

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1975-1397	W 195.04	DUPAGE	105	60
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT M-5003(27)		

**BILL OF MATERIAL**

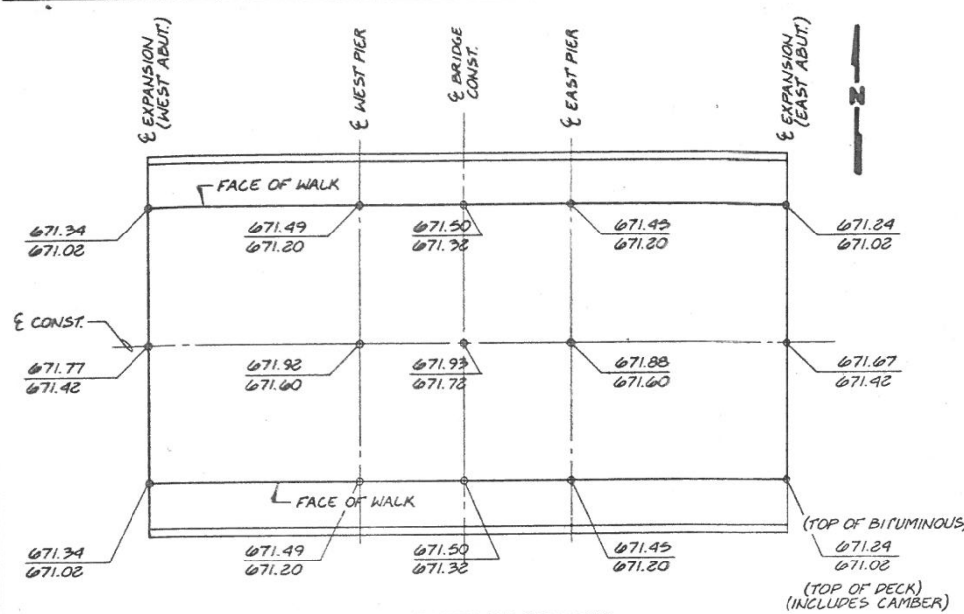
WATERPROOF MEMBRANE SYSTEM	SQ. YDS.	690
2" NEOPRENE EXPANSION JOINT	LIN. FT.	137
BITUMINOUS CONCRETE SURFACE COURSE, MIX E CLASS I	TON	110

**ALTERNATE NEOPRENE EXPANSION JOINTS (2")**

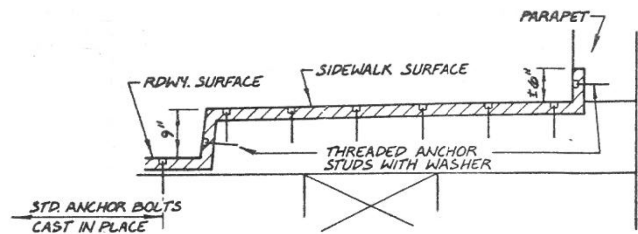
MODEL	SUPPLIER	BLOCKOUT DIMENSIONS		
TRANSFLEX, MODEL 200A	GENERAL TIRE COMPANY	T = 1 13/16"	A = 1 1/8"	B = 3 5/16"
WABOFLEX, MODEL, SR 2	WATSON BOWMAN ASSOCIATES, INC.	T = 1 13/16"	A = 1 1/4"	B = 3 3/16"
FEL-SPAN, MODEL T-30 SET JOINT SEAL 1 5/8" AT 50°F	FEL-PRO BUILDING PRODUCTS INC.	T = 1 3/4"	A = 2 1/4"	B = 2 13/16"
WABO ELASTODAM, TYPE 300 SET JOINT SEAL 1 5/8" AT 50°F	WATSON BOWMAN ASSOCIATES, INC.	T = 1 3/4"	A = 2 1/4"	B = 2 13/16"
WABO ALU-STRIP, TYPE III S300 SET JOINT SEAL 1 1/2" AT 50°F	WATSON BOWMAN ASSOCIATES, INC.	T = 1 3/4"	A = 1 5/8"	B = 2 3/4"
LOW PROFILE ONFLEX-25 SET JOINT SEAL 1 1/2" AT 50°F	STRUCTURAL ACCESSORIES, INC.	T = 1 3/4"	A = 1 5/8"	B = 2 3/8"

NOTE: ROADWAY BOLT CHANNEL SHALL BE FILLED WITH APPROVED GROUT PERMITTED FOR UP TO 50°F SKEW

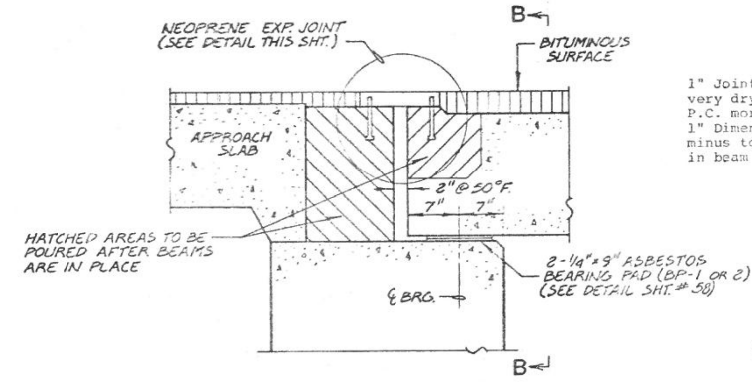
NOTE: FURNISHING AND INSTALLATION OR APPLICATION OF ALL NECESSARY HARDWARE, ANCHOR BOLTS OR STUDS, DRAIN HOLES, SEALANTS, ADHESIVES, AND OTHER ACCESSORIES ARE INCLUDED IN THE CONTRACT UNIT PRICE FOR NEOPRENE EXPANSION JOINT.



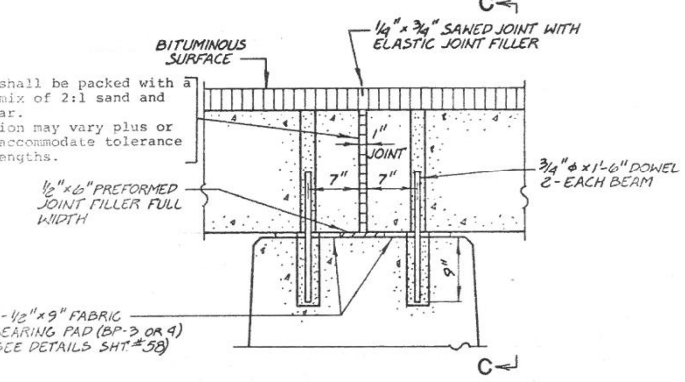
**PLAN - SURFACE GRADES ON BRIDGE DECK**



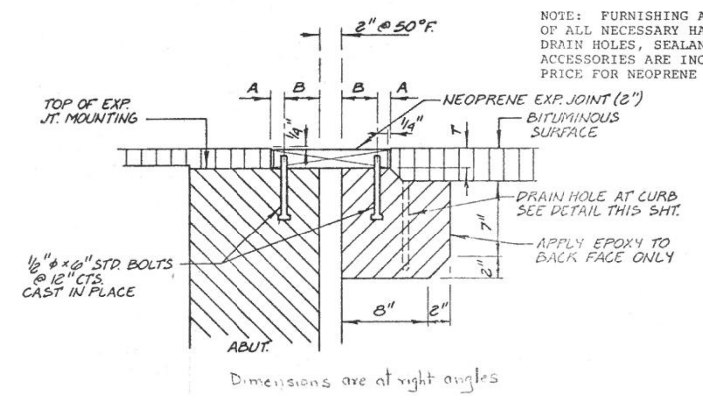
**NEOPRENE END TREATMENT (TYPICAL AT SIDEWALK)**



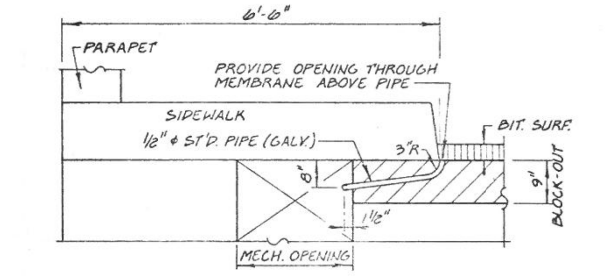
**EXPANSION BEARING DETAILS (ABUTMENTS)**



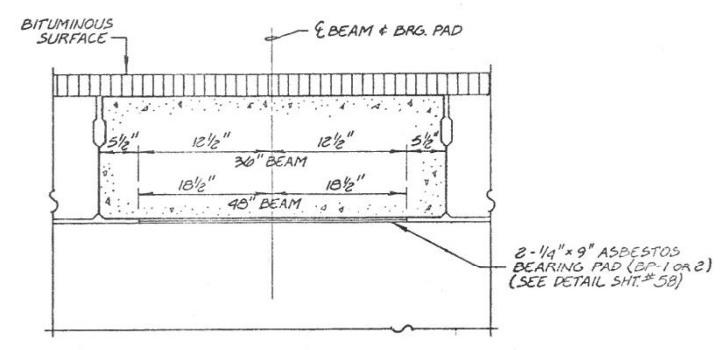
**FIXED BEARING DETAIL (PIERS)**



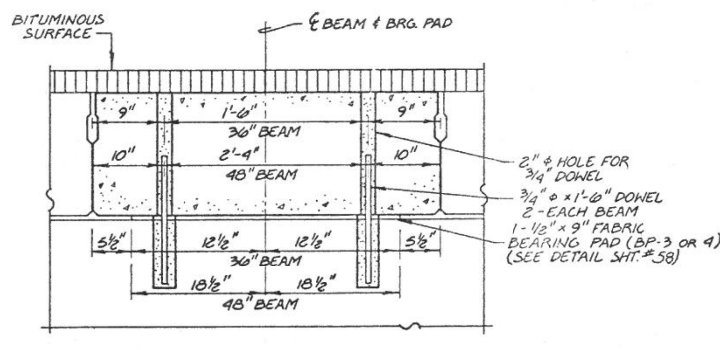
**EXPANSION JOINT AT ABUT. - DECK NEOPRENE**



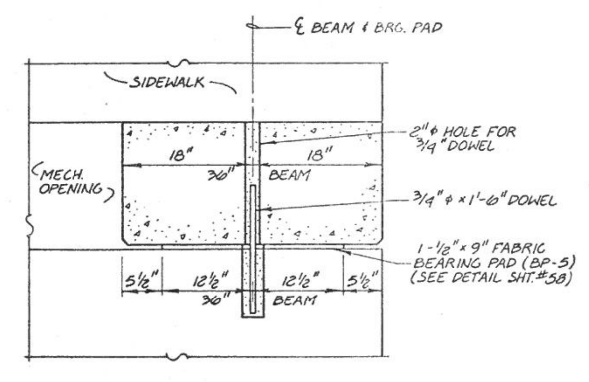
**SECTION A-A**



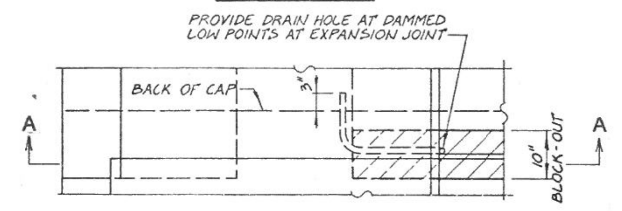
**SECTION B-B (EXP. END)**



**SECTION C-C (FIXED END)**



**SECTION (FIXED END) (SPECIAL BEAM)**



**PLAN - DRAIN HOLES AT EXPANSION JOINT**

ILLINOIS DIVISION OF HIGHWAYS

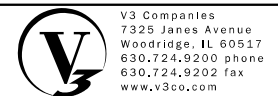
**MISC. DECK DETAILS**

ST. CHARLES ROAD BRIDGE - SALT CREEK

DATE: 12-13-77

DRAWN BY: D. C. N.

CHECKED BY: E. M.



V3 Companies  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com

USER NAME = cf1gus	DESIGNED - BS	REVISED -
PLOT SCALE = 0:2.0000 '1' = 1"	DRAWN - BS	REVISED -
PLOT DATE = 2/13/2019	CHECKED - CB	REVISED -
	DATE - 11/16/18	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

RECORD ST. CHARLES ROAD BRIDGE PLAN  
- FOR INFORMATION ONLY

SCALE: N.T.S. SHEET 11 OF 15 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	82
PROJECT:		JOB: C-91-313-15		
ILLINOIS				

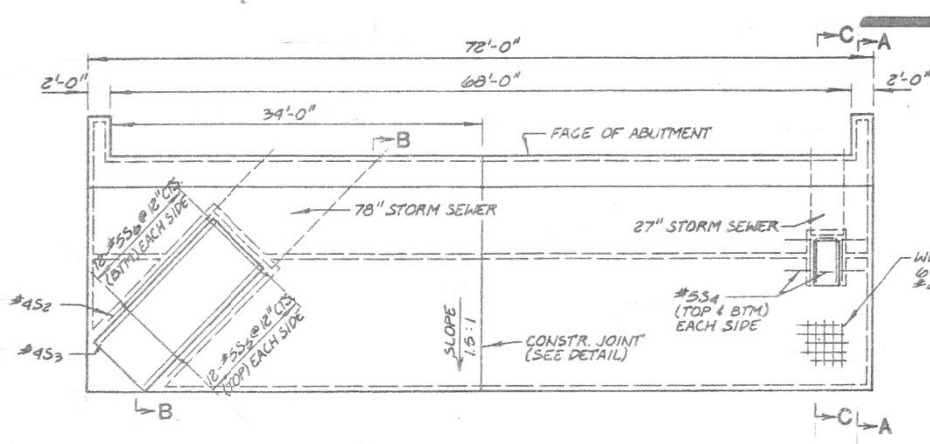


REVISIONS	
NAME	DATE
D.C.N.	2-16-78
D.C.N.	4-6-78
G.M.	3-22-79

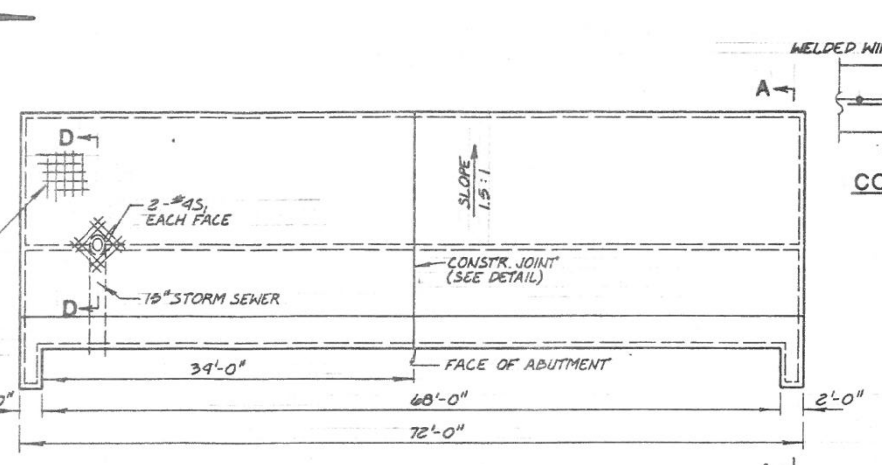
AR 10 U-10

00104

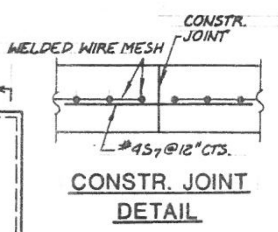
RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU	1975-136-1397	DUPAGE	105	61
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	M-2003(27)	



WEST SLOPE WALL - PLAN



EAST SLOPE WALL - PLAN



CONSTR. JOINT DETAIL

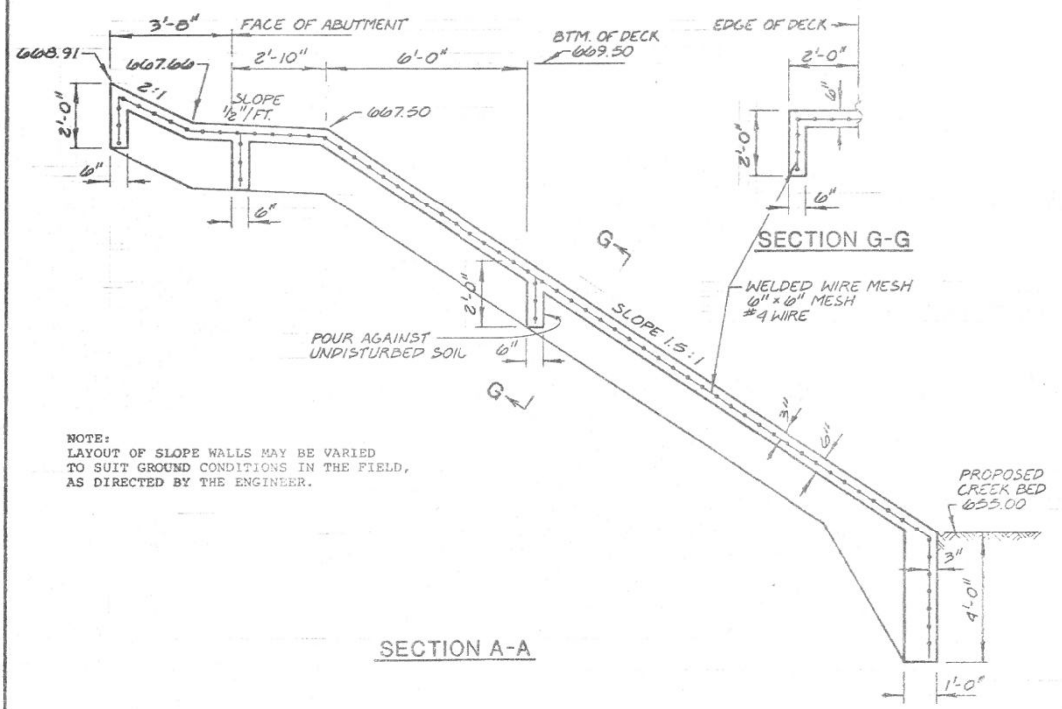
**BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
S <sub>1</sub>	25	#4	4'-0"	
S <sub>2</sub>	12	#4	14'-0"	
S <sub>3</sub>	5	#4	15'-6"	
S <sub>4</sub>	16	#5	4'-6"	
S <sub>5</sub>	24	#5	7'-0"	
S <sub>6</sub>	24	#5	9'-0"	
S <sub>7</sub>	62	#4	3'-0"	

• CLASS X CONCRETE CU. YDS. 102  
 • REINFORCEMENT BARS POUNDS 835

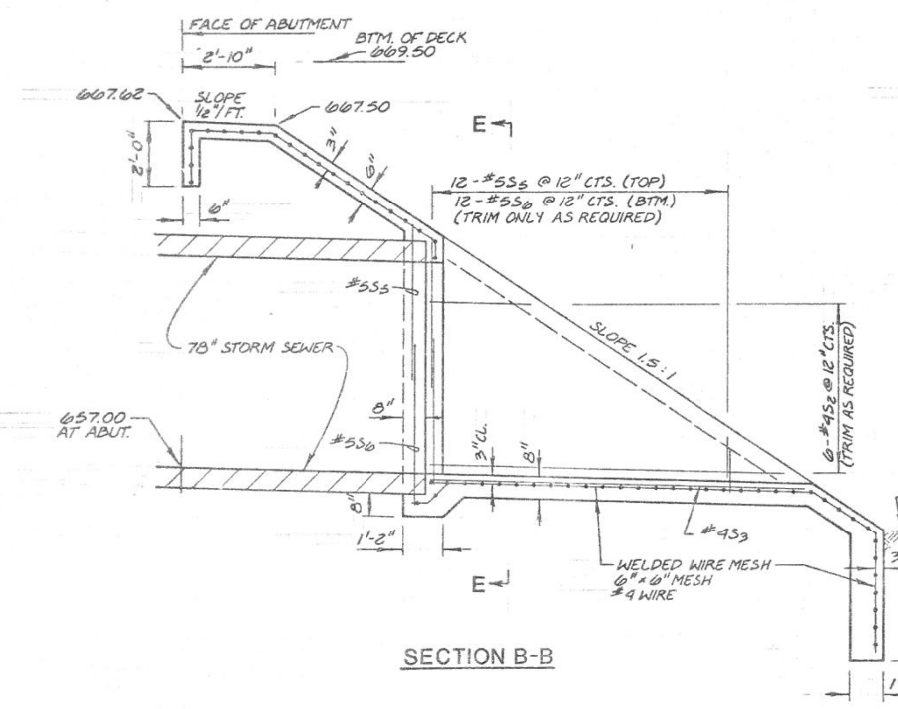
NOTE: CLASS X CONCRETE AND REINFORCEMENT BARS SHALL NOT BE MEASURED SEPARATELY FOR PAYMENT BUT SHALL BE INCLUDED IN THE COST OF:

OUTFALL STRUCTURE, SPECIAL 15"	1 EACH
OUTFALL STRUCTURE, SPECIAL 27"	1 EACH
OUTFALL STRUCTURE, SPECIAL 78"	1 EACH
SLOPE WALL 6 INCH	SQ. YD. 400

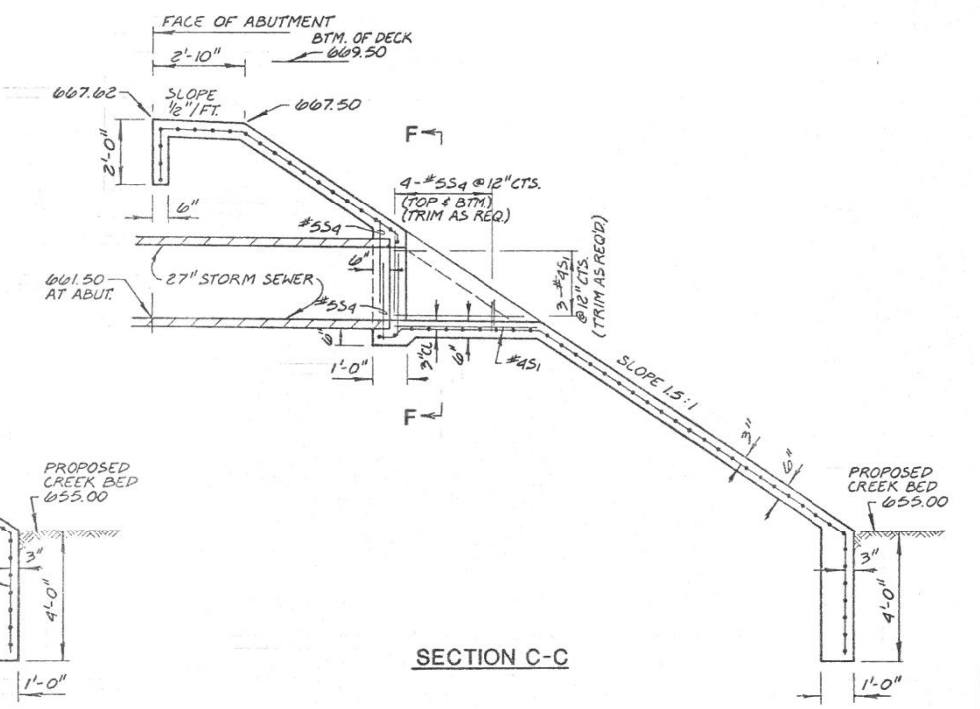


SECTION A-A

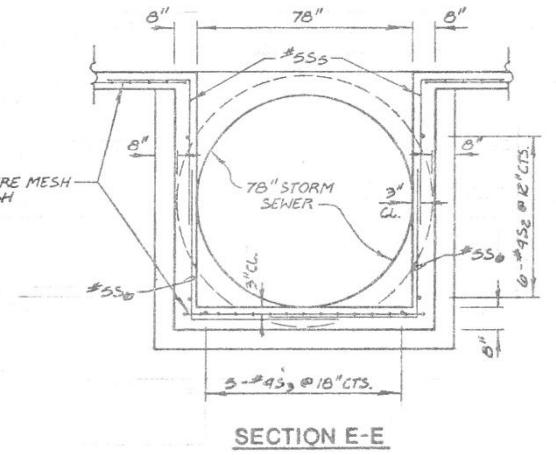
SECTION G-G



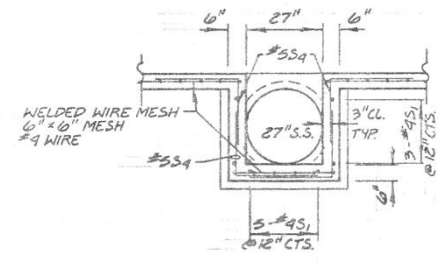
SECTION B-B



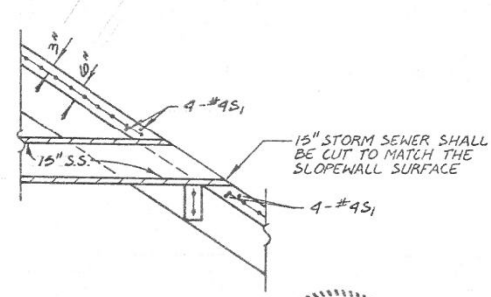
SECTION C-C



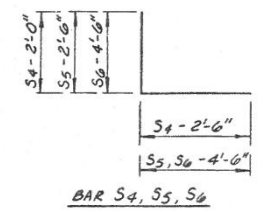
SECTION E-E



SECTION F-F



SECTION D-D



BAR S<sub>4</sub>, S<sub>5</sub>, S<sub>6</sub>



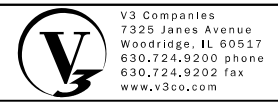
REVISIONS	
NAME	DATE
D.C.N.	3-15-78
D.C.N.	4-6-78
G.M.	3-22-79

ILLINOIS DIVISION OF HIGHWAYS

**SLOPE WALL DETAILS**

ST. CHARLES ROAD BRIDGE - SALT CREEK

DRAWN BY: D.C.N.



USER NAME = cf1gus	DESIGNED - BS	REVISED -
PLOT SCALE = 0.20000 '1' / in.	DRAWN - BS	REVISED -
PLOT DATE = 2/13/2019	CHECKED - CB	REVISED -
	DATE - 11/16/18	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

RECORD ST. CHARLES ROAD BRIDGE PLAN  
- FOR INFORMATION ONLY

SCALE: N.T.S. SHEET 12 OF 15 SHEETS STA. TO STA.

F.A.U. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	83
PROJECT:		JOB: C-91-313-15		
ILLINOIS				

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PAU 1397	1975-1980 W & R.S. BY	DUPAGE	105	62
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT M-5003 (27)	

**BILL OF MATERIAL**

ITEM	UNIT	QUANT.
ALUMINUM RAILING	LIN. FT.	204

**GENERAL NOTES**

All posts shall be normal to parapet.

All aluminum alloy extruded rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.

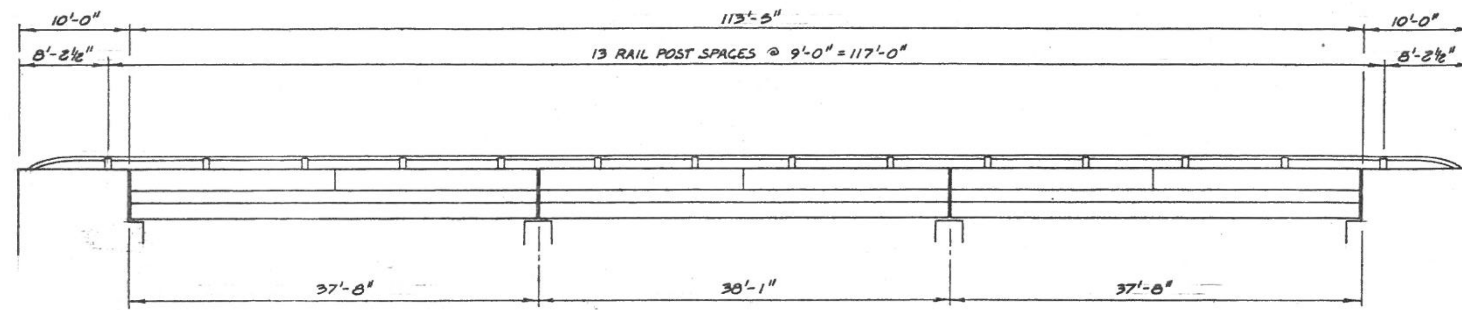
All joints in rails shall be spliced per detail.

Provide 1-1/8" and 2-1/16" Aluminum Shims for 25% of the posts. Rail elements shall be parallel to grade - High spots shall be ground and low spots shimmed.

Aluminum alloy rail shall conform to ASTM B221 Alloy 6061-T6 or 6351-T5 with minimum yield 35 KSI, minimum tensile 38 KSI, and elongations of 10% in 2 inches.

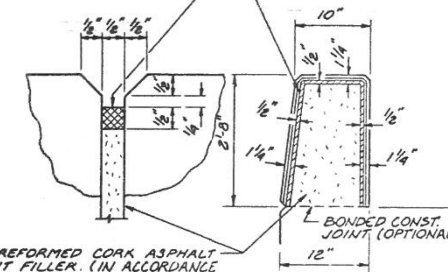
Stainless steel machine bolts or cap screws shall be in accordance with Article 710.37(a) of the STD specifications except Grade B8 or B8M may be furnished.

Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers, gun grade with primer. Fabric bearing pad shall have same dimensions as base of post.

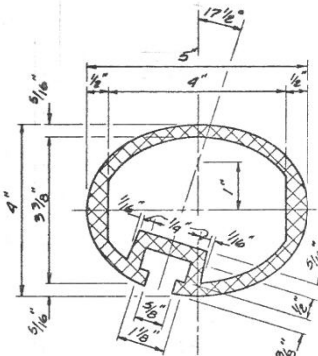


**RAILING ELEVATION**

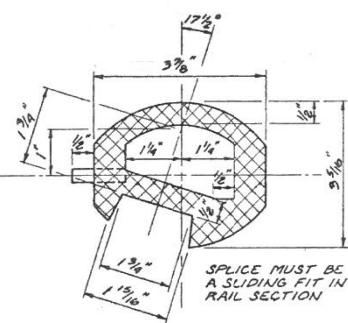
TWO COMPONENT NON-STAINING GRAY SEALING COMPOUND WITH POLYSULFIDE LIQUID POLYMERS GUN GRADE WITH PRIMER



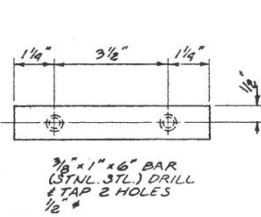
**PARAPET JOINT DETAIL**



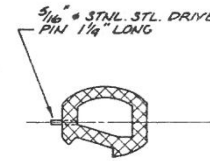
**SEC. THRU ELLIPTICAL RAIL SECTION**



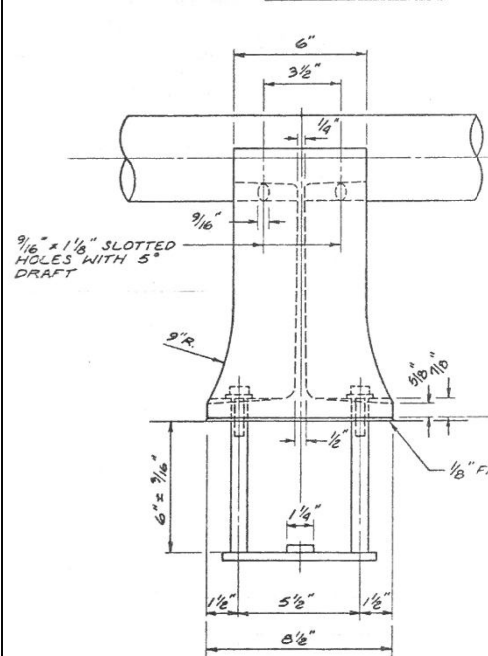
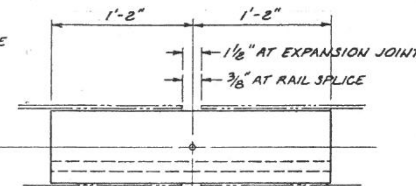
**SECTION THRU SPLICE**



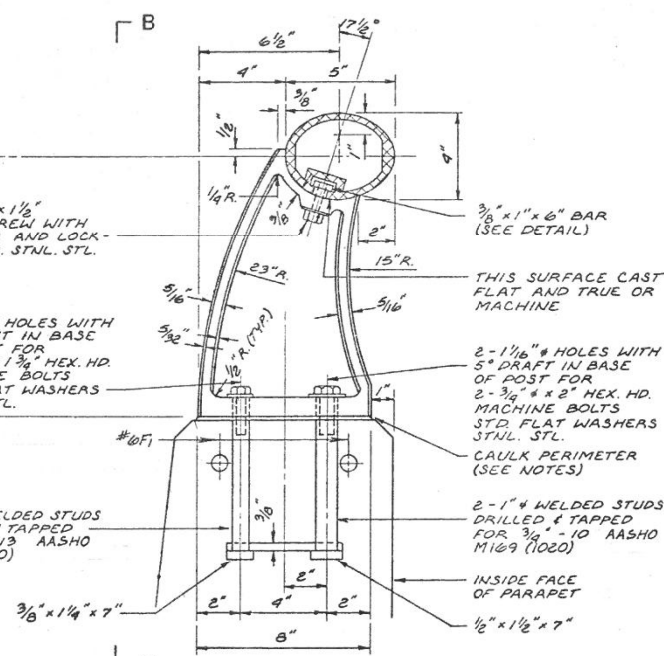
**CLAMP BAR**



**RAIL SPLICE**

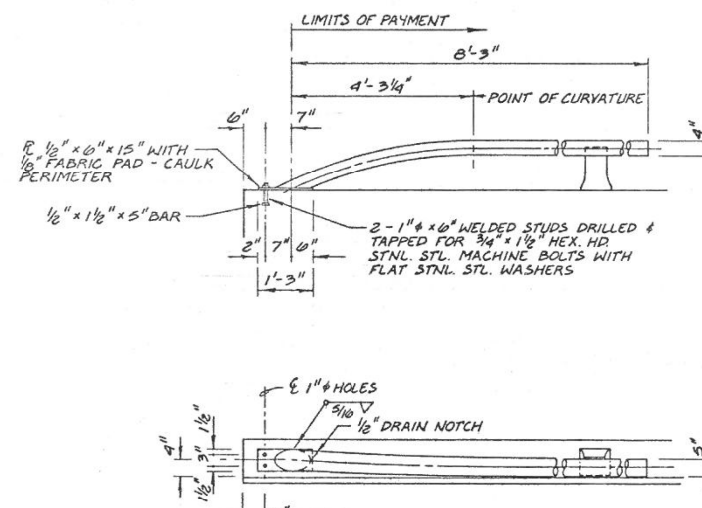


**VIEW B-B**



**SECTION A-A ALSO AT WINGWALL**

**RAIL POST DETAILS**



**RAIL TERMINAL SECTION**



REVISIONS	
NAME	DATE
D.C.N.	2-14-70
D.C.N.	4-6-78
G.M.	3-22-79

ILLINOIS DIVISION OF HIGHWAYS

**HANDRAIL DETAILS**

ST. CHARLES ROAD BRIDGE - SALT CREEK

DRAWN BY: D.C.N.

CHECKED BY: E.M.

DATE: 12-13-77



USER NAME = cfisus	DESIGNED - BS	REVISED -
PLOT SCALE = 0:2.0000 '1' / in.	DRAWN - BS	REVISED -
PLOT DATE = 2/13/2019	CHECKED - CB	REVISED -
	DATE - 11/16/18	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

RECORD ST. CHARLES ROAD BRIDGE PLAN  
- FOR INFORMATION ONLY

SCALE: N.T.S. SHEET 13 OF 15 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	84
PROJECT:			JOB: C-91-313-15	
ILLINOIS				

00104

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
197	136-1397	DUPAGE	105	63
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT M-5003(27)	

**BORING NO. SB - 34**

STATION 88+91  
OFFSET 11'R.

GROUNDWATER DATA		DRILLING METHOD	
DATE	DEPTH	HOUR	RIG TYPE
6-7-79	20.0	-	CME 55
6-7-79	19.0	-	AUGER TYPE-DEPTH 6" HSA
6-7-79	5.0	-	CASING TYPE-DEPTH -
6-7-79	5.0	-	SAMPLER TYPE SS
CLASSIFICATION			
Depth	N	Qu	W
3.0 IN. AC SURFACE			
3.0 IN. PCC BASE			
661.1			
FILL: BR-GR-BK SILTY CLAY, A-6 W/ STONE FRAGMENTS	15	-	14
666.0			
FILL: DK GR SILTY CLAY 5 LOAM, A-6 W/FIBERS	10	-	25
663.5			
	27	7.0	18
BR SILTY CLAY, A-6	10	34	8.1
	34	7.9	17
655.5			
	25	20	4.6
654.0 END OF BORING 12-30-71	16.0		
GR SILTY CLAY, A-6	13	4.3	14
651.5			
BTM. FTG. WEST ABUT. GR CLAY, A-6	20	17	3.9
648.5			
INTERBEDDED BR GR SILTY CLAY, A-6; BR GR SILTY, A-4; AND GR SAND, A-2.4	7	1.5	14
25	7	1.3	14
643.5			
GR LOAM, A-4	21	3.2	17
640.0			
GR SAND, A-1-a W/GRAVEL	30	3.0	16
638.5			
	34	-	17
GR SAND, A-3	35	34	20
	24	-	14
630.5			
GR SILTY LOAM, A-4	40	18	3.0
	21	1.1	12
626.0			
GR LOAM, A-4 W/ROCK FRAGMENTS	45	49	4.5
	100	4.8	9
21.5 END OF BORING	48.5		

**BORING NO. SB - 51**

STATION 87+25  
OFFSET C.L.

GROUNDWATER DATA		DRILLING METHOD	
DATE	DEPTH	HOUR	RIG TYPE
6-2-80	10.0	-	CME 55
6-2-80	10.0	-	AUGER TYPE-DEPTH 6" HSA
6-2-80	9.5	4d	CASING TYPE-DEPTH -
6-2-80	9.5	4d	SAMPLER TYPE SS
CLASSIFICATION			
Depth	N	Qu	W
BRIDGE DECK			
3.0 IN. AC			
18.0 IN. PCC			
668.2			
BOTTOM OF BRIDGE DECK			
5			
SALT CREEK WATER LEVEL			
660.0			
SALT CREEK			
658.0			
DK BR & GR CLAY LOAM, A-6 W/SAND SEAMS	30	-	19
655.0			
GR SILTY CLAY, A-6	11	2.3	18
653.5			
BTM. FTG. WEST ABUT. GR CLAY, A-6	11	1.9	28
649.7			
BTM. FTG. WEST PIER	20	10	2.1
INTERBEDDED BR GR SILTY CLAY, A-6; BR GR SILTY, A-4; AND GR SAND, A-2.4	10	2.5	16
647.5			
GR LOAM, A-4	6	2.0	14
646.7			
GR LOAM, A-4	9	-	23
25	16	1.7	11
642.3			
GR SAND, A-1-a W/GRAVEL	20	2.3	12
640.7			
GR SAND, A-3	12	-	9
30	42	-	19
34	-	21	-
20	-	16	-
635.0			
GR SILTY LOAM, A-6	35	12	-
	29	3.7	15
631.0			
GR SILTY LOAM, A-4	40	19	2.5
627.0			
GR LOAM, A-4 W/ROCK FRAGMENTS	14	1.4	10
102	5.0	9	-
627.0			
GR LOAM, A-4 W/ROCK FRAGMENTS	102	5.0	9
45	44	-	10
623.5			
GR SAND, A-1-b	100	-	12
622.0 END OF BORING	48.5		

**BORING NO. SB - 52**

STATION 87+97  
OFFSET 14'R.

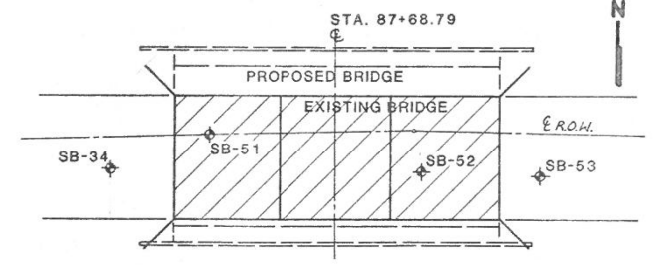
GROUNDWATER DATA		DRILLING METHOD	
DATE	DEPTH	HOUR	RIG TYPE
5-30-79	25.0	-	CME 55
5-30-79	25.0	-	AUGER TYPE-DEPTH 6" HSA
5-30-79	9.5	4d	CASING TYPE-DEPTH -
5-30-79	9.5	4d	SAMPLER TYPE SS
CLASSIFICATION			
Depth	N	Qu	W
BRIDGE DECK			
3.0 IN. AC			
18.0 IN. PCC			
668.2			
BOTTOM OF BRIDGE DECK			
5			
TOP OF GROUND			
661.5			
DK BR & GR CLAY LOAM, A-6 W/SAND SEAMS	3	0.3	27
656.0			
GR SILTY CLAY, A-6	15	9	3.2
653.5			
GR CLAY, A-6	9	2.6	25
651.0			
BTM. FTG. EAST PIER	20	7	2.7
INTERBEDDED BR GR SILTY CLAY, A-6; BR GR SILTY, A-4; AND GR SAND, A-2.4	7	2.7	15
648.5			
GR LOAM, A-4	13	3.4	15
10	4.0	14	-
645.0			
GR SAND, A-1-a, W/GRAVEL	25	21	-
643.5			
GR SANDY LOAM, A-4	21	-	14
641.0			
GR SAND, A-1-a W/GRAVEL	30	44	-
638.5			
GR SAND, A-3	46	-	20
636.0			
PEBBLE			
GR CLAY LOAM, A-6	35	19	-
	6	1.0	14
631.0			
GR SAND, A-3	12	-	18
630.0			
GR SILTY LOAM, A-6	40	14	4.4
628.5			
GR SILTY LOAM, A-4	11	1.2	12
626.0			
GR SILTY LOAM, A-4			
625.6			
GR LOAM, A-4 W/ROCK FRAGMENTS	45	53	4.5
623.6 END OF BORING	46.0		
100	-	12	-
622.0 END OF BORING	48.0		

**BORING NO. SB - 53**

STATION 88+38  
OFFSET 15'R.

GROUNDWATER DATA		DRILLING METHOD	
DATE	DEPTH	HOUR	RIG TYPE
5-29-79	13.0	-	CME 55
5-29-79	12.5	0	AUGER TYPE-DEPTH 6" HSA
5-30-79	10.0	1d	CASING TYPE-DEPTH -
5-30-79	10.0	1d	SAMPLER TYPE SS
CLASSIFICATION			
Depth	N	Qu	W
4.5 IN. AC SURFACE			
9.0 IN. PCC BASE			
668.5			
COBBLE	16	2.3	15
FILL: DK BR & GR SILTY CLAY, A-7-6 W/ COBBLES & WOOD FRAGMENTS	5	4	0.8
663.6			
FILL: GR CRUSHED STONE MIXED W/BR SILTY CLAY, A-7-6	4	-	32
660.6			
FILL: DK GR ORGANIC SILTY CLAY, A-7-6 W/WOOD FRAGMENTS	4	0.5	35
	4	0.6	30
657.1			
BR & GR TO GR SANDY LOAM, A-4	16	-	22
656.6			
	26	5.0	16
15	15	4.8	14
GR SILTY CLAY, A-5	11	2.0	19
650.6			
BTM. FTG. EAST ABUT. GR CLAY, A-6	20	12	1.9
648.1			
GR SANDY CLAY LOAM, A-4	12	-	14
GR SANDY CLAY LOAM, A-4			
645.6			
GR LOAM, A-4	25	16	1.7
643.1			
GR SAND, A-1-a W/GRAVEL	22	-	14
641.6			
GR SANDY LOAM, A-4	18	-	18
640.6			
GR SAND, A-1-a W/GRAVEL	30	22	-
638.6			
INTERBEDDED W/ SILTY LOAM, A-6			
GR SAND, A-3	30	-	21
GR SAND, A-3	35	20	-
630.6			
GR SILTY LOAM, A-6	40	19	4.5
629.1			
GR SILTY LOAM, A-4	20	3.0	12
	31	4.5	12
625.6			
GR SILTY LOAM, A-4			
623.6			
GR LOAM, A-4 W/ROCK FRAGMENTS	45	58	4.5
623.6 END OF BORING	46.0		

**LEGEND**  
N - STANDARD PENETRATION RESISTANCE  
Qu - UNCONFINED COMPRESSIVE STRENGTH  
W - NATURAL WATER CONTENT

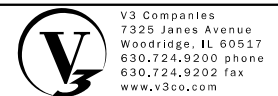


KEY - BORING LOCATIONS



REVISIONS	
NAME	DATE
G.A.	3-22-79

ILLINOIS DIVISION OF HIGHWAYS  
**BRIDGE SOIL BORING LOGS**  
ST. CHARLES ROAD BRIDGE - SALT CREEK  
DRAWN BY: D.C.N.  
CHECKED BY: J.W.A.  
DATE: 12-13-77



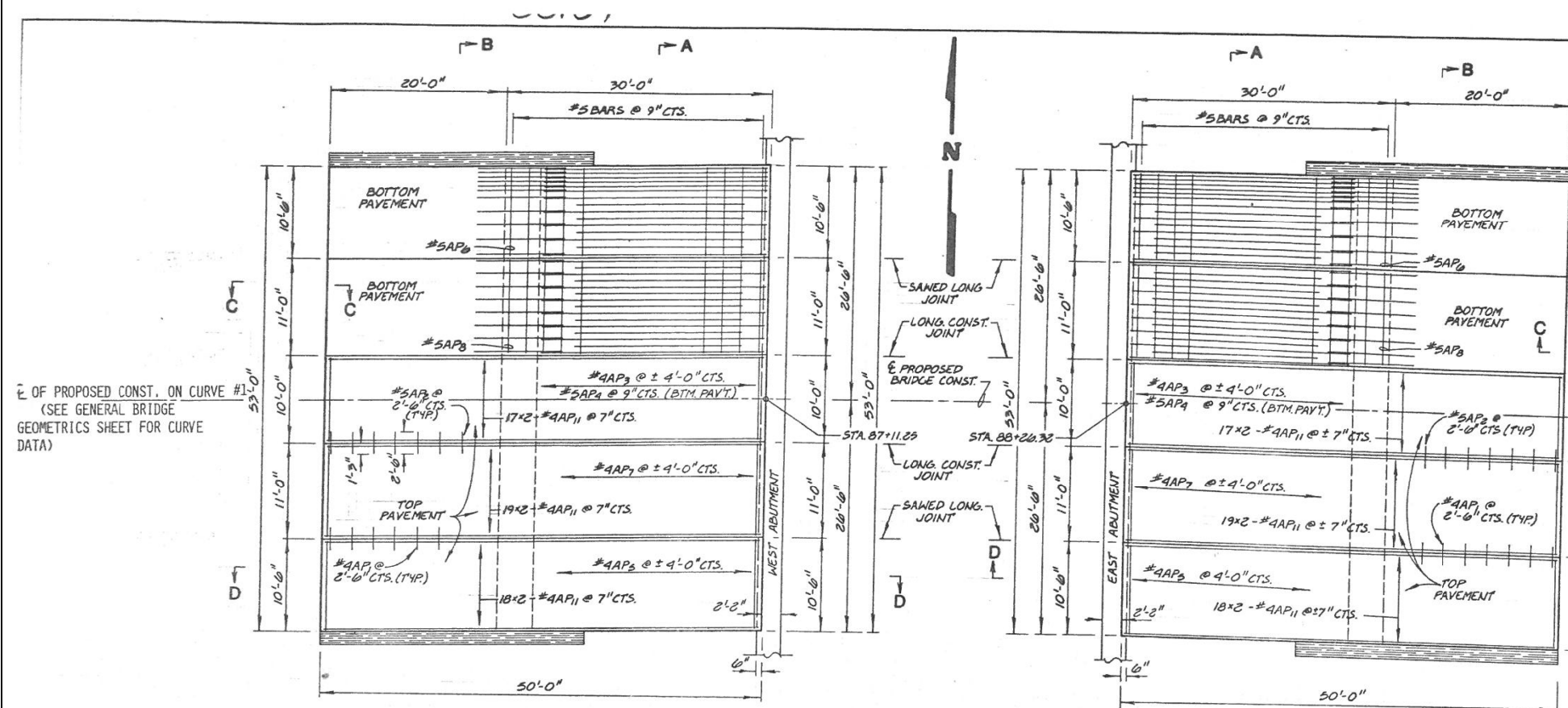
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PLOT SCALE = 0.20000' / 1" =  
PLOT DATE = 2/13/2019

DESIGNED - BS	REVISED -
DRAWN - BS	REVISED -
CHECKED - CB	REVISED -
DATE - 11/16/18	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

RECORD ST. CHARLES ROAD BRIDGE PLAN  
- FOR INFORMATION ONLY  
SCALE: N.T.S. SHEET 14 OF 15 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	85
PROJECT:		JOB: C-91-313-15		
ILLINOIS				



WEST APPROACH PAVEMENT - PLAN

EAST APPROACH PAVEMENT - PLAN

- NOTES:
1. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER POUND FOR REINFORCEMENT BARS AND PER SQUARE YARD FOR BRIDGE APPROACH PAVEMENT.
  2. THE TIE BARS, EXPANSION JOINT, STABILIZED SUB-BASE, BITUMINOUS PRIME COAT AND ALL OTHER MATERIALS AND WORK NECESSARY TO CONSTRUCT THE APPROACH PAVEMENT AS SHOWN, SHALL BE CONSIDERED INCIDENTAL TO THE BRIDGE APPROACH PAVEMENT.
  3. THE COMBINATION CONCRETE CURB AND GUTTER NECESSARY ALONG THE BRIDGE APPROACH PAVEMENT WILL BE PAID FOR SEPARATELY.
  4. PAVEMENT REINFORCEMENT SHALL BE PLACED SO THAT THE TOP OF LONGITUDINAL STEEL WILL BE AT LEAST 1 1/2" BELOW THE TOP OF SLAB AND THE BOTTOM OF LONGITUDINAL STEEL WILL NOT BE LOWER THAN MID-DEPTH OF SLAB.

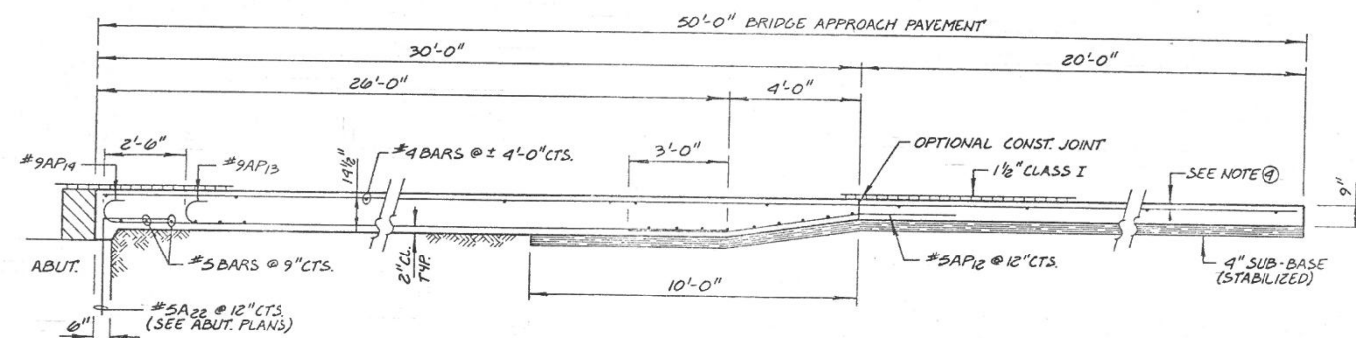
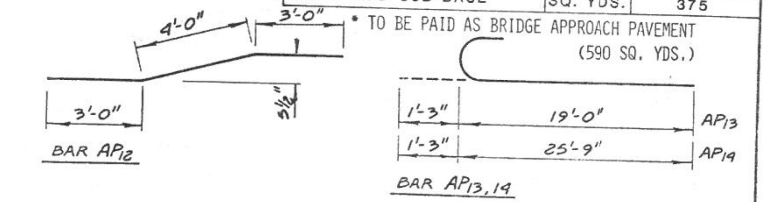
RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F&U 1975-186-W 1897	L.R.S. BY	DUPAGE	105	103
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT#-5003(27)	

**BILL OF MATERIAL**

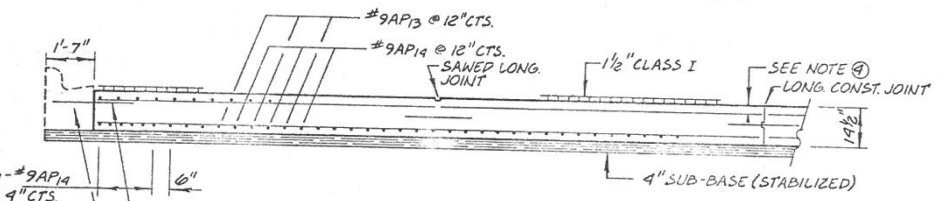
BAR	NO.	SIZE	LENGTH	SHAPE
AP1	80	#4	2'-6"	
AP2	80	#5	2'-6"	
AP3	20	#4	9'-6"	
AP4	80	#5	9'-6"	
AP5	52	#4	10'-0"	
AP6	100	#5	10'-0"	
AP7	52	#4	10'-0"	
AP8	160	#5	10'-0"	
AP11	369	#4	25'-6"	
AP12	124	#5	10'-0"	
AP13	90	#9	20'-3"	
AP14	124	#9	27'-0"	

**REINFORCEMENT BARS**

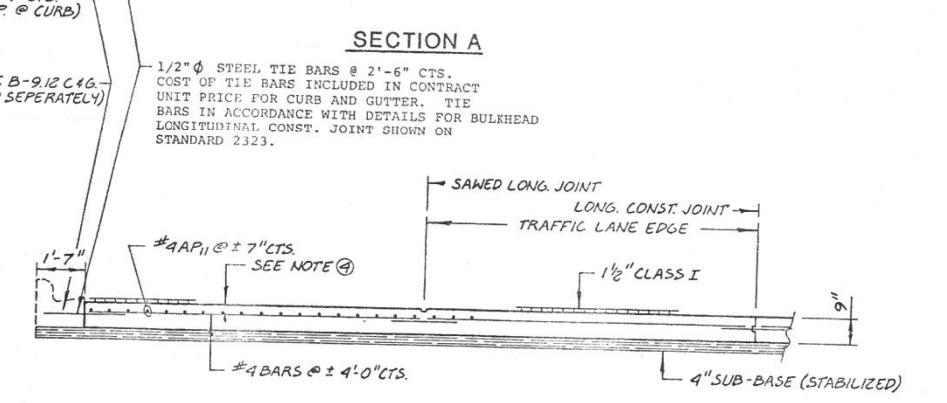
CLASS X CONCRETE	POUNDS	32,120
BIT. CONC. SURFACE CRS. CL. (MIX E)	CU. YDS.	199
STABILIZED SUB-BASE	TONS	50
	SQ. YDS.	375



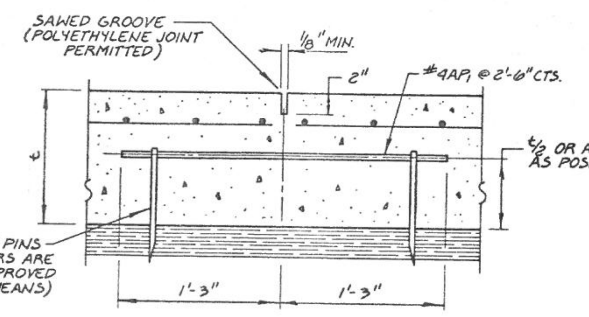
SECTION D-D



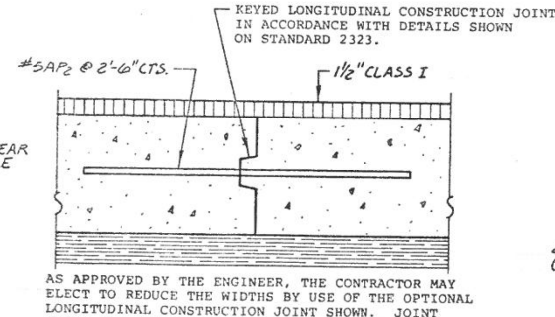
SECTION A



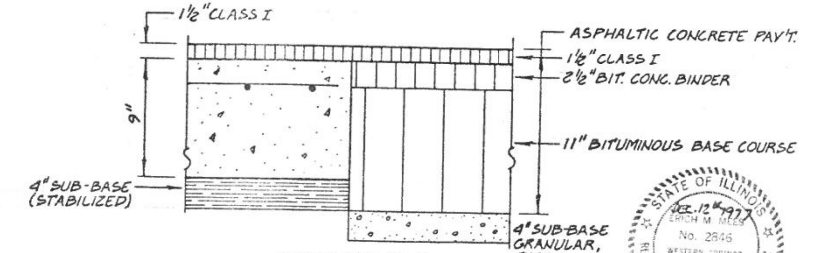
SECTION B



SAWED LONG. JOINT



OPTIONAL LONG. CONST. JOINT



SECTION C-C

REVISIONS

NAME	DATE
D.C.N.	2-19-78
R.M.F.	3-31-78
G.M.	3-22-79

ILLINOIS DIVISION OF HIGHWAYS

**BRIDGE APPROACH PAVEMENT**

**DETAILS**

ST. CHARLES ROAD BRIDGE - SALT CREEK

SCALE: AS SHOWN      DRAWN BY: D.C.N.

DATE: 1-29-78      CHECKED BY: G.A.S.



V3 Companies  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com

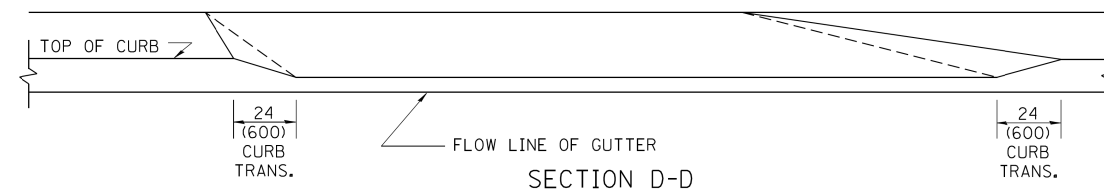
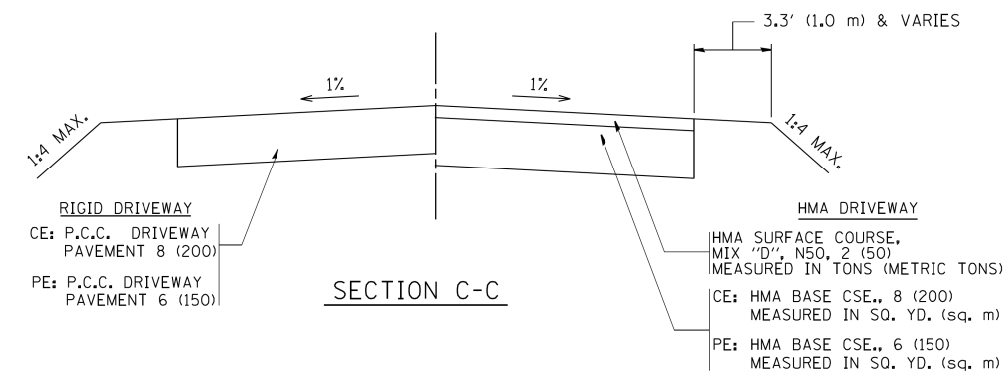
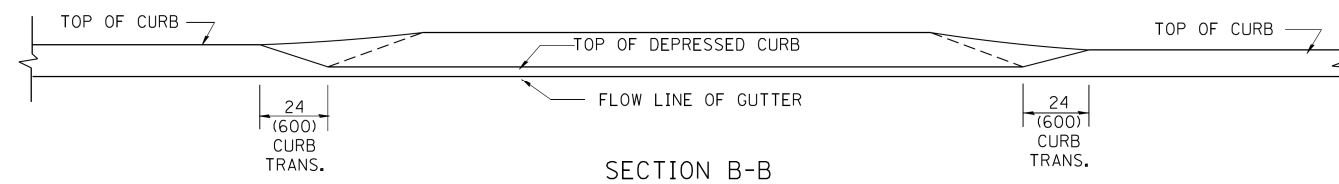
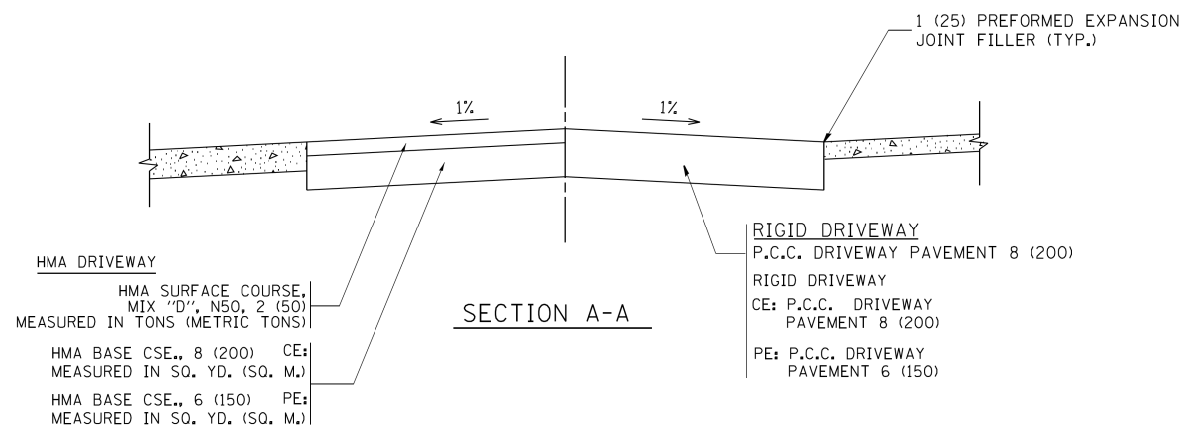
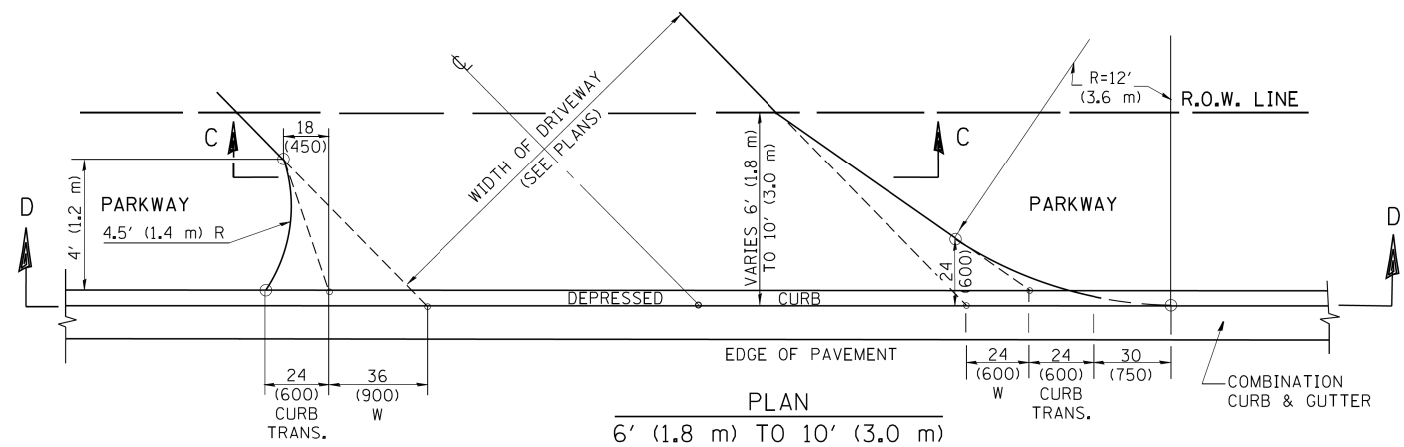
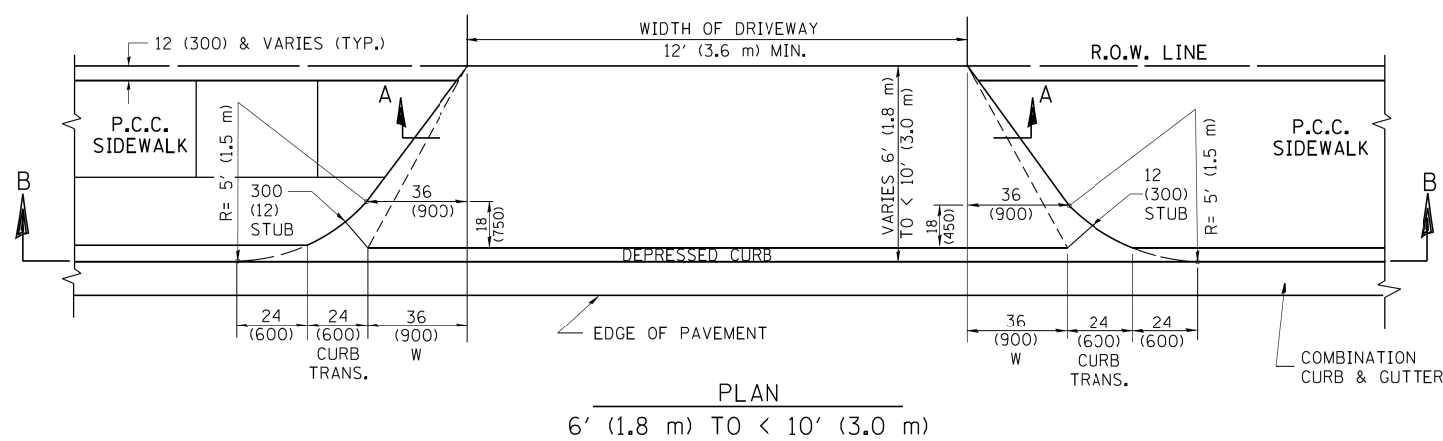
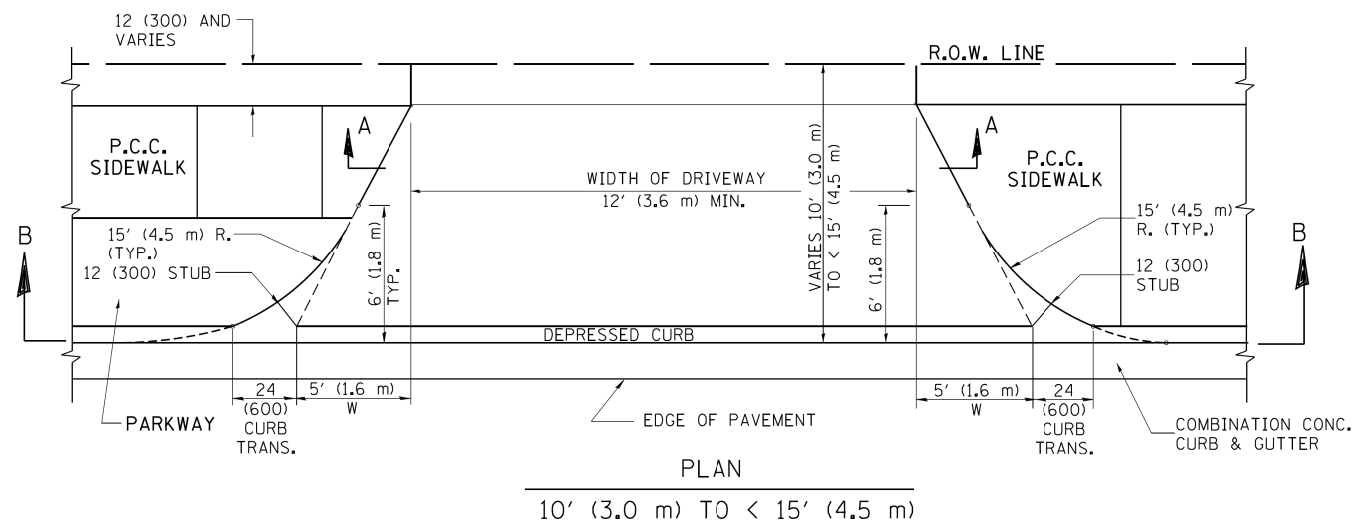
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PLOT DATE = 2/13/2019	CHECKED - CB	REVISED -
	DATE - 11/16/18	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

RECORD ST. CHARLES ROAD BRIDGE PLAN  
- FOR INFORMATION ONLY

SCALE: N.T.S.      SHEET 15 OF 15 SHEETS      STA.      TO STA.

F&U RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	86
PROJECT:		JOB: C-91-313-15		
ILLINOIS				



**GENERAL NOTES**

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

THE 1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

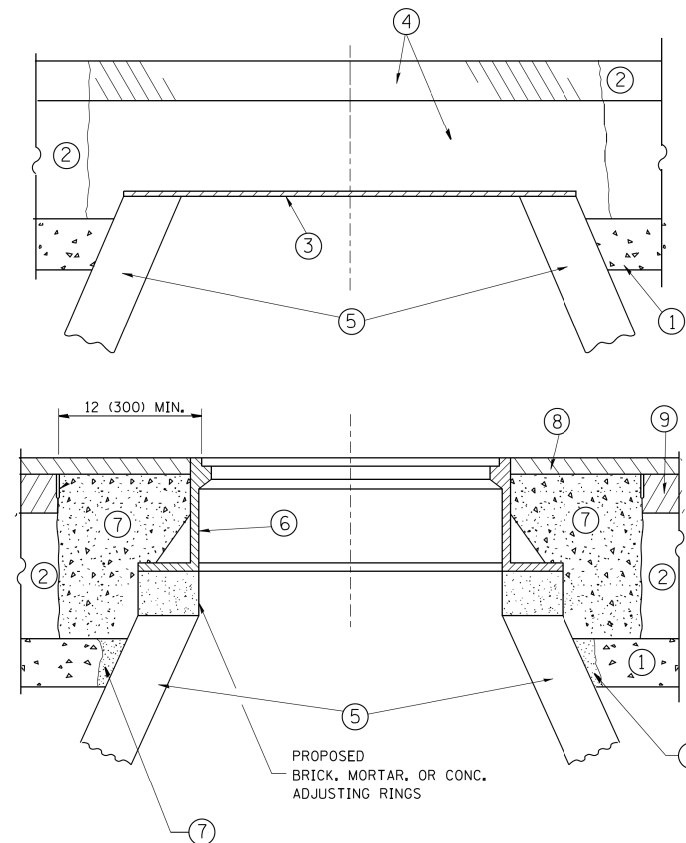
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED.

FILE NAME =	USER NAME = lryss	DESIGNED - R. SHAH	REVISED - M. GOMEZ 04-05-01
et:\pw\work\p\tdot\lrysa\d0108315\bd02.dgn		DRAWN -	REVISED - P. LOFLEUR 04-15-03
	PLOT SCALE = 50.0000' / 1"	CHECKED -	REVISED - R. BORO 01-01-07
	PLOT DATE = 10/28/2011	DATE - 11-06-95	REVISED - R. BORO 09-06-11

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

DRIVEWAY DETAILS			
DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	87
BD400-02 (BD-02)		CONTRACT NO. 61F73		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

**STAGE 2 (AFTER PAVEMENT MILLING)**

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1\* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

\* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

**LEGEND**

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS PP-1\* CONCRETE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

**LOCATION OF STRUCTURES:**

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

**BASIS OF PAYMENT:**

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

**NOTES:**

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

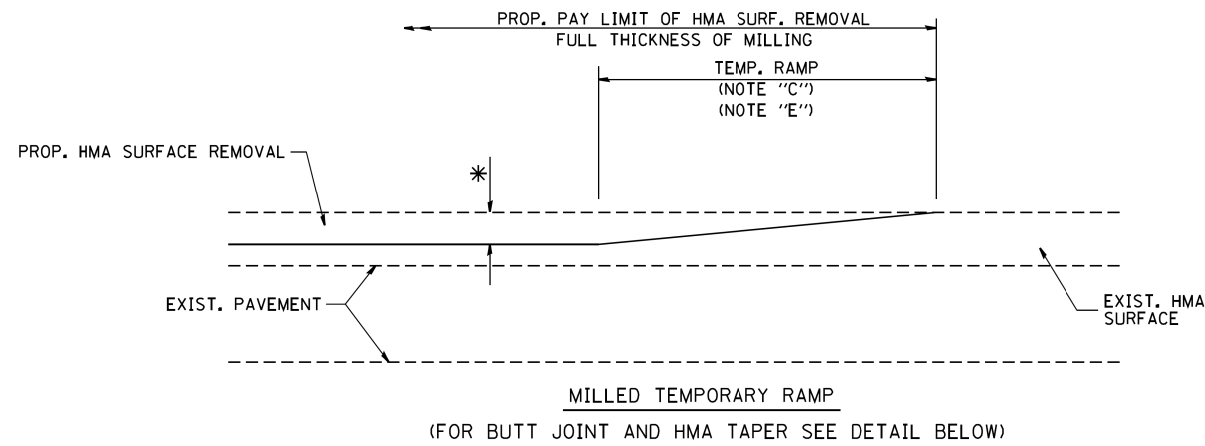
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	PLOT SCALE = 1/68.5000 "/ m	CHECKED -	REVISED - R. BORO 03-09-11
	PLOT DATE = 12/6/2011	DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

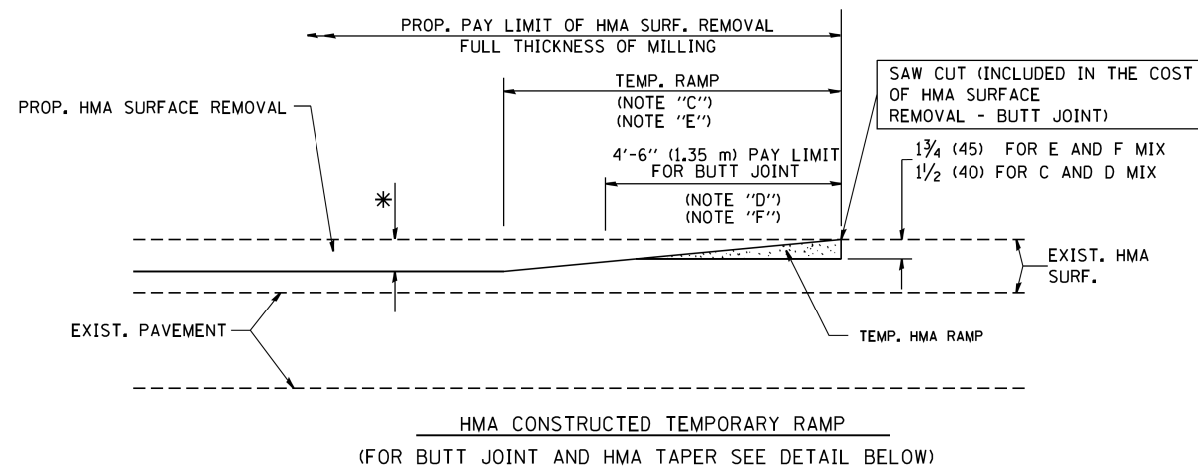
**DETAILS FOR  
FRAMES AND LIDS ADJUSTMENT WITH MILLING**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	88
BD600-03 (BD-8)			CONTRACT NO. 61F73	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

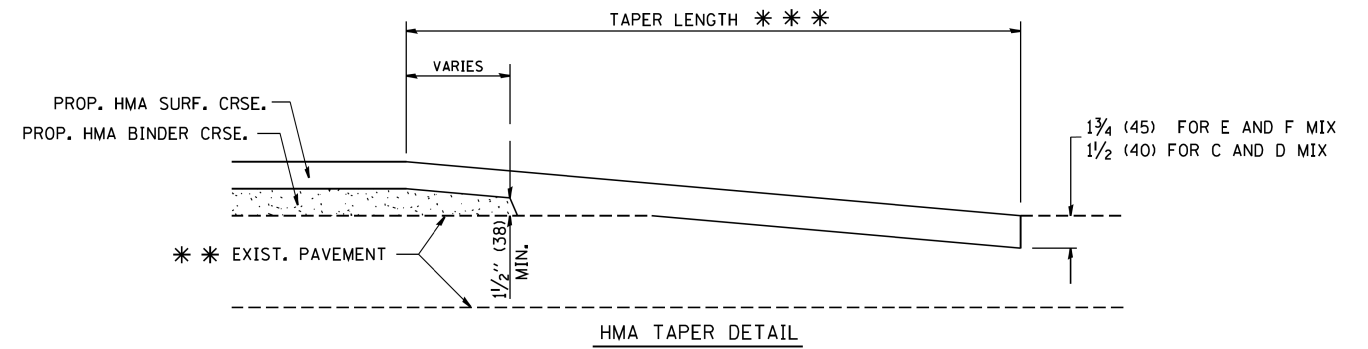
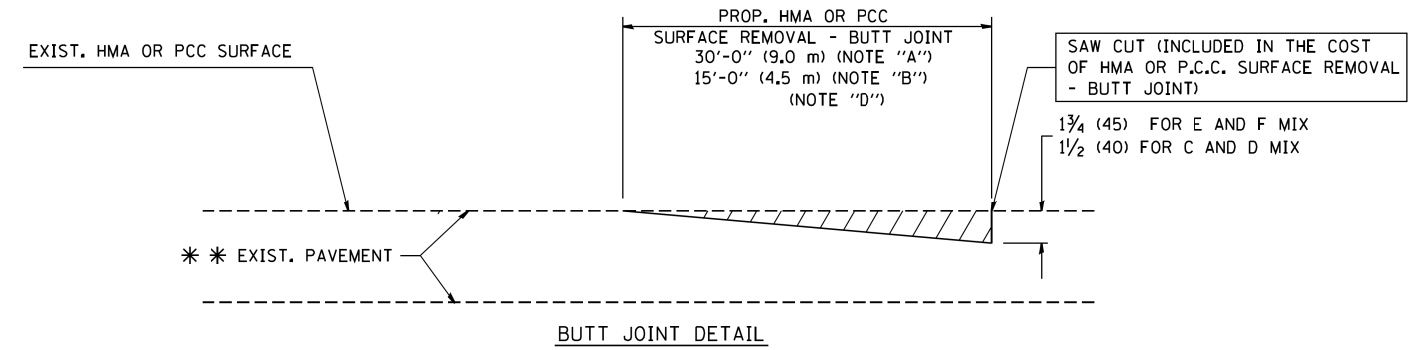


**OPTION 1**



**OPTION 2**

**TYPICAL TEMPORARY RAMP**



**TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY**

\*\*\* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

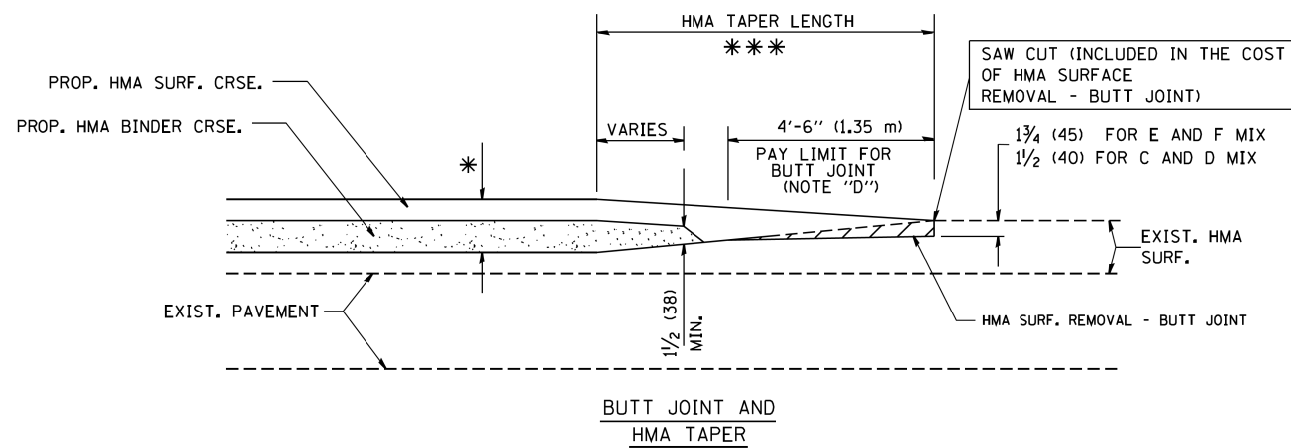
**NOTES**

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
  - B: MINOR SIDE ROADS.
  - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
  - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
  - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
  - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
  - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- \*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")  
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

**BASIS OF PAYMENT:**

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

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



**TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING**

FILE NAME = W:\diststd\22x34\bd32.dgn	USER NAME = gegl1enobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50,0000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

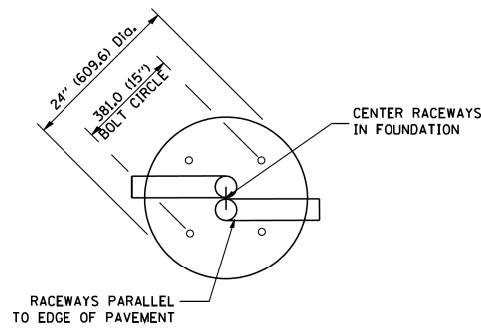
<b>BUTT JOINT AND HMA TAPER DETAILS</b>	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	89
BD400-05 BD32		CONTRACT NO. 61F73		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

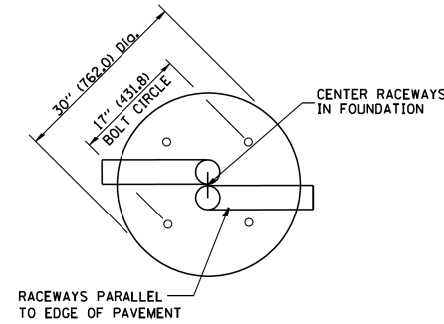


**LIGHT POLE FOUNDATION DEPTH TABLE**  
40 FT. (12.192 m) TO 47.5 FT. (14.478 m) MOUNTING HEIGHT

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY O <sub>u</sub> = 0.375 TON/SO. FT.	13'-0" (3.96 m)	15'-0" (4.57 m)
MEDIUM CLAY O <sub>u</sub> = 0.75 TON/SO.FT	9'-6" (2.93 m)	10'-9" (3.23 m)
STIFF CLAY O <sub>u</sub> = 1.50 TON/SO. FT.	7'-0" (2.13 m)	8'-0" (2.44 m)
LOOSE SAND φ = 34°	9'-0" (2.74 m)	10'-0" (3.05 m)
MEDIUM SAND φ = 37.5°	8'-3" (2.52 m)	9'-0" (2.74 m)
DENSE SAND φ = 40°	7'-9" (2.36 m)	7'-0" (2.13 m)



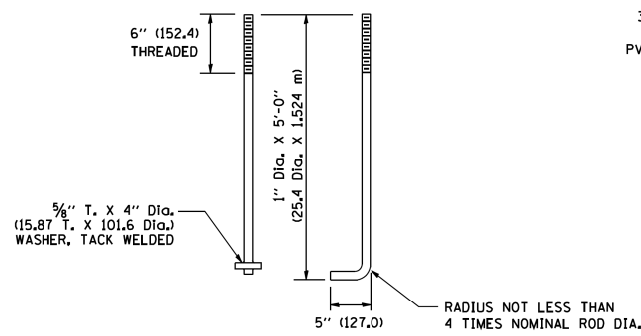
**TOP VIEW**



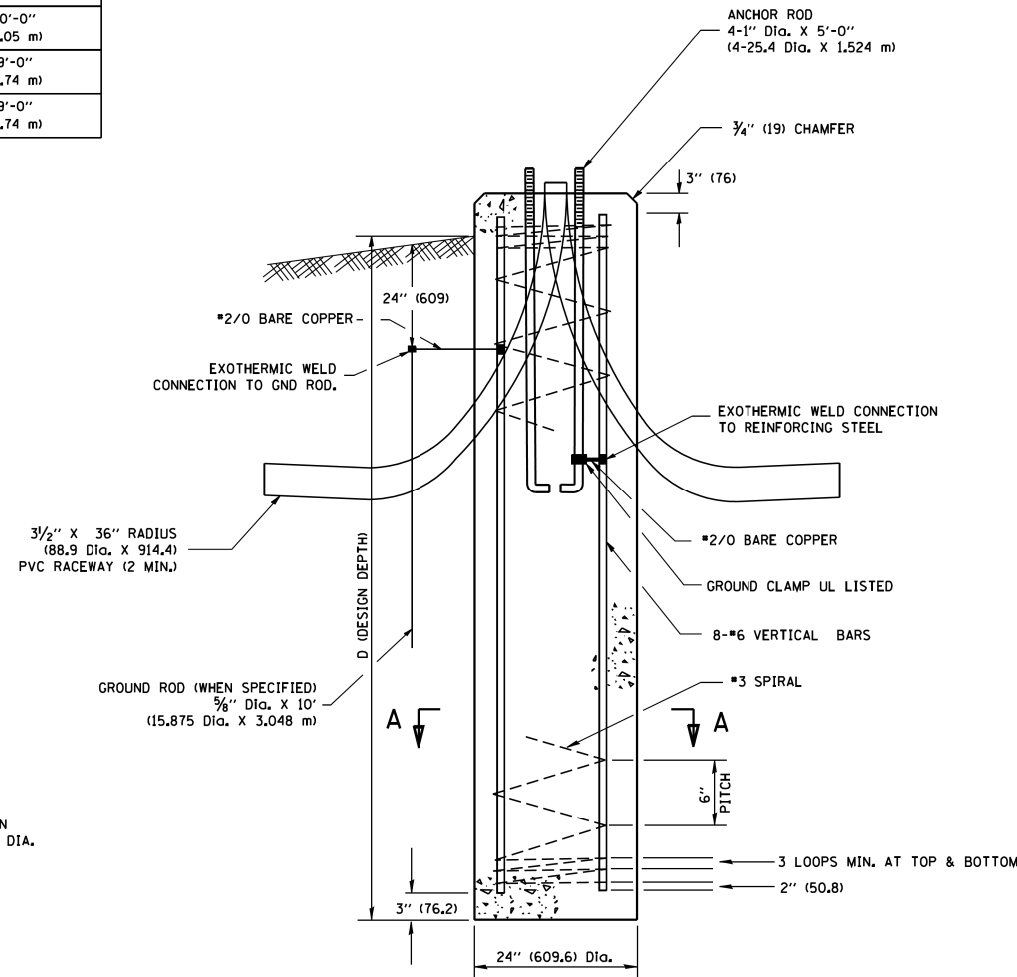
**TOP VIEW**

**NOTES**

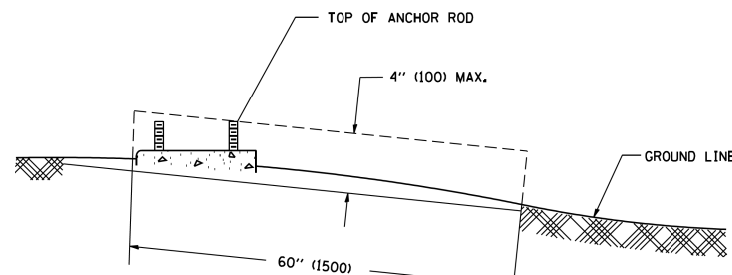
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES, IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UMG MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION, IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.



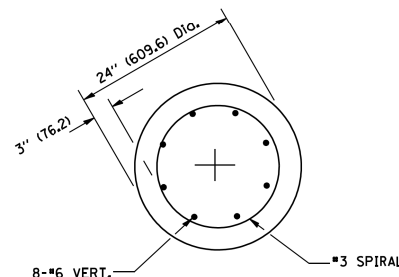
**ANCHOR ROD DETAIL**



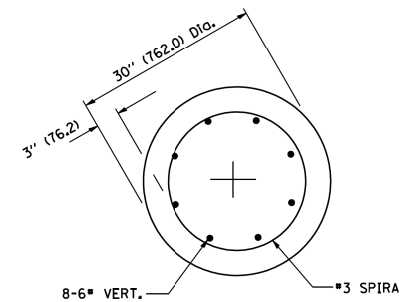
**FOUNDATION DETAIL**



**FOUNDATION EXTENSION DETAIL**

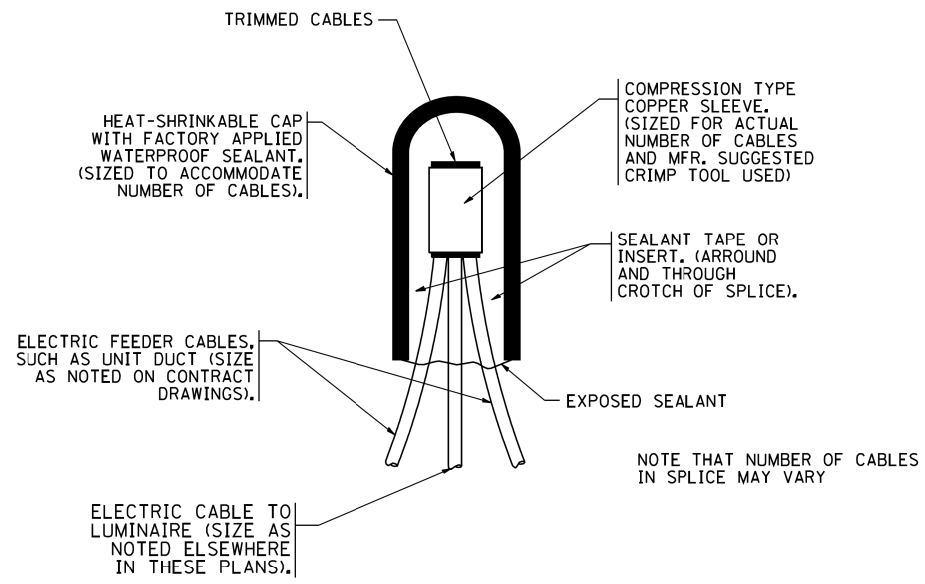


**SECTION A-A**



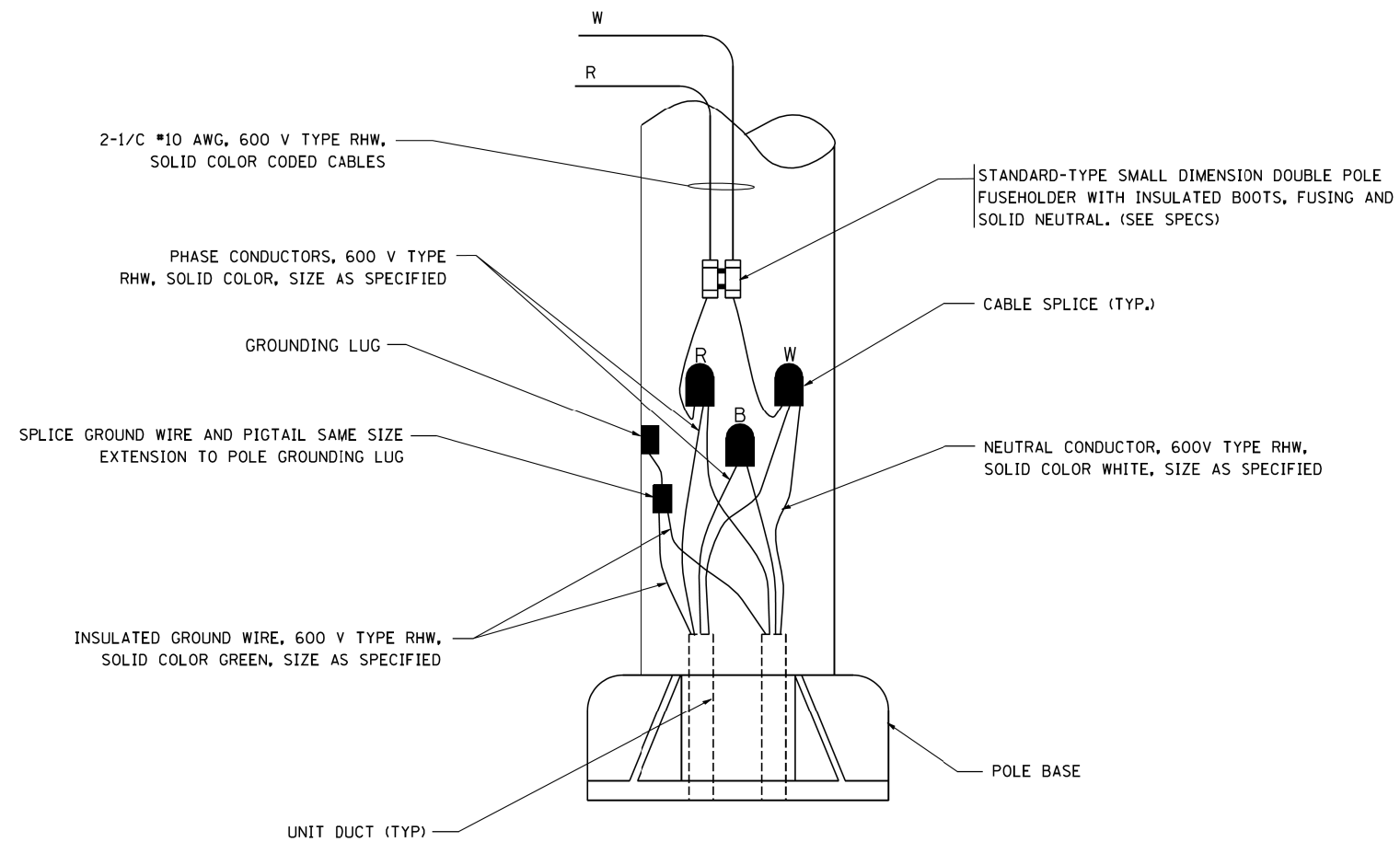
**SECTION A-A**

FILE NAME = W:\dststd\22x34\be301.dgn	USER NAME = gegl1enobt	DESIGNED - DRAWN -	REVISED - 04-22-02 REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>LIGHT POLE FOUNDATION</b>			F.A. RTE. 1397	SECTION 15-00094-00-BR	COUNTY DUPAGE	TOTAL SHEETS 106	SHEET NO. 90
					40' (12.192 m) TO 47' 12" (14.478 m) M.H. 15" (381 mm) BOLT CIRCLE			<b>BE-301</b>		CONTRACT NO. 61F73		
					SCALE: NONE			SHEET NO. 1 OF 1 SHEETS		STA. TO STA.		



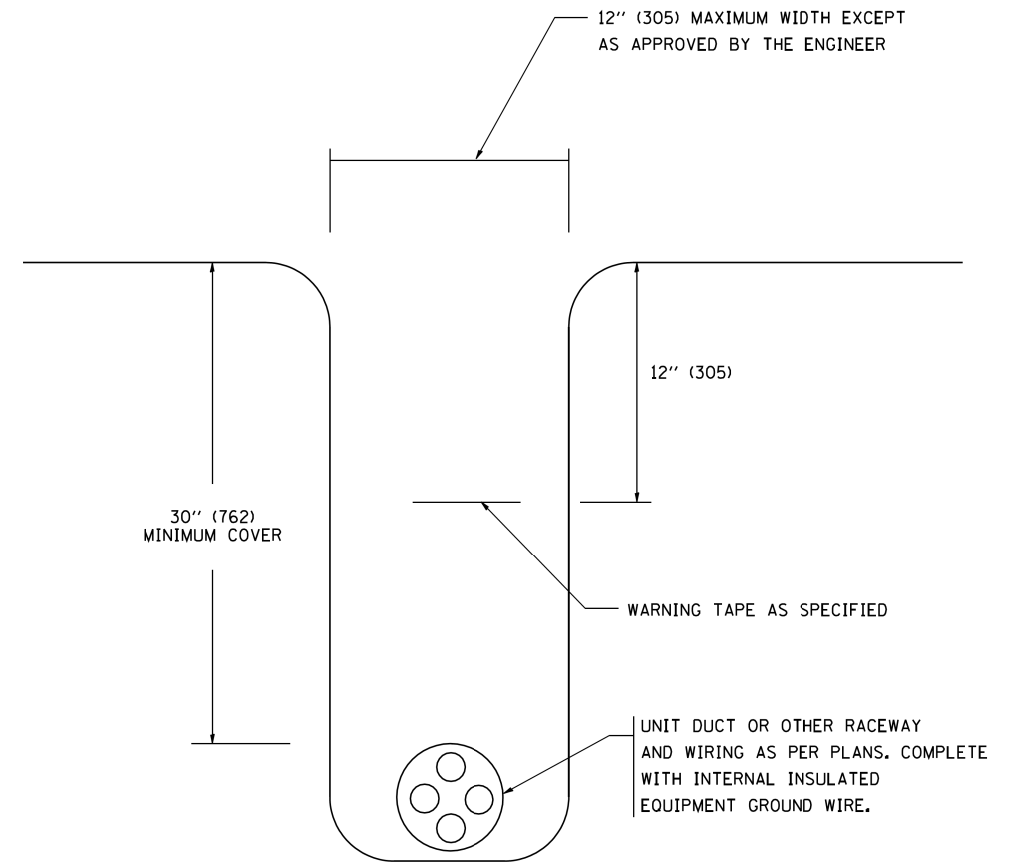
**TYPICAL SPLICE DETAIL**

N.T.S.



**POLE WIRING DETAIL**

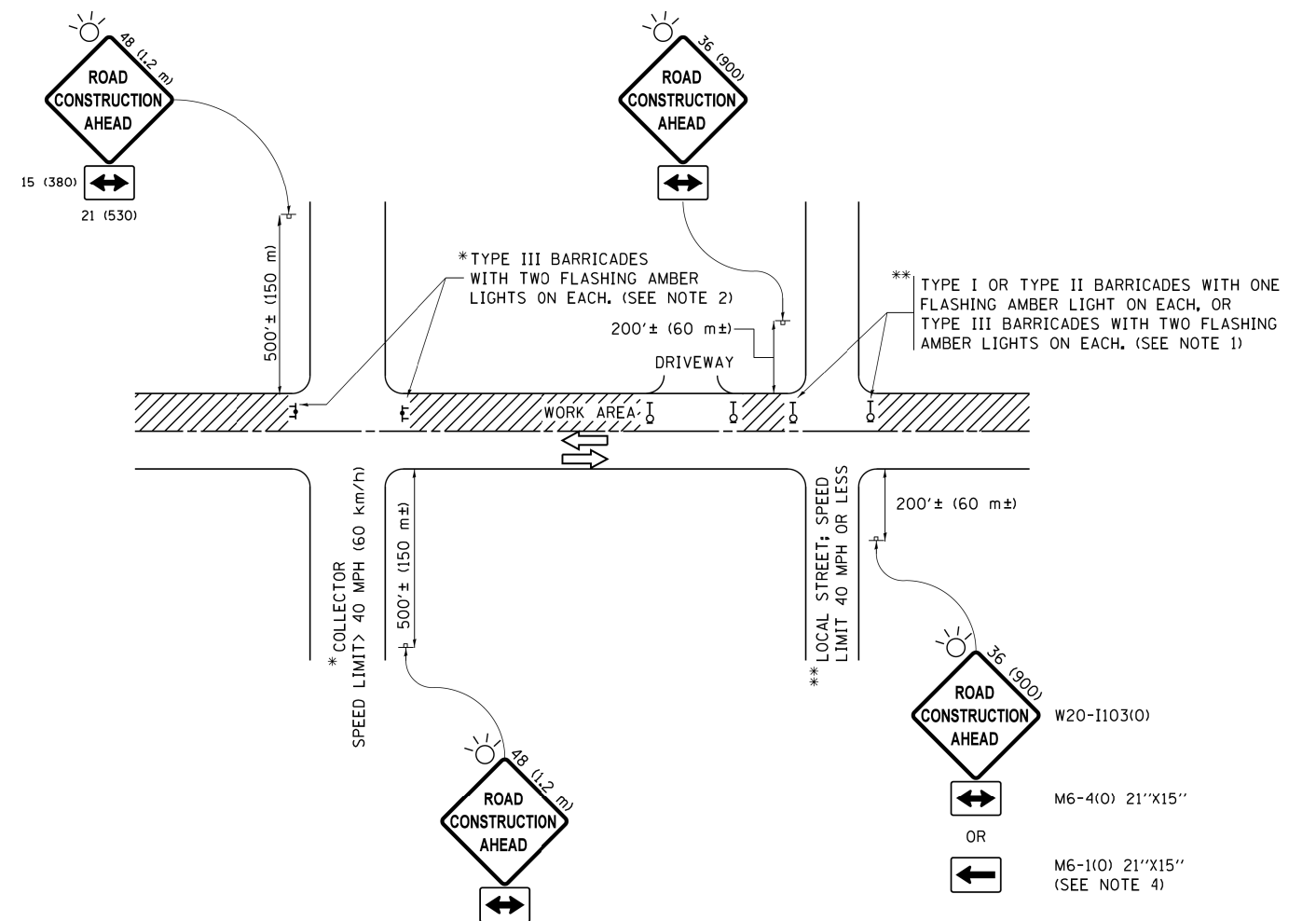
N.T.S.



**TYPICAL WIRING IN TRENCH DETAIL**

N.T.S.

FILE NAME = W:\diststd\22x34\be702.dgn	USER NAME = geglano	DESIGNED - DRAWN -	REVISED - 08-08-03 REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MISC. ELECTRICAL DETAILS SHEET A</b>			F.A. RTE. 1397	SECTION 15-00094-00-BR	COUNTY DUPAGE	TOTAL SHEETS 106	SHEET NO. 91
	PLOT SCALE = 50,000 ' / IN.	CHECKED -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	<b>BE-702</b>		CONTRACT NO. 61F73	
	PLOT DATE = 1/4/2008	DATE -	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							



**NOTES:**

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) 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.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) 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. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. 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).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

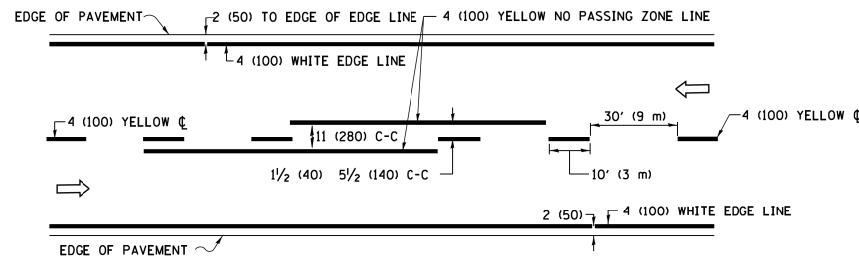
FILE NAME =	USER NAME = footemj	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
p:\j\084EBIDINTEG\illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist		DRAWN\CADDData\CADsheets\c10.dgn	REVISED - T. RAMMACHER 01-06-00
Default	PLOT SCALE = 50.000' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

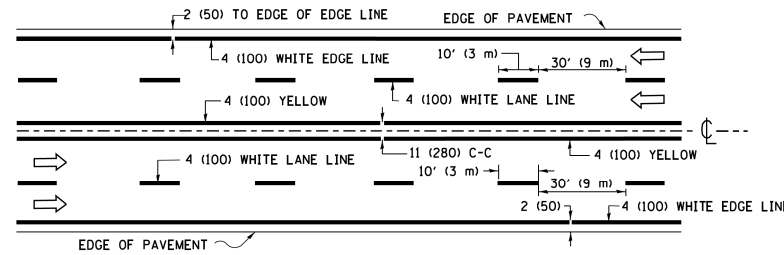
**TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

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

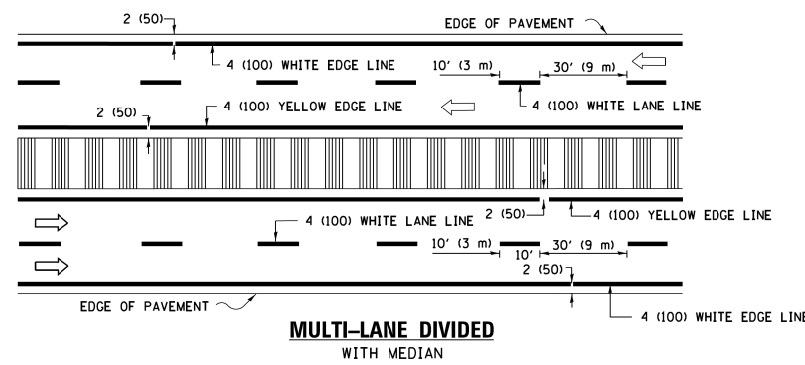
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	92
<b>TC-10</b>			<b>CONTRACT NO. 61F73</b>	
ILLINOIS FED. AID PROJECT				



**2-LANE ROADWAY**

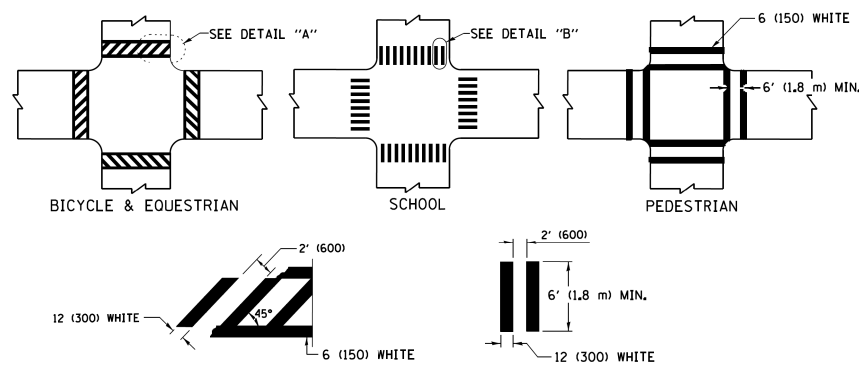


**MULTI-LANE UNDIVIDED**



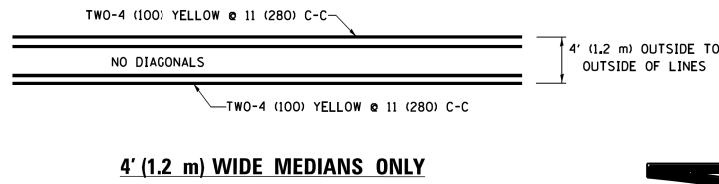
**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

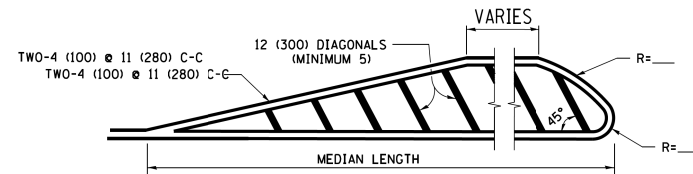


**DETAIL "A" TYPICAL CROSSWALK MARKING**

\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

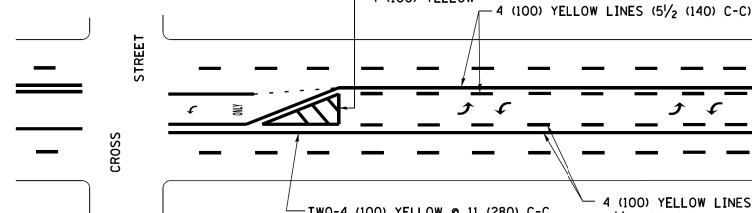


**4' (1.2 m) WIDE MEDIANS ONLY**



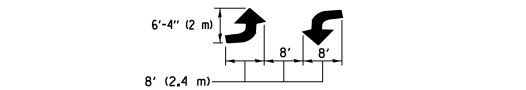
**MEDIANS OVER 4' (1.2 m) WIDE**

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))



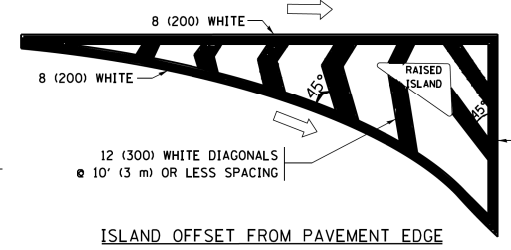
**MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING**

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

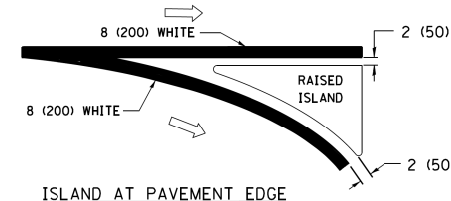


**TYPICAL LEFT (OR RIGHT) TURN LANE TYPICAL TURN LANE MARKING**

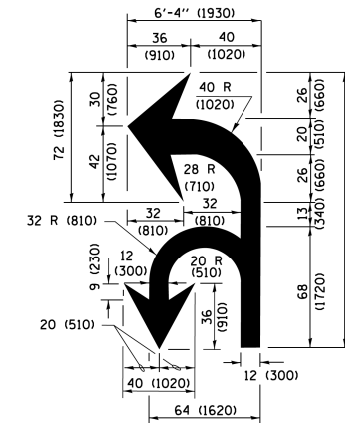
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".



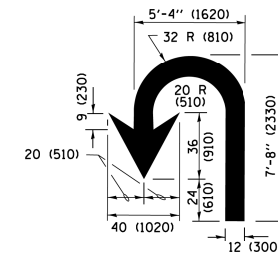
**ISLAND OFFSET FROM PAVEMENT EDGE**



**ISLAND AT PAVEMENT EDGE TYPICAL ISLAND MARKING**



**COMBINATION LEFT AND U-TURN**



**U-TURN**

**LANE REDUCTION TRANSITION**  
\* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE.
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

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

FILE NAME = W:\dststd\22x34\to13.dgn	USER NAME = l1eyoo	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
Default	PLOT SCALE = 50.000' / in.	DRAWN -	REVISED - C. JUCIUS 07-01-13
	PLOT DATE = 6/23/2017	CHECKED -	REVISED - C. JUCIUS 12-21-15
		DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16

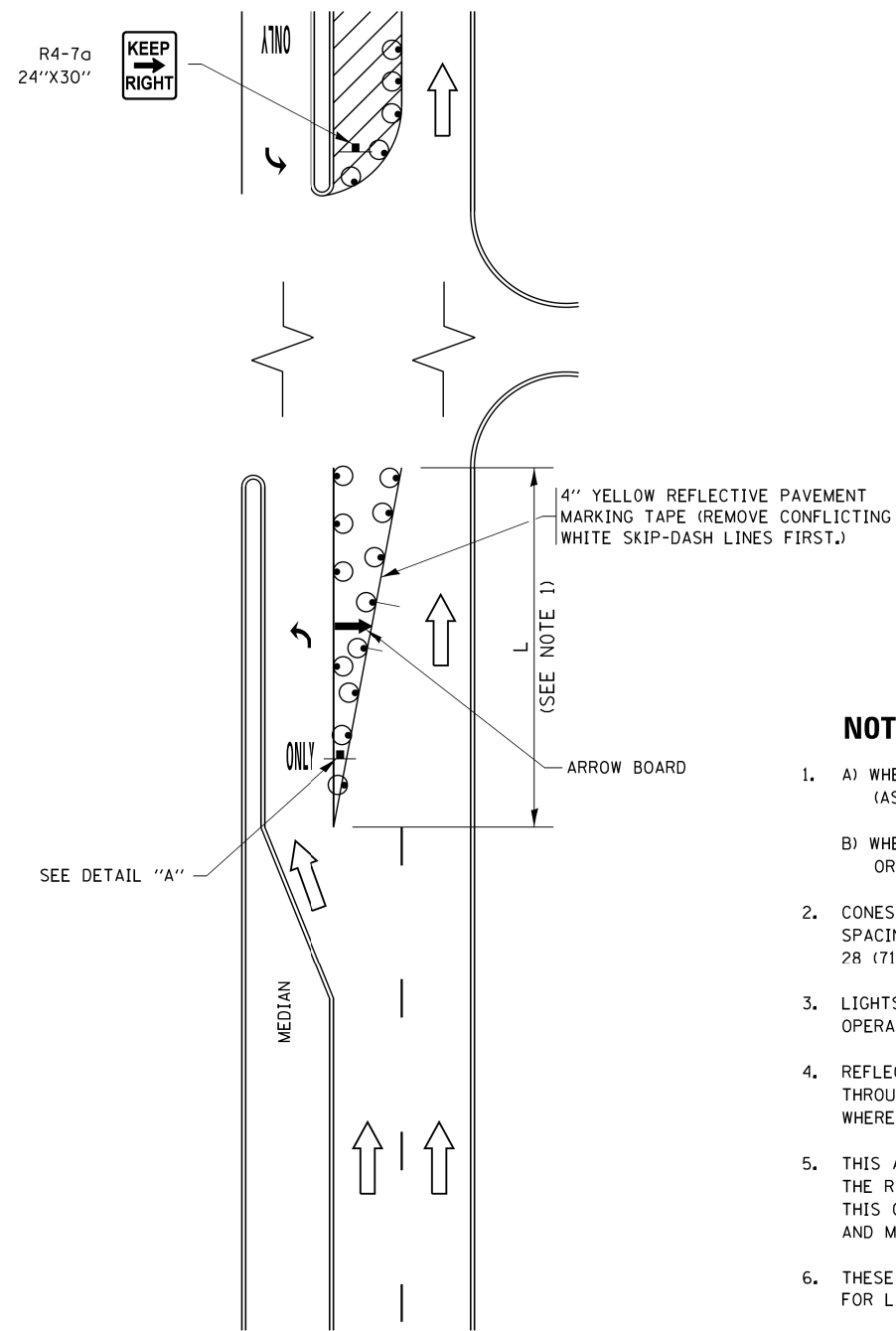
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE TYPICAL PAVEMENT MARKINGS**

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

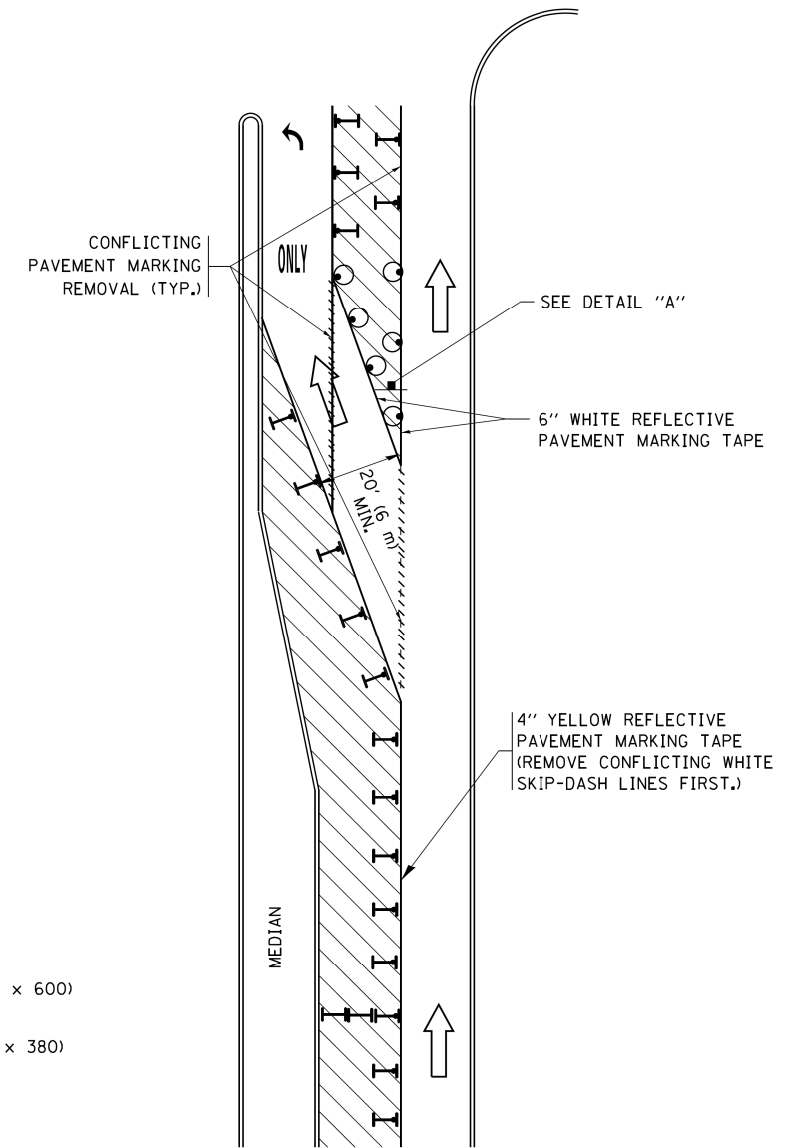
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	93
<b>TC-13</b>		<b>CONTRACT NO.</b>	<b>61F73</b>	
ILLINOIS FED. AID PROJECT				

# TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

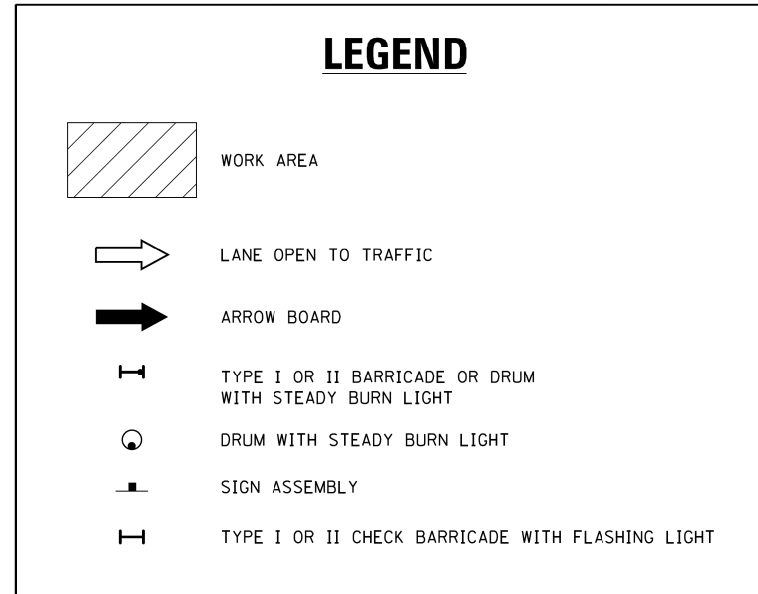


**FIGURE 1**

# TURN BAY ENTRANCE WITHIN A LANE CLOSURE

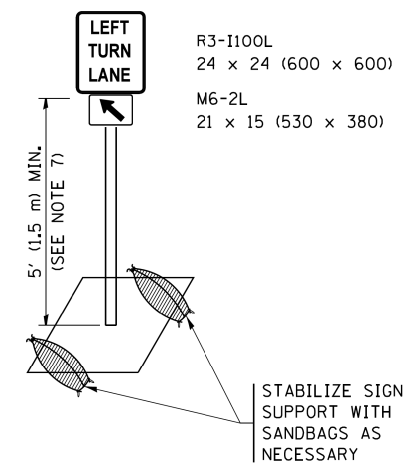


**FIGURE 2**



### NOTES:

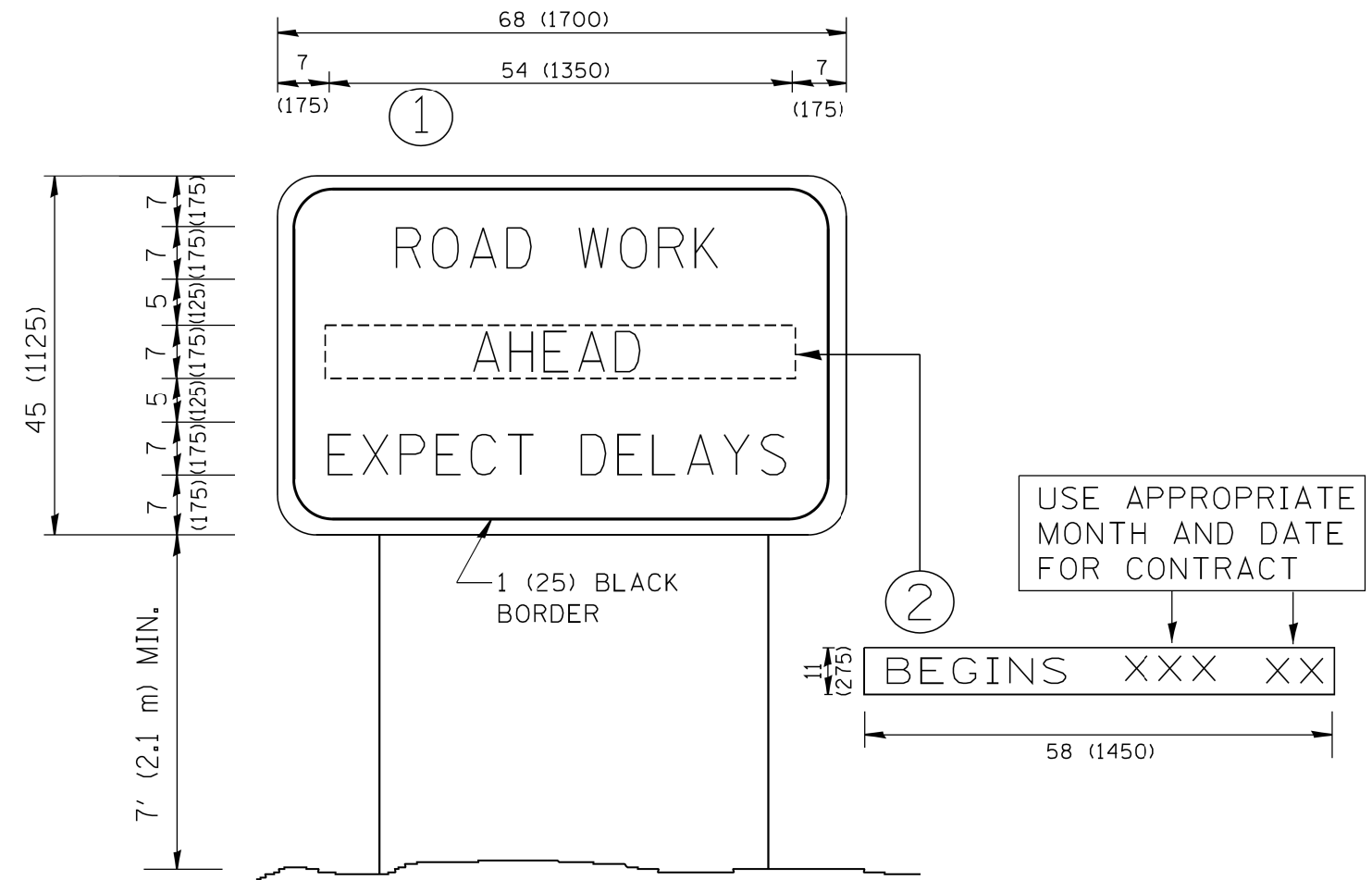
1. A) WHEN "L" IS  $\leq$  THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.  
B) WHEN "L" IS  $>$  THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-I100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



**DETAIL A**

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

FILE NAME =	USER NAME = footemj	REVISED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\1\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\Dist		REVISED - A. HOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13		1397	15-00094-00-BR	DUPAGE	106	94			
Default	PLOT SCALE = 50,0000' / in.	REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16		<b>TC-14</b>			<b>CONTRACT NO. 61F73</b>				
	PLOT DATE = 9/15/2016	REVISED - T. RAMMACHER 01-06-00	REVISED -		SCALE: NONE	SHEET 1	OF 1 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		

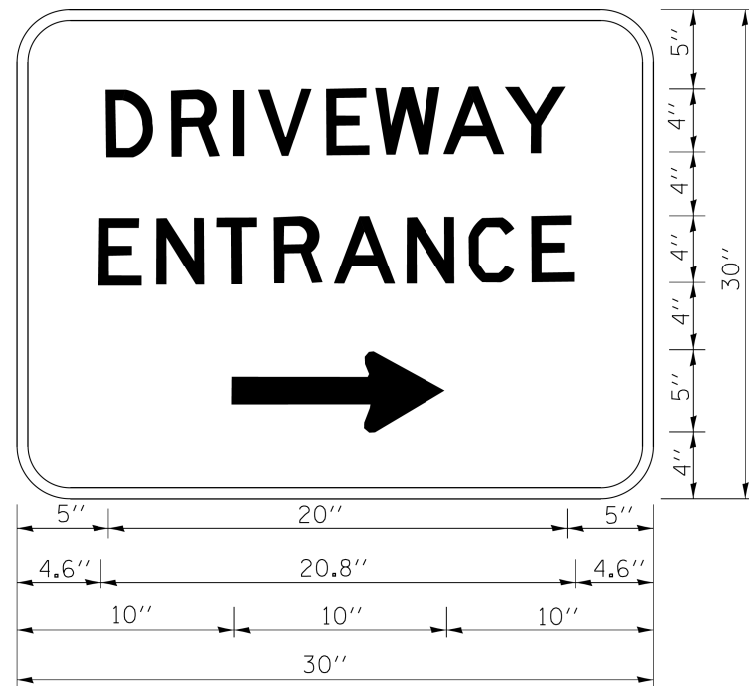


**NOTES:**

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 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gegl1enobt	DESIGNED - DRAWN -	REVISED - R. MIRS 09-15-97 REVISED - R. MIRS 12-11-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ARTERIAL ROAD INFORMATION SIGN</b>			F.A. RTE. 1397	SECTION 15-00094-00-BR	COUNTY DUPAGE	TOTAL SHEETS 106	SHEET NO. 95
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	<b>TC-22</b>		<b>CONTRACT NO. 61F73</b>	
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07		<small>FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT</small>							



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED  
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

**NOTES:**

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE  
 PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN)  
 SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY  
 AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE  
 FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME =	USER NAME = gaglanobt	DESIGNED -	REVISED - C. JUCIUS 02-15-07
et:\pwork\pwork\gaglanobt\d0108315\to	gaglanobt	DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**DRIVEWAY ENTRANCE SIGNING**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	96
<b>TC-26</b>			<b>CONTRACT NO. 61F73</b>	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

# TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

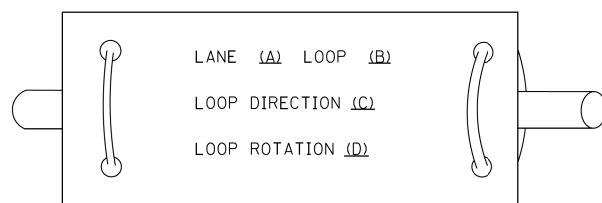
ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLER CABINET			HANDHOLE -SQUARE -ROUND	 	 	SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD		
COMMUNICATION CABINET			HEAVY DUTY HANDHOLE -SQUARE -ROUND	 	 	SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
MASTER CONTROLLER			DOUBLE HANDHOLE			PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
MASTER MASTER CONTROLLER			JUNCTION BOX			PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER		
UNINTERRUPTABLE POWER SUPPLY			RAILROAD CANTILEVER MAST ARM			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
SERVICE INSTALLATION -(P) POLE MOUNTED			RAILROAD FLASHING SIGNAL			NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED		
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	 	 	RAILROAD CROSSING GATE			GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)		
TELEPHONE CONNECTION			RAILROAD CROSSBUCK			ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
STEEL MAST ARM ASSEMBLY AND POLE			RAILROAD CONTROLLER CABINET			COAXIAL CABLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			VENDOR CABLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY			SYSTEM ITEM	S	SP	FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		
WOOD POLE			INTERSECTION ITEM	I	IP	GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE		
GUY WIRE			REMOVE ITEM		R			
SIGNAL HEAD			RELOCATE ITEM		RL			
SIGNAL HEAD WITH BACKPLATE			ABANDON ITEM		A			
SIGNAL HEAD OPTICALLY PROGRAMMED			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF			
FLASHER INSTALLATION -(FS) SOLAR POWERED	 	 	MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF			
PEDESTRIAN SIGNAL HEAD			SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF			
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			DETECTOR LOOP, TYPE I					
RADAR DETECTION SENSOR			PREFORMED DETECTOR LOOP					
VIDEO DETECTION CAMERA			SAMPLING (SYSTEM) DETECTOR					
RADAR/VIDEO DETECTION ZONE			INTERSECTION AND SAMPLING (SYSTEM) DETECTOR					
PAN, TILT, ZOOM (PTZ) CAMERA			QUEUE AND SAMPLING (SYSTEM) DETECTOR					
EMERGENCY VEHICLE LIGHT DETECTOR			WIRELESS DETECTOR SENSOR					
CONFIRMATION BEACON			WIRELESS ACCESS POINT					
WIRELESS INTERCONNECT								
WIRELESS INTERCONNECT RADIO REPEATER								



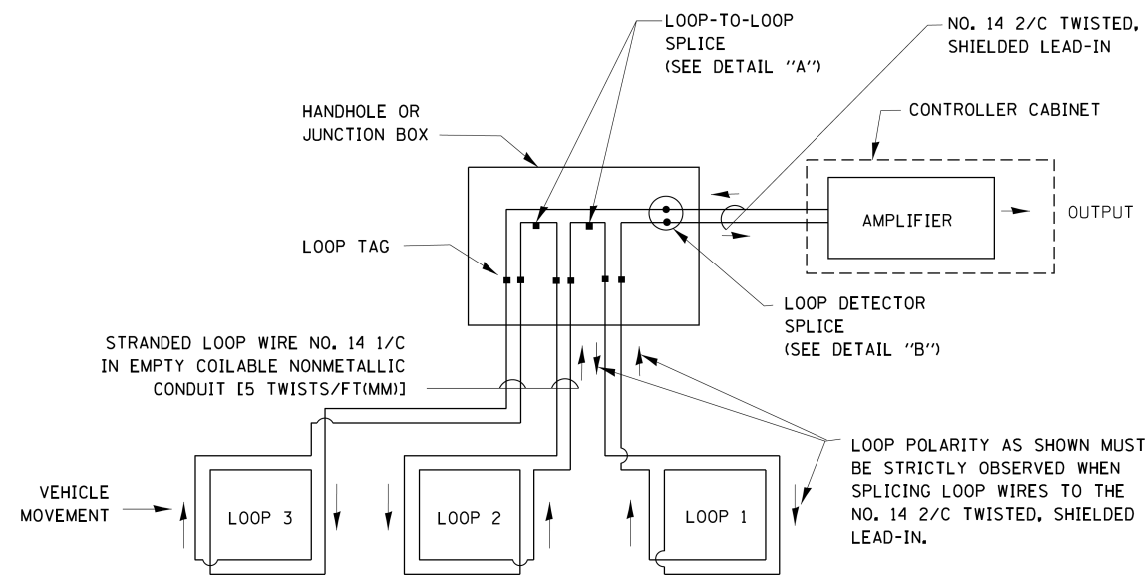
**LOOP DETECTOR NOTES**

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

**LOOP LEAD-IN CABLE TAG**

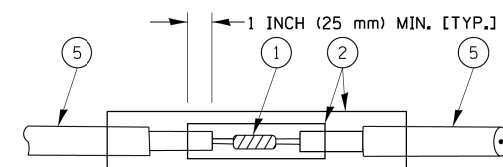


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

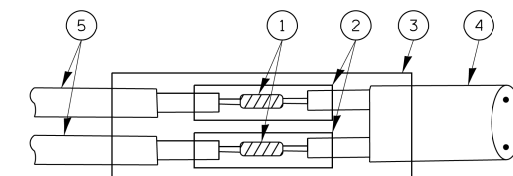


**DETECTOR LOOP WIRING SCHEMATIC**

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

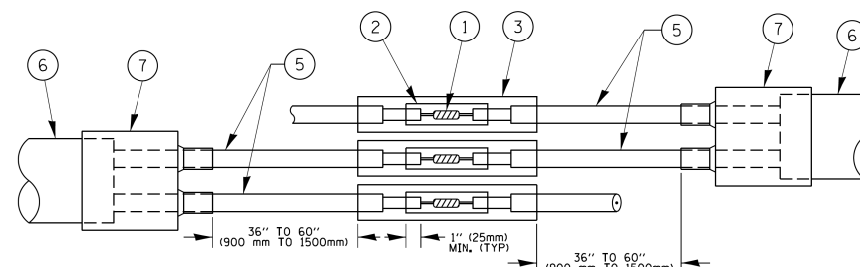


DETAIL "A"  
LOOP-TO-LOOP SPLICE

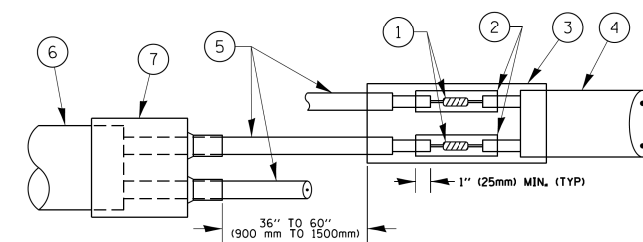


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**TYPE I LOOP**



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

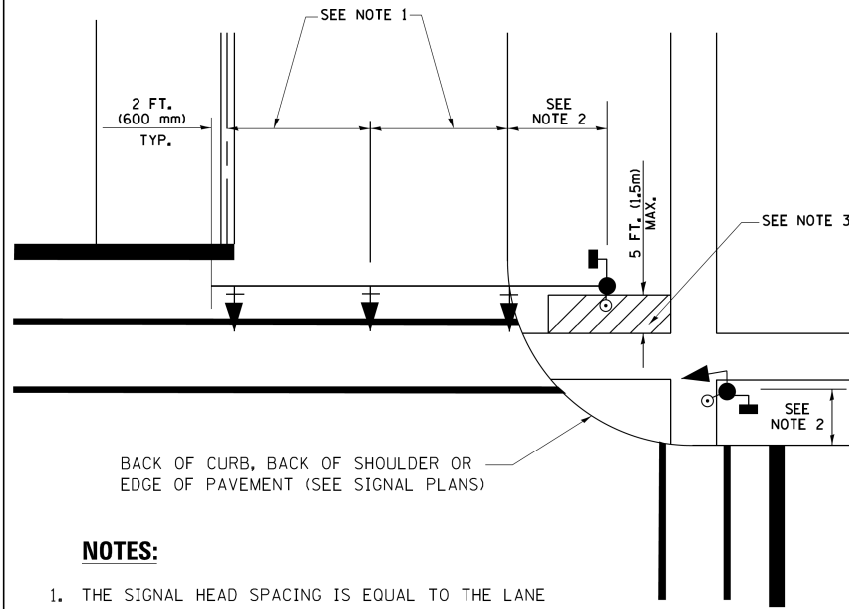
**PREFORMED LOOP**

**LOOP DETECTOR SPLICE**

- ① WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- ② WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- ③ WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- ④ NO. 14 2/C TWISTED, SHIELDED CABLE.
- ⑤ LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- ⑥ PREFORMED LOOP
- ⑦ XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>			F.A. RTE. 1397	SECTION 15-00094-00-BR	COUNTY DUPAGE	TOTAL SHEETS 106	SHEET NO. 98
DRAWN - BCK	CHECKED - DAD	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 2 OF 7 SHEETS	STA. TO STA.	<b>TS-05</b>		CONTRACT NO. 61F73		
PLOT SCALE = 50.0000' / in.					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
PLOT DATE = 1/13/2014												

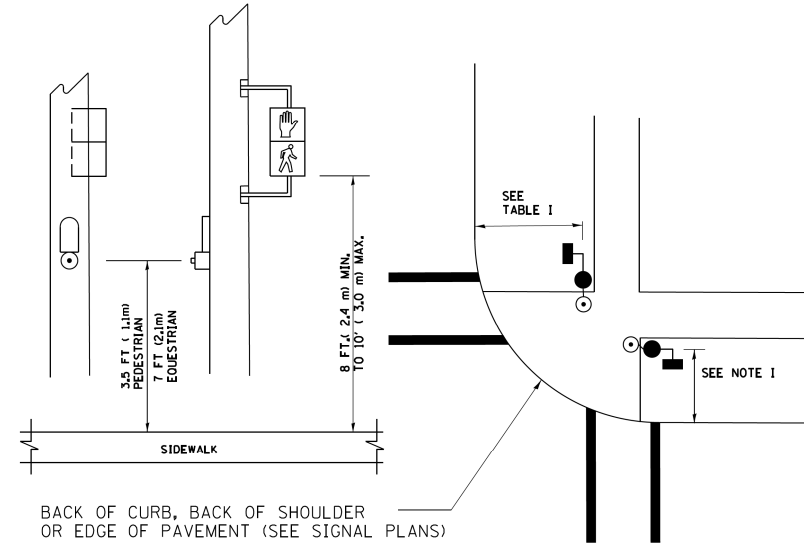
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST  
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR  
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN  
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



**NOTES:**

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

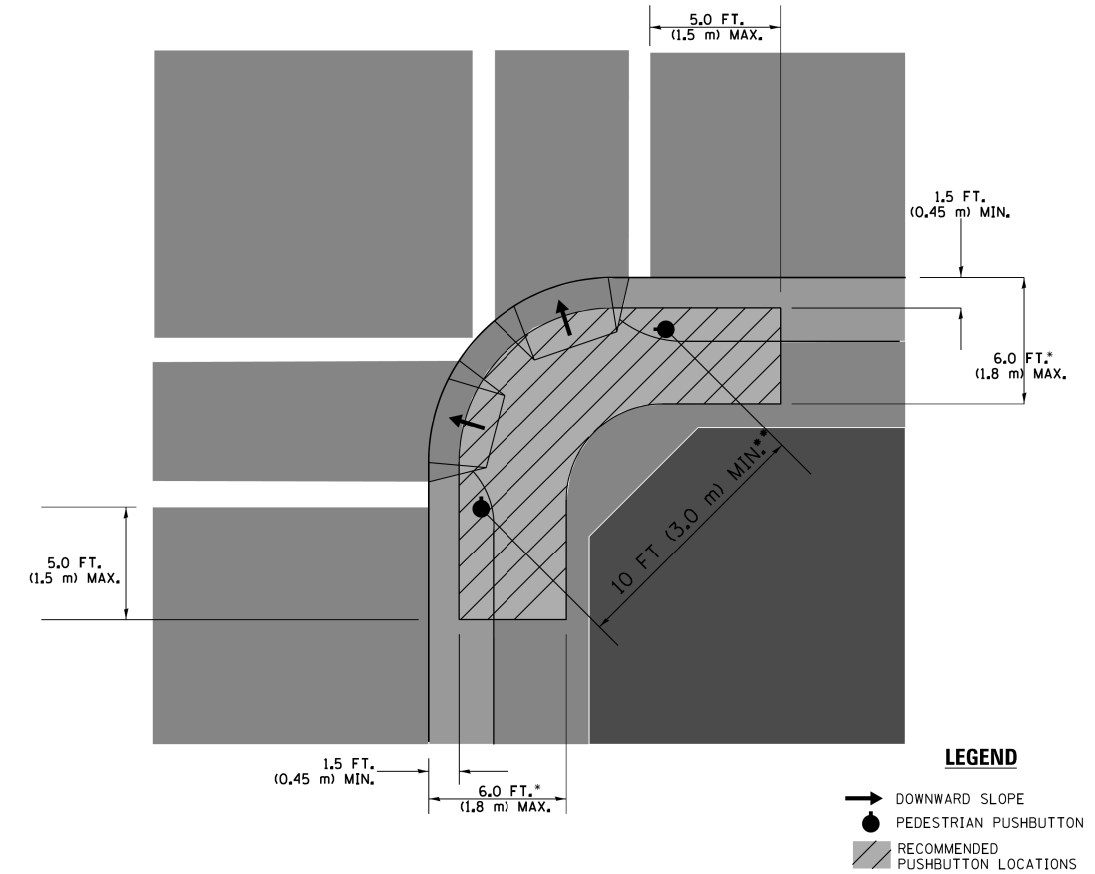
**PEDESTRIAN SIGNAL POST  
AND  
PEDESTRIAN PUSH BUTTON POST**



**NOTES:**

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

**RECOMMENDED PUSHBUTTON LOCATIONS**



- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPARATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

**NOTES:**

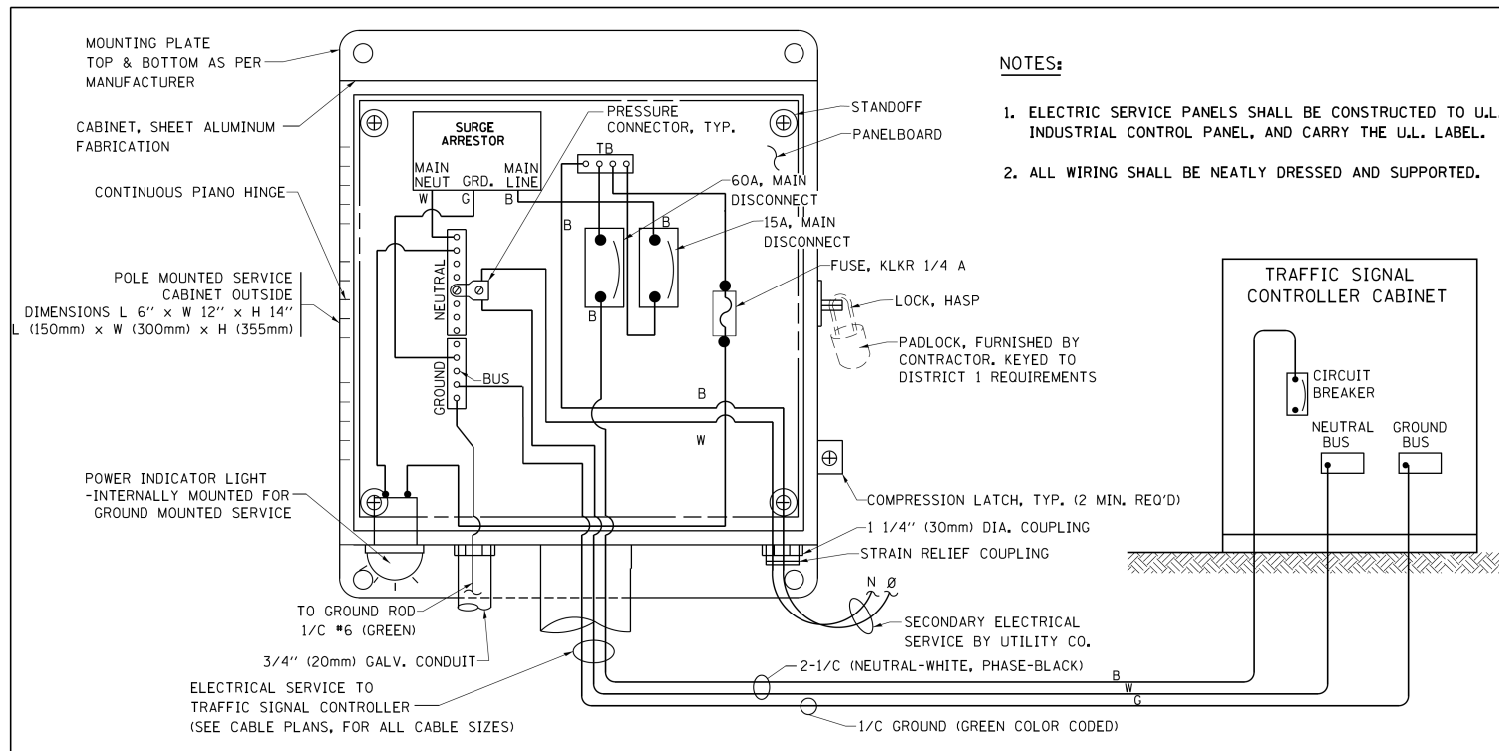
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

**TRAFFIC SIGNAL EQUIPMENT OFFSET**

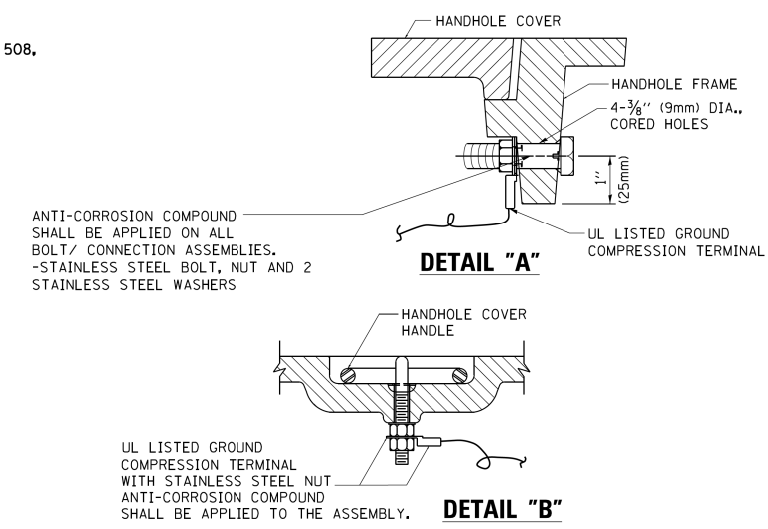
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

**NOTES:**

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

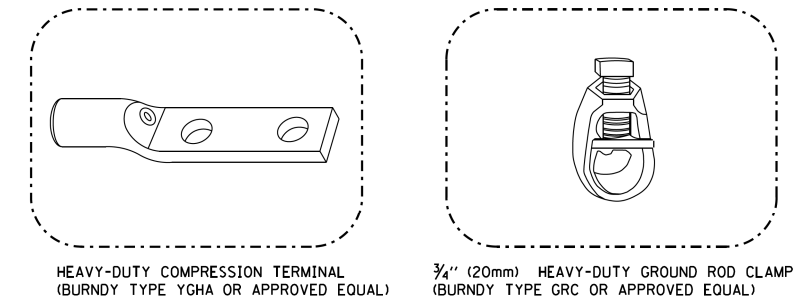
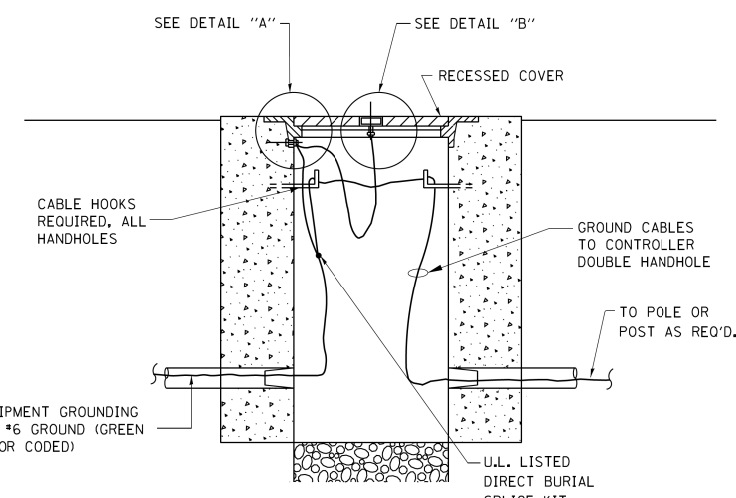


**ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)  
SERVICE INSTALLATION POLE MOUNT (SHOWN)  
(NOT TO SCALE)**



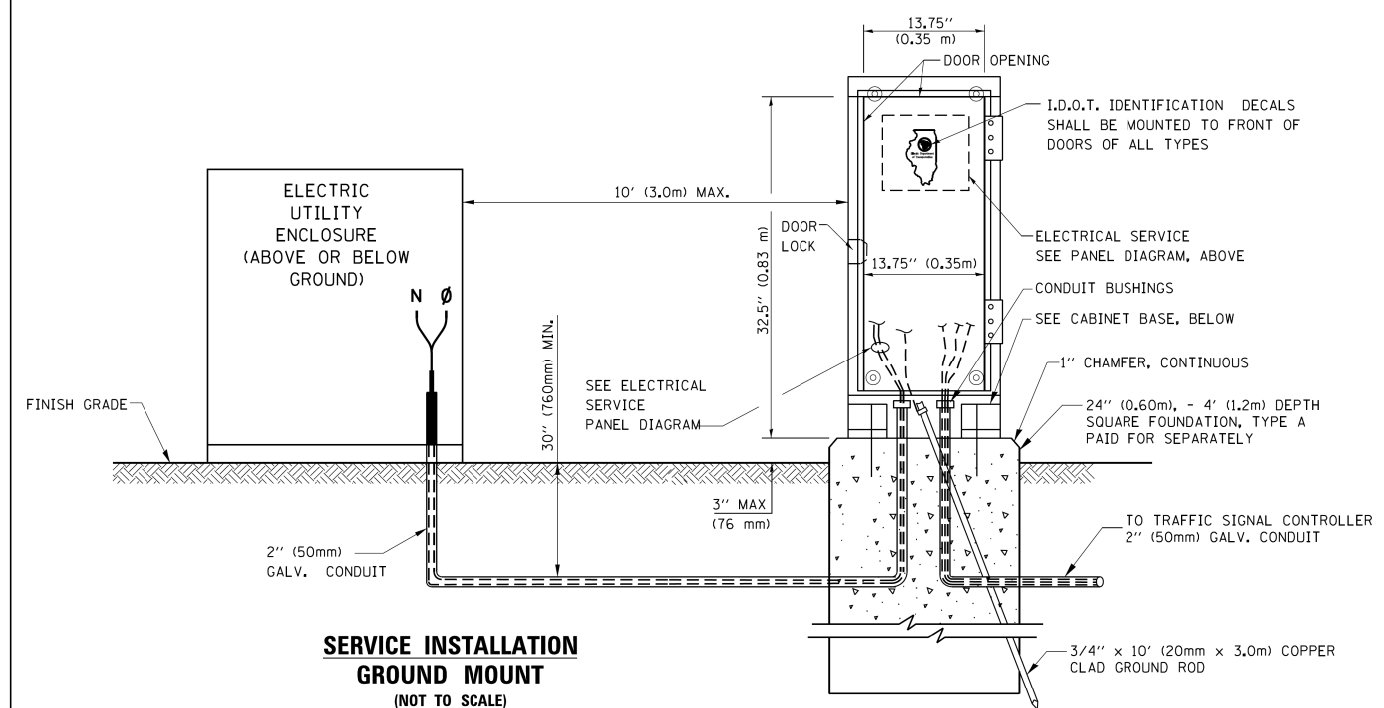
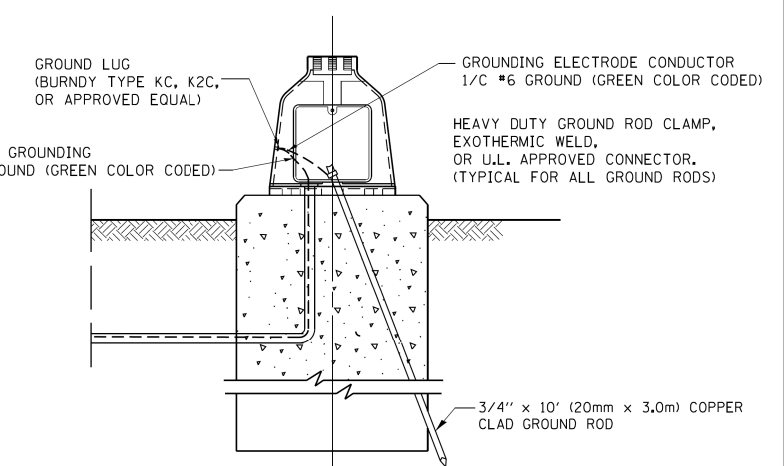
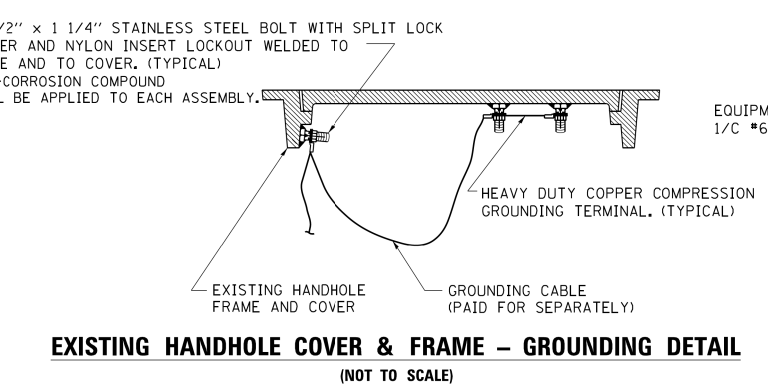
**NOTES:**  
**GROUNDING SYSTEM**

- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
- THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

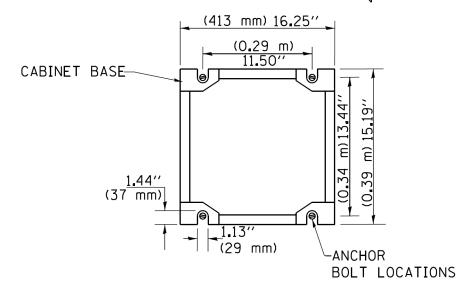


**NOTES:**

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

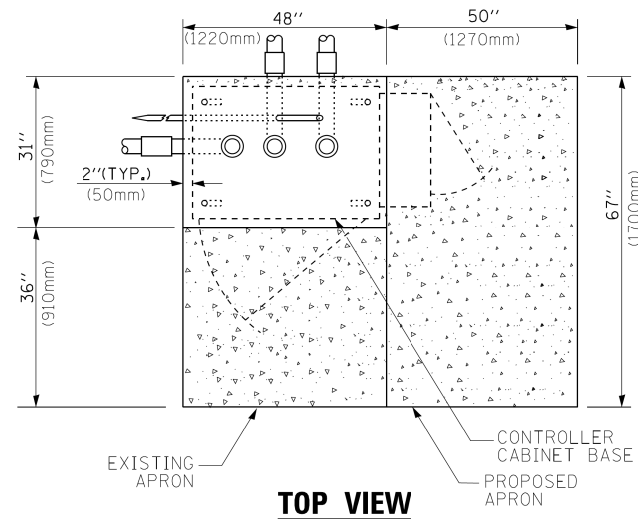


**CABINET – BASE BOLT PATTERN  
(NOT TO SCALE)**

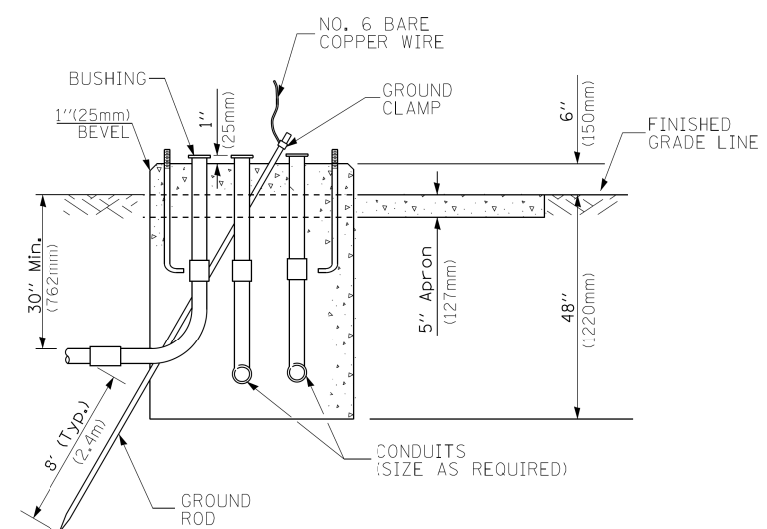


FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>			F.A. RT#.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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		CHECKED - DAD	REVISED -							<b>TS-05</b>			
		DATE - 10-28-09	REVISED -								CONTRACT NO.		61F73

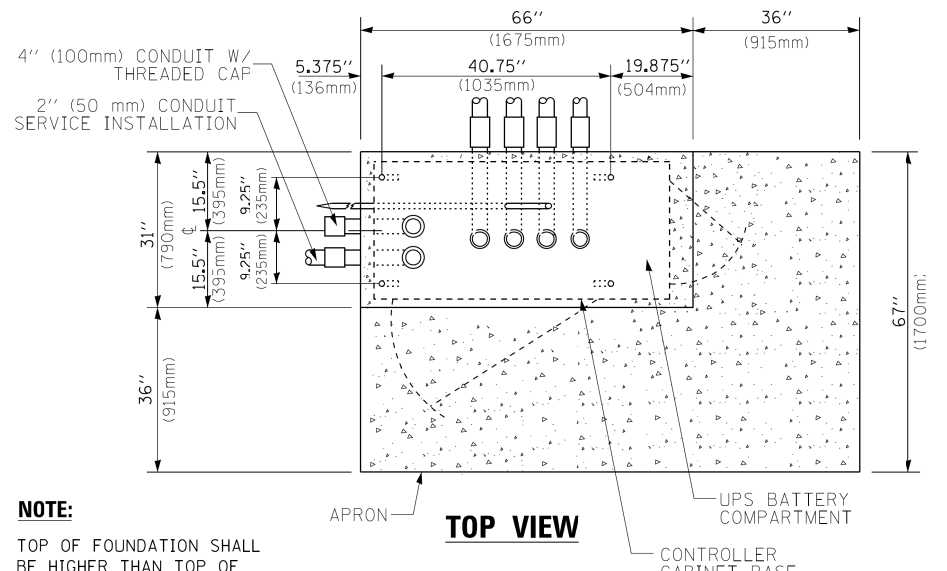
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



**TOP VIEW**

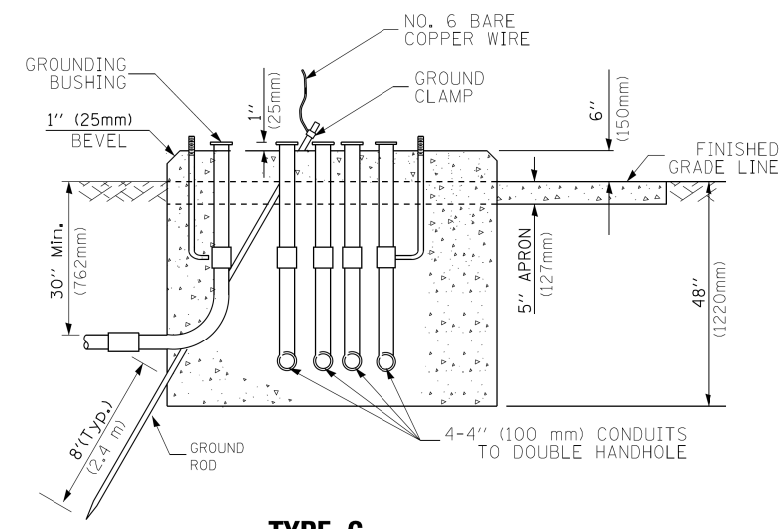


**TYPE D  
FOR GROUND MOUNTED  
CONTROLLER CABINET  
AND UPS BATTERY CABINET**

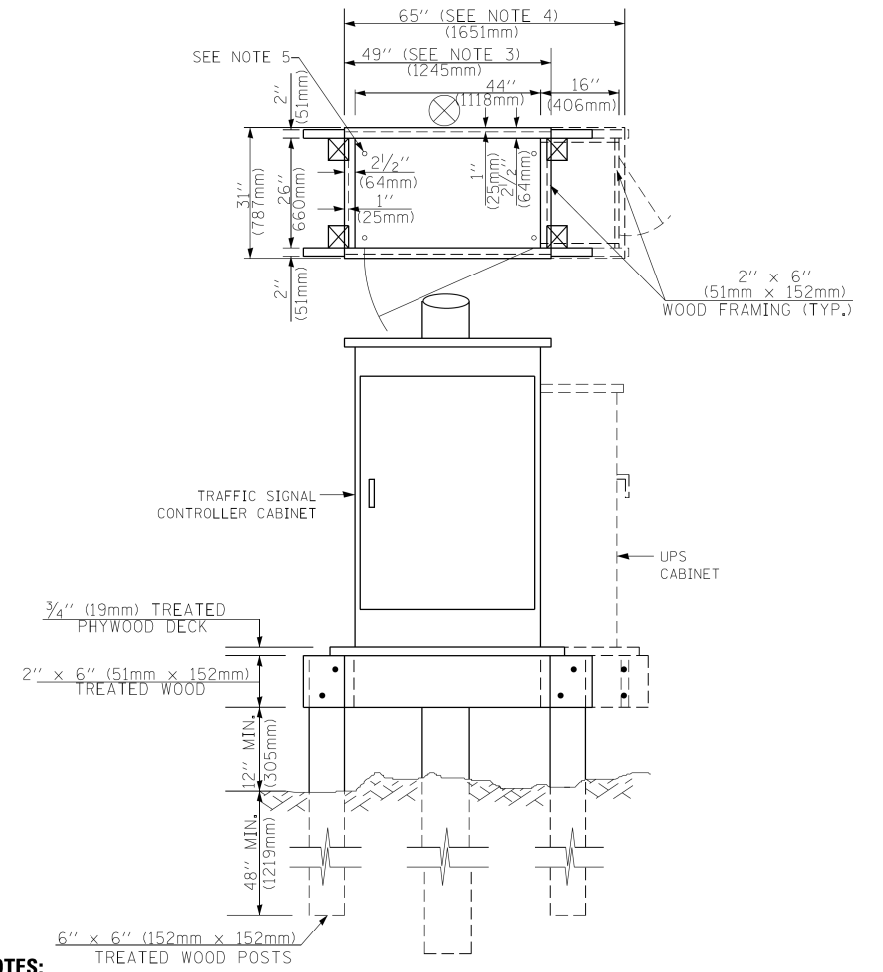


**TOP VIEW**

**NOTE:**  
TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



**TYPE C  
FOR GROUND MOUNTED  
SUPER P (TYPE IV) AND SUPER R (TYPE V)  
CONTROLLER CABINETS**



**NOTES:**

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION..

**TEMPORARY SIGNAL CONTROLLER  
WOOD SUPPORT PLATFORM**

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

**CABLE SLACK**

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

**VERTICAL CABLE LENGTH**

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

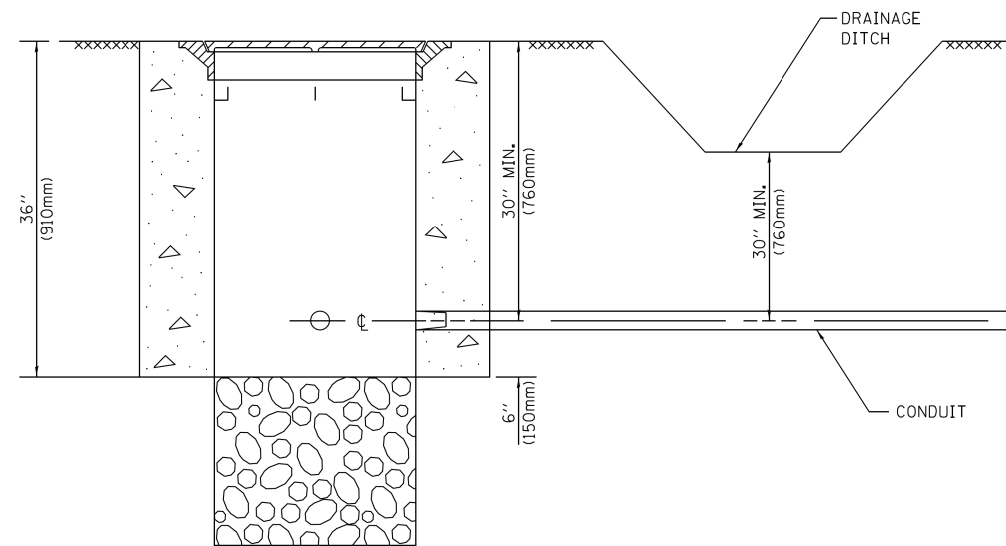
**DEPTH OF FOUNDATION**

MAST ARM LENGTH	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	24" (600mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

**NOTES:**

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001..

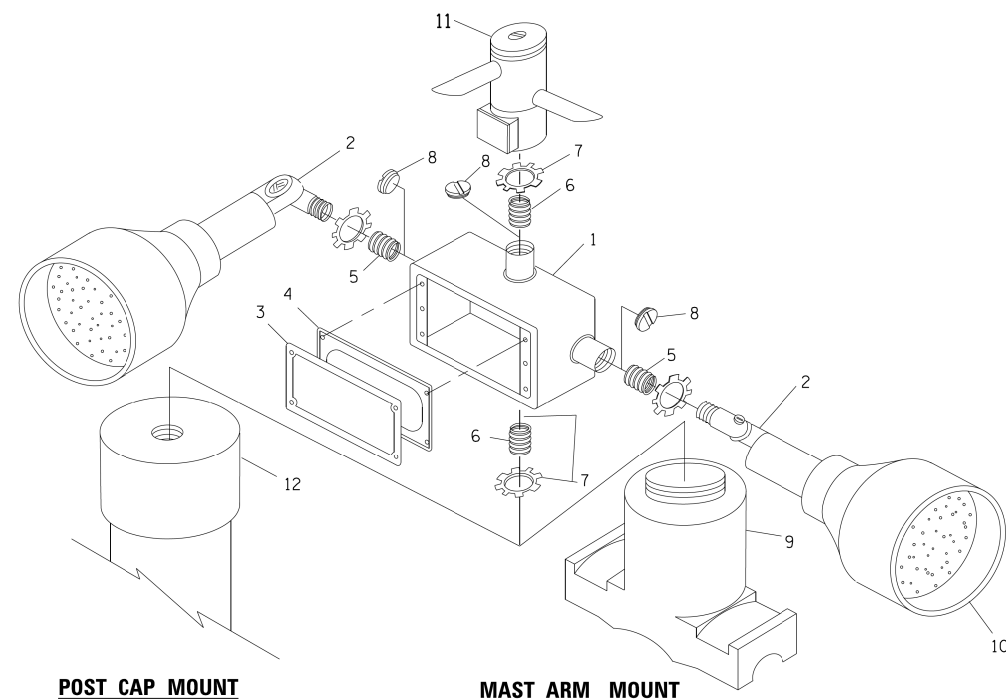
**DEPTH OF MAST ARM FOUNDATIONS, TYPE E**



**NOTES:**

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

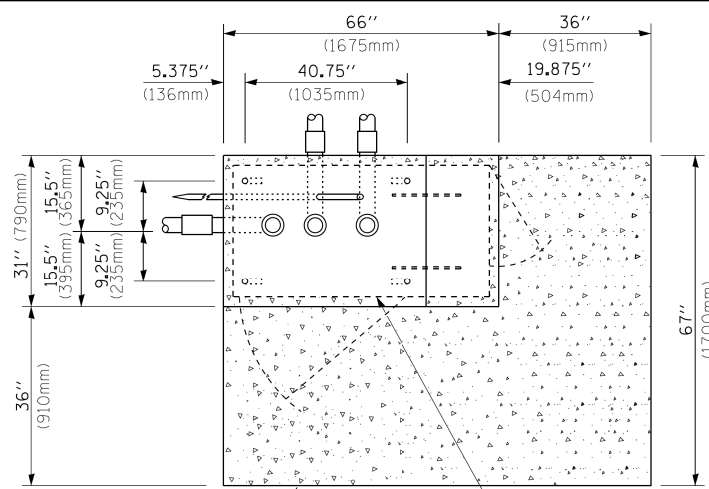
**HANDHOLE WITH MINIMUM CONDUIT DEPTH**  
(NOT TO SCALE)



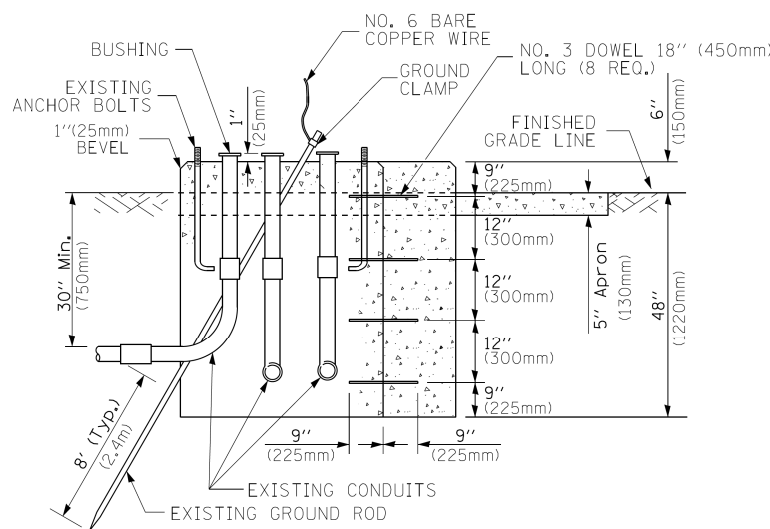
**POST CAP MOUNT**

**MAST ARM MOUNT**

**EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL**



**TOP VIEW**  
(NOT TO SCALE)

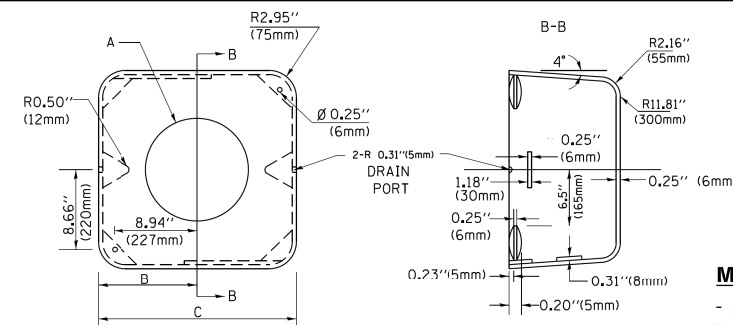


**MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION**  
(NOT TO SCALE)

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0,000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

**NOTES:**

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT  
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT  
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



**MATERIAL:**

- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

A	B	C	HEIGHT	WEIGHT
VARIABLES	9.5" (241mm)	19" (483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIABLES	10.75" (273mm)	21.5" (546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIABLES	13.0" (330mm)	26" (660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIABLES	18.5" (470mm)	37" (940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

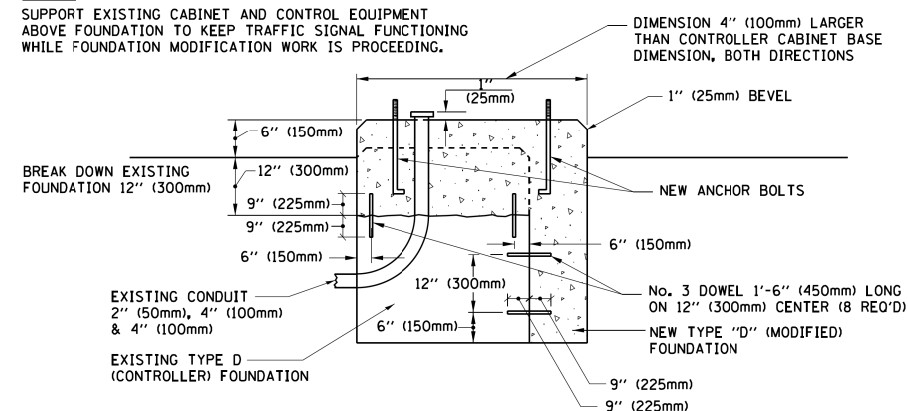
**SHROUD**

**NOTES:**

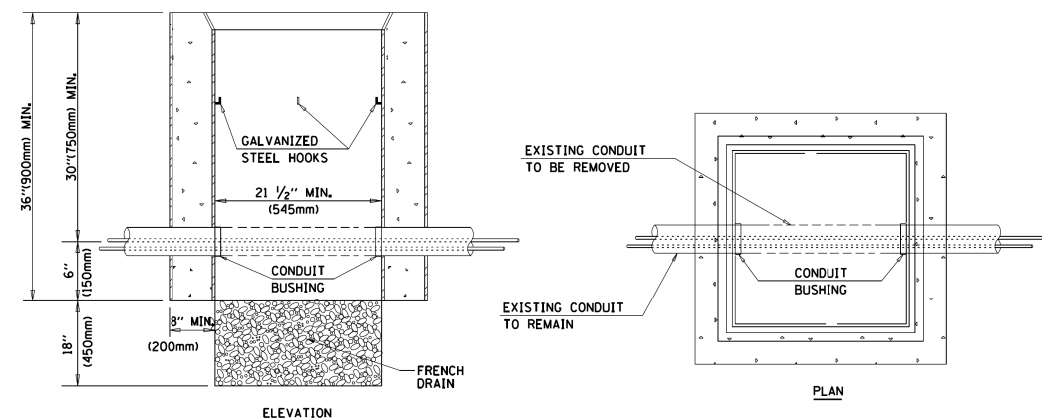
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

**NOTE:**

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



**MODIFY EXISTING TYPE "D" FOUNDATION**



**NOTES:**

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

**HANDHOLE TO INTERCEPT EXISTING CONDUIT**

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14
ca:\pwwork\p\dot\footemj\d0108315\ts05.dgn		DRAWN - BCK	REVISED -
	PLOT SCALE = 50.0000' / in.	CHECKED - DAD	REVISED -
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

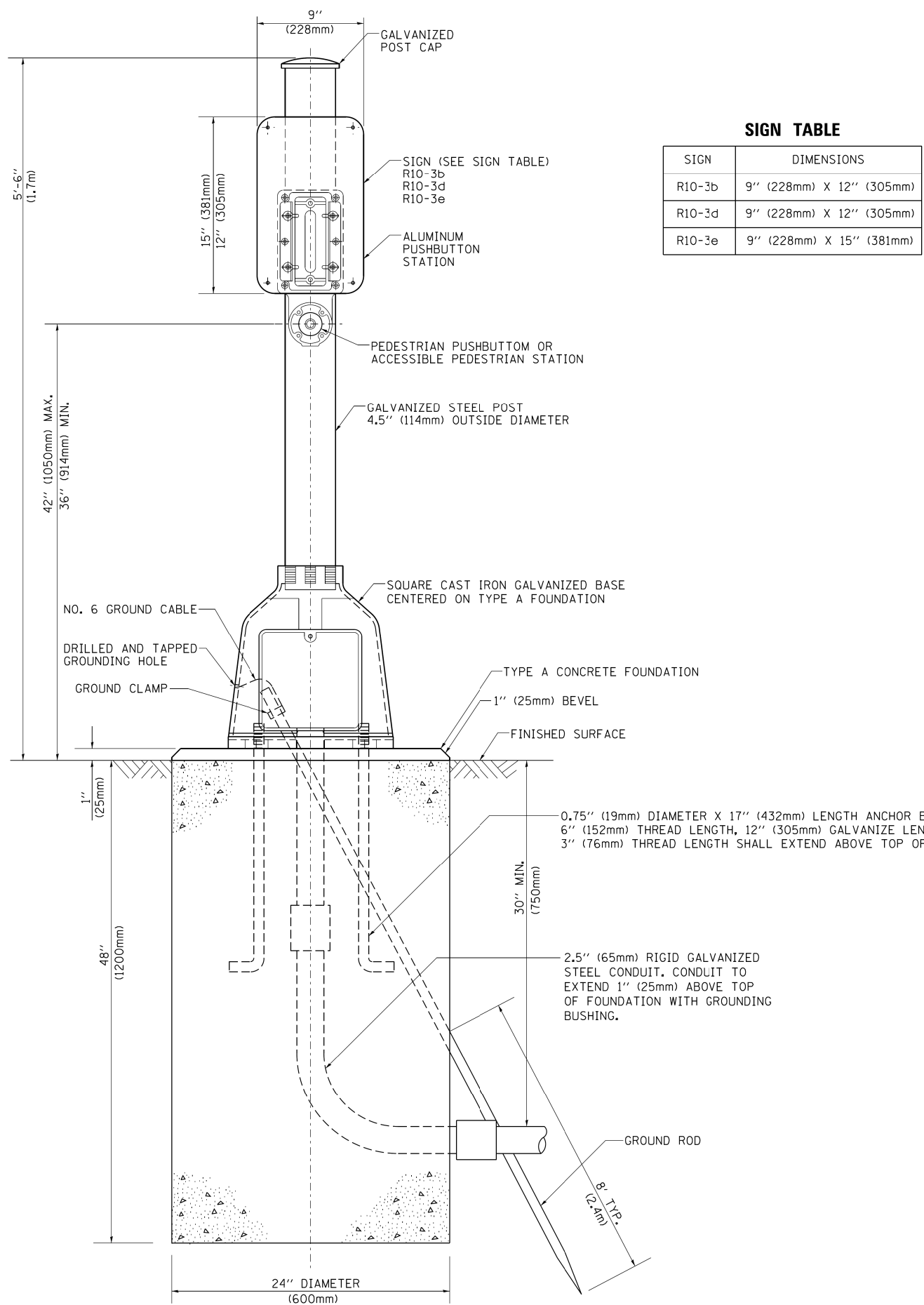
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE**  
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE

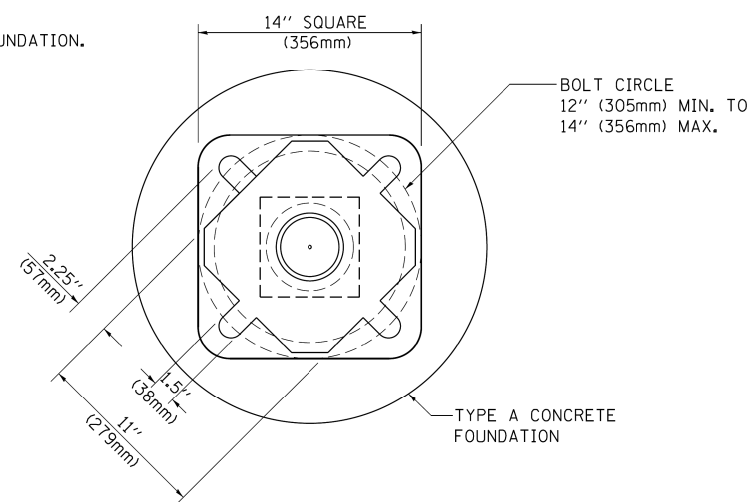
SHEET NO. 6 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	102
	<b>TS-05</b>		CONTRACT NO.	61F 73
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**SIGN TABLE**

SIGN	DIMENSIONS
R10-3b	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



**BOLT PATTERN**

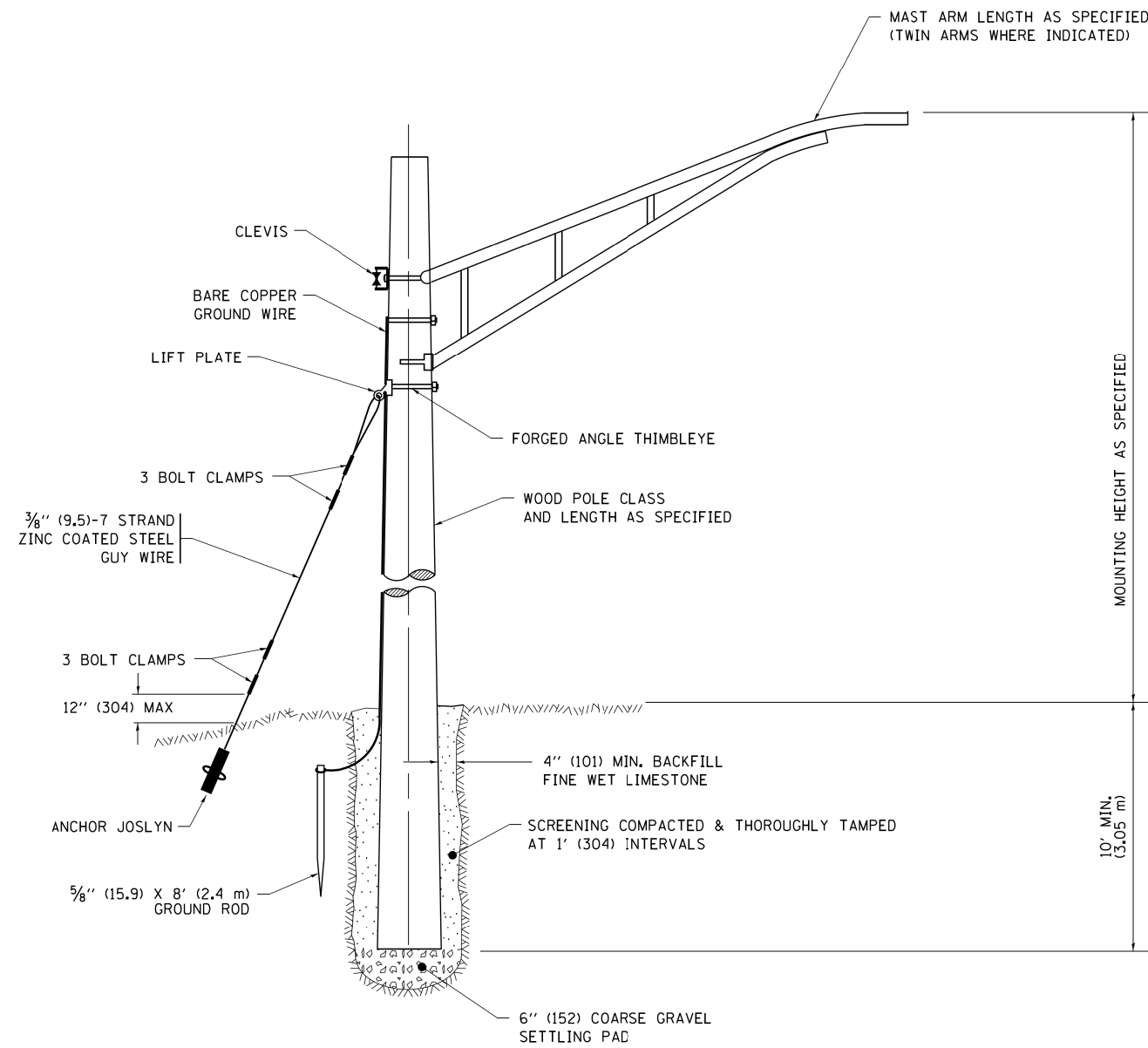
**PEDESTRIAN PUSH BUTTON POST, TYPE A**

FILE NAME =	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14
ei:\pwork\pwork\pwork\footemj\d0108315\ts05.dgn		DRAWN - GND	REVISED -
	PLOT SCALE = 50.0000' / 1"	CHECKED - DAD	REVISED -
	PLOT DATE = 1/13/2014	DATE - 10/1/2012	REVISED -

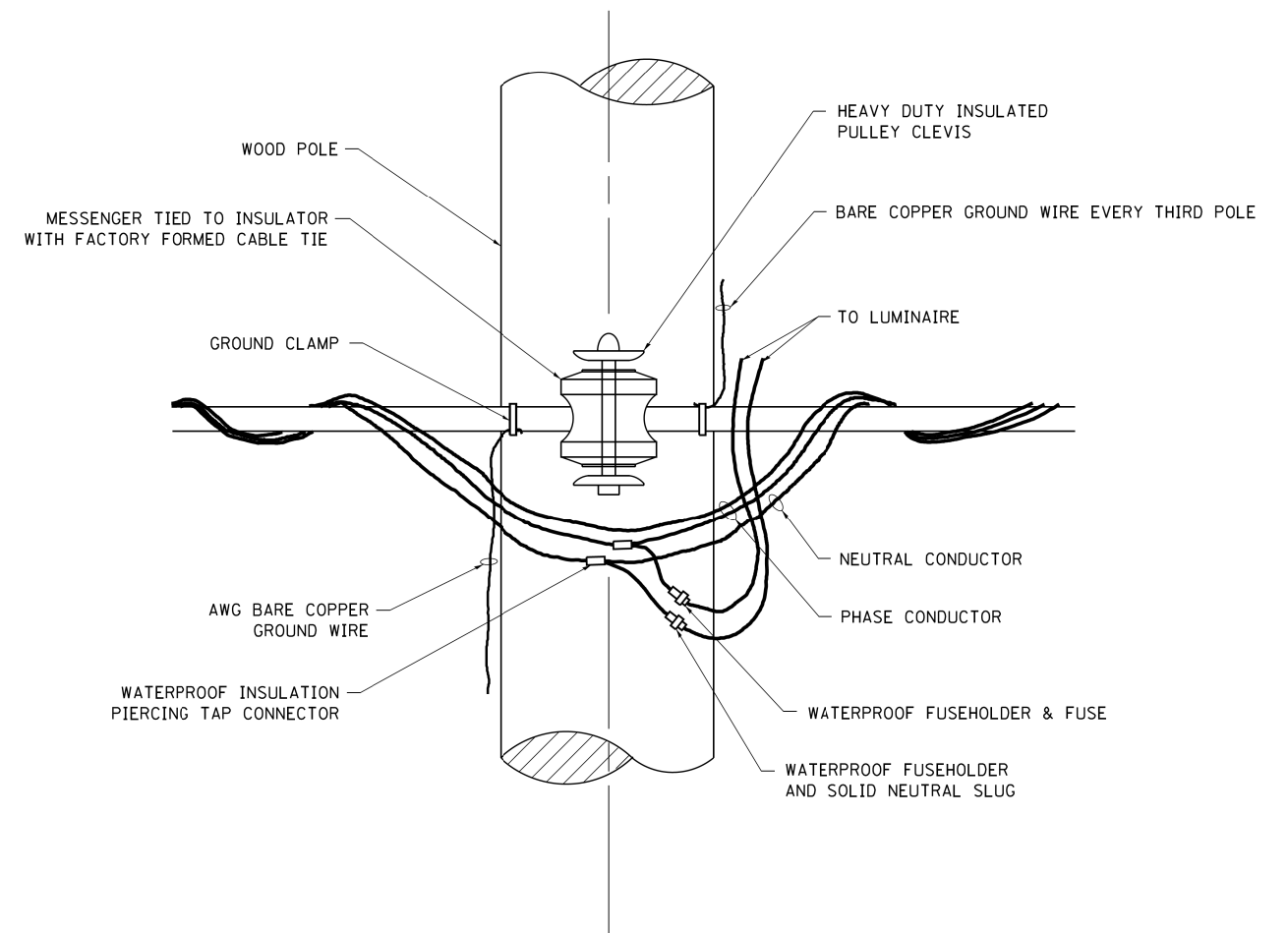
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>			
SCALE: NONE	SHEET NO. 7 OF 7 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	103
<b>TS-05</b>			<b>CONTRACT NO. 61F73</b>	
<small>FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT</small>				



### TEMPORARY LIGHT POLE DETAIL

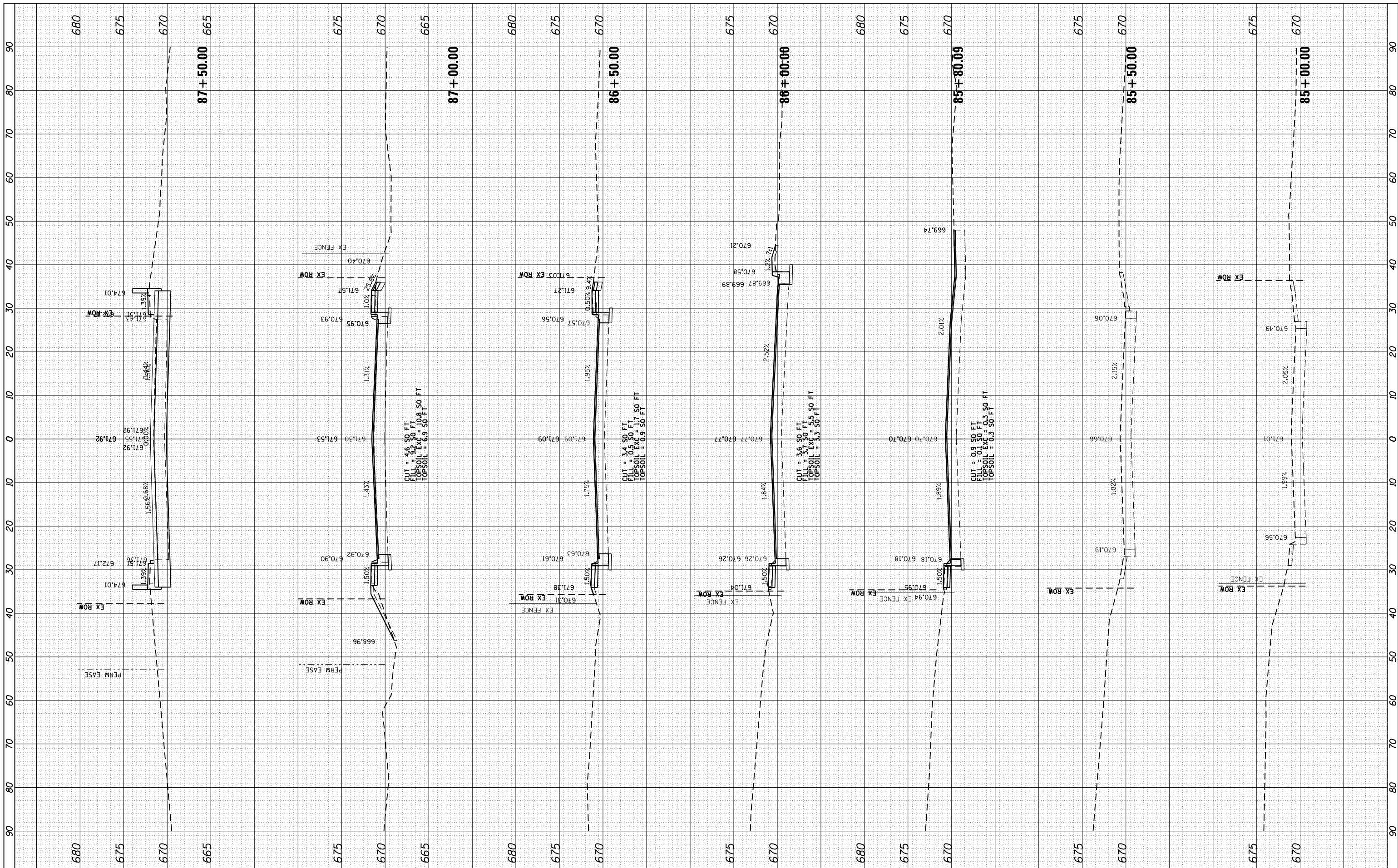


### TEMPORARY LIGHT POLE ATTACHMENT DETAIL

**NOTE:**

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. MAST ARM SHALL BE RATED FOR THE SPECIFIED MOUNTING HEIGHT.

FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED - 08-08-03	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY LIGHT POLE DETAILS</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\j\084EBID\INTEG\illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist	DRAWN\CADD\cadd\cadsheets\be800.dgn	CHECKED -	REVISED - R.T. 07-26-16					1397	15-00094-00-BR	DUPAGE	106	104
Default	PLOT SCALE = 50,000' / in.	DATE -	REVISED -		<b>BE-800</b>			CONTRACT NO. 61F73				
	PLOT DATE = 9/1/2016				SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT	



V3 Companies  
 7325 Janes Avenue  
 Woodridge, IL 60517  
 630.724.9200 phone  
 630.724.9202 fax  
 www.v3co.com

USER NAME = cf19us  
 PLOT SCALE = 20.0000' / in.  
 PLOT DATE = 2/13/2019

DESIGNED - EIH  
 DRAWN - EIH  
 CHECKED - MJR  
 DATE - 02/13/19

REVISED - 08/12/16  
 REVISED -  
 REVISED -  
 REVISED -

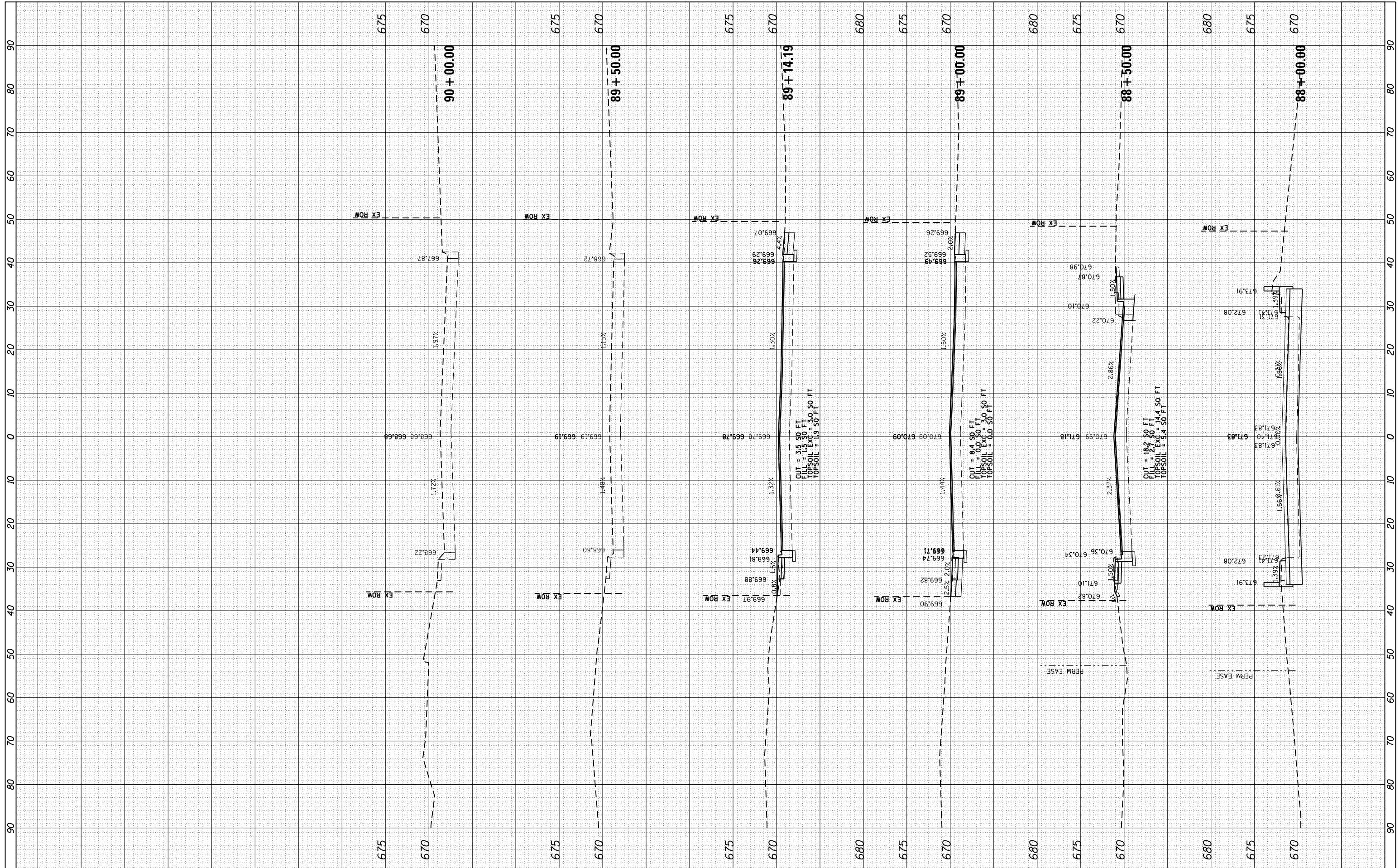
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SCALE: 1"=10' SHEET 1 OF 2 SHEETS STA. 85+00.00 TO STA. 87+50.00

ST. CHARLES ROAD  
 CROSS SECTIONS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	15-00094-00-BR	DUPAGE	106	105
ILLINOIS			CONTRACT NO: 61F73	





V3 Companies  
 7325 Janes Avenue  
 Woodridge, IL 60517  
 630.724.9200 phone  
 630.724.9202 fax  
 www.v3co.com

USER NAME = cf1gus	DESIGNED - EIH	REVISED - 08/12/16
PLOT SCALE = 20.0000' / in.	DRAWN - EIH	REVISED -
PLOT DATE = 2/13/2019	CHECKED - MJR	REVISED -
	DATE - 02/13/19	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**ST. CHARLES ROAD  
 CROSS SECTIONS**

SCALE: 1"=10'    SHEET 2 OF 2 SHEETS    STA. 88+00.00 TO STA. 90+00.00

F.A.U. RTE. 1397	SECTION 15-00094-00-BR	COUNTY DUPAGE	TOTAL SHEETS 106	SHEET NO. 106
ILLINOIS			CONTRACT NO: 61F73	