

F.A.I. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	COOK	312	10
STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	
60A62		• (1919.15, 2021-922 PT1 & PT2) R-1	

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	QUANTITY	90% FEDERAL / 10% STATE																		
				URBAN ROADWAY	RETAINING WALL		BRIDGE		SIGNING	SAFETY	LIGHTING	SURVEILLANCE	COOT LIGHTING									
					016-W923	016-W931	STR NO 016-0142	STR NO 016-1148						Y000	Y007	Y007	SFTY-2A	SFTY-2A	Y002-1C	SFTY-3N	Y030-1E	Y032-1F
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	42,408	42,408																		
70300530	PAVEMENT MARKING TAPE, TYPE III 5"	FOOT	7,213	7,213																		
70300550	PAVEMENT MARKING TAPE, TYPE III 8"	FOOT	11,653	11,653																		
70300560	PAVEMENT MARKING TAPE, TYPE III 12"	FOOT	1,563	1,563																		
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	30,530	30,530																		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	5,580	5,580																		
72000100	SIGN PANEL-TYPE 1	SQ FT	102.5							102.5												
72000200	SIGN PANEL-TYPE 2	SQ FT	112.6							112.6												
72000300	SIGN PANEL - TYPE 3	SQ FT	871							871												
72400200	REMOVE SIGN PANEL ASSEMBLY-TYPE B	EACH	4							4												
72400330	REMOVE SIGN PANEL-TYPE 3	SQ FT	226							226												
72700100	STRUCTURAL STEEL SIGN SUPPORT - BREAKAWAY	POUND	652							652												
72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	90.5							90.5												
73000100	WOOD SIGN SUPPORT	FOOT	98							98												
73100100	BASE FOR TELESCOPING STEEL SIGN SUPPORT	EACH	9							9												
73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	64							64												
73300300	OVERHEAD SIGN STRUCTURE - SPAN,TYPE III-A (5'-0" X 7'-0")	FOOT	66							66												
73302210	OVERHEAD SIGN STRUCTURE -CANTILEVER, TYPE III-C-A(36" X 7'-0")	FOOT	32.25							32.25												
73304000	OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED	FOOT	16							16												
73305000	OVERHEAD SIGN STRUCTURE WALKWAY	FOOT	107							107												
73400100	CONCRETE FOUNDATIONS	CU YD	1.4							1.4												
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	50.2							50.2												
73600200	REMOVE OVERHEAD SIGN STRUCTURE - CANTILEVER	EACH	3							3												
73700100	REMOVE GROUND-MOUNTED SIGN SUPPORT	EACH	2							2												
73700200	REMOVE CONCRETE FOUNDATION - GROUND MOUNT	EACH	2							2												
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	3							3												
* 78008200	POLYUREA PAVEMENT MARKING TYPE I - LETTERS & SYMBOLS	SQ FT	199.7	199.7																		
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	39,645	39,645																		
* 78008220	POLYUREA PAVEMENT MARKING TYPE I - LINE 5"	FOOT	11,612	11,612																		
* 78008230	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	475	475																		

* DENOTES SPECIALTY ITEMS

REVISIONS	
NAME	DATE

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

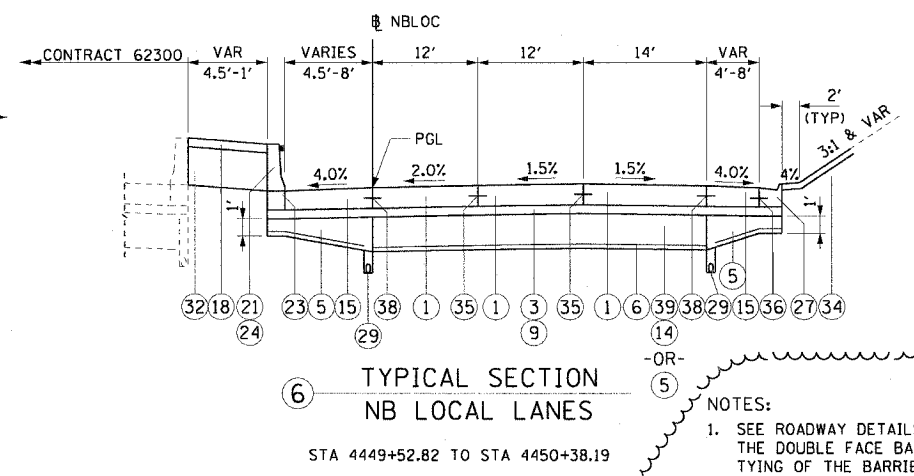
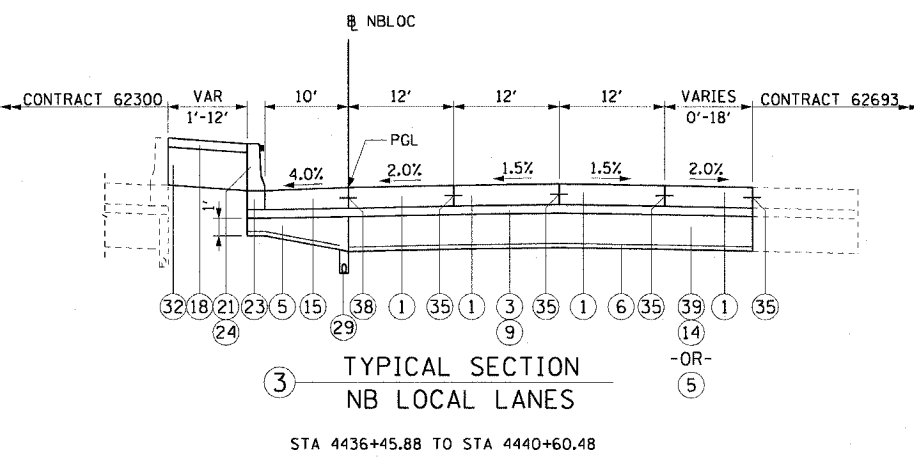
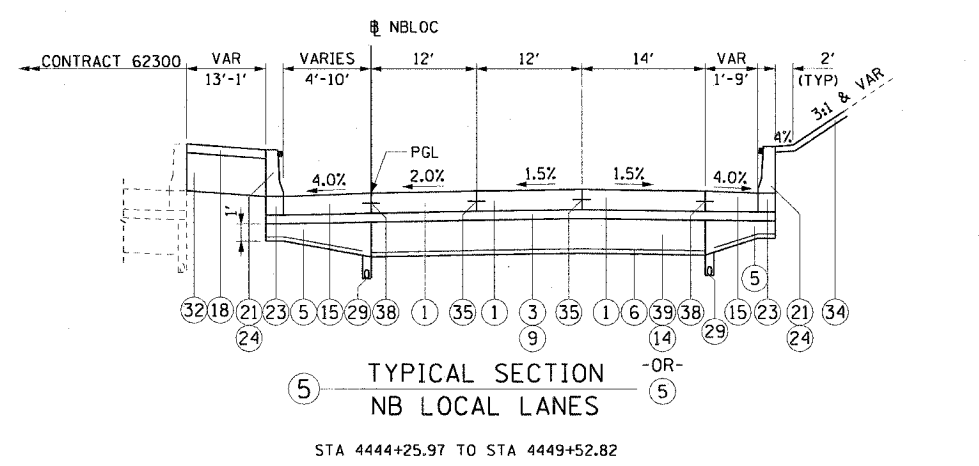
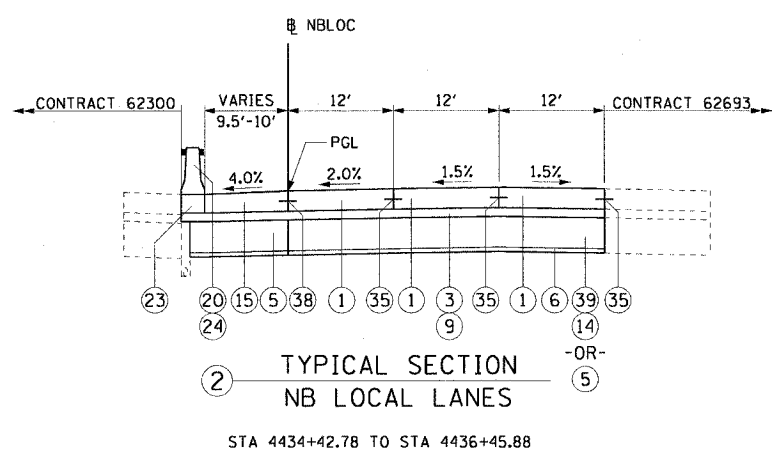
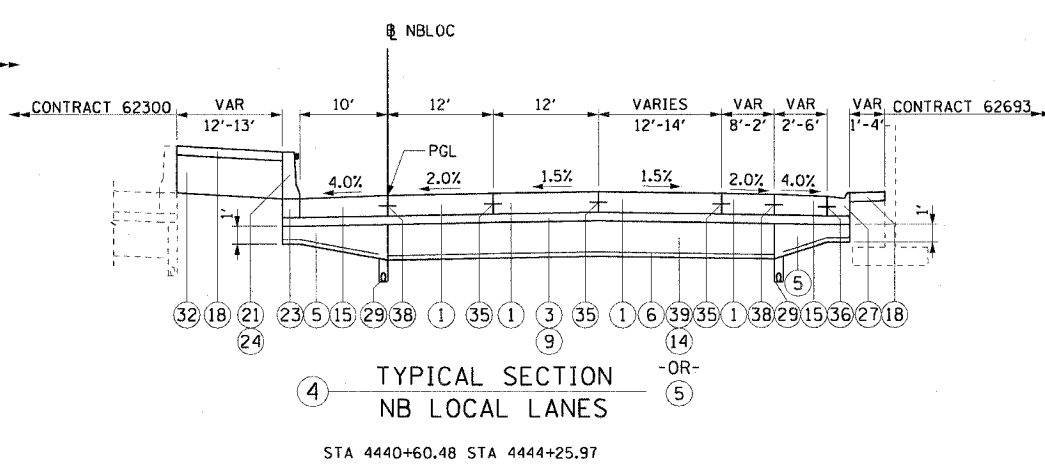
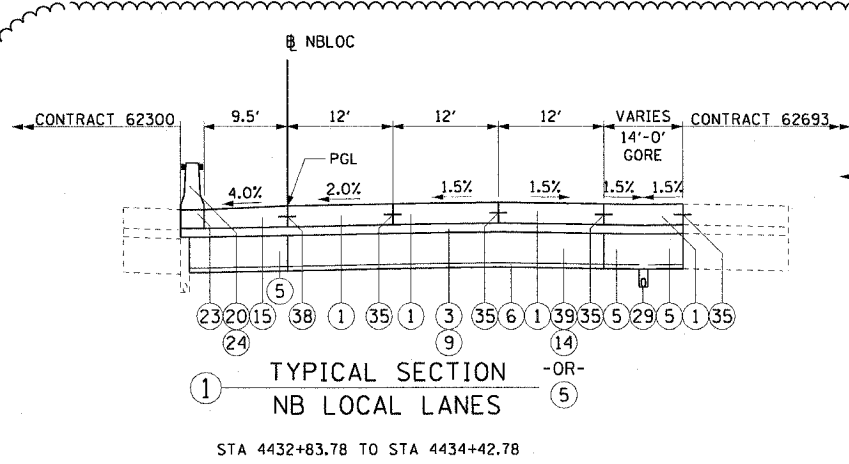
SUMMARY OF QUANTITIES

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

CTE | AECOM

Rev. 8-21-06 S00-4

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PROPOSED LEGEND:

- 1 CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 14" AND PAVEMENT REINFORCEMENT 14"
- 3 BITUMINOUS STABILIZED SUB-BASE, 4 1/2"
- 5 SUB-BASE GRANULAR MATERIAL, TYPE B 24"
- 6 GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- 9 BITUMINOUS MATERIALS (PRIME COAT)
- 14 EXCAVATE AND PLACE EXISTING GRANULAR MATERIAL
- 15 PORTLAND CEMENT CONCRETE SHOULDERS 14" & VARIES
- 18 CONCRETE MEDIAN SURFACE, 6" (SPECIAL)
- 20 CONCRETE BARRIER, DOUBLE FACE, 32" HEIGHT
- 21 CONCRETE BARRIER, SINGLE FACE, 32" HEIGHT
- 23 BARRIER BASE
- 24 BARRIER WALL MARKERS, TYPE C (80' C-C)
- 26 COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.24
- 27 COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.24
- 28 COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.48 (MODIFIED)
- 29 PIPE UNDERDRAINS 6"
- 30 RETAINING WALL
- 31 MODIFIED EXISTING RETAINING WALL
- 32 SAND BACKFILL
- 33 GUARDRAIL
- 34 TOPSOIL FURNISH AND PLACE / SEEDING (SEE LANDSCAPING PLANS FOR DETAILS)
- 35 LONGITUDINAL SAWED OR CONSTRUCTION JOINT. FOR LONGITUDINAL SAWED JOINT, POUR IN PLACE NO. 6 DEFORMED EPOXY TIE BARS 30" LONG AT 30" C-C. FOR LONGITUDINAL CONSTRUCTION JOINT, DRILL AND GROUT NO. 8 DEFORMED EPOXY TIE BARS 24" LONG AT 24" C-C. (SHALL BE INCLUDED IN THE COST OF CONTINUOUSLY REINFORCED PCC PAVEMENT 14")
- 36 LONGITUDINAL CONSTRUCTION JOINT. DRILL AND GROUT NO. 6 DEFORMED EPOXY TIE BARS 24" LONG AT 24" C-C. (SHALL BE INCLUDED IN THE COST OF THE APPLICABLE COMB CONC CURB AND GUTTER TYPE)
- 38 LONGITUDINAL CONSTRUCTION JOINT. DRILL AND GROUT NO. 8 DEFORMED EPOXY TIE BARS 30" LONG AT 24" C-C. (SHALL BE INCLUDED IN THE COST OF THE APPLICABLE P.C.C. SHOULDERS TYPE)
- 39 SUB-BASE GRANULAR MATERIAL, TYPE B 12"

STRUCTURAL PAVEMENT DESIGN FOR MAINLINE

STRUCTURAL DESIGN TRAFFIC:	YEAR 2020
PV= 125,272	SU= 10,930 MU= 31,949
ROAD/STREET CLASSIFICATION:	CLASS 1
PV= 8%	SU= 37% MU= 37%
TRAFFIC FACTOR:	ACTUAL TF= 264.46 AC TYPE= N/A
	MINIMUM TF= 12.39
AC GRADE:	BINDER= - SURFACE= -
SUBGRADE SUPPORT RATING:	
SSR= 2.00	(STA. to STA.)
SSR= 2.00	(STA. to STA.)

- NOTES:**
- SEE ROADWAY DETAILS FOR VARIABLE HEIGHT OF THE DOUBLE FACE BARRIER WALL AND FOR THE TYING OF THE BARRIER BASE TO THE PCC SHOULDER AND FOR THE LIMITS OF CONSTRUCTION OF THE SUB-BASE GRANULAR MATERIAL UNDER THE DOUBLE FACE BARRIER WALL.
 - THE SHOULDER RUMBLE STRIPS SHALL BE PLACED IN ALL PROPOSED AND EXISTING SHOULDERS ACCORDING TO IDOT STANDARD 642001. SEE ROADWAY PLANS FOR EXACT LOCATIONS.
 - TYPICAL SECTIONS NEED TO BE VERIFIED WITH THE ROADWAY PLANS AS THEY ARE A REPRESENTATION OF THE PLANS. THEY DO NOT SHOW ALL CONFIGURATIONS, JUST THE MOST PREDOMINANT.

NOTES CONT:

4. THE SLOPE OF THE STABILIZED SUB-BASE 4 1/2" UNDER THE SHOULDERS AND CURB & GUTTER SHALL MATCH THE SLOPE OF THE ADJACENT PAVEMENT IN THE NORMAL CROWNED AREAS.

REVISIONS	
NAME	DATE
ADDENDUM 1	7/27/06

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

**PROPOSED TYPICAL SECTIONS
NORTHBOUND LOCAL LANES**

SCALE: H1"=10' V1"=5'
DATE: June 9, 2006

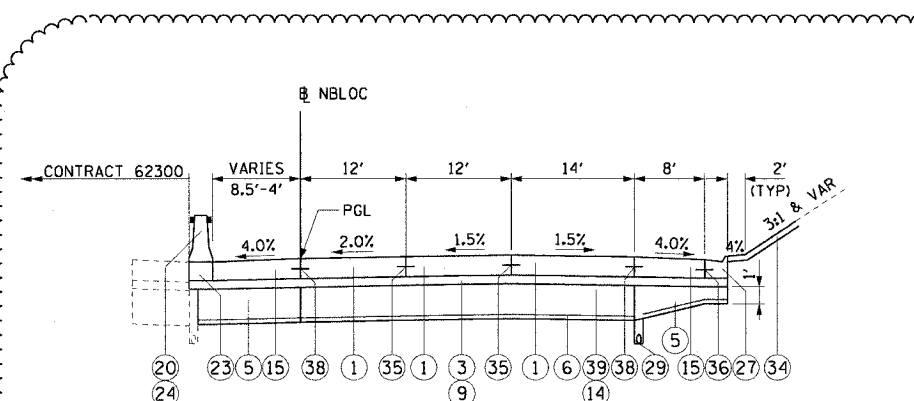
PRTYP-02
DRAWN BY: NJH
CHECKED BY: RMG

PROPOSED LEGEND:

- ① CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 14" AND PAVEMENT REINFORCEMENT 14"
- ③ BITUMINOUS STABILIZED SUB-BASE, 4 1/2"
- ⑤ SUB-BASE GRANULAR MATERIAL, TYPE B 24"
- ⑥ GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- ⑨ BITUMINOUS MATERIALS (PRIME COAT)
- ⑭ EXCAVATE AND PLACE EXISTING GRANULAR MATERIAL
- ⑮ PORTLAND CEMENT CONCRETE SHOULDERS 14" & VARIES
- ⑱ CONCRETE MEDIAN SURFACE, 6" (SPECIAL)
- ⑳ CONCRETE BARRIER, DOUBLE FACE, 32" HEIGHT
- ㉑ CONCRETE BARRIER, SINGLE FACE, 32" HEIGHT
- ㉒ BARRIER BASE
- ㉔ BARRIER WALL MARKERS, TYPE C (80' C-C)
- ㉖ COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.24
- ㉗ COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.24
- ㉘ COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.48 (MODIFIED)
- ㉙ PIPE UNDERDRAINS 6"
- ㉚ RETAINING WALL
- ㉛ MODIFIED EXISTING RETAINING WALL
- ㉜ SAND BACKFILL
- ㉝ GUARDRAIL
- ㉞ TOPSOIL FURNISH AND PLACE / SEEDING (SEE LANDSCAPING PLANS FOR DETAILS)
- ㉟ LONGITUDINAL SAWED OR CONSTRUCTION JOINT. FOR LONGITUDINAL SAWED JOINT, POUR IN PLACE NO. 6 DEFORMED EPOXY TIE BARS 30" LONG AT 30" C-C. FOR LONGITUDINAL CONSTRUCTION JOINT, DRILL AND GROUT NO. 8 DEFORMED EPOXY TIE BARS 24" LONG AT 24" C-C. (SHALL BE INCLUDED IN THE COST OF CONTINUOUSLY REINFORCED PCC PAVEMENT 14")
- ㊱ LONGITUDINAL CONSTRUCTION JOINT. DRILL AND GROUT NO. 6 DEFORMED EPOXY TIE BARS 24" LONG AT 24" C-C. (SHALL BE INCLUDED IN THE COST OF THE APPLICABLE COMB CONC CURB AND GUTTER TYPE)
- ㊲ LONGITUDINAL CONSTRUCTION JOINT. DRILL AND GROUT NO. 8 DEFORMED EPOXY TIE BARS 30" LONG AT 24" C-C. (SHALL BE INCLUDED IN THE COST OF THE APPLICABLE P.C.C. SHOULDERS TYPE)
- ㊳ SUB-BASE GRANULAR MATERIAL, TYPE B 12"

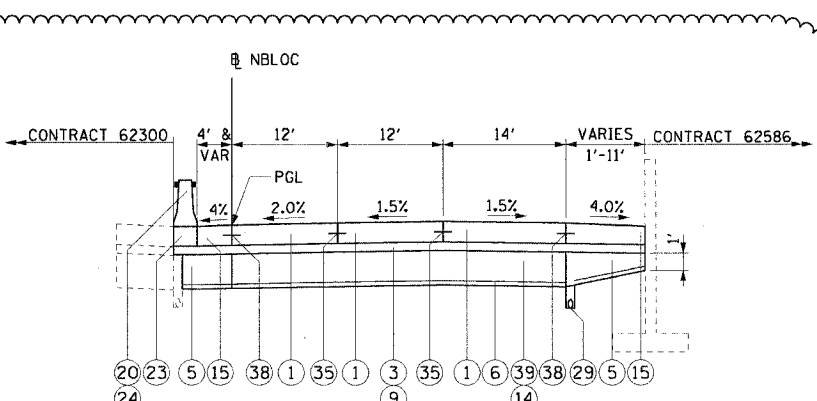
STRUCTURAL PAVEMENT DESIGN FOR MAINLINE

STRUCTURAL DESIGN TRAFFIC:	YEAR 2020
PV= 125,272	SU= 10,930 MU= 31,949
ROAD/STREET CLASSIFICATION:	CLASS 1
PV= 8%	SU= 37% MU= 37%
TRAFFIC FACTOR:	ACTUAL TF= 264.46 AC TYPE= N/A
	MINIMUM TF= 12.39
AC GRADE:	BINDER= - SURFACE= -
SUBGRADE SUPPORT RATING:	
SSR= 2.00 (STA. to STA.)	
SSR= 2.00 (STA. to STA.)	



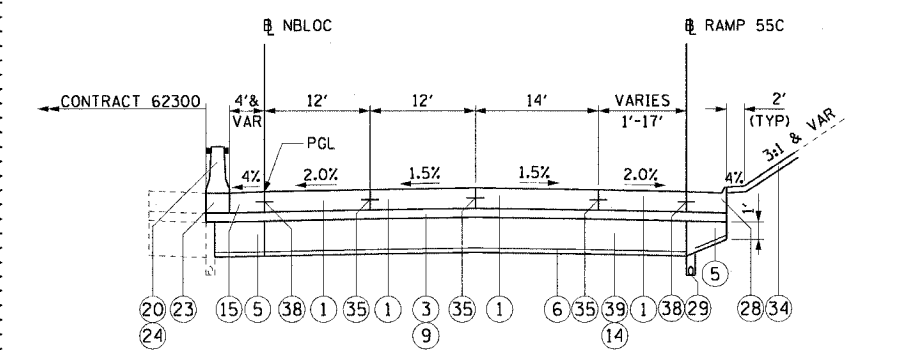
1 TYPICAL SECTION NB LOCAL LANES

STA 4450+38.19 TO STA 4455+57.88



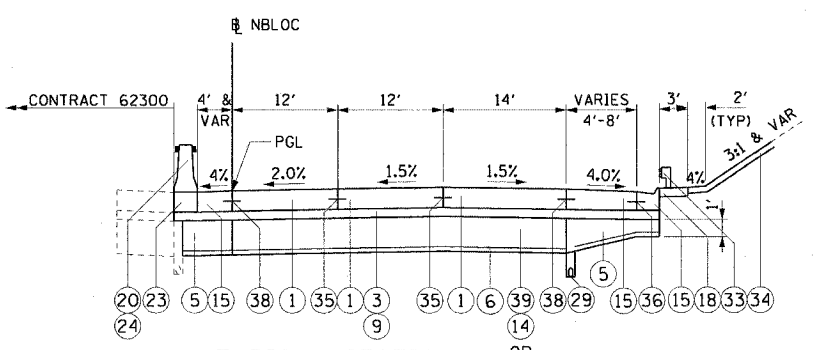
4 TYPICAL SECTION NB LOCAL LANES

STA 4461+99.18 TO STA 4468+57.90
STA 4474+10.95 TO STA 4474+50.00



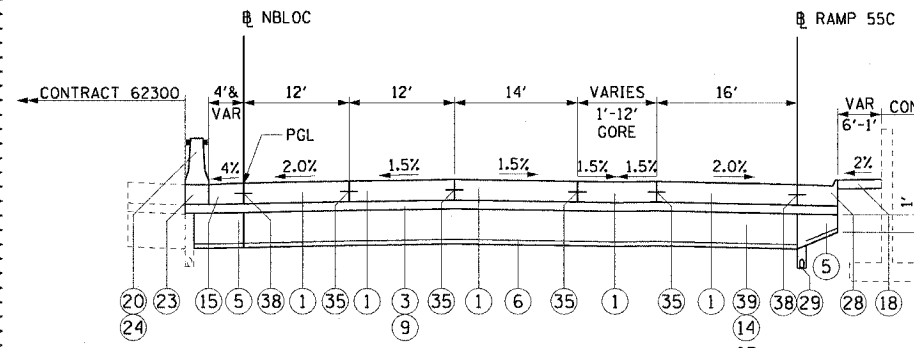
2 TYPICAL SECTION NB LOCAL LANES

STA 4455+57.88 TO STA 4458+76.39



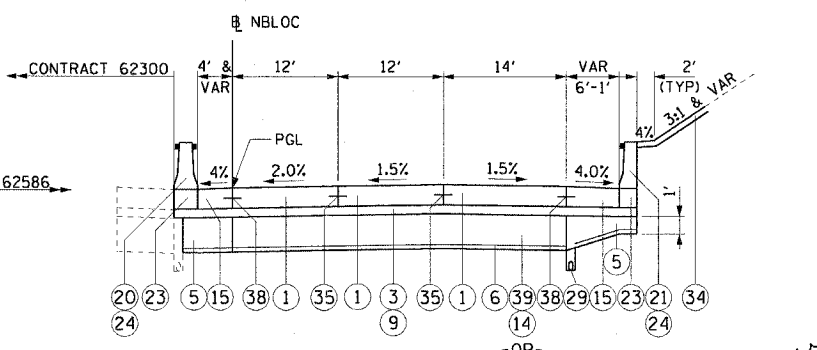
5 TYPICAL SECTION NB LOCAL LANES

STA 4468+57.90 TO STA 4472+56.43



3 TYPICAL SECTION NB LOCAL LANES

STA 4458+76.39 TO STA 4461+99.18



6 TYPICAL SECTION NB LOCAL LANES

STA 4472+56.43 TO STA 4474+10.95

- NOTES:**
- SEE ROADWAY DETAILS FOR VARIABLE HEIGHT OF THE DOUBLE FACE BARRIER WALL AND FOR THE TYING OF THE BARRIER BASE TO THE PCC SHOULDER AND FOR THE LIMITS OF CONSTRUCTION OF THE SUB-BASE GRANULAR MATERIAL UNDER THE DOUBLE FACE BARRIER WALL.
 - THE SHOULDER RUMBLE STRIPS SHALL BE PLACED IN ALL PROPOSED AND EXISTING SHOULDERS ACCORDING TO IDOT STANDARD 642001. SEE ROADWAY PLANS FOR EXACT LOCATIONS.
 - TYPICAL SECTIONS NEED TO BE VERIFIED WITH THE ROADWAY PLANS AS THEY ARE A REPRESENTATION OF THE PLANS. THEY DO NOT SHOW ALL CONFIGURATIONS, JUST THE MOST PREDOMINANT.

NOTES CONT:

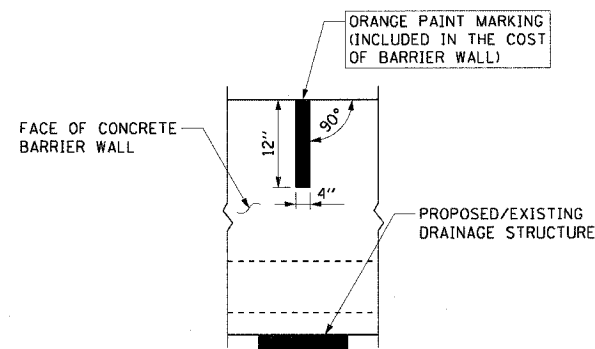
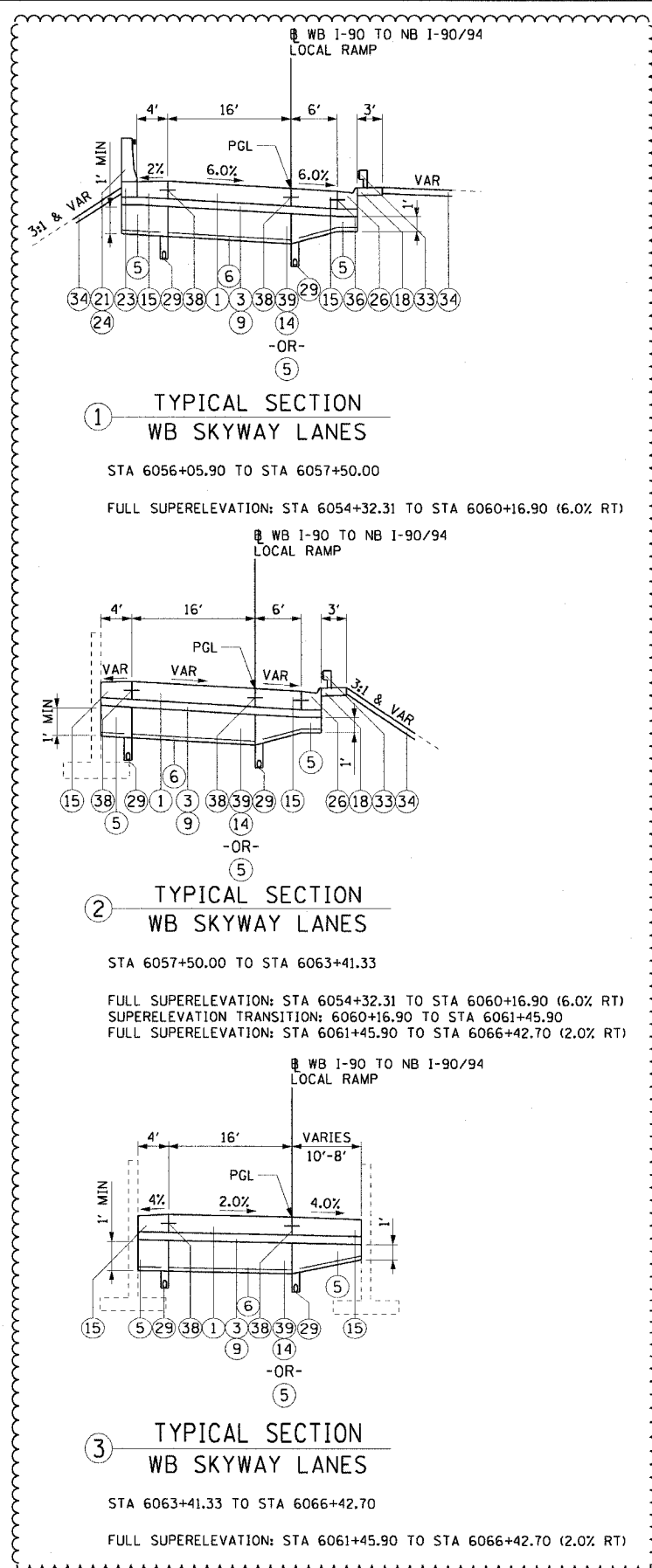
- THE SLOPE OF THE STABILIZED SUB-BASE 4 1/2" UNDER THE SHOULDERS AND CURB & GUTTER SHALL MATCH THE SLOPE OF THE ADJACENT PAVEMENT IN THE NORMAL CROWNED AREAS.

REVISIONS	
NAME	DATE
ADDENDUM 1	7/27/06

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

PROPOSED TYPICAL SECTIONS NORTHBOUND LOCAL LANES

SCALE: H:1"=10' V:1"=5'
DATE: June 9, 2006
DRAWN BY: NJH
CHECKED BY: RMG



CONCRETE BARRIER WALL MARKING AT DRAINAGE STRUCTURE
PLACE ON BARRIER WALL CONSTRUCTED ADJACENT TO ALL PROPOSED AND/OR EXISTING DRAINAGE STRUCTURES

PROPOSED LEGEND:

- 1 CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 14" AND PAVEMENT REINFORCEMENT 14"
- 3 BITUMINOUS STABILIZED SUB-BASE, 4 1/2"
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- 6 GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- 9 BITUMINOUS MATERIALS (PRIME COAT)
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- 27 COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.24
- 28 COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.48 (MODIFIED)
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- 35 LONGITUDINAL SAWED OR CONSTRUCTION JOINT. FOR LONGITUDINAL SAWED JOINT, POUR IN PLACE NO. 6 DEFORMED EPOXY TIE BARS 30" LONG AT 30" C-C. FOR LONGITUDINAL CONSTRUCTION JOINT, DRILL AND GROUT NO. 8 DEFORMED EPOXY TIE BARS 24" LONG AT 24" C-C. (SHALL BE INCLUDED IN THE COST OF CONTINUOUSLY REINFORCED PCC PAVEMENT 14")
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- 39 SUB-BASE GRANULAR MATERIAL, TYPE B 12"

STRUCTURAL PAVEMENT DESIGN FOR MAINLINE

STRUCTURAL DESIGN TRAFFIC:	YEAR 2020
PV= 125,272	SU= 10,930 MU= 31,949
ROAD/STREET CLASSIFICATION:	CLASS 1
PV= 8%	SU= 37% MU= 37%
TRAFFIC FACTOR:	ACTUAL TF= 264.46 AC TYPE= N/A
	MINIMUM TF= 12.39
AC GRADE:	BINDER= - SURFACE= -
SUBGRADE SUPPORT RATING:	
SSR= 2.00	(STA. to STA.)
SSR= 2.00	(STA. to STA.)

NOTES:

1. SEE ROADWAY DETAILS FOR VARIABLE HEIGHT OF THE DOUBLE FACE BARRIER WALL AND FOR THE TYING OF THE BARRIER BASE TO THE PCC SHOULDER AND FOR THE LIMITS OF CONSTRUCTION OF THE SUB-BASE GRANULAR MATERIAL UNDER THE DOUBLE FACE BARRIER WALL.
2. THE SHOULDER RUMBLE STRIPS SHALL BE PLACED IN ALL PROPOSED AND EXISTING SHOULDERS ACCORDING TO IDOT STANDARD 642001. SEE ROADWAY PLANS FOR EXACT LOCATIONS.
3. TYPICAL SECTIONS NEED TO BE VERIFIED WITH THE ROADWAY PLANS AS THEY ARE A REPRESENTATION OF THE PLANS. THEY DO NOT SHOW ALL CONFIGURATIONS, JUST THE MOST PREDOMINANT.
4. THE SLOPE OF THE STABILIZED SUB-BASE 4 1/2" UNDER THE SHOULDERS AND CURB & GUTTER SHALL MATCH THE SLOPE OF THE ADJACENT PAVEMENT IN THE NORMAL CROWNED AREAS.

REVISIONS	
NAME	DATE
ADDENDUM 1	7/27/06

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

**PROPOSED TYPICAL SECTIONS
NORTHBOUND LOCAL LANES**

SCALE: H:1"=10' V:1"=5'
DATE: June 9, 2006
DRAWN BY: NJH
CHECKED BY: RMC

PROPOSED SIGNING SCHEDULE

SHEET NUMBER	STRUCTURE NUMBER	STATION	SIGN CALLOUT	SIGN PANEL-TYPE 1	SIGN PANEL-TYPE 2	SIGN PANEL-TYPE 3	REMOVE SIGN PANEL ASSEMBLY-TYPE B	REMOVE SIGN PANEL-TYPE 3	STRUCTURAL STEEL SIGN SUPPORT - BREAKAWAY	TELESCOPING STEEL SIGN SUPPORT	WOOD SIGN SUPPORT	BASE FOR TELESCOPING STEEL SIGN SUPPORT	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	OVERHEAD SIGN STRUCTURE - SPAN, TYPE III-A (5'-0" X 7'-0")	OVERHEAD SIGN STRUCTURE - CANTILEVER, TYPE III-C-A (36" X 7'-0")	OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED	OVERHEAD SIGN STRUCTURE WALKWAY	CONCRETE FOUNDATIONS	DRILLED SHAFT CONCRETE FOUNDATIONS	REMOVE OVERHEAD SIGN STRUCTURE - CANTILEVER	REMOVE GROUND-MOUNTED SIGN SUPPORT	REMOVE CONCRETE FOUNDATION - GROUND MOUNT	REMOVE CONCRETE FOUNDATION - OVERHEAD	
				SQ FT	SQ FT	SQ FT	EACH	SQ FT	POUND	FOOT	FOOT	EACH	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	CU YD	CU YD	EACH	EACH	EACH
SG-01	-	3250' E of ES01-03	ES01-01					192																
SG-01	-	3250' E of ES01-03	PS01-01			203																		
SG-02	-	4381+05	PS02-01	4						8		1												
SG-02	-	2384+47	ES02-02					114																
SG-02	-	2384+47	PS02-02		12																			
SG-03	1C0161094L059.2	4396+00	PS03-01			84									32.25		14.5		7.5					
SG-03	-	2398+75	PS03-02	11							15													
SG-03	-	4399+00	PS03-03	11							15													
SG-03	-	4407+50	PS03-04	4						8		1												
SG-04	-	4421+19	ES04-01																		1			1
SG-04	-	4412+50	GS04-01				1																	
SG-04	-	4429+51	GS04-02				1																	
SG-04	-	4410+25	PS04-01		16					12		1												
SG-04	1SS0161094L058.8	4421+30	PS04-02			212							64											
SG-04	-	4421+30	PS04-03		12													46		16				
SG-04	-	4424+50	PS04-04	20						10.5		1												
SG-04	-	4429+00	PS04-05		16						17													
SG-05	-	4448+56	ES05-03																		1			1
SG-05	-	9515+61	GS05-02				1																	
SG-05	-	4447+13	GS05-03					112													1			1
SG-05	-	4455+50	GS05-04																			2		2
SG-05	-	4434+85	PS05-01	4						8		1									1			1
SG-05	-	4440+65	PS05-02		16.3					10.25		1												
SG-05	-	2442+20	PS05-03		12																			
SG-05	-	4448+00	PS05-04			112			652									1.4						
SG-05	1B0161094L058.2	4448+68	PS05-05			128										16								
SG-05	-	4452+50	PS05-06	20						10.5		1												
SG-05	-	4452+50	PS05-07	24.5							19													
SG-05	-	4454+50	PS05-08			30					32													
SG-05	1S0161094L058.1	4455+50	PS05-09			102								66			46.5		26.7					
SG-06	-	4462+01	GS06-01				1																	
SG-06	-	4461+10	PS06-01	4						8		1												
SG-06	-	2461+51	PS06-02		12																			
SG-06	-	4462+05	PS06-03		16.3					15.25		1												
TOTALS				102.5	112.6	871	4	226	652	90.5	98	9	64	66	32.25	16	107	1.4	50.2	3	2	2	3	

16

50.2

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CTE | AECOM

REVISIONS	
NAME	DATE
ADDENDUM 1	7/27/06

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

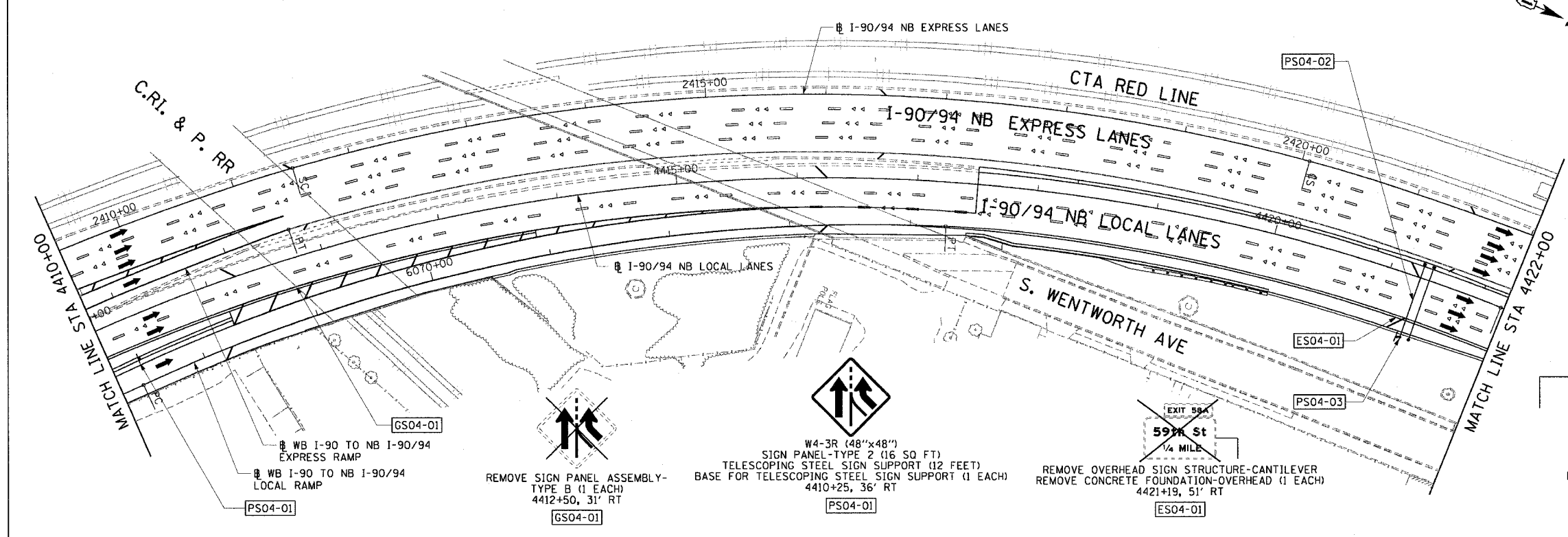
SCHEDULE OF QUANTITIES
FOR PROPOSED SIGNING

SCALE: NONE
DATE: June 9, 2006

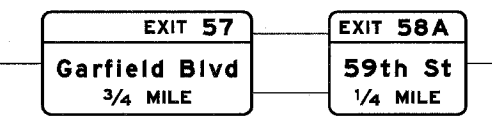
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CHECKED BY: XXX

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	312	122
STA. 4410+00		TO STA. 4434+00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
60A62		* (1919.15, 2021-922 PT1 & PT2) R-1		



SPEED LIMIT 45
 R2-1 (36"x48")
 SIGN PANEL-TYPE 2 (12 SQ FT)
 OVERHEAD TRUSS LEG MOUNTED (RIGHT)
 4421+30
 PS04-03



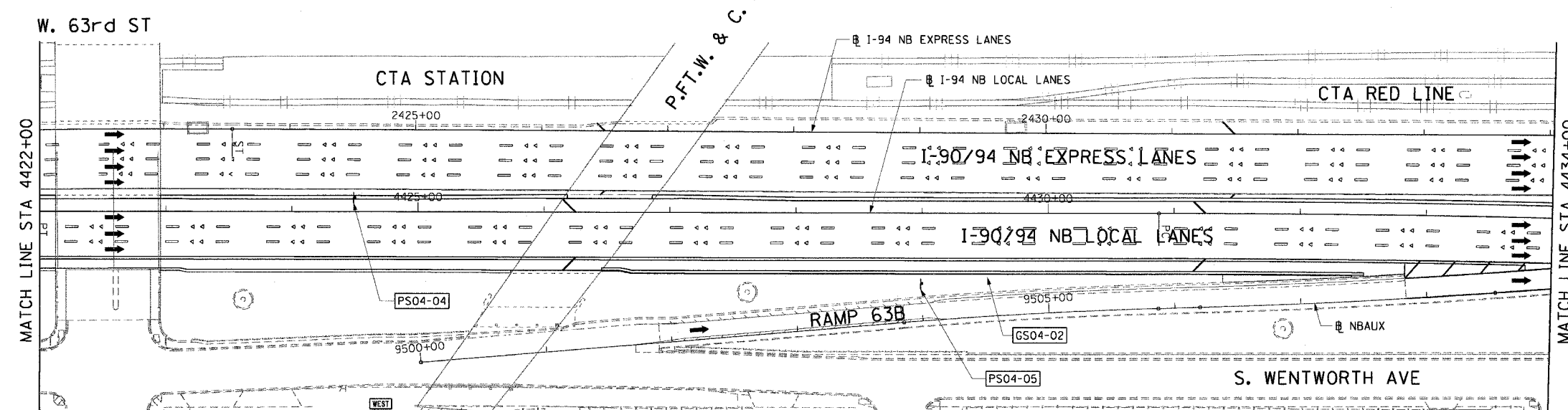
SIGN PANEL-TYPE 3 (212 SQ FT)
 OVERHEAD SIGN STRUCTURE-SPAN (64 FEET)
 OVERHEAD SIGN STRUCTURE WALKWAY (46 FEET)
 DRILLED SHAFT CONCRETE FOUNDATIONS (16.0 CU YD)
 (S0161094) 058.8
 4421+30
 PS04-02

W4-3R (48"x48")
 SIGN PANEL-TYPE 2 (16 SQ FT)
 TELESCOPING STEEL SIGN SUPPORT (12 FEET)
 BASE FOR TELESCOPING STEEL SIGN SUPPORT (1 EACH)
 4410+25, 36' RT
 PS04-01

REMOVE OVERHEAD SIGN STRUCTURE-CANTILEVER
 REMOVE CONCRETE FOUNDATION-OVERHEAD (1 EACH)
 4421+19, 51' RT
 ES04-01

WB I-90 TO NB I-90/94 EXPRESS RAMP
 WB I-90 TO NB I-90/94 LOCAL RAMP
 PS04-01

- LEGEND:
- ESXX-XX EXISTING OVERHEAD OR CANTILEVER SIGNS
 - GSXX-XX EXISTING POST MOUNTED SIGNS
 - PSXX-XX PROPOSED SIGNS
- NOTES:
1. FOR SIGN PANEL AND TRUSS DETAILS SEE OVERHEAD SIGN STRUCTURE DETAIL SHEETS.
 2. FOR SIGNS MOUNTED ON OVERHEAD TRUSS LEGS, A CLEAR HEIGHT OF 6-Feet SHALL BE MAINTAINED.



SCALE: 1"=50'
 DATE: June 9, 2006
 DRAWN BY: PJP
 CHECKED BY: RMG

REVISIONS	
NAME	DATE
Addendum 1	7/21/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 63RD STREET TO GARFIELD BLVD (NB LOCAL LANES)
PROPOSED SIGNING PLANS
 SG-04

M3-4 (24"x12"), M1-1 (36"x36"), M1-1 (36"x36")
 SIGN PANEL-TYPE 1 (20 SQ FT)
 TELESCOPING STEEL SIGN SUPPORT (10.5' FEET)
 BASE FOR TELESCOPING STEEL SIGN SUPPORT (1 EACH)
 STA 4424+50, 11' LT
 PS04-04

W4-1R (48"x48")
 SIGN PANEL-TYPE 2 (16 SQ FT)
 WOOD SIGN SUPPORT (17 FEET)
 4429+00, 56' RT
 PS04-05

REMOVE SIGN PANEL ASSEMBLY-TYPE B (1 EACH)
 4429+51, 50' RT
 ES04-02



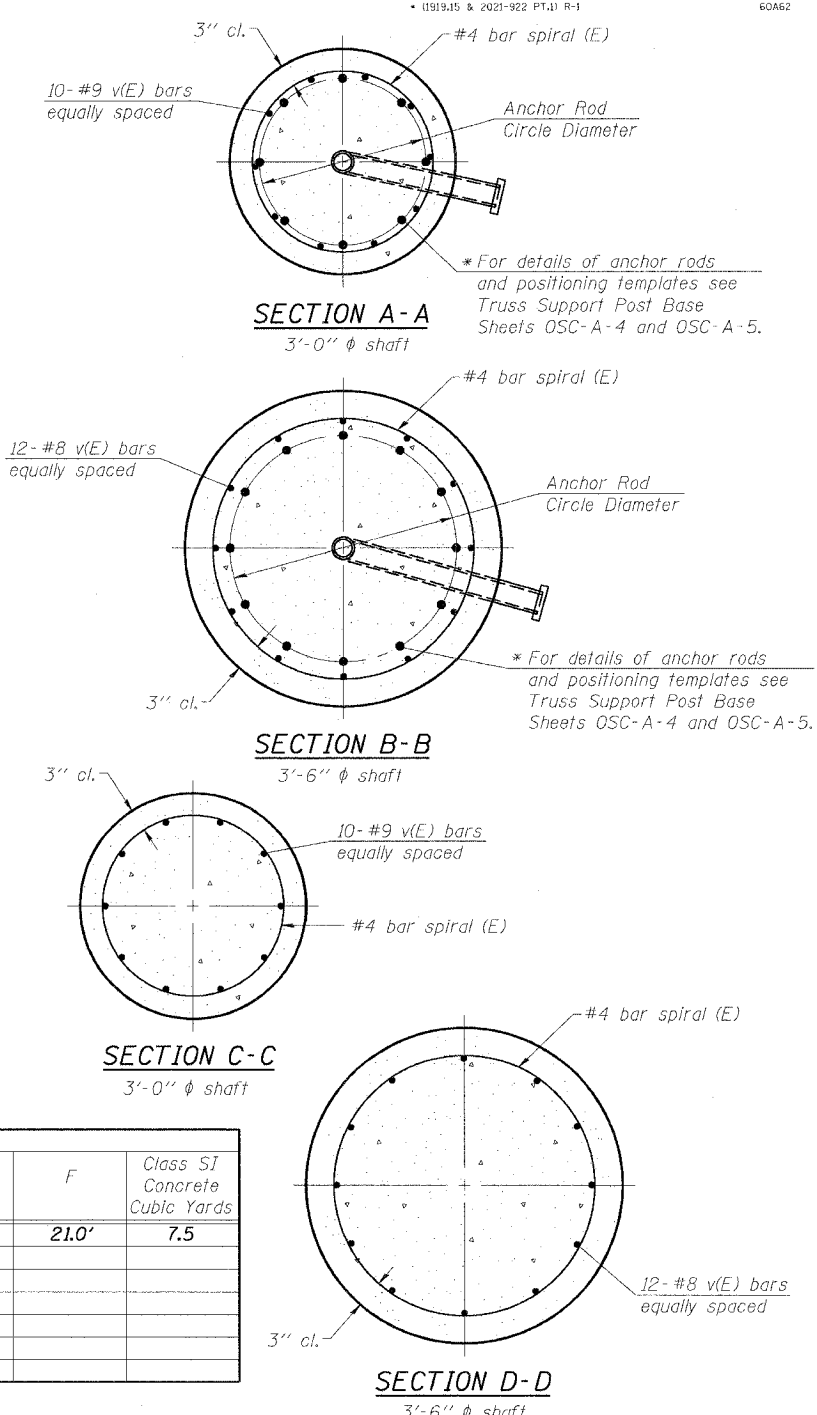
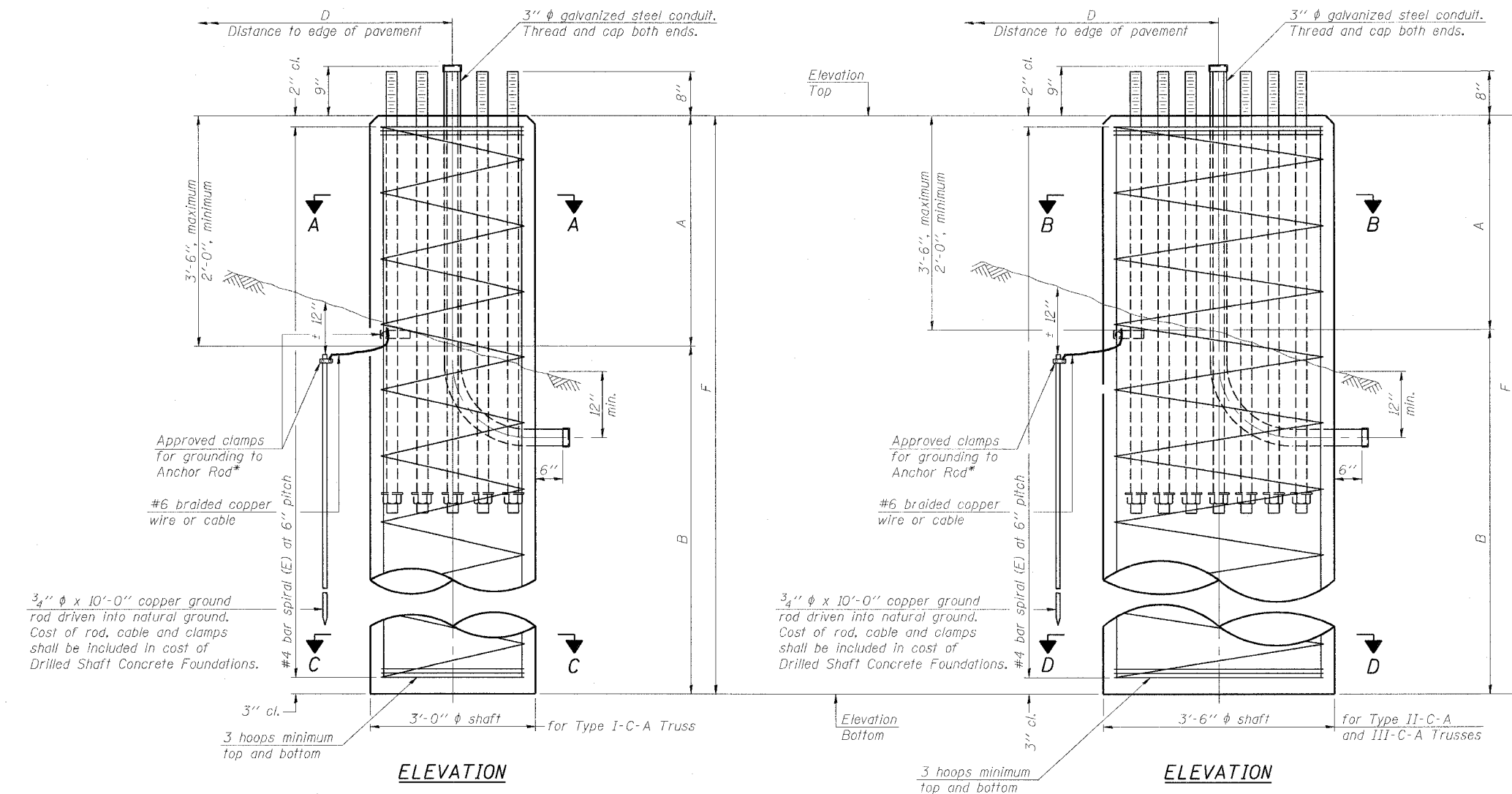
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94		COOK	312	137
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

• (1919,15 & 2021-922 PT.1) R-1 60462

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



NOTES:
The foundation dimensions shown in the Foundation Design Table are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Q_u) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown in the Foundation Data Table will be the result of site specific designs.
If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.
No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.
Concrete shall be placed monolithically, without construction joints.
Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.
A normal surface finish followed by a 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	Truss Type	Shaft Diameter	Elevation Top	Elevation Bottom	Q_u	A	B	F	Class ST Concrete Cubic Yards
1C0161094L059.2	4396+00.00	III-C-A	3.5'	4.00'	-17.0'	4.9 tsf	2.0'	19'	21.0'	7.5

Truss Type	Post Base Sheet	Maximum Cantilever Length (ft)	Maximum Total Sign Area (sq ft)	Shaft Diameter (ft)	"B" Depth (ft)	Anchor Rods No.	Anchor Rod Diameter (in)	Anchor Rod Circle Diameter (in)
I-C-A	OSC-A-4	25	170	3.0	16.0	8	2	22
II-C-A	OSC-A-5	30	170	3.5	17.0	12	2	30
II-C-A	OSC-A-5	30	340	3.5	21.5	12	2	30
III-C-A	OSC-A-5	35	170	3.5	19.0	12	2	30
III-C-A	OSC-A-5	35	250	3.5	22.5	12	2	30
III-C-A	OSC-A-5	35	400	3.5	26.5	12	2	30
III-C-A	OSC-A-5	40	400	3.5	32.0	12	2	30

DESIGNED - JSS	EXAMINED	20
CHECKED - RDP	PASSED	
DRAWN - JSS		
CHECKED - RDP		

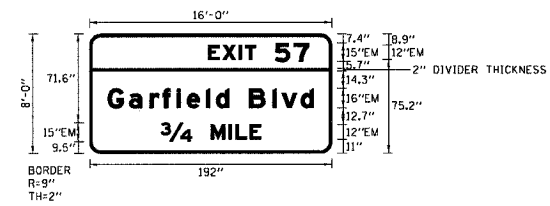
NUMBER	REVISION	DATE
1	Shaft Diameter - (in) to (ft)	7/21/06

CANTILEVER SIGN STRUCTURES
DRILLED SHAFT
ALUMINUM TRUSS & STEEL POST

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

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SIGN DETAIL



SIGN NUMBER	ISO161094L058.8 LT
WIDTH x HEIGHT	16'-0" x 8'-0"
BORDER WIDTH	2"
CORNER RADIUS	9"
MOUNTING	OVERHEAD
BACKGROUND	TYPE: REFLECTIVE
	COLOR: GREEN
LEGEND/BORDER	TYPE: REFLECTIVE
	COLOR: WHITE

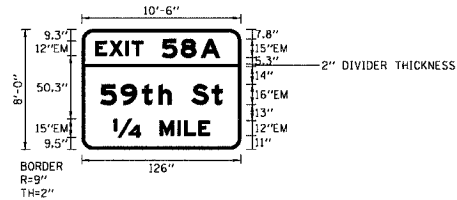
SYMBOL	X	Y	WID	HT

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	7						79.8	EM12,EM15		
94.2	105.5	118.3	123.1	146.9	162									
G	a	r	f	i	d	B	l	v	d		163.4	EM16/12		
14.3	31.3	47.6	57.7	69	77.1	92.3	100.2	110.4	126.4	144.9	152.4	167.5		
3/4	M	I	L	E									79.6	EM15,EM12
56.2	96.2	110.3	115.7	127										

SIGN DETAIL



SIGN NUMBER	ISO161094L058.8 RT
WIDTH x HEIGHT	10'-6" x 8'-0"
BORDER WIDTH	2"
CORNER RADIUS	9"
MOUNTING	OVERHEAD
BACKGROUND	TYPE: REFLECTIVE
	COLOR: GREEN
LEGEND/BORDER	TYPE: REFLECTIVE
	COLOR: WHITE

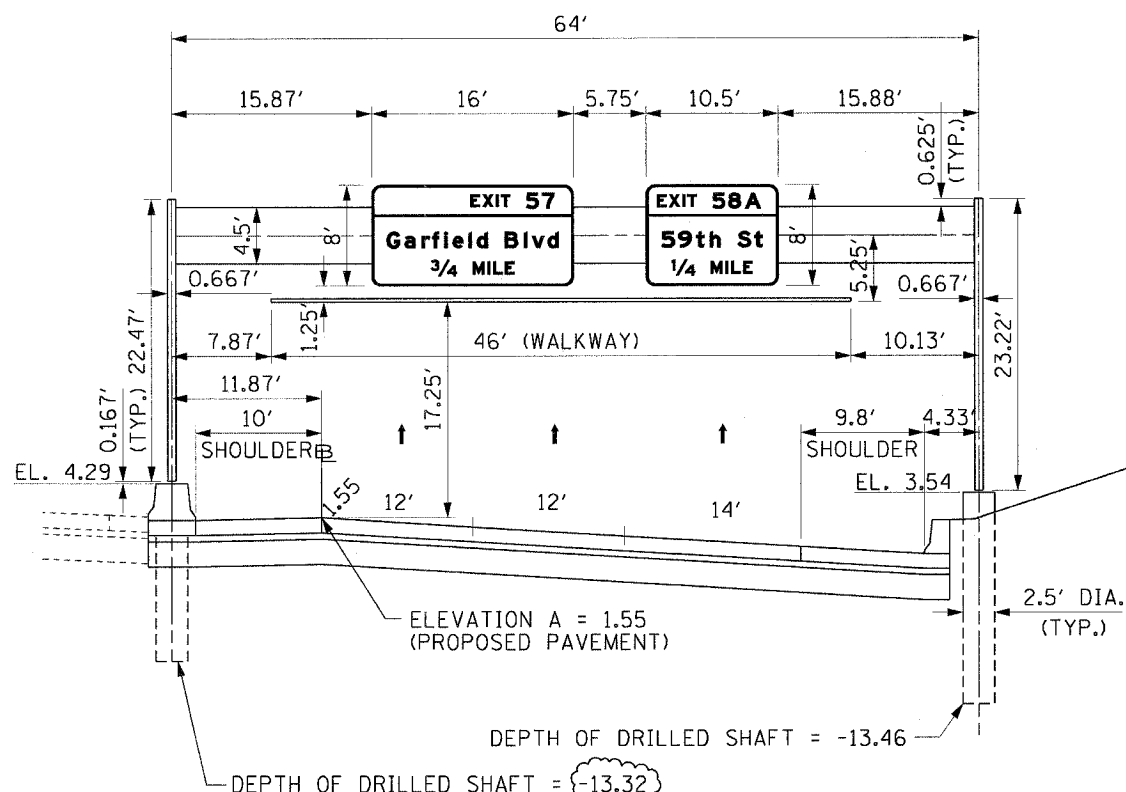
SYMBOL	X	Y	WID	HT

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	B	A					98.7	EM12,EM15
10.7	21.9	34.8	39.6	63.4	78.5	94.4						
5	9	+	h	S	+						96.5	EM16/12
14.7	30.8	47.7	60.8	71	87	103.2						
1/4	M	I	L	E							76.6	EM15,EM12
24.7	61.7	75.8	81.2	92.5								

TYPE I-A 8" PIPE TRUSS SUPPORT FRAME



ISO161094L058.8
MOUNTING DETAIL
PROPOSED OVERHEAD SIGN STRUCTURE
STA 4421+30.00 N.B. LOCAL I-90/94
LOOKING NORTH

NOTES:

1. PROPOSED PAVEMENT FOR LOCAL LANES IS SHOWN FOR INFORMATION ONLY.
2. REFER TO ELECTRICAL INFRASTRUCTURE PLANS FOR ORIENTATION AND LOCATION OF THE CONDUIT EMBEDDED IN THE OVERHEAD SIGN FOUNDATIONS.

REVISIONS	
NAME	DATE
Addendum 1	7/21/06

OSS-11
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (NB LOCAL LANES)
PERMANENT SIGN PANEL MOUNTING DETAILS
PROPOSED OVERHEAD SIGN STRUCTURE
STA. 4421+30.00
SCALE: NONE
DATE: June 9, 2006
DRAWN BY: JSS
CHECKED BY: RDP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SIGN SHEETS	SHEET NO.
F.A.I. R.I.E. 90/94		COOK	312	140
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		
* US19,15 & 2021-922 PT.1) R-1				60A62

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.

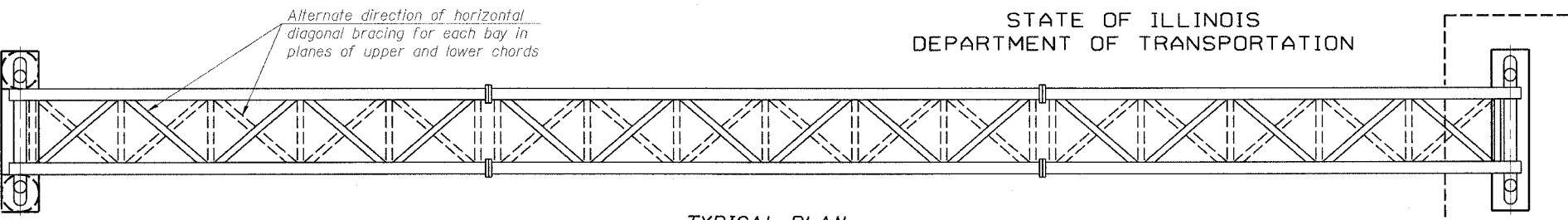
GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

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.

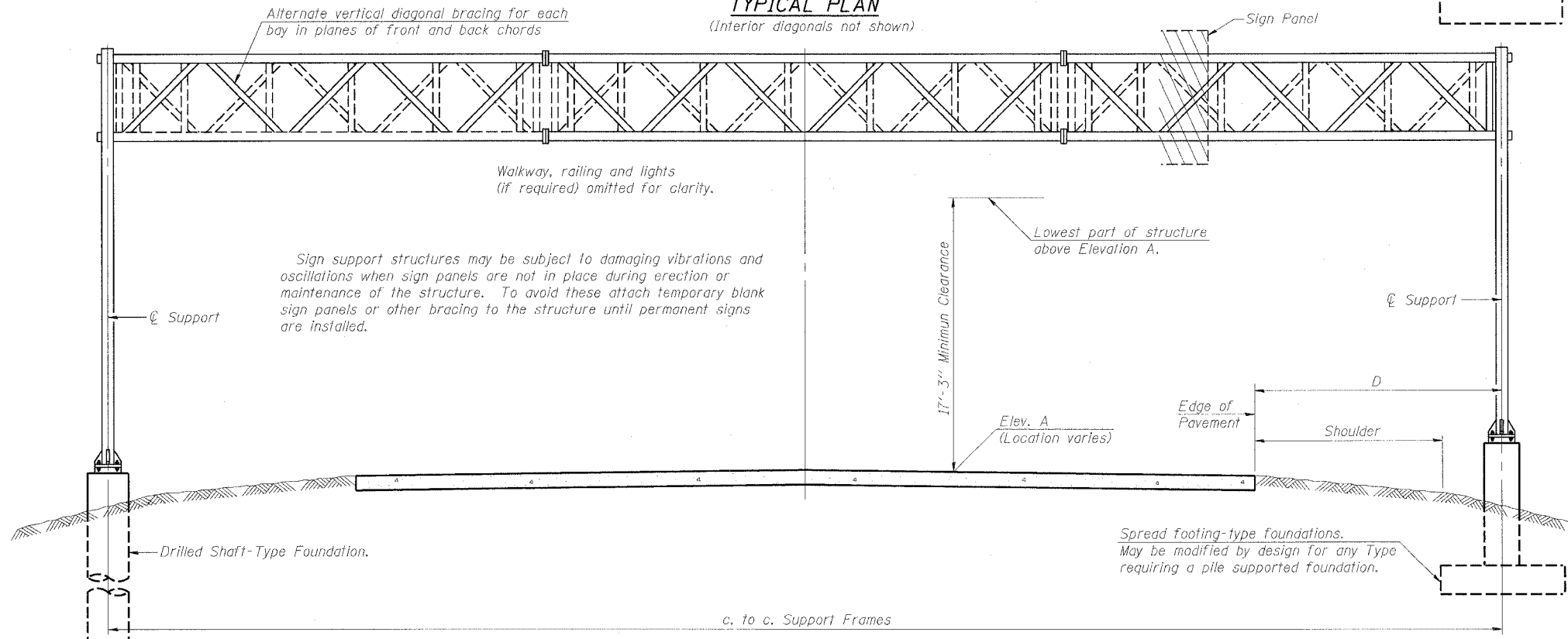
CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Bridge Seal Sealer in accordance with the Standard Specifications.

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

OSS-13



TYPICAL PLAN
(Interior diagonals not shown)

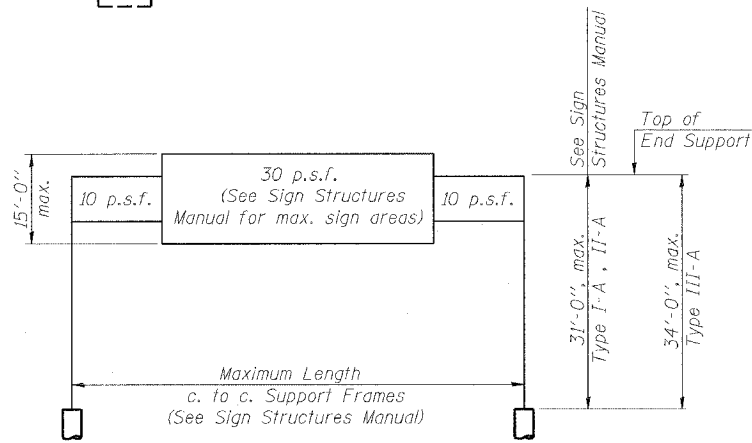


TYPICAL ELEVATION
(Looking at Face of Signs)**

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

Structure Number	Station	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
ISO161094L058.8	4421+30.00	I-A	64'	1.55'	11.87' L 14.13' R	8.0'	212.0 SF
ISO161094L058.1	4455+50.00	III-A	66'	0.75'	6.15' L 21.85' R	8.5'	324.0 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.

DESIGNED - JSS	EXAMINED - _____ ENGINEER OF STRUCTURAL SERVICES
CHECKED - RDP	PASSED - _____ ENGINEER OF BRIDGES AND STRUCTURES
DRAWN - JSS	
CHECKED - RDP	

OS-A-1 1-7-05

NUMBER	REVISION	DATE
1	Total Bill of Material	7/21/06

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE TYPE I-A (4'-0" x 4'-6")	Foot	64
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	66
OVERHEAD SIGN STRUCTURE WALKWAY TYPE A	Foot	92.5
CONCRETE FOUNDATIONS	Cu. Yds.	0
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	42.7

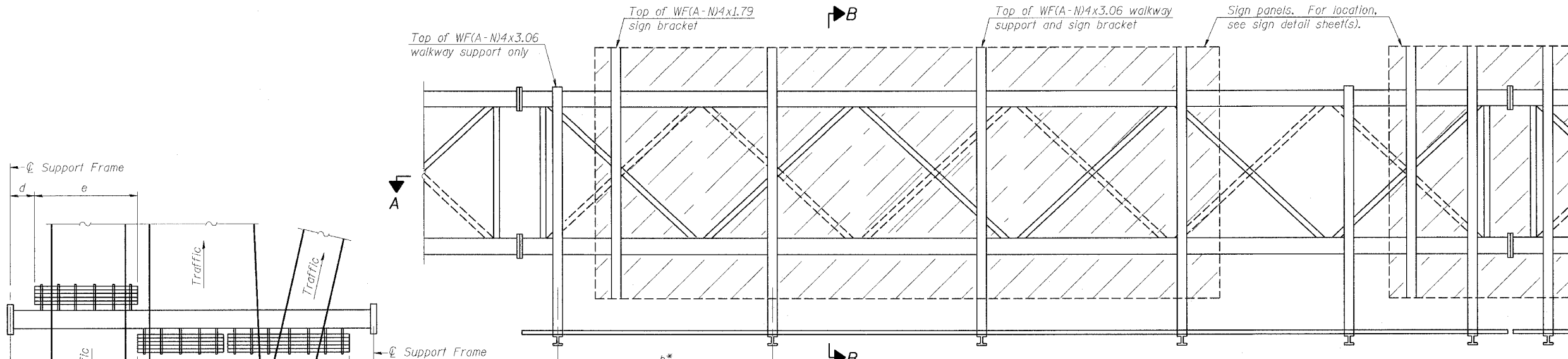
**OVERHEAD SIGN STRUCTURES
GENERAL PLAN & ELEVATION
ALUMINUM TRUSS & STEEL SUPPORTS**

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

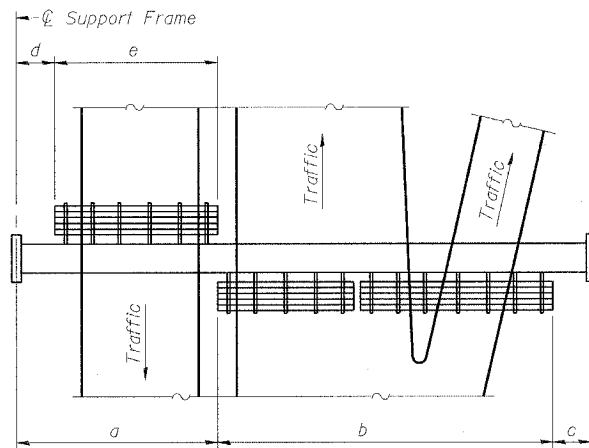
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

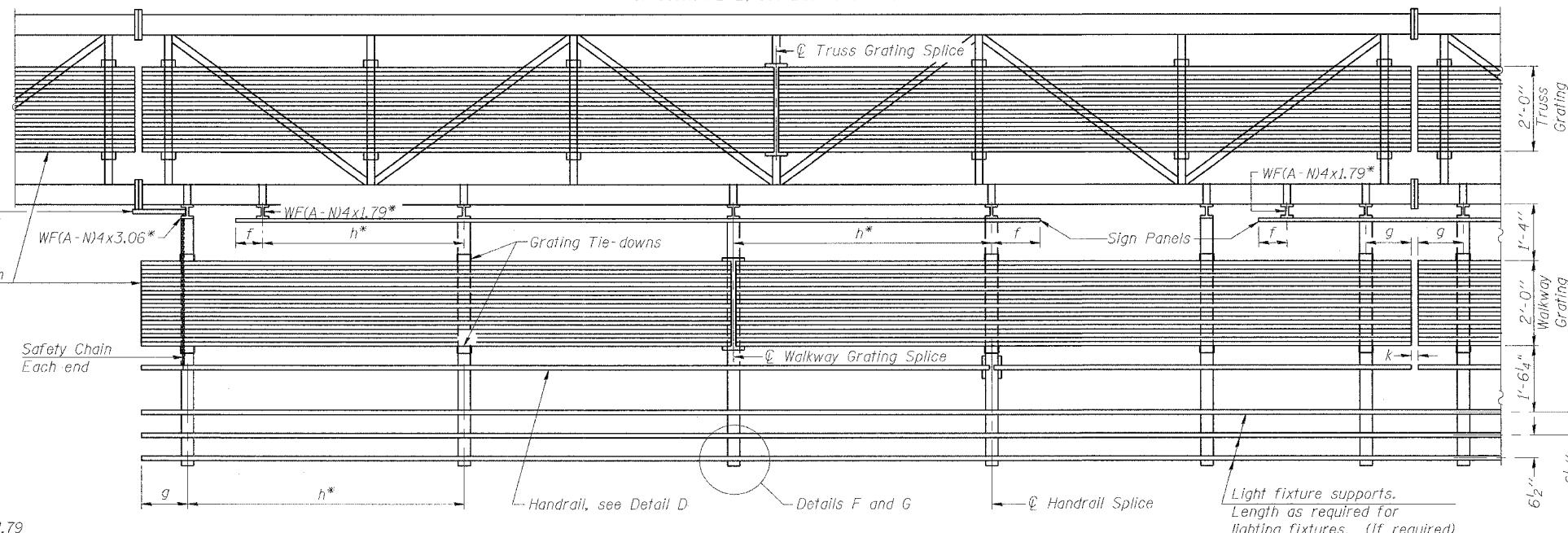
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94		COOK	312	148
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		
11919.15 & 2021-922 PT.11 R-1				60462



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



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



SECTION A-A
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.

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

BRACKET TABLE

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

- 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 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.

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
ISO161094L058.8	4421+30.00	7.87'	46.0'	10.13'	---	---	46.0'

**OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS**

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

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

NUMBER	REVISION	DATE
1	Dimensions b and c	7/21/06

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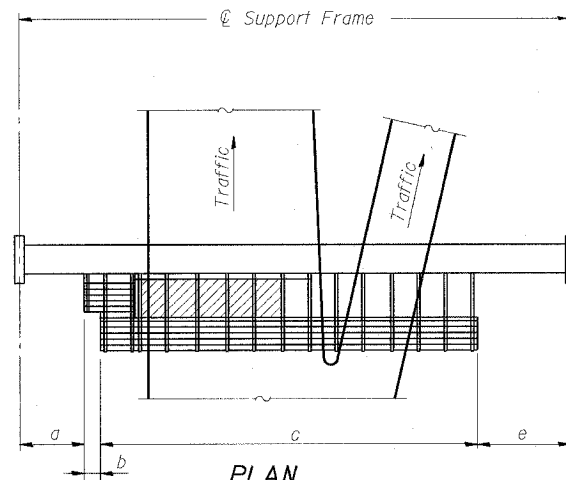
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Top of WF6x5.40 walkway
support and sign bracket

Top of WF6x5.40 for
walkway support only

Sign panel. For location,
see sign detail sheet(s).

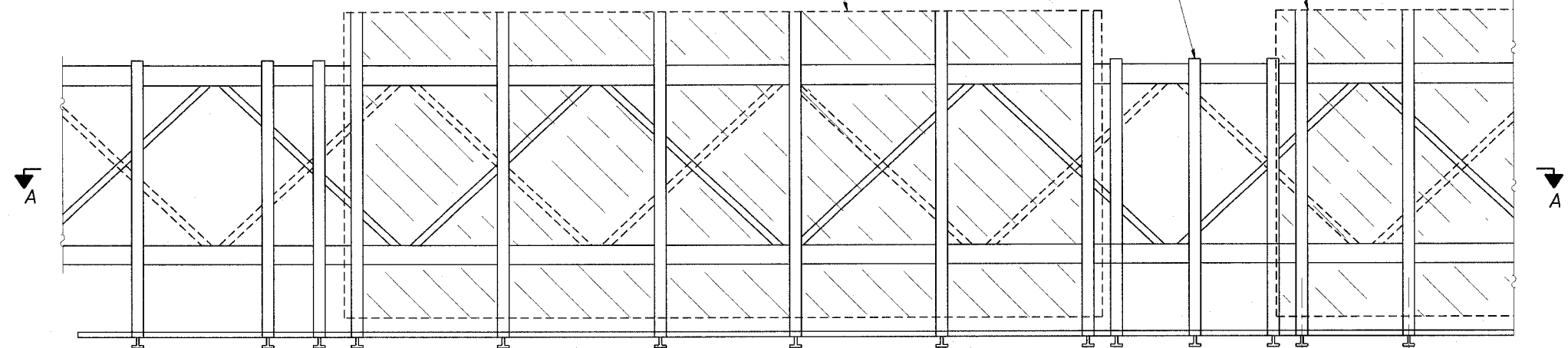
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94		COOK	312	151
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
0919.15 & 2021-922 PT. II R-1			60A62	



PLAN

WALKWAY AND HANDRAIL SKETCH

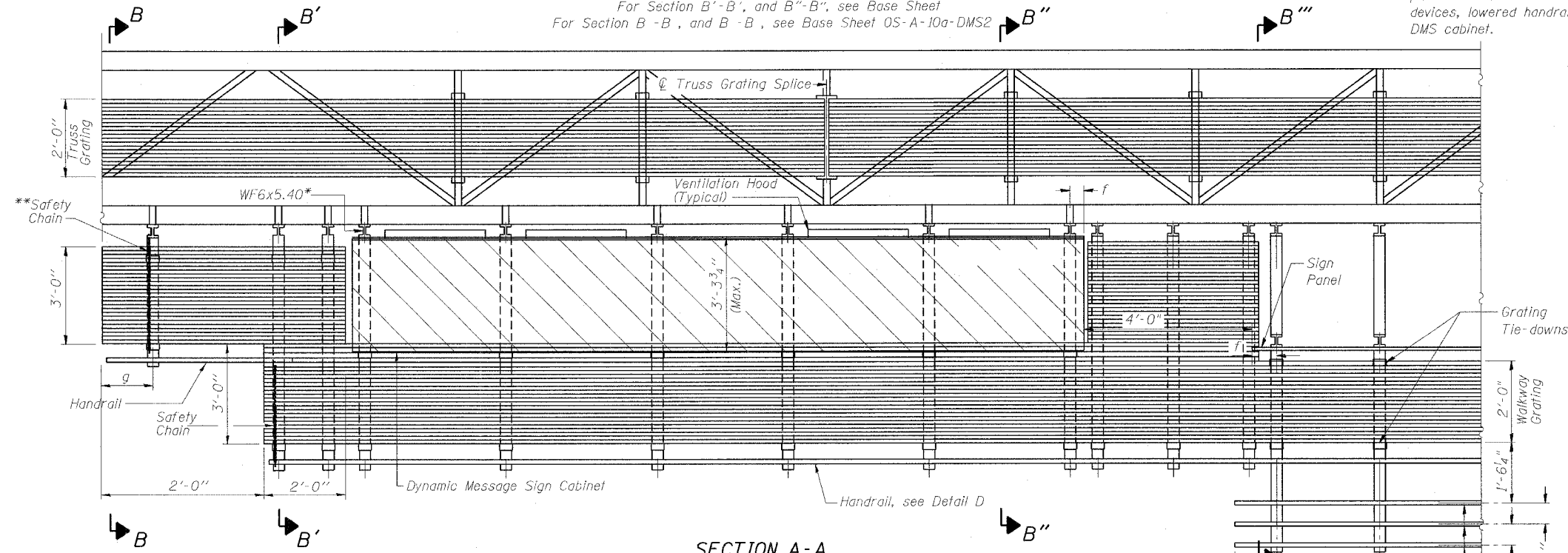
(Road plan beneath truss varies)



TYPICAL FRONT ELEVATION

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

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



SECTION A-A

BRACKET TABLE

WF6x5.40 ASTM B308, Alloy 6061-T6	
Sign Width	Number Brackets Required
26'-1"	6
12'-0"	6

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

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

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

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

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

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

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"

Light fixture supports. Length as required
for lighting fixtures. (If required)

OSS-24

OVERHEAD SIGN STRUCTURES
ALTERNATE ALUMINUM WALKWAY DETAILS

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

DESIGNED	JSS
CHECKED	RDP
DRAWN	JSS
CHECKED	RDP

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

NUMBER	REVISION	DATE
1	Updated Sheet	7/21/06

Structure Number	Station	a	b	c	d	e	Walkway Grating and Handrail Lengths
ISO161094L058.1	4455+50.00	1.11'	2.00'	44.50'	0	18.39'	46.50'

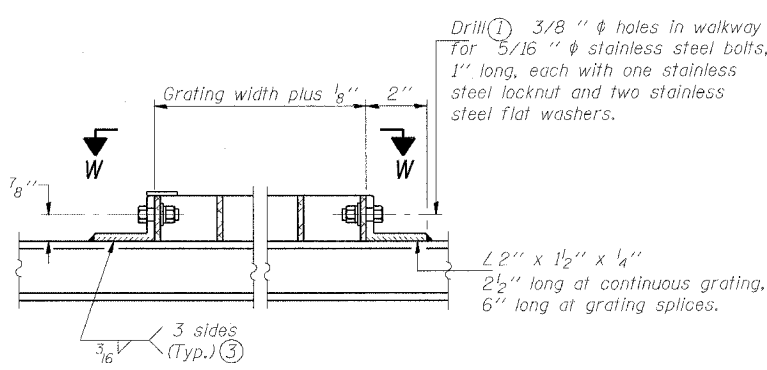
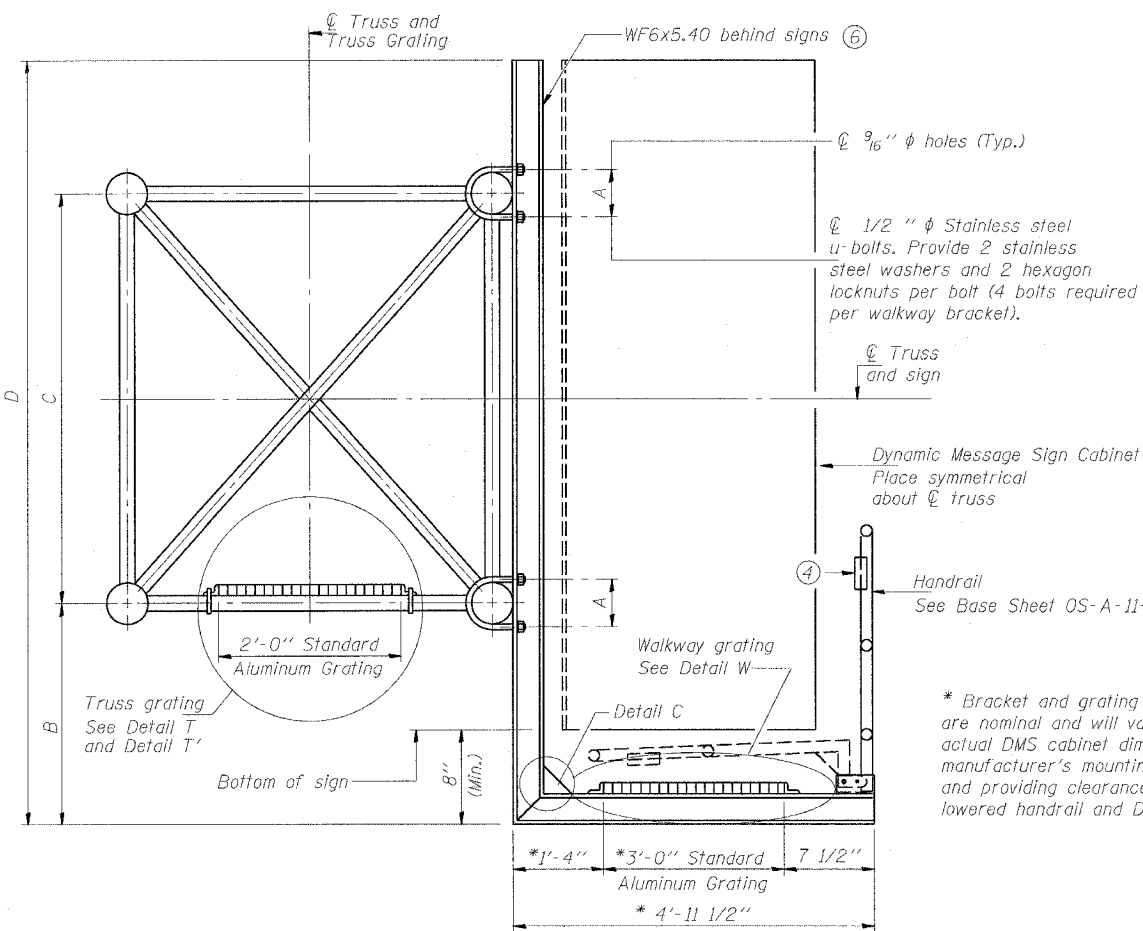
MODIFIED BY CTE ENGINEERS, INC FROM OS-A-9-DMS2 7/1/2001

7/26/2006 09:59 AM

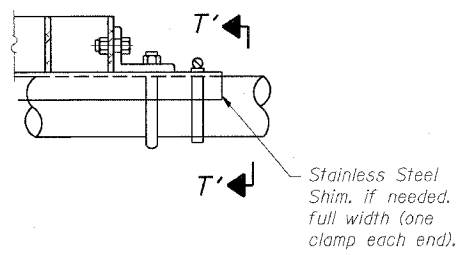
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
F.A.I. RTE. 90/94		COOK	312	152
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

• (1918,15 & 2021-922 P1.1) R-1 60462

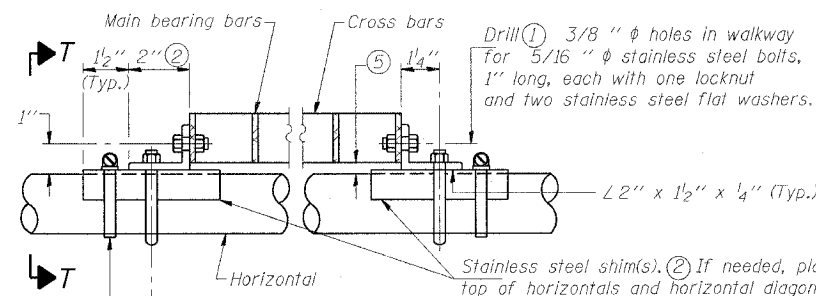
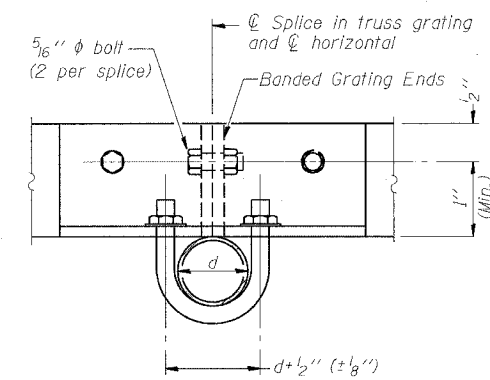


DETAIL W
(Walkway grating)

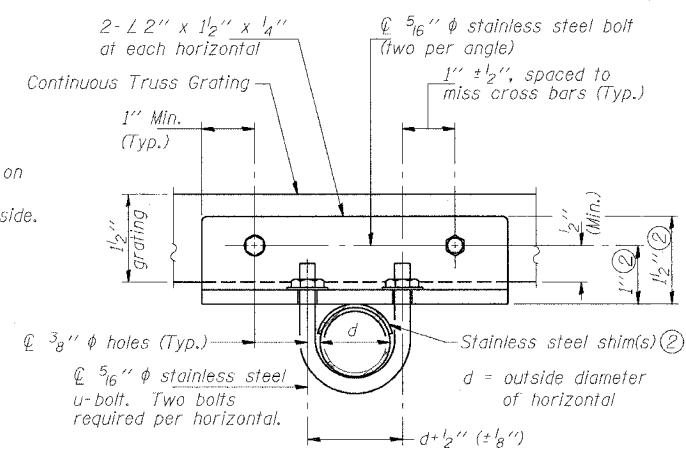


DETAIL T'

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



DETAIL T
(Continuous Truss grating)



SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

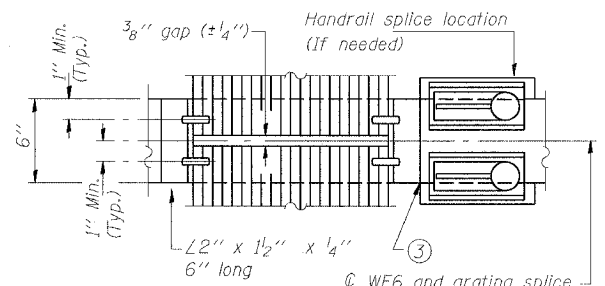
Main Bearing Bars shall be 3/16" x 1 1/2" on 1 3/16" centers and conform to ASTM B211 Alloy 6061-T6.
Cross bars shall be 3/16" x 1 1/2" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

OR

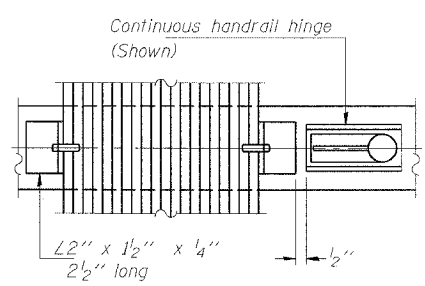
Aluminum Grating with modified "T" sections for main bearing bars shall meet the following requirements:
Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.³ per bar, a depth of 1 1/2", spaced on 1 3/16" centers.
Cross bars shall conform to ASTM B221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

Structure Number	Station	A	B	C	D
IS0161094L058.1	4455+50	7 1/2"	2'-0"	7'-0"	9'-9"

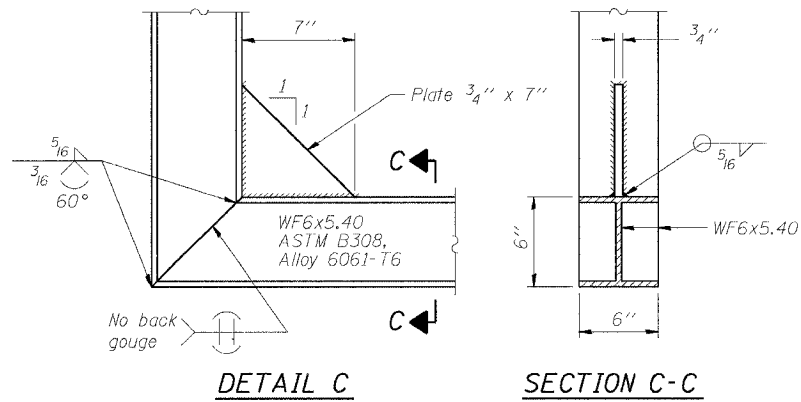
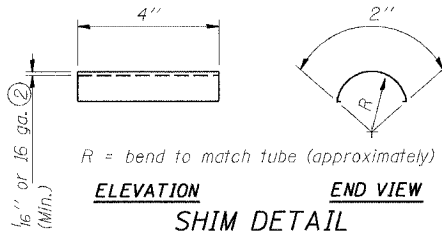
SECTION B-B



(AT WALKWAY GRATING SPLICE)



(CONTINUOUS WALKWAY GRATING)



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

NUMBER	REVISION	DATE
1	Updated Sheet	7/21/06

OS-A-10-DMS2 1/7/2005

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

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

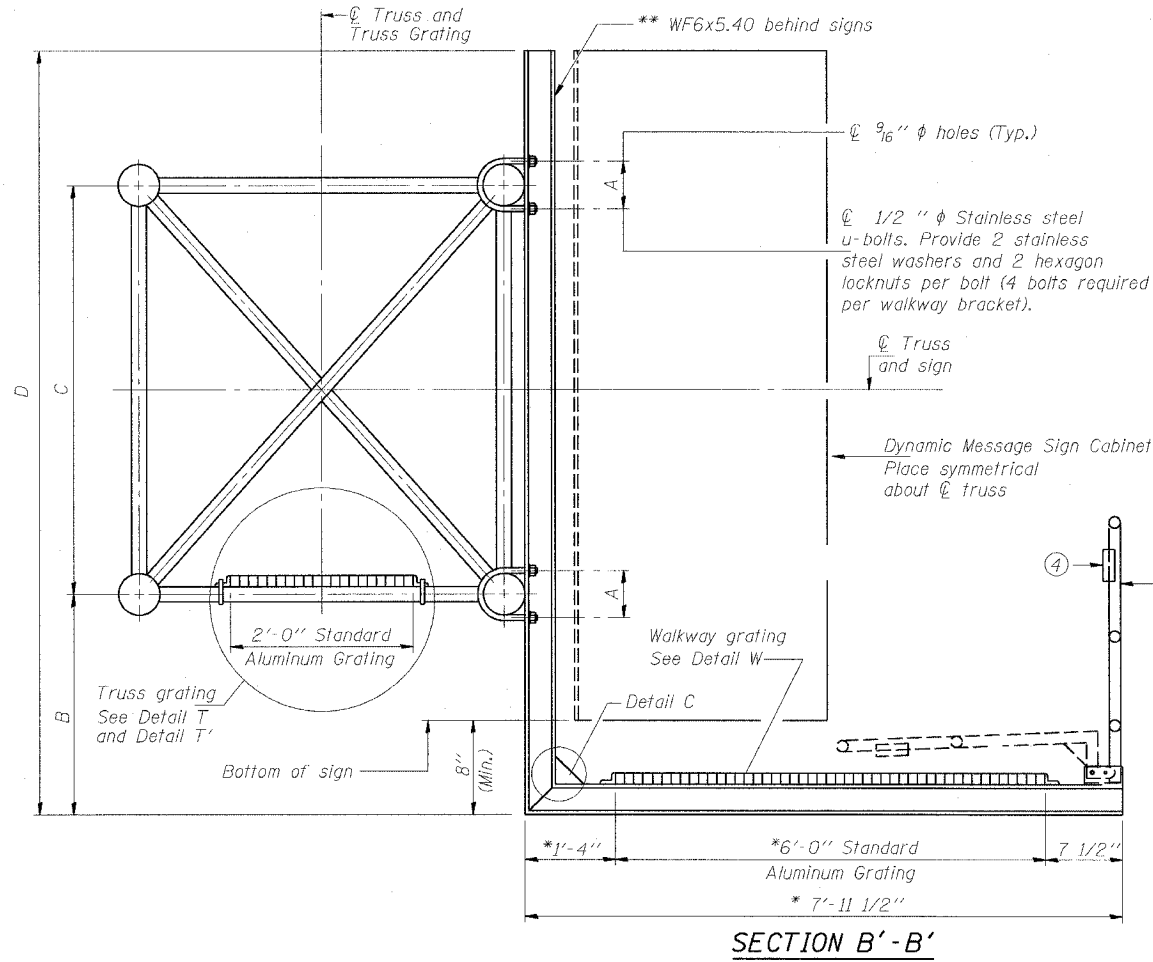
OSS-25

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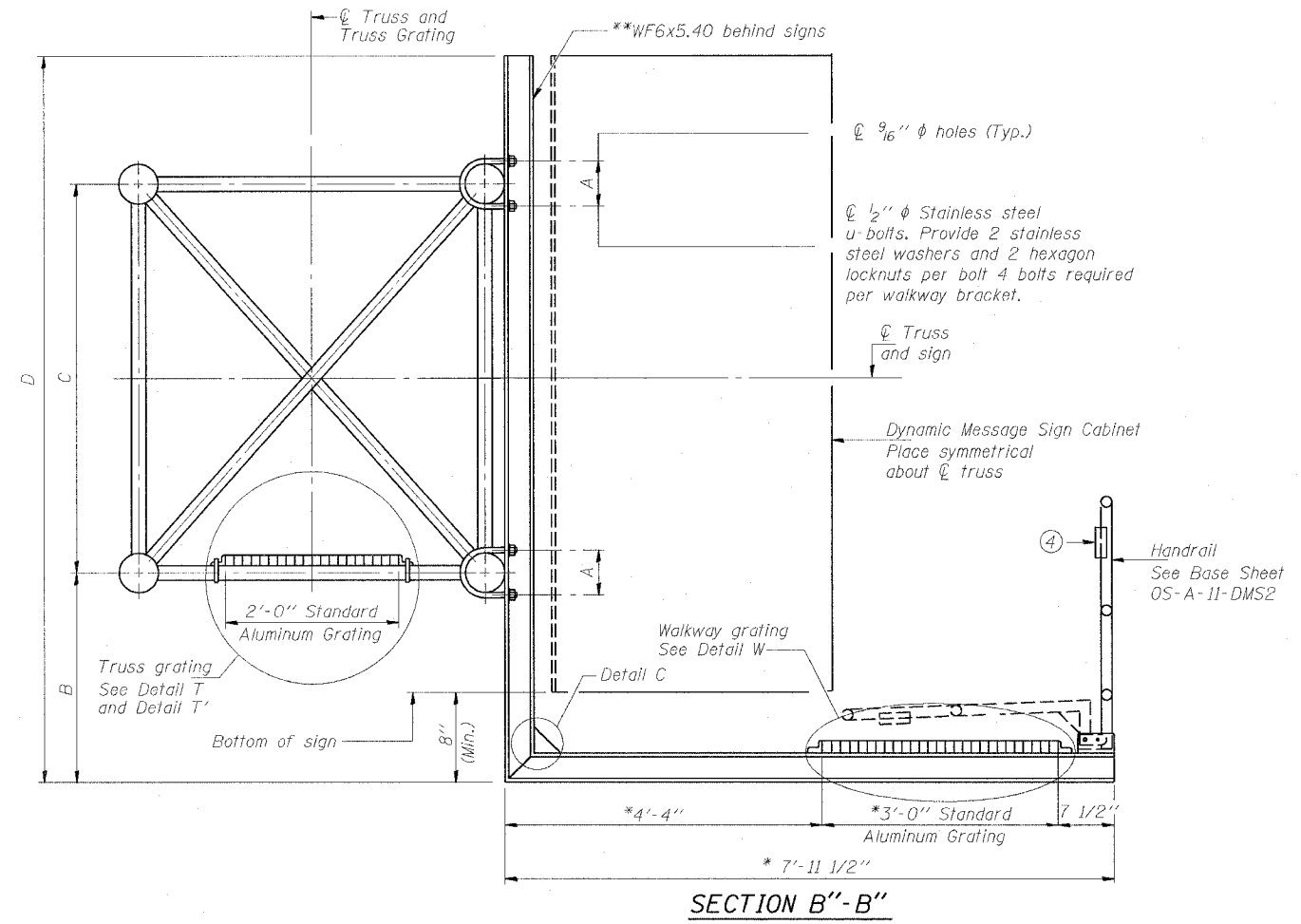
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94		COOK	312	153
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

• (1919,15 & 2021-922 PT.1) R-1 60462



SECTION B'-B'



SECTION B''-B''

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

** Cabinet manufacturer must design and supply hardware for connection of cabinet to WF6's. Bolts must be stainless steel or hot dip galvanized high strength per IDOT specifications.

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

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

NUMBER	REVISION	DATE
1	Updated Sheet	7/21/06

OS-A-10a-DMS2 1/7/2005

OSS-26
OVERHEAD SIGN STRUCTURES
ALTERNATE ALUMINUM WALKWAY DETAILS
FOR DMS

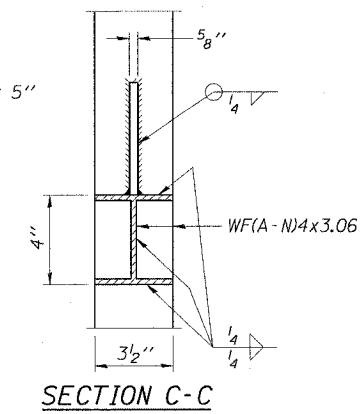
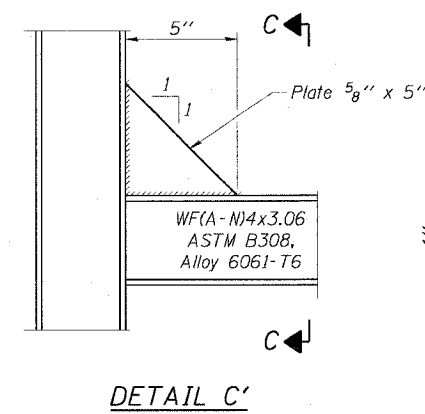
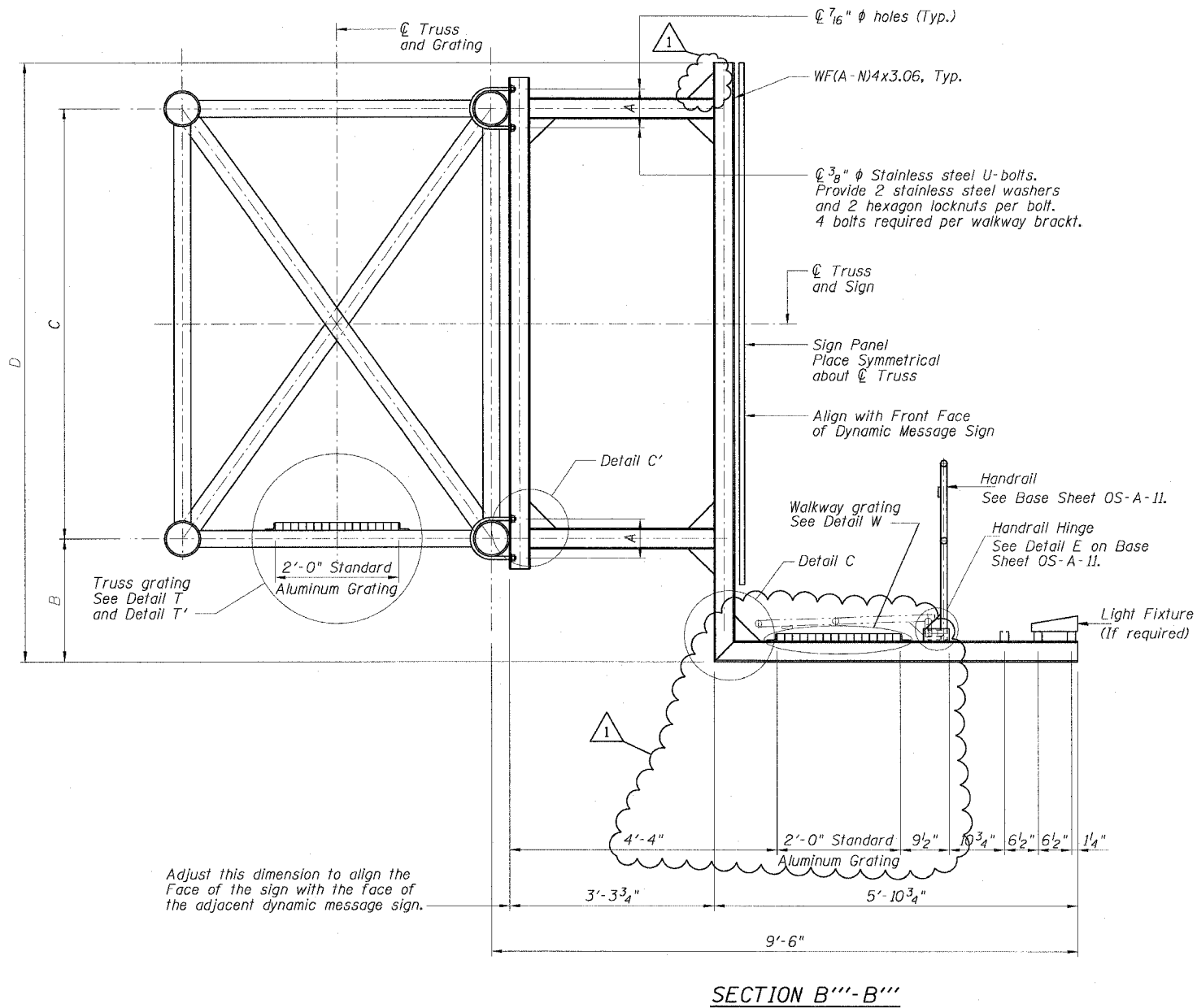
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (NB LOCAL LANES)
PROPOSED IMPROVEMENT
63RD STREET TO GARFIELD BLVD

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94		COOK	312	154
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

• (1919.15 & 2021-922 PT.1) R-1 60A62



OSS-27

OVERHEAD SIGN STRUCTURES
ALTERNATE ALUMINUM WALKWAY DETAILS

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

REVISIONS	
NAME	DATE
Addendum 1	7/27/06

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

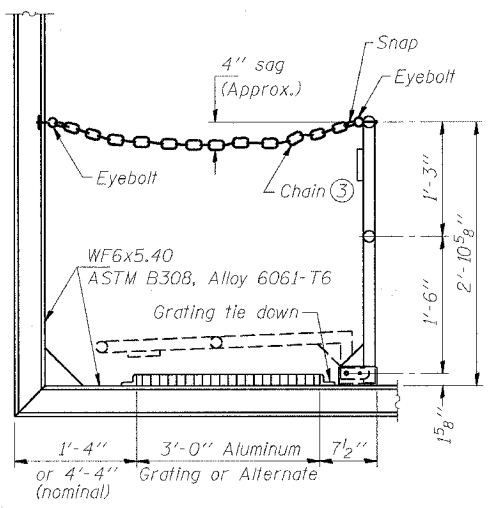
MODIFIED BY CTE ENGINEERS, INC FROM OS-A-9-DMS2

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

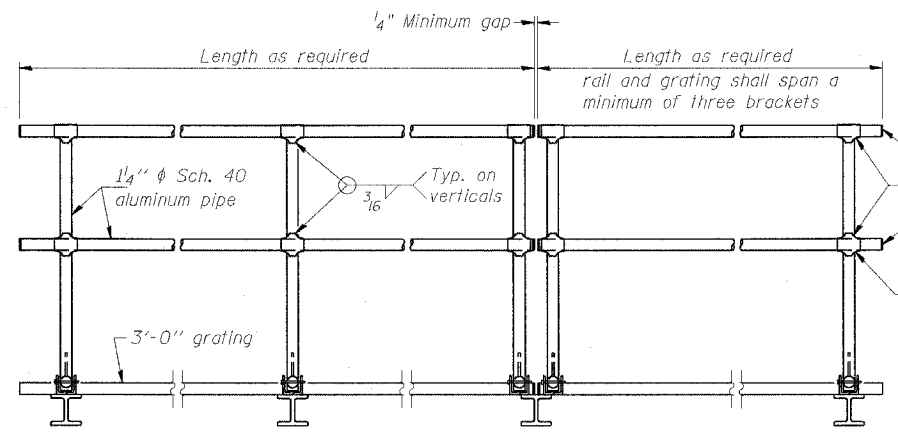
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94		COOK	312	155
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

• (1919.15 & 2021-922 PT.1) R-1 60462



SIDE ELEVATION

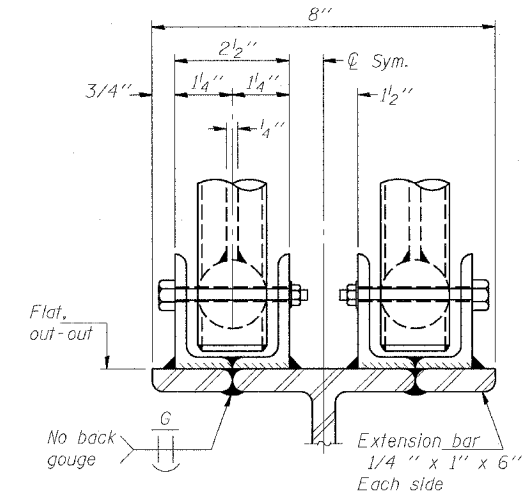
(Showing safety chain w/o sign)



FRONT ELEVATION

② Horizontal handrail member shall be continuous thru fitting. Provide 7/16" ϕ hole in fitting for 3/8" ϕ bolt. Field drill 1/16" ϕ hole in horizontal rail member. Provide washer and locknut for bolt. (Use 5/16" eyebolts in 7/16" ϕ holes on top rail at ends only.)

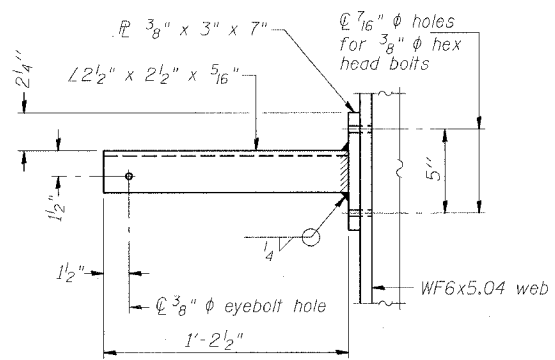
① Install standard force-fit end caps or weld 1/8" end plates with 1/8" c.f.w. and grind smooth. (All rail ends)
Fittings-ASTM B26, Alloy 356-T7



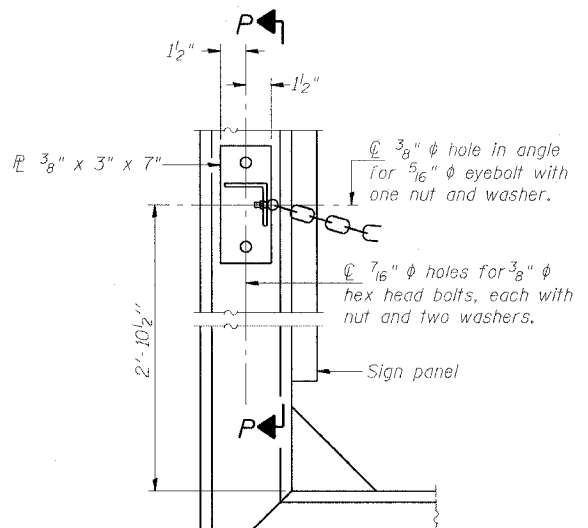
ELEVATION AT HANDRAIL JOINT ④

HANDRAIL DETAILS

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

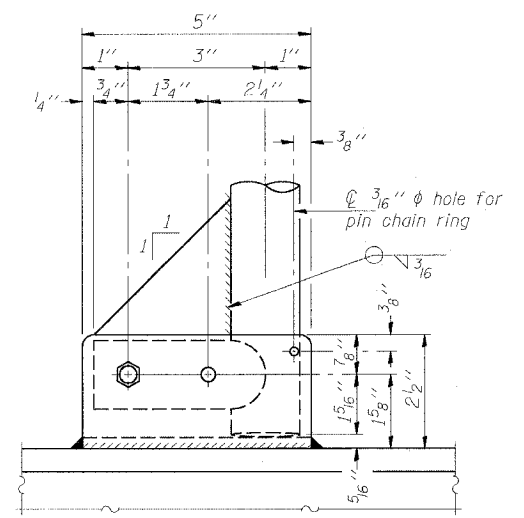


SECTION P-P

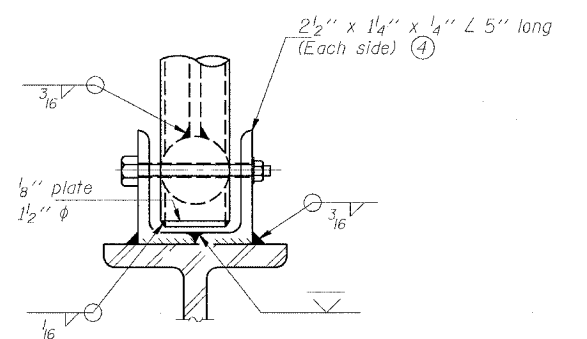


ALTERNATE SAFETY CHAIN ATTACHMENT

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

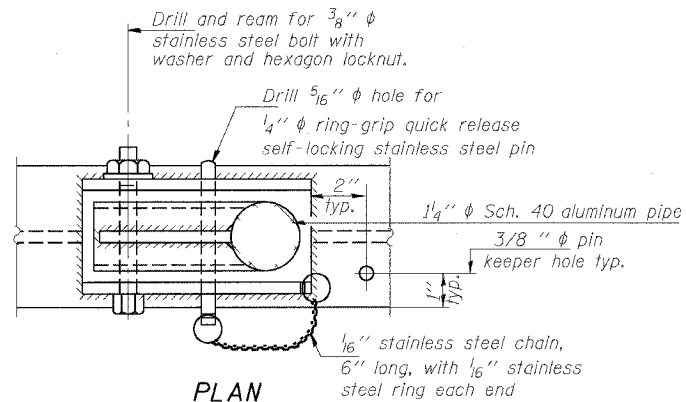


SIDE ELEVATION

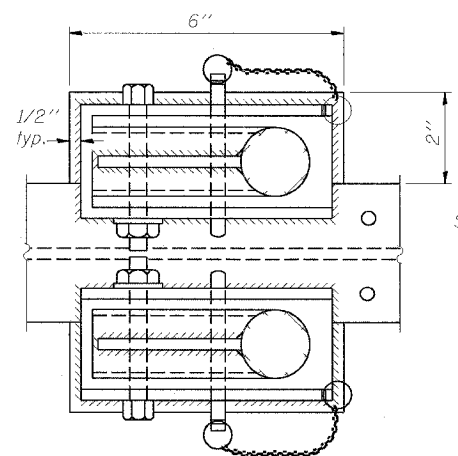


FRONT ELEVATION

See "ELEVATION" at right for dimensions.

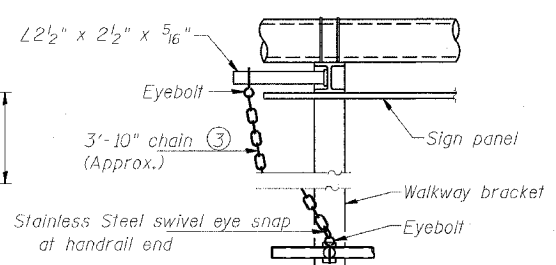


PLAN
DETAIL E HANDRAIL HINGE



PLAN AT HANDRAIL JOINT

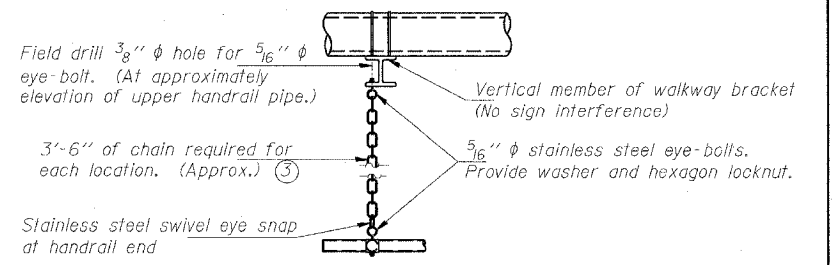
Details not shown same as "PLAN"



ALTERNATE SAFETY CHAIN ATTACHMENT

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

- ③ 3/16" type 304L stainless steel chain, approximately 12 links per foot.
- ④ Extrusions may be used in lieu of the details shown, with approval of the Engineer.



SAFETY CHAIN

One required for each end of each walkway.

Field drill 3/8" ϕ hole for 5/16" ϕ eye-bolt. (At approximately elevation of upper handrail pipe.)
Vertical member of walkway bracket (No sign interference)
3'-6" of chain required for each location. (Approx.) ③
5/16" ϕ stainless steel eye-bolts. Provide washer and hexagon locknut.

DESIGNED	JSS
CHECKED	RDP
DRAWN	JSS
CHECKED	RDP

EXAMINED	20
PASSED	

ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES

NUMBER	REVISION	DATE
1	Updated Sheet	7/21/06

OSS-28
**OVERHEAD SIGN STRUCTURES
ALTERNATE ALUMINUM HANDRAIL DETAILS
FOR DMS**

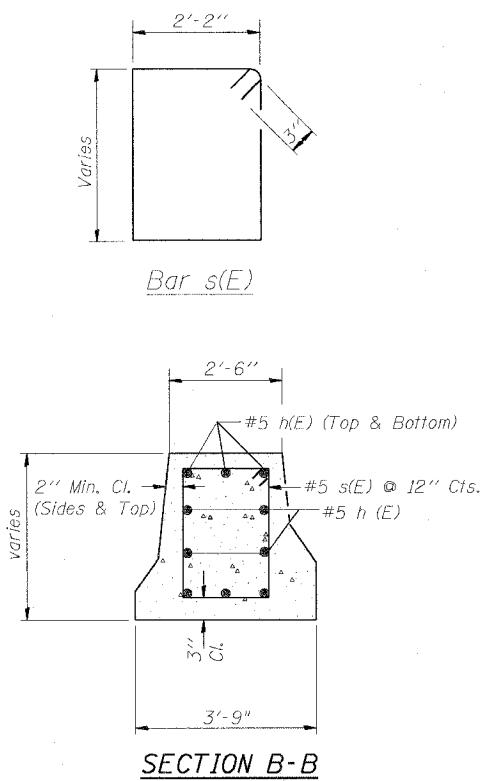
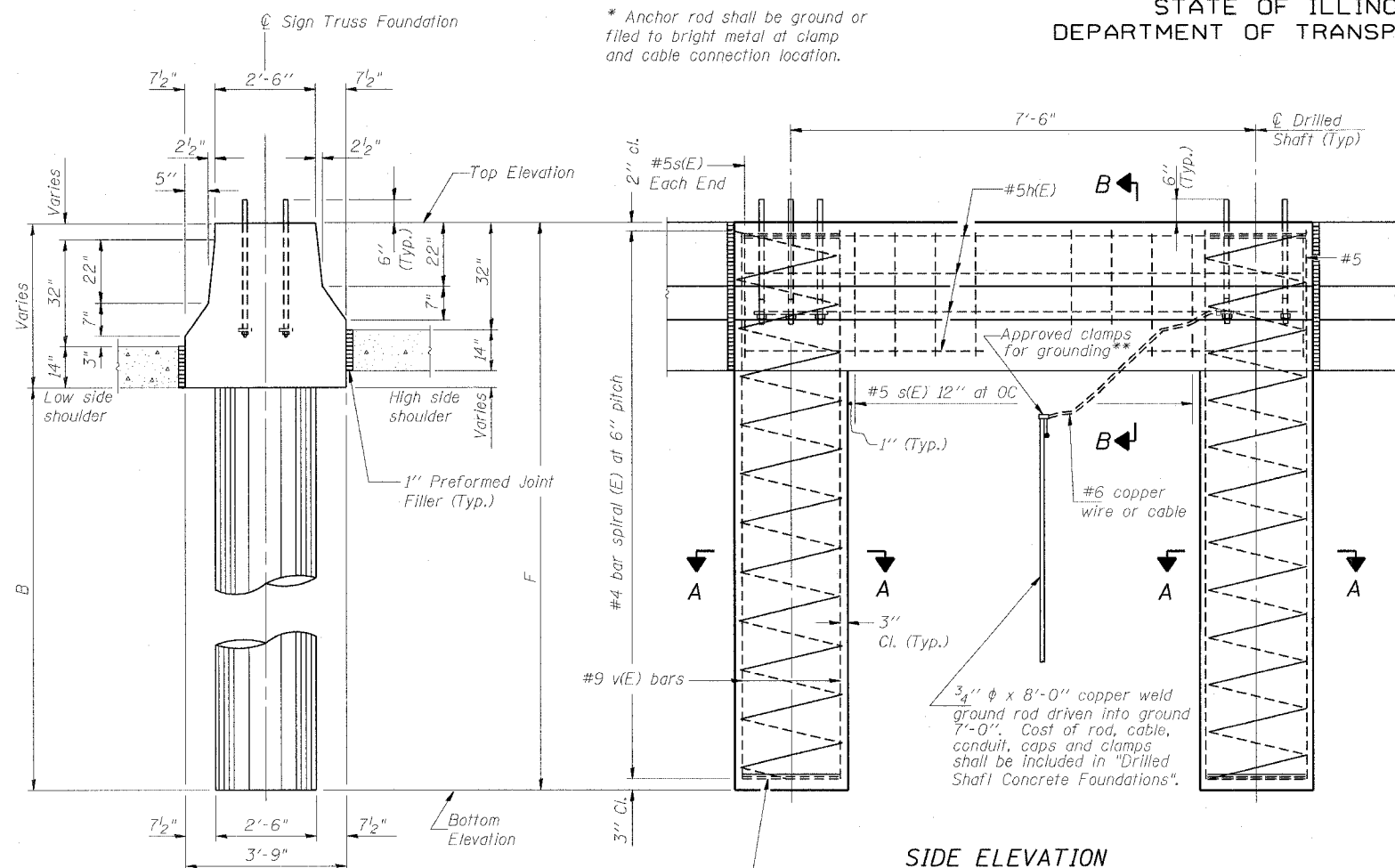
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (NB LOCAL LANES)
PROPOSED IMPROVEMENT
63RD STREET TO GARFIELD BLVD

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. RTE. 90/94		COOK	312	158
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

• (1919.15 & 2021-922 P1.1) R-1 60A62



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 Foundations".

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

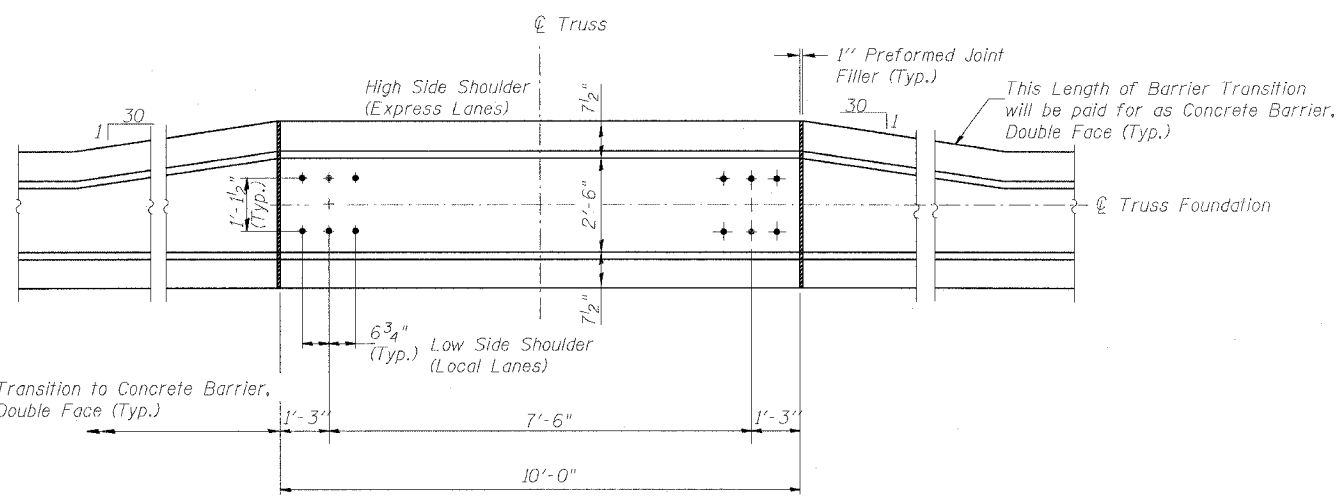
BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
h(E)	10	#5	9'-8"	—
s(E)	9	#5	Varies	□
v(E)	24	#9	F less 0'-5"	—

#4(E) bar spiral - see Side Elevation

SIDE ELEVATION
Concrete Foundation poured monolithically with no construction joint.

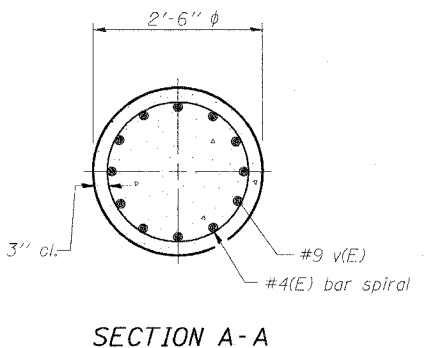
Structure Number	Station	Left Foundation				Right Foundation				Class SI Concrete (Cl. Yds.)
		Elevation Top	Elevation Bottom	B	F	Elevation Top	Elevation Bottom	B	F	
ISO161094L058.8	4421+30.00	4.29'	-13.32'	13.50'	17.61'	----	----	----	----	9.8



DESIGNED	- JSS
CHECKED	- RDP
DRAWN	- JSS
CHECKED	- RDP

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

NUMBER	REVISION	DATE
1	Elevation Bottom, B and F Dimensions Class SI Concrete	7/21/06



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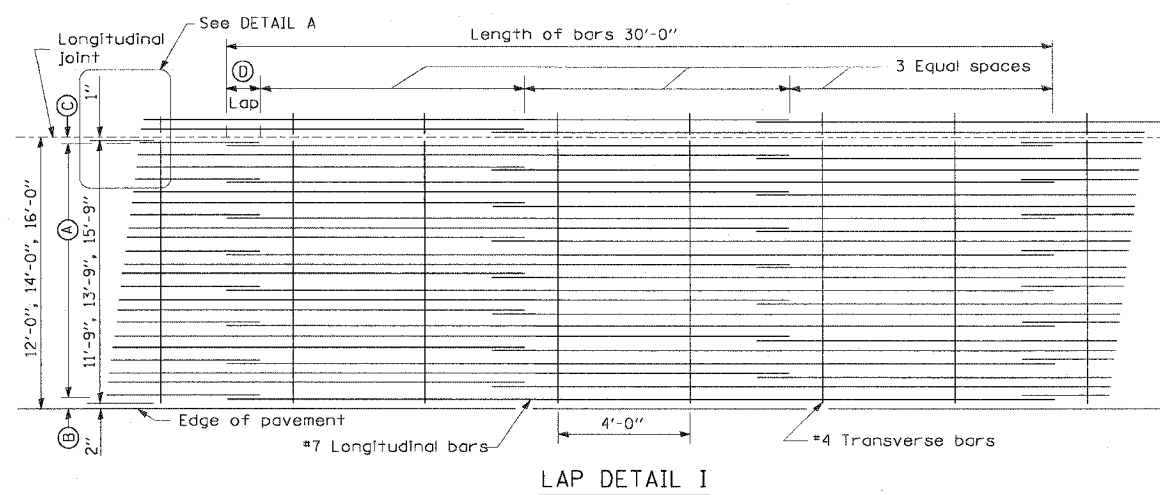
OSS-31

**OVERHEAD SIGN STRUCTURES
MEDIAN SUPPORT FOUNDATION DETAILS**

F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63RD STREET TO GARFIELD BLVD (NB LOCAL LANES)
PROPOSED IMPROVEMENT
63RD STREET TO GARFIELD BLVD
DOUBLE FACE MEDIAN SUPPORT FOUNDATION

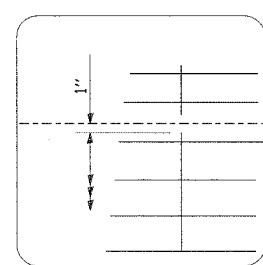
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	312	208
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
60A62	* (1919.15, 2021-922 PT1 & PT2) R-1			

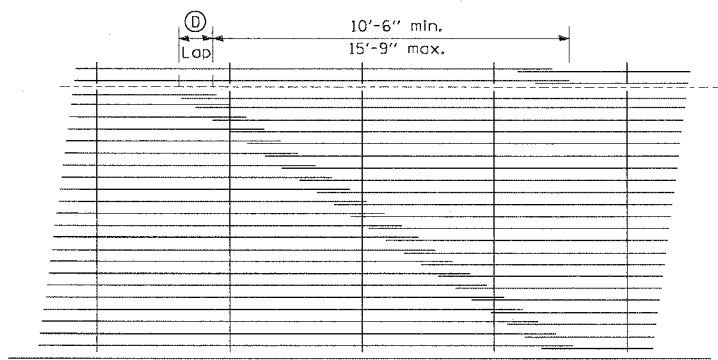


Pavement Width	Bar Size	Pavement Thickness	(A) (Approx. Spacing)	(B)	(C)	(D)
12 feet	#7	14"	23 spaces (24 bars) @ 6"	3 1/2"	3"	26"
14 feet	#7	14"	27 spaces (28 bars) @ 6"	3 1/2"	3"	26"
16 feet	#7	14"	31 spaces (32 bars) @ 6"	3 1/2"	3"	26"

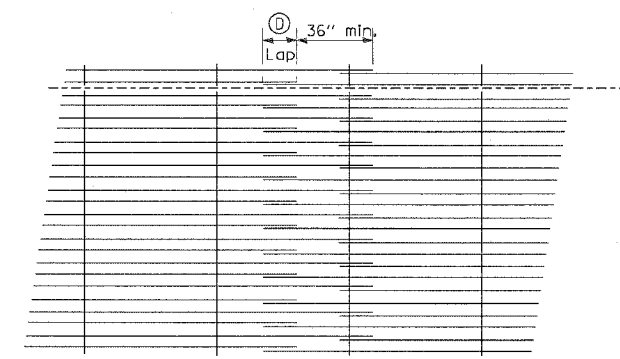
1



DETAIL A



LAP DETAIL II



LAP DETAIL III

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 (B) 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.

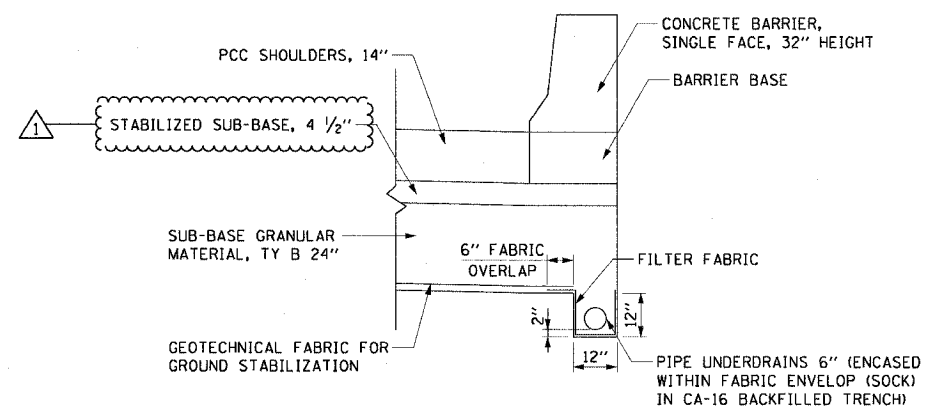
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REVISIONS	
NAME	DATE
ADDENDUM 1	7/27/06

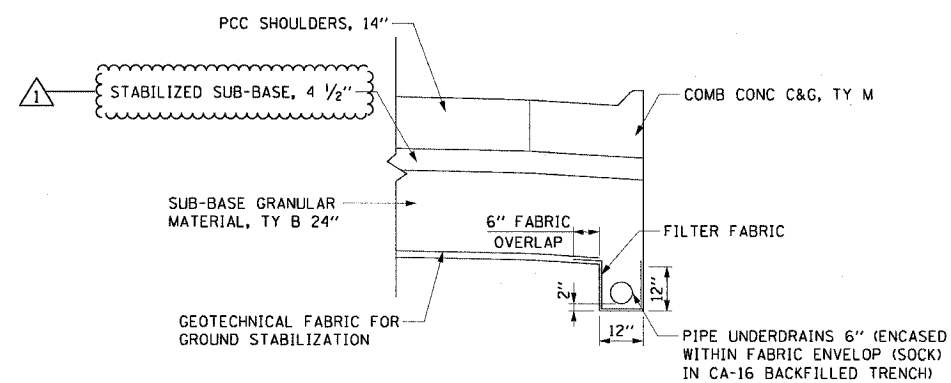
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 63RD STREET TO GARFIELD BLVD (NB LOCAL LANES)
 ROADWAY DETAILS
 EXTENDED LANE REINFORCEMENT FOR
 CONTINUOUSLY REINFORCED PCC PAVEMENT

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

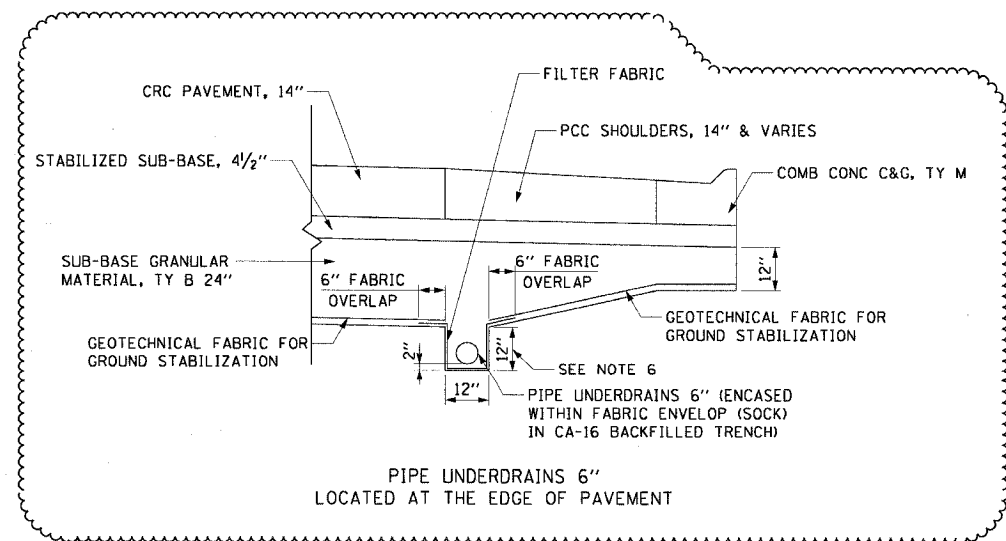
PIPER UNDERDRAINS 6"
N.T.S.



PIPE UNDERDRAINS 6"
LOCATED UNDER SINGLE FACE BARRIER WALL



PIPE UNDERDRAINS 6"
LOCATED UNDER COMB CONC C&G



PIPE UNDERDRAINS 6"
LOCATED AT THE EDGE OF PAVEMENT

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
NO.	DESCRIPTION		
1	ADDENDUM 1		7/27/06

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

**DRAINAGE DETAILS
PIPE UNDERDRAINS 6"**

SCALE: NONE
DATE: June 9, 2006

DRAWN BY: RMG
CHECKED BY: XXX