STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN THE CITY OF CRYSTAL LAKE

PROPOSED HIGHWAY PLANS

F.A.P. 336 : ILL ROUTE 31 AT CRYSTAL LAKE AVENUE SECTION: 112 R-N-1

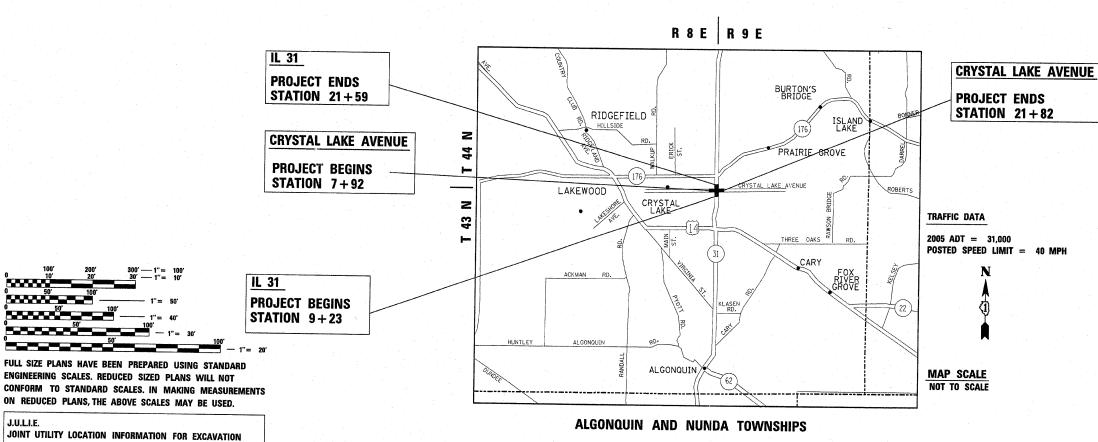
TRAFFIC SIGNAL MODERNIZATION, MEDIAN BARRIER, RESURFACING (3P)

MCHENRY COUNTY PROJECT: ACHSIP-0336 (046)

C-91-034-08

(IL 31) GROSS & NET LENGTH OF PROJECT = 1,237 LINEAL FEET = 0.23 MILE

(CRYSTAL LAKE AVENUE) GROSS & NET LENGTH OF PROJECT = 1,390 LINEAL FEET = 0.26 MILE



D-91-034-08 LOCATION OF SECTION INDICATED THUS: -

RTE. SECTION COUNTY
336 112 R-N-1 MCHENRY

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION Eric E. Harn 10

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

J.U.L.I.E.

1-800-892-0123

CONTRACT NO. 60D52

10

INDEX OF SHEETS

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12 - 20	TRAFFIC SIGNAL PLANS
21	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
22	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
23	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
24	BUTT JOINT AND HMA TAPER DETAILS
25	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECITONS, AND DRIVEWAYS
26	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
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28	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
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30	ARTERIAL ROAD INFORMATION SIGN
31	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-03	CLASS C AND D PATCHES
606301- <i>0</i> 3	PC CONCRETE ISLANDS AND MEDIANS
701501 - 04	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701601 <i>-05</i>	URBAN LANE CLOSURE MULTILANE 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701701- <i>05</i>	URBAN LANE CLOSURE MULTILANE INTERSECTION
701901	TRAFFIC CONTROL DEVICES

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 CRYSTAL LAKE.

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

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

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" SHEETS INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.

THE RESIDENT ENGINEER SHALL CONTACT MS. DEBBIE HANLON AREA TRAFFIC FIELD ENGINEER AT (847) 438-2300 A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKING.

10 FEET (3 METERS) TRANSITION SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER TO EXISTING CURB AND GUTTERS AND MEDIANS ITEMS OF WORK TO EXISTING CURBS AND GUTTERS AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITION SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OR WORK SPECIFIED.

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40MM) WHERE THE SPEED LIMIT IS 45 MPH (80 KM/H) OR LESS AND 1 INCH (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80 KM/H). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 MM) MAY BE ALLOWED IF THE EDGE OFTHE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

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STATE	E OF	ILLINOI	S
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	II 21 INDEV	NE QUEETO STATE	CTANDADDC 0	GENERAL NOTES	F.A.P RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
	IF 31 IMPEX	Ur SHEETS, STATE	SIANDANDS Q	GENERAL MAIES	336	112 R-N-1	McHenry	31	2
	2011 5	T =					CONTRACT	NO. 6	OD52
	SCALE:	SHEET NO. OF	SHEETS STA.	TO STA.	FED. RC	AD DIST. NO. ILLINOIS FED. AI	D PROJECT	***************************************	

CONTRACT NO. 60D52

F.A.P. RTE.	SECTION		COUNT	Υ	TOTAL SHEETS	SHEET NO.
336	112 R-N-1		McHen	ry.	31	3
FED.	ROAD DIST. NO. 1	ILL	INOIS	HIG	HWAY PR	OJECT

	THE PROPERTY OF A PARTY TITLE			T		CONSTRUCT	TION TYPE (CODE		1	SUMMARY OF QUANTITIES	:	1			CONSTRUCT	TION TYPE C	CODE	
CODE NO	SUMMARY OF QUANTITIES ITEM	UNIT	TOTAL QUANTITIES		E 10% STATE	,				CODE NO	1 1 1	UNIT	TOTAL QUANTITIES	10% STATE	90% FED 10% STATE Y031-1F				
X0325890	REOPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1		1					70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1					
X0325891	IMPACT ATTENUATORS (FULLY REDIRECTIVE, RESETTABLE), TEST LEVEL 2	EACH	1	1						70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1.	. !				
20200100	EARTH EXCAVATION	CU YD	259	259		1				70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1			1		
31101400	SUB-BASE GRANULAR MATERIAL, TYPE B 6" PORTLAND CEMENT CONCRETE	SQ YD	844	844						70300100	SHORT-TERM PAVEMENT MARKING	FOOT	1140	1140	1				
35300600	(BASE COURSE 11"	SQ YD	844	844						70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	510	510	F				
40300200	BITUMINOUS MATERIALS (PRIME COAT) AGGREGATE (PRIME COAT)	TON	6 31	31						70300220	TEMPORARY PAVEMENT MARKING	FOOT	5450	5450					
40600300		TON	5	5						70300240		FOOT	1107	1107					
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	655	655	1					70301000	- LINE 6" WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	380	380			3		
40600895	CONSTRUCTING TEST STRIP	EACH	2	2						* 78000100	THERMOPLASTIC PAVEMENT MARKING	SQ FT	510	510	-				
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	155	155						* 78000200	- LETTERS AND SYMBOLS THERMOPLASTIC PAVEMENT MARKING	FOOT	5450	5450					
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	613	613							- LINE 4"	FOOT	1107	1107					
40603595		TON	814	814	7					* 78000400	- LINE 6"					. :			
42001300	PROTECTIVE COAT	SQ YD	834	834			4 20 20		-	* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	167	167					
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2	SQ YD	8301	8301						* 78100100		EACH	66	66			V 150		
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2	SQ YD	7300	7300						78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	66	66					
	1/2" COMBINATION CURB AND GUTTER REMOVAL	FOOT	972	972					. 1	81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	490		490				
44000500	COMBINATION CONCRETE CURB AND GUTTER	FOOT	1050	1050						81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	41		41				
44003100	REMOVAL AND REPLACEMENT MEDIAN REMOVAL	SQ FT	13790	13790						81001100		FOOT	10		10				
44201777		SQ YD	129	129					.	81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED	FOOT	95		95				
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	10998	10998						81018900	STEEL	FOOT	430		430				
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	40	40							STEEL			1.					
60619600		SQ FT		10232						81400100		EACH			5			1	
63200310		FOOT	30	30						81400200		EACH			i				
67000400		CAL MO		6															
ំ 67100100	MOBILIZATION	L 55	•	-															

* SPECIALTY ITEM

REVISIONS	S	ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	SUMMARY OF QUANTITIES
		ILL 31 @ CRYSTAL LAKE AVENUE

CONTRACT NO. 60D52

F.A.P. RTE.	SECTION		COUNT	Y	TOTAL SHEETS	SHEET NO.
336	112 R-N-1		McHen	ry .	31	4
FED.	ROAD DIST. NO. 1	ILL	INOIS	HIG	HWAY PRO	DJECT

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·	SUMMARY OF QUANTITIES					CONSTRUC	TION TYPE	CODE		4 ' '	SUMMARY OF QUANTITIE	5				CONSTRUCT	TION TYPE	CODE	
CODE NO	ITEM	TINU	TOTAL QUANTITIES	90% FED 10% STATE 1000-2A	90% FED 10% STATE Y031-1F					CODE NO	ITEM	UNIT	TOTAL QUANTITIES	10% STATE					
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	541		541					★ 89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	9		9		100		
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1		1					¥ X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	103	103					
85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1		1					¥ X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	2785		2785		-		
85900100	TRANSCEIVER	EACH	1		. 1	-				X4420156	CLASS D PATCHES, TYPE II, 15 1/4 I	ICH SQ YD	193	193					
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	300		300					X8050015 X8620020	SERVICE INSTALLATION - POLE MOUNTED UNINTERRUPTIBLE POWER SUPPLY	EACH EACH			1				
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	768		768					¥ X8710020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	2785		2785				
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	3459		3459					★ X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3, TWISTED, SHIELDED	с, гоот	300		300			0.1	-
37301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1718		1718					NP Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	11	11					
37301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	25		25														
37502520	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	4		4														
37700250	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	4		4														
37800150	CONCRETE FOUNDATION, TYPE C	FOOT	4		4														
37800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60		60														
37900200	DRILL EXISTING HANDHOLE	EACH	2 2		2														
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4		4											13. T.			
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4		4														
38030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1 4		4														
8200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8		8										- 1		N		
8500100	INDUCTIVE LOOP DETECTOR	EACH	12		12									. 19	* :				
39000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1		1														
9502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2785		2785		-												
9502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1		1														
9502380	REMOVE EXISTING HANDHOLE	EACH	8		8										:				

* SPECIALTY ITEM

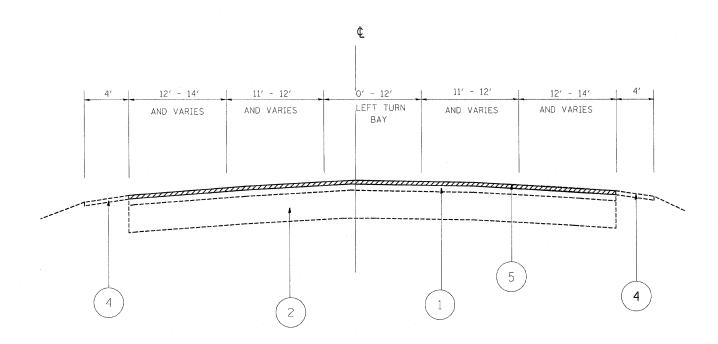
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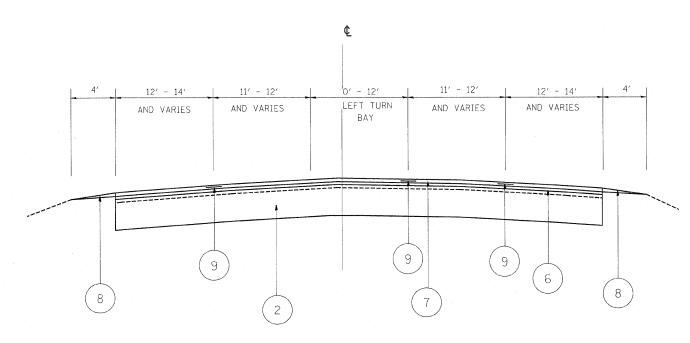
ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

31 @ CRYSTAL LAKE AVENUE

PLOT DATE: 10/25/2007



CRYSTAL LAKE AVENUE
EXISTING TYPICAL SECTION
STA. 7+92 TO STA. 13+48



CRYSTAL LAKE AVENUE

PROPOSED TYPICAL SECTION
STA. 13+48 TO STA. 21+82

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL. ROUTE 31 © CRYSTAL LAKE AVENUE

EXISTING AND PROPOSED TYPICAL CROSS SECTIONS

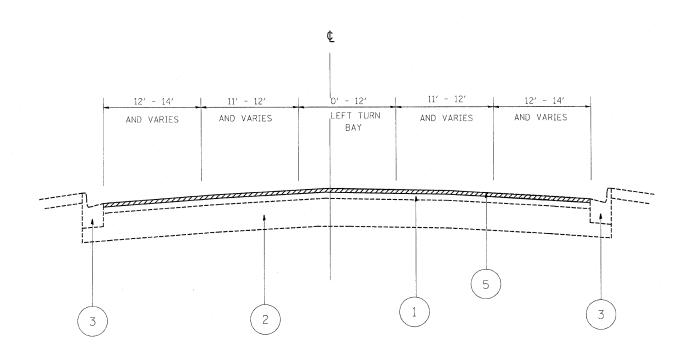
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McHenry 31 5

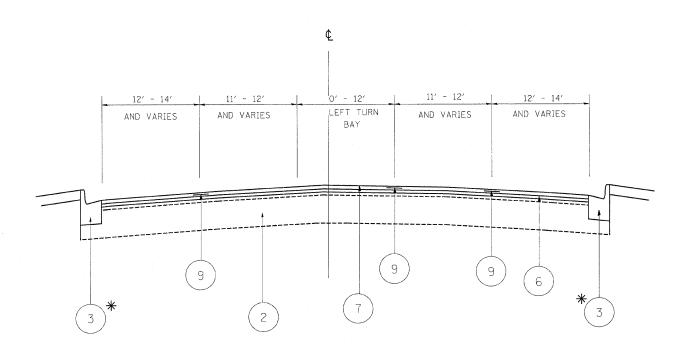
CONTRACT NO. 60D52

LEGEND

- (1) EXISTING HOT-MIX ASPHALT SURFACE, 3" ±
- EXISTING HOT-MIX ASPHALT BASE COURSE, 8" ±
- (3) EXISTING CONCRETE CURB AND GUTTER, TYPE B-6.24
- 4 EXISTING AGGREGATE SHOULDERS
- (5) PROPOSED HOT MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- PROPOSED LEVELING BINDER (MACHINE METHOD), N70, 3/4"
- PROPOSED HOT MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- 8 PROPOSED AGGREGATE WEDGE SHOULDER TYPE B
- 9 PROPOSED STRIP REFLECTIVE CRACK CONTROL



CRYSTAL LAKE AVENUE EXISTING TYPICAL SECTION STA. 13+48 TO STA. 21+82



CRYSTAL LAKE AVENUE

*CURB AND GUTTER AND SIDEWALK LOCATIONS TO BE DETERMINE BY R.E.

PROPOSED TYPICAL SECTION STA. 13+48 TO STA. 21+82

LEGEND

- EXISTING HOT-MIX ASPHALT SURFACE, 3" ±
- EXISTING HOT-MIX ASPHALT BASE COURSE, 8" ±
- EXISTING CONCRETE CURB AND GUTTER, TYPE B-6.24
- EXISTING AGGREGATE SHOULDERS
- PROPOSED HOT MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- PROPOSED LEVELING BINDER (MACHINE METHOD), N70, 3/4"
- PROPOSED HOT MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- PROPOSED AGGREGATE WEDGE SHOULDER TYPE B
- PROPOSED STRIP REFLECTIVE CRACK CONTROL

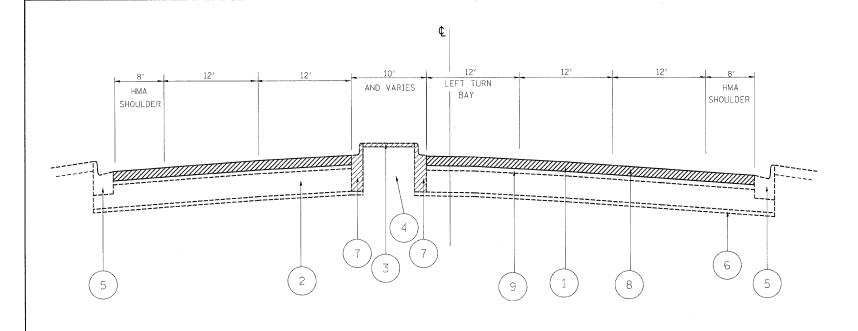
HOT-MIX ASPHALT MIXTURE	REQUIREMENTS	-
MIXTURE TYPE	AC TYPE	AIR VOIDS(%)
IL 31 – PAVEMENT RESURFACING (MAINLINE)		
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	SBS/SBR PG 70-22	4% @ 90 GYR
LEVELING BINDER (MM) N70	PG 64-22*	4% @ 70 GYR
CRYSTAL LAKE AVENUE – PAVEMENT RESURFACING		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	PG 64-22*	4% @ 70 GYF
LEVELING BINDER (MM), N70	PG 64-22*	4% @ 70 GYF
PATCHING		
CLASS D PATCHES TYPE II, 11" & 15 1/4", (BINDER IL-19 mm)	PG 64-22*	4% @ 70 GYI
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19 mm)	PG 64-22*	4% @ 70 GYI

* WHEN RAP EXEEDS 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 QUANTATIES IS 112 LBS ${\rm SQ}$ YD/N.

OF TRANSPORTATION

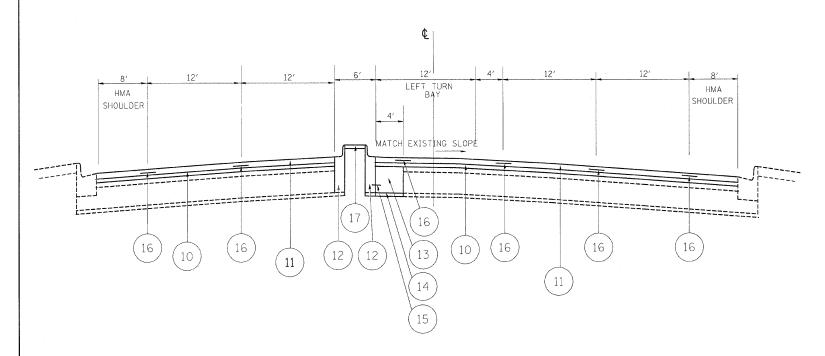
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IL. ROUTE 31 @ CRYSTAL LAKE AVENUE	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FXISTING AND PROPOSED TYPICAL CROSS SECTIONS	336	112 R-N-1	McHenry	31	6
LAISTING AND THOUGHD THE TOAL CHOOS SECTIONS	_		CONTRACT	NO. 6	OD52
SCALE: SHEET NO. OF SHEETS STA. TO STA.	FFD. ROA	D DIST. NO. THE INOIS FED. AT	PROJECT		



EXISTING TYPICAL SECTION
STA. 9+22 TO STA. 20+58

IL 31



IL 31
PROPOSED TYPICAL SECTION
STA. 9+22 TO STA. 20+58

LEGEND

- (1) EXISTING HOT-MIX ASPHALT SURFACE COURSE, 4 1/4" ±
- EXISTING HOT MIX ASPHALT BASE COURSE, 11" ±
- (3) EXISTING P.C.C. MEDIAN
- (4) EXISTING COMPACTED EARTH
- (5) EXISTING CONCRETE CURB AND GUTTER, TYPE B-6.24
- 6 EXISTING SUB-BASE GRANULAR MATERIAL
- (7) EXISTING CURB AND GUTTER TO BE REMOVED
- 8 PROPOSED HOT MIX ASPHALT SURFACE REMOVAL, 2 1/2"
- (9) EXISTING HOT MIX ASPHALT OVERLAY AFTER MILLING
- 10) PROPOSED LEVELING BINDER (MACHINE METHOD), N70 (3/4")
- PROPOSED POLYMERIZED HOT MIX ASPHALT SURFACE COURSE MIX "F", N90 1 3/4"
- PROPOSED CURB AND GUTTER SB-6.12
- (13) PROPOSED P.C.C. BASE COURSE WIDENING, 11"
- (14) PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE B, 6"

112 R-N-1

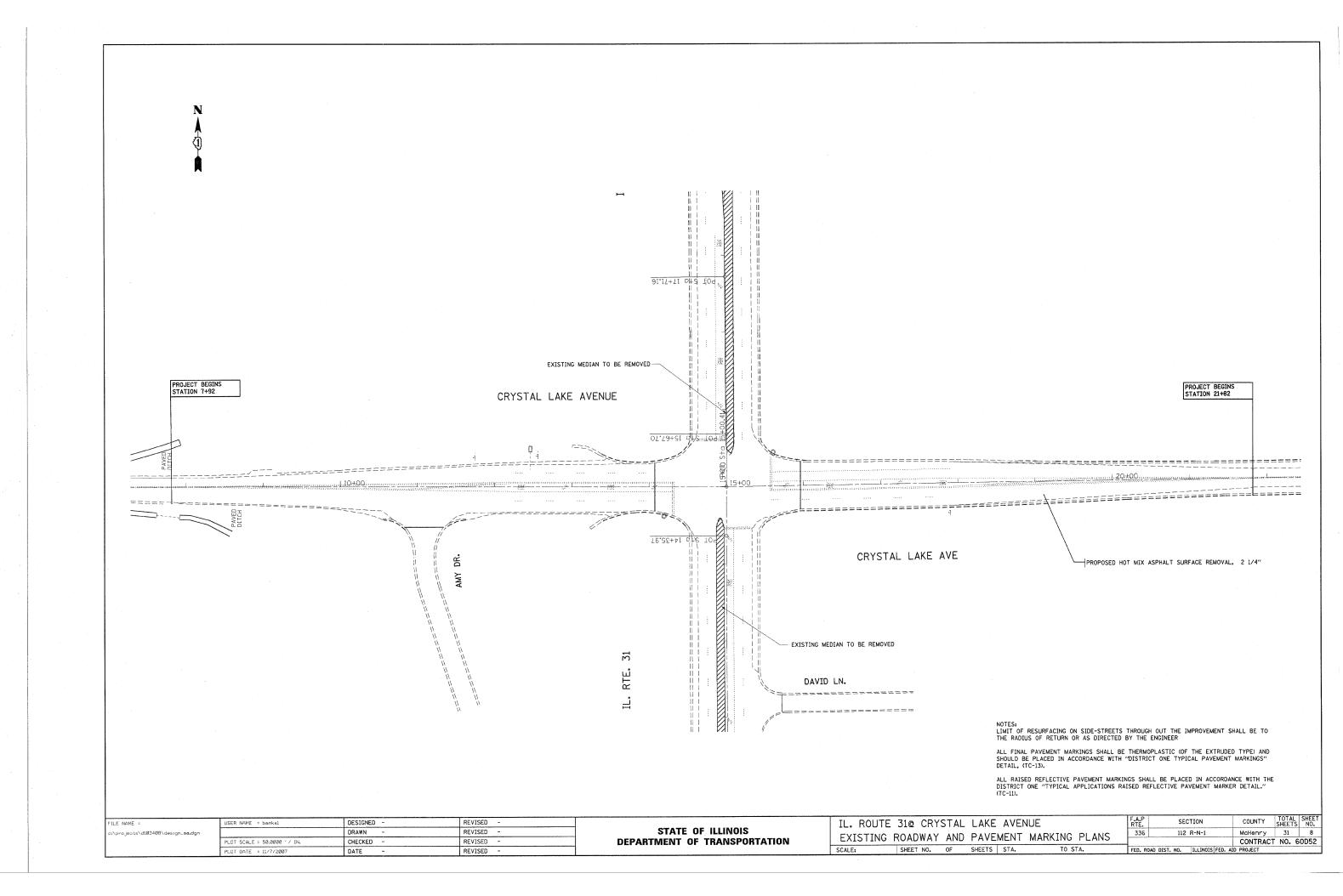
CONTRACT NO. 60D52

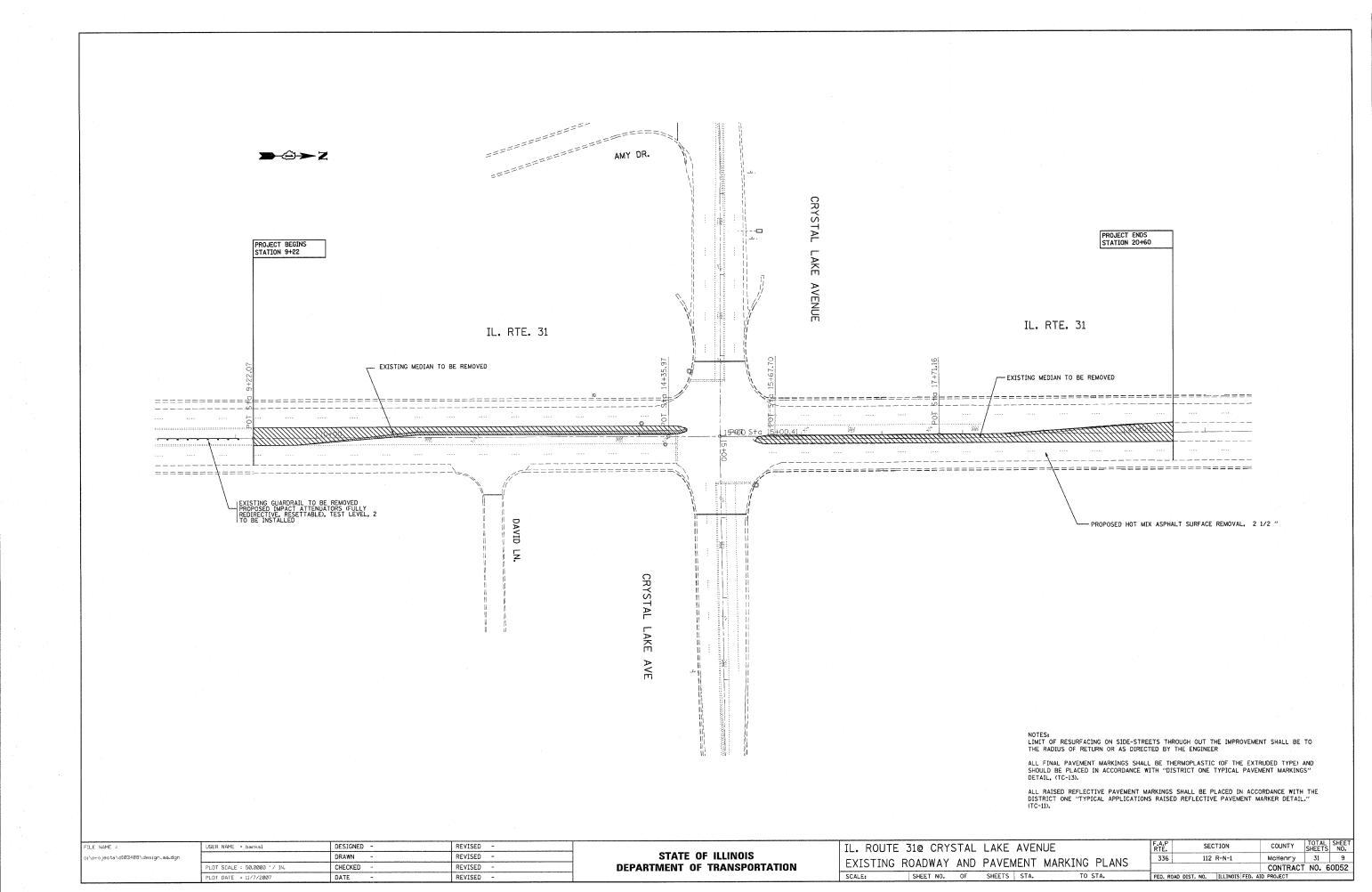
- PROPOSED DRILL AND GROUT *6 TIE BAR, SHAPE (24" C-C), EPOXY COATED, DEFORMED COST INCLUDED IN CONCRETE CURB AND GUTTER, TYPE SB-6.12 PAY ITEM
- 16) PROPOSED STRIP REFLECTIVE CRACK CONTROL
- 17) PROPOSED P.C.C. MEDIAN SB-6.12

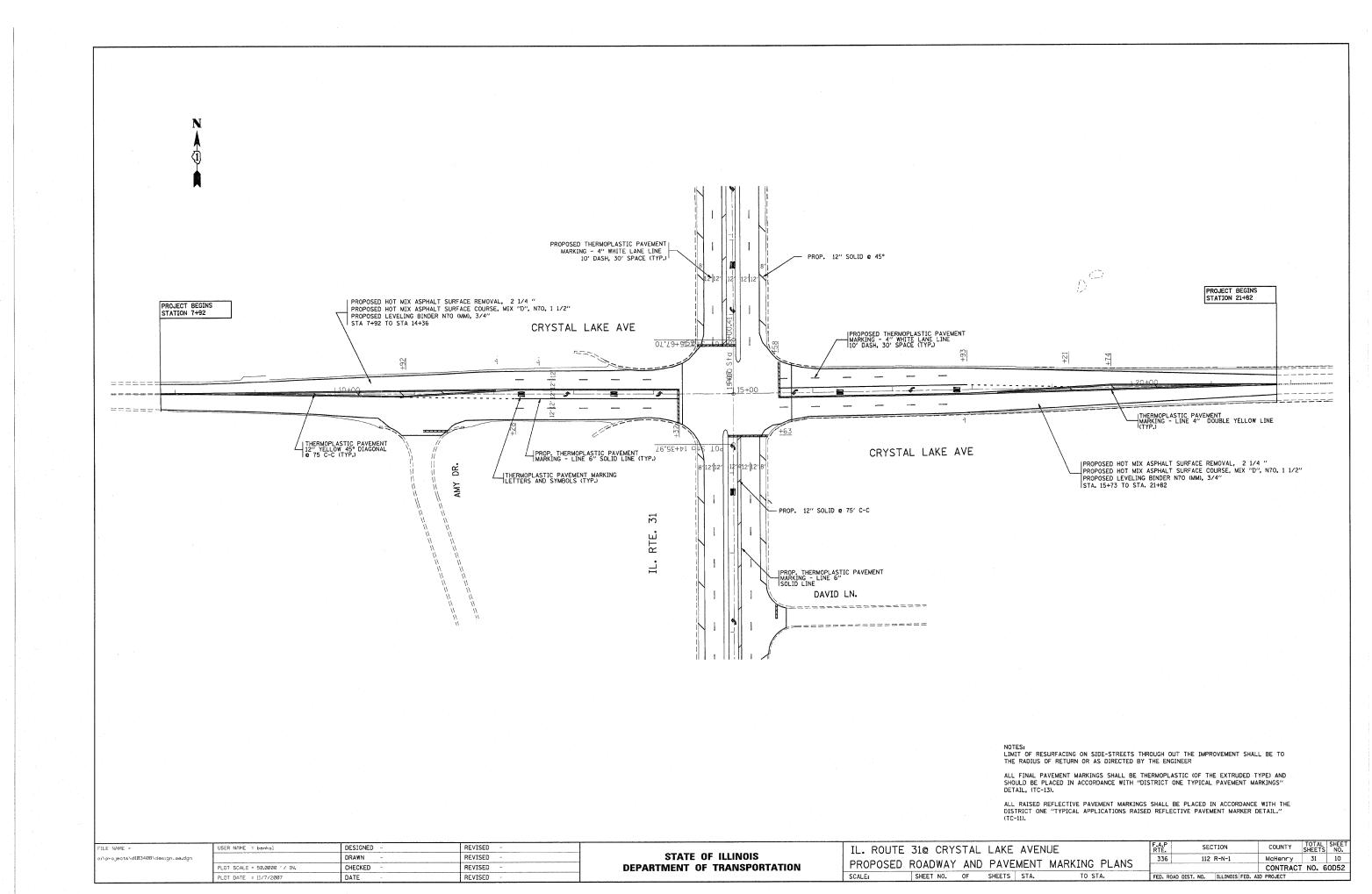
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

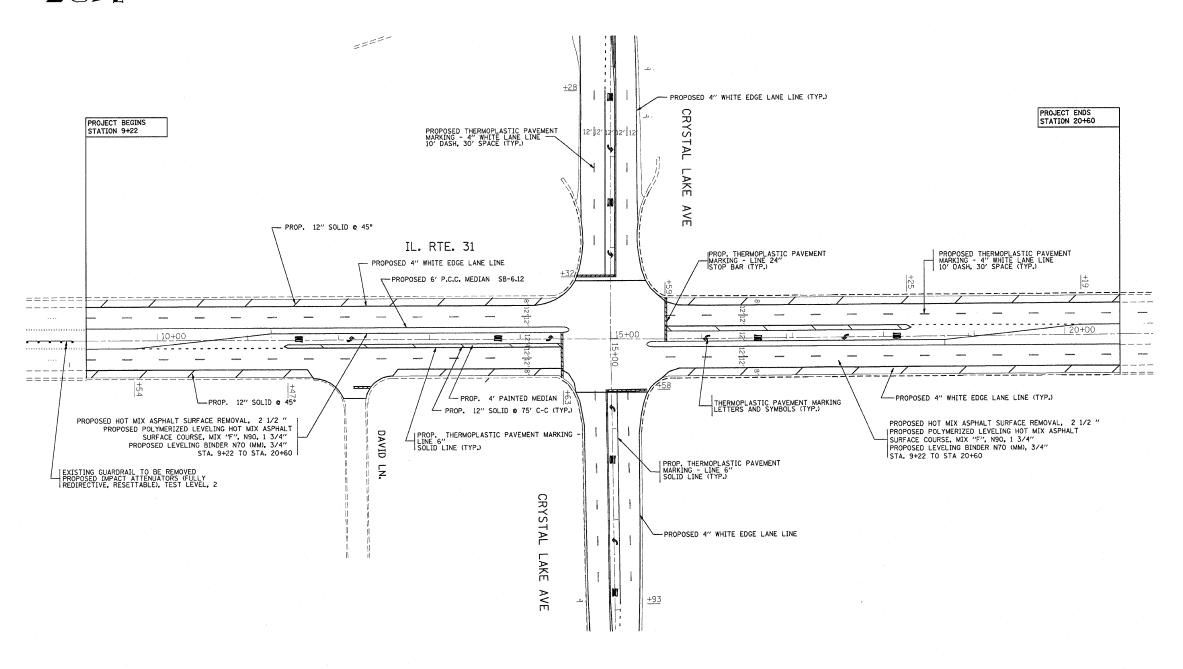
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							SECTIONS	ļ	336
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NOTES:
LIMIT OF RESURFACING ON SIDE-STREETS THROUGH OUT THE IMPROVEMENT SHALL BE TO
THE RADIUS OF RETURN OR AS DIRECTED BY THE ENGINEER

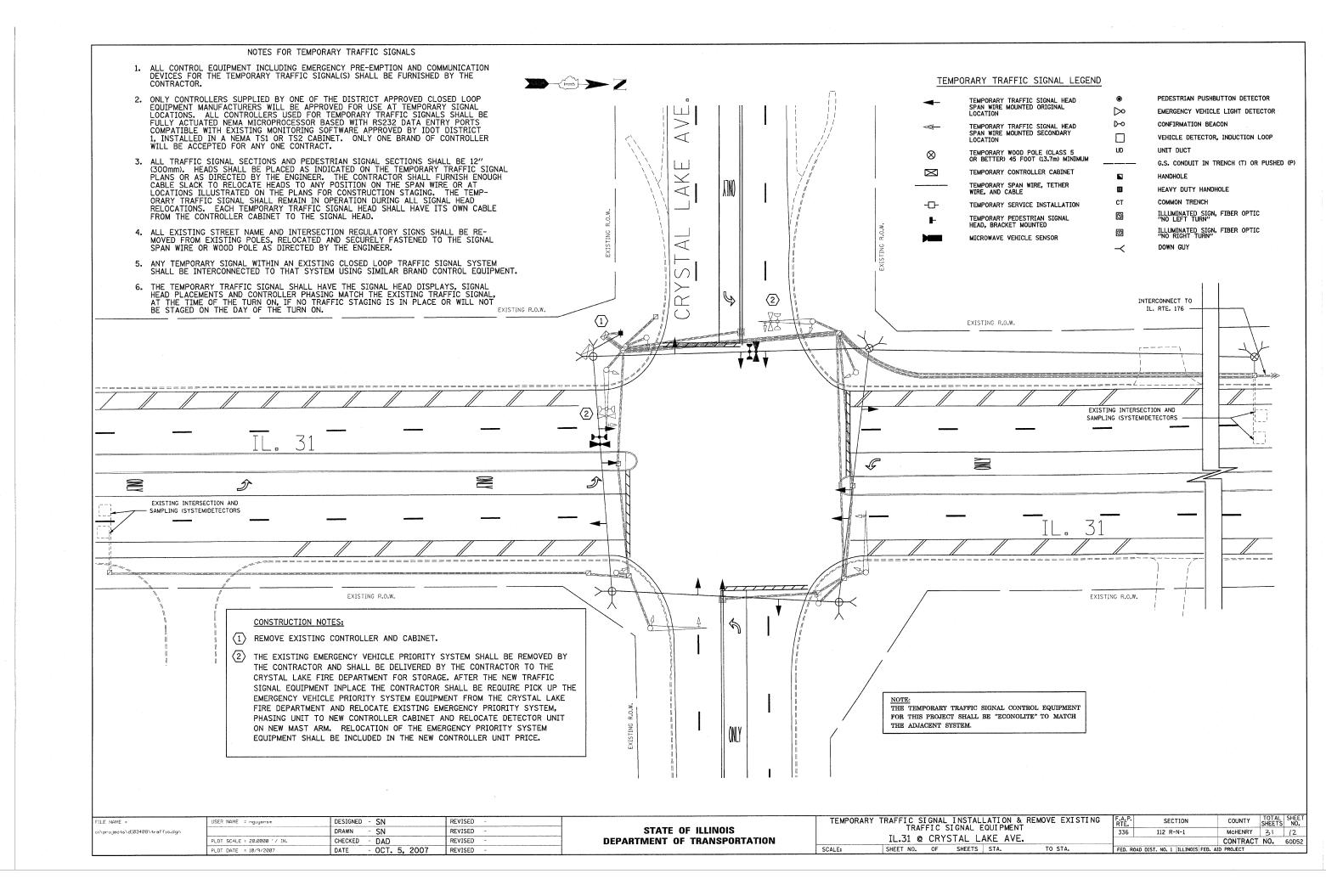
ALL FINAL PAYEMENT MARKINGS SHALL BE THERMOPLASTIC (OF THE EXTRUDED TYPE) AND SHOULD BE PLACED IN ACCORDANCE WITH "DISTRICT ONE TYPICAL PAYEMENT MARKINGS" DETAIL, (TC-13).

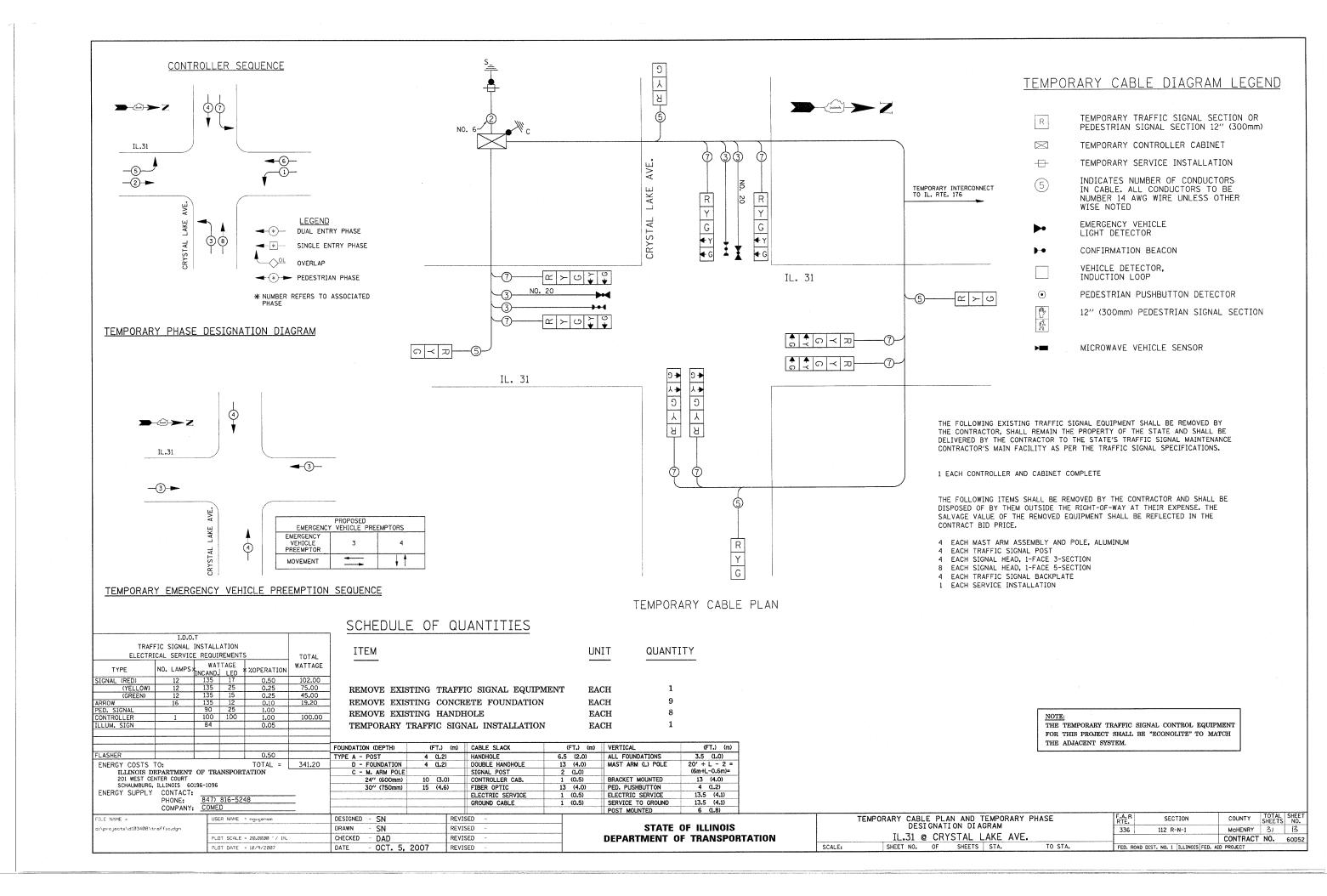
ALL RAISED REFLECTIVE PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH THE DISTRICT ONE "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKER DETAIL." (TC-11).

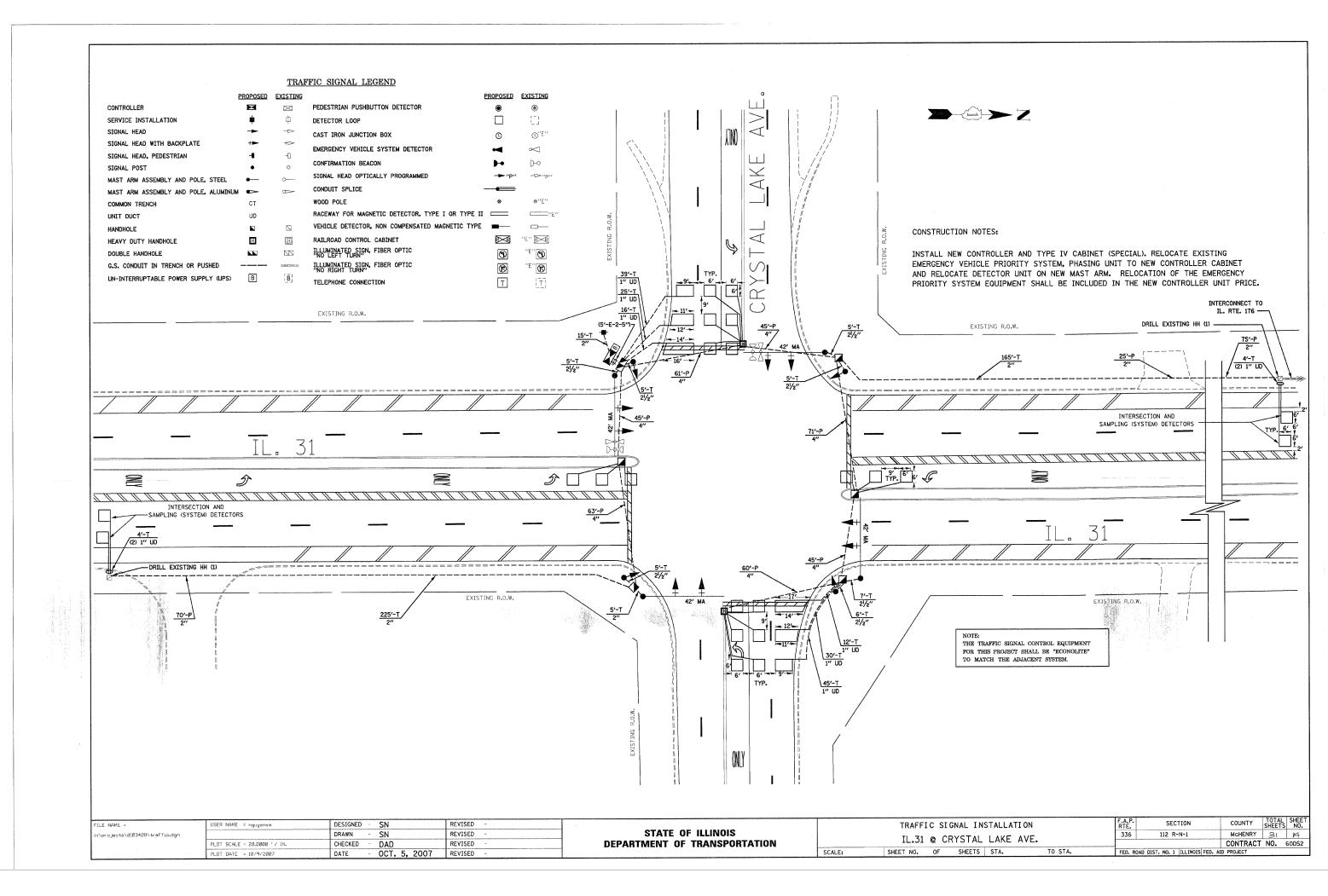
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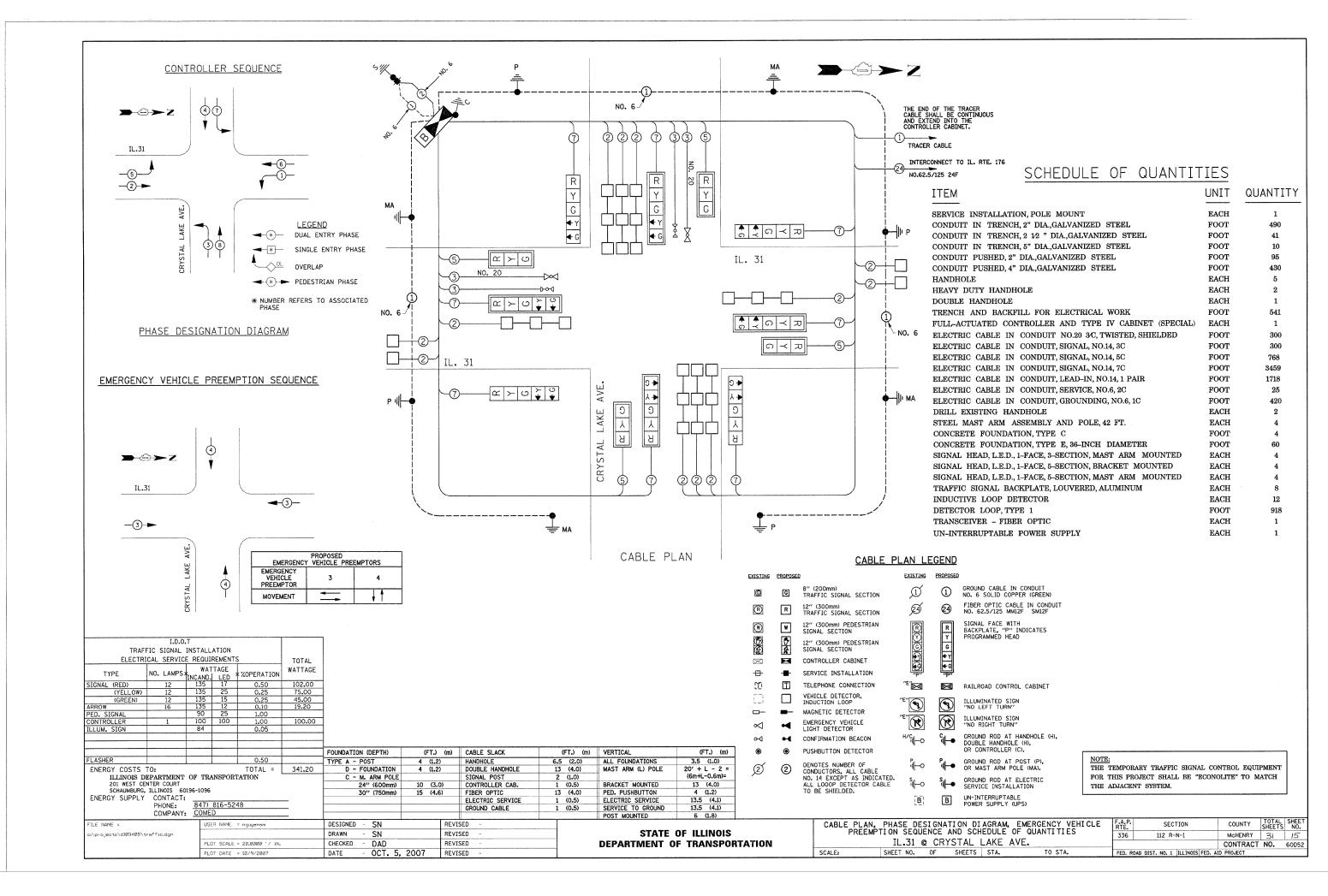
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

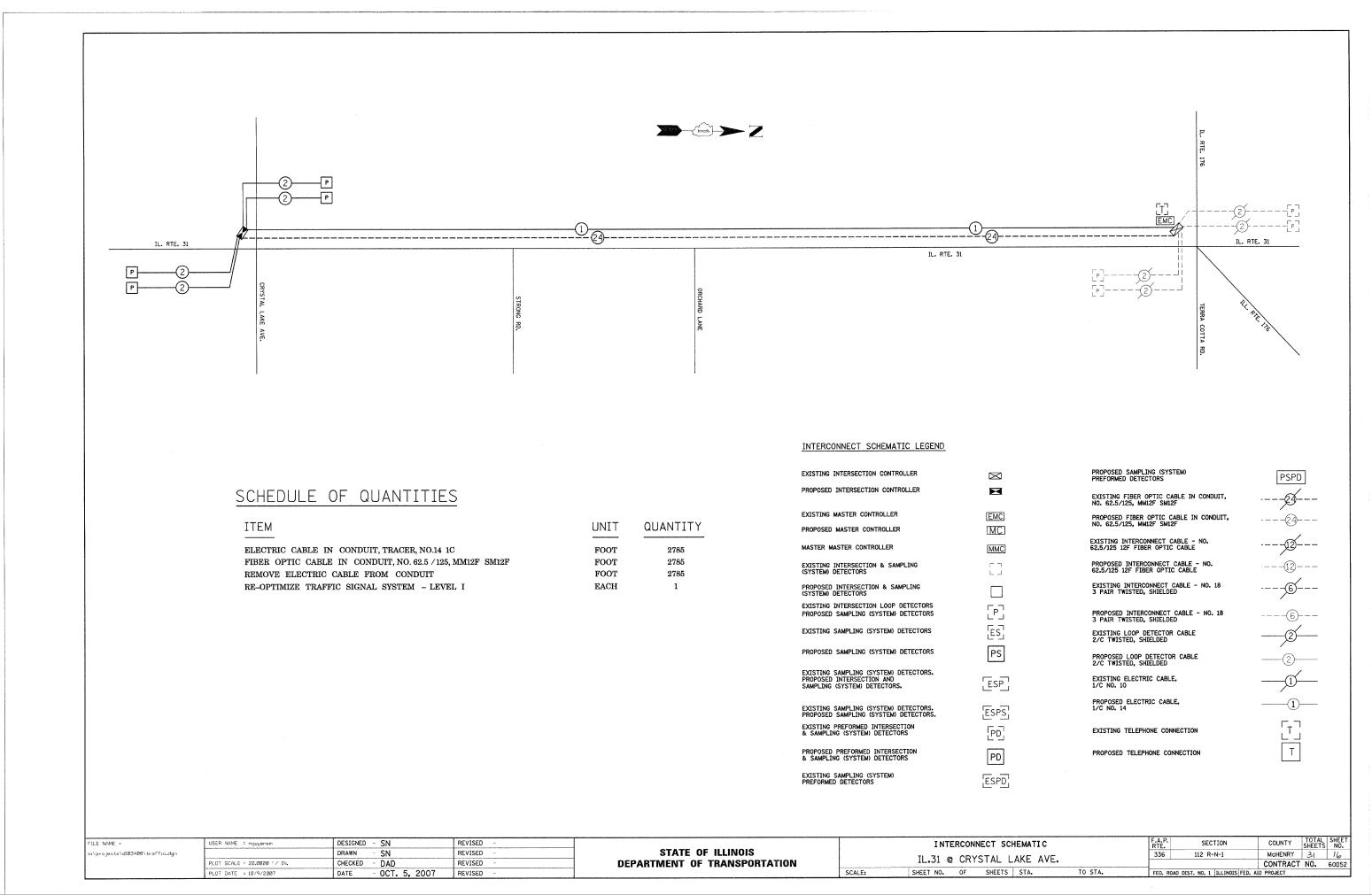
TI. ROUTE	31@ CRYS	STAL	LAKE	AVEN	UE	F.A.P RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
PROPOSED	ROADWAY	AND	PAVE	MENT	MARKING PLANS	336	112 R-N-1	MCHENRY CONTRAC	31 T NO. 6	11 SOD52
SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. RO	AD DIST. NO. ILLINOIS	ED. AID PROJECT	1 140.	,0002

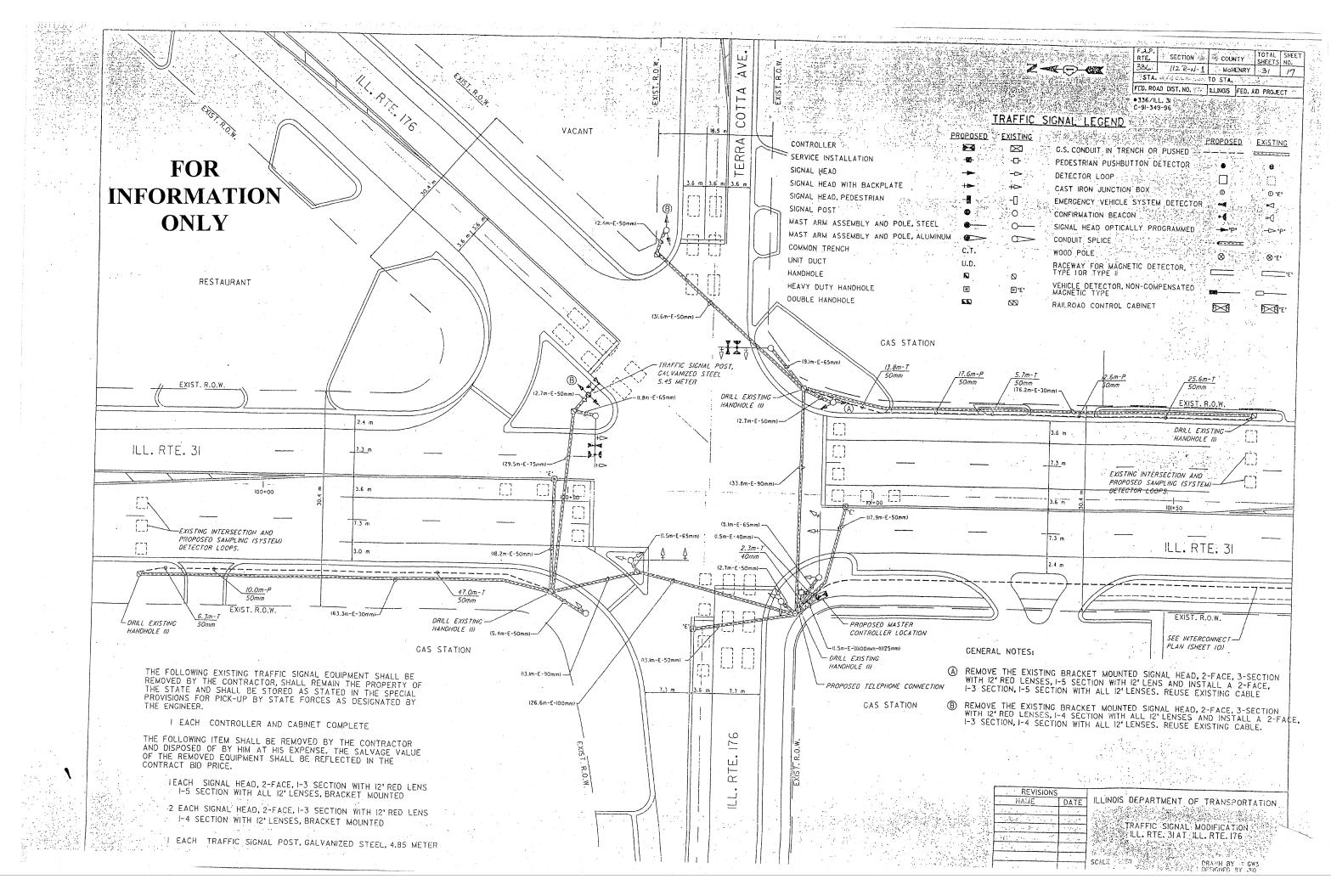


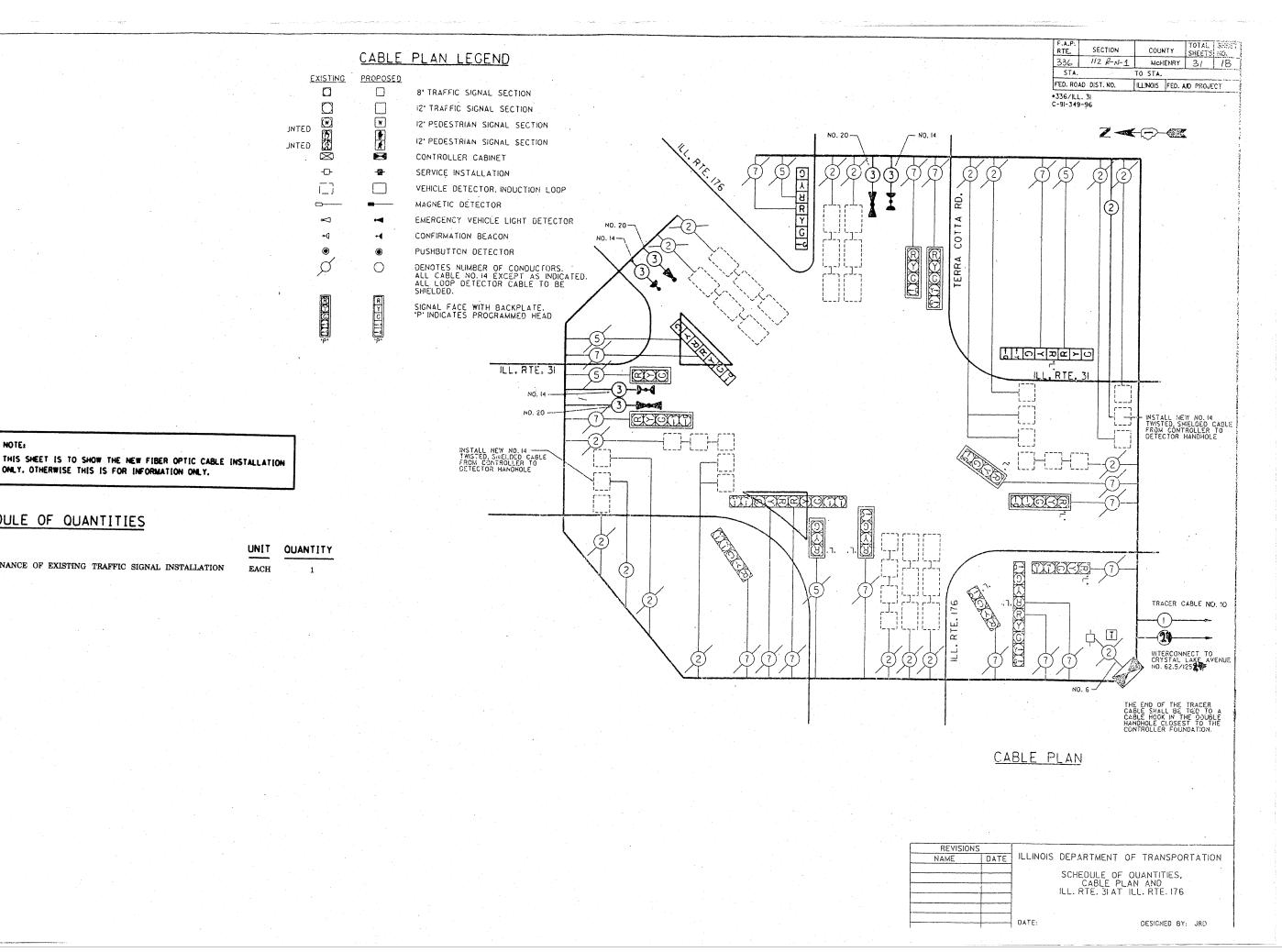












NOTE:

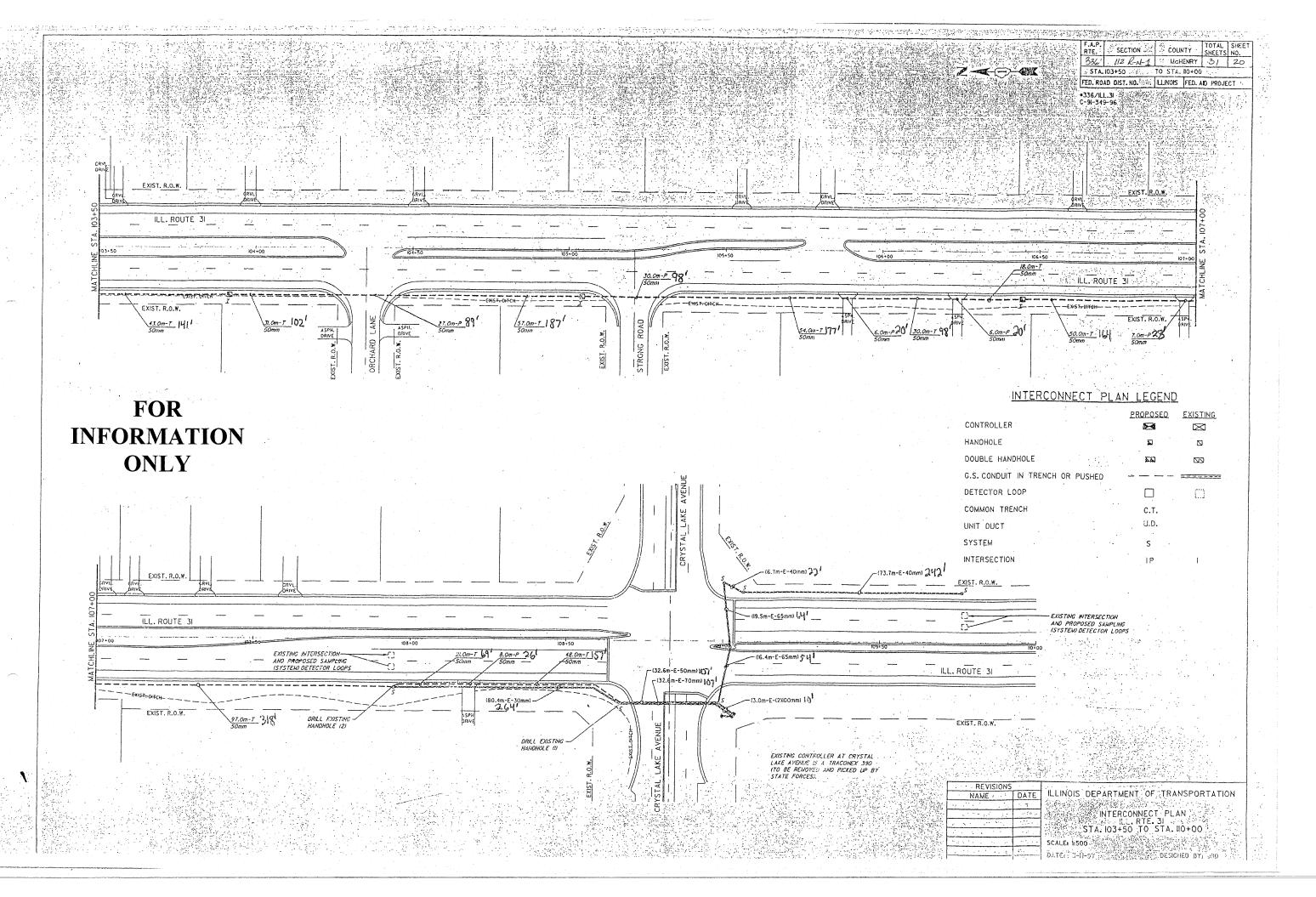
ITEM

SCHEDULE OF QUANTITIES

ONLY, OTHERWISE THIS IS FOR INFORMATION ONLY,

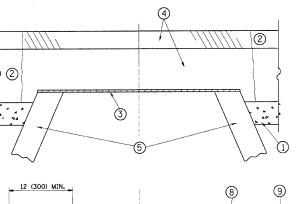
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

.. SECTION COUNTY MCHENRY 31. 2 -TO STA. 103+50 STA 100+00 FED. ROAD DIST. NO. T : BLINOIS FED. AND PROJECT. •336/LL.3I C-9I-349-96 INTERCONNECT PLAN LEGEND CONTROLLER HANDHOLE Ø DOUBLE HANDHOLE ALL DISTURBED GROUND AREAS CAUSED BY THE G.S. CONDUIT IN TRENCH OR PUSHED INSTALLATION OF THE TRAFFIC SIGNAL HANDHOLES -CONDUIT RUNS AND TRENCHING SHALL BE RESTORED DETECTOR LOOP IN ACCORDANCE WITH ARTICLE 211 AND ARTICLE 252 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JAN. 1, 1997. COMMON TRENCH C.T. THE TYPE OF RESTORATION SHALL BE TOPSOIL, 4 INCHES (100mm) AND SODDING, SALT TOLERANT. U.D. UNIT DUCT SYSTEM THIS WORK SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED AS INCIDENTAL TO THE COST OF THE RELATED TRAFFIC SIGNAL PAY ITEMS. INTERSECTION ASPHALT , EXIST. R.O.W. ~(76.2m-E-50mm) 2501 EXISTING INTERSECTION
AND PROPOSED SAMPLING
ISYSTEMI DETECTOR LOOPS EXISTING INTERSECTION ILL. ROUTE 31 (33.8m~E-90mm) -- EXISTING INTERSECTION AIND PROPOSED SAMPLING (SYSTEM) DETECTOR LOOPS-29.0m-1951 50mm 30.0m-P 98 - (63.3m-E-50mm) 268 ILL. ROUTE 31 ASPITALT ORIVE EMST-DITCH I ONVE DRILL EXISTING (I3.lm-E-90mm 431 GAS STATION McDONALD'S AUTO DEALERSHIP BANK EXISTIMO CONTROLLER AT M.L. RTE. 176
IS A EACLE DP 3000 (TO BE REMOYED
AND PICKED UP BY STATE FORCES). **FOR INFORMATION ONLY** ILLINOIS DEPARTMENT OF TRANSPORTATION NAME INTERCONNECT PLAN
ILL. RTE. 31
STA. 100+00 TO STA. 103+50 SCALE: 1:500 DATE: 3-11-97



CONTRACT NO.60352

COUNTY TOTAL SHEET NO. F.A. SECTION 336 1122-N-1 Motteney 31 21 TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



-6 PROPOSED BRICK, MORTAR, OR CONC. - PROPOSED SAND FILL ADJUSTING RINGS PROPOSED

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.

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 11/2 (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
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 5 EXISTING STRUCTURE
- 6 FRAME AND LID (SEE NOTES)
- 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.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT

WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

R. SHAH R. SHAH R. SHAH A. ABBAS	03/10/9
R. SHAH	
	03/10/9
A. ABBAS	
	03/21/9
R. WIEDEMAN	05/14/0
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION DETAILS FOR

FRAMES AND LIDS ADJUSTMENT WITH MILLING

SCALE: VERT. NONE

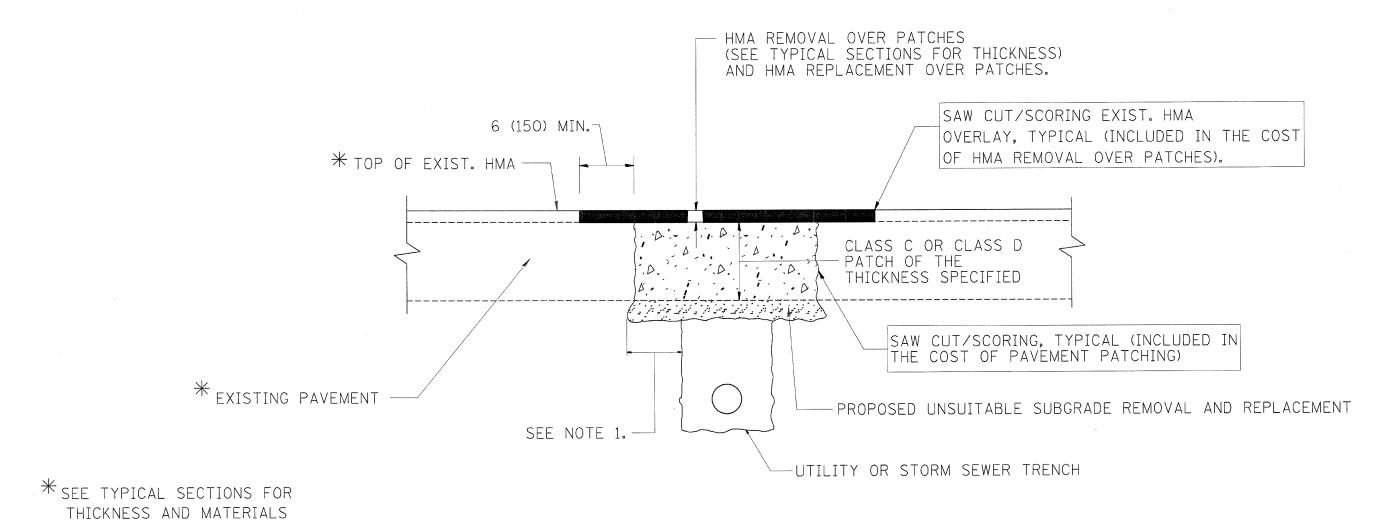
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BD600-03 (BD-8)

10/25/2007 Wi\diststd\bd08 52.9411'/ IN. smithkl

DATE NAME SCALE NAME PLOT FILE PLOT USER

F.A. SECTION COUNTY FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



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.

REVISIO	ONS
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
D BODO	00/04/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

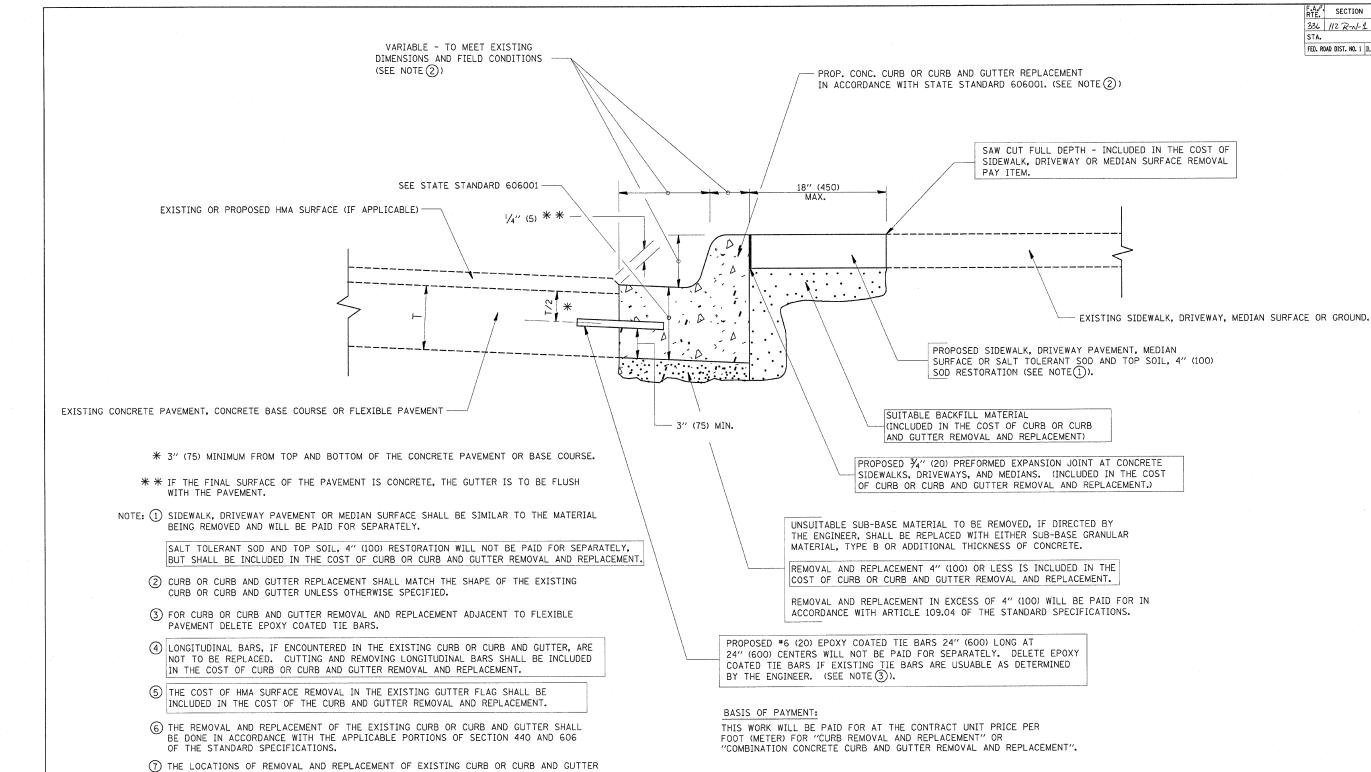
SCALE: VERT. NONE

CHECKED BY

BD400-04 (BD-22)

| CONTRACT NO. 60552 | RTE. | SECTION | COUNTY | TOTAL SHEETS NO. 848. | SHEETS NO.

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



SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

REVISIO	
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

IZ. NONE DRAWN BY

CHECKED BY BD600-06 (BD-24)

PROP. PAY LIMIT OF HMA SURF, REMOVAL FULL THICKNESS OF MILLING TEMP. RAMP (NOTE "C") (NOTE "E") PROP. HMA SURFACE REMOVAL EXIST. HMA SURFACE EXIST. PAVEMENT MILLED TEMPORARY RAMP (FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW) OPTION 1 PROP. PAY LIMIT OF HMA SURF. REMOVAL FULL THICKNESS OF MILLING SAW CUT (INCLUDED IN THE COST OF HMA SURFACE REMOVAL - BUTT JOINT) PROP. HMA SURFACE REMOVAL 13/4 (45) FOR E AND F MIX 4'-6" (1.35 m) PAY LIMIT FOR BUTT JOINT 11/2 (40) FOR C AND D MIX EXIST. HMA EXIST. PAVEMENT TEMP. HMA RAMI HMA CONSTRUCTED TEMPORARY RAMP (FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW) OPTION 2 TYPICAL TEMPORARY RAMP HMA TAPER LENGTH SAW CUT (INCLUDED IN THE COST OF HMA SURFACE REMOVAL - BUTT JOINT) PROP. HMA SURF. CRSE. PROP. HMA BINDER CRSE. 4'-6" (1.35 m) VARIES _ 13/4 (45) FOR E AND F MIX PAY LIMIT FOR BUTT JOINT (NOTE "D") 11/2 (40) FOR C AND D MIX EXIST. HMA EXIST. PAVEMENT HMA SURF. REMOVAL - BUTT JOINT BUTT JOINT AND

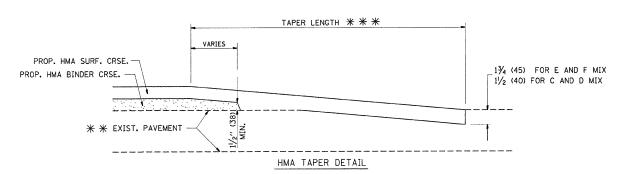
HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER

FOR MILLING AND RESURFACING

DATE NAME SCALE NAME

TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT PROP. HMA OR PCC SURFACE REMOVAL - BUTT JOINT SAW CUT (INCLUDED IN THE COST EXIST. HMA OR PCC SURFACE 30'-0" (9.0 m) (NOTE "A") OF HMA OR P.C.C. SURFACE REMOVAL 15'-0" (4.5 m) (NOTE "B") (NOTE "D") - BUTT JOINT) 13/4 (45) FOR E AND F MIX 11/2 (40) FOR C AND D MIX * * EXIST. PAVEMENT BUTT JOINT DETAIL



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.

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".

BASIS OF PAYMENT:

- 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.

R. SHAH

- 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.

ILLINOIS DEPARTMENT OF TRANSPORTATION DATE

BUTT JOINT AND HMA TAPER **DETAILS**

SCALE: VERT. NONE

DRAWN BY

BD400-05 (VI=BD32)

CONTRACT NO. GODSZ

COUNTY 336 112 R-N-1 MCHENRY 31 24

SECTION

COUNTY TOTAL SHEETS NO. SECTION 336 1/2 R-N-1 Methody 31 25 STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT ROAD CONSTRUCTION AHEAD ROAD CONSTRUCTION AHEAD TYPE III BARRICADES - WITH TWO FLASHING AMBER LIGHTS ON EACH. TYPE I OR TYPE II BARRICADES WITH ONE FLASHING AMBER LIGHT ON EACH, OR TYPE III BARRICADES WITH TWO FLASHING 200'± (60 m±)---AMBER LIGHTS ON EACH. 21 (530) DRIVEWAY /WORK AREA STREET; SPEED 40 MPH OR LES 200'± (60 m±) 09) COLLECTOR LIMIT> 40 MPH (W20-1(0) ROAD CONSTRUCTION M6-4(0)-2115 AHEAD ROAD M6-1(0)-2115

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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- d) 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.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-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.

REVISIO	VS .	
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: NONE

DRAWN BY CHECKED BY TC-10

CONTRACT NO. 60052

= 10/25/2007 = W:\diststd\tcli = 52,941 ' / IN, = benksl

PLOT FILE PLOT USER

DATE NAME SCALE NAME

CONTRACT NO. 6052

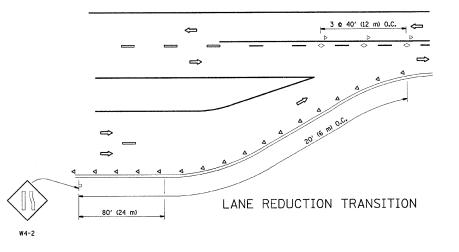
COUNTY TOTAL SHEET SHEETS NO. RTE. SECTION 336 112 R-N-1 Metterly 31 26

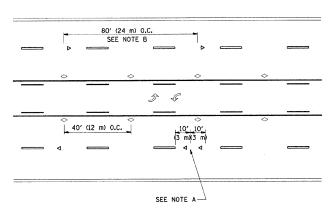
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

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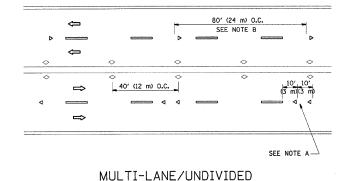
*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

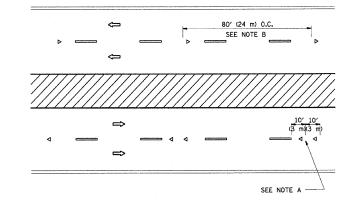
TWO-LANE/TWO-WAY





TWO-WAY LEFT TURN





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.
- MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

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.

SYMBOLS

YELLOW STRIPE

WHITE STRIPE

- ONE-WAY CRYSTAL MARKER (W/O)

______ DESIGN NOTES

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

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

NOIS DEPARTMENT			REVISIO	
1013 DEFARTMENT	TE	D/	NAME	
TVOTO AL AC	9-94	09-	RAMMACHER	
TYPICAL AF	2-99		RAMMACHER	
SED REFLEC	6-00	01-0	RAMMACHER	_
ERS (SNOW-				_
				1

OF TRANSPORTATION PPLICATIONS CTIVE PAVEMENT -PLOW RESISTANT)

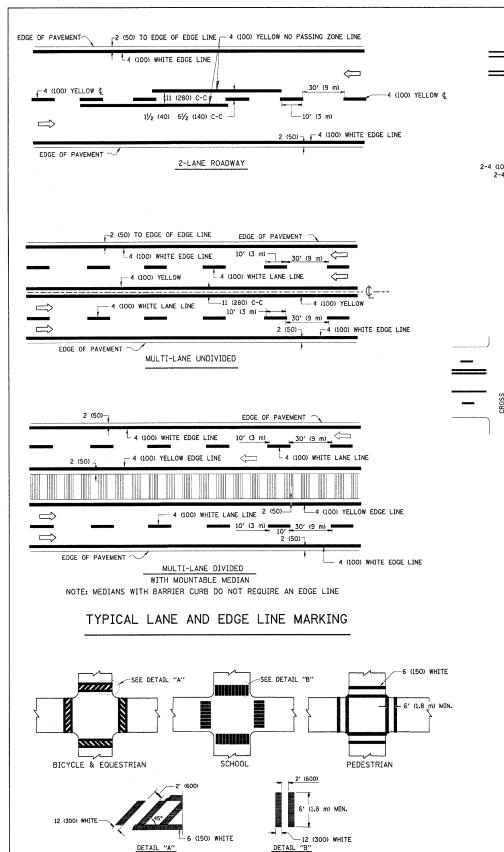
SCALE: NONE

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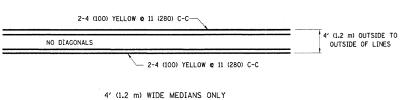
DATE NAME SCALE NAME PLOT FILE P PLOT USER

MINIMUM OF 3 W
EQUALLY SPACED 3 @ 80' (24 m) 0.C. 3 @ 40' (12 m) 40' (12 m) 0.C. 40' (12 m) 0.C. \Rightarrow * SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN



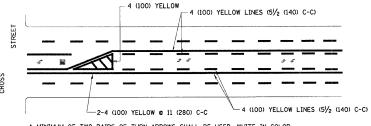
TYPICAL CROSSWALK MARKING



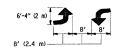
VARIES 12 (300) DIAGONALS -2-4 (100) @ 11 (280) C-C 2-4 (100) @ 11 (280) C-C-MEDIAN LENGTH FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

> 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

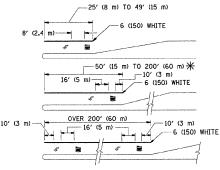


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

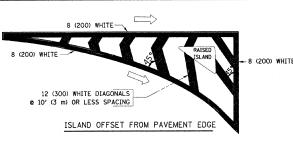


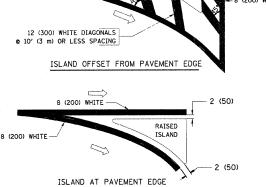
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \P AREA = 15.6 SQ. FT. (1.5 m²) $\Pi \Pi \Pi$ AREA = 20.8 SQ. FT. (1.9 m²)

* 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 UNDIVEDED 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	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 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 5' (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	DIACONALS: 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 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
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 (0VER 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 inches (millimeters) unless otherwise shown.

ILLINOIS DEPARTMENT OF TRANSPORTATION

CONTRACT NO. 6052

SECTION COUNTY TOTAL SHEETS NO.

336 112 R-N-1 McHENLY 31 27

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

TO STA. -

STA.

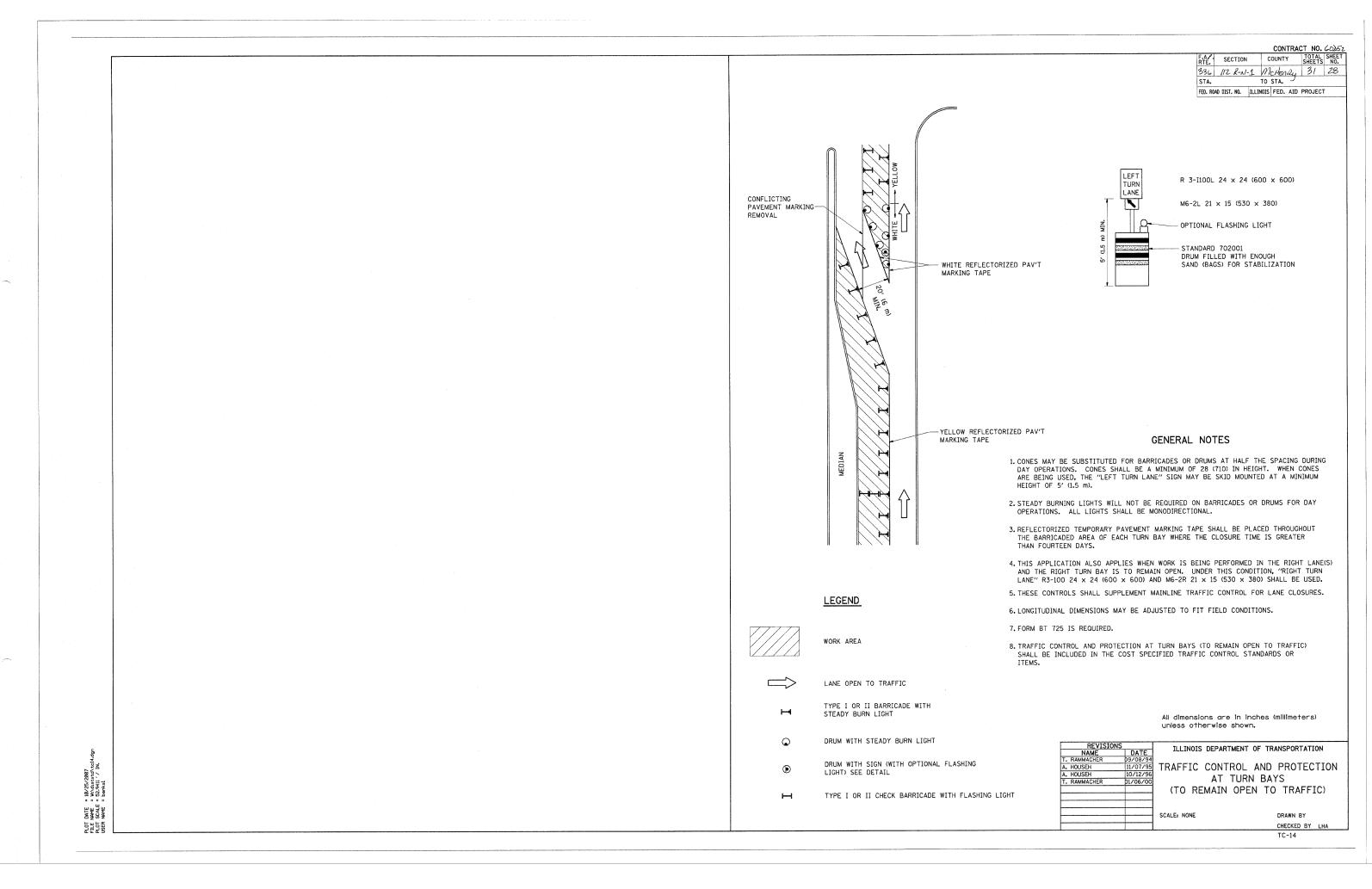
REVISIO	NS	
NAME	DATE 03-19-90	
EVERS		
T. RAMMACHER	10-27-94	
ALEX HOUSEH	10-09-96	
ALEX HOUSEH	10-17-96	
T. RAMMACHER	01-06-00	

DISTRICT ONE TYPICAL PAVEMENT MARKINGS

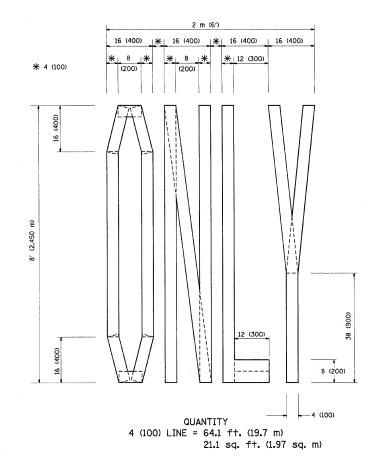
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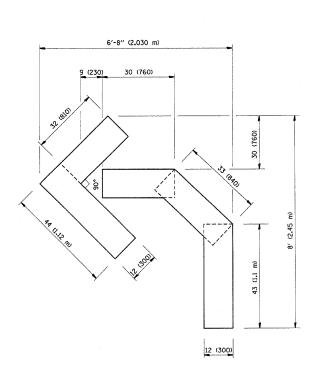
DRAWN BY CADD CHECKED BY TC-13

= 10/25/2007 = W:\diststd\tcl3 = 52.941 '/ IN. = benksl DATE NAME SCALE NAME

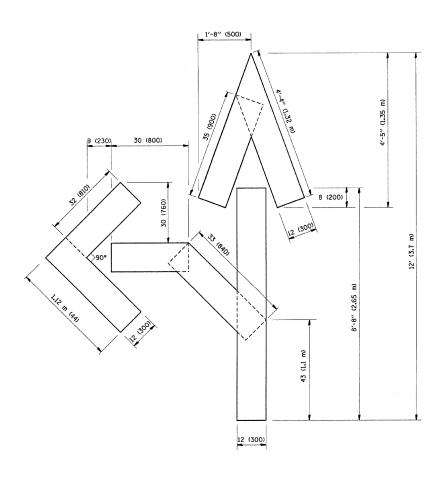


| CONTRACT NO. COD52
| F.A.P. | SECTION | COUNTY | SHEETS | NO. |
| 336 | 1/2 R-N-1 | McHenly | 31 | Z9 |
| STA. | TO STA. | FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT





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



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

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

NAME	DATE
T. RAMMACHER	09/18/9
J. OBERLE	06/01/9
T. RAMMACHER	06/05/9
T. RAMMACHER	11/04/9
T. RAMMACHER	03/02/9
E. GOMEZ	08/28/0

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

SCALE: NONE

CHECKED BY

PLOT E FILE N PLOT S USER P

F.A.P. SECTION COUNTY TOTAL SHEET NO. 33L 112 RAY 1 Metholy 31 30 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT 68 (1700) 54 (1350) (175) (175) ROAD WORK (1125) 45 EXPECT DELAYS USE APPROPRIATE MONTH AND DATE FOR CONTRACT -1 (25) BLACK BORDER Ž N N = BEGINS XXX XX 58 (1450) NOTES: 1. USE BLACK LETTERING ON ORANGE BACKGROUND. 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER. 3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION. 4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION. 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION. 6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.) 7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN, ILLINOIS DEPARTMENT OF TRANSPORTATION ARTERIAL ROAD INFORMATION SIGN DATE NAME SCALE NAME SCALE: NONE DRAWN BY DESIGN PLOT FILE PLOT USER CHECKED BY

CONTRACT NO. 60

COUNTY

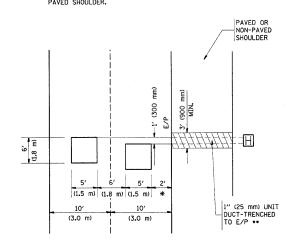
TO STA. -

336 112 R-N-2 MCHERRY 31 31

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

TOTAL SHEET SHEETS NO.

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

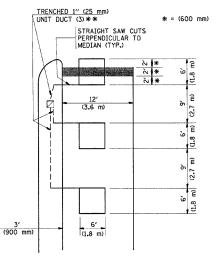


* * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

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

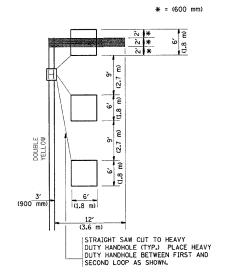


** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS. NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

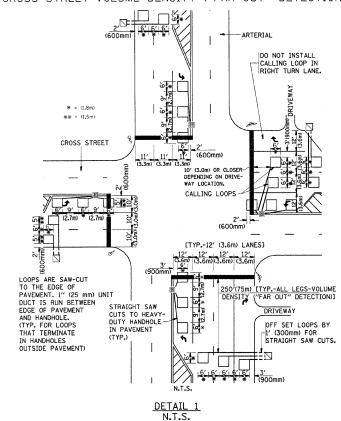
LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

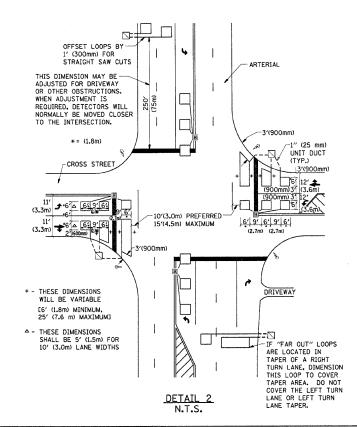


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



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



NOTES:

VEHICLES LOOP DETECTORS

* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIFL DED.

SECTION

- * 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 SEPARATLY. 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.

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		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		DISTRICT 1
		DETECTOR LOOP
		INSTALLATION DETAILS
		FOR ROADWAY RESURFACING
		DESIGNED BY
		SCALE: NONE DRAWN BY CADD
		CUTCALD BY BY

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DATE NAME SCALE NAME