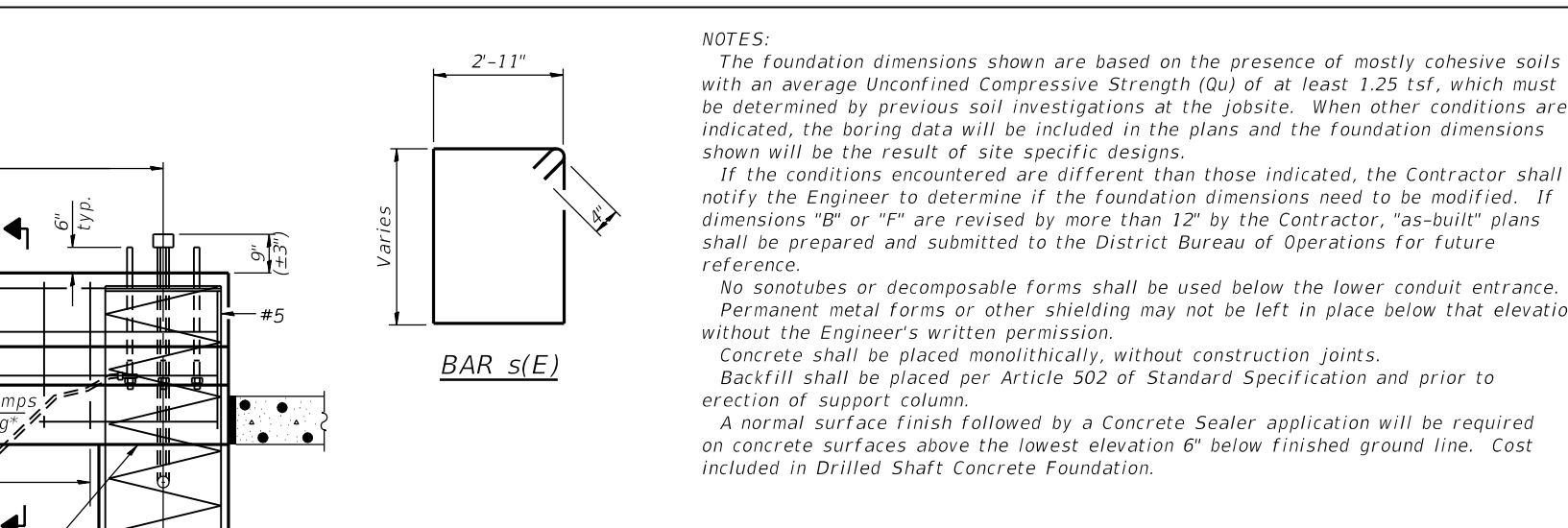
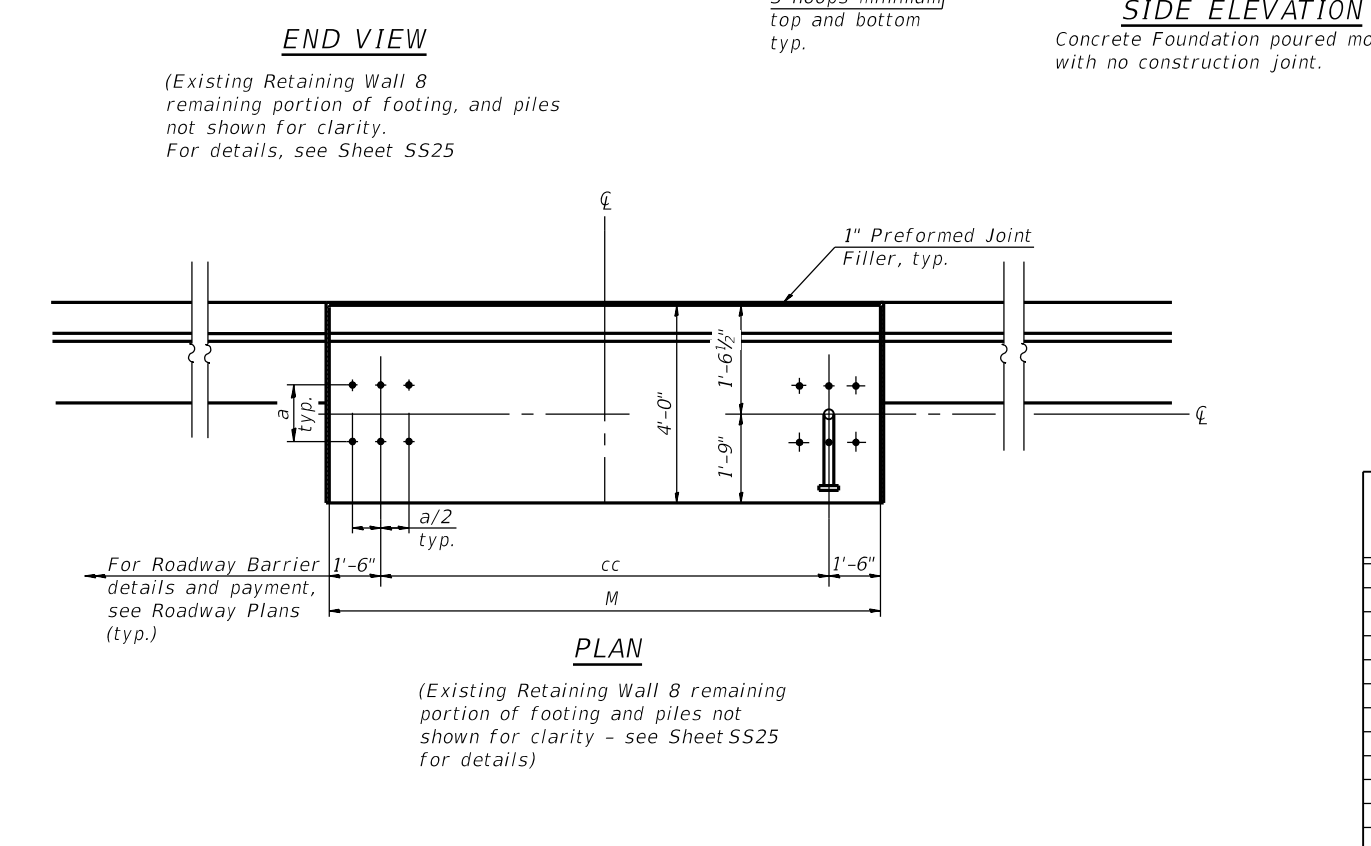
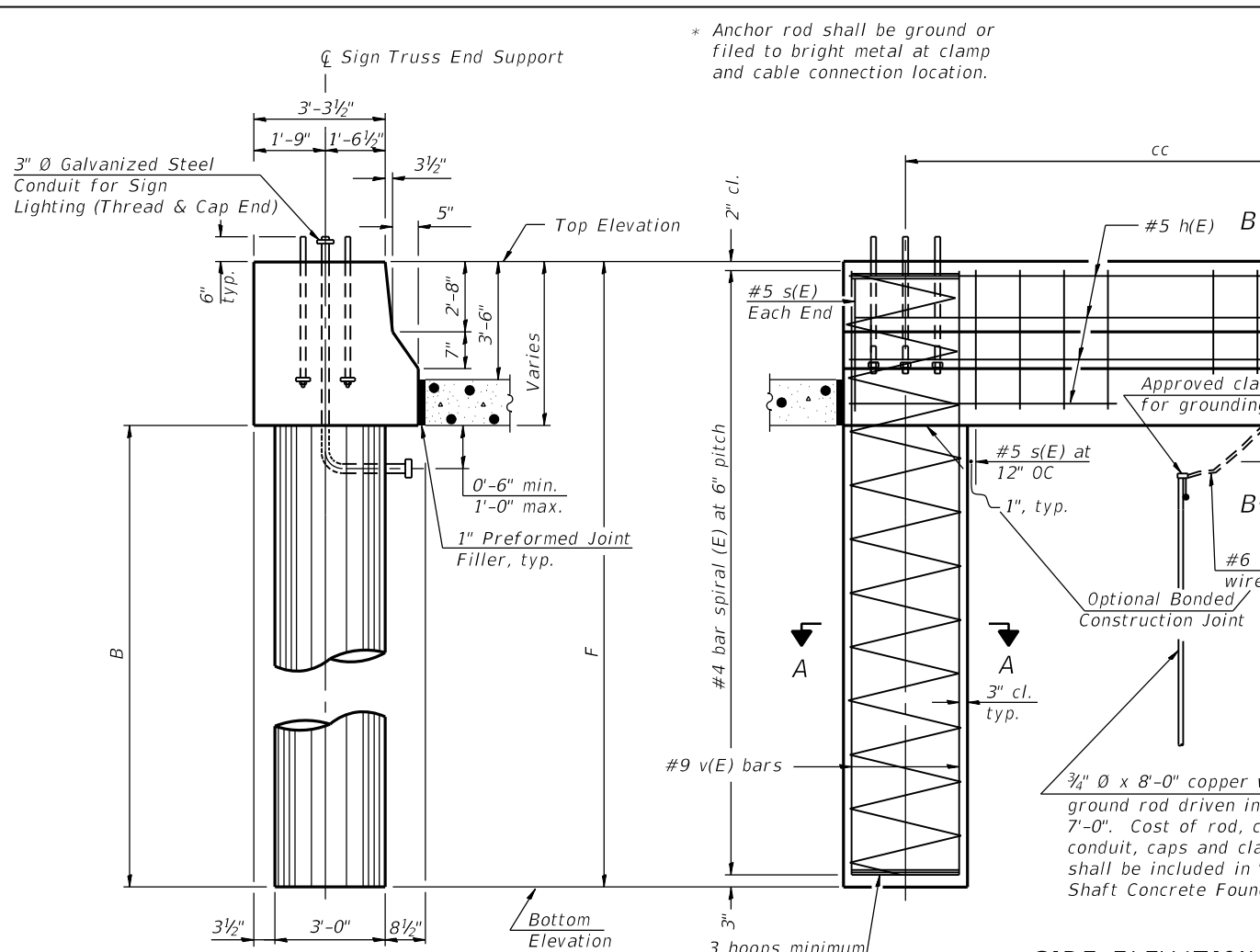
**BAR LIST - EACH FOUNDATION**

Bar	Number	Size	Length	Shape
h(E)	10	#5	M less 4"	—
s(E)	Varies	#5	Varies	□
v(E)	16	#9	F less 0'-5"	—
v(E)	24	#9	F less 0'-5"	—
#4(E) bar spiral - see Side Elevation				



Structure Number	** Station	Left Foundation				Right Foundation				Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	B	F	Elevation Top	Elevation Bottom	B	F	
1S0161094R052.1	6245+25.00	578.56	551.31	22'-6"	27'-3"	-	-	-	-	19.7

FILE NAME: D:\V\AECOM-NA-AWS1\...; USER: jana.jssa; DESIGNED: JJS, WM; CHECKED: MAI, JMG; DRAWN: AMS; PLOT DATE: 03/04/2020

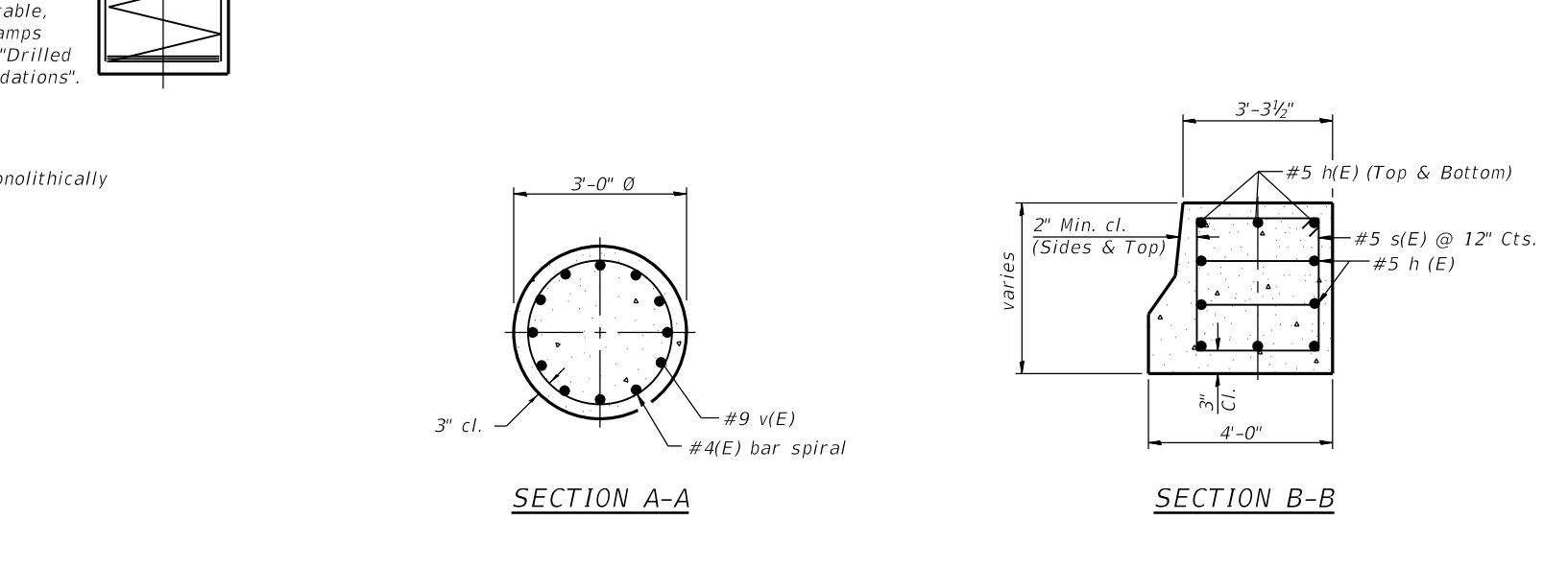


**BAR LIST - EACH FOUNDATION**

Bar	Number	Size	Length	Shape
h(E)	10	#5	M less 4"	—
s(E)	Varies	#5	Varies	□
v(E)	24	#9	F less 0'-5"	—
#4(E) bar spiral see Side Elevation				

Pipe Support Frames	cc	M	a	a/2
12"Ø	9'-0"	12'-0"	1'-6"	9"



Structure Number	**Station	Left Foundation				Right Foundation				Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	B	F	Elevation Top	Elevation Bottom	B	F	
1S0161094R052.1	6245+25.00	-	-	-	-	577.80	550.55	22'-6"	27'-3"	19.6





# BORING LOG 1165-B-02

wangeng@wangeng.com  
1145 North Main Street  
Lombard, IL 60148  
Telephone: 630-953-9928  
Fax: 630-953-9938

WEI Job No.: 1100-04-01  
Client: **AECOM**  
Project: **Jane Byrne Interchange**  
Location: **Section 16, T39N, R14E of 3rd PM**

Datum: NAVD 88  
Elevation: 574.80 ft  
North: 1895901.50 ft  
East: 1171749.50 ft  
Station: 7611+92.60  
Offset: 48.4479 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
573.4	17-inch thick, ASPHALT --PAVEMENT--														
	Medium dense, brown SANDY GRAVEL --BASE COURSE--	1		1	7 7 9	NP	15						0.75	23	
571.1	Stiff, gray SILTY CLAY, trace gravel	5		2	5 3 4	1.39 B	18	545.8	Stiff to hard, gray SILTY CLAY to SILTY CLAY LOAM, trace gravel	30		12	3 10 9	1.80	19
569.3	Very soft to medium stiff, gray CLAY to SILTY CLAY, trace gravel			3	0 0 0	0.25 B	24					13	7 11 12	1.80	19
		10		4	0 0 1	0.08 B	25					14	5 8 15	4.92	19
				5	0 0 1	0.08 B	27					15	7 11 18	5.49	19
	--L <sub>L</sub> (%)=36, P <sub>L</sub> (%)=15-- --%Gravel=4.1-- --%Sand=13.8--15 --%Silt=50.0-- --%Clay=32.1-- --A-6 (16)--			6	0 0 1	0.08 B	27					16	4 8 17	2.95	22
		20		8	0 1 1	0.50 P	30					21	19 25 38	5.00	10
				9	0 1 1	0.50 P	26								
		25		10	1 1 2	0.41 B	24								

### GENERAL NOTES

Begin Drilling 05-08-2013 Complete Drilling 05-08-2013  
 Drilling Contractor Wang Testing Services Drill Rig  
 Driller P&N Logger D. Wind Checked by C. Marin  
 Drilling Method 2.25" SSA to 16', mud rotary thereafter, boring  
 backfilled upon completion

### WATER LEVEL DATA

While Drilling 18.50 ft  
 At Completion of Drilling 18.50 ft  
 Time After Drilling NA  
 Depth to Water NA  
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



# BORING LOG 1165-B-02

wangeng@wangeng.com  
1145 North Main Street  
Lombard, IL 60148  
Telephone: 630-953-9928  
Fax: 630-953-9938

WEI Job No.: 1100-04-01  
Client: **AECOM**  
Project: **Jane Byrne Interchange**  
Location: **Section 16, T39N, R14E of 3rd PM**

Datum: NAVD 88  
Elevation: 574.80 ft  
North: 1895901.50 ft  
East: 1171749.50 ft  
Station: 7611+92.60  
Offset: 48.4479 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	--A-4 (3)--														
	--HARD DRILLING-- --Possible cobbles--														
		55		17	12 17 20	1.64 B	22					22	17 50/5	4.50	21
				18	9 13 21	8.12 B	13					23	32 50/2	4.50	14
	--L <sub>L</sub> (%)=29, P <sub>L</sub> (%)=14-- --%Gravel=7.2-- --%Sand=22.8--60 --%Silt=47.3-- --%Clay=22.7-- --A-6 (8)--			19	8 14 36	3.69 B	22	488.8	Strong, good rock quality, grayish white, fresh, slightly to moderately fractured, joint breaks with little to no infill, highly vuggy DOLOSTONE Run#1: 86to 96 feet --RECOVERY=100%-- --RQD=70%--	90		1			
		65		20	48 50/3	4.00 P	12								
508.1	Very dense, gray SILTY LOAM, little to some gravel, possible cobbles	70		21	19 25 38	5.00 S	10								
	--L <sub>L</sub> (%)=22, P <sub>L</sub> (%)=12-- --%Gravel=8.4-- --%Sand=26.3-- --%Silt=53.9-- --%Clay=11.4--														
		75													
								478.8	Boring terminated at 96.00 ft	100					

### GENERAL NOTES

Begin Drilling 05-08-2013 Complete Drilling 05-08-2013  
 Drilling Contractor Wang Testing Services Drill Rig  
 Driller P&N Logger D. Wind Checked by C. Marin  
 Drilling Method 2.25" SSA to 16', mud rotary thereafter, boring  
 backfilled upon completion

### WATER LEVEL DATA

While Drilling 18.50 ft  
 At Completion of Drilling 18.50 ft  
 Time After Drilling NA  
 Depth to Water NA  
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

FILE NAME: D:\V\AECOM-NA-AW51...americas\Transportation\60269938\_Circle\Phase\_I\000\_CAD\008\_Structural\Sign\_Structures\62A77\_Sign\_Structure\62A77-Span-SSDM5111-SignStruct.dgn



USER NAME = ali.jssa	DESIGNED - JJS, WM	REVISED -
PLOT SCALE = N.T.S	CHECKED - MAI, JMG	REVISED -
PLOT DATE = 1/23/2020	DRAWN - AMS	REVISED -
	CHECKED - MAI, JMG	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS I

SHEET NO. SS36 OF SS83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	715
CONTRACT NO. 62A77				
ILLINOIS		FED. AID PROJECT		



# BORING LOG 16-RWB-05

wangeng@wangeng.com  
1145 North Main Street  
Lombard, IL 60148  
Telephone: 630-953-9928  
Fax: 630-953-9938

WEI Job No.: 1100-04-01

Client: **AECOM**  
Project: **Jane Byrne Interchange**  
Location: **Section 16, T39N, R14E of 3rd PM**

Datum: NAVD 88  
Elevation: 592.35 ft  
North: 1895983.56 ft  
East: 1171638.82 ft  
Station: 7325+32.44  
Offset: 17.9588 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
591.5	10-inch thick CONCRETE --PAVEMENT-- Dense, white CRUSHED STONE --FILL--			1	20 22 22	NP	4					11	0 0 1	< 0.25 P	25
		5		2	4 14 19	NP	4			30		12	0 0 0	0.16 B	26
586.2	Stiff, black and brown SILTY CLAY LOAM, trace gravel --FILL--			3	6 6 7	1.15 B	16			35		13	0 0 0	0.08 B	28
584.4	Stiff, black and brown LOAM to SILTY LOAM, trace gravel --FILL--	10		4	3 2 3	NP	11			40		14	0 0 1	0.16 B	27
581.9	Very stiff, brownish gray SILTY CLAY, trace gravel			5	3 4 4	2.46 B	27			45		15	0 0 3	0.57 B	24
579.4	Very soft to medium stiff, gray CLAY to SILTY CLAY, trace gravel	15		6	2 2 2	0.49 B	28			50		16	11 10 11	NP	15
		20		7	0 0 0	0.16 B	33								
		25		8	0 0 0	0.25 B	30								
				9	0 1 2	0.41 B	19	545.6	Medium dense, gray SILT to SILTY LOAM, trace gravel --DRY--						
				10	0 0 0	0.16 B	28								

### GENERAL NOTES

Begin Drilling **07-24-2014** Complete Drilling **07-24-2014**  
 Drilling Contractor **Wang Testing Services** Drill Rig  
 Driller **R&J** Logger **S. Woods** Checked by **C. Marin**  
 Drilling Method **2.25' SSA to 10', mud rotary thereafter, boring backfilled upon completion**

### WATER LEVEL DATA

While Drilling **groundwater not observed**  
 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.



# BORING LOG 16-RWB-05

wangeng@wangeng.com  
1145 North Main Street  
Lombard, IL 60148  
Telephone: 630-953-9928  
Fax: 630-953-9938

WEI Job No.: 1100-04-01

Client: **AECOM**  
Project: **Jane Byrne Interchange**  
Location: **Section 16, T39N, R14E of 3rd PM**

Datum: NAVD 88  
Elevation: 592.35 ft  
North: 1895983.56 ft  
East: 1171638.82 ft  
Station: 7325+32.44  
Offset: 17.9588 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
540.6	Brown, coarse SAND														
538.5	Hard, gray SILTY CLAY LOAM, trace gravel	55		17	10 11 15	5.25 B	16			60		18	14 18 18	NP	12
535.6	Dense to very dense, gray SILTY LOAM to SILT, trace gravel, occasional sand seams --DRY--									65		19	28 30 32	NP	17
527.4	Boring terminated at 65.00 ft														

### GENERAL NOTES

Begin Drilling **07-24-2014** Complete Drilling **07-24-2014**  
 Drilling Contractor **Wang Testing Services** Drill Rig  
 Driller **R&J** Logger **S. Woods** Checked by **C. Marin**  
 Drilling Method **2.25' SSA to 10', mud rotary thereafter, boring backfilled upon completion**

### WATER LEVEL DATA

While Drilling **groundwater not observed**  
 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.

FILE NAME: D:\V\AECOM-NA-AW51\_aecomonline\local\AECOM\_DS02\_NAD\008\_Structural\Sign\_Structure\62A77\_Sign\_Structure\62A77-Span-SSDMS112-SignStruct.dgn



USER NAME = ali.jssa	DESIGNED - JJS, WM	REVISED -
PLOT SCALE = N.T.S	CHECKED - MAI, JMG	REVISED -
PLOT DATE = 1/23/2020	DRAWN - AMS	REVISED -
	CHECKED - MAI, JMG	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

### SOIL BORINGS II

SHEET NO. SS37 OF SS83 SHEETS

F.A.I. RTE. 90/94/290	SECTION	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 716
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				





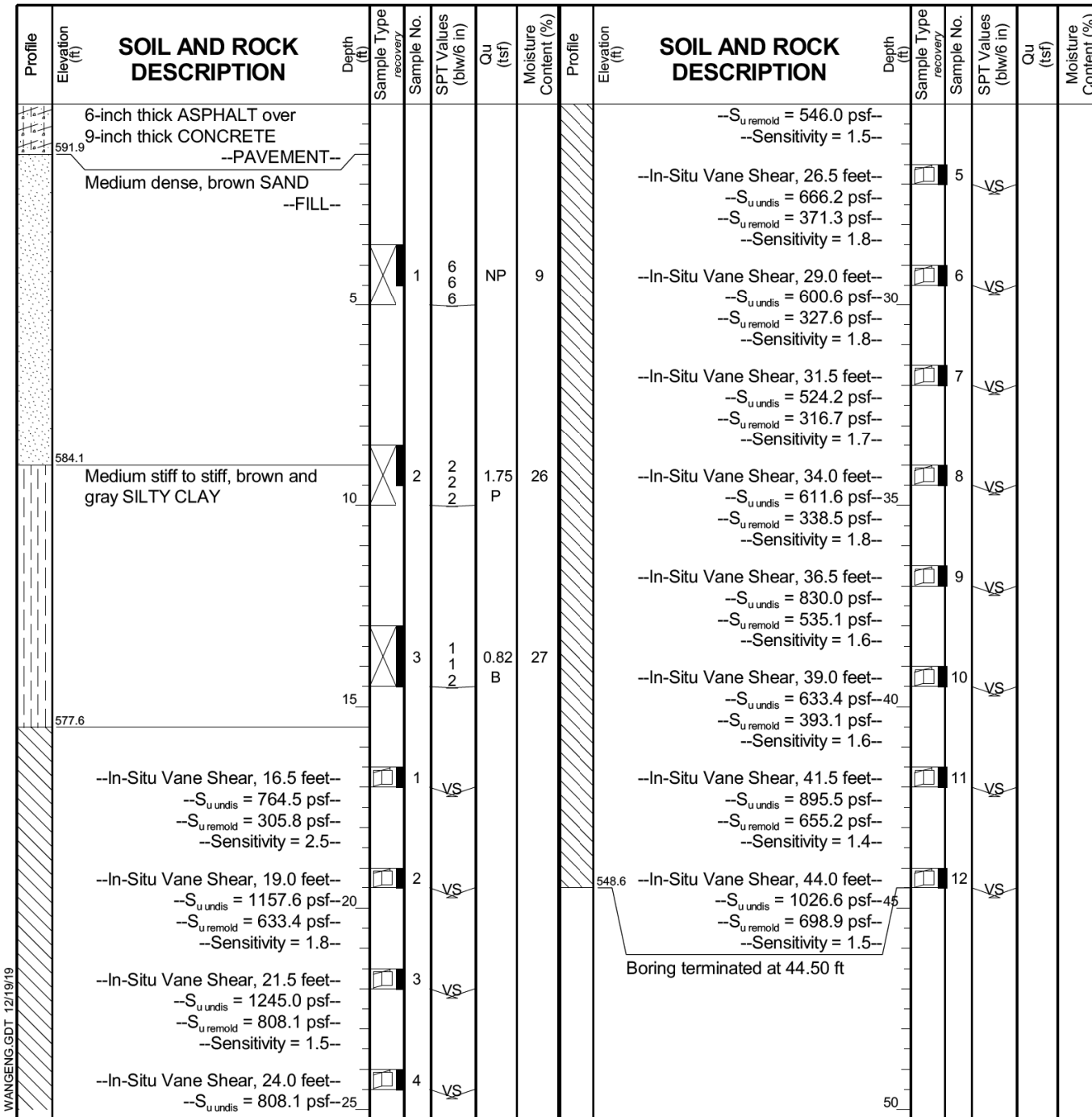
wangeng@wangeng.com  
 1145 North Main Street  
 Lombard, IL 60148  
 Telephone: 630-953-9928  
 Fax: 630-953-9938

### BORING LOG VST-07

WEI Job No.: 1100-04-01

Client: **AECOM**  
 Project: **Jane Byrne Interchange**  
 Location: **Section 16, T39N, R14E of 3rd PM**

Datum: NAVD 88  
 Elevation: 593.11 ft  
 North: 1895740.00 ft  
 East: 1171636.91 ft  
 Station: 6247+22.16  
 Offset: 105.461 RT



GENERAL NOTES				WATER LEVEL DATA	
Begin Drilling	12-10-2015	Complete Drilling	12-10-2015	While Drilling	groundwater not observed
Drilling Contractor	Wang Testing Services	Drill Rig		At Completion of Drilling	▼ mud in the borehole
Driller	R&N	Logger	F. Bozga	Checked by	A. Kurnia
Drilling Method	2.25" HSA to 10', mud rotary thereafter, boring			Time After Drilling	NA
	backfilled upon completion			Depth to Water	▼ NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.					

FILE NAME: D:\V\AECOM-NA-AW51...aecomonline\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_I\000\_CAD\008\_Structural\Sign\_Structures\62A77\_Sign\_Structure\62A77-Span-SSDMS113-SignStruct.dgn



USER NAME =	alljssa	DESIGNED -	JJS, WM	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	AMS	REVISED -	
PLOT DATE =	1/23/2020	CHECKED -	MAI, JMG	REVISED -	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SOIL BORINGS III

SHEET NO. SS38 OF SS83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	717
CONTRACT NO. 62A77				
ILLINOIS		FED. AID PROJECT		

FOR INFORMATION ONLY

INDEX OF SHEETS

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- 2. GENERAL NOTES AND STANDARD SYMBOLS & STANDARDS
- 3-4. TYPICAL SECTIONS
- 5-6. SUMMARY OF QUANTITIES
- 7. SCHEDULE OF QUANTITIES
- 8. LOCATION PLAN
- 9. ALIGNMENT AND TIES
- 10. CURVE DATA
- 11-14. PLAN AND PROFILE
- 15. PAVING PLAN
- 16. ROADWAY DETAILS
- 17. APPROACH SLAB DETAIL
- 18. MAINTENANCE OF TRAFFIC AND DETOUR PLAN
- 19-20. MAINTENANCE OF TRAFFIC
- 21. PAVEMENT MARKING PLAN
- 22. ONE LANE CLOSURE
- 23. TWO LANE CLOSURE
- 24. ENTRANCE AND EXIT RAMP CLOSURE
- 25-27. MISCELLANEOUS DETAILS
- 28. EXISTING RETAINING WALL REMOVAL

BRIDGE AND RETAINING WALL PLANS

- 29. GENERAL PLAN AND ELEVATION
- 30. GENERAL NOTES AND CAISSON LAYOUT
- 31. DECK ELEVATIONS LOCATION PLAN
- 32-33. TOP OF SLAB ELEVATIONS
- 34. SUPERSTRUCTURE - MAIN SPANS
- 35. SUPERSTRUCTURE DETAILS - MAIN SPANS
- 36. SUPERSTRUCTURE - APPROACH SPAN
- 37. SUPERSTRUCTURE DETAILS - APPROACH SPAN
- 38. PEDESTRIAN RAIL - 4 FOOT
- 39. P.P.C. I-BEAM, 36 INCH
- 40. STRUCTURAL STEEL FRAMING PLAN
- 41. STRUCTURAL STEEL DETAILS
- 42-43. BEARING DETAILS
- 44. ANCHOR BOLT DETAILS
- 45-46. ABUTMENT 1
- 47. EXISTING PIER NO. 2
- 48. PIER 3
- 49-51. ABUTMENT 4 AND APPROACH BENT
- 52-54. RETAINING WALLS
- 55. PAVEMENT SLAB - RUBLE STREET
- 56. GENERAL LAYOUT OF SHEET PILING
- 57. NEOPRENE EXPANSION JOINT, 4 INCH
- 58. STEEL DRAINAGE SCUPPER
- 59. ALTERNATE - CAST IRON DRAINAGE SCUPPER

ELECTRICAL PLANS

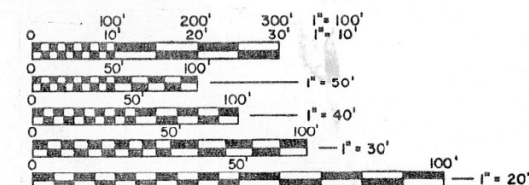
- 60. GENERAL NOTES - ELECTRICAL
- 61. LEGEND - ELECTRICAL
- 62. EXPOSED AND ENCASED CABLE AND CONDUIT SCHEDULES
- 63. DEMOLITION AND AERIAL CABLE - PLAN AND SECTION
- 64-65. DEMOLITION ROADWAY LIGHTING PLAN
- 66. UNDERPASS LIGHTING - PLAN AND SECTION
- 67. UNDERPASS LIGHTING DETAILS
- 68. CITY ROADWAY LIGHTING AND SIGNALING PLAN
- 69-76. CITY ELECTRICAL DETAILS

CROSS SECTIONS

- 77-84. CROSS SECTIONS

DESIGN DESIGNATION

TAYLOR ST.	15,000 (2000)	AREA SERVICE	4.74 (B-20)
RUBLE ST.	14,000 (2000)	LOCAL	8.47 (P.C.C.-20)
EXIT RAMP	7,500 (2000)	LOCAL	3.82 (P.C.C.-20)



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

CONTRACT NO. 42379

CONTR. PEABODY MIDWEST CONST., INC.  
 STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 PROJ. ENG. W. CROSSON  
 RES. ENG. J. CICHON  
 ON JOB INSPECTION  
 BAKER ENGINEERING

COST \$3,113,901.80  
 START 6/15/87 (MAYBE)  
 COMPLETION DATE 11/15/87 (BY CONTRACT)  
 INCENTIVE \$2,400/CAL. DAY #72,000 MAX (30 CAL. DAYS)

LIQUIDATED DAMAGES \$2,400/CAL. DAY

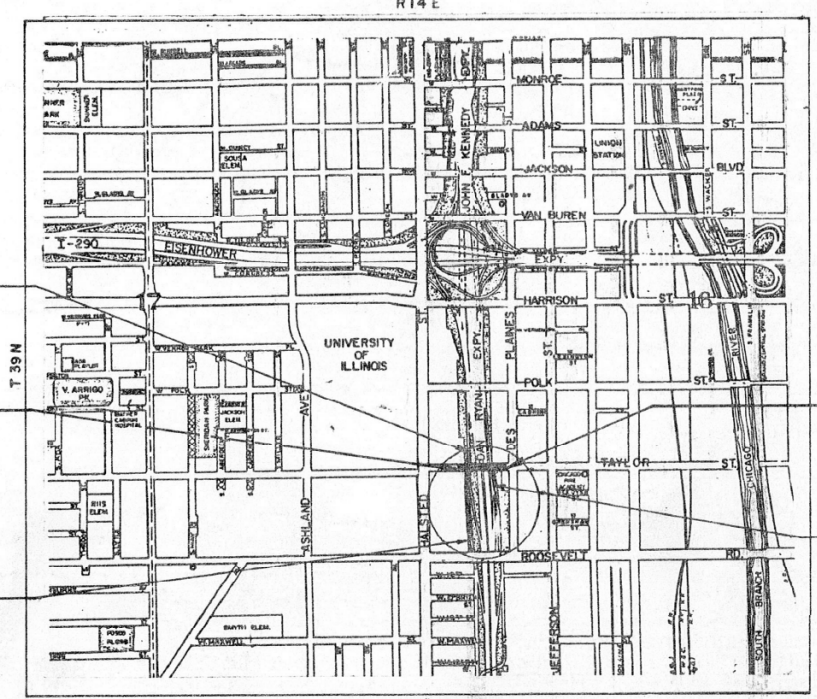
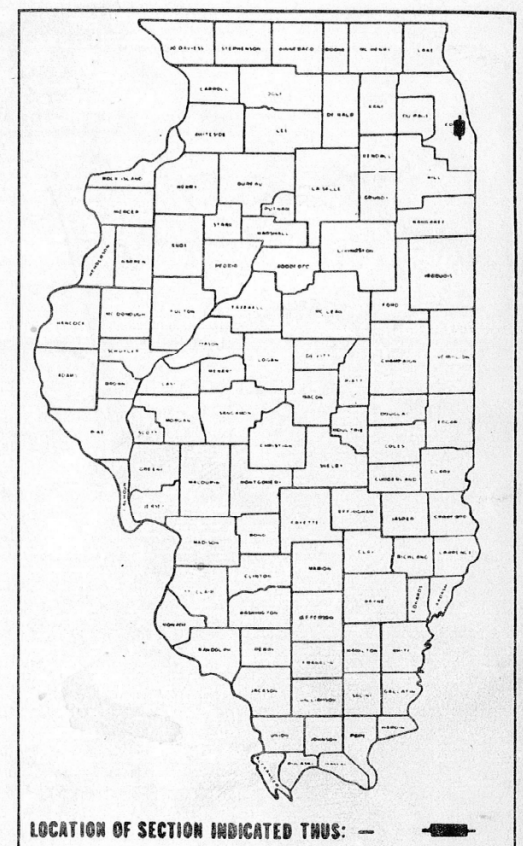
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

PLANS FOR PROPOSED  
 FEDERAL AID INTERSTATE HIGHWAY

F.A.I. ROUTE 90/94 (DAN RYAN EXPRESSWAY)  
 SECTION 2626.2 - 3B-R (85)  
 PROJECT IR-94-3(255)52  
 COOK COUNTY  
 C-91-408-85  
 TAYLOR STREET OVER THE DAN RYAN EXPRESSWAY

FILE # 740  
 016-1165

FA. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
90/94	S	COOK	84
PROJECT NO. 2626.2-3B-R(85)			1



LIMIT OF PROJECT STA. 24+82

PROJECT BEGINS STA. 3+00

LIMIT OF PROJECT STA. 7+60

PROJECT ENDS STA. 8+00

LIMIT OF PROJECT STA. 17+12

NET LENGTH = 1383 FT. • 0.26 MILES  
 GROSS LENGTH = 1383 FT. • 0.26 MILES



STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED: October 9, 1986

EXAMINED: 4-10-87

PASSED: 4-20-87

APPROVED: 4-10-87

DEPARTMENT OF TRANSPORTATION  
 FEDERAL HIGHWAY ADMINISTRATION

DIVISION ADMINISTRATOR \_\_\_\_\_ DATE \_\_\_\_\_

REVISED SET 4-10-87

COUNTY COOK SECTION 2626.2-3B-R (85) ROUTE 90/94 (DAN RYAN EXPRESSWAY)

USER NAME =	alljssa	DESIGNED -	JJS, WM	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MAI, JMG	REVISED -	
PLOT DATE =	1/23/2020	DRAWN -	AMS	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

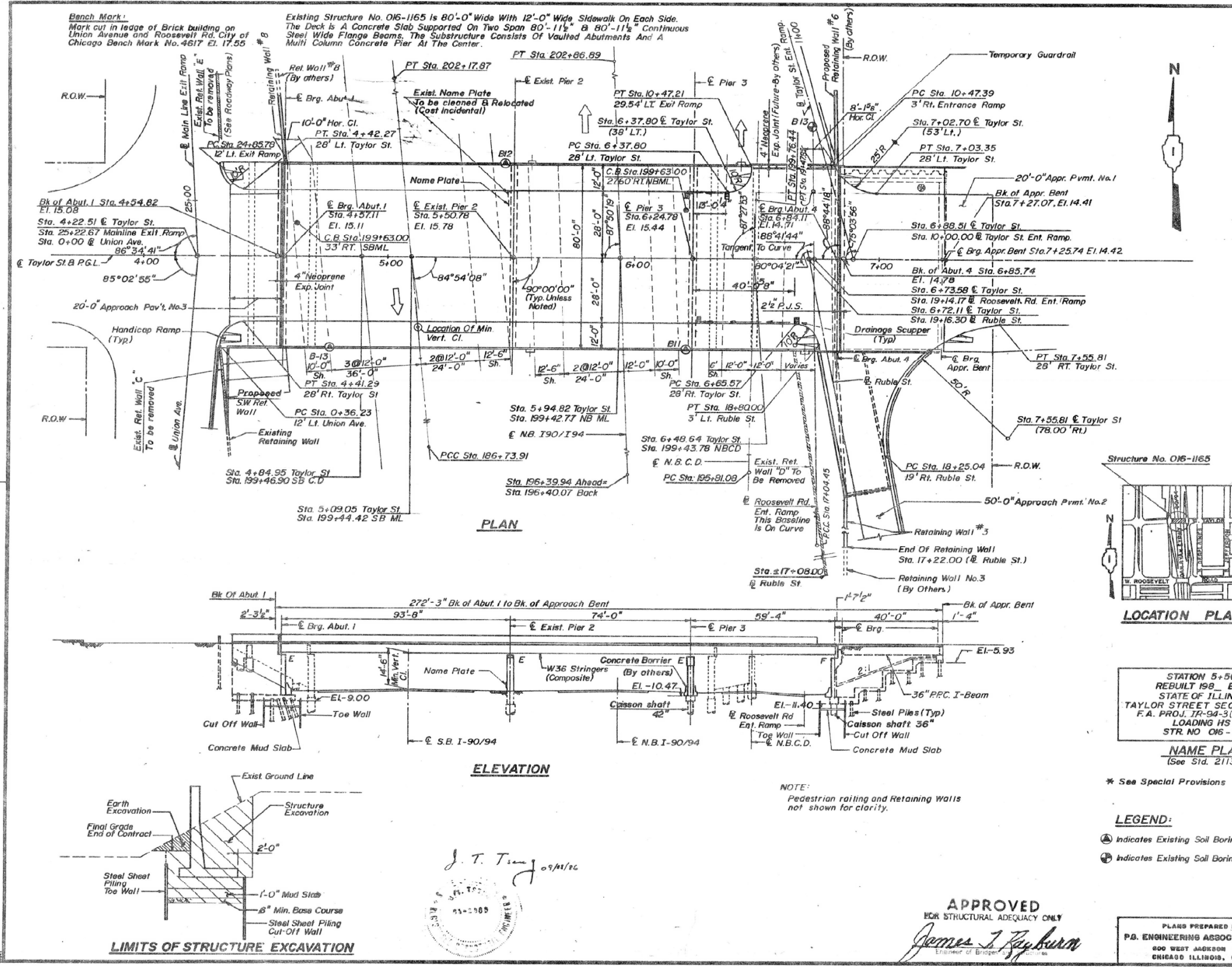
EXISTING RECORD DRAWINGS  
 STRUCTURE NO. SB-14A

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	718
CONTRACT NO. 62A77				
ILLINOIS		FED. AID PROJECT		



FILE NAME: D:\V\AE\COM-NA-AWS1...  
 CONSULTANT SECTION ENGINEER: K. HENNSTREET / J. KOS 312-884-4269

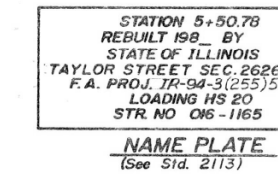
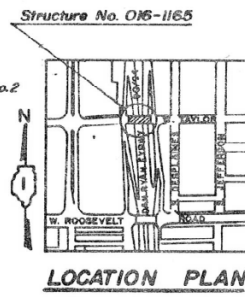
# FOR INFORMATION ONLY



FEDERAL AID DISTRICT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-90/94	2-2	COOK	84	29

### TOTAL BILL OF MATERIAL

ITEMS	UNIT	SUPER	SUB	TOTAL
* Removal of Existing Structures	Each		1	1
* Concrete Removal	Cu.Yd.		5	5
Expansion Bolts (3/4" Ø)	Each		288	288
Structure Excavation	Cu.Yd.		8,280	8,280
Protective Coat	Sq.Yd.	918		918
* Class X Concrete	Cu.Yd.		1,399.7	1,399.7
* Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	2,304		2,304
Reinforcement Bars	Pound	5,100	109,050	113,150
Furnishing Steel Piles (Epoxy Coated)	Pound	153,240	20,200	173,440
Furnishing & Erecting P.P.C. I-Beams, 36"	Lin. Ft.	451		451
Furnishing Steel Piles, HP 14x73	Lin. Ft.		3,009	3,009
Furnishing Steel Piles, HP 12x53	Lin. Ft.		9,338	9,338
Driving Steel Piles	Lin. Ft.		12,347	12,347
Metal Shoes	Each		214	214
* Steel Sheet Piling	Sq. Ft.		20,245	20,245
* Geocomposite Wall Drain	Sq. Yd.		694	694
Test Piles, Steel HP 14x73	Each		1	1
Test Piles, Steel HP 12x53	Each		2	2
Elastomeric Bearing Assembly Type I	Each	12		12
Elastomeric Bearing Assembly Type II	Each	24		24
Pedestrian Rail - 6 Ft.	Lin. Ft.	656		656
Epoxy Mortar Repair	Cu. Ft.		7	7
Epoxy Crack Sealing	Lin. Ft.		32	32
Name Plates	Each		1	1
Neoprene Expansion Joint, 4"	Lin. Ft.	80		80
Preformed Joint Seal, 2 1/2"	Lin. Ft.	124		124
* Caisson Shafts, 42"	Cu. Ft.		1,540	1,540
* Caisson Shafts, 36"	Cu. Ft.		1,980	1,980
* Caisson Shafts	Cu. Ft.		1,280	1,280
Protective Shield	Sq. Yd.	3,370		3,370
Temporary Steel Plate Beam Guardrail	Lin. Ft.	32		32
Drainage Scuppers	Each	2		2
* Porous Granular Backfill	Cu. Yd.		560	560
* Sheet Piling Wall	Sq. Ft.		2,610	2,610
* Pipe Underdrain - Part, Corrugated - 6"	Lin. Ft.		330	330
Class X Concrete Superstructure	Cu. Yd.	7781		7781



**Design Specifications:**  
A.A.S.H.T.O. 1983 Standard Specifications For Highway Bridges @ 1994 & 1995 Interims.

**Design Criteria:**  
Load Factor Design  
Live Load: HS 20-44  
Allow 25 PSF For Future Wearing Surface.

**Design Stresses:**  
Reinforced Concrete:  $f'_c = 3500$  PSI  
 $f'_t = 1400$  PSI  
Structural Steel:  $F_y = 50,000$  PSI A.A.S.H.T.O. M223 Steel GR 50  
 $F_y = 36,000$  PSI A.A.S.H.T.O. M183 Steel  
Reinforcement:  $F_y = 60,000$  PSI A.A.S.H.T.O. M-31 or M-53 Grade 60.

**P.P.C. I-Beams:**  
 $f'_c = 5000$  PSI  
 $f'_t = 4000$  PSI  
 $f'_s = 270,000$  PSI  
 $f'_t = 229,500$  PSI  
 $f'_s = 189,000$  PSI  
 $f'_t = 183,600$  PSI

\* See Special Provisions

**LEGEND:**  
⊙ Indicates Existing Soil Borings Dated July, 1960  
⊕ Indicates Existing Soil Borings Dated December, 1984

**APPROVED**  
FOR STRUCTURAL ADEQUACY ONLY  
*James J. Ryburn*  
Engineer of Bridges

PLANS PREPARED BY  
P.B. ENGINEERING ASSOCIATES, INC.  
600 WEST JACKSON BLVD.  
CHICAGO ILLINOIS, 60606

REVISIONS	
Name	Date

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
F.A.I. ROUTE 90/94 (DAN RYAN EXPRESSWAY)  
SECTION 2626.2-3B-R (85) COOK COUNTY  
TAYLOR STREET OVER DAN RYAN EXPRESSWAY  
GENERAL PLAN & ELEVATION

Scale: None  
Date: 9/86

Drawn By: S.D.D.  
Checked By: J.M.P.

ENVIRODYNE ENGINEERS INC.  
Chicago, Illinois

FILE NAME: D:\VACOM-NA-AWS1\acocomonline\local\AECOM\_D502\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\Structural\Sign Structures\62A77\_Sign\_Structure\62A77-Span-SSDMS114-SignStruct.dgn



USER NAME	DESIGNED	REVISIONS
alljssa	JJS, WM	-
	MAI, JMG	-
	AMS	-
	MAI, JMG	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
STRUCTURE NO. SB-14A  
SHEET NO. SS40 OF SS83 SHEETS

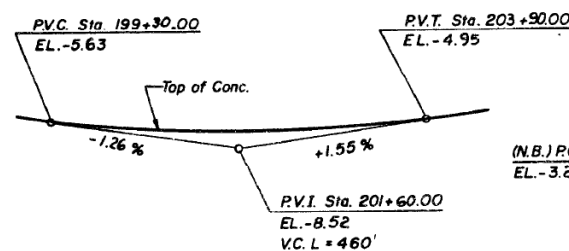
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	719

CONTRACT NO. 62A77

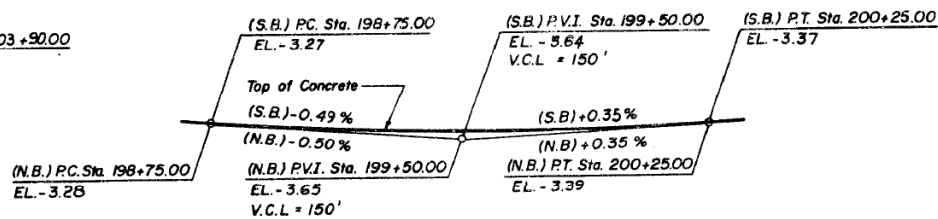
# FOR INFORMATION ONLY

FEDERAL AID ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-90/94	# 8	COOK	84	30
STA.	TO STA.			
FED. RD. DIST. NO.	ILLINOIS	FED. AID PROJECT		

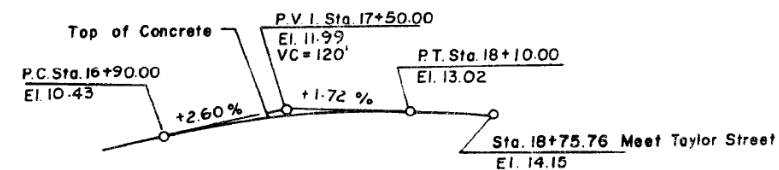
\* 2626.2-3B-R(85)



**N.B. COLLECTOR DISTRIBUTOR**



**I-90/94**

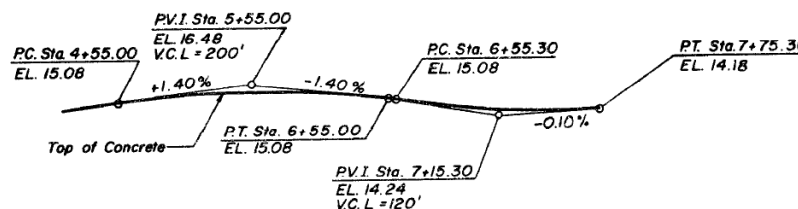


**RUBLE STREET**

**CURVE DATA**

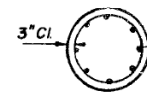
S.B. I-90/94	N.B. COLLECTOR DISTRIBUTOR
$\Delta = 4^{\circ}37'54''$	$\Delta = 5^{\circ}55'49''$
$R = 19,100.000'$	$R = 3819.72'$
$D = 0^{\circ}18'00''$	$D = 1^{\circ}30'00''$
$T = 772.408'$	$T = 197.93'$
$L = 1543.958'$	$L = 395.36'$
$E = 15.612'$	$E = 5.12'$

N.B. I-90/94	ROOSEVELT RD ENTRANCE RAMP
$\Delta = 3^{\circ}17'04''$	$\Delta = 3^{\circ}39'49''$
$R = 11,460.000'$	$R = 3906.59'$
$D = 0^{\circ}30'00''$	$D = 1^{\circ}30'19''$
$T = 328.570'$	$T = 121.74'$
$L = 656.950'$	$L = 243.41'$
$E = 4.709'$	$E = 1.95'$

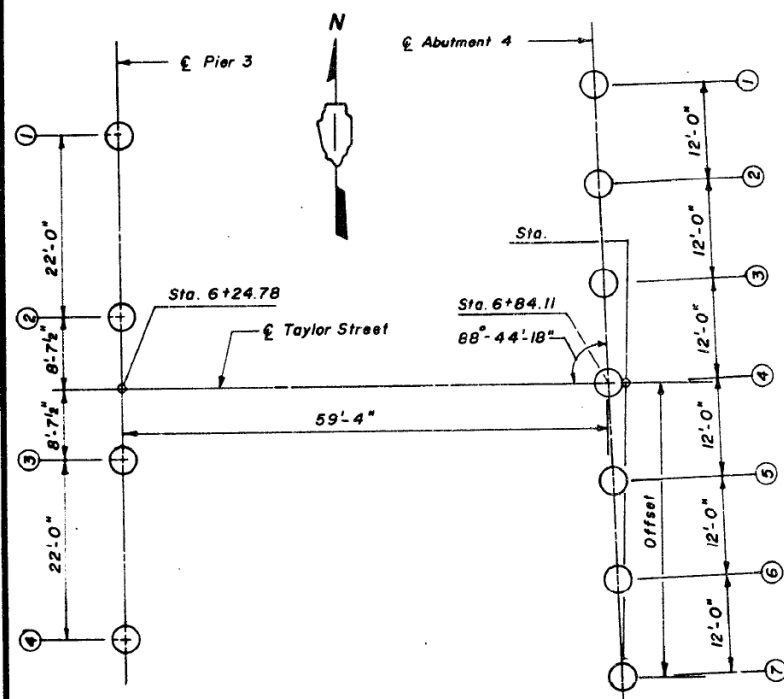


**TAYLOR ST**

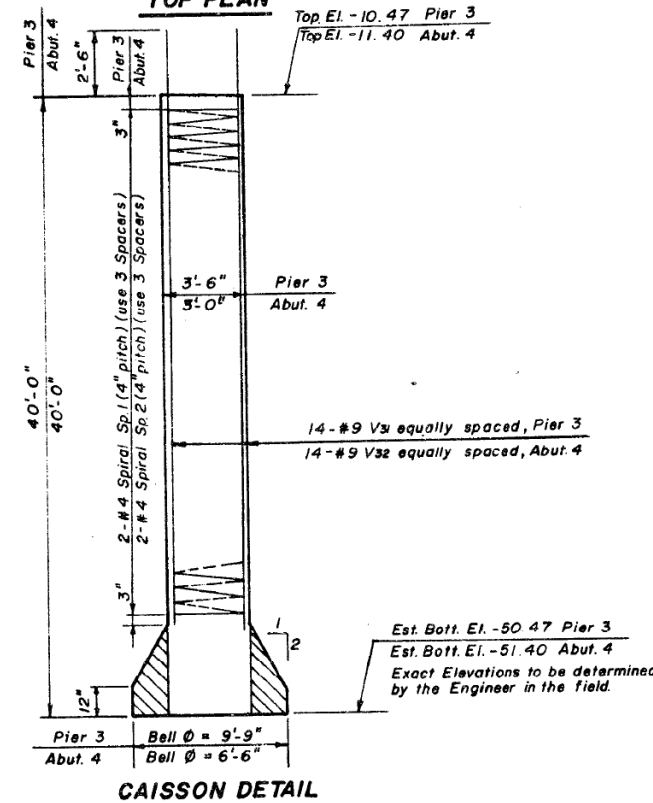
**PROFILE GRADES**



**TOP PLAN**



**CAISSON LAYOUT**



**CAISSON DETAIL**

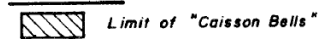
**CAISSON SCHEDULE**

No.	Station	Offset
Pier 3, 1 @ 4	6+24.78	30'-7 1/2"
2 @ 3	6+24.78	9'-7 1/2"
Abut. 4	1 6+83.32	38'-11 1/8"
2	6+83.58	23'-11 1/8"
3	6+83.85	12'-0"
4	6+84.11	0'-0"
5	6+84.37	12'-0"
6	6+84.64	23'-11 1/8"
7	6+84.90	35'-11 1/8"

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
V3/4	56	#9	35'-3"	—
V3/2	98	#9	38'-0"	—
Sp.1	8	#4	470'-0"	MMW
Sp.2	14	#4	426'-2"	MMW
Item		Unit	Quantity	
Reinforcement Bars	Lbs		25870	
Caisson Shafts, 36"	C.F.		1979.3	
Caisson Shafts, 42"	C.F.		1539.6	
Caisson Bells	C.F.		1279.3	

**LEGEND**



**GENERAL NOTES**

See Proposal For Boring Data And Historical Plans Dated July 1960.  
Fasteners Shall Be High Strength Bolts. Bolts 3/4"  $\phi$ , Open Holes 1 1/8"  $\phi$ , Bolts 3/4"  $\phi$ , Open Holes 1 1/8"  $\phi$ , Unless Otherwise Noted.  
Calculated Weight of Structural Steel = M-183 = 48,455 Lbs.  
M-222 or M-223, Grade 50 = 510,626 Lbs.

Field Welding Of Construction Accessories Will Not Be Permitted To The Bottom Flange Of Beams Nor To The Top Flange For A Distance Equal To One-Fourth The Span Length Each Way From The Pier Supports. Field Welding In Other Areas Will Be Permitted Only When Approved By The Engineer.  
Anchor Bolts Shall Be Set Before Bolting Diaphragms Over Supports.

The Main Load Carrying Member Components Subject To Tensile Stress Shall Conform To The Supplemental Requirements For Notch Toughness Zone 2. These Components Are The Wide Flange Beams And All Splice Plate Material Of The Wide Flange Beams.  
Reinforcement Bars Shall Conform To The Requirements Of A.A.S.H.T.O. M-31, M-42 or M-53, Grade 60.  
The Structural Steel Bearing Plates Of The Elastomeric Bearing Assembly Shall Conform To The Requirements Of A.A.S.H.T.O. M-222 or M-223, Gr. 50.  
The Back Face Of Abutment 1 And Retaining Walls Shall Be Waterproofed According To Article 503.11 Of The Standard Specifications.

Bearing Seat Surface Shall Be Constructed Or Adjusted To The Designated Elevations Within A Tolerance Of 1/8" Inch. Adjustment Shall Be Made, Either By Grinding The Surface Or By Shimming The Bearing. Two 1/8" Adjusting Shims, Of The Dimensions Of The Bottom Bearing Plate, Shall Be Provided For Each Bearing In Addition To All Other Plates Or Shims. (For Type I Elastomeric Bearings, Shims Of The Dimensions Of Top Plate Shall Be Provided And Placed As Detailed.)

The Contractor Shall Drive 3 Test Piles In A Permanent Location, One At Abut. No. 4, One At Approach Bent And One At Retaining Wall No. 3 As Directed By The Engineer Before Ordering The Remainder Of Piles.  
Expansion Bolts Shall Consist Of Approved Expansion Anchors Providing Minimum Certified Proof Load = 4,080 lbs., And 3/4"  $\times$  12" Hooked Bolts.

Plan Dimensions And Details Relative To Existing Structure Have Been Taken From Existing Plans And Are Subject To Nominal Construction Variations. It Shall Be The Contractor's Responsibility To Verify Such Dimensions And Details In The Field And Make Necessary Approved Adjustments Prior To Construction Or Ordering Of Materials. Such Variation Shall Not Be Cause For Additional Compensation For A Change In The Scope Of The Work, However, The Contractor Will Be Paid For The Quantity Actually Furnished At The Unit Price Bid For The Work.  
The Zinc-Silicate And Vinyl Paint System Shall Be Used For Shop And Field Painting Of Structural Steel Except Where Otherwise Noted.  
Exterior Beams: The Final Finish Coat Shall Be A Medium Yellow Vinyl Enamel Paint Which Conforms With Section 712, Article 712.26 Of The Special Provisions And As Directed By The Engineer. The Intermediate Coat Shall Be A High-Build Vinyl Paint Of A Color Which Shall Be Distinct From The Final Coat.  
Interior Beams: The Finish Coat Shall Be A Silver Colored High-Build Vinyl Paint Which Conforms With Section 712, Article 712.26 Of The Special Provisions And As Directed By The Engineer.

SHEET S-2 OF S-31

REVISIONS	
Name	Date

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
F.A.I. ROUTE 90/94 (DAN RYAN EXPRESSWAY)  
SECTION 2626.2-3B-R (85) COOK COUNTY  
TAYLOR STREET OVER DAN RYAN EXPRESSWAY  
GENERAL NOTES & CAISSON LAYOUT

Scale: None  
Date: 9/86

Drawn By: S.D.D.  
Checked By: J.M.P.

ENVIRODYNE ENGINEERS INC.  
Chicago, Illinois

PLANS PREPARED BY  
P.G. ENGINEERING ASSOCIATES, INC  
800 WEST JACKSON BLVD.  
CHICAGO ILLINOIS, 60606

EXISTING RECORD DRAWINGS  
STRUCTURE NO. SB-14A

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	720
CONTRACT NO. 62A77				

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SHEET NO. SS41 OF SS83 SHEETS

USER NAME =	alljssa	DESIGNED -	JJS, WM	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	AMS	REVISED -	
PLOT DATE =	1/23/2020	CHECKED -	MAI, JMG	REVISED -	



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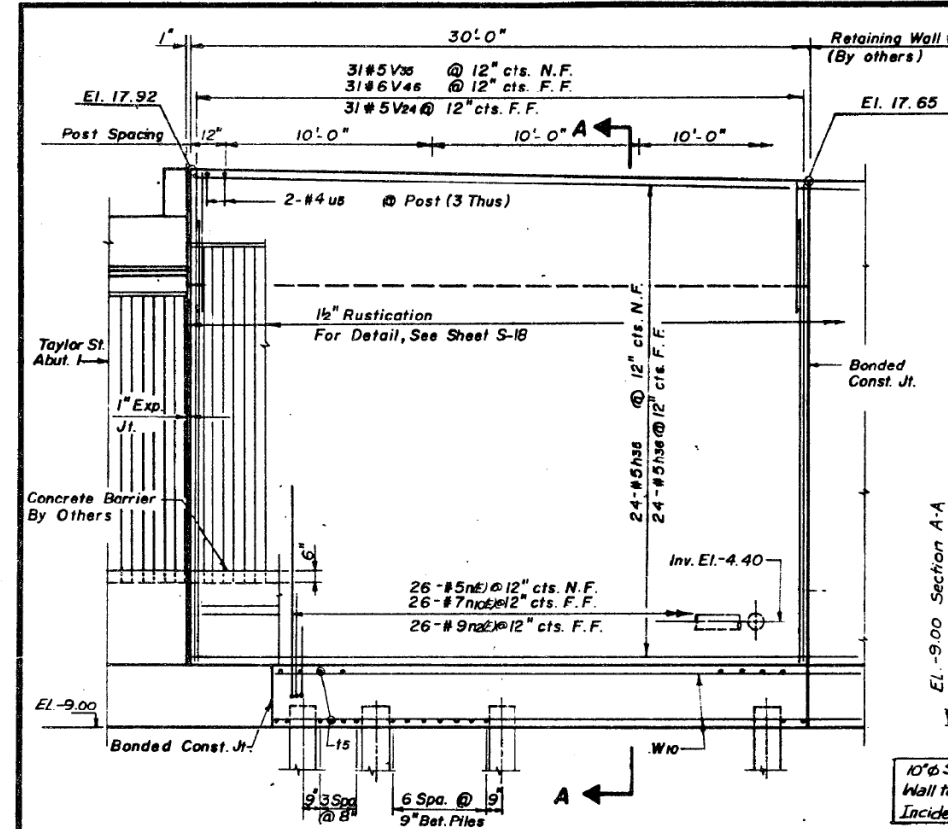
# FOR INFORMATION ONLY

FEDERAL AID ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-90/94	**	COOK	84	52
STA.	TO STA.			
FED. DIST. NO.	ILLINOIS	FED. AID PROJECT		
# 2626.2-3B-R (85)				

### BILL OF MATERIAL

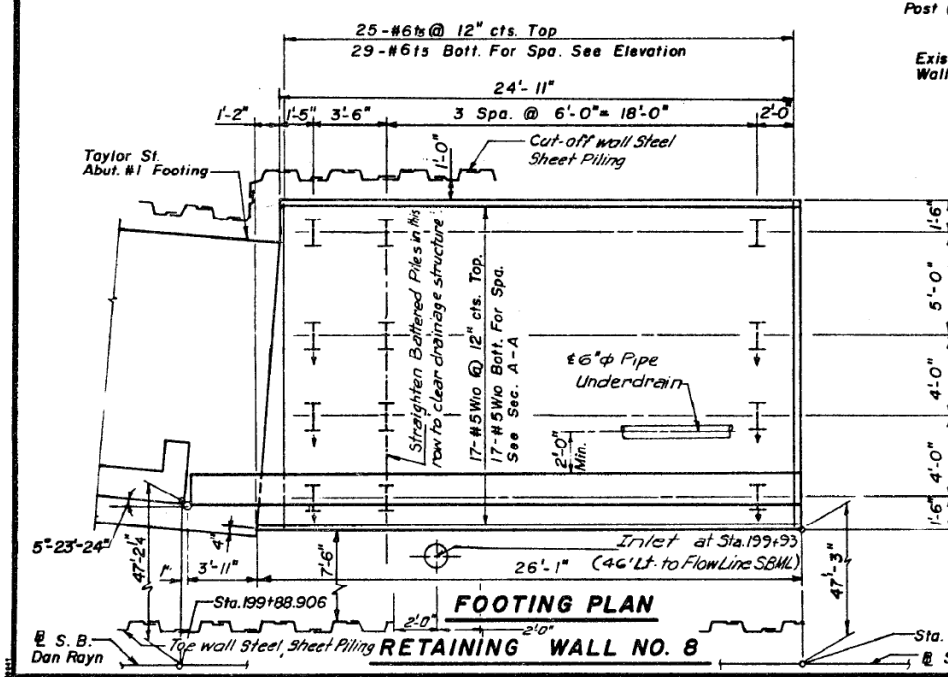
Bar	No	Size	Length	Shape
h35	108	# 5	31'-6"	
h36	108	# 5	31'-6"	
h37	11	# 4	20'-6"	
h38	32	# 5	20'-6"	
h39	14	# 4	18'-6"	
h40	14	# 5	18'-6"	
h41	21	# 5	13'-0"	
h42	21	# 5	13'-0"	
h43	21	# 5	20'-5"	
n(2)	193	# 5	4'-10"	
n2(2)	193	# 9	12'-7"	
n10(2)	193	# 7	5'-10"	
n11(2)	17	# 7	6'-11"	
n12(2)	37	# 6	6'-9"	
n15	14	# 5	7'-0"	
15	396	# 6	15'-6"	
16	40	# 6	6'-2"	
17	38	# 6	8'-1"	
18	10	# 6	11'-0"	
u5	20	# 4	2'-8"	
u10	12	# 4	2'-7"	
V24	113	# 5	8'-3"	
V35	31	# 5	23'-6"	
V36	20	# 5	9'-1"	
V37	20	# 6	9'-1"	
V38	19	# 5	13'-0"	
V39	19	# 6	13'-0"	
V41	12	# 5	8'-3"	
V42	12	# 5	6'-9"	
V43	105	# 5	19'-9"	
V44	146	# 5	6'-9"	
V45	51	# 5	20'-3"	
V46	105	# 6	18'-3"	
V47	82	# 6	16'-3"	
W10	34	# 5	27'-6"	
W11	14	# 5	18'-6"	
W12	18	# 5	17'-6"	
W13	68	# 5	30'-0"	
W14	34	# 5	24'-9"	
W15	24	# 5	6'-3"	
W16	34	# 5	24'-10"	
Item	Unit	Quantity		
Class X Concrete	Cu. Yd.	547.9		
Reinforcement Bars	Lbs.	37,570		
Furnishing Steel Piles, HP 12x53	L.F.	6,756		
Driving Steel Piles	L.F.	6,756		
Test Piles Steel, HP 12x53	Each	1		
Metal Shoes	Each	118		
Geocomposite Wall Drain	Sq. Yd.	422		
Steel Sheet Piling	Sq. Ft.	8,340		
Reinf. Bars (Epoxy Coated)	Lbs.	12,140		

Note: Bars designated (E) shall be epoxy coated.

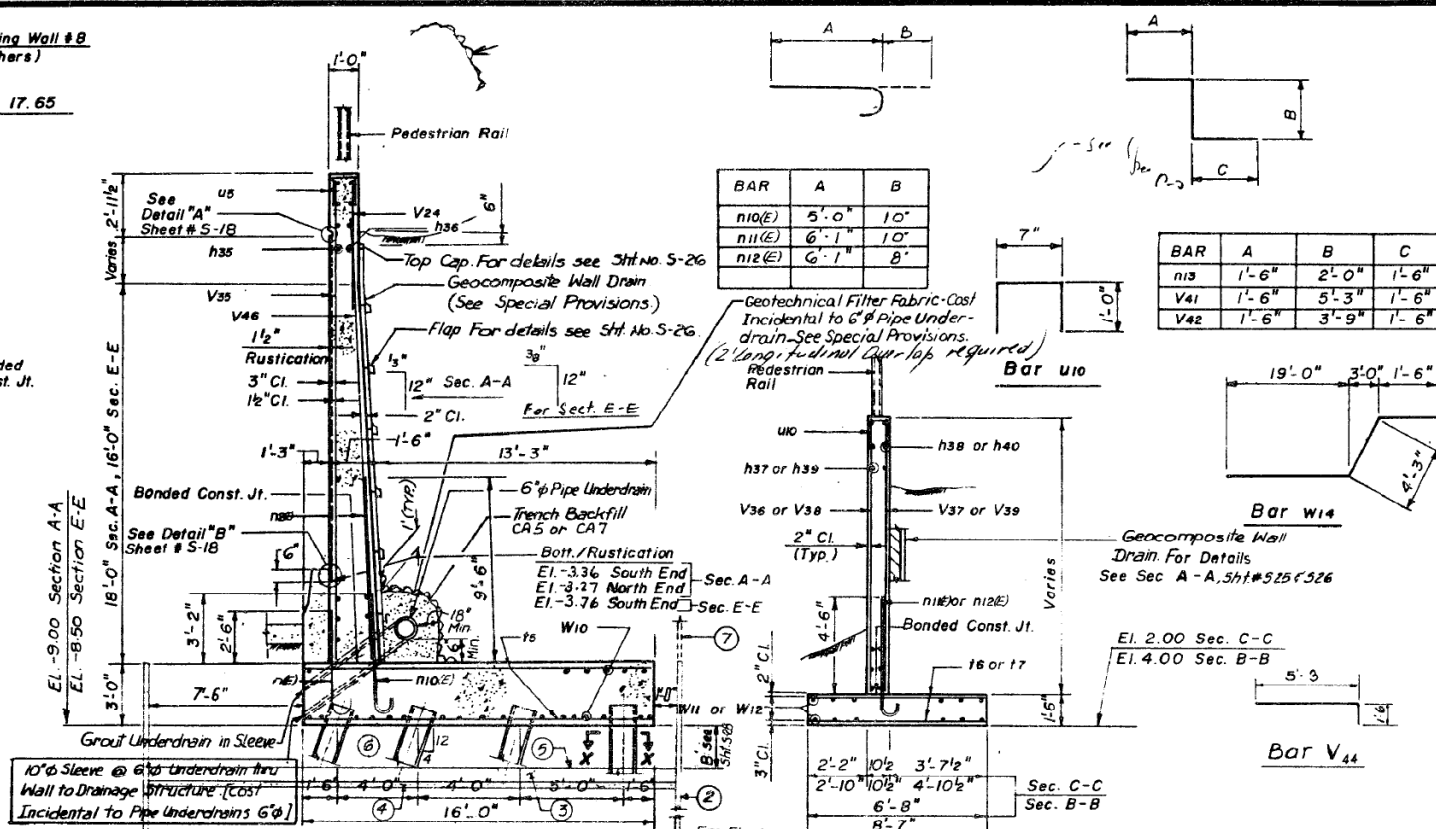


**ELEVATION**

**PILE DATA**  
 Type: HP 12-53  
 Capacity: 70 Tons Design,  
 driven to 10 Ton Bearing.  
 Est. Length: 51'  
 No. Req'd: 20

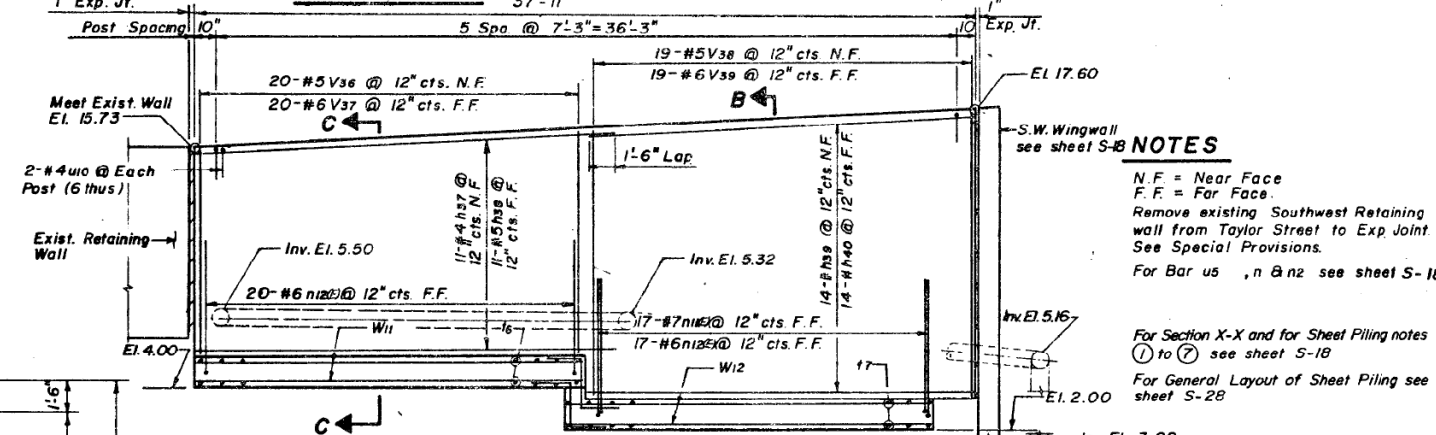


**FOOTING PLAN**  
RETAINING WALL NO. 8

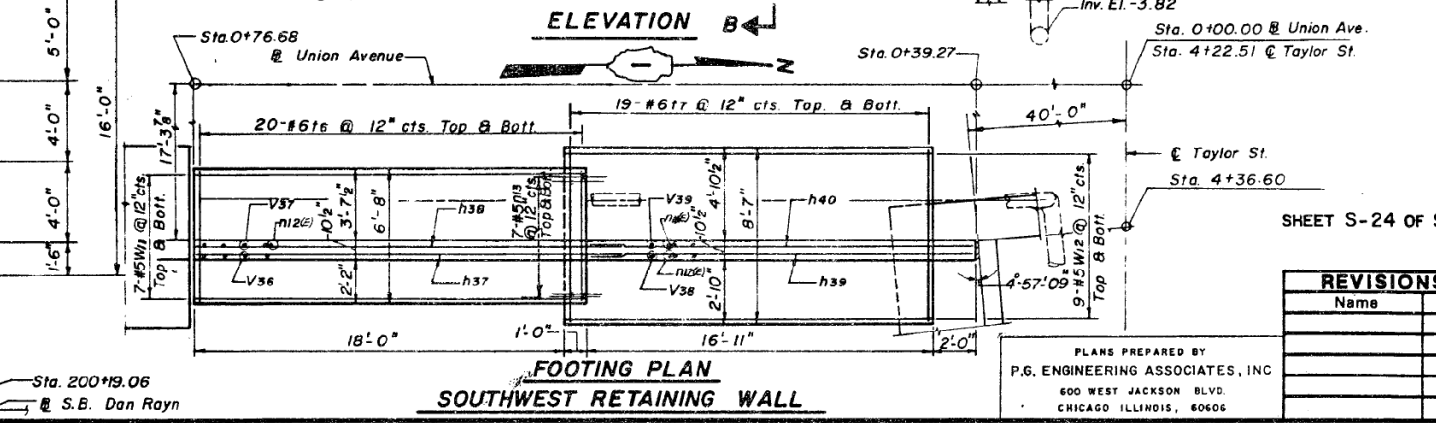


**SECTION A-A**  
Sec. E E, Similar

**SECTION B-B & C-C**



**ELEVATION B**



**FOOTING PLAN**  
SOUTHWEST RETAINING WALL

**NOTES**

N.F. = Near Face  
 F.F. = Far Face  
 Remove existing Southwest Retaining wall from Taylor Street to Exp Joint. See Special Provisions.  
 For Bar us, n and n2 see sheet S-18  
 For Section X-X and for Sheet Piling notes ① to ⑦ see sheet S-18  
 For General Layout of Sheet Piling see sheet S-28

SHEET S-24 OF S-31

REVISIONS	
Name	Date

PLANS PREPARED BY  
 P.G. ENGINEERING ASSOCIATES, INC.  
 600 WEST JACKSON BLVD.  
 CHICAGO ILLINOIS, 60606

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 F.A.I. ROUTE 90/94 (DAN RYAN EXPRESSWAY)  
 SECTION 2626.2-3B-R (85) COOK COUNTY  
 TAYLOR STREET OVER DAN RYAN EXPRESSWAY  
 RETAINING WALLS

Scale: None  
 Date: 9/86  
 Drawn By: BCS  
 Checked By: J.M.P.  
 ENVIRODYNE ENGINEERS INC.  
 Chicago, Illinois

Rev. 4-30-87

FILE NAME: p:\v\ae\com-na-aw51...americas\transportation\60269938\_Circle\Phase\_I\0000\_CAD\008\_Structural\Sign\_Structure\62A77-Span-SSD\M5114-SignStruct.dgn



USER NAME =	alljssa	DESIGNED -	JJS, WM	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MAI, JMG	REVISED -	
PLOT DATE =	1/23/2020	DRAWN -	AMS	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

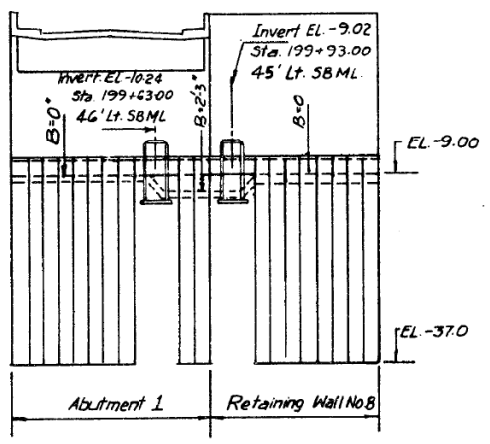
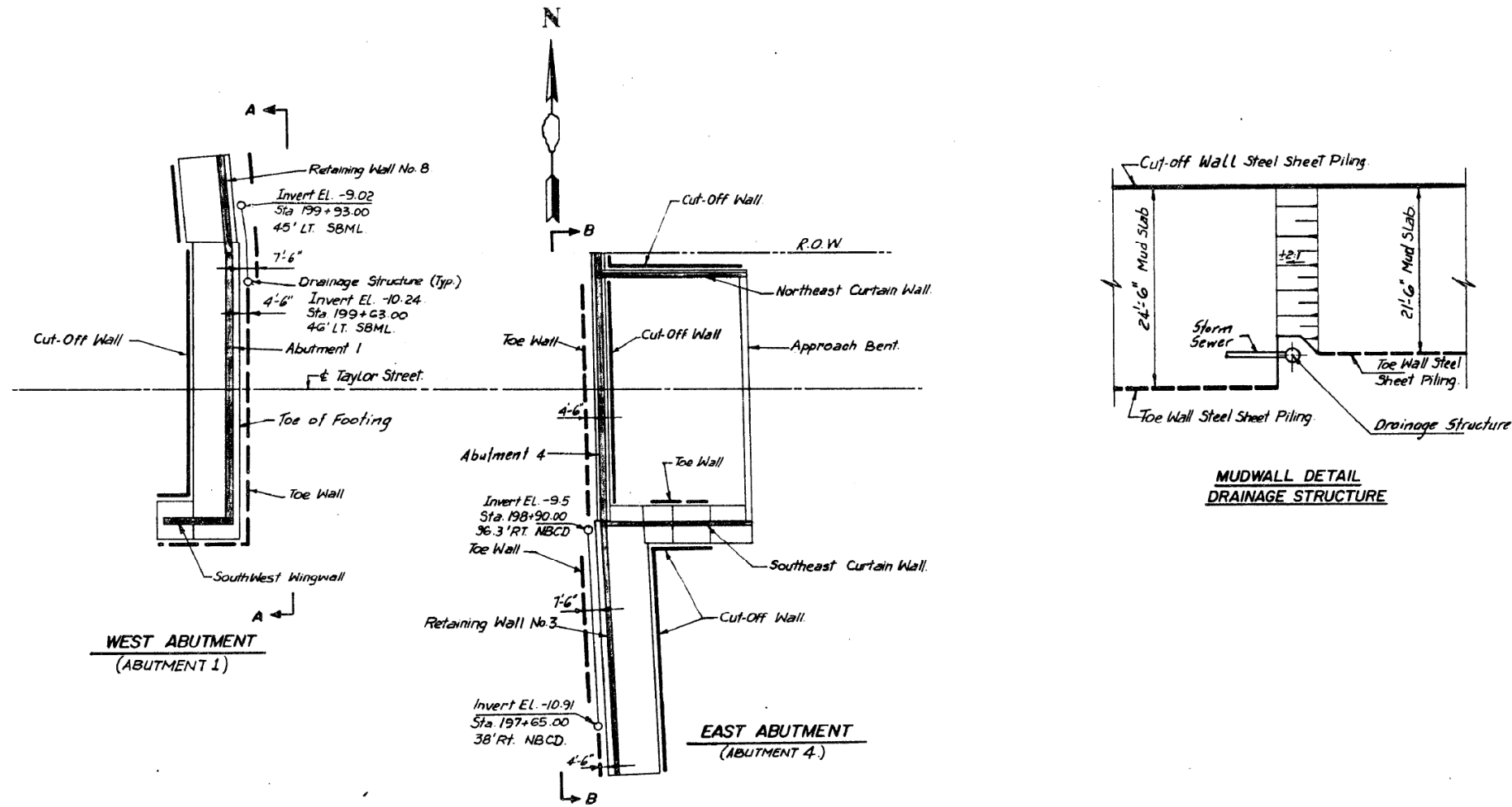
EXISTING RECORD DRAWINGS  
 STRUCTURE NO. SB-14A

SHEET NO. SS42 OF SS83 SHEETS

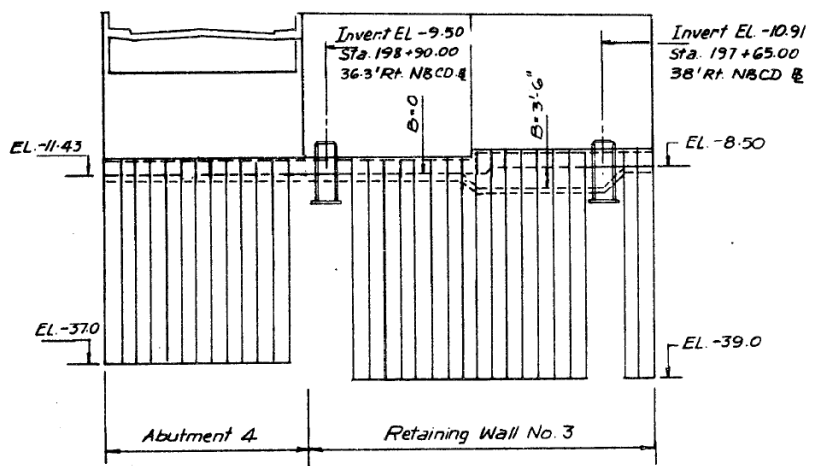
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	721
CONTRACT NO. 62A77				
ILLINOIS		FED. AID PROJECT		

# FOR INFORMATION ONLY

FEDERAL AID ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-90/94	**	COOK	84	56
STA.	TO STA.			
FED. NO. DIST. NO.	ILLINOIS	FED. AID PROJECT		
** 2626.2 -3B-R (85)				



VIEW A - A



VIEW B - B

NOTE: 'B' = Dimension between Bottom of Footing to Top of Concrete Mud Slab.

MUDWALL DETAIL  
DRAINAGE STRUCTURE

SHEET S-28 OF S-31

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
F.A.I. ROUTE 90/94 (DAN RYAN EXPRESSWAY)  
SECTION 2626.2-3B-R(85) COOK COUNTY  
TAYLOR STREET OVER DAN RYAN EXPRESSWAY  
GENERAL LAYOUT OF SHEET PILING

REVISIONS	
Name	Date

Scale: None  
Date: 9/86

Drawn By: S.D.D.  
Checked By: J.M.P.

ENVIRODYNE ENGINEERS INC.  
Chicago, Illinois

PLANS PREPARED BY  
P.G. ENGINEERING ASSOCIATES, INC.  
600 WEST JACKSON BLVD.  
CHICAGO ILLINOIS, 60604

FILE NAME: D:\V\AECOM\NA-AWS1\arecomonline\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_II\000\_CAD\008\_Structural\Sign\_Structures\62A77-Span-SSDMS114-Sign-Struct.dgn



USER NAME =	alljssa	DESIGNED -	JJS, WM	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MAI, JMG	REVISED -	
PLOT DATE =	1/23/2020	DRAWN -	AMS	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
STRUCTURE NO. SB-14A

SHEET NO. SS43 OF SS83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	722
CONTRACT NO. 62A77				
ILLINOIS		FED. AID PROJECT		

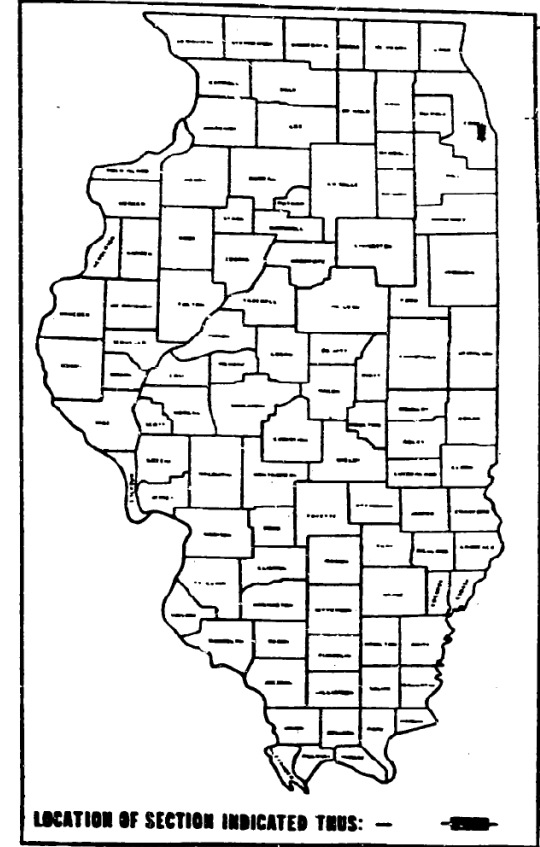
FOR INFORMATION ONLY

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**PLANS FOR PROPOSED  
 FEDERAL AID INTERSTATE HIGHWAY**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	79	1
1985-080 R P-91-179-84				

**INDEX OF VOLUMES**

VOL. NO.	DESCRIPTION	NO. OF SHEETS
1	ROADWAY PLANS & GENERAL SHEETS	151
2	MAINTENANCE OF TRAFFIC & ROADWAY CROSS SECTIONS	81
3	BRIDGES & ASSOCIATED STRUCTURES	79
4	RETAINING WALLS AND MISC. STRUCTURES	38
5	ROADWAY LIGHTING & SURVEILLANCE	36
<b>TOTAL</b>		<b>386</b>



**VOLUME NO. 3**  
 F.A.I. ROUTE 90/94 (DAN RYAN EXPRESSWAY)  
 SECTION 1985 - 080 R  
**PROJECT**  
 COOK COUNTY  
 C-91-433-85

PLAN 1 INCH = 50 FEET  
 PROFILE HORIZ. 1 INCH = 50 FEET  
 PROFILE VERT. 1 INCH = 5 FEET  
 CROSS SECTION 1 INCH = 10 FEET HORIZONTAL  
 1 INCH = 5 FEET VERTICAL

**ROADWAY GRADING AND PAVING  
 MAXWELL STREET TO I-290**

PROJECT ENDS  
 STA. 17+50 (S.B.)  
 STA. 14+75 (N.B.)  
 DAN RYAN EXPRESSWAY

STA. EQ. SE. DAN RYAN EXPRESSWAY  
 STA. 16+37.86 BK +  
 STA. 16+37.67 AHD.

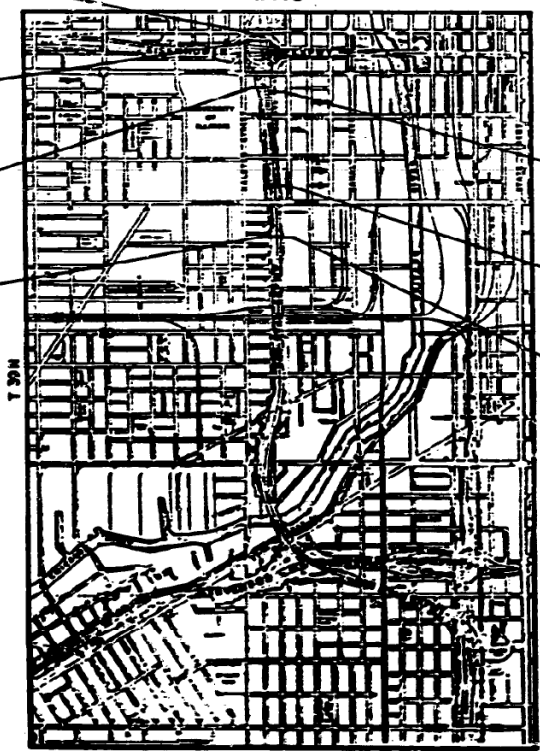
STA. EQ. SB. DAN RYAN EXPRESSWAY  
 STA. 209+97.18 BK +  
 STA. 3+11.69 AHD.

PROJECT BEGINS  
 STA. 183+13.36  
 DAN RYAN EXPRESSWAY

STA. EQ. NB. DAN RYAN EXPRESSWAY  
 STA. 209+85.95 BK +  
 STA. 3+06.94 AHD.

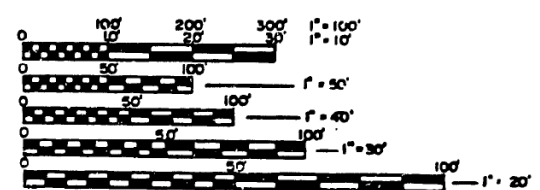
STA. EQ. NB. DAN RYAN EXPRESSWAY  
 STA. 196+40.07 BK +  
 STA. 196+39.94 AHD.

STA. EQ. SB. DAN RYAN EXPRESSWAY  
 STA. 183+87.10 BK +  
 STA. 183+13.36 AHD.



**DESIGN DESIGNATION**

DAN RYAN EXPRESSWAY (MAINLINE S.B. & N.B.) 165,700 (2000) TRUNK 118.41 (15" CRPCC - 20)  
 COLLECTOR-DISTRIBUTOR (S.B. & N.B.) 28,100 (2000) COLLECTOR 21.63 (15" CRPCC - 20)  
 N.B. ROOSEVELT RD./RUBLE ST } 19,300 (2000) AREA SERVICE 16.08 (12" PCC - 20)  
 S.B. ROOSEVELT RD./UNION AVE. }  
 N.B. TAYLOR ST. ENTRANCE RAMP }  
 TAYLOR ST. MAINLINE EXIT } 7,700 (2000) AREA SERVICE 4.67 (10" PCC - 20)  
 AND RAMP W-5 }



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

CONTRACT NO. **80063**

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED: \_\_\_\_\_ BY \_\_\_\_\_  
 CLASSIFIED: \_\_\_\_\_ BY \_\_\_\_\_  
 FORWARDED: \_\_\_\_\_ BY \_\_\_\_\_  
 APPROVED: \_\_\_\_\_ BY \_\_\_\_\_

DEPARTMENT OF TRANSPORTATION  
 FEDERAL HIGHWAY ADMINISTRATION

DIVISION ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

NET LENGTH = 4,122.32 LIN. FT. (0.78 MILES)  
 GROSS LENGTH = 4,122.32 LIN. FT. (0.78 MILES)

SHEET G1 OF 2

Revision - Nov 23 1987

COUNTY COOK SECTION 1985 - 080 R ROUTE 1 90/94 (DAN RYAN EXPRESSWAY)



USER NAME = alljssa	DESIGNED - JJS, WM	REVISED -
PLOT SCALE = N.T.S.	CHECKED - MAI, JMG	REVISED -
PLOT DATE = 1/23/2020	DRAWN - AMS	REVISED -
	CHECKED - MAI, JMG	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
 STRUCTURE NO. SB-14A

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	723
CONTRACT NO. 62A77				

SHEET NO. SS44 OF SS83 SHEETS

ILLINOIS FED. AID PROJECT

FILE NAME: D:\V\AE\COM-NA-AWS1\recomonline\local\AE\COM\_D502\_NAV\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_I\1000\_CAD\008\_Structural\Sign\_Structure\62A77\_Sign\_Structure\SSDM5114-SignStructure.dgn



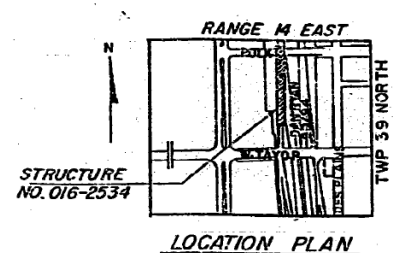
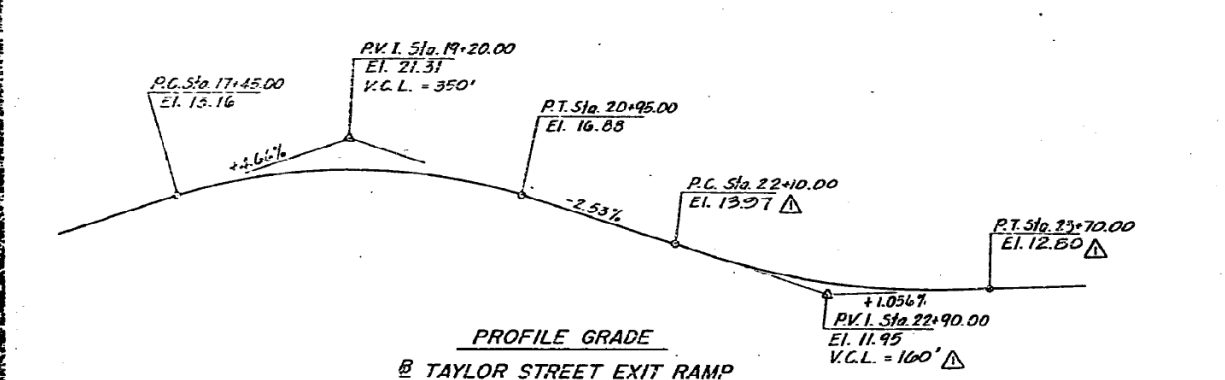
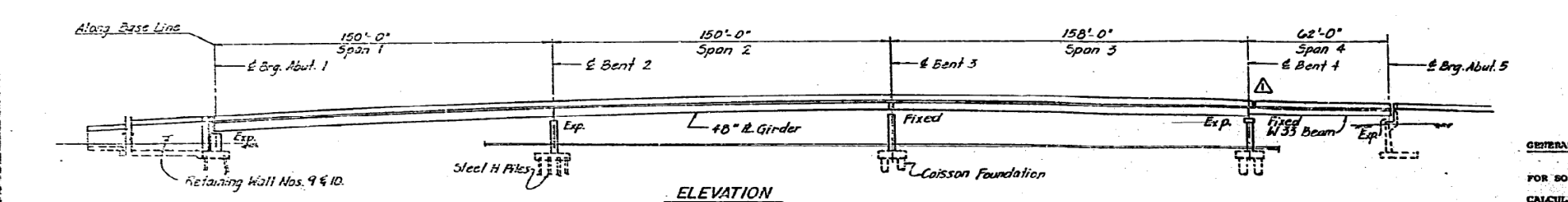
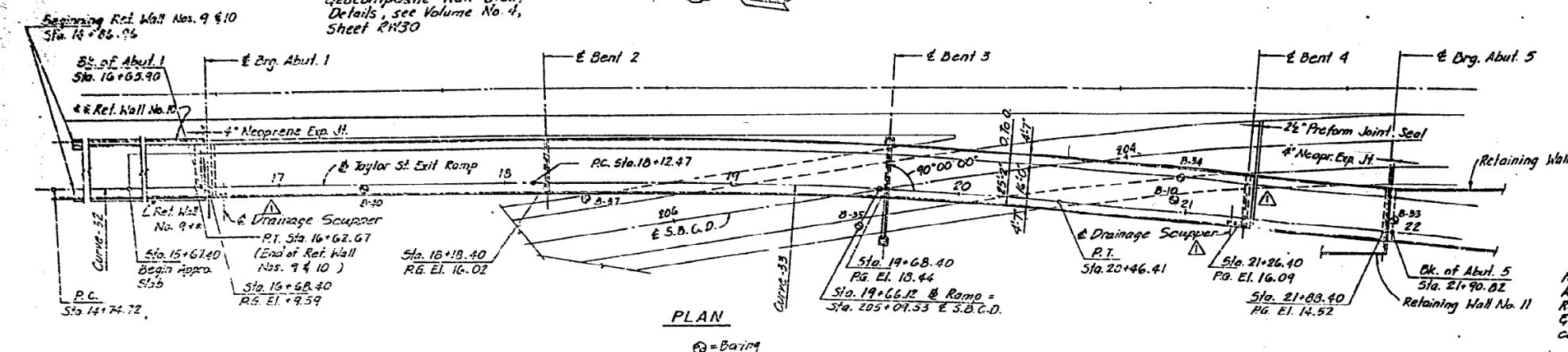


# FOR INFORMATION ONLY

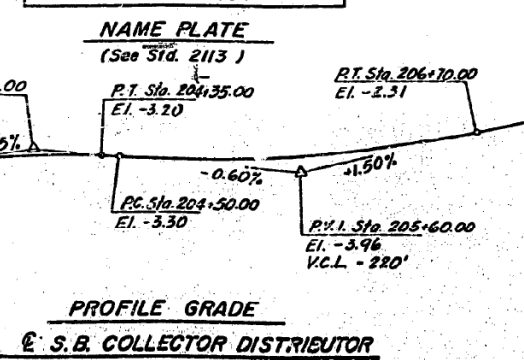
PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	COOK	COOK	1360	725
CONTRACT NO. 62A77				

**Bench Mark**  
Mark cut in ledge of brick building on Union Avenue and Roosevelt Road. City of Chicago Bench Mark No. 4617 El. 11.55

For Rustication Details and Geocomposite Wall Drain Details, see Volume No. 4, Sheet R1130



STATION 19+28.36 BUILT 1988 BY STATE OF ILLINOIS SECTION 155-080R F.A. PROJ. 1DR-94-3(268)52 LOADING HS 20 STR. NO. 016-2534



**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Structure Excavation	Cu. Yd.	1258		1258
Protective Coat	Sq. Yd.	425	149	674
Class X Concrete	Cu. Yd.		6762	6762
Class X Concrete Superstructure	Cu. Yd.	430		430
Stud Shear Connectors	Each	5124		5124
Reinforcement Bars (Epoxy Coated)	Pound		52,660	52,660
Name Plate	Each		1	1
Furnishing and Erecting Structural Steel	L. Sum	0.42		0.42
Elastomeric Bearing Assembly Type #	Each	8		8
Floating Bearings-Guided Expansion-150k	Each	2		2
Neoprene Expansion Joint, 4'	Lin. Ft.	48		48
Coisson Shafts 42"	Cu. Ft.		1528	1528
Coisson Shafts 40"	Cu. Ft.		855	855
Coisson Balls	Cu. Ft.		1207	1207
Preformed Joint Seal, 2 1/2"	Lin. Ft.	25		25
Drainage Scuppers	Each	2		2
Downspout Drainage System	Lin. Ft.		34	34
Test Piles (HP 12x55)	Each		4	4
Pipe Underdrain - 6"	Lin. Ft.		330	330
Geocomposite Wall Drain	Sq. Yd.		275	275
Furnishing Steel Piles (HP 12x55)	Lin. Ft.		5020	5020
Driving Steel Piles	Lin. Ft.		5020	5020
Floating Bearings-Guided Expansion-400k	Each	4		4
Floating Bearings-Fixed-390k	Each	1		1
Floating Bearings-Fixed-1000k	Each	1		1

**GENERAL NOTES**

- FOR SOIL BORING LOGS SEE PROPOSAL.
- CALCULATED WEIGHT OF STRUCTURAL STEEL: M-223 (6r.50) = 666,330 LBS., M-105 = 21,230 LBS.
- THE MAIN LOAD CARRYING MEMBERS SUBJECT TO TENSILE STRESSES SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS, SECTION 2. THESE COMPONENTS INCLUDE TENSION PLATES AND WELDS OF PLATE GIRDERS, WELD PLATE RIBS AND ALL SPICE PLATES. THE WELDED PLATE GIRDERS AND ARE DESIGNATED ON THE PLANS BY "W.P.R.". F.C.M. SHALL APPLY TO CROSS GIRDER MEMBERS. REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31, M-42 OR M-53 GRADE 60.
- CONTRACTOR SHALL PLACE REINFORCEMENT BARS AT THE TOP OF PIER CAP IN SUCH A MANNER AS TO MISS ANCHOR BOLTS.
- FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE TOP FLANGE FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE PIER SUPPORTS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.
- ANCHOR BOLTS SHALL BE SET BEFORE BOLTING DIAPHRAGMS OR CROSS FRAMES OVER SUPPORTS.
- FASTENERS SHALL CONFORM TO THE REQUIREMENT OF AASHTO M164. ALL FASTENERS SHALL BE 7/8" DIAMETER UNLESS OTHERWISE NOTED WITH 15/16" DIAMETER BOLT HOLES. BOLT HOLES SHALL BE DRILLED 1-1/16" DIAMETER FOR 7/8" DIAMETER BOLTS AT CROSS FRAME CONNECTIONS. DIAPHRAGMS SHALL BE CORRELATED WITH 3/4" DIAMETER BOLTS AND BOLT HOLES SHALL BE PREDRILLED TO 15/16" DIAMETER. HARDENED WASHERS SHALL BE USED FOR ALL CROSS FRAME AND DIAPHRAGM CONNECTIONS.
- ALL HIGH STRENGTH BOLT CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST ISSUE OF THE SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 (M164) OR A490 (M163) BOLTS FOR SLIP-CRITICAL CONNECTIONS. EXCEPT TIGHTENING METHODS USING EITHER THE LOAD INDICATING WASHERS OR THE CALIBRATED WRENCH ARE NOT ALLOWED.
- ROADWAY EXPANSION GUARDS SHALL BE ASSEMBLED IN THE PROPER POSITION WITH THE EMBOS IN PLACE AND SHALL BE LEFT ASSEMBLED FOR SHOP INSPECTION.
- ALL STEEL MEMBERS SHALL BE OF HIGH STRENGTH STEEL, M-223 (Grade 60), EXCEPT FOR DIAPHRAGM MEMBERS, WHICH SHALL BE M-105.
- THE ROADWAY EXPANSION PLATES SHALL BE PLANK WHICH AS PROVIDED IN ARTICLE 507.04(1) OF THE STANDARD SPECIFICATIONS.
- BEARING SEAT SURFACES SHALL BE CONSTRUCTED OR ADJUSTED TO THE DESIGNATED ELEVATION WITHIN A TOLERANCE OF 1/8" INCH. ADJUSTMENT SHALL BE MADE EITHER BY GRINDING THE SURFACE OR BY SHIMMING THE BEARINGS. TWO 1/8" ADJUSTING SHIMS, OF THE DIMENSIONS OF THE BOTTOM BEARING PLATE, SHALL BE PROVIDED FOR EACH BEARING IN ADDITION TO ALL OTHER PLATES OR SHIMS. (FOR TYPES I ELASTOMERIC BEARINGS, SHIMS OF THE DIMENSIONS OF TOP PLATE BE PROVIDED AND PLACED AS DETAILED).
- U.S. BOLT HEADS SHALL BE TO THE EXTERIOR OF MEMBERS UNLESS NOTED.
- THE SYNC-BLICKATE AND VINYL PAINT SYSTEM SHALL BE USED FOR SHOP AND FIELD PAINTING OF STRUCTURAL STEEL EXCEPT WHERE OTHERWISE NOTED.
- EXTERIOR BEAMS: THE FINAL FINISH COAT SHALL BE A MEDIUM YELLOW VINYL PAINT WHICH CONFORMS WITH SECTION 712.26 OF THE STANDARD SPECIFICATION AND AS DIRECTED BY THE ENGINEER. THE INTERMEDIATE COAT SHALL BE A HIGH-BUILT VINYL PAINT OF A COLOR WHICH SHALL BE DISTINCT FROM THE FINAL COAT.
- INTERIOR BEAMS: THE FINAL FINISH COAT SHALL BE A MEDIUM YELLOW VINYL PAINT WHICH CONFORMS WITH SECTION 712.26 OF THE SUPPLEMENTAL AND AS DIRECTED BY THE ENGINEER.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
F.A. ROUTE 90/94 (DAN RYAN EXPRESSWAY)  
SECTION 155-080R COOK COUNTY  
ROADWAY GRADING AND PAVING  
TAYLOR ST. EXIT RAMP OVER S.B. COLL. DIST.  
PLAN AND ELEVATION  
Scale: NONE  
Date: 8-1-97  
Drawn By: D.C.  
Checked By: M.M.  
INVIRODYNE ENGINEERS INC.  
Chicago, Illinois

SHEET EXIT 1 OF 17

**REVISIONS**

Name	Date
(1) Revision	1-8-88
(2) Revision	2-8-88

Revision - Nov. 23, 1987  
Rev. 12-9-97



USER NAME =	alljssa	DESIGNED -	JJS, WM	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MAI, JMG	REVISED -	
PLOT DATE =	1/23/2020	DRAWN -	AMS	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
STRUCTURE NO. SB-14A

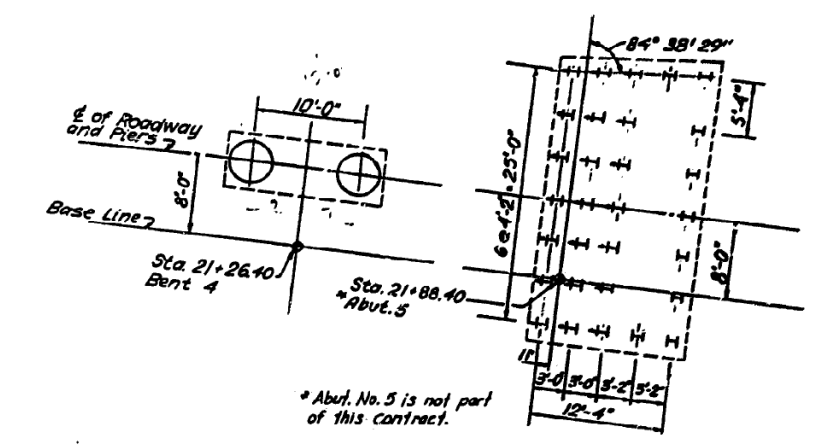
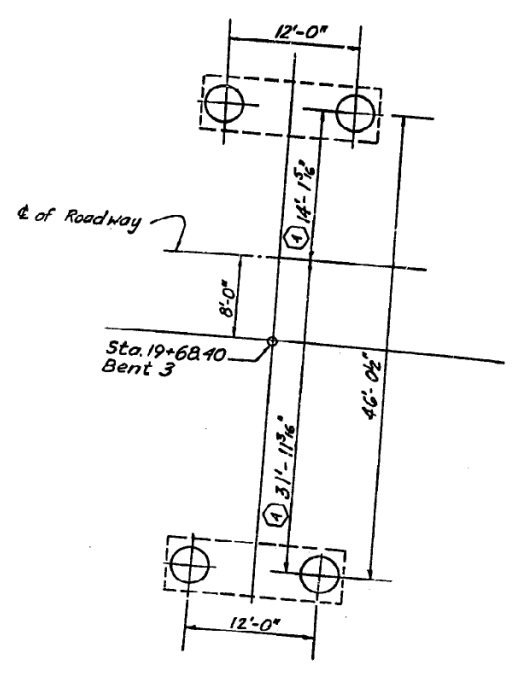
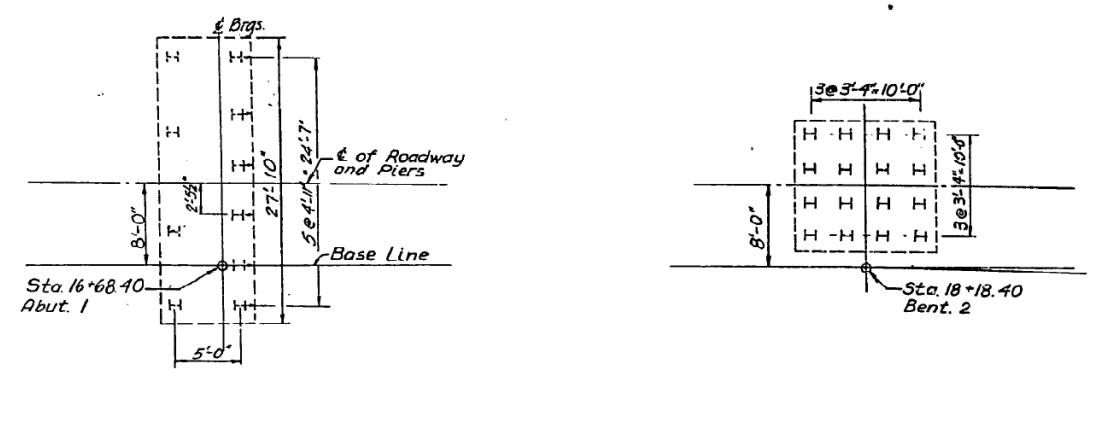
SHEET NO. SS46 OF SS83 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	725
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE NAME: D:\VAE\COM-NA-AWS1\acocomonline\local\AECOM\_D502\_NAV\Documents\01\_Americas\Transportation\620269938\_Circle\Phase\_I\0000\_CAD\008\_Structural\Sign\_Structure\62A77\_Sign\_Structure\SSDMS114-SignStruct.dgn

FOR INFORMATION ONLY

FED. AID DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	79	4
STA.	TO STA.			
FED. AID PROJ. NO.	ALIGNMENT	FED. AID PROJECT		
* 1985-080 R				



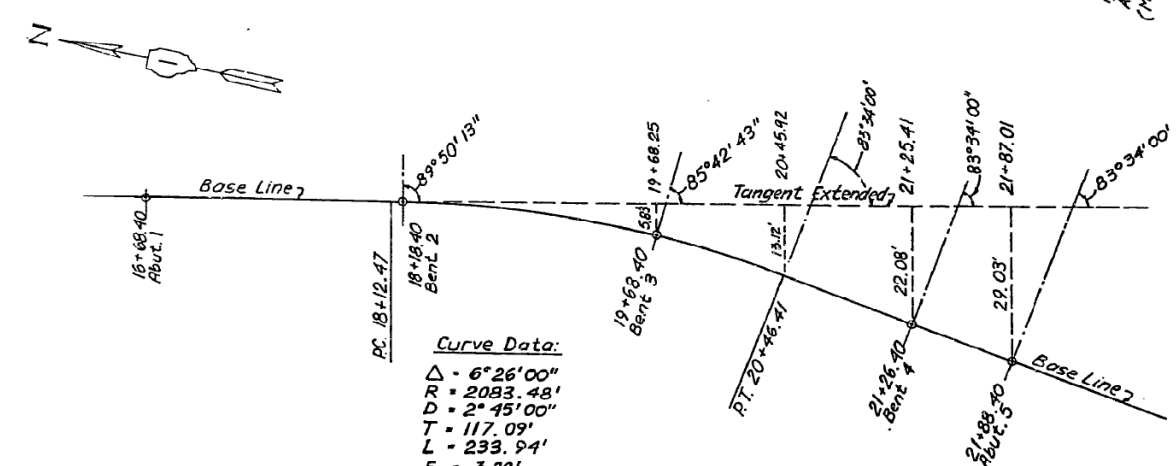
**Curve Data**  
 $\Delta = 4^\circ 41' 55''$   
 $R = 2291.85'$   
 $D = 2^\circ 30' 00''$   
 $T = 94.03'$   
 $L = 187.95'$

**SUBSTRUCTURE LAYOUT**

**LOCATION OF CONSTRUCTION AND EXPANSION JTS.**

Station	Offset to Back of Wall	Type of Joints
14+86.96 ( @ Taylor St. Exit Ramp)	6.00' Rt.	Beginning of Wall
15+16.86	4.66' Rt.	Expansion
15+45.50	3.75' Rt.	Construction
15+74.18	3.20' Rt.	Construction
16+02.75	3.00' Rt.	Expansion
16+32.71	3.00' Rt.	Construction
16+62.67	3.00' Rt.	Expansion
14+86.96 ( @ Taylor St. Exit Ramp)	19.00' Lt.	Beginning of Wall
15+16.86	19.00' Lt.	Expansion
15+45.50	19.00' Lt.	Construction
15+74.18	19.00' Lt.	Construction
16+02.75	19.00' Lt.	Expansion
16+32.71	19.00' Lt.	Construction
16+62.67	19.00' Lt.	Expansion

**Note:**  
 All Abutments and Bents are normal to Base Line.



**Curve Data:**  
 $\Delta = 6^\circ 26' 00''$   
 $R = 2093.48'$   
 $D = 2^\circ 45' 00''$   
 $T = 117.09'$   
 $L = 233.94'$   
 $E = 3.29'$

**BASE LINE GEOMETRY**  
 Not to scale

SHEET EXIT 2 OF 17

REVISIONS	
Name	Date
(4) Revision	4-22-88

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 F.A.I. ROUTE 90/94 (DAN RYAN EXPRESSWAY)  
 SECTION 1985-0808 COOK COUNTY  
 ROADWAY GRADING AND PAVING  
 TAYLOR ST. EXIT RAMP OVER S.B. COLL. DIST.  
 SUBSTRUCTURE LAYOUT  
 Scale: NONE  
 Date: 6-14-87  
 Drawn By: S.G.  
 Checked By: W.M.  
 ENVIRONMENTAL ENGINEERS INC.  
 Chicago, Illinois

FILE NAME: D:\VAE\COM-NA\AW51... \NAV\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_I\0000\_CAD\008\_Structural\Sign\_Structure\62A77\_Sign\_Structure\SSDM5114-Signs\Struct.dgn



USER NAME =	alljssa	DESIGNED -	JJS, WM	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MAI, JMG	REVISED -	
PLOT DATE =	1/23/2020	DRAWN -	AMS	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
 STRUCTURE NO. SB-14A  
 SHEET NO. SS47 OF SS83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	726
CONTRACT NO. 62A77				
ILLINOIS		FED. AID PROJECT		

# FOR INFORMATION ONLY

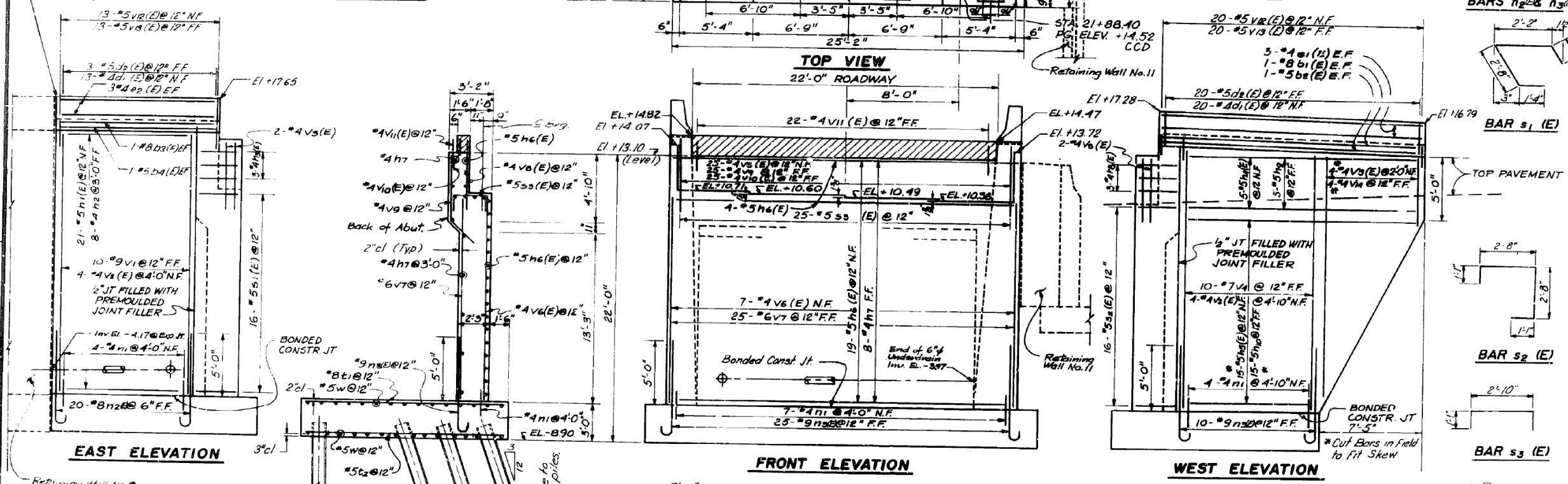
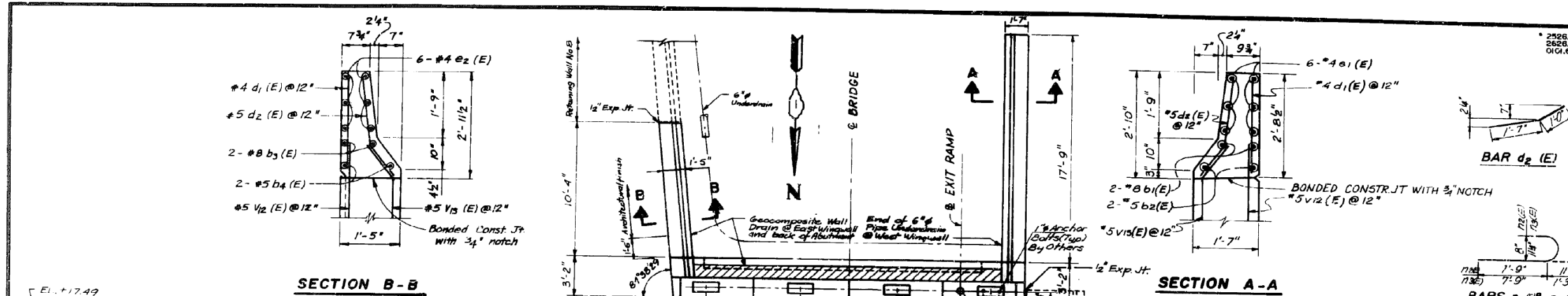
2526.6-P-R-3  
2628.2-EB-DM  
010.6-P-R183

FED. DIST. NO.	SECTION	COUNTY	TOTAL SHEETS
90/94		COOK	81
STA.	TO STA.		
FED. DIST. NO.	ILLINOIS	FED. AID PROJECT	

### ABUTMENT NO. 5 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
b1 (E)	2	#8	18'-11"	
b2 (E)	2	#5	18'-11"	
b3 (E)	2	#8	11'-6"	
b4 (E)	2	#5	11'-6"	
d1 (E)	33	#4	2'-6"	
d2 (E)	33	#5	2'-7"	
e1 (E)	6	#4	18'-11"	
e2 (E)	6	#4	11'-6"	
h1 (E)	21	#5	10'-0"	
h2	8	#4	10'-10"	
h3 (E)	8	#4	2'-10"	
h4	5	#5	17'-5"	
hs (E)	15	#5	17'-5"	CUT IN FIELD
ht (E)	23	#5	24'-10"	
ht	8	#4	24'-10"	
ha	15	#5	17'-5"	CUT IN FIELD
ho	5	#5	17'-5"	
ni	15	#4	2'-0"	
ns (E)	20	#8	8'-3"	
ns (E)	35	#9	9'-0"	
s1 (E)	16	#5	7'-6"	
s2 (E)	16	#5	7'-6"	
s3 (E)	25	#5	5'-0"	
v1	20	#8	14'-6"	
v2 (E)	10	#9	20'-5"	
v3 (E)	8	#4	20'-1"	
v4 (E)	4	#4	5'-5"	
v4	10	#7	20'-1"	
v5 (E)	4	#4	15'-8"	CUT IN FIELD
v6 (E)	7	#4	16'-1"	
v7	25	#6	16'-1"	
v8 (E)	25	#4	5'-6"	
v9	25	#4	7'-0"	
v10 (E)	25	#4	3'-4"	
v11 (E)	22	#4	3'-0"	
v12 (E)	33	#5	3'-0"	
v13 (E)	33	#5	3'-0"	
v14	4	#4	15'-8"	CUT IN FIELD
w1	6	#5	28'-4"	
w2	8	#5	28'-4"	
w3	8	#5	27'-11"	
w4	8	#5	27'-6"	

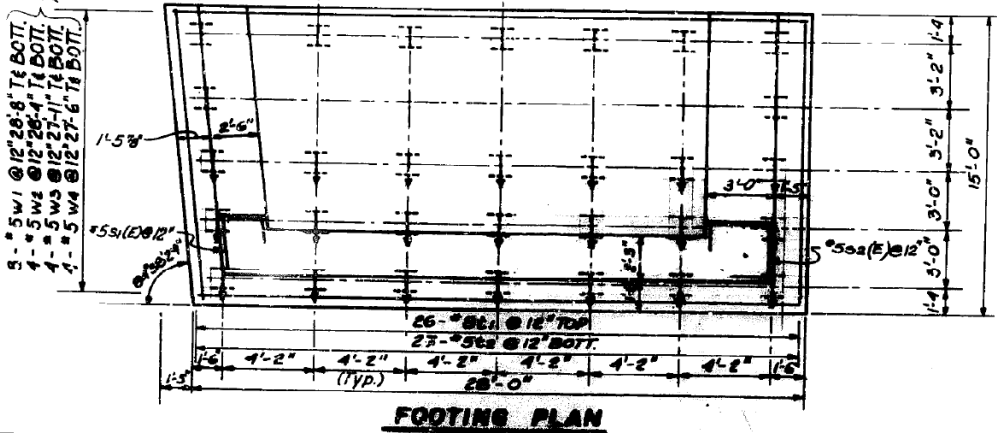
Item	Unit	Quantity
Steel Sheet Piling	Sq.Yd.	758
Structure Excavation	Cu.Yd.	280
Class X Concrete	Cu.Yd.	133.7
Reinforcement Bars	Lbs.	4,920
Reinforcement Bars Epoxy Coated	Lbs.	4,140
Steel Piles HP 12x53	Lbs.	1,450
Test Pile Steel HP 12x53	Each	1
Pipe Underdrain 6"	Lbs.	27
Geocomposite Wall Drain	Sq.Yd.	62.8
Protective Coat	Sq.Yd.	71



### GENERAL NOTES

- LOADING - AS 20-44 AND ALLOWANCE OF 25 psf FOR FUTURE WEARING SURFACE.
- INSTALLATION OF MATCHED PORTION OF BACKWALL IS NOT PART OF THIS CONTRACT.
- CARRY UP BACKFILLING EVENLY ON BOTH SIDE OF NORTH WEST WINGWALL.
- SPACE REINFORCEMENT IN BRIDGE SEAT TO CLEAR ANCHOR BOLTS.
- FOR ARCHITECTURAL FINISH DETAILS AND ELEVATIONS, UNDERDRAWS AND BACKFILL DETAILS, SEE SHEET NO. S-27.
- FOR CUT-OFF WALL, SEE SHEET NO. S-6.
- ARCHITECTURAL FINISH ALONG EAST WINGWALL OF ABUTMENT TO END 1'-6" BEFORE EXPANSION JOINT AT STA. 202+81.21 S.B.M.L.
- BARS DESIGNATED (E) SHALL BE EPOXY COATED.

### SECTION



N.F. = Near Face  
F.F. = Far Face  
E.F. = Each Face

Indicates Pile  
battered 3" per foot

### PILE DATA

TYPE: STEEL HP 12-53  
CAPACITY: TO TON DRIVE TO 105 TON BEARING  
EST. LENGTH = 50 FT.  
NUMBER REQUIRED = 29 PLUS 1 TEST PILE

SHEET S-3 OF S-27

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
F.A.I. ROUTE 58/14 (DAN RYAN EXPRESSWAY)  
SECTION 2628.2-EB-DM  
AND 2628.2-EB-DM  
AND 2628.2-EB-DM COOK COUNTY  
POLK STREET BRIDGE DEMOLITION AND  
RETAINING WALL NOS. 5, 11, AND 12  
ABUTMENT NO. 5  
Scale: None  
Date: 5-87  
Drawn By: J.R.  
Checked By: W.R.K.  
ENGINEERING GROUP, INC.  
Chicago, Illinois



USER NAME =	alljssa	DESIGNED -	JJS, WM	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MAI, JMG	REVISED -	
PLOT DATE =	1/23/2020	DRAWN -	AMS	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
STRUCTURE NO. SB-14A  
SHEET NO. SS48 OF SS83 SHEETS

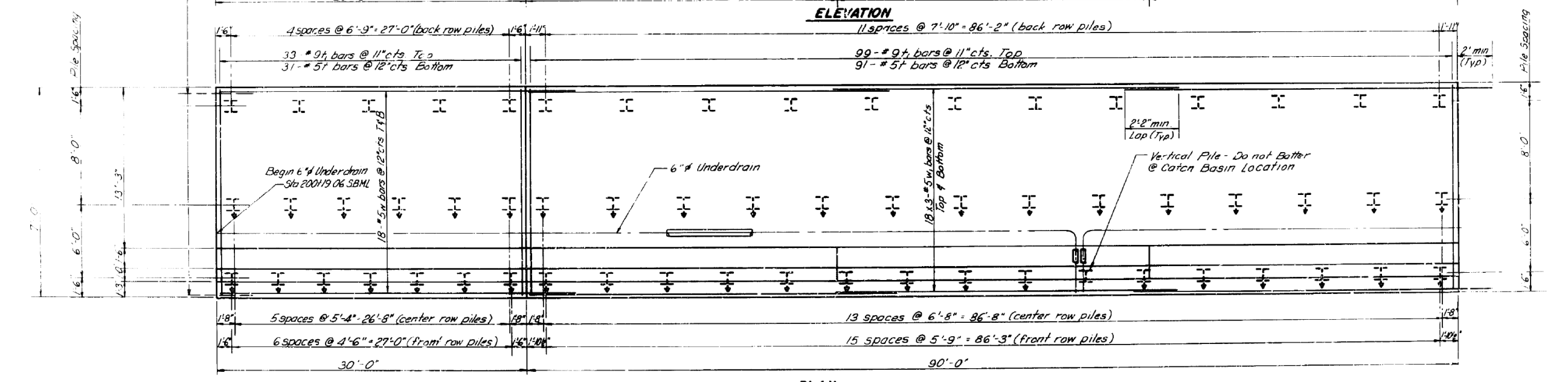
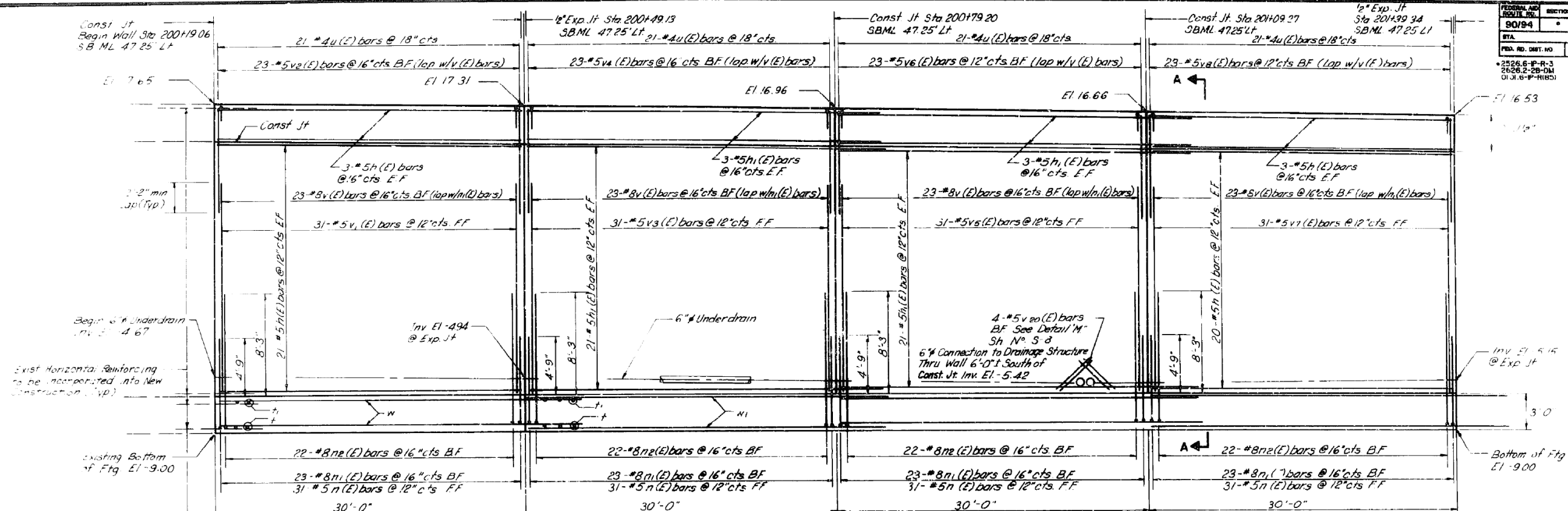
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	727
				CONTRACT NO. 62A77
ILLINOIS FED. AID PROJECT				

FILE NAME: p:\v\ae\com-na\aw51\_aec\online\local\ae\com\_D502\_NAV\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_I\0000\_CAD\008\_Structural\Sign\_Structure\62A77-Span-SSDM5114-Sign-Struct.dgn

11:10:02 AM

# FOR INFORMATION ONLY

FEDERAL AID DISTRICT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	81	40
FED. AID PROJECT		ILLINOIS		



- NOTES:**
- For joint details, architectural finish details and elevations, underdrains and backfill details, see detail No. S-27.
  - For Cut-off Wall see Sheet No. S-6.
  - For Pedestrian Railing see Sheet No. S-7.
  - Refer to Alignment and Ties sheet for horizontal alignment.
  - All longitudinal dimensions shown are measured along the east face of the wall.
  - Bars indicated thus: 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
  - Make connection from 6" underdrain to drainage structure @ Sta. 201+03 S.B.M.L.
  - Contractor shall use extreme care in locating Commonwealth Edison High Voltage Duct near Sta. 202+54 S.B.M.L. prior to driving piles in that area. See Special Provisions.
  - Bars designated (E) shall be epoxy coated.

↓ indicates pile battered 4° per foot.  
 B.F. = Back face  
 F.F. = Front face  
 E.F. = Each face

SHEET S-4 OF S-27

REVISIONS	
Name	Date

**STATE OF ILLINOIS**  
 DEPARTMENT OF TRANSPORTATION  
 F.A.L. ROUTE 3094 (DAN RYAN EXPRESSWAY)  
 SECTION 2326.0-P-R-3, 2822.2-2B-DM  
 AND 0101.0-P-R-355-COOK COUNTY  
 POLK STREET BRIDGE DEMOLITION AND  
 RETAINING WALL NOS. 8, 11, AND 12  
 (STA. 200+19.06 TO 201+39.34 S.B.M.L.)

Scale: NONE  
 Date: 5-07  
 Drawn By: PVV  
 Checked By: GSP  
 ENGINEERING GROUP, INC.  
 Chicago, Illinois

FILE NAME: D:\V\AE\COM-NA\AW51\ae\comonline\local\AE\COM\_DS02\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\0000\_CAD\008\_Structural\Sign\_Structures\62A77\_Sign\_Structures\62A77-Sign\_Struct.dgn



USER NAME =	alljssa	DESIGNED -	JJS, WM	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MAI, JMG	REVISED -	
PLOT DATE =	1/23/2020	DRAWN -	AMS	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	

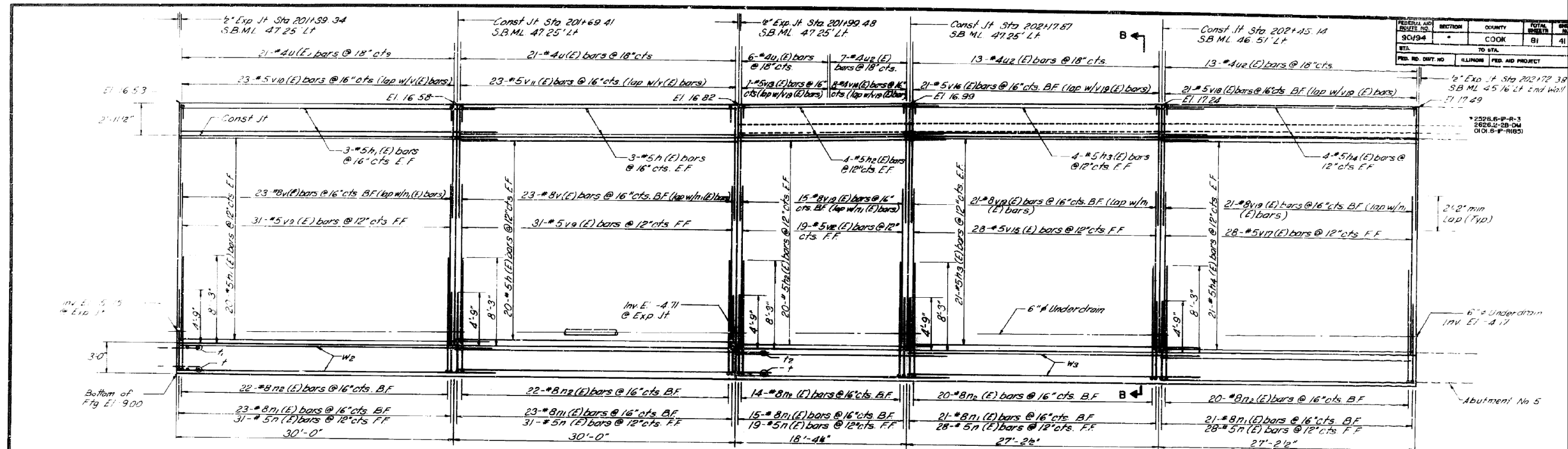
**STATE OF ILLINOIS**  
 DEPARTMENT OF TRANSPORTATION

**EXISTING RECORD DRAWINGS**  
 STRUCTURE NO. SB-14A

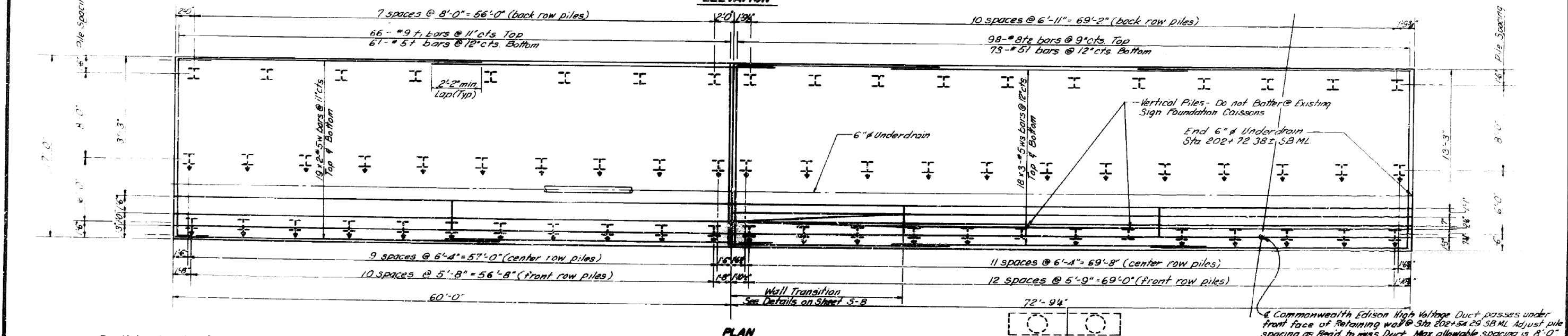
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	728
SHEET NO. SS49 OF SS83 SHEETS		CONTRACT NO. 62A77		
ILLINOIS		FED. AID PROJECT		

# FOR INFORMATION ONLY

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	COOK	1360	729



ELEVATION



PLAN

For Notes See Sheet No. S-4

& Existing Sign Foundation Sta. 202+35.00 S.B.M.L.

SHEET S-5 OF S-27

REVISIONS	Name	Date

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 F.A.I. ROUTE 50/94 (DAN RYAN EXPRESSWAY)  
 SECTIONS 2526.6-P-R-3, 2626.2-2B-DM  
 AND 01.8-P-1093-COOK COUNTY  
 POLK STREET BRIDGE DEMOLITION AND  
 RETAINING WALL NOS. 8, 11, AND 12  
 (STA. 201+39.34 TO 202+72.38 S.B.M.L.)

Scale: NONE  
 Date: 5-87  
 Drawn By: PVV  
 Checked By: GSP

ENVIROLINE SERVICES INC.  
 Chicago, Illinois

FILE NAME: P:\V\AE\COM-NA-AW51\_aecomonline.local\AE\COM\_ID502\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\_I\000\_CAD\008\_Structural\Sign\_Structure\62A77-Span-SS50M5114-SignStruct.dgn



USER NAME =	alljssa	DESIGNED -	JJS, WM	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	MAI, JMG	REVISED -	
PLOT DATE =	1/23/2020	DRAWN -	AMS	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

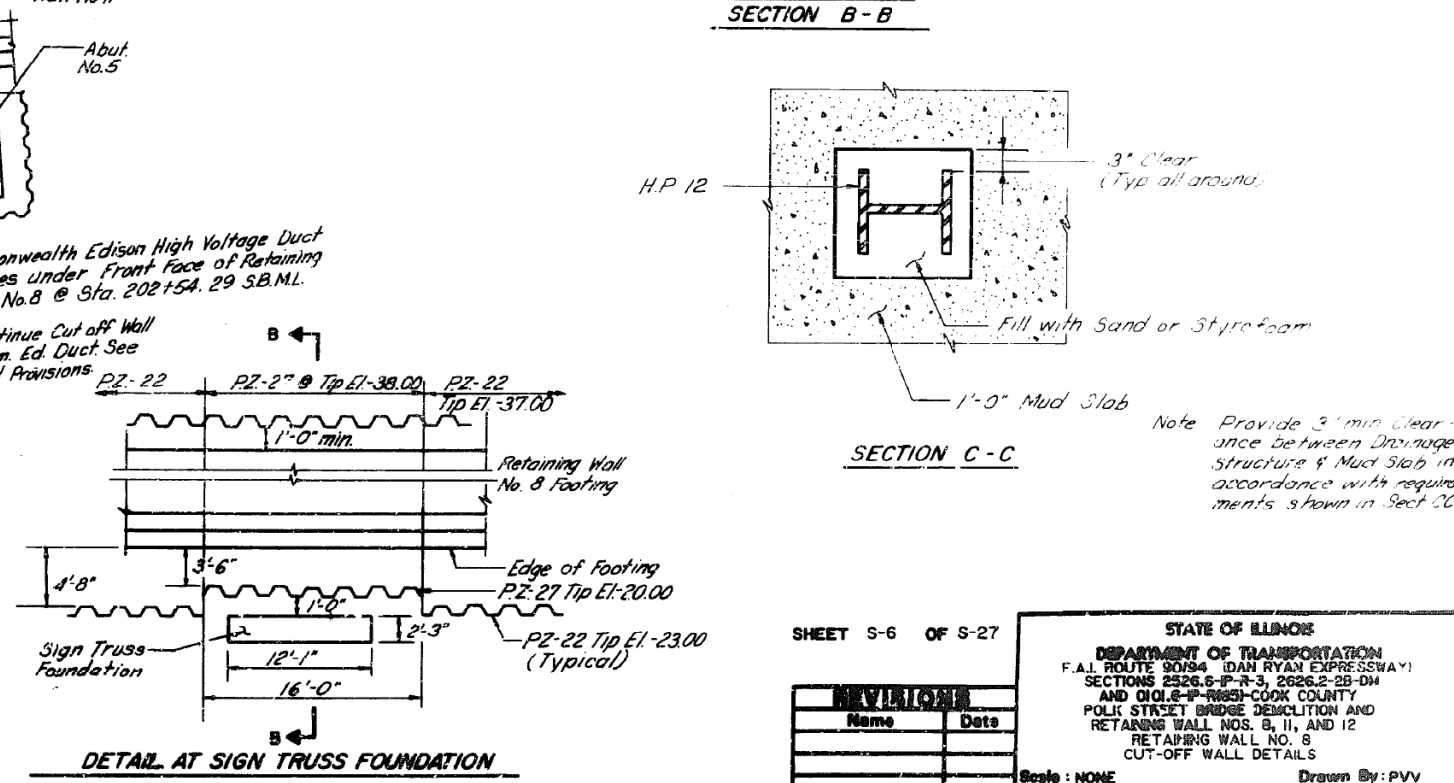
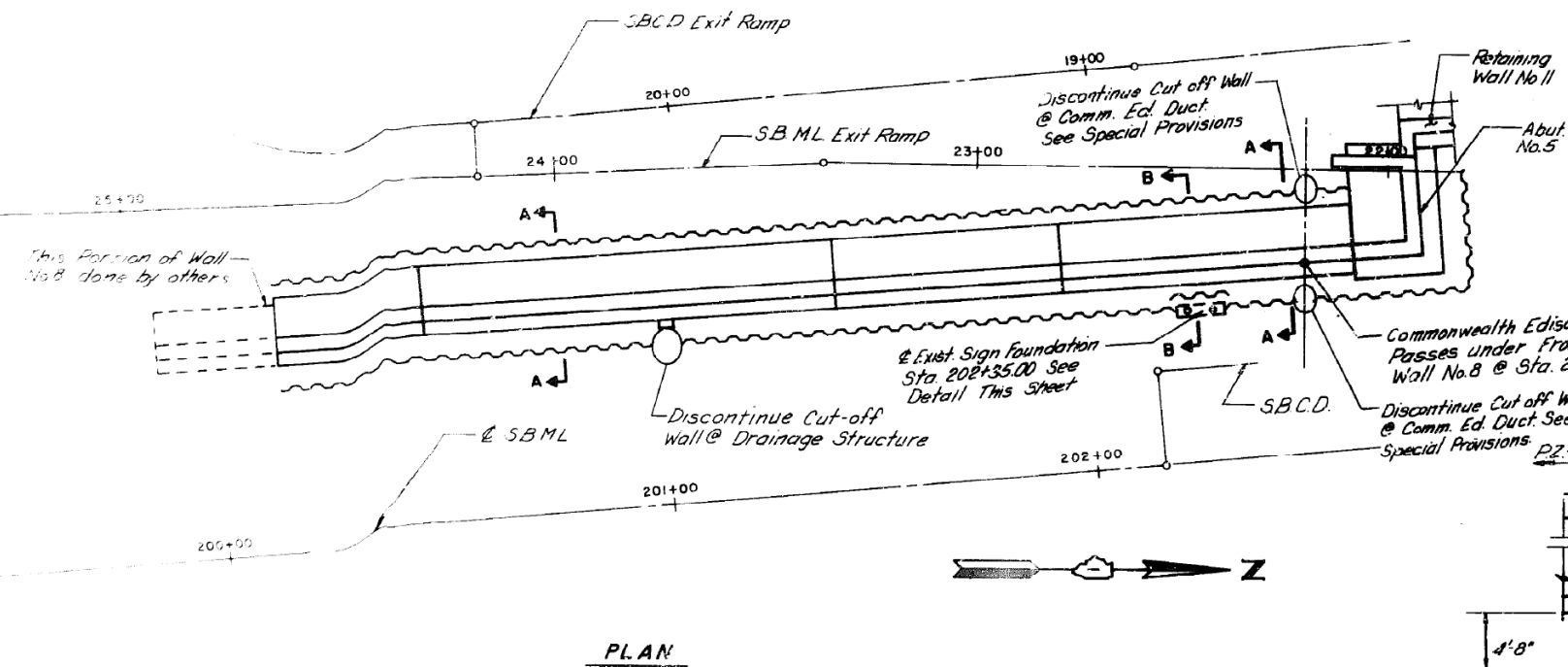
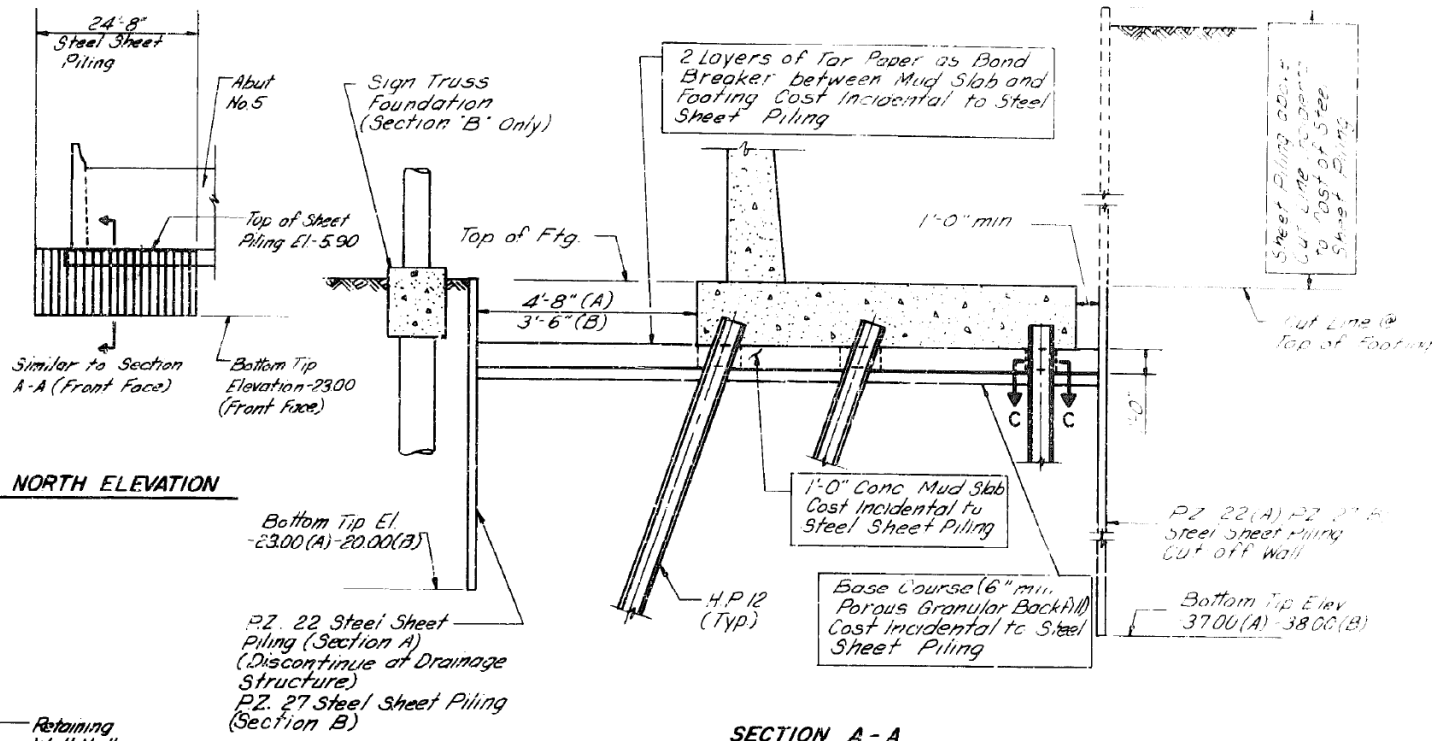
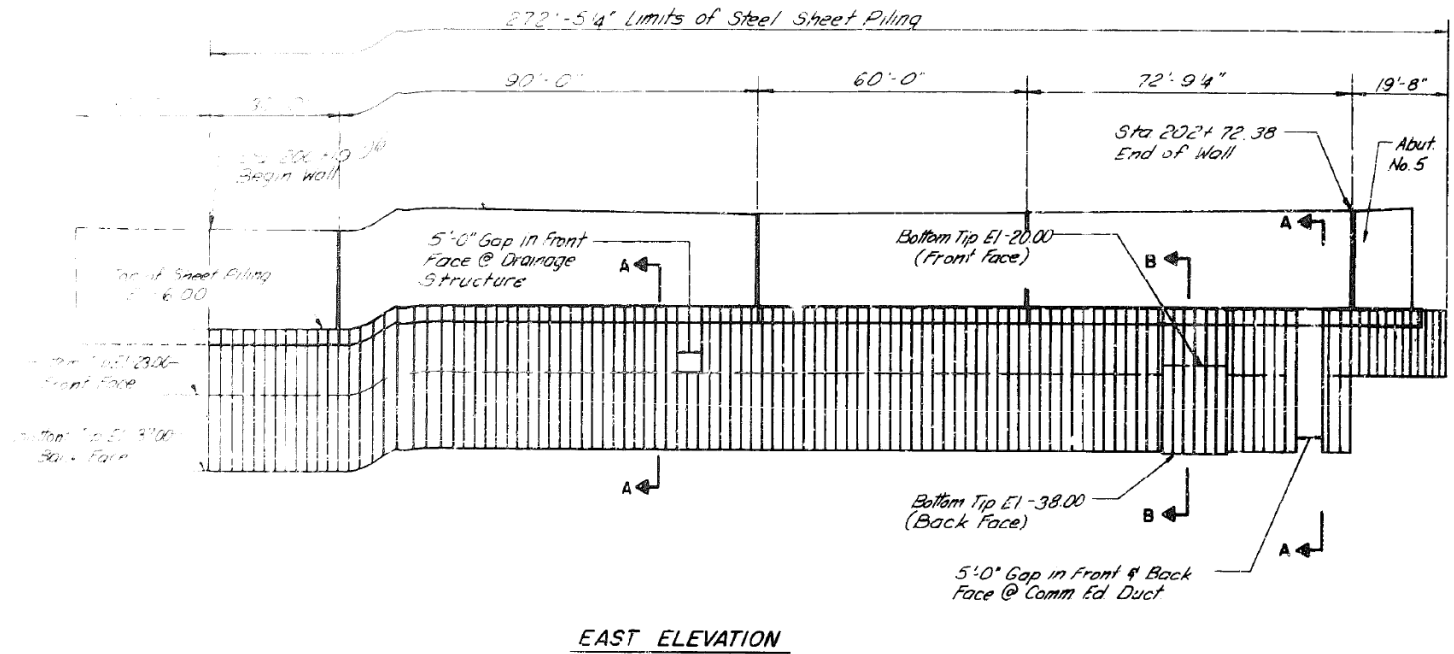
EXISTING RECORD DRAWINGS  
 STRUCTURE NO. SB-14A

SHEET NO. SS50 OF SS83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	729
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

# FOR INFORMATION ONLY

2526.6-P-R-3  
2626.2-28-DW  
0101-R-10-R-15



SHEET S-6 OF S-27

REVISIONS	
Name	Date

Scale: NONE  
Date: 5-87

Drawn By: PVV  
Checked By: GSP

ENVIROTECH ENGINEERS INC.  
Chicago, Illinois

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
F.A.L. ROUTE 80/94 (DAN RYAN EXPRESSWAY)  
SECTIONS 2526.6-P-R-3, 2626.2-28-DW  
AND 0101-R-10-R-15 COOK COUNTY  
POLK STREET BRIDGE DEMOLITION AND  
RETAINING WALL NOS. 8, 11, AND 12  
RETAINING WALL NO. 8  
CUT-OFF WALL DETAILS

FILE NAME: D:\V\AE\COM-NA-AW51\arc\comonline\local\AE\COM\_ID502\_NAD\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_I\000\_CAD\008\_Structural\Sign\_Structures\62A77\_Sign\_Structure\62A77\_Sign\_Structure.dgn



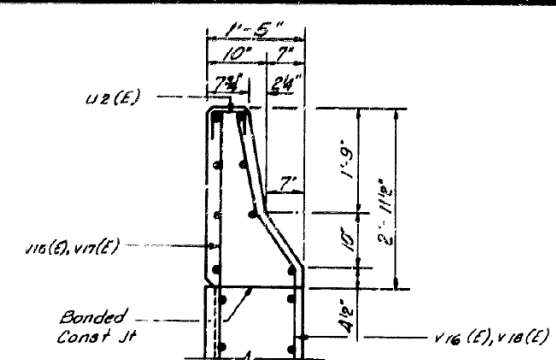
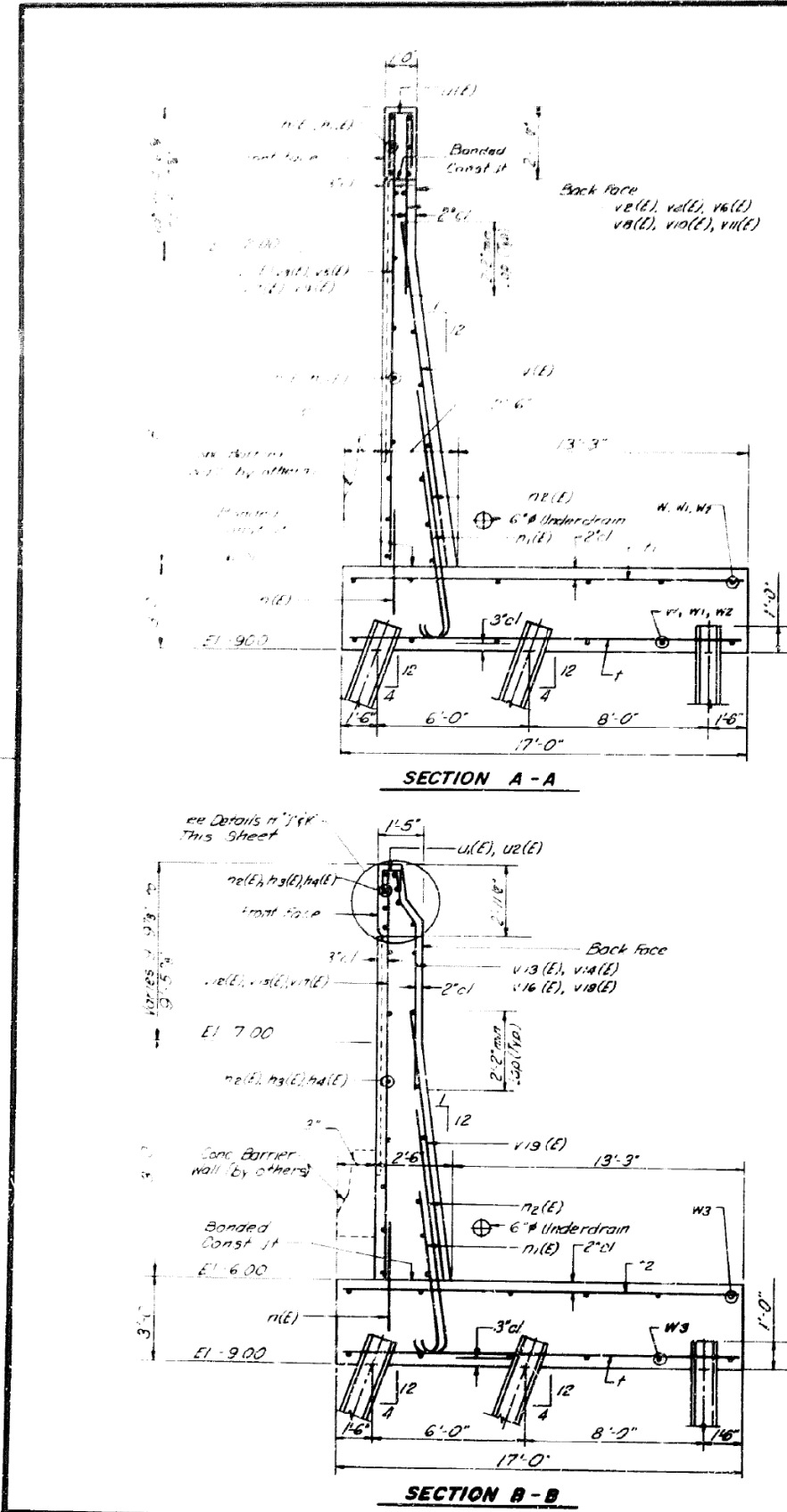
USER NAME =	alljssa	DESIGNED -	JJS, WM	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	AMS	REVISED -	
PLOT DATE =	1/23/2020	CHECKED -	MAI, JMG	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

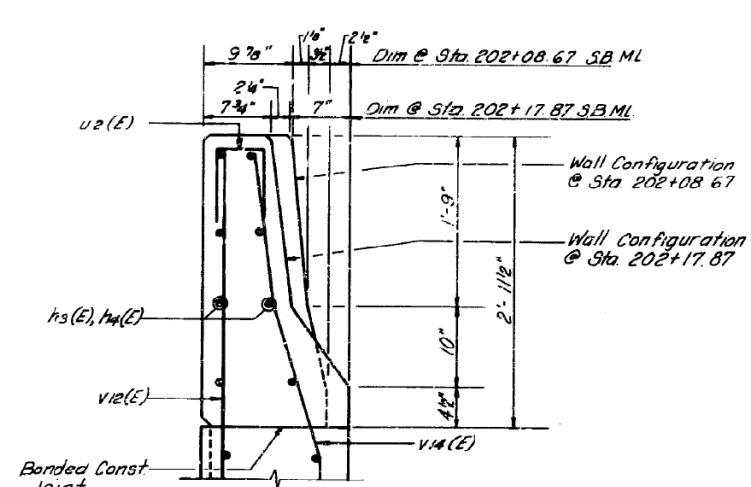
EXISTING RECORD DRAWINGS  
STRUCTURE NO. SB-14A  
SHEET NO. SS51 OF SS83 SHEETS

F.A.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	730
CONTRACT NO. 62A77				
ILLINOIS		FED. AID PROJECT		

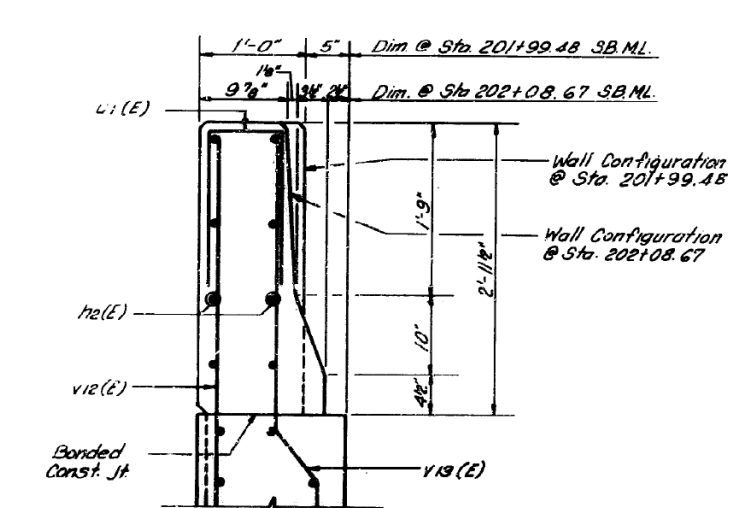
# FOR INFORMATION ONLY



DETAIL "H"  
 STA 202+17.87 to STA 202+72.38 SB.ML.

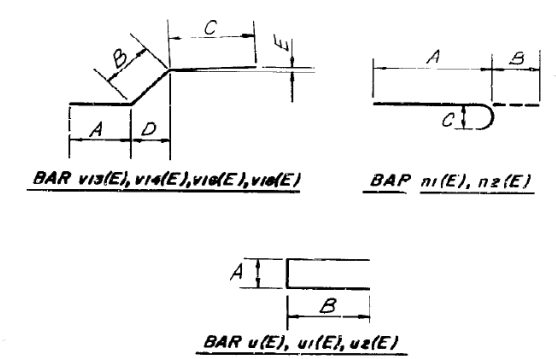
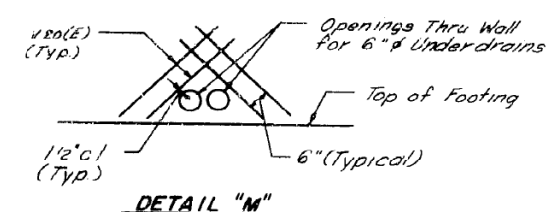


DETAIL "J"  
 STA. 202+08.67 to STA. 202+17.87 SB.ML.



DETAIL "K"  
 (STA 201+99.48 to STA. 202+08.67 SB.ML.)

WALL TRANSITION



Mark	Size	A	B	C	D	E
n1(E)	#8	7'-6"	11"	8"		
n2(E)	#8	11'-0"	11"	8"		
u1(E)	#4	7"	1'-3"			
u1(E)	#4	6"	1'-3"			
u2(E)	#4	4"	1'-3"			
v13(E)	#5	7'-4"	9"	3'-0"	7"	0"
v14(E)	#5	7'-10"	1'-8"	1'-7"	1'-7"	2"
v16(E)	#5	3'-8"	1'-0"	1'-7"	10"	24"
v18(E)	#5	3'-11"	1'-0"	1'-7"	10"	24"

FED. AID DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301B4		COOK	81	44

## RETAINING WALL NO. 8 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
n1(E)	140	#5	29'-8"	
n1(E)	142	#5	32'-0"	
h2(E)	18	#5	20'-5"	
h3(E)	50	#5	20'-3"	
h4(E)	50	#5	26'-11"	
n1(E)	261	#5	3'-0"	
n1(E)	195	#8	8'-5"	
n2(E)	186	#8	11'-11"	
f	256	#5	16'-8"	
f1	198	#9	16'-8"	
f2	98	#8	16'-8"	
u1(E)	126	#4	3'-1"	
u1(E)	6	#4	2'-10"	
u2(E)	53	#3	3'-0"	
v1(E)	138	#8	10'-0"	
v1(E)	31	#5	23'-11"	
v2(E)	23	#5	6'-8"	
v3(E)	31	#5	20'-9"	
v4(E)	23	#5	6'-4"	
v5(E)	31	#5	22'-5"	
v6(E)	23	#5	6'-0"	
v7(E)	31	#5	22'-4"	
v8(E)	23	#5	5'-8"	
v9(E)	62	#5	22'-4"	
v10(E)	23	#5	5'-7"	
v11(E)	23	#5	5'-10"	
v12(E)	19	#5	22'-7"	
v13(E)	7	#5	11'-1"	
v14(E)	8	#5	11"	
v15(E)	28	#5	22'-9"	
v16(E)	21	#5	11'-3"	
v17(E)	28	#5	23'-0"	
v18(E)	21	#5	11'-6"	
v19(E)	57	#8	14'-0"	
v20(E)	4	#5	3'-0"	
w	18	#5	32'-0"	
w1	108	#5	32'-6"	
w2	76	#5	32'-1"	
w3	108	#5	25'-8"	

Item	Unit	Quantity
Steel Sheet Piling	Sq. Ft.	11,776
Structure Excavation	Cu. Yd.	2,576
Geocomposite Mat/Dum	Sq. Yd.	5,149
Class X Concrete	Cu. Yd.	814.7
Reinforcement Bars	Lb.	29,700
Rein. Bars (Coarse)	Lb.	41,160
Steel Piles (HP12x53)	Lin. Ft.	6,200
Test Piles (HP12x53)	Each	1
Pipe Underdrain 6"	Lin. Ft.	253
Underdrain Railing 6"	Lin. Ft.	180
Protective Coat	Sq. Yd.	711

**PILE DATA**  
 TYPE: STEEL HP 12x53  
 CAPACITY: 70 TON DRIVE  
 TO 100 TON BEARINGS  
 EST. LENGTH = 50 FT.  
 NUMBER REQUIRED = 124 PLUS  
 1 TEST PILE

SHEET S-8 OF 5-27

**STATE OF ILLINOIS**  
 DEPARTMENT OF TRANSPORTATION  
 F.A.I. ROUTE 50/54 (DAN RYAN EXPRESSWAY)  
 SECTIONS 2525.6-F-R-3, 2525.2-25-0M  
 AND 010.6-F-R-3 COOK COUNTY  
 POLK STREET BRIDGE DEMOLITION AND  
 RETAINING WALL NOS. 8, 11, AND 12  
 RETAINING WALL NO. 8  
 SECTIONS AND BILL OF MATERIAL

Scale: NONE  
 Date: 5-27

Drawn By: FVW  
 Checked By: GSP

ENGINEERING CONSULTANTS INC.  
 Chicago, Illinois

FILE NAME: D:\V\AE\COM-NA-AWS1\aecononline\local\AE\COM\_D502\_NAV\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\Structural\Sign\_Structure\62A77-Sign\_Structure\SS5DM5114-SignStruct.dgn



USER NAME	DESIGNED	REVISIONS
alljssa	JJS, WM	
	MAI, JMG	
	AMS	
	MAI, JMG	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
 STRUCTURE NO. SB-14A  
 SHEET NO. SS52 OF SS83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	731

CONTRACT NO. 62A77  
 ILLINOIS FED. AID PROJECT

FOR INFORMATION ONLY

2 \* 1972 + 5 = 1977 TOTAL SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	1
ILLINOIS			CONTRACT NO. 60X93	

PROJECT LOCATED IN CITY OF CHICAGO  
D-91-227-13

FOR INDEX OF SHEETS AND STANDARDS SEE SHEETS NO. 3 AND 4

DESIGN DESIGNATIONS:		POSTED /DESIGN SPEEDS:
EB I-290	109,000(2040) INTERSTATE	45 /50 MPH
WB I-290	31,000(2040) INTERSTATE	45 /45 MPH
EB CONGRESS PARKWAY	33,000(2040) INTERSTATE	45 /50 MPH
WB CONGRESS PARKWAY	31,000(2040) INTERSTATE	45 /45 MPH
ES RAMP	43,000(2040) INTERSTATE	40 /40 MPH
EN RAMP	31,000(2040) INTERSTATE	30 /30 MPH
EB TAYLOR STREET EXIT RAMP	2,000(2040) INTERSTATE	25 /35 MPH
SB TAYLOR STREET EXIT RAMP	8,000(2040) INTERSTATE	NA /25 MPH
SB I-90/94	99,000(2040) INTERSTATE	45 /60 MPH
NB I-90/94	81,000(2040) INTERSTATE	45 /60 MPH
SE RAMP	5,000(2040) INTERSTATE	25 /25 MPH
WS RAMP	8,900(2048) INTERSTATE	25 /25 MPH
WN RAMP	9,000(2040) INTERSTATE	20 /30 MPH

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**PROPOSED  
HIGHWAY PLANS**

MISC. INTERCHANGE RAMPS AT VARIOUS LOCATIONS  
FAI ROUTE 90/94 AT I-290/CONGRESS PARKWAY  
(JANE BYRNE INTERCHANGE)  
WB CONGRESS TO SB I-90/94  
WB CONGRESS TO NB I-90/94  
SB I-90/94 TO EB CONGRESS  
SECTION 2014-013R&B-R  
PROJECT: NHPP-VQ14(255)  
BRIDGE REPLACEMENT,  
ROADWAY RECONSTRUCTION,  
LIGHTING AND ITS  
COOK COUNTY  
C-91-273-14

NPDES PERMIT INFORMATION

NPDES Disturbed  
Area = 12.79 Acres

Approximate Location of Roadway is :  
Longitude 87° 38' 43.53" W  
Latitude 41° 52' 28.62" N



STATION EQUATION  
SB TAYLOR EXIT RAMP  
STA 7404 + 00.00 BK =  
STA 6404 + 00.00 AH

STATION EQUATION  
RAMP SE  
STA 2401 + 40.00 BK =  
STA 1401 + 40.00 AH

RETAINING WALL 48  
SN 016-1835  
STA 1403 + 78.00 TO  
STA 1404 + 80.58

RAMP WS BRIDGE  
SN 016-1715  
STA 1210 + 40.15 TO  
STA 1229 + 66.00

RAMP SE BRIDGE  
SN 016-1714  
STA 1404 + 80.51 TO  
1412 + 21.28

SB TAYLOR STREET  
EXIT RAMP BRIDGE  
SN 016-1718  
STA 6407 + 67.96 TO  
STA 6409 + 18.85

BEGIN PROJECT LIMIT  
RAMP ES  
STA 1507 + 75.00  
EB TAYLOR EXIT RAMP  
STA 7306 + 37.89

END PROJECT LIMIT  
RAMP ES  
STA 1518 + 55.15

END PROJECT LIMIT  
RAMP WS  
STA 1241 + 20.44

END PROJECT LIMIT  
SB TAYLOR EXIT RAMP  
STA 6424 + 10.70

EXISTING RETAINING  
WALL 12  
SN 016-2311  
STA 7316 + 31.15 TO  
STA 7322 + 25.12

END PROJECT LIMIT  
EB TAYLOR EXIT RAMP  
7326 + 25.98

RETAINING WALL 47  
SN 016-1834  
STA 6405 + 49.34 TO  
STA 6407 + 69.43

RETAINING WALL 46  
SN 016-1833  
STA 1105 + 03.64 TO  
STA 1105 + 60.00

END PROJECT LIMIT  
RAMP WN  
STA 1105 + 76.20

RAMP WN BRIDGE  
SN 016-1706  
STA 1103 + 05.18  
TO STA 1105 + 26.72

END PROJECT LIMIT  
RAMP SE  
STA 1412 + 21.28

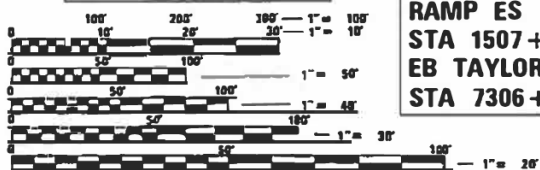
BEGIN PROJECT LIMIT  
RAMP WN STA  
1103 + 05.41

WB I-290 (CONGRESS)  
VIADUCT  
SN 016-0461  
STA 5206 + 58.47 TO  
5212 + 92.32

BEGIN PROJECT LIMIT  
RAMP WS STA  
1210 + 37.67

RETAINING WALL 14  
SN 016-1803  
STA 1229 + 61.00 TO  
STA 1231 + 81.19

RETAINING WALL 16  
SN 016-1805  
STA 7320 + 50.00 TO  
STA 7326 + 25.98

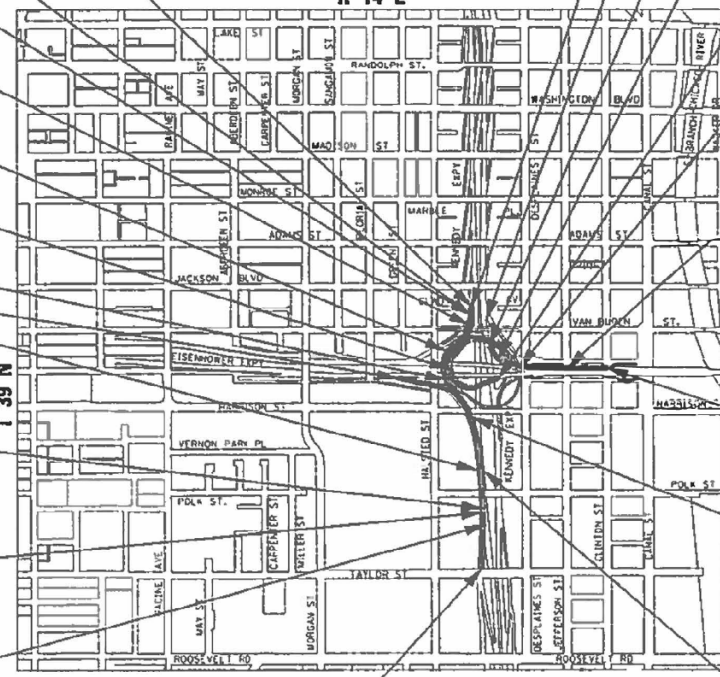


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD  
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT  
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS  
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

FOR PROFESSIONAL SEALS  
SEE SHEET 2

C.U.A.N.  
CHICAGO UTILITY ALERT NETWORK  
1-312-744-7000

PROJECT MANAGER: BRIAN KUTTAB, PE  
CONTRACT NO. 60X93



LOCATION MAP  
NOT TO SCALE  
GROSS LENGTH = 10,534.10 FT. = 1.995 MILES  
NET LENGTH = 10,534.10 FT. = 1.995 MILES

DISTRICT 1 DESIGN /CONSULTANT SERVICES: BRIAN KUTTAB, P.E. (847)705-4831 SCHAUMBURG, ILLINOIS

**TranSystems** 1475 EAST WOODFIELD ROAD, SUITE 600  
SCHAUMBURG, IL 60193  
PHONE: (847) 605-9900  
FAX: (847) 463-0565

**AECOM** 303 EAST WACKER DRIVE, SUITE 1400  
CHICAGO, IL 60601-3775  
PHONE: (312) 573-7700  
FAX: (312) 373-6800

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED *June 6 2018*  
*Anthony J. D'Amico / CNB*  
REGIONAL ENGINEER

*Oct 5 2018*  
*Paul P. Chu*  
ENGINEER OF DESIGN AND ENVIRONMENT

*Oct 9 2018*  
*Paul P. Chu*  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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OF THE STATE OF ILLINOIS

REV. 10/31/18 REV. 9/17/18

FILE NAME: D:\V\AECOM-NA-AWS1\AECOMonline\local\AECOM\_D502\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\_I\0000\_CAD\008\_Structural\Sign\_Structure\62A77-Sign\_Structure\SSDMS114-SignStructure.dgn



USER NAME =	alljssa	DESIGNED -	JJS, WM	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	AMS	REVISED -	
PLOT DATE =	1/23/2020	CHECKED -	MAI, JMG	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
STRUCTURE NO. SB-14A  
SHEET NO. SS53 OF SS83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	732
ILLINOIS			CONTRACT NO. 62A77	
ILLINOIS			FED. AID PROJECT	



# FOR INFORMATION ONLY

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2	PROFESSIONAL SEALS			1084-1098	PROPOSED WALL #47 PLANS (SN 016-1834)
3	INDEX OF DRAWINGS	289-296	SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL PLAN - I-290 MAINLINE STAGE 5	1099-1109	PROPOSED WALL #48 PLANS (SN 016-1835)
4	HIGHWAY STANDARDS, IDOT DISTRICT 1 STANDARDS AND IDOT TRAFFIC SYSTEMS CENTER STANDARDS			1110-1119	EXISTING RETAINING WALL #12 (SN 016-2311)
5	GENERAL NOTES	297-306	SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL PLAN - I-90/94 MAINLINE STAGE 6	1120-1151	DISTRICT 1 STANDARD DETAILS
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7-35	SUMMARY OF QUANTITIES	307-314	SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL PLAN - I-290 MAINLINE STAGE 6	1163-1168	CDOT STANDARD DETAILS
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		953-1024	PROPOSED CONGRESS PARKWAY BRIDGE PLANS (SN 016-0461)		
		1025-1046	PROPOSED WALL #14 PLANS (SN 016-1803)		
		1047-1072	PROPOSED WALL #16 PLANS (SN 016-1805)		

376-386A 2



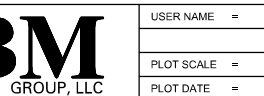
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DRAWN - BMJ	REVISED -
CHECKED - MJL	REVISED -
DATE - 7/30/2018	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCALE: NONE		SHEET 1 OF 4 SHEETS STA.		TO STA.	
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	3
CONTRACT NO. 60X93				
ILLINOIS FED. AID PROJECT				

REV. 11/1/18



USER NAME = alljssa	DESIGNED - JJS, WM	REVISED -
PLOT SCALE = N.T.S	CHECKED - MAI, JMG	REVISED -
PLOT DATE = 1/23/2020	DRAWN - AMS	REVISED -
	CHECKED - MAI, JMG	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SHEET NO. SS54 OF SS83 SHEETS	
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	733
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

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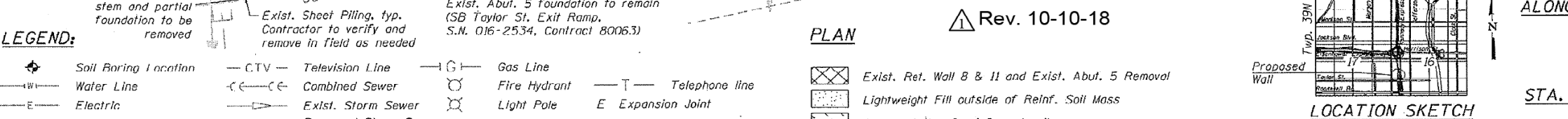
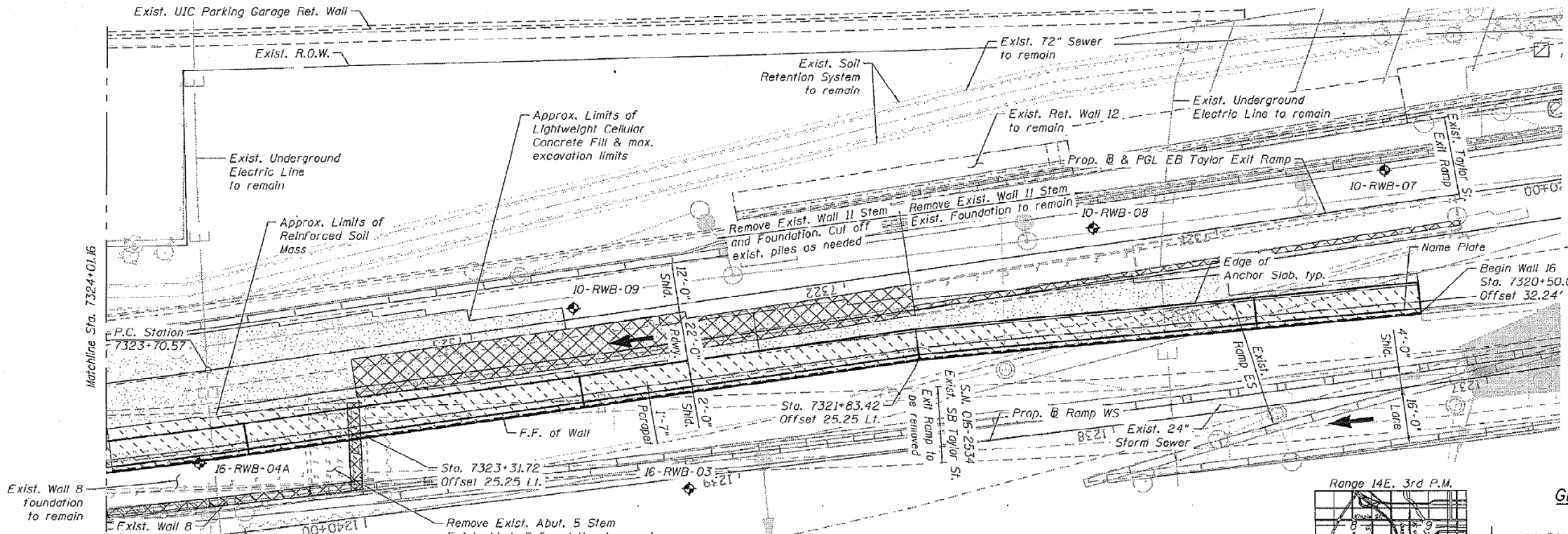
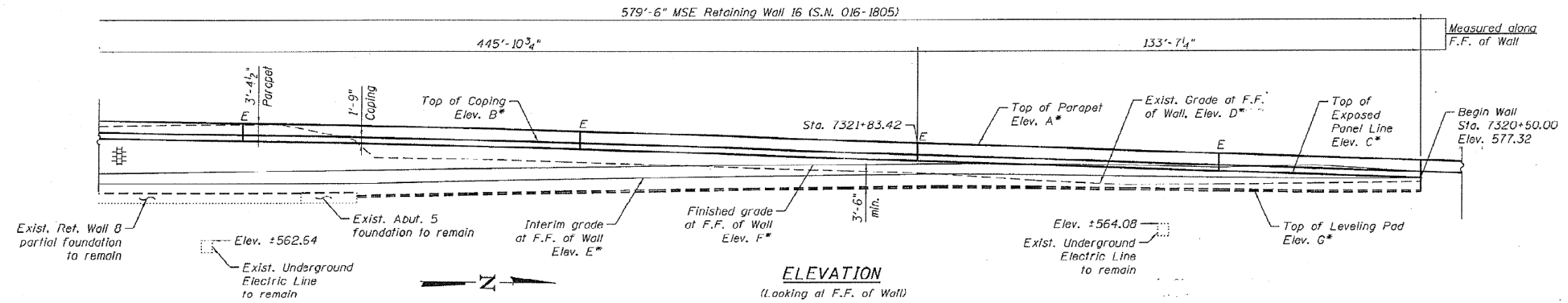
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# FOR INFORMATION ONLY

Bench Mark: Cut "X" on NE Bolt of Taylor St. on SW corner of Roosevelt and Union St. Elev. 593.36.

Existing Structure: S.N. 016-2534 was built in 1988 and carries traffic for Taylor St exit ramp from SB I-90/94. Exist. four span structure has an overall length of approx. 428'. The exist. superstructure consists of steel beams with 7 1/2" thick concrete deck. The exist. substructure consists of reinforced concrete high wall abutment and piers supported on steel pile foundation. Existing structure to be removed.  
 Exist. Cast-In-Place Ret. Wall 8 was built under two separate contracts in 1986 & 1987. Total length of the wall is approx. 282'-9" with max. height of 23'-11". Exist. wall is supported on steel H-pile foundation. Steel sheet piling used during wall construction was cut-off at the top of wall footing elev.  
 Exist. Cast-In-Place Ret. Wall 11 was built in 1987. Total length of wall is approx. 296'-4" with max. height of 10'-6". Wall is supported on steel H-piles.

Traffic Control: SB Taylor St. Exit Ramp Structure and EB Taylor St. Exit Ramp will be closed and traffic will be detoured during construction. Traffic along SB I-90/94 will be maintained.



**DESIGN SPECIFICATIONS**  
 2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 & 2016 Interims

**DESIGN STRESSES**  
**FIELD UNITS**  
 f'c = 4,000 psi  
 fy = 60,000 psi (Reinforcement)  
**PRECAST UNITS**  
 f'c = 4,500 psi (Precast Panels)

\* For Elevations, see Elevations Table on Sheets S7-08 thru S7-11.

**NOTES:**  
 1. Stations and offsets are measured along Prop. EB & PGL EB Taylor Exit Ramp to the front face the precast panels.  
 2. F.F. denotes Front Face.  
 3. B.F. denotes Back Face.

**APPROVED**  
 For Structural Adequacy Only  
*Amish T. Bhatt*  
 Engineer of Bridges & Structures



*Amish T. Bhatt*  
 AMISH T. BHATT  
 LICENSE EXPIRES 11/30/2018

**GENERAL PLAN & ELEVATION I**  
**RETAINING WALL 16**  
 ALONG EB TAYLOR STREET EXIT RAMP  
 F.A.I. RTE. 90/94/290  
 SECTION 2014-013R&B-R  
 COOK COUNTY  
 STA. 7320+50.00 TO STA. 7326+25.98  
 STRUCTURE NO. 016-1805



USER NAME = USER	DESIGNED - MK	REVISED
PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED
PLOT DATE = 7/30/2018	DRAWN - MK	REVISED
	CHECKED - ATB	REVISED

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

RETAINING WALL 16 (STRUCTURE NO. 016-1805)  
 SHEET NO. S7-01 OF S7-26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	1047
CONTRACT NO. 60X93				



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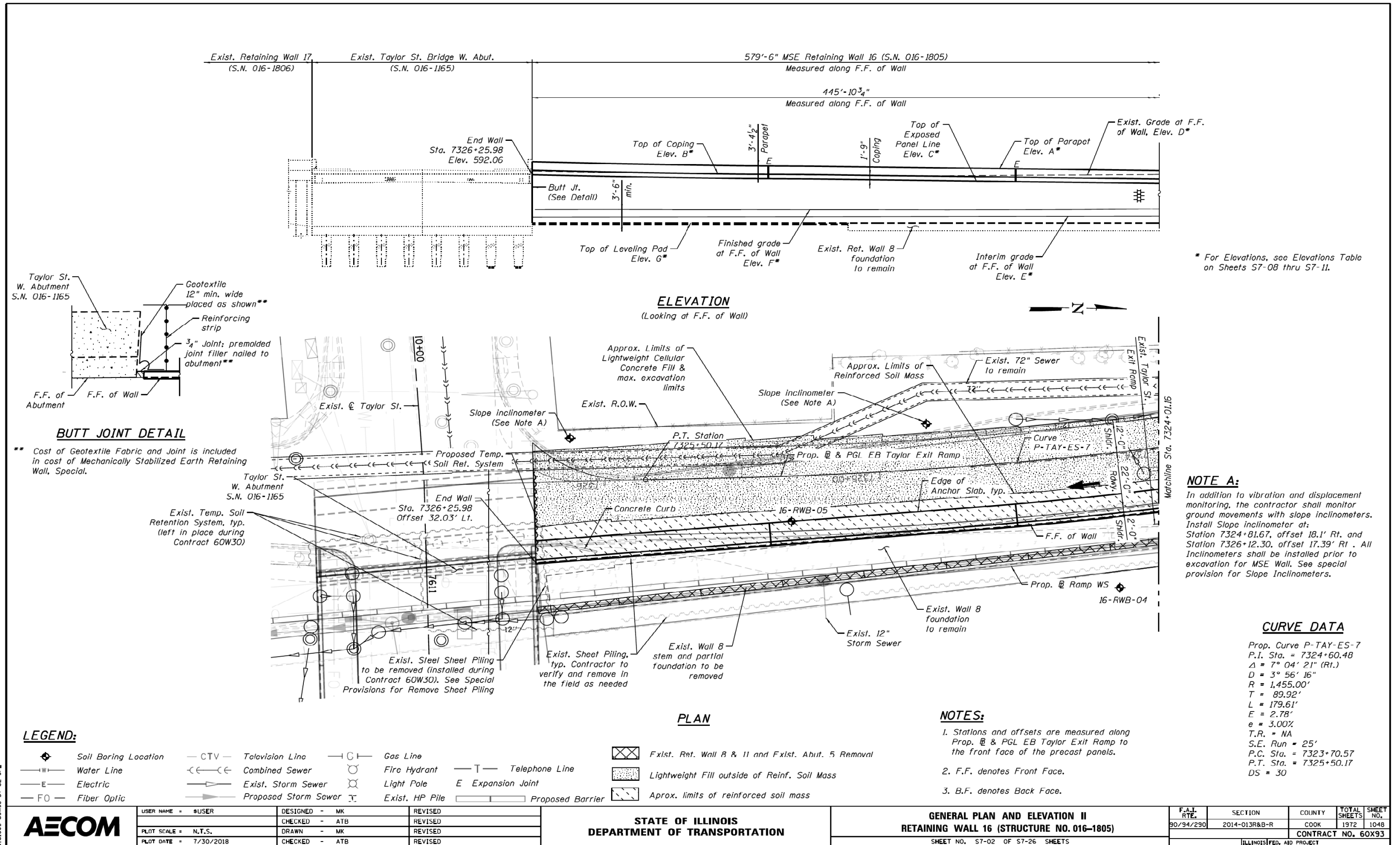
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
 STRUCTURE NO. SB-14A  
 SHEET NO. SS55 OF SS83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	734
CONTRACT NO. 62A77				

FILE NAME: P:\V\AECOM-NA-AWS1\ecomonline\local\AECOM\_D502\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\_I\000\_CAD\008\_Structural\Sign\_Structures\62A77\_Sign\_Structure\62A77-Span-SSDM5114-SignStruct.dgn

# FOR INFORMATION ONLY



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PLOT SCALE = N.T.S.	DRAWN - MK	REVISED
PLOT DATE = 7/30/2018	CHECKED - ATB	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION II  
RETAINING WALL 16 (STRUCTURE NO. 016-1805)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	1048
CONTRACT NO. 60X93				
ILLINOIS FED. AID PROJECT				



USER NAME = ali.jssa	DESIGNED - JJS, WM	REVISED -
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PLOT DATE = 1/23/2020	CHECKED - MAI, JMG	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING RECORD DRAWINGS  
STRUCTURE NO. SB-14A

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	735
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

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# FOR INFORMATION ONLY

## GENERAL NOTES

- Stations and offsets for the wall are given from the @ EB Taylor St. Exit Ramp to the front face of the precast panels.
- MSE Wall length measured along front face of the precast panels.
- Reinforcement bars designated (E) shall be epoxy coated.
- Bars noted thus, 3x2-#5 indicates 3 lines of bars with 2 lengths per line.
- Protective coat shall be applied to the designated surfaces of the Parapet and Anchor Slab.
- Slip forming of the parapets is not allowed.
- Plan dimensions and details relative to existing plans are subjected to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering materials. Such variations shall not be cause for additional compensation for a change in scope of work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- Lightweight Cellular Concrete Fill shall be Class III (District I), see Special Provisions.
- MSE Wall supplier shall design the MSE Wall using granular reinforced mass with minimum effective internal friction angle of 34 degrees and unit weight of 120 lbs./cu. ft. For embankment behind granular reinforced mass, an embankment unit weight of 120 lbs./cu. ft and an effective friction angle of 30 degrees shall be used in the wall system design.
- Quantity for Lightweight Cellular Concrete Fill includes MSE Reinforced Soil Mass and fill area behind reinforced soil mass as shown in the cross sections; Type is specified as Class III (District I). See Special Provisions.
- See Special Provision for Mechanically Stabilized Earth Retaining Wall, Special for design and construction requirements.
- MSE Supplier to design load transfer systems to accommodate drainage structures. For drainage structure location, type and size, see Drainage Sheets.
- The Contractor shall exercise extreme caution during construction to make certain that construction activities, live load surcharge and other load applied to the structures will not have detrimental effects on the adjacent building foundations, utilities and retaining wall foundations. See Contract Special Provision for details.
- The Contractor shall field verify location of existing utilities prior to construction. The Contractor shall take precautions not to damage existing utilities. Any such damage shall be repaired by the Contractor at no additional cost.
- The contractor shall provide vibration and displacement monitoring at the locations specified in the Special Provision for Construction Vibration Monitoring and Monitoring Adjacent Structures, to ensure that removal/construction activities in the vicinity of the structures do not have detrimental effects on building foundations. No additional compensation shall be provided to the Contractor for alternative means and methods, or additional precautionary measures, required during removal/construction activities to satisfy these requirements. See Contract Special Provisions for details.
- Earth Excavation beyond the limits of Structure Excavation shall be sloped as shown in the cross-sections. For Earth Excavation quantity see Civil sheets.
- Concrete for Anchor Slab and Parapet shall be paid for as Concrete Superstructure.

## TOTAL BILL OF MATERIAL

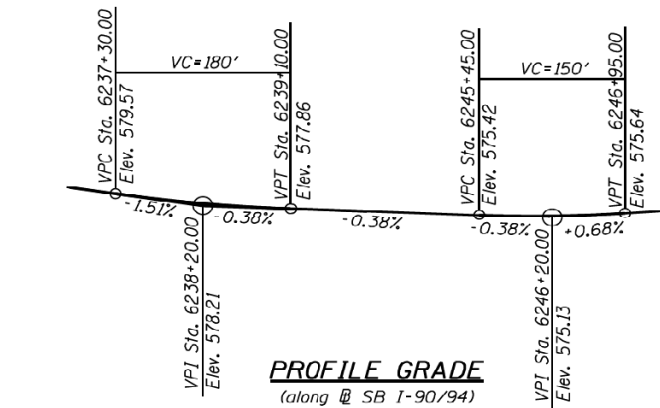
Description	Unit	Total
Structure Excavation	Cu Yd	3695
Removal of Existing Structures No. 3	Each	1
Removal of Existing Structures No. 4	Each	1
Removal of Existing Structures No. 5	Each	1
Concrete Superstructure	Cu Yd	338
Protective Coat	Sq Yd	771
Bridge Deck Grooving (Longitudinal)	Sq Yd	387
Reinforcement Bars, Epoxy Coated	Pound	49350
Mechanically Stabilized Earth Retaining Wall, Special	Sq Ft	7432
Lightweight Cellular Concrete Fill	Cu Yd	5618
Temporary Soil Retention System	Sq Ft	502
Name Plates	Each	1
Remove Sheet Piling	L Sum	1
Protective Shield	Sq Yd	1686
Slope inclinometer	Each	2

## INDEX OF SHEETS

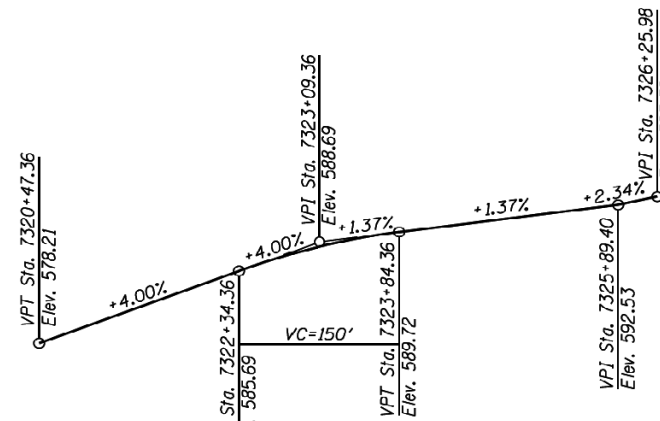
S7-01 General Plan and Elevation I	S7-19 Boring Logs I
S7-02 General Plan and Elevation II	S7-20 Boring Logs II
S7-03 General Notes, Total Bill of Materials and Index of Sheets	S7-21 Boring Logs III
S7-04 Existing Structures Removal I	S7-22 Boring Logs IV
S7-05 Existing Structures Removal II	S7-23 Boring Logs V
S7-06 Existing Structures Removal III	S7-24 Boring Logs VI
S7-07 Existing Structures Removal IV	S7-25 Boring Logs VII
S7-08 Typical Section I	S7-26 Boring Logs VIII
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S7-10 Typical Section III	
S7-11 Typical Section IV	
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S7-13 Parapet and Anchor slab II	
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S7-15 Parapet and Anchor slab IV	
S7-16 Parapet and Anchor Slab Section and Details	
S7-17 Architectural Details I	
S7-18 Architectural Details II	

## SUGGESTED SEQUENCE OF CONSTRUCTION

- Locate existing utilities that are to remain. Contractor to coordinate any required improvements to or removals of existing utilities with utility owner(s).
- Excavate for proposed MSE wall and remove Existing Wall 11 Stem and partially remove Foundation, as shown on removal sheets.
- Remove existing SB Taylor St. Exit Ramp (S.N. 016-2534) and existing Abutment 5 Stem as shown.
- Install proposed Soil Retention System along North side of W. Abut. of Taylor Street Bridge (S.N. 016-1165) and remove Existing Soil Retention System installed during Contract 60W30.
- Excavate for proposed MSE wall and remove Existing Wall 8 stem as shown on removal sheets.
- Construct proposed Retaining Wall 16, S.N. 016-1805.
- Place lightweight cellular concrete fill.
- Install Anchor Slab, Parapet and Roadway pavement.
- Finish interim grading in front of the wall.
- No portions of the wall shall be compromised by excavation for other elements of work. If the sequencing of work requires that the wall construction is staged, the stage line shall be located at a panel edge with any exposed lightweight fill protected from damage.



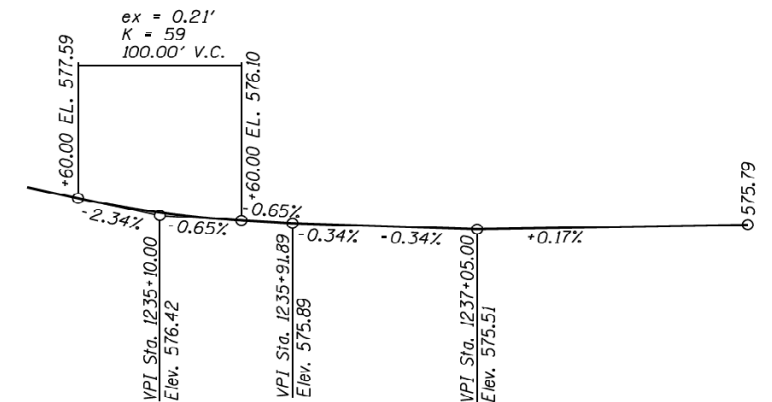
PROFILE GRADE  
(along @ SB I-90/94)



PROFILE GRADE  
(along @ EB Taylor Exit Ramp)

STATION 7320+50.00 TO 7326+25.98  
BUILT BY  
STATE OF ILLINOIS  
F.A.I. RTE. 90/94/290 - SECTION 2014-013R&B-R  
LOADING HL-93  
STRUCTURE NO. 016-1805

NAME PLATE  
See Std. 515001

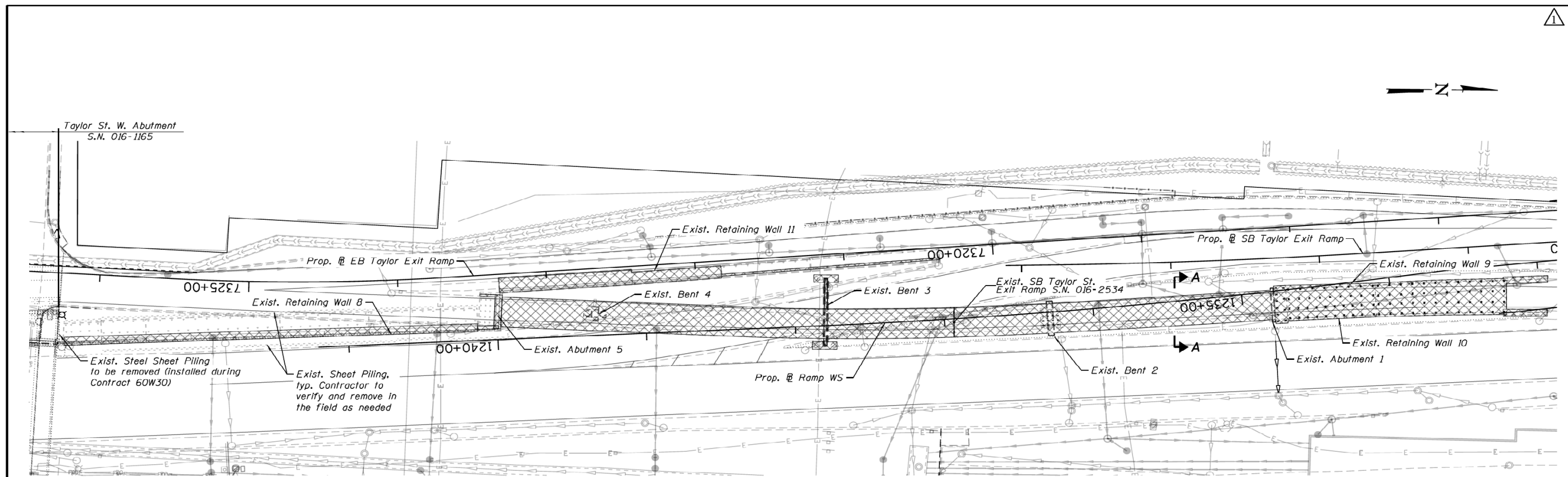


PROFILE GRADE  
(along @ Ramp WS)

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	PLOT DATE = 7/30/2018	CHECKED - ATB	REVISED							

	USER NAME = ali.jssa	DESIGNED - JJS, WM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING RECORD DRAWINGS STRUCTURE NO. SB-14A	F.A.I. RTE. 90/94/290	SECTION	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 736
	PLOT SCALE = N.T.S.	DRAWN - AMS	REVISED -			SHEET NO. SS57 OF SS83 SHEETS	ILLINOIS FED. AID PROJECT			
	PLOT DATE = 1/23/2020	CHECKED - MAI, JMG	REVISED -							

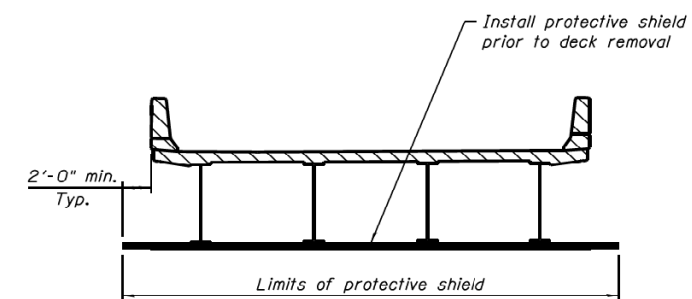
# FOR INFORMATION ONLY



**PLAN - EXISTING STRUCTURES REMOVAL**

**NOTES:**

- See Sheets S7-05 to S7-07 for additional existing structure removal details.
- Removal of the existing SB I-90/94 to Taylor Street Exist Ramp structure (S.N. 016-2534) and the existing North approach Retaining Wall 9 and 10 shall be per Special Provision for the See Removal of Existing Structures No. 3. See Table 1 for Minimum Removal Elevation at each substructure unit of existing Taylor Street Exit Ramp structure (S.N. 016-2534). See Sheet S7-05 for existing Abutment 5 removal details.
- See Removal of Existing Structures No. 4 Special Provisions for the removal of the existing Retaining Wall 8 along SB I-90/94.
- See Removal of Existing Structures No. 5 Special Provisions for the removal of the existing Retaining Wall 11 along East side of SB I-90/94 to Taylor Street Exit Ramp.
- The Contractor shall install protective shield system to protect travelling public from falling objects during the removal of existing S.N. 016-2534 (SB Taylor Street Exit Ramp). See Section A-A for the limits of Protective Shield.
- See Remove Sheet Piling Special Provisions for the removal of the existing Steel Sheet Piling at North end of the West Abutment of Taylor Street Bridge (S.N. 016-1165).
- Sheet piling left in place during the construction of Existing Retaining Wall 8 may be in conflict with proposed wall construction. Contractor shall verify in the field and remove sheet piling that is in conflicts with proposed wall construction. Cost shall be included with the Removal of Existing Structures No. 5.



**SECTION A-A**

Note: Approximate length of the existing structure that requires Protective Shield is ±520'-0".

**EXISTING STRUCTURES REMOVAL ELEVATION TABLE**

Exist. Structure	Minimum Removal Elev.
Retaining Wall 9	Bottom of Footing
Retaining Wall 10	Bottom of Footing
Abutment 1	+573.94
Bent 2	+571.69
Bent 3 West Column	+568.69
Bent 3 East Column	+568.69
Bent 4	+568.19

**LEGEND:**

- Exist. Structure Removal
- Water Line
- Electric
- Combined Sewer
- Exisl. Storm Sewer
- Proposed Storm Sewer
- Light Pole
- Fire Hydrant

0161805-60X93-S7-04-RetPlan.dgn

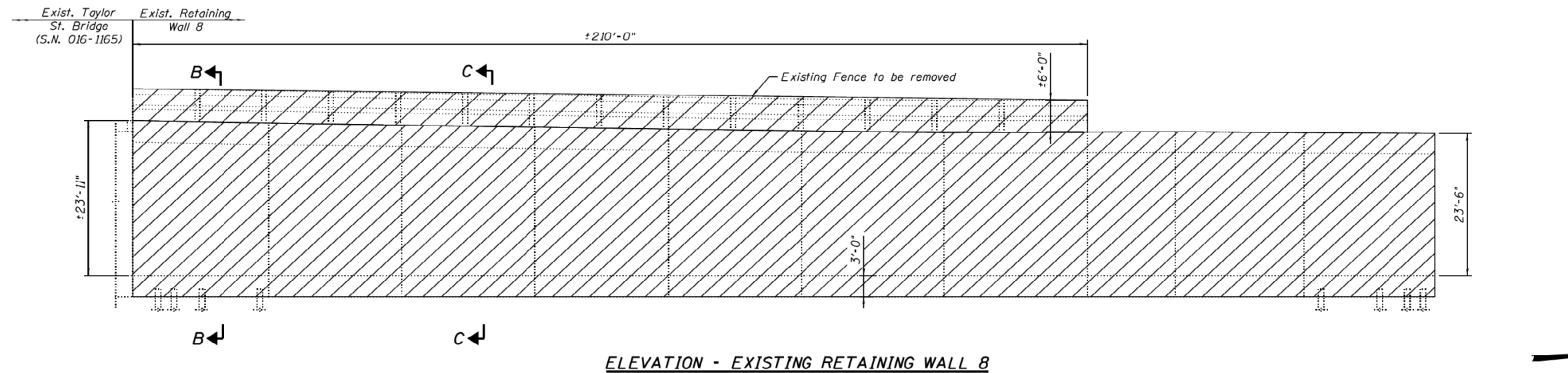
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	PLOT SCALE = N.T.S.	CHECKED - ATB	REVISED			CONTRACT NO. 60X93				
	PLOT DATE = 9/10/2018	DRAWN - MK	REVISED	ILLINOIS FED. AID PROJECT						

**REVISD ENTIRE SHEET 10/29/18**

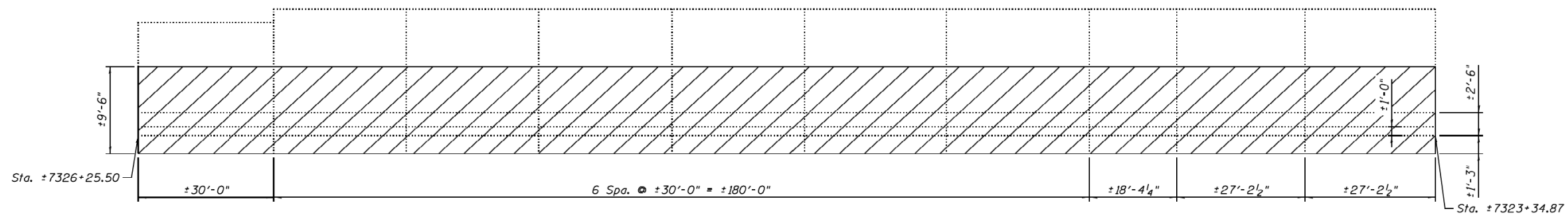
<b>HBM ENGINEERING GROUP, LLC</b>	USER NAME = alljssa	DESIGNED - JJS, WM	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING RECORD DRAWINGS STRUCTURE NO. SB-14A</b>	F.A.I. RTE. 90/94/290	SECTION	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 737
	PLOT SCALE = N.T.S.	CHECKED - MAI, JMG	REVISED -			CONTRACT NO. 62A77				
	PLOT DATE = 1/23/2020	DRAWN - AMS	REVISED -	ILLINOIS FED. AID PROJECT						

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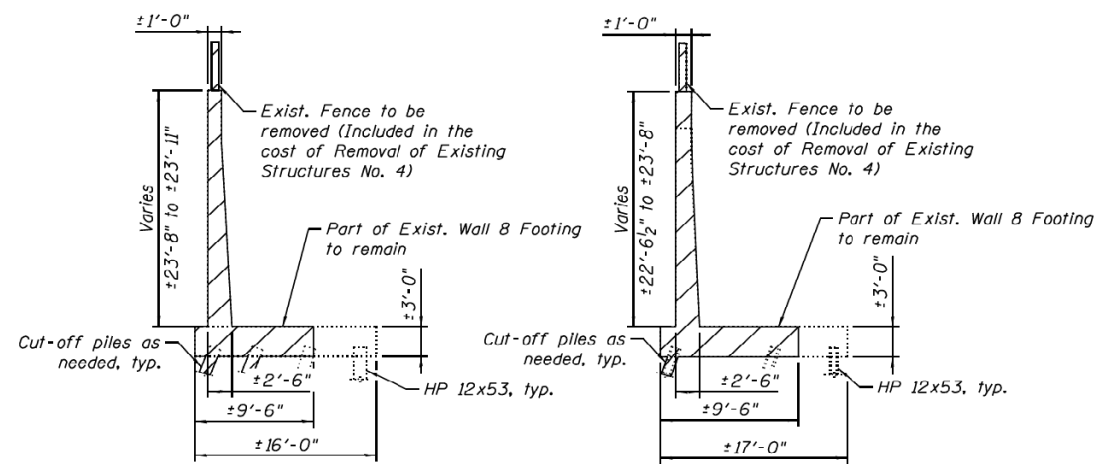


**ELEVATION - EXISTING RETAINING WALL 8**



**PLAN - EXISTING RETAINING WALL 8**

(Piles not shown for clarity)



**SECTION B-B**

**SECTION C-C**

**BILL OF MATERIAL**

Item	Unit	Quantity
Removal of Existing Structures No. 4	Each	1

**NOTES:**

1. Removal of Existing Retaining Wall 8 shall be as per special provisions for Removal of Existing Structures No. 4.
2. Removal of Concrete Barrier in front of Existing Retaining Wall 8 is paid for separately. See Civil Plans.

**LEGEND:**

Removal of Existing Retaining Wall 8

0161805-60X93-S1-06-ExistR4.dgn



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STATE OF ILLINOIS  
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EXISTING STRUCTURES REMOVAL III  
RETAINING WALL 16 (STRUCTURE NO. 016-1805)

SHEET NO. S7-06 OF S7-26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	1052
CONTRACT NO. 60X93				
ILLINOIS FED. AID PROJECT				



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PLOT DATE = 1/23/2020	DRAWN - AMS	REVISED -
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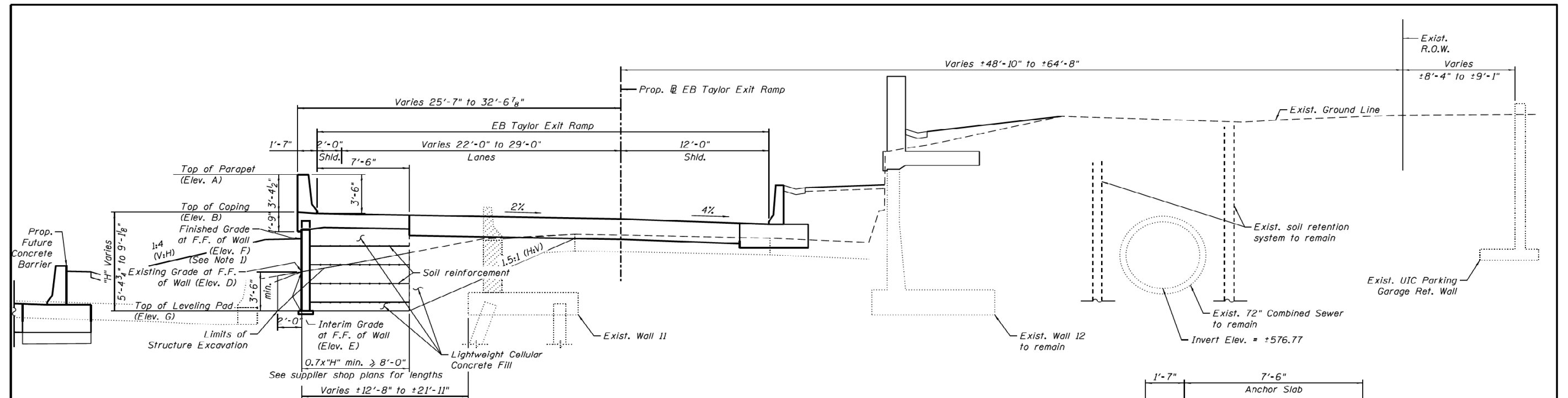
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EXISTING RECORD DRAWINGS  
STRUCTURE NO. SB-14A

SHEET NO. SS59 OF SS83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	738
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

# FOR INFORMATION ONLY



**TYPICAL SECTION**  
(Sta. 7320+50.00 to Sta. 7321+83.42)  
(Looking Upstation)

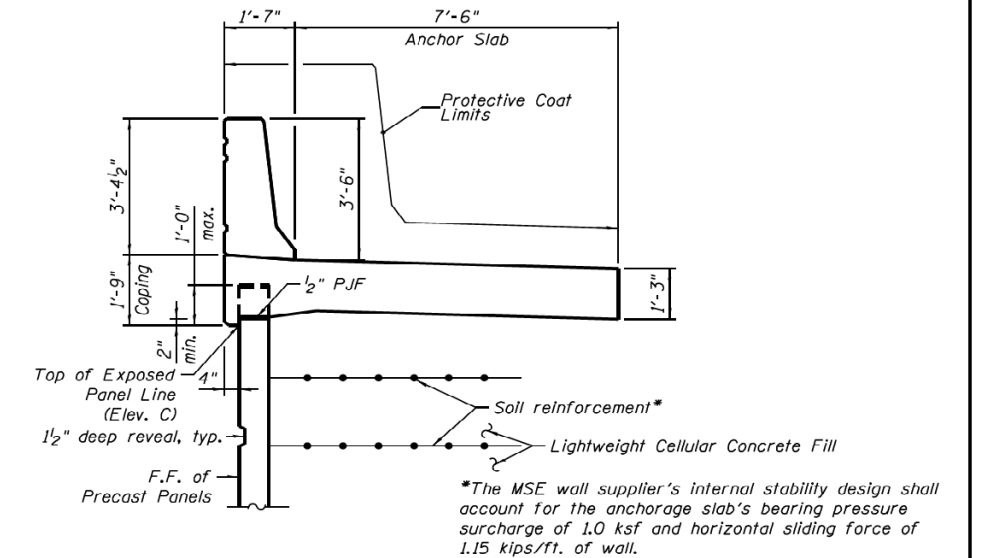
### ELEVATION TABLE

Wall Type	Station	Offset	Elevation A	Elevation B	Elevation C	Elevation D	Elevation E	Elevation F	Elevation G
MSE	7320+50.00	32.24 Lt.	582.44	579.07	577.32	575.97	578.15	578.80	573.67
MSE	7320+75.00	30.93 Lt.	583.41	580.04	578.29	575.74	577.68	579.45	574.18
MSE	7321+00.00	29.62 Lt.	584.38	581.01	579.26	575.55	577.78	580.61	574.28
MSE	7321+25.00	28.31 Lt.	585.36	581.99	580.24	575.41	578.18	580.95	574.68
MSE	7321+50.00	27.00 Lt.	586.33	582.96	581.21	577.25	578.59	581.26	575.09
MSE	7321+75.00	25.69 Lt.	587.30	583.93	582.18	578.63	578.82	581.61	575.32
MSE	7321+83.42	25.25 Lt.	587.64	584.27	582.52	578.90	578.67	581.49	575.17

Elevation A - Top of Parapet  
 Elevation B - Top of Coping  
 Elevation C - Top of Exposed Panel Line  
 Elevation D - Existing Grade at F.F. of Wall  
 Elevation E - Interim Grade at F.F. of Wall  
 Elevation F - Finished Grade at F.F. of Wall  
 Elevation G - Top of Leveling Pad

### NOTES:

- Earth Excavation beyond the limits of Structure Excavation shall be sloped as shown in the cross-sections. For Earth Excavation quantity see Civil sheets.
- MSE reinforced soil mass and area behind reinforced soil mass, as shown in the cross-section, shall be backfilled with Lightweight Cellular Concrete Fill.



**SECTION THRU PARAPET AND ANCHORAGE SLAB**  
(Looking Upstation)

### LEGEND:

- Removal of Existing Wall 11
- Limits of Structure Excavation



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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION I  
RETAINING WALL 16 (STRUCTURE NO. 016-1805)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	1054
CONTRACT NO. 60X93				
ILLINOIS FED. AID PROJECT				

EXISTING RECORD DRAWINGS  
STRUCTURE NO. SB-14A

SHEET NO. SS60 OF SS83 SHEETS

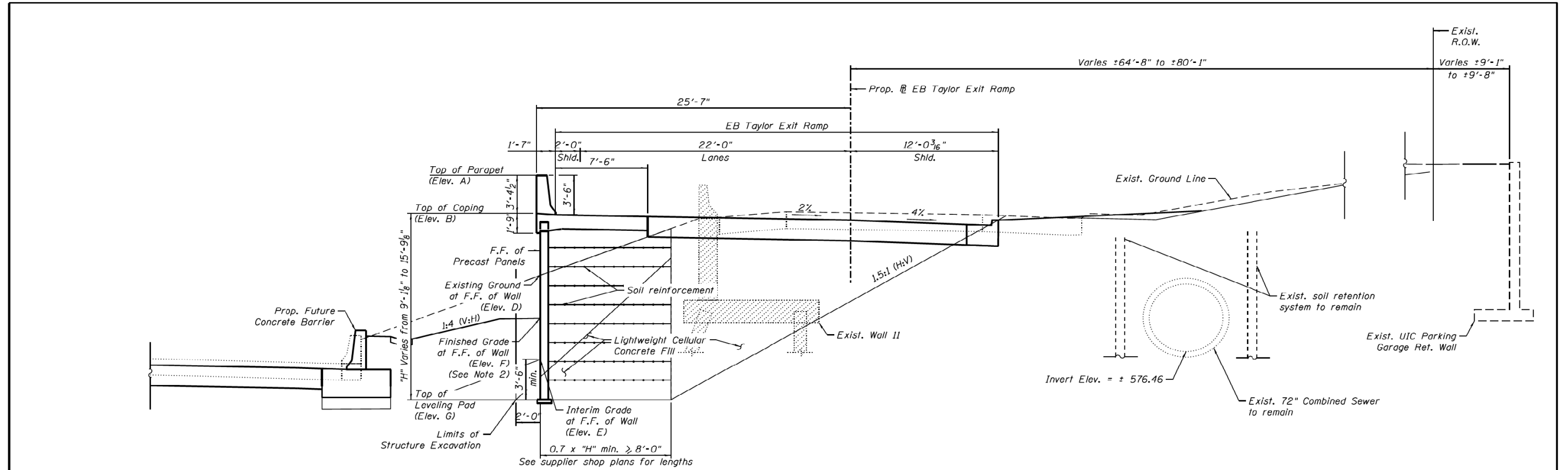
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	739
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				



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DESIGNED - JJS, WM	CHECKED - MAI, JMG	REVISED -
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PLOT DATE = 1/23/2020	CHECKED - MAI, JMG	REVISED -

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# FOR INFORMATION ONLY





**TYPICAL SECTION**  
(Sta. 7321+83.42 to Sta. 7323+11.00)  
(Looking Upstation)

### ELEVATION TABLE

Wall Type	Station	Offset	Elevation A	Elevation B	Elevation C	Elevation D	Elevation E	Elevation F	Elevation G
MSE	7321+83.42	25.25 Lt.	587.64	584.27	582.52	578.90	578.67	581.49	575.17
MSE	7322+00.00	25.25 Lt.	588.30	584.93	583.18	579.35	578.64	581.31	575.14
MSE	7322+25.00	25.25 Lt.	589.30	585.93	584.18	581.98	578.25	580.99	574.75
MSE	7322+50.00	25.25 Lt.	590.27	586.90	585.15	579.87	577.83	580.66	574.33
MSE	7322+75.00	25.25 Lt.	591.15	587.78	586.03	580.49	578.03	580.34	573.94
MSE	7323+00.00	25.25 Lt.	591.92	588.55	586.80	581.77	578.22	579.99	573.39
MSE	7323+11.00	25.25 Lt.	592.22	588.85	587.10	585.30	578.30	579.92	573.08

Elevation A - Top of Parapet  
Elevation B - Top of Coping  
Elevation C - Top of Exposed Panel Line  
Elevation D - Existing Grade at F.F. of Wall  
Elevation E - Interim Grade at F.F. of Wall  
Elevation F - Finished Grade at F.F. of Wall  
Elevation G - Top of Leveling Pad

### LEGEND:

-  Removal of Existing Wall II
-  Limits of Structure Excavation

### NOTES:

- For Section thru Parapet and Anchorage Slab, see Sheet S7-08
- Earth Excavation beyond the limits of Structure Excavation shall be sloped as shown in the cross-sections. For Earth Excavation quantity see Civil sheets.
- MSE reinforced soil mass and area behind reinforced soil mass, as shown in the cross-section, shall be backfilled with Lightweight Cellular Concrete Fill.

0161805-60X93-S7-09-TypSect2



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	CHECKED - ATB	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION II  
RETAINING WALL 16 (STRUCTURE NO. 016-1805)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	19/2	1055
CONTRACT NO. 60X93				
ILLINOIS FED. AID PROJECT				



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DEPARTMENT OF TRANSPORTATION

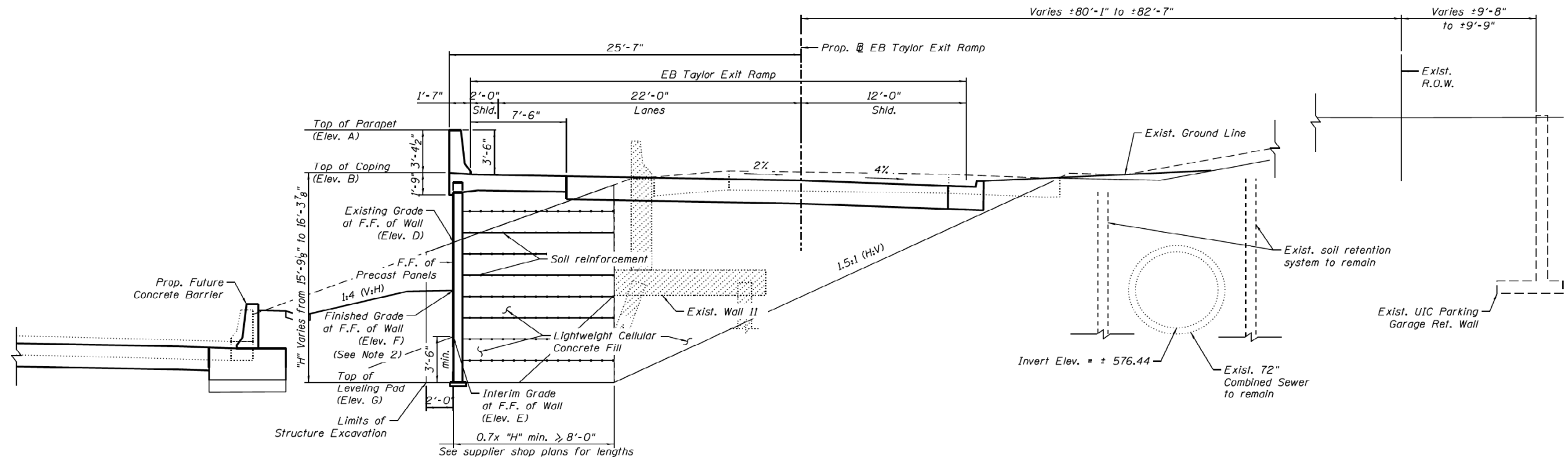
EXISTING RECORD DRAWINGS  
STRUCTURE NO. SB-14A

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	740
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

SHEET NO. SS61 OF SS83 SHEETS



# FOR INFORMATION ONLY



**TYPICAL SECTION**  
(Sta. 7323+11.00 to Sta. 7323+31.72)  
(Looking Upstation)

**ELEVATION TABLE**

Wall Type	Station	Offset	Elevation A	Elevation B	Elevation C	Elevation D	Elevation E	Elevation F	Elevation G
MSE	7323+11.00	25.25 Lt.	592.22	588.85	587.10	585.30	578.30	579.92	573.08
MSE	7323+25.00	25.25 Lt.	592.57	589.20	587.45	587.72	578.41	579.58	572.87
MSE	7323+31.72	25.25 Lt.	592.73	589.36	587.61	588.30	578.46	579.55	573.31

Elevation A - Top of Parapet  
 Elevation B - Top of Coping  
 Elevation C - Top of Exposed Panel Line  
 Elevation D - Existing Grade at F.F. of Wall  
 Elevation E - Interim Grade at F.F. of Wall  
 Elevation F - Finished Grade at F.F. of Wall  
 Elevation G - Top of Leveling Pad

**LEGEND:**

- Removal of Existing Wall II
- Limits of Structure Excavation

**NOTES:**

1. For Section thru Parapet and Anchorage Slab, see Sheet S7-08.
2. Earth Excavation beyond the limits of Structure Excavation shall be sloped as shown in the cross-sections. For Earth Excavation quantity see Civil sheets.
3. MSE reinforced soil mass and area behind reinforced soil mass, as shown in the cross-section, shall be backfilled with Lightweight Cellular Concrete Fill.



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PLOT DATE = 7/30/2018	CHECKED - ATB	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION III  
RETAINING WALL 16 (STRUCTURE NO. 016-1805)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	1056
CONTRACT NO. 60X93				
ILLINOIS FED. AID PROJECT				

EXISTING RECORD DRAWINGS  
STRUCTURE NO. SB-14A

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	741
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

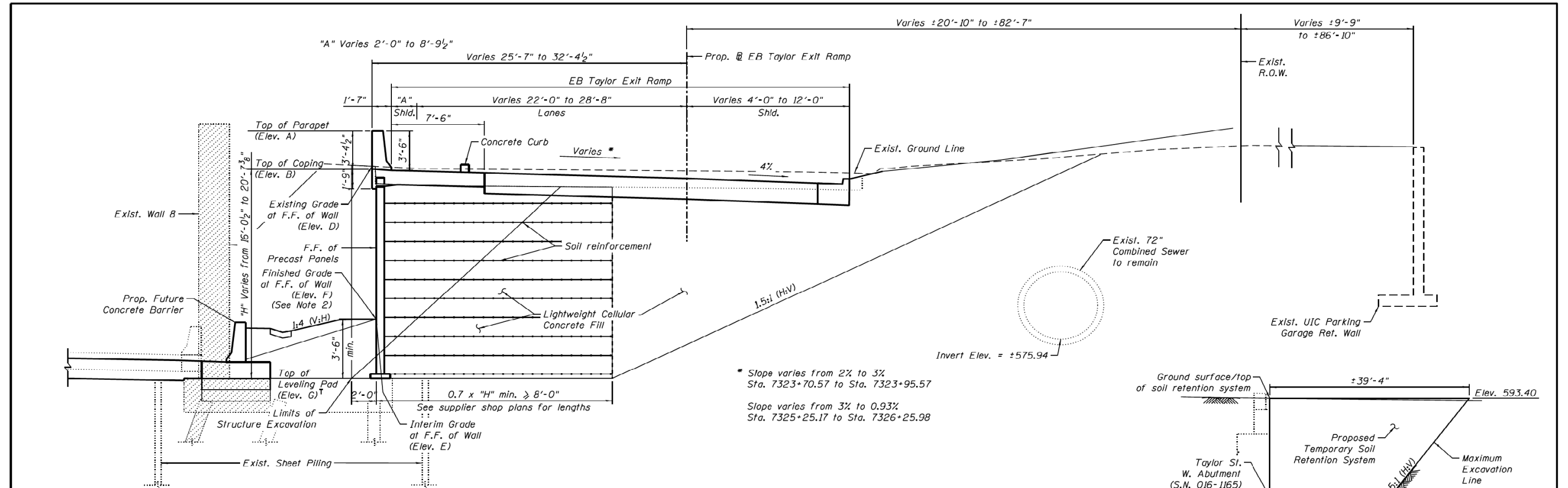
SHEET NO. SS62 OF SS83 SHEETS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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PLOT DATE = 1/23/2020	CHECKED - MAI, JMG	REVISED -



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**TYPICAL SECTION**  
(Sta. 7323+31.72 to Sta. 7326+25.98)  
(Looking Upstation)

† From Sta. 7323+31.72 to Sta. 7325+11.88 MSE Precast Panels are supported on the existing Ret. Wall 8 footing.

### ELEVATION TABLE

Wall Type	Station	Offset	Elevation A	Elevation B	Elevation C	Elevation D	Elevation E	Elevation F	Elevation G
MSE	7323+31.72	25.25 Lt.	592.73	589.36	587.61	588.30	578.46	579.55	573.31
MSE	7323+50.00	25.25 Lt.	593.12	589.75	588.00	594.09	578.05	579.18	573.19
MSE	7323+75.00	25.25 Lt.	593.61	590.24	588.49	592.94	577.48	578.79	573.19
MSE	7324+00.00	25.25 Lt.	594.15	590.78	589.03	592.54	577.01	578.45	573.19
MSE	7324+25.00	25.25 Lt.	594.50	591.13	589.38	592.90	576.73	578.24	573.19
MSE	7324+50.00	25.25 Lt.	594.84	591.47	589.72	592.23	576.60	578.11	573.19
MSE	7324+75.00	25.27 Lt.	595.18	591.81	590.06	592.03	576.66	578.10	573.19
MSE	7325+00.00	25.64 Lt.	595.54	592.17	590.42	592.14	576.84	578.12	573.19
MSE	7325+25.00	26.44 Lt.	595.90	592.53	590.78	592.34	577.03	578.14	573.19
MSE	7325+50.00	27.67 Lt.	596.15	592.78	591.03	592.70	577.22	578.15	573.19
MSE	7325+75.00	29.11 Lt.	596.38	593.01	591.26	593.01	577.40	578.17	573.19
MSE	7326+00.00	30.54 Lt.	596.71	593.34	591.59	593.33	577.58	578.18	573.19
MSE	7326+25.00	31.98 Lt.	597.16	593.79	592.04	593.87	577.74	578.18	573.19
MSE	7326+25.98	32.03 Lt.	597.18	593.81	592.06	593.84	577.75	578.17	573.19

Elevation A - Top of Parapet  
Elevation B - Top of Coping  
Elevation C - Top of Exposed Panel Line  
Elevation D - Existing Grade at F.F. of Wall  
Elevation E - Interim Grade at F.F. of Wall  
Elevation F - Finished Grade at F.F. of Wall  
Elevation G - Top of Leveling Pad

### NOTES:

- For Section thru Parapet and Anchorage Slab, see Sheet S7-08.
- Earth Excavation beyond the limits of Structure Excavation shall be sloped as shown in the cross-sections. For Earth Excavation quantity see Civil sheets.
- MSE reinforced soil mass and area behind reinforced soil mass, as shown in the cross-section, shall be backfilled with Lightweight Cellular Concrete Fill.
- A cantilevered 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.
- Temporary Soil Retention System shall be installed without the use of impact-type pile drivers. The proposed equipment and procedures used for the installation of Temporary Soil Retention System shall be submitted to the Engineer for approval prior to their use. If vibratory equipment utilized, the Contractor shall also submit documentation regarding the operating noise levels and operating vibration characteristics of the equipment proposed. The approval of the equipment and procedure by the Engineer does not guarantee the performance in the field of the equipment will be acceptable. All provisions and requirements required under Construction Vibration Monitoring, Monitoring Adjacent Structures and Noise Compliance shall apply to work performed under this item. The costs incurred finding suitable equipment and procedures shall be included in the cost of Temporary Soil Retention System. No additional costs shall be paid for this effort.

### TEMPORARY SOIL RETENTION SYSTEM

### BILL OF MATERIAL

Item	Unit	Total
Temporary Soil Retention System	Sq. Ft.	502

### LEGEND:

- Removal of Existing Wall B
- Limits of Structure Excavation



USER NAME = #USER	DESIGNED - MK	REVISED
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PLOT DATE = 7/30/2018	CHECKED - ATB	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION IV  
RETAINING WALL 16 (STRUCTURE NO. 016-1805)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-013R&B-R	COOK	1972	1057
CONTRACT NO. 60X93				
ILLINOIS FED. AID PROJECT				



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PLOT DATE = 1/23/2020	CHECKED - MAI, JMG	REVISED -

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EXISTING RECORD DRAWINGS  
STRUCTURE NO. SB-14A

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290		COOK	1360	742
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

**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.  
 $f_y = 60,000$  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)(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 shall include reinforcement bars complete in place.

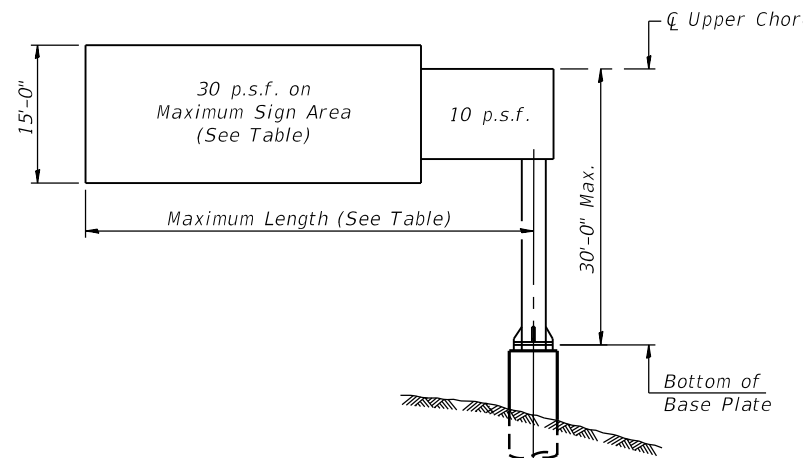
WALKWAY: Walkway grating, walkway brackets, handrails, lighting and associated components shown in these plans on the traffic side of the sign structure/sign panel will not be installed with Contract 62A77. The truss grating and maintenance walkway behind the sign panel will be included with Overhead Sign Structure Cantilever Type III-C-A.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE III-C-A	Foot	30
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	11.8

Structure Number	**Station	Design Truss Type	Cantilever Length (L)	<sup>t</sup> Elev. A	Dim. D	Ds	Total Sign Area
1C0161094R048.4	319+20.00	III-C-A	30'-0"	609.12	18'-9"	14'-6"	268.25 Sq. Ft.

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.

Note:

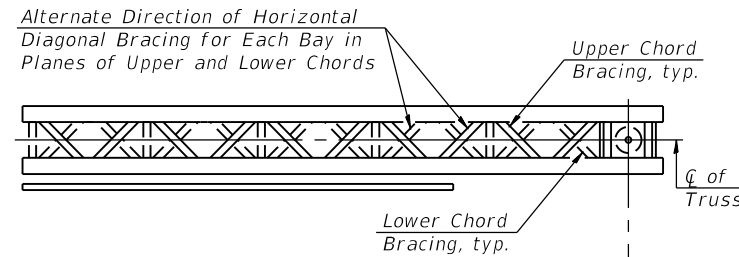
Trusses shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection of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

- ① After adjustments to level truss and ensure 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.

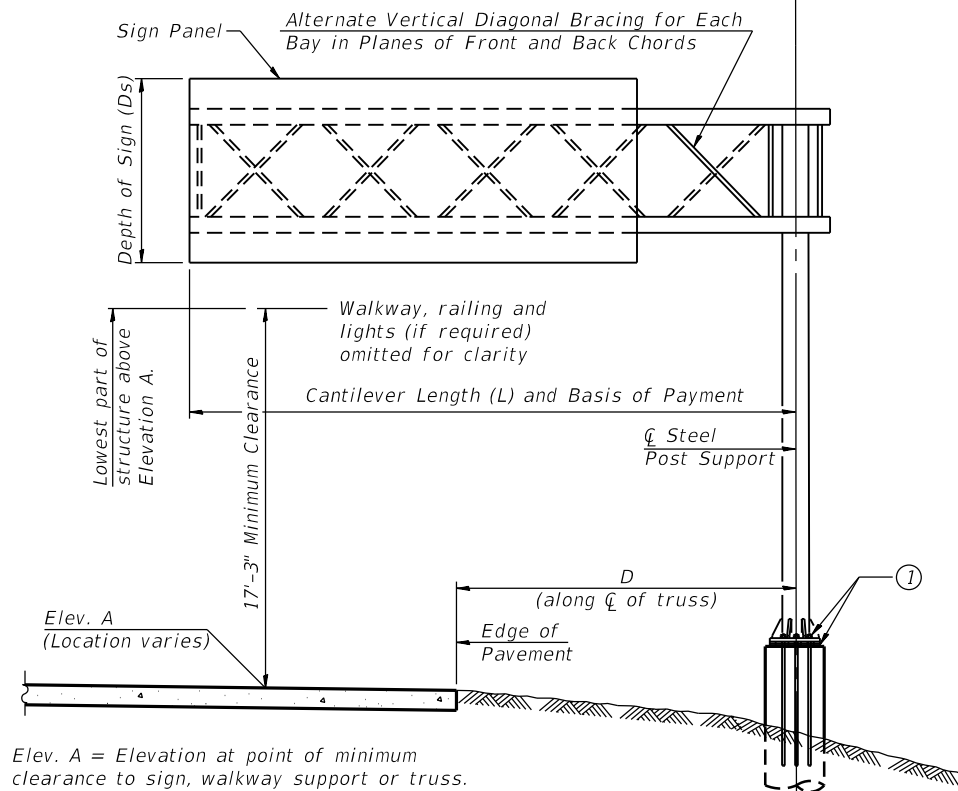
\*If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

<sup>t</sup>Elevation A has been approximated based on historical drawings and assuming a future 3" increase in top of roadway elevations. The Contractor shall field-verify this elevation and make necessary approved adjustments. Any variations shall not be cause for additional compensation for a change in the scope of work. Consideration of the future 3" increase in top of roadway elevations shall be included in the final determination of Elevation A.

\*\*Approximately 30' southeast of existing cantilever sign structure along SB I-90/94



**TYPICAL PLAN**  
(Walkway not shown)



**TYPICAL ELEVATION**

Looking in Direction of Traffic

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

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.



SIGNED: DR. MOUSSA A. ISSA, S.E., IL. LIC. NO. 081-005738  
 EXPIRES 11-30-2020  
 DATE: \_\_\_\_\_ FOR SHEETS SS64 THRU SS71  
 (TOTAL OF 8 SHEETS)

OSC-A-1

2-17-2017



USER NAME = jana.jssa	DESIGNED - JJS, MAA	REVISED -
PLOT SCALE = N.T.S	CHECKED - MAI, JMG	REVISED -
PLOT DATE = 03/04/2020	DRAWN - JMI	REVISED -
	CHECKED - MAI, JMG	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

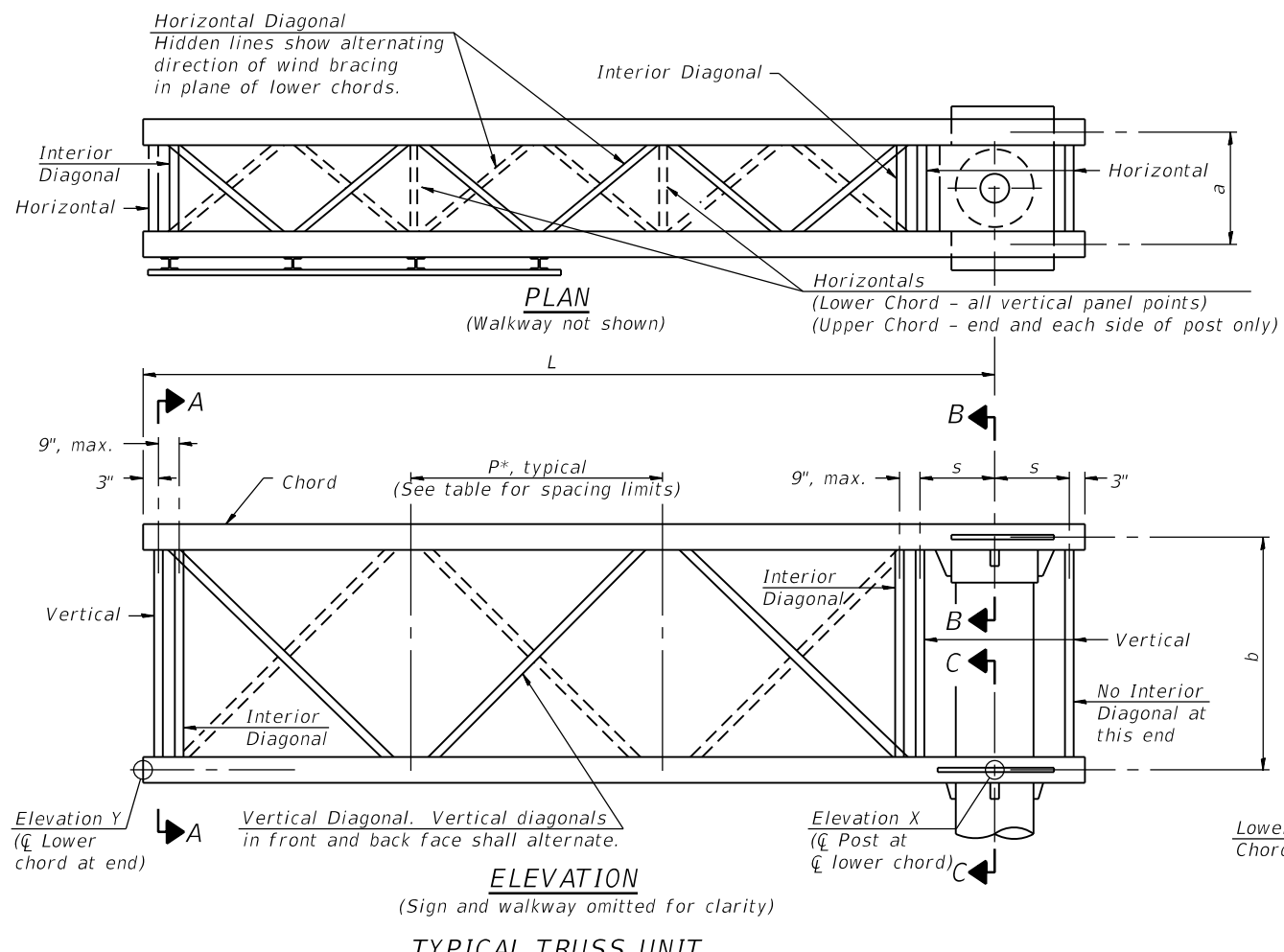
CANTILEVER SIGN STRUCTURES - GENERAL PLAN & ELEVATION  
 ALUMINUM TRUSS & STEEL POST

SHEET NO. SS64 OF SS83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	743
CONTRACT NO. 62A77				

ILLINOIS FED. AID PROJECT

FILE NAME: P:\VIAE\COM-NA-AWS1\_...recomonline-local\AE\COM\_D502\_NAV\Documents\01\_Americas\Transportation\620269938\_Circle\Phase\_II\000\_CAD\008\_Structural\Sign\_Structure\62A77\_Sign\_Structure\62A77-Cant-55202-SignStruct.dgn



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

**TRUSS UNIT TABLE**

Truss Type	Dimension "a"	Dimension "b"	Dimension "s"	Limits for Panel Spacing (P)*	Up. & Low. Chord		Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals	
					O.D.	Wall	O.D.	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"

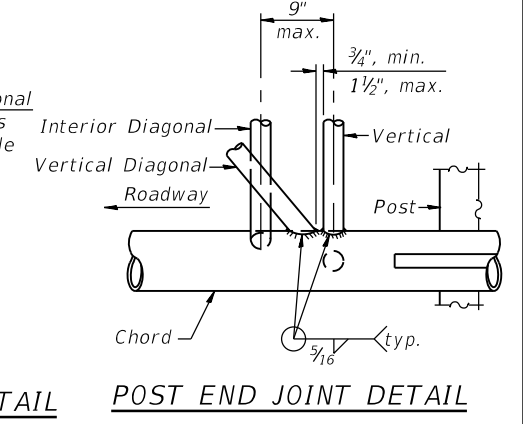
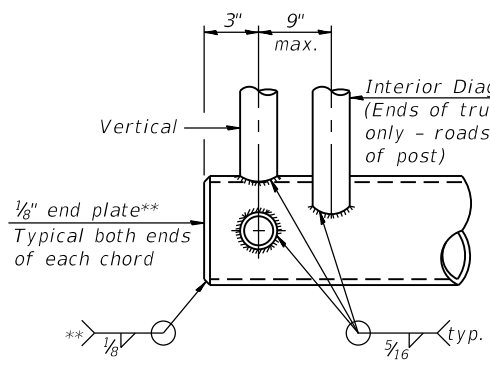
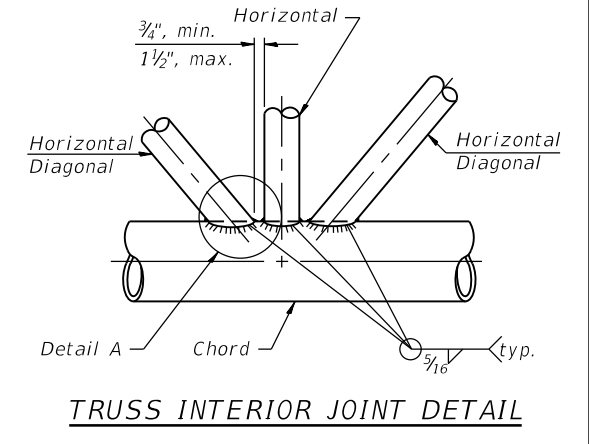
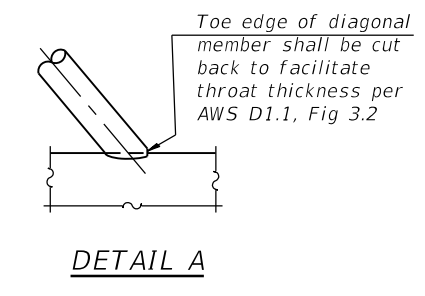
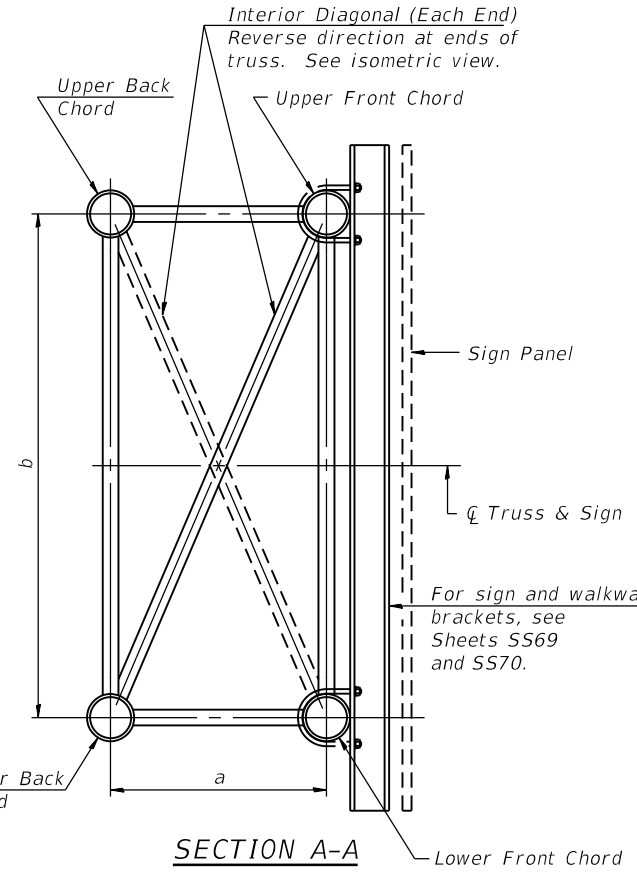
$$*p = \frac{L-s-3"}{\# \text{ Panels}}$$

Structure Number	***Station	Truss Type	Design Length (L)	Number of Panels Per Unit	Panel Length (P)*
1C0161094R048.4	319+20.00	III-C-A	30'-0"	6	4'-8"

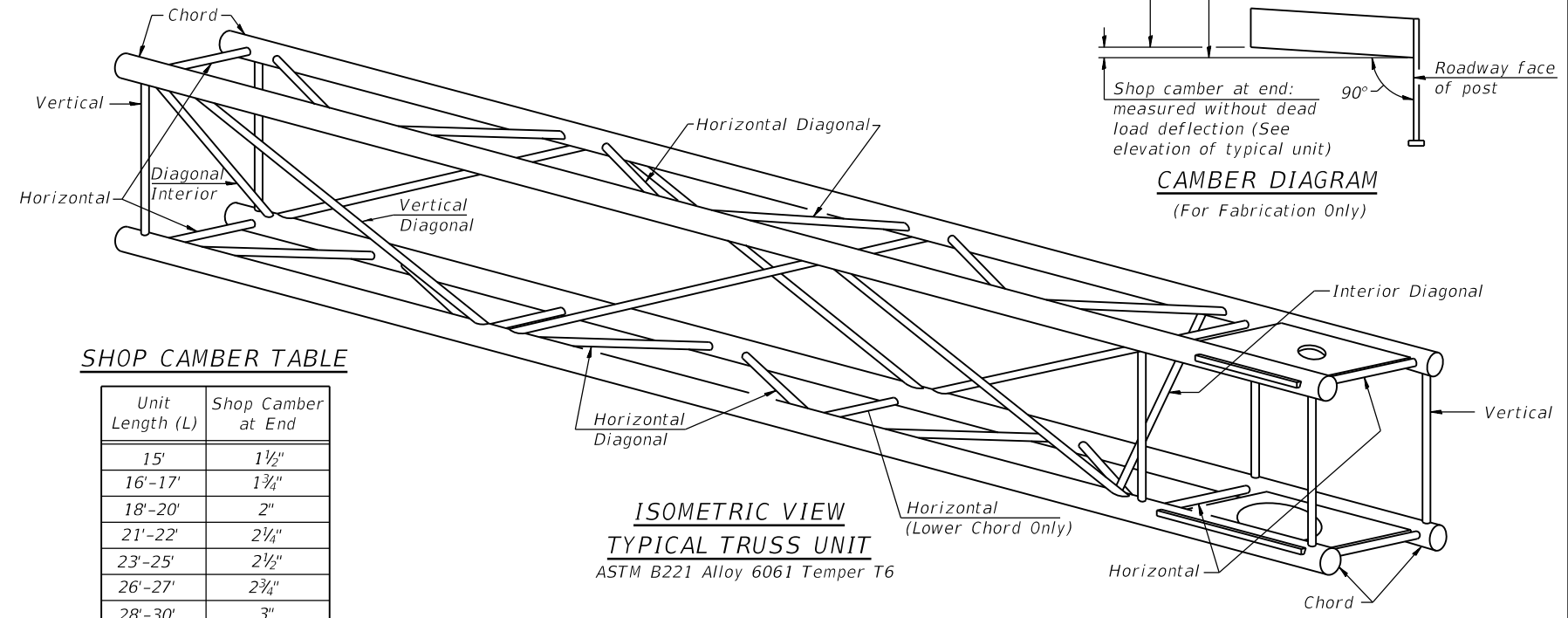
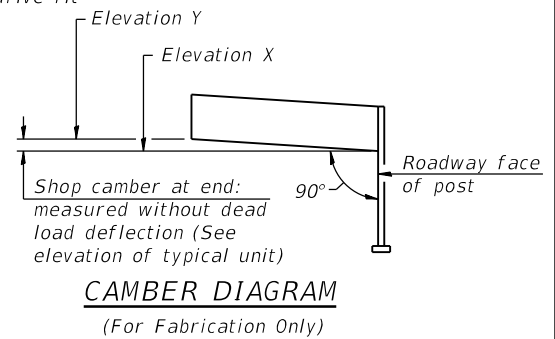
\*\*\* Approximately 30' southeast of existing cantilever sign structure along SB I-90/94  
OSC-A-2 2-17-2017



USER NAME = jana.jssa	DESIGNED - JJS, MAA	REVISED -
PLOT SCALE = N.T.S	CHECKED - MAI, JMG	REVISED -
PLOT DATE = 03/04/2020	DRAWN - JMI	REVISED -
	CHECKED - MAI, JMG	REVISED -



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



**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"

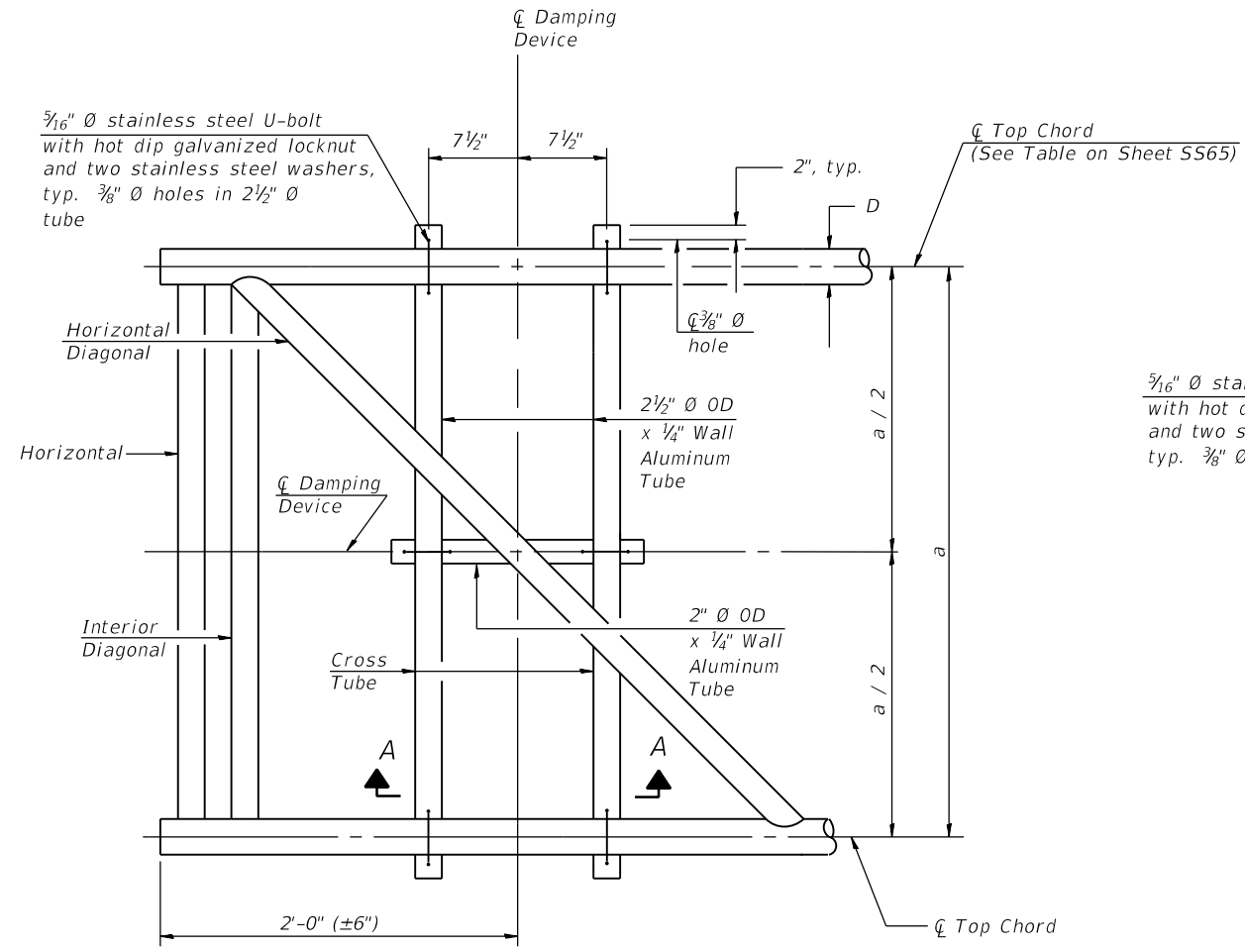
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES - TRUSS DETAILS  
ALUMINUM TRUSS & STEEL POST

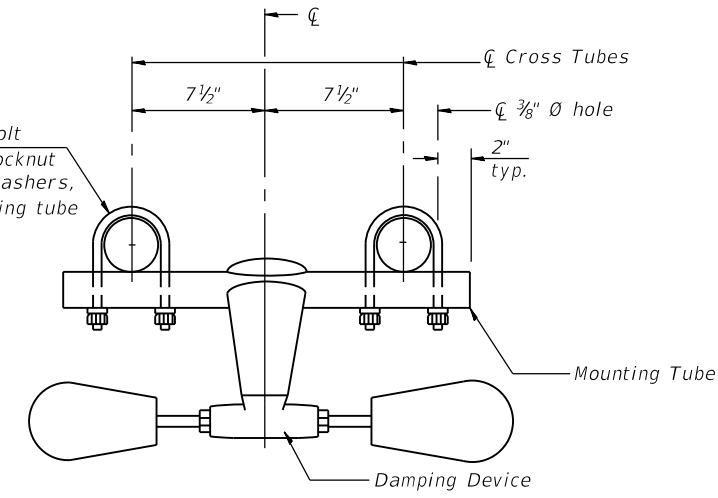
SHEET NO. SS65 OF SS83 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 744
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

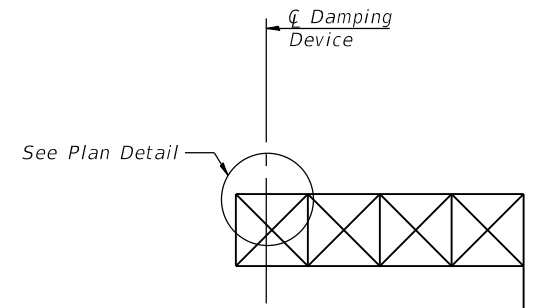
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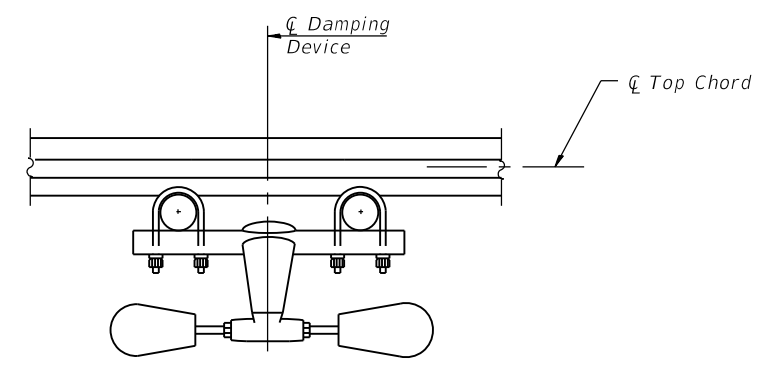
PLAN DETAIL



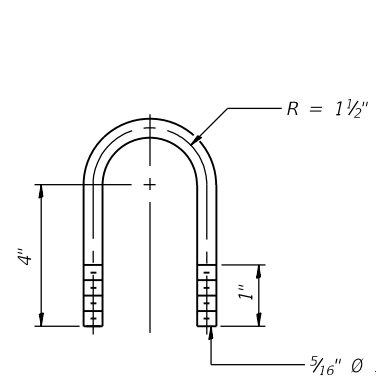
TRUSS DAMPING DEVICE CONNECTION DETAIL



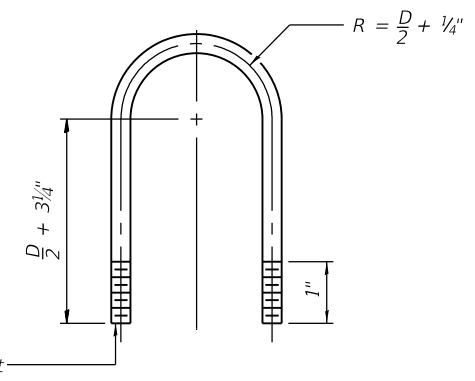
ELEVATION  
Aluminum Cantilever Sign Structure



SECTION A-A



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL  
(Typical)



TOP CHORD TO CROSS TUBE U-BOLT DETAIL  
(Typical)

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

OSC-A-D

2-17-2017



USER NAME =	alljssa	DESIGNED -	JJS, MAA	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	JMI	REVISED -	
PLOT DATE =	1/23/2020	CHECKED -	MAI, JMG	REVISED -	

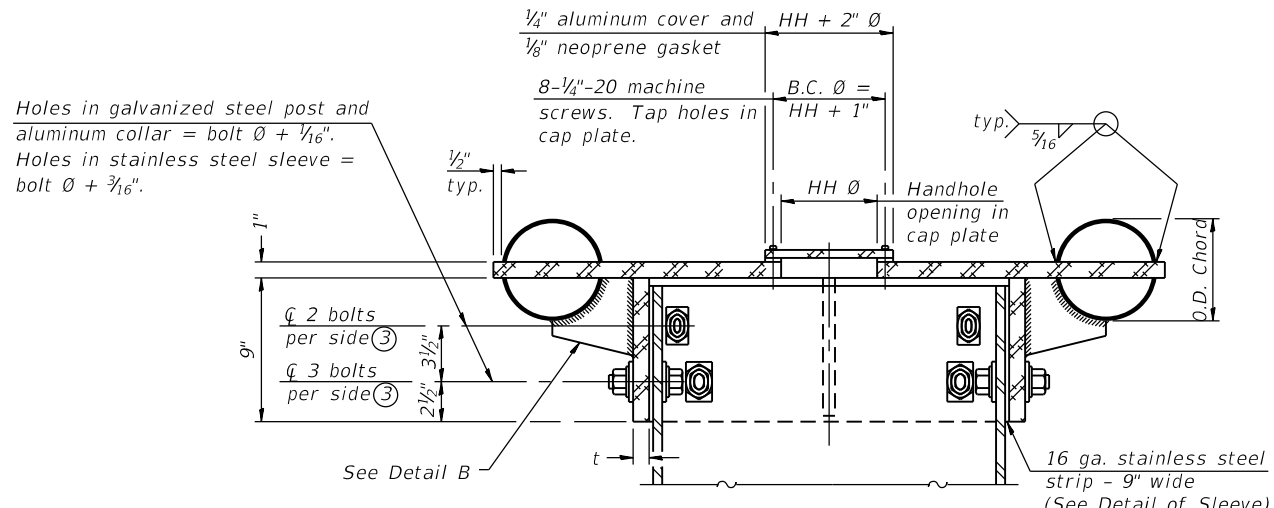
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURE  
DAMPING DEVICE

SHEET NO. SS66 OF SS83 SHEETS

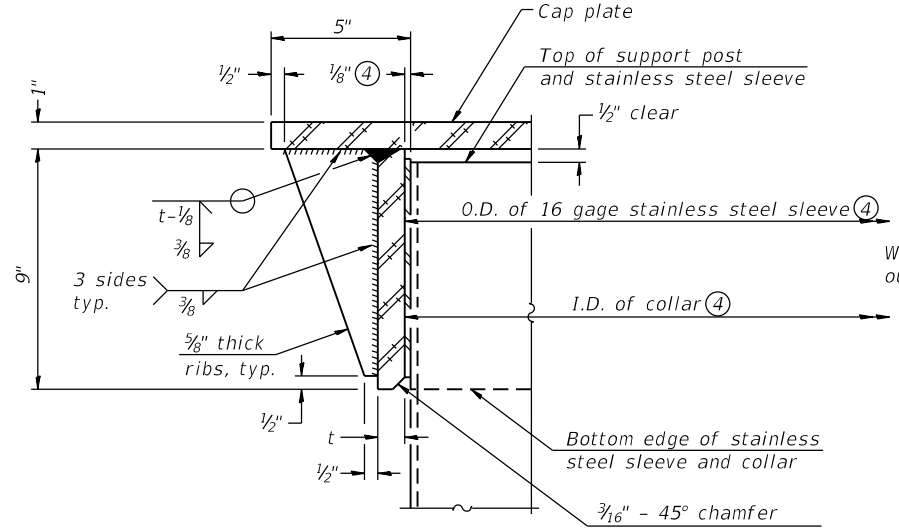
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	745
CONTRACT NO. 62A77				
ILLINOIS		FED. AID PROJECT		

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 2-17-2017  
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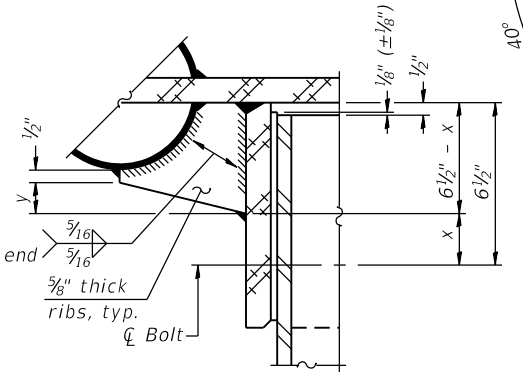


④ Collar I.D. shall be manufactured to correspond to O.D. of actual galvanized post and stainless steel sleeve plus 1/8" (±1/16"). Maximum gap between post and collar at any location equals 1/8" before tightening bolts.

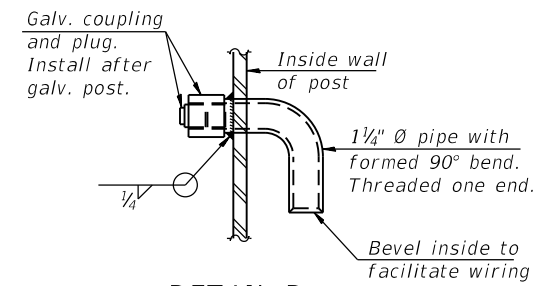
**SECTION B-B**  
Bolts, washers (including contoured washers), and locknuts shall be stainless steel.



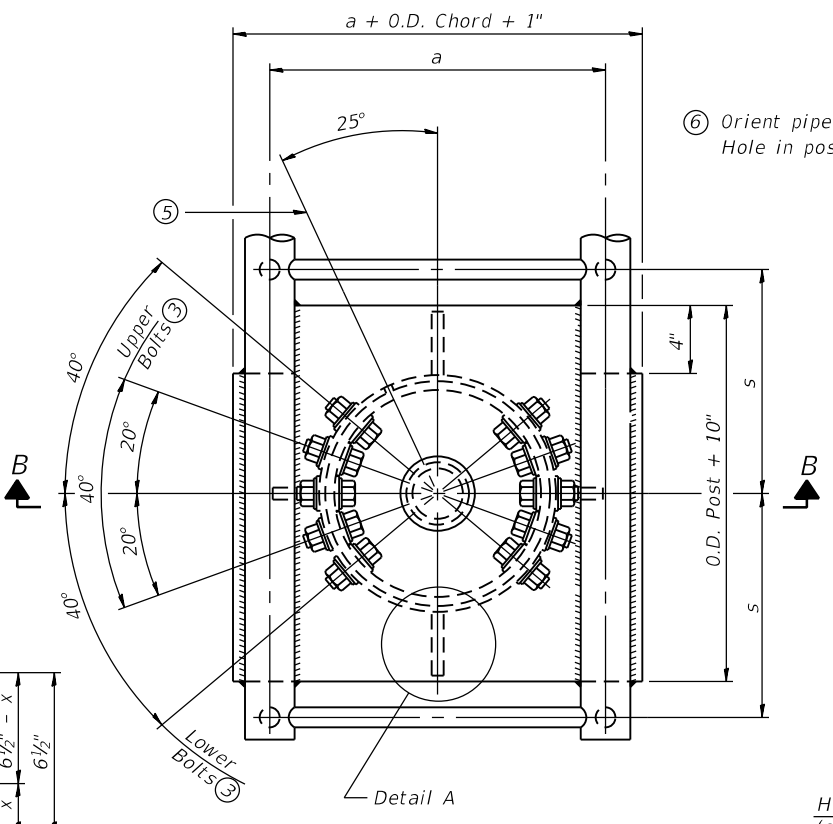
**DETAIL A**  
(Two locations)  
3/16" - 45° chamfer on inside of collar to facilitate field assembly



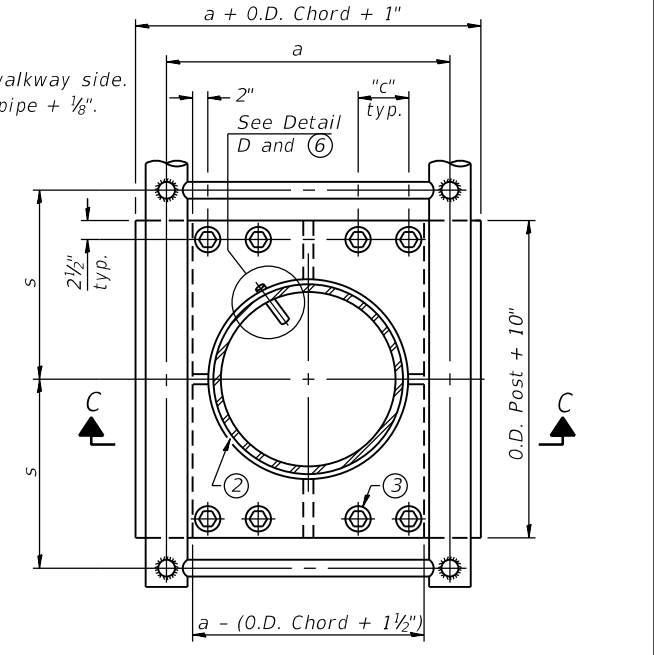
**DETAIL B**  
Two locations  
(For details not shown, see Detail C)



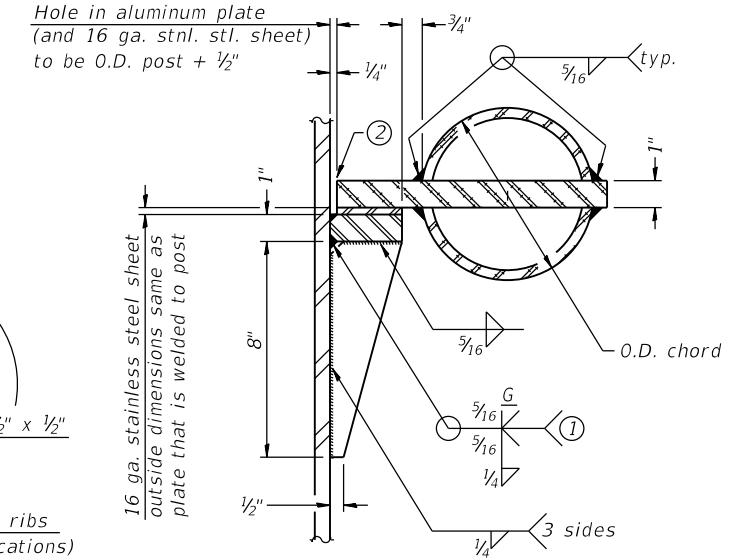
**DETAIL D**



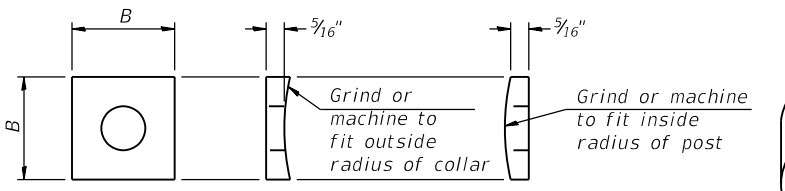
**PLAN VIEW - TOP OF COLUMN**  
⑤ Optional full penetration weld in collar. (Two locations maximum....(180° apart)....X-ray or UT 100%)



**SECTION THRU POST ABOVE LOWER CHORDS**



**DETAIL C**



**CONTOURED WASHERS**

Bolt Size	Contoured Washers	
	Hole Dia.	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 ensure tight, uniform fit and allow welding.) Welds to be 1 1/2" long at 6" cts. along top edge and at 1/4" opening.

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	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



USER NAME =	alljssa	DESIGNED -	JJS, MAA	REVISED -	
		CHECKED -	MAI, JMG	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	JMI	REVISED -	
PLOT DATE =	1/23/2020	CHECKED -	MAI, JMG	REVISED -	

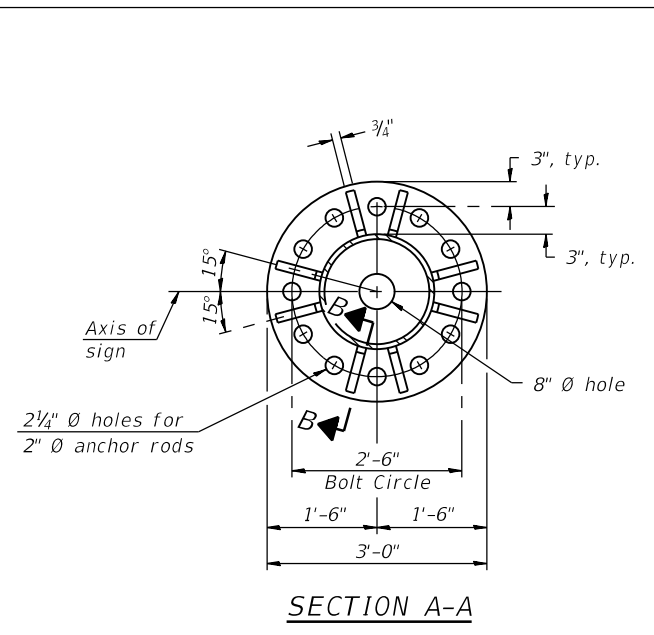
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES - JUNCTURE DETAILS  
ALUMINUM TRUSS & STEEL POST

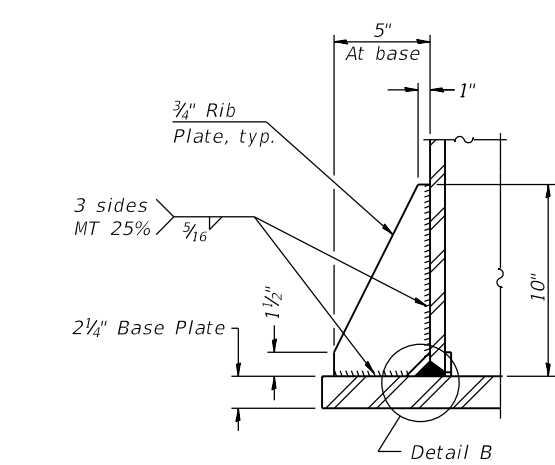
SHEET NO. SS67 OF SS83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	746
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

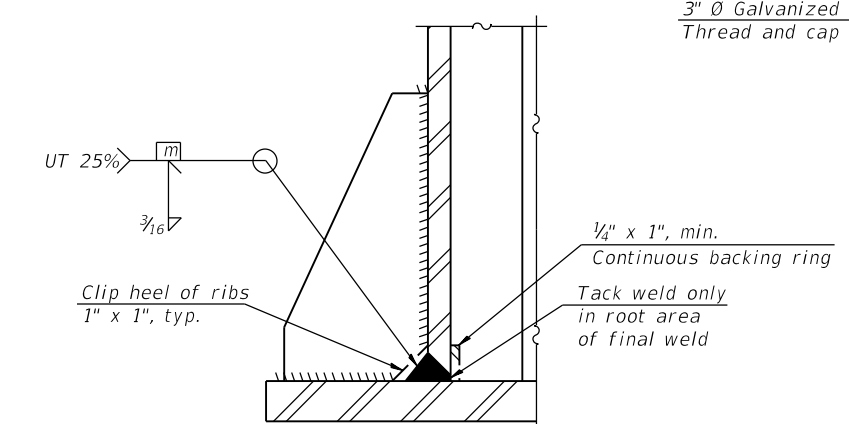
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 OSC-A-5  
 2-17-2017  
 USER NAME = jana.jssa  
 DESIGNED - JJS, MAA  
 CHECKED - MAI, JMG  
 PLOT SCALE = N.T.S  
 DRAWN - JMI  
 PLOT DATE = 03/04/2020  
 CHECKED - MAI, JMG  
 REVISED -  
 REVISED -  
 REVISED -  
 REVISED -  
 STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 CANTILEVER SIGN STRUCTURES - TYPE II-C-A & III-C-A  
 TRUSS SUPPORT POST - ALUMINUM TRUSS & STEEL POST  
 SHEET NO. SS68 OF SS83 SHEETS  
 F.A.I. RTE. 90/94/290  
 SECTION 2015-018R  
 COUNTY COOK  
 TOTAL SHEETS 1360  
 SHEET NO. 747  
 CONTRACT NO. 62A77  
 ILLINOIS FED. AID PROJECT



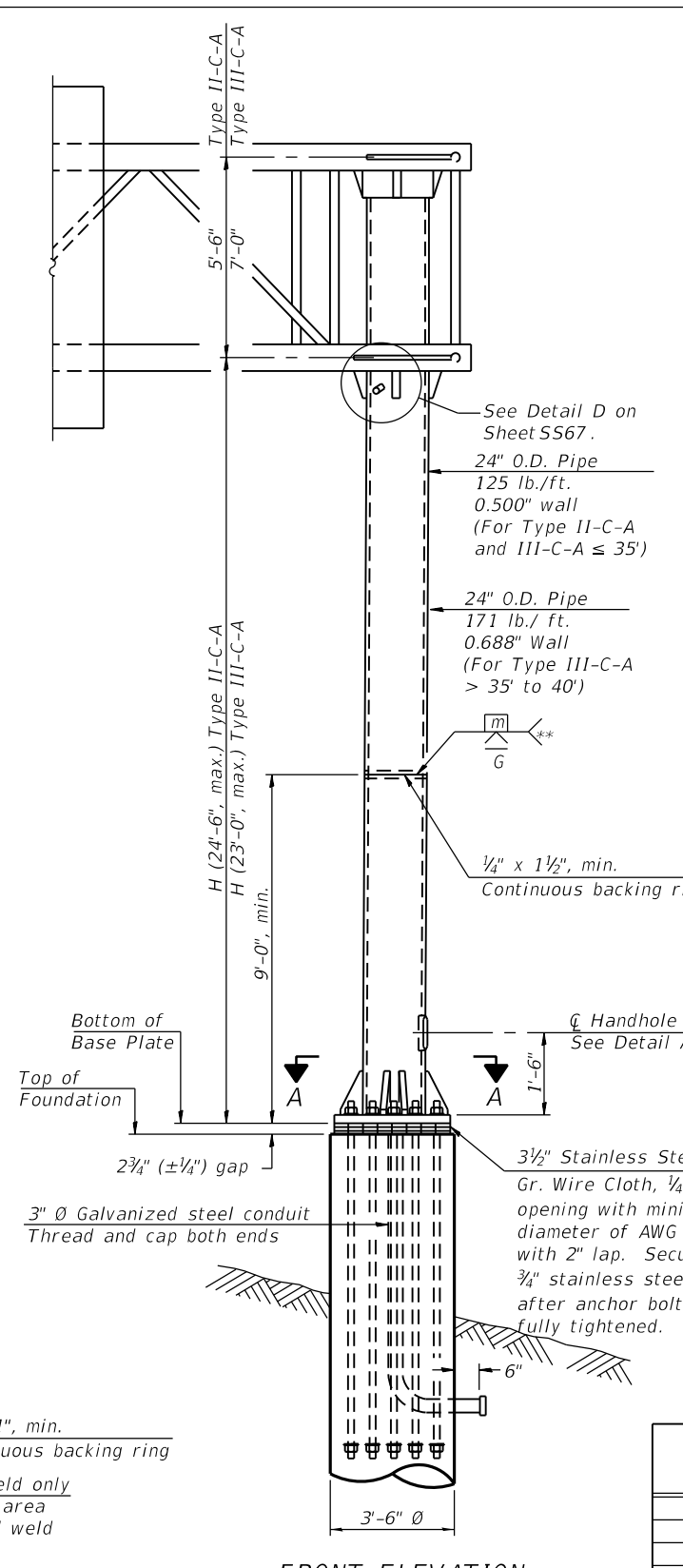
**SECTION A-A**



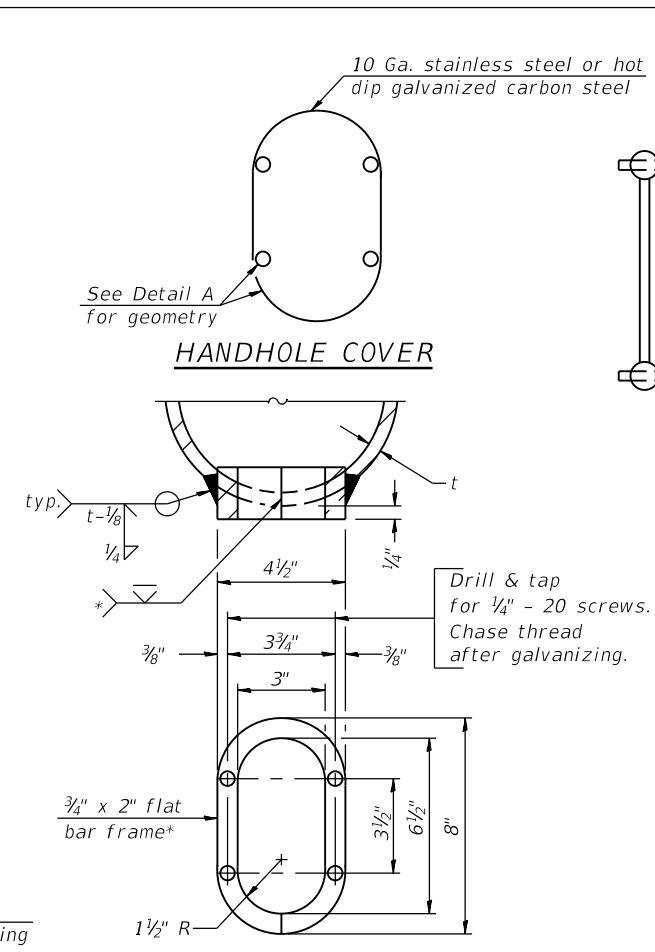
**SECTION B-B**



**DETAIL B**  
(Typical rib)



**FRONT ELEVATION**  
For Foundation Details, see Sheet SS71.



**DETAIL A**

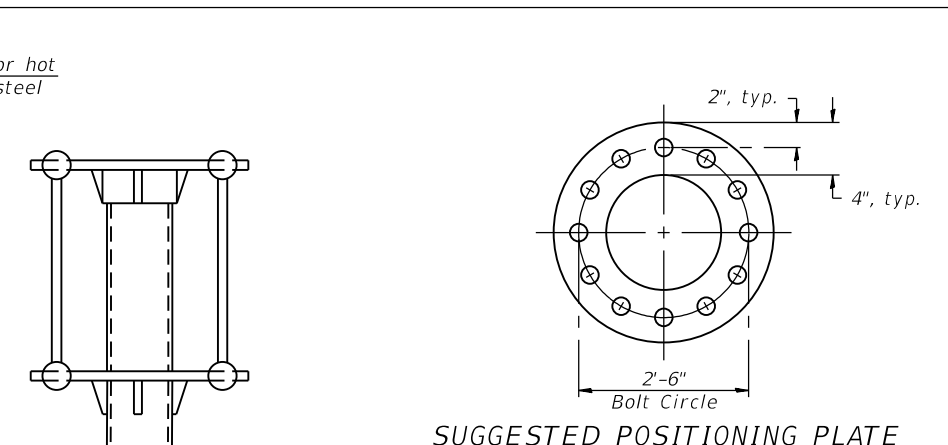
Provide 8" x 4 1/2" cover. Outside corners = 2 1/4" radius. Provide 4-3/16" Ø holes in cover for 1/4" - 20 round head hot dip galvanized or stainless steel machine screws. (See cover details.)

\* 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.

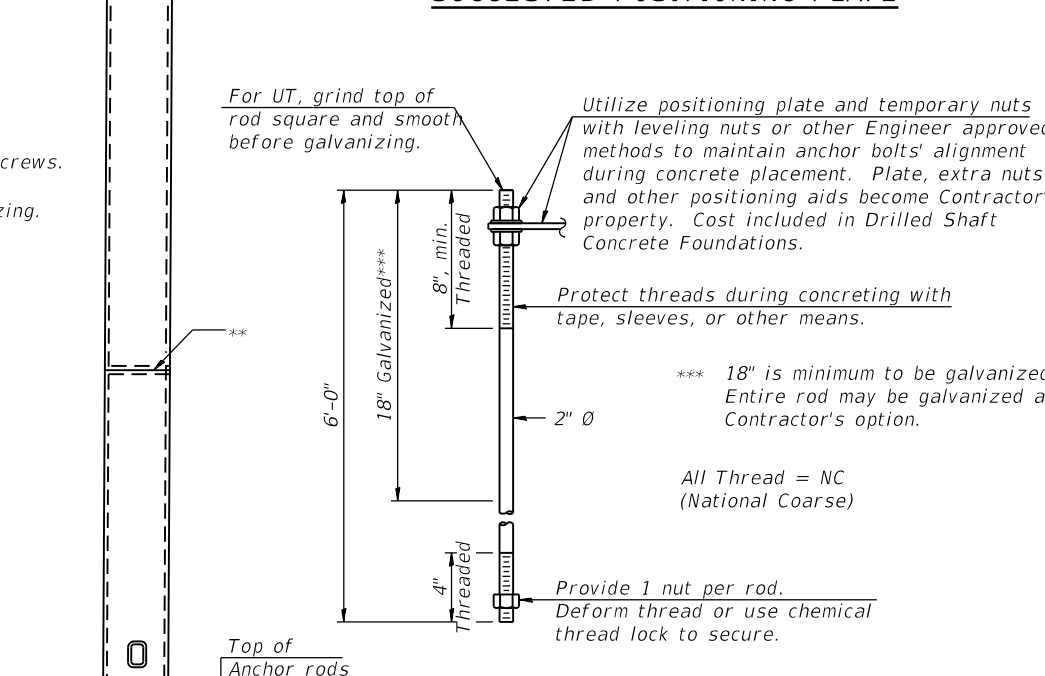
\*\* Butt welded joint in post is only allowed for post heights (H) over 20 ft. in length. If used, weld procedure must be preapproved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

Structure Number	t <sub>Station</sub>	H
1C0161094R048.4	319+20.00	20'-5"

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



**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 ensure no rejectable flaws exist in the upper 18" (tension criteria). Cost of testing included in Drilled Shaft Concrete Foundations.

\*\*\* 18" is minimum to be galvanized. Entire rod may be galvanized at Contractor's option.

All Thread = NC (National Coarse)

Provide 1 nut per rod. Deform thread or use chemical thread lock to secure.

Protect threads during concreting with tape, sleeves, or other means.

Utilize positioning plate and temporary nuts with leveling nuts or other Engineer approved methods to maintain anchor bolts' alignment during concrete placement. Plate, extra nuts and other positioning aids become Contractor's property. Cost included in Drilled Shaft Concrete Foundations.

For UT, grind top of rod square and smooth before galvanizing.

**SIDE ELEVATION**

t<sub>Station</sub> Approximately 30' southeast of existing cantilever sign structure along SB 1-90/94

OSC-A-5

2-17-2017



USER NAME	DESIGNED	REVISIONS
jana.jssa	JJS, MAA	-
MAI, JMG	CHECKED	-
JMI	DRAWN	-
MAI, JMG	CHECKED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

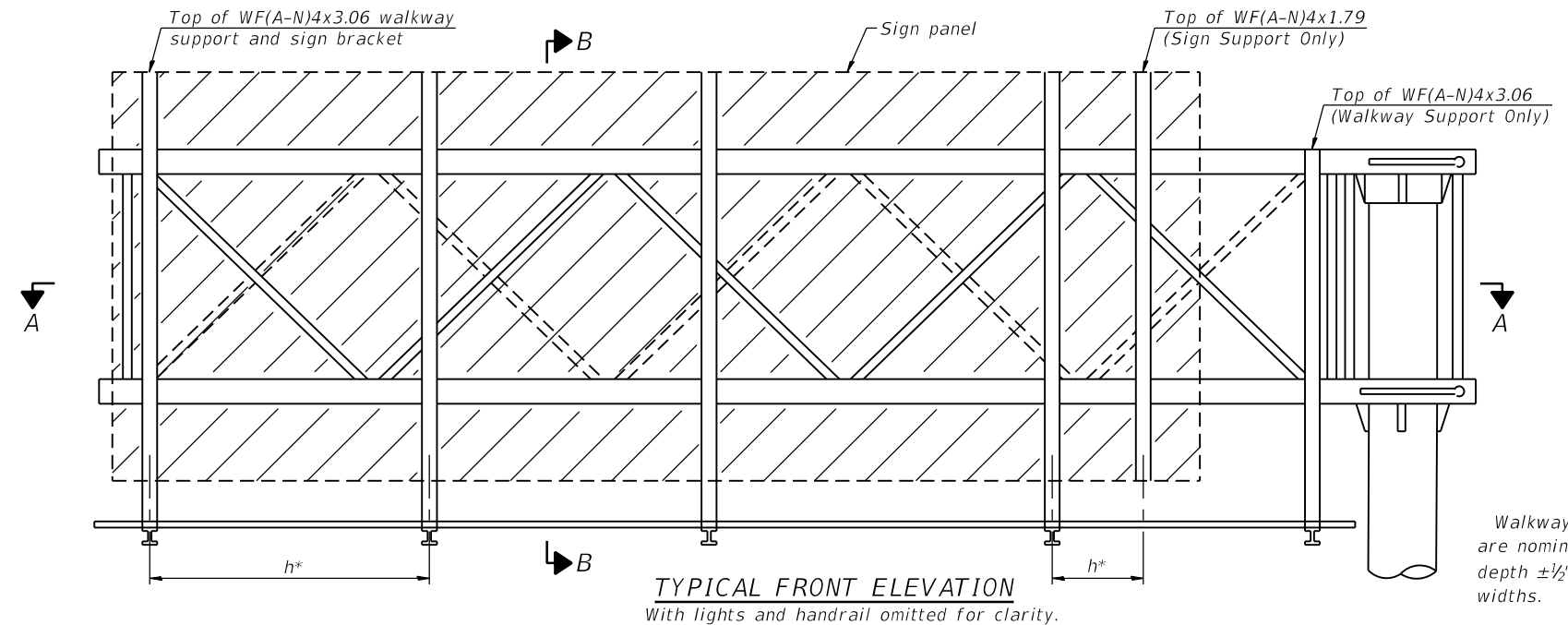
CANTILEVER SIGN STRUCTURES - TYPE II-C-A & III-C-A  
TRUSS SUPPORT POST - ALUMINUM TRUSS & STEEL POST

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	747
CONTRACT NO. 62A77				

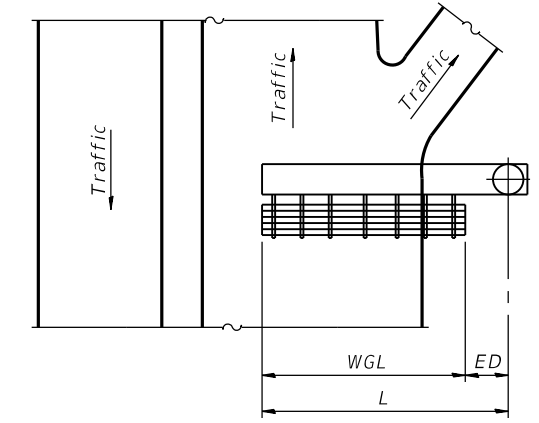
SHEET NO. SS68 OF SS83 SHEETS

ILLINOIS FED. AID PROJECT

FILE NAME: P:\V\AECOM\NA-AW51...recomonline.local\AECOM\_ID502\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\_I\000\_CAD\008\_Structural\Sign\_Structures\62A77\_Sign\_Structure\62A77-Sign\_Struct.dgn

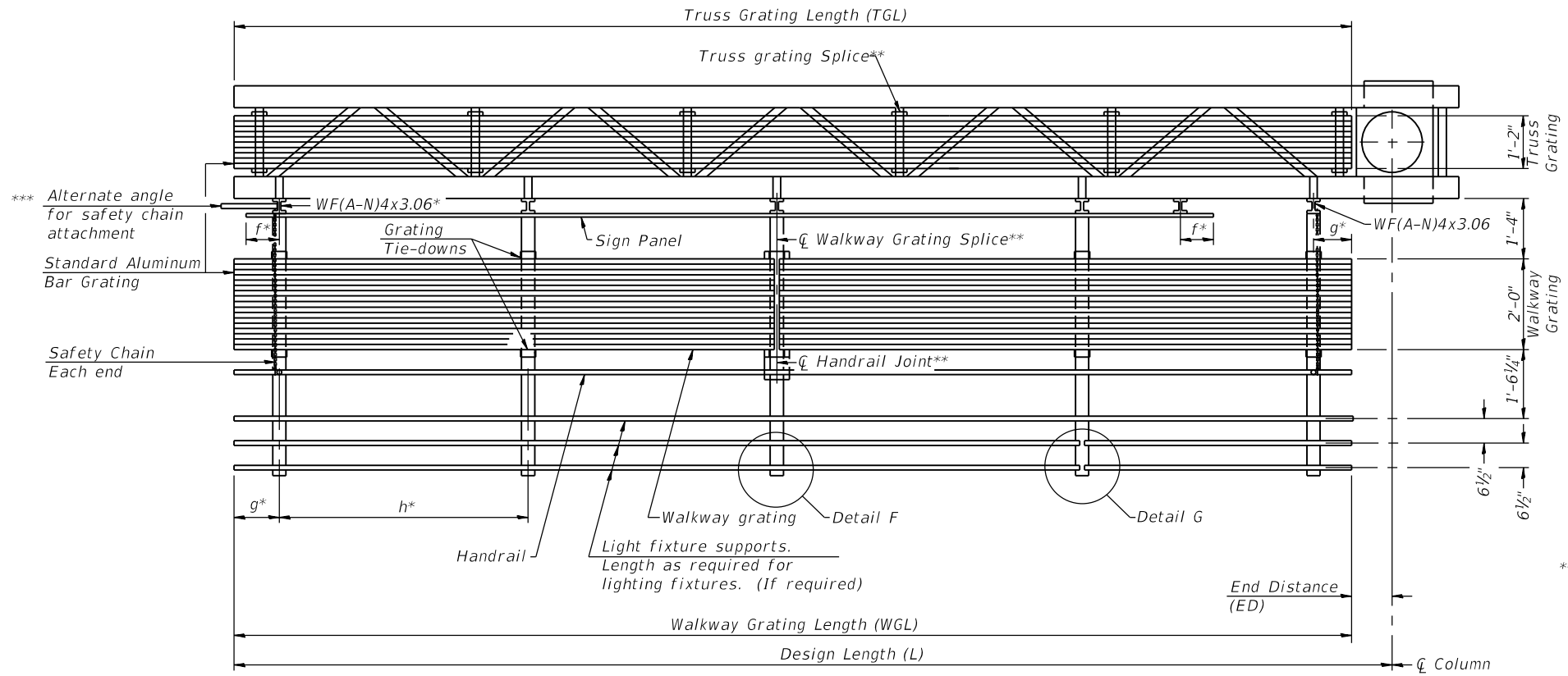


**TYPICAL FRONT ELEVATION**  
With lights and handrail omitted for clarity.



**PLAN WALKWAY AND HANDRAIL SKETCH**  
(Road plan beneath truss varies)

Walkway and truss grating dimensions are nominal and may vary (width ±1/2", depth ±1/2") based on available standard widths.



**SECTION A-A**

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

Handrail and walkway grating shall span a minimum of three brackets between splices.  
\*\* Use and location of handrail joints or grating splices are optional, based on lengths needed and material availability.

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

Structure Number	<sup>t</sup> Station	WGL	ED	TGL
1C0161094R048.4	319+20.00	-	-	28'-6"

<sup>t</sup> Approximately 30' southeast of existing cantilever sign structure along SB I-90/94

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

- f = 12" maximum, 4" minimum (End of sign to center of nearest bracket)
- g = 12" maximum, 4" minimum (End of walkway to center of nearest bracket)
- h = 6'-0" maximum (center to center sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)

\*\*\* If walkway bracket at safety chain location is behind sign, add angle to bracket. See alternate safety chain attachment on Base Sheet OSC-A-8.

For details of sign placement, sign/walkway brackets, truss and walkway gratings, grating splices and Section B-B, see Sheet SS70.  
For details of handrail, handrail joint, safety chain and Details F and G, see Base Sheet OSC-A-8.

**BRACKET TABLE**

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

OSC-A-6

2-17-2017



USER NAME = jana.jssa	DESIGNED - JJS, MAA	REVISED -
PLOT SCALE = N.T.S	CHECKED - MAI, JMG	REVISED -
PLOT DATE = 03/04/2020	DRAWN - JMI	REVISED -
	CHECKED - MAI, JMG	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

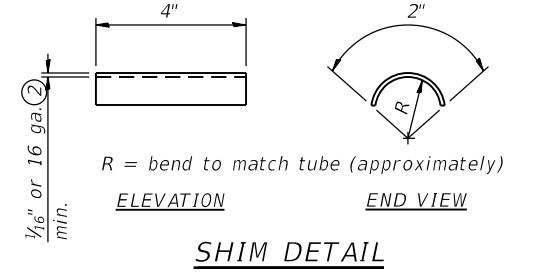
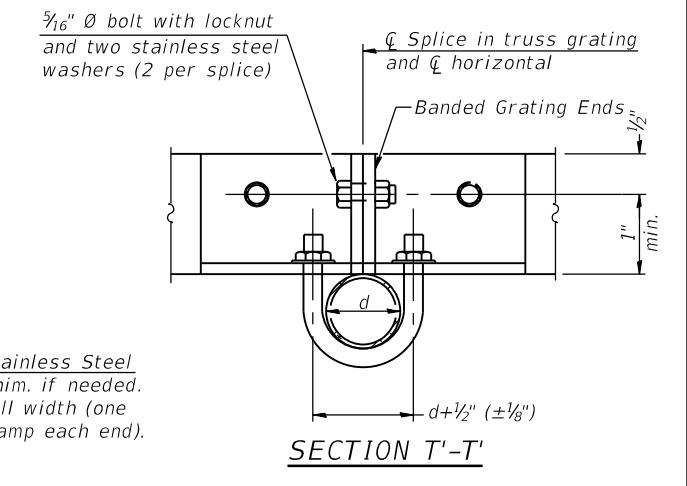
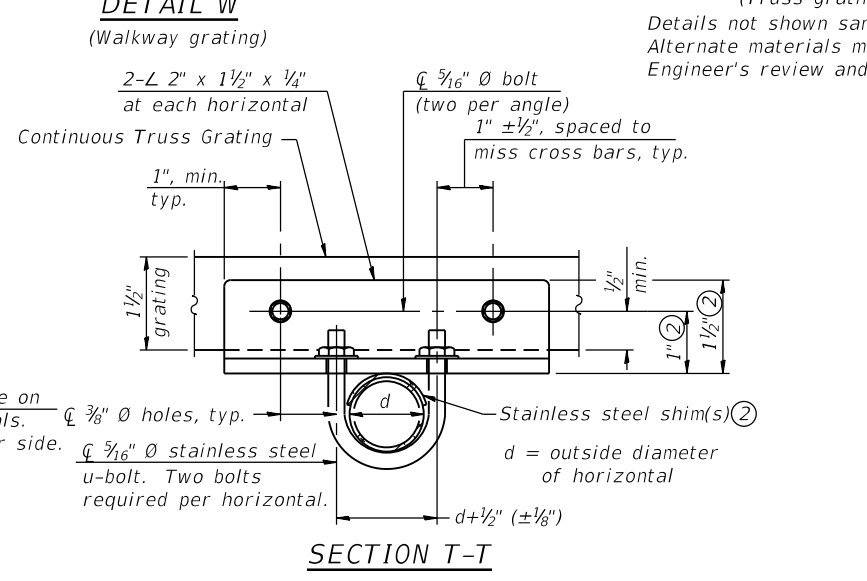
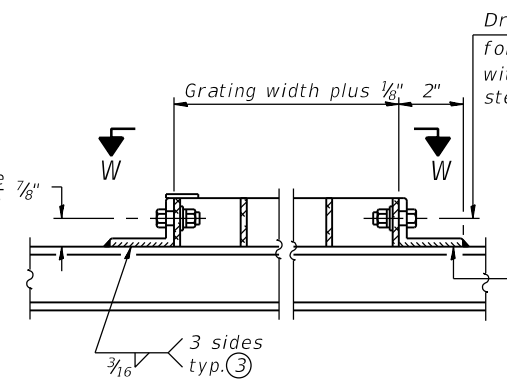
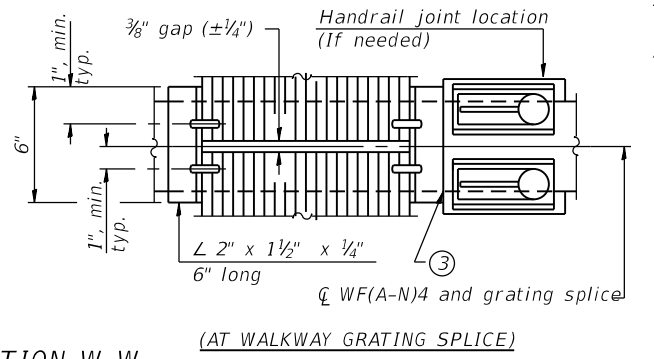
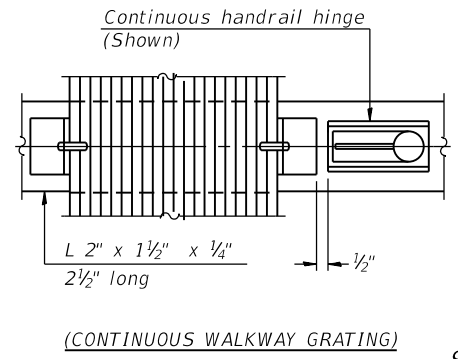
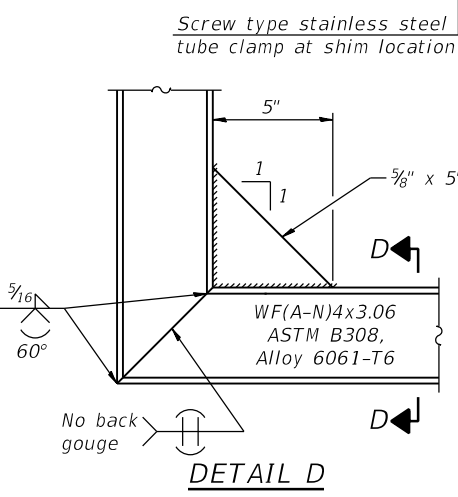
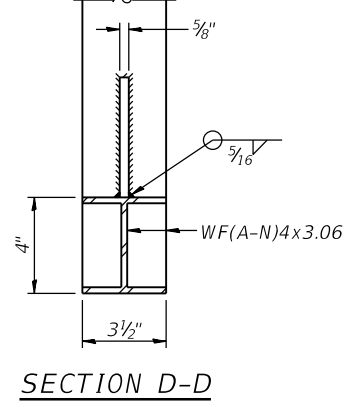
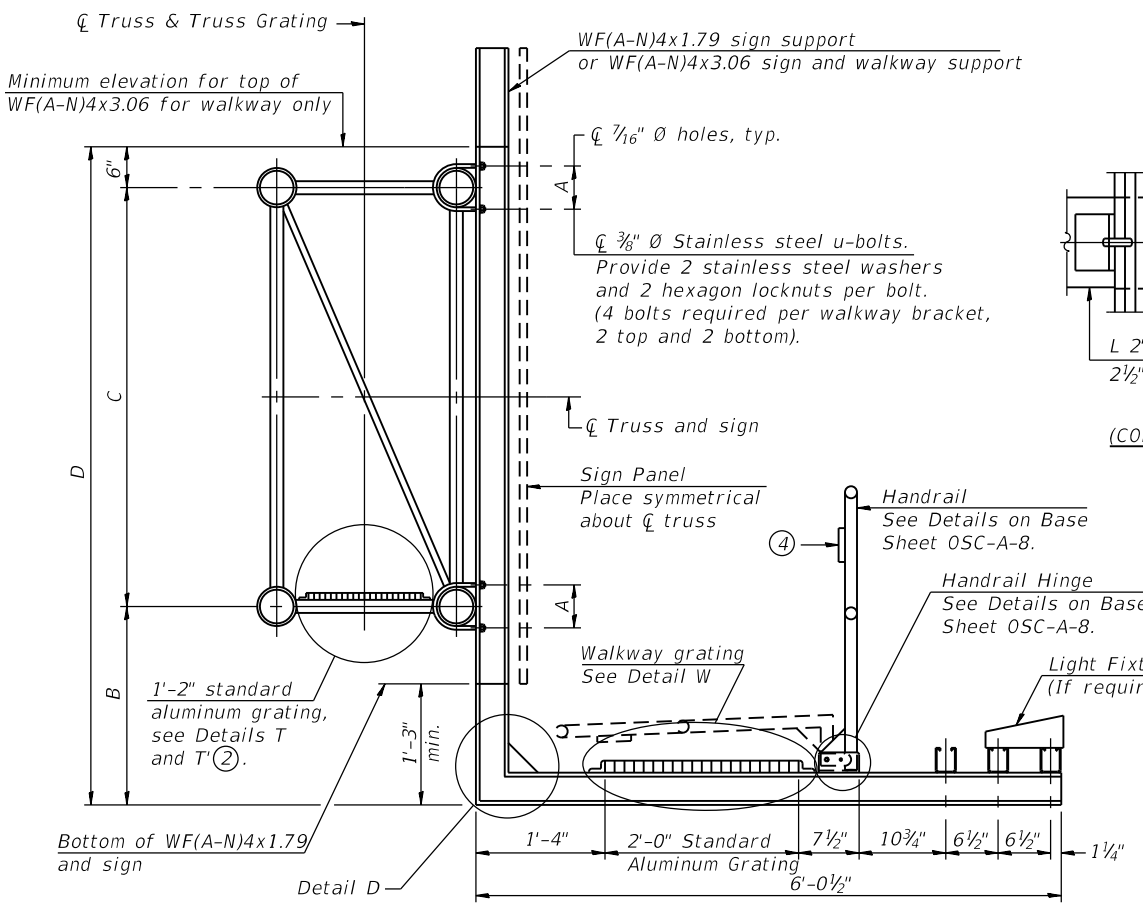
**CANTILEVER SIGN STRUCTURES - ALUMINUM WALKWAY  
DETAILS - ALUMINUM TRUSS & STEEL POST**

SHEET NO. SS69 OF SS83 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 748
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				



FILE NAME: p:\vaecom\NA-AW51\_recomonline\local\AECOM\_DS502\_NAD\Documents\01\_Americas\Transportation\6269938\_Circle\Phase\_I\000\_CAD\008\_Structural\Sign\_Structures\62A77\_Sign\_Structure\62A77-Cant-SS207-SignStruct.dgn  
 OSC-A-7 12-17-2017



- $\textcircled{1}$  Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- $\textcircled{2}$  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.
- $\textcircled{3}$  If Handrail Joint present, weld angle to WF(A-N)4 and  $\frac{1}{4}$ " extension bars. (See Base Sheet OSC-A-8.)
- $\textcircled{4}$   $\frac{1}{2}$ " x  $\frac{1}{2}$ " x 2" welded to handrail posts to protect locations that contact grating.
- $\textcircled{5}$  Tube to grating gap may vary from 0 to  $\frac{1}{2}$ ", max. to align walkway, allow for camber, etc.
- $\textcircled{6}$  Based on actual sign height,  $D_s$ , given on Sheet SS64.

Structure Number	*Station	A	$\textcircled{6}$ B	C	$\textcircled{6}$ D
1C0161094R048.4	319+20.00	7 $\frac{1}{2}$ "	5'-0"	7'-0"	12'-6"

\*Approximately 30' southeast of existing cantilever sign structure along SB I-90/94



USER NAME = jana.jssa	DESIGNED - JJS, MAA	REVISED -
PLOT SCALE = N.T.S	CHECKED - MAI, JMG	REVISED -
PLOT DATE = 03/04/2020	DRAWN - JMI	REVISED -
	CHECKED - MAI, JMG	REVISED -

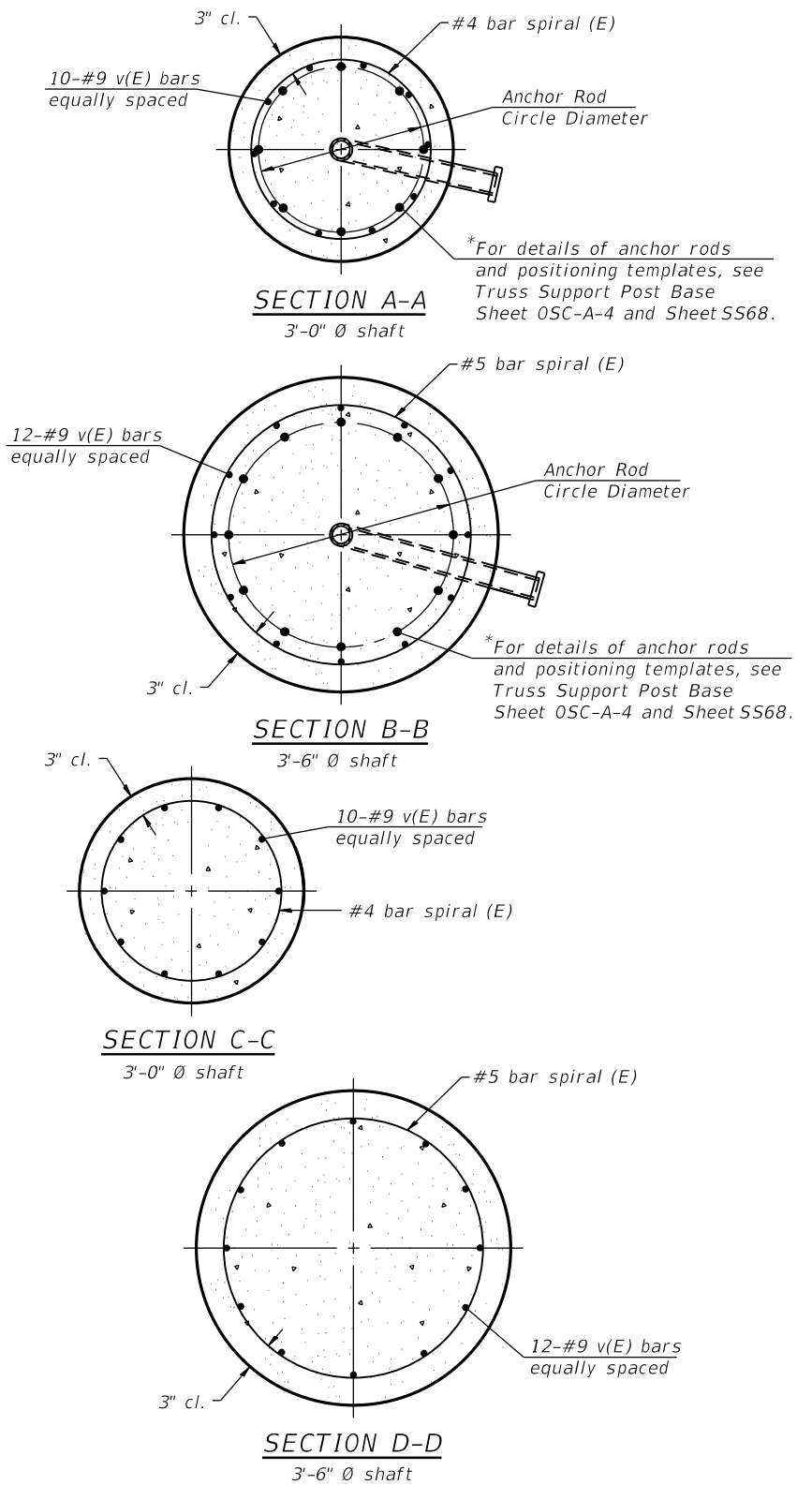
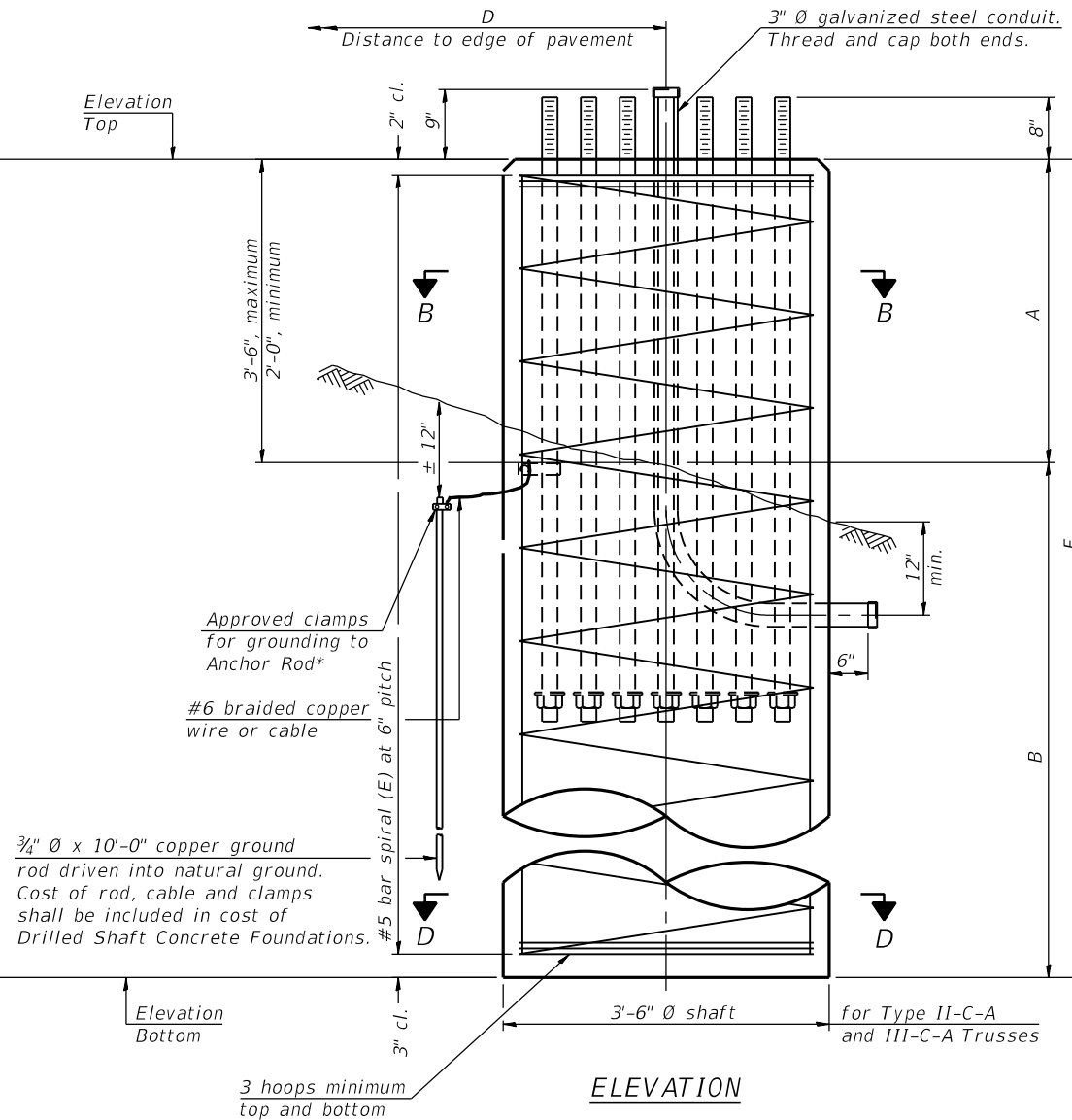
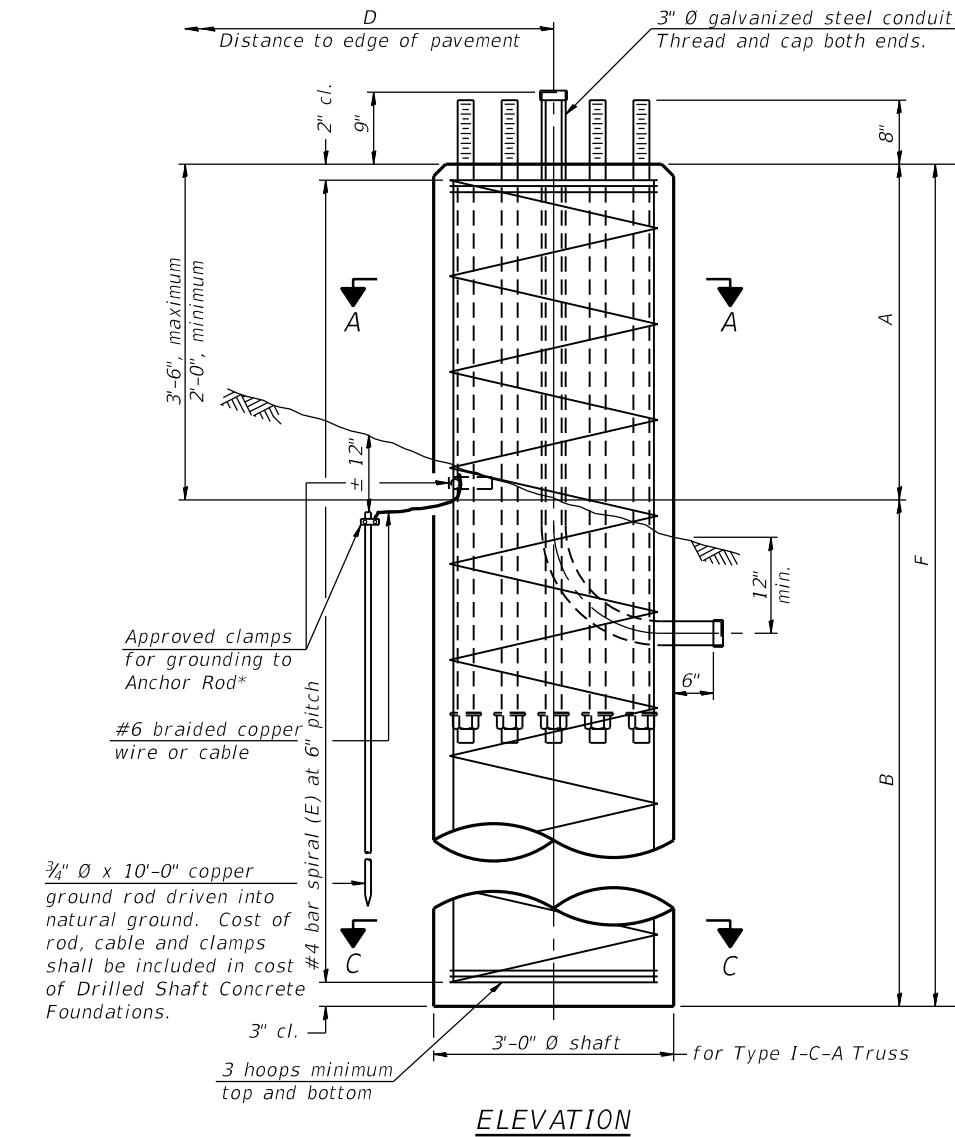
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES - WALKWAY DETAILS  
ALUMINUM TRUSS & STEEL POST

SHEET NO. SS70 OF SS83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	749
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

\*Grind anchor rod to bright finish at ground clamp location before installing clamp.



**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 ( $Q_u$ ) 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".

Truss Type	Post Base Sheet	Maximum Cantilever Length (ft)	Maximum Total Sign Area (sq ft)	Shaft Diameter (ft)	"B" Depth (ft)	Anchor Rods		Anchor Rod Circle Diameter (in)
						No.	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	3.5	17.0	12	2	30
II-C-A	OSC-A-5	30	340	3.5	21.5	12	2	30
III-C-A	OSC-A-5	35	170	3.5	19.0	12	2	30
III-C-A	OSC-A-5	35	250	3.5	22.5	12	2	30
III-C-A	OSC-A-5	35	400	3.5	26.5	12	2	30
III-C-A	OSC-A-5	40	400	3.5	32.0	12	2	30

Structure Number	** Station	Truss Type	Shaft Diameter	<sup>t</sup> Elevation Top	Elevation Bottom	$Q_u$	A	B	F	Class DS Concrete Cubic Yards
1C0161094R048.4	319+20.00	III-C-A	3'-6"	610.97	577.97	-	3'-0"	30'-0"	33'-0"	11.8

\*\* Approximately 30' southeast of existing cantilever sign structure along SB I-90/94  
<sup>t</sup> Contractor shall verify existing grade elevation in the field and make necessary approved adjustments prior to construction or ordering of materials.

OSC-A-9

2-17-2017



USER NAME = jana.jssa	DESIGNED - JJS, MAA	REVISED -
PLOT SCALE = N.T.S	CHECKED - MAI, JMG	REVISED -
PLOT DATE = 03/04/2020	DRAWN - JMI	REVISED -
	CHECKED - MAI, JMG	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES - DRILLED SHAFT  
 ALUMINUM TRUSS & STEEL POST

SHEET NO. SS71 OF SS83 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 750
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE NAME: p:\v\vaecom-na-aw51\_recomonline\local\vaecom\_na\Documents\01\_Americas\Transportation\60269938\_Circle\Phase1\Structural\Sign\_Structures\62A77\_Sign\_Structure\62A77-Cant-55208-SignStruct.dgn

11:17:14 AM



# BORING LOG SB-01

wangeng@wangeng.com  
1145 N Main Street  
Lombard, IL 60148  
Telephone: 630 953-9928  
Fax: 630 953-9938

WEI Job No.: 1100-04-01

Client: **AECOM**  
Project: **Jane Byrne Interchange**  
Location: **Section 16, T39N, R14E of 3rd PM**

Datum: NAVD 88  
Elevation: 607.09 ft  
North: 1912970.42 ft  
East: 1164914.52 ft  
Station: NA  
Offset: NA

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
606.3	10-inch thick CONCRETE --PAVEMENT--														
	Very dense, gray CRUSHED STONE; dry --AGGREGATE BASE-- --RDR 3--	1	X	1	36 38 22	NP	7				X	9	5 6 9	4.35 B	19
604.1	Stiff to very stiff, dark brown, brown and gray SILTY CLAY LOAM to CLAY LOAM, trace to little gravel and debris; damp --FILL-- --RDR 3--	2	X	2	3 7 15	2.50 P	15			25	X	10	5 9 10	2.52 B	18
		3	X	3	3 5 5	2.05 B	17		581.6		X	11	4 4 3	0.79 B	22
		4	X	4	3 5 5	1.75 P	18			30	X	12	3 3 4	0.57 B	25
	--some brick fragments and debris--	5	X	5	3 9 15	NA	18			35	X	13	2 2 4	0.41 B	24
		6	X	6	3 3 8	2.30 B	20			40	X	14	2 3 4	0.41 B	26
591.6	Medium dense, brown, gray and black SANDY GRAVEL; damp --FILL-- --RDR 3--	7	X	7	9 6 8	NP	20								
589.1	Stiff to hard, brown and gray to brown SILTY CLAY, trace gravel; damp --RDR 2--	8	X	8	6 8 8	1.97 B	21								

### GENERAL NOTES

Begin Drilling: 01-29-2020 Complete Drilling: 01-29-2020  
 Drilling Contractor: Wang Testing Services Drill Rig: \_\_\_\_\_  
 Driller: R&K Logger: F. Bozga Checked by: C. Marin  
 Drilling Method: 3.25" IDA HSA, boring backfilled upon completion

### WATER LEVEL DATA

While Drilling: 52.00 ft  
 At Completion of Drilling: 68.00 ft  
 Time After Drilling: NA  
 Depth to Water: NA

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



# BORING LOG SB-01

wangeng@wangeng.com  
1145 N Main Street  
Lombard, IL 60148  
Telephone: 630 953-9928  
Fax: 630 953-9938

WEI Job No.: 1100-04-01

Client: **AECOM**  
Project: **Jane Byrne Interchange**  
Location: **Section 16, T39N, R14E of 3rd PM**

Datum: NAVD 88  
Elevation: 607.09 ft  
North: 1912970.42 ft  
East: 1164914.52 ft  
Station: NA  
Offset: NA

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
565.3	Hard, gray SILTY CLAY, trace gravel; damp --RDR 2--	15	X	15	7 10 16	4.26 B	14			65	X	19	6 14 15	NP	21
		16	X	16	35 50/5"	NP	13			70	X	20	9 15 19	NP	17
560.3	Dense to very dense, gray SILT; damp to saturated --RDR 2--	17	X	17	16 31 42	NP	22			75	X	21	11 19 20	NP	16
		18	X	18	16 15 19	NP	20			80	X	22	19 28 37	10.25 B	13
535.3	Dense, gray coarse SAND; saturated --RDR 2--														
530.3	Hard, gray SILTY CLAY LOAM to SILTY LOAM, trace gravel; damp --RDR 2--														

### GENERAL NOTES

Begin Drilling: 01-29-2020 Complete Drilling: 01-29-2020  
 Drilling Contractor: Wang Testing Services Drill Rig: \_\_\_\_\_  
 Driller: R&K Logger: F. Bozga Checked by: C. Marin  
 Drilling Method: 3.25" IDA HSA, boring backfilled upon completion

### WATER LEVEL DATA

While Drilling: 52.00 ft  
 At Completion of Drilling: 68.00 ft  
 Time After Drilling: NA  
 Depth to Water: NA

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

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USER NAME = marian.agamy	DESIGNED - JJS, MAA	REVISED -
PLOT SCALE = N.T.S	CHECKED - MAI, JMG	REVISED -
PLOT DATE = 03/04/2020	DRAWN - JMI	REVISED -
	CHECKED - MAI, JMG	REVISED -

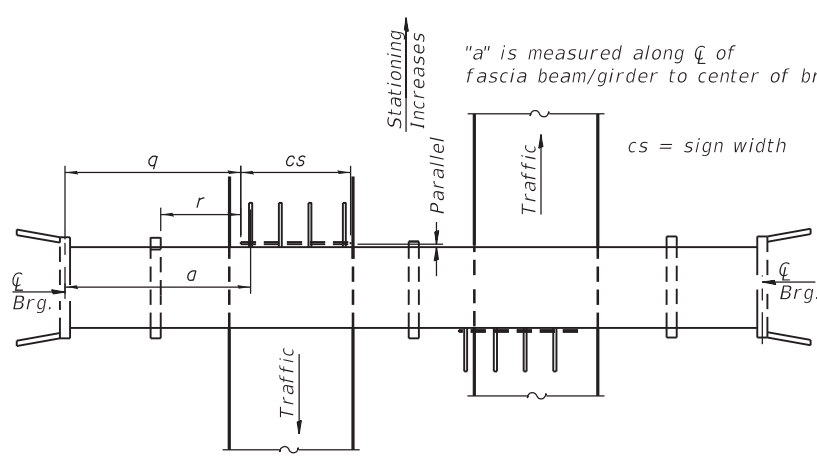
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOIL BORING

SHEET NO. SS71A OF SS83 SHEETS

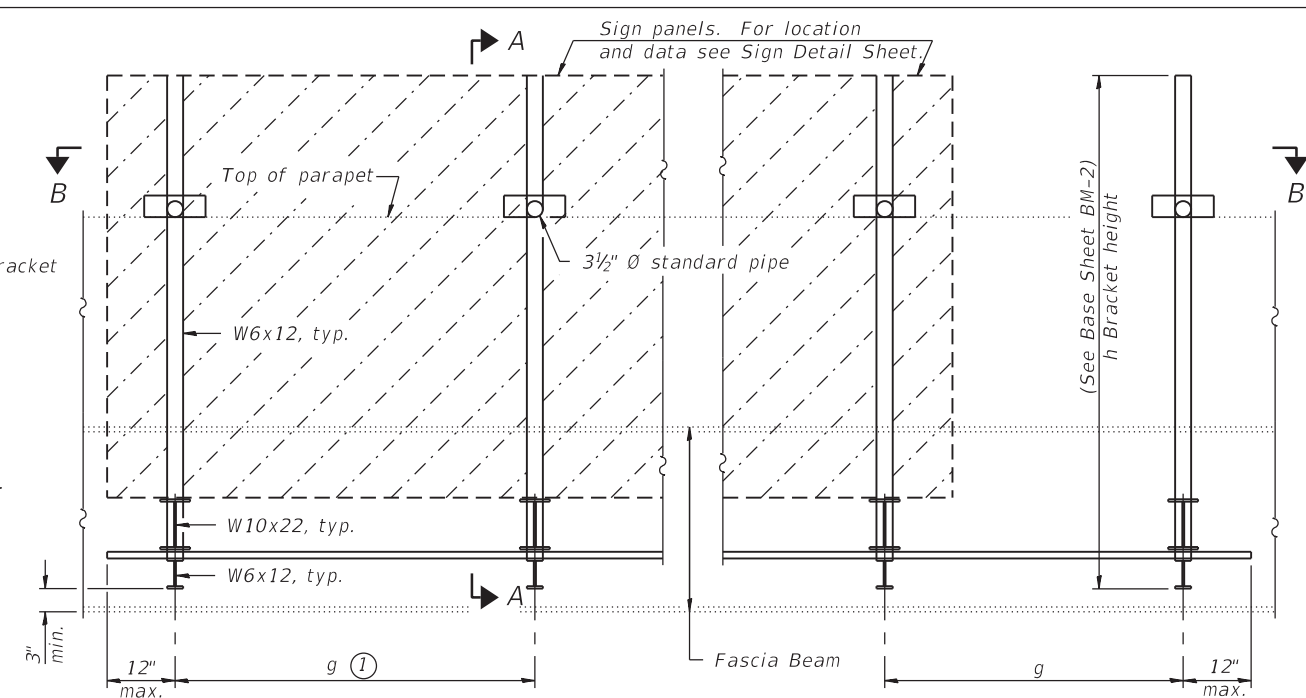
F.A.I. RTE. 90/94/290	SECTION	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 750A
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE NAME: p:\v\AECOM-NA-AWS1\_aecom\online\local\AECOM\_DS02\_NAV\Documents\01\_Americas\Transportation\6269938\_Circle\Phase\_I\000\_CAD\008\_Structural\Sign\_Structure\62A77-BM-SS301-SignStruct.dgn

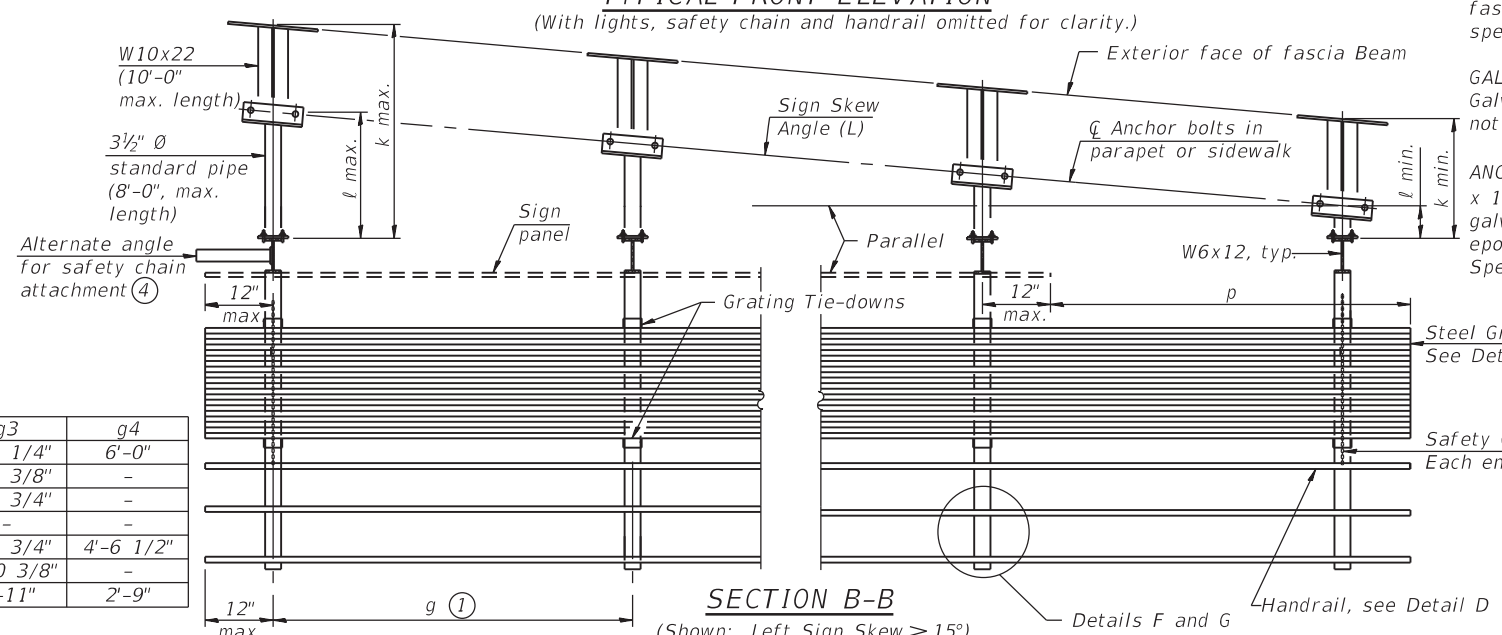


**PLAN**  
(For Sign Skew  $\le 15^\circ$ , all brackets constant)  
**WALKWAY AND HANDRAIL SKETCH**  
(Road plan beneath structure varies.)

Dimensions a & g may vary as approved by the Engineer, see ①.



**TYPICAL FRONT ELEVATION**  
(With lights, safety chain and handrail omitted for clarity.)



**SECTION B-B**  
(Shown: Left Sign Skew  $> 15^\circ$ )

Structure Number	Bridge Name	g1	g2	g3	g4
1B0161904R050.1B	Ogden Avenue	1'-3"	5'-3 3/4"	4'-5 1/4"	6'-0"
1B0161904R051.1A	Randolph Street	5'-3 5/8"	6'-2"	1'-6 3/8"	-
1B0161904R051.1B	Randolph Street	5'-2 1/2"	1'-6"	5'-3 3/4"	-
1B0161904R051.2A	Washington Street	6'-1 3/4"	5'-11 1/2"	-	-
1B0161904R051.3A	Monroe Street	5'-2 3/4"	3'-2"	3'-4 3/4"	4'-6 1/2"
1B0161904R051.3B	Monroe Street	5'-2 3/4"	5'-3 3/4"	4'-10 3/8"	-
1B0161904R051.4A	Adams Street	4'-11"	4'-11"	4'-11"	2'-9"

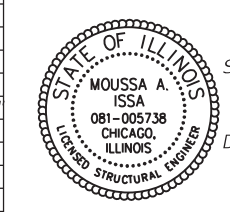
Structure Number	Sign Skew Angle (L) or (R)	Bridge Station	Bridge Structure Number	Bridge Name	Contract Route Designation	cs	r	a	g	No. of Brackets	q
1B0161904R050.1B	0°	4+68.12	016-2047	Ogden Avenue	SB I-90/94	18'-6"	-	11'-0 1/2"	*	5	10'-5"
1B0161904R051.1A	0°	8712+85.63	016-0608	Randolph Street	SB I-90/94	14'-0"	23'-8 1/4"	67'-9 1/4"	*	2 **	-
1B0161904R051.1B	0°	8712+69.34	016-0608	Randolph Street	SB I-90/94	15'-0"	6'-10 3/4"	52'-0 1/4"	*	1 **	-
1B0161904R051.2A	0°	8612+79.10	016-0601	Washington Street	SB I-90/94	14'-0"	17'-2 3/4"	84'-6 1/4"	*	0 **	-
1B0161904R051.3A	0°	8412+42.47	016-1700	Monroe Street	SB I-90/94	17'-6"	-	33'-1"	*	2 **	32'-5"
1B0161904R051.3B	0°	8412+23.13	016-1700	Monroe Street	SB I-90/94	17'-0"	-	14'-4"	*	1 **	13'-4"
1B0161904R051.4A	0°	8312+46.14	016-1701	Adams Street	SB I-90/94	18'-6"	-	43'-5 3/4"	*	5	42'-11 3/4"
1B0161904R051.4B	0°	8312+28.06	016-1701	Adams Street	SB I-90/94	14'-6"	-	28'-1 3/4"	4'-4"	4	27'-1 3/4"
1B0161904R051.4C	0°	8312+11.56	016-1701	Adams Street	SB I-90/94	17'-6"	-	10'-1 3/4"	5'-2"	4	9'-1 3/4"
1B0161904R051.5A	0°	8212+28.46	016-1702	Jackson Blvd	SB I-90/94	18'-6"	-	22'-4"	5'-7"	4	21'-7"
1B0161904R051.5B	0°	8212+11.46	016-1702	Jackson Blvd	SB I-90/94	14'-6"	-	7'-7"	4'-2"	4	6'-7"
1B0161290R029.7	0°	3702+77.68	016-1708	Peoria Street	EB I-290	20'-6"	-	26'-2"	3'-6"	1**	6'-8"

Note Signs A, B, C and g1-g4 are listed from east to west  
 \*\* On signs with existing brackets to be reused, only proposed brackets, or brackets to be removed and re-erected, are listed  
 For 1B0161904R050.1B (Ogden Ave), all brackets except the western most bracket shall be installed at the location of the existing holes.  
 For 1B0161904R051.1A (Randolph St), the east bracket shall be removed and re-erected, one proposed bracket shall be installed at the west end of the sign, and two existing brackets shall be reused.  
 For 1B0161904R051.1B (Randolph St), one proposed bracket shall be installed, and three existing brackets shall be reused.  
 For 1B0161904R051.2A (Washington St), all 3 brackets shall be reused.  
 For 1B0161904R051.3A (Monroe St), the east and west bracket shall be removed and re-erected. The other three brackets shall be reused.  
 For 1B0161904R051.3B (Monroe St), the three east brackets shall be reused, and 1 proposed bracket shall be installed west of the western bracket.  
 \* Varies, see separate table



USER NAME =	all.issa	DESIGNED -	CP, LAB	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	LAB, JJS	REVISED -	
PLOT DATE =	1/23/2020	DRAWN -	CP	REVISED -	
		CHECKED -	LAB, JJS	REVISED -	

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**



SIGNED: *Moussa A. Issa*  
 DR. MOUSSA A. ISSA, S.E., IL. LIC. NO. 081-005738  
 EXPIRES 11-30-2020  
 DATE: 1/29/2020 FOR SHEETS SS72 THRU SS78  
 (TOTAL OF 7 SHEETS)

**GENERAL NOTES**

- SPECIFICATIONS:**
- 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.
- MINIMUM CLEARANCE: 3" greater than bridge members at all locations. (All Obstructions)
- WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 Structural Welding Code (Steel) and the Standard Specifications.
- MATERIALS: All Structural Steel Pipe shall be ASTM A53 Grade B with a minimum yield of 35,000 p.s.i., or A500 Grade B or C with a minimum yield of 46,000 p.s.i. 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 (M183, M223 Gr. 50.).
- HIGH STRENGTH BOLTS: All bolts, washers, nuts and locknuts shall satisfy the requirements of ASTM designation A307 unless noted as "H.S." which shall require AASHTO M164 (A325), ASTM A449, or approved alternate. All fasteners shall be hot dip galvanized per AASHTO M232 unless otherwise specified.
- 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: All-threaded rod shall conform to ASTM F1554 Grade 105, 3/4"  $\phi$  x 12" long, each with one plate washer and locknut and be hot dip galvanized per AASHTO M232. They shall be either cast into the concrete or epoxy grouted in accordance with Section 584 of the Standard Specifications. Minimum embedment in concrete shall be 9".
- Bracket spacing  $g \leq 6'-0"$ , max. Spacing shall be uniform if possible but may vary  $\pm 6"$  to miss existing obstruction (rail post, light poles, web stiffeners, splice plates, etc.). Adjust bracket lengths accordingly on skewed structures.
  - Any design modifications shall be based on the current version of applicable specifications and submitted for the Engineer's approval.
  - Unit price includes grating, handrail, brackets, supports, anchor bolts, fasteners, fabrication, delivery, erection, field drilling and other necessary items. Limits of payment are based sign width (cs). For Safety Chain Details and Details D, F and G, see Sheet SS78
  - If walkway bracket at safety chain location is behind sign, add angle to bracket. See detail on Sheet SS78

**NOTES:**

- "q" is measured from  $\phi$  Brg. of abutment along  $\phi$  of fascia beam/girder to edge of sign.
- "r" is measured from face of pier along  $\phi$  of fascia beam/girder to edge of sign.
- Walkway grating, walkway brackets, handrail, lighting, and associated components shown in these plans will not be installed with Contract 62A77.

**TOTAL BILL OF MATERIAL**

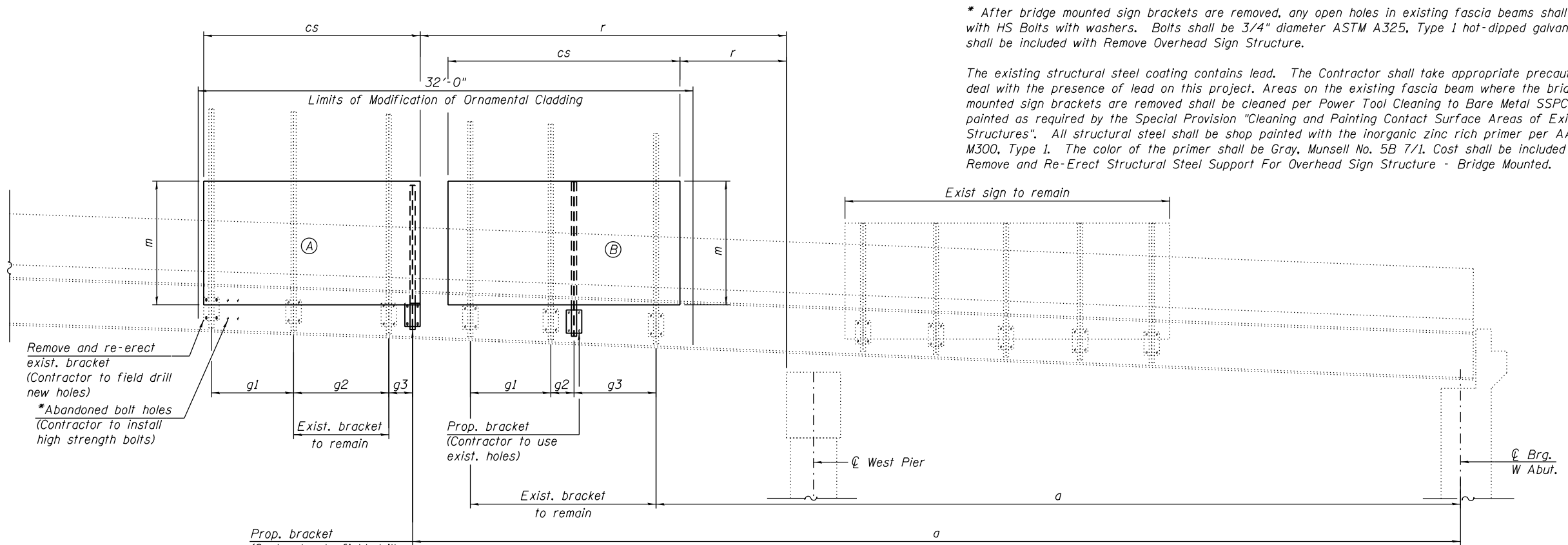
ITEM	UNIT	QUANTITY
OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED	FOOT	102
REMOVE AND RE-ERECT STRUCTURAL STEEL SUPPORT FOR OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED	EACH	3
STRUCTURAL STEEL SUPPORT FOR OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED	EACH	4
MODIFICATION OF ORNAMENTAL CLADDING	FOOT	65

**BRIDGE MOUNT SIGN STRUCTURES**  
**GENERAL PLAN AND ELEVATION**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	751
CONTRACT NO. 62A77				
ILLINOIS		FED. AID PROJECT		

SHEET NO. SS72 OF SS83 SHEETS

FILE NAME: D:\VAECOM-NA-AW51\ecomonline\local\VAECOM\_D502\_NAD\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_I\000\_CAD\008\_Structural\Sign\_Structures\62A77\_Sign\_Structure\62A77-BM-SS301A-SignStruct.dgn

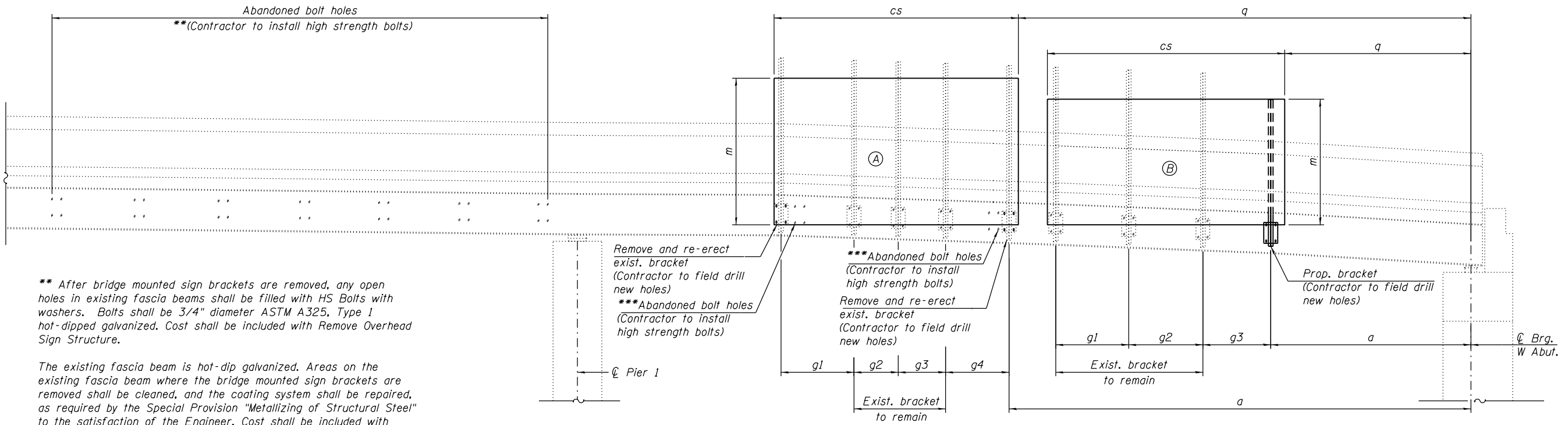


\* After bridge mounted sign brackets are removed, any open holes in existing fascia beams shall be filled with HS Bolts with washers. Bolts shall be 3/4" diameter ASTM A325, Type 1 hot-dipped galvanized. Cost shall be included with Remove Overhead Sign Structure.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project. Areas on the existing fascia beam where the bridge mounted sign brackets are removed shall be cleaned per Power Tool Cleaning to Bare Metal SSPC-SP-11 and painted as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures". All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. The color of the primer shall be Gray, Munsell No. 5B 7/1. Cost shall be included with Remove and Re-Erect Structural Steel Support For Overhead Sign Structure - Bridge Mounted.

**ELEVATION - SN 1B016I094R051.1**

North Fascia Girder of Randolph Street Bridge SN 016-0608  
(Looking South)  
(Ornamental cladding not shown for clarity)



\*\* After bridge mounted sign brackets are removed, any open holes in existing fascia beams shall be filled with HS Bolts with washers. Bolts shall be 3/4" diameter ASTM A325, Type 1 hot-dipped galvanized. Cost shall be included with Remove Overhead Sign Structure.

The existing fascia beam is hot-dip galvanized. Areas on the existing fascia beam where the bridge mounted sign brackets are removed shall be cleaned, and the coating system shall be repaired, as required by the Special Provision "Metallizing of Structural Steel" to the satisfaction of the Engineer. Cost shall be included with Remove Overhead Sign Structure.

\*\*\* Cost included with Remove and Re-Erect Structural Steel Support For Overhead Sign Structure - Bridge Mounted.

**ELEVATION - SN 1B016I094R051.3**

North Fascia Girder of Monroe Street Bridge SN 016-1700  
(Looking South)



USER NAME = jana.jssa	DESIGNED - AMS, LAB	REVISED -
PLOT SCALE = N.T.S	CHECKED - LAB, JJS	REVISED -
PLOT DATE = 03/04/2020	DRAWN - AMS	REVISED -
	CHECKED - LAB, JJS	REVISED -

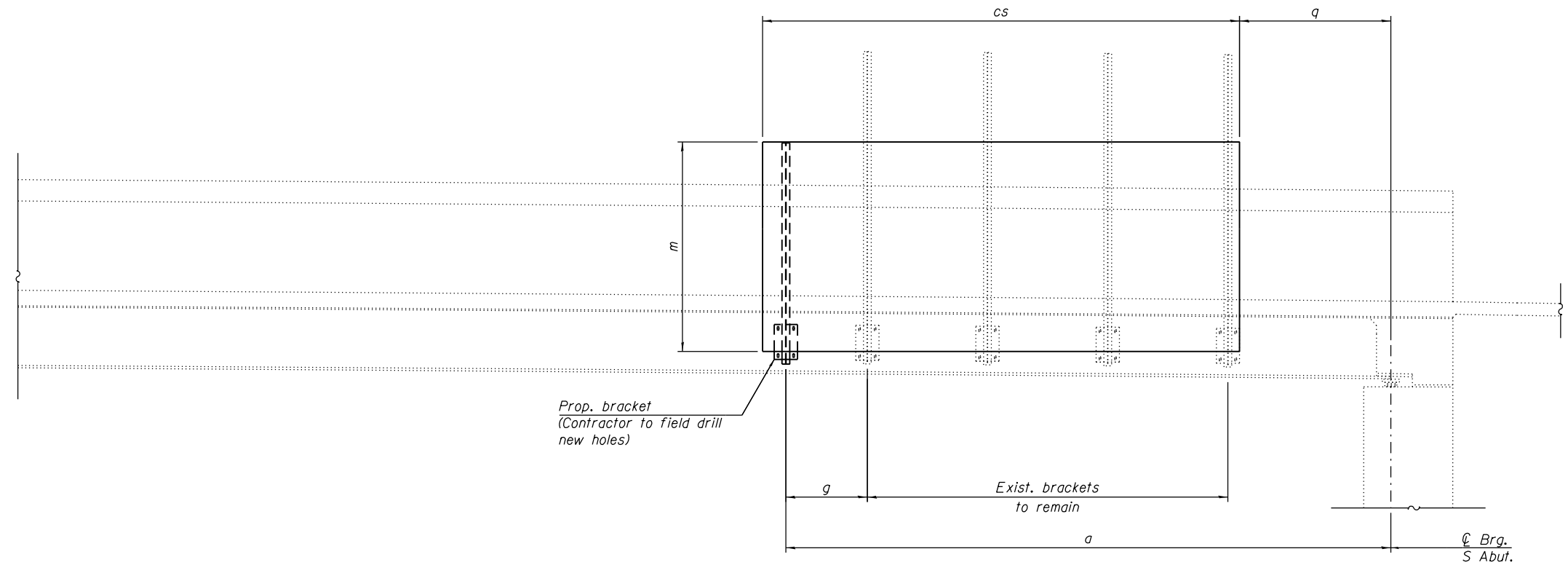
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BRIDGE MOUNT SIGN STRUCTURES  
ELEVATION

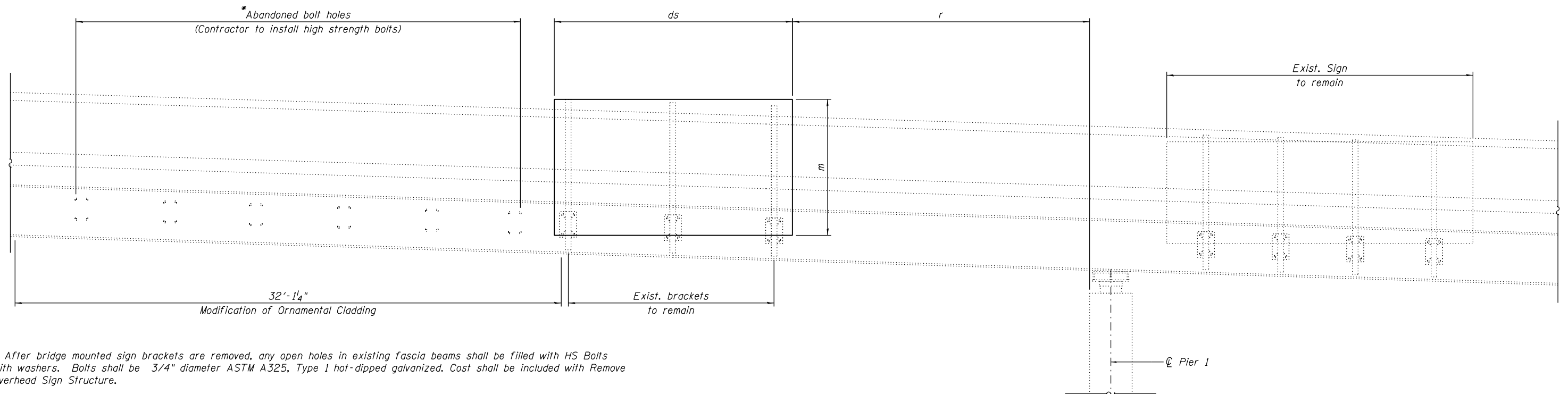
SHEET NO. SS73 OF SS83 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 752
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE NAME: D:\V\AE\COM-NA-AWS1\ae\comonline\local\AE\COM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_I\000\_CAD\008\_Structural\Sign\_Structures\62A77\_Sign\_Structure\62A77-BM-SS301B-SignStruct.dgn



**ELEVATION - SN 1B016I290R029.7**  
 West Fascia Girder of Peoria Bridge SN 016-1708  
 (Looking East)



\* After bridge mounted sign brackets are removed, any open holes in existing fascia beams shall be filled with HS Bolts with washers. Bolts shall be 3/4" diameter ASTM A325, Type 1 hot-dipped galvanized. Cost shall be included with Remove Overhead Sign Structure.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project. Areas on the existing fascia beam where the bridge mounted sign brackets are removed shall be cleaned per Power Tool Cleaning to Bare Metal SSPC-SP-11 and painted as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures". All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. The color of the primer shall be Gray, Munsell No. 5B 7/1. Cost shall be included with Remove Overhead Sign Structure.

**ELEVATION - SN 1B016I290R051.2**  
 North Fascia Girder of Washington Bridge SN 016-0601  
 (Looking South)  
 (Ornamental cladding not shown for clarity)



USER NAME = jana.jssa	DESIGNED - AMS, LAB	REVISED -
PLOT SCALE = N.T.S	CHECKED - LAB, JJS	REVISED -
PLOT DATE = 03/04/2020	DRAWN - AMS	REVISED -
	CHECKED - LAB, JJS	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

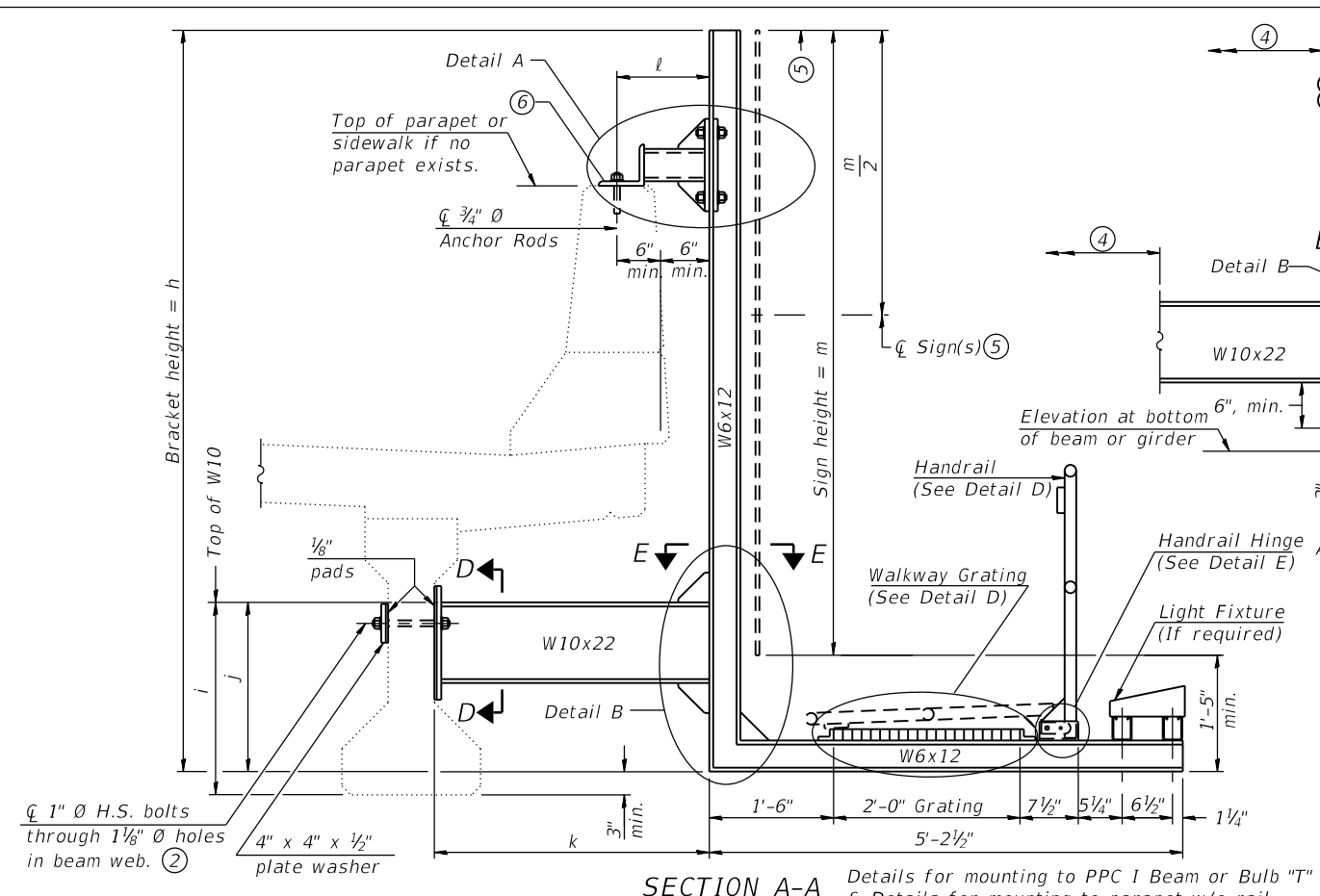
**BRIDGE MOUNT SIGN STRUCTURES  
 ELEVATION**

SHEET NO. SS74 OF SS83 SHEETS

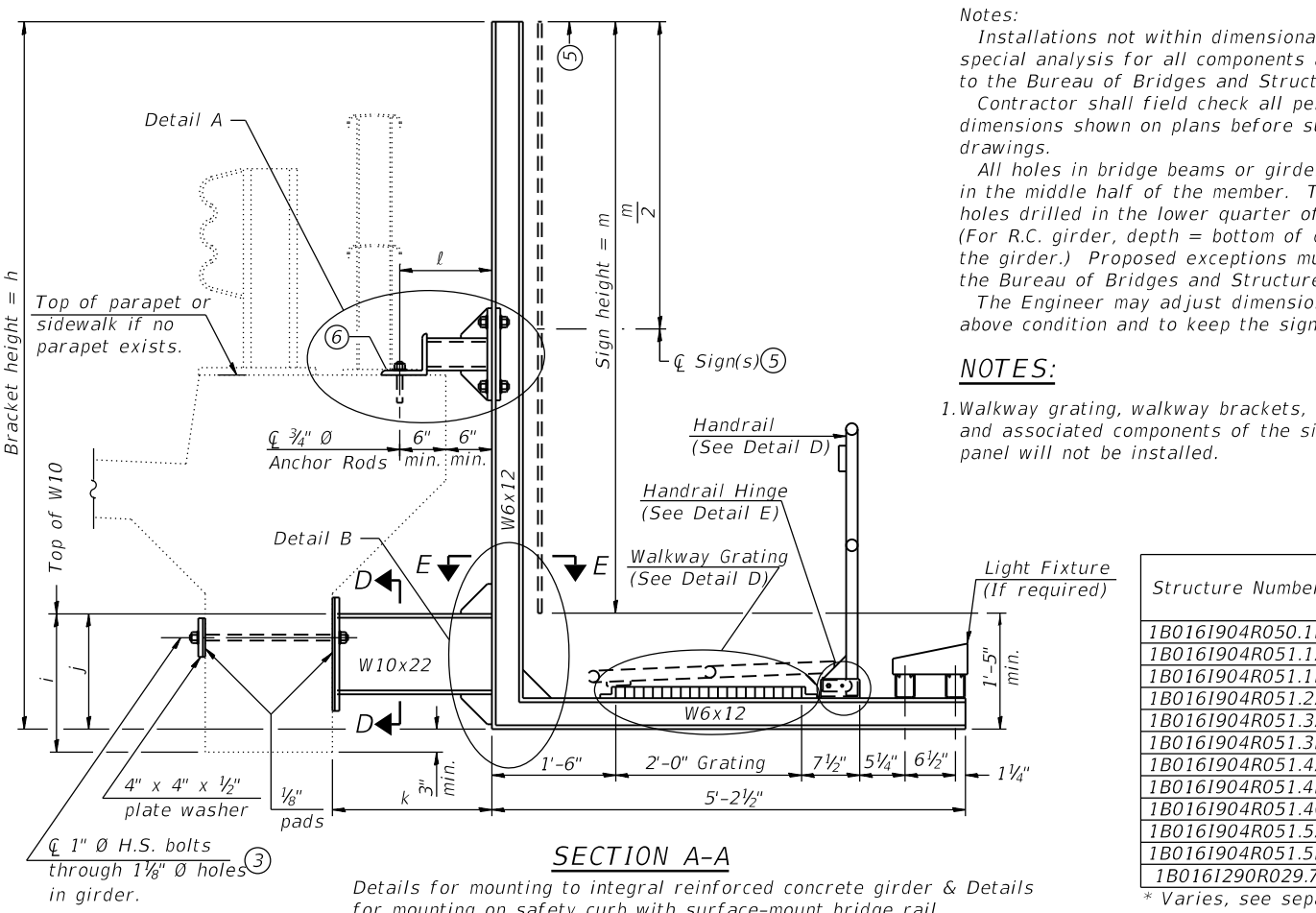
F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 753
CONTRACT NO. 62A77				

ILLINOIS FED. AID PROJECT

FILE NAME: P:\VACOM-NA-AWS1\ecomonline\local\AECOM\_DS02\_NAVDocuments\01\_Americas\Transportation\6269938\_Circle\Phase\_I\000\_CAD\008\_Structural\Sign\_Structures\62A77-Sign\_Structure\62A77-BM-SS302-SignStruct.dgn



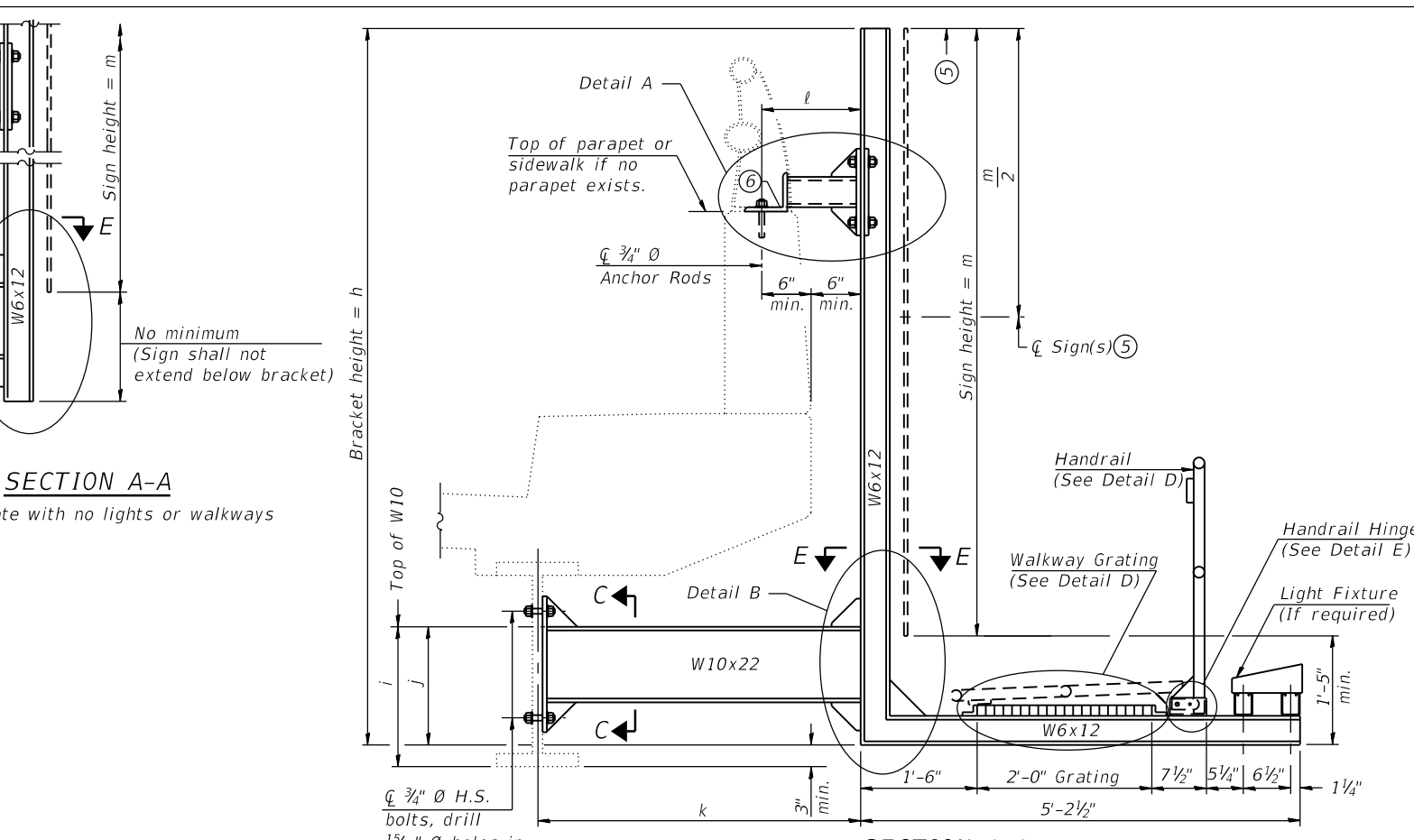
**SECTION A-A** Details for mounting to PPC I Beam or Bulb "T" & Details for mounting to parapet w/o rail



**SECTION A-A** Details for mounting to integral reinforced concrete girder & Details for mounting on safety curb with surface-mount bridge rail

**Notes:**  
 Installations not within dimensional limits shown require special analysis for all components and must be submitted to the Bureau of Bridges and Structures for approval. Contractor shall field check all pertinent existing bridge dimensions shown on plans before submitting shop drawings.  
 All holes in bridge beams or girders should be located in the middle half of the member. There shall be no holes drilled in the lower quarter of the member's depth. (For R.C. girder, depth = bottom of deck to bottom of the girder.) Proposed exceptions must be approved by the Bureau of Bridges and Structures.  
 The Engineer may adjust dimension "i" to meet the above condition and to keep the sign level.

**NOTES:**  
 1. Walkway grating, walkway brackets, handrail, lighting, and associated components of the sign structure/sign panel will not be installed.



**SECTION A-A** Details for mounting to steel beam or girder & Details for mounting with existing parapet mounted rail

- ① Holes in new steel members may be drilled in the fabrication shop or in the field. Field drill existing members.
- ② For new PPC I beams, holes shall be formed during casting. For existing PPC I beams, prestressing strand locations shall be determined and spaced to miss strands by 6", min. Minimize spalling during field drilling of existing beams.
- ③ For new construction, form holes. For existing RC beams, locate primary reinforcement and space holes to miss by 6", min. Minimize spalling and concrete fracturing/damage during field drilling of existing concrete. Spalls over 1/4" deep or beyond the coverage of the 4x4 plate washer shall be repaired with epoxy mortar before installing washer.
- ④ For attachment details of 3/2" pipe and W10x22, see other sections as applicable.
- ⑤ Sign shall not extend more than 6" above top of bracket, and this dimension may vary to keep sign level if bridge is on grade or vertical curve. Multiple signs of various heights shall share a common horizontal centerline and use equal bracket heights. If no sign is attached to a W6x12 vertical (bracket only supporting walkway), dimension h shall be the same as an adjacent bracket with a sign attached, unless Engineer specifically directs shorter brackets due to locational restraints on future uses. (See Detail A for minimum bracket height.)
- ⑥ For bridge mounted sign structures installed on new bridges with railing, during design, bracket spacing must be coordinated with railing post spacing and the Contractor must install upper brackets prior to railing installation. For bridge mounted sign structures installed on existing bridges with railing, during design, brackets spacing must be coordinated with railing post spacing and the Contractor must temporarily remove sections of railing to facilitate upper bracket installation. If it is determined during design that existing railings can't be removed, alternate upper connection details must be developed for the contract plans and approved by the Bureau of Bridges and Structures.

Structure Number	Bridge Name	i1-i3	i4-i5
1B0161904R051.4A	Adams Street	1'-8 1/2"	1'-7 3/4"

Structure Number	Bridge Name	Bridge Station	h	i	j	k max. (10'-0" max.)	l max. (8'-0" max.)	m (15'-0" max.)
1B0161904R050.1B	Ogden Avenue	4+68.12	12'-10"	1'-11"	1'-4 1/2"	4'-2 1/2"	1'-7"	11'-6"
1B0161904R051.1A	Randolph Street	8712+85.63	9'-4"	1'-11 1/2"	1'-4 1/2"	3'-9" **	2'-0" **	8'-0"
1B0161904R051.1B	Randolph Street	8712+69.34	10'-0"	1'-11 1/2"	1'-4 1/2"	3'-9" **	2'-0" **	8'-0"
1B0161904R051.2A	Washington Street	8612+79.10	8'-11" ^	-	-	-	-	8'-0"
1B0161904R051.3A	Monroe Street	8412+42.47	12'-6" ^	1'-11 1/4"	-	-	-	10'-6"
1B0161904R051.3B	Monroe Street	8412+23.13	10'-6"	1'-10 3/4"	1'-4 1/2"	3'-0" **	1'-0" **	9'-0"
1B0161904R051.4A	Adams Street	8312+46.14	15'-2"	*	1'-4 1/2"	3'-4 1/2"	1'-0"	14'-6"
1B0161904R051.4B	Adams Street	8312+28.06	15'-0"	1'-7 3/4"	1'-4 1/2"	3'-4 1/2"	1'-0"	13'-6"
1B0161904R051.4C	Adams Street	8312+11.56	13'-10"	1'-7 3/4"	1'-4 1/2"	3'-4 1/2"	1'-0"	11'-6"
1B0161904R051.5A	Jackson Blvd	8212+28.46	15'-0"	1'-10 1/4"	1'-4 1/2"	3'-4 1/2"	1'-0"	14'-6"
1B0161904R051.5B	Jackson Blvd	8212+11.46	14'-6"	1'-10 1/4"	1'-4 1/2"	3'-4 1/2"	1'-0"	13'-6"
1B0161290R029.7	Peoria Street	3702+77.68	9'-6"	1'-9 1/4"	1'-4 1/2"	4'-0"	1'-9"	9'-0"

\* Varies, see separate table ^ Height of existing bracket, for information only  
 \*\* Verify in field: match l and k of existing brackets to remain

For Details A & B, Sections C-C, D-D and E-E, see Sheet SS77.  
 For Details D & E, see Sheet SS78.



USER NAME =	all.jssa	DESIGNED -	CP, LAB	REVISED -	
		CHECKED -	LAB, JJS	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	CP	REVISED -	
PLOT DATE =	1/23/2020	CHECKED -	LAB, JJS	REVISED -	

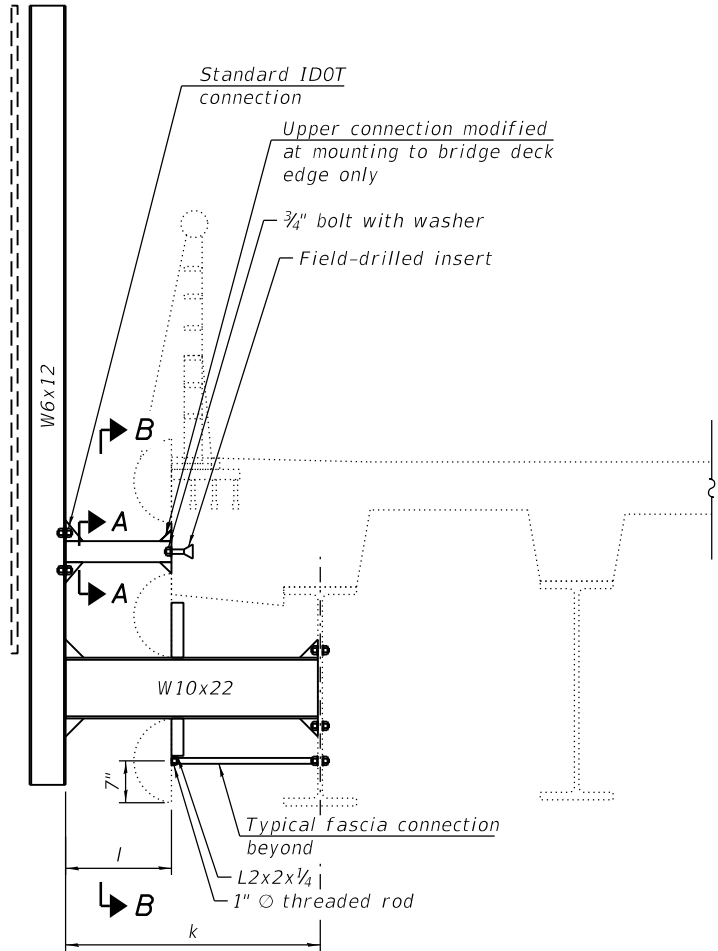
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BRIDGE MOUNT SIGN STRUCTURES**  
**WALKWAY AND CONNECTION DETAILS I**

SHEET NO. SS75 OF SS83 SHEETS

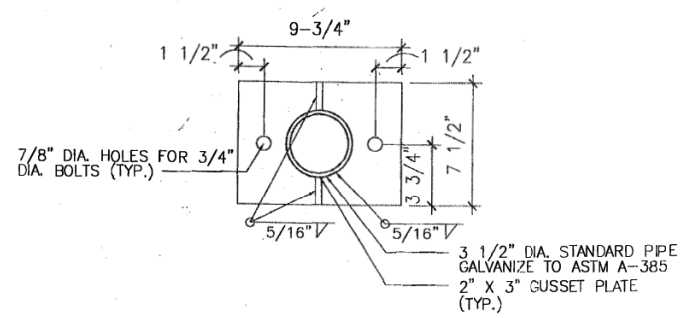
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	754
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE NAME: D:\V\AECOM-NA-AW51\_aecomonline\local\AECOM\_ID502\_NAVDocuments\01\_Americas\Transportation\60269938\_Circle\Phase\_I\0000\_CAD\008\_Structural\Sign\_Structures\62A77-BM-SS302A-SignStruct.dgn



**ORNAMENTAL CLADDING CONNECTION DETAIL**

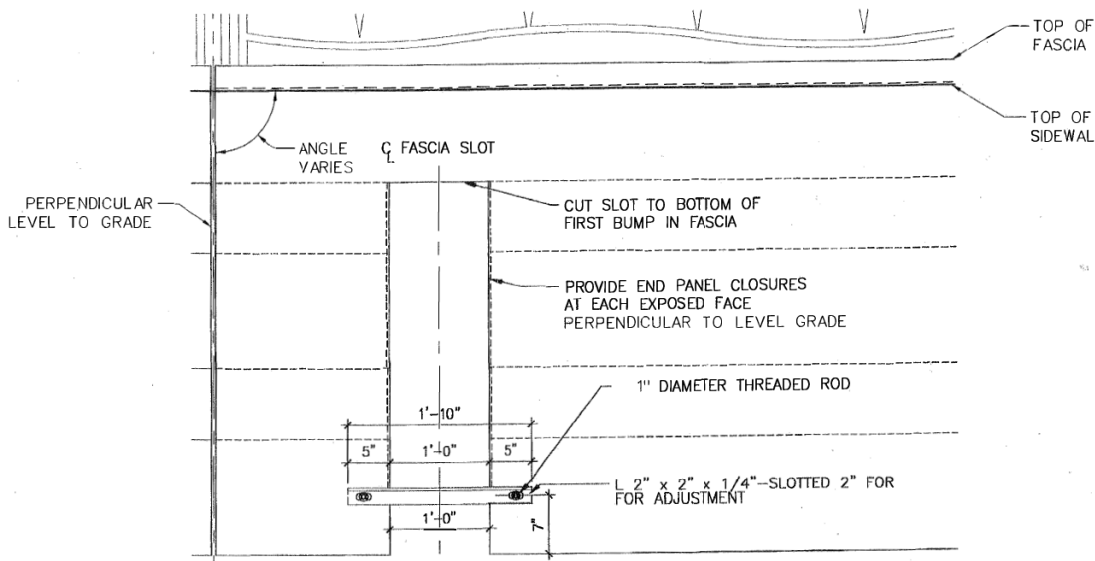
Note: All threaded rod conforming to ASTM A307, 3/4"x12" long each with one plate washer and locknut and be hot dip galvanized per AASHTO M232. They shall be epoxy grouted in accordance with section 584 of the standard specifications. Minimum embedment in concrete shall be 9".



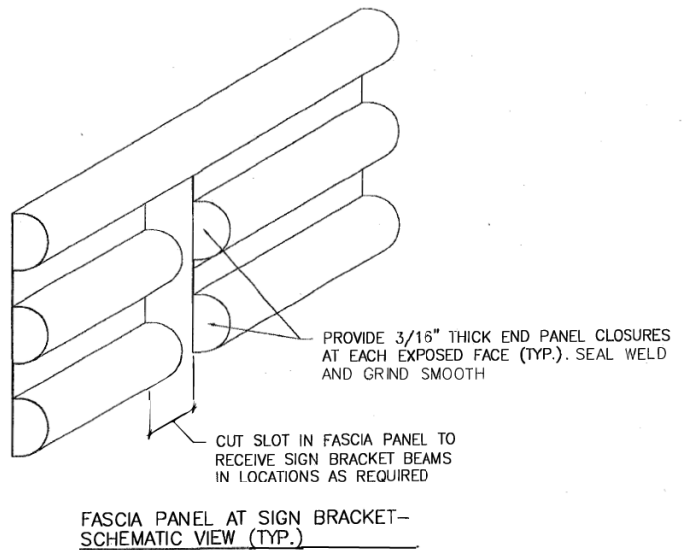
**VIEW A-A SUPPORT BRACKET DETAIL**

**NOTES:**

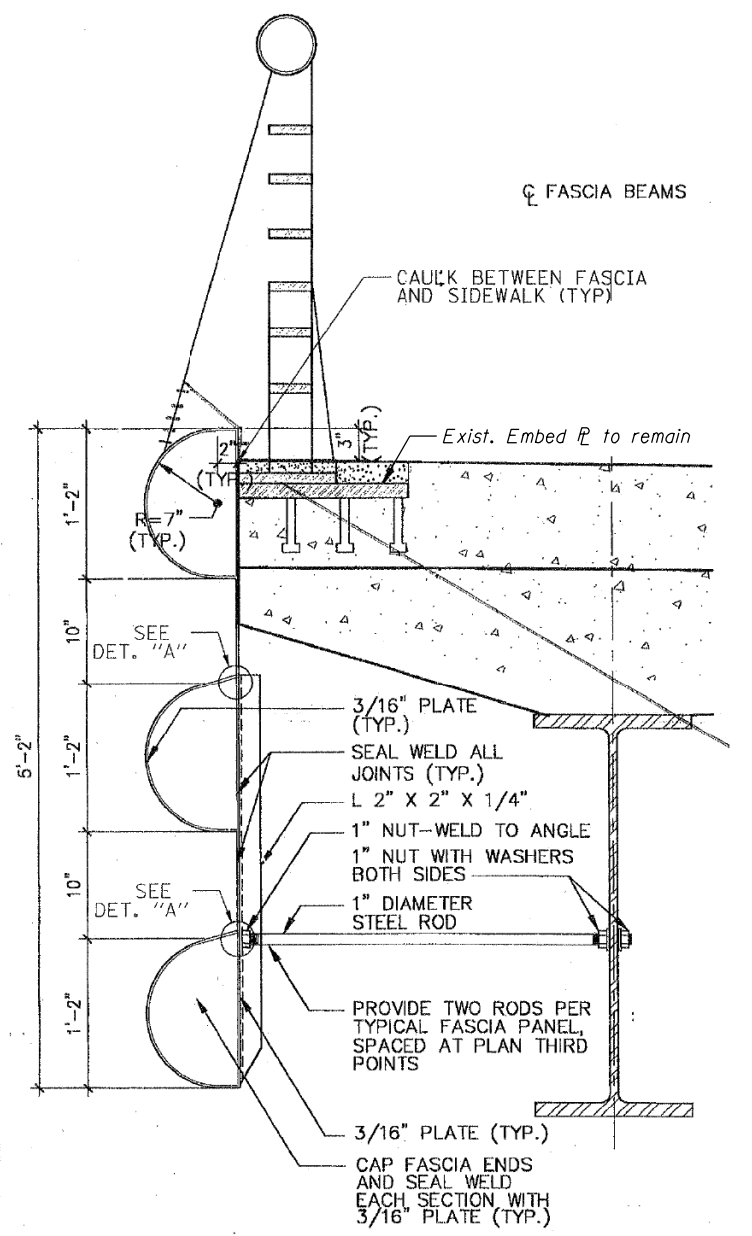
- Existing slots which are abandoned, due to removal or relocation of the sign structure supports, shall be filled.
- The existing ornamental cladding shall be modified per the details shown in the plans, or as directed by the Engineer, to permit connection of new sign structure supports to the existing structure.
- Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field-verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- The Contractor shall take all necessary precautions during removal/construction activities to avoid damage to existing elements to remain. Any damage to existing elements to remain, caused by the Contractor in the performance of his/her work, shall be repaired by the Contractor, to the satisfaction of the Engineer, at no cost to the Department.
- See Special Provision for Modification of Ornamental Cladding for details.



**VIEW B-B FASCIA SLOT DETAIL**

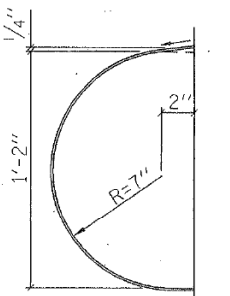


**FASCIA PANEL AT SIGN BRACKET- SCHEMATIC VIEW (TYP.)**



**ORNAMENTAL CLADDING DETAIL**

(SN 016-0601 & SN 016-0608, For Information Only)



USER NAME = jana.jssa	DESIGNED - CP, LAB	REVISED -
PLOT SCALE = N.T.S	CHECKED - LAB, JJS	REVISED -
PLOT DATE = 03/04/2020	DRAWN - CP	REVISED -
	CHECKED - LAB, JJS	REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

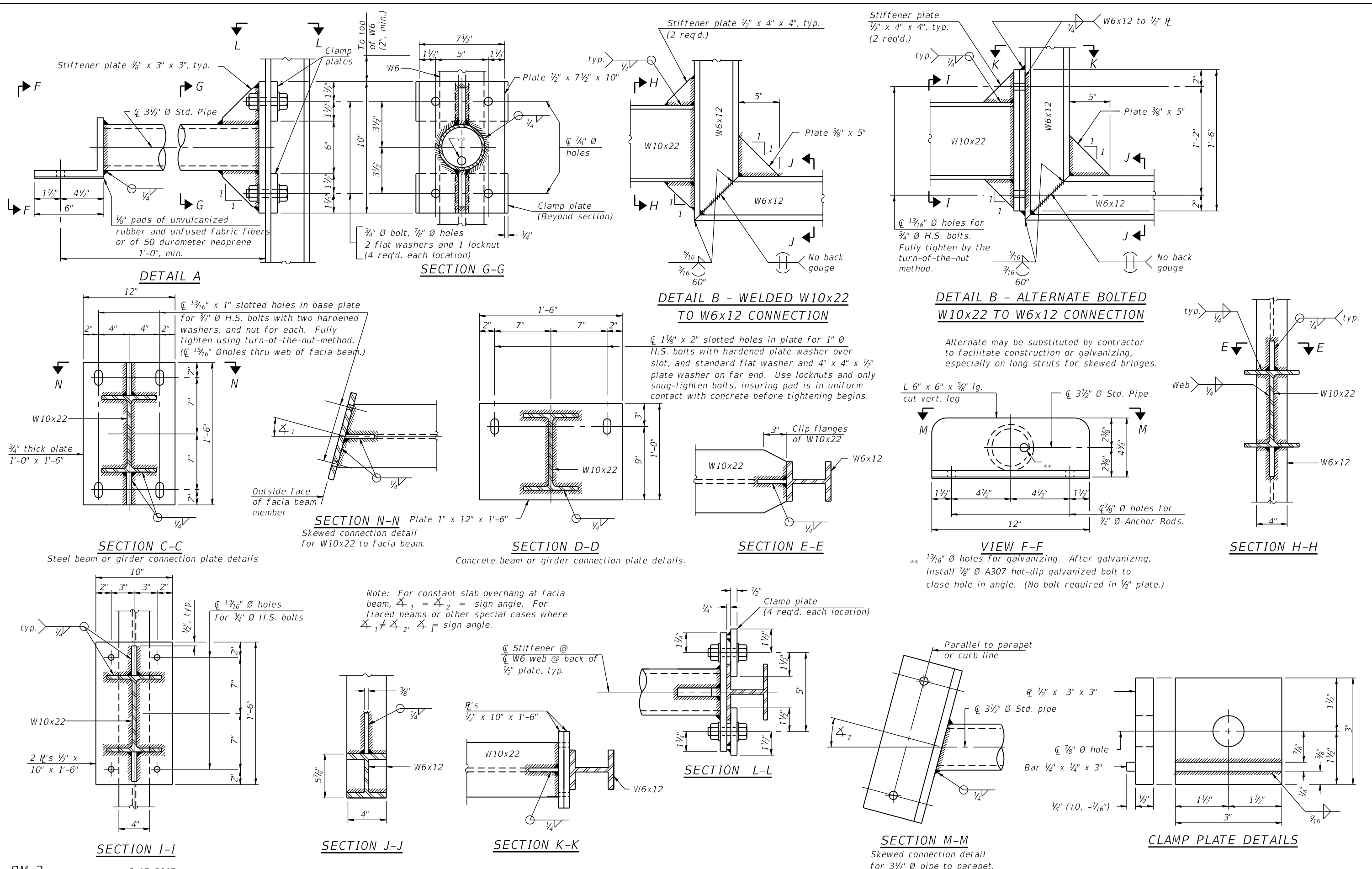
**BRIDGE MOUNT SIGN STRUCTURES WALKWAY AND CONNECTION DETAILS II**

SHEET NO. SS76 OF SS83 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 755
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				



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 BM-3  
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BM-3

2-17-2017



USER NAME =	alljssa	DESIGNED -	CP, LAB	REVISED -	
CHECKED -	LAB, JJS	CHECKED -	LAB, JJS	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	CP	REVISED -	
PLOT DATE =	1/23/2020	CHECKED -	LAB, JJS	REVISED -	

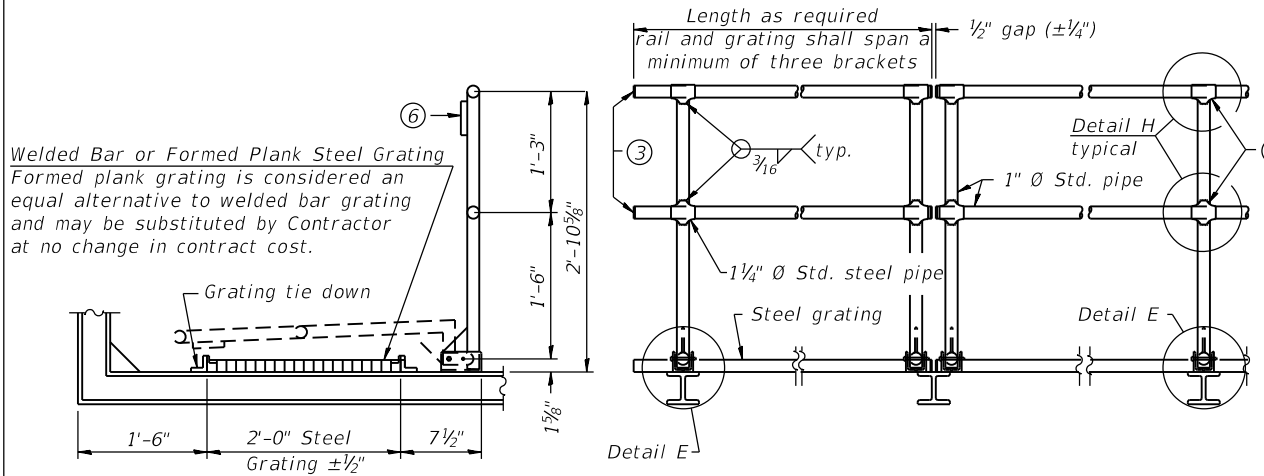
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BRIDGE MOUNT SIGN STRUCTURES**  
**CONNECTION DETAILS**

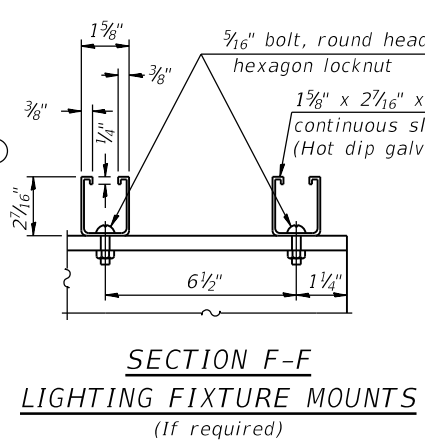
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90/94/290	2015-018R	COOK	1360	756
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

SHEET NO. SS77 OF SS83 SHEETS

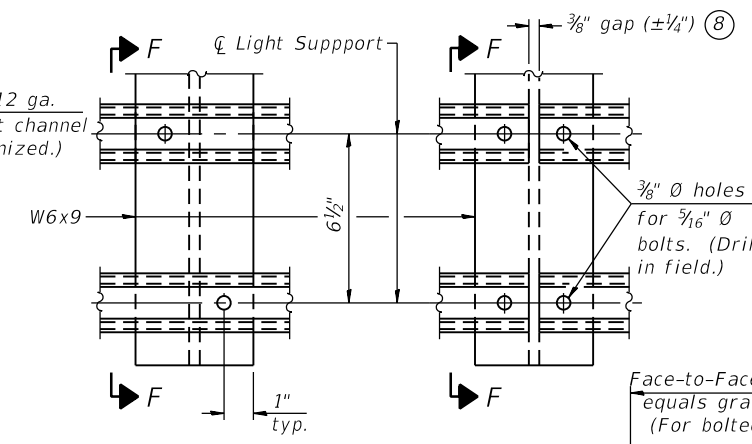
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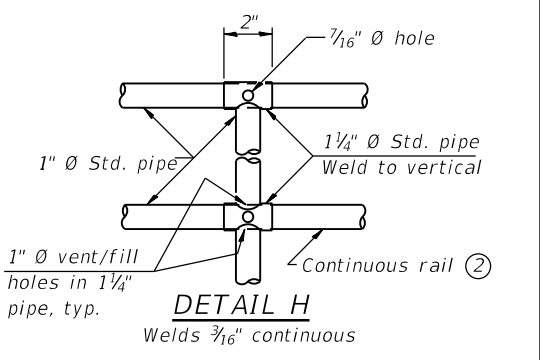
**SIDE ELEVATION DETAIL D HANDRAIL FRONT ELEVATION**



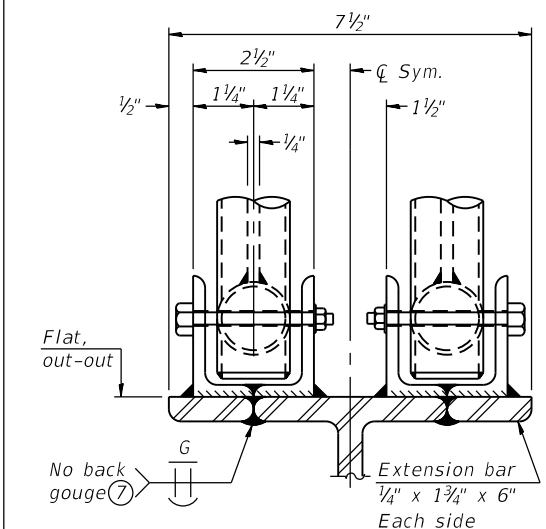
**SECTION F-F LIGHTING FIXTURE MOUNTS (If required)**



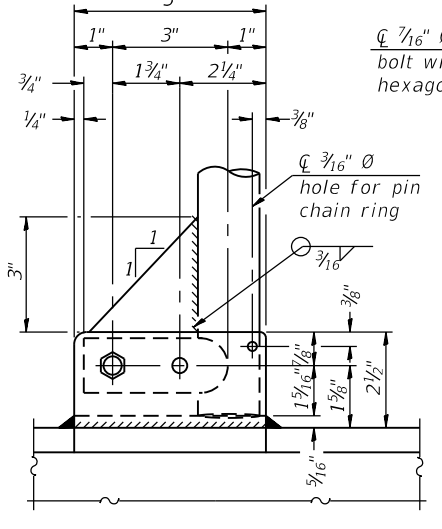
**DETAIL F DETAIL G**



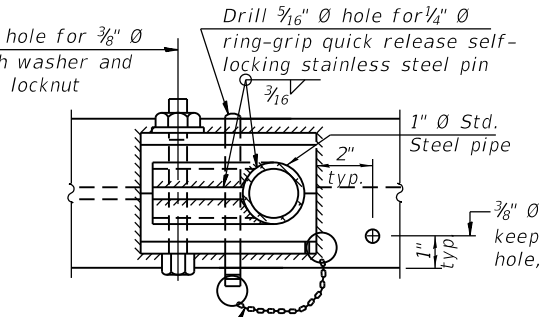
**DETAIL H Welds 3/16" continuous**



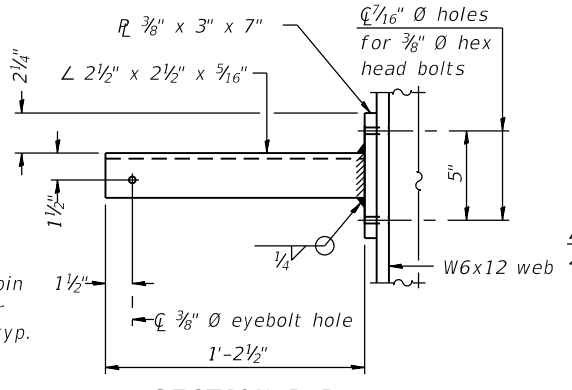
**ELEVATION AT HANDRAIL JOINT (Details not shown same as "FRONT ELEVATION")**



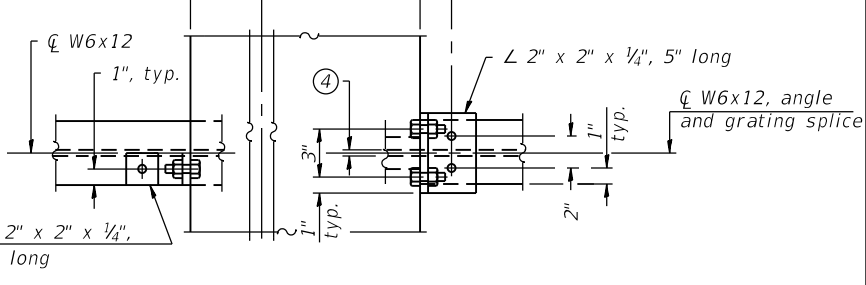
**SIDE ELEVATION**



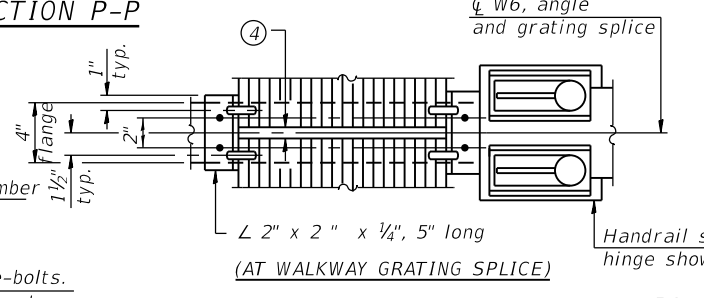
**PLAN AT SINGLE HANDRAIL HINGE DETAIL E**



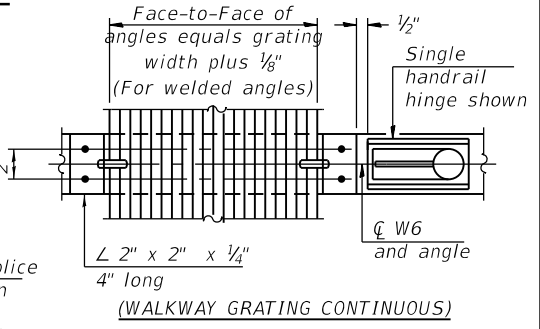
**SECTION P-P**



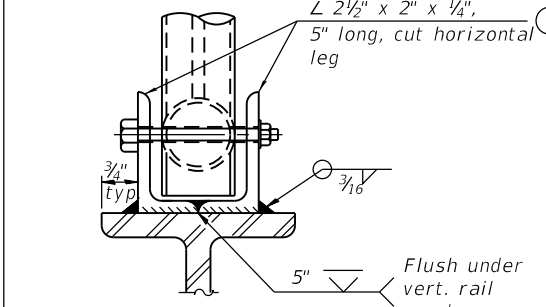
**VIEW W-W**



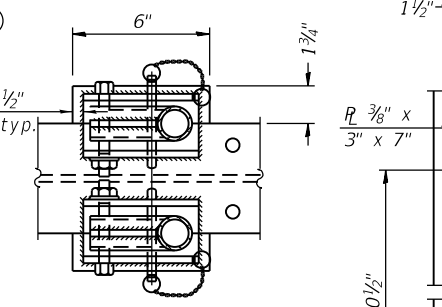
**PLAN (AT WALKWAY GRATING SPLICE)**



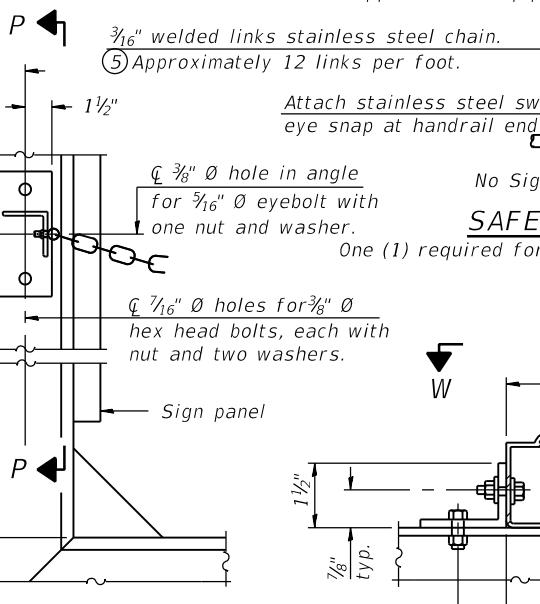
**PLAN (WALKWAY GRATING CONTINUOUS)**



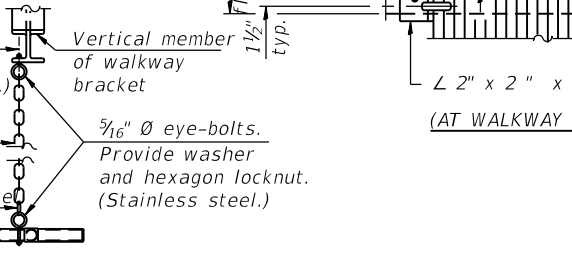
**FRONT ELEVATION (See above Elevations for dimensions.)**



**PLAN AT HANDRAIL JOINT (For Details, see Elevations.)**

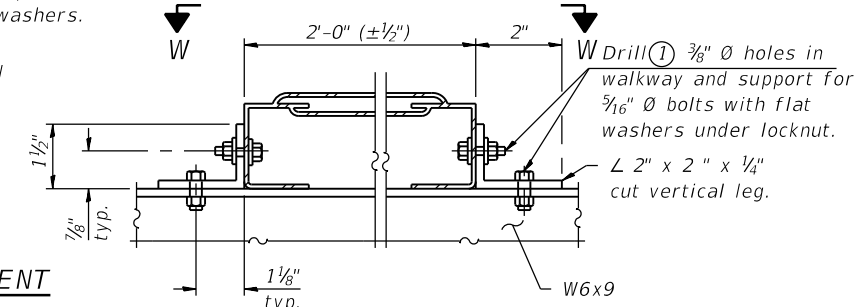


**SAFETY CHAIN ATTACHMENT (With Sign Present)**



**SAFETY CHAIN**

One (1) required for each end of each walkway.



**ALTERNATE FORMED PLANK GRATING DETAILS**

Plank Grating: nominal depth = 2 1/2" (± 1/2"); perforated or expanded steel sheet with a non-skid surface (non-serrated) concentrated load capacity = 500 lbs. with 6'-0" clear span.

- NOTES**
- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment. Field drilled holes must be touched up with galvanized paint.
  - Horizontal rail member shall be continuous thru 1 1/4" Std. pipe. Provide 3/8" hole in 1 1/4" Std. pipe for 3/8" bolt. Field drill 3/16" hole in horizontal rail member. Provide washer and locknut for bolt. (Use 3/16" eyebolts in 3/16" holes on top rail at ends only.)
  - Install standard force-fit end caps or weld 1/8" end plates with 1/8" c.f.w. and grind smooth. (All rail ends.)
  - 3/8" (± 1/4") gap between grating panels at splice.
  - Chain to be type 304L stainless steel suitable for prolonged exterior exposure. Approximately 3'-6" long chain per location. Maximum sag with handrail erected = 4".
  - R 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
  - Extrusions may be used in lieu of details shown, with approval by Engineer.
  - Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.

**WELDED BAR GRATING DETAILS**

2-17-2017



USER NAME =	alljssa	DESIGNED -	CP, LAB	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	LAB, JJS	REVISED -	
PLOT DATE =	1/23/2020	DRAWN -	CP	REVISED -	
		CHECKED -	LAB, JJS	REVISED -	

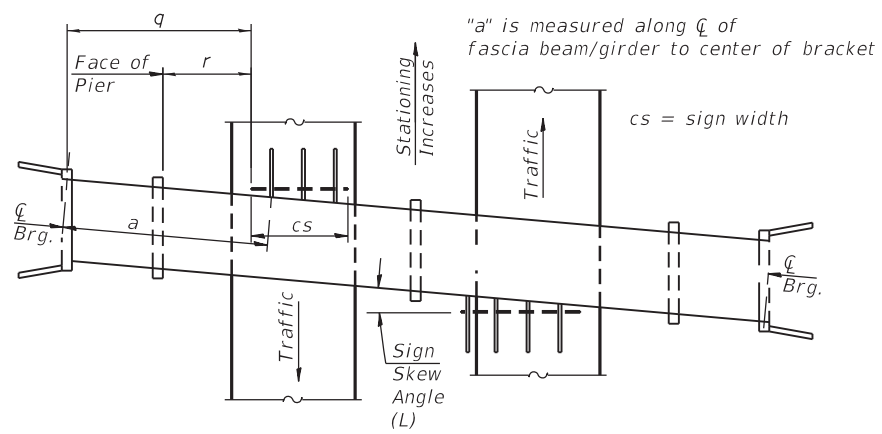
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**BRIDGE MOUNT SIGN STRUCTURES WALKWAY DETAILS**

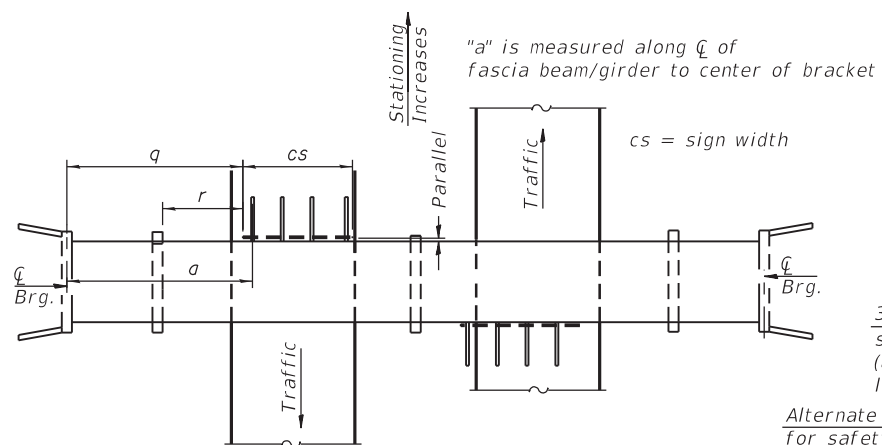
SHEET NO. SS78 OF SS83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	757
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

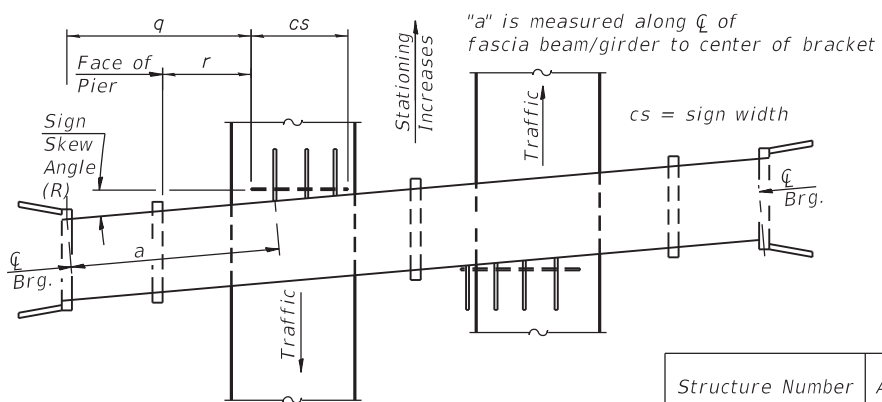
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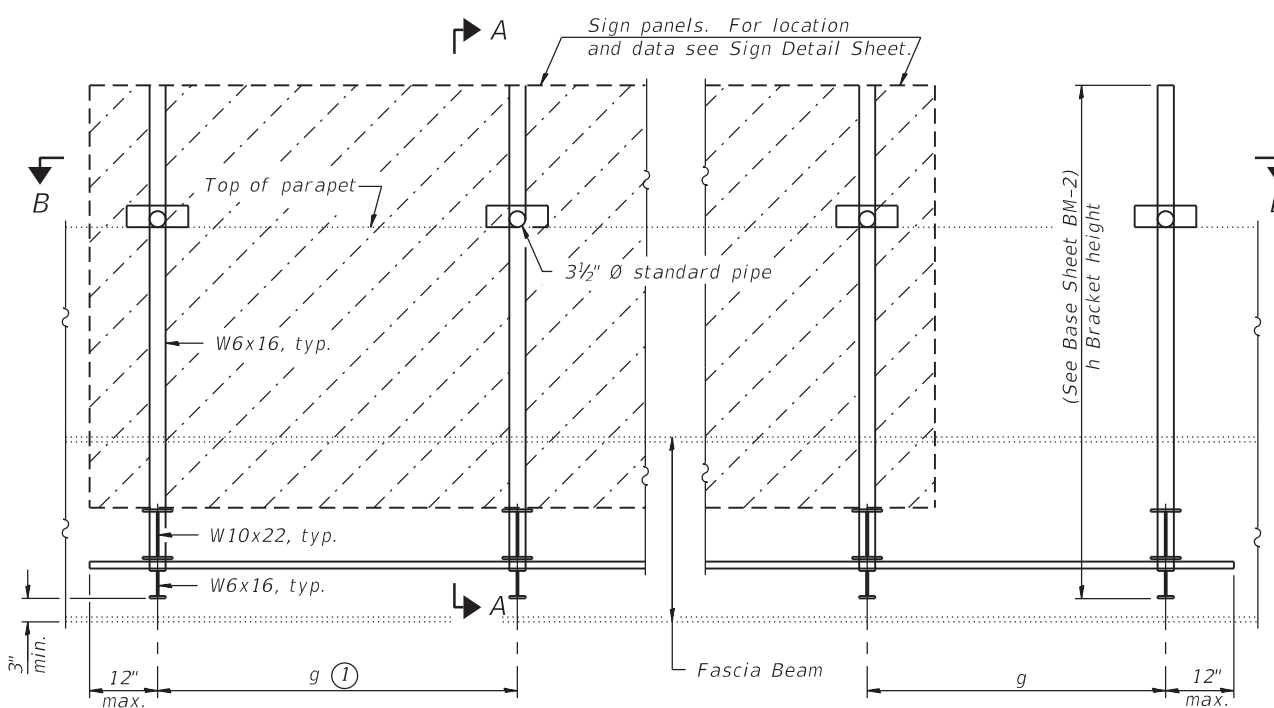
**PLAN**  
(Left Sign Skew > 15°)  
**WALKWAY AND HANDRAIL SKETCH**  
(Road plan beneath structure varies.)



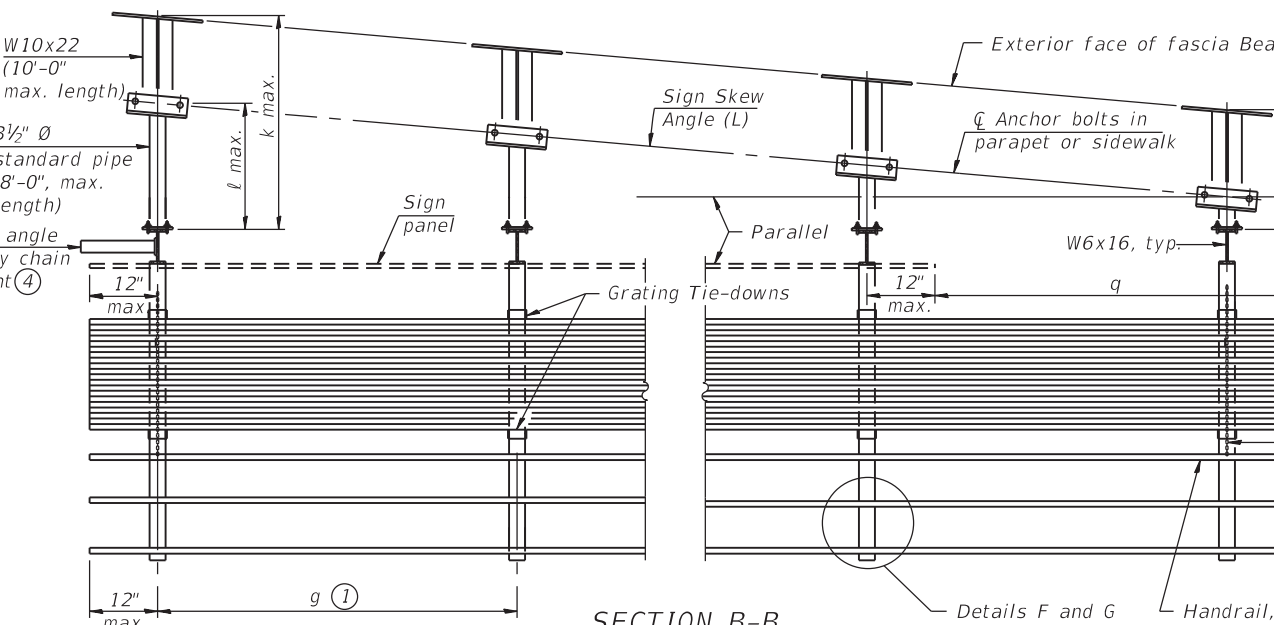
**PLAN**  
(For Sign Skew ≤ 15°, all brackets constant)  
**WALKWAY AND HANDRAIL SKETCH**  
(Road plan beneath structure varies.)



**PLAN**  
(Right Sign Skew > 15°)  
**WALKWAY AND HANDRAIL SKETCH**  
(Road plan beneath structure varies.)



**TYPICAL FRONT ELEVATION**  
(With lights, safety chain and handrail omitted for clarity.)



**SECTION B-B**  
(Shown: Left Sign Skew > 15°)

Structure Number	Sign Skew Angle (L) or (R)	Bridge Station	Bridge Structure Number	Bridge Name	Contract Route Designation	cs	r	a	g	No. of Brackets	q
1B0161904R050.1A	0°	4+30.70	016-2047	Ogden Avenue	SB I-90/94	53'-0"	-	31'-3 3/4"	*	10	30'-7"

Note signs A, B and g1-g9 are listed from east to west.  
For 1B0161904R050.1A (Ogden Ave), all brackets except the east bracket shall be installed at the location of the existing holes.  
\* Varies, see separate table

Structure Number	Bridge Name	g1	g2	g3-g7	g8	g9
1B0161904R050.1A	Ogden Avenue	5'-1 3/4"	5'-7"	6'-0"	6'-1 1/2"	4'-4 1/2"

Dimensions a & g may vary as approved by the Engineer, see ①.  
When cw < cs and/or dw < ds, use alternate brackets without walkway supports where applicable, see ③.

**GENERAL NOTES**

- SPECIFICATIONS:**
- 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.
- MINIMUM CLEARANCE:** 3" greater than bridge members at all locations. (All Obstructions)
- WELDING:** All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 Structural Welding Code (Steel) and the Standard Specifications.
- MATERIALS:** All Structural Steel Pipe shall be ASTM A53 Grade B with a minimum yield of 35,000 p.s.i., or A500 Grade B or C with a minimum yield of 46,000 p.s.i. 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 (M183, M223 Gr. 50.).
- HIGH STRENGTH BOLTS:** All bolts, washers, nuts and locknuts shall satisfy the requirements of ASTM designation A307 unless noted as "H.S." which shall require AASHTO M164 (A325), ASTM A449, or approved alternate. All fasteners shall be hot dip galvanized per AASHTO M232 unless otherwise specified.
- 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:** All-threaded rod shall conform to ASTM F1554 Grade 105, 3/4" Ø x 12" long, each with one plate washer and locknut and be hot dip galvanized per AASHTO M232. They shall be either cast into the concrete or epoxy grouted in accordance with Section 584 of the Standard Specifications. Minimum embedment in concrete shall be 9".

- Bracket spacing  $g \leq 6'-0"$ , max. Spacing shall be uniform if possible but may vary  $\pm 6"$  to miss existing obstruction (rail post, light poles, web stiffeners, splice plates, etc.). Adjust bracket lengths accordingly on skewed structures.
- Any design modifications shall be based on the current version of applicable specifications and submitted for the Engineer's approval.
- Unit price includes grating, handrail, brackets, supports, anchor bolts, fasteners, fabrication, delivery, erection, field drilling and other necessary items. Limits of payment are based on sign width (cs). For Safety Chain Details and Details D, F and G, see Sheet SS83
- If walkway bracket at safety chain location is behind sign, add angle to bracket. See detail on Sheet SS83

**NOTES:**

- "q" is measured from  $\phi$  Brg. of abutment along  $\phi$  of fascia beam/girder to edge of sign.
- "r" is measured from face of pier along  $\phi$  of fascia beam/girder to edge of sign.
- Walkway grating, walkway brackets, handrail, lighting, and associated components shown in these plans will not be installed in Contract 62A77.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
OVERHEAD SIGN STRUCTURE- BRIDGE MOUNTED (SPECIAL)	FOOT	53



SIGNED Moussa A. Issa  
DR. MOUSSA A. ISSA, S.E., IL. LIC. NO. 081-005738  
EXPIRES 11-30-2020  
DATE 1/29/2020 FOR SHEETS SS79 THRU SS83  
(TOTAL OF 5 SHEETS)



USER NAME = all.issa	DESIGNED - CP, LAB	REVISED -
PLOT SCALE = N.T.S	CHECKED - LAB, JJS	REVISED -
PLOT DATE = 1/23/2020	DRAWN - CP	REVISED -
	CHECKED - LAB, JJS	REVISED -

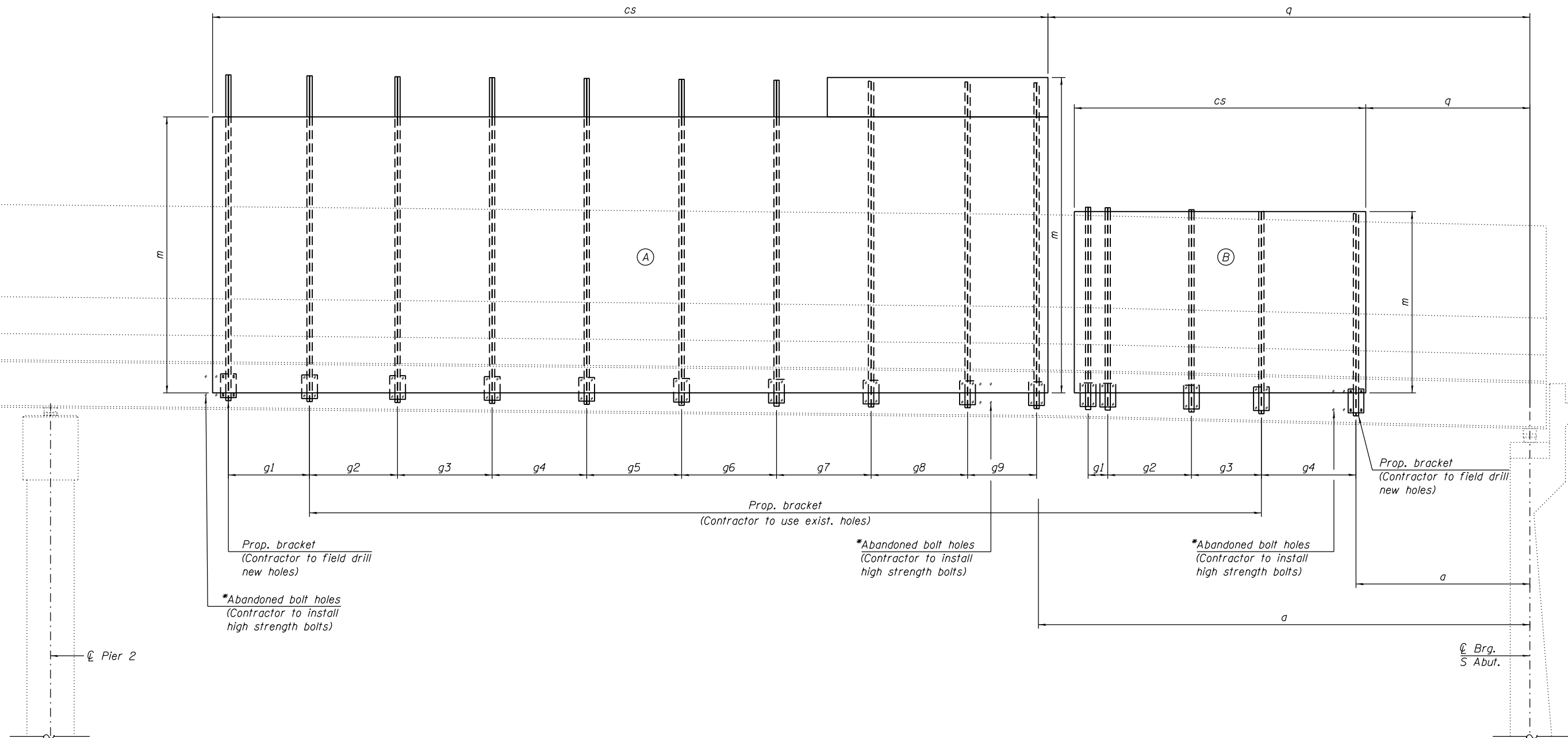
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BRIDGE MOUNT SIGN STRUCTURES**  
**GENERAL PLAN AND ELEVATION**

SHEET NO. SS79 OF SS83 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 758
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE NAME: D:\V\AECOM\NA-AW51\_aecomonline\local\AECOM\_ID502\_NAD\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_I\000\_CAD\008\_Structural\Sign\_Structures\62A77\_Sign\_Structure\62A77-BM-SS305A-SignStruct.dgn



**ELEVATION - SN 1B0161094R050.1**

West Fascia Girder of Ogden Avenue Bridge SN 016-2047  
Looking Southeast

\* After bridge mounted sign brackets are removed, any open holes in existing fascia beams shall be filled with HS Bolts with washers. Bolts shall be 3/4" diameter ASTM A325, Type 1 hot-dipped galvanized. Cost shall be included with Remove Overhead Sign Structure.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project. Areas on the existing fascia beam where the bridge mounted sign brackets are removed shall be cleaned per Power Tool Cleaning to Bare Metal SSPC-SP-11 and painted as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures". All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. The color of the primer shall be Reddish Brown, Munsell No. 2.5YR 3/4. Cost shall be included with Remove Overhead Sign Structure.



USER NAME =	all.jssa	DESIGNED -	AMS, LAB	REVISED -	
		CHECKED -	LAB, JJS	REVISED -	
PLOT SCALE =	N.T.S	DRAWN -	AMS	REVISED -	
PLOT DATE =	1/23/2020	CHECKED -	LAB, JJS	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

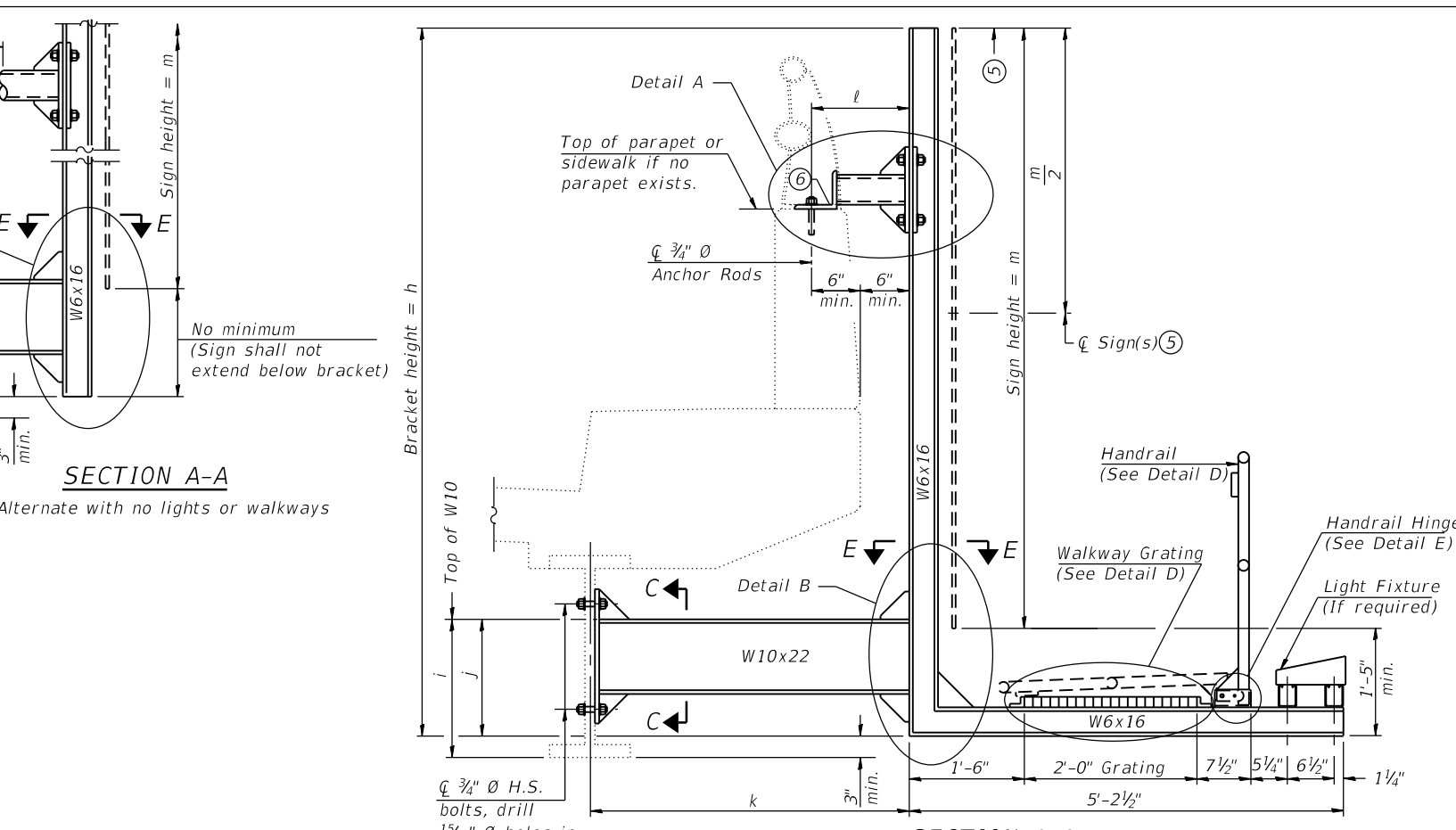
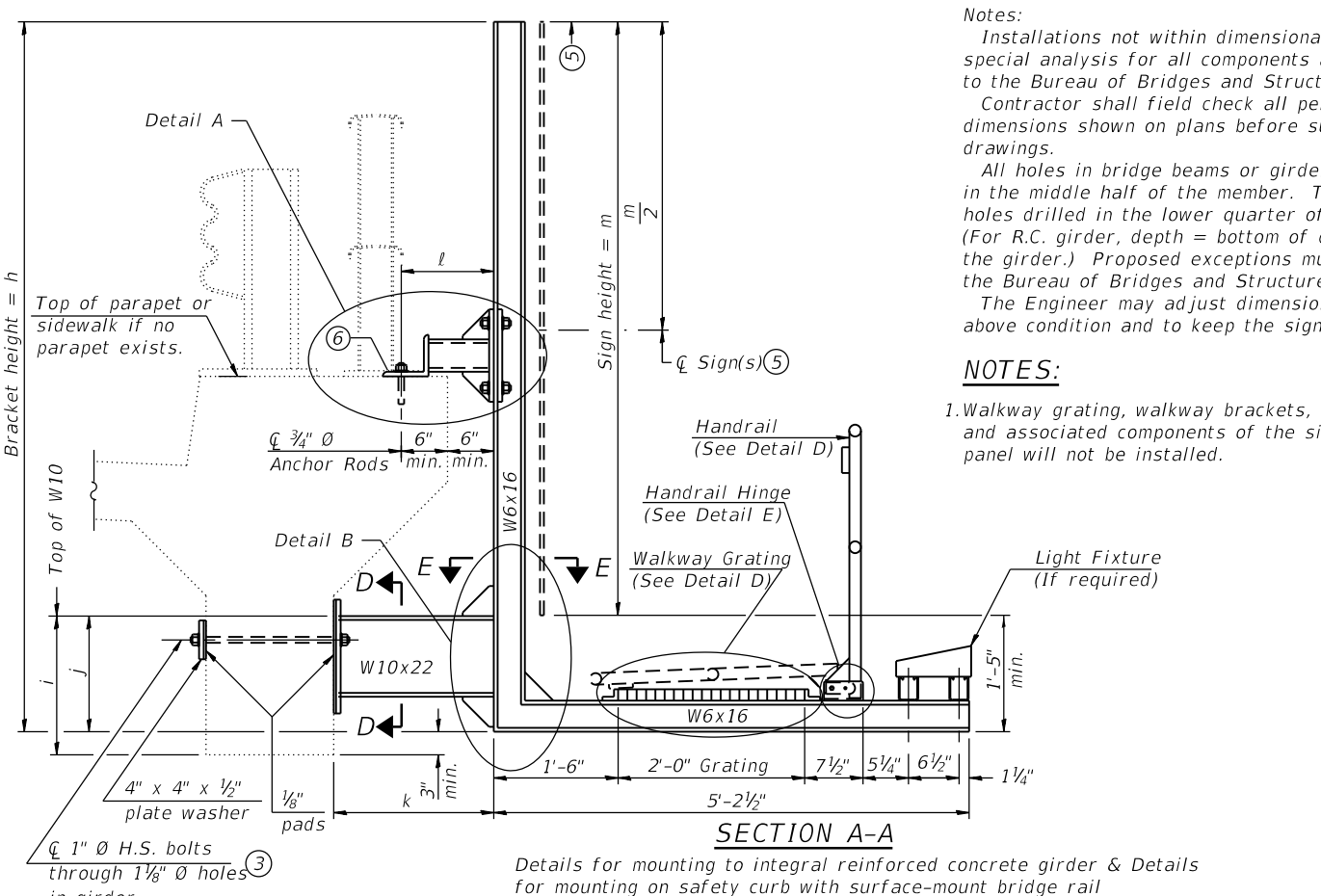
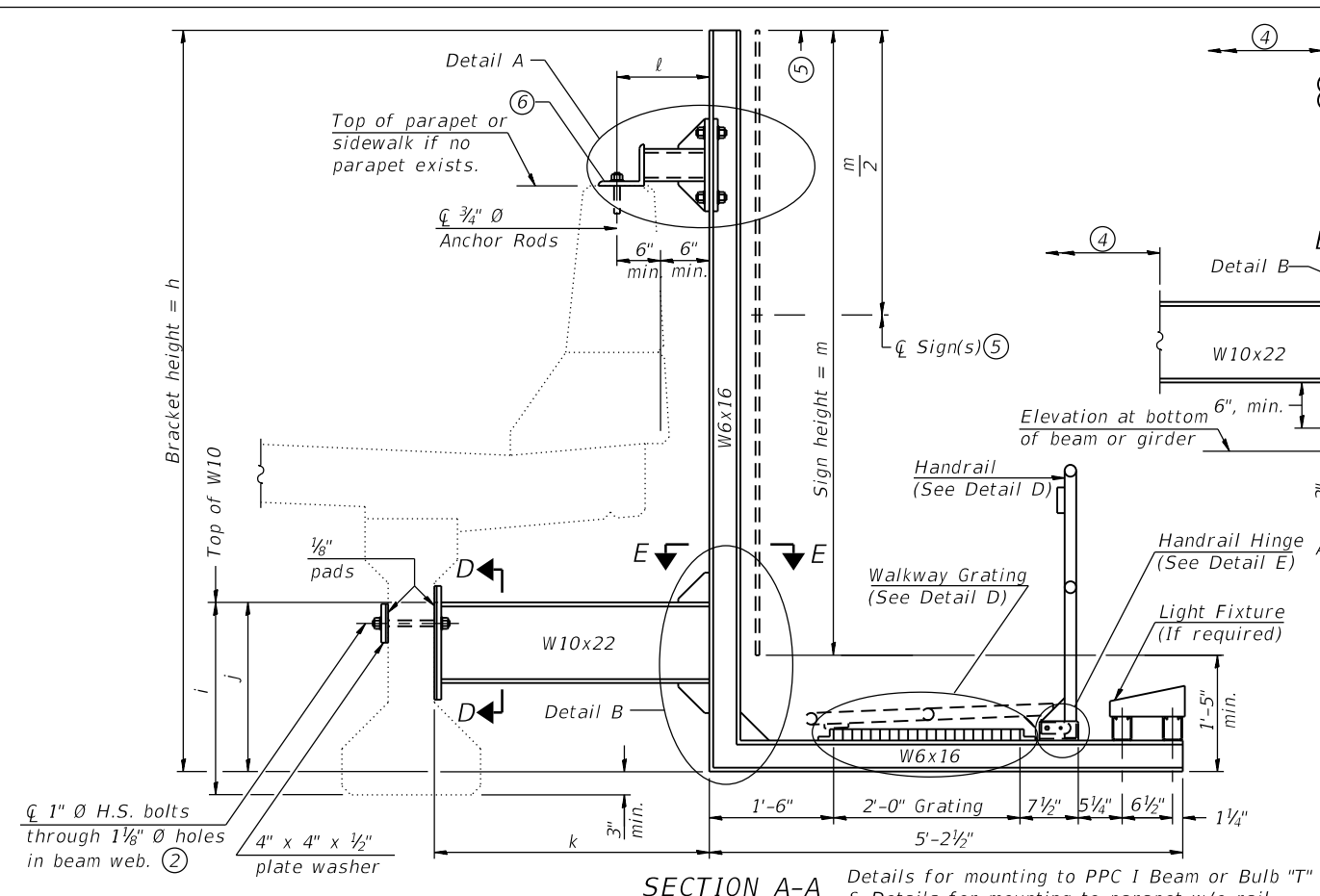
**BRIDGE MOUNT SIGN STRUCTURES  
ELEVATION**

SHEET NO. SS80 OF SS83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	759
CONTRACT NO. 62A77				

ILLINOIS FED. AID PROJECT

FILE NAME: P:\V\AECOM-NA-AWS1\...; I:\AECOM\Transportation\6269938\_Circle\Phase\_I\000\_CAD\008\_Structural\Sign\_Structure\62A77-BM-SS306-SignStruct.dgn



- NOTES:**
- Installations not within dimensional limits shown require special analysis for all components and must be submitted to the Bureau of Bridges and Structures for approval. Contractor shall field check all pertinent existing bridge dimensions shown on plans before submitting shop drawings. All holes in bridge beams or girders should be located in the middle half of the member. There shall be no holes drilled in the lower quarter of the member's depth. (For R.C. girder, depth = bottom of deck to bottom of the girder.) Proposed exceptions must be approved by the Bureau of Bridges and Structures. The Engineer may adjust dimension "i" to meet the above condition and to keep the sign level.
  - Holes in new steel members may be drilled in the fabrication shop or in the field. Field drill existing members.
  - For new PPC I beams, holes shall be formed during casting. For existing PPC I beams, prestressing strand locations shall be determined and spaced to miss strands by 6", min. Minimize spalling during field drilling of existing beams.
  - For new construction, form holes. For existing RC beams, locate primary reinforcement and space holes to miss by 6", min. Minimize spalling and concrete fracturing/damage during field drilling of existing concrete. Spalls over 1/4" deep or beyond the coverage of the 4x4 plate washer shall be repaired with epoxy mortar before installing washer.
  - For attachment details of 3 1/2" pipe and W10x22, see other sections as applicable. For Details A & B, Sections C-C, D-D and E-E, see Sheet SS82. For Details D & E, see Sheet SS83.
  - Sign shall not extend more than 6" above top of bracket, and this dimension may vary to keep sign level if bridge is on grade or vertical curve. Multiple signs of various heights shall share a common horizontal centerline and use equal bracket heights. If no sign is attached to a W6x12 vertical (bracket only supporting walkway), dimension h shall be the same as an adjacent bracket with a sign attached, unless Engineer specifically directs shorter brackets due to locational restraints on future uses. (See Detail A for minimum bracket height.)
  - For bridge mounted sign structures installed on new bridges with railing, during design, bracket spacing must be coordinated with railing post spacing and the Contractor must install upper brackets prior to railing installation. For bridge mounted sign structures installed on existing bridges with railing, during design, brackets spacing must be coordinated with railing post spacing and the Contractor must temporarily remove sections of railing to facilitate upper bracket installation. If it is determined during design that existing railings can't be removed, alternate upper connection details must be developed for the contract plans and approved by the Bureau of Bridges and Structures.

Structure Number	Bridge Name	Bridge Station	h	i	j	k max. (10'-0" max.)	l max. (8'-0" max.)	m
1B0161904R050.1A	Ogden Avenue	4+30.70	20'-8"	1'-11"	1'-4 1/2"	4'-2 1/2"	1'-7"	Varies from 17'-6" to 20'-0"

BM-2-SPECIAL

2-17-2017

<b>HBM</b> ENGINEERING GROUP, LLC	USER NAME = all.jssa	DESIGNED - CP, LAB	REVISED -
	PLOT SCALE = N.T.S	CHECKED - LAB, JJS	REVISED -
	PLOT DATE = 1/23/2020	DRAWN - CP	REVISED -
		CHECKED - LAB, JJS	REVISED -

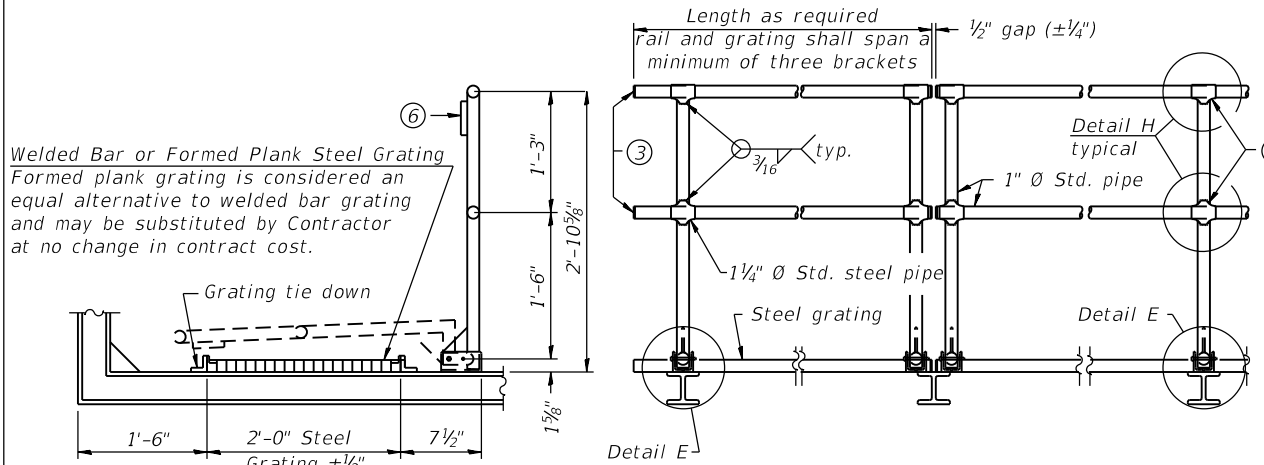
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BRIDGE MOUNT SIGN STRUCTURES  
WALKWAY AND CONNECTION DETAILS**

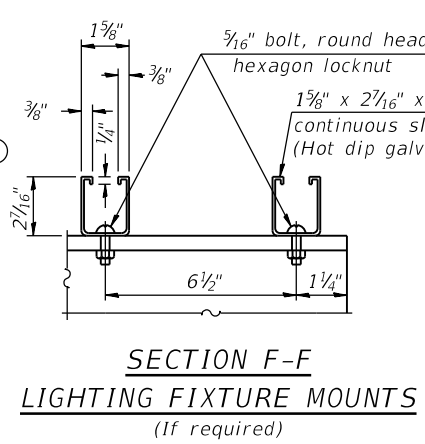
F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 780
CONTRACT NO. 62A77				
SHEET NO. SS81 OF SS83 SHEETS				
ILLINOIS FED. AID PROJECT				



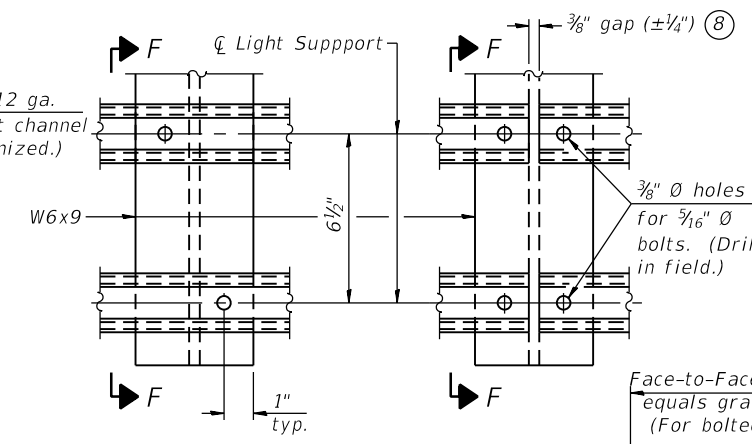
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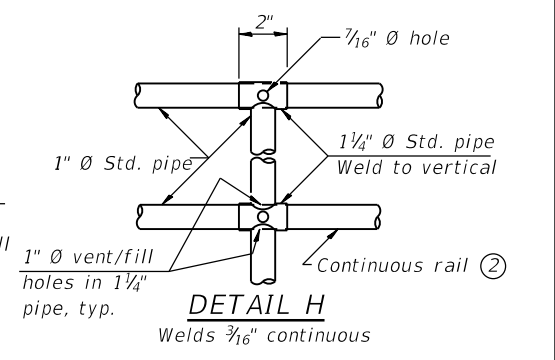
**SIDE ELEVATION DETAIL D HANDRAIL FRONT ELEVATION**



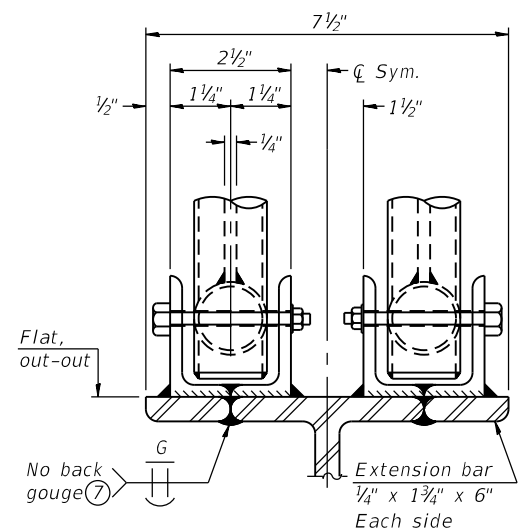
**SECTION F-F LIGHTING FIXTURE MOUNTS (If required)**



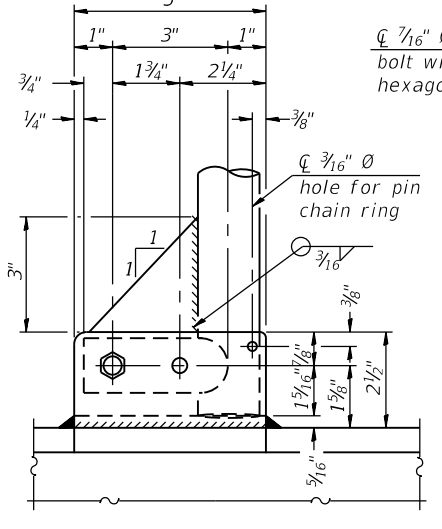
**DETAIL F DETAIL G**



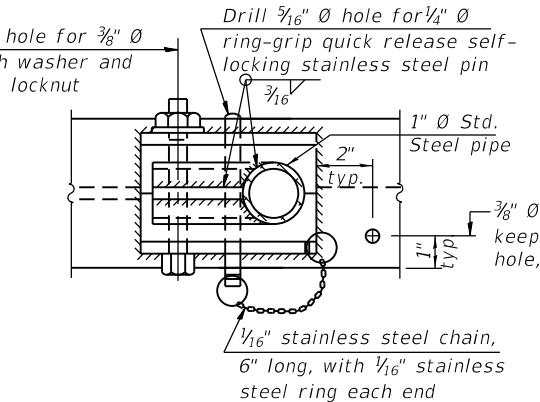
**DETAIL H Welds 3/16" continuous**



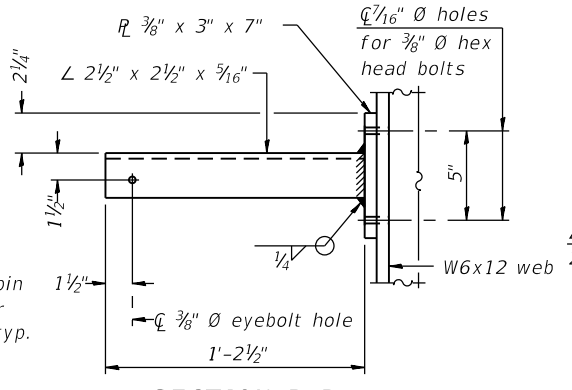
**ELEVATION AT HANDRAIL JOINT (Details not shown same as "FRONT ELEVATION")**



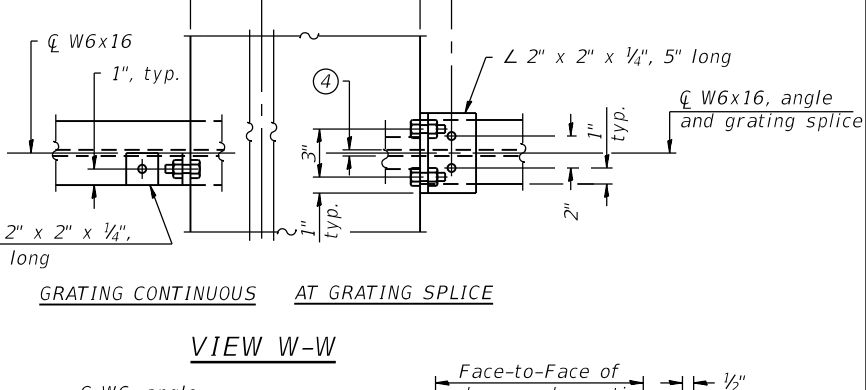
**SIDE ELEVATION**



**PLAN AT SINGLE HANDRAIL HINGE DETAIL E**

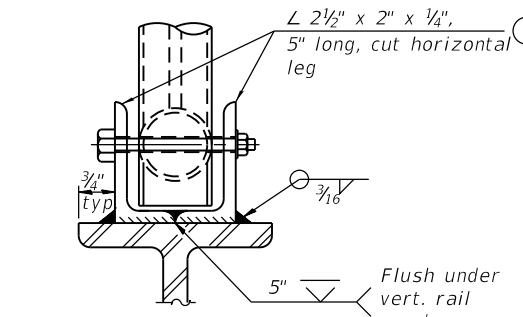


**SECTION P-P**

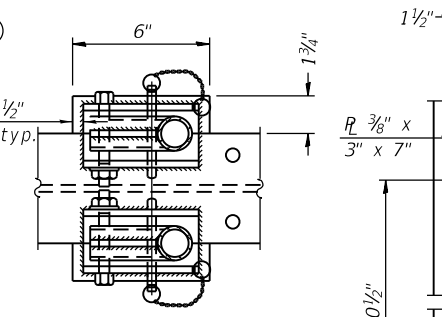


**GRATING CONTINUOUS AT GRATING SPLICE**

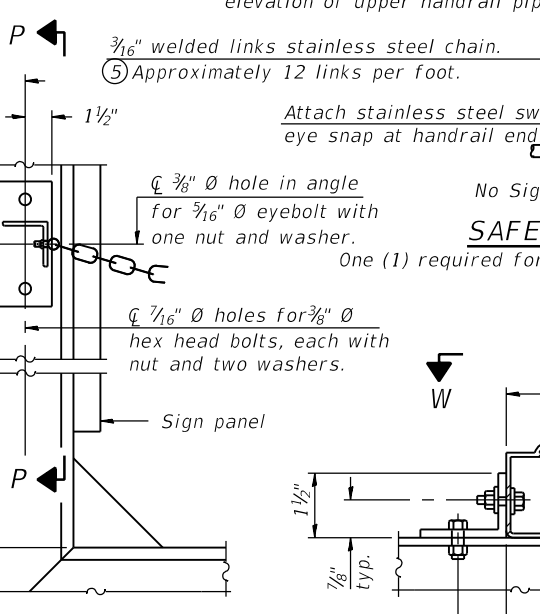
**VIEW W-W**



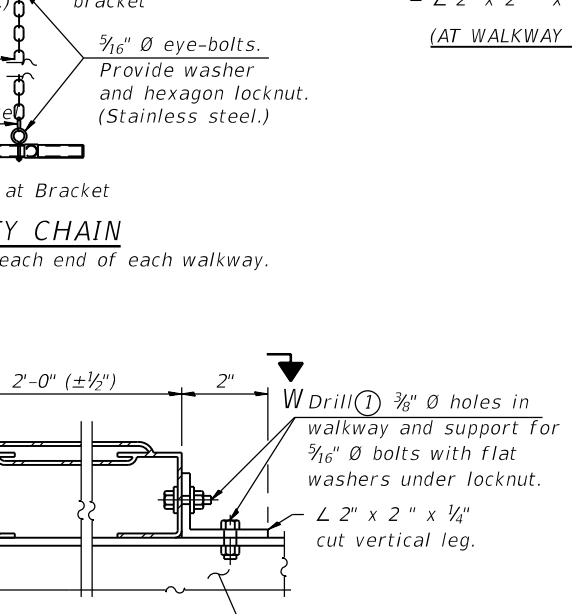
**FRONT ELEVATION (See above Elevations for dimensions.)**



**PLAN AT HANDRAIL JOINT (For Details, see Elevations.)**



**SAFETY CHAIN ATTACHMENT**



**ALTERNATE FORMED PLANK GRATING DETAILS**

Plank Grating: nominal depth = 2 1/2" (±1/2"); perforated or expanded steel sheet with a non-skid surface (non-serrated) concentrated load capacity = 500 lbs. with 6'-0" clear span.

- NOTES**
- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment. Field drilled holes must be touched up with galvanized paint.
  - Horizontal rail member shall be continuous thru 1 1/4" Ø pipe. Provide 7/16" Ø hole in 1 1/4" Ø pipe 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.)
  - Install standard force-fit end caps or weld 1/8" end plates with 1/8" c.f.w. and grind smooth. (All rail ends.)
  - 3/8" (±1/4") gap between grating panels at splice.
  - Chain to be type 304L stainless steel suitable for prolonged exterior exposure. Approximately 3'-6" long chain per location. Maximum sag with handrail erected = 4".
  - R 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
  - Extrusions may be used in lieu of details shown, with approval by Engineer.
  - Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.

**WELDED BAR GRATING DETAILS BM-4-SPECIAL 2-17-2017**



USER NAME =	alljssa	DESIGNED -	CP, LAB	REVISED -	
PLOT SCALE =	N.T.S	CHECKED -	LAB, JJS	REVISED -	
PLOT DATE =	1/23/2020	DRAWN -	CP	REVISED -	
		CHECKED -	LAB, JJS	REVISED -	

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**BRIDGE MOUNT SIGN STRUCTURES WALKWAY DETAILS**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	762
CONTRACT NO. 62A77				

SHEET NO. SS83 OF SS83 SHEETS

ILLINOIS FED. AID PROJECT

FOR INDEX OF SHEETS AND STANDARDS SEE SHEET NO. 2 AND 3

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

PROJECT LOCATED IN CITY OF CHICAGO

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	763
ILLINOIS CONTRACT NO. 62A77				

D-91-227-13

DESIGN DESIGNATIONS:

SB I-9094	98,000(2040) INTERSTATE
RAMP SW	23,000(2040) INTERSTATE RAMP
SB TAYLOR EXIT RAMP	8,000(2040) INTERSTATE RAMP
RAMP SE	5,000(2040) INTERSTATE RAMP
RAMP ES	43,000(2040) INTERSTATE RAMP
RAMP WS	8,000(2040) INTERSTATE RAMP
SB MADISON ENTRANCE RAMP	11,000(2040) INTERSTATE RAMP
SB JACKSON EXIT RAMP	4,000(2040) INTERSTATE RAMP
SB ADAMS EXIT RAMP	5,000(2040) INTERSTATE RAMP

POSTED /DESIGN SPEEDS:

45 /60 MPH
35 /35 MPH
25 /25 MPH
25 /25 MPH
40 /40 MPH
25 /25 MPH
30 /30 MPH
30 /30 MPH
30 /30 MPH

PROPOSED HIGHWAY PLANS

FAI ROUTE 90/94/290  
AT I-290/CONGRESS PARKWAY  
(JANE BYRNE INTERCHANGE)

FROM ROOSEVELT RD TO LAKE ST/MADISON ST

SECTION 2015-018R

PROJECT: NHPP-FB4M(631)

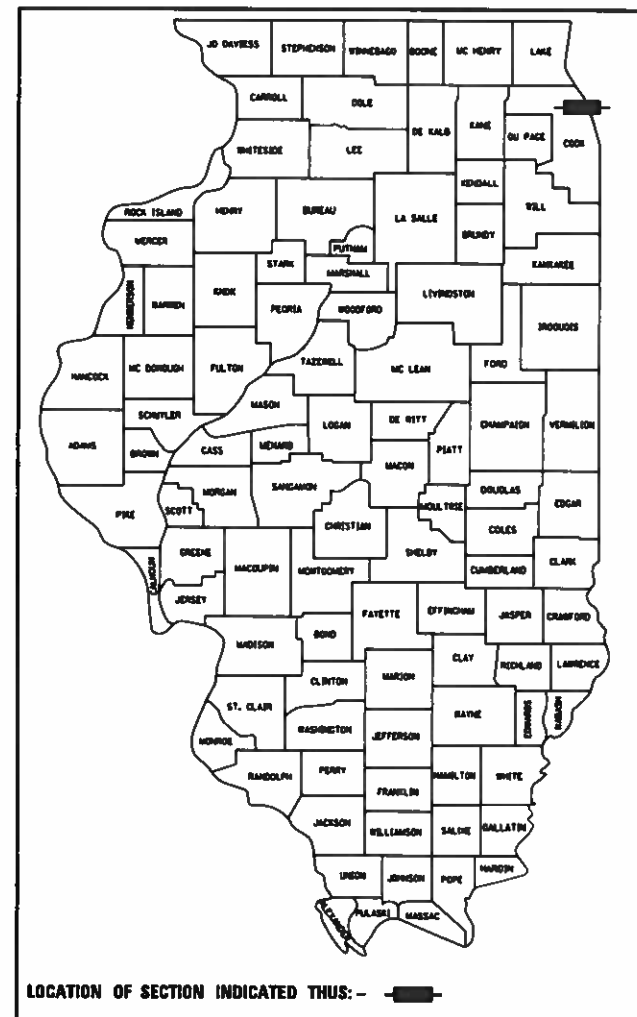
RECONSTRUCTION,  
RAMP MODIFICATIONS,  
RETAINING WALL

COOK COUNTY

C-91-311-15

R 14 E

NPDES PERMIT INFORMATION	
NPDES Disturbed	
Area =	15.94 Acres
Approximate Location of Roadway is:	
Longitude	87° 39' 6" W
Latitude	41° 52' 32" N



LOCATION OF SECTION INDICATED THUS: -

**AECOM**  
303 EAST WACKER DRIVE, SUITE 1400  
CHICAGO, IL 60601-5276  
PHONE: (312) 373-7700  
FAX: (312) 373-6800

**TranSystems**  
1475 EAST WOODFIELD ROAD, SUITE 600  
SCHALBURG, IL 60173  
PHONE: (847) 605-9600  
FAX: (847) 463-0565

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED January 21, 2020

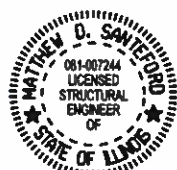
Anthony J. Ramirez REGIONAL ENGINEER

\_\_\_\_\_  
ENGINEER OF DESIGN AND ENVIRONMENT

\_\_\_\_\_  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION



Michael J. Eichten 1/10/2020  
MICHAEL J. EICHTEIN, P.E. DATE  
LICENSE EXPIRES 11/30/2021  
SHEET RANGE: 1-148, 162-533, 556-565  
614-627, 763-764, 986-1360



Matthew D. Santoford 1/10/2020  
MATTHEW D. SANTOFORD, S.E. DATE  
LICENSE EXPIRES 11/30/2020  
SHEET RANGE: 836-846



Jennifer M. Golemba 1/10/2020  
JENNIFER M. GOLEMBIA, P.E. DATE  
LICENSE EXPIRES 11/30/2021  
SHEET RANGE: 380-527, 555, 628-679  
380-527, 555, 628-679



Moussa A. Issa 1/10/2020  
MOUSSA A. ISSA, S.E. DATE  
LICENSE EXPIRES 11/30/2020  
SHEET RANGE: 680-688, 691-699, 703-714  
743-762, 863-866, 897-900



Matthew J. Letourneau 1/10/2020  
MATTHEW J. LETOURNEAU, P.E. DATE  
LICENSE EXPIRES 11/30/2021  
SHEET RANGE: 790-835



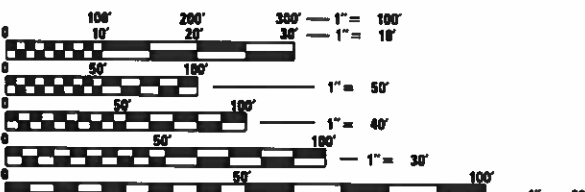
Amish T. Bhatt 1/10/2020  
AMISH T. BHATT, P.E., S.E. DATE  
LICENSE EXPIRES 11/30/2020  
SHEET RANGE: 149-156A



William D. Stermer 1/10/2020  
WILLIAM D. STERMER, P.E. DATE  
LICENSE EXPIRES 11/30/2021  
SHEET RANGE: 765-789



Robert L. Peters 1/10/2020  
ROBERT L. PETERS, S.E. DATE  
LICENSE EXPIRES 11/30/2020  
SHEET RANGE: 553-554



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

C.U.A.N.  
CHICAGO UTILITY ALERT NETWORK  
1-312-744-7000

PROJECT MANAGER: BRIAN KUTTAB, P.E.

CONTRACT NO. 62A77

SB I-9094 RESURFACING LIMIT  
STA 6166 + 84.49 TO STA 6202 + 91.11

SB I-9094 PROJECT LIMIT  
BEGIN STA 6202 + 91.11

EX RETAINING WALL 50 SN 016-1189  
STA 6203 + 23.74 TO STA 6206 + 17.14

ADAMS ST EXIT RAMP PROJECT LIMIT  
STA 8380 + 00.00 TO STA 8383 + 45.00

RAMP SW PROJECT LIMIT  
STA 1300 + 00.00 TO STA 1315 + 34.11

DRYLAND BRIDGE OVER CTA TUNNELS SN 016-D006  
STA 6224 + 48.04 TO STA 6225 + 06.31

RAMP ES PROJECT LIMIT  
STA 1513 + 60.00 TO STA 1516 + 78.79

RAMP WS PROJECT LIMIT  
STA 1234 + 00.00 TO STA 1245 + 86.14

SB I-9094 PROJECT LIMIT  
END STA 6250 + 95.00



LOCATION MAP NOT TO SCALE

GROSS LENGTH = 8,410.51 FT (1.594 MILES)  
NET LENGTH = 8,410.51 FT (1.594 MILES)

VOLUME II

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

DISTRICT 1 DESIGN /CONSULTANT SERVICES: BRIAN KUTTAB, P.E. (847)705-4431 SCHAUMBURG, ILLINOIS



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814001-03	HANDHOLES

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INDEX OF DRAWINGS AND HIGHWAY STANDARDS**

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	764
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

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	<b>LIGHT TOWER:</b> LED LUMINAIRES, TYPE I NUMBER INDICATES TOWER TYPE
	TYPE      TOWER HEIGHT 13      -      130 FEET 15      -      150 FEET
	LIGHTING UNIT: TYPE AS INDICATED
	47'-6" M.H., 6 FT. DAVIT ARM LED M-C-III LUMINAIRE. MOUNTED ON PARAPET WALL
	47'-6" M.H., 12 FT. DAVIT ARM LED M-C-III LUMINAIRE. MOUNTED ON PARAPET WALL
	47'-6" M.H., 2-6 FT. DAVIT ARM 2-LED M-C-III LUMINAIRE. MOUNTED ON PARAPET WALL
	TEMPORARY LED LUMINAIRE AND POLE; 80 FOOT WOOD POLE
	TEMPORARY LIGHTING UNIT: 80 FOOT WOOD POLE WITH FOUR TYPE I LED HIGH MAST LUMINAIRES
	UNDERPASS LUMINAIRE: LED, TYPE AS SHOWN ON PLANS (PRIMARY DISTRIBUTION PATTERN DIRECTION AS INDICATED BY ARROW)
	MANHOLE
	ELECTRIC HANDHOLE: TYPE AS INDICATED TYPE E1: PRECAST CONCRETE, 21.5"x21.5"x30", IDOT STANDARD 814001 TYPE E2: PRECAST CONCRETE-HEAVY DUTY, 22"x22"x30", IDOT STANDARD 814001 TYPE C1: COMMUNICATIONS VAULT, 49 5/8"x32 1/8"x57" TYPE S1: PRECAST CONCRETE-HEAVY DUTY, 22"x22"x36" TYPE S2: PRECAST CONCRETE-HEAVY DUTY SPECIAL, 30"x30"x36"
	DOUBLE ELECTRIC HANDHOLE
	JUNCTION BOX: TYPE AND SIZE AS INDICATED ON PLANS
	PULL BOX: TYPE AND SIZE AS INDICATED ON PLANS
	TELEPHONE CONNECTION
	FIBER OPTIC COMMUNICATIONS HUT
	EXISTING LIGHT TOWER
	EXISTING LIGHTING UNIT, TWIN LUMINAIRE
	EXISTING LIGHTING UNIT
	EXISTING TEMPORARY LIGHTING UNIT
	EXISTING CDOT LIGHTING UNIT
	EXISTING UNDERPASS LUMINAIRE
	EXISTING ELECTRIC MANHOLE
	EXISTING ELECTRIC HANDHOLE
	EXISTING JUNCTION BOX
	EXISTING PULL BOX
	EXISTING TELEPHONE CONNECTION
	EXISTING FIBER OPTIC COMMUNICATIONS HUT
	EXISTING ELECTRIC HANDHOLE/MANHOLE
	EXISTING CDOT SURVEILLANCE CABINET

**ELECTRICAL SYMBOLS FOR PROPOSED WORK**

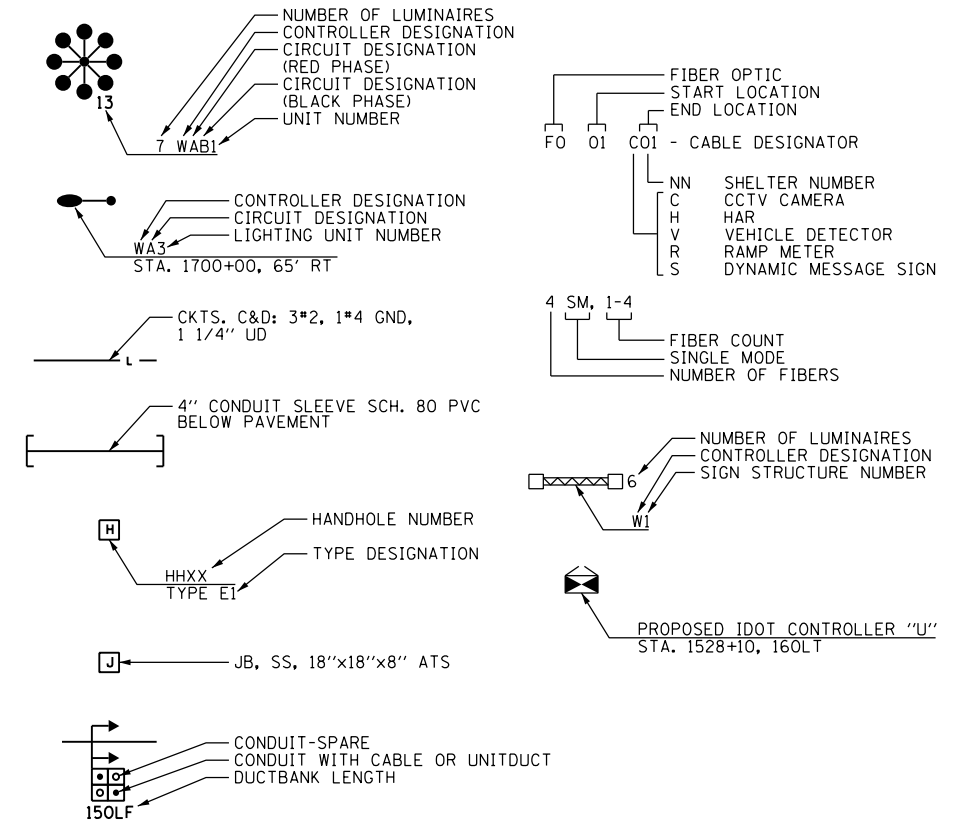
	4	LIGHTED SIGN STRUCTURE-CANTILEVER TYPE (NUMBER OF FLUORESCENT FIXTURES AS INDICATED - TYP.)
	6	LIGHTED SIGN STRUCTURE-TRUSS TYPE
	6	LIGHTED SIGN STRUCTURE-BRIDGE MOUNT TYPE
		DYNAMIC MESSAGE SIGN
	FBS	FLASHING BEACON SIGN
	C	CLOSED CIRCUIT TELEVISION CAMERA
	M	MICROWAVE DETECTOR
	OR	DETECTOR LOOP
		CONTROLLER CABINET: LIGHTING, RADIO CONTROL DUPLX TYPE WITH SCADA (DOOR SIDE AS INDICATED)
		CONTROLLER CABINET: SURVEILLANCE
		CONTROLLER CABINET: SURVEILLANCE, TYPE 334
		RAMP METER SIGNAL POLE/HEAD
		RAMP METER FLASHER POST
	T80	TEMPORARY WOOD POLE, LENGTH AS INDICATED ON THE PLANS
	HAR	HIGHWAY ADVISORY RADIO ANTENNA
		ELECTRIC UTILITY POLE
		CCTV CAMERA POLE
		POLE MOUNTED ELECTRIC UTILITY TRANSFORMER(S)

**ELECTRICAL SYMBOLS FOR EXISTING CONDITIONS**

	C	EXISTING CDOT ELECTRIC HANDHOLE/MANHOLE
	E	EXISTING LIGHTED SIGN STRUCTURE- CANTILEVER TYPE
	E	EXISTING LIGHTED SIGN STRUCTURE-TRUSS TYPE
	E	EXISTING LIGHTED SIGN STRUCTURE- BRIDGE MOUNT TYPE
	E	EXISTING DYNAMIC MESSAGE SIGN
	FBS	EXISTING FLASHING BEACON SIGN
	E	EXISTING CLOSED CIRCUIT TELEVISION CAMERA
	E	EXISTING MICROWAVE DETECTOR
	E	EXISTING DETECTOR LOOP
	E	EXISTING LIGHTING CONTROLLER, DUPLEX
	E	EXISTING CONTROLLER CABINET

		PAD MOUNTED ELECTRIC UTILITY TRANSFORMER
		GROUND ROD
		MAIN SERVICE FUSED DISCONNECT SWITCH (RATING AS INDICATED)
	PC	PHOTOCELL
		AERIAL CABLE
		FLEXIBLE CONDUIT
		RACEWAY EMBEDDED IN STRUCTURE
		EXPOSED CONDUIT
		RACEWAY OR DIRECT BURIAL CABLE UNDERGROUND WITHOUT ENCASEMENT
		TYPE AS SHOWN ON PLANS CONDUIT SLEEVE, INSTALLED BELOW PAVEMENT
		UNDERGROUND REINFORCED CONCRETE ENCASED CONDUIT DUCTBANK, UNLESS NOTED OTHERWISE. (NUMBER, TYPE, AND SIZE OF DUCTS AS SHOWN)
		CONDUIT TURNED DOWN
		CONDUIT TURNED UP
		EXISTING RAMP METER FLASHER
	HAR	EXISTING HIGHWAY ADVISORY RADIO ANTENNA
	E	EXISTING CCTV CAMERA POLE
	E	EXISTING UTILITY SERVICE CONNECTION, POLE MOUNTED
	E	EXISTING UTILITY SERVICE CONNECTION, PAD MOUNTED
	-E-	EXISTING CONCEALED CONDUIT IN STRUCTURE
	-E-	EXISTING EXPOSED CONDUIT
	-E-	EXISTING RACEWAY OR DIRECT BURIED CABLE WITHOUT ENCASEMENT
	==E==	EXISTING CONCEALED CONDUIT UNDERGROUND, TRENCHED OR PUSHED
	-E-	EXISTING ELECTRIC CABLE IN CONDUIT SLEEVE
	-A-	EXISTING AERIAL CABLE TO REMAIN
	-E-	EXISTING ELECTRICAL EQUIPMENT TO BE ABANDONED

**GENERAL ELECTRICAL CALLOUTS**



**TYPICAL EXISTING TO BE REMOVED SYMBOLS**

	R	EXISTING LIGHTING UNIT TO BE REMOVED AND NO SALVAGE
	R	EXISTING UNDERPASS LUMINAIRE TO BE REMOVED AND NO SALVAGE
	R	EXISTING JUNCTION BOX TO BE REMOVED
	R	EXISTING LIGHTED SIGN STRUCTURE- CANTILEVER TYPE TO BE REMOVED
	R	DYNAMIC MESSAGE SIGN TO BE REMOVED
	R	FLASHING BEACON SIGN TO BE REMOVED
	R	EXISTING LIGHTING CONTROLLER, DUPLEX TO BE REMOVED
	R	EXISTING CONTROLLER CABINET TO BE REMOVED
	R	EXISTING DETECTOR LOOP TO BE REMOVED
	R	EXISTING RAMP METER SIGNAL POLE/HEAD TO BE REMOVED
	R	EXISTING RAMP METER FLASHER TO BE REMOVED
	R	EXISTING POLE MOUNTED UTILITY SERVICE CONNECTION TO BE REMOVED
	R	EXISTING LIGHT TOWER, PAD, AND FOUNDATION TO BE REMOVED AND NO SALVAGE
	R	EXISTING TEMPORARY LIGHTING UNIT TO BE REMOVED AND LUMINAIRES SALVAGED TO IDOT



D162A77-sht-Light-01	DESIGNED - TJL	REVISED -
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

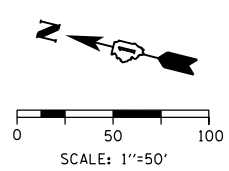
**IDOT ELECTRICAL SYMBOLS**

SCALE: N.T.S. SHEET 1 OF 25 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	765
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

**NOTES:**

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. THE EXISTING ELECTRICAL SYSTEMS, AS DEPICTED ON THE PLANS, ARE INTENDED TO INDICATE THE GENERAL EQUIPMENT INSTALLATIONS INVOLVED AND SHALL NOT BE CONSTRUED AS AN EXACT REPRESENTATION OF THE FIELD CONDITIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM AND ASCERTAIN THE EXACT CONDITION, SIZE, TYPE, QUANTITY AND LOCATION OF THE EXISTING ELECTRICAL EQUIPMENT. ANY DISCREPANCIES BETWEEN THE ACTUAL EXISTING ELECTRICAL EQUIPMENT IN THE FIELD AND THE DEPICTION OF THE EXISTING ELECTRICAL EQUIPMENT SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER FOR RESOLUTION. FAILURE TO VERIFY THE CONDITIONS, DIMENSIONS AND DETAILS OF THE EXISTING ELECTRICAL EQUIPMENT TO CONFIRM THAT THE NEW EQUIPMENT IS COMPATIBLE WITH THE EXISTING EQUIPMENT AND CAN BE PROPERLY INSTALLED AND CONNECTED AS SHOWN ON THE PLANS WILL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY FOR PROVIDING A SAFE, COMPLETE AND FULLY FUNCTIONAL ELECTRICAL SYSTEM.



NO WORK SHOWN ON THIS SHEET

E-02

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D162A77-SHT-Light-02  
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 PLOT DATE = 1/23/2020

DESIGNED - TJL	REVISED -
DRAWN - CAM	REVISED -
CHECKED - WDS	REVISED -
DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

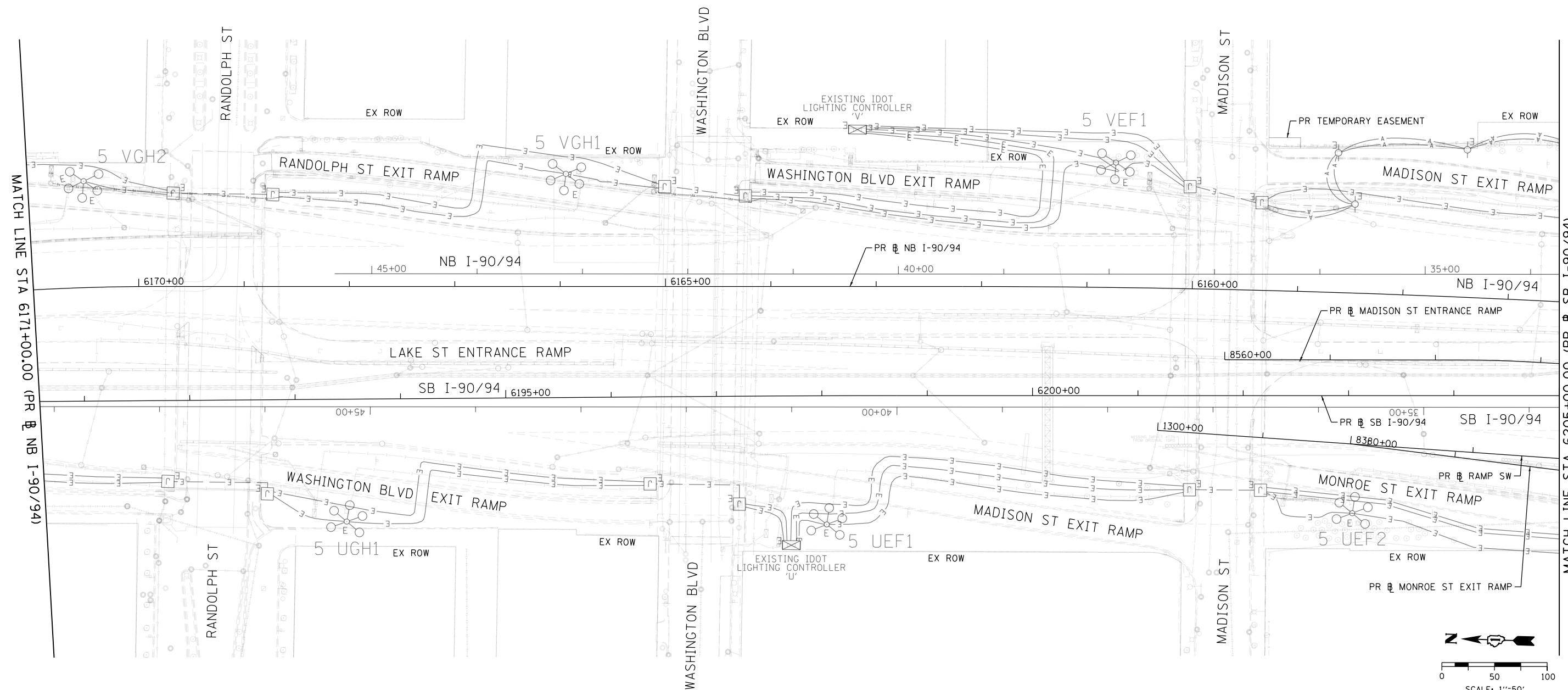
**EXISTING LIGHTING PLAN  
 SB I-90/94**

SCALE: 1"=50' SHEET 2 OF 25 SHEETS STA. TO STA. 6171+00 (NB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	766
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

**NOTES:**

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. THE EXISTING ELECTRICAL SYSTEMS, AS DEPICTED ON THE PLANS, ARE INTENDED TO INDICATE THE GENERAL EQUIPMENT INSTALLATIONS INVOLVED AND SHALL NOT BE CONSTRUED AS AN EXACT REPRESENTATION OF THE FIELD CONDITIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM AND ASCERTAIN THE EXACT CONDITION, SIZE, TYPE, QUANTITY AND LOCATION OF THE EXISTING ELECTRICAL EQUIPMENT. ANY DISCREPANCIES BETWEEN THE ACTUAL EXISTING ELECTRICAL EQUIPMENT IN THE FIELD AND THE DEPICTION OF THE EXISTING ELECTRICAL EQUIPMENT SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER FOR RESOLUTION. FAILURE TO VERIFY THE CONDITIONS, DIMENSIONS AND DETAILS OF THE EXISTING ELECTRICAL EQUIPMENT TO CONFIRM THAT THE NEW EQUIPMENT IS COMPATIBLE WITH THE EXISTING EQUIPMENT AND CAN BE PROPERLY INSTALLED AND CONNECTED AS SHOWN ON THE PLANS WILL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY FOR PROVIDING A SAFE, COMPLETE AND FULLY FUNCTIONAL ELECTRICAL SYSTEM.



NO WORK SHOWN ON THIS SHEET

E-03

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 PLOT DATE = 1/23/2020

DESIGNED - TJL	REVISED -
DRAWN - CAM	REVISED -
CHECKED - WDS	REVISED -
DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

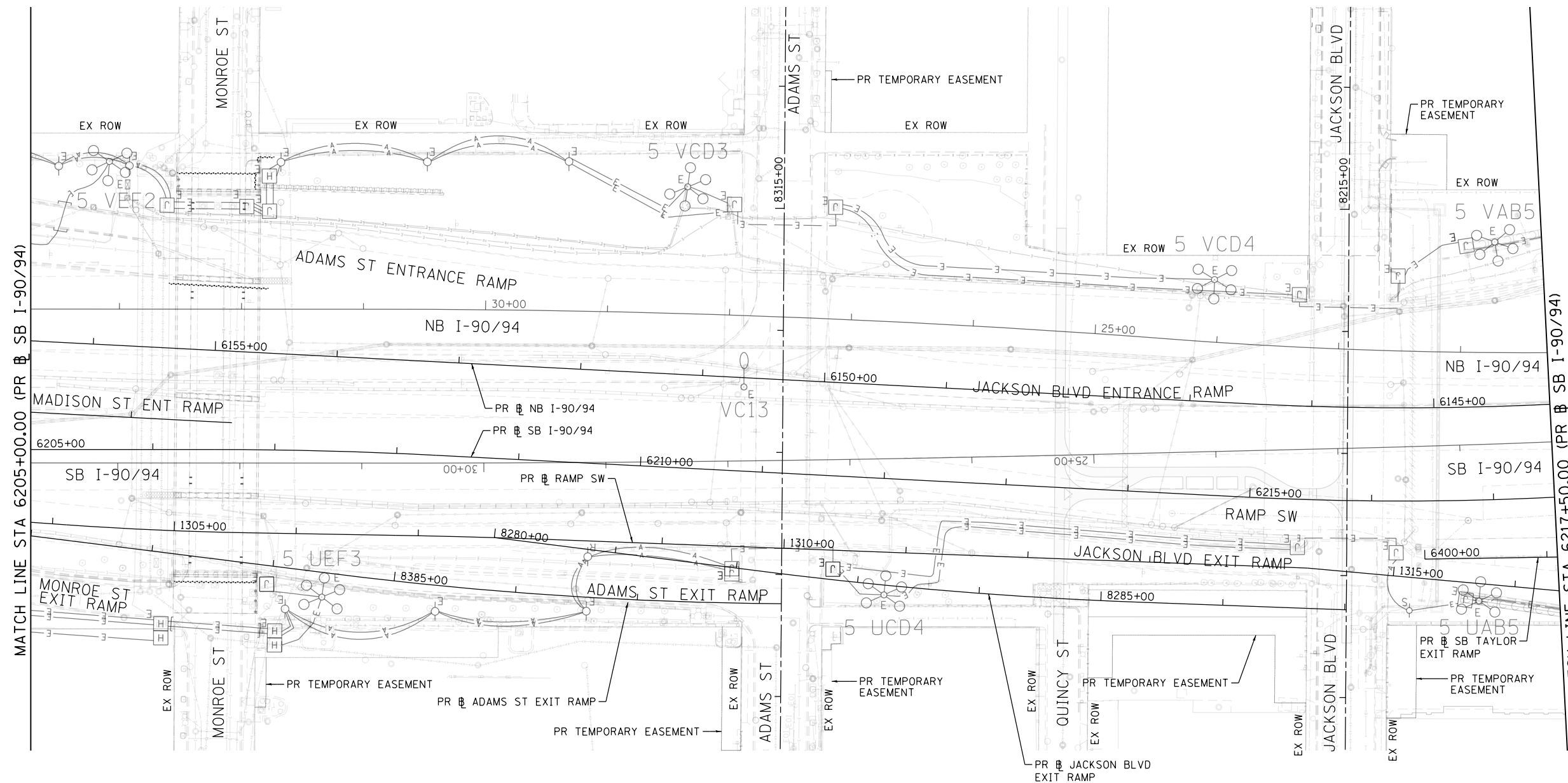
**EXISTING LIGHTING PLAN  
 SB I-90/94**

SCALE: 1"=50' SHEET 3 OF 25 SHEETS STA. 6171+00(NB) TO STA. 6205+00(SB)

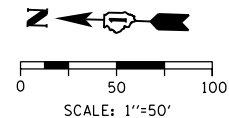
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	767
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

**NOTES:**

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. THE EXISTING ELECTRICAL SYSTEMS, AS DEPICTED ON THE PLANS, ARE INTENDED TO INDICATE THE GENERAL EQUIPMENT INSTALLATIONS INVOLVED AND SHALL NOT BE CONSTRUED AS AN EXACT REPRESENTATION OF THE FIELD CONDITIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM AND ASCERTAIN THE EXACT CONDITION, SIZE, TYPE, QUANTITY AND LOCATION OF THE EXISTING ELECTRICAL EQUIPMENT. ANY DISCREPANCIES BETWEEN THE ACTUAL EXISTING ELECTRICAL EQUIPMENT IN THE FIELD AND THE DEPICTION OF THE EXISTING ELECTRICAL EQUIPMENT SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER FOR RESOLUTION. FAILURE TO VERIFY THE CONDITIONS, DIMENSIONS AND DETAILS OF THE EXISTING ELECTRICAL EQUIPMENT TO CONFIRM THAT THE NEW EQUIPMENT IS COMPATIBLE WITH THE EXISTING EQUIPMENT AND CAN BE PROPERLY INSTALLED AND CONNECTED AS SHOWN ON THE PLANS WILL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY FOR PROVIDING A SAFE, COMPLETE AND FULLY FUNCTIONAL ELECTRICAL SYSTEM.



NO WORK SHOWN ON THIS SHEET



FILE PATH = p:\AECOM\NA-AWS\encom\line\local\AECOM\_0502\_NA\Documents\01\_Americas\Transportation\6269938\_Circle\Phase\I\000\_CAD\01E\Electrical\Sheets\62677\_SHT-Light-04



D162A77-SHT-Light-04  
 USER NAME = myersc  
 PLOT SCALE = 100.0000' / in.  
 PLOT DATE = 1/23/2020

DESIGNED - T.J.L.  
 DRAWN - CAM  
 CHECKED - WDS  
 DATE - 1/29/2019

REVISED -  
 REVISED -  
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 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**EXISTING LIGHTING PLAN  
 SB I-90/94**

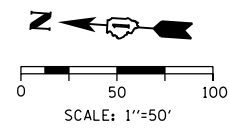
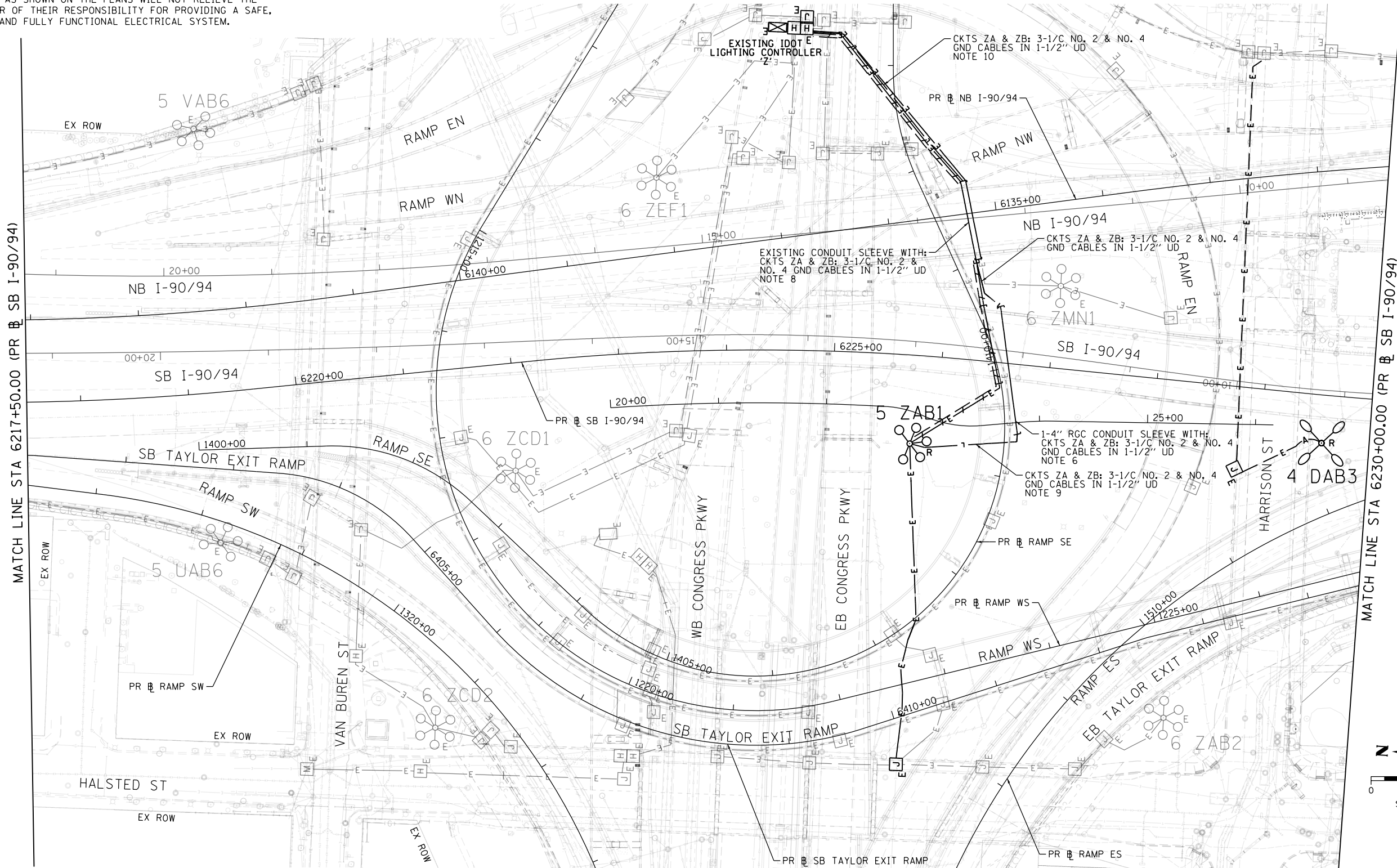
SCALE: 1"=50' SHEET 4 OF 25 SHEETS STA. 6205+00(SB) TO STA. 6217+50(SB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	768
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

E-04

**NOTES:**

- SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
- THE EXISTING ELECTRICAL SYSTEMS, AS DEPICTED ON THE PLANS, ARE INTENDED TO INDICATE THE GENERAL EQUIPMENT INSTALLATIONS INVOLVED AND SHALL NOT BE CONSTRUED AS AN EXACT REPRESENTATION OF THE FIELD CONDITIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM AND ASCERTAIN THE EXACT CONDITION, SIZE, TYPE, QUANTITY AND LOCATION OF THE EXISTING ELECTRICAL EQUIPMENT. ANY DISCREPANCIES BETWEEN THE ACTUAL EXISTING ELECTRICAL EQUIPMENT IN THE FIELD AND THE DEPICTION OF THE EXISTING ELECTRICAL EQUIPMENT SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER FOR RESOLUTION. FAILURE TO VERIFY THE CONDITIONS, DIMENSIONS AND DETAILS OF THE EXISTING ELECTRICAL EQUIPMENT TO CONFIRM THAT THE NEW EQUIPMENT IS COMPATIBLE WITH THE EXISTING EQUIPMENT AND CAN BE PROPERLY INSTALLED AND CONNECTED AS SHOWN ON THE PLANS WILL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY FOR PROVIDING A SAFE, COMPLETE AND FULLY FUNCTIONAL ELECTRICAL SYSTEM.
- ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
- IDOT CONTRACTS 60X94, 62A76, 62A77 AND 60Y00 WILL BE ONGOING SIMULTANEOUSLY WITH THIS CONTRACT. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL ELECTRICAL WORK FOR THIS CONTRACT WITH THE WORK IN THOSE CONTRACTS. THIS COORDINATION WORK SHALL BE INCLUDED AT NO ADDITIONAL COST TO THIS CONTRACT.
- ALL OF THE EXISTING LIGHTING UNITS AND LIGHTING CIRCUITS CURRENTLY FED FROM EXISTING IDOT LIGHTING CONTROLLERS SHALL REMAIN ENERGIZED DURING NIGHTTIME HOURS FOR THE DURATION OF THE CONTRACT. ANY TEMPORARY POWER REQUIRED TO KEEP THE LIGHTING SYSTEM ENERGIZED WILL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.
- THE CONDUIT SLEEVE SHALL BE INSTALLED AT A DEPTH THAT IS BELOW THE PROPOSED SB I-90/94 CONCRETE PAVEMENT, SUBBASE, AGGREGATE SUBGRADE AND UNDERDRAIN. SEE "DETAIL A" ON DRAWING E-22 FOR THE ELEVATION VIEW OF THE PROPOSED CONDUIT SLEEVE ROUTING.
- ALL EXISTING LIGHT TOWERS SHOWN TO BE REMOVED SHALL BE DISPOSED OF PROPERLY OFFSITE.
- REMOVE THE EXISTING LIGHTING CIRCUIT CABLES FOR CIRCUITS ZA AND ZB FROM THE EXISTING CONDUIT SLEEVE LOCATED UNDER NB I-90/94. ROD AND CLEAN THE CONDUIT SLEEVE PRIOR TO INSTALLING THE PROPOSED CABLES SHOWN ON THIS DRAWING.
- PRIOR TO ROUTING THE PROPOSED UNIT DUCT INTO THE BASE OF EXISTING LIGHT TOWER 5 ZAB1 PROVIDE AN ADDITIONAL 75 FEET OF SLACK ADJACENT TO THE LIGHT TOWER TO ALLOW FOR THE RELOCATION OF THE UNIT DUCT AS SHOWN ON DRAWING E-12. THE UNIT DUCT SHALL BE PROTECTED THROUGHOUT CONSTRUCTION AND ANY DAMAGE INCURRED TO THE UNIT DUCT SHALL BE IMMEDIATELY REPLACED IN KIND AT NO COST TO THE CONTRACT.
- DISCONNECT AND ABANDON EXISTING LIGHTING CIRCUITS ZA AND ZB BETWEEN EXISTING IDOT LIGHTING CONTROLLER 'Z' AND EXISTING TOWER 5 ZAB1 PRIOR TO INSTALLING PROPOSED CIRCUITS ZA AND ZB UNLESS OTHERWISE NOTED.



E-05

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D162A77-SHT-Light-05	DESIGNED - TJL	REVISED -
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PLOT SCALE = 100.0000' / in.	CHECKED - WDS	REVISED -
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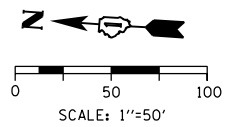
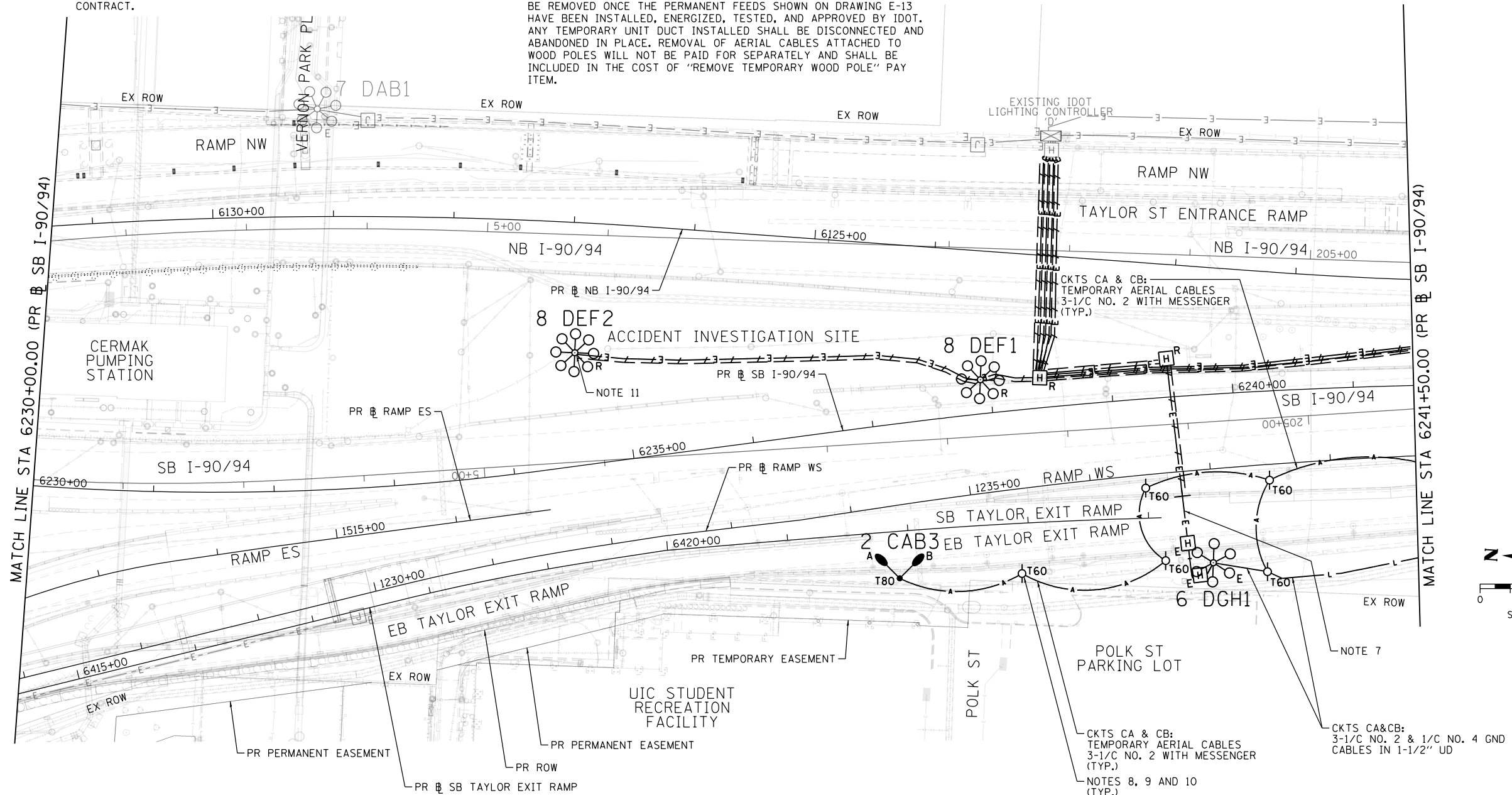
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

<b>EXISTING LIGHTING PLAN</b>	
<b>SB I-90/94</b>	
SCALE: 1"=50'	SHEET 5 OF 25 SHEETS
STA. 6217+50(SB) TO STA. 6230+00(SB)	

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	769
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

**NOTES:**

- SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
- THE EXISTING ELECTRICAL SYSTEMS, AS DEPICTED ON THE PLANS, ARE INTENDED TO INDICATE THE GENERAL EQUIPMENT INSTALLATIONS INVOLVED AND SHALL NOT BE CONSTRUED AS AN EXACT REPRESENTATION OF THE FIELD CONDITIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM AND ASCERTAIN THE EXACT CONDITION, SIZE, TYPE, QUANTITY AND LOCATION OF THE EXISTING ELECTRICAL EQUIPMENT. ANY DISCREPANCIES BETWEEN THE ACTUAL EXISTING ELECTRICAL EQUIPMENT IN THE FIELD AND THE DEPICTION OF THE EXISTING ELECTRICAL EQUIPMENT SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER FOR RESOLUTION. FAILURE TO VERIFY THE CONDITIONS, DIMENSIONS AND DETAILS OF THE EXISTING ELECTRICAL EQUIPMENT TO CONFIRM THAT THE NEW EQUIPMENT IS COMPATIBLE WITH THE EXISTING EQUIPMENT AND CAN BE PROPERLY INSTALLED AND CONNECTED AS SHOWN ON THE PLANS WILL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY FOR PROVIDING A SAFE, COMPLETE AND FULLY FUNCTIONAL ELECTRICAL SYSTEM.
- ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
- IDOT CONTRACTS 60X94, 62A76, 62A77 AND 60Y00 WILL BE ONGOING SIMULTANEOUSLY WITH THIS CONTRACT. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL ELECTRICAL WORK FOR THIS CONTRACT WITH THE WORK IN THOSE CONTRACTS. THIS COORDINATION WORK SHALL BE INCLUDED AT NO ADDITIONAL COST TO THIS CONTRACT.
- ALL OF THE EXISTING LIGHTING UNITS AND LIGHTING CIRCUITS CURRENTLY FED FROM EXISTING IDOT LIGHTING CONTROLLERS SHALL REMAIN ENERGIZED DURING NIGHTTIME HOURS FOR THE DURATION OF THE CONTRACT. ANY TEMPORARY POWER REQUIRED TO KEEP THE LIGHTING SYSTEM ENERGIZED WILL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.
- ALL EXISTING LIGHT TOWERS SHOWN TO BE REMOVED SHALL BE DISPOSED OF PROPERLY OFFSITE.
- CUT THE EXISTING CONDUITS IN THE CORE AREA BETWEEN THE TAYLOR EXIT RAMP AND SOUTHBOUND I-90/94. REMOVE THE EXISTING CABLES ROUTED IN THE CONDUIT TO LIGHT TOWER 6 DGH1 LOCATED ON EXISTING RETAINING WALL #12 AND ROD AND CLEAN THE EXISTING CONDUIT.
- THE LOCATIONS OF THE WOOD POLES SHOWN ARE APPROXIMATIONS. THE FINAL INSTALLATION LOCATION OF THE POLE SHALL BE STAKED IN THE FIELD AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION TO IDENTIFY ANY CONFLICTS WITH EXISTING/PROPOSED UTILITIES AND WORK TO BE PERFORMED BY OTHER DISCIPLINES.
- PROVIDE 50 FEET OF SLACK CABLE AT EACH TEMPORARY WOOD POLE TO ALLOW FOR RELOCATION OF AERIAL CABLES DURING THE DIFFERENT STAGES OF CONSTRUCTION.
- THE TEMPORARY WOOD POLES AND ASSOCIATED AERIAL CABLES SHALL BE REMOVED ONCE THE PERMANENT FEEDS SHOWN ON DRAWING E-13 HAVE BEEN INSTALLED, ENERGIZED, TESTED, AND APPROVED BY IDOT. ANY TEMPORARY UNIT DUCT INSTALLED SHALL BE DISCONNECTED AND ABANDONED IN PLACE. REMOVAL OF AERIAL CABLES ATTACHED TO WOOD POLES WILL NOT BE PAID FOR SEPARATELY AND SHALL BE INCLUDED IN THE COST OF "REMOVE TEMPORARY WOOD POLE" PAY ITEM.
- EXISTING LIGHT TOWER 8 DEF2 SHALL NOT BE REMOVED UNTIL PROPOSED LIGHT TOWER 8 DEF1 SHOWN ON DRAWING E-13 HAS BEEN INSTALLED, ENERGIZED, TESTED, AND APPROVED BY IDOT. COORDINATION BETWEEN CONTRACTS 62A76 AND 62A77 WILL BE NECESSARY FOR INSTALLATION OF THE PROPOSED FEED FOR LIGHT TOWER 8 DEF1.



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D162A77-SHT-Light-06  
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 PLOT SCALE = 100.0000' / in.  
 PLOT DATE = 3/2/2020

DESIGNED - TJL  
 DRAWN - CAM  
 CHECKED - WDS  
 DATE - 3/4/2020

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

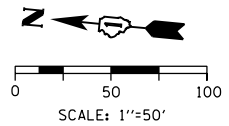
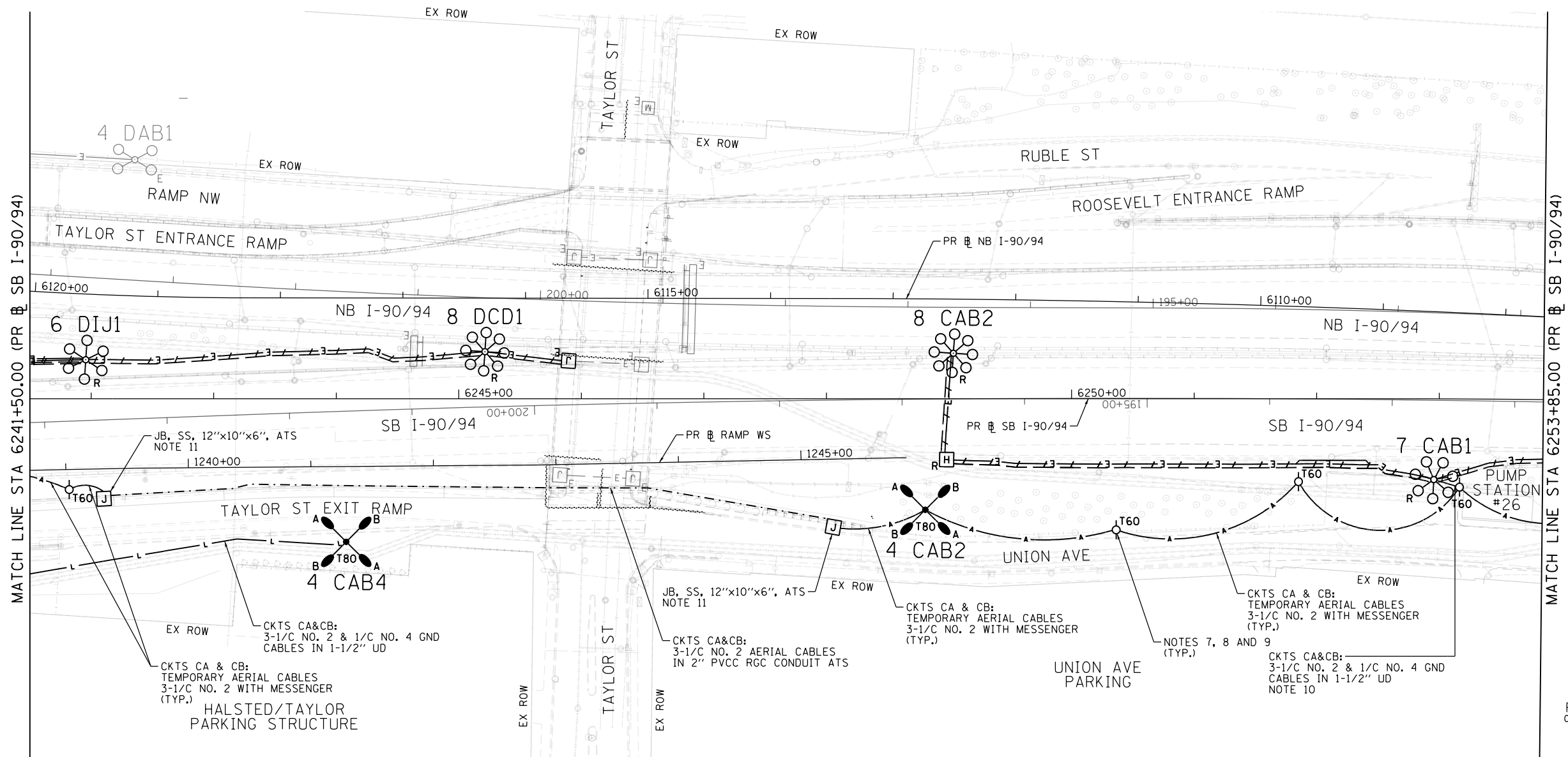
**EXISTING/TEMPORARY LIGHTING PLAN  
 SB I-90/94**

SCALE: 1"=50' SHEET 6 OF 25 SHEETS STA. 6230+00(SB) TO STA. 6241+50(SB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	770
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

**NOTES:**

- SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
- THE EXISTING ELECTRICAL SYSTEMS, AS DEPICTED ON THE PLANS, ARE INTENDED TO INDICATE THE GENERAL EQUIPMENT INSTALLATIONS INVOLVED AND SHALL NOT BE CONSTRUED AS AN EXACT REPRESENTATION OF THE FIELD CONDITIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM AND ASCERTAIN THE EXACT CONDITION, SIZE, TYPE, QUANTITY AND LOCATION OF THE EXISTING ELECTRICAL EQUIPMENT. ANY DISCREPANCIES BETWEEN THE ACTUAL EXISTING ELECTRICAL EQUIPMENT IN THE FIELD AND THE DEPICTION OF THE EXISTING ELECTRICAL EQUIPMENT SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER FOR RESOLUTION. FAILURE TO VERIFY THE CONDITIONS, DIMENSIONS AND DETAILS OF THE EXISTING ELECTRICAL EQUIPMENT TO CONFIRM THAT THE NEW EQUIPMENT IS COMPATIBLE WITH THE EXISTING EQUIPMENT AND CAN BE PROPERLY INSTALLED AND CONNECTED AS SHOWN ON THE PLANS WILL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY FOR PROVIDING A SAFE, COMPLETE AND FULLY FUNCTIONAL ELECTRICAL SYSTEM.
- ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
- IDOT CONTRACTS 60X94, 62A76, 62A77 AND 60Y00 WILL BE ONGOING SIMULTANEOUSLY WITH THIS CONTRACT. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL ELECTRICAL WORK FOR THIS CONTRACT WITH THE WORK IN THOSE CONTRACTS. THIS COORDINATION WORK SHALL BE INCLUDED AT NO ADDITIONAL COST TO THIS CONTRACT.
- ALL OF THE EXISTING LIGHTING UNITS AND LIGHTING CIRCUITS CURRENTLY FED FROM EXISTING IDOT LIGHTING CONTROLLERS SHALL REMAIN ENERGIZED DURING NIGHTTIME HOURS FOR THE DURATION OF THE CONTRACT. ANY TEMPORARY POWER REQUIRED TO KEEP THE LIGHTING SYSTEM ENERGIZED WILL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.
- ALL EXISTING LIGHT TOWERS SHOWN TO BE REMOVED SHALL BE DISPOSED OF PROPERLY OFFSITE.
- THE TEMPORARY WOOD POLES AND ASSOCIATED AERIAL CABLES SHALL BE REMOVED ONCE THE PERMANENT FEEDS SHOWN ON DRAWING E-14 HAVE BEEN INSTALLED, ENERGIZED, TESTED, AND APPROVED BY IDOT. ANY TEMPORARY UNIT DUCT INSTALLED SHALL BE DISCONNECTED AND ABANDONED IN PLACE. REMOVAL OF AERIAL CABLES ATTACHED TO WOOD POLES WILL NOT BE PAID FOR SEPARATELY AND SHALL BE INCLUDED IN THE COST OF "REMOVE TEMPORARY WOOD POLE" PAY ITEM.
- THE LOCATIONS OF THE WOOD POLES SHOWN ARE APPROXIMATIONS. THE FINAL INSTALLATION LOCATION OF THE POLE SHALL BE STAKED IN THE FIELD AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION TO IDENTIFY ANY CONFLICTS WITH EXISTING/PROPOSED UTILITIES AND WORK TO BE PERFORMED BY OTHER DISCIPLINES.
- PROVIDE 50 FEET OF SLACK CABLE AT EACH TEMPORARY WOOD POLE TO ALLOW FOR RELOCATION OF AERIAL CABLES DURING THE DIFFERENT STAGES OF CONSTRUCTION.
- ROUTE THE PROPOSED UNIT DUCT INTO THE BASE OF LIGHT TOWER 7 CAB1 AND CONNECT THE CABLES TO THE EXISTING CABLES WITHIN THE HANDHOLE OF THE HIGH MAST LIGHT TOWER. THE EXISTING TOWER SHALL REMAIN ACTIVE UNTIL PROPOSED TOWER 8 CAB1 ON DRAWING E-14 HAS BEEN INSTALLED, ENERGIZED, TESTED, AND APPROVED BY IDOT.
- SEE IDOT STANDARD BE-801 FOR AERIAL CABLE INSTALLATION DETAILS FOR ROUTING THE AERIAL CABLES INTO THE JUNCTION BOX ATTACHED TO STRUCTURE.



E-07

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D162A77-SHT-Light-07  
 USER NAME = myersc  
 PLOT SCALE = 100.0000' / in.  
 PLOT DATE = 3/2/2020

DESIGNED - TJL	REVISED -
DRAWN - CAM	REVISED -
CHECKED - WDS	REVISED -
DATE - 3/4/2020	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**EXISTING/TEMPORARY LIGHTING PLAN  
 SB I-90/94**

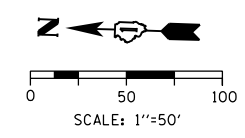
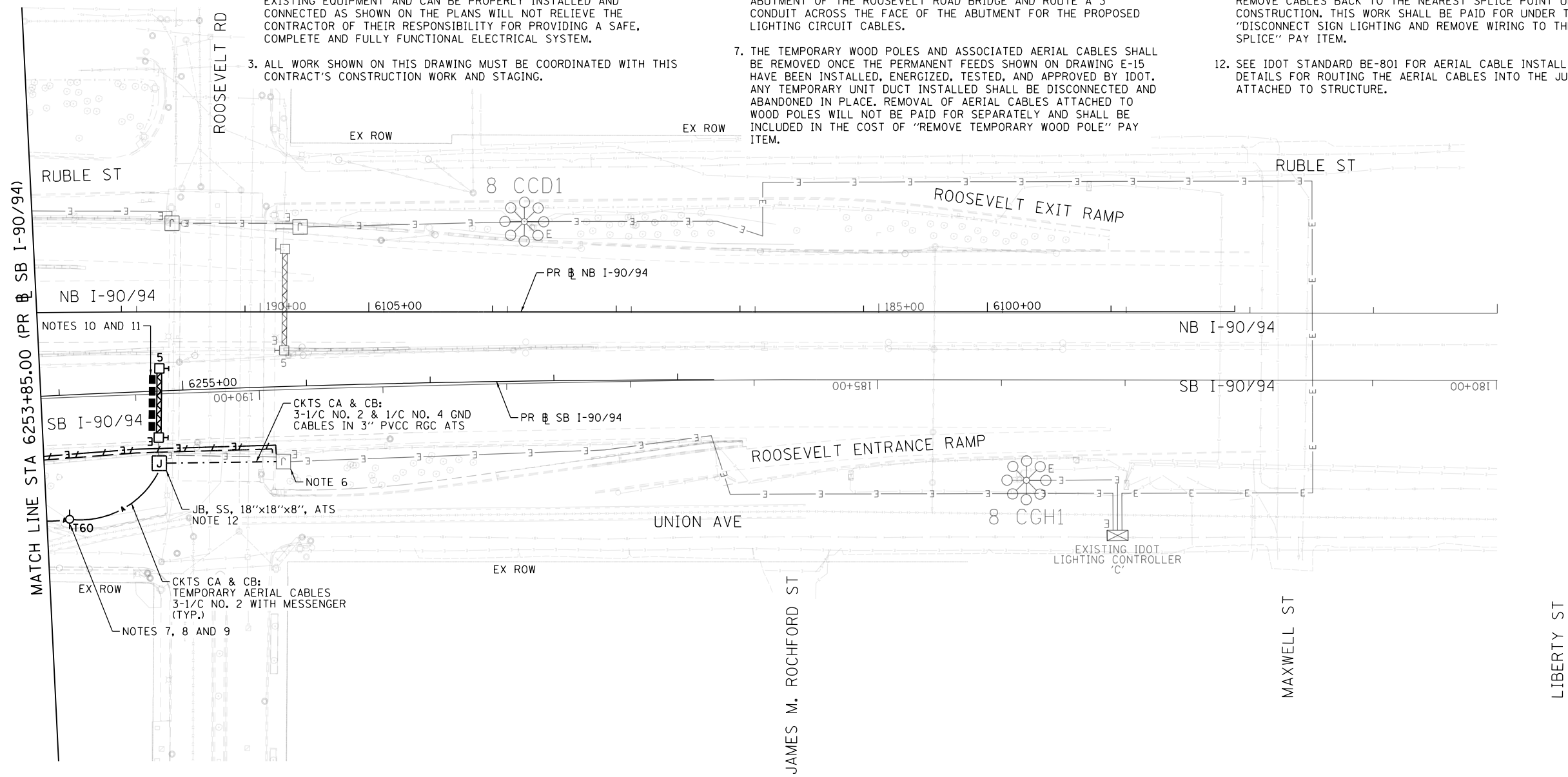
SCALE: 1"=50' SHEET 7 OF 25 SHEETS STA. 6241+50(SB) TO STA. 6253+85(SB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	771
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				



**NOTES:**

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. THE EXISTING ELECTRICAL SYSTEMS, AS DEPICTED ON THE PLANS, ARE INTENDED TO INDICATE THE GENERAL EQUIPMENT INSTALLATIONS INVOLVED AND SHALL NOT BE CONSTRUED AS AN EXACT REPRESENTATION OF THE FIELD CONDITIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM AND ASCERTAIN THE EXACT CONDITION, SIZE, TYPE, QUANTITY AND LOCATION OF THE EXISTING ELECTRICAL EQUIPMENT. ANY DISCREPANCIES BETWEEN THE ACTUAL EXISTING ELECTRICAL EQUIPMENT IN THE FIELD AND THE DEPICTION OF THE EXISTING ELECTRICAL EQUIPMENT SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER FOR RESOLUTION. FAILURE TO VERIFY THE CONDITIONS, DIMENSIONS AND DETAILS OF THE EXISTING ELECTRICAL EQUIPMENT TO CONFIRM THAT THE NEW EQUIPMENT IS COMPATIBLE WITH THE EXISTING EQUIPMENT AND CAN BE PROPERLY INSTALLED AND CONNECTED AS SHOWN ON THE PLANS WILL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY FOR PROVIDING A SAFE, COMPLETE AND FULLY FUNCTIONAL ELECTRICAL SYSTEM.
3. ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
4. IDOT CONTRACTS 60X94, 62A76, 62A77 AND 60Y00 WILL BE ONGOING SIMULTANEOUSLY WITH THIS CONTRACT. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL ELECTRICAL WORK FOR THIS CONTRACT WITH THE WORK IN THOSE CONTRACTS. THIS COORDINATION WORK SHALL BE INCLUDED AT NO ADDITIONAL COST TO THIS CONTRACT.
5. ALL OF THE EXISTING LIGHTING UNITS AND LIGHTING CIRCUITS CURRENTLY FED FROM EXISTING IDOT LIGHTING CONTROLLERS SHALL REMAIN ENERGIZED DURING NIGHTTIME HOURS FOR THE DURATION OF THE CONTRACT. ANY TEMPORARY POWER REQUIRED TO KEEP THE LIGHTING SYSTEM ENERGIZED WILL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.
6. DRILL THE EXISTING JUNCTION BOX ATTACHED TO THE WEST ABUTMENT OF THE ROOSEVELT ROAD BRIDGE AND ROUTE A 3" CONDUIT ACROSS THE FACE OF THE ABUTMENT FOR THE PROPOSED LIGHTING CIRCUIT CABLES.
7. THE TEMPORARY WOOD POLES AND ASSOCIATED AERIAL CABLES SHALL BE REMOVED ONCE THE PERMANENT FEEDS SHOWN ON DRAWING E-15 HAVE BEEN INSTALLED, ENERGIZED, TESTED, AND APPROVED BY IDOT. ANY TEMPORARY UNIT DUCT INSTALLED SHALL BE DISCONNECTED AND ABANDONED IN PLACE. REMOVAL OF AERIAL CABLES ATTACHED TO WOOD POLES WILL NOT BE PAID FOR SEPARATELY AND SHALL BE INCLUDED IN THE COST OF "REMOVE TEMPORARY WOOD POLE" PAY ITEM.
8. THE LOCATIONS OF THE WOOD POLES SHOWN ARE APPROXIMATIONS. THE FINAL INSTALLATION LOCATION OF THE POLE SHALL BE STAKED IN THE FIELD AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION TO IDENTIFY ANY CONFLICTS WITH EXISTING/PROPOSED UTILITIES AND WORK TO BE PERFORMED BY OTHER DISCIPLINES.
9. PROVIDE 50 FEET OF SLACK CABLE AT EACH TEMPORARY WOOD POLE TO ALLOW FOR RELOCATION OF AERIAL CABLES DURING THE DIFFERENT STAGES OF CONSTRUCTION.
10. REMOVE EXISTING SIGN LUMINAIRES. THIS REMOVAL WORK SHALL BE INCLUDED IN THE COST OF THE "REMOVE OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED" PAY ITEM.
11. DISCONNECT THE EXISTING SIGN LIGHTING ELECTRICAL FEED AND REMOVE CABLES BACK TO THE NEAREST SPLICE POINT UNAFFECTED BY CONSTRUCTION. THIS WORK SHALL BE PAID FOR UNDER THE "DISCONNECT SIGN LIGHTING AND REMOVE WIRING TO THE NEAREST SPLICE" PAY ITEM.
12. SEE IDOT STANDARD BE-801 FOR AERIAL CABLE INSTALLATION DETAILS FOR ROUTING THE AERIAL CABLES INTO THE JUNCTION BOX ATTACHED TO STRUCTURE.



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E-08



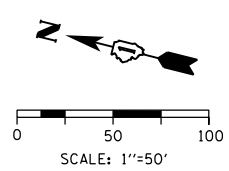
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PLOT DATE = 1/23/2020	DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>EXISTING LIGHTING PLAN</b>		
<b>SB I-90/94</b>		
SCALE: 1"=50'	SHEET 8 OF 25 SHEETS	STA. 6253+85(SB) TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	772
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

NOTES:  
 1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS AND ABBREVIATIONS.



NO WORK SHOWN ON THIS SHEET

E-09

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D162A77-SHT-Light-09  
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 PLOT SCALE = 100.0000' / in.  
 PLOT DATE = 1/23/2020

DESIGNED - TJL	REVISED -
DRAWN - CAM	REVISED -
CHECKED - WDS	REVISED -
DATE - 1/29/2019	REVISED -

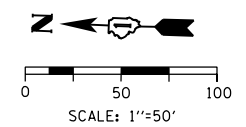
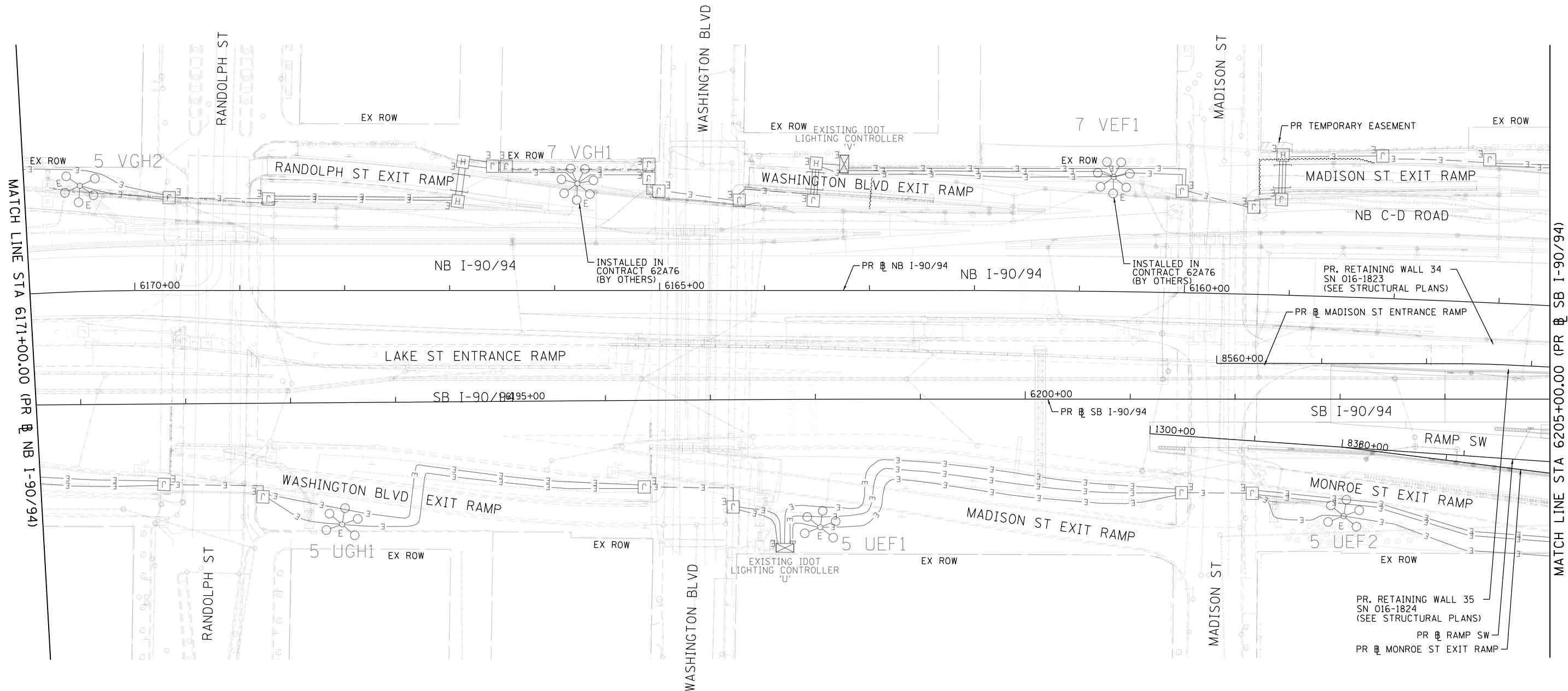
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING PLAN**  
**SB I-90/94**

SCALE: 1"=50'    SHEET 9 OF 25 SHEETS    STA.    TO STA. 6171+00(NB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	773
CONTRACT NO. 62A77			ILLINOIS FED. AID PROJECT	

NOTES:  
 1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS AND ABBREVIATIONS.



NO WORK SHOWN ON THIS SHEET

FILE PATH = p:\AECOM\NA-AWS\encomon\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\1\000\_CAD\01E\_Electrical\Sheets\62A77\_Contract\0162A77-SHT-Light-10



D162A77-SHT-Light-10	DESIGNED - T.J.L.	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - WDS	REVISED -
PLOT DATE = 1/23/2020	DATE - 1/29/2019	REVISED -

DESIGNED - T.J.L.	REVISED -
DRAWN - CAM	REVISED -
CHECKED - WDS	REVISED -
DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

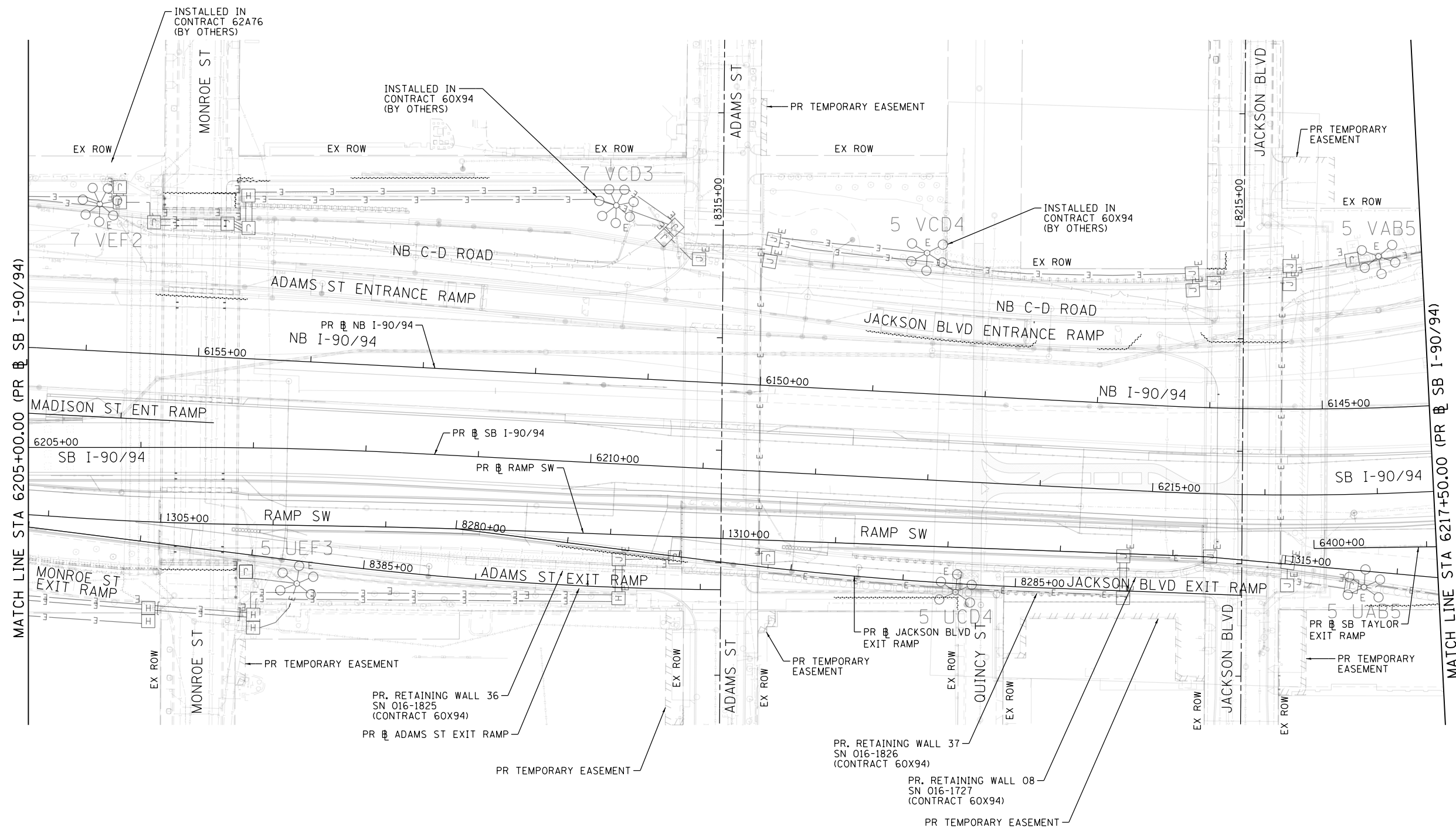
**PROPOSED LIGHTING PLAN  
 SB I-90/94**

SCALE: 1"=50' SHEET 10 OF 25 SHEETS STA. 6171+00(NB) TO STA. 6205+00(SB)

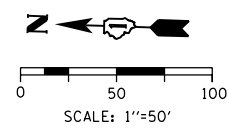
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	774
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

E-10

NOTES:  
 1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS AND ABBREVIATIONS.



NO WORK SHOWN ON THIS SHEET



FILE PATH = p:\AECOM\NA-AVSI\encom\line\local\AECOM\_0502\_NA\Documents\01\_Americas\Transportation\6205-00\SB I-90/94\Electrical\Sheets\62077\_SHT-Light-11



D162477-SHT-Light-11  
 USER NAME = myersc  
 PLOT SCALE = 100.0000' / in.  
 PLOT DATE = 1/23/2020

DESIGNED - TJL	REVISED -
DRAWN - CAM	REVISED -
CHECKED - WDS	REVISED -
DATE - 1/29/2019	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

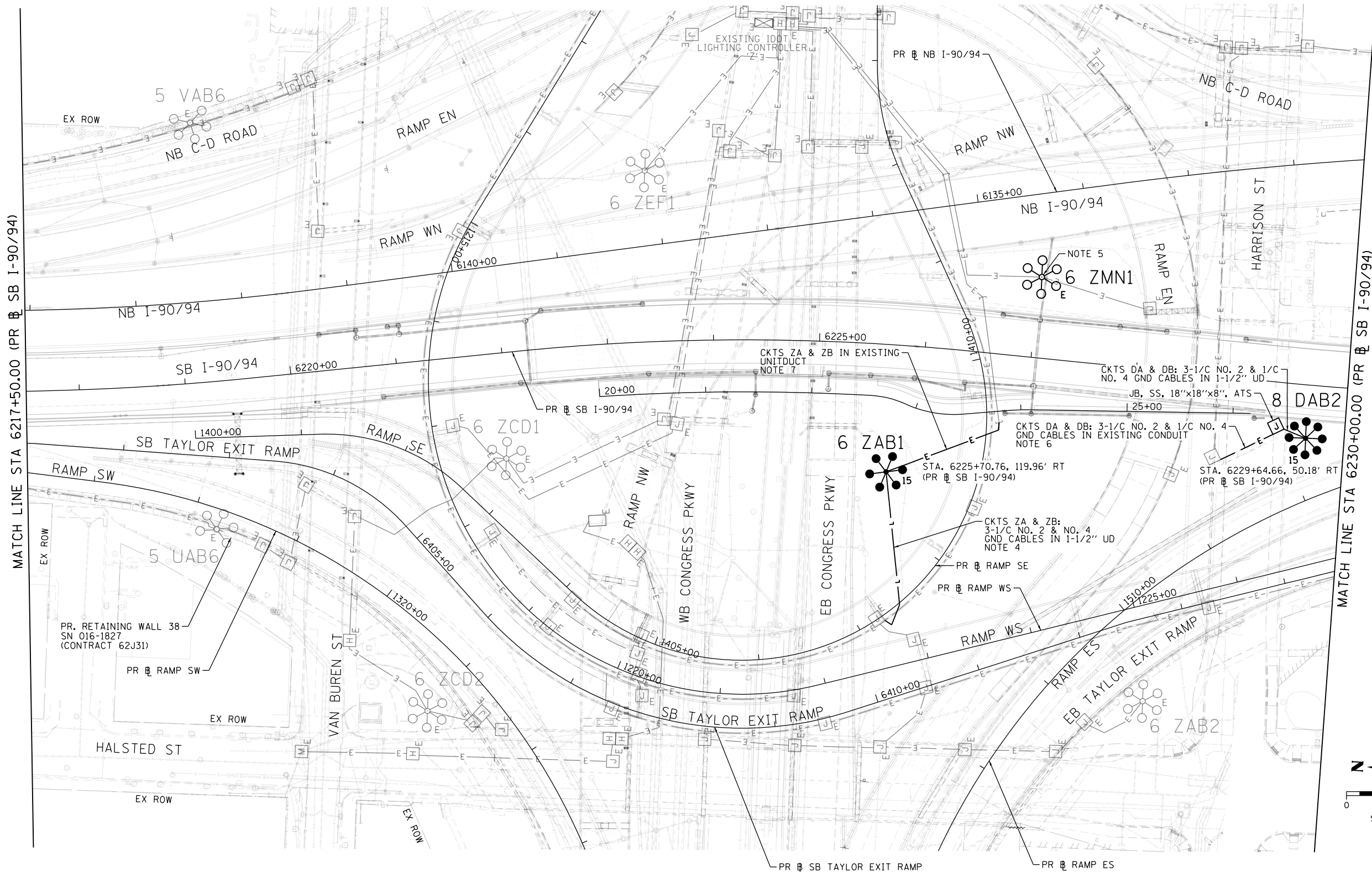
PROPOSED LIGHTING PLAN  
 SB I-90/94

SCALE: 1"=50' SHEET 11 OF 25 SHEETS STA. 6205+00(SB) TO STA. 6217+50(SB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	775
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

**NOTES:**

- SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
- ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
- IDOT CONTRACTS 60X94, 62A76, 62A77 AND 60Y00 WILL BE ONGOING SIMULTANEOUSLY WITH THIS CONTRACT. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL ELECTRICAL WORK FOR THIS CONTRACT WITH THE WORK IN THOSE CONTRACTS. THIS COORDINATION WORK SHALL BE INCLUDED AT NO ADDITIONAL COST TO THIS CONTRACT.
- ROUTE THE PROPOSED UNIT DUCT FROM LIGHT TOWER 6 ZAB1 THROUGH THE EXISTING CONDUIT ATTACHED TO THE RAMP SE PIER STRUCTURE AND MAKE ALL NECESSARY CONNECTIONS TO THE UNDERPASS LIGHTING SYSTEM CABLES WITHIN THE JUNCTION BOX ATTACHED TO THE PIER.
- PROVIDE A NEW SERVICE PAD FOR EXISTING LIGHT TOWER 6 ZMNI. INSTALL THE SERVICE PAD ONLY AFTER THE AREA AROUND THE EXISTING TOWER HAS BEEN GRADED TO THE FINAL ELEVATION FOR THIS CONTRACT. SEE DRAWING E-22 FOR SERVICE PAD DETAILS.
- INTERCEPT THE EXISTING CONDUIT ATTACHED TO THE HARRISON STREET BRIDGE PIER WITH THE PROPOSED JUNCTION BOX. PRIOR TO PULLING THE PROPOSED LIGHTING CIRCUIT CABLES THROUGH THE EXISTING CONDUIT RACEWAY THE CONDUIT SHALL BE ROD AND CLEANED.
- DISCONNECT AND ROUTE THE EXISTING UNIT DUCT FROM EXISTING LIGHT TOWER 5 ZAB1 TO PROPOSED LIGHT TOWER 6 ZAB1.



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D162A77-SHT-Light-12  
 USER NAME = myersc  
 PLOT SCALE = 100.0000' / in.  
 PLOT DATE = 1/23/2020

DESIGNED - TJL	REVISED -
DRAWN - CAM	REVISED -
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DATE - 1/29/2019	REVISED -

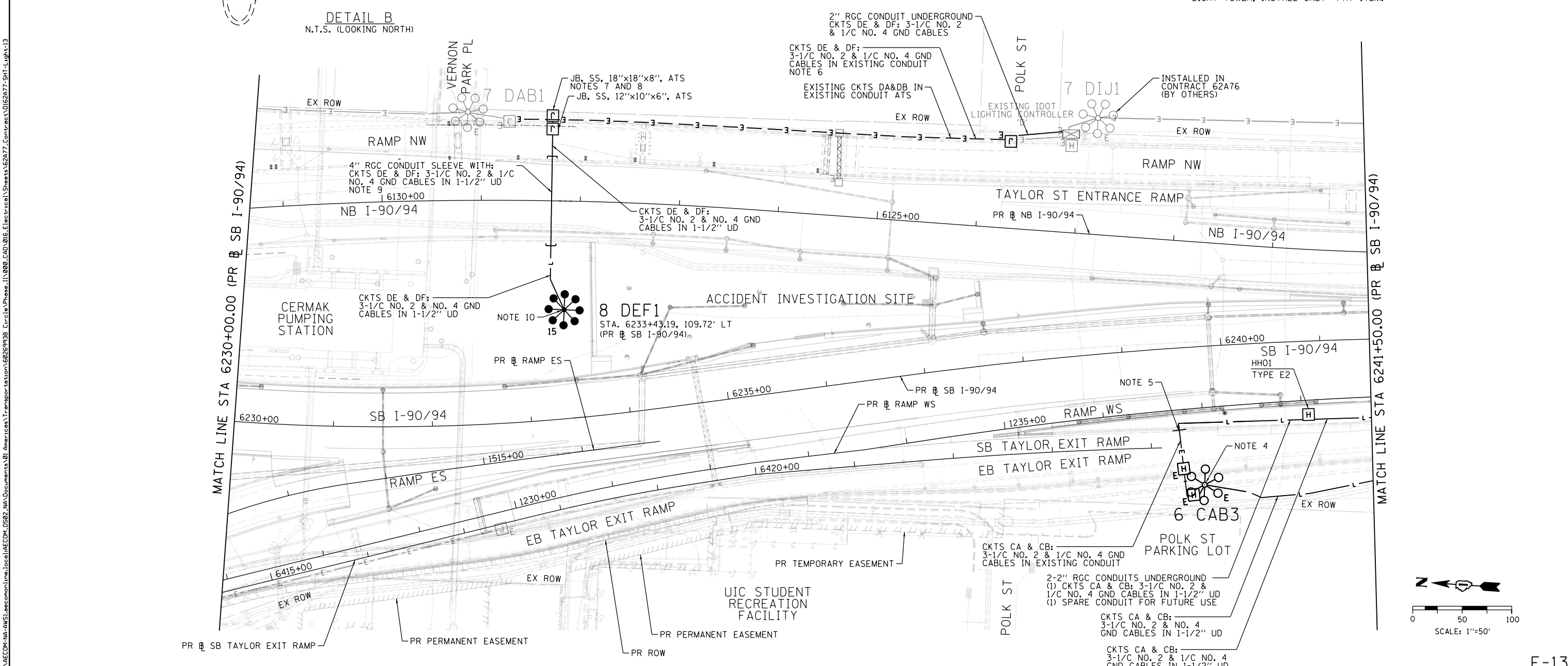
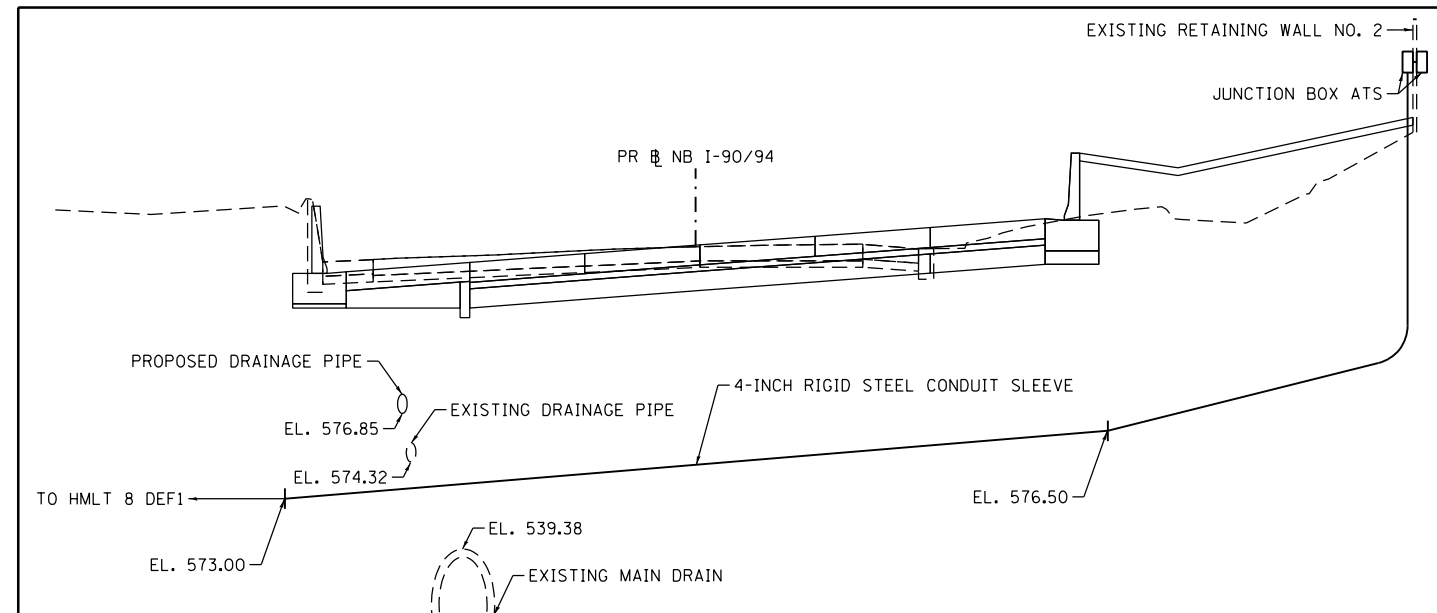
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING PLAN  
SB I-90/94**

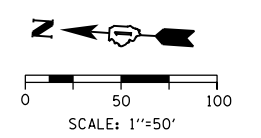
SCALE: 1"=50' SHEET 12 OF 25 SHEETS STA. 6217+50(SB) TO STA. 6230+00(SB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	776
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\a\AECOM\NA-ANSI\encom\line\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\1\000\_CAD\01E\Electrical\Sheets\62A77\_Contract\0162A77-SHT-Light-13



- NOTES:**
- SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS AND ABBREVIATIONS.
  - ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
  - IDOT CONTRACTS 60X94, 62A76, 62A77 AND 60Y00 WILL BE ONGOING SIMULTANEOUSLY WITH THIS CONTRACT. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL ELECTRICAL WORK FOR THIS CONTRACT WITH THE WORK IN THOSE CONTRACTS. THIS COORDINATION WORK SHALL BE INCLUDED AT NO ADDITIONAL COST TO THIS CONTRACT.
  - PROVIDE A NEW LIGHTING DECAL ON THE EXISTING LIGHT TOWER TO RENAME AS SHOWN.
  - INTERCEPT THE EXISTING CONDUITS, INSTALLED IN PREVIOUS CONTRACT 60X93, LOCATED IN THE GORE AREA BETWEEN THE TAYLOR STREET EXIT RAMP AND SB I-90/94. CONNECT THE TWO NEW CONDUITS (1 SPARE) TO THE EXISTING CONDUITS. ROUTE PROPOSED LIGHTING CIRCUITS CA AND CB THROUGH THE EXISTING CONDUIT AND HANDHOLES TO LIGHT TOWER 6 CAB3 AS SHOWN.
  - INSTALL PROPOSED LIGHTING CIRCUITS E AND F IN THE EXISTING CONDUIT WITH EXISTING LIGHTING CIRCUITS A AND B ONCE THE PROPOSED JUNCTION BOX HAS BEEN INSTALLED.
  - THE EXISTING CONDUIT ATTACHED TO THE BACK OF THE RETAINING WALL SHALL BE CUT AND INTERCEPTED BY THE PROPOSED JUNCTION BOX. ALL NECESSARY WORK FOR INTERCEPTING THE EXISTING CONDUIT WITH THE PROPOSED JUNCTION BOX SHALL BE INCLUDED IN THE COST OF THE "INTERCEPT EXISTING CONDUIT" PAY ITEM.
  - CORE DRILL THROUGH THE EXISTING RETAINING WALL IN ORDER TO ROUTE LIGHTING CIRCUITS E AND F THROUGH THE WALL INTO THE PROPOSED JUNCTION BOX LOCATED ON THE OTHER SIDE.
  - THE CONDUIT SLEEVE SHALL BE INSTALLED AT THE BEGINNING OF THE CONTRACT PRIOR TO STAGE 1A. THE SLEEVE SHALL BE INSTALLED AT A DEPTH THAT IS BELOW THE PROPOSED NB I-90/94 CONCRETE PAVEMENT, SUBBASE, AGGREGATE SUBGRADE AND UNDERDRAIN. THE SLEEVE SHALL BE INSTALLED AT THE FOLLOWING MINIMUM ELEVATIONS: 576.50 AT THE EAST END OF THE SLEEVE AND 573.00 AT THE WEST END. ONCE INSTALLED, THE CONDUIT SLEEVE SHALL BE PROTECTED FROM DAMAGE DURING THE PROPOSED NB I-90/94 PAVEMENT EXCAVATION AND RECONSTRUCTION WORK. ANY DAMAGE INCURRED TO THE CONDUIT SLEEVE AND THE LIGHTING CIRCUITS CONTAINED WITHIN SHALL BE IMMEDIATELY REPLACED IN KIND AT NO COST TO THE CONTRACT. SEE "DETAIL B" ON THIS SHEET FOR THE ELEVATION VIEW OF THE PROPOSED CONDUIT ROUTING.
  - THE HIGH MAST LIGHT TOWER WAS PREVIOUSLY PURCHASED AND STORED UNDER IDOT CONTRACT 62J31. THE CONTRACTOR SHALL PICK UP THE TOWER AT A LOCATION DETERMINED BY IDOT DISTRICT 1 AND THE 62J31 CONTRACTOR. ALL NECESSARY WORK FOR PICKING UP, TRANSPORTING, AND INSTALLING THE LIGHT TOWER SHALL BE INCLUDED IN THE COST OF THE "LIGHT TOWER, INSTALL ONLY" PAY ITEM.



E-13



D162A77-SHT-Light-13  
 USER NAME = myersc  
 PLOT SCALE = 100.0000' / in.  
 PLOT DATE = 1/23/2020

DESIGNED - TJL	REVISED -
DRAWN - CAM	REVISED -
CHECKED - WDS	REVISED -
DATE - 1/29/2019	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

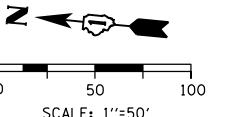
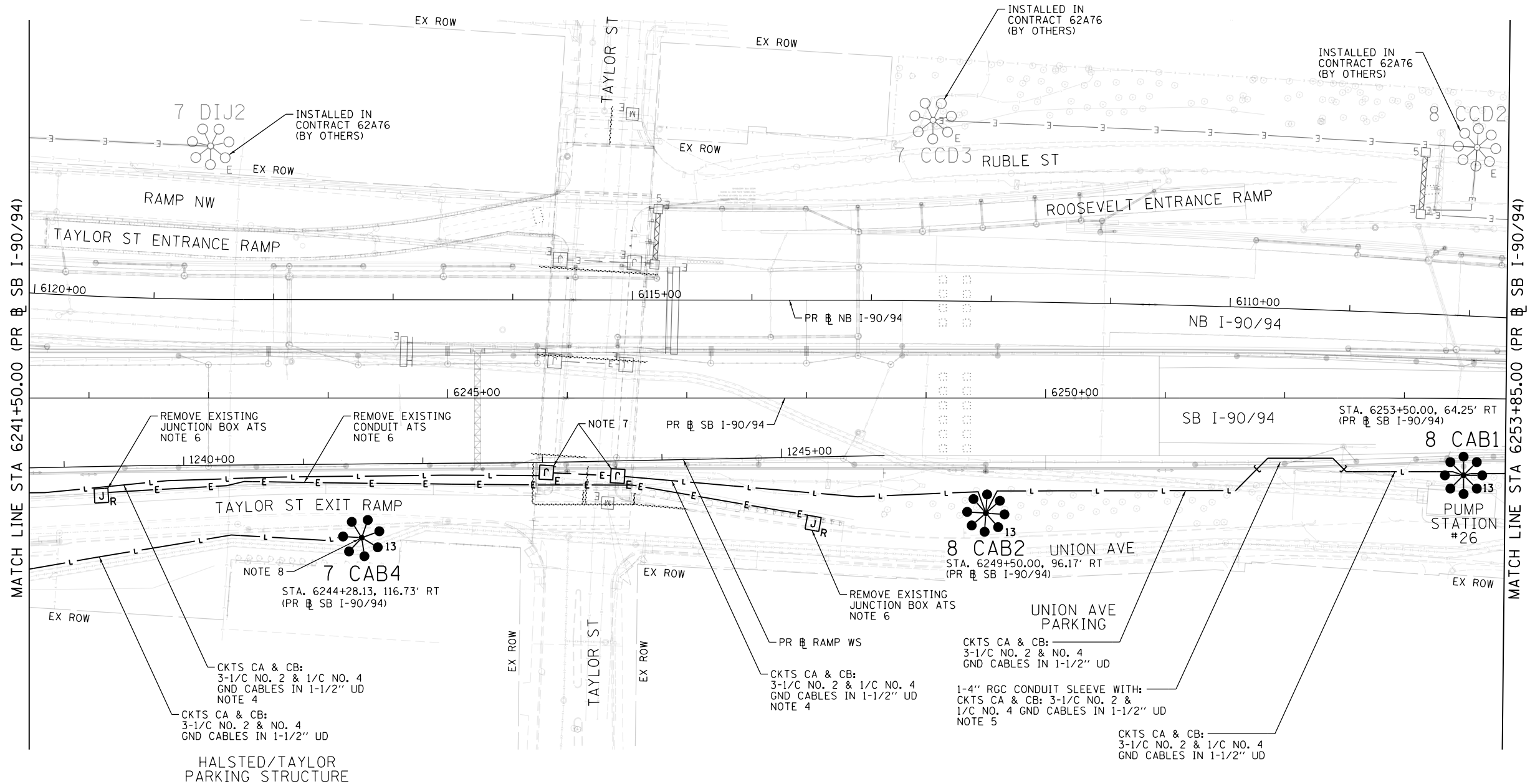
PROPOSED LIGHTING PLAN  
 SB I-90/94

SCALE: 1"=50' SHEET 13 OF 25 SHEETS STA. 6230+00(SB) TO STA. 6241+50(SB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	777
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

**NOTES:**

- SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
- IDOT CONTRACTS 60X94, 62A76, 62A77 AND 60Y00 WILL BE ONGOING SIMULTANEOUSLY WITH THIS CONTRACT. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL ELECTRICAL WORK FOR THIS CONTRACT WITH THE WORK IN THOSE CONTRACTS. THIS COORDINATION WORK SHALL BE INCLUDED AT NO ADDITIONAL COST TO THIS CONTRACT.
- ROUTE THE PROPOSED UNIT DUCT THROUGH THE 3" CONDUIT RISER TO THE EXISTING JUNCTION BOX ATTACHED TO THE WEST ABUTMENT OF THE TAYLOR STREET.
- THE CONDUIT SLEEVE SHALL BE BURIED AT A DEPTH 30" BELOW THE FINAL ELEVATION OF THE PROPOSED SHOULDER AND EXTEND AT LEAST 10' PAST THE CURB.
- THE CONDUIT AND JUNCTION BOXES INSTALLED FOR THE TEMPORARY FEED ON DRAWING E-07 SHALL BE REMOVED ONCE THE PROPOSED FEED SHOWN ON THIS DRAWING HAS BEEN INSTALLED, ENERGIZED, TESTED, AND APPROVED BY IDOT.
- ROUTE THE PROPOSED UNIT DUCT FOR LIGHTING CIRCUITS CA AND CB THROUGH THE EXISTING 3-INCH CONDUITS ATTACHED TO STRUCTURE TO THE EXISTING JUNCTION BOXES ATTACHED TO THE TAYLOR STREET BRIDGE STRUCTURE AS SHOWN. SEE DRAWING E-16 FOR CONTINUATION OF THE LIGHTING CIRCUIT ROUTING BETWEEN JUNCTION BOXES.
- AVOID 72" SEWER PIPE DURING THE CONSTRUCTION OF THE FOUNDATION OF TOWER 7 CAB4.



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D162A77-SHT-Light-14  
 USER NAME = myersc  
 PLOT SCALE = 100.0000' / in.  
 PLOT DATE = 1/23/2020

DESIGNED - TJL	REVISED -
DRAWN - CAM	REVISED -
CHECKED - WDS	REVISED -
DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

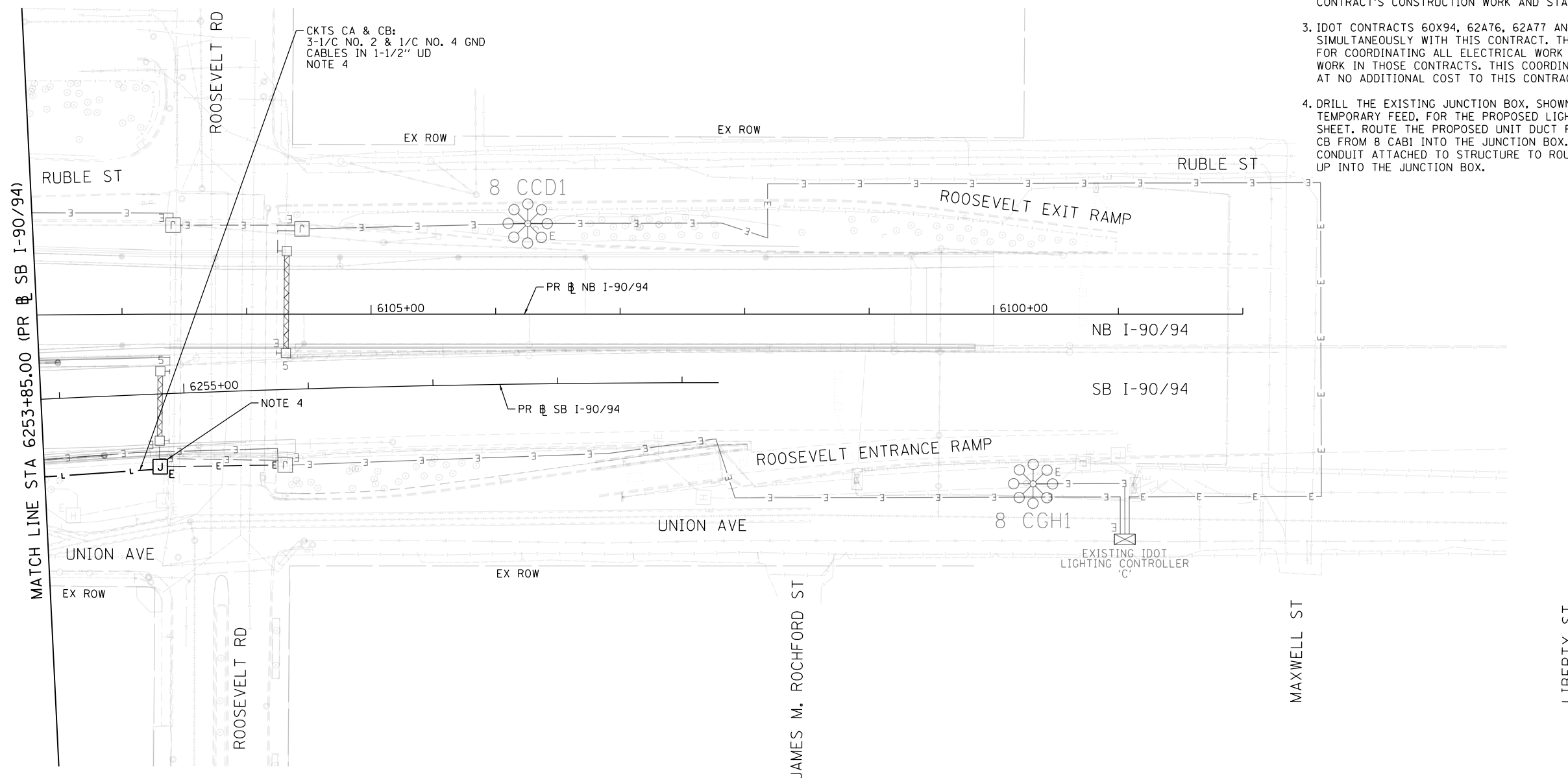
**PROPOSED LIGHTING PLAN  
 SB I-90/94**

SCALE: 1"=50' SHEET 14 OF 25 SHEETS STA. 6241+50(SB) TO STA. 6253+85(SB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	778
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

**NOTES:**

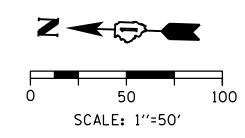
1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS AND ABBREVIATIONS.
2. ALL WORK SHOWN ON THIS DRAWING MUST BE COORDINATED WITH THIS CONTRACT'S CONSTRUCTION WORK AND STAGING.
3. IDOT CONTRACTS 60X94, 62A76, 62A77 AND 60Y00 WILL BE ONGOING SIMULTANEOUSLY WITH THIS CONTRACT. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL ELECTRICAL WORK FOR THIS CONTRACT WITH THE WORK IN THOSE CONTRACTS. THIS COORDINATION WORK SHALL BE INCLUDED AT NO ADDITIONAL COST TO THIS CONTRACT.
4. DRILL THE EXISTING JUNCTION BOX, SHOWN ON DRAWING E-08 FOR TEMPORARY FEED, FOR THE PROPOSED LIGHTING FEED SHOWN ON THIS SHEET. ROUTE THE PROPOSED UNIT DUCT FOR LIGHTING CIRCUITS CA AND CB FROM 8 CAB1 INTO THE JUNCTION BOX. PROVIDE A 3-INCH PVCC RGS CONDUIT ATTACHED TO STRUCTURE TO ROUTE THE UNIT DUCT FROM GRADE UP INTO THE JUNCTION BOX.



CKTS CA & CB:  
3-1/C NO. 2 & 1/C NO. 4 GND  
CABLES IN 1-1/2" UD  
NOTE 4

NOTE 4

EXISTING IDOT  
LIGHTING  
CONTROLLER  
'C'



FILE PATH = p:\AECOM\NA-AVSI\ecommon\line\local\AECOM\_DS02\_NA\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\_1\1000\_CAD\01E\_Electrical\Sheets\62A77\_Contract\0162A77-SHT-Light-15



D162A77-SHT-Light-15	DESIGNED - TJL	REVISED -
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

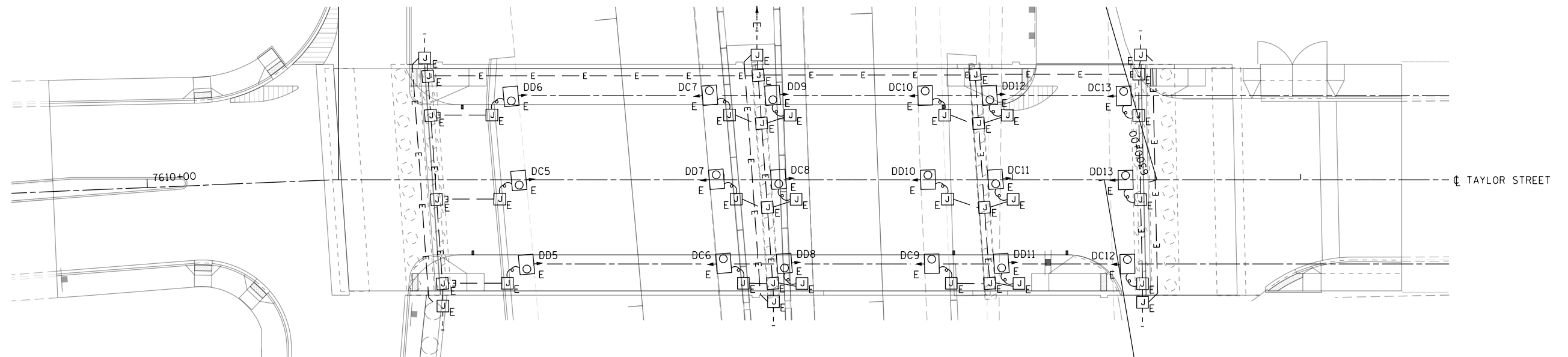
**PROPOSED LIGHTING PLAN  
SB I-90/94**

SCALE: 1"=50' SHEET 15 OF 25 SHEETS STA. 6253+85(SB) TO STA.

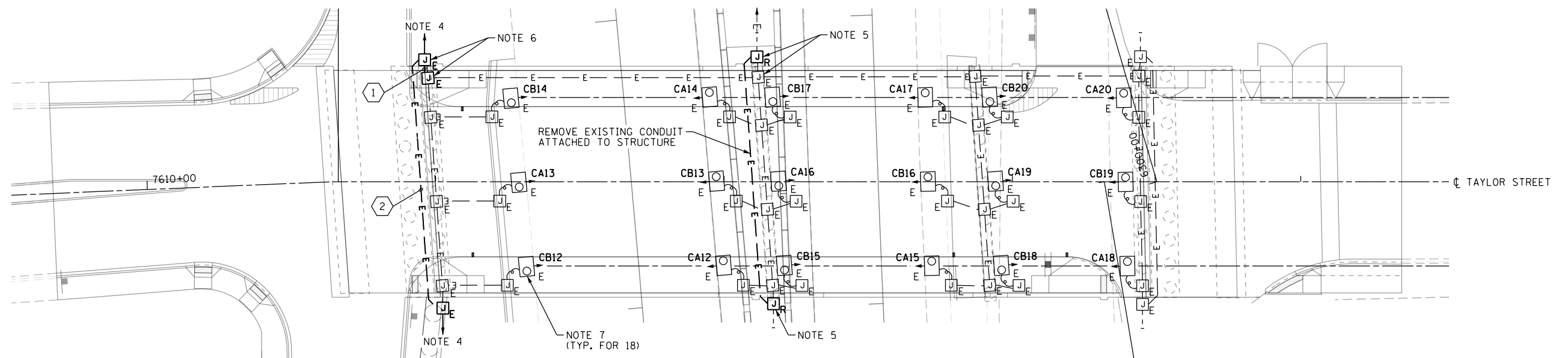
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	779
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				



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**EXISTING UNDERPASS LIGHTING PLAN**

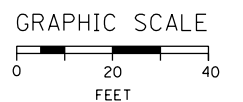


**PROPOSED UNDERPASS LIGHTING PLAN**

**NOTES:**

1. SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
2. LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN ON THIS DRAWING ARE APPROXIMATIONS AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
3. ALL UNDERPASS LIGHTING UNITS SHOWN ON THIS DRAWING WILL BE FED FROM EXISTING IDOT LIGHTING CONTROLLER "C".
4. SEE DRAWING E-14 FOR CONTINUATION OF THE LIGHTING CIRCUIT ROUTING.
5. REMOVE THE EXISTING CONDUIT ATTACHED TO THE FACE OF THE EXISTING PIER STRUCTURE ROUTED INTO GRADE. ABANDON THE UNDERGROUND PORTIONS OF THE EXISTING RACEWAYS.
6. DRILL THE EXISTING JUNCTION BOX AND ROUTE THE NEW CONDUIT AND LIGHTING CIRCUIT CABLES INTO THE JUNCTION BOX AND SPLICE TO THE EXISTING LIGHTING CIRCUIT CABLES TO FEED THE UNDERPASS LIGHTING SYSTEM.
7. PROVIDE A NEW LIGHTING DECAL FOR THE EXISTING UNDERPASS LUMINAIRE TO RENAME AS SHOWN.

CABLE / CONDUIT SCHEDULE	
1	3-1/C#10, 1-1/C#10 GND IN 1" DIA PVCC RGC ATTACHED TO STRUCTURE (CKTS AS INDICATED ON THIS DRAWING)
2	3-1/C#2, 1-1/C#4 GND XLP TYPE USE CABLES IN EXISTING 3" CONDUIT ATTACHED TO STRUCTURE



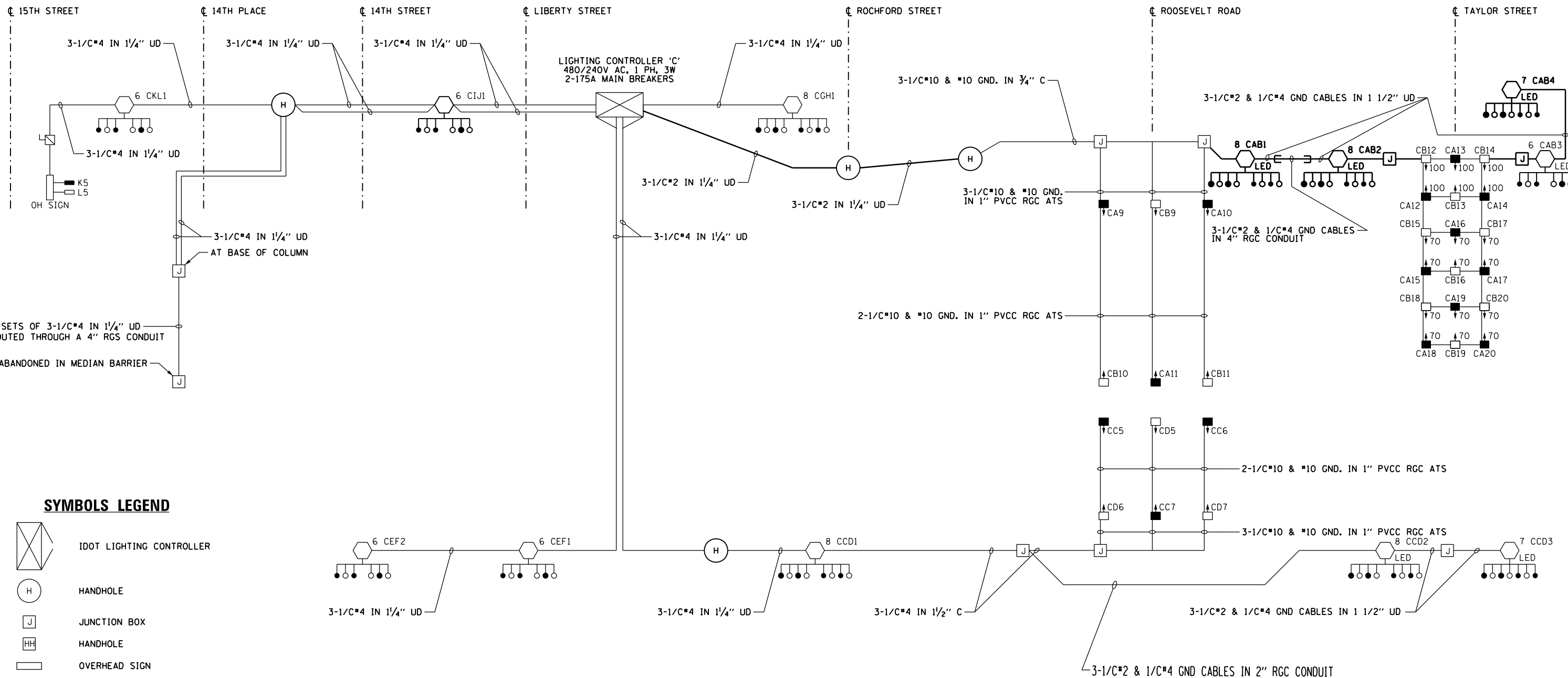
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**











**TAYLOR STREET UNDERPASS LIGHTING PLAN**

SCALE: 1"=20' SHEET 16 OF 25 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	780
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				



**SYMBOLS LEGEND**

-  IDOT LIGHTING CONTROLLER
-  HANDHOLE
-  JUNCTION BOX
-  HANDHOLE
-  OVERHEAD SIGN
-  DISCONNECT SWITCH
-  UNDERPASS LIGHTING UNIT  
55 WATT HPS LUMINAIRE  
(BLACK PHASE - SOLID SYMBOL  
RED PHASE - OPEN SYMBOL)
-  HIGH MAST LIGHT TOWER  
400 WATT HPS LUMINAIRE  
(BLACK PHASE - SOLID SYMBOL  
RED PHASE - OPEN SYMBOL)
-  HIGH MAST LIGHT TOWER  
LED LUMINAIRE  
(BLACK PHASE - SOLID SYMBOL  
RED PHASE - OPEN SYMBOL)
-  LIGHTED OVERHEAD SIGN STRUCTURE  
WITH 170 WATT FLUORESCENT  
LUMINAIRE, QUANTITY OF  
LUMINAIRE AS REQUIRED  
(BLACK PHASE - SOLID SYMBOL  
RED PHASE - OPEN SYMBOL)

LOAD TABLE LIGHTING CONTROLLER "C"					
CIRCUIT	BLACK PHASE		CIRCUIT	RED PHASE	
	AMPS	WATTS		AMPS	WATTS
A	33.23	7974	B	31.55	7572
C	24.69	5926	D	23.02	5524
E	11.40	2736	F	11.40	2736
G	7.60	1824	H	7.60	1824
I	5.70	1368	J	5.70	1368
K	6.20	1488	L	6.20	1488
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	88.8	21316	TOTAL	85.5	20512



E-17



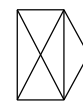










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 DESIGNED - TJL  
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 DATE - 1/29/2019  
 REVISED -  
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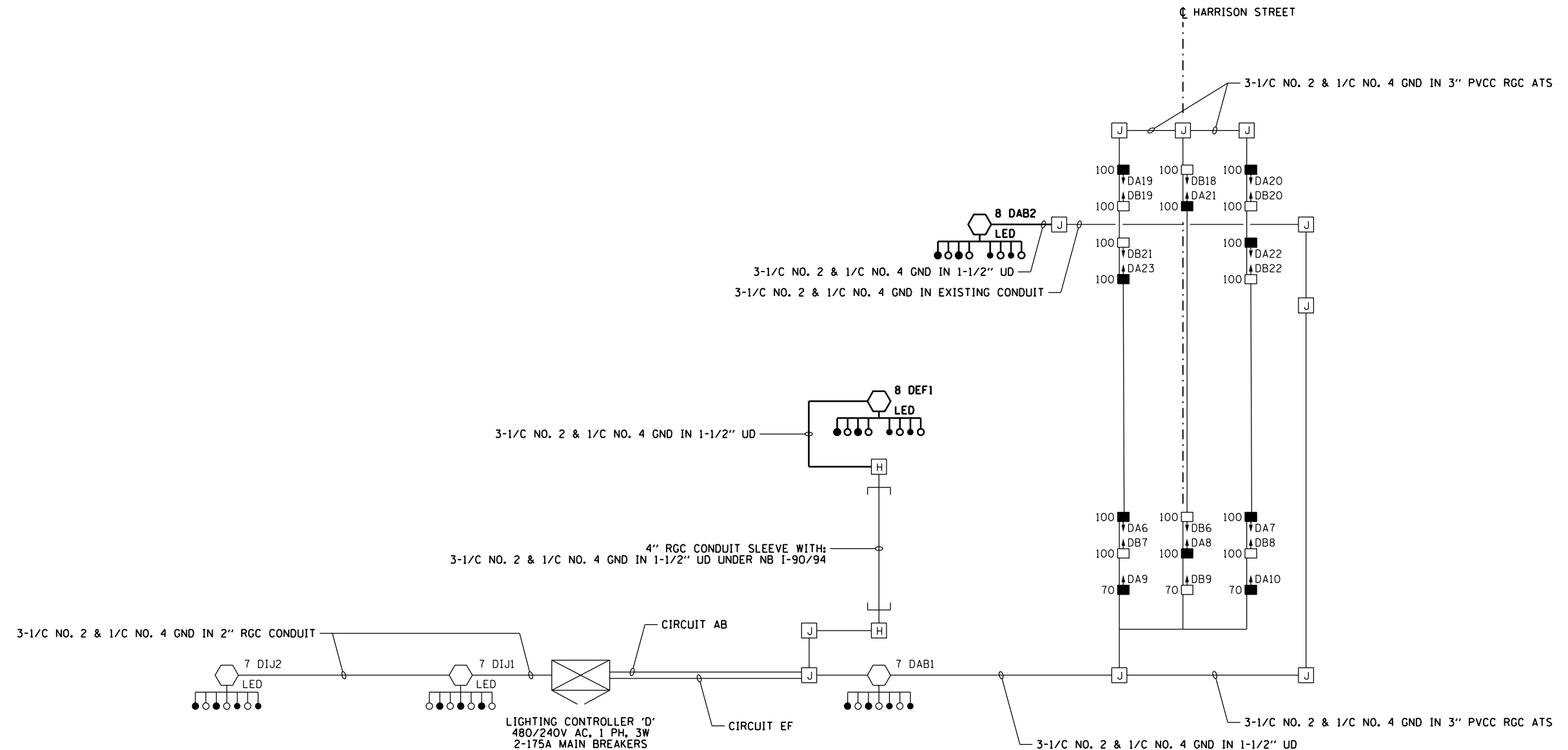
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**IDOT LIGHTING CONTROLLER 'C'**  
**WIRING DIAGRAM**  
 SCALE: N.T.S.    SHEET 17 OF 25 SHEETS    STA.    TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	781
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\a\ecdm-na-ansi\ecdm\local\ecdm\0502\_NA\Documents\01\_Americas\Transportation\60269938\_Circle\Phase\1\000\_CAD\01E\Electrical\Sheets\62A77\_sht-Light-1B

- SYMBOLS LEGEND**
-  IDOT LIGHTING CONTROLLER
  -  HANDHOLE
  -  JUNCTION BOX
  -  HANDHOLE
  -  OVERHEAD SIGN
  -  DISCONNECT SWITCH
  -  UNDERPASS LIGHTING UNIT  
55 WATT HPS LUMINAIRE  
(BLACK PHASE - SOLID SYMBOL  
RED PHASE - OPEN SYMBOL)
  -  HIGH MAST LIGHT TOWER  
400 WATT HPS LUMINAIRE  
(BLACK PHASE - SOLID SYMBOL  
RED PHASE - OPEN SYMBOL)
  -  HIGH MAST LIGHT TOWER  
LED LUMINAIRE  
(BLACK PHASE - SOLID SYMBOL  
RED PHASE - OPEN SYMBOL)
  -  LIGHTED OVERHEAD SIGN STRUCTURE  
WITH 170 WATT FLUORESCENT  
LUMINAIRE, QUANTITY OF  
LUMINAIRE AS REQUIRED  
(BLACK PHASE - SOLID SYMBOL  
RED PHASE - OPEN SYMBOL)
  -  PROPOSED UNDERPASS LIGHTING UNIT  
70 OR 100 WATT HPS LUMINAIRE  
(BLACK PHASE - SOLID SYMBOL  
RED PHASE - OPEN SYMBOL)



**LOAD TABLE  
LIGHTING CONTROLLER "D"**

CIRCUIT	BLACK PHASE		CIRCUIT	RED PHASE	
	AMPS	WATTS		AMPS	WATTS
A	20.04	4810	B	17.71	4250
C	-	-	D	-	-
E	6.70	1608	F	6.70	1608
G	-	-	H	-	-
I	11.73	2814	J	11.73	2814
K	-	-	L	-	-
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	38.5	9232	TOTAL	36.1	8672



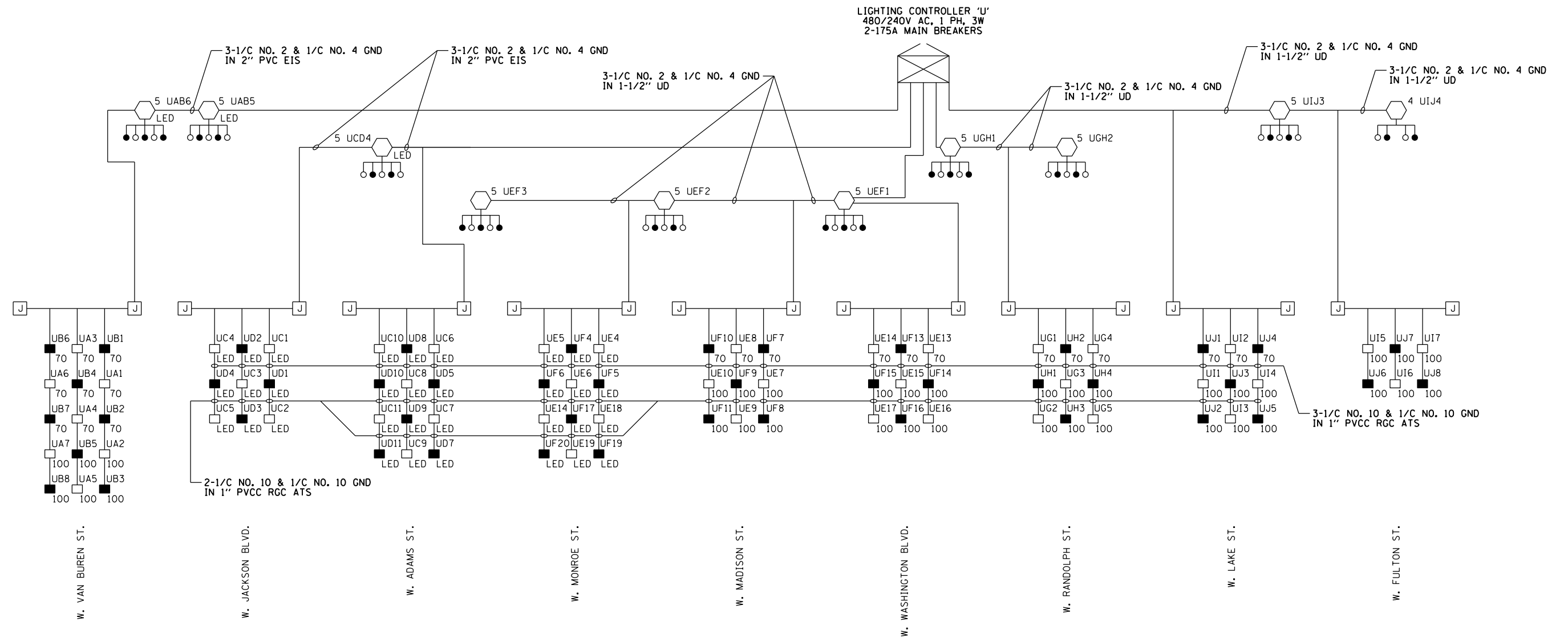
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PLOT DATE = 1/23/2020	DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**








<b>IDOT LIGHTING CONTROLLER 'D' WIRING DIAGRAM</b>	
SCALE: N.T.S.	SHEET 18 OF 25 SHEETS STA. TO STA.

F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 782
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

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**SYMBOLS LEGEND**

-  IDOT LIGHTING CONTROLLER
-  JUNCTION BOX
-  UNDERPASS LIGHTING UNIT  
55 WATT LPS LUMINAIRE  
(BLACK PHASE - SOLID SYMBOL  
RED PHASE - OPEN SYMBOL)
-  UNDERPASS LIGHTING UNIT  
LED LUMINAIRE  
(BLACK PHASE - SOLID SYMBOL  
RED PHASE - OPEN SYMBOL)
-  HIGH MAST LIGHT TOWER  
400 WATT HPS LUMINAIRE  
(BLACK PHASE - SOLID SYMBOL  
RED PHASE - OPEN SYMBOL)
-  UNDERPASS LIGHTING UNIT  
70 OR 100 WATT HPS LUMINAIRE  
(BLACK PHASE - SOLID SYMBOL  
RED PHASE - OPEN SYMBOL)
-  HIGH MAST LIGHT TOWER  
LED LUMINAIRE  
(BLACK PHASE - SOLID SYMBOL  
RED PHASE - OPEN SYMBOL)

LOAD TABLE (240V) LIGHTING CONTROLLER "U"					
CIRCUIT	BLACK PHASE		CIRCUIT	RED PHASE	
	AMPS	WATTS		AMPS	WATTS
A	11.9	2862	B	12.4	2965
C	9.4	2262	D	7.4	1764
E	22.6	5412	F	20.7	4956
G	12.2	2926	H	11.8	2822
I	13.6	3262	J	12.1	2909
K	-	-	L	-	-
M	-	-	N	-	-
O	-	-	P	-	-
TOTAL	69.7	16723	TOTAL	64.2	15416



D162A77-sht-Light-19  
USER NAME = myersc  
PLOT SCALE = 40.0000' / in.  
PLOT DATE = 1/23/2020

DESIGNED - WDS  
DRAWN - CAM  
CHECKED - WDS  
DATE - 1/29/2019

REVISED -  
REVISED -  
REVISED -  
REVISED -

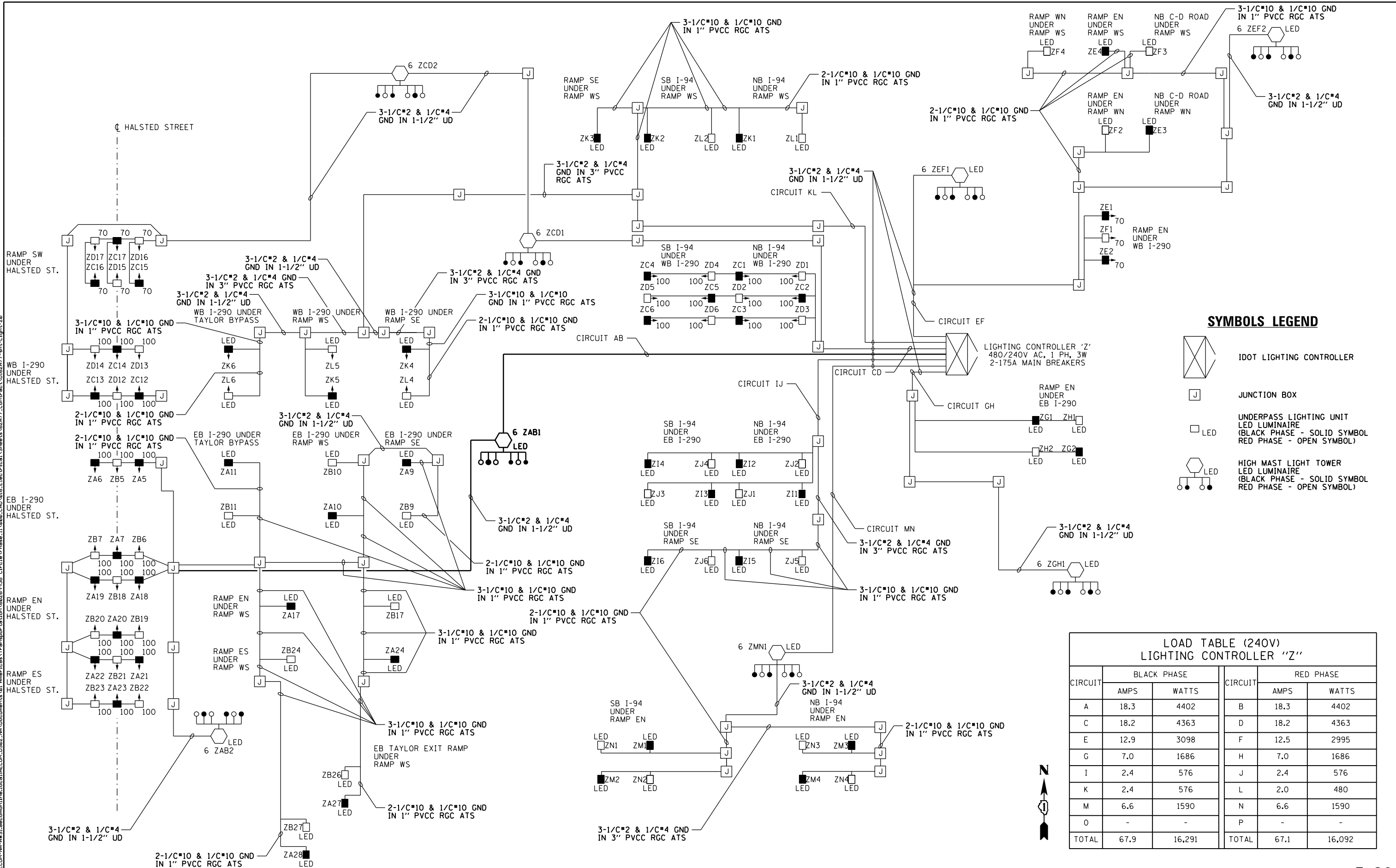
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IDOT LIGHTING CONTROLLER 'U'  
WIRING DIAGRAM**





SCALE: N.T.S. SHEET 19 OF 25 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	783
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

FILE PATH = p:\a\AECOM\NA-NSI\encomon\line\local\AECOM\_DS02\_NA Documents\01\_Americas\Transportation\62677\_Contract\0162677\_sht-Light-20



**SYMBOLS LEGEND**

-  IDOT LIGHTING CONTROLLER
-  JUNCTION BOX
-  UNDERPASS LIGHTING UNIT LED LUMINAIRE (BLACK PHASE - SOLID SYMBOL, RED PHASE - OPEN SYMBOL)
-  HIGH MAST LIGHT TOWER LED LUMINAIRE (BLACK PHASE - SOLID SYMBOL, RED PHASE - OPEN SYMBOL)

**LOAD TABLE (240V) LIGHTING CONTROLLER "Z"**

CIRCUIT	BLACK PHASE		RED PHASE		
	AMPS	WATTS	AMPS	WATTS	
A	18.3	4402	B	18.3	4402
C	18.2	4363	D	18.2	4363
E	12.9	3098	F	12.5	2995
G	7.0	1686	H	7.0	1686
I	2.4	576	J	2.4	576
K	2.4	576	L	2.0	480
M	6.6	1590	N	6.6	1590
O	-	-	P	-	-
TOTAL	67.9	16,291	TOTAL	67.1	16,092



D162677-sht-Light-20  
 USER NAME = myersc  
 PLOT SCALE = 40.0000' / in.  
 PLOT DATE = 1/23/2020

DESIGNED - WDS  
 DRAWN - CAM  
 CHECKED - WDS  
 DATE - 1/29/2019

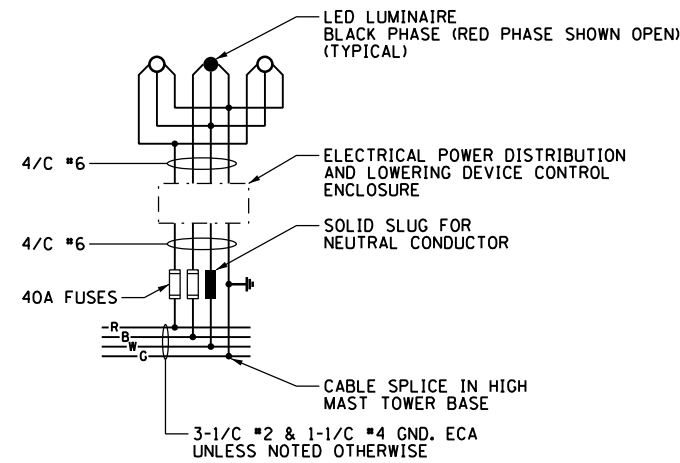
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

IDOT LIGHTING CONTROLLER 'Z'  
 WIRING DIAGRAM  
 SCALE: N.T.S. SHEET 20 OF 25 SHEETS STA. TO STA.

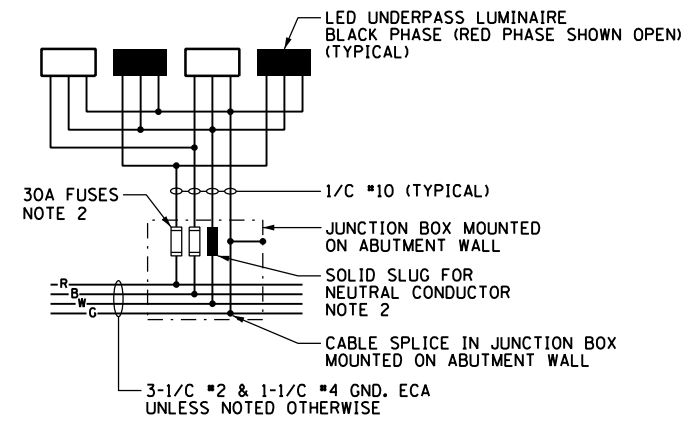
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 SECTION 2015-018R  
 COUNTY COOK  
 TOTAL SHEETS 1360  
 SHEET NO. 784  
 CONTRACT NO. 62A77  
 ILLINOIS FED. AID PROJECT

HIGH MAST LIGHT TOWER FOUNDATION SCHEDULE (NOTE 3)

HIGH MAST LIGHT TOWER IDENTIFICATION	HIGH MAST LIGHT TOWER FOUNDATION LOCATION			HIGH MAST LIGHT TOWER FOUNDATION ELEVATIONS			HIGH MAST TOWER HEIGHT	REMARKS AND NOTES
	STATION	OFFSET	BASELINE	TOP ELEVATION	BOTTOM ELEVATION	DESIGN DEPTH (FT)		
6 ZAB1	6225+70.76	119.96 RT	SB I-90/94	590.81	535.81	55	150	---
8 DAB2	6229+64.66	50.18 RT	SB I-90/94	580.88	530.88	50	150	---
8 DEF1	6233+43.19	109.72 LT	SB I-90/94	586.56	541.56	45	150	---
7 CAB4	6244+28.13	116.73 RT	SB I-90/94	593.49	538.49	55	130	---
8 CAB2	6249+50.00	96.17 RT	SB I-90/94	589.64	539.64	50	130	---
8 CAB1	6253+50.00	64.25 RT	SB I-90/94	579.83	539.83	40	130	---



TYPICAL HIGH MAST LIGHT TOWER WIRING DIAGRAM  
NOT TO SCALE



TYPICAL UNDERPASS LIGHTING UNIT WIRING DIAGRAM  
NOT TO SCALE

NOTES:

- SEE DRAWING E-01 FOR IDOT ELECTRICAL SYMBOLS.
- THE FUSES, FUSE HOLDERS, AND SOLID SLUGS SHALL BE PROVIDED ACCORDING TO ARTICLE 1065.01 OF THE IDOT STANDARDS. THE COST OF PROVIDING THE FUSES, FUSE HOLDERS, AND SOLID SLUGS IN THE JUNCTION BOX WILL NOT BE PAID FOR SEPARATELY AND WILL BE INCLUDED IN THE COST OF THE JUNCTION BOX IN WHICH THEY ARE INSTALLED.
- THE SCHEDULE ON THIS DRAWING REPLACES THE "SHAFT LENGTH (D) TABLE" SHOWN ON IDOT STANDARDS BE-506 AND BE-511.
- SEE IDOT STANDARDS BE-506 AND BE-511 FOR LIGHT TOWER FOUNDATION DETAILS.

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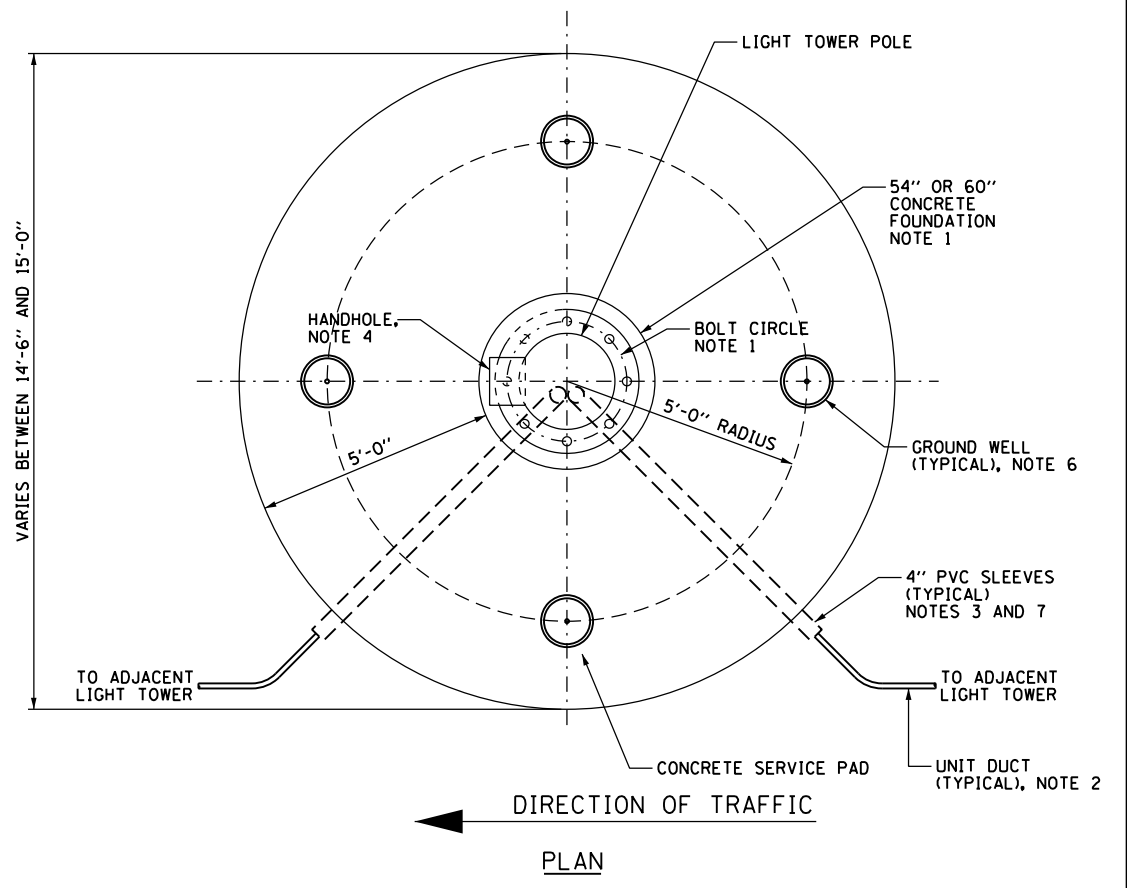
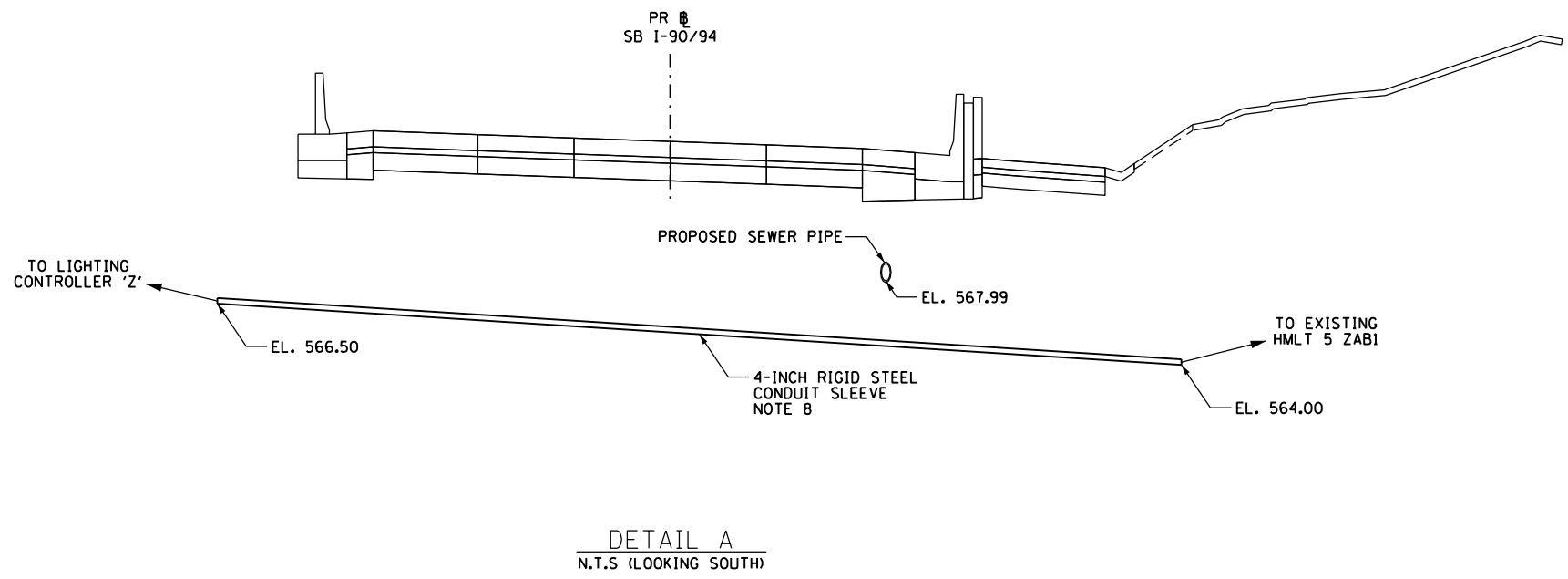
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ELECTRICAL DETAILS

SCALE: N.T.S. SHEET 21 OF 25 SHEETS STA. TO STA.

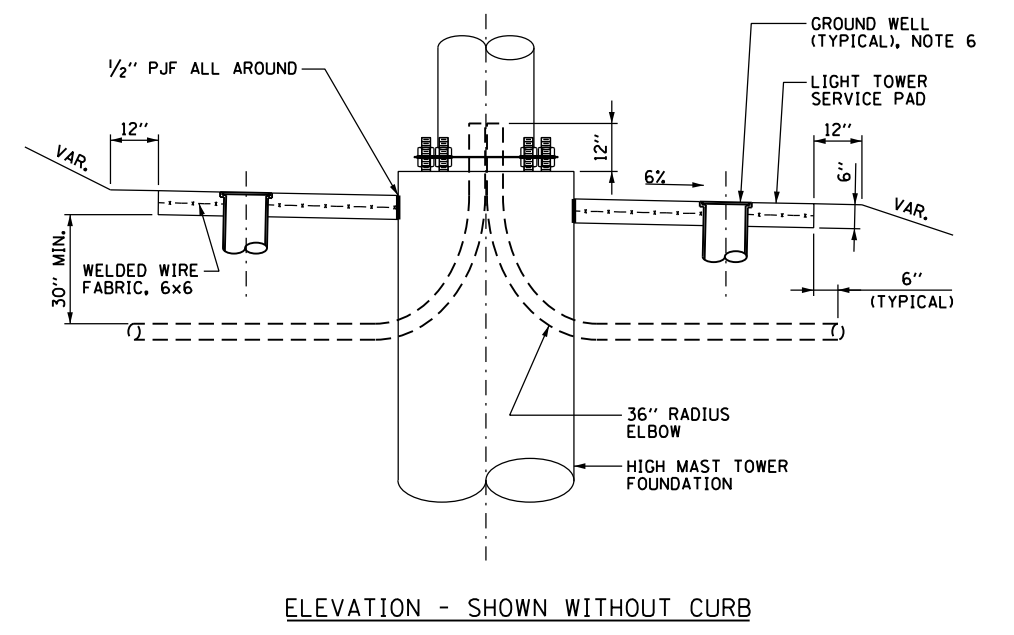
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	785
CONTRACT NO. 62A77			ILLINOIS FED. AID PROJECT	

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**NOTES:**

1. SEE IDOT STANDARD DRAWING BE-506 FOR ADDITIONAL HIGH MAST LIGHT TOWER FOUNDATION AND GROUND WELL DETAILS.
2. SEE ELECTRICAL PLAN DRAWINGS FOR QUANTITY, SIZE, AND TYPE OF RACEWAY AND LIGHTING CIRCUITS ROUTED TO EACH HIGH MAST LIGHT TOWER FOUNDATION.
3. PVC SLEEVES MUST BE EXTENDED 6 INCHES BEYOND THE EDGE OF THE CONCRETE PAD.
4. THE HANDHOLE FOR THE HIGH MAST LIGHTING UNIT MUST BE ORIENTED SUCH THAT IT IS MOUNTED ON THE SIDE OF THE POLE THAT IS OPPOSITE THE DIRECTION OF TRAFFIC.
5. ALL EMPTY SLEEVES MUST BE CAPPED UNLESS NOTED OTHERWISE ON THE PLANS.
6. INSTALL GROUND WELLS 5'-0" AS MEASURED FROM THE CENTER LINE OF THE HIGH MAST TOWER TO THE CENTER LINE OF THE WELL.
7. PVC CONDUIT SLEEVES SHALL BE INCLUDED IN THE COST OF THE LIGHT TOWER FOUNDATION AND SHALL NOT BE PAID FOR SEPARATELY.
8. THE CONDUIT SLEEVE SHALL BE INSTALLED AT A DEPTH THAT IS BELOW THE PROPOSED SB I-90/94 CONCRETE PAVEMENT, SUBBASE, AGGREGATE SUBGRADE AND UNDERDRAIN. THE SLEEVE SHALL BE INSTALLED AT THE FOLLOWING MINIMUM ELEVATIONS: 566.50 AT THE EAST END OF THE SLEEVE AND 564.00 AT THE WEST END. ONCE INSTALLED, THE CONDUIT SLEEVE SHALL BE PROTECTED FROM DAMAGE DURING THE PROPOSED SB I-90/94 PAVEMENT EXCAVATION AND RECONSTRUCTION WORK AS WELL AS THE PROPOSED DRAINAGE WORK. ANY DAMAGE INCURRED TO THE CONDUIT SLEEVE AND THE LIGHTING CIRCUITS CONTAINED WITHIN SHALL BE IMMEDIATELY REPLACED IN KIND AT NO COST TO THE CONTRACT.



GROUND MOUNTED HIGH MAST TOWER SERVICE PAD, GROUNDING AND CONDUIT INSTALLATION DETAILS  
NOT TO SCALE

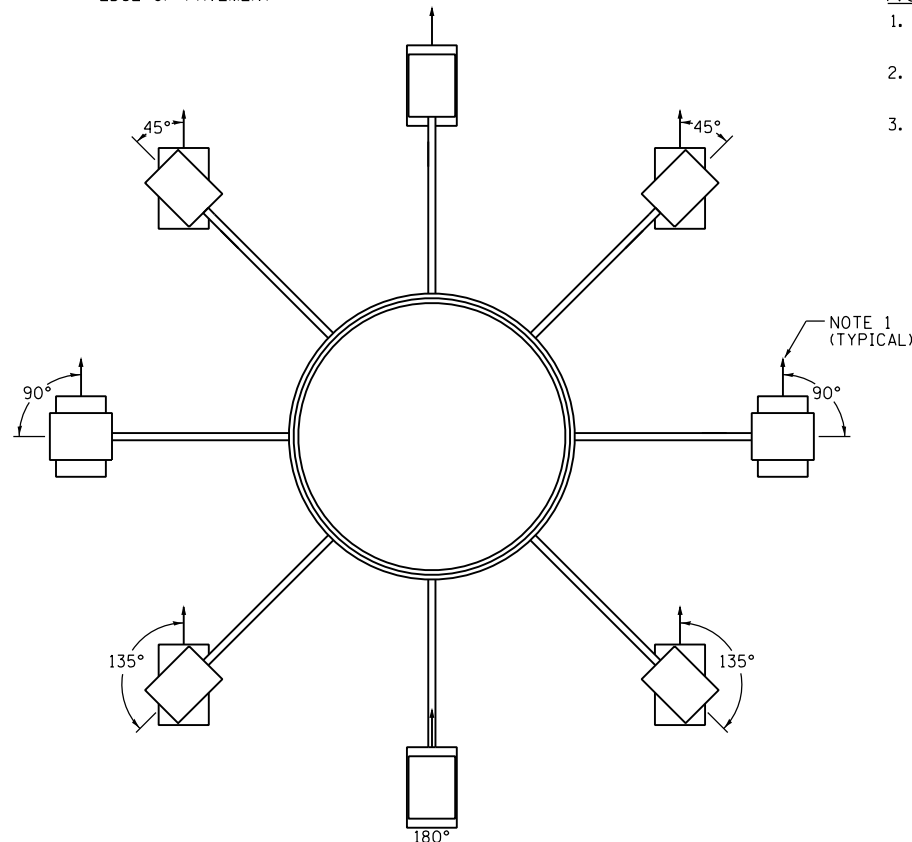


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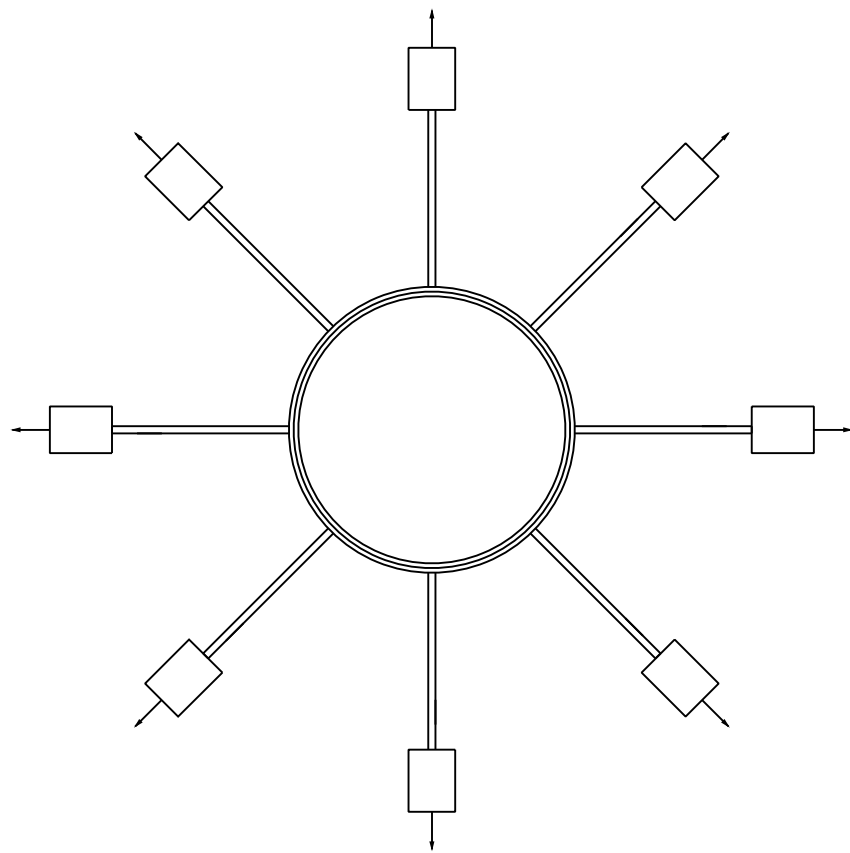
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

LIGHT TOWER SERVICE PAD AND CONDUIT DETAILS		
SCALE: N.T.S.	SHEET 22 OF 25 SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	786
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				



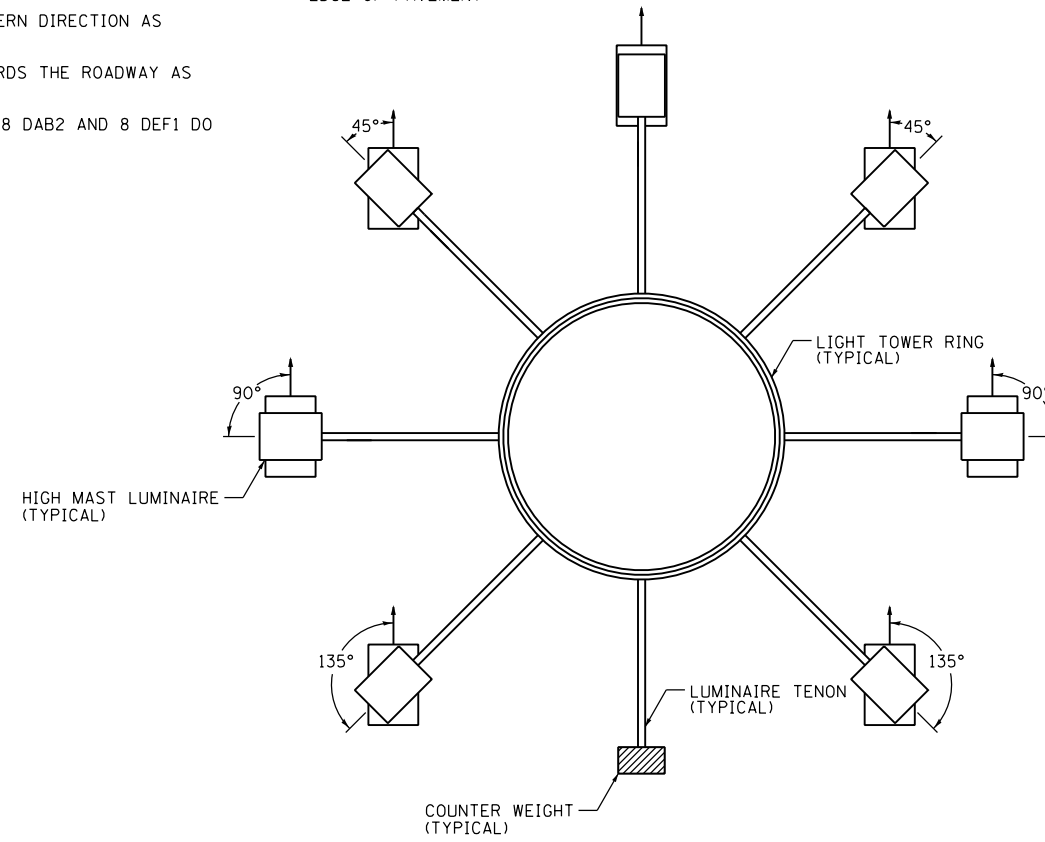
8 LUMINAIRE RING - 8 LUMINAIRES  
8 CAB2, 8 CAB1



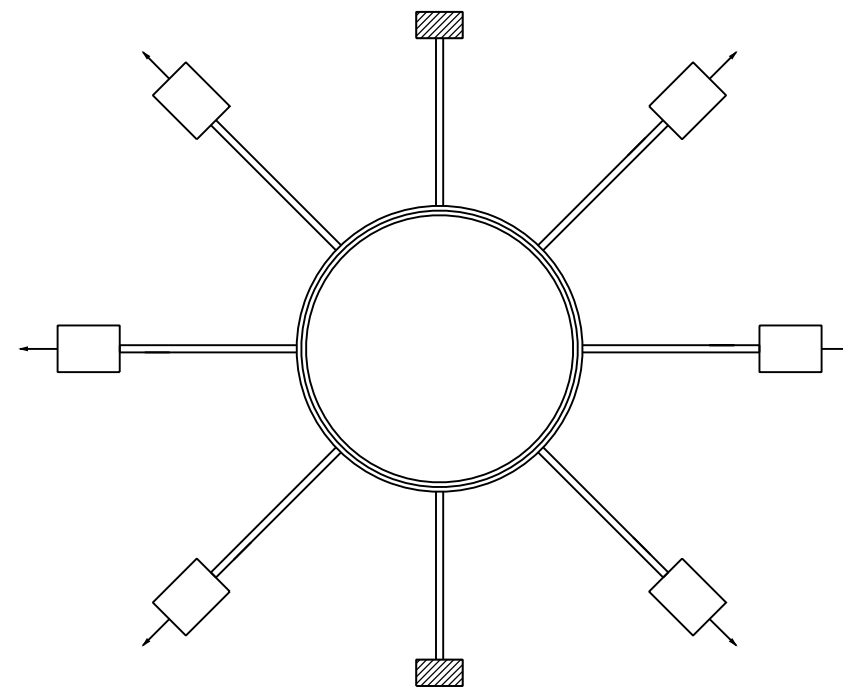
8 LUMINAIRE RING - 8 LUMINAIRES  
8 DAB2, 8 DEF1

NOTES:

1. LUMINAIRE DISTRIBUTION PATTERN DIRECTION AS INDICATED BY ARROW.
2. ROTATE THE LUMINAIRES TOWARDS THE ROADWAY AS SHOWN.
3. LUMINAIRES FOR LIGHT TOWER 8 DAB2 AND 8 DEF1 DO NOT REQUIRE ORIENTATION.



8 LUMINAIRE RING - 7 LUMINAIRES  
7 CAB4



8 LUMINAIRE RING - 6 LUMINAIRES  
6 ZAB1

VIEW LOOKING FROM TOP OF LIGHT TOWERS

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DATE - 1/29/2019	REVISED -

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DEPARTMENT OF TRANSPORTATION

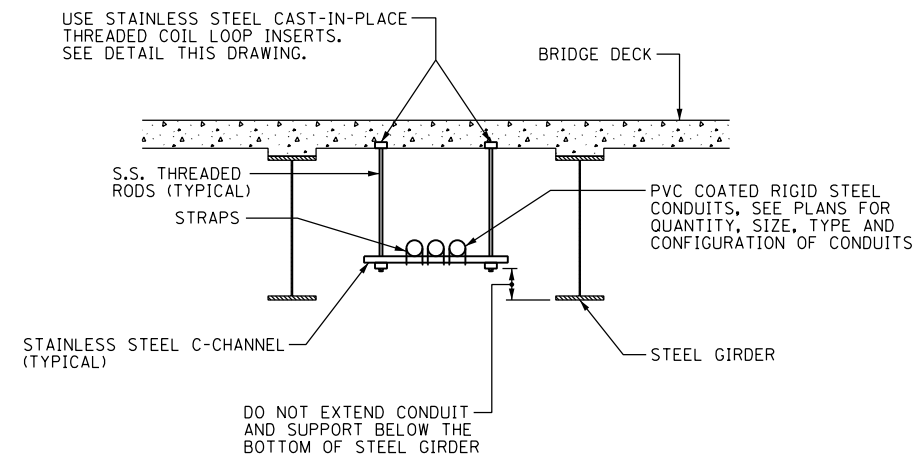
HIGH MAST LIGHT TOWER LUMINAIRE ORIENTATION

SCALE: N.T.S. SHEET 23 OF 25 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	787
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

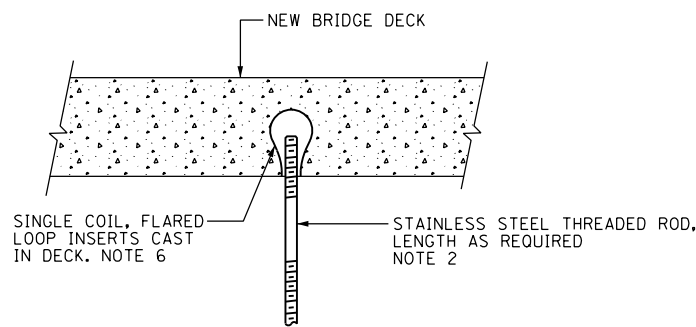


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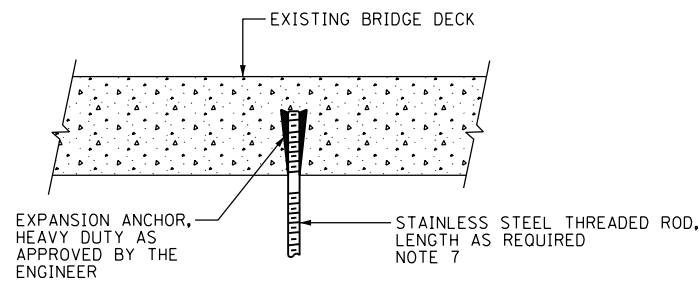
**TYPICAL CONDUIT SUPPORT ATTACHED TO BRIDGE DECK DETAIL**

SCALE: NOT TO SCALE  
NOTES 3 & 5

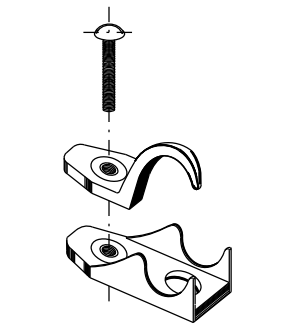


**NEW BRIDGE DECK THREADED ROD INSTALLATION ANCHOR DETAILS**

SCALE: NOT TO SCALE

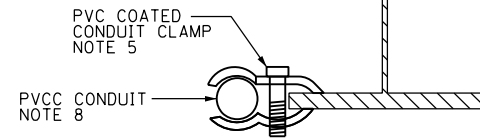
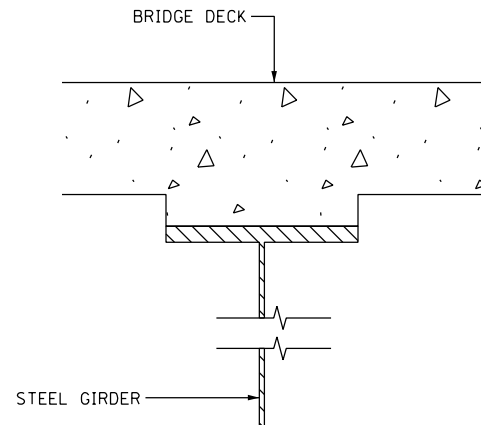


**EXISTING BRIDGE DECK THREADED ROD INSTALLATION ANCHOR DETAILS**



**PVC COATED CONDUIT CLAMP**

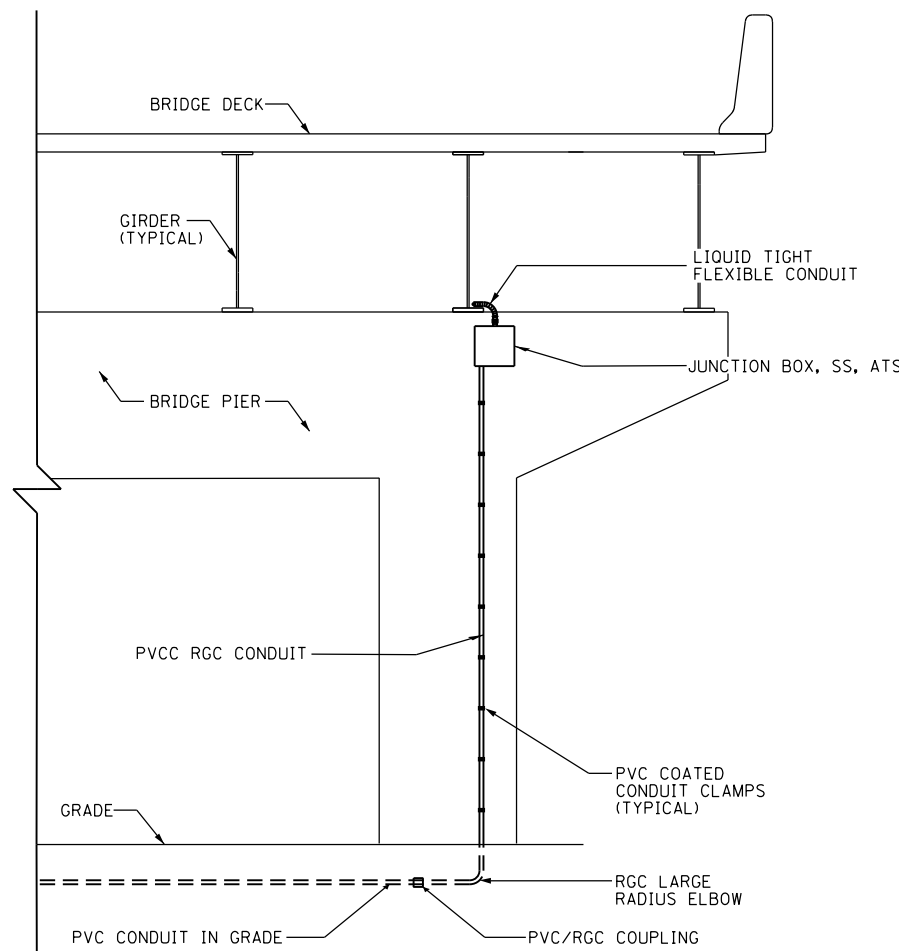
NOT TO SCALE NOTE 7



**CONDUIT BEAM CLAMPED INSTALLATION DETAIL**

**PVC COATED CONDUIT BEAM CLAMP**

NOT TO SCALE NOTE 7

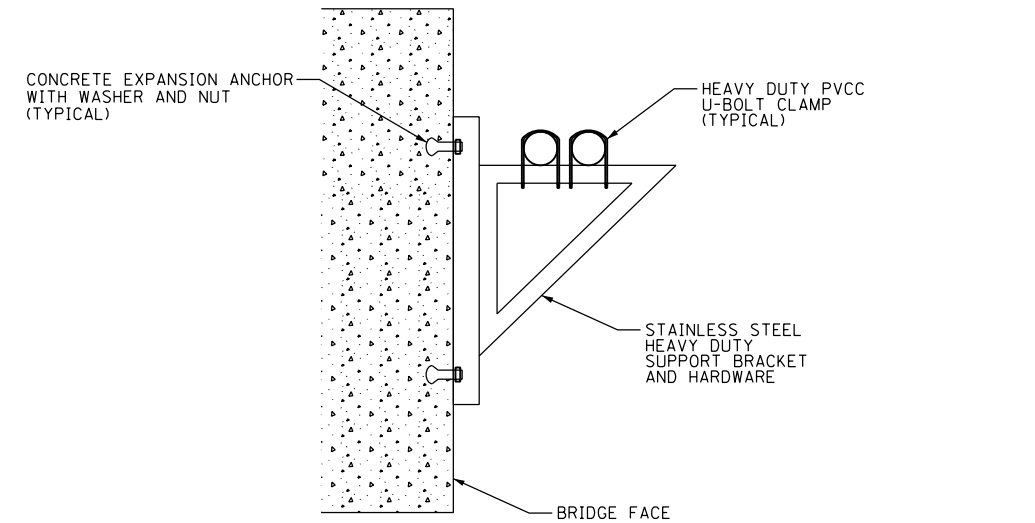


**VERTICAL CONDUIT ATTACHED TO STRUCTURE DETAIL**

NOT TO SCALE

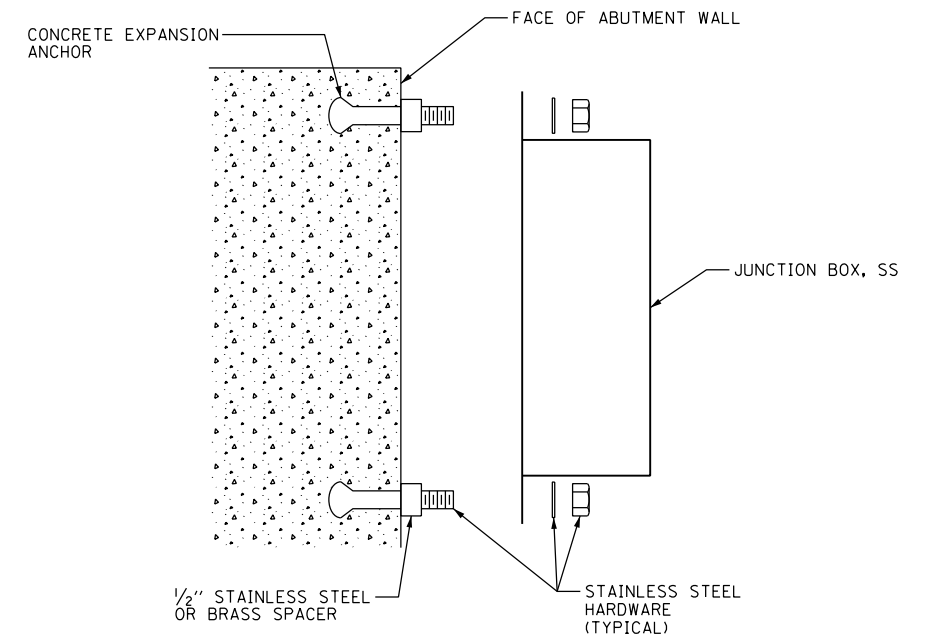
**NOTES:**

1. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR ATTACHING CONDUITS AND JUNCTION BOXES TO A STRUCTURE. ALL WORK REQUIRED TO ATTACH CONDUIT TO STRUCTURES MUST COMPLY WITH SECTION 811 OF THE STANDARD SPECIFICATIONS AND ALL MATERIALS MUST COMPLY WITH SECTION 1088 OF THE STANDARD SPECIFICATIONS.
2. THE CONTRACTOR MUST COORDINATE THREADED ROD END SIZES WITH THE C-CHANNEL AND FLARED LOOP INSERT MANUFACTURERS.
3. THE CONDUIT SUPPORT SYSTEM ATTACHED TO THE BRIDGE STRUCTURE, INCLUDING THE CONCRETE INSERTS AND MOUNTING HARDWARE, WILL NOT BE PAID FOR SEPARATELY, AND SHALL BE INCLUDED IN THE COST FOR THE "CONDUIT ATTACHED TO STRUCTURE" PAY ITEM.
4. SEE PLAN DRAWINGS FOR THE PROPOSED CONDUIT ROUTING.
5. ALL MOUNTING HARDWARE FOR THE PVCC RGC CONDUIT MUST BE PVC COATED.
6. THE CONTRACTOR MUST USE APPROVED SINGLE COIL FLARED LOOP INSERTS WHEN PENDANT MOUNTING THREADED RODS TO A NEW BRIDGE DECK. THE FLARED LOOP INSERTS MUST BE CAST INTO THE CONCRETE DECK. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING THE INSERT LOCATIONS IN THE FIELD AND COORDINATING ALL WORK WITH THE BRIDGE DECK CONSTRUCTION.
7. SECURE THE CONDUIT WITH PVC COATED CONDUIT CLAMPS OR CONDUIT BEAM CLAMPS AS SHOWN AT 5'-0" INTERVALS FOR LATERALS AND WITHIN 2'-0" MAXIMUM FROM ANY JUNCTION BOX, FLEXIBLE CONDUIT, OR CHANGE IN DIRECTION. ALL PVC COATED CONDUIT CLAMPS OR BEAM CLAMPS WILL BE INCLUDED WITH THE COST OF THE "CONDUIT ATTACHED TO STRUCTURE" PAY ITEM.
8. ALL CONDUIT ATTACHED TO STRUCTURE SHALL BE PVC COATED RIGID STEEL CONDUIT (PVCC RGC) TYPICAL.



**MOUNTING BRACKET FOR MULTIPLE CONDUITS**

NOT TO SCALE



**JUNCTION BOX MOUNTED TO STRUCTURE**

NOT TO SCALE



D162A77-sht-Light-24  
USER NAME = myersc  
PLOT SCALE = 40.0000' / in.  
PLOT DATE = 1/23/2020

DESIGNED - TJL  
DRAWN - CAM  
CHECKED - WDS  
DATE - 1/29/2019

REVISED -  
REVISED -  
REVISED -  
REVISED -

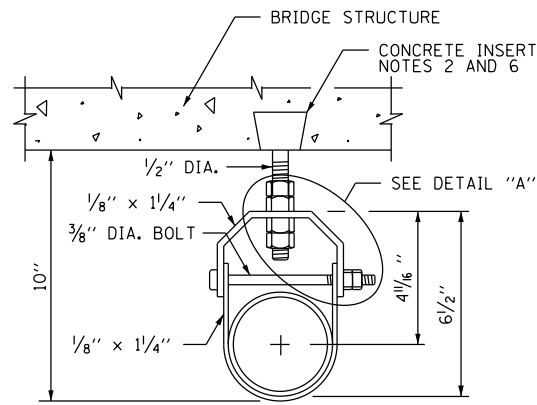
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**MISCELLANEOUS ELECTRICAL DETAILS**

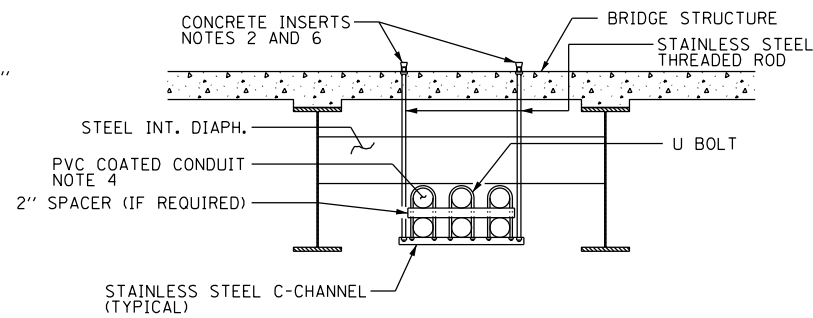
SCALE: N.T.S. SHEET 24 OF 25 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	788
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

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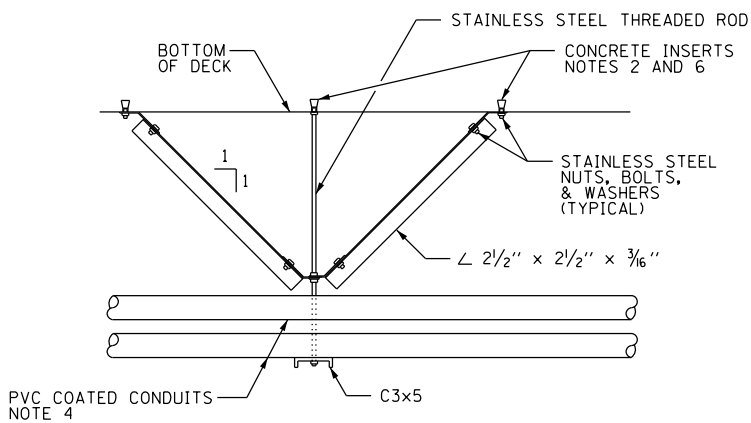


CONDUIT HANGER DETAIL



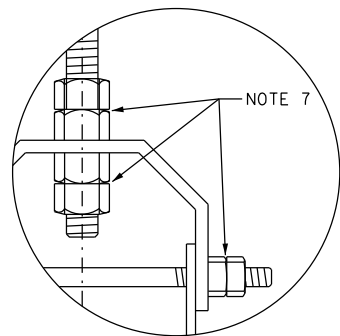
TYPICAL CONDUIT SUPPORT ATTACHED TO BRIDGE DECK WITH DIAPHRAGM DETAIL

NOTES 2 AND 3

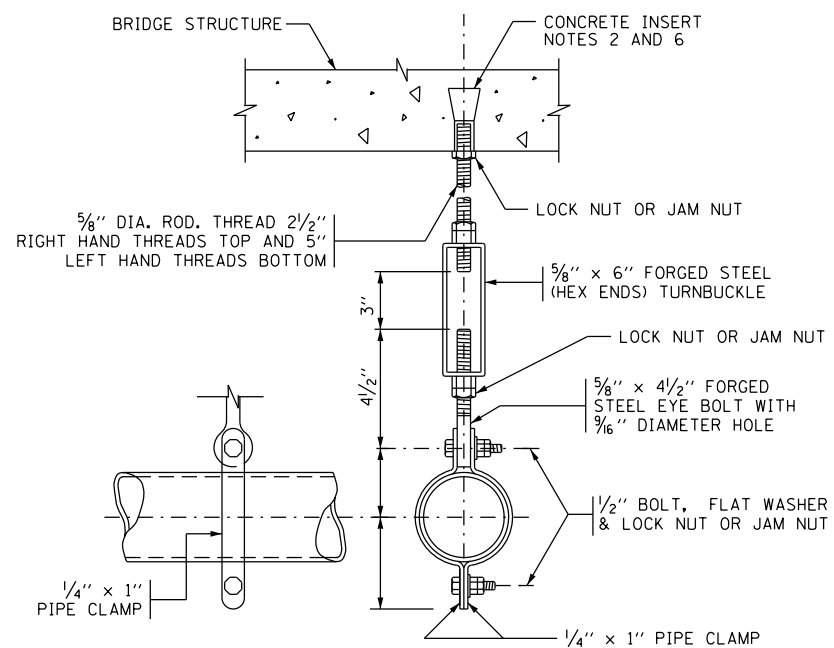


CENTERING DEVICE DETAIL - SIDE VIEW

(LOCATED ONLY ON A HANGER ADJACENT TO PIER)

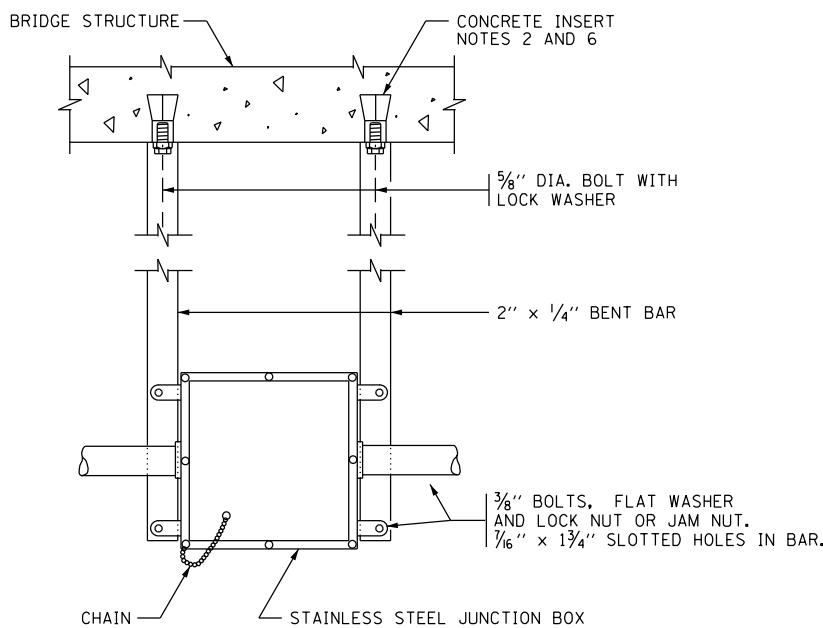


DETAIL "A"



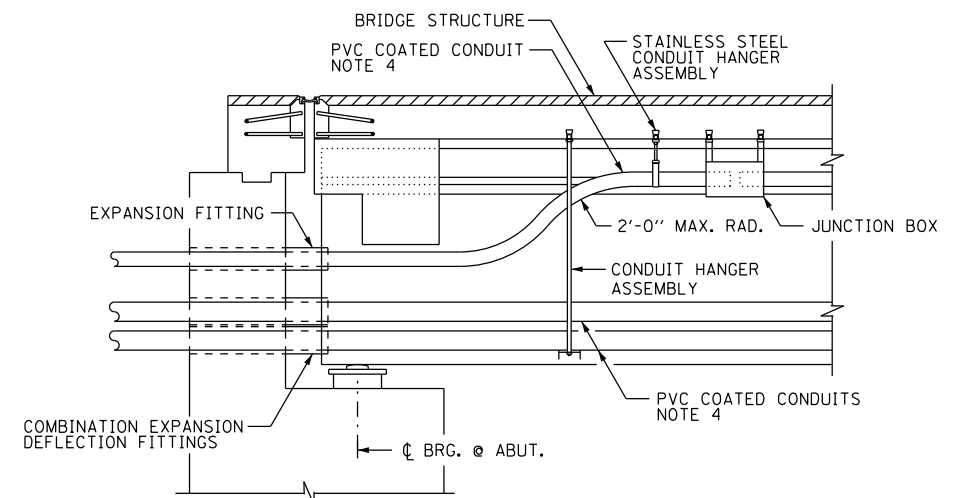
HANGER ASSEMBLY

EACH HANGER ASSEMBLY SHALL CONSIST OF CONCRETE INSERT, STAINLESS STEEL ROD, PIPE CLAMPS, NUTS, BOLTS, WASHERS, TURNBUCKLE AND EYE BOLT



JUNCTION BOX SUSPENDED FROM STRUCTURE DETAILS

NOTE 5



LONGITUDINAL SECTION

NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR ATTACHING CONDUITS AND JUNCTION BOXES TO A STRUCTURE. ALL WORK REQUIRED TO ATTACH CONDUIT TO STRUCTURES MUST COMPLY WITH SECTION 811 OF THE STANDARD SPECIFICATIONS AND ALL MATERIALS MUST COMPLY WITH SECTION 1088 OF THE STANDARD SPECIFICATIONS.
2. SEE DRAWING E-24 FOR ADDITIONAL CONDUIT MOUNTING DETAILS AND FOR DETAILS REGARDING THE INSTALLATION OF CONCRETE INSERTS.
3. THE CONDUIT SUPPORT SYSTEM ATTACHED TO THE BRIDGE STRUCTURE, INCLUDING THE CONCRETE INSERTS AND MOUNTING HARDWARE, WILL NOT BE PAID FOR SEPARATELY, AND SHALL BE INCLUDED IN THE COST FOR THE "CONDUIT ATTACHED TO STRUCTURE" PAY ITEM.
4. SEE THE PLAN DRAWINGS FOR THE PROPOSED CONDUIT ROUTING.
5. THE JUNCTION BOX SUPPORT SYSTEM ATTACHED TO THE BRIDGE STRUCTURE, INCLUDING THE CONCRETE INSERTS AND ALL MOUNTING HARDWARE, WILL NOT BE PAID FOR SEPARATELY, AND SHALL BE INCLUDED IN THE COST FOR THE "JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE" PAY ITEM.
6. SPACE INSERTS AT 10 FOOT (MAXIMUM) CENTERS.
7. PROVIDE STAINLESS STEEL DOUBLE NUTS, JAM NUTS OR LOCK NUTS FOR THIS INSTALLATION.
8. PROVIDE CONDUIT SLEEVES IN THE BRIDGE ABUTMENT AS REQUIRED TO ROUTE THE CONDUITS THROUGH THE STRUCTURE AS SHOWN. THE DIAMETER OF THE SLEEVES SHALL BE A MINIMUM OF 2 INCHES LARGER IN DIAMETER THAN THE DIAMETER OF THE CONDUIT. PROVIDE WATERPROOF SEALANT IN THE INTERSTITIAL SPACE BETWEEN THE SLEEVE AND THE CONDUIT.



D162A77-sht-Light-25  
 USER NAME = myersc  
 PLOT SCALE = 40.0000' / in.  
 PLOT DATE = 1/23/2020

DESIGNED - TJL  
 DRAWN - CAM  
 CHECKED - WDS  
 DATE - 1/29/2019

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS ELECTRICAL DETAILS

SCALE: N.T.S. SHEET 25 OF 25 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	789
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

**SEQUENCING NOTES:**

- IMPLEMENTATION OF INTELLIGENT TRANSPORTATION SYSTEMS TO BE PERFORMED IN COORDINATION WITH CONCURRENT CONTRACTS 60X79, 60X93, 62J31, 60Y00, 62A76, AND 60X94. THESE CONTRACTS REMOVE EXISTING ITS ELEMENTS AND INSTALL CONDUIT, HANDHOLES/JUNCTION BOXES, ITS CABINETS, CABLING, ITS DEVICE STRUCTURES, AND OTHER INFRASTRUCTURE THAT MUST BE COORDINATED WITH WORK DESCRIBED HEREIN. STAGES REFERENCED IN THESE PLANS CORRELATES TO STAGES OF CONSTRUCTION FROM THE CONCURRENT CONTRACTS.
- IN GENERAL, ITS EQUIPMENT IDENTIFIED FOR REMOVAL OR SALVAGING TO BE REMOVED/SALVAGED IN THE CONSTRUCTION STAGE THAT INCLUDES WORK AROUND THE ITS SITE. LIKEWISE, ITS INFRASTRUCTURE INSTALLATION TO TAKE PLACE IN THE CONSTRUCTION STAGE THAT INCLUDES WORK AROUND THE ITS SITE.
- PUMP STATION #26.** REMOVE THE EXISTING HIGHWAY ADVISORY RADIO (HAR) SIGN AND ASSOCIATED CABLING TO PUMP STATION #26. INSTALL A CONDUIT LINK BETWEEN THE EXISTING COMMUNICATIONS HANDHOLE NEAR STA. 6254+00 AND PUMP STATION #26. THIS ROUTE WILL UTILIZE ATTACHED CONDUIT TO THE PUMP STATION THAT HAD BEEN USED FOR THE HAR CABLING. INSTALL A NEW 12 SINGLE MODE FIBER (SMF) LATERAL CABLE BETWEEN THE HANDHOLE AND PUMP STATION, SPLICING THE CABLE TO THE 96 SMF DISTRIBUTION FIBER CABLE IN THE HANDHOLE AND TERMINATING IN THE PUMP STATION (SEE SHEET ITS-08). REMOVE THE EXISTING 12 SMF CABLE BETWEEN PUMP STATION #26 AND THE NORTHBOUND MEDIAN JUNCTION BOX NEAR STA. 6244+50. THIS WORK MUST BE PERFORMED BEFORE THE POWER AND COMMUNICATIONS CABLE TO EXISTING DMS-10 IS REROUTED TO THE AERIAL INSTALLATION (BY OTHERS IN CONTRACT 62A76).
- TEMPORARY DMS-10.** BEFORE REMOVAL OF EXISTING DMS-10 IN THE MEDIAN (BY OTHERS IN CONTRACT 62A76), INSTALL NEW OVERHEAD SIGN TRUSS WITH DMS AT STA 6245+25. INSTALL TEMPORARY DMS CABINET ON SIGN TRUSS. REROUTE AERIAL POWER AND COMMUNICATION CABLE FROM EXISTING DMS-10 IN THE MEDIAN TO TEMPORARY DMS ON SIGN TRUSS VIA ATTACHED AND AERIAL CONDUIT. POWER AND COMMUNICATIONS SOURCES TO BE RETAINED (SEE SHEET ITS-08).
- PERMANENT DMS-10.** INSTALL DOWNTIME BETWEEN THE OPERATION OF EXISTING, TEMPORARY, AND PERMANENT DMS-10 TO BE MINIMIZED (SEE NOTE 6 BELOW).
- WORK THAT IMPACTS THE NORMAL OPERATION OF THE TRAFFIC MANAGEMENT OR COMMUNICATIONS SYSTEMS SHALL ONLY BE EXECUTED ON WEEKENDS FROM 10 PM FRIDAY EVENING TO 4 AM MONDAY MORNING. HOLIDAYS AND SPECIAL EVENT WEEKENDS SHALL BE EXCLUDED. THE CONTRACTOR SHALL COORDINATE AND RECEIVE PRIOR APPROVAL FROM THE ENGINEER FOR ALL WORK THAT COULD DEGRADE OR IMPAIR THE OPERATIONAL SYSTEMS. REQUESTS FOR APPROVAL SHALL BE MADE TO THE ENGINEER A MINIMUM OF 72 HOURS PRIOR TO THE ACTUAL COMMENCEMENT OF THE WORK.

**GENERAL NOTES:**

- EXISTING/TEMPORARY ITS 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. PROPOSED ITS SHEETS ALSO SHOW ITS INFRASTRUCTURE INSTALLED BY OTHERS IN CONCURRENT CONTRACTS AS EXISTING, WITH THE APPLICABLE CONTRACT NUMBER LISTED IN PARENTHESIS.
- NOTATION FOR THE EXISTING/TEMPORARY ITS SHEETS IS AS FOLLOWS:
  - MAINTAINED = ITS INFRASTRUCTURE AND ITS OPERATION TO BE MAINTAINED THROUGH THE CONTRACT PERIOD (UNLESS OTHERWISE NOTED). THIS WORK IS TO BE PERFORMED UNDER THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.
  - REMOVED = ITS INFRASTRUCTURE AND ITS OPERATION TO BE MAINTAINED UNTIL NO LONGER FEASIBLE DUE TO OTHER WORK IN THIS OR ANOTHER CONTRACT. ITEM(S) TO BE REMOVED AND DISPOSED OF. THIS WORK WILL NOT BE PAID FOR SEPARATELY AND WILL BE INCLUDED IN THE COST OF THE "REMOVE EXISTING SURVEILLANCE EQUIPMENT" PAY ITEM.
  - SALVAGED = ITS INFRASTRUCTURE AND ITS OPERATION TO BE MAINTAINED UNTIL NO LONGER FEASIBLE DUE TO OTHER WORK IN THIS OR ANOTHER CONTRACT. ITEM(S) TO BE REMOVED AND TURNED OVER TO IDOT DISTRICT 1. THIS WORK WILL NOT BE PAID FOR SEPARATELY AND WILL BE INCLUDED IN THE COST OF THE "REMOVE EXISTING SURVEILLANCE EQUIPMENT" PAY ITEM.
  - ABANDONED = ITS INFRASTRUCTURE AND ITS OPERATION TO BE MAINTAINED UNTIL NO LONGER FEASIBLE DUE TO OTHER WORK IN THIS OR ANOTHER CONTRACT.
- THE EXISTING ITS INFRASTRUCTURE, AS DEPICTED ON THE PLANS, IS INTENDED TO INDICATE THE GENERAL EQUIPMENT INSTALLATIONS INVOLVED AND SHALL NOT BE CONSTRUED AS AN EXACT REPRESENTATION OF THE FIELD CONDITIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM AND ASCERTAIN THE EXACT CONDITION, SIZE, TYPE, QUANTITY, AND LOCATION OF THE EXISTING ITS EQUIPMENT IN THE FIELD. ANY DISCREPANCIES BETWEEN THE ACTUAL EXISTING ITS EQUIPMENT IN THE FIELD AND THE EXISTING ITS EQUIPMENT AS DEPICTED SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER FOR RESOLUTION. FAILURE TO VERIFY THE CONDITIONS, DIMENSIONS, AND DETAILS OF THE EXISTING ITS EQUIPMENT TO CONFIRM THAT THE NEW EQUIPMENT IS COMPATIBLE WITH THE EXISTING EQUIPMENT CAN BE PROPERLY INSTALLED AND CONNECTED AS SHOWN ON THE PLANS SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY FOR PROVIDING SAFE, COMPLETE, AND FULLY FUNCTIONAL ITS INFRASTRUCTURE.
- LOCATIONS SHOWN FOR PROPOSED ITS INFRASTRUCTURE ARE DIAGRAMMATIC ONLY, UNLESS STATIONING AND OFFSET VALUES ARE PROVIDED. FINAL LOCATIONS FOR PROPOSED ITS ITEMS SHALL BE AS APPROVED BY THE ENGINEER. BURY DEPTH OF PROPOSED ITS CONDUITS SHALL BE COORDINATED IN THE FIELD WHEN CONDUITS INTERSECT PROPOSED DRAINAGE STRUCTURES. SEE DRAINAGE PLANS.

**ABBREVIATIONS:**

ATS	ATTACHED TO STRUCTURE
CCTV	CLOSED-CIRCUIT TELEVISION
DIA	DIAMETER
EIS	EMBEDDED IN STRUCTURE
ENC	ENCASED IN CONCRETE, REINFORCED
EX	EXISTING
GS	GALVANIZED STEEL
HDHH	HEAVY-DUTY HANDHOLE
ITS	INTELLIGENT TRANSPORTATION SYSTEM
JB	JUNCTION BOX
PVC	POLYVYNAL CHLORIDE
PVCC GS	PVC COATED GALVANIZED STEEL
SS	STAINLESS STEEL
SMF	SINGLE MODE FIBER
UG	UNDERGROUND
WVDS	WIRELESS VEHICLE DETECTION SYSTEM
RVSD	RADAR VEHICLE SENSING DEVICE

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ITS-01



D162A77-SHT-ITS-01	DESIGNED - PTJ	REVISED -
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PLOT DATE = 1/30/2020	DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

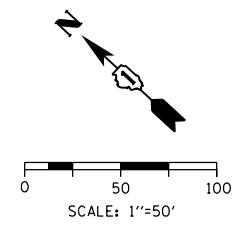
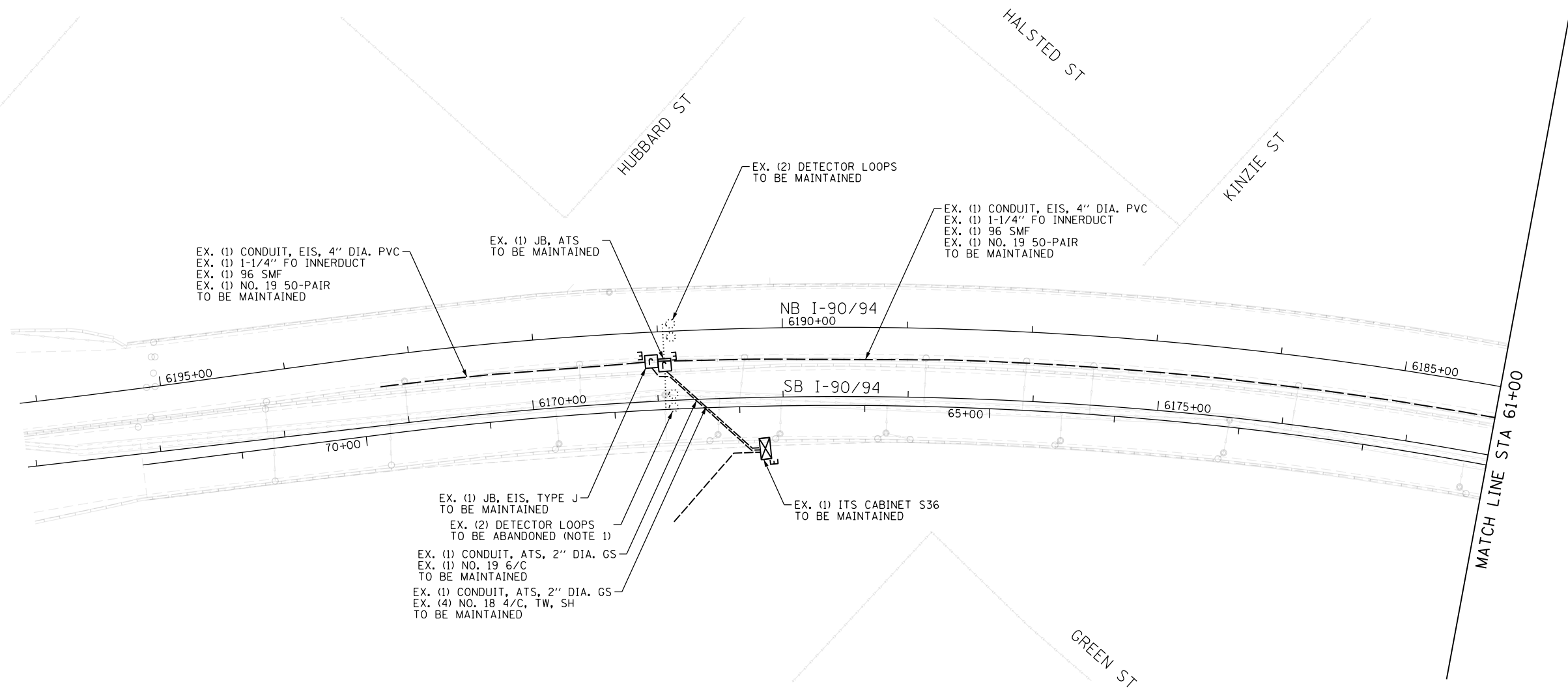
**PROPOSED ITS PLAN  
SUGGESTED STAGING AND GENERAL NOTES**

SCALE: N.T.S    SHEET 1 OF 46 SHEETS    STA.                      TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	790
<b>CONTRACT NO. 62A77</b>				
ILLINOIS FED. AID PROJECT				

**NOTES:**

1. MAINTAIN THE EXISTING IDOT ITS EQUIPMENT THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PROPOSED ITS PLAN SHEETS. THIS ITS MAINTENANCE WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.



ITS-02

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PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/30/2020	DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING/TEMPORARY ITS PLAN  
SB I-90/94**

SCALE: 1"=50' SHEET 2 OF 46 SHEETS STA. TO STA. 61+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	791
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

**NOTES:**

1. MAINTAIN THE EXISTING IDOT ITS EQUIPMENT THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PROPOSED ITS PLAN SHEETS. THIS ITS MAINTENANCE WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.
2. TO BE REMOVED BY CONTRACT 60Y00.
3. REMOVE CABLE IN CONDUIT/HANDHOLE/JUNCTION BOX.
4. REMOVE EXISTING SURVEILLANCE EQUIPMENT (SALVAGE) WHERE NOTED AND TURN OVER TO IDOT DISTRICT 1. THIS WORK WILL NOT BE PAID FOR SEPARATELY AND WILL BE INCLUDED IN THE COST OF THE "REMOVE EXISTING TRAFFIC SURVEILLANCE EQUIPMENT" PAY ITEM.

EX. (1) JB, EIS, TYPE J  
TO BE MAINTAINED  
EX. (1) JB, ATS, 20"x16"x10"  
TO BE MAINTAINED  
EX. (1) CONDUIT, UG, 4" DIA. GS  
EX. (1) 96 SMF  
EX. (1) NO. 19 50-PAIR  
TO BE MAINTAINED  
EX. (1) JB, ATS, 20"x16"x10"  
TO BE MAINTAINED  
EX. (1) JB, ATS, 12"x10"x6"  
TO BE MAINTAINED  
EX. (1) CONDUIT, EIS, 4" DIA. PVC  
EX. (1) 96 SMF  
EX. (1) NO. 19 50-PAIR  
TO BE MAINTAINED

EX. (2) CONDUIT, ATS, 2" DIA., GS  
EX. (1) NO. 6 2/C & NO. 8 1/C  
EX. (2) NO. 19 25-PAIR  
TO BE ABANDONED (NOTE 1)

EX. DETECTOR LOOPS  
TO BE ABANDONED  
(NOTE 1)  
EX. (1) HDHH  
TO BE MAINTAINED

EX. (2) CONDUIT, ATS, 2" DIA., GS  
EX. (1) NO. 6 2/C & NO. 8 1/C  
EX. (2) NO. 19 25-PAIR  
TO BE MAINTAINED  
EX. (1) CONDUIT, UG, 2" DIA. GS  
EX. (6) NO. 18 4/C  
TO BE MAINTAINED  
EX. ITS CABINET Y30  
TO BE SALVAGED  
EX. CONCRETE FOUNDATION  
TO BE REMOVED  
(NOTE 1,3,4)

EX. (1) CONDUIT, UG, 2" DIA., GS  
EX. (2) NO. 19 25-PAIR  
TO BE MAINTAINED

EX. (1) CONDUIT, UG, 2" DIA., GS  
EX. (2) NO. 19 25-PAIR  
TO BE MAINTAINED

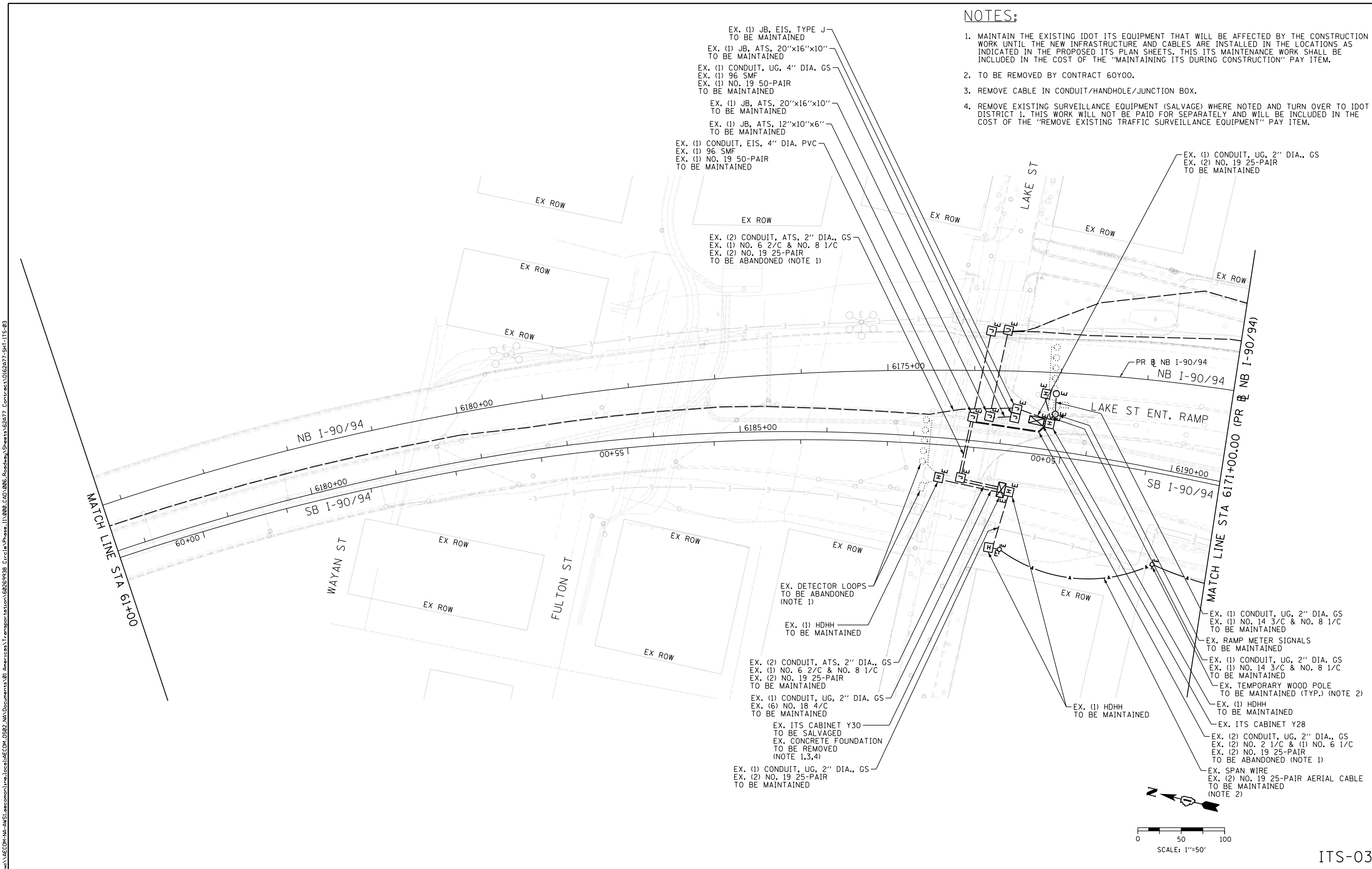
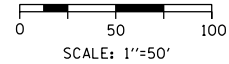
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EX. (1) NO. 14 3/C & NO. 8 1/C  
TO BE MAINTAINED  
EX. RAMP METER SIGNALS  
TO BE MAINTAINED

EX. (1) CONDUIT, UG, 2" DIA. GS  
EX. (1) NO. 14 3/C & NO. 8 1/C  
TO BE MAINTAINED  
EX. TEMPORARY WOOD POLE  
TO BE MAINTAINED (TYP.) (NOTE 2)

EX. (1) HDHH  
TO BE MAINTAINED  
EX. ITS CABINET Y28

EX. (2) CONDUIT, UG, 2" DIA., GS  
EX. (2) NO. 2 1/C & (1) NO. 6 1/C  
EX. (2) NO. 19 25-PAIR  
TO BE ABANDONED (NOTE 1)

EX. SPAN WIRE  
EX. (2) NO. 19 25-PAIR AERIAL CABLE  
TO BE MAINTAINED  
(NOTE 2)



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 PLOT SCALE = 100.0000' / in.  
 PLOT DATE = 1/30/2020

DESIGNED - PTJ	REVISED -
DRAWN - CAM	REVISED -
CHECKED - MJL	REVISED -
DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING/TEMPORARY ITS PLAN  
SB I-90/94**

SCALE: 1"=50' SHEET 3 OF 46 SHEETS STA. 61+00 TO STA. 6171+00 (NB)

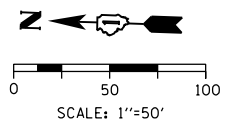
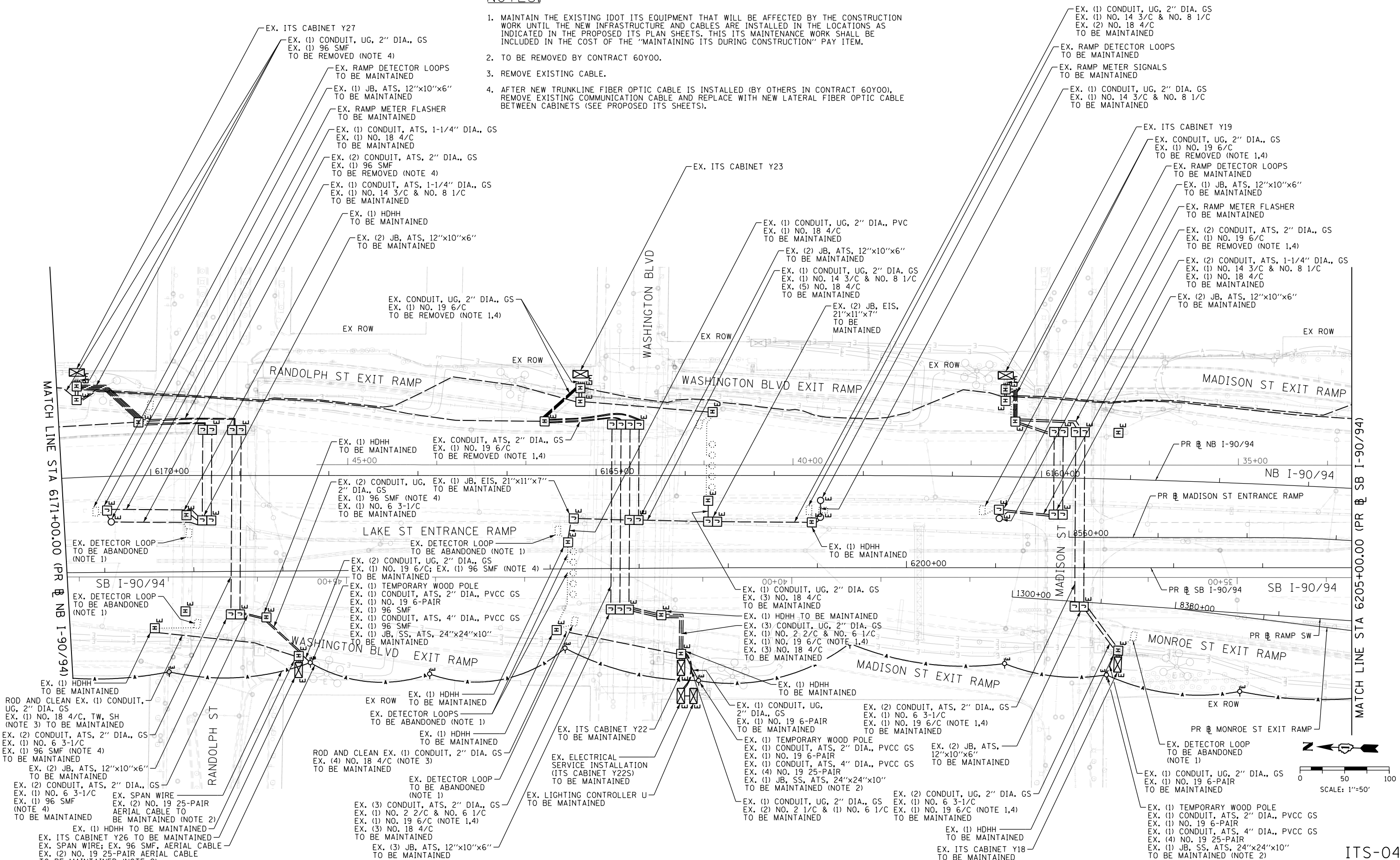
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	792
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

ITS-03

**NOTES:**

1. MAINTAIN THE EXISTING IDOT ITS EQUIPMENT THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PROPOSED ITS PLAN SHEETS. THIS ITS MAINTENANCE WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.
2. TO BE REMOVED BY CONTRACT 60Y00.
3. REMOVE EXISTING CABLE.
4. AFTER NEW TRUNKLINE FIBER OPTIC CABLE IS INSTALLED (BY OTHERS IN CONTRACT 60Y00), REMOVE EXISTING COMMUNICATION CABLE AND REPLACE WITH NEW LATERAL FIBER OPTIC CABLE BETWEEN CABINETS (SEE PROPOSED ITS SHEETS).

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 CONTRACTS\0162A77-SHT-ITS-04



ITS-04



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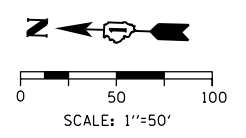
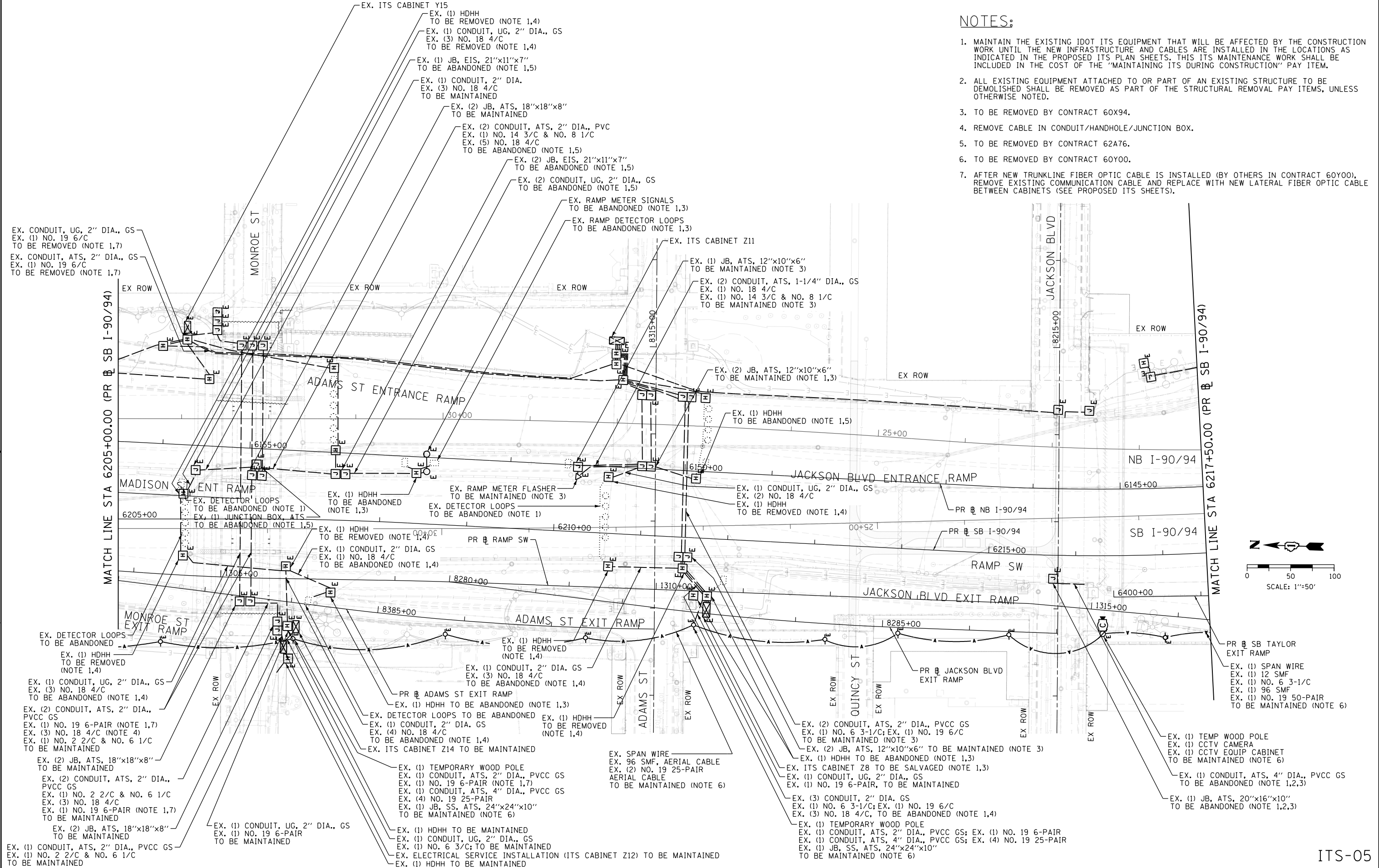
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

<b>EXISTING/TEMPORARY ITS PLAN</b>	
<b>SB I-90/94</b>	
SCALE: 1"=50'	SHEET 4 OF 46 SHEETS
STA. 6171+00(NB) TO STA. 6205+00(SB)	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	793
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

**NOTES:**

1. MAINTAIN THE EXISTING IDOT ITS EQUIPMENT THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PROPOSED ITS PLAN SHEETS. THIS ITS MAINTENANCE WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.
2. ALL EXISTING EQUIPMENT ATTACHED TO OR PART OF AN EXISTING STRUCTURE TO BE DEMOLISHED SHALL BE REMOVED AS PART OF THE STRUCTURAL REMOVAL PAY ITEMS, UNLESS OTHERWISE NOTED.
3. TO BE REMOVED BY CONTRACT 60X94.
4. REMOVE CABLE IN CONDUIT/HANDHOLE/JUNCTION BOX.
5. TO BE REMOVED BY CONTRACT 62A76.
6. TO BE REMOVED BY CONTRACT 60Y00.
7. AFTER NEW TRUNKLINE FIBER OPTIC CABLE IS INSTALLED (BY OTHERS IN CONTRACT 60Y00), REMOVE EXISTING COMMUNICATION CABLE AND REPLACE WITH NEW LATERAL FIBER OPTIC CABLE BETWEEN CABINETS (SEE PROPOSED ITS SHEETS).



EX. CONDUIT, UG, 2" DIA., GS  
EX. (1) NO. 19 6/C  
TO BE REMOVED (NOTE 1,7)

EX. CONDUIT, ATS, 2" DIA., GS  
EX. (1) NO. 19 6/C  
TO BE REMOVED (NOTE 1,7)

EX. (1) CONDUIT, UG, 2" DIA., GS  
EX. (3) NO. 18 4/C  
TO BE ABANDONED (NOTE 1,4)

EX. (2) CONDUIT, ATS, 2" DIA.,  
PVCC GS  
EX. (1) NO. 19 6-PAIR (NOTE 1,7)  
EX. (3) NO. 18 4/C (NOTE 4)  
EX. (1) NO. 2 2/C & NO. 6 1/C  
TO BE MAINTAINED

EX. (2) JB, ATS, 18"x18"x8"  
TO BE MAINTAINED

EX. (2) CONDUIT, ATS, 2" DIA.,  
PVCC GS  
EX. (1) NO. 2 2/C & NO. 6 1/C  
EX. (3) NO. 18 4/C  
EX. (1) NO. 19 6-PAIR (NOTE 1,7)  
TO BE MAINTAINED

EX. (2) JB, ATS, 18"x18"x8"  
TO BE MAINTAINED

EX. (1) CONDUIT, UG, 2" DIA., GS  
EX. (1) NO. 19 6-PAIR  
TO BE MAINTAINED

EX. (1) CONDUIT, ATS, 2" DIA., PVCC GS  
EX. (1) NO. 2 2/C & NO. 6 1/C  
TO BE MAINTAINED

PR SB TAYLOR  
EXIT RAMP

EX. (1) SPAN WIRE  
EX. (1) 12 SMF  
EX. (1) NO. 6 3-1/C  
EX. (1) 96 SMF  
EX. (1) NO. 19 50-PAIR  
TO BE MAINTAINED (NOTE 6)

EX. (1) TEMP WOOD POLE  
EX. (1) CCTV CAMERA  
EX. (1) CCTV EQUIP CABINET  
TO BE MAINTAINED (NOTE 6)

EX. (1) CONDUIT, ATS, 4" DIA., PVCC GS  
TO BE ABANDONED (NOTE 1,2,3)

EX. (1) JB, ATS, 20"x16"x10"  
TO BE ABANDONED (NOTE 1,2,3)



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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING/TEMPORARY ITS PLAN  
SB I-90/94**

SCALE: 1"=50' SHEET 5 OF 46 SHEETS STA. 6205+00(SB) TO STA. 6217+50(SB)

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	794
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

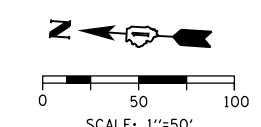
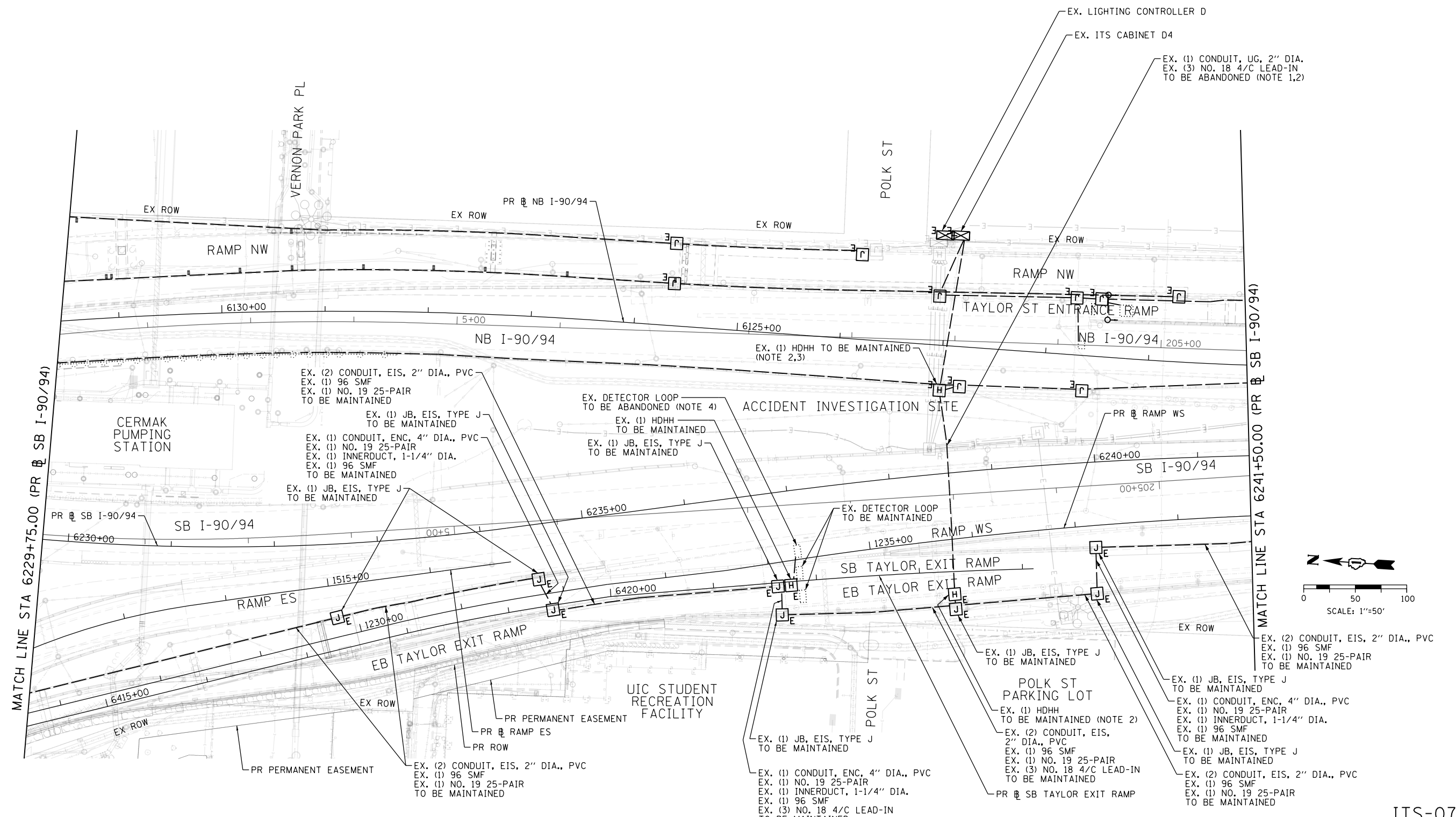
ITS-05





**NOTES:**

1. MAINTAIN THE EXISTING IDOT ITS EQUIPMENT THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PROPOSED ITS PLAN SHEETS. THIS ITS MAINTENANCE WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.
2. PULL DETECTOR LEAD-IN CABLES FROM MEDIAN HANDHOLE TO HANDHOLE ON TAYLOR STREET EXIT RAMP AT STA. 6238+50 AND COIL FOR FUTURE USE. REMOVE EXCESS CABLE AS NECESSARY, LEAVING SUFFICIENT LENGTH FOR REINSTALLATION TO PROPOSED CABINET D1 (SEE PROPOSED ITS SHEETS). THIS WILL REQUIRE COORDINATION WITH CONTRACT 62A76, WHICH COILS THE CABLE IN THE MEDIAN HANDHOLE.
3. TO BE REMOVED BY CONTRACT 62A76.
4. DETECTOR LOOP TO BE REMOVED WITH RAMP WS PAVEMENT; MAINTAIN 2" GS CONDUIT ROUTED TO THE LOOP UNDER SB TAYLOR EXIT RAMP PAVEMENT.



ITS-07

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D162A77-SHT-ITS-07  
 USER NAME = patrick.jordan  
 PLOT SCALE = 100.0000' / in.  
 PLOT DATE = 1/30/2020

DESIGNED - PTJ  
 DRAWN - CAM  
 CHECKED - MJL  
 DATE - 1/29/2019

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**EXISTING/TEMPORARY ITS PLAN  
 SB I-90/94**

SCALE: 1"=50' SHEET 7 OF 46 SHEETS STA. 6229+75(SB) TO STA. 6241+50(SB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	796
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

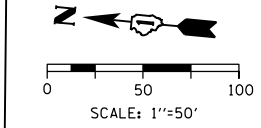
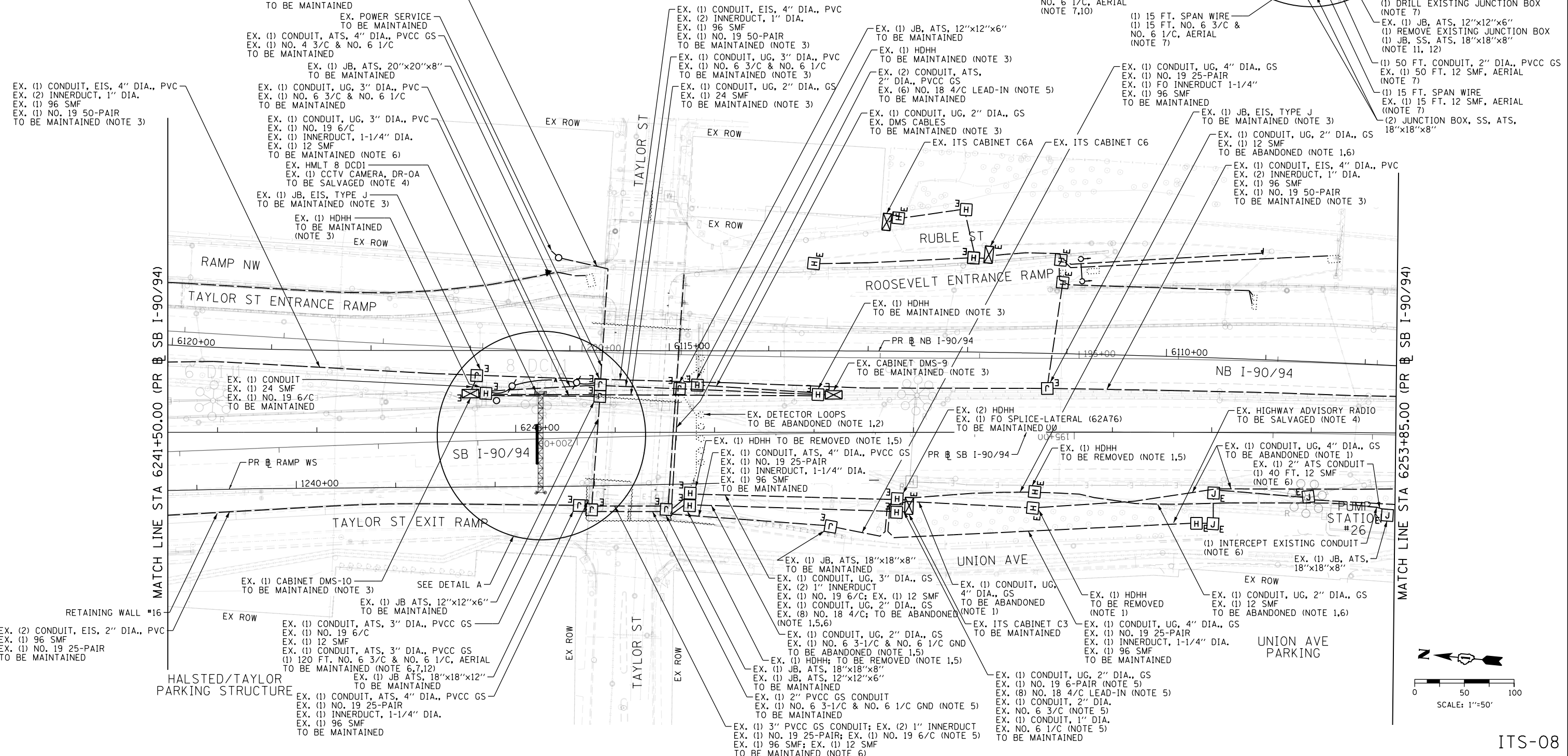
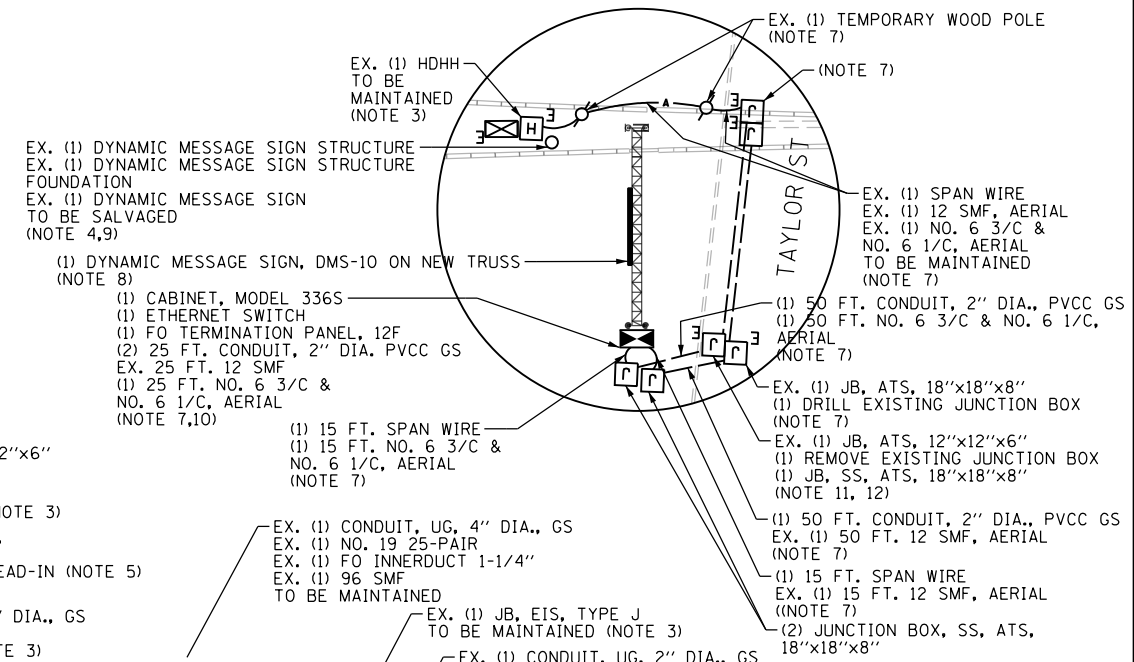
**NOTES:**

1. MAINTAIN THE EXISTING IDOT ITS EQUIPMENT THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PROPOSED ITS PLAN SHEETS. THIS ITS MAINTENANCE WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.
2. DISCONNECT DETECTOR LOOPS AND REMOVE LEAD-IN CABLES FROM CONDUIT.
3. TO BE REMOVED BY CONTRACT 62A76.
4. REMOVE EXISTING SURVEILLANCE EQUIPMENT (SALVAGE) AND TURN OVER TO IDOT DISTRICT 1. THIS WORK WILL NOT BE PAID FOR SEPARATELY AND WILL BE CONSIDERED INCLUDED IN THE COST OF THE "REMOVE EXISTING TRAFFIC SURVEILLANCE EQUIPMENT" PAY ITEM.
5. REMOVE CABLE FROM CONDUIT/HANDHOLE/JUNCTION BOX.
6. AFTER REMOVAL OF CABLE FOR HIGHWAY ADVISORY RADIO SIGN, INTERCEPT EXISTING CONDUIT ATTACHED TO RETAINING WALL (FORMERLY FOR HAR CABLES), INSTALL FIBER OPTIC LATERAL FROM EXISTING 96 SMF CABLE IN HANDHOLE TO PUMP STATION #26 VIA THE FORMER HAR CONDUIT AND TERMINATE CABLE AT EXISTING TERMINATION PANEL. AFTER ESTABLISHMENT OF FIBER OPTIC LINK BETWEEN 96 SMF DISTRIBUTION CABLE AND PUMP STATION #26, EXISTING 12 SMF CABLE BETWEEN PUMP STATION #26 AND EXISTING CABINET DMS-10 TO BE REMOVED BY OTHERS (CONTRACT 62A76).

7. DISCONNECT AERIAL POWER CABLE AND AERIAL 12 SMF FROM EXISTING CABINET DMS-10. REINSTALL AERIAL 12 SMF TO THE TEMPORARY DMS CABINET. SPLICE NEW AERIAL POWER CABLES IN THE JUNCTION BOX ATTACHED TO THE TAYLOR ST MEDIAN PIER AND CONNECT TO TEMPORARY DMS CABINET. THIS WILL REQUIRE COORDINATION WITH CONTRACT 62A76 WHICH INSTALLS THE AERIAL CABLES TO EXISTING DMS-10. THIS WORK SHALL BE DONE TO MINIMIZE THE TRANSITION TIME FROM EXISTING TO TEMPORARY DMS-10.
8. INSTALL DYNAMIC MESSAGE SIGN, WALK-IN ACCESS, FULL MATRIX, COLOR, NTCIP 1203. SEE SHEETS ITS-28 & ITS-30 FOR DMS INSTALLATION DETAILS.
9. THE EXISTING DYNAMIC MESSAGE SIGN, DMS STRUCTURE AND FOUNDATION SHALL NOT BE REMOVED UNTIL THE TEMPORARY DMS-10 IS INSTALLED AND OPERATIONAL.
10. SEE SHEET ITS-25 FOR CABINET DETAIL.
11. AFTER REMOVAL OF POWER CABLES TO CABINET C3, REMOVE THE EXISTING JUNCTION BOX ATTACHED TO THE NORTHWEST CORNER OF THE TAYLOR STREET WEST ABUTMENT AND REPLACE WITH NEW JUNCTION BOX WITH SIZE AS SPECIFIED IN THE PLANS. ONLY THE EXISTING JUNCTION BOX SHALL BE REMOVED AND REPLACED. THE ASSOCIATED CONDUIT SHALL REMAIN AND BE RECONNECTED TO THE NEW JUNCTION BOX. PAYMENT FOR RECONNECTING EXISTING CONDUITS SHALL BE INCLUDED IN THE COST OF THE JUNCTION BOX.
12. CONDUITS SHALL BE INCLUDED IN THE COST OF THE JUNCTION BOX.

SEE SHEET ITS-26 FOR TEMPORARY & PERMANENT DMS-10 INSTALLATION DETAILS.

**DETAIL A**  
NOTE 6



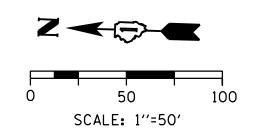
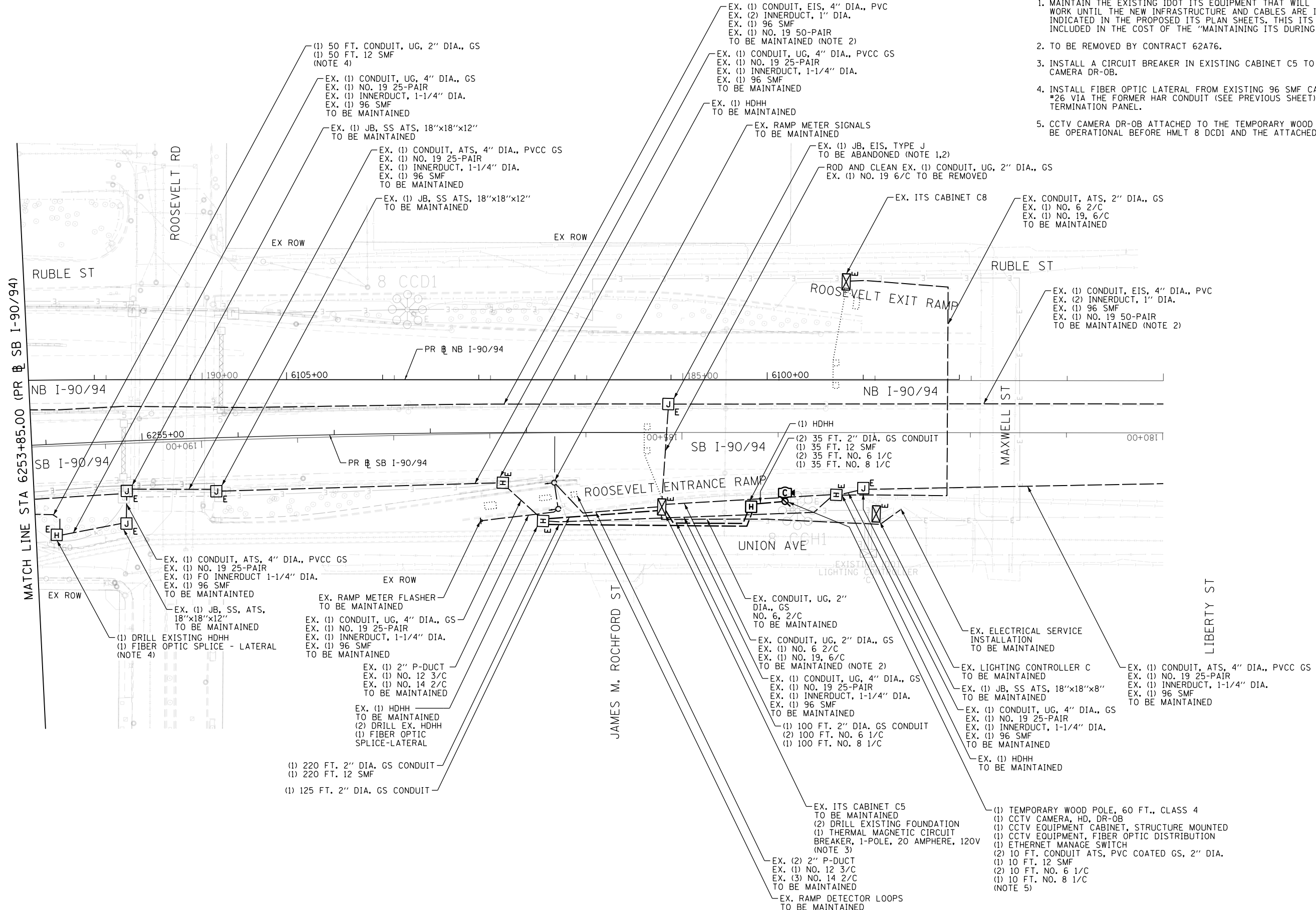
ITS-08

<p>303 EAST WACKER DRIVE, SUITE 1400 CHICAGO, IL 60601-5276 PHONE: (312) 373-1700 FAX: (312) 373-6800</p>	D162A77-SHT-ITS-08	DESIGNED - PTJ	REVISED -	<p><b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b></p> <p><b>EXISTING/TEMPORARY ITS PLAN</b> <b>SB I-90/94</b></p> <p>SCALE: 1"=50' SHEET 8 OF 46 SHEETS STA. 6241+50(SB) TO STA. 6253+85(SB)</p>	F.A.I. RTE. 90/94/290	SECTION 2015-018R	COUNTY COOK	TOTAL SHEETS 1360	SHEET NO. 797
	USER NAME = patrick.jordan	DRAWN - CAM	REVISED -		CONTRACT NO. 62A77				
	PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -		ILLINOIS FED. AID PROJECT				
	PLOT DATE = 1/30/2020	DATE = 1/29/2019	REVISED -						

**NOTES:**

1. MAINTAIN THE EXISTING IDOT ITS EQUIPMENT THAT WILL BE AFFECTED BY THE CONSTRUCTION WORK UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PROPOSED ITS PLAN SHEETS. THIS ITS MAINTENANCE WORK SHALL BE INCLUDED IN THE COST OF THE "MAINTAINING ITS DURING CONSTRUCTION" PAY ITEM.
2. TO BE REMOVED BY CONTRACT 62A76.
3. INSTALL A CIRCUIT BREAKER IN EXISTING CABINET C5 TO PROVIDE 120V POWER TO CCTV CAMERA DR-OB.
4. INSTALL FIBER OPTIC LATERAL FROM EXISTING 96 SMF CABLE IN HANDHOLE TO PUMP STATION #26 VIA THE FORMER HAR CONDUIT (SEE PREVIOUS SHEET) AND TERMINATE CABLE AT EXISTING TERMINATION PANEL.
5. CCTV CAMERA DR-OB ATTACHED TO THE TEMPORARY WOOD POLE AS SHOWN IN THE PLANS MUST BE OPERATIONAL BEFORE HMLT 8 DCD1 AND THE ATTACHED CCTV CAMERA DR-OA IS REMOVED

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ITS-09



D162A77-SHT-ITS-09	DESIGNED - PTJ	REVISED -
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/30/2020	DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

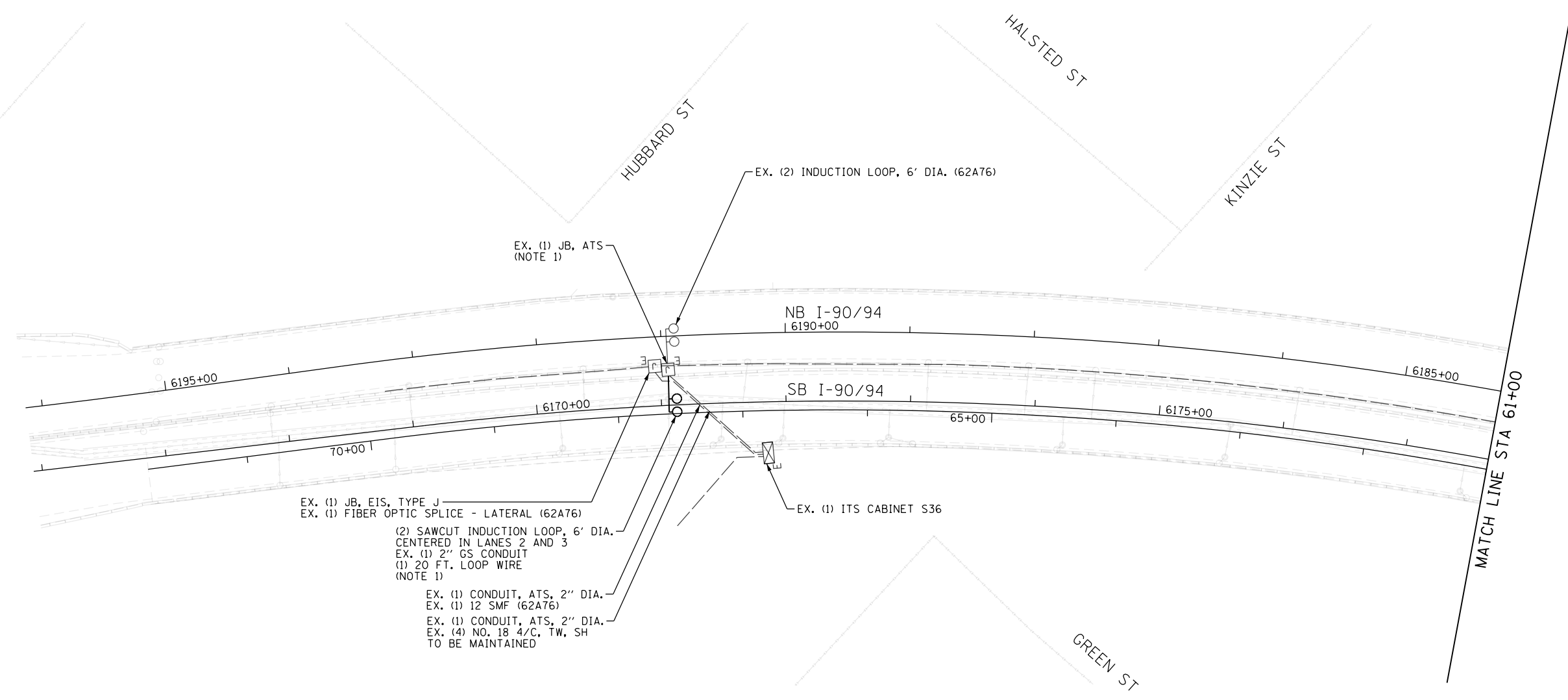
**EXISTING/TEMPORARY ITS PLAN  
SB I-90/94**

SCALE: 1"=50' SHEET 9 OF 46 SHEETS STA. 6253+85(SB) TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	798
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

**NOTES:**

1. NEW INDUCTION LOOPS TO BE SPLICED TO EXISTING LEAD-IN CABLE IN ATTACHED JUNCTION BOX. COST FOR THIS WORK IS INCLUDED IN THE ELECTRICAL CABLE PAY ITEM.



EX. (2) INDUCTION LOOP, 6' DIA. (62A76)

EX. (1) JB, ATS (NOTE 1)

NB I-90/94  
6190+00

6195+00 | 6170+00 | 6175+00 | 6185+00

70+00 | 65+00 |

SB I-90/94

EX. (1) JB, EIS, TYPE J  
EX. (1) FIBER OPTIC SPLICE - LATERAL (62A76)

(2) SAWCUT INDUCTION LOOP, 6' DIA.  
CENTERED IN LANES 2 AND 3  
EX. (1) 2" GS CONDUIT  
(1) 20 FT. LOOP WIRE  
(NOTE 1)

EX. (1) CONDUIT, ATS, 2" DIA.  
EX. (1) 12 SMF (62A76)

EX. (1) CONDUIT, ATS, 2" DIA.  
EX. (4) NO. 18 4/C, TW, SH  
TO BE MAINTAINED

EX. (1) ITS CABINET S36

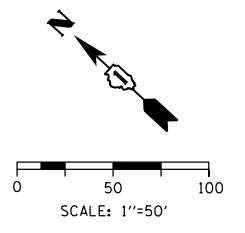
HUBBARD ST

HALSTED ST

KINZIE ST

GREEN ST

MATCH LINE STA 61+00



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D162A77-SHT-ITS-10	DESIGNED - PTJ	REVISED -
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/30/2020	DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED ITS PLAN  
SB I-90/94**

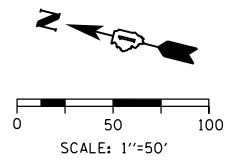
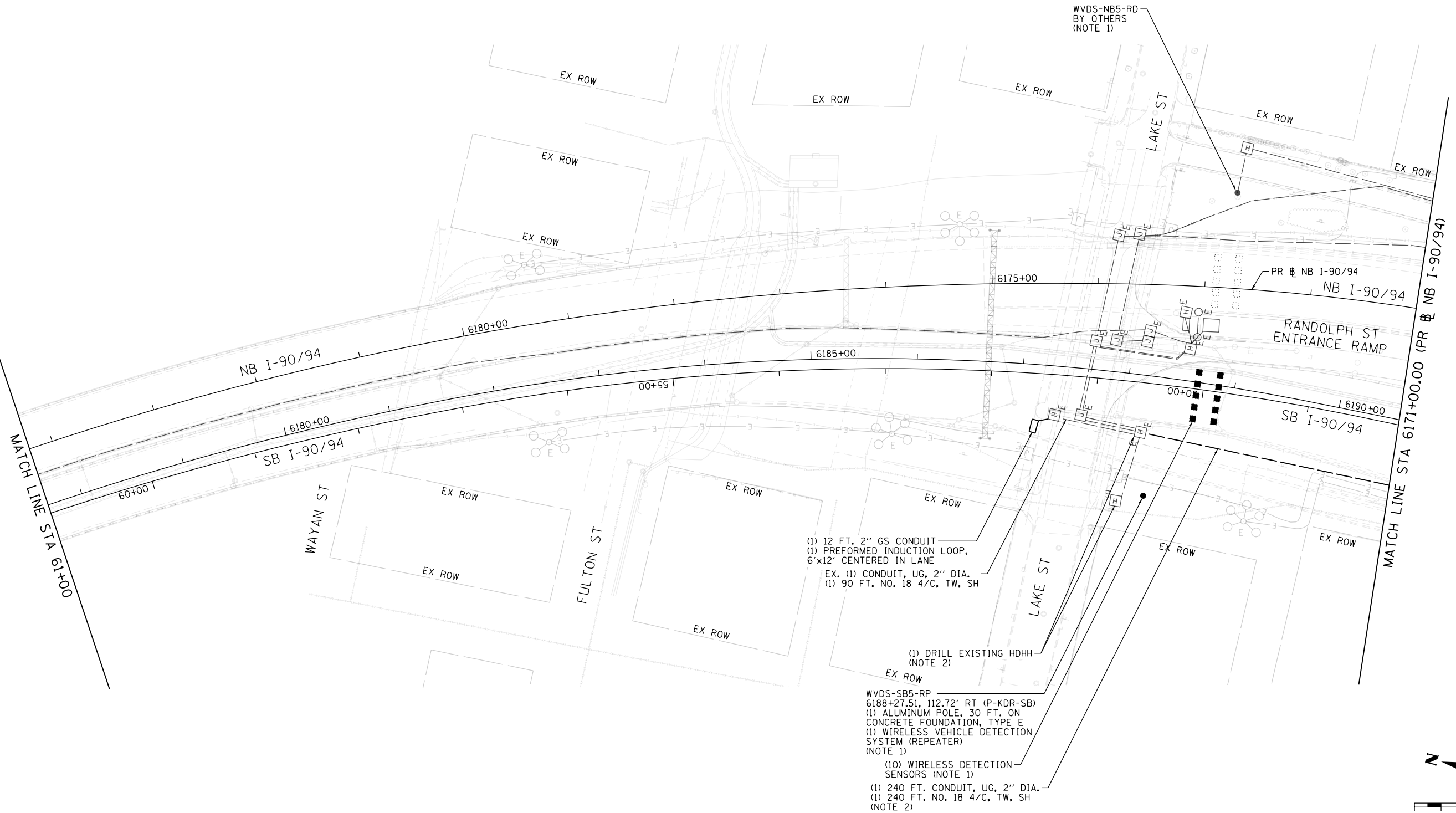
SCALE: 1"=50'    SHEET 10 OF 46 SHEETS    STA.    TO STA. 61+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	799
CONTRACT NO. 62A77			ILLINOIS FED. AID PROJECT	

ITS-10

**NOTES:**

1. WIRELESS VEHICLE DETECTION SENSORS SHALL BE CENTERED IN LANE. SENSORS SHALL BE SPACED 20 FT. EACH LANE. COORDINATE WVDS REPEATER INSTALLATION WITH CONTRACT 62A76, WHICH INSTALLS THE RADIO SITE (WVDS-NB5-RD).
2. INSTALL NEW CONDUIT FROM THE HANDHOLE NEAR CABINET Y30 TO THE HANDHOLE ADJACENT TO THE DETECTOR LOOP ON THE SOUTHBOUND WASHINGTON STREET EXIT RAMP. INSTALL NEW DETECTOR LOOP ON THE SOUTHBOUND RANDOLPH STREET EXIT RAMP AND RUN THE NEW LEAD-IN CABLE FROM THE DETECTOR LOOP TO CABINET Y26 AND MAKE CONNECTIONS.



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D162A77-SHT-ITS-11	DESIGNED - PTJ	REVISED -
USER NAME = patrick.jordan	DRAWN - CAM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 1/30/2020	DATE - 1/29/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED ITS PLAN  
SB I-90/94**

SCALE: 1"=50' SHEET 11 OF 46 SHEETS STA. 61+00 TO STA. 6171+00(NB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2015-018R	COOK	1360	800
CONTRACT NO. 62A77				
ILLINOIS FED. AID PROJECT				

ITS-11