STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT IS LOCATED IN THE VILLAGES OF MIDLOTHIAN AND POSEN

0

705-4432

(847)

CHANG

ENG/JENPAI

X F N

ENGINEER:

PREPARATION

ONE

RICT

DIST

Service: \$10139363/29256ac.com | 1277472066 5105741 DK (Screensisting)

PROPOSED HIGHWAY PLANS

F.A.U. ROUTE 1602: IL. 83 (147TH ST.)

IL. 50 (CICERO AVE.) TO CLEVELAND AVE.

SECTION: (0405-1 & 0506-2) RS-1

RESURFACING (MAINTENANCE)

COOK COUNTY

C-91-393-06

ROADWAY OMISSION:
STA. 52+82 TO
STA. 54+26

RAILROAD OMISSION:
STA. 66+38 TO
STA. 66+87

ROADWAY OMISSION:
STA. 66+87

ROADWAY OMISSION:
STA. 66+87

ROADWAY OMISSION:
STA. 52-82 TO
STA. 66+87

ROADWAY OMISSION:
STA. 52-82 TO
STA. 66+87

ROADWAY OMISSION:
STA. 52-82 TO
STA. 66+38 TO
STA. 66+87

ROADWAY OMISSION:
STA. 66+87

ROADWAY OMISSION:
STA. 52-82 TO
STA. 66+87

ROADWAY OMISSION:
STA. 52-82 TO
STA. 66+38 TO
STA. 66+87

ROADWAY OMISSION:
STA. 52-82 TO
STA. 66+38 TO
STA. 66+87

ROADWAY OMISSION:
STA. 52-82 TO
STA. 66+87

ROADWAY OMISSION:
STA. 52-82 TO
STA. 66+38 TO
STA. 66+87

ROADWAY OMISSION:
STA. 52-82 TO
STA. 54-26

RAILROAD OMISSION:
STA. 66+87

ROADWAY OMISSION:
STA. 52-82 TO
STA. 66-83 TO
STA. 66-87

ROADWAY OMISSION:
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ROADWAY OMISSION:
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STA. 66-83 TO
STA. 66-87

ROADWAY OMISSION:
STA. 52-82 TO
STA. 66-83 TO
ST

TRAFFIC DATA

2005 ADT = 20,600 SPEED LIMIT = 30-35 MPH

100' 200' 300' 1" = 100'

10' 20' 30' - 1" = 10'

50' 100' 1" = 50'

3 50' 100' 1" = 40'

0 50' 100' - 1" = 30'

0 50' 100' - 1" = 30'

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. 60B68

GROSS LENGTH OF IMPROVEMENT = 13,212 FT. (2.50 MI.)
NET LENGTH OF IMPROVEMENT =13,017 FT. (2.47 MI.)

D-91-393-06



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED

DEC. 20 20 66

Dione O' Keefe Cod

DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

JULY L. HOLLING

AND ENGINEER OF DESIGN AND ENVIRONMENT

Telegrapy 2, 20 07

Millon R. Soen P. H. D

DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.				
1602	в	COOK	38	2				
STA. TO STA.								
FED. ROAE	DIST. NO. 1 ILLIN	WOIS FED. AID	PROJECT					
*(040	5-1 & 0506	-2) RS-1						

INDEX OF SHEETS

DRIVEWAY DETAILS <= 4.5M (15')

STATE STANDARDS

G	E	N	_	R	Д	ľ	V	0	1	E	S

CONTRACT NO. 60B68

SHEET NO.	DESCRIPTION
1.	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES.
3-4	SUMMARY OF QUANTITIES
5-8	EXISTING AND PROPOSED TYPICAL SECTIONS
7-13	ROADWAY AND PAVEMENT MARKING PLANS
14-21	DETECTOR LOOP REPLACEMENT PLANS
22	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MİLLING
23	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
24	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
25	BUTT JOINT AND HMA TAPER DETAILS
26	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
27	TYPICAL APPLICATIONS: RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
28	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
29	TRAFFIC CONTROL AND PROTECTION OF TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
30	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
31	TEMPORARY INFORMATION SIGNING
32-35	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN
36	DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING
.37	DRIVEWAY DETAILS >= 4.5M (15')

DESCRIPTION STANDARD NO.

000001-04 TYPICAL SYMBOLS, ABBREVIATIONS AND PATTERNS

442201-02 CLASS C AND D PATCHES

604001-02 FRAME AND LIDS, TYPE 1

604086-01 FRAME AND GRATE, TYPE 23

606001-03 CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER

701301-02 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS

701311-02 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY

701606-04 URBAN LANE CLOSURE, MULTILANE 2W WITH MOUNTABLE MEDIAN

701701-04 URBAN LANE CLOSURE, MULTILANE INTERSECTION

701801-03 LANE CLOSURE, MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE

702001-06 TRAFFIC CONTROL DEVICES

886001 DETECTOR LOOP INSTALLATION

886006 TYPICAL LAYOUT FOR DETECTION LOOPS

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 REQUIRED)

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND VILLAGES OF MIDLOTHIAN AND POSEN.

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

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

THE RESIDENT ENGINEER SHALL CONTACT MS. PATRICE HARRIS, AREA TRAFFIC FIELD ENGINEER, AT (708) 597-9800 A MINIMUM OF 72 HOURS PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKINGS.

3 METERS (10 FEET) TRANSITION SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER TO EXISTING CURB AND CUTTERS IN THE FIELD, UNLESS OTHERWISE SHOWN, THE TRANSITION SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF 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 WHERE THE SPEED LIMIT IS 45 MPH OR LESS, AND 1 INCH WHERE THE SPEED LIMIT IS 45 MPH, WITH WRITTEN APPROVAL FROM THE RESIDENT ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM OF 1:3 (V:H)

> ILLINOIS DEPARTMENT OF TRANSPORTATION INDEX OF SHEETS. STATE STANDARDS AND GENERAL NOTES SCALE: VERT. DATE CHECKED BY

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CONTRACT NO. 60B68

 F.A.U. RTE.	SECTION		COUNT	Υ	TOTAL SHEETS	SHEET NO.
1602	•		соок		38	3
FED.	ROAD DIST. NO. 1	ILL	INOIS	HIG	HWAY PRO	DJECT
*(Q4 <u>C</u>)5_1 & 0506-2) R	S-1				

	SUMMARY OF QUANTITIES					CONSTRUCT	TION TYPE	CODE	DE		SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE			
	SUMMART OF QUANTITIES		- <i>URBAN</i> TOTAL	1000	1000	1000							URBAN TOTAL	1000	1000 50% STATE	1000	
CODE NO	ITEM	TINU	QUANTITIES	100% STATE	50% STATE	1000 100% VILLAGE				CODE NO	ITEM	TINU	QUANTITIES	100% STATE	50% STATE 50% VILLAGE	100% VILLAGE	
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	34	33	1					60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	20	19	1		
40600300	AGGREGATE (PRIME COAT)	TON	148	147	1					67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6			1
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	23	22	1					67100100	MOBILIZATION	L SUM	1	1			
40600895	CONSTRUCTING TEST STRIP	EACH	2	2						70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1			
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	1165 ,	1165						70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1			
40600990	TEMPORARY RAMP	SQ YD	1165	1165						70102635	TRAFFIC CONTROL AND PROTECTION,	L SUM	1	1			
40601005	HOT-MIX ASPHALT REPLACEMENT OVER	TON	150	150							STANDARD 701701						
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	6215	6125	90					70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1			
42004700		SQ YD	427	375		52				70300100	SHORT-TERM PAVEMENT MARKING	FOOT	11950	11950			
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5	SQ FT	125	125		32			AND ADDRESS OF THE REAL PROPERTY OF THE REAL PROPER	70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	760	760			
44000158	INCH HOT-MIX ASPHALT SURFACE REMOVAL, 2	SQ YD	73856	72850	1006					70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	38100	38100			
	1/4"									70300240	TEMPORARY PAVEMENT MARKING	FOOT	2400	2400			
44000600	SIDEWALK REMOVAL	SQ FT	125	125		150				70300260	- LINE 6" TEMPORARY PAVEMENT MARKING	FOOT	2900	2000			
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	F00T	1230	1074		156				10300260	- LINE 12"	F001	2900	2900			
44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"	SQ YD	1390	1390						70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	670	670			
44003510	MEDIAN REMOVAL PARTIAL DEPTH	SQ FT	10540	10540						70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	4000	4000			
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	350	350						* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	760	760			
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	560	560						¥ 78000200	THERMOPLASTIC PAVEMENT MARKING	FOOT	38100	38100			
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SQ YD	477	477							- LINE 4"						
55039700	STORM SEWERS TO BE CLEANED	FOOT	1500	1500						★ 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2400	2400			
60250400	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, OPEN LID	EACH	10	10			FE PARKET TANKET AND THE PARKET T			* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	F00T	2900	2900			
60253000	CATCH BASINS TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, OPEN LID	EACH	1	1			en e			¥ 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	F00T	670	670			
60258200	MANHOLES TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1	1						* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	811	811	- Andrews - Andr		
60264130	INLETS TO BE RECONSTRUCTED WITH NEW TYPE 23 FRAME AND GRATE	EACH	1	1			Parameter Company			78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	487	487			
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	3	3						X 81400115	HANDHOLE TO BE ADJUSTED	EACH	2	2			
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	1	1					- Andrewson and	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	3	3			,

REVISIONS
NAME DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES

* SPECIALTY ITEMS

PLOT DATE: 12/21/2006

CONTRACT NO. 60868

2001	
COOK 38	4
S HIGHWAY	PROJECT
	S HIGHWAY

	SUMMARY OF QUANTITIES					CONSTRUCT	ION TYPE CODE		SUMMARY OF QUANTITIES			CONSTRUC	TION TYPE CODE
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	1000 100% STATE	IOOO 50% STATE 50% VILLAGE	1000 100% VILLAGE		CODE NO	ITEM	UNIT	TOTAL QUANTITIES		
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	3102	3102									
88500100	INDUCTIVE LOOP DETECTOR	EACH	8	3									
88600100	DETECTOR LOOP, TYPE I	FOOT	1378	1378								200	
88600600	DETECTOR LOOP REPLACEMENT	FOOT	886	886	,							- Annual	
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	742	742									
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	51.4	51.4									-
X0656100	DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT	SQ YD	80	80									
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	1	1									
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	3	3									
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	3200	3155	45					1111			
XX004385	FRAMES AND LIDS TO BE ADJUSTED, WITH NEW TYPE 1 FRAME, CLOSED LID (SPECIAL)	EACH	30	30									
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	38	38									
Z0018600	DRAINAGE STRUCTURES TO BE RECONSTRUCTED	EACH	1	1								THE STATE OF THE S	
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1									
					-								
3830scouden													

*SPECIALTY ITEMS

REVISIONS
NAME DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES

PLOT DATE: 12/21/2006

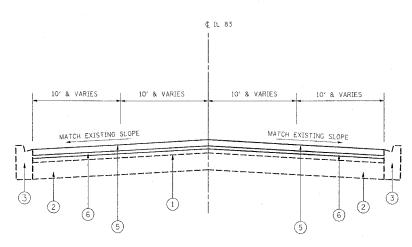
F	A.U.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
1	602	RS-1		COOK	38	5
S	TA.		TO	STA.		
F	ED. ROA	D DIST. NO. 1	ILLINOIS	FED. AI	D PROJECT	
_	(040	5-1 9 OF	06-21	DC-1		

*(0405-1 & 0506-2) RS-1 CONTRACT NO. 60B68

Ç IL 83 EXISTING SLOPE

EXISTING TYPICAL SECTION IL 83 (147TH STREET)

STATION 8+00 TO 47+84 59+78 TO 101+64 111+87 TO 134+04



PROPOSED TYPICAL SECTION IL 83 (147TH STREET)

STATION 8+00 TO 47+84 59+78 TO 101+64 111+87 TO 134+04

LEGEND

- 1 EXISTING HOT-MIX ASPHALT SURFACE COURSE, 3"(±)
- 2 EXISTING PCC BASE COURSE, 10"(±)
- 3 EXISTING COMBINATION CONC. CURB & GUTTER TYPE B.24
- 4 HOT-MIX ASPHALT SURFACE REMOVAL 2 1/4 "
- (5) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2 "
- (6) PROPOSED POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4 "

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE USE	AC TYPE	AIR VOIDS (%)
POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50	SBS/SBR 76-28	4% @ 50 GYR
HOT-MIX ASPHALT SURFACE COURSE, MIX "D" N70	PG 64-22	4% @ 70 GYR
HOT-MIX ASPHALT REPLACEMENT OVER PATCHES, IL-19.0 MM	PG 64-22*	4% © 70 GYR
CLASS D PATCHES, IL-19.0, 10"	PG 64-22*	4% @ 70 GYR

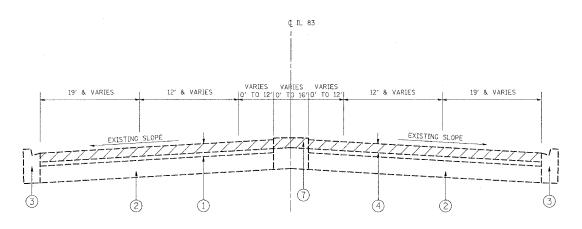
THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SY/IN.

*WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22

REVISIONS		TIL INOTS DEPAR	RTMENT OF TRANSPORTATION							
NAME	DATE		The state of the s							
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		EXISTING	G AND PROPOSED							
		TYPICAL SECTIONS								
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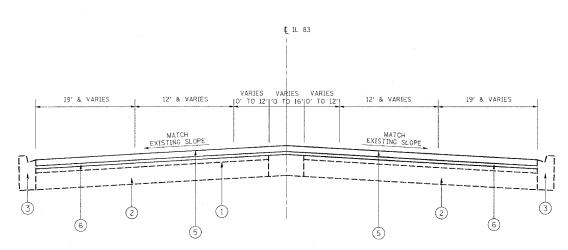
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*(0405-1 & 0506-2) RS-1 CONTRACT NO. 60B68



EXISTING TYPICAL SECTION IL 83 (147TH STREET)

> STATION 47+84T0 52+82 54+26 TO 59+78 134+04 TO 136+05

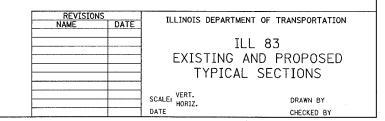


PROPOSED TYPICAL SECTION IL 83 (147TH STREET)

STATION 47+84 TO 52+82 54+26 TO 59+78 134+04 TO 136+05

LEGEND

- 1) EXISTING HOT-MIX ASPHALT SURFACE COURSE, 3"(±)
- 2) EXISTING PCC BASE COURSE, 10"(±)
- 3) EXISTING COMBINATION CONC. CURB & GUTTER TYPE B.24
- 4) HOT-MIX ASPHALT SURFACE REMOVAL 2 1/4 "
- (5) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2 "
- 6 PROPOSED POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4 "
- 7 MEDIAN REMOVAL, PARTIAL DEPTH



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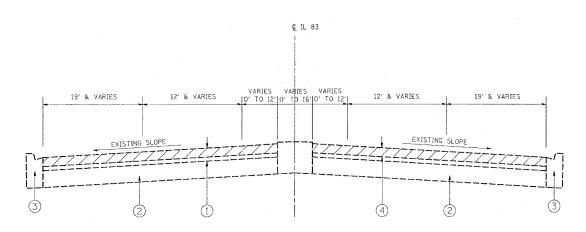
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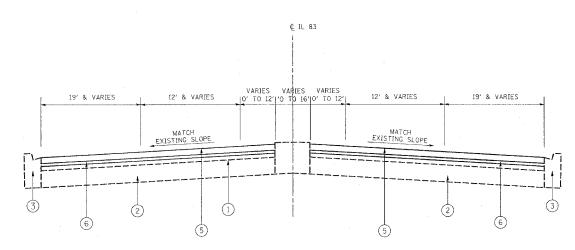
F.A.U. SECTION 1602 RS-1 COOK 38 7 STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

*(0405-1 & 0506-2) RS-1 CONTRACT NO. 60B68



EXISTING TYPICAL SECTION IL 83 (147TH STREET)

STATION 101+64 TO 111+87 136+05 TO 140+12



PROPOSED TYPICAL SECTION IL 83 (147TH STREET)

STATION 101+64 TO 111+87 136+05 TO 140+12

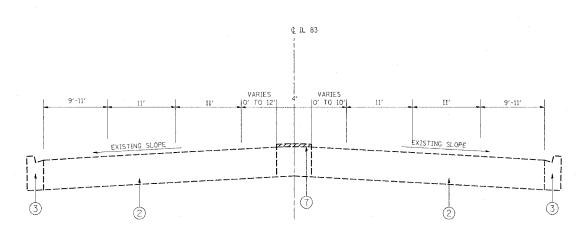
LEGEND

- 1 EXISTING HOT-MIX ASPHALT SURFACE COURSE, 3"(±)
- 2 EXISTING PCC BASE COURSE, 10"(±)
- 3 EXISTING COMBINATION CONC. CURB & GUTTER TYPE B.24
- 4 HOT-MIX ASPHALT SURFACE REMOVAL 2 1/4 "
- (5) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D". N70, 1 1/2 "
- 6 PROPOSED POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4 "

ILLINOIS DEPARTMENT OF TRANSPORTATION ILL 83 EXISTING AND PROPOSED TYPICAL SECTIONS SCALE: VERT. HORIZ. DRAWN BY CHECKED BY

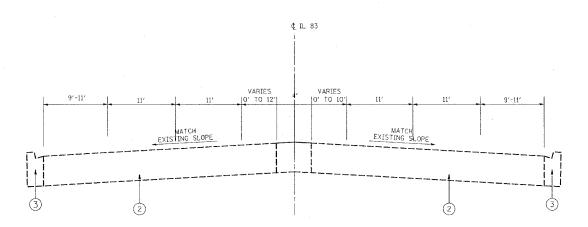
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EXISTING TYPICAL SECTION IL 83 (147TH STREET)

STATION 52+82 TO 52+98 54+13 TO 54+26



PROPOSED TYPICAL SECTION IL 83 (147TH STREET)

STATION 52+82 TO 52+98 54+13 TO 54+26

LEGEND

- 1 EXISTING HOT-MIX ASPHALT SURFACE COURSE, 3"(±)
- 2 EXISTING PCC
- 3 EXISTING COMBINATION CONC. CURB & GUTTER TYPE B.24
- 4 HOT-MIX ASPHALT SURFACE REMOVAL 2 1/4 "
- PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2 "
- 6 PROPOSED POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4 "
- MEDIAN REMOVAL, PARTIAL DEPTH

CURB AND GUTTER REMOVAL AND REPLACEMENT SCHEDULE

APPROX. STA. (AND/OR ADDRESS)	DIRECTION	LENGTH (LN. FT.)
9+03	RT	138
10+80	RT	26
12+20	RT	10
13+98	L.T	10
15+98	RŤ	10
18+00	LT	30
19+00	LT	15
19+00	RT	15
20+20	LT	20
21+25	RT	43
21+00	LT	100
23+75	RT	10
27+00	RT	23
33+15	RT	14
33+70	RT	14
36+50	RT	10
60+75 (ADJACENT TO PARKING LANE)	LT	14
61+12 (ADJACENT TO PARKING LANE)	LT	27
61+50/ (INCLUDING 3844 147TH ST	LT	100
ADJACENT TO PARKING LANE)		
63+55	RT	10
64+05	RT	14
64+80	RT	20
71+30	LT	5
80+09	RT	20
82+08	LT	29
95+75	LT	10
101+90	RT	22
112+70	LT	11
3831 147TH ST	RT	60
19+82 (BRIDGE)	RT	20
19+82 (BRIDGE)	LT	20
60+35 (ADJAENT TO PARKING LANE)	LT	15
10+50	LT	41
30+15	RT	50
35+25	RT	23
35+75	RT	. 20
	RT	86
36458	Ft I	
36+58 37+60		
37+60	RT	30
37+60 114+70	RT RT	30 23
37+60 114+70 128+65	RT RT RT	30 23 27
37+60 114+70	RT RT	30 23

REVISIONS		TILL TAKES OF DEDARTS	TOANCOODTATION						
NAME	DATE	ILLINOIS DEPARTMENT OF TRANSPORTATI							
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		EXISTING	ANU	ID PROPOSED					
		TYPICA	CTIONS						
		I II ICA	L JL	EC 1101/12					
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RS-1

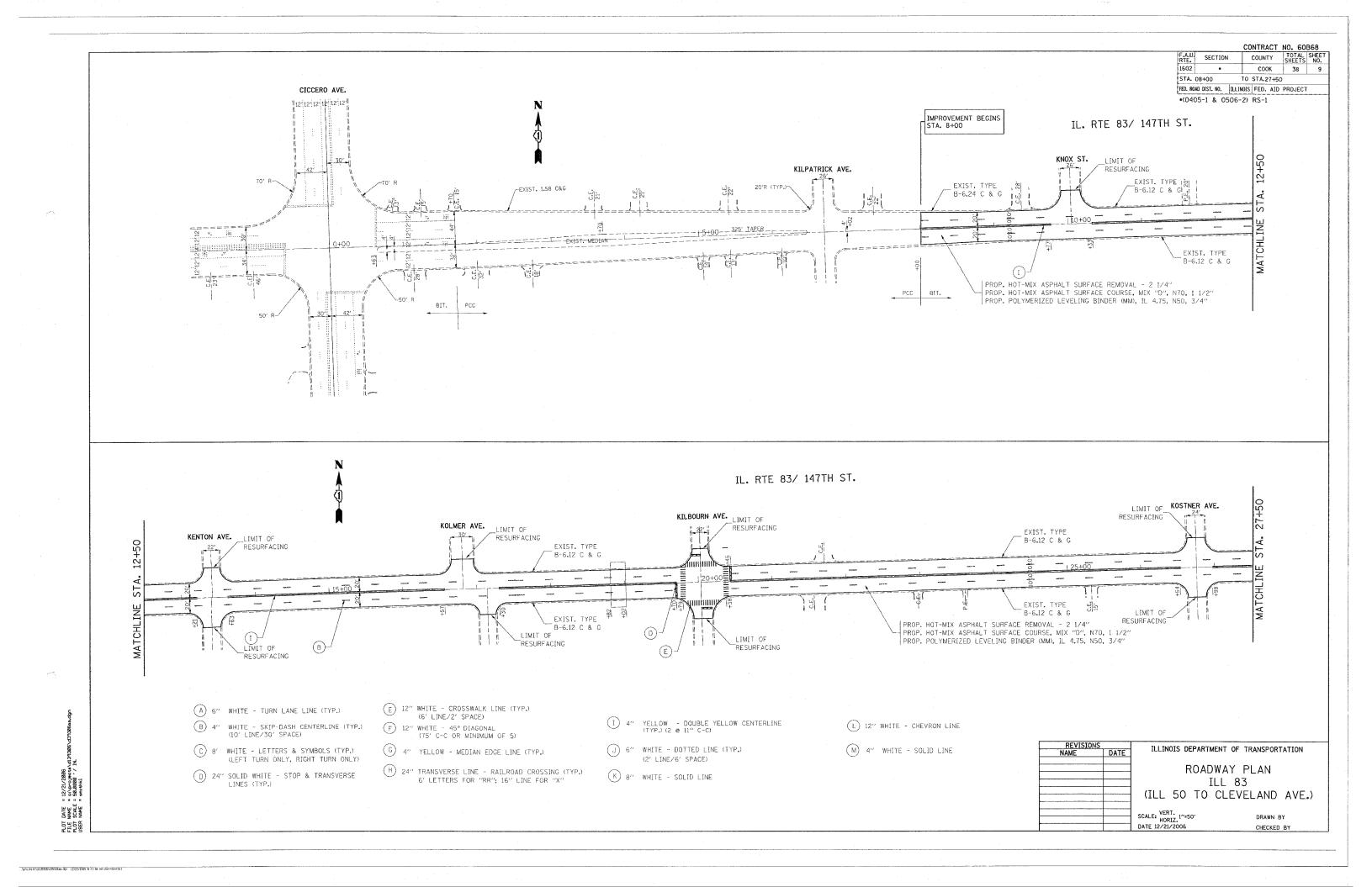
*(0405-1 & 0506-2) RS-1

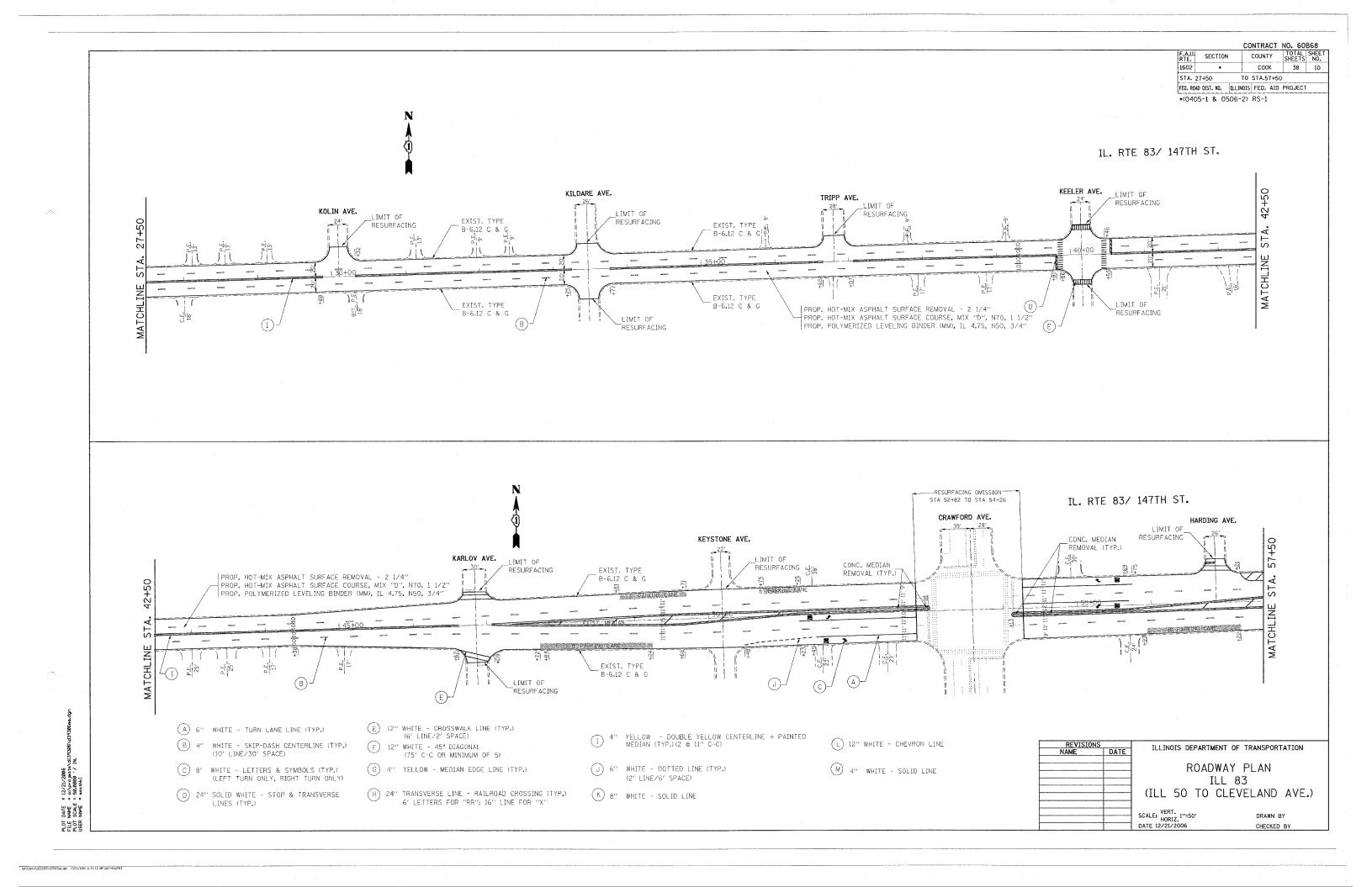
COUNTY TOTAL SHEE

CONTRACT NO. 60B68

COOK

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



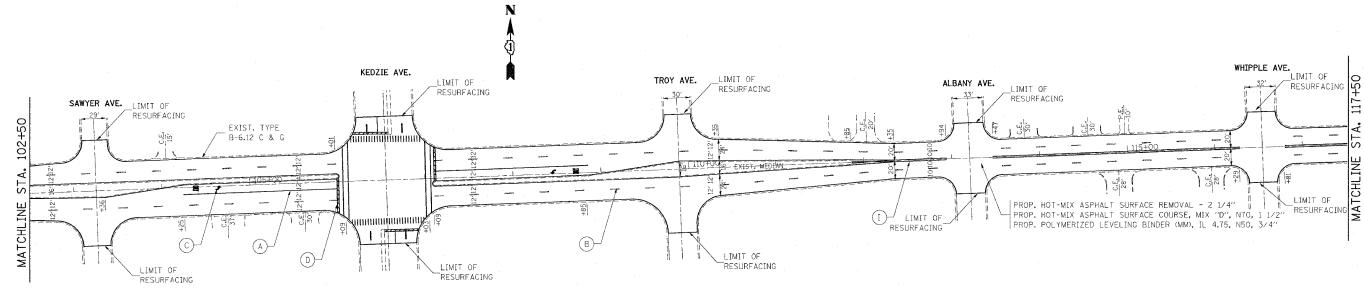


CONTRACT NO. 60B68 F.A.U. SECTION COUNTY 1602 COOK STA, 57+50 TO STA.87+50 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT *(0405-1 & 0506-2) RS-1 IL. RTE 83/ 147TH ST. C.R.I. & R R.R. OMISSION WAVERLY AVE. STA. 66+38 TO STA. 66+87 ABBOTTSFORD RD. _LIMIT OF AVERS AVE. D-LIMIT OF RESURFACING RESURFACING SPRINGFIELD AVE. _LIMIT OF LIMIT OF RESURFACING RESURFACING 1 EXIST. TYPE CONC. MEDIAN B-6.12 C & G REMOVAL (TYP.) MATCHLINE 33, EXISTING MOUNTABLE CURB & GUTTER TO REMAIN PROP. HOT-MIX ASPHALT SURFACE REMOVAL - 2 1/4"
PROP. HOT-MIX ASPHALT SURFACE COURSE, MIX "O", N70, 1 1/2"
PROP. POLYMERIZED LEVELING BINDER (MM), IL 4.75, N50, 3/4" RESURFACING HAMLIN AVE. RESURFACING WAVERLY AVE. IL. RTE 83/ 147TH ST. ST. LOUIS AVE. LIMIT OF LIMIT OF RESURFACING CENTRAL AVE. __LIMIT OF RESURFACING WILLARD AVE. RESURFACING RESURFACING EXIST. TYPE B-6.12 C & G LIMIT OF RESURFACING EXIST. TYPE RESURFACING LIMIT OF B-6.12 C & G RESURFACING LIMIT OF PROP. HOT-MIX ASPHALT SURFACE REMOVAL - 2 1/4" - PROP. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2" PROP. POLYMERIZED LEVELING BINDER (MM), IL 4.75, N50, 3/4" LAWNDALE AVE. RESURFACING E 12" WHITE - CROSSWALK LINE (TYP.)
(6' LINE/2' SPACE) (A) 6" WHITE - TURN LANE LINE (TYP.) 4" YELLOW - DOUBLE YELLOW CENTERLINE + PAINTED MEDIAN (TYP.) (2 @ 11" C-C) B 4" WHITE - SKIP-DASH CENTERLINE (TYP.) (10' LINE/30' SPACE) (L) 12" WHITE - CHEVRON LINE (F) 12" WHITE - 45° DIAGONAL (75' C-C OR MINIMUM OF 5) J 6" WHITE - DOTTED LINE (TYP.) C) 8' WHITE - LETTERS & SYMBOLS (TYP.)
(LEFT TURN ONLY, RIGHT TURN ONLY) G 4" YELLOW - MEDIAN EDGE LINE (TYP.) M 4" WHITE - SOLID LINE ILLINOIS DEPARTMENT OF TRANSPORTATION (2' LINE/6' SPACE) ROADWAY PLAN D) 24" SOLID WHITE - STOP & TRANSVERSE H) 24" TRANSVERSE LINE - RAILROAD CROSSING (TYP.) 6' LETTERS FOR "RR"; 16" LINE FOR "X" K 8" WHITE - SOLID LINE ILL 83 (ILL 50 TO CLEVELAND AVE.) SCALE: VERT. 1"=50' HORIZ. 1"=50' DATE 12/21/2006 DRAWN BY CHECKED BY

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CONTRACT NO. 60B68 SECTION COUNTY соок STA. 87+50 TO STA.117+50 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT *(0405-1 & 0506-2) RS-1 MATCHL EXIST. TYPE B-6.12 C & G WHIPPLE AVE.
__LIMIT.OF ILLINOIS DEPARTMENT OF TRANSPORTATION ROADWAY PLAN

IL. RTE 83/ 147TH ST. IL. RTE 83/ 147TH ST. SPALDING AVE. LIMIT OF RESURFACING TURNER AVE. LIMIT OF HOMAN AVE. _LIMIT OF TRUMBELL AVE. LIMIT OF RESURFACING RESURFACING EXIST. TYPE B-6.12 C & G EXIST. TYPE MATCHL B-6.12 C & G RESURFACING TURNER AVE. RESURFACING RESURFACING PROP. HOT-MIX ASPHALT SURFACE REMOVAL - 2 1/4" PROP. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2" PROP. POLYMERIZED LEVELING BINDER (MM). IL 4.75, N50, 3/4"



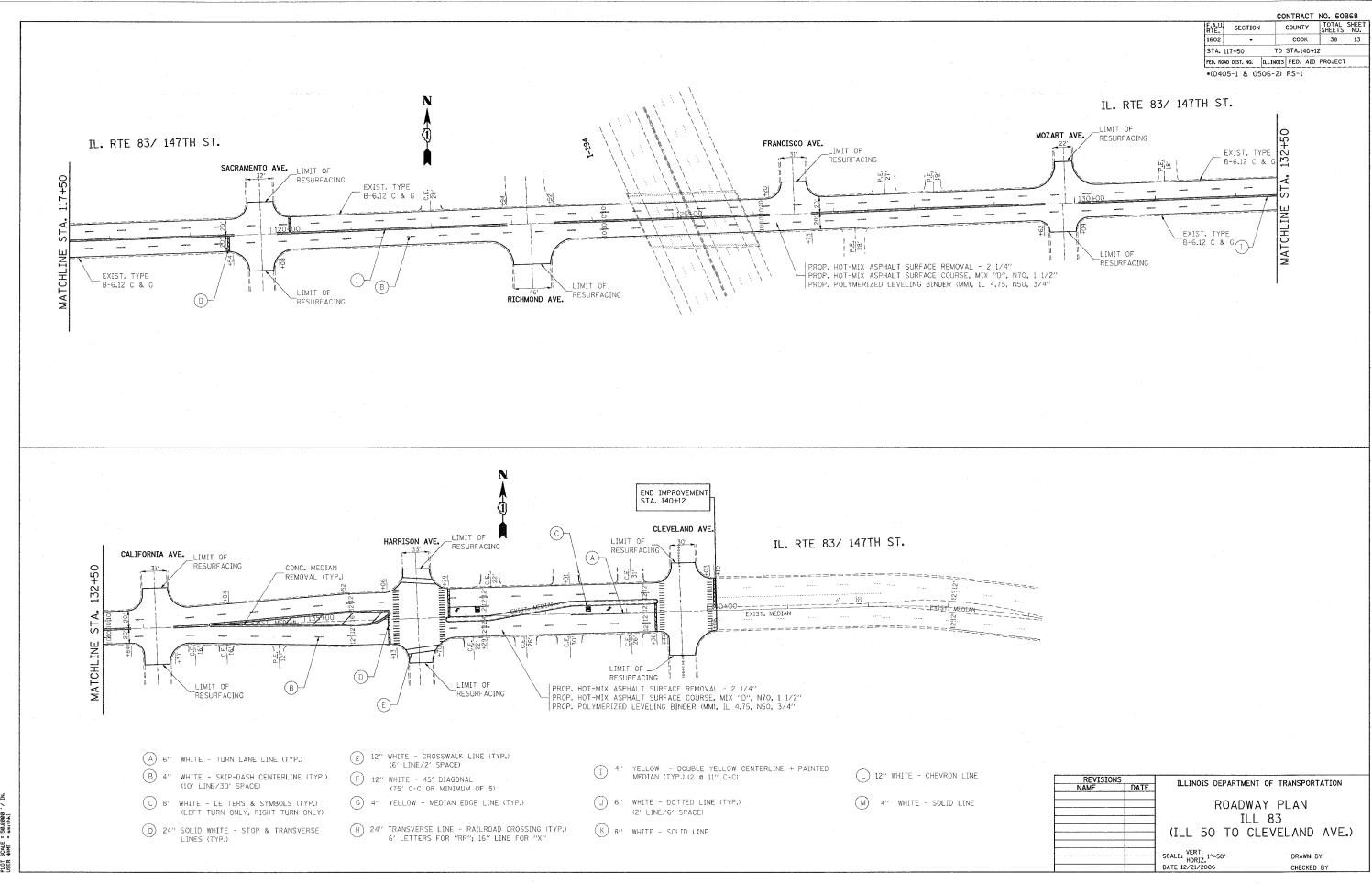
- A 6" WHITE TURN LANE LINE (TYP.)
- B 4" WHITE SKIP-DASH CENTERLINE (TYP.) (10' LINE/30' SPACE)
- C) 8' WHITE LETTERS & SYMBOLS (TYP.)
 (LEFT TURN ONLY, RIGHT TURN ONLY)
- D 24" SOLID WHITE STOP & TRANSVERSE LINES (TYP.)
- E 12" WHITE CROSSWALK LINE (TYP.) (6' LINE/2' SPACE)
- F 12" WHITE- 45° DIAGONAL (75' C-C OR MINIMUM OF 5)
- G 4" YELLOW MEDIAN EDGE LINE (TYP.)
- (H) 24" TRANSVERSE LINE RAILROAD CROSSING (TYP.) 6' LETTERS FOR "RR"; 16" LINE FOR "X"
- [] 4" YELLOW DOUBLE YELLOW CENTERLINE + PAINTED MEDIAN (TYP.) (2 @ 11" C-C)
- (J) 6" WHITE DOTTED LINE (TYP.) (2' LINE/6' SPACE)
- K 8" WHITE SOLID LINE

- (L) 12" WHITE CHEVRON LINE
- M) 4" WHITE SOLID LINE

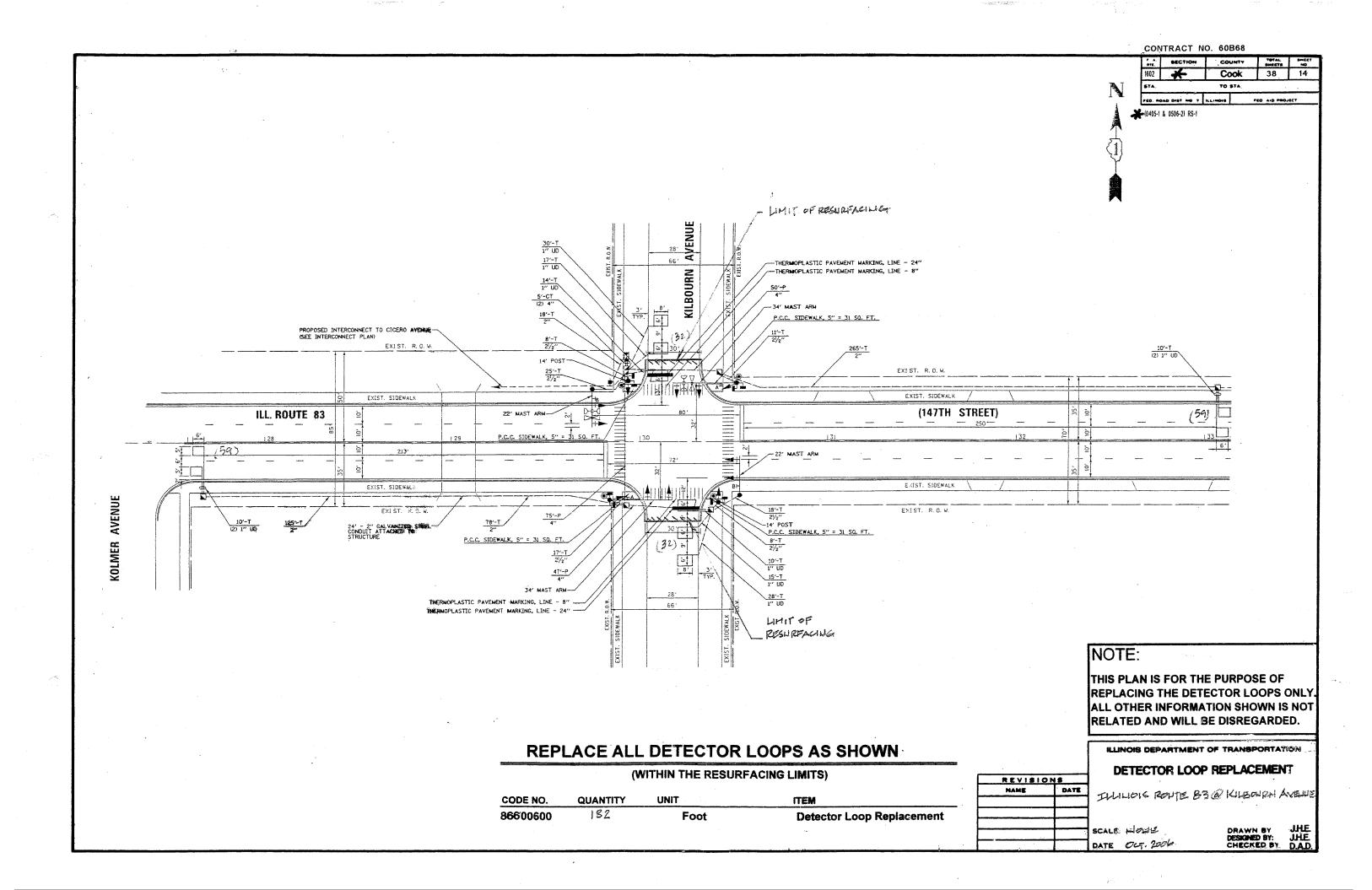
ILL 83 (ILL 50 TO CLEVELAND AVE.)

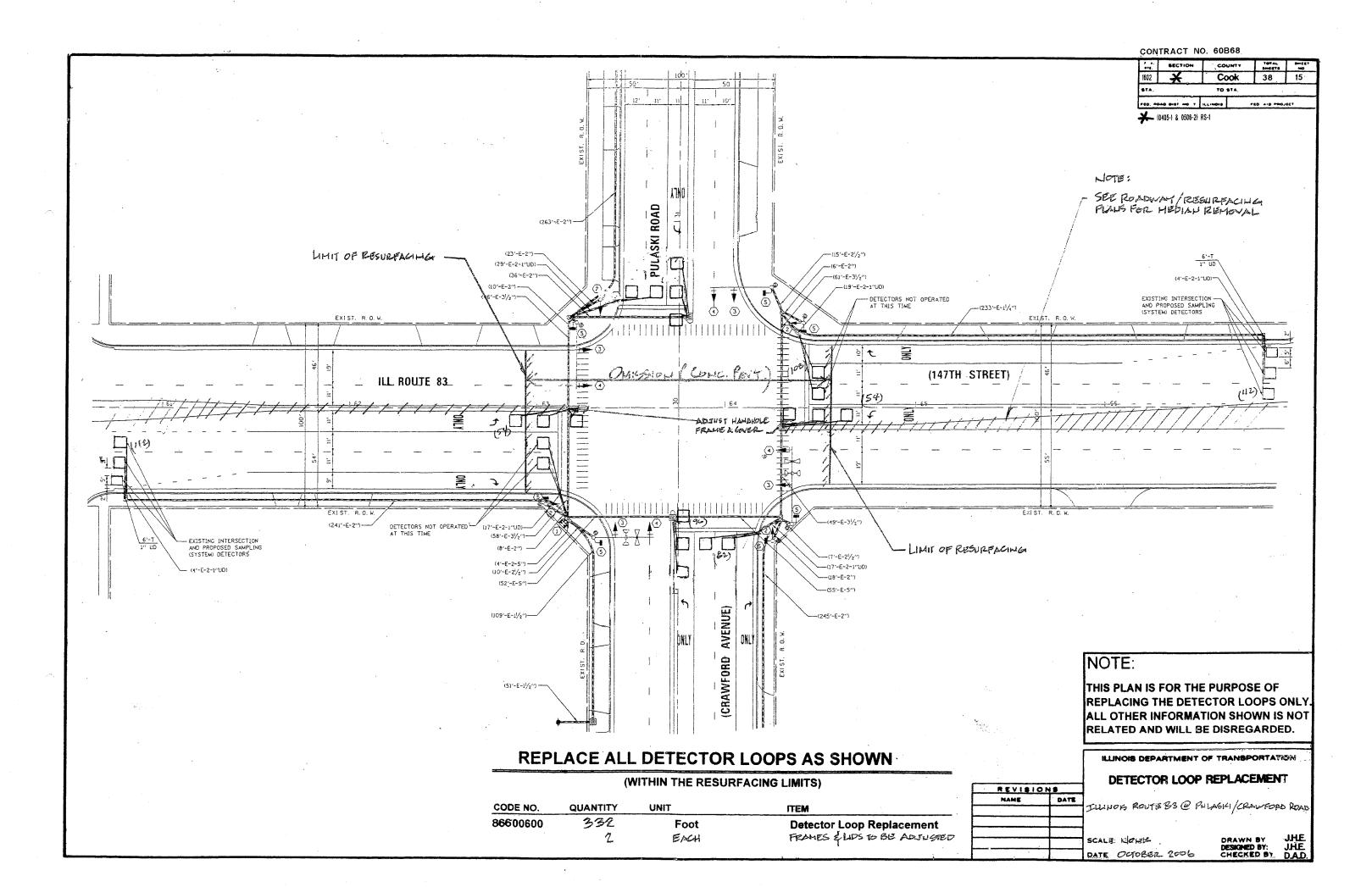
SCALE: VERT. 1"=50' HORIZ. 1"=50' DATE 12/21/2006

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Detector Loop Replacement

DRAWN BY JHE DESIGNED BY: JHE D.AD.

SCALE HOHE

86600600

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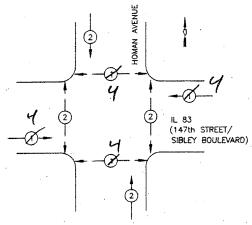
Foot

PTG.	SECTION	COUNTY	TOTAL SMEETS	BMEET MD
1602	*	Cook	38	17
STA.		TO STA.		
	T			

* (0405-1 & 0506-2) RS-1

CONTROLLER SEQUENCE

REFERRING TO STANDARD 2393, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED BELOW.



LEGEND

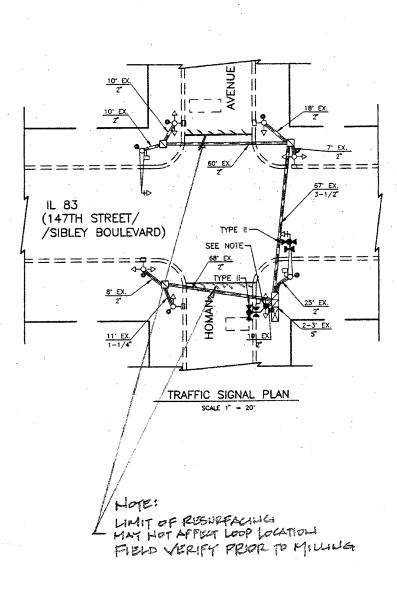
DUAL ENTRY PHASE

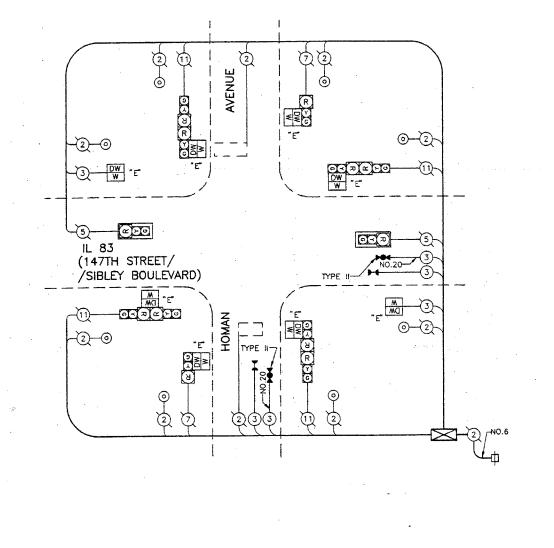
PEDESTRIAN MOVEMENT

NUMBER REFERS TO ASSOCIATED

PHASE DESIGNATION DIAGRAM

DUAL ENTRY - ALL LEGS - PERMITTED LEFT TURN PHASING





NOTE:

THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

REPLACE ALL DETECTOR LOOPS AS SHOWN

(WITHIN THE RESURFACING LIMITS)

CODE NO.	QUANTITY	UNIT	ПЕМ
86600600	-0-	Foot	Detector Loop Replacement

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT

NAME D	I TUNG	as raute 85	@ HOMAH	AVENUE

DATE OUTOBER TOOL

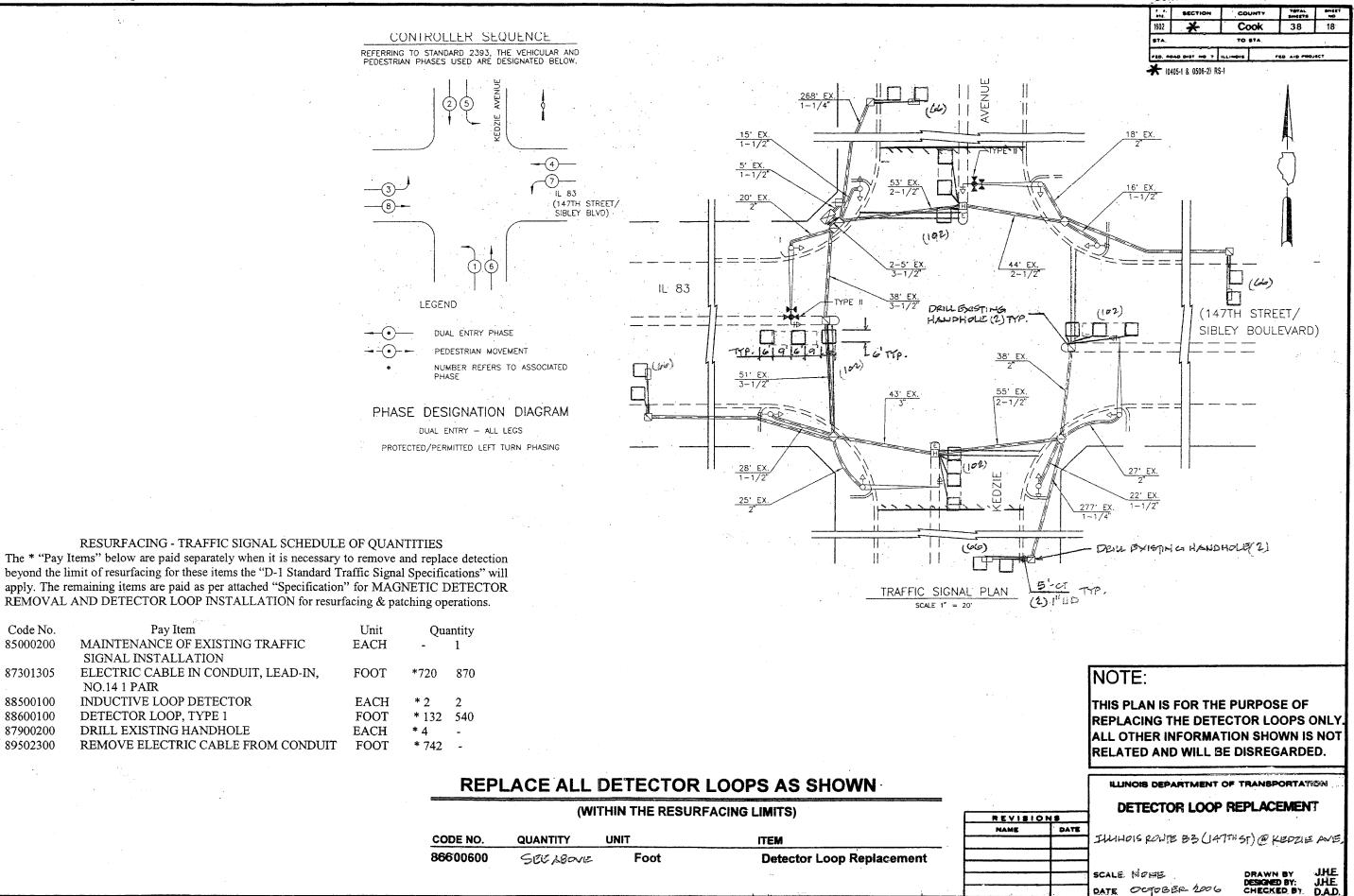
REVISIONS

DRAWN BY JHE DESIGNED BY: JHE DAD.

SCALE HOME

DATE OCTOBER 2006

DRAWN BY DESIGNED BY:



Code No.

85000200

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88500100

88600100

87900200

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Pay Item

INDUCTIVE LOOP DETECTOR

DRILL EXISTING HANDHOLE

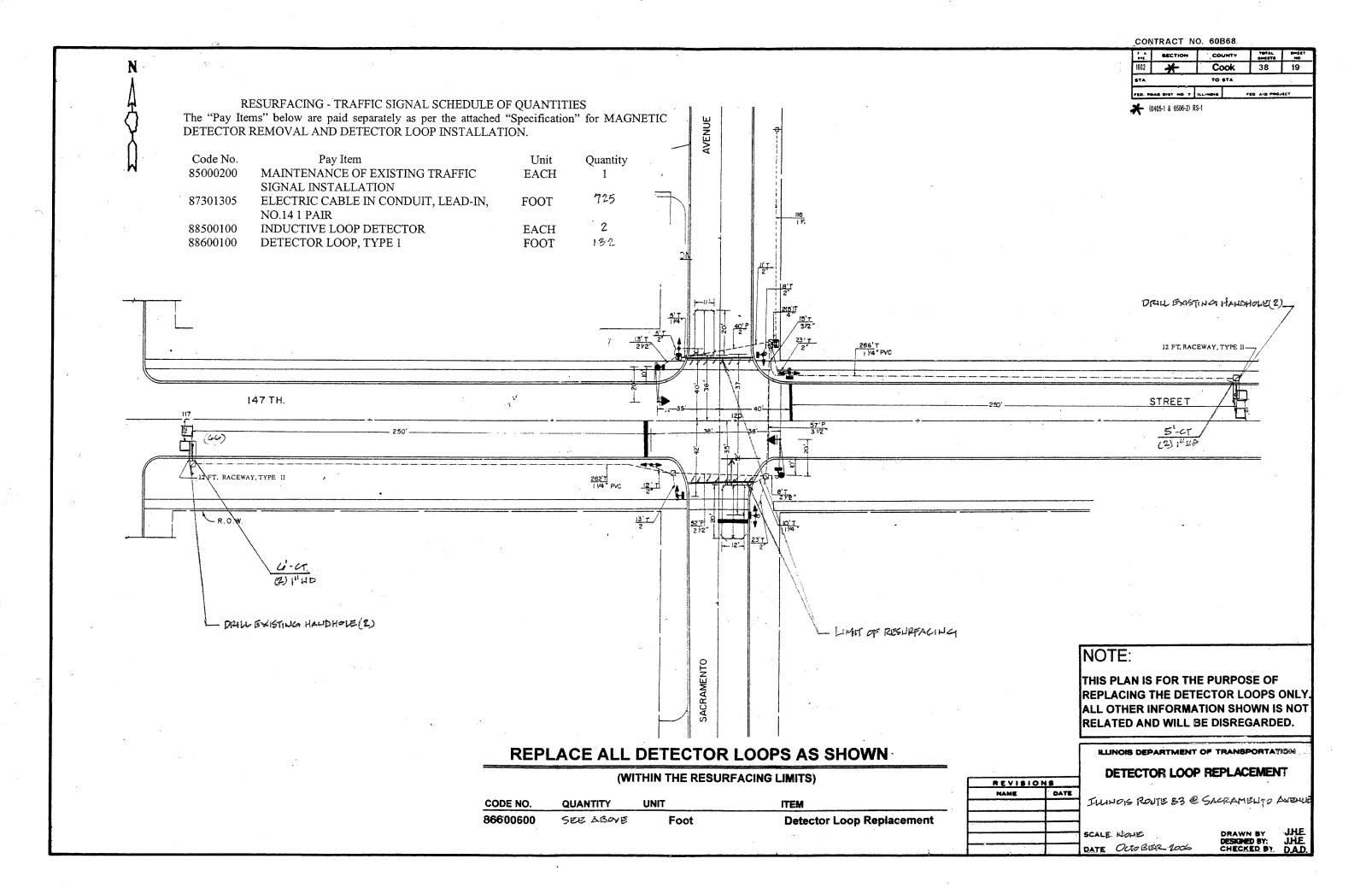
SIGNAL INSTALLATION

DETECTOR LOOP, TYPE 1

NO.14 1 PAIR

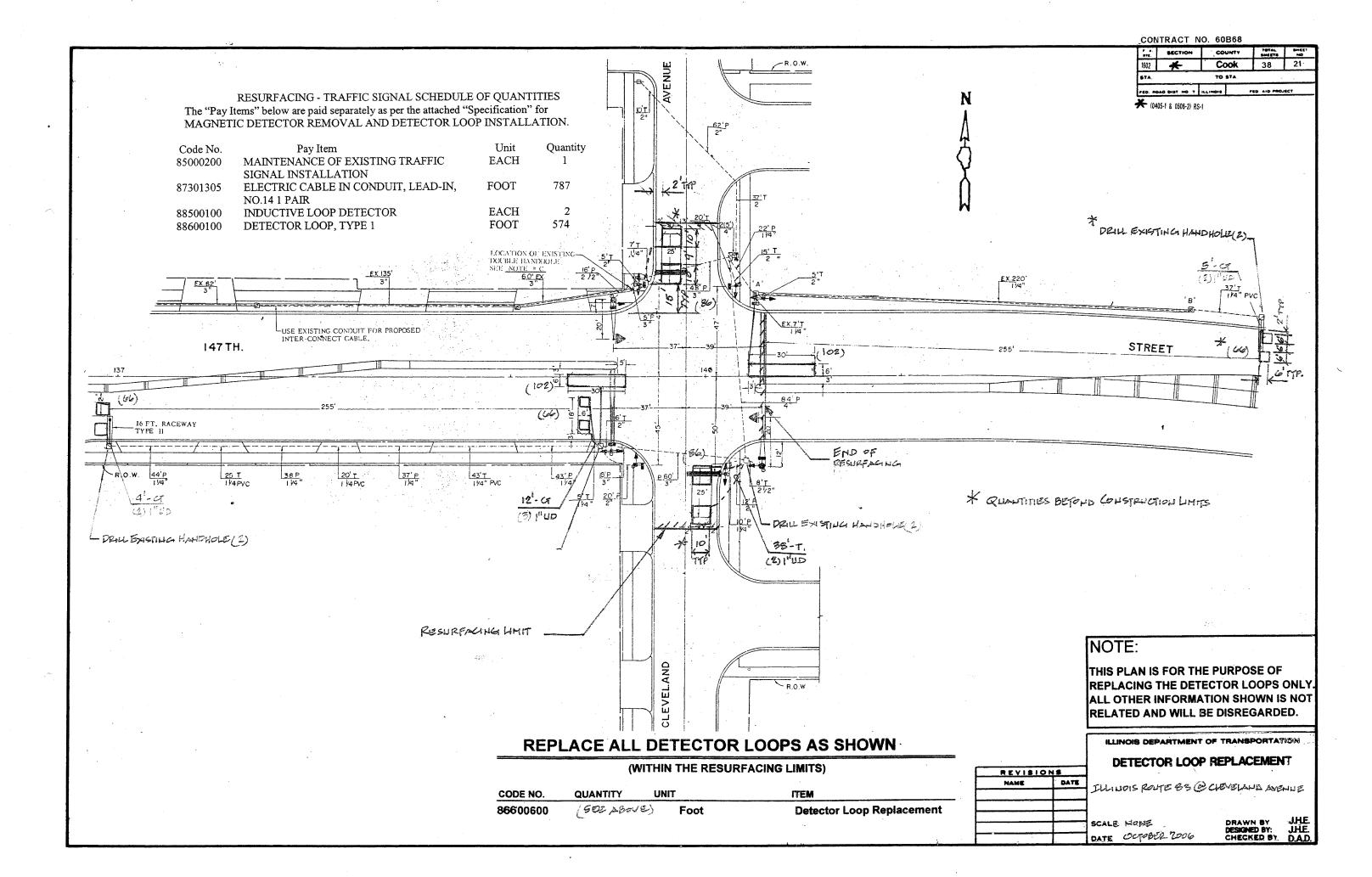
MAINTENANCE OF EXISTING TRAFFIC

ELECTRIC CABLE IN CONDUIT, LEAD-IN,



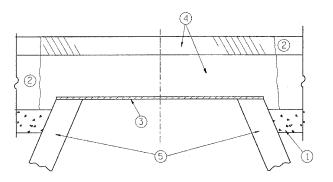
CONTRACT NO. 60B68 BECTION COUNTY AVENUE Cook 38 TO STA. FED AID PROJECT * (0405-1 & 0506-2) RS-1 LIMIT OF RESURFACION * DAM EXISTING HANDHOLE (1) -EXISTING 3" CONDUIT FOR INTER-CONNECT CABLE 412 2/C CABLE FROM CABINET 147 TH DRILL EXISTING HANDHOLE STREET SCHEDULE OF PROPOSED TRAFFIC SIGNAL HEADS * DEALL EXIST. HAUDHOLE (1) SIGNAL HEAD, ALUMINUM, 1-FACE, 3 SECTION WITH 12" RED LIENS, BRACKET MOUNTED SIGNAL HEAD, ALUMINUM, 1-FACE, 3 SECTION WITH 12" LIENSES, MAST ARM MOUNTED EACH EACH SIGNAL HEAD, ALUMINUM, 2-PACE, 3 SECTION WITH 12" LENSES, BRACKET MOUNTED EACH EACH PEDESTRIAN SIGNAL HEAD, ALUMINUM, 1-FACE, 2 SECTION 12"LENSES, BRACKET MOUNTED * PRILLING OF EXISTING HANDHOLES IS INCIDENTAL TO COST OF LOOP REPLACEMENT LIMIT OF RESURFACING NOTE: HARRISON THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED. REPLACE ALL DETECTOR LOOPS AS SHOWN ILLINOIS DEPARTMENT OF TRANSPORTATION DETECTOR LOOP REPLACEMENT (WITHIN THE RESURFACING LIMITS) REVISIONS ILLIHOIS ROUTE 33 @ HAPRISON AVENUE CODE NO. QUANTITY UNIT 86600600 176 Foot **Detector Loop Replacement** DRAWN BY JHE DESIGNED BY: JHE CHECKED BY DAD. SCALE NODE

DATE OCT - 2006



CONTRACT NO. 60B68 COUNTY TOTAL SHEET NO. SECTION 1602 COOK 38 22 STA. TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

* (0405-1 & 0506-2) RS-1



12 (300) MIN. -6 PROPOSED SAND FILL BRICK, MORTAR, OR CONC. ADJUSTING RINGS

SAND FILL

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.

NOTES:

2 EXISTING PAVEMENT

(5) EXISTING STRUCTURE

CONSTRUCTION PROCEDURES

STAGE [(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 $1\frac{1}{2}$ (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
- 3 36 (900) DIAMETER METAL PLATE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- (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.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT

WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

R. SHAH R. SHAH A. ABBAS R. WIEDEMAN R. BORO 01/01/07

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ILLINOIS DEPARTMENT OF TRANSPORTATION

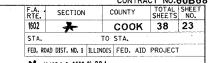
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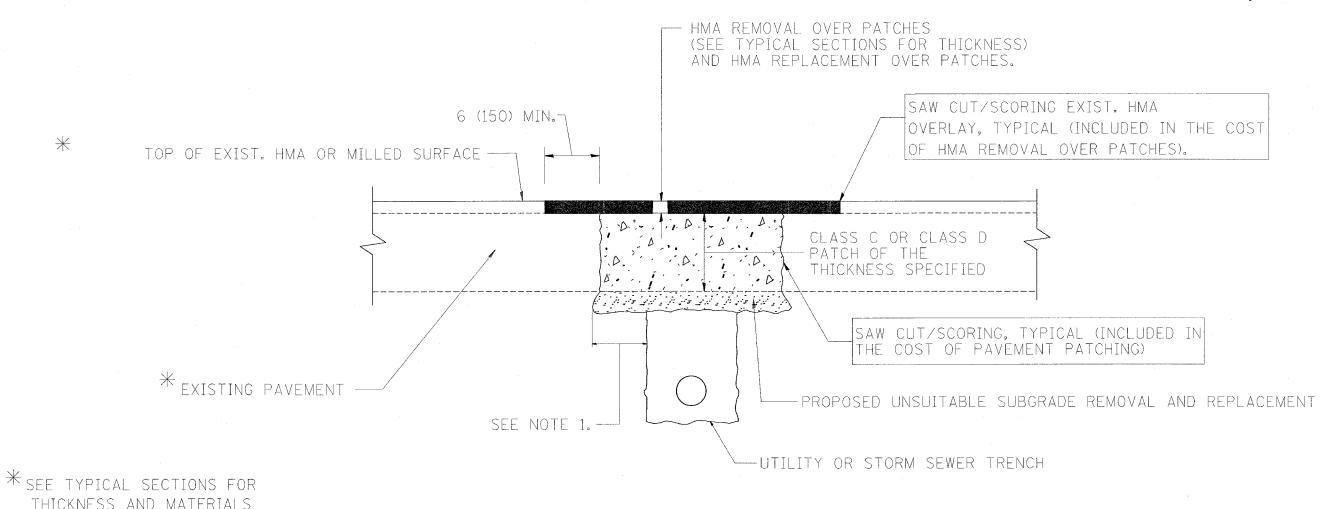
BD600-03 (BD-8) REVISION DATE: 01/01/07

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(0405-1 & 0506-2) RS-1



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.

REVISION	ONS	TILI THOSE DEPARTMENT	T OF TRANSPORTATION
NAME	DATE	ILLINOIS DEFARTMEN	I OF TRANSFORTATION
R. SHAH	10/25/94		
R. SHAH	01/14/95		
R. SHAH	03/23/95	PAVEMENT F	PATCHING FOR
R. SHAH	04/24/95	LIMA CI	JRFACED
A. HOUSEH	03/15/96		- · · · · · · · · · ·
A. ABBAS	03/21/97	PAVE	EMENT
A. ABBAS	01/20/98		
ART ABBAS	04/27/98	SCALE: VERT. NONE	201111 21
R. BORO	01/01/07	SCALE: HORIZ NONE	DRAWN BY

PLOT DATE: 12/21/2006

CHECKED BY

BD400-04 (BD-22)

SECTION COUNTY COOK 38 24 TO STA. VARIABLE - TO MEET EXISTING FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT DIMENSIONS AND FIELD CONDITIONS (0405-1 & 0506-2) RS-1 (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. 18 (450) SEE STATE STANDARD 606001 MAX. EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE) $\frac{1}{4}$ (5) ** V. . . 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 SUITABLE BACKFILL MATERIAL -3 (75) MIN. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT) * 3 (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE. PROPOSED 34" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST * * IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.) 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. UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR SALT TOLERANT SOD AND TOP SOIL, 4 (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE. BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT. REMOVAL AND REPLACEMENT 4 (100) OR LESS IS INCLUDED IN THE (2) CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT. CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED. REMOVAL AND REPLACEMENT IN EXCESS OF 4 (100) WILL BE PAID FOR IN (3) FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS. PAVEMENT DELETE EPOXY COATED TIE BARS. PROPOSED #6 (20) EPOXY COATED TIE BARS 24 (600) LONG AT 4 LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE 24 (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT. BY THE ENGINEER. (SEE NOTE 3). (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. BASIS OF PAYMENT: 6 THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR OF THE STANDARD SPECIFICATIONS. "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT". (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. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN. ILLINOIS DEPARTMENT OF TRANSPORTATION

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

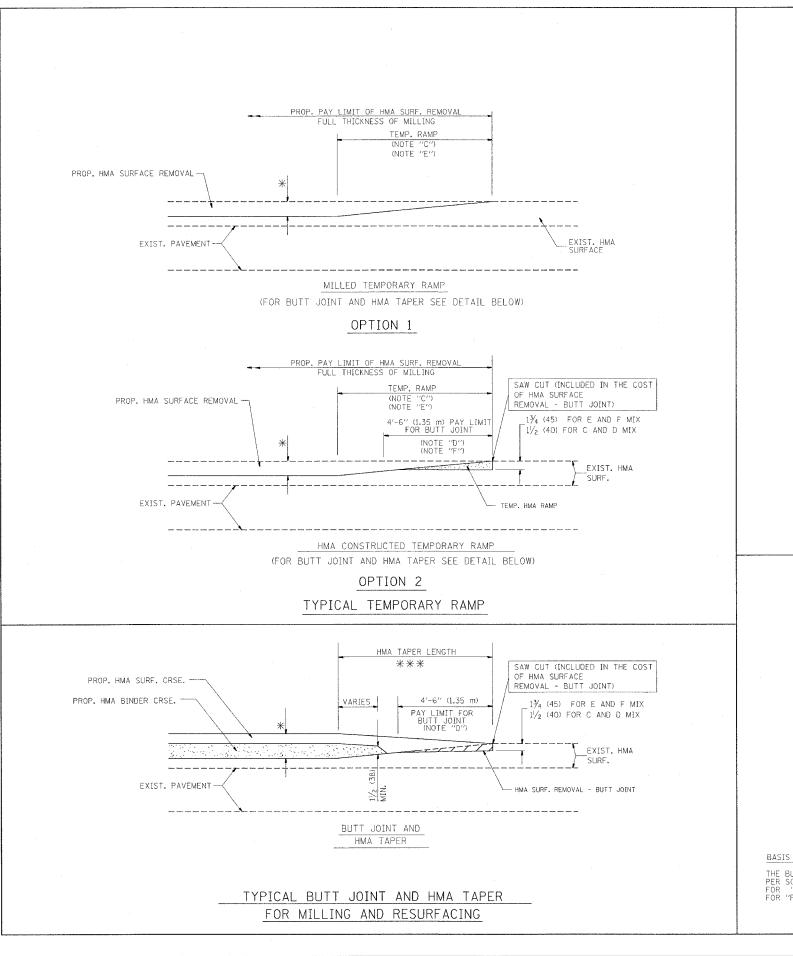
REVISIO	ONS
NAME	DATE
A. HOUSEH	03/11/94
R. SHAH	02/24/95
R. SHAH	03/02/95
R. SHAH	08/19/96
R. SHAH	09/12/96
R. SHAH	09/19/96
R. SHAH	10/03/96
A. ABBAS	03/21/97
M. GOMEZ	01/22/01
R. BORO	01/01/07

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

SCALE: VERT. NONE PLOT DATE: 12/21/2006

CHECKED BY BD600-06 (BD-24)

CONTRACT NO.60B6



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CONTRACT NO.60B68 COUNTY SECTION COOK 38 25 1602 STA. TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT * (0405-1 & 0506-2) RS-1 PROP. HMA OR PCC SURFACE REMOVAL - BUTT JOINT 30'-0" (9.0 m) (NOTE "A") SAW CUT (INCLUDED IN THE COST EXIST. HMA OR PCC SURFACE OF HMA OR P.C.C. SURFACE REMOVAL 15'-0" (4.5 m) (NOTE "B") - BUTT JOINT) (NOTE "D") 13/4 (45) FOR E AND F MIX 1/2 (40) FOR C AND D MIX * * EXIST. PAVEMENT BUTT JOINT DETAIL TAPER LENGTH * * * VARIES PROP. HMA SURF. CRSE.- $1\frac{3}{4}$ (45) FOR E AND F MIX PROP. HMA BINDER CRSE. 11/2 (40) FOR C AND D MIX * * EXIST. PAVEMENT HMA TAPER 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.
- 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.

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 SOUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

LE ATOTA	UNO I	
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	SC
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ILLINOIS DEPARTMENT OF TRANSPORTATION

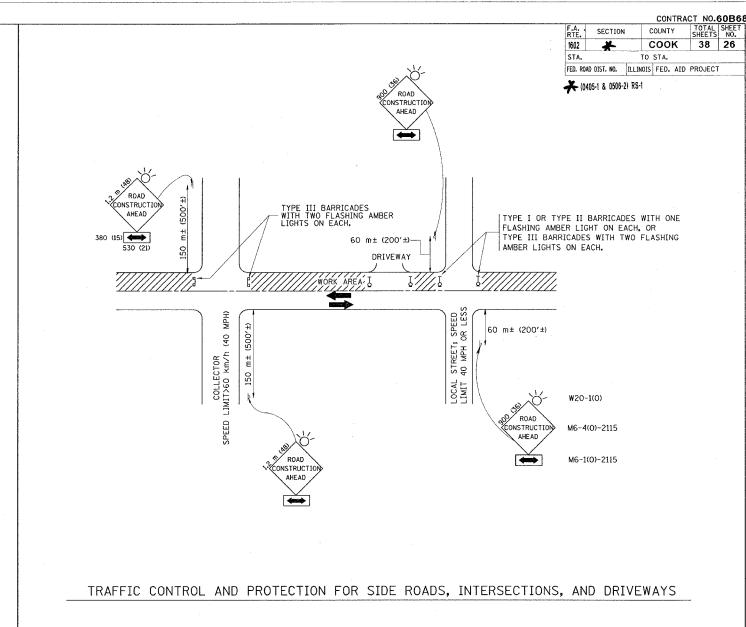
BUTT JOINT AND HMA TAPER DETAILS

SCALE: VERT. NONE HORIZ, NONE PLOT DATE: 12/21/2006

DRAWN BY CHECKED BY

BD400-05 (VI=BD32)

REVISION DATE: 01/01/07



NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 900×900 (36×36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- g) ONE ROAD CONSTRUCTION AHEAD SIGN 1.2 m \times 1.2 m (48 \times 48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500°) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (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.

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l	/18/95		J. OBERLE
ر ا	/06/96	03	A. HOUSEH
<u>ا</u> ک	/15/96	10	A. HOUSEH
ł	/06/00	01	T. RAMMACHER
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ILLINOIS DEPARTMENT OF TRANSPORTATION
RAFFIC CONTROL AND PROTECTION
FOR
SIDE ROADS, INTERSECTIONS, AND

DRIVEWAYS

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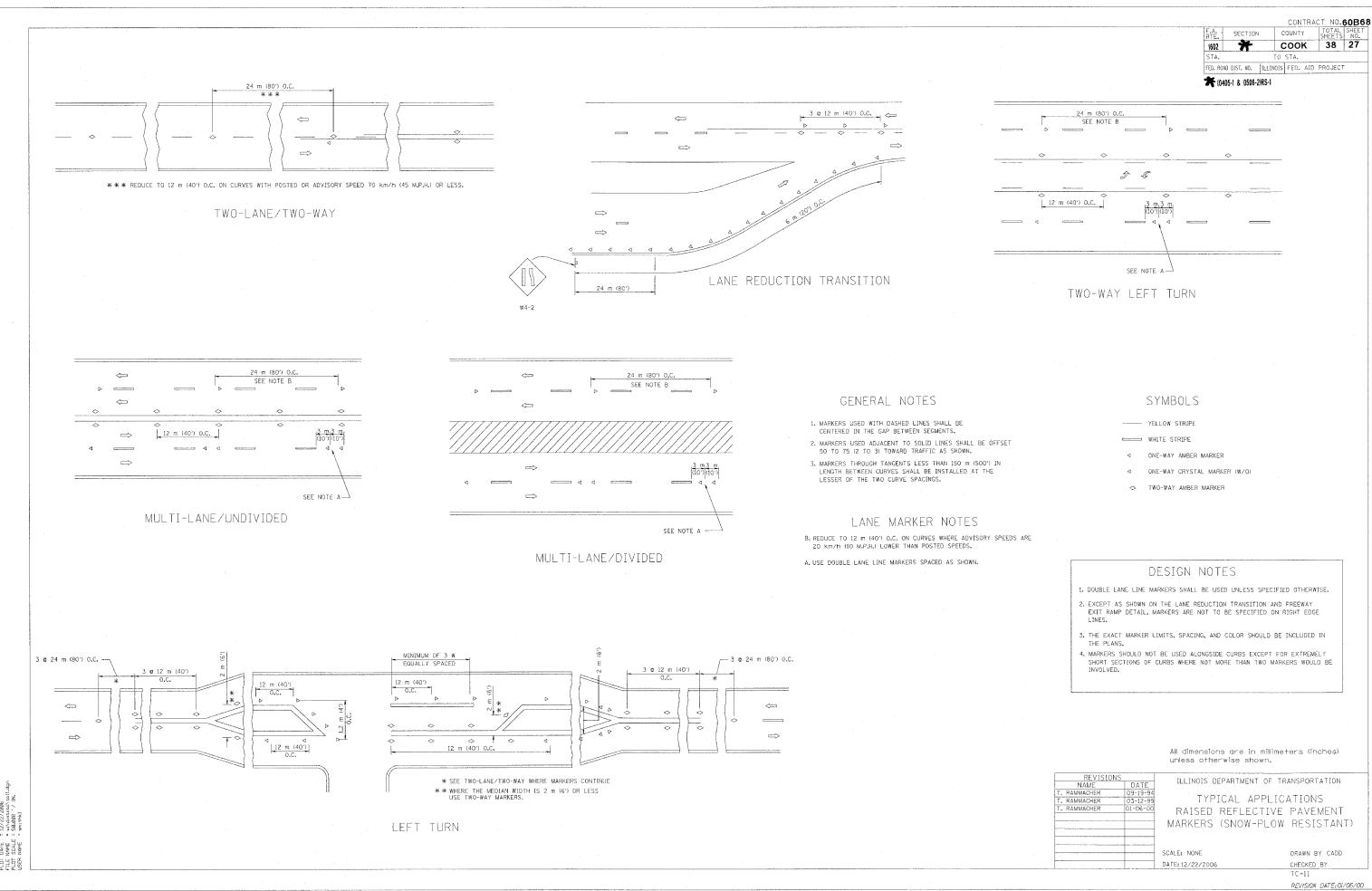
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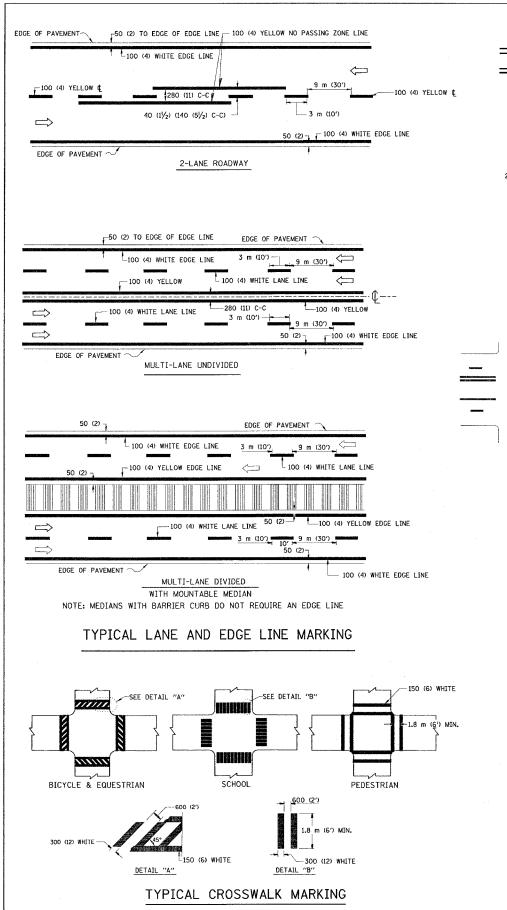
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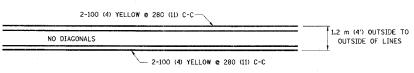
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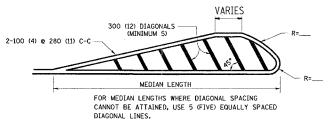


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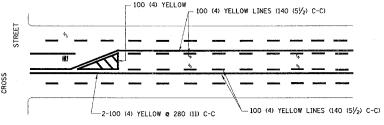


1.2 m (4') WIDE MEDIANS ONLY

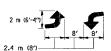


DIAGONAL LINE SPACING: 15 m (50') C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 45 m (150') C-C (MORE THAN 70 km/h (45 MPH))

MEDIANS OVER 1.2 m (4') WIDE

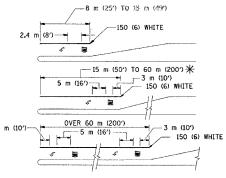


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 60 m (200') TO 90 m (300') INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

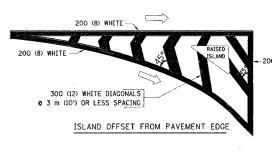


FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED. \P AREA = 1.5 m² (15.6 SO. FT.) MNY AREA = 1.9 m² (20.8 SO. FT.)

 \divideontimes turn lanes in excess of 120 m (400°) in length may have an additional set of arrow - "only" installed midway between the other two sets of

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



- 50 (2) 200 (8) WHITE -RAISED ISLAND -50 (2) ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	100 (4)	SKIP-DASH	YELLOW	3 m (10") LINE WITH 9 m (30") SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	100 (4) 2 @ 100 (4)	SOLID SOLID	AETFOM AETFOM	140 (51/2) C-C FROM SKIP-DASH CENTERLINE 280 (11) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	100 (4) 125 (5) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	3 m (10') LINE WITH 9 m (30') SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 m (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINE; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE FOR SKIP-DASH; 140 (51/2) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	2.4 m (8') 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 @ 150 (6) 300 (12) @ 45° 300 (12) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART 600 (2') APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLIO	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45° NO DIAGONALS USED FOR 1.2 m (4') WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	280 (11) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIACONALS: 4.5 m (15') C-C (LESS THAN 50 km/h (30 MPH)) 6 m (20') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 9 m (30') C-C (0VER 70 km/h (45 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "%"=0.33m2 (3.6 SQ. FT.) EACH "X"=5.0 m2 (54.0 SQ. FT.)
SHOULDER DIAGONALS	300 (12) e 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	15 m (50') C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75') C-C (50 km/h (30 MPH) T0 70 km/h (45 MPH); 45 m (150') C-C (OVER 70 km/h (45 MPH))

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

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

REVISIONS		THE THIRTS DEPARTMEN	T OF TRANSPORTATION
NAME	DATE	ILLINOIS DE ANTWER	TO TRANSPORTATION
EVERS	03-19-90		
T. RAMMACHER	10-27-94	DISTRI	CT ONE
ALEX HOUSEH	10-09-96		
ALEX HOUSEH	10-17-96	TYPICAL	PAVEMENT
T. RAMMACHER	01-06-00	MADI	KINGS
		MARIN	11103
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TC-13 REVISION DATE: 01/06/00

CONTRACT NO.60B68 TOTAL SHEET SHEETS NO.

COOK 38 28

COUNTY

TO STA.

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

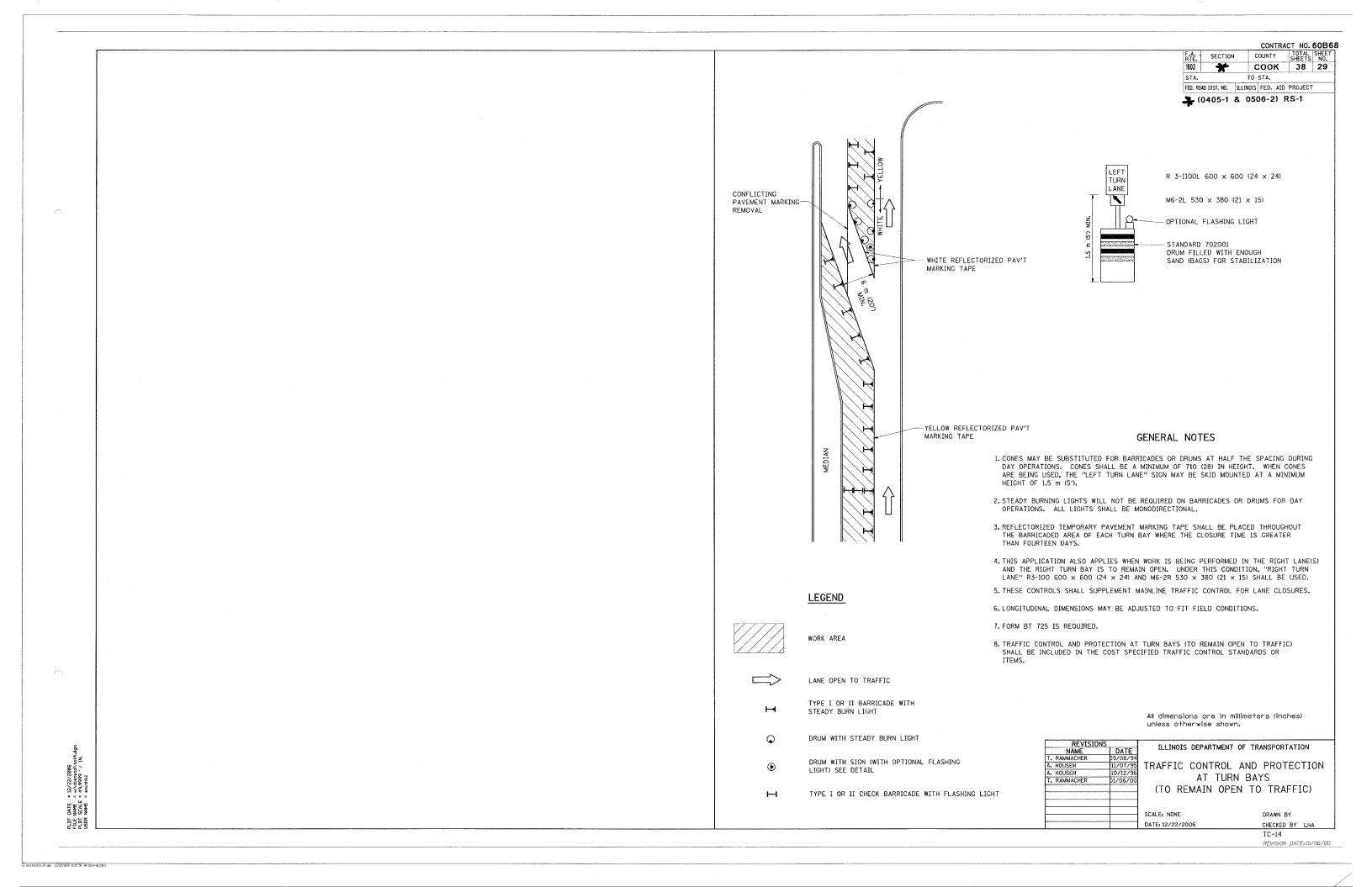
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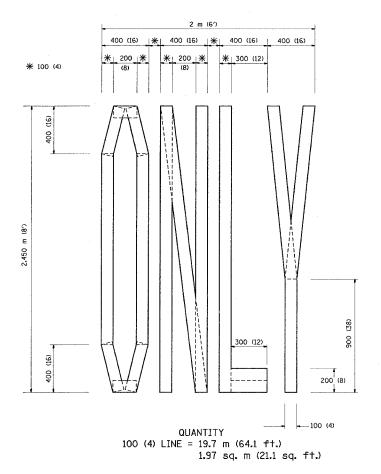
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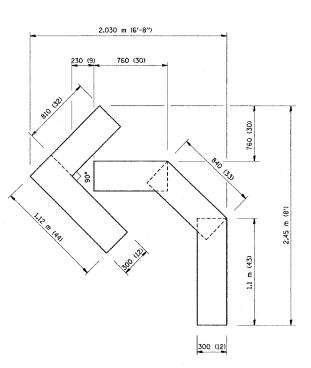


CONTRACT NO. 60B68 COUNTY TOTAL SHEET NO.

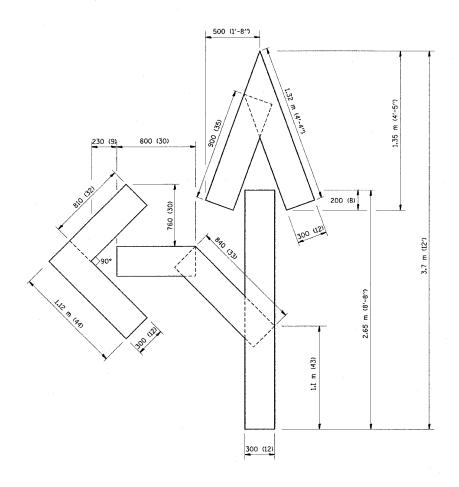
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1602 STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

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



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

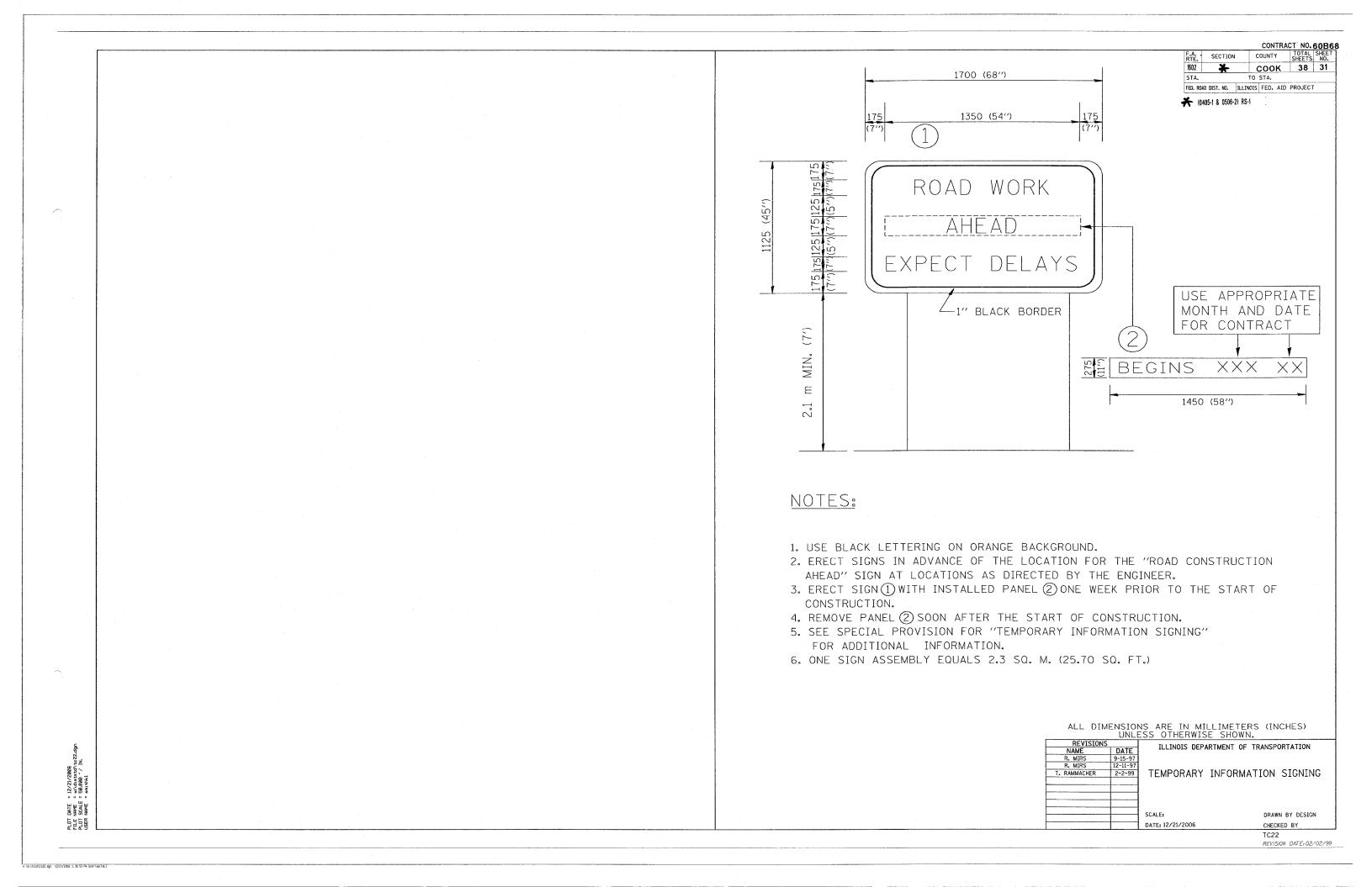
All dimensions are in millimeters (inches) unless otherwise shown.

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NAME	DATE	ILLINOIS DELAKIMENI OF	IKANSFORTATION
T. RAMMACHER	09/18/94		
J. OBERLE	06/01/96	DAVEMENT	MADVING
T. RAMMACHER	06/05/96	PAVEMENT	MARKING
T. RAMMACHER	11/04/97	LETTERS AND	SYMBOLS
T. RAMMACHER	03/02/98		
E. GOMEZ	08/28/00	FOR TRAFFIC	STAGING
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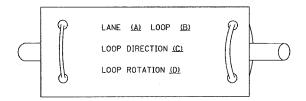
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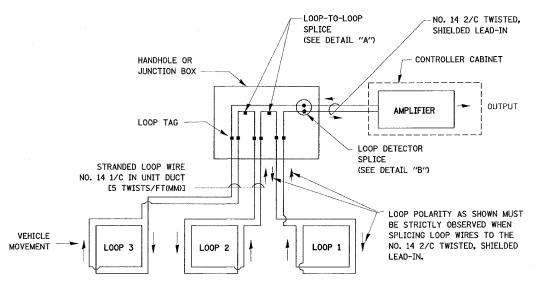
LOOP DETECTOR NOTES

- 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.

LOOP LEAD-IN CABLE TAG

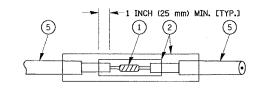


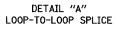
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

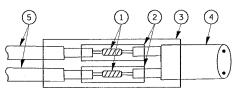


DETECTOR LOOP WIRING SCHEMATIC

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







DETAIL "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 LENGHT 6" (150 mm), UNDERWATER GRADE.
- (4) NO, 14 2/C TWISTED, SHIELDED CABLE.
- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

REVISIONS		
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ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE DATE: 12/21/2006 DRAWN BY: RWP DESIGNED BY: DAD CHECKED BY: DAZ

CONTRACT NO. 60B68

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TO STA.

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

COOK 38 32

F.A. SECTION

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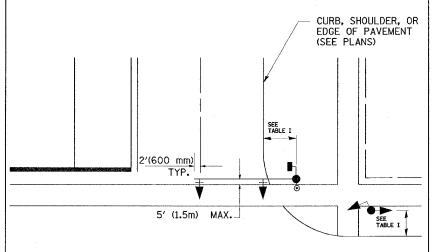
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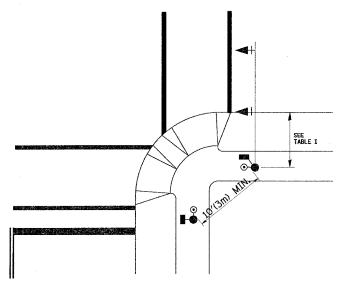
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PEDESTRIAN SIGNAL PUSHBUTTON



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

NOTES:

CONTRACT NO.60B68 COUNTY TOTAL SHEET NO. F.A. SECTION COOK 38 33 1602 STA. TO STA. FED. ROAD DIST, NO. ILLINOIS FED. AID PROJECT

(0405-1 & 0506-2) RS-1

1. 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
- 2. 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.
- 3. 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.
- 4. 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

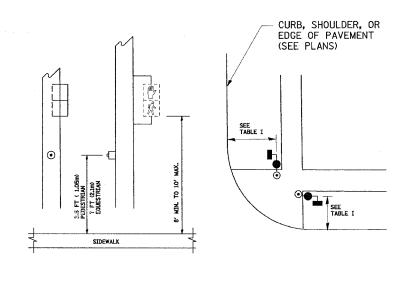


TABLE I

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

ILLINOIS DEPARTMENT OF TRANSPORTATION UREAU OF TRAFFIC

DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

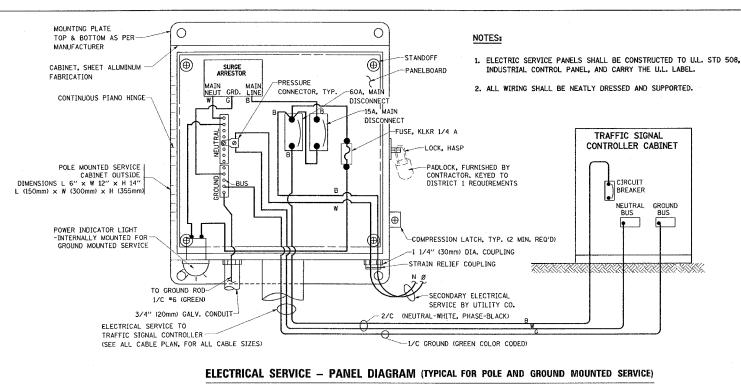
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SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)

-- DOOR OPENING I.D.O.T. IDENTIFICATION DECALS SHALL BE MOUNTED TO FRONT OF 10' (3.0m) MAX. UTILITY DOOR **ENCLOSURE** ELECTRICAL SERVICE LOCK (ABOVE OR BELOW SEE PANEL DIAGRAM, ABOVE 13,75" (0,35m GROUND) CONDUIT BUSHINGS - SEE CABINET BASE, BELOW 1" CHAMFER, CONTINUOUS SEE ELECTRICAL FINISH GRADE-SQUARE FOUNDATION PANEL DIAGRAM TO TRAFFIC SIGNAL CONTROLLER 2" (50mm) GALV. CONDUIT (76 mm) GALV. CONDUIT **SERVICE INSTALLATION** -3/4" x 10' (20mm x 3.0m) COPPER CLAD GROUND ROD **GROUND MOUNT** (413 mm) 16.25" CABINET BASE 1.44" (37 mm) BOLT LOCATIONS

CABINET - BASE BOLT PATTERN (NOT TO SCALE)

NOTES:

HANDHOLE COVER

DETAIL "A"

HANDLE

DETAIL "B"

-U.L. LISTED

- SEE DETAIL "B"

CAST CORNER FRAME WEB

ANTI-CORROSION COMPOUND SHALL BE APPLIED ON ALL

BOLT/ CONNECTION ASSEMBLIES

-STAINLESS STEEL NUT AND 2 STAINLESS STEEL WASHERS

SEE DETAIL "A"

CABLE HOOKS REQUIRED, ALL

HANDHOLES

LIL LISTED GROWND. COMPRESSION CONNECTOR

UL LISTED GROUND COMPRESSION CONNECTOR

WITH STAINLESS STEEL NUT

ANDHOLE FRAME

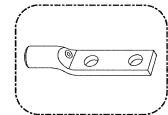
GROUND CABLES TO CONTROLLER DOUBLE HANDHOLE

POST AS REQ'D.

GROUNDING SYSTEM

CONTRACT NO. 60B68 F.A. . SECTION COUNTY COOK 1602 STA. TO STA. FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT ** (0405-1 & 0506-2) RS-1

- 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 $3/4^{\prime\prime}$ DIA. \times 10'-0" (20mm \times 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
- 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
- 4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

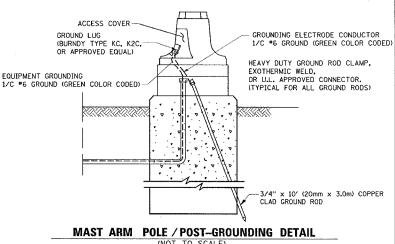


HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EUAL)

- 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.



ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS SCALE: NONE

DATE: 12/21/2006

TS05

(2) 1/2" \times 1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO FRAME AND TO COVER. (TYPICAL) HEAVY DUTY COPPER COMPRESSION GROUNDING TERMINAL. (TYPICAL) - EXISTING HANDHOLE GROUNDING CABLE
(PAID FOR SEPARATELY) FRAME AND COVER

(GREEN)

HANDHOLE COVER & FRAME - GROUNDING DETAIL

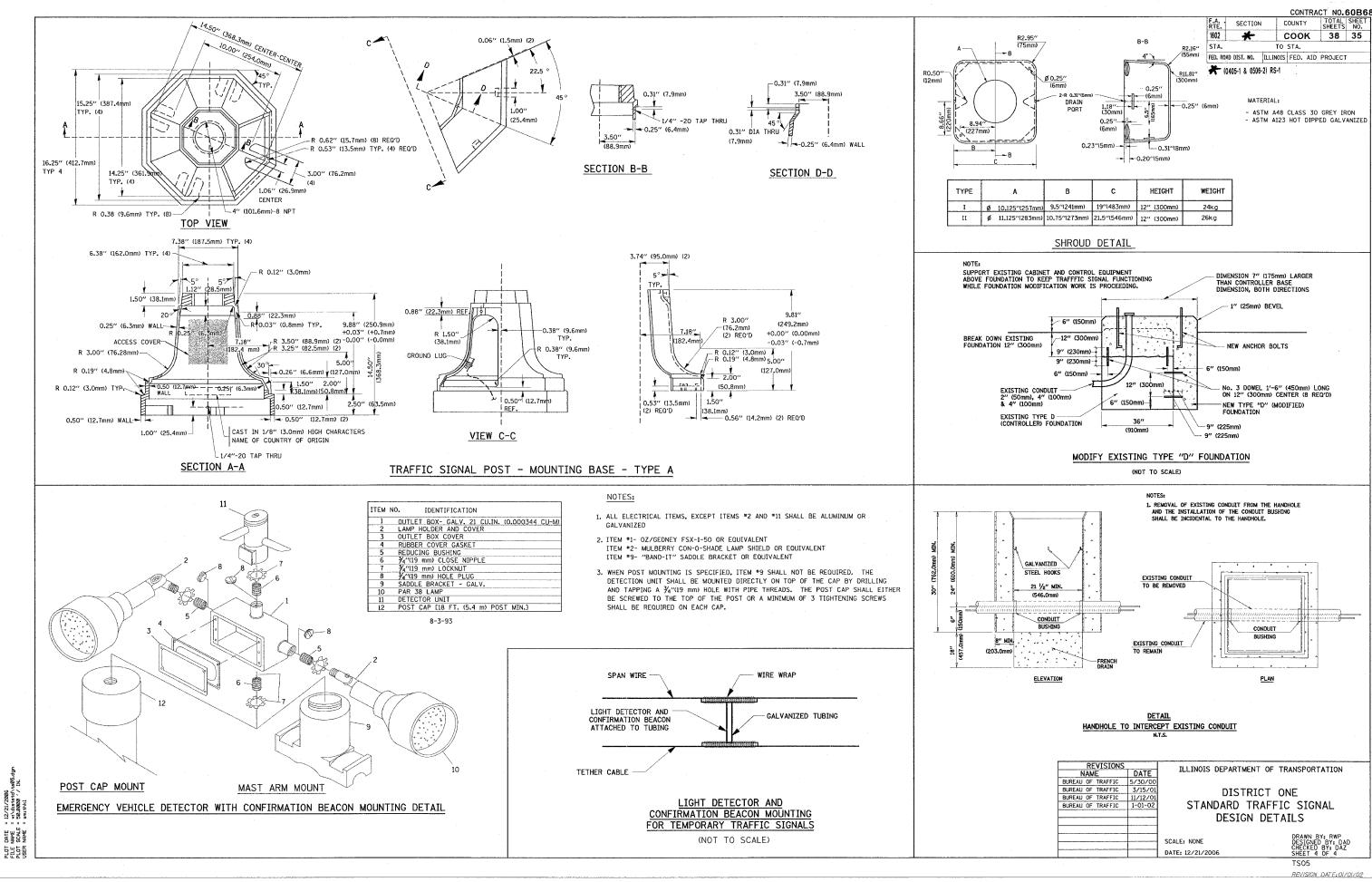
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EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

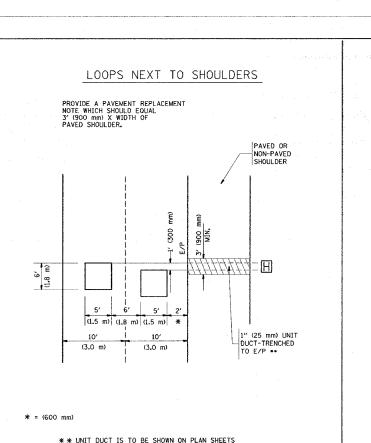
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REVISION DATE: 01/01/02



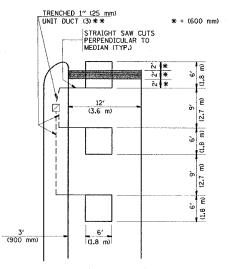
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LEFT TURN LANES WITH MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLE LOCATION MAY 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.



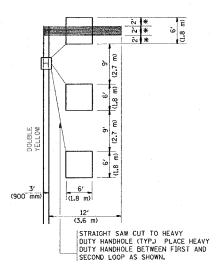
** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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)

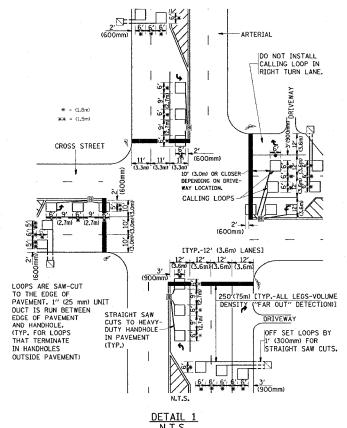
* = (600 mm)



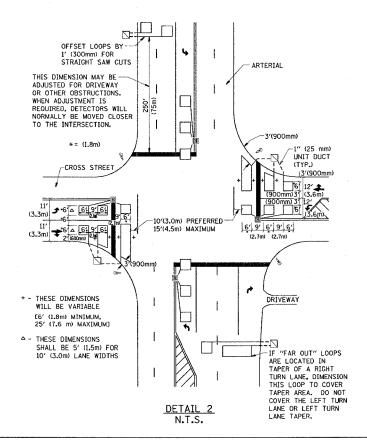
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.



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



CONTRACT NO.60B68 TOTAL SHEET SHEETS NO. SECTION COUNTY COOK 38 36 1602 STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

(0405-1 & 0506-2) RS-1

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
- * 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.

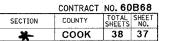
ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

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	TELINOIS DEL ALLIMENT	OF TRANSFORTATION
		DIST	RICT 1
		DETECT	OR LOOP
		INSTALLAT	ION DETAILS
		FOR ROADWA	Y RESURFACING
			DESIGNED BY
		SCALE: NONE	DRAWN BY CADD
		DATE: 12/21/2006	CHECKED BY R.K.F.

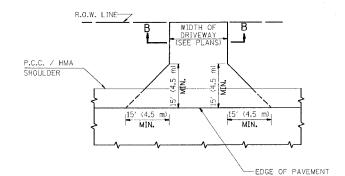
TS07 REVISION DATE:

DATE NAME SCALE NAME



1602 TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

₩ (0405-1 & 0506-2) RS-1



ADJACENT TO P.C.C. / HMA SHOULDER

WIDTH OF COMBINATION CURB AND GUTTER-15' (4.5 m) 15' (4.5 m) MIN. MIN. DEPRESSED CURB EDGE OF PAVEMENT ADJACENT TO CURB AND GUTTER

WITH CONCRETE CURB, TYPE B

DEPRESSED CURB PROPOSED PAVEMENT

EXISTING DRIVEWAY OR

PARKING LOT

WIDTH OF DRIVEWAY (SEE PLANS)

12 (300) STUB

CURB RAMP PER STD. 424001 (TYP.)

TYP, TRANSITION 300(12)-

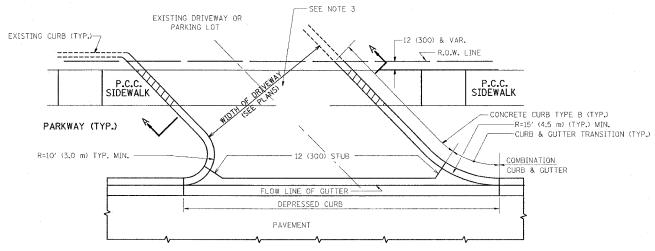
EXISTING CURB (TYP.)-

CONCRETE CURB TYPE B (TYP.)-CURB AND GUTTER TRANSITION (TYP.)

SIDEWALK

COMBINATION

CURB & GUTTER



-3.3' (1.0 m) & VAR. 1:4 MAX. SECTION B-B RIGID DRIVEWAY HMA DRIVEWAY CE: P.C.C. DRIVEWAY IHMA SURFACE COURSE. PAVEMENT 8 (200 MIX "C", N50, 2 (50) MEASURED IN TONS (METRIC TONS) PE: P.C.C. DRIVEWAY PAVEMENT 6 (150) CE: HMA BASE CSE., 8 (200) MEASURED IN SQ. YD. (m2). PE: HMA BASE CSE., 6 (150) MEASURED IN SQ. YD. (m2).

RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE, MIX "C", N50, 2 (50)
MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE A 8 (200) MEASURED IN SQ. YD. (m²).

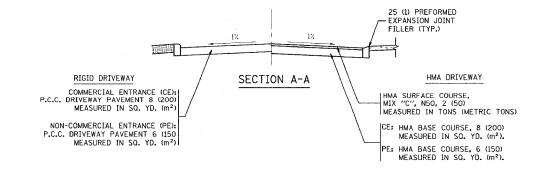
WITH CONCRETE CURB, TYPE B

-12 (300) & VAR. - R.O.W. LINE

P.C.C. SIDEWALK

R = 15' (4.5 m) MIN.

PARKWAY (TYP.)



GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

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

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

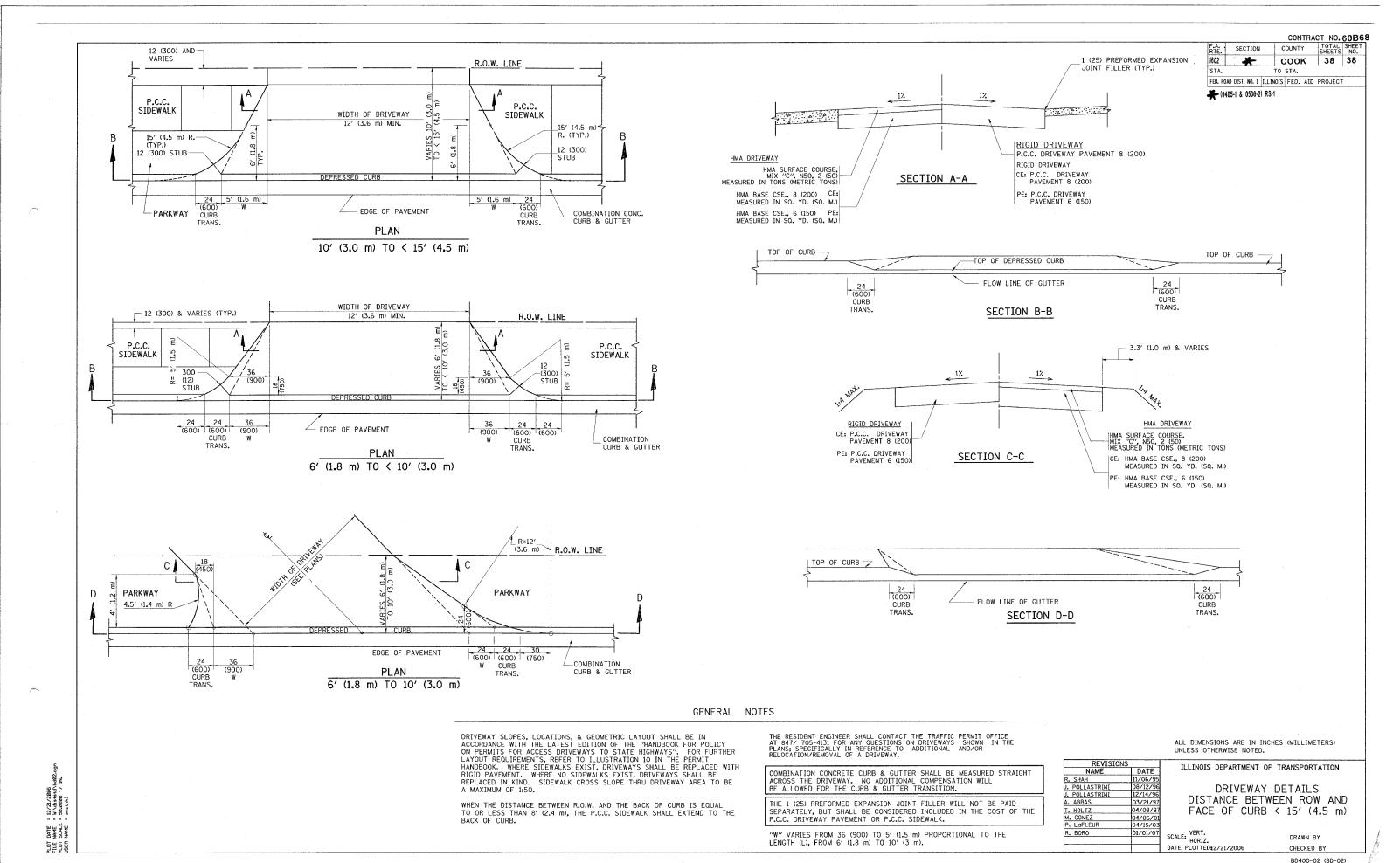
1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE NOTED

REVISIONS		THE THINTS DEPARTM	ENT OF TRANSPORTATION
NAME	DATE	ILLINOIS DELAKIM	ENT OF TRANSFORTATION
R. SHAH	11-04-95	UDIVEM	AY DETAILS
J. POLLASTRINI	08-12-96		
J. POLLASTRINI	12-14-96	IDISTANCE BE	TWEEN R.O.W. AND
A. ABBAS	03-21-97	FACE OF C	
T. HOLTZ	04-08-97		
M. GOMEZ	04-06-01	I SHOULDER	>= 15′ (4.5 m)
• LaFLEUR	04-15-03		
R. BORO	01-01-07	SCALE: VERT. NONE	DDAWN DV
	1	HORIZ. NONE	DRAWN BY
		DLOT DATE 12 /21 /2006	CHECKED BY

BD0156-07 (BD-01) REVISION DATE: 01/01/07



REVISION DATE: 01/01/07