

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DUPAGE	42	1

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

F.A.P. 338 (IL-59)  
AT BATAVIA ROAD

SECTION: 112 N-2 PROJ. ACHSIP-0338(033)

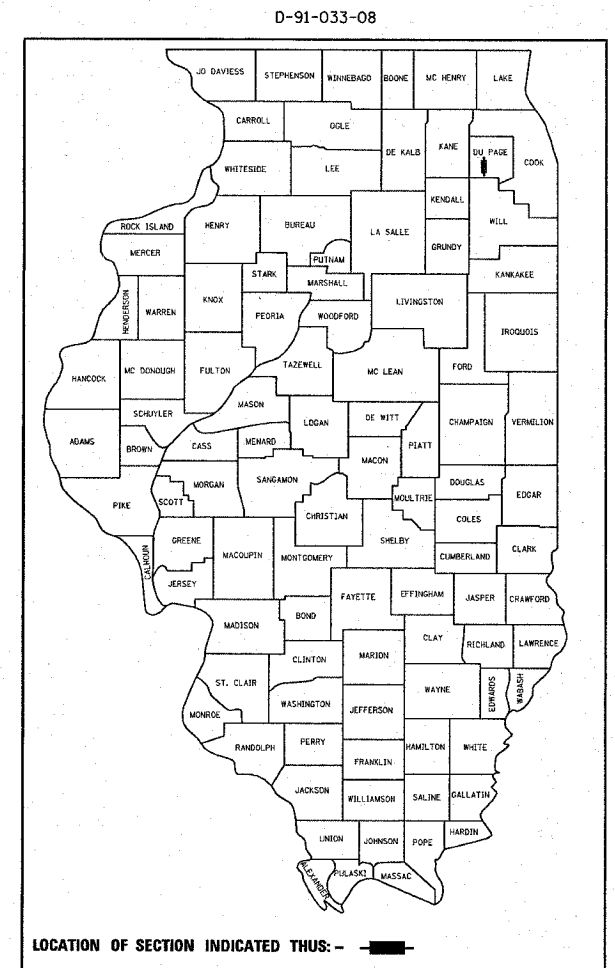
**RESURFACING (MAINTENANCE)  
AND TRAFFIC SIGNAL MODERNIZATION  
DUPAGE COUNTY**

**C-91-033-08**

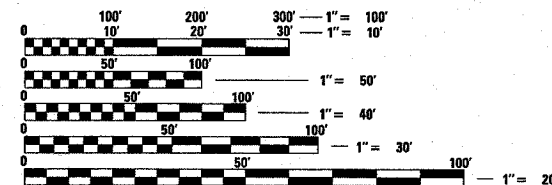
R. 9 E.

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE PROJECT IS LOCATED  
IN THE CITY OF WARRENVILLE



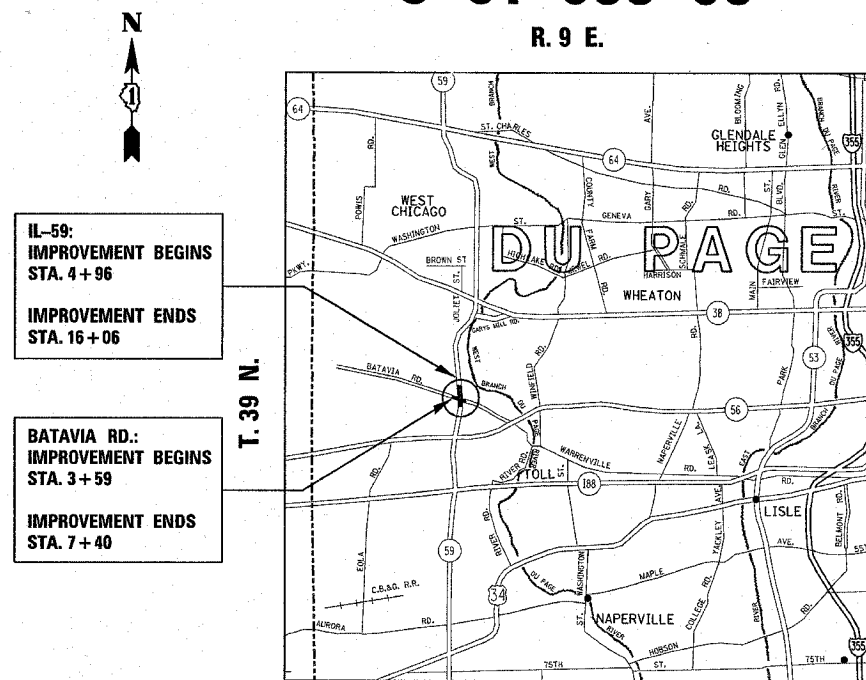
DISTRICT 1 DESIGN - PLAN PREP ENGINEER: KEN ENG/LONG TRAN - (847) 705-4240



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

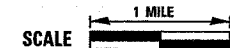
CONTRACT NO. 60D51



IL-59:  
IMPROVEMENT BEGINS  
STA. 4+96  
IMPROVEMENT ENDS  
STA. 16+06

BATAVIA RD.:  
IMPROVEMENT BEGINS  
STA. 3+59  
IMPROVEMENT ENDS  
STA. 7+40

WINFIELD TOWNSHIP



GROSS AND NET LENGTH OF IMPROVEMENT = 1448 FT (0.27 MILE)

AVERAGE DAILY TRAFFIC  
2005 ADT = 38,800 (IL 59)  
= 10,200 (BATAVIA RD.)

POSTED SPEED LIMIT  
45 MPH

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED October 25, 2007

Diane O'Keefe  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER  
December 7, 2007

Eric E. Clark  
ENGINEER OF DESIGN AND ENVIRONMENT  
December 7, 2007

Christina M. Reed  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DU PAGE	42	2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

INDEX OF SHEETS

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2	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES	424001-05 CURB RAMPS FOR SIDEWALKS
3 - 5	SUMMARY OF QUANTITIES	442201-03 CLASS C AND D PATCHES
6 - 8	TYPICAL CROSS SECTIONS	482011-03 HMA SHOULDER STRIPS/SHPULDERS WITH RESURFACING OR WIDENING & RESURFACING PROJECTS
9-10	ROADWAY PLANS	604016-01 FRAME AND GRATE, TYPE 4
11	PAVEMENT MARKING PLANS	606001-03 CONCRETE CURB & COMBINATION CONCRETE CURB & GUTTER
12-26	TRAFFIC SIGNAL PLANS	606301-03 PC CONCRETE ISLANDS AND MEDIANN
27	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING	606306-02 CORRUGATED PC CONCRETE MEDIAN
28	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT	701301-02 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
29	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	701311-02 LANE CLOSURE, 2L, 2W, MOVING DAY ONLY OPERATIONS
30	BUTT JOINT AND HMA TAPER DETAILS	701606-05 URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
31	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	701701-05 LANE CLOSURE, MULTILANE, 1W OR 2W, CROSSWALK OR SIDEWALK CLOSURE
32	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	701801-03 TRAFFIC CONTROL DEVICES
33-34	DISTRICT ONE TYPICAL PAVEMENT MARKINGS	701901 TYPICAL APPLICATIONS, RAISED REFLECTIVE PAVEMENT MARKERS
35	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)	
36	SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS	
37	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING	
38	ARTERIAL ROAD INFORMATION SIGN	
39-41	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	
42	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING	

GENERAL NOTES

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

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF WARRENVILLE.

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

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE ARTERIAL TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO START OF WORK.

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.

THE RESIDENT ENGINEER SHALL CONTACT MR. DON CHIARUGI, AREA TRAFFIC ENGINEER, AT (847) 741-9857 A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKING.

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES WHERE THE POSTED SPEED IS 45 MPH OR LESS AND 1 INCH WHERE THE POSTED SPEED IS GREATER THAN 45 MPH. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED AT A MINIMUM OF 1:3 (V:H).

PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKING ON ALL FINAL SURFACES, THE COST OF THE PAVEMENT MARKING TAPE, TYPE III AND ITS REMOVAL SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKING.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**INDEX OF SHEETS,  
STATE STANDARDS &  
GENERAL NOTES**

SCALE: VERT.  
HORIZ.  
DATE

DRAWN BY  
CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DUPAGE	42	3
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		90% FED. 10% STATE ROADWAY 1000-2A	90% FED. 5% STATE 5% WARRENSVILLE SIGNALS Y031-1F	100% WARRENSVILLE F.P.D. PRE-EMPTION Y031-3D
20200500	EARTH EXCAVATION (WIDENING)	CU YD	80	80		
20201550	SUB-BASE GRANULAR MATERIAL, TYPE B	CU YD	25	25		
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	30	30		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	0.6	0.6		
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	0.6	0.6		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	0.6	0.6		
25200110	SODDING, SALT TOLERANT	SQ YD	30	30		
25200200	SUPPLEMENTAL WATERING	UNIT	0.3	0.3		
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	5	5		
40600300	AGGREGATE (PRIME COAT)	TON	24	24		
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	4	4		
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	825	825		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	125	125		
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	301	301		
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	1170	1170		
42001300	PROTECTIVE COAT	SQ YD	300	300		
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	70	70		
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	560	560		
42400800	DETECTABLE WARNINGS	SQ FT	48	48		
<del>44000159</del>	<del>HOT MIX ASPHALT SURFACE REMOVAL, 2 1/2"</del>	<del>SQ YD</del>	<del>11715</del>	<del>11715</del>		
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	70	70		
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	615	615		
44000600	SIDEWALK REMOVAL	SQ FT	925	925		
44003510	MEDIAN REMOVAL PARTIAL DEPTH	SQ FT	5815	5815		
44201729	CLASS D PATCHES, TYPE II, 7 INCH	SQ YD	70	70		
44201733	CLASS D PATCHES, TYPE III, 7 INCH	SQ YD	100	100		

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
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44201735	CLASS D PATCHES, TYPE IV, 7 INCH	SQ YD	66	66		
44201803	CLASS D PATCHES, TYPE II, 13 INCH	SQ YD	56	56		
44201839	CLASS D PATCHES, TYPE II, 16 INCH	SQ YD	70	70		
44201843	CLASS D PATCHES, TYPE III, 16 INCH	SQ YD	100	100		
44201845	CLASS D PATCHES, TYPE IV, 16 INCH	SQ YD	60	60		
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	2720	2720		
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	12	12		
55039700	STORM SEWERS TO BE CLEANED	FOOT	300	300		
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	2	2		
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	2	2		
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	501	501		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6		
67100100	MOBILIZATION	L SUM	1	1		
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1		
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1		
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1		
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	1230	1230		
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	290.4	290.4		
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	3820	3820		
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	660	660		
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	200	200		
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	175	175		
* 72000100	SIGN PANEL - TYPE 1	SQ FT	31.5		31.5	
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	290.4	290.4		

\* SPECIALTY ITEMS

NP = NON-PARTICIPATING  
\* SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SUMMARY OF QUANTITIES  
IL 59 AT BATAVIA ROAD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DUPAGE	42	4
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		90% FED. 10% STATE ROADWAY 1000-2A	90% FED. 10% STATE 5% WARRENVILLE SIGNALS Y031-1F	100% WARRENVILLE F.P.D. PRE-EMPTION Y031-3D
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3820	3820		
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	660	660		
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	200	200		
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	175	175		
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	87	87		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	87	87		
81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	730	730		
81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	141	141		
81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	50	50		
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	114	114		
81018600	CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	35	35		
81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	307	307		
81400100	HANDHOLE	EACH	7	7		
81400200	HEAVY-DUTY HANDHOLE	EACH	4	4		
81400300	DOUBLE HANDHOLE	EACH	1	1		
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	884	884		
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1		
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1	1		
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1261	1261		
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1840	1840		
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2563	2563		

\* SPECIALTY ITEMS

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		90% FED. 10% STATE ROADWAY 1000-2A	90% FED. 10% STATE 5% WARRENVILLE SIGNALS Y031-1F	100% WARRENVILLE F.P.D. PRE-EMPTION Y031-3D
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1763	1763		
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2099	2099		
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	55	55		
<del>87502440</del>	<del>TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.</del>	<del>EACH</del>	<del>2</del>	<del>2</del>		
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2	2		
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2	2		
<del>87700170</del>	<del>STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.</del>	<del>EACH</del>	<del>1</del>	<del>1</del>		
87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1	1		
<del>87700240</del>	<del>STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.</del>	<del>EACH</del>	<del>2</del>	<del>2</del>		
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16	16		
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4	4		
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	4	4		
87800300	CONCRETE FOUNDATION, TYPE E 24-INCH DIAMETER	FOOT	20	20		
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30	30		
87900200	DRILL EXISTING HANDHOLE	EACH	2	2		
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8	8		
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2	2		
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2	2		
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2	2		
88030220	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2	2		
88100400	PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED	EACH	2	2		

\* SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SUMMARY OF QUANTITIES  
IL 59 AT BATAVIA ROAD

PLOT DATE: 11/7/2007

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DUPAGE	42	5
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		90% FED. ROADWAY 1000-2A	90% FED. STATE SIGNALS WARRENVILLE Y031-1F	PRE-EMPTION Y031-3D 100% WARRENVILLE F.P.D.			
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10		10				
88500100	INDUCTIVE LOOP DETECTOR	EACH	8		8				
88600100	DETECTOR LOOP, TYPE I	FOOT	552		552				
88700200	LIGHT DETECTOR	EACH	2			2			
88700300	LIGHT DETECTOR AMPLIFIER	EACH	1			1			
88800100	PEDESTRIAN PUSH-BUTTON	EACH	6		6				
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1		1				
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1		1				
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	51.4	51.4					
X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1557		1557				
X0325737	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1		1				
X3540500	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 11-3/4"	SQ YD	140	140					
X8050015	SERVICE INSTALLATION - POLE MOUNTED	EACH	1		1				
X8620020	UNINTERRUPTIBLE POWER SUPPLY	EACH	1		1				
X8710020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	1650		1650				
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	1877		1877				
X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	618			618			
NP Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	14	14					
* X0325890	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM - LEVEL 1	EACH	1		1				
44002264	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 16"	SQ YD	336	336					
44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	SQ YD	11,715	11,715					
87700160	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1		1				
87700250	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	2		2				
88100200	PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED	EACH	4		4				

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT							

NP= NON-PARTICIPATING  
 \* SPECIALTY ITEMS

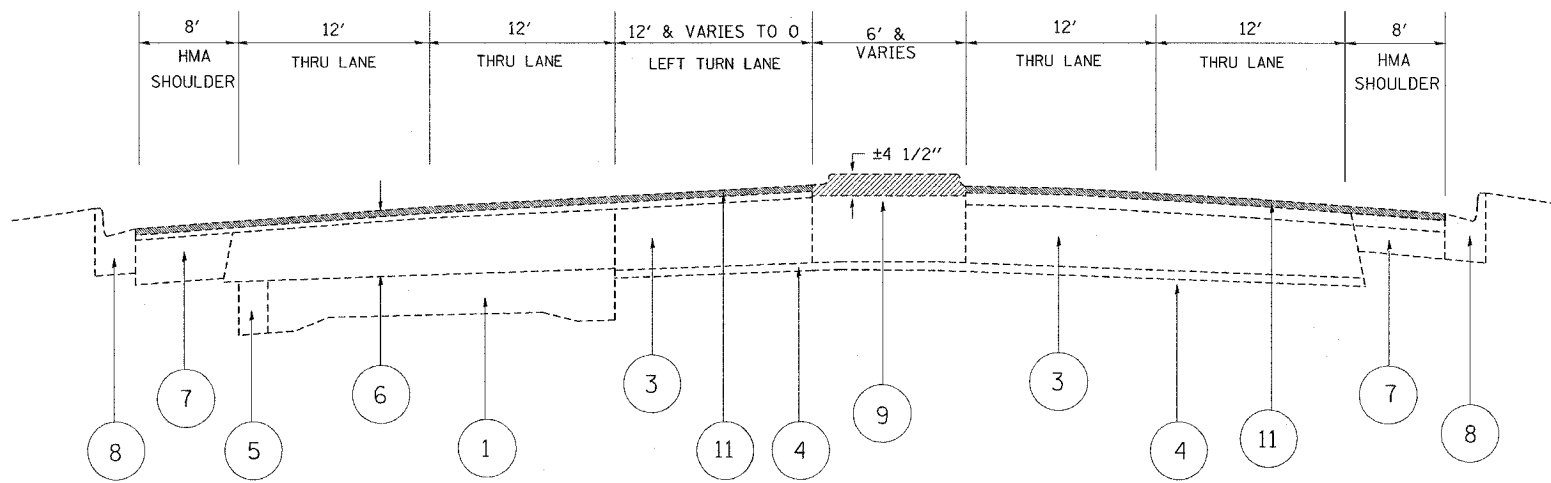
REVISIONS	
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ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SUMMARY OF QUANTITIES  
 IL 59 AT BATAVIA ROAD

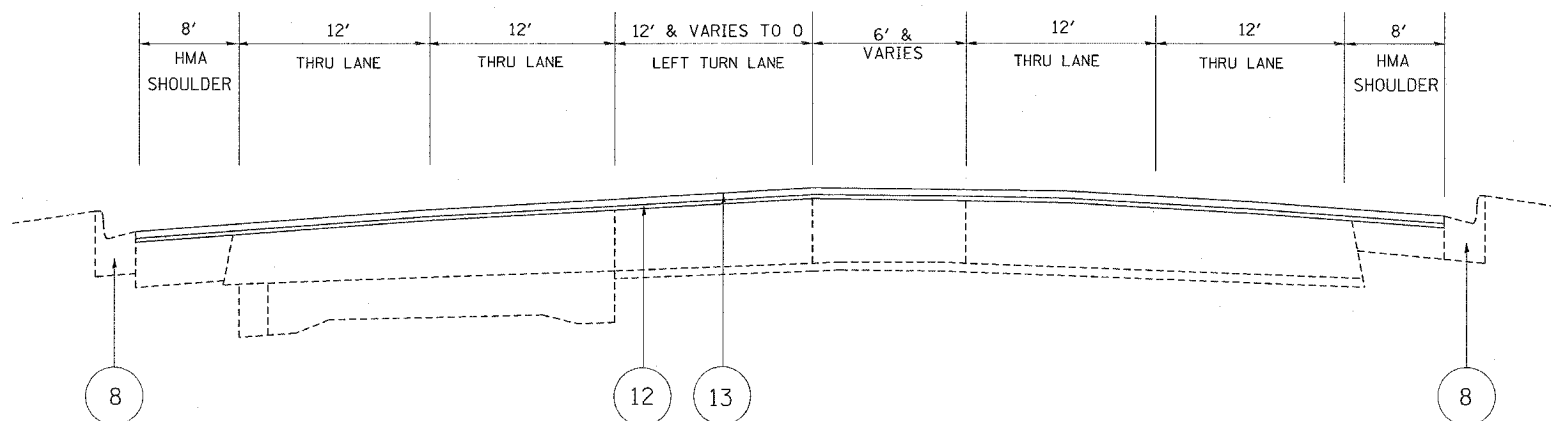
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DU PAGE	42	6
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



IL 59  
**EXISTING TYPICAL SECTION**  
 STA. 4+96 TO STA. 6+90  
 STA. 12+31 TO STA. 16+05



IL 59  
**PROPOSED TYPICAL SECTION**  
 STA. 4+96 TO STA. 6+90  
 STA. 12+31 TO STA. 16+05

**LEGEND**

- ① EXISTING P.C.C. PAVEMENT (7")
- ② EXISTING HMA PAVEMENT (13")
- ③ EXISTING HMA PAVEMENT (16")
- ④ EXIST. SUB-BASE GRANULAR MATERIAL
- ⑤ EXISTING HMA WIDENING (9")
- ⑥ EXISTING HMA OVERLAY (±14")
- ⑦ EXISTING STABILIZED SHOULDER (8")
- ⑧ EXISTING COMB. CONCRETE CURB & GUTTER, TYPE B-6.24
- ⑨ PROPOSED MEDIAN REMOVAL PARTIAL DEPTH (±4 1/2")
- ⑩ EXISTING BARRIER MEDIAN
- ⑪ PROPOSED HMA SURFACE REMOVAL, 3"
- ⑫ PROPOSED LEVELING BINDER (MACHINE METHOD), N70, 1 1/4"
- ⑬ PROPOSED POLYMERIZED HMA SURFACE COURSE MIX F, N90, 1 3/4"

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AC TYPE	AIR VOIDS(%)
<b>PAVEMENT RESURFACING</b>		
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	SBS/SBR PG 70-22	4%@90 GYR.
LEVELING BINDER (MACHINE METHOD), N70 (IL-9.5 mm)	PG 64-22*	4%@70 GYR.
<b>PATCHING</b>		
CLASS D PATCHES TYPE II, III, IV, (HMA BINDER IL-19)	PG 64-22*	4%@70 GYR.
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19 mm)	PG 64-22*	4%@70 GYR.

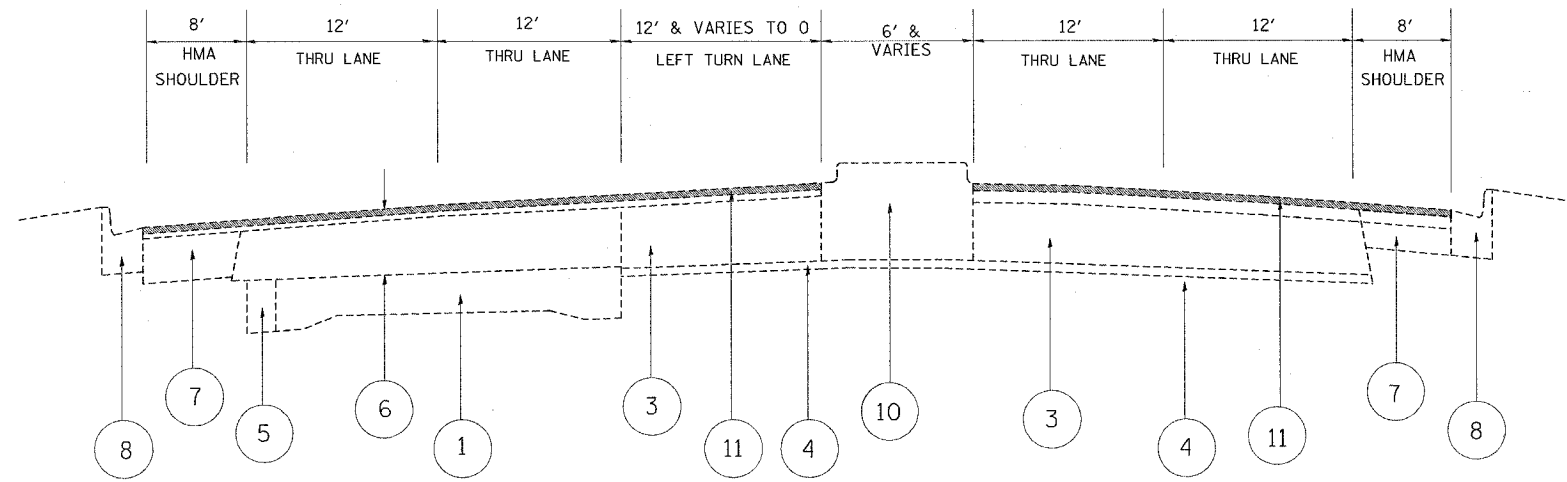
\* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.  
 NOTE: THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL. 59 AT BATAVIA RD.  
 TYPICAL CROSS SECTIONS

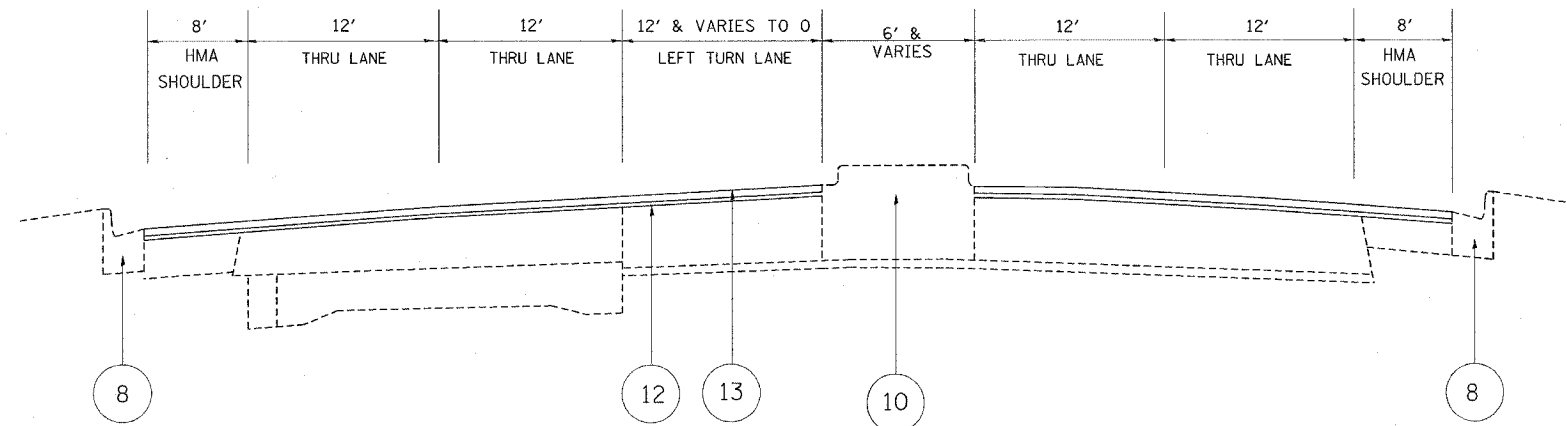
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	I12 N-2	DU PAGE	42	7
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



IL 59  
EXISTING TYPICAL SECTION  
 STA. 6+90 TO STA. 12+31

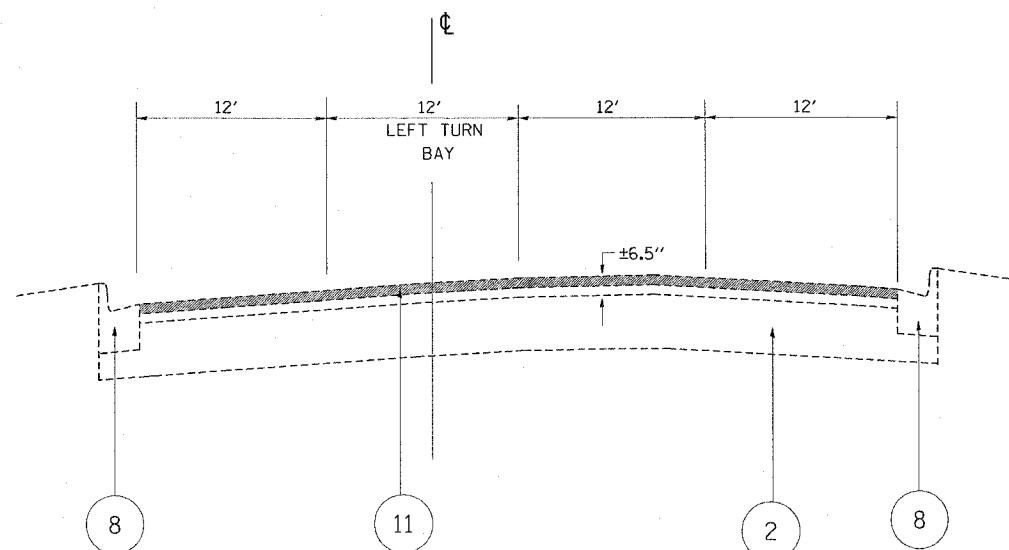
- LEGEND
- ① EXISTING P.C.C. PAVEMENT (7")
  - ② EXISTING HMA PAVEMENT (13")
  - ③ EXISTING HMA PAVEMENT (16")
  - ④ EXIST. SUB-BASE GRANULAR MATERIAL
  - ⑤ EXISTING HMA WIDENING (9")
  - ⑥ EXISTING HMA OVERLAY (±14")
  - ⑦ EXISTING STABILIZED SHOULDER (8")
  - ⑧ EXISTING COMB. CONCRETE CURB & GUTTER, TYPE B-6.24
  - ⑨ PROPOSED MEDIAN REMOVAL PARTIAL DEPTH (±4 1/2")
  - ⑩ EXISTING BARRIER MEDIAN
  - ⑪ PROPOSED HMA SURFACE REMOVAL, 3"
  - ⑫ PROPOSED LEVELING BINDER (MACHINE METHOD), N70, 1 1/4"
  - ⑬ PROPOSED POLYMERIZED HMA SURFACE COURSE MIX F, N90, 1 3/4"



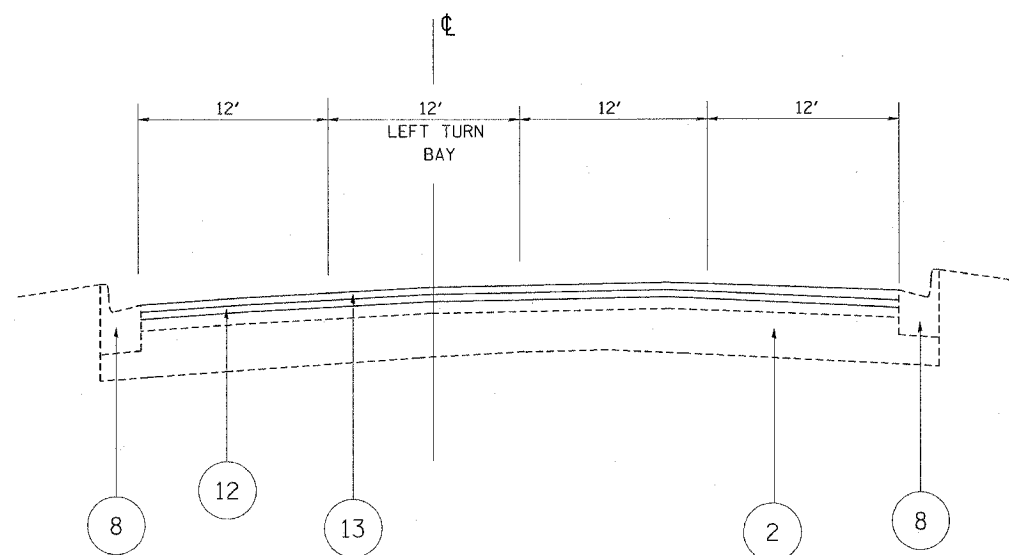
IL 59  
PROPOSED TYPICAL SECTION  
 STA. 6+90 TO STA. 12+31

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		IL. 59 AT BATAVIA RD. TYPICAL CROSS SECTIONS  *SCALE* 11/28/2007  DRAWN BY CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DU PAGE	42	8
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



BATAVIA ROAD  
EXISTING TYPICAL SECTION  
STA. 3+59 TO STA. 7+40



BATAVIA ROAD  
EXISTING TYPICAL SECTION  
STA. 3+59 TO STA. 7+40

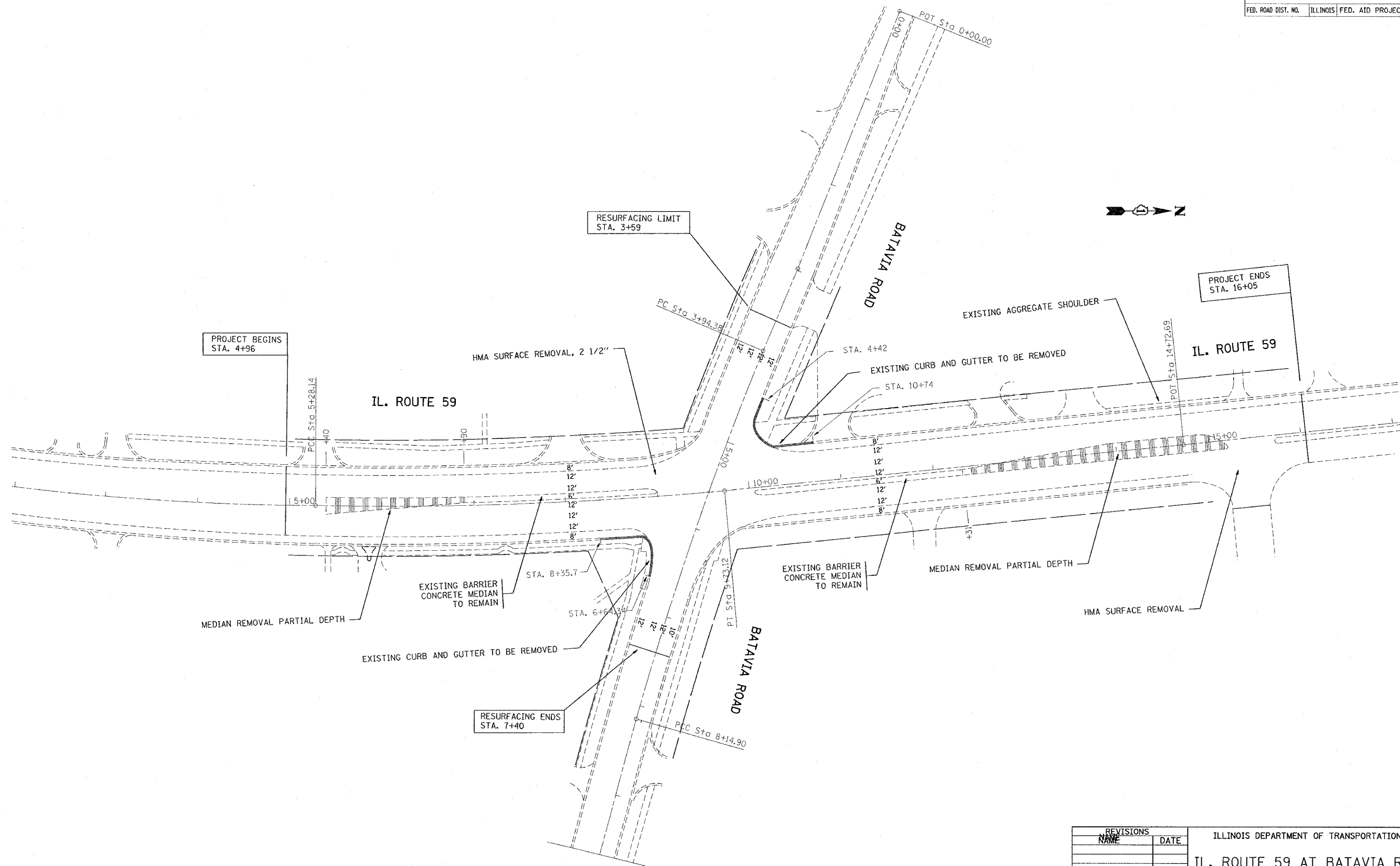
LEGEND

- ① EXISTING P.C.C. PAVEMENT (7")
- ② EXISTING HMA PAVEMENT (13")
- ③ EXISTING HMA PAVEMENT (16")
- ④ EXIST. SUB-BASE GRANULAR MATERIAL
- ⑤ EXISTING HMA WIDENING (9")
- ⑥ EXISTING HMA OVERLAY (±14")
- ⑦ EXISTING STABILIZED SHOULDER (8")
- ⑧ EXISTING COMB. CONCRETE CURB & GUTTER, TYPE B-6.24
- ⑨ PROPOSED MEDIAN REMOVAL PARTIAL DEPTH (±4 1/2")
- ⑩ EXISTING BARRIER MEDIAN
- ⑪ PROPOSED HMA SURFACE REMOVAL, 3"
- ⑫ PROPOSED LEVELING BINDER (MACHINE METHOD), N70, 1 1/4"
- ⑬ PROPOSED POLYMERIZED HMA SURFACE COURSE MIX F, N90, 1 3/4"

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		IL. 59 AT BATAVIA RD. TYPICAL CROSS SECTIONS
*SCALE*		DRAWN BY
11/28/2007		CHECKED BY



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DU PAGE	42	9
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



REVISIONS	
NAME	DATE

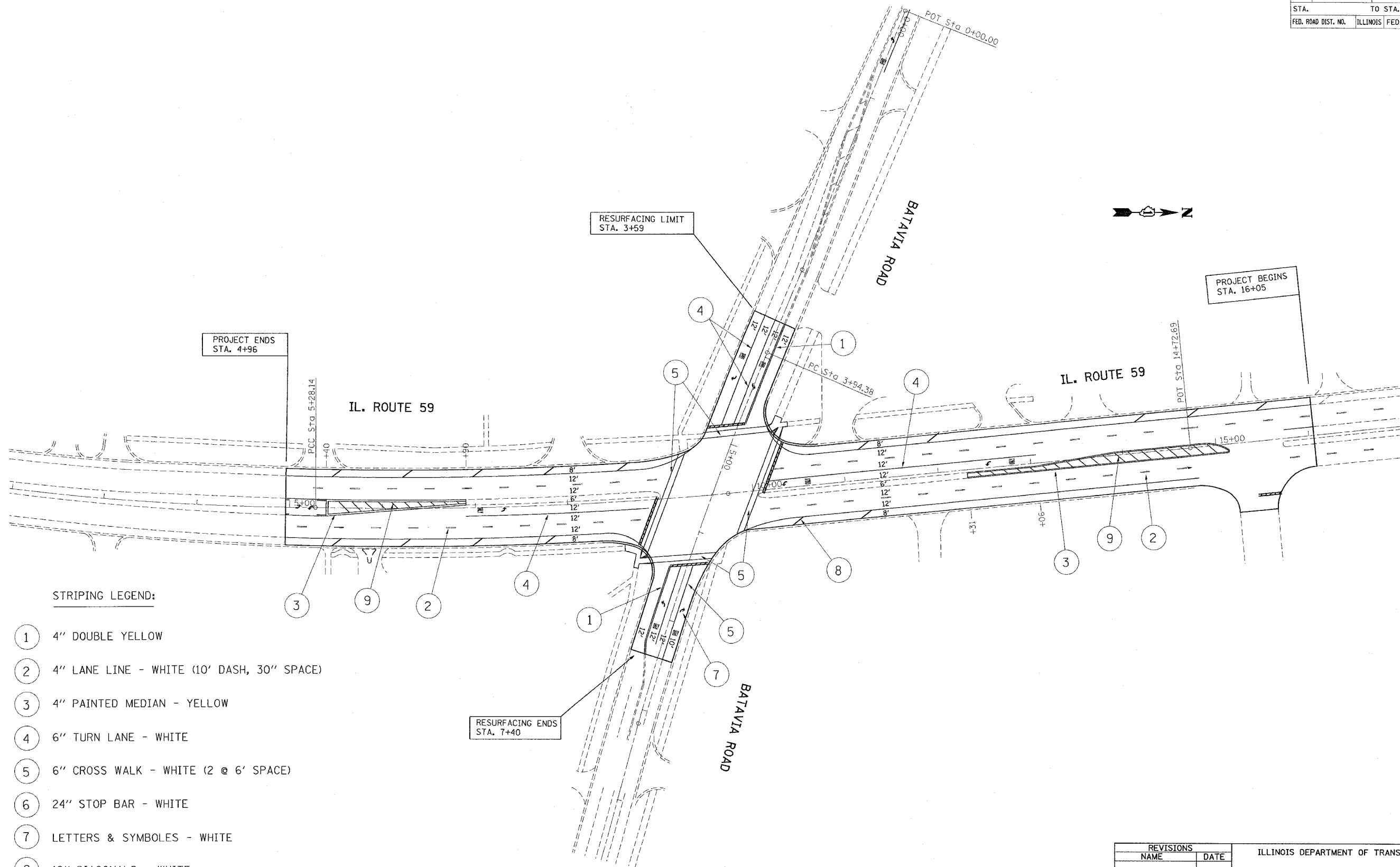
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 IL. ROUTE 59 AT BATAVIA RD.  
 EXISTING ROADWAY  
 PLANS

\*SCALE\*  
 11/6/2007

DRAWN BY  
 CHECKED BY



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DU PAGE	42	11
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



STRIPING LEGEND:

- ① 4" DOUBLE YELLOW
- ② 4" LANE LINE - WHITE (10' DASH, 30" SPACE)
- ③ 4" PAINTED MEDIAN - YELLOW
- ④ 6" TURN LANE - WHITE
- ⑤ 6" CROSS WALK - WHITE (2 @ 6' SPACE)
- ⑥ 24" STOP BAR - WHITE
- ⑦ LETTERS & SYMBOLES - WHITE
- ⑧ 12" DIAGONALS - WHITE
- ⑨ 12" DIAGONALS - YELLOW

NOTE:  
ALL PAVEMENT MARKING SHALL BE THERMOPLASTIC

REVISIONS	
NAME	DATE

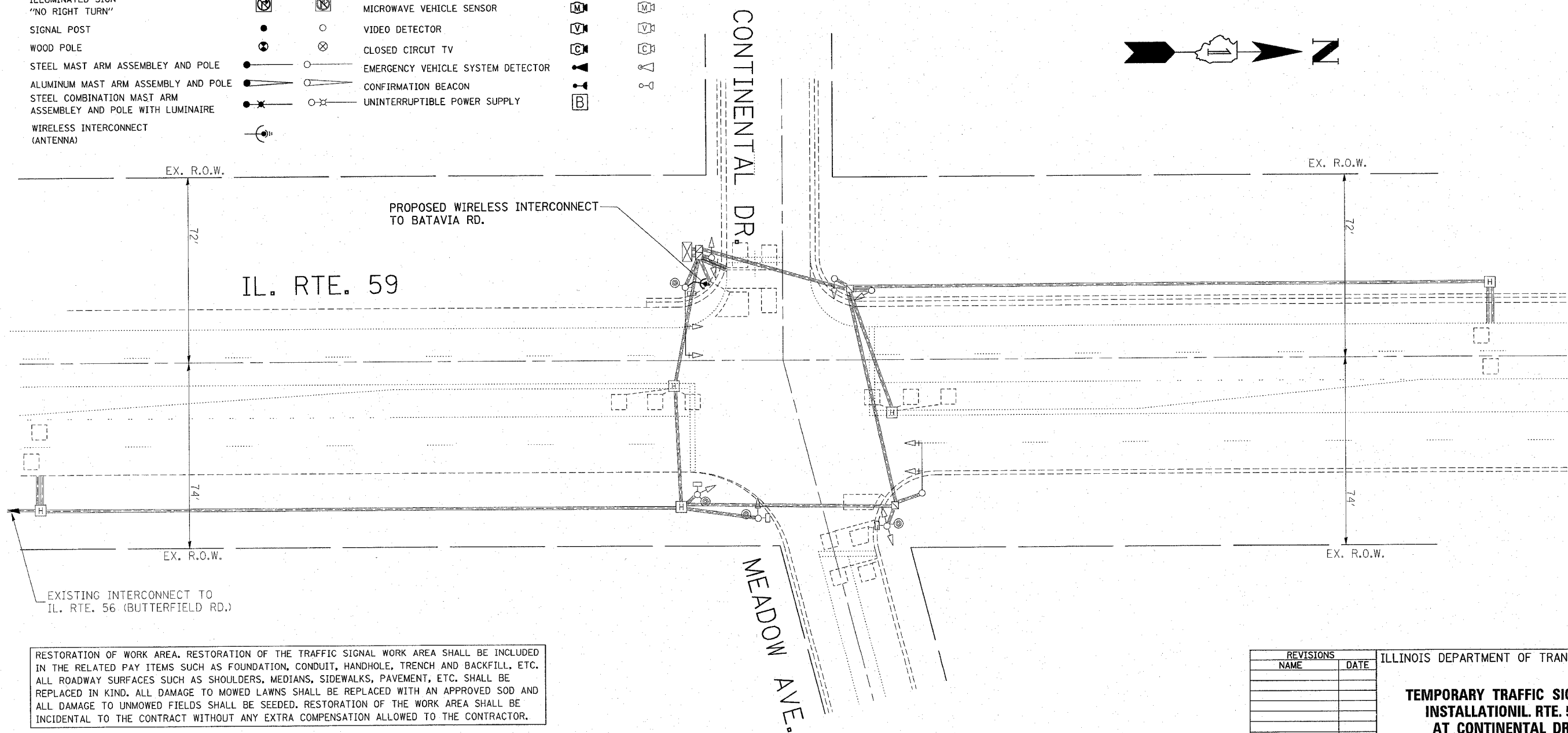
ILLINOIS DEPARTMENT OF TRANSPORTATION  
**IL. ROUTE 59 AT BATAVIA RD.  
 PAVEMENT MARKING PLANS**  
 \*SCALE\*  
 11/7/2007  
 DRAWN BY  
 CHECKED BY

### TRAFFIC SIGNAL LEGEND

	<b>PROPOSED</b>	<b>EXISTING</b>		<b>PROPOSED</b>	<b>EXISTING</b>
CONTROLLER CABINET			JUNCTION BOX		
RAILROAD CONTROL CABINET			HANDHOLE		
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT			HEAVY DUTY HANDHOLE		
TELEPHONE CONNECTION			DOUBLE HANDHOLE		
SIGNAL HEAD			G.S. CONDUIT IN TRENCH OR PUSHED		
SIGNAL HEAD WITH BACKPLATE			COMMON TRENCH	CT	
SIGNAL HEAD OPTICALLY PROGRAMMED			UNIT DUCT	UD	
SIGNAL HEAD PEDESTRIAN			PEDESTRIAN PUSHBUTTON DETECTOR		
ILLUMINATED SIGN "NO LEFT TURN"			DETECTOR LOOP, TYPE I		
ILLUMINATED SIGN "NO RIGHT TURN"			PREFORMED DETECTOR LOOP		
SIGNAL POST			MICROWAVE VEHICLE SENSOR		
WOOD POLE			VIDEO DETECTOR		
STEEL MAST ARM ASSEMBLY AND POLE			CLOSED CIRCUIT TV		
ALUMINUM MAST ARM ASSEMBLY AND POLE			EMERGENCY VEHICLE SYSTEM DETECTOR		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			CONFIRMATION BEACON		
WIRELESS INTERCONNECT (ANTENNA)			UNINTERRUPTIBLE POWER SUPPLY		

NOTE:  
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT IS "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

NOTE:  
ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE).



RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEMS SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED. RESTORATION OF THE WORK AREA SHALL BE INCIDENTAL TO THE CONTRACT WITHOUT ANY EXTRA COMPENSATION ALLOWED TO THE CONTRACTOR.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		<p><b>TEMPORARY TRAFFIC SIGNAL INSTALLATION IL. RTE. 59 AT CONTINENTAL DR.</b></p> <p>SCALE: _____</p> <p>DATE: 11/19/2007</p> <p>DRAWN BY: BCK DESIGNED BY: BCK CHECKED BY: DAD</p>

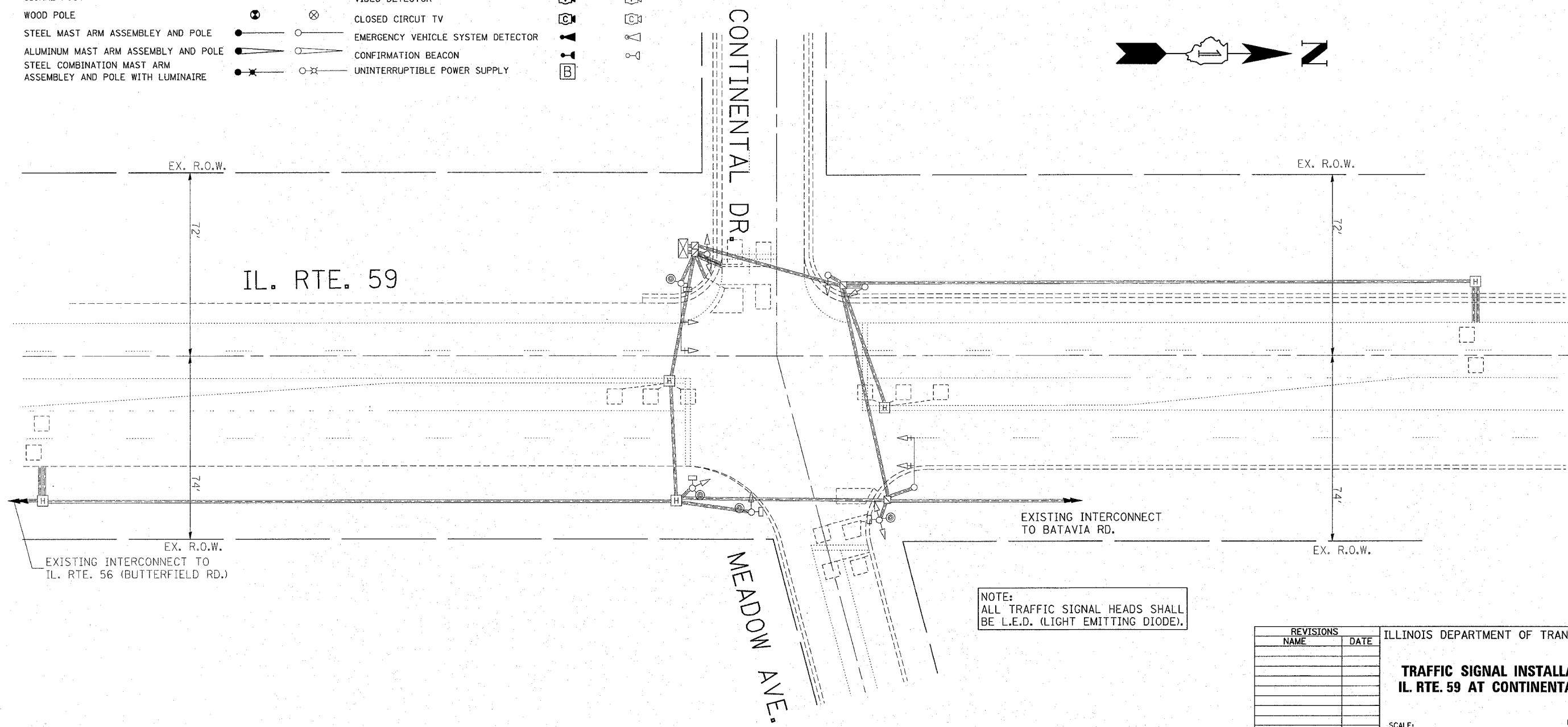
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### TRAFFIC SIGNAL LEGEND

CONTROLLER CABINET			JUNCTION BOX		
RAILROAD CONTROL CABINET			HANDHOLE		
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT			HEAVY DUTY HANDHOLE		
TELEPHONE CONNECTION			DOUBLE HANDHOLE		
SIGNAL HEAD			G.S. CONDUIT IN TRENCH OR PUSHED		
SIGNAL HEAD WITH BACKPLATE			COMMON TRENCH	CT	
SIGNAL HEAD OPTICALLY PROGRAMMED			UNIT DUCT	UD	
SIGNAL HEAD PEDESTRIAN			PEDESTRIAN PUSHBUTTON DETECTOR		
ILLUMINATED SIGN "NO LEFT TURN"			DETECTOR LOOP, TYPE I		
ILLUMINATED SIGN "NO RIGHT TURN"			PREFORMED DETECTOR LOOP		
SIGNAL POST			MICROWAVE VEHICLE SENSOR		
WOOD POLE			VIDEO DETECTOR		
STEEL MAST ARM ASSEMBLY AND POLE			CLOSED CIRCUIT TV		
ALUMINUM MAST ARM ASSEMBLY AND POLE			EMERGENCY VEHICLE SYSTEM DETECTOR		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			CONFIRMATION BEACON		
			UNINTERRUPTIBLE POWER SUPPLY		

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEMS SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED. RESTORATION OF THE WORK AREA SHALL BE INCIDENTAL TO THE CONTRACT WITHOUT ANY EXTRA COMPENSATION ALLOWED TO THE CONTRACTOR.

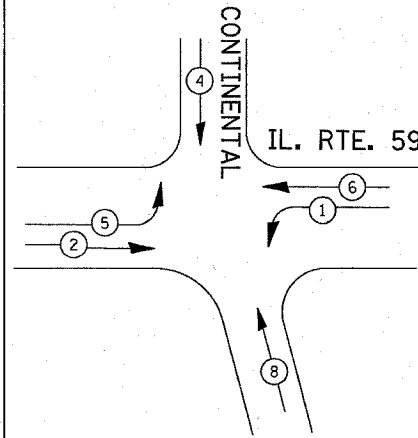


NOTE:  
ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE).

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		<p><b>TRAFFIC SIGNAL INSTALLATION</b> <b>IL. RTE. 59 AT CONTINENTAL DR.</b></p> <p>SCALE: DATE: 11/19/2007</p> <p>DRAWN BY: BCK DESIGNED BY: BCK CHECKED BY: DAD</p>

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**CONTROLLER SEQUENCE**



**LEGEND**

- DUAL ENTRY PHASE
- PROTECTED LEFT TURN PHASE
- OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

**PHASE DESIGNATION DIAGRAM**

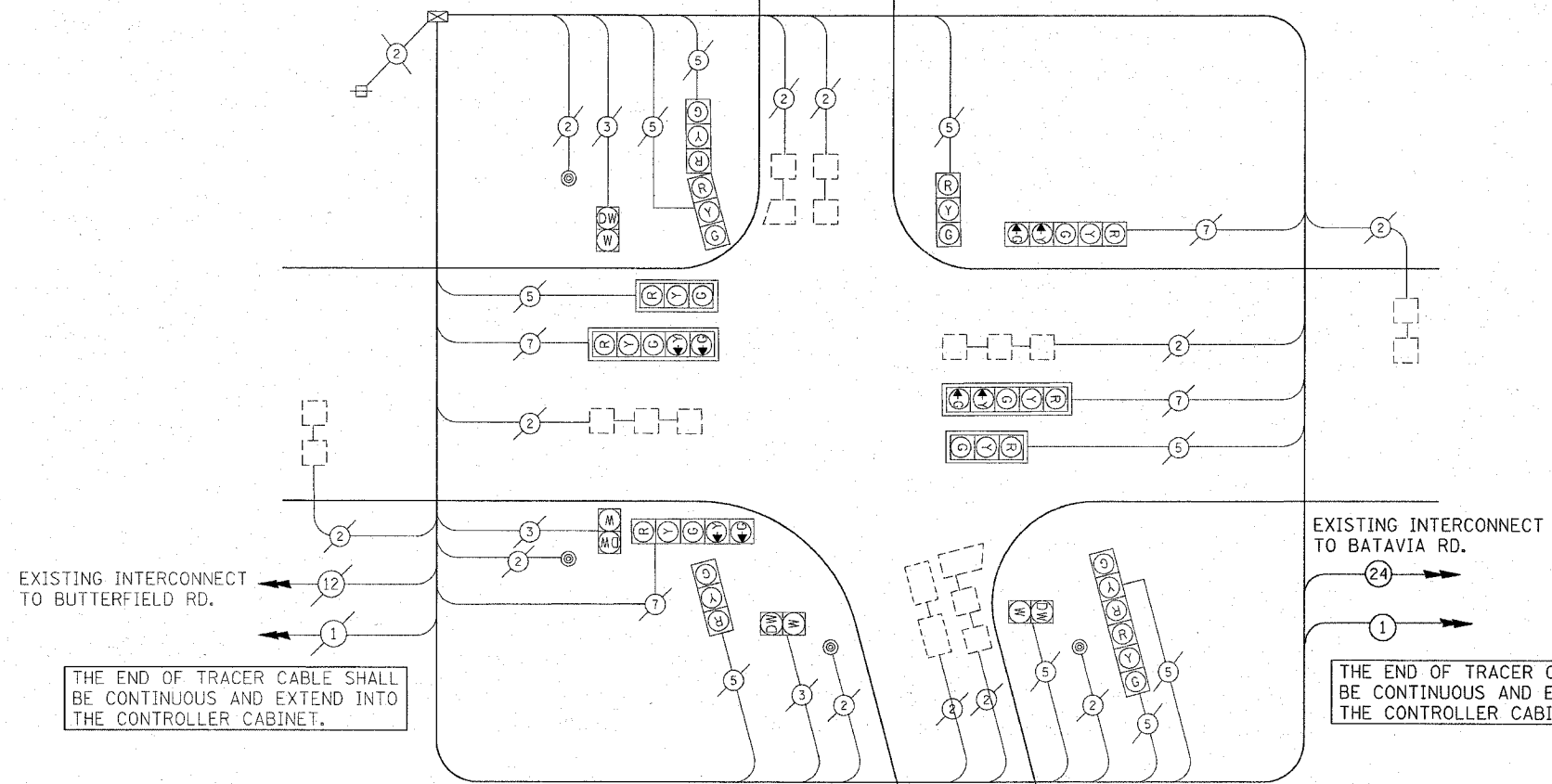
DUAL ENTRY - ALL LEGS  
PROTECTED/PERMITTED LEFT TURN PHASING

CONTINENTAL DR.



**TEMPORARY CABLE DIAGRAM LEGEND**

- |  | PROPOSED | EXISTING |
|--|----------|----------|
| TEMPORARY CONTROLLER CABINET   |          |          |
| TEMPORARY SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT                             |          |          |
| TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION, 12" (300 mm)              |          |          |
| 12" (300 MM) PEDESTRIAN SIGNAL SECTION   |          |          |
| ELECTRIC CABLE IN CONDUIT, NO. 14, UNLESS OTHERWISE NOTED, NUMBER OF CONDUCTORS AS NOTED |          |          |
| PEDESTRIAN PUSHBUTTON DETECTOR   |          |          |
| VEHICLE DETECTOR, INDUCTION LOOP   |          |          |
| MICROWAVE VEHICLE SENSOR   |          |          |
| VIDEO DETECTOR   |          |          |
| CLOSED CIRCUIT TV  |          |          |
| EMERGENCY VEHICLE SYSTEM DETECTOR  |          |          |
| CONFIRMATION BEACON  |          |          |
| WIRELESS INTERCONNECT (ANTENNA)  |          |          |



THE END OF TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

THE END OF TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

NOTE:  
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT IS "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEMS SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED. RESTORATION OF THE WORK AREA SHALL BE INCIDENTAL TO THE CONTRACT WITHOUT ANY EXTRA COMPENSATION ALLOWED TO THE CONTRACTOR.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND.)	WATTAGE (LED)	% OPERATION	
SIGNAL (RED)	12	135	17	0.50	102.00
(YELLOW)	12	135	25	0.25	75.00
(GREEN)	12	135	15	0.25	45.00
ARROW	8	135	12	0.10	9.60
PED. SIGNAL	4	90	25	1.00	100.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 431.6

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 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+H-2=
E - M. ARM POLE		SIGNAL POST	2 (0.6)	(6m+L-0.6m)=	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

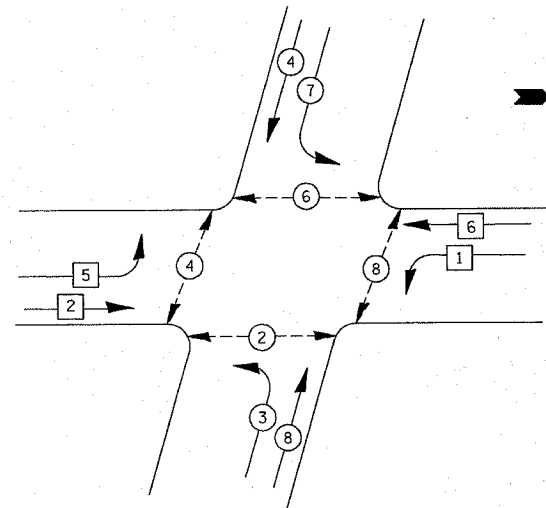
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		<p><b>PROPOSED CABLE PLAN AND PHASE DESIGNATION DIAGRAM</b> <b>IL. RTE. 59 AT CONTINENTAL DR.</b></p> <p>SCALE: _____ DATE: 11/27/2007</p> <p>DRAWN BY: BCK DESIGNED BY: BCK CHECKED BY: DAD</p>

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**CONTROLLER SEQUENCE**

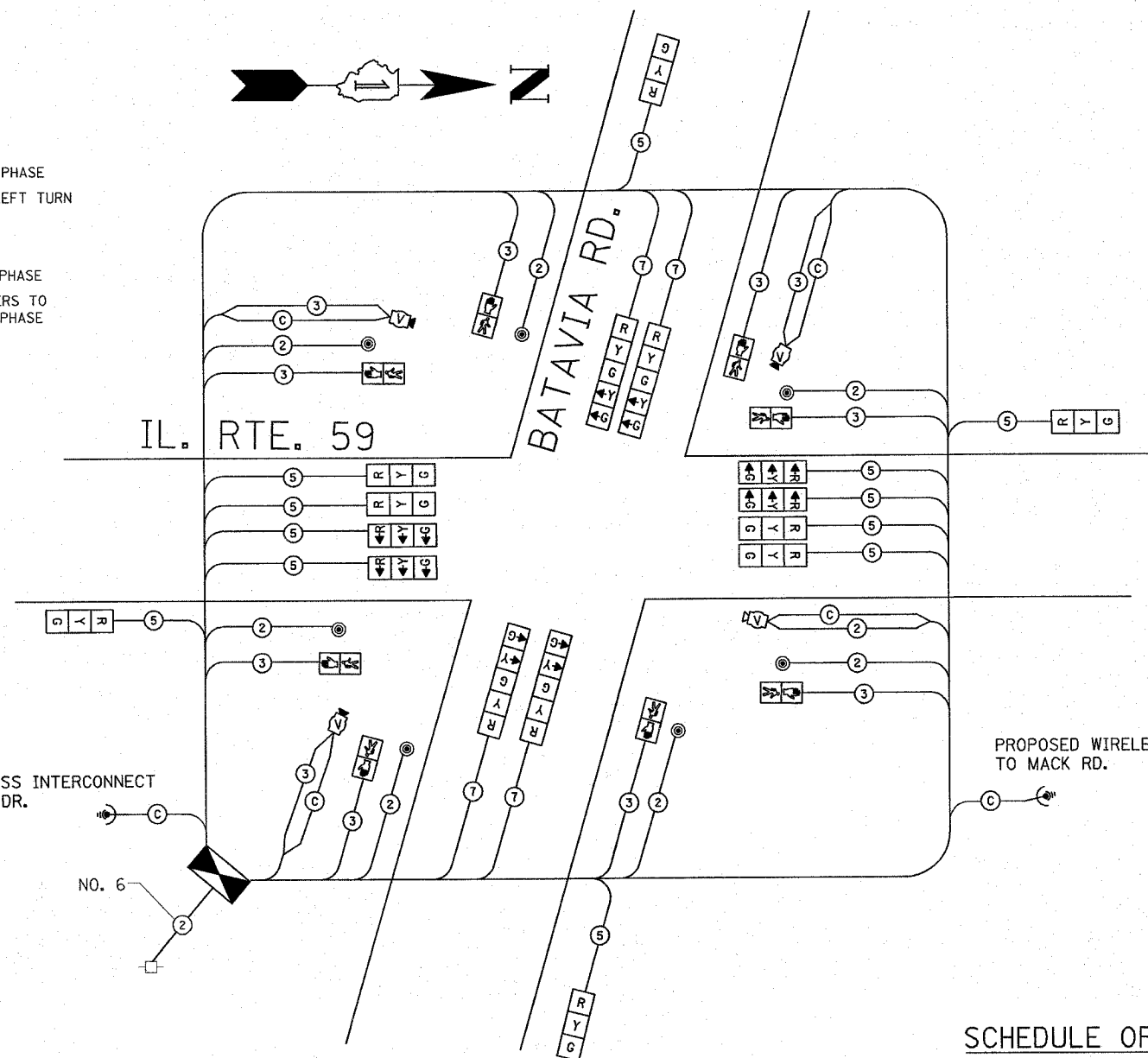


**TEMPORARY PHASE DESIGNATION DIAGRAM**

- LEGEND**
- ⊛ DUAL ENTRY PHASE
  - ⊛ PROTECTED LEFT TURN PHASE
  - OL OVERLAP
  - ⊛ PEDESTRIAN PHASE
  - \* NUMBER REFERS TO ASSOCIATED PHASE

**TEMPORARY CABLE DIAGRAM LEGEND**

- |  |                 |                 |
|--|-----------------|-----------------|
|  | <b>PROPOSED</b> | <b>EXISTING</b> |
| TEMPORARY CONTROLLER CABINET   | ⊞               | ⊞               |
| TEMPORARY SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT                             | ⊞               | P               |
| TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION, 12" (300 mm)              | R               | R               |
| 12" (300 MM) PEDESTRIAN SIGNAL SECTION   | ⊞               | ⊞               |
| ELECTRIC CABLE IN CONDUIT, NO. 14, UNLESS OTHERWISE NOTED. NUMBER OF CONDUCTORS AS NOTED | 2               | 2               |
| PEDESTRIAN PUSHBUTTON DETECTOR   | ⊞               | ⊞               |
| VEHICLE DETECTOR, INDUCTION LOOP   | ⊞               | ⊞               |
| MICROWAVE VEHICLE SENSOR   | ⊞               | ⊞               |
| VIDEO DETECTOR   | ⊞               | ⊞               |
| CLOSED CIRCUIT TV  | ⊞               | ⊞               |
| EMERGENCY VEHICLE SYSTEM DETECTOR  | ⊞               | ⊞               |
| CONFIRMATION BEACON  | ⊞               | ⊞               |
| WIRELESS INTERCONNECT (ANTENNA)  | ⊞               | ⊞               |



**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QUANTITY
TEMPORARY TRAFFIC SIGNAL	EACH	1

I.O.O.T					TOTAL WATTAGE
TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	14	135	17	0.50	119.00
(YELLOW)	14	135	25	0.25	87.50
(GREEN)	14	135	15	0.25	52.50
ARROW	20	135	12	0.10	24.00
PED. SIGNAL	8	90	25	1.00	200.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN		84		0.05	
ENERGY COSTS TO:					TOTAL = 583.00
ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, ILLINOIS 60196-1096 CONTACT: KEA MCKENZIE PHONE: 630-437-2495 COMPANY: COMM. ED.					

NOTE:  
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT IS "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEMS SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED. RESTORATION OF THE WORK AREA SHALL BE INCIDENTAL TO THE CONTRACT WITHOUT ANY EXTRA COMPENSATION ALLOWED TO THE CONTRACTOR.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		<p align="center"><b>TEMPORARY CABLE AND PHASE DESIGNATION DIAGRAM IL. RTE. 59 AT BATAVIA RD.</b></p> <p>SCALE: _____ DATE: 11/19/2007</p> <p align="right">DRAWN BY: BCK DESIGNED BY: BCK CHECKED BY: DAD</p>

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### CABLE PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER CABINET		
RAILROAD CONTROL CABINET		
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT		
TELEPHONE CONNECTION		
GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE		
FIBER OPTIC CABLE IN CONDUIT, NUMBER OF FIBERS AS NOTED		
ELECTRIC CABLE IN CONDUIT, NO. 14, UNLESS OTHERWISE NOTED. NUMBER OF CONDUCTORS AS NOTED		
GROUND CABLE IN CONDUIT NO. 6 COPPER (GREEN)		
SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD		

12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE

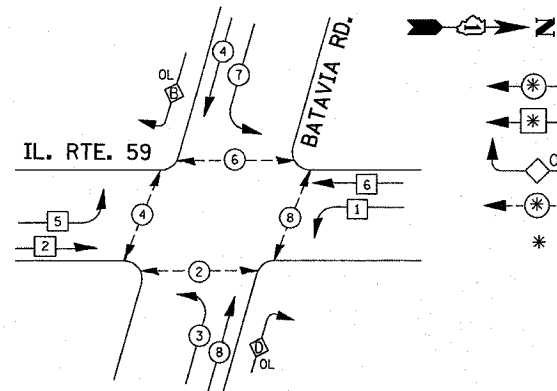
12" (300mm) TRAFFIC SIGNAL SECTION  
12" (300mm) PEDESTRIAN SIGNAL SECTION

ILLUMINATED SIGN "NO LEFT TURN"  
ILLUMINATED SIGN "NO RIGHT TURN"

PUSHBUTTON DETECTOR  
DETECTOR LOOP  
PERFORMED DETECTOR LOOP  
MICROWAVE VEHICLE SENSOR  
VIDEO DETECTOR  
CLOSED CIRCUIT TV  
EMERGENCY VEHICLE SYSTEM DETECTOR  
CONFIRMATION BEACON  
UNINTERRUPTIBLE POWER SUPPLY

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		<p align="center"><b>PROPOSED CABLE PLAN</b> <b>IL. RTE. 59 AT BATAVIA ROAD</b></p> <p>SCALE: _____ DATE: 11/19/2007</p> <p align="right">DRAWN BY: BCK DESIGNED BY: BCK CHECKED BY: DAD</p>

### CONTROLLER SEQUENCE



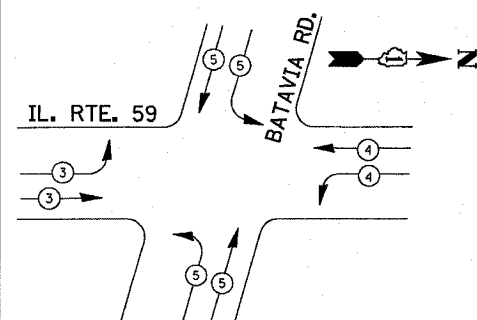
### LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- \* NUMBER REFERS TO ASSOCIATED PHASE

### PHASE DESIGNATION DIAGRAM

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5
D	= 8	+ 1

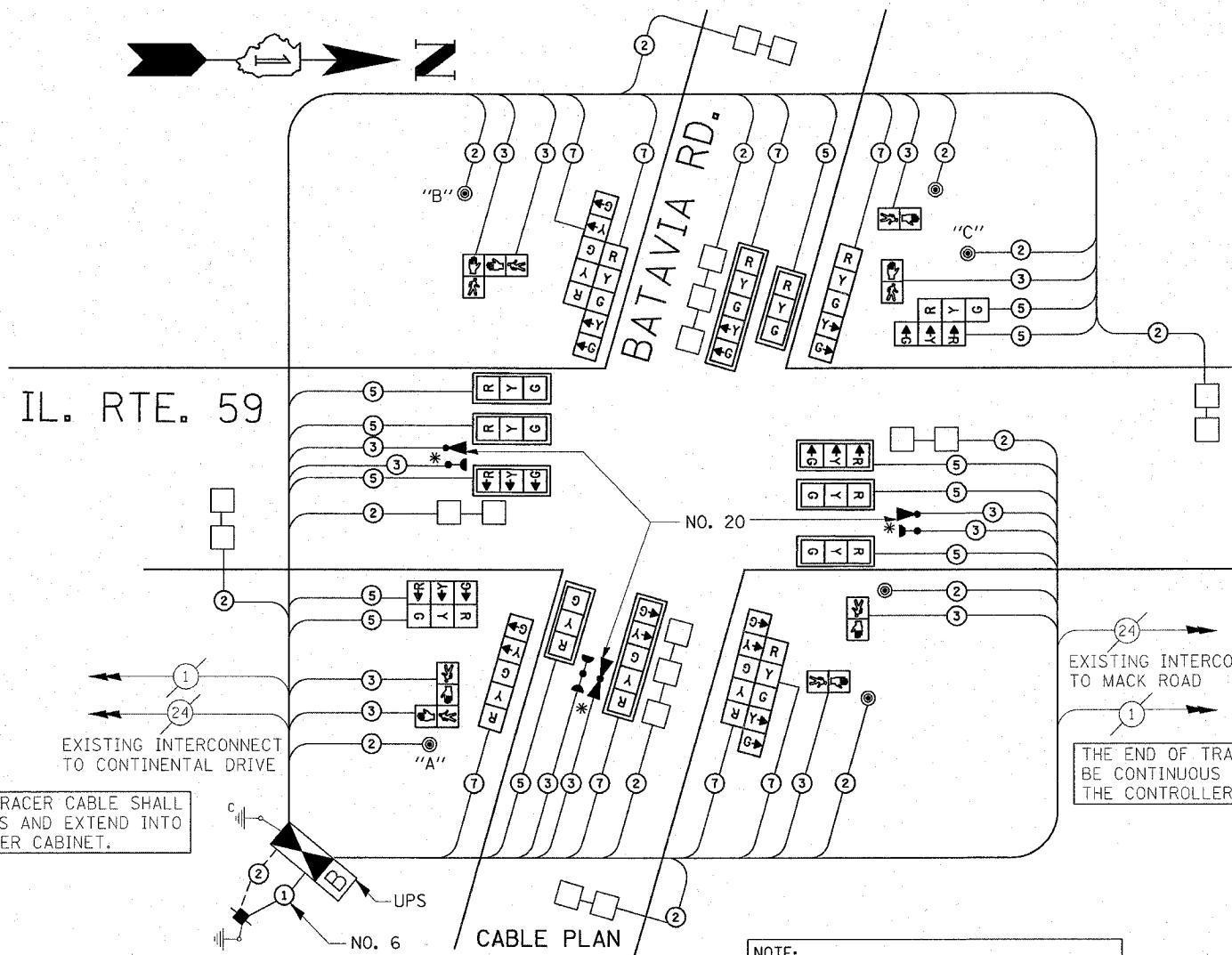
### EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

\* 2100 COST TO THE VILLAGE OF WARRENVILLE

IL. RTE. 59



THE END OF TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

EXISTING INTERCONNECT TO MACK ROAD

THE END OF TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

NOTE: THE PROPOSED TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT IS "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

### SCHEDULE OF QUANTITIES

ITEM	UNIT	QNTY	ITEM	UNIT	QNTY
SIGNAL PANEL - TYPE 1	SO. FT.	31.5	* ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	618
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	730	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
CONDUIT IN PUSH, 2" DIA., GALVANIZED STEEL	FOOT	114	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	141	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
CONDUIT IN PUSH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	35	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	50	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	2
CONDUIT IN PUSH, 4" DIA., GALVANIZED STEEL	FOOT	367	CONCRETE FOUNDATION, TYPE A	FOOT	16
HANDHOLE	EACH	7	CONCRETE FOUNDATION, TYPE C	FOOT	4
HEAVY-DUTY HANDHOLE	EACH	4	CONCRETE FOUNDATION, TYPE E 24-INCH DIAMETER	FOOT	20
DOUBLE HANDHOLE	EACH	1	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	884	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1	INDUCTIVE LOOP DETECTOR	EACH	8
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	1877	DETECTOR LOOP, TYPE I	FOOT	552
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1261	* LIGHT DETECTOR	EACH	2
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1840	* LIGHT DETECTOR AMPLIFIER	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2563	SIGNAL HEAD, L. E. D., 1-FACE, 5-SECT., BRKTED. MNTED.	EACH	2
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1763	SIGNAL HEAD, L. E. D., 1-FACE, 5-SECT., MAST ARM MNTED.	EACH	2
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2099	SIGNAL HEAD, L. E. D., 1-FACE, 3-SECT., MAST ARM MNTED.	EACH	8
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	25	SIGNAL HEAD, L. E. D., 2-FACE, 5-SECT., BRKTED. MNTED.	EACH	2
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	SIGNAL HEAD, L. E. D., 2-FACE, 3-SECT., BRKTED. MNTED.	EACH	2
			PEDESTRIAN SIGNAL HEADS, L. E. D., 1-FACE BRKTED. MNTED.	EACH	4
			PEDESTRIAN SIGNAL HEADS, L. E. D., 2-FACE BRKTED. MNTED.	EACH	2
			PUSH-BUTTONS	EACH	6
			SERVICE INSTALLATION, POLE MNTED.	EACH	1
			REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
			UNINTERRUPTIBLE POWER SUPPLY	EACH	1

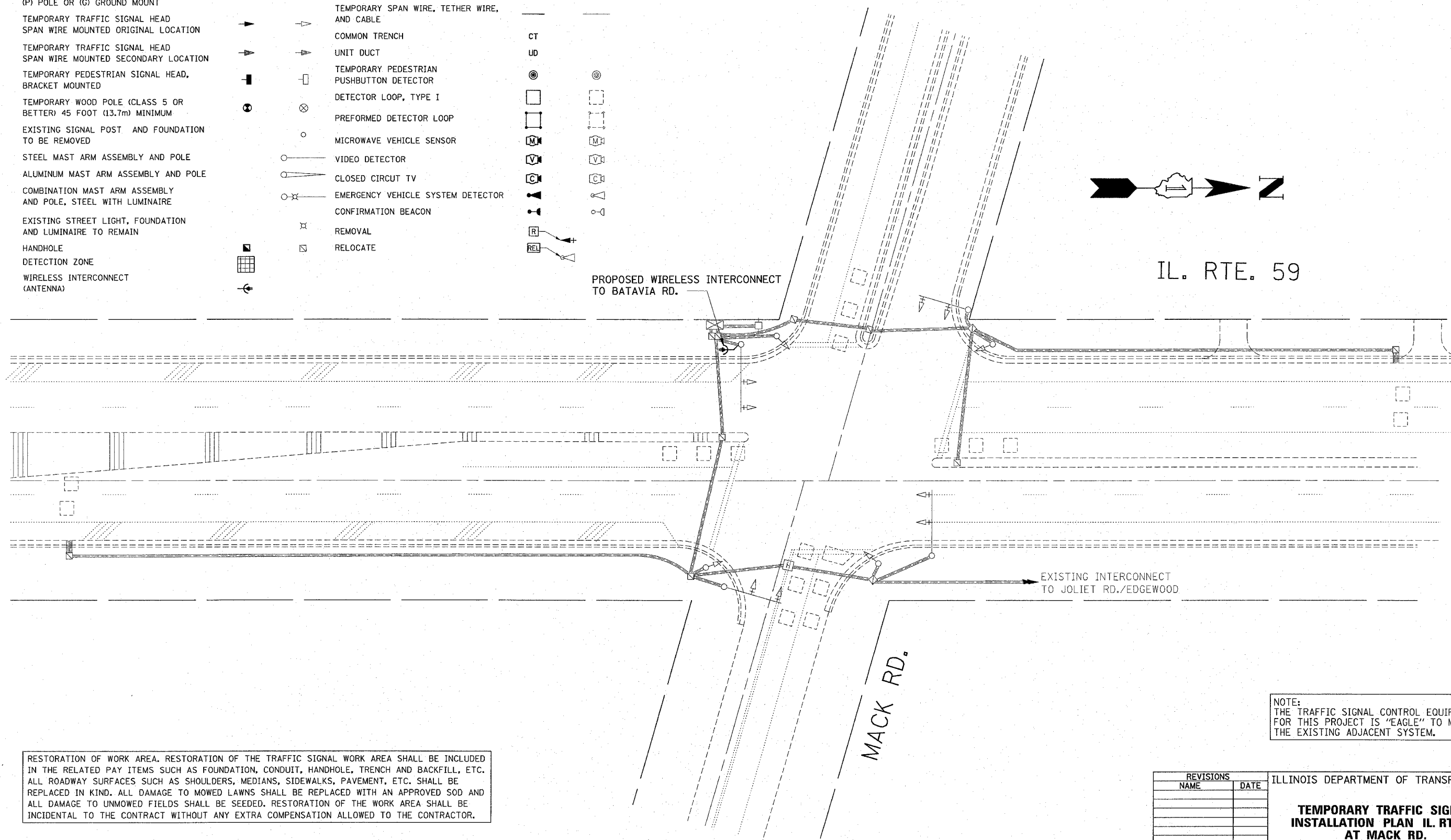
FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C - UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' H-2- (6m H-0.6m)
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
E - M. ARM POLE		CONTROLLER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

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### TEMPORARY TRAFFIC SIGNAL

	PROPOSED	EXISTING		PROPOSED	EXISTING
TEMPORARY CONTROLLER CABINET			HEAVY-DUTY HANDHOLE		
TEMPORARY SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT			G.S. CONDUIT IN TRENCH OR PUSHED		
TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION			TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE		
TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION			COMMON TRENCH	CT	
TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED			UNIT DUCT	UD	
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM			TEMPORARY PEDESTRIAN PUSHBUTTON DETECTOR		
EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED			DETECTOR LOOP, TYPE I		
STEEL MAST ARM ASSEMBLY AND POLE			PREFORMED DETECTOR LOOP		
ALUMINUM MAST ARM ASSEMBLY AND POLE			MICROWAVE VEHICLE SENSOR		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE			VIDEO DETECTOR		
EXISTING STREET LIGHT, FOUNDATION AND LUMINAIRE TO REMAIN			CLOSED CIRCUIT TV		
HANDHOLE			EMERGENCY VEHICLE SYSTEM DETECTOR		
DETECTION ZONE			CONFIRMATION BEACON		
WIRELESS INTERCONNECT (ANTENNA)			REMOVAL		
			RELOCATE		



IL. RTE. 59

PROPOSED WIRELESS INTERCONNECT TO BATAVIA RD.

EXISTING INTERCONNECT TO JOLIET RD./EDGEWOOD

MACK RD.

NOTE:  
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT IS "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEMS SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDDED. RESTORATION OF THE WORK AREA SHALL BE INCIDENTAL TO THE CONTRACT WITHOUT ANY EXTRA COMPENSATION ALLOWED TO THE CONTRACTOR.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

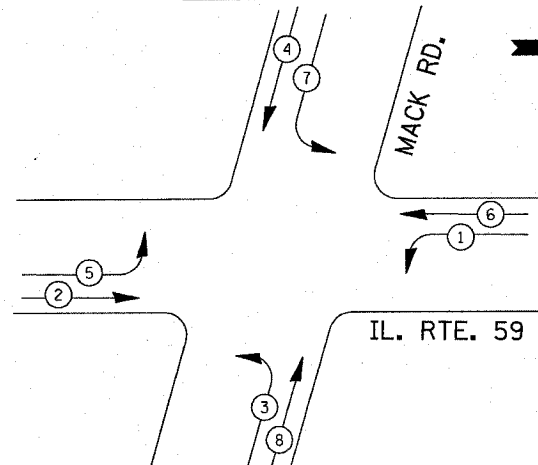
### TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN IL. RTE. 59 AT MACK RD.

SCALE:  
DATE: 11/19/2007

DRAWN BY: BCK  
DESIGNED BY: BCK  
CHECKED BY: DAD

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 11/19/2007  
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 kanthaphixybc

### CONTROLLER SEQUENCE

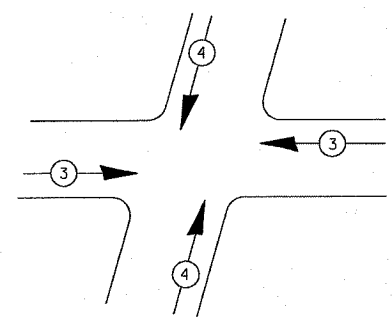


### PHASE DESIGNATION DIAGRAM

DUAL ENTRY - ALL LEGS  
PROTECTED/PERMITTED LEFT TURN PHASING

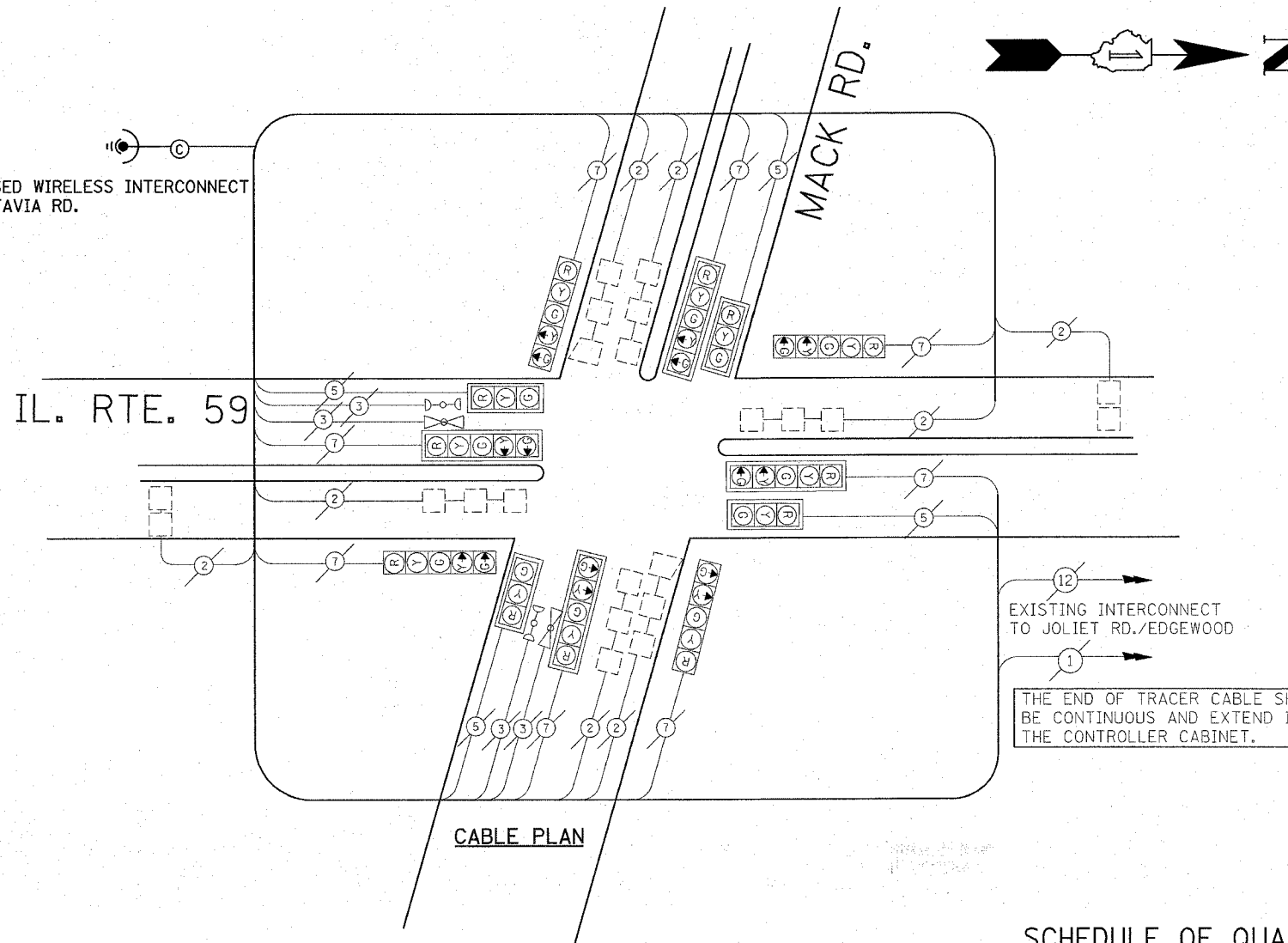
- #### LEGEND
- DUAL ENTRY PHASE
  - PROTECTED LEFT TURN PHASE
  - OVERLAP
  - PEDESTRIAN PHASE
  - NUMBER REFERS TO ASSOCIATED PHASE

### PROPOSED EMERGENCY VEHICLE SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTOR		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

PROPOSED WIRELESS INTERCONNECT TO BATAVIA RD.



### CABLE PLAN

### SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND.)	WATTAGE LED	% OPERATION	
SIGNAL (RED)	12	135	17	0.50	102.00
(YELLOW)	12	135	25	0.25	75.00
(GREEN)	12	135	15	0.25	45.00
ARROW	16	135	12	0.10	19.20
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 341.20
ENERGY SUPPLY					

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEMS SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED. RESTORATION OF THE WORK AREA SHALL BE INCIDENTAL TO THE CONTRACT WITHOUT ANY EXTRA COMPENSATION ALLOWED TO THE CONTRACTOR.

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 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' H-2=
E - M. ARM POLE		SIGNAL POST	2 (1.0)	(6m H-0.6m)=	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

NOTE: THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT IS "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

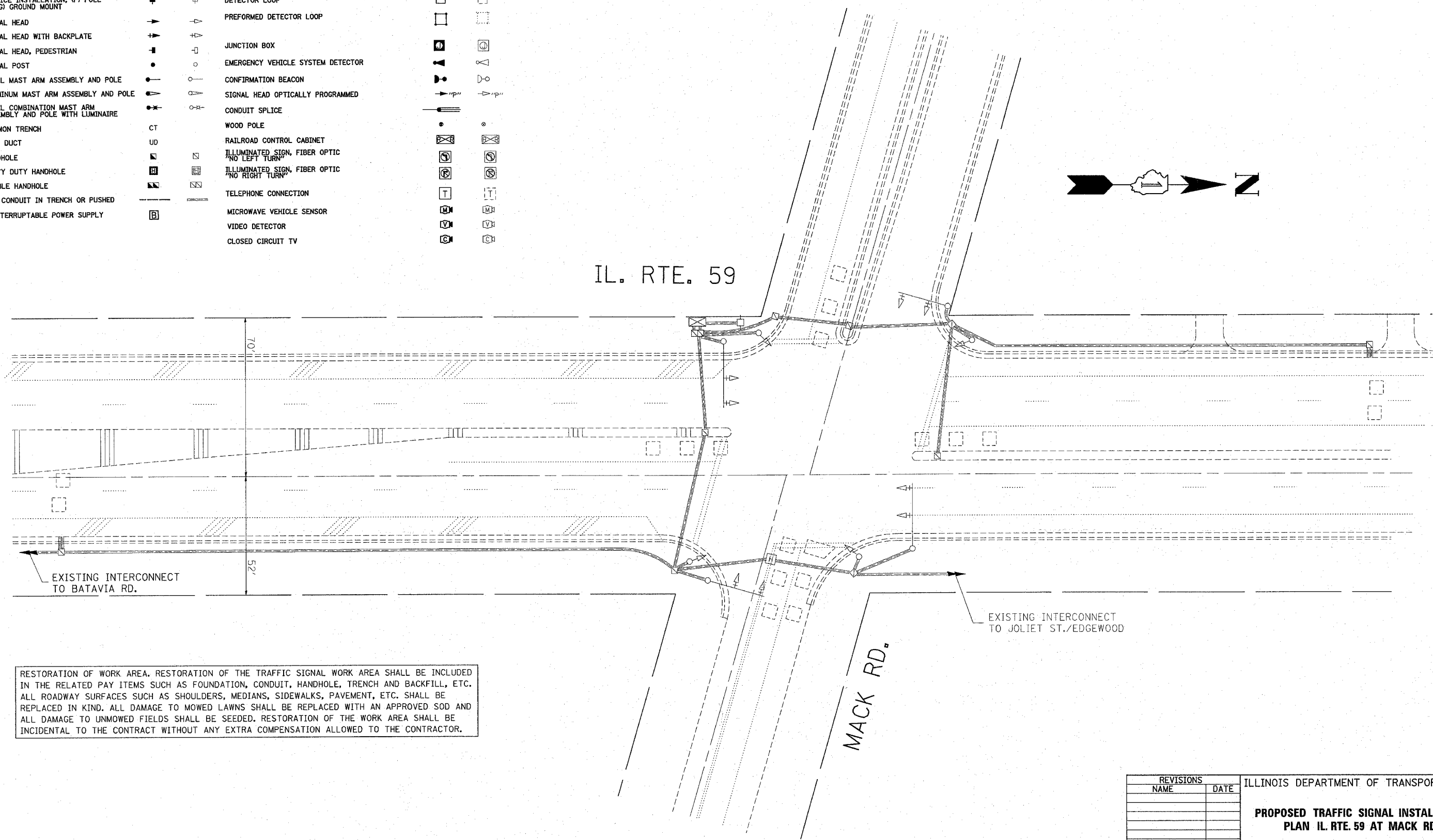
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		<b>TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL. RTE. 59 AT MACK RD.</b>  SCALE: _____ DATE: 11/19/2007 DRAWN BY: BCK DESIGNED BY: BCK CHECKED BY: DAD

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DuPAGE	42	22
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60D51				

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER CABINET			PEDESTRIAN PUSHBUTTON DETECTOR		
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT			DETECTOR LOOP		
SIGNAL HEAD			PERFORMED DETECTOR LOOP		
SIGNAL HEAD WITH BACKPLATE			JUNCTION BOX		
SIGNAL HEAD, PEDESTRIAN			EMERGENCY VEHICLE SYSTEM DETECTOR		
SIGNAL POST			CONFIRMATION BEACON		
STEEL MAST ARM ASSEMBLY AND POLE			SIGNAL HEAD OPTICALLY PROGRAMMED		
ALUMINUM MAST ARM ASSEMBLY AND POLE			CONDUIT SPLICE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			WOOD POLE		
COMMON TRENCH	CT		RAILROAD CONTROL CABINET		
UNIT DUCT	UD		ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"		
HANDHOLE			ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"		
HEAVY DUTY HANDHOLE			TELEPHONE CONNECTION		
DOUBLE HANDHOLE			MICROWAVE VEHICLE SENSOR		
G.S. CONDUIT IN TRENCH OR PUSHED			VIDEO DETECTOR		
UNINTERRUPTABLE POWER SUPPLY			CLOSED CIRCUIT TV		



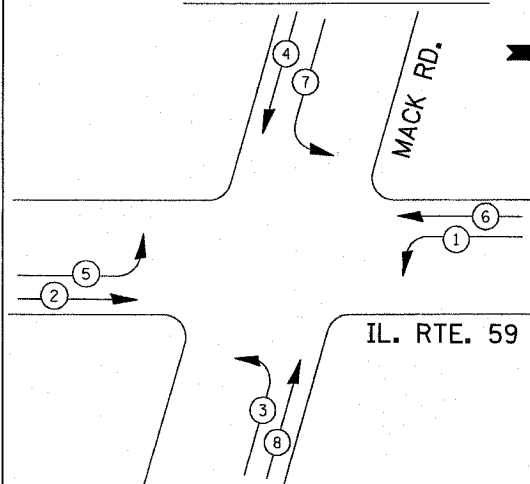
RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEMS SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED. RESTORATION OF THE WORK AREA SHALL BE INCIDENTAL TO THE CONTRACT WITHOUT ANY EXTRA COMPENSATION ALLOWED TO THE CONTRACTOR.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		<p><b>PROPOSED TRAFFIC SIGNAL INSTALLATION PLAN IL. RTE. 59 AT MACK RD.</b></p> <p>SCALE: _____</p> <p>DATE: 11/19/2007</p> <p>DRAWN BY: BCK DESIGNED BY: BCK CHECKED BY: DAD</p>

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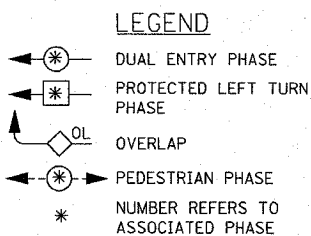
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 kanthaphixaybc

**CONTROLLER SEQUENCE**

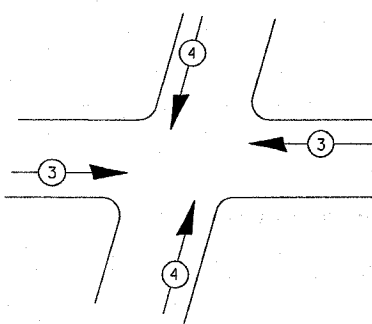


**PHASE DESIGNATION DIAGRAM**

DUAL ENTRY - ALL LEGS  
PROTECTED/PERMITTED LEFT TURN PHASING



**PROPOSED EMERGENCY VEHICLE SEQUENCE**



EXISTING EMERGENCY VEHICLE PREEMPTOR		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

**IL. RTE. 59**

EXISTING INTERCONNECT TO BATAVIA RD.

EXISTING INTERCONNECT TO JOLIET RD./EDGEWOOD

THE END OF TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

THE END OF TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

**CABLE PLAN**

**CABLE PLAN LEGEND**

	PROPOSED	EXISTING
CONTROLLER CABINET		
RAILROAD CONTROL CABINET		
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT		
TELEPHONE CONNECTION		
GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE		
FIBER OPTIC CABLE IN CONDUIT, NUMBER OF FIBERS AS NOTED		
ELECTRIC CABLE IN CONDUIT, NO. 14, UNLESS OTHERWISE NOTED, NUMBER OF CONDUCTORS AS NOTED		
GROUND CABLE IN CONDUIT NO. 6 COPPER (GREEN)		
SIGNAL FACE WITH BACKPLATE. 'P' INDICATES PROGRAMMED HEAD		
12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE		
12" (300mm) TRAFFIC SIGNAL SECTION		
12" (300mm) PEDESTRIAN SIGNAL SECTION		
ILLUMINATED SIGN "NO LEFT TURN"		
ILLUMINATED SIGN "NO RIGHT TURN"		
PUSHBUTTON DETECTOR		
DETECTOR LOOP		
PREFORMED DETECTOR LOOP		
MICROWAVE VEHICLE SENSOR		
VIDEO DETECTOR		
CLOSED CIRCUIT TV		
EMERGENCY VEHICLE SYSTEM DETECTOR		
CONFIRMATION BEACON		
UNINTERRUPTABLE POWER SUPPLY		

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	12	135	17	0.50	102.00
(YELLOW)	12	135	25	0.25	75.00
(GREEN)	12	135	15	0.25	45.00
ARROW	16	135	12	0.10	19.20
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 341.20

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 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'HL-2"= (6m+L-0.6m)=
E - M. ARM POLE		SIGNAL POST	2 (1.0)		
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEMS SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED. RESTORATION OF THE WORK AREA SHALL BE INCIDENTAL TO THE CONTRACT WITHOUT ANY EXTRA COMPENSATION ALLOWED TO THE CONTRACTOR.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		<p><b>CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL. RTE. 59 AT MACK RD.</b></p> <p>SCALE: _____</p> <p>DATE: 11/19/2007</p> <p>DRAWN BY: BCK DESIGNED BY: BCK CHECKED BY: DAD</p>

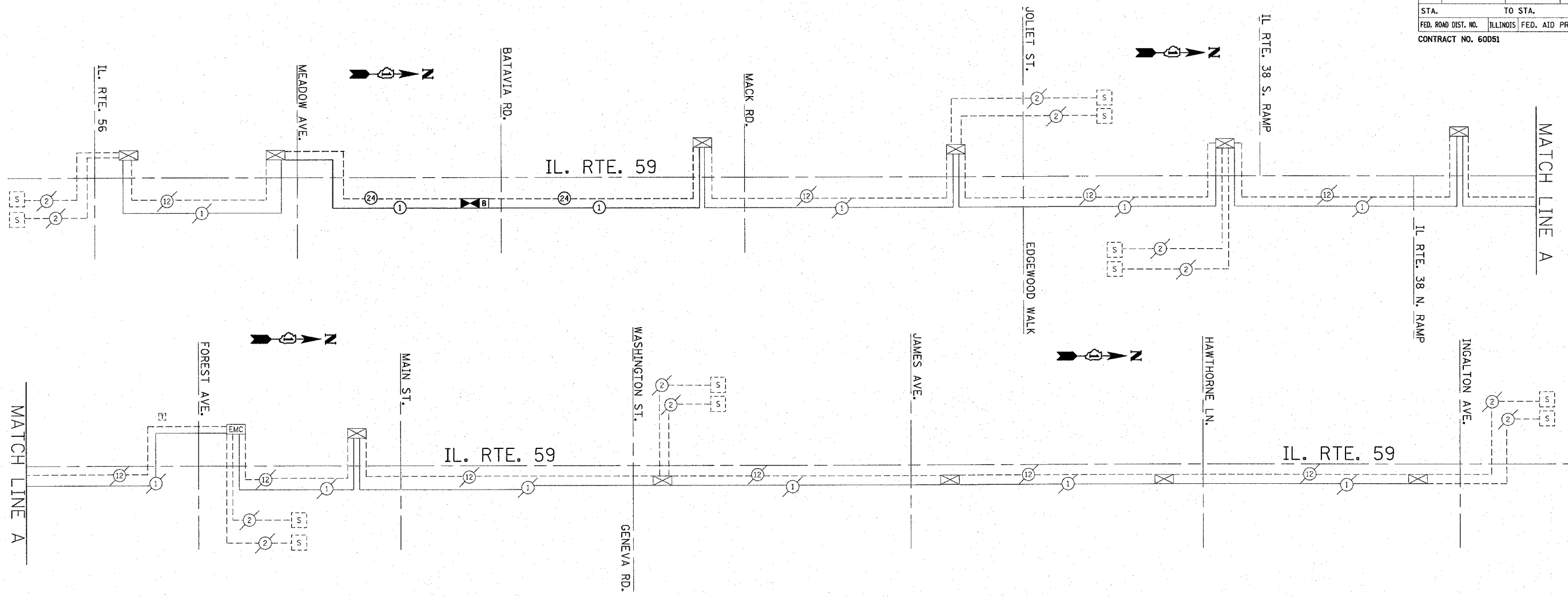
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DuPAGE	42	25
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60D51				



ITEM

UNIT

QUANTITY

FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125 MM12F & SM12F.	FOOT	1650
ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1C	FOOT	1557
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM - LEVEL 1	EACH	1

**INTERCONNECT SCHEMATIC LEGEND**

	PROPOSED	EXISTING		PROPOSED	EXISTING
INTERSECTION CONTROLLER			EXISTING SAMPLING (SYSTEM) DETECTORS;		
MASTER CONTROLLER			PROPOSED INTERSECTION AND		
MASTER MASTER CONTROLLER			SAMPLING (SYSTEM) DETECTORS.		
TELEPHONE CONNECTION			EXISTING SAMPLING (SYSTEM) DETECTORS,		
INTERSECTION & SAMPLING (SYSTEM) DETECTORS			PROPOSED SAMPLING (SYSTEM) DETECTORS		
PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS			FIBER OPTIC CABLE IN CONDUIT,		
EXISTING INTERSECTION LOOP DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS			NUMBER OF FIBERS AS NOTED		
SAMPLING (SYSTEM) DETECTORS			INTERCONNECT CABLE - NO. 18		
SAMPLING (SYSTEM) PREFORMED DETECTORS			3 PAIR TWISTED, SHIELDED		
			ELECTRIC CABLE IN CONDUIT,		
			LEAD-IN, NO. 14, 1 PAIR		
			ELECTRIC CABLE IN CONDUIT, TRACER,		
			NO. 14 1/C, UNLESS NOTED OTHERWISE		
			UNINTERRUPTABLE POWER SUPPLY		

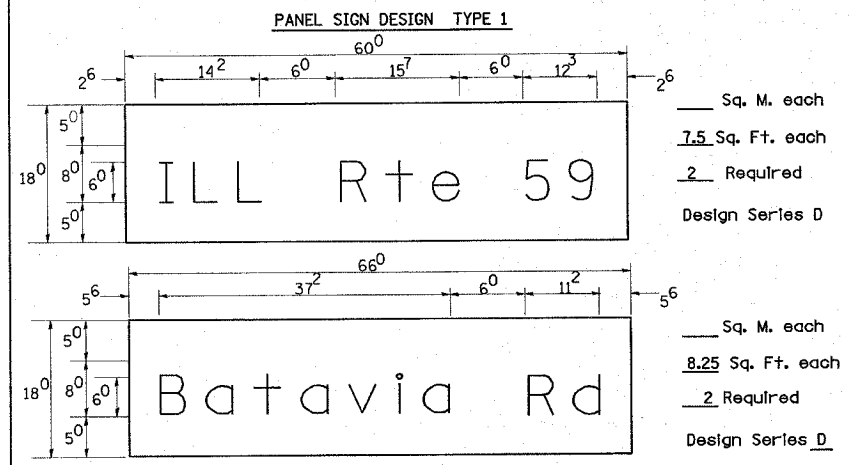
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**INTERCONNECT SCHEMATIC PLAN**  
**IL. RTE. 59 (FROM IL. RTE. 56**  
**TO INGLATON AV.)**

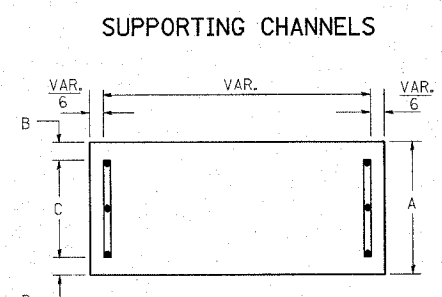
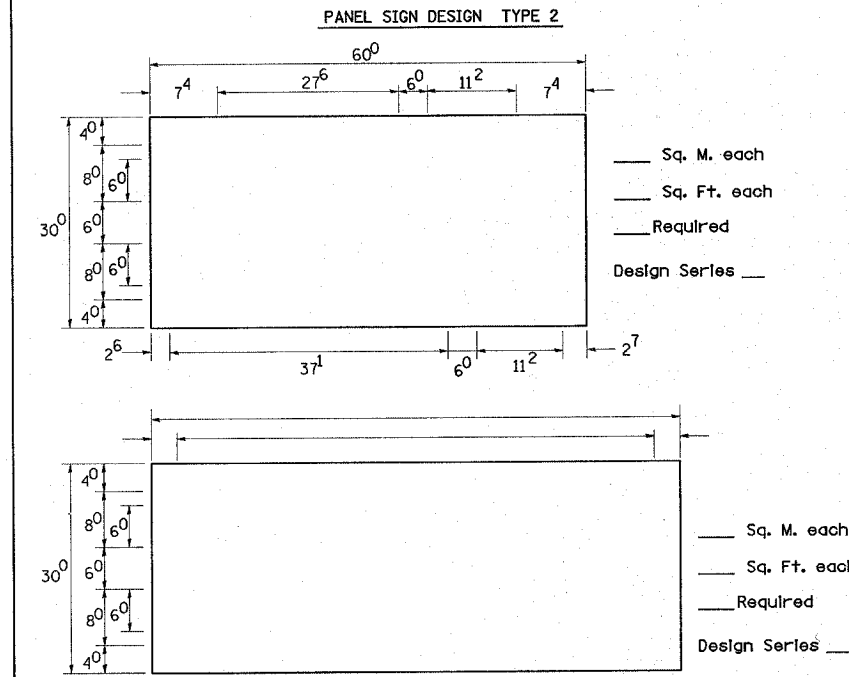
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 DATE 11/21/2007

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 DESIGNED BY BCK  
 CHECKED BY DAD

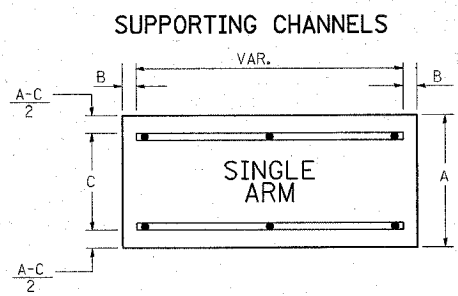
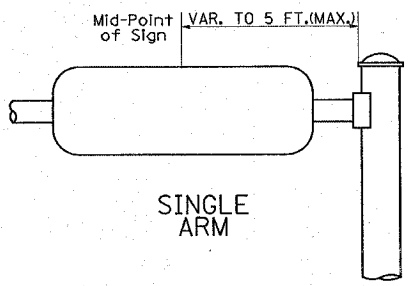
EXAMPLE, 2<sup>3</sup> DENOTES  $\frac{3''}{8}$



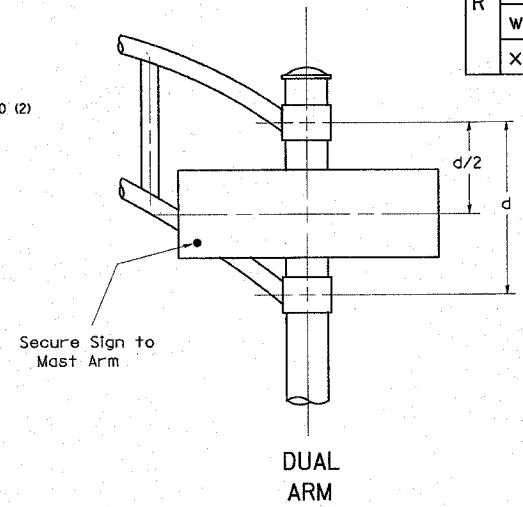
NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS



A	B	C
18"	2"	14"



A	B	C
18"	2"	12"
30"	2"	22"



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

Upper Case To Lower Case  
 Spacing Chart 8-6 Inch Series "C & D"

SERIES	SECOND LETTER																	
	acde		goh		bhikl		mnp ru		f w		J		s t		v y		x z	
A W X	12	14	14	15	12	14	06	10	11	14	06	10	11	12	12	14	14	15
B	14	15	20	21	14	15	11	12	14	15	12	14	12	14	14	15	14	15
C E G	14	15	20	21	12	14	06	10	12	14	12	14	14	15	14	15	15	15
D O Q R	14	15	20	21	14	15	06	10	12	14	12	14	14	15	14	15	15	15
F	05	06	14	15	06	10	05	06	06	10	06	10	06	10	11	12	12	12
H I M N	20	21	22	24	20	21	14	15	16	17	16	17	20	21	20	21	21	21
J U	20	21	20	21	16	17	14	15	16	17	16	17	16	17	20	21	21	21
K L	11	12	16	17	11	12	05	06	11	12	11	12	11	12	12	14	12	14
P	12	14	14	15	12	14	05	06	11	12	11	12	12	14	12	14	12	14
S	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14	12	14
T	11	12	16	17	06	10	06	10	11	12	11	12	11	12	12	14	12	14
V	06	10	14	15	11	12	06	10	12	14	12	14	12	14	12	14	12	14
Y	05	06	14	15	06	10	05	06	05	07	05	06	06	10	11	12	12	12
Z	16	17	22	24	16	17	12	14	16	17	16	17	16	17	20	21	21	21

Lower Case To Lower Case  
 Spacing Chart 6 Inch Series "C & D"

SERIES	SECOND LETTER																	
	acde		goh		bhikl		mnp ru		f w		J		s t		v y		x z	
ad h g l j	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17	17	17
im n q u	12	14	16	17	11	12	05	06	11	12	11	12	12	14	12	14	12	14
b f k o p s	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14	12	14
c e	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14	12	14
r	06	10	12	14	06	10	03	03	05	06	05	06	06	10	06	10	06	10
t z	12	14	16	17	12	14	06	10	11	12	11	12	12	14	12	14	12	14
v y	11	12	14	15	11	12	05	06	06	10	06	10	11	12	11	12	12	14
w	11	12	14	15	11	12	05	06	11	12	11	12	11	12	12	14	12	14
x	12	14	16	17	11	12	05	06	11	12	11	12	11	12	12	14	12	14

Number To Number  
 Spacing Chart 8 Inch Series "C & D"

SERIES	SECOND NUMBER																			
	0		1		2		3		4		5		6		7		8		9	
0 9	16	17	16	17	14	15	12	14	14	15	14	15	16	17	12	14	16	17	16	17
1	20	21	20	21	20	21	16	17	14	15	20	21	20	21	14	15	20	21	20	21
2 3 4	14	15	14	15	14	15	12	14	12	14	14	15	14	15	11	12	16	17	14	15
5	14	15	14	15	14	15	11	12	11	12	14	15	14	15	11	12	14	15	14	15
6	16	17	14	15	14	15	12	15	12	14	14	15	14	15	11	12	14	15	14	15
7	12	14	12	14	14	15	12	15	05	06	12	14	14	15	11	12	14	15	12	14
8	16	17	16	17	14	15	12	15	12	14	14	15	16	17	12	14	16	17	14	15

UPPER AND LOWER CASE  
 LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS		8 INCH UPPER CASE LETTERS		LETTERS	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>

NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>
2	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
3	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
4	3 <sup>5</sup>	4 <sup>3</sup>	4 <sup>7</sup>	5 <sup>7</sup>
5	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
6	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
7	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
8	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
9	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
0	3 <sup>4</sup>	4 <sup>2</sup>	4 <sup>5</sup>	5 <sup>5</sup>

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**MAST ARM MOUNTED STREET NAME SIGNS**

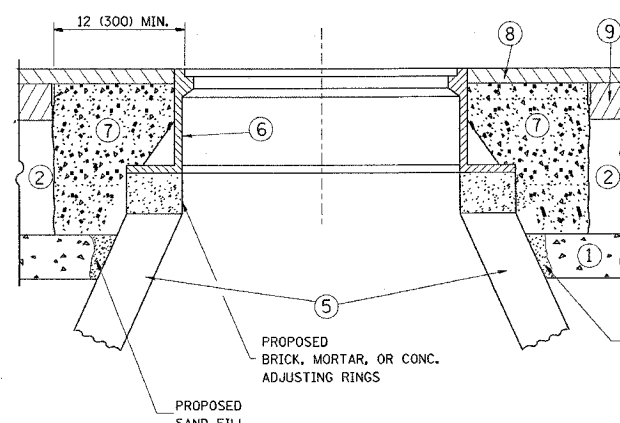
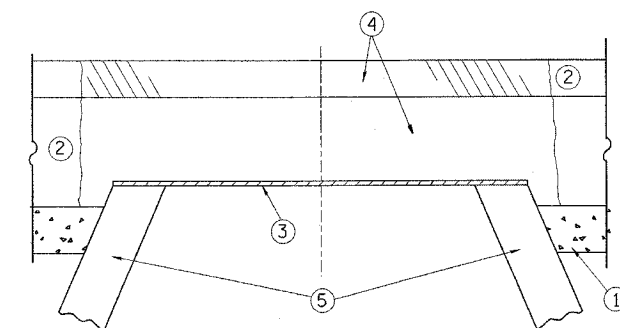
SCALE: VERT. 1"=20'  
 HORIZ. 1"=20'  
 DATE 11/27/2007

DRAWN BY: BCK  
 DESIGNED BY: BCK  
 CHECKED BY: DAD

PLOT DATE = 11/27/2007  
 FILE NAME = c:\projects\112n2\112n2signs.dgn  
 PLOT SCALE = 20.0000 / IN  
 REFERENCE = SHEET

- 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
    - \* 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  
 SELF TAPPING WITH NEOPRENE WASHER  
 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.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DUPAGE	42	27
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	



**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

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

**STAGE 2 (AFTER PAVEMENT MILLING)**

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS SI CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE 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
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

**LOCATION OF STRUCTURES:**

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

**BASIS OF PAYMENT:** THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"  
NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

**NOTES:**

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

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

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

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

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

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

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

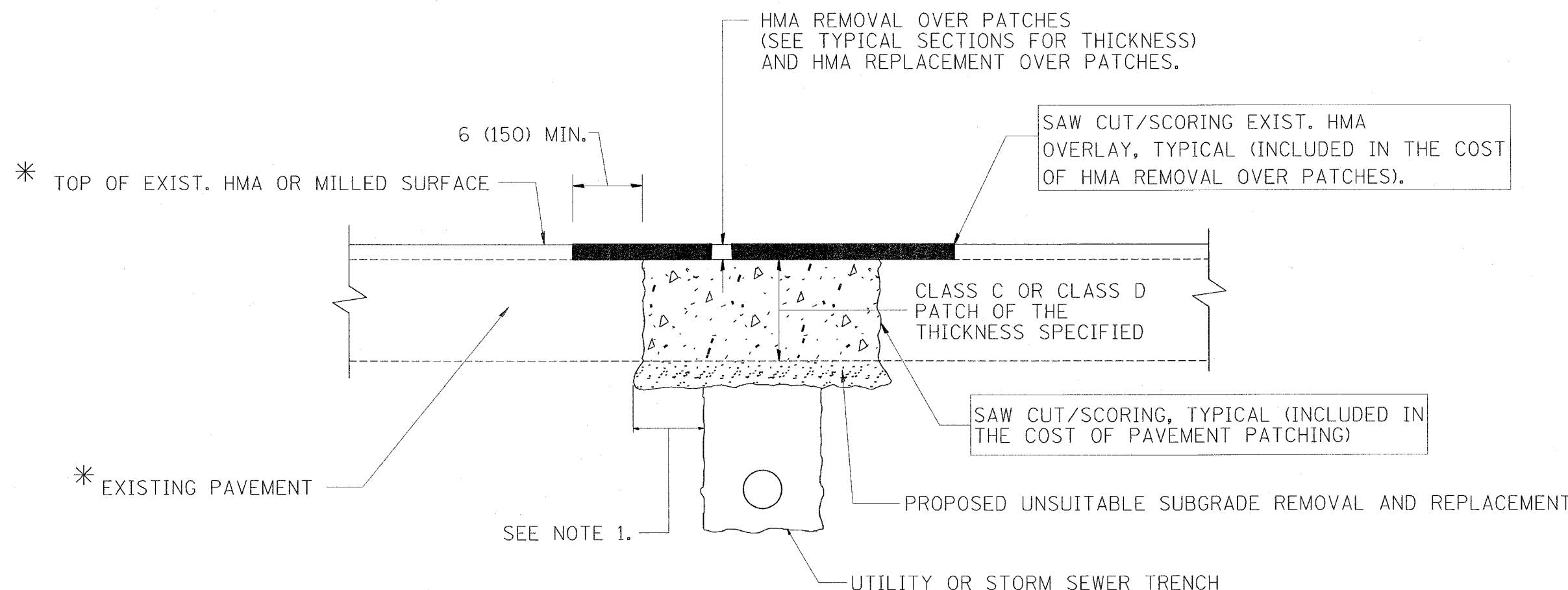
REVISIONS	
NAME	DATE
R. SHAH	10/25/94
R. SHAH	01/30/95
R. SHAH	03/10/95
A. ABBAS	03/21/97
R. WIEDEMAN	05/14/04
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

SCALE: VERT. NONE  
HORIZ. NONE  
PLOT DATE: 11/6/2007

DRAWN BY  
CHECKED BY

BD600-03 (BD-B)  
REVISION DATE: 01/01/07



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE FULL DEPTH PATCHES
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

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

REVISIONS	
NAME	DATE
R. SHAH	10/25/94
R. SHAH	01/14/95
R. SHAH	03/23/95
R. SHAH	04/24/95
A. HOUSEH	03/15/96
A. ABBAS	03/21/97
A. ABBAS	01/20/98
ART ABBAS	04/27/98
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**PAVEMENT PATCHING FOR  
 HMA SURFACED  
 PAVEMENT**

SCALE: VERT. NONE  
 HORIZ. HORIZ.  
 PLOT DATE: 11/6/2007

DRAWN BY  
 CHECKED BY  
 BD400-04 (BD-22)  
 REVISION DATE: 01/01/07

PLOT DATE = 11/6/2007  
 PLOT SCALE = 50/000 / IN.  
 USER NAME = gman/hm

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DUPAGE	42	29
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001  
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)  
1/4" (5)\*\*

18" (450) MAX.

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SALT TOLERANT SOD AND TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

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

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

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) 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).

- \* 3" (75) 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, 4" (100) 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 HMA 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.

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

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

# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

REVISIONS	
NAME	DATE
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
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

## CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

SCALE: VERT. NONE  
HORIZ. PLOT DATE: 11/6/2007

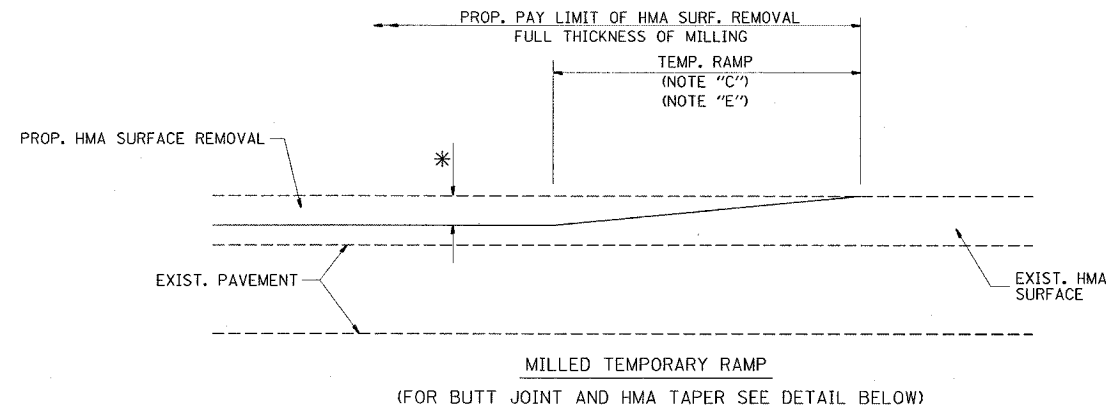
DRAWN BY  
CHECKED BY

BD600-06 (BD-24)

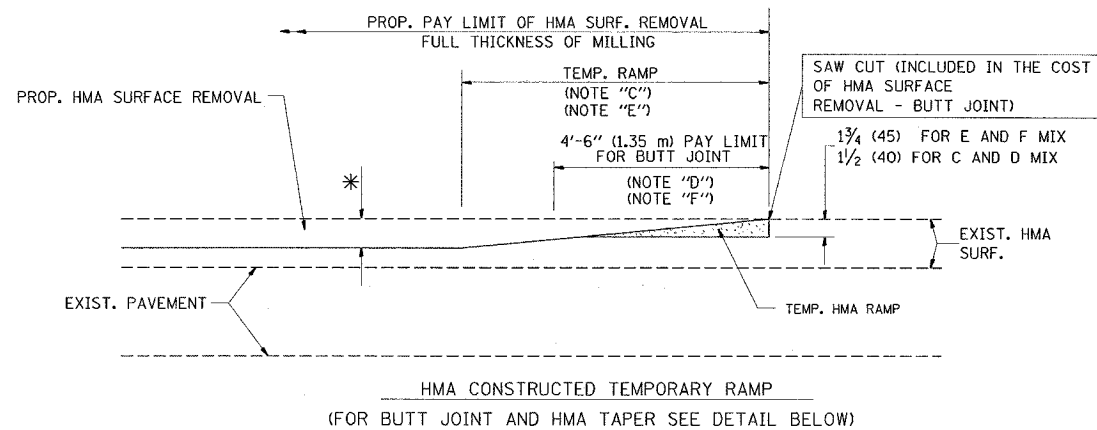
REVISION DATE: 01/01/07

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USER NAME = gannphm

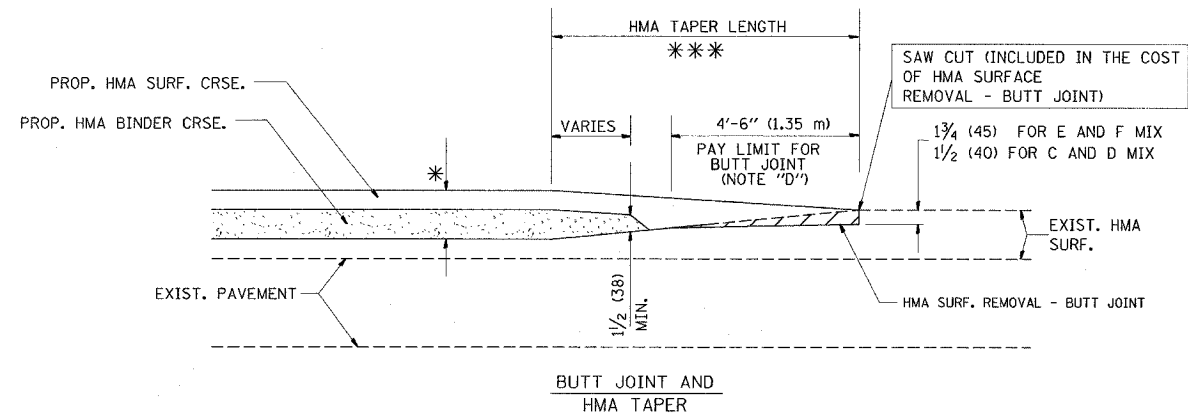
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DUPAGE	42	30
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	



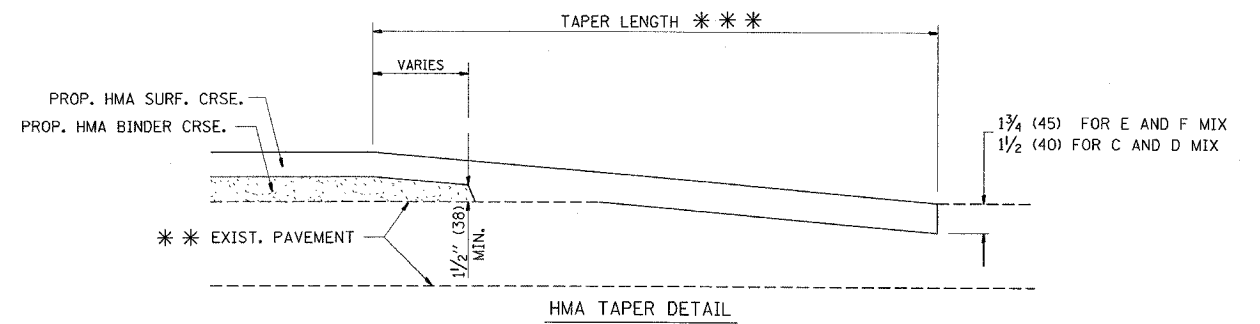
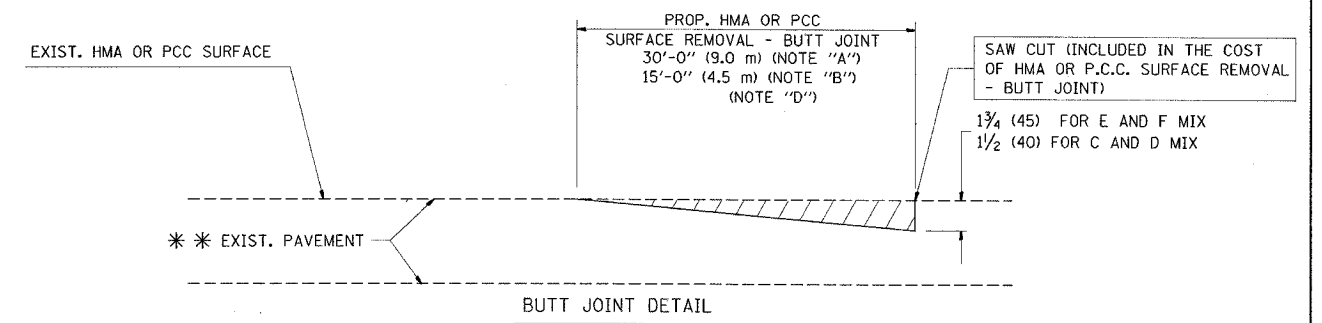
OPTION 1



OPTION 2  
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER  
FOR MILLING AND RESURFACING



TYPICAL BUTT JOINT AND HMA TAPER  
FOR RESURFACING ONLY

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

NOTES

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

\*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")  
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

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

BASIS OF PAYMENT:

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

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

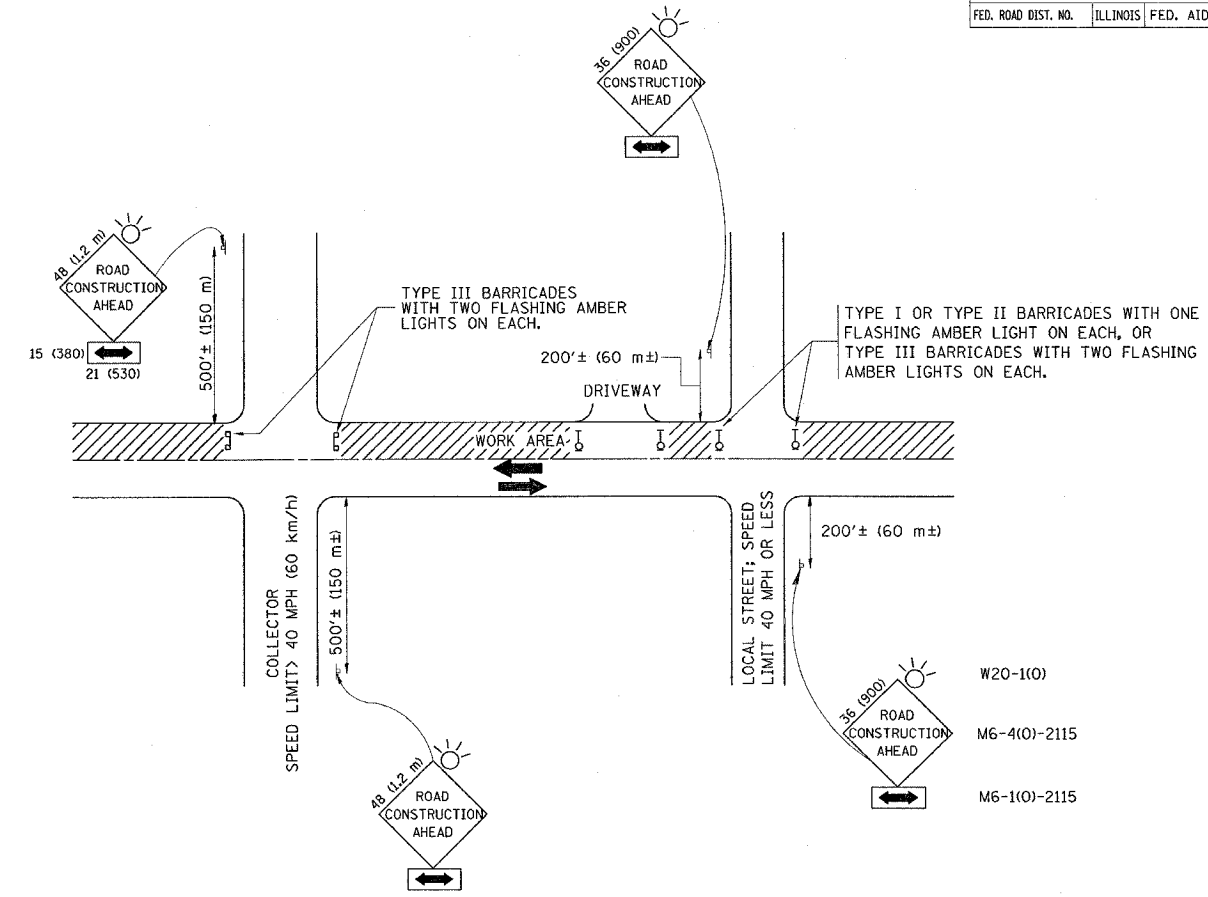
SCALE: VERT. NONE  
HORIZ. NONE  
PLOT DATE: 11/7/2007

DRAWN BY

CHECKED BY

BD400-05 (VI-BD32)  
REVISION DATE: 01/01/07

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DUPAGE	42	31
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



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

NOTES:

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

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

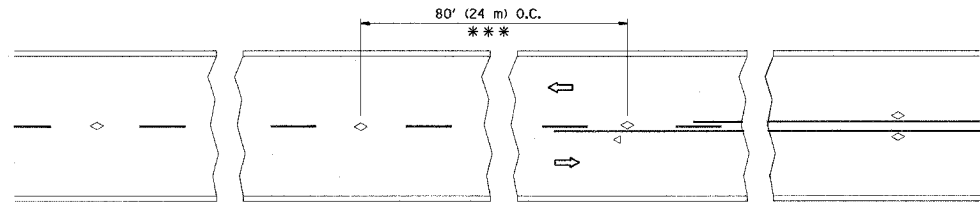
REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

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

SCALE: DATE: 11/6/2007  
 DRAWN BY: CHECKED BY: TC-10  
 REVISION DATE: 01/06/00

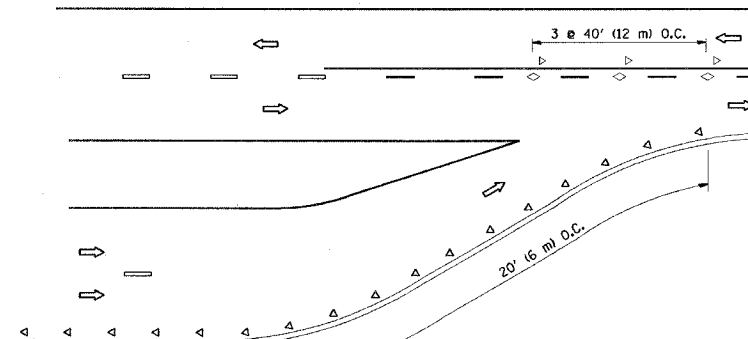
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DUPAGE	42	32
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

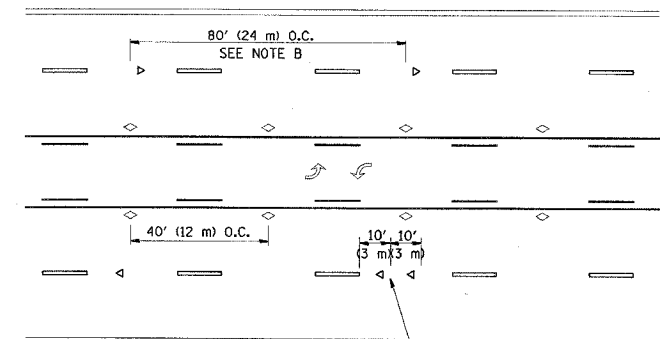


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

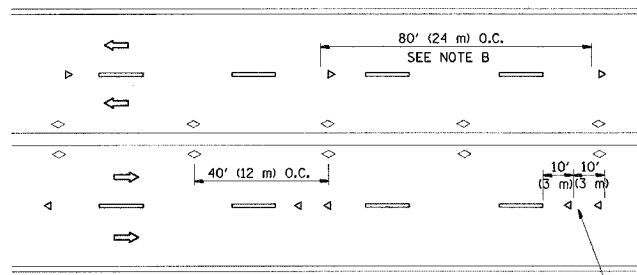
TWO-LANE/TWO-WAY



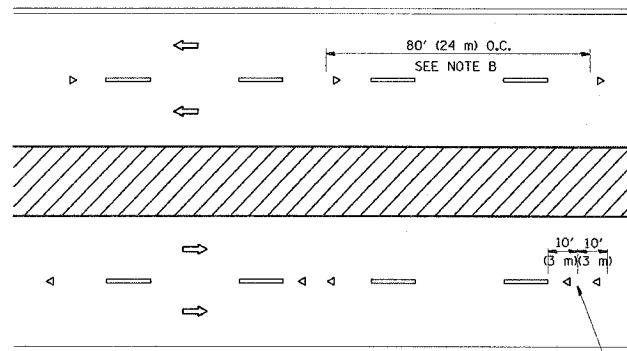
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

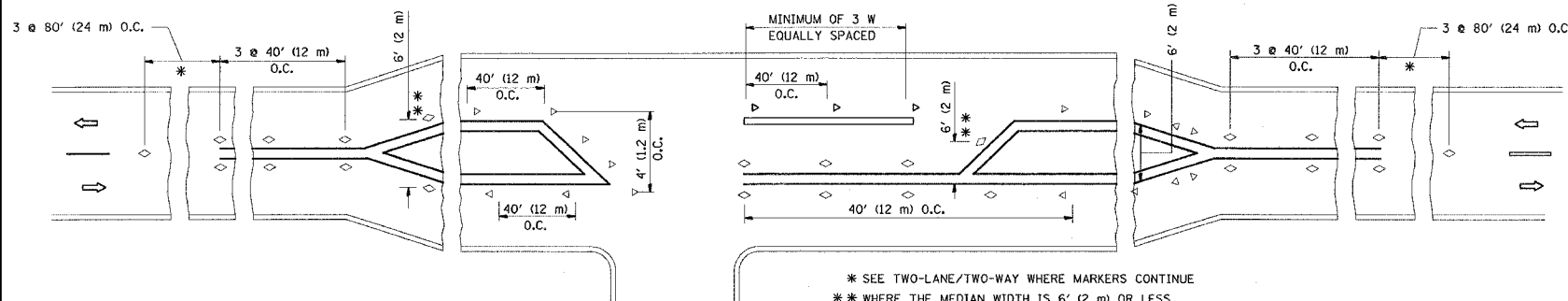
1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE 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 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/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 6' (2 m) OR LESS USE TWO-WAY MARKERS.

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 TYPICAL APPLICATIONS  
 RAISED REFLECTIVE PAVEMENT  
 MARKERS (SNOW-PLOW RESISTANT)

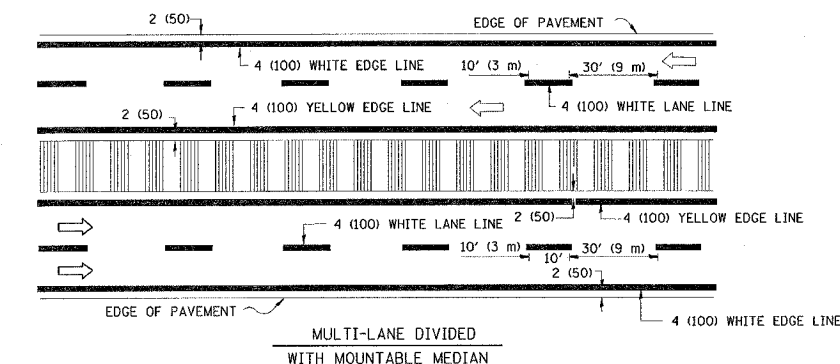
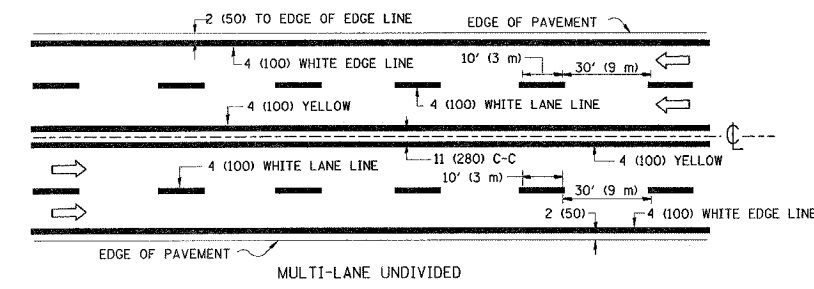
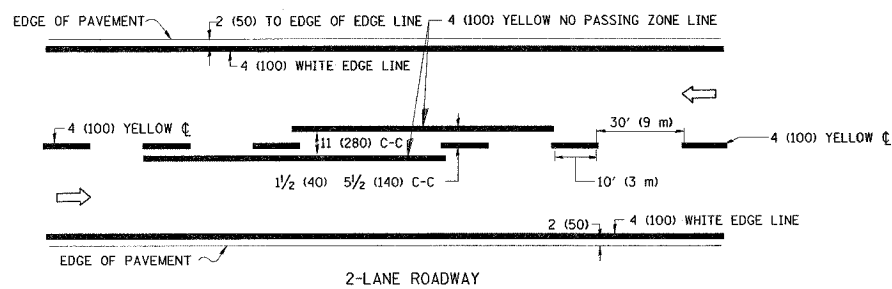
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 DATE: 11/7/2007

DRAWN BY CADD  
 CHECKED BY  
 TC-11

REVISION DATE: 01/06/00

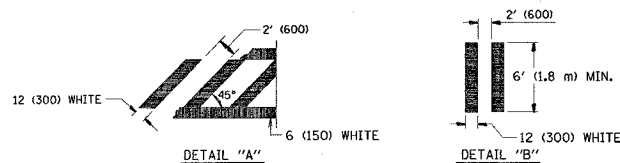
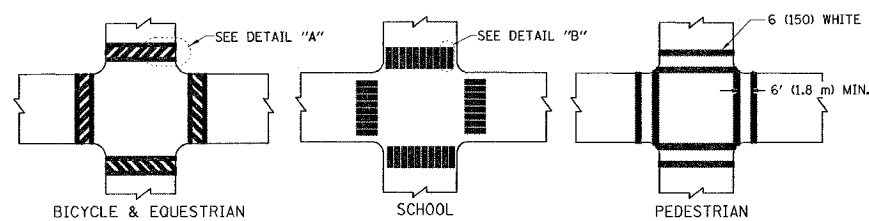


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DUPAGE	42	33
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

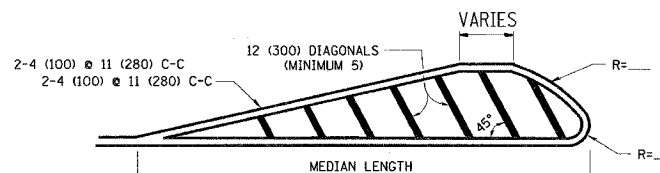
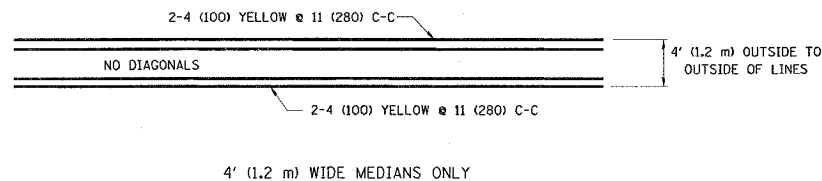


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



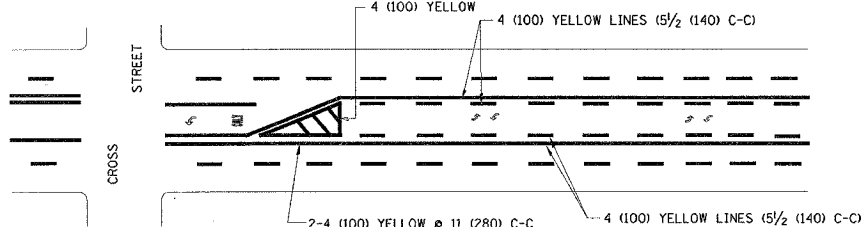
TYPICAL CROSSWALK MARKING



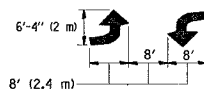
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

MEDIANS OVER 4' (1.2 m) WIDE

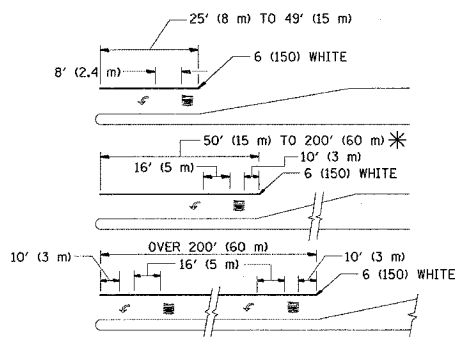


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

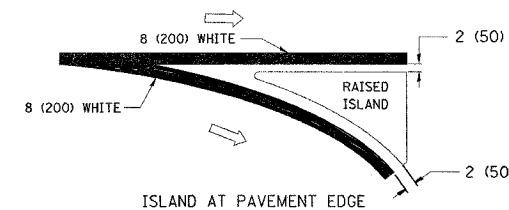
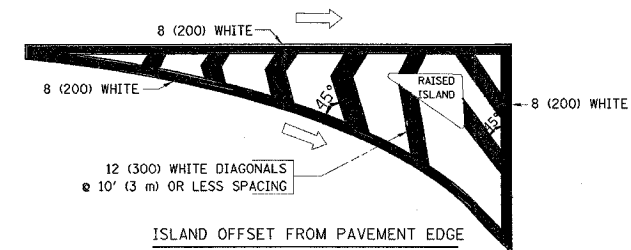


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
\* AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) □ AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

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

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

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.

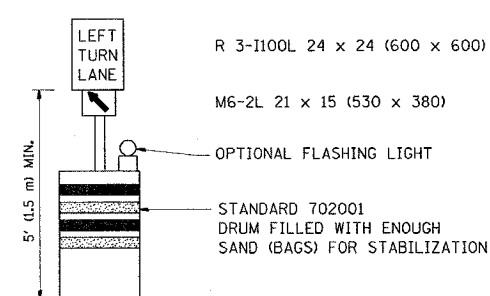
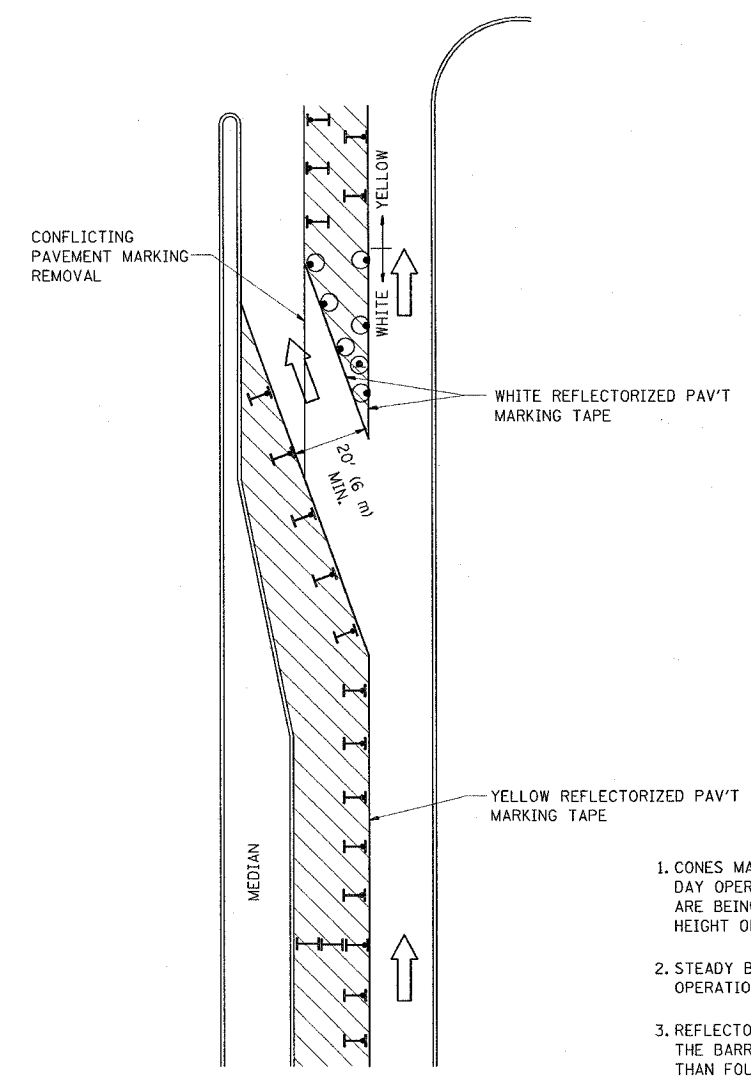
REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT ONE  
TYPICAL PAVEMENT MARKINGS

SCALE: NONE  
DATE: 11/7/2007

DRAWN BY CADD  
CHECKED BY  
TC-13  
REVISION DATE: 01/06/00

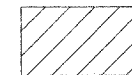





F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DUPAGE	42	34
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



**GENERAL NOTES**

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
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 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) 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.

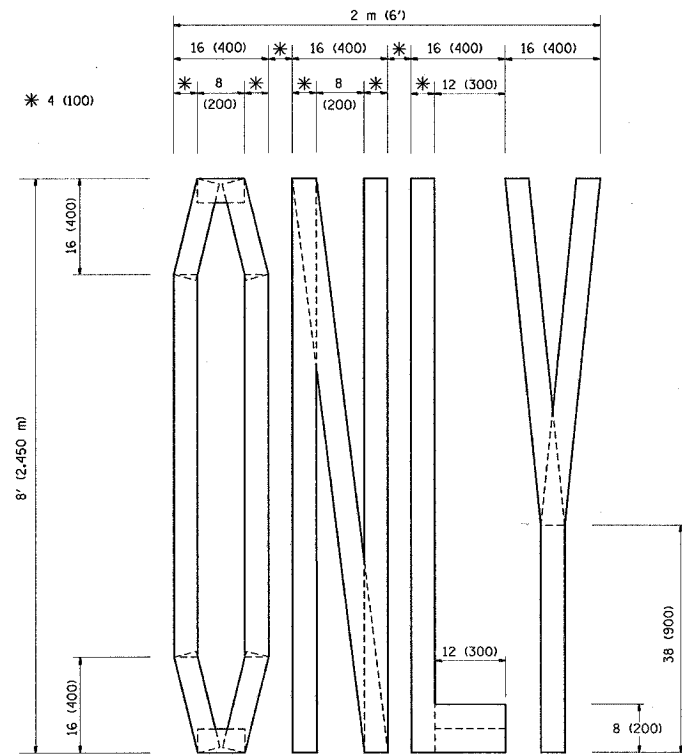
REVISIONS	
NAME	DATE
T. RAMMACHER	09/08/94
A. HOUSEH	11/07/95
A. HOUSEH	10/12/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)**

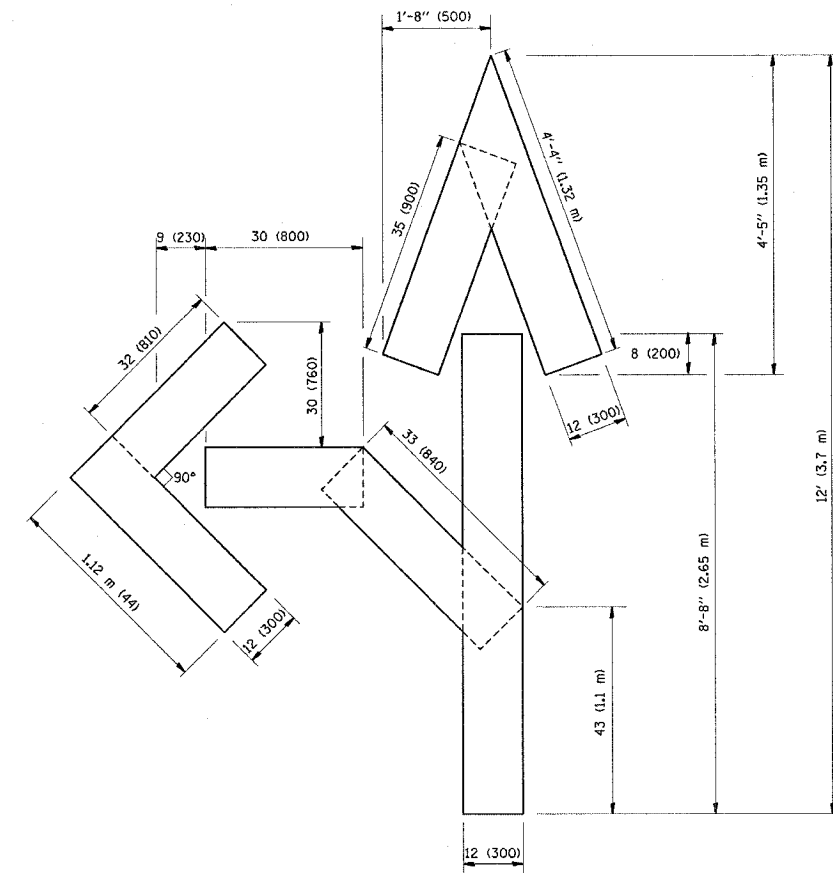
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 CHECKED BY LHA

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 USER NAME = osamohm

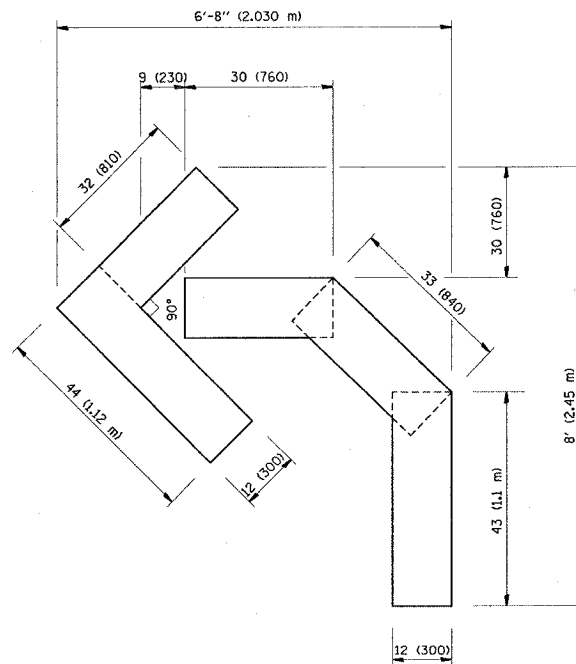
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DUPAGE	42	35
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



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



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



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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING  
 LETTERS AND SYMBOLS  
 FOR TRAFFIC STAGING

SCALE: NONE  
 DATE: 11/6/2007

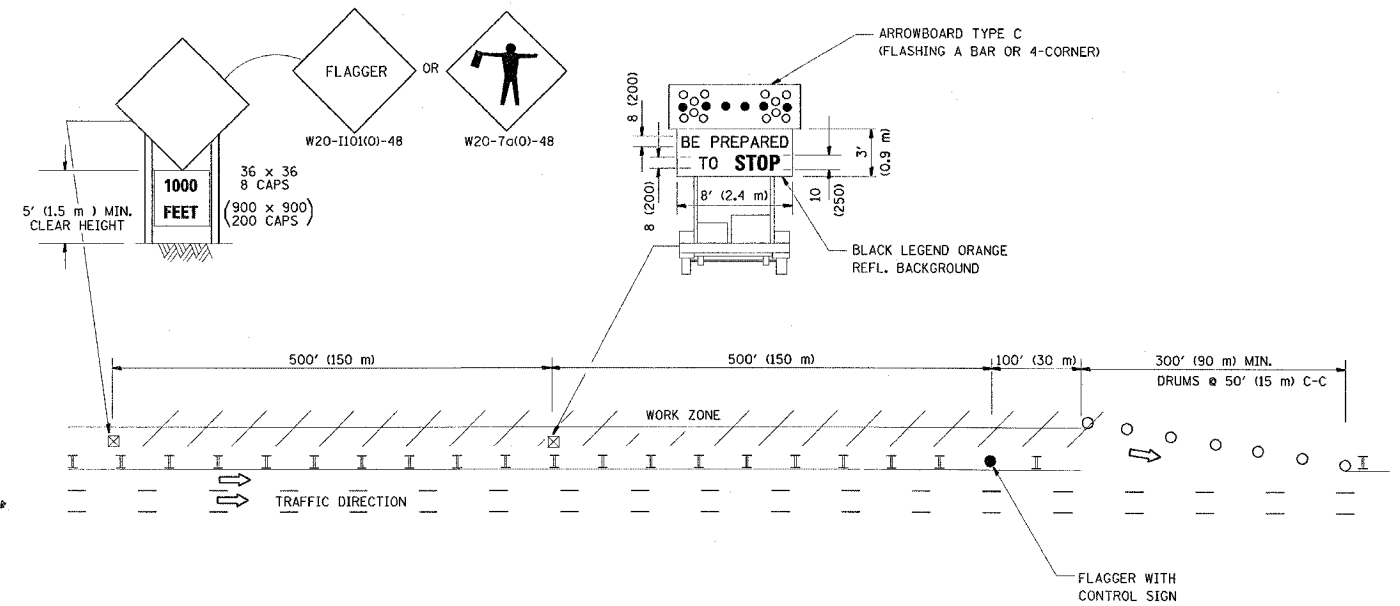
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 CHECKED BY  
 TC-16

REVISION DATE: 08/28/00

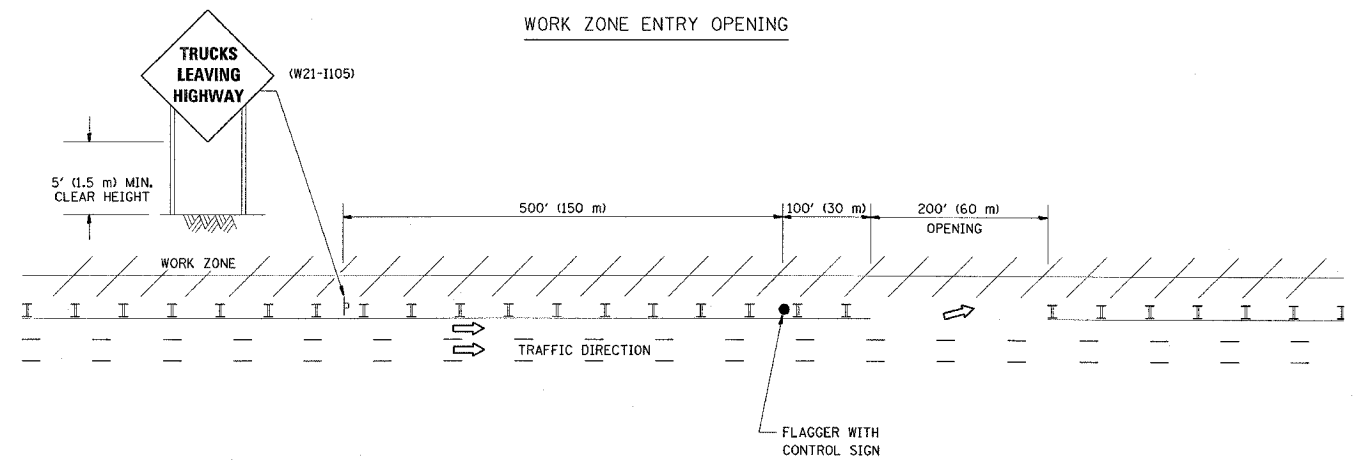
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DUPAGE	42	36
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

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

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

REVISIONS	
NAME	DATE
DWS	8/98
JAF	4/03
JAF	2/06
SPB	1/07

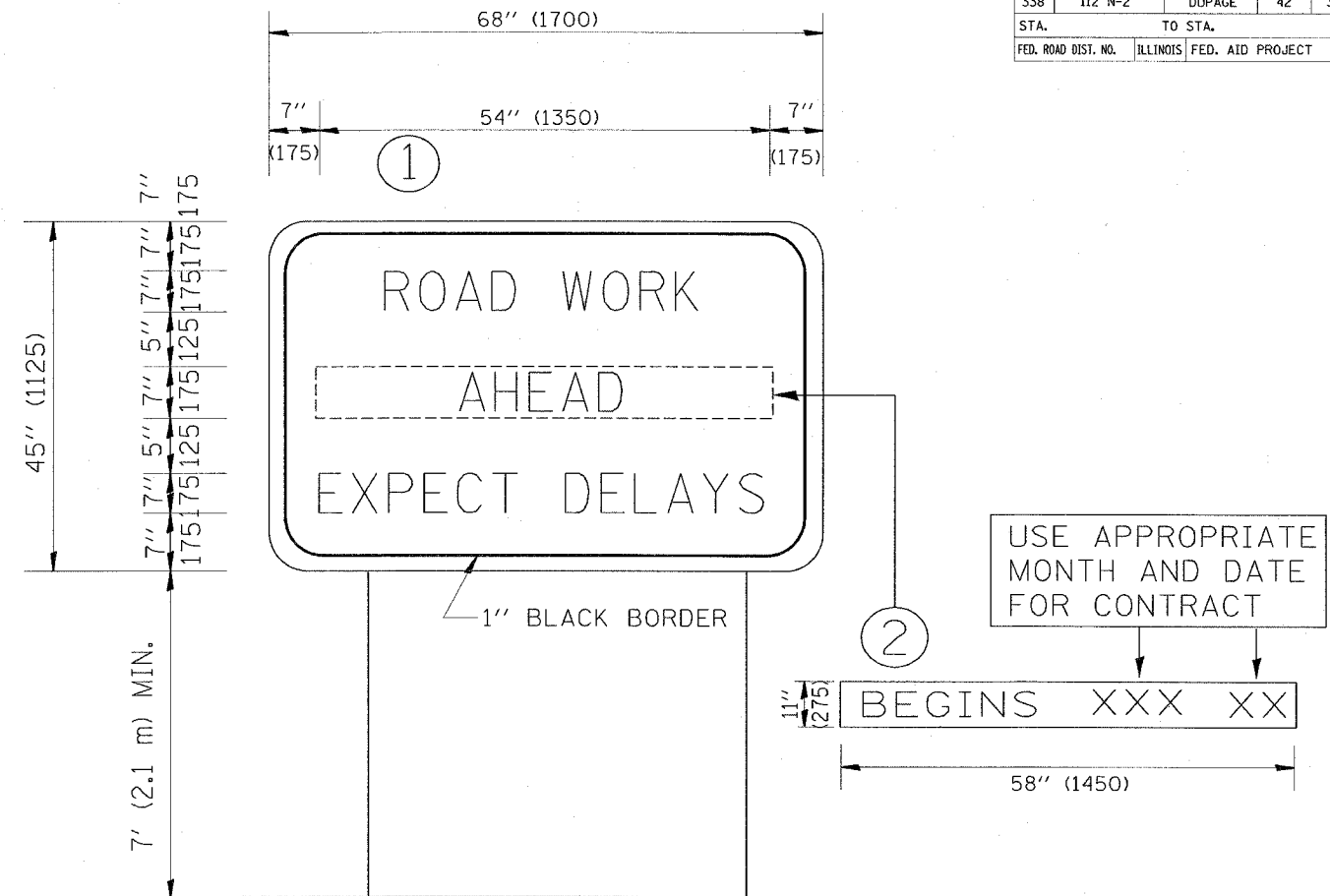
ILLINOIS DEPARTMENT OF TRANSPORTATION  
SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

SCALE: NONE  
DATE: 11/6/2007

DRAWN BY CADD  
CHECKED BY

TC-18

REVISION DATE: 01/01/07



NOTES:

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

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: 11/6/2007

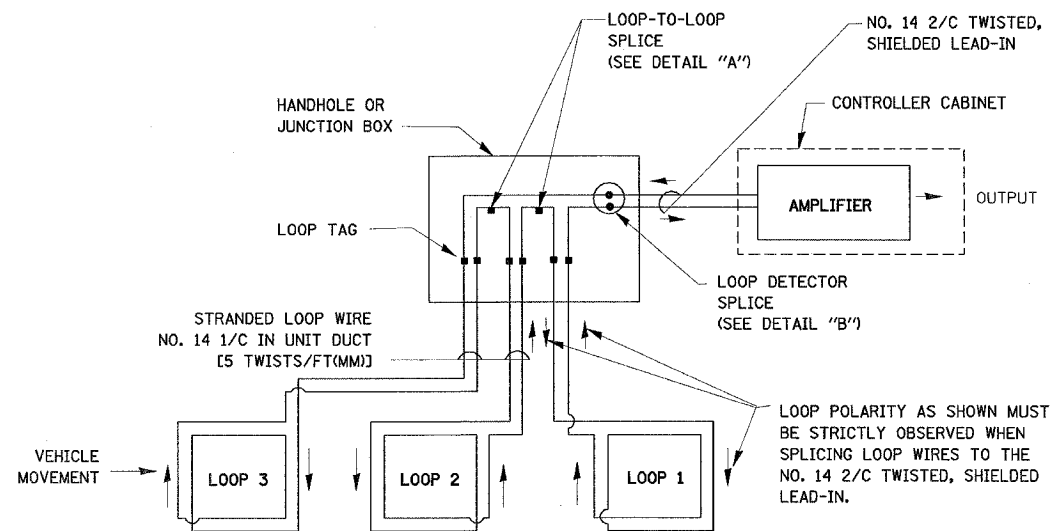
DRAWN BY DESIGN  
 CHECKED BY

TC22  
 REVISION DATE: 02/02/99

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DUPAGE	42	38
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

**LOOP DETECTOR NOTES**

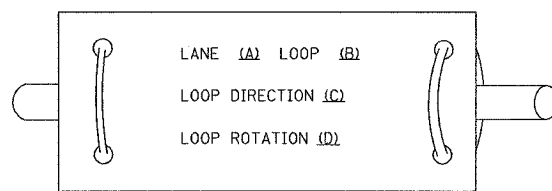
1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED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



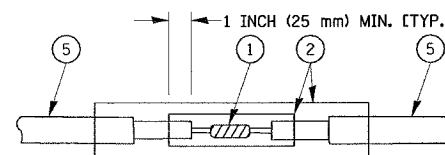
**DETECTOR LOOP WIRING SCHEMATIC**

- 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.

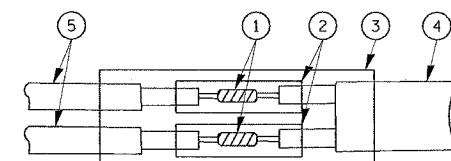
**LOOP LEAD-IN CABLE TAG**



- 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
CADD	5/30/00
ADD NOTE NO. 8	11/12/01
BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION

**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL  
DESIGN DETAILS**

SCALE: NONE  
DATE: 11/7/2007

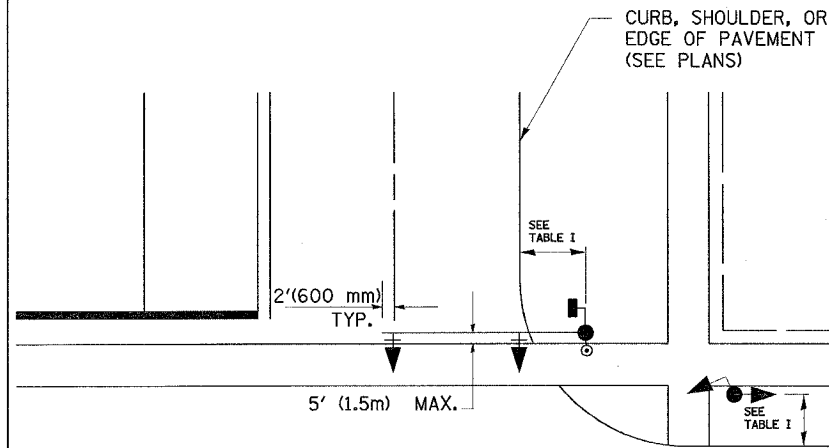
DRAWN BY: RWP  
DESIGNED BY: DAZ  
CHECKED BY: DAZ  
SHEET 1 OF 4

TS05  
REVISION DATE: 01/01/02

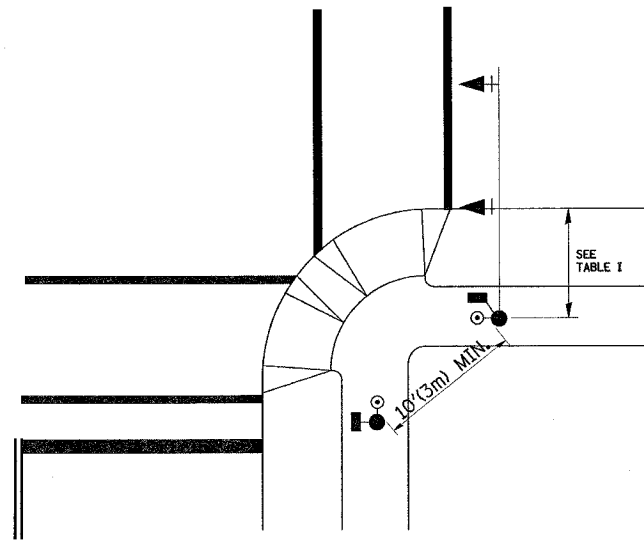
F.A.P. RT.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DUPAGE	42	39
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

**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**



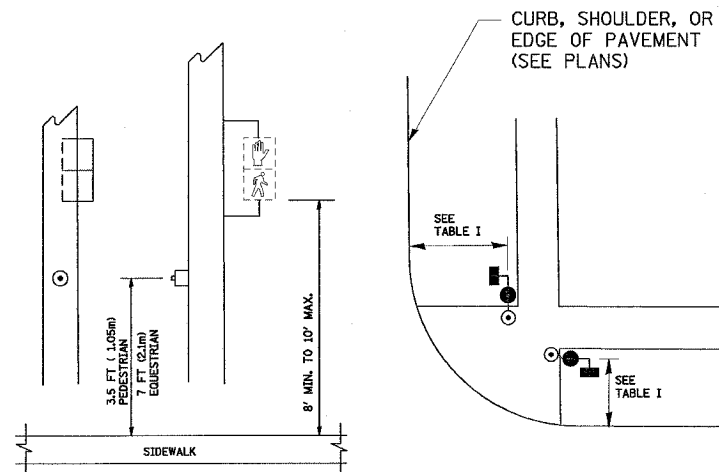
RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

**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
BUREAU OF TRAFFIC	1/01/02

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DISTRICT 1  
 STANDARD TRAFFIC SIGNAL  
 DESIGN DETAILS

SCALE: NONE  
 DATE: 11/7/2007

DRAWN BY: RWP  
 DESIGNED BY: DAD  
 CHECKED BY: DAZ  
 SHEET 2 OF 4

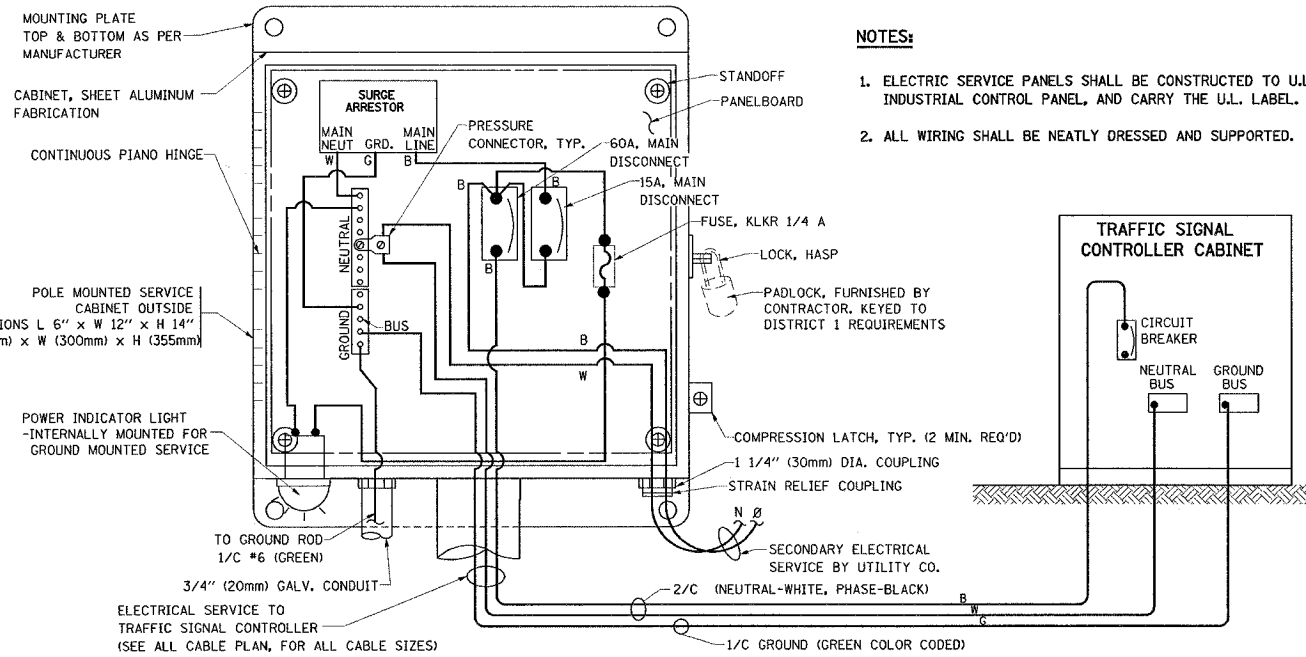
TS05  
 REVISION DATE: 01/01/02

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DUPAGE	42	40
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

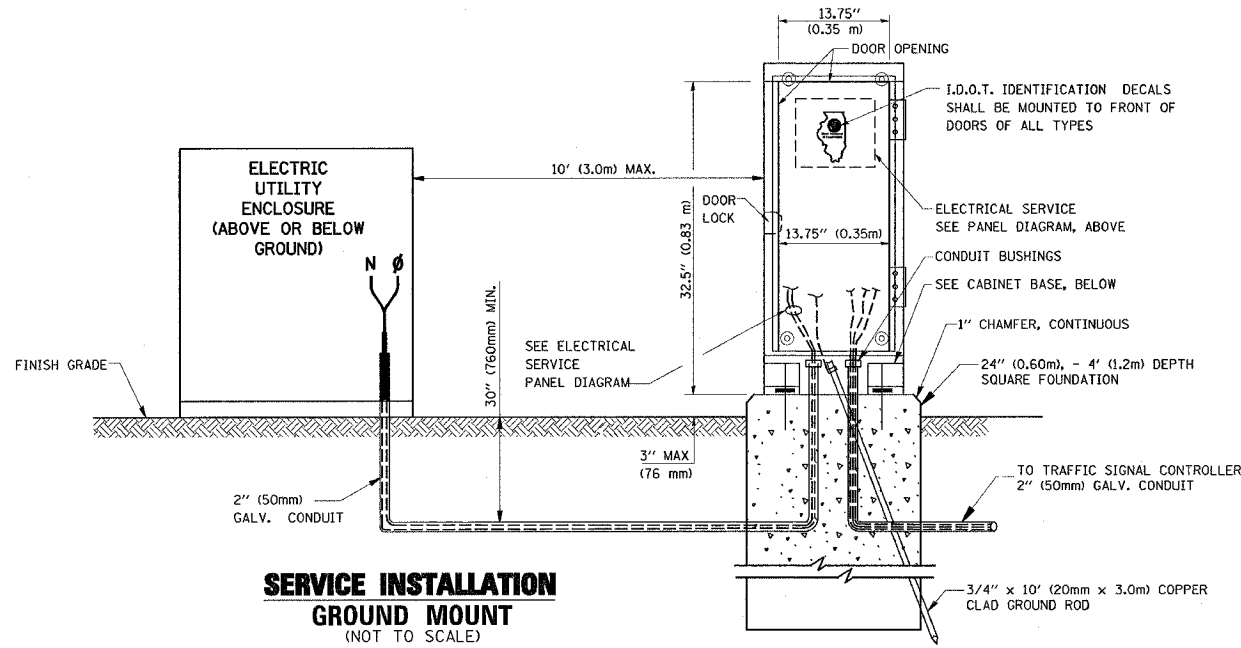
**NOTES:**

**GROUNDING SYSTEM**

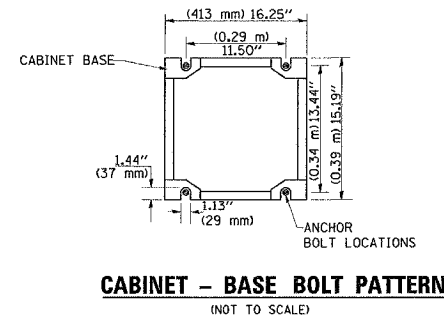
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, 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.
2. 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.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



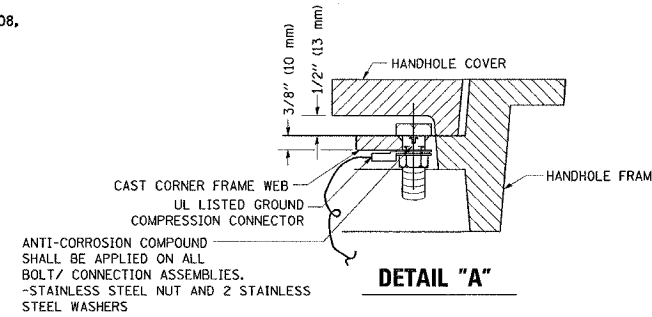
**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN) (NOT TO SCALE)**



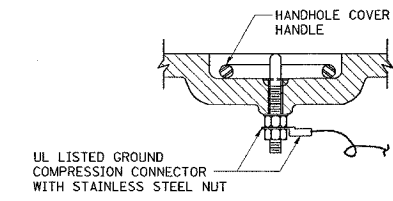
**SERVICE INSTALLATION GROUND MOUNT (NOT TO SCALE)**



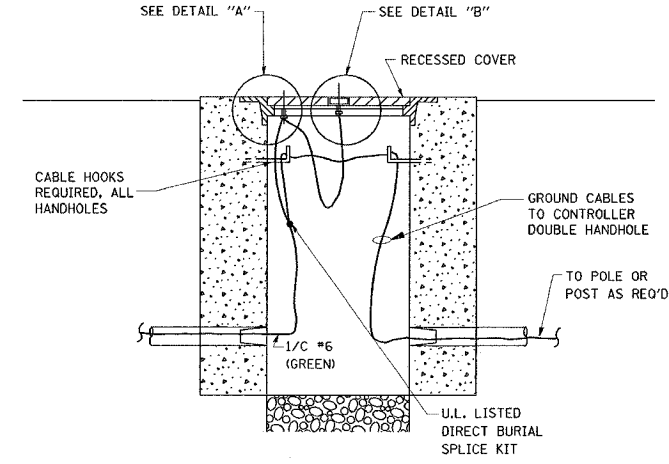
**CABINET - BASE BOLT PATTERN (NOT TO SCALE)**



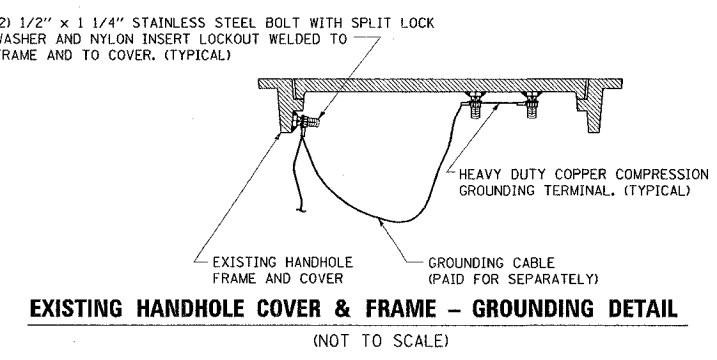
**DETAIL "A"**



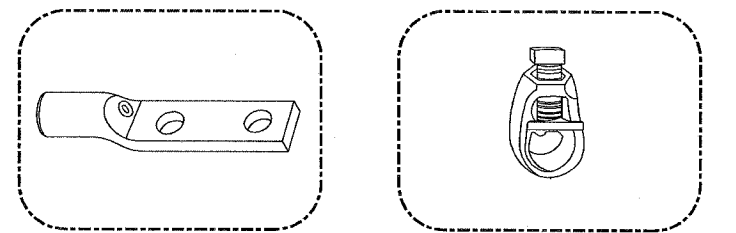
**DETAIL "B"**



**HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)**



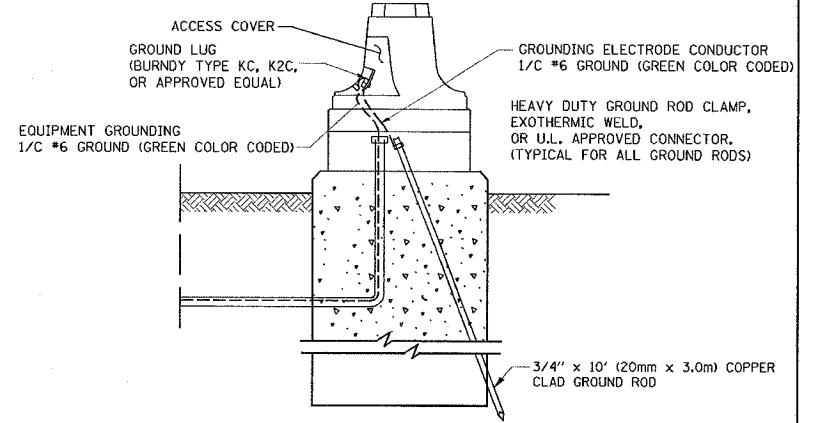
**EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)**



**HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YCHA OR APPROVED EQUAL) 3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)**

**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.



**MAST ARM POLE / POST-GROUNDING DETAIL (NOT TO SCALE)**

REVISIONS	
NAME	DATE
CADD	5/30/00
CADD	3/15/01
BUREAU OF TRAFFIC	1/01/02

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL  
DESIGN DETAILS**

SCALE: NONE  
DATE: 11/7/2007

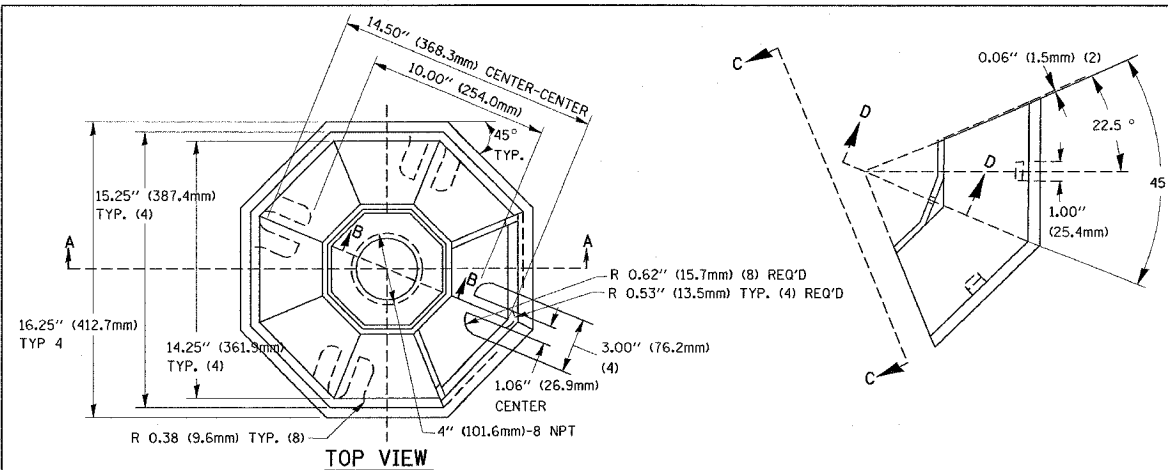
DRAWN BY: RWP  
DESIGNED BY: DAD  
CHECKED BY: DAZ  
SHEET 3 OF 4

TS05  
REVISION DATE: 01/01/02

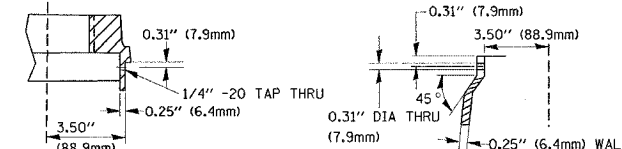
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USER NAME = casanm



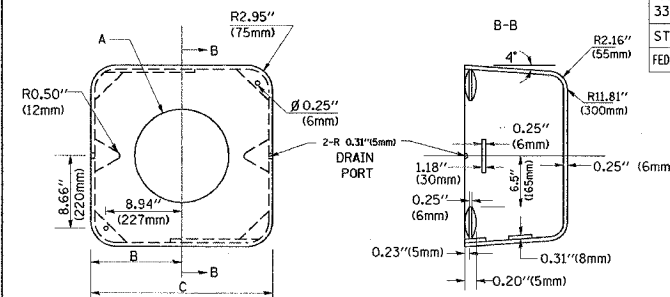
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DUPAGE	42	41
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



SECTION B-B



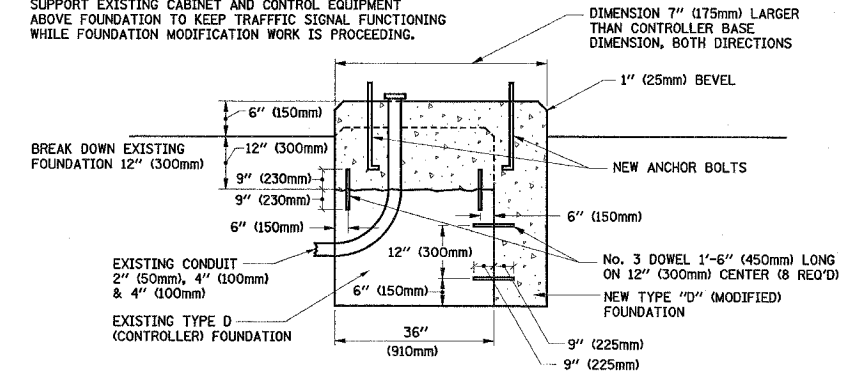
SECTION D-D



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

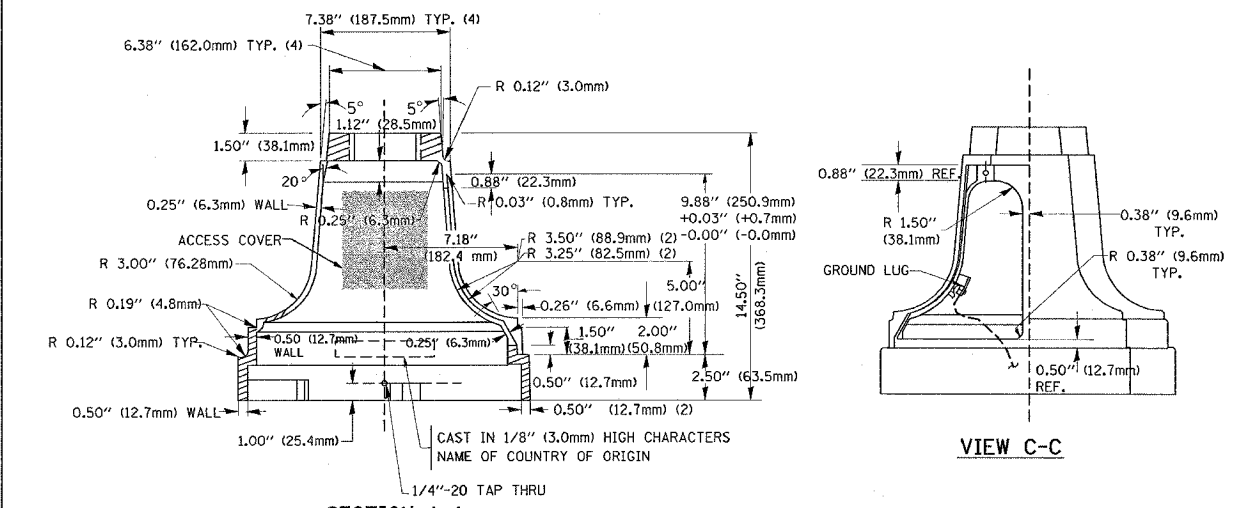
SHROUD DETAIL

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

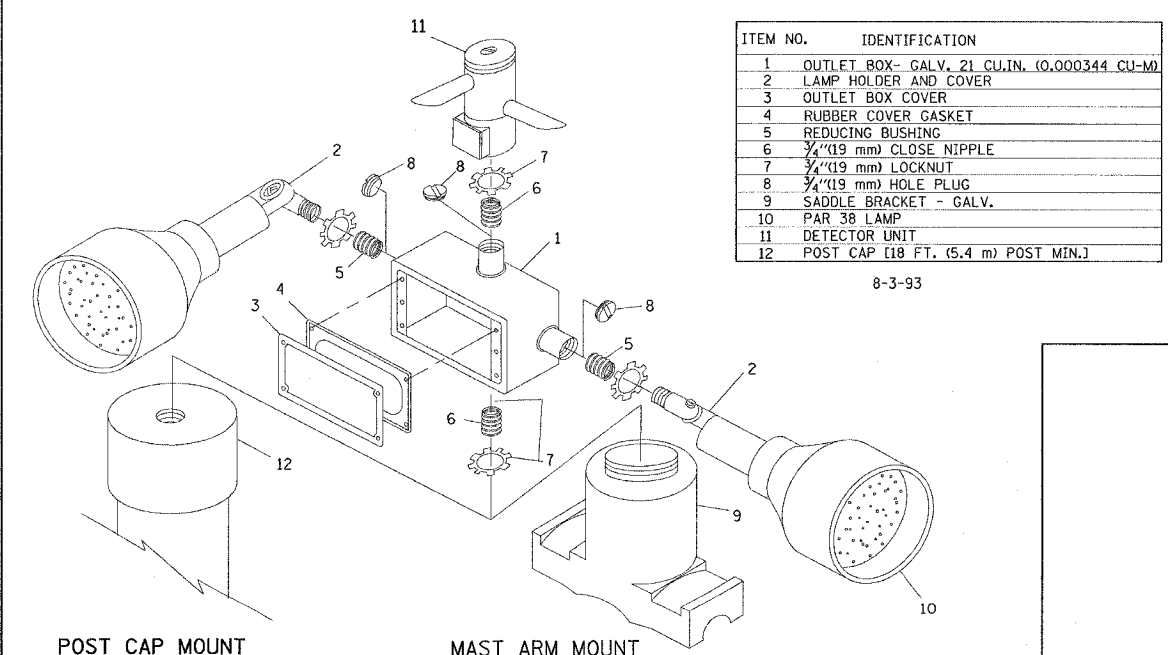
(NOT TO SCALE)



SECTION A-A

VIEW C-C

TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

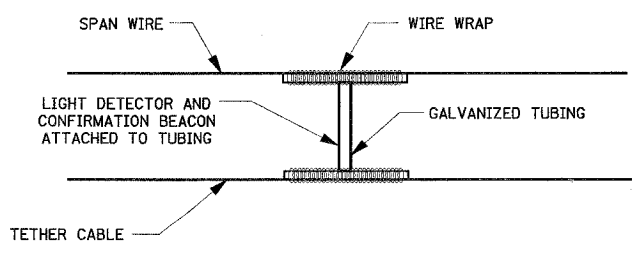


ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\"(19 mm) CLOSE NIPPLE
7	3/4\"(19 mm) LOCKNUT
8	3/4\"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

8-3-93

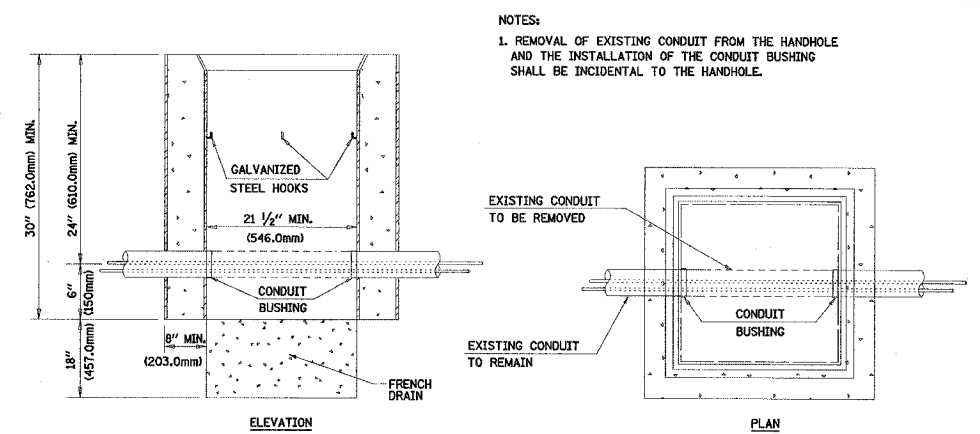
NOTES:

- 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.



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
BUREAU OF TRAFFIC	5/30/00
BUREAU OF TRAFFIC	3/15/01
BUREAU OF TRAFFIC	11/12/01
BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**DISTRICT ONE**  
**STANDARD TRAFFIC SIGNAL**  
**DESIGN DETAILS**

SCALE: NONE  
DATE: 11/7/2007

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

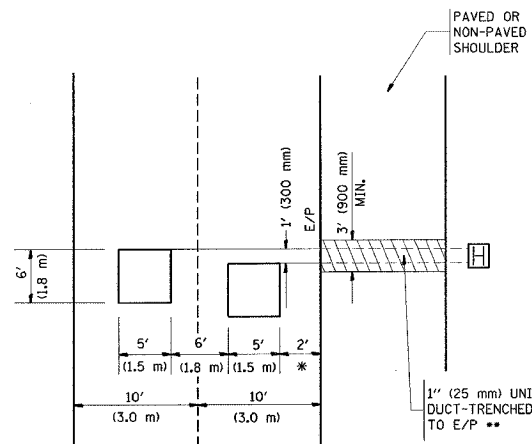
TS05  
REVISION DATE: 01/01/02

PLT DATE = 11/7/2007  
PLT SCALE = 5/8\"/>

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	112 N-2	DUPAGE	42	42
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LOOPS NEXT TO SHOULDERS

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

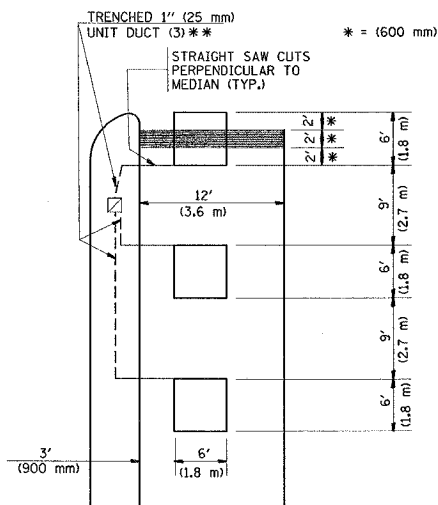


\* = (600 mm)

\*\* 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)

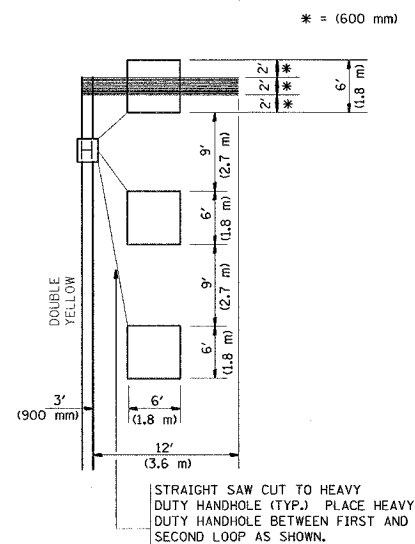
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



\*\* 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

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

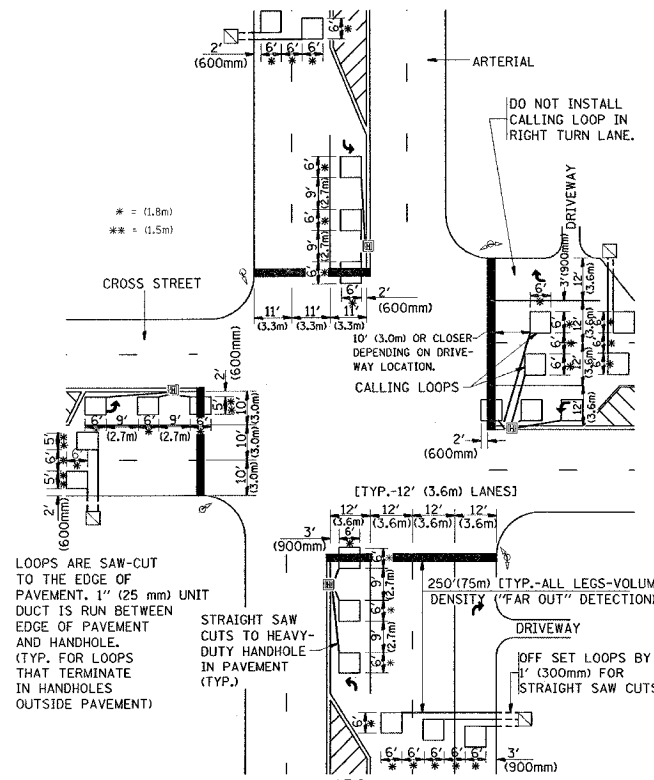
THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT 1  
DETECTOR LOOP  
INSTALLATION DETAILS  
FOR ROADWAY RESURFACING  
DESIGNED BY  
DRAWN BY CADD  
CHECKED BY R.K.F.  
TS07  
REVISION DATE:

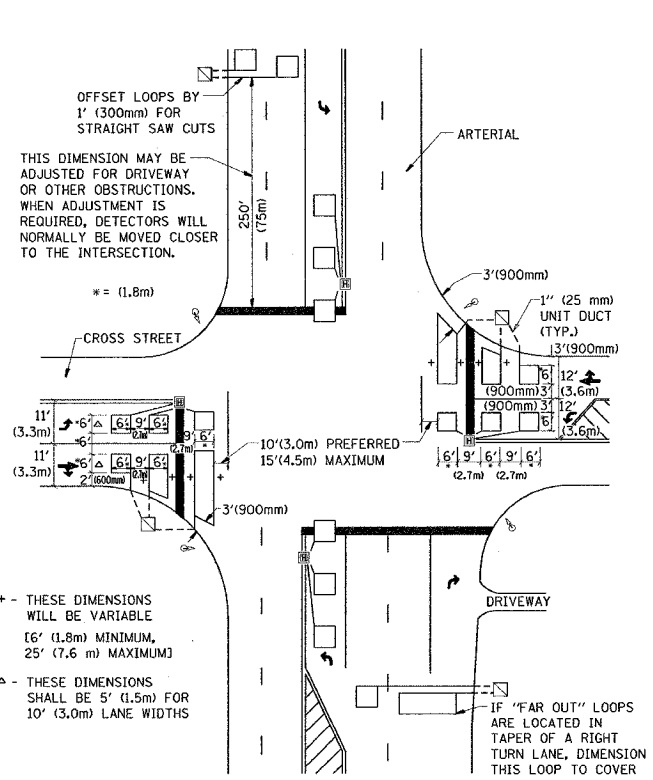
SCALE: NONE  
DATE: 11/7/2007

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



DETAIL 1  
N.T.S.

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



DETAIL 2  
N.T.S.

PLOT DATE = 11/7/2007  
FILE NAME = P:\cadd\resurf\1107.dgn  
SCALE = 1/8" = 1'-0"  
USER NAME = cadd