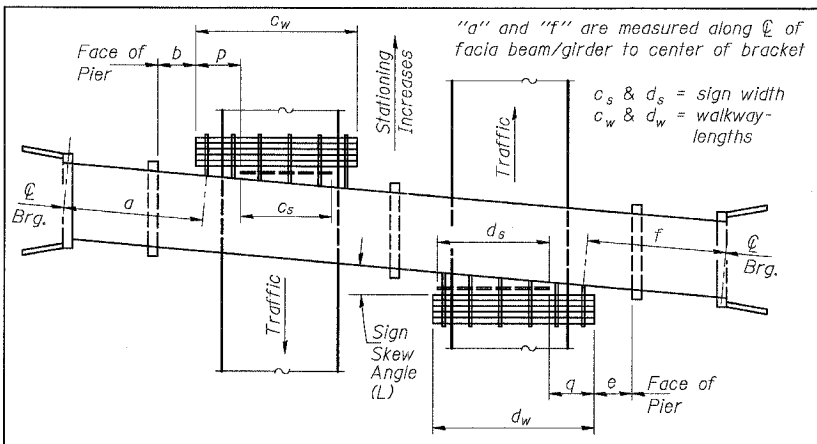


ROUTE NO.	SECTION	COUNTY	LETS	SHEET
94/90	*	COOK	556	301
FED. ROAD DIST. NO. 1		ILLINOIS	FED. ROAD PROJECT	
62300		* (1818, ETC. 2324.6-1) IPR-8		

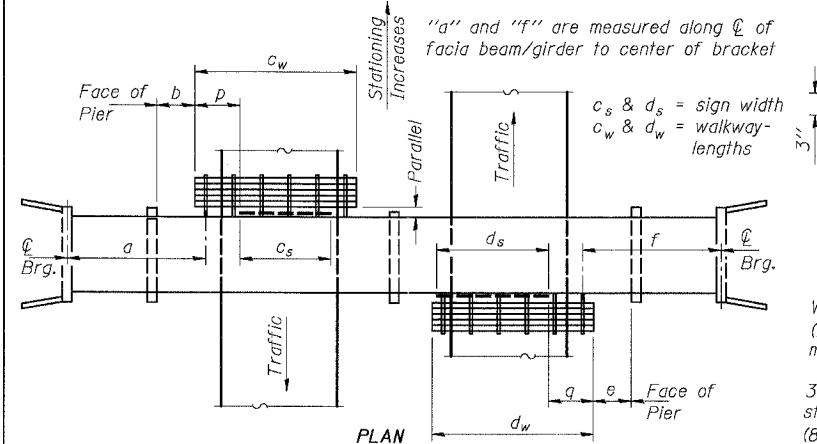
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

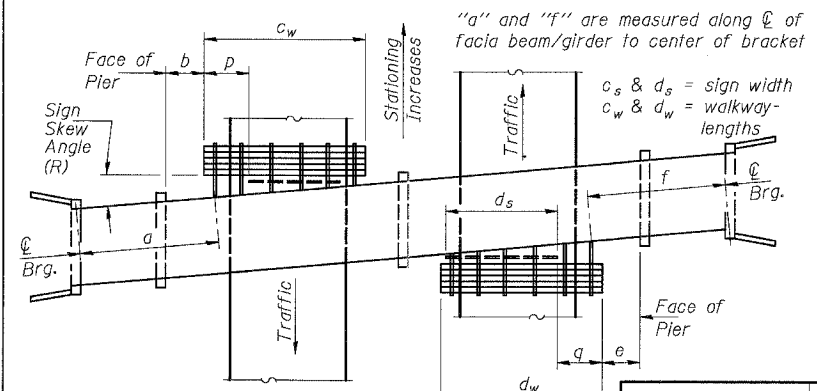
- SPECIFICATIONS:**
- DESIGN:** AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications") (2)
- CONSTRUCTION:** Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")
- LOADING:** 80 M.P.H. WIND VELOCITY PLUS 30% GUST FACTOR
WIND LOADING: 35 p.s.f. normal to Sign Panel Area and truss elements not behind sign Loading Diagram.
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 conforming to ASTM A307, 3/4" ϕ 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".



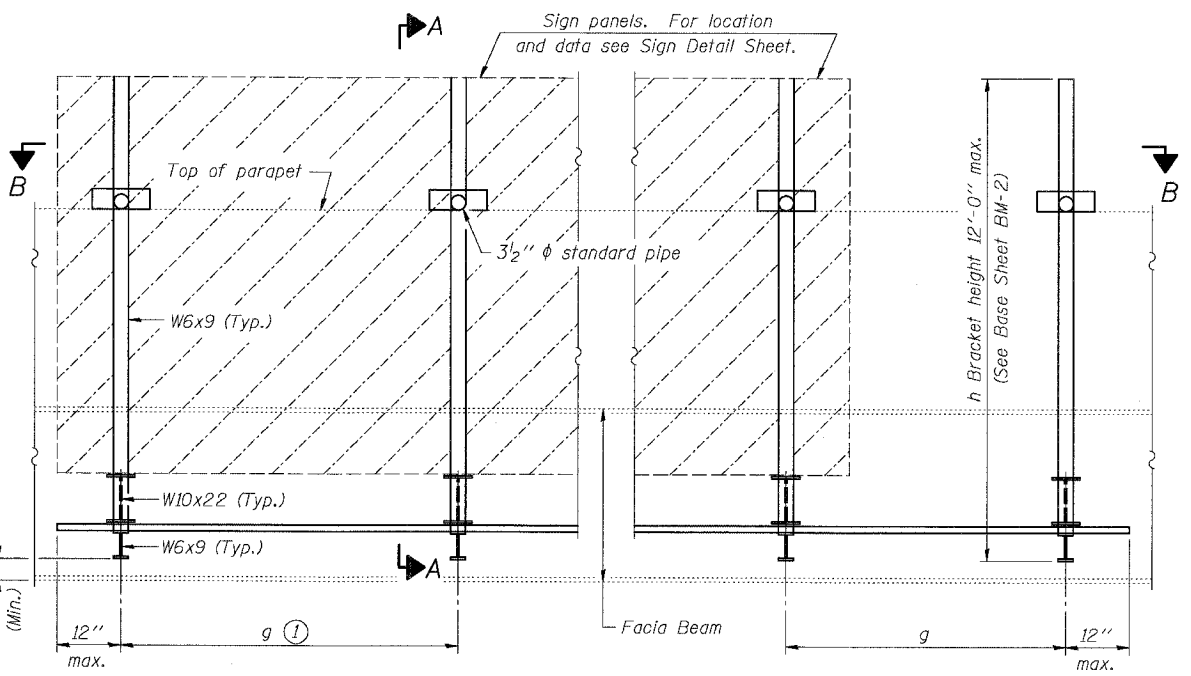
PLAN
(Left Sign Skew > 15°)
WALKWAY AND HANDRAIL SKETCH
(Road plan beneath structure varies.)



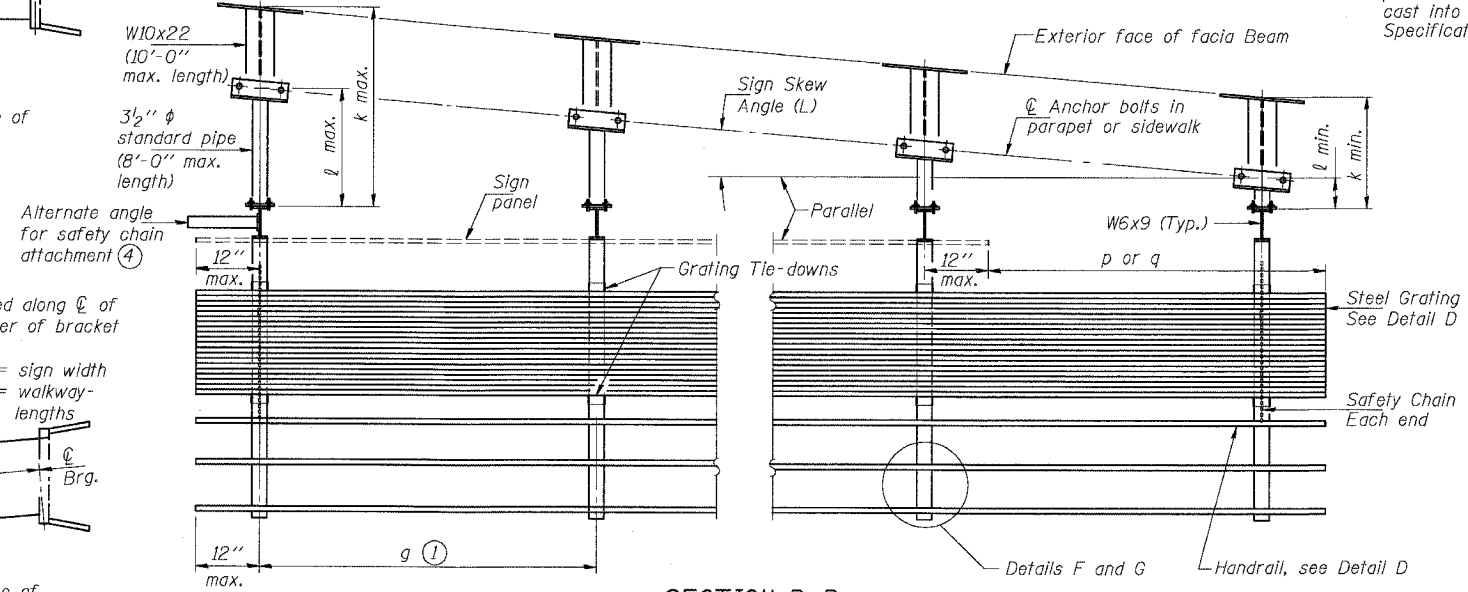
PLAN
(For Sign Skew $\leq 15^\circ$, all brackets constant)
WALKWAY AND HANDRAIL SKETCH
(Road plan beneath structure varies.)



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°)

- 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 grating length (c_w , d_w) unless otherwise specified.
- For Safety Chain Details and Details D, F and G, see Base Sheet BM-4.
- If walkway bracket at safety chain location is behind sign, add angle to bracket. See detail on Base Sheet BM-4.

NUMBER	REVISION	DATE

TOTAL BILL of MATERIAL SGN-21

③ OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED	Foot	332'
--	------	------

Structure Number	Sign Skew Angle (L) or (R)	Bridge Station	Bridge Structure Number	Contract Route Designation	a	b	c _s	c _w	d _s	d _w	e	f	g	No. of Brackets (Total)	p	q	Total Grating/Hndrl. Lengths (c _w + d _w)
IB0161094L055.73	0	4582+26	016-0398	I-94	-	-	-	-	23'/17.5'	56'	7'	67.37'	5'-3"/5'-2"	12	-	9.5'	56'
IB0161094L054.97	0	4622+31	016-1158	I-94	-	-	-	-	23'/17.5'	52'	7'	113.83'	5'-3"/5'-2"	11	-	9.5'	52'
IB0161094L054.72	0	4635+47	016-1159	I-94	-	-	-	-	23'/17.5'	56'	6.92'	117.3'	5'-3"/5'-2"	12	-	9.5'	56'
IB0161094L057.2	(L)1°24'0"	2501+77.65	016-1157	I-94	-	-	-	-	16/30	56'	2.75'	53.75'	5'-6"	11	-	5.5'	56'
IB0161094L057.8	(R)0°16'30"	2474+11.88	016-1152	I-94	-	-	-	-	16/30	56'	2.5'	-	5'-6"	11	-	5.5'	56'
IB0161094L056.7	(R)14°36'25"	4528+51.01	016-1156	I-94	-	-	-	-	18/30	56'	2.5'	-	5'-6"	11	-	5.5'	56'

Dimensions a, b, e, f & g may vary as approved by the Engineer, see (1).
 When $c_w < c_s$ and/or $d_w < d_s$, use alternate brackets without walkway supports where applicable, see (3).

DESIGNED	MSA	EXAMINED	
CHECKED	AS	PASSED	ENGINEER OF STRUCTURAL SERVICES
DRAWN	MD		ENGINEER OF BRIDGES AND STRUCTURES
CHECKED	MSA		

BM-1 11/1/2002

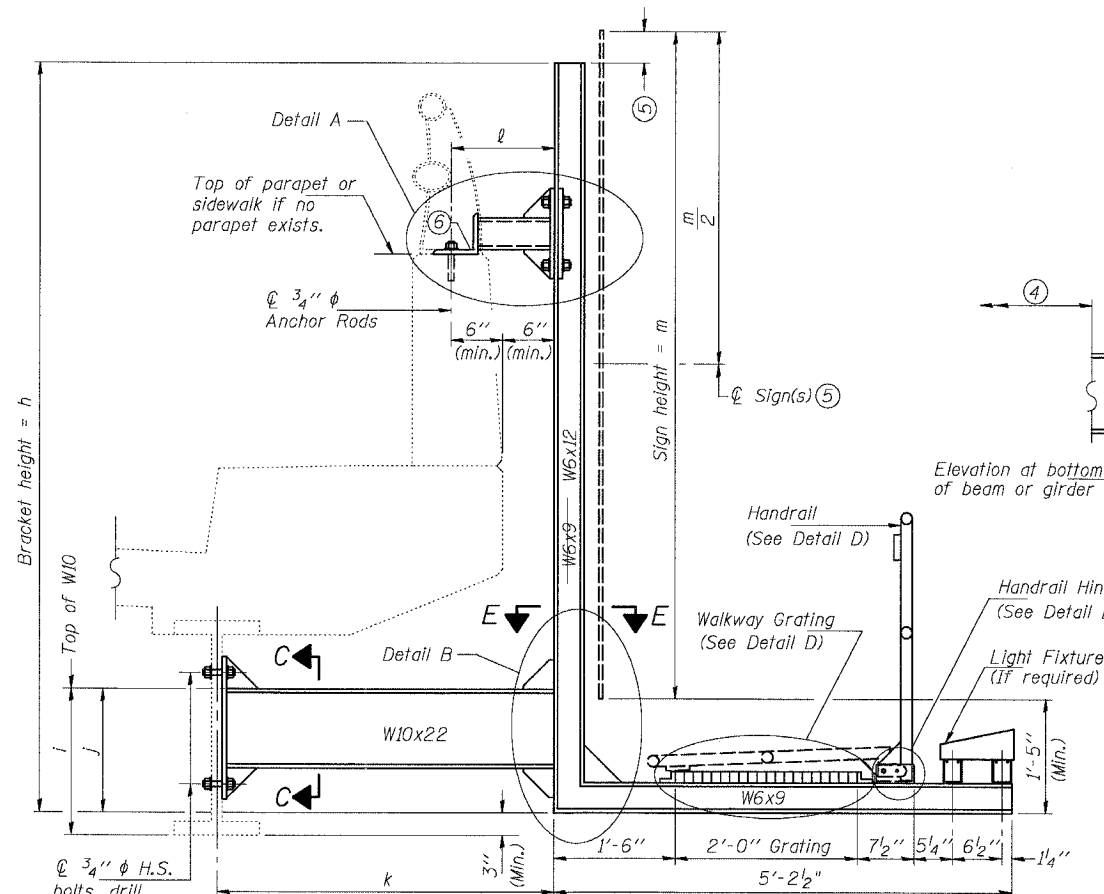
**BRIDGE MOUNT SIGN STRUCTURES
GENERAL PLAN AND ELEVATION**

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
OVERHEAD SIGN STRUCTURES
(BRIDGE MOUNTED)

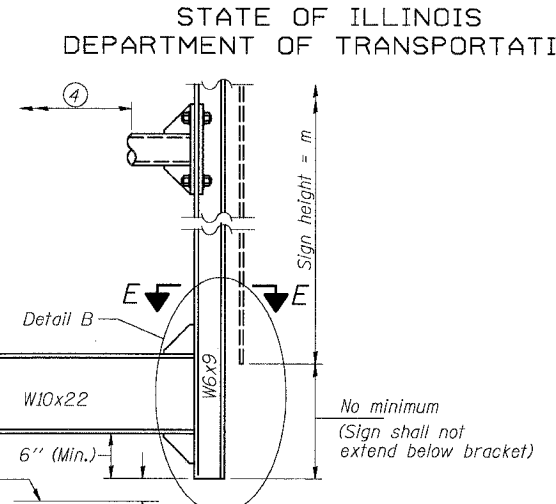
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
94/90	*	COOK	556	302
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

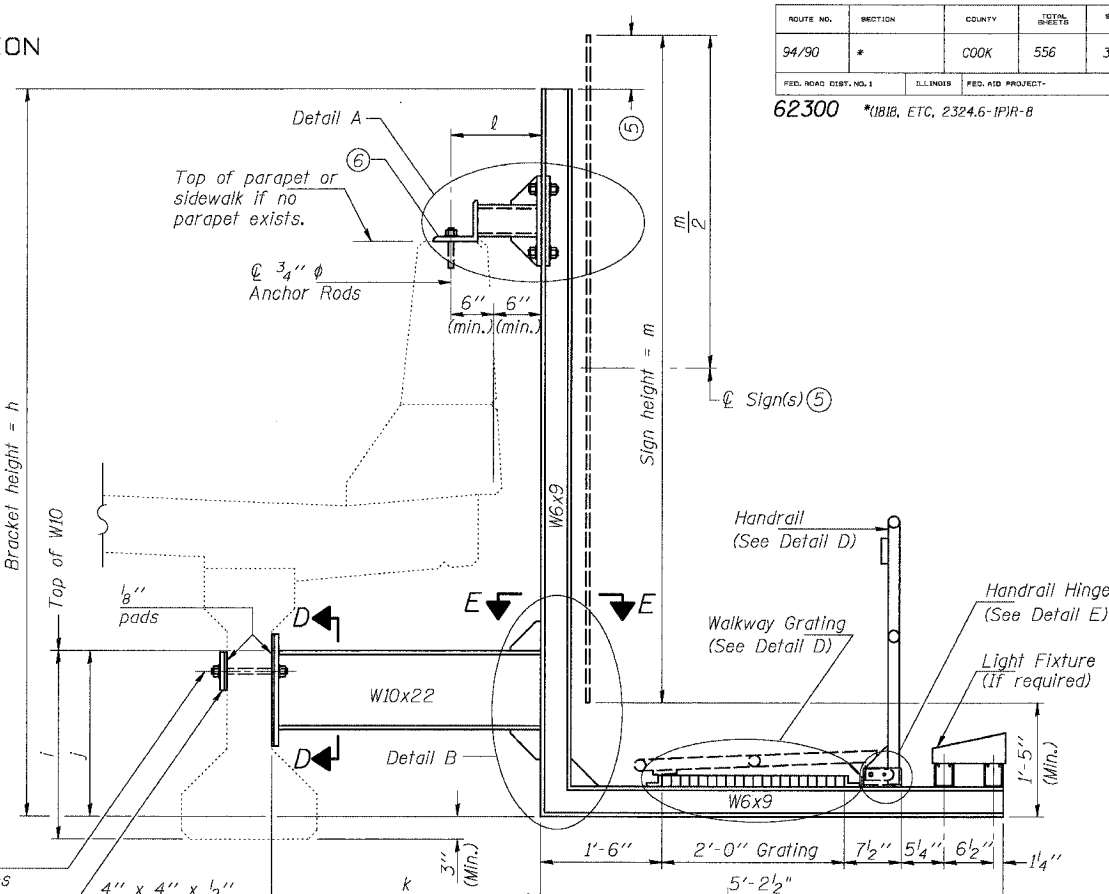
62300 *1818, ETC, 2324.6-IPR-B



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



SECTION A-A
Alternate with no lights or walkways
④ For attachment details of 3/2 inch pipe and W10x22, see other sections as applicable.



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

* 14' APPROVED BY SPRINGFIELD

Structure Number	Station	h (12'-0" max.)	i	j	k max. (10'-0" max.)	l max. (8'-0" max.)	m * (11'-0" max.)
IB0161094L055.73	4582+26±	14.92'	1.69'	1.44'	3.64'	1.13'	14'
IB0161094L054.97	4622+31±	14.92'	1.69'	1.44'	3.50'	1.09'	14'
IB0161094L054.72	4635+47±	14.92'	1.81'	1.56'	3.50'	1.09'	14'
IB0161094L057.2	2501+77.65	13.5'	1.5'	1.75'	3'-8"	1'-1"	12.5'
IB0161094L057.8	2474+11.88	13.5'	1.5'	1.75'	3'-7"	1'-1"	12.5'
IB0161094L056.7	4528+51.01	13.5'	1.5'	1.75'	3'-1"	1'-1"	12.5'

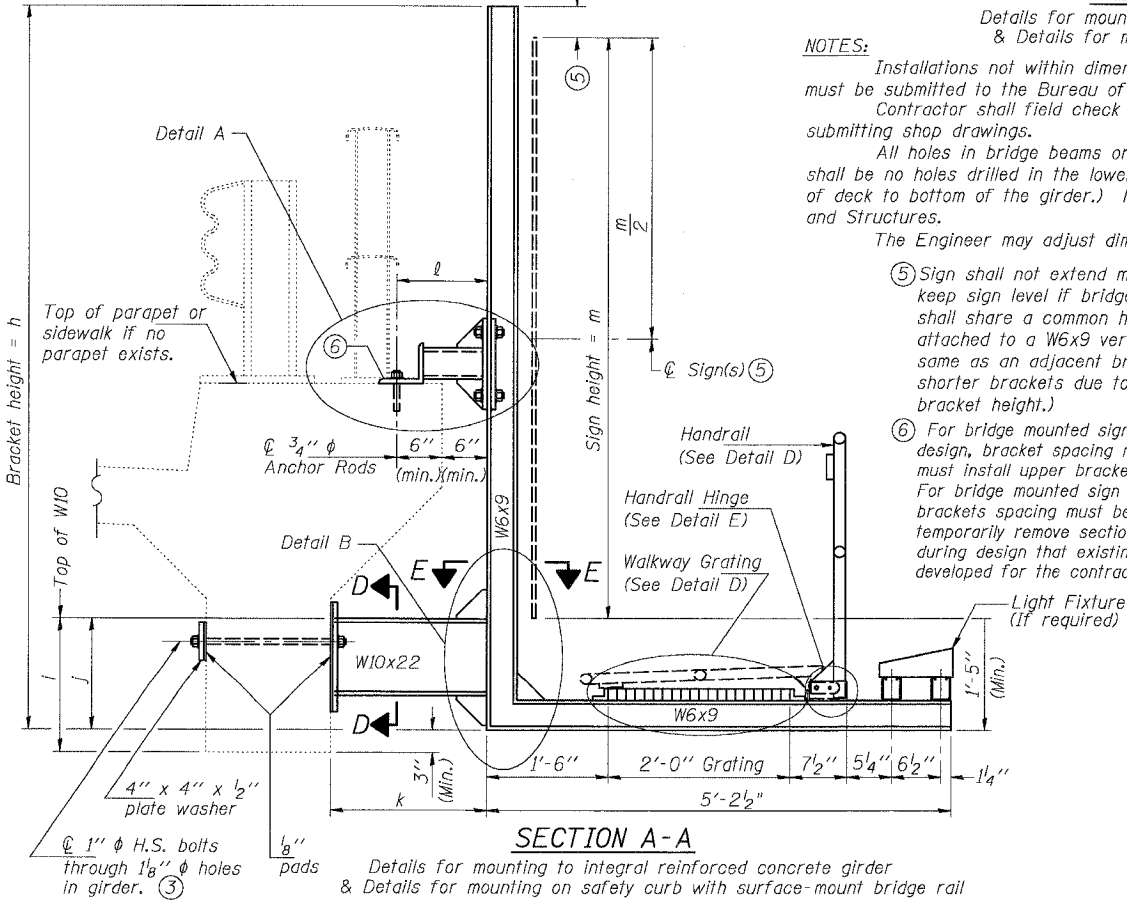
For Details A & B, Sections C-C, D-D and E-E, see Base Sheet BM-3.
For Details D & E, see Base Sheet BM-4.

- 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.

DESIGNED	MSA
CHECKED	AS
DRAWN	MD
CHECKED	MSA

EXAMINED	19
PASSED	ENGINEER OF STRUCTURAL SERVICES
	ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE



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.
 - 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 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.

SGN-22

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
OVERHEAD SIGN STRUCTURES
(BRIDGE MOUNTED)

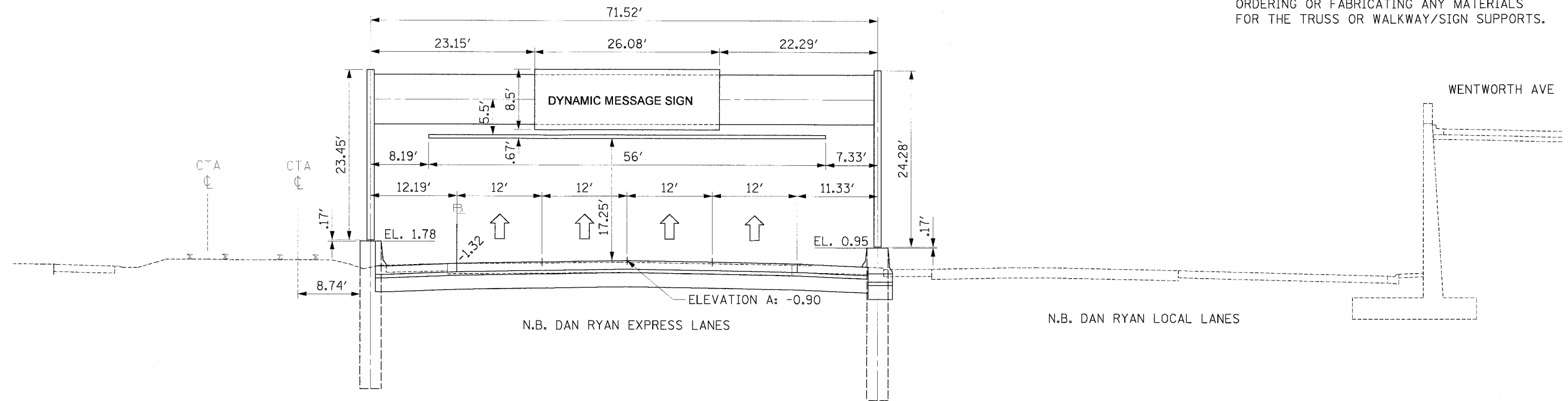
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	COOK	556	307
STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	
		• (1818, ETC, 2324.6-1)PR-8	

62300

NOTES:

1. DYNAMIC MESSAGE SIGN WILL BE INSTALLED IN ANOTHER CONTRACT. COORDINATE WITH CONTRACT 62583 FOR LOCATION, TYPE, AND ORIENTATION OF HARDWARE AND CONDUIT.
2. THE FABRICATOR SHALL COORDINATE WITH THE MANUFACTURER OF THE DYNAMIC MESSAGE SIGN (DMS) TO DETERMINE THE ACTUAL SIZE, WEIGHT AND MOUNTING DETAILS OF THE DMS BEFORE ORDERING OR FABRICATING ANY MATERIALS FOR THE TRUSS OR WALKWAY/SIGN SUPPORTS.



1S016I094L058.0
MOUNTING DETAIL
PROPOSED OVERHEAD SIGN STRUCTURE
FOR DYNAMIC MESSAGE SIGN
STA. 2461+51.44/4461+50 N.B. I-90/94
LOOKING NORTH

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 31st STREET TO 71st STREET (NB Express Lanes)
NAME	DATE	
		PROPOSED DYNAMIC MESSAGE SIGN INSTALLATION
		SCALE: NONE
		DATE: JULY 7, 2005
		DRAWN BY: SWANG
		CHECKED BY: JAL

CTE | AECOM

CTE
300 East Wacker Drive, Suite 400, Chicago, Illinois 60601-3176
312.438.0300 F 312.438.0100 www.cteaecom.com

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	PROJECT	SHEET NO.	SHEET NO.
90/94	*	COOK	556	308
ILLINOIS		FED. AID PROJECT		
* (1818, ETC, 2324.6-1P) R-8		62300		

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
WIND LOADING: 30 p.s.f. normal to Sign Panel Area and truss elements not behind sign Loading Diagram.
WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES:
Field Units
 $f' = 3,500$ 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 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 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) of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

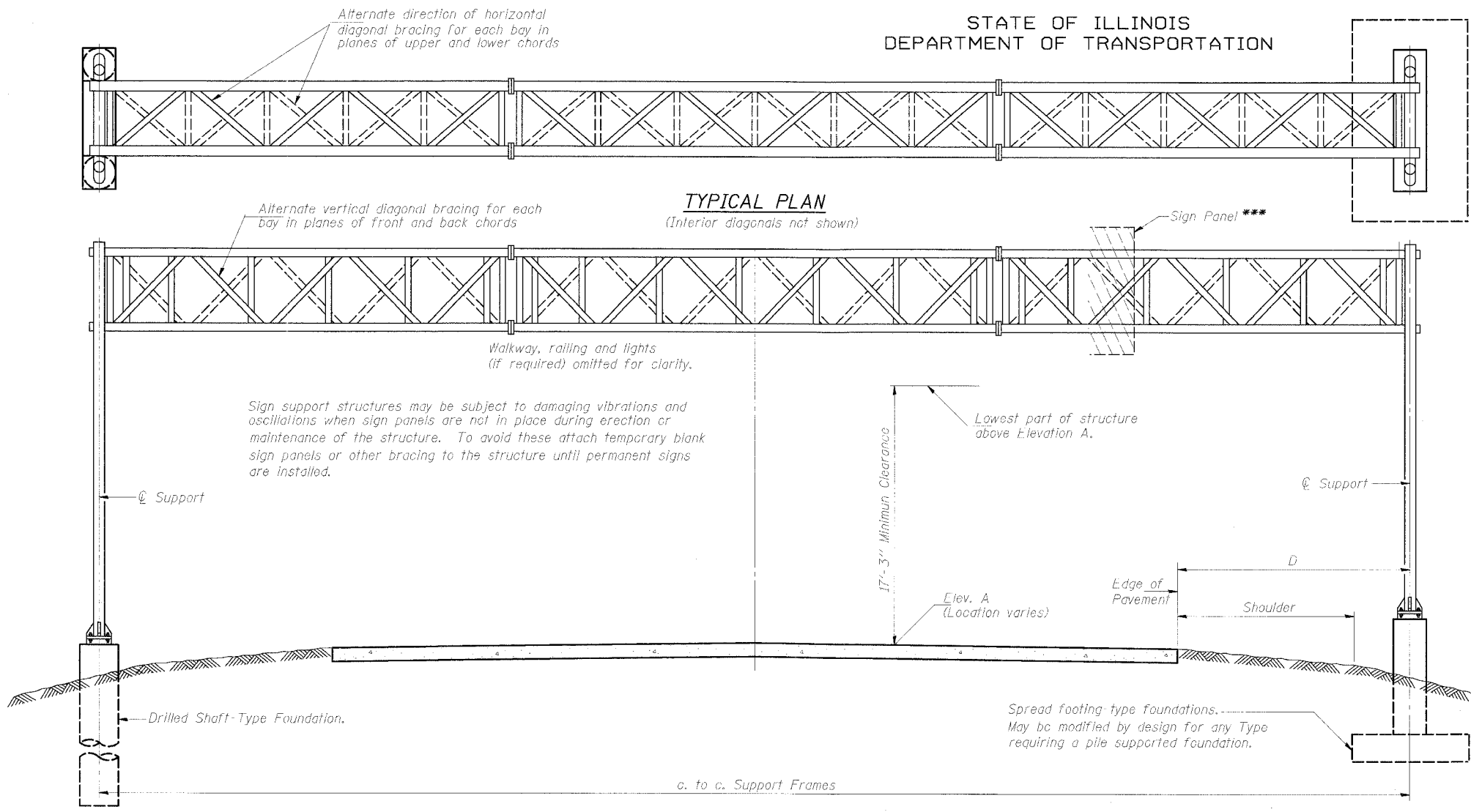
U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts 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 AASHTO M314 Gr. 36 or 55 with a minimum Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F.

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

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



TYPICAL ELEVATION
(Looking at Face of Signs)**

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

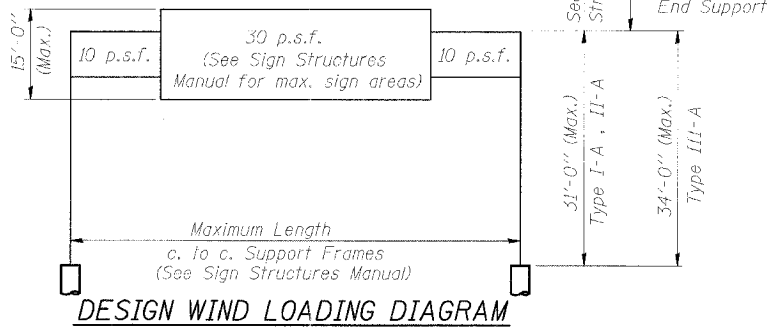
Structure Number	Station	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total*** Sign Area
ISO161094L058.0	2461+51.44	III-A	71.52'	-0.90	12.19' L 11.33' R	8.5'	221.7 SF

**Looking upstation for structures with signs both sides.
***A DYNAMIC MESSAGE SIGN (DMS) WILL BE INSTALLED ON THIS TRUSS IN CONTRACT 62583

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE TYPE I-A (4'-0" x 4'-6")	Foot	
OVERHEAD SIGN STRUCTURE TYPE II-A (4'-6" x 5'-3")	Foot	
OVERHEAD SIGN STRUCTURE TYPE III-A (5'-0" x 7'-0")	Foot	71.6
OVERHEAD SIGN WALKWAY TYPE A	Foot	56
CONCRETE FOUNDATIONS	Cu. Yds.	
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	38.3

NUMBER	REVISION	DATE



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.

DESIGNED - SWANG	20
CHECKED - JAL	EXAMINED
DRAWN -	PASSED
CHECKED -	ENGINEER OF BRIDGES AND STRUCTURES

OS-A-1 11/1/2002

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

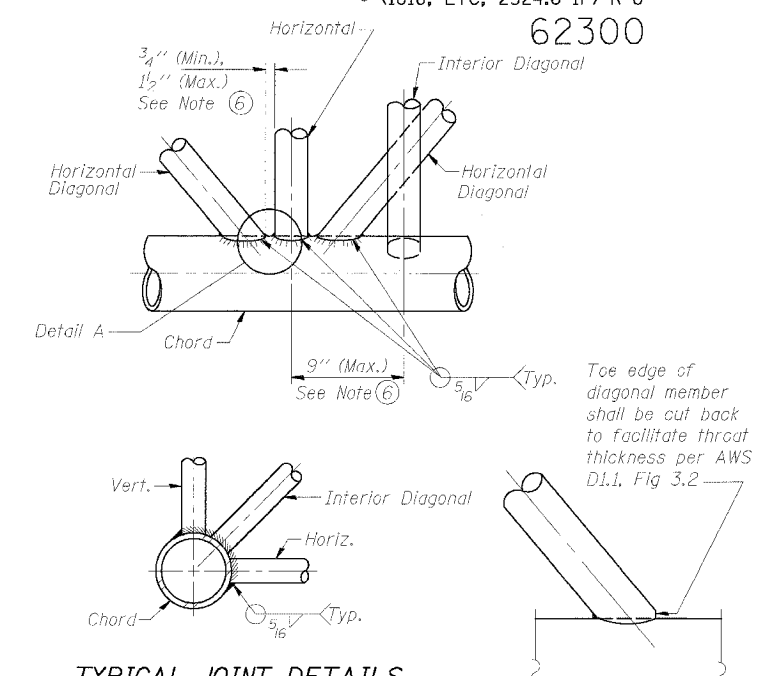
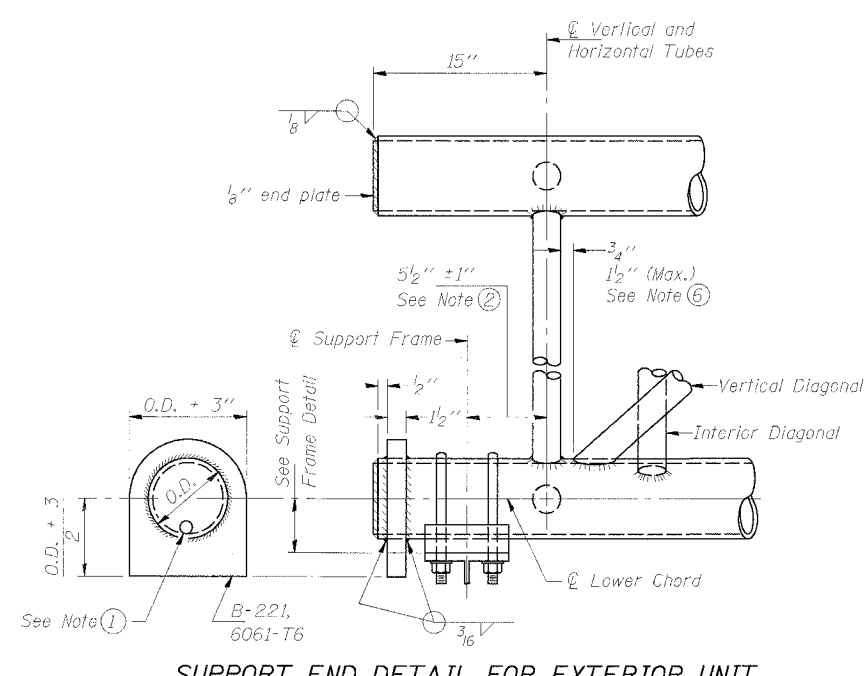
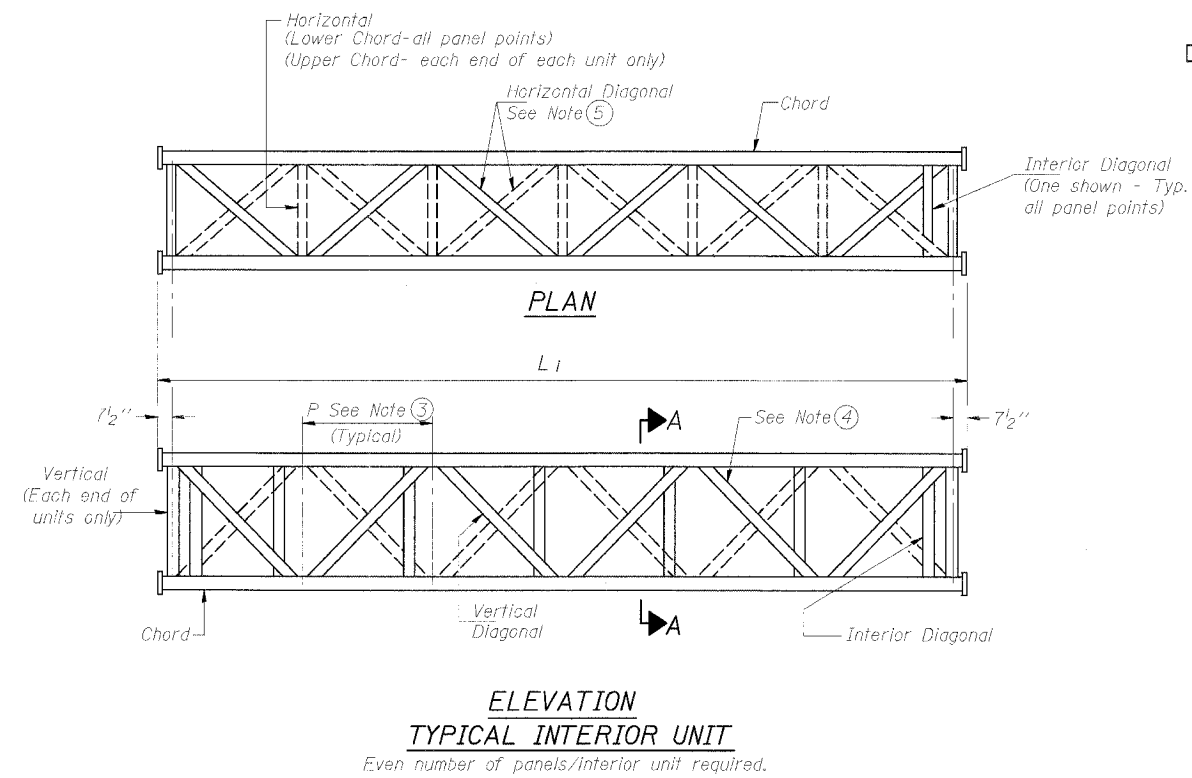
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO 71st STREET
(NB Express Lanes)

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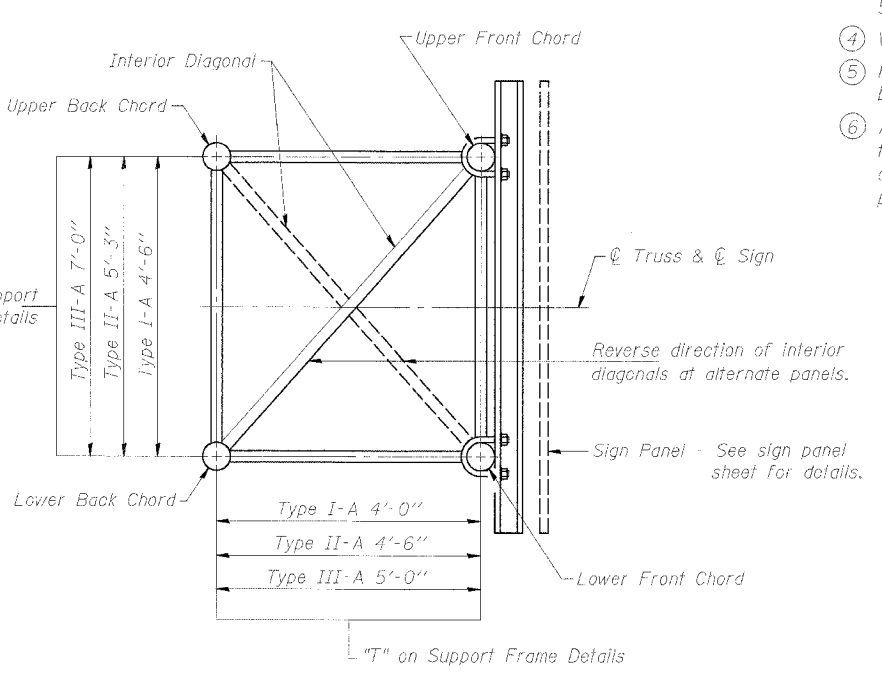
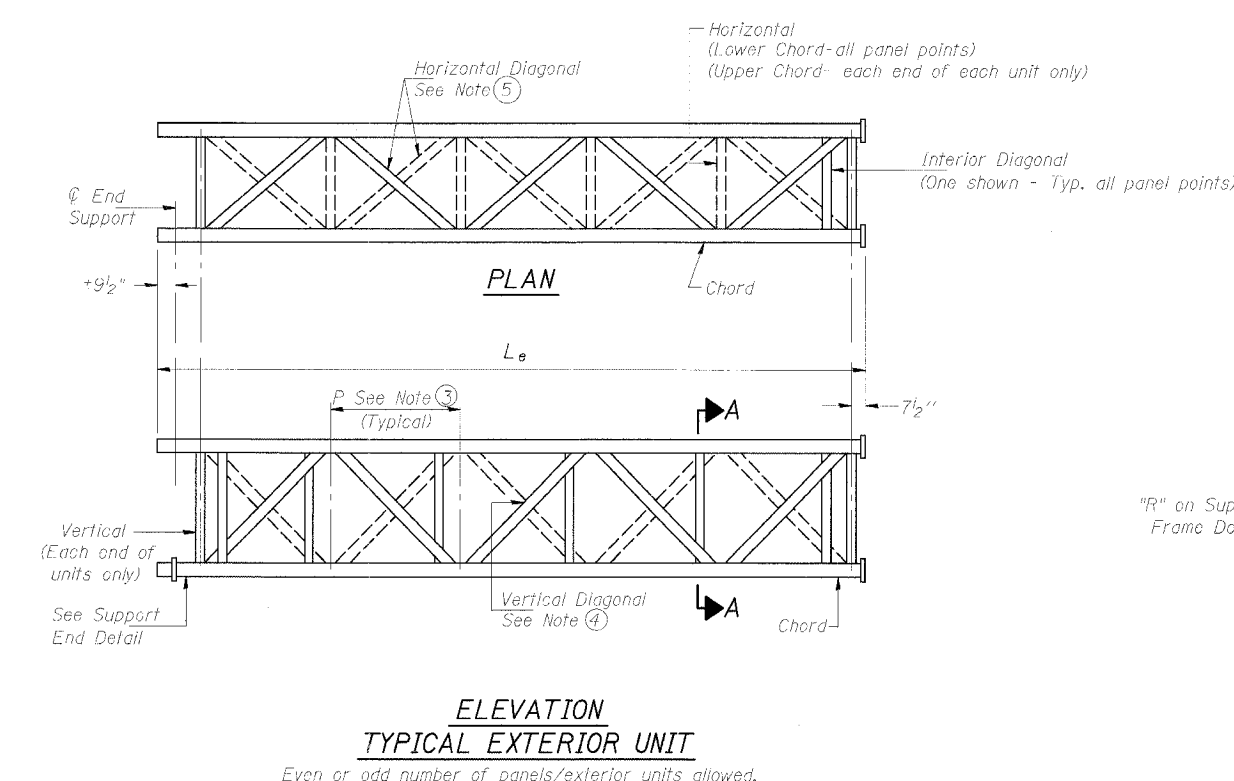
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLN. NO.	SECTION	COUNTY	SHEET	SHEET NO.
90/94	*	COOK	556	309
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	
* (1818, ETC, 2324.6-1P) R-8				

62300



- NOTES**
- Contractor may alternatively use standard aluminum drive-fit cap to close end. $\frac{1}{2}$ " ϕ drain hole in end plate/drive-fit cap. (Typ. at ends of all chords)
 - $5\frac{1}{2}$ " end dimension may vary by ± 1 " to provide uniform panel spacing (P).
 - 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.
 - Vertical Diagonals in front and back face shall alternate.
 - Hidden lines show wind bracing alternates direction between planes of top and bottom chords.
 - All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a $\frac{3}{4}$ " minimum to $1\frac{1}{2}$ " maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.



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

F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO 71st STREET
(NB Express Lanes)

DESIGNED - SWANG	EXAMINED	20
CHECKED - JAL	PASSED	ENGINEER OF STRUCTURAL SERVICES
DRAWN -		ENGINEER OF BRIDGES AND STRUCTURES
CHECKED -		

NUMBER	REVISION	DATE

OS-A-2 11/1/2002

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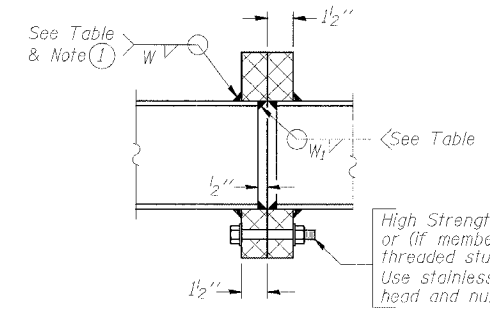
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO.
90/94	*	COOK	556	310	
FED. ROAD DIST. NO. 7					SHEETS

(1818, ETC, 2324.6-1P) R-8
62300

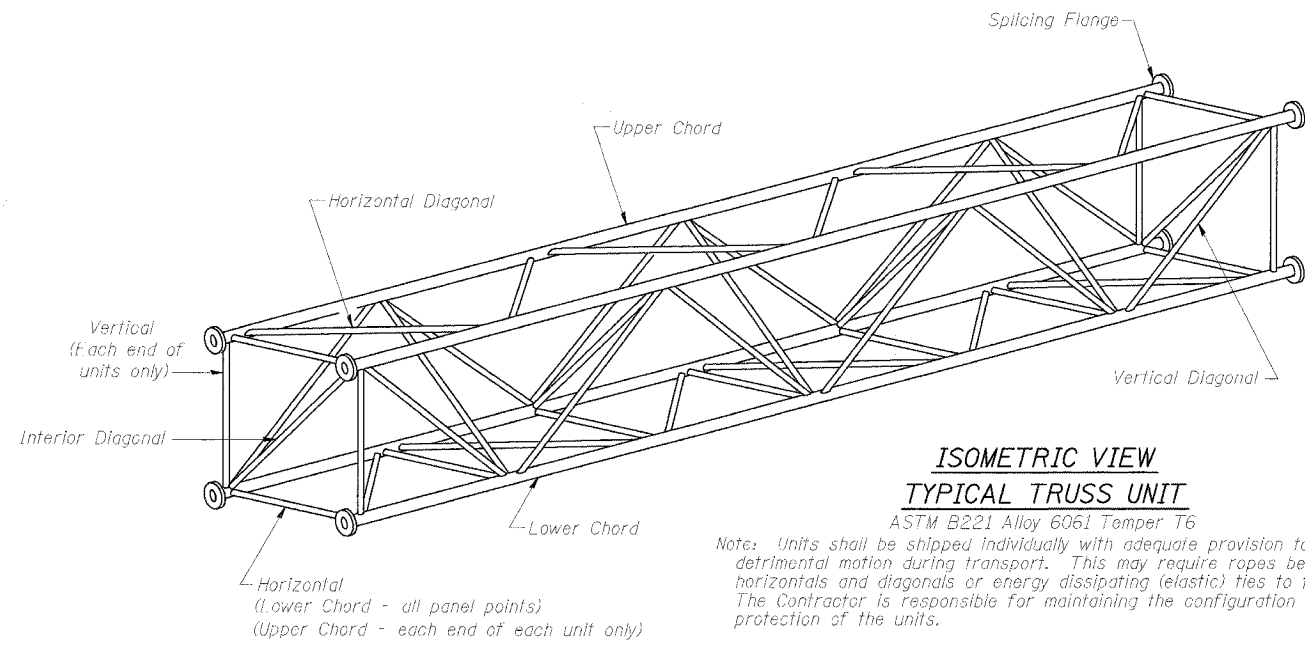
TRUSS UNIT TABLE

Structure Number	Station	Design Truss Type	Exterior Units (2)			Interior Unit				Upper & Lower Chord		Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals		Camber at Midspan	Splicing Flange					
			No. Panels per Unit	Unit Lgth.(L _u)	Panel Lgth.(P)	No. Req'd.	No. Panels per Unit	Unit Lgth.(L _i)	Panel Lgth.(P)	O.D.	Wall	O.D.	Wall		Bolts		Weld Sizes		A	B
															No./Splice	Dia.	W	W ₁		
ISO161094L058.0	2461+51.44	III - A	7	36.58'	4.96'					7"	5/16"	3 1/4"	5/16"	1.8"	6	1"	7/16"	5/16"	11 1/2"	15"



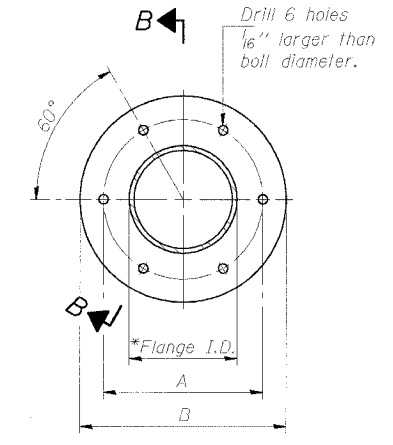
SECTION B-B

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

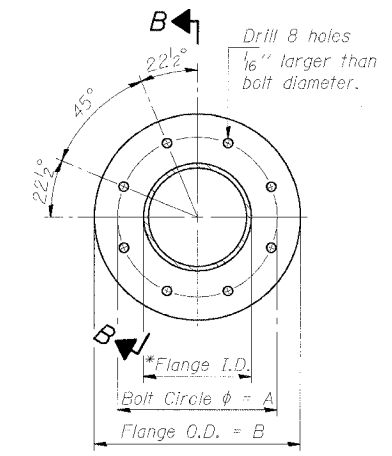


ISOMETRIC VIEW
TYPICAL TRUSS UNIT

ASTM B221 Alloy 6061 Temper T6



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

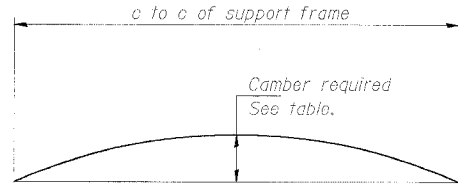


TRUSS TYPES II-A & III-A

SPLICING FLANGES

ASTM B221, Alloy 6061-T6
or ASTM B209, Alloy 6061-T651

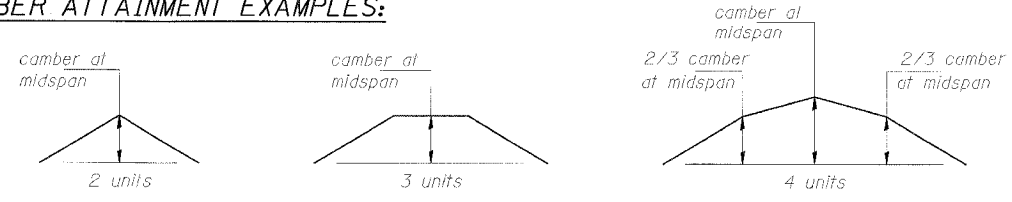
*To fit O.D. of Chord with maximum gap of 1/16".



CAMBER DIAGRAM

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

CAMBER ATTAINMENT EXAMPLES:



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

NUMBER	REVISION	DATE

DESIGNED - SLW	EXAMINED - 20
CHECKED - RD	PASSED - ENGINEER OF STRUCTURAL SERVICES
DRAWN -	PASSED - ENGINEER OF BRIDGES AND STRUCTURES
CHECKED -	

OS4-A-2 11/1/2002

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

F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO 71st STREET
(NB Express Lanes)

F:\P\4668\Struct\4668.Dwg\CFR-6230001_Signs\OS4-A-2.dwg

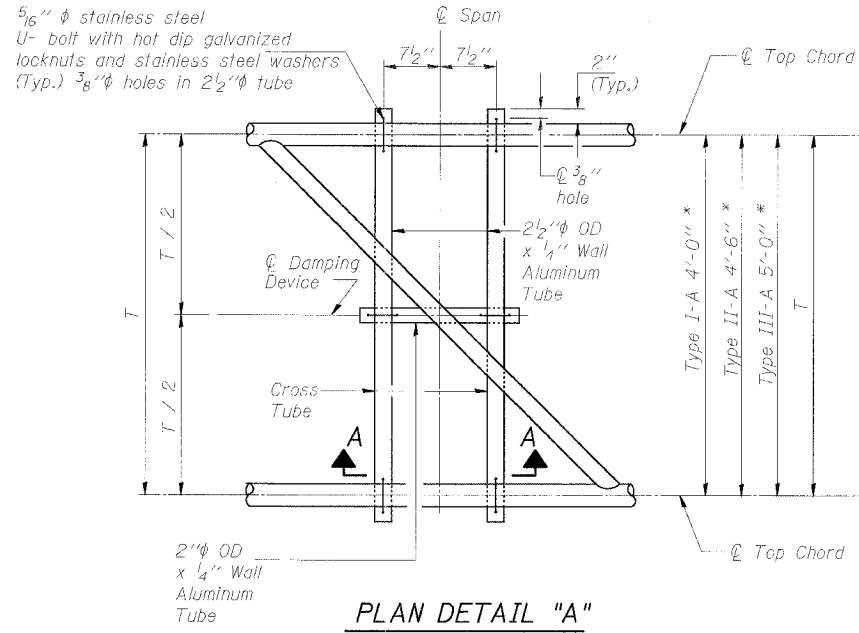
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

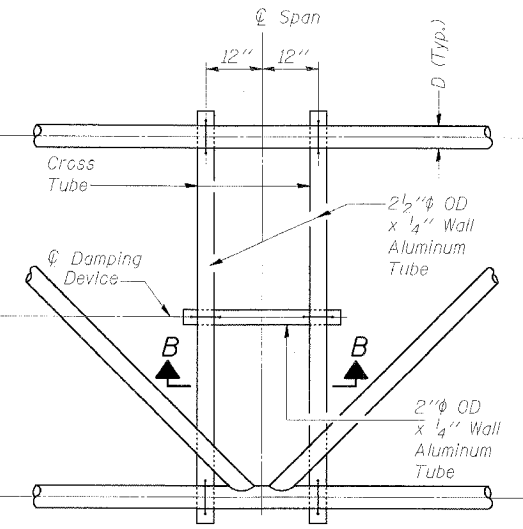
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
90/94	*	COOK	556	311	- SHEETS

• (1818, ETC, 2324.6-1P) R-8

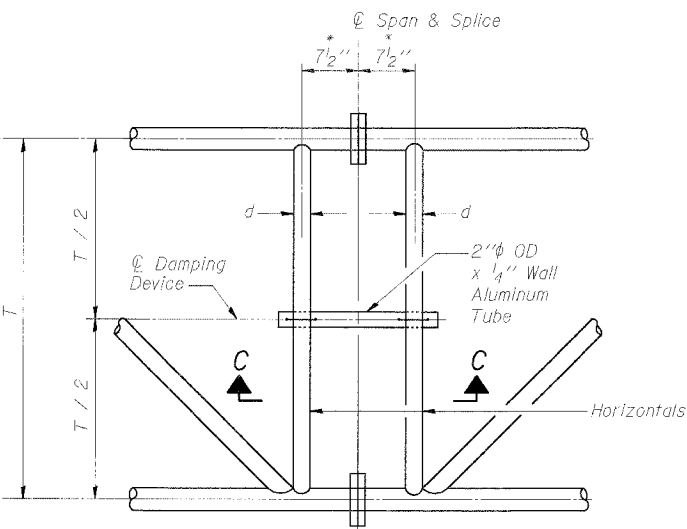
62300



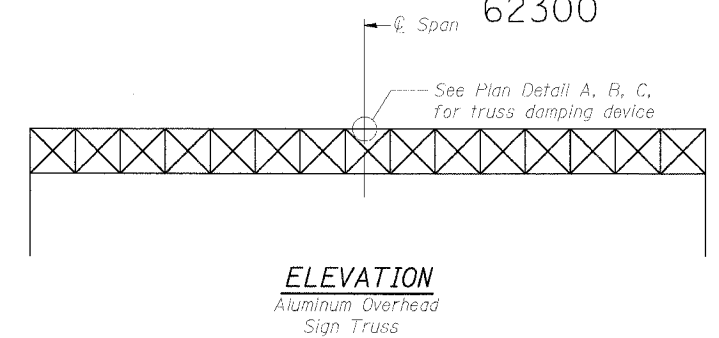
PLAN DETAIL "A"
@ SPAN BETWEEN PANEL POINTS



PLAN DETAIL "B"
@ SPAN AT PANEL POINT



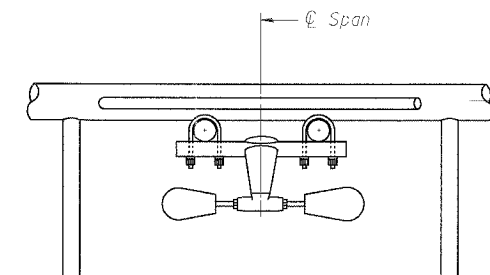
PLAN DETAIL "C"
@ SPAN AT @ CHORD SPLICE



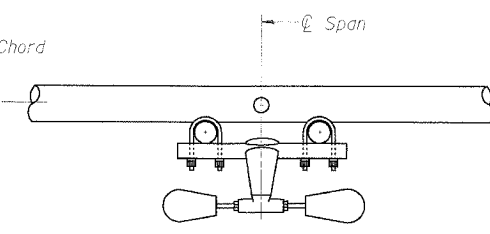
ELEVATION
Aluminum Overhead Sign Truss

NOTES

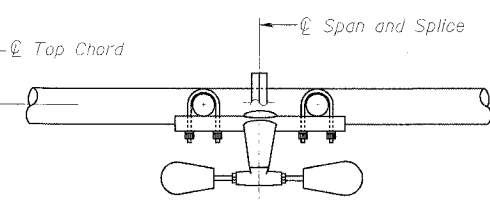
Damper: One damper per truss.
(31 lbs. Stockbridge-Type Aluminum)
Cost included in "Overhead Sign Structure..."
Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in "Overhead Sign Structure..."



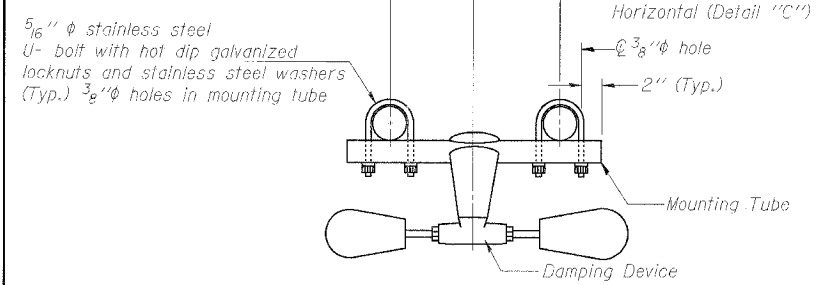
SECTION A-A



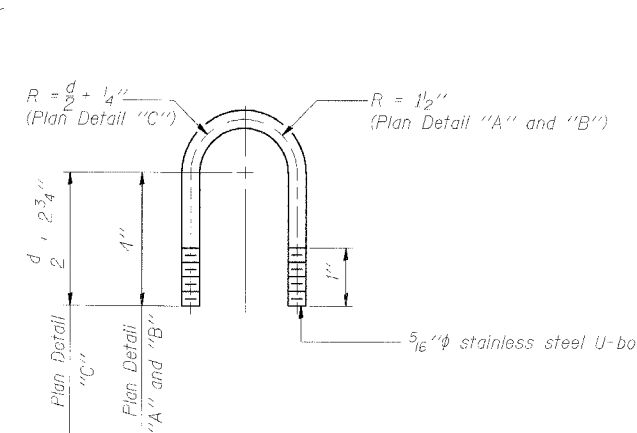
SECTION B-B



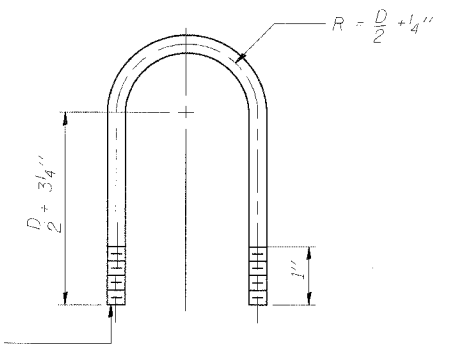
SECTION C-C



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")

DESIGNED - SWANG	20
CHECKED - JAL	EXAMINED
DRAWN	PASSED
CHECKED	ENGINEER OF BRIDGES AND STRUCTURES

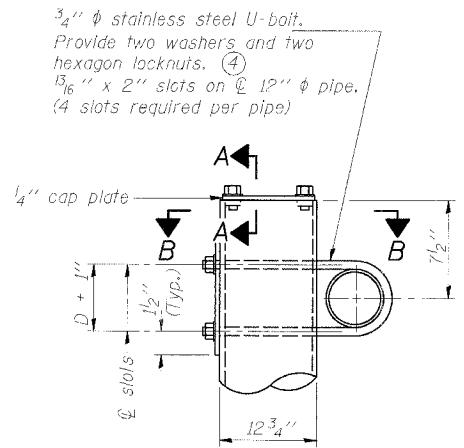
OS-A-D 11/1/2002

OVERHEAD SIGN STRUCTURE DAMPING DEVICE
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO 71st STREET
(NB Express Lanes)

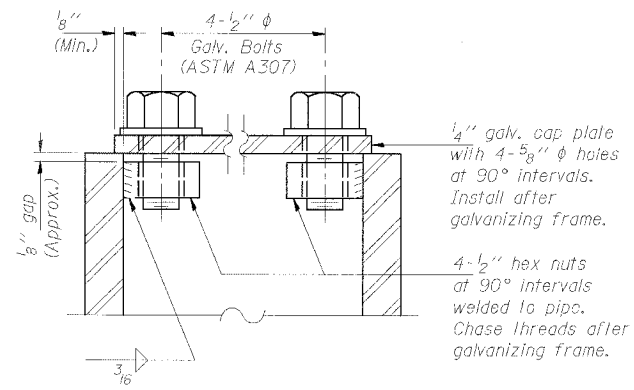
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO.
90/94	*	COOK	556	312	
FED. ROAD DIST. NO. 7		"AIDED" FED. AID PROJECT			

* (1818, ETC, 2324.6-1P) R-8
62300

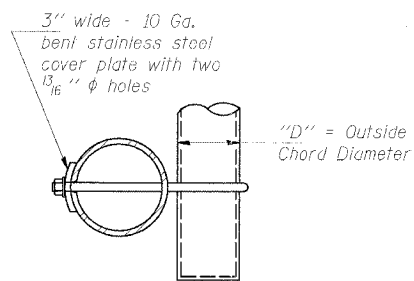


DETAIL A

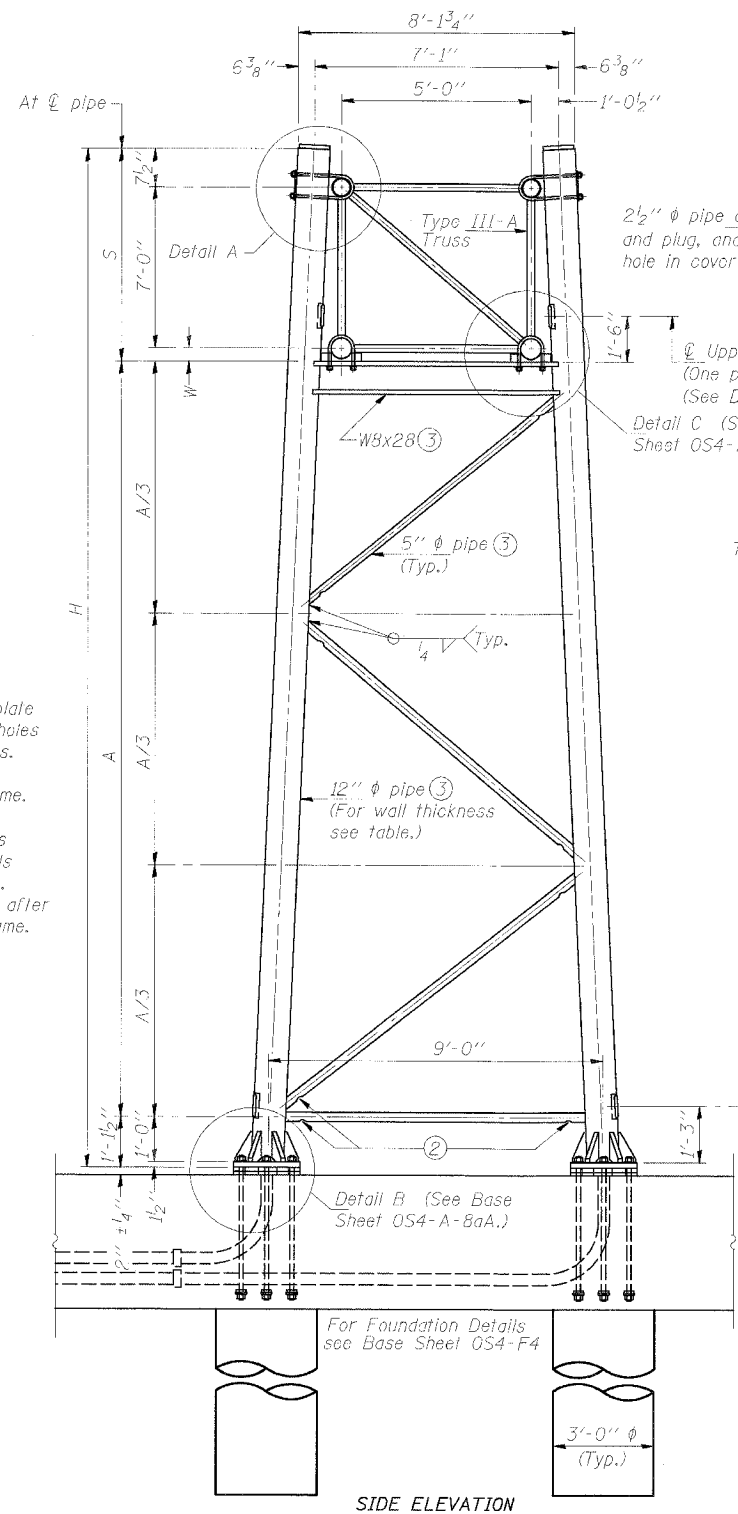


SECTION A-A

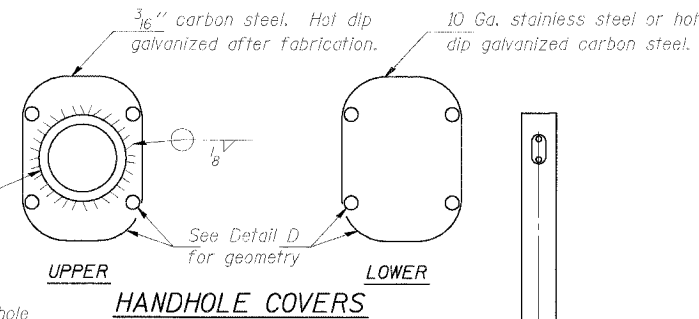
As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.



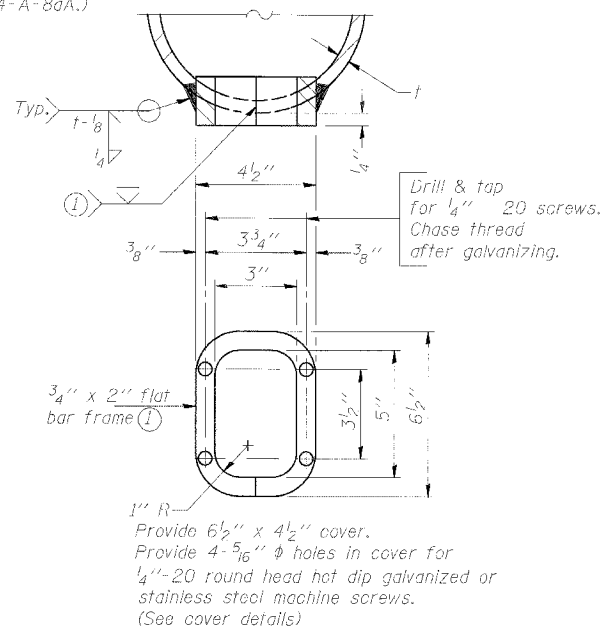
SECTION B-B



SIDE ELEVATION



HANDHOLE COVERS



DETAIL D

Truss Chord Nominal Dia.	Dimensions	
	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"

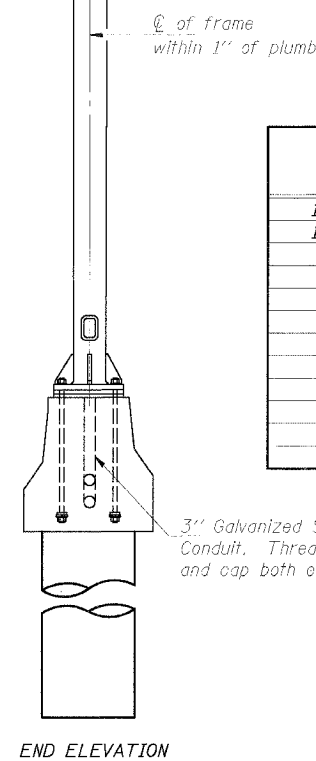
TRUSS SUPPORT DETAILS
(12" ϕ Pipe-Type III-A Truss)

* COORDINATE WITH CONTRACT 62583 FOR LOCATION, TYPE, AND ORIENTATION OF CONDUIT.

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

- 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 \sqrt{in} or less.
- 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.)
- Steel pipe, plate, carbon steel handhole covers and rolled sections shall be hot dip galvanized after fabrication. Painting is not permitted. See Base Sheet OS-A-1.
- See General Notes for fasteners.
- Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.

Structure Number	Station	Support		Pipe Wall Thickness	H	A
		Left	Right			
ISO161094L058.0	2461+51.44	X		.33	23.45'	14.30'
ISO161094L058.0	2461+51.44		X	.33	24.28'	15.13'



END ELEVATION

DESIGNED - XXX	20
CHECKED - XXX	EXAMINED
DRAWN	PASSED
CHECKED	ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE

OS4-A-8a 11/1/2002

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

F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO 71st STREET
(NB Express Lanes)

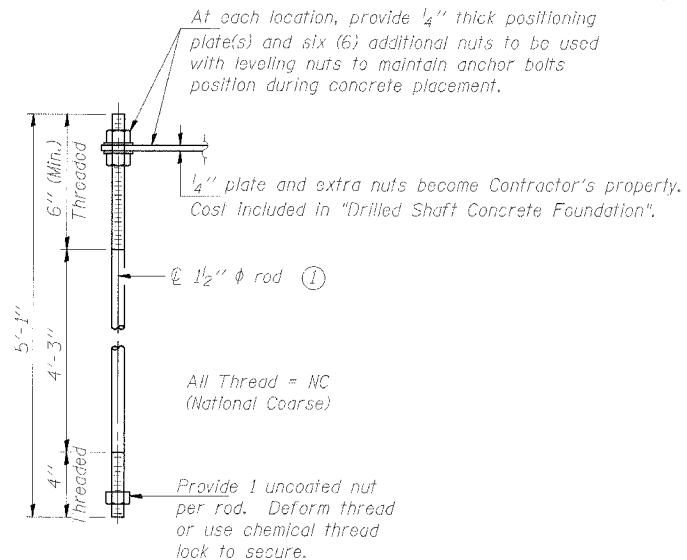
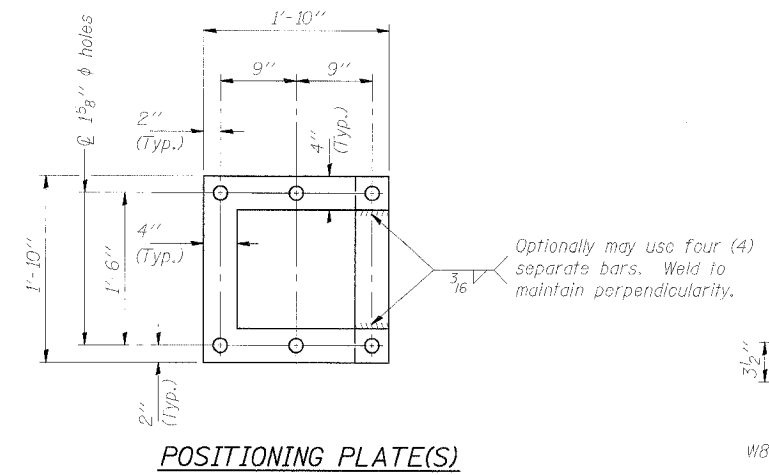
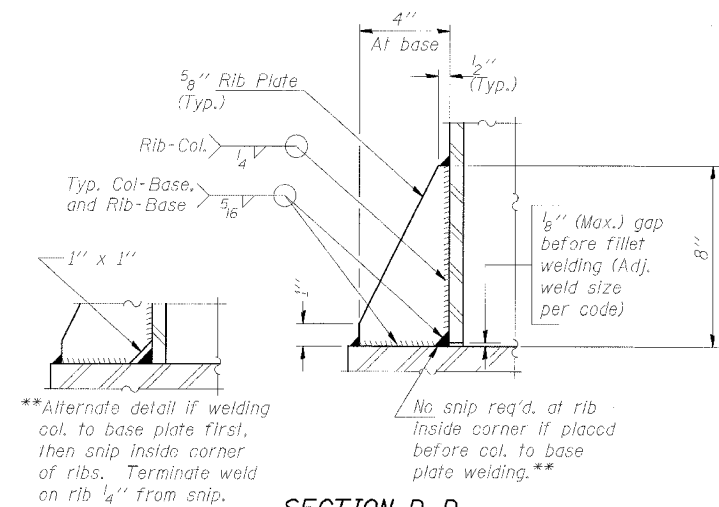
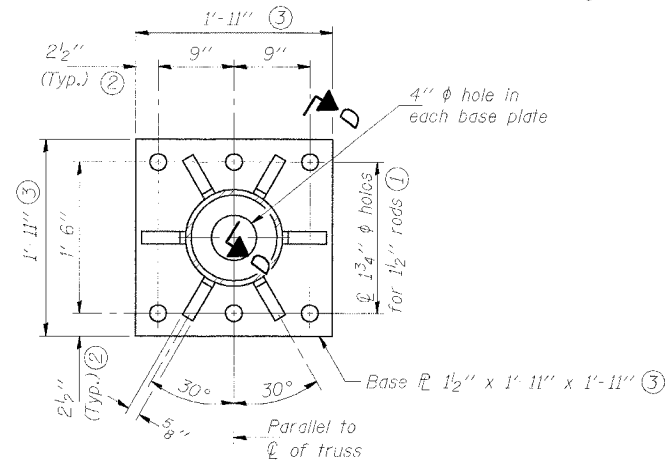
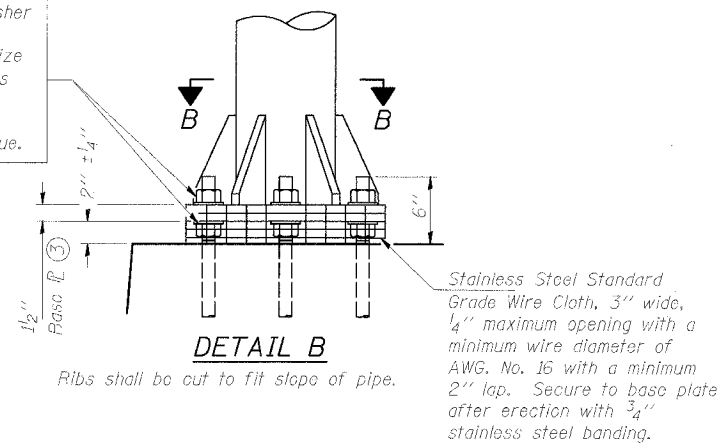
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO.
90/94	*	COOK	556	313	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

(1818, ETC, 2324.6-1P) R-8
62300

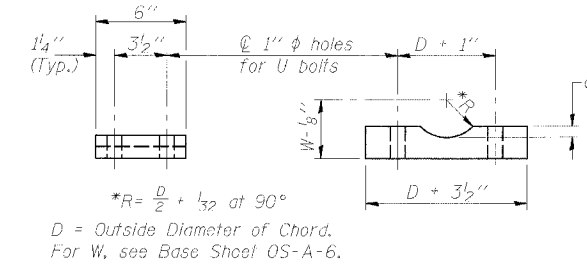
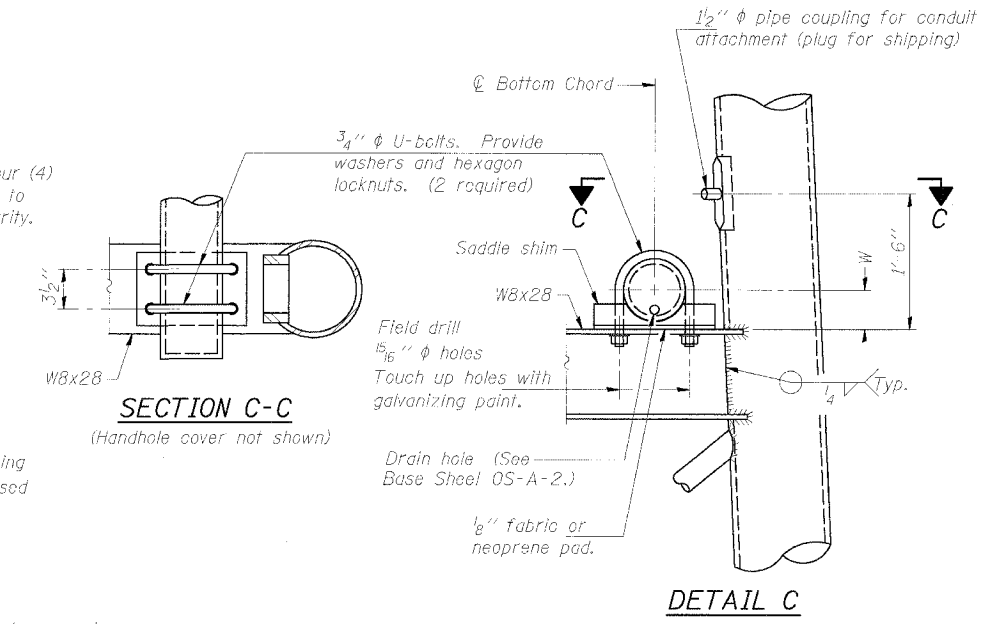
Hexagon locknut and washer (top), leveling nut and washer (bottom). Galvanize per AASHTO M232. Nuts shall each be tightened against base plate with 200 lb.-ft. minimum torque.



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

Anchor rods shall conform to AASHTO M314 Grade 36 or 55 and meet Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. Galvanize upper 12" per AASHTO M232. No welding shall be permitted on rods.

- Notes: For Type III-A Truss spans greater than 150 ft, and up to 160 ft.:
- 1 3/4" ϕ rod, 2" ϕ holes
 - 2 3/4" edge distance
 - Base ϕ 1 5/8" x 1'-11 1/2" x 1'-11 1/2"



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

ASTM B26 Alloy 356-F
or
ASTM B209 Alloy 6061-T6S1
(4 required per sign truss)

DESIGNED - SWANG	20
CHECKED - JAL	EXAMINED
DRAWN -	PASSED
CHECKED -	ENGINEER OF STRUCTURAL SERVICES
	ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE

OS4-A-8aA 11/1/2002

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

F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO 71st STREET
(NB Express Lanes)

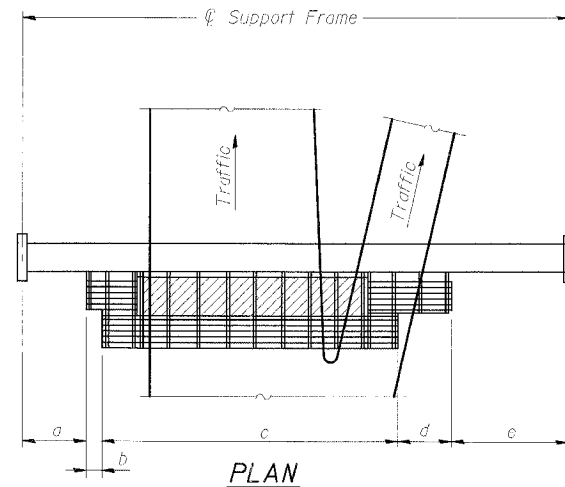
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

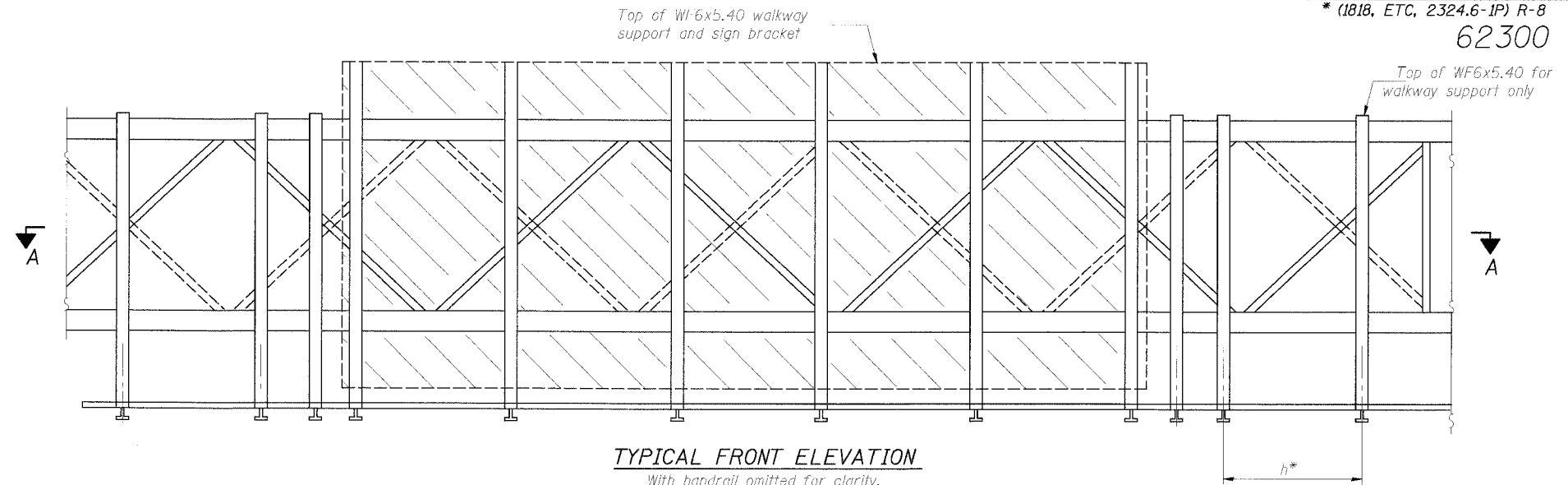
ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO.
90/94	*	COOK	556	314	
FED. ROAD DIST. NO. 7		S.LANGES		FED. AID PROJECT	

*(1818, ETC, 2324.6-1P) R-8
62300

SHEET NO.
SHEETS



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

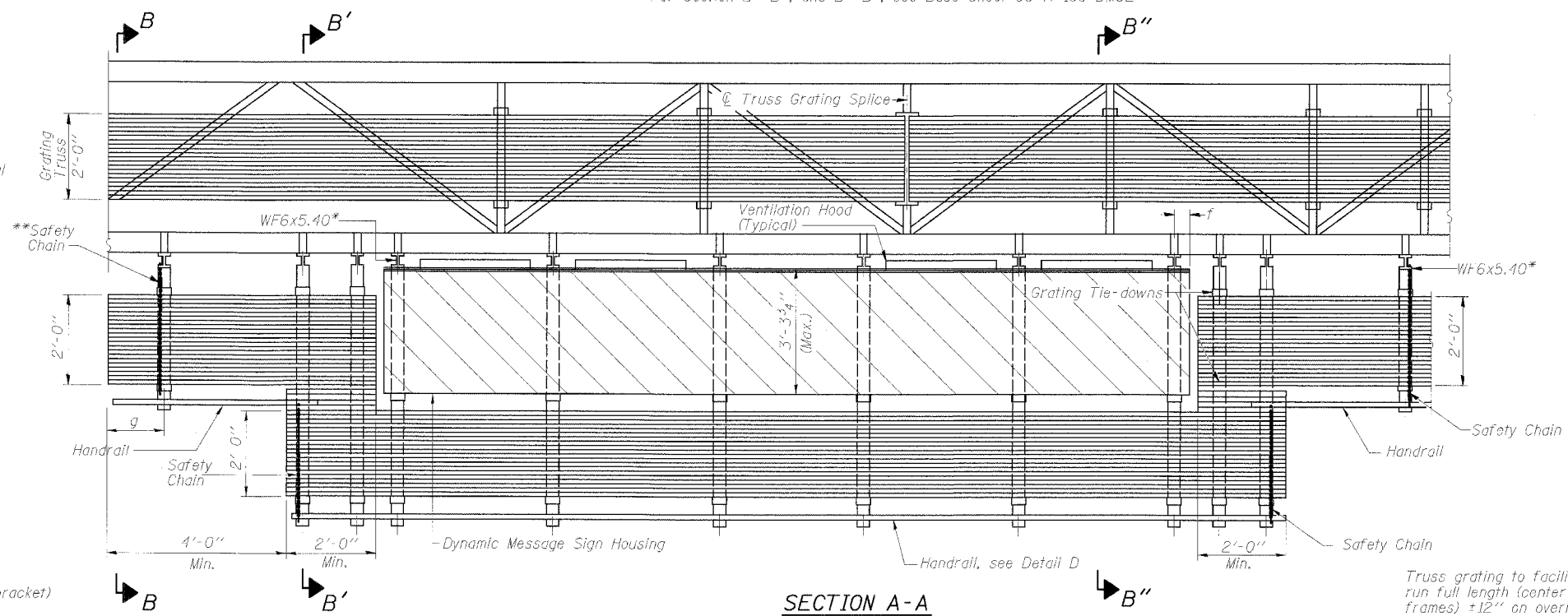


TYPICAL FRONT ELEVATION
With handrail omitted for clarity.
For Section B-B, see Base Sheet OS-A-10-DMS2
For Section B'-B', and B''-B'', see Base Sheet OS-A-10a-DMS2

Walkway and Truss Grating width dimensions are nominal and may vary 1/2" based on available standard widths.

BRACKET TABLE

WF6x5.40 ASTM B308, Alloy 6061-T6	
Sign Width	Number Brackets Required
26'-1"	6



SECTION A-A

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

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

Notes: *Space WF6x5.40 brackets for efficiency and within limits shown:

- f = 12" maximum, 4" minimum (End of sign to ϕ of nearest bracket)
- g = 12" maximum, 4" minimum (End of walkway grating to ϕ of nearest support bracket)
- h = 6'-0" maximum (ϕ to ϕ or walkway support brackets, WF6x5.40)

**If walkway bracket at safety chain location is behind sign, add angle to bracket, see Alternate Safety Chain Attachment on Base Sheet OS-A-11-DMS2

For Details T and W, Section B-B and Grating Splice Details, see Base Sheet OS-A-10-DMS2.
For Details D, F, G and P and Handrail Splice Details, see Base Sheet OS-A-11-DMS2.

**OVERHEAD SIGN STRUCTURES
ALTERNATE ALUMINUM WALKWAY DETAILS**

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st Street to 71st Street
(NB Express Lanes)

DESIGNED	19
CHECKED	EXAMINED
DRAWN	PASSED
CHECKED	ENGINEER OF STRUCTURES

EXAMINED	19
PASSED	ENGINEER OF STRUCTURAL SERVICES
	ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE

Structure Number	Station	a	b	c	d	e	Walkway Grating and Handrail Lengths
ISO161094L058.0	2461+51.44	8.19'	12.00'	32.00'	12.00'	7.33'	56.00'

OS-A-9-DMS2 7/1/2001

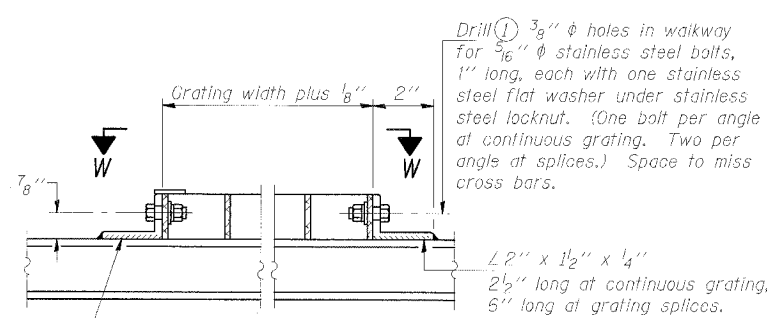
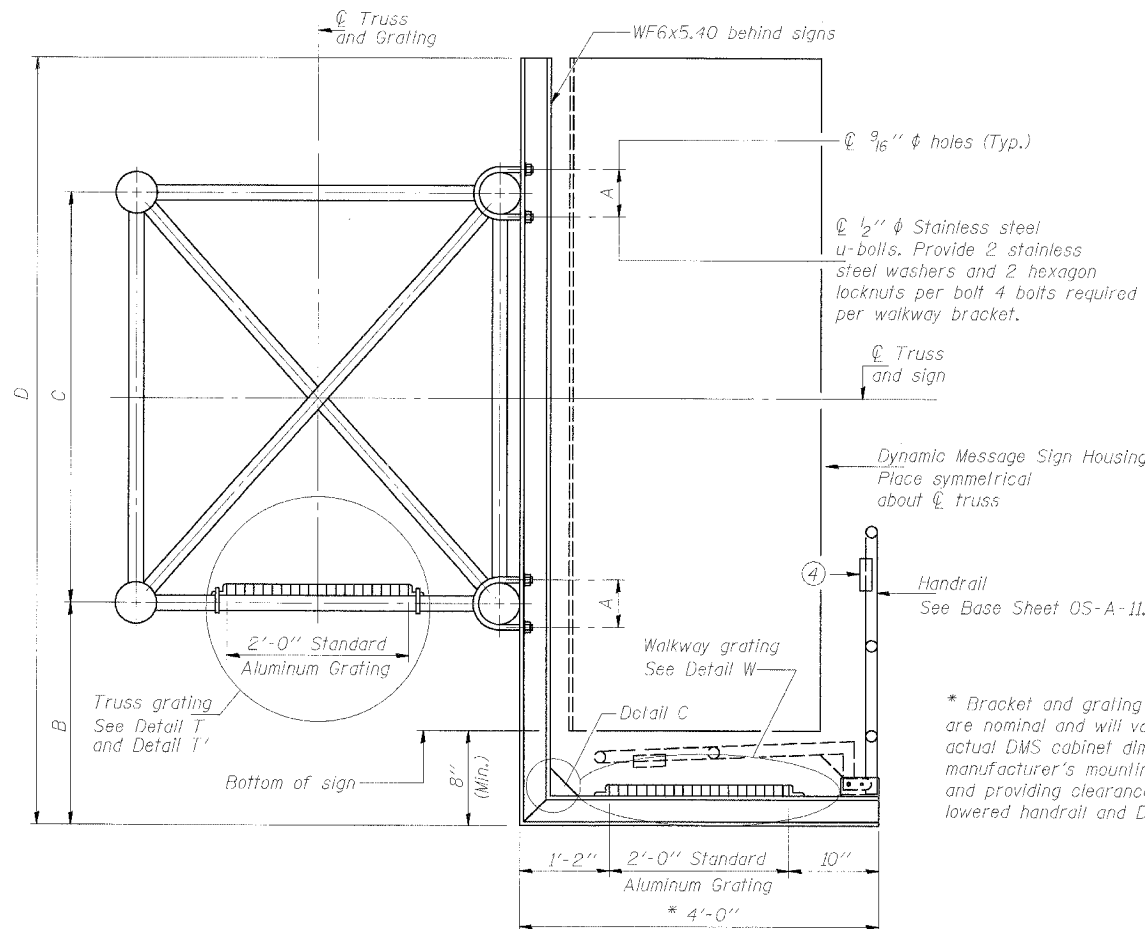
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

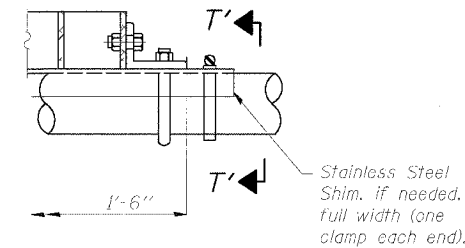
ROUTE NO.	SECTION	COUNTY	PROJECT	SHEET
90/94	*	COOK	556	315

*(1818, ETC, 2324.6-1P) R-8

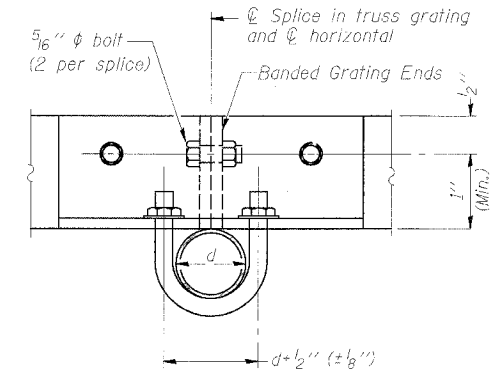
62300



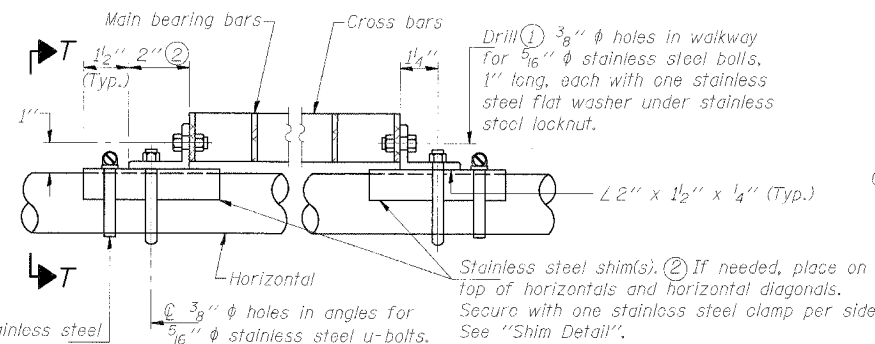
DETAIL W
(Walkway grating)



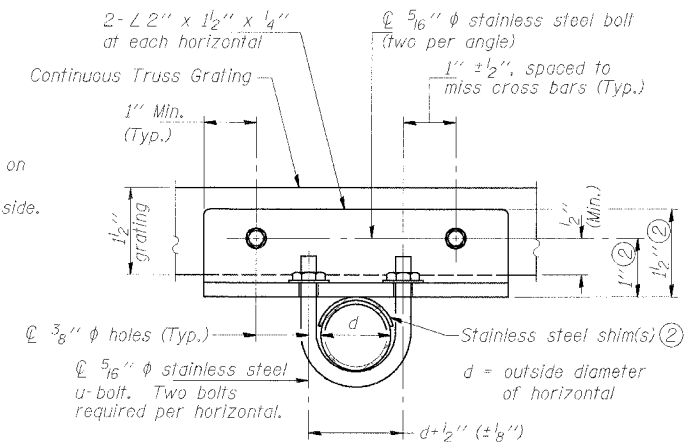
DETAIL T'
(Truss grating splice)
Details not shown same as Detail T.
Alternate materials may be used subject to the Engineer's review and approval.



SECTION T'-T'



DETAIL T
(Continuous Truss grating)



SECTION T-T

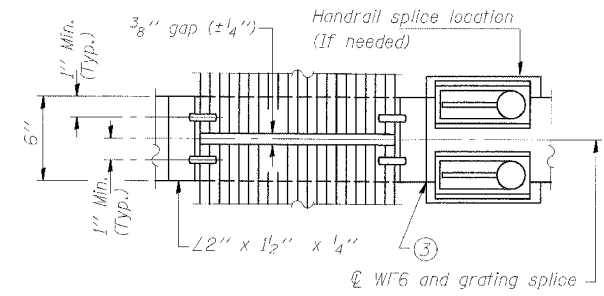
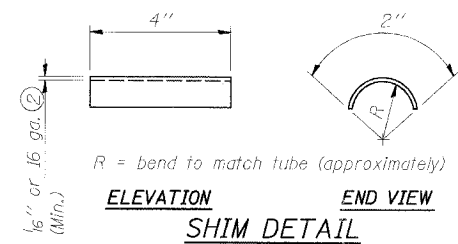
SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars shall be $\frac{3}{16}$ " x $1\frac{1}{2}$ " on $1\frac{3}{16}$ " centers and conform to ASTM B211 Alloy 6061-T6.
Cross bars shall be $\frac{3}{16}$ " x $1\frac{1}{2}$ " on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

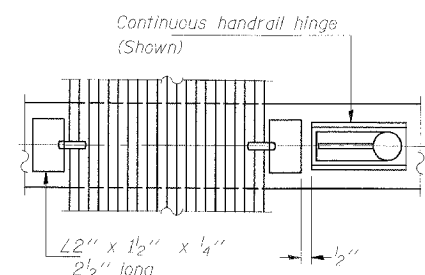
OR

Aluminum Grating with modified "4" sections for main bearing bars shall meet the following requirements:
Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.³ per bar, a depth of 1 1/2", spaced on 1 3/8" centers.
Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.

Structure Number	Station	A	B	C	D
IS0161094R057.7	1476+25.00	7 1/2"	1'-5"	7'-0"	9'-2"

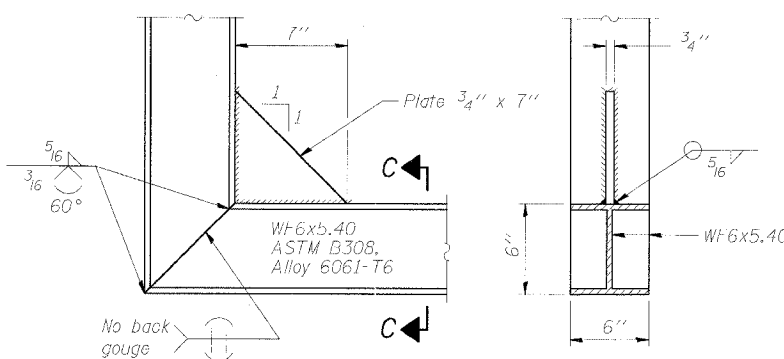


(AT WALKWAY GRATING SPLICE)



(CONTINUOUS WALKWAY GRATING)

SECTION W-W



DETAIL C

SECTION C-C

DESIGNED	19
CHECKED	EXAMINED
DRAWN	PASSED
CHECKED	ENGINEER OF STRUCTURAL SERVICES
	ENGINEER OF BUSINESS AND STRUCTURES

NUMBER	REVISION	DATE

OS-A-10-DMS2 7/1/2001

OVERHEAD SIGN STRUCTURES
ALTERNATE ALUMINUM WALKWAY DETAILS

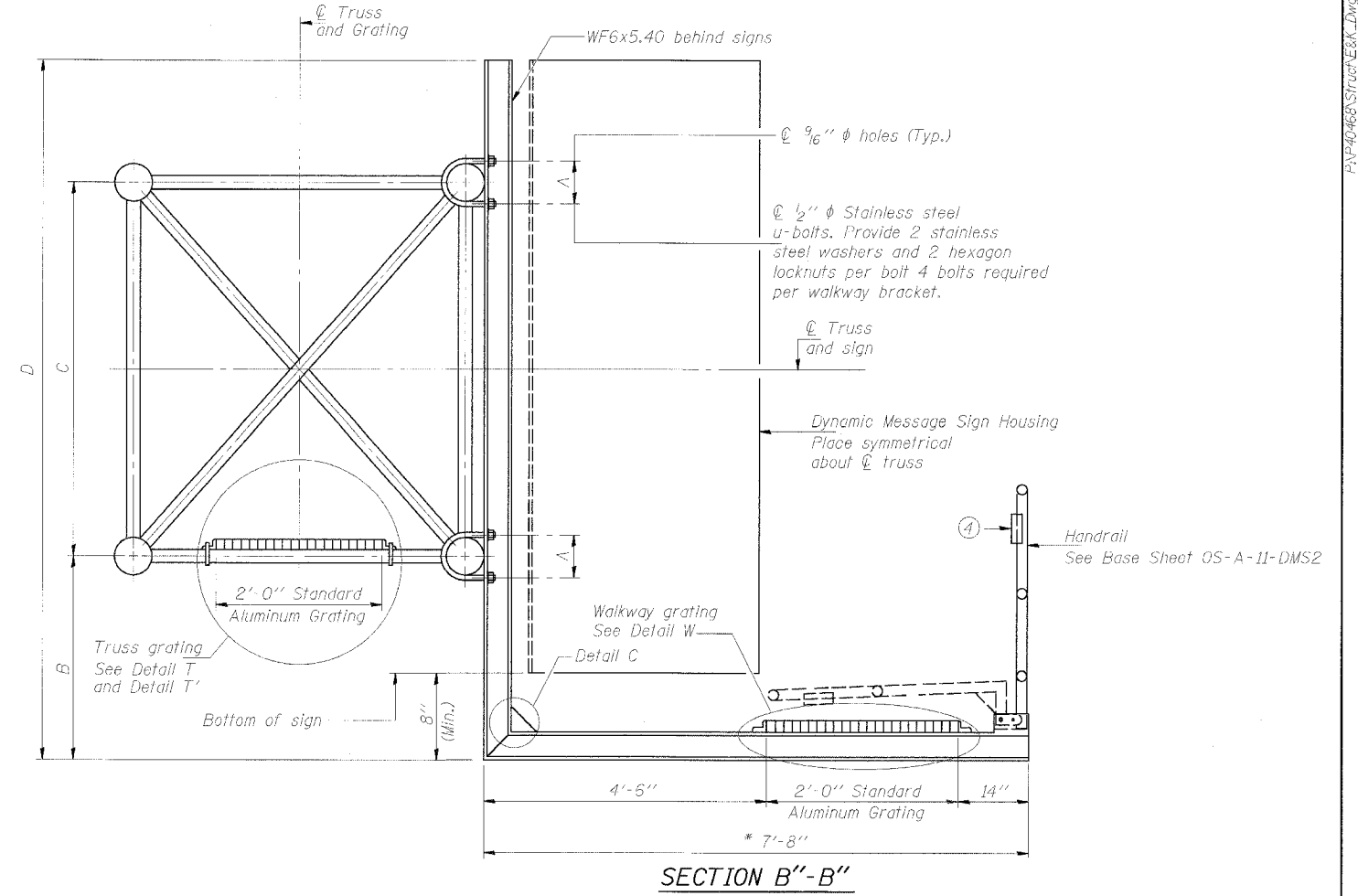
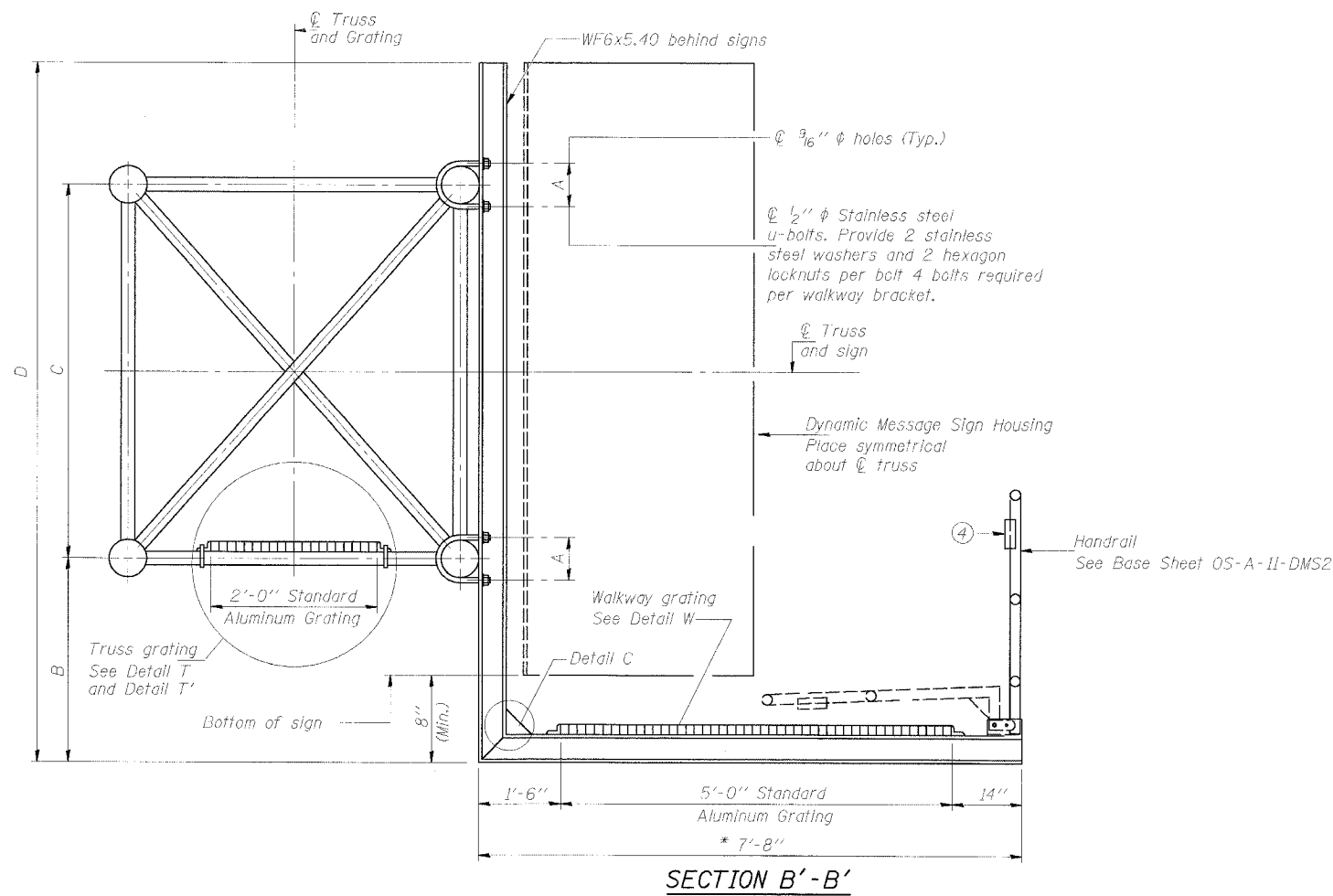
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st Street to 71st Street
(NB Express Lanes)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	CONTRACT NO.	SHEET NO.
90/94	*	COOK	556	316

*(1818, ETC, 2324.6-1P) R-8
62300



* Bracket and grating dimensions are nominal and will vary based on actual DMS cabinet dimensions plus manufacturer's mounting devices, and providing clearance between the lowered handrail and DMS cabinet.

Note:
For dimensions "A" to "D" and remaining details, see sheet OS-A-10-DMS2

DESIGNED	19
CHECKED	EXAMINED
DRAWN	PASSED
CHECKED	ENGINEER OF BRIDGES AND STRUCTURES

OS-A-10a-DMS2 7/1/2001

NUMBER	REVISION	DATE

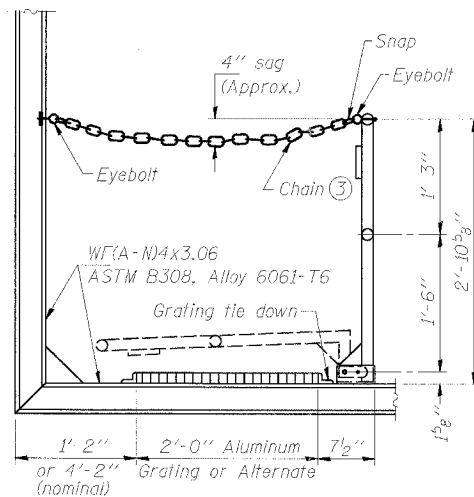
OVERHEAD SIGN STRUCTURES
ALTERNATE ALUMINUM WALKWAY DETAILS

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st Street to 71st Street
(NB Express Lanes)

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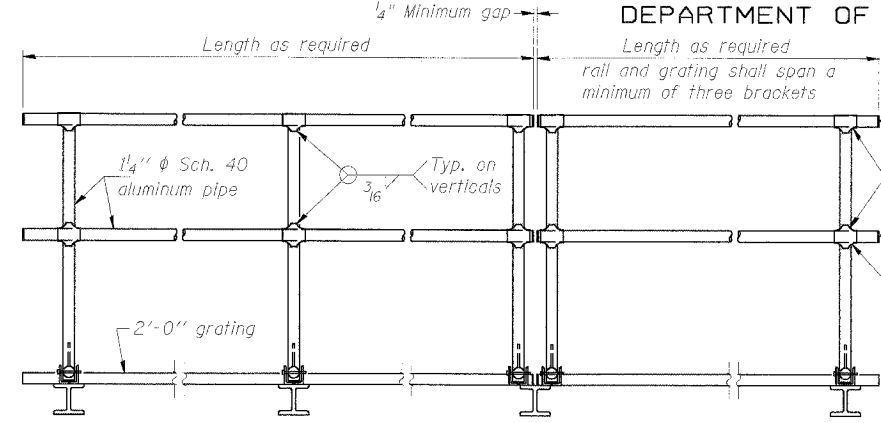
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO.
90/94	*	COOK	556	317	
FED. AID PROJ. NO. 7		ILLINOIS		FED. AID PROJECT	



SIDE ELEVATION

(Showing safety chain w/o sign)



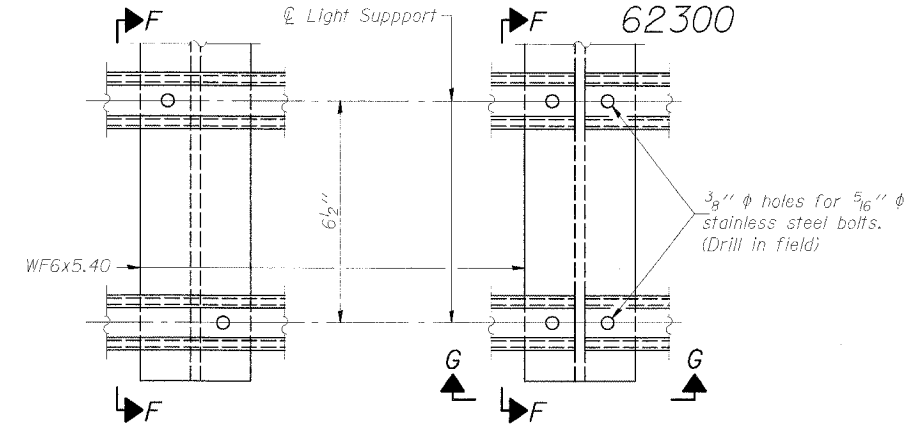
FRONT ELEVATION

HANDRAIL DETAILS

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

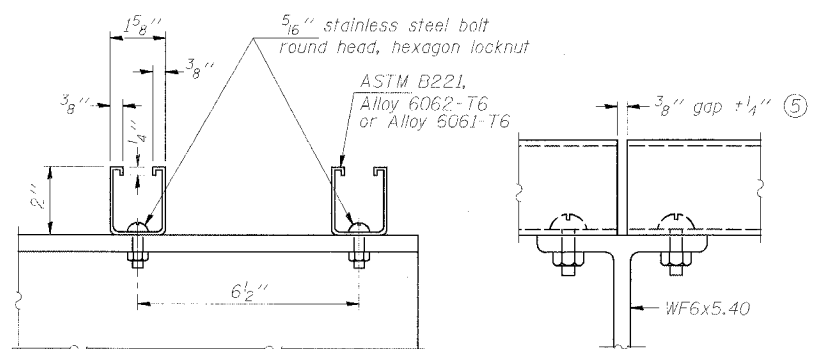
① Install standard force-fit end caps or weld 1/8" end plates with 1/8" c.f.w. and grind smooth. (All rail ends)
Fittings-ASTM B26, Alloy 356-T7

② Horizontal handrail member shall be continuous thru fitting. Provide 7/16" hole in fitting for 3/8" bolt. Field drill 1/16" 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.)



DETAIL F

DETAIL G

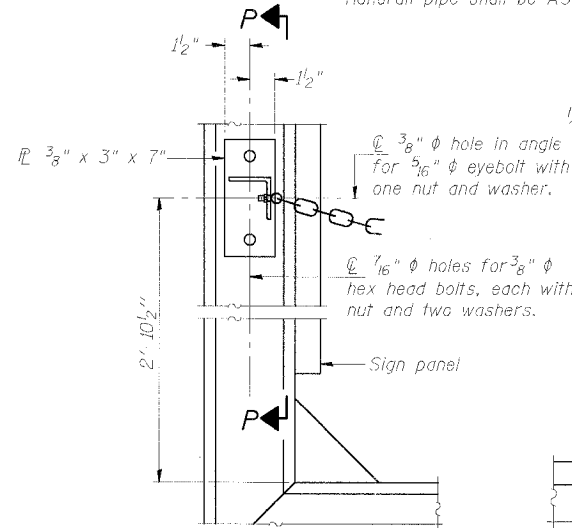


SECTION F-F

SECTION G-G

LIGHTING FIXTURE MOUNTS (IF REQUIRED)

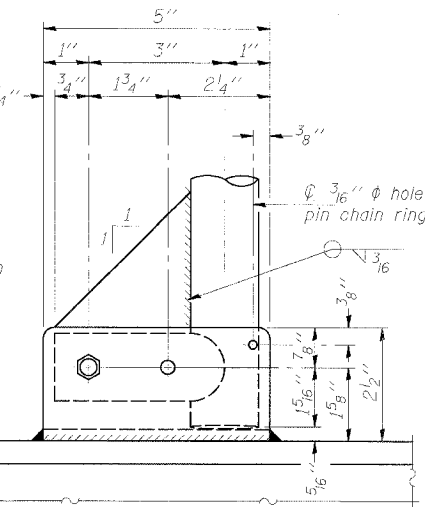
⑤ Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.



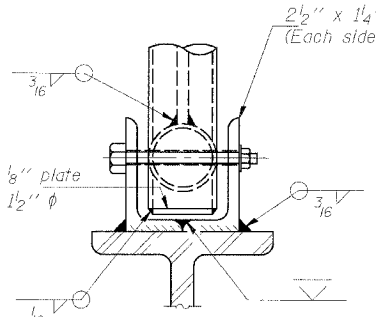
ALTERNATE SAFETY CHAIN ATTACHMENT

(With Sign Present)

Items not shown same as "Side Elevation" of "Handrail Details"

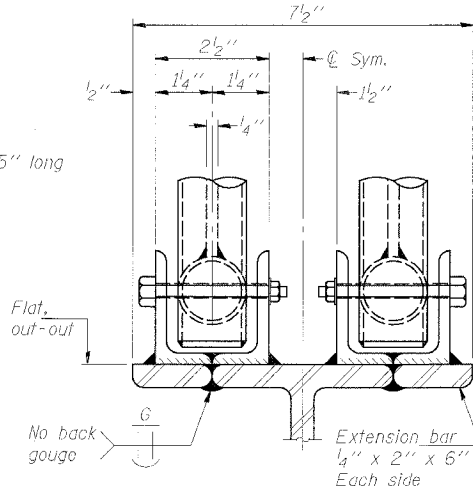


SIDE ELEVATION

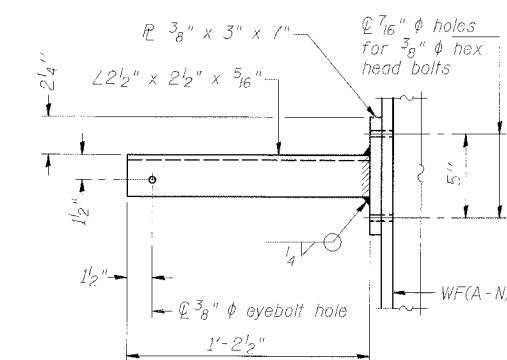


FRONT ELEVATION

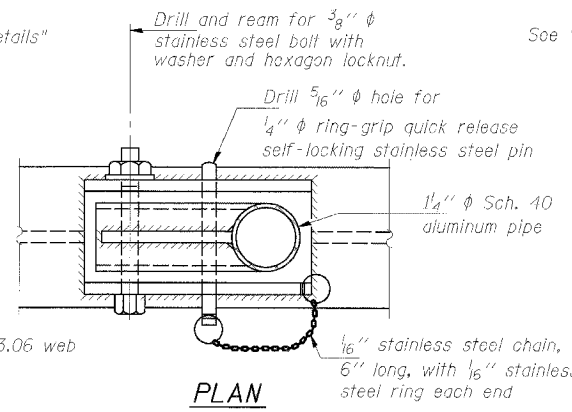
See "ELEVATION" at right for dimensions.



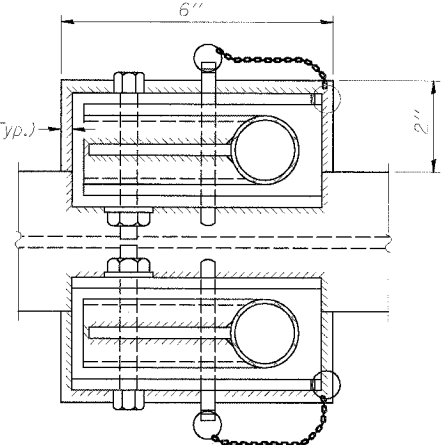
ELEVATION AT HANDRAIL JOINT



SECTION P-P

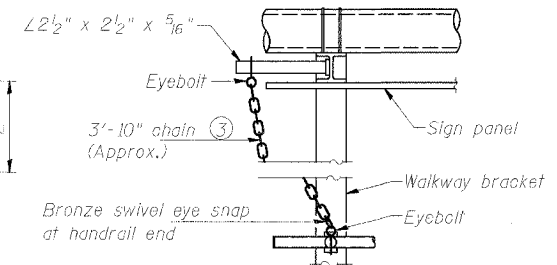


PLAN DETAIL E HANDRAIL HINGE



PLAN AT HANDRAIL JOINT

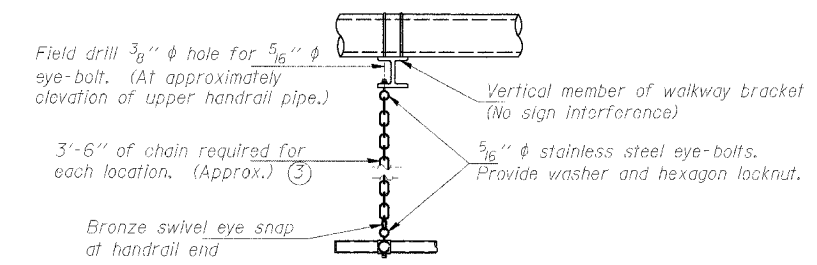
Details not shown same as "PLAN"



ALTERNATE SAFETY CHAIN ATTACHMENT

Details not shown similar to "Safety Chain" Details (Walkway omitted for clarity)

③ 3/16" galvanized steel chain, approximately 12 links per foot. Chain to be hot dip galvanized after manufacture and suitable for prolonged exterior exposure. Alternate materials may be substituted with the Engineer's approval.
④ Extrusions may be used in lieu of the details shown, with approval of the Engineer.



SAFETY CHAIN

One required for each end of each walkway.

DESIGNED	19
CHECKED	EXAMINED
DRAWN	PASSED
CHECKED	ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE

**OVERHEAD SIGN STRUCTURES
ALTERNATE ALUMINUM HANDRAIL DETAILS**

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
31st Street to 71st Street
(NB Express Lanes)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	PLAN	SHEET NO.	SHEET NO.
90/94	*	COOK	556	318
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT

(1818, ETC, 2324.6-1P) R-8
62300

NOTES:

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

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

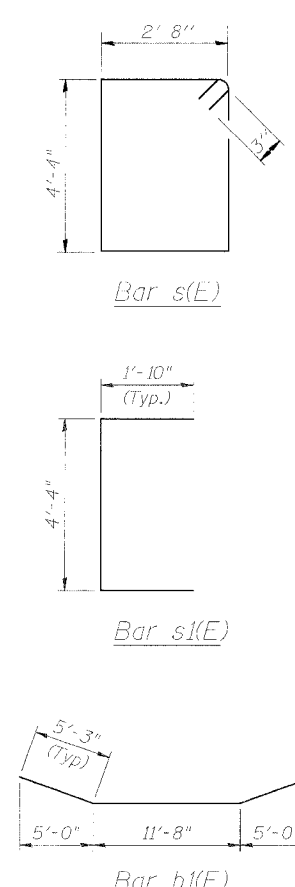
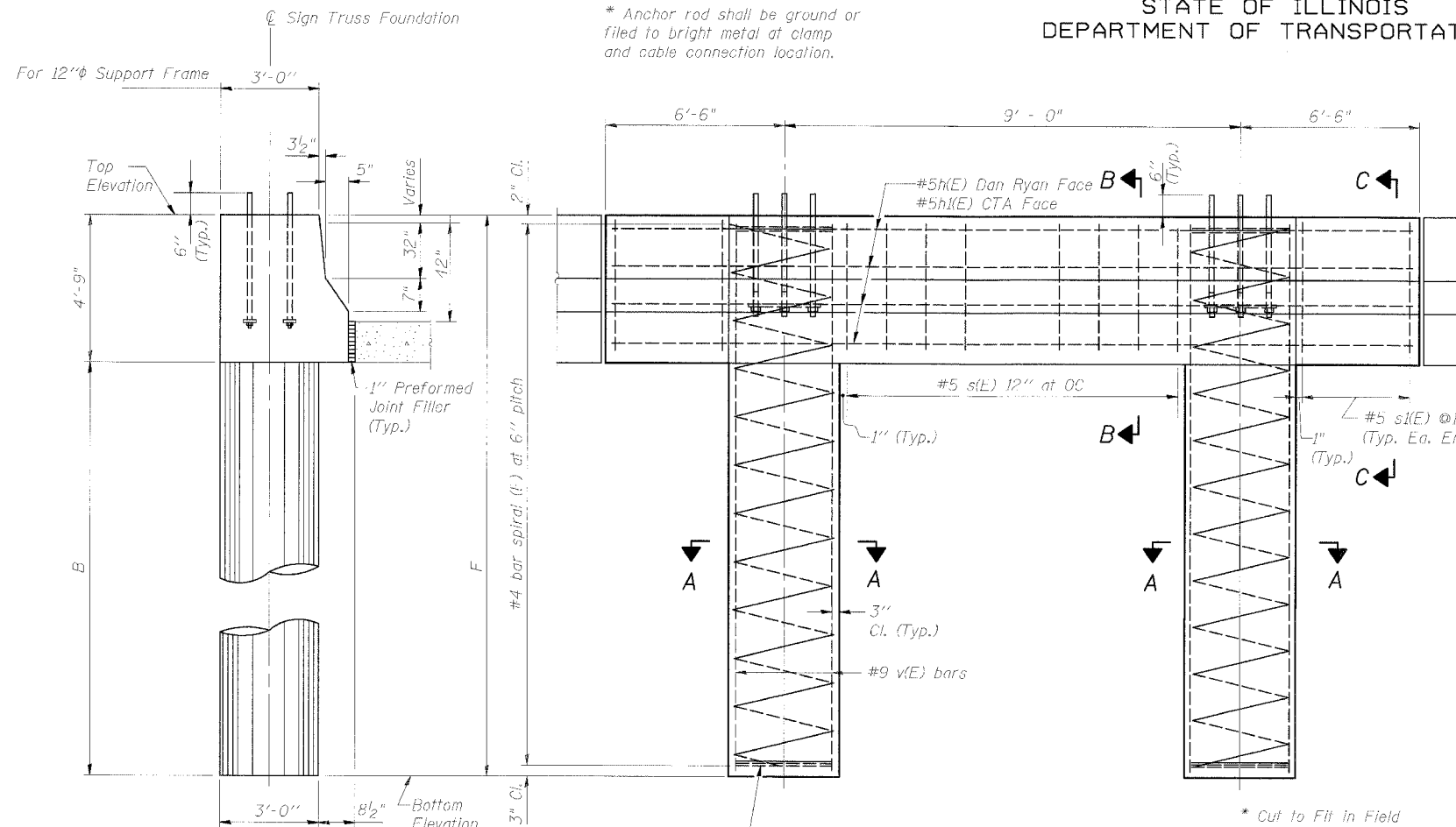
No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints. Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

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

Face of median support foundation shall match dimensions of permanent barrier wall F shape.

Refer to CONTRACT 62583 for location and orientation of the conduit.

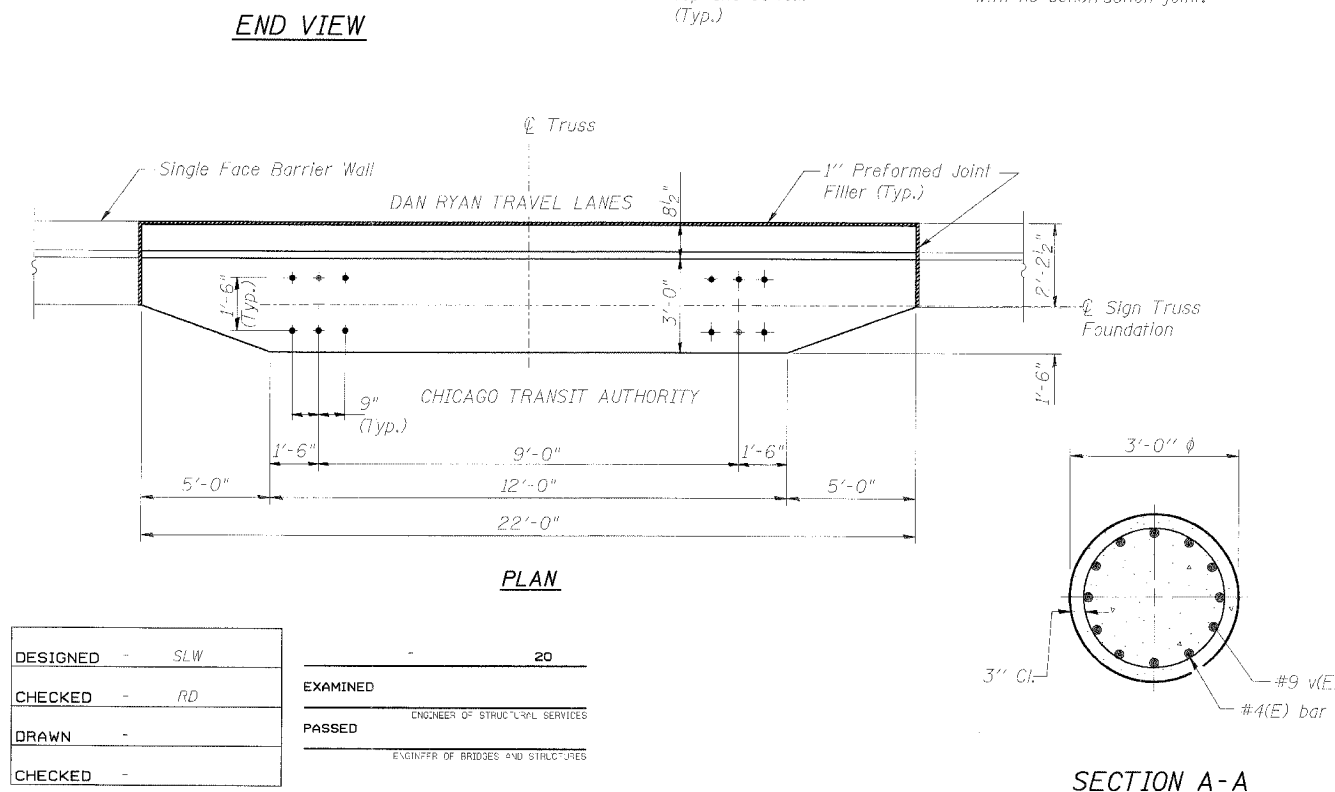


BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
h(F)	6	#5	21'-8"	—
h(E)	4	#5	22'-2"	—
s(E)	Varies	#5	14'-6"	C
s(E)	24	#5	8'-0"	C
v(E)	24	#9	22'-4"	—
#4(E) bar spiral - see Side Elevation				

RIGHT FOUNDATION USES DOUBLE FACE MEDIAN SUPPORT

Structure Number	Station	Left Foundation				Right Foundation				Class SI Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	B	F	Elevation Top	Elevation Bottom	B	F	
IS0161094L058.0	2461+51.44	1.78'	-20.97'	18'	22.75'					21.1



DESIGNED	SLW	20
CHECKED	RD	EXAMINED
DRAWN		PASSED
CHECKED		

MODIFIED BY CTE ENGINEERS, INC. FROM OS4-MED

OVERHEAD SIGN STRUCTURES
MEDIAN SUPPORT FOUNDATION DETAILS

F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31st STREET TO 71st STREET
(NB Express Lanes)

SINGLE FACE MEDIAN SUPPORT FOUNDATION

P:\P\0468\Struct\NE&L\Draws\CHT_62300\01_Signs\40126.dwg



Illinois Department of Transportation SOIL BORING LOG

Page 1 of 2

ROUTE: F.A.I. 90/94 / I-94 DESCRIPTION: Dan Ryan Expressway (I-94-415-01) LOGGED BY: B.P.
 SECTION: 1191-154-ETC LOCATION: Chicago, Illinois

STRUCT. NO.	STATION	BORING NO.	STATION	DEPTH	SPT	DESCRIPTION	ELEVATION	CORRECTION	CORRECTED ELEVATION	WATER	REMARKS	D	L	U	M	J	C	O	I	S	T	
																						ft
						Surface Water Elev.																
						Stream Bed Elev.																
						Groundwater Elev.																
						First Encounter																
						Upon Completion																
						After																
						Asphalt, 2"																
						Sub Base, Gravel (P)LL																
						Vary Stiff to Hard Gray SILTY CLAY LOAM (continued)																
						Vary Stiff Gray CLAY																
						Hard / Vary Dense Gray SILTY CLAY LOAM / SILTY LOAM																
						Vary Stiff to Hard Gray SILTY CLAY LOAM																
						Auger Refused @ 30 feet																
						End of Boring																

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N) value is the sum of the last two blow values in each sampling zone (AASHTO T206)
 BBS, from IST (Rev. 8-99)



Illinois Department of Transportation SOIL BORING LOG

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

Date: 8/28/05

ROUTE: F.A.I. 90/94 / I-94 DESCRIPTION: Dan Ryan Expressway (I-94-415-01) LOGGED BY: A.P.
 SECTION: 1201-822PT 1-2-4 LOCATION: Chicago, Illinois

STRUCT. NO.	STATION	BORING NO.	STATION	DEPTH	SPT	DESCRIPTION	ELEVATION	CORRECTION	CORRECTED ELEVATION	WATER	REMARKS	D	L	U	M	J	C	O	I	S	T	
																						ft
						Surface Water Elev.																
						Stream Bed Elev.																
						Groundwater Elev.																
						First Encounter																
						Upon Completion																
						After																
						Asphalt, 5"																
						Crushed Stone (FILL)																
						Vary Stiff to Hard Gray CLAY																
						Hard / Vary Dense Gray SILTY CLAY LOAM / SILTY LOAM (continued)																
						Vary Stiff to Hard Gray CLAY																
						Hard / Vary Dense Gray SILTY CLAY LOAM / SILTY LOAM																
						Vary Stiff to Hard Gray SILTY CLAY LOAM																
						Auger Refused @ 30 feet																
						End of Boring																

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N) value is the sum of the last two blow values in each sampling zone (AASHTO T206)
 BBS, from IST (Rev. 8-99)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	556	318B
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT
				62300

(1818, ETC, 2324.6-1PJR-8)

CTE AECOM

CTE
 303 East Wacker Drive, Suite 600, Chicago, Illinois 60601-5776
 T 312.438.0000 F 312.438.0001 www.cte.aecom.com

REVISIONS		NAME	DATE
NO.	DESCRIPTION		

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 31st STREET TO 71st STREET (NB Express Lanes)

SOIL BORING LOGS FOR
 SIGN STRUCTURE FOUNDATIONS

SCALE: NONE DRAWN BY: JSS
 DATE: JULY 7, 2005 CHECKED BY: PJO

6/24/2005 2:44:58 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	319
STA. TO STA.		FED. AID PROJECT		
62300		11818, ETC, 2324.6-1P1R-8		

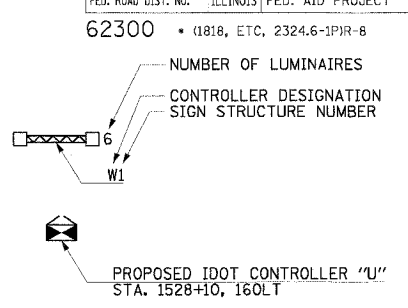
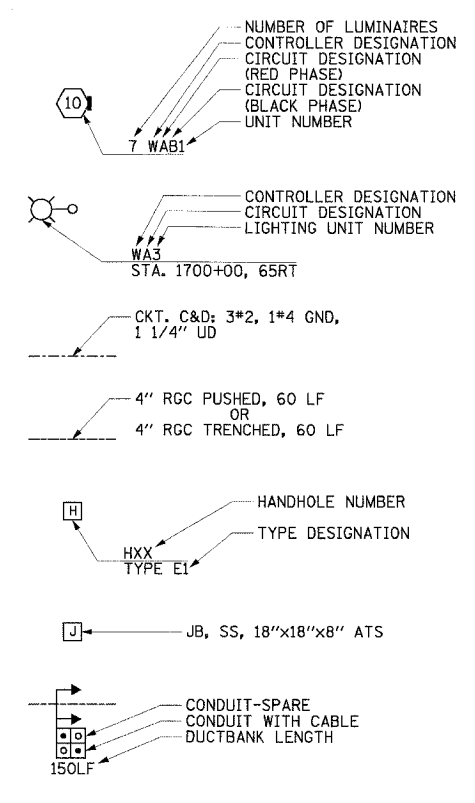
ELECTRICAL SYMBOLS FOR PROPOSED WORK

GENERAL ELECTRICAL CALLOUTS

- LIGHT TOWER FOUNDATION
NUMBER INSIDE HEXAGON INDICATES TOWER TYPE
HANDHOLE LOCATION AS INDICATED
TOWER INSTALLED BY OTHERS,
UNDER A SEPARATE CONTRACT
- TYPE TOWER HEIGHT
10 - 100 FEET
11 - 110 FEET
12 - 120 FEET
- LIGHT POLE FOUNDATION
POLE INSTALLED BY OTHERS
UNDER A SEPARATE CONTRACT
- TEMPORARY LIGHTING UNIT INCLUDING 60 FOOT
WOOD POLE (GLASS 4), 8'-0" MAST ARM WITH
400 WATT HPS LUMINAIRE
- ELECTRIC HANDHOLE: TYPE AS INDICATED
TYPE E1: PC CONCRETE, 21.5"x21.5"x30"
IDOT STANDARD 814001
TYPE E2: PC CONCRETE-HEAVY DUTY, 22"x22"x30",
IDOT STANDARD 814001
TYPE C1: COMMUNICATIONS VAULT
TYPE S1: PC CONCRETE-HEAVY DUTY, 22"x22"x36"
TYPE S2: PC CONCRETE-HEAVY DUTY SPECIAL,
30"x30"x36"
- JUNCTION BOX: TYPE AND SIZE AS INDICATED
ON PLANS
- PULL BOX: TYPE AND SIZE AS INDICATED
ON PLANS
- TELEPHONE CONNECTION
- FIBER OPTIC COMMUNICATIONS HUT
- LIGHTED SIGN STRUCTURE-CANTILEVER TYPE
(NUMBER OF FLUORESCENT FIXTURES AS
INDICATED WITH ASSOCIATED DISCONNECT
SWITCH - TYP.) (N.I.C.)

- LIGHTED SIGN STRUCTURE-TRUSS TYPE (N.I.C.)
- TEMPORARY LIGHTED SIGN STRUCTURE-TRUSS
TYPE, QUANTITY OF LUMINAIRES AS SHOWN
ON SIGNING PLANS
- LIGHTED SIGN STRUCTURE-BRIDGE MOUNT TYPE (N.I.C.)
- DYNAMIC MESSAGE SIGN (N.I.C.)
- FLASHING BEACON SIGN (N.I.C.)
- CLOSED CIRCUIT TELEVISION CAMERA (N.I.C.)
- MICROWAVE DETECTOR (N.I.C.)
- DETECTOR LOOP
- CONTROLLER CABINET FOUNDATION
- CONTROLLER CABINET FOUNDATION: SURVEILLANCE
- CONTROLLER CABINET FOUNDATION: SURVEILLANCE,
TYPE 334
- RAMP METER SIGNAL POLE/HEAD FOUNDATION
- RAMP METER FLASHER FOUNDATION
- TEMPORARY WOOD POLE, 50 FOOT LENGTH
(10 FOOT BURIED, 40 FOOT INSTALLED HEIGHT)
- HIGHWAY ADVISORY RADIO ANTENNA (N.I.C.)
- ELECTRIC UTILITY POLE
- CCTV CAMERA POLE (N.I.C.)

- POLE MOUNTED ELECTRIC UTILITY TRANSFORMER(S)
- PAD MOUNTED ELECTRIC UTILITY TRANSFORMER
- GROUND ROD
- MAIN SERVICE FUSED DISCONNECT SWITCH
(RATING AS INDICATED)
- EXISTING RACEWAY OR CONDUIT RUN
AS INDICATED ON PLANS
- RACEWAY EMBEDDED IN STRUCTURE
- RACEWAY OR DIRECT BURIAL CABLE
UNDERGROUND WITHOUT ENCASEMENT
- RIGID GALVANIZED STEEL CONDUIT
SLEEVE, TRENCHED OR PUSHED
- UNDERGROUND REINFORCED CONCRETE ENCASED
DUCTBANK, UNO. (NUMBER, TYPE, AND SIZE OF
DUCTS AS SHOWN)
- RACEWAY OR CONDUIT IN TRENCH, TYPE AS
INDICATED ON PLANS
- AERIAL CABLE, TYPE AS INDICATED ON PLANS
- CONDUIT TURNED DOWN
- CONDUIT TURNED UP



ELECTRICAL SYMBOLS FOR EXISTING CONDITIONS

- EXISTING LIGHTING UNIT, TWIN LUMINAIRE
- EXISTING LIGHTING UNIT
- EXISTING TEMPORARY LIGHTING UNIT
- EXISTING CDOT LIGHTING UNIT
- EXISTING UNDERPASS LUMINAIRE
- EXISTING ELECTRIC HANDHOLE
- EXISTING JUNCTION BOX
- EXISTING PULL BOX
- EXISTING TELEPHONE CONNECTION
- EXISTING FIBER OPTIC COMMUNICATIONS HUT
- EXISTING ELECTRIC HANDHOLE/MANHOLE

- EXISTING CDOT ELECTRIC HANDHOLE/MANHOLE
- EXISTING LIGHTED SIGN STRUCTURE-
CANTILEVER TYPE
- EXISTING LIGHTED SIGN STRUCTURE-TRUSS TYPE
- EXISTING LIGHTED SIGN STRUCTURE-
BRIDGE MOUNT TYPE
- EXISTING DYNAMIC MESSAGE SIGN
- EXISTING FLASHING BEACON SIGN
- EXISTING CLOSED CIRCUIT TELEVISION CAMERA
- EXISTING MICROWAVE DETECTOR
- EXISTING DETECTOR LOOP
- EXISTING LIGHTING CONTROLLER, DUPLEX
- EXISTING CONTROLLER CABINET
- EXISTING RAMP METER SIGNAL POLE/HEAD

- EXISTING RAMP METER FLASHER
- EXISTING HIGHWAY ADVISORY RADIO ANTENNA
- EXISTING CCTV CAMERA POLE
- EXISTING UTILITY SERVICE CONNECTION,
POLE MOUNTED
- EXISTING UTILITY SERVICE CONNECTION,
PAD MOUNTED
- EXISTING CONCEALED CONDUIT IN STRUCTURE
- EXISTING EXPOSED CONDUIT
- EXISTING RACEWAY OR DIRECT BURIED CABLE
WITHOUT ENCASEMENT
- EXISTING CONCEALED CONDUIT UNDERGROUND,
TRENCHED OR PUSHED
- EXISTING ELECTRIC CABLE IN CONDUIT

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 ELECTRICAL SYMBOLS
 SCALE: NOT TO SCALE DRAWN BY: CJM
 DATE: 7/7/05 CHECKED BY: WDS

ABBREVIATIONS

A	AMPERES	ID	INNERDUCT	WB	WESTBOUND
AC	ALTERNATING CURRENT	IDOT	ILLINOIS DEPARTMENT OF TRANSPORTATION	WM	WALL MOUNTED
A/C	AERIAL CABLE	IN	INCHES	WP	WOOD POLE
AFG	ABOVE FINISHED GRADE	J, JB	JUNCTION BOX	XFMR	TRANSFORMER
ANT	ANTENNA	KVA	KILOVOLT-AMPERE		
AOBE	AS ORDERED BY THE ENGINEER	KW	KILOWATT		
ASPH	ASPHALT	LF	LINEAR FEET		
ATS	ATTACHED TO STRUCTURE	LP	LIGHT POLE		
AVE	AVENUE	L SUM	LUMP SUM		
BHD	BULKHEAD	LT	LEFT		
BIT	BITUMINOUS	M	METER		
BLK	BLOCK	MA	MAST ARM		
BR	BRIDGE	MD	MICROWAVE DETECTOR		
C	CONDUIT, CONDUCTOR	MM	MULTI-MODE		
CAB	CABINET	MW	MESSENGER WIRE		
CBW	CONCRETE BLOCK WALL	NB	NORTHBOUND		
CC	COMMUNICATIONS CENTER	NIC	NOT IN CONTRACT		
CCTV	CLOSED CIRCUIT TELEVISION	NM	NONMETALLIC		
CDOT	CDOT-CHICAGO DEPARTMENT OF TRANSPORTATION	NO	NUMBER		
COMED	COMED	NTS	NOT TO SCALE		
CKT	CIRCUIT	OH	OVERHEAD		
CLF	CHAIN LINK FENCE	PL	PROPERTY LINE		
CNC	COILABLE NONMETALLIC CONDUIT	PH	PHASE		
COMM	COMMUNICATIONS	PIN	PROJECT IDENTIFICATION NUMBER		
CONC	CONCRETE	PNL	PANEL		
CONST	CONSTRUCTION	PROP	PROPOSED		
CORR	CORRUGATED	PTZ	PAN-TILT-ZOOM		
CW	CONCRETE WALL	PEC	POLYETHYLENE CONDUIT		
☉	CENTERLINE	PVC	POLYVINYL CHLORIDE		
DB	DIRECT BURIED	PVCC	POLYVINYL CHLORIDE COATED		
DC	DIRECT CURRENT	R	EXISTING UNIT TO BE REMOVED (OWNER SALVAGED UNO)		
DF	DARK FIBER	RC	REINFORCED CONCRETE		
DIA	DIAMETER	RD	ROAD		
DMS	DYNAMIC MESSAGE SIGN	RGC	RIGID GALVANIZED STEEL CONDUIT		
DWG	DRAWING(S)	RM	RAMP METER		
E	EXISTING UNIT TO REMAIN	ROW	RIGHT OF WAY		
EA	EACH	RR	EXISTING UNIT TO BE REMOVED AND REINSTALLED		
EB	EASTBOUND	RT	RIGHT		
ECA	ELECTRIC CABLE ASSEMBLY	RW	RETAINING WALL		
EL	ELEVATION	SB	SOUTHBOUND		
EM	EXISTING UNIT TO BE MODIFIED (e.g. NEW LUMINAIRE, BALLAST, OR MAST ARM)	SH	SHEET		
ER	EXISTING RELOCATED UNIT	SM	SINGLE MODE		
ET	EXISTING TEMPORARY UNIT TO REMAIN OR MODIFIED	SS	STAINLESS STEEL		
ETP	EMERGENCY TRAFFIC PATROL	ST	STREET		
ETR	EXISTING TEMPORARY RELOCATED UNIT	STA	STATION		
EXCAV	EXCAVATION	STD	STANDARD		
F, FT	FOOT, FEET	STL	STEEL		
FDN	FOUNDATION	STRUCT	STRUCTURE		
FO	FIBER OPTIC	SURF	SURFACE		
GM	GROUND MOUNTED	SURV	SURVEILLANCE		
GND, GRD	GROUND	SW	SIDEWALK		
GR	GUARD RAIL	T	TEMPORARY		
GSC	GALVANIZED STEEL CONDUIT	TAN	TANGENT		
HAR	HIGHWAY ADVISORY RADIO	TC	TRAY CABLE		
HD	HEAVY DUTY	TEL	TELEPHONE		
HH	HANDHOLE	TS	TRAFFIC SIGNAL		
HPS	HIGH PRESSURE SODIUM	TSC	TRAFFIC SYSTEMS CENTER		
HYD	HYDRANT	TYP	TYPICAL		
I	INTERSTATE	UD	UNIT DUCT		
		UND	UNDERDRAIN		
		UNO	UNLESS NOTED OTHERWISE		
		V	VOLT		
		W	WATT		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90 *		COOK	556	320
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	* (1818, ETC, 2324.6-1PR-8			

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EI-101



REVISIONS	
NAME	DATE

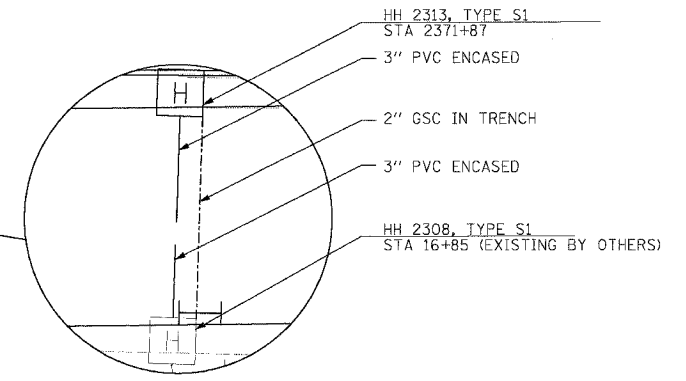
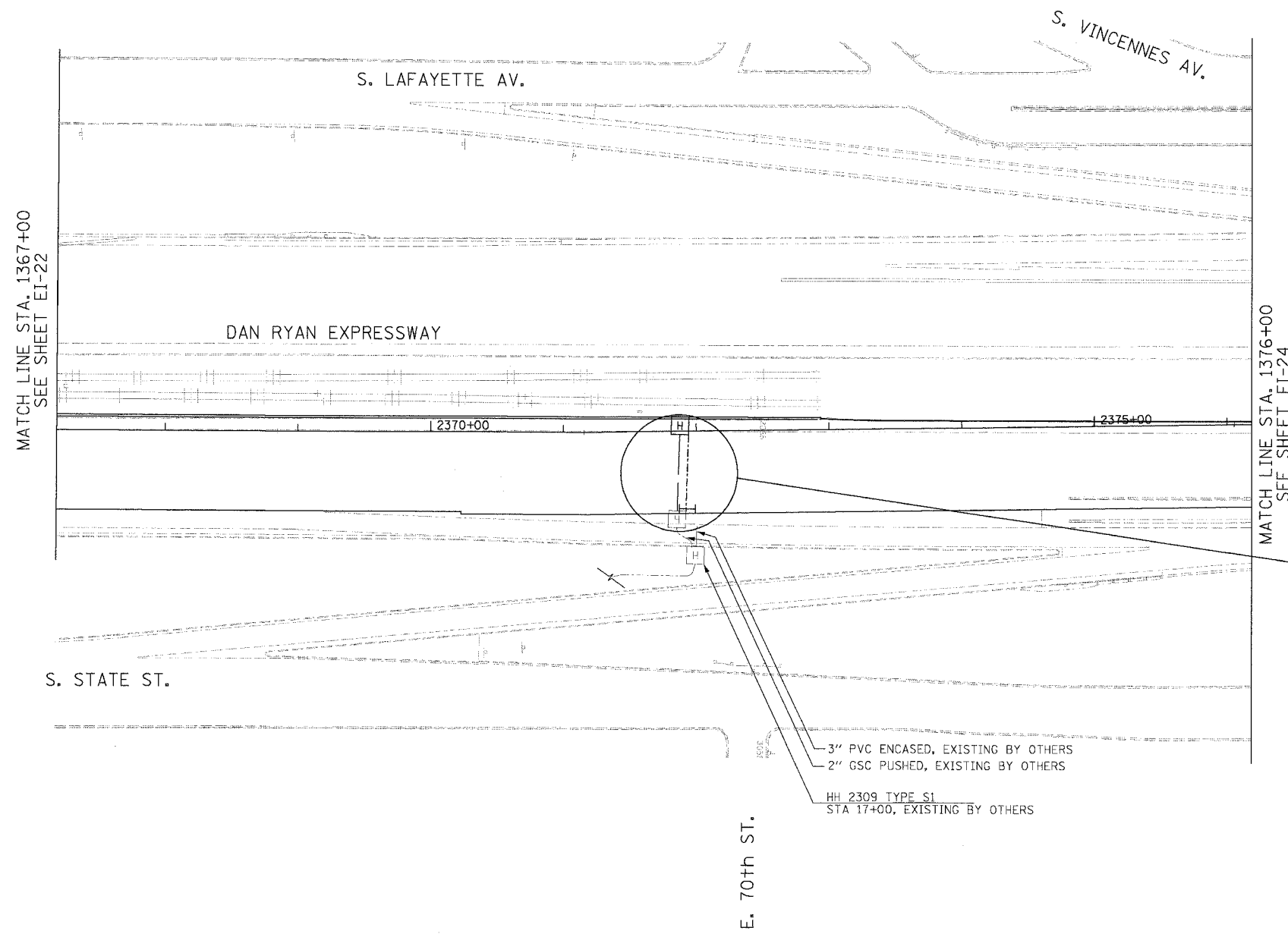
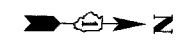
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 ELECTRICAL ABBREVIATIONS

SCALE: NOT TO SCALE
 DATE: 7/7/05

DRAWN BY: CJM
 CHECKED BY: WDS

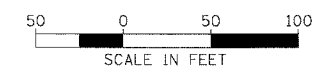
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	321
STA. 1366+00		TO STA. 1376+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300		• (1818, ETC, 2324.6-1P)R-8		



NOTE:
 3" PVC ENCASED, EXISTING BY OTHERS
 2" GSC PUSHED, EXISTING BY OTHERS
 HH 2309 TYPE S1
 STA 17+00, EXISTING BY OTHERS

- NOTES:
1. SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 2. UNLESS OTHERWISE STATED, ALL NOTED CABLE TO BE FURNISHED AND INSTALLED UNDER ANOTHER CONTRACT.
 3. TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 4. THIS SHEET ONLY DEPICTS INSTALLATION OF DETECTION/RAMP METER ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 5. DETECTOR LOOPS INSTALLED BY OTHERS.
 6. REFER TO HANDHOLE DETAILS. SEE DRAWING DET-29



EI-23

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 ELECTRICAL INFRASTRUCTURE PLAN
 NORTHBOUND STA. 1367+00 TO 1376+00

SCALE: 1"=50'
 DATE: 7/7/05

DRAWN BY: CJH
 CHECKED BY: MJL

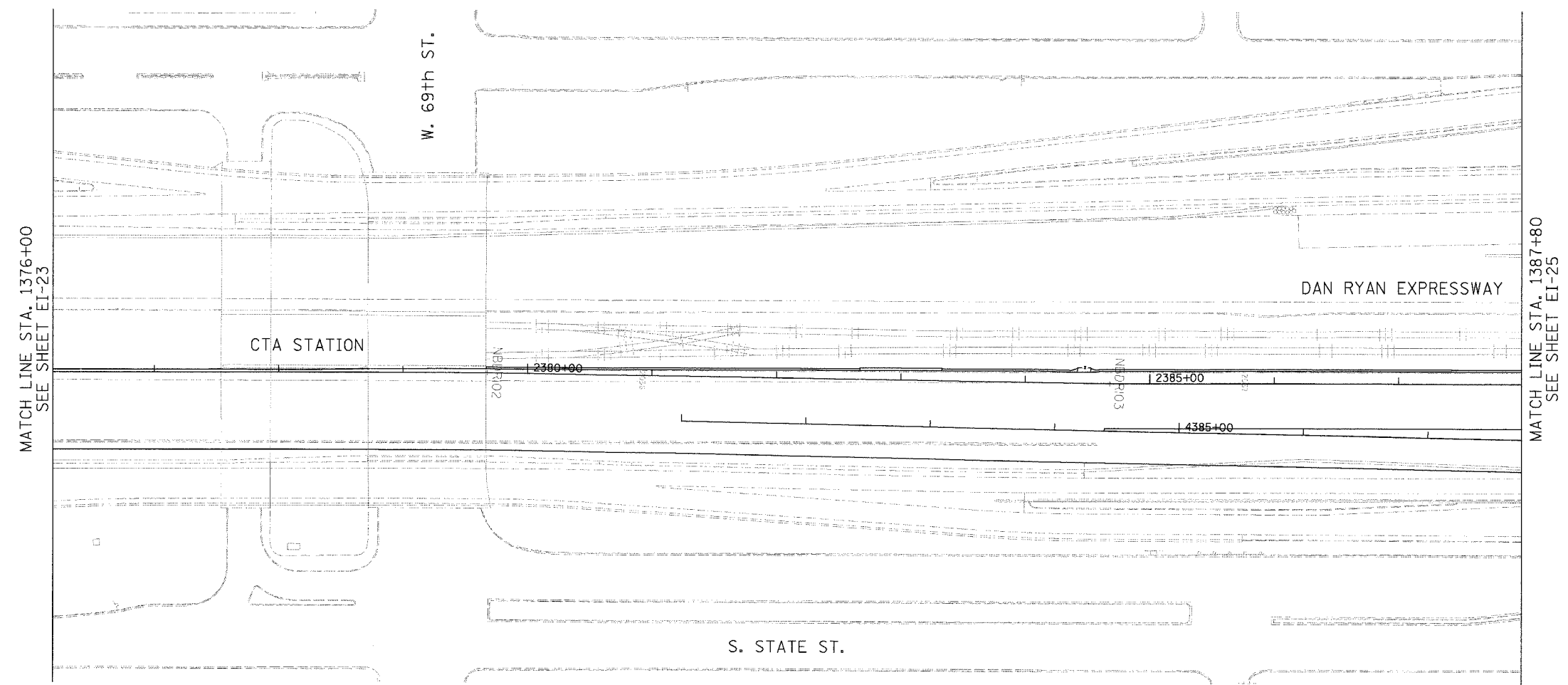
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

05/24/2005 06:08:25 PM



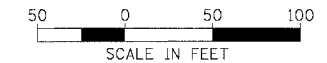
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	322
STA. 1376+00		TO STA. 1388+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	*	(1818, ETC, 2324.6-1PIR-8		

NO PROPOSED WORK
ON THIS SHEET



- NOTES:**
1. SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 2. UNLESS OTHERWISE STATED, ALL NOTED CABLE TO BE FURNISHED AND INSTALLED UNDER ANOTHER CONTRACT.
 3. TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 4. THIS SHEET ONLY DEPICTS INSTALLATION OF DETECTION/RAMP METER ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 5. DETECTOR LOOPS INSTALLED BY OTHERS.
 6. REFER TO HANDHOLE DETAILS. SEE DRAWING DET-29

Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
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 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 ELECTRICAL INFRASTRUCTURE PLAN
 NORTHBOUND STA. 1376+00 TO 1387+80

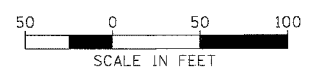
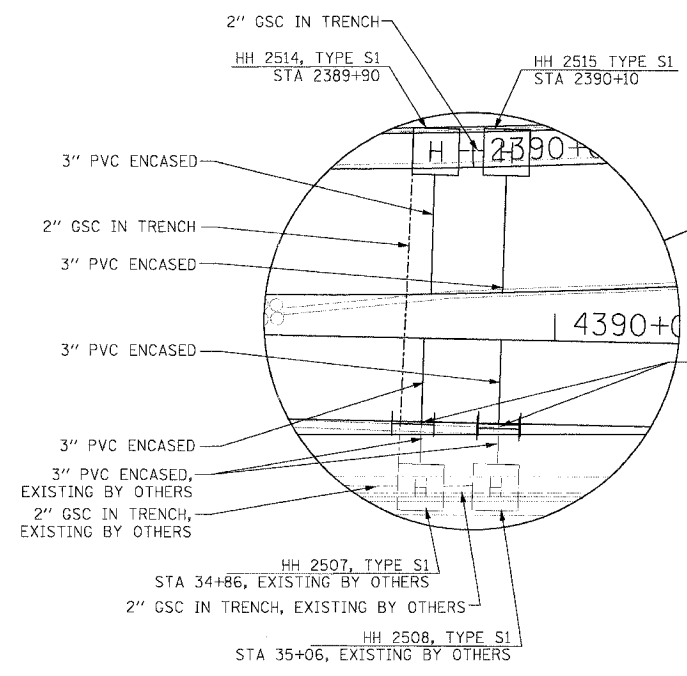
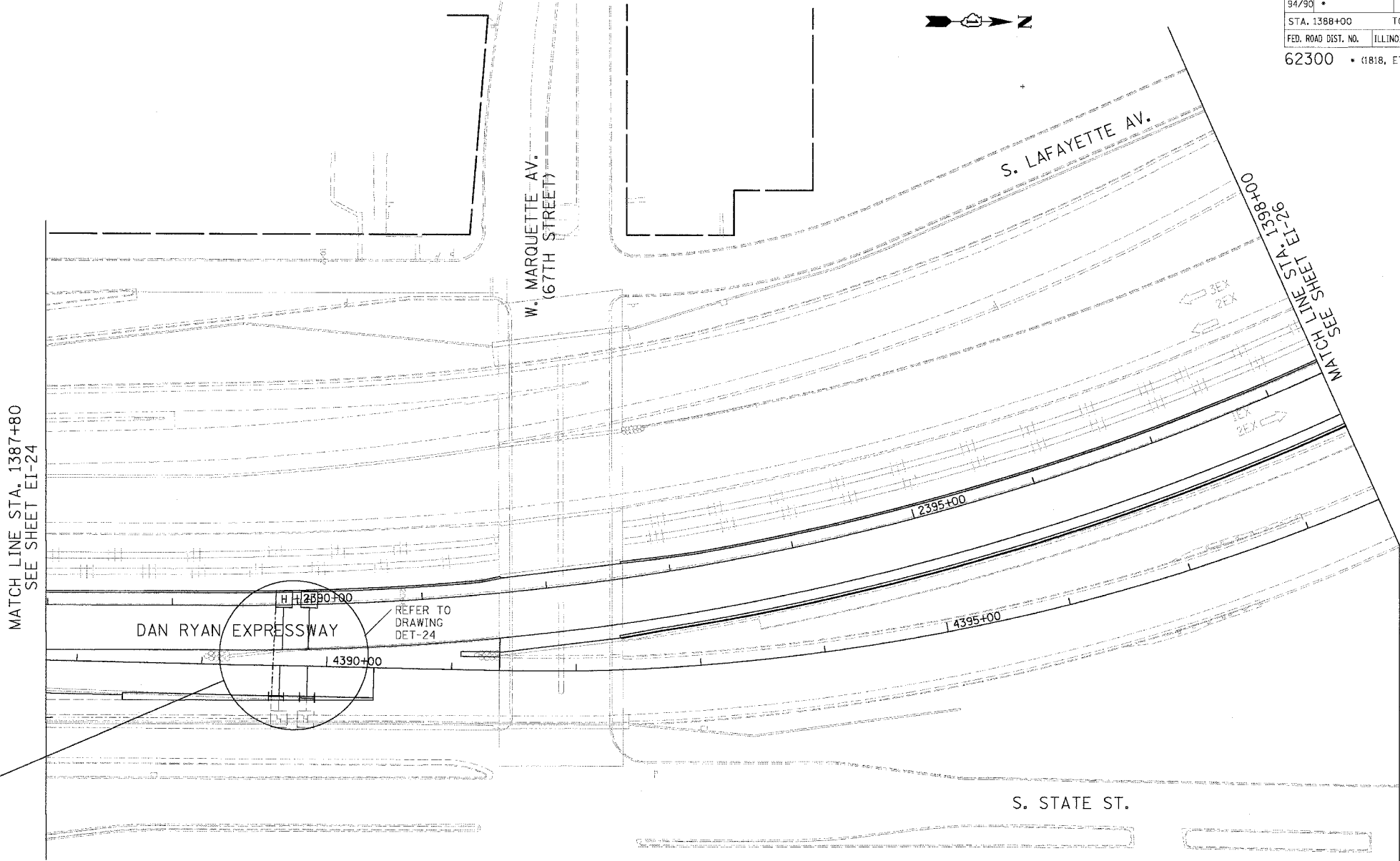
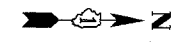
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 DATE: 7/7/05

DRAWN BY: CJH
 CHECKED BY: MJL

EI-24

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	323
STA. 1388+00		TO STA. 1398+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300		1818, ETC. 2324.6-1P1R-8		



EI-25

- NOTES:
- SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 - UNLESS OTHERWISE STATED, ALL NOTED CABLE TO BE FURNISHED AND INSTALLED UNDER ANOTHER CONTRACT.
 - TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 - THIS SHEET ONLY DEPICTS INSTALLATION OF DETECTION/RAMP METER ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 - DETECTOR LOOPS INSTALLED BY OTHERS.

REVISIONS	
NAME	DATE

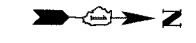
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 ELECTRICAL INFRASTRUCTURE PLAN
 NORTHBOUND STA. 1387+80 TO 1398+00

SCALE: 1"=50'
 DATE: 7/7/05
 DRAWN BY: CJH
 CHECKED BY: MJL

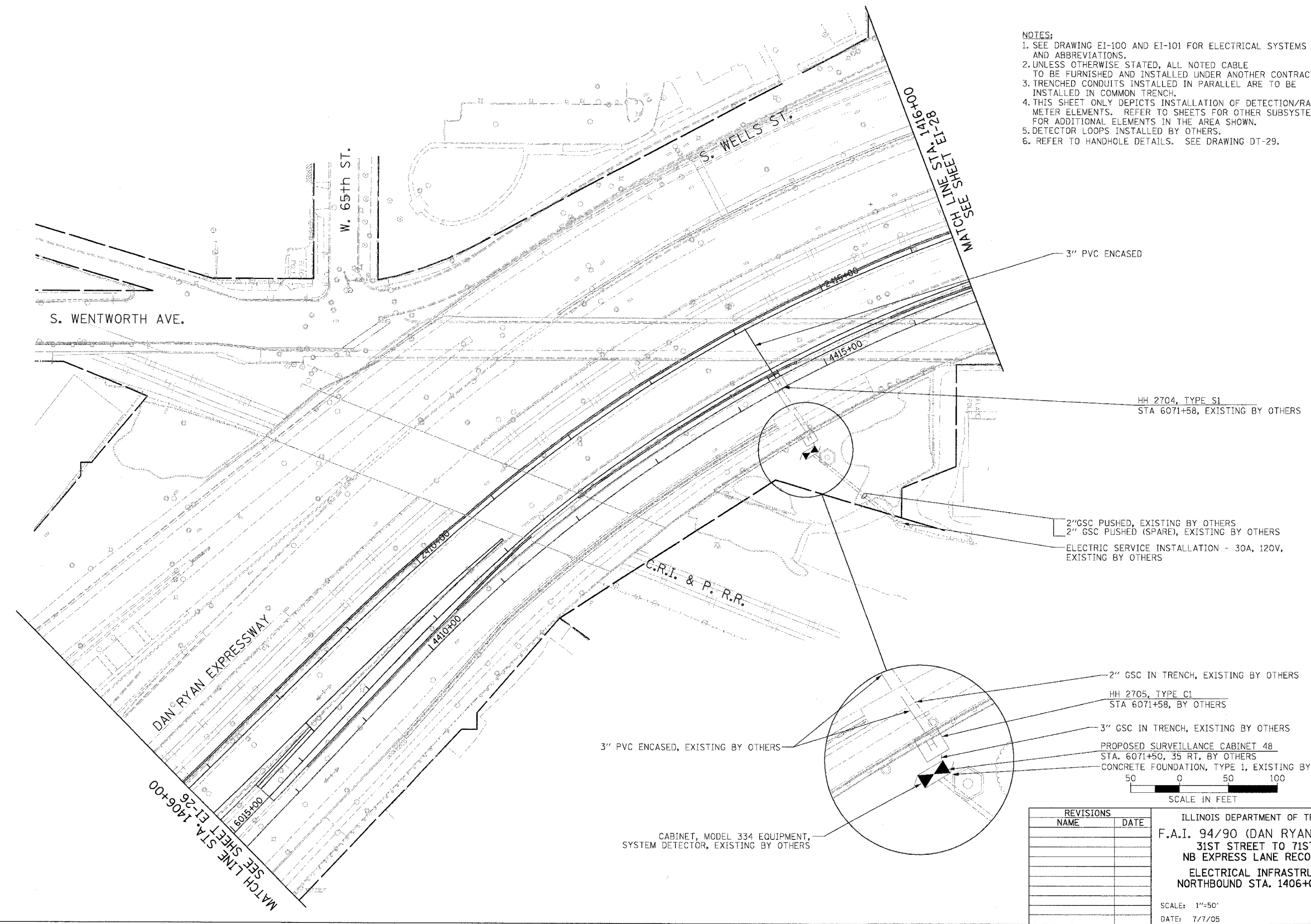
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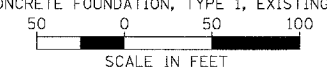
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	325
STA. 1406+00		TO STA. 1416+00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62300		• 11818, ETC, 2324.6-1PIR-8		



- NOTES:
1. SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 2. UNLESS OTHERWISE STATED, ALL NOTED CABLE TO BE FURNISHED AND INSTALLED UNDER ANOTHER CONTRACT.
 3. TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 4. THIS SHEET ONLY DEPICTS INSTALLATION OF DETECTION/RAMP METER ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 5. DETECTOR LOOPS INSTALLED BY OTHERS.
 6. REFER TO HANDHOLE DETAILS. SEE DRAWING DT-29.



- 3" PVC ENCASED
- HH 2704, TYPE S1
STA 6071+58, EXISTING BY OTHERS
- 2" GSC PUSHED, EXISTING BY OTHERS
2" GSC PUSHED (SPARE), EXISTING BY OTHERS
- ELECTRIC SERVICE INSTALLATION - 30A, 120V,
EXISTING BY OTHERS
- 2" GSC IN TRENCH, EXISTING BY OTHERS
- HH 2705, TYPE C1
STA 6071+58, BY OTHERS
- 3" GSC IN TRENCH, EXISTING BY OTHERS
- PROPOSED SURVEILLANCE CABINET 48
STA. 6071+50, 35 RT, BY OTHERS
- CONCRETE FOUNDATION, TYPE 1, EXISTING BY OTHERS



EI-27

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 ELECTRICAL INFRASTRUCTURE PLAN
 NORTHBOUND STA. 1406+00 TO 1416+00

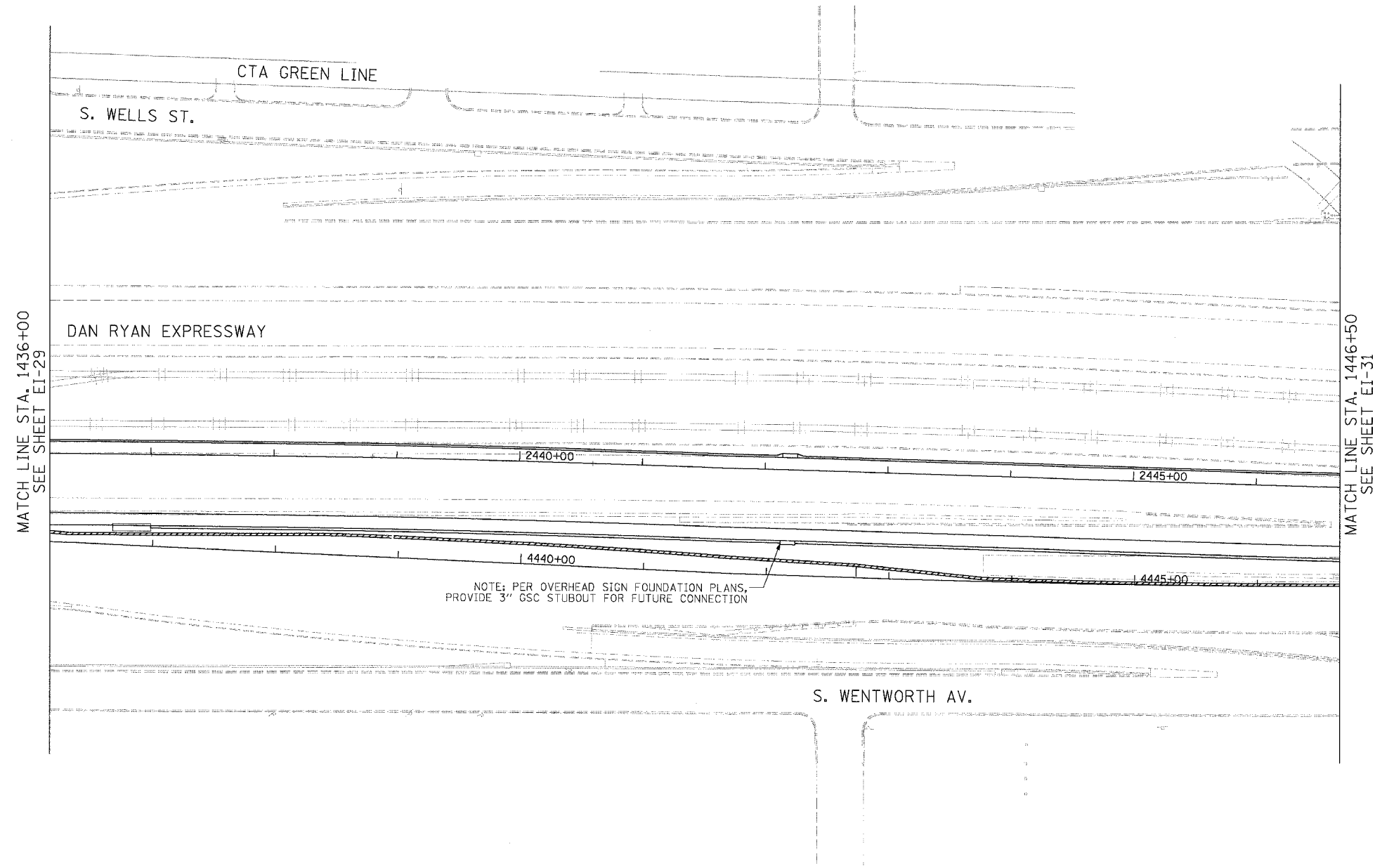
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 DATE: 7/7/05

DRAWN BY: CJH
 CHECKED BY: MJL

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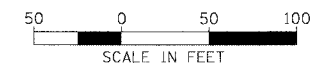
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	328
STA. 1436+00		TO STA. 1446+50		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
62300		11818, ETC, 2324.6-1P1R-8		



NOTE: PER OVERHEAD SIGN FOUNDATION PLANS,
PROVIDE 3" GSC STUBOUT FOR FUTURE CONNECTION

- NOTES:**
1. SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 2. UNLESS OTHERWISE STATED, ALL NOTED CABLE TO BE FURNISHED AND INSTALLED UNDER ANOTHER CONTRACT.
 3. TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 4. THIS SHEET ONLY DEPICTS INSTALLATION OF DETECTION/RAMP METER ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 5. DETECTOR LOOPS INSTALLED BY OTHERS.
 6. REFER TO HANDHOLE DETAILS. SEE DRAWING DT-29.



EI-30

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REVISIONS	
NAME	DATE

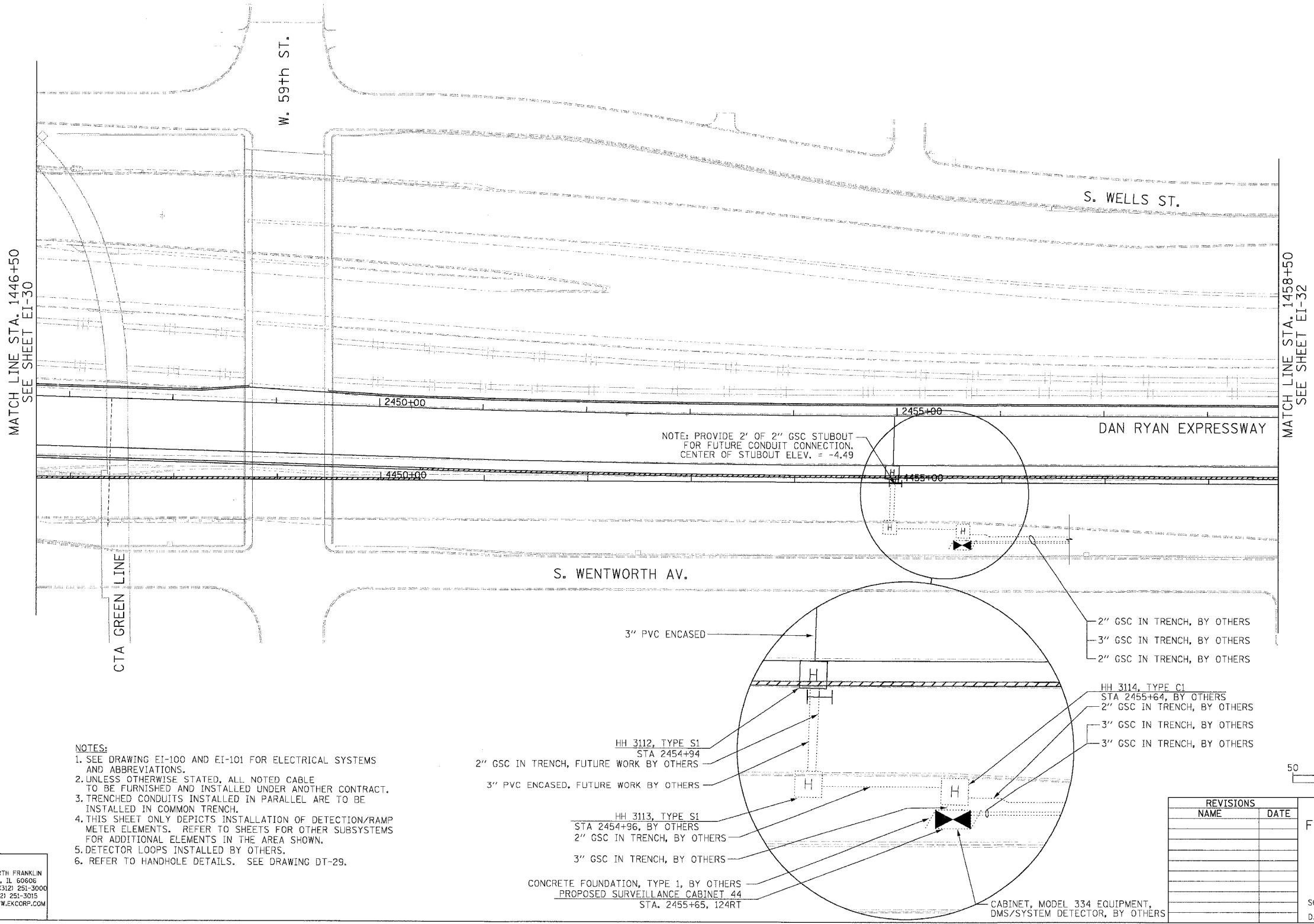
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
ELECTRICAL INFRASTRUCTURE PLAN
SOUTHBOUND STA. 1436+00 TO 1446+50

SCALE: 1"=50'
DATE: 7/7/05

DRAWN BY: CJH
CHECKED BY: MJL

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	329
STA. 1446+50	TO STA. 1458+50			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62300	11818, ETC. 2324.6-1P1R-8			



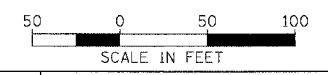
MATCH LINE STA. 1446+50
SEE SHEET EI-30

MATCH LINE STA. 1458+50
SEE SHEET EI-32

- NOTES:**
- SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 - UNLESS OTHERWISE STATED, ALL NOTED CABLE TO BE FURNISHED AND INSTALLED UNDER ANOTHER CONTRACT.
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 - THIS SHEET ONLY DEPICTS INSTALLATION OF DETECTION/RAMP METER ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 - DETECTOR LOOPS INSTALLED BY OTHERS.
 - REFER TO HANDHOLE DETAILS. SEE DRAWING DT-29.

NOTE: PROVIDE 2' OF 2" GSC STUBOUT FOR FUTURE CONDUIT CONNECTION. CENTER OF STUBOUT ELEV. = -4.49

REVISIONS	
NAME	DATE



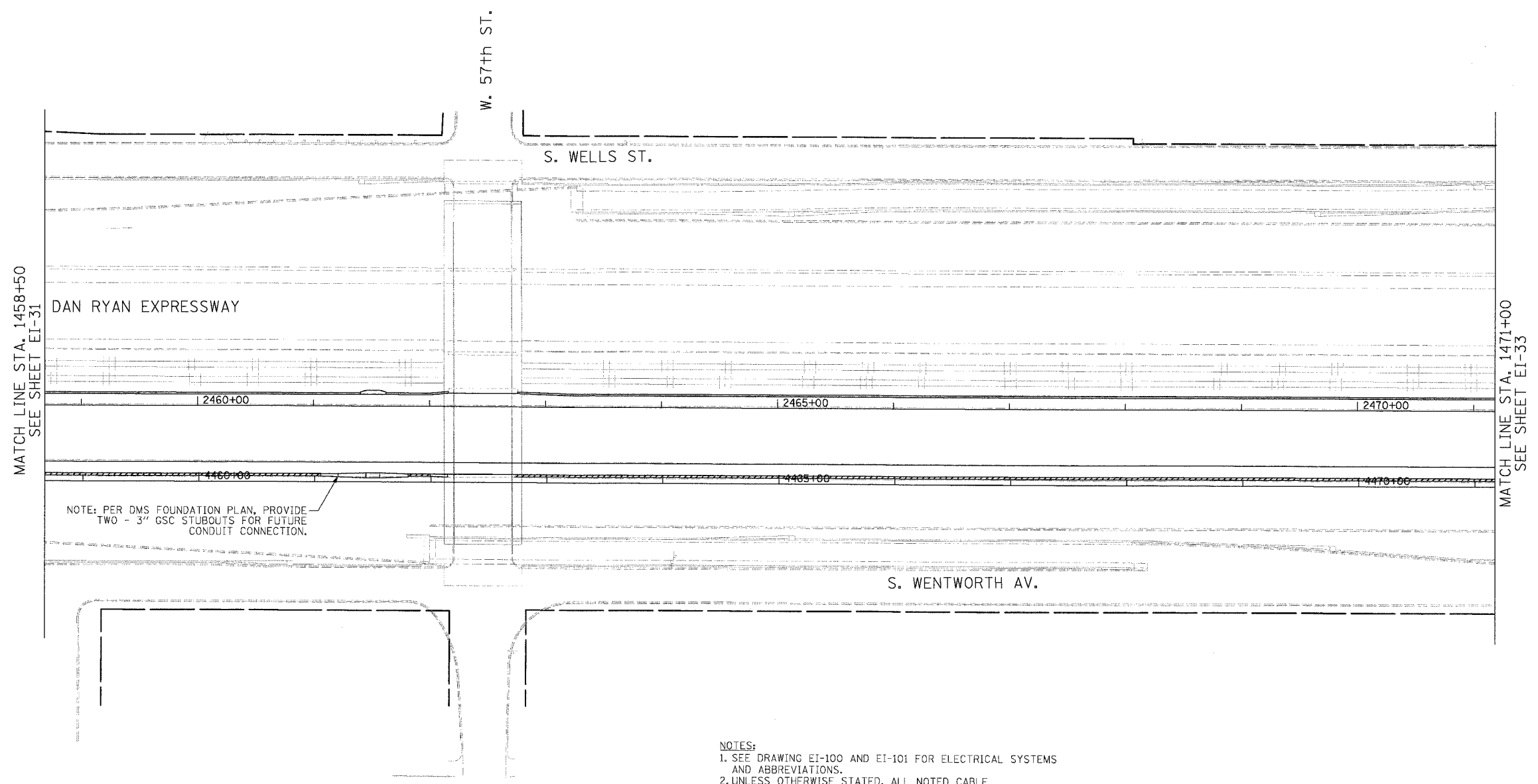
EI-31

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 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 ELECTRICAL INFRASTRUCTURE PLAN
 NORTHBOUND STA 1446+50 TO 1458+50
 SCALE: 1"=50'
 DATE: 7/7/05
 DRAWN BY: CJH
 CHECKED BY: MJL

06/27/2005 09:32:29 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	330
STA. 1458+50		TO STA. 1471+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300		11818, ETC, 2324.6-1P1R-8		

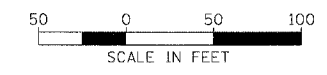


MATCH LINE STA. 1458+50
SEE SHEET EI-31

MATCH LINE STA. 1471+00
SEE SHEET EI-33

NOTE: PER DMS FOUNDATION PLAN, PROVIDE TWO - 3" GSC STUBOUTS FOR FUTURE CONDUIT CONNECTION.

- NOTES:**
1. SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
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 5. DETECTOR LOOPS INSTALLED BY OTHERS.
 6. REFER TO HANDHOLE DETAILS. SEE DRAWING DT-29.



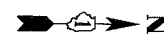
EI-32

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REVISIONS	
NAME	DATE

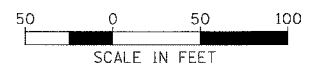
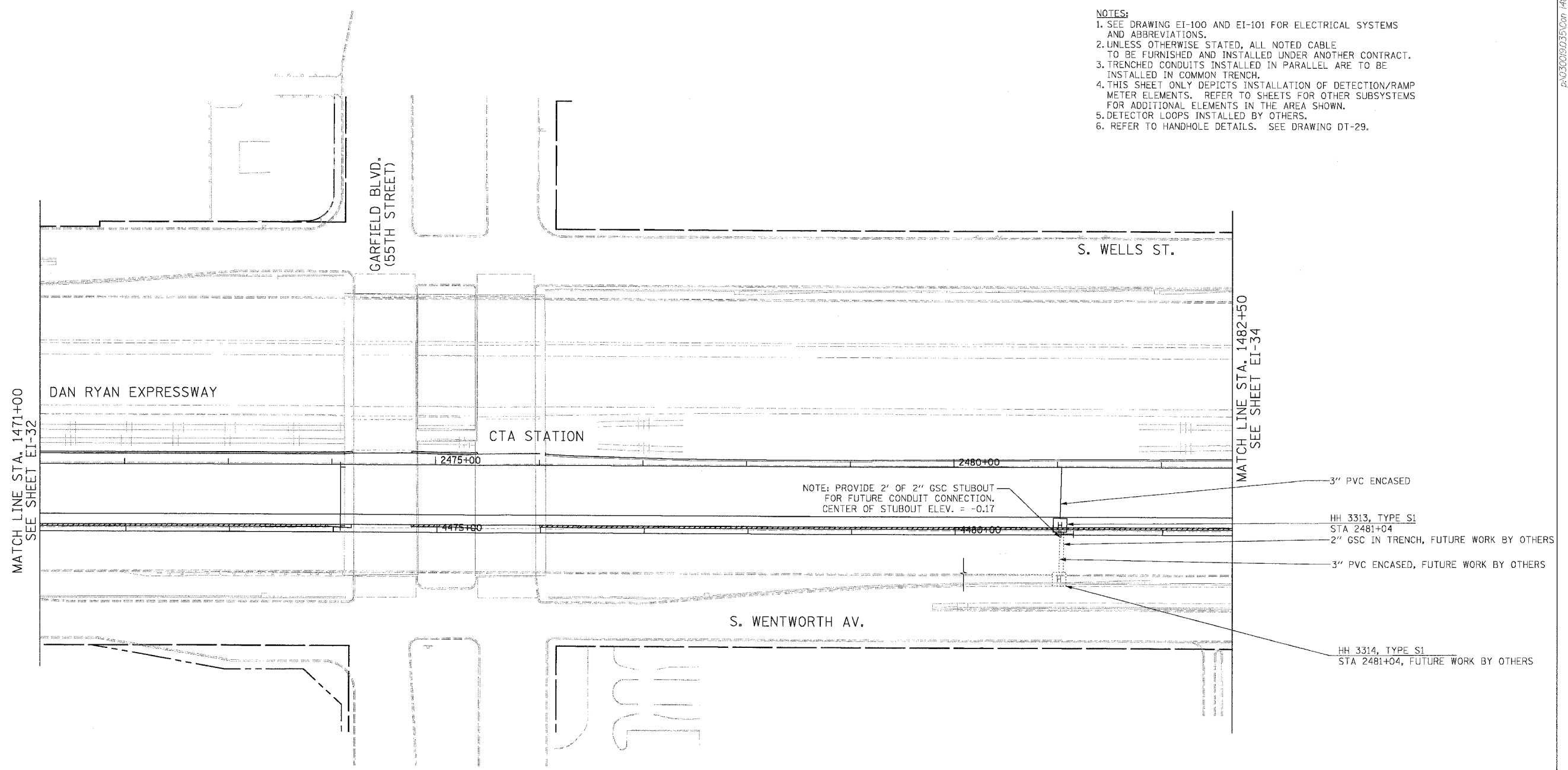
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 ELECTRICAL INFRASTRUCTURE PLAN
 NORTHBOUND STA. 1458+50 TO 1471+00
 SCALE: 1"=50'
 DATE: 7/7/05
 DRAWN BY: CJH
 CHECKED BY: MJL

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90 *		COOK	556	331
STA. 1471+00		TO STA. 1482+50		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62300	• (1818, ETC, 2324.6-1PR-8			

- NOTES:**
1. SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 2. UNLESS OTHERWISE STATED, ALL NOTED CABLE TO BE FURNISHED AND INSTALLED UNDER ANOTHER CONTRACT.
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 5. DETECTOR LOOPS INSTALLED BY OTHERS.
 6. REFER TO HANDHOLE DETAILS. SEE DRAWING DT-29.



EI-33

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 ELECTRICAL INFRASTRUCTURE PLAN
 NORTHBOUND STA 1471+00 TO 1482+50
 SCALE: 1"=50'
 DATE: 7/7/05
 DRAWN BY: CJH
 CHECKED BY: MJL

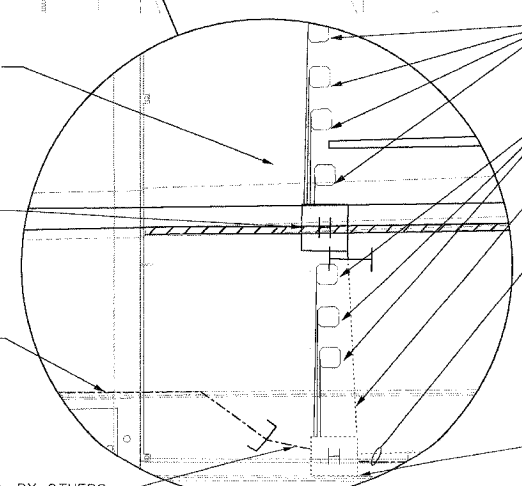
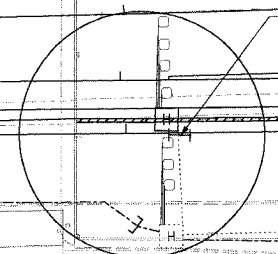
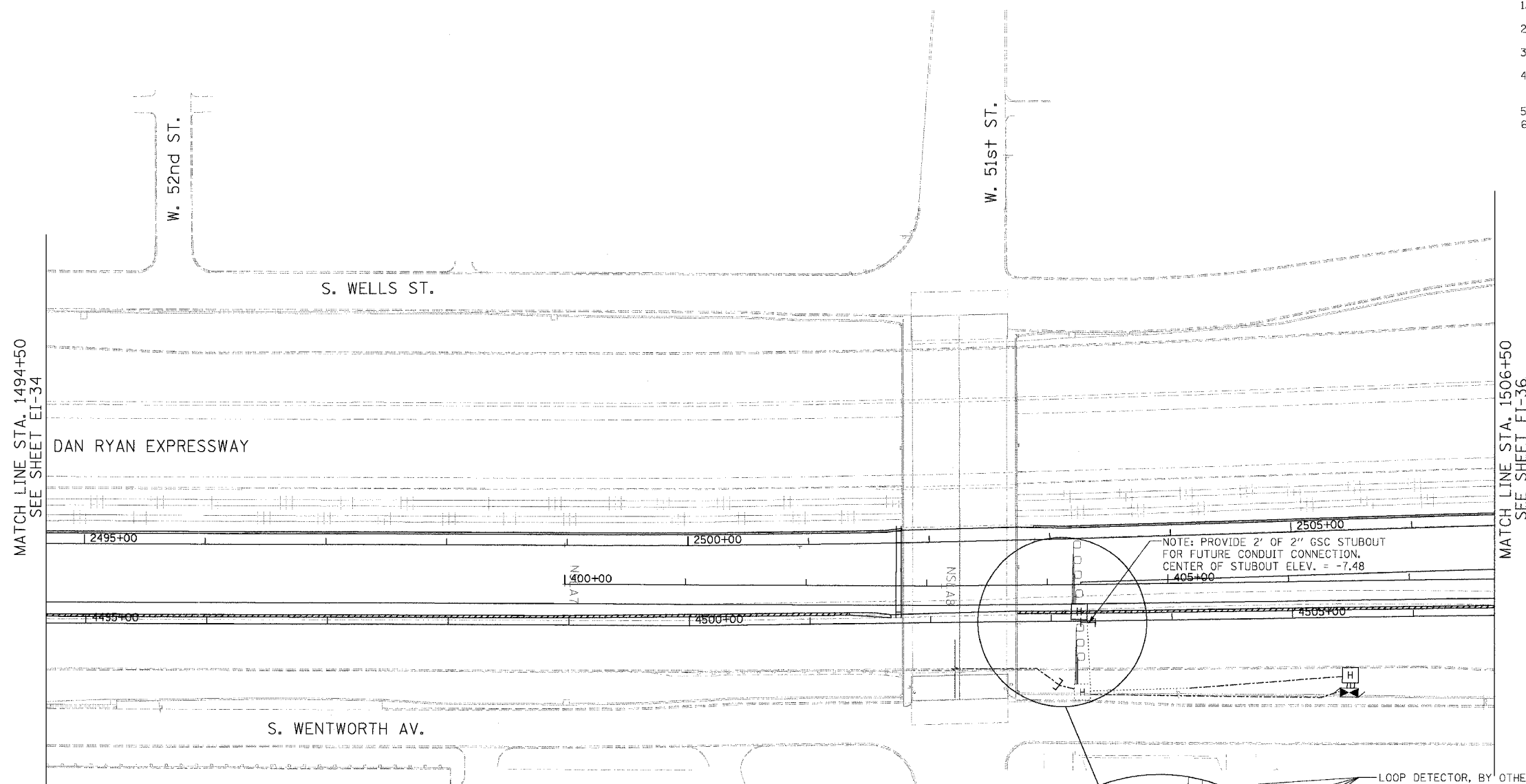
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 CHICAGO, IL 60606
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 FAX: (312) 251-3015
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	333
STA. 1494+50		TO STA. 1506+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	• (1818, ETC, 2324.6-1P)R-8			



- NOTES:
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 5. DETECTOR LOOPS INSTALLED BY OTHERS.
 6. REFER TO HANDHOLE DETAILS. SEE DRAWING DT-29.



- LOOP DETECTOR, BY OTHERS
NOTE: CONTRACTOR MUST COORDINATE LOOP DETECTOR PLACEMENT WITH CONTRACT 62583
- LOOP DETECTOR, FUTURE WORK BY OTHERS
- (4) 4/C #18, FUTURE WORK BY OTHERS
3" GSC IN TRENCH, FUTURE WORK BY OTHERS
- (7) 4/C #18, FUTURE WORK BY OTHERS
3" GSC IN TRENCH, FUTURE WORK BY OTHERS
2/C #1/0, 1/C #6 GND, FUTURE WORK BY OTHERS
3" GSC IN TRENCH, FUTURE WORK BY OTHERS



EI-35

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 ELECTRICAL INFRASTRUCTURE PLAN
 NORTHBOUND STA. 1494+50 TO 1506+50

SCALE: 1"=50'
 DATE: 7/7/05

DRAWN BY: CJH
 CHECKED BY: MJL

Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
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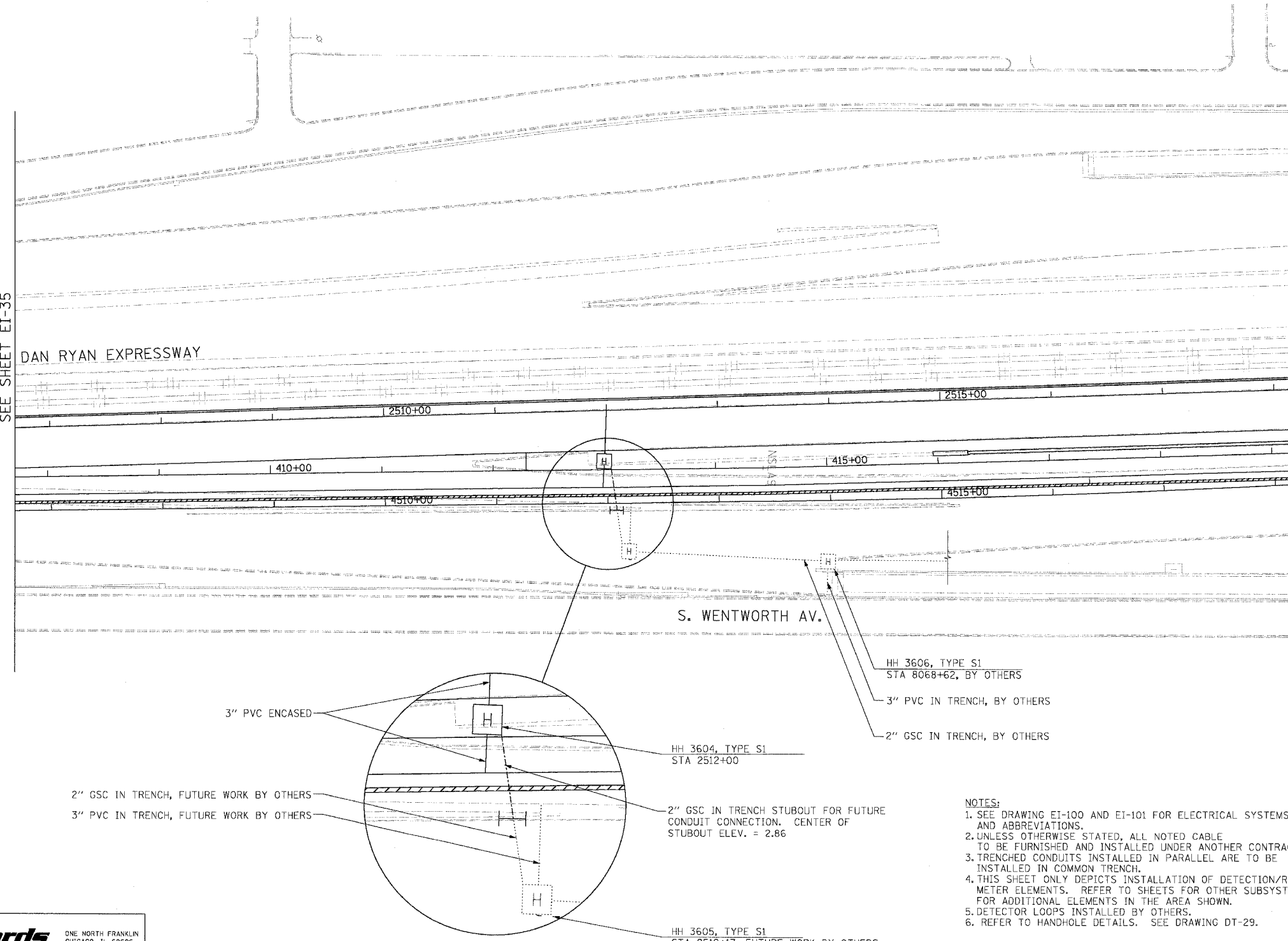
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	334
STA. 1506+50		TO STA. 1518+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	11818, ETC, 2324.6-IPR-8			



MATCH LINE STA. 1506+50
SEE SHEET EI-35

MATCH LINE STA. 1518+00
SEE SHEET EI-37



S. WENTWORTH AV.

- HH 3606, TYPE S1
STA 8068+62, BY OTHERS
- 3" PVC IN TRENCH, BY OTHERS
- 2" GSC IN TRENCH, BY OTHERS

3" PVC ENCASED

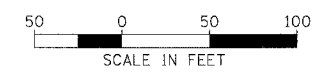
HH 3604, TYPE S1
STA 2512+00

- 2" GSC IN TRENCH, FUTURE WORK BY OTHERS
- 3" PVC IN TRENCH, FUTURE WORK BY OTHERS

2" GSC IN TRENCH STUBOUT FOR FUTURE
CONDUIT CONNECTION. CENTER OF
STUBOUT ELEV. = 2.86

HH 3605, TYPE S1
STA 2512+17, FUTURE WORK BY OTHERS

- NOTES:**
- SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
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 - DETECTOR LOOPS INSTALLED BY OTHERS.
 - REFER TO HANDHOLE DETAILS. SEE DRAWING DT-29.



EI-36

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
ELECTRICAL INFRASTRUCTURE PLAN
SOUTHBOUND STA 1506+50 TO 1518+00

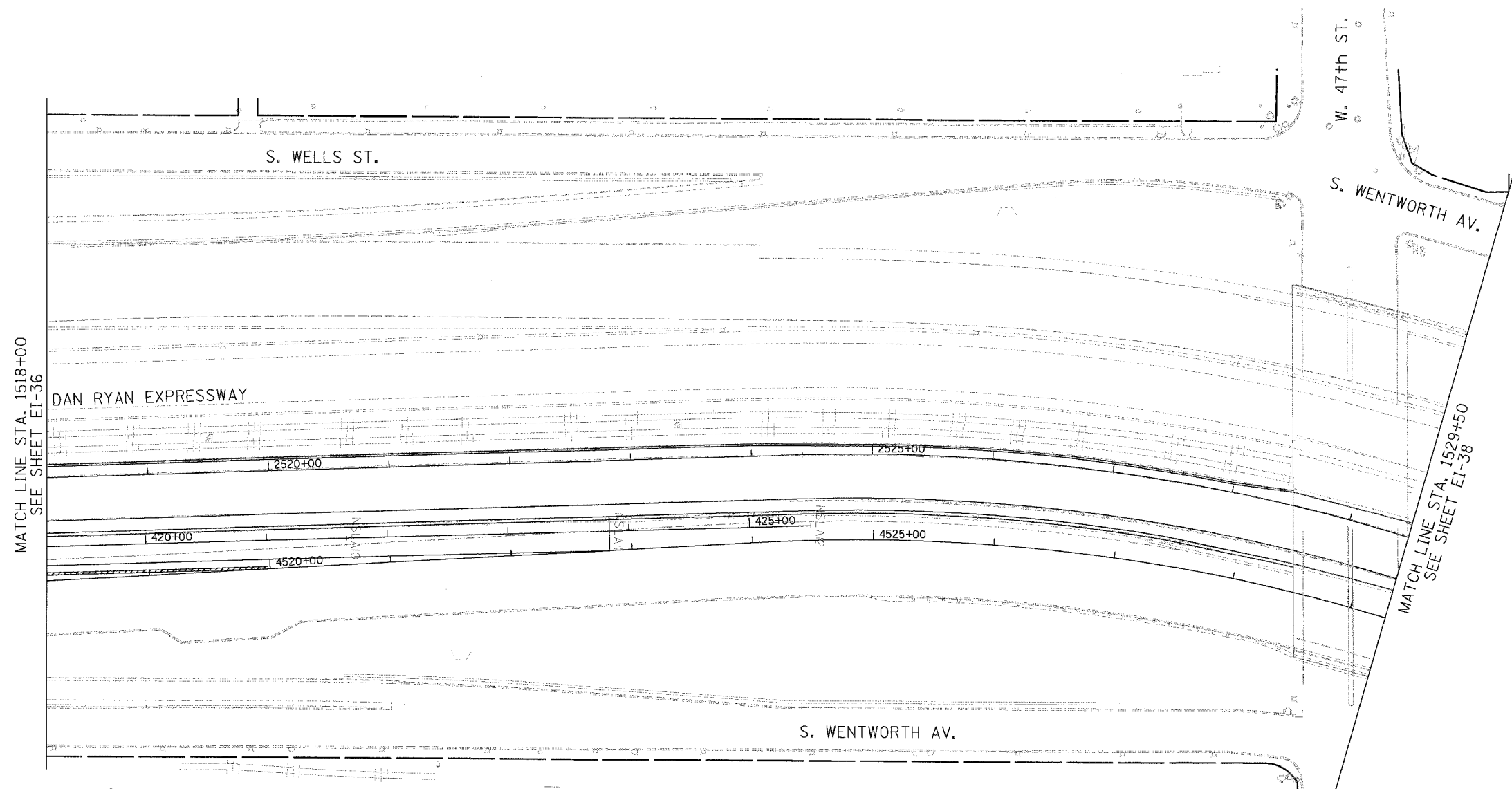
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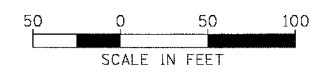
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	335
STA. 1518+00		TO STA. 1529+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300		• (1818, ETC, 2324.6-1P)R-8		



NO PROPOSED WORK
ON THIS SHEET



- NOTES:
1. SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 2. UNLESS OTHERWISE STATED, ALL NOTED CABLE TO BE FURNISHED AND INSTALLED UNDER ANOTHER CONTRACT.
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 5. DETECTOR LOOPS INSTALLED BY OTHERS.
 6. REFER TO HANDHOLE DETAILS. SEE DRAWING DT-29.



EI-37

**Edwards
AND
Kelcey**
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
ELECTRICAL INFRASTRUCTURE PLAN
NORTHBOUND STA 1518+00 TO 1529+50

SCALE: 1"=50'
DATE: 7/7/05

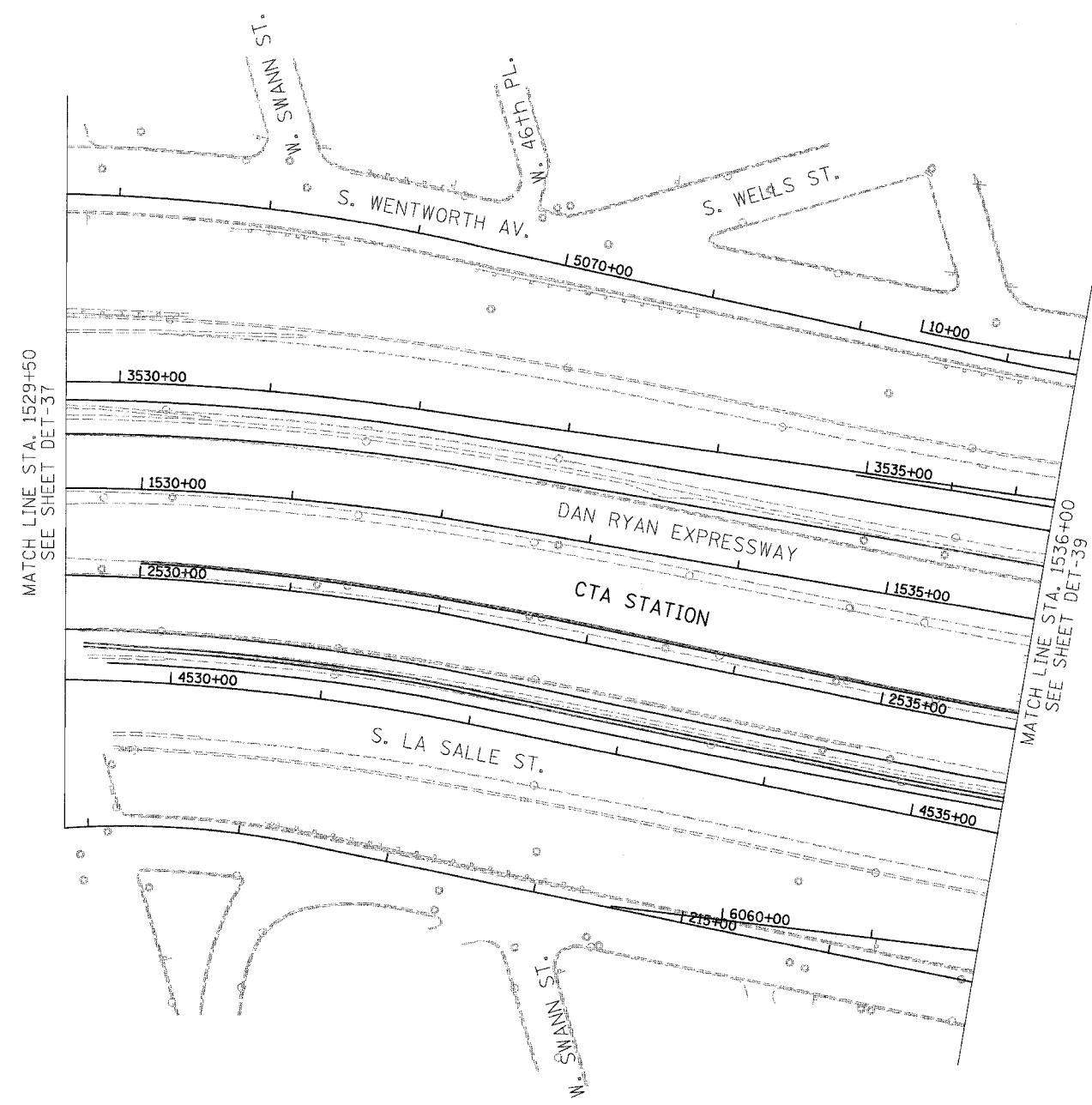
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CHECKED BY: M.JL

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	336
STA.	1529+50	TO STA.	1536+00	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300 •11818, ETC, 2324.6-1PR-8				

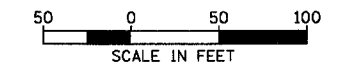


NO PROPOSED WORK ON THIS SHEET



- NOTES:
1. SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 2. UNLESS OTHERWISE STATED, ALL NOTED CABLE TO BE FURNISHED AND INSTALLED UNDER ANOTHER CONTRACT.
 3. TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 4. THIS SHEET ONLY DEPICTS INSTALLATION OF DETECTION/RAMP METER ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 5. DETECTOR LOOPS INSTALLED BY OTHERS.
 6. REFER TO HANDHOLE DETAILS. SEE DRAWING DT-29.

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312.228.0100
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EI-38

REVISIONS	
NAME	DATE

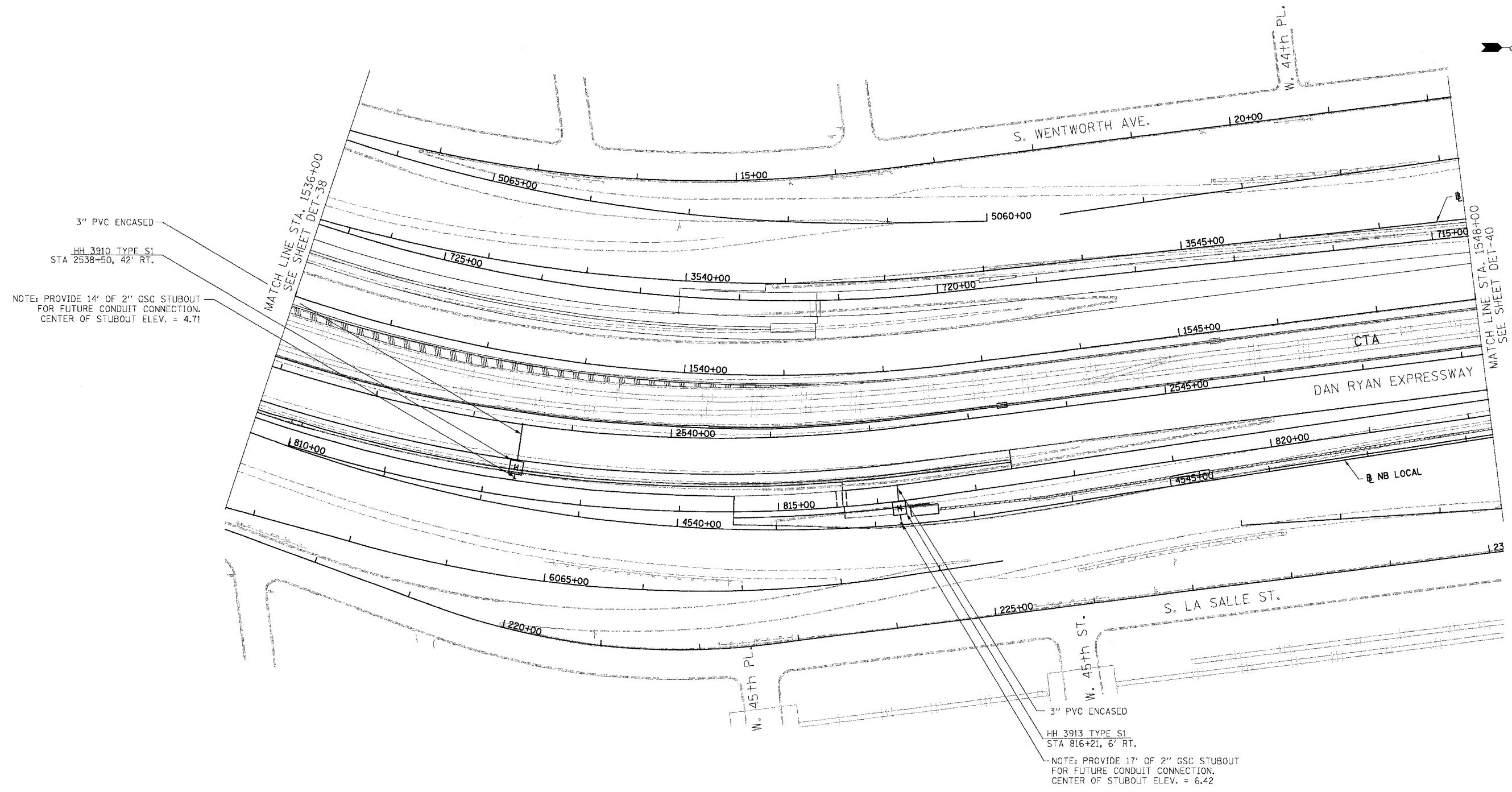
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
ELECTRICAL INFRASTRUCTURE PLAN
NORTHBOUND STA. 1529+50 TO STA. 1536+00

SCALE: 1"=50'
DATE: 07/07/05

DRAWN BY: TER
CHECKED BY: JDC

6/27/2005 5:08:55 PM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	337
STA. 1536+00	TO STA. 1548+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	*1818, ETC.	2324.6-1PR-B		

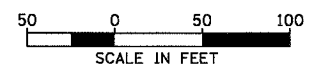


3" PVC ENCASED
 HH 3910 TYPE S1
 STA 2538+50, 42' RT.
 NOTE: PROVIDE 14' OF 2" GSC STUBOUT
 FOR FUTURE CONDUIT CONNECTION.
 CENTER OF STUBOUT ELEV. = 4.71

3" PVC ENCASED
 HH 3913 TYPE S1
 STA 816+21, 6' RT.
 NOTE: PROVIDE 17' OF 2" GSC STUBOUT
 FOR FUTURE CONDUIT CONNECTION.
 CENTER OF STUBOUT ELEV. = 6.42

- NOTES:
1. SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 2. UNLESS OTHERWISE STATED, ALL NOTED CABLE TO BE FURNISHED AND INSTALLED UNDER ANOTHER CONTRACT.
 3. TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 4. THIS SHEET ONLY DEPICTS INSTALLATION OF DETECTION/RAMP METER ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 5. DETECTOR LOOPS INSTALLED BY OTHERS.
 6. REFER TO HANDHOLE DETAILS. SEE DRAWING DT-29.

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EI-39

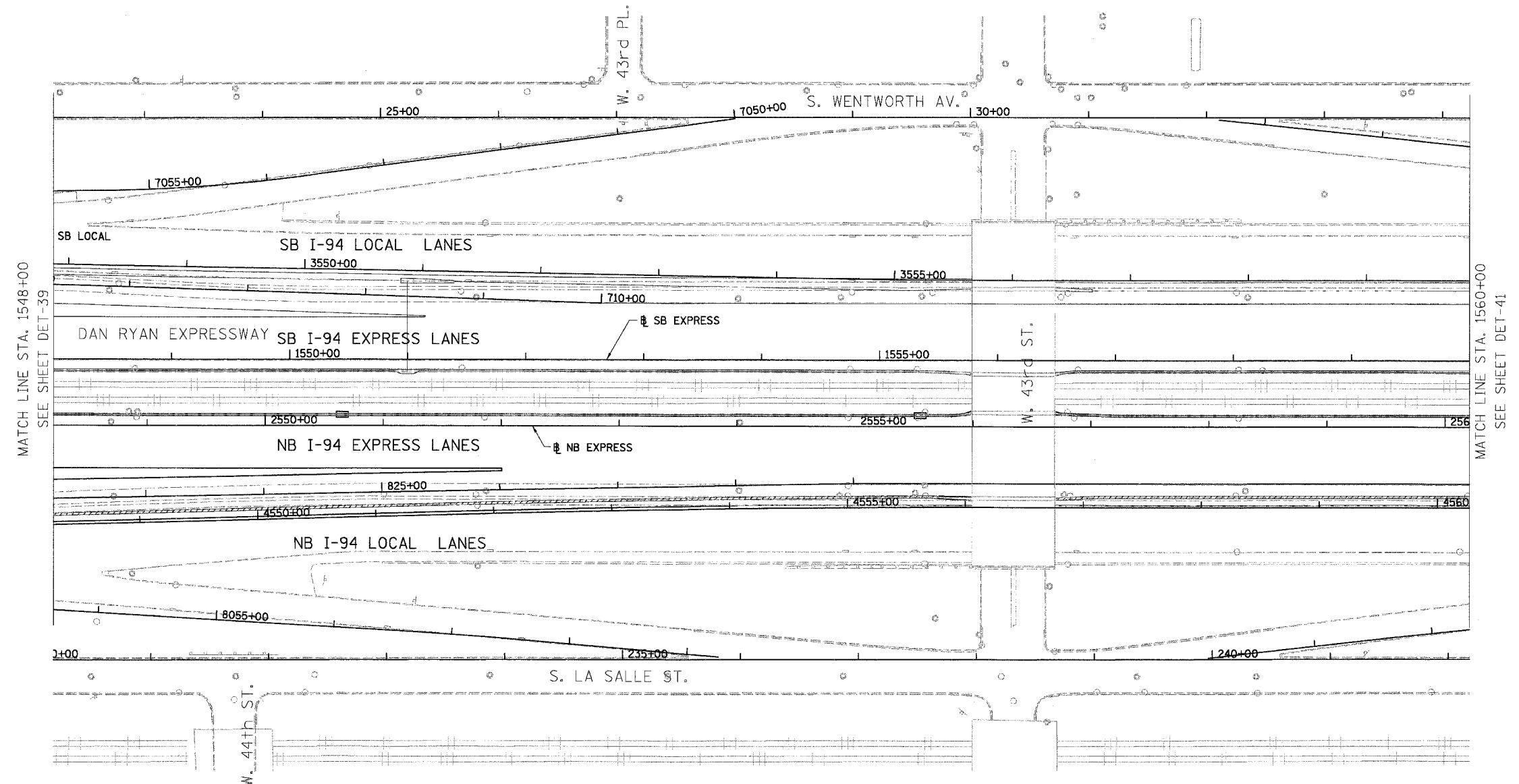
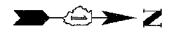
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 ELECTRICAL INFRASTRUCTURE PLAN
 NORTHBOUND STA. 1536+00 TO STA. 1548+00
 SCALE: 1"=50'
 DATE: 07/07/05
 DRAWN BY: TER
 CHECKED BY: JDC

6/27/2005 5:06:56 PM

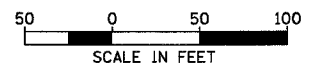
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	338
STA. 1548+00	TO STA. 1560+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300 *181B, ETC, 2324.6-1P1R-8				

NO PROPOSED WORK ON THIS SHEET



MATCH LINE STA. 1548+00
SEE SHEET DET-39

MATCH LINE STA. 1560+00
SEE SHEET DET-41



EI-40

- NOTES:
1. SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 2. UNLESS OTHERWISE STATED, ALL NOTED CABLE TO BE FURNISHED AND INSTALLED UNDER ANOTHER CONTRACT.
 3. TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 4. THIS SHEET ONLY DEPICTS INSTALLATION OF DETECTION/RAMP METER ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 5. DETECTOR LOOPS INSTALLED BY OTHERS.
 6. REFER TO HANDHOLE DETAILS. SEE DRAWING DT-29.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 ELECTRICAL INFRASTRUCTURE PLAN
 NORTHBOUND STA. 1548+00 TO STA. 1560+00

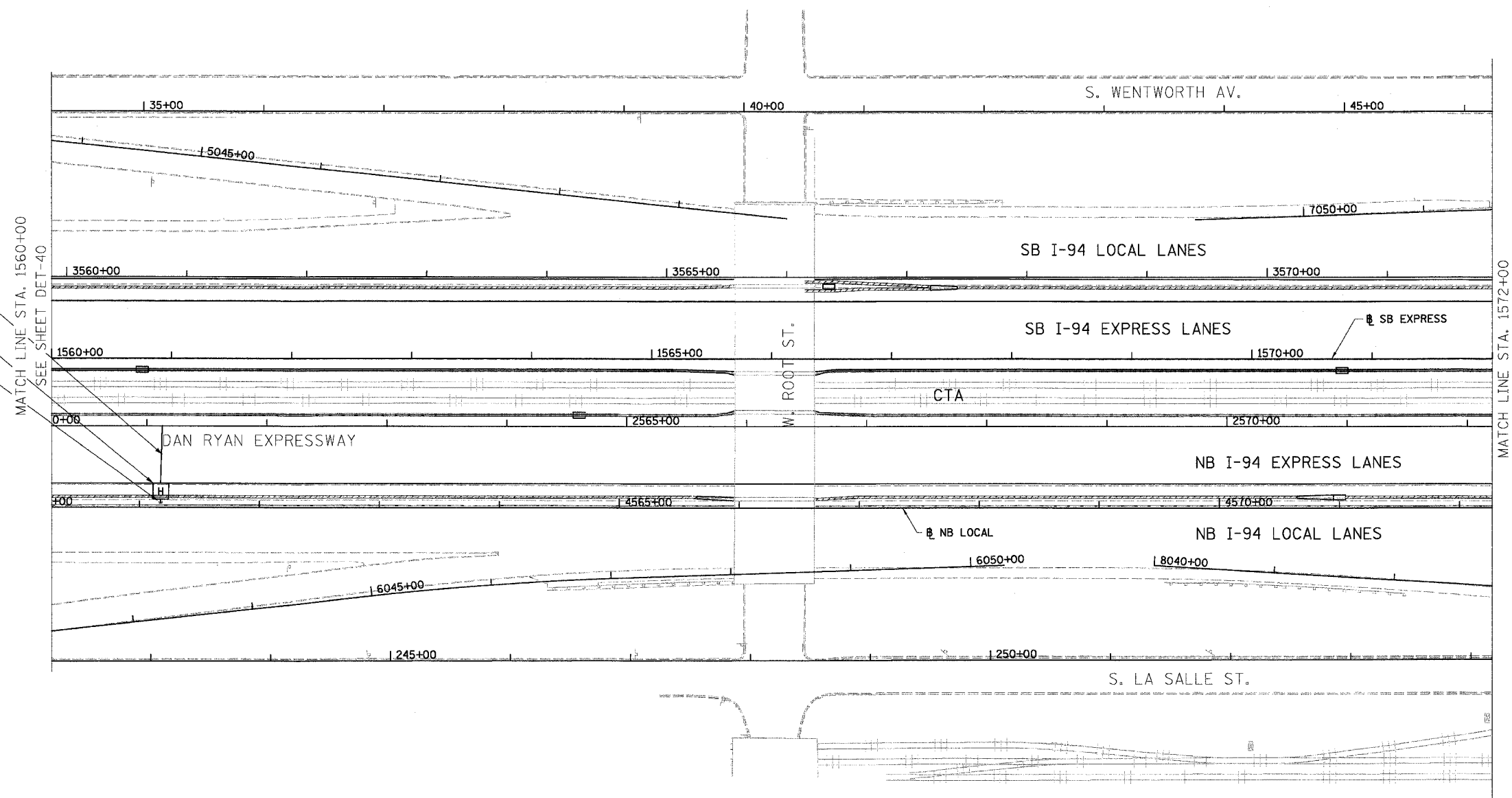
SCALE: 1"=50'
 DATE: 07/07/05

DRAWN BY: TER
 CHECKED BY: JDC

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 312 228 0100
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5/26/05 PM
6/27/2005

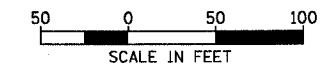
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	339
STA. 1560+00	TO STA. 1572+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	*(1818, ETC, 2324.6-IPR-8			



3" PVC ENCASED
 HH 4107 TYPE S1
 STA 2561+13, 54' RT.
 NOTE: PROVIDE 12' OF 2" GSC STUBOUT
 FOR FUTURE CONDUIT CONNECTION.
 CENTER OF STUBOUT ELEV. = -4.77

- NOTES:
1. SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 2. UNLESS OTHERWISE STATED, ALL NOTED CABLE TO BE FURNISHED AND INSTALLED UNDER ANOTHER CONTRACT.
 3. TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 4. THIS SHEET ONLY DEPICTS INSTALLATION OF DETECTION/RAMP METER ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 5. DETECTOR LOOPS INSTALLED BY OTHERS.
 6. REFER TO HANDHOLE DETAILS. SEE DRAWING DT-29.

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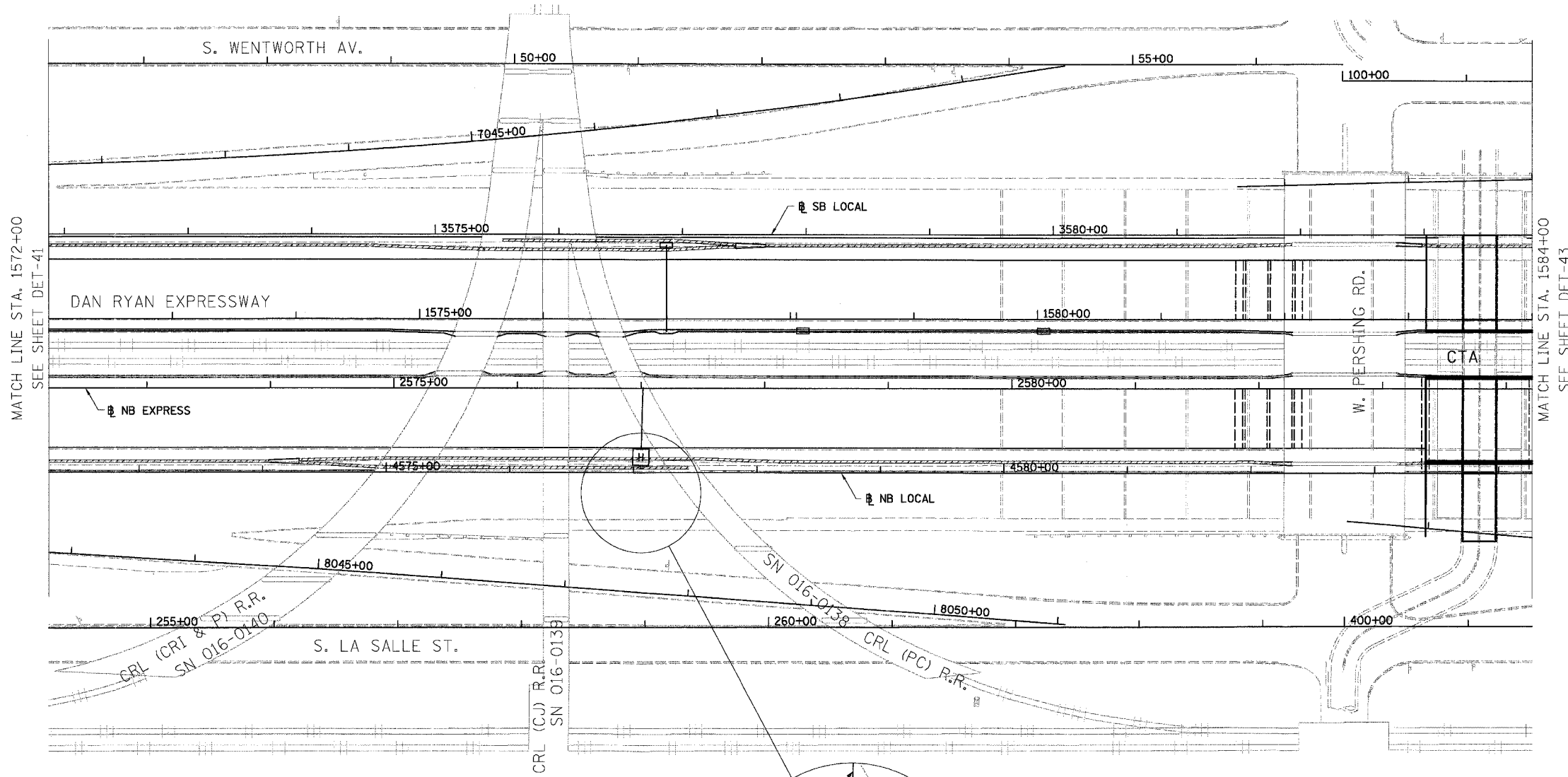
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 ELECTRICAL INFRASTRUCTURE PLAN
 NORTHBOUND STA. 1560+00 TO 1572+00
 SCALE: 1"=50'
 DATE: 07/07/05
 DRAWN BY: TER
 CHECKED BY: JDC

EI-41

6/27/2005 5:08:56 PM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	340
STA. 1572+00	TO STA. 1584+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300 •(1816, ETC. 2324.6-1P)R-8				

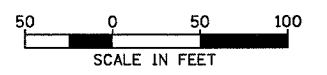
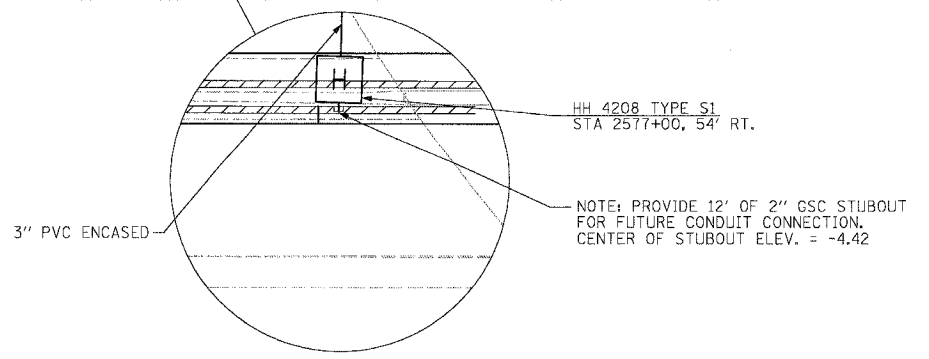


MATCH LINE STA. 1572+00
SEE SHEET DET-41

MATCH LINE STA. 1584+00
SEE SHEET DET-43

NOTES:

1. SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
2. UNLESS OTHERWISE STATED, ALL NOTED CABLE TO BE FURNISHED AND INSTALLED UNDER ANOTHER CONTRACT.
3. TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
4. THIS SHEET ONLY DEPICTS INSTALLATION OF DETECTION/RAMP METER ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
5. DETECTOR LOOPS INSTALLED BY OTHERS.
6. REFER TO HANDHOLE DETAILS. SEE DRAWING DT-29.



EI-42

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
ELECTRICAL INFRASTRUCTURE PLAN
NORTHBOUND STA. 1572+00 TO 1584+00

SCALE: 1"=50'
DATE: 07/07/05

DRAWN BY: TER
CHECKED BY: JDC

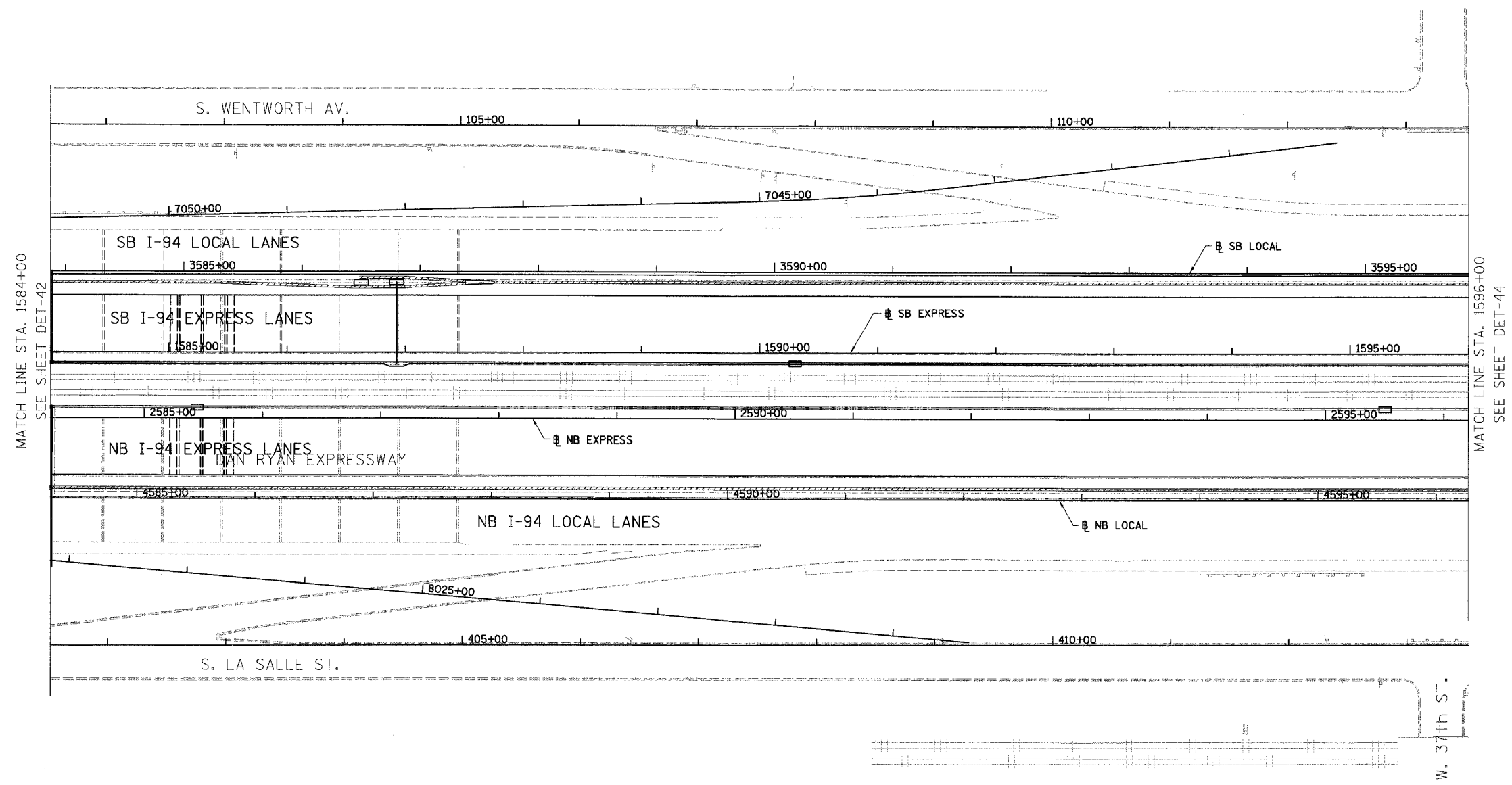
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	341
STA. 1584+00	TO STA. 1596+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62300 *1818, ETC, 2324.6-1PR-8



NO PROPOSED WORK ON THIS SHEET



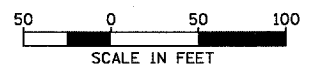
MATCH LINE STA. 1584+00
SEE SHEET DET-42

MATCH LINE STA. 1596+00
SEE SHEET DET-44

W. 37th ST.

- NOTES:
1. SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 2. UNLESS OTHERWISE STATED, ALL NOTED CABLE TO BE FURNISHED AND INSTALLED UNDER ANOTHER CONTRACT.
 3. TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 4. THIS SHEET ONLY DEPICTS INSTALLATION OF DETECTION/2X BVC ENCASED METER ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 5. DETECTOR LOOPS INSTALLED BY OTHERS.
 6. REFER TO HANDHOLE DETAILS. SEE DRAWING DT-29.

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EI-43

REVISIONS	
NAME	DATE

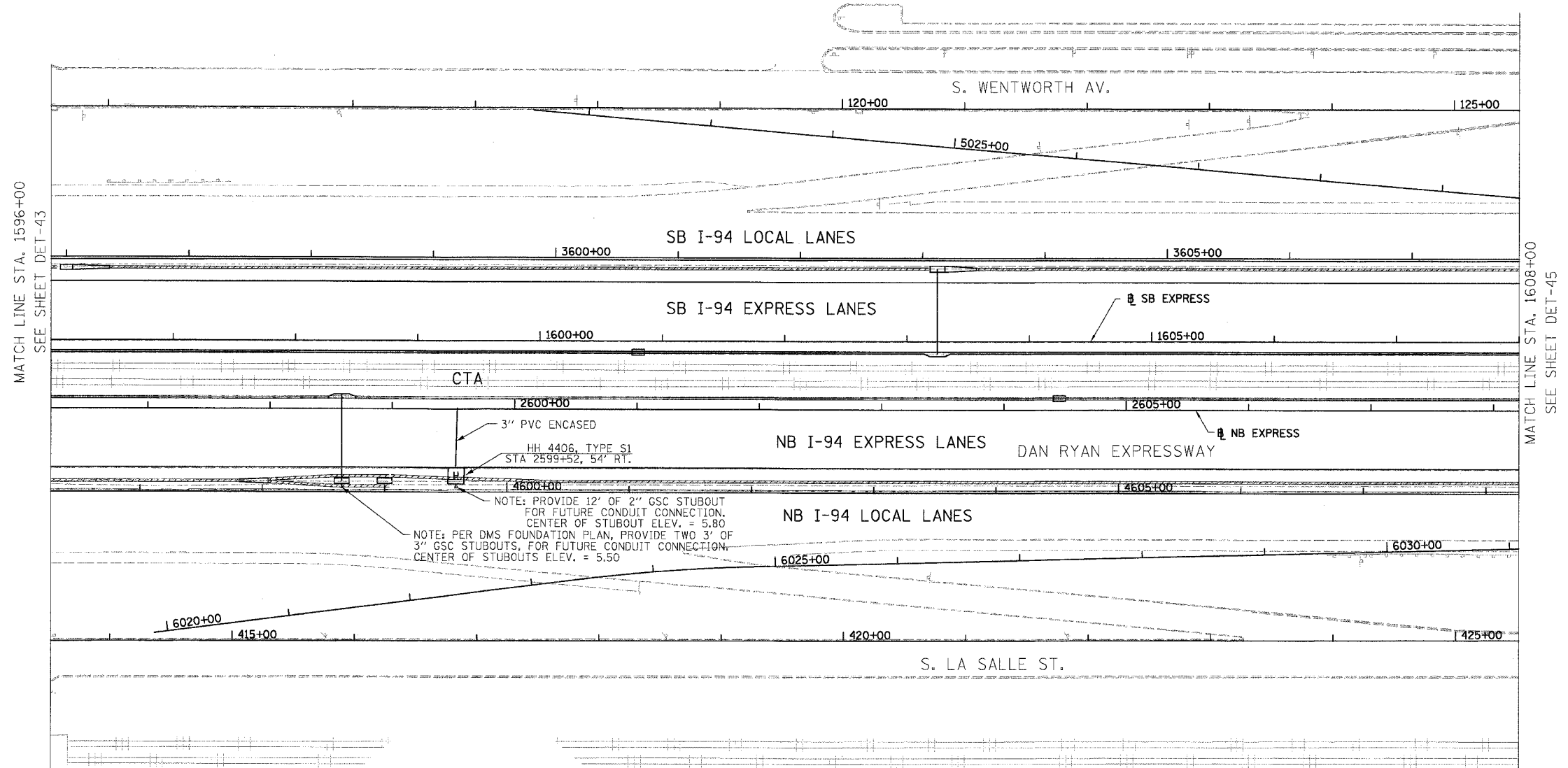
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
ELECTRICAL INFRASTRUCTURE PLAN
NORTHBOUND STA. 1584+00 TO STA. 1596+00

SCALE: 1"=50'
DATE: 07/07/05
DRAWN BY: TER
CHECKED BY: JDC

6/27/2005 5:09:01 PM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	342
STA. 1596+00	TO STA. 1608+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

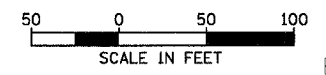
62300 • 11818, ETC, 2324.6-1PR-8



MATCH LINE STA. 1596+00
SEE SHEET DET-43

MATCH LINE STA. 1608+00
SEE SHEET DET-45

- NOTES:**
1. SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 2. UNLESS OTHERWISE STATED, ALL NOTED CABLE TO BE FURNISHED AND INSTALLED UNDER ANOTHER CONTRACT.
 3. TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 4. THIS SHEET ONLY DEPICTS INSTALLATION OF DETECTION/3\"/>



EI-44

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 ELECTRICAL INFRASTRUCTURE PLAN
 NORTHBOUND STA. 1596+00 TO STA. 1608+00

SCALE: 1"=50'
 DATE: 07/07/05

DRAWN BY: TER
 CHECKED BY: JDC

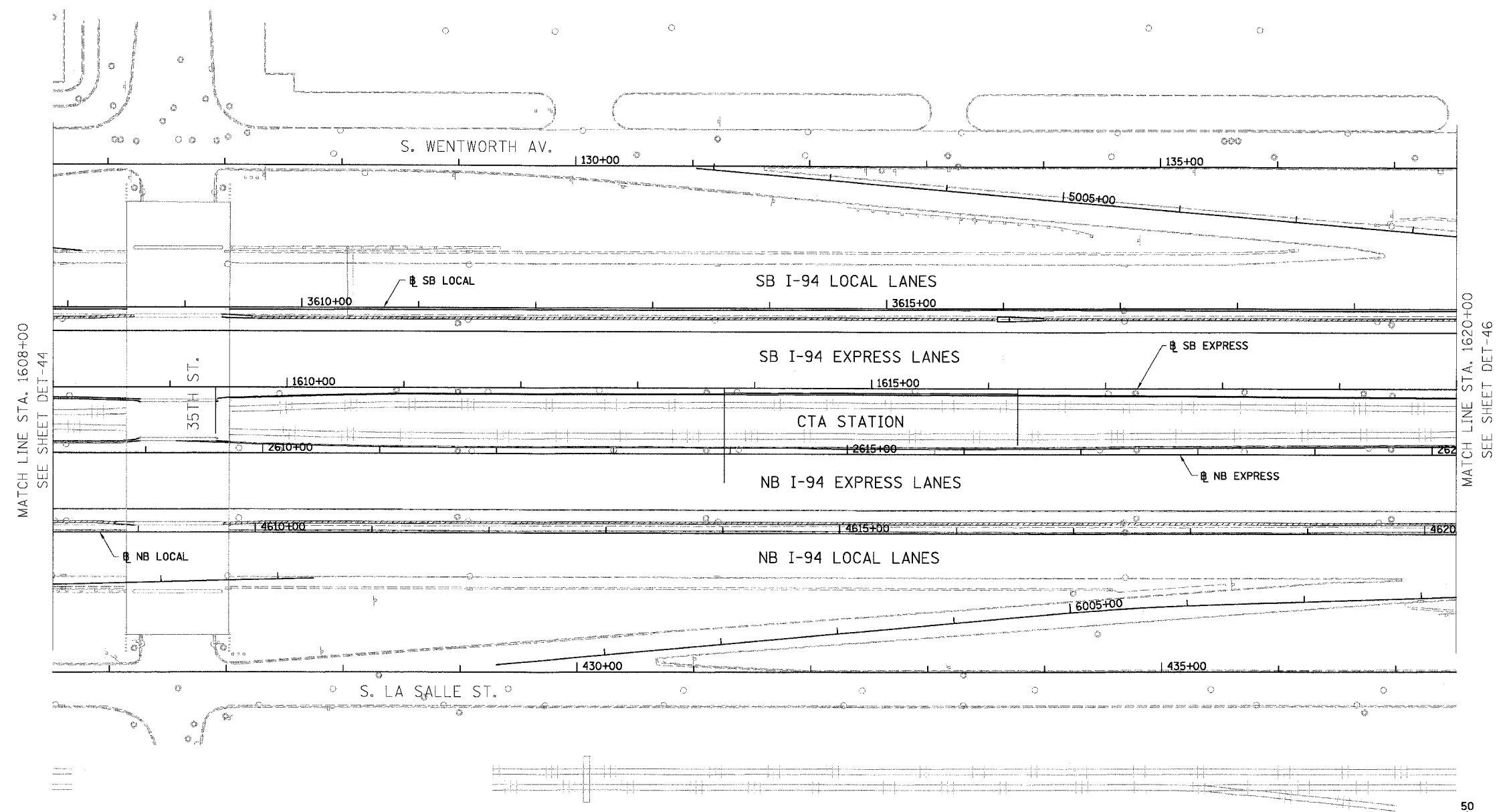
BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
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 312.228.0100
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5/27/2005 5:09:02 PM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	343
STA. 1608+00	TO STA. 1620+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	*(1818, ETC, 2324.6-1)R-8			



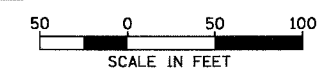
NO PROPOSED WORK ON THIS SHEET



MATCH LINE STA. 1608+00
SEE SHEET DET-44

MATCH LINE STA. 1620+00
SEE SHEET DET-46

- NOTES:
1. SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 2. UNLESS OTHERWISE STATED, ALL NOTED CABLE TO BE FURNISHED AND INSTALLED UNDER ANOTHER CONTRACT.
 3. TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 4. THIS SHEET ONLY DEPICTS INSTALLATION OF DETECTION/RTM METER ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 5. DETECTOR LOOPS INSTALLED BY OTHERS.
 6. REFER TO HANDHOLE DETAILS. SEE DRAWING DT-29.



EI-45

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Chicago, Illinois
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
ELECTRICAL INFRASTRUCTURE PLAN
NORTHBOUND STA. 1608+00 TO STA. 1620+00

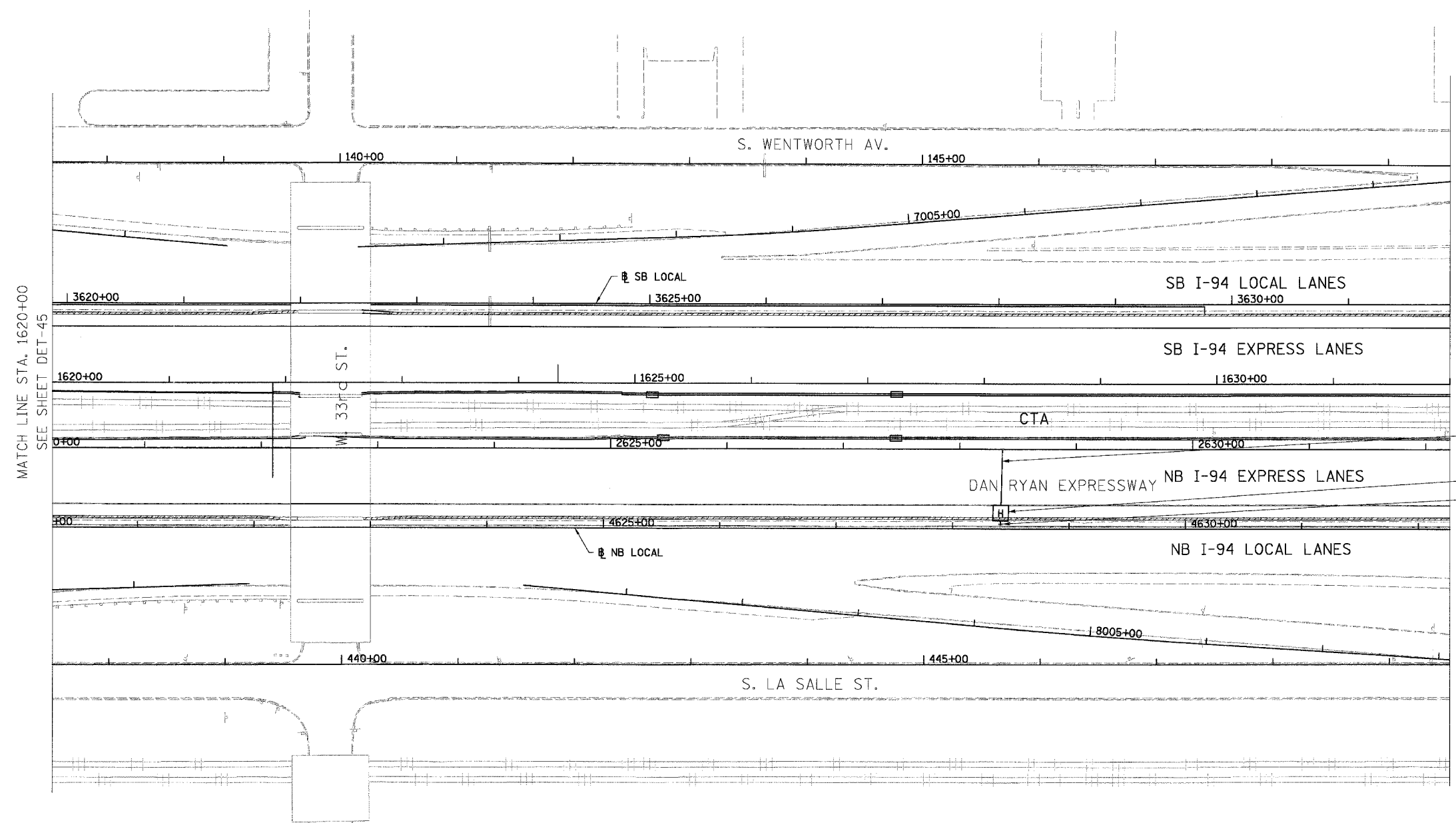
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DATE: 07/07/05

DRAWN BY: TER
CHECKED BY: JDC

6/27/2005 5:09:07 PM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	344
STA. 1620+00		TO STA. 1632+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62300 •(181B, ETC, 2324.6-1)PR-8



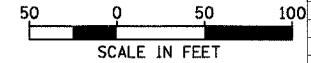
MATCH LINE STA. 1632+00
END OF ELECTRICAL INFRASTRUCTURE WORK

MATCH LINE STA. 1620+00
SEE SHEET DET-45

3" PVC ENCASED
HH 4612 TYPE S1
STA. 2628+35, 54' RT.
NOTE: PROVIDE 12' OF 2" GSC STUBOUT
FOR FUTURE CONDUIT CONNECTION
CENTER OF STUBOUT ELEV. = -3.43

- NOTES:
1. SEE DRAWING EI-100 AND EI-101 FOR ELECTRICAL SYSTEMS AND ABBREVIATIONS.
 2. UNLESS OTHERWISE STATED, ALL NOTED CABLE TO BE FURNISHED AND INSTALLED UNDER ANOTHER CONTRACT.
 3. TRENCHED CONDUITS INSTALLED IN PARALLEL ARE TO BE INSTALLED IN COMMON TRENCH.
 4. THIS SHEET ONLY DEPICTS INSTALLATION OF DETECTION/3" PVC ENCASED METER ELEMENTS. REFER TO SHEETS FOR OTHER SUBSYSTEMS FOR ADDITIONAL ELEMENTS IN THE AREA SHOWN.
 5. DETECTOR LOOPS INSTALLED BY OTHERS.
 6. REFER TO HANDHOLE DETAILS. SEE DRAWING DT-29.

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CONSULTING ENGINEERS
Chicago, Illinois
312 228 0100
www.bbainc.com



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
ELECTRICAL INFRASTRUCTURE PLAN
NORTHBOUND STA. 1620+00 TO STA. 1632+00

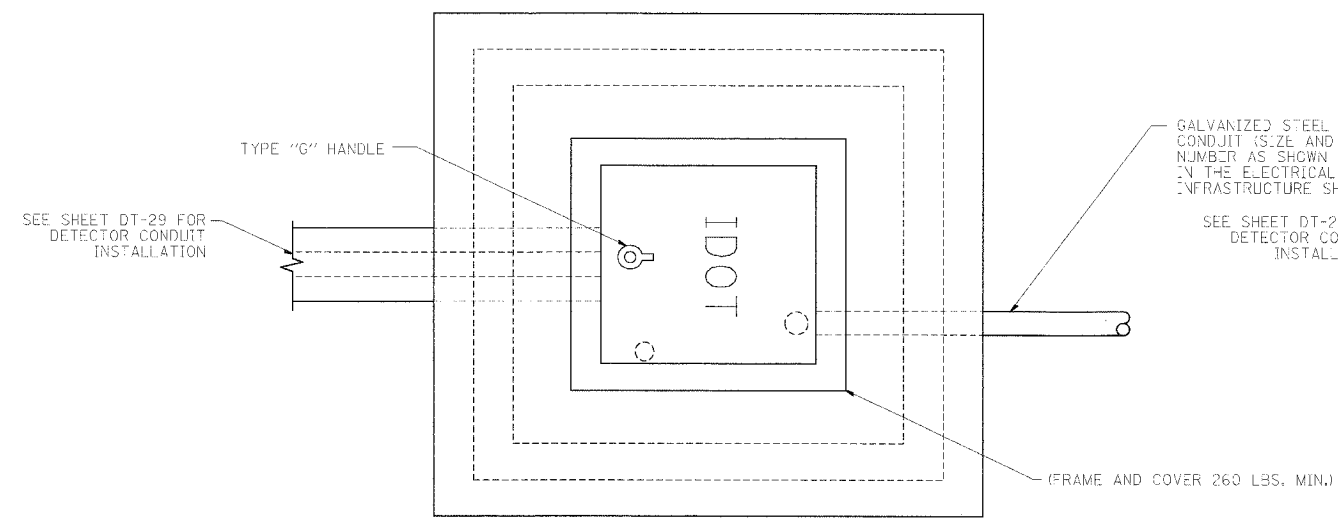
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CHECKED BY: JDC

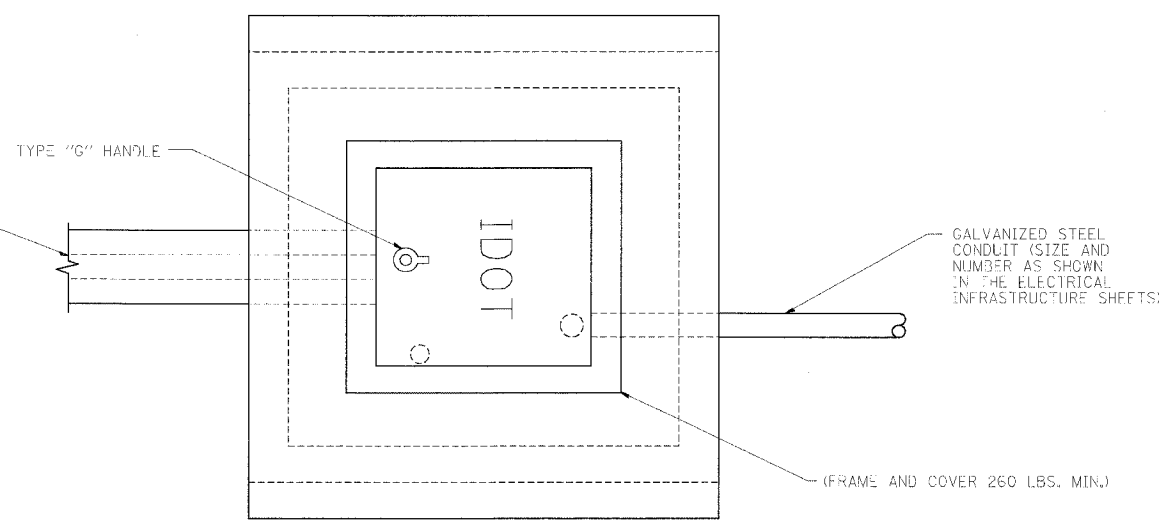
EI-46

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6/27/2005

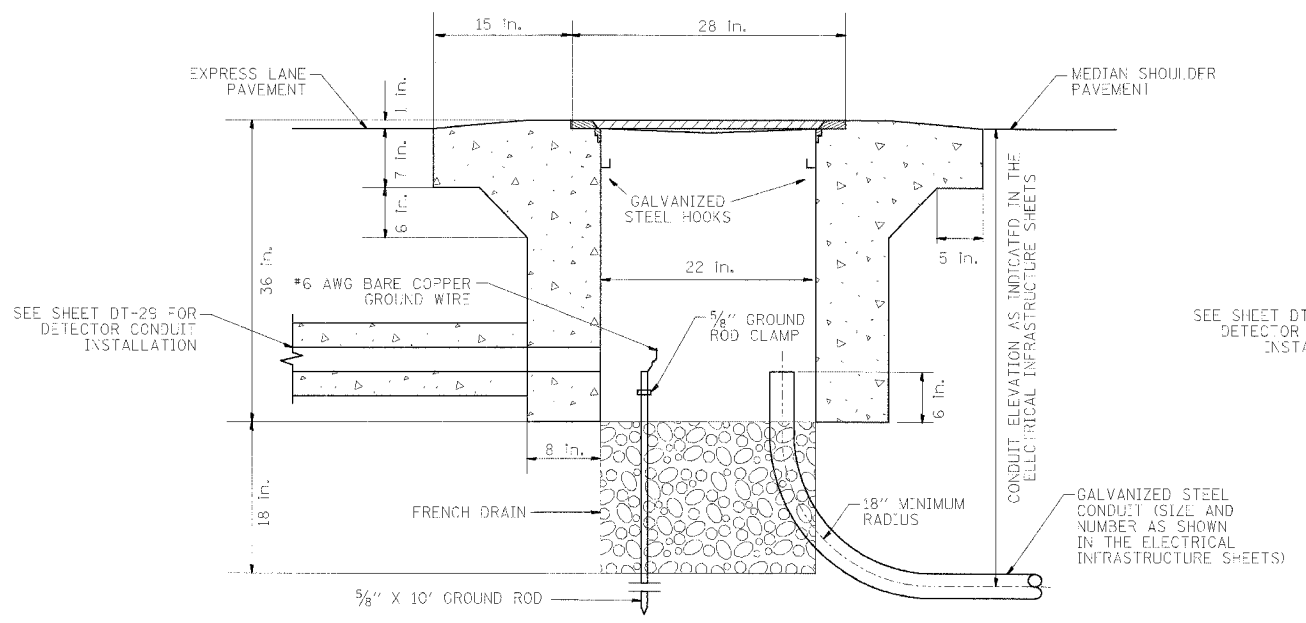
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	346
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	11818, ETC, 2324.6-1PJR-8			



PLAN

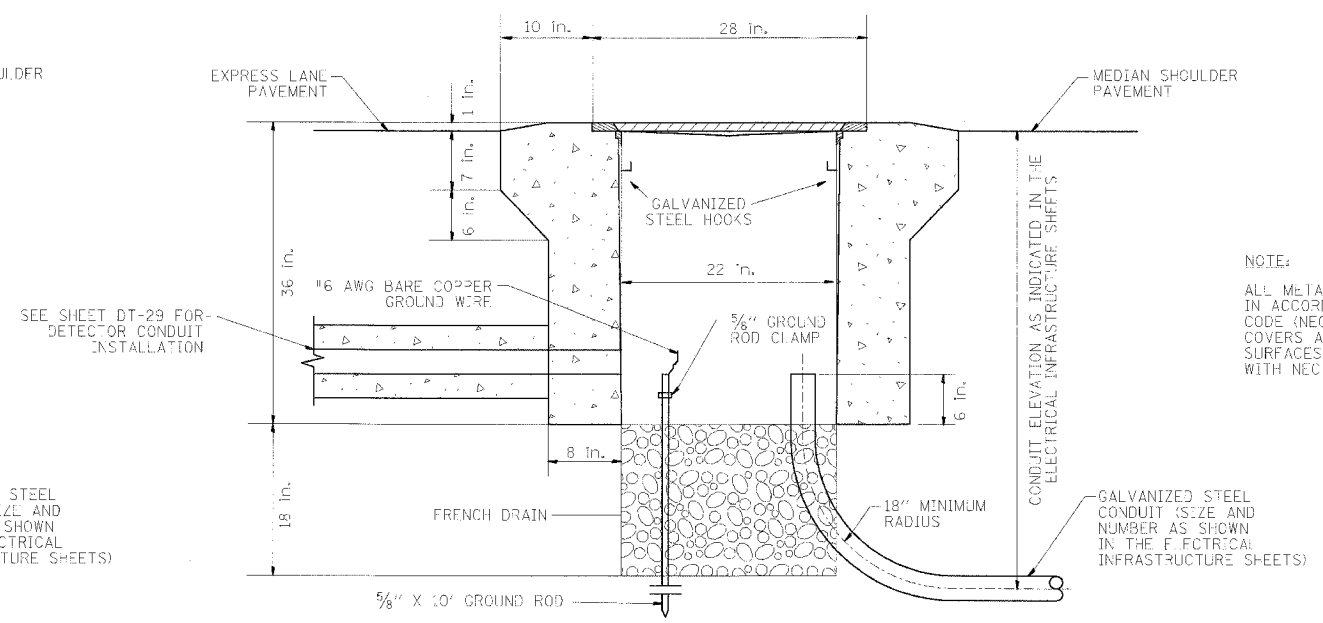


PLAN



ELEVATION

PC CONCRETE - HEAVY DUTY HANDHOLE



ELEVATION

PC CONCRETE - HEAVY DUTY HANDHOLE (SPECIAL)

NOTE:
ALL METALLIC ELEMENTS SHALL BE GROUND IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC), SECTION 250, GROUNDING. METAL COVERS AND OTHER EXPOSED CONDUCTIVE SURFACES SHALL BE BONDED IN ACCORDANCE WITH NEC ARTICLE 250.96 (A).

DT-46

Edwards AND Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

REVISIONS	
NAME	DATE

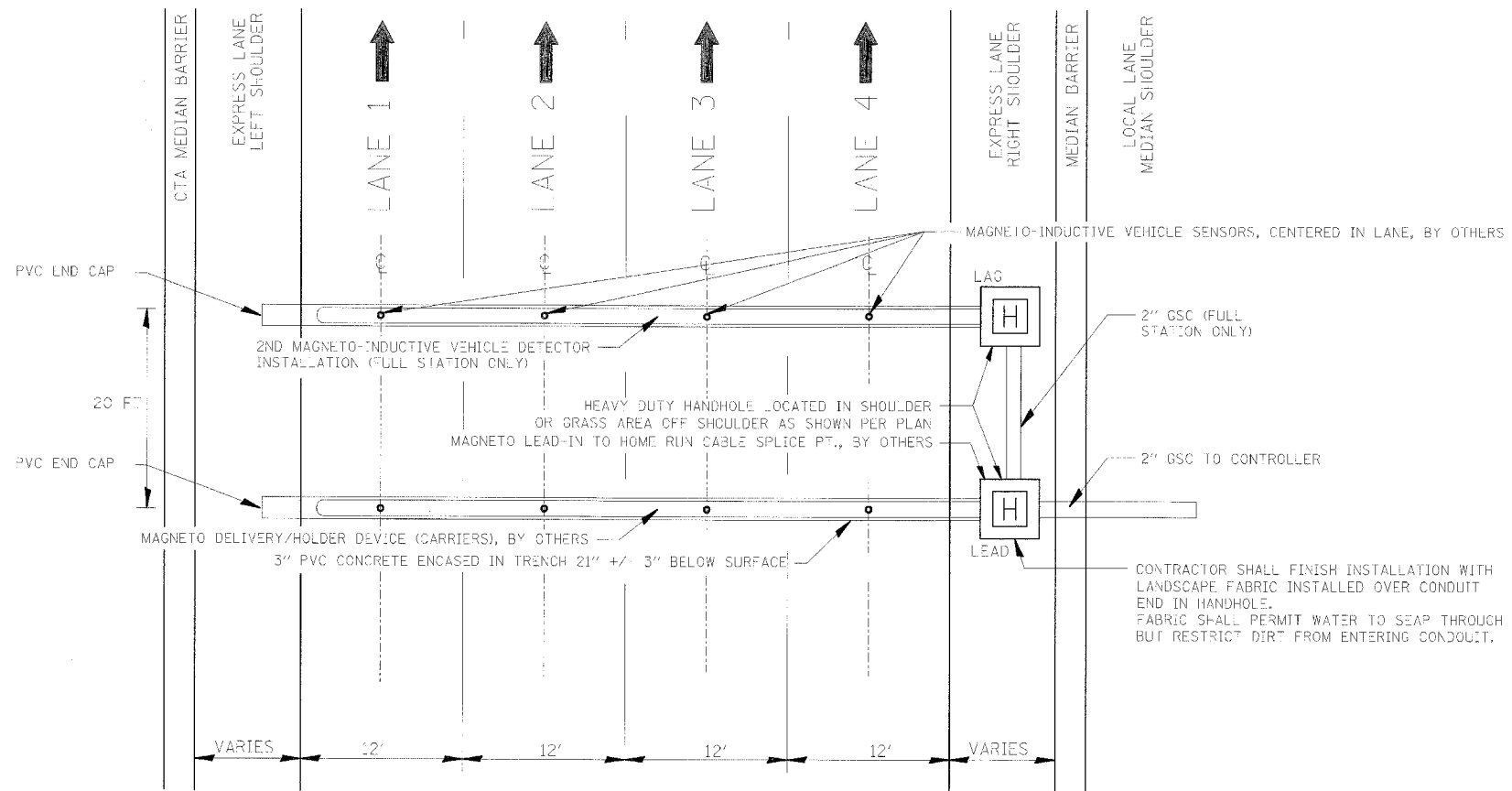
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
PC CONCRETE - HEAVY DUTY HANDHOLE DETAIL (TYPE S1)
SCALE: NTS
DATE: 7/7/05
DRAWN BY: CJH
CHECKED BY: MJL

06/24/2005 01:43 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	347
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	• (1818, ETC, 2324.6-1P)R-8			

NOTES:

1. ANY DEVIATION IN CONDUIT ALIGNMENT SHALL BE LESS THAN 1/4 IN. PER FT.
2. CONDUIT END CAP TO BE PRESS FITTED (NO ADHESIVE). 1/8 IN. DRAINAGE HOLE TO BE DRILLED IN END CAP. HOLE TO BE POSITIONED AT BOTTOM.
3. CONDUIT TO EXTEND APPROXIMATELY 3 IN. INTO HANDHOLE.
4. FOR 3" PVC CONCRETE ENCASED IN TRENCH DETAIL, SEE SHEET DT-29. FOR HANDHOLE DETAIL, SEE SHEET DT-46.



DAN RYAN TYPICAL 4 LANE CROSS SECTION WITH NON-INVASIVE MAGNETO-INDUCTIVE VEHICLE SENSOR (PROBE) INSTALLED IN ALL LANES

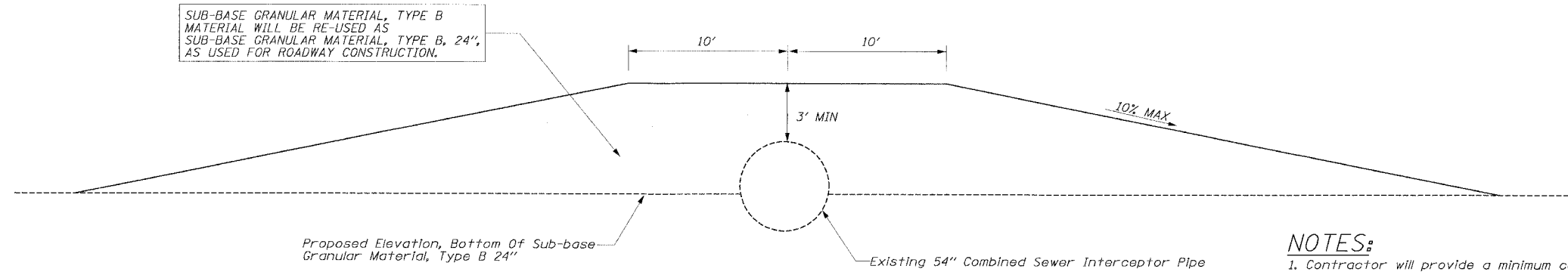
DT-24

Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) 31ST STREET TO 71ST STREET NB EXPRESS LANE RECONSTRUCTION TYPICAL MULTIPLE MAGNETO-INDUCTIVE VEHICLE SENSOR (MICROLOOP) - FULL INSTALLATION/SPEED MEASURING LAYOUT
NAME	DATE	
		SCALE: NTS
		DATE: 7/7/05
		DRAWN BY: NB
		CHECKED BY: CTC

06/24/2005 09:48 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	348
STA. 7111+80.00		TO STA. 7114+90.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	• (1818, ETC, 2324.6-1P)R-8			



54" SEWER INTERCEPTOR (STA. 1385+44 SB, 2385+64 NB)
 36" WATER MAIN (STA. 1533+28 SB, 2533+49 NB)
 CONSTRUCTION PROTECTION

NOTES:
 1. Contractor will provide a minimum cover, as shown above at all times during construction and prior to the installation of the permanent Water Main/Sewer Protection Cap. Construction traffic shall not cross the water main/sewer pipe without protection in place.
 2. CONTRACTOR IS RESPONSIBLE FOR THE INTEGRITY OF WATER MAIN/SEWER PIPE THROUGH THE DURATION OF THE PROJECT, AND WILL NOT BE PAID FOR ANY REPAIRS REQUIRED, AS DETERMINED BY THE ENGINEER, TO THE PIPE, DUE TO CONSTRUCTION ACTIVITIES.

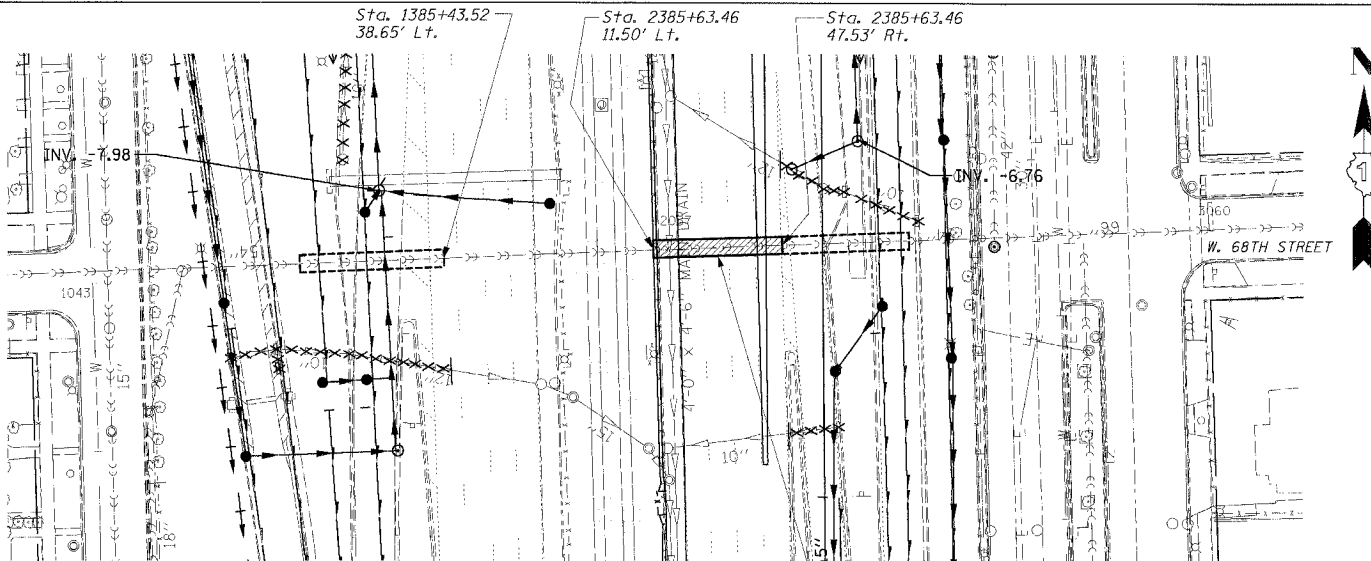
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

REVISIONS	
NAME	DATE

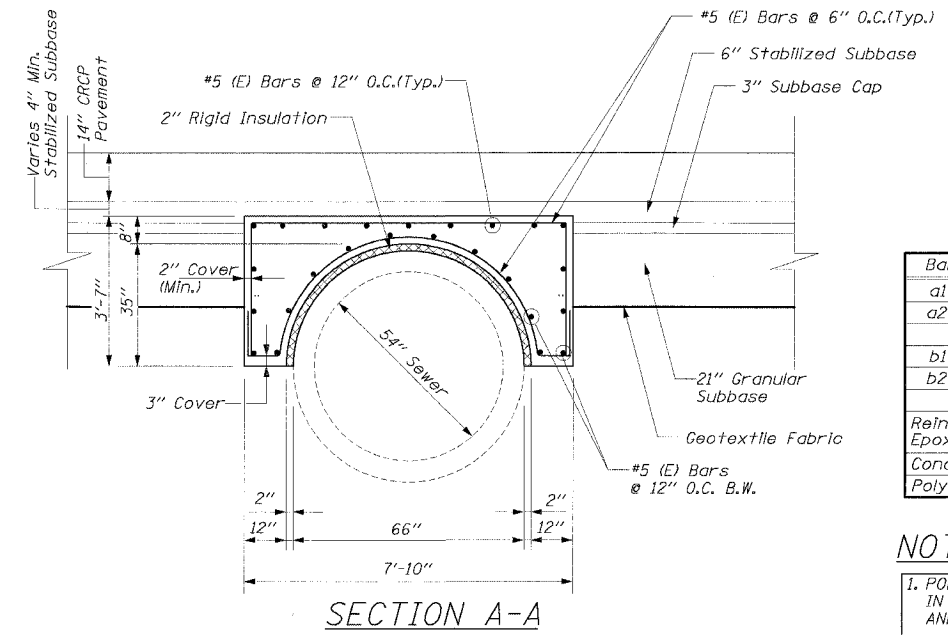
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 CIVIL DETAILS
 CONSTRUCTION PROTECTION
 SCALE: NOT TO SCALE
 DATE: 7/7/05
 DRAWN BY: TAI
 CHECKED BY: DPB

CDT-1
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90 *		COOK	556	349
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	• (1818, ETC, 2324.6-1PIR-8			



TOPOGRAPHIC PLAN



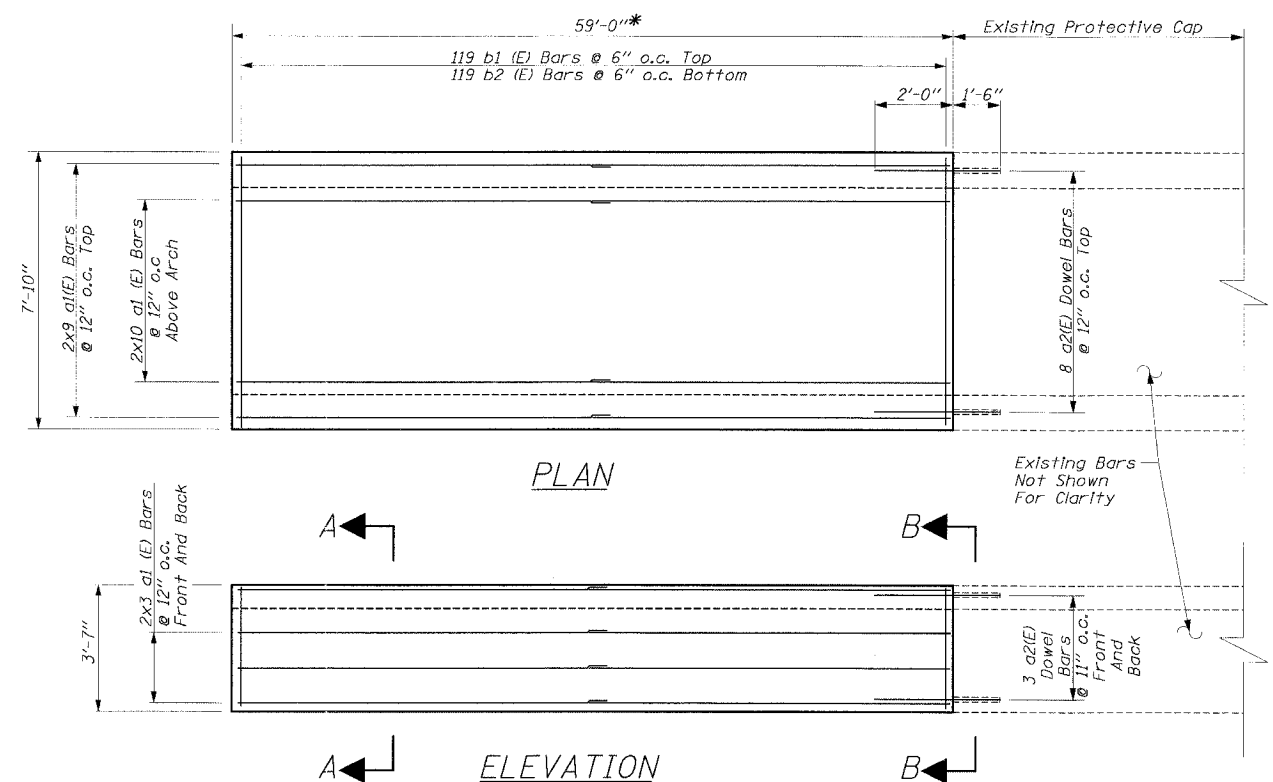
SECTION A-A

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1(E)	50	#5	30'-5"	—
a2(E)	14	#6	3'-6"	—
b1(E)	119	#5	13'-10"	⌒
b2(E)	119	#5	13'-0"	⌒
Reinforcement Bars, Epoxy Coated			Pounds	4,990
Concrete Structures			Cu. Yd.	32.1
Polystyrene Insulation			Sq. Ft.	540

NOTES

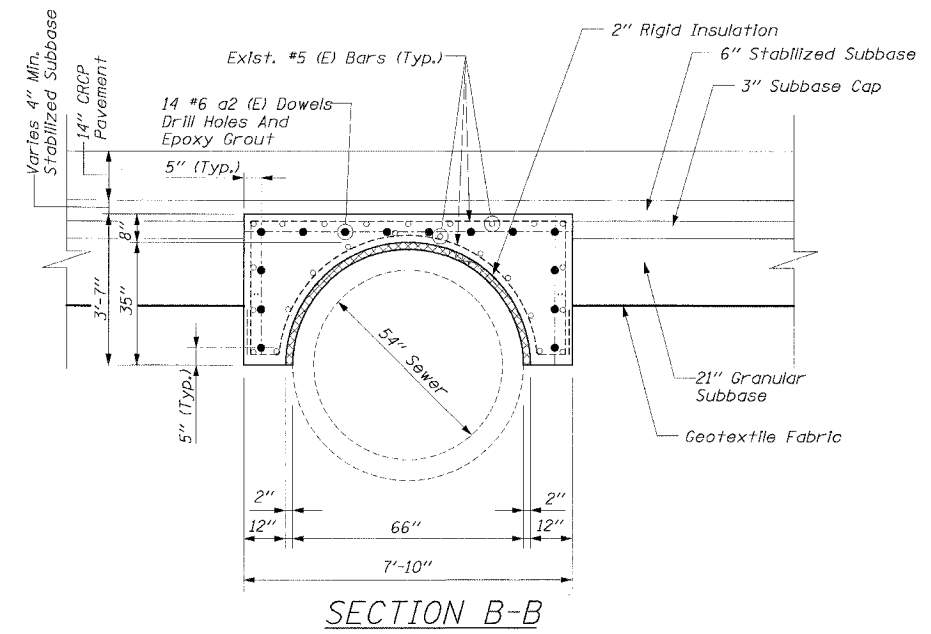
- POLYSTYRENE INSULATION SHALL BE INCLUDED IN 54" SEWER PROTECTION CAP CONSTRUCTION, AND WILL NOT BE PAID FOR SEPARATELY.
- DRILLING AND EPOXY GROUTING OF a2(E) BARS IS PAID FOR UNDER REINFORCEMENT BARS, EPOXY COATED.



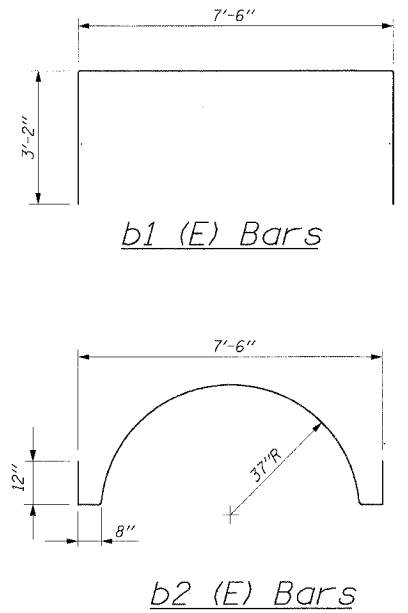
PLAN

ELEVATION

*Field Verify Dimension Prior to Ordering Reinforcement Bars



SECTION B-B



b1 (E) Bars

b2 (E) Bars

NOTES:

- All bars designated (E) must be epoxy coated.
- All bars must be #5 bars with a minimum overlap of 2'-2".
- All dowel bars must be #6 bars.
- Sewer location based on existing plans. Field adjustment of lengths may be necessary.

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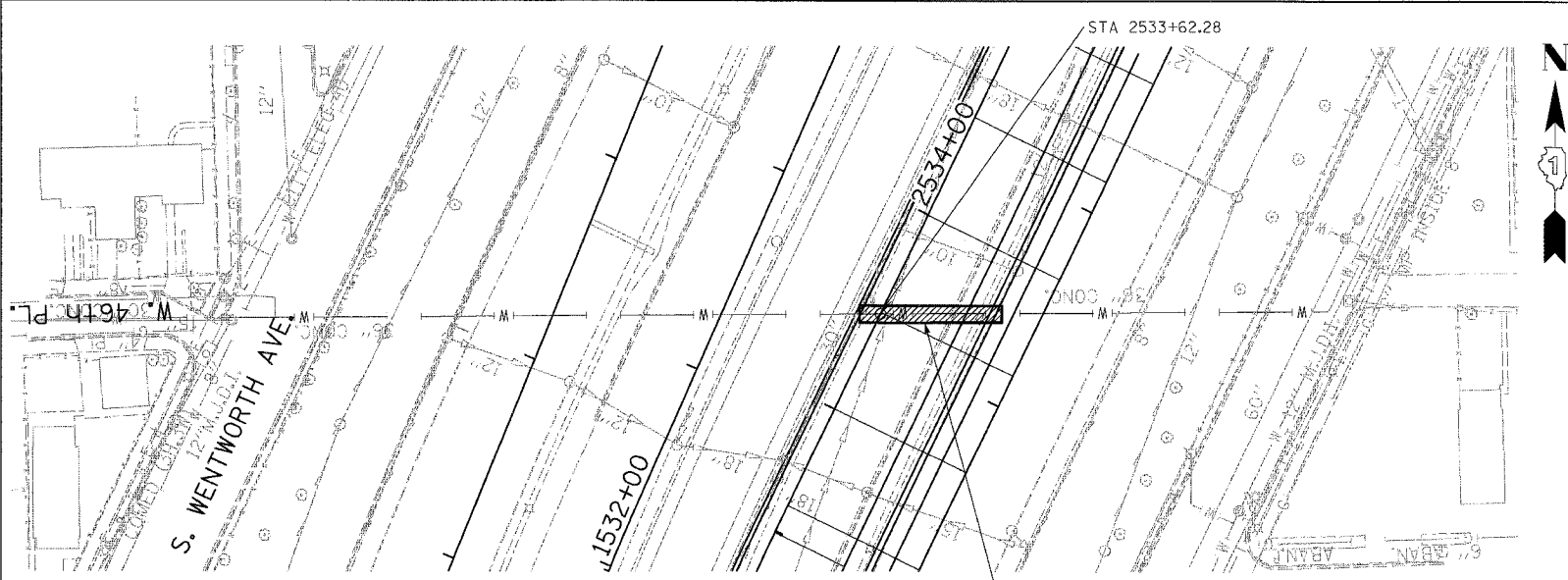
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 CIVIL DETAILS - 68TH STREET CROSSING
 54" SEWER PROTECTION CAP
 STA. 2385+63.46
 SCALE: NOT TO SCALE
 DATE: 7/7/05
 DRAWN BY: AJW
 CHECKED BY: EL

CDT-2

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	350
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	*1818, ETC, 2324.6-1PR-8			



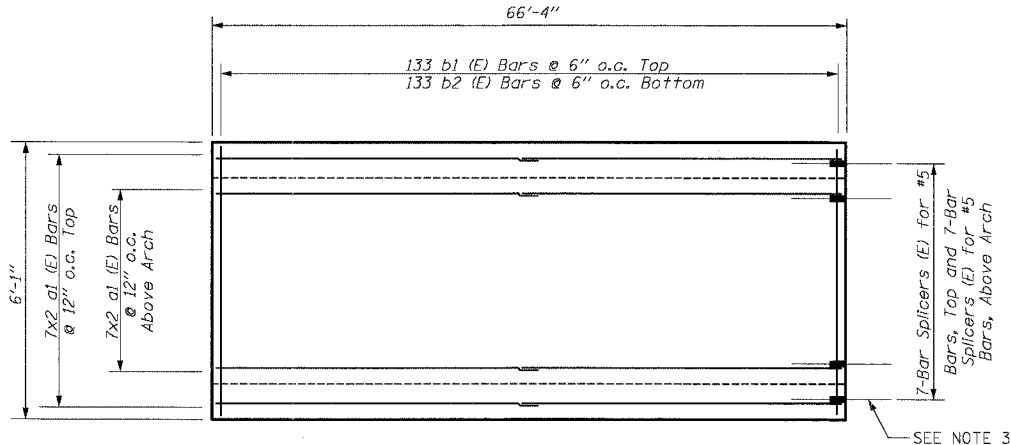
TOPOGRAPHIC PLAN

BILL OF MATERIAL

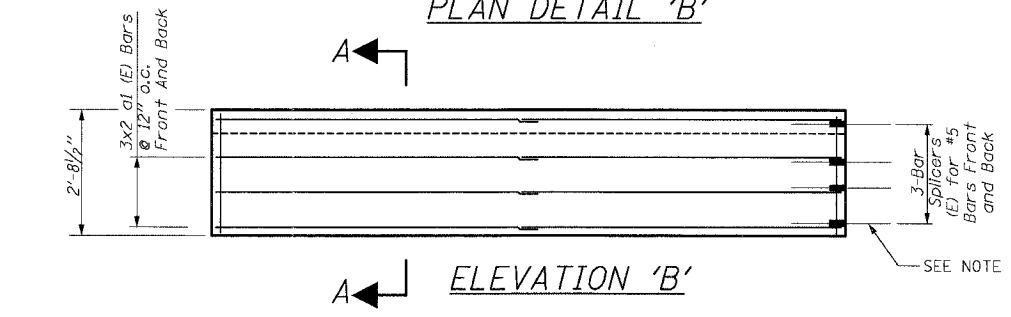
Bar	No.	Size	Length	Shape
a1(E)	40	#5	34'-1"	—
b1(E)	133	#5	10'-4"	□
b2(E)	133	#5	10'-3"	⤴
Reinforcement Bars, Epoxy Coated			Pounds	4,280
Bar Splicers			Each	20
Concrete Structures			Cu. Yd.	24.4

NOTES:

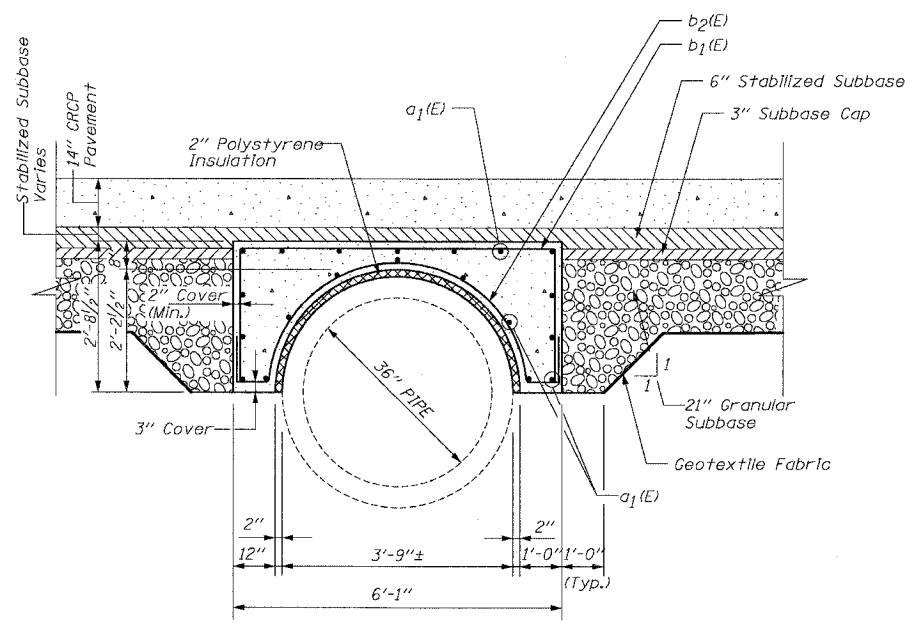
1. THE 2" POLYSTYRENE INSULATION SHALL BE INCLUDED IN THE COST OF 36" WATER MAIN PROTECTION CAP CONSTRUCTION. THE ESTIMATED QUANTITY IS 426 SQ. FT.
2. ADDITIONAL GRANULAR SUB-BASE REQUIRED AS SHOWN IN SECTION A-A OR AS DIRECTED BY ENGINEER WILL BE INCLUDED IN THE COST OF SUB-BASE GRANULAR MATERIAL, TYPE B 24".
3. CONTRACTOR SHALL PROVIDE BAR SPLICERS AS SHOWN. INSTALL STAGE I PORTION AND PROVIDE STAGE II PORTION TO THE ENGINEER. PLUG THREADED COUPLER WITH PLASTIC NIPPLE OR H.S. BOLT FOR PROTECTION. COST INCLUDED WITH "BAR SPLICERS".



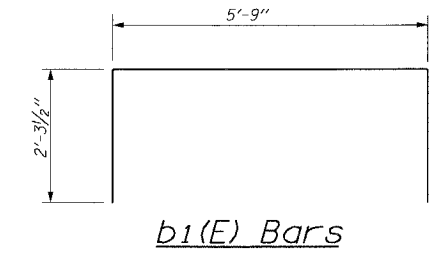
PLAN DETAIL 'B'



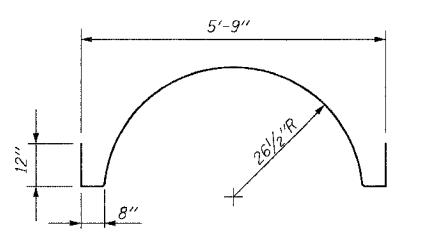
ELEVATION 'B'



SECTION A-A



b1(E) Bars



b2(E) Bars

NOTES:

1. All bars designated (E) must be epoxy coated.
2. All bars must be #5 bars with a minimum overlap of 2'-2".

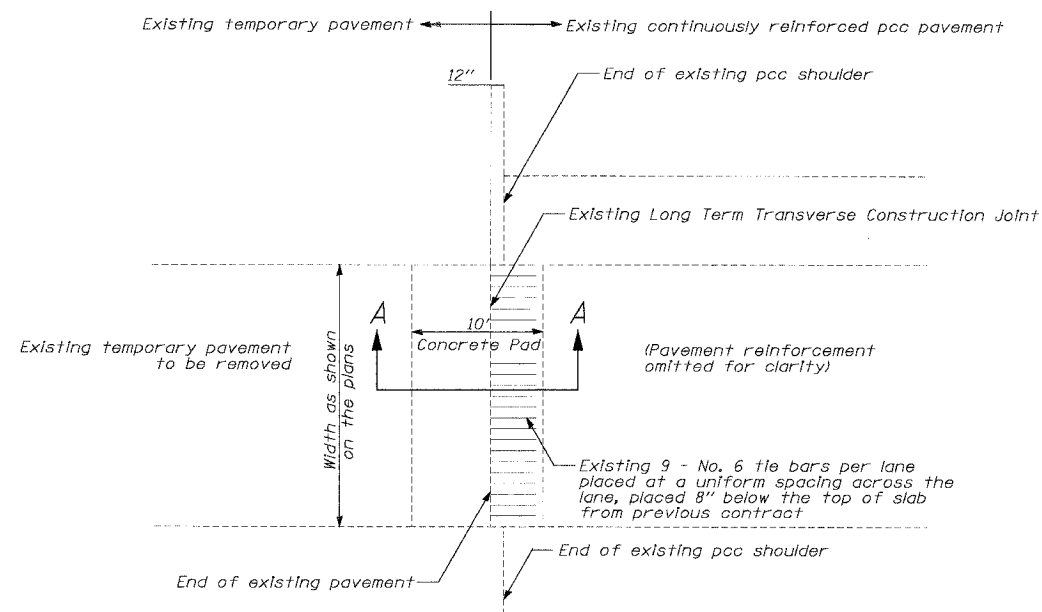
BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbainc.com

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
CIVIL DETAILS - 46TH ST CROSSING
36" WATER MAIN PROTECTION CAP
SCALE: =NTS DRAWN BY: EGH
DATE: 07/07/05 CHECKED BY: CBB

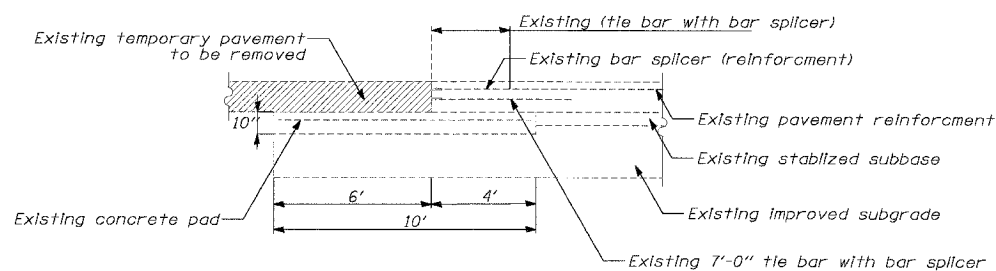
CDT-3

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6/27/2005

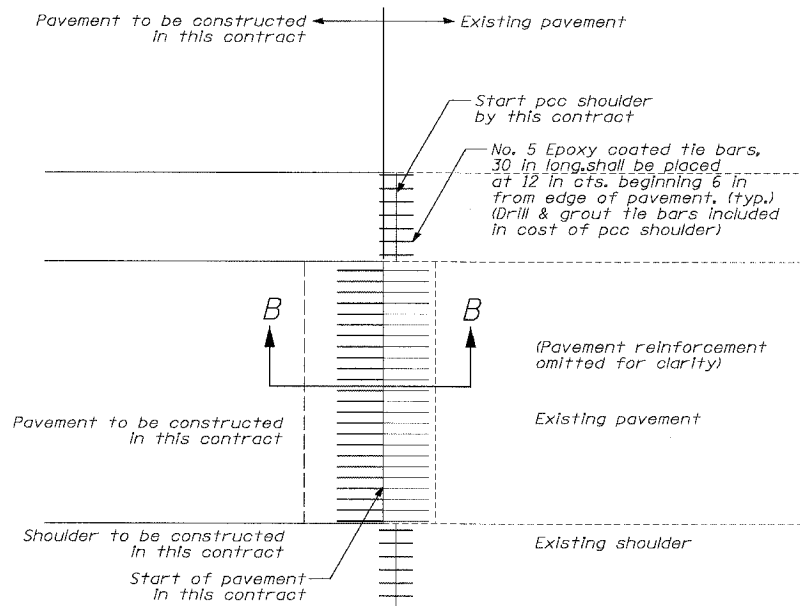


PLAN

(EXISTING LONG TERM TRANSVERSE CONSTRUCTION JOINT)

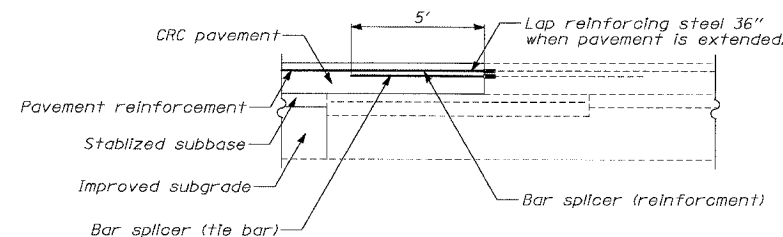


LONG TERM TRANSVERSE CONSTRUCTION JOINT SECTION A-A



PLAN

(CONNECTION TO EXISTING LONG TERM TRANSVERSE CONSTRUCTION JOINT)



LONG TERM TRANSVERSE CONSTRUCTION JOINT SECTION B-B

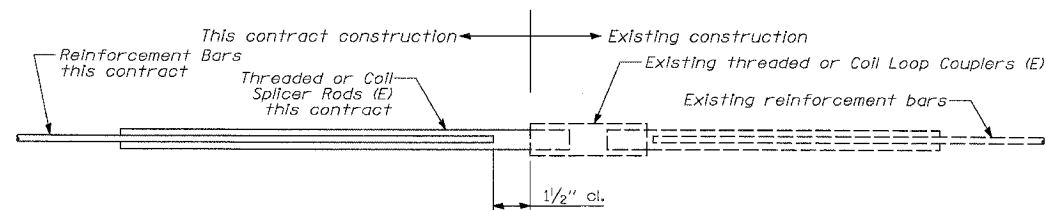
NOTES

- This detail shows connection of proposed CRC pavement to existing pavement at an existing long term transverse construction joint.
- Bar splicer assemblies shall be of an IDOT approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
- Bar splicers shall be of the "coupler" type, and shall not have flanges.
- Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
- All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
- Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
- Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:
 - Minimum Capacity (Tension in ksi) = $1.25 \times f_y \times A(t)$
 - Minimum Pull-out Strength (Tension in ksi) = $1.25 \times f_s(\text{allow}) \times A(t)$

Where:
 f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_s(\text{allow})$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 $A(t)$ = Tensile stress area of lapped reinforcement bars (in^2).
 * = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	STRENGTH REQUIREMENTS	
		Min. Capacity (kips) tension	Min. Pull-Out Strength (kips) tension
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0

- Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted.
- Reinforcement shall not be paid for separately but included in the cost of CONTINUOUSLY REINFORCED PORTLAND CEMENT PAVEMENT, of the thickness specified.
- Connection to long term transverse construction joint work includes the installation of the bar splicers, payment for this work will be included in the cost of CONTINUOUSLY REINFORCED PORTLAND CEMENT PAVEMENT of the thickness specified. Tie bars to be drilled and grouted shall not be paid for separately but included in the cost of PORTLAND CEMENT CONCRETE SHOULDERS, of the thickness specified.



BAR SPLICER ASSEMBLY DETAIL
 (E) : Indicates epoxy coating.



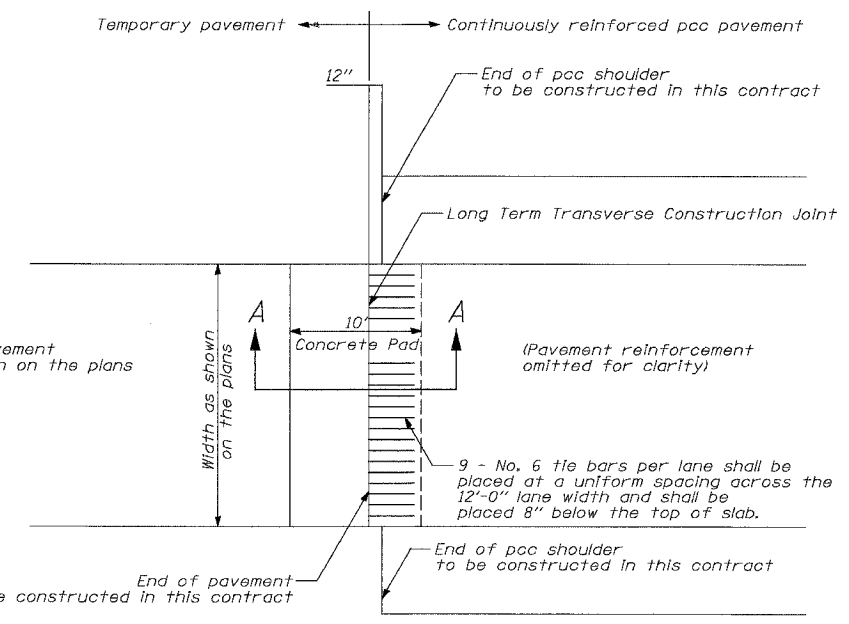
ROLLED THREAD DOWEL BAR

NOTES

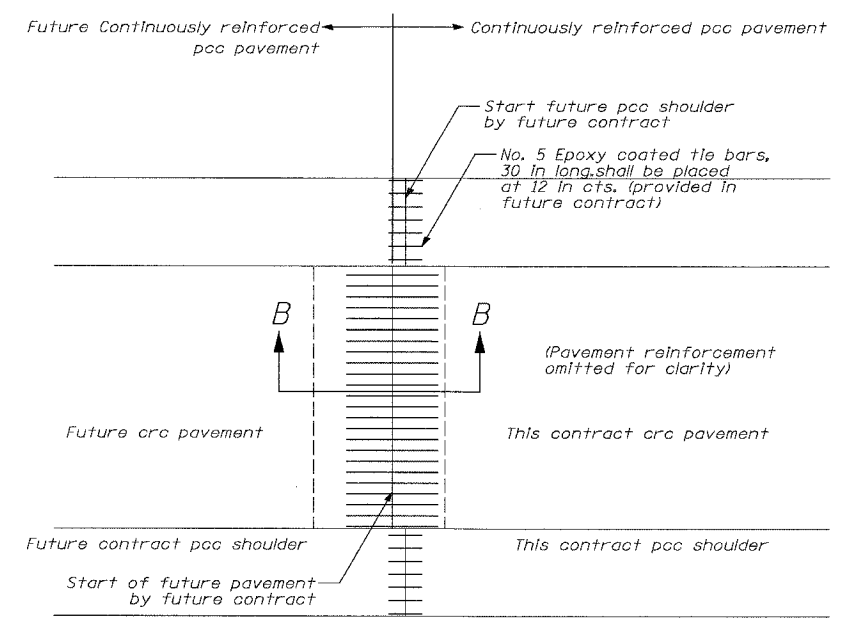
1. This detail shows the termination of proposed CRC pavement that will be extended by future construction.
 2. Bar splicer assemblies shall be of an IDOT approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 3. Bar splicers shall be of the "coupler" type, and shall not have flanges.
 4. Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
 5. All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
 6. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
 7. Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:
 - A. Minimum Capacity (Tension in ksi) = $1.25 \times f_y \times A(t)$
 - B. Minimum Pull-out Strength (Tension in ksi) = $1.25 \times f_s(\text{allow}) \times A(t)$
- Where:
 f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_s(\text{allow})$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 $A(t)$ = Tensile stress area of lapped reinforcement bars (in²).
 * = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	STRENGTH REQUIREMENTS	
		Min. Capacity (kips) tension	Min. Pull-Out Strength (kips) tension
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0

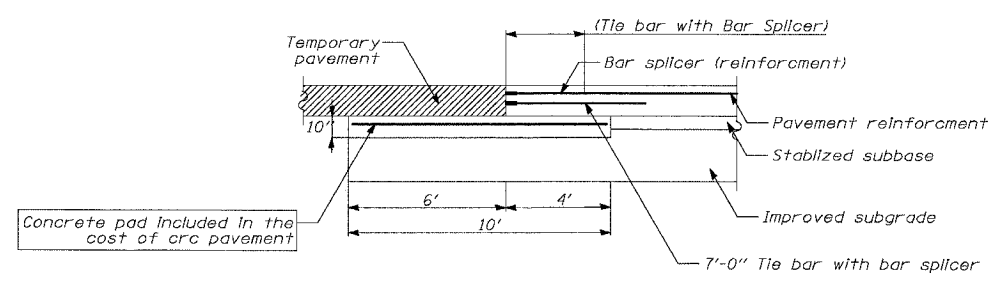
8. Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted.
9. Reinforcement shall not be paid for separately but included in the cost of CONTINUOUSLY REINFORCED PORTLAND CEMENT PAVEMENT, of the thickness specified.
10. Connection to long term transverse construction joint work includes the installation of the bar splicers, payment for this work will be included in the cost of CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT of the thickness specified. Tie bars to be drilled and grouted shall not be paid for separately but included in the cost of PORTLAND CEMENT CONCRETE SHOULDERS, of the thickness specified.



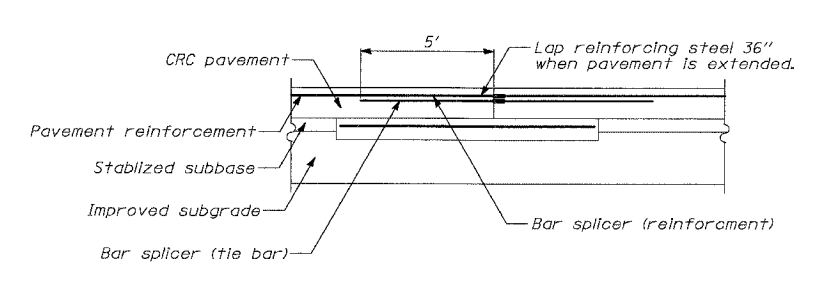
PLAN
(LONG TERM TRANSVERSE CONSTRUCTION JOINT IN THIS CONTRACT)



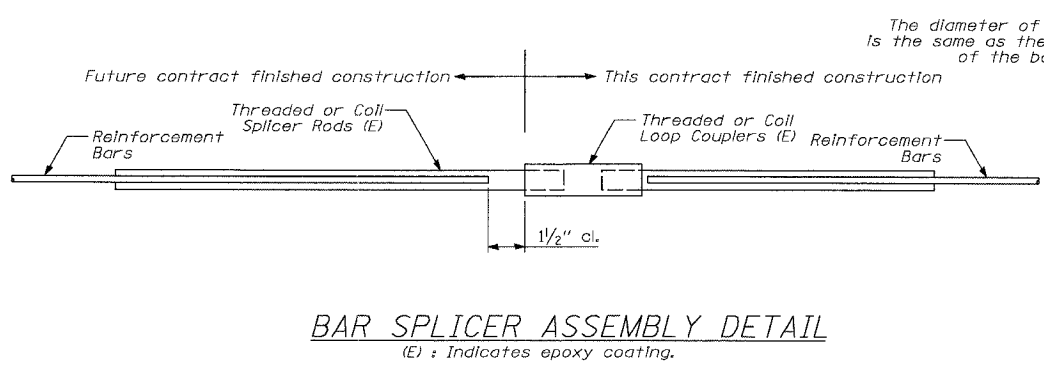
PLAN
(CONNECTION TO LONG TERM TRANSVERSE CONSTRUCTION JOINT BY FUTURE CONTRACT)



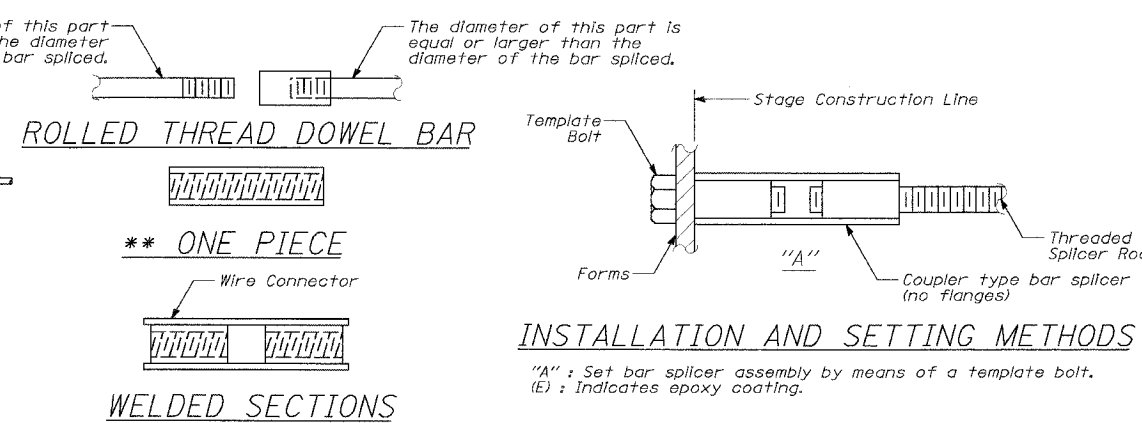
LONG TERM TRANSVERSE CONSTRUCTION JOINT SECTION A-A



LONG TERM TRANSVERSE CONSTRUCTION JOINT SECTION B-B



BAR SPLICER ASSEMBLY DETAIL
(E) : Indicates epoxy coating.



BAR SPLICER ASSEMBLY ALTERNATIVES
** Heavy Hex Nuts conforming to ASTM A 563M, Grade C, D or DH may be used.

INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
(E) : Indicates epoxy coating.

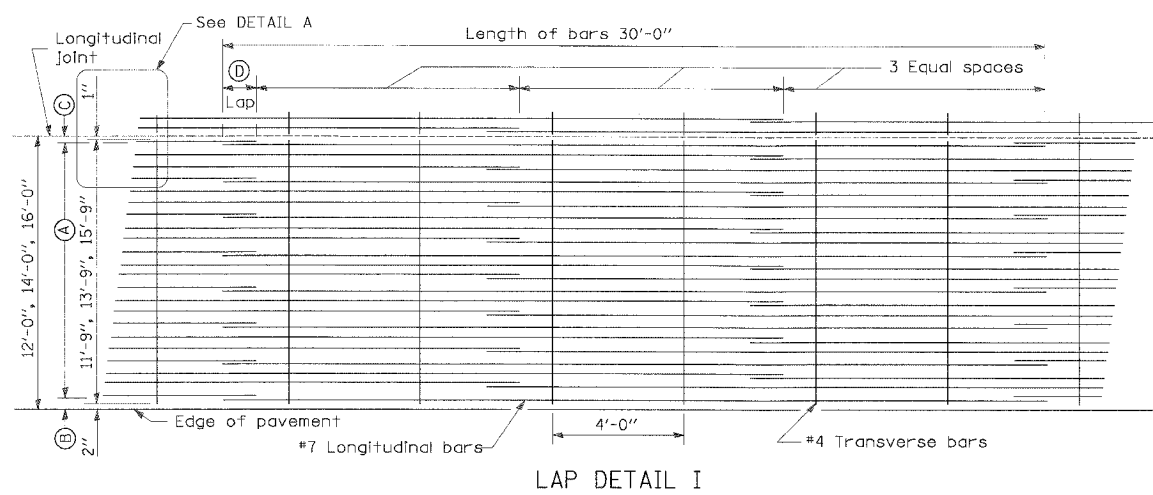
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 CIVIL DETAILS
 LONG TERM TRANSVERSE CONSTRUCTION JOINT
 (SHEET 2 OF 2)

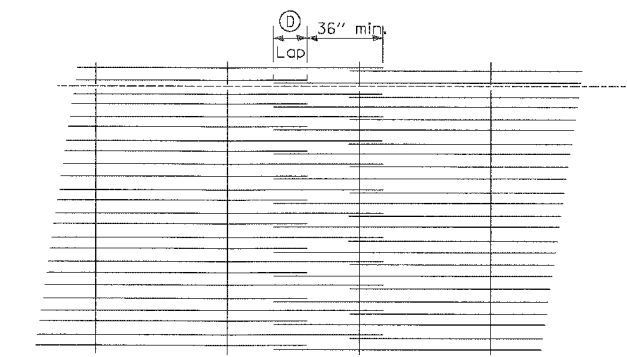
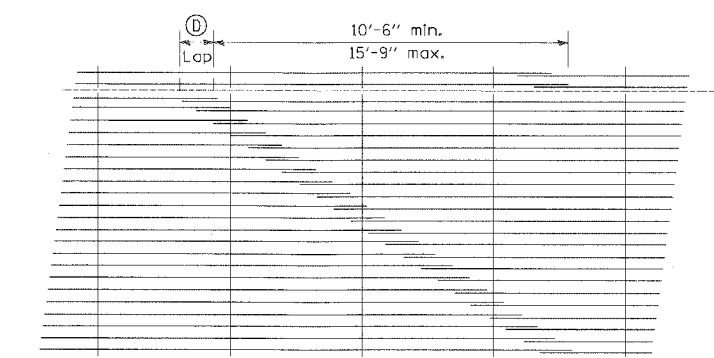
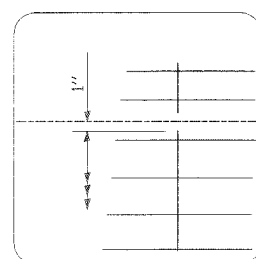
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F.A.I. SHEETS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	353
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	* (1818, ETC, 2324.6-1P)R-8			



Pavement Width	Bar Size	Pavement Thickness	(A) (Approx. Spacing)	(B)	(C)	(D)
12 feet	#7	14"	26 spaces (27 bars) @ 5 1/4"	3 1/2"	3"	26"
14 feet	#7	14"	30 spaces (31 bars) @ 5 5/8"	3 1/2"	3"	26"
16 feet	#7	14"	35 spaces (36 bars) @ 5 1/4"	3 1/2"	3"	26"



GENERAL NOTES

1. THE PAVEMENT REINFORCEMENT SHALL BE 4.5" FROM THE TOP OF PAVEMENT.
2. EXCEPT AS NOTED OR SHOWN, THE DIMENSIONS AND NOTES SPECIFIED FOR LAP DETAIL I ARE TYPICAL FOR LAP DETAIL II AND III.
3. THE (D) DIMENSION AND THE DISTANCE FROM THE END OF THE TRANSVERSE BAR TO THE EDGE OF PAVEMENT MAY BE INCREASED BY 1" FOR SLIP FORM PAVING.

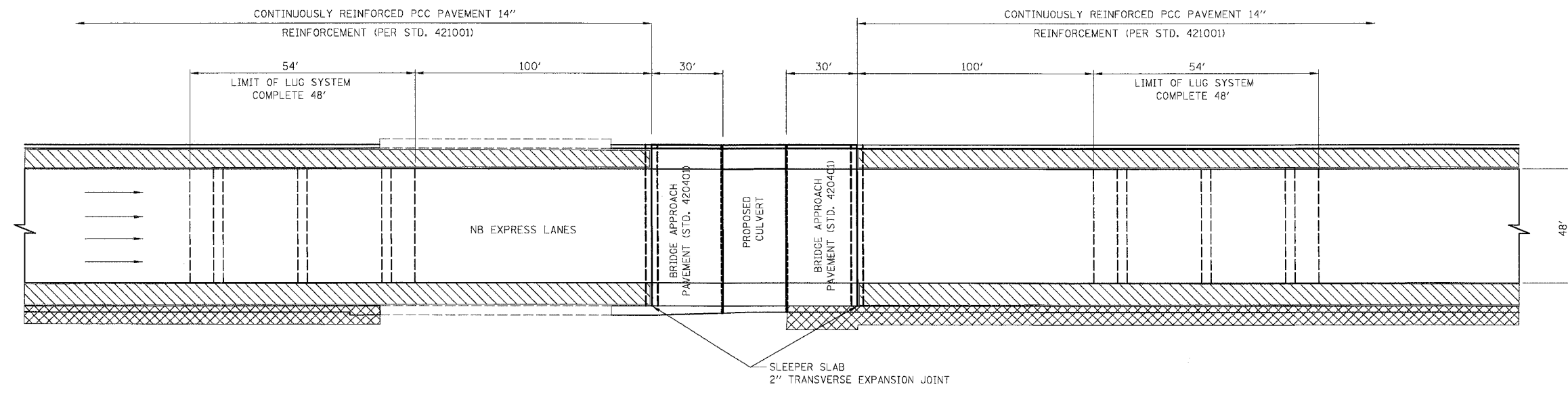
CDT-6

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) 31ST STREET TO 71ST STREET NB EXPRESS LANE RECONSTRUCTION CIVIL DETAILS EXTENDED LANE REINFORCEMENT FOR CONTINUOUSLY REINFORCED PCC PAVEMENT SCALE: NONE DATE: 7/7/05
NAME	DATE	
		DRAWN BY: TAI CHECKED BY: DPB

Edwards AND Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

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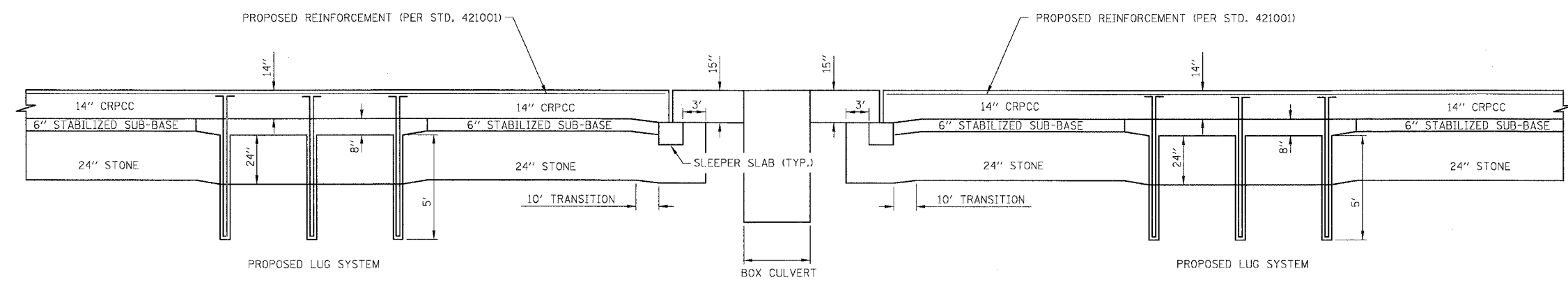
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	354
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	*1818, ETC, 2324.6-1PR-8			



PROPOSED PLAN

LEGEND:

	PCC SHOULDERS 14"
	TEMPORARY PAVEMENT



PROPOSED PROFILE

MATERIALS REQUIRED FOR ONE LUG SYSTEM COMPLETE 48'
(EXCLUDING PAVEMENT CONCRETE AND PAVEMENT REINFORCEMENT)

BAR	QTY.	SIZE	LENGTH	SHAPE
a	266	#8	16'-4"	
b	18	#5	48'-9"	
c	266	#5	20'-0"	
d	56	#4	11'-9"	

CONCRETE 116 CU. YDS.
REINFORCING BARS 18,502 LBS.

- NOTE
- ABOVE SCHEDULE ONLY ACCOUNTS FOR ONE OF THE TWO LUG SYSTEMS
 - LUG SYSTEM COMPLETE 48' IS SIMILAR TO (24") CRC PAVEMENT -WITH LUG SYSTEM (STD. 421201). SEE STANDARD 421201 FOR LAYOUT OF REINFORCING BARS.

BOWMAN, BARRETT & ASSOCIATES INC.
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REVISIONS	NAME	DATE

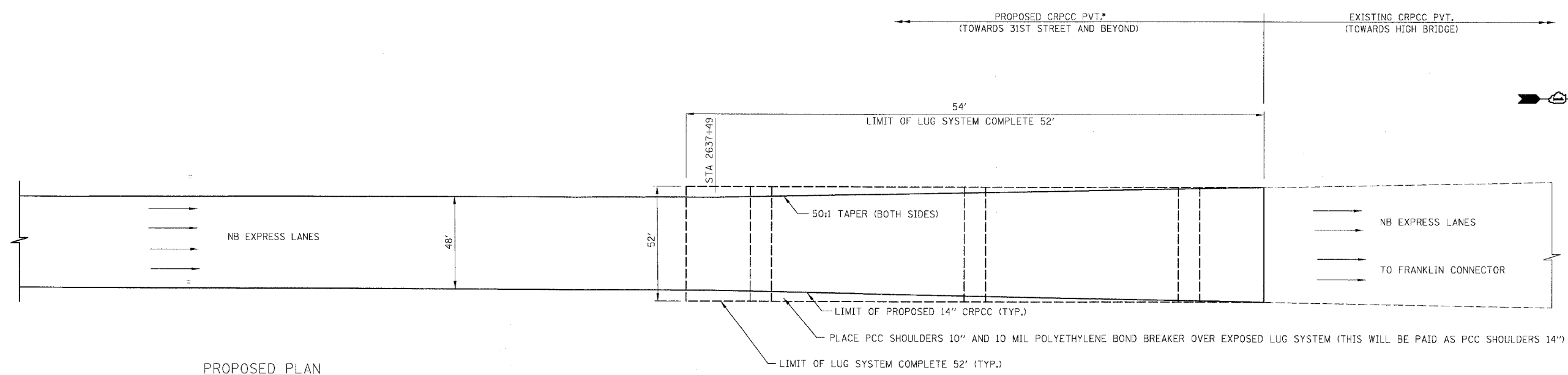
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
LUG SYSTEM INTERFACE
AT PERSHING ROAD

SCALE: NTS
DATE: 07/07/05

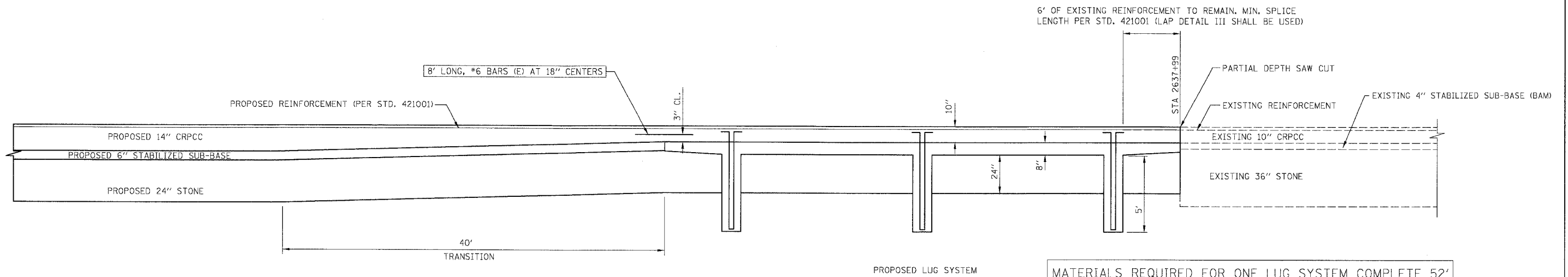
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CHECKED BY: TF

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PROPOSED PLAN



PROPOSED PROFILE

MATERIALS REQUIRED FOR ONE LUG SYSTEM COMPLETE 52' (EXCLUDING PAVEMENT CONCRETE AND PAVEMENT REINFORCEMENT)

BAR	QTY.	SIZE	LENGTH	SHAPE
a	266	#8	15'-8"	
b	18	#5	52'-9"	
c	266	#5	20'-0"	
d	56	#4	12'-3"	

CONCRETE 126 CU. YDS.
REINFORCING BARS 18,127 LBS.

- NOTES
- EXISTING LUG SYSTEM AND RELIEF JOINT LOCATIONS MAY DIFFER FROM STATIONING SHOWN IN PLANS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING EXISTING LUG SYSTEMS AND RELIEF JOINTS PRIOR TO WORK BEING PERFORMED.
 - THE CONTRACTOR SHALL TAKE CARE IN REMOVING THE EXISTING CRC PAVEMENT SO AS NOT TO DAMAGE THE PORTIONS OF THE LUG SYSTEM TO BE INCORPORATED. ANY DAMAGE TO THE EXISTING LUG SYSTEM IS TO BE REPAIRED AT THE CONTRACTOR'S EXPENSE AS DIRECTED BY THE ENGINEER.
 - 4"-#6 BARS ARE TO BE SUPPORTED BY PINS OR OTHER METHOD AS APPROVED BY THE ENGINEER. MUCKING IN OF THE BARS IS NOT ACCEPTABLE. COST OF THESE ADDITIONAL BARS WILL NOT BE PAID FOR SEPARATE, BUT WILL BE INCLUDED IN THE PRICE FOR CRPCC PAVEMENT 14".
 - TRANSITION AREA FROM 10" TO 14" CRPCC AND 10" CRPCC WILL BE PAID AS CRPCC PAVEMENT 14".
 - LUG SYSTEM COMPLETE 52' IS SIMILAR TO (24") CRC PAVEMENT - WITH LUG SYSTEM (STD. 421201). SEE STANDARD 421201 FOR LAYOUT OF REINFORCING BARS.

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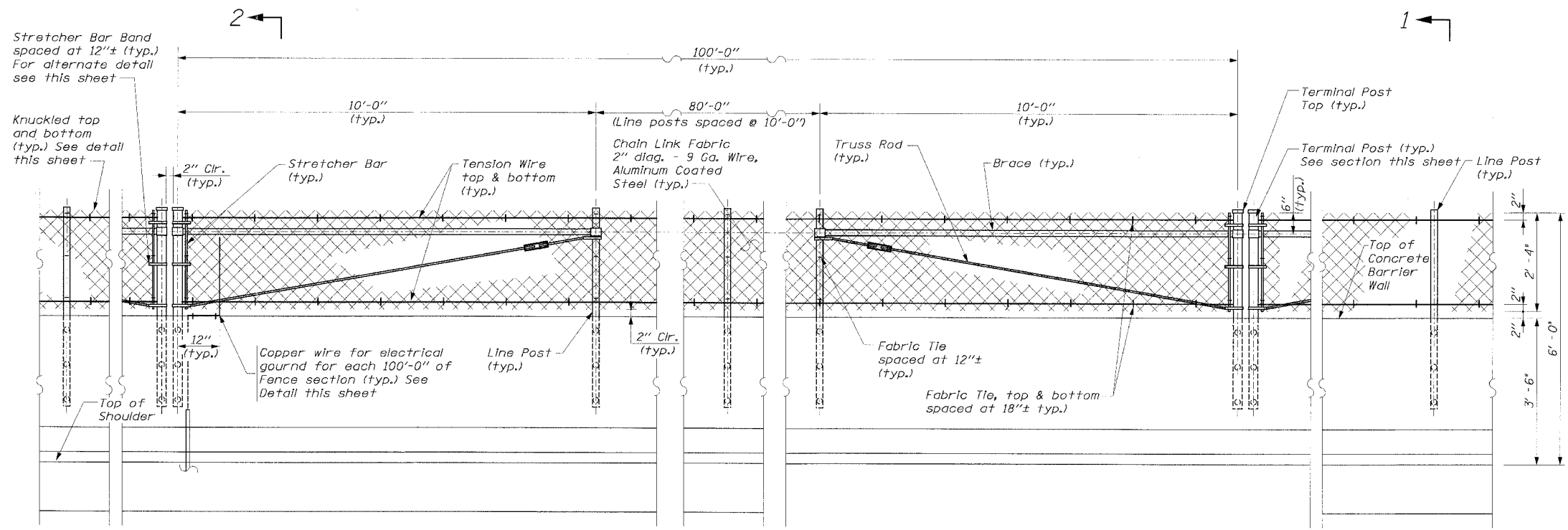
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
LUG SYSTEM INTERFACE
AT 31ST STREET

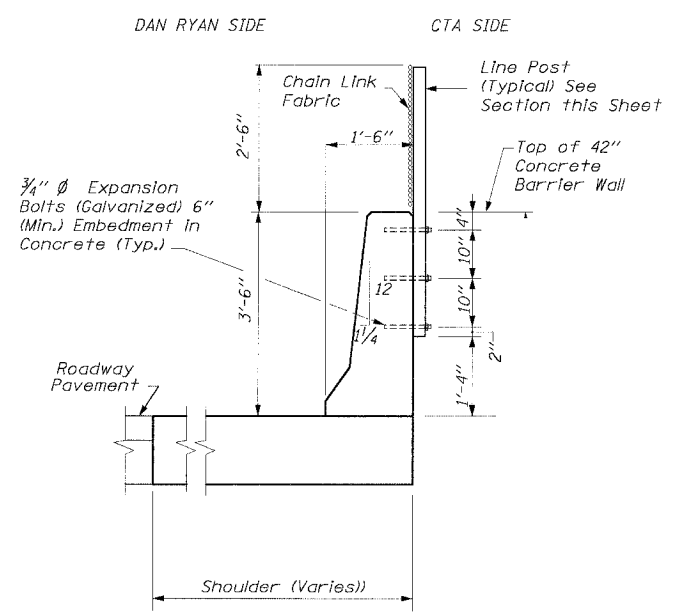
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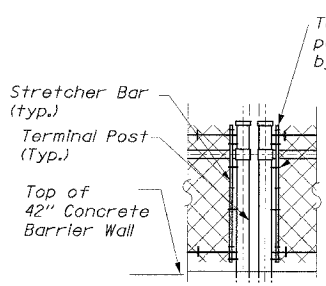
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	357
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	1818, ETC, 2324.6-1PIR-8			



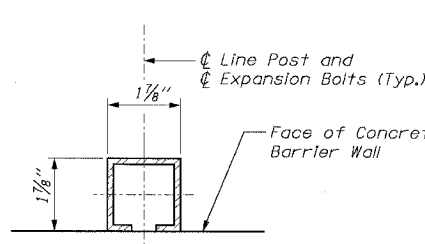
ELEVATION
CHAIN LINK FENCE ON CONCRETE BARRIER WALL



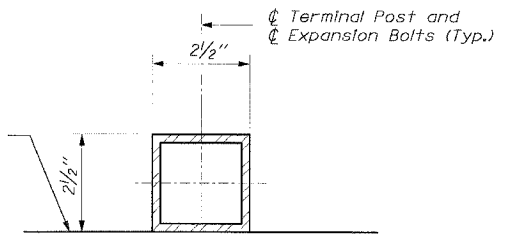
SECTION 1-1



ALTERNATE DETAIL FOR
STRETCHER BAR BAND



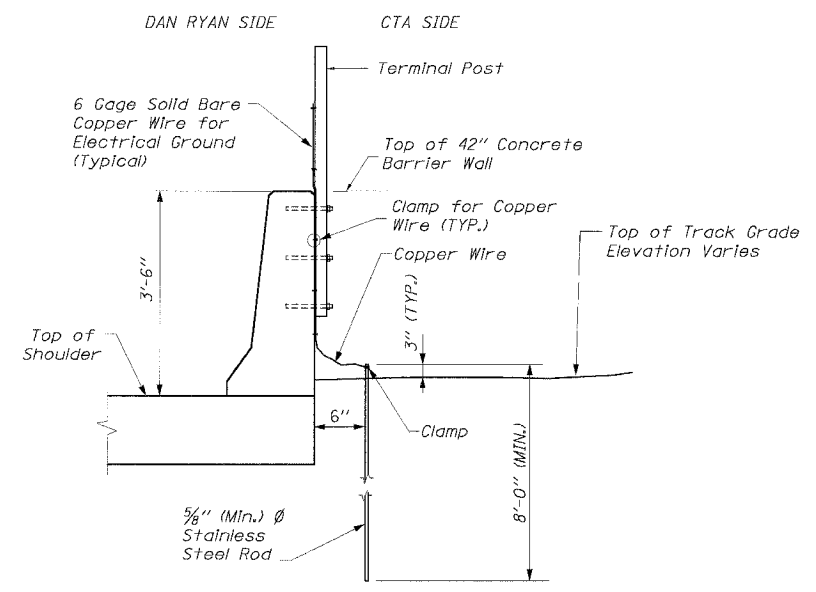
LINE POST SECTION



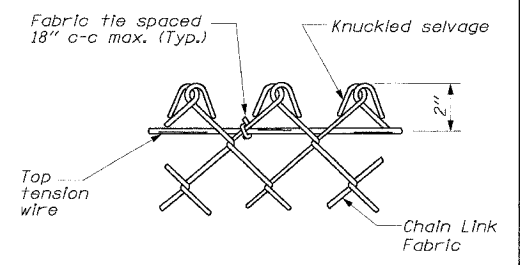
TERMINAL POST SECTION

NOTE:
The Contractor May Use Another C Section as per the Standards of the Illinois Department of Transportation.

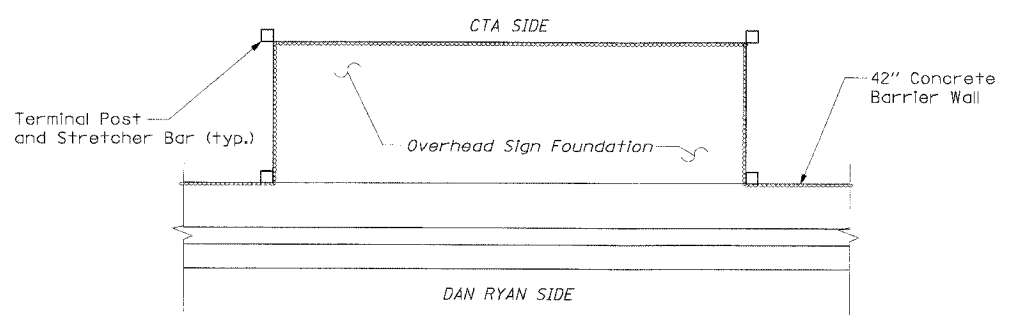
NOTE:
Where the fence meets bridge piers and other vertical structures taller than the fence a maximum gap of 2" clear between the terminal post is to be provided.



SECTION 2-2
ELECTRICAL GROUND DETAIL



KNUCKLED DETAIL



DETAIL AT OVERHEAD SIGN FOUNDATIONS

Fence, hardware and posts around the overhead sign foundation are paid for as CTA Fence.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION

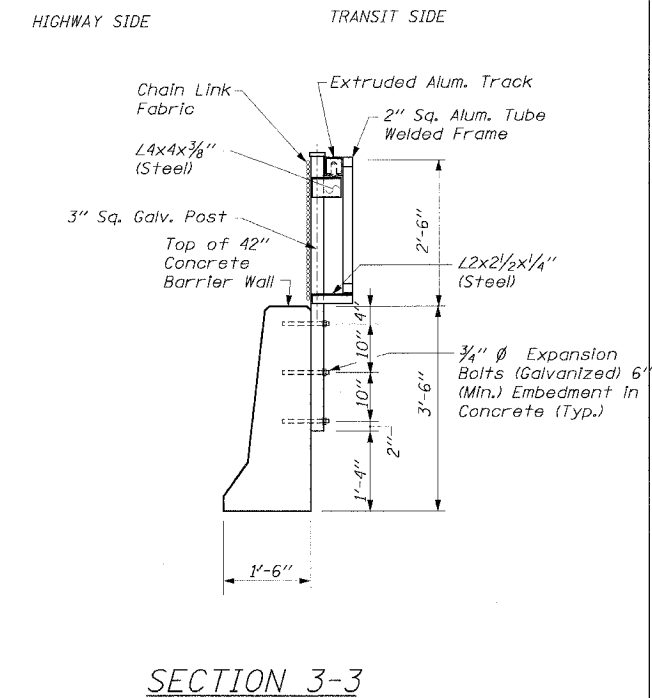
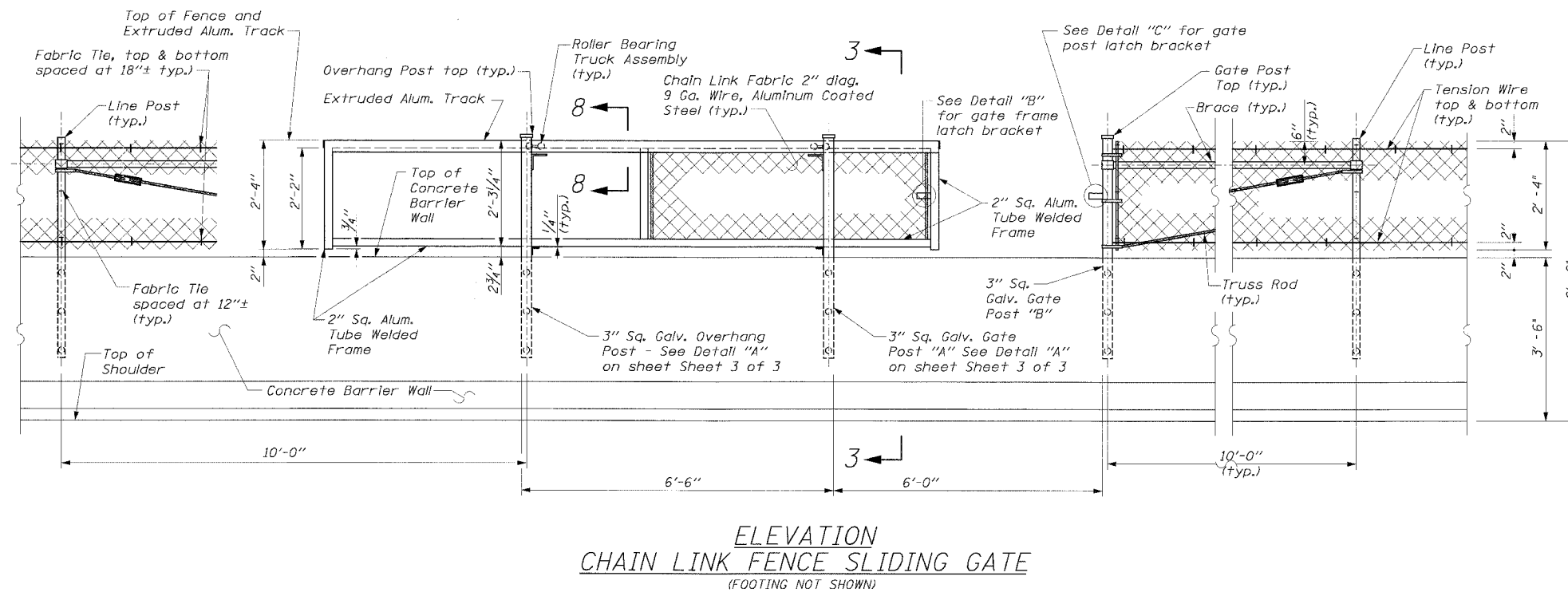
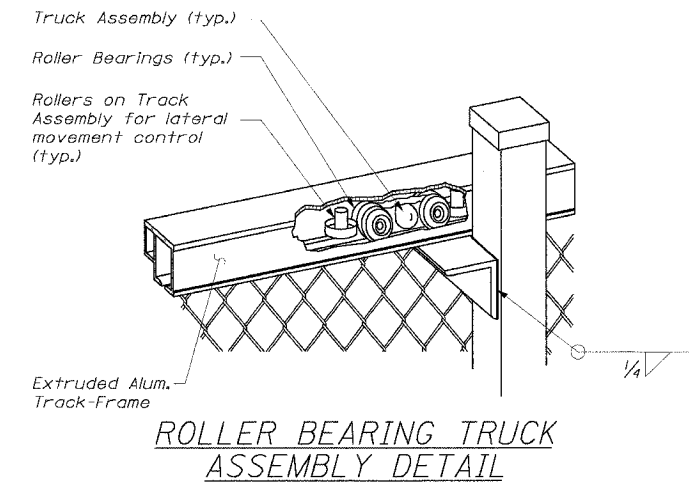
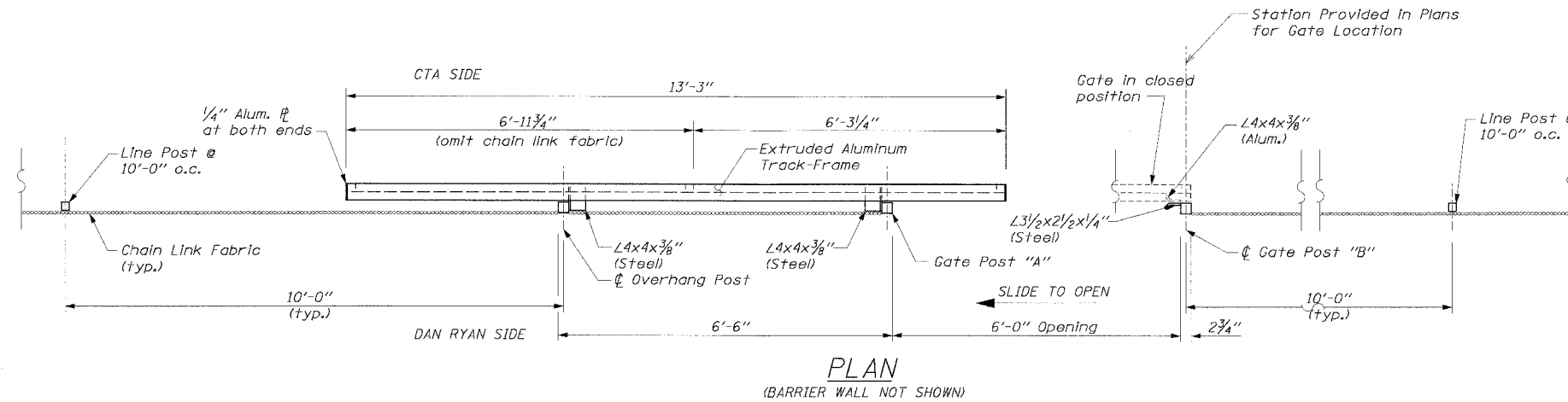
CTA FENCE
ELEVATIONS AND DETAILS
SHEET 1 OF 3

SCALE: NONE
DATE: 7/7/05

DRAWN BY: RLK
CHECKED BY: EL

Edwards AND Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
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06/24/2005 01:32:16 PM

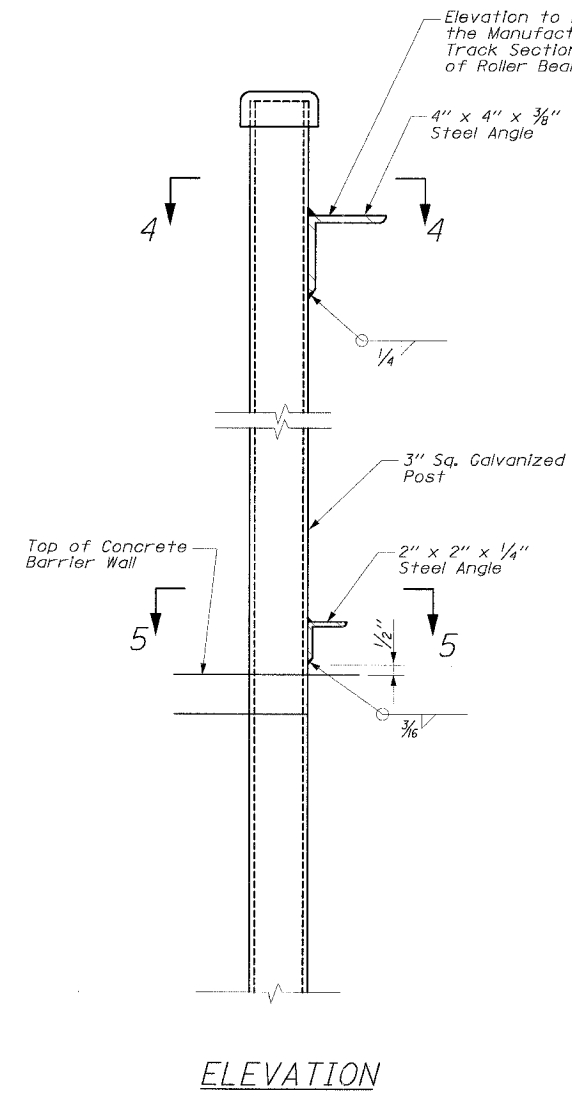


NOTE: For Additional Details and Sections see Sheet 3 of 3

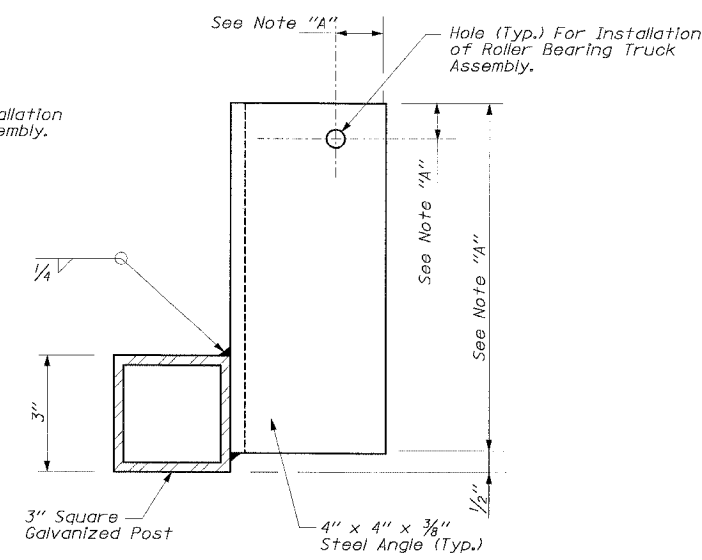
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 CTA FENCE
 ELEVATIONS AND DETAILS
 SHEET 2 OF 3
 SCALE: NONE
 DATE: 7/7/05
 DRAWN BY: RLK
 CHECKED BY: EL

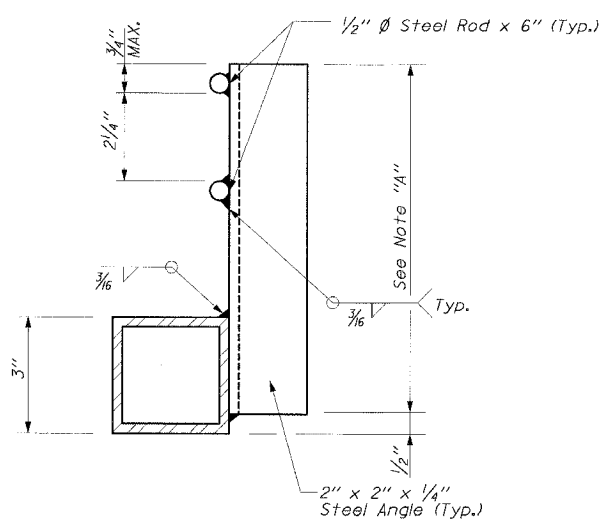
F.A.I. SHEETS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	359
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	11818, ETC, 2324.6-IPR-8			



ELEVATION



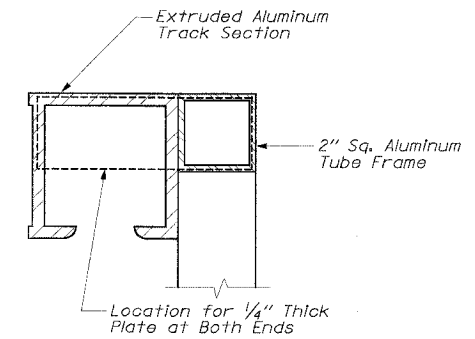
SECTION 4-4



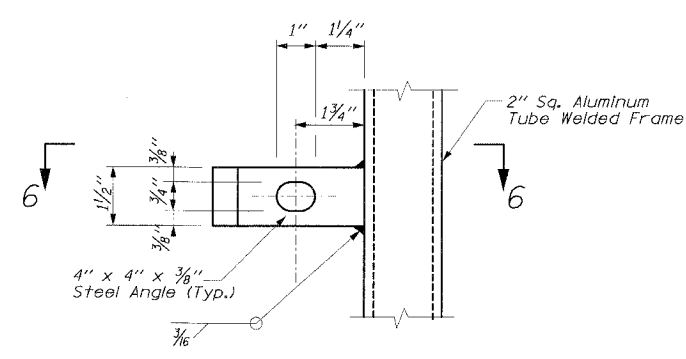
SECTION 5-5

DETAIL A
 For Overhang Post - As Shown
 For Gate Post "A" - Opposite Hand

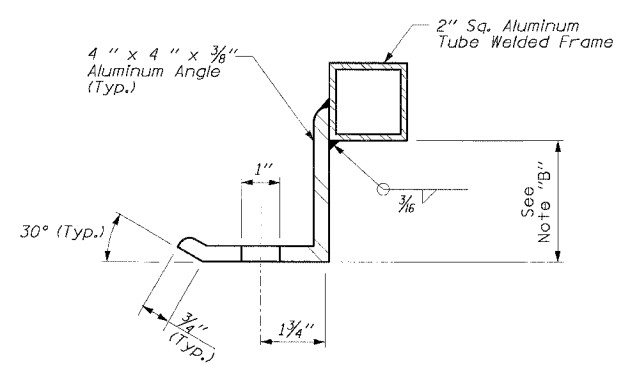
NOTE:
 "A": The Manufacturer of the Sliding Gate Shall Determine the Length of Angles and Location of Hole for Installation of Roller Bearing Truck Assembly.



SECTION 8-8



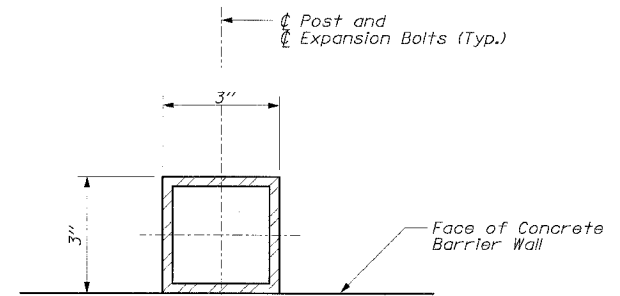
ELEVATION



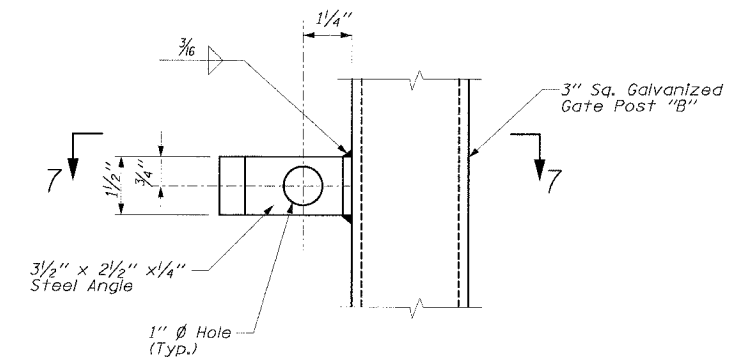
SECTION 6-6

DETAIL B

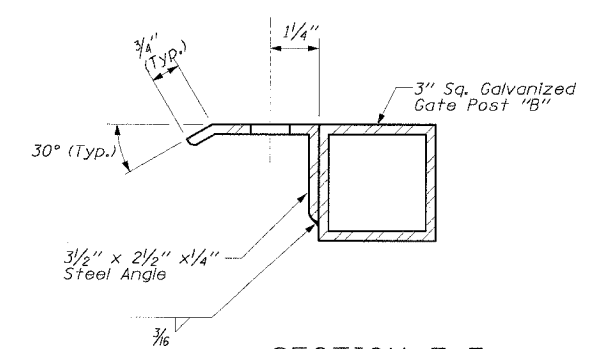
NOTE:
 "B": The Manufacturer of the Sliding Gate Shall Set the Angle Based on the Size of the Track Frame



GATE AND OVERHANG POST SECTION



ELEVATION



SECTION 7-7

DETAIL C

GENERAL NOTE:
 The Slide Gates Shall be of the Cantilevered Type with NO Track or Support Across the Opening.

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 WEB: WWW.EKCORP.COM

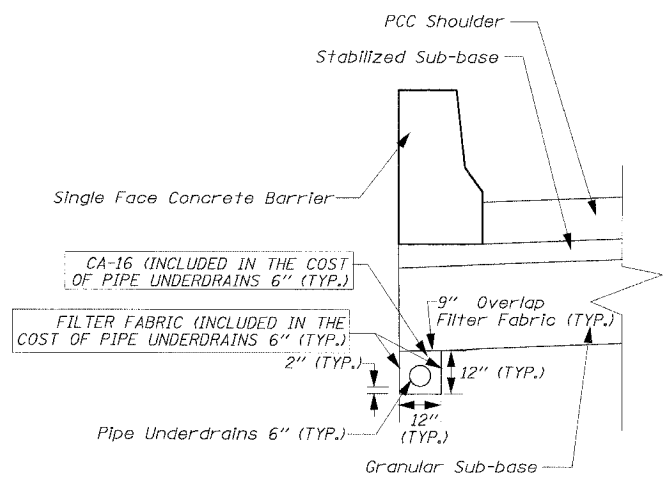
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 CTA FENCE
 ELEVATIONS AND DETAILS
 SHEET 3 OF 3
 SCALE: NONE DRAWN BY: RLK
 DATE: 7/7/05 CHECKED BY: EL

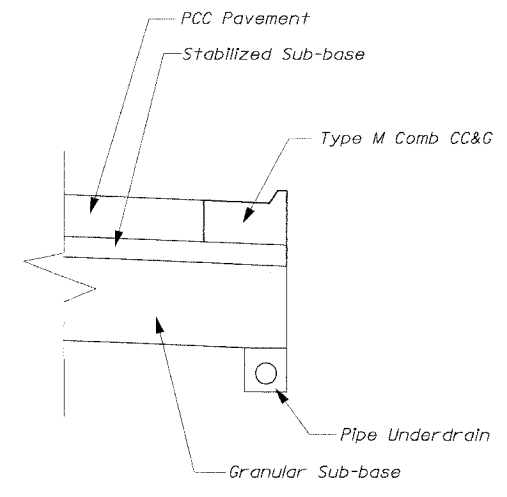
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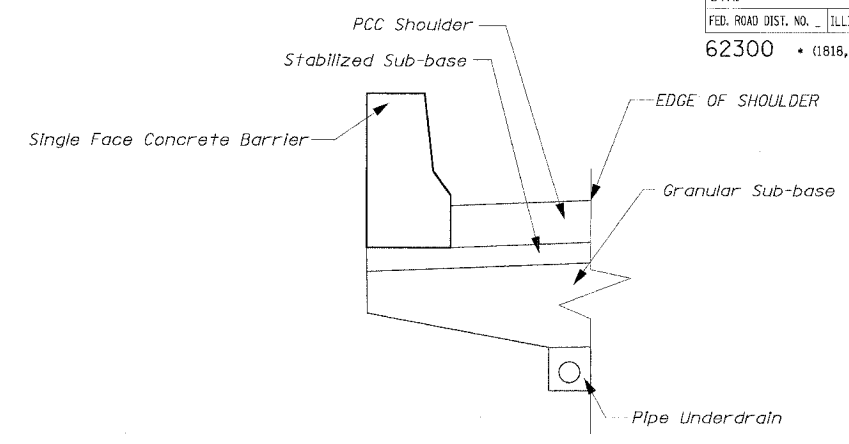
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94/90		COOK	556	360
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300		(1818, ETC, 2324.6-1PIR-8		



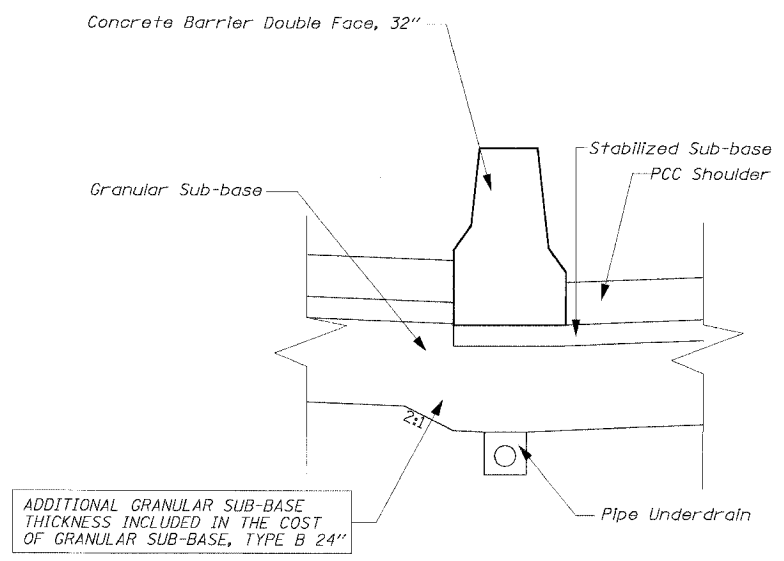
PIPE UNDERDRAINS 6" UNDER SINGLE FACE BARRIER WALL



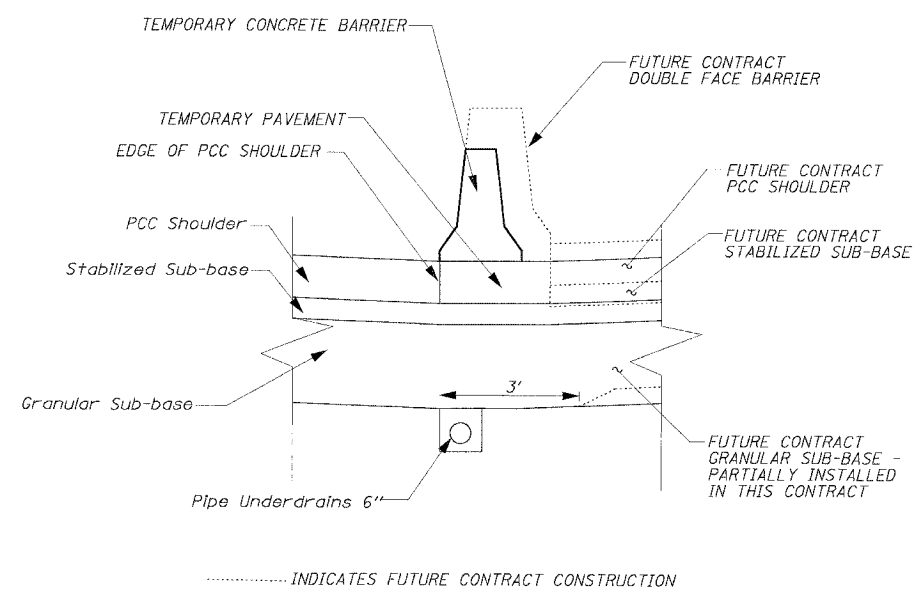
PIPE UNDERDRAINS 6" - UNDER TYPE M COMBINATION CONCRETE CURB & GUTTER



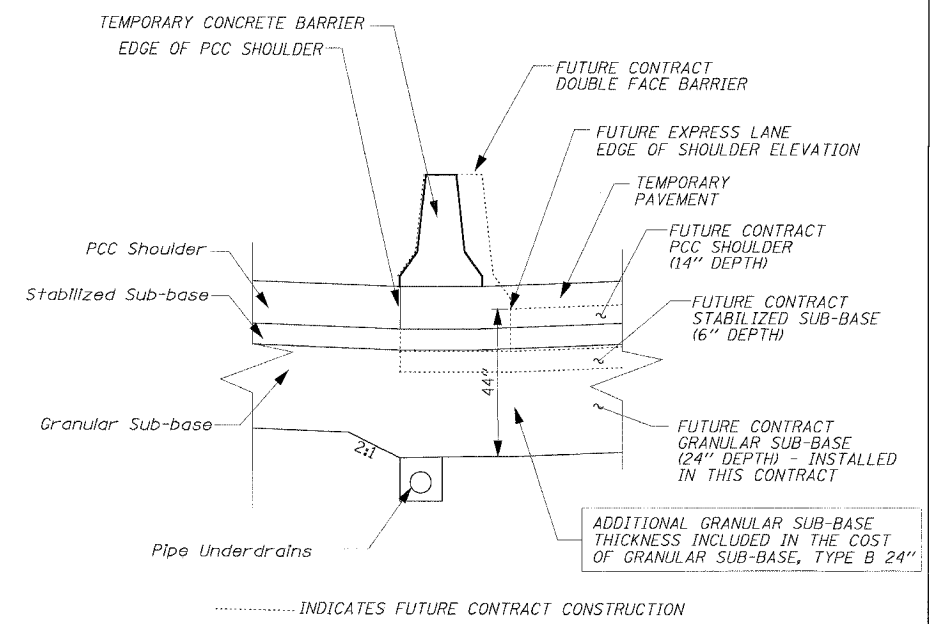
PIPE UNDERDRAINS 6" UNDER SHOULDER ADJACENT TO CTA



PIPE UNDERDRAINS 6" UNDER DOUBLE FACE BARRIER WALL



PIPE UNDERDRAINS 6" UNDER TEMPORARY CONCRETE BARRIER WALL SCENARIO A - FUTURE LOCAL LANES HIGHER THAN EXPRESS LANES



PIPE UNDERDRAINS 6" UNDER TEMPORARY CONCRETE BARRIER WALL SCENARIO B - FUTURE LOCAL LANES LOWER THAN EXPRESS LANES

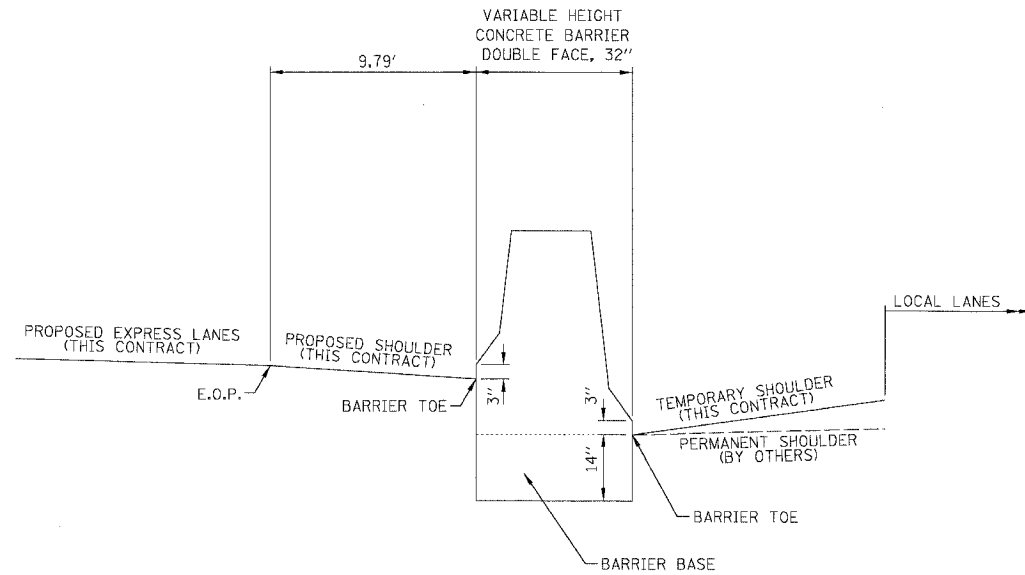
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 CIVIL DETAILS
 PIPE UNDERDRAINS 6"
 SCALE: NONE
 DATE: 7/7/05
 DRAWN BY: TAI
 CHECKED BY: PJM

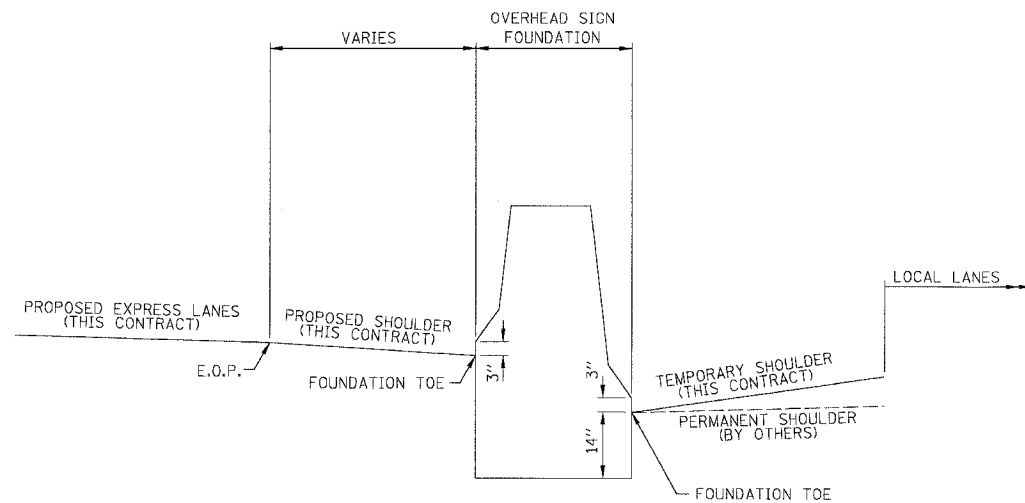
CDT-13

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CONCRETE BARRIER DOUBLE FACE

EXPRESS LANE STATION	E.O.P. ELEV. OUTSIDE EXPRESS LANES	TOE OF BARRIER ELEV. ALONG EXPRESS LANES	TOE OF BARRIER ELEV. ALONG LOCAL LANES
2530+00	-4.83	-5.41	-4.54
2530+50	-4.32	-4.90	-3.93
2531+00	-3.81	-4.39	-3.17
2531+50	-3.30	-3.88	-2.31
2532+00	-2.42	-2.89	-1.65
2532+50	-1.46	-1.85	-0.96
2533+00	-0.49	-0.88	-0.19
2533+50	0.48	0.09	0.59
2534+00	1.45	1.06	1.35
2534+50	2.42	2.03	2.15
2535+00	3.39	3.00	2.93
2535+50	4.36	3.98	3.69
2536+00	5.33	5.08	4.38
2536+50	6.07	5.88	5.11
2537+00	6.57	6.37	5.77
2537+50	7.08	6.88	6.48
2538+00	7.59	7.39	7.17
2538+50	8.10	7.90	7.78
2539+00	8.61	8.41	8.29
2539+50	9.12	8.92	8.72
2540+00	9.62	9.42	9.05
2540+50	10.05	9.85	9.31
2541+00	10.41	10.21	9.46
2541+50	10.55	10.32	9.52
2542+00	10.49	10.18	9.64
2542+50	10.35	9.97	9.84
2543+00	10.15	9.75	9.77



DOUBLE FACE OVERHEAD SIGN FOUNDATION

EXPRESS LANE STATION	E.O.P. ELEV. OUTSIDE EXPRESS LANES	TOE OF FOUNDATION ELEV. ALONG EXPRESS LANES	TOE OF FOUNDATION ELEV. ALONG LOCAL LANES	LOCAL LANE STATION
2536+25.78	5.82	5.64	4.72	4535+94.62
2536+36.53	5.93	5.75	4.93	810+07.19
819+24.43	8.22	7.68	8.38	4545+30
819+34.43	8.16	7.62	8.26	4545+40
2570+88.71	-0.69	-1.05	-2.07	4570+95
2570+98.71	-0.53	-0.89	-1.90	4571+05
2598+52.69	11.71	11.36	10.77	4598+59
2598+64.69	11.63	11.28	10.69	4598+71
2598+87.69	11.48	11.13	10.53	4598+94
2598+99.69	11.40	11.05	10.45	4599+06

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 DOUBLE FACE BARRIER
 ELEVATIONS

SCALE: NTS
 DATE: 07/07/05

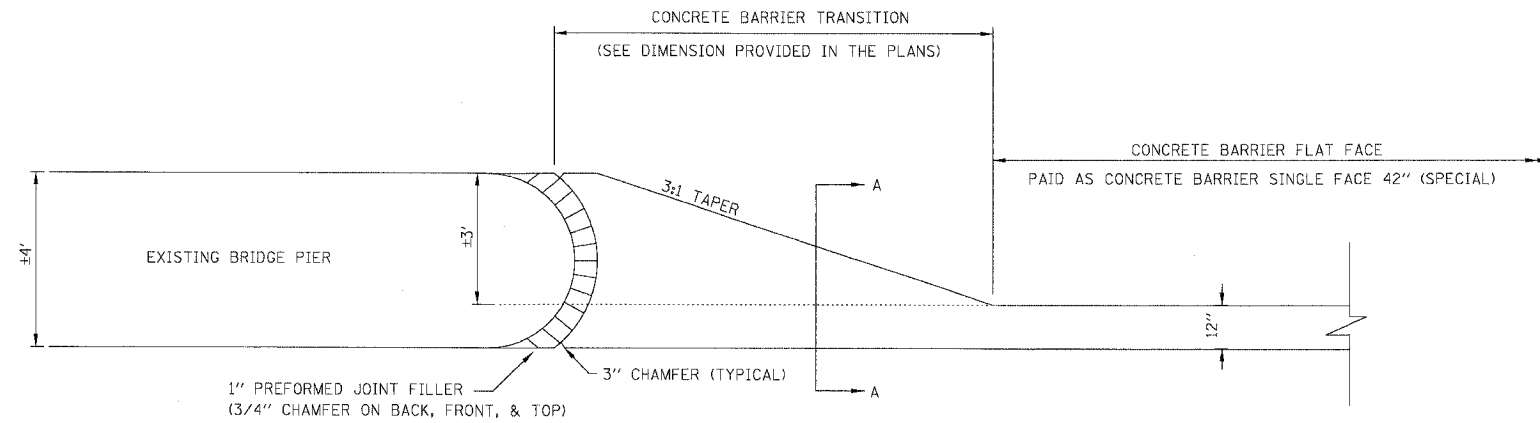
DRAWN BY: JDC
 CHECKED BY: RS

BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbainc.com

CDT-14

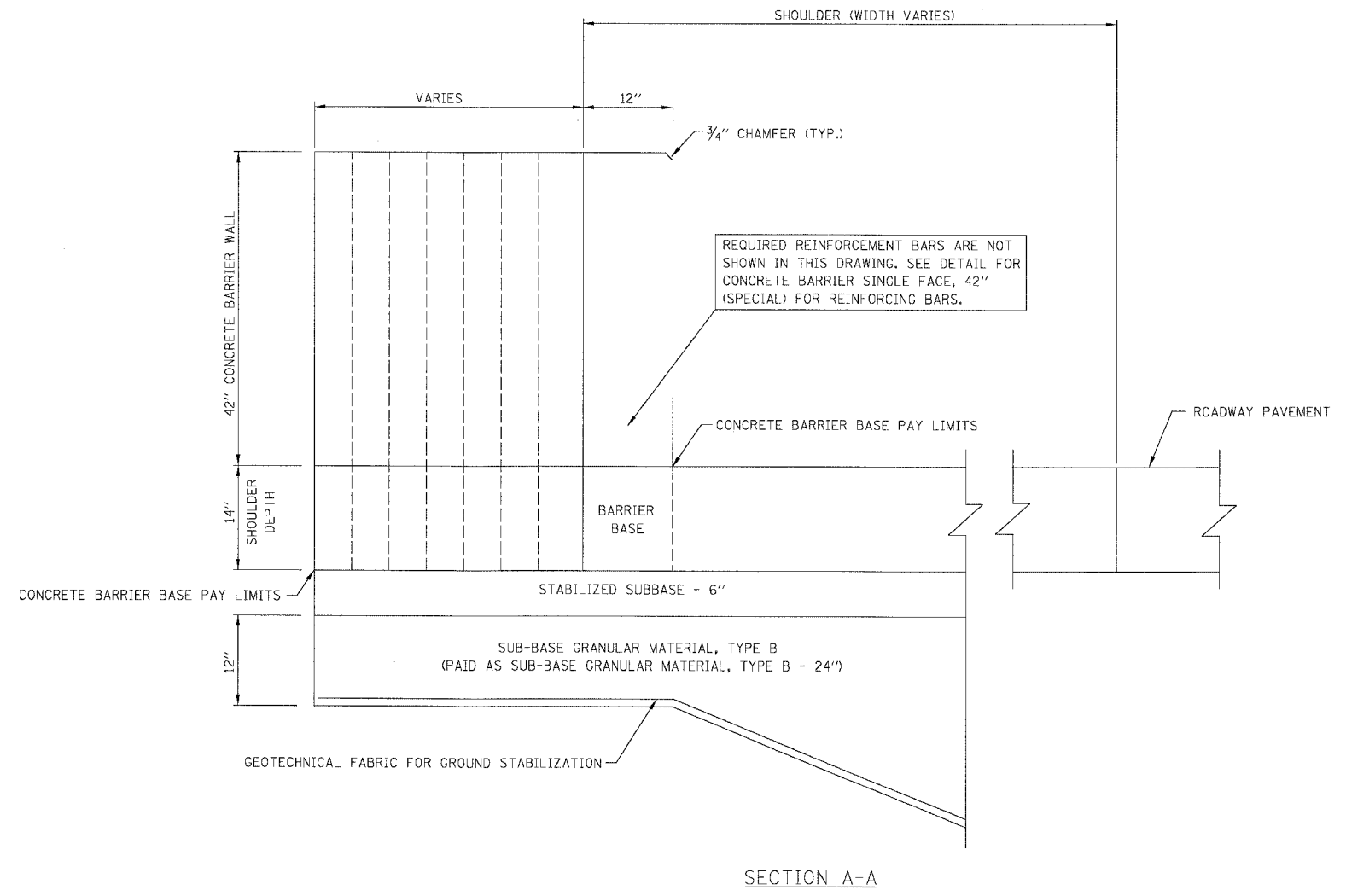
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 6/27/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	362
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	*1818, ETC, 2324.6-1PR-8			



CONCRETE BARRIER FLAT FACE

STA. 2575+72.07 TO STA. 2576+21.44
 STA. 2576+40.50 TO STA. 2576+78.37



SECTION A-A

REVISIONS	
NAME	DATE

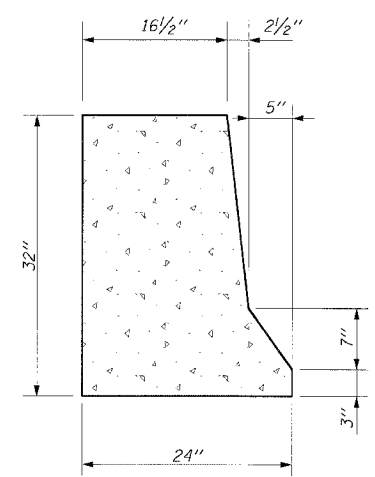
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
CONCRETE BARRIER FLAT FACE
 SCALE: NTS
 DATE: 07/07/05
 DRAWN BY: JDC
 CHECKED BY: RS

BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
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 312.228.0100
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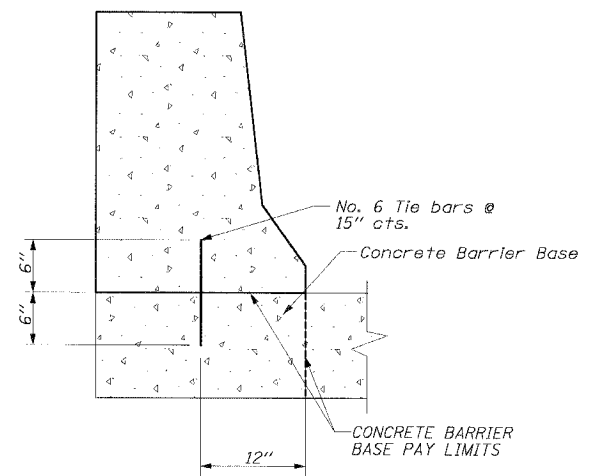
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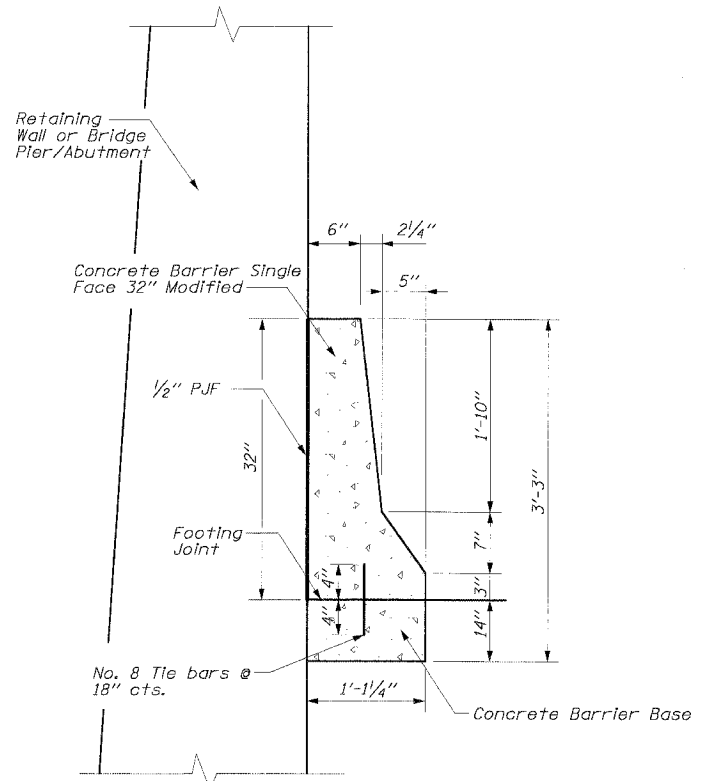
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94/90		COOK	556	363
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	• (181B, ETC, 2324.6-1PR-8			



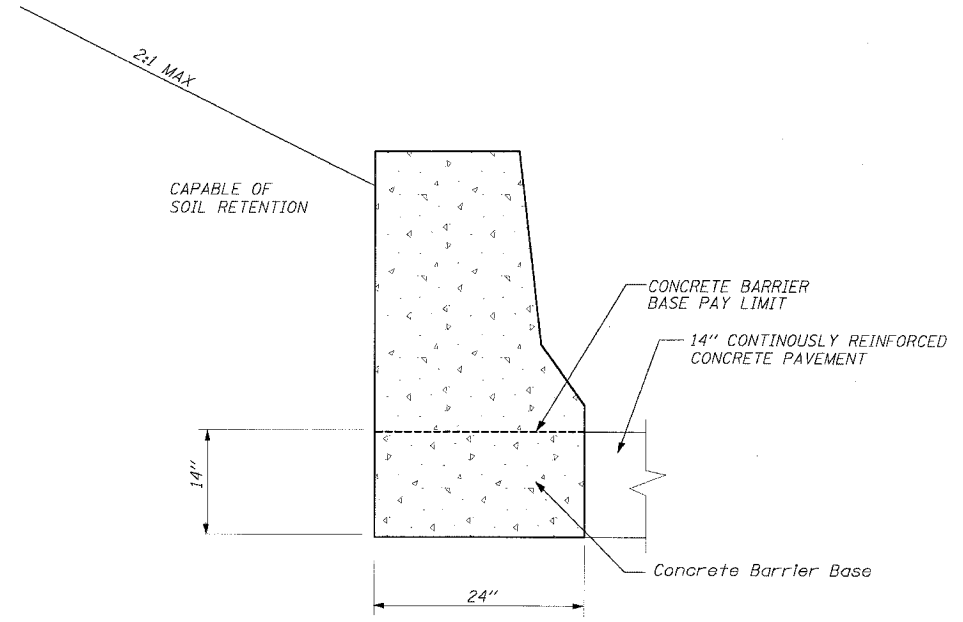
**CONCRETE BARRIER
TYPICAL SECTION**



ANCHORING METHOD

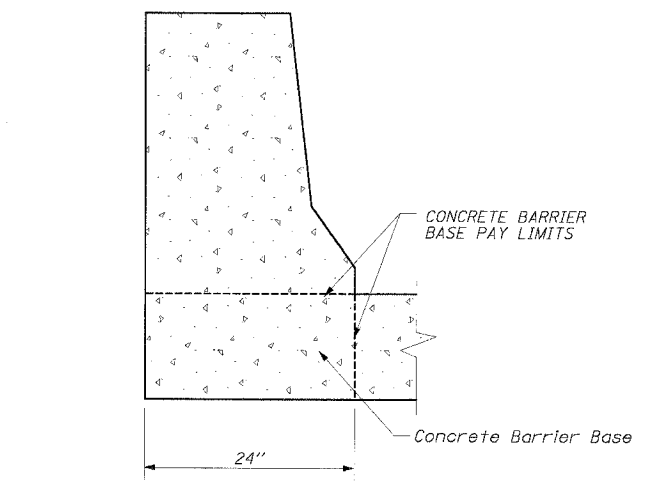


**CONCRETE BARRIER
SINGLE FACE, 32 IN, MODIFIED**
*(Used Adjacent to Retaining Walls
or Bridge Piers or Abutments)*

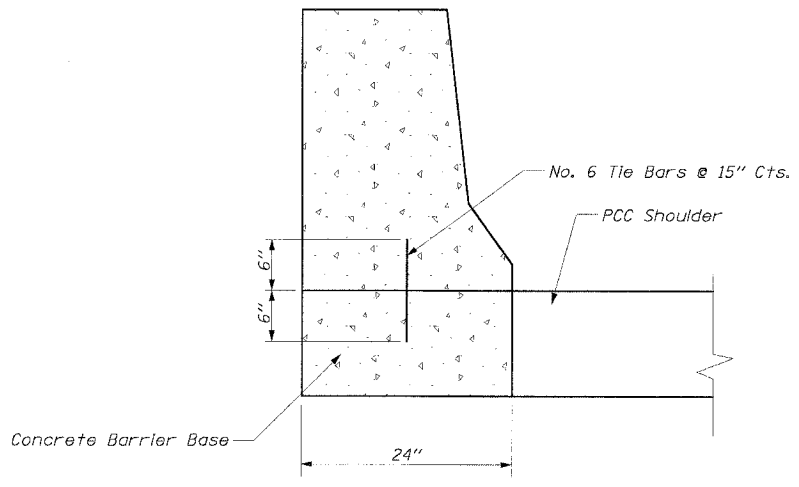


**CONCRETE BARRIER
ALTERNATE ANCHORING METHOD**

IF SOIL RETENTION IS USED, 14" CONTINUOUSLY REINFORCED CONCRETE PAVEMENT MUST BE IN PLACE PRIOR TO BACKFILLING BARRIER WALL



**CONCRETE BARRIER INTEGRAL
WITH PCC SHOULDER SLAB**



**CONCRETE BARRIER ON
INDEPENDANT FOUNDATION**

NOTE:

1. THE CONTRACTOR HAS THE OPTION OF CHOOSING BETWEEN ANCHORING METHODS SHOWN ON THIS SHEET.
2. ALL TIE BARS SHOWN ON THIS SHEET SHALL BE EPOXY COATED.

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ONE NORTH FRANKLIN
CHICAGO, IL 60606
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION

CIVIL DETAILS
CONCRETE BARRIER, SINGLE FACE, 32"

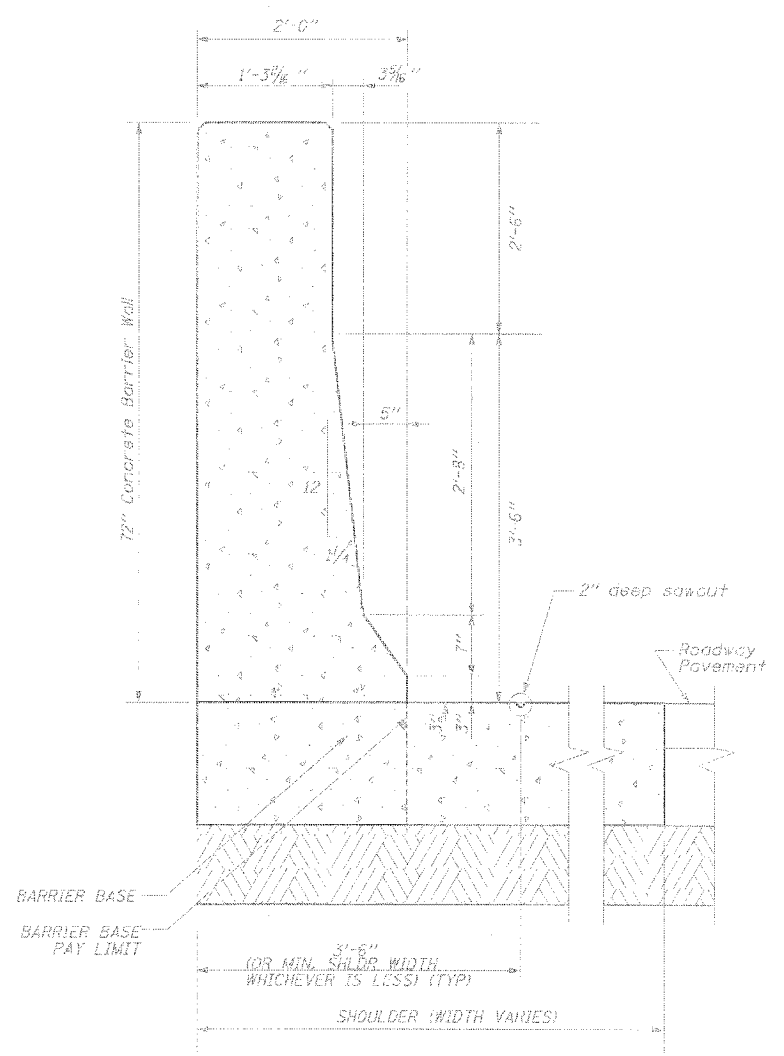
SCALE: NOT TO SCALE
DATE: 7/7/05

DRAWN BY: AJW
CHECKED BY: EL

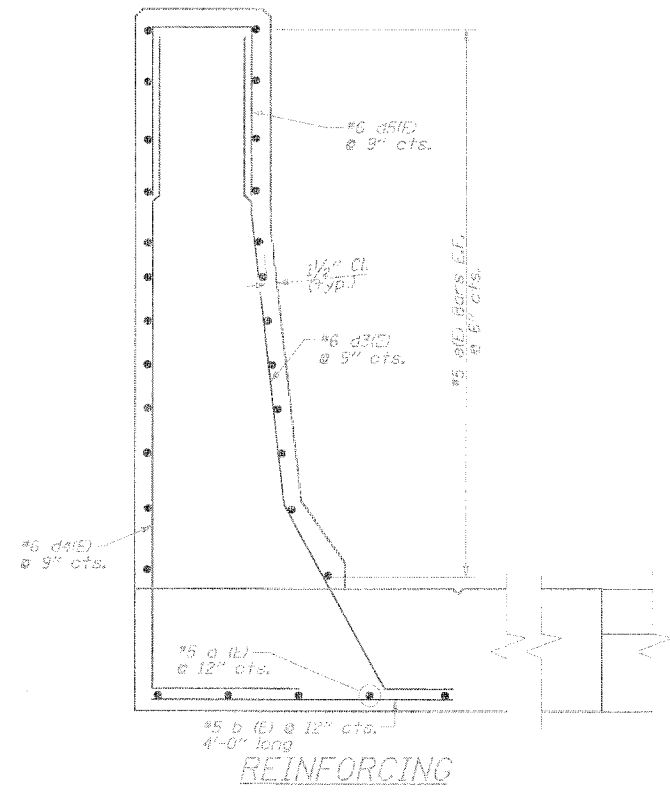
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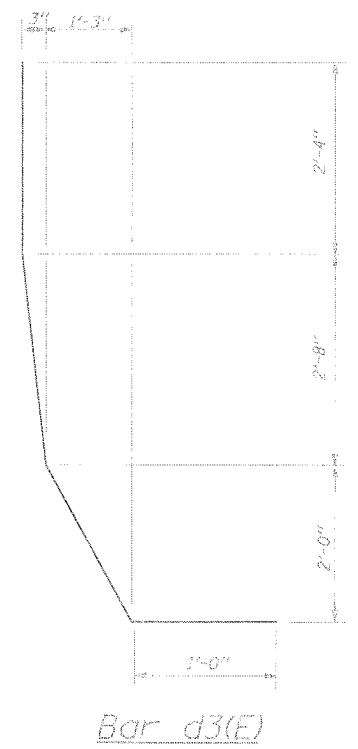
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	364
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	* (1818, ETC. 2324.6-1)PR-8			



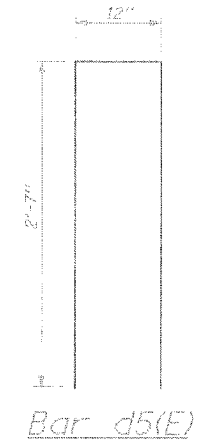
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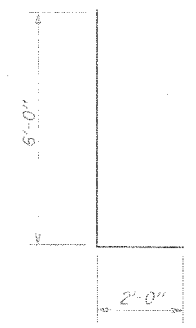
REINFORCING



Bar d3(E)



Bar d5(E)



Bar d4(E)

MIN LAP:

- *5 Bars - 2'-2"
- *6 Bars - 2'-7"

*Lap varies as necessary

- NOTES:**
1. All reinforcing bars, tie bars and dowel bars shall be seated in the final position prior to the concrete operations. The cost of these items is included in the cost of the barrier wall. Bars cannot be mucked into place.
 2. Maintain slope of face as shown on details.

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 CHICAGO, IL 60606
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 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

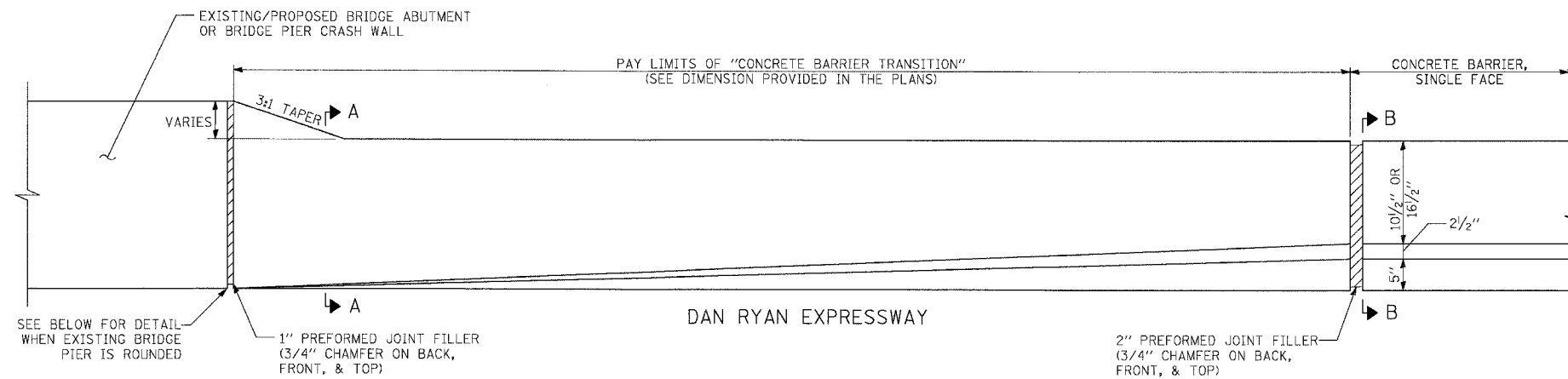
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 CONCRETE BARRIER
 SINGLE FACE, 72" (SPECIAL)
 SCALE: NOT TO SCALE
 DATE: 7/7/05
 DRAWN BY: AJW
 CHECKED BY: EL

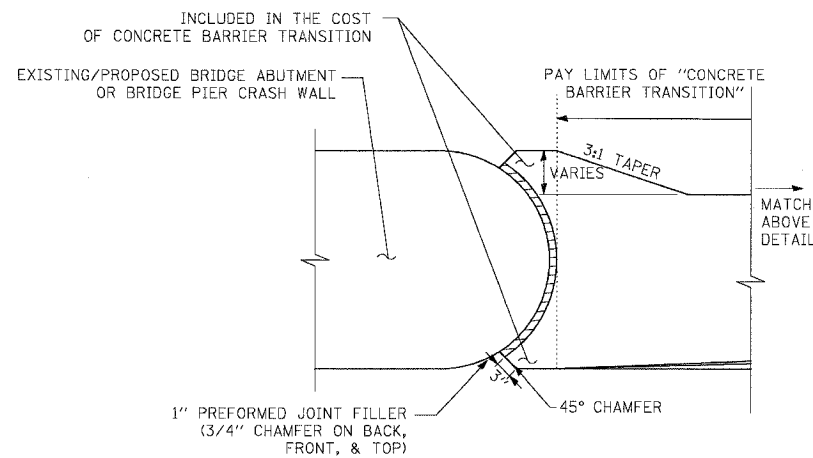
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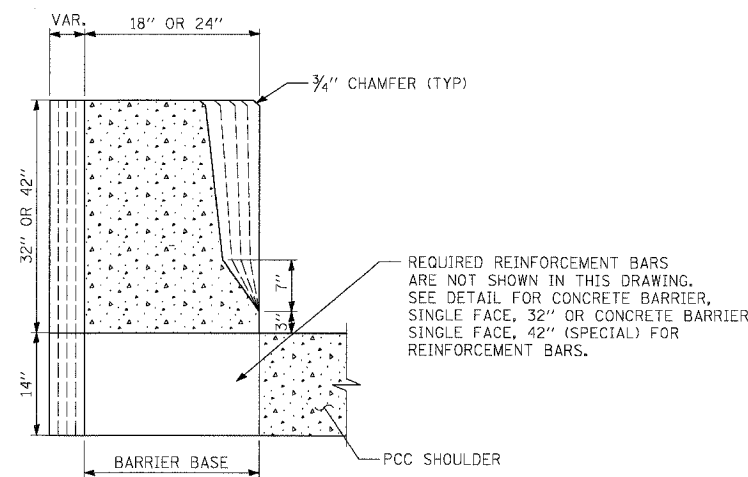
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS	NO.
94/90		COOK	556	366
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	• (1818, ETC, 2324.6-1P)-8			



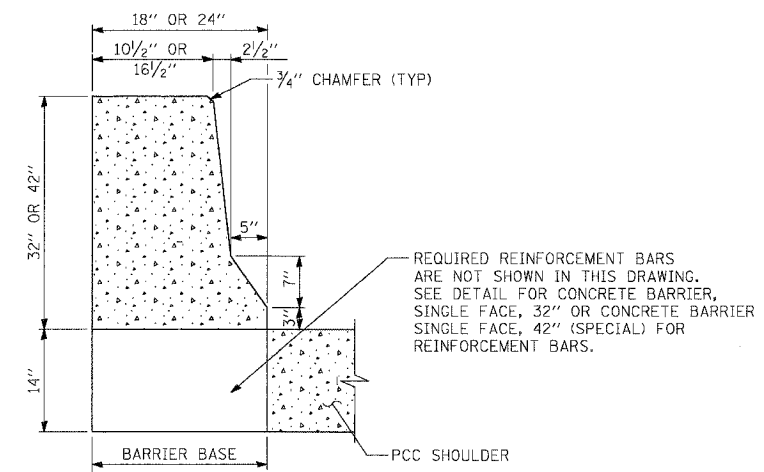
DETAIL OF "CONCRETE BARRIER TRANSITION"
FOR SINGLE FACE BARRIER WALL



DETAIL OF "CONCRETE BARRIER TRANSITION"
AT EXISTING ROUNDED PIER



SECTION A-A
CONCRETE BARRIER TRANSITION



SECTION B-B
CONCRETE BARRIER, SINGLE FACE
& CONCRETE BARRIER BASE

NOTE:
ALL TRANSITIONS PAID FOR AS
CONCRETE BARRIER TRANSITION

**Edwards
AND Kelcey**
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EDCORP.COM

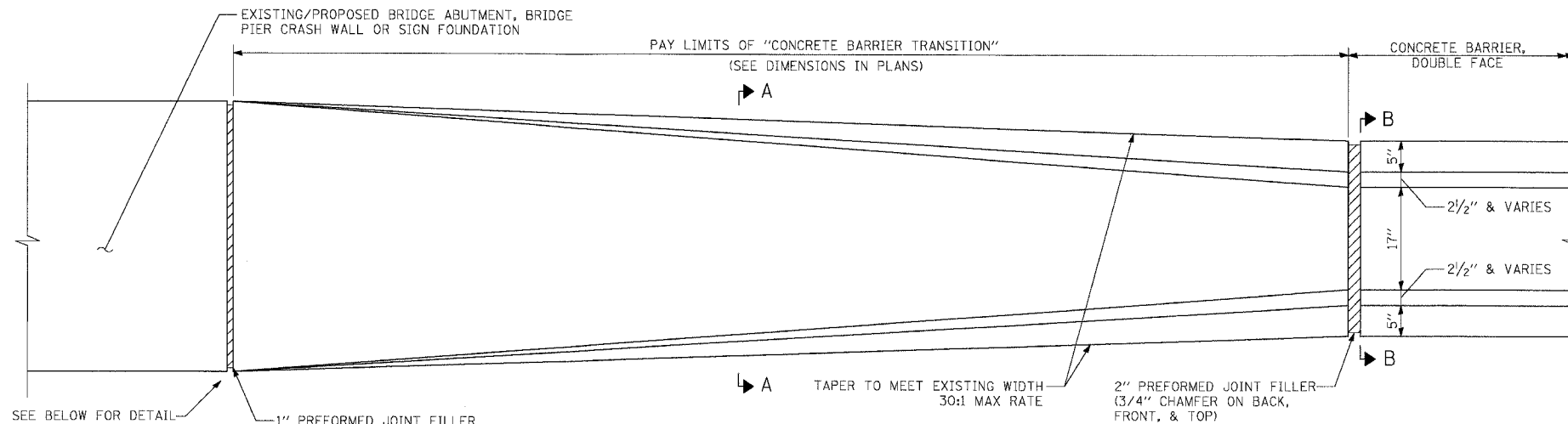
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
CONCRETE BARRIER TRANSITION
(SHEET 1 OF 3)
SCALE: NONE
DATE: 7/7/05
DRAWN BY: TAI
CHECKED BY: PJM

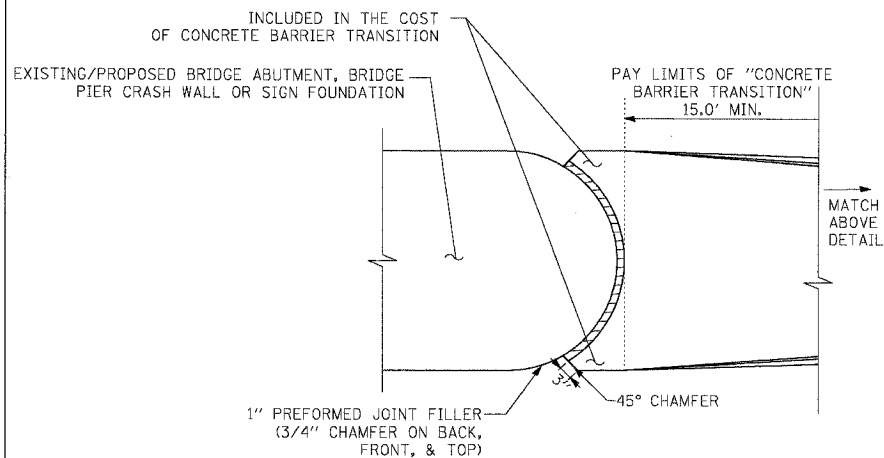
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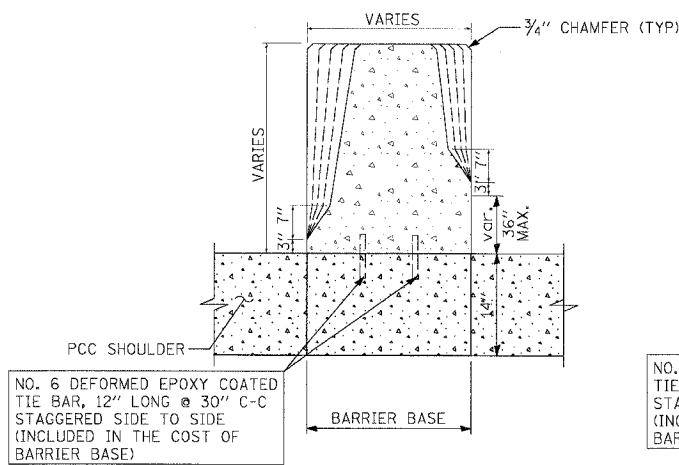
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	367
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	1818, ETC, 2324.6-1P1R-8			



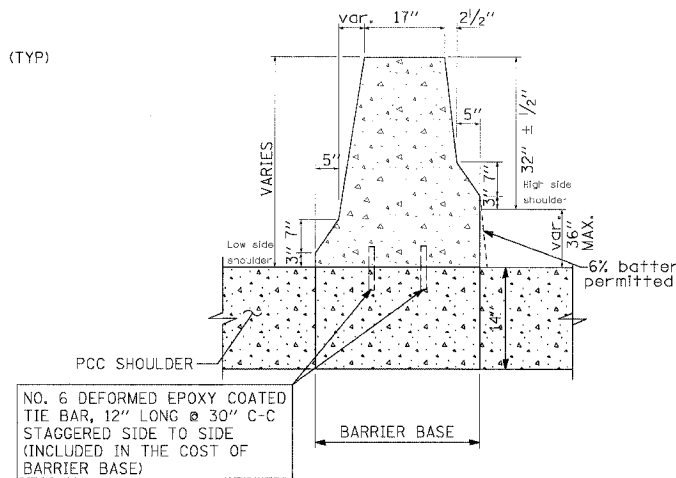
DETAIL OF "CONCRETE BARRIER TRANSITION"
FOR DOUBLE FACE BARRIER WALL



DETAIL OF "CONCRETE BARRIER TRANSITION" AT EXISTING ROUNDED PIER



SECTION A-A
CONCRETE BARRIER TRANSITION



SECTION B-B
DOUBLE FACE BARRIER WALL

NOTE:
ALL TRANSITIONS PAID FOR AS
CONCRETE BARRIER TRANSITION

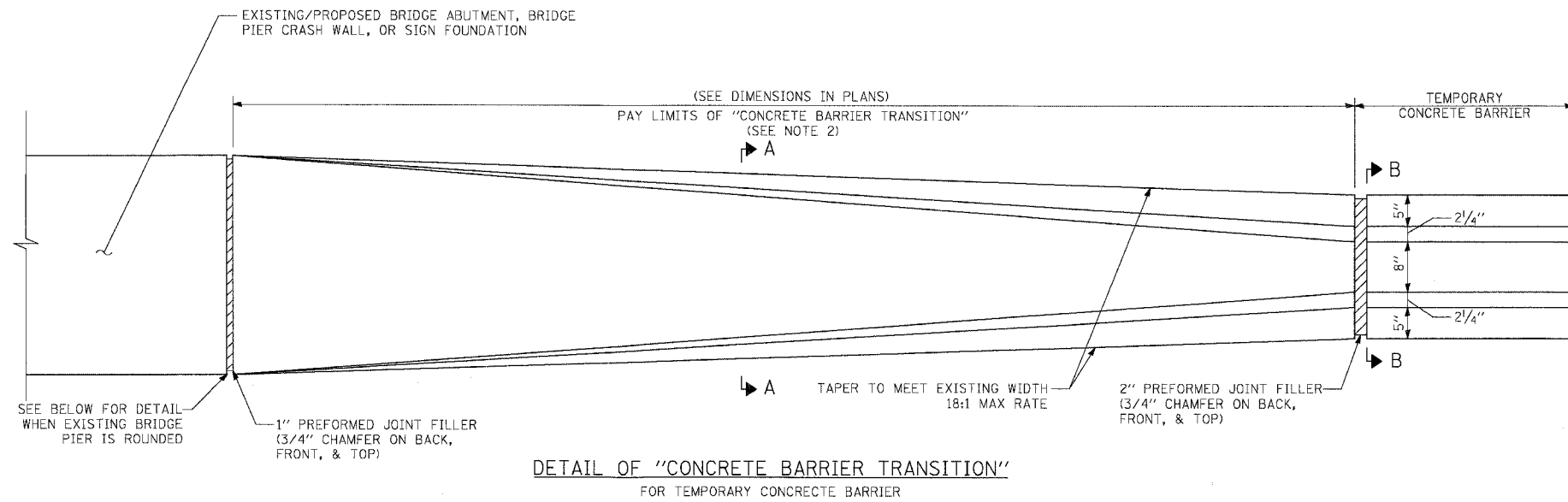
Edwards AND Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EKCORP.COM

REVISIONS	
NAME	DATE

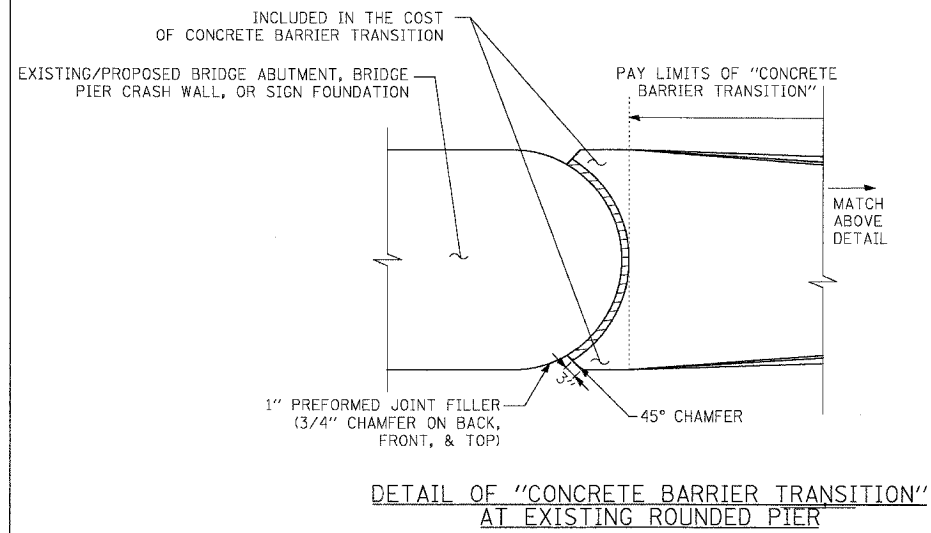
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
CONCRETE BARRIER TRANSITION
(SHEET 2 OF 3)
SCALE: NONE
DATE: 7/7/05
DRAWN BY: TAI
CHECKED BY: PJM

CDT-20
06/24/2005 01:35:16 PM

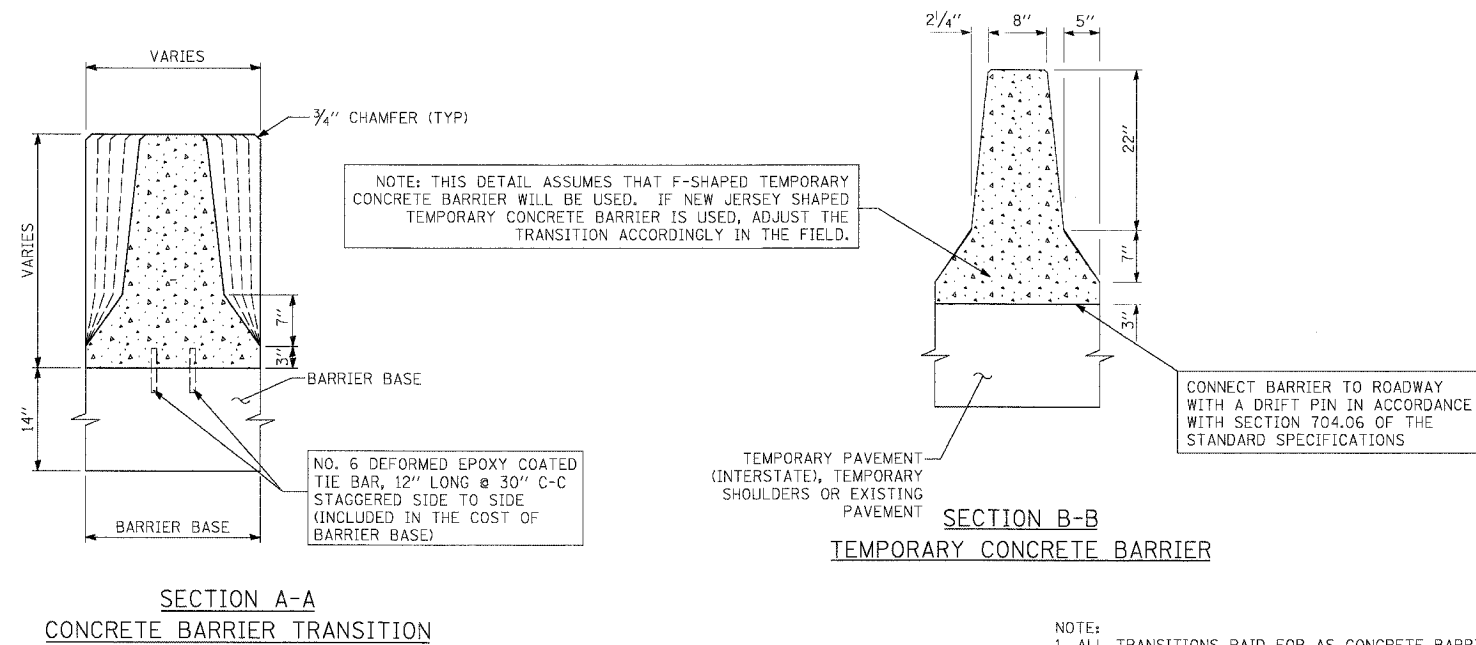
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	368
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300	1818, ETC, 2324.6-1PJR-8			



DETAIL OF "CONCRETE BARRIER TRANSITION"
FOR TEMPORARY CONCRETE BARRIER



DETAIL OF "CONCRETE BARRIER TRANSITION"
AT EXISTING ROUNDED PIER



SECTION A-A
CONCRETE BARRIER TRANSITION

SECTION B-B
TEMPORARY CONCRETE BARRIER

- NOTE:
1. ALL TRANSITIONS PAID FOR AS CONCRETE BARRIER TRANSITION.
 2. LENGTHS PROVIDED IN THE PLANS ARE APPROXIMATE. THE CONTRACTOR MUST ADJUST THE LENGTH OF CONCRETE BARRIER TRANSITION AS NECESSARY TO MEET TEMPORARY CONCRETE BARRIER SEGMENTS USED.

CDT-21

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
CONCRETE BARRIER TRANSITION
(SHEET 3 OF 3)

SCALE: NONE
DATE: 7/1/05
DRAWN BY: TAI
CHECKED BY: PJM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	556	369
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		62300
* (1818, ETC, 2324.6-IP)R-8				

CTA BARRIER WALL LOCATION AND MODIFICATION TABLE

STATION	NORTH BOUND							SOUTH BOUND						
	Soldier Piles			Proposed T / Shoulder At or Above Existing		Proposed T / Shoulder Below Existing		Soldier Piles			Proposed T / Shoulder At or Above Existing		Proposed T / Shoulder Below Existing	
	Size	Length	Max. Spacing	Location	Modification	Location	Modification	Size	Length	Max. Spacing	Location	Modification	Location	Modification
35 th St.	W12x120	30'	5'-0"	Sta. 2611+51 to 2618+39	6" Facing	-----	-----	W12x120	30'	5'-0"	Sta. 1611+71 to 1618+59	6" Facing	-----	-----
47 th St.	W12x106	20'	5'-0"	-----	-----	Sta. 2530+19 to 2537+02	1'-4 1/2" Facing	W12x72	20'	6'-6"	Sta. 1530+63 to 1537+46	6" Facing	-----	-----
55 th St.	W12x106	20'	8'-0"	-----	-----	Sta. 2476+06 to 2481+81	1'-4 1/2" Facing	W12x106	20'	8'-0"	-----	-----	Sta. 1475+89 to 1484+84	1'-4 1/2" Facing
63 rd St.	W12x72	20'	8'-0"	Sta. 2422+99 to 2428+31	①	-----	-----	W12x106	20'	8'-0"	-----	-----	Sta. 1422+79 to 1426+92	①
69 th St.	W12x72	20'	8'-0"	Sta. 2372+94 to 2378+56	②	-----	-----	W12x106	20'	8'-0"	Sta. 1372+75 to 1374+50	①	Sta. 1374+50 to 1378+53	①

- ① Replace Exist. 32" Barrier with Single Face Barrier, 42" Special
- ② Reface Existing CTA Barrier Wall with Vertical Facing

GENERAL NOTES:

1. Utility locations shown on these plans may not be correct or complete. The contractor shall coordinate construction activities with the respective utilities of the city of Chicago. Before starting any excavation, the contractor shall call "cuan" (Chicago utility alert network) at 312-744-7000 for field locations of buried electric, telephone, and gas facilities (48 hour notification is required). Contact the department of water management permit section at (312) 747-7893 for water and sewer locations.
2. In locations where the main sewers, drainage structures, public, and private drain connections are disturbed or damaged during construction by the contractor, it will be the contractor's responsibility to restore and replace the damaged facilities at his/her own expense to the satisfaction of the department of water management. The sewer flows must be maintained at all times.
3. In locations where pilings/drilled shafts are being proposed in the vicinity of the existing sewer facilities, a licensed structural engineer should approve construction methods of support in order to maintain the structural integrity of the city's sewer system.
4. The Location of various items such as pavement, barrier walls and drainage structures built in contracts under construction during the preparation of these plans is based on the published contract plan drawings available during design. The contractor must field verify limits, locations and elevations of these previously constructed items.
5. The contractor shall use care in grading or excavating near any and all existing items which will not be removed. Any damage done to existing items by the contractor shall be repaired by the contractor at the contractor's own expense.
6. The contractor shall take all necessary safety precautions to protect and provide access to abutting CTA property, utilities and vehicular traffic.
7. It shall be the contractor's responsibility to ensure that no gap remains between proposed CTA fencing or where proposed CTA fencing terminates and existing CTA fence remains in place.
8. Hammer driving of piles will not be allowed. All piles must be vibrated into place.
9. Plan dimensions and details relating to existing structures 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 variations shall not be cause for additional compensation or a change in the scope of work. However the Contractor will be paid for the quantity actually furnished at the unit price for the work.
10. All construction joints shall be bonded.
11. All exposed concrete edges shall have a 3/4" by 45° chamfer except where shown otherwise. Chamfer on vertical edges shall be continued a minimum of 1 foot below the finished ground line.
12. A protective coat shall be applied within the limits shown on the plans according to Section 503.19 of the Standard Specifications.
13. Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.
14. Reinforcement bars designated "E" shall be epoxy coated.

15. For Existing Barrier Wall Modifications for Proposed T / Shoulder Below Existing, See Sheets B2 and B3.
16. For Existing Barrier Wall Modifications for Proposed T / Shoulder At or Above Existing, See Sheet B4 and B5.
17. For Existing Barrier Wall Modifications for 63rd St. Station (NB & SB), For 69th St. Station (SB) See Sheet B6.
18. For Existing Barrier Wall Modifications for 69rd St. Station (NB) See Sheet B7.
19. For Refaced Barrier to Pier, Transition Details (Taper), Proposed T / Shoulder Below Existing, See Sheet B8.
20. For Refaced Barrier to Pier, Transition Details (No Taper), Proposed T / Shoulder Below Existing, See Sheet B9.
21. For Refaced Barrier to Pier, Transition Details (Taper), Proposed T / Shoulder At or Above Existing, See Sheet B10.
22. For Refaced Barrier to Pier, Transition Details (No Taper), Proposed T / Shoulder At or Above Existing, See Sheet B11.
23. For New 42" Barrier to Vert. Refaced Barrier, Transition Details (Taper), Proposed T / Shoulder At or Above Existing, See Sheet B12.
24. For Vert. Refaced Barrier to Pier, Transition Details (No Taper), Proposed T / Shoulder At or Above Existing, See Sheet B13.
25. For Refaced Barrier to New 42" Barrier, Transition Details, Proposed T / Shoulder Below Existing, See Sheet B14.
26. For Refaced Barrier to New 42" Barrier, Transition Details, Proposed T / Shoulder At or Above Existing, See Sheet B15.
27. For New 42" Barrier to Pier, Transition Details, Proposed T / Shoulder Below or Above Existing, See Sheet B16.
28. For Refaced Barrier to New Sign Structure, Transition Plan, Elevation and Details, Proposed T / Shoulder Below Existing, See Sheets B17 and B18.

DESIGN STRESSES:
FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinf.)

Sheet B1 of 16

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
**EXISTING BARRIER WALL
AT CTA STATIONS
LOCATION AND MODIFICATION TABLE**

SCALE: None
DATE: JULY 7, 2005

DRAWN BY: KWT
CHECKED BY: RDP

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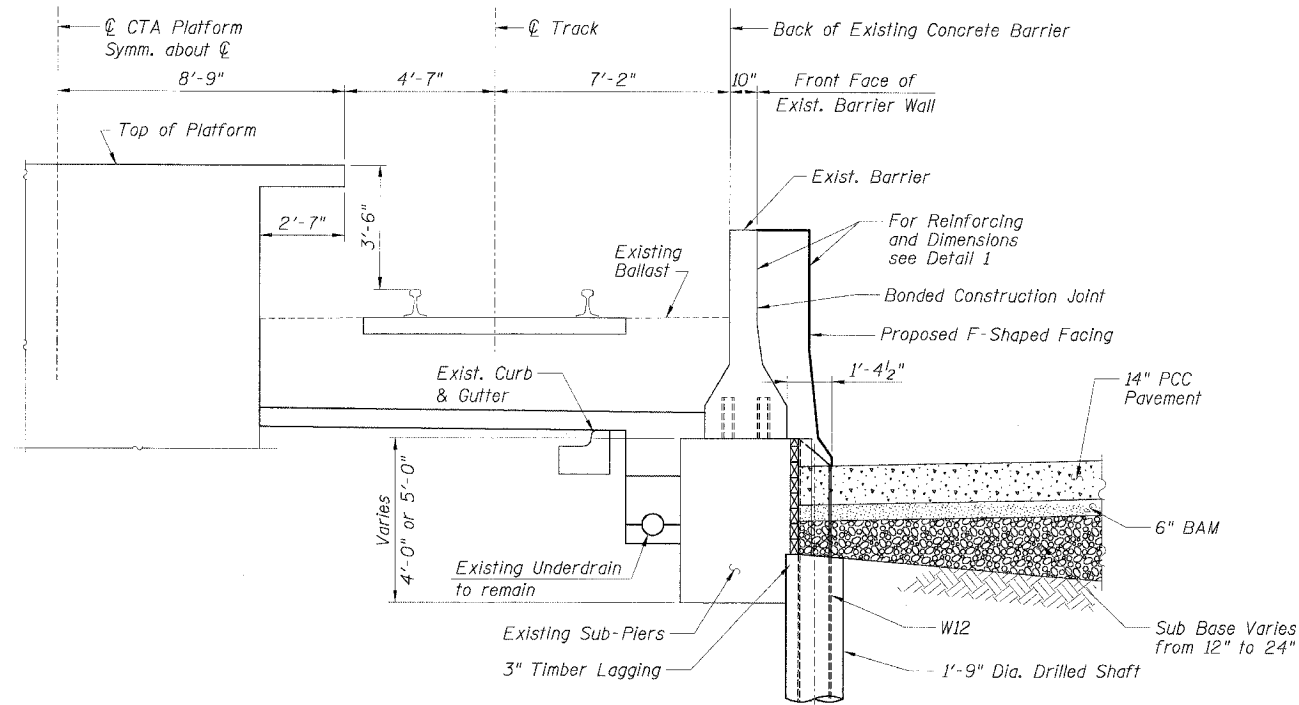
CTE
303 East Wacker Drive, Suite 600, Chicago, Illinois 60607-5276
T 312.938.0300 F 312.938.1104 www.cteaecom.com

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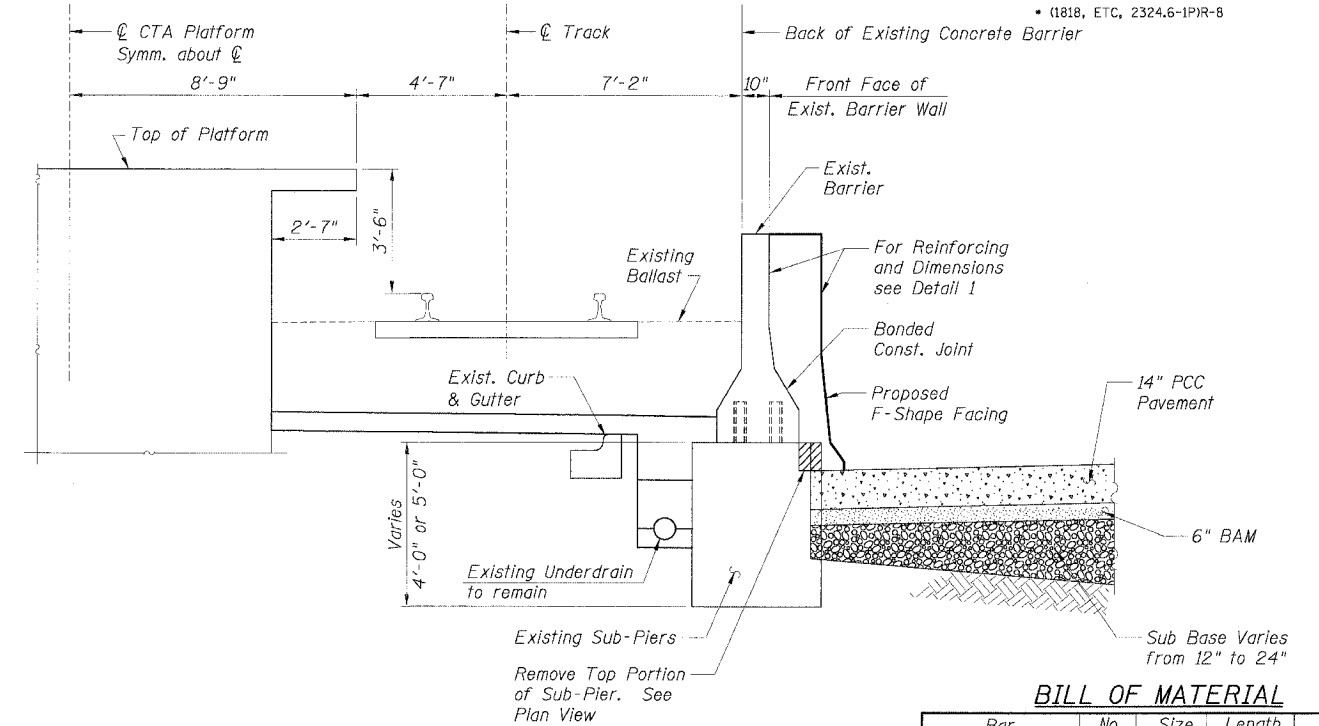
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE. 90/94	SECTION •	COUNTY COOK	TOTAL SHEETS 556	SHEET NO. 370
STA. FED. ROAD DIST. NO. 1		TO STA. ILLINOIS FED. AID PROJECT		
• (1818, ETC, 2324.6-1PIR-8				62300



TYPICAL SECTION
BETWEEN SUB-PIERS



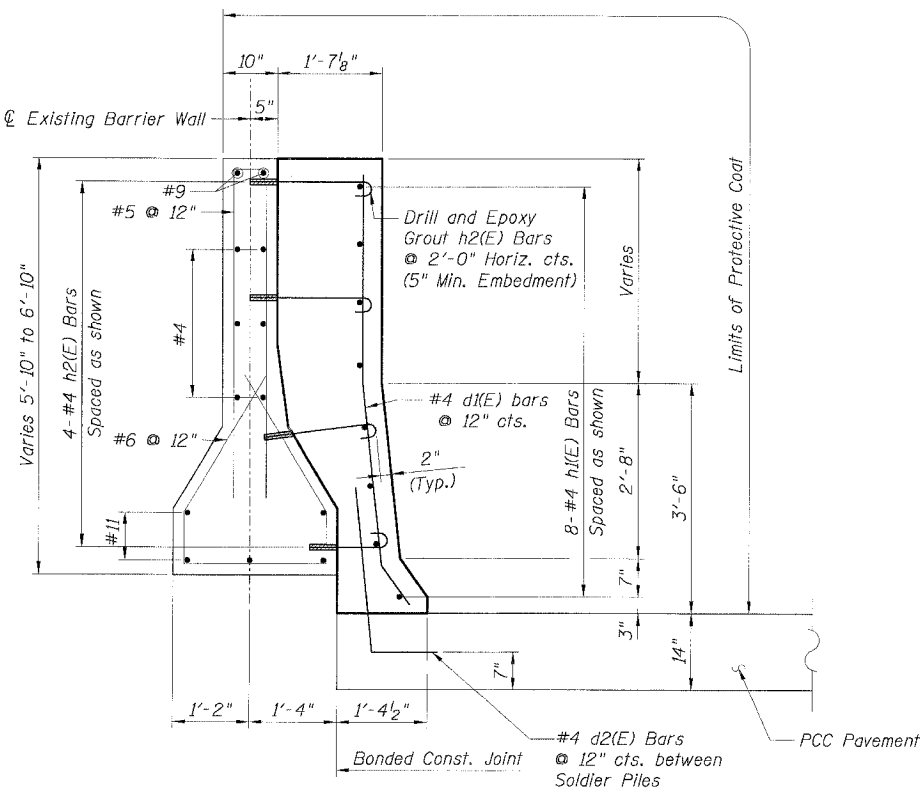
TYPICAL SECTION
AT SUB-PIER

BILL OF MATERIAL

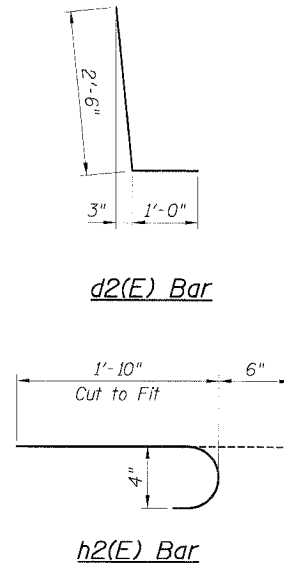
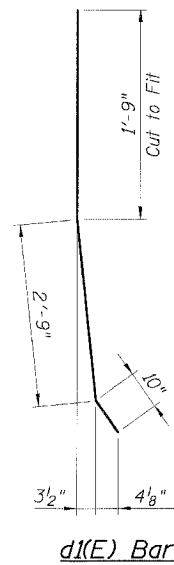
Bar	No.	Size	Length	Shape
d1(E)		#4	5'-4"	┌
d2(E)		#4	3'-6"	┌
h1(E)		#4		┌
h2(E)		#4	2'-4"	┌
Item	Unit	Quantity		
Furnishing Soldier Piles, W12x...	Foot			
Drilling and Setting Soldier Piles (in Soil)	Cu. Ft.			
Untreated Timber Lagging	Sq. Ft.			
Concrete Removal	Cu. Yd.			
Reinforcement Bars, Epoxy Coated	Lbs.			
Concrete Structures	Cu. Yd.			
Protective Coat	Sq. Yd.			

NOTES:

1. Drilling and grouting of #4 h2(E) bars shall be in accordance with Section 584 of the Standard Specifications.
2. #4 d2(E) bars shall be seated in their final position prior to the placement of the concrete shoulder. Bars shall not be mucked into place.
3. The cost of drilling holes, furnishing and placing Epoxy Grout and setting #4 h2(E) bars shall be included in the cost per cubic yard for Concrete Structures.
4. Provide joints in facing to match those in the existing barrier.



DETAIL 1



LEGEND:

	Concrete Removal
	PCC Pavement
	BAM
	Sub Base
	Earth

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/S SHOULDER BELOW EXISTING
TYPICAL SECTIONS & DETAILS

SCALE: None
DATE: JULY 7, 2005
DRAWN BY: KWT
CHECKED BY: RDP

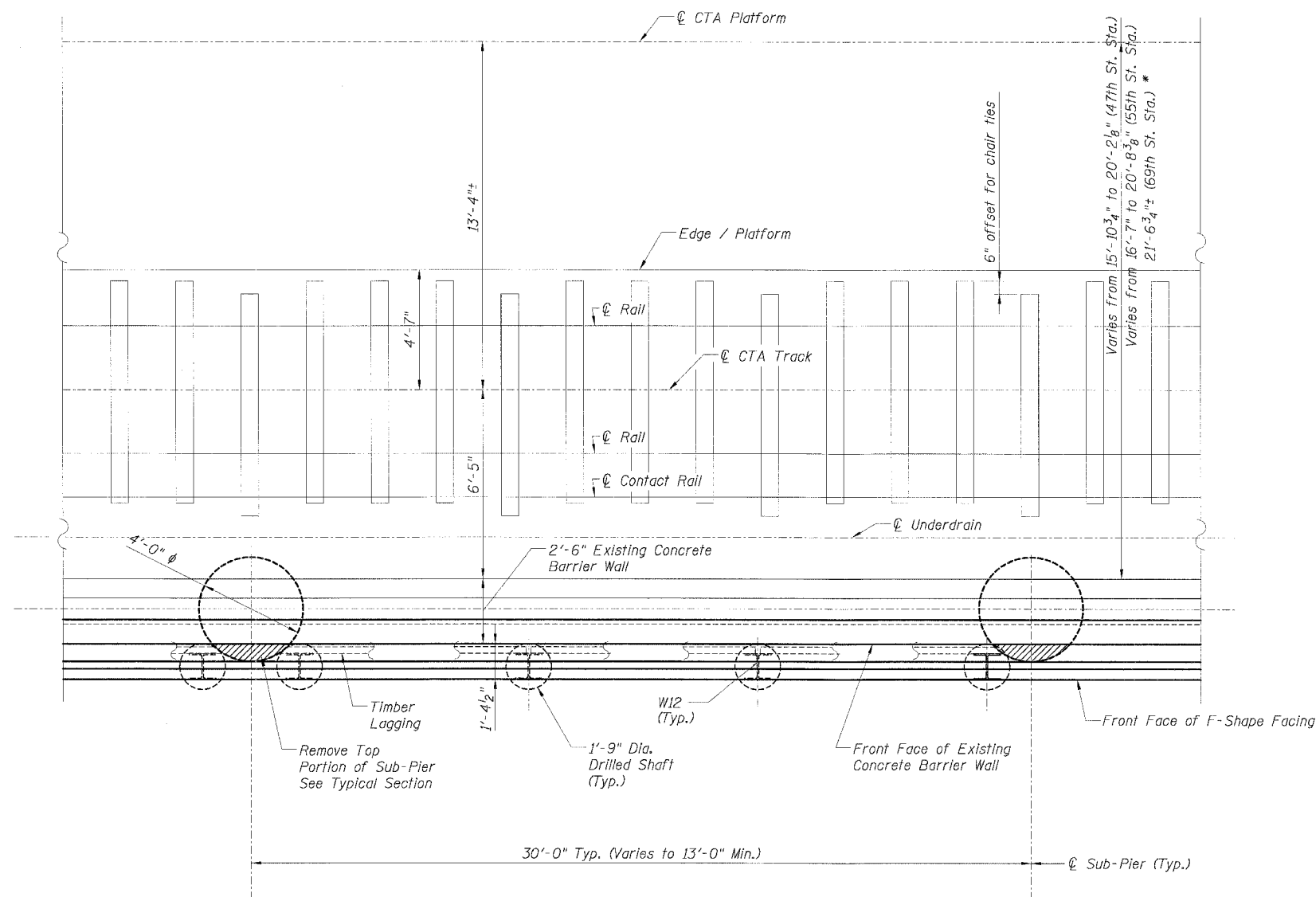
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RY.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	556	371
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
• (1818, ETC. 2324.6-1P1R-8			62300	



PLAN - (NORTH BOUND SHOWN)
(SOUTH BOUND SIMILAR)

Sheet B3 of 16

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/S SHOULDER BELOW EXISTING
TYPICAL PLAN

SCALE: None
DATE: JULY 7, 2005

DRAWN BY: KWT
CHECKED BY: RDP

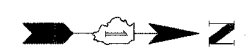
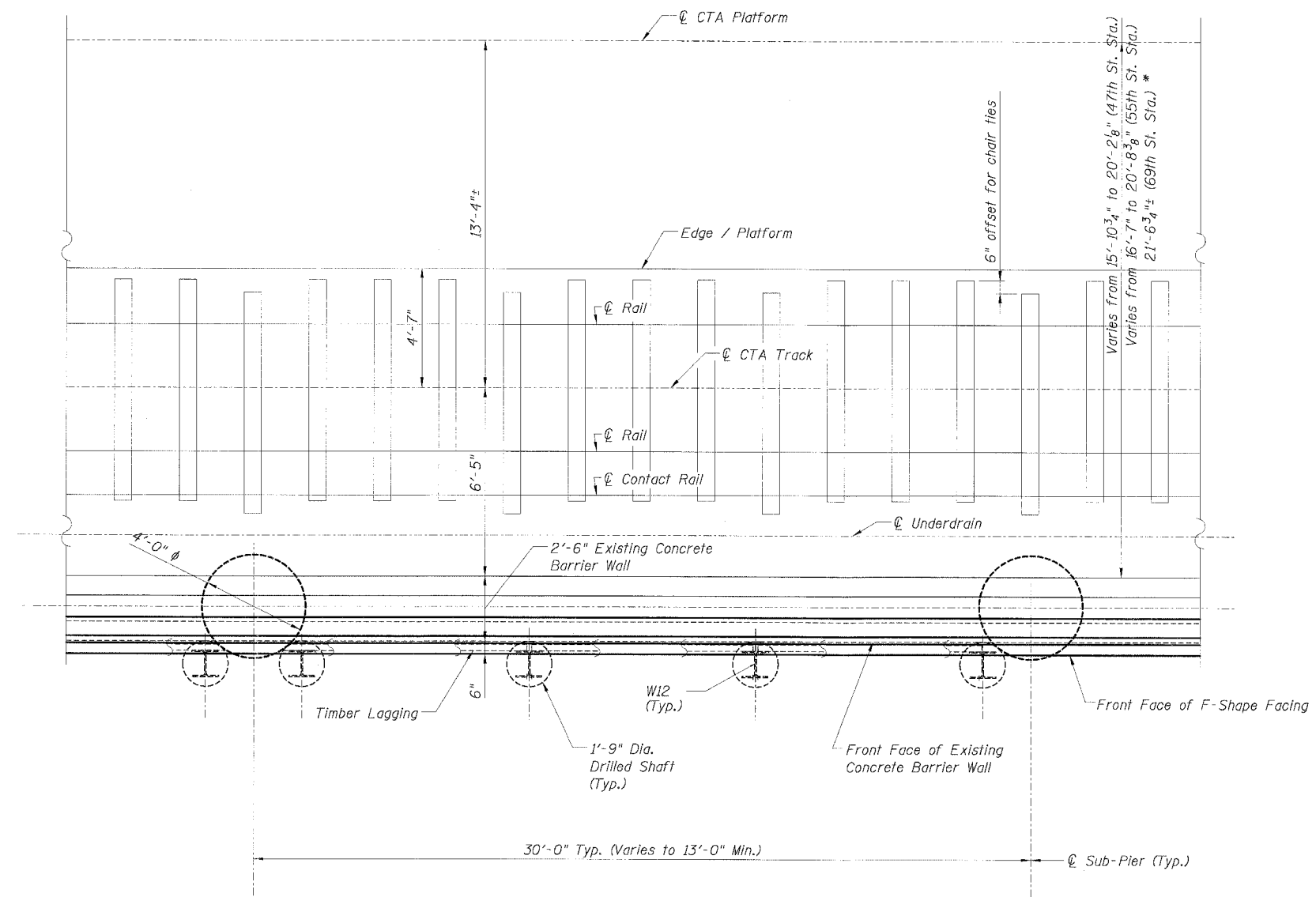
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	556	373
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT			
• (1818, ETC, 2324.6-1P)R-8				62300



PLAN - (NORTH BOUND SHOWN)
(SOUTH BOUND SIMILAR)

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Sheet B5 of 16

REVISIONS	
NAME	DATE

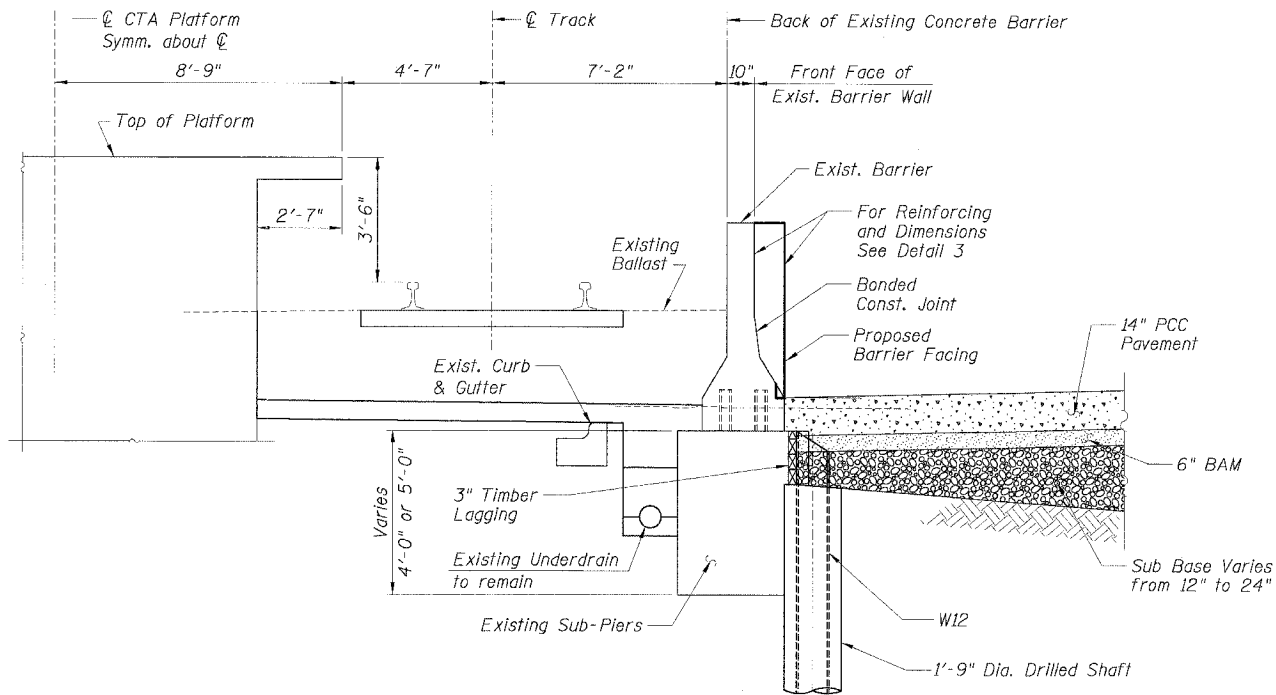
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/SOULDER AT OR ABOVE EXISTING
TYPICAL PLAN

SCALE: None
DATE: JULY 7, 2005
DRAWN BY: KWT
CHECKED BY: RDP

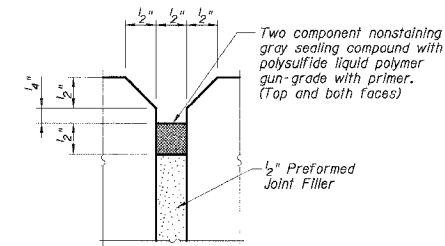
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE. 90/94	SECTION *	COUNTY COOK	TOTAL SHEETS 556	SHEET NO. 375
STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		
* (1818, ETC. 2324.6-1P)R-8				62300



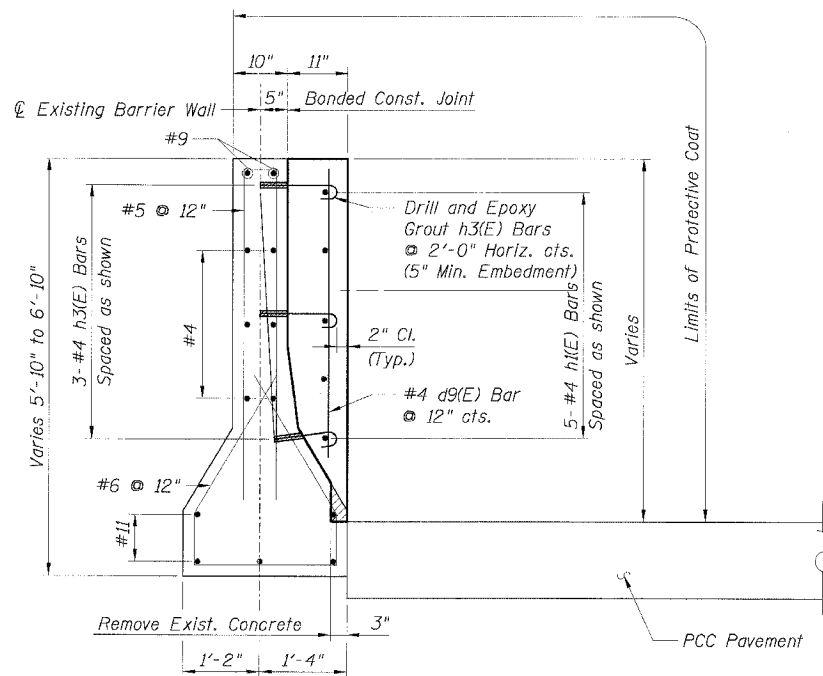
TYPICAL SECTION
BETWEEN SUB-PIERS
AT 69TH ST. STATION (NB)



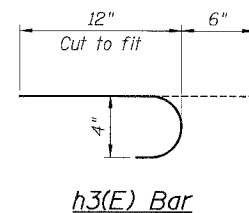
EXPANSION JOINT DETAIL

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d9(E)		#4	4'-4"	—
h1(E)		#4		—
h3(E)		#4	1'-6"	—
Item	Unit	Quantity		
Furnishing Soldier Piles W12x	Foot			
Drilling and Setting				
Soldier Piles (In Soil)	Cu. Ft.			
Untreated Timber Lagging	Sq. Ft.			
Concrete Removal	Cu. Yd.			
Reinforcement Bars,				
Epoxy Coated	Lbs.			
Concrete Structures	Cu. Yd.			
Protective Coat	Sq. Yd.			



DETAIL 3



LEGEND:

	Concrete Removal
	PCC Pavement
	BAM
	Sub Base
	Earth

NOTES:

1. Drilling and grouting of #4 h3(E) bars shall be in accordance with Section 584 of the Standard Specifications.
2. The cost of drilling holes, furnishing and placing Epoxy Grout and setting #4 h3(E) bars shall be included in the cost per cubic yard for Concrete Structures.
3. Provide joints in facing to match those in the existing barrier.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
NAME	DATE	
		EXISTING BARRIER WALL MODIFICATIONS AT CTA STATIONS TYPICAL SECTIONS & DETAILS FOR 69th ST. STATION (NB)
		SCALE: None DRAWN BY: KWT
		DATE: JULY 7, 2005 CHECKED BY: RDP

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CTE
300 East Wacker Drive, Suite 600, Chicago, Illinois 60601-5216
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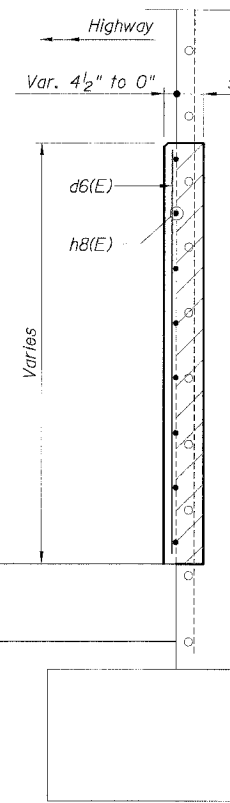
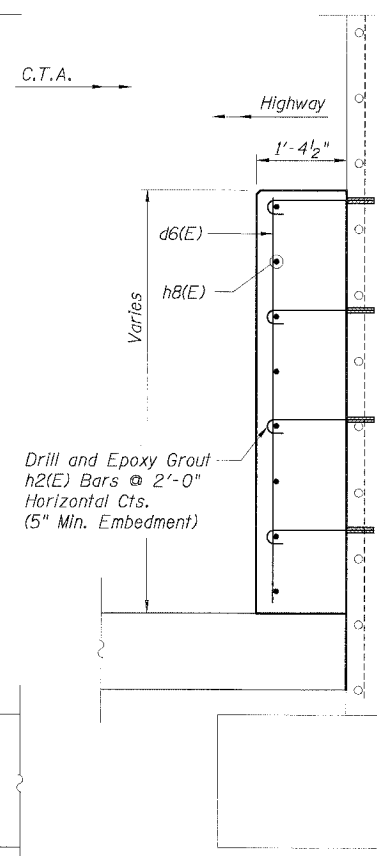
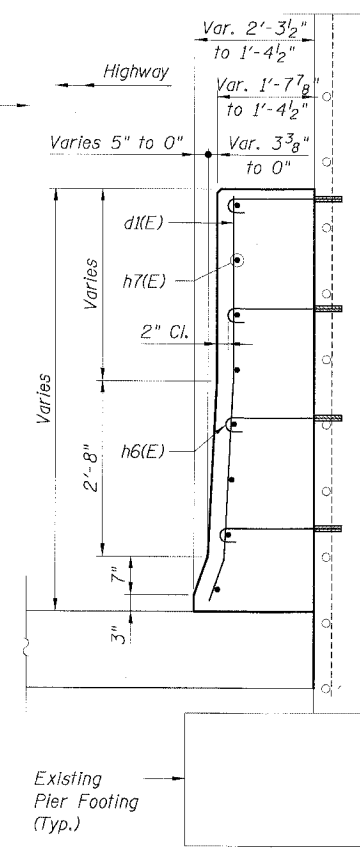
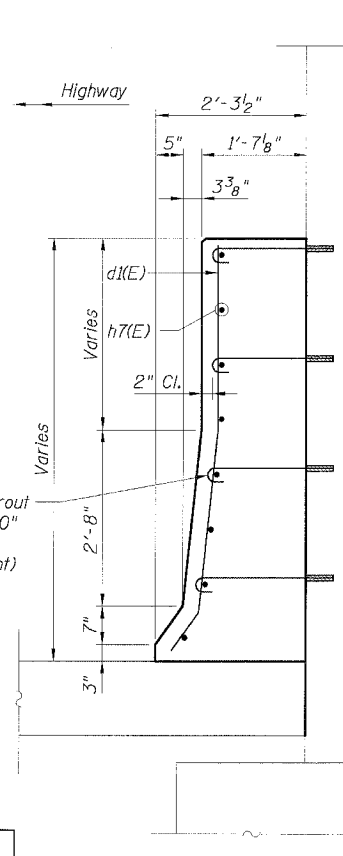
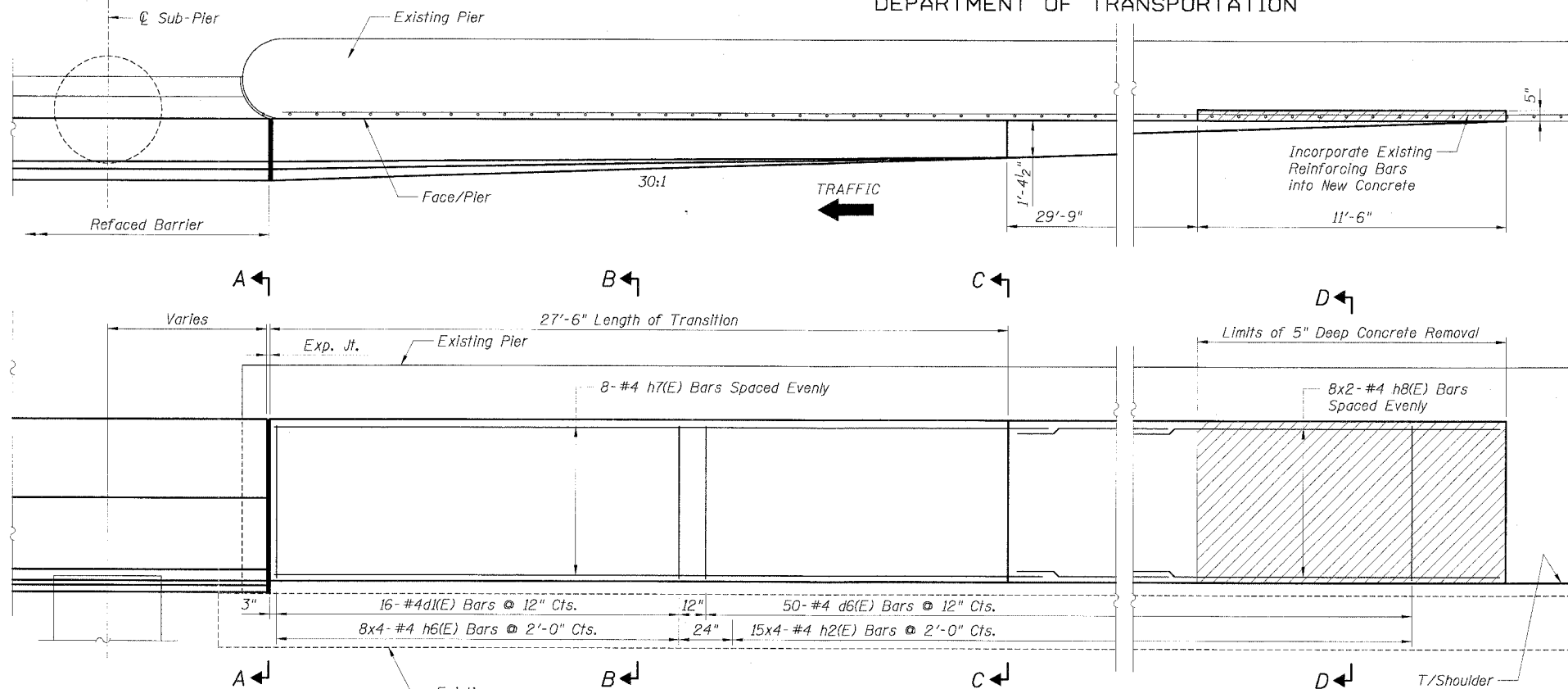
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

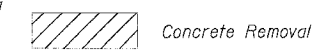
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	556	376
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (1818, ETC, 2324.6-1P)R-8 62300				

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d1(E)	17	#4	5'-4"	—
d6(E)	50	#4	6'-0"	—
h2(E)	60	#4	2'-4"	—
h6(E)	32	#4	2'-6"	—
h7(E)	8	#4	28'-10"	—
h8(E)	16	#4	21'-2"	—
Item		Unit	Quantity	
Reinforcement Bars, Epoxy Coated		Lbs.	790	
Concrete Structures		Cu. Yd.	18.6	
Protective Coat		Sq. Yd.	56	
Concrete Removal		Cu. Yd.	1.1	



LEGEND:



NOTES:

1. Drilling and grouting of h2(E) and h6(E) bars shall be in accordance with Section 584 of the Standard Specifications.
2. The cost of drilling holes, furnishing and placing Epoxy Grout and setting h2(E) and h6(E) bars shall be included in the cost per cubic yard for Concrete Structures.
3. Provide joints in facing to match those in the existing barrier.
4. For Refaced Barrier details see Sheets B2 and B3.
5. For locations of Transition, see Roadway Plans.

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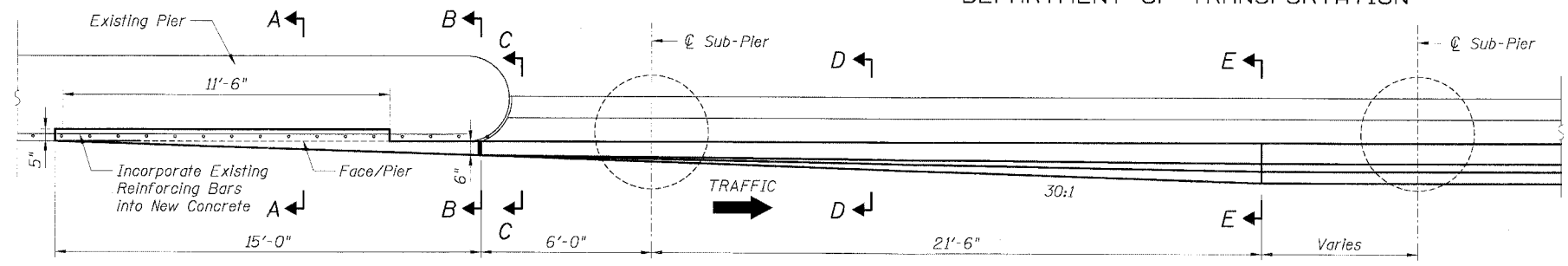
REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
EXISTING BARRIER WALL MODIFICATIONS AT CTA STATIONS
PROPOSED T/SOULDER BELOW EXISTING REFACED BARRIER TO PIER TRANSITION DETAILS (TAPER)
SCALE: None DRAWN BY: CHD
DATE: JULY 7, 2005 CHECKED BY: RDP

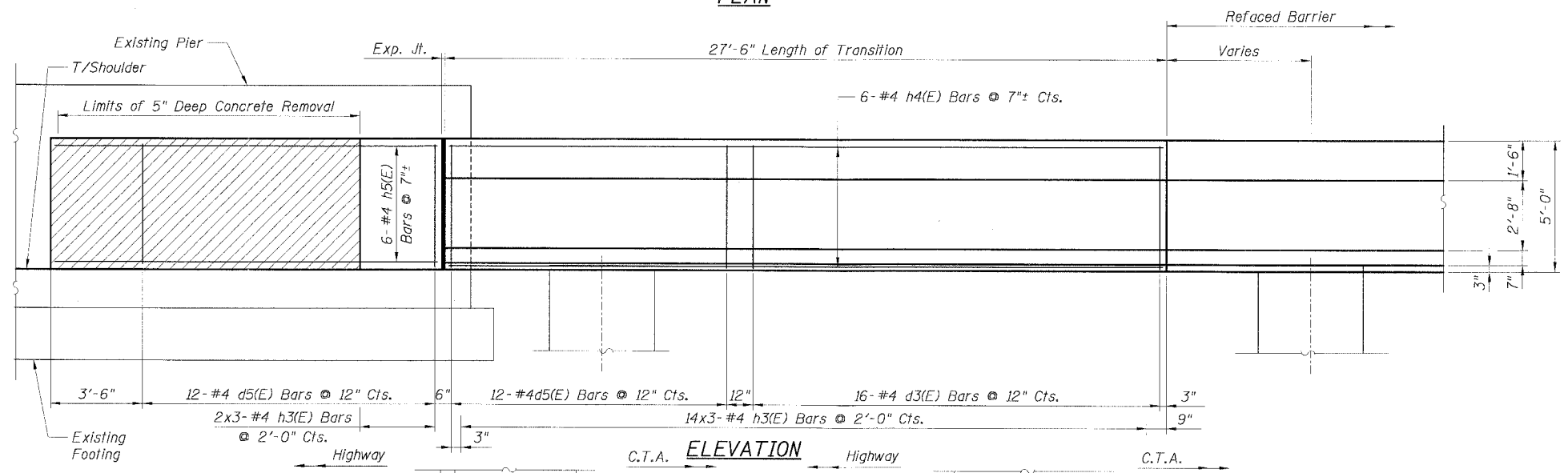
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

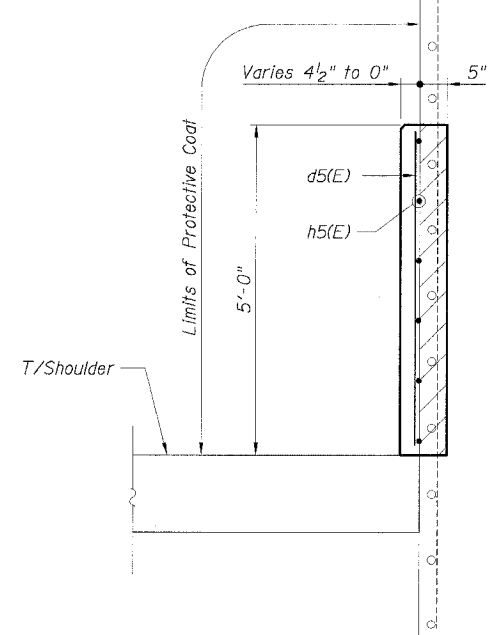
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90/94	*	COOK	556	378
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
* (1818, ETC, 2324.6-1)PR-8				62300



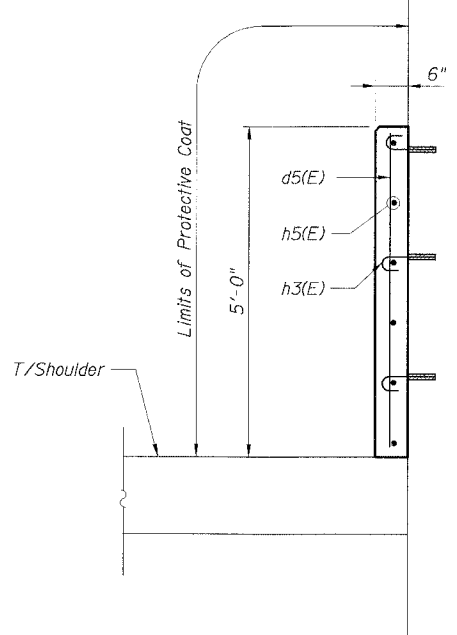
PLAN



ELEVATION



SECTION A-A



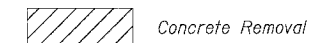
SECTION B-B

BILL OF MATERIAL
FOR ONE TRANSITION

Bar	No.	Size	Length	Shape
d3(E)	16	#4	5'-3"	—
d5(E)	24	#4	4'-8"	—
h3(E)	48	#4	1'-6"	—
h4(E)	6	#4	26'-8"	—
h5(E)	6	#4	14'-8"	—

Item	Unit	Quantity
Reinforcement Bars, Epoxy Coated	Lbs.	345
Concrete Structures	Cu. Yd.	4.6
Protective Coat	Sq. Yd.	22.5
Concrete Removal	Cu. Yd.	0.9

LEGEND:



NOTES:

1. Drilling and grouting of #4 h3(E) bars shall be in accordance with Section 584 of the Standard Specifications.
2. The cost of drilling holes, furnishing and placing Epoxy Grout and setting #4 h3(E) bars shall be included in the cost per cubic yard for Concrete Structures.
3. Provide joints in facing to match those in the existing barrier.
4. For Refaced Barrier details, see Sheets B4 and B5.
5. For Sections C-C, D-D and E-E see Sheet B11.
6. For d3(E) and h3(E) bar details, see Sheet B4.
7. For locations of Transition, see Roadway Plans.

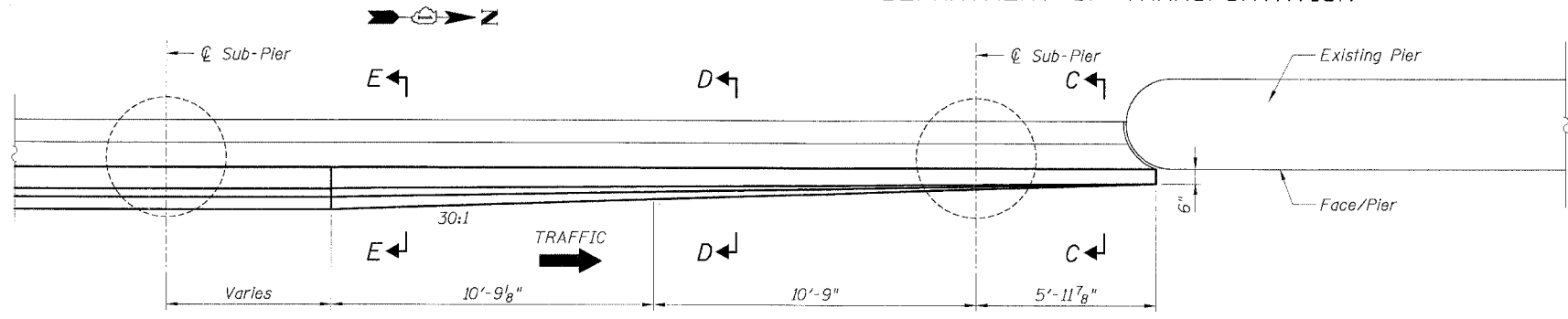
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/S SHOULDER AT OR ABOVE EXISTING
REFACED BARRIER TO PIER
TRANSITION DETAILS (TAPER)
SCALE: None DRAWN BY: CHD
DATE: JULY 7, 2005 CHECKED BY: MJP

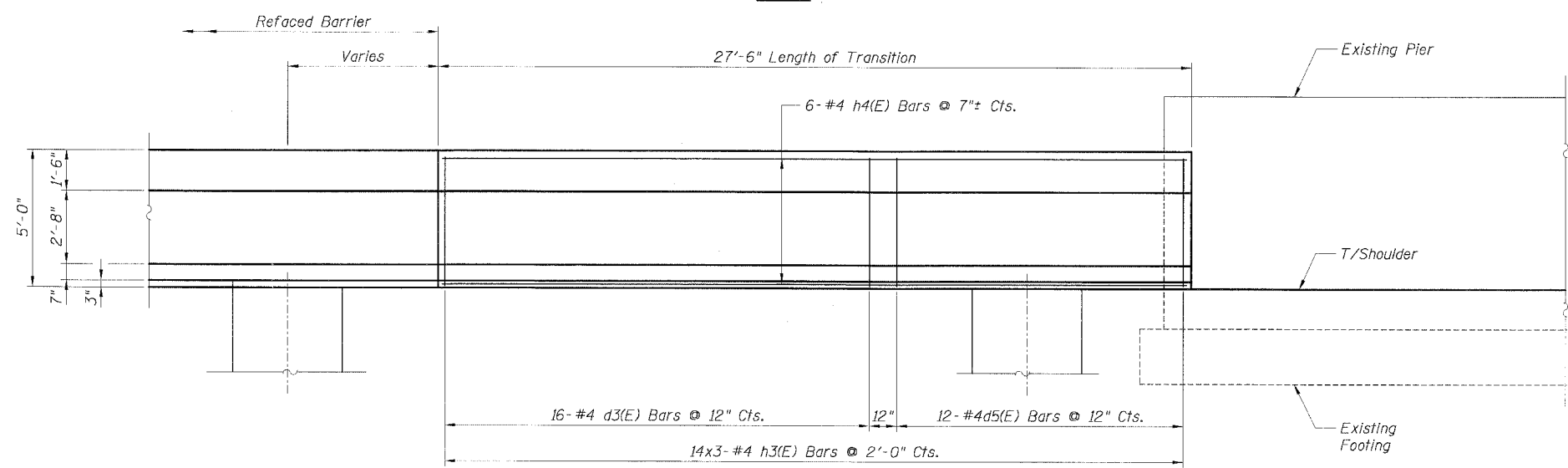
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

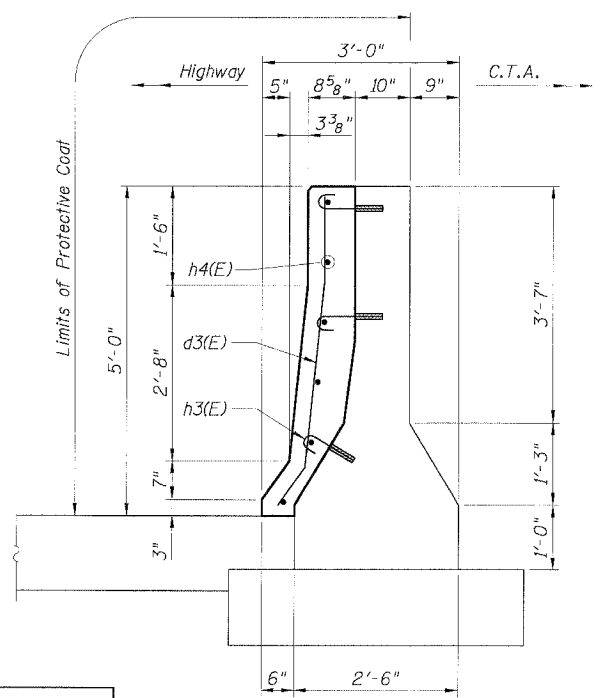
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	556	379
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
* (1818, ETC, 2324.6-1PIR-8		62300		



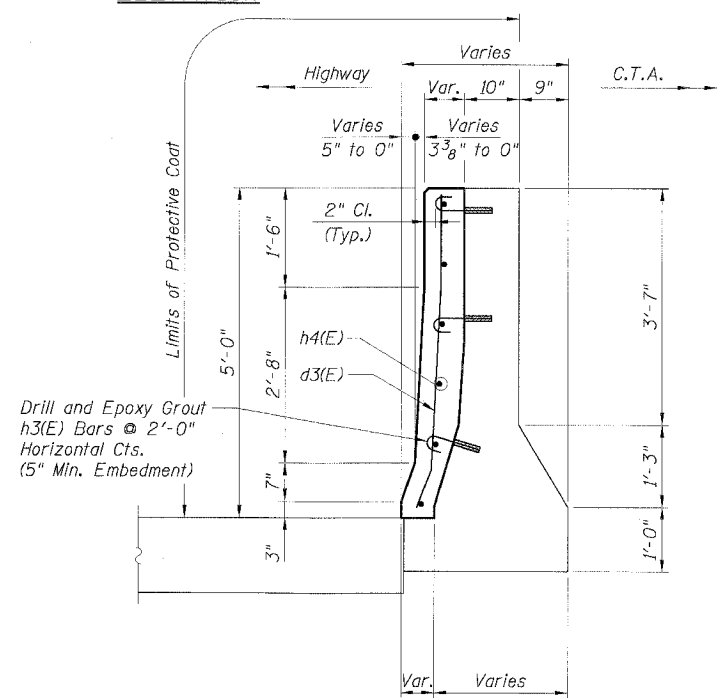
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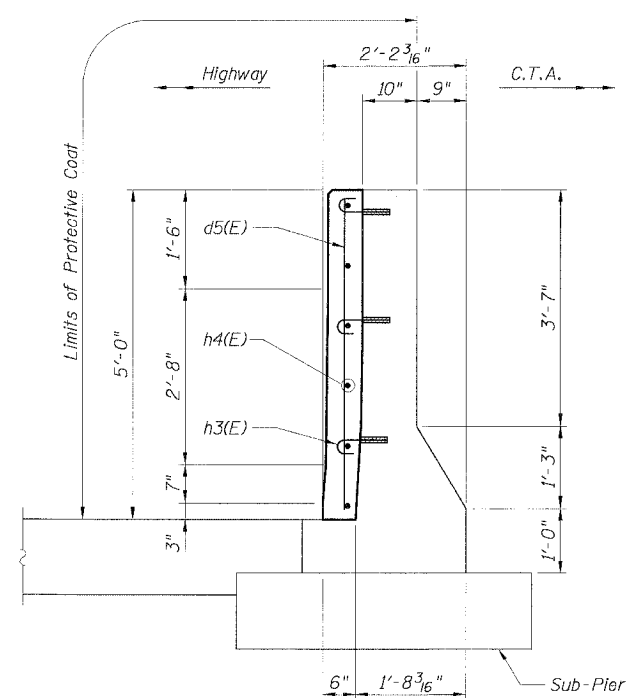
ELEVATION



SECTION E-E



SECTION D-D

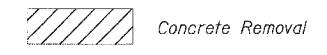


SECTION C-C

BILL OF MATERIAL
FOR ONE TRANSITION

Bar	No.	Size	Length	Shape
d3(E)	16	#4	5'-3"	—
d5(E)	12	#4	4'-8"	—
h3(E)	42	#4	1'-6"	—
h4(E)	6	#4	26'-8"	—
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated		250		
Concrete Structures		3.0		
Protective Coat		19.6		
Concrete Removal				

LEGEND:



NOTES:

1. Drilling and grouting of #4 h3(E) bars shall be in accordance with Section 584 of the Standard Specifications.
2. The cost of drilling holes, furnishing and placing Epoxy Grout and setting #4 h3(E) bars shall be included in the cost per cubic yard for Concrete Structures.
3. Provide joints in facing to match those in the existing barrier.
4. For Refaced Barrier details, see Sheets B4 and B5.
5. For locations of Transition, see Roadway Plans.

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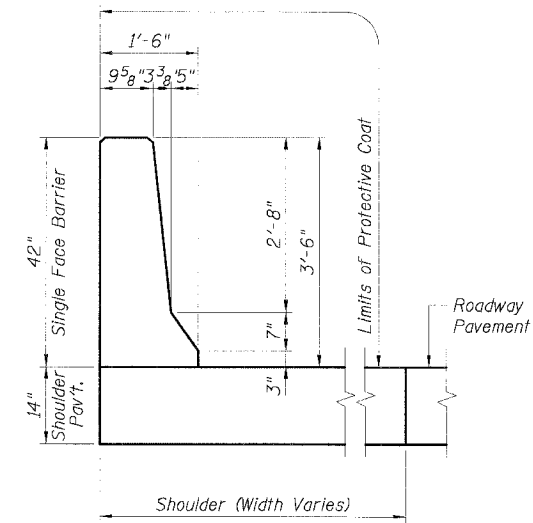
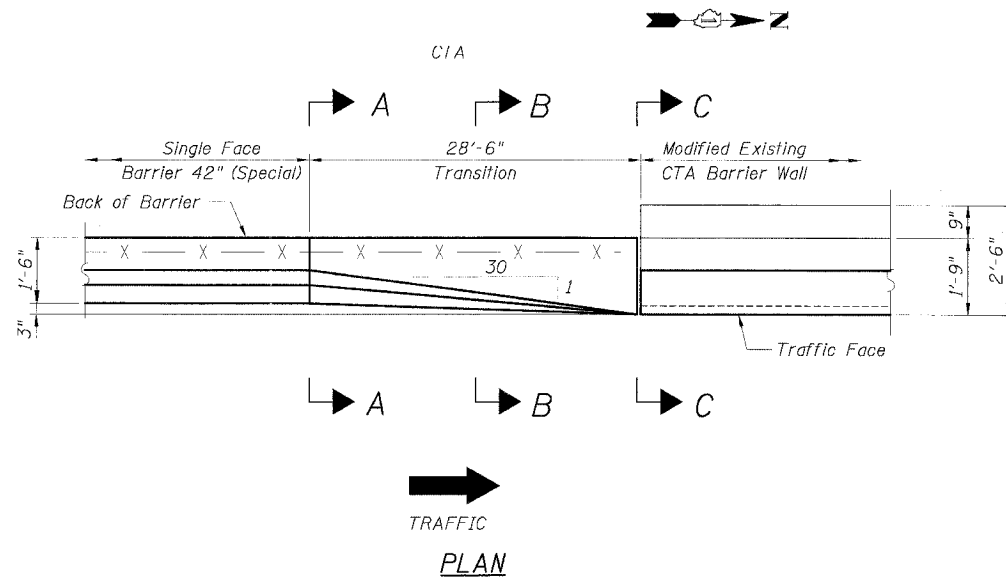
REVISIONS	
NAME	DATE

Sheet B11 of 16
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/S SHOULDER AT OR ABOVE EXISTING
REFACED BARRIER TO PIER
TRANSITION DETAILS (NO TAPER)
SCALE: None DRAWN BY: CHD
DATE: JULY 7, 2005 CHECKED BY: RDP

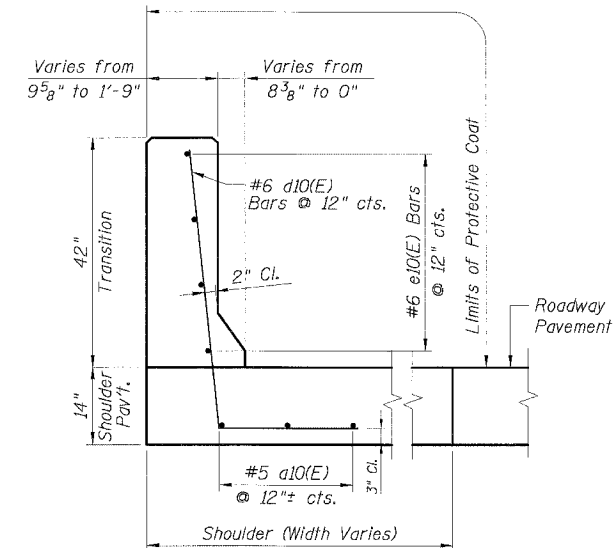
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

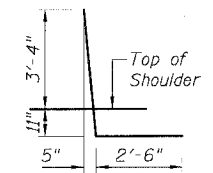
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	556	380
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
* (1818, ETC, 2324.6-1PR-8				
				62300



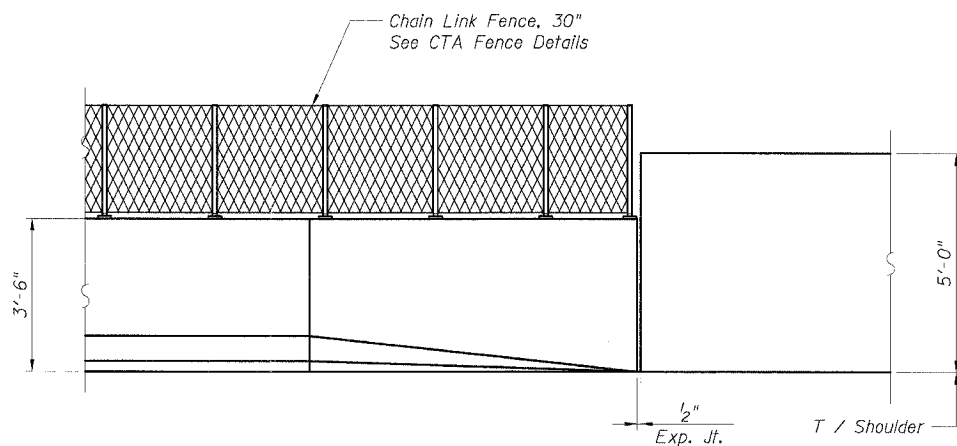
SECTION A



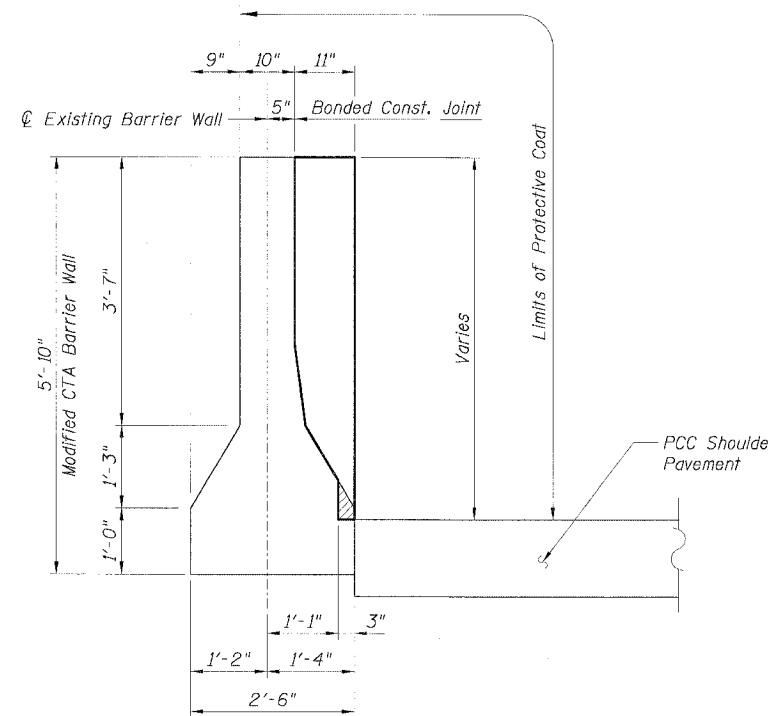
SECTION B



BAR d10(E)



ELEVATION



SECTION C

BILL OF MATERIAL
FOR ONE TRANSITION

Bar	No.	Size	Length	Shape
d10	3	#5	28'-2"	—
d10	29	#6	6'-9"	L
e10	4	#4	28'-2"	—
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Lbs.	460		
Concrete Structures	Cu. Yd.	5.2		
Protective Coat	Sq. Yd.	16		

NOTES:

- For alternative vertical reinforcing details, see "Concrete Barrier Single Face, 42" Alternates".
- For existing CTA Barrier modifications - vertical facing, see sheet B7.
- For locations of Transition, see Roadway Plans.

Sheet B12 of 16

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROPOSED T/SOULDER AT OR ABOVE EXISTING
VERT. NEW 42" BARRIER TO REFACED BARRIER
TRANSITION DETAILS (TAPER)
SCALE: None DRAWN BY: CHD
DATE: JULY 7, 2005 CHECKED BY: RDP

CTE | AECOM

CTE
303 East Wacker Drive, Suite 600, Chicago, IL 60601-5276
T 312.438.2200 F 312.438.1009 www.cteaecom.com

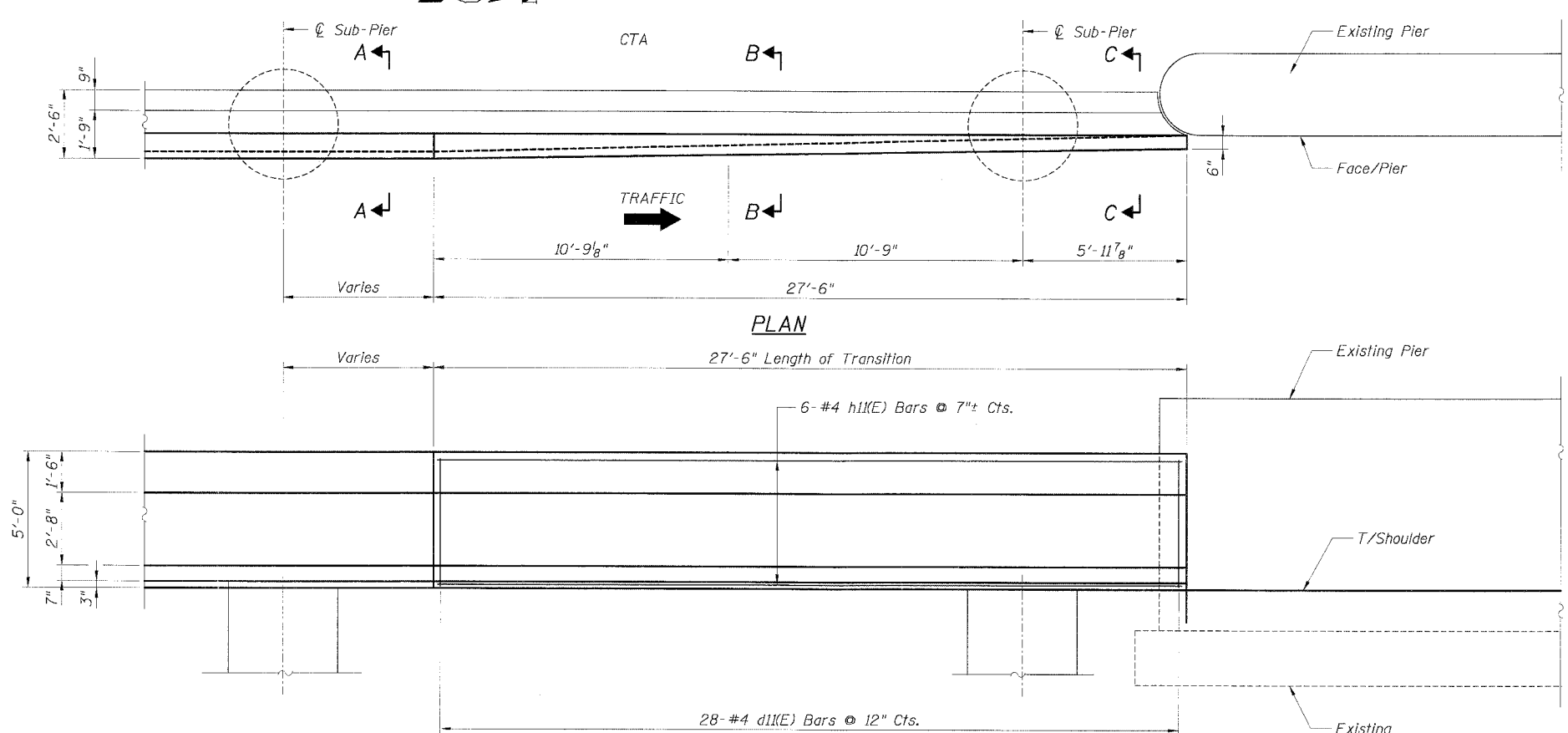
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	556	381
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (1818, ETC, 2324.6-1P)R-8 62300				

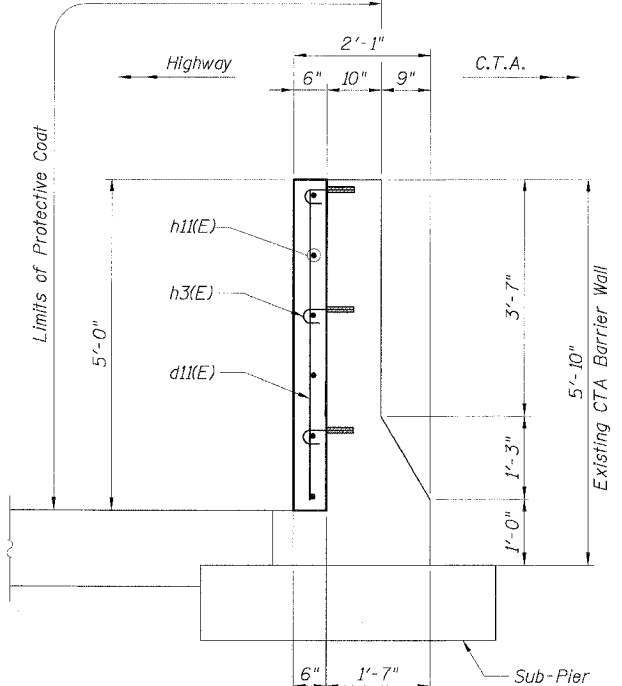
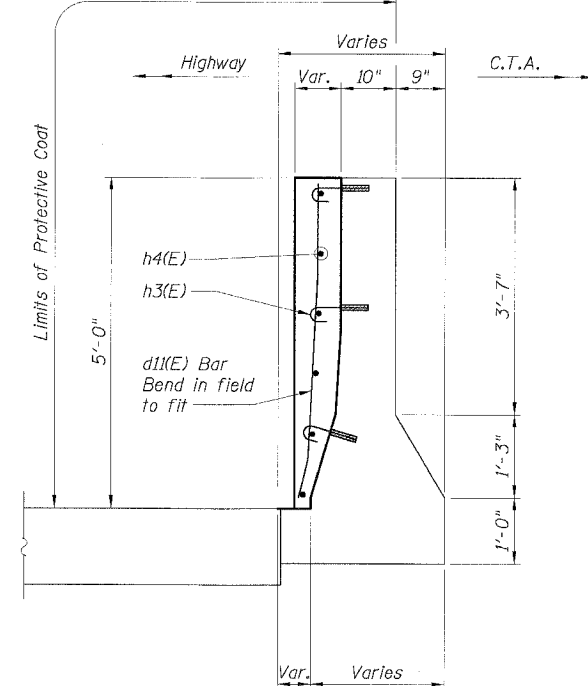
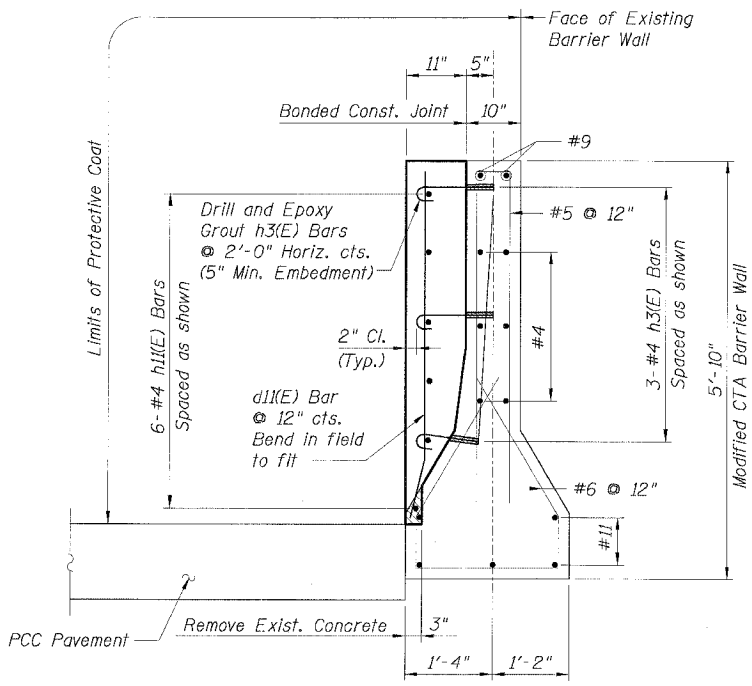
**BILL OF MATERIAL
FOR ONE TRANSITION**

Bar	No.	Size	Length	Shape
d11(E)	28	#4	5'-3"	—
h3(E)	42	#4	1'-6"	⌋
h11(E)	6	#4	27'-2"	—
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Lbs.	250		
Concrete Structures	Cu. Yd.	3.2		
Protective Coat	Sq. Yd.	40		
Concrete Removal	Cu. Yd.	0.1		



LEGEND:
 Concrete Removal

- NOTES:**
1. Drilling and grouting of #4 h3(E) bars shall be in accordance with Section 584 of the Standard Specifications.
 2. The cost of drilling holes, furnishing and placing Epoxy Grout and setting #4 h3(E) bars shall be included in the cost per cubic yard for Concrete Structures.
 3. Provide joints in facing to match those in the existing barrier.
 4. For Soldier Pile and Lagging Retention System see Sheets 4 and 5.
 5. For Sections C-C, D-D and E-E see Sheet
 6. For locations of Transition, see Roadway Plans.



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SECTION A

SECTION B

SECTION C-C

REVISIONS	
NAME	DATE

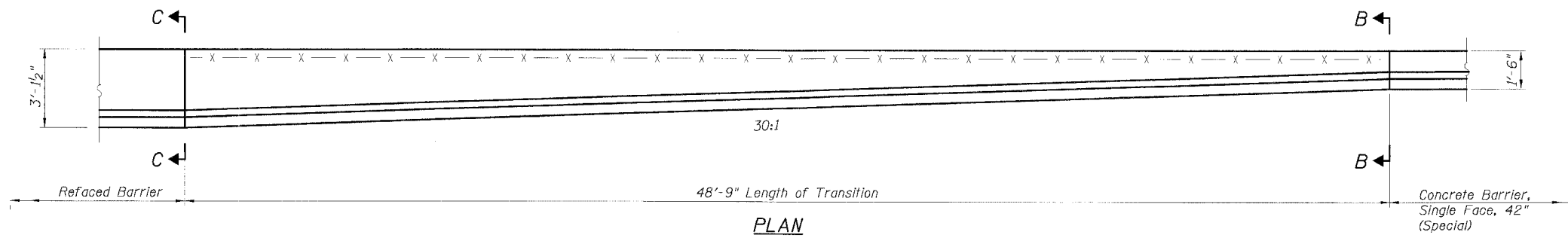
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
**EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS**
**PROPOSED T/S SHOULDER AT OR ABOVE EXISTING
VERT. REFACED BARRIER TO PIER
TRANSITION DETAILS (NO TAPER)**
SCALE: None DRAWN BY: CHD
DATE: JULY 7, 2005 CHECKED BY: RDP

Sheet B13 of 16

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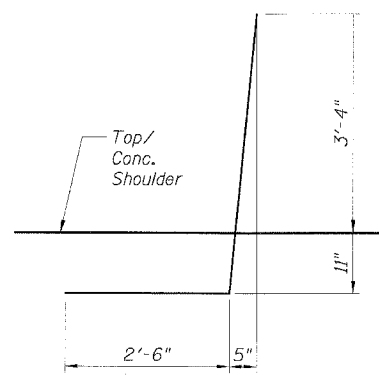
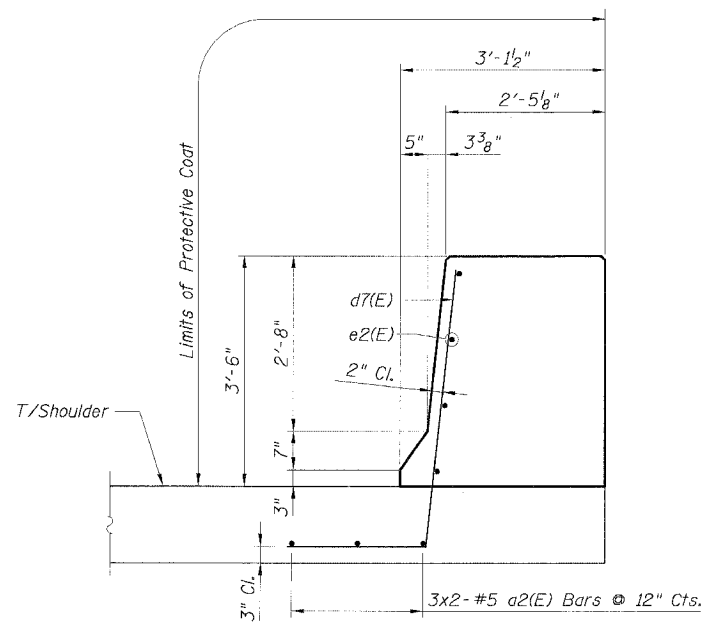
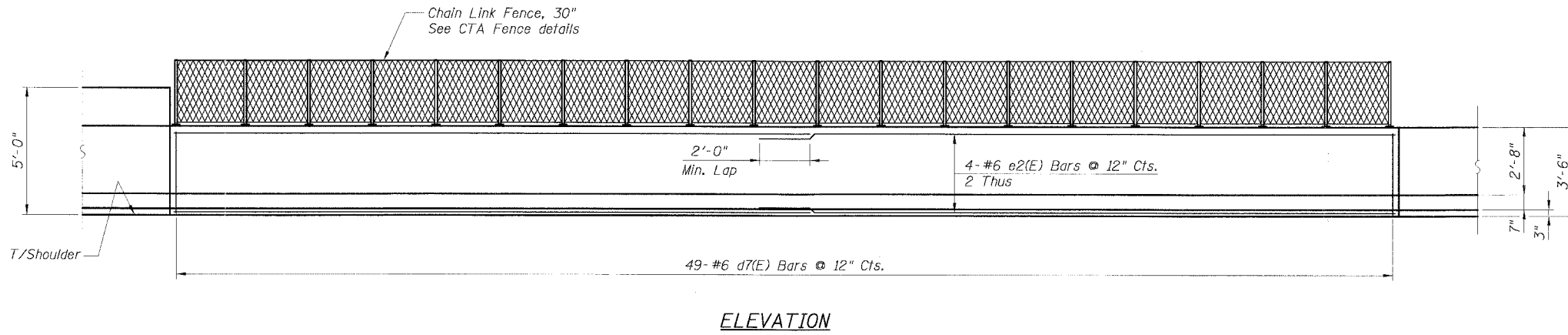
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE. 90/94	SECTION *	COUNTY COOK	TOTAL SHEETS 556	SHEET NO. 382
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS		FED. AID PROJECT		
* (1818, ETC, 2324.6-1)PR-8				62300



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a2(E)	6	#5	25'-3"	—
d7(E)	49	#6	6'-9"	—
e2(E)	8	#6	25'-3"	—
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Lbs.	1,030		
Concrete Structures	Cu. Yd.	11.7		
Protective Coat	Sq. Yd.	28.5		



SECTION C-C

d7(E) BAR

NOTES:

1. Provide joints in facing to match those in the Existing Barrier.
2. For Refaced Barrier details, see Sheets B2 and B3.
3. For Concrete Barrier, Single Face, 42" (Special), see Civil details.
4. For locations of Transition, see Roadway Plans.

Sheet B14 of 16

REVISIONS		NAME	DATE
NO.	DESCRIPTION		

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
EXISTING BARRIER WALL MODIFICATIONS AT CTA STATIONS
PROPOSED T/SOULDER BELOW EXISTING REFACED BARRIER TO NEW 42" BARRIER TRANSITION DETAILS

SCALE: None DRAWN BY: CHD
DATE: JULY 7, 2005 CHECKED BY: RDP

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CTE
301 East Wacker Drive, Suite 600, Chicago, Illinois 60601-5216
312.291.0300 F. 312.291.1009 www.cte.aecom.com

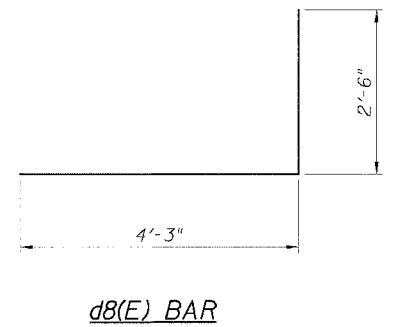
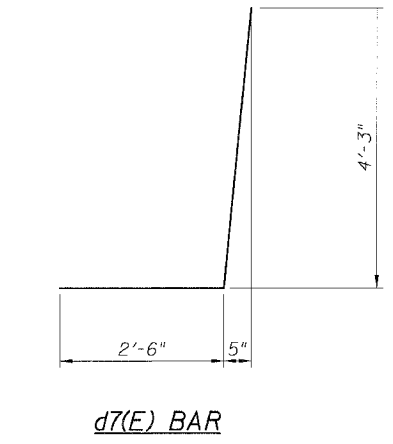
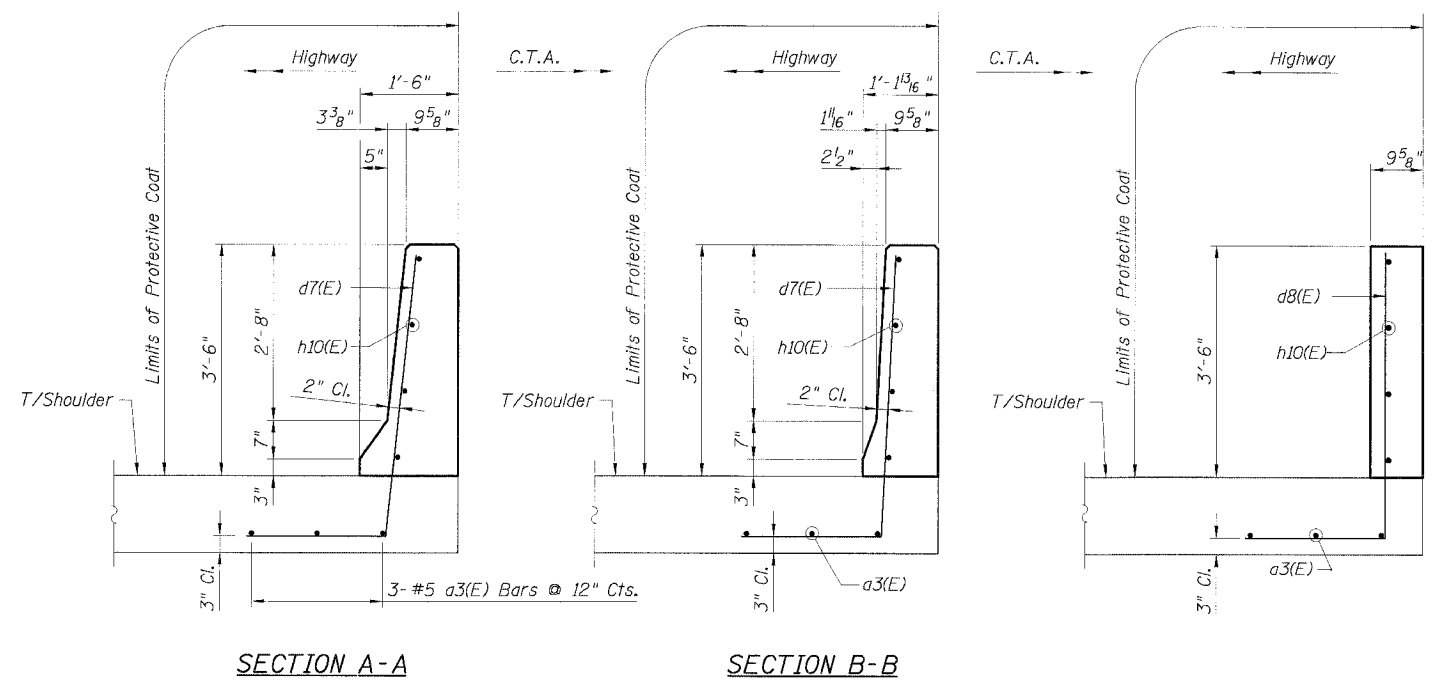
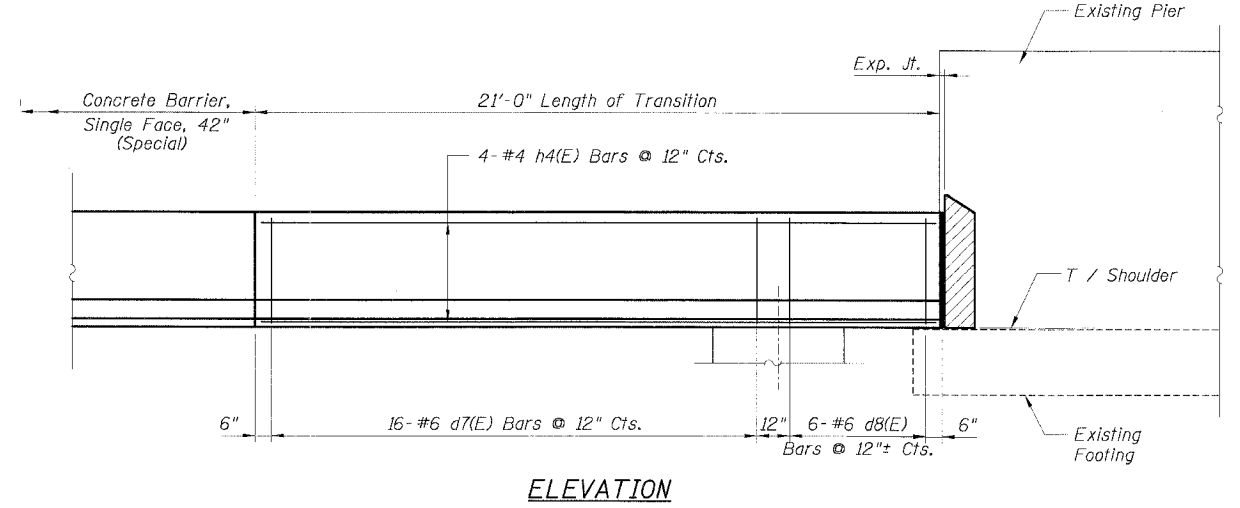
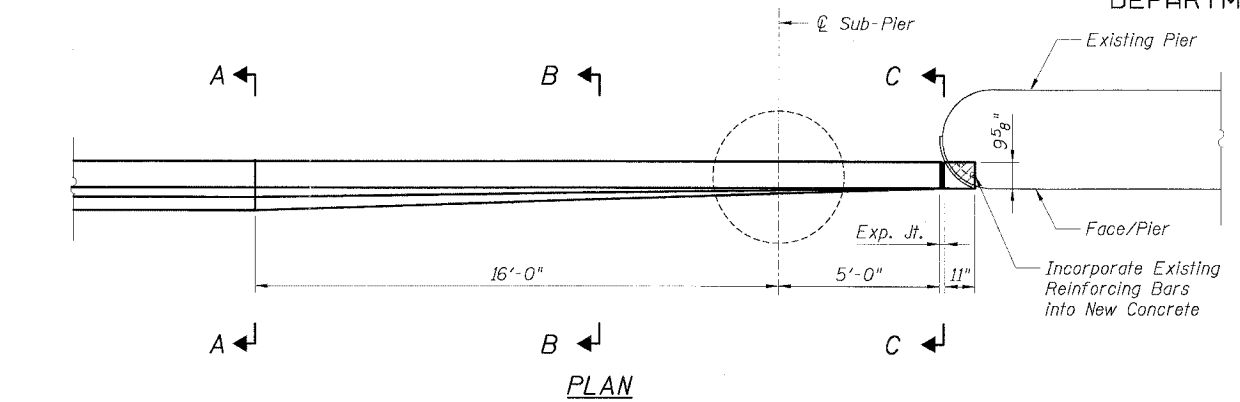
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	556	384
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
* (1818, ETC, 2324.6-1)PR-8				62300

**BILL OF MATERIAL
FOR ONE TRANSITION**

Bar	No.	Size	Length	Shape
a3(E)	3	#5	20'-8"	
d7(E)	15	#6	6'-9"	
d8(E)	5	#6	6'-9"	
h10(E)	4	#4	20'-8"	
Item	Unit	Quantity		
Reinforcement Bars, Epoxy Coated	Lbs.	365		
Concrete Structures	Cu. Yd.	2.7		
Protective Coat	Sq. Yd.	11		
Concrete Removal	Cu. Yd.	0.1		



LEGEND:



NOTES:

1. Provide joints in facing to match those in the existing barrier.
2. For Concrete Barrier, Single Face, 42" (Special), see Civil details.
3. For locations of Transition, see Roadway Plans.

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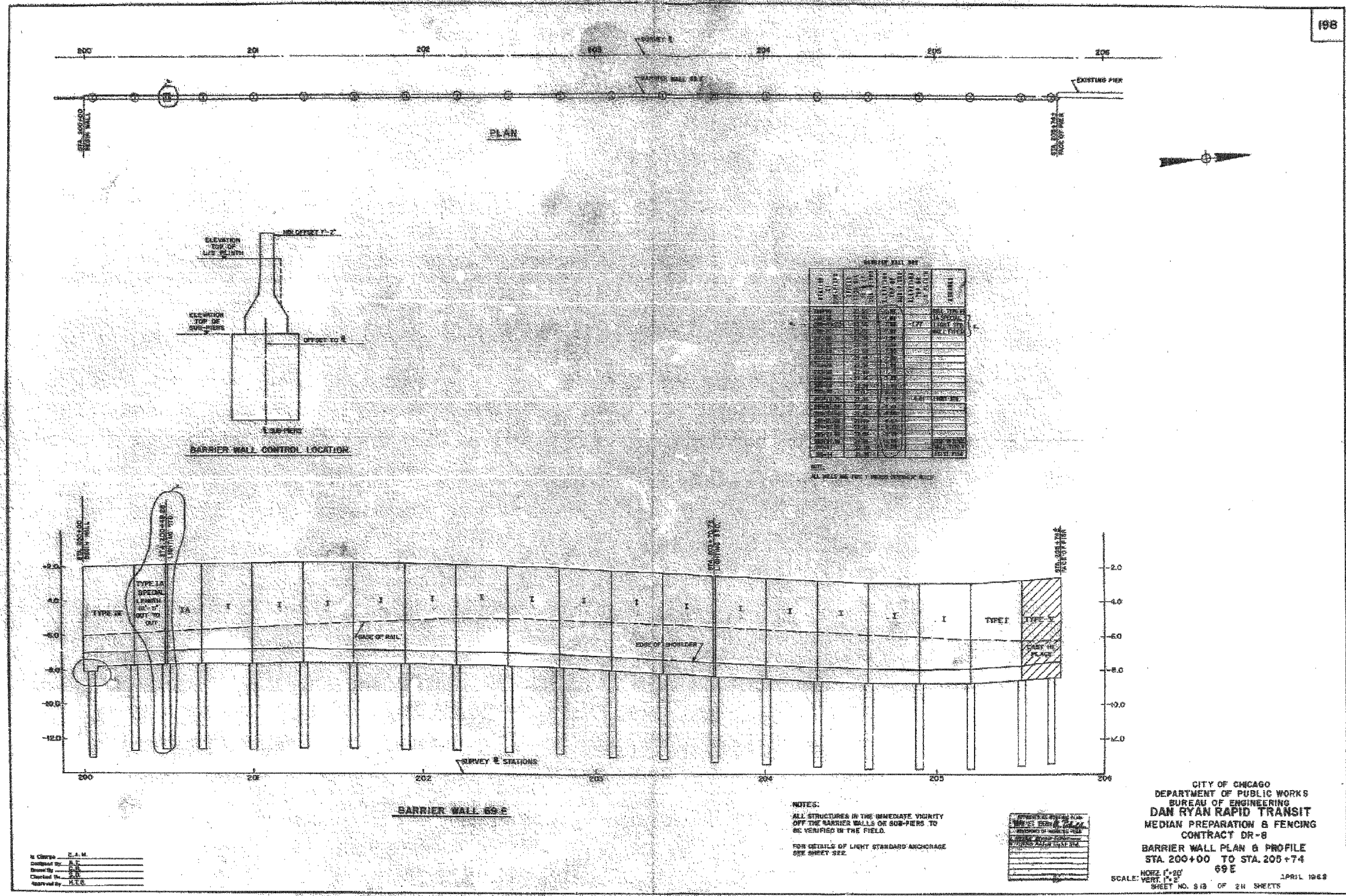
CTE
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REVISIONS	
NAME	DATE

Sheet B16 of 16
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
EXISTING BARRIER WALL MODIFICATIONS
AT CTA STATIONS
PROP. T/SOULDER ABOVE OR BELOW EXISTING
NEW 42" BARRIER TO PIER
TRANSITION DETAILS
SCALE: None DRAWN BY: CHD
DATE: JULY 7, 2005 CHECKED BY: RDP

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90 *		COOK	556	385
STA.		TO STA.		
62300		* (1818, ETC, 2324.6-1PJR-8		



NOTES:
 ALL STRUCTURES IN THE IMMEDIATE VICINITY OFF THE BARRIER WALLS OR SUB-PIERS TO BE VERIFIED IN THE FIELD.
 FOR DETAILS OF LIGHT STANDARD ANCHORAGE SEE SHEET 69 E.

CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
DAN RYAN RAPID TRANSIT
 MEDIAN PREPARATION & FENCING
 CONTRACT DR-8
 BARRIER WALL PLAN & PROFILE
 STA. 200+00 TO STA. 205+74
 69 E
 SCALE: HORIZ. 1"=20' VERT. 1"=2'
 SHEET NO. 818 OF 24 SHEETS APRIL 1968

IN CHARGE: E.A.M.
 DRAWN BY: J.L.
 CHECKED BY: J.P.
 APPROVED BY: M.T.S.

SHEET SD-1 OF SD-11

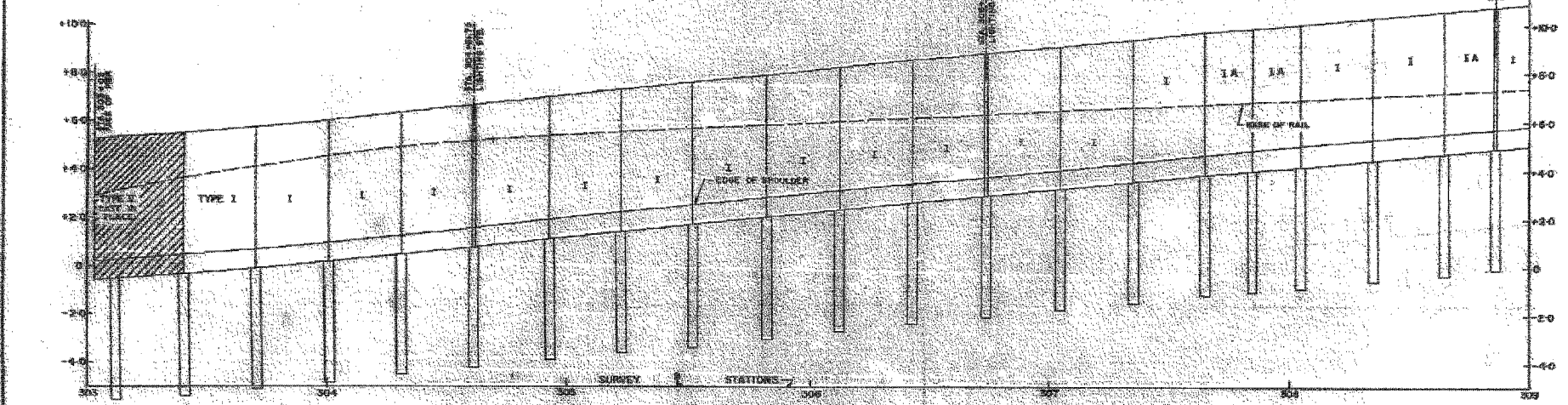
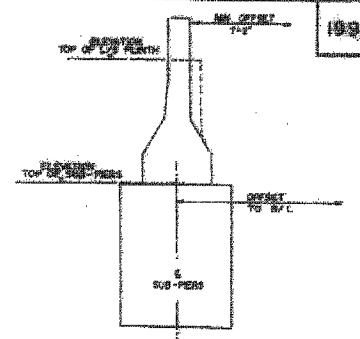
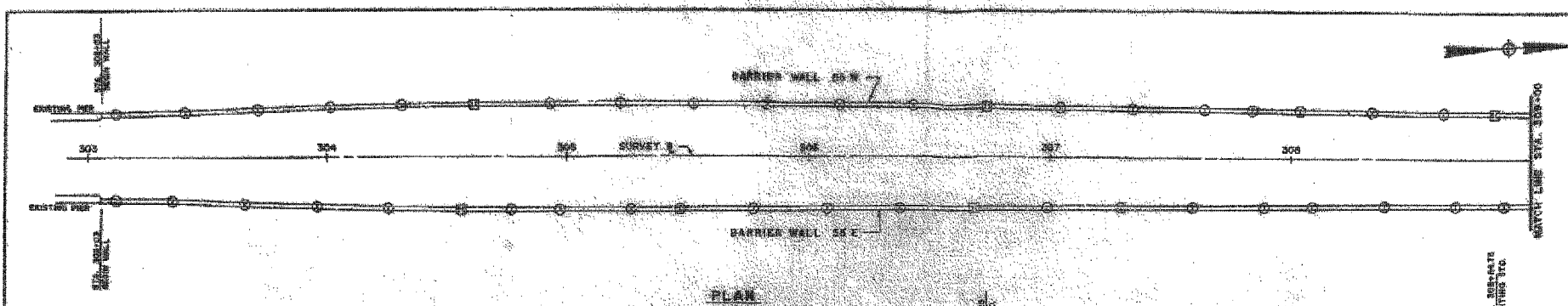
FOR INFORMATION ONLY

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 EXISTING BARRIER WALL PLANS
 AT CTA STATIONS

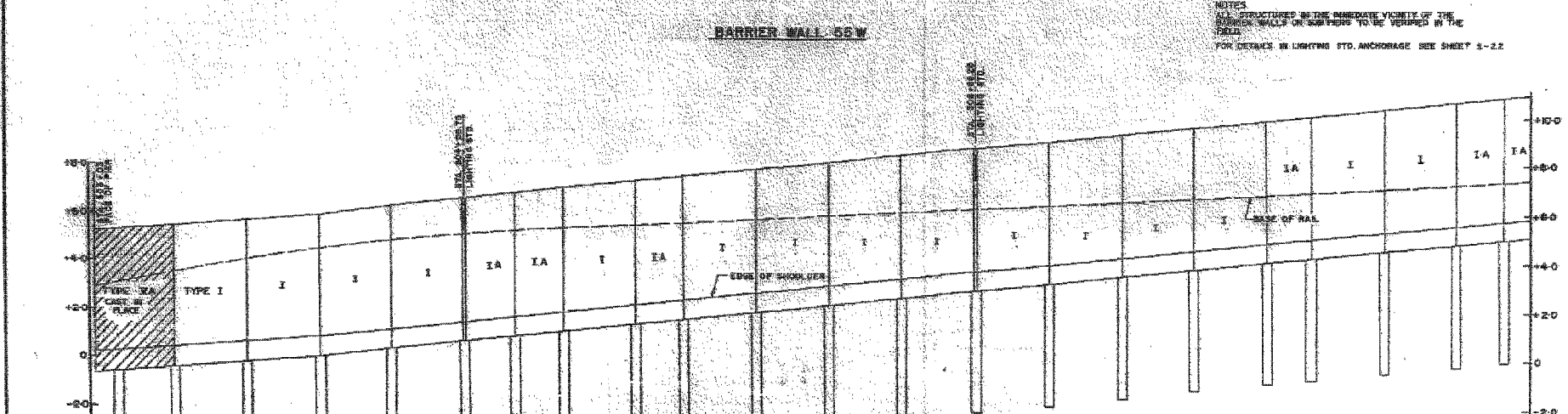
SCALE: NONE
 DATE: 7/7/05
 DRAWN BY: CTA
 CHECKED BY: CTA

Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM



BARRIER WALL CONTROL LOCATION

STATION	TYPE	HEIGHT	WIDTH	SPACING	REMARKS
303+00	I	4.00	4.00	10.00	
303+10	I	4.00	4.00	10.00	
303+20	I	4.00	4.00	10.00	
303+30	I	4.00	4.00	10.00	
303+40	I	4.00	4.00	10.00	
303+50	I	4.00	4.00	10.00	
303+60	I	4.00	4.00	10.00	
303+70	I	4.00	4.00	10.00	
303+80	I	4.00	4.00	10.00	
303+90	I	4.00	4.00	10.00	
304+00	I	4.00	4.00	10.00	
304+10	I	4.00	4.00	10.00	
304+20	I	4.00	4.00	10.00	
304+30	I	4.00	4.00	10.00	
304+40	I	4.00	4.00	10.00	
304+50	I	4.00	4.00	10.00	
304+60	I	4.00	4.00	10.00	
304+70	I	4.00	4.00	10.00	
304+80	I	4.00	4.00	10.00	
304+90	I	4.00	4.00	10.00	
305+00	I	4.00	4.00	10.00	
305+10	I	4.00	4.00	10.00	
305+20	I	4.00	4.00	10.00	
305+30	I	4.00	4.00	10.00	
305+40	I	4.00	4.00	10.00	
305+50	I	4.00	4.00	10.00	
305+60	I	4.00	4.00	10.00	
305+70	I	4.00	4.00	10.00	
305+80	I	4.00	4.00	10.00	
305+90	I	4.00	4.00	10.00	
306+00	I	4.00	4.00	10.00	
306+10	I	4.00	4.00	10.00	
306+20	I	4.00	4.00	10.00	
306+30	I	4.00	4.00	10.00	
306+40	I	4.00	4.00	10.00	
306+50	I	4.00	4.00	10.00	
306+60	I	4.00	4.00	10.00	
306+70	I	4.00	4.00	10.00	
306+80	I	4.00	4.00	10.00	
306+90	I	4.00	4.00	10.00	
307+00	I	4.00	4.00	10.00	
307+10	I	4.00	4.00	10.00	
307+20	I	4.00	4.00	10.00	
307+30	I	4.00	4.00	10.00	
307+40	I	4.00	4.00	10.00	
307+50	I	4.00	4.00	10.00	
307+60	I	4.00	4.00	10.00	
307+70	I	4.00	4.00	10.00	
307+80	I	4.00	4.00	10.00	
307+90	I	4.00	4.00	10.00	
308+00	I	4.00	4.00	10.00	
308+10	I	4.00	4.00	10.00	
308+20	I	4.00	4.00	10.00	
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308+50	I	4.00	4.00	10.00	
308+60	I	4.00	4.00	10.00	
308+70	I	4.00	4.00	10.00	
308+80	I	4.00	4.00	10.00	
308+90	I	4.00	4.00	10.00	
309+00	I	4.00	4.00	10.00	



STATION	TYPE	HEIGHT	WIDTH	SPACING	REMARKS
303+00	I	4.00	4.00	10.00	
303+10	I	4.00	4.00	10.00	
303+20	I	4.00	4.00	10.00	
303+30	I	4.00	4.00	10.00	
303+40	I	4.00	4.00	10.00	
303+50	I	4.00	4.00	10.00	
303+60	I	4.00	4.00	10.00	
303+70	I	4.00	4.00	10.00	
303+80	I	4.00	4.00	10.00	
303+90	I	4.00	4.00	10.00	
304+00	I	4.00	4.00	10.00	
304+10	I	4.00	4.00	10.00	
304+20	I	4.00	4.00	10.00	
304+30	I	4.00	4.00	10.00	
304+40	I	4.00	4.00	10.00	
304+50	I	4.00	4.00	10.00	
304+60	I	4.00	4.00	10.00	
304+70	I	4.00	4.00	10.00	
304+80	I	4.00	4.00	10.00	
304+90	I	4.00	4.00	10.00	
305+00	I	4.00	4.00	10.00	
305+10	I	4.00	4.00	10.00	
305+20	I	4.00	4.00	10.00	
305+30	I	4.00	4.00	10.00	
305+40	I	4.00	4.00	10.00	
305+50	I	4.00	4.00	10.00	
305+60	I	4.00	4.00	10.00	
305+70	I	4.00	4.00	10.00	
305+80	I	4.00	4.00	10.00	
305+90	I	4.00	4.00	10.00	
306+00	I	4.00	4.00	10.00	
306+10	I	4.00	4.00	10.00	
306+20	I	4.00	4.00	10.00	
306+30	I	4.00	4.00	10.00	
306+40	I	4.00	4.00	10.00	
306+50	I	4.00	4.00	10.00	
306+60	I	4.00	4.00	10.00	
306+70	I	4.00	4.00	10.00	
306+80	I	4.00	4.00	10.00	
306+90	I	4.00	4.00	10.00	
307+00	I	4.00	4.00	10.00	
307+10	I	4.00	4.00	10.00	
307+20	I	4.00	4.00	10.00	
307+30	I	4.00	4.00	10.00	
307+40	I	4.00	4.00	10.00	
307+50	I	4.00	4.00	10.00	
307+60	I	4.00	4.00	10.00	
307+70	I	4.00	4.00	10.00	
307+80	I	4.00	4.00	10.00	
307+90	I	4.00	4.00	10.00	
308+00	I	4.00	4.00	10.00	
308+10	I	4.00	4.00	10.00	
308+20	I	4.00	4.00	10.00	
308+30	I	4.00	4.00	10.00	
308+40	I	4.00	4.00	10.00	
308+50	I	4.00	4.00	10.00	
308+60	I	4.00	4.00	10.00	
308+70	I	4.00	4.00	10.00	
308+80	I	4.00	4.00	10.00	
308+90	I	4.00	4.00	10.00	
309+00	I	4.00	4.00	10.00	

NOTES:
 ALL STRUCTURES IN THE IMMEDIATE VICINITY OF THE
 BARRIER WALLS OR SHOULDERS TO BE VERIFIED IN THE
 FIELD.
 FOR DETAILS ON LIGHTING STD. ANCHORAGE SEE SHEET S-2.2

CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
 DAN RYAN RAPID TRANSIT
 MEDIAN PREPARATION & FENCING
 CONTRACT DR-8
 BARRIER WALL PLAN & PROFILES
 STA. 303+00 TO STA 309+00
 HORIZ. 1"=20'
 VERT. 1"=2'
 SCALE: 1"=20' HORIZ. 1"=2' VERT. 1"=2'
 SHEET NO. 3/4 OF 2/11 SHEETS
 APRIL, 1968

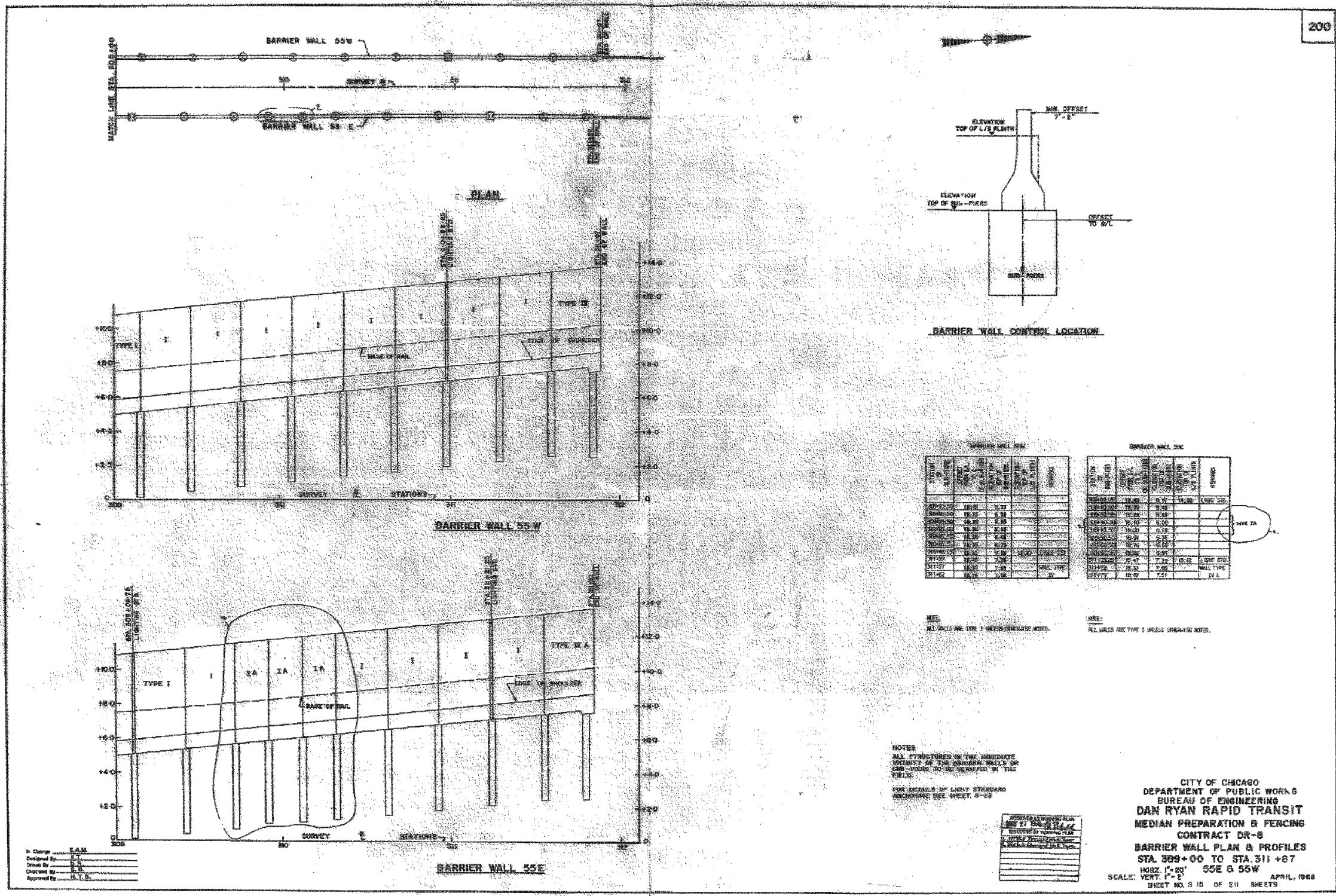
Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.EKCORP.COM

FOR INFORMATION ONLY

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 EXISTING BARRIER WALL PLANS
 AT CTA STATIONS
 SCALE: NONE
 DATE: 7/7/05
 DRAWN BY: CTA
 CHECKED BY: CTA

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90 *		COOK	556	387
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62300 • (1818, ETC, 2324.6-1PR)-8				



SPRINKLER WALL 55W					SPRINKLER WALL 55E				
STATION	WALL HGT	WALL THK	WALL TYPE	REMARKS	STATION	WALL HGT	WALL THK	WALL TYPE	REMARKS
309+00	10.0	2.0	TYPE I		309+00	10.0	2.0	TYPE I	
309+10	10.0	2.0	TYPE I		309+10	10.0	2.0	TYPE I	
309+20	10.0	2.0	TYPE I		309+20	10.0	2.0	TYPE I	
309+30	10.0	2.0	TYPE I		309+30	10.0	2.0	TYPE I	
309+40	10.0	2.0	TYPE I		309+40	10.0	2.0	TYPE I	
309+50	10.0	2.0	TYPE I		309+50	10.0	2.0	TYPE I	
309+60	10.0	2.0	TYPE I		309+60	10.0	2.0	TYPE I	
309+70	10.0	2.0	TYPE I		309+70	10.0	2.0	TYPE I	
309+80	10.0	2.0	TYPE I		309+80	10.0	2.0	TYPE I	
309+90	10.0	2.0	TYPE I		309+90	10.0	2.0	TYPE I	
310+00	10.0	2.0	TYPE I		310+00	10.0	2.0	TYPE I	
310+10	10.0	2.0	TYPE I		310+10	10.0	2.0	TYPE I	
310+20	10.0	2.0	TYPE I		310+20	10.0	2.0	TYPE I	
310+30	10.0	2.0	TYPE I		310+30	10.0	2.0	TYPE I	
310+40	10.0	2.0	TYPE I		310+40	10.0	2.0	TYPE I	
310+50	10.0	2.0	TYPE I		310+50	10.0	2.0	TYPE I	
310+60	10.0	2.0	TYPE I		310+60	10.0	2.0	TYPE I	
310+70	10.0	2.0	TYPE I		310+70	10.0	2.0	TYPE I	
310+80	10.0	2.0	TYPE I		310+80	10.0	2.0	TYPE I	
310+90	10.0	2.0	TYPE I		310+90	10.0	2.0	TYPE I	
311+00	10.0	2.0	TYPE I		311+00	10.0	2.0	TYPE I	

NOTES:
 ALL WALLS ARE TYPE I UNLESS OTHERWISE NOTED.
 ALL WALLS ARE TYPE I UNLESS OTHERWISE NOTED.

NOTES:
 ALL STRUCTURES IN THE IMMEDIATE VICINITY OF THE BARRIER WALLS OR S/W - PILES TO BE VERIFIED IN THE FIELD.
 FOR DETAILS OF LIGHT STANDARD ANCHORAGE SEE SHEET 9-22

CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
 DAN RYAN RAPID TRANSIT
 MEDIAN PREPARATION & FENCING
 CONTRACT DR-8
 BARRIER WALL PLAN & PROFILES
 STA. 309+00 TO STA. 311+87
 HORIZ. 1" = 20' 55E & 55W
 SCALE: VERT. 1" = 2'
 SHEET NO. 3 OF 21 SHEETS

In Charge: E.S.M.
 Designed by: J.L.
 Drawn by: J.L.
 Checked by: J.L.
 Approved by: J.L.

SHEET SD-3 OF SD-11

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 EXISTING BARRIER WALL PLANS
 AT CTA STATIONS

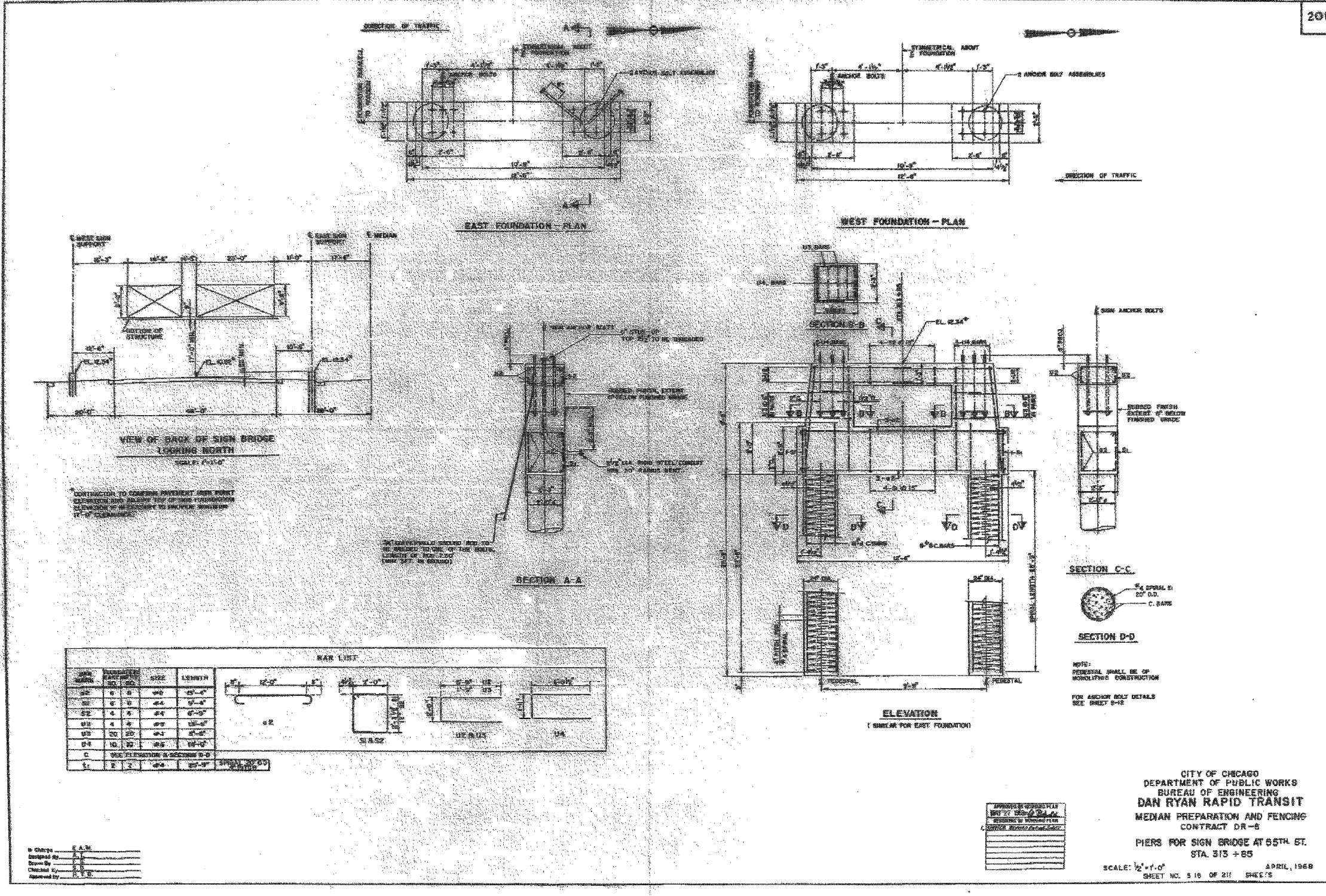
SCALE: NONE
 DATE: 7/7/05
 DRAWN BY: CTA
 CHECKED BY: CTA

FOR INFORMATION ONLY

Edwards AND Kelcey
 ONE NORTH FRANKLIN
 CHICAGO, IL 60606
 PHONE: (312) 251-3000
 FAX: (312) 251-3015
 WEB: WWW.ECKCORP.COM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	388
STA.	TO STA.			
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62300		• (1818, ETC, 2324.6-1PR-8		

201



CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
DAN RYAN RAPID TRANSIT
MEDIAN PREPARATION AND FENCING
CONTRACT DR-8
PIERS FOR SIGN BRIDGE AT 55TH ST.
STA. 313 + 85
SCALE: 1/2" = 1'-0" APRIL, 1968
SHEET NO. 5 16 OF 211 SHEET'S

APPROVED BY	DATE

Designed By: E.A.K.
Drawn By: J.C.B.
Checked By: J.C.B.
Approved By: J.C.B.

SHEET SD-4 OF SD-11

REVISIONS	NAME	DATE

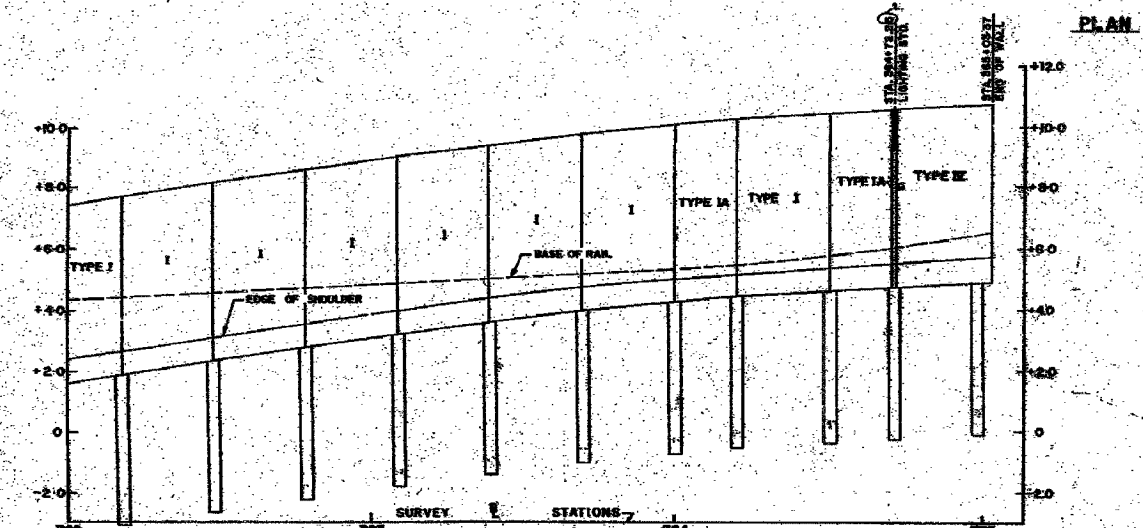
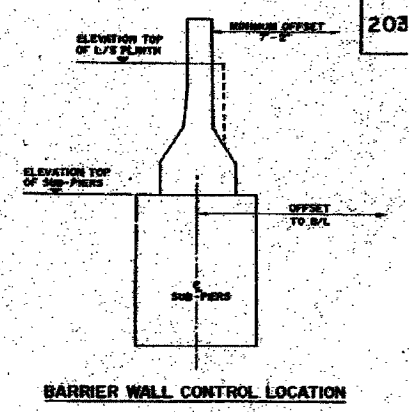
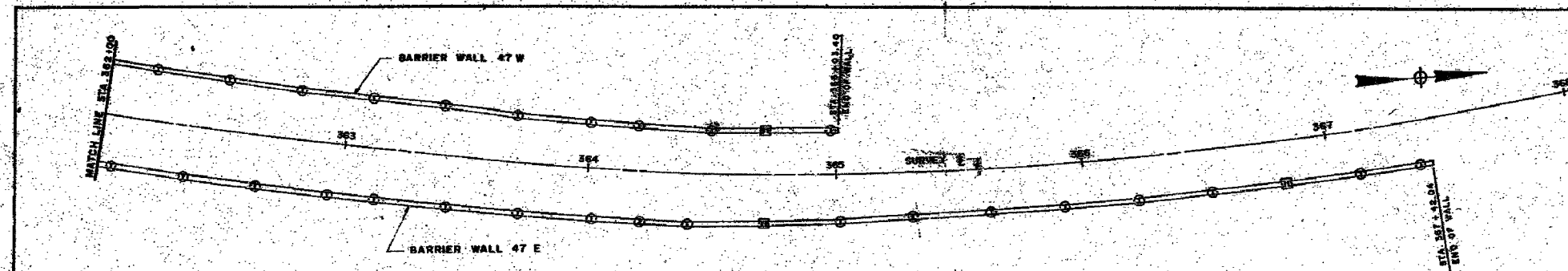
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
EXISTING BARRIER WALL PLANS
AT CTA STATIONS

SCALE: NONE
DATE: 7/7/05

DRAWN BY: CTA
CHECKED BY: CTA

FOR INFORMATION ONLY

Edwards AND Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
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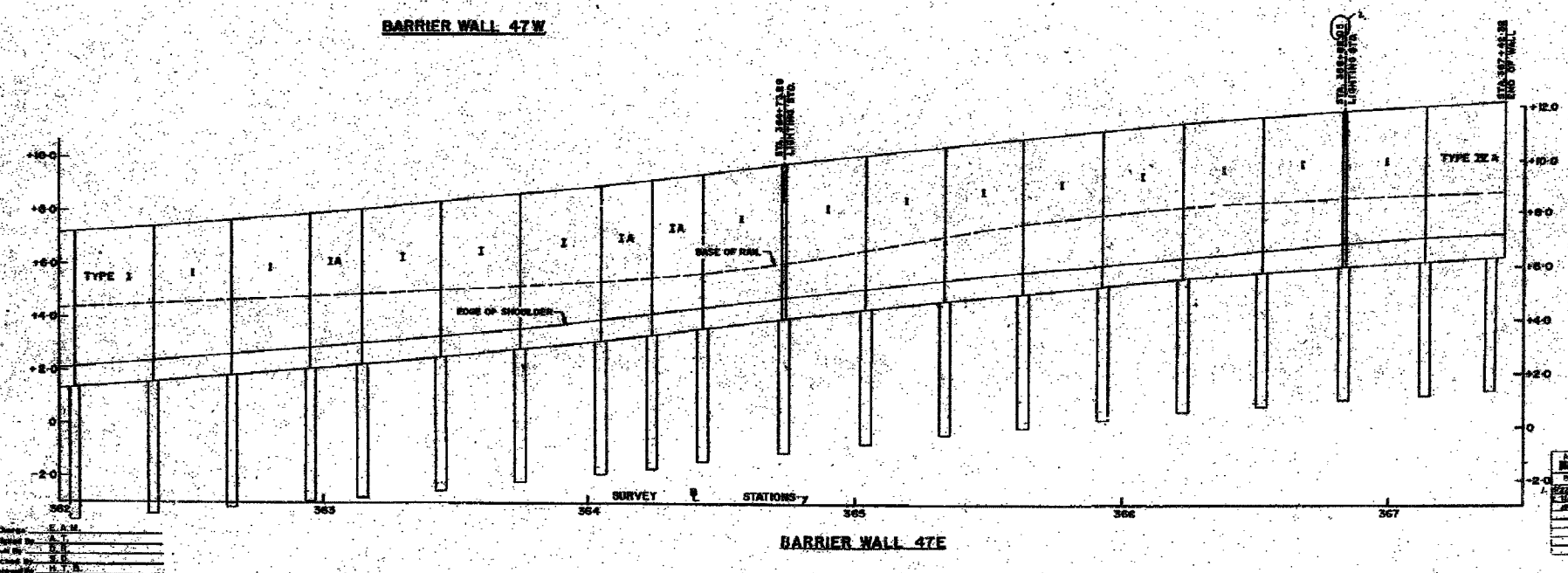
NOTES
 ALL CONCERNING THE IMMEDIATE ADJACENT TO THE BARRIERS OR SUB-FIERS SHALL BE AS SHOWN IN THE PLAN.
 THE BARRIERS AND SUB-FIERS SHOWN AND SHOWN SEE SHEET 5-22

BARRIER WALL 47W

STATION	TYPE	HEIGHT	WIDTH	SPACING	TYPE	REMARKS
362+00	I	21.15	1.33			
362+10	I	21.02	1.33			
362+20	I	20.89	1.33			
362+30	I	20.76	1.33			
362+40	I	20.63	1.33			
362+50	I	20.50	1.33			
362+60	I	20.37	1.33			
362+70	I	20.24	1.33			
362+80	I	20.11	1.33			
362+90	I	19.98	1.33			
363+00	I	19.85	1.33			
363+10	I	19.72	1.33			
363+20	I	19.59	1.33			
363+30	I	19.46	1.33			
363+40	I	19.33	1.33			
363+50	I	19.20	1.33			
363+60	I	19.07	1.33			
363+70	I	18.94	1.33			
363+80	I	18.81	1.33			
363+90	I	18.68	1.33			
364+00	I	18.55	1.33			
364+10	I	18.42	1.33			
364+20	I	18.29	1.33			
364+30	I	18.16	1.33			
364+40	I	18.03	1.33			
364+50	I	17.90	1.33			
364+60	I	17.77	1.33			
364+70	I	17.64	1.33			
364+80	I	17.51	1.33			
364+90	I	17.38	1.33			
365+00	I	17.25	1.33			
365+10	I	17.12	1.33			
365+20	I	16.99	1.33			
365+30	I	16.86	1.33			
365+40	I	16.73	1.33			
365+50	I	16.60	1.33			
365+60	I	16.47	1.33			
365+70	I	16.34	1.33			
365+80	I	16.21	1.33			
365+90	I	16.08	1.33			
366+00	I	15.95	1.33			
366+10	I	15.82	1.33			
366+20	I	15.69	1.33			
366+30	I	15.56	1.33			
366+40	I	15.43	1.33			
366+50	I	15.30	1.33			
366+60	I	15.17	1.33			
366+70	I	15.04	1.33			
366+80	I	14.91	1.33			
366+90	I	14.78	1.33			
367+00	I	14.65	1.33			
367+10	I	14.52	1.33			
367+20	I	14.39	1.33			
367+30	I	14.26	1.33			
367+40	I	14.13	1.33			
367+50	I	14.00	1.33			
367+60	I	13.87	1.33			
367+70	I	13.74	1.33			
367+80	I	13.61	1.33			
367+90	I	13.48	1.33			
368+00	I	13.35	1.33			

BARRIER WALL 47E

STATION	TYPE	HEIGHT	WIDTH	SPACING	TYPE	REMARKS
362+00	I	21.15	1.33			
362+10	I	21.02	1.33			
362+20	I	20.89	1.33			
362+30	I	20.76	1.33			
362+40	I	20.63	1.33			
362+50	I	20.50	1.33			
362+60	I	20.37	1.33			
362+70	I	20.24	1.33			
362+80	I	20.11	1.33			
362+90	I	19.98	1.33			
363+00	I	19.85	1.33			
363+10	I	19.72	1.33			
363+20	I	19.59	1.33			
363+30	I	19.46	1.33			
363+40	I	19.33	1.33			
363+50	I	19.20	1.33			
363+60	I	19.07	1.33			
363+70	I	18.94	1.33			
363+80	I	18.81	1.33			
363+90	I	18.68	1.33			
364+00	I	18.55	1.33			
364+10	I	18.42	1.33			
364+20	I	18.29	1.33			
364+30	I	18.16	1.33			
364+40	I	18.03	1.33			
364+50	I	17.90	1.33			
364+60	I	17.77	1.33			
364+70	I	17.64	1.33			
364+80	I	17.51	1.33			
364+90	I	17.38	1.33			
365+00	I	17.25	1.33			
365+10	I	17.12	1.33			
365+20	I	16.99	1.33			
365+30	I	16.86	1.33			
365+40	I	16.73	1.33			
365+50	I	16.60	1.33			
365+60	I	16.47	1.33			
365+70	I	16.34	1.33			
365+80	I	16.21	1.33			
365+90	I	16.08	1.33			
366+00	I	15.95	1.33			
366+10	I	15.82	1.33			
366+20	I	15.69	1.33			
366+30	I	15.56	1.33			
366+40	I	15.43	1.33			
366+50	I	15.30	1.33			
366+60	I	15.17	1.33			
366+70	I	15.04	1.33			
366+80	I	14.91	1.33			
366+90	I	14.78	1.33			
367+00	I	14.65	1.33			
367+10	I	14.52	1.33			
367+20	I	14.39	1.33			
367+30	I	14.26	1.33			
367+40	I	14.13	1.33			
367+50	I	14.00	1.33			
367+60	I	13.87	1.33			
367+70	I	13.74	1.33			
367+80	I	13.61	1.33			
367+90	I	13.48	1.33			
368+00	I	13.35	1.33			



CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
DAN RYAN RAPID TRANSIT
 MEDIAN PREPARATION & FENCING
 CONTRACT DR-8
 BARRIER WALL PLAN & PROFILES
 STA 362+00 TO STA 367+42.32
 47E & 47W
 HORIZ 1"=20'
 VERT 1"=2'
 APRIL, 1968
 SCALE: SHEET NO. 3 OF 20 SHEETS

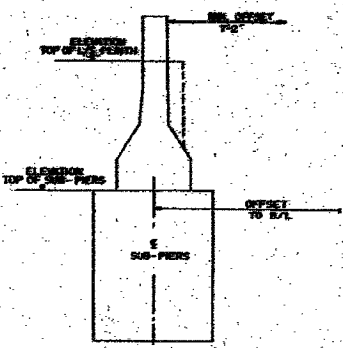
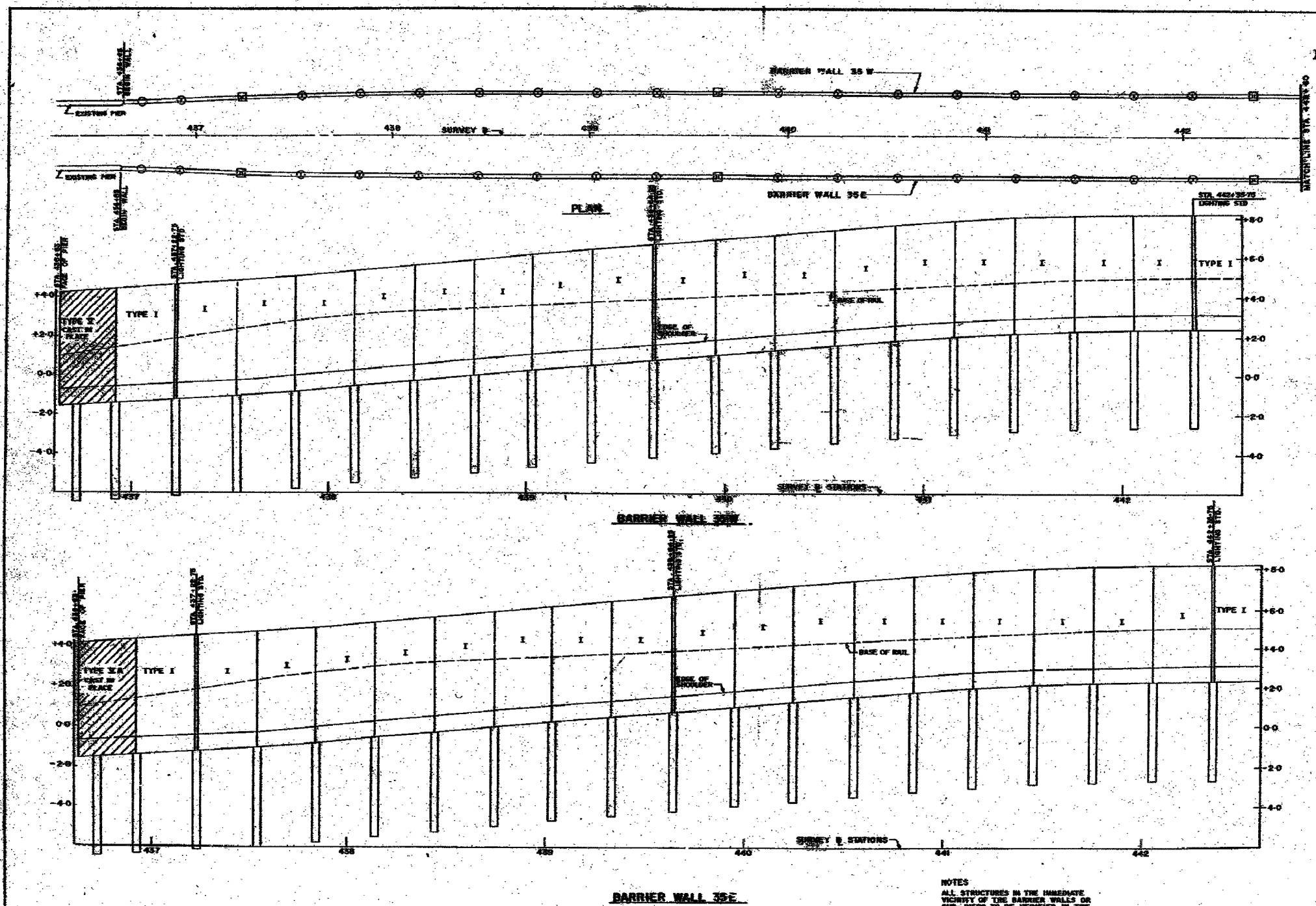
BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbainc.com

FOR INFORMATION ONLY

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 EXISTING BARRIER WALL PLANS
 AT CTA STATIONS
 SCALE: N.T.S.
 DATE: 07/07/05
 DRAWN BY: MTR
 CHECKED BY: BLU

I:\660\road\civil\STRUCTURES\CTA Barrier As-Built\660_4BCTA_BARRIER2.dwg 6/27/2005 4:47:16 PM



BARRIER WALL CONTROL LOCATION
BARRIER WALL 35W

STATION	TYPE	HEIGHT	WIDTH	DEPTH	REMARKS
437+00	TYPE II	17.00	1.00	1.00	EXIST. PIER
437+05	TYPE I	18.50	1.00	1.00	TYPE I WALL
437+10	TYPE I	18.50	1.00	1.00	TYPE I WALL
437+15	TYPE I	18.50	1.00	1.00	TYPE I WALL
437+20	TYPE I	18.50	1.00	1.00	TYPE I WALL
437+25	TYPE I	18.50	1.00	1.00	TYPE I WALL
437+30	TYPE I	18.50	1.00	1.00	TYPE I WALL
437+35	TYPE I	18.50	1.00	1.00	TYPE I WALL
437+40	TYPE I	18.50	1.00	1.00	TYPE I WALL
437+45	TYPE I	18.50	1.00	1.00	TYPE I WALL
437+50	TYPE I	18.50	1.00	1.00	TYPE I WALL
437+55	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+00	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+05	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+10	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+15	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+20	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+25	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+30	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+35	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+40	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+45	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+00	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+05	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+10	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+15	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+20	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+25	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+30	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+35	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+40	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+45	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+00	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+05	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+10	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+15	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+20	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+25	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+30	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+35	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+40	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+45	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+00	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+05	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+10	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+15	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+20	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+25	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+30	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+35	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+40	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+45	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+00	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+05	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+10	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+15	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+20	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+25	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+30	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+35	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+40	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+45	TYPE I	18.50	1.00	1.00	TYPE I WALL

STATION	TYPE	HEIGHT	WIDTH	DEPTH	REMARKS
437+00	TYPE II	17.00	1.00	1.00	EXIST. PIER
437+05	TYPE I	18.50	1.00	1.00	TYPE I WALL
437+10	TYPE I	18.50	1.00	1.00	TYPE I WALL
437+15	TYPE I	18.50	1.00	1.00	TYPE I WALL
437+20	TYPE I	18.50	1.00	1.00	TYPE I WALL
437+25	TYPE I	18.50	1.00	1.00	TYPE I WALL
437+30	TYPE I	18.50	1.00	1.00	TYPE I WALL
437+35	TYPE I	18.50	1.00	1.00	TYPE I WALL
437+40	TYPE I	18.50	1.00	1.00	TYPE I WALL
437+45	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+00	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+05	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+10	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+15	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+20	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+25	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+30	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+35	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+40	TYPE I	18.50	1.00	1.00	TYPE I WALL
438+45	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+00	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+05	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+10	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+15	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+20	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+25	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+30	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+35	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+40	TYPE I	18.50	1.00	1.00	TYPE I WALL
439+45	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+00	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+05	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+10	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+15	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+20	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+25	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+30	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+35	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+40	TYPE I	18.50	1.00	1.00	TYPE I WALL
440+45	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+00	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+05	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+10	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+15	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+20	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+25	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+30	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+35	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+40	TYPE I	18.50	1.00	1.00	TYPE I WALL
441+45	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+00	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+05	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+10	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+15	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+20	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+25	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+30	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+35	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+40	TYPE I	18.50	1.00	1.00	TYPE I WALL
442+45	TYPE I	18.50	1.00	1.00	TYPE I WALL

NOTES
ALL STRUCTURES IN THE IMMEDIATE VICINITY OF THE BARRIER WALLS OR SUB-PIERS TO BE VERIFIED IN THE FIELD.
FOR DETAILS OF LIGHTING STANDARD ANCHORAGE SEE SHEET S-22



CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
DAN RYAN RAPID TRANSIT
MEDIAN PREPARATION & FENCING
CONTRACT DR-8
BARRIER WALL PLAN & PROFILES
STA. 436 + 63 TO STA. 442 + 60-0
HORIZ. 1" = 20'
VERT. 1" = 2'
APRIL, 1968
SHEET NO. 5 OF 24 SHEETS

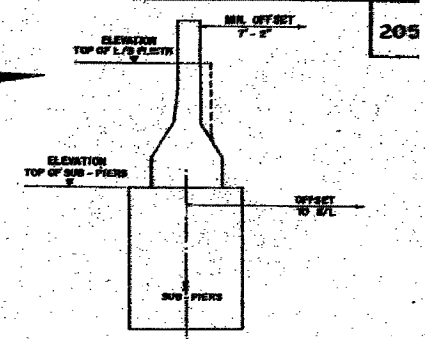
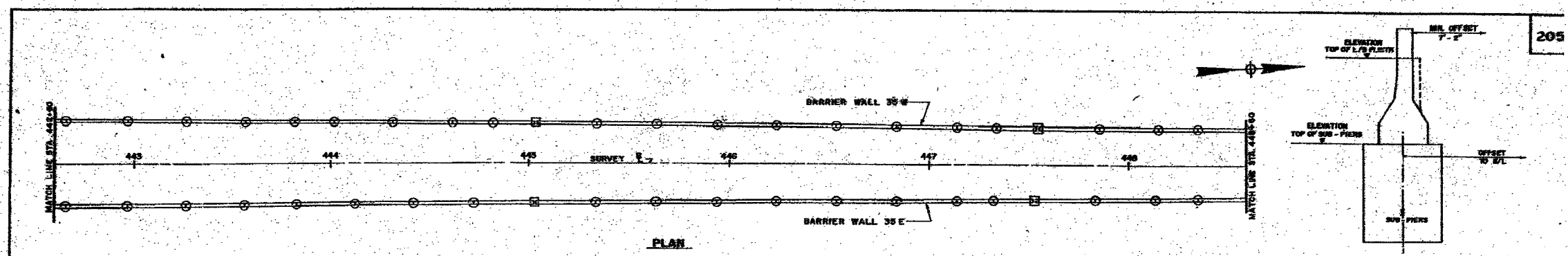
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
EXISTING BARRIER WALL PLANS
AT CTA STATIONS
SCALE: N.T.S.
DATE: 07/07/05
DRAWN BY: MTR
CHECKED BY: BLU

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BARRIER WALL CONTROL LOCATION

BARRIER WALL 35W

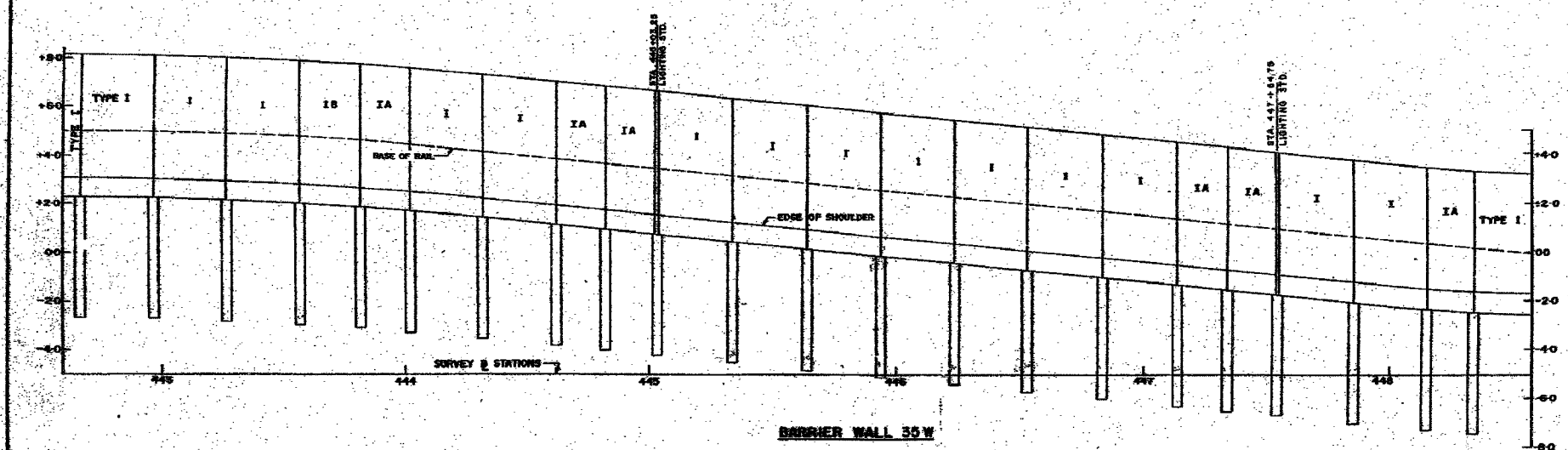
STATION	OFF-PIER	TOP OF SUB-PIERS	ELEVATION TOP OF L.P. PIER	MIN. OFFSET	REMARKS
443+00	1.00	1.00	1.00		
443+10	1.00	1.00	1.00		
443+20	1.00	1.00	1.00		
443+30	1.00	1.00	1.00		
443+40	1.00	1.00	1.00		
443+50	1.00	1.00	1.00		
443+60	1.00	1.00	1.00		
443+70	1.00	1.00	1.00		
443+80	1.00	1.00	1.00		
443+90	1.00	1.00	1.00		
444+00	1.00	1.00	1.00		
444+10	1.00	1.00	1.00		
444+20	1.00	1.00	1.00		
444+30	1.00	1.00	1.00		
444+40	1.00	1.00	1.00		
444+50	1.00	1.00	1.00		
444+60	1.00	1.00	1.00		
444+70	1.00	1.00	1.00		
444+80	1.00	1.00	1.00		
444+90	1.00	1.00	1.00		
445+00	1.00	1.00	1.00		
445+10	1.00	1.00	1.00		
445+20	1.00	1.00	1.00		
445+30	1.00	1.00	1.00		
445+40	1.00	1.00	1.00		
445+50	1.00	1.00	1.00		
445+60	1.00	1.00	1.00		
445+70	1.00	1.00	1.00		
445+80	1.00	1.00	1.00		
445+90	1.00	1.00	1.00		
446+00	1.00	1.00	1.00		
446+10	1.00	1.00	1.00		
446+20	1.00	1.00	1.00		
446+30	1.00	1.00	1.00		
446+40	1.00	1.00	1.00		
446+50	1.00	1.00	1.00		
446+60	1.00	1.00	1.00		
446+70	1.00	1.00	1.00		
446+80	1.00	1.00	1.00		
446+90	1.00	1.00	1.00		
447+00	1.00	1.00	1.00		
447+10	1.00	1.00	1.00		
447+20	1.00	1.00	1.00		
447+30	1.00	1.00	1.00		
447+40	1.00	1.00	1.00		
447+50	1.00	1.00	1.00		
447+60	1.00	1.00	1.00		
447+70	1.00	1.00	1.00		
447+80	1.00	1.00	1.00		
447+90	1.00	1.00	1.00		
448+00	1.00	1.00	1.00		

NOTE:
ALL WALLS ARE TYPE I UNLESS OTHERWISE NOTED.

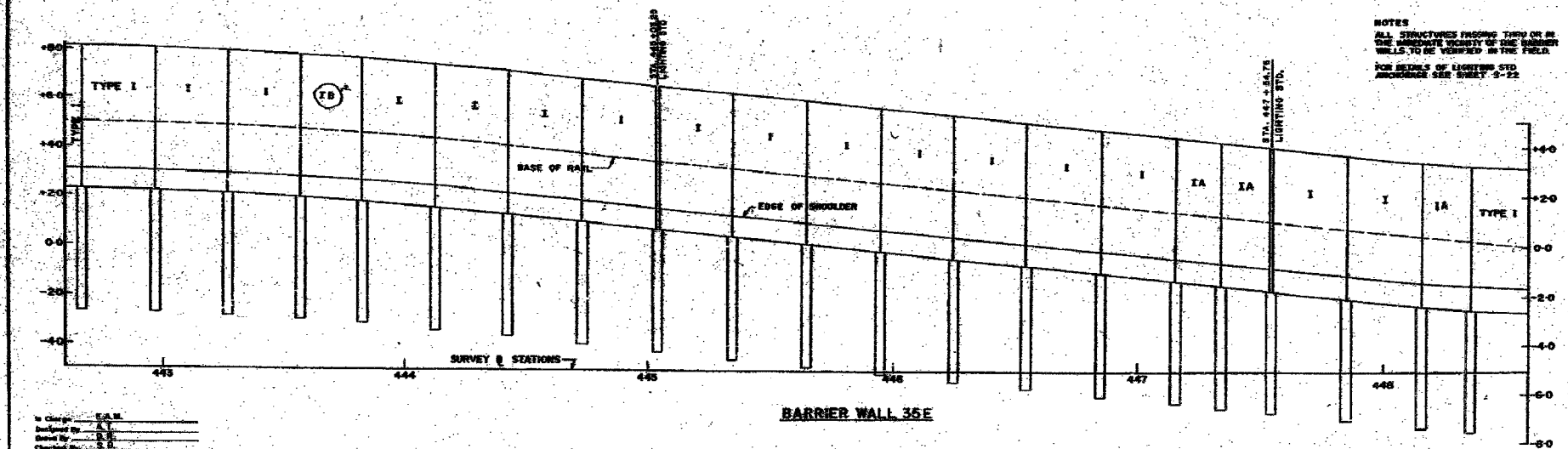
BARRIER WALL 35E

STATION	OFF-PIER	TOP OF SUB-PIERS	ELEVATION TOP OF L.P. PIER	MIN. OFFSET	REMARKS
443+00	1.00	1.00	1.00		
443+10	1.00	1.00	1.00		
443+20	1.00	1.00	1.00		
443+30	1.00	1.00	1.00		
443+40	1.00	1.00	1.00		
443+50	1.00	1.00	1.00		
443+60	1.00	1.00	1.00		
443+70	1.00	1.00	1.00		
443+80	1.00	1.00	1.00		
443+90	1.00	1.00	1.00		
444+00	1.00	1.00	1.00		
444+10	1.00	1.00	1.00		
444+20	1.00	1.00	1.00		
444+30	1.00	1.00	1.00		
444+40	1.00	1.00	1.00		
444+50	1.00	1.00	1.00		
444+60	1.00	1.00	1.00		
444+70	1.00	1.00	1.00		
444+80	1.00	1.00	1.00		
444+90	1.00	1.00	1.00		
445+00	1.00	1.00	1.00		
445+10	1.00	1.00	1.00		
445+20	1.00	1.00	1.00		
445+30	1.00	1.00	1.00		
445+40	1.00	1.00	1.00		
445+50	1.00	1.00	1.00		
445+60	1.00	1.00	1.00		
445+70	1.00	1.00	1.00		
445+80	1.00	1.00	1.00		
445+90	1.00	1.00	1.00		
446+00	1.00	1.00	1.00		
446+10	1.00	1.00	1.00		
446+20	1.00	1.00	1.00		
446+30	1.00	1.00	1.00		
446+40	1.00	1.00	1.00		
446+50	1.00	1.00	1.00		
446+60	1.00	1.00	1.00		
446+70	1.00	1.00	1.00		
446+80	1.00	1.00	1.00		
446+90	1.00	1.00	1.00		
447+00	1.00	1.00	1.00		
447+10	1.00	1.00	1.00		
447+20	1.00	1.00	1.00		
447+30	1.00	1.00	1.00		
447+40	1.00	1.00	1.00		
447+50	1.00	1.00	1.00		
447+60	1.00	1.00	1.00		
447+70	1.00	1.00	1.00		
447+80	1.00	1.00	1.00		
447+90	1.00	1.00	1.00		
448+00	1.00	1.00	1.00		

NOTE:
ALL WALLS ARE TYPE I UNLESS OTHERWISE NOTED.



BARRIER WALL 35W



BARRIER WALL 35E

NOTES
ALL STRUCTURES EXISTING THERE OR IN THE VICINITY OF THE BARRIER WALLS TO BE VERIFIED IN THE FIELD.
FOR DETAILS OF LIGHTNING ROD ARCHITECTURE SEE SHEET S-22.

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
DAN RYAN RAPID TRANSIT
MEDIAN PREPARATION & FENCING
CONTRACT DR-8
BARRIER WALL PLAN & PROFILES
STA. 442+60.0 TO STA. 448+60.0
SCALE: HORIZ. 1"=20' VERT. 1"=2'
APRIL, 1968
SHEET NO. 8 20 OF 24 SHEETS

Designed by: E.A.M.
Checked by: S.P.A.
Date: 4/1/68

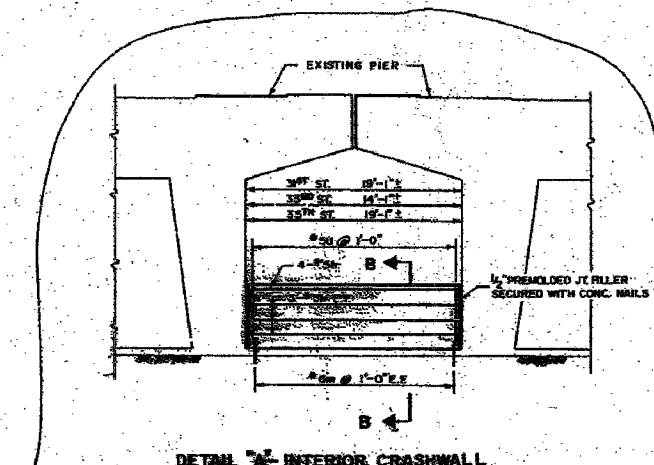
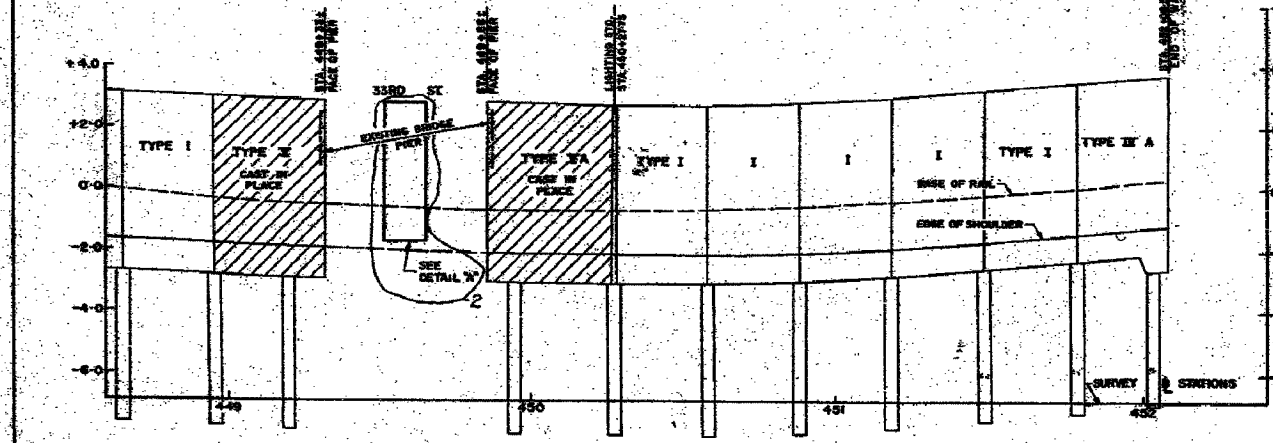
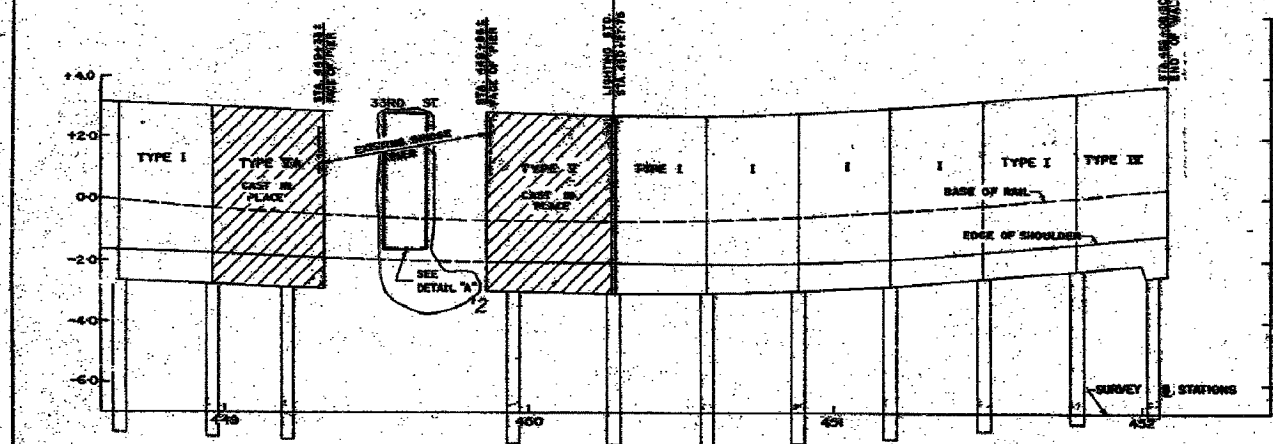
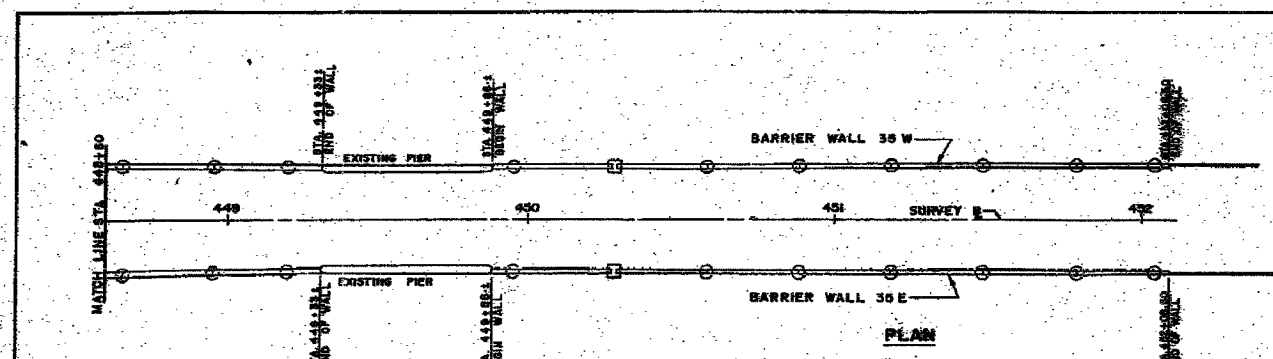
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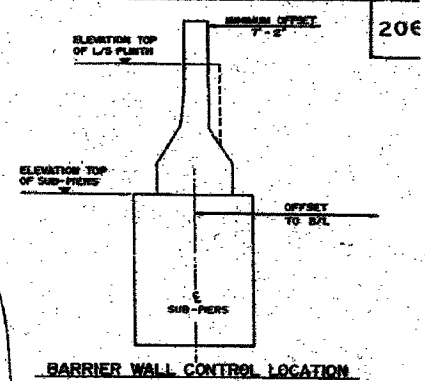
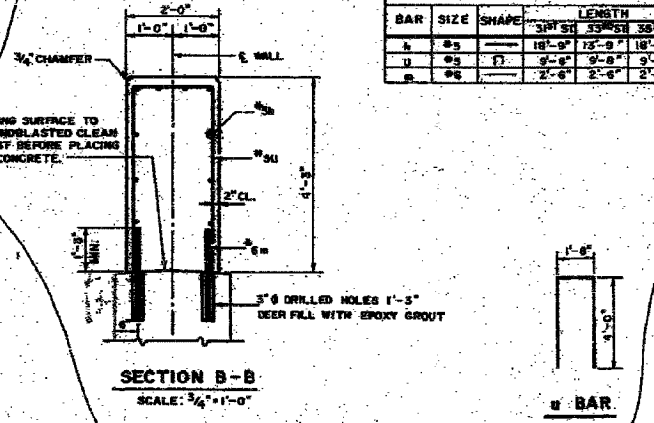
REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
EXISTING BARRIER WALL PLANS
AT CTA STATIONS
SCALE: N.T.S. DRAWN BY: MTR
DATE: 07/07/05 CHECKED BY: BLU

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BAR	SIZE	SHAPE	3RD ST	3RD ST	3RD ST
A	#5	18'-9"	13'-9"	18'-9"	
U	#5	9'-8"	9'-8"	9'-8"	
B	#5	2'-6"	2'-6"	2'-6"	



STATION	OFFSET	ELEVATION	ELEVATION	REMARKS
448+00	17.77	-2.75		EXIST. PI
448+00	17.82	-2.80		EXIST. WALL
448+00	17.88	-3.14		TYPE II
448+00				EXIST. PIER
448+00	17.83	-3.00		EXIST. WALL
448+00	17.82	-3.32	+3.74	EXIST. WALL
448+00	17.84	-3.35		EXIST. WALL
448+00	17.82	-2.94		EXIST. WALL
448+00	17.83	-3.14		EXIST. WALL
448+00	17.82	-3.35		EXIST. WALL
448+00	17.82	-3.35		EXIST. WALL

STATION	OFFSET	ELEVATION	ELEVATION	REMARKS
448+00	17.83	-2.75		EXIST. PI
448+00	17.82	-2.80		EXIST. WALL
448+00	17.88	-3.14		TYPE I
448+00				EXIST. PIER
448+00	17.83	-3.00		EXIST. WALL
448+00	17.82	-3.32	+3.74	EXIST. WALL
448+00	17.84	-3.35		EXIST. WALL
448+00	17.82	-2.94		EXIST. WALL
448+00	17.83	-3.14		EXIST. WALL
448+00	17.82	-3.35		EXIST. WALL
448+00	17.82	-3.35		EXIST. WALL

NOTES
 ALL STRUCTURES IN THE IMMEDIATE VICINITY OF THE BARRIER WALLS OR SUB-PIERS TO BE VERIFIED IN THE FIELD.
 FOR DETAILS OF LIGHTING STANDARD ANCHORAGE SEE SHEET 5-22

NOTE:
 ALL WALLS ARE TYPE I UNLESS OTHERWISE NOTED.

CITY OF CHICAGO
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF ENGINEERING
DAN RYAN RAPID TRANSIT
 MEDIAN PREPARATION AND FENCING
 CONTRACT DR-8
BARRIER WALL PLAN & PROFILES
 STA. 448+60-0 TO STA. 452+08.5
 HORZ. 1" = 20'
 VERT. 1" = 2'
 APRIL, 1968
 SHEET NO. 321 OF 211 SHEETS

Chicago E.A.M.
 Designed by E.T.
 Drawn by J.L.
 Checked by J.L.
 Approved by J.L.

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 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
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FOR INFORMATION ONLY

REVISIONS	DATE
NAME	

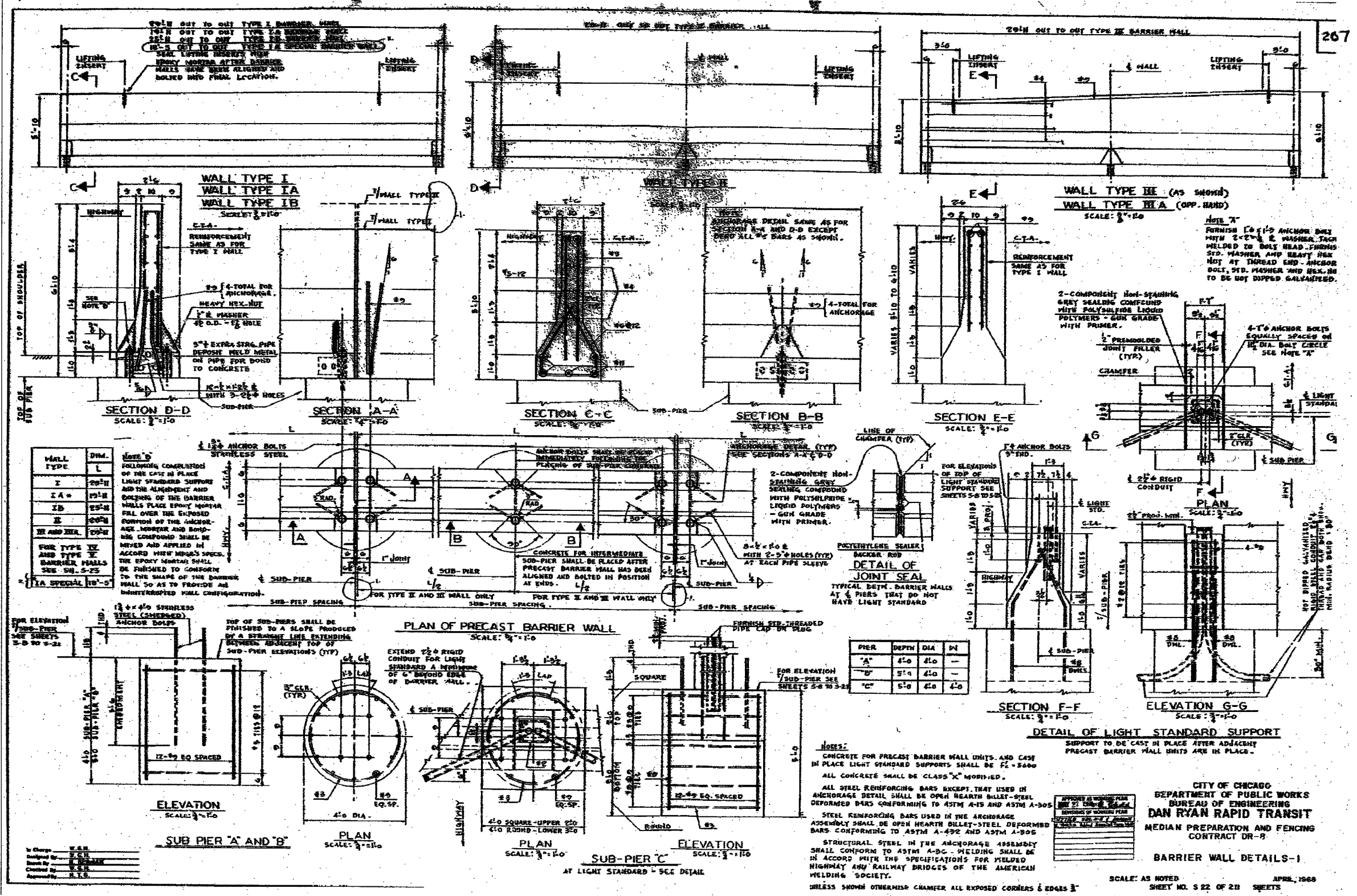
SHEET SD-9 OF SD-11

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 EXISTING BARRIER WALL PLANS
 AT CTA STATIONS

SCALE: N.T.S.
 DATE: 07/07/05

DRAWN BY: MTR
 CHECKED BY: BLU

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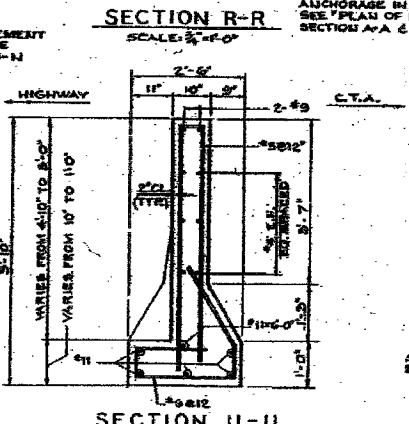
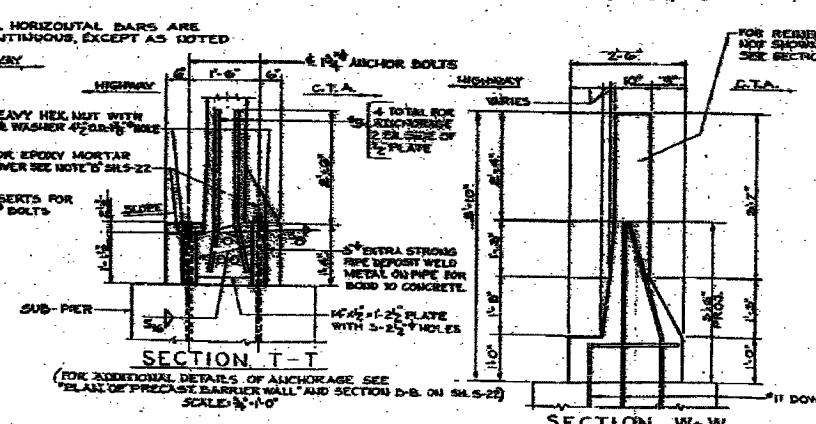
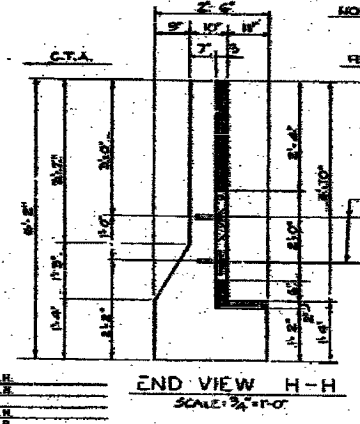
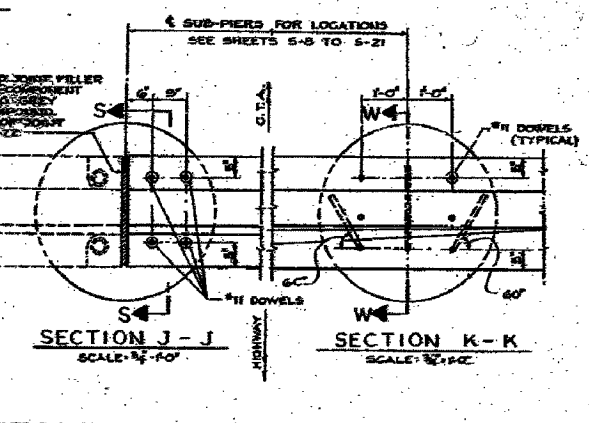
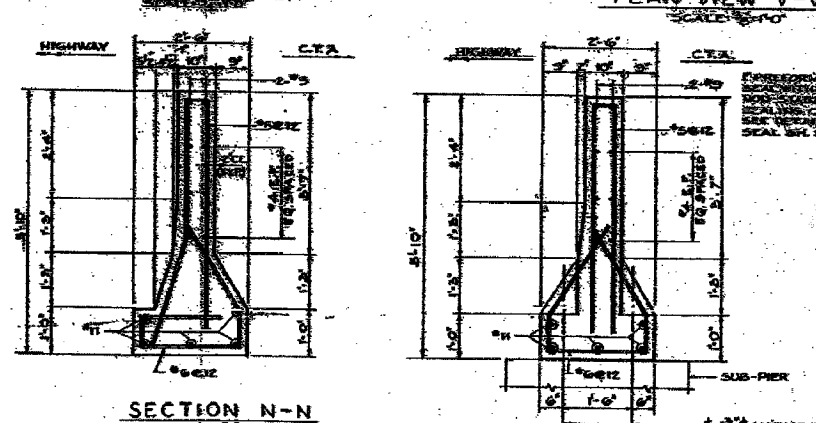
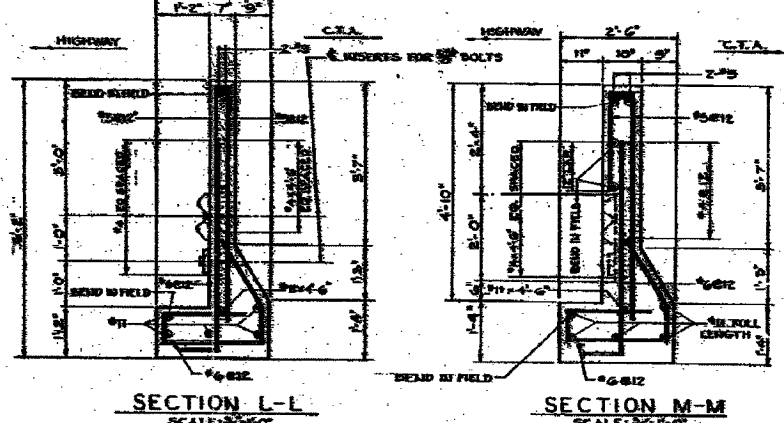
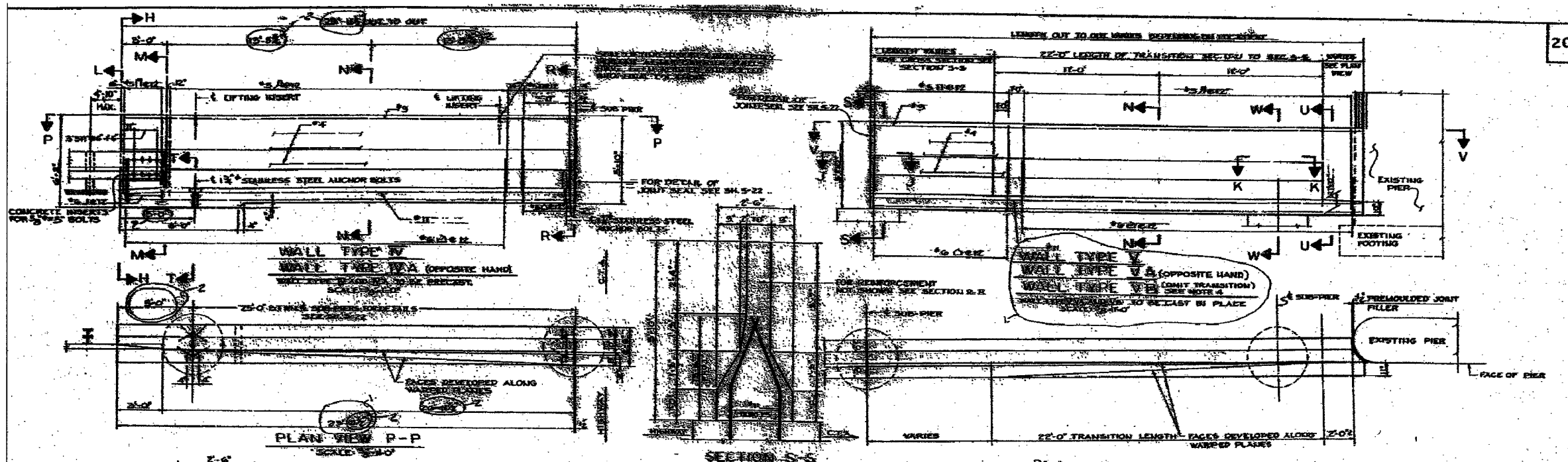
REVISIONS	
NAME	DATE

SHEET SD-10 OF SD-11

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
EXISTING BARRIER WALL PLANS
AT CTA STATIONS

SCALE: N.T.S. DRAWN BY: MTR
DATE: 07/07/05 CHECKED BY: BLU

11/2005/0001/STRUCTURE/CTA Barrier As-Built/SD-10-11



NOTE:
ALL HORIZONTAL BARS ARE CONTINUOUS, EXCEPT AS NOTED

- NOTES:
1. CONCRETE FOR PRECAST AND CAST IN PLACE BARRIER WALLS SHALL BE $f'_c = 5000$.
 2. ALL CONCRETE SHALL BE CLASS X MODIFIED.
 3. FOR ANCHOR BOLT AND SUB-PIER DETAILS AND SUPPLEMENTARY NOTES AND DETAILS SEE SM S-22.
 4. WALL TYPE 2B SHALL HAVE HIGHWAY FACE SAME AS WALL TYPE 1 BUT SHALL BE CAST IN PLACE.

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
DAN RYAN RAPID TRANSIT
MEDIAN PREPARATION AND FENCING
CONTRACT DR-8
BARRIER WALL DETAILS-2

SCALE: AS NOTED
SHEET NO. 8 23 OF 211 SHEETS
APRIL, 1968

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
31ST STREET TO 71ST STREET
NB EXPRESS LANE RECONSTRUCTION
EXISTING BARRIER WALL PLANS
AT CTA STATIONS

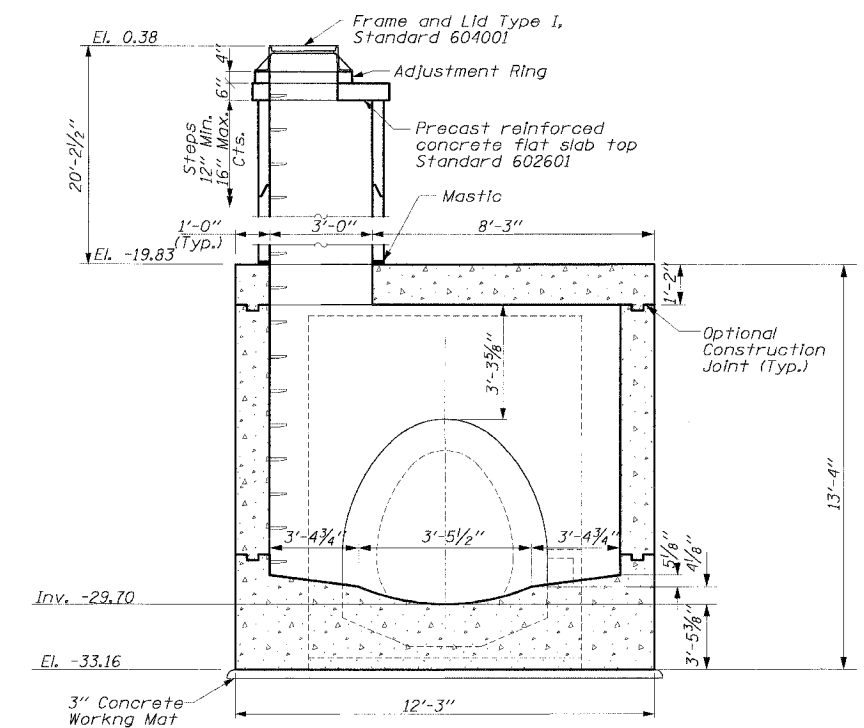
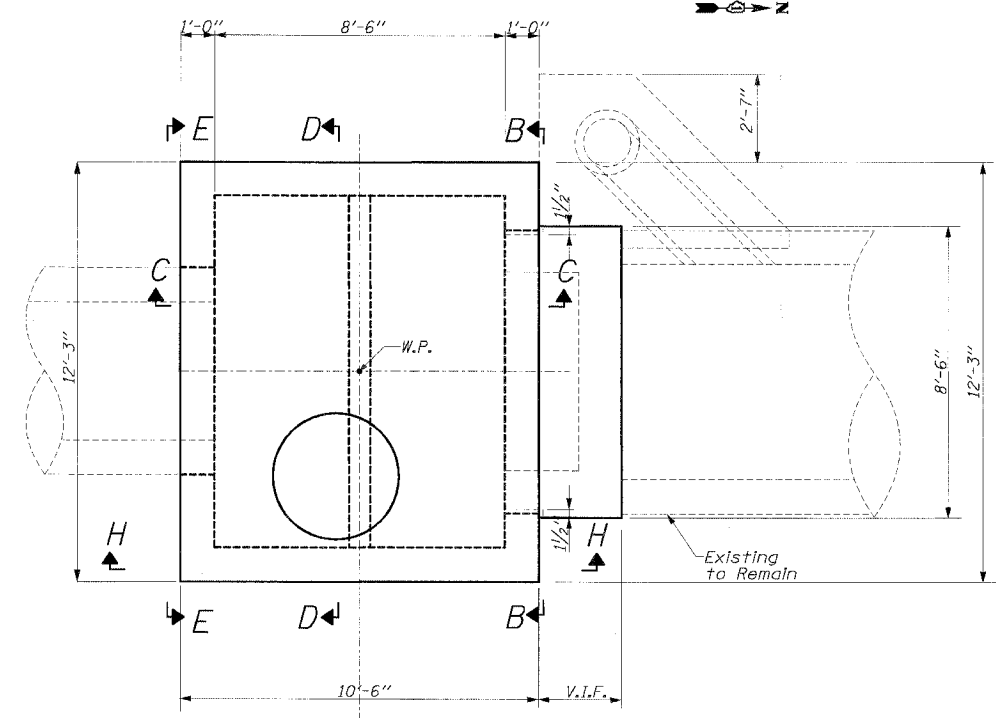
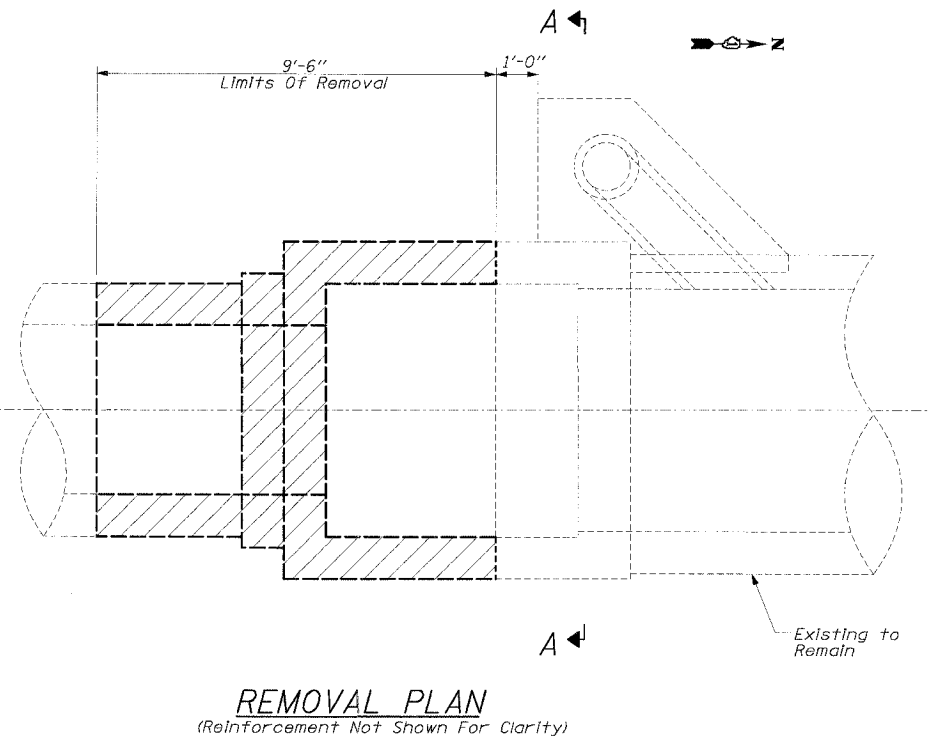
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DATE: 07/07/05
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FOR INFORMATION ONLY

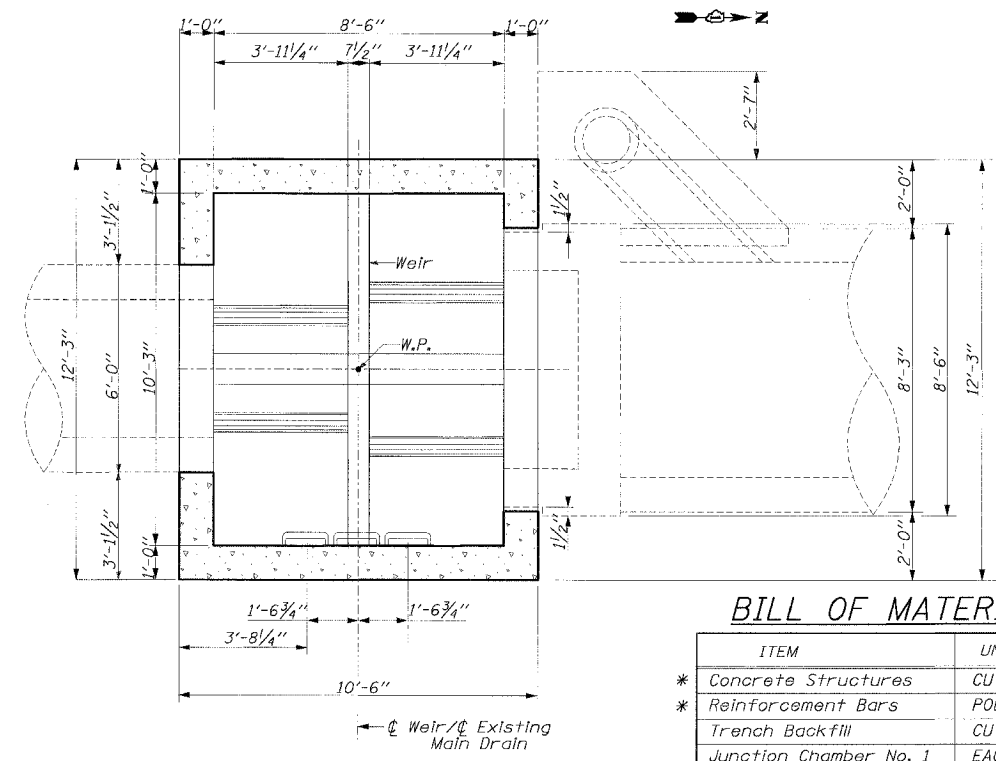
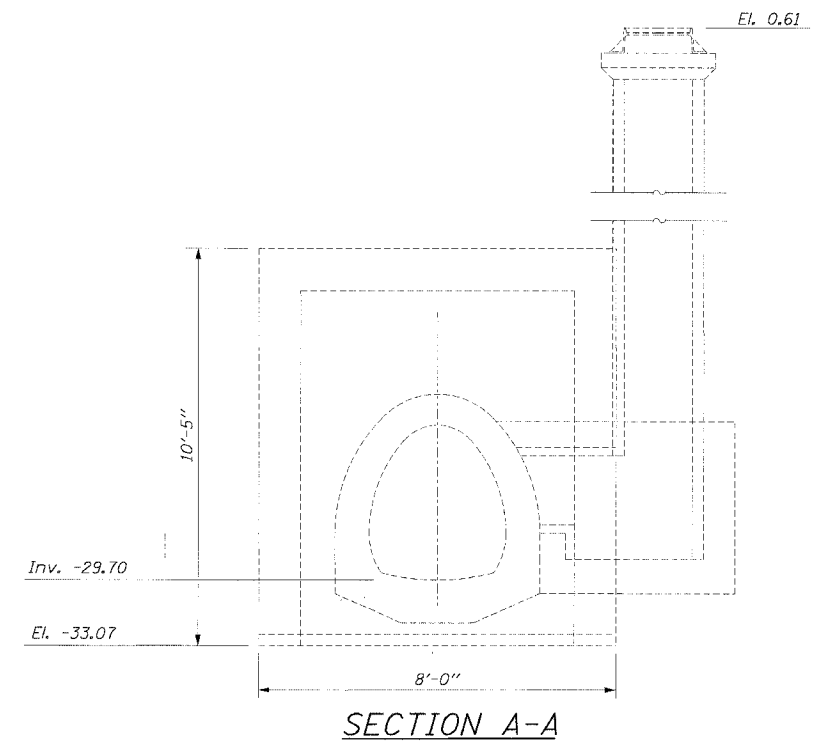
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F.A.I. RT#	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	556	396
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62300	* (1818, ETC, 2324.6-1PIR-8			



- NOTES:**
- For additional information, see Standard Specifications.
 - For reinforcement details, see the following 3 Sheets.
 - All pipe openings are based on wall C ASTM C76, coordinate openings with pipe supplier.
 - For Station and Offset, see "Drainage Schedules".
 - The maximum width of excavation is the width of the junction chamber plus 4 feet, and the maximum length is the length of the junction chamber plus 4 feet. Excavation outside the maximum dimensions specified will not be measured for payment.
 - The design of the braced excavation is the responsibility of the Contractor. The Contractor shall submit drawings and design for the braced excavation to the Engineer for approval. The braced excavation design and drawings shall be signed and sealed by an Illinois licensed Structural Engineer, submitted and approved prior to the start of any work. The Engineer's approval shall not relieve the Contractor from the sole responsibility of the structural integrity of the braced excavation system.
 - Removal of any existing concrete is included with the pay item Junction Chamber No. 1.
 - Contractor to verify existing dimensions in field prior to ordering materials.



BILL OF MATERIAL

ITEM	UNIT	TOTAL
* Concrete Structures	CU YD	25
* Reinforcement Bars	POUND	15,540
Trench Backfill	CU YD	267
Junction Chamber No. 1	EACH	1
Braced Excavation	CU YD	372

* For information only. Cost included with pay item Junction Chamber No. 1

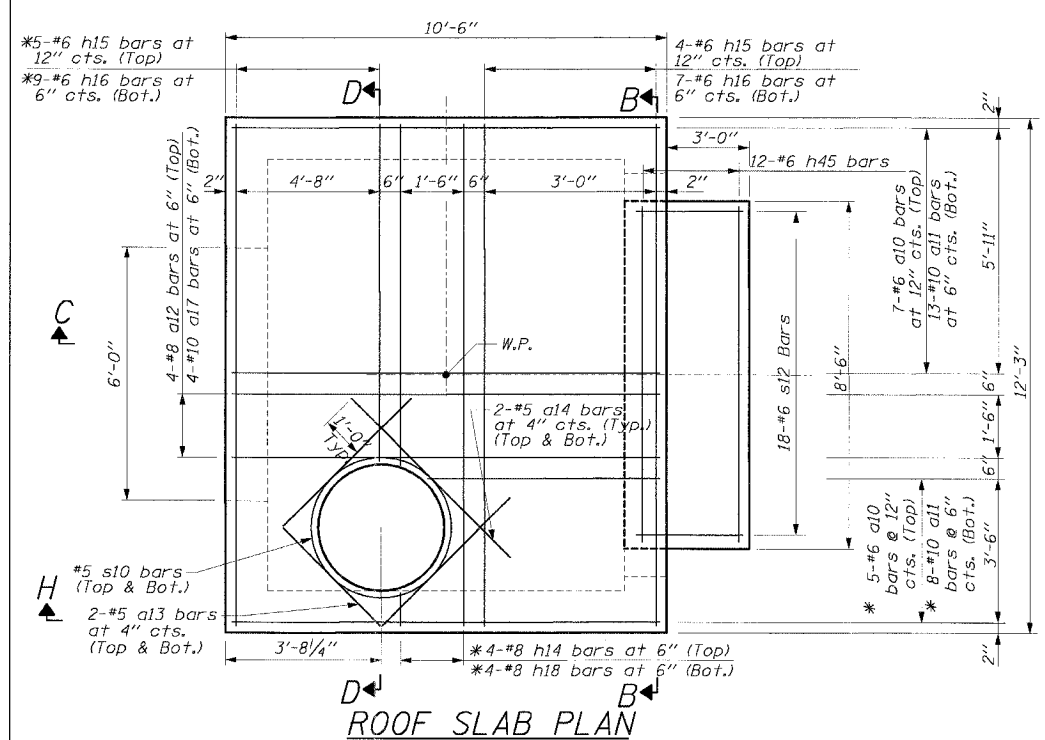
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) 31ST STREET TO 71ST STREET NB EXPRESS LANE RECONSTRUCTION JUNCTION CHAMBER 4-01 GENERAL PLAN AND ELEVATION
NAME	DATE	

SCALE: DATE: 7/7/05

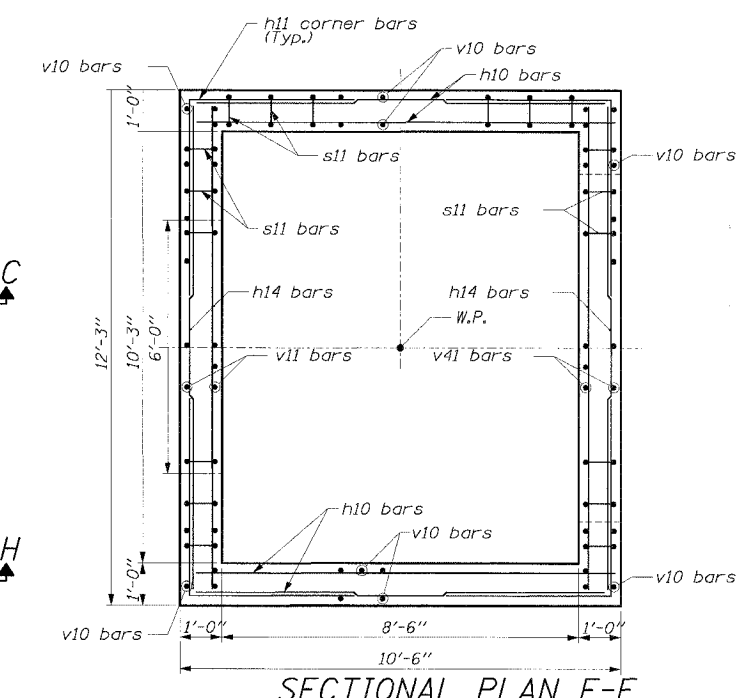
DRAWN BY: JRW
CHECKED BY: EL

Edwards AND Kelcey
ONE NORTH FRANKLIN
CHICAGO, IL 60606
PHONE: (312) 251-3000
FAX: (312) 251-3015
WEB: WWW.EDKORP.COM

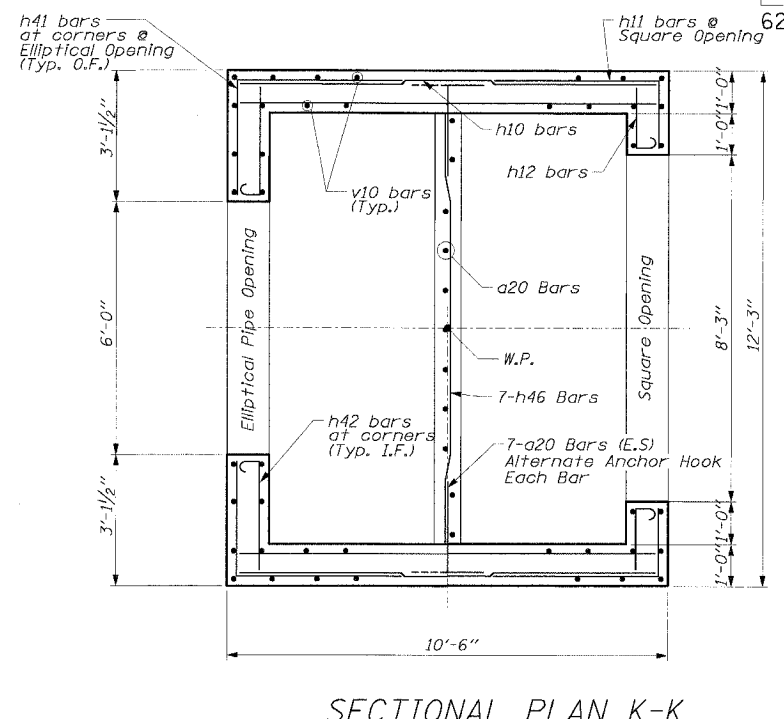
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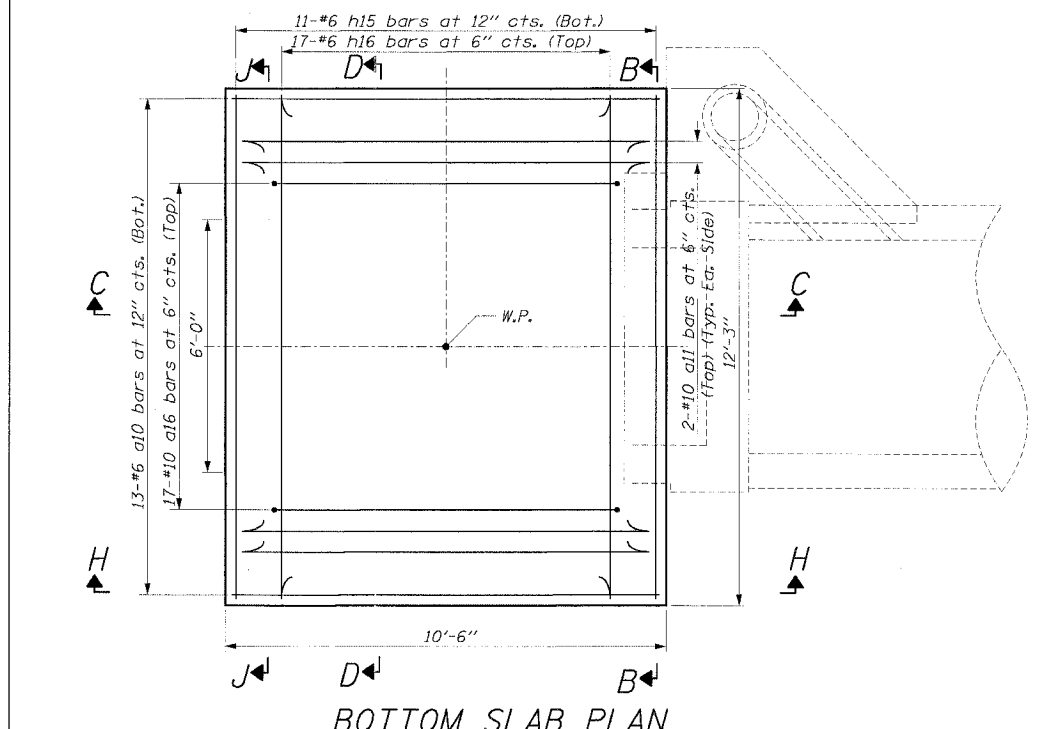
ROOF SLAB PLAN



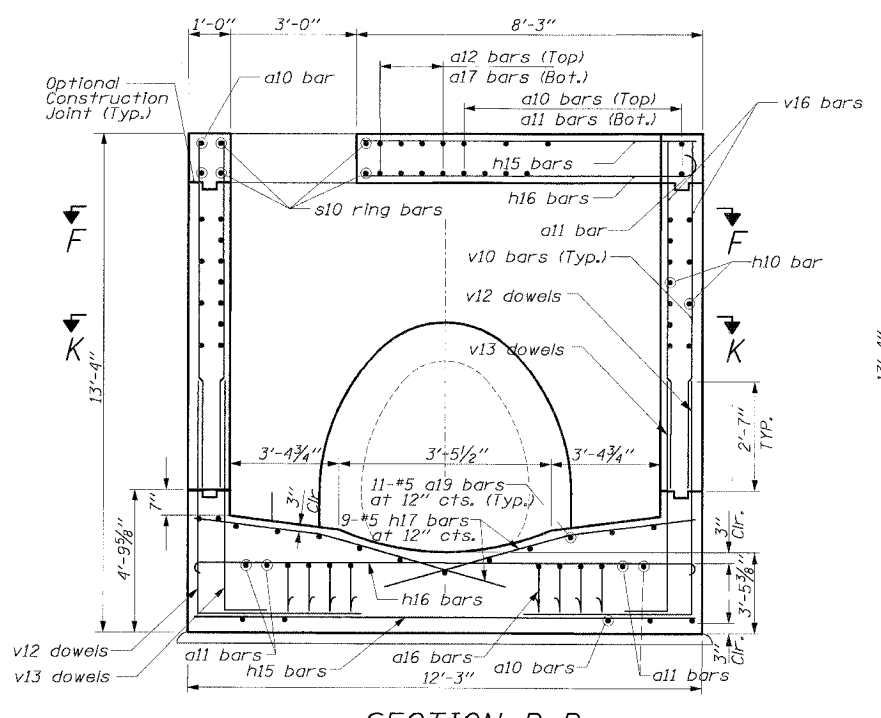
SECTIONAL PLAN F-F



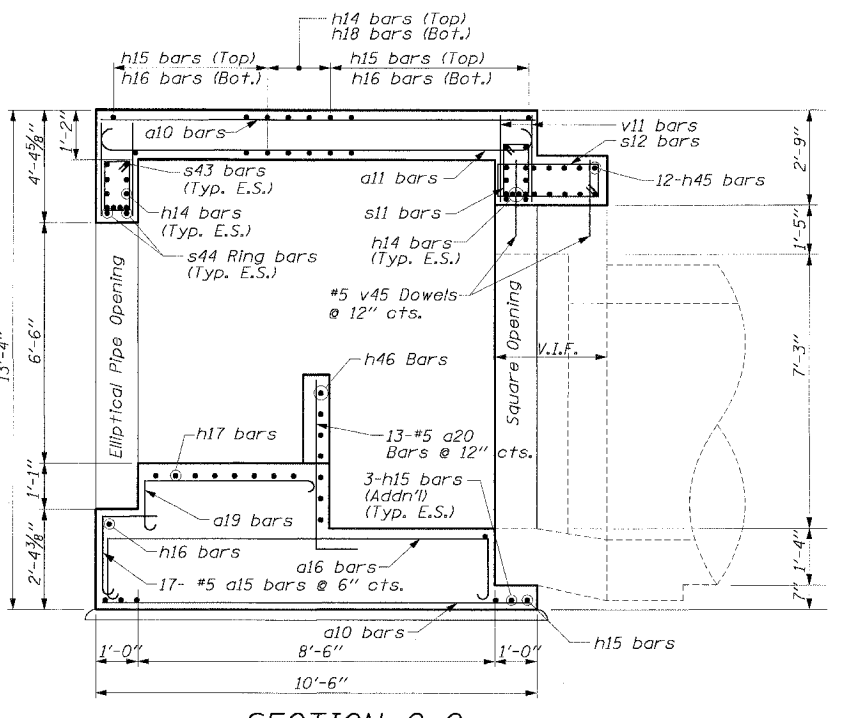
SECTIONAL PLAN K-K



BOTTOM SLAB PLAN



SECTION D-D



SECTION C-C

NOTES:

- All dimensions and elevations shall be field verified prior to construction.
- Concrete pipe sizes shall be coordinated with openings provided into junction chamber before pouring concrete.
- Manhole Frame, Ladder Rungs, and any Inserts Installation shall be coordinated with Roadway Plans.
- Concrete cover for reinforcement steel to be 2" unless otherwise noted.

LEGEND:

- All concrete edges shall be chamfered 1 inch.
 - All lap splices marked on the drawings are minimum.
 - Concrete Compressive Strength $f_c' = 3,500$ psi.
 - Steel Yield Strength = 60,000 psi.
 - Work this Sheet with other Junction Chamber Sheets.
- * Cut bars to fit in field.
 E.F. - denotes Each Face
 E.S. - denotes Each Side
 I.F. - denotes Inside Face
 O.F. - denotes Outside Face

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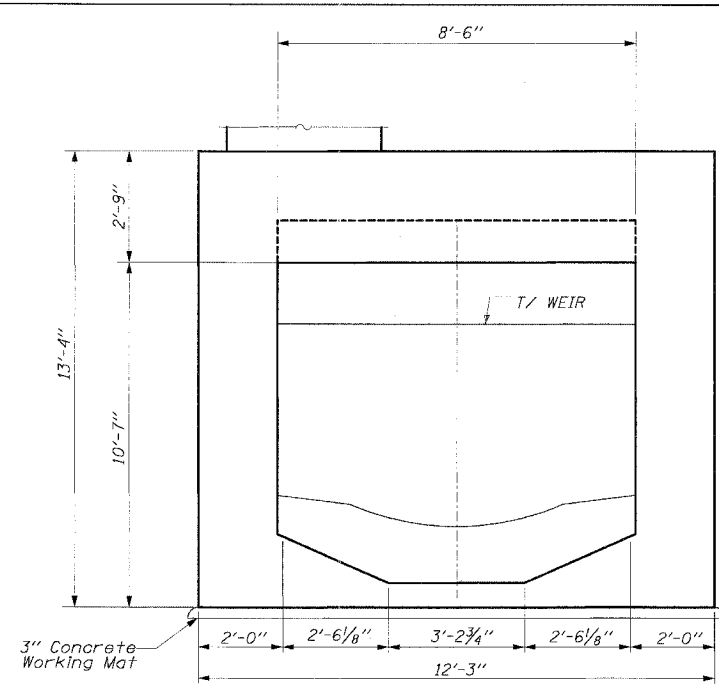
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 JUNCTION CHAMBER 4-01
 DETAILS 1

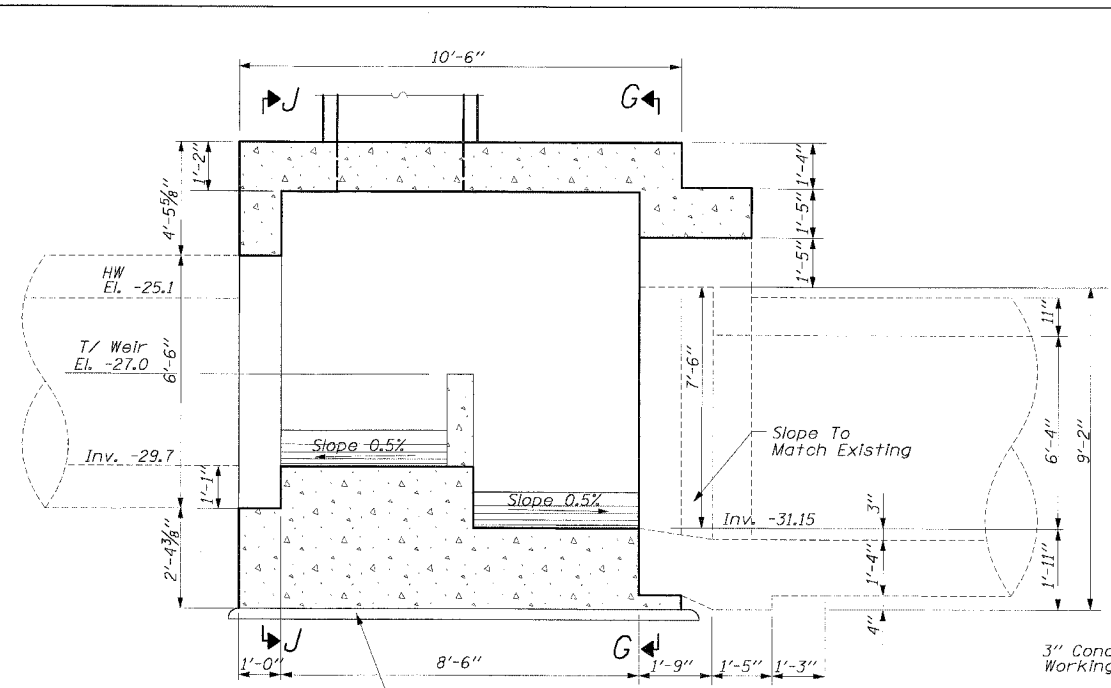
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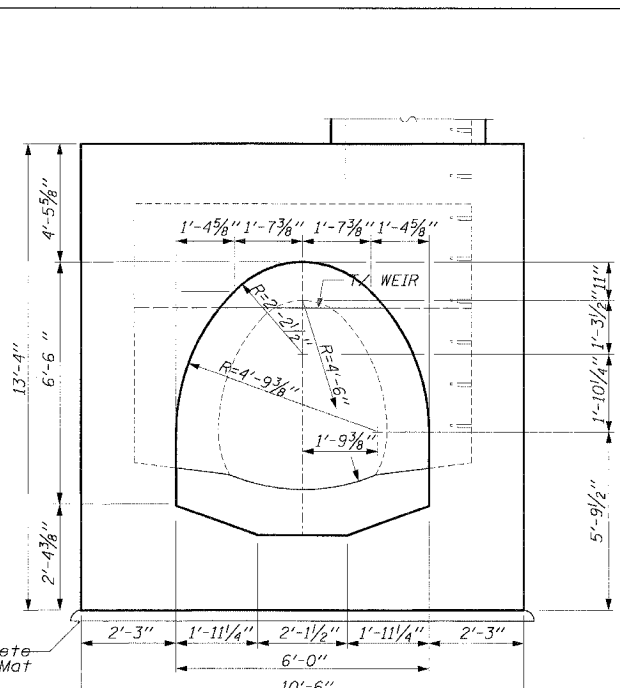
F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	556	398
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62300	• (1818, ETC, 2324.6-IPR-8			



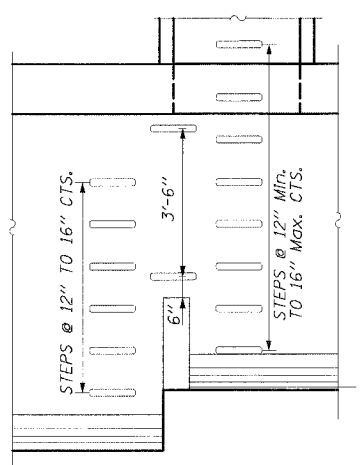
ELEVATION VIEW B-B



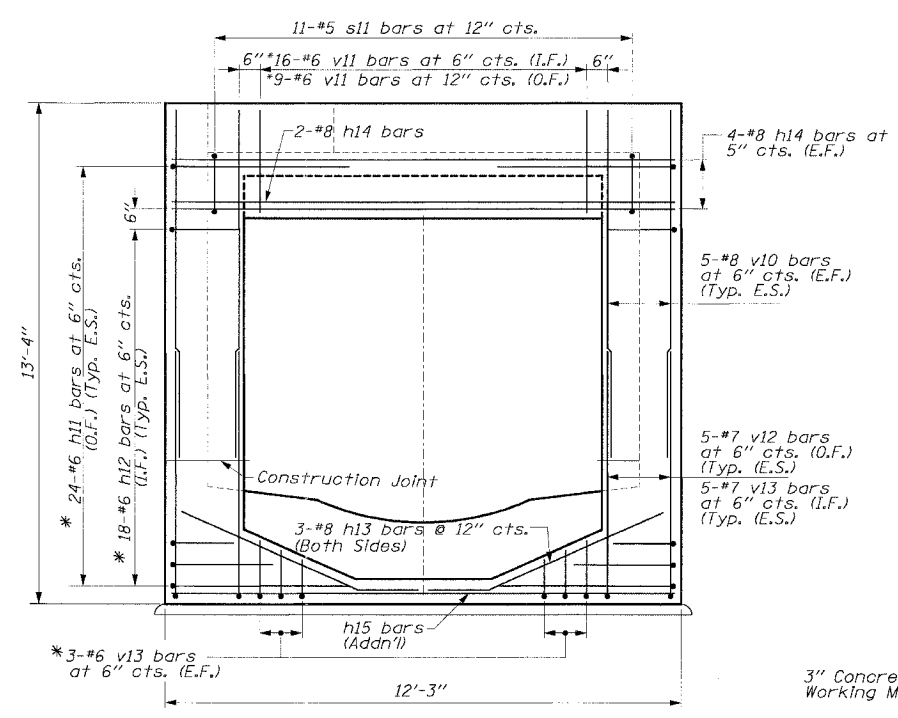
SECTION C-C



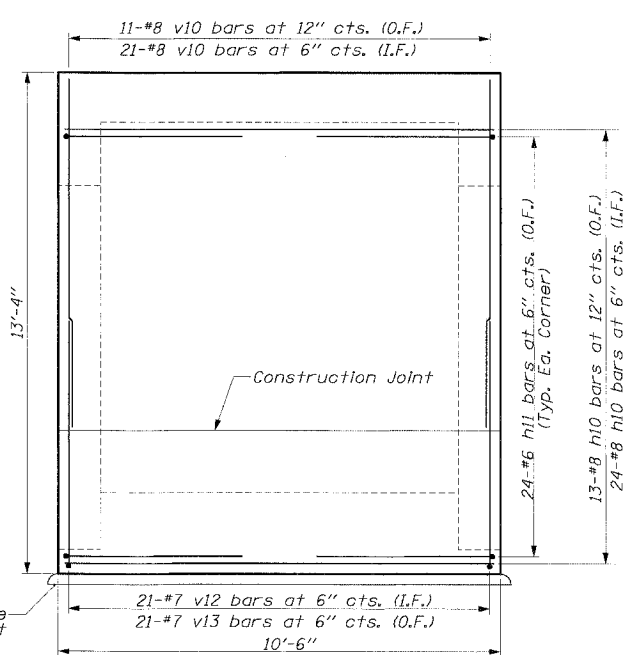
ELEVATION VIEW E-E



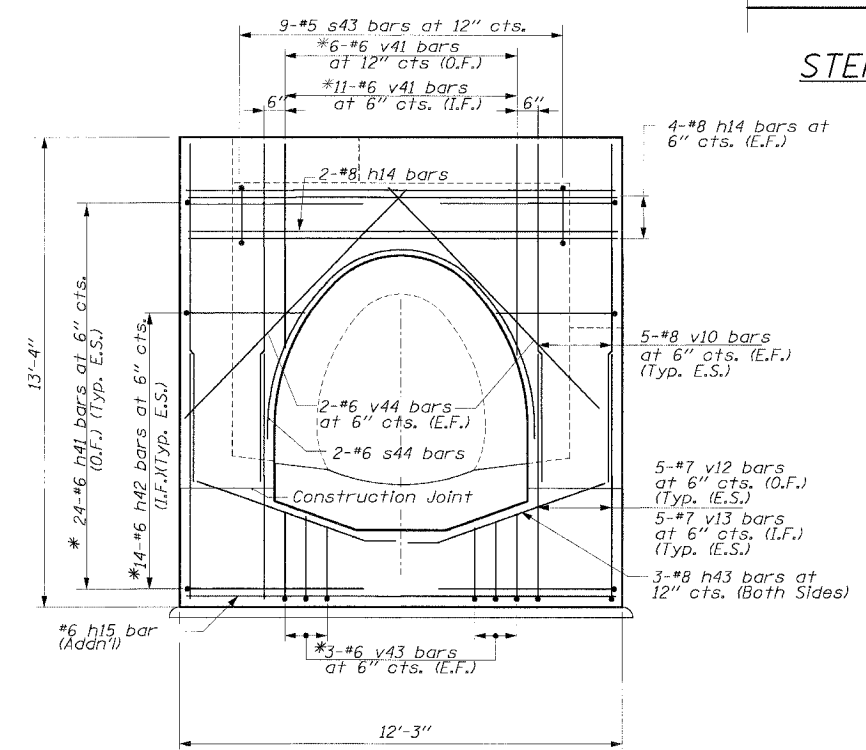
STEP PATTERN



SECTION G-G



SECTION H-H
(Typ. Both Sides)



SECTION J-J

NOTES:

- All dimensions and elevations shall be field verified prior to construction.
- Concrete pipe sizes shall be coordinated with openings provided into junction chamber before pouring concrete.
- Manhole Frame, Ladder Rungs, and any Inserts Installation shall be coordinated with Roadway Plans.
- Concrete cover for reinforcement steel to be 2" unless otherwise noted.
- All concrete edges shall be chamfered 1 inch.
- All lap splices marked on the drawings are minimum.
- Concrete Compressive Strength $f_c' = 3,500$ psi.
- Steel Yield Strength = 60,000 psi.
- Work this Sheet with other 2 Sheets.

LEGEND

- * Cut bars to fit in field.
- E.F. - denotes Each Face
- E.S. - denotes Each Side
- I.F. - denotes Inside Face
- O.F. - denotes Outside Face

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 31ST STREET TO 71ST STREET
 NB EXPRESS LANE RECONSTRUCTION
 JUNCTION CHAMBER 4-01
 DETAILS 2

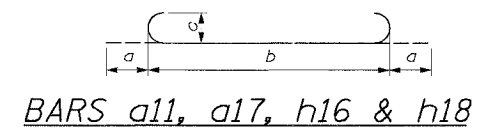
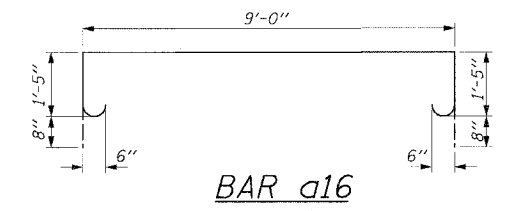
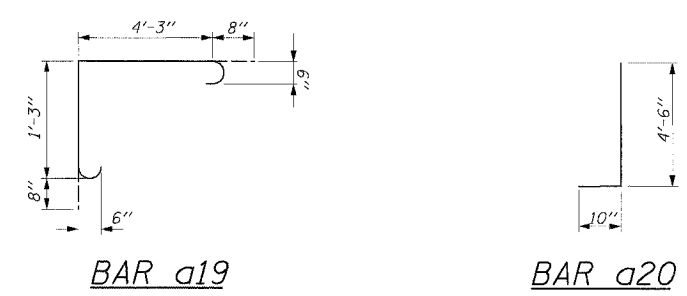
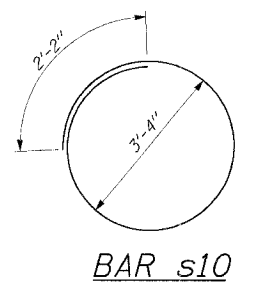
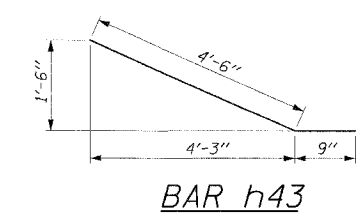
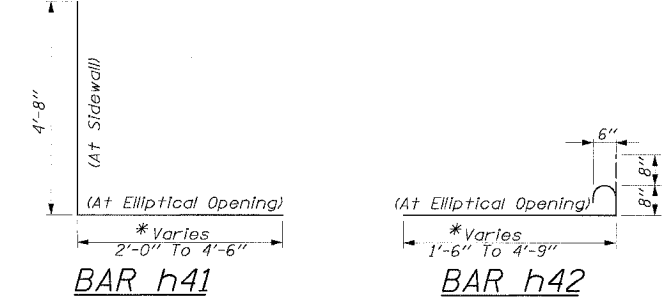
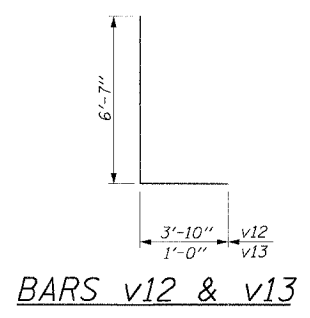
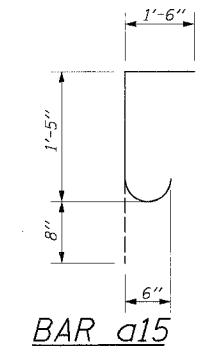
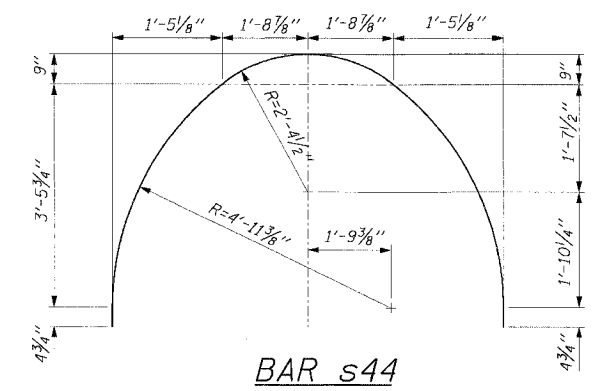
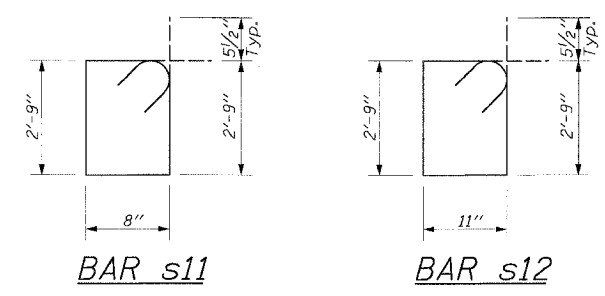
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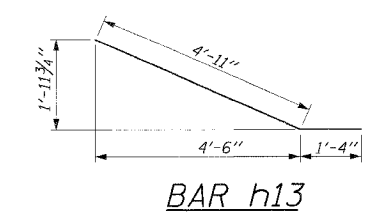
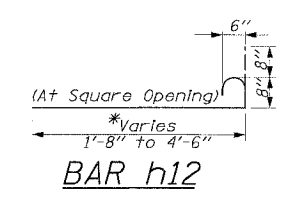
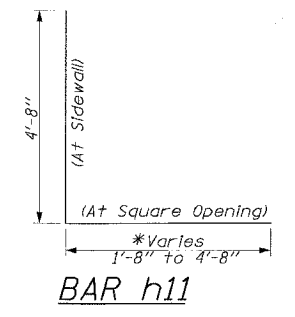
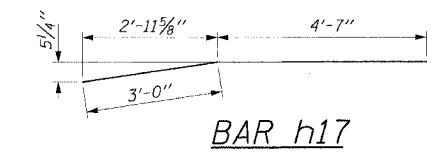
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**BILL OF MATERIAL
JUNCTION CHAMBER 4-01**

Bar	No.	Size	Length	Shape
a10	25	#6	10'-2"	—
a11	25	#10	11'-8"	—
a12	4	#8	10'-2"	—
a13	4	#5	5'-0"	—
a14	4	#5	6'-0"	—
a15	17	#5	3'-7"	—
a16	17	#10	13'-2"	—
a17	4	#10	11'-6"	—
a19	11	#6	6'-10"	—
a20	27	#5	5'-0"	—
h10	74	#8	10'-2"	—
h11	48	#6	9'-4"	—
h12	36	#6	9'-4"	—
h13	6	#8	6'-3"	—
h14	24	#8	11'-9"	—
h15	24	#6	11'-9"	—
h16	33	#6	13'-3"	—
h17	18	#5	7'-7"	—
h18	4	#8	13'-9"	—
h41	48	#6	10'-2"	—
h42	28	#6	9'-2"	—
h43	6	#8	5'-3"	—
h45	12	#6	7'-11"	—
h46	7	#5	9'-11"	—
s10	2	#5	12'-8"	—
s11	11	#5	7'-10"	—
s12	18	#6	7'-4"	—
s43	9	#5	8'-3"	—
s44	2	#6	12'-5"	—
v10	104	#8	8'-5"	—
v11	25	#6	3'-0"	—
v12	20	#7	10'-5"	—
v13	20	#7	7'-7"	—
v41	17	#6	7'-6"	—
v44	4	#6	8'-6"	—
v45	18	#5	2'-6"	—
Reinforcement Bars		Lbs.	15,540	
Concrete Structures		Cu. Yd.	25	



Bar	a	b	c
a11	8"	10'-2"	6"
a17	11"	10'-2"	8"
h16	8"	11'-11"	6"
h18	11"	11'-11"	8"



NOTE:
Quantities included for information only. All quantities associated with the junction chamber are included with the pay item Junction Chamber No. 1 except for Braced Excavation and Trench Backfill which shall be paid for separately.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) 31ST STREET TO 71ST STREET NB EXPRESS LANE RECONSTRUCTION JUNCTION CHAMBER 4-01 DETAIL 3
NAME	DATE	
SCALE:	DATE: 7/7/05	ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) 31ST STREET TO 71ST STREET NB EXPRESS LANE RECONSTRUCTION JUNCTION CHAMBER 4-01 DETAIL 3
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