

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	101 TS-2	COOK	26	1

+2  
28

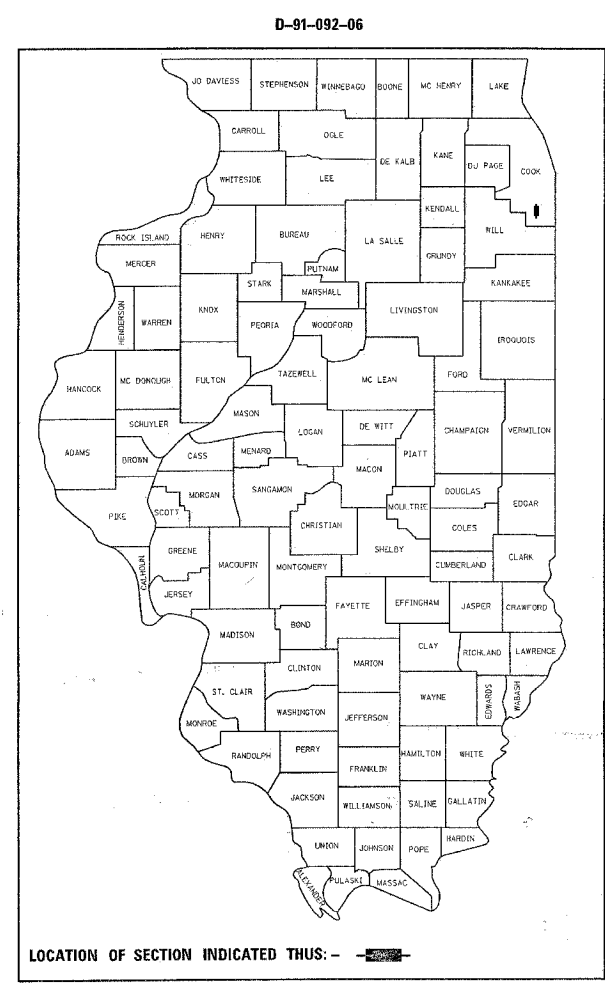
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

F.A.P. 350: IL 50 (CICERO AVENUE)  
AT 207TH STREET / BIRCHWOOD LANE  
SECTION: 101 TS-2  
SIGNAL INSTALLATION  
PROJECT: ACHPP-HPP-2768 (001)  
COOK COUNTY  
C-91-092-06

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN THE VILLAGE OF MATTESSON

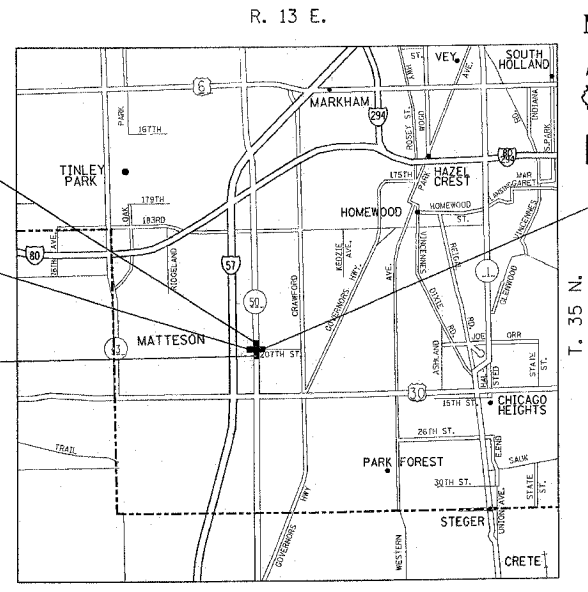


DISTRICT ONE - PLAN PREPARATION ENGINEER: KEN ENG / J.P. CHANG (847) 705-4432

PROJECT LIMIT  
STATION 54+26.41

PROJECT LIMIT  
STATION 16+11.51

PROJECT LIMIT  
STATION 45+67.31



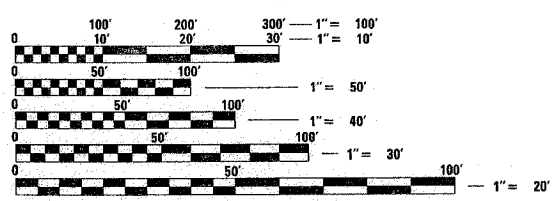
PROJECT LIMIT  
STATION 23+80.17

TRAFFIC DATA

IL 50/CICERO AVE.  
2005 ADT = 16,500  
SPEED LIMIT = 45-50 MPH

207TH ST.  
2005 ADT = 2,700  
SPEED LIMIT = 25 MPH

SCALE: NONE



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

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123

**LOCATION MAP**

207TH GROSS AND NET LENGTH OF PROJECT = 768.66 FEET  
ILL 50 GROSS AND NET LENGTH OF PROJECT = 859.10 FEET

CONTRACT NO. 60A64

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED Feb. 10 2006

Diane M. O'Keefe  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 24, 2006  
Mike Neal RD  
ENGINEER OF DESIGN AND ENVIRONMENT

March 24, 2006  
Milton P. Seep P.E./RD  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	101 TS-2	COOK	26	2
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. _____		ILLINOIS FED. AID PROJECT		

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
3-4	SUMMARY OF QUANTITIES
5-7	TYPICAL SECTIONS
8-9	ROADWAY PLAN
10	PAVEMENT MARKING PLAN
11-14	TRAFFIC SIGNAL PLANS
15	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
16	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
16A	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
17	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)
18	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
19	TRAFFIC CONTROL AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
20	PAVEMENT MARKINGS, LETTERS AND SYMBOLS FOR TRAFFIC STAGING
21	TEMPORARY INFORMATION SIGNING
21A	MEDIAN NOSE DETAIL
22	DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING
23-26	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS

STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
604001-02	FRAME AND LIDS, TYPE 1
606001-02	CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER
606301-02	PC CONCRETE ISLANDS AND MEDIANS
701301-02	LANE CLOSURE, 2L, 2W SHORT TIME OPERATIONS
701601-04	URBAN LANE CLOSURE, MULTILANE 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701701-04	URBAN LANE CLOSURE, MULTILANE INTERSECTION
702001-06	TRAFFIC CONTROL DEVICES
720001	SIGN PANEL MOUNTING DETAILS
780001-01	TYPICAL PAVEMENT MARKINGS
814001	CONCRETE HANDHOLES
814006	DOUBLE HANDHOLES
857001	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
877001-02	STEEL MAST ARM ASSEMBLY AND POLE
878001-04	CONCRETE FOUNDATION DETAILS
880006	TRAFFIC SIGNAL MOUNTING DETAILS
886001	DETECTOR LOOP INSTALLATION

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED)

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF MATTESON

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

3 METER (10') TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURB & GUTTER AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITION SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.

THE RESIDENT ENGINEER SHALL CONTACT MS. PATRICE HARRIS, AREA TRAFFIC FIELD ENGINEER AT (773)685-8386 A MINIMUM OF 72 HOURS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

THE RESIDENT ENGINEER SHALL VERIFY THE LOCATIONS OF ALL EXISTING PAVEMENT MARKINGS PRIOR TO START OF CONSTRUCTION.

THE UNIT WEIGHT (CONVERSION FACTOR) QUOTED IS FOR THE ESTIMATED PLAN QUANTITIES ONLY. ACTUAL QUANTITIES TO FUFILL CONTRACT REQUIREMENTS WILL BE DETERMINED BASED ON UNIT WEIGHT OF THE APPROVED MIX DESIGN, PLAN DIMENSIONS AND DENSITY LIMITATIONS. MAXIMUM PAYMENT WILL BE COMPUTED BASED ON WEIGHT AVERAGE DENSITIES OF THE IN-PLACE MIXTURES.

TWO PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE PROVIDED FOR A PERIOD OF ONE MONTH EACH. THE SIGNS SHALL NOTIFY MOTORIST THAT THE "TRAFFIC SIGNAL WILL BE TURNED ON" 7 - 10 DAYS BEFORE SIGNAL IS ACTIVATED.

THE CONTRACTOR SHALL VERIFY PROPOSED CULVERT DIAMETER BEFORE ORDERING MATERIALS

PAVEMENT MARKING REMOVAL SCHEDULE

PAVEMENT MARKING	UNIT	STA. TO STA.	QUANTITY
4" WHITE - SKIP DASH LINE	FOOT	45+67 TO 49+56 50+46 TO 54+26	385 FT
4" YELLOW - DOUBLE YELLOW CENTERLINE	FOOT	20+46 TO 22+52 23+29 TO 23+80	516 FT
4" YELLOW - MEDIAN EDGE LINE	FOOT	45+67 TO 49+56 50+46 TO 54+26	1561 FT
4" WHITE - EDGE LINE	FOOT	45+67 TO 49+77 50+61 TO 54+26	775 FT
TOTAL REMOVAL - 4" WHITE			3237 FT
6" WHITE - TURN LANE LINE	FOOT	45+76 TO 49+56 45+09 TO 49+56 50+46 TO 54+26 50+46 TO 52+46 20+72 TO 21+91	1526 FT
6" WHITE - DOTTED LINE	FOOT	NA	-
6" WHITE - CROSSWALK LINE	FOOT	NA	-
TOTAL REMOVAL - 6" WHITE			1526 FT
TOTAL REMOVAL - LETTERS AND SYMBOLS	SQ FT	STA 46+00, STA 48+00 STA 48+85, STA 50+73 STA 51+18, STA 52+25 STA 54+00, STA 21+55	341 SQFT
TOTAL REMOVAL - 12" WHITE - 45° DIAGONAL	FOOT	45+67 TO 49+56 50+46 TO 54+26	81 FT
TOTAL REMOVAL - 24" SOLID WHITE - STOP LINES	FOOT	STA 49+56, STA 50+46 STA 19+23, STA 20+72	130 FT
TOTAL PAVEMENT MARKING REMOVAL			894 SQFT

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION INDEX OF SHEETS, STATE STANDARDS, GENERAL NOTES AND PAVEMENT MARKING REMOVAL SCHEDULE
NAME	DATE	
		SCALE: VERT. _____ HORIZ. _____ DATE _____ DRAWN BY _____ CHECKED BY _____ <b>RI</b>

PLOT DATE = 2/29/2006  
FILE NAME = c:\projects\p128485\design\m32  
PLOT SCALE = 48.8898 / IN.  
REFERENCE = REF#

60A64

SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE			
CODE NO	ITEM	UNIT		IL 50 @ 207th			
				I000-1A 80% FED 20% STATE	Y031-1F 80% FED 10% STATE 10% VILLAGE	Y031-3D 100% VILLAGE	
20200100	EARTH EXCAVATION	CU YD	10	10			
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	2	2			
20400800	FURNISHED EXCAVATION	CU YD	10	10			
20800150	TRENCH BACKFILL	CU YD	3.5	3.5			
21400100	GRADING AND SHAPING DITCHES	FOOT	15	15			
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	5	5			
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	0.5	0.5			
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	0.5	0.5			
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	0.5	0.5			
25200100	SODDING	SQ YD	5	5			
25200200	SUPPLEMENTAL WATERING	UNIT	0.5	0.5			
28100707	STONE DUMPED RIPRAP, CLASS A4	SQ YD	2	2			
28200200	FILTER FABRIC	SQ YD	2	2			
31101200	SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	450	450			
42101300	PROTECTIVE COAT	SQ YD	720	720			
42400400	PORTLAND CEMENT CONCRETE SIDEWALK 7 INCH	SQ FT	660	660			
42400800	DETECTABLE WARNINGS	SQ FT	100	100			
44000100	PAVEMENT REMOVAL	SQ YD	80	80			
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1650	1650			
44000600	SIDEWALK REMOVAL	SQ FT	460	460			
44003100	MEDIAN REMOVAL	SQ FT	6075	6075			
50105220	PIPE CULVERT REMOVAL	FOOT	8	8			
54201279	PIPE CULVERTS, TYPE 2 RCCP 24"	FOOT	16	16			
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	1	1			
54247130	GRATING FOR CONCRETE FLARED END SECTION 24"	EACH	1	1			
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	1	1			
60604200	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12(SPECIAL)	FOOT	870	870			
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ. FT.	2110	2110			
60619900	CONCRETE MEDIAN, TYPE SB - 6.12(SPECIAL)	SQ. FT.	1660	1660			
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3			
67100100	MOBILIZATION	L SUM	1	1			
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1			

\* SPECIALTY ITEM

SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE			
CODE NO	ITEM	UNIT		IL 50 @ 207th			
				I000-1A 80% FED 20% STATE	Y031-1F 80% FED 10% STATE 10% VILLAGE	Y031-3D 100% VILLAGE	
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1			
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	400	400			
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	380	380			
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	3900	3900			
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	2000	2000			
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	100	100			
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	150	150			
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	3300	3300			
* 72000100	SIGN PANEL - TYPE 1	SQ FT	14		14		
* 72000200	SIGN PANEL - TYPE 2	SQ FT	25		25		
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	380	380			
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3900	3900			
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2000	2000			
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	100	100			
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	150	150			
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	100	100			
78300100	PAVEMENT MARKING REMOVAL	SQ FT	920	920			
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	70	70			
81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	665		665		
81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	89		89		
81001100	CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10		10		
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	203		203		
81018600	CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	90		90		

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SUMMARY OF QUANTITIES  
PLOT DATE: 2/10/2006

Rev.

2/10/2006 2:10:06 PM

60A64

SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		IL 50 @ 207th		Y031-3D 100% VILLAGE		
				1000-1A 80% FED 20% STATE	Y031-1F 80% FED 10% STATE 10% VILLAGE			
81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	121	121				
81019000	CONDUIT PUSHED, 5" DIA., GALVANIZED STEEL	FOOT	135	135				
81400100	HANDHOLE	EACH	4	4				
81400200	HEAVY-DUTY HANDHOLE	EACH	4	4				
81400300	DOUBLE HANDHOLE	EACH	2	2				
81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	759	759				
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1	1				
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	913	913				
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1586	1586				
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1162	1162				
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1537	1537				
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1600	1600				
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	228	228				
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2	2				
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2	2				
87700150	STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1	1				
87700180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1	1				
87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	2	2				
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	20	20				
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	4	4				
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	60	60				
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8	8				
88500100	INDUCTIVE LOOP DETECTOR	EACH	8	8				
88600100	DETECTOR LOOP, TYPE I	FOOT	1166	1166				

SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		IL 50 @ 207th		Y031-3D 100% VILLAGE		
				1000-1A 80% FED 20% STATE	Y031-1F 80% FED 10% STATE 10% VILLAGE			
88700200	LIGHT DETECTOR	EACH	2				2	
88700300	LIGHT DETECTOR AMPLIFIER	EACH	1					1
88800100	PEDESTRIAN PUSH-BUTTON	EACH	5				5	
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	103.4	103.4				
X0322903	SAW CUTTING, (FULL DEPTH)	FOOT	1745	1745				
<del>X4066426</del>	<del>BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70</del>	<del>TON</del>	<del>22</del>	<del>22</del>				
X4066426	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	TON	22	22				
X4066740	LEVELING BINDER (MACHINE METHOD) SUPERPAVE N70	TON	15	15				
<del>X4066740</del>	<del>LEVELING BINDER (MACHINE METHOD) SUPERPAVE N70</del>	<del>TON</del>	<del>15</del>	<del>15</del>				
X7015000	CHANGEABLE MESSAGE SIGN	CAL MO	2	2				
X8050010	SERVICE INSTALLATION - GROUND MOUNTED	EACH	1				1	
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	737				737	
X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	272					272
X8800020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6				6	
X8800040	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2				2	
X8800045	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2				2	
X8800060	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2				2	
X8810610	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	2				2	
X8810620	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	3				3	
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	1	1				
X0325252	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 15 1/2"	SQ. YD.	260	260				

\* SPECIALTY ITEM  
 Δ NON-PARTICIPATING

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SUMMARY OF QUANTITIES

Rev.

PLOT DATE: 2/10/2006

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	101 TS-2	COOK	26	5
STA. 45+67		TO STA. 49+59		
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT

LEGEND

- ① EXISTING PCC BASE COURSE, 15''(±)
- ② EXISTING BIT. CONC. SURFACE COURSE, 3''(±)
- ③ EXISTING PCC SIDEWALK, 7''
- ④ EXISTING COMBINATION CONC. CURB & GUTTER, TYPE B-6.12
- ⑤ EXISTING COMBINATION CONC. CURB & GUTTER, TYPE B-6.24
- ⑥ EXISTING CRUSHED STONE
- ⑦ EXISTING PC CONCRETE CURB
- ⑧ EXISTING CONCRETE MEDIAN SURFACE
- ⑨ PROPOSED PCC SIDEWALK, 7''
- ⑩ PROPOSED CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)
- ⑪ PROPOSED 1 1/2'' BIT. CONC. SURF. CRSE, SUPERPAVE, MIX "D", N70
- ⑫ PROPOSED 1'' LEVELING BINDER (HM) SUPERPAVE, N70
- ⑬ PROPOSED 15 1/2'' PCC BASE COURSE
- ⑭ SUB-BASE GRANULAR MATERIAL, TYPE B 4''
- ⑮ PROPOSED CONCRETE MEDIAN SURFACE, 4''

- ⑯ PROP. DRILL AND GROUT #4 TIE BAR, SHAPE (24'' C-C), COST INCLUDED IN CONCRETE CURB AND GUTTER, TYPE B-6.12 PAY ITEM
- ⑰ PROP. COARSE AGGREGATE - FILL TO SUBGRADE (TYP.) COST INCLUDED IN CONC. MEDIAN SURFACE 4'' PAY ITEM
- ⑱ PROP. 5/8'' PREFORMED EXPANSION JOINT FILLER - COST INCLUDED IN CONCRETE CURB AND GUTTER, TYPE B-6.12 PAY ITEM

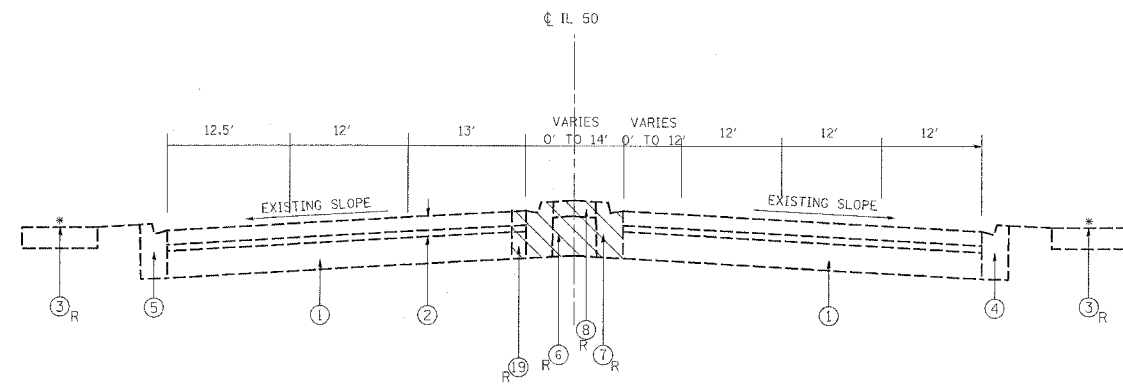
- ⑲ PAVEMENT REMOVAL (VARIES FROM 0' TO 2')
- ⑳ CONCRETE MEDIAN TYPE SB-6.12 (SPECIAL)
- R- DESIGNATED FOR REMOVAL

NOTES:

\* SEE ROADWAY PLAN SHEETS FOR SIDEWALK REMOVAL AND REPLACEMENT LOCATIONS

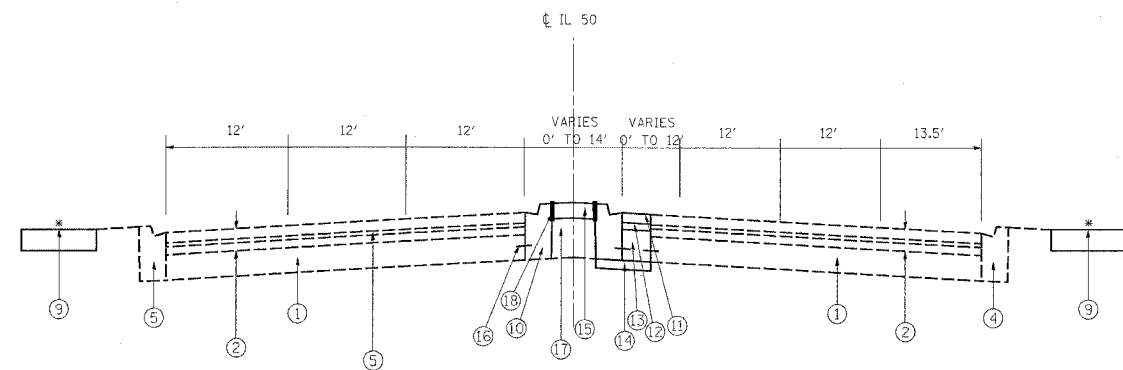
ITEMS 11-13 HAVE A VARIABLE WIDTH FROM 0' TO 5'

ANY SUB-BASE GRANULAR MATERIAL UNDER THE CURB AND GUTTER SHALL NOT BE PAID FOR SEPARATELY BUT WILL BE CONSIDERED AS INCLUDED IN THE COST PER SQUARE YARD OF "SUB-BASE GRANULAR MATERIAL, TYPE B 4"



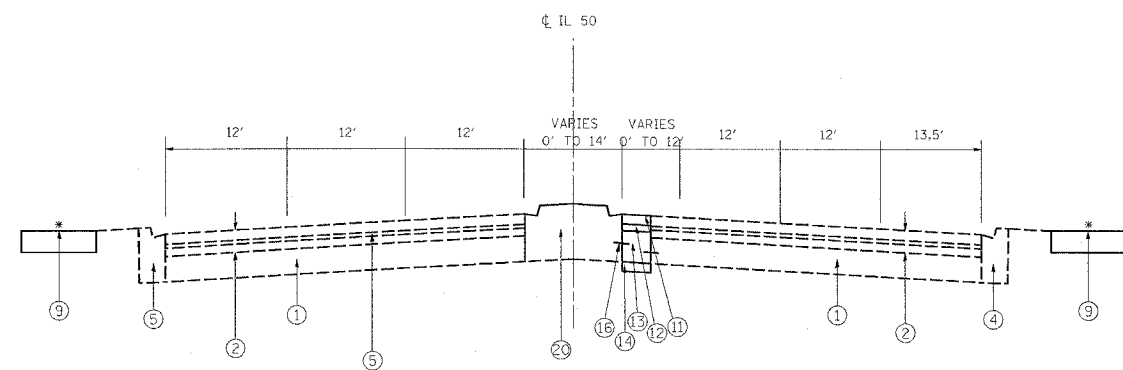
EXISTING TYPICAL SECTION  
IL 50

STATION  
45+67 TO 49+59



PROPOSED TYPICAL SECTION  
IL 50

STATION  
45+67 TO 47+47



PROPOSED TYPICAL SECTION  
IL 50

STATION  
47+47 TO 49+59

BITUMINOUS MIXTURE REQUIREMENTS

MIXTURE USE	AC TYPE	MAX RAP. (%)	AIR VOIDS (%)
LEVELING BINDER (HM), SUPERPAVE N70	PG 64-22	10%	4% @ 70 GYR
BIT. CONC. SURFACE COURSE, SUPERPAVE, MIX "D" N70	PG 64-22	10%	4% @ 70 GYR

THE UNIT WEIGHT USED TO CALCULATE ALL BITUMINOUS SURFACE MIXTURES IS 112 LBS/SQ YD/IN

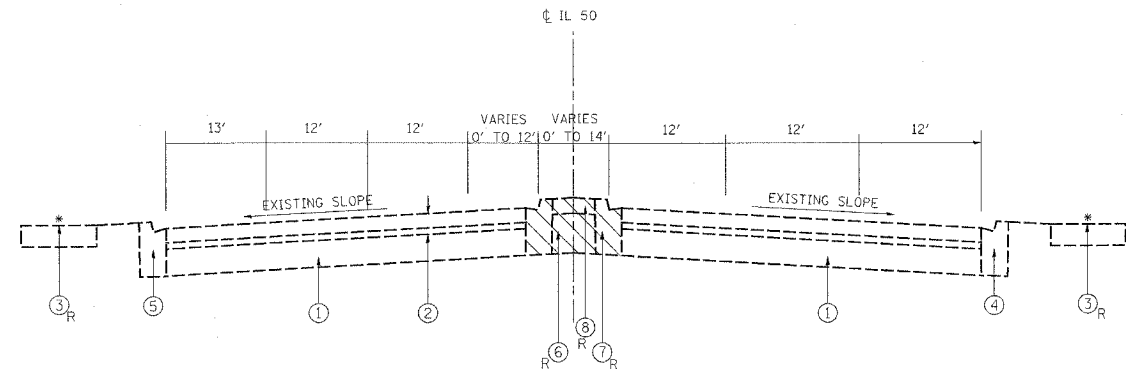
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		TYPICAL SECTIONS

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HORIZ. \_\_\_\_\_  
DATE \_\_\_\_\_ DRAWN BY \_\_\_\_\_  
CHECKED BY \_\_\_\_\_

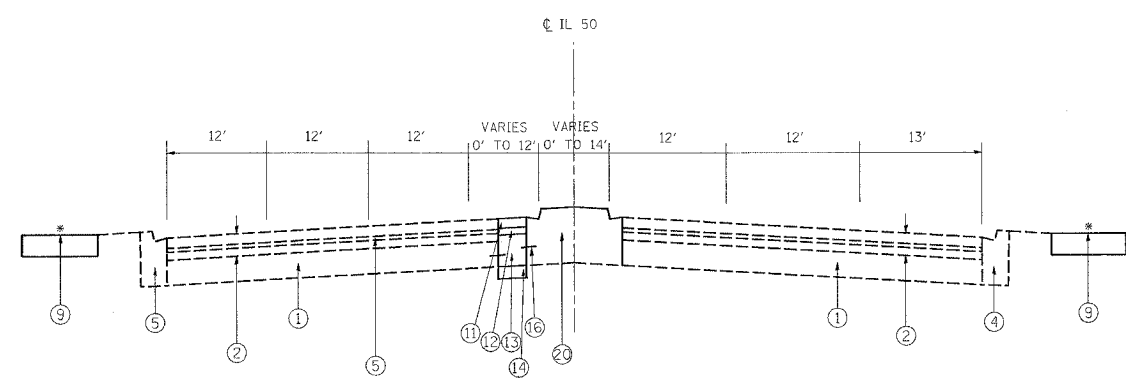
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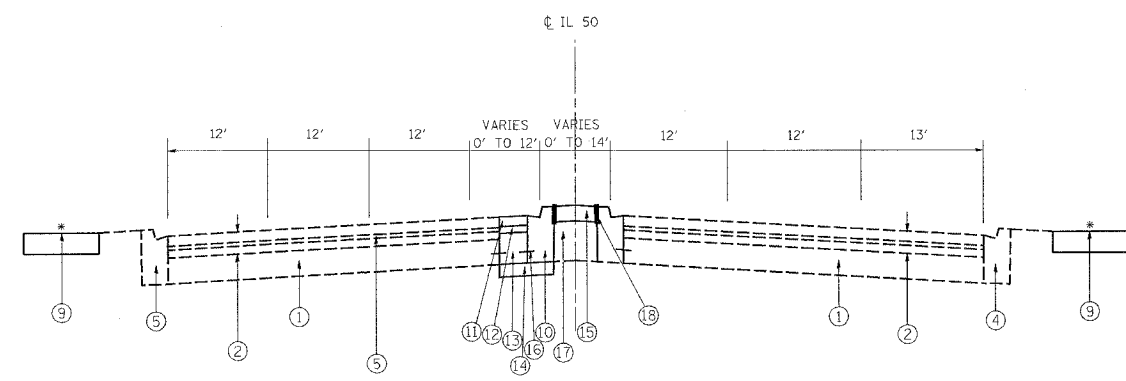
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	101 TS-2	COOK	26	6
STA. 50+58		TO STA. 54+26		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



EXISTING TYPICAL SECTION  
IL 50  
STATION  
50+58 TO 54+26



PROPOSED TYPICAL SECTION  
IL 50  
STATION  
50+58 TO 52+61



PROPOSED TYPICAL SECTION  
IL 50  
STATION  
52+61 TO 54+26

LEGEND

- ① EXISTING PCC BASE COURSE, 15"(±)
  - ② EXISTING BIT. CONC. SURFACE COURSE, 3"(±)
  - ③ EXISTING PCC SIDEWALK, 7"
  - ④ EXISTING COMBINATION CONC. CURB & GUTTER, TYPE B-6.12
  - ⑤ EXISTING COMBINATION CONC. CURB & GUTTER, TYPE B-6.24
  - ⑥ EXISTING CRUSHED STONE
  - ⑦ EXISTING PC CONCRETE CURB
  - ⑧ EXISTING CONCRETE MEDIAN SURFACE
  - ⑨ PROPOSED PCC SIDEWALK, 7"
  - ⑩ PROPOSED CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)
  - ⑪ PROPOSED 1 1/2" BIT. CONC. SURF. CRSE, SUPERPAVE, MIX "D", N70
  - ⑫ PROPOSED 1" LEVELING BINDER (HM) SUPERPAVE, N70
  - ⑬ PROPOSED 15 1/2" PCC BASE COURSE
  - ⑭ SUB-BASE GRANULAR MATERIAL, TYPE B 4"
  - ⑮ PROPOSED CONCRETE MEDIAN SURFACE, 4"
  - ⑯ PROP. DRILL AND GROUT #4 TIE BAR, SHAPE (24" C-C), COST INCLUDED IN CONCRETE CURB AND GUTTER, TYPE B-6.12 PAY ITEM
  - ⑰ PROP. COARSE AGGREGATE - FILL TO SUBGRADE (TYP.) COST INCLUDED IN CONC. MEDIAN SURFACE 4" PAY ITEM
  - ⑱ PROP. 5/8" PREFORMED EXPANSION JOINT FILLER - COST INCLUDED IN CONCRETE CURB AND GUTTER, TYPE B-6.12 PAY ITEM
  - ⑲ PAVEMENT REMOVAL (VARIES FROM 0' TO 2')
  - ⑳ CONCRETE MEDIAN TYPE SB-6.12 (SPECIAL)
- R - DESIGNATED FOR REMOVAL

NOTES:

\* SEE ROADWAY PLAN SHEETS FOR SIDEWALK REMOVAL AND REPLACEMENT LOCATIONS

ITEMS 11-13 HAVE A VARIABLE WIDTH FROM 0' TO 4'

ANY SUB-BASE GRANULAR MATERIAL UNDER THE CURB AND GUTTER SHALL NOT BE PAID FOR SEPARATELY BUT WILL BE CONSIDERED AS INCLUDED IN THE COST PER SQUARE YARD OF "SUB-BASE GRANULAR MATERIAL, TYPE B 4"

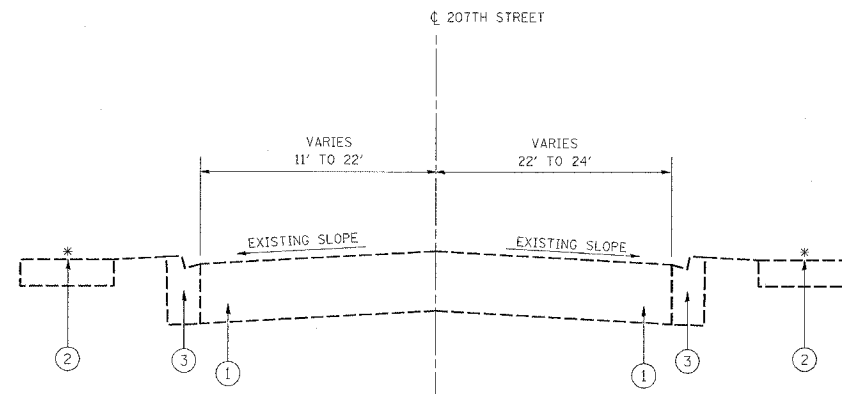
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		TYPICAL SECTIONS

SCALE: VERT. \_\_\_\_\_  
HORIZ. \_\_\_\_\_  
DATE \_\_\_\_\_

DRAWN BY \_\_\_\_\_  
CHECKED BY \_\_\_\_\_

PLOT DATE = 9/18/2008  
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 USER NAME = smt\jcl

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	101 TS-2	COOK	26	7
STA. 16+15 TO STA. 23+80				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



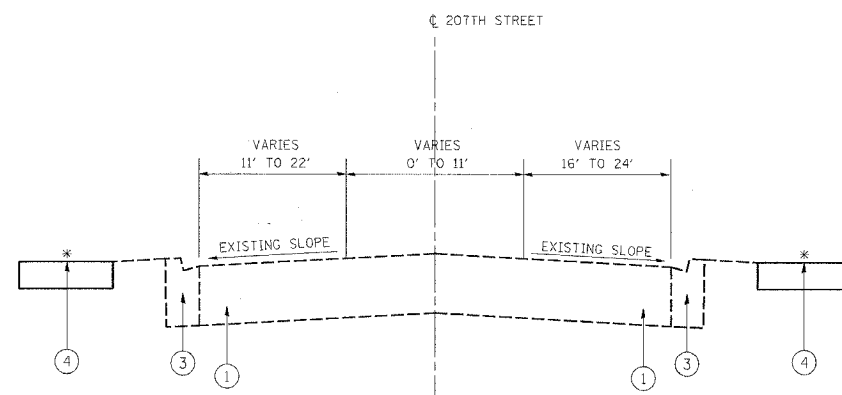
EXISTING TYPICAL SECTION  
207TH STREET

STATION  
16+15 TO 23+80

LEGEND

- ① EXISTING BIT. CONCRETE, 10"( $\pm$ )
- ② EXISTING PCC SIDEWALK, 7"
- ③ EXISTING COMBINATION CONC. CURB & GUTTER, TYPE B-6.12
- ④ PROPOSED PCC SIDEWALK, 7"

\* SEE ROADWAY PLAN SHEETS FOR SIDEWALK REMOVAL AND REPLACEMENT LOCATIONS.



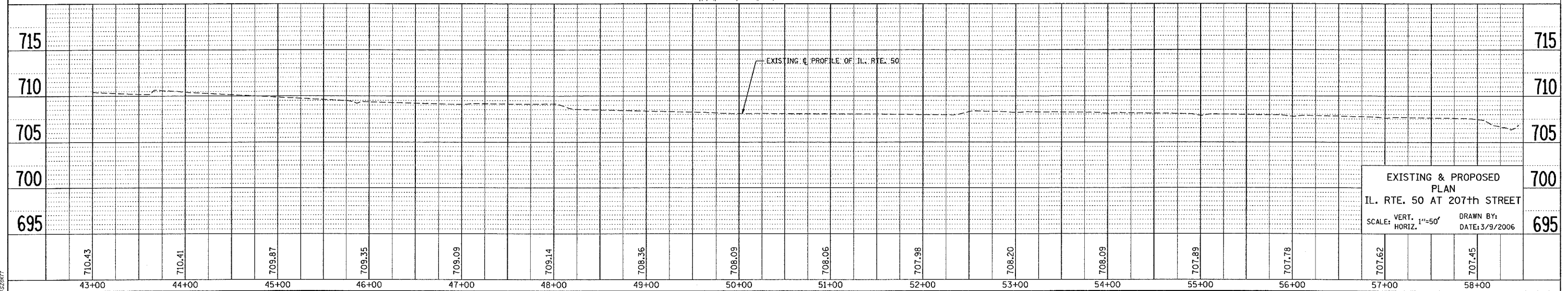
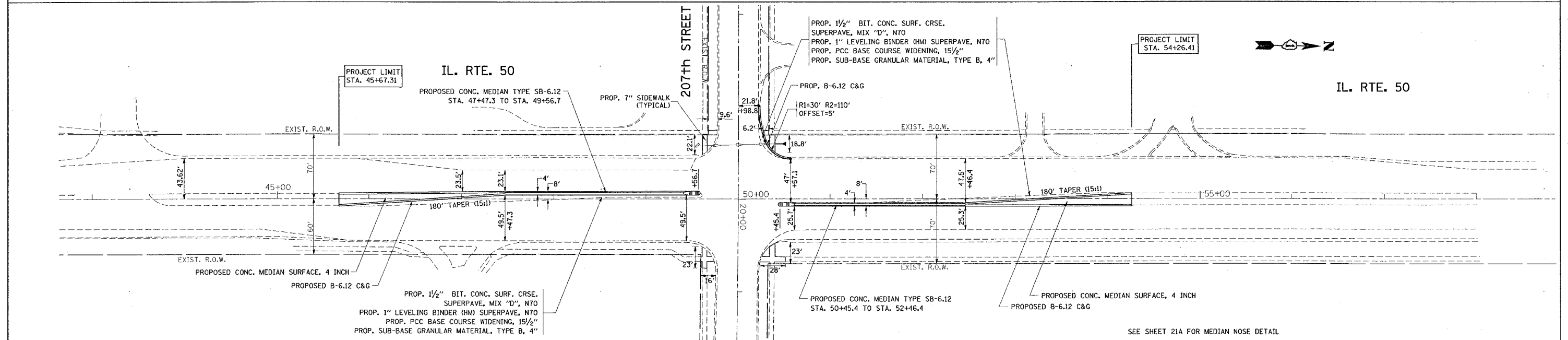
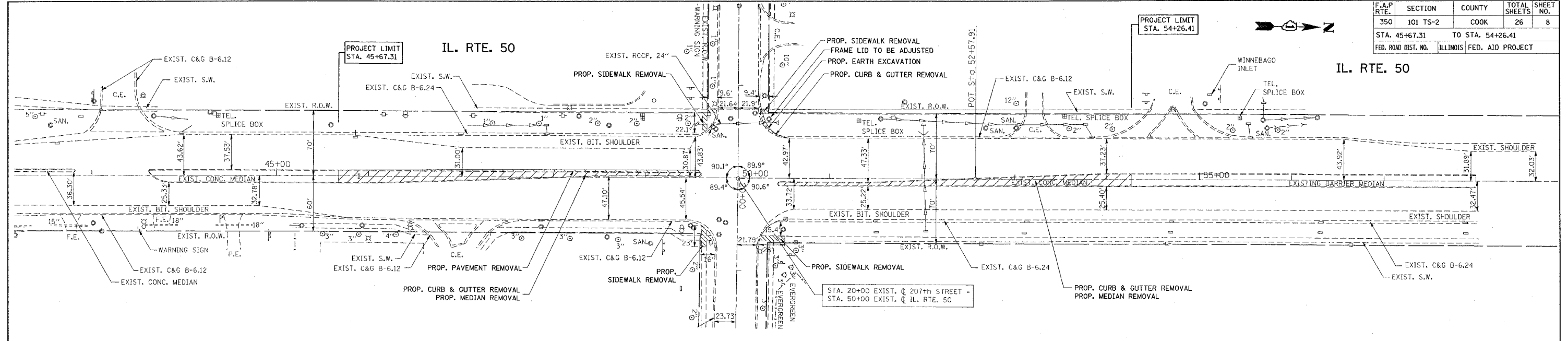
PROPOSED TYPICAL SECTION  
207TH STREET

STATION  
16+15 TO 23+80

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		TYPICAL SECTIONS
SCALE: VERT. _____		DRAWN BY _____
DATE _____		

PLOT DATE = 3/1/2006  
 PLOT SCALE = 5/8"=1'-0"  
 USER NAME = smthkl

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	101 TS-2	COOK	26	8
STA. 45+67.31		TO STA. 54+26.41		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

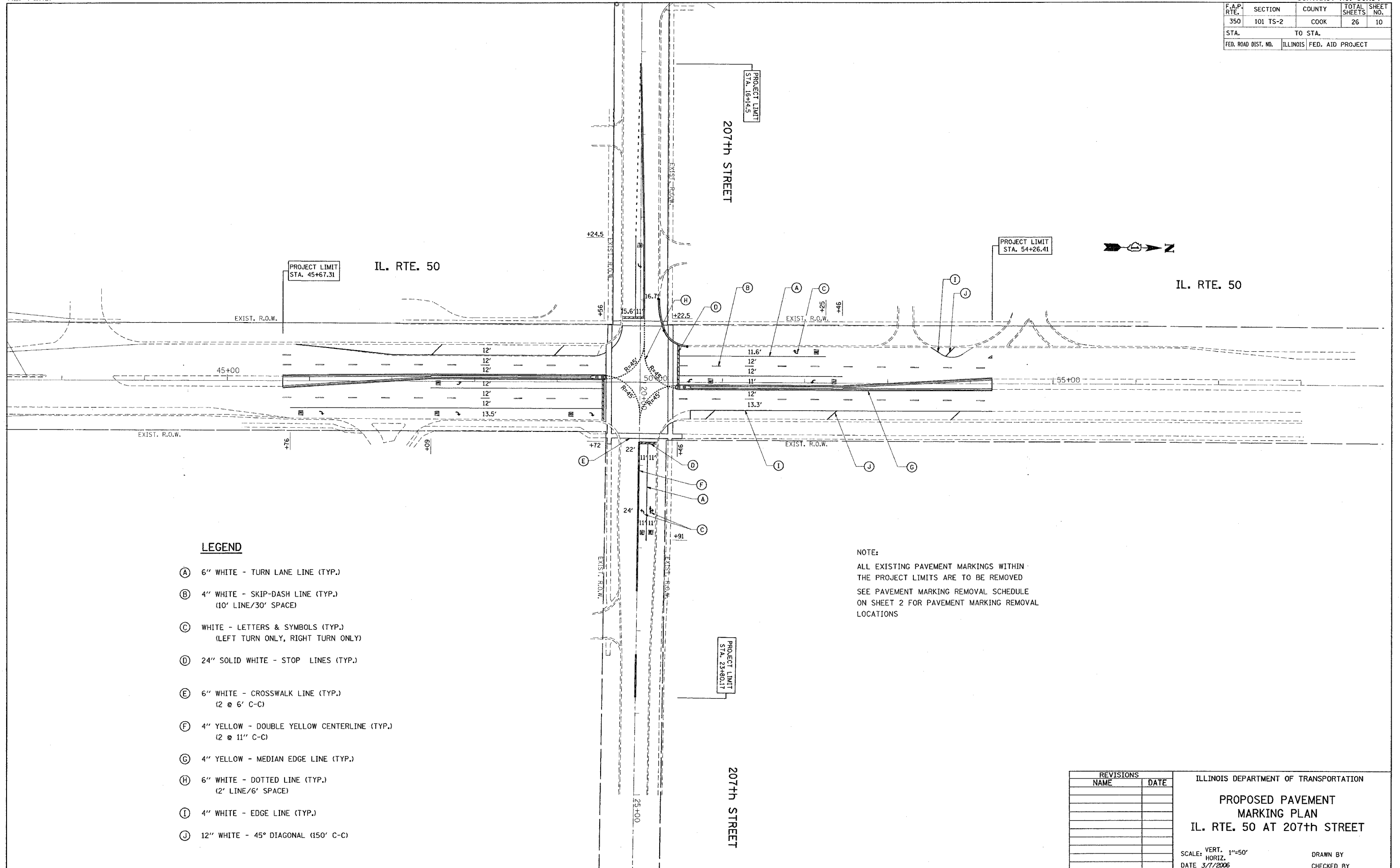


EXISTING & PROPOSED PLAN  
IL. RTE. 50 AT 207th STREET  
SCALE: VERT. 1"=50'  
HORIZ. DATE: 3/9/2006





F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	101 TS-2	COOK	26	10
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



**LEGEND**

- (A) 6" WHITE - TURN LANE LINE (TYP.)
- (B) 4" WHITE - SKIP-DASH LINE (TYP.) (10' LINE/30' SPACE)
- (C) WHITE - LETTERS & SYMBOLS (TYP.) (LEFT TURN ONLY, RIGHT TURN ONLY)
- (D) 24" SOLID WHITE - STOP LINES (TYP.)
- (E) 6" WHITE - CROSSWALK LINE (TYP.) (2 @ 6' C-C)
- (F) 4" YELLOW - DOUBLE YELLOW CENTERLINE (TYP.) (2 @ 11" C-C)
- (G) 4" YELLOW - MEDIAN EDGE LINE (TYP.)
- (H) 6" WHITE - DOTTED LINE (TYP.) (2' LINE/6' SPACE)
- (I) 4" WHITE - EDGE LINE (TYP.)
- (J) 12" WHITE - 45° DIAGONAL (150' C-C)

**NOTE:**

ALL EXISTING PAVEMENT MARKINGS WITHIN THE PROJECT LIMITS ARE TO BE REMOVED. SEE PAVEMENT MARKING REMOVAL SCHEDULE ON SHEET 2 FOR PAVEMENT MARKING REMOVAL LOCATIONS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**PROPOSED PAVEMENT MARKING PLAN**  
IL. RTE. 50 AT 207th STREET

SCALE: VERT. 1"=50'  
HORIZ. 1"=50'  
DATE 3/1/2006

DRAWN BY  
CHECKED BY

PLOT DATE = 3/7/2006  
 FILE NAME = c:\p\m\60a64\207th\pmk.dgn  
 PLOT SCALE = 1/8"=1'-0"  
 USER NAME = lizakrf

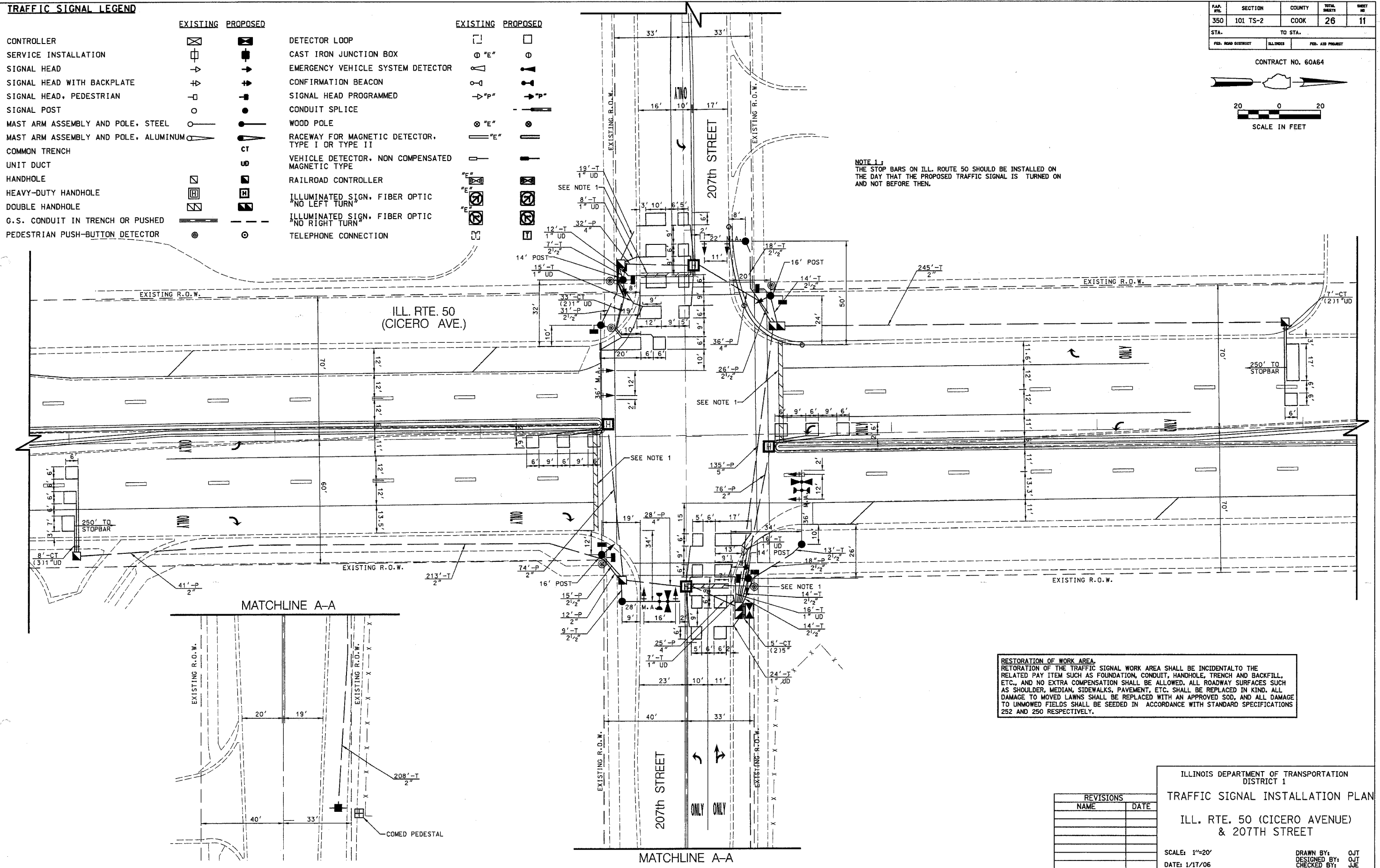
**TRAFFIC SIGNAL LEGEND**

		EXISTING	PROPOSED		EXISTING	PROPOSED
CONTROLLER				DETECTOR LOOP		
SERVICE INSTALLATION				CAST IRON JUNCTION BOX		
SIGNAL HEAD				EMERGENCY VEHICLE SYSTEM DETECTOR		
SIGNAL HEAD WITH BACKPLATE				CONFIRMATION BEACON		
SIGNAL HEAD, PEDESTRIAN				SIGNAL HEAD PROGRAMMED		
SIGNAL POST				CONDUIT SPLICE		
MAST ARM ASSEMBLY AND POLE, STEEL				WOOD POLE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM				RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
COMMON TRENCH				VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
UNIT DUCT				RAILROAD CONTROLLER		
HANDHOLE				ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"		
HEAVY-DUTY HANDHOLE				ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"		
DOUBLE HANDHOLE				TELEPHONE CONNECTION		
G.S. CONDUIT IN TRENCH OR PUSHED						
PEDESTRIAN PUSH-BUTTON DETECTOR						

PAP. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	101 TS-2	COOK	26	11

CONTRACT NO. 60A64

SCALE IN FEET



**NOTE 1:**  
THE STOP BARS ON ILL. ROUTE 50 SHOULD BE INSTALLED ON THE DAY THAT THE PROPOSED TRAFFIC SIGNAL IS TURNED ON AND NOT BEFORE THEN.

**RESTORATION OF WORK AREA.**  
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOVED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT 1

**TRAFFIC SIGNAL INSTALLATION PLAN**

ILL. RTE. 50 (CICERO AVENUE)  
& 207TH STREET

SCALE: 1"=20'  
DATE: 1/17/06

DRAWN BY: QJT  
DESIGNED BY: QJT  
CHECKED BY: JJE

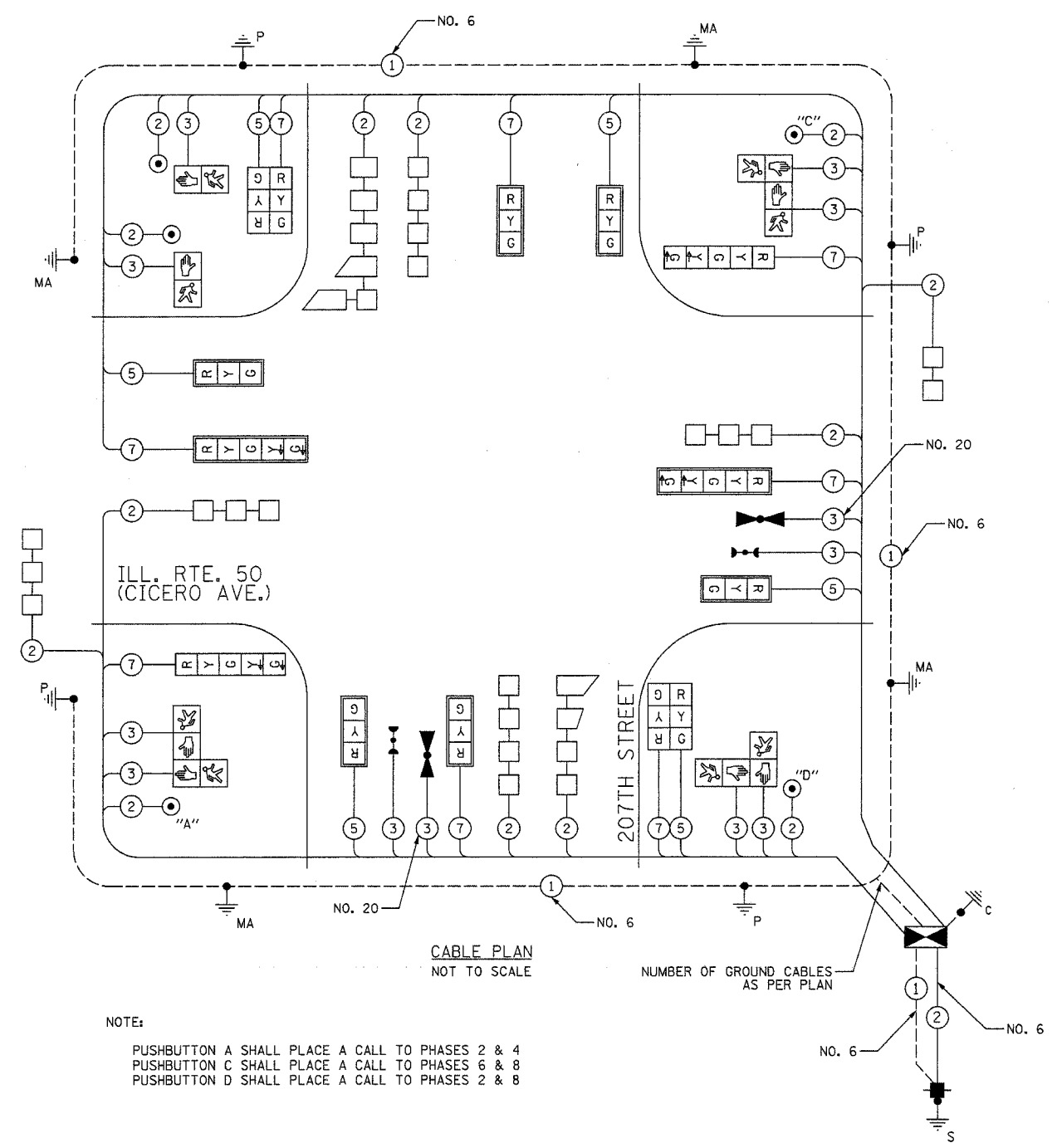
P.A.P. ETC.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	101 TS-2	COOK	26	12
STA.		TO STA.		
FED. ROAD DISTRICT	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A64



### CABLE PLAN LEGEND

- | EXISTING | PROPOSED |   |
|----------|----------|---|
|          |          | 8" (200mm) TRAFFIC SIGNAL SECTION                                   |
|          |          | 12" (300mm) PEDESTRIAN SIGNAL SECTION                               |
|          |          | 12" (300mm) PEDESTRIAN SIGNAL SECTION                               |
|          |          | CONTROLLER CABINET  |
|          |          | SERVICE INSTALLATION  |
|          |          | TELEPHONE CONNECTION  |
|          |          | MAGNETIC DETECTOR   |
|          |          | EMERGENCY VEHICLE LIGHT DETECTOR                                    |
|          |          | CONFIRMATION BEACON   |
|          |          | PUSHBUTTON DETECTOR   |
|          |          | VEHICLE DETECTOR, INDUCTION LOOP                                    |
|          |          | MICROWAVE VEHICLE SENSOR  |
|          |          | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD           |
|          |          | RAILROAD CONTROL CABINET  |
|          |          | ILLUMINATED SIGN "NO LEFT TURN"                                     |
|          |          | ILLUMINATED SIGN "NO RIGHT TURN"                                    |
|          |          | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C). |
|          |          | GROUND ROD AT POST (P), OR MAST ARM POLE (MA).                      |
|          |          | GROUND ROD AT ELECTRIC SERVICE INSTALLATION                         |
|          |          | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)                  |
|          |          | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F             |



NOTE:  
 PUSHBUTTON A SHALL PLACE A CALL TO PHASES 2 & 4  
 PUSHBUTTON C SHALL PLACE A CALL TO PHASES 6 & 8  
 PUSHBUTTON D SHALL PLACE A CALL TO PHASES 2 & 8

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	14		17	0.50	119
(YELLOW)	14		25	0.25	88
(GREEN)	14		15	0.25	53
ARROW	8		12	0.10	10
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
FLASHER				0.50	
TOTAL =					570

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (2.0)
D- CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'±L-2'± (6m±L-0.6m)±
E- M. ARM POLE		SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, IL 60196-1096  
 CONTACT: DENETTE PRICE  
 PHONE: 708-235-2482  
 COMPANY: COM ED

REVISIONS	
NAME	DATE

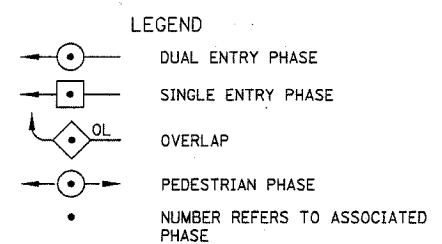
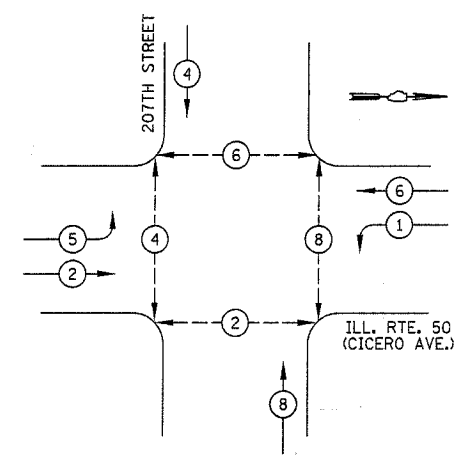
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DISTRICT 1  
**CABLE PLAN**  
 ILL. RTE. 50 (CICERO AVENUE)  
 & 207TH STREET

NOT TO SCALE  
 DATE: 1/17/06

DRAWN BY: OJT  
 DESIGNED BY: OJT  
 CHECKED BY: JJE

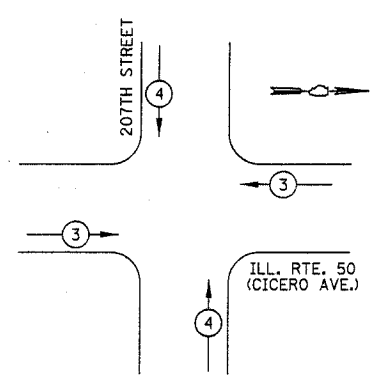
CONTRACT NO. 60A64

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

SCHEDULE OF QUANTITIES

CODE NUMBER	PAY ITEM	UNIT	QUANTITY
72000100	SIGN PANEL- TYPE 1	SQ FT	13.5
72000200	SIGN PANEL- TYPE 2	SQ FT	25
81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	665
81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	89
81001100	CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	203
81018600	CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	90
81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	121
81019000	CONDUIT PUSHED, 5" DIA., GALVANIZED STEEL	FOOT	135
81400100	HANDHOLE	EACH	4
81400200	HEAVY-DUTY HANDHOLE	EACH	4
81400300	DOUBLE HANDHOLE	EACH	2
81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	759
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	913
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1586
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1162
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1537
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1PAIR	FOOT	1600
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	228
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
87700150	STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1
87700180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	2
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	20
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	4
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	60
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
88500100	INDUCTIVE LOOP DETECTOR	EACH	8
88600100	DETECTOR LOOP, TYPE 1	FOOT	1166
* 88700200	LIGHT DETECTOR	EACH	2
* 88700300	LIGHT DETECTOR AMPLIFIER	EACH	1
88800100	PEDESTRIAN PUSH-BUTTON	EACH	5
X8050010	SERVICE INSTALLATION, GROUND MOUNTED	EACH	1
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	737
* X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	272
X8800020	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
X8800040	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
X8800045	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
X8800060	SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
X8810610	PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED	EACH	2
X8810620	PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED	EACH	3

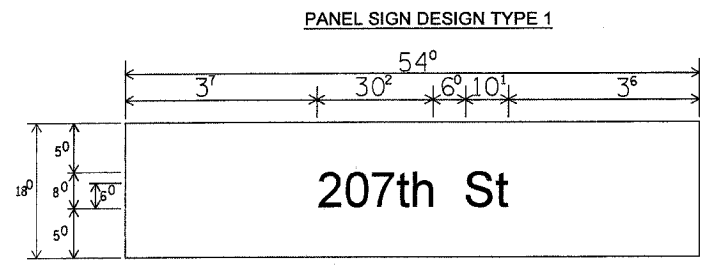
\* 100% COST TO VILLAGE OF MATTESON

REVISIONS	
NAME	DATE

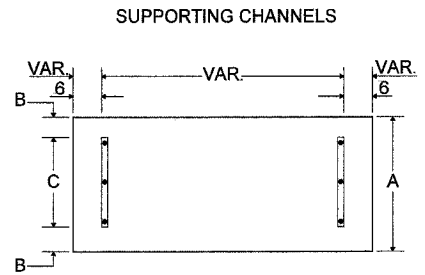
ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT 1  
SEQUENCES, &  
SCHEDULE OF QUANTITIES  
ILL. RTE. 50 (CICERO AVENUE)  
& 207TH STREET

NOT TO SCALE  
DATE: 1/17/06

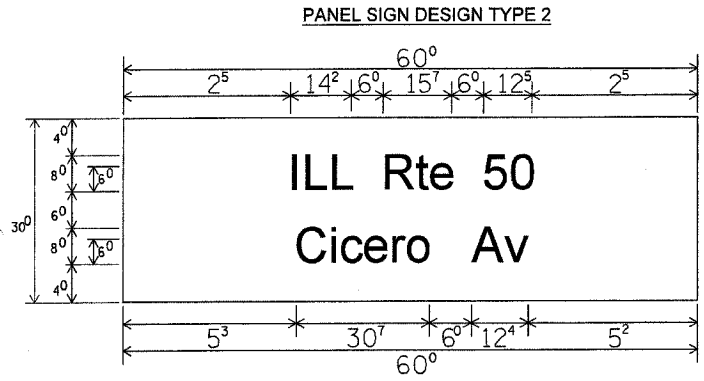
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DESIGNED BY: JUE  
CHECKED BY: JUE



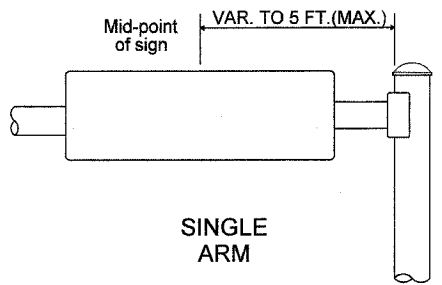
Sq. M Each  
6.75 Sq. Ft. Each  
2 Required  
Design Series D



A	B	C
18"	2"	14"



Sq. M Each  
12.5 Sq. Ft. Each  
2 Required  
Design Series D



**NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS.**

**UPPER TO LOWER CASE SPACING CHART 8-6 INCH SERIES "C & D"**

EXAMPLE, 2<sup>3</sup> DENOTES 3/8"

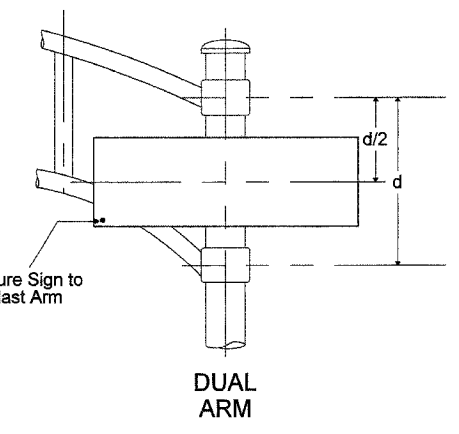
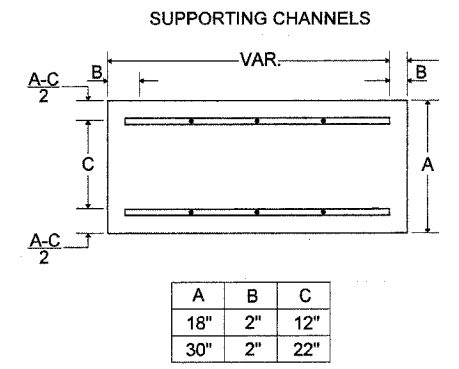
SERIES	SECOND LETTER															
	a c d e		b h i k				f w		j		s t		v y		x z	
	g o q	l m n p	r u													
A W X	1 <sup>2</sup> 1 <sup>4</sup> 1 <sup>4</sup>	1 <sup>4</sup> 1 <sup>5</sup> 2 <sup>0</sup>	2 <sup>1</sup> 1 <sup>4</sup> 1 <sup>5</sup>	1 <sup>2</sup> 1 <sup>4</sup> 1 <sup>5</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>4</sup> 1 <sup>5</sup>	1 <sup>2</sup> 1 <sup>4</sup> 1 <sup>5</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	
B	1 <sup>4</sup> 1 <sup>5</sup> 2 <sup>0</sup>	2 <sup>1</sup> 1 <sup>4</sup> 1 <sup>5</sup>	1 <sup>2</sup> 1 <sup>4</sup> 1 <sup>5</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	
C E G	1 <sup>4</sup> 1 <sup>5</sup> 2 <sup>0</sup>	2 <sup>1</sup> 1 <sup>4</sup> 1 <sup>5</sup>	1 <sup>2</sup> 1 <sup>4</sup> 1 <sup>5</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	
D O O R	1 <sup>4</sup> 1 <sup>5</sup> 2 <sup>0</sup>	2 <sup>1</sup> 1 <sup>4</sup> 1 <sup>5</sup>	1 <sup>2</sup> 1 <sup>4</sup> 1 <sup>5</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>6</sup> 1 <sup>7</sup>	
F	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>4</sup>	1 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	
H I M N	2 <sup>0</sup> 2 <sup>1</sup> 2 <sup>2</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	
J U	2 <sup>0</sup> 2 <sup>1</sup> 2 <sup>2</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	2 <sup>4</sup> 2 <sup>0</sup> 2 <sup>1</sup>	
K L	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>6</sup>	1 <sup>7</sup> 1 <sup>1</sup> 1 <sup>2</sup>	1 <sup>6</sup> 1 <sup>7</sup> 1 <sup>1</sup>	1 <sup>2</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>6</sup>	1 <sup>7</sup> 1 <sup>1</sup> 1 <sup>2</sup>	1 <sup>6</sup> 1 <sup>7</sup> 1 <sup>1</sup>	1 <sup>2</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>6</sup>	1 <sup>7</sup> 1 <sup>1</sup> 1 <sup>2</sup>	1 <sup>6</sup> 1 <sup>7</sup> 1 <sup>1</sup>	1 <sup>2</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>6</sup>	1 <sup>7</sup> 1 <sup>1</sup> 1 <sup>2</sup>	1 <sup>6</sup> 1 <sup>7</sup> 1 <sup>1</sup>	
P	1 <sup>2</sup> 1 <sup>4</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>4</sup> 1 <sup>5</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>5</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>5</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>5</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>5</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>5</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>5</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>5</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>5</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>5</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>5</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>5</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>5</sup> 1 <sup>2</sup>	
S	1 <sup>2</sup> 1 <sup>4</sup> 1 <sup>6</sup>	1 <sup>7</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>6</sup> 1 <sup>7</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>2</sup> 1 <sup>4</sup> 1 <sup>6</sup>	1 <sup>7</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>6</sup> 1 <sup>7</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>2</sup> 1 <sup>4</sup> 1 <sup>6</sup>	1 <sup>7</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>6</sup> 1 <sup>7</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>2</sup> 1 <sup>4</sup> 1 <sup>6</sup>	1 <sup>7</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>6</sup> 1 <sup>7</sup> 1 <sup>2</sup>	
T	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>6</sup>	1 <sup>7</sup> 1 <sup>1</sup> 1 <sup>2</sup>	1 <sup>6</sup> 1 <sup>7</sup> 1 <sup>1</sup>	1 <sup>2</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>6</sup>	1 <sup>7</sup> 1 <sup>1</sup> 1 <sup>2</sup>	1 <sup>6</sup> 1 <sup>7</sup> 1 <sup>1</sup>	1 <sup>2</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>6</sup>	1 <sup>7</sup> 1 <sup>1</sup> 1 <sup>2</sup>	1 <sup>6</sup> 1 <sup>7</sup> 1 <sup>1</sup>	1 <sup>2</sup> 1 <sup>6</sup> 1 <sup>7</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>6</sup>	1 <sup>7</sup> 1 <sup>1</sup> 1 <sup>2</sup>	1 <sup>6</sup> 1 <sup>7</sup> 1 <sup>1</sup>	
V	0 <sup>6</sup> 1 <sup>0</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>1</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>5</sup> 1 <sup>1</sup>	1 <sup>2</sup> 1 <sup>4</sup> 1 <sup>5</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>1</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>5</sup> 1 <sup>1</sup>	1 <sup>2</sup> 1 <sup>4</sup> 1 <sup>5</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>1</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>5</sup> 1 <sup>1</sup>	1 <sup>2</sup> 1 <sup>4</sup> 1 <sup>5</sup>	1 <sup>1</sup> 1 <sup>2</sup> 1 <sup>4</sup>	1 <sup>5</sup> 1 <sup>1</sup> 1 <sup>2</sup>	1 <sup>4</sup> 1 <sup>5</sup> 1 <sup>1</sup>	
Y	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>4</sup>	1 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	0 <sup>5</sup> 0 <sup>6</sup> 1 <sup>0</sup>	
Z	1 <sup>6</sup> 1 <sup>7</sup> 2 <sup>2</sup>	2 <sup>4</sup> 1 <sup>6</sup> 1 <sup>7</sup>	2 <sup>4</sup> 1 <sup>6</sup> 1 <sup>7</sup>	2 <sup>4</sup> 1 <sup>6</sup> 1 <sup>7</sup>	2 <sup>4</sup> 1 <sup>6</sup> 1 <sup>7</sup>	2 <sup>4</sup> 1 <sup>6</sup> 1 <sup>7</sup>	2 <sup>4</sup> 1 <sup>6</sup> 1 <sup>7</sup>	2 <sup>4</sup> 1 <sup>6</sup> 1 <sup>7</sup>	2 <sup>4</sup> 1 <sup>6</sup> 1 <sup>7</sup>	2 <sup>4</sup> 1 <sup>6</sup> 1 <sup>7</sup>	2 <sup>4</sup> 1 <sup>6</sup> 1 <sup>7</sup>	2 <sup>4</sup> 1 <sup>6</sup> 1 <sup>7</sup>	2 <sup>4</sup> 1 <sup>6</sup> 1 <sup>7</sup>	2 <sup>4</sup> 1 <sup>6</sup> 1 <sup>7</sup>	2 <sup>4</sup> 1 <sup>6</sup> 1 <sup>7</sup>	

**UPPER AND LOWER CASE LETTER WIDTHS**

L E T T E R S	6 INCH UPPER CASE LETTERS		8 INCH UPPER CASE LETTERS		L E T T E R S	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES			SERIES	
	C	D	C	D		C	D
A	3 <sup>6</sup>	5 <sup>0</sup>	5 <sup>0</sup>	6 <sup>5</sup>	a	3 <sup>5</sup>	4 <sup>2</sup>
B	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	b	3 <sup>5</sup>	4 <sup>2</sup>
C	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	c	3 <sup>5</sup>	4 <sup>1</sup>
D	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	d	3 <sup>5</sup>	4 <sup>2</sup>
E	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	e	3 <sup>5</sup>	4 <sup>2</sup>
F	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	f	2 <sup>3</sup>	2 <sup>6</sup>
G	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	g	3 <sup>5</sup>	4 <sup>2</sup>
H	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	h	3 <sup>5</sup>	4 <sup>2</sup>
I	0 <sup>7</sup>	0 <sup>7</sup>	1 <sup>1</sup>	1 <sup>2</sup>	i	1 <sup>1</sup>	1 <sup>1</sup>
J	3 <sup>0</sup>	3 <sup>6</sup>	4 <sup>0</sup>	5 <sup>0</sup>	j	2 <sup>0</sup>	2 <sup>2</sup>
K	3 <sup>2</sup>	4 <sup>1</sup>	4 <sup>3</sup>	5 <sup>4</sup>	k	3 <sup>5</sup>	4 <sup>2</sup>
L	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	l	1 <sup>1</sup>	1 <sup>1</sup>
M	3 <sup>7</sup>	4 <sup>5</sup>	5 <sup>1</sup>	6 <sup>1</sup>	m	6 <sup>0</sup>	7 <sup>0</sup>
N	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	n	3 <sup>5</sup>	4 <sup>2</sup>
o	3 <sup>4</sup>	4 <sup>2</sup>	4 <sup>5</sup>	5 <sup>5</sup>	o	3 <sup>6</sup>	4 <sup>3</sup>
P	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	p	3 <sup>5</sup>	4 <sup>2</sup>
q	3 <sup>4</sup>	4 <sup>2</sup>	4 <sup>5</sup>	5 <sup>5</sup>	q	3 <sup>5</sup>	4 <sup>2</sup>
R	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	r	2 <sup>6</sup>	3 <sup>2</sup>
S	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	s	3 <sup>6</sup>	4 <sup>2</sup>
T	3 <sup>0</sup>	3 <sup>5</sup>	4 <sup>0</sup>	4 <sup>7</sup>	t	2 <sup>7</sup>	3 <sup>2</sup>
U	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	u	3 <sup>5</sup>	4 <sup>2</sup>
V	3 <sup>5</sup>	4 <sup>4</sup>	4 <sup>7</sup>	6 <sup>0</sup>	v	4 <sup>2</sup>	4 <sup>7</sup>
W	4 <sup>4</sup>	5 <sup>2</sup>	6 <sup>0</sup>	7 <sup>0</sup>	w	5 <sup>5</sup>	6 <sup>4</sup>
X	3 <sup>4</sup>	4 <sup>0</sup>	4 <sup>5</sup>	5 <sup>3</sup>	x	4 <sup>4</sup>	5 <sup>1</sup>
Y	3 <sup>6</sup>	5 <sup>0</sup>	5 <sup>0</sup>	6 <sup>6</sup>	y	4 <sup>6</sup>	5 <sup>3</sup>
Z	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>	z	3 <sup>6</sup>	4 <sup>3</sup>

- GENERAL NOTES**
- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 834001, 834006 AND 834011, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" X 6'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
  - ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
  - THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 6'-0".
  - ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
  - SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:
    - \*A.K.T. CORPORATION SCHALMBURG, IL
    - \*TUCKER COMPANY, INC. WAUWATOSA, WI
    - \*AMERICAN FABRICATION CO. CHICAGO HEIGHTS, IL
    - \*WESTERN TRAFFIC CONTROL, INC. CICERO, IL
- PARTS LISTING:**
- |              |   |
|--------------|---|
| SIGN CHANNEL | PART #HPN053 (MED. CHANNEL)                   |
| SIGN SCREWS  | 1/4" X 14 X 1" H.W.H #3                       |
| BRACKETS     | PART #HPN034 (UNIVERSAL)                      |
|              | CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING |
- OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.

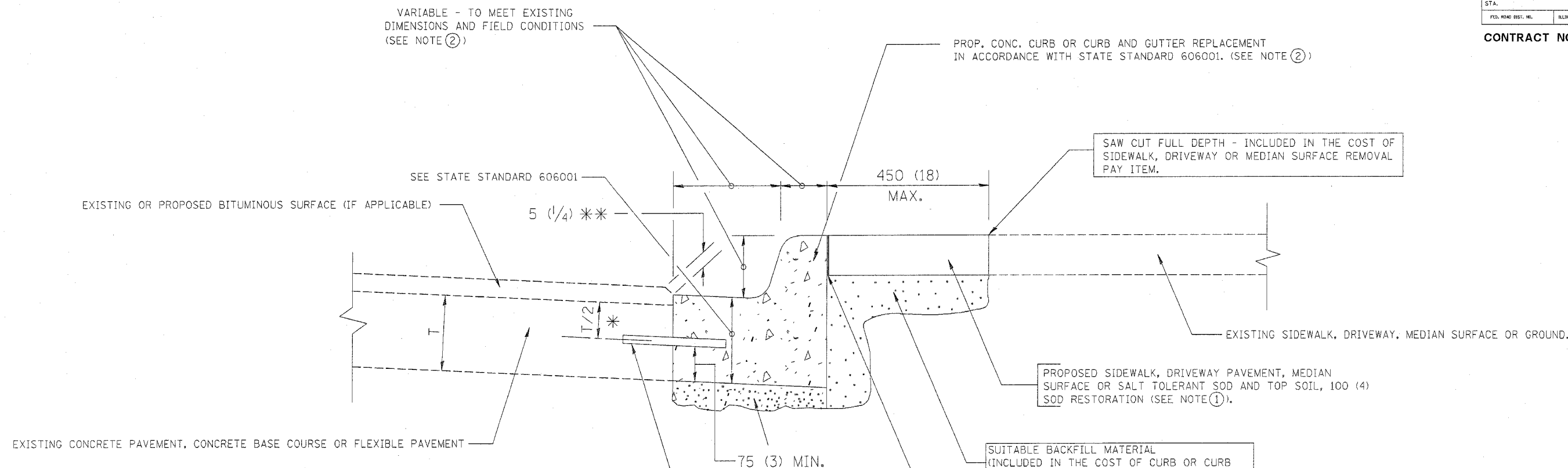
**SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM shall be used. See Note #5.**



**LOWER CASE TO LOWER CASE SPACING CHART 6 INCH SERIES "C" & "D"**

SERIES	SECOND LETTER															
	a c d e		b h i k				f w		j		s t		v y		x z	
	g o q	l m n p	r u													
F	1 <sup>6</sup>	1 <sup>7</sup>	2 <sup>2</sup>	2												

CONTRACT NO. 60A64



\* 75 (3) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

\* \* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SALT TOLERANT SOD AND TOP SOIL, 100 (4) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

④ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑤ THE COST OF BITUMINOUS SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑦ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 100 (4) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 100 (4) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED NO. 20 (NO. 6) EPOXY COATED TIE BARS 600 (24) LONG AT 600 (24) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

**BASIS OF PAYMENT:**

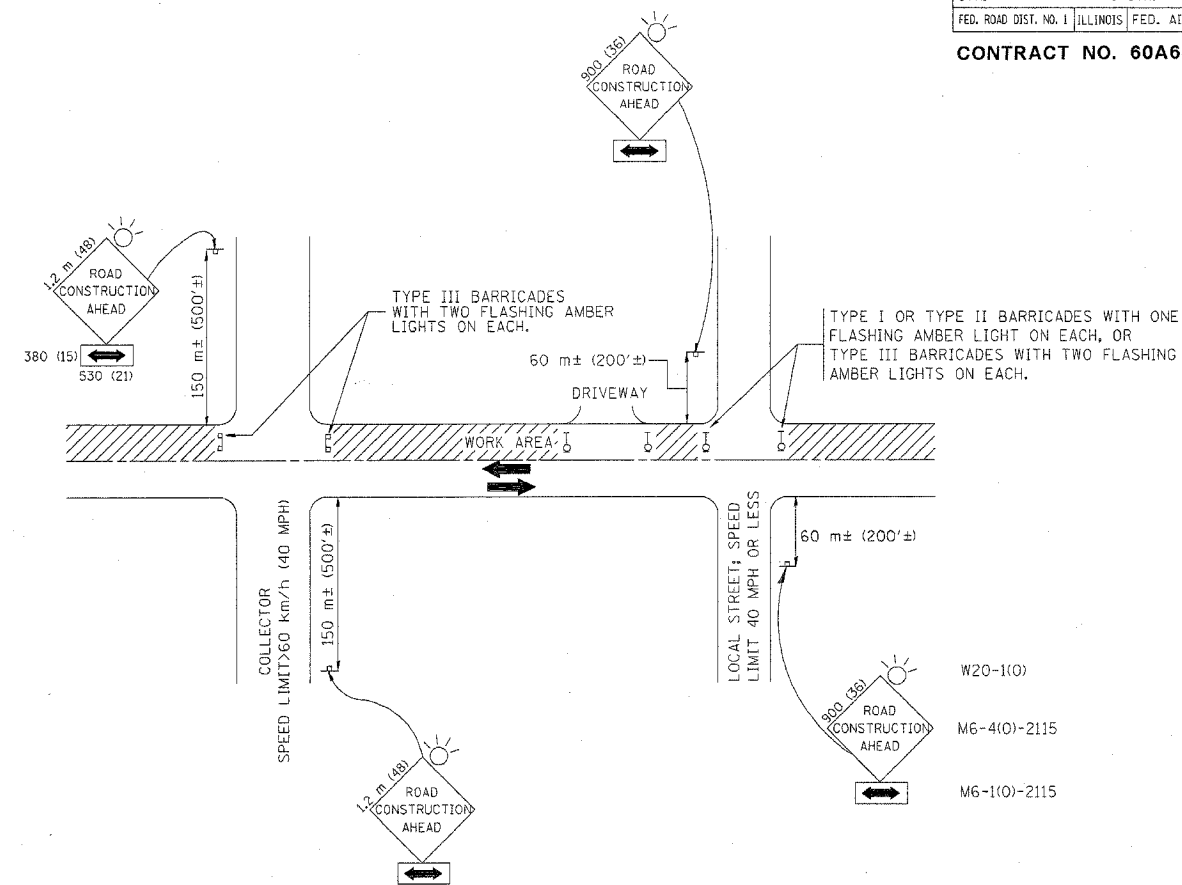
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER METER (FOOT) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

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

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
M. DE YONG	05/28/91	<p align="center"><b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b></p> <p>SCALE: NONE DATE: 10/18/2002</p> <p>DRAWN BY CHECKED BY BD600-06 (BD-24)</p>
A. HOUSEH	03/11/94	
R. SHAH	02/24/95	
R. SHAH	03/02/95	
R. SHAH	08/19/96	
R. SHAH	09/12/96	
R. SHAH	09/19/96	
R. SHAH	10/03/96	
A. ABBAS	03/21/97	
M. GOMEZ	01/22/01	

## CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

CONTRACT NO. 60A64



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

#### NOTES:

##### A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 900x900 (36x36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') IN ADVANCE OF THE MAIN ROUTE.

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 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 1.2 m x 1.2 m (48x48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') IN ADVANCE OF THE MAIN ROUTE.

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. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

##### B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. T0150), STD. T01606 OR THE APPROPRIATE STANDARD. THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

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

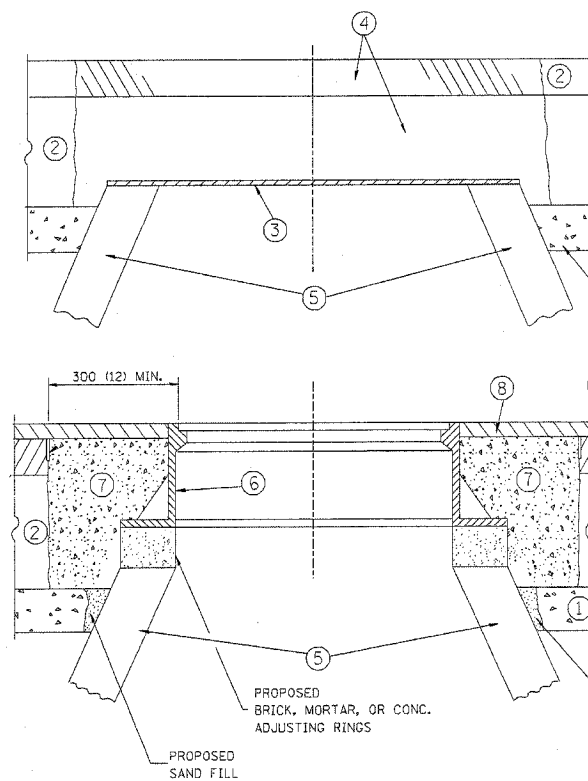
SCALE: VERT.  
 HORIZ.  
 DATE 10/18/2002

DRAWN BY  
 CHECKED BY  
 TC-10

REVISION DATE: 01/06/00



CONTRACT NO. 60A64



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

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

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE BITUMINOUS MATERIAL 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 SI CONCRETE, OR BITUMINOUS CONCRETE SURFACE OR BINDER COURSE MATERIAL TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

LEGEND

- |  |  |
|--|--|
| ① SUB-BASE GRANULAR MATERIAL                     | ⑥ FRAME AND LID (SEE NOTES)  |
| ② EXISTING PAVEMENT                              | ⑦ CLASS SI CONCRETE, BITUMINOUS CONCRETE SURFACE OR BINDER COURSE MATERIAL |
| ③ 900 (36) DIAMETER METAL PLATE                  | ⑧ PROPOSED BITUMINOUS CONCRETE SURFACE COURSE                              |
| ④ PROPOSED CRUSHED STONE AND BITUMINOUS MATERIAL | ⑨ PROPOSED BITUMINOUS CONCRETE BINDER COURSE                               |
| ⑤ EXISTING STRUCTURE                             |  |

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: FRAMES AND LIDS TO BE ADJUSTED, SPECIAL EACH

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 MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

REVISIONS	
NAME	DATE
R. SHAH	10/25/94
R. SHAH	01/30/95
R. SHAH	03/10/95
A. ABBAS	03/21/97
R. WIEDEMAN	05/14/04

SCALE: NONE  
DATE: 05/17/2004

DRAWN BY

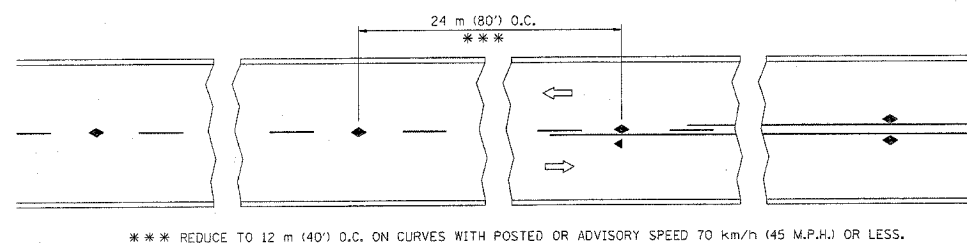
CHECKED BY

BD600-03 (BD-8)

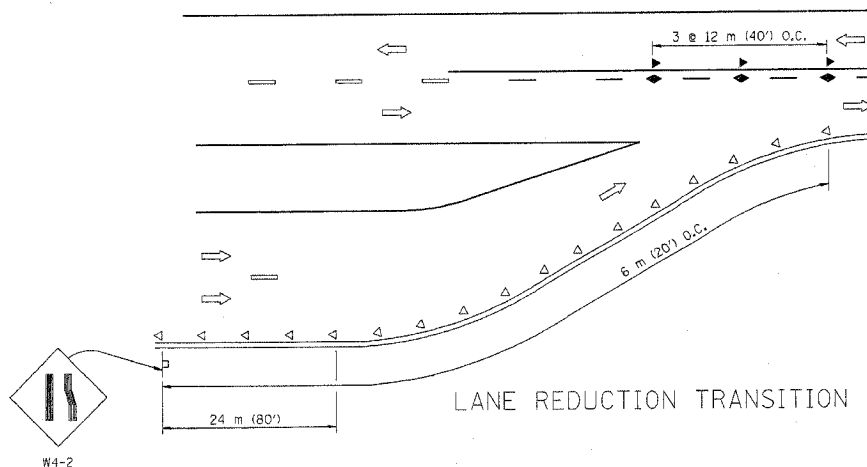
REVISION DATE: 05/17/04

F. A.P. FILE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

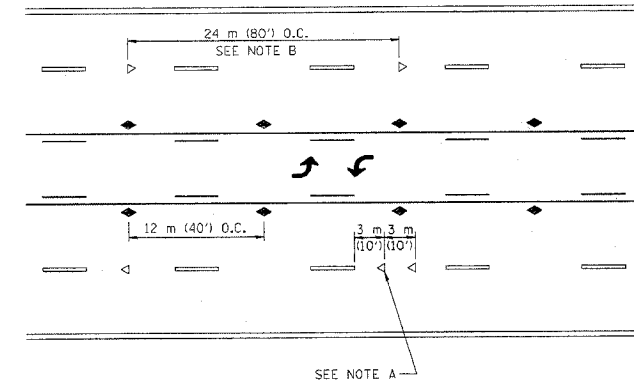
CONTRACT NO. 60A64



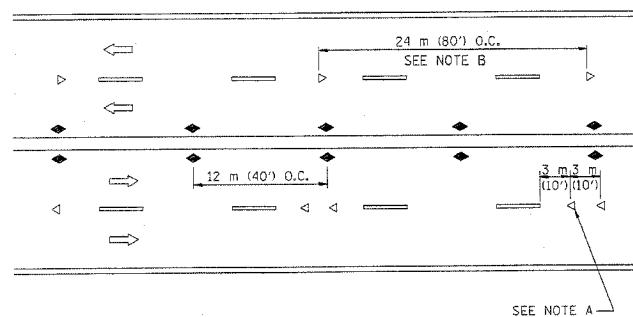
TWO-LANE/TWO-WAY



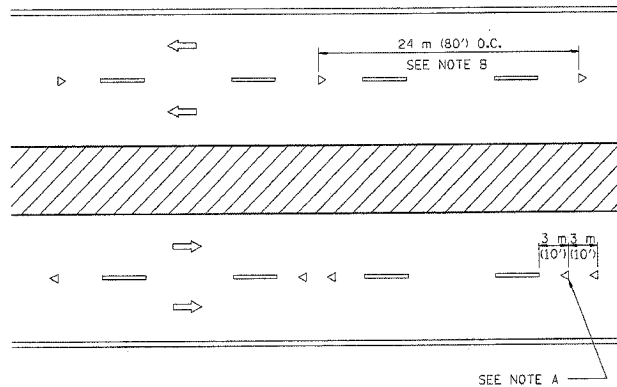
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

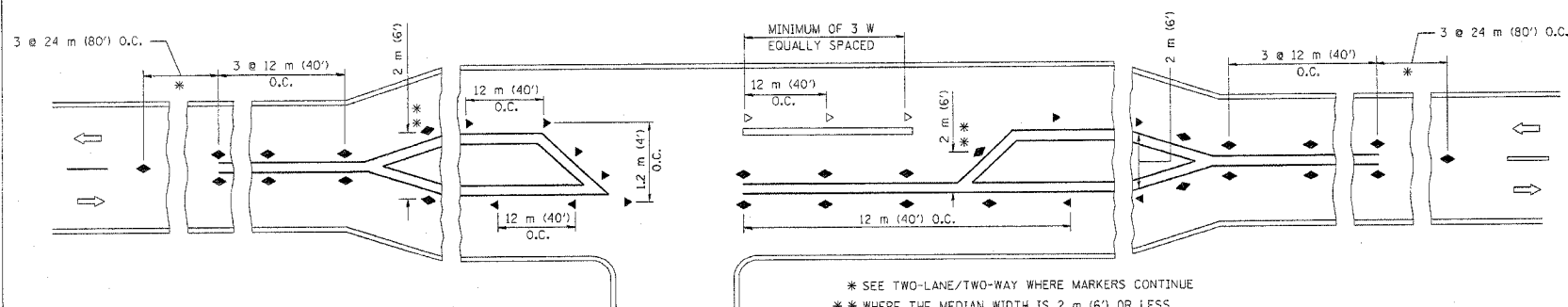
1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 50 TO 75 (2 TO 3) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 150 m (500') IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE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

SYMBOLS

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

LANE MARKER NOTES

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



LEFT TURN

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

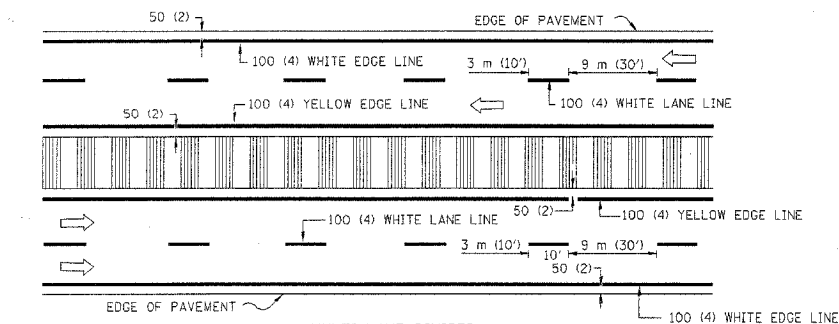
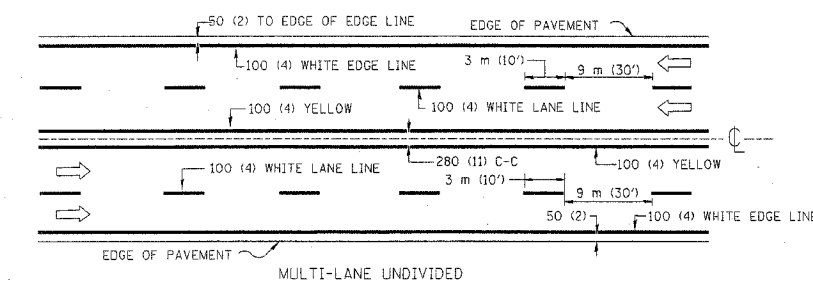
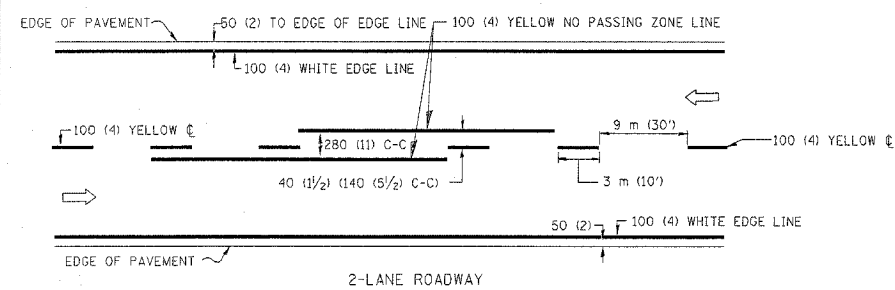
REVISIONS	
NAME	DATE
T. RAMMACHER	09-19-94
T. RAMMACHER	03-12-99
T. RAMMACHER	01-06-00

SCALE: NONE  
DATE: 10/18/2002

DRAWN BY CADD  
CHECKED BY

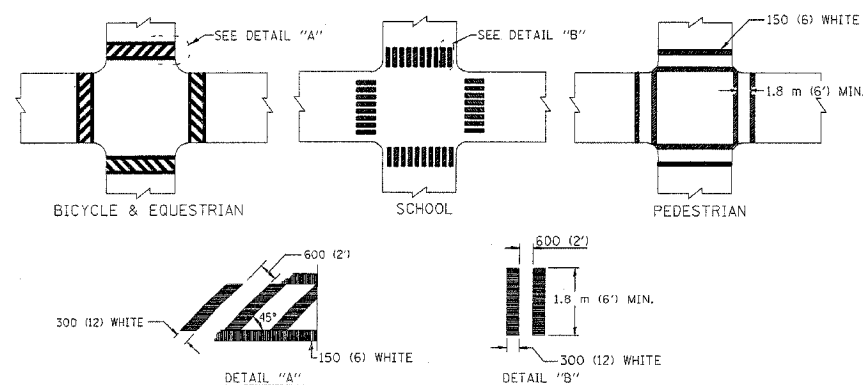
TC-11  
REVISION DATE: 01/06/00

CONTRACT NO. 60A64

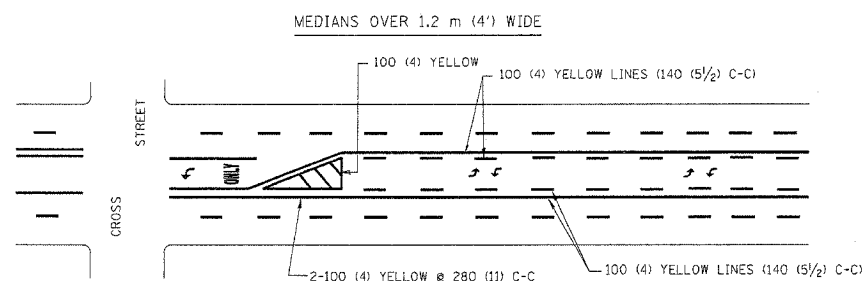
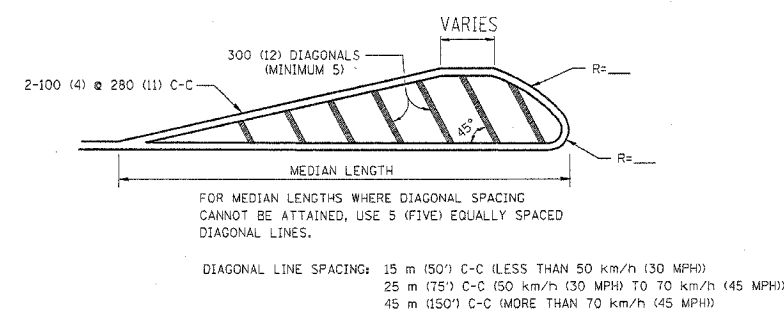
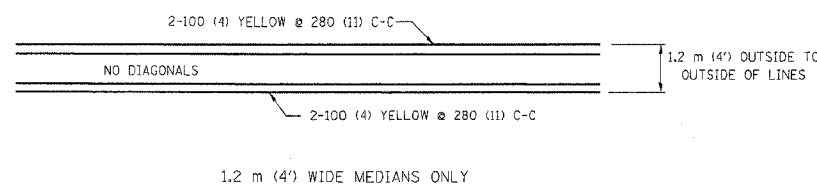


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

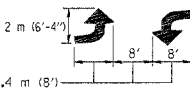
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

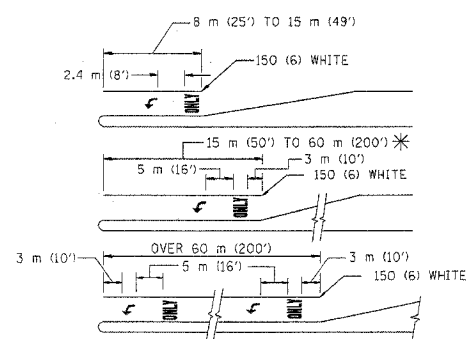


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 60 m (200') TO 90 m (300') INTERVALS.



TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

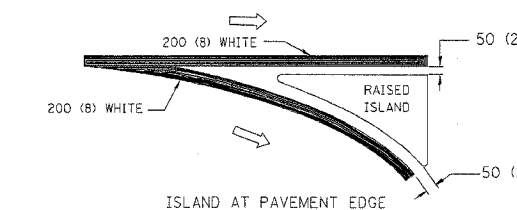
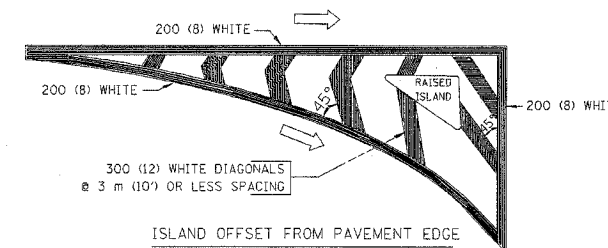


FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED. AREA = 1.5 m<sup>2</sup> (15.6 SQ. FT.) ONLY AREA = 1.9 m<sup>2</sup> (20.8 SQ. FT.)

\* TURN LANES IN EXCESS OF 120 m (400') IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE  
TYPICAL PAVEMENT  
MARKINGS

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

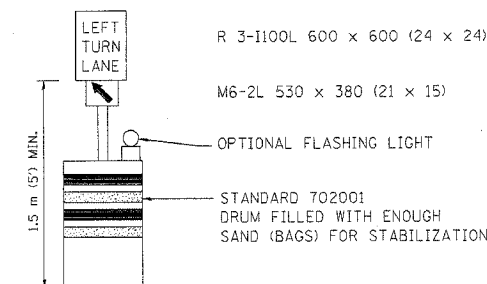
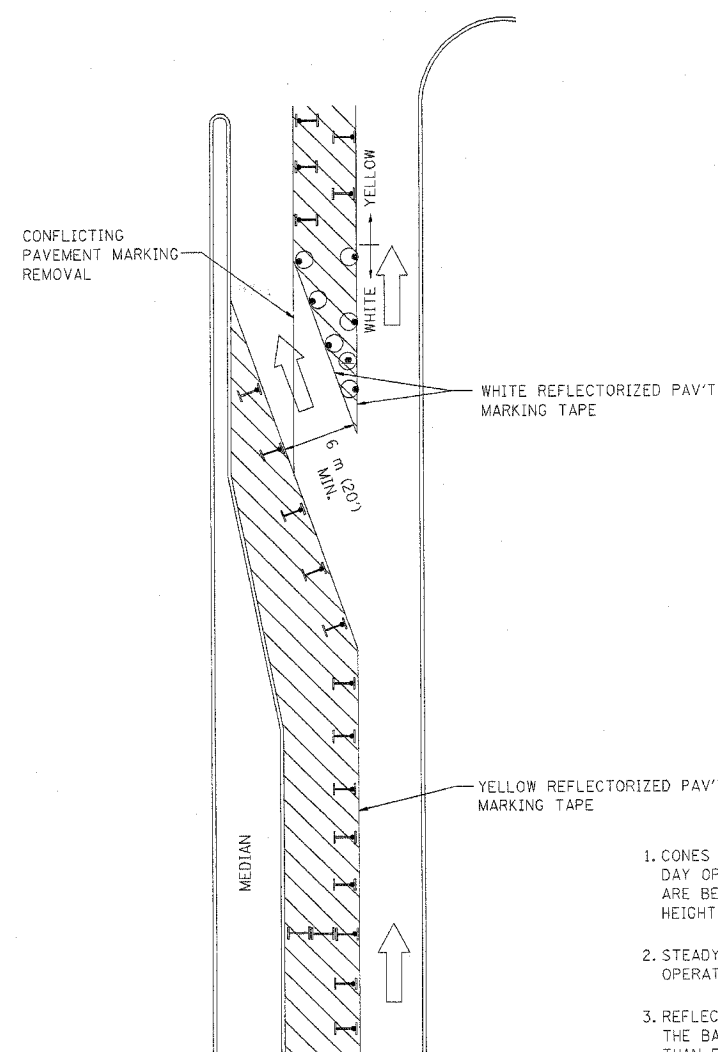
SCALE: NONE  
DATE 10/18/2002

DRAWN BY CADD  
CHECKED BY  
TC-13

REVISION DATE: 01/06/00

P. & F. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	101 TS-2	COOK	26	19
STA.	TO STA.			
FED. ROAD DIST. NO.	ALLOWS	FED. AID PROJECT		

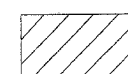





CONTRACT NO. 60A64



GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 710 (28) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 1.5 m (5').
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. 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" R3-100 600 x 600 (24 x 24) AND M6-2R 530 x 380 (21 x 15) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

LEGEND

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)

REVISIONS	
NAME	DATE
T. RAMMACHER	09/08/94
A. HOUSEH	11/07/95
A. HOUSEH	10/12/96
T. RAMMACHER	01/06/00

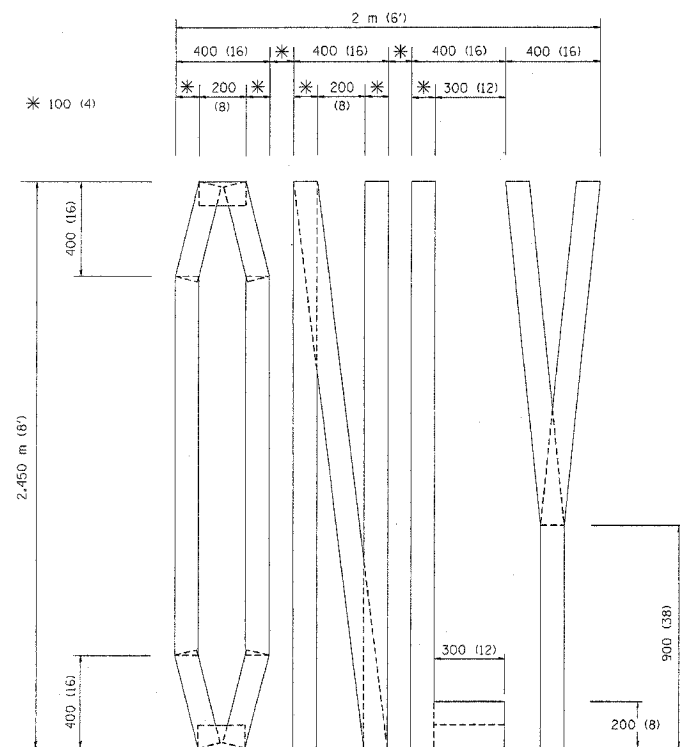
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DRAWN BY  
CHECKED BY LHA  
TC-14

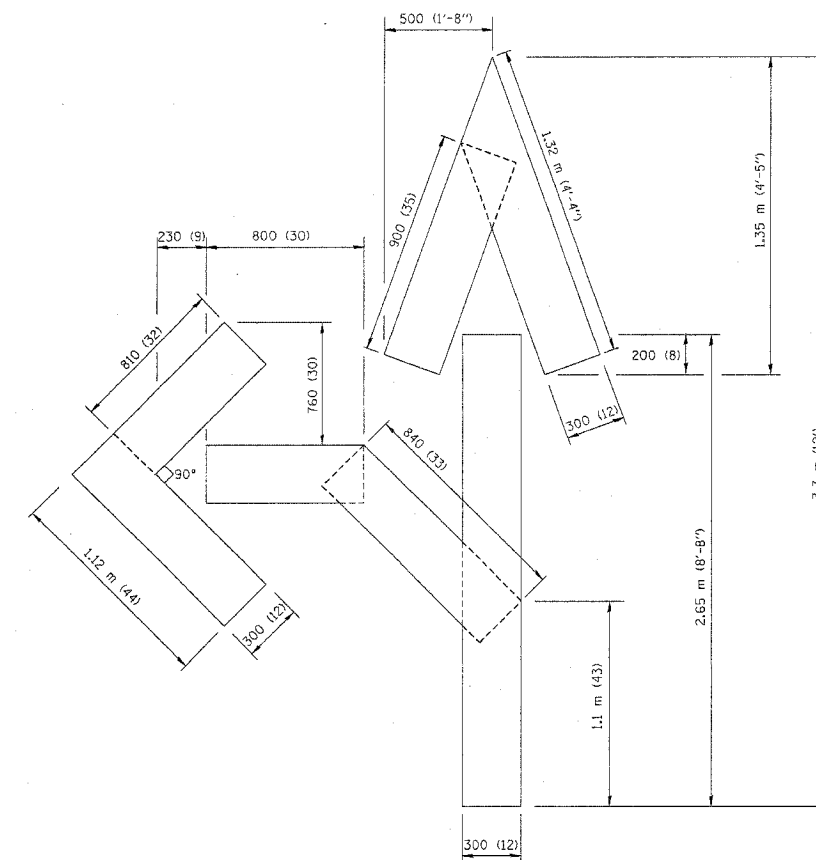
REVISION DATE: 01/06/00

F. & P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	101 TS-2	COOK	26	20
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

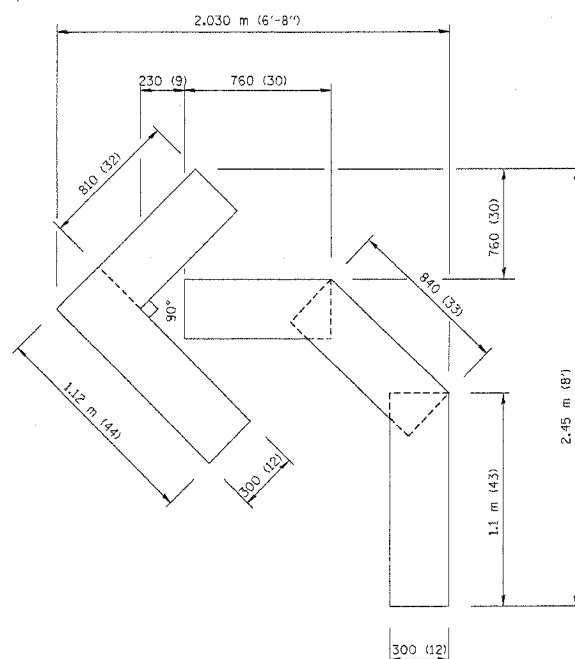
CONTRACT NO. 60A64



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



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



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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING  
LETTERS AND SYMBOLS  
FOR TRAFFIC STAGING

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

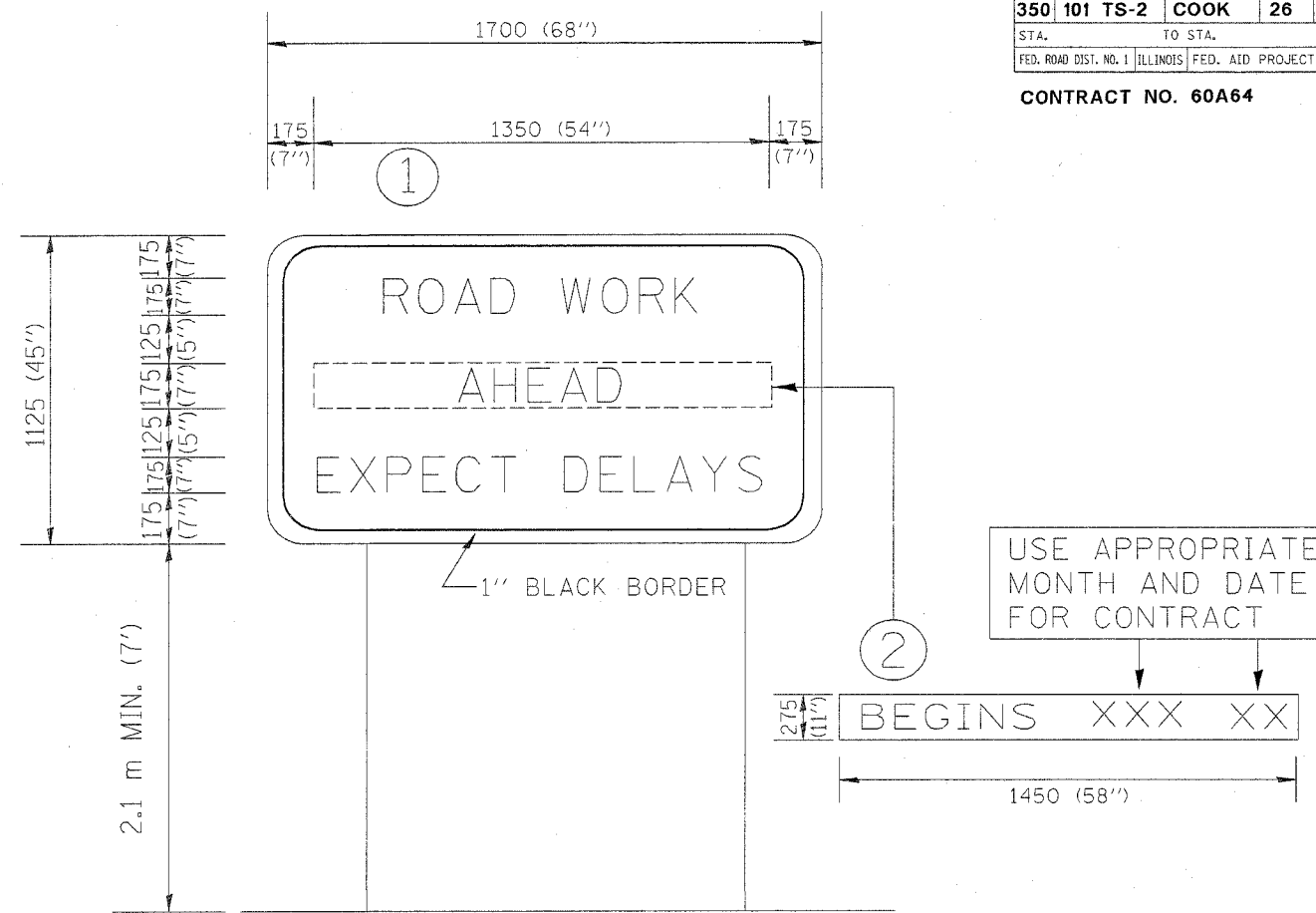
SCALE: NONE  
DATE 10/18/2002

DRAWN BY CADD  
CHECKED BY  
TC-16

REVISION DATE: 08/28/00

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	101 TS-2	COOK	26	21
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60A64



NOTES:

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

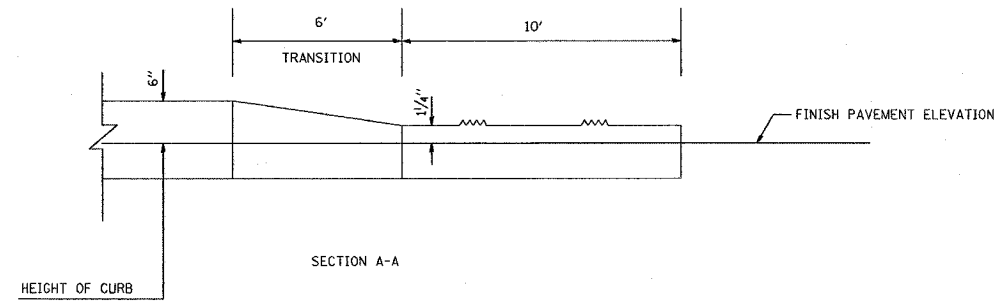
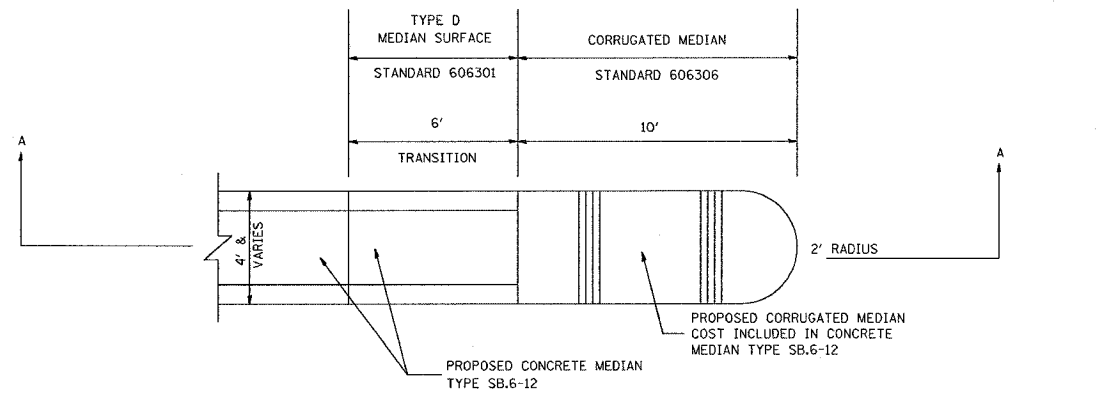
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99

ILLINOIS DEPARTMENT OF TRANSPORTATION  
TEMPORARY INFORMATION SIGNING

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

F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	101 TS-2	COOK	26	21A
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

MEDIAN NOSE DETAIL

SCALE: VERT.  
HORIZ.  
DATE 3/8/2006

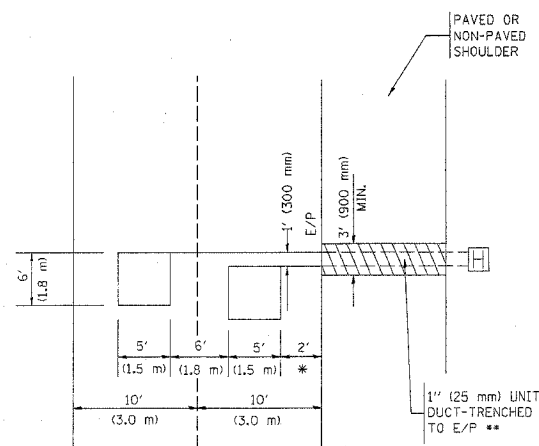
DRAWN BY  
CHECKED BY

F.P. RFL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	101 TS-2	COOK	26	22
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60A64

LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.

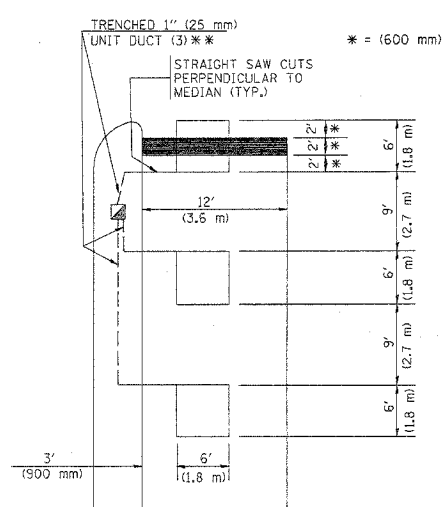


\* = (600 mm)

\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

LEFT TURN LANES WITH MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH  
(PROTECTED / PERMITTED LEFT TURN PHASING)

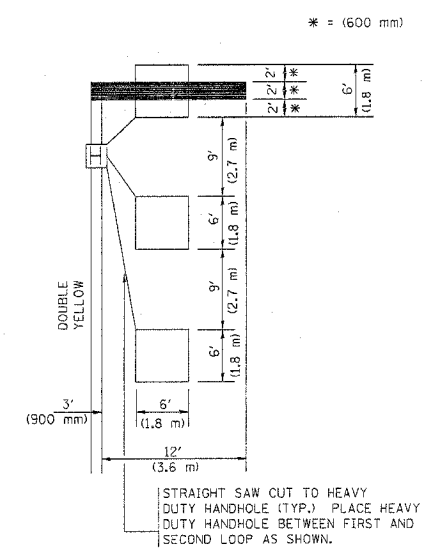
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

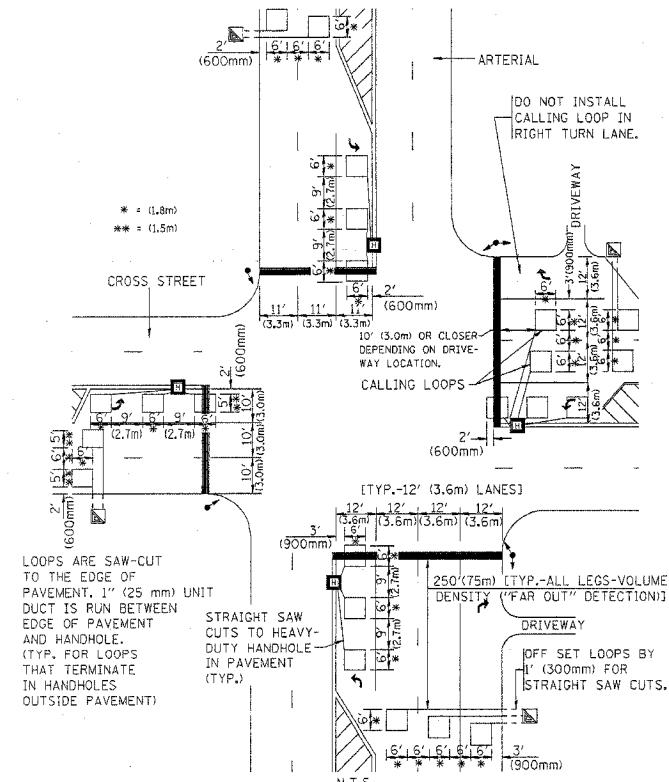
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

LEFT TURN LANES WITHOUT MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH  
(PROTECTED / PERMITTED LEFT TURN PHASING)



NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

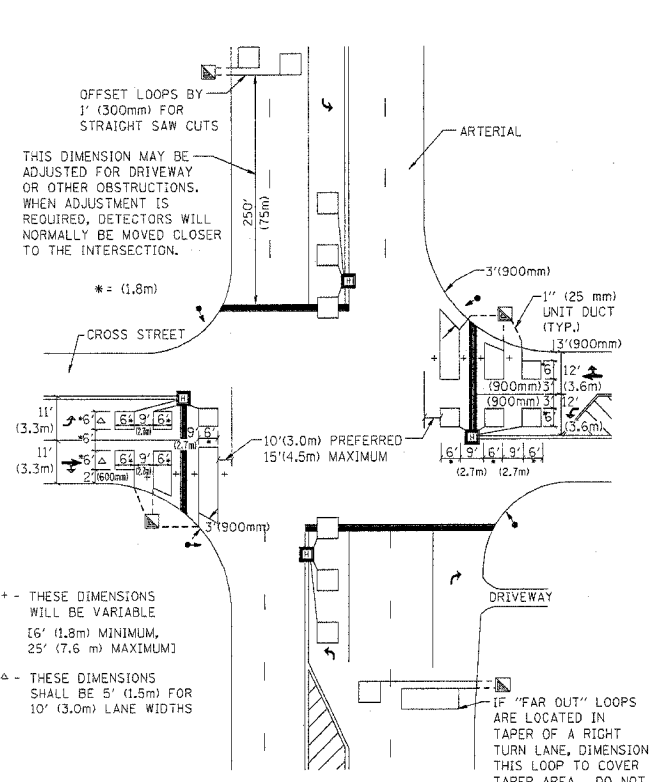
ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)  
CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)



LOOPS ARE SAW-CUT TO THE EDGE OF PAVEMENT. 1" (25 mm) UNIT DUCT IS RUN BETWEEN EDGE OF PAVEMENT AND HANDHOLE. (TYP. FOR LOOPS THAT TERMINATE IN HANDHOLES OUTSIDE PAVEMENT)

DETAIL 1  
N.T.S.

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)  
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)



+ - THESE DIMENSIONS WILL BE VARIABLE 16' (4.8 m) MINIMUM, 25' (7.6 m) MAXIMUM

△ - THESE DIMENSIONS SHALL BE 5' (1.5 m) FOR 10' (3.0 m) LANE WIDTHS

DETAIL 2  
N.T.S.

NOTES:

- VEHICLES LOOP DETECTORS
- ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATELY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED, THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT 1  
DETECTOR LOOP  
INSTALLATION DETAILS  
FOR ROADWAY RESURFACING

SCALE: NONE  
DATE 10/18/2002

DRAWN BY CADD  
DESIGNED BY  
CHECKED BY R.K.F.  
TS07  
REVISION DATE:

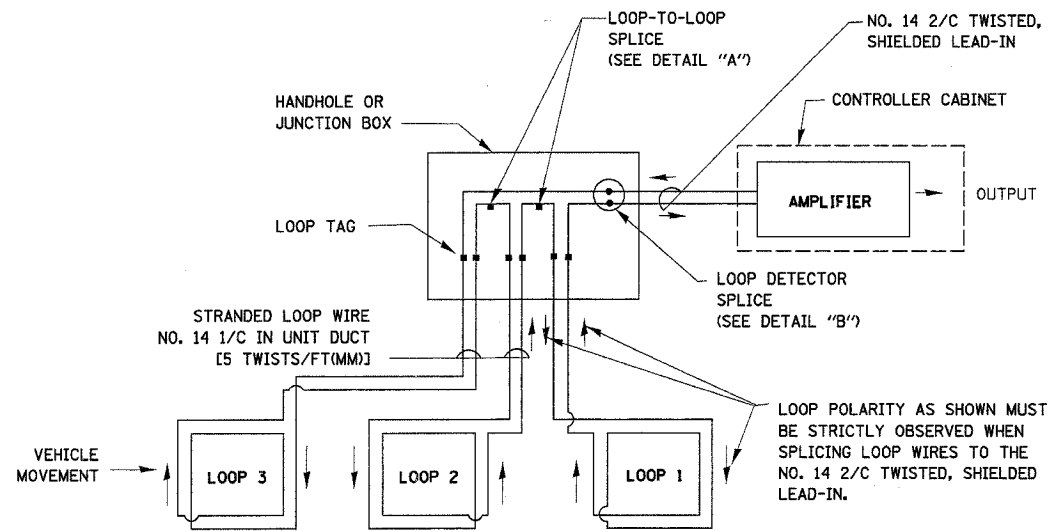


F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	101 TS-2	COOK	26	23
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 60A64

**LOOP DETECTOR NOTES**

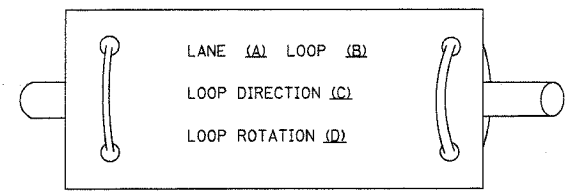
1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED 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.



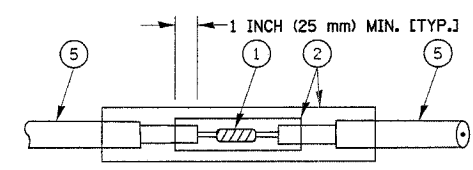
**DETECTOR LOOP WIRING SCHEMATIC**

- 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.

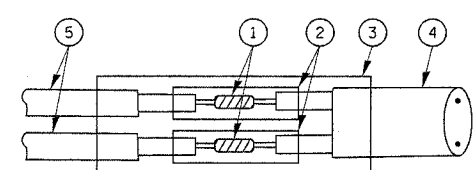
**LOOP LEAD-IN CABLE TAG**



- 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.



**DETAIL "A"  
LOOP-TO-LOOP SPLICE**



**DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE**

**LOOP DETECTOR SPLICE**

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- 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.

REVISIONS	
NAME	DATE

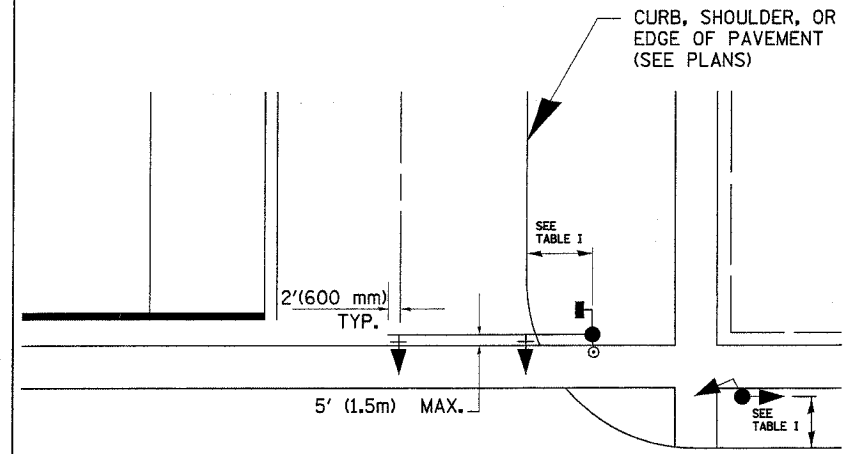
ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT ONE  
STANDARD TRAFFIC SIGNAL  
DESIGN DETAILS

SCALE: VERT. NONE  
HORIZ. NONE  
DATE 1-01-02

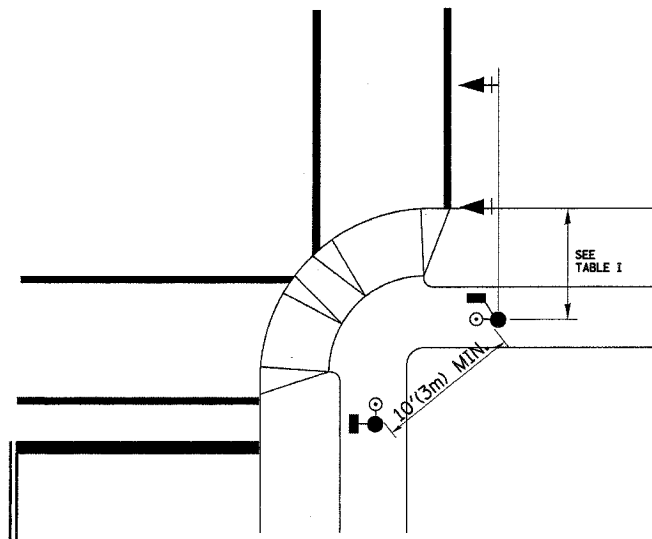
DRAWN BY: RWP  
DESIGNED BY: DAD  
CHECKED BY: DAZ  
SHEET 1 OF 4

**TRAFFIC SIGNAL MAST ARM AND POST**

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



**PEDESTRIAN SIGNAL PUSHBUTTON**



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

**NOTES:**

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.  
 AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.  
 PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:  
 A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.  
 B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.  
 C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.  
 D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).  
 E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

**PEDESTRIAN SIGNAL POST**

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

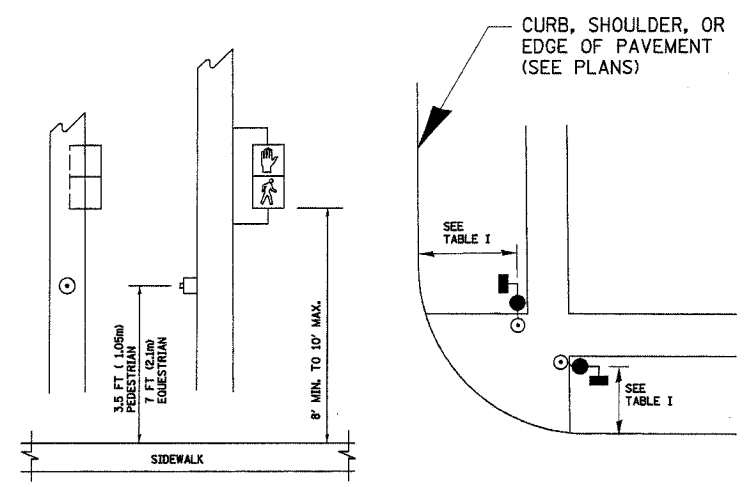


TABLE I

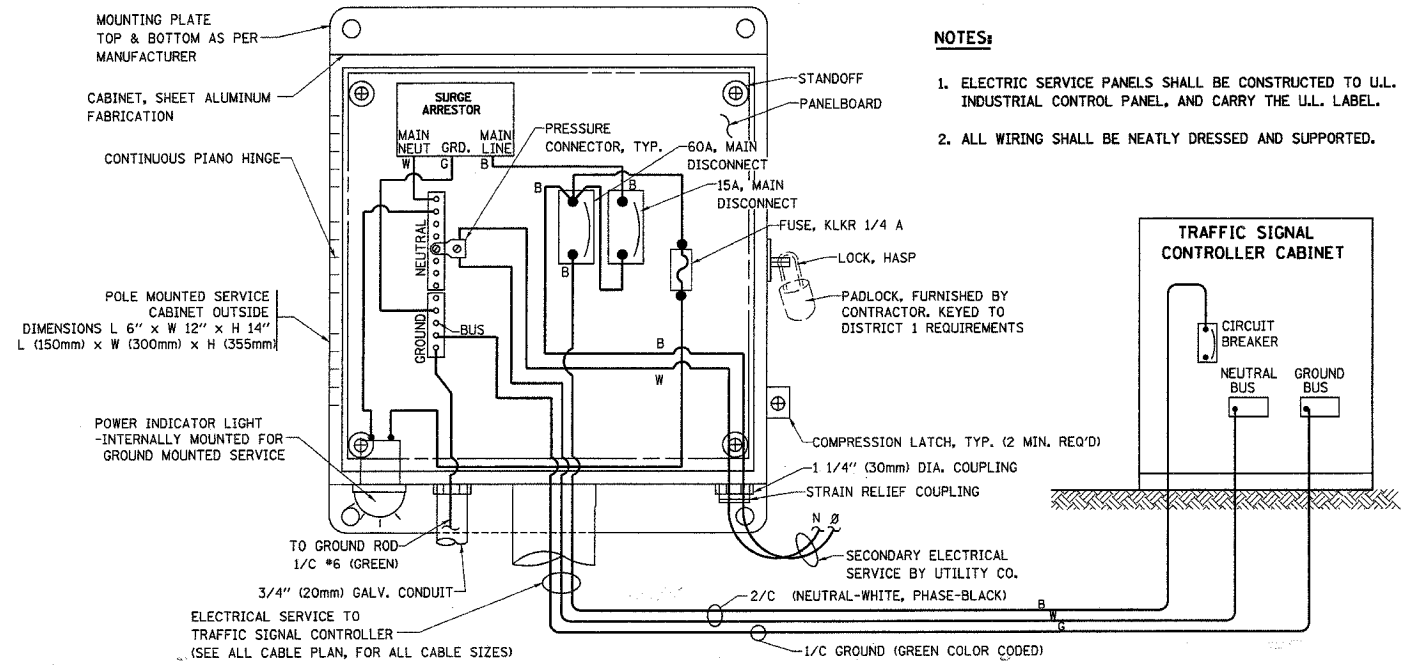
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

REVISIONS	
NAME	DATE

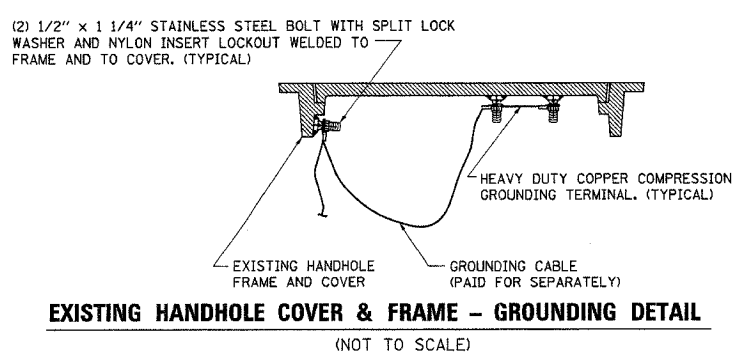
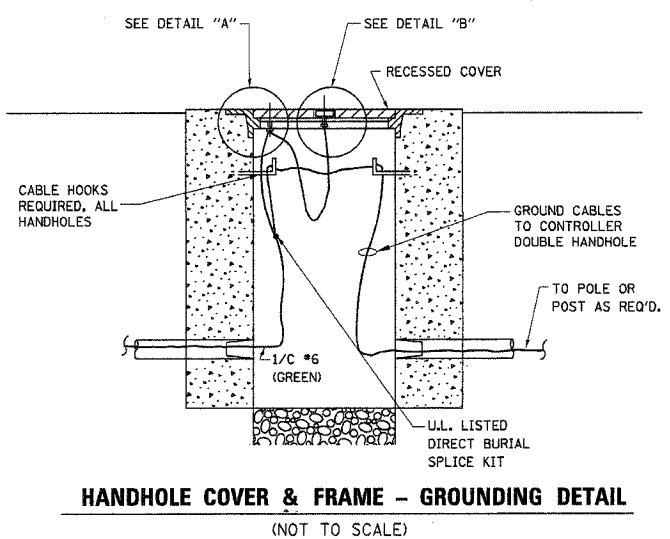
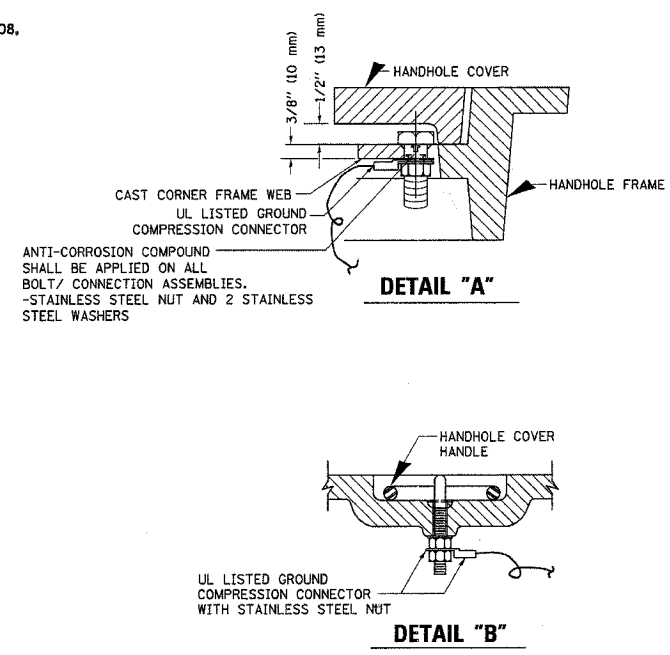
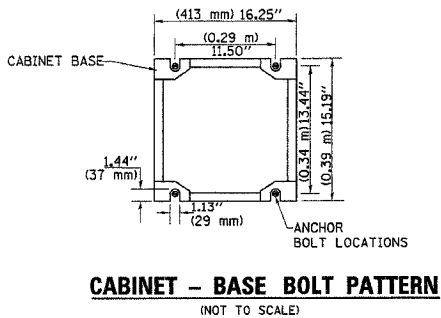
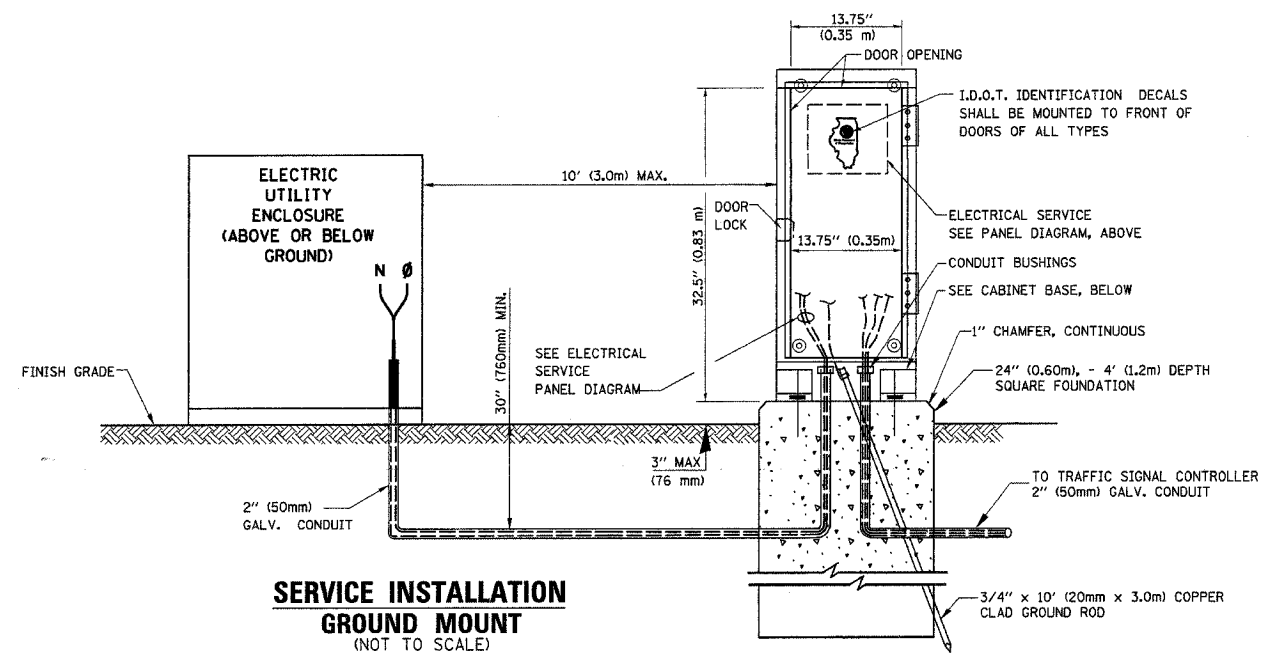
ILLINOIS DEPARTMENT OF TRANSPORTATION  
**DISTRICT 1**  
**STANDARD TRAFFIC SIGNAL**  
**DESIGN DETAILS**  
 SCALE: VERT. NONE  
 HORIZ. NONE  
 DATE 1-01-02  
 DRAWN BY: RWP  
 DESIGNED BY: DAD  
 CHECKED BY: DAZ  
 SHEET 2 OF 4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	101 TS-2	COOK	26	25
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

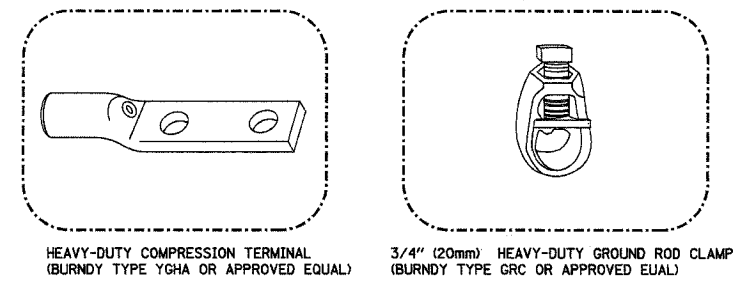
CONTRACT NO. 60A64



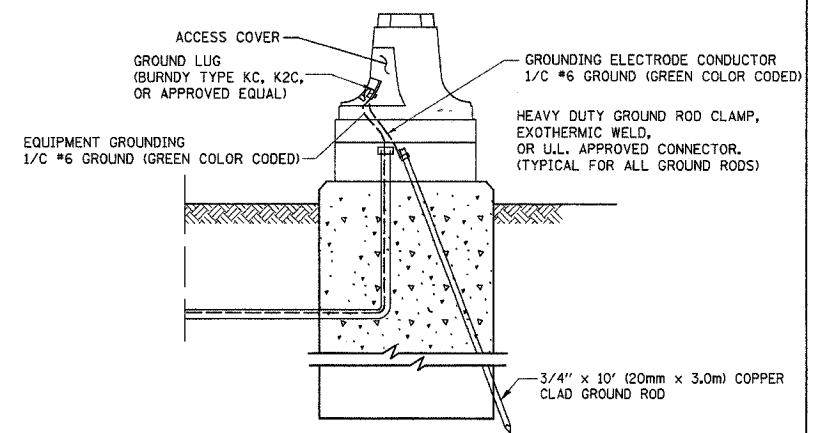
**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**  
**SERVICE INSTALLATION POLE MOUNT (SHOWN)**  
 (NOT TO SCALE)



- 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.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**DISTRICT 1**

**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: VERT. NONE  
 HORIZ. NONE  
 DATE 1-01-02

DRAWN BY: RWP  
 DESIGNED BY: DAD  
 CHECKED BY: DAZ  
 SHEET 3 OF 4

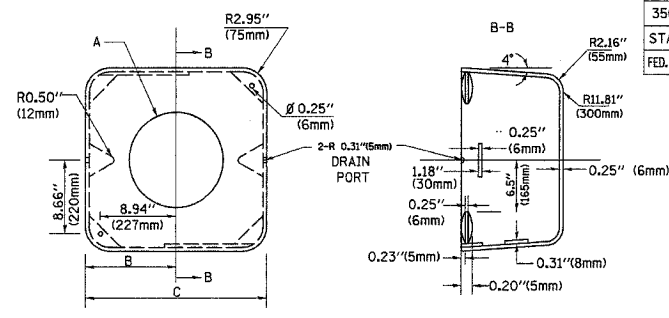
\$FILE\$

\*DATE-TIME\*  
 \*CON-SPEC\*

TS05

CONTRACT NO. 60A64

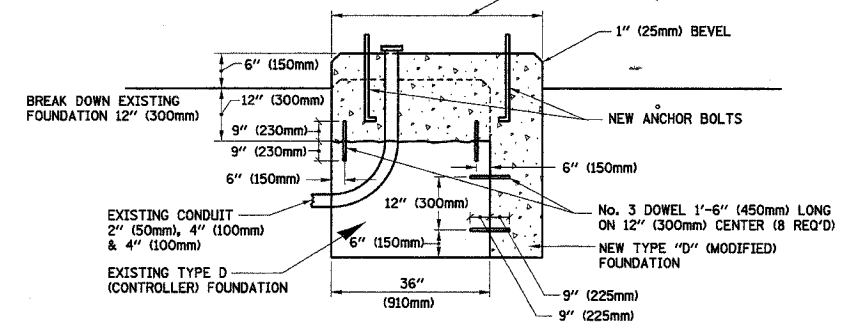
MATERIAL:  
 - ASTM A48 CLASS 30 GREY IRON  
 - ASTM A123 HOT DIPPED GALVANIZED



TYPE	A	B	C	HEIGHT	WEIGHT
I	∅ 10.125" (257mm)	9.5" (241mm)	19" (483mm)	12" (300mm)	24kg
II	∅ 11.125" (283mm)	10.75" (273mm)	21.5" (546mm)	12" (300mm)	26kg

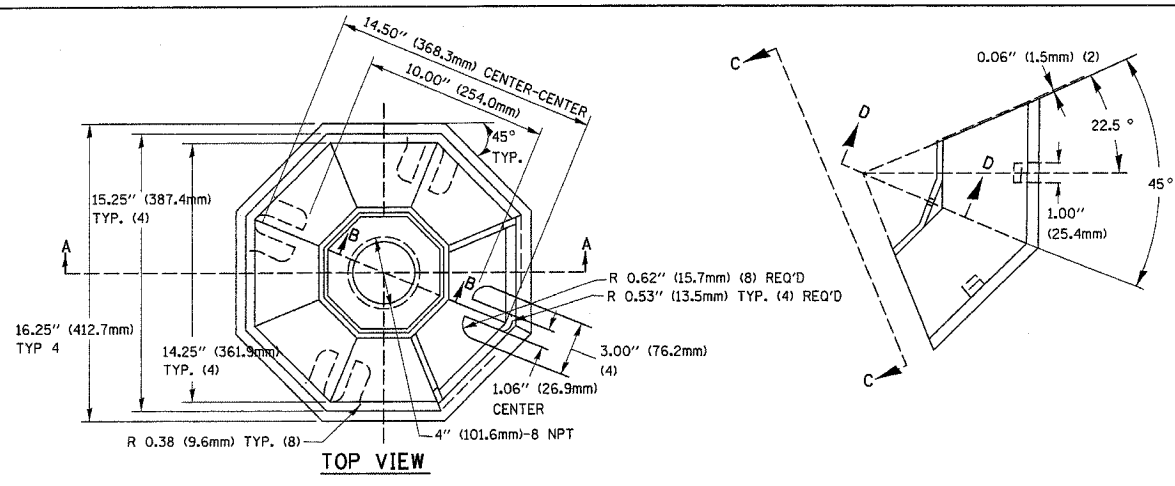
SHROUD DETAIL

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

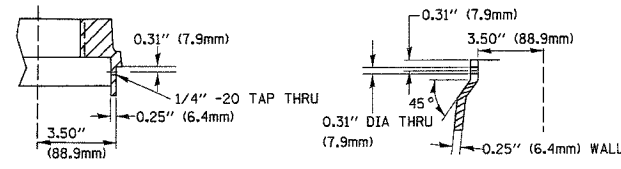


MODIFY EXISTING TYPE "D" FOUNDATION

(NOT TO SCALE)

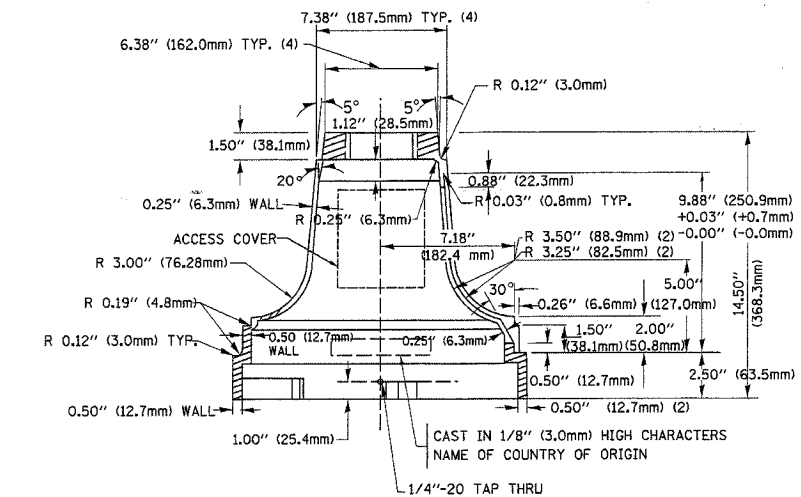


TOP VIEW

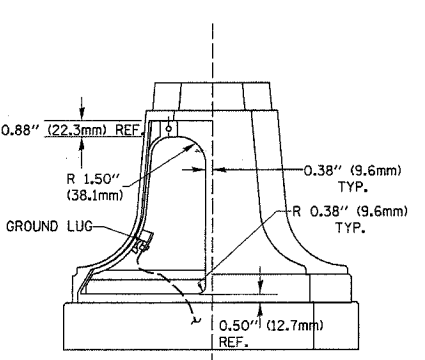


SECTION B-B

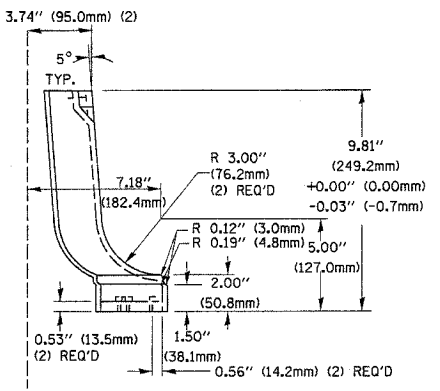
SECTION D-D



SECTION A-A



VIEW C-C



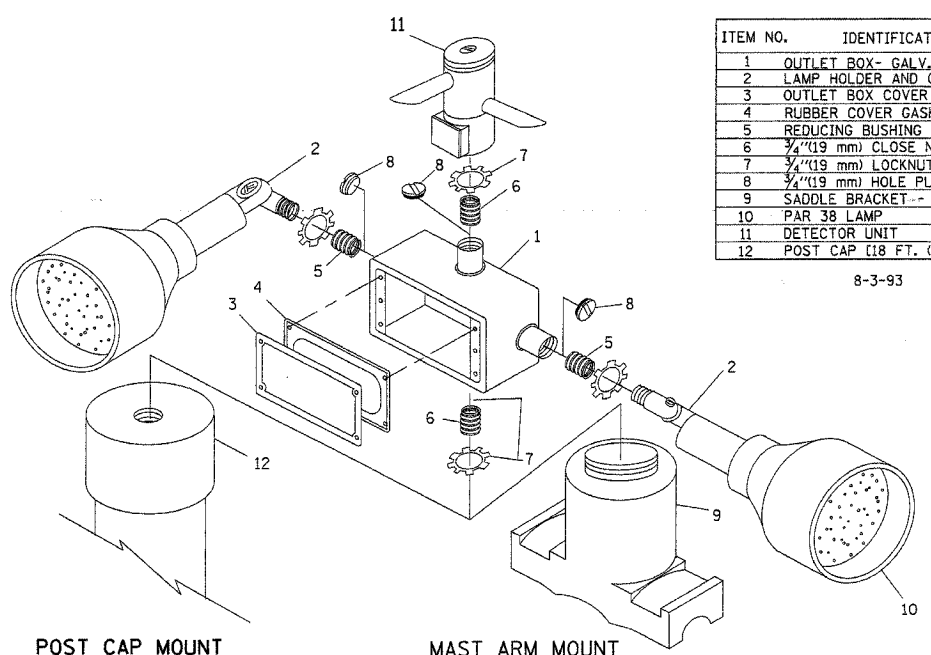
TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

NOTES:

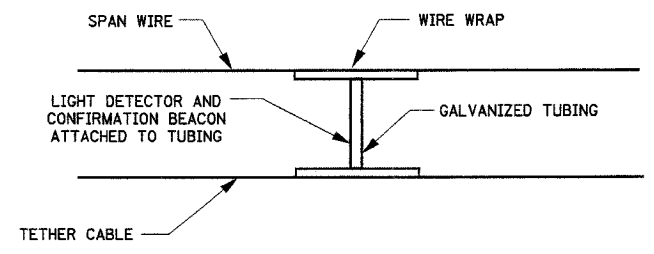
- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT  
 ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT  
 ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE 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.

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	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP (18 FT. (5.4 m) POST MIN.)

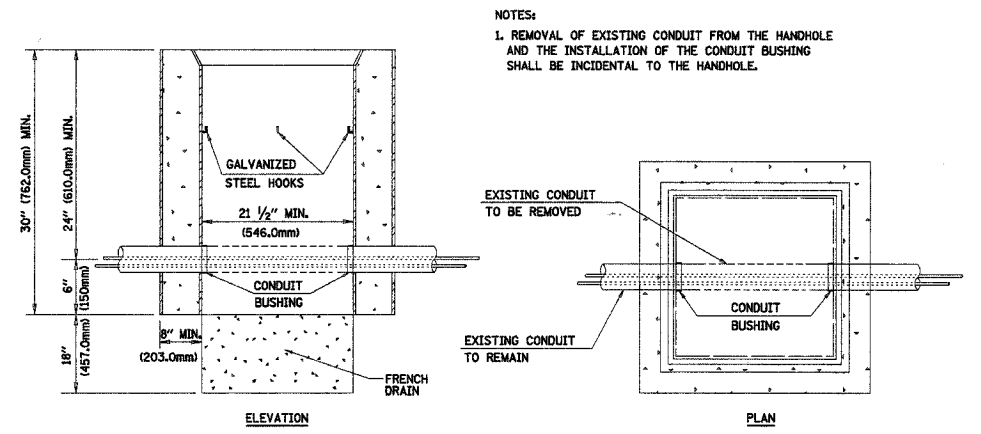
8-3-93



POST CAP MOUNT  
 MAST ARM MOUNT  
 EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS  
 (NOT TO SCALE)



DETAIL HANDHOLE TO INTERCEPT EXISTING CONDUIT  
 N.T.S.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DISTRICT 1  
 STANDARD TRAFFIC SIGNAL  
 DESIGN DETAILS

SCALE: VERT. NONE  
 HORIZ. NONE  
 DATE 1-01-02

DRAWN BY: RWP  
 DESIGNED BY: DAZ  
 CHECKED BY: DAZ  
 SHEET 4 OF 4