

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	LETTING DIST.	SHEET NO.
F.A.I. RTE. 90/94	*	COOK	247	101
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	
			R-2	

60A63

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
 $f'_c = 3,500$ p.s.i.
 $f_y = 60,000$ p.s.i. (reinforcement)

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

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B 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) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

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

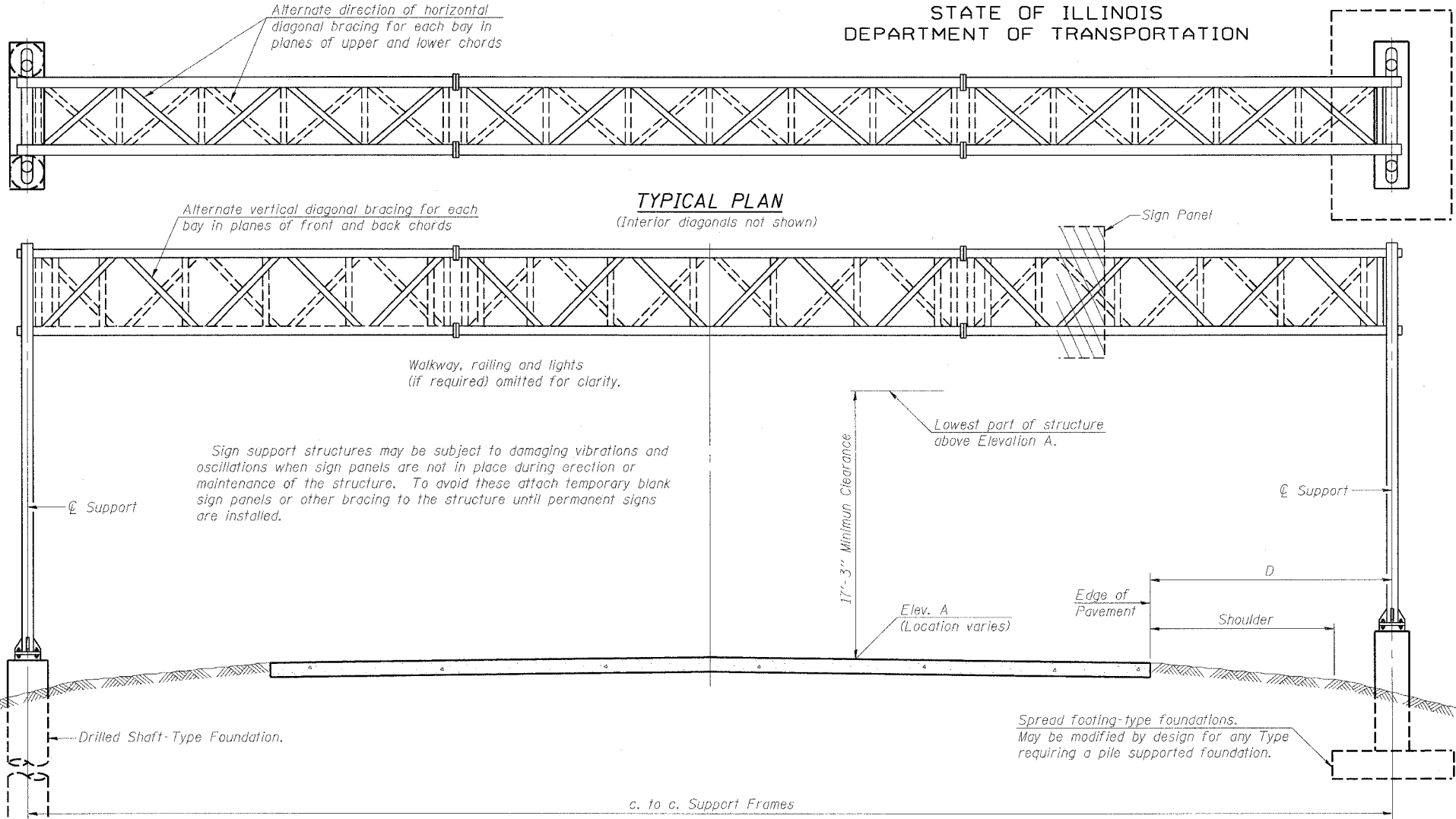
GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to 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 Seat Sealer in accordance with the Standard Specifications.

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

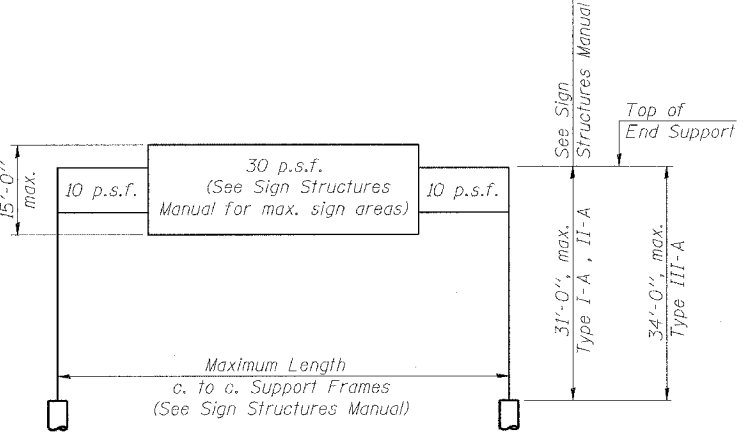
* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.



TYPICAL ELEVATION
(Looking at Face of Signs**)

Structure Number	Station	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
ISO161094R058.3	3444+50.00	I-A	86'	2.80'	8.48'L 21.38'R	12.5'	346.5 SF
ISO161094R058.1	3453+00.00	I-A	71'	-1.12'	9.86'L 22.71'R	12.5'	346.5 SF

**Looking upstation for structures with signs both sides.



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

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE TYPE I-A (4'-0" x 4'-6")	Foot	157
OVERHEAD SIGN STRUCTURE TYPE II-A (4'-6" x 5'-3")	Foot	0
OVERHEAD SIGN STRUCTURE TYPE III-A (5'-0" x 7'-0")	Foot	0
OVERHEAD SIGN STRUCTURE WALKWAY TYPE A	Foot	100
CONCRETE FOUNDATIONS	Cu. Yds.	0
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	43.3

NUMBER	REVISION	DATE

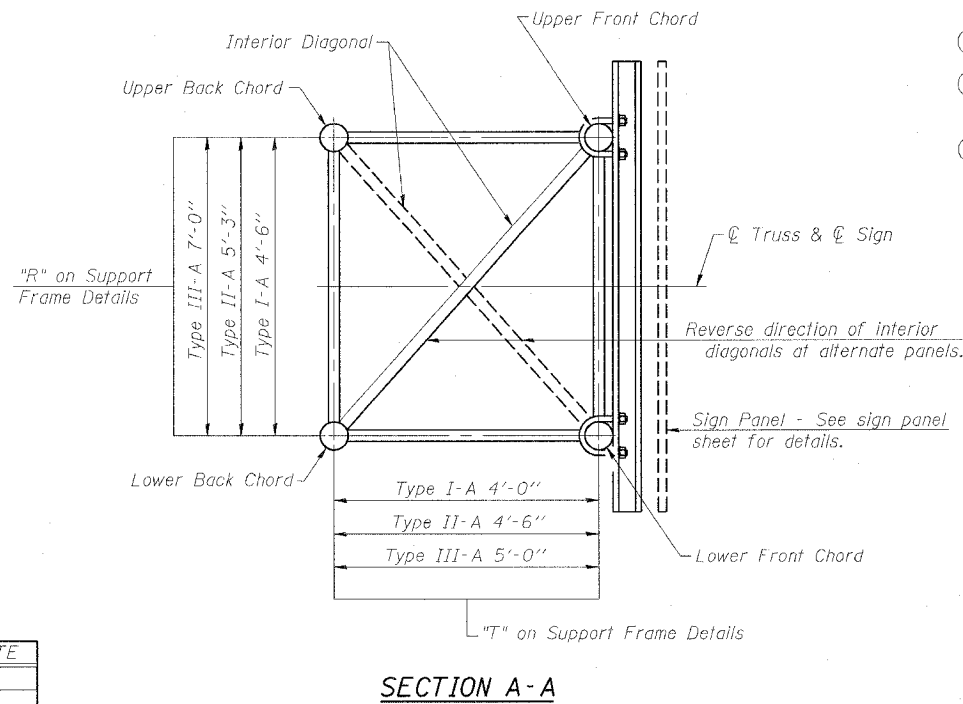
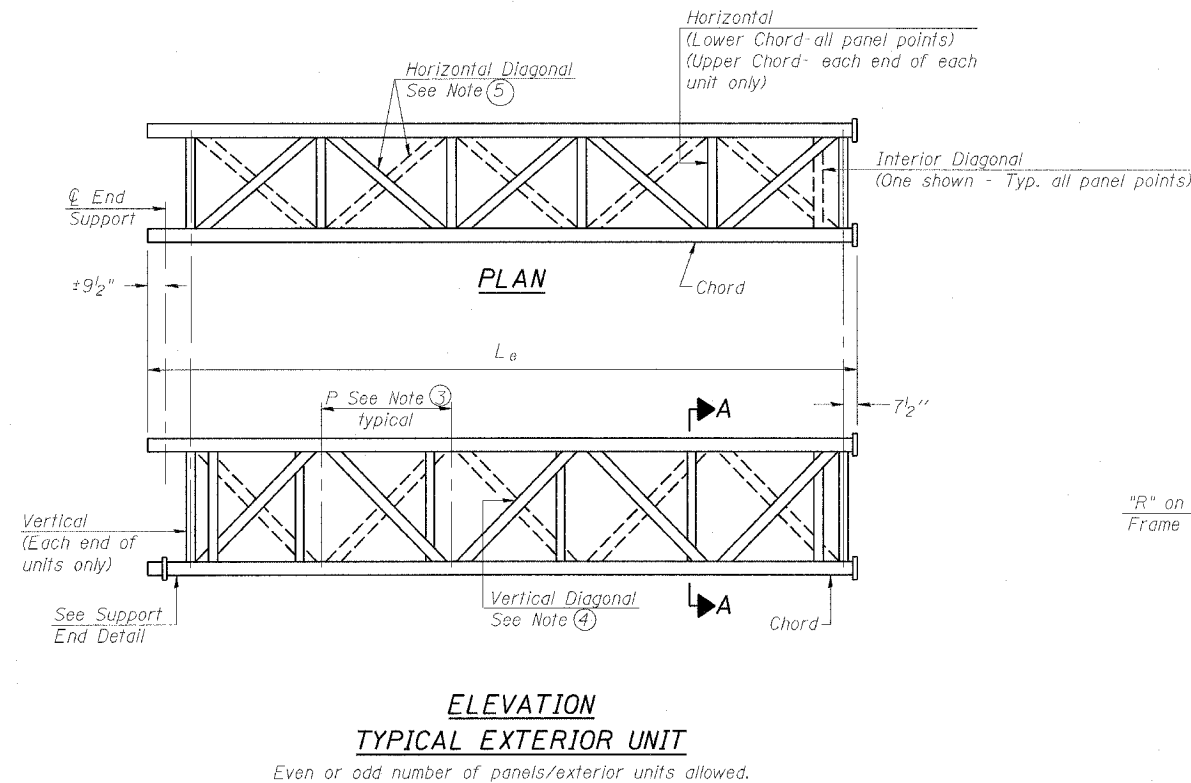
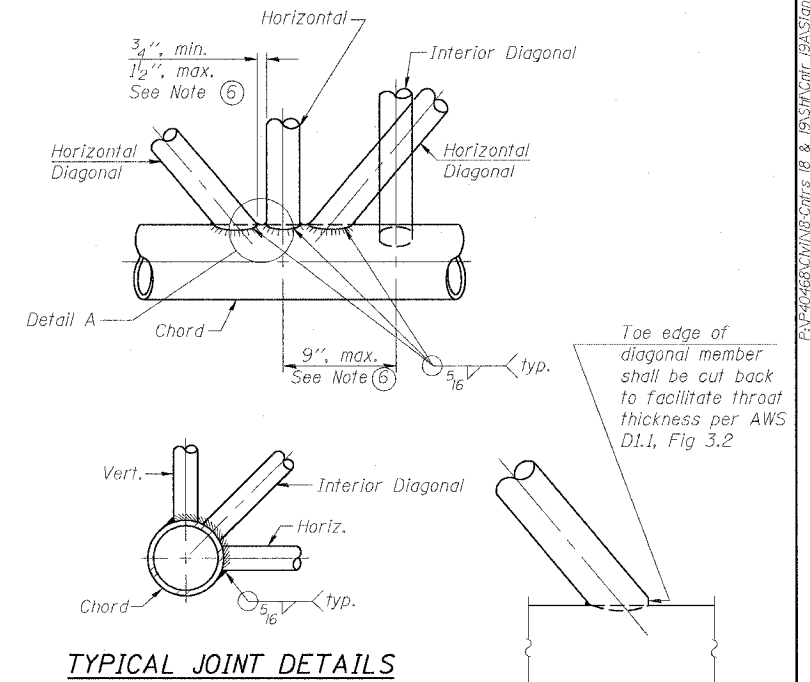
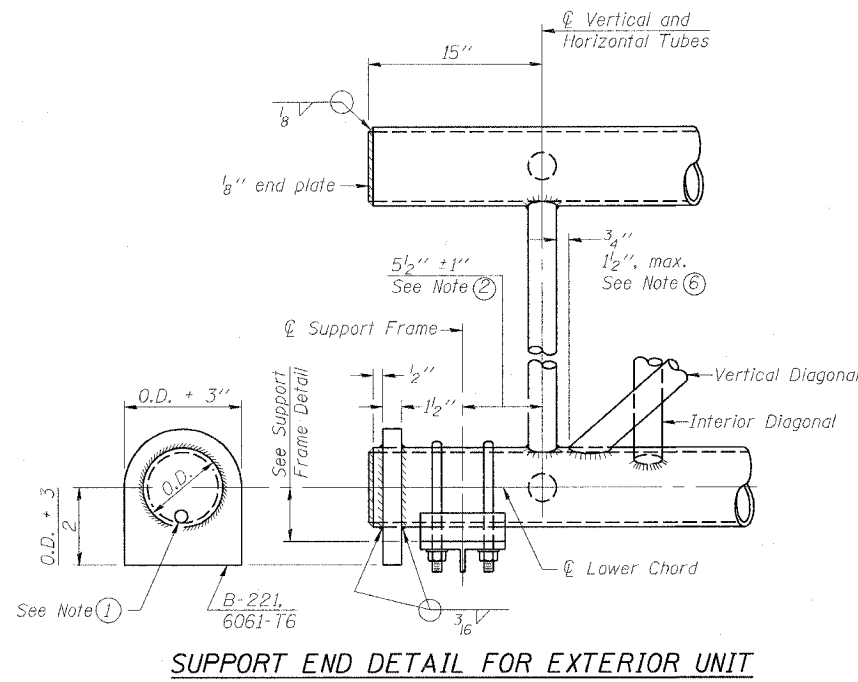
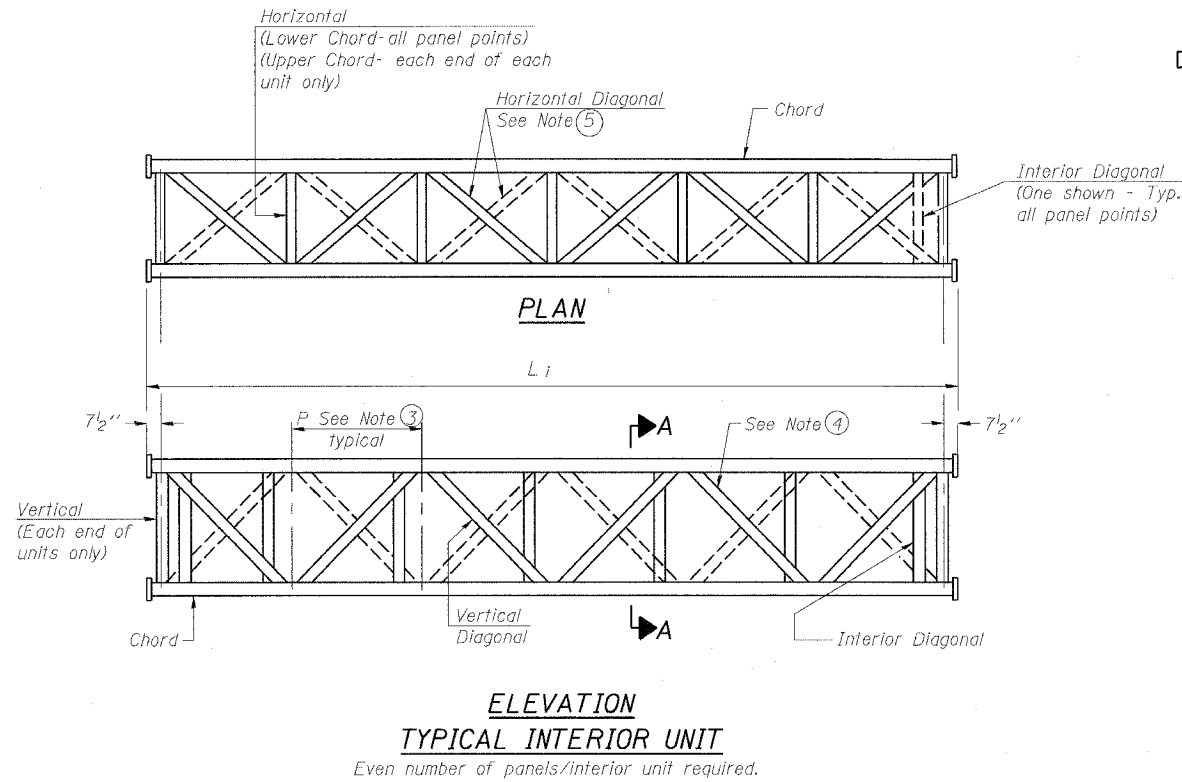
DESIGNED - JSS	EXAMINED	20
CHECKED - MJP	ENGINEER OF STRUCTURAL SERVICES	
DRAWN - JSS	PASSED	
CHECKED - MJP	ENGINEER OF BRIDGES AND STRUCTURES	

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

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET
F.A.I. RTE. 90/94		COOK	247	102
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
• (1919.15 & 2021-922 PT.1) R-2				60A63



- NOTES**
- Contractor may alternatively use standard aluminum drive-fit cap to close end. 1/2" Ø drain hole in end plate/drive-fit cap. (Typ. at ends of all chords)
 - 5 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 3/4" minimum to 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.

DESIGNED	JSS
CHECKED	MJP
DRAWN	JSS
CHECKED	MJP

EXAMINED	20
PASSED	ENGINEER OF STRUCTURAL SERVICES
	ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE

OS-A-2 1-7-05

OSS-4

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

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

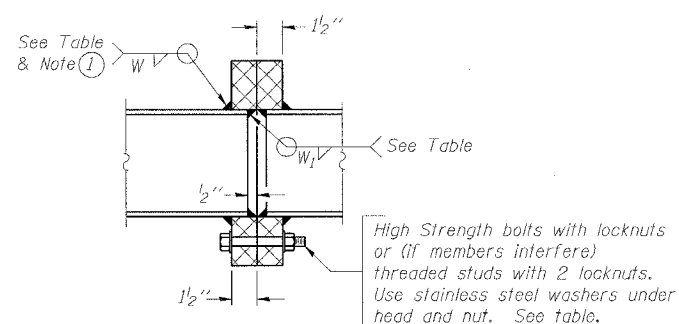
6/12/2006 11:23:02 AM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94		COOK	247	103
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
11915.15 & 2021-922 PT.1) R-2				60A63

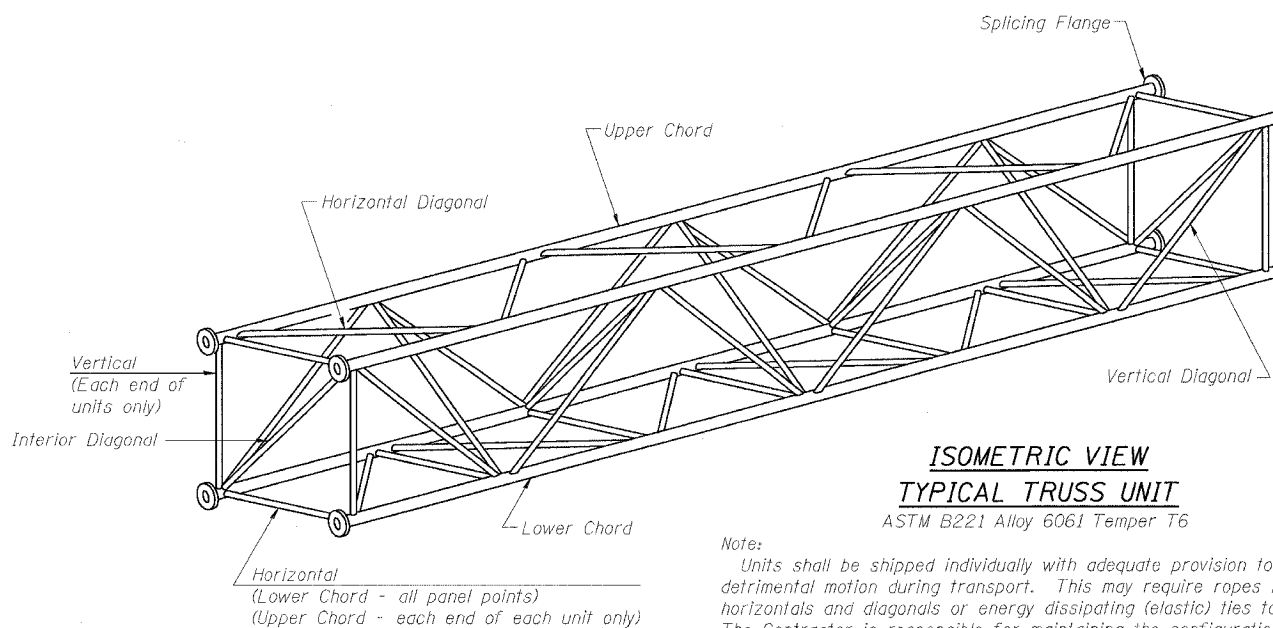
TRUSS UNIT TABLE

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 _e)	Panel Lgth.(P)	No. Req'd.	No. Panels per Unit	Unit Lgth.(L _i)	Panel Lgth.(P)	O.D.	Wall	O.D.	Wall		No./Splice	Bolts Dia.	Weld Sizes W	W ₁	A	B
ISO161094R058.3	3444+50.00	I - A	6	29'-4 1/2"	4'-7"	1	6	28'-9"	4'-7"	5"	5/16"	2 1/2"	5/16"	2.6"	6	7/8"	5/16"	1/4"	8 3/4"	11 3/4"
ISO161094R058.1	3453+00.00	I - A	7	36'-3 1/2"	4'-11"	0	--	--	--	5"	5/16"	2 1/2"	5/16"	1.8"	6	7/8"	5/16"	1/4"	8 3/4"	11 3/4"



SECTION B-B

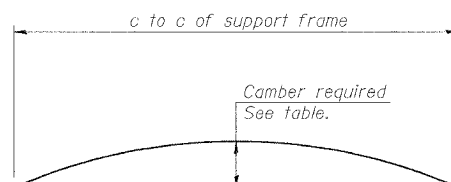
① Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining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



ISOMETRIC VIEW
TYPICAL TRUSS UNIT

ASTM B221 Alloy 6061 Temper T6

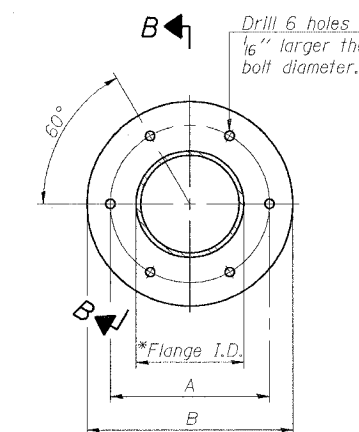
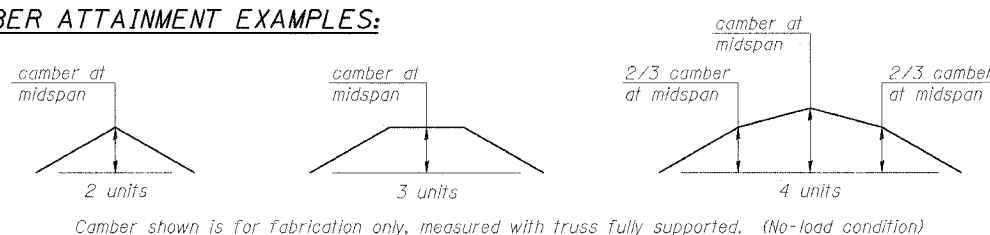
Note: Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection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



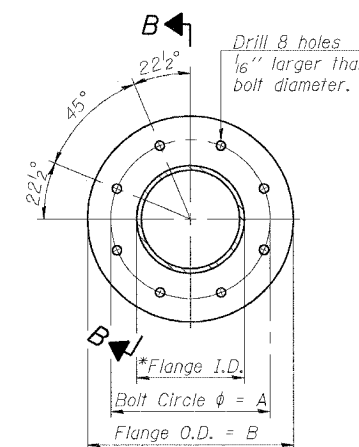
CAMBER DIAGRAM

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

CAMBER ATTAINMENT EXAMPLES:



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".

NUMBER	REVISION	DATE

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

OS4-A-2

1-7-05

OSS-5

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

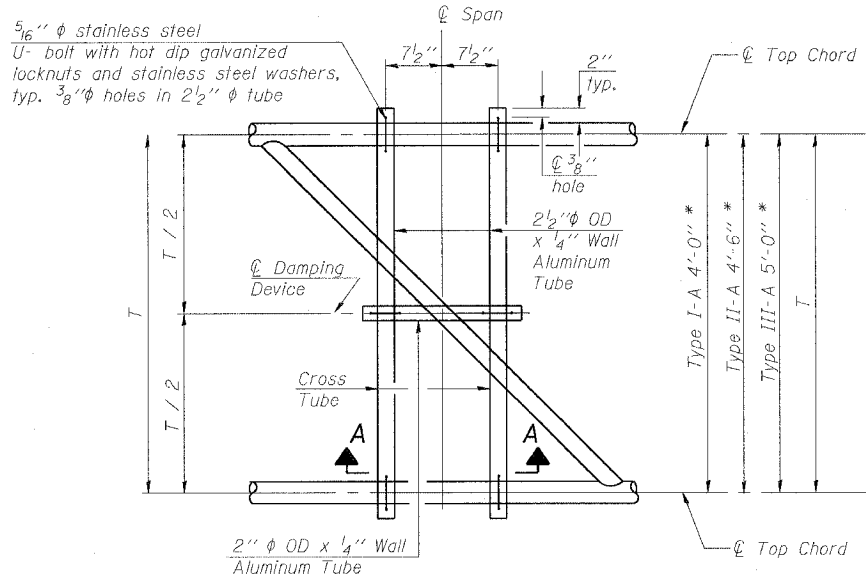
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

F:\P4066\CONTR-CNRS 18 & 19\STN\CTR 18\AS\Signng\519140524.dgn 5/2/2006 11:23:17 AM

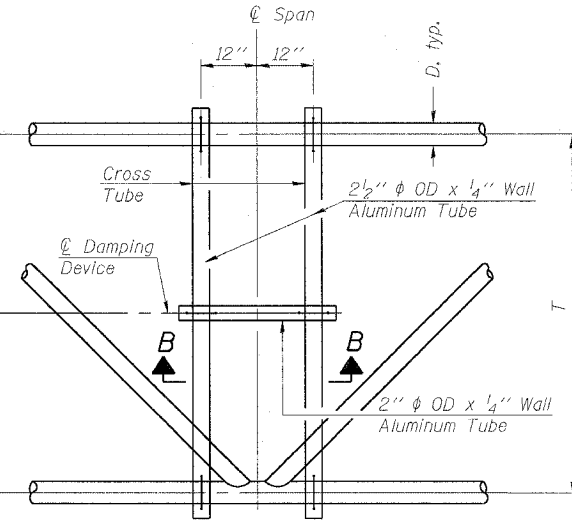
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

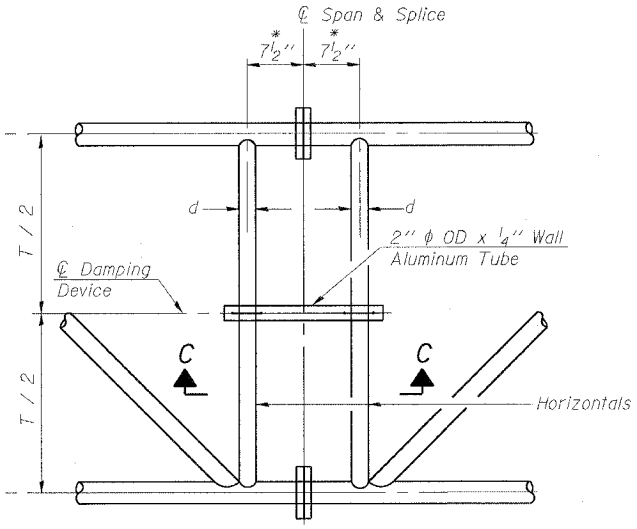
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A.I. RTE. 90/94		COOK	247	104
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
191915 & 2021-922 PT.JJ R-2			60A63	



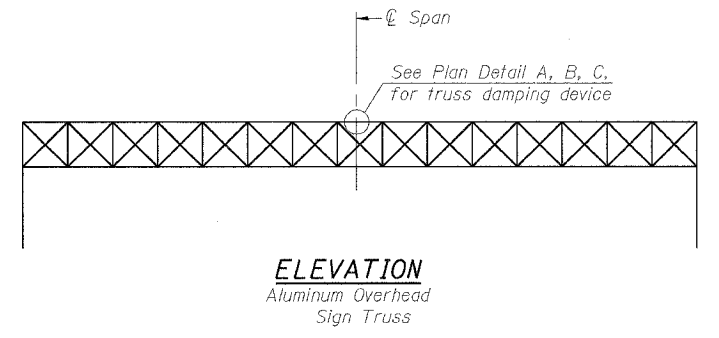
PLAN DETAIL "A"
Span between Panel Points



PLAN DETAIL "B"
Span at Panel Point

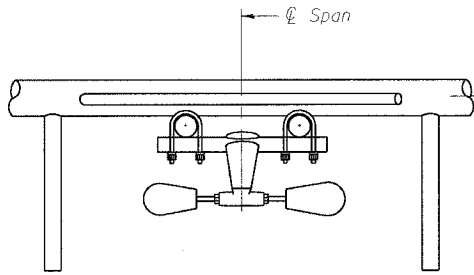


PLAN DETAIL "C"
Span at Chord Splice

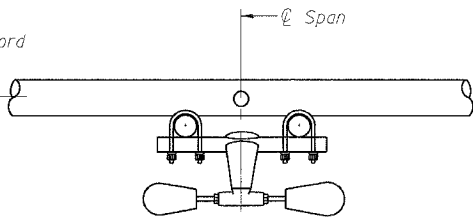


ELEVATION
Aluminum Overhead Sign Truss

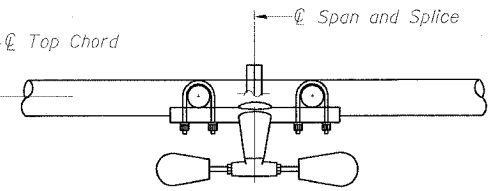
NOTES
Damper: One damper per truss. (31 lbs. Stockbridge-Type Aluminum) Cost included in Overhead Sign Structure...
Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure...



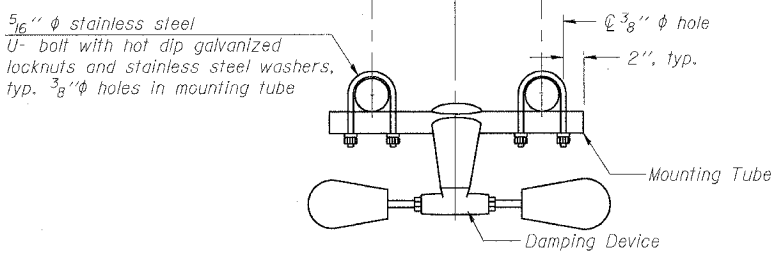
SECTION A-A



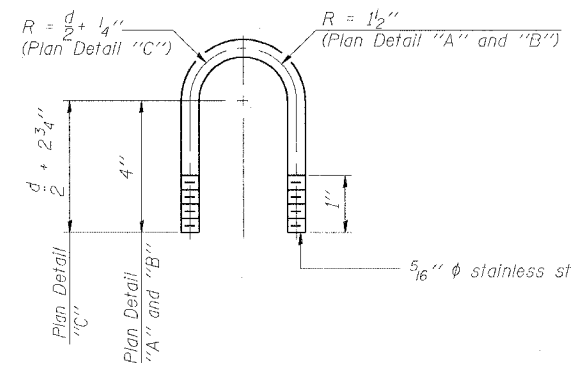
SECTION B-B



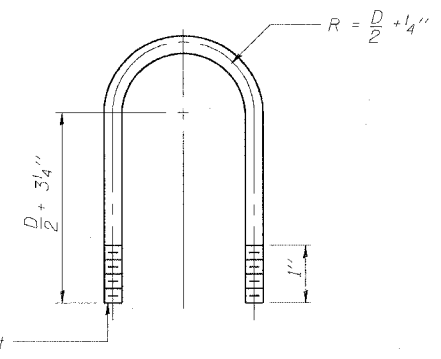
SECTION C-C



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 - JSS	20
CHECKED - MJP	EXAMINED
DRAWN - JSS	PASSED
CHECKED - MJP	ENGINEER OF STRUCTURAL SERVICES
	ENGINEER OF BRIDGES AND STRUCTURES

OS-A-D 1-7-05

OSS-6

OVERHEAD SIGN STRUCTURE DAMPING DEVICE

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

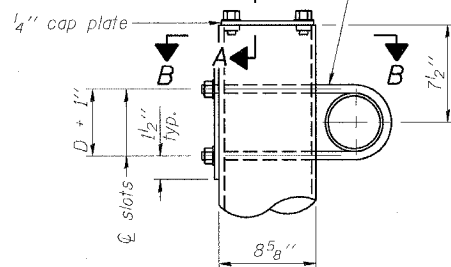
F:\P466\CHINE\cans 18 & 19\STACR\IBAS\signing\SS19A00624.dgn 5/2/2006 11:23:27 AM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

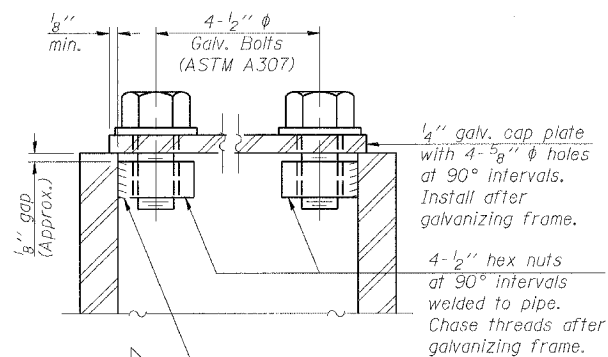
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94	*	COOK	247	105
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

(1915.15 & 2021-922 PT.1) R-2

3/4" φ stainless steel U-bolt.
Provide two washers and two hexagon locknuts. (4)
1 1/16" x 2" slots on 8" φ pipe.
(4 slots required per pipe)

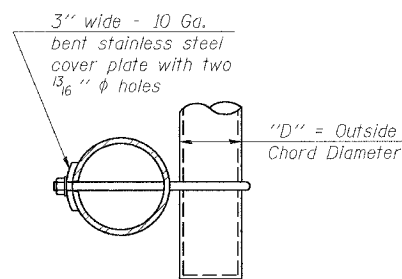


DETAIL A

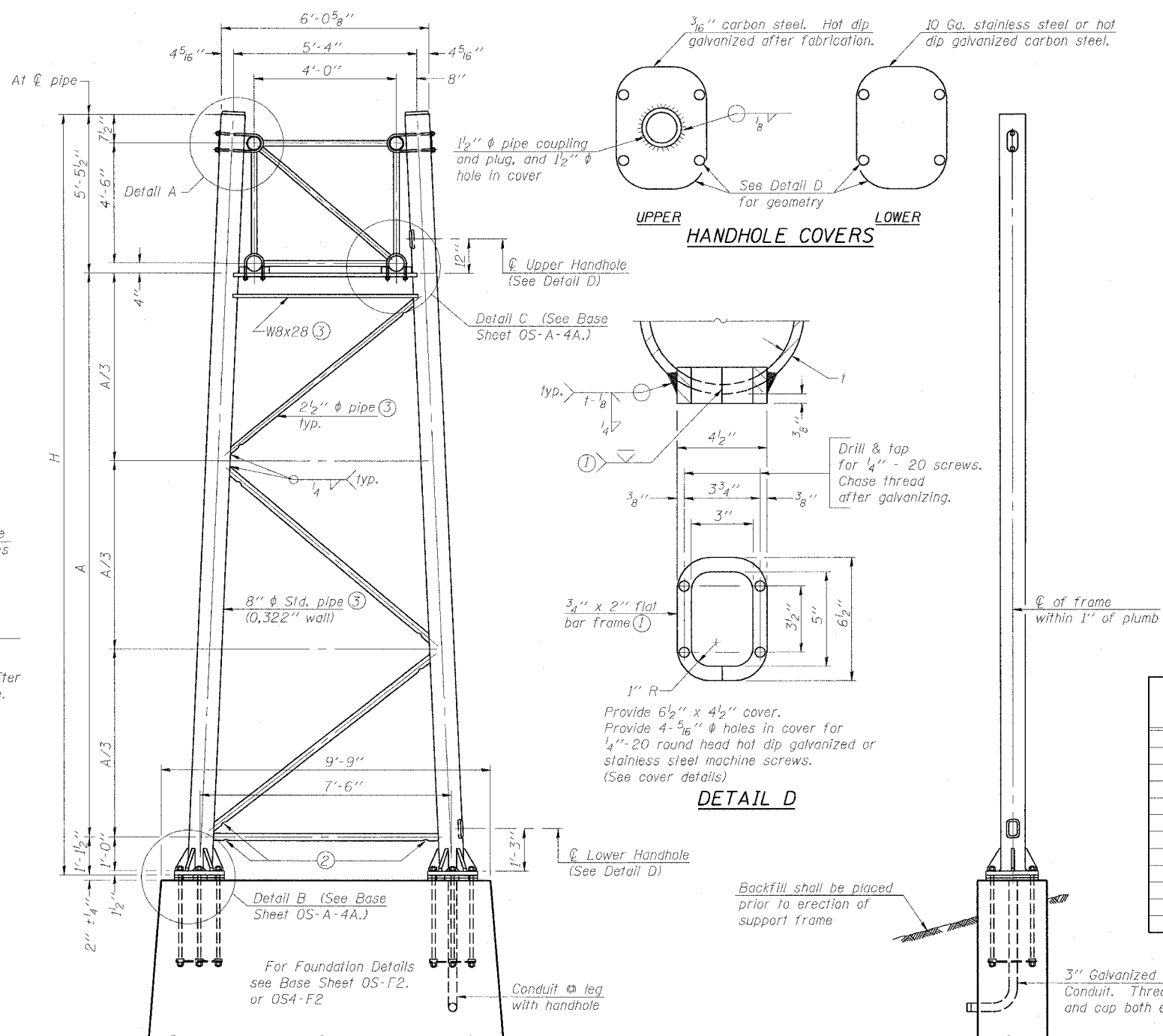


SECTION A-A

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



SECTION B-B



SIDE ELEVATION

END ELEVATION

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

- In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANST Roughness of 500 μin 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		H	A
		Left	Right		
ISO161094R058.1	3453+00.00	X		24.33'	17.74'
ISO161094R058.1	3453+00.00		X	21.06'	14.47'

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

NUMBER	REVISION	DATE

OS-A-4 1-7-05

8" φ PIPE TRUSS SUPPORT FRAME

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

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

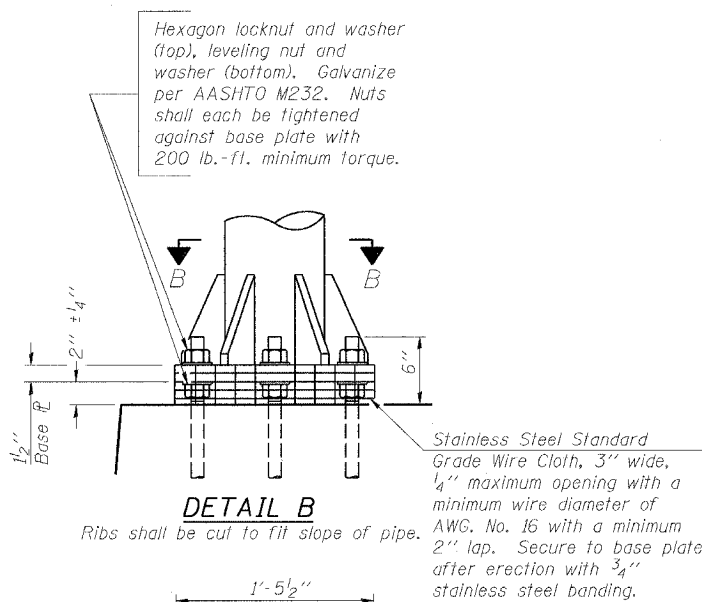
OSS-7

6/2/2006 11:53:37 AM

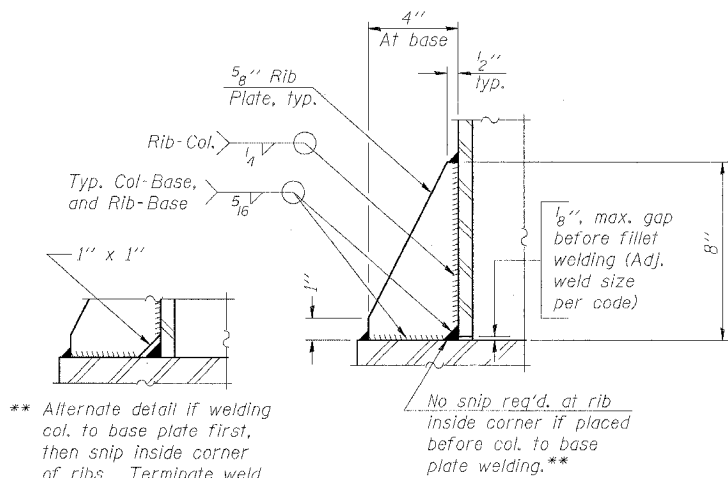
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET
F.A.I. RTE. 90/94	*	COOK	247	106
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

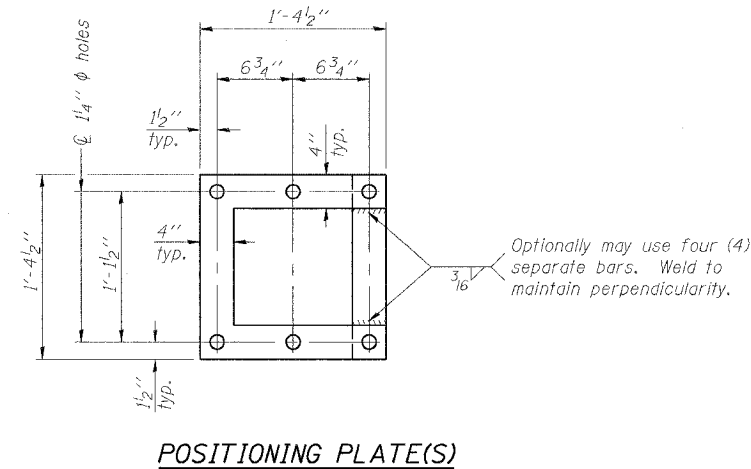
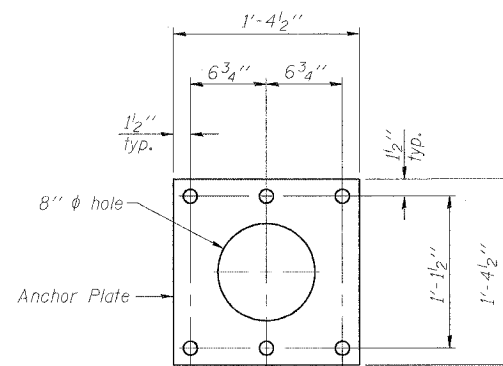
60463



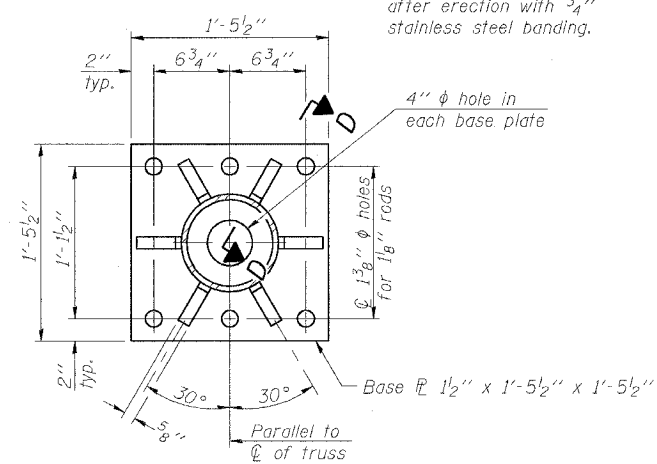
DETAIL B



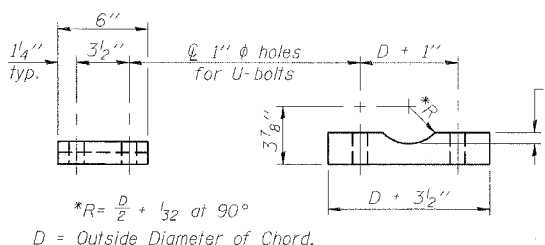
SECTION D-D



POSITIONING PLATE(S)



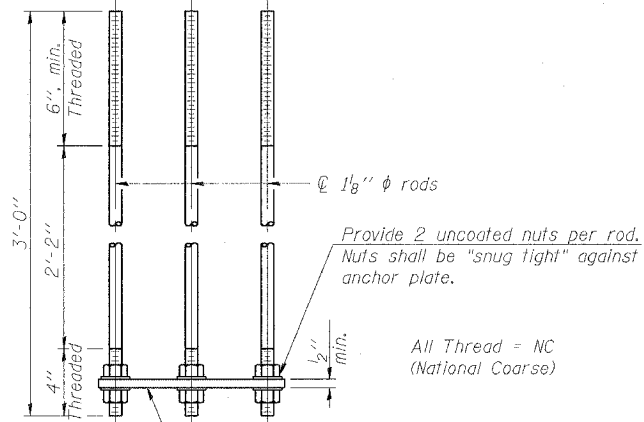
SECTION B-B



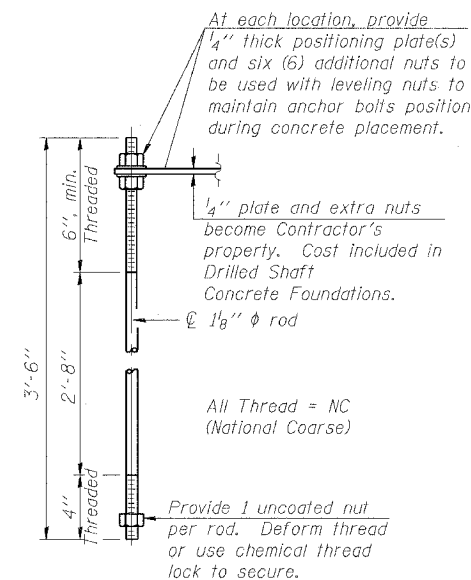
SADDLE SHIM DETAIL

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

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



ANCHOR ROD DETAIL
Spread Footing Foundation



ANCHOR ROD DETAIL
Drilled Shaft Foundation

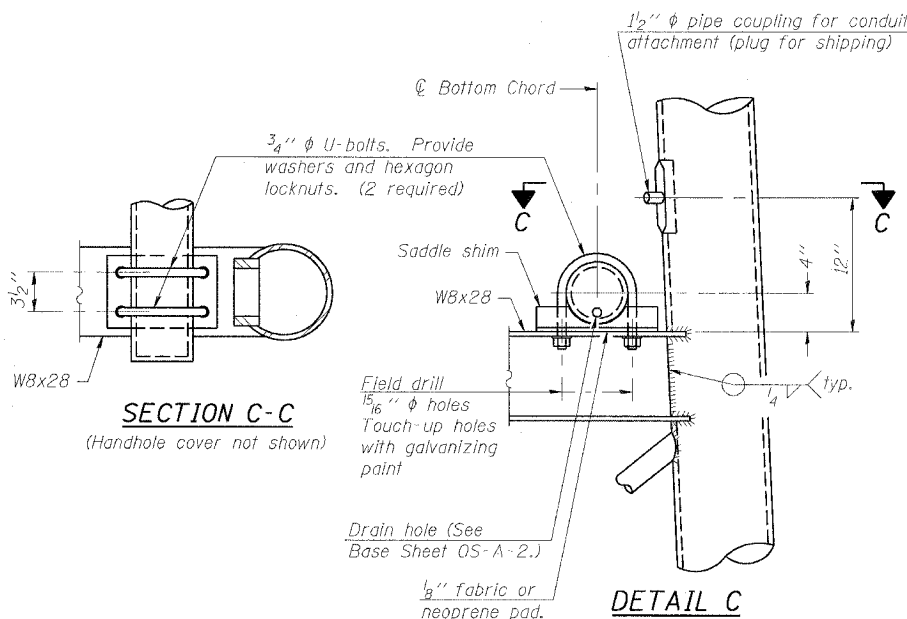
Anchor rods shall conform to AASHTO M314 Grade 36 or 55 and meet Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. Galvanize upper 12" per AASHTO M232. No welding shall be permitted on rods.

NUMBER	REVISION	DATE

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

OS-A-4A

1-7-05



SECTION C-C
(Handhole cover not shown)

DETAIL C

TYPE I-A TRUSS
8" ϕ PIPE SUPPORT FRAME DETAILS

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME DETAILS ALUMINUM TRUSS

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

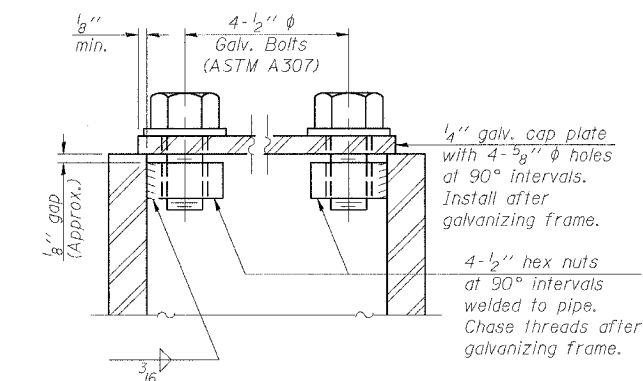
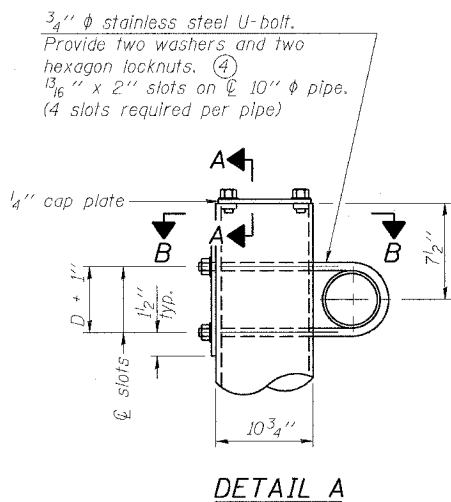
OSS-8

11/2/2006

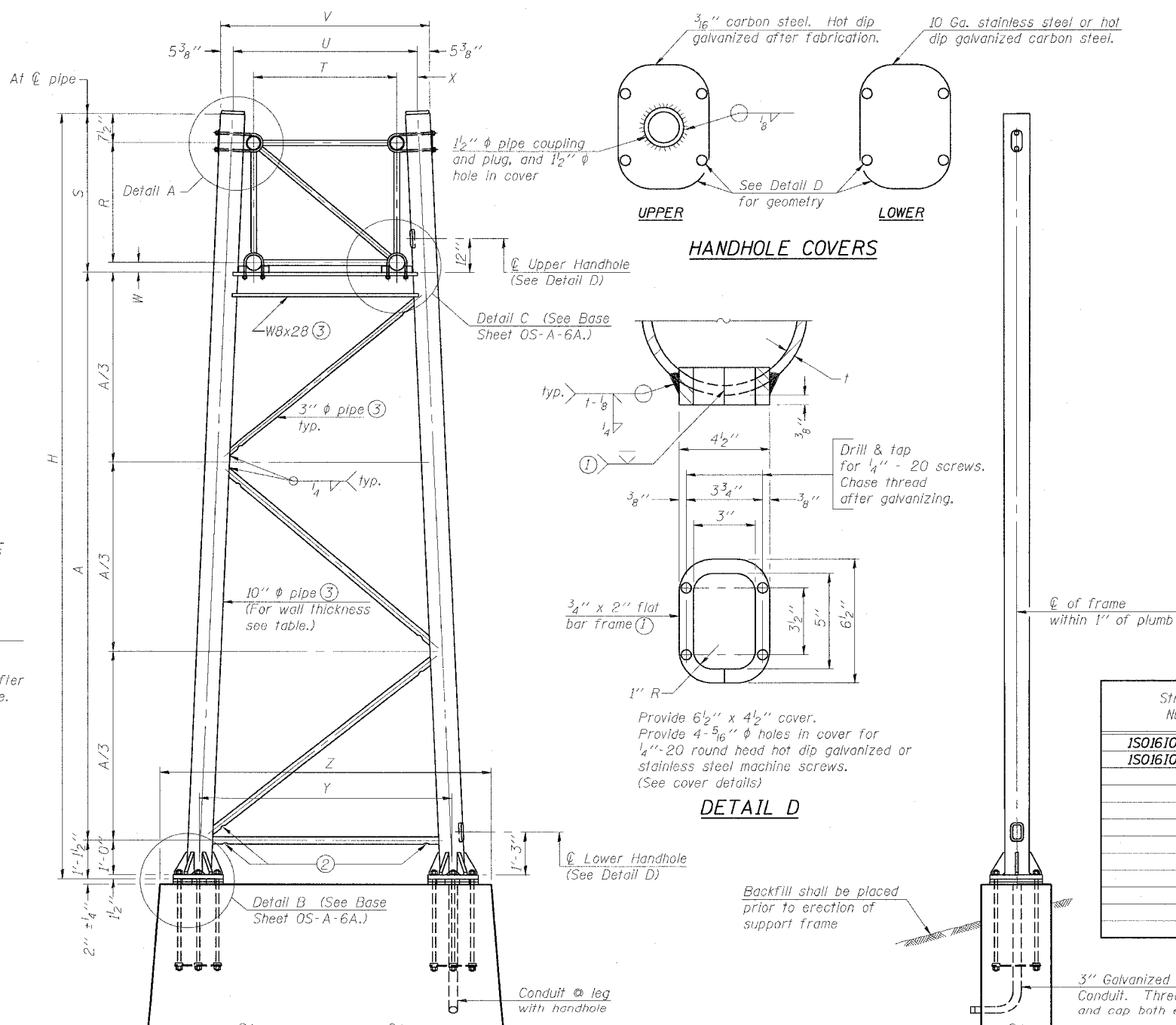
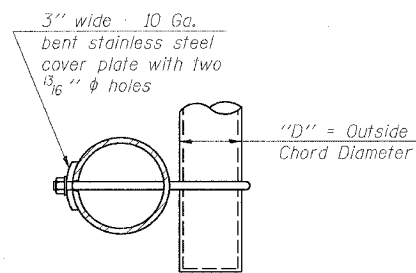
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94		COOK	247	107
FED. AID DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

• (0919,15 & 2021-922 PT.1) R-2 60A63



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



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 µin 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		Truss Type	Pipe Wall Thickness	H	A
		Left	Right				
ISO161094R058.3	3444+50.00	X		I-A	0.279	24.71'	18.13'
ISO161094R058.3	3444+50.00		X	I-A	0.279	22.04'	15.46'

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

NUMBER	REVISION	DATE

Truss Type	Dimensions									
	R	S	T	U	V	W	X	Y	Z	
I-A	4'-6"	5'-5 1/2"	4'-0"	5'-6"	6'-4 3/4"	4"	9"	8'-3"	11'-3"	
II-A ⑤	5'-3"	6'-3 1/4"	4'-6"	6'-1"	6'-11 3/4"	4 3/4"	9 1/2"	8'-3"	11'-3"	

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME for ALUMINUM TRUSS

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

OSS-9

OS-A-6

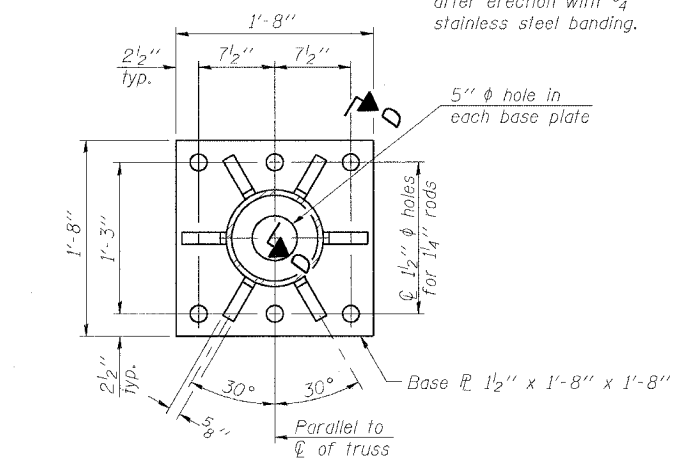
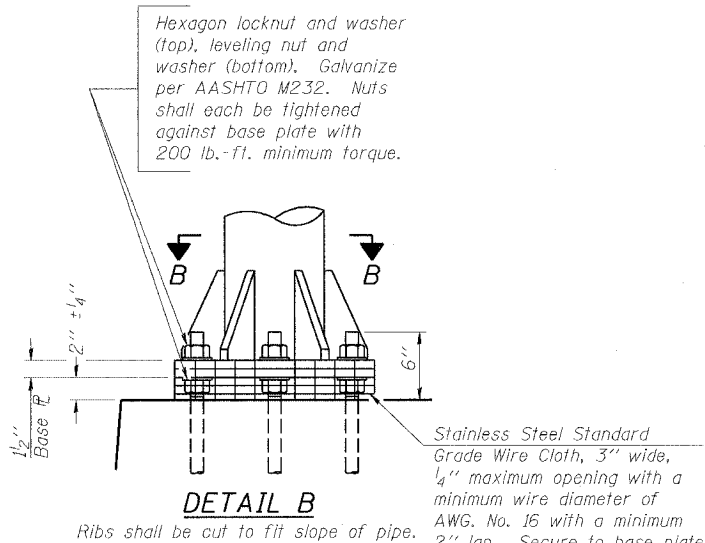
1-7-05

6/27/2006 11:26:00 AM P:\P\4665C\WINE\Ctr 18 & 19\SP\CTR 19\AS\SIGN\SS1910092A.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
F.A.I. RTE. 90/94		COOK	247	108
FED. ROAD DIST. NO. 1	ALLIGES	FED. AID PROJECT		

(1915.15 & 2021-522 PT.1) R-2



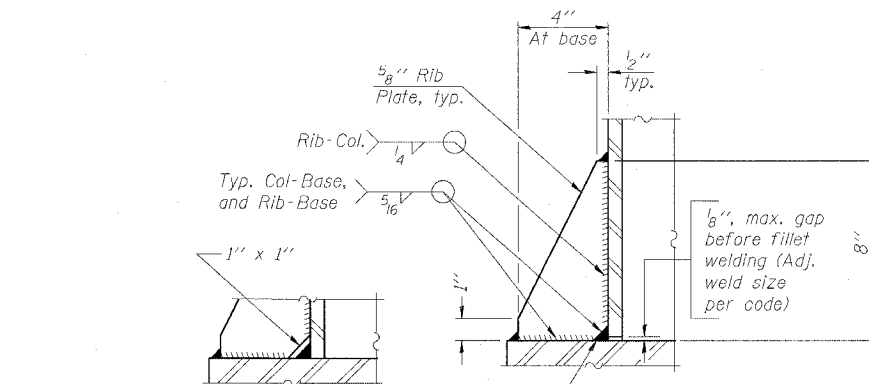
SECTION B-B

NUMBER	REVISION	DATE

DESIGNED - JSS	20
CHECKED - MJP	EXAMINED
DRAWN - JSS	ENGINEER OF STRUCTURAL SERVICES
CHECKED - MJP	PASSED
	ENGINEER OF BRIDGES AND STRUCTURES

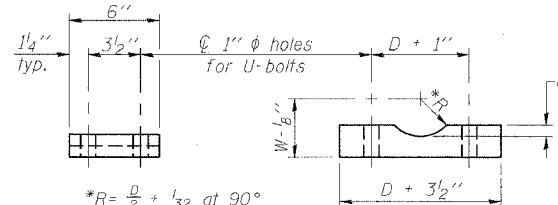
OS-A-6A

1-7-05



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

SECTION D-D

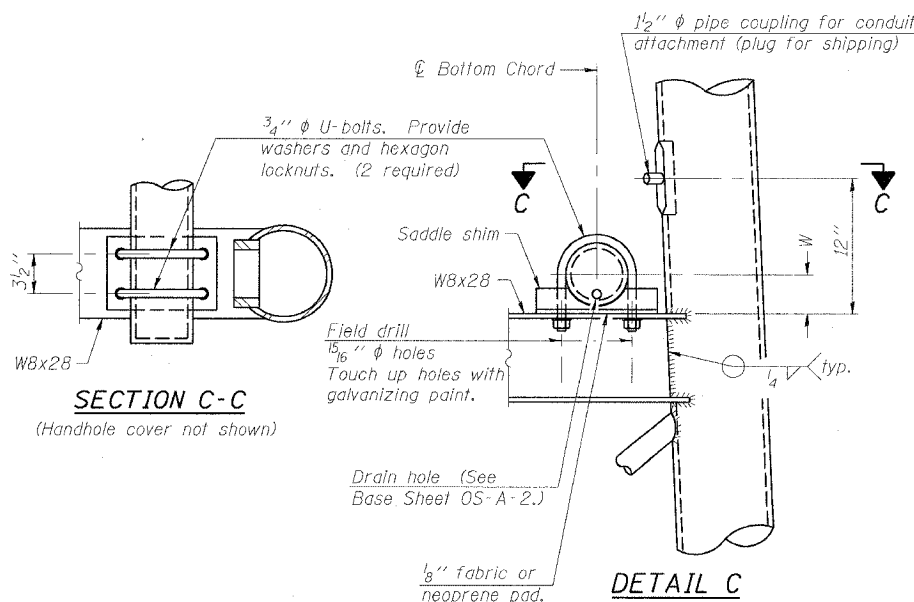


D = Outside Diameter of Chord.
For W, see Base Sheet OS-A-6.

SADDLE SHIM DETAIL

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

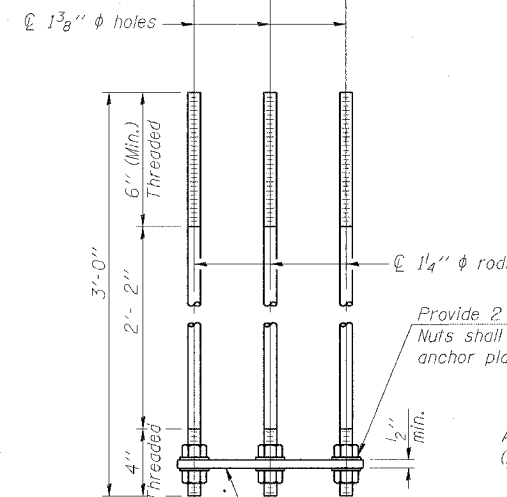
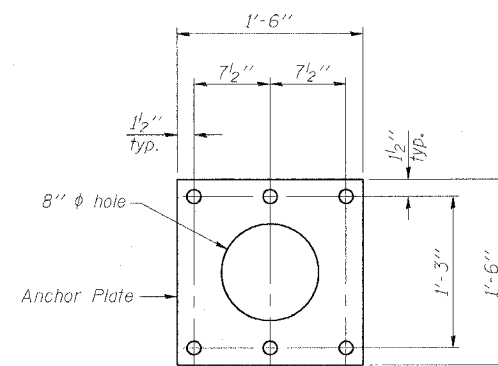
Truss Chord Nominal Dia.	a
5"	3 1/4"
5 1/2"	13/16"
6"	7/8"
6 1/2"	15/16"
7"	1"



SECTION C-C

(Handhole cover not shown)

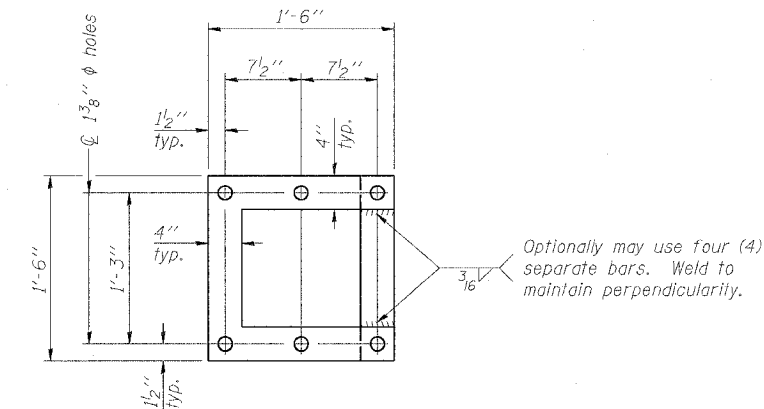
DETAIL C



ANCHOR ROD DETAIL
Spread Footing Foundation

Anchor rods shall conform to AASHTO M314 Grade 36 or 50 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.

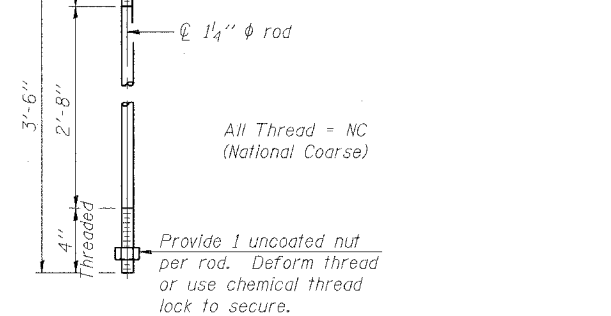
10" PIPE SUPPORT FRAME DETAILS



POSITIONING PLATE(S)

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

1/4" plate and extra nuts become Contractor's property. Cost included in Drilled Shaft Concrete Foundations.



ANCHOR ROD DETAIL
Drilled Shaft Foundation

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME DETAILS ALUMINUM TRUSS

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

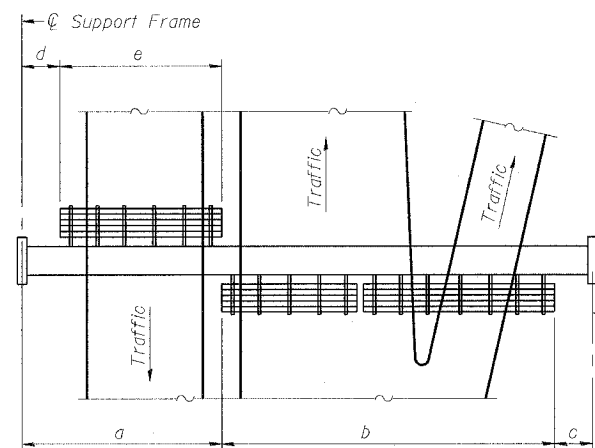
OSS-10

6/27/2006 10:24:17 AM P:\P\4630\IN\B-C\truss 10 & 19\STRUCT\19A\Sign\truss\SS19A0102A.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94	*	COOK	247	109
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT-

• (1919,15 & 2021-922 P.I.) R-2 60AG3



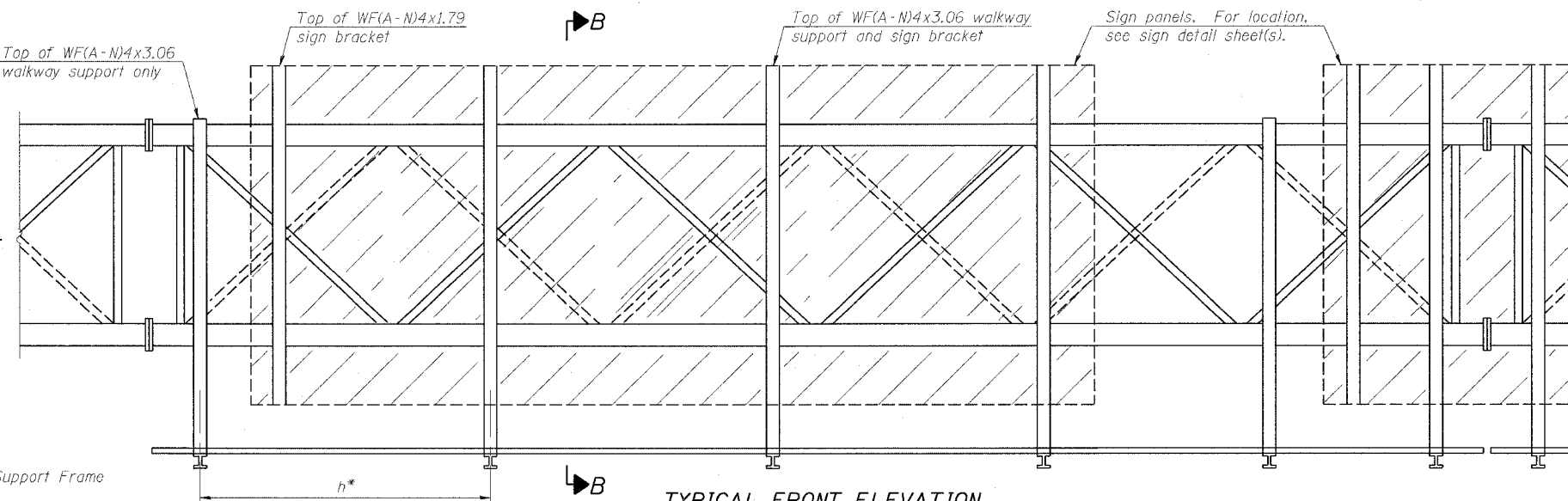
PLAN
WALKWAY AND HANDRAIL SKETCH
(Road plan beneath truss varies)

BRACKET TABLE

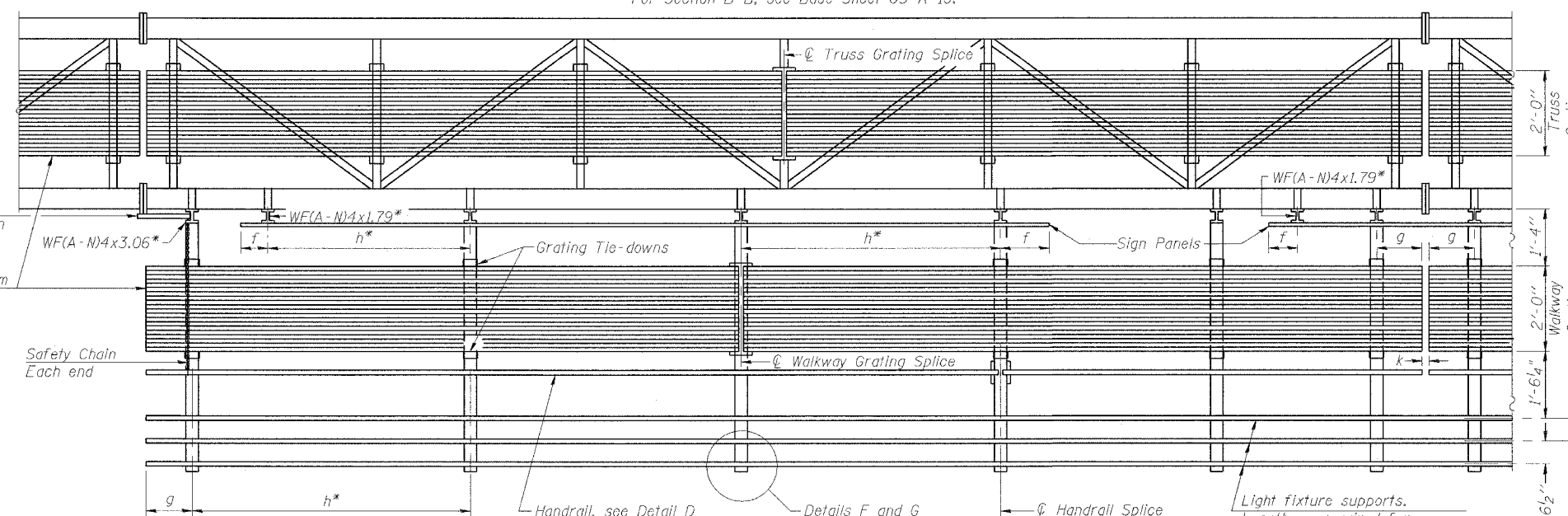
WF(A-N)4x1.79 or WF(A-N)4x3.06
ASTM B308, Alloy 6061-T6

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

** Alternate angle for safety chain attachment
Standard Aluminum Grating, see Details T and W



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



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

- Notes:
* Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:
f = 12" maximum, 4" minimum (End of sign to center of nearest bracket)
g = 12" maximum, 4" minimum (End of walkway grating to center of nearest support bracket)
h = 6'-0" maximum (center to center of sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)
k = 2" maximum gap between adjacent walkway grating sections and handrail ends

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

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

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, handrail and light support splices placed as needed.

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".

Structure Number	Station	a	b	c	d	e	Walkway Grating and Handrail Lengths
ISO161094R058.3	3444+50.00	8.48'	56.0'	21.52'	---	---	56.0'
ISO161094R058.1	3453+00.00	5.86'	44.0'	21.14'	---	---	44.0'

DESIGNED - JSS	EXAMINED	20
CHECKED - MJP	PASSED	ENGINEER OF STRUCTURAL SERVICES
DRAWN - JSS		ENGINEER OF BRIDGES AND STRUCTURES
CHECKED - MJP		

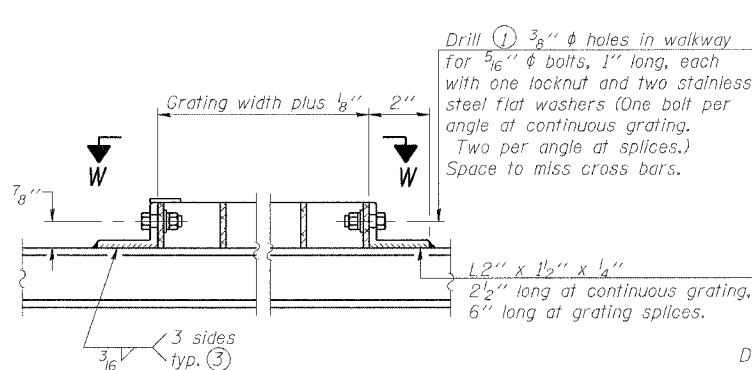
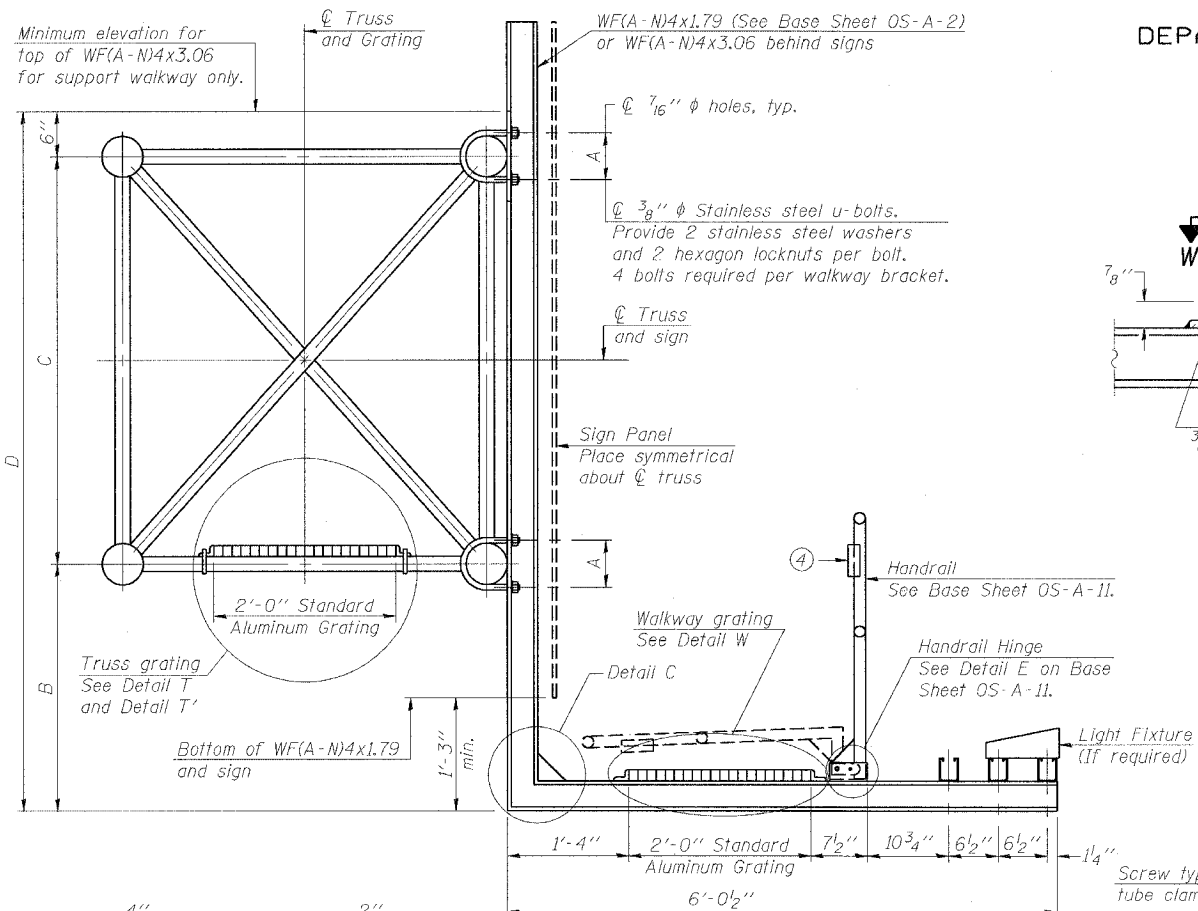
NUMBER	REVISION	DATE

OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS

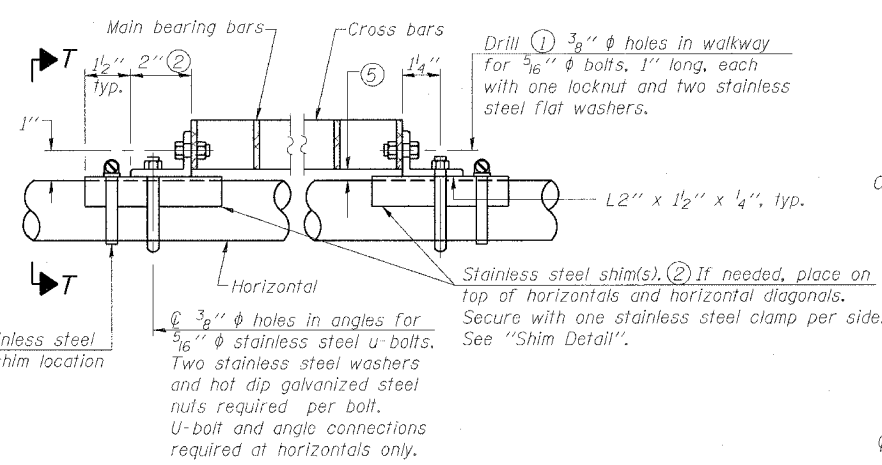
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET
F.A.I. RTE. 90/94		COOK	247	110
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
(1919.15 & 2021-922 P.T.1) R-2				



DETAIL W
(Walkway grating)



DETAIL T
(Continuous Truss grating)

SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

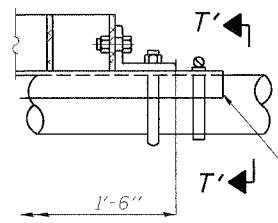
Main Bearing Bars shall be 3/16" x 1 1/2" on 1 3/16" centers and conform to ASTM B221 Alloy 6061-T6.

Cross bars shall be 3/16" x 1 1/2" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

OR

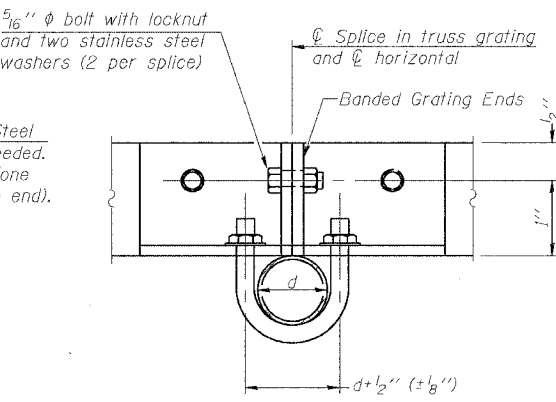
Aluminum Grating with modified "I" sections for main bearing bars shall meet the following requirements:
Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.³ per bar, a depth of 1 1/2", spaced on 1 3/16" centers.
Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.

Structure Number	Station	A	B	C	D
ISO161094R058.3	3444+50	5 1/2"	5'-3"	4'-6"	10'-3"
ISO161094R058.1	3453+00	5 1/2"	5'-3"	4'-6"	10'-3"

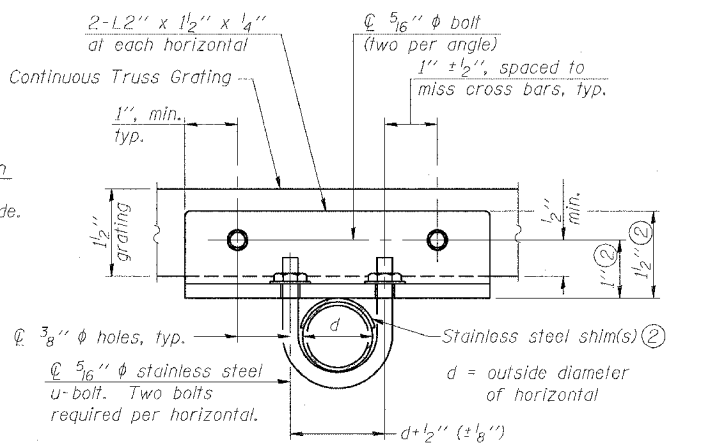


DETAIL T'

(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'



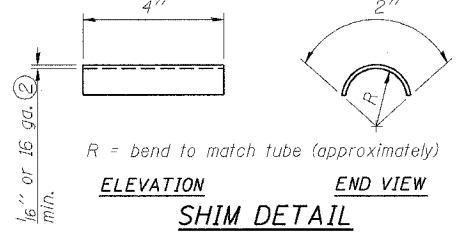
SECTION T-T

- ① Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- ② Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.
- ③ If Handrail Joint present, weld angle to WF(A-N)4 and 1/4" extension bars. (See Base Sheet OS-A-II.)
- ④ ϕ 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
- ⑤ Tube to grating gap may vary from 0 to 1/2", max. to align walkway, allow for camber, etc.

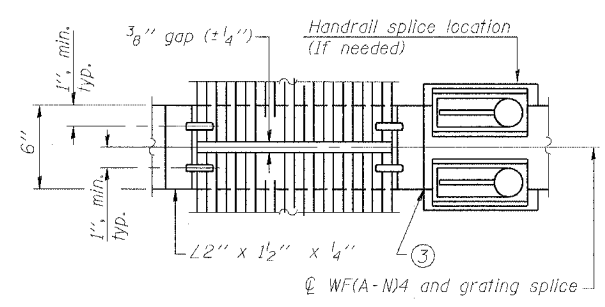
OSS-12

OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS

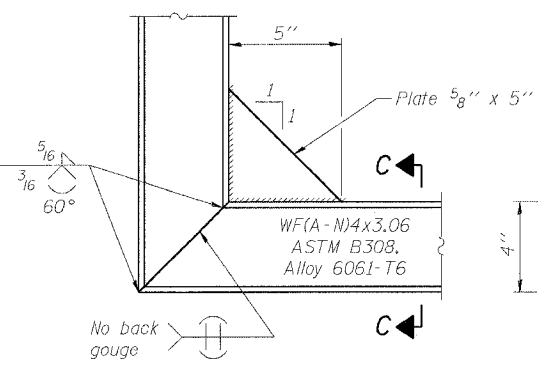
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT



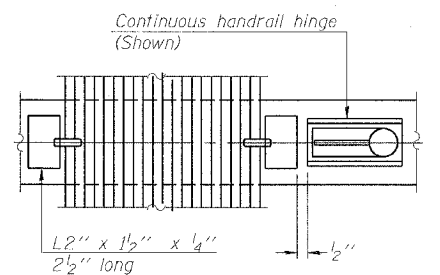
SECTION B-B



(AT WALKWAY GRATING SPLICE)



SECTION C-C



SECTION W-W

DESIGNED - JSS	EXAMINED
CHECKED - MJP	PASSED
DRAWN - JSS	
CHECKED - MJP	

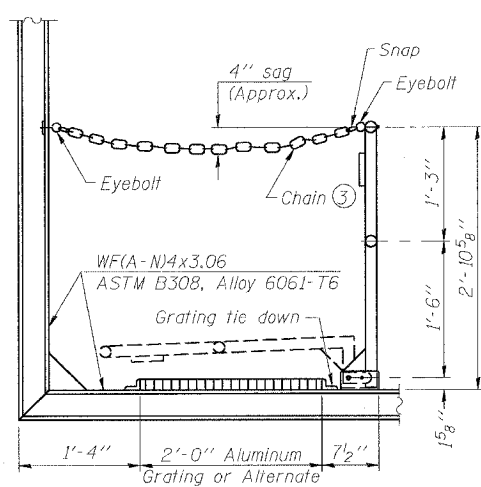
20	ENGINEER OF STRUCTURAL SERVICES
	ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE

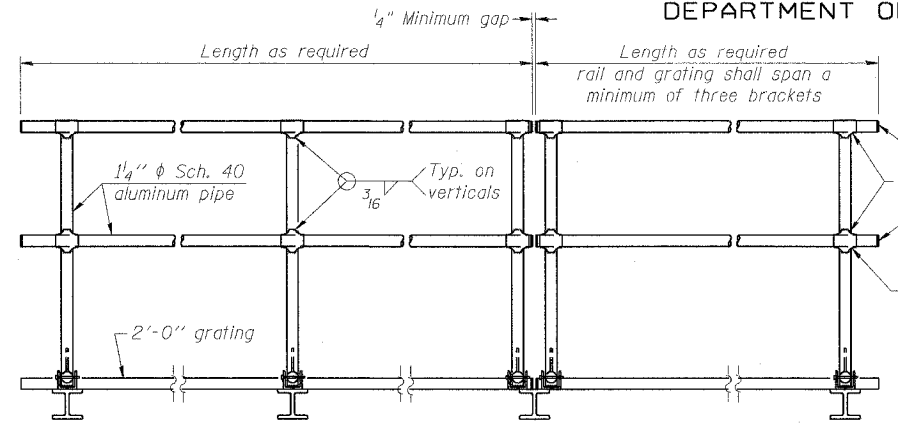
6/2/2006 11:24:32 AM P:\0468\CHIN\B-cmrs 15 & 19\STRUCT\19A\Sign\OS-A10\2EA.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94		COOK	247	111
FED. ROAD DIST. NO. 1	ILLINOIS	PER. AID PROJECT		
11915.15 & 2021-922 PT.1) R-2				



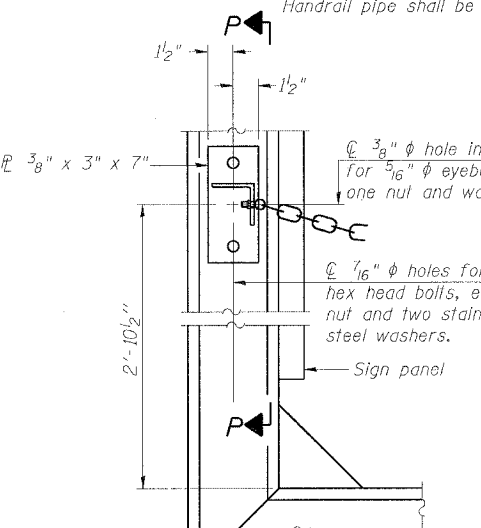
SIDE ELEVATION
(Showing safety chain w/o sign)



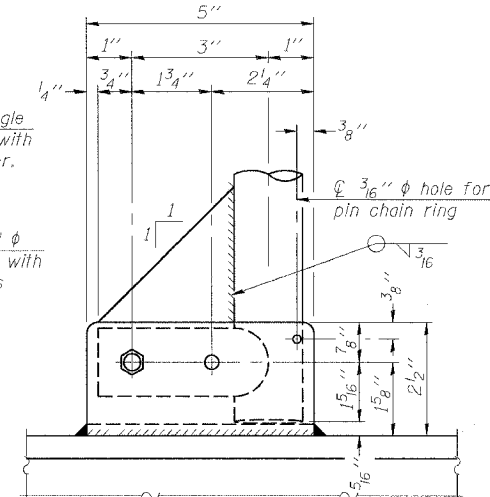
FRONT ELEVATION

HANDRAIL DETAILS

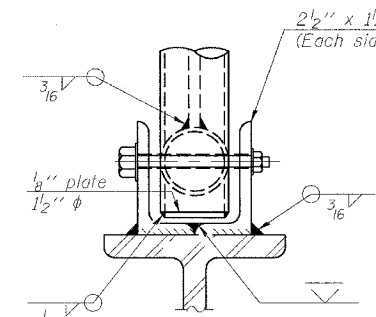
Handrail pipe shall be ASTM B241, Alloy 6063-T6 or Alloy 6061-T6.



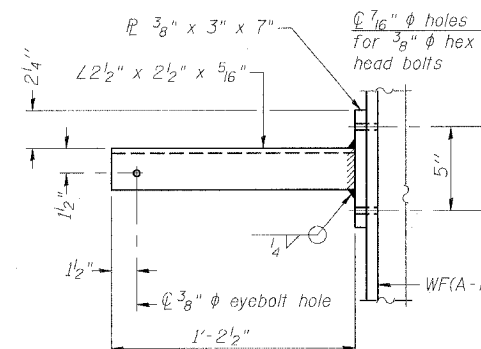
ALTERNATE SAFETY CHAIN ATTACHMENT
(With Sign Present)
Items not shown same as "Side Elevation" of "Handrail Details"



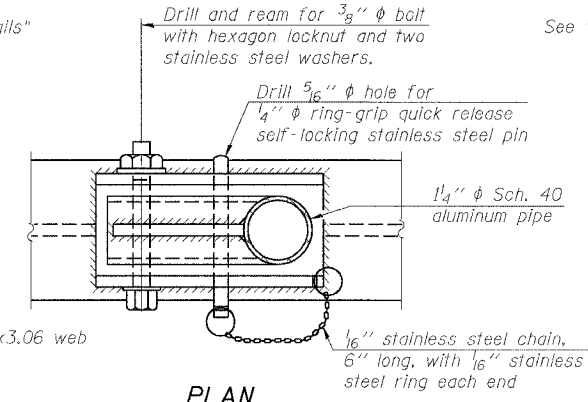
SIDE ELEVATION



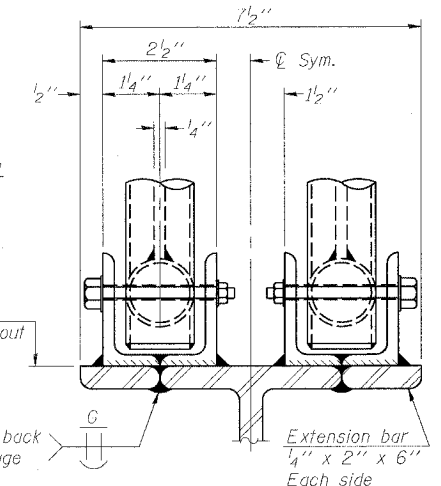
FRONT ELEVATION
See "Elevation" at right for dimensions.



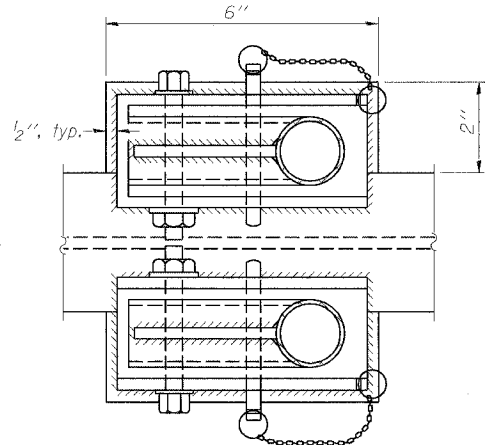
SECTION P-P



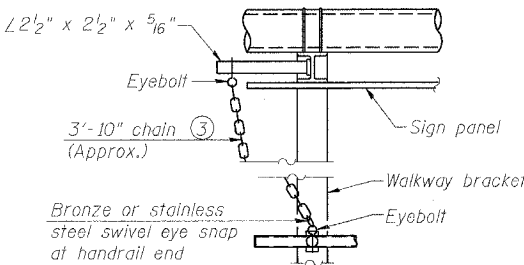
PLAN DETAIL E HANDRAIL HINGE



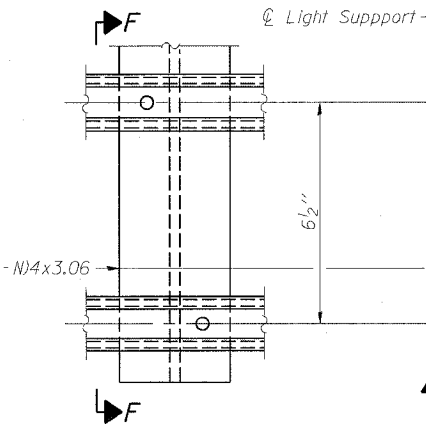
ELEVATION AT HANDRAIL JOINT (4)



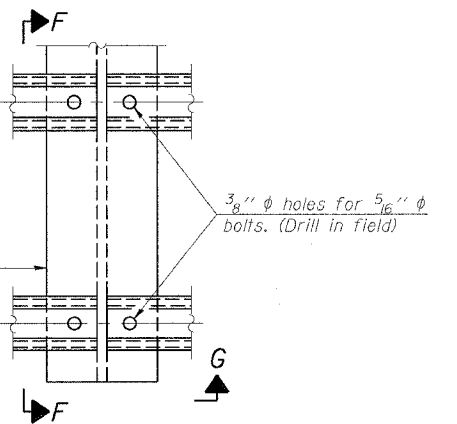
PLAN AT HANDRAIL JOINT
Details not shown same as "PLAN"



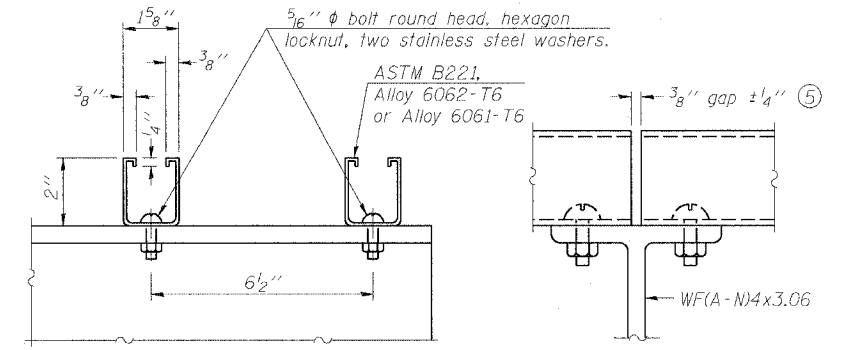
ALTERNATE SAFETY CHAIN ATTACHMENT
Details not shown similar to "Safety Chain" Details
(Walkway omitted for clarity)



DETAIL F

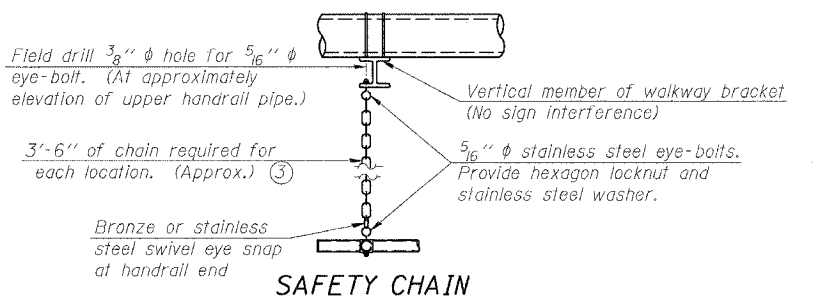


DETAIL G



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.



SAFETY CHAIN
One required for each end of each walkway.

DESIGNED	JSS
CHECKED	MJP
DRAWN	JSS
CHECKED	MJP

EXAMINED	20
PASSED	

NUMBER	REVISION	DATE

OSS-13

**OVERHEAD SIGN STRUCTURES
ALUMINUM HANDRAIL DETAILS**

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

6/27/2006 11:24:41 AM P:\P40466\CHINB\CHINB-18 & 19\SIGN\CHN-18AS\Sign\SS99AD032A.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94	.	COOK	247	112
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
				60463

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

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

BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
v4 (E)	16	#9	F less 5"	—
#4 bar spiral (E) - see Side Elevation				

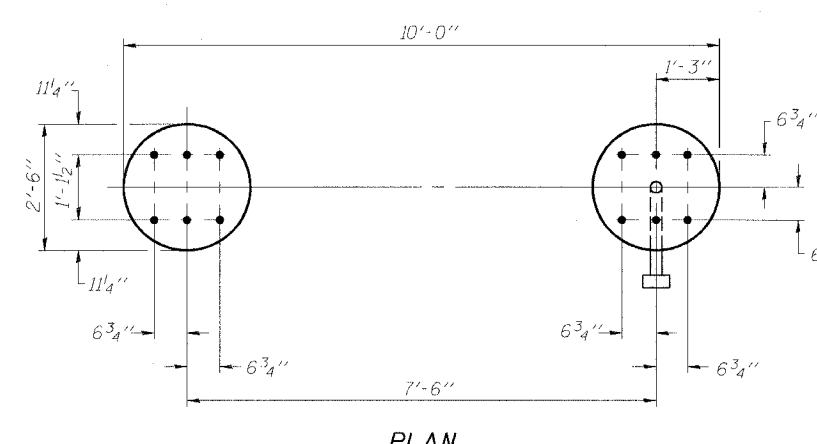
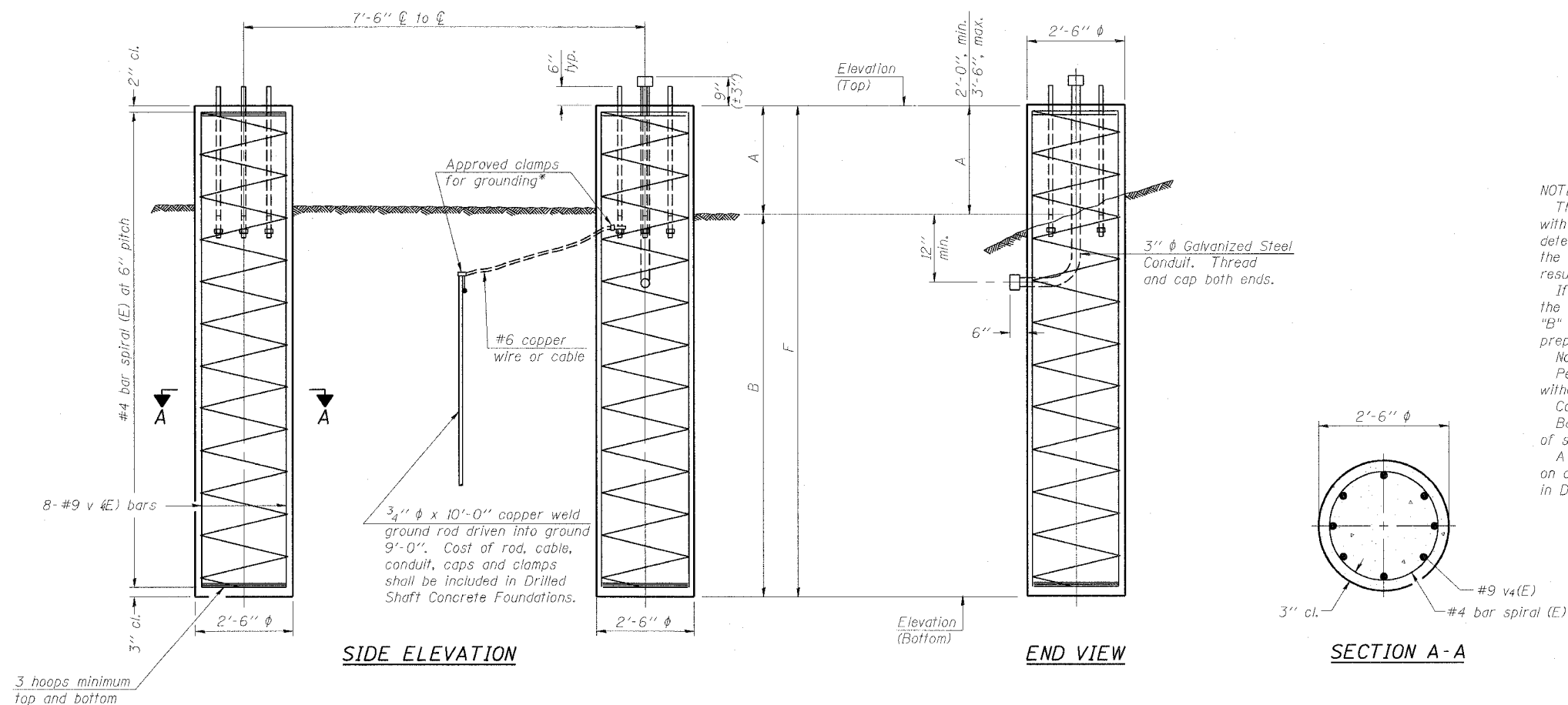
NOTES:

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

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

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

Concrete shall be placed monolithically, without construction joints. Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column. A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.



Structure Number	Station	Left Foundation					Right Foundation					Class S1 Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	A	B	F	Elevation Top	Elevation Bottom	A	B	F	
ISO161094R058.1	3453+00	---	---	---	---	---	5.28'	-11.22'	2.0'	14.5'	16.5'	6.0

DESIGNED - JSS
CHECKED - MJP
DRAWN - JSS
CHECKED - MJP

EXAMINED
PASSED

20
ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE

DETAILS FOR 8" ϕ SUPPORT FRAME
TYPE I-A TRUSS

OVERHEAD SIGN STRUCTURES
DRILLED SHAFT DETAILS

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

OSS-14

OS4-F2 1-7-05

6/2/2006 11:24:49 AM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94		COOK	247	113
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
• (1919.15 & 2021-522 P.T.) R-2				

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

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

BAR LIST - EACH FOUNDATION

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

NOTES:

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

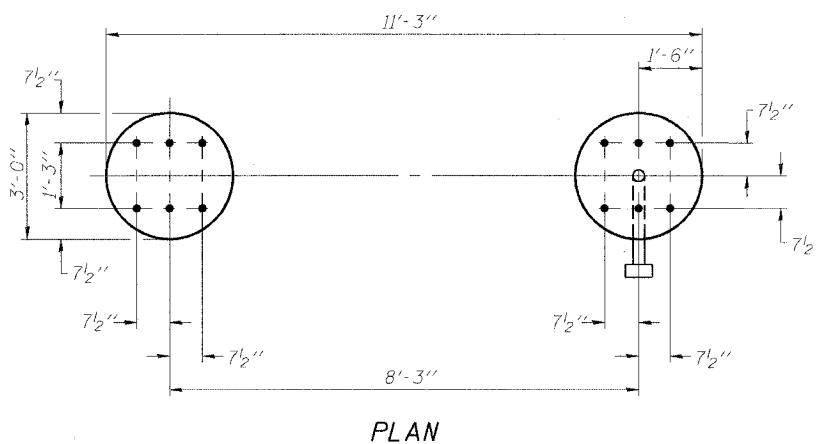
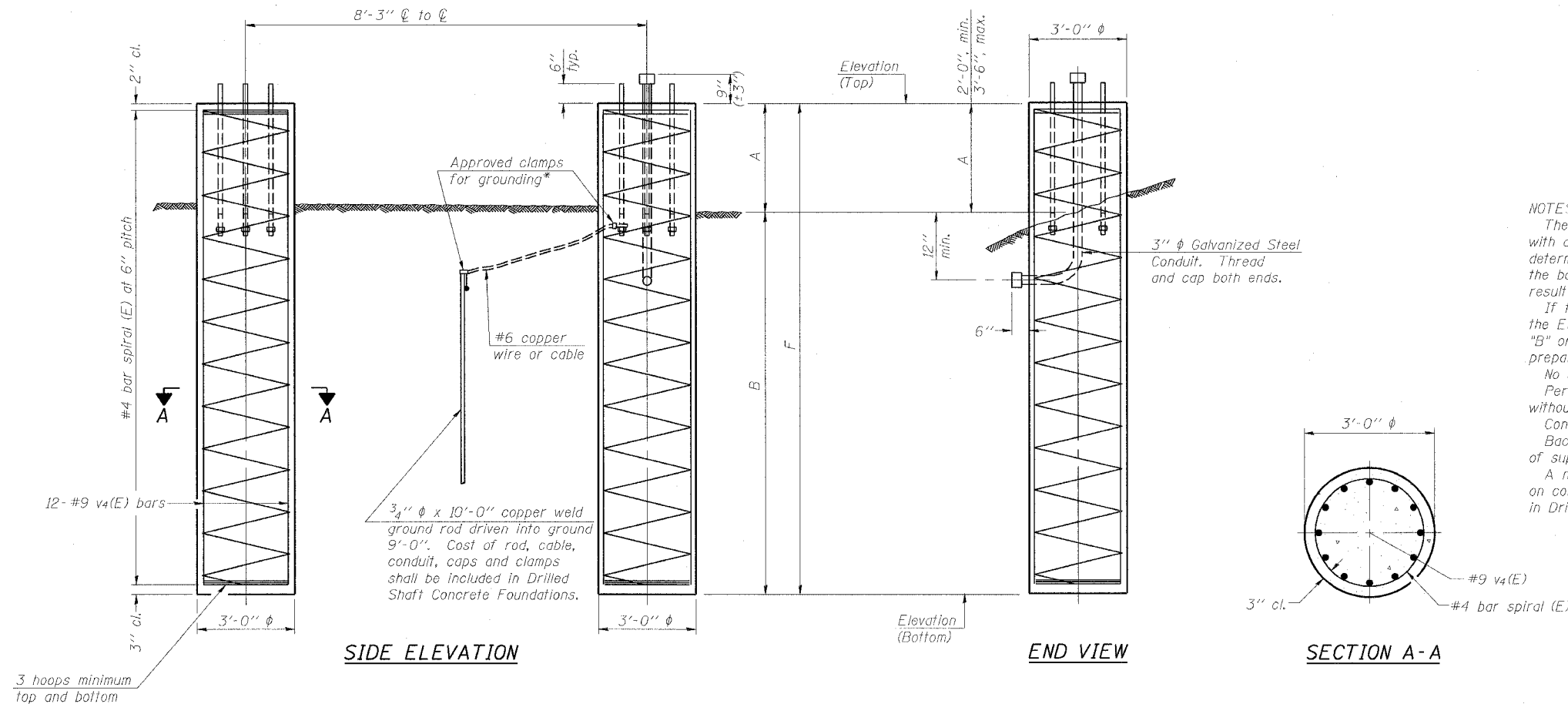
If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District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

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

Concrete shall be placed monolithically, without construction joints.

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

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



Structure Number	Station	Left Foundation					Right Foundation					Class SI Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	A	B	F	Elevation Top	Elevation Bottom	A	B	F	
ISO161094R058.3	3444+50	---	---	---	---	---	8.22'	-10.28'	2.00'	16.5'	18.5'	9.7

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

NUMBER	REVISION	DATE

DETAILS FOR 10" Ø SUPPORT FRAME
TYPE I-A or II-A TRUSS

OVERHEAD SIGN STRUCTURES
DRILLED SHAFT DETAILS

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

OS4-F3

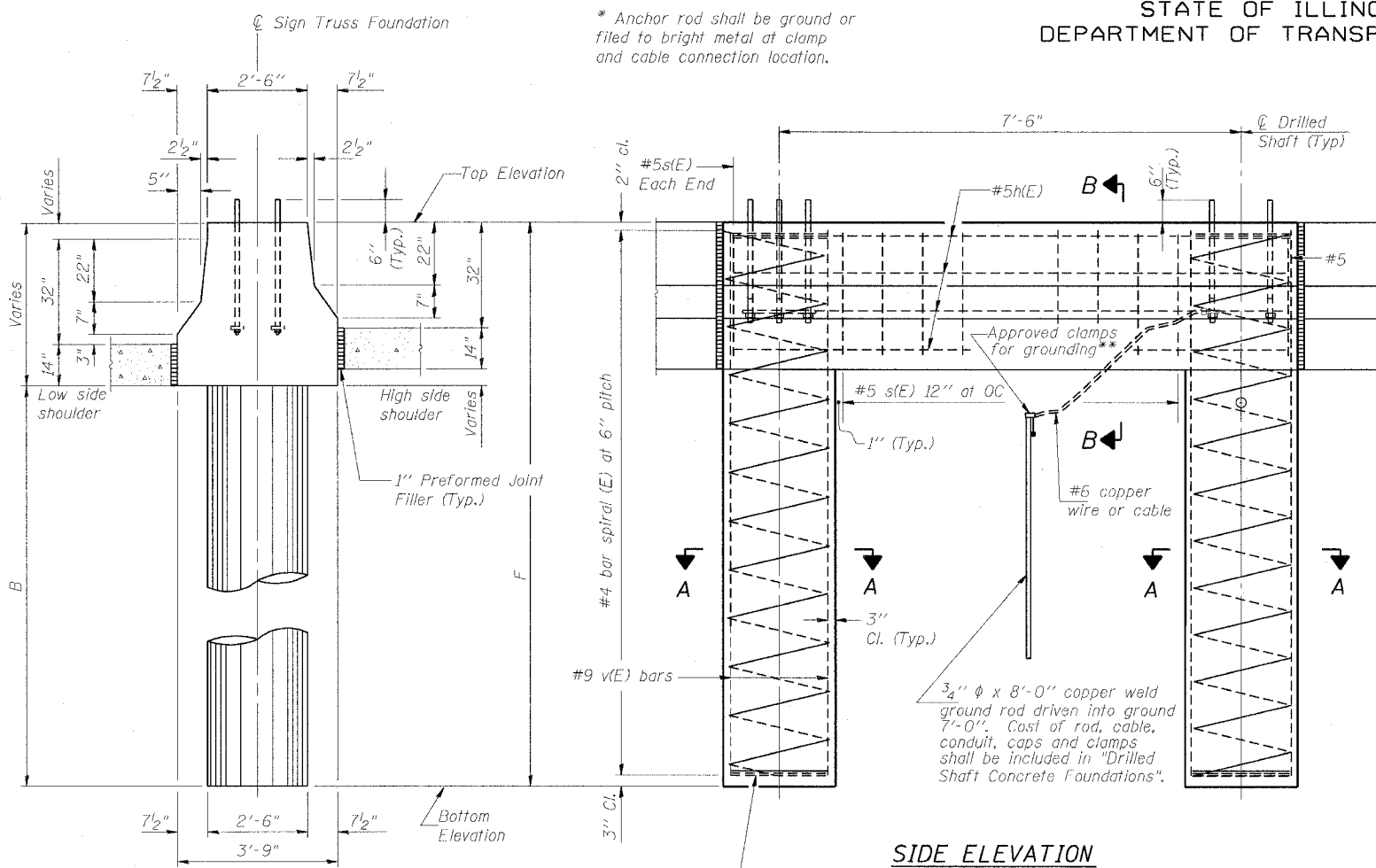
1-7-05

OSS-15

F:\P\1065\CHN\B-cons 18 & 19\SP\CHT 19A\Signing\SS1910052A.dgn 6/27/2006 11:24:57 AM

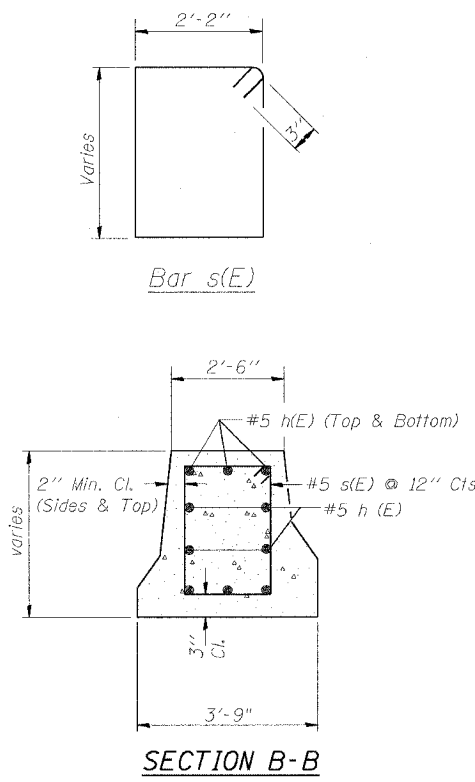
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
F.A.I. RTE. 90/94	*	COOK	247	114
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
* (1818, ETC, 2324, 6-1P) R-11				



SOUTH END VIEW

SIDE ELEVATION



SECTION B-B

BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
h(E)	10	#5	9'-8"	
s(E)	9	#5	Varies	□
v(E)	24	#9	F less 0'-5"	
#4(E) bar spiral - see Side Elevation				

NOTES:

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

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

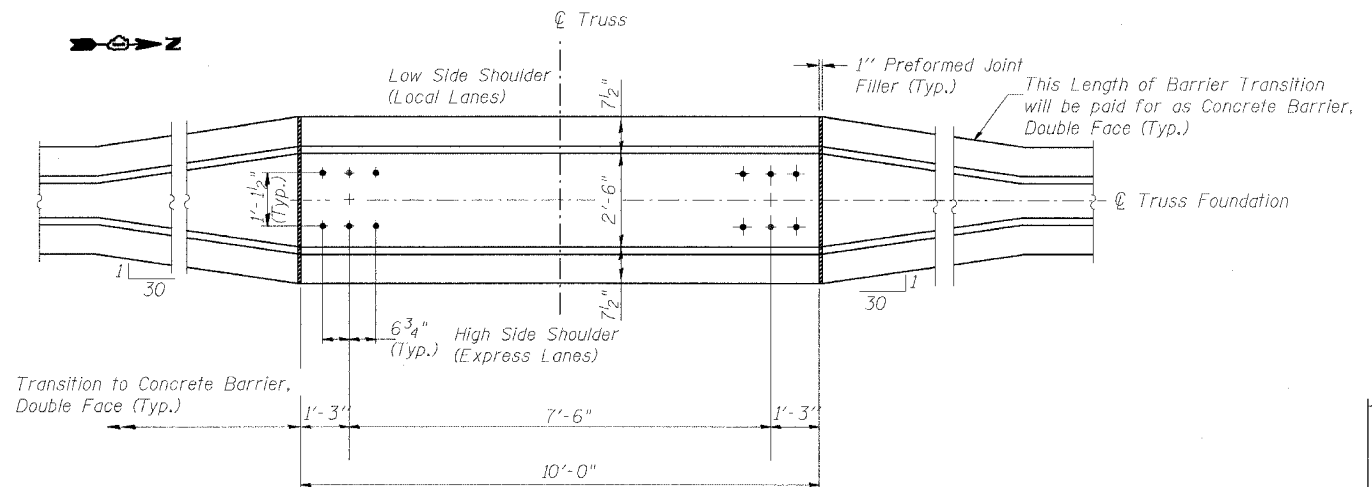
No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints.

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

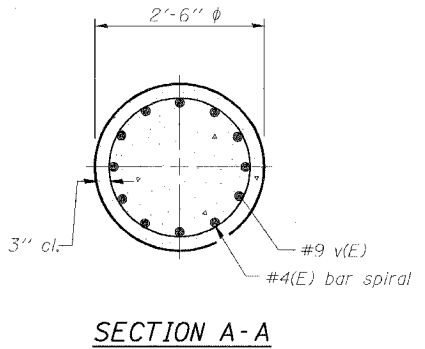
A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in "Drilled Shaft Concrete Foundation".

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



PLAN

Structure Number	Station	Left Foundation				Right Foundation				Class SI Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	B	F	Elevation Top	Elevation Bottom	B	F	
IS0161094R058.1	3453+00.00	2.01'	-17.52'	14.50'	19.53'	----	----	----	----	11.3



SECTION A-A

DESIGNED - JSS	20
CHECKED - MJP	EXAMINED
DRAWN - JSS	PASSED
CHECKED - MJP	ENGINEER OF STRUCTURAL SERVICES
	ENGINEER OF BRIDGES AND STRUCTURES

MODIFIED BY CTE ENGINEERS, INC. FROM OS4-MED

OSS-16

**OVERHEAD SIGN STRUCTURES
MEDIAN SUPPORT FOUNDATION DETAILS**

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
GARFIELD BLVD TO 31ST STREET (SB LOCAL LANES)
PROPOSED IMPROVEMENT

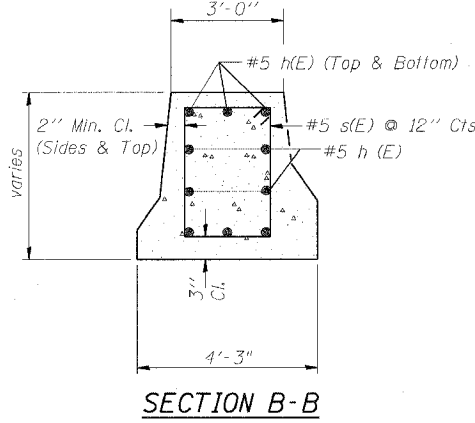
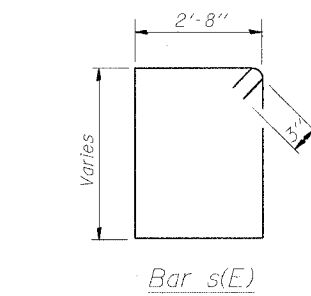
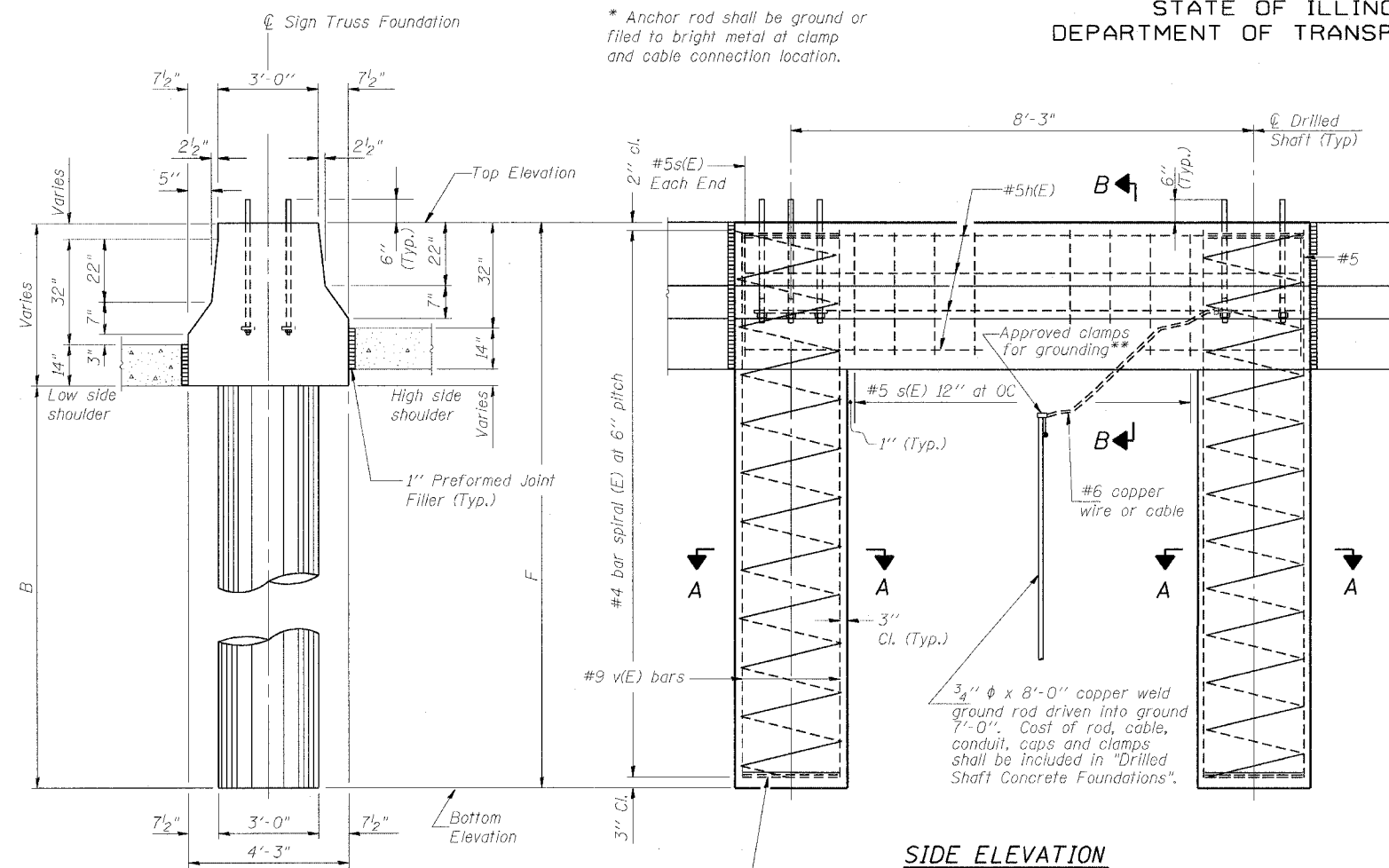
DOUBLE FACE MEDIAN SUPPORT FOUNDATION

6/27/2006 10:56:40 AM AV949488.CHM\B-CMS-18 & 19\STRUCT\BAS\SIGNING\SS\940624\57

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET
F.A.I. RTE. 90/94	•	COOK	247	115
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

• (1913.15 & 2021-922 PT.1) R-2 60463



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.

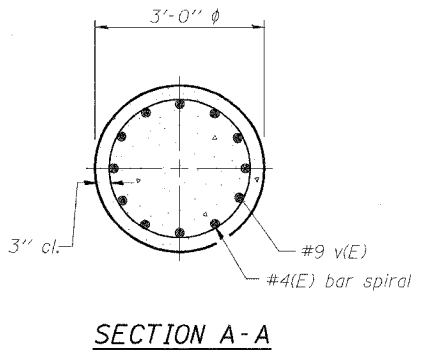
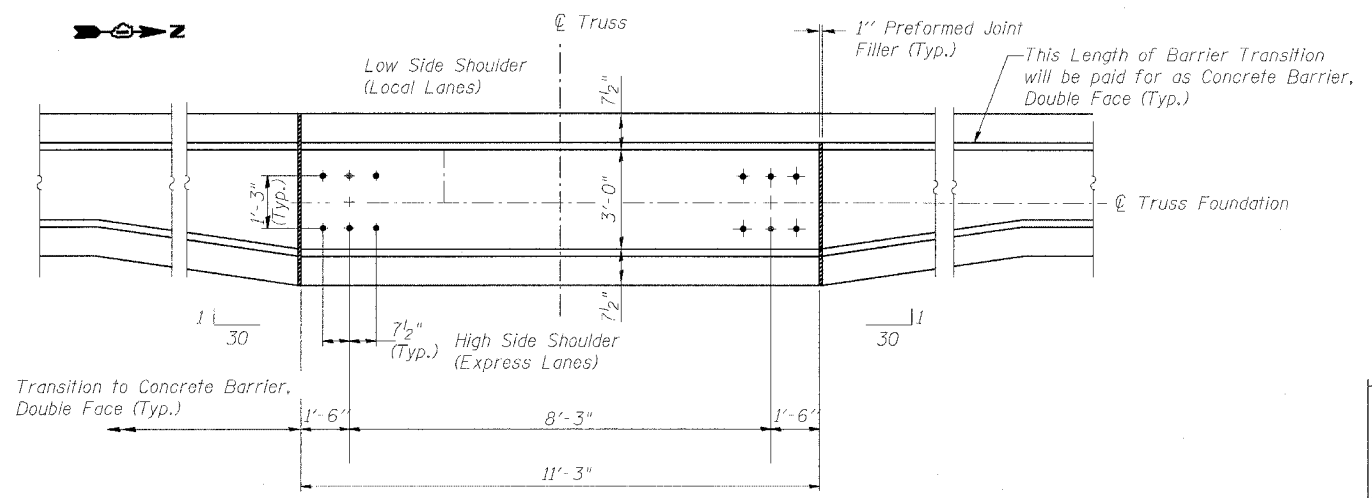
A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in "Drilled Shaft Concrete Foundation".

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

BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
h(E)	10	#5	10'-11"	—
s(E)	8	#5	Varies	□
v(E)	24	#9	F less 0'-5"	—
#4(E) bar spiral - see Side Elevation				

Structure Number	Station	Left Foundation				Right Foundation				Class SI Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	B	F	Elevation Top	Elevation Bottom	B	F	
IS0161094R058.3	3444+50.00	5.55'	-15.94'	16.5'	21.49'	----	----	----	----	16.3



DESIGNED - JSS	20
CHECKED - MJP	EXAMINED
DRAWN - JSS	PASSED
CHECKED - MJP	ENGINEER OF STRUCTURAL SERVICES
	ENGINEER OF BRIDGES AND STRUCTURES

MODIFIED BY CTE ENGINEERS, INC. FROM OS4-MED

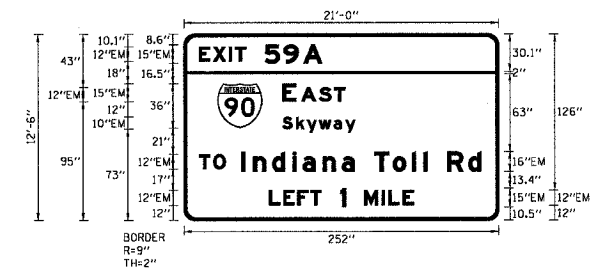
OVERHEAD SIGN STRUCTURES
MEDIAN SUPPORT FOUNDATION DETAILS

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

DOUBLE FACE MEDIAN SUPPORT FOUNDATION

6/2/2006 10:58:52 AM

SIGN DETAIL



SIGN NUMBER	1C016I094R057.9
WIDTH x HEIGHT	21'-0" x 12'-6"
BORDER WIDTH	2"
CORNER RADIUS	9"
MOUNTING	OVERHEAD
BACKGROUND	TYPE: REFLECTIVE
	COLOR: GREEN
LEGEND/BORDER	TYPE: REFLECTIVE
	COLOR: WHITE

SYMBOL	X	Y	WID	HT
M1.1	26.7	73.9	36	36

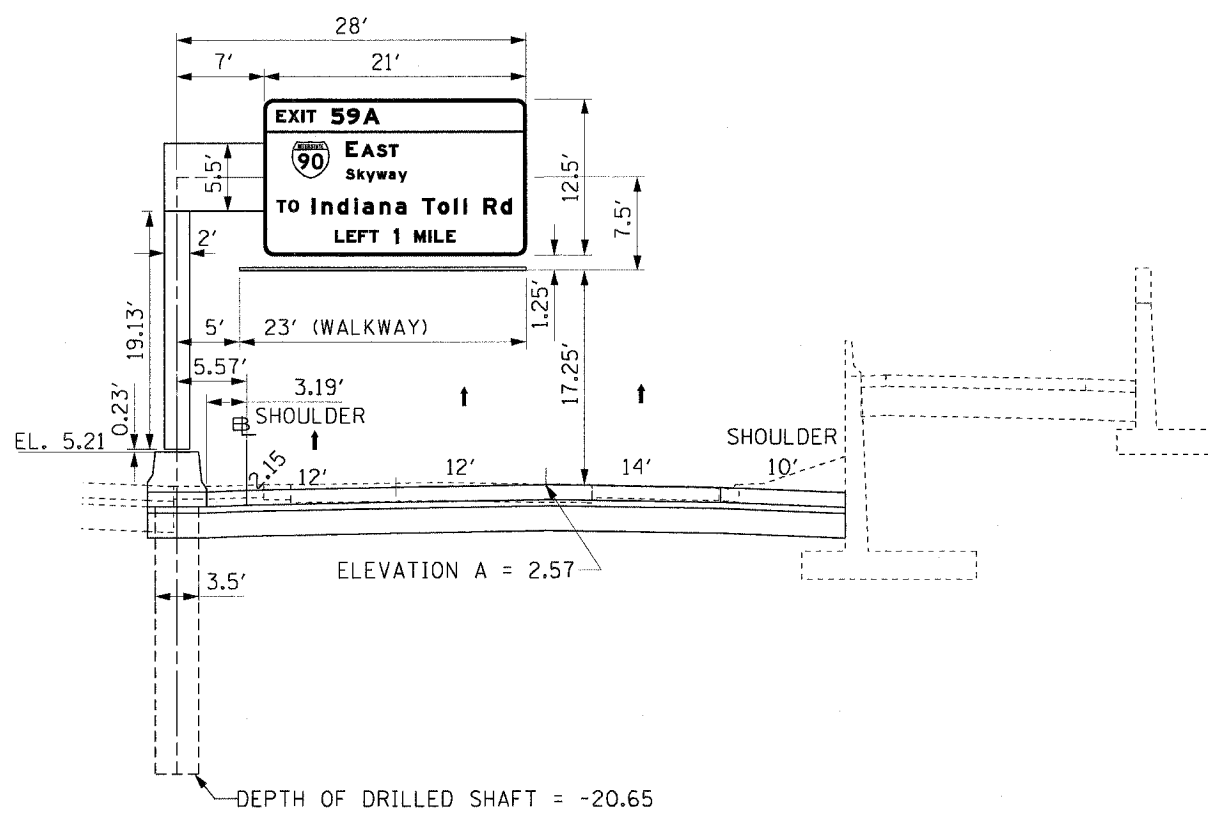
DIMENSIONS ARE IN INCHES.TENTHS

LETTER LOCATIONS ARE PANEL EDGE TO LOWER LEFT CORNER

LETTER POSITIONS (X)													LENGTH SERIES, SIZE	
E	X	I	T	S	9	A							98.7	EM12,EM15
12	23.3	36.1	41	64.8	79.8	95.7								
E	A	S	T										50.3	EM15,EM12
78.7	93.7	108.2	120.2											
S	k	y	w	a	y								58.5	EM10/7.5
78.7	89.9	98.2	108.1	120	129.1									
T	O												21.3	EM12
12	23.4													
I	n	d	I	a	n	a	T	o	I	I	R	d	192.2	EM16/12
45.8	55.4	70.6	86.9	94.9	111.2	126.3	136.5	152.5	167.3	182.7	191.8	194.8	210.8	227.8
L	E	F	T	I	M	I	L	E					115.7	EM12,EM15
68.1	79.4	90.7	101.2	125	144.2	158.3	163.8	175.1						

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	116
STA.	TO STA.			
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
62303		(2021-922 PT2 ETC 2324.6-1P) R-11		

TYPE II-C-A CANTILEVER



1C016I094R057.9
MOUNTING DETAIL
PROPOSED OVERHEAD SIGN STRUCTURE
STA 3468+00.00 S.B. I-90/94
LOOKING SOUTH

NOTES:

1. PROPOSED PAVEMENT FOR LOCAL LANES IS SHOWN FOR INFORMATION ONLY, SEE ROADWAY PLANS FOR DETAILS.
2. REFER TO LIGHTING PLANS FOR ORIENTATION AND LOCATION OF THE CONDUIT.



REVISIONS	
NAME	DATE

OSS-18

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
GARFIELD BLVD TO 31ST STREET (SB LOCAL LANES)

PERMANENT SIGN PANEL MOUNTING DETAILS
PROPOSED OVERHEAD SIGN STRUCTURES
STA. 3468+00.00

SCALE: NONE DRAWN BY: JSS
DATE: June 9, 2006 CHECKED BY: MJP

F:\P04066\CAD\WIP\CH18 & 19\SIGN\CH18\SS\90182.dwg 5/12/2006 10:59:02 AM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94	*	COOK	247	117
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

GENERAL NOTES

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

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

LOADING: 90 M.P.H. WIND VELOCITY

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

DESIGN STRESSES:
Field Units
F_c = 3,500 p.s.i.
f_y = 60,000 p.s.i. (reinforcement)

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

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B 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) (2)d of the 1001 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.

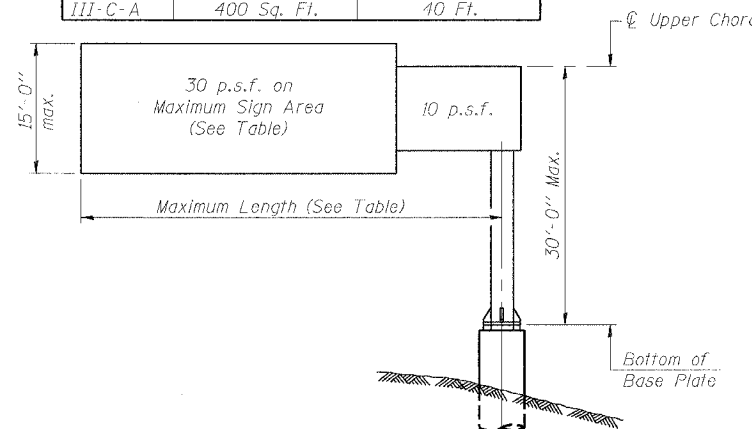
ANCHOR RODS: Shall conform to AASHTO M314 Gr. 55 with a minimum Charpy V-Notch (CVN) energy of 15 lb.-ft. at 10° F.

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.

Structure Number	Station	Design Truss Type	Cantilever Length (L)	Elev. A	Dim. D	D _s	Total Sign Area
1C0161094R057.9	3468+00.00	II-C-A	28.00'	2.57'	5.57'	12.5'	262.5 SF

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



DESIGN WIND LOADING DIAGRAM

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

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

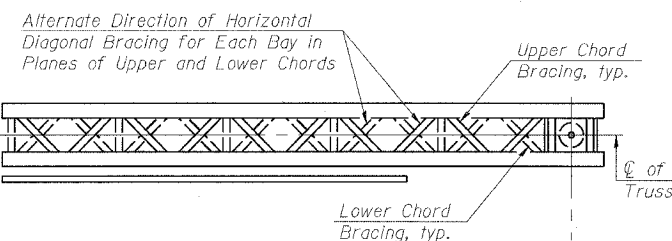
Note:

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

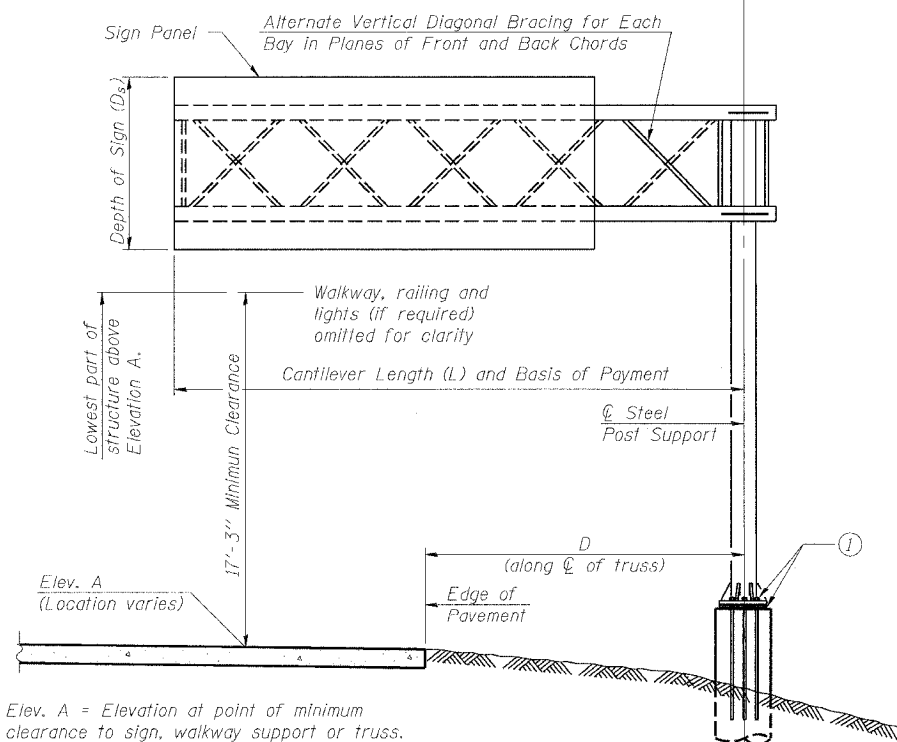
* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE I-C-A	Foot	
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE II-C-A	Foot	28.0
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE III-C-A	Foot	
OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	Foot	23
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	10.0



TYPICAL PLAN
(Walkway not shown)



TYPICAL ELEVATION

Looking in Direction of Traffic

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

Sign support structures may be subject to damaging vibrations and oscillations when sign panels are not in place during erection or maintenance of the structure. To avoid these vibrations and oscillations, consideration should be given to attaching temporary blank sign panels to the structure.

DESIGNED - JSS	
CHECKED - MJP	
DRAWN - JSS	
CHECKED - MJP	

EXAMINED	20
PASSED	ENGINEER OF STRUCTURAL SERVICES
	ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE

OSC-A-1

1-7-05

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

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

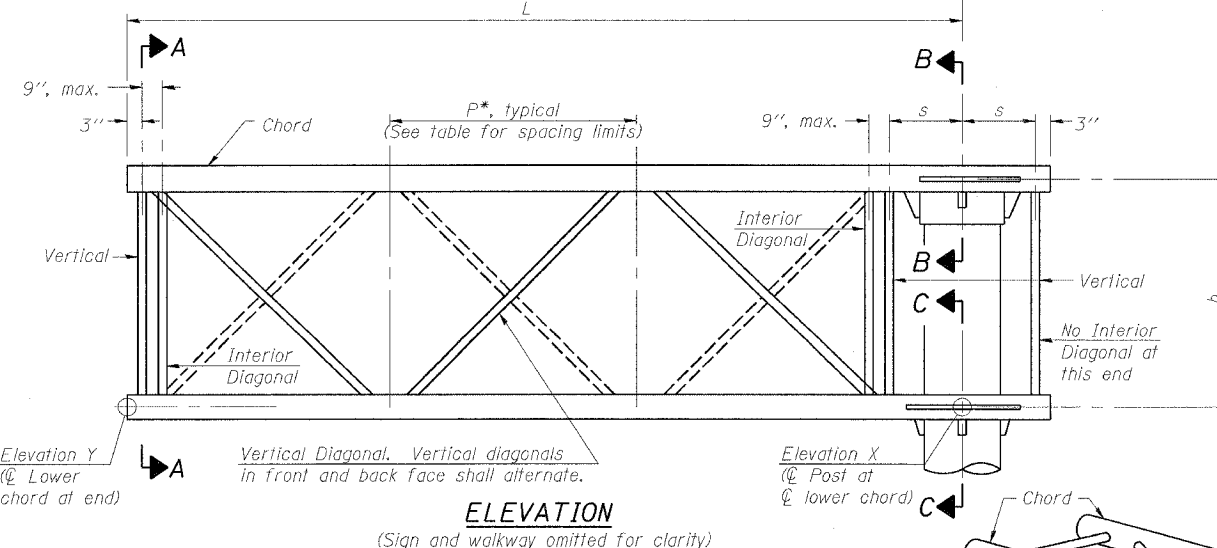
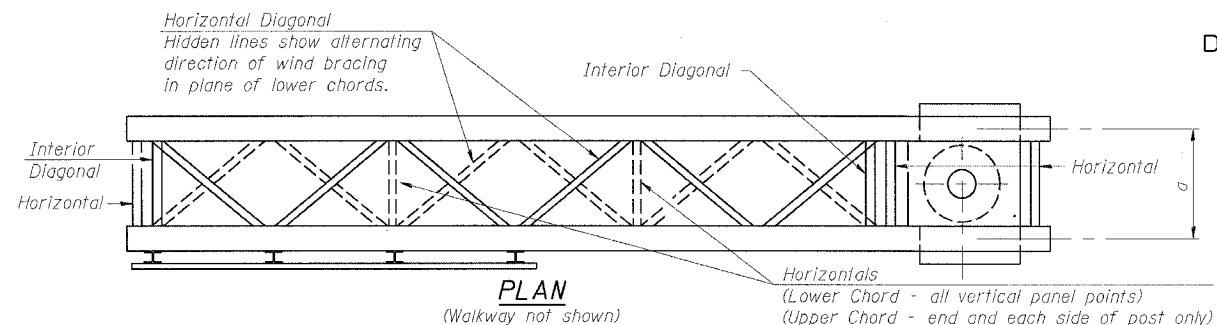
OSS-19

1/25/04 AM 6/2/2006 P:\46468\CHIVUS\CHRS 18 & 19\STACITR 19A\Signing\SS\94092A.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET
F.A.I. RTEL. 90/94	*	COOK	247	118
FED. ROAD DIST. NO. 1	TULLINESS	FED. AID PROJECT		

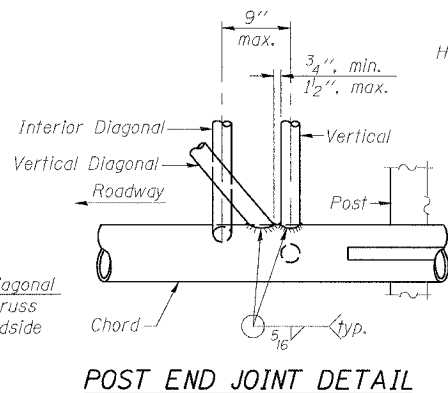
• (1915,15 & 2021-922 PT.1) R-2 60A63



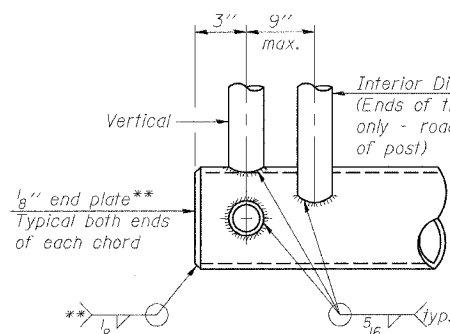
TYPICAL TRUSS UNIT

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

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



POST END JOINT DETAIL



CANTILEVER END JOINT DETAIL

** Contractor may alternatively use standard aluminum drive-fit cap to close ends.

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

OSC-A-2

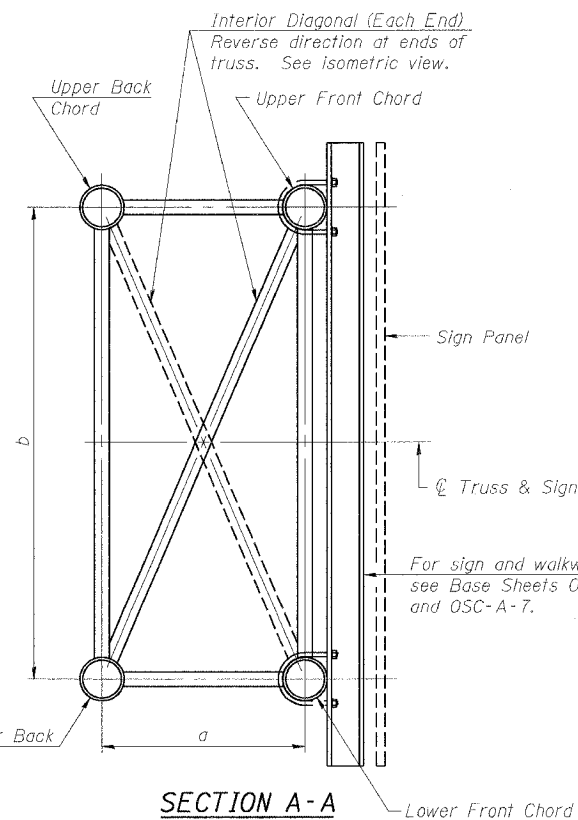
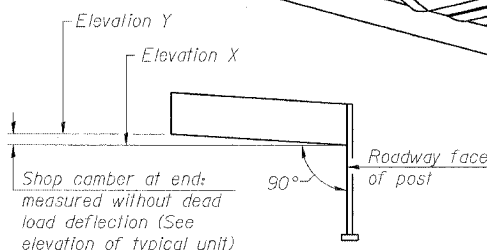
1-7-05

SHOP CAMBER TABLE

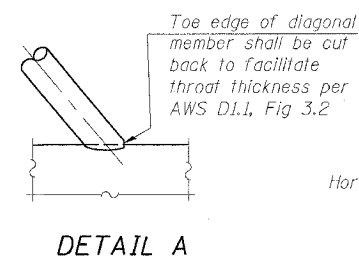
Unit Length (L)	Shop Camber at End
15'	1 1/2"
16'-17'	1 3/4"
18'-20'	2"
21'-22'	2 1/4"
23'-25'	2 1/2"
26'-27'	2 3/4"
28'-30'	3"
31'-32'	3 1/4"
33'-35'	3 1/2"
36'-37'	4"
38'-40'	4 1/2"

CAMBER DIAGRAM

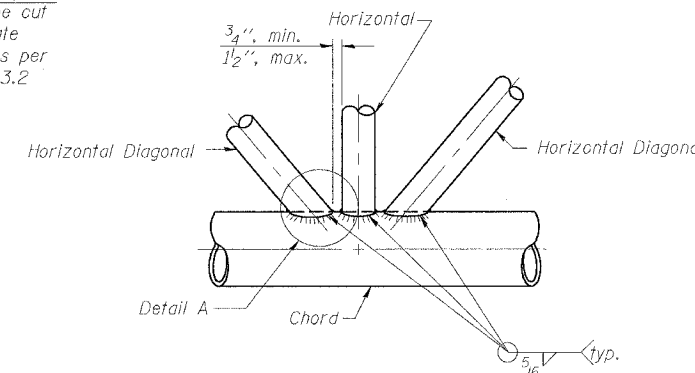
(For Fabrication Only)



SECTION A-A



DETAIL A



TRUSS INTERIOR JOINT DETAIL

Structure Number	Station	Truss Type	Design Length (L)	Number of Panels Per Unit	Panel Length (P)*
ICQ161094R057.9	3468+00.00	II-C-A	28.0'	6	4'-4"

ISOMETRIC VIEW TYPICAL TRUSS UNIT

ASTM B221 Alloy 6061 Temper T6

TRUSS UNIT TABLE

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

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

NUMBER	REVISION	DATE

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

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

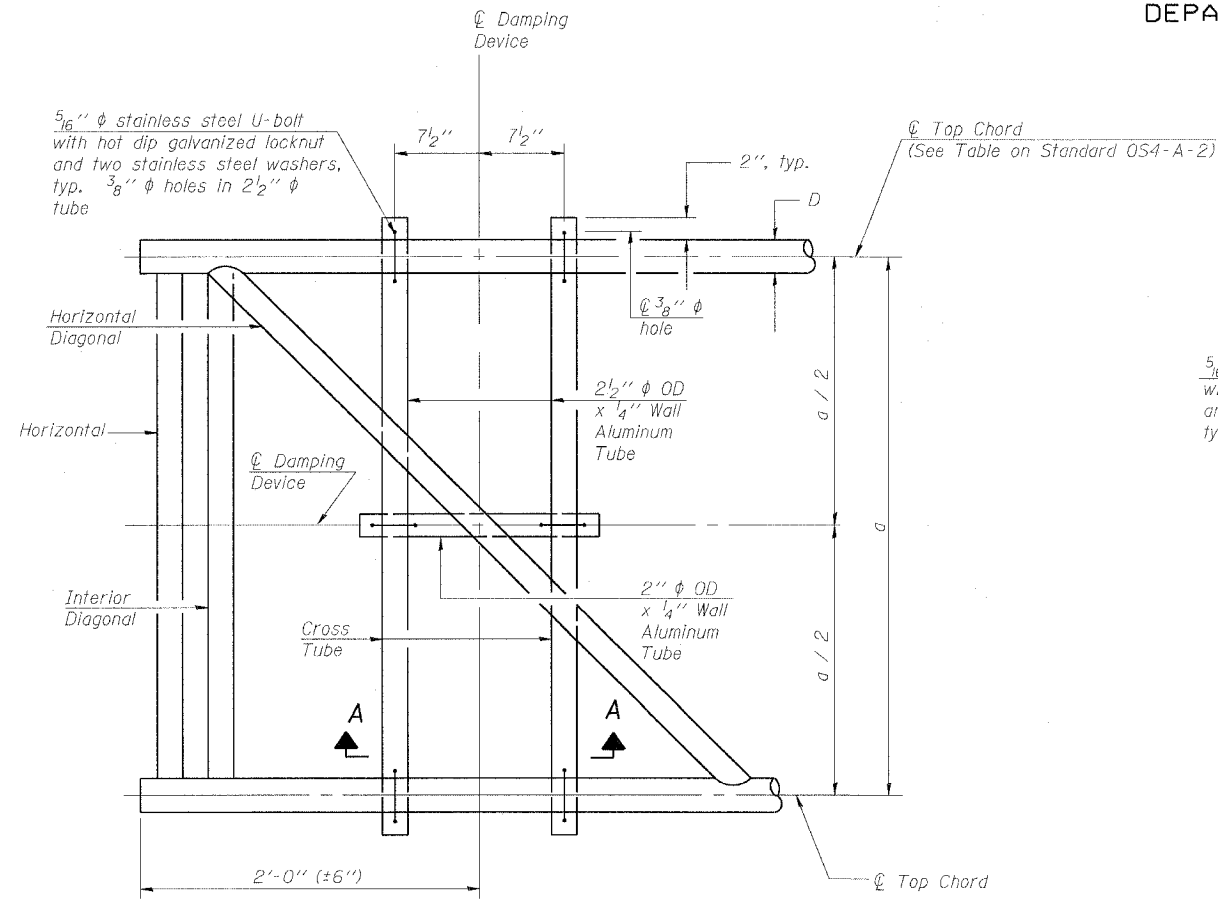
OSS-20

6/27/2006 11:25:11 AM P:\P\0665\CONTRACTS\18 & 19\SIGN\CTR\18ASIGNING\SS1806020A.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

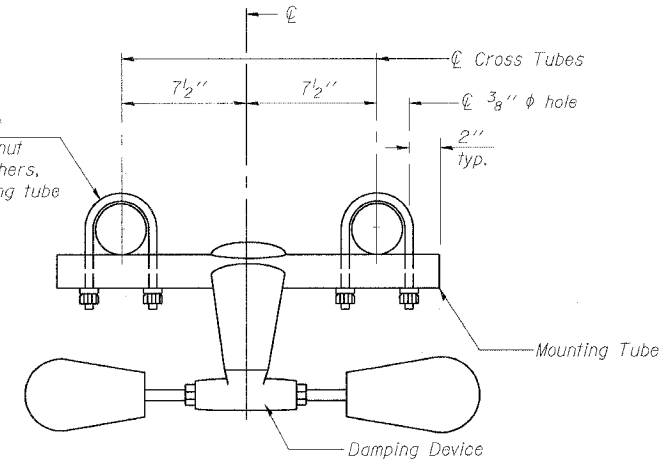
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94		COOK	247	119
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

• (1919,15 & 2021-922 PT.1) R-2 60A63

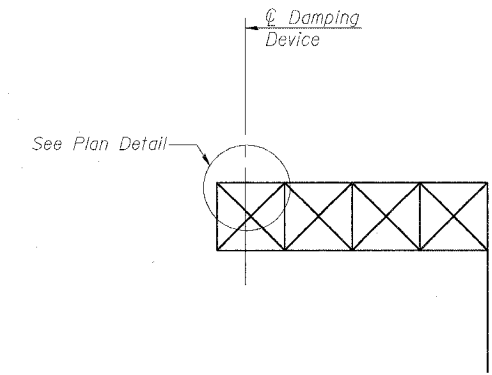


PLAN DETAIL

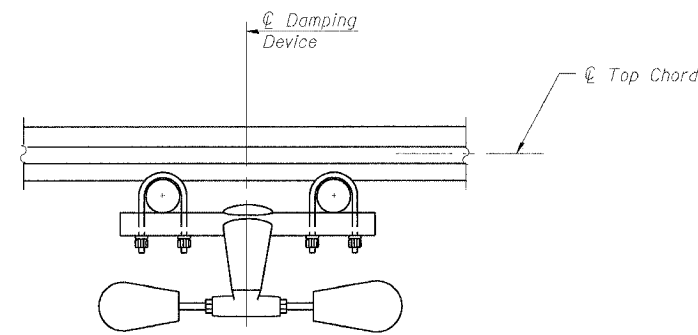
5/16" ϕ stainless steel U-bolt with hot dip galvanized locknut and two stainless steel washers, typ. 3/8" ϕ holes in mounting tube



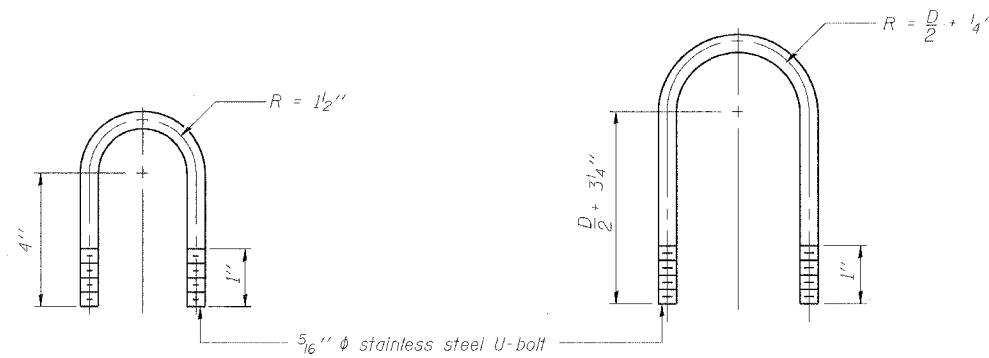
TRUSS DAMPING DEVICE CONNECTION DETAIL



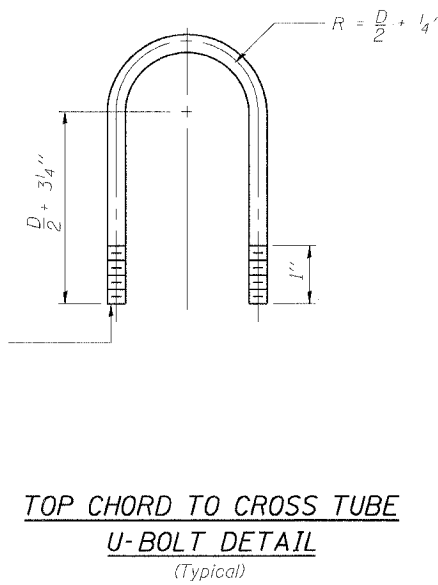
ELEVATION
Aluminum Cantilever Sign Structure



SECTION A-A



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL
(Typical)



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

GENERAL NOTES

- Damper: One damper per truss. (31 lbs. Stockbridge-Type Aluminum)
- Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6

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

OSC-A-D

1-7-05

CANTILEVER SIGN STRUCTURE
DAMPING DEVICE

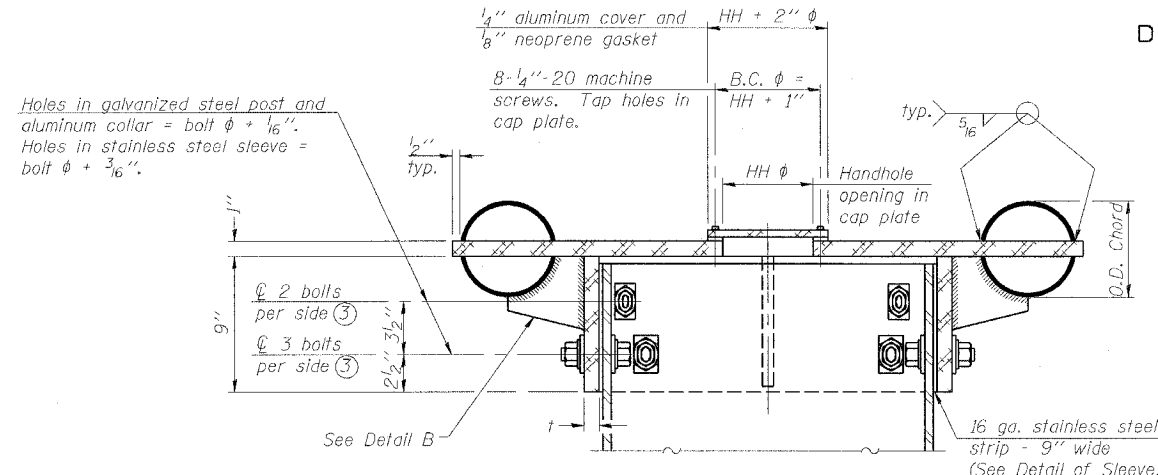
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

OSS-21

P:\P\060601\B\C\18 & 19\SIGN\18A\SIGNING\SS191902\24.DGN 6/27/2006 11:25:19 AM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

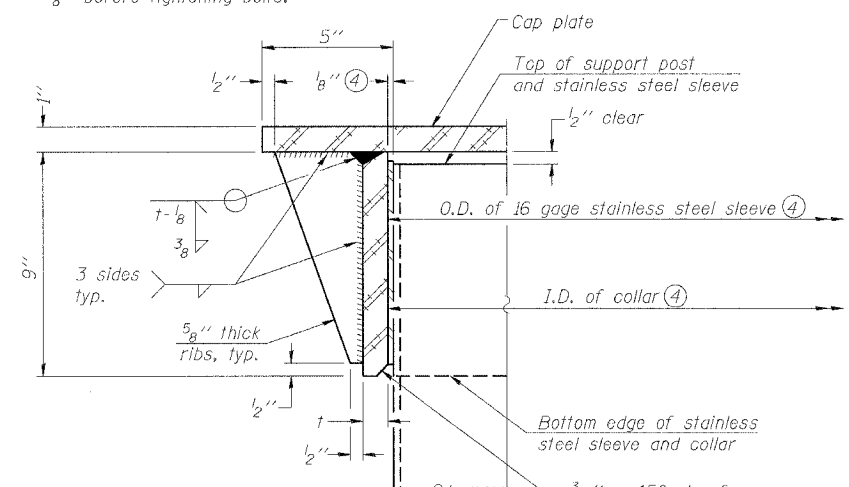
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94		COOK	247	120
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
• (1919.15 & 2021-922 PT.1) R-2				



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

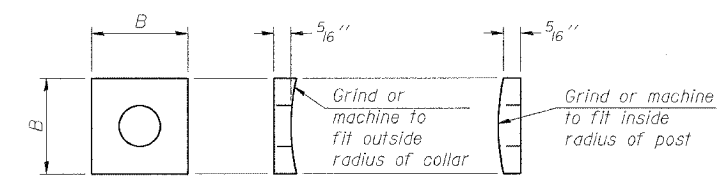
SECTION B-B

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



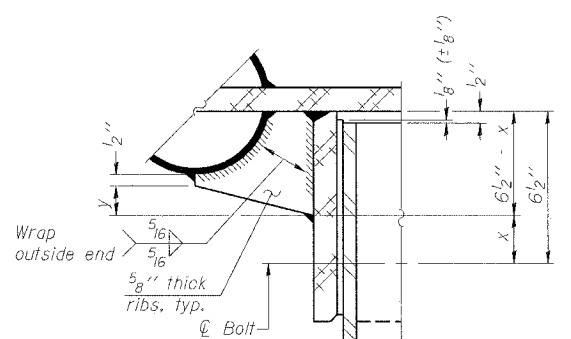
DETAIL A
(Two locations)

$\frac{3}{16}$ " - 45° chamfer on inside of collar to facilitate field assembly



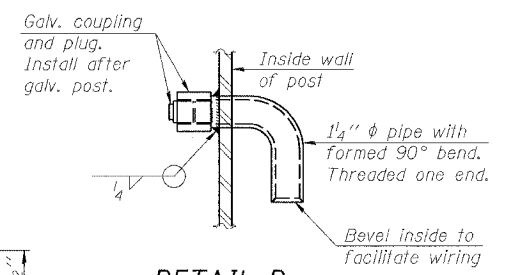
CONTOURED WASHERS

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



DETAIL B

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



DETAIL D

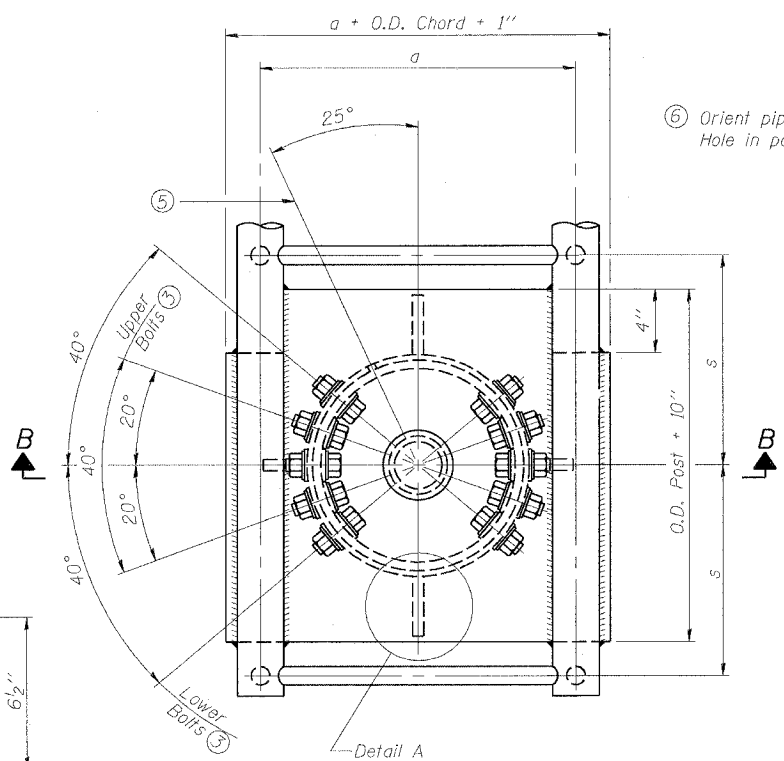
DETAIL OF STAINLESS STEEL SLEEVE

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

NUMBER	REVISION	DATE

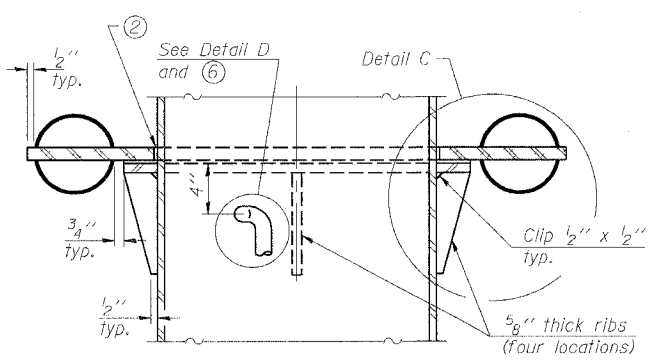
Truss Type	Post Size	Upper & Lower Connection Bolt Diameter ③	Lower Juncture Bolt Spacing Dimension "c" ③	Opening in Cap Plate "HH"	Collar Thickness (t)	Side Ribs	
						x	y
I-C-A	16" ϕ (83#/#)	7/8"	3 1/4"	8"	5/8"	1 3/4"	2 1/4"
II-C-A	24" ϕ (125#/#)	1"	3 1/2"	12"	7/8"	2"	1 1/4"
III-C-A (35' max.)	24"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

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

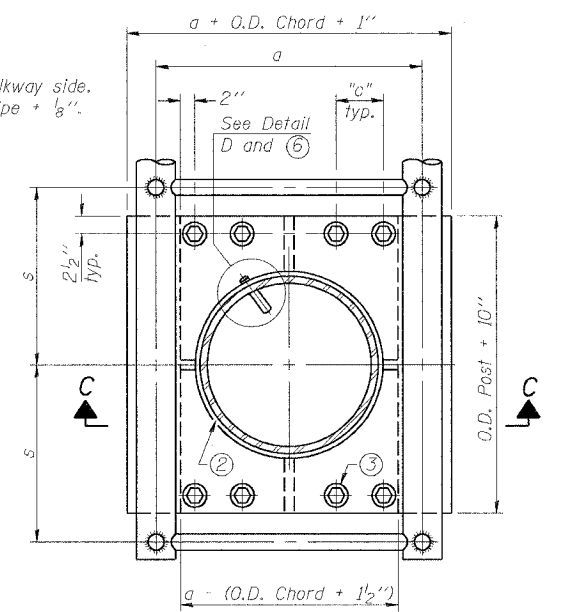


PLAN VIEW - TOP OF COLUMN

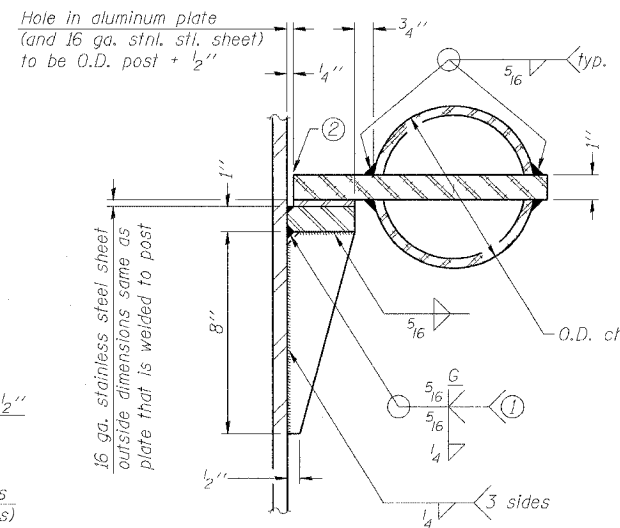
⑤ Optional full penetration weld in collar. (Two locations maximum....(180° apart)....X-ray or UT 100%)



SECTION C-C



SECTION THRU POST ABOVE LOWER CHORDS



DETAIL C

- ① Grind top if required to fully seat aluminum plate and stainless steel sheet.
- ② After tightening lower connection bolts, fill gap with non-hardening, silicone caulk suitable for exterior exposure and acceptable to the Engineer. Cost is included in Overhead Sign Structure Cantilever. OSS-22

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

OSC-A-3 1-7-05

**CANTILEVER SIGN STRUCTURES
JUNCTURE DETAILS
ALUMINUM TRUSS & STEEL POST**

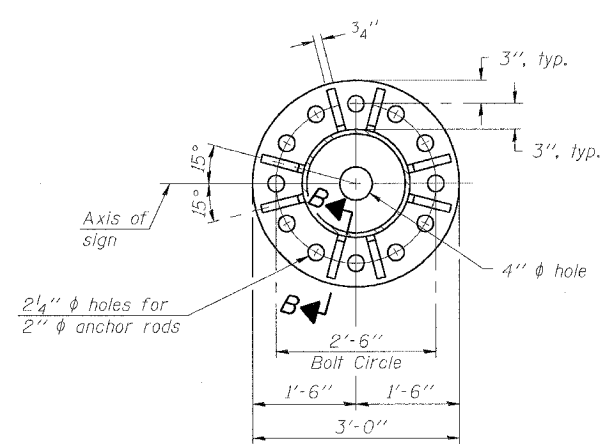
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

6/27/2006 11:25:27 AM P:\P\0466\CH\WB-Cntfr 18 8 19\5\1\0119\BANS\signing\SS\040222A.dgn

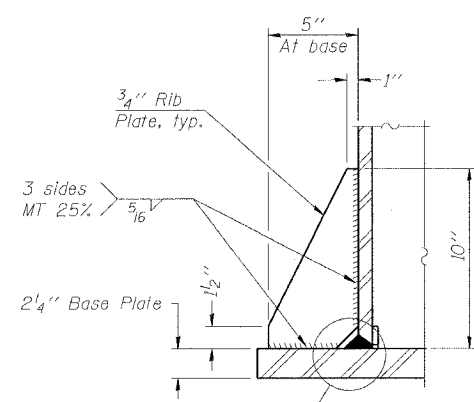
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
F.A.I. RTE. 90/94		COOK	247	121
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

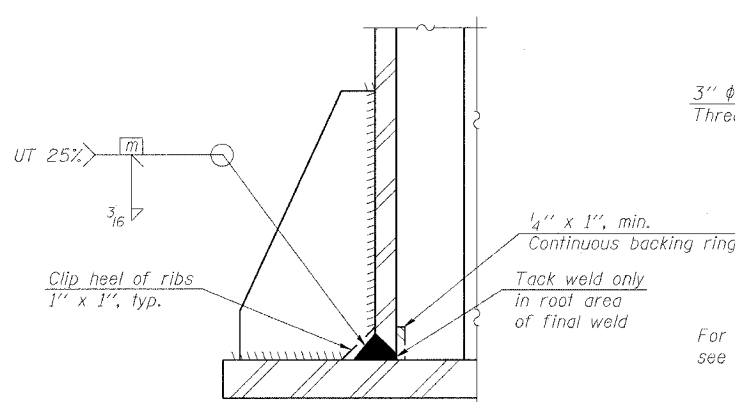
(1919,15 & 2021-922 PT.1) R-2 60A63



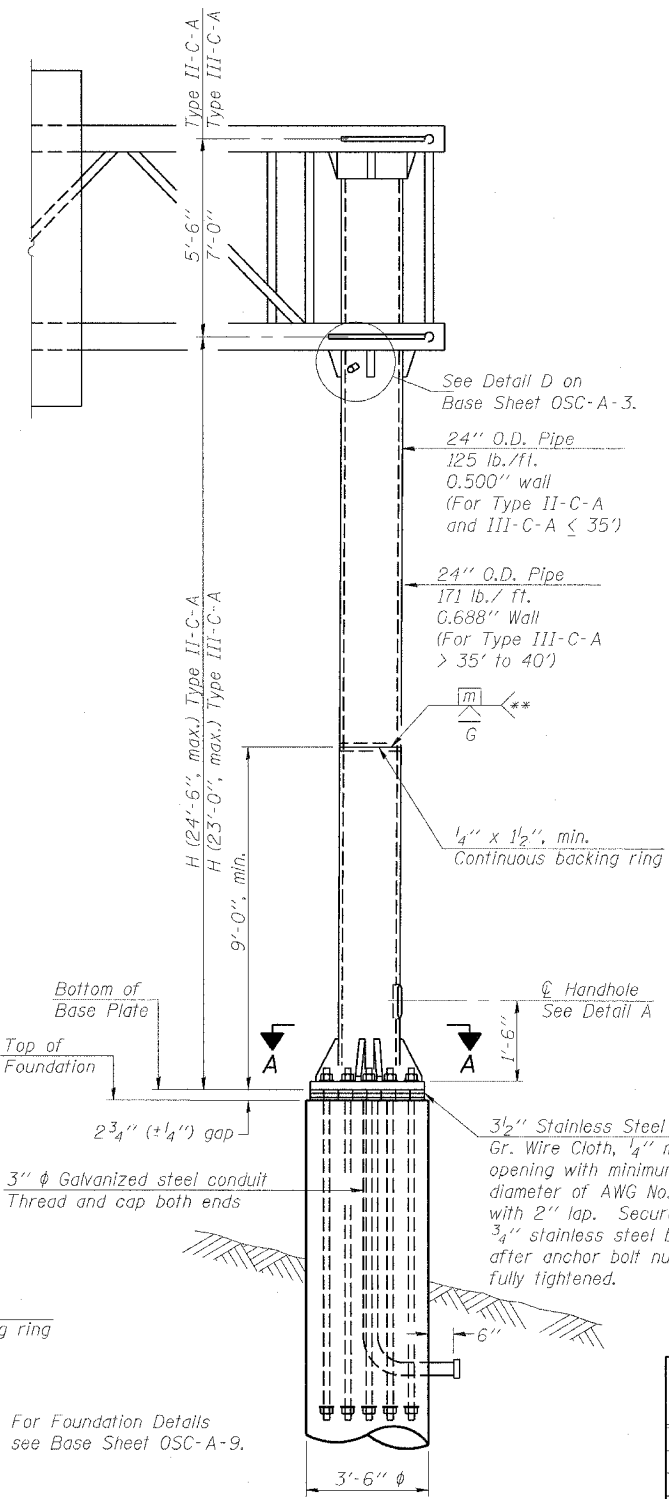
SECTION A-A



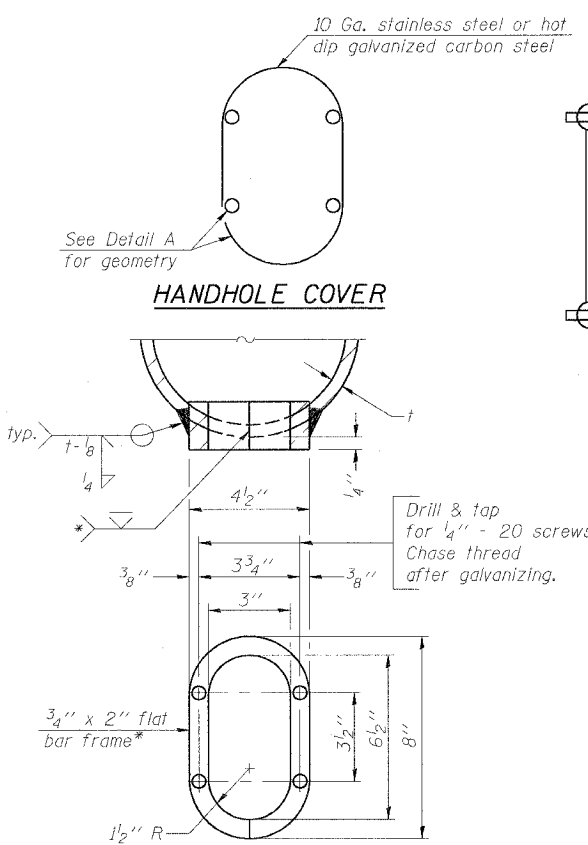
SECTION B-B



DETAIL B
(Typical rib)



FRONT ELEVATION

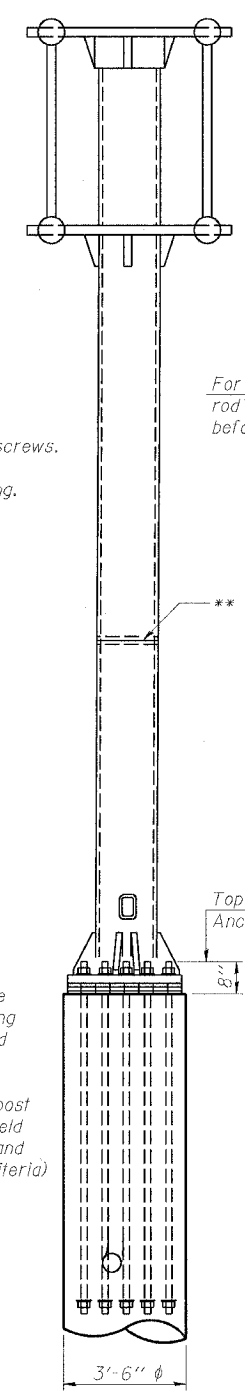


DETAIL A

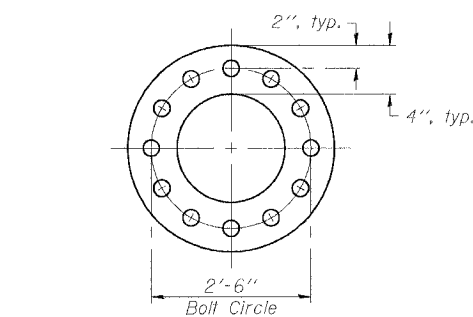
Provide 8" x 4 1/2" cover. Outside corners = 2 1/4" radius. Provide 4 - 5/16" phi holes in cover for 1/4" - 20 round head hot dip galvanized or stainless steel machine screws. (See cover details.)

- * Bent bars may be butt welded top and bottom or bottom only. In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500 μ in or less.
- ** Butt welded joint in post is only allowed for post heights (H) over 20 ft. in length. If used, weld procedure must be preapproved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

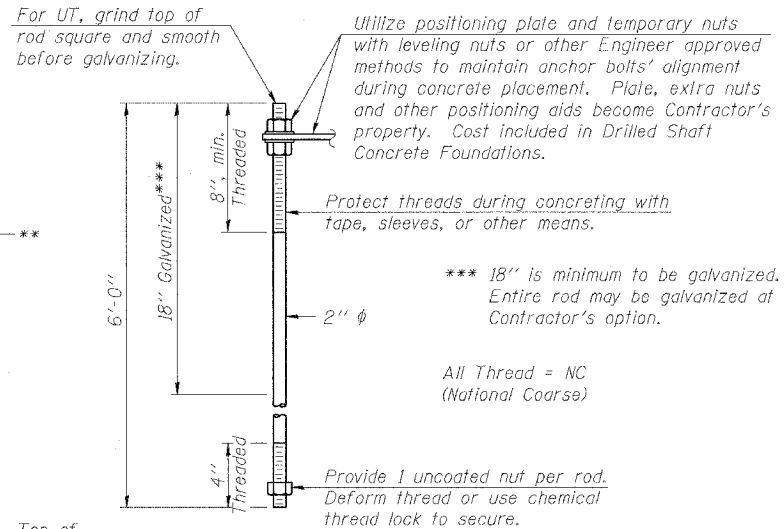
Structure Number	Station	H
1C0161094R057.9	3468+00.00	19.13'



SIDE ELEVATION



SUGGESTED POSITIONING PLATE



ANCHOR ROD DETAIL

Anchor rods shall conform to AASHTO M314 Grade 55 and meet Charpy V-Notch (CVN) energy of 15 lb.-ft. at 10° F. before galvanizing. Galvanize the upper 18" (minimum) and associated M291, Grade A, C or DH heavy hex nuts and hardened washers per AASHTO M232. No welding shall be permitted on rods. Provide an unfinished nut at bottom, a hexagon locknut and washer above base plate and a leveling nut and washer below base plate. Nuts shall each be tightened with 200 lb.-ft. minimum torque against base plate. Before or after threading, but before galvanizing, each anchor rod shall be ultrasonically tested (UT) by a Level II or III inspector, qualified in accord with ANSI guidelines, using a straight beam, 1/2" phi 3.5 mhz. transducer, to insure no rejectable flaws exist in the upper 18" (tension criteria). Cost of testing included in Drilled Shaft Concrete Foundations.

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

OSC-A-5 1-7-05

NUMBER	REVISION	DATE

OSS-23

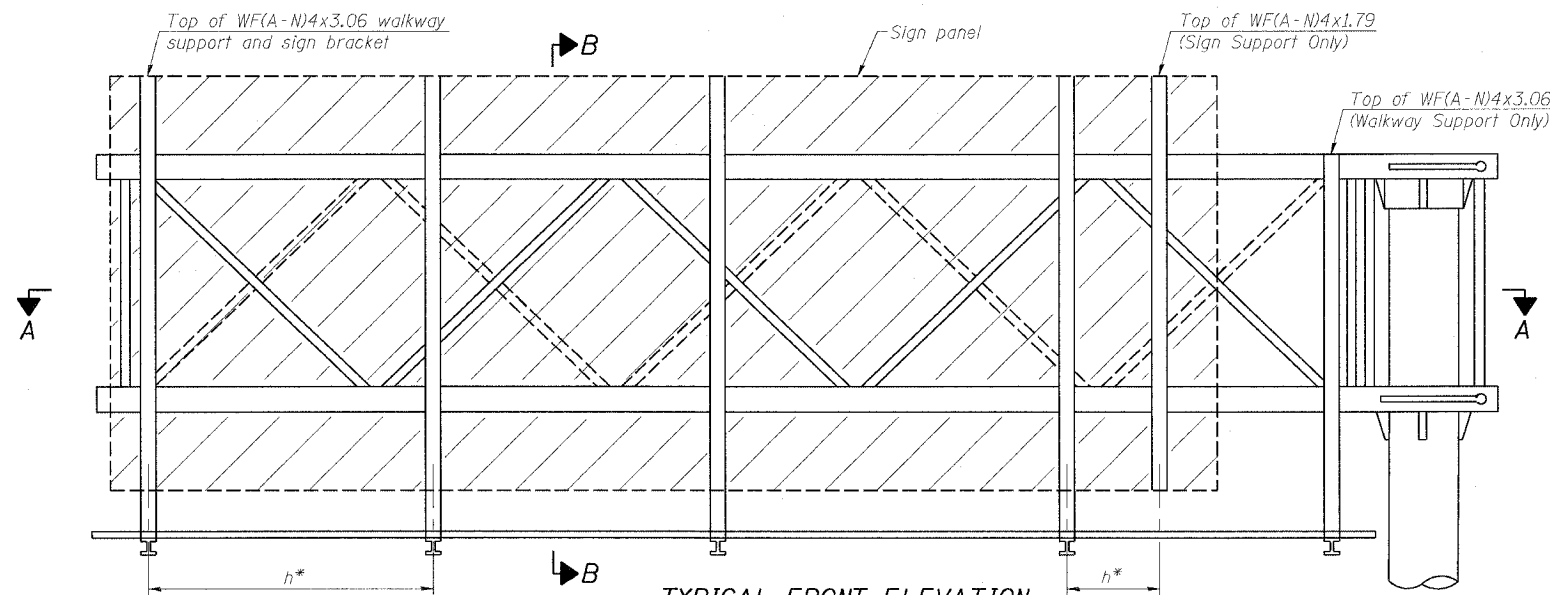
CANTILEVER SIGN STRUCTURES
TYPE II-C-A & III-C-A TRUSS SUPPORT POST
ALUMINUM TRUSS & STEEL POST

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

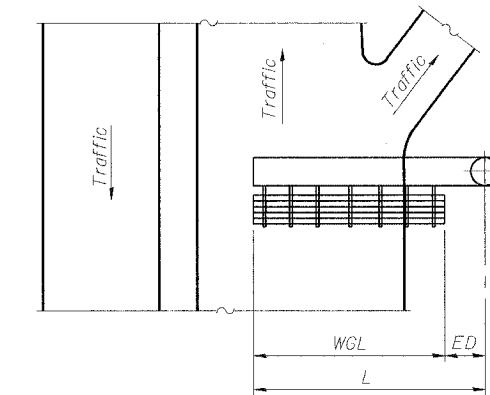
6/2/2006 11:25:36 AM P:\P\06060\DRAWING\CONTS 18 & 19\STA\CONTR 19\AS\Sign\0519140232A.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94	*	COOK	247	122
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	
* (1919.15 & 2021-922 PT.1) R-7				60463

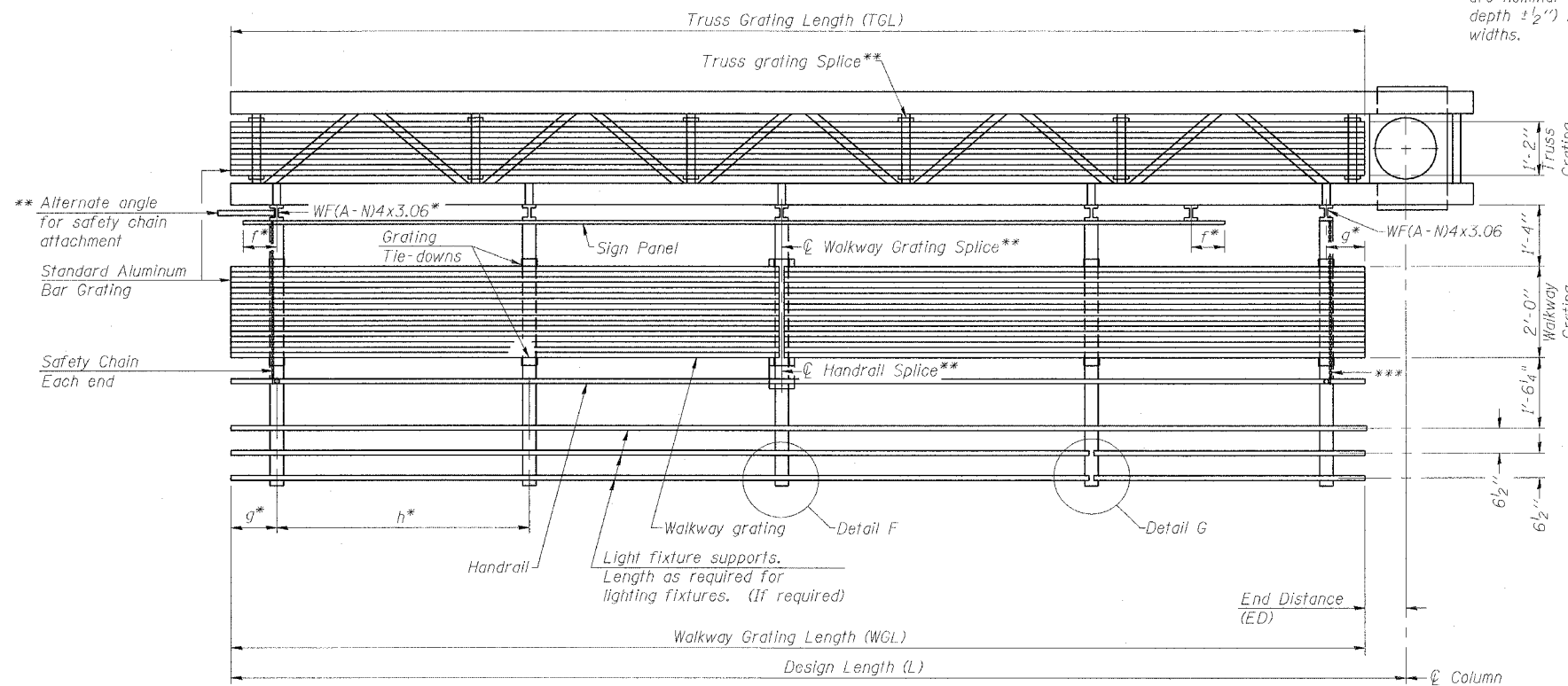


TYPICAL FRONT ELEVATION
With lights and handrail omitted for clarity.



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

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



SECTION A-A

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

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

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

DESIGNED	- JSS
CHECKED	- MJP
DRAWN	- JSS
CHECKED	- MJP

EXAMINED	20
PASSED	ENGINEER OF STRUCTURAL SERVICES
	ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE

Structure Number	Station	WGL	ED	TGL
1C0161094R057.9	3468+00.00	23.0'	5.00'	26.5'

Notes:

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

f = 12" maximum, 4" minimum (End of sign to center of nearest bracket)

g = 12" maximum, 4" minimum (End of walkway to center of nearest bracket)

h = 6'-0" maximum (center to center sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)

*** If walkway bracket at safety chain location is behind sign, add angle to bracket.

For details of sign placement, sign/walkway brackets, truss and walkway gratings, grating splices and Section B-B, see Base Sheet OSC-A-7.

For details of handrail, handrail splice, safety chain and Details F and G, see Base Sheet OSC-A-8.

BRACKET TABLE

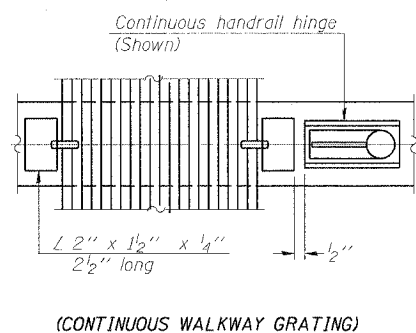
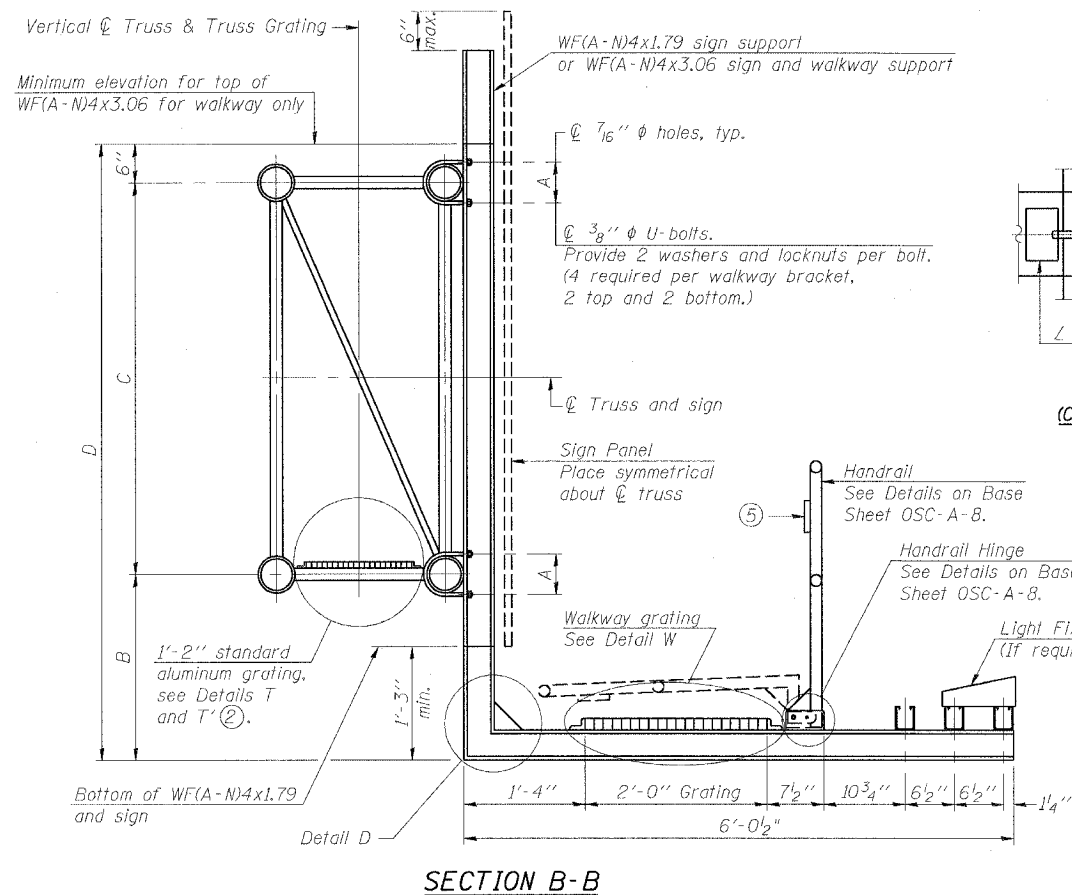
Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
8'-0"	8'-0"	2
14'-0"	14'-0"	3
20'-0"	20'-0"	4
26'-0"	26'-0"	5
32'-0"	32'-0"	6

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

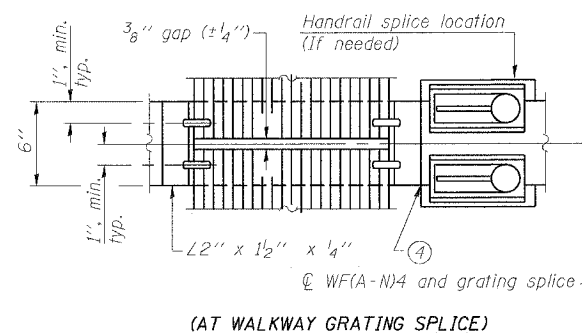
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

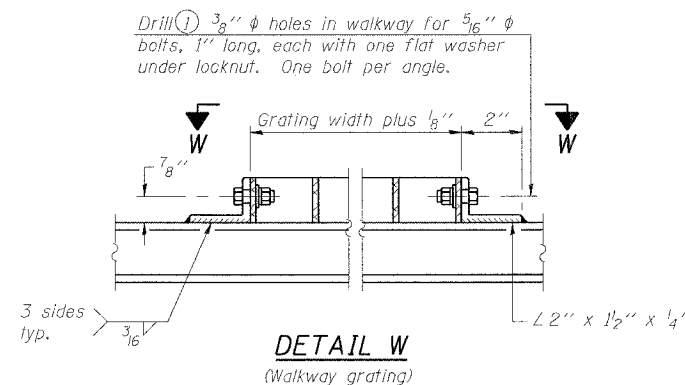
ROUTE NO.	SECTION	COUNTY	SHEET	SHEET
F.A.I. RTE. 90/94		COOK	247	123
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		
• (1915.15 & 2021-922 PT.1) R-2				



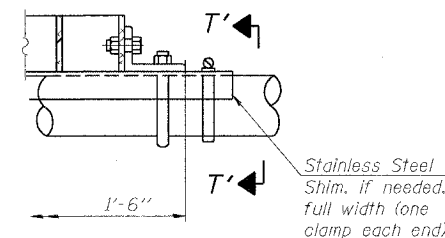
SECTION W-W



(AT WALKWAY GRATING SPLICE)

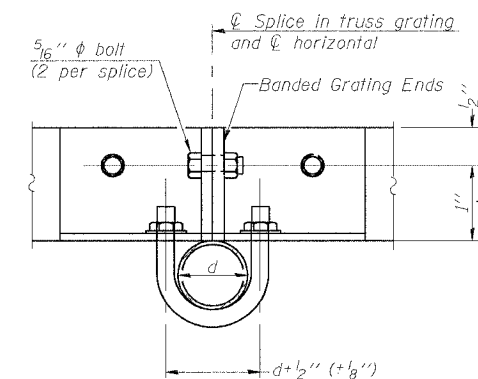


DETAIL W (Walkway grating)

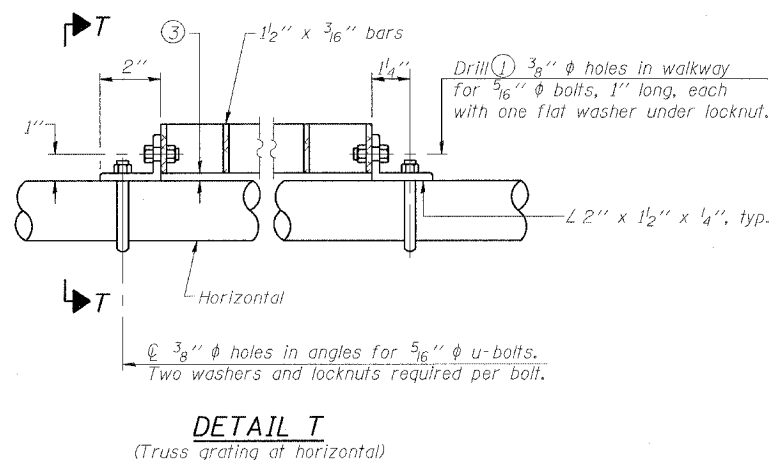


DETAIL T' (Truss grating splice)

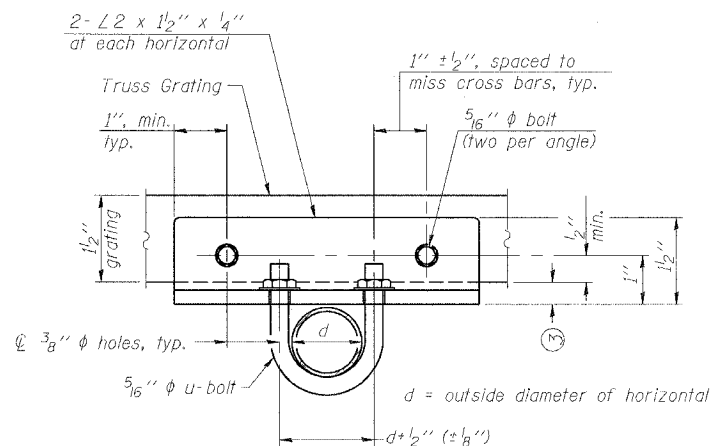
Details not shown same as Detail T. Alternate materials may be used subject to the Engineer's review and approval.



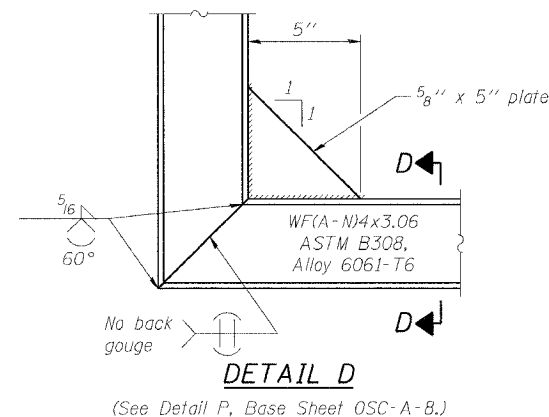
SECTION T'-T'



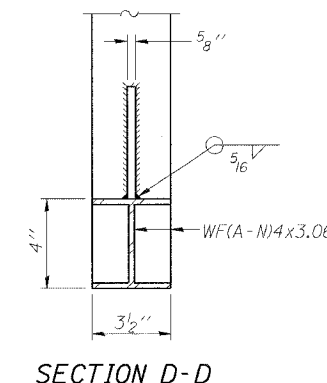
DETAIL T (Truss grating at horizontal)



SECTION T-T



DETAIL D (See Detail P, Base Sheet OSC-A-B.)



SECTION D-D

NUMBER	REVISION	DATE

DESIGNED - JSS
CHECKED - MJP
DRAWN - JSS
CHECKED - MJP

20
EXAMINED
PASSED
ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES

OSC-A-7

1-7-05

- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- When truss grating must be spliced, use suggested detail or other methods subject to the Engineer's review and approval. Locate splice to avoid interference between cross bars and bolt locations.
- Tube to grating gap may vary from 0 to 1/2" max. to align walkway, allow for camber, etc.
- If Handrail Joint present, weld angle to WF(A-N)4 and 1/4" extension bars. (See Base Sheet OSC-A-B)
- \bar{C} 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.

Structure Number	Station	A	B	C	D
IC0161094R057.9	3468+00.00	7"	4'-9"	5'-6"	10'-9"

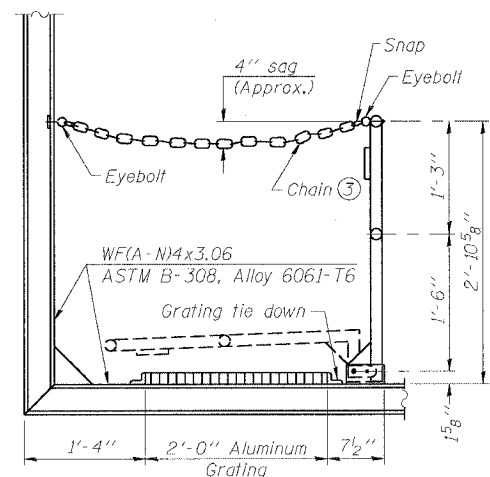
CANTILEVER SIGN STRUCTURES
WALKWAY DETAILS
ALUMINUM TRUSS & STEEL POST

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

OSS-25

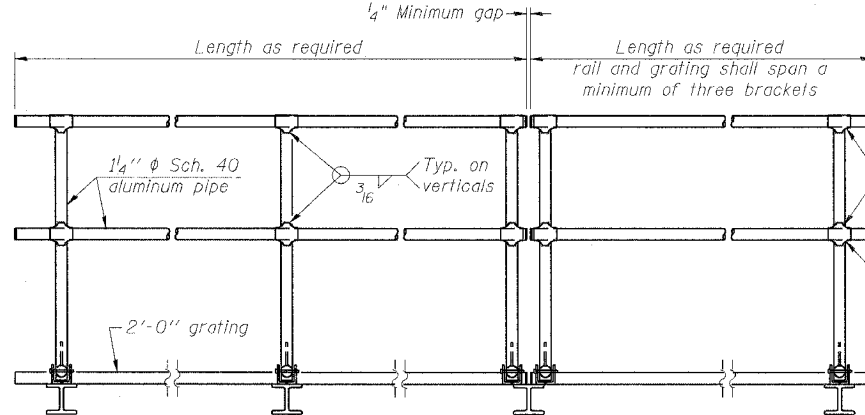
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94		COOK	247	124
FED. AID DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		
• (1919.15 & 2021-922 PT.1) R-2				



SIDE ELEVATION

(Showing Safety Chain W/O Sign)

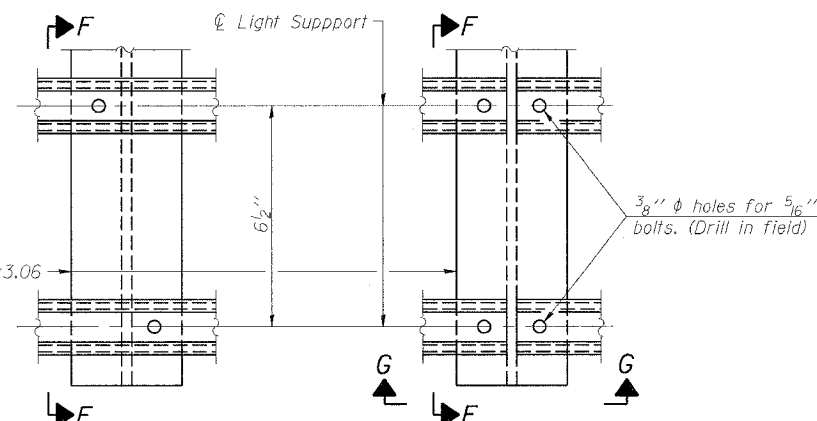


FRONT ELEVATION

HANDRAIL DETAILS

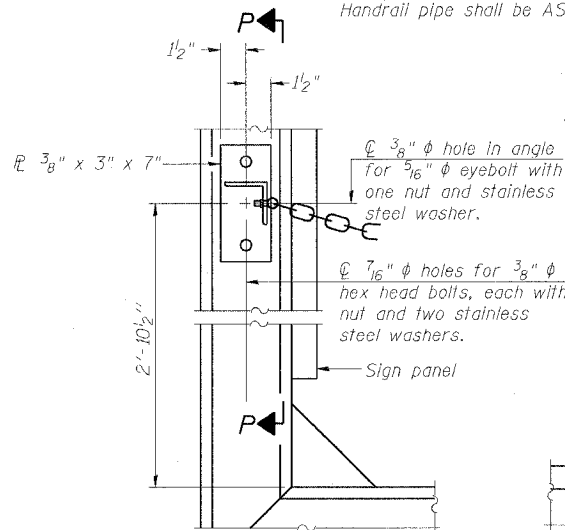
Handrail pipe shall be ASTM B241, Alloy 6063-T6 or Alloy 6061-T6.

- Install standard force-fit end caps or weld 1/8" end plates with 1/8" c.f.w. and grind smooth. (All rail ends)
- 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 locknut and two stainless steel washers for bolt. (Use 5/16" eyebolts in 7/16" holes on top rail at ends only.)



DETAIL F

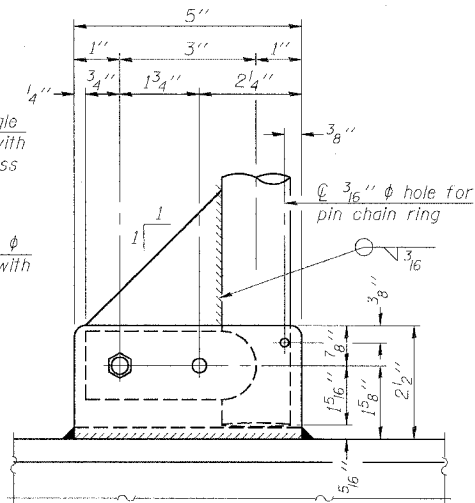
DETAIL G



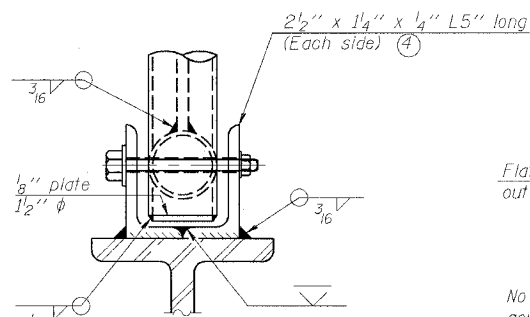
ALTERNATE SAFETY CHAIN ATTACHMENT

(With Sign Present)

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

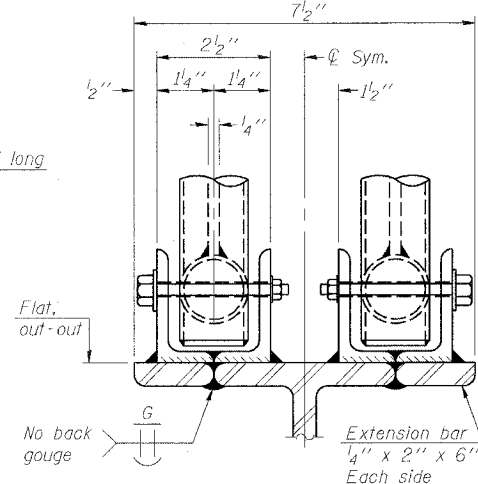


SIDE ELEVATION



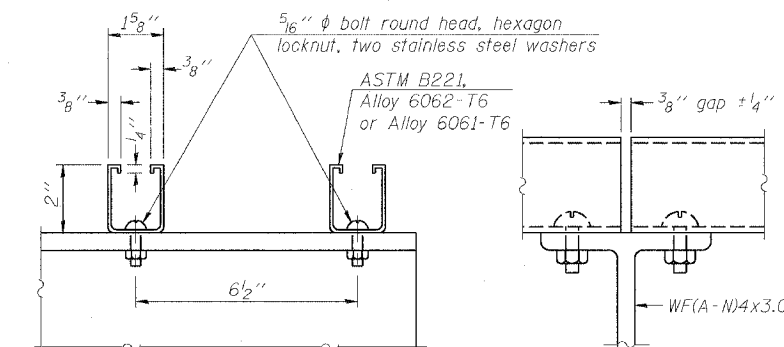
FRONT ELEVATION

Details not shown same as "ELEVATION" at right.



ELEVATION AT HANDRAIL JOINT

Details not shown same as "FRONT ELEVATION"

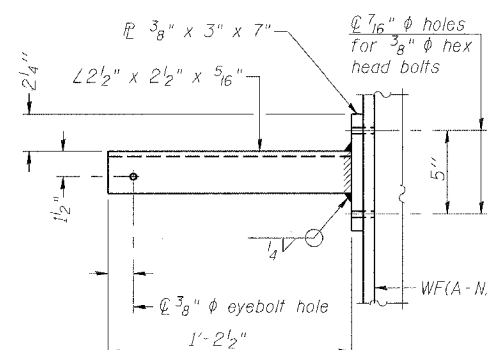


SECTION F-F

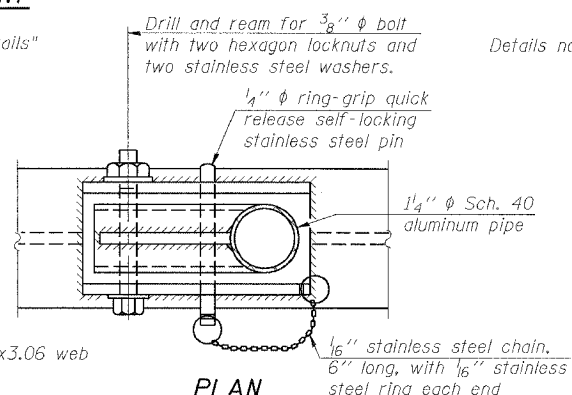
SECTION G-G

LIGHTING FIXTURE MOUNTS (IF REQUIRED)

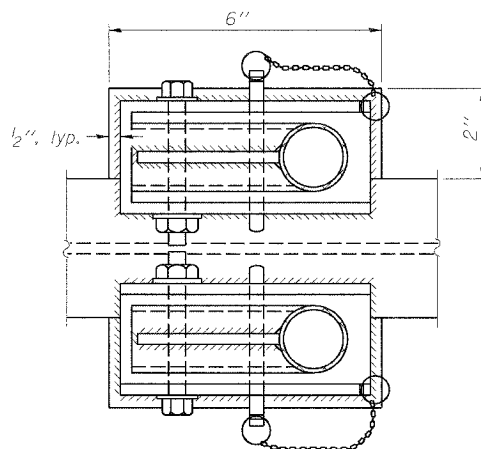
- Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.



SECTION P-P

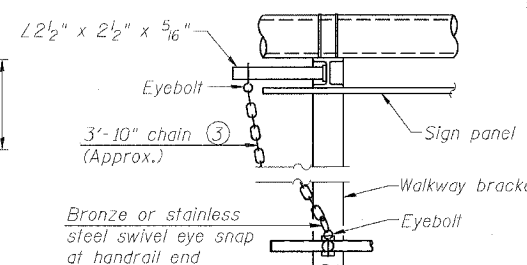


PLAN
DETAIL E HANDRAIL HINGE



PLAN AT HANDRAIL JOINT

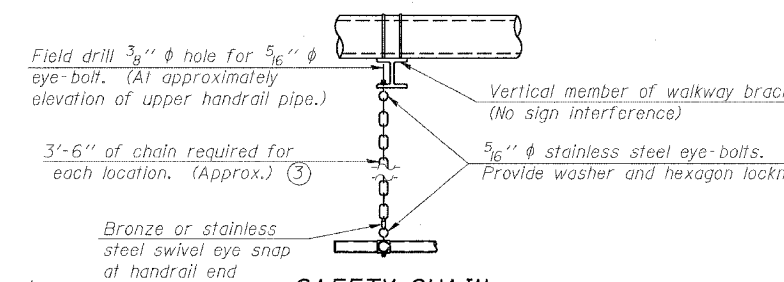
Details not shown same as "PLAN"



ALTERNATE SAFETY CHAIN ATTACHMENT

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

- 3/16" 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.
- 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 - JSS	20
CHECKED - MJP	EXAMINED
DRAWN - JSS	PASSED
CHECKED - MJP	ENGINEER OF STRUCTURAL SERVICES
	ENGINEER OF BRIDGES AND STRUCTURES

OSC-A-8

1-7-05

NUMBER	REVISION	DATE

**CANTILEVER SIGN STRUCTURES
HANDRAIL DETAILS
ALUMINUM TRUSS & STEEL POST**

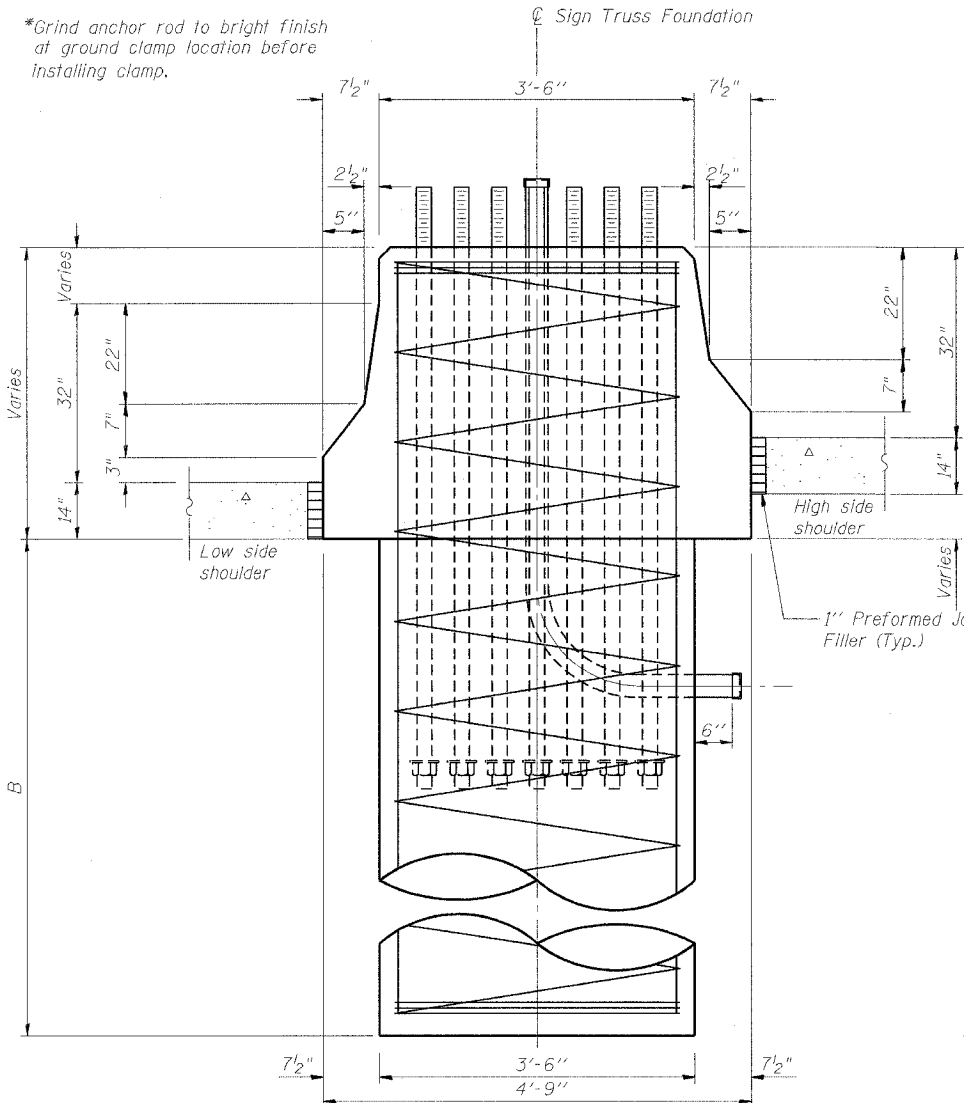
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

OSS-26

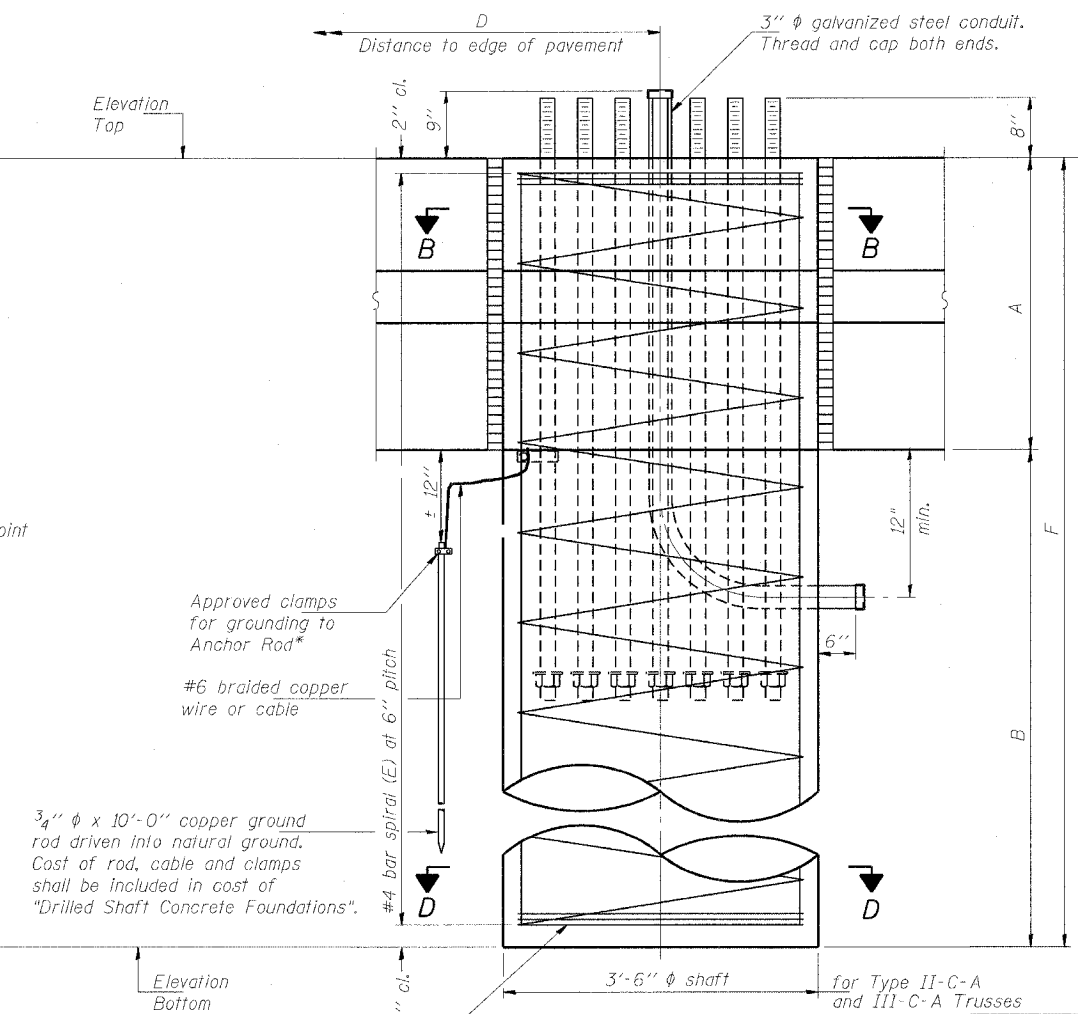
6/27/2006 11:25:26 AM P:\V\40466\CHINESE\CHNS 15 & 19\SIGN\CHN 15\AS\Signing\SS19\40466\26A.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

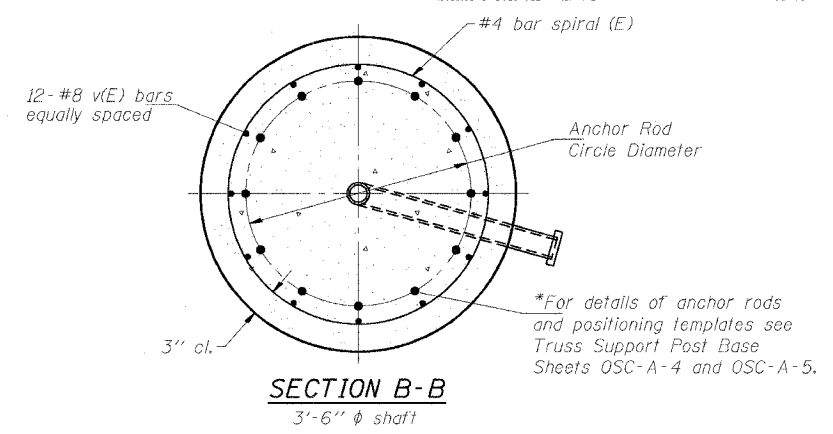
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94		COOK	247	125
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		
* (1915.15 & 2021-922 P.1.) R-2				



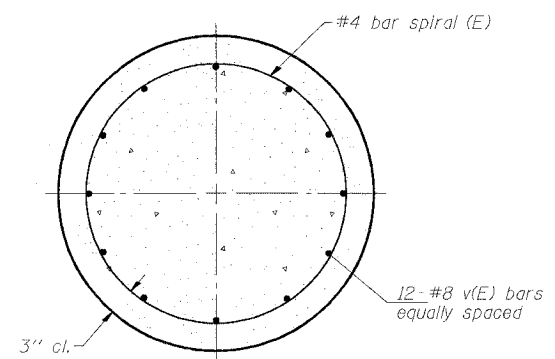
END VIEW



ELEVATION

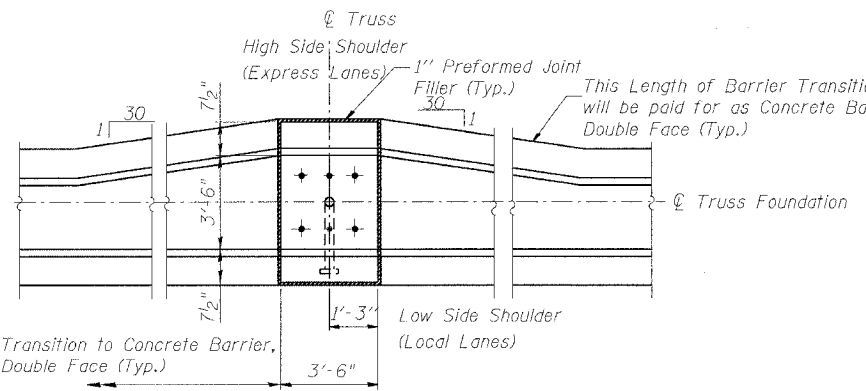


SECTION B-B
3'-6" ϕ shaft



SECTION D-D
3'-6" ϕ shaft

Truss Type	Post Base Sheet	Maximum Cantilever Length (ft)	Maximum Total Sign Area (sq ft)	Shaft Diameter (ft)	"B" Depth (ft)	Anchor Rods		Anchor Rod Circle Diameter (in)
						No.	Diameter (in)	
I-C-A	OSC-A-4	25	170	3.0	15.5	8	2	22
II-C-A	OSC-A-5	30	170	3.5	15.0	12	2	30
II-C-A	OSC-A-5	30	340	3.5	21.5	12	2	30
III-C-A	OSC-A-5	35	170	3.5	19.0	12	2	30
III-C-A	OSC-A-5	35	250	3.5	22.5	12	2	30
III-C-A	OSC-A-5	35	400	3.5	26.5	12	2	30
III-C-A	OSC-A-5	40	400	3.5	30.0	12	2	30



PLAN

NOTES:
The foundation dimensions shown in the Foundation Design Table are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Q_u) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown in the Foundation Data Table will be the result of site specific designs.
If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.
No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.
Concrete shall be placed monolithically, without construction joints.
Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.
A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in "Drilled Shaft Concrete Foundation".

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

NUMBER	REVISION	DATE

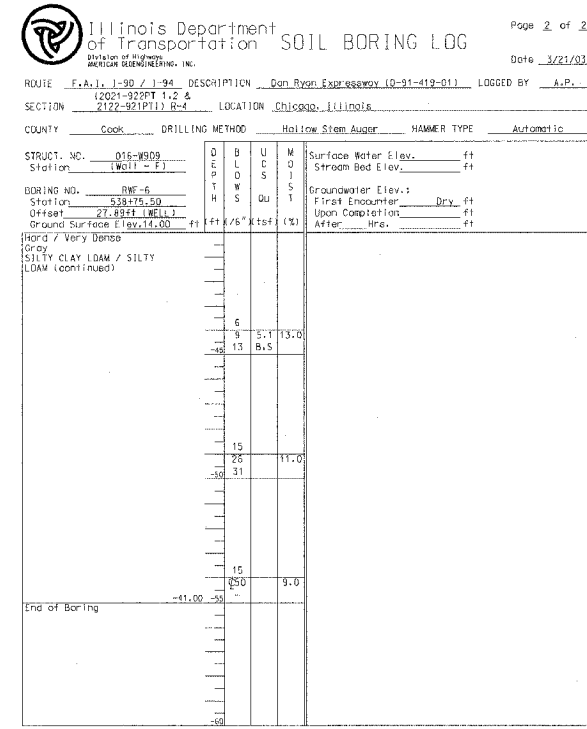
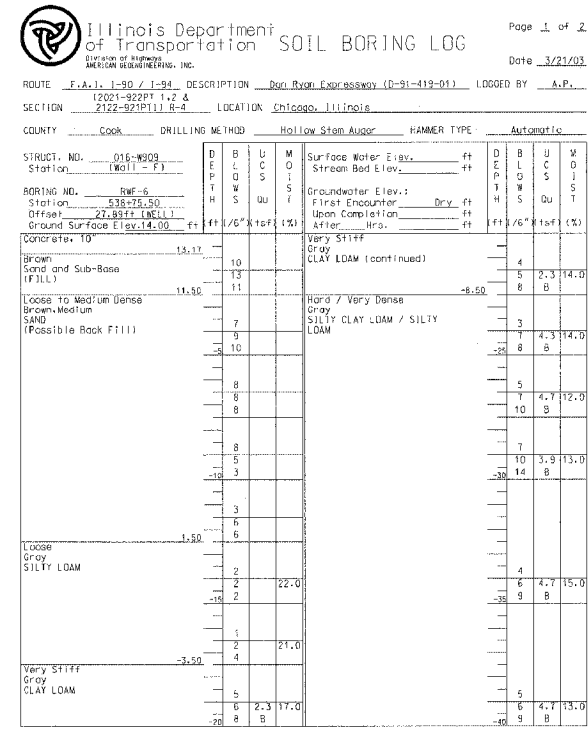
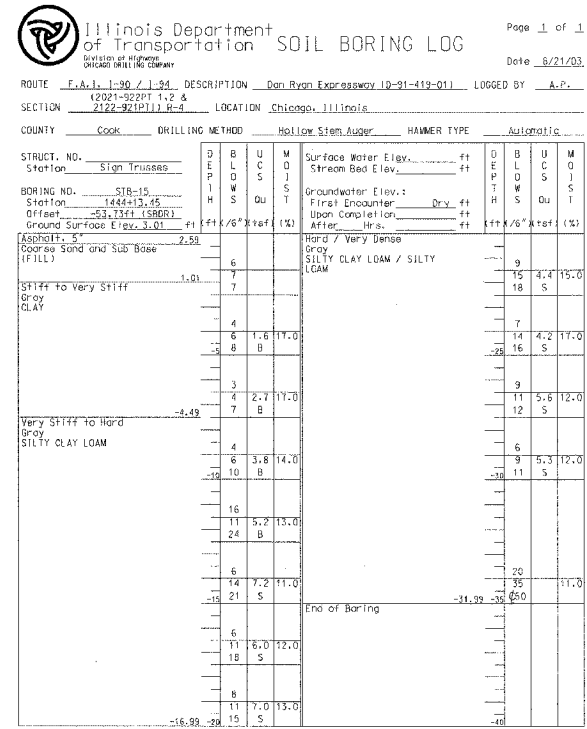
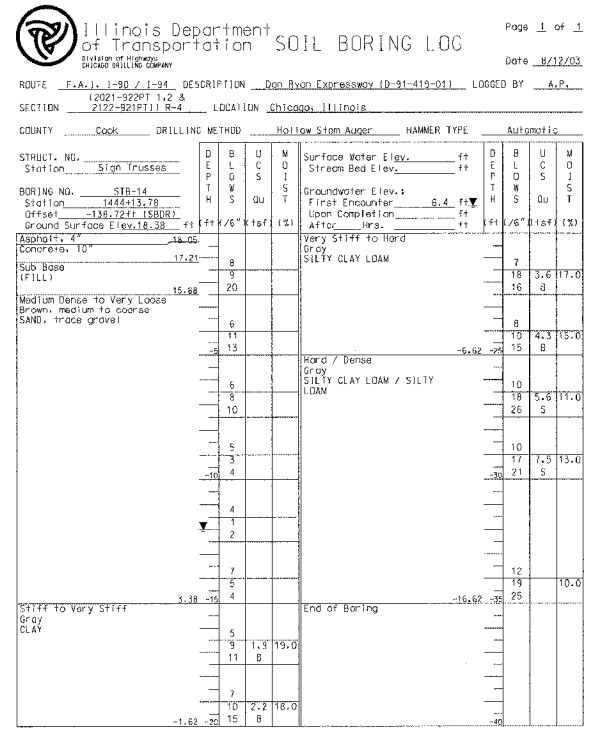
Structure Number	Station	Truss Type	Shaft Diameter	Elevation Top	Elevation Bottom	Q_u	A	B	F	Class SI Concrete Cubic Yards
IC0161094R057.9	3468+00.00	II-C-A	3.5'	5.21'	-20.65'	4.7 tsf	4.36'	21.5'	25.86'	10.0

OSS-27
**CANTILEVER SIGN STRUCTURES
DRILLED SHAFT
ALUMINUM TRUSS & STEEL POST**

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PROPOSED IMPROVEMENT

6/27/2006 11:05:34 AM P:\P4046\CHN\B CHNS 15 & 19\SP\CHN 19\AS\Signing\SS19A022\24517

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	126
STA. TO STA.				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 * (1919.15, 2021-922 PT1 & PT2) R-2				

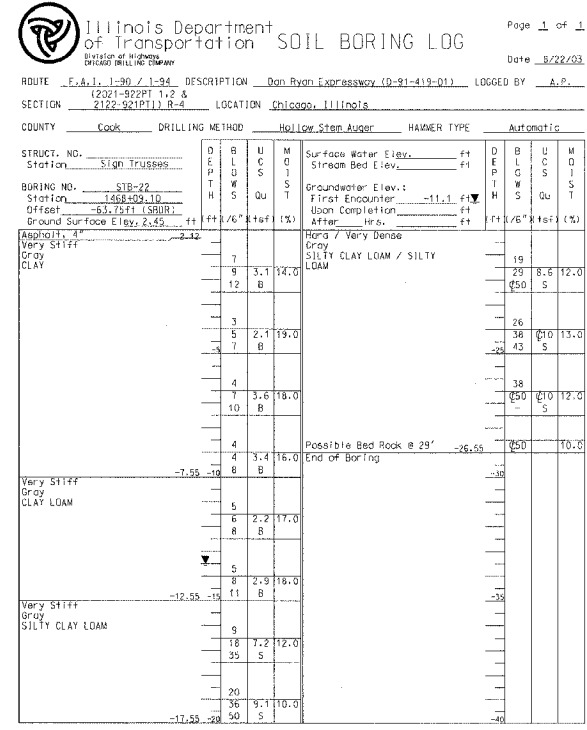
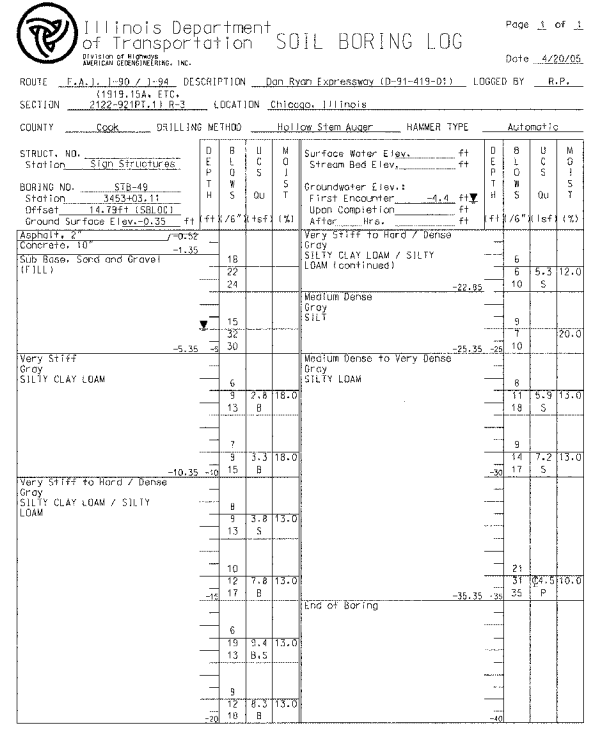


The Unconfined Compressive Strength (UCS) Failure Mode is Indicated by (B-Bulge, S-Shear, P-Penetrometer). The SPT (N value) is the sum of the last two blow values in each sampling zone (ASTM D206). BBS, from 137 (Rev. 8-99)

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 (ASTM D206). BBS, from 137 (Rev. 8-99)

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 (ASTM D206). BBS, from 137 (Rev. 8-99)

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 (ASTM D206). BBS, from 137 (Rev. 8-99)



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 (ASTM D206). BBS, from 137 (Rev. 8-99)

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 (ASTM D206). BBS, from 137 (Rev. 8-99)

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 (ASTM D206). BBS, from 137 (Rev. 8-99)

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 (ASTM D206). BBS, from 137 (Rev. 8-99)

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

SOIL BORING LOGS FOR
 SIGN STRUCTURE FOUNDATIONS

SCALE: NONE DRAWN BY: JSS
 DATE: June 9, 2006 CHECKED BY: MJP



OSS-28
 6/2/2006

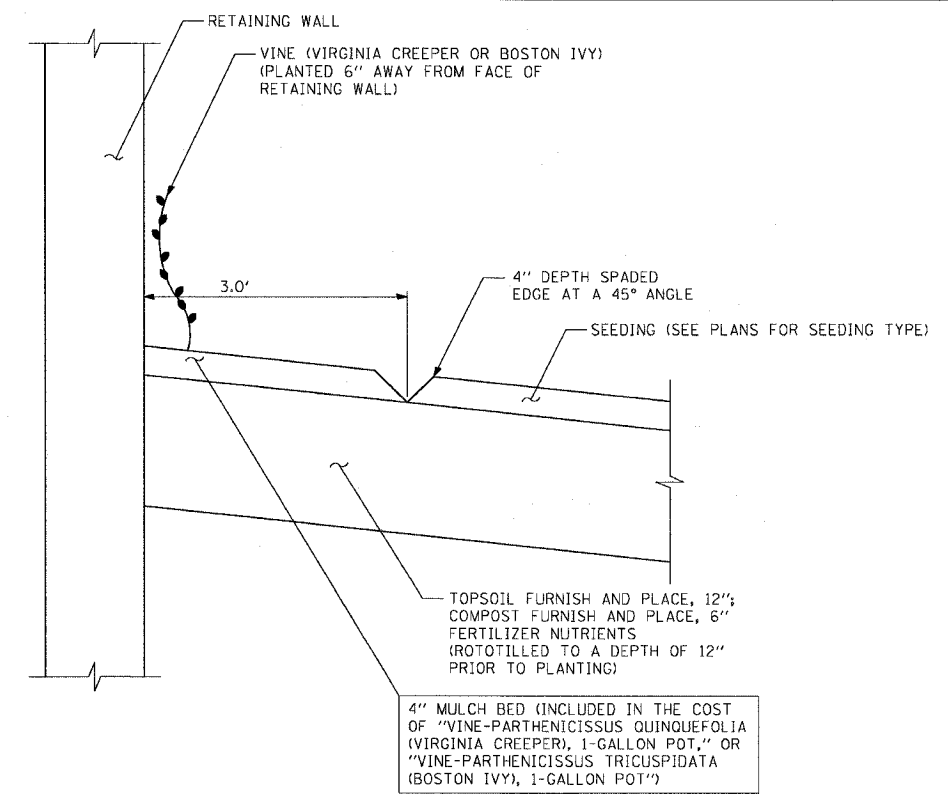
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	-	COOK	247	127
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		(1919.15, 2021-922 PT1 & PT2) R-2		

GENERAL PLAN NOTES - LANDSCAPING:

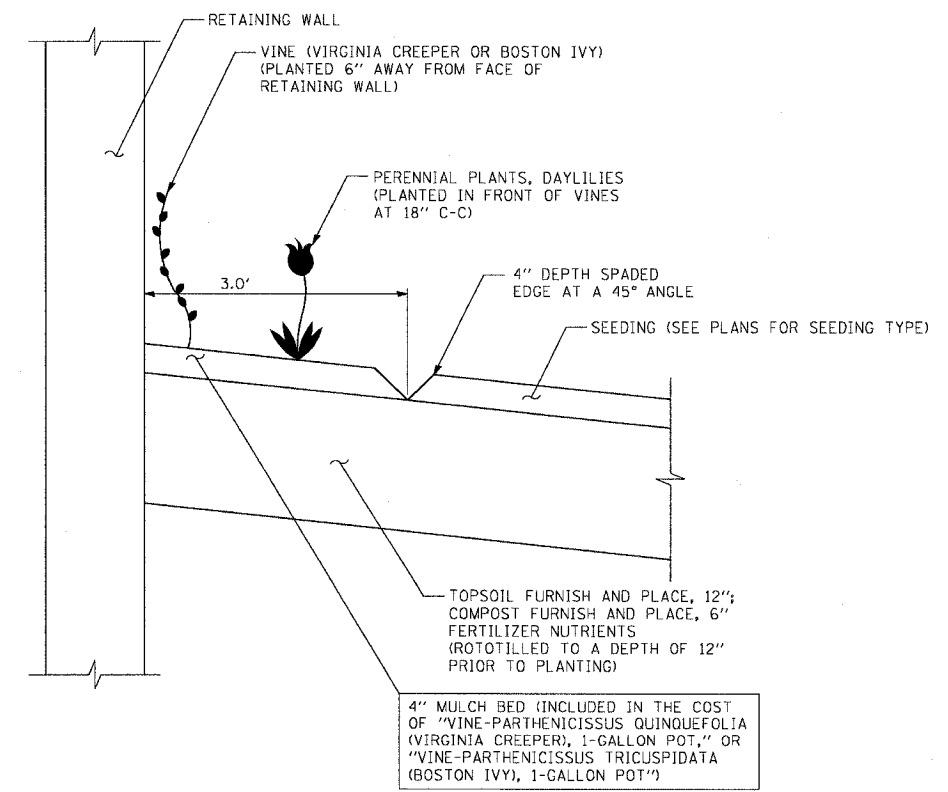
1. THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS WHICH WILL NOT BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
2. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF EXISTING PLANT MATERIAL FOR WHICH THE CONTRACT DOES NOT PROVIDE REMOVAL. THE PROTECTION OF EXISTING PLANT MATERIAL AND THE REPAIR OR REPLACEMENT OF EXISTING PLANT MATERIAL DAMAGED BY THE CONTRACTOR SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 201 OF THE STANDARD SPECIFICATIONS.
3. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASS 2A SHALL BE FROM APRIL 1 TO JUNE 1 AND FROM AUGUST 15 TO SEPTEMBER 30. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AS HIS/HER EXPENSE.
4. AREAS TO BE SEEDED BETWEEN NOVEMBER 15 AND MARCH 31 SHALL REQUIRE DORMANT SEEDING, WHICH SHALL BE INCLUDED IN THE COST OF "SEEDING CLASS 2A," "SEEDING CLASS 4 (MODIFIED)," OR "SEEDING, CLASS 5A (MODIFIED)."
5. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASSES 4 AND 5 SHALL BE FROM APRIL 15 TO JUNE 30 AND FROM OCTOBER 15 TO DECEMBER 1. ALL SEEDING NOT SOWN ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AS HIS/HER EXPENSE.
6. LAYOUT OF LANDSCAPED AREAS WILL REQUIRE APPROVAL OF THE ENGINEER PRIOR TO TOPSOIL PLACEMENT, SEEDING, AND PLANTING.

GENERAL PLAN NOTES - PLANTING BED:

7. SEE LANDSCAPING PLANS FOR SPECIFIC LOCATIONS AND QUANTITIES OF VINES, SHRUBS, AND DAYLILIES.
8. ALL COMPOST AND TOPSOIL AREAS SHALL BE THOROUGHLY ROTOTILLED TO A DEPTH OF 12" PRIOR TO PLANTING AND/OR SEEDING.
9. THE CONTRACTOR SHALL ORDER THE FOLLOWING PLANT MATERIAL IMMEDIATELY FOLLOWING EXECUTION OF THE CONTRACT TO ASSURE AVAILABILITY OF THE PLANT MATERIAL FOR SPRING PLANTING AT THE CONCLUSION OF THE CONTRACT:
 - VINE-PARTHENOCISSUS QUINQUEFOLIA (VIRGINIA CREEPER), 1-GALLON
 - VINE-PARTHENOCISSUS TRICUSPIDATA (BOSTON IVY), 1-GALLON
 - HEMEROCALLIS "STELLA D'ORO" (STELLA D'ORO DAYLILY), 1-GALLON
 - SHRUB, SYRINGA X PERSICA (PERSIAN LILAC), 3' HEIGHT, BALLED AND BURLAPPED.
 - SHRUB, RHUS AROMTICA GRO-LOW (GRO-LOW FRAGRANT SUMAC), 18" CONTAINER.
10. MULCH BED SHALL BE PLACED OVER ROTOTILLED COMPOST/TOPSOIL AS SHOWN IN THE PLANTING DETAILS AND ACCORDING TO IDOT STANDARD SPECIFICATION 253.11, EXCEPT THAT NO WEED BARRIER FABRIC IS REQUIRED. COST OF MULCH COVER IS INCLUDED WITH PAYMENT FOR THE VINES, DAYLILIES, AND SHRUBS.
11. PRE-EMERGENT GRANULAR HERBICIDE SHALL BE PLACED IN MULCHED BEDS ACCORDING TO THE SPECIAL PROVISION.
12. FERTILIZER NUTRIENTS SHALL BE ADDED AND APPLIED TO THE VINE BEDS AT A 5:3:2 RATIO AS FOLLOWS:
 - NITROGEN FERTILIZER NUTRIENTS: 90 LBS/ACRE
 - PHOSPHORUS FERTILIZER NUTRIENTS: 54 LBS/ACRE
 - POTASSIUM FERTILIZER NUTRIENTS: 36 LBS/ACRE
 THIS FERTILIZER SHALL BE TILLED AND CULTIVATED INTO THE SOIL TO A DEPTH OF 12"



VINE PLANTING DETAIL



VINE AND DAYLILY PLANTING DETAIL

SCHEDULE OF LANDSCAPE ITEMS

PAY ITEM DESCRIPTION	COMMON NAME	SIZE	SPACING	UNIT	TOTAL
VINE - PARTHENOCISSUS QUINQUEFOLIA, 1- GALLON POT	VIRGINIA CREEPER	1-GALLON	3' C-C	EACH	234
VINE - PARTHENOCISSUS TRICUSPIDATA	BOSTON IVY	1-GALLON	3' C-C	EACH	108
SHRUB, RHUS AROMTICA GRO-LOW	GRO-LOW FRAGRANT SUMAC	18" CONTAINER	3' C-C" STAGGERED	EACH	144
SHRUB, SYRINGA X PERSICA	PERSIAN LILAC	3' HEIGHT - BALLED AND BURLAPPED	3' C-C" STAGGERED	EACH	463
PERENNIAL PLANTS, DAYLILIES	STELLA D'ORO	1-GALLON	18" C-C"	UNITS	4.67

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

LANDSCAPING NOTES AND DETAILS

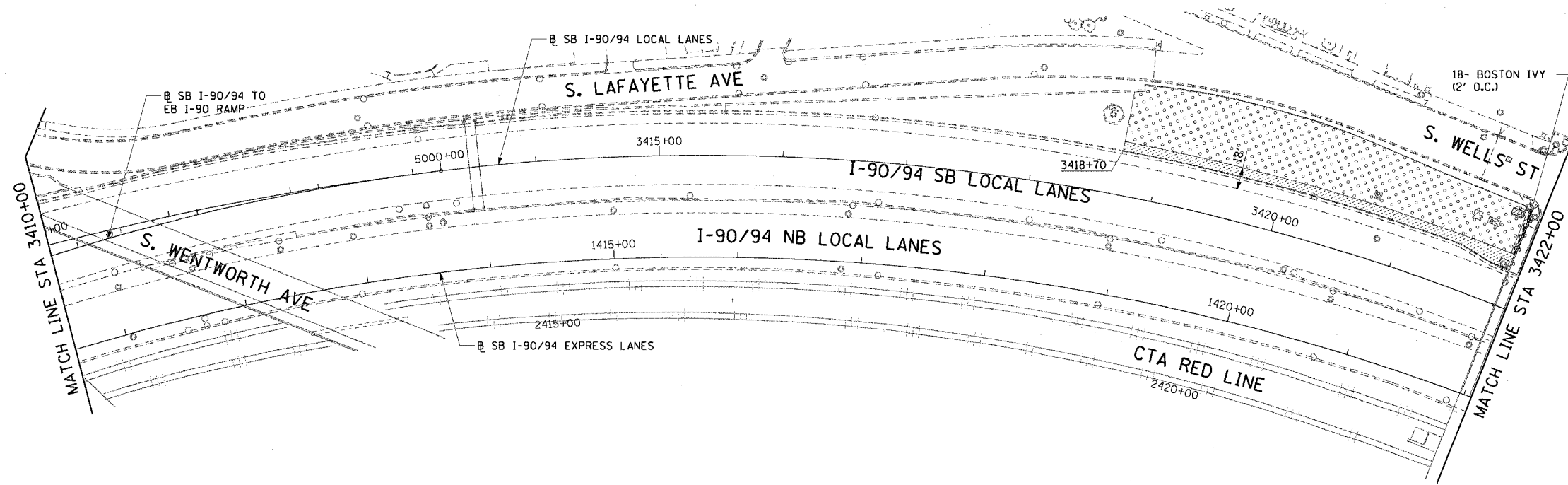
SCALE: NONE
 DATE: June 9, 2006

DRAWN BY: PHP
 CHECKED BY: RMC

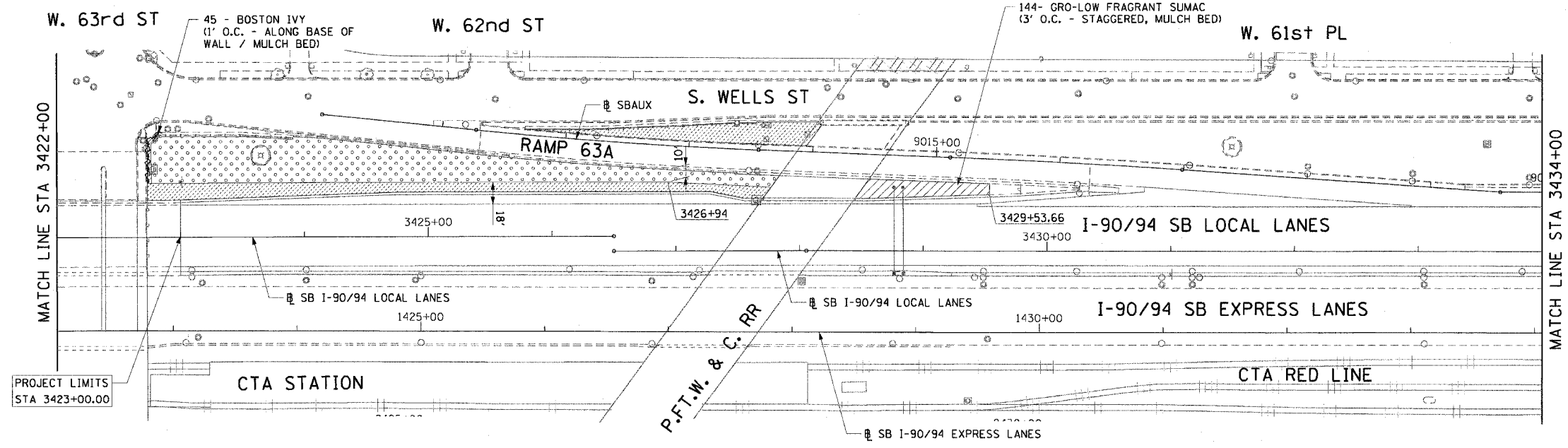


P:\P\40466\CV\N\06\Chrs 18 & 19\Site\Chtr 19\Landscaping\LD\9A002\AS17 9:54:53 AM 6/5/2006

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	128
STA. 3423+00		TO STA. 3434+00		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
60A63		* (1919.15, 2021-922 PT1 & PT2) R-2		



- LEGEND:
- TOPSOIL FURNISH AND PLACE, 4" SEEDING, CLASS 2A EROSION CONTROL BLANKET
 - TOPSOIL FURNISH AND PLACE, 12" COMPOST FURNISH AND PLACE, 6" SEEDING, CLASS 2A EROSION CONTROL BLANKET
 - TOPSOIL FURNISH AND PLACE, 12" COMPOST FURNISH AND PLACE, 6" SEEDING, CLASS 4 (MODIFIED) SEEDING, CLASS 5A (MODIFIED) EROSION CONTROL BLANKET
 - TOPSOIL FURNISH AND PLACE, 12" COMPOST FURNISH AND PLACE, 6" SEEDING, CLASS 4A (MODIFIED) SEEDING, CLASS 5 (MODIFIED) EROSION CONTROL BLANKET
 - PERENNIAL PLANTS, IVY OR SHRUBS TOPSOIL FURNISH AND PLACE, 12" COMPOST FURNISH AND PLACE, 6" EROSION CONTROL BLANKET
 - VINE



- NOTES:
- THE DIMENSIONS SHOWN ON THE PLANS SHALL BE USED AS A GUIDE TO LAY OUT THE SPECIFIED RESTORATION AREAS.

CTE | AECOM

REVISIONS	NAME	DATE

LA-01

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

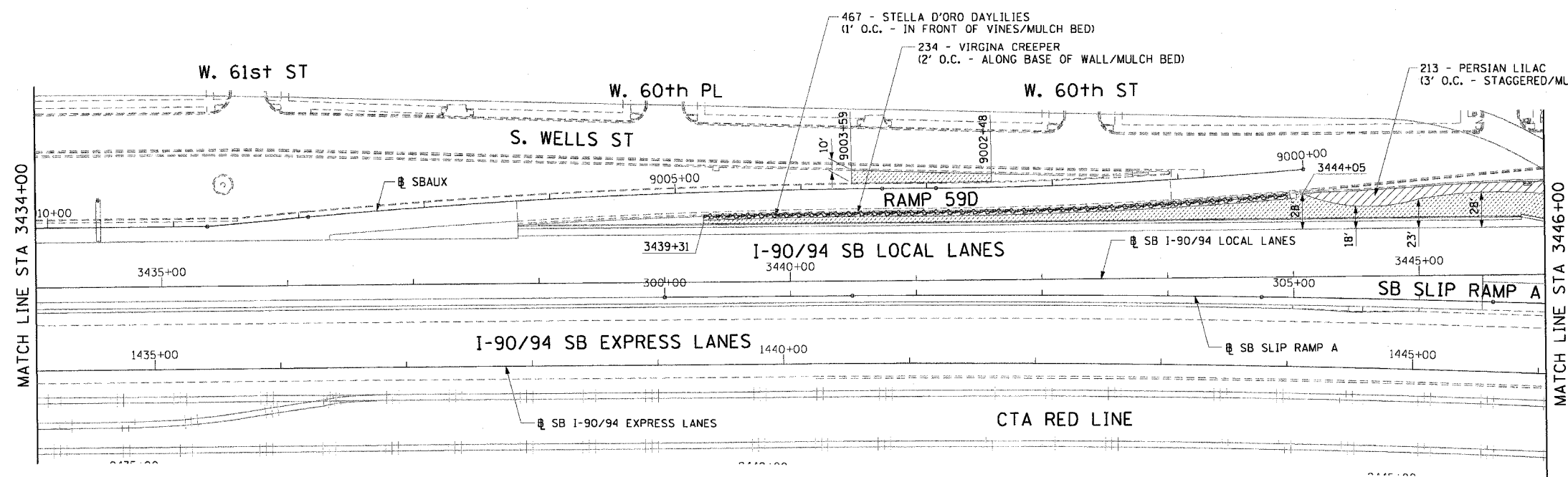
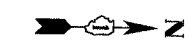
LANDSCAPING PLANS
AND DETAILS

SCALE: 1"=50'
DATE: June 9, 2006

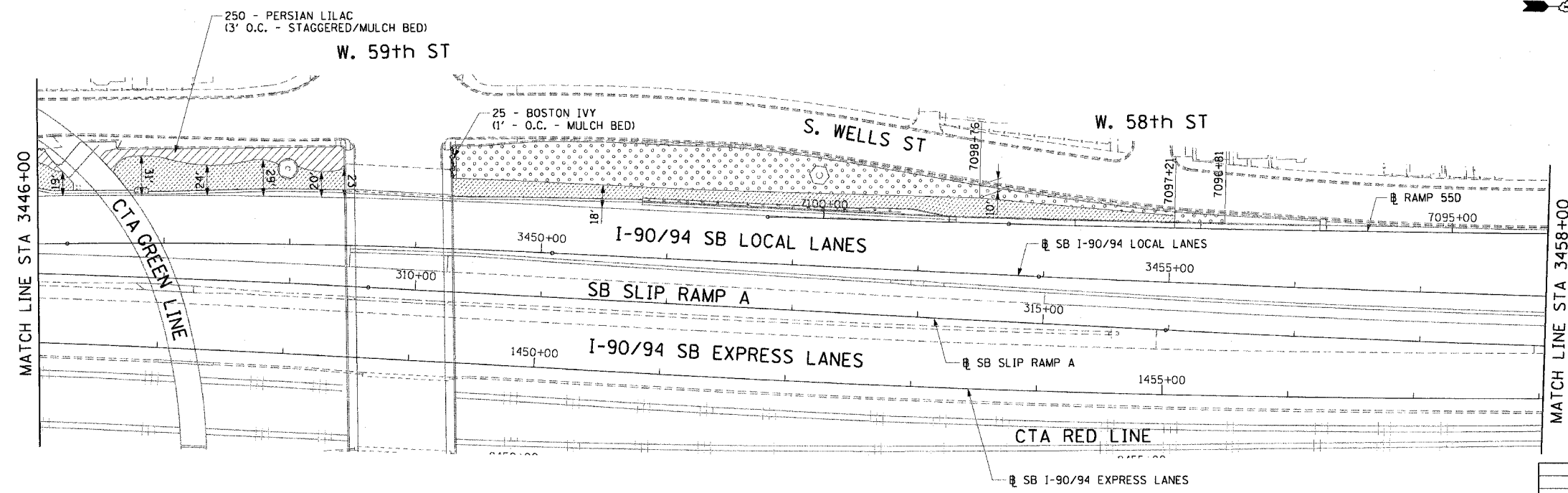
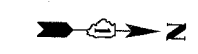
DRAWN BY: PHP
CHECKED BY: RMG

F:\940468\Civil\18 Ctr\18 & 19\SP\CH19\LANDSCAPING\LA01\0012.dwg 10/29/06 10:29:58 AM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	129
STA. 3434+00		TO STA. 3458+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				



- LEGEND:**
- TOPSOIL FURNISH AND PLACE, 4" SEEDING, CLASS 2A EROSION CONTROL BLANKET
 - TOPSOIL FURNISH AND PLACE, 12" COMPOST FURNISH AND PLACE, 6" SEEDING, CLASS 2A EROSION CONTROL BLANKET
 - TOPSOIL FURNISH AND PLACE, 12" COMPOST FURNISH AND PLACE, 6" SEEDING, CLASS 4 (MODIFIED) SEEDING, CLASS 5A (MODIFIED) EROSION CONTROL BLANKET
 - TOPSOIL FURNISH AND PLACE, 12" COMPOST FURNISH AND PLACE, 6" SEEDING, CLASS 4A (MODIFIED) SEEDING, CLASS 5 (MODIFIED) EROSION CONTROL BLANKET
 - PERENNIAL PLANTS, IVY OR SHRUBS TOPSOIL FURNISH AND PLACE, 12" COMPOST FURNISH AND PLACE, 6" SEEDING, CLASS 4A (MODIFIED) EROSION CONTROL BLANKET
 - VINE



- NOTES:**
- THE DIMENSIONS SHOWN ON THE PLANS SHALL BE USED AS A GUIDE TO LAY OUT THE SPECIFIED RESTORATION AREAS.

CTE | AECOM

REVISIONS	
NAME	DATE

LA-02

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

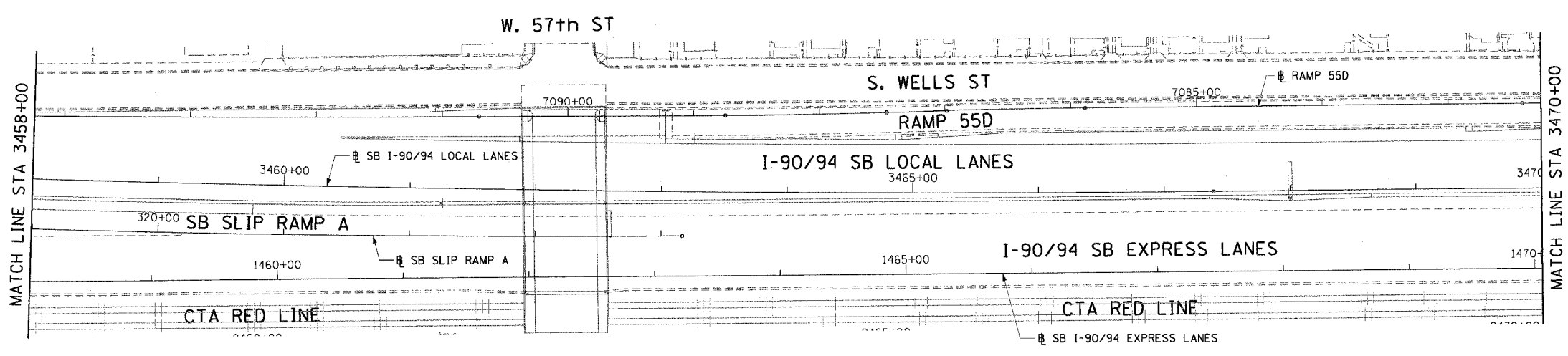
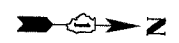
**LANDSCAPING PLANS
AND DETAILS**

SCALE: 1"=50'
DATE: June 9, 2006

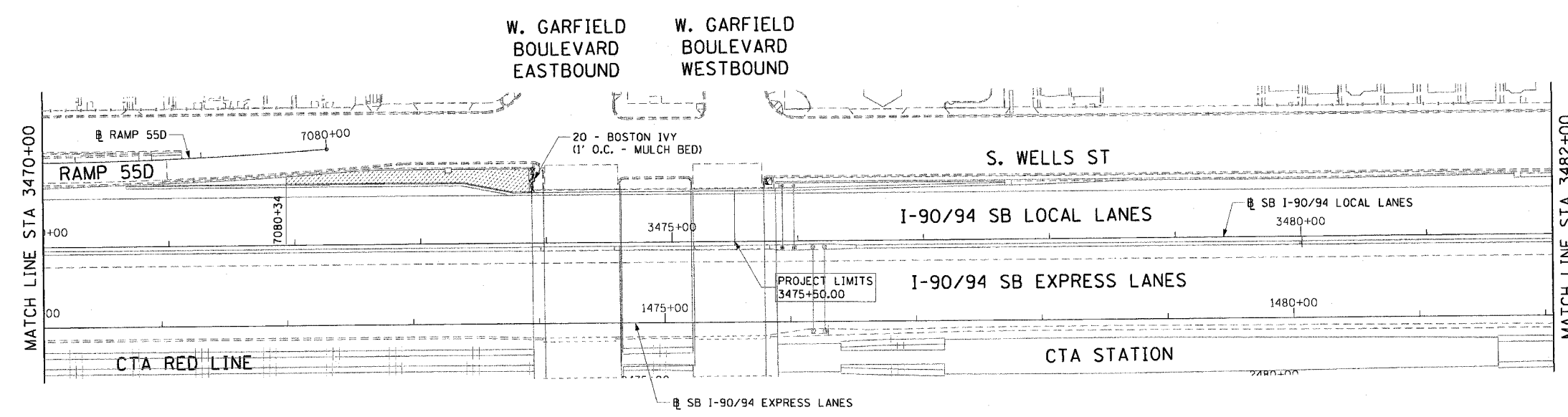
DRAWN BY: PHP
CHECKED BY: RMG

P:\P\060666\CH\1906\chrs 18 & 19\CH\CH17 19\LA\Landscaping\LA19060222.dwg 10/30/02 AM 6/2/2006

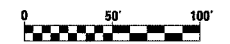
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	-	COOK	247	130
STA. 3458+00		TO STA. 3482+00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		(1919.15, 2021-922 PT1 & PT2) R-2		



- LEGEND:
- TOPSOIL FURNISH AND PLACE, 4" SEEDING, CLASS 2A EROSION CONTROL BLANKET
 - TOPSOIL FURNISH AND PLACE, 12" COMPOST FURNISH AND PLACE, 6" SEEDING, CLASS 2A EROSION CONTROL BLANKET
 - TOPSOIL FURNISH AND PLACE, 12" COMPOST FURNISH AND PLACE, 6" SEEDING, CLASS 4 (MODIFIED) SEEDING, CLASS 5A (MODIFIED) EROSION CONTROL BLANKET
 - TOPSOIL FURNISH AND PLACE, 12" COMPOST FURNISH AND PLACE, 6" SEEDING, CLASS 4A (MODIFIED) SEEDING, CLASS 5 (MODIFIED) EROSION CONTROL BLANKET
 - PERENNIAL PLANTS, IVY OR SHRUBS TOPSOIL FURNISH AND PLACE, 12" COMPOST FURNISH AND PLACE, 6" SEEDING, CLASS 5 (MODIFIED) EROSION CONTROL BLANKET
 - VINE



- NOTES:
- THE DIMENSIONS SHOWN ON THE PLANS SHALL BE USED AS A GUIDE TO LAY OUT THE SPECIFIED RESTORATION AREAS.



LA-03

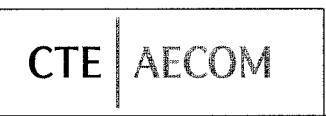
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

LANDSCAPING PLANS
 AND DETAILS

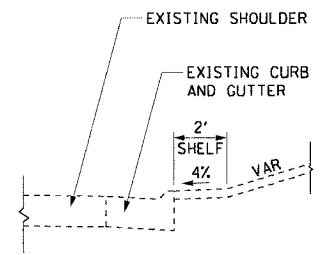
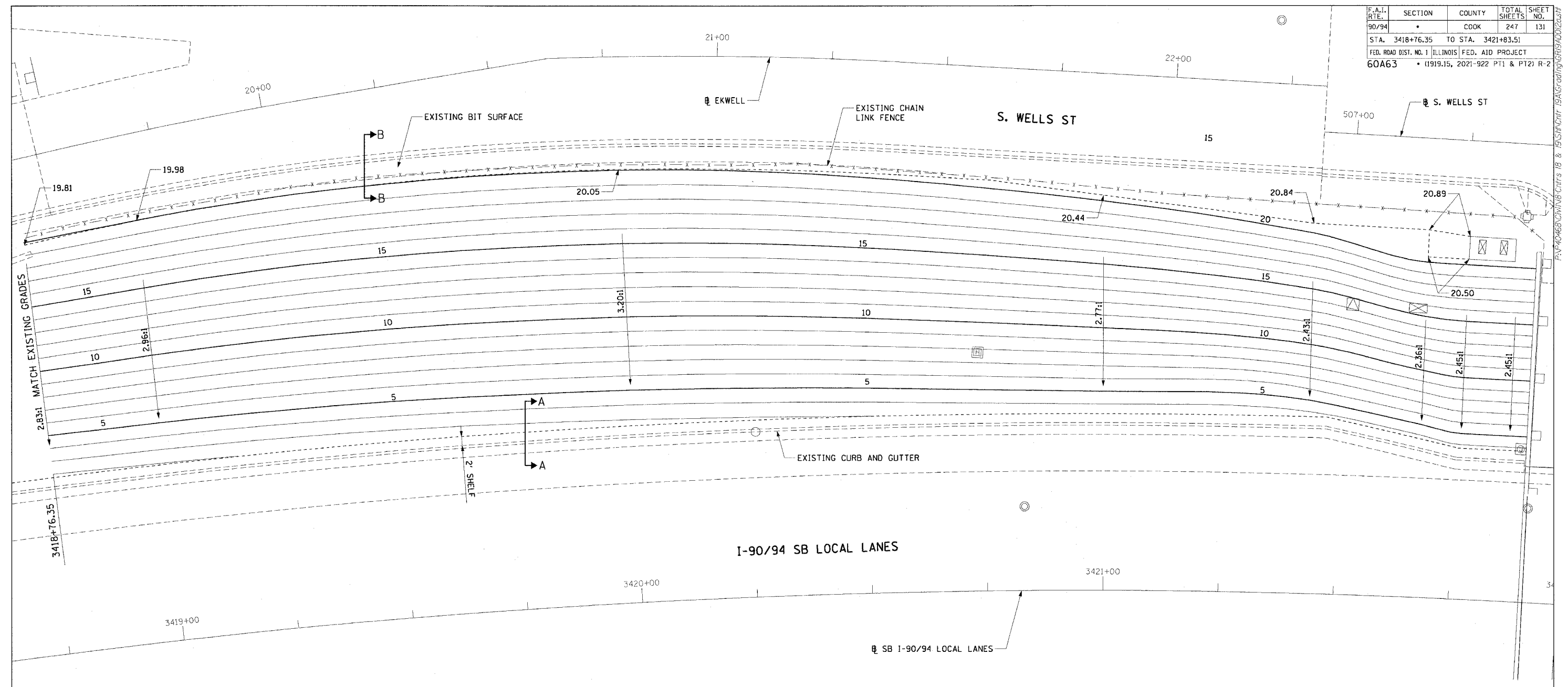
SCALE: 1"=50'
 DATE: June 9, 2006

DRAWN BY: PHP
 CHECKED BY: RMG

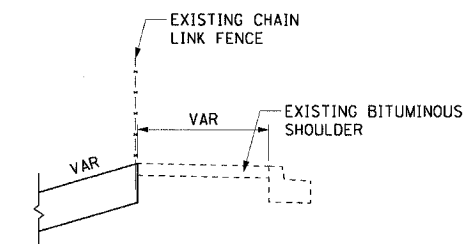


P:\P\0665 CIV\065 CIV\065 CIV\18 & 19\ST\CH\19\LA\landscaping\LA03A00-22.dwg
 6/27/2006 10:30:24 AM

F.A.I. RT.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	131
STA. 3418+76.35 TO STA. 3421+83.51				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				



SECTION A-A



SECTION B-B

GRADING ELEVATIONS		
STATION	OFFSET	ELEV
3418+76.35	89.69' LT	19.81
3419+00.00	92.08' LT	19.98
3420+00.00	94.50' LT	20.05
3421+00.00	86.13' LT	20.44
3421+43.71	80.70' LT	20.84
3421+67.64	74.21' LT	20.50
3421+67.64	80.11' LT	20.89

NOTES:
 1. ELEVATIONS ARE FOR FUTURE LOCATION OF FLUTED KNEE WALL CONSTRUCTED IN CONTRACT 62985.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

GRADING PLANS

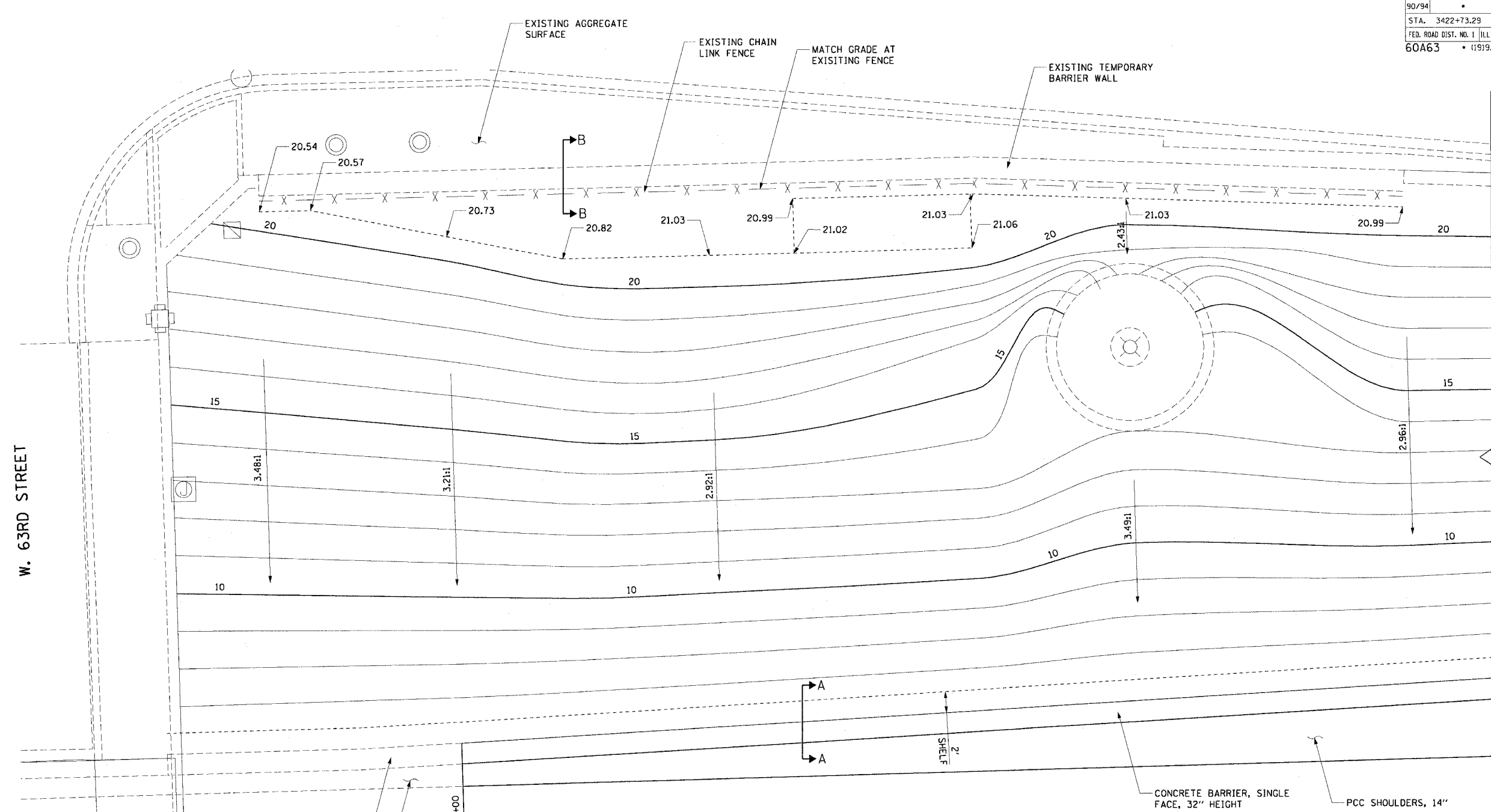
SCALE: 1"=10'
 DATE: June 9, 2006

DRAWN BY: NJH
 CHECKED BY: RMG

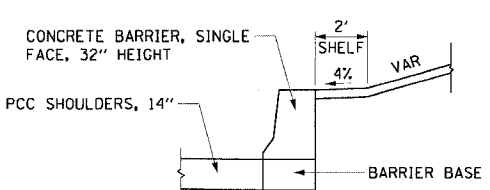


10/3/02 PW
 6/5/2006

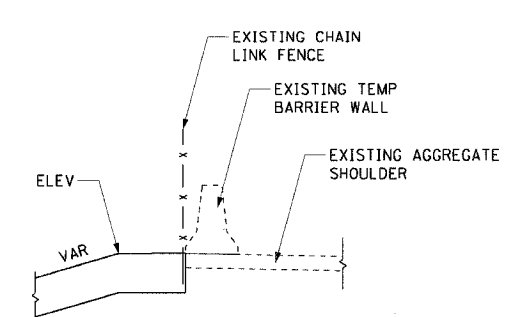
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	247	132
STA. 3422+73.29 TO STA. 3423+91.19				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				



W. 63RD STREET



SECTION A-A



SECTION B-B

STATION	OFFSET	ELEV
3422+82.21	81.49' LT	20.54
3423+00.00	78.59' LT	20.73
3423+11.01	76.12' LT	20.82
3423+25.00	76.07' LT	21.03
3423+33.06	76.03' LT	21.02
3423+50.00	76.03' LT	21.06
3423+64.77	80.33' LT	21.03
3423+91.14	78.74' LT	20.94

NOTE:
ELEVATIONS ARE FOR FUTURE LOCATION OF FLUTED KNEE WALL CONSTRUCTED IN CONTRACT 62985.

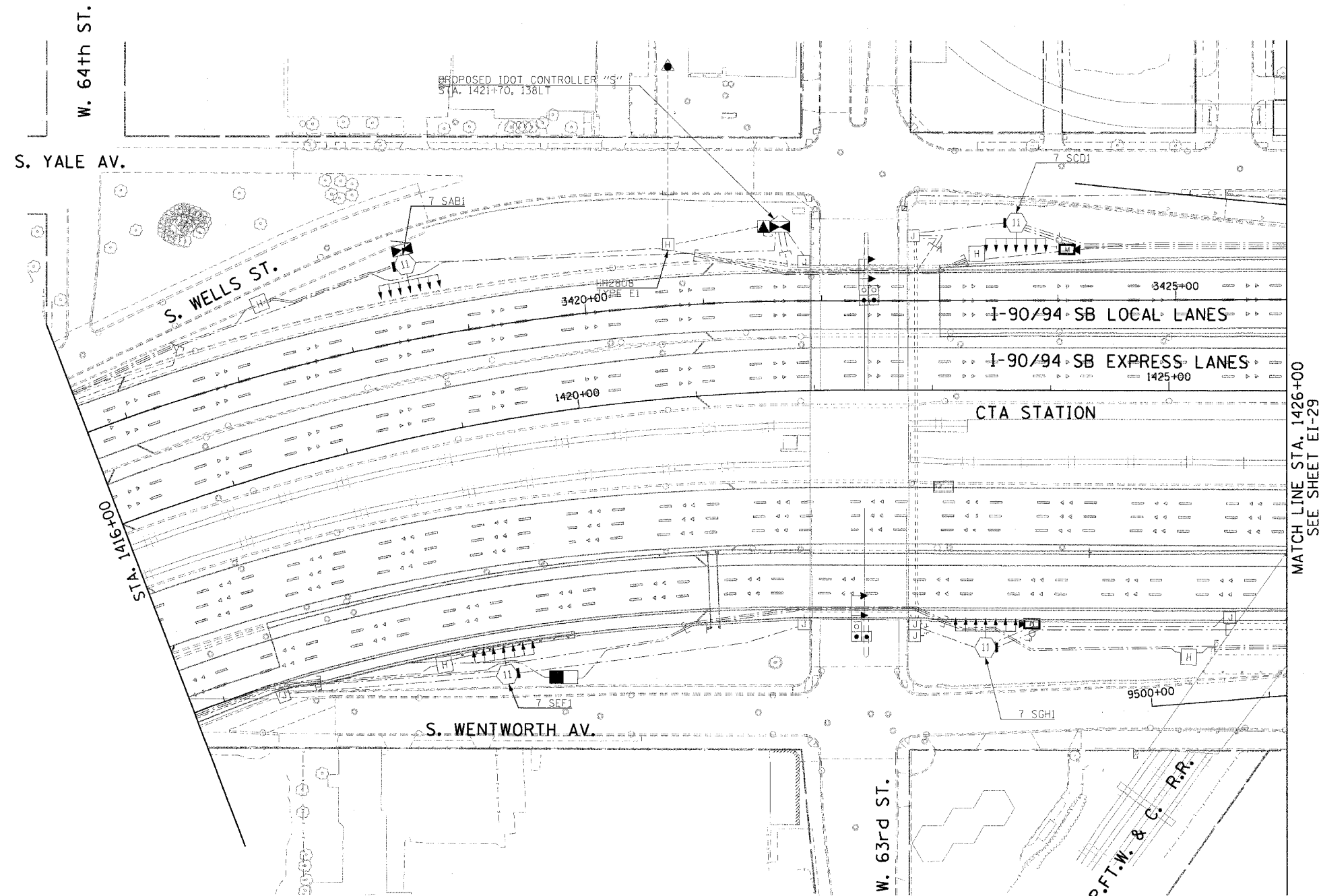
REVISIONS	
NAME	DATE

GR-2
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
GRADING PLANS
SCALE: 1"=5'
DATE: June 9, 2006
DRAWN BY: NJH
CHECKED BY: XXX

CTE | AECOM

6/9/2006 10:34:44 PM

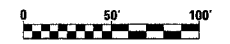
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	133
STA. 1416+00.00		TO STA. 1426+00.00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		(1919.15, 2021-922 PT1 & PT2) R-2		



NO WORK PROPOSED
ON THIS SHEET

MATCH LINE STA. 1426+00
SEE SHEET EI-29

CTE | AECOM



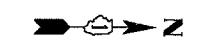
EI-28

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
ELECTRICAL INFRASTRUCTURE PLAN
SCALE: 1"=50'
DATE: June 9, 2006
DRAWN BY: HAR
CHECKED BY: JPC

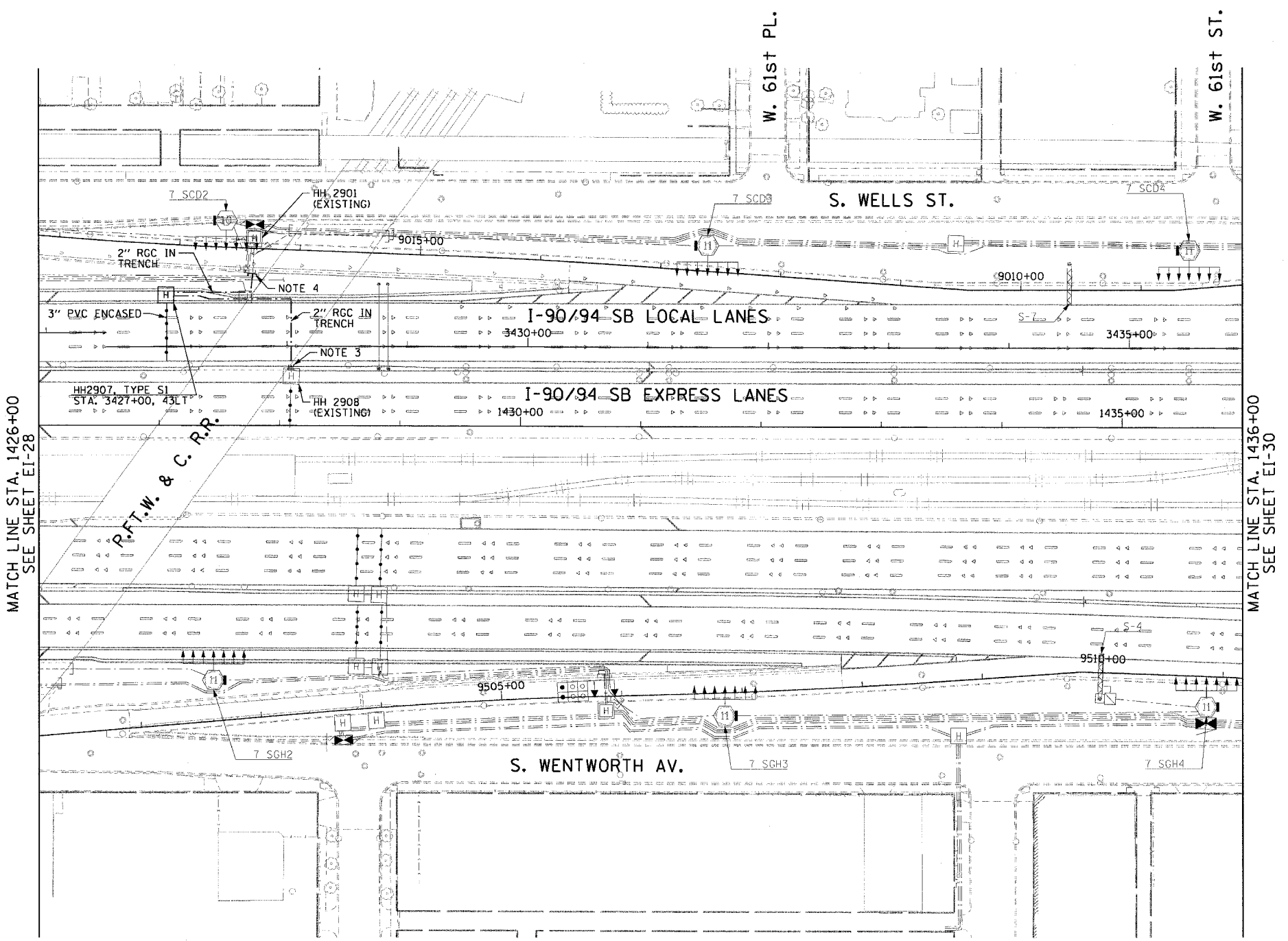
A:\P40468\elec\8-ctrls 18 & 19\central 190317\19020202.dwg 06/09/2006 03:03:34 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	134
STA. 1426+00.00		TO STA. 1436+00.00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				



NOTES:

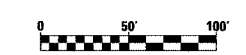
- SEE DRAWINGS EI-100 AND EI-101 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- SEE DRAWINGS EI-102, EI-103 AND EI-104 FOR TYPICAL HANDHOLE INSTALLATION DETAILS.
- THE CONTRACTOR SHALL LOCATE THE EXISTING CONDUIT STUB-OUTS INSTALLED IN IDOT CONTRACT NO. 62302 AND CONNECT THE PROPOSED CONDUITS.
- THE CONTRACTOR SHALL LOCATE THE EXISTING CONDUIT STUB-OUT INSTALLED IN IDOT CONTRACT NO. 62693 AND CONNECT THE PROPOSED CONDUIT.
- UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED NEW ITEMS AND WORK.



MATCH LINE STA. 1426+00
SEE SHEET EI-28

MATCH LINE STA. 1436+00
SEE SHEET EI-30

P.F.T.W. & C. R.P.



EI-29

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

ELECTRICAL INFRASTRUCTURE PLAN

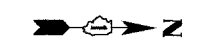
SCALE: 1"=50'
DATE: June 9, 2006

DRAWN BY: HAR
CHECKED BY: JPC

CTE | AECOM

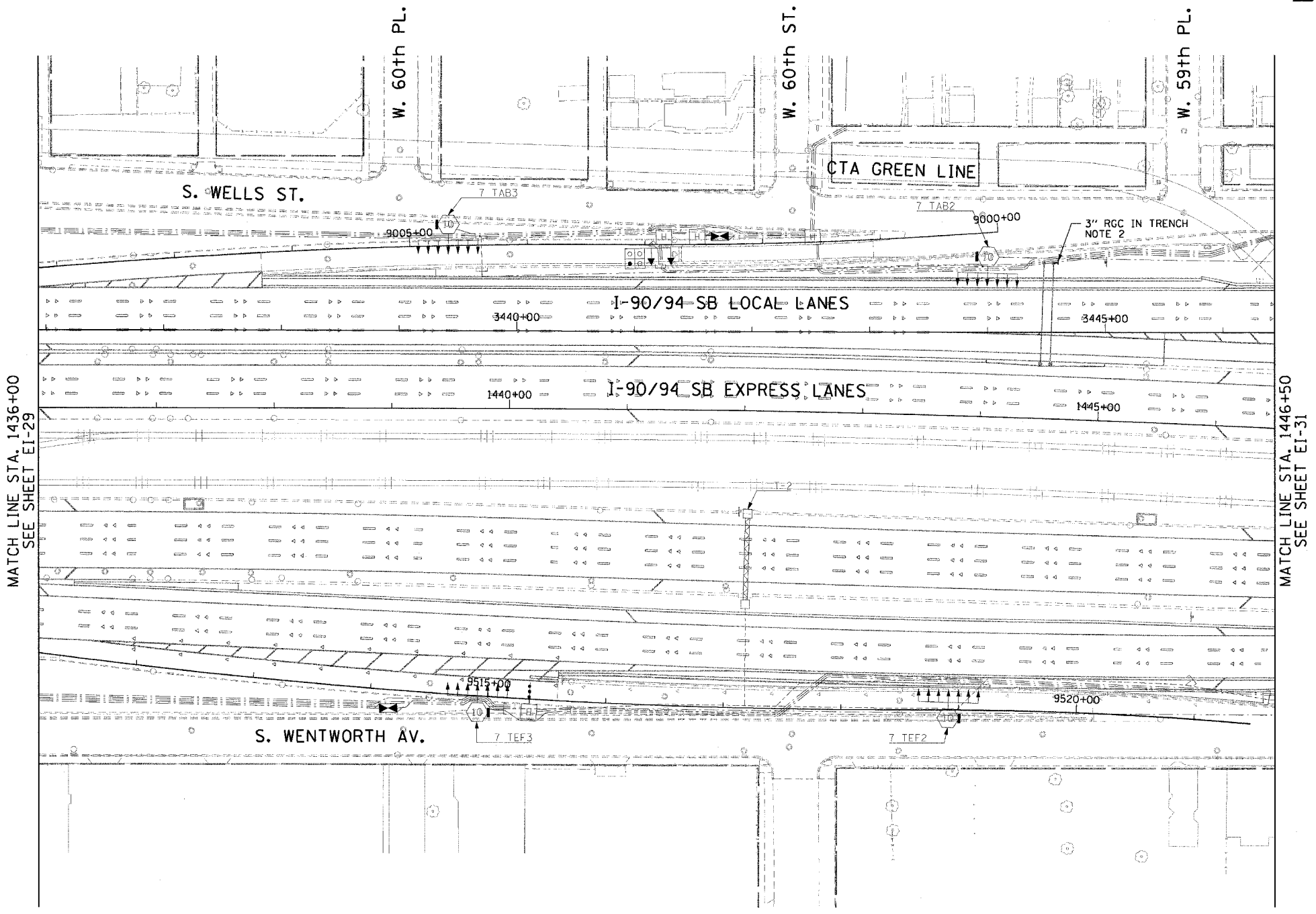
06/09/2006 03:03:36 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	135
STA. 1436+00.00 TO STA. 1446+50.00				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				



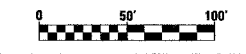
NOTES:

1. SEE DRAWINGS EI-100 AND EI-101 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
2. EXTEND CONDUIT STUB-OUT 2' BEYOND THE SIGN STRUCTURE FOUNDATION. CAP FOR FUTURE USE.
3. UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED NEW ITEMS AND WORK.



MATCH LINE STA. 1436+00
SEE SHEET EI-29

MATCH LINE STA. 1446+50
SEE SHEET EI-31



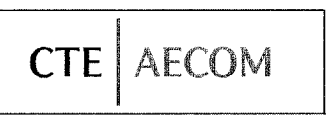
EI-30

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
ELECTRICAL INFRASTRUCTURE PLAN

SCALE: 1"=50'
DATE: June 9, 2006

DRAWN BY: HAR
CHECKED BY: JPC

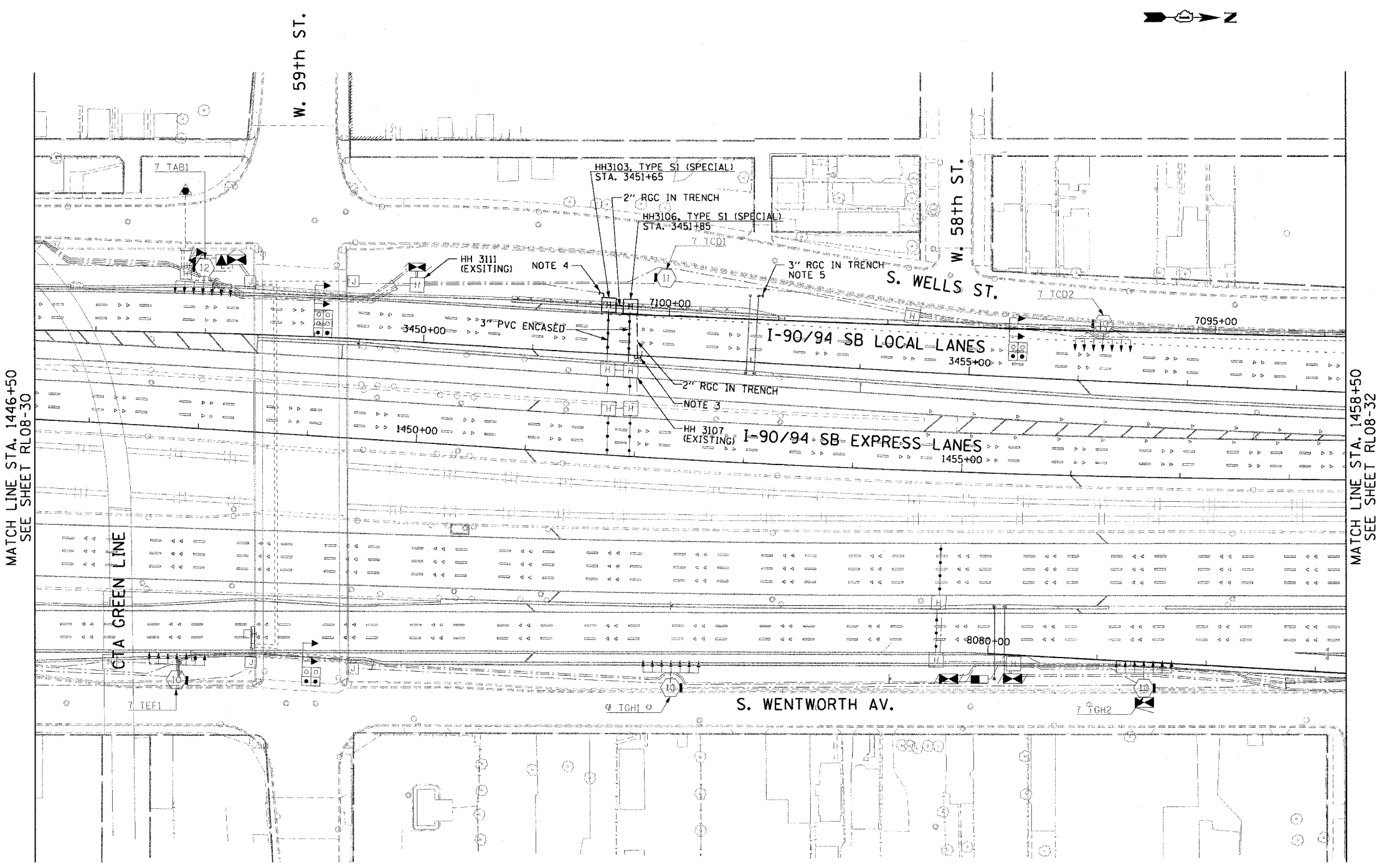


03/02/2006 03:03:37 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	136
STA. 1446+50.00 TO STA. 1458+50.00				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				

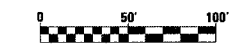
NOTES:

1. SEE DRAWINGS EI-100 AND EI-101 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
2. SEE DRAWING EI-102, EI-103 AND EI-104 FOR TYPICAL HANDHOLE INSTALLATION DETAILS.
3. THE CONTRACTOR SHALL LOCATE THE EXISTING CONDUIT STUB-OUT INSTALLED IN IDOT CONTRACT NO. 62302 AND CONNECT THE PROPOSED CONDUIT.
4. THE CONTRACTOR SHALL PROVIDE 5' OF 2" RGC CONDUIT IN TRENCH FROM THE WEST SIDE OF HH3103 PAST THE PROPOSED GUARD RAIL FOR CONNECTION TO A 2" CNC DUCT FROM HH3111 THAT IS INSTALLED IN CONTACT 62583.
5. EXTEND CONDUIT STUB-OUT 2' BEYOND THE SIGN STRUCTURE FOUNDATION. CAP FOR FUTURE USE.
6. UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED NEW ITEMS AND WORK.



MATCH LINE STA. 1446+50
SEE SHEET RL08-30

MATCH LINE STA. 1458+50
SEE SHEET RL08-32



EI-31

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

ELECTRICAL INFRASTRUCTURE PLAN

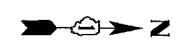
SCALE: 1"=50'
DATE: June 9, 2006

DRAWN BY: HAR
CHECKED BY: JPC

CTE | AECOM

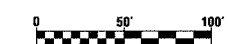
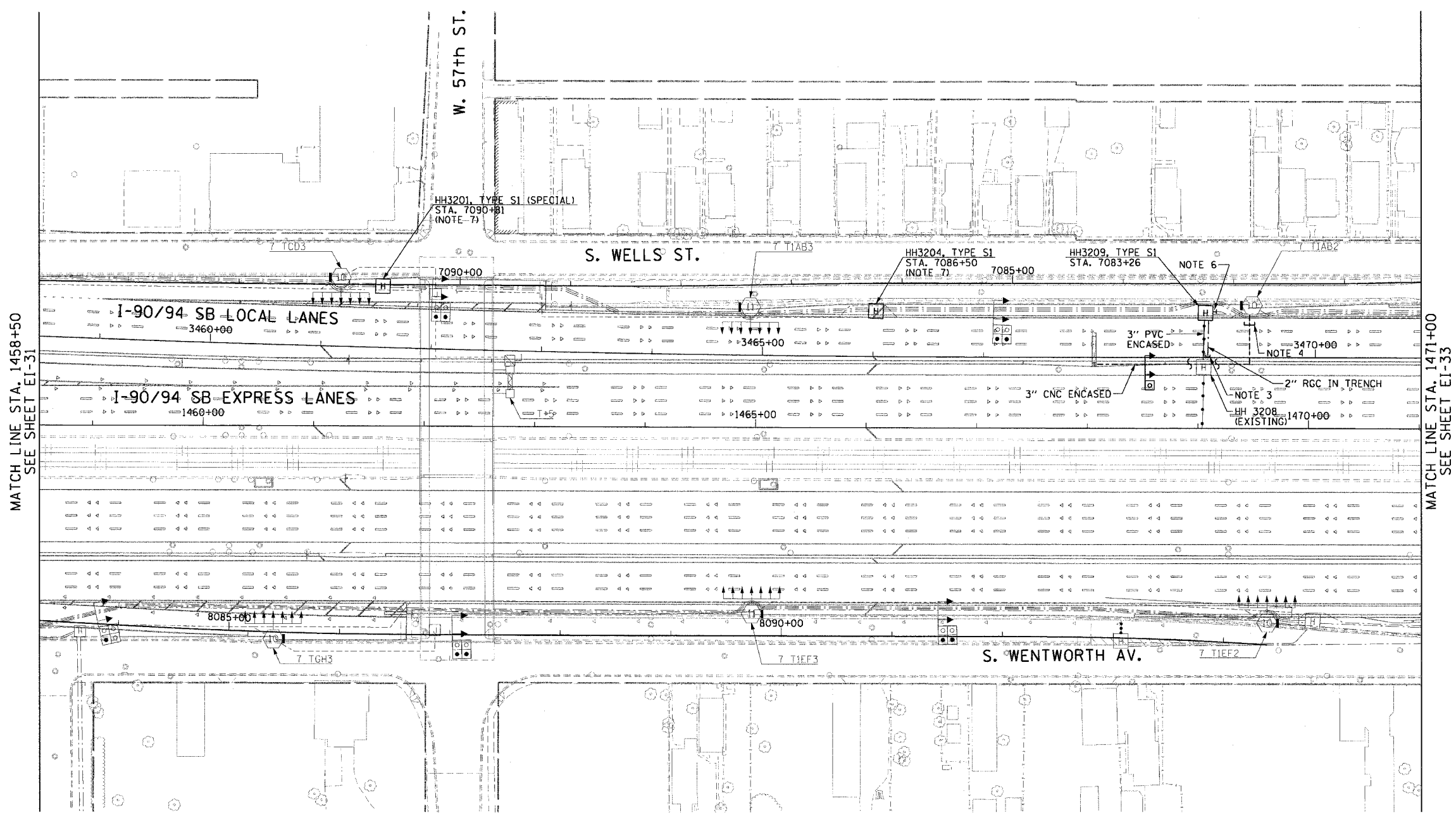
06/02/2006 03:03:39 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	137
STA. 1458+50.00 TO STA. 1471+00.00				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				



NOTES:

- SEE DRAWINGS EI-100 AND EI-101 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- SEE DRAWING EI-102, EI-103 AND EI-104 FOR TYPICAL HANDHOLE INSTALLATION DETAILS.
- THE CONTRACTOR SHALL LOCATE THE EXISTING CONDUIT STUB-OUT INSTALLED IN IDOT CONTRACT NO. 62302 AND CONNECT THE PROPOSED CONDUIT.
- THE CONTRACTOR SHALL LOCATE THE EXISTING 4" CNC CONDUIT STUB-OUT INSTALLED IN IDOT CONTRACT NO. 62586 AND CONNECT THE PROPOSED CONDUIT. PROVIDE 4" TO 3" REDUCER FITTING.
- UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED NEW ITEMS AND WORK.
- THE CONTRACTOR SHALL LOCATE THE 2" RGC CONDUIT STUB-OUT INSTALLED IN CONTRACT NO. 62586 AND CONTINUE THE 2" RGC TO HH3209.
- THE CONTRACTOR SHALL INSTALL THE HH IN THE APPROXIMATE LOCATION SHOWN AND EXTEND EXISTING CONCRETE ENCASED DUCTS INSTALLED IN CONTRACT 62586 TO THE NEW HH. SEE DRAWINGS EI-106 AND EI-107 FOR INSTALLATION DETAILS.



EI-32

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
ELECTRICAL INFRASTRUCTURE PLAN
 SCALE: 1"=50'
 DATE: June 9, 2006
 DRAWN BY: HAR
 CHECKED BY: JPC

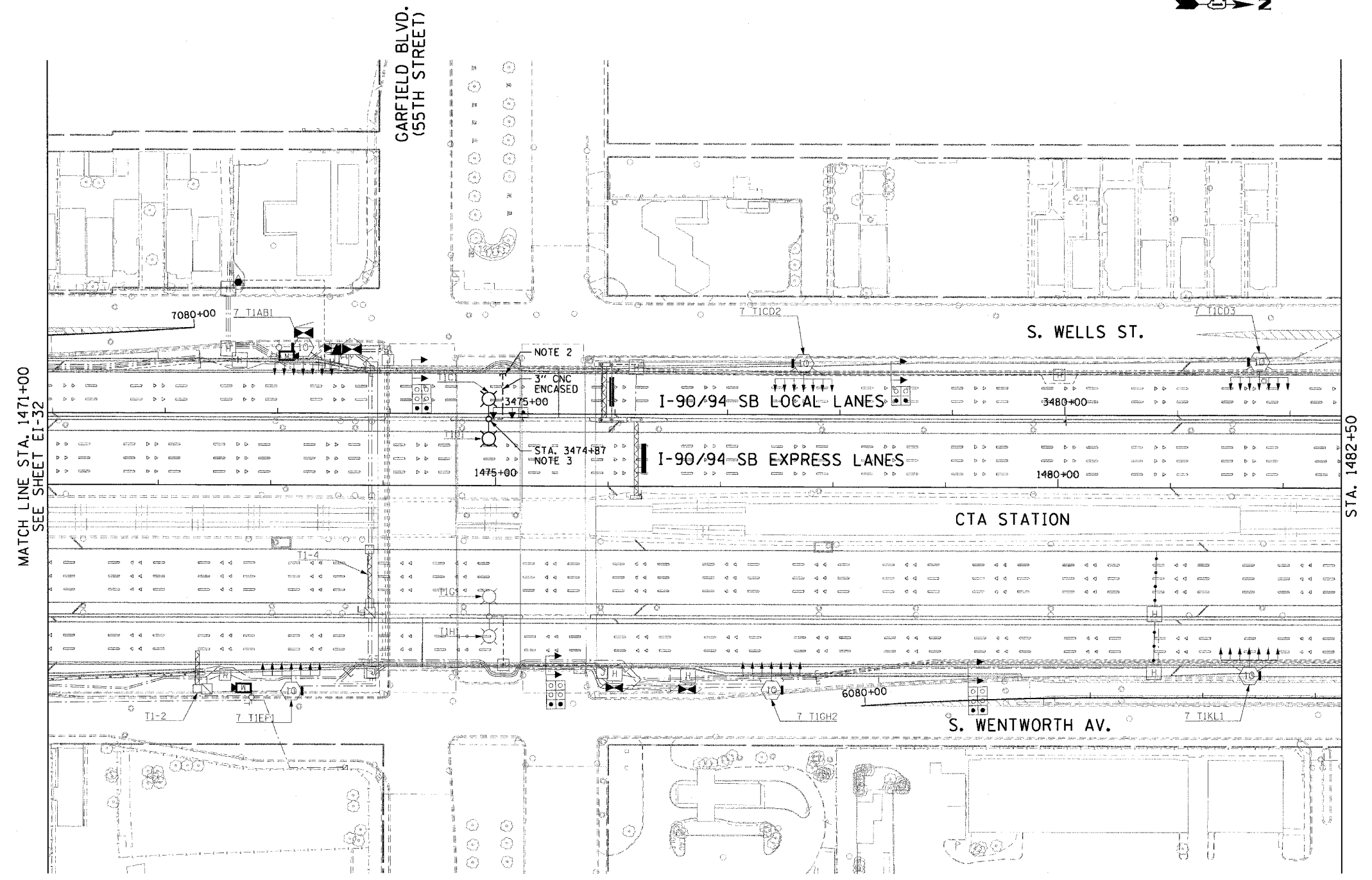
CTE | AECOM

06/02/2006 03:03:41 PM

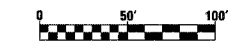
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	138
STA. 1471+00.00		TO STA. 1482+50.00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				

NOTES:

- SEE DRAWINGS EI-100 AND EI-101 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- THE CONTRACTOR SHALL LOCATE THE EXISTING CONDUIT STUB-OUT INSTALLED IN IDOT CONTRACT NO. 62586 AND CONNECT THE PROPOSED CONDUIT.
- THE CONTRACTOR SHALL INSTALL THE LIGHT POLE FOUNDATION ONLY. LIGHT POLE AND LUMINAIRES TO BE INSTALLED UNDER CONTRACT 62583. SEE SHEET EI-108 FOR FOUNDATION DETAIL.
- UNLESS NOTED OTHERWISE, ALL ITEMS AND WORK SHOWN IN HEAVY LINE WEIGHT ON THIS DRAWING ARE PROPOSED NEW ITEMS AND WORK.



CTE | AECOM



EI-33

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
ELECTRICAL INFRASTRUCTURE PLAN
 SCALE: 1"=50'
 DATE: June 9, 2006
 DRAWN BY: HAR
 CHECKED BY: JPC

06/09/2006 03:03:42 PW

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	247	139
STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		
60A63		• (1919.15, 2021-922 PT1 & PT2) R-2		

ELECTRICAL SYMBOLS FOR PROPOSED WORK

GENERAL ELECTRICAL CALLOUTS

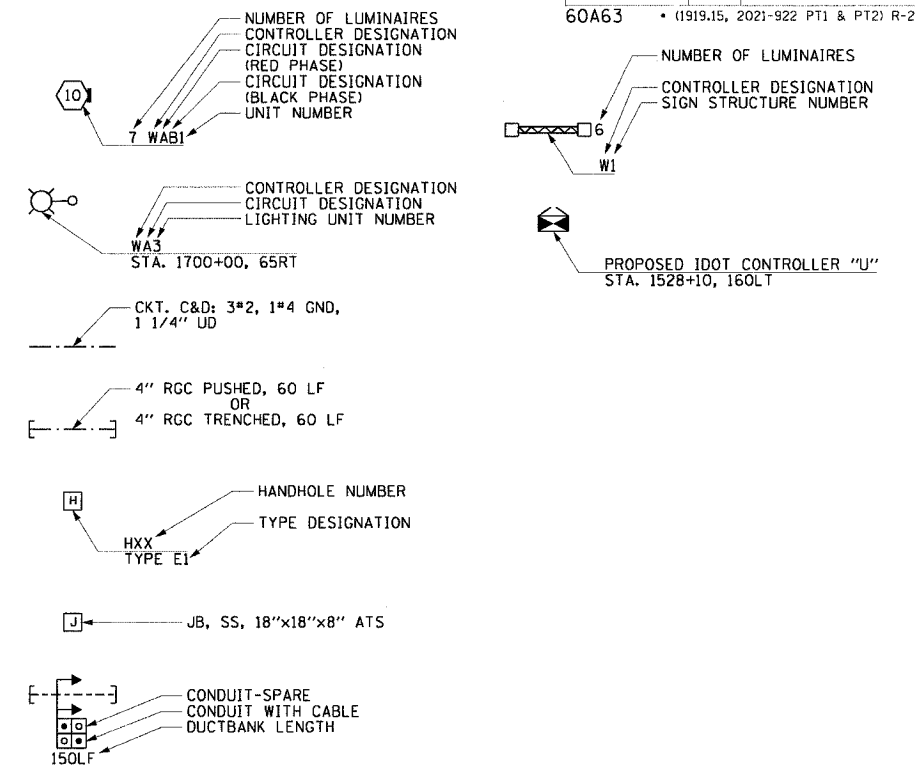
- LIGHT TOWER FOUNDATION
NUMBER INSIDE HEXAGON INDICATES TOWER TYPE
HANDHOLE LOCATION AS INDICATED
TOWER INSTALLED BY OTHERS,
UNDER A SEPARATE CONTRACT

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 (CLASS 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 B14001
TYPE E2: PC CONCRETE-HEAVY DUTY, 22"x22"x30",
IDOT STANDARD B14001
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
- TEMPORARY LIGHTED SIGN STRUCTURE-TRUSS
TYPE, QUANTITY OF LUMINAIRES AS SHOWN
ON SIGNING PLANS
- LIGHTED SIGN STRUCTURE-BRIDGE MOUNT TYPE
- DYNAMIC MESSAGE SIGN
- FLASHING BEACON SIGN
- CLOSED CIRCUIT TELEVISION CAMERA
- MICROWAVE DETECTOR
- 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
- ELECTRIC UTILITY POLE
- CCTV CAMERA POLE
- PULLING PEDESTAL

- 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 PULLING PEDESTAL

- 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. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

ELECTRICAL SYMBOLS

SCALE: NOT TO SCALE
DATE: June 9, 2006

DRAWN BY: HAR
CHECKED BY: JPC



A:\P\0606\electrical\chrs 18 & 19\contract 190319\190302.dwg

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.
90/94	•	COOK	247	140
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
60A63	•	(1919.15, 2021-922 PT1 & PT2) R-2		

A:\p\40465\elec\VB\cmts\18 & 19\contract\190318\190318.dwg



EI-101

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
ELECTRICAL ABBREVIATIONS
 SCALE: NOT TO SCALE DRAWN BY: HAR
 DATE: June 9, 2006 CHECKED BY: JPC

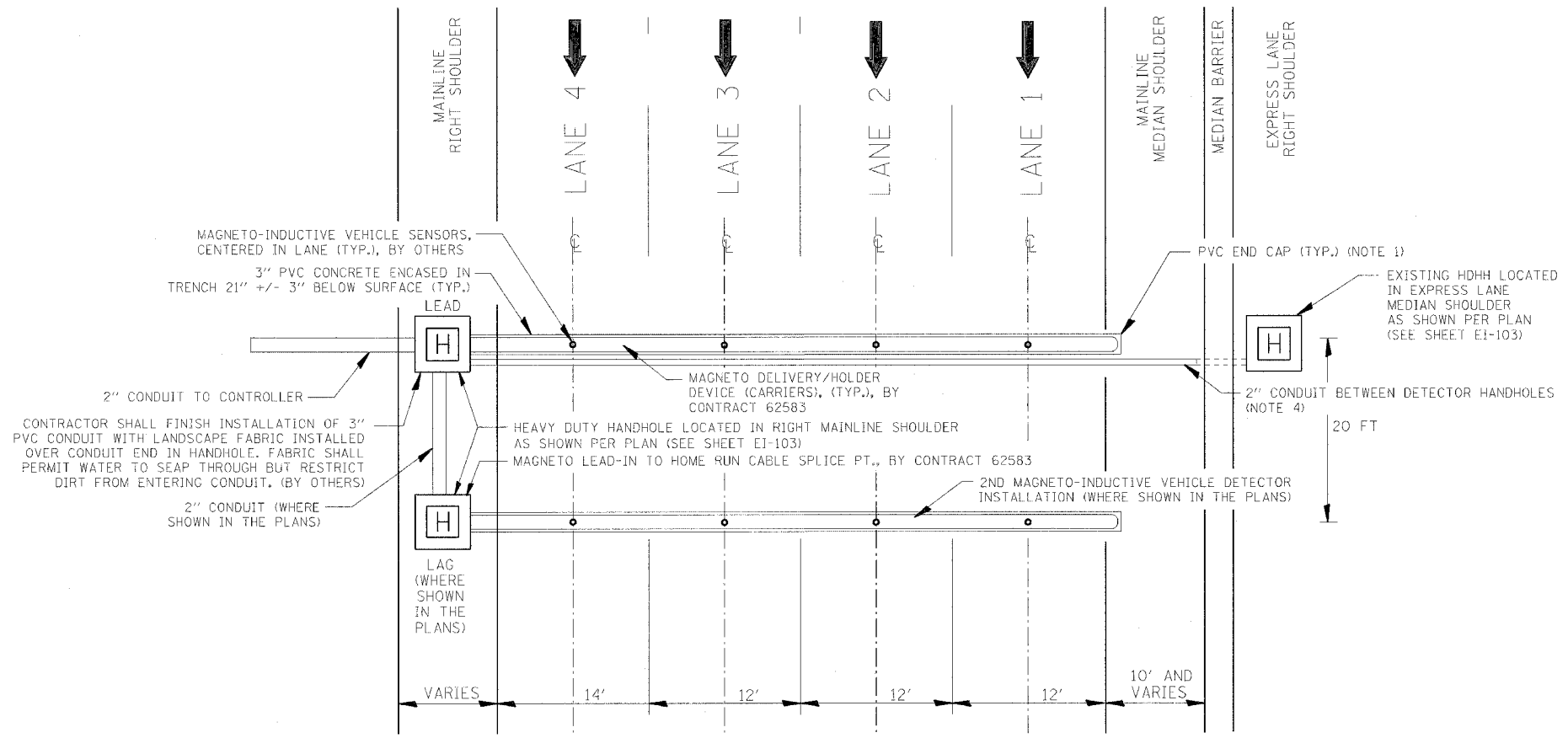
06/09/2006 03:03:29 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	141
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		* (1919.15, 2021-922 PT1 & PT2) R-2		

P:\40468\elect\8-ent's 18 & 19\contract 19035\19035.dwg

NOTES:

1. CONDUIT END CAP TO BE PRESS FITTED (NO ADHESIVE).
2. CONDUIT TO EXTEND 2-3 IN. INTO HANDHOLE.
3. FOR 3" PVC CONCRETE ENCASED IN TRENCH DETAIL, SEE SHEET EI-103. FOR HANDHOLE DETAIL, SEE SHEET EI-104.
4. CONNECT PROPOSED 2" RGC TO EXISTING 2" RGC (SEE ELECTRICAL INFRASTRUCTURE SHEETS FOR EXISTING CONDUIT LOCATIONS AND ELEVATIONS).



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

EI-102

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
**TYPICAL LOCAL LANE
 DETECTOR STATION LAYOUT**

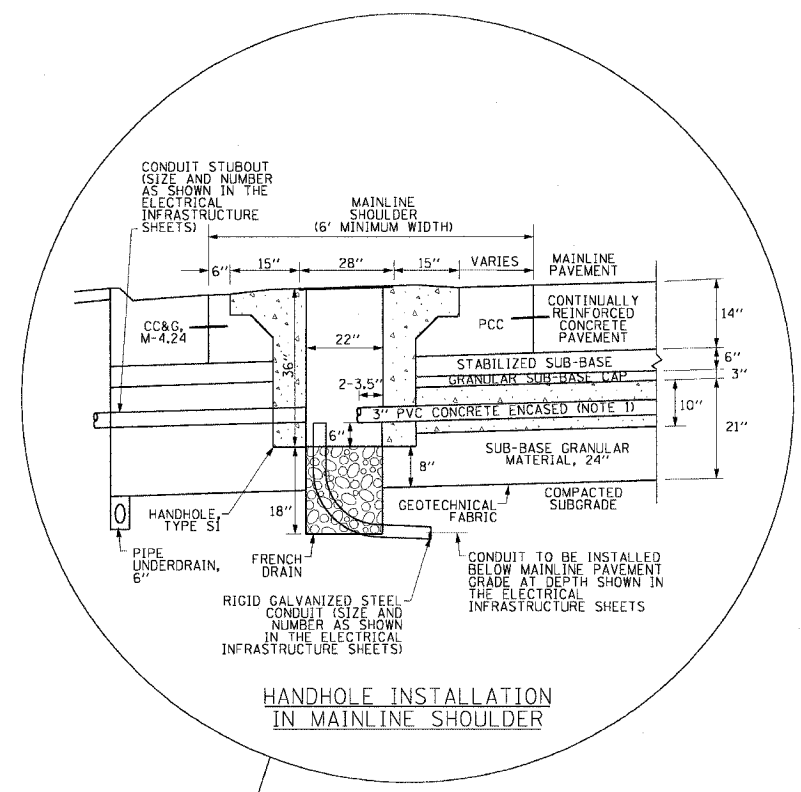
SCALE: NOT TO SCALE
 DATE: June 9, 2006

DRAWN BY: HAR
 CHECKED BY: JPC

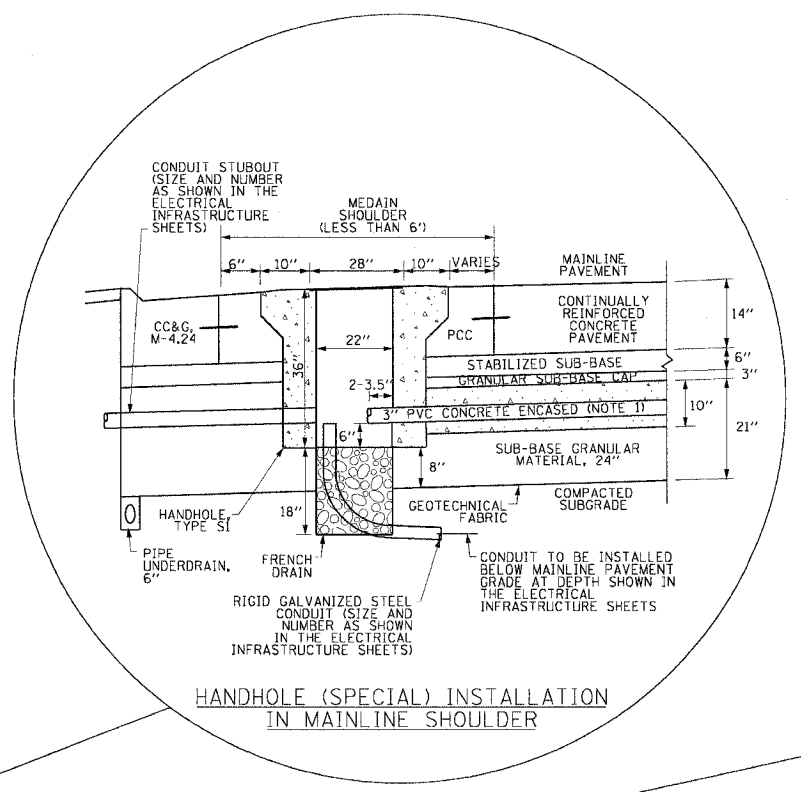


06/02/2006 03:03:29 PM

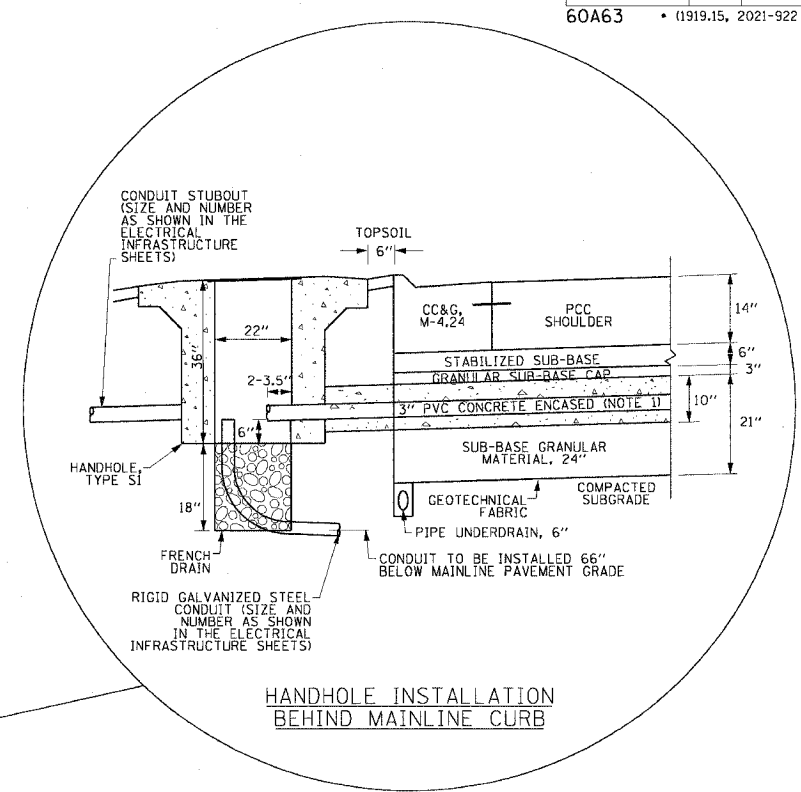
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	142
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT			
60A63	• (1919.15, 2021-922 PT1 & PT2) R-2			



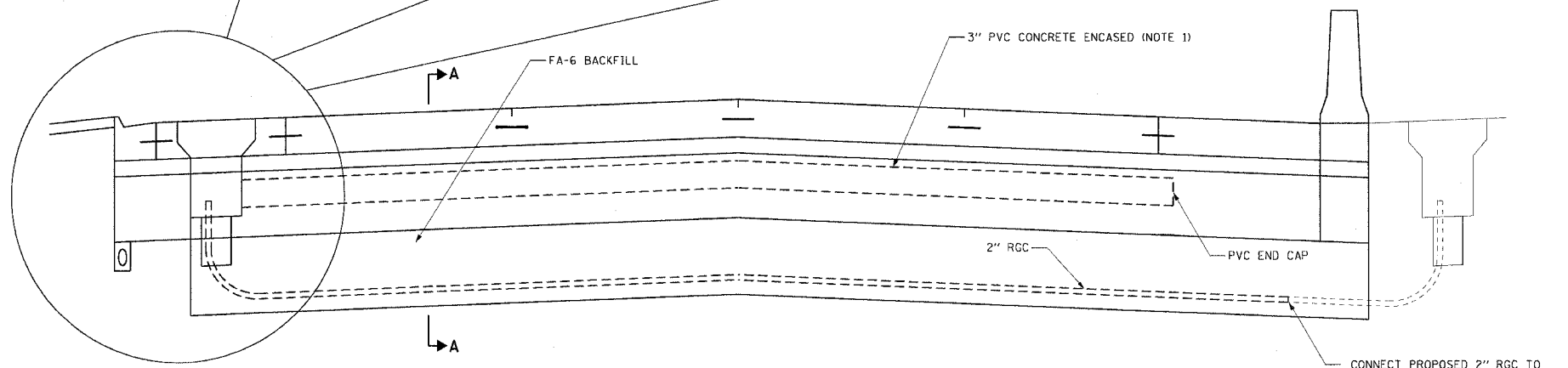
HANDHOLE INSTALLATION IN MAINLINE SHOULDER



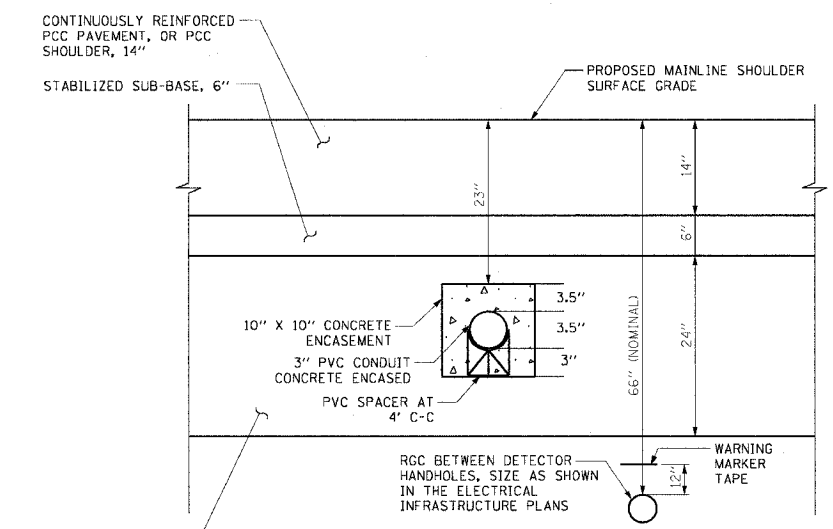
HANDHOLE (SPECIAL) INSTALLATION IN MAINLINE SHOULDER



HANDHOLE INSTALLATION BEHIND MAINLINE CURB



TYPICAL MAINLINE DETECTOR INSTALLATION



SECTION A-A TYPICAL DETECTOR CONDUIT INSTALLATION

- NOTES
1. 3" PVC CONCRETE ENCASED CONDUIT IS REQUIRED ONLY WHERE SHOWN ON THE PLAN DRAWINGS. WHEN INSTALLED, THE CONDUIT MUST MAINTAIN THE SAME ANGLE AS THE PAVEMENT THROUGHOUT ITS ENTIRE LENGTH.
 2. FOR HANDHOLE DETAIL SEE SHEET EI-104.
 3. WHEN INSTALLING CONDUIT NEAR OR THROUGH UNDERDRAIN GEOTECHNICAL FABRIC, THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY AND UNIFORMITY OF THE UNDERDRAIN FABRIC THROUGH OVERLAP TO THE SATISFACTION OF THE ENGINEER.



REVISIONS	
NAME	DATE

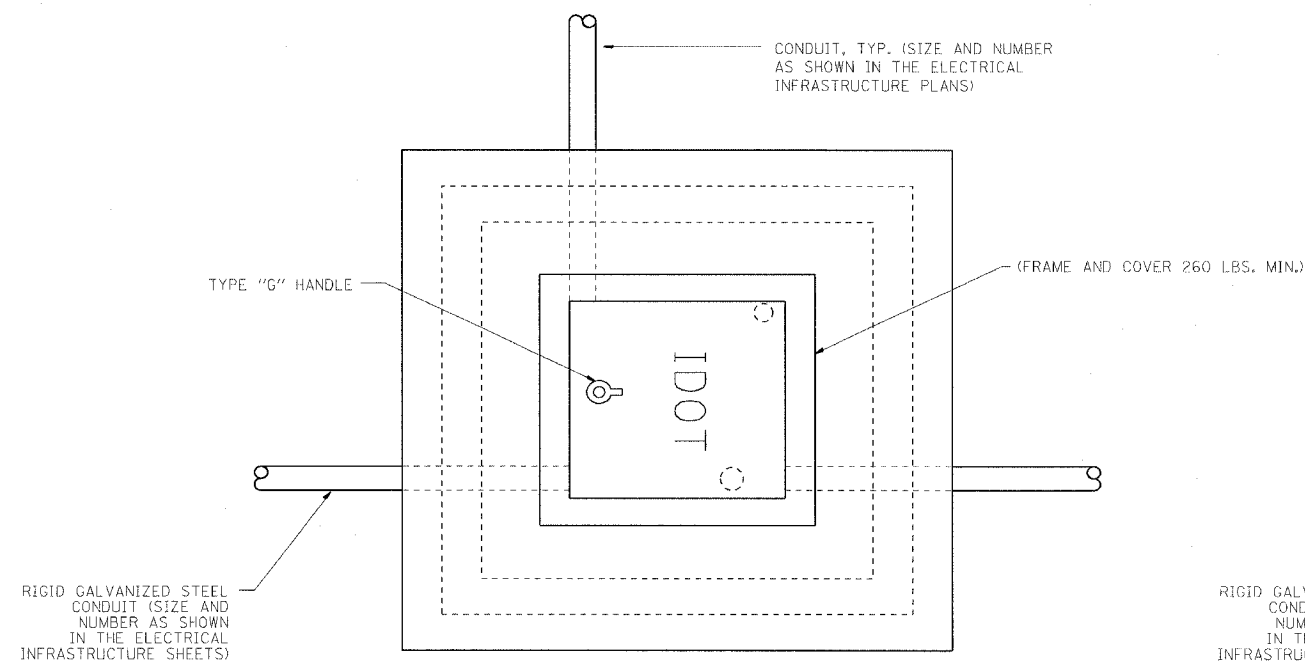
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
 TYPICAL DETECTOR
 INSTALLATION

SCALE: NOT TO SCALE
 DATE: June 9, 2006

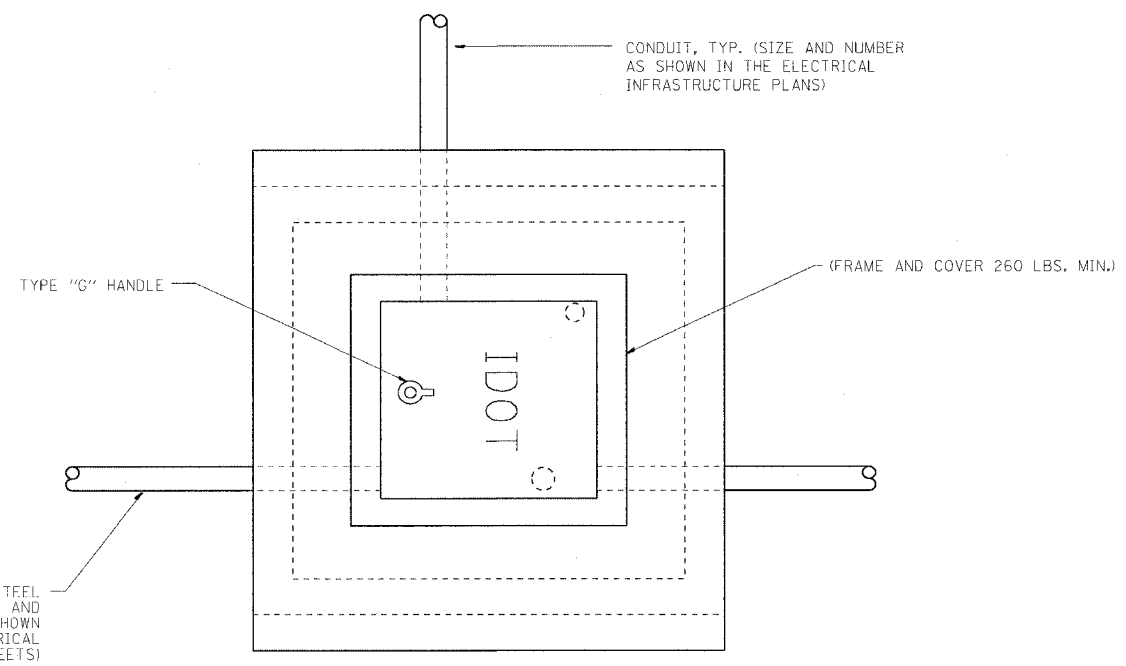
DRAWN BY: HAR
 CHECKED BY: JPC

P:\04068\electrical\cmts 18 & 19\contract 190\stn\9000\2006\

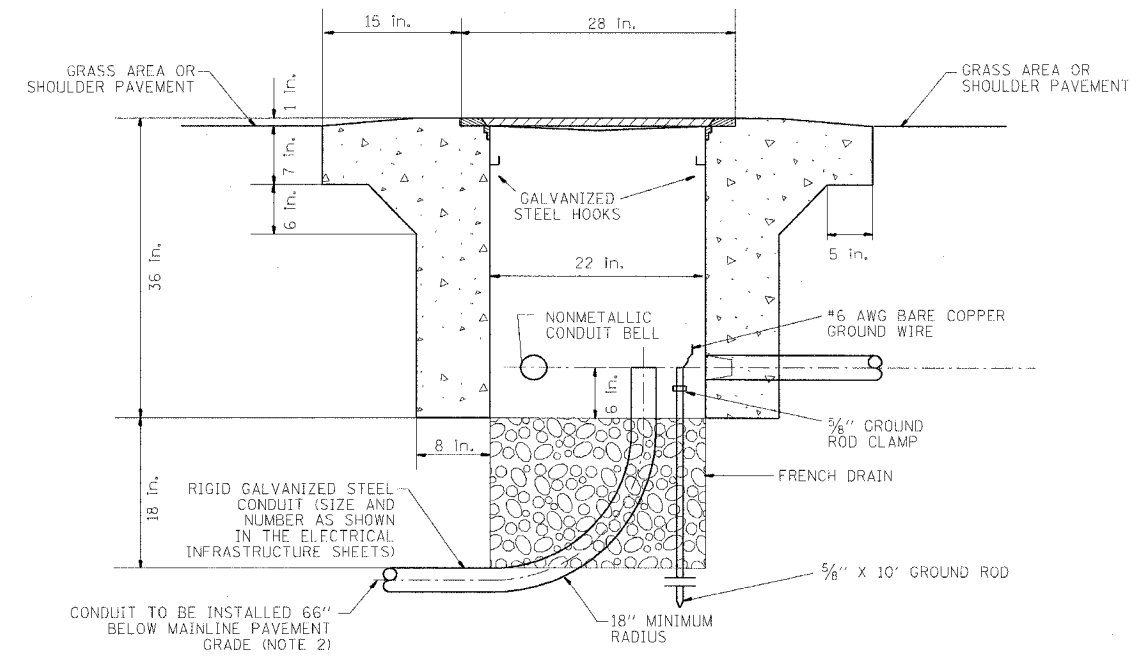
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	143
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
60A63	* (1919.15, 2021-922 PT1 & PT2) R-2			



PLAN



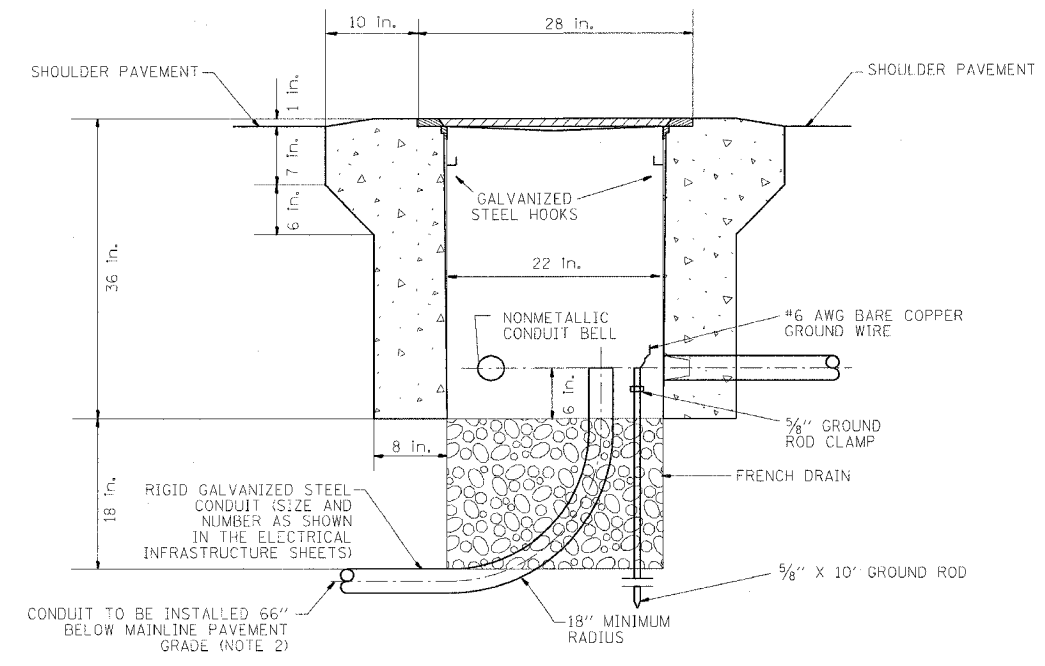
PLAN



ELEVATION

**PC CONCRETE
HEAVY DUTY HANDHOLE, TYPE S1**

(FOR INSTALLATION IN
SHOULDER WIDER THAN 6' OR
BEHIND PAVED AREA)



ELEVATION

**PC CONCRETE
HEAVY DUTY HANDHOLE, TYPE S1 (SPECIAL)**

(FOR INSTALLATION IN
SHOULDER NARROWER
THAN 6', 4' MINIMUM WIDTH)

- NOTE:**
1. 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).
 2. CONDUIT TO BE INSTALLED BELOW MAINLINE PAVEMENT WHERE SHOWN IN THE ELECTRICAL INFRASTRUCTURE PLANS (SEE SHEET EI-103).

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
**PC CONCRETE - HEAVY DUTY HANDHOLE
DETAIL, TYPE S1 AND
TYPE S1 SPECIAL**

SCALE: NOT TO SCALE
DATE: June 9, 2006

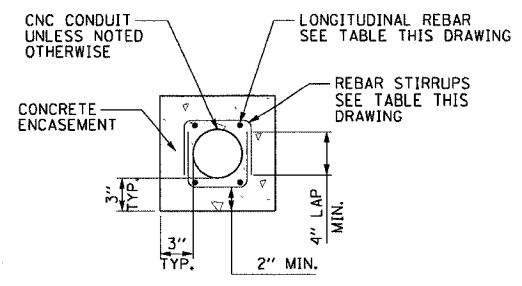
DRAWN BY: HAR
CHECKED BY: JPC



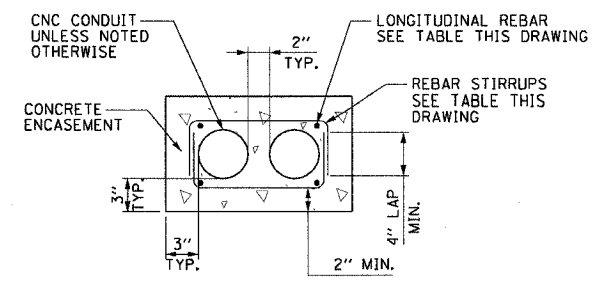
EI-104

03/03/30 PH

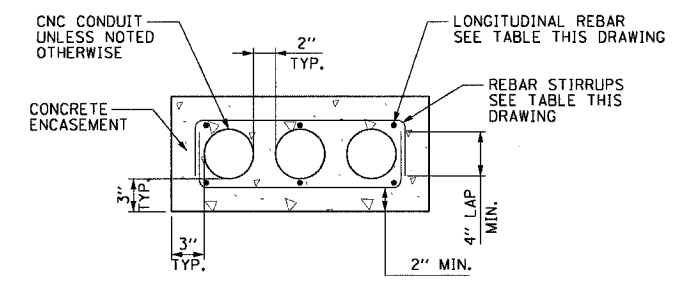
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	144
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
60A63	* (1919.15, 2021-922 PT1 & PT2) R-2			



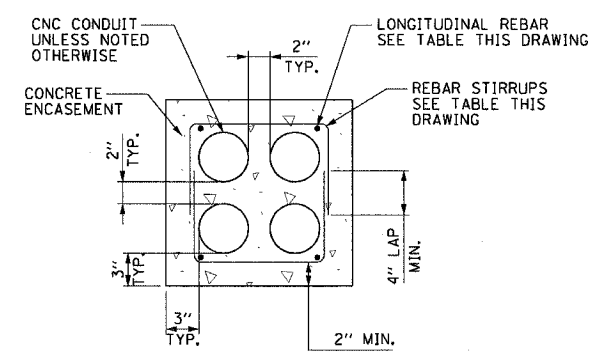
**1x1 DUCTBANK DETAIL-
IN REINFORCED CONCRETE**
NOT TO SCALE



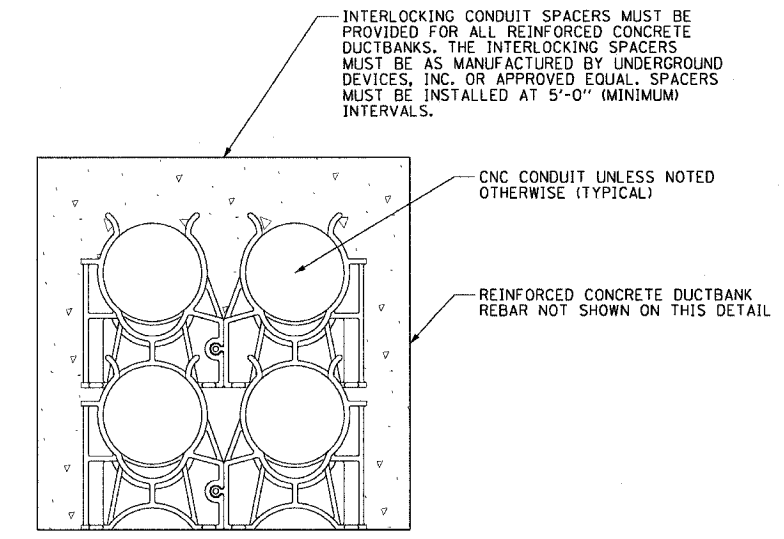
**2x1 DUCTBANK DETAIL-
IN REINFORCED CONCRETE**
NOT TO SCALE



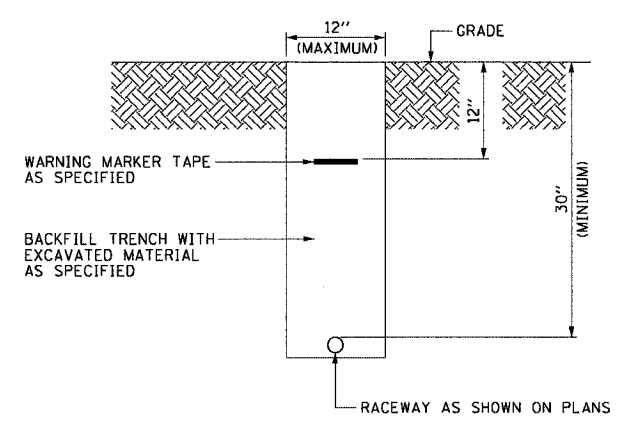
**3x1 DUCTBANK DETAIL-
IN REINFORCED CONCRETE**
NOT TO SCALE



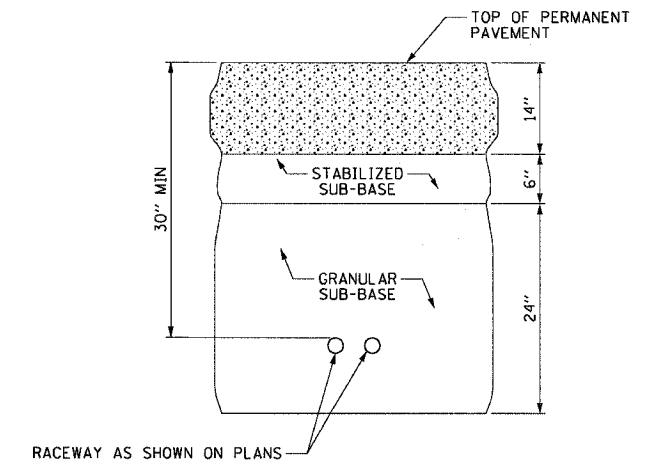
**2x2 DUCTBANK DETAIL-
IN REINFORCED CONCRETE**
NOT TO SCALE



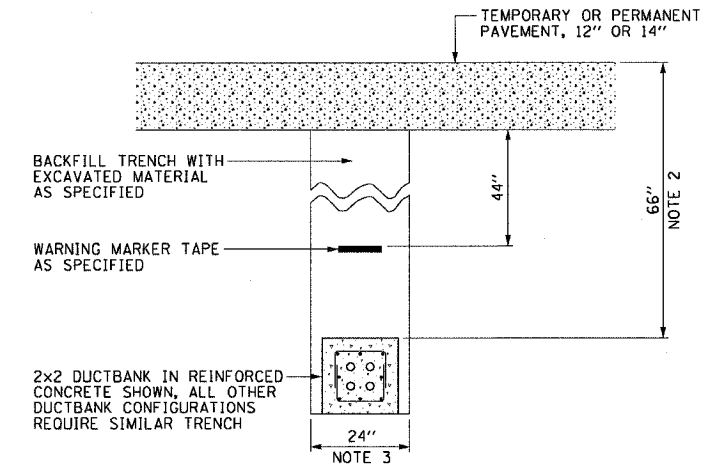
INTERLOCKING CONDUIT SPACER DETAIL
NOT TO SCALE



**TYPICAL ELECTRICAL
CONDUIT IN UNPAVED AREA**
NOT TO SCALE



**TYPICAL SURVEILLANCE
CONDUIT UNDER PERMANENT PAVEMENT**
NOT TO SCALE



**TYPICAL ELECTRICAL
DUCTBANK UNDER PAVEMENT**
NOT TO SCALE

NOTES:

- SEE DRAWINGS EI-100 AND EI-101 FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS.
- PROVIDE MINIMUM CLEARANCE SHOWN FROM TOP OF DUCTBANK TO FINISHED GRADE FOR ALL DUCTBANKS, REGARDLESS OF SIZE. CONTRACTOR MUST INSTALL DUCTBANKS SUCH THAT THEY WILL CLEAR ALL UNDERGROUND OBSTACLES.
- TRENCH MUST HAVE MINIMUM WIDTH SHOWN FOR ALL DUCTBANKS DETAILED ON THIS DRAWING. THE CONTRACTOR MUST INCREASE TRENCH WIDTH FOR ADDITIONAL CONDUITS, AS DIRECTED BY THE COMMISSIONER, AT NO ADDITIONAL COST.
- NOT ALL DUCTBANK CONFIGURATIONS ARE SHOWN. ALL DUCTBANKS INSTALLED UNDER THIS CONTRACT WILL CONFORM TO THE TYPICAL SPACINGS SHOWN ON THIS DRAWING.

DUCTBANK CONCRETE CROSS-SECTIONAL AREA SQ. INCHES	LONGITUDINAL REBAR	REBAR STIRRUPS
	BARS	
LESS THAN 450	#4	#3 AT 12" SPACING
451 TO 650	#5	#3 AT 12" SPACING
GREATER THAN 651	#6	#3 AT 12" SPACING

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

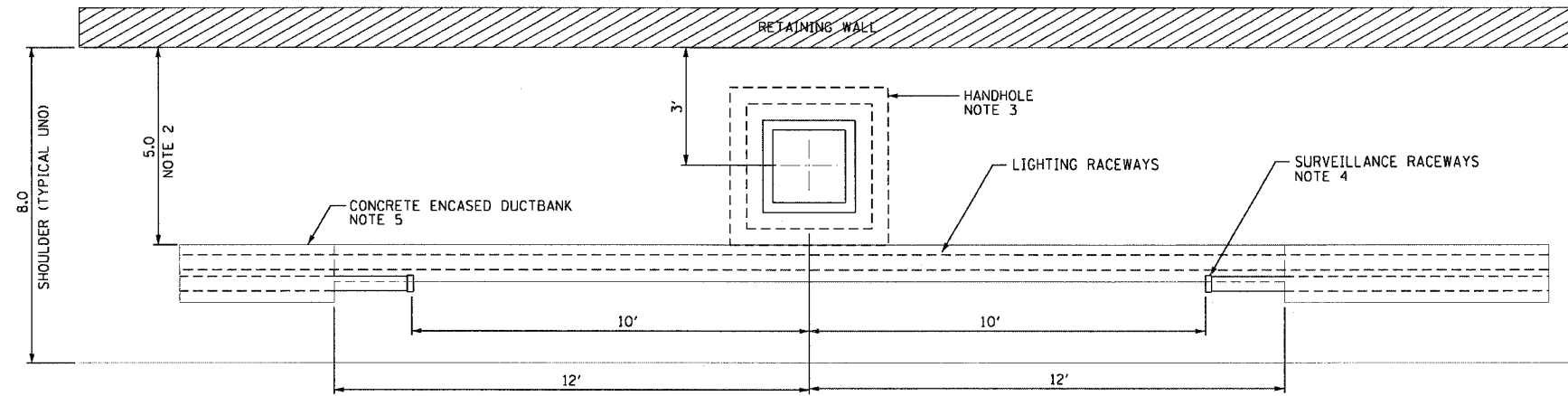
ELECTRICAL DUCTBANK DETAILS

SCALE: NOT TO SCALE DRAWN BY: HAR
DATE: June 9, 2006 CHECKED BY: JPC

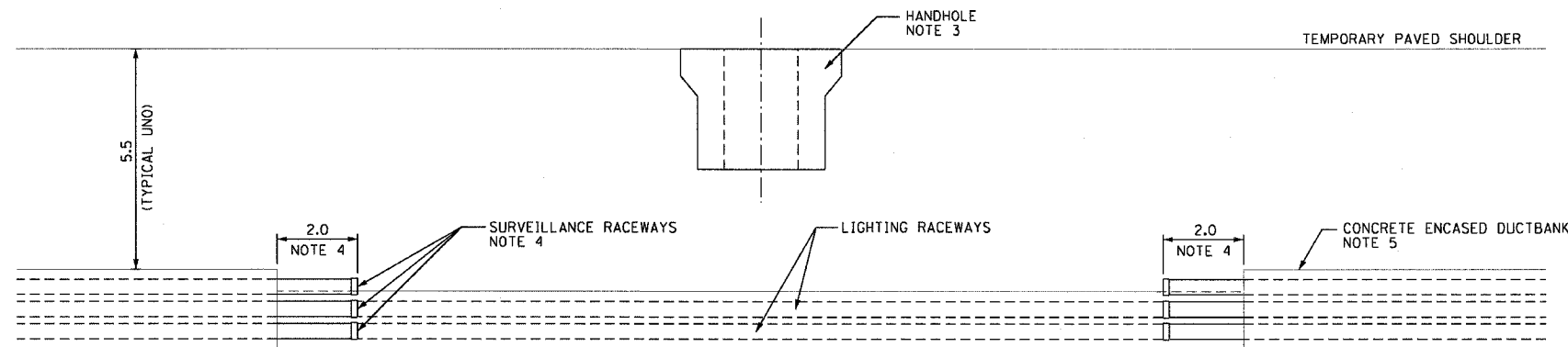
P:\V\4686\elec\IB-cntrs 18 & 19\contractor\190106\19060202037

06/02/2006 03:03:30 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	145
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		* (1919.15, 2021-922 PT1 & PT2) R-2		



TOP VIEW



ELEVATION VIEW

NOTES:

- SEE DRAWING EI-105 FOR ELECTRICAL DUCTBANK DETAILS.
- THE DISTANCE IS MEASURED FROM THE FRONT FACE OF RETAINING WALL TO THE FACE OF DUCTBANK.
- THE HANDHOLE WILL BE INSTALLED CONTRACT 60A63. THE PLANS SHOW THE ANTICIPATED LOCATIONS OF PROPOSED HANDHOLES. THIS SHEET IS INCLUDED TO PROVIDE THE CONTRACTOR WITH ANTICIPATED EXISTING CONDITIONS. DUCTBANK SHOWN WAS INSTALLED IN CONTRACT 62586.
- THE SURVEILLANCE RACEWAYS SHOULD BE STUBBED OUT FROM THE CONCRETE ENCASEMENT AND CAPPED AS SHOWN. THE DUCTBANK REINFORCING REBAR SHOULD ALSO BE EXTENDED OUT FROM THE CONCRETE ENCASEMENT A MINIMUM OF 2 FEET AS SHOWN.
- DUCTBANK WAS LOCATED 5 FEET FROM THE FACE OF WALL TO AVOID CONFLICTS WITH PROPOSED AND FUTURE DRAINAGE STRUCTURES.

CTE | AECOM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
 EXISTING DUCTBANK
 INSTALLATION DETAILS
 AT PROPOSED HANDHOLE

SCALE: NOT TO SCALE
 DATE: June 9, 2006

DRAWN BY: HAR
 CHECKED BY: JPC

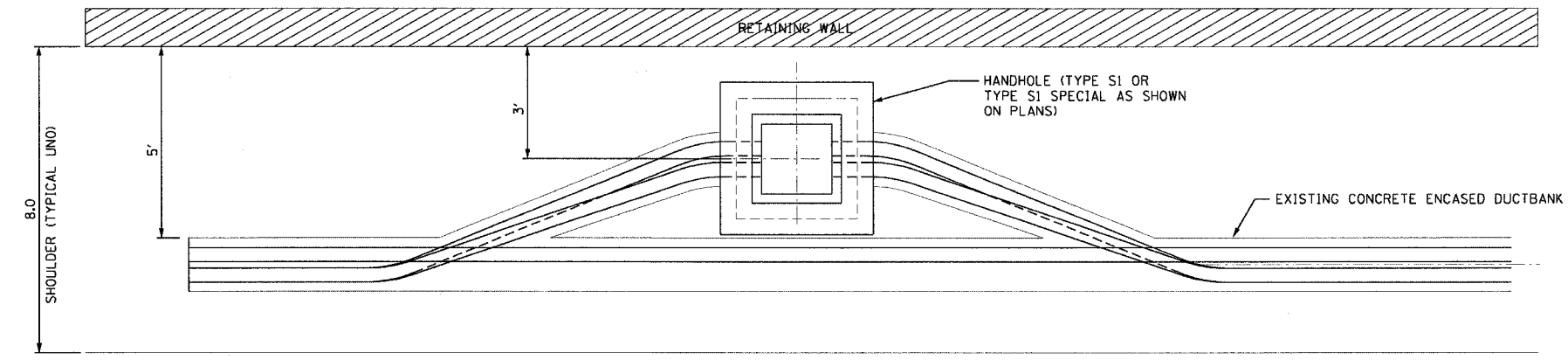
EI-106

06/09/2006 03:03:37 PM

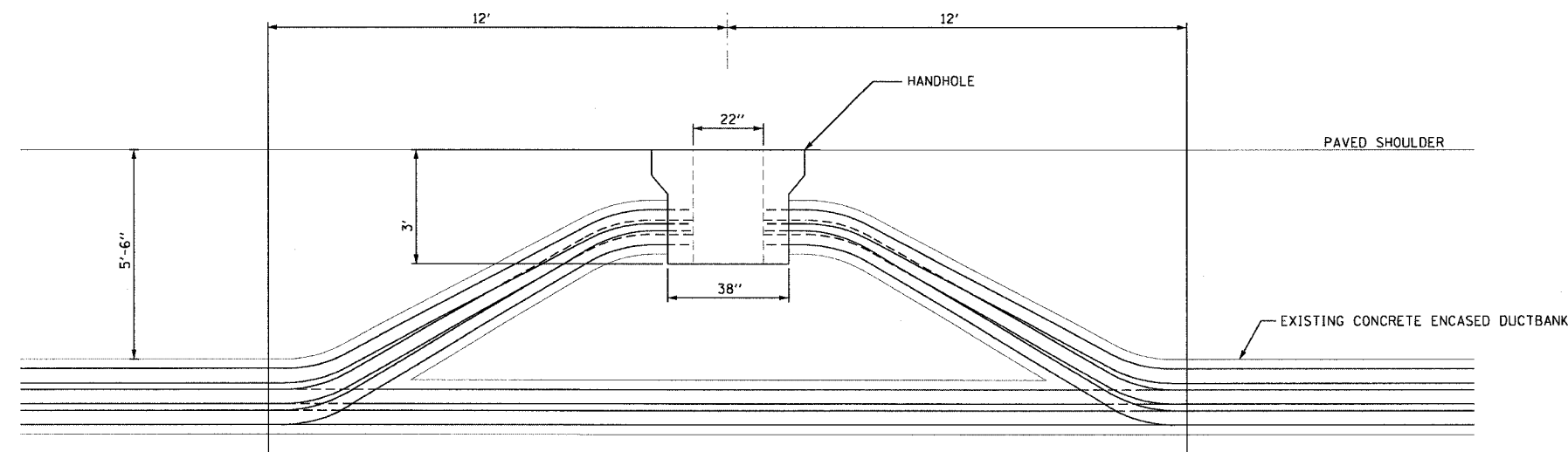
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	247	146
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
60A63	• (1919.15, 2021-922 PT1 & PT2) R-2			

NOTES:

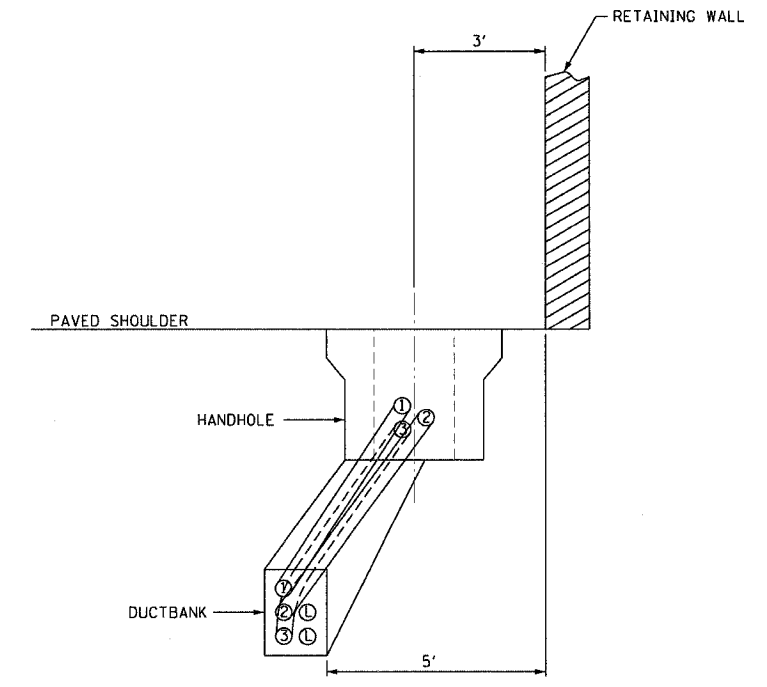
1. SEE DRAWING EI-105 FOR ELECTRICAL DUCTBANK DETAILS.
2. SEE DRAWING EI-106 FOR EXISTING CONDITIONS.
3. EXTEND 4" RACEWAYS FROM EXISTING DUCTBANK TO HANDHOLE. COORDINATE WORK WITH SHOULDER CONSTRUCTION. ALL CONDUIT SHALL BE ENCASED IN REINFORCED CONCRETE.
4. ADJUST HANDHOLE LOCATION AS REQUIRED TO ACCOMMODATE EXISTING CONDITIONS. FINAL LOCATION MUST BE APPROVED BY THE ENGINEER.



TOP VIEW



ELEVATION VIEW



SIDE VIEW

NOTE 3

NOTE 3

CTE | AECOM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
DUCTBANK ROUTING INTO HANDHOLE

SCALE: NOT TO SCALE
 DATE: June 9, 2006

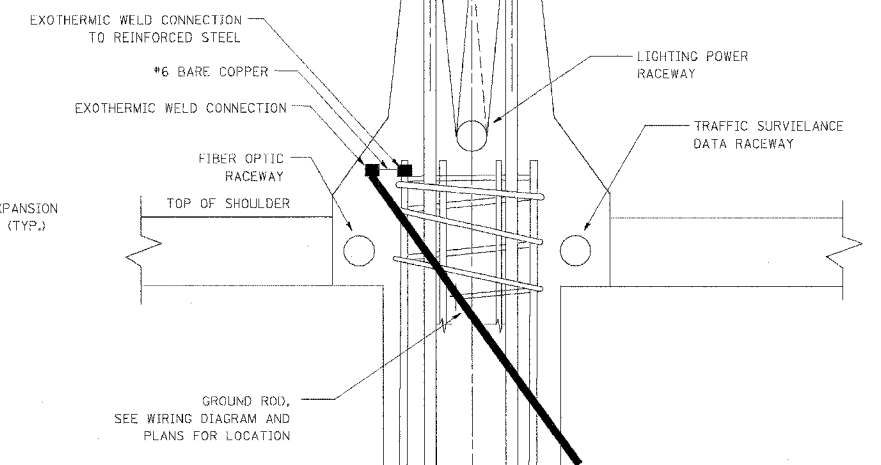
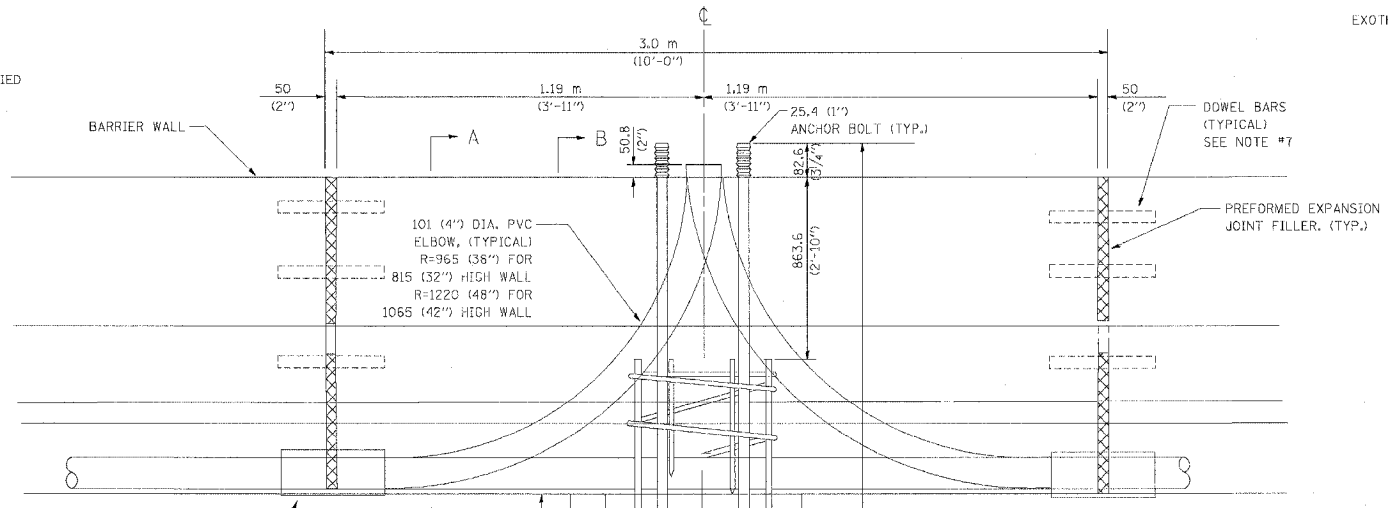
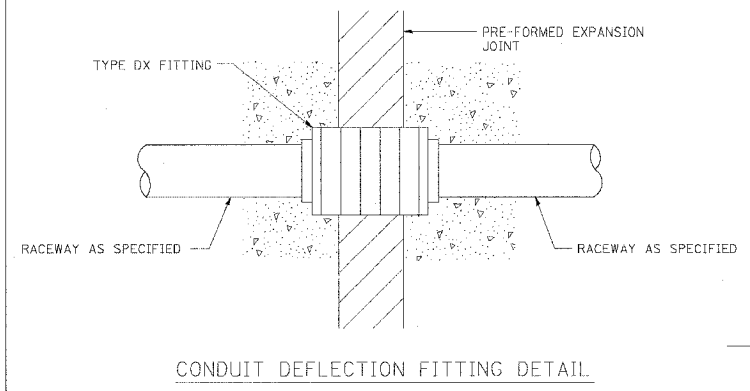
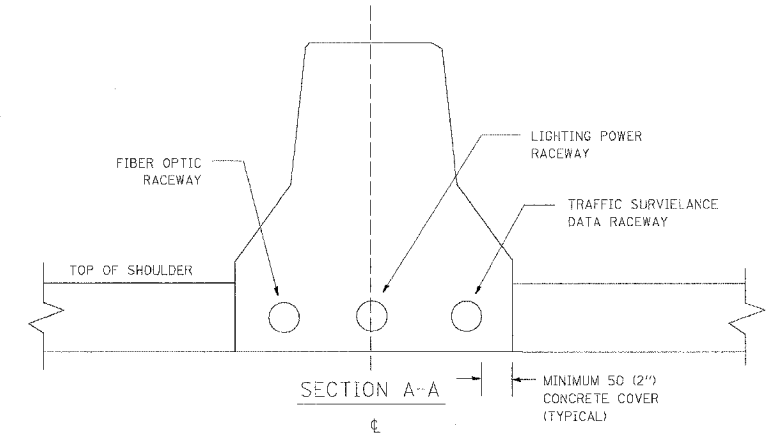
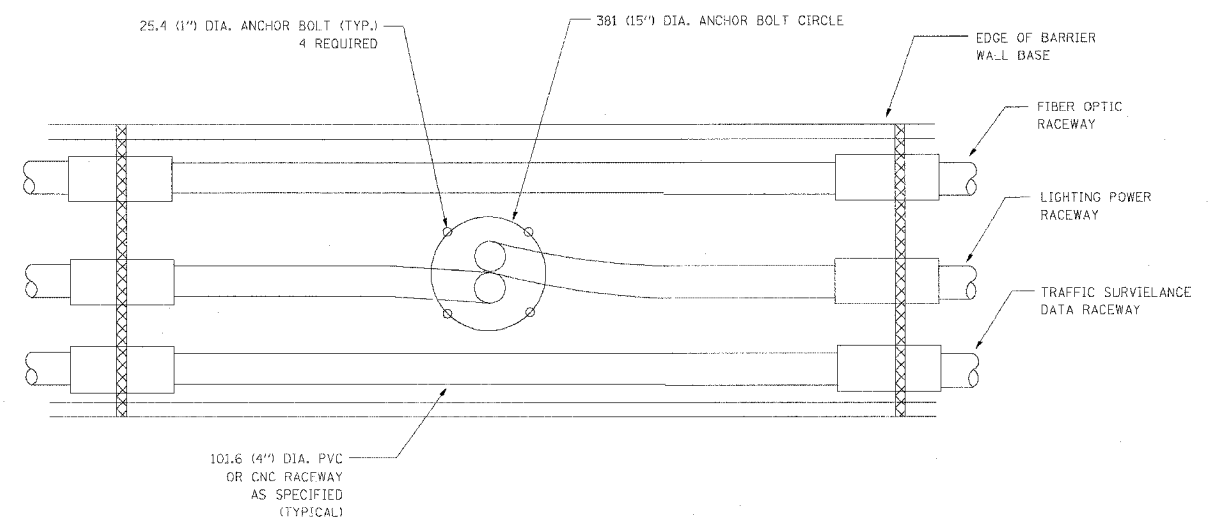
DRAWN BY: HAR
 CHECKED BY: JPC

EI-107

PAV-040666elecV8-ch1rs'18 & 19/contract/19/contract/19/01/19/01/2006

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6094	*	COOK	247	147
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
60A63	*(1919.15, 2021-922 PT1 & PT2) R-2			

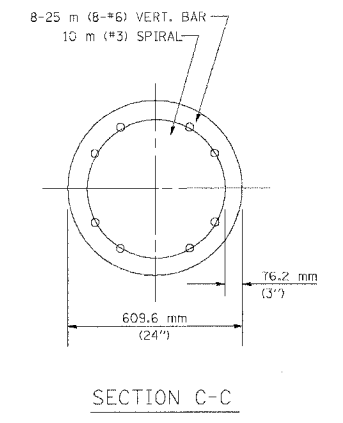
- NOTES:
- ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
 - THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORMS.
 - THE CONTRACTOR AT HIS OPTION MAY SUBSTITUTE 15 m (#4) TIES AT 304.8 m (12") CTRS. FOR THE 3 m (#3) SPIRAL. TACKWELDED TYPE BOLT MAY BE SUBSTITUTED FOR THE HOOK TYPE BOLT.
 - COLD BENDING OF THE HOOK BOLT SHALL NOT BE ALLOWED.
 - EXCAVATION FOR THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER 609.6 m (24 INCHES) IN DIAMETER.
 - THE ENGINEER SHALL DETERMINE THE TYPE OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE USING THE DOMINANT CHARACTERISTIC OF THE SOIL ENCOUNTERED.
 - BARRIER WALL EXPANSION AND CONSTRUCTION JOINTS SHALL BE IN ACCORDANCE WITH STANDARD DETAIL 637001-02 AND 637006 AS APPLICABLE.



FOUNDATION DEPTH

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

DESIGN: 80 MPH AASHTD



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 609.6 mm (24") DIA. LIGHT POLE FOUNDATION INTEGRAL WITH DOUBLE FACE BARRIER WALL
 SCALE: VERT. NONE
 HORIZ. NONE
 DATE 04/08/2004
 DRAWN BY CADD
 CHECKED BY
 BE-322

ELECTRICAL GENERAL NOTES

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	148
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		* (1919-15, 2021-922 PT1 & PT2) R-2		

1. ALL WORK MUST BE PERFORMED IN STRICT ACCORDANCE WITH THE LATEST CHICAGO ELECTRICAL CODE RULES AND ORDINANCES, CITY OF CHICAGO DEPARTMENT OF ELECTRICAL WIRING AND COMMUNICATIONS REQUIREMENTS, BUREAU OF BRIDGES, AND CHICAGO BUREAU OF ELECTRICITY (BOE) STANDARDS, DRAWINGS, DETAILS AND ALL APPLICABLE SPECIFICATIONS/REQUIREMENTS FOR COMPLETE AND APPROVED ROADWAY AND UNDERPASS LIGHTING INSTALLATIONS.
2. REFER TO CIVIL AND STRUCTURAL DRAWINGS FOR STAGING DIAGRAMS AND PHASES OF CONSTRUCTION. COORDINATE ALL DEMOLITION OF EXISTING AND INSTALLATION OF PROPOSED ELECTRICAL WORK SUCH AS INSTALLATION OF EXPANSION/DEFLECTION FITTINGS, LIGHT POLES, HANDHOLES, MANHOLES, CONTROLLERS, ETC., WITH ROADWAY CONSTRUCTION STAGES.
3. A STAGING SCHEDULE FOR MATERIAL AND EQUIPMENT REMOVAL, INSTALLATION, AND APPROXIMATE DATE OF PROPOSED ENERGIZING OF PERMANENT LIGHTING SYSTEMS MUST BE SUBMITTED PRIOR TO THE COMMENCEMENT OF WORK TO ASSURE COORDINATION OF THE WORK SCHEDULE.
4. ALL INFORMATION FOR EXISTING ITEMS SHOWN ON THE DRAWINGS ARE BASED ON FIELD OBSERVATIONS AND AVAILABLE DOCUMENTS, AND ARE NOT GUARANTEED TO BE COMPLETE AND/OR TOTALLY ACCURATE. THE CONTRACTOR MUST VERIFY ALL EXISTING CONDITIONS AND EQUIPMENT LOCATIONS IN THE FIELD PRIOR TO SUBMITTING PROPOSAL. FAILURE TO DO SO WILL NOT RELIEVE THIS CONTRACTOR FROM PERFORMING THE WORK AS PART OF THIS CONTRACT. INCLUDE IN THE PROPOSAL ANY RELOCATION OR ALTERATION OF EXISTING ELECTRICAL SYSTEMS, EQUIPMENT OR COMPONENTS WHICH ARE REQUIRED TO CLEAR THE NEW CONSTRUCTION, ADDITIONS OR ALTERATIONS TO BE PERFORMED.
5. NOTIFY THE ENGINEER, IN WRITING, OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND NEW WORK, OR BETWEEN ELECTRICAL WORK AND THE WORK OF OTHER TRADES PRIOR TO SUBMITTING PROPOSAL. LACK OF SUCH NOTIFICATION WILL BE CONSTRUED TO INDICATE NO DISCREPANCIES OR CONFLICTS EXIST. ADDITIONAL COMPENSATION WILL NOT BE GRANTED AFTER AWARD OF CONTRACT FOR ANY SUCH WORK REQUIRED TO COMPLY WITH THESE REQUIREMENTS.
6. THE QUANTITIES OF ALL MATERIALS AS INDICATED ON THESE PLAN DRAWINGS ARE APPROXIMATIONS ONLY. THE CONTRACTOR MUST FIELD VERIFY ALL LENGTHS AND QUANTITIES PRIOR TO ORDERING MATERIALS IN COMPLIANCE WITH THE SPECIFIED REQUIREMENTS.
7. THE CONTRACTOR IS RESPONSIBLE TO MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLES, HANDHOLES, MANHOLES, CONDUIT ROUTES, AND OTHER EQUIPMENT AND ITEMS FOR A CONTRACTOR REQUESTED PRE CONSTRUCTION INSPECTION BY THE ENGINEER. THE EXACT LOCATIONS OF ALL ITEMS MUST BE APPROVED BY THE ENGINEER PRIOR TO STARTING WORK. ANY WORK INSTALLED WITHOUT LOCATION APPROVAL WILL BE SUBJECT TO CORRECTIVE ACTION AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR WILL NOT DE-ENERGIZE ANY EXISTING ELECTRICAL EQUIPMENT WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
9. FURNISH, INSTALL, AND MAINTAIN ADEQUATE TEMPORARY POWER AND LIGHTING REQUIRED FOR CONSTRUCTION. THE CONTRACTOR MUST PAY ALL ENERGY COSTS AND ALL POWER COMPANY COSTS.
10. ALL EXISTING AREAS THAT ARE DAMAGED AS PART OF THIS WORK; INCLUDING BUT NOT LIMITED TO FENCING, CURB AND GUTTER, SIDEWALKS, AND WHERE RESTORATION IS NOT COVERED BY THE APPLICABLE SECTIONS OF THE SPECIFICATIONS, MUST BE RESTORED TO THE SATISFACTION OF THE ENGINEER. THIS WORK WILL BE INCLUDED IN THE COST OF THIS CONTRACT. SEPARATE PAYMENT WILL NOT BE MADE.
11. NOTIFY THE UTILITY COMPANIES (SUCH AS COMED, CABLE TV, TELEPHONE, ETC.) TO RELOCATE THEIR EXISTING EQUIPMENT LOCATED ON PUBLIC RIGHT OF WAY SPACES WHICH INTERFERE WITH THE PROPOSED CONSTRUCTION OF ROADWAY.
12. TRENCHED CONDUITS MUST BE INSTALLED AT A MINIMUM DEPTH OF 30" BELOW GRADE AND POSITIONED IN THE FIELD TO AVOID CONFLICT WITH TREE ROOTS, ROADWAY SEWER DRAINS, SHEET PILING, AND OTHER EXISTING AND PROPOSED UTILITIES. THE CONTRACTOR MUST INCREASE THE DEPTH OF TRENCH AND CONDUITS TO AVOID CONFLICTS AS REQUIRED AT NO ADDITIONAL COST TO IDOT.
13. ALL EQUIPMENT, CONDUITS, LIGHT POLES, LIGHTING CONTROLLERS AND CABINET ENCLOSURES MUST BE PROPERLY GROUNDED IN ACCORDANCE WITH THE CITY OF CHICAGO ELECTRICAL CODE REQUIREMENTS. USE A CONTINUOUS EQUIPMENT GROUNDING CONDUCTOR THROUGHOUT ALL WIRING, PROPERLY BONDED TO POLES, JUNCTION BOXES, CABINETS ETC. AND INCORPORATED IN ALL CIRCUIT RUNS.
14. GROUND RODS MUST BE INSTALLED FOR SERVICE GROUNDING AT LIGHTING CONTROLLERS, TEMPORARY LIGHTING UNITS, CONTROLLER FOUNDATION, AND AT EACH CONCRETE POLE FOUNDATION INSTALLED ON EMBANKMENT.
15. CONNECTIONS TO THE GROUND RODS MUST BE MADE WITH EXOTHERMIC WELDS, CITY OF CHICAGO APPROVED. THE DRIVEN GROUND ROD ELECTRODES MUST HAVE A LOW RESISTANCE TO THE GROUND NOT TO EXCEED 25 OHMS.
16. THE ELECTRIC CABLE PHASE AND NEUTRAL CONDUCTORS MUST BE RUN CONTINUOUS WITHOUT ANY UNDERGROUND SPLICES, LIGHTING CONTROLLER SPLICES, HANDHOLE SPLICES, OR MANHOLE SPLICES. SPLICING OF ELECTRIC CABLE PHASE AND NEUTRAL CONDUCTORS WILL BE PERMITTED ONLY IN THE BASE OF THE EXISTING TO REMAIN OR PROPOSED LIGHT POLES. THIS WORK WILL BE INCLUDED IN THE ELECTRIC CABLE PAY ITEM. SEPARATE PAYMENT WILL NOT BE MADE.
17. PRIOR TO ENERGIZING THE ELECTRICAL SYSTEM, TEST THE ENTIRE INSTALLATION FOR GROUNDS, SHORTS, IMPROPER INSULATION RESISTANCE OR IMPROPER CONNECTION. APPLY DC VOLTAGE OF 1000 VOLTS FOR MEASUREMENT OF INSULATION RESISTANCE. (USE MOTOR DRIVEN MEGGER INSTRUMENT.)
18. THE CONTRACTOR MUST SCHEDULE A FINAL ACCEPTANCE INSPECTION WITH THE ENGINEER AND THE BOE UPON COMPLETION OF ALL PROPOSED LIGHTING WORK. UPON FINAL ACCEPTANCE, THE CONTRACTOR MUST TRANSFER ALL LIGHTING INSTALLATIONS TO THE BOE FOR MAINTENANCE PURPOSES.

E-1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

CDOT ELECTRICAL GENERAL NOTES

 SCALE: NOT TO SCALE DRAWN BY: HAR
 DATE: June 9, 2006 CHECKED BY: JPC



P:\040463\elec\NB\civils 18 & 19\contract\190608\60A63\60A63E00020317

ELECTRICAL SYMBOLS FOR CDOT (BOE) WORK

- EXISTING CDOT COMBINATION TRAFFIC SIGNAL/LIGHTING UNIT; POLE, MAST ARM AND LUMINAIRE AS INDICATED ON PLANS.
- EXISTING CDOT LIGHTING UNIT; POLE, MAST ARM AND LUMINAIRE AS INDICATED ON PLANS
- EXISTING LUMINAIRE, 310W HPS LAMP, 240V, SEMI-CUTOFF
- EXISTING CDOT LIGHTING UNIT TO BE REMOVED AND/OR RELOCATED (POLE, MAST ARM AND LUMINAIRE) AS INDICATED ON PLANS
- EXISTING CITY ELECTRIC HANDHOLE/MANHOLE
- EXISTING POLE, CITY STEEL, EMBEDDED, 4"x9"x20' 7 GA, TAPERED TUBULAR
- EXISTING POLE, CITY STEEL, ANCHOR BASE, 20'-0", 7 GA, STEEL AND FND WITH 10" BC AND 1/4" ANCHOR RODS
- EXISTING STREET LIGHTING CONTROLLER, PEDESTAL OR BASE MOUNTED

GENERAL ELECTRICAL CABLE AND CONDUIT SYMBOLS

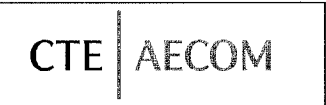
- EXISTING RACEWAY OR CONDUIT RUN AS INDICATED ON PLANS
- RACEWAY OR CONDUIT IN TRENCH, LENGTH AND TYPE AS INDICATED ON PLANS
- EXPOSED RACEWAY OR CONDUIT, LENGTH AND TYPE AS INDICATED ON PLANS
- RACEWAY OR CONDUIT EMBEDDED IN STRUCTURE, LENGTH AND TYPE AS INDICATED ON PLANS
- PROPOSED RACEWAY OR CONDUIT IN TRENCH FOR TRAFFIC SIGNALS/LIGHTING, LENGTH AND TYPE AS INDICATED ON THE TRAFFIC SIGNAL PLANS.
- AERIAL CABLE, LENGTH AND TYPE AS INDICATED ON PLANS
- CABLE, STREET LIGHTING, 2-1/C*6, 1-1/C*8 GND EPRN, 600 V, TRIPLEXED, IN RACEWAY OR CONDUIT AS INDICATED ON PLANS
- EXISTING CABLE, STREET LIGHTING, IN EXISTING RACEWAY OR CONDUIT RUN
- CABLE, STREET LIGHTING, 3-1/C *2/0 EPR, 600V, IN RACEWAY OR CONDUIT AS INDICATED ON THE PLANS

ABBREVIATIONS (CDOT)

A	AMPERES	LF	LINEAR FEET
AC	ALTERNATING CURRENT	LT	LEFT
A/C	AERIAL CABLE	LTG	LIGHTING
ALUM	ALUMINUM	MA	MAST ARM
ATS	ATTACHED TO STRUCTURE	MAX	MAXIMUM
AWG	AMERICAN WIRE GAUGE	MIN	MINIMUM
B	BASELINE	MTD	MOUNTED
BC	BOLT CIRCLE	NB	NORTHBOUND
BHB	BALLAST HOUSING BASE	NEC	NATIONAL ELECTRIC CODE
BOE	CITY OF CHICAGO BUREAU OF ELECTRICITY	NEMA	NATIONAL ELEC MANUFACTURERS ASSOCIATION
C	CONDUIT	NM	NON-METALLIC
CDOT	CITY OF CHICAGO DEPARTMENT OF TRANSPORTATION	NO	NUMBER
CEC	CHICAGO ELECTRIC CODE	NTS	NOT TO SCALE
CONC	CONCRETE	PH	PHASE
CKT(S)	CIRCUIT(S)	PNL	PANEL
C	CENTERLINE	PTZ	PAN-TILT-ZOOM
D	DUCTBANK	PVC	POLYVINYL CHLORIDE
DC	DIRECT CURRENT	PVCC	PVC COATED
DIA	DIAMETER	PVGRS	PVC COATED GALVANIZED RIGID STEEL CONDUIT
DWG(S)	DRAWING(S)	R	EXISTING UNIT TO BE REMOVED (OWNER SALVAGED UNO)
E	EXISTING UNIT TO REMAIN	ROW	RIGHT OF WAY
EB	EASTBOUND	RT	RIGHT
ECA	ELECTRIC CABLE ASSEMBLY	SB	SOUTHBOUND
EL	ELEVATION	SS	STAINLESS STEEL
EM	EXISTING UNIT TO BE MODIFIED	STA	STATION
ER	EXISTING RELOCATED UNIT	STRUCT	STRUCTURE
F	FOOT, FEET	T	TEMPORARY EQUIPMENT OR INSTALLATION
FND	FOUNDATION	TYP	TYPICAL
GA	GAUGE	UNO	UNLESS NOTED OTHERWISE
GND	GROUND	V	VOLT
GRS	GALVANIZED RIGID STEEL CONDUIT	W	WATT
HPS	HIGH PRESSURE SODIUM	WB	WESTBOUND
JB	JUNCTION BOX	WM	WALL MOUNTED
KVA	KILOVOLT-AMPERE	WP	WOOD POLE
KW	KILOWATT	XFMR	TRANSFORMER
LC	LIGHTING CONTROLLER		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	149
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		* (19)9.15, 2021-922 PT1 & PT2) R-2		

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
NAME	DATE	
		CDOT ELECTRICAL SYMBOLS AND ABBREVIATIONS
SCALE: NOT TO SCALE		DRAWN BY: HAR
DATE: June 9, 2006		CHECKED BY: JPC

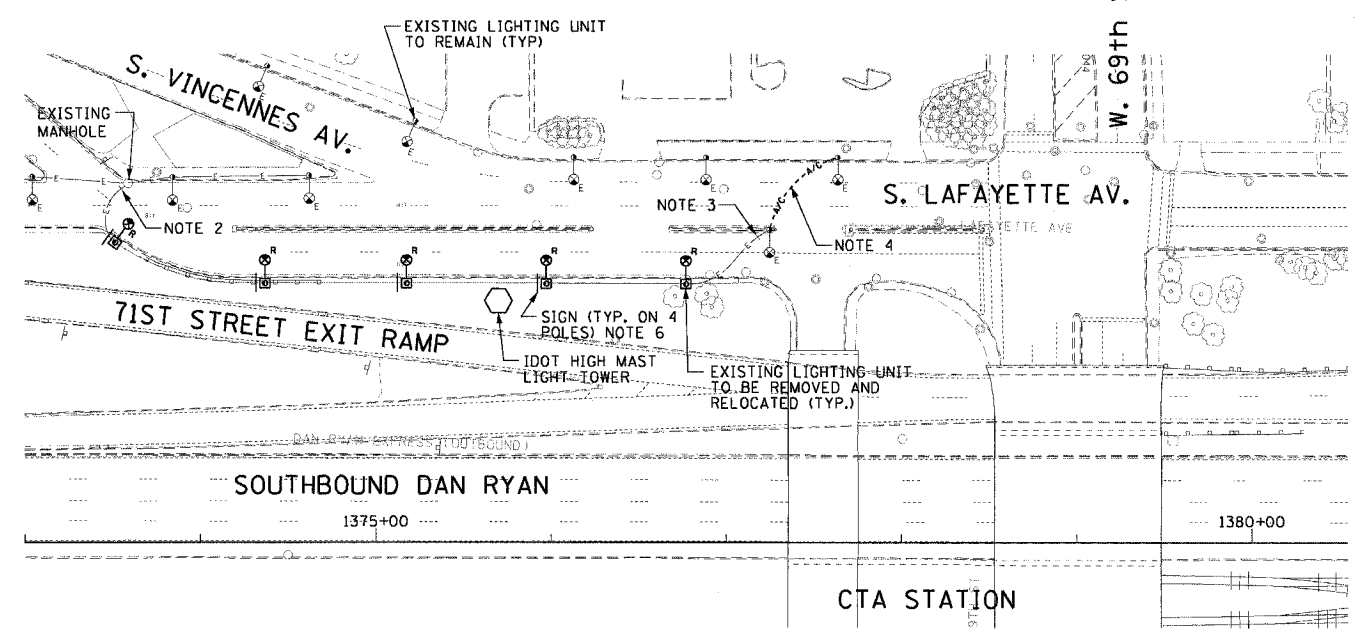
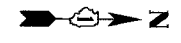


06/02/2006 03:03:25 PM

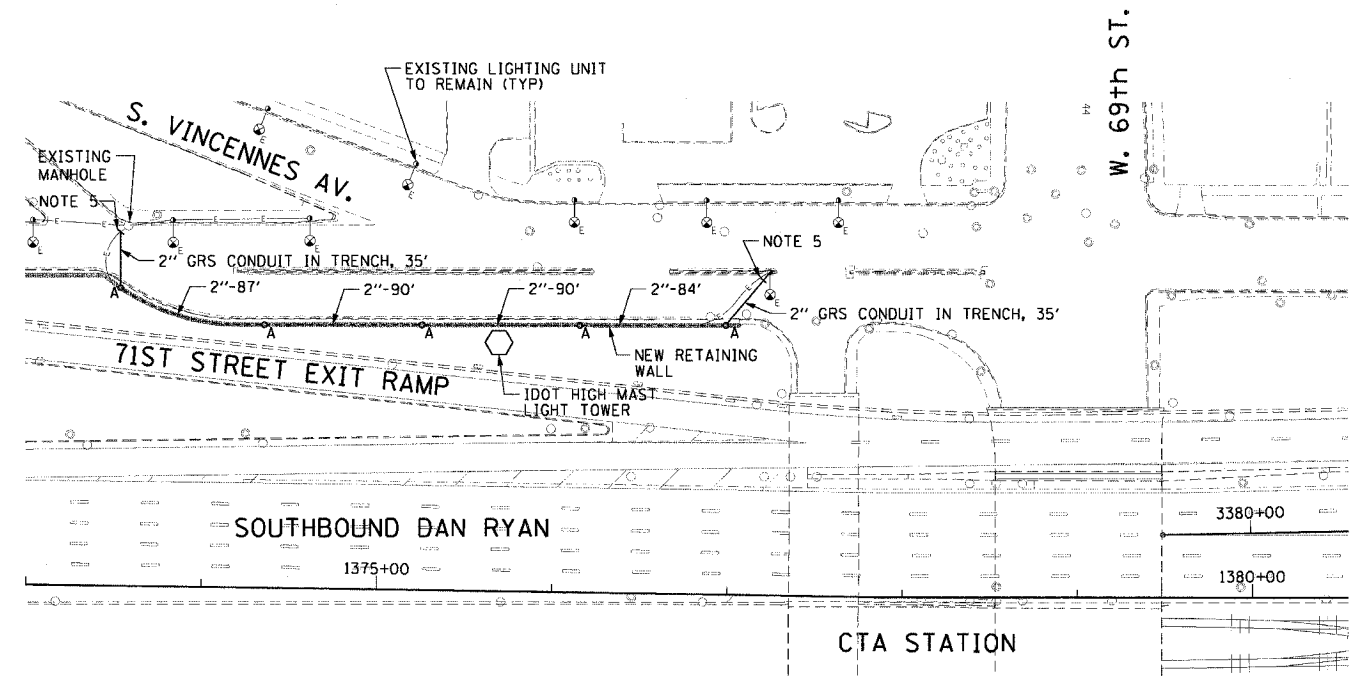
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	150
STA. 1372+00.00		TO STA. 1380+00.00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				

ATLAS NO. P-38
GROUP NO. 11

LIGHTING CONTROLLER 11 IS LOCATED AT THE NORTHWEST CORNER OF 70TH ST. AND S. VINCENNES AVE.



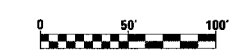
EXISTING PLAN



PROPOSED CONDUIT AND FOUNDATION PLAN

A- FOUNDATION INTEGRAL WITH RETAINING WALL SEE STRUCTURAL DRAWINGS. 10" B.C., 1/4" ANCHOR RODS

2" CONDUIT BETWEEN FOUNDATIONS SHALL BE SCHEDULE 80 PVC EMBEDDED IN RETAINING WALL



E-3

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

EXISTING PLAN
PROPOSED CONDUIT AND
FOUNDATION PLAN

SCALE: 1"=50' DRAWN BY: HAR
DATE: June 9, 2006 CHECKED BY: JPC



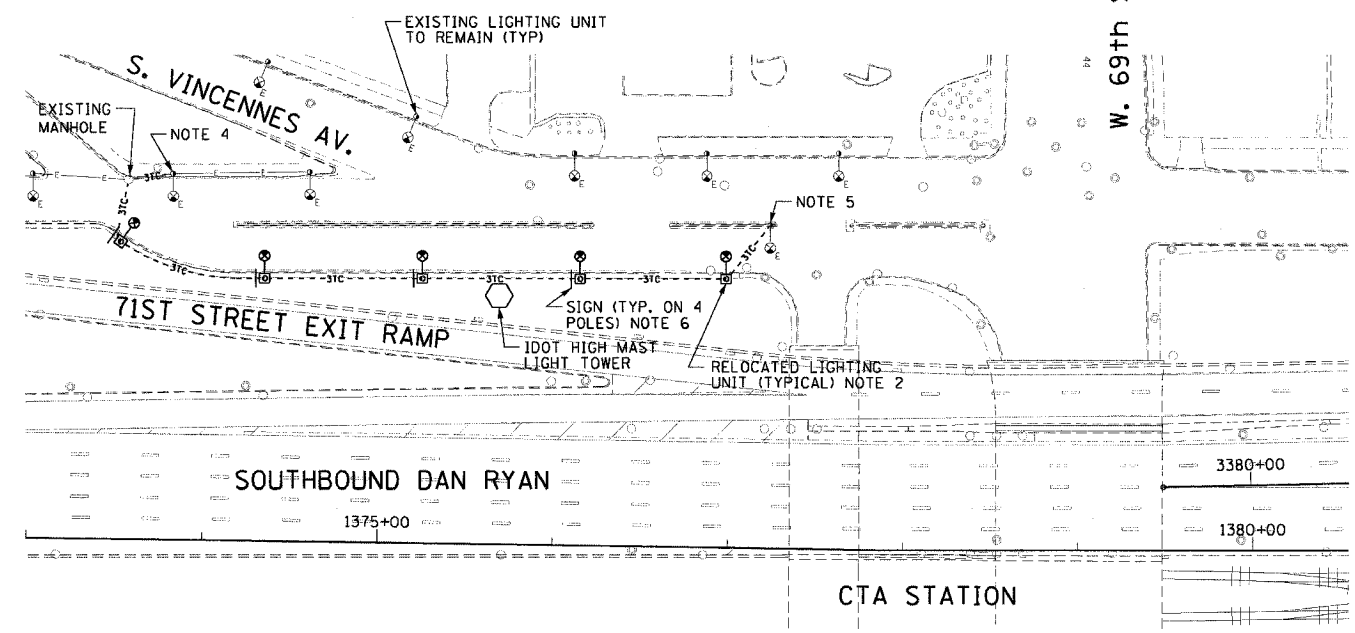
P:\14\0468\elec\NB-ctrls 18 & 19\ctrls\19\ctrls\190003203.rvt

06/02/2006 03:03:28 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	151
STA. 1372+00.00		TO STA. 1380+00.00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		(1919.15, 2021-922 PT1 & PT2) R-2		

ATLAS NO. P-38
GROUP NO. 11

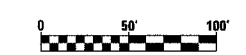
LIGHTING CONTROLLER 11
IS LOCATED AT THE NORTHWEST
CORNER OF 70TH ST. AND
S. VINCENNES AVE.



WIRING PLAN

NOTES:

1. SEE DRAWINGS E-1 AND E-2 FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.
2. EXISTING LIGHTING UNITS TO BE REMOVED, CLEANED, PAINTED, PROVIDED WITH NEW LAMPS AND BE INSTALLED ON TOP OF THE NEW RETAINING WALL. EXCESS EQUIPMENT SHALL BE RETURNED TO THE CITY OF CHICAGO. SEE STRUCTURAL DRAWINGS FOR RETAINING WALL FOUNDATION DETAILS. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.
3. ROUTE ALL PROPOSED LIGHTING CIRCUIT CABLE SHOWN ON THIS DRAWING IN CONDUIT SHOWN ON THE PROPOSED CONDUIT AND FOUNDATION PLAN, DRAWING E-3.
4. SPLICE NEW CIRCUIT CABLES TO EXISTING CIRCUIT CABLES AT EXISTING LIGHT POLE OR AS DIRECTED BY THE COMMISSIONER.
5. CONNECT EXISTING LIGHT POLE TO NEW CIRCUIT CABLES.
6. EXISTING REGULATORY SIGNS SHALL BE REINSTALLED ON LIGHT POLES AS DIRECTED BY THE COMMISSIONER.



E-4

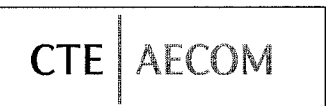
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

WIRING PLAN

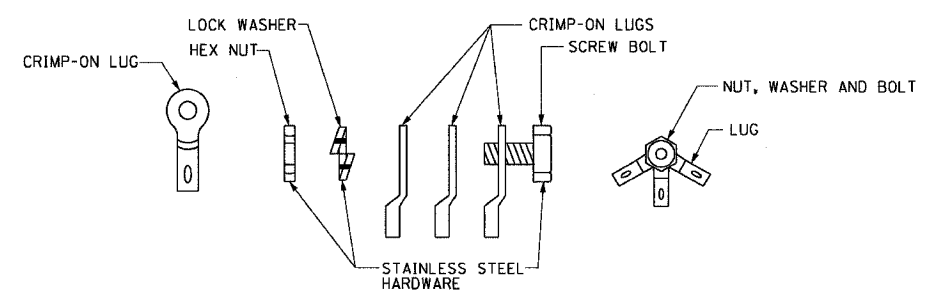
SCALE: 1"=50'
DATE: June 9, 2006

DRAWN BY: HAR
CHECKED BY: JPC

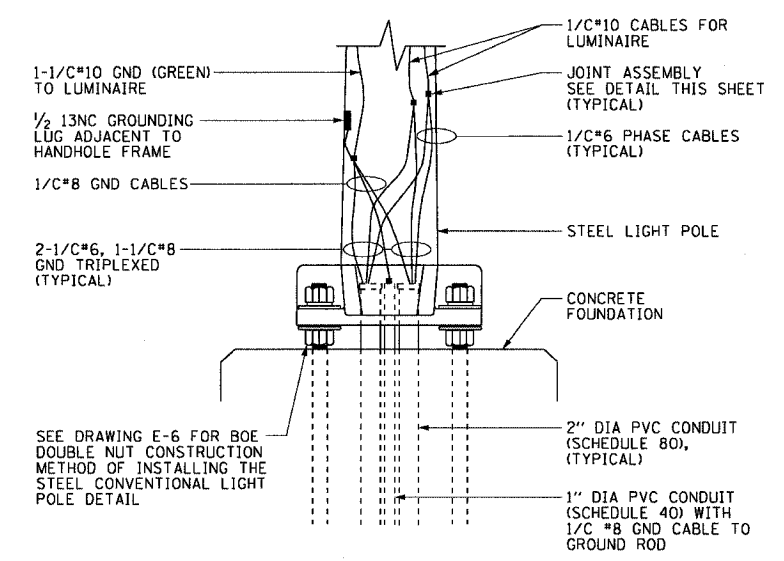


03/03/2006 03:03:28 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	247	152
STA. -	TO STA. -			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				



JOINT ASSEMBLY DETAILS
NOT TO SCALE



WALL MOUNTED POLE BASE WIRING DETAIL
NOT TO SCALE

NOTES:

1. SEE DRAWINGS E-1 AND E-2 FOR CDOT ELECTRICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.
2. SEE PLAN DRAWING E-3 FOR THE PROPOSED CONDUIT ROUTING.

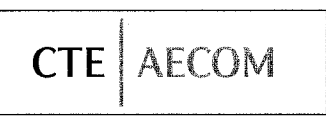
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

MISCELLANEOUS ELECTRICAL DETAILS

SCALE: AS SHOWN
DATE: June 9, 2006

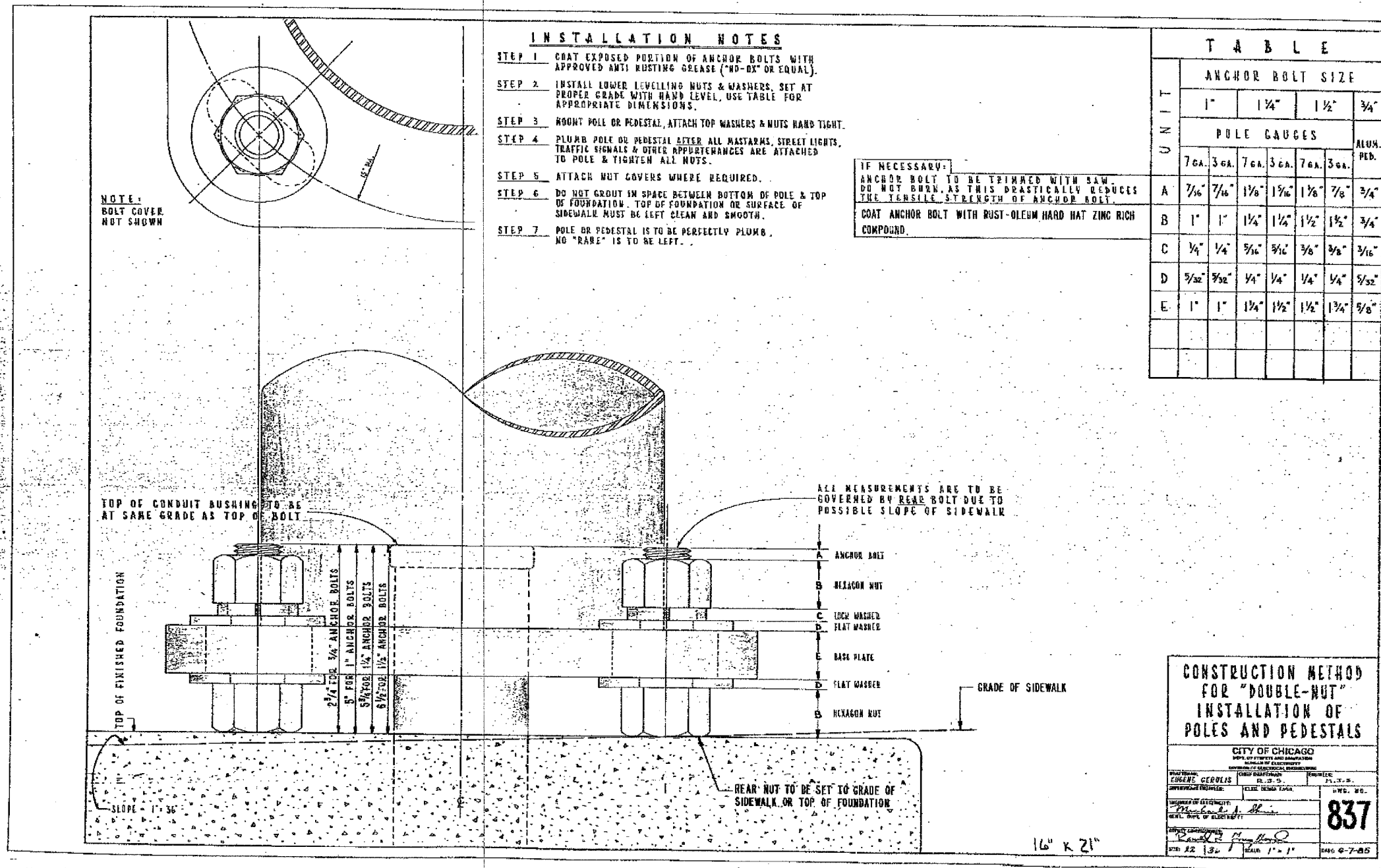
DRAWN BY: HAR
CHECKED BY: JPC



06/02/2006 03:03:29 PM

NOTES:

- THIS IS A STANDARD DRAWING MADE BY THE CITY OF CHICAGO, DEPARTMENT OF STREETS AND SANITATION, BUREAU OF ELECTRICITY. THIS DRAWING IS INCLUDED FOR THE CONVENIENCE OF THE CONTRACTOR.



INSTALLATION NOTES

- COAT EXPOSED PORTION OF ANCHOR BOLTS WITH APPROVED ANTI RUSTING GREASE ("WD-40" OR EQUAL).
- INSTALL LOWER LEVELLING NUTS & WASHERS. SET AT PROPER GRADE WITH HAND LEVEL, USE TABLE FOR APPROPRIATE DIMENSIONS.
- HOIST POLE OR PEDESTAL, ATTACH TOP WASHERS & NUTS HAND TIGHT.
- PLUMB POLE OR PEDESTAL AFTER ALL MASTARMS, STREET LIGHTS, TRAFFIC SIGNALS & OTHER APPURTENANCES ARE ATTACHED TO POLE & TIGHTEN ALL NUTS.
- ATTACH NUT COVERS WHERE REQUIRED.
- DO NOT GROUT IN SPACE BETWEEN BOTTOM OF POLE & TOP OF FOUNDATION. TOP OF FOUNDATION OR SURFACE OF SIDEWALK MUST BE LEFT CLEAN AND SMOOTH.
- POLE OR PEDESTAL IS TO BE PERFECTLY PLUMB. NO "RARE" IS TO BE LEFT.

IF NECESSARY:
 ANCHOR BOLT TO BE TRIMMED WITH SAW. DO NOT BURN, AS THIS PRACTICALLY REDUCES THE TENSILE STRENGTH OF ANCHOR BOLT.
 COAT ANCHOR BOLT WITH RUST-OLEUM HARD HAT ZINC RICH COMPOUND.

T A B L E

UNIT	ANCHOR BOLT SIZE					
	1"	1 1/4"	1 1/2"	3/4"	ALUM. PED.	
	POLE GAUGES					
	7 GA.	3 GA.	7 GA.	3 GA.	7 GA.	3 GA.
A	7/16"	7/16"	1/8"	1/8"	1/8"	3/4"
B	1"	1"	1/4"	1/4"	1/2"	3/4"
C	1/4"	1/4"	3/16"	3/16"	3/8"	3/16"
D	5/32"	3/32"	1/4"	1/4"	1/4"	5/32"
E	1"	1"	1/4"	1/2"	1/2"	5/8"

CONSTRUCTION METHOD FOR "DOUBLE-NUT" INSTALLATION OF POLES AND PEDESTALS

CITY OF CHICAGO
 DEPARTMENT OF STREETS AND SANITATION
 BUREAU OF ELECTRICITY

DESIGNED BY: *ENG. CEROLAS* DATE: *11-20-05* DRAWN BY: *[Signature]* DATE: *11-20-05*

NO. OF SHEETS: *1* OF *1* SHEET NO. *837*

DATE: *12-18-05* SCALE: *1" = 1'* DATE: *6-9-06*

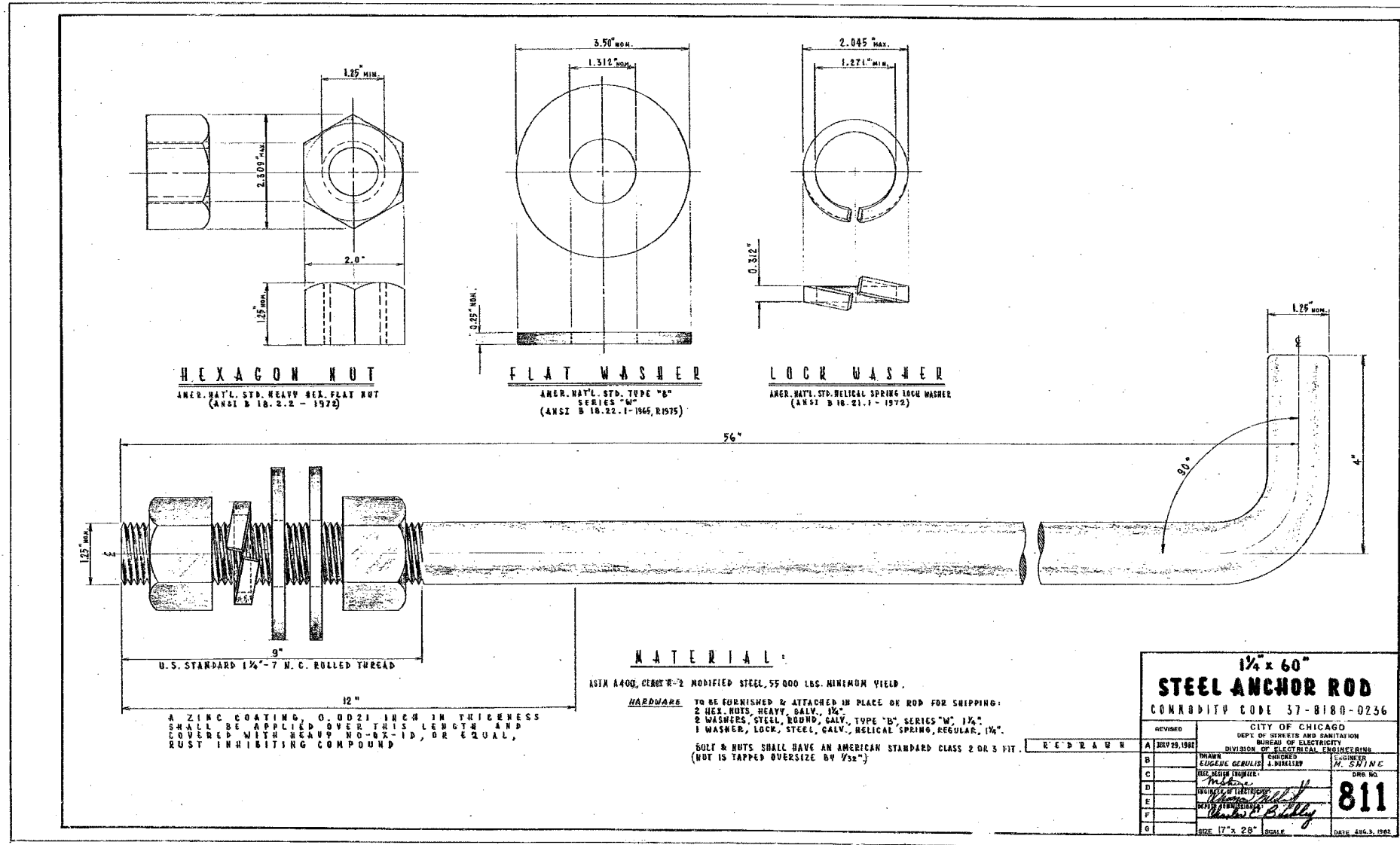
REVISIONS	NAME	DATE

6/9/02/2006 03:56:30 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	154
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		(1919.15, 2021-922 PT1 & PT2) R-2		

NOTES:

- THIS IS A STANDARD DRAWING MADE BY THE CITY OF CHICAGO, DEPARTMENT OF STREETS AND SANITATION, BUREAU OF ELECTRICITY. THIS DRAWING IS INCLUDED FOR THE CONVENIENCE OF THE CONTRACTOR.



E-7

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
NAME	DATE	
		STANDARD BOE DETAILS

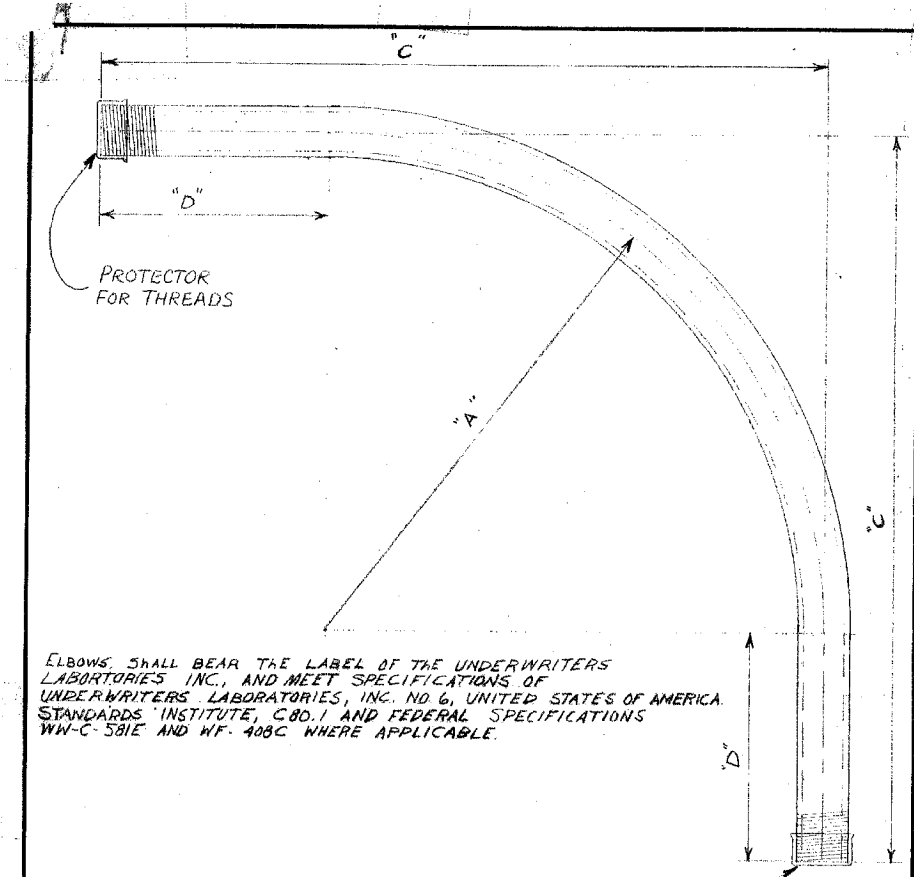
SCALE: NOT TO SCALE
DATE: June 9, 2006

DRAWN BY: HAR
CHECKED BY: JPC

CTE | AECOM

06/02/2006 03:01:02 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	247	155
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
60A63	• (1919.15, 2021-922 PT1 & PT2) R-2			



ELBOWS SHALL BEAR THE LABEL OF THE UNDERWRITERS LABORATORIES INC., AND MEET SPECIFICATIONS OF UNDERWRITERS LABORATORIES, INC. NO. 6, UNITED STATES OF AMERICA STANDARDS INSTITUTE, C80.1 AND FEDERAL SPECIFICATIONS WW-C-581E AND WF-408C WHERE APPLICABLE.

NOTE:
TWO THREAD PROTECTORS TO BE FURNISHED ON EACH ELBOW, PROTECTOR TO COVER A MINIMUM OF TEN THREADS.

TABLE OF DIMENSIONS				
CONDUIT SIZE	DIMENSIONS			COMMODITY CODE
	A"	C"	D"	
1 1/4"	24"	35"	11"	09-4001-0510
1 1/2"	24"	35"	11"	09-4001-0520
2"	24"	35"	11"	09-4001-4126
2 1/2"	24"	35"	11"	09-4001-4128
3"	24"	35"	11"	09-4001-4230
4"	24"	35"	11"	09-4001-0000

B SPECIFICATIONS REVISED
A REVISED DIMENSIONS ON 3" x 4" CONDUIT L.P.
ELBOW, CONDUIT, RIGID GALVANIZED STEEL, LARGE RADIUS

CITY OF CHICAGO
DEPT. OF STREETS AND SANITATION
BUREAU OF ELECTRICITY
DIVISION OF ELECTRICAL ENGINEERING

REVISION	DATE	DRAWN	CHECKED	ENGINEER
A	7-22-71	LON BURDY	M.S.	M. SHINE
B	7-3-79			
C				
D				
E				
F				
G				

SIZE 8 1/2" x 14" SCALE: 3/16" DATE 6-2-71

NOTES:
1. THIS IS A STANDARD DRAWING MADE BY THE CITY OF CHICAGO, DEPARTMENT OF STREETS AND SANITATION, BUREAU OF ELECTRICITY. THIS DRAWING IS INCLUDED FOR THE CONVENIENCE OF THE CONTRACTOR.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
NAME	DATE	

STANDARD BOE DETAILS

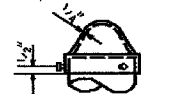
SCALE: NOT TO SCALE DRAWN BY: HAR
DATE: June 9, 2006 CHECKED BY: JPC

p:\v\40468\elec\18-cntrs 18 & 19\contract 19\stf\elec\0002020.stf
05/02/2006 03:01:04 PM

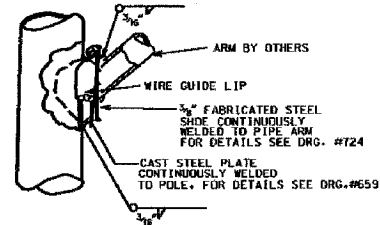
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	156
STA. TO STA.				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				

NOTES:

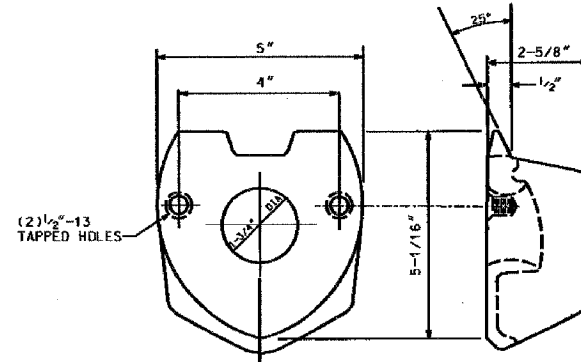
1. THIS IS A STANDARD DRAWING MADE BY THE CITY OF CHICAGO, DEPARTMENT OF STREETS AND SANITATION, BUREAU OF ELECTRICITY. THIS DRAWING IS INCLUDED FOR THE CONVENIENCE OF THE CONTRACTOR.



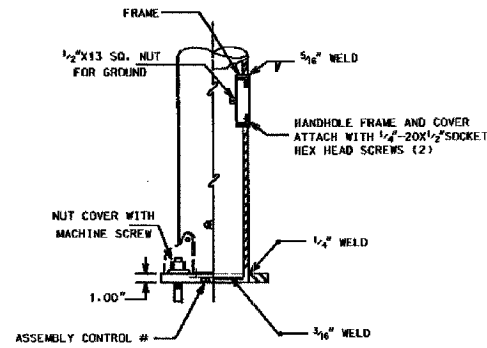
$\frac{3}{8}$ "-16NCX $\frac{3}{4}$ " LONG SET SCREWS (3@120°)
POLE CAP
FOR DETAILS SEE DRG. # 11420-A



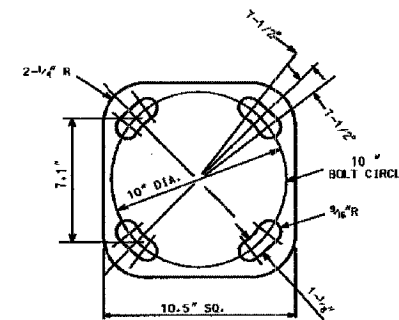
SECTION AT POLE PLATE



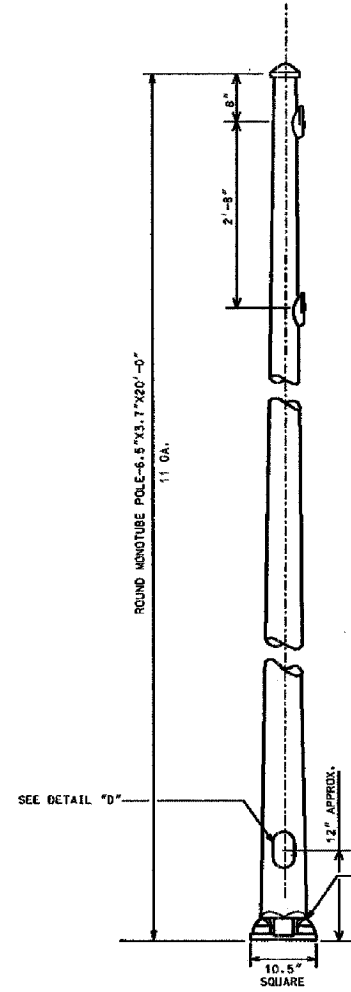
2 BOLT MAST ARM ATTACHMENT
FOR DETAILS SEE DRG. # 659 MATERIAL: CAST STEEL



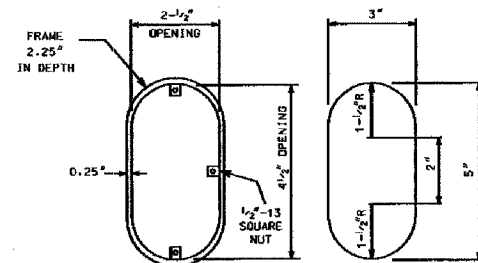
DETAIL "D"



DETAIL "A"
BOLT SLOTS



ROUND MINUTUBE POLE-4.5"x3.7"x20'-0"
11 GA.
SEE DETAIL "D"
12" APPROX.
BOLT COVER W/ HEX HD. ST. STL. MACH. SCREWS
10.5" SQUARE



FRAME **DOOR**
HANDHOLE **DETAIL**

3.7"x6.5" STEEL/20'-0" POLE 11 GAUGE		
CITY OF CHICAGO DEPT. OF STREETS AND SANITATION BUREAU OF ELECTRICITY DIVISION OF ELECTRICAL ENGINEERING		
DRAFTSMAN: ROBERT IVY	CHIEF DRAFTSMAN: ROBERT CARTER	ENGINEER: RON POOL
SUPERVISING ENGINEER:	ELEC. DESIGN ENGR.:	DWG. NO.
ENGINEER OF ELECTRICITY:		652
DEPT. SUPERV. ELECTRICITY:		
DEPUTY COMMISSIONER:		
		10-03-01

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

STANDARD BOE DETAILS

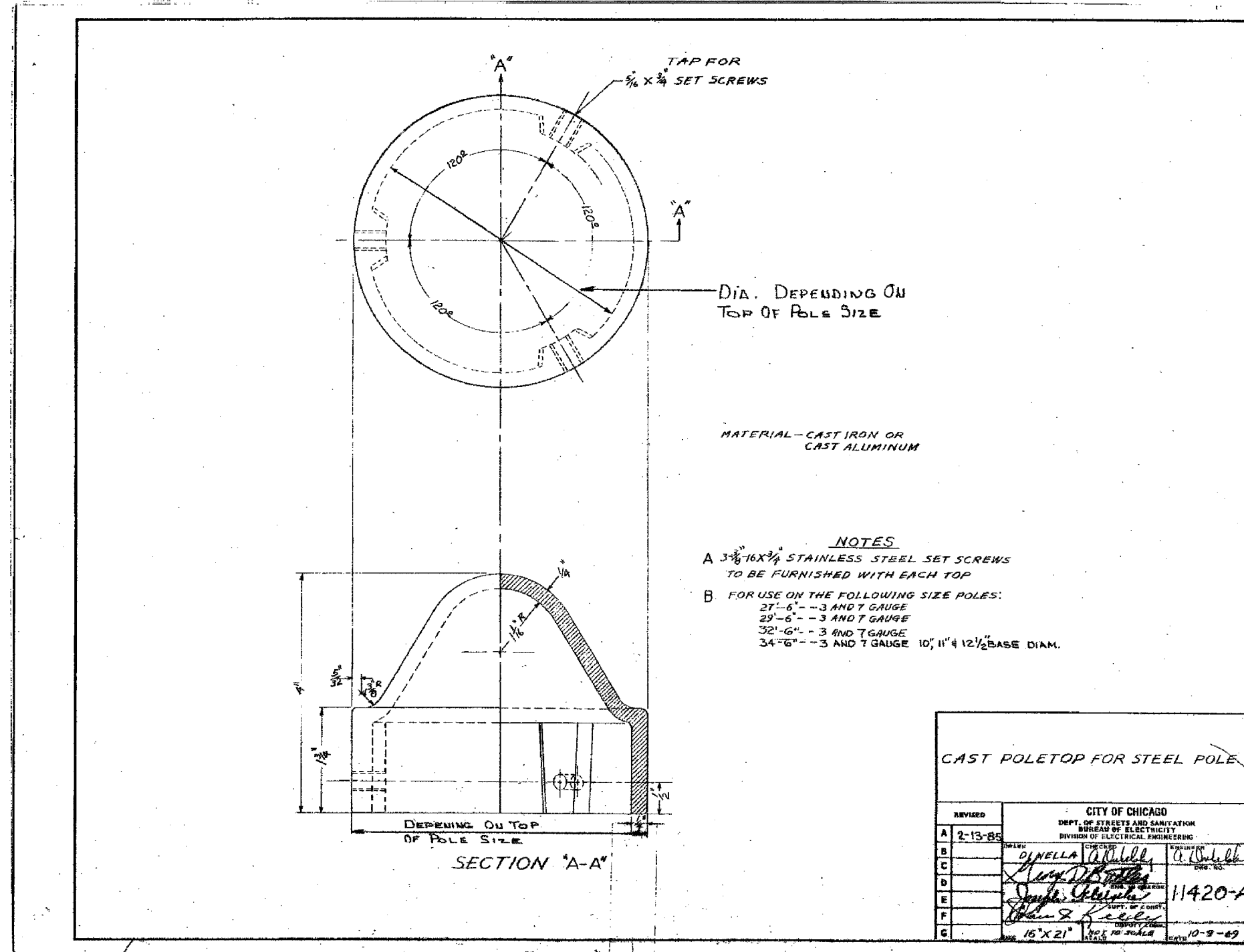
SCALE: NOT TO SCALE DRAWN BY: HAR
DATE: June 9, 2006 CHECKED BY: JPC

15-10-0465elec-VF-cntrs 18 & 19-contract 190309hnl900202037

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	157
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
60A63	* (1919.15, 2021-922 PT1 & PT2) R-2			

NOTES:

- THIS IS A STANDARD DRAWING MADE BY THE CITY OF CHICAGO, DEPARTMENT OF STREETS AND SANITATION, BUREAU OF ELECTRICITY. THIS DRAWING IS INCLUDED FOR THE CONVENIENCE OF THE CONTRACTOR.



REVISED	CITY OF CHICAGO DEPT. OF STREETS AND SANITATION BUREAU OF ELECTRICITY DIVISION OF ELECTRICAL ENGINEERING	
A	2-13-85	
B		
C		
D		
E		
F		
G		

16" X 21" NOT TO SCALE DATE 10-9-89

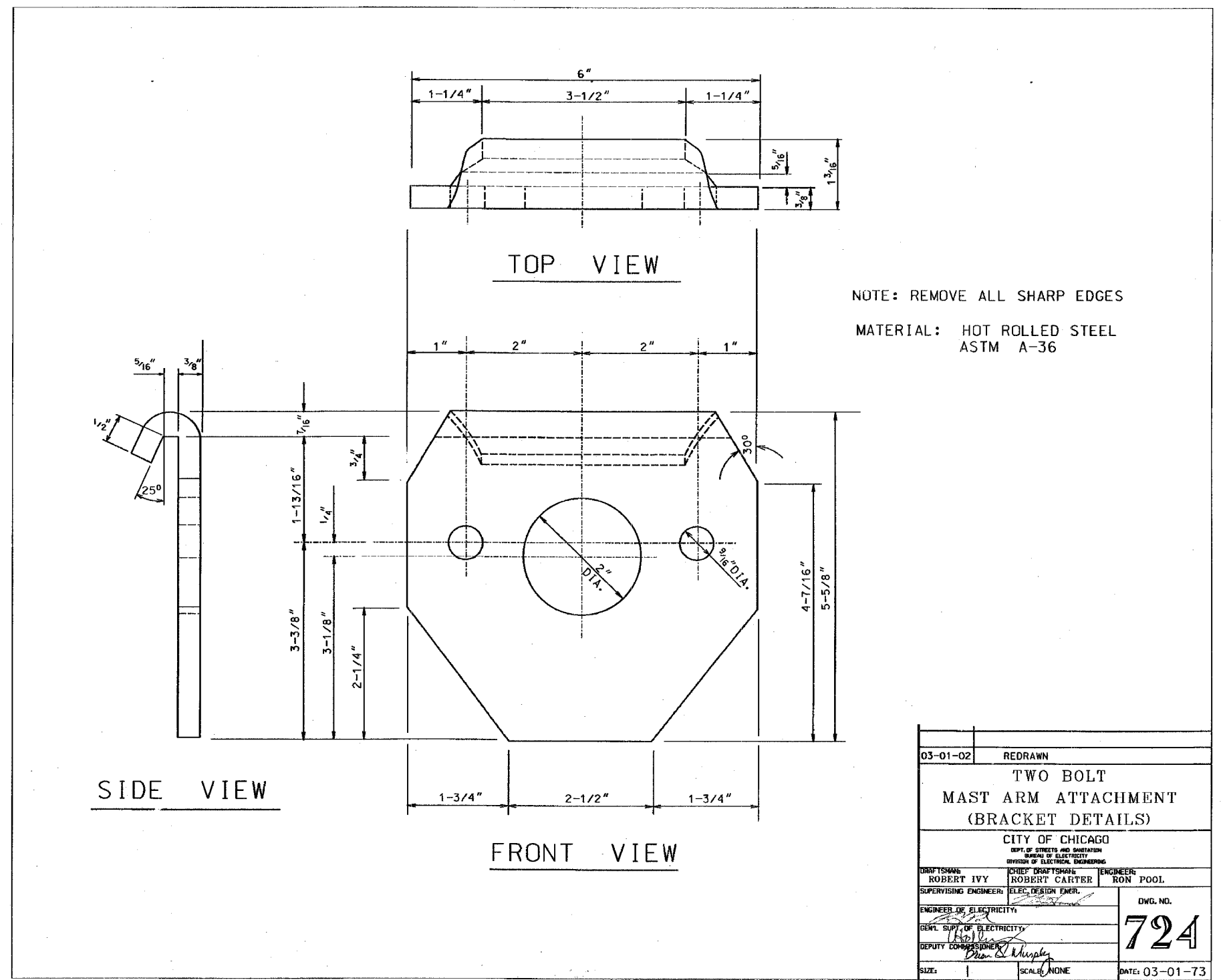
CTE | AECOM

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
NAME	DATE	
		STANDARD BOE DETAILS

SCALE: NOT TO SCALE DRAWN BY: HAR
DATE: June 9, 2006 CHECKED BY: JPC

P:\p46463\elect\B con's 18 & 19\contract\190318\elec\900102.cdw

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	247	158
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		• (1919.15, 2021-922 PT1 & PT2) R-2		



NOTE: REMOVE ALL SHARP EDGES
MATERIAL: HOT ROLLED STEEL
ASTM A-36

03-01-02	REDRAWN
TWO BOLT MAST ARM ATTACHMENT (BRACKET DETAILS)	
CITY OF CHICAGO DEPT. OF STREETS AND SANITATION BUREAU OF ELECTRICITY DIVISION OF ELECTRICAL ENGINEERING	
DRAFTSMAN: ROBERT IVY	ENGINEER: RON POOL
SUPERVISING ENGINEER: ELEC. DESIGN ENGR.	CHIEF DRAFTSMAN: ROBERT CARTER
ENGINEER OF ELECTRICITY:	DWG. NO. 724
DEPT. SUPV. OF ELECTRICITY:	DATE: 03-01-73
DEPUTY COMMISSIONER:	SCALE: NONE
SIZE:	

NOTES:
1. THIS IS A STANDARD DRAWING MADE BY THE CITY OF CHICAGO, DEPARTMENT OF STREETS AND SANITATION, BUREAU OF ELECTRICITY. THIS DRAWING IS INCLUDED FOR THE CONVENIENCE OF THE CONTRACTOR.

CTE | AECOM

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
NAME	DATE	
		STANDARD BOE DETAILS

SCALE: NOT TO SCALE DRAWN BY: HAR
DATE: June 9, 2006 CHECKED BY: JPC

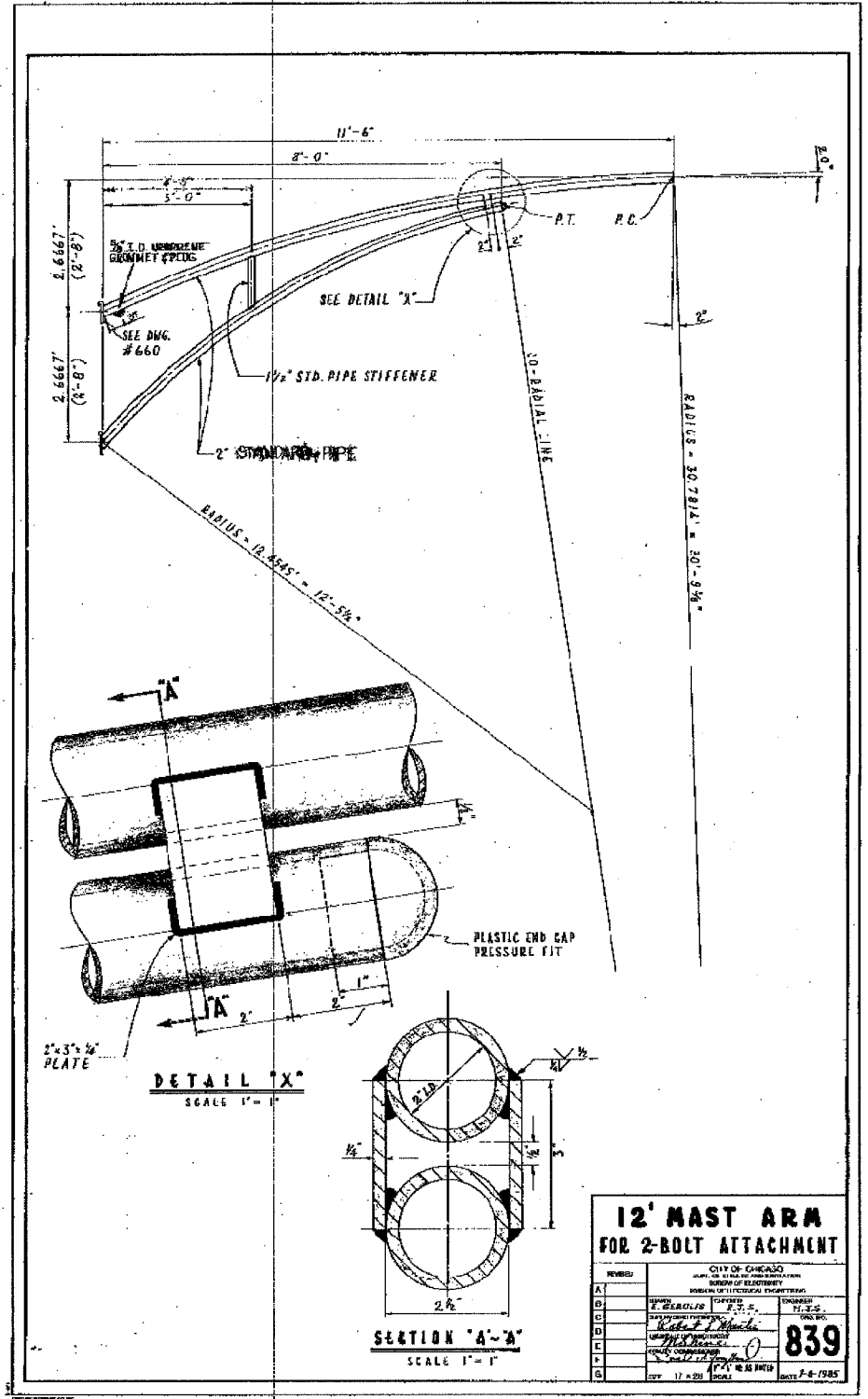
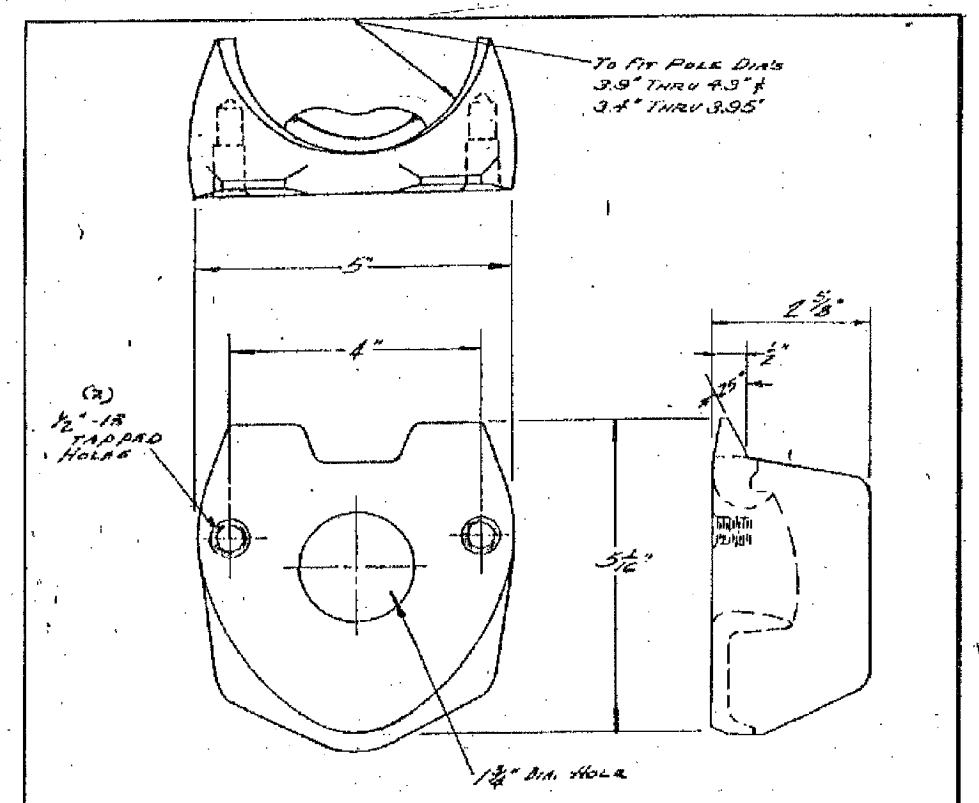
E-11

P:\p40465\elec\18-cntrs 18 & 19\contract 18\9094\9094\2007

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	247	159
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		• (1919.15, 2021-922 PT1 & PT2) R-2		

NOTES:

1. THIS IS A STANDARD DRAWING MADE BY THE CITY OF CHICAGO, DEPARTMENT OF STREETS AND SANITATION, BUREAU OF ELECTRICITY. THIS DRAWING IS INCLUDED FOR THE CONVENIENCE OF THE CONTRACTOR.



A J.O.C. MATERIAL NOTE ADDED.	
2 BOLT MAST ARM ATTACHMENT POLE PLATE DETAILS	
CITY OF CHICAGO DEPT. OF STREETS AND SANITATION DIVISION OF ELECTRICAL ENGINEERING	
REVISED	ENGINEER
A 5-27-76	J. BORE
DRAWN	CHECKED
J. WIMPFELDT	J. BORE
DRG. NO.	659
DATE	10-25-88
SIZE	8 1/2" x 11"
SCALE	

12' MAST ARM FOR 2-BOLT ATTACHMENT	
CITY OF CHICAGO DEPT. OF STREETS AND SANITATION DIVISION OF ELECTRICAL ENGINEERING	
REVISED	ENGINEER
A	J. BORE
D	J. BORE
E	J. BORE
F	J. BORE
G	J. BORE
DATE	10-25-88
SCALE	

CTE | AECOM

REVISIONS	NAME	DATE

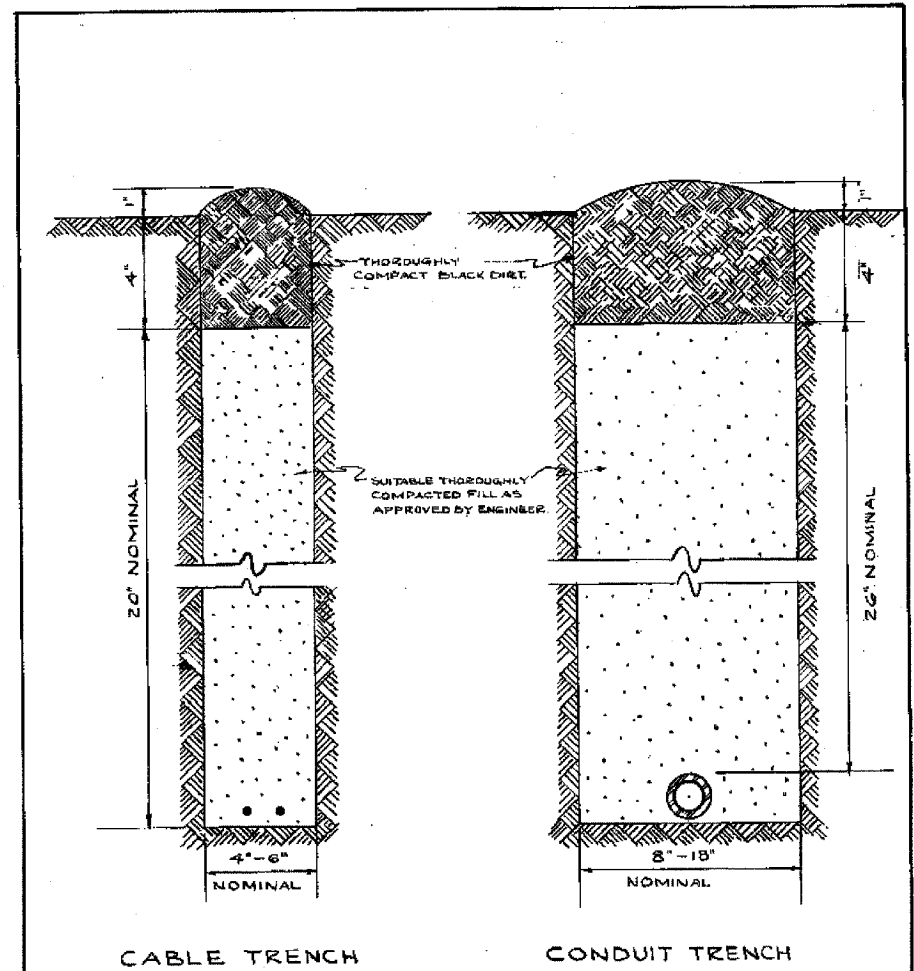
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

STANDARD BOE DETAILS

SCALE: NOT TO SCALE DRAWN BY: HAR
DATE: June 9, 2006 CHECKED BY: JPC

06/09/2006 03:09:42 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	160
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT			
60A63	(1919.15, 2021-922 PT1 & PT2) R-2			

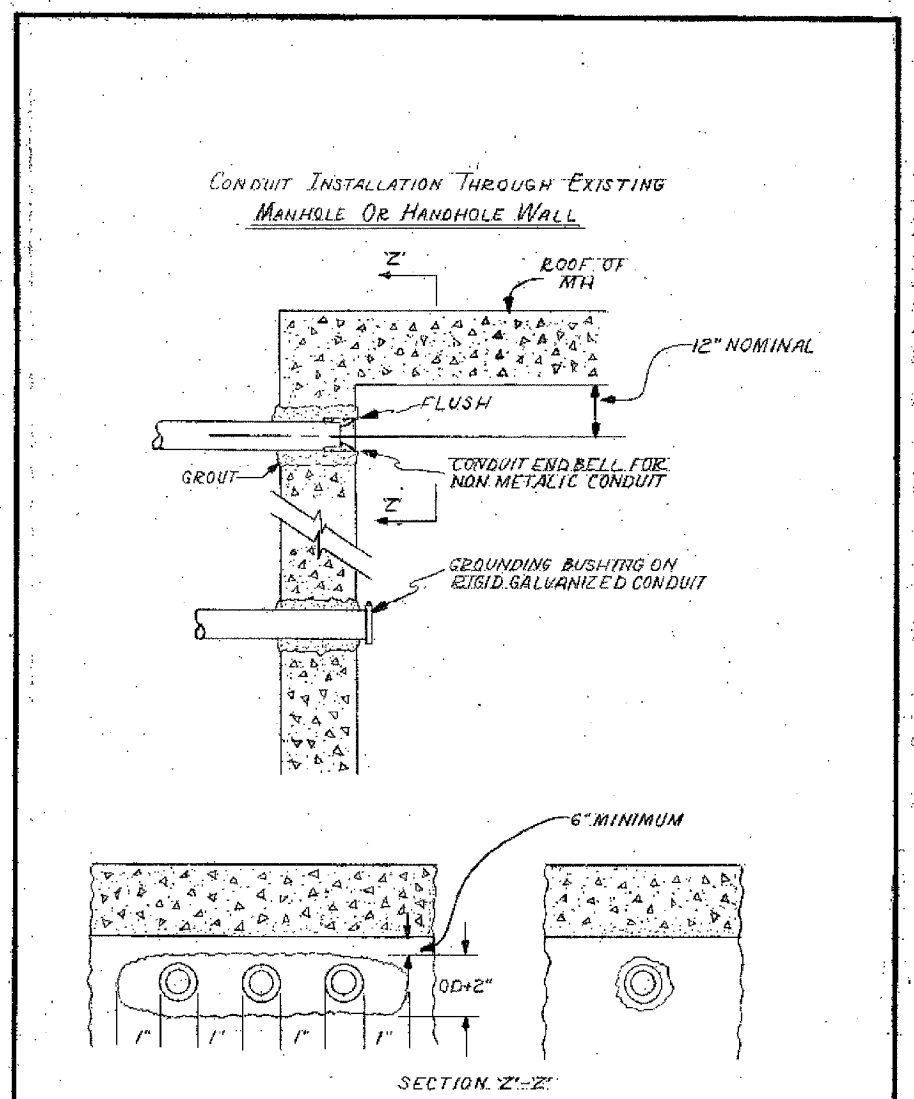


CABLE TRENCH

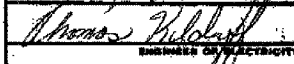
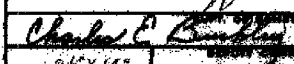
CONDUIT TRENCH

NOTE
 EXCESS SOIL FROM TRENCH TO BE COMPLETELY REMOVED FROM SITE AS SOON AS PRACTICABLE.
 BLACK DIRT TO BE TAMPED & THOROUGHLY COMPACTED AS SHOWN.

STANDARD METHOD FOR BACK FILLING CABLE & CONDUIT TRENCHES IN SODDED PARKWAY & LAWNS			
CITY OF CHICAGO			
DEPT. OF STREETS & SANITATION			
DIVISION OF ELECTRICAL ENGINEERING			
REVISION	DRAWN	CHECKED	ENGINEER
A	W. E. HAEP	M. J. HANE	J. O'CONNOR
B			
C			
D			
E			
F			
G			
H			
SIZE: 8 1/2" x 11"		SCALE: 1/4"	DATE: 7-14-01



OPENING THROUGH WALL TO BE KEPT TO MINIMUM SIZE TO ADMIT CONDUIT AND SUFFICIENT GROUT TO ASSURE SEALING WALL.

INSTALLATION METHOD OF INSTALLING CONDUIT THRU MANHOLE WALL		
CITY OF CHICAGO		
DEPT. OF STREETS AND SANITATION		
BUREAU OF ELECTRICITY		
DIVISION OF ELECTRICAL ENGINEERING		
DRAWN	CHECKED	ENGINEER
A.M. JOHNSON	R. SIEKOWSKI	R.L. MARTIN
 THOMAS WILBUR ENGINEER OF ELECTRICITY		DRG. NO. 814
 CHARLES E. BENTLEY ENGINEER		
SIZE: 8 1/2" x 11"	DATE: 7-14-01	

NOTES:
 1. THIS IS A STANDARD DRAWING MADE BY THE CITY OF CHICAGO, DEPARTMENT OF STREETS AND SANITATION, BUREAU OF ELECTRICITY. THIS DRAWING IS INCLUDED FOR THE CONVENIENCE OF THE CONTRACTOR.

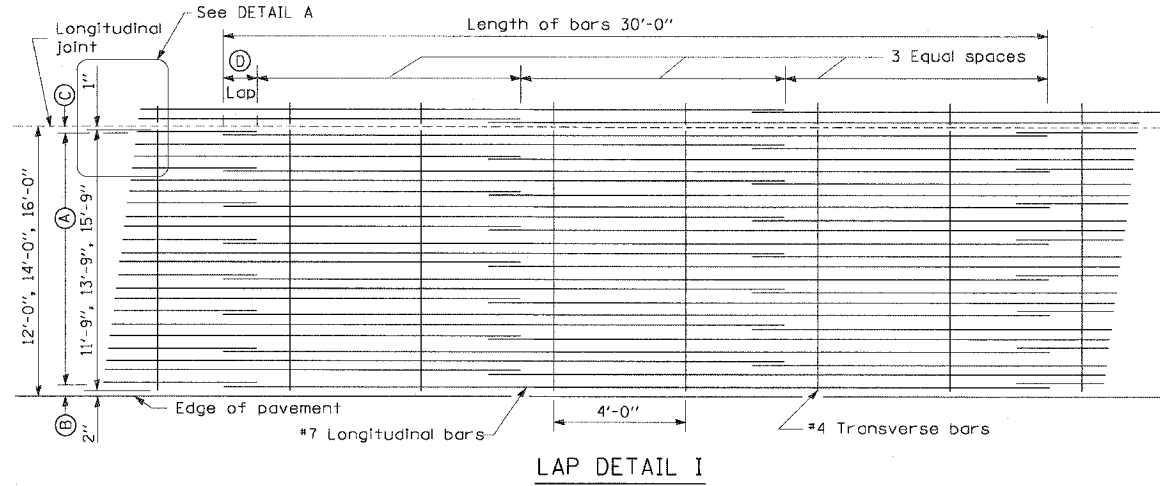
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
STANDARD BOE DETAILS
 SCALE: NOT TO SCALE
 DATE: June 9, 2006
 DRAWN BY: HAR
 CHECKED BY: JPC

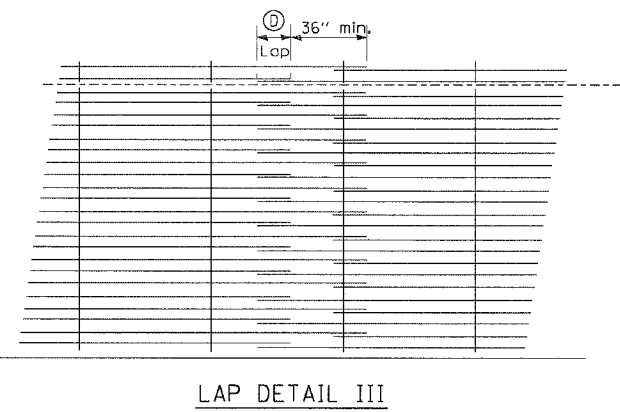
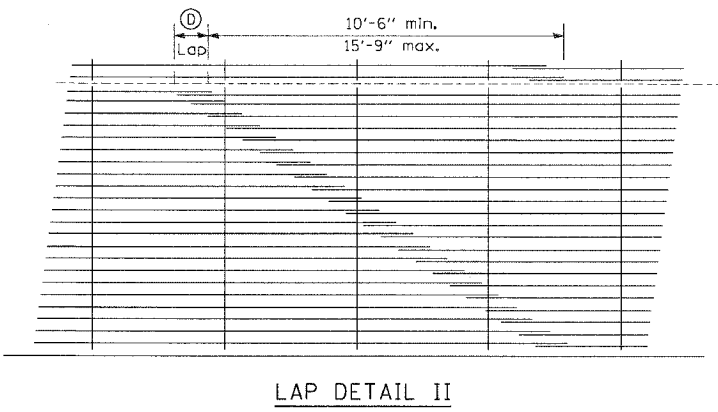
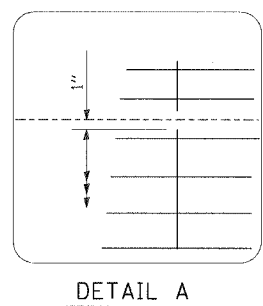
CTE | AECOM

06/02/2006 03:02 PM
 P:\90-94\elec\NB-cvirs 18 & 19\contract\90\94\elec\900132.dwg

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	161
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		* (1919.15, 2021-922 PT1 & PT2) R-2		



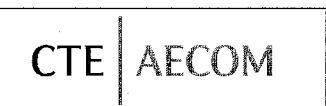
Pavement Width	Bar Size	Pavement Thickness	(A) (Approx. Spacing)	(B)	(C)	(D)
12 feet	#7	14"	26 spaces (27 bars) @ 5 1/4"	3 1/2"	3"	26"
14 feet	#7	14"	30 spaces (31 bars) @ 5 3/8"	3 1/2"	3"	26"
16 feet	#7	14"	35 spaces (36 bars) @ 5 1/4"	3 1/2"	3"	26"



- 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.

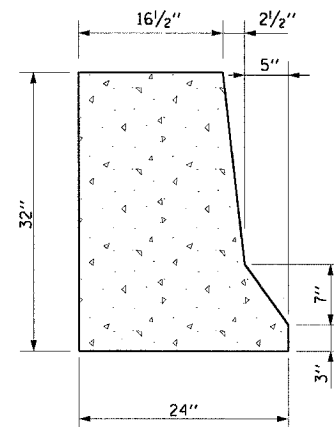
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES) ROADWAY DETAILS EXTENDED LANE REINFORCEMENT FOR CONTINUOUSLY REINFORCED PCC PAVEMENT
NAME	DATE	

SCALE: NONE DRAWN BY: NJH
DATE: June 9, 2006 CHECKED BY: RMG

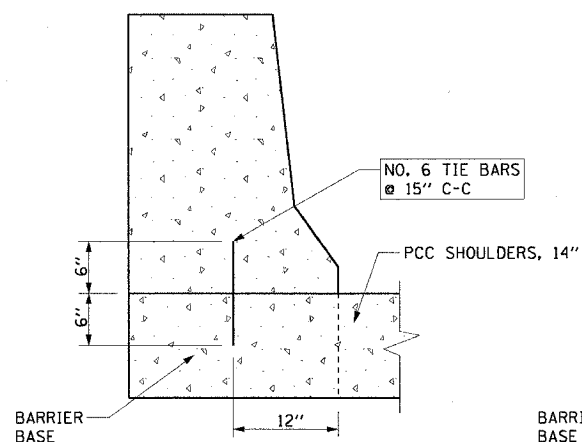


RDT-1
6/5/2006 10:29 PM

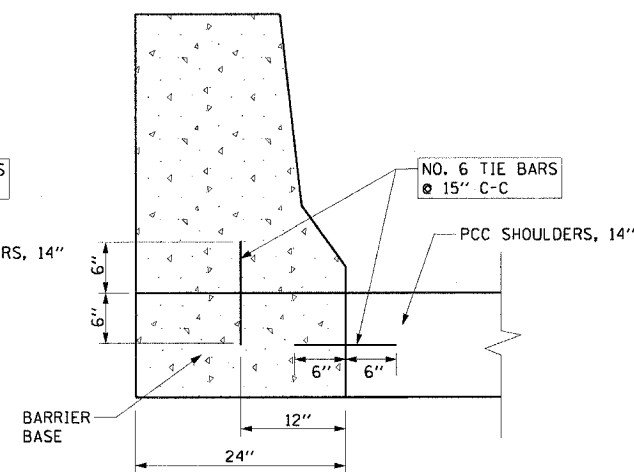
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	162
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		* (1919.15, 2021-922 PT1 & PT2) R-2		



CONCRETE BARRIER
TYPICAL SECTION



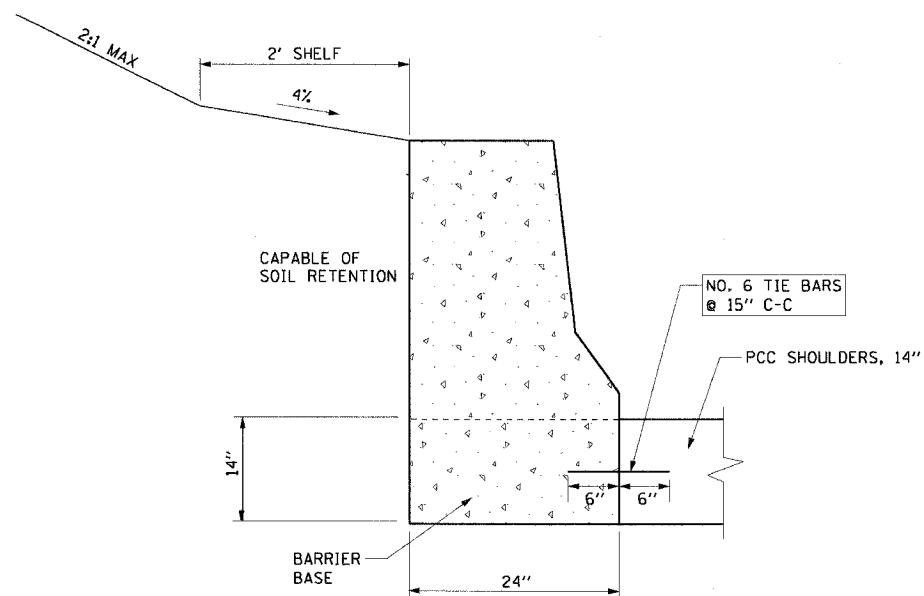
ANCHORING METHOD



CONCRETE BARRIER ON
INDEPENDANT FOUNDATION

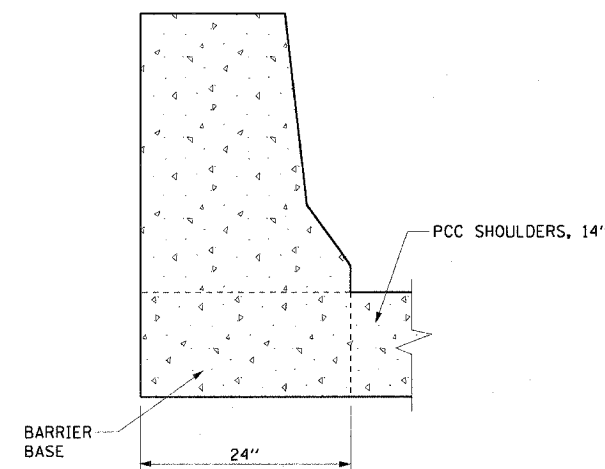
NOTE:

1. TIE BARS SHALL BE EPOXY COATED AND INCLUDED IN THE COST OF CONCRETE BARRIER, SINGLE FACE, 32" HEIGHT AND BARRIER BASE.
2. THE CONTRACTOR HAS THE OPTION OF CHOOSING BETWEEN ANCHORING METHODS SHOWN ON THIS SHEET.



MONOLITHIC CONCRETE BARRIER

IF SOIL RETENTION IS USED, 14" PCC SHOULDER PAVEMENT
MUST BE IN PLACE PRIOR TO BACKFILLING BARRIER WALL



CONCRETE BARRIER INTEGRAL
WITH PCC SHOULDERS, 14"

CONCRETE BARRIER, SINGLE FACE, 32" HEIGHT

CTE | AECOM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

ROADWAY DETAILS
CONCRETE BARRIER, SINGLE FACE, 32" HEIGHT

SCALE: NONE
DATE: June 9, 2006

DRAWN BY: NJH
CHECKED BY: RMG

RDT-2

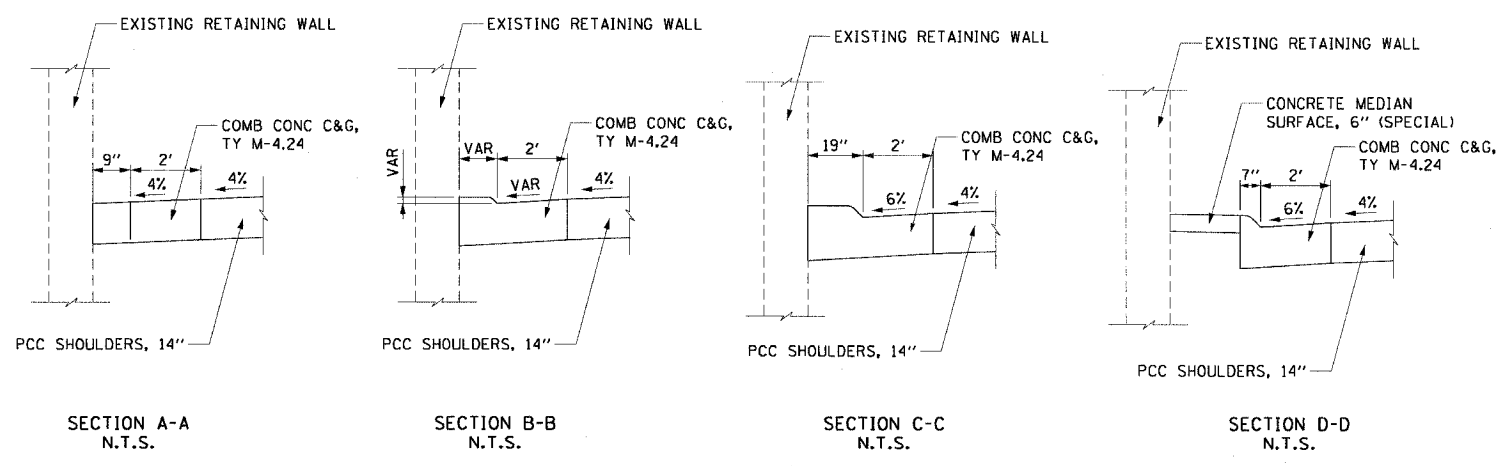
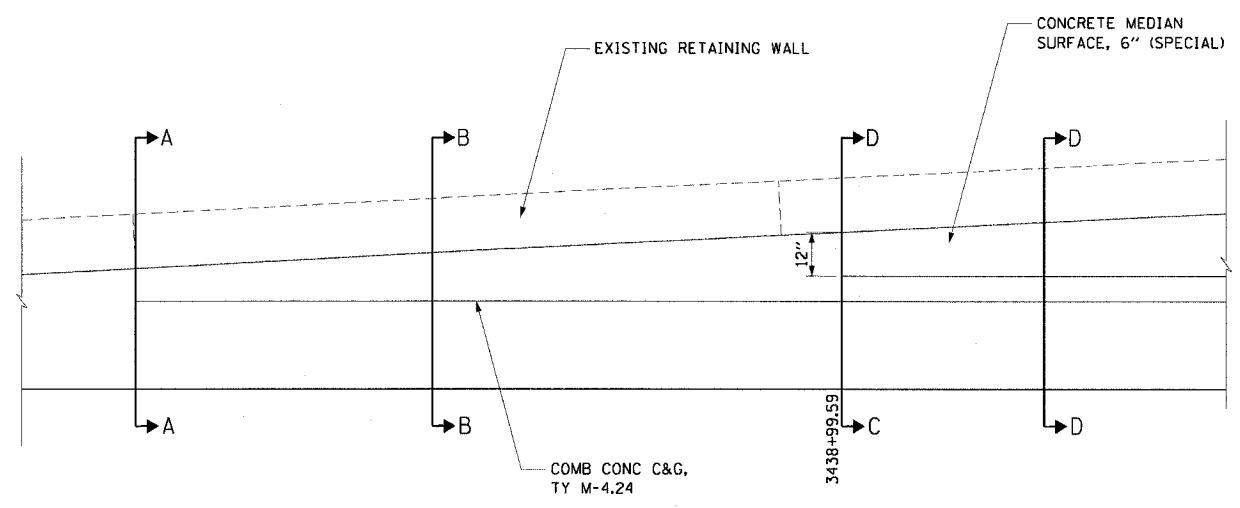
6/5/2006 107:29 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	163
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
60A63	* (19:15, 2021-922 PT1 & PT2) R-2			

VARIABLE CURB WIDTH AND GUTTER TRANSITIONS FOR COMB CONC C&G, TY M-4.24

N.T.S.

STA 3438+99.59
STA 3470+87.46

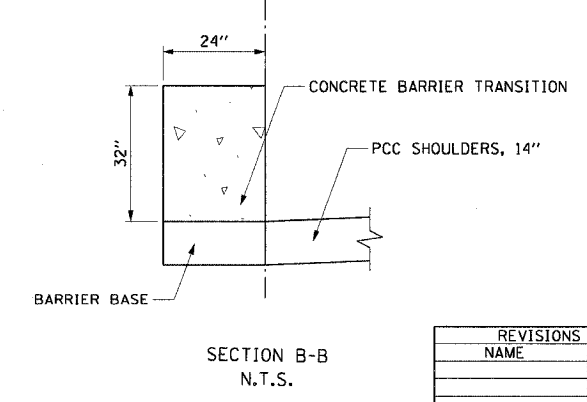
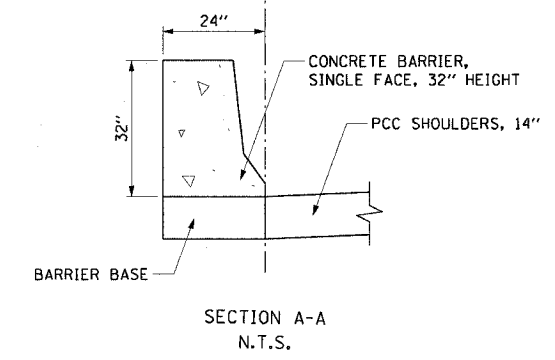
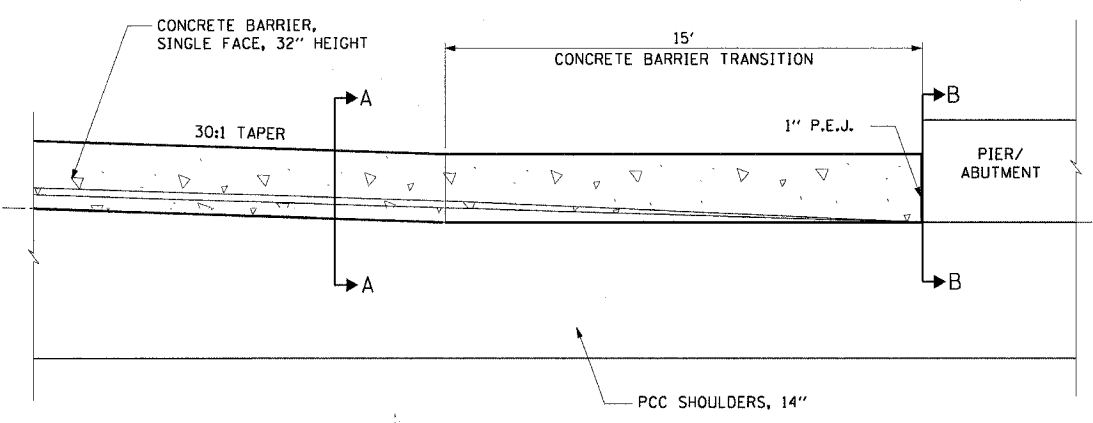


- NOTES:
1. THE TRANSITION SECTION SHALL BE PAID FOR AS COMB CONC C&G, TY M-4.24
 2. SEE IDOT HIGHWAY STANDARD 606001 FOR THE COMB CONC C&G, TY M-4.24 DETAILS.

SINGLE FACE CONCRETE BARRIER TRANSITION TO PIER/ABUTMENT

N.T.S.

STA 3427+70.44
STA 3428+45.12
STA 3446+76.28
STA 3446+87.57
STA 3448+44.56
STA 3449+27.22



- NOTES:
1. THE 1" PREFORMED EXPANSION JOINT SHALL BE INCLUDED IN THE COST OF CONCRETE BARRIER TRANSITION.
 2. SEE RDT-2 FOR CONCRETE BARRIER, SINGLE FACE, 32" HEIGHT DETAILS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

ROADWAY DETAILS
COMB CONC C&G, TY M-4.24 TRANSITION
SINGLE FACE CONCRETE BARRIER TRANSITION

SCALE: NONE
DATE: June 9, 2006

DRAWN BY: NJH
CHECKED BY: RMG



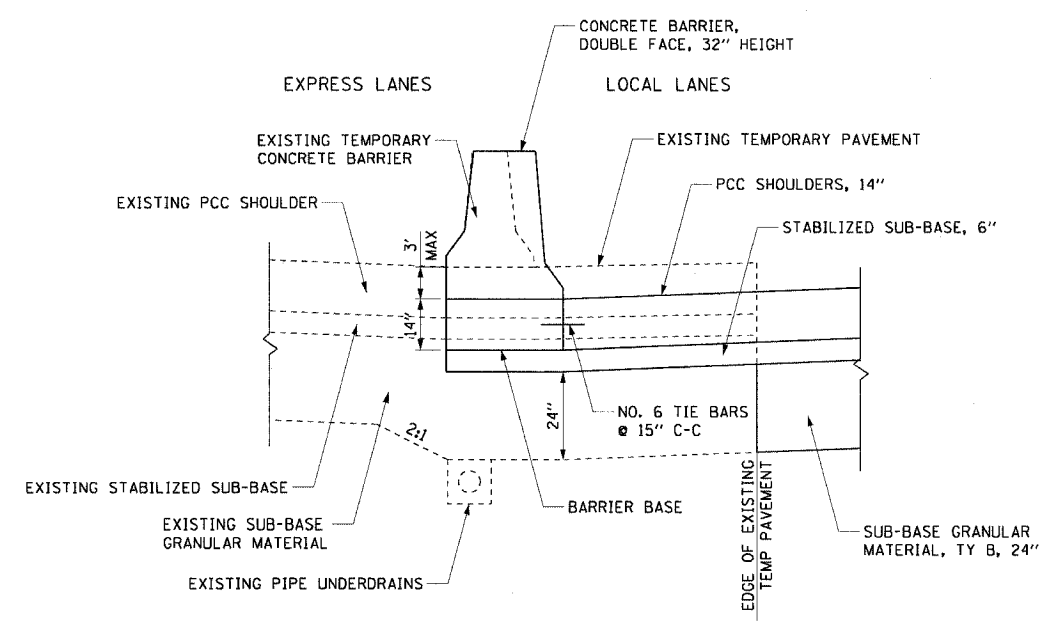
p:\p040463\civil\IB-entrs 18 & 19\sh\ntar 19\roadway details\rdt3\rdt3.dwg

RDT-3

6/5/2006 1407:30 FM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	247	165
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
60A63	• (1919.15, 2021-922 PT1 & PT2) R-2			

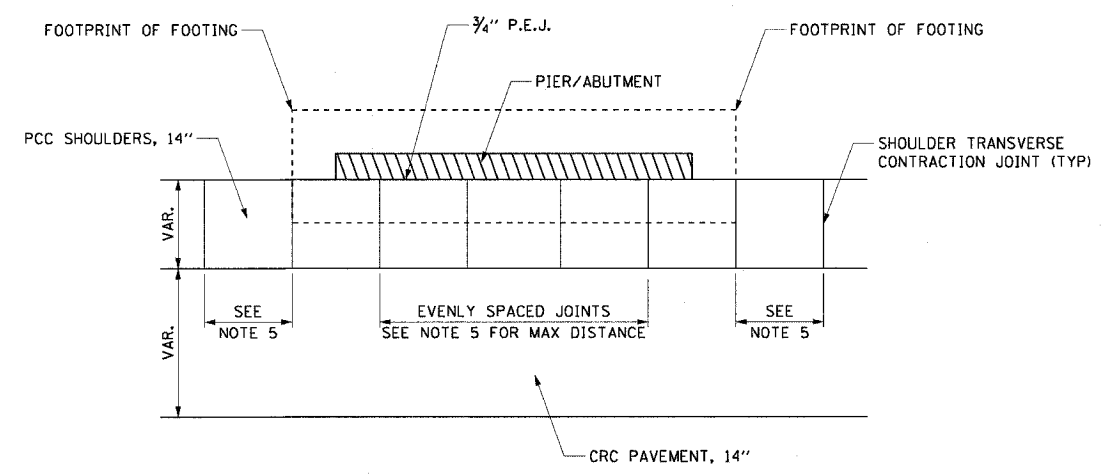
CONSTRUCTION OF SUB-BASE GRANULAR MATERIAL UNDER PROPOSED DOUBLE FACE BARRIER WALL



EXISTING EXPRESS LANES HIGHER THAN PROPOSED LOCAL LANES
N.T.S.

- NOTES:
- SEE IDOT HIGHWAY STANDARD 637001 FOR DOUBLE FACE CONCRETE BARRIER DETAILS.
 - THE TOE OF THE PROPOSED BARRIER WALL ALONG THE EXPRESS LANES SHOULDER SHALL MATCH THE EDGE OF THE EXISTING SHOULDER.
 - SEE RDT-4 FOR DOUBLE FACE BARRIER WALL ELEVATIONS.
 - PROPOSED SUB-BASE GRANULAR MATERIAL, TY B, 24" SHALL BE CONSTRUCTED BEGINNING AT THE EDGE OF THE EXISTING TEMPORARY PAVEMENT.
 - IF THE BARRIER BASE IS CONSTRUCTED INDEPENDENTLY OF THE PCC SHOULDER, THE TIE BARS SHALL BE PLACED AT A DEPTH WHERE THE BAR TIES THE BARRIER BASE TO THE "LOW SIDE" PCC SHOULDER.
 - TIE BARS SHALL BE NO. 6 EPOXY COATED, 12" LONG, 15" C-C AND SHALL BE INCLUDED IN THE COST OF THE BARRIER BASE.

SHOULDER JOINTS AT PIERS AND ABUTMENTS



- NOTES:
- CARE SHOULD BE TAKEN WHEN EXCAVATING NEAR AND AROUND EXISTING PIERS AND ABUTMENTS.
 - THE CONTRACTOR SHALL VERIFY THE FOOTPRINT OF THE FOOTING DURING EXCAVATION.
 - THE MINIMUM WIDTH BETWEEN SHOULDER TRANSVERSE CONTRACTION JOINTS SHOULD BE NO LESS THAN 7' C-C.
 - 3/4" P.E.J. SHALL BE INCLUDED IN THE COST OF PCC SHOULDERS, 14".
 - THE SPACING OF THE SHOULDER TRANSVERSE CONTRACTION JOINT SHALL BE 20' C-C ALONG THE INSIDE SHOULDER AND 15' C-C ALONG THE OUTSIDE SHOULDER.

CTE | AECOM

REVISIONS		DATE	

RDT-5

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

ROADWAY DETAILS
SHOULDER JOINTS AT PIERS AND ABUTMENTS
CONSTRUCTION OF SUB-BASE GRAN MATERIAL

SCALE: NONE
DATE: June 9, 2006

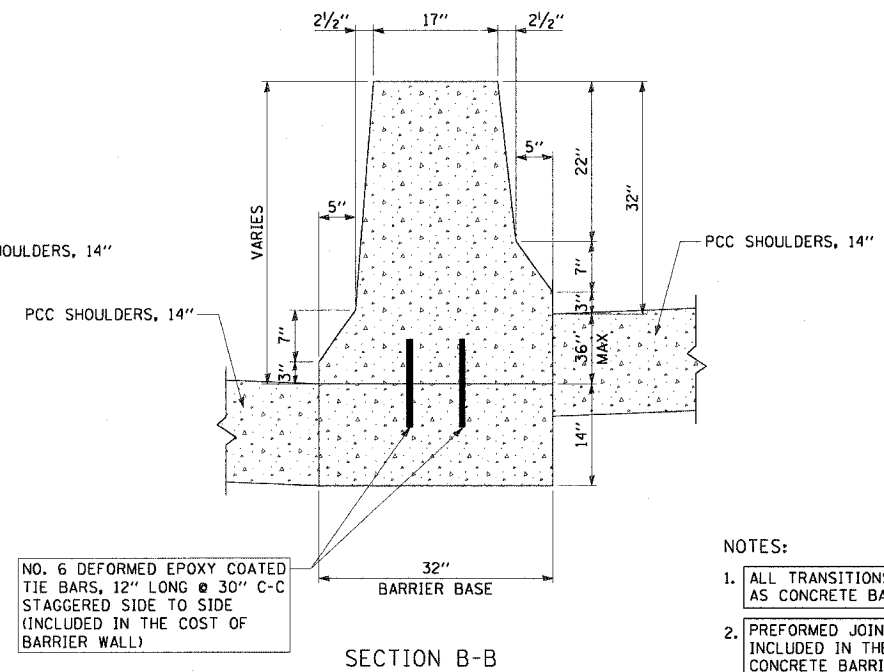
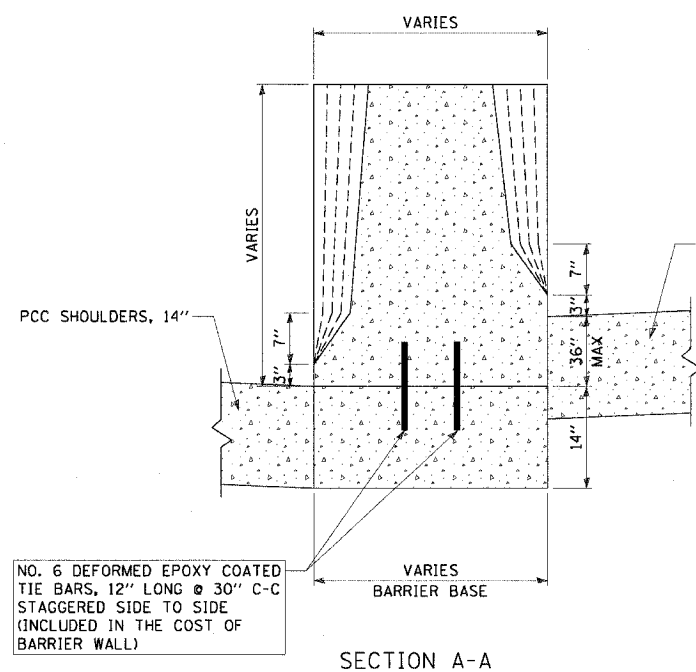
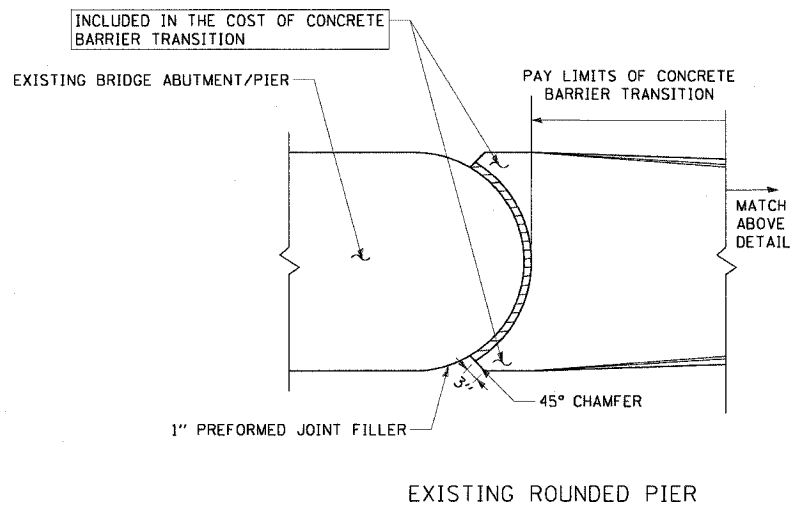
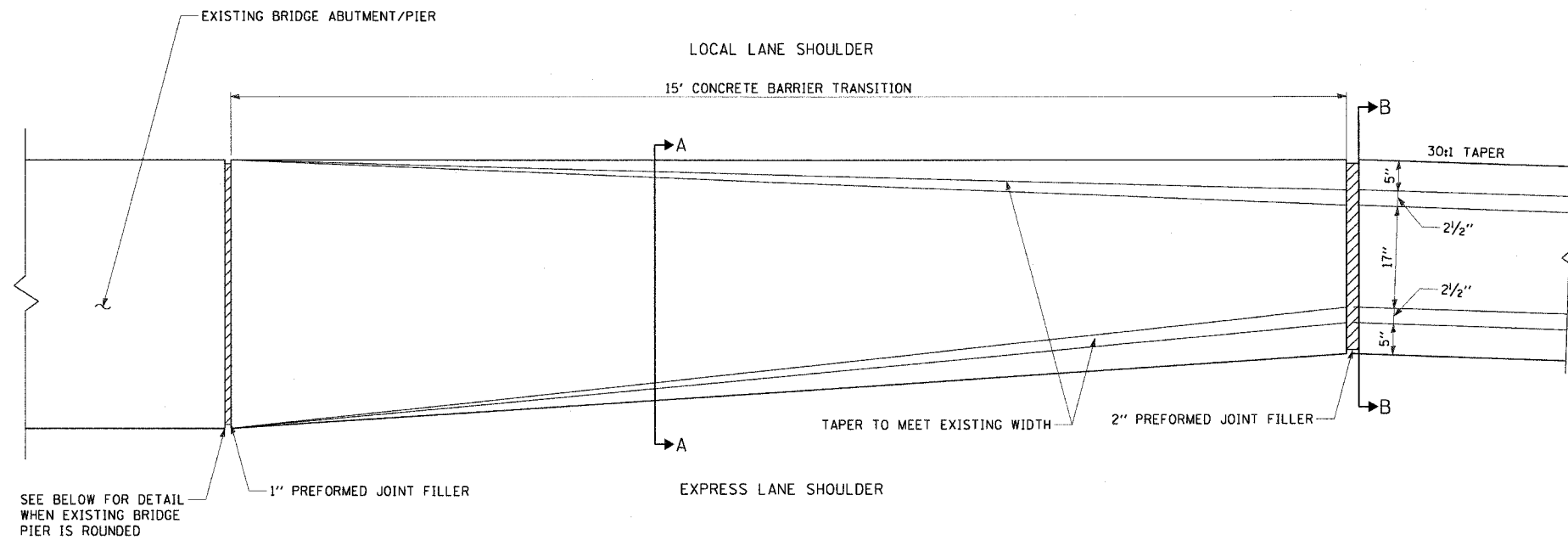
DRAWN BY: NJH
CHECKED BY: RMG

I:\p\90468\civil\18-crits 18 & 19\civil\18-19\roadway details\18\90468\002.dwg

6/5/2006 1:07:32 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	166
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT			
60A63	* (1919.15, 2021-922 PT1 & PT2) R-2			

DOUBLE FACE CONCRETE BARRIER TRANSITION
N.T.S.



- NOTES:
1. ALL TRANSITIONS SHALL BE PAID FOR AS CONCRETE BARRIER TRANSITION
 2. PREFORMED JOINT FILLER SHALL BE INCLUDED IN THE COST OF THE CONCRETE BARRIER TRANSITION.

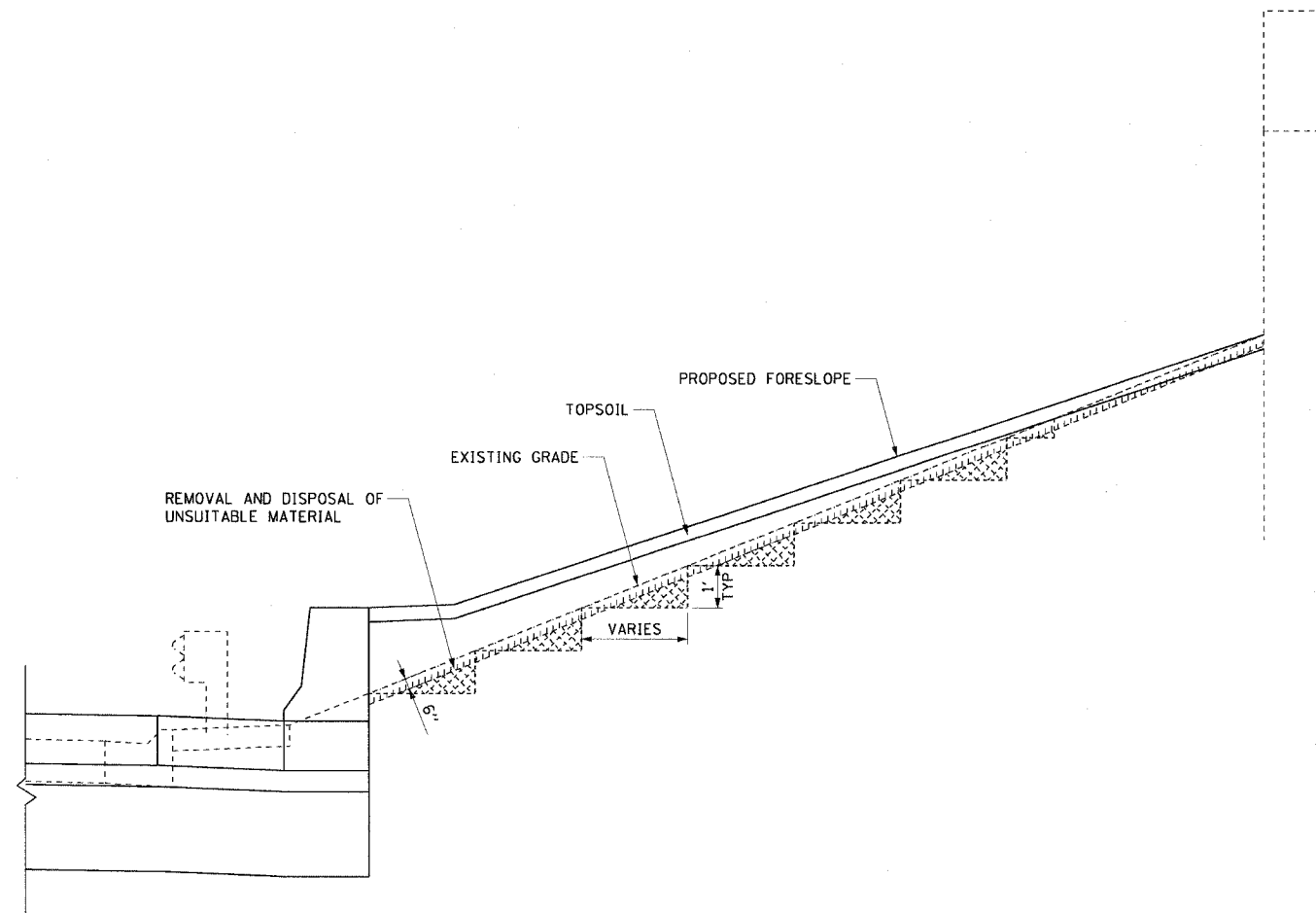
REVISIONS	
NAME	DATE

RDT-6
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
ROADWAY DETAILS
DOUBLE FACE CONCRETE BARRIER TRANSITION
SCALE: NONE
DATE: June 9, 2006
DRAWN BY: NJH
CHECKED BY: RMC

I:\p\0468\CIVIL\B-contrs 18 & 19\civil\contr 19\roadway details\16000202.rvt 1:07:33 PM 6/5/2006

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	167
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		* (1919.15, 2021-922 PT1 & PT2) R-2		

BENCHING DETAIL FOR EMBANKMENT
N.T.S.



LEGEND:

- EARTH EXCAVATION (SPECIAL)
- REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL

NOTES:

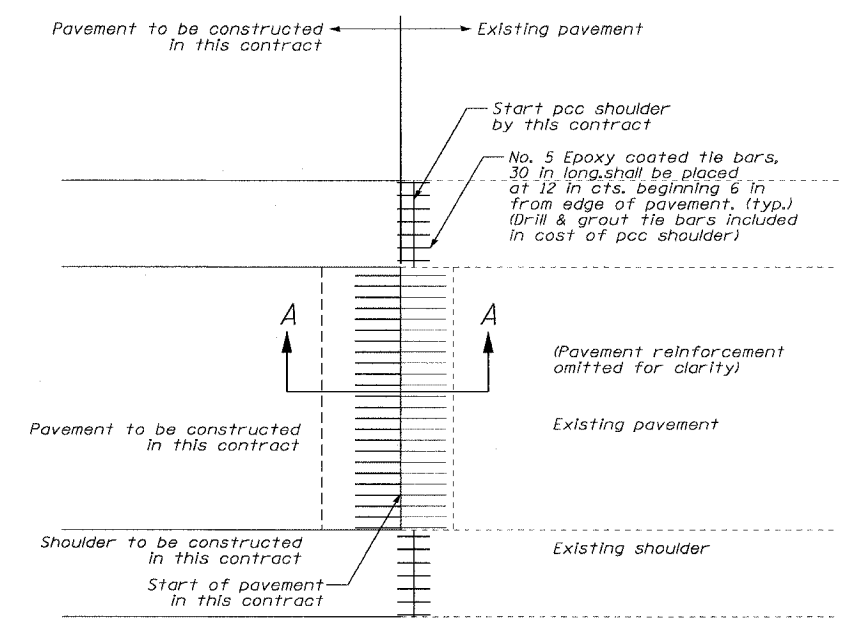
1. SEE LANDSCAPING PLANS AND DETAILS FOR TOPSOIL AND SEEDING TYPES.
2. THE EXCAVATION OF THE TOP 6" OF EXISTING SOIL SHALL BE PAID FOR AS "REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL."
3. CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
4. EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.04 OF THE STANDARD SPECIFICATIONS.
5. BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
6. EQUAL 6-INCH LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.06 OF THE STANDARD SPECIFICATIONS.
7. EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR "EARTH EXCAVATION (SPECIAL)". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
8. SEE CROSS SECTIONS SHEETS FOR EMBANKMENT AREAS THAT NEED TO BE BENCHED.
9. BENCHING HEIGHT SHALL BE 1 FOOT TYPICAL WITH A MAXIMUM HEIGHT OF 2.5 FOOT.

RDT-7

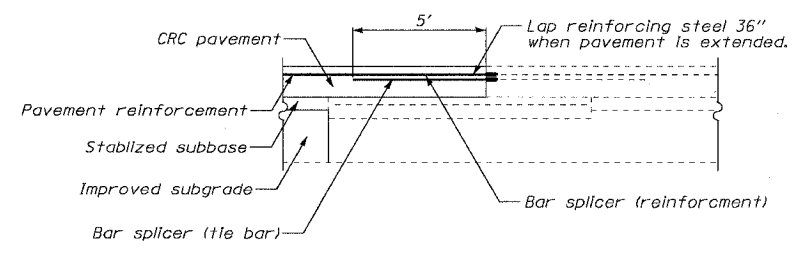
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
NAME	DATE	
		ROADWAY DETAILS BENCHING DETAIL FOR EMBANKMENT
SCALE: NONE		DRAWN BY: NJH
DATE: June 9, 2006		CHECKED BY: RMG

CTE | AECOM

P:\040468\04\118\cans 18 & 19\struc\190\roadway details\60a63\167.dwg



PLAN
 (CONNECTION TO EXISTING LONG TERM TRANSVERSE CONSTRUCTION JOINT)



LONG TERM TRANSVERSE CONSTRUCTION JOINT SECTION A-A

NOTES

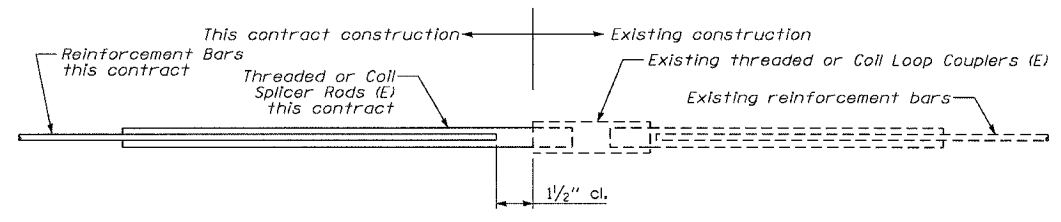
- This detail shows connection of proposed CRC pavement to existing pavement at an existing long term transverse construction joint.
 - Bar splicer assemblies shall be of an IDOT approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 - 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 ksl) = $1.25 \times f_y \times A(t)$
 - Minimum Pull-out Strength (Tension in ksl) = $1.25 \times f_s \text{ (allow)} \times A(t)$
- 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 (klps) tension	Min. Pull-Out Strength (klps) 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

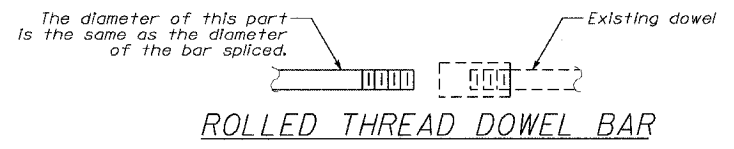
- Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted.
- Reinforcement shall not be paid for separately but included in the cost of PAVEMENT REINFORCEMENT, 14"
- Connection to long term transverse construction joint work includes the installation of the bar splicers, payment for this work will be included in the cost of CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 14". Tie bars to be drilled and grouted shall not be paid for separately but included in the cost of PORTLAND CEMENT CONCRETE SHOULDERS, 14"

GENERAL NOTES

- See Standard 421001 for details of CRC pavement reinforcement.
- See Standards 420001 and 420401 for details of joints and tie bars not shown.
- See Standard 483001 for pcc shoulder details



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



REVISIONS	
NAME	DATE

RDT-8

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

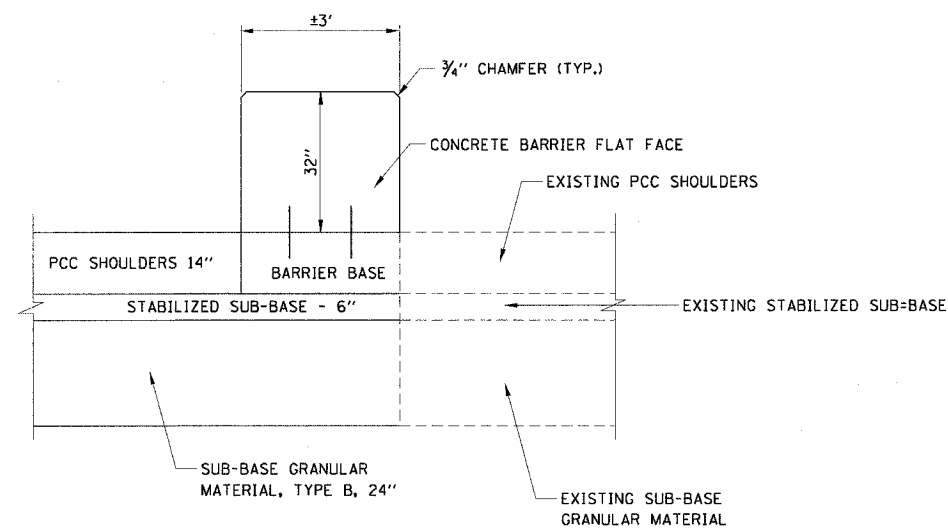
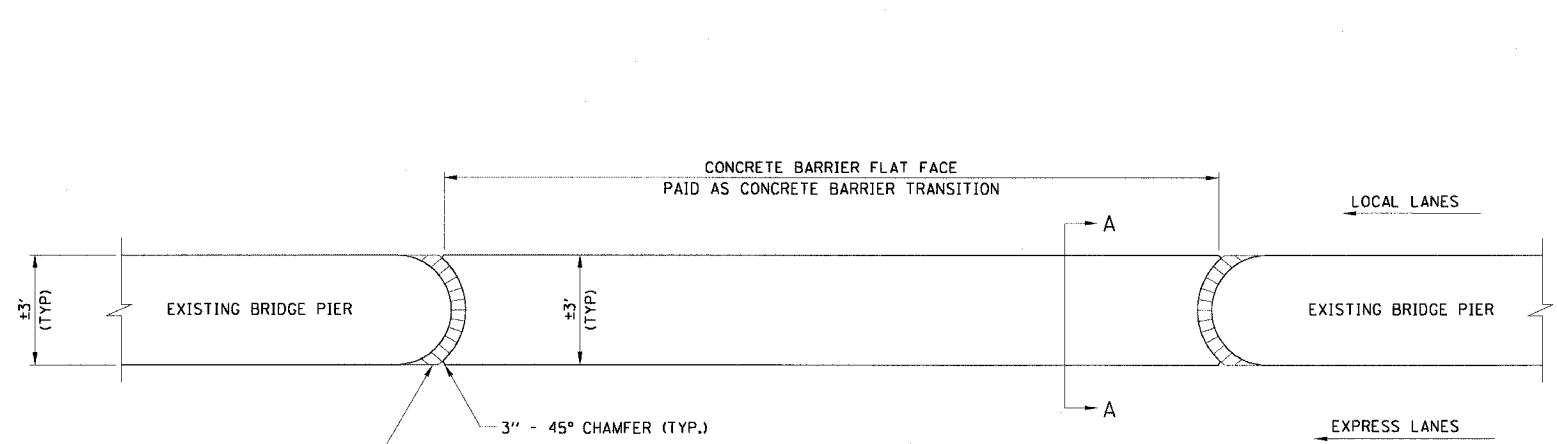
ROADWAY DETAILS
CONNECTION TO EXISTING LONG TERM TRANSVERSE CONSTRUCTION JOINT

SCALE: NONE DRAWN BY: TAI
 DATE: June 9, 2006 CHECKED BY: PJM

I:\p\0466\civ\1907\roadway details\9094\9094.dwg
 6/15/2006 1:07:34 PM

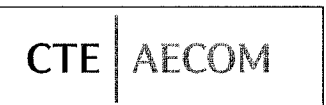
F.A.I. RTE. 90/94	SECTION •	COUNTY COOK	TOTAL SHEETS 247	SHEET NO. 169
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		• (1919.15, 2021-922 PT1 & PT2) R-2		

D:\040463\CONTR-18 & 19\STRUCT\90V\roadway_details\900202.stb



CONCRETE BARRIER FLAT FACE
STA 3474+54.32 TO STA 3475+17.14

- NOTES:
- THE 1" PREFORMED JOINT FILLER SHALL BE INCLUDED IN THE COST OF THE CONCRETE BARRIER TRANSITION



REVISIONS	
NAME	DATE

RDT-9

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

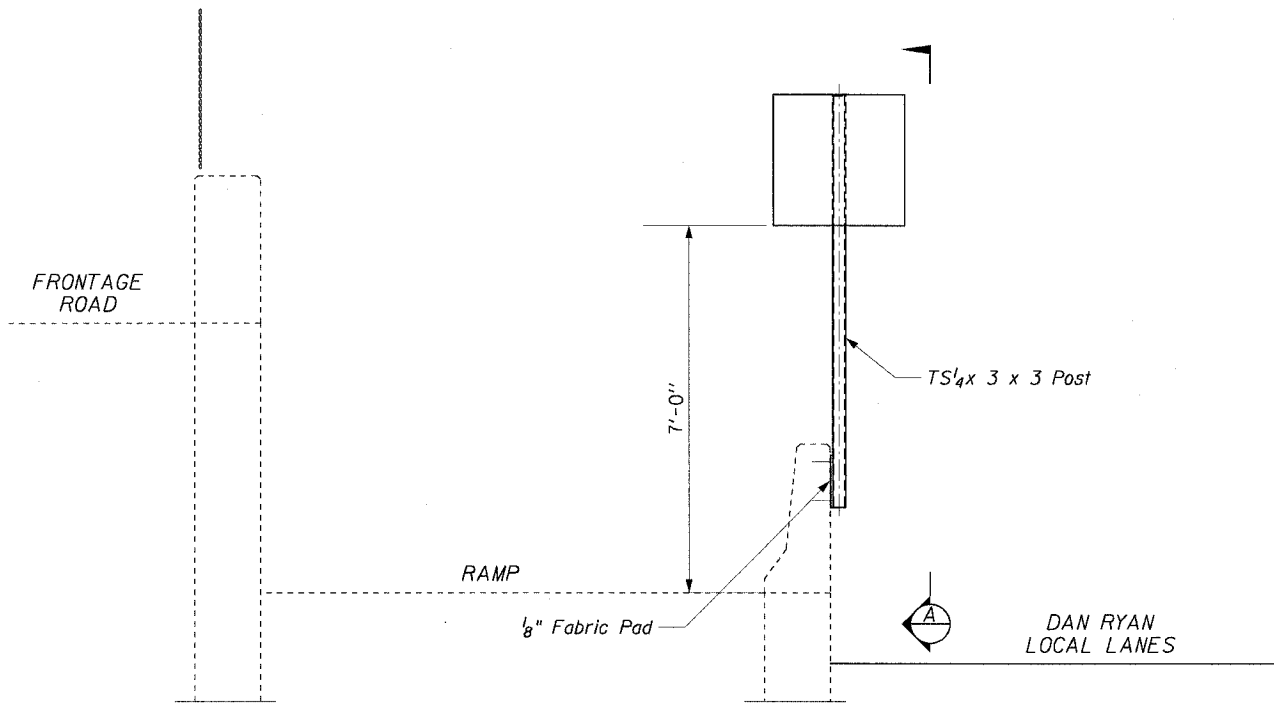
ROADWAY DETAILS
CONCRETE BARRIER FLAT FACE

SCALE: NONE DRAWN BY: N.J.H.
DATE: June 9, 2006 CHECKED BY: RMG

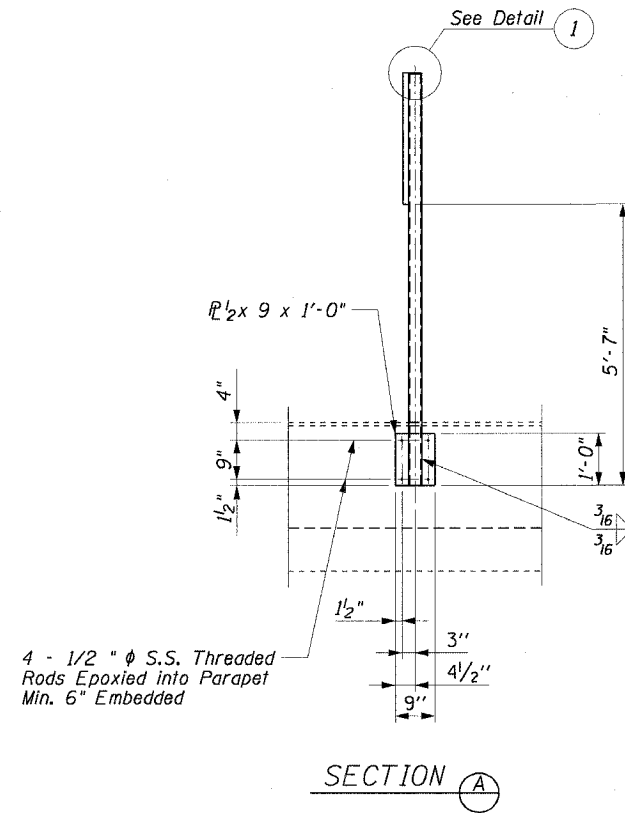
6/5/2006 10:35 PM

EXISTING BARRIER WALL SIGN POST MOUNTING DETAILS

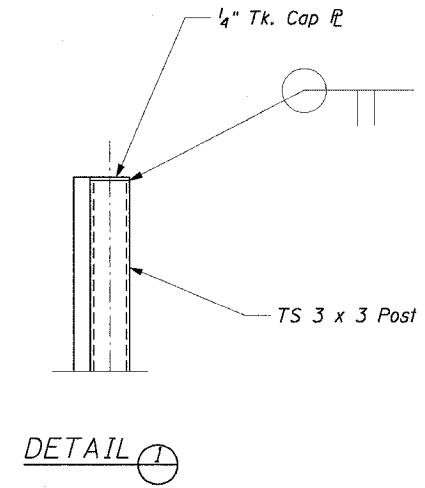
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	247	170
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
60A63	• (1919.15, 2021-922 PT1 & PT2) R-2			



ELEVATION



SECTION A



DETAIL 1

NOTE

When drilling and epoxy grouting the anchor rods, the Contractor shall use the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by IDOT. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures. The capsule or the adhesive cartridge shall be sealed with pre-measured amounts of the adhesive chemical. This associated materials and work performed shall be included in the cost of Base For Telescoping Steel Sign Support.

CTE | AECOM

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
 ROADWAY DETAILS
 EXISTING BARRIER WALL
 SIGN POST MOUNTING DETAILS

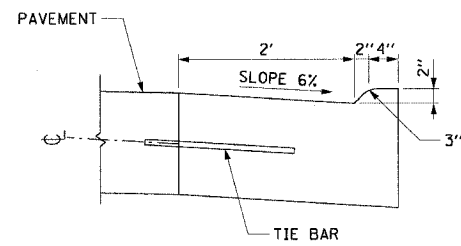
SCALE: NONE DRAWN BY: DS
 DATE: June 9, 2006 CHECKED BY: SWANG

RDT-10

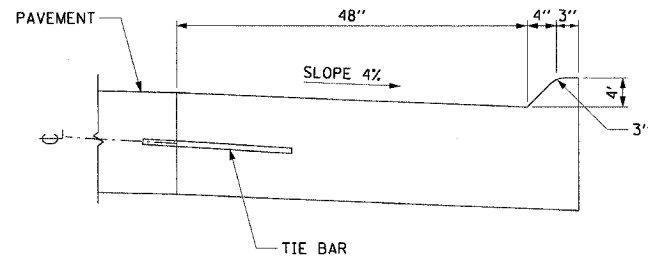
6/15/2006 1:07:36 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	171
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
60A63	* (19)9.15, 2021-922 PT1 & PT2) R-2			

COMB CONC C&G, TY M-2.24 AND M-4.48 (MOD) DETAILS
N.T.S.



TY M-2.24



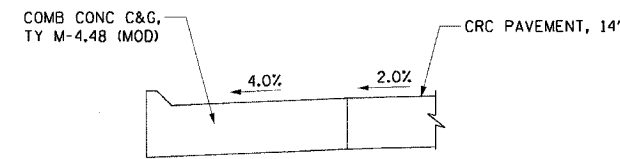
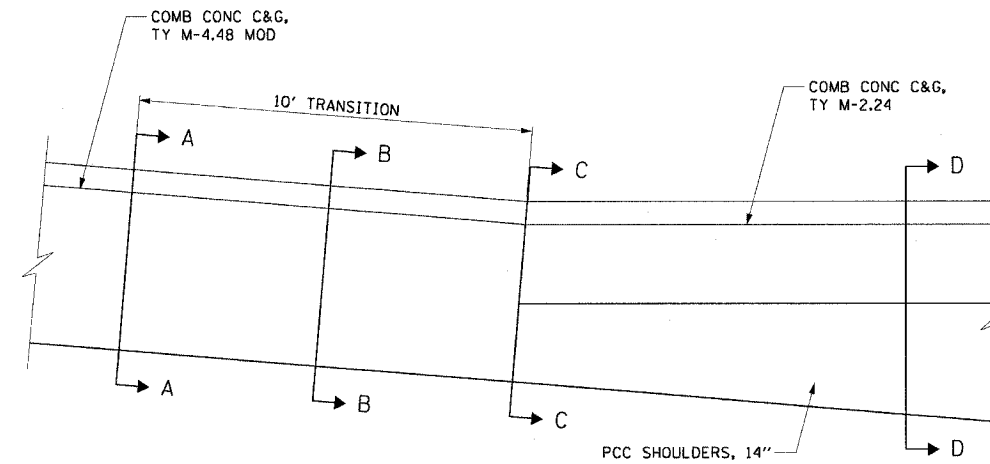
TY M-4.48 (MODIFIED)

NOTES:

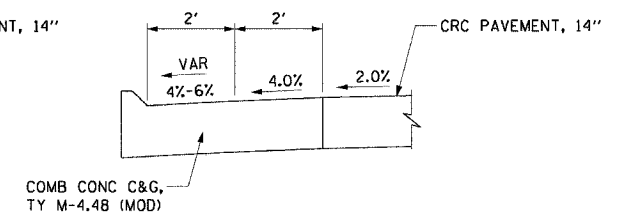
- CONTRACTOR SHALL FOLLOW IDOT HIGHWAY STANDARD 606001 FOR GENERAL NOTES AND PROCEDURES
- TIE BARS SHALL BE INCLUDED IN THE COST OF COMB CONC C&G, TY M-2.24 & TY M-4.48 (MOD).
- FOR THE TY M-2.24 C&G, THE TIE BARS SHALL BE NO. 6 DEFORMED EPOXY, 24" LONG AT 24" C-C.
- FOR THE TY M-4.48 (MOD) C&G, THE TIE BARS SHALL BE NO. 8 DEFORMED EPOXY, 30" LONG AT 24" C-C.

C&G TY M-4.48 (MOD) TRANSITION TO C&G TY M-2.24
N.T.S.

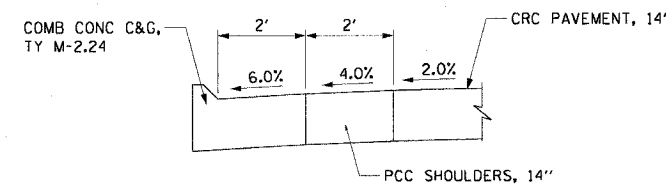
STA 3453+28.74



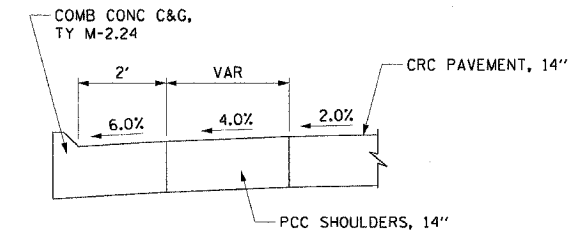
SECTION A-A
N.T.S.



SECTION B-B
N.T.S.



SECTION C-C
N.T.S.



SECTION D-D
N.T.S.

NOTES:

- THE TRANSITION SECTION SHALL BE PAID FOR AS COMB CONC C&G, TY M-4.48 (MOD)
- SEE RDT-11 FOR COMB CONC C&G, TY M-4.48 (MOD) DETAILS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

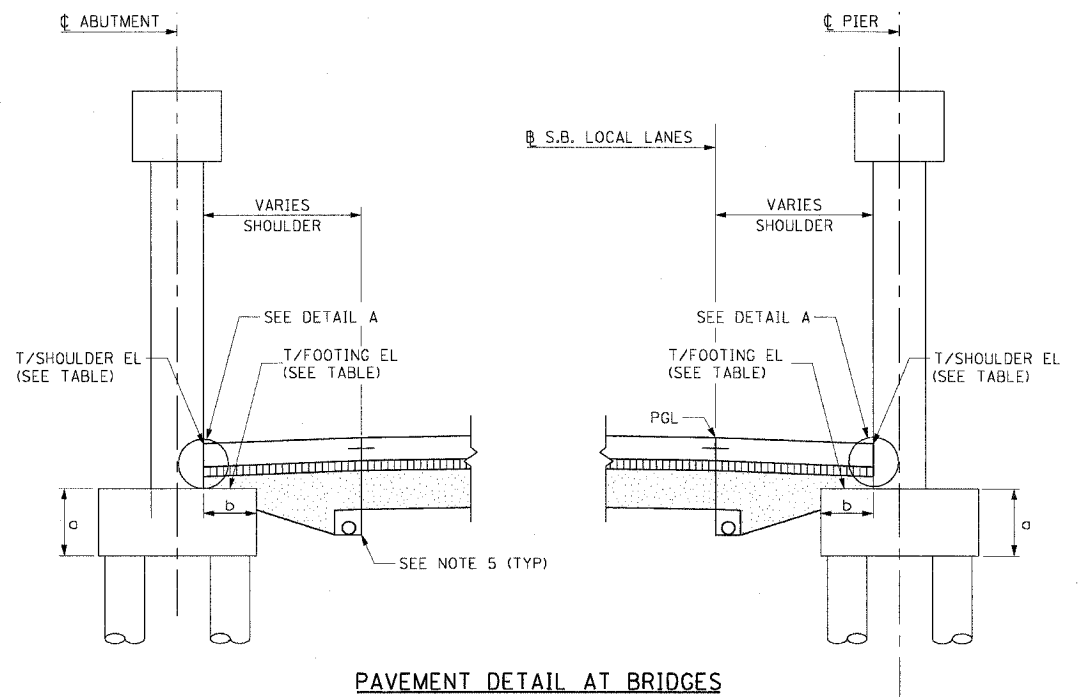
ROADWAY DETAILS
MOUNTABLE CURB & GUTTER DETAILS
TY M-4.48 (MOD) TO TY M-2.24 TRANSITION

SCALE: NONE
DATE: June 9, 2006

DRAWN BY: NJH
CHECKED BY: RMG

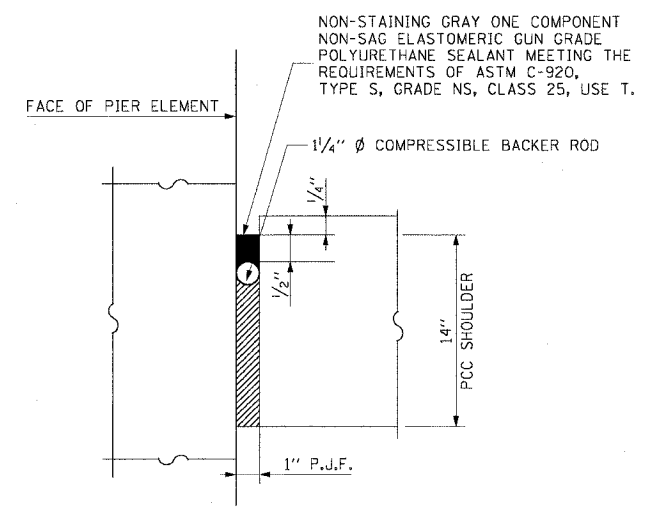
RDT-11

p:\p40466\civ\18 & 19\sh\citr 190\roadway details\m202037f



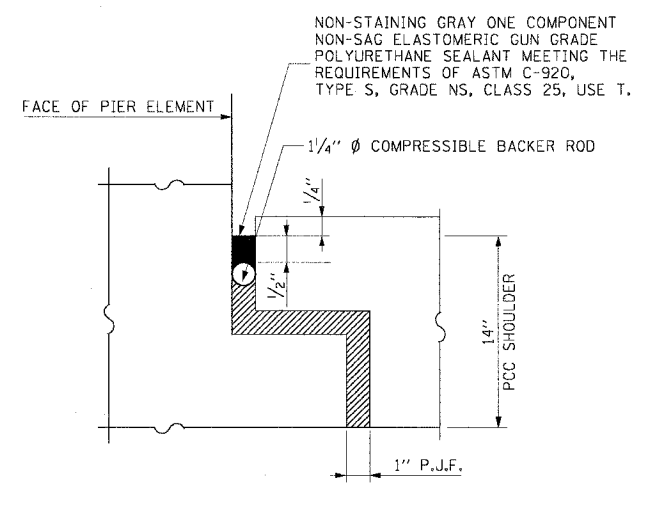
LOCATION	PIER	T/FOOTING EL	FOOTING THICKNESS "a" (FT)	TOE WIDTH "b" (FT)	T/SHOULDER EL	
					MAX	MIN
CONRAIL R.R.	6	0.10	4.50	4.75	2.82	2.47
	5	0.10	4.50	4.75	2.45	2.09
59TH ST	W. ABUT.	-4.00	2.00	3.50	-1.30	-2.09
	1	-4.00	2.00	1.75	-0.90	-2.91
57TH ST	W. ABUT.	-6.00	2.50	6.13	-1.54	-2.37
	1	-6.00	1.50	2.25	-0.74	-2.75
55TH ST (SOUTH BRIDGE)	W. ABUT.	-2.92	2.00	3.50	-1.91	-2.11
	1	-3.00	2.00	2.50	-1.69	-2.36
55TH ST (NORTH BRIDGE)	W. ABUT.	-3.17	2.00	3.50	-0.73	-1.45
	1	-3.00	2.00	2.50	-0.53	-1.70

PAVEMENT DETAIL AT BRIDGES



DETAIL A

COST OF P.J.F., BACKER ROD AND SEALANT INCLUDED WITH PCC SHOULDER



DETAIL B

COST OF P.J.F., BACKER ROD AND SEALANT INCLUDED WITH PCC SHOULDER

LEGEND:

- STABILIZED SUB-BASE 6"
- SUB-BASE GRANULAR MATERIAL, TY B 24"

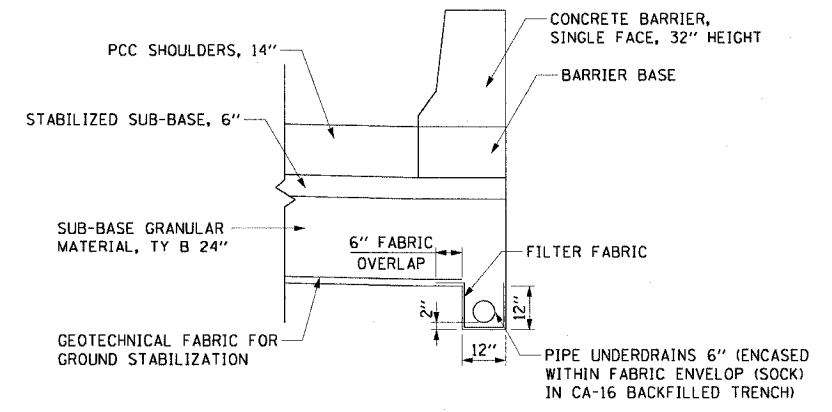
NOTES:

1. SEE TYPICAL SECTIONS FOR COMPOSITION OF EXISTING AND PROPOSED PAVEMENT.
2. ALL VIEWS LOOKING NORTH.
3. CONTRACTOR SHALL USE CAUTION DURING PAVEMENT REMOVAL AND EXCAVATION OPERATIONS AROUND EXISTING OVERHEAD BRIDGE FOUNDATION.
4. PROVIDE 10 MIL POLYETHYLENE BOND BRAKER AND POUR SHOULDER PAVEMENT DIRECTLY ON PIER FOOTING.
5. SEE DRAINAGE AND UTILITY SHEETS FOR LOCATION OF PIPE UNDERDRAINS 6".
6. SEE DETAIL B WHEN PCC SHOULDER IS LOCATED WITHIN THE FOOTING.
7. THE ADDITIONAL DEPTH OF AGGREGATE SUBGRADE UNDER THE SHOULDER SHALL BE INCLUDED IN THE COST OF SUB-BASE GRANULAR MATERIAL, TY B, 24".

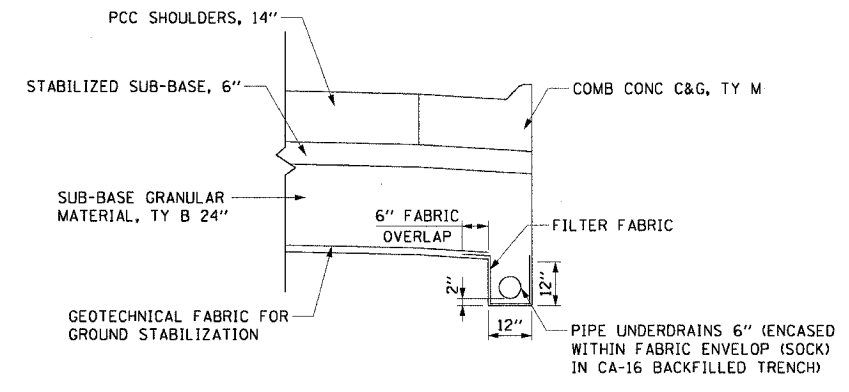
REVISIONS	
NAME	DATE

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	173
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		* (1919.15, 2021-922 PT1 & PT2) R-2		

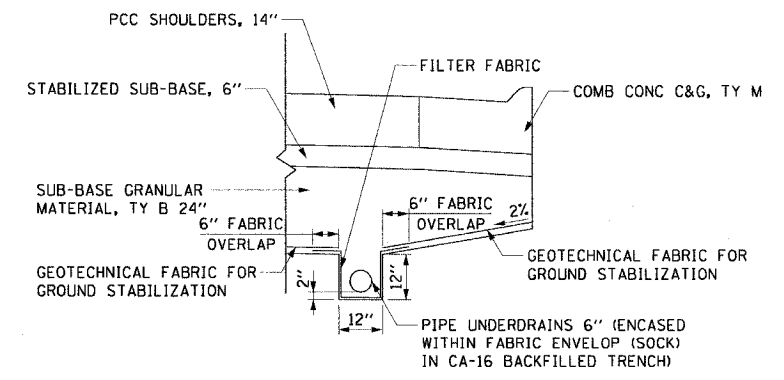
PIPER UNDERDRAINS 6"
N.T.S.



PIPE UNDERDRAINS 6"
LOCATED UNDER SINGLE FACE BARRIER WALL



PIPE UNDERDRAINS 6"
LOCATED UNDER COMB CONC C&G



PIPE UNDERDRAINS 6"
NOT LOCATED AT BACK OF CURB OR BARRIER WALL

NOTES:

1. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION SHALL BE PLACED SUCH THAT IT EXTENDS TO THE EDGE OF THE TRENCH AND OVERLAPS THE FILTER FABRIC BY A MINIMUM OF 6". AT NO TIME SHALL THE GEOTECHNICAL FABRIC FOR GROUND STABILIZATION BE OVER OR COVER THE UNDERDRAIN TRENCH.
2. NO CONSTRUCTION TRAFFIC SHALL BE ALLOWED ON THE TRENCH UNTIL A MINIMUM OF 12" OF COMPACTED SUB-BASE IS PROVIDED.
3. THE PIPE UNDERDRAIN TRENCH SHALL BE LINED WITH FILTER FABRIC ON THE BOTTOM AND SIDES OF THE TRENCH. THE TOP OF THE TRENCH MUST NOT BE COVERED WITH ANY FABRIC.
4. FILTER FABRIC, FABRIC ENVELOPE, AND CA-16 AGGREGATE ARE INCLUDED IN THE UNIT COST OF PIPE UNDERDRAIN, 6".
5. CONTRACTOR SHALL FLUSH PIPE UNDERDRAIN WITH WATER TO INSURE UNDERDRAIN IS FUNCTIONING PROPERLY PRIOR TO THE PLACEMENT OF STABILIZED SUB-BASE. PRIOR TO COMMENCING THIS WORK, THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH HIS APPROACH AND METHODS FOR COMPLETING THIS WORK, FOR THE ENGINEER'S REVIEW AND APPROVAL. THE COST OF FLUSHING THE PIPE IS INCLUDED IN THE UNIT COST OF PIPE UNDERDRAIN, 6".

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

**DRAINAGE DETAILS
PIPE UNDERDRAINS 6"**

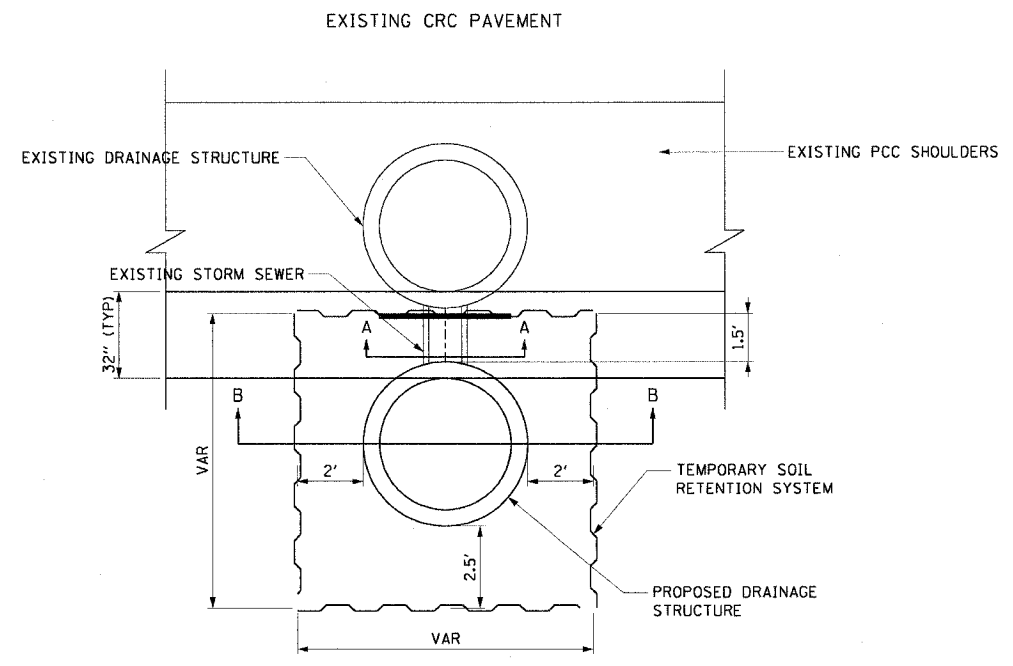
SCALE: NONE
DATE: June 9, 2006

DRAWN BY: RMG
CHECKED BY: XXX



DDT-1
1607-27 PM
6/7/2006

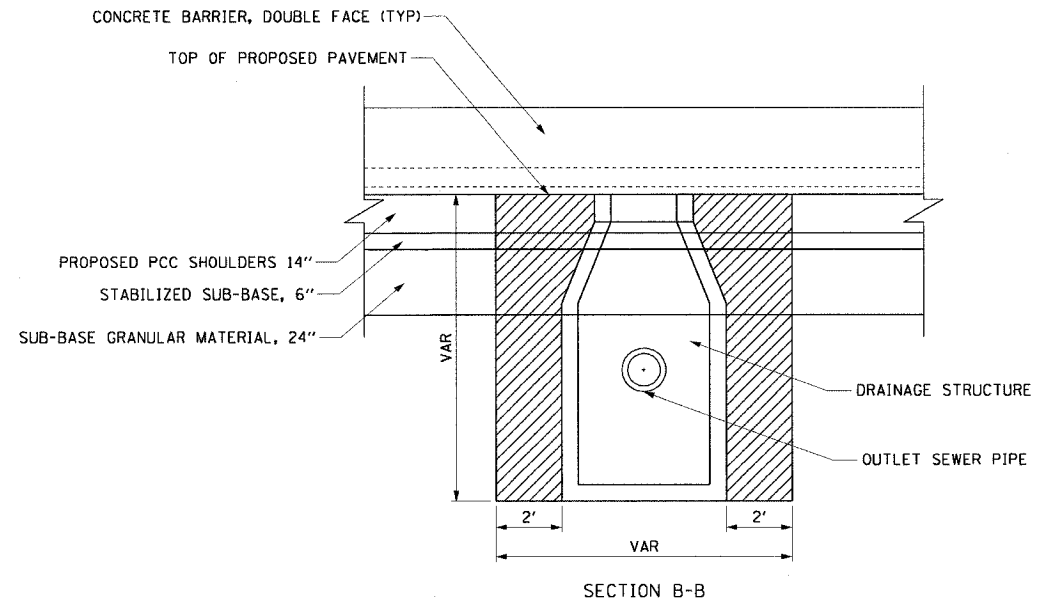
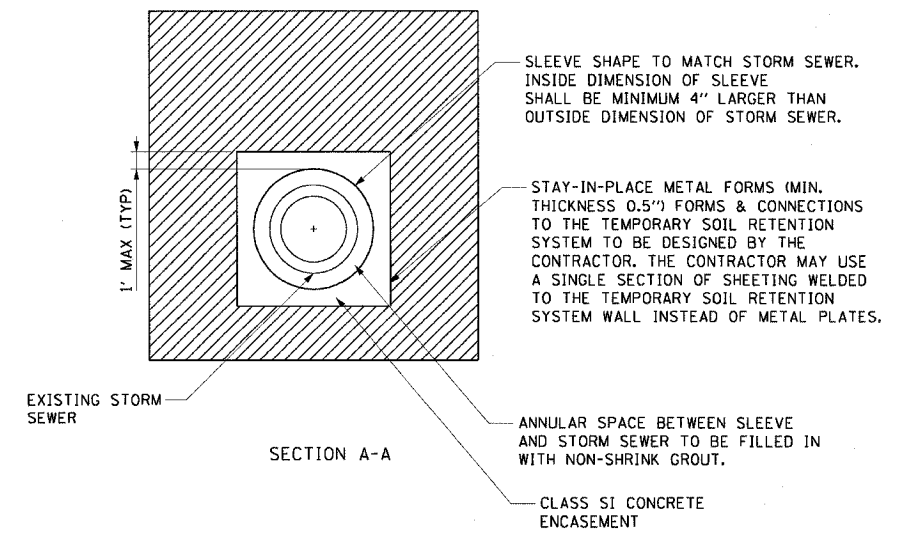
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	174
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				



PLAN VIEW

NOTES
 1. STORM SEWER PENETRATIONS THROUGH THE TEMPORARY SOIL RETENTION SYSTEM WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN THE COST FOR THE TEMPORARY SOIL RETENTION SYSTEM.

LEGEND
 TEMPORARY SOIL RETENTION SYSTEM



SECTION B-B

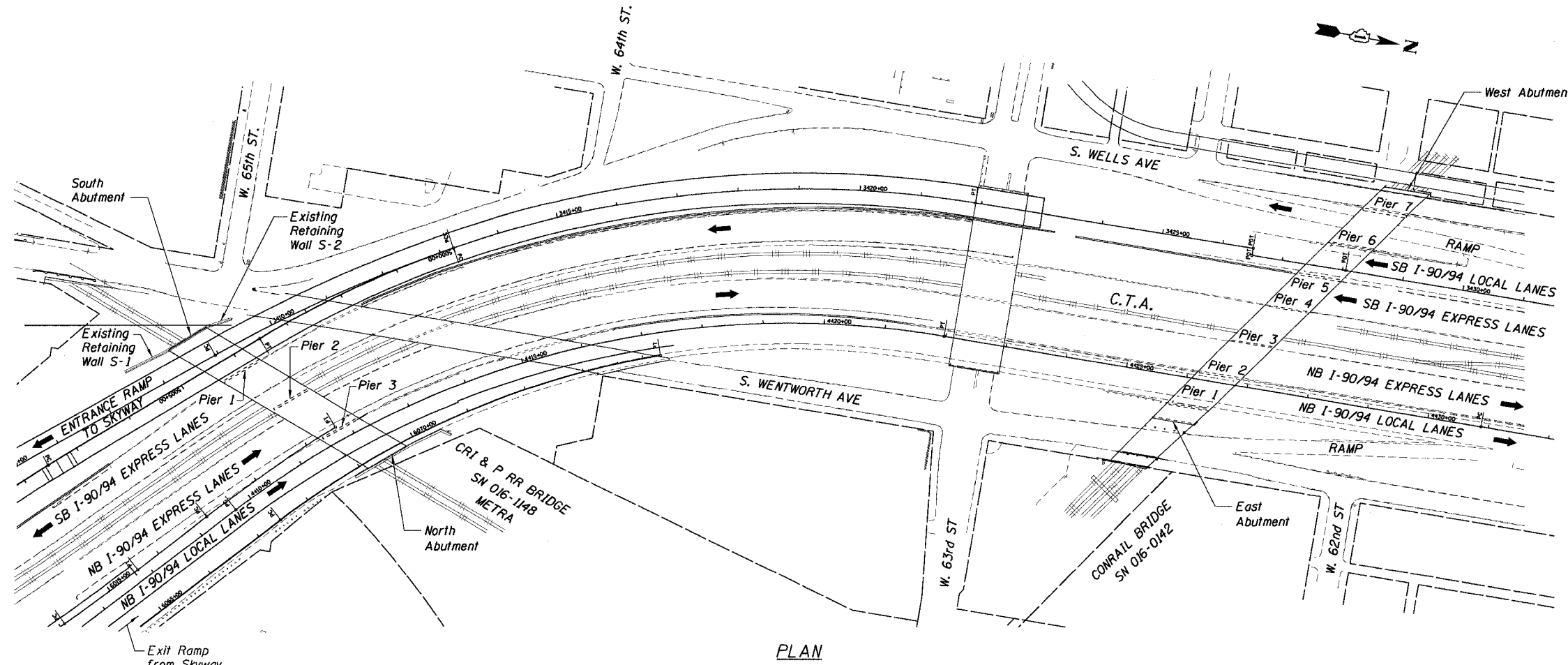
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
DRAINAGE DETAILS
TEMPORARY SOIL RETENTION SYSTEM
 SCALE: NONE
 DATE: June 9, 2006
 DRAWN BY: RMG
 CHECKED BY: xxx

I:\P\40468\CH\N\B\chrs 1B & 19\st\c\tr 19av\roadway details\dt19002205.rvt 6/15/2006 1:07:26 PM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	175
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT			
60A63	1919.15, 2021-922 PT1 & PT2 R-2			



PLAN

TOTAL BILL OF MATERIAL
Structure No. 016-1148

Item	Unit	Quantity
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq Ft	903
Epoxy Crack Sealing	LF	140
Protective Coat	Sq Yd	101

TOTAL BILL OF MATERIAL
Structure No. 016-0142

Item	Unit	Quantity
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq Ft	715
Structural Repair of Concrete (Special)	Sq Ft	1,196
Epoxy Crack Sealing	LF	213
Protective Coat	Sq Yd	213



GENERAL NOTES:

- Pier Repair Locations and Quantities are estimated. The necessary adjustments based on current field conditions will be made at time of construction. However, such variations shall not be cause for additional compensation for a change in the Scope of Work; however, the Contractor will be paid for the quantity actually furnished at the Unit Price bid for the Work.
- The Contractor shall expose the top of footing at all pier and abutment repair locations. The cost shall be included in the cost of Structural Repair of Concrete.
- Delaminated and spalled areas of concrete shall be repaired by utilizing Structural Repair of Concrete and described in the Specifications as Structural Repair of Concrete.
- Cracks shall be repaired by utilizing the Epoxy Crack Sealing and described in Section 590 of the Standard Specifications as Epoxy Crack Sealing.
- The approximate location of the downspout is shown in the Elevation. If repairs are to be made near the attachments of the downspout, the downspout shall be detached before making the repairs. The Contractor shall reattach the downspout. The cost of the detachment and reattachment of the downspouts to the Piers shall be included in the cost of Structural Repair of Concrete and Structural Repair of Concrete (Special).
- Existing rustication shall be maintained and re-established in new repair areas and shall be included in the cost of Structural Repair of Concrete and Structural Repair of Concrete (Special).
- The Contractor shall provide Railroad Protective Liability Insurance in accordance with Articles 107.11 and 107.12 of the Standard Specifications for all Railroad Highway Crossings and the Chicago Transit Authority (CTA). The CTA has additional requirements as shown in the "CTA Coordination" provision as shown in the Contract Special Provisions.

INDEX OF SHEETS

- BR1 General Plan
- BR2 Pier 1 - Plan and Elevation (SN 016-1148)
- BR3 South Abutment - Plan and Elevation (SN 016-1148)
- BR4 Pier 5 (West Face) - Plan and Elevation (SN 016-0142)
- BR5 Pier 6 - Plan and Elevation (SN 016-0142)
- BR6 Pier 7 and West Abutment - Plan and Elevation (SN 016-0142)

DESIGN SPECIFICATIONS

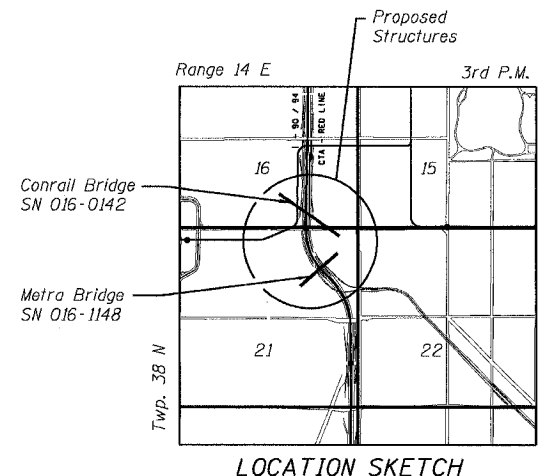
2002 AASHTO, Standard Specifications for Highway Bridges

DESIGN STRESSES

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinf.)

SUBSTRUCTURE REPAIR WORK ITEMS

- Metra Railroad Bridge (SN 016-1148)
 - Pier 1 Repairs (South Face)
 - South Abutment Repairs (North Face)
- Conrail Railroad Bridge (SN 016-0142)
 - Pier 5 Repairs (West Face)
 - Pier 6 Repairs (East and West Face)
 - Pier 7 Repairs (East and West Face)



LOCATION SKETCH

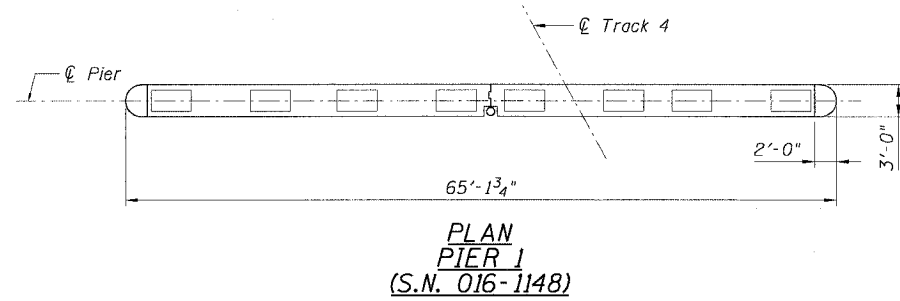
Sheet BR1 of 6

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 63RD STREET TO GARFIELD BLVD (SB LOCAL LANES) GENERAL PLAN SUBSTRUCTURE AND ABUTMENT REPAIRS METRA BRIDGE (SN 016-1148) AND CONRAIL BRIDGE (SN 016-0142) COOK COUNTY
NAME	DATE	
		SCALE: None DATE: June 9, 2006 DRAWN BY: CHD CHECKED BY: MJF

F:\P\04663\Struct\BR1\BR1\016-1148\016-0142\016-0142-0006-3.dwg 10:52:15 AM 6/22/2006

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	176
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		• (1919.15, 2021-922 PT1 & PT2) R-2		



Clean and incorporate existing Reinforcement Bars. Reinforcement Bars that have been cut or have lost 25% or more of their original cross sectional area shall be supplemented by new Epoxy Coated Reinforcement Bars.

Existing Concrete Pier

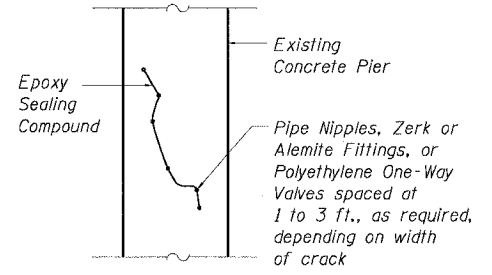
Depth of concrete removal for depth greater than 8", and for all overhead repair areas, provide 3/4" Expansion Hook Bolts spaced 15" Max. cts., both vertically and horizontally

Deteriorated Concrete Area

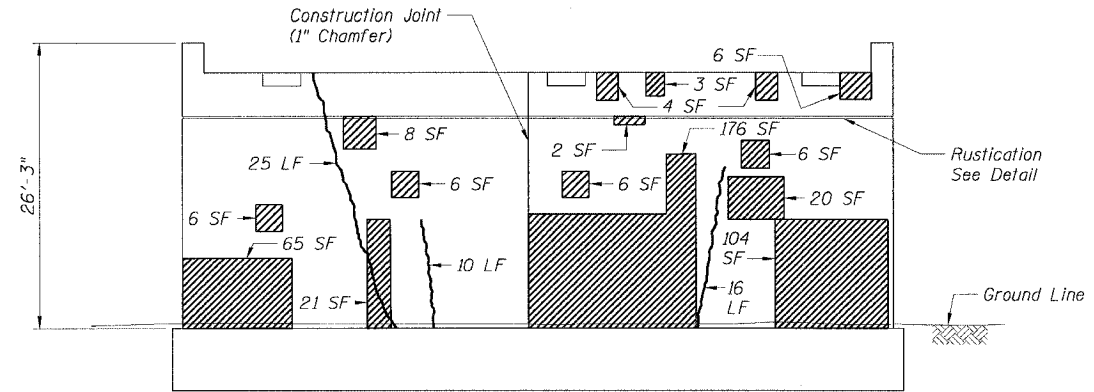
Apply a protective coat to the exposed surface of all Structural Repair of Concrete in accordance with Article 503.19 of the Standard Specifications

Formwork shall be completely mortar tight and closely fitted where it adjoins the existing concrete surface to prevent leakage

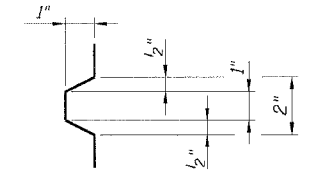
STRUCTURAL REPAIR OF CONCRETE DETAIL



EPOXY CRACK SEALING DETAIL



ELEVATION
PIER 1 - SOUTH FACE
(S.N. 016-1148)



DETAIL OF
RUSTICATION

LEGEND

- Area of Structural Repair of Concrete (Depth Equal to or Less than 5")
- Epoxy Crack Sealing

CTE | AECOM

BILL OF MATERIAL		
Item	Unit	Quantity
		Pier 1 South Face
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq Ft	462
Epoxy Crack Sealing	LF	51
Protective Coat	Sq Yd	51

REVISIONS	
NAME	DATE

Sheet BR2 of 6

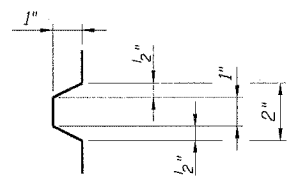
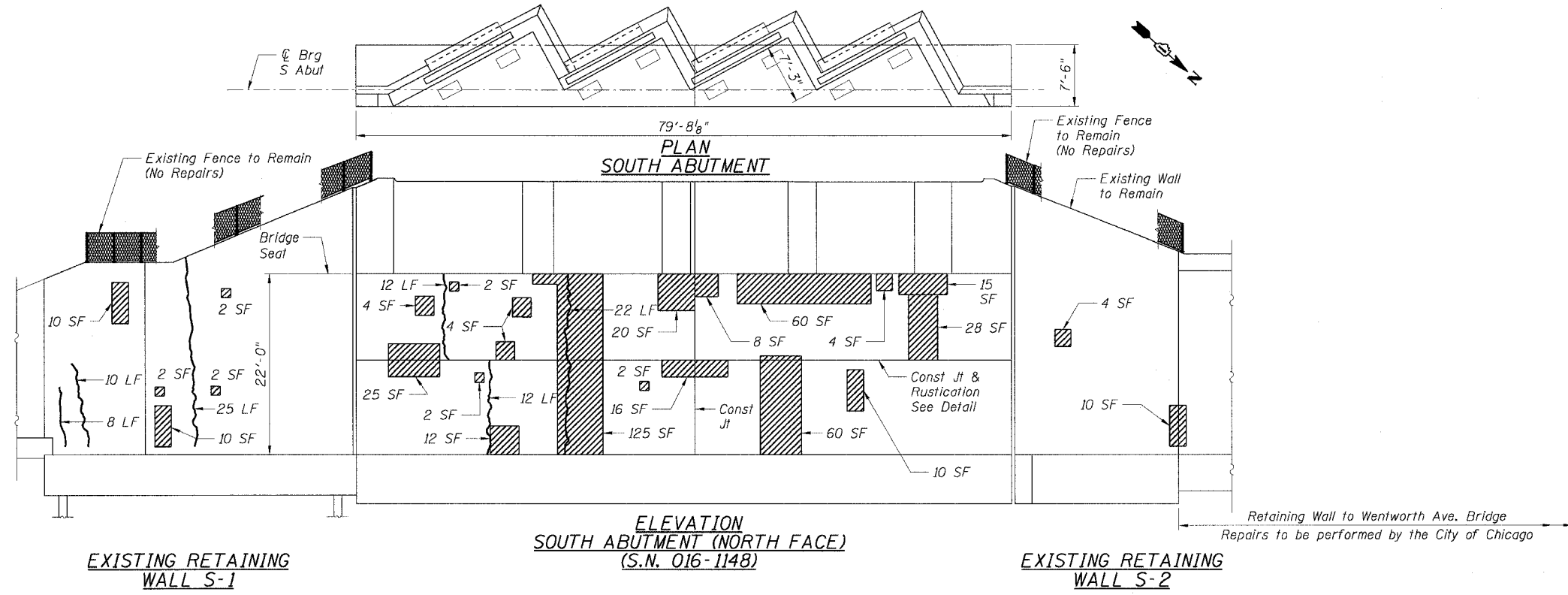
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PIER 1 - PLAN AND ELEVATION
SUBSTRUCTURE AND ABUTMENT REPAIRS
METRA BRIDGE (SN 016-1148) AND
COOK COUNTY

SCALE: None DRAWN BY: CHD
DATE: June 9, 2006 CHECKED BY: MJP

F:\40466\STRUCTURE\CHT\1819\90\94\PIER1\PIER1.PLT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	177
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
60A63	• (1919.15, 2021-922 PT1 & PT2) R-2			



DETAIL OF RUSTICATION

LEGEND

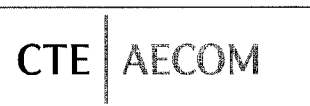
- Area of Structural Repair of Concrete (Depth Equal to or Less than 5")
- Epoxy Crack Sealing

Sheet BR3 of 6

BILL OF MATERIAL				
Item	Unit	Quantity		
		South Abutment	Retaining Wall S-1	Retaining Wall S-2
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq Ft	401	26	14
Epoxy Crack Sealing	LF	46	43	0
Protective Coat	Sq Yd	45	3	2

REVISIONS	DATE
NAME	

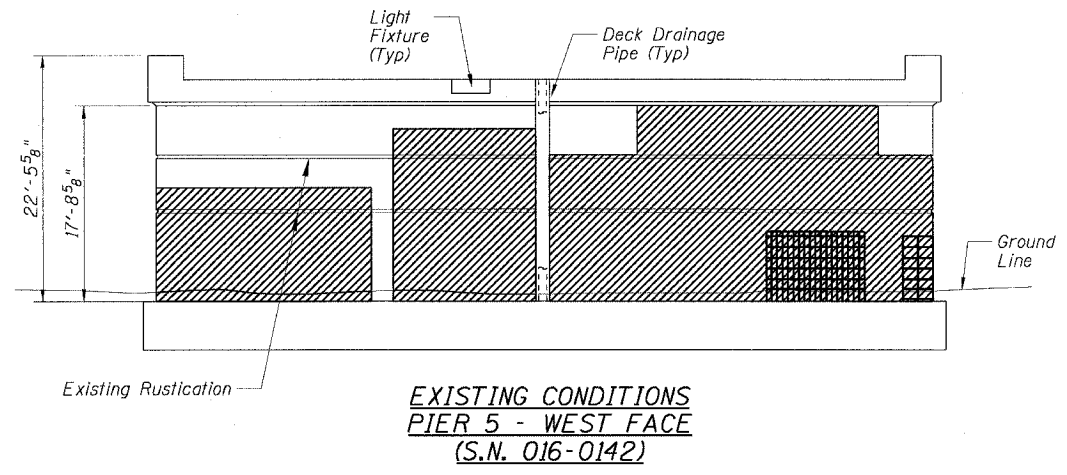
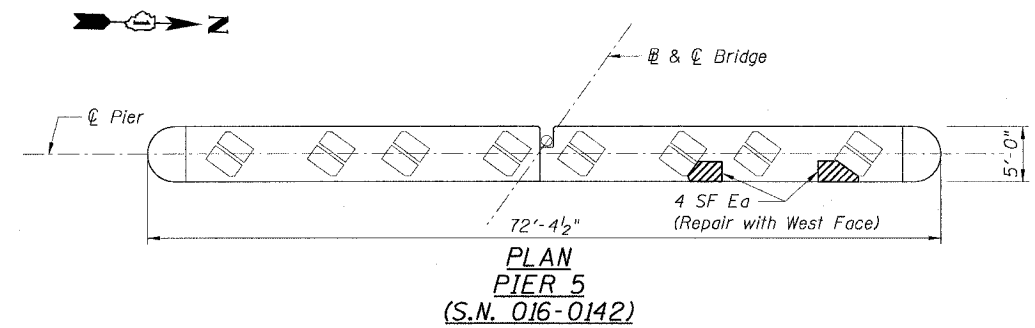
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
SOUTH ABUTMENT - PLAN AND ELEVATION
SUBSTRUCTURE AND ABUTMENT REPAIRS
METRA BRIDGE (SN 016-1148) AND
COOK COUNTY
SCALE: None
DATE: June 9, 2006
DRAWN BY: CHD
CHECKED BY: MJP



6/27/2006 10:52:36 AM

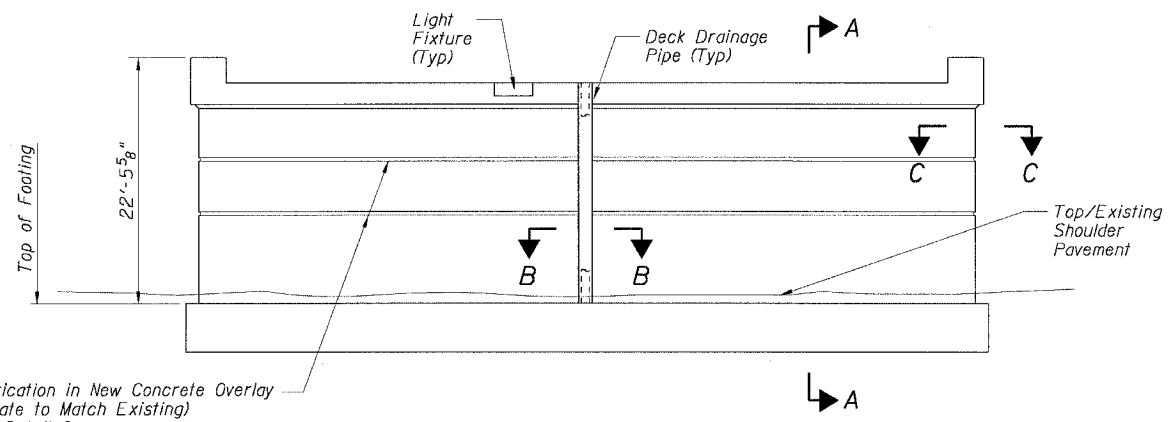
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	178
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				



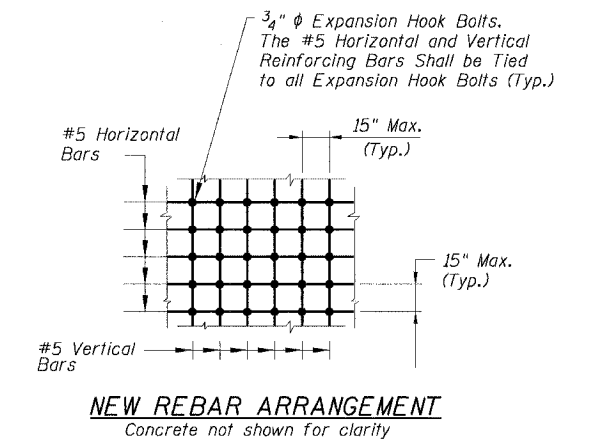
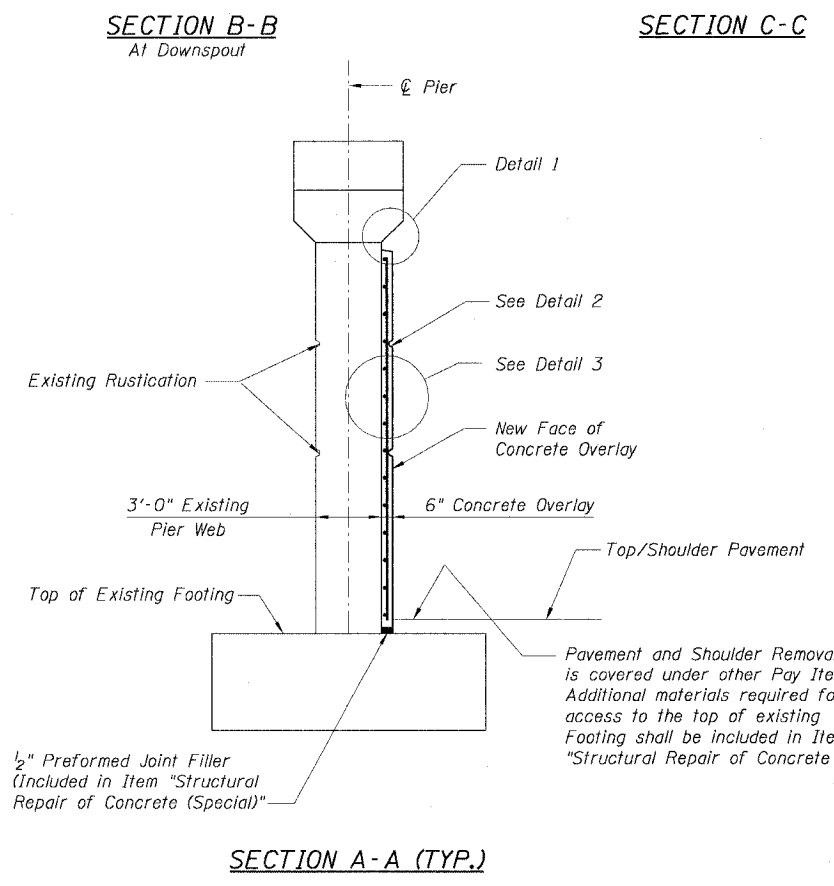
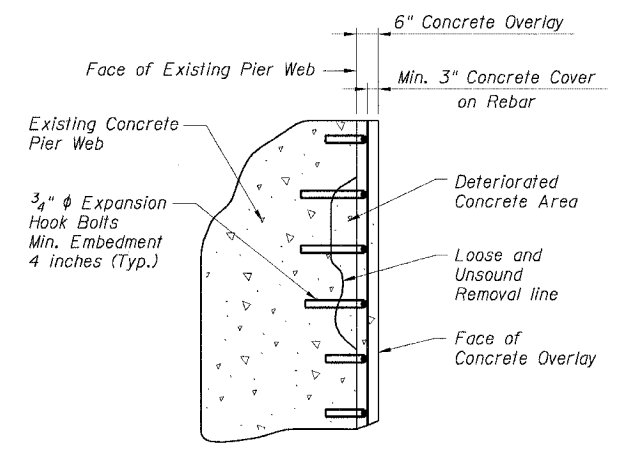
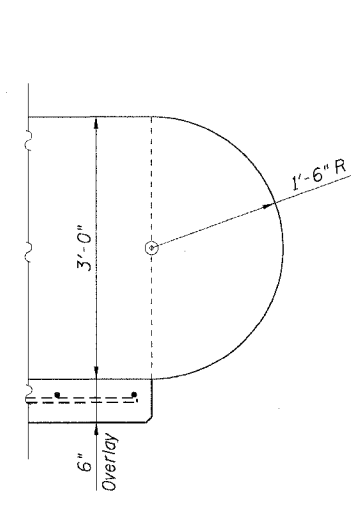
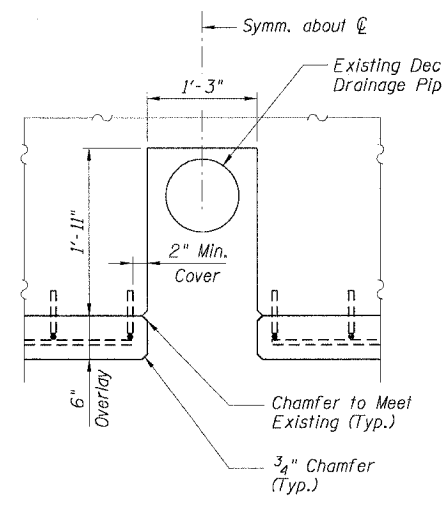
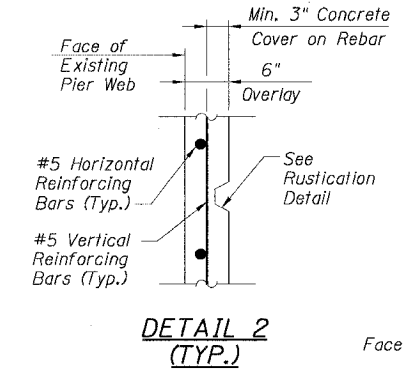
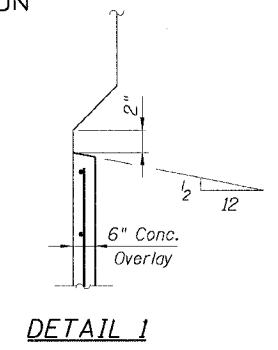
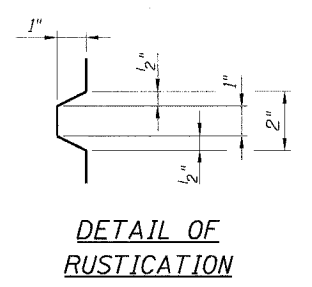
LEGEND:
(For Existing Conditions
Pier 5 - West Face)

- Spalled or Delaminated Concrete
- Spalled Concrete with Exposed Rebar



BILL OF MATERIAL		
Item	Unit	Quantity
Structural Repair of Concrete (Special)	Sq Ft	1,196
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq Ft	8
Protective Coat	Sq Yd	134

CTE | AECOM



NOTE:
The Furnishing and Placing of the Expansion Hook Bolts and the #5 Horizontal and Vertical Reinforcing Bars shall be Included in Item "Structural Repair of Concrete (Special)". Reinforcing Bars shall be Epoxy Coated and conform to AASHTO M31 or M322 Grade 60 (U.N.O.)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
**PIER 5 - PLAN AND ELEVATION
SUBSTRUCTURE AND ABUTMENT REPAIRS
CONRAIL BRIDGE (SN 016-0142)
COOK COUNTY**

SCALE: None
DATE: June 9, 2006

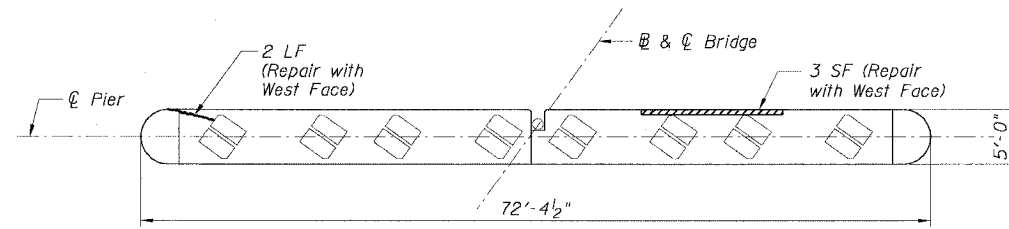
DRAWN BY: CHD/SR
CHECKED BY: MJP

Sheet BR4 of 6

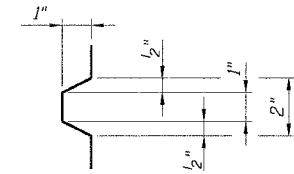
F:\P\0668\Struct\8-Corr\1889\9C\1819\A\SP\RT\18A0042A-60-AG-3.DWG 5/27/2006 10:52:46 AM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

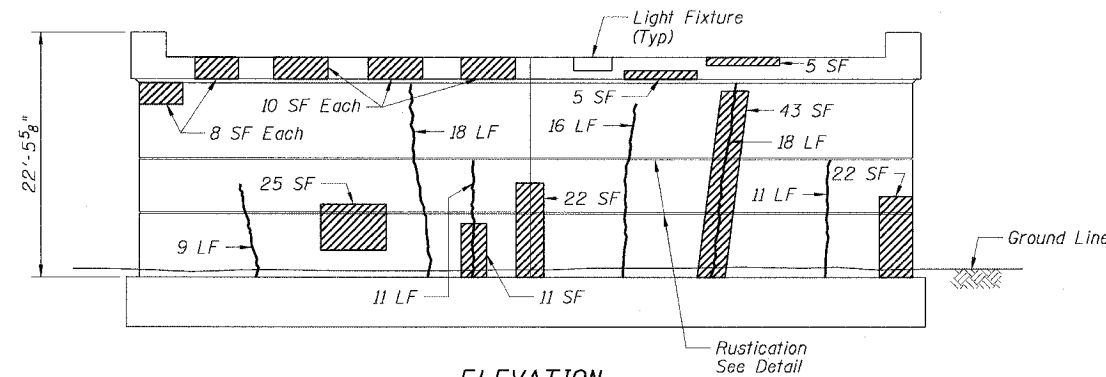
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	179
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
60A63	* (1919.15, 2021-922 PT1 & PT2) R-2			



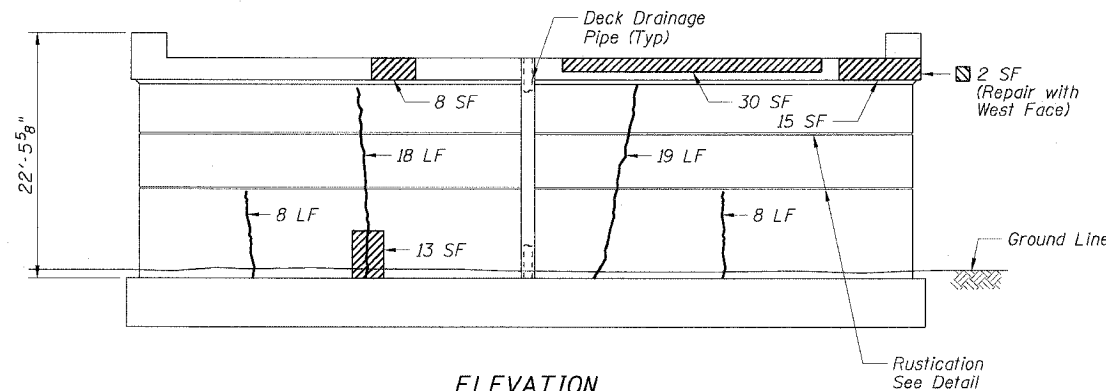
PLAN
PIER 6
(S.N. 016-0142)



DETAIL OF
RUSTICATION



ELEVATION
PIER 6 - EAST FACE
(S.N. 016-0142)



ELEVATION
PIER 6 - WEST FACE
(S.N. 016-0142)

LEGEND

- Area of Structural Repair of Concrete (Depth Equal to or Less Than 5")
- Epoxy Crack Sealing

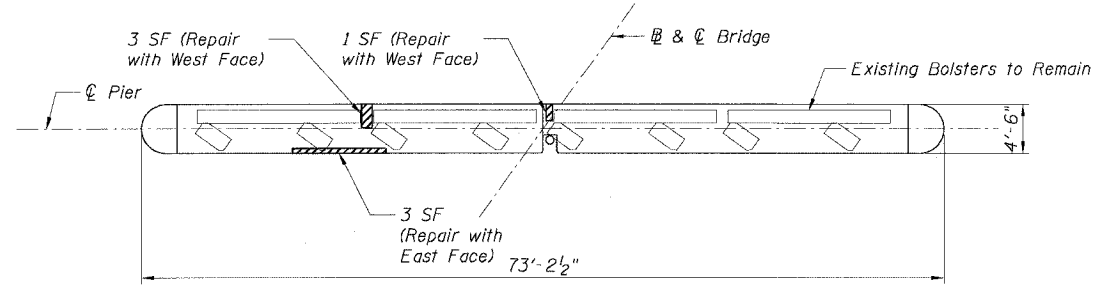
BILL OF MATERIAL				
Item	Unit	Quantity		
		Pier 6		
		East Face	West Face	
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq Ft	179	71	
Epoxy Crack Sealing	LF	83	55	
Protective Coat	Sq Yd	20	8	

REVISIONS	
NAME	DATE

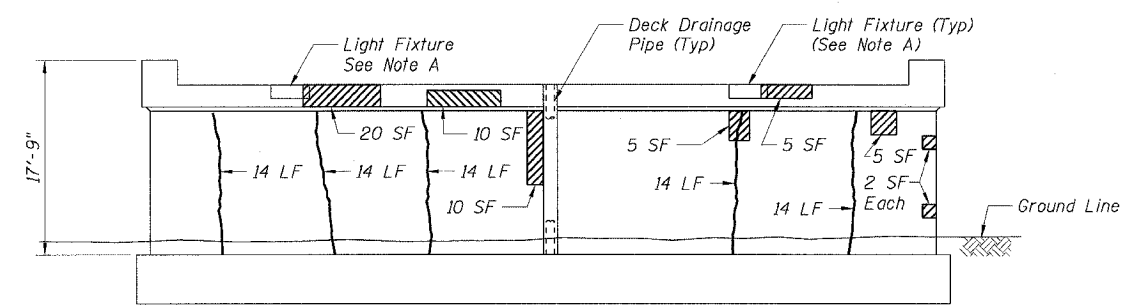
Sheet BR5 of 6
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PIER 6 - PLAN AND ELEVATION
SUBSTRUCTURE AND ABUTMENT REPAIRS
CONRAIL BRIDGE (SN 016-0142)
COOK COUNTY
SCALE: None DRAWN BY: CHD
DATE: June 9, 2006 CHECKED BY: MJP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE. 90/94	SECTION •	COUNTY COOK	TOTAL SHEETS 247	SHEET NO. 180
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
60A63	• (1919.15, 2021-922 PT1 & PT2) R-2			

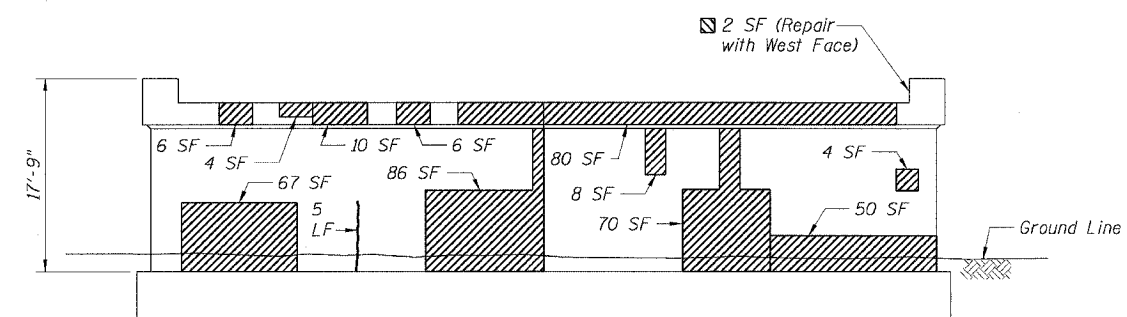


**PLAN
PIER 7
(S.N. 016-0142)**

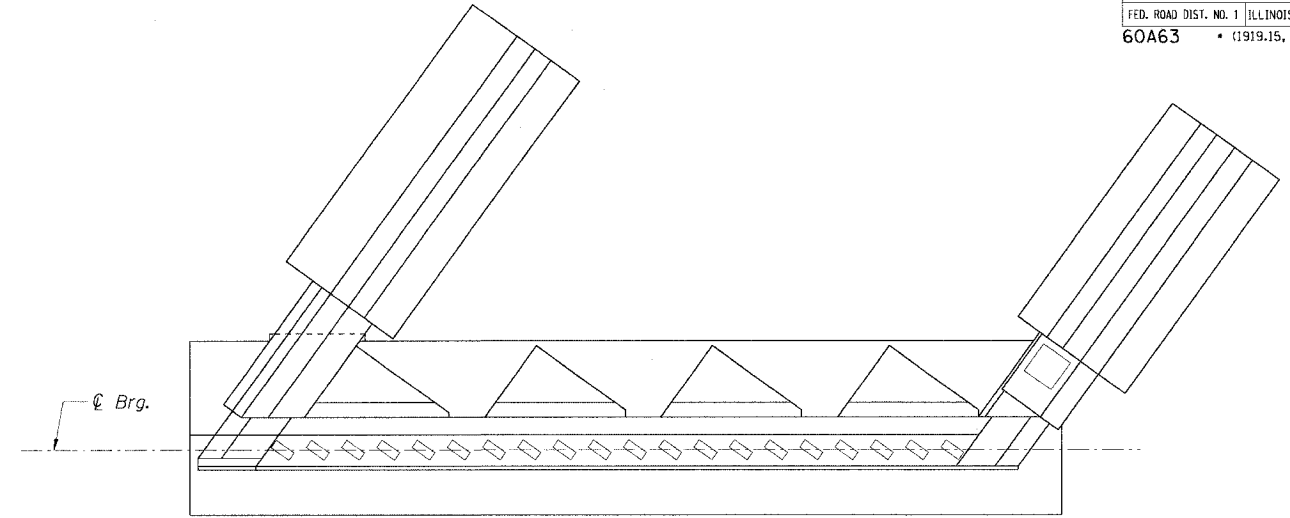


**ELEVATION
PIER 7 - EAST FACE
(S.N. 016-0142)**

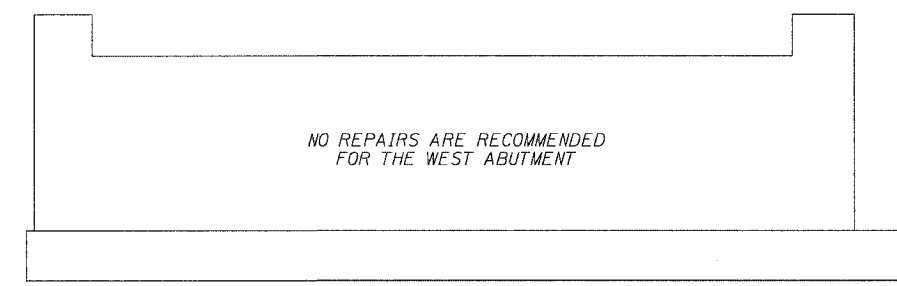
Note A:
The Contractor shall detach the Light Fixture and reattach after repairs have been completed. Cost shall be incidental to Structural Repair of Concrete.



**ELEVATION
PIER 7 - WEST FACE
(S.N. 016-0142)**



**PLAN
WEST ABUTMENT
(S.N. 016-0142)**



**ELEVATION
WEST ABUTMENT - EAST FACE
(S.N. 016-0142)**

LEGEND

- Area of Structural Repair of Concrete (Depth Equal to or Less Than 5')
- Epoxy Crack Sealing

CTE | AECOM

BILL OF MATERIAL				
Item	Unit	Quantity		
		Pier 7		
		East Face	West Face	
Structural Repair of Concrete (Depth Equal to or Less Than 5')	Sq Ft	62	395	
Epoxy Crack Sealing	LF	70	5	
Protective Coat	Sq Yd	7	44	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
PIER 7 AND WEST ABUTMENT
PLAN AND ELEVATION
SUBSTRUCTURE AND ABUTMENT REPAIRS
CONRAIL BRIDGE (SN 016-0142)
COOK COUNTY

SCALE: None DRAWN BY: CHD
DATE: June 9, 2006 CHECKED BY: MJP

P:\P40466\Struct\B-C\11718\B-C\11719A\SNRPT19A0062A\60A63.dwg
 6/27/2006 10:53:46 AM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	181
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 * (1919.15, 2021-922 PT1 & PT2) R-2				

GENERAL NOTES:

- Station and offsets are measured from SB Collector/Distributor to the front face of the retaining wall.
- All construction joints shall be bonded.
- 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.
- A protective coat shall be applied according to Section 503.19 of the Standard Specifications to all concrete surfaces not in contact with soil.
- Reinforcement bars shall conform to the requirements of AASHTO M31 or M322, Grade 60.
- Reinforcement bars designated "(E)" shall be epoxy coated.
- Removal and disposal of existing fence is included in the cost of Concrete Removal.
- 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 to 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.
- For Concrete Median Surface, 5" (Modified), see sheet B7.

STRUCTURAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu Yd	61
Concrete Superstructure	Cu. Yd.	116.5
Protective Coat	Sq. Yd.	528
Reinforcement Bars, Epoxy Coated Rustication Finish	Pound	14,161
Chain Link Fence 42", Attached to Structure (Special)	Foot	549
Structure Excavation	Cu. Yd.	71
Porous Granular Embankment	Cu. Yd.	55

INDEX OF SHEETS

- B1 General Plan I
- B2 General Plan II
- B3 Detailed Elevation I
- B4 Detailed Elevation II
- B5 Wall Sections & Details
- B6 Standard Details Chain Link Fence

DESIGN SPECIFICATIONS

2002 AASHTO, Standard Specifications for Highway Bridges

DESIGN STRESSES

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

NOTE:

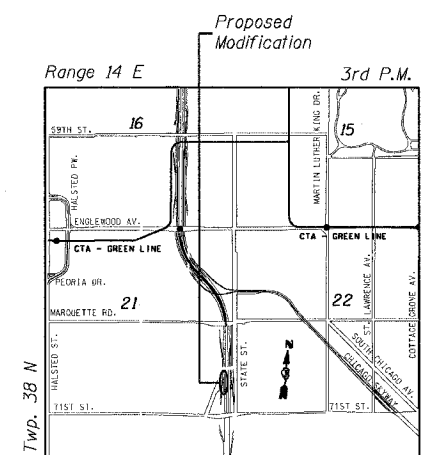
Rustication Finish not shown for clarity.

ABBREVIATIONS:

- B Bottom
- BF Back Face
- EF Each Face
- EW Each Way
- FF Front Face
- Ftg Footing
- LT Left
- Sta Station
- T Top

LEGEND:

- Concrete Removal
- Construction Joint
- Expansion Joint
- Wall Mounted Light Pole
- Chain Link Fence



LOCATION SKETCH

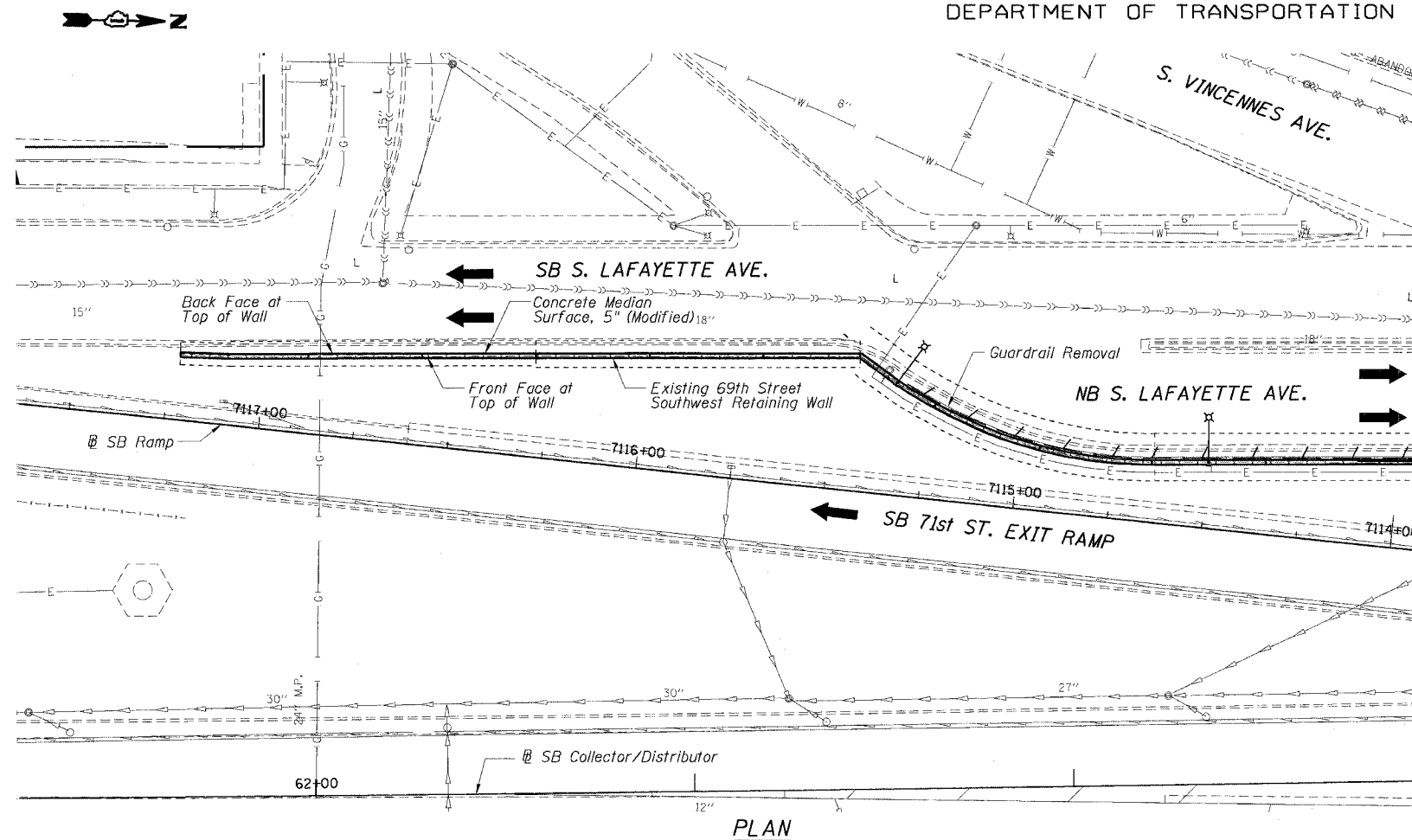
Sheet B1 of 7

REVISIONS		NAME	DATE
NO.	DESCRIPTION		

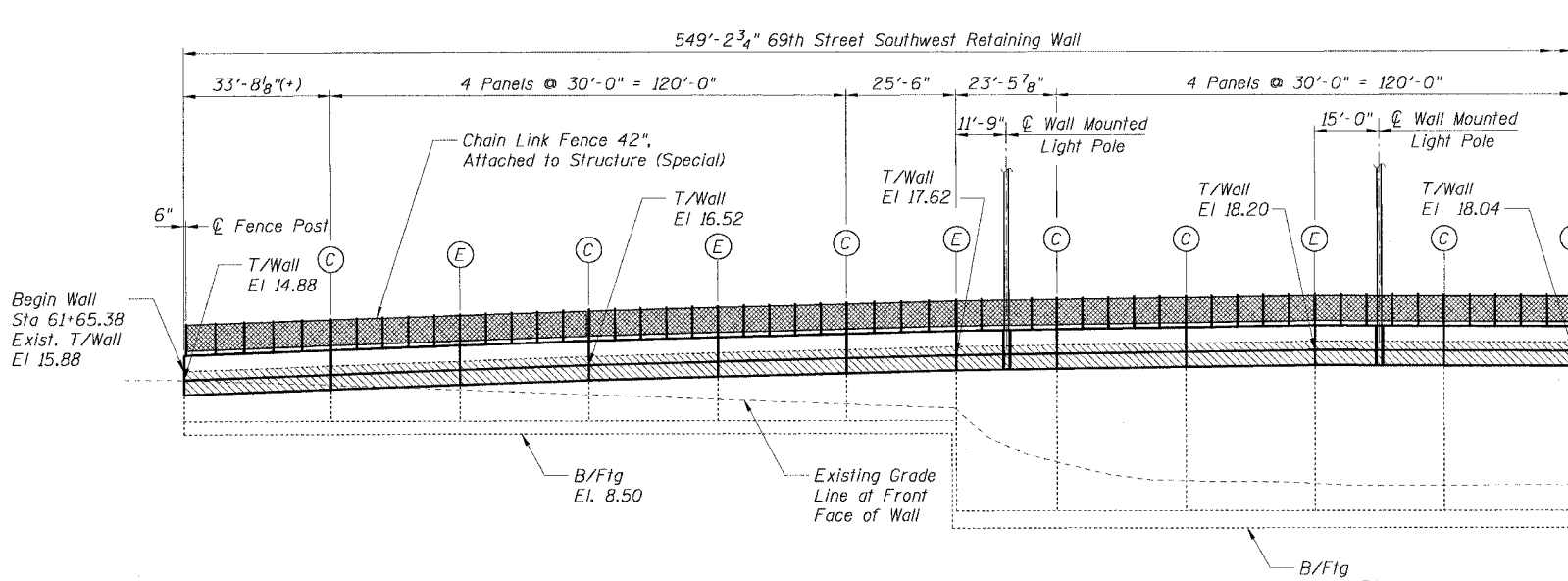
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
GENERAL PLAN I
69TH STREET SOUTHWEST RETAINING WALL
SECTION (1818, ETC, 2324.6-1P) R-11
STATION 61+65.38 TO 67+08.38
COOK COUNTY

SCALE: NONE DRAWN BY: CHD
DATE: June 9, 2006 CHECKED BY: MJP

EXPIRATION DATE: 11-30-2006



PLAN



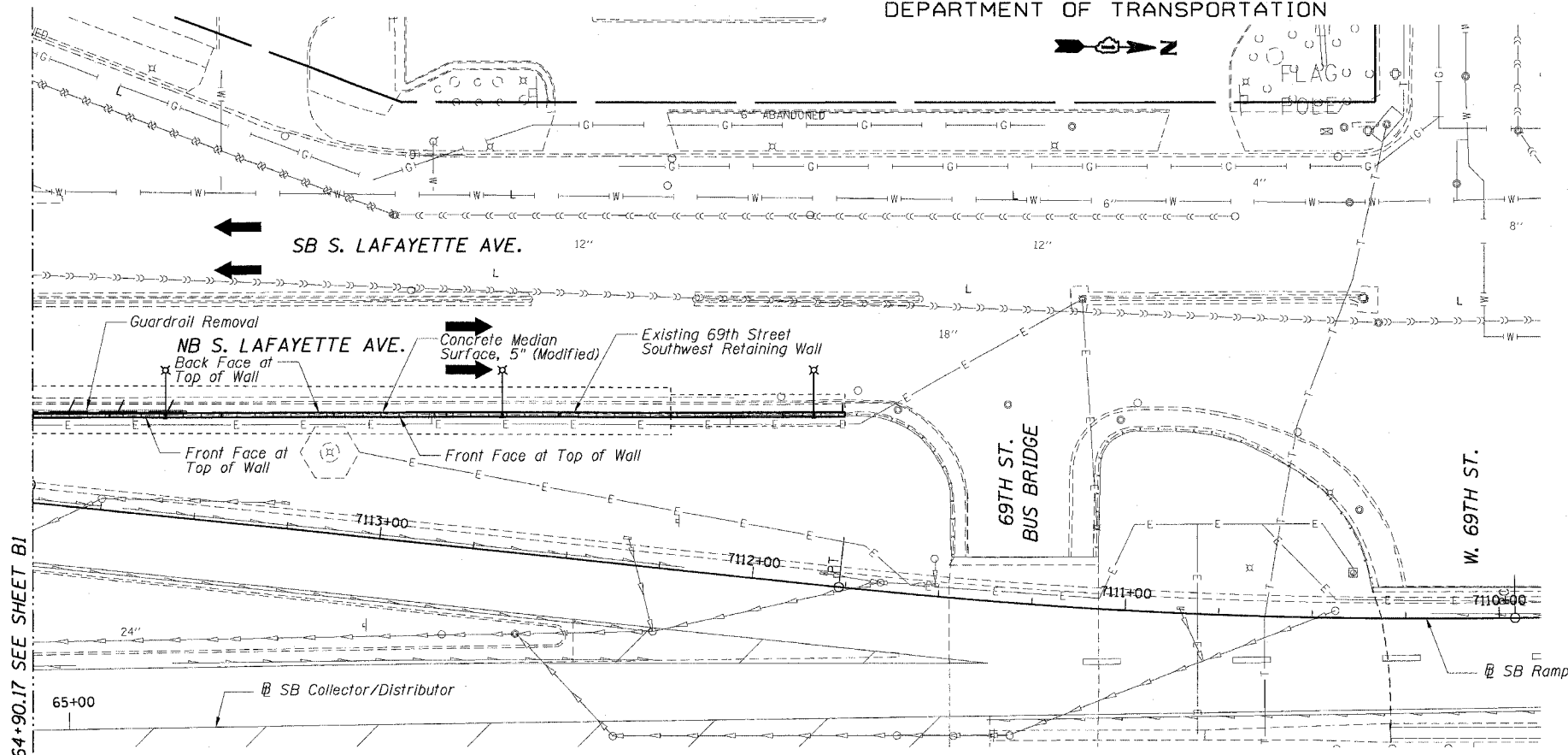
FRONT FACE ELEVATION
(Looking West)

CTE | AECOM

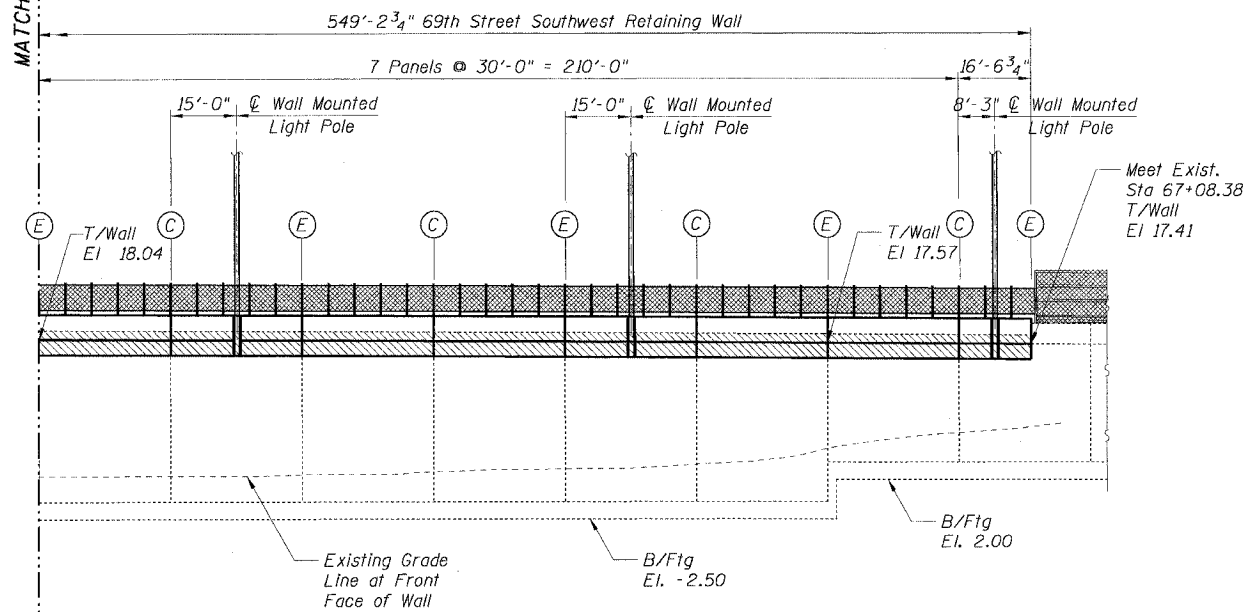
P:\90463\ST-08\NB-CM\788\CM\79A\ST-08\19A\02\06-W\27 10:33:57 AM 6/27/2006

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	182
STA.		TO STA.		
60A63		1919.15, 2021-922 PT1 & PT2 R-2		



PLAN



FRONT FACE ELEVATION

(Looking West)

NOTES:

1. For General Notes, Index of Sheets, Legend and Abbreviations, see Sheet B1.
2. For Total Bill of Materials, see Sheet B1.
3. For Detailed Elevation, see Sheets B3 and B4.
4. For Typical Sections and Details, see Sheet B5.
5. For Chain Link Fence 42", Attached to Structure (Special) details, see Sheet B6.
6. For Wall Mounted Light Pole Foundation details, see Sheet B4.
7. Rustication Finish not shown for clarity.

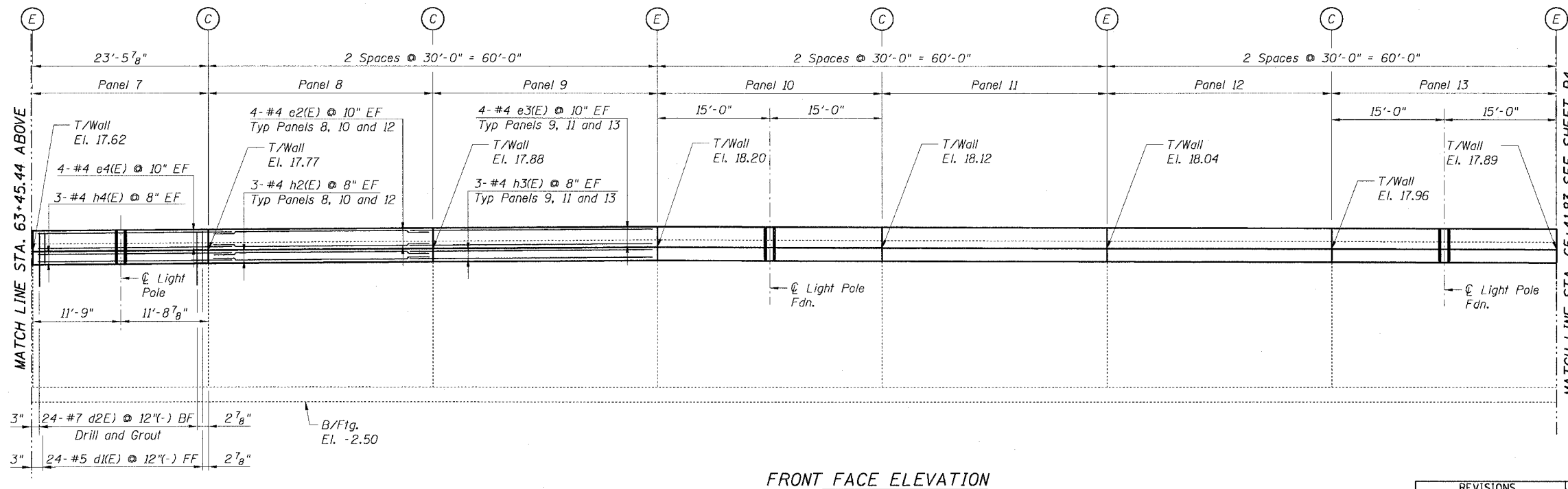
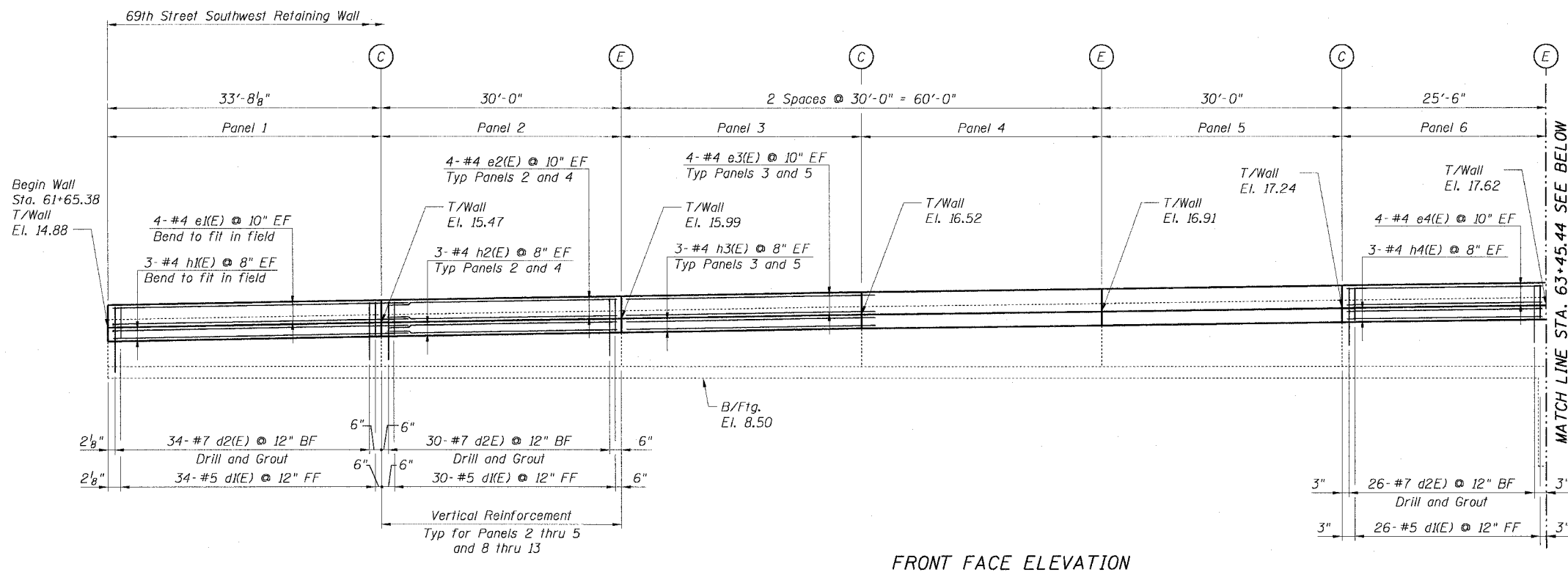
REVISIONS	
NAME	DATE

Sheet B2 of 7
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
GENERAL PLAN II
69TH STREET SOUTHWEST RETAINING WALL
SECTION (1818, ETC. 2324.6-1P) R-II
STATION 61+65.38 TO 67+08.38
COOK COUNTY
SCALE: NONE DRAWN BY: CHD
DATE: June 9, 2006 CHECKED BY: MJP

6/22/2006 10:54:30 AM P:\P\40463\STUD\8-CRIT\89-CRIT\9A\SR\79\A012\A016-W23.P

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	183
STA.		TO STA.		
60A63		ILLINOIS FED. AID PROJECT		
• (1919.15, 2021-922 PT1 & PT2) R-2				



- NOTES:**
- For General Notes and Abbreviations see Sheet B1.
 - For Typical Sections see Sheet B5.
 - For Bar Schedule see Sheet B5.
 - For Wall Mounted Light Pole Foundation Details, see Sheet B4.
 - Minimum Lap Length for Horizontal #4e & #4h Bars shall be 1'-8".

- LEGEND**
- (C) - Construction Joint
 - (E) - Expansion Joint

CTE | AECOM

REVISIONS	
NAME	DATE

Sheet B3 of 7

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
DETAILED ELEVATION I
69TH STREET SOUTHWEST RETAINING WALL
SECTION (1818, ETC, 2324.6-1P) R-11
STATION 61+65.38 TO 67+08.38
COOK COUNTY

SCALE: None DRAWN BY: CHD
DATE: June 9, 2006 CHECKED BY: MJP

6/2/2006 10:54:39 AM

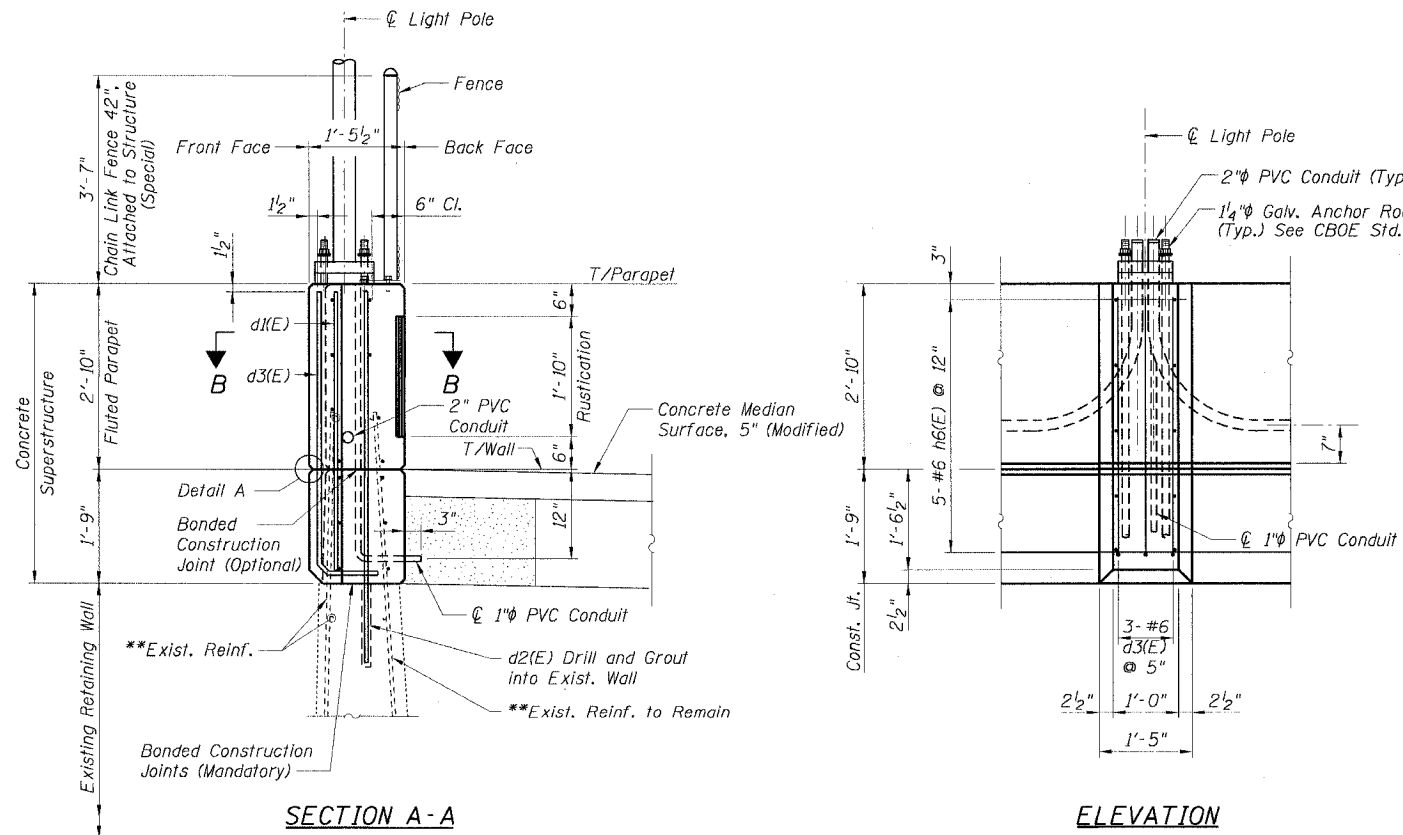
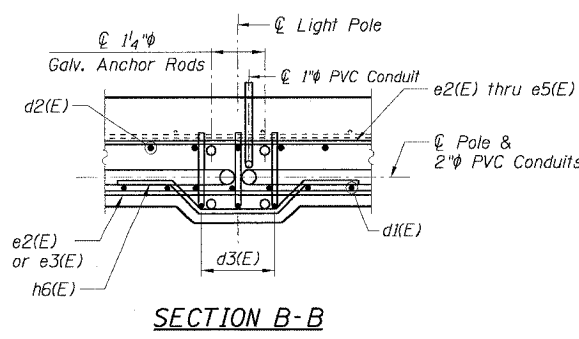
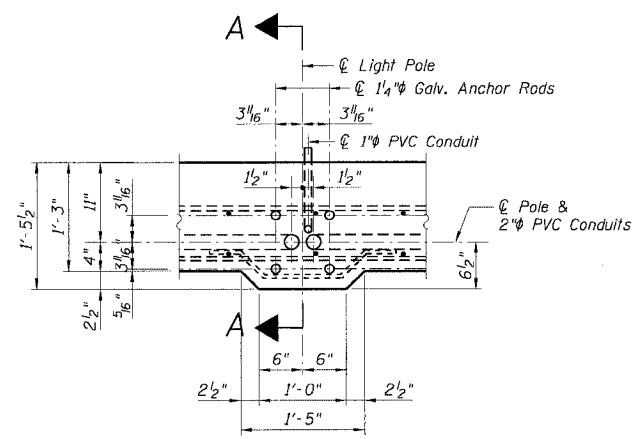
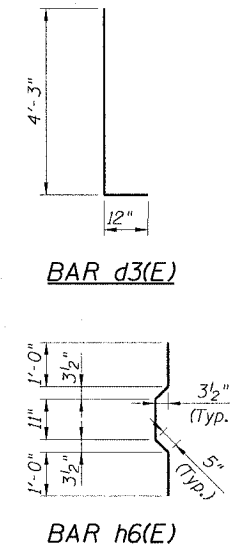
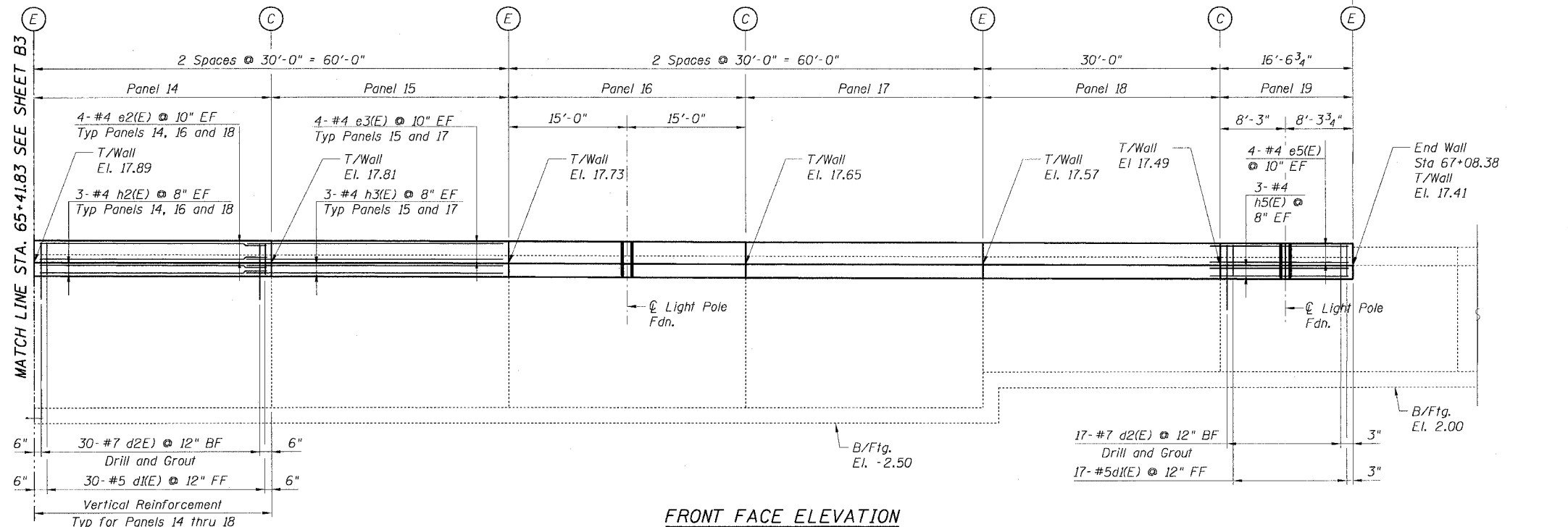
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	184
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
60A63		(1919.15, 2021-922 PT1 & PT2) R-2		

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d1(E)	551	#5	4'-3"	—
d2(E)	551	#7	5'-6"	—
d3(E)	15	#6	5'-3"	—
e1(E)	8	#4	35'-5"	—
e2(E)	64	#4	29'-8"	—
e3(E)	56	#4	31'-8"	—
e4(E)	16	#4	25'-2"	—
e5(E)	8	#4	18'-3"	—
h1(E)	6	#4	35'-5"	—
h2(E)	48	#4	29'-8"	—
h3(E)	42	#4	31'-8"	—
h4(E)	12	#4	25'-2"	—
h5(E)	6	#4	18'-3"	—
h6(E)	25	#6	3'-9"	—

Item	Unit	Quantity
Reinforcement Bars, Epoxy Coated	Pound	14,161
Concrete Removal	Cu Yd	61
Concrete Superstructure	Cu Yd	116.5
Protective Coat	Sq Yd	528
Rustication Finish	Sq Ft	1,005



- NOTES:
- For Notes and Legend see Sheet B3.
 - For Concrete Median Surface, 5" (Modified), see Sheet B7.
 - Contractor shall verify Bolt Circle and Anchor Bolt Diameters with the Commissioner prior to Constructing Light Pole Foundations.
 - The Cost of Furnishing and Installing Anchor Bolts, Nuts and Washers is Included in the Cost for "Concrete Structures".

REVISIONS		NAME	DATE
NO.	DESCRIPTION		

Sheet B4 of 7

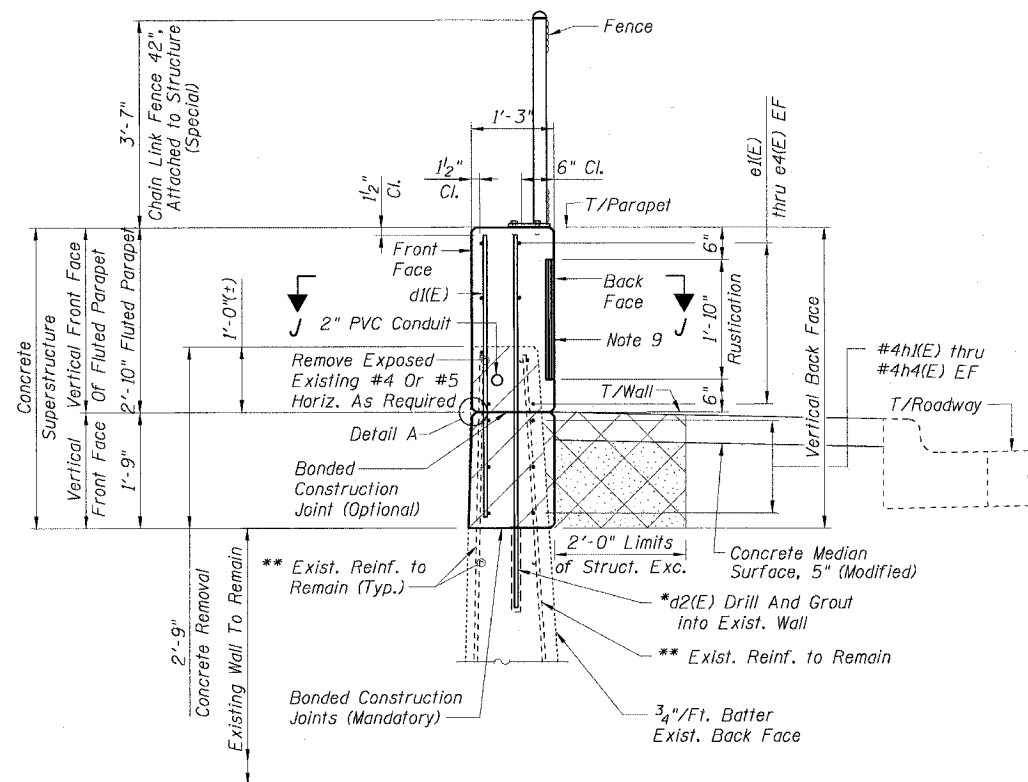
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
DETAILED ELEVATION II
69TH STREET SOUTHWEST RETAINING WALL
SECTION (1818, ETC, 2324.6-1P) R-11
STATION 61+65.38 TO 67+08.38
COOK COUNTY

SCALE: None
DATE: June 9, 2006
DRAWN BY: CHD
CHECKED BY: MJP

CTE | AECOM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

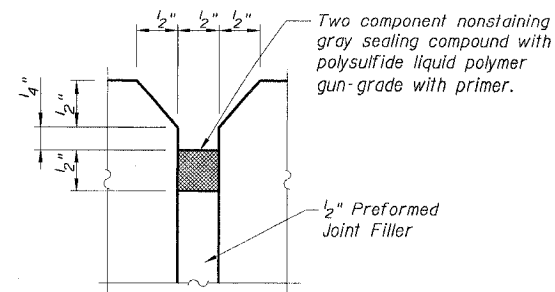
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	185
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
60A63	* (1919.15, 2021-922 PT1 & PT2) R-2			



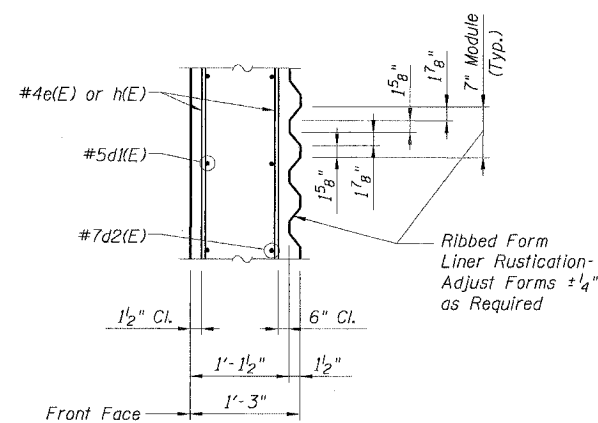
TYPICAL TOP OF WALL SECTION

* Drill & Grout d2(E) & d4(E) Bars in 1/8" Dia. drilled holes with a minimum depth of 1'-3", according to Article 584 of the Standard Specifications. (Cost included with Reinforcement Bars, Epoxy Coated)

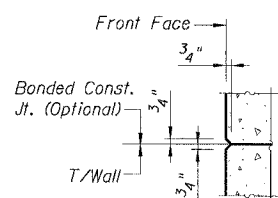
** Existing reinforcing steel which is exposed by the concrete removal process, but which is to remain partially embedded in the existing structure, shall be cleaned to be free of existing concrete and rust, straightened if necessary, and recast into the new concrete. (Cost included with Concrete Removal).



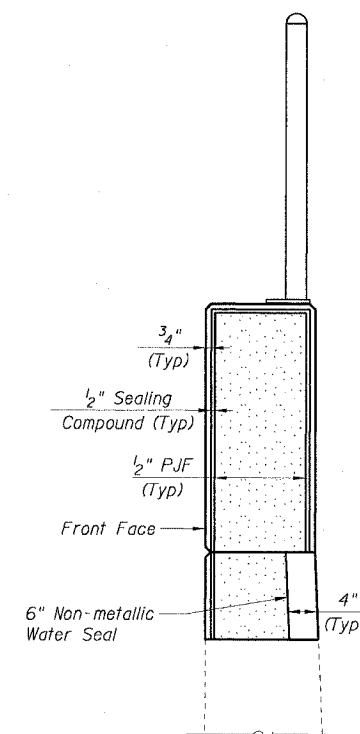
EXPANSION JOINT SEALING DETAIL



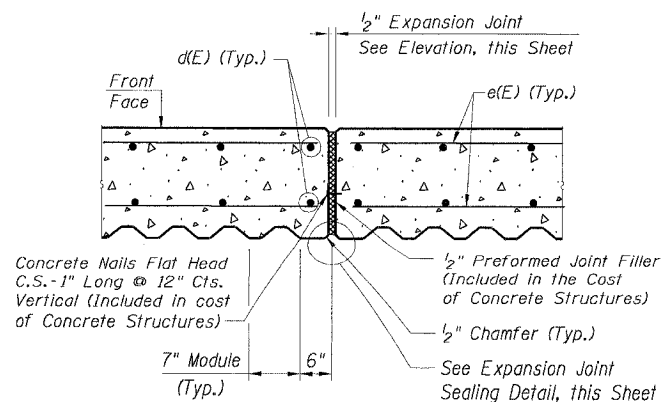
SECTION J-J



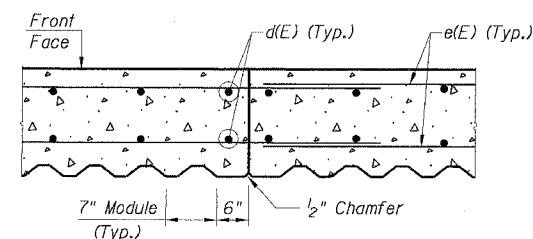
DETAIL A



EXPANSION JOINT ELEVATION



EXPANSION JOINT DETAIL



CONSTRUCTION JOINT DETAIL

LEGEND:

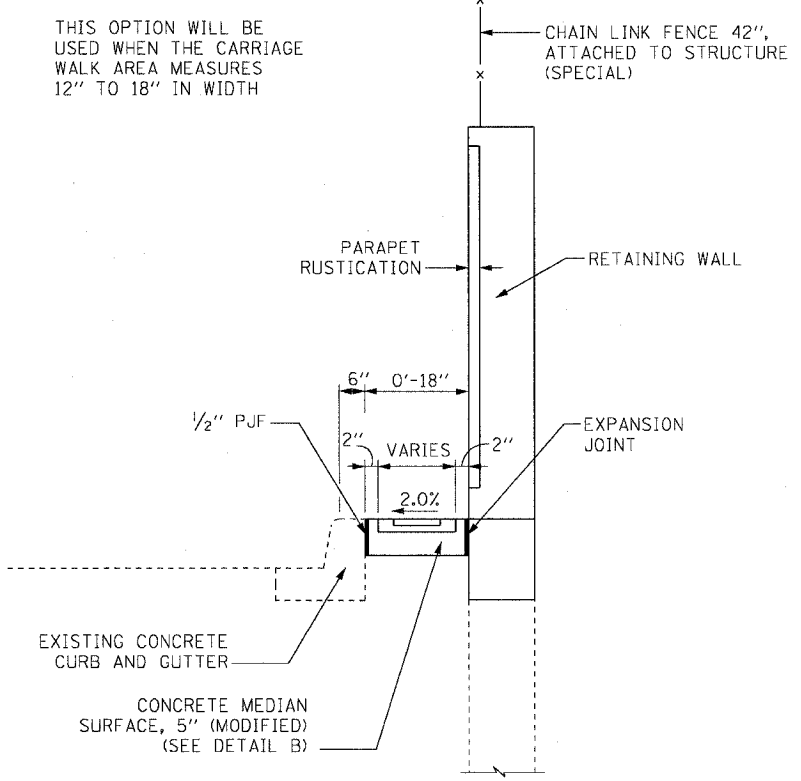
	Structure Excavation
	Porous Granular Embankment
	Concrete Removal

REVISIONS	
NAME	DATE

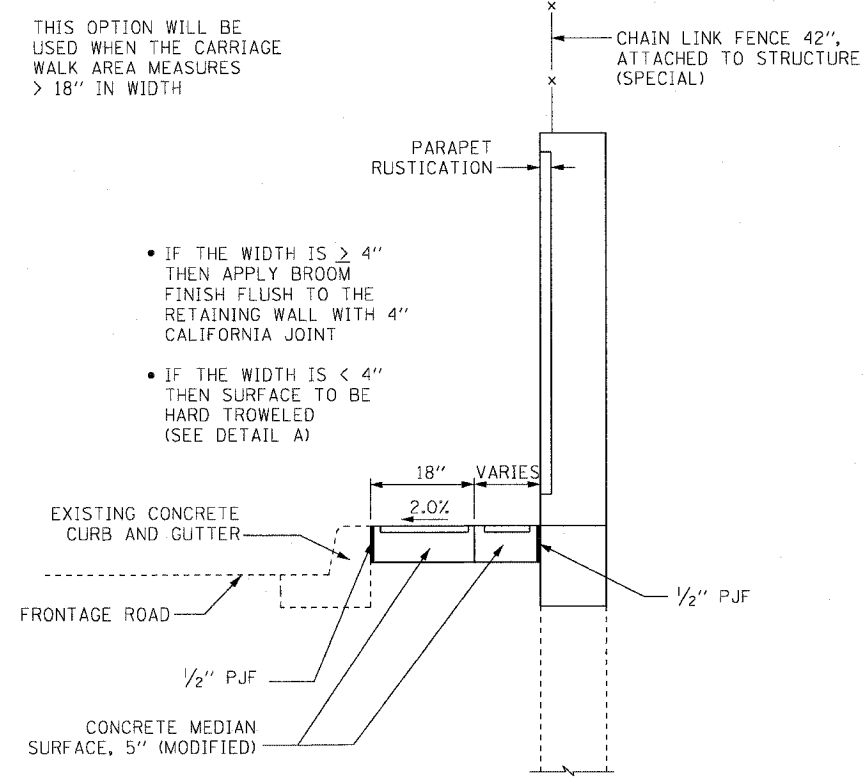
Sheet B5 of 7
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)
WALL SECTIONS & DETAILS
69TH STREET SOUTHWEST RETAINING WALL
SECTION (1818, ETC. 2324.6-1P) R-11
STATION 61+65.38 TO 67+08.38
COOK COUNTY
SCALE: None DRAWN BY: CHD
DATE: June 9, 2006 CHECKED BY: MJP

F:\40468\Struct\08-Ctrl\889\Chn\19\AS\19179\02\24016-W5.SIT 10:55:06 AM 6/27/2006

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	187
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT			
60A63	(1919.15, 2021-922 PT1 & PT2) R-2			



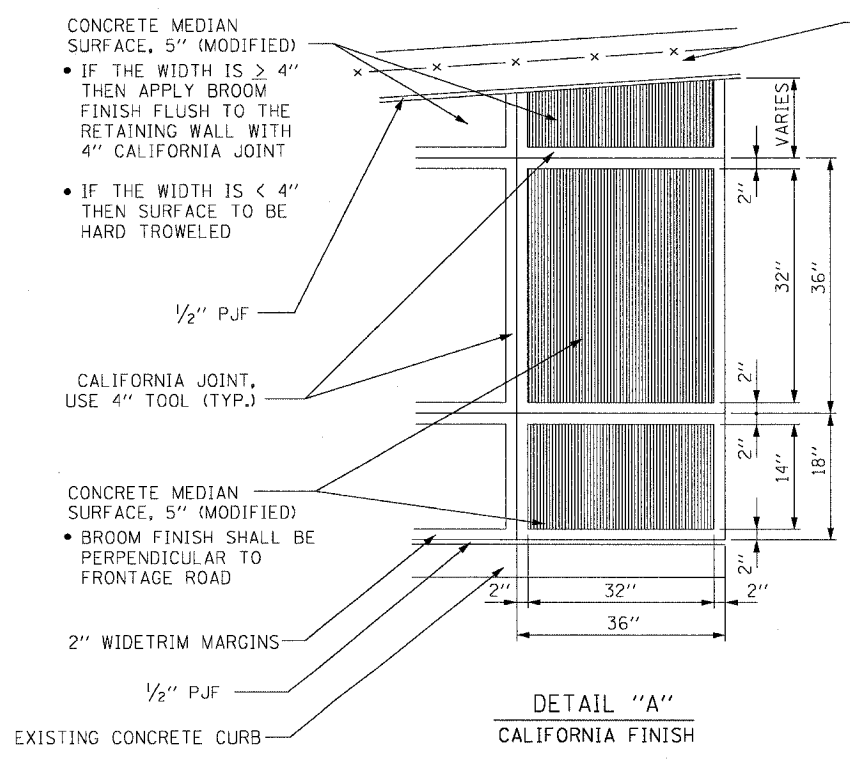
CARRIAGE WALK
AREA 12" TO 18" WIDE



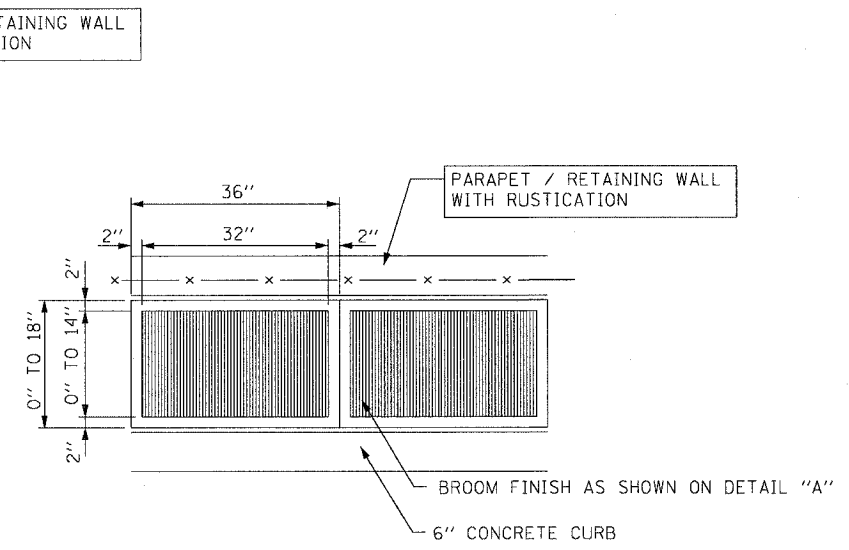
CARRIAGE WALK
AREA > 18" WIDE

CIVIL BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
Protective Coat	Sq. Yd.	134
Paved Shoulder Removal	Sq. Yd.	149
Guardrail Removal	Foot	176
Concrete Median Surface, 5" (Modified)	Sq. Ft.	1,201

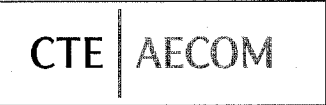
- IF THE WIDTH IS \geq 4" THEN APPLY BROOM FINISH FLUSH TO THE RETAINING WALL WITH 4" CALIFORNIA JOINT
- IF THE WIDTH IS $<$ 4" THEN SURFACE TO BE HARD TROWELED (SEE DETAIL A)



DETAIL "A"
CALIFORNIA FINISH



DETAIL "B"
CALIFORNIA FINISH



REVISIONS	
NAME	DATE

Sheet B7 of 7

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (SB LOCAL LANES)

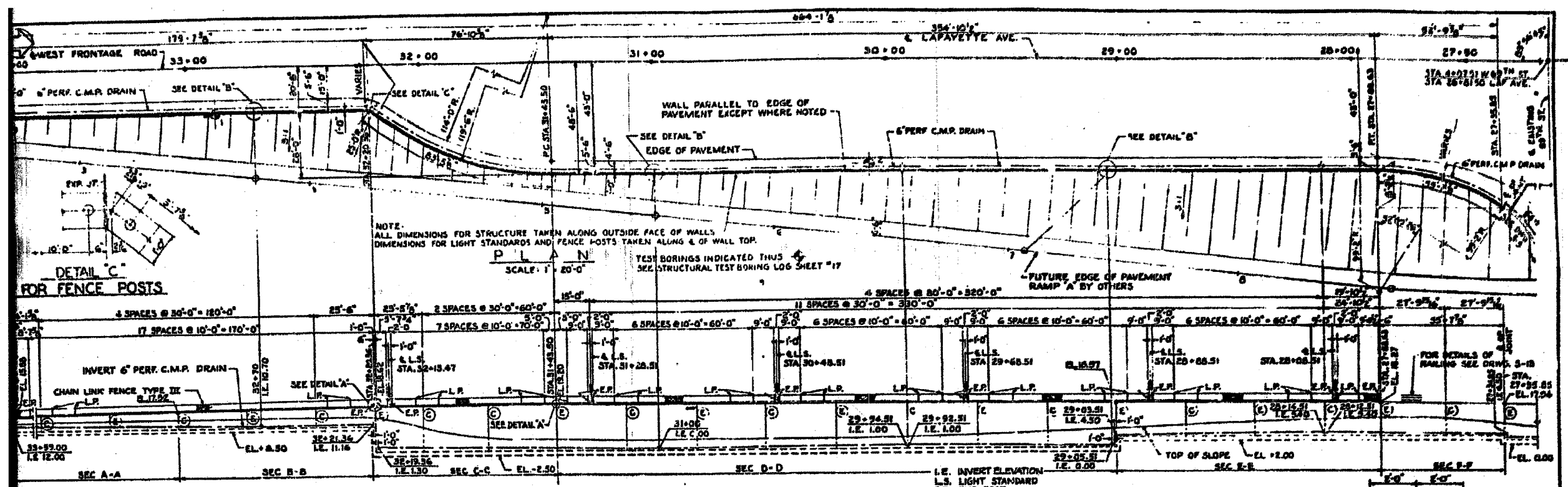
CONCRETE MEDIAN SURFACE, 5" (MODIFIED)
CARRIAGE WALK AND CALIFORNIA FINISH DETAIL

SCALE: NONE
DATE: June 9, 2006

DRAWN BY: PHP
CHECKED BY: NJH

P:\V\40468\Struct\8-Chris\809-Chris\90AS\1\SD19\002\A317

10:36:05 AM 6/27/2006



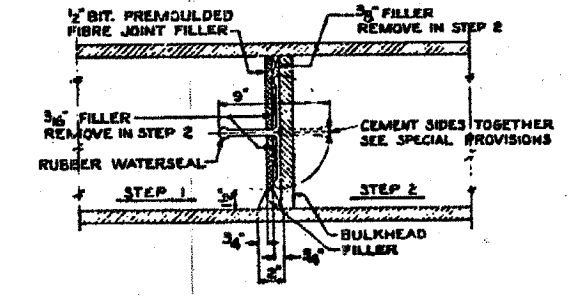
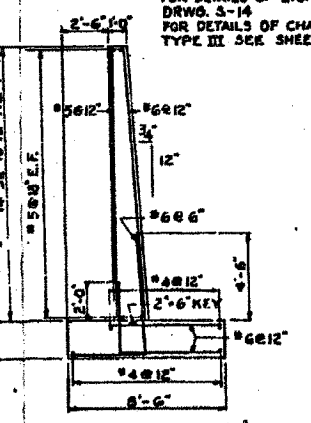
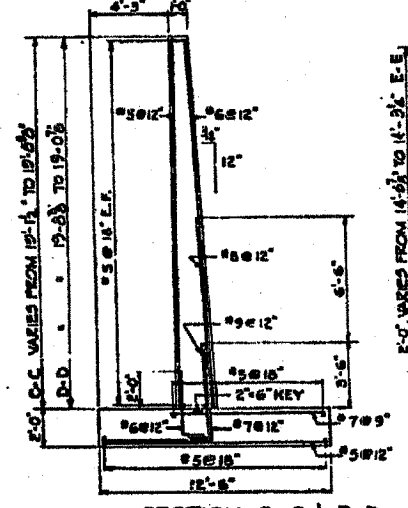
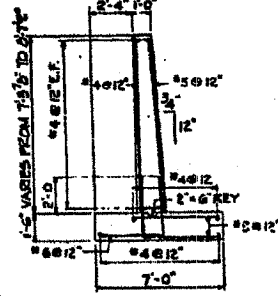
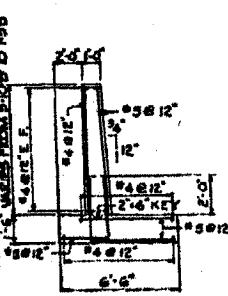
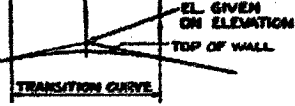
NOTE:
ALL DIMENSIONS FOR STRUCTURE TAKEN ALONG OUTSIDE FACE OF WALLS
DIMENSIONS FOR LIGHT STANDARDS AND FENCE POSTS TAKEN ALONG & OF WALL TOP.
TEST BORINGS INDICATED THUS
SEE STRUCTURAL TEST BORING LOG SHEET #17

ELEVATION
SCALE: 1" = 20'-0"

FOR DETAILS OF LIGHT STANDARD SEE
DRWS. 3-14
FOR DETAILS OF CHAIN LINK FENCE
TYPE III SEE SHEET

I.E. INVERT ELEVATION
L.S. LIGHT STANDARD
E.P. END POST
L.P. LINE POST
E EXPANSION JOINT
C CONSTRUCTION JOINT
6\"/>

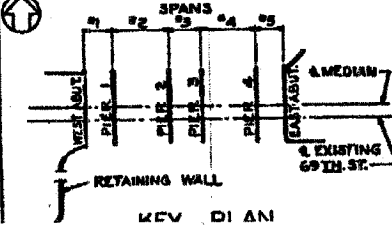
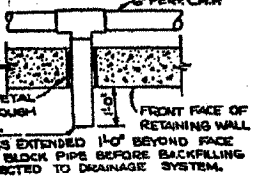
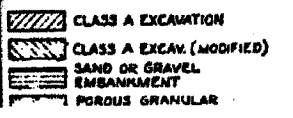
DETAIL 'A'
NO SCALE



BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
CLASS B CONCRETE	CU YDS.	1,030
REINFORCING BARS	LBS.	101,500
CLASS A EXCAVATION FOR STRUCTURES	CU YDS.	1,300
CLASS A EXCAVATION FOR STRUCTURES (MODIFIED)	CU YDS.	2,800
SAND OR GRAVEL EMBANKMENT	TONS	2,900
POROUS GRANULAR EMBANKMENT	CU YDS.	630
CORRUGATED METAL PIPE, 6 IN.	LN. FT.	670
CHAIN LINK FENCE TYPE III	LN. FT.	660

DEPARTMENT OF HIGHWAYS COOK COUNTY, ILLINOIS			
RETAINING WALLS 63RD STREET GRADE SEPARATION OVER SOUTH ROUTE EXPRESSWAY			
COMPUTED BY	DRAWN BY	CHECKED BY	APPROVED BY
R. E. M.	R. E. M.	J. L. - R. D.	[Signature]
PROJECT	SCALE	DATE	DATE
81-30-31871-108	AS SHOWN		
NO.	DATE	BY	REVISIONS
90	608	R	S-7

**TYP. SECTION OF
RET. WALL**
SCALE: 3/8" = 1'-0"



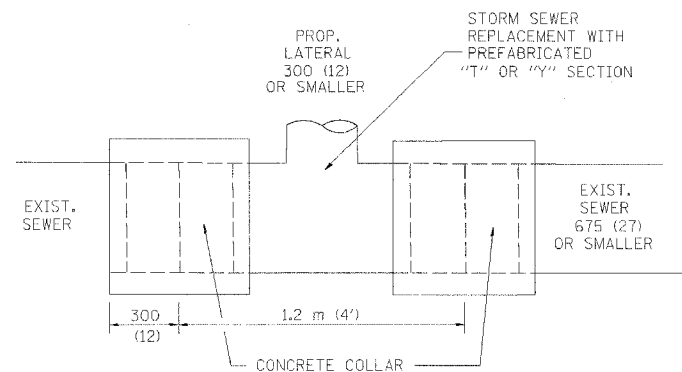
REVISIONS		
DATE	BY	DESCRIPTION

REVISIONS	
NAME	DATE

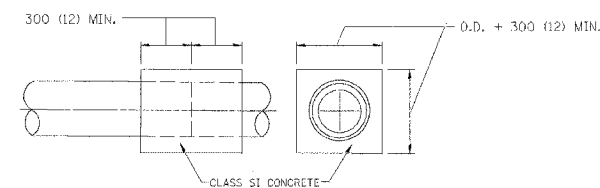
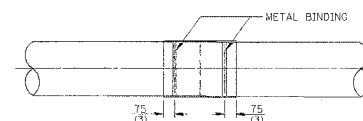
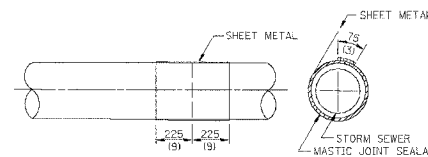
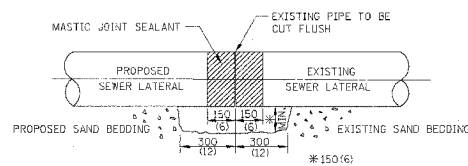
F:\904685\Struct\8-Civil\85\COOK\90A\AS\AS19A\002.dwg 10:50:49 AM 6/2/2006

F. A. SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
00094	*	COOK	247	190
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

60A63 (1819.15, 2021-822 PT1 & PT2) R-2



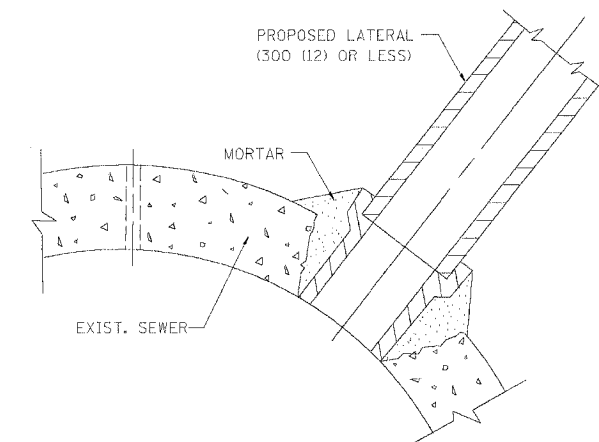
DETAIL "A"
LATERAL CONNECTION TO EXISTING SEWER OF 675 (27) OR SMALLER



DETAIL "B"
CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

- CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
- APPLY THE MASTIC JOINT SEALANT TO THE FIRST 150 (6) OF EACH PIPE.
- BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 300 X 150 (12 X 6) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
- CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 450 (18) WIDE BY THE OUTSIDE CIRCUMFERENCE OF THE PIPE PLUS 75 (3) LONG.
- WRAP THE SHEET METAL AROUND THE PIPES, 225 (9) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
- LAP THE SHEET METAL AT LEAST 75 (3) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
- PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
- WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
- PLACE CLASS SI CONCRETE AROUND THE JOINT.



DETAIL "C"
PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 750 (30) OR LARGER

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

I THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.

II CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:

- PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 675 (27) OR SMALLER SEE DETAIL "A" AND "B".
- PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 750 (30) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS. THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

ILLINOIS DEPARTMENT OF TRANSPORTATION

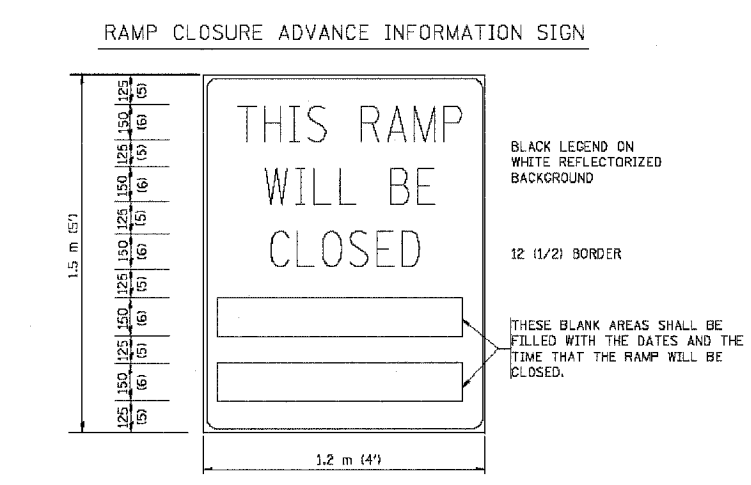
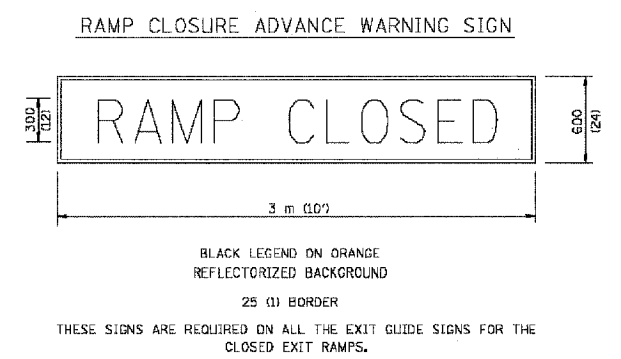
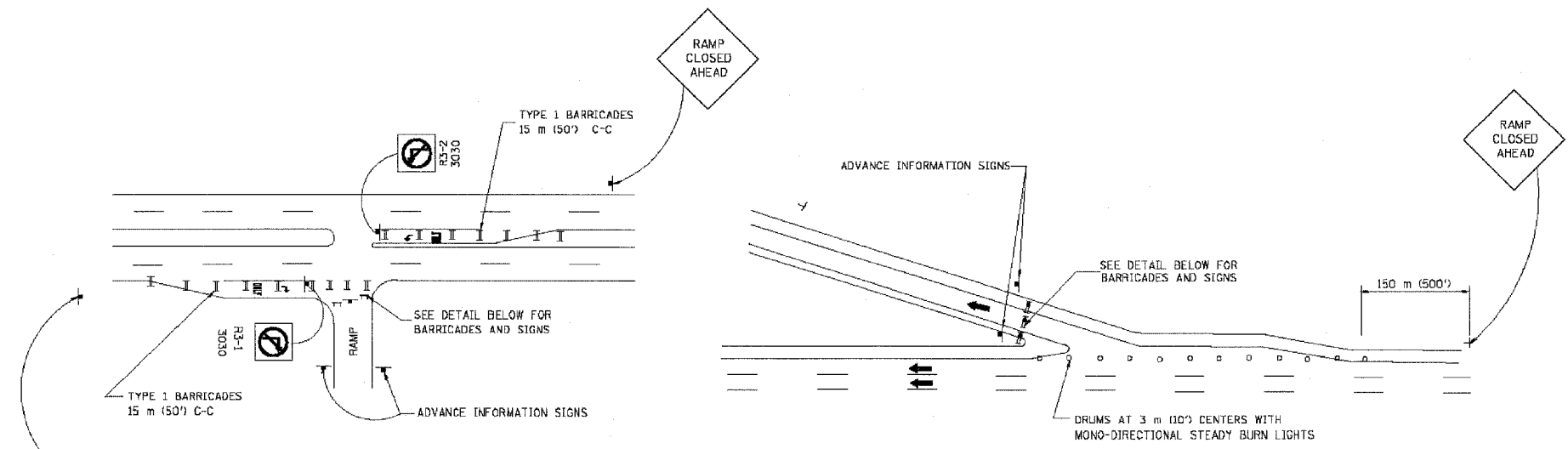
DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER

REVISIONS	
NAME	DATE
M. DE YONG	07/25/90
M. DE YONG	02/05/92
M. DE YONG	05/08/92
R. SHAH	09/09/94
R. SHAH	10/25/94
R. SHAH	06/12/96

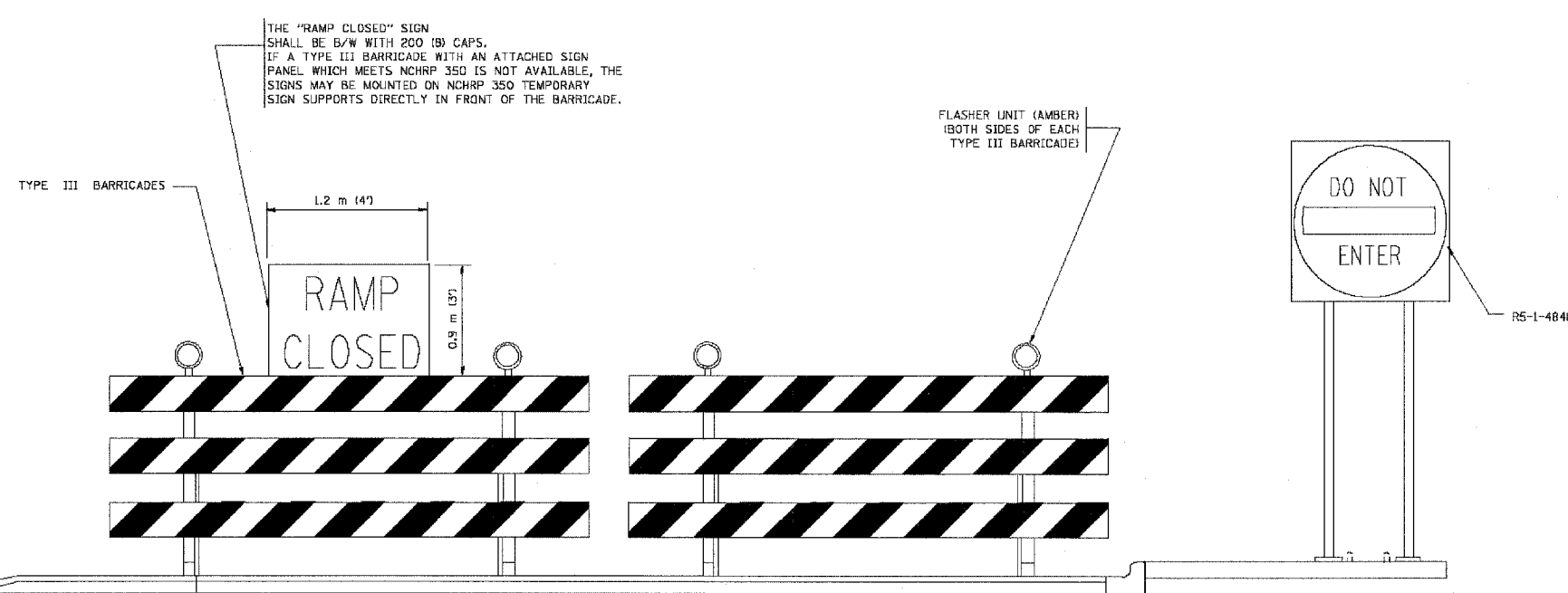
SCALE: NONE
DATE 10/18/2002

DRAWN BY CADD
CHECKED BY
BD500-01 (BD-7)
REVISION DATE: 06/12/96

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/64	*	COOK	247	191
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
60A03	*(1919.15, 2021-922 PT1 & PT2) R-2			



THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, A MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.



THE "RAMP CLOSED" SIGN SHALL BE B/W WITH 200 (8) CAPS. IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORTS DIRECTLY IN FRONT OF THE BARRICADE.

FLASHER UNIT (AMBER) (BOTH SIDES OF EACH TYPE III BARRICADE)

- GENERAL NOTES:
- CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 700 (28) HIGH.
 - STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
 - A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES.
 - FOR DAYTIME RAMP CLOSURES, LASTING 6 HOURS OR LESS, THE CONTRACTOR MAY ELIMINATE THE ADVANCE WARNING SIGNS ON THE EXIT GUIDE SIGNS.
 - ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED.
 - THE SIGNING AND BARRICADE WHICH IS REQUIRED BY THIS DETAIL SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND PROTECTION.
 - AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.

- NOTES:
- CONES MAY BE SUBSTITUTED FOR TYPE I AND TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28" IN HEIGHT.
 - STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
 - THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS.
 - ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED TWENTY FOUR (24) HOURS IN LENGTH.

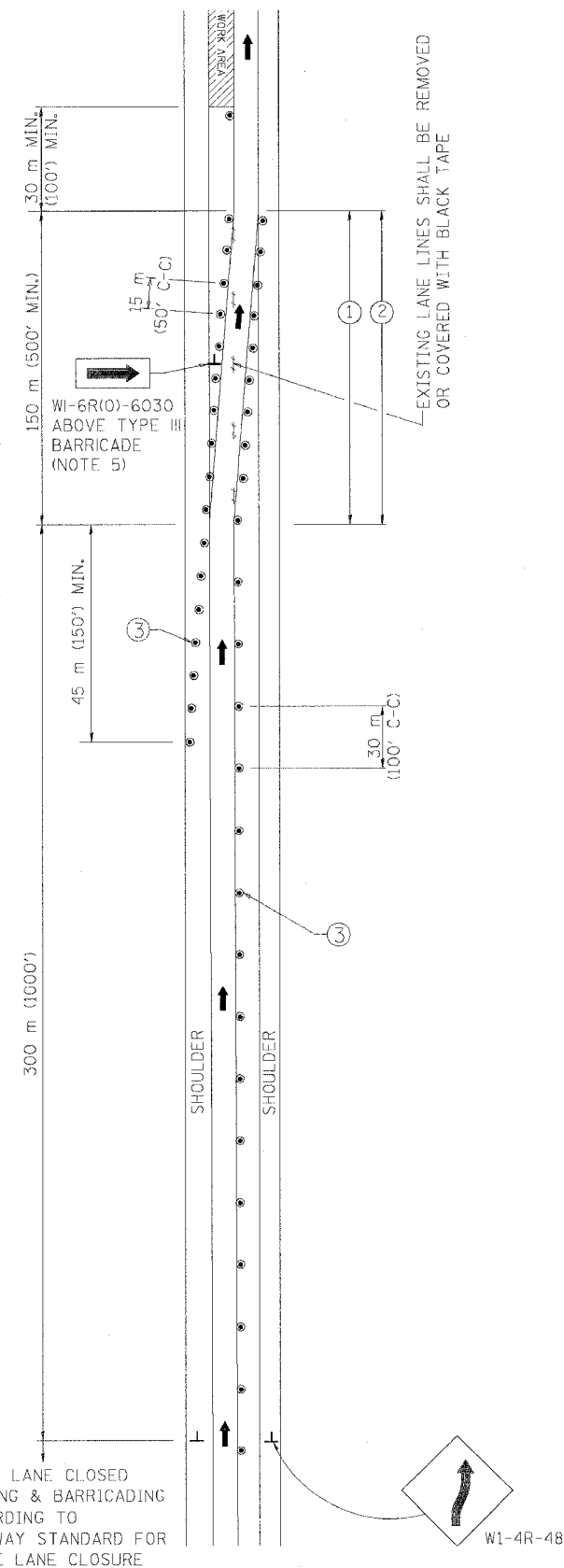
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

ILLINOIS DEPARTMENT OF TRANSPORTATION
FREWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS

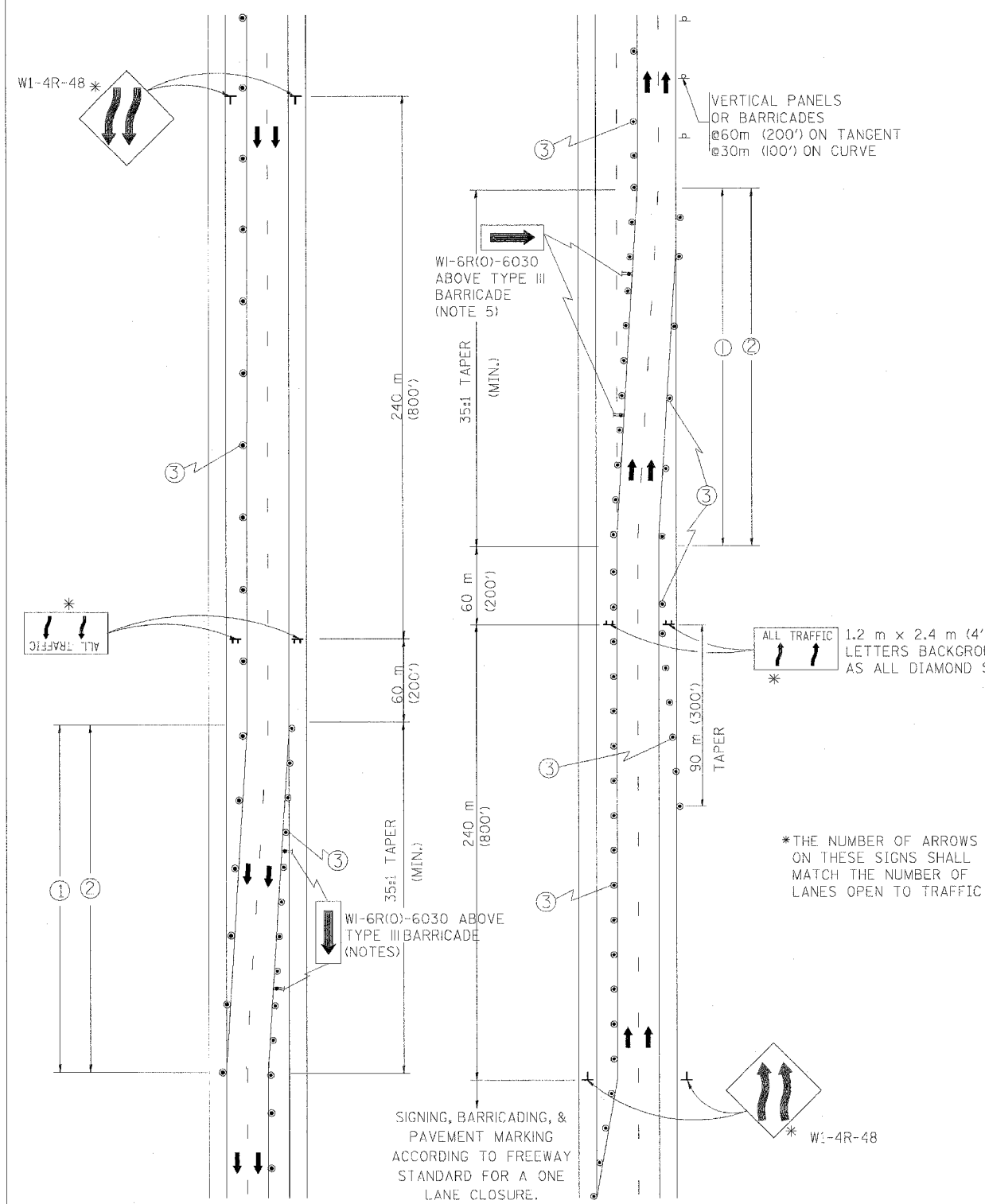
REVISIONS	
NAME	DATE
DWS	2-83
DWS	1/90
DWS	9/94
DWS	12/94
DWS/JAF	12/02
Revise devices to meet NCHRP 350	4/03

SCALE: NONE
DATE 05/06/2003
DRAWN BY
CHECKED BY TC-8

SINGLE LANE WEAVE



MULTI-LANE WEAVE



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9094	*	COOK	247	192
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

60A63 (1918.15, 2021-922 PT1 & PT2) R-2

GENERAL NOTES

- EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED OR COVERED WITH BLACK TAPE. PAVEMENT MARKING REMOVAL OR BLACK TAPE SHALL NOT BE REQUIRED FOR LANE CLOSURES UNDER 24 HOURS IN DURATION.
- CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 90 m (300') ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVE LANE LINES SHALL BE 3 M-9 M (10'-30') SKIP DASH, WHITE.
- PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 15 m (50') C-C SPACING IN TAPERS AND 30 m (100') C-C SPACING IN TANGENTS.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORTS DIRECTLY IN FRONT OF THE BARRICADE.

SYMBOLS

- DIRECTION OF TRAFFIC
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT

REVISIONS	
NAME	DATE
DWS	2/87
DWS	1/90
DWS	12/27/94
DWS	11/96
JAF	4/03

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN

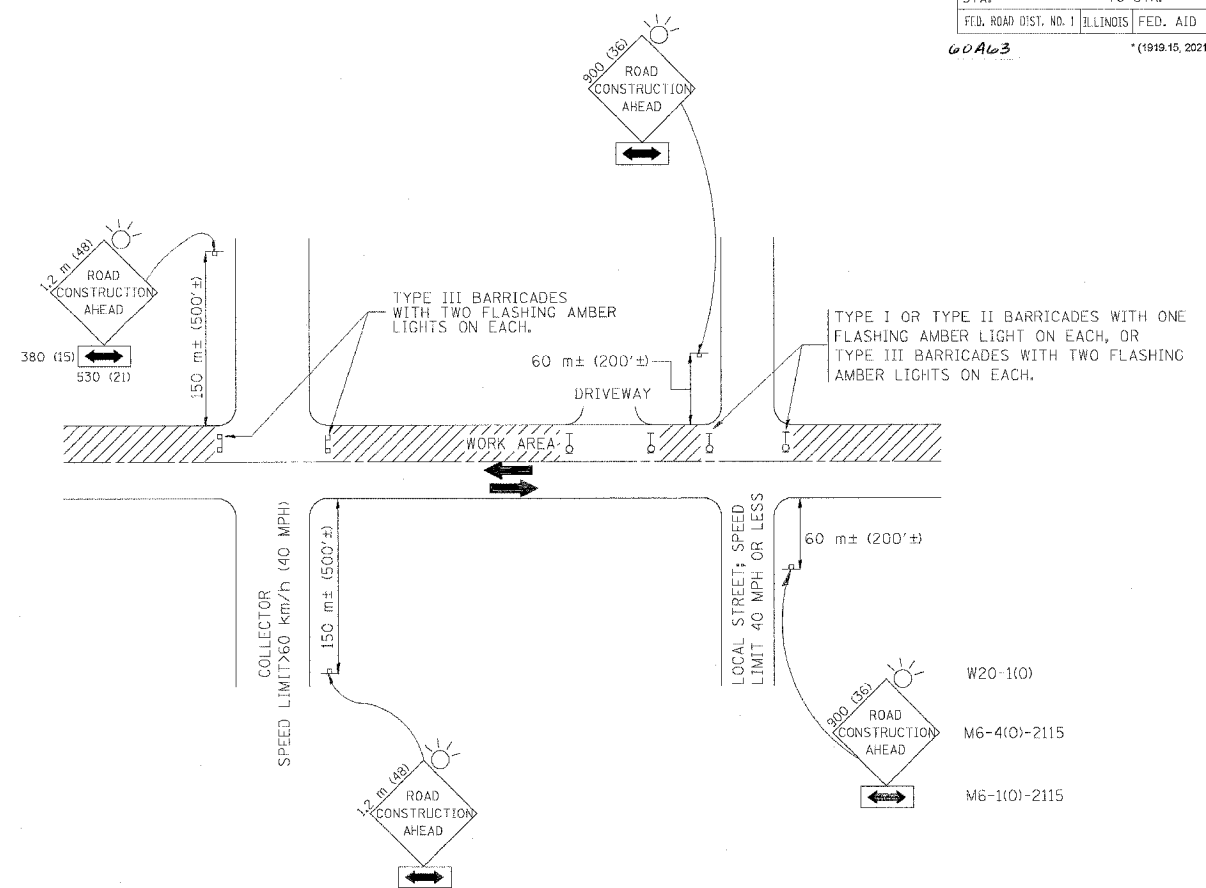
ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL DETAILS
 FOR FREEWAY
 SINGLE & MULTI-LANE WEAVE

SCALE: NONE
 DATE: 05/12/2003

DRAWN BY R.H.
 CHECKED BY TC-9

REVISION DATE: 04/20/03

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9094	*	COOK	247	193
STA.	TO STA.			
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
60A63		*(1919.15, 2021-922 PT1 & PT2) R-2		



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE **ROAD CONSTRUCTION AHEAD** SIGN 900x900 (36x36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE **ROAD CONSTRUCTION AHEAD** SIGN 1.2 m x 1.2 m (48x48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL AND PROTECTION
 FOR
 SIDE ROADS, INTERSECTIONS, AND
 DRIVEWAYS**

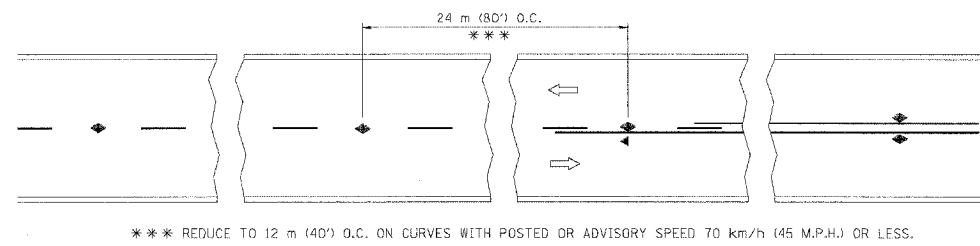
SCALE: VERT. _____
 HORIZ. _____
 DATE 10/18/2002

DRAWN BY _____
 CHECKED BY _____
 TC-10

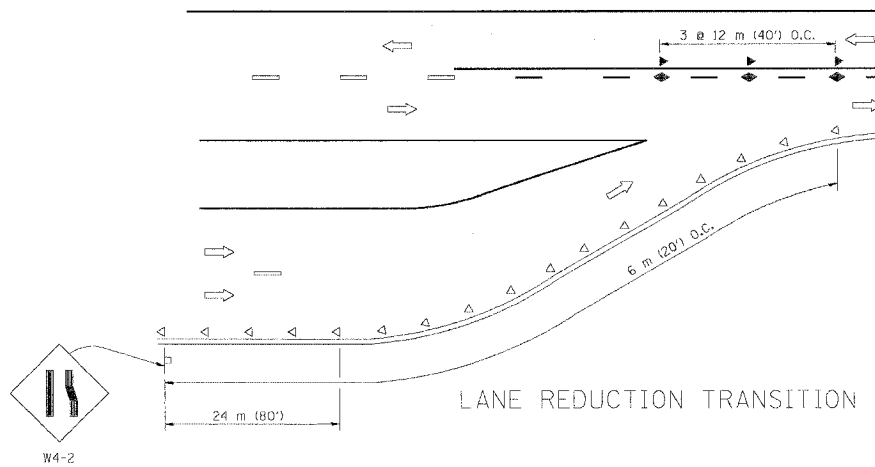
REVISION DATE: 01/06/00

F. A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9064	*	COOK	247	194
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

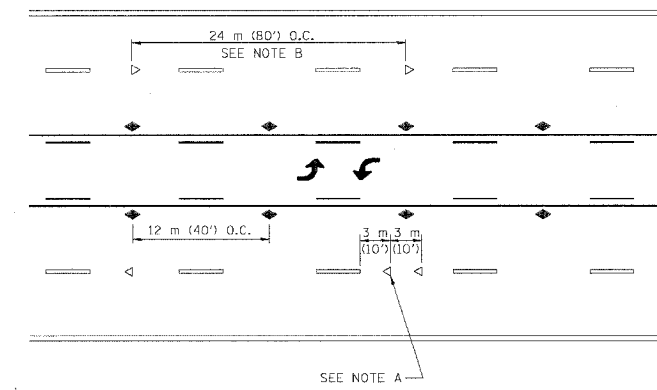
60A63 (1818.15, 2021-922 PT1 & PT2) R-2



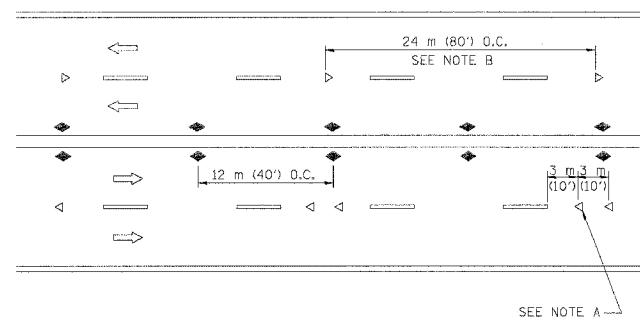
TWO-LANE/TWO-WAY



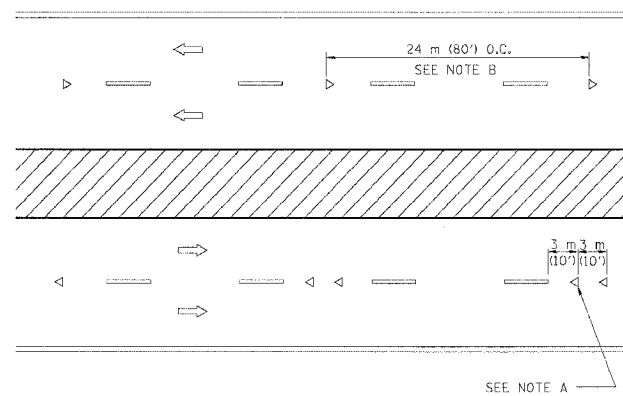
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 50 TO 75 (2 TO 3) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 150 m (500') IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

LANE MARKER NOTES

- B. REDUCE TO 12 m (40') O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 20 km/h (10 M.P.H.) LOWER THAN POSTED SPEEDS.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

SYMBOLS

- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

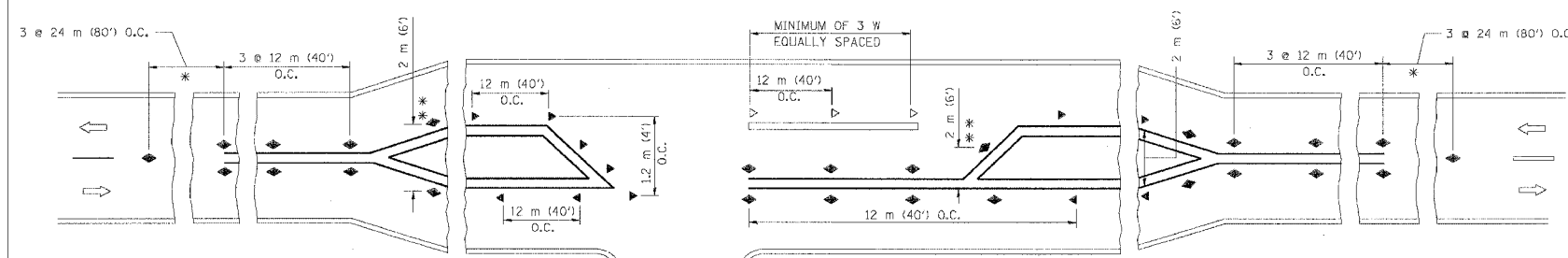
TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT MARKERS
(SNOW-PLOW RESISTANT)

REVISIONS	
NAME	DATE
T. RAMMACHER	09-19-94
T. RAMMACHER	03-12-99
T. RAMMACHER	01-06-00

SCALE: NONE
DATE: 10/18/2002

DRAWN BY CADD
CHECKED BY TC-11

REVISION DATE: 01/06/00

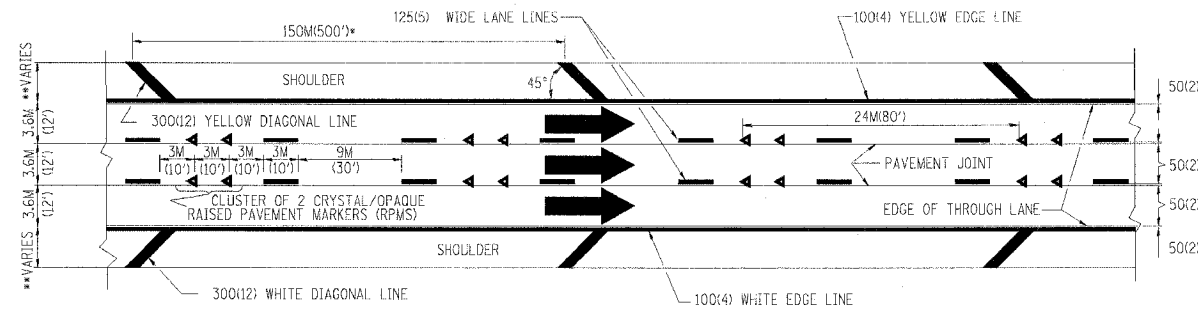


- * SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
- ** WHERE THE MEDIAN WIDTH IS 2 m (6') OR LESS USE TWO-WAY MARKERS.

LEFT TURN

F. A. SHE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	195
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS		FED. AID PROJECT	
60A03			*(1918.15, 2021-822 PT1 & PT2) R-2	

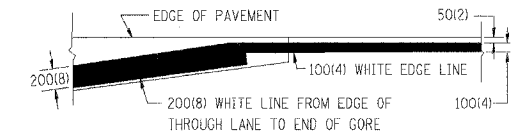
- THE DIAGONAL LINES SHALL BE SPACED AT 12M (40') C-C ACROSS ALL STRUCTURES WHICH ARE 150M (500') OR LESS IN LENGTH
- THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 1.8M (6') OR LESS IN WIDTH



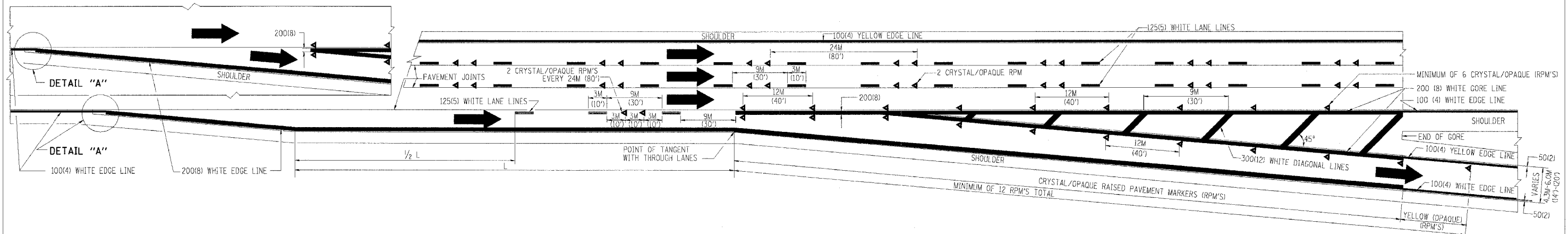
TYPICAL EDGE LINES & LANE LINES

NOTES:

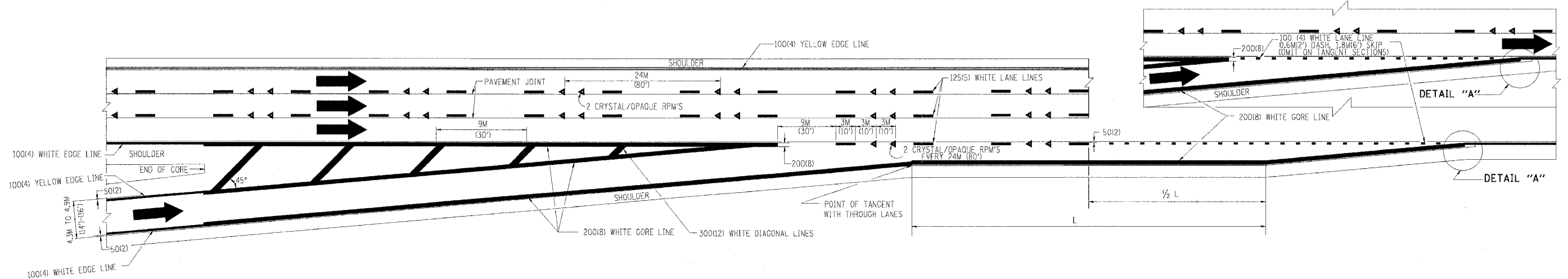
1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
2. PREFORMED PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR ALL LANE LINES
3. PREFORMED PLASTIC PAVEMENT MARKING LINE SHALL BE USED ON PCC PAVEMENT.



DETAIL "A"



TYPICAL EXIT RAMP PAVEMENT MARKINGS



TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS

REVISIONS		
NAME	DATE	
DWS	1/90	
DWS	5/91	
AH	3/96	
DWS	7/96	

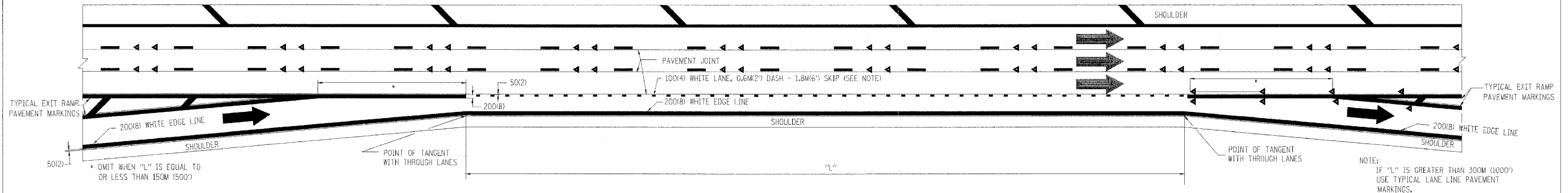
ILLINOIS DEPARTMENT OF TRANSPORTATION

**MULTI-LANE FREEWAY
PAVEMENT MARKING
DETAILS**

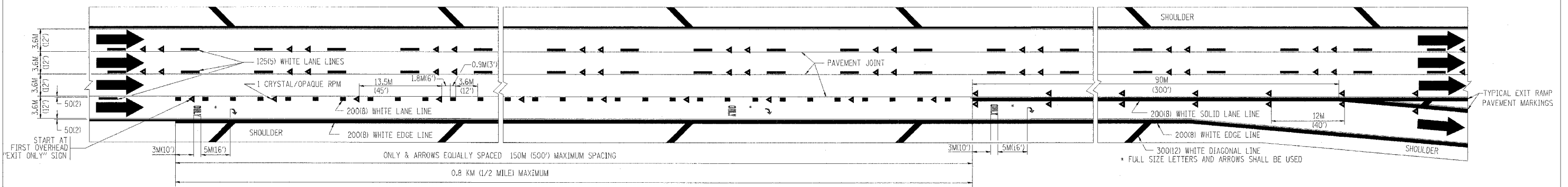
SCALE: NONE
DATE: 10/18/2002

DRAWN BY C.A.D.D.
CHECKED BY
TC12 SHEET 1 OF 2
REVISION DATE: 01/20/96

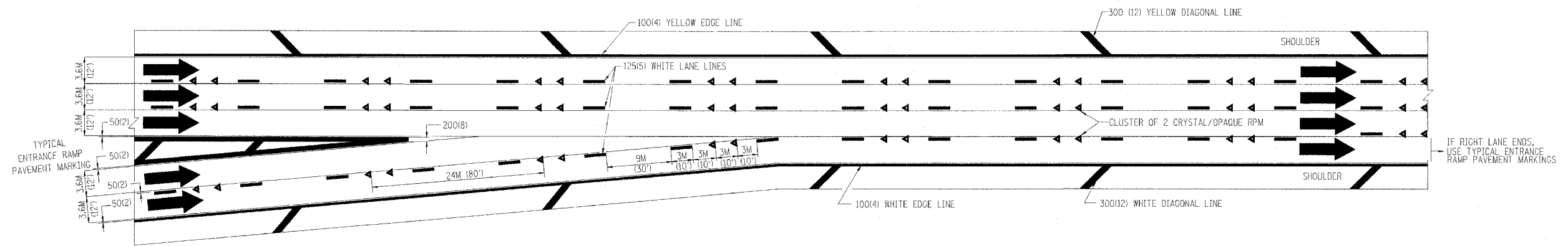
F. A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	196
STA.	TO STA.			
FED. ROAD DIST. NO. 1	BLINDS	FED. AID PROJECT		
60A63		*(1919.16, 2021-922 FT1 & PT2) R-2		



TYPICAL ENTRANCE/EXIT RAMP COMBINATION PAVEMENT MARKINGS



TYPICAL EXIT ONLY LANE PAVEMENT MARKINGS



TYPICAL TWO LANE ENTRANCE RAMP PAVEMENT MARKINGS

REVISIONS	
NAME	DATE
DWS	1/90
DWS	5/91

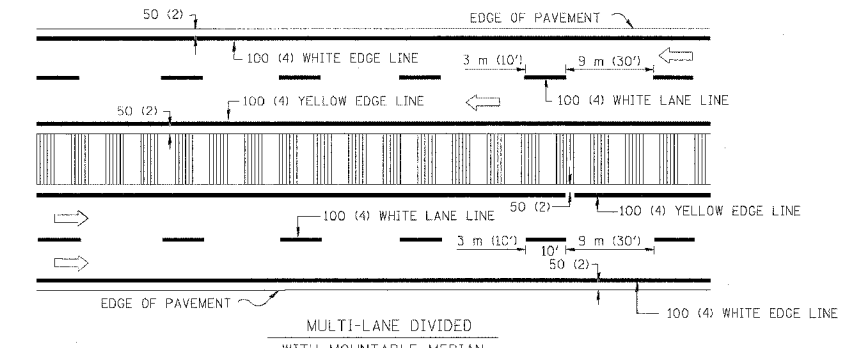
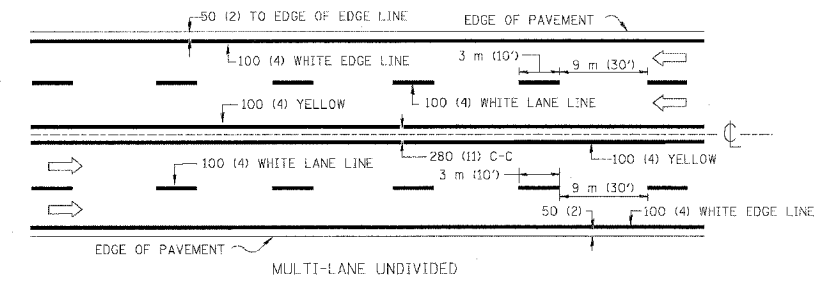
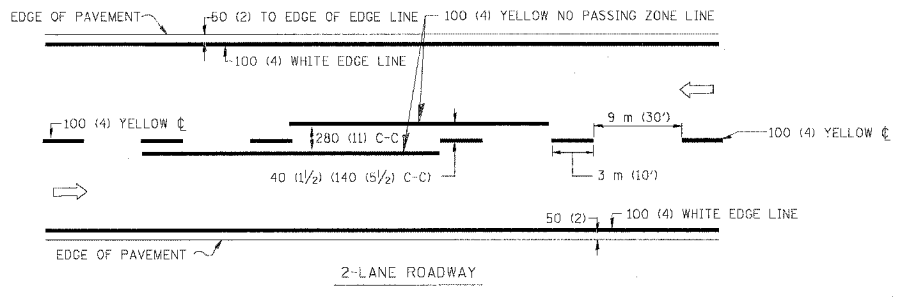
ILLINOIS DEPARTMENT OF TRANSPORTATION

**MULTI-LANE FREEWAY
PAVEMENT MARKING
DETAILS**

SCALE: NONE
DATE: 10/18/2002

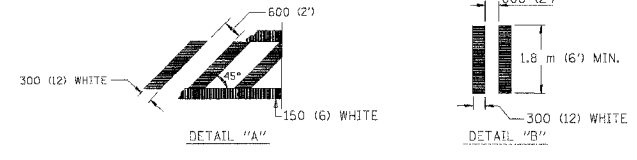
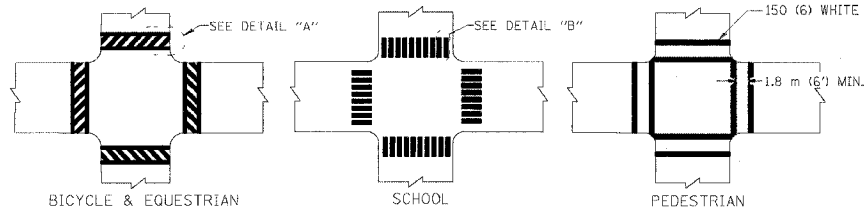
DRAWN BY C.A.D.D.
CHECKED BY

F.A. R.T.C.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9094		COOK	247	197
STA.	TO STA.			
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
60A03		*(1919.15, 2021-922 FT1 & PT2) R-2		

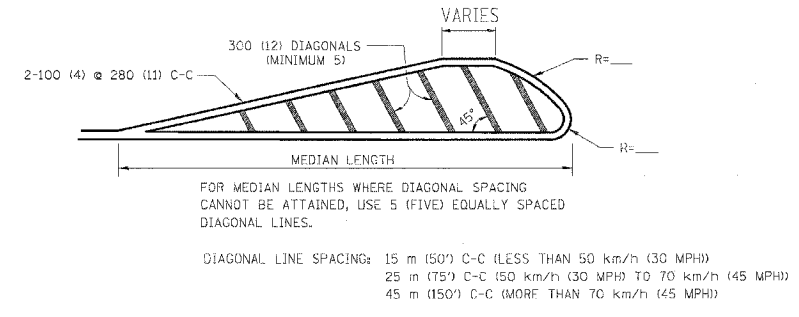
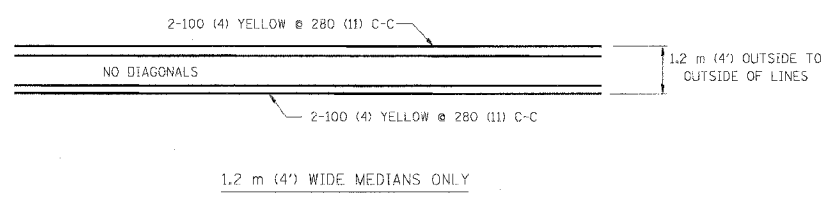


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

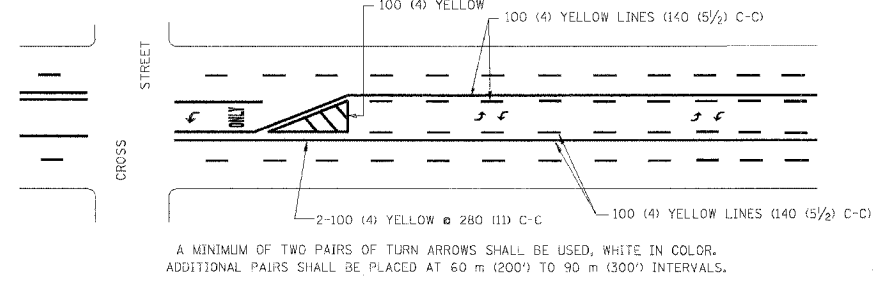
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

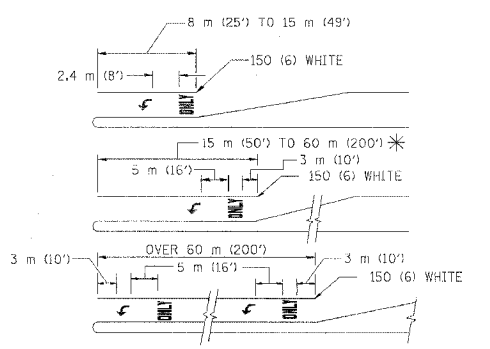


MEDIANS OVER 1.2 m (4') WIDE



MEDIAN WITH TWO-WAY LEFT TURN LANE

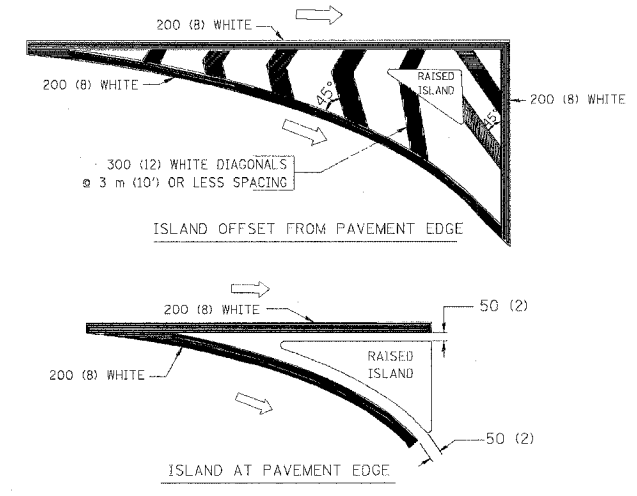
TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED.
AREA = 1.5 m² (15.6 SQ. FT.) ONLY AREA = 1.9 m² (20.8 SQ. FT.)
* TURN LANES IN EXCESS OF 20 m (140') IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	100 (4)	SKIP-DASH	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	100 (4)	SOLID	YELLOW	140 (5 1/2) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES: FOR BOTH DIRECTIONS	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	100 (4)	SKIP-DASH	WHITE	3 m (10') LINE WITH 9 m (30') SPACE
LANE LINES	125 (5) ON FREEWAYS	SKIP-DASH	WHITE	WHITE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 m (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINE; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE FOR SKIP-DASH; 140 (5 1/2) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
TWO WAY LEFT TURN MARKING	2.4 m (8') LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN)	2 @ 150 (6)	SOLID	WHITE	NOT LESS THAN 1.8 m (6') APART
CROSSWALK LINES (BIKE & EQUESTRIAN)	300 (12) @ 45°	SOLID	WHITE	600 (2') APART
CROSSWALK LINES (LONGITUDINAL BARS (SCHOOL))	300 (12) @ 90°	SOLID	WHITE	600 (2') APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45°	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	280 (11) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 4.5 m (15') C-C (LESS THAN 50 km/h (30 MPH)) 6 m (20') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 9 m (30') C-C (OVER 70 km/h (45 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=0.33m ² (3.6 SQ. FT.) EACH "X"=5.0 m ² (54.0 SQ. FT.)
SHOULDER DIAGONALS	300 (12) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	15 m (50') C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 45 m (150') C-C (OVER 70 km/h (45 MPH))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

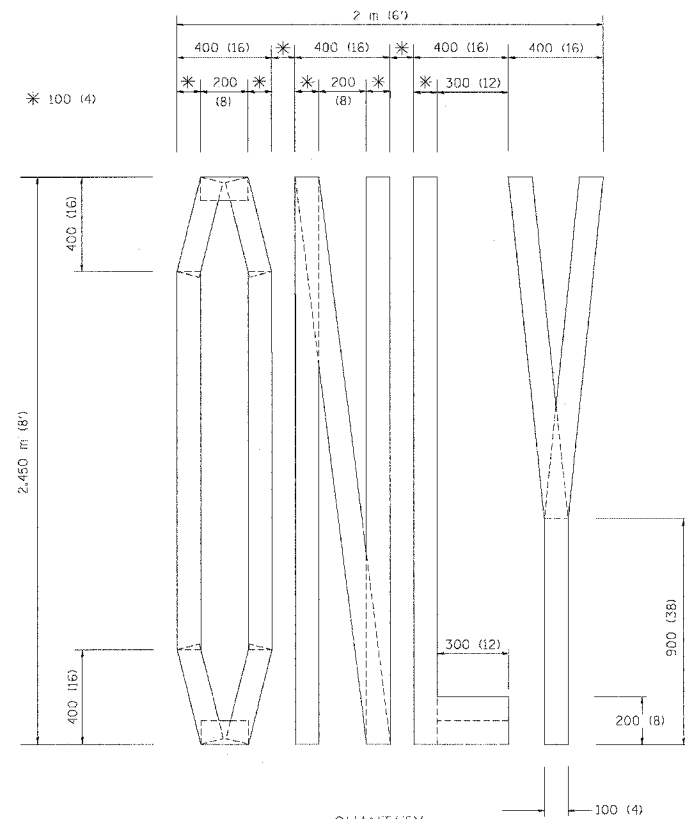
DISTRICT ONE
TYPICAL PAVEMENT
MARKINGS

REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

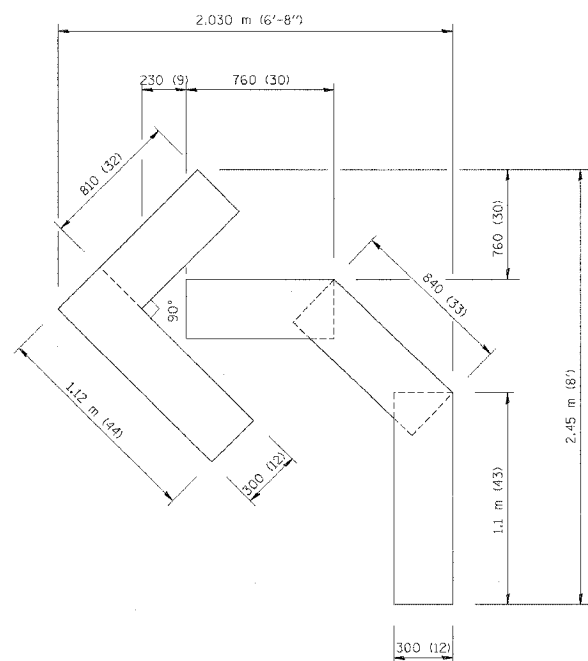
SCALE: NONE
DATE: 10/16/2002
DRAWN BY: CADD
CHECKED BY:

F. A. SHEET	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9064	*	COOK	247	198
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

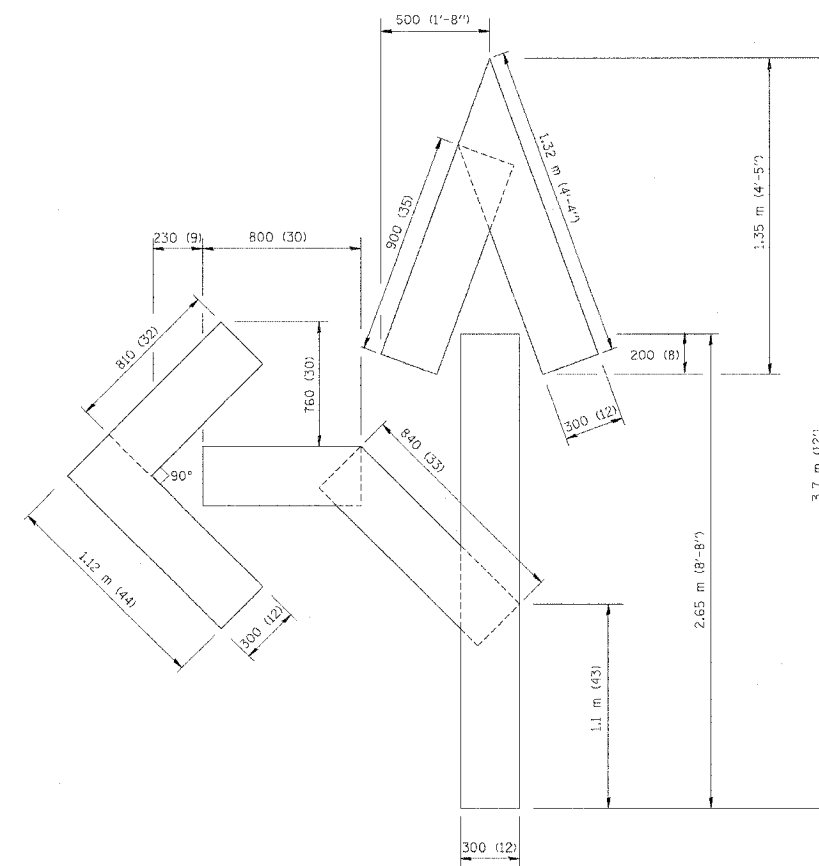
60A63 (1919.15, 2021-022 PT1 & PT2) R-2



QUANTITY
 100 (4) LINE = 19.7 m (64.1 ft.)
 1.97 sq. m (21.1 sq. ft.)



QUANTITY
 100 (4) LINE = 13.9 m (45.5 ft.)
 1.39 sq. m (15.2 sq. ft.)



QUANTITY
 100 (4) LINE = 25.3 m (82.5 ft.)
 2.53 sq. m (27.5 sq. ft.)

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING
 LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING

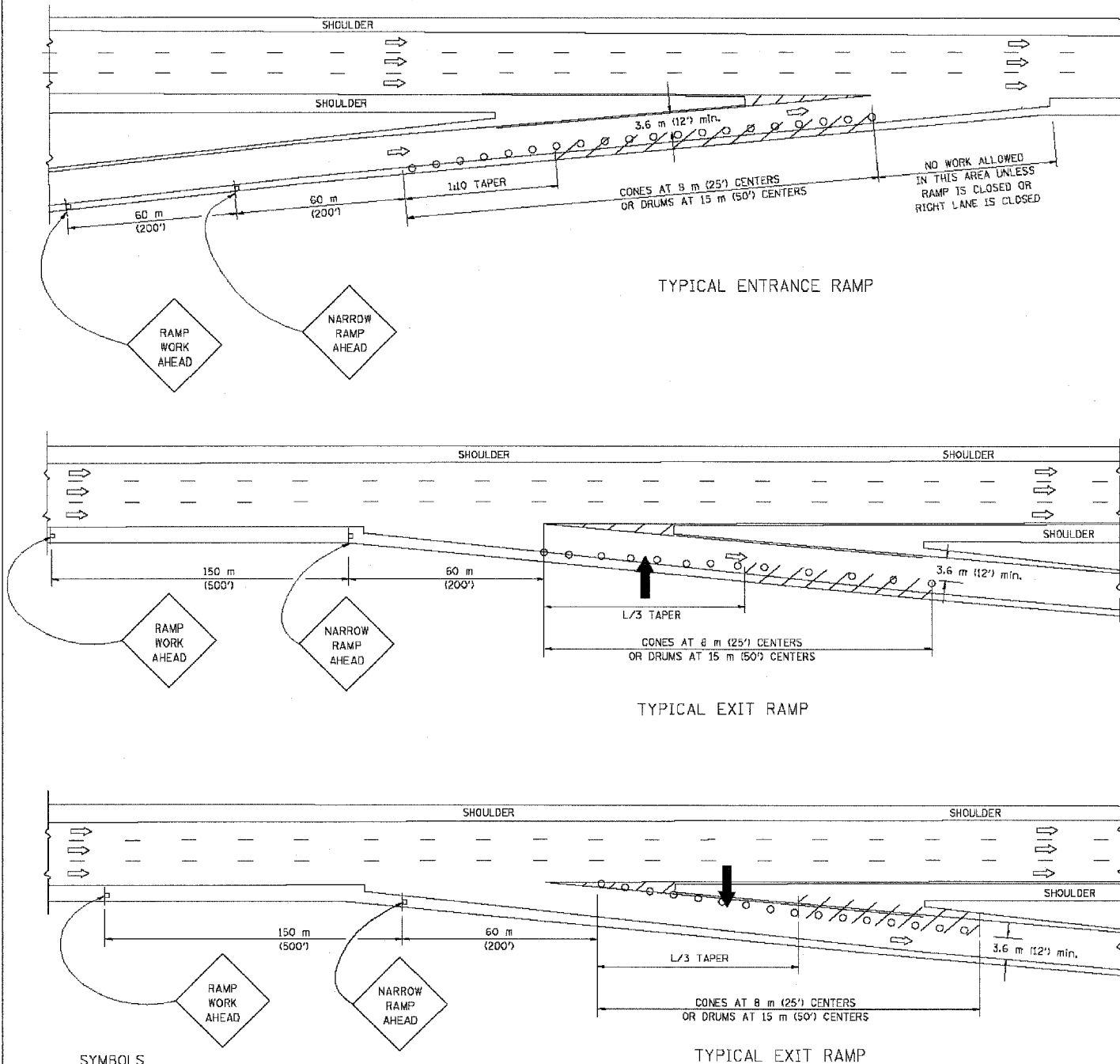
REVISIONS	
NAME	DATE
T. RAMMACHER	09/18/94
J. OBERLE	06/01/96
T. RAMMACHER	06/05/96
T. RAMMACHER	11/04/97
T. RAMMACHER	03/02/98
E. GOMEZ	08/28/00

SCALE: NONE
 DATE 10/18/2002

DRAWN BY CADD
 CHECKED BY TC-16

REVISION DATE: 08/28/00

PARTIAL RAMP CLOSURE DETAILS



SYMBOLS

- ARROWBOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- CONES - 700 (28) IN HEIGHT

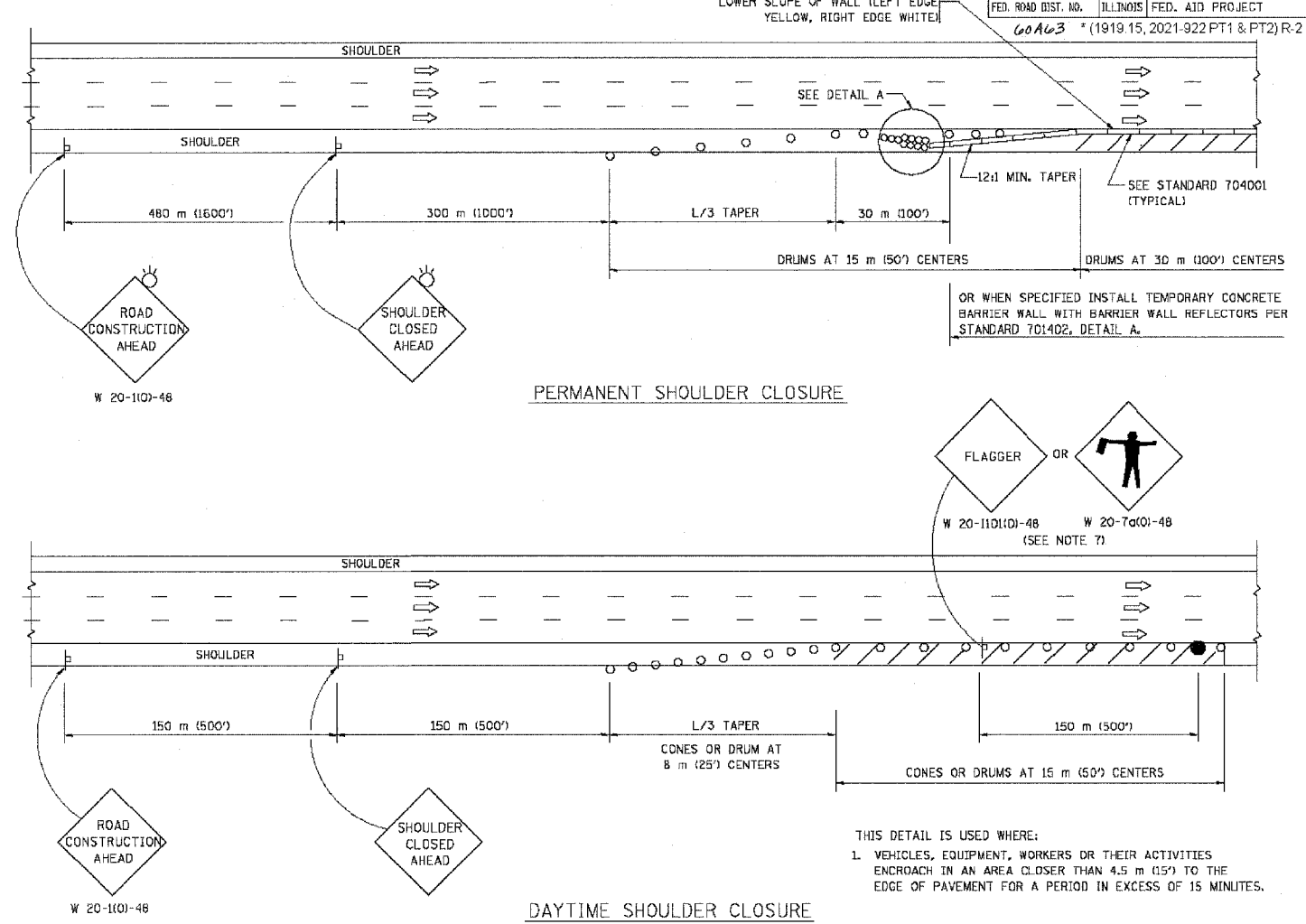
GENERAL NOTES

1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS
80 km/h (45 mph) OR GREATER:	METRIC: $L = C \cdot 66 \cdot W / S$ ENGLISH: $L = (W \cdot S)$

W = WIDTH OF OFFSET IN METERS (FEET)
S = NORMAL POSTED SPEED KM/H (MPH)
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

SHOULDER CLOSURE DETAILS



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/64		COOK	247	199

STA. TO STA. TO STA. TO STA.
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT
 60A63 * (1919.15, 2021-922 PT1 & PT2) R-2

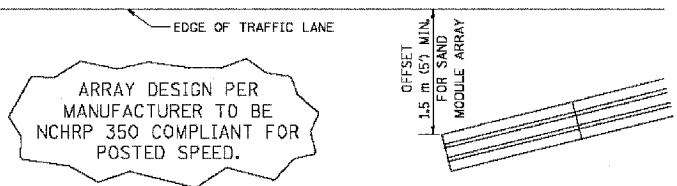
REFLECTIVE 150 (6) EDGE LINE ON LOWER SLOPE OF WALL (LEFT EDGE YELLOW, RIGHT EDGE WHITE)

SEE DETAIL A
 12:1 MIN. TAPER
 SEE STANDARD 704001 (TYPICAL)

DRUMS AT 15 m (50') CENTERS
 DRUMS AT 30 m (100') CENTERS

FLAGGER OR
 W 20-110(10)-46 W 20-7a(0)-46
 (SEE NOTE 7)

THIS DETAIL IS USED WHERE:
 1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENDOURCH IN AN AREA CLOSER THAN 4.5 m (15') TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



DETAIL "A"
 IMPACT ATTENUATOR, TEMPORARY
 (SEE NOTE 5)

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES PARTIAL RAMP CLOSURES

SCALE: NONE
 DATE: 05/06/2003

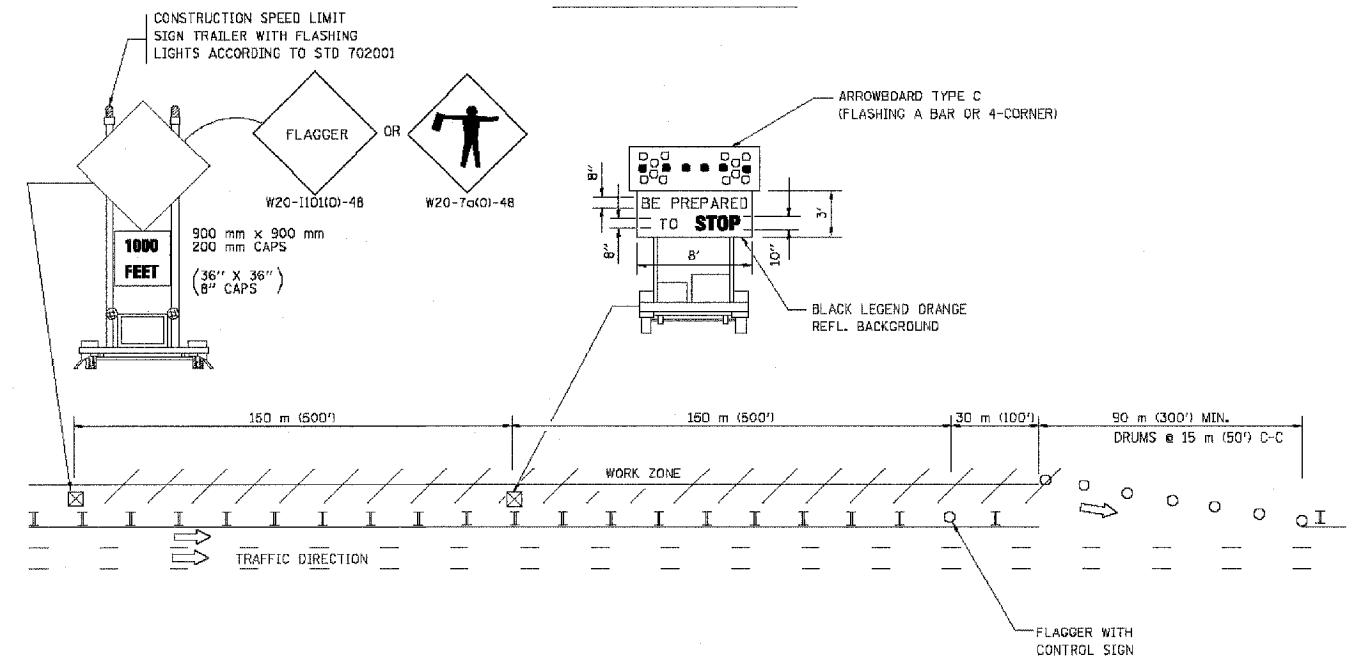
DRAWN BY: DWS
 DESIGNED BY: DWS
 CHECKED BY: TC-11

REVISIONS	
NAME	DATE
DWS	11/96
JAF	12/02
NCHRP 350	04/03

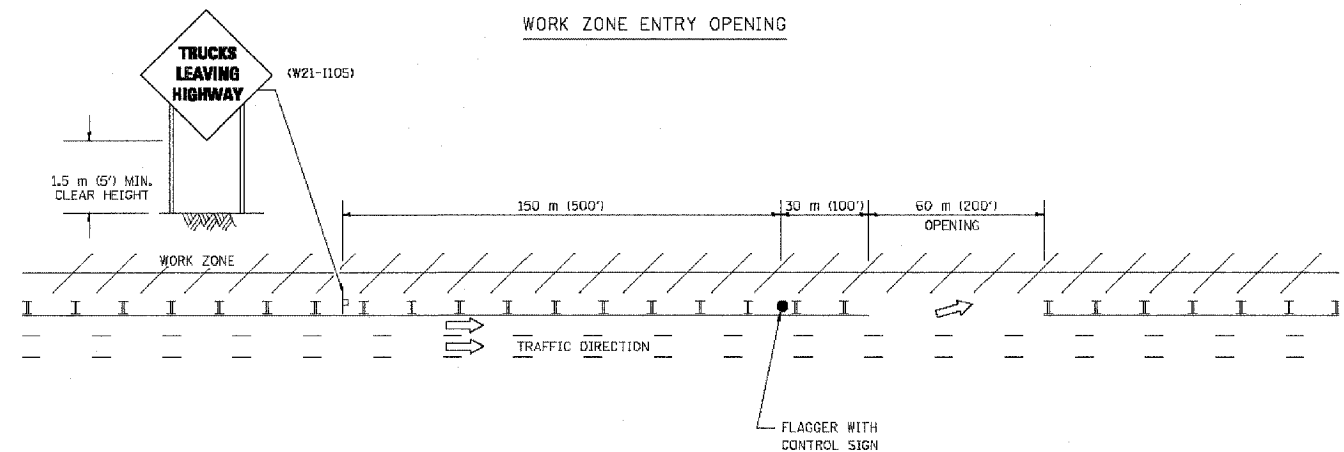
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9004	*	COOK	247	200
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
66A63	*(1919.15, 2021-922 PT1 & PT2) R-2			

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. The Arrowboard, the Flagger Ahead trailer mounted sign, and the Trucks Leaving Highway sign shall be removed or turned away from traffic and the exit and entry openings shall be closed when the flagging operation ceases.
2. Work Zone Exit Openings should be a minimum of one half mile apart.
3. Exiting the work zone at any place other than at a Work Zone Exit Opening will be prohibited.
4. All vehicles shall enter the work zone at entry openings, using their turn signals to warn motorists

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN

ILLINOIS DEPARTMENT OF TRANSPORTATION

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

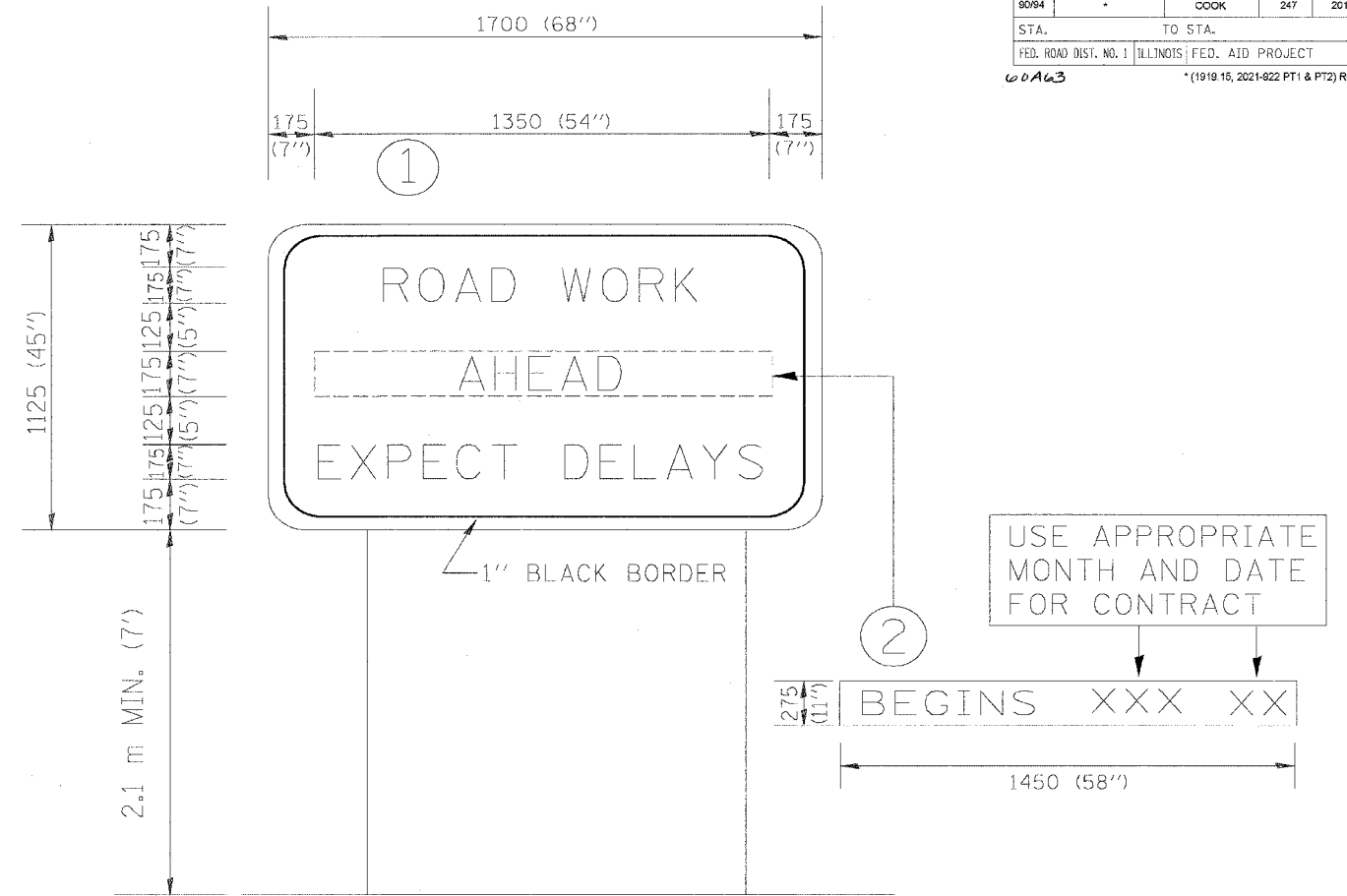
REVISIONS	
NAME	DATE
DWS	8/98
JAF	4/03

SCALE: NONE
DATE 05/06/2003

DRAWN BY CADD
CHECKED BY TC-18

REVISION DATE: 04/24/03

F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6094		COOK	247	201
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		*(1919.15, 2021-022 PT1 & PT2) R-2		



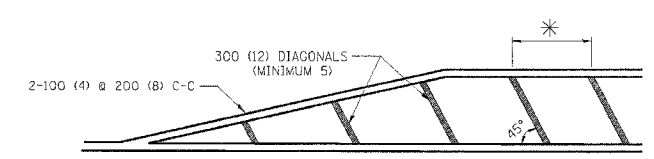
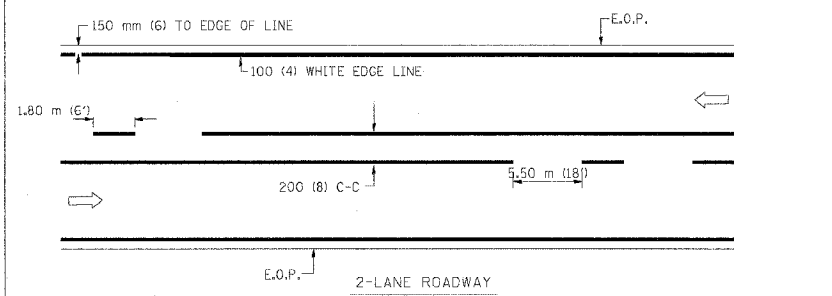
NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 2.3 SQ. M. (25.70 SQ. FT.)

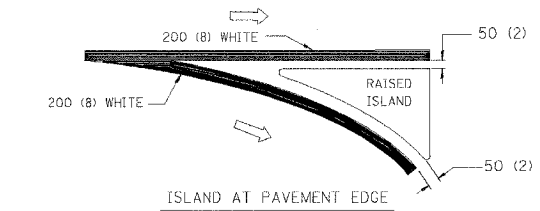
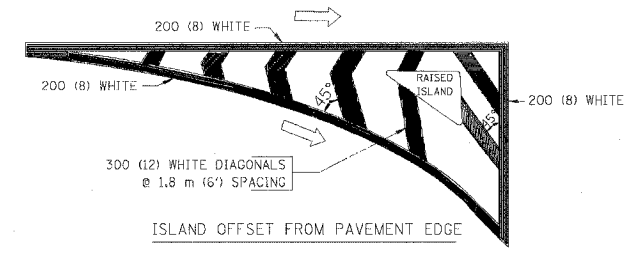
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION TEMPORARY INFORMATION SIGNING
NAME	DATE	
R. MIRS	9-15-97	
R. MIRS	12-11-97	
T. RAMMACHER	2-2-99	

SCALE: DATE 10/18/2002
DRAWN BY: BUR. OF DESIGN
CHECKED BY:

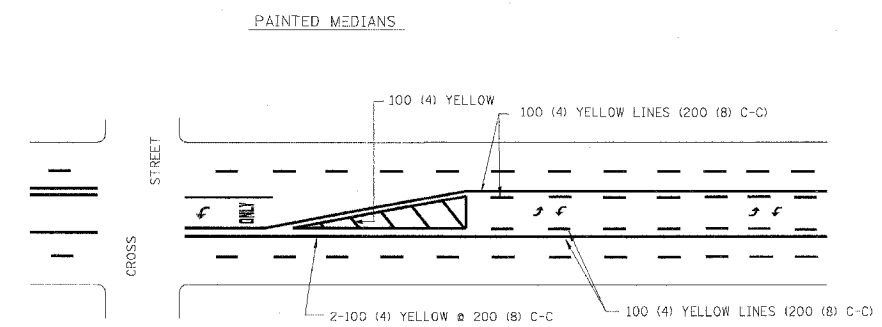
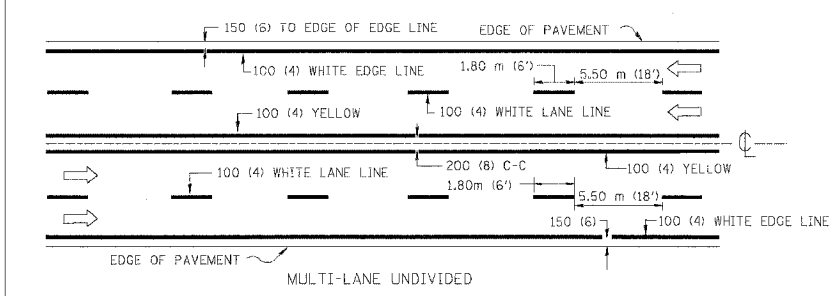


* FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.
 * DIAGONAL LINE SPACING: 6.1 m (20') C-C

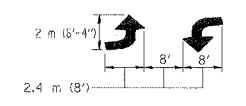


TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	100 (4)	SKIP-DASH	YELLOW	1.80 m (6') LINE WITH 5.50 m (18') SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	200 (8) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	100 (4) 2 @ 100 (4)	SOLID SOLID	YELLOW YELLOW	200 (8) C-C
LANE LINES	100 (4) 125 (5) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	1.80 m (6') LINE WITH 5.50 m (18') SPACE
DOTTED LINES (EXTENSIONS OF CENTER LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINE; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	1.8 m (6') LINE WITH 5.50 m (18') SPACE FOR SKIP-DASH; 200 (8) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	2.4 m (8') LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 150 (6) 300 (12) @ 45° 200 (8) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART 700 (2'-4") APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45°	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	200 (8) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 6.1 m (20') (LESS THAN 50 km/h (30 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=0.33m ² (3.6 SQ. FT.) EACH "X"=5.0 m ² (54.0 SQ. FT.)

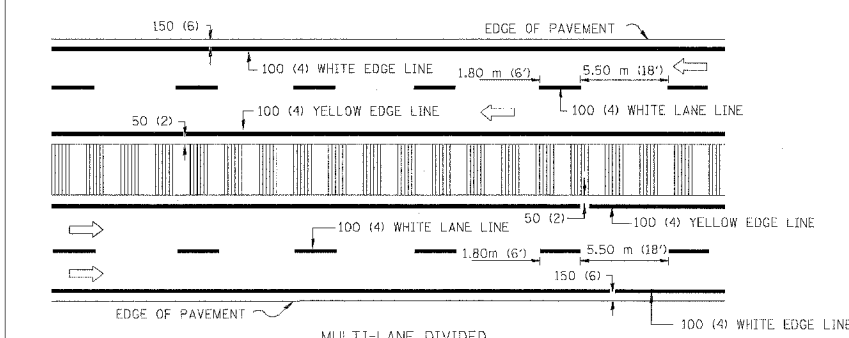


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 60 m (200') TO 90 m (300') INTERVALS.



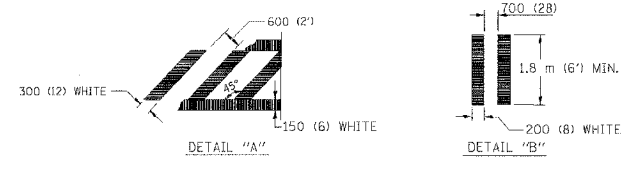
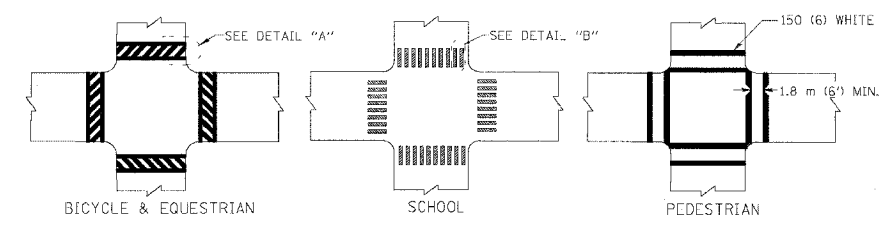
MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

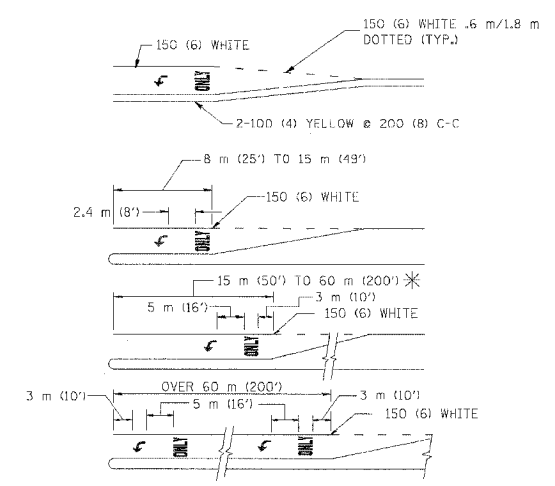


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED.
 AREA = 1.47 m² (15.8 SQ. FT.) ONLY AREA = 2.13 m² (22.9 SQ. FT.)
 * TURN LANES IN EXCESS OF 20 m (100') IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

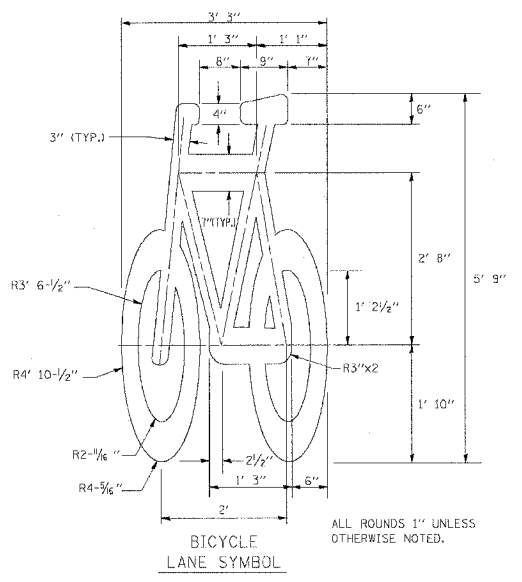
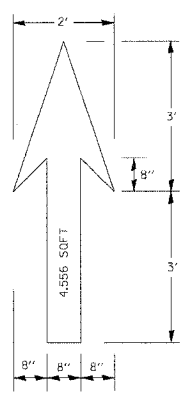
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STREET MARKING STANDARDS, PRINTED BY CITY OF CHICAGO, DEPARTMENT OF TRANSPORTATION, BUREAU OF TRAFFIC.

All dimensions are in millimeters (inches) unless otherwise shown. 1 OF 2

REVISIONS	
NAME	DATE
T. RAMMACHER	12/07/00

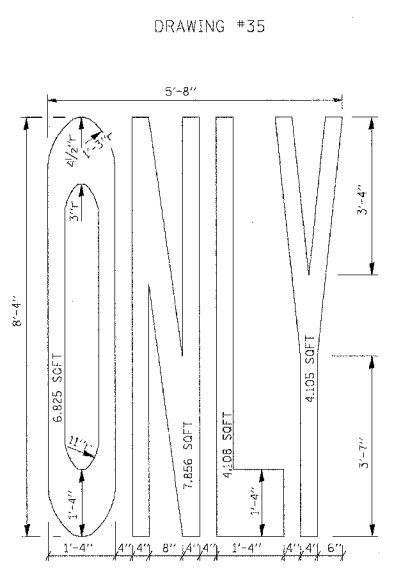
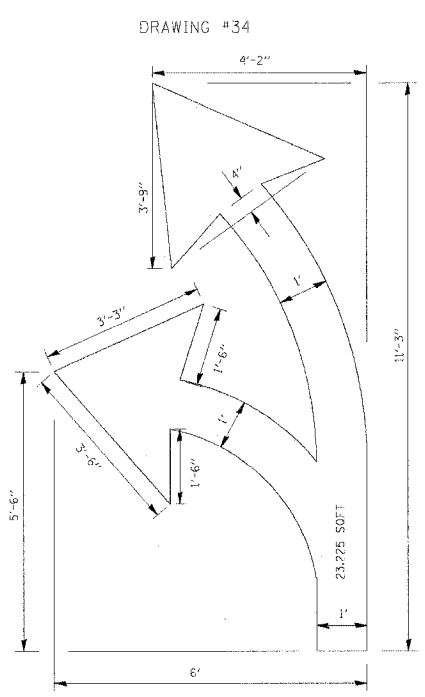
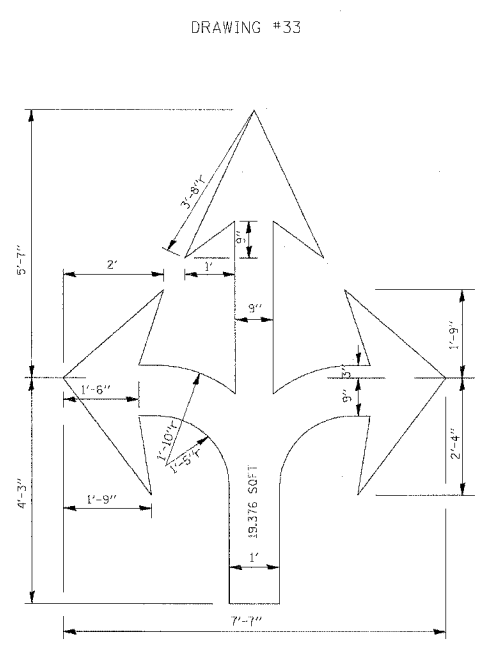
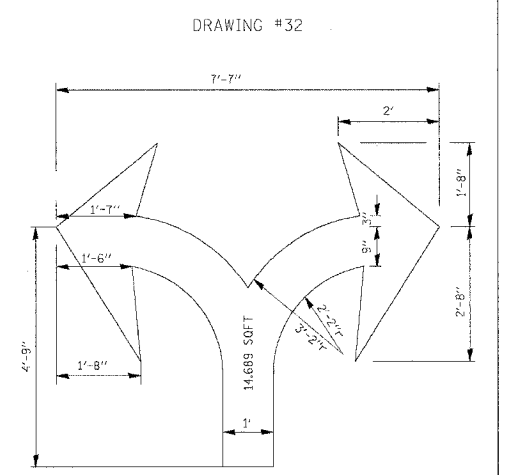
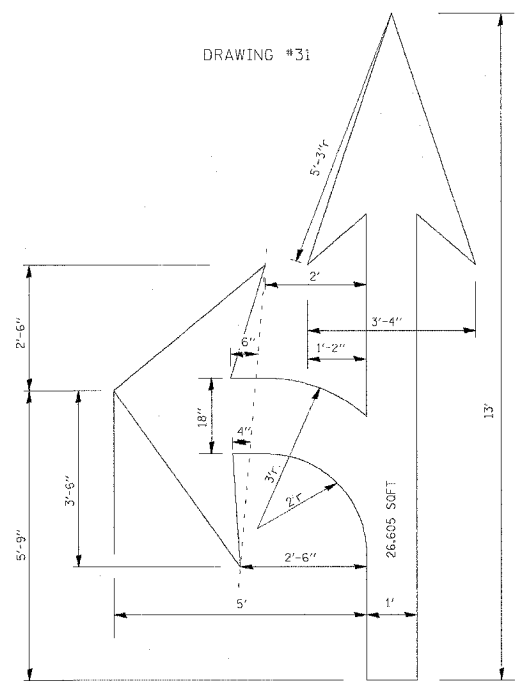
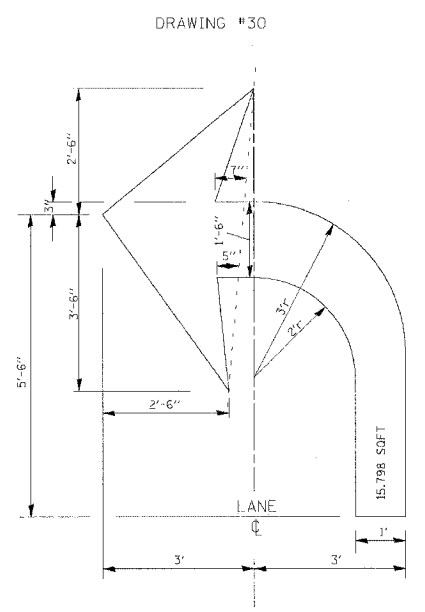
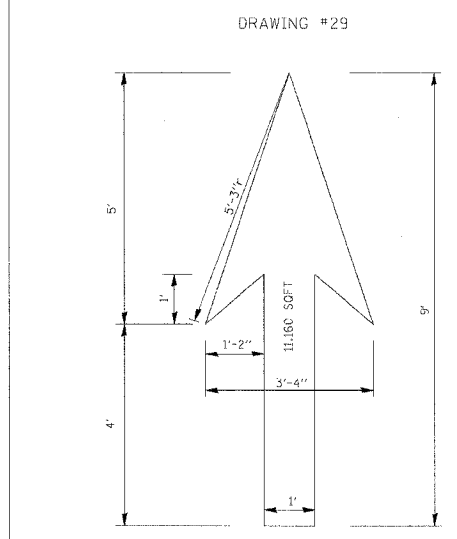
ILLINOIS DEPARTMENT OF TRANSPORTATION
 CITY OF CHICAGO
 TYPICAL PAVEMENT MARKINGS

SCALE: NONE
 DATE 10/18/2002
 DRAWN BY CADD
 CHECKED BY TC-24



NOTE:
 1.) FOR BIKE LANE SYMBOLS ONLY, USE PRE-FORMED THERMOPLASTIC WITH A MINIMUM THICKNESS OF 90 MILS, MINIMUM SKID RESISTANCE VALUE OF 60 BPN, & A MINIMUM INDEX OF REFRACTION OF 1.50.
 2.) THE RESIDENT ENGINEER SHALL CONTACT MR. BEN COMBERG AT 312-744-8093 AT LEAST ONE CALENDAR WEEK PRIOR TO INSTALLING BIKE LANE SYMBOLS.

TYPICAL BIKE LANE SYMBOLS
DRAWING #28



NOTE:
ALL MARKINGS SHALL BE SOLID WHITE UNLESS OTHERWISE NOTED IN THE PLANS

REVISIONS	
NAME	DATE
T. RAMMACHER	12/07/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
CITY OF CHICAGO
TYPICAL PAVEMENT MARKINGS.

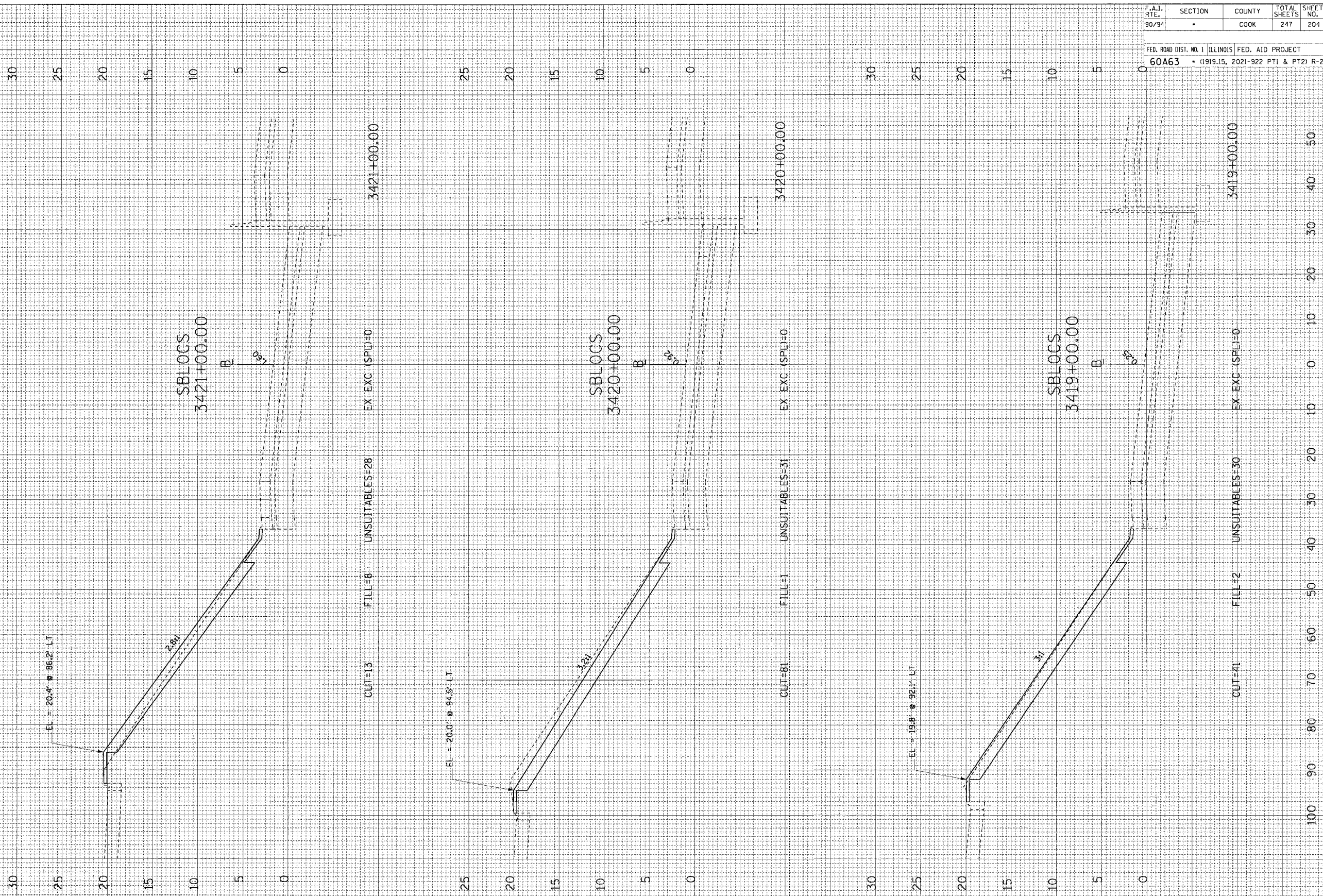
SCALE: NONE
DATE 03/09/2004

DRAWN BY
CHECKED BY
TC-24

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	TEMPLATE		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	TEMPLATE		
	AREAS CHECKED		

CTE | AECOM



F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	247	204
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A63		• (1919.15, 2021-922 PT1 & PT2) R-2		

ORIGINAL SURVEY PLOTTED
NOTE BOOK NO. _____
DATE _____

BY _____

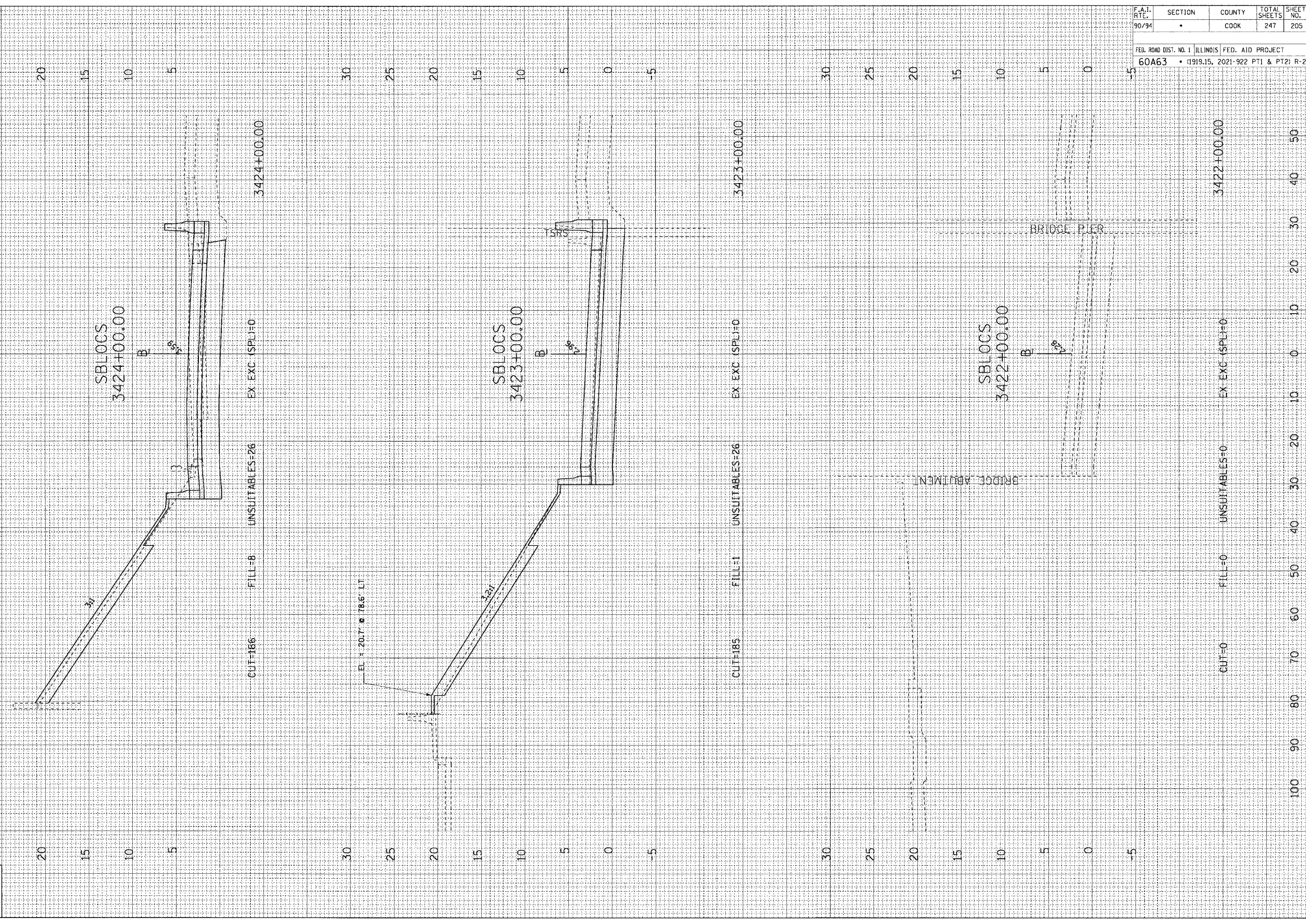
APPROVED BY _____
DATE _____

ORIGINAL SURVEY PLOTTED
NOTE BOOK NO. _____
DATE _____

BY _____

APPROVED BY _____
DATE _____

CTE | AECOM



F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	205

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2

6/5/2006 12:57:23 PM F:\194463\Civil\8-Ctrls 18 & 19\STVCNR 19A\Cross Sections\690a_sblloc_205.dwg

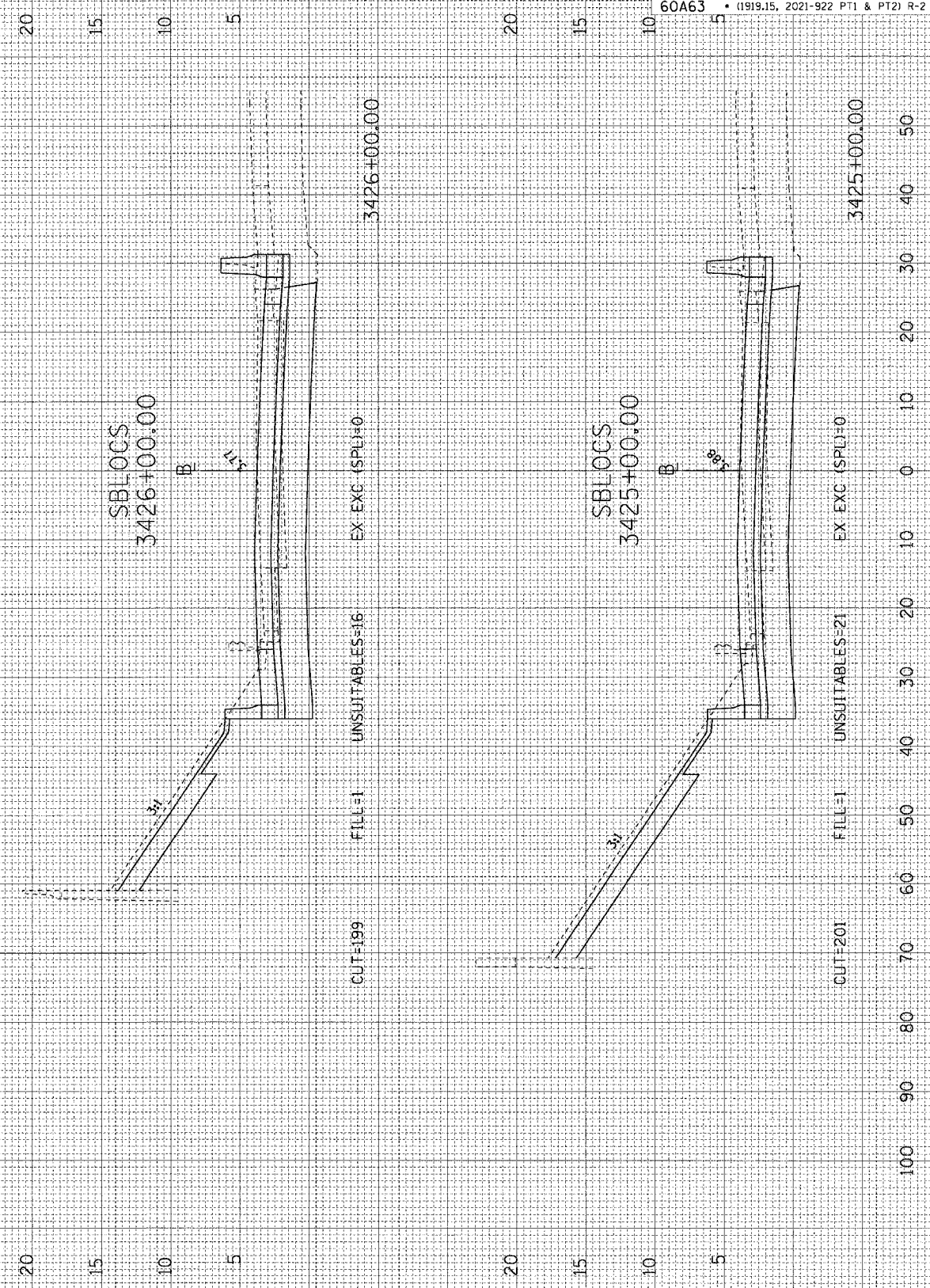
ORIGINAL SURVEY _____ BY _____ DATE _____
 SURVEYED _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____

ORIGINAL SURVEY _____ BY _____ DATE _____
 SURVEYED _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____

CTE | AECOM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	247	206

FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT
60A63	• (1919.15, 2021-922 PT1 & PT2)	R-2

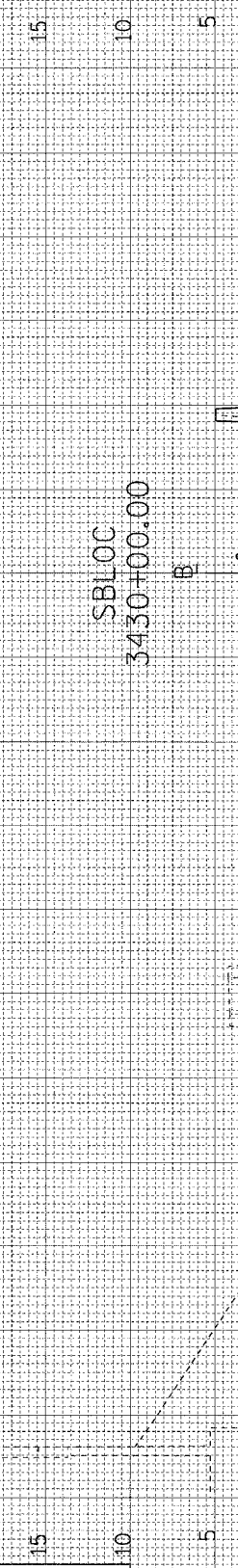


6/5/2006 12:57:33 PM F:\144662\1148-C1116 IB & 1915\1148-C1116 19A\Cross Sections\90-247-206-2.dwg

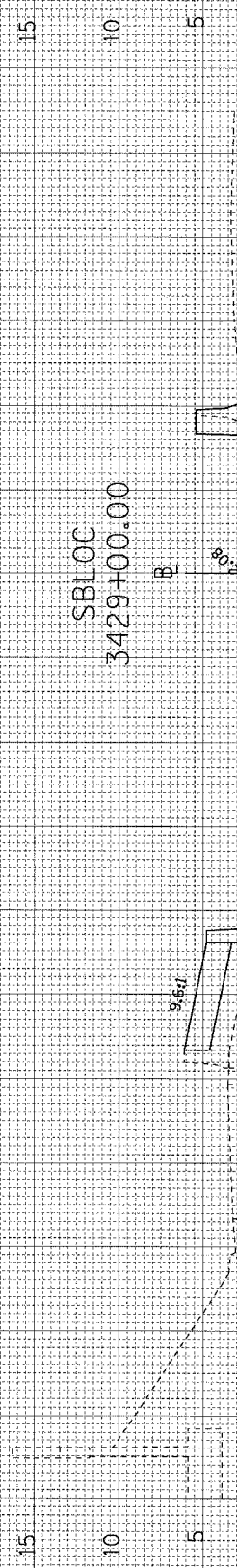
FINAL SURVEY NO.	DATE
UNRECORDED SURVEY	BY
PLOTTED TEMPLATE	
AREAS CHECKED	

ORIGINAL SURVEY NO.	DATE
UNRECORDED SURVEY	BY
PLOTTED TEMPLATE	
AREAS CHECKED	

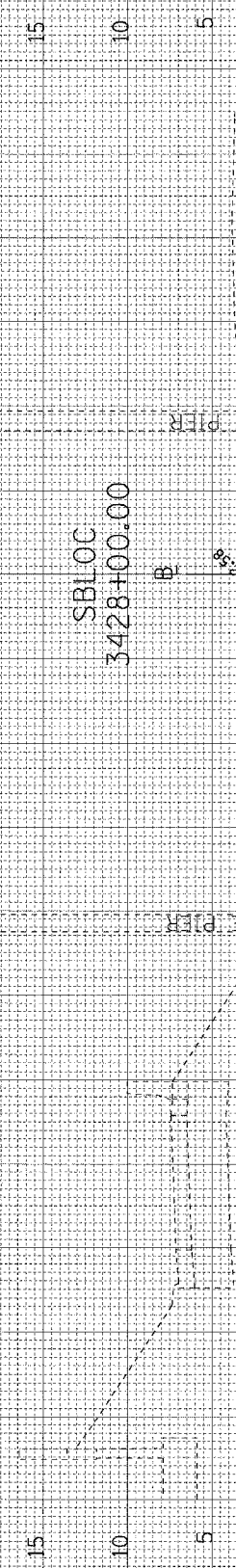
CTE | AECOM



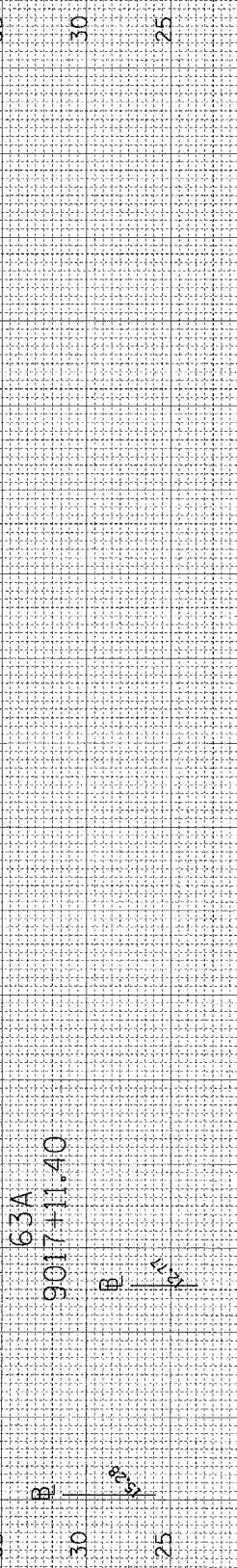
CUT=137 FILL=0 UNSUITABLES=0 EX EXC (SPL)=0 3430+00.00



CUT=161 FILL=15 UNSUITABLES=0 EX EXC (SPL)=0 3429+00.00



CUT=155 FILL=0 UNSUITABLES=0 EX EXC (SPL)=0 3428+00.00



CUT=201 FILL=1 UNSUITABLES=13 EX EXC (SPL)=0 3427+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	207
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				

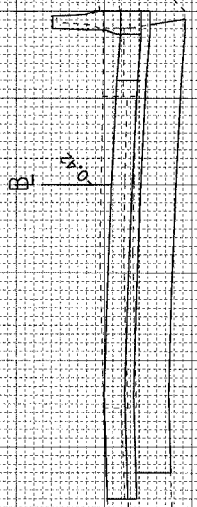
FINAL SURVEY CHECKED BY DATE
 SURVEY PLOTTED
 NOTE BOOK TEMPLATE
 AREAS CHECKED

ORIGINAL SURVEY CHECKED BY DATE
 SURVEY PLOTTED
 NOTE BOOK TEMPLATE
 AREAS CHECKED

CTE | AECOM

20
15
10
5
0

SBLOC
3434+00.00



3434+00.00

EX EXC (SPL)=0

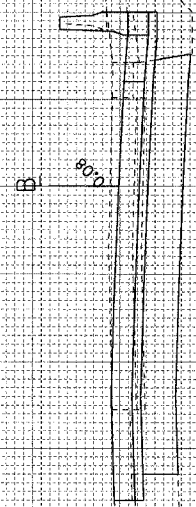
UNSUITABLES=0

FILL=0

CUT=150

20
15
10
5
0

SBLOC
3433+00.00



3433+00.00

EX EXC (SPL)=0

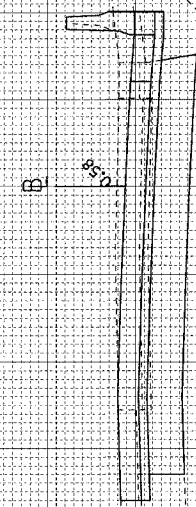
UNSUITABLES=0

FILL=0

CUT=137

20
15
10
5

SBLOC
3432+00.00



3432+00.00

EX EXC (SPL)=0

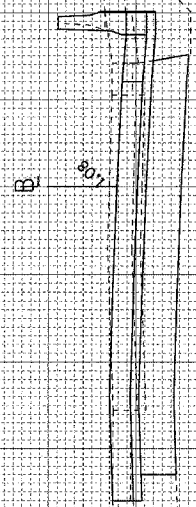
UNSUITABLES=0

FILL=0

CUT=136

20
15
10
5

SBLOC
3431+00.00



3431+00.00

EX EXC (SPL)=0

UNSUITABLES=0

FILL=0

CUT=132

100
90
80
70
60
50

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	208

FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT
60A63		(1919.15, 2021-922 PT1 & PT2) R-2

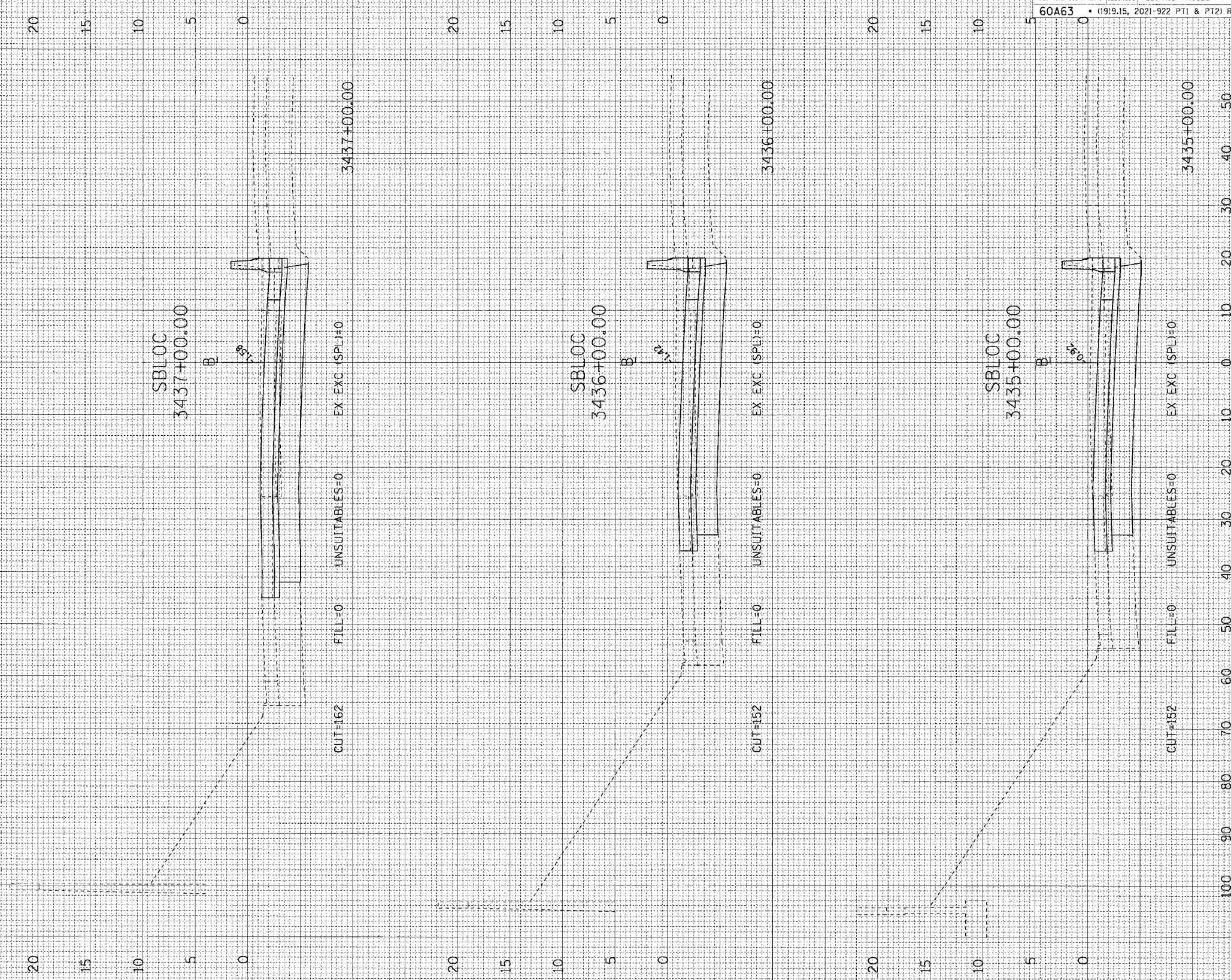
P:\P\465\CHIRUB-Chirs B & 1915M\Chir 19A\Cross Sections\5950_sblloc_208.dwg

6/5/2006 12:57:40 PM

FINAL	SUPERVISED	BY	DATE
SURVEY	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS CHECKED		

ORIGINAL	SUPERVISED	BY	DATE
SURVEY	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS CHECKED		

CTE | AECOM



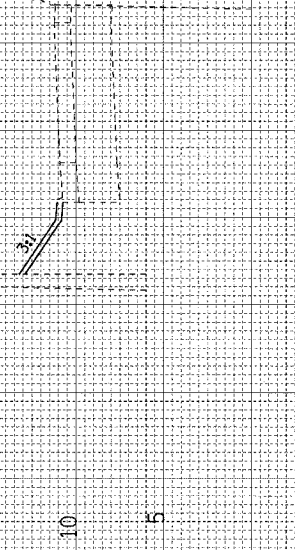
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	209
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				

ORIGINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED NO. BY DATE

FINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED NO. BY DATE

20 15 10 5

20 15 10 5



CUT=162

FILL=1

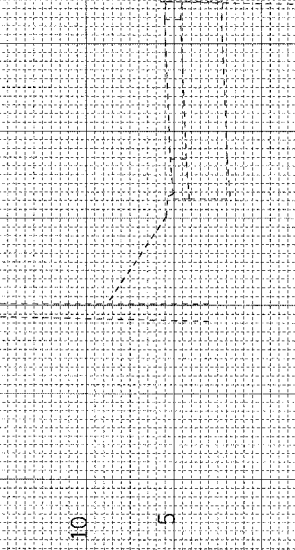
UNSUITABLES=9

EX EXC (SPL)=0

3441+00.00

20 15 10 5

20 15 10 5



CUT=154

FILL=5

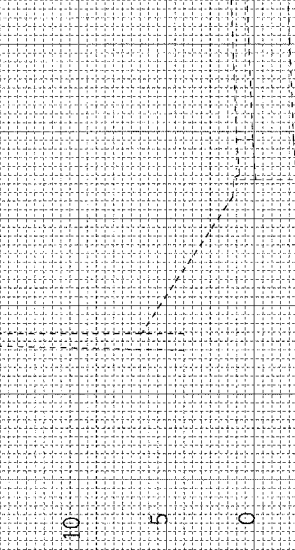
UNSUITABLES=9

EX EXC (SPL)=0

3440+00.00

20 15 10 5 0

20 15 10 5 0



CUT=157

FILL=0

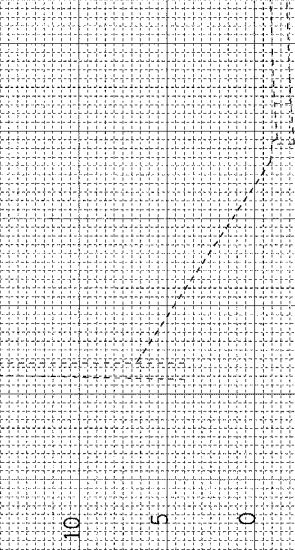
UNSUITABLES=8

EX EXC (SPL)=0

3439+00.00

20 15 10 5 0 -5

20 15 10 5 0



CUT=165

FILL=0

UNSUITABLES=6

EX EXC (SPL)=0

3438+00.00

100 90 80 70 60 50 40 30 20 10 0

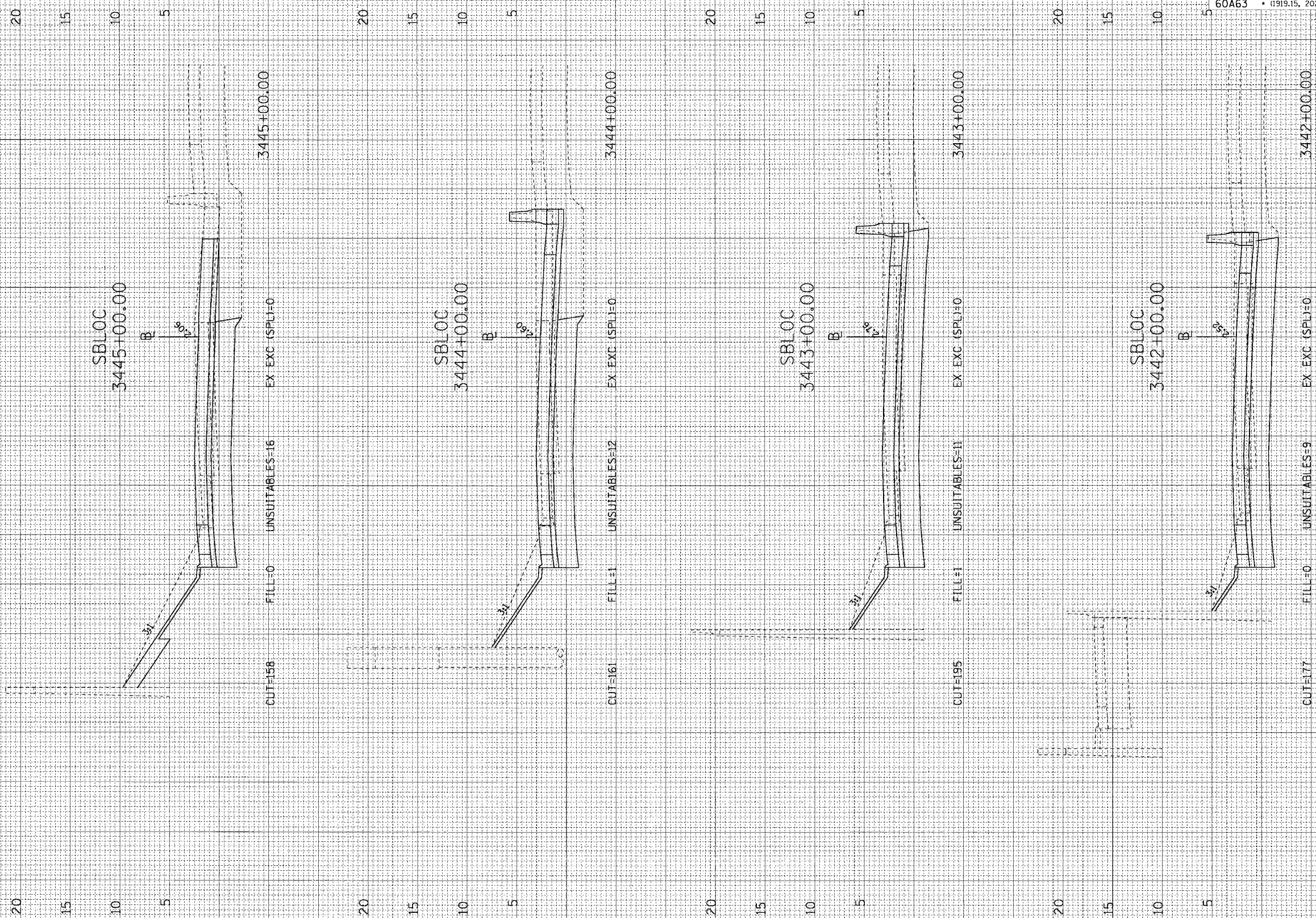
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	210

FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT
60A63		(1919.15, 2021-922 PT1 & PT2) R-2

FINAL SURVEYED BY DATE
 SURVEY NO. DATE
 NOTE BOOK NO. DATE
 AREAS CHECKED

ORIGINAL SURVEYED BY DATE
 SURVEY NO. DATE
 NOTE BOOK NO. DATE
 AREAS CHECKED

CTE | AECOM

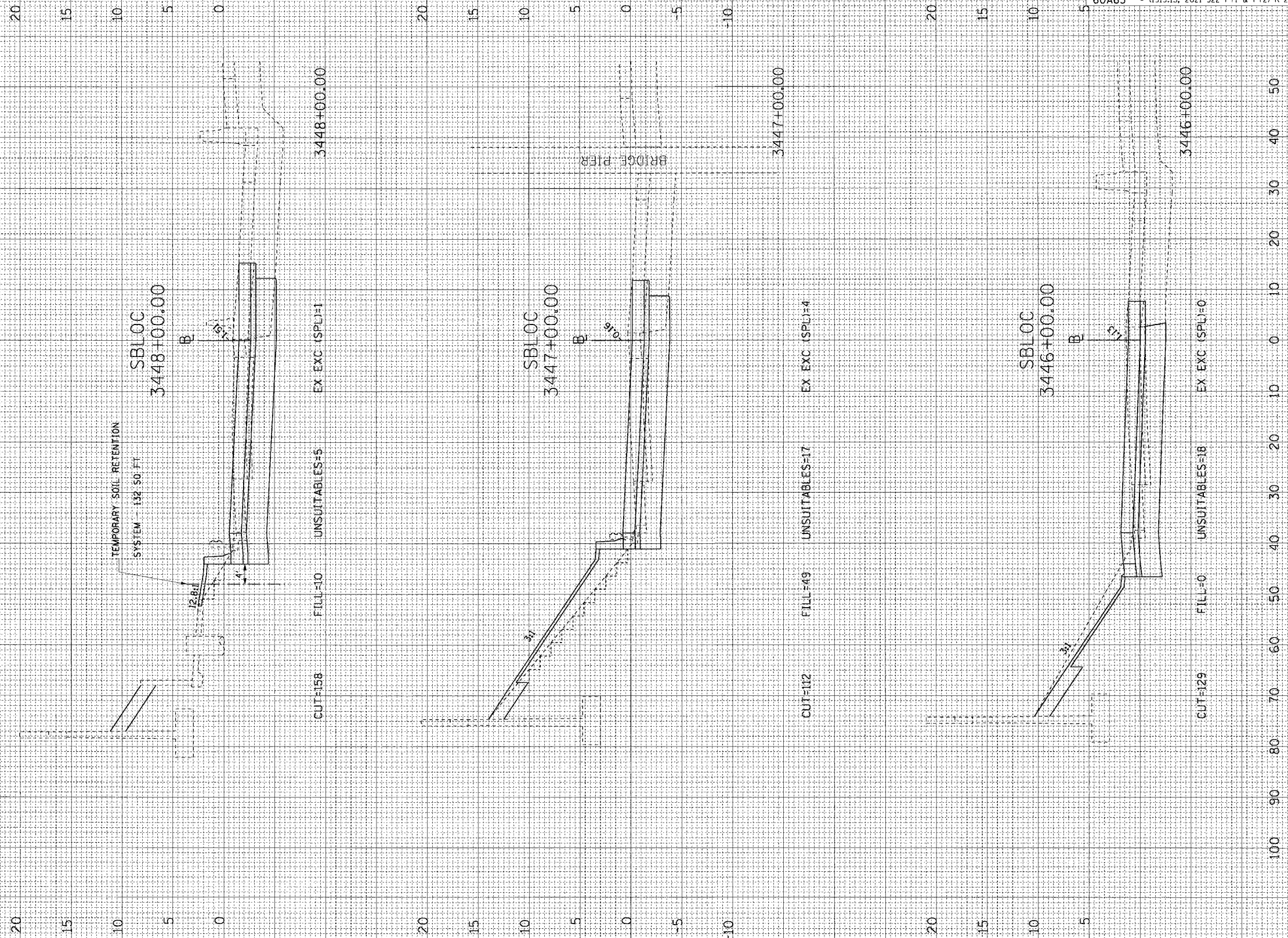


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	247	211
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				

6/5/2006 12:51:53 PM P:\44660\W18-Ctr18 & 19\SW\CTR 19\Cross Sections\W18-SBLOC-2.dwg

FINAL SURVEY	DATE
NO. _____	BY _____
DATE _____	BY _____
NO. _____	BY _____

ORIGINAL SURVEY	DATE
NO. _____	BY _____
DATE _____	BY _____
NO. _____	BY _____

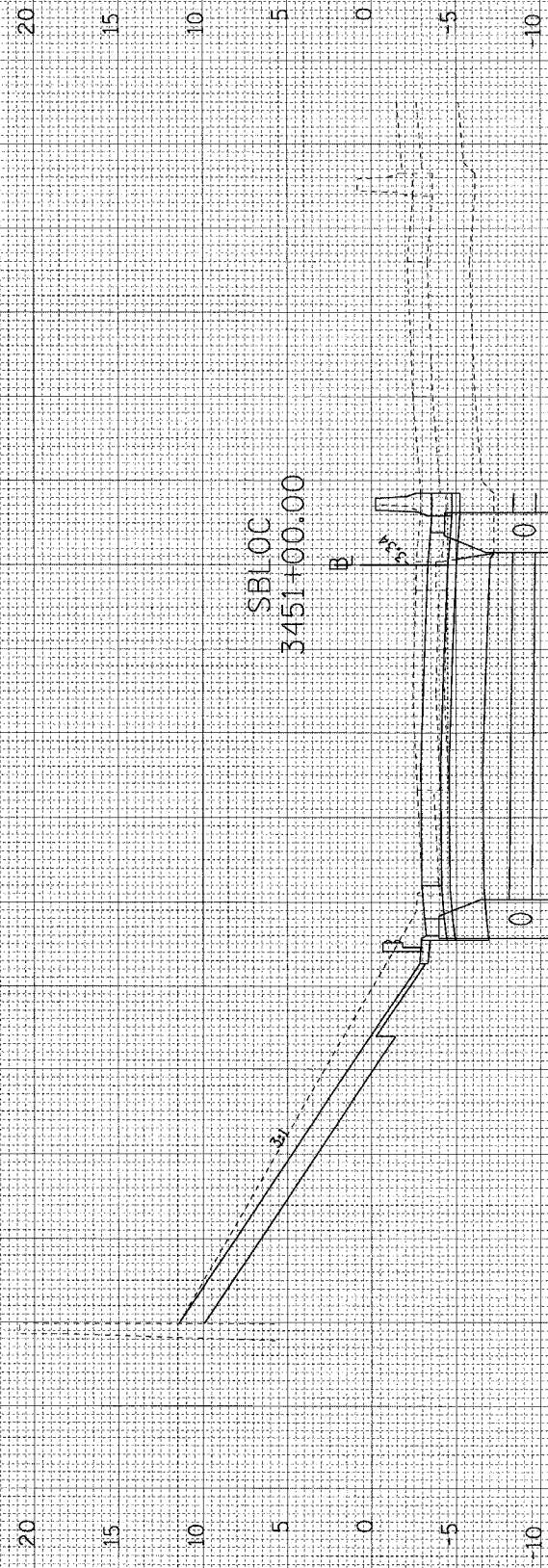


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	247	212
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				

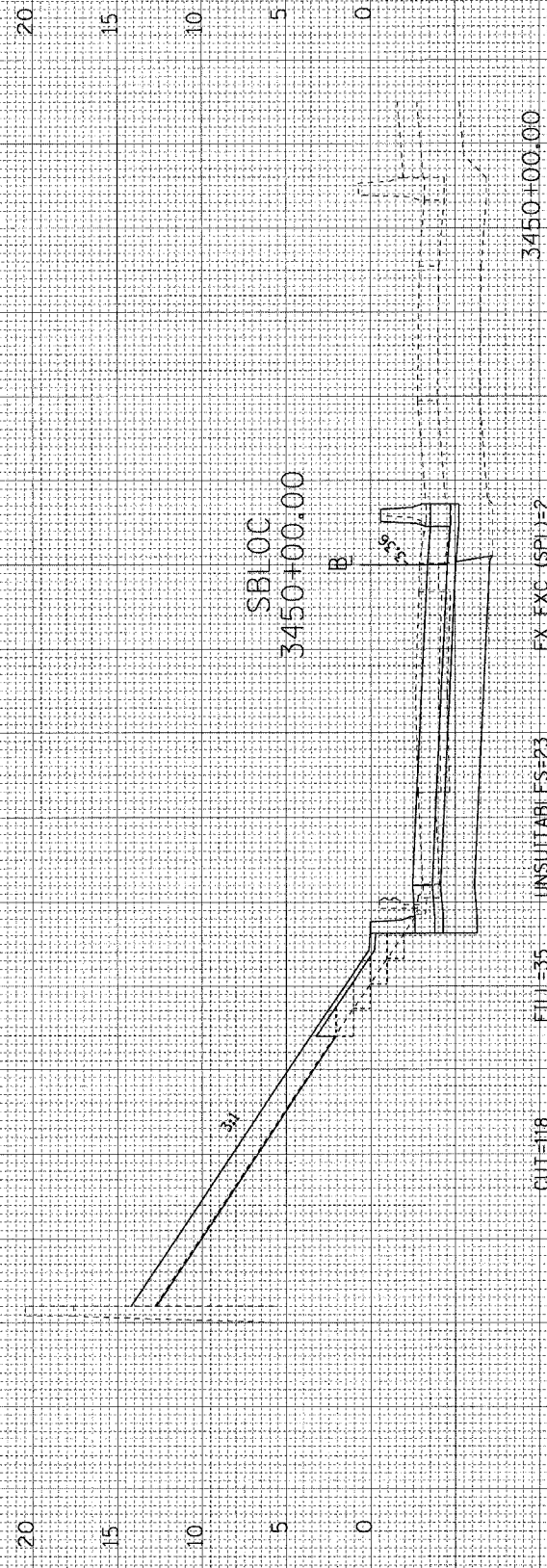
6/5/2006 12:57:51 PM P:\40466\CHIR-CHIR 18 & 19\SM\CHIR 19\Cross Sections\sbloc_212.dwg

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
AREAS CHECKED	TEMPLATE		
	AREAS CHECKED		

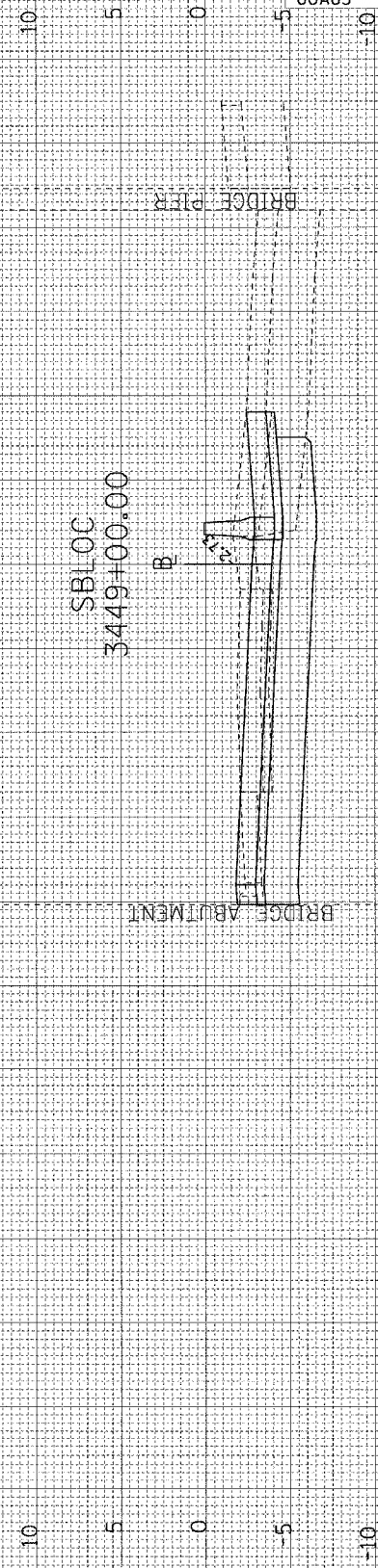
ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
AREAS CHECKED	TEMPLATE		
	AREAS CHECKED		



CUT=222 FILL=0 UNSUITABLES=25 EX EXC (SPL)=0 3451+00.00



CUT=118 FILL=35 UNSUITABLES=23 EX EXC (SPL)=2 3450+00.00

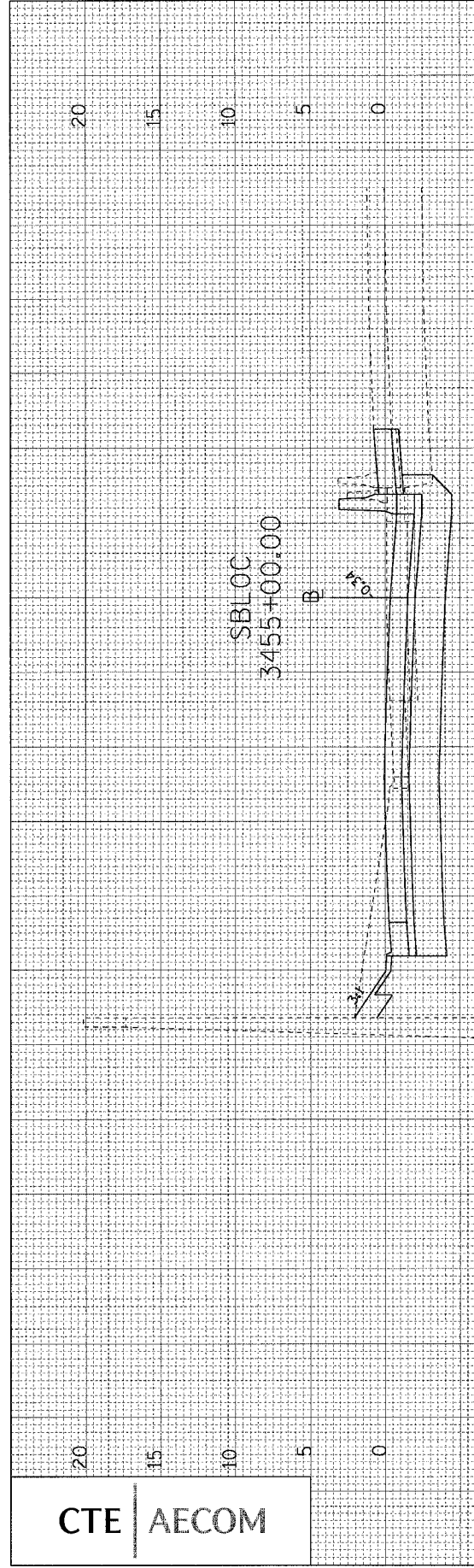


CUT=355 FILL=0 UNSUITABLES=0 EX EXC (SPL)=0 3449+00.00

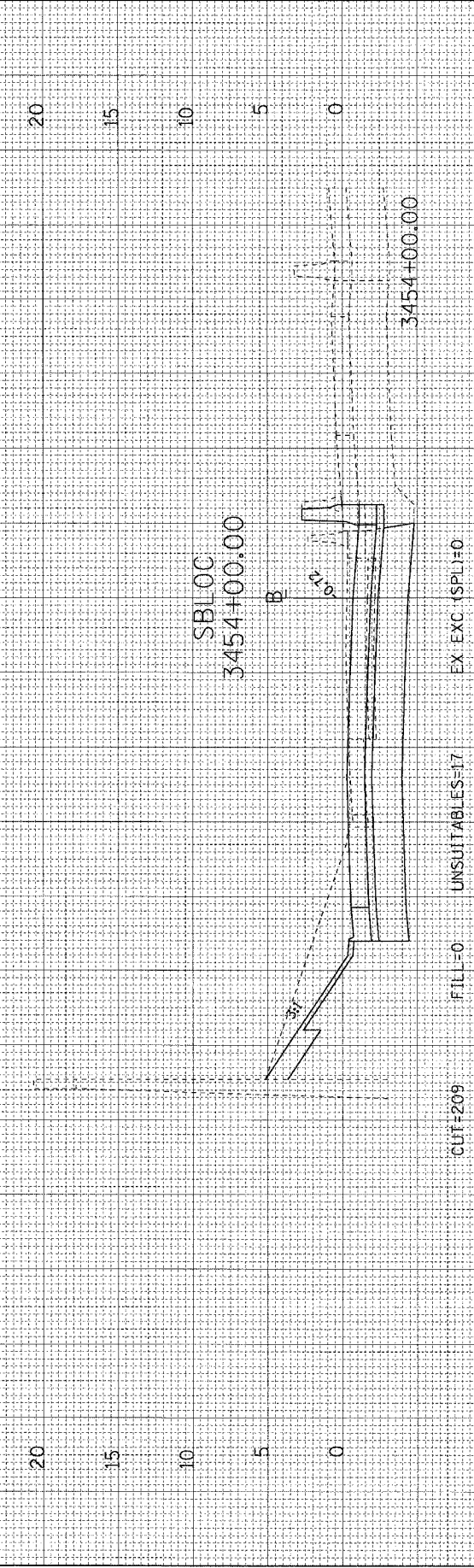
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	247	213
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				

FINAL SURVEY	DATE
BY	
NO.	

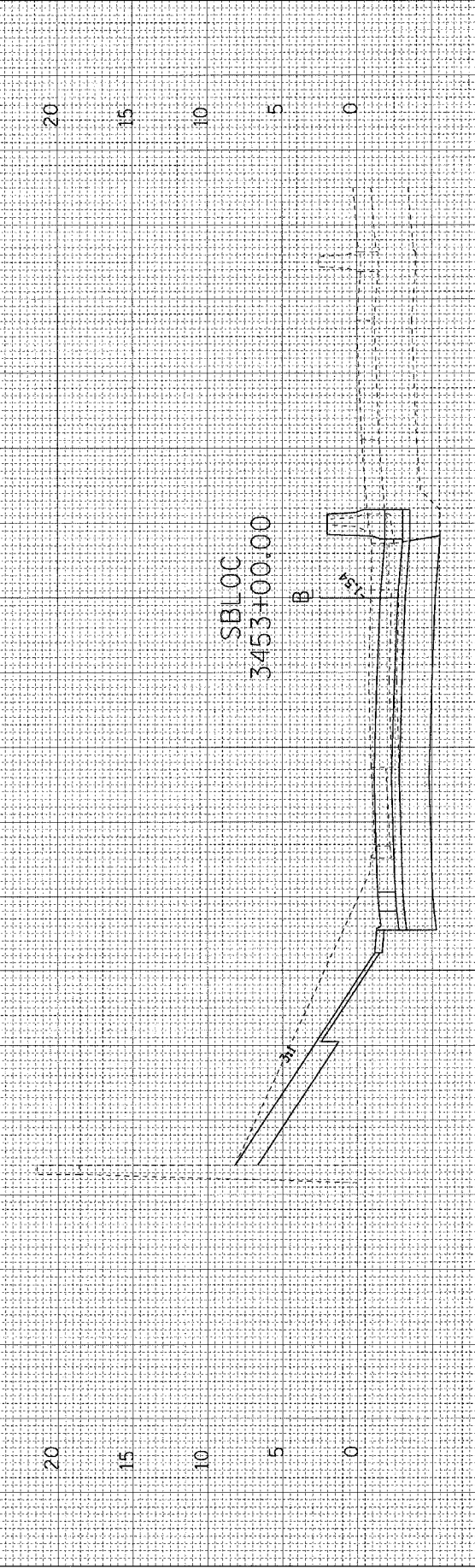
ORIGINAL SURVEY	DATE
BY	
NO.	



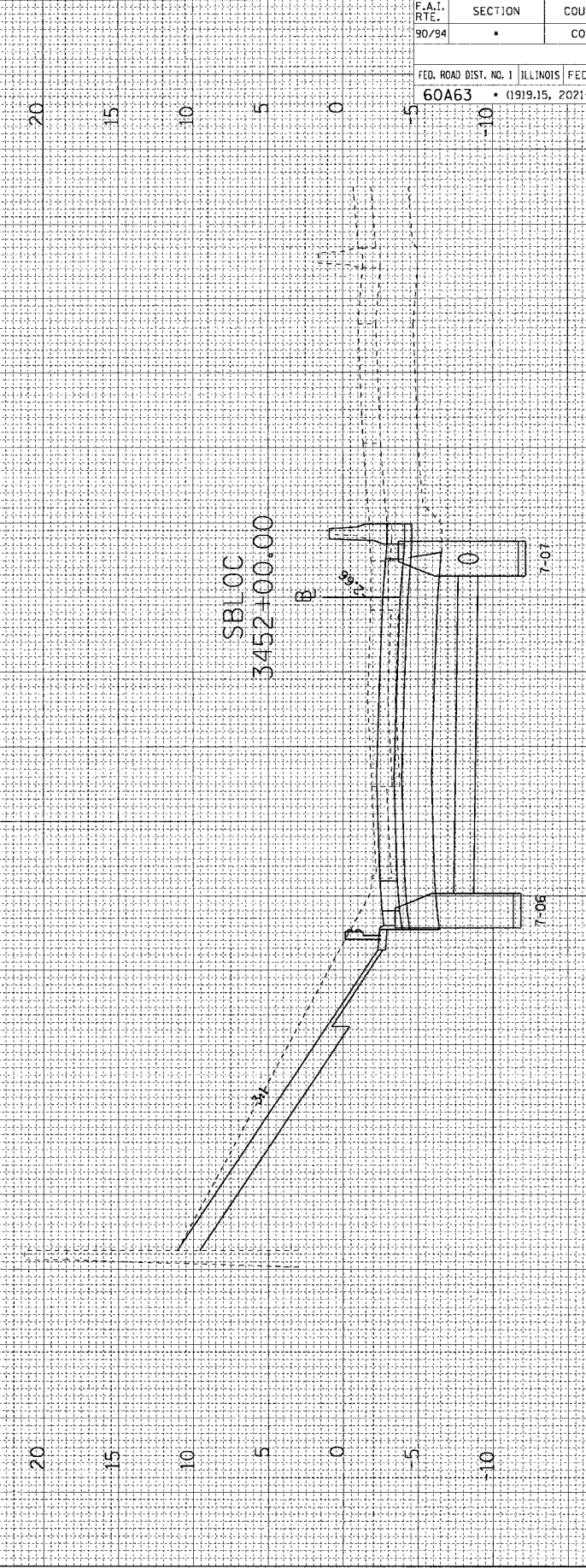
CUT=202 FILL=0 UNSUITABLES=15 EX EXC (SPL)=0 3455+00.00



CUT=209 FILL=0 UNSUITABLES=17 EX EXC (SPL)=0 3454+00.00



CUT=234 FILL=0 UNSUITABLES=21 EX EXC (SPL)=0 3453+00.00

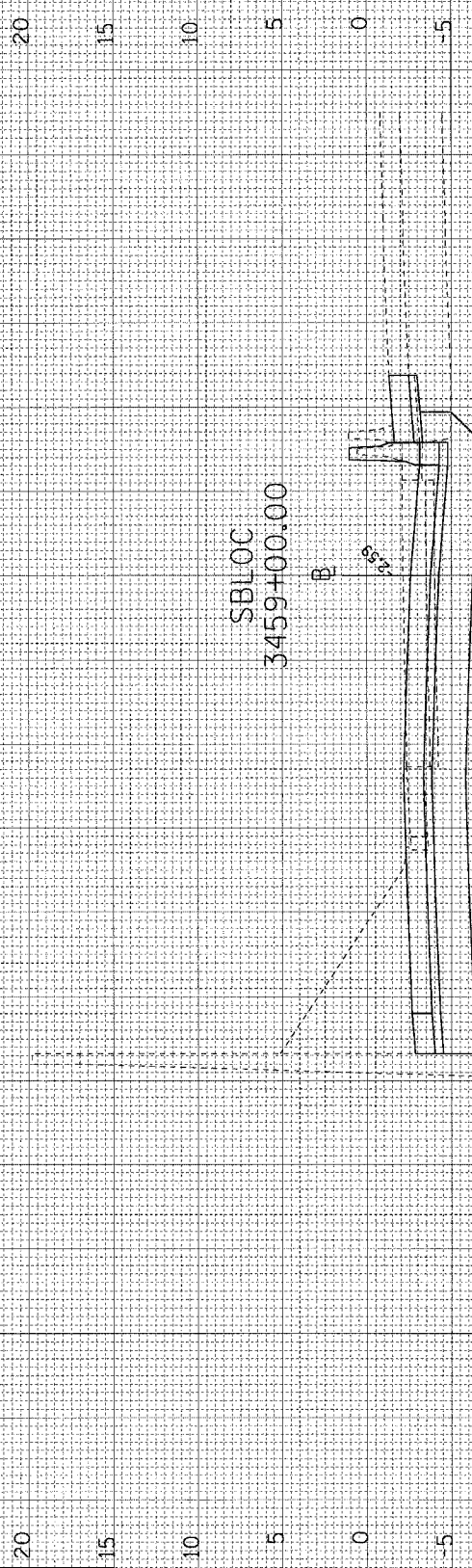


CUT=253 FILL=0 UNSUITABLES=25 EX EXC (SPL)=0 3452+00.00

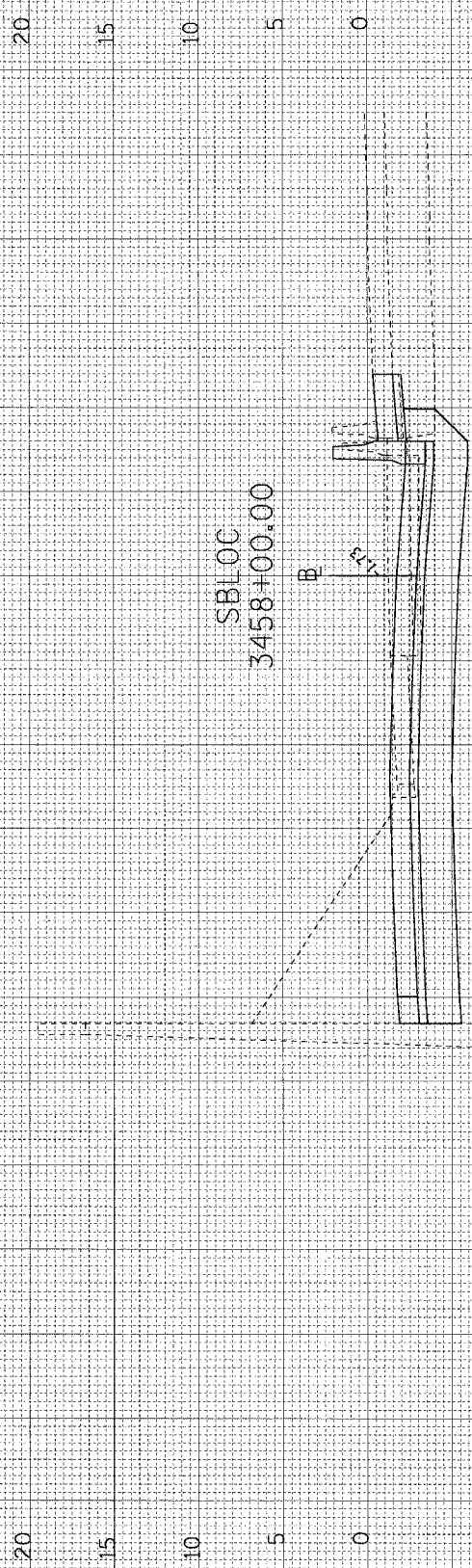
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	214
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 FT1 & PT2) R-2				

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	CHECKED		

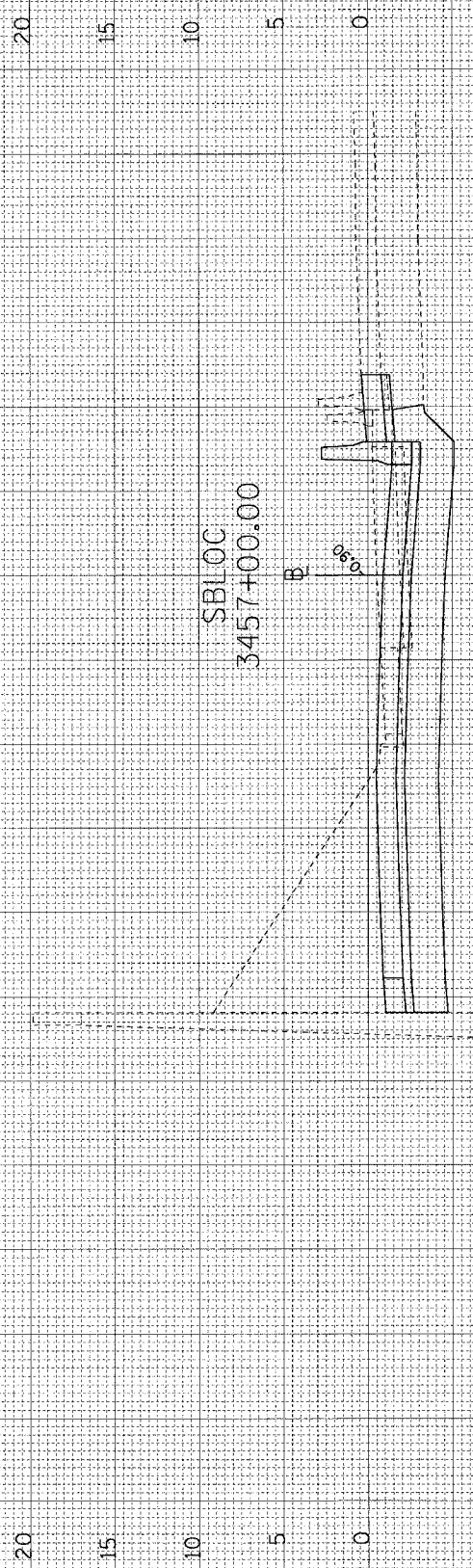
ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	CHECKED		



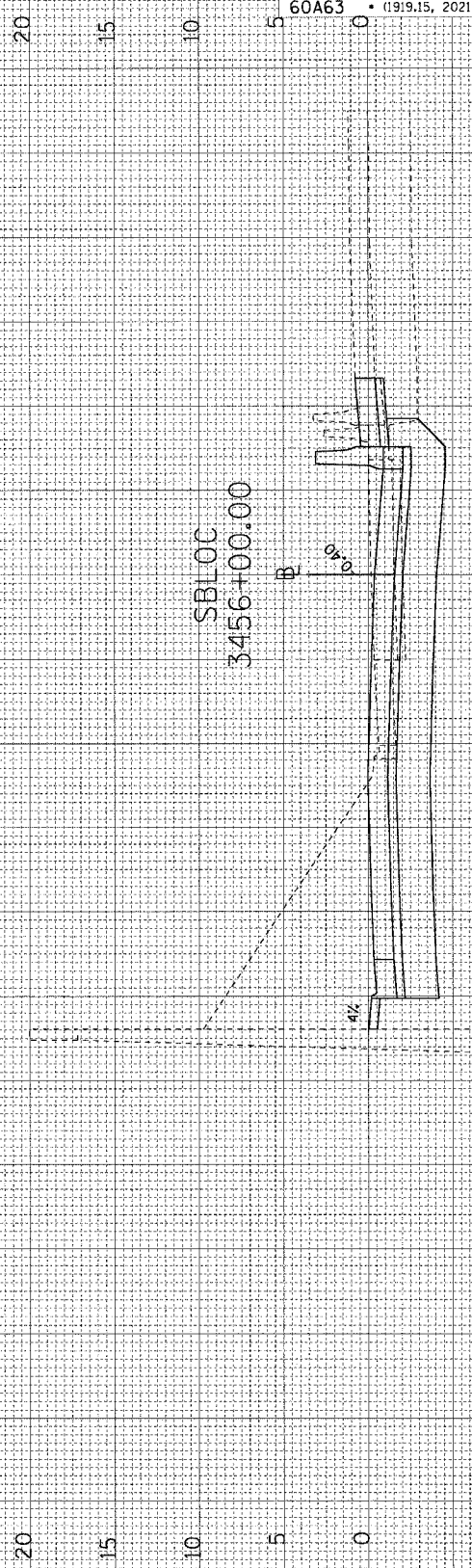
CUT=305 FILL=0 UNSUITABLES=12 EX EXC (SPL)=0 3459+00.00



CUT=322 FILL=0 UNSUITABLES=13 EX EXC (SPL)=0 3458+00.00



CUT=356 FILL=0 UNSUITABLES=16 EX EXC (SPL)=0 3457+00.00



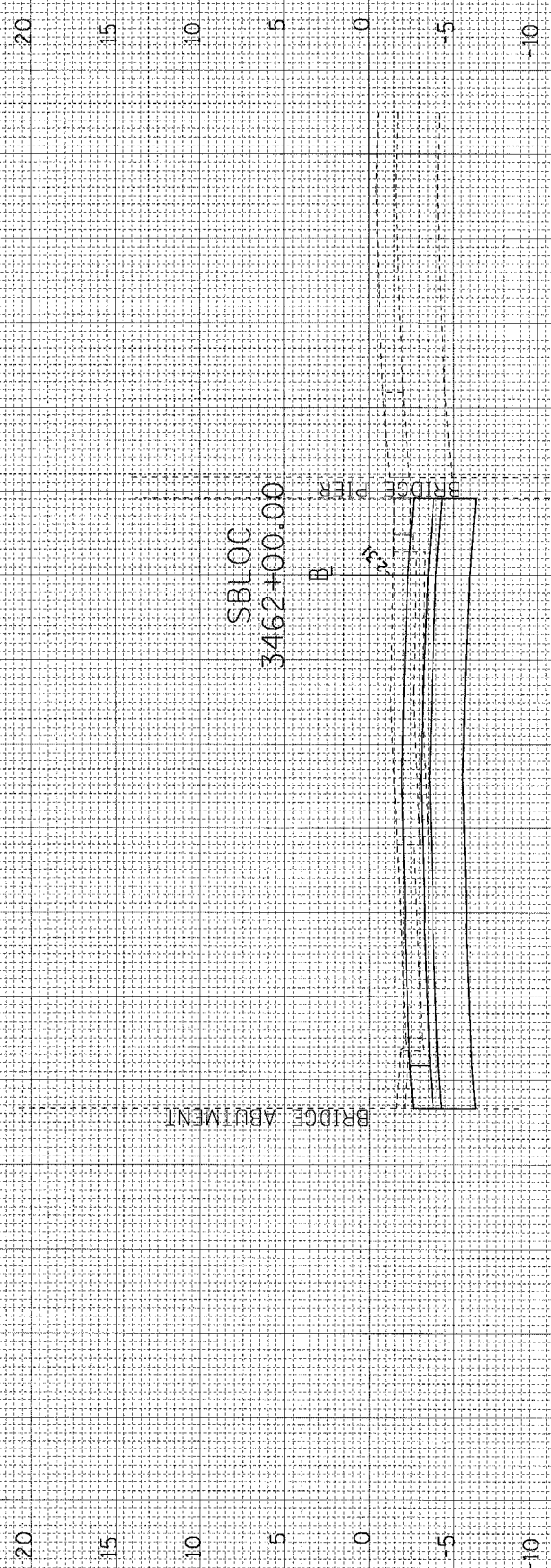
CUT=341 FILL=0 UNSUITABLES=16 EX EXC (SPL)=0 3456+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	215
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				

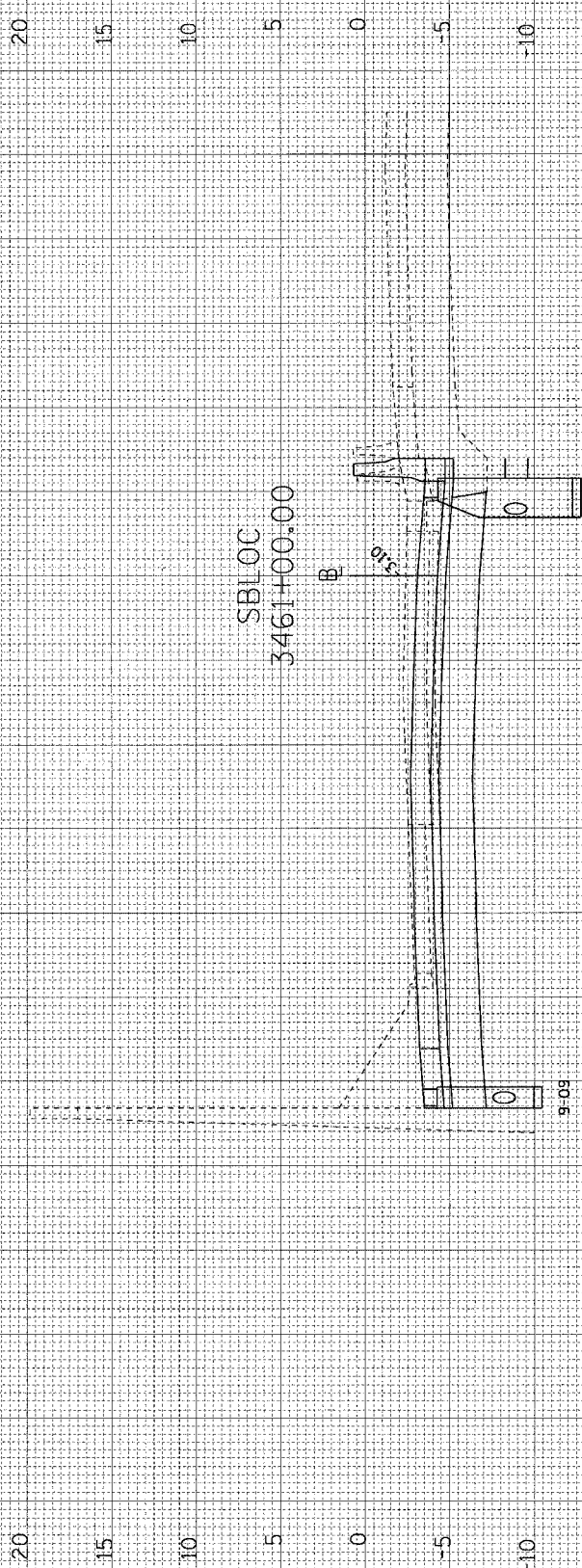
FINAL SURVEY SUBMITTED BY DATE
 SURVEY PLOTTED
 NOTE BOOK TEMPLATE
 AREAS CHECKED

ORIGINAL SURVEY SUBMITTED BY DATE
 SURVEY PLOTTED
 NOTE BOOK TEMPLATE
 AREAS CHECKED

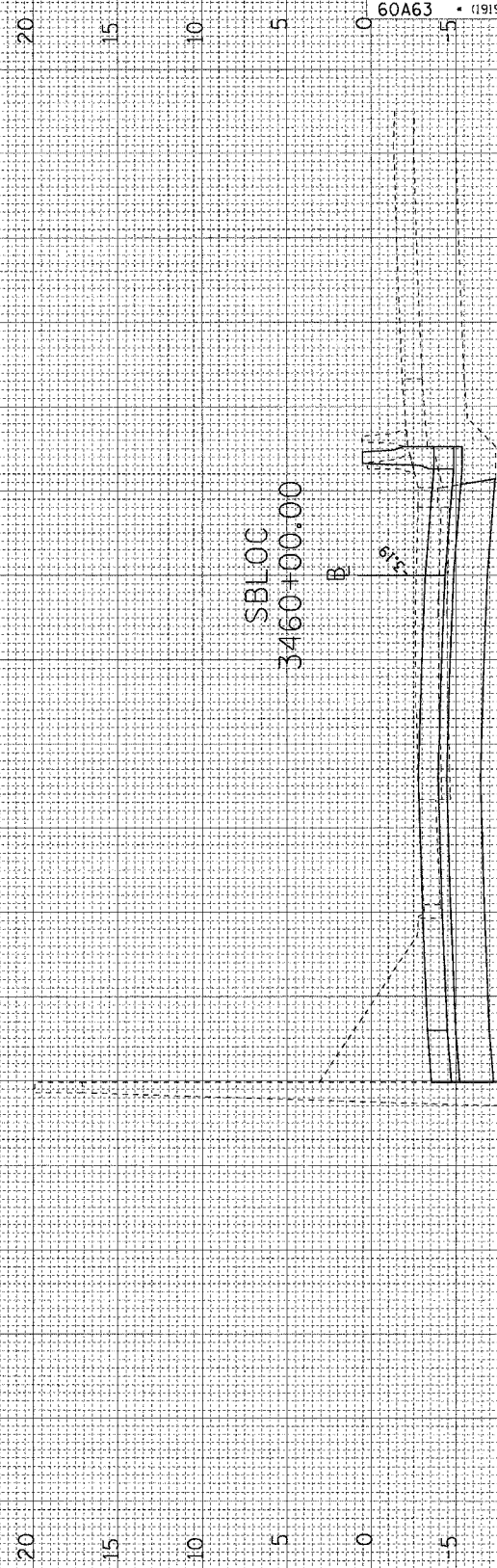
CTE AECOM



CUT=226 FILL=0 UNSUITABLES=0 EX EXC (SPL)=0 3462+00.00



CUT=255 FILL=0 UNSUITABLES=7 EX EXC (SPL)=0 3461+00.00



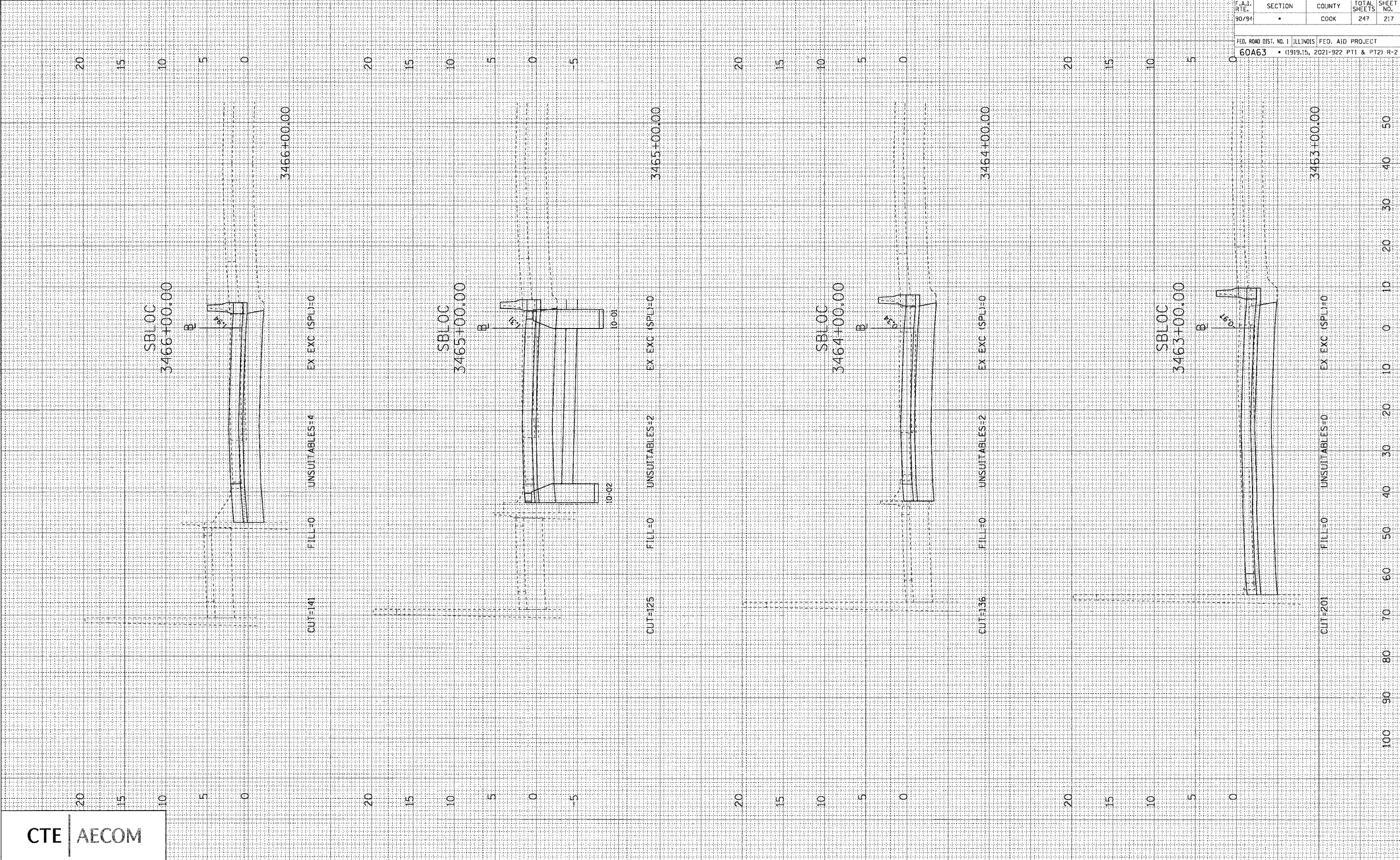
CUT=268 FILL=0 UNSUITABLES=10 EX EXC (SPL)=0 3460+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	216
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				

ORIGINAL SURVEY
 SURVEYED BY: _____
 DATE: _____
 NOTE BOOK NO.: _____
 AREAS CHECKED: _____

FINAL SURVEY
 SURVEYED BY: _____
 DATE: _____
 NOTE BOOK NO.: _____
 AREAS CHECKED: _____

CTE | AECOM



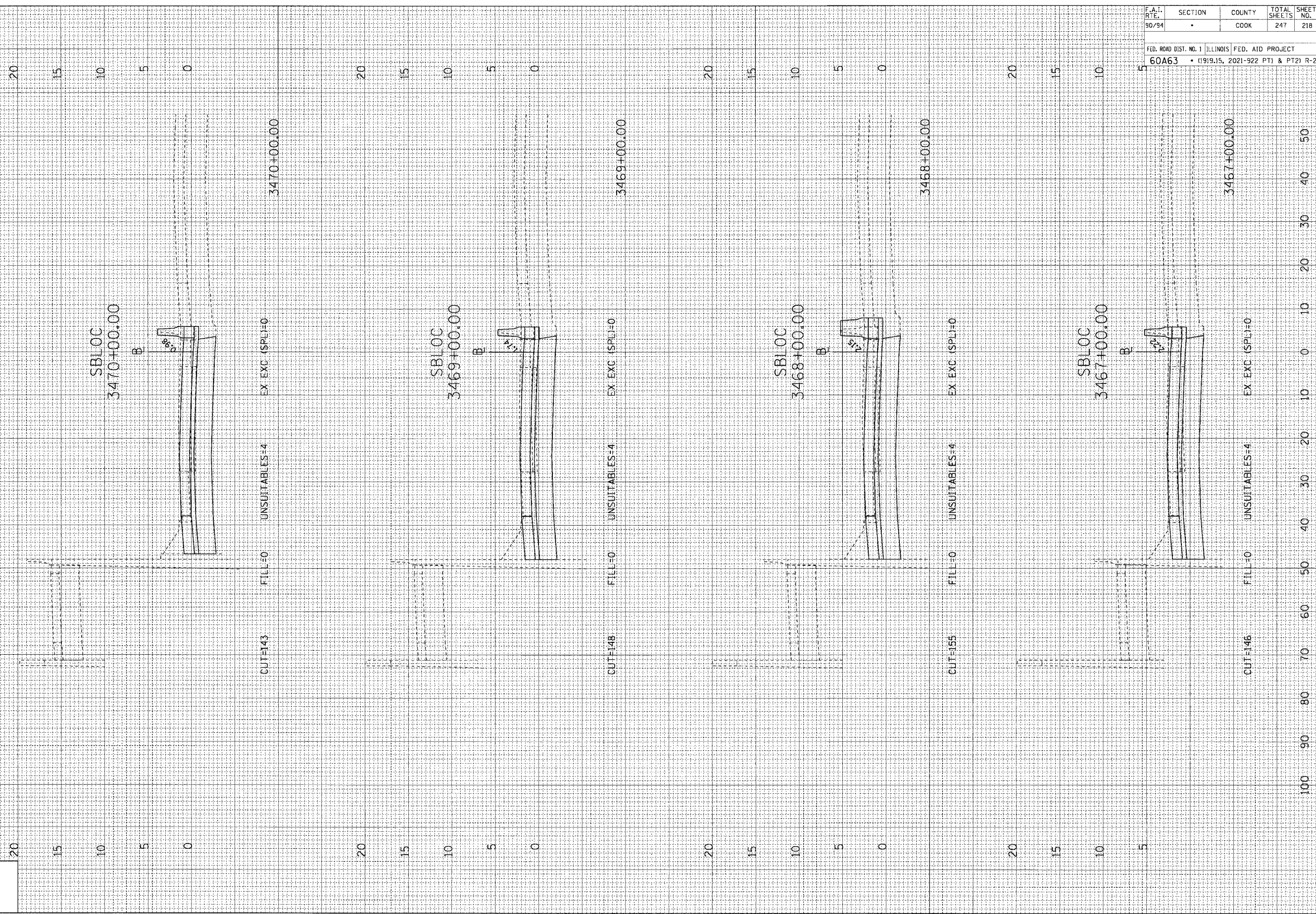
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	247	217

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT
 60A63 • (1919.15, 2021-922 PT1 & PT2) R-2

6/3/2006 12:58:09 PM

ORIGINAL SURVEY NO.	BY	DATE
SURVEYED PLOTTED		
NOTE BOOK AREAS CHECKED		

FINAL SURVEY NO.	BY	DATE
SURVEYED PLOTTED		
NOTE BOOK AREAS CHECKED		



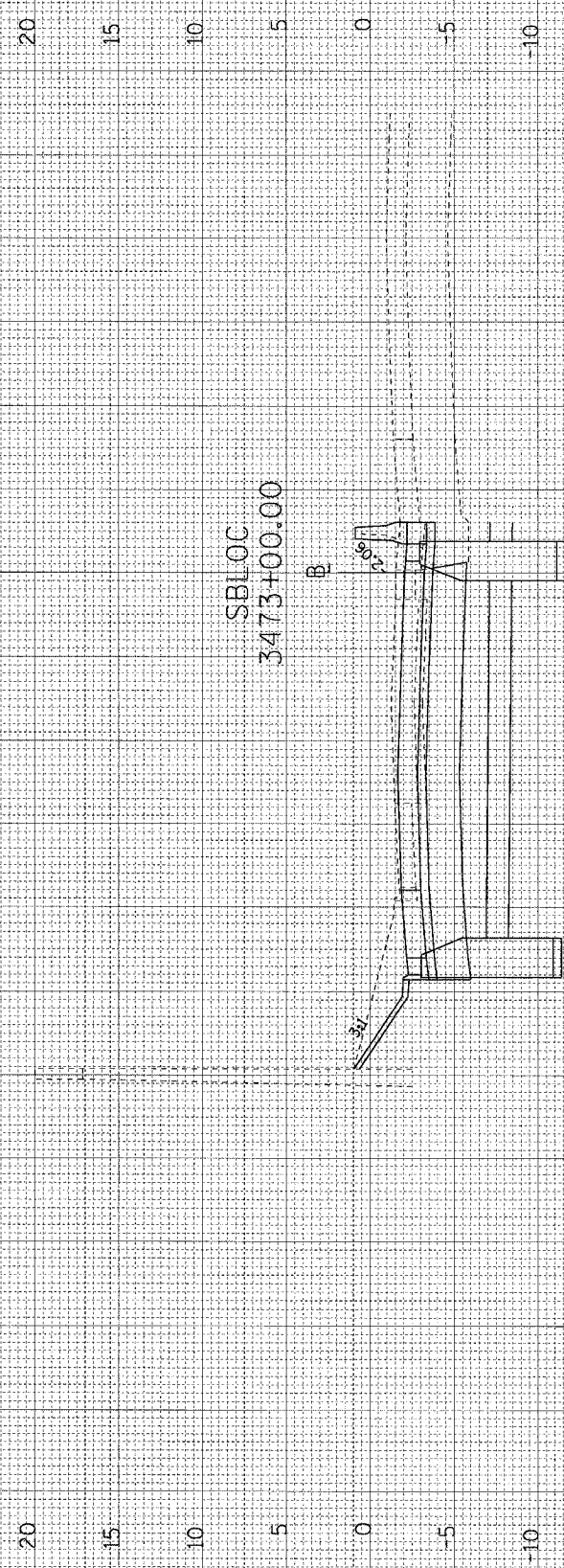
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	247	218
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
60A63		(1919-15, 2021-922 PT1 & PT2) R-2		

ORIGINAL SURVEY PLOTTED
 NOTE BOOK AREAS CHECKED

FINAL SURVEY PLOTTED
 NOTE BOOK AREAS CHECKED

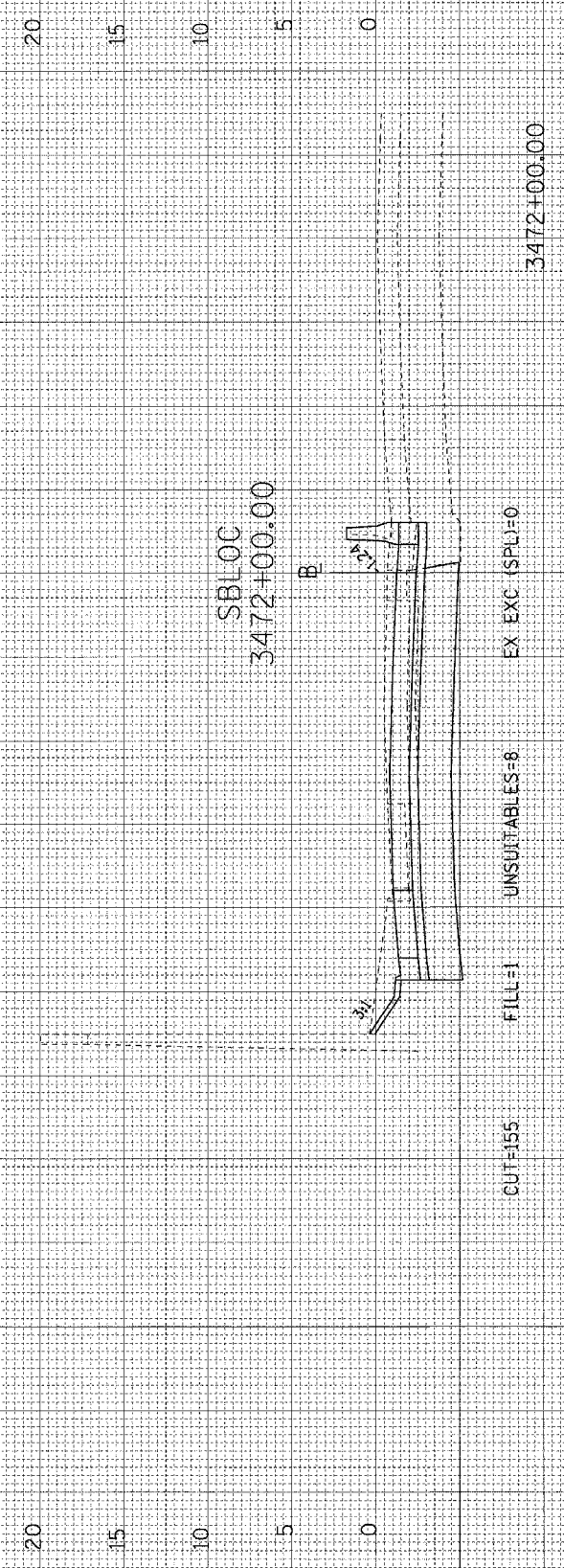
BY DATE

BY DATE



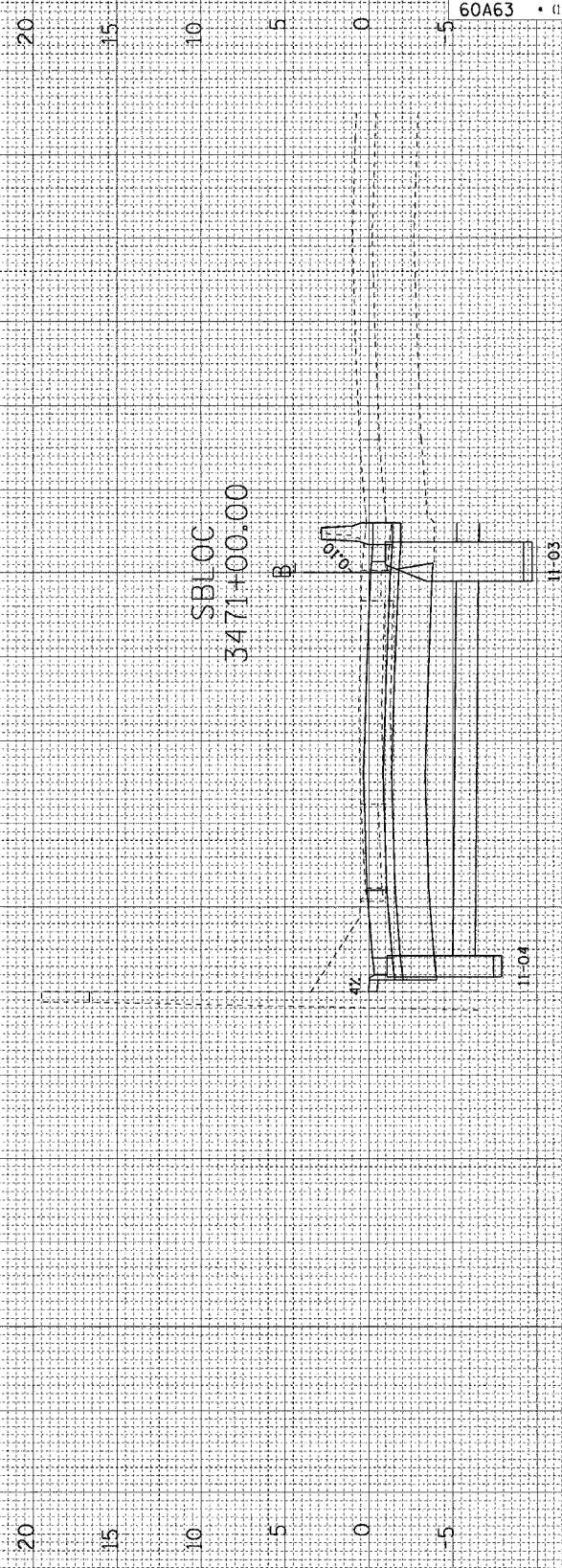
3473+00.00

CUT=164 FILL=1 UNSUITABLES=10 EX EXC (SPL)=0



3472+00.00

CUT=155 FILL=1 UNSUITABLES=8 EX EXC (SPL)=0



3471+00.00

CUT=162 FILL=0 UNSUITABLES=5 EX EXC (SPL)=0

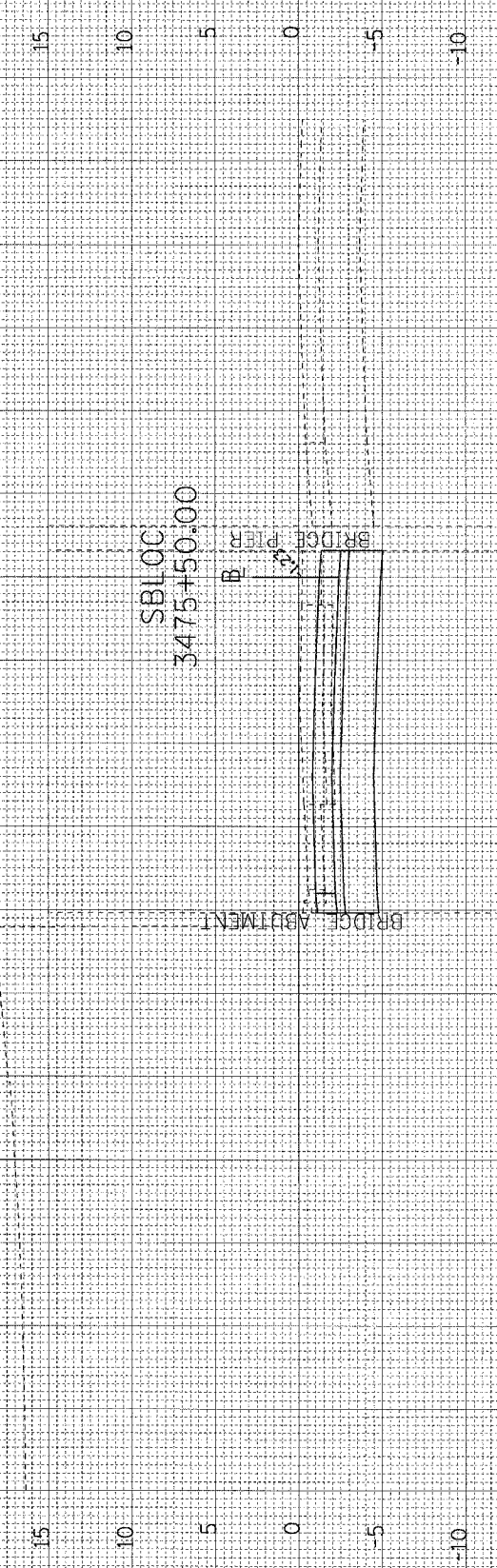
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	219

FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT
60A63	(1919.15, 2021-922 PT1 & PT2) R-2

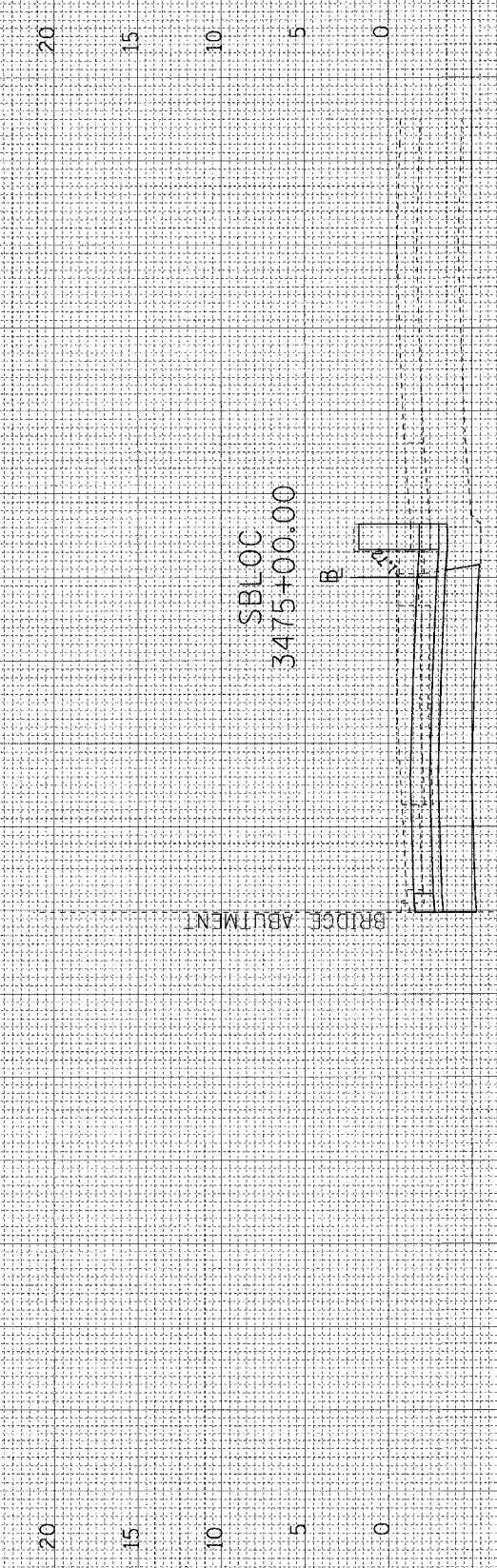
FINAL SURVEY
 CONVEYED
 PLOTTED
 NOTE BOOK
 TEMPLATE
 AREAS
 CHECKED
 NO.
 BY
 DATE

ORIGINAL SURVEY
 CONVEYED
 PLOTTED
 NOTE BOOK
 TEMPLATE
 AREAS
 CHECKED
 NO.
 BY
 DATE

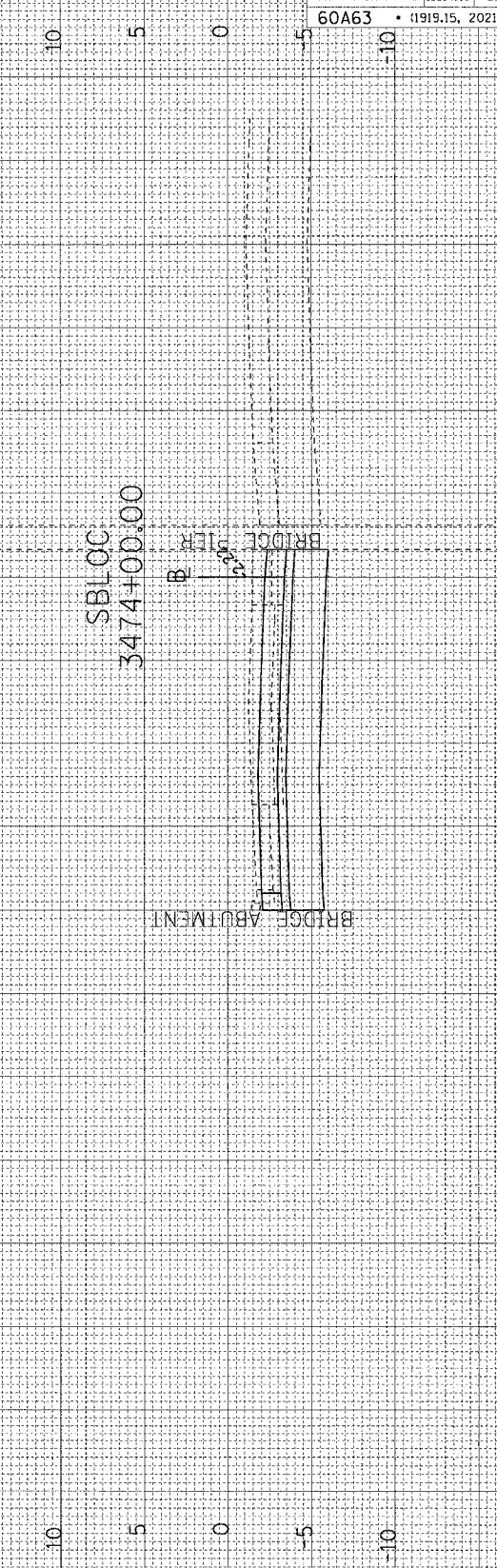
CTE | AECOM



CUT=139 FILL=0 UNSUITABLES=0 EX EXC (SPL)=0 3475+50.00



CUT=138 FILL=0 UNSUITABLES=0 EX EXC (SPL)=0 3475+00.00



CUT=130 FILL=0 UNSUITABLES=0 EX EXC (SPL)=0 3474+00.00

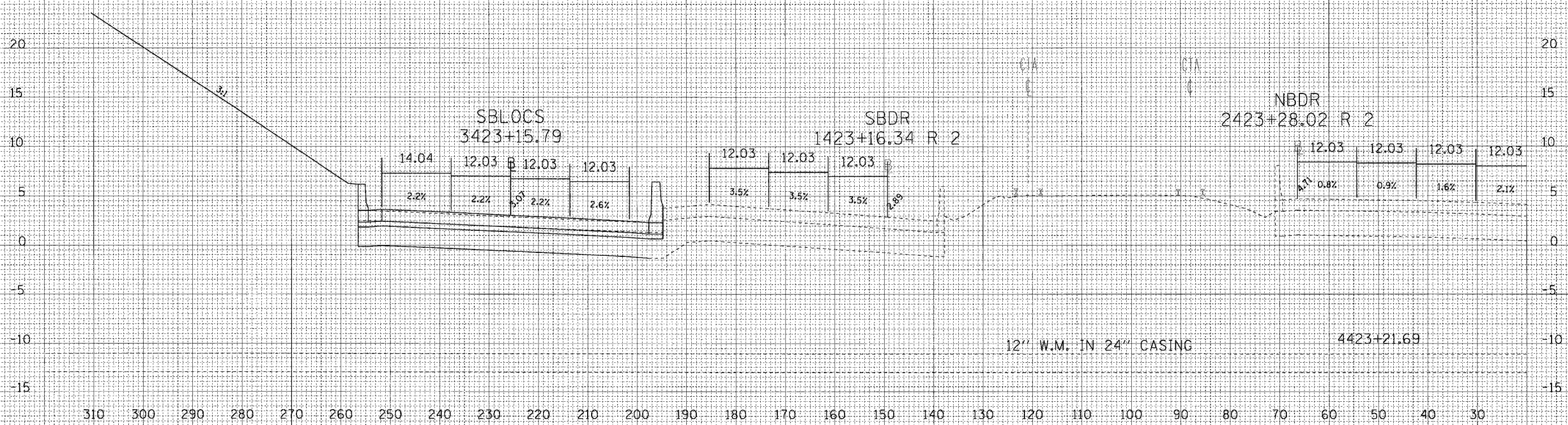
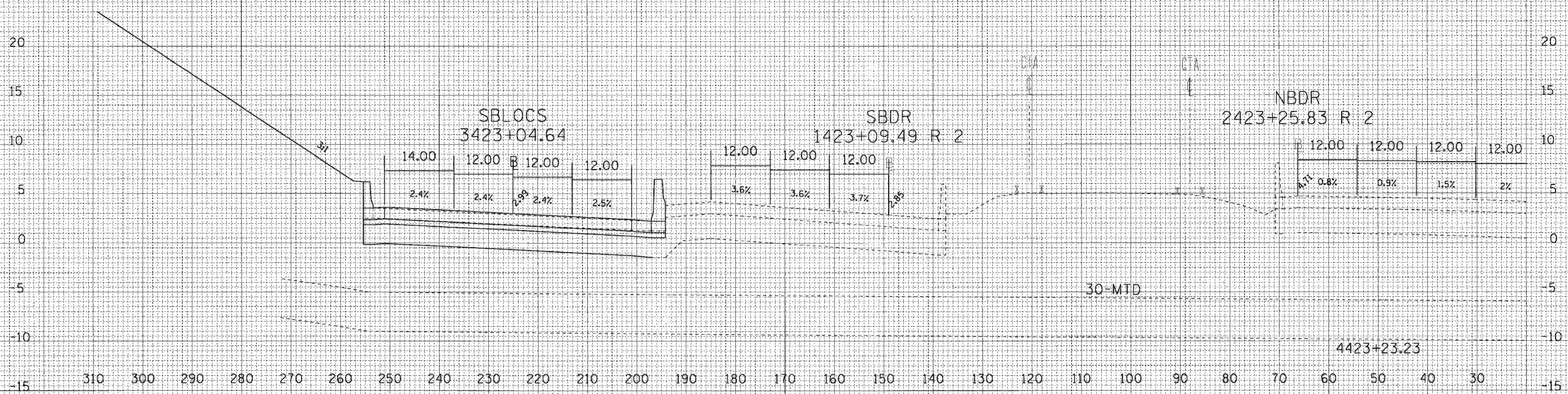
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	•	COOK	247	220

FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT
60A63	•	(1919.15, 2021-922 PT1 & PT2) R-2

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	221
FED. ROAD DIST. NO. 1 ILLINOIS		FED. AID PROJECT		
60A63		01919.15, 2021-922 PT1 & PT2 R-2		

DATE	BY
NO.	NO.
NO.	NO.
NO.	NO.

DATE	BY
NO.	NO.
NO.	NO.
NO.	NO.



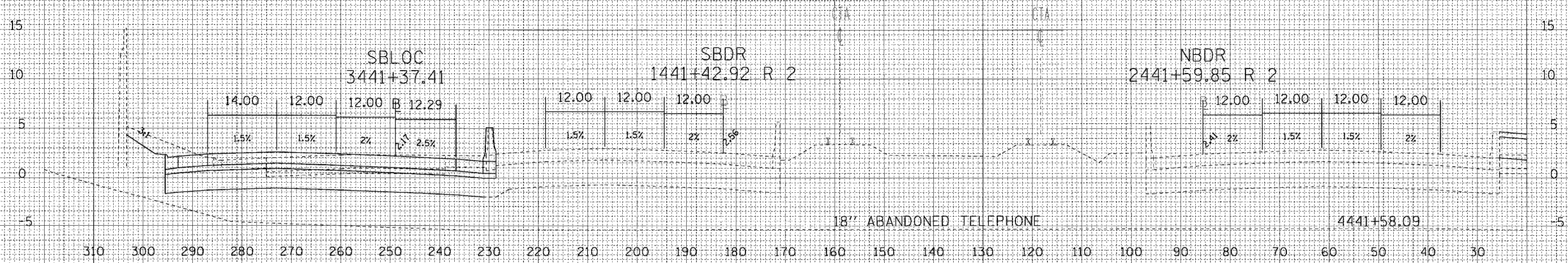
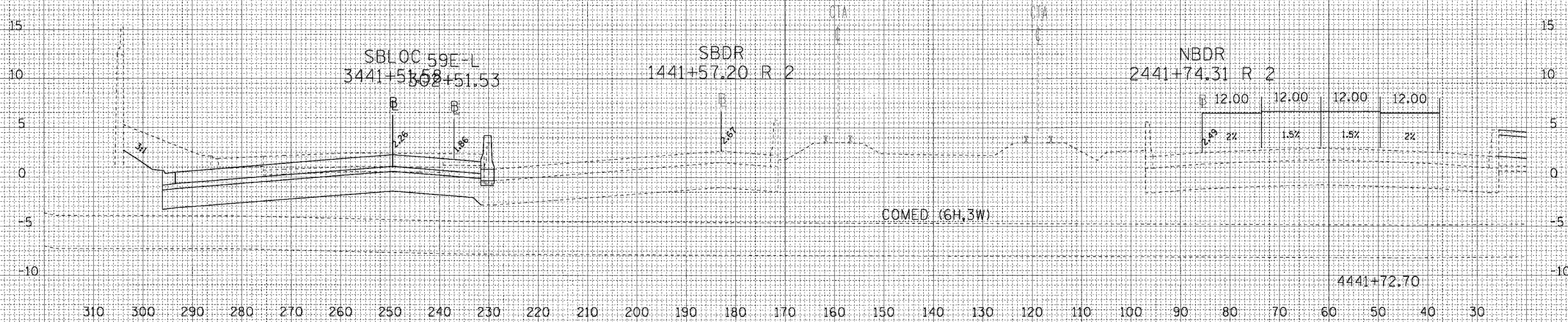
CTE | AECOM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	222

FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT
60A63	(1919.15, 2021-922 PT1 & PT2)	R-2

DATE	
BY	
FMV SURVEYED	
REVISION	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEYED	
REVISION	
NOTE BOOK	
AREAS CHECKED	
NO.	



CTE | AECOM

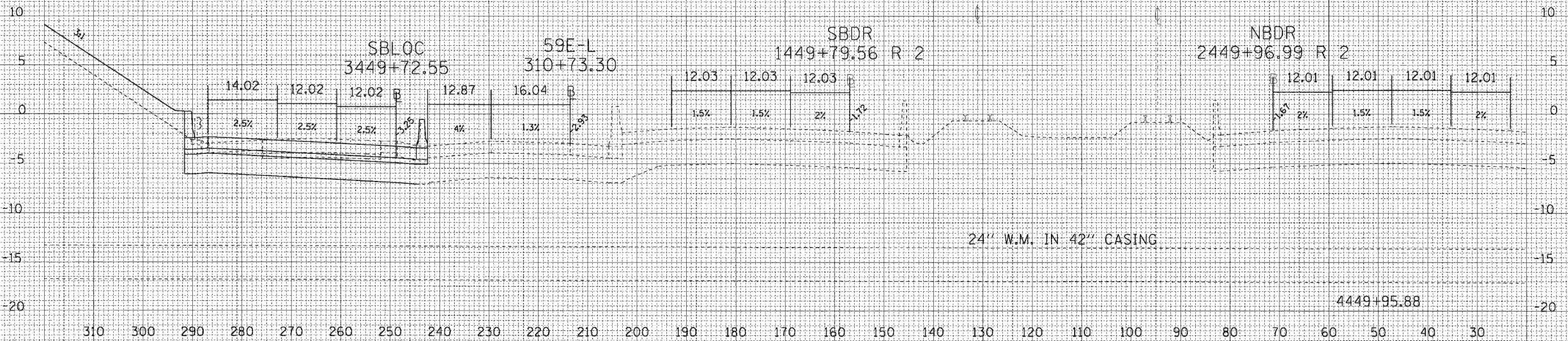
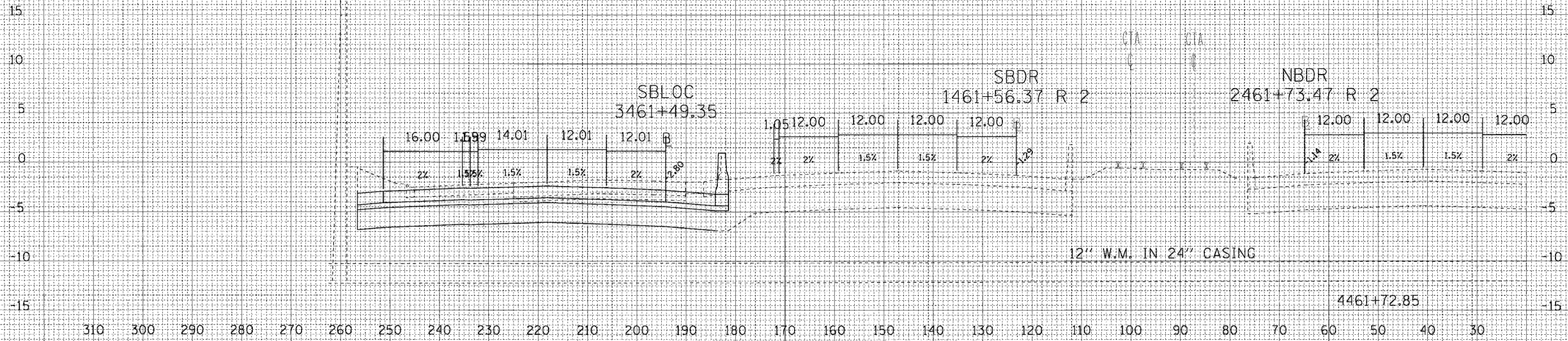
6/17/2006 12:59:47 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	223

FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT
60A63	(1919.15, 2021-922 PT1 & PT2)	R-2

FINAL SURVEY
 SURVEYED
 DATE
 BY
 NO. AREAS CHECKED

ORIGINAL SURVEY
 SURVEYED
 DATE
 BY
 NO. AREAS CHECKED



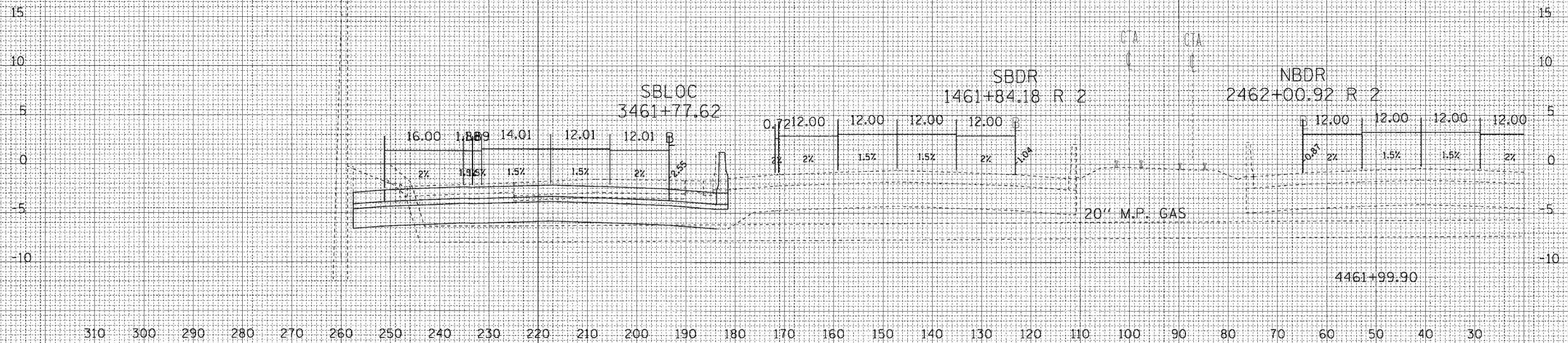
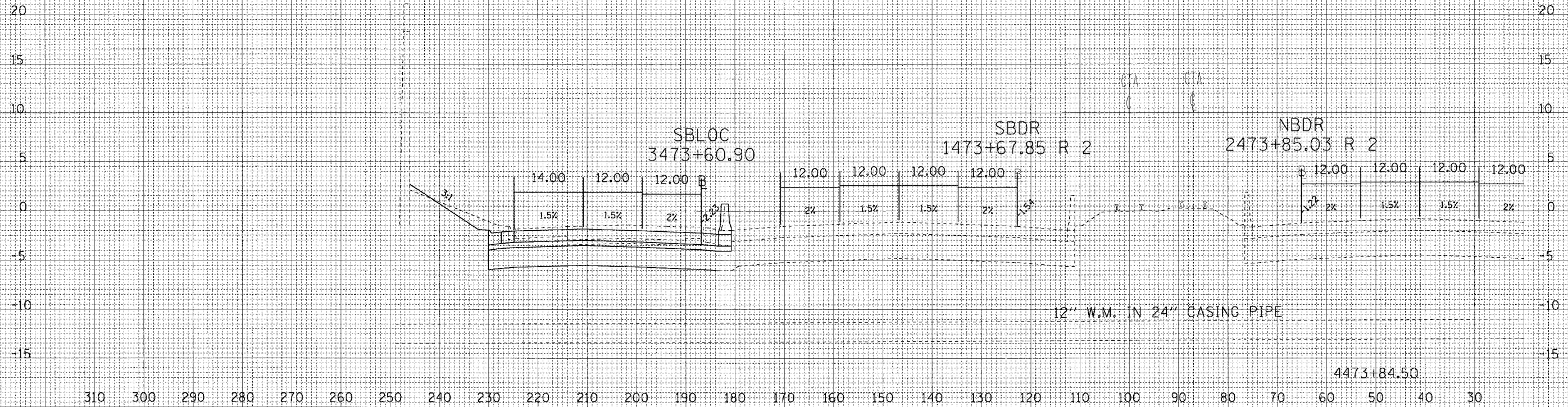
CTE | AECOM

6/5/2006 12:55:51 PM
 P:\0468\CH\IB-entrs IB & 19\ST\CH\B-Cross sections\09\stloc-utility-2006

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	247	224
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
60A63 • (1919.15, 2021-922 PT1 & PT2) R-2				

FINAL SURVEY	DATE
BY	
NO.	

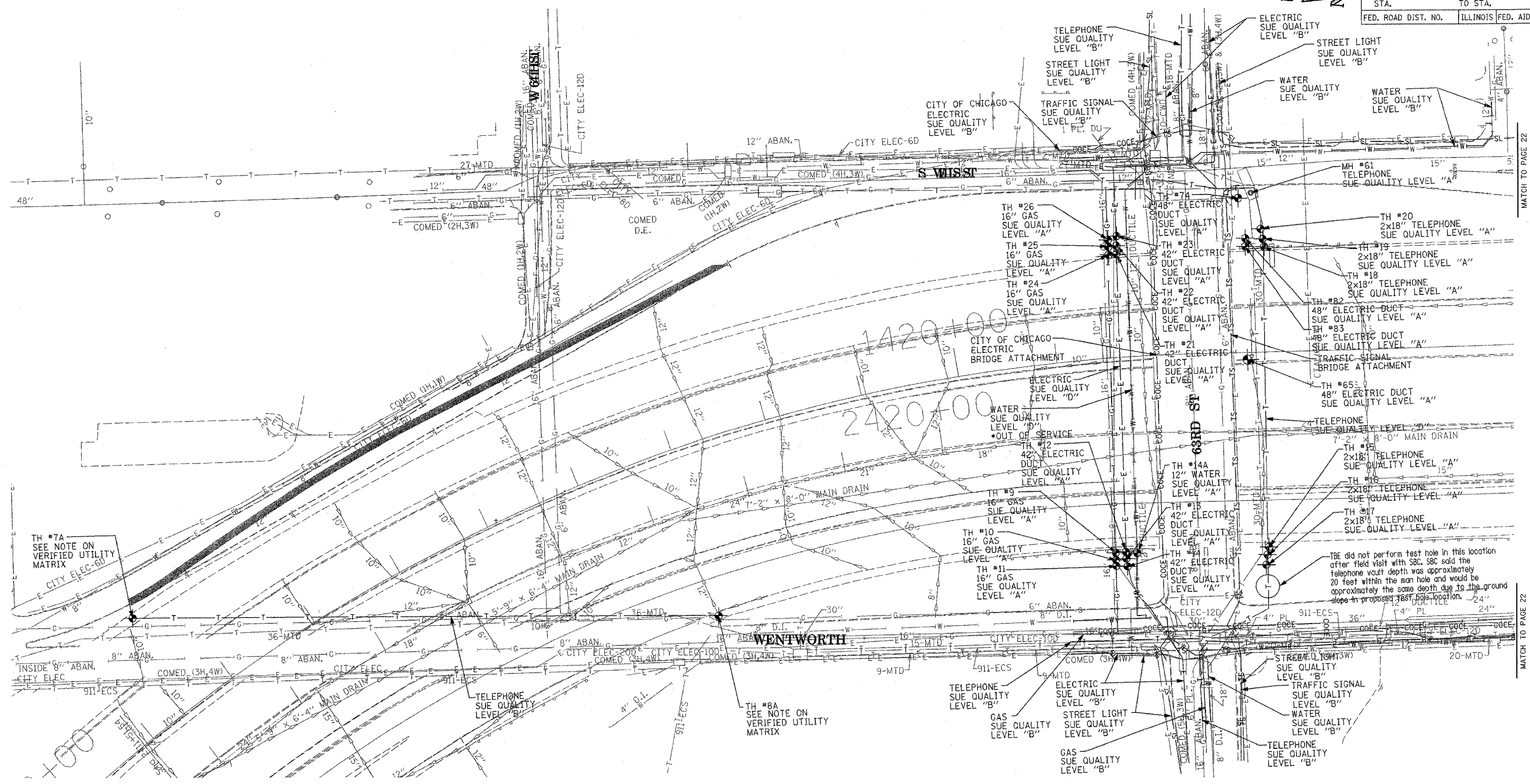
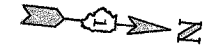
ORIGINAL SURVEY	DATE
BY	
NO.	



CTE | AECOM

P:\p\04086\1\18-cntrs B & 15\18\1\18\180\cross sections\180a_sbrac_180a.dwg 6/5/2006 12:59:56 PM

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	1818.15, 2021.802 P1 & P10 B-2	Cook	247	225
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



MATCH TO PAGE 22

MATCH TO PAGE 22

TBE could not locate buried utilities directly beneath the expressway due to traffic and safety issues.

*At the time of Quality Level "B" SUE services, the water lines were active. The lines, however, are now expected to be out of service per IDOT.



TBE GROUP, INC.
 CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL
 * PLANNING * UTILITY ENGINEERING/LOCATING
 SOUTHERN REGION: FL, GA, SC, NC
 NORTHERN REGION: IL, IN, MI, OH, MD, NJ, NY
 PA, VA, CANADA
 WESTERN REGION: AZ, NV, NM, TX, CA, OR, UT, WA

IL09500164, 167, 168, 170, 171, 179, 180, 182, 204,
 205, 206, 211, 212, 219, 221, 225, 226, 227, 228, 230, 232
 TBE SUE PAGE NO: 21 of 36
 Checked by: *J. J. [Signature]* 8/28/02
 SUE Quality Level "A" : Test Holes
 SUE Quality Level "B" : Designating

—TS—	—TS—	TRAFFIC SIGNAL
—SL—	—SL—	STREET LIGHT
—COCE—	—COCE—	CITY OF CHICAGO ELECTRIC
—T—	—T—	TELEPHONE
—W—	—W—	WATER
—G—	—G—	GAS
—CTV—	—CTV—	CABLE TELEVISION
—FO—	—FO—	FIBER OPTIC
—E—	—E—	ELECTRIC
●	●	TEST HOLE

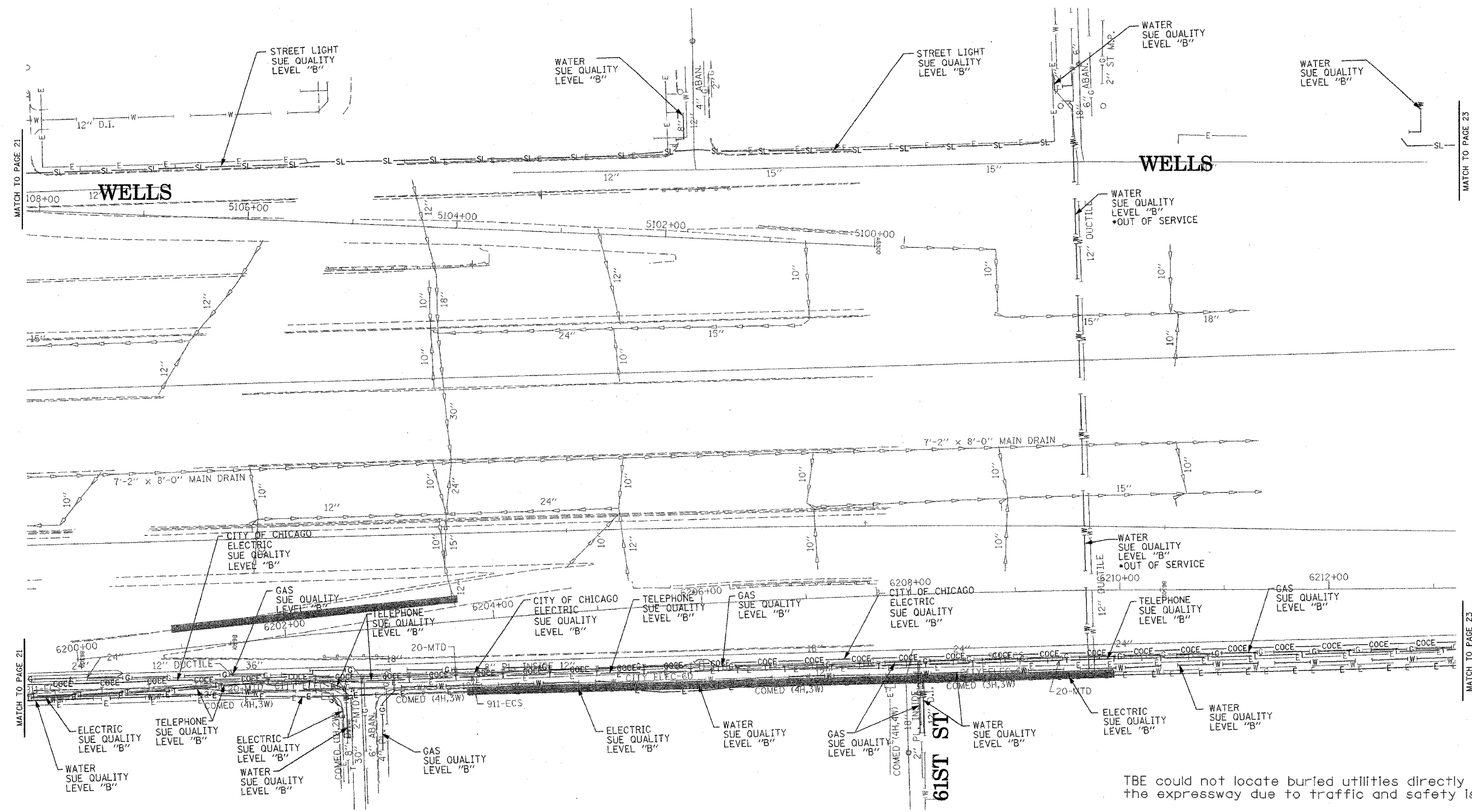
Utilities shown on these plans as depicted in the legend have been investigated by TBE Group, Inc in accordance with SUE Industry Standards. All other information shown has been provided to TBE Group, Inc by others.

205 W. WACKER DRIVE
 SUITE 1020
 CHICAGO, IL 60606
 (312) 704-1970

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUE Investigation of Underground Utilities
 I-90/I-94 Dan Ryan Expressway from
 I-57 to 69th Street
 Contract Number: 62590, 62592, 62594
 SQL "A" DATE : 7/22/04
 SQL "B" DATE : 7/22/04
 DRAWN BY : KLC
 SCALE : 1" = 50'

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	1810-15, 2021-022 P1 & P2 (N-2)	Cook	247	226
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



MATCH TO PAGE 21

MATCH TO PAGE 23

MATCH TO PAGE 21

MATCH TO PAGE 23

TBE could not locate buried utilities directly beneath the expressway due to traffic and safety issues.

*At the time of Quality Level "B" SUE services, the water lines were active. The lines, however, are now expected to be out of service per IDOT.



TBE GROUP, INC.
 CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL
 * PLANNING * UTILITY ENGINEERING/LOCATING
 SOUTHERN REGION: FL, GA, SC, NC
 NORTHERN REGION: IL, IN, MI, OH, MD, NJ, NY
 PA, VA, CANADA
 WESTERN REGION: AZ, NV, NM, TX, CA, OR, UT, WA

IL09500164, 167, 168, 170, 171, 179, 180, 182, 204,
 205, 206, 211, 212, 219, 221, 225, 226, 227, 228, 230, 232
 TBE SUE PAGE NO: 22 of 36
 Checked by: *[Signature]*
 SUE Quality Level "A" : Test Holes
 SUE Quality Level "B" : Designating

—TS—	—TS—	TRAFFIC SIGNAL
—SL—	—SL—	STREET LIGHT
—COCE—	—COCE—	CITY OF CHICAGO ELECTRIC
—T—	—T—	TELEPHONE
—W—	—W—	WATER
—G—	—G—	GAS
—CTV—	—CTV—	CABLE TELEVISION
—FO—	—FO—	FIBER OPTIC
—E—	—E—	ELECTRIC
—●—	—●—	TEST HOLE

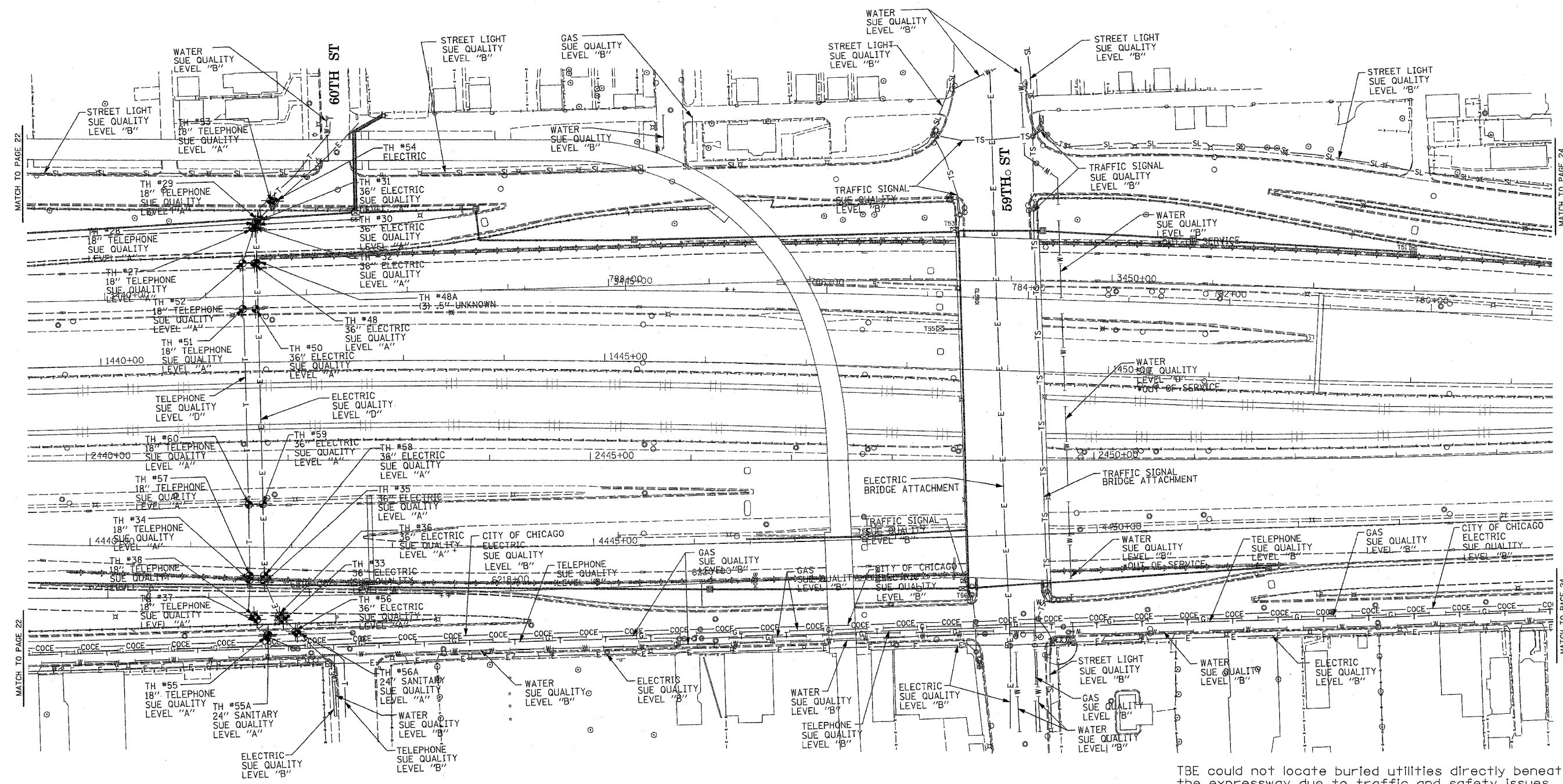
Utilities shown on these plans as depicted in the legend have been investigated by TBE Group, Inc in accordance with SUE Industry Standards. All other information shown has been provided to TBE Group, Inc by others.

205 W. WACKER DRIVE
 SUITE 1020
 CHICAGO, IL 60606
 (312) 704-1970

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUE Investigation of Underground Utilities
 I-90/I-94 Dan Ryan Expressway from
 I-57 to 69th Street
 Contract Number: 62590, 62592, 62594
 SQL "B" DATE : 7/22/04
 DRAWN BY : KLC
 SCALE : 1" = 50'

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	10918.15, 2024-022 P13 & P123 R-2	Cook	247	227
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TBE could not locate buried utilities directly beneath the expressway due to traffic and safety issues.

*At the time of Quality Level "B" SUE services, the water lines were active. The lines, however, are now expected to be out of service per IDOT.

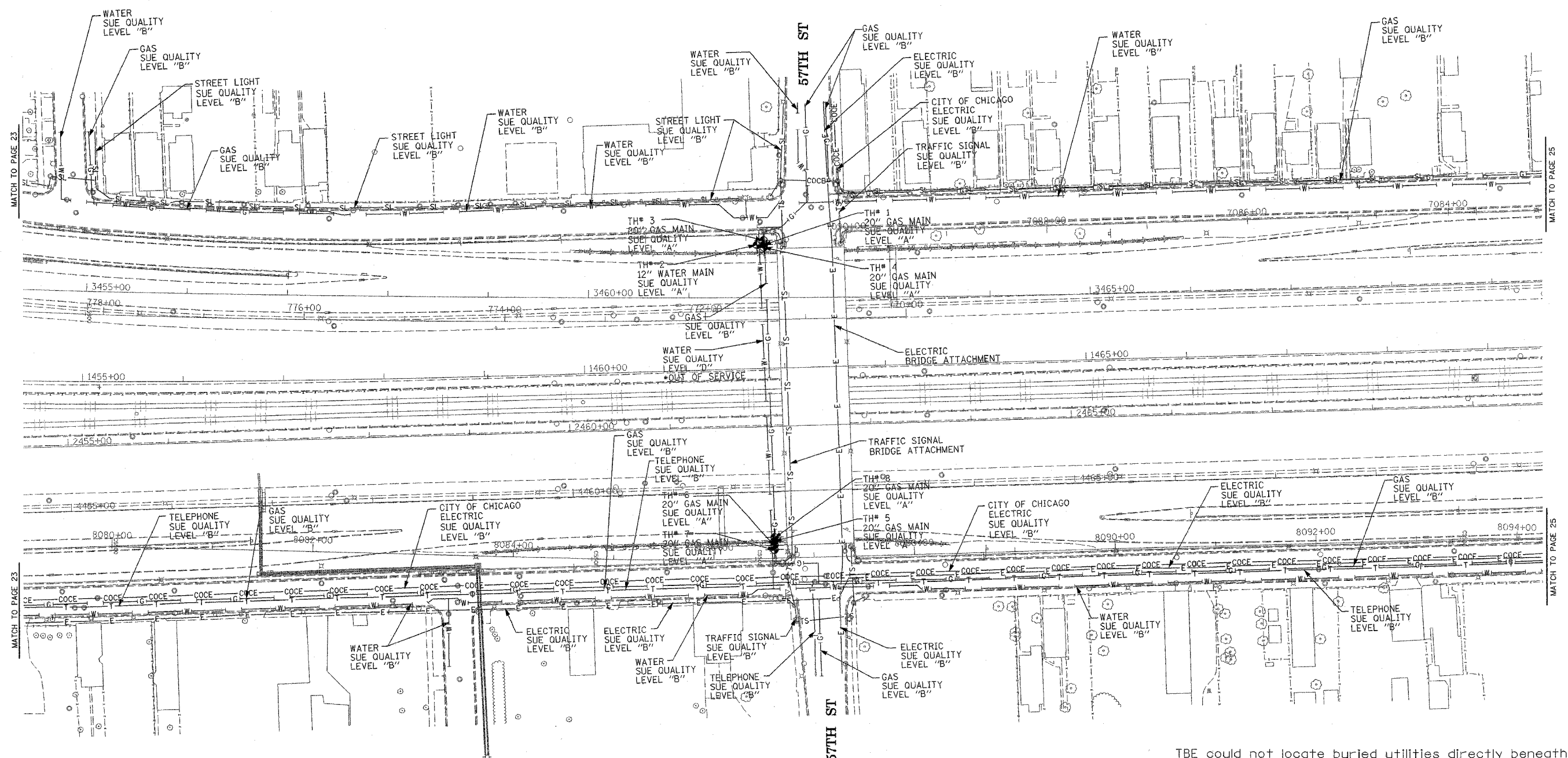
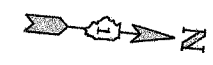
TBE GROUP, INC.
 CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL
 * PLANNING * UTILITY ENGINEERING/LOCATING
 SOUTHERN REGION: FL, GA, SC, NC
 NORTHERN REGION: IL, IN, MI, OH, MD, NJ, NY
 PA, VA, CANADA
 WESTERN REGION: AZ, NV, NM, TX, CA, OR, UT, WA
 IL09500164, 167, 168, 170, 171, 179, 180, 182, 204,
 205, 206, 211, 212, 219, 221, 225, 226, 227, 228, 230, 232
 TBE SUE PAGE NO: 23 of 36
 Checked by: *Sandra...*
 SUE Quality Level "A" : Test Holes
 SUE Quality Level "B" : Designating

—TS—	—TS—	TRAFFIC SIGNAL
—SL—	—SL—	STREET LIGHT
—COCE—	—COCE—	CITY OF CHICAGO ELECTRIC
—T—	—T—	TELEPHONE
—W—	—W—	WATER
—G—	—G—	GAS
—CTV—	—CTV—	CABLE TELEVISION
—FO—	—FO—	FIBER OPTIC
—E—	—E—	ELECTRIC
●	●	TEST HOLE

Utilities shown on these plans as depicted in the legend have been investigated by TBE Group, Inc in accordance with SUE Industry Standards. All other information shown has been provided to TBE Group, Inc by others.

 205 W. WACKER DRIVE SUITE 1020 CHICAGO, IL 60606 (312) 704-1970	REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION SUE Investigation of Underground Utilities I-90/I-94 Dan Ryan Expressway from I-57. to 69th Street Contract Numbers: 62590, 62592, 62594 SQL "A" DATE : 7/22/04 SQL "B" DATE : 7/22/04 DRAWN BY : KLC SCALE : 1" = 50'
	NAME	DATE	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	101615, 202-022 P1 & P20 P2	Cook	247	228
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



TBE could not locate buried utilities directly beneath the expressway due to traffic and safety issues.


*At the time of Quality Level "B" SUE services, the water lines were active. The lines, however, are now expected to be out of service per IDOT.

TBE GROUP, INC.
 CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL
 * PLANNING * UTILITY ENGINEERING/LOCATING
 SOUTHERN REGION: FL, GA, SC, NC
 NORTHERN REGION: IL, IN, MI, OH, MD, NJ, NY
 PA, VA, CANADA
 WESTERN REGION: AZ, NV, NM, TX, CA, OR, UT, WA

IL09500164, 167, 168, 170, 171, 179, 180, 182, 204,
 205, 206, 211, 212, 219, 221, 225, 226, 227, 228, 230, 232
 TBE SUE PAGE NO: 24 of 36
 Checked by: *[Signature]*
 SUE Quality Level "A" : Test Holes
 SUE Quality Level "B" : Designating

—TS—	—TS—	TRAFFIC SIGNAL
—SL—	—SL—	STREET LIGHT
—COCE—	—COCE—	CITY OF CHICAGO ELECTRIC
—T—	—T—	TELEPHONE
—W—	—W—	WATER
—G—	—G—	GAS
—CTV—	—CTV—	CABLE TELEVISION
—FO—	—FO—	FIBER OPTIC
—E—	—E—	ELECTRIC
⊙	⊙	TEST HOLE

Utilities shown on these plans as depicted in the legend have been investigated by TBE Group, Inc in accordance with SUE Industry Standards. All other information shown has been provided to TBE Group, Inc by others.


 205 W. WACKER DRIVE
 SUITE 1020
 CHICAGO, IL 60606
 (312) 704-1970

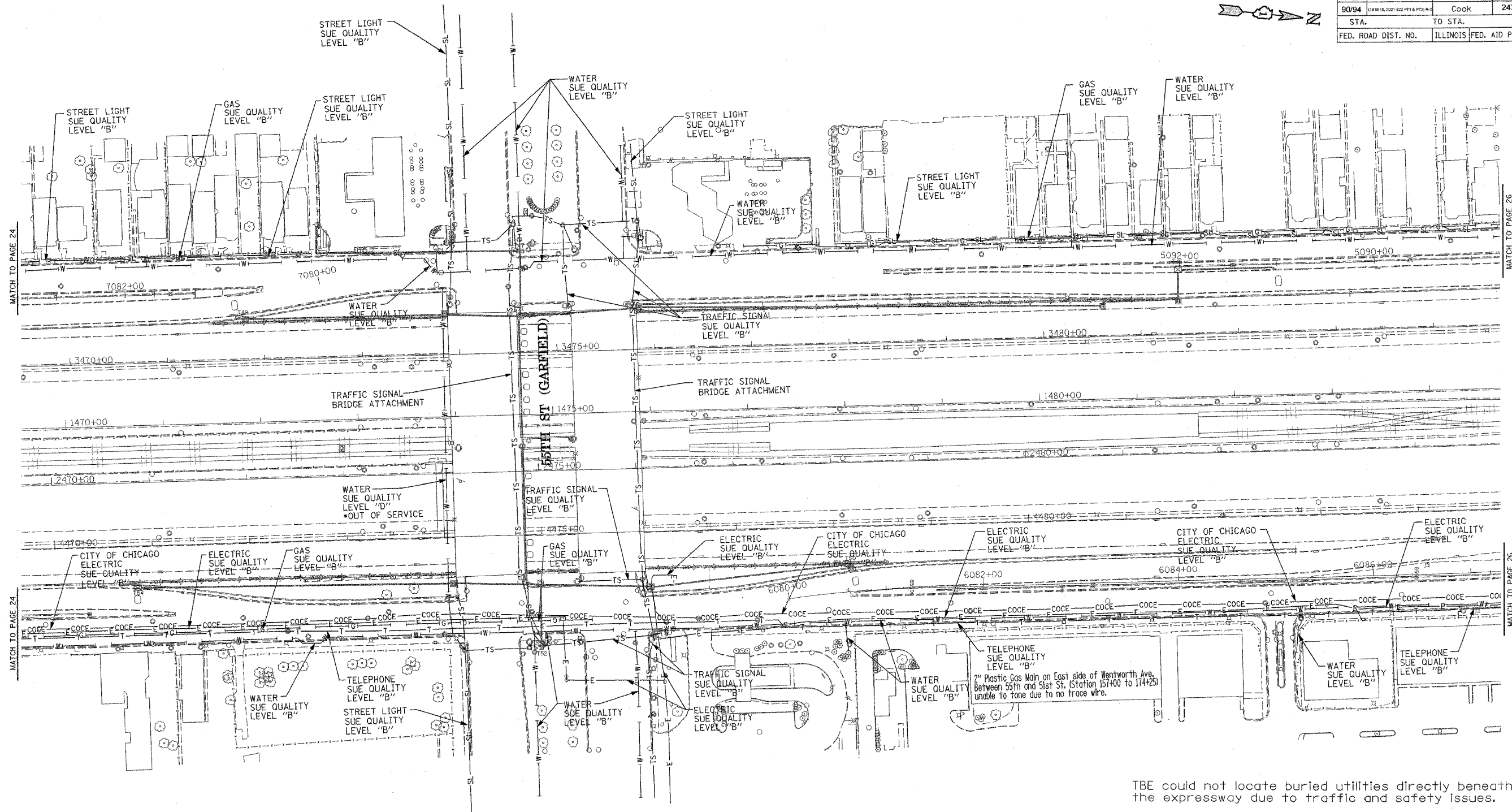
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUE Investigation of Underground Utilities
 I-90/I-94 Dan Ryan Expressway from
 I-57 to 69th Street
 Contract Number: 62590, 62592, 62594

SQL "A" DATE : 7/22/04
 SQL "B" DATE : 7/22/04

DRAWN BY : KLC
 SCALE : 1" = 50'

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	(1918, 15, 2021-922 P1 & P2) R-2	Cook	247	229
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



TBE could not locate buried utilities directly beneath the expressway due to traffic and safety issues.

*At the time of Quality Level "B" SUE services, the water lines were active. The lines, however, are now expected to be out of service per IDOT.

TBE CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL
 * PLANNING * UTILITY ENGINEERING/LOCATING
 SOUTHERN REGION: FL, GA, SC, NC
 NORTHERN REGION: IL, IN, MI, OH, MD, NJ, NY
 PA, VA, CANADA
 WESTERN REGION: AZ, NV, NM, TX, CA, OR, UT, WA
 IL09500164, 167, 168, 170, 171, 179, 180, 182, 204,
 205, 206, 211, 212, 219, 221, 225, 226, 227, 228, 230, 232
 TBE SUE PAGE NO: 25 of 36
 Checked by: *M. A. Jones*
 SUE Quality Level "A" : Test Holes
 SUE Quality Level "B" : Designating

—TS—	—TS—	TRAFFIC SIGNAL
—SL—	—SL—	STREET LIGHT
—COCE—	—COCE—	CITY OF CHICAGO ELECTRIC
—T—	—T—	TELEPHONE
—W—	—W—	WATER
—G—	—G—	GAS
—CTV—	—CTV—	CABLE TELEVISION
—FO—	—FO—	FIBER OPTIC
—E—	—E—	ELECTRIC
—●—	—●—	TEST HOLE

Utilities shown on these plans as depicted in the legend have been investigated by TBE Group, Inc in accordance with SUE Industry Standards. All other information shown has been provided to TBE Group, Inc by others.

205 W. WACKER DRIVE
 SUITE 1020
 CHICAGO, IL 60606
 (312) 704-1970

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUE Investigation of Underground Utilities
 I-90/I-94 Dan Ryan Expressway from
 I-57 to 69th Street
 Contract Number: 62590, 62592, 62594
 SOL "B" DATE : 7/22/04
 DRAWN BY : KLC
 SCALE : 1" = 50'

VERIFIED UTILITY INFORMATION

TEST HOLE #	SIZE & TYPE	NORTHING	EASTING	TOP OF UTILITY	EXISTING CUT	REFERENCE GROUND ELEVATION	COMMENTS
1	20" G	1867123.035	1175606.560	-1.85	1.50	-0.35	SUE QUALITY LEVEL "A"
2	12" W	1867115.884	1175606.924	-1.53	1.13	-0.40	SUE QUALITY LEVEL "A"
3	20" G	1867122.650	1175602.392	-0.08	0.69	0.61	SUE QUALITY LEVEL "A"
4	20" G	1867122.945	1175609.366	-6.36	5.41	-0.95	SUE QUALITY LEVEL "A"
5	20" G	1867132.835	1175901.810	-4.63	3.39	-1.24	SUE QUALITY LEVEL "A"
6	20" G	1867132.928	1175905.856	-2.34	2.74	0.40	SUE QUALITY LEVEL "A"
7	20" G	1867132.947	1175910.232	0.11	1.93	2.04	SUE QUALITY LEVEL "A"
8	20" G	1867132.990	1175897.762	-5.44	3.49	-1.95	SUE QUALITY LEVEL "A"
1A	20" G	1861211.910	1177445.200	15.85	3.65	19.50	SUE QUALITY LEVEL "A"
2A	8" W	1861211.860	1177441.360	14.70	4.87	19.57	SUE QUALITY LEVEL "A"
3A	6" G	1861211.740	1177450.260	15.19	4.18	19.37	SUE QUALITY LEVEL "A"
4A	6" G	1861598.210	1177437.850	15.50	4.43	19.93	SUE QUALITY LEVEL "A"
5A	20" G	1861598.200	1177433.420	17.22	2.82	20.04	SUE QUALITY LEVEL "A"
6A	8" W	1861597.270	1177429.100	15.66	4.42	20.08	SUE QUALITY LEVEL "A"
7A	SEE NOTE	1862113.690	1176035.420	—	7.29	0.33	SEE NOTE
8A	SEE NOTE	1862704.020	1176033.590	-6.74	5.31	-1.43	SUE QUALITY LEVEL "A"
9	16" G	1863104.250	1175969.140	-2.44	4.55	2.11	SUE QUALITY LEVEL "A"
10	16" G	1863104.500	1175976.510	-1.83	5.77	3.94	SUE QUALITY LEVEL "A"
11	16" G	1863104.750	1175982.670	0.42	5.48	5.90	SUE QUALITY LEVEL "A"
12	*42" E	1863114.170	1175968.110	-2.35	4.64	2.29	SUE QUALITY LEVEL "A"
13	*42" E	1863114.830	1175975.120	-2.35	6.43	4.08	SUE QUALITY LEVEL "A"
14	*42" E	1863116.050	1175983.240	-2.34	9.02	6.68	SUE QUALITY LEVEL "A"
14A	12" W	1863125.770	1175969.560	-2.99	5.96	2.97	SUE QUALITY LEVEL "A"
15	2x*18" BT	1863258.330	1175962.750	-6.25	9.98	3.73	SUE QUALITY LEVEL "A"
16	2X*18" BT	1863256.850	1175970.740	-3.14	9.44	6.30	SUE QUALITY LEVEL "A"
17	2x*18" BT	1863255.680	1175981.210	-3.00	12.97	9.97	SUE QUALITY LEVEL "A"
18	2x*18" BT	1863254.030	1175661.690	-5.00	8.95	3.95	SUE QUALITY LEVEL "A"
19	2x*18" BT	1863252.560	1175654.200	-4.38	11.01	6.63	SUE QUALITY LEVEL "A"
20	2x*18" BT	1863250.510	1175644.060	-3.62	13.39	9.77	SUE QUALITY LEVEL "A"
21	*42" E	1863105.180	1175669.260	0.89	3.54	4.43	SUE QUALITY LEVEL "A"
22	*42" E	1863105.160	1175660.820	-1.00	7.50	6.50	SUE QUALITY LEVEL "A"

VERIFIED UTILITY INFORMATION

TEST HOLE #	SIZE & TYPE	NORTHING	EASTING	TOP OF UTILITY	EXISTING CUT	REFERENCE GROUND ELEVATION	COMMENTS
23	*42" E	1863105.310	1175651.280	-0.63'	10.05'	9.42'	SUE QUALITY LEVEL "A"
24	16" G	1863097.580	1175669.900	0.15'	4.36'	4.51'	SUE QUALITY LEVEL "A"
25	16" G	1863097.130	1175661.950	1.09'	5.01'	6.10'	SUE QUALITY LEVEL "A"
26	16" G	1863096.690	1175655.260	1.53'	6.63'	8.16'	SUE QUALITY LEVEL "A"
27	*18" BT	1865094.940	1175582.150	0.35'	11.57'	11.92'	SUE QUALITY LEVEL "A"
28	*18" BT	1865097.810	1175578.180	1.03'	12.10'	13.13'	SUE QUALITY LEVEL "A"
29	*18" BT	1865100.160	1175573.950	2.11'	12.35'	14.46'	SUE QUALITY LEVEL "A"
30	*36" E	1865099.910	1175578.500	-3.55'	16.71'	13.16'	SUE QUALITY LEVEL "A"
31	*36" E	1865103.162	1175573.669	-2.89'	17.47'	14.58'	SUE QUALITY LEVEL "A"
32	*36" E	1865097.615	1175581.930	-3.91'	15.88'	11.97'	SUE QUALITY LEVEL "A"
33	*36" E	1865124.435	1175973.073	0.82'	13.43'	14.25'	SUE QUALITY LEVEL "A"
34	*18" BT	1865090.975	1175932.544	-4.41'	6.37'	1.96'	SUE QUALITY LEVEL "A"
35	*36" E	1865105.924	1175934.833	-4.59'	7.05'	2.46'	SUE QUALITY LEVEL "A"
36	*36" E	1865120.467	1175968.691	-0.94'	14.14'	13.20'	SUE QUALITY LEVEL "A"
37	*18" BT	1865098.448	1175972.477	2.26'	10.37'	12.63'	SUE QUALITY LEVEL "A"
38	*18" BT	1865095.321	1175968.307	-0.23'	12.22'	11.99'	SUE QUALITY LEVEL "A"
39	See Note G	1873623.853	1175722.432	—	16.00'	12.60'	CLEARANCE DEPTH
40	20" G	1873624.086	1175713.696	-6.36'	16.78'	10.42'	SUE QUALITY LEVEL "A"
41	20" G	1873629.270	1175680.376	-10.19'	9.14'	-1.05'	SUE QUALITY LEVEL "A"
42	20" G	1873630.734	1175671.020	-12.73'	9.01'	-3.72'	SUE QUALITY LEVEL "A"
43	20" G	1873631.833	1175664.164	-13.65'	7.75'	-5.90'	SUE QUALITY LEVEL "A"
44	20" G	1873662.688	1175369.141	-3.90'	4.72'	0.82'	SUE QUALITY LEVEL "A"
45	20" G	1873663.608	1175361.458	-2.90'	5.76'	2.86'	SUE QUALITY LEVEL "A"
46	20" G	1873664.488	1175351.804	-0.50'	5.98'	5.48'	SUE QUALITY LEVEL "A"
47	20" G	1873661.260	1175377.470	-4.21'	3.61'	-0.60'	SUE QUALITY LEVEL "A"
48	*36" E	1865096.950	1175617.420	-3.95'	5.91'	1.96'	SUE QUALITY LEVEL "A"
48A	(3)12" UNK	1865098.890	1175616.560	-1.25'	3.20'	1.95'	
49	20" G	1873654.520	1175434.880	-6.86'	4.54'	-2.32'	SUE QUALITY LEVEL "A"
50	*36" E	1865097.950	1175663.360	-4.48'	6.85'	2.37'	SUE QUALITY LEVEL "A"
51	*18" BT	1865085.150	1175663.290	-5.46'	7.73'	2.27'	SUE QUALITY LEVEL "A"
52	*18" BT	1865085.030	1175617.240	-4.60'	6.57'	1.97'	SUE QUALITY LEVEL "A"

TBE Project Information

* Size given is duct width only.
 TH#7A unable to determine object found due to water & soil collapsing.
 TH#8A found old wood RR ties laid straight in direction of duct. Could not expose utility, however, SBC confirmed that the duct is directly below RR ties. The existing cut is to top of RR ties.
 TH#39 TBE could not physically see gas main. Dug to 16' got electronic depth of 19.5'.

ALL INFORMATION SHOWN WAS OBTAINED FROM A LOCATION SURVEY.

Illinois Department of Transportation

I-90 /94 (NB & SB of Dan Ryan Expressway)
 Chicago-Cook County
 Sec No: (2122-921 PT1) R, (2021-922 PT1,2)
 Contract No. 62586, 62589, 62693, 62694, 62695
 TBE Project No.: IL09500164, 167, 168, 170, 171, 179, 180, 182, 204, 205, 206, 211, 212, 219, 221, 225, 226, 227, 228, 230, 232

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
6-15-05	KLC	REMOVE QL "A" FROM TH#48A															



VERIFIED UTILITY LOCATIONS

Handwritten signature E-9802

VERIFIED UTILITY INFORMATION

Table with 8 columns: TEST HOLE #, SIZE & TYPE, NORTHING, EASTING, TOP OF UTILITY, EXISTING CUT, REFERENCE GROUND ELEVATION, COMMENTS. Contains data for test holes 53 through 77.

TBE Project Information
* Size given is duct width only.
TH#54 TBE could not reach utility due to depth, Clearance given.
MH#61 Man Hole elevation to top of phone cables exiting man hole.
TH#80 Could not expose utilities due to extremely hard clay. Clearance depth of 7.88' given.
TH#81 Appears to be a 34" poured in place concrete cap over CTA conduit.
TH#87 found a 16" pipe but was unable to see it due to water table. Probed another 3' down past pipe, unable to find 36" w/m electronic Depth 24'
TH#89 Utility not exposed due to excessive water in hole.
TH#90 Utility not exposed, clearance depth of 13.65'.
TH#96 Utility not exposed, clearance depth of 10.80'.
TH#97 Reference point destroyed by construction crews before survey could be completed. Material was unidentifiable.
TH#104 Concrete cap poured over utility.
TH#107 Utility not exposed, clearance depth of 16.79'.

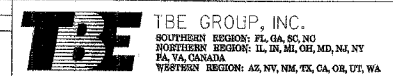
ALL INFORMATION SHOWN WAS OBTAINED FROM A LOCATION SURVEY.

VERIFIED UTILITY INFORMATION

Table with 8 columns: TEST HOLE #, SIZE & TYPE, NORTHING, EASTING, TOP OF UTILITY, EXISTING CUT, REFERENCE GROUND ELEVATION, COMMENTS. Contains data for test holes 78 through 109.

Illinois Department of Transportation
I-90 /94 (NB & SB of Dan Ryan Expressway)
Chicago-Cook County
Sec No: (2122-921 PT1) R, (2021-922 PT1,2)
Contract No. 62586, 62589, 62693, 62694, 62695
TBE Project No.: IL09500164, 167, 168, 170, 171, 179, 180, 182, 204, 205, 206, 211, 212, 219, 221, 225, 226, 227, 228, 230, 232

Table with 10 columns: DATE, BY, DESCRIPTION, DATE, BY, DESCRIPTION, DATE, BY, DESCRIPTION, DATE, BY, DESCRIPTION. Includes a revision entry for 6-15-05 by KLC to REMOVE QL "A" FROM TH#87 & 89.



VERIFIED UTILITY LOCATIONS

Jefferson E-9802

VERIFIED UTILITY INFORMATION

TEST HOLE #	SIZE & TYPE	NORTHING	EASTING	TOP OF UTILITY	EXISTING CUT	REFERENCE GROUND ELEVATION	COMMENTS
110	24" BT	1841825.430	1177895.600	-4.15'	4.72'	0.57'	SUE QUALITY LEVEL "A"
111	24" BT	1841825.960	1177908.730	1.05'	4.44'	5.49'	SUE QUALITY LEVEL "A"
112	SEE NOTE BT	1844068.060	1177841.750	—	6.79'	2.89'	CLEARANCE DEPTH ONLY
113	SEE NOTE BT	1844066.820	1177850.390	—	8.03'	5.95'	CLEARANCE DEPTH ONLY
114	24" BT	1847363.280	1177733.270	-13.55'	5.33'	-8.22'	SUE QUALITY LEVEL "A"
115	24" BT	1847363.890	1177740.570	-12.87'	7.00'	-5.87'	SUE QUALITY LEVEL "A"
116	24" BT	1847364.010	1177750.010	-13.15'	10.51'	-2.64'	SUE QUALITY LEVEL "A"
117	24" BT	1847354.070	1177540.800	-12.62'	4.98'	-7.64'	SUE QUALITY LEVEL "A"
118	24" BT	1847354.020	1177532.210	-11.52'	4.52'	-7.00'	SUE QUALITY LEVEL "A"
119	24" BT	1841818.360	1177704.030	-6.42'	4.55'	-1.87'	SUE QUALITY LEVEL "A"
120	24" BT	1841818.190	1177694.600	-5.43'	5.12'	-0.31'	SUE QUALITY LEVEL "A"
121	24" E	1844061.030	1177617.950	-1.50'	6.67'	5.17'	SUE QUALITY LEVEL "A"
122	(3) 1" E	1840742.250	1177446.860	10.93'	4.47'	15.40'	SUE QUALITY LEVEL "A"
123	(2) 2.5" E	1840753.910	1177452.070	12.73'	2.88'	15.61'	SUE QUALITY LEVEL "A"
124	2" BT	1840831.420	1177479.340	13.17'	2.57'	15.74'	SUE QUALITY LEVEL "A"
125	2" E	1840820.710	1177506.720	5.90'	3.01'	8.91'	SUE QUALITY LEVEL "A"
126	2" E	1840804.920	1177597.800	0.06'	3.54'	3.60'	SUE QUALITY LEVEL "A"
127	(3) 1" E	1840788.150	1177588.790	0.28'	3.56'	3.84'	SUE QUALITY LEVEL "A"
128	2" E	1840818.210	1177530.500	0.02'	1.85'	1.87'	SUE QUALITY LEVEL "A"
129	2" E	1840816.460	1177545.960	0.42'	1.74'	2.16'	SUE QUALITY LEVEL "A"
130	SEE NOTE BT	1839700.920	1178266.540	—	10.98'	-7.69'	CLEARANCE DEPTH ONLY
131	SEE NOTE BT	1839752.990	1178287.460	—	11.56'	-8.92'	CLEARANCE DEPTH ONLY
132	18" G	1852714.050	1177842.550	0.87'	7.94'	8.81'	SUE QUALITY LEVEL "A"
133	18" G	1852719.380	1177840.460	1.09'	8.36'	9.45'	SUE QUALITY LEVEL "A"
134	8" G	1847348.900	1177540.960	-13.64'	6.05'	-7.59'	SUE QUALITY LEVEL "A"
135	8" G	1847348.540	1177532.100	-11.04'	4.42'	-6.62'	SUE QUALITY LEVEL "A"
136	8" G	1847347.120	1177490.770	1.16'	7.28'	8.44'	
137	18" G	1852715.850	1177387.130	-13.52'	7.22'	-6.30'	SUE QUALITY LEVEL "A"
138	18" G	1852720.360	1177378.410	-11.64'	7.05'	-4.59'	SUE QUALITY LEVEL "A"
139	18" G	1852715.890	1177378.870	-10.80'	6.30'	-4.50'	SUE QUALITY LEVEL "A"
140	18" G	1852720.130	1177387.470	-13.53'	7.46'	-6.07'	SUE QUALITY LEVEL "A"

VERIFIED UTILITY INFORMATION

TEST HOLE #	SIZE & TYPE	NORTHING	EASTING	TOP OF UTILITY	EXISTING CUT	REFERENCE GROUND ELEVATION	COMMENTS
141	8" G	1847360.470	1177779.600	3.77'	4.76'	8.53'	SUE QUALITY LEVEL "A"
142	18" G	1852731.450	1177624.740	-0.09'	9.49'	9.40'	SUE QUALITY LEVEL "A"
143	18" G	1852724.450	1177627.310	-1.19'	10.92'	9.73'	SUE QUALITY LEVEL "A"
144	34" BT	1853977.420	1177596.570	1.18'	8.13'	9.31'	SUE QUALITY LEVEL "A"
145	18" G	1852725.400	1177579.740	-14.03'	6.32'	-7.71'	
146	18" G	1852729.670	1177579.630	-14.36'	6.93'	-7.43'	
147	18" G	1852729.620	1177588.130	-12.06'	7.15'	-4.91'	SUE QUALITY LEVEL "A"
148	18" G	1852725.710	1177589.950	-11.85'	7.38'	-4.47'	SUE QUALITY LEVEL "A"
149	8" G	1847359.120	1177733.980	-13.27'	4.96'	-8.31'	SUE QUALITY LEVEL "A"
150	8" G	1847359.090	1177742.040	-10.62'	5.02'	-5.60'	SUE QUALITY LEVEL "A"
151	34" BT	1853976.090	1177565.940	-2.85'	4.64'	1.79'	SUE QUALITY LEVEL "A"
152	34" BT	1853965.300	1177212.750	1.75'	6.56'	8.31'	SUE QUALITY LEVEL "A"
153	34" BT	1853967.560	1177268.590	-5.31'	4.54'	-0.77'	SUE QUALITY LEVEL "A"
154	34" BT	1853974.820	1177507.770	-7.53'	5.75'	-1.78'	SUE QUALITY LEVEL "A"
155	34" BT	1853976.540	1177529.050	-4.24'	5.72'	1.48'	SUE QUALITY LEVEL "A"
156	34" BT	1853967.230	1177304.800	-5.16'	4.11'	-1.05'	SUE QUALITY LEVEL "A"
157	30" G	1839844.630	1178297.170	-11.94'	11.58'	-0.36'	SUE QUALITY LEVEL "A"
158	30" G	1839771.030	1178274.550	-15.29'	6.58'	-8.71'	SUE QUALITY LEVEL "A"
159	30" G	1839779.300	1178277.090	-15.12'	6.55'	-8.57'	SUE QUALITY LEVEL "A"
160	N/A G	1839815.630	1178285.320	—	7.00'	-7.56'	CLEARANCE ONLY
161	30" G	1839683.380	1178240.910	-8.79'	10.86'	-19.65'	
162	N/A G	1839720.200	1178252.850	—	7.00'	-14.44'	CLEARANCE ONLY
163	30" G	1839633.400	1178223.490	-10.63'	6.14'	-16.77'	
164	30" G	1839624.490	1178220.270	-10.23'	6.61'	-16.84'	

TBE Project Information

TH#112 Utility not exposed, clearance depth of 6.79'.
 TH#113 Utility not exposed, clearance depth of 8.03'.
 TH#130 Utility not exposed, clearance depth of 10.98'.
 TH#131 Utility not exposed, clearance depth of 11.56'.
 TH#136 Unable to expose utility due to hard clay, probed and felt top and side of utility.
 TH#145 & 146 Unable to expose utility due to water table at 3' +/-, but were able to feel the sides and top.
 TH#160 & 162 Unable to expose utility due to hard clay, clearance of 7' given.
 TH#161 Unable to expose utility due to water, but did feel the pipe.
 TH#163 & 164 Unable to expose utility due to water, but did feel top and sides of 30" pipe.

ALL INFORMATION SHOWN WAS OBTAINED FROM A LOCATION SURVEY.

Illinois Department of Transportation

I-90 /94 (NB & SB of Dan Ryan Expressway)
 Chicago-Cook County
 Sec No: (2122-921 PT1) R, (2021-922 PT1,2)
 Contract No. 62586, 62589, 62693, 62694, 62695
 TBE Project No.: IL09500164, 167, 168, 170, 171, 179, 180, 182, 204, 205, 206, 211, 212, 219, 221, 225, 226, 227, 228, 230, 232

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
6-15-05	KLC	REMOVE CL "A" FROM TH#136, 146, 161, 163 & 164 REMOVED TOP OF UTILITY FROM TH#160 & 162												



VERIFIED UTILITY LOCATIONS

Handwritten signature: J. Adams E-9802

VERIFIED UTILITY INFORMATION

TEST HOLE #	SIZE & TYPE	NORTHING	EASTING	OFFSET	TOP OF UTILITY	EXISTING CUT	REFERENCE GROUND ELEVATION	COMMENTS
165	24" G	1858583.099	1177452.100	148.05 RT	-2.91'	6.08'	3.18'	SUE QUALITY LEVEL "A"
166	24" G	1858582.607	1177422.881	118.82 RT	-7.96'	11.04'	3.08'	SUE QUALITY LEVEL "A"
167	24" G	1858581.829	1177388.290	84.23 RT	-11.42'	5.64'	-5.78'	SUE QUALITY LEVEL "A"
168	— G	1858576.435	1177169.958	73.59 LT	-14.41'	7.92'	-6.49'	SEE NOTE
169A	— G	1858575.515	1177148.755	94.81 LT	-8.73'	5.63'	-3.10'	SEE NOTE
169B	8" —	1858574.341	1177148.755	94.81 LT	-7.34'	4.24'	-3.10'	SUE QUALITY LEVEL "A"
170	24" G	1858574.341	1177125.527	118.07 LT	1.84'	4.35'	6.19'	SUE QUALITY LEVEL "A"
171	24" G	1858573.831	1177107.217	136.38 LT	5.50'	5.82'	11.32'	SUE QUALITY LEVEL "A"
172	36" E	1859349.450	1177086.590	133.62 LT	-2.77'	10.34'	7.57'	SUE QUALITY LEVEL "A"
173	36" E	1859349.210	1177115.830	104.39 LT	-5.89'	4.92'	-0.97'	SUE QUALITY LEVEL "A"
174	— BT	1859189.980	1177120.790	104.24 LT	-13.77'	12.58'	-1.19'	SUE QUALITY LEVEL "A"
175	— BT	1859187.890	1177093.060	132.02 LT	SEE NOTE	9.12'	4.53'	CLEARANCE ONLY
176	36" E	1859357.690	1177382.160	100.06 RT	-11.29'	4.45'	-6.84'	SUE QUALITY LEVEL "A"
177	— E	1859358.400	1177405.990	123.90 RT	-10.32'	10.06'	-0.26'	SUE QUALITY LEVEL "A"
178	— T	1859198.040	1177390.570	103.95 RT	-21.35'	12.85'	-8.50'	SUE QUALITY LEVEL "A"
179	— E	1859345.500	1177059.620	160.69 LT	SEE NOTE	15.15'	16.93'	CLEARANCE ONLY
180	36" G	1851291.10	1177413.23	80.62 LT	-9.95'	6.63'	-3.32'	SUE QUALITY LEVEL "A"
181	36" G	1851290.85	1177418.67	75.19 LT	-9.70'	6.38'	-3.32'	SUE QUALITY LEVEL "A"
182	36" G	1851297.11	1177630.28	136.52 RT	-8.88'	5.89'	-2.94'	SUE QUALITY LEVEL "A"
MAN HOLE #								
183	24" G	1851285.94	1177708.75	45.04 RT	4.76'	4.16'	8.92'	Elev. taken from RIM of MH.
184	12" G	1851278.82	1177708.69	44.77 RT	4.39'	4.52'	8.91'	Elev. taken from RIM of MH.
TEST HOLE #	SIZE & TYPE	NORTHING	EASTING	OFFSET	TOP OF UTILITY	EXISTING CUT	REFERENCE GROUND ELEVATION	COMMENTS
185	72" BT	1877424.23	1176032.38	61.60 LT	-3.79'	2.70'	-1.09'	SUE QUALITY LEVEL "A"
186	66" BT	1877416.11	1175712.30	66.43 RT	-8.51'	5.85'	-2.66'	SEE NOTE

NOTES

- TH #168 Unable to see gas due to ground water.
- TH #169A Unable to see gas due to back fill continually caving in.
- TH #174 We were unable to determine size due to ground water in the hole.
- TH #175 Attempt was made to expose phone duct but were unsuccessful due to extreme heavy compacted clay, we were only able to reach 9.12'
- TH #179 Attempt was made to find electric duct. Went down 15.15' & 2.5' radius of Reference Point.
- TH #186 Unable to expose due to mud and ground water, felt top and sides.
- TH #187 Unable to expose due to wet sand collapsing in hole.
- TH #189 - Offset is taken from N. bound Dan Ryan fence line.
- TH #190 - Unable to expose due to soil collapsing in hole
- TH #192 - Telephone was buried/trenched underneath a slab of concrete with rough edges; width was 48"
- TH #195 - Unable to expose due to deep roots in hole
- TH #200 - Felt both sides of gas line but unable to cover completely for picture, doing so would leave a void in soil because of angle of ground level. Back fill kept falling from uphill.
- TH #204 - Found the utilities for the street lights at about 2' deep. Offset pulled from CL of Dan Ryan on ramp.
- TH #207 - Could not expose due to collapsing sand. Had a good feel with the air lance. Offset taken from CL of exit ramp
- TH #215A - TBE could not find electric crossing, vacumed down 13'.

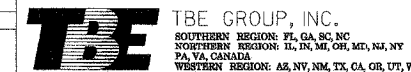
VERIFIED UTILITY INFORMATION

TEST HOLE #	SIZE & TYPE	NORTHING	EASTING	OFFSET	TOP OF UTILITY	EXISTING CUT	REFERENCE GROUND ELEVATION	COMMENTS
187	— W	1880442.920	1175949.580	65.37' RT	3.59'	8.43'	12.02'	SEE NOTE
188	16" BT	1880464.590	1175947.690	64.06' RT	6.63'	5.31'	11.94'	SUE QUALITY LEVEL "A"
189	24" W	1880443.800	1175999.780	115.57' RT	7.85'	7.83'	15.68'	SUE QUALITY LEVEL "A"
190	— W	1880442.870	1175973.130	88.91' RT	3.81'	10.10'	13.91'	SEE NOTE
191	16" BT	1880465.830	1175973.580	89.98' RT	9.59'	4.42'	14.01'	SUE QUALITY LEVEL "A"
192	16" BT	1880464.890	1175999.080	115.44' RT	10.21'	5.35'	15.56'	SUE QUALITY LEVEL "A"
193	16" BT	1880456.000	1175630.210	61.54' LT	5.66'	8.94'	11.59'	SUE QUALITY LEVEL "A"
194	16" BT	1880454.690	1175603.520	88.25' LT	5.44'	8.66'	14.10'	SUE QUALITY LEVEL "A"
195	— BT	1880453.540	1175575.610	116.18' LT	4.75'	12.13'	16.88'	SEE NOTE
196	24" W	1880435.180	1175604.240	88.06' LT	6.76'	7.24'	14.00'	SUE QUALITY LEVEL "A"
197	24" W	1880435.160	1175579.320	112.97' LT	11.06'	5.48'	16.54'	SUE QUALITY LEVEL "A"
198	36" G	1883748.370	1175516.740	86.01' LT	1.10'	7.08'	8.18'	SUE QUALITY LEVEL "A"
199	36" G	1883747.800	1175488.980	113.78' LT	6.36'	8.62'	14.98'	SUE QUALITY LEVEL "A"
200	36" G	1883758.000	1175883.780	89.15' RT	-1.07'	5.96'	4.89'	SUE QUALITY LEVEL "A"
201	36" G	1883758.190	1175903.970	109.34' RT	4.06'	6.58'	10.64'	SUE QUALITY LEVEL "A"
202	36" W	1883741.550	1175904.750	109.67' RT	4.82'	5.74'	10.56'	SUE QUALITY LEVEL "A"
203	36" W	1883730.260	1175489.640	113.59' LT	8.72'	6.25'	14.97'	SUE QUALITY LEVEL "A"
204	36" W	1883731.680	1175518.680	84.53' LT	1.69'	5.90'	7.59'	SUE QUALITY LEVEL "A"
205	36" W	1883740.460	1175883.620	88.52' RT	-3.96'	8.26'	4.30'	SUE QUALITY LEVEL "A"
206	36" W	1883731.390	1175553.040	50.19' LT	-5.51'	6.13'	0.62'	SUE QUALITY LEVEL "A"
207	— BT	1884487.410	1175842.900	67.99' RT	-6.61'	2.98'	-3.63'	SEE NOTE
208	24" W	1880435.060	1175628.960	63.35' LT	3.08'	8.72'	11.80'	SUE QUALITY LEVEL "A"
209	36" G	1883749.960	1175552.500	50.22' LT	-5.24'	5.99'	0.75'	SUE QUALITY LEVEL "A"
210	36" G	1883756.720	1175845.280	50.63' RT	-6.85'	8.42'	1.566'	SUE QUALITY LEVEL "A"
211	36" W	1883739.550	1175839.290	44.18' RT	-5.25'	5.86'	0.606'	SUE QUALITY LEVEL "A"
212	18" BT	1884480.420	1175521.840	61.14' LT	-7.58'	4.95'	-2.634'	SUE QUALITY LEVEL "A"
213	18" BT	1884480.320	1175509.110	73.87' LT	-3.89'	4.91'	1.019'	SUE QUALITY LEVEL "A"
214	20" BT	1884487.060	1175860.740	85.82' RT	-0.82'	3.19'	2.370'	SUE QUALITY LEVEL "A"
215	(1)2" (3).25" SL	1879776.080	1175973.630	71.99' RT	2.91'	4.08'	6.995'	SUE QUALITY LEVEL "A"
215A	SEE NOTE	1879798.750	1175970.990	69.36' RT	SEE NOTE	13.00'	7.040'	SEE NOTE

ALL INFORMATION SHOWN WAS OBTAINED FROM A LOCATION SURVEY.

Illinois Department of Transportation
 I-90 /94 (NB & SB of Dan Ryan Expressway)
 Chicago-Cook County
 Sec No: (2122-921 PT1) R, (2021-922 PT1,2)
 Contract No. 62584, 62585, 62586, 62589, 62693, 62694, 62695
 TBE Project No.: IL09500164, 167, 168, 170, 171, 179, 180, 182, 204, 205, 206, 211, 212, 219, 221, 225, 226, 227, 228, 230, 232, 238

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
5/1/05	ST	SAFAC												



VERIFIED UTILITY LOCATIONS

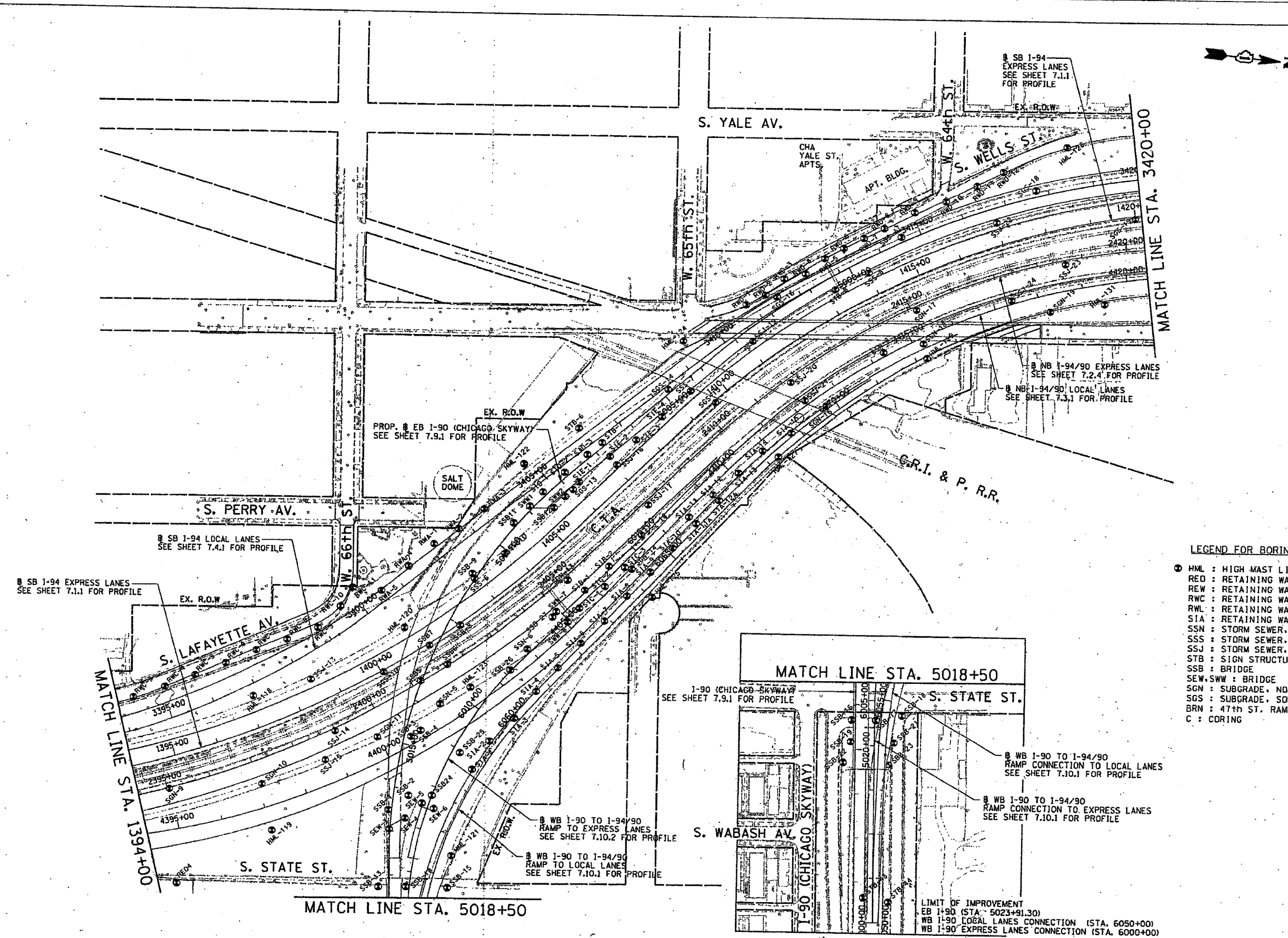
P.A.I. R/F	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	*	COOK		234
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
* - PENDING I.D.O.T. PROGRAMMING				



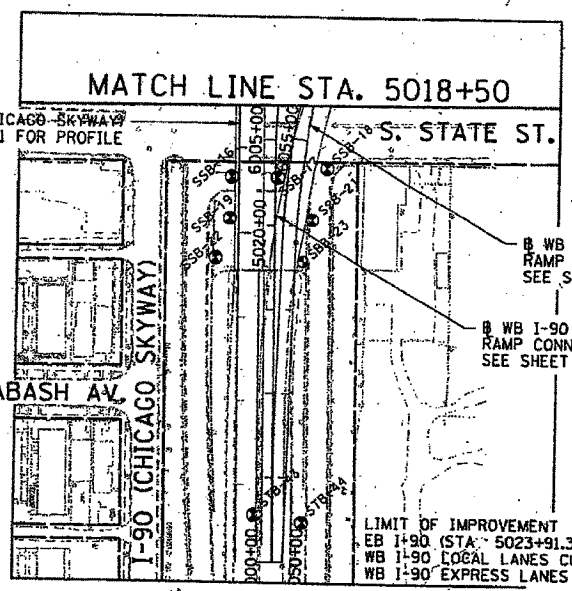
PLAN	DATE
PROJECTED	
PLOTTED	
NOTED	
NO. OF WAY CHECKED	
NO. OF FILE MADE	

PROFILE	DATE
SAWLETS	
GRADES CHECKED	
REVISIONS	
STRUCTURE NOTATIONS	

D:\40468\civil\02-dc\shh\asol\profile\468exh05_11.sht
11/2/2003



- LEGEND FOR BORINGS**
- HML : HIGH MAST LIGHT POLE
 - RED : RETAINING WALL, EAST SIDE, WALL-O
 - REW : RETAINING WALL, EAST SIDE, WALL-W
 - RWC : RETAINING WALL, WEST SIDE, WALL-C
 - RWL : RETAINING WALL, WEST SIDE, WALL-L
 - SIA : RETAINING WALL, INTERCHANGE, WALL IA
 - SSN : STORM SEWER, NORTHBOUND
 - SSS : STORM SEWER, SOUTHBOUND
 - SSJ : STORM SEWER, JACKING
 - STB : SIGN STRUCTURE
 - SSB : BRIDGE
 - SEW, SWW : BRIDGE
 - SGN : SUBGRADE, NORTHBOUND
 - SGS : SUBGRADE, SOUTHBOUND
 - BRN : 47th ST. RAMP
 - C : CORING



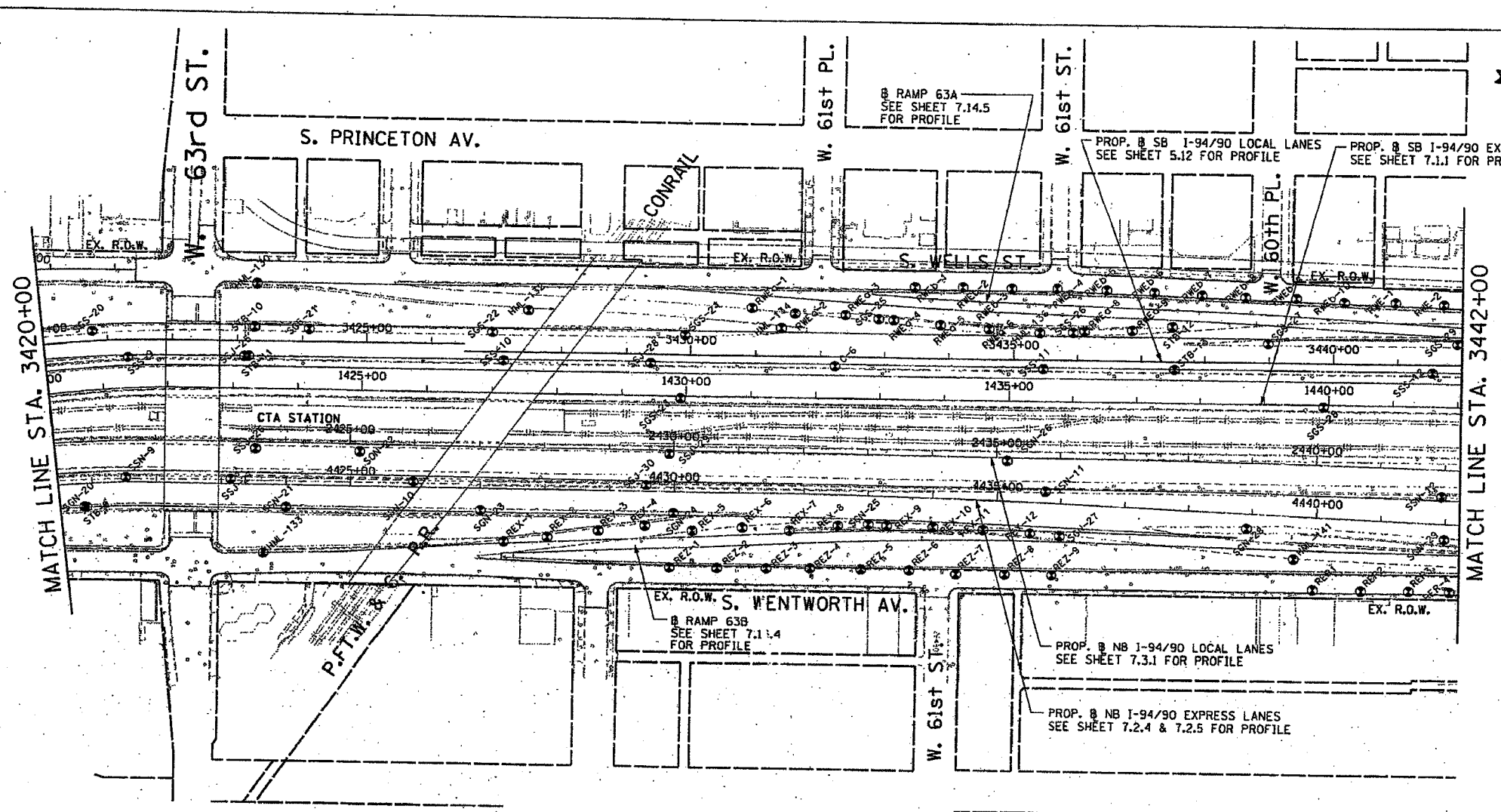
CTE 40256

DAN RYAN AND SKYWAY INTERCHANGE PLAN

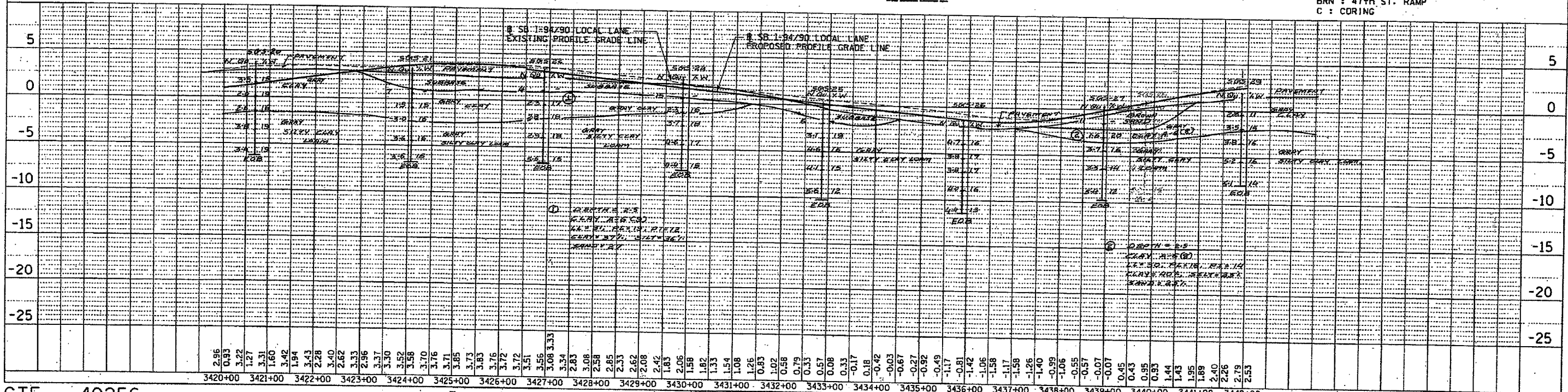
1"=100'

EXHIBIT NO. 5.11

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	*	COOK	239	239
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
* - PENDING I.D.O.T. PROGRAMMING				



- LEGEND FOR BORINGS**
- ⊙ HML : HIGH MAST LIGHT POLE
 - RED : RETAINING WALL, EAST SIDE, WALL-D
 - REW : RETAINING WALL, EAST SIDE, WALL-W
 - RWC : RETAINING WALL, WEST SIDE, WALL-C
 - RWL : RETAINING WALL, WEST SIDE, WALL-L
 - SIA : RETAINING WALL, INTERCHANGE, WALL IA
 - SSN : STORM SEWER, NORTHBOUND
 - SSS : STORM SEWER, SOUTHBOUND
 - SSJ : STORM SEWER, JACKING
 - STB : SIGN STRUCTURE
 - SSB : BRIDGE
 - SEW.SWW : BRIDGE
 - SGN : SUBGRADE, NORTHBOUND
 - SGS : SUBGRADE, SOUTHBOUND
 - BRN : 47th ST. RAMP
 - C : CORING



CTE 40256 DAN RYAN PLAN AND SB I-94/90 LOCAL LANES PROFILE SCALE: HORIZ. 1"=100' VERT. 1"=5' EXHIBIT NO. 5.12

DATE	
BY	
PLAN	
NOTE BOOK	
NO.	
NO.	
NO.	
NO.	
NO.	
NO.	

DATE	
BY	
PROFILE	
NOTE BOOK	
NO.	
NO.	
NO.	
NO.	
NO.	

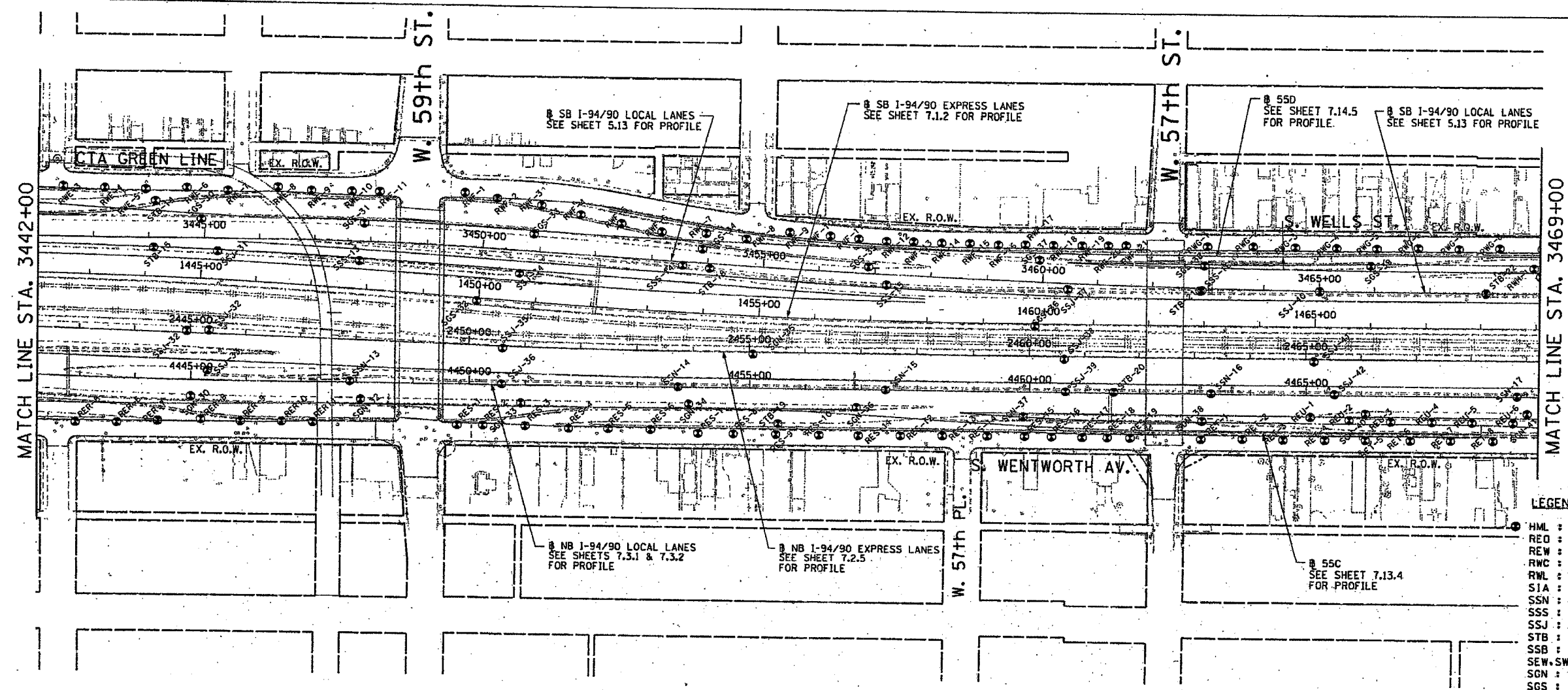
m:\p40468\civil\02-dc\ent\1601\profile\468ent05_12.sht
11/2/2003

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	*	COOK		236
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
* - PENDING I.D.O.T. PROGRAMMING				

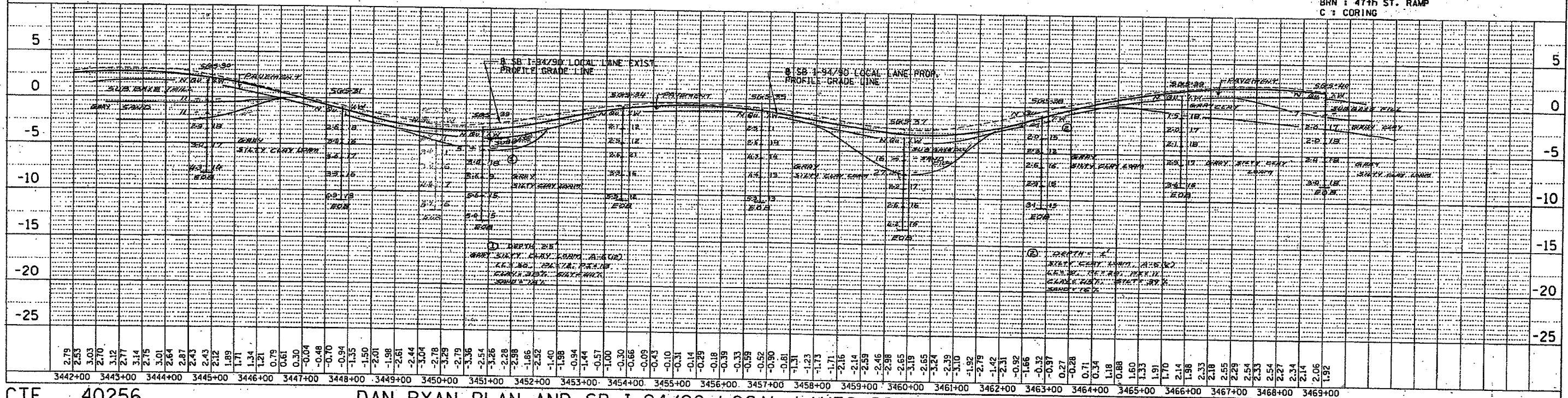


DATE	BY	REVISIONS

DATE	BY	REVISIONS



- LEGEND FOR BORINGS**
- HML : HIGH MAST LIGHT POLE
 - RED : RETAINING WALL, EAST SIDE, WALL-O
 - REW : RETAINING WALL, EAST SIDE, WALL-W
 - RWC : RETAINING WALL, WEST SIDE, WALL-C
 - RWL : RETAINING WALL, WEST SIDE, WALL-L
 - SIA : RETAINING WALL, INTERCHANGE, WALL 1A
 - SSN : STORM SEWER, NORTHBOUND
 - SSS : STORM SEWER, SOUTHBOUND
 - SSJ : STORM SEWER, JACKING
 - STB : SIGN STRUCTURE
 - SSB : BRIDGE
 - SEW,SWW : BRIDGE
 - SGN : SUBGRADE, NORTHBOUND
 - SGS : SUBGRADE, SOUTHBOUND
 - BRN : 47th ST. RAMP
 - C : CORING



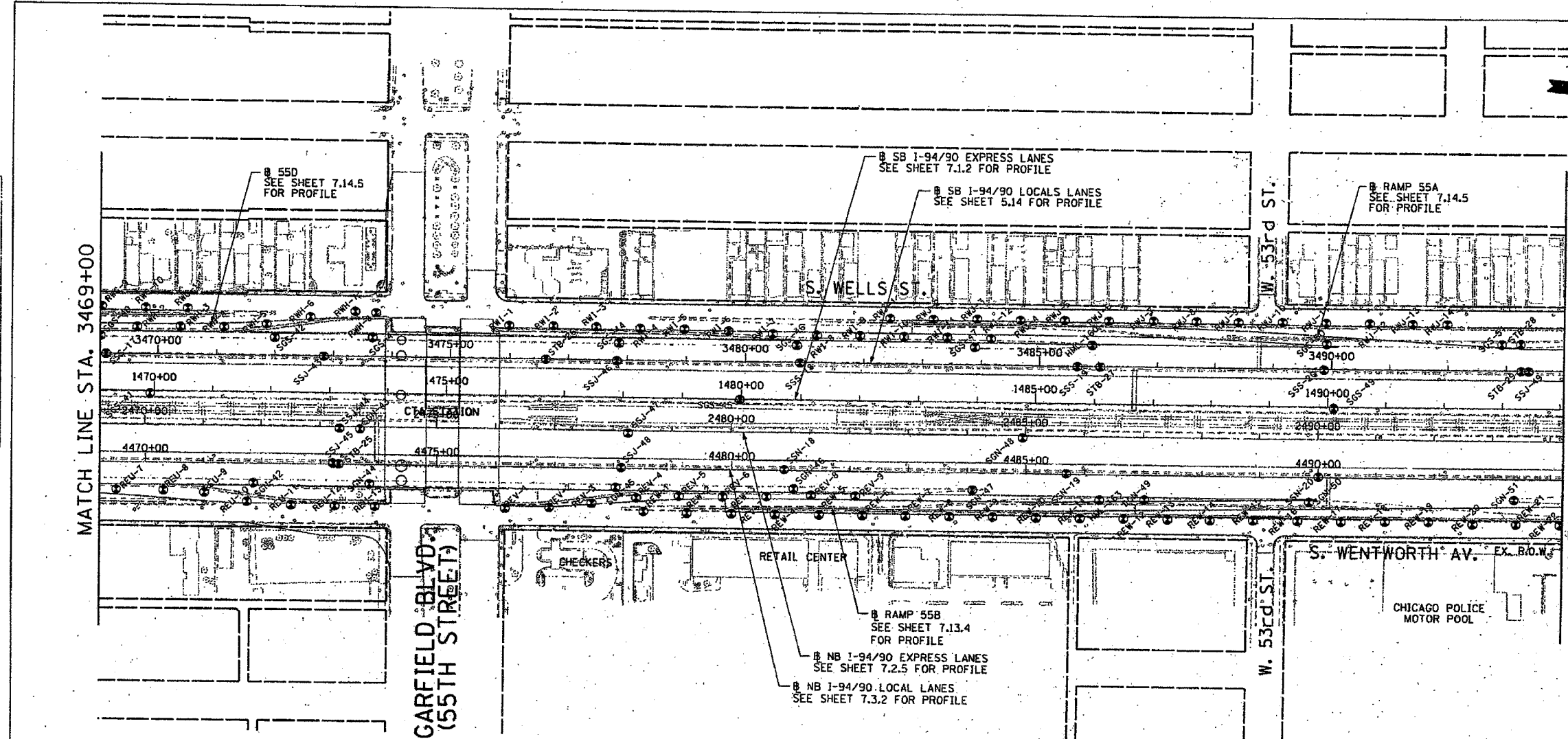
CTE 40256 DAN RYAN PLAN AND SB I-94/90 LOCAL LANES PROFILE

SCALE: HORIZ. 1"=100'
VERT. 1"=5'

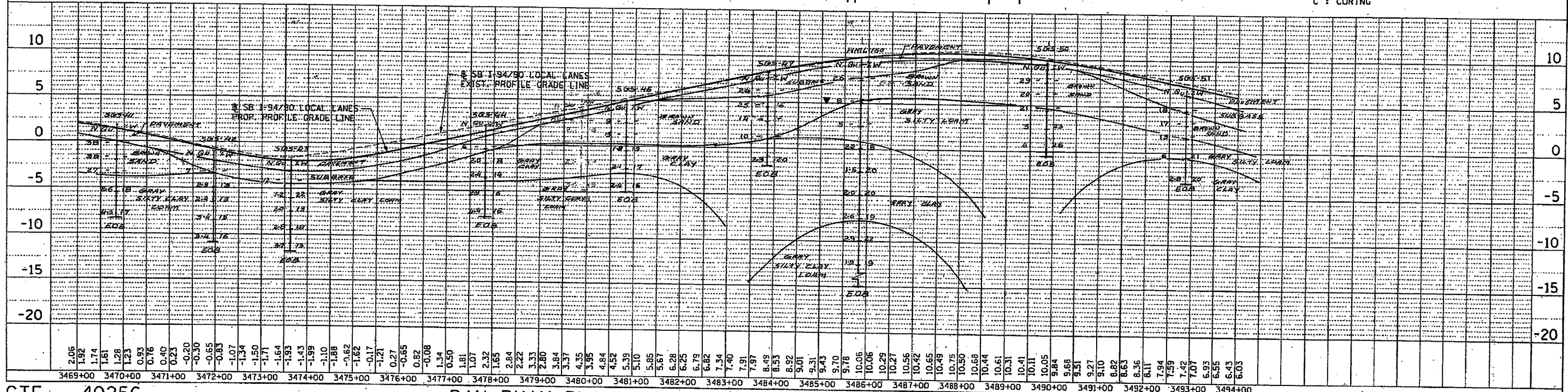
EXHIBIT NO. 5.13

m:\p40468\civ\h\02-dc\sh\soil\profile\468exh05_13.sht
11/2/2003

F.A. I RTE. 94	SECTION *	COUNTY COOK	TOTAL SHEETS 337	SHEET NO. 337
STA. FED. ROAD DIST. NO.		TO STA. ILLINOIS FED. AID PROJECT		
* - PENDING I.D.O.T. PROGRAMMING				



- LEGEND FOR BORINGS**
- HML : HIGH MAST LIGHT POLE
 - RED : RETAINING WALL, EAST SIDE, WALL-O
 - REW : RETAINING WALL, EAST SIDE, WALL-W
 - RWC : RETAINING WALL, WEST SIDE, WALL-C
 - RWL : RETAINING WALL, WEST SIDE, WALL-L
 - SIA : RETAINING WALL, INTERCHANGE, WALL IA
 - SSN : STORM SEWER, NORTHBOUND
 - SSS : STORM SEWER, SOUTHBOUND
 - SSJ : STORM SEWER, JACKING
 - STB : SIGN STRUCTURE
 - SSB : BRIDGE
 - SEW,SWW : BRIDGE
 - SGN : SUBGRADE, NORTHBOUND
 - SGS : SUBGRADE, SOUTHBOUND
 - BRN : 47th ST. RAMP
 - C : CORING



CTE 40256 DAN RYAN PLAN AND SB I-94/90 LOCAL LANES PROFILE SCALE: HORIZ. 1"=100' VERT. 1"=5' EXHIBIT NO. 5.14

PLAN

DATE	BY

REVISIONS

NO.	DESCRIPTION

PROFILE

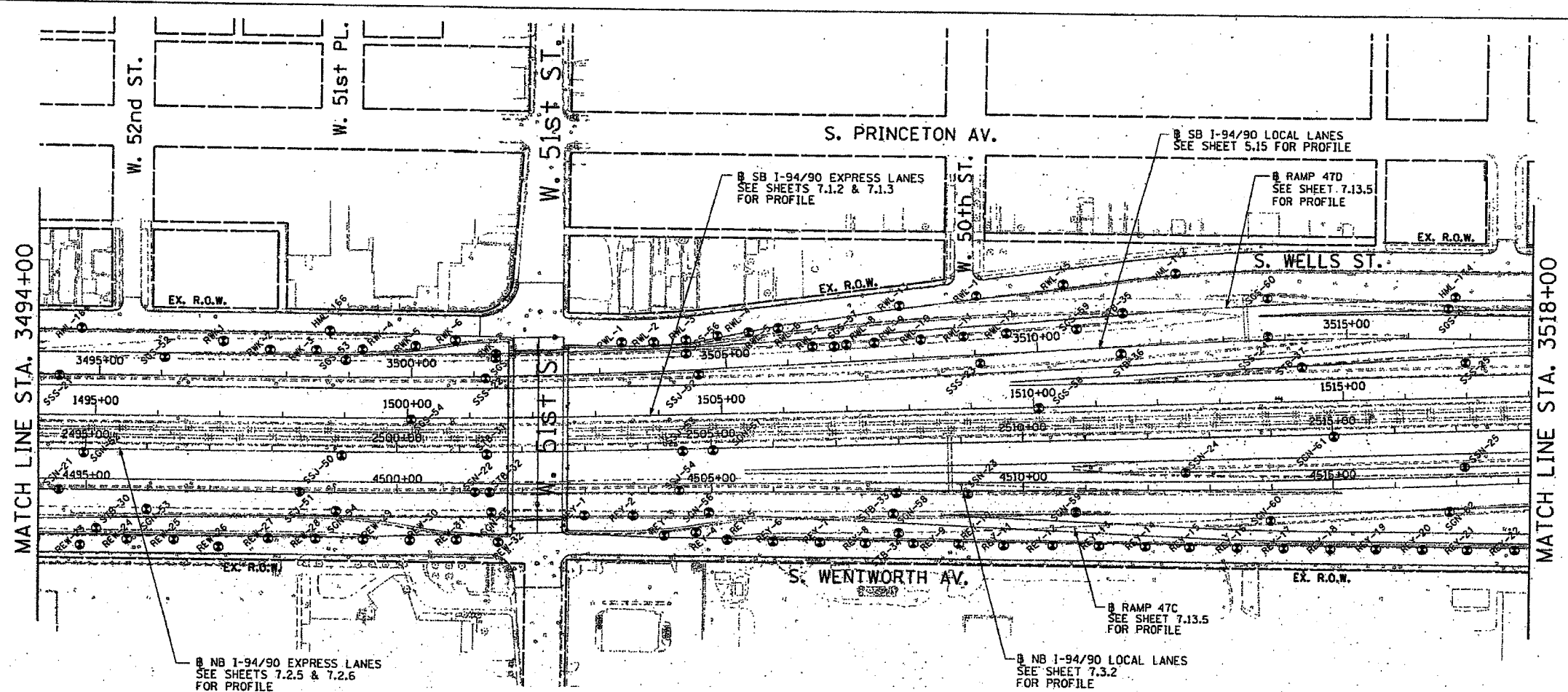
DATE	BY

REVISIONS

NO.	DESCRIPTION

m:\p40468\civil\02-dc\sh\soil\profile\468exh05.rvt
11/2/2003

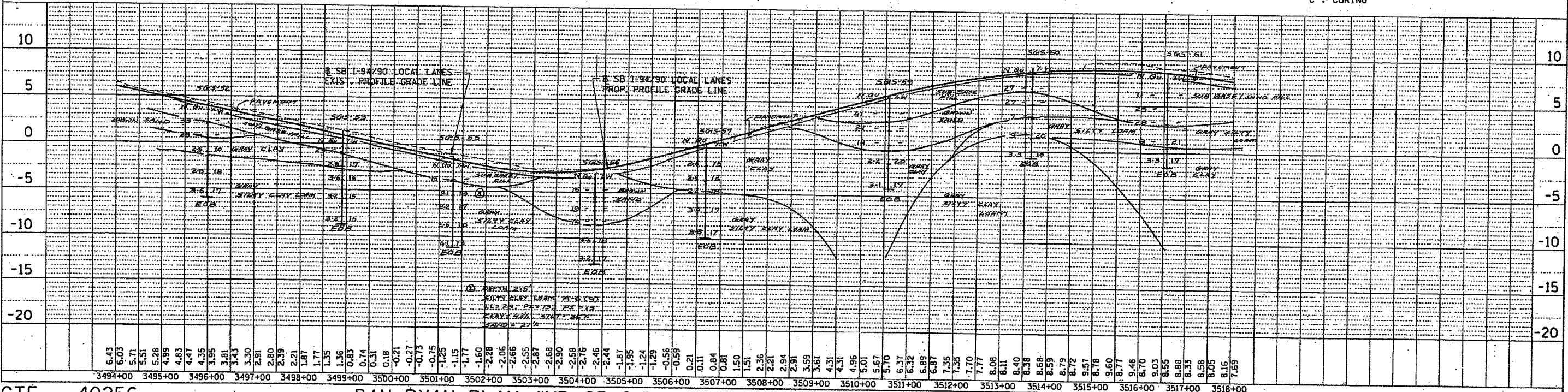
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	*	COOK		238
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
* - PENDING I.D.O.T. PROGRAMMING				



- LEGEND FOR BORINGS**
- ⊙ HML : HIGH MAST LIGHT POLE
 - ⊠ REW : RETAINING WALL, EAST SIDE, WALL-O
 - ⊡ REW : RETAINING WALL, EAST SIDE, WALL-W
 - ⊣ RWC : RETAINING WALL, WEST SIDE, WALL-C
 - ⊞ RWL : RETAINING WALL, WEST SIDE, WALL-L
 - ⊞ SIA : RETAINING WALL, INTERCHANGE, WALL IA
 - ⊞ SSN : STORM SEWER, NORTHBOUND
 - ⊞ SSS : STORM SEWER, SOUTHBOUND
 - ⊞ SSJ : STORM SEWER, JACKING
 - ⊞ STB : SIGN STRUCTURE
 - ⊞ SSB : BRIDGE
 - ⊞ SEW, SWW : BRIDGE
 - ⊞ SGN : SUBGRADE, NORTHBOUND
 - ⊞ SGS : SUBGRADE, SOUTHBOUND
 - ⊞ BRN : 47th ST. RAMP
 - C : CORING

DATE	
BY	
REVISION	
NO.	
DATE	
BY	
REVISION	
NO.	

DATE	
BY	
REVISION	
NO.	
DATE	
BY	
REVISION	
NO.	



CTE 40256

DAN RYAN PLAN AND SB I-94/90 LOCAL LANES PROFILE

SCALE: HORIZ. 1"=100'
VERT. 1"=5'

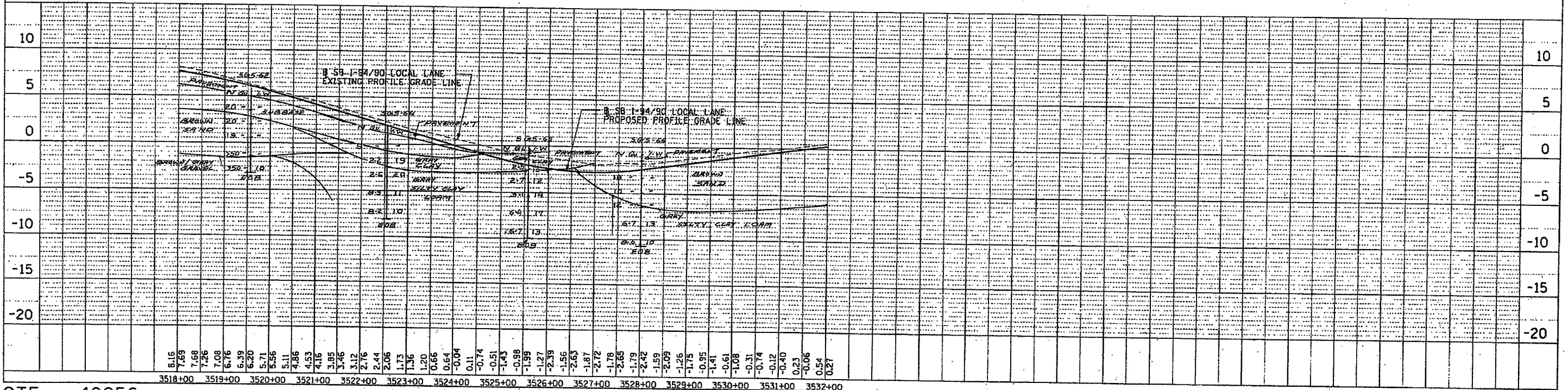
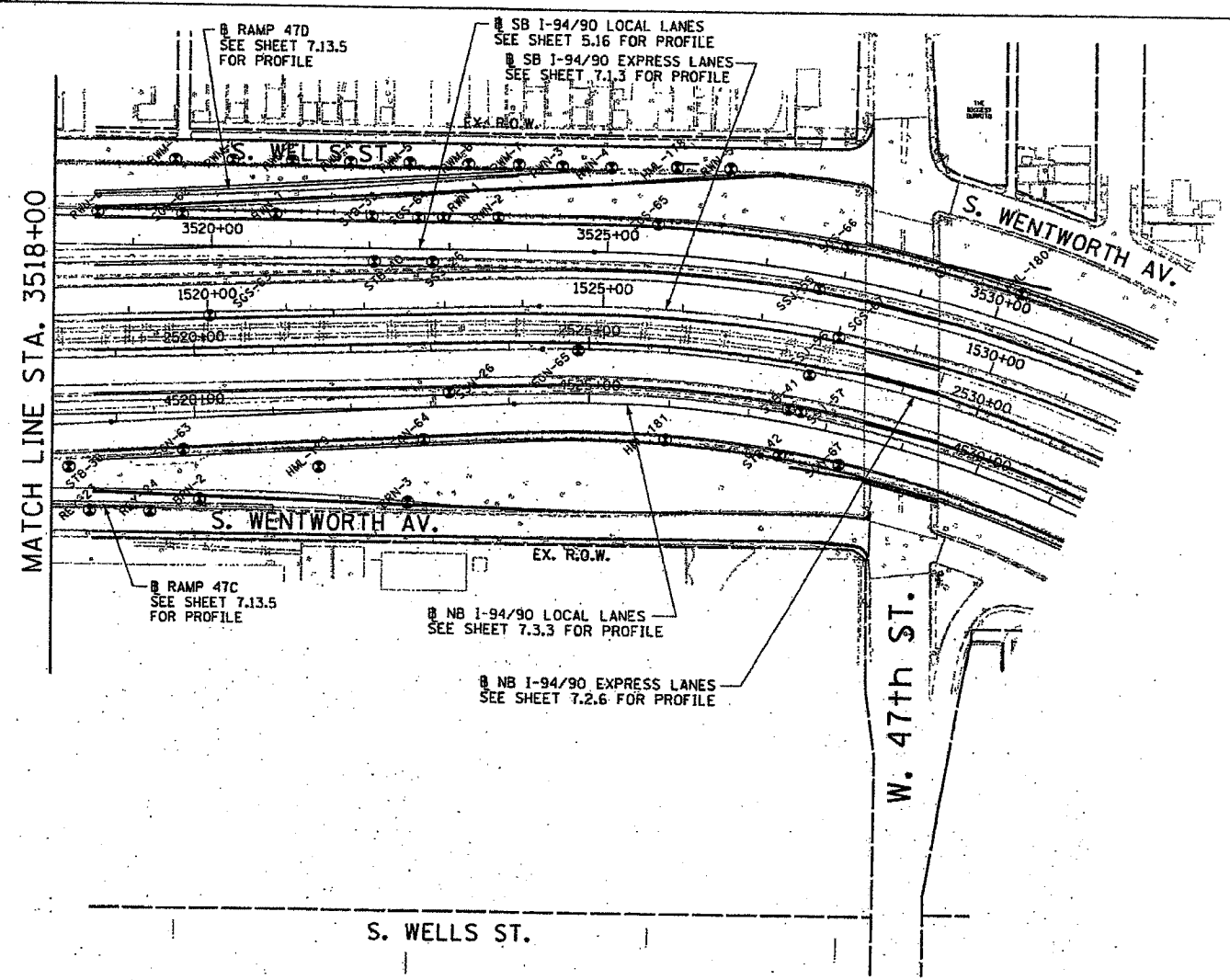
EXHIBIT NO. 5.15

M:\140469\civil\02-dc\shh\coll\profile\469exh05_15.shx

PLAN	DATE

PROFILE	DATE

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	*	COOK		239
STA.	TO STA.			
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
* - PENDING I.D.O.T. PROGRAMMING				



m:\p\40468\civil\02-dc\sh1\soil\profile\468exh05_1b.dwt
11/27/2003

CTE 40256

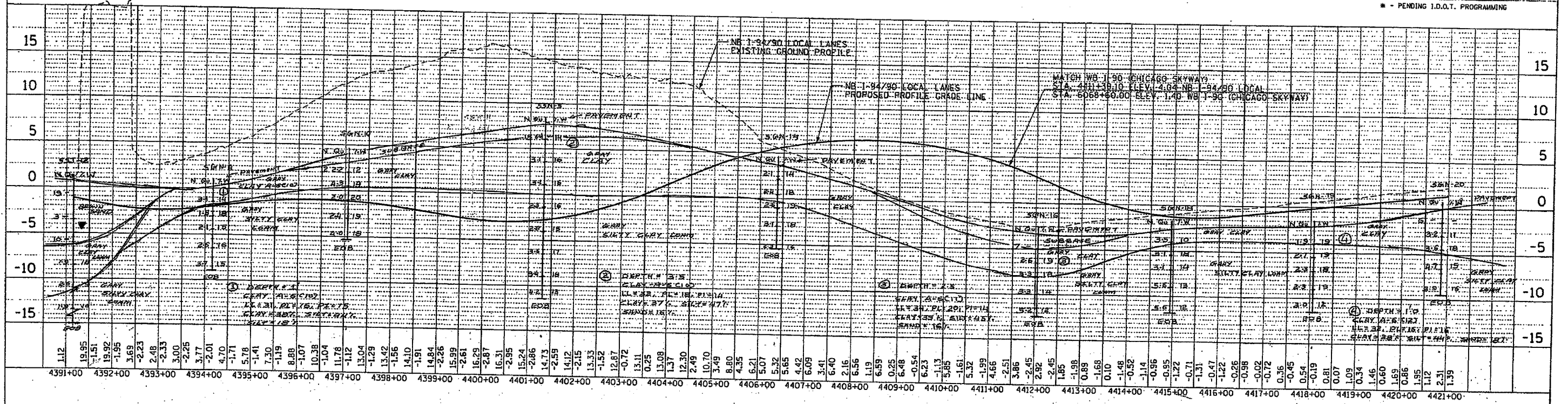
DAN RYAN PLAN AND SB I-94/90 LOCAL LANES PROFILE

SCALE: HORIZ. 1"=100'
VERT. 1"=5'

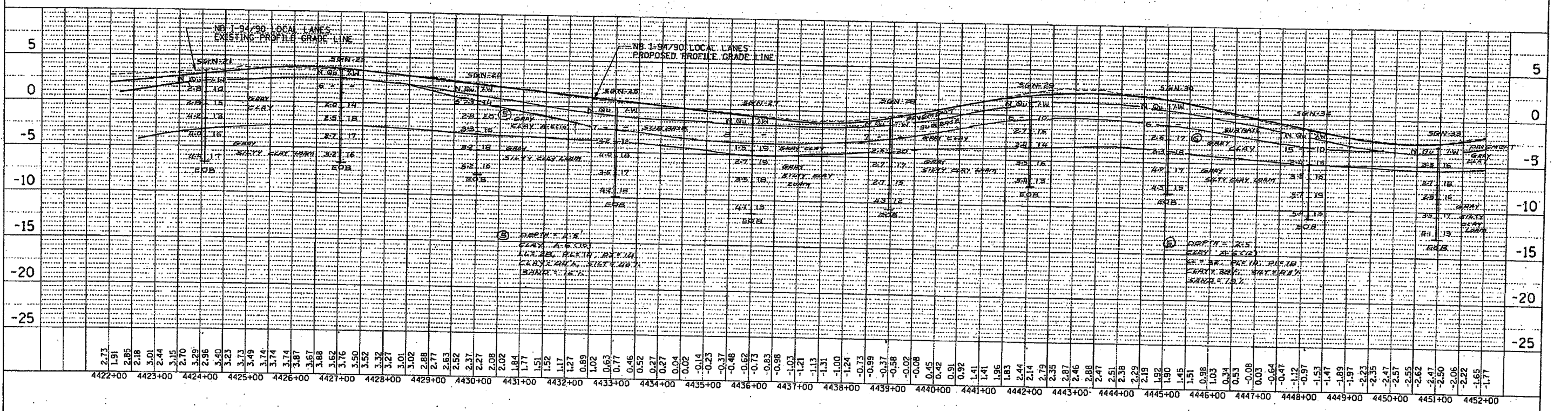
EXHIBIT NO. 5.16

F.A. I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	*	COOK		1740
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
* - PENDING I.O.O.T. PROGRAMMING				

PLAN	DATE	BY
DATE		
BY		
NOTE BOOK		
NO. OF PAGES		
FILE NAME		



PROFILE	DATE	BY
DATE		
BY		
NOTE BOOK		
NO. OF PAGES		
FILE NAME		



m:\p0468\civil\02-dc\shy\soil\profile\468ex07_03_01.sht
 11/27/2003

CTE 40256

NB I-94 AND I-94/90 LOCAL LANES PROFILE (STA. 4392+00 TO STA. 4452+00)

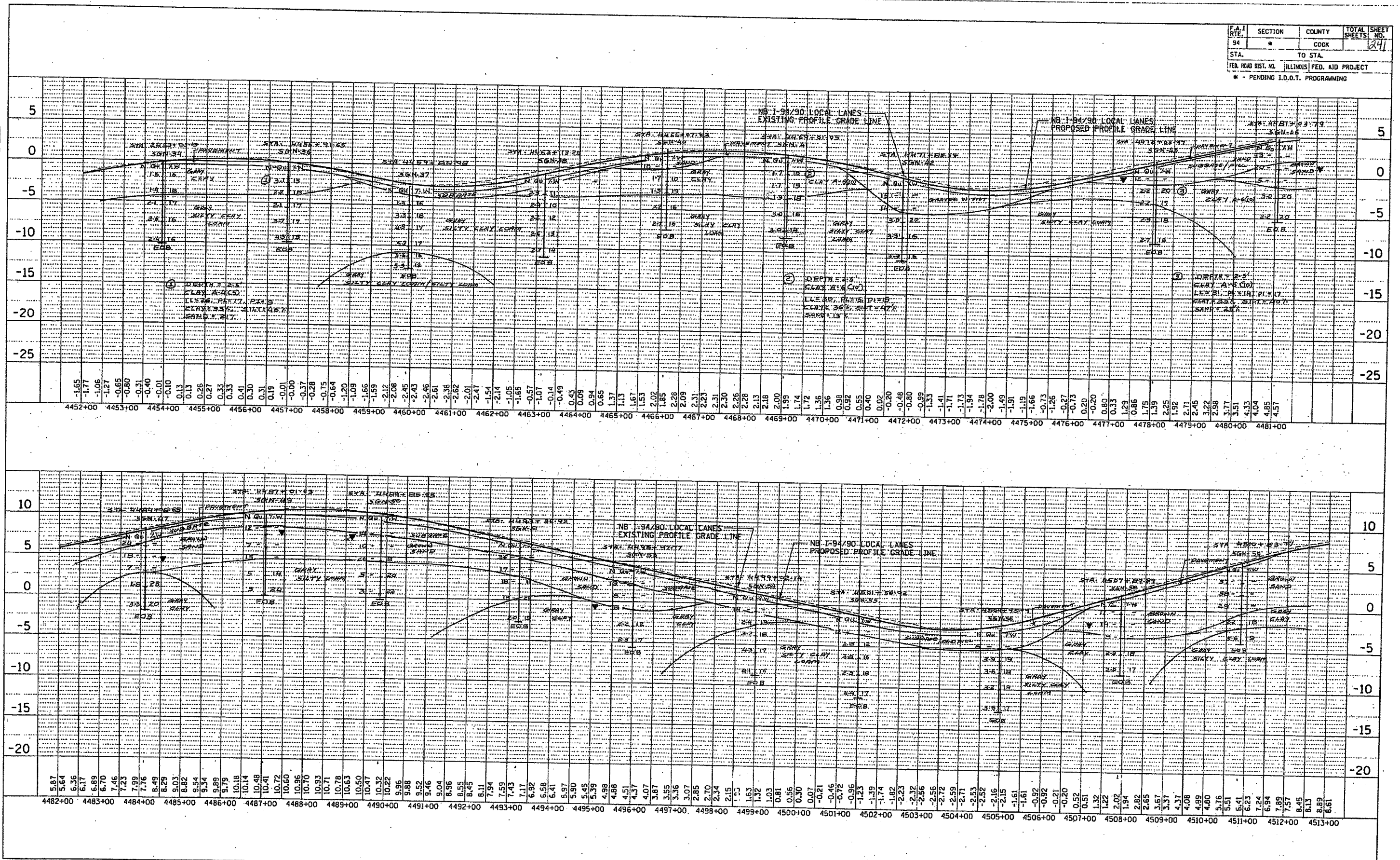
SCALE: HORIZ. 1"=100'
VERT. 1"=5'

EXHIBIT NO. 7.3.1

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	#	COOK	241	
STA.	TO STA.			
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
* - PENDING I.D.O.T. PROGRAMMING				

DATE	BY
REVISION	NO.
PROFILE	
NOTE BOOK	
DATE	
NO.	

DATE	BY
REVISION	NO.
PROFILE	
NOTE BOOK	
DATE	
NO.	



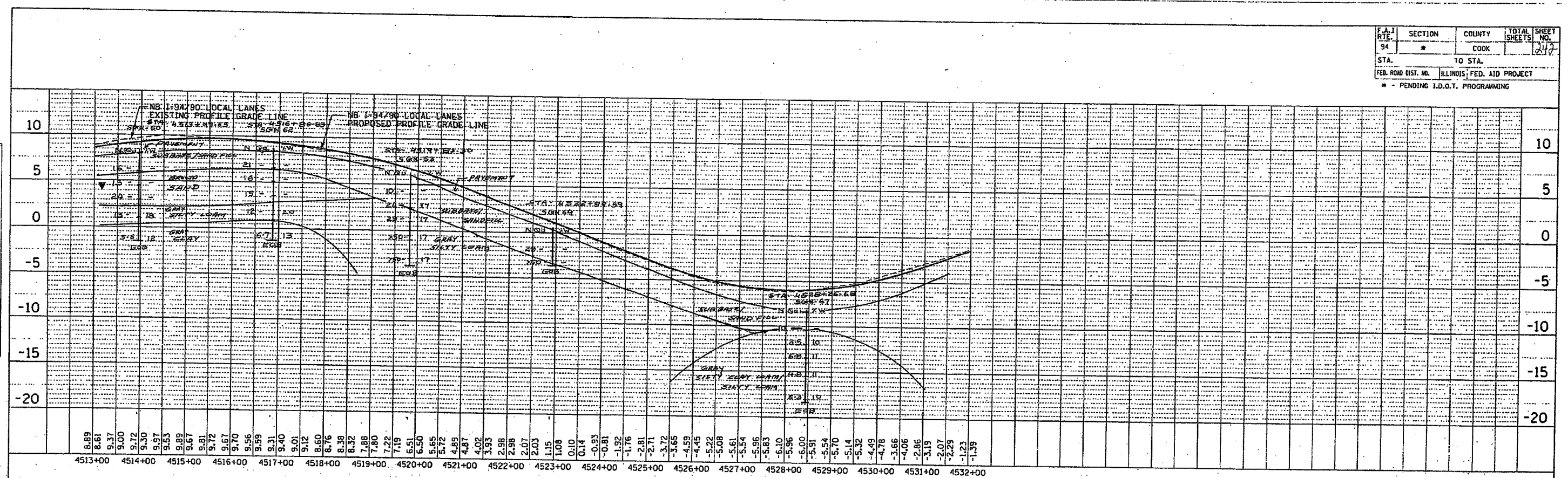
m:\p-40468\civil\02-do\ent\soil\profile\468ex07_03_02.sht
11/27/2003

CTE 40256 NB I-94/90 LOCAL LANES PROFILE (STA. 4452+00 TO STA. 4512+00) SCALE: HORIZ. 1"=100' VERT. 1"=5' EXHIBIT NO. 7.3.2

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	*	COOK		217
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
* - PENDING I.D.O.T. PROGRAMMING				

PLAN	DATE	BY
REVISION		
NOTE BOOK		
NO.		

PROFILE	DATE	BY
REVISION		
NOTE BOOK		
NO.		

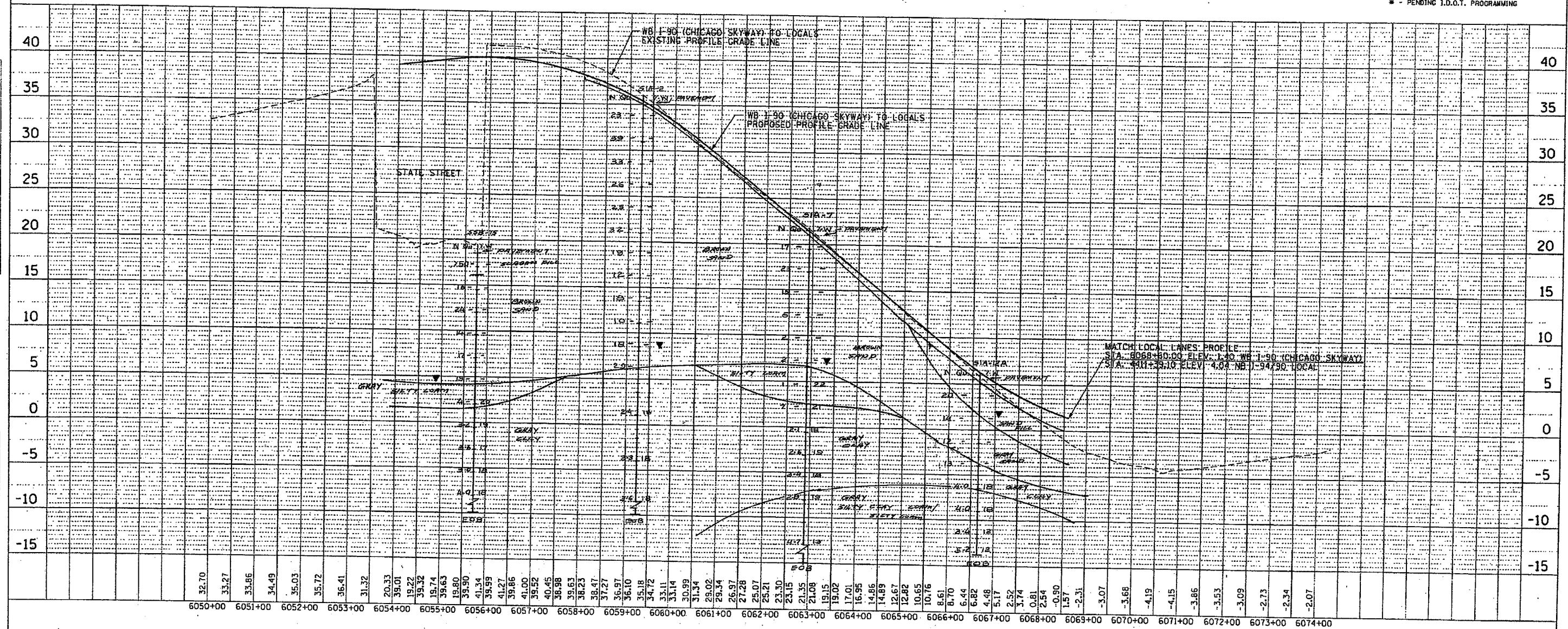


CTE 40256 NB I-94/90 LOCAL LANES PROFILE (STA. 4513+00 TO STA. 4532+00)

SCALE: HORIZ. 1"=100'
VERT. 1"=5'
EXHIBIT NO. 7.3.3

m:\p40468\civil\02-dc\sh\soil\profile\468exh07_03_03.sht
1/12/2003

F.A.I. RITE	SECTION	COUNTY	TOTAL SHEETS
94	*	COOK	243
STA. TO STA.		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	
* - PENDING I.D.O.T. PROGRAMMING			



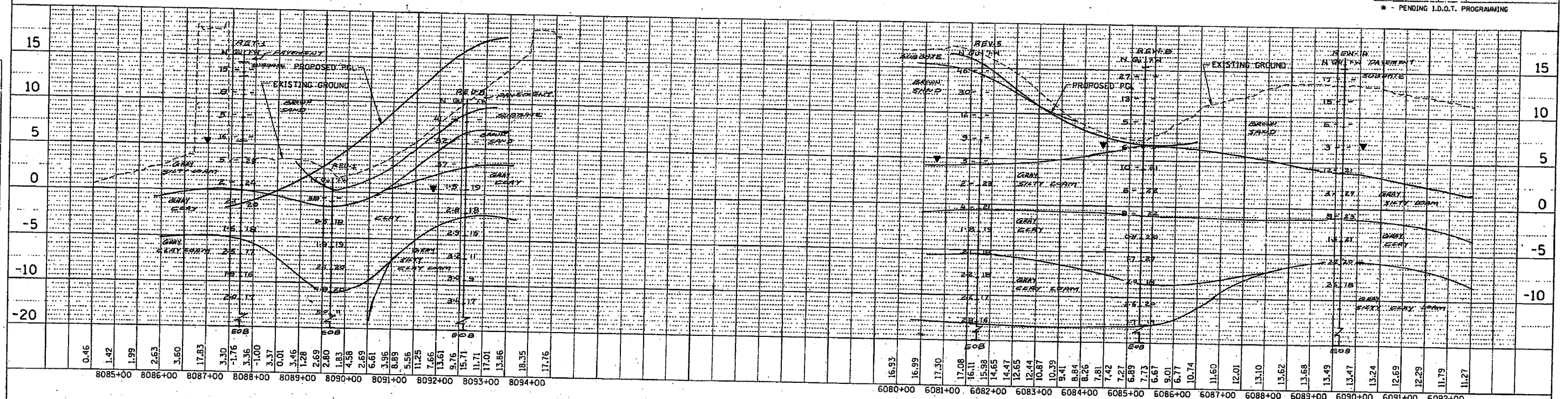
PLAN	DATE
REVISION	
DATE	
BY	
DATE	

PROFILE	DATE
REVISION	
DATE	
BY	
DATE	

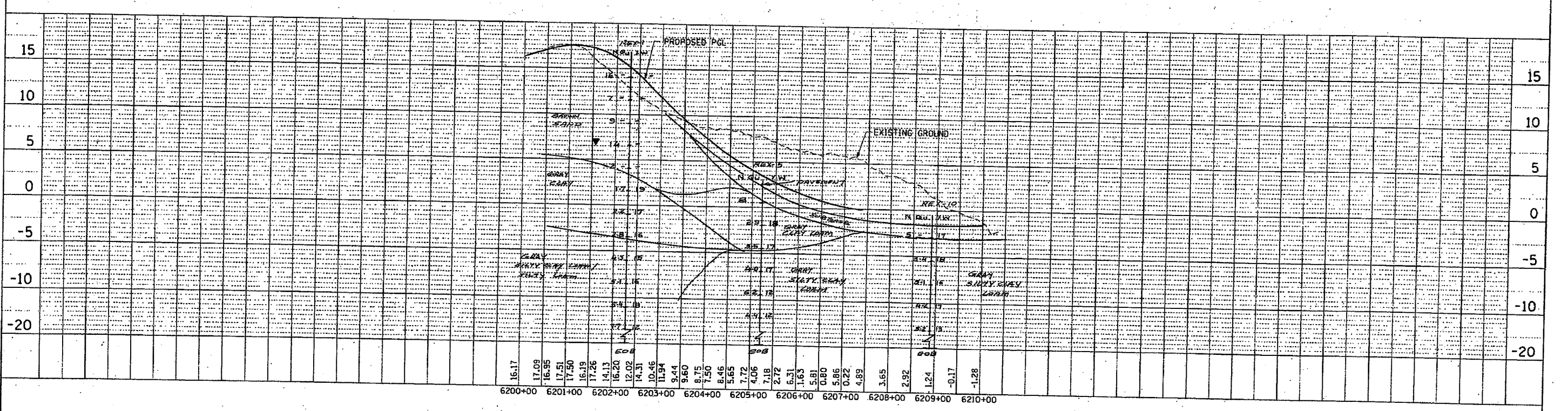
I:\p\40458\civil\02-dc\shht\soil\profile\4868xh07_10_01.sht
 11/12/2005

F.A.J. RYE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	*	COOK		244
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
* - PENDING I.D.O.T. PROGRAMMING				

DATE	
BY	
PROJECT	
PLAN	
NOTE BOOK	
NO.	
FILE NAME	



DATE	
BY	
PROJECT	
PROF FILE	
NOTE BOOK	
NO.	
STRUCTURE IDENTIFICATION	



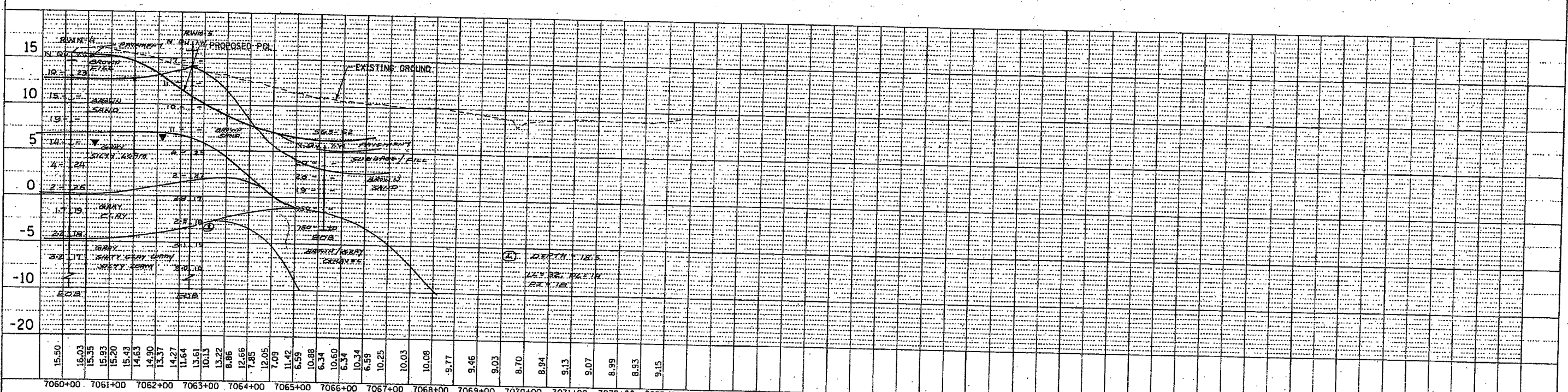
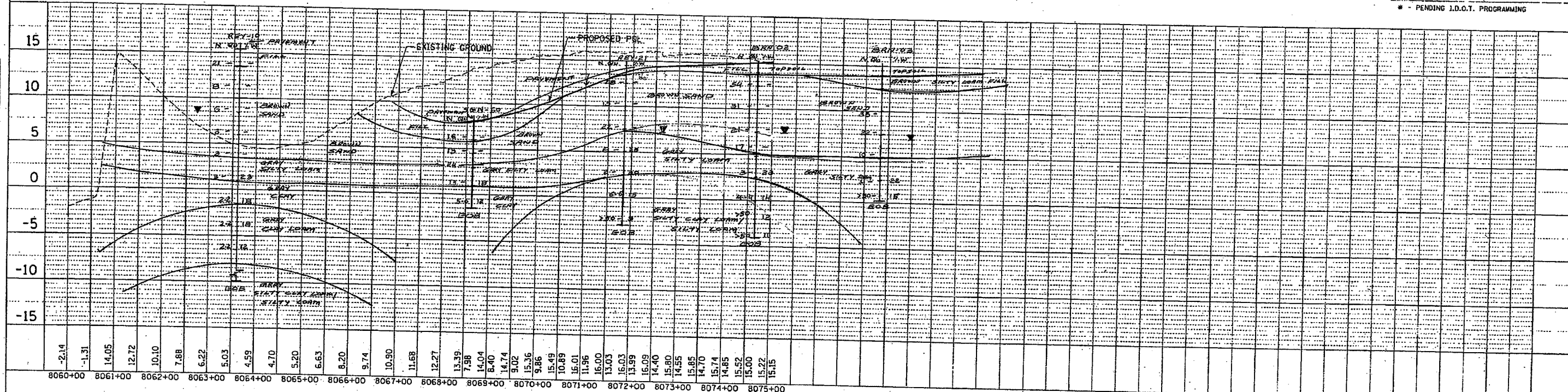
P:\2003\civil\02-dc\hnt\soil\profile\468exh07.13.04.dwt
 12/2/2003

CTE 40256

NB RAMP PROFILES

SCALE: HORIZ. 1"=100'
 VERT. 1"=5'
 EXHIBIT NO. 7.13.4

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	*	COOK		249
STA. TO STA.		ILLINOIS FED. AID PROJECT		
* - PENDING I.D.O.T. PROGRAMMING				



DATE	BY

PLAN
 REVISION
 DATE
 DRAWN BY
 CHECKED BY
 IN CHARGE
 NO.

DATE	BY

PROFILE
 REVISION
 DATE
 DRAWN BY
 CHECKED BY
 IN CHARGE
 NO.

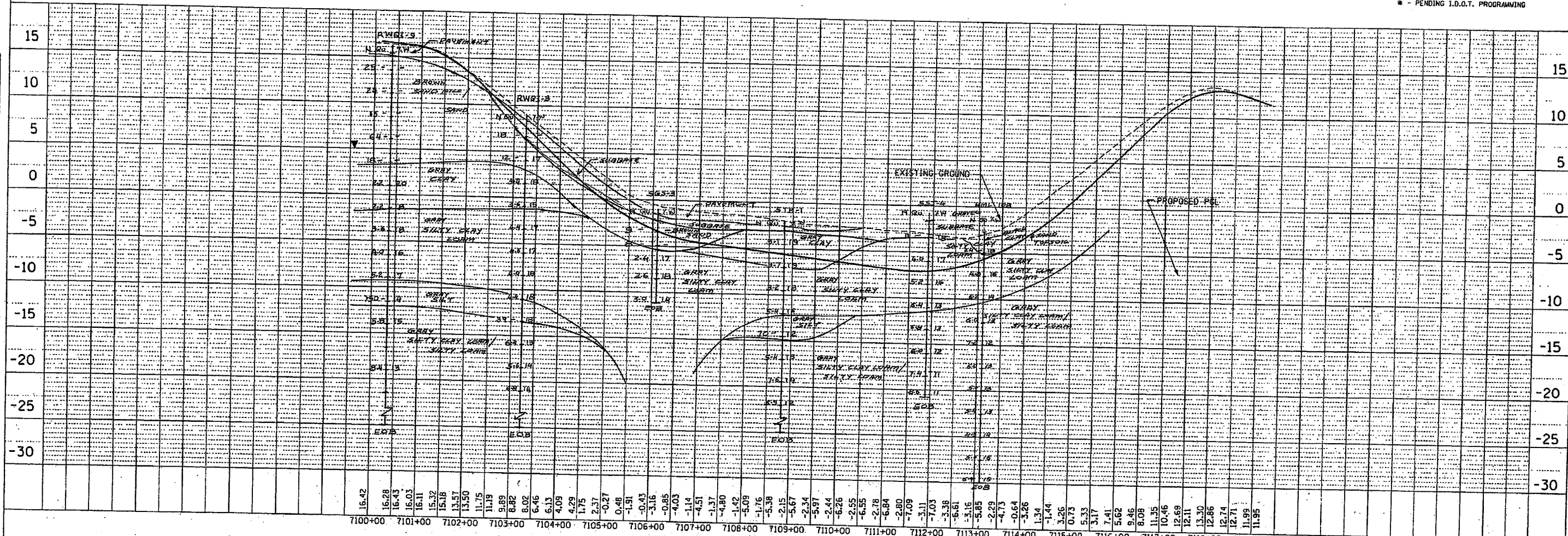
I:\projects\0466\civil\02-dc\sh\soil\profile\468ex07.13.05.sht
 1/12/2005

CTE 40256

NB AND SB RAMP PROFILES

SCALE: HORIZ. 1"=100'
 VERT. 1"=5'
 EXHIBIT NO. 7.13.5

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	*	COOK		276
STA.	TO STA.			
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
* - PENDING I.D.O.T. PROGRAMMING				



RAMP 67D71A - SB COLLECTOR - DISTRIBUTOR ROAD BETWEEN 71ST AND 67TH STREETS

PLAN	DATE
REVISION	BY
PLotted	
Checked	
Approved	
File Name	

PROFILE	DATE
Surveyed	
Checked	
Approved	
File Name	

\\p40468\civil\02-dc\sh\soil\p\offile\468exh07_14_04.dwt
11/2/2003

CTE 40256

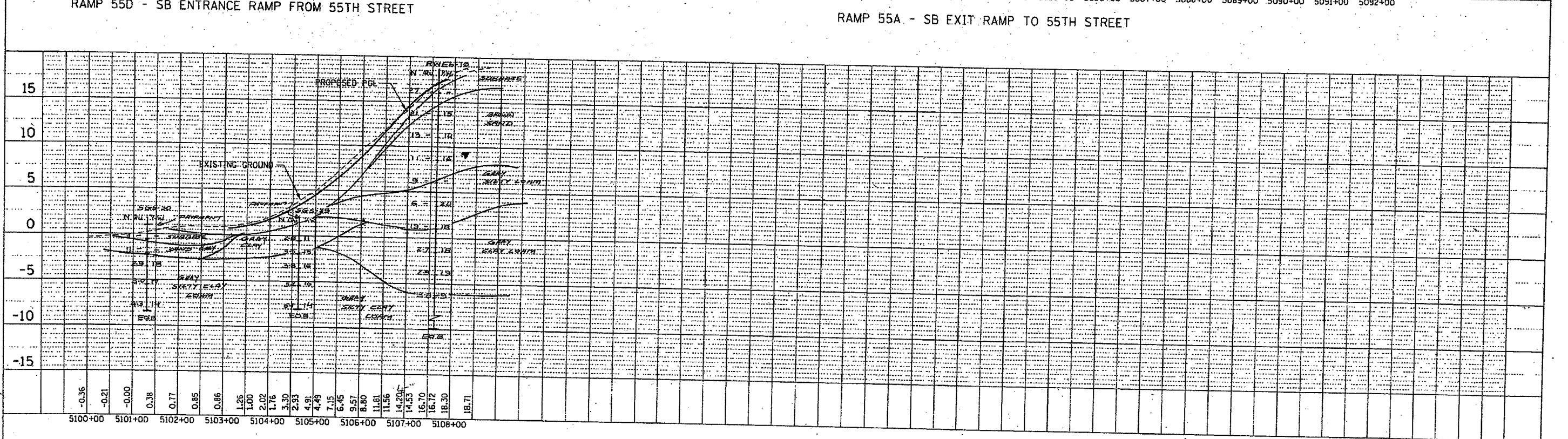
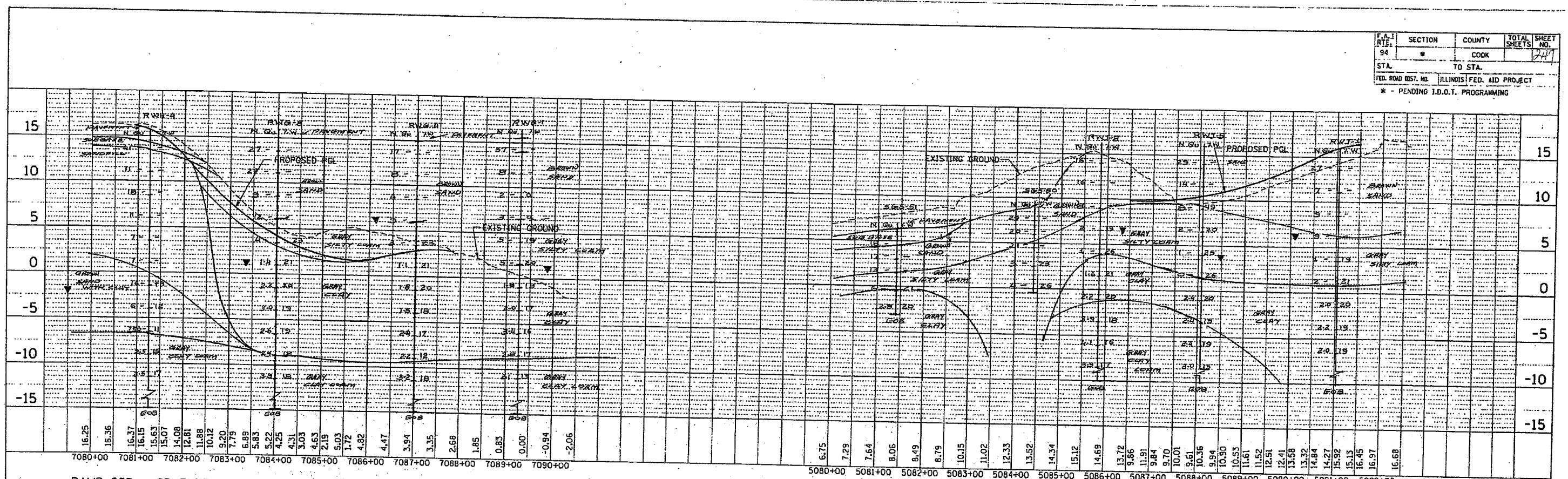
SB RAMP PROFILES

SCALE: HORIZ. 1"=100'
VERT. 1"=5' EXHIBIT NO. 7.14.4

F.A.1	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	#	COOK		247
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
* - PENDING I.D.O.T. PROGRAMMING				

PLAN	DATE
REVISION	DATE
BY	DATE
CHECKED	DATE
IN CHARGE	DATE
FILE NO.	
PROJECT NO.	
DATE	

PROFILE	DATE
REVISION	DATE
BY	DATE
CHECKED	DATE
IN CHARGE	DATE
FILE NO.	
PROJECT NO.	
DATE	



m:\p\40468\civil\02-dc\sh\soil\profile\468ex107_14_08.sht
 11/27/2003

CTE 40256

SB RAMP PROFILES

SCALE: HORIZ. 1"=100'
 VERT. 1"=5'
 EXHIBIT NO. 7.14.5