

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	16-2-1-K-RS	COOK	31	1
FED. ROAD DIST. NO. 1		ILLINOIS	CONTRACT NO. 60E26	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

F.A.P. ROUTE 345 /ELGIN-O'HARE (FRONTAGE ROAD)
SPRINGINGGUTH RD. TO WRIGHT BLVD.
SECTION: 16-2-1-K-RS
RESURFACING (MAINTENANCE)
COOK COUNTY
C-91-347-08

D-91-347-08

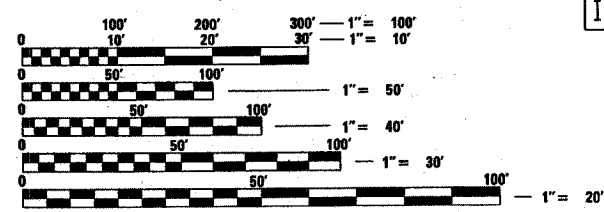


LOCATION OF SECTION INDICATED THUS: - ■ -

FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT IS LOCATED IN THE VILLAGE
OF SCHAUMBURG

DISTRICT ONE DESIGN PLAN PREPARATION ENGINEER:
KEN ENG (847) 705-4247

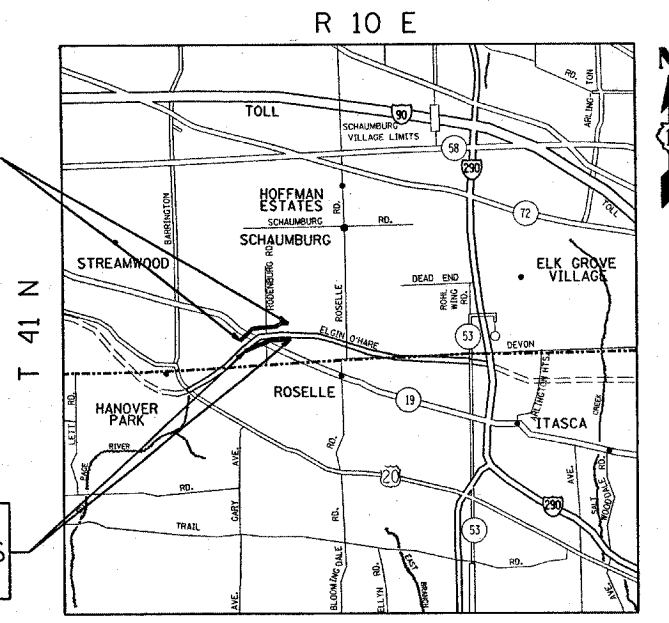


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

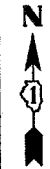
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

WB FRONTAGE RD
IMPROVEMENT BEGINS STA. 9+50
IMPROVEMENT ENDS STA 61+10

EB FRONTAGE RD
IMPROVEMENT BEGINS STA. 10+36
IMPROVEMENT ENDS STA 59+21



SCHAUMBURG TOWNSHIP



TRAFFIC DATA
SPEED LIMIT: 40 MPH
ADT: NOT COUNTED

PROJECT ENGINEER: ANA ABREU
PROJECT MANAGER: KEN ENG

CONTRACT NO. 60E26

GROSS LENGTH OF PROJECT = 10,045 FEET (1.9 MILES)
NET LENGTH OF PROJECT = 10,045 FEET (1.9 MILES)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED March 26, 2008

Don Okin
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 9, 2008
Eric F. Harrod
Interim ENGINEER OF DESIGN AND ENVIRONMENT

May 9, 2008
Christina M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

SHEET
NO.

DESCRIPTION

STATE STANDARDS

GENERAL NOTES:

1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4-6	TYPICAL SECTIONS
7-10	ROADWAY & PAVEMENT MARKING PLANS
11-18	DETECTOR LOOP REPLACEMENT PLANS
19	PAVEMENT PATCHING FOR HOT-MIX ASPHALT SURFACED PAVEMENT
20	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
21	BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS
22	TRAFFIC CONTROL AND PROTECTION FOR SIDES ROADS, INTERSECTIONS AND DRIVEWAYS
23	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)
24	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
25	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
26	PAVEMENT MARKING LETTER AND SYMBOLS FOR TRAFFIC STAGING
27	DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING
28	SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS
29	ARTERIAL ROAD INFORMATION SIGNING
30-31	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAIL

000001-05	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
442201-03	CLASS C AND D PATCHES
606001-03	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB & GUTTER
701411-04	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS > 45MPH
701601-05	URBAN LANE CLOSURE, MULTILANE 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701701-05	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901	TRAFFIC CONTROL DEVICES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 OR 811 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 VILLAGE OF SCHAUMBURG.

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

ALL HOT-MIX ASPHALT PAVEMENT PATCHING SHALL BE CLASS D.

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE 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 (80KM/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 OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

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

THE RESIDENT ENGINEER SHALL VERIFY THE LOCATIONS OF ALL EXISTING PAVEMENT MARKINGS PRIOR TO MILLING OR RESURFACING.

ALL PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE IMPROVEMENT ACCORDING TO DISTRICT 1 TYPICAL PAVEMENT MARKING.

TWO WEEKS PRIOR TO PLACING PERMANENT PAVEMENT MARKINGS, CONTACT DON CHIARUGI, AREA TRAFFIC FIELD ENGINEER AT (847) 741-5302.

RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED THROUGHOUT THE IMPROVEMENT ACCORDING TO THE DISTRICT STANDARDS AS NOTED IN THE DETAIL.

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

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

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.

FILE NAME = c:\projects\dl134708\dl134708.dgn	USER NAME = steedea	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ELGIN-O'HARE (FRONTAGE ROAD) INDEX OF SHEETS STATE STANDARDS AND GENERAL NOTES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED -	345			16-2-1-K-RS	COOK	31	2	
PLOT DATE = 4/7/2008	CHECKED -	REVISED -	SCALE: 1" = 50'			SHEET NO. OF SHEETS STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		
	DATE -	REVISED -								

D-91-347-08

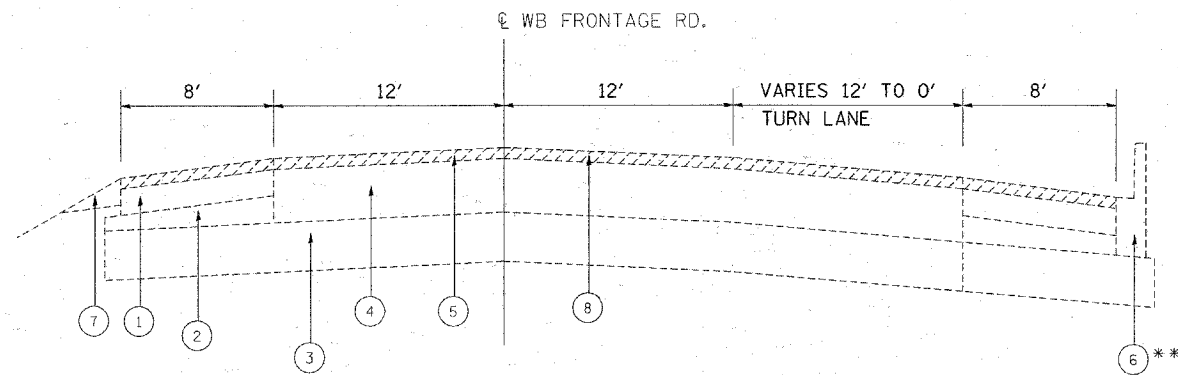
SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		I000 100% STATE						CODE NO	ITEM		UNIT	I000 100% STATE				
20201006	GRADING AND SHAPING SHOULDERS	UNIT	144.8	144.8														
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	42.4	42.4														
40600300	AGGREGATE (PRIME COAT)	TON	212.4	212.4														
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	16	16														
40600895	CONSTRUCTING TEST STRIP	EACH	2	2														
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	727	727														
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	134	134														
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	4592	4592														
42001300	PROTECTIVE COAT	SO YD	28	28														
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SO YD	53077	53077														
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	100	100														
44002206	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 1 1/2"	SO YD	1592	1592														
44201785	CLASS D PATCHES, TYPE I, 12 INCH	SO YD	80	80														
44201789	CLASS D PATCHES, TYPE II, 12 INCH	SO YD	1194	1194														
44201794	CLASS D PATCHES, TYPE III, 12 INCH	SO YD	159	159														
44201796	CLASS D PATCHES, TYPE IV, 12 INCH	SO YD	159	159														
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	579	579														
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6														
67100100	MOBILIZATION	L SUM	1	1														
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1														
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1														
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	5388	5388														
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	416	416														
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	19756	19756														
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	1797	1797														
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	1479	1479														
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	979	979														
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	713	713														
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	599	599														
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	416	416														
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	19756	19756														
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1797	1797														
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	1479	1479														
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	979	979														
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	713	713														
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	234	234														
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	234	234														
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	1292	1292														
X0322256	TEMPORARY INFORMATION SIGNING	SO FT	51.4	51.4														
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	2296	2296														
X7011420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	L SUM	1	1														

* Specialty Items

REVISIONS	
NAME	DATE

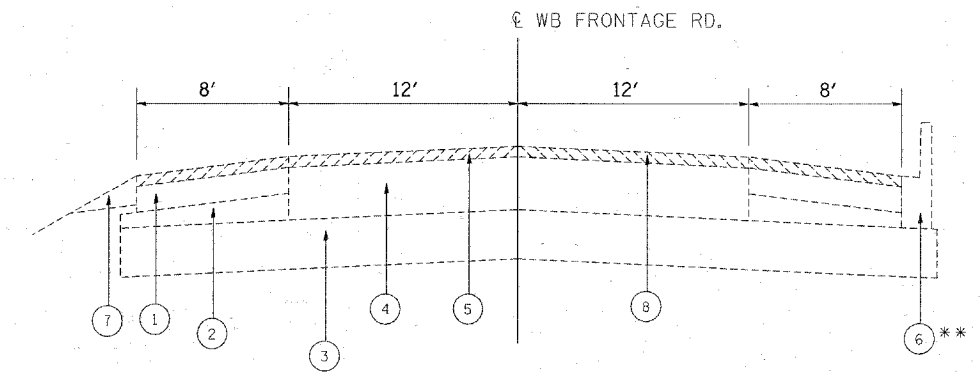
ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES
ELGIN-O'HARE (FRONTAGE RD.)
SPRINGSGUTH RD. TO WRIGHT BLVD.

4/1/2008 08:00:00 AM



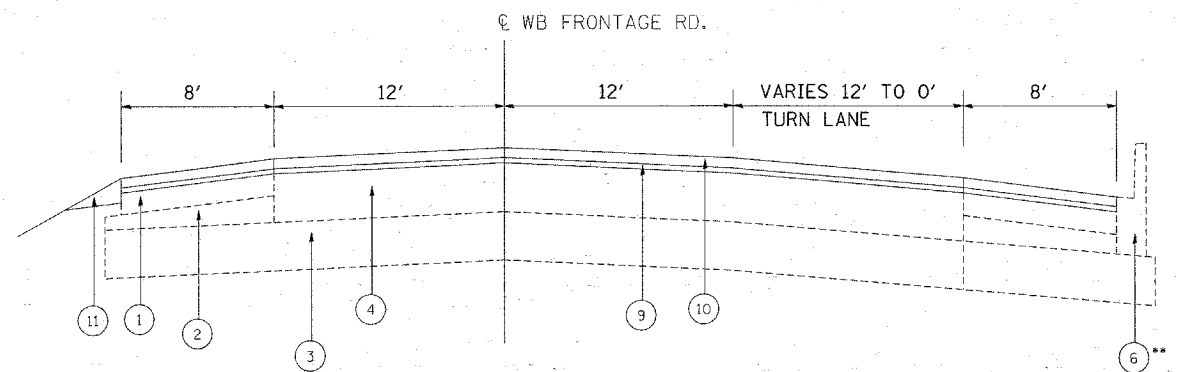
EXISTING TYPICAL SECTION
W/B ELGIN-O'HARE (FRONTAGE ROAD)
STA. 10+27 TO STA. 13+18

**REFER TO PLAN FOR LOCATIONS OF CURB & GUTTER

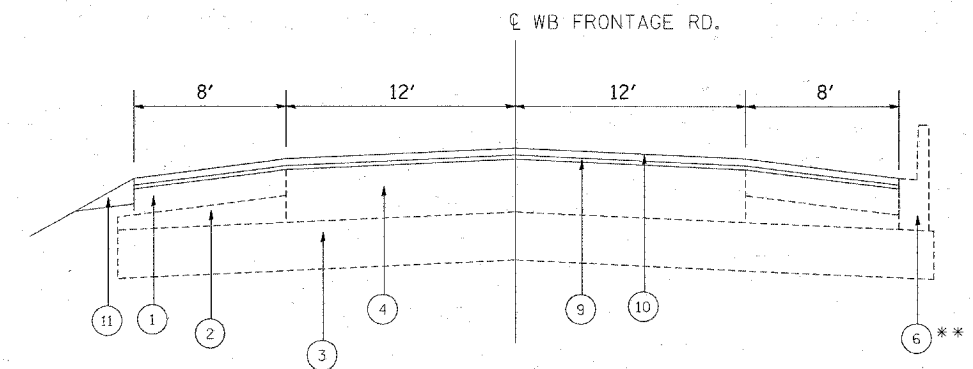


EXISTING TYPICAL SECTION
W/B ELGIN-O'HARE (FRONTAGE ROAD)
STA. 13+18 TO STA. 16+34
STA. 25+64 TO STA. 37+55
STA. 42+96 TO STA. 59+50

**REFER TO PLAN FOR LOCATIONS OF CURB & GUTTER



PROPOSED TYPICAL SECTION
W/B ELGIN-O'HARE (FRONTAGE ROAD)
STA. 10+27 TO STA. 16+34



PROPOSED TYPICAL SECTION
W/B ELGIN-O'HARE (FRONTAGE ROAD)
STA. 13+18 TO STA. 16+34
STA. 25+64 TO STA. 37+55
STA. 42+96 TO STA. 59+50

LEGEND

- ① EXISTING HMA SHOULDER 8"
- ② EXISTING SUB-BASE GRANULAR MATERIAL, TYPE B
- ③ EXISTING AGGREGATE SUBGRADE, 12"
- ④ EXISTING HMA BINDER COURSE, TYPE 2, 12"
- ⑤ EXISTING HMA SURFACE COURSE, 1 1/2"
- ⑥ EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- ⑦ EXISTING AGGREGATE SHOULDER TYPE B
- ⑧ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- ⑨ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ⑩ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- ⑪ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE USES	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5 MM)	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES (BINDER IL-19MM)	CLASS D PATCHES (HMA BINDER IL-19MM)
AC TYPE	SBS/SBR PG 76-28/-22	PG 64-22	PG 64-22 *	PG 64-22 *
DESIGN AIR VOIDS	4.0% @ 50 GYR	4.0% @ 70 GYR	4% @ 70 GYR	4% @ 70 GYR

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

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PLOT SCALE = 58.0000 "/ IN.

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PLOT DATE = 4/1/2008

DATE -

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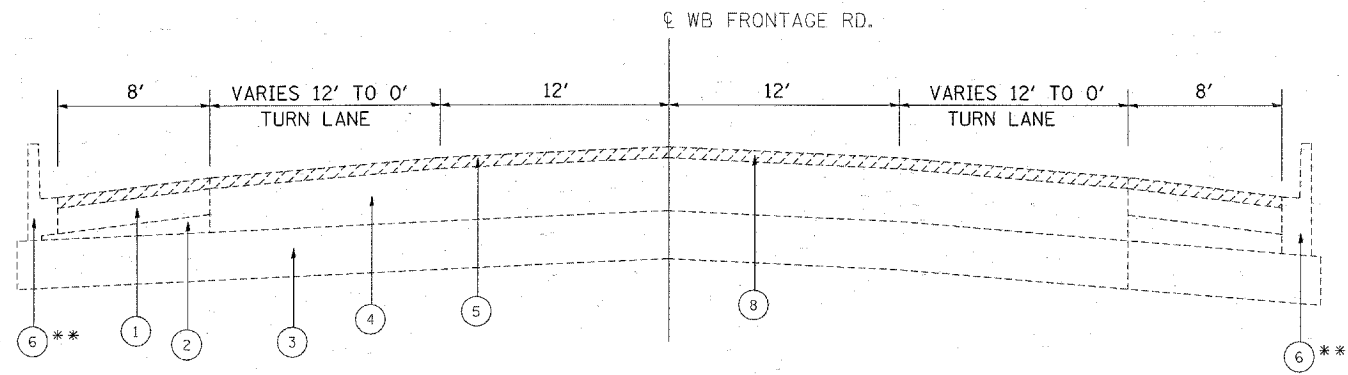
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ELGIN-O'HARE (FRONTAGE ROAD)
TYPICAL SECTIONS**

SCALE: NTS SHEET NO. OF SHEETS STA. X TO STA. X

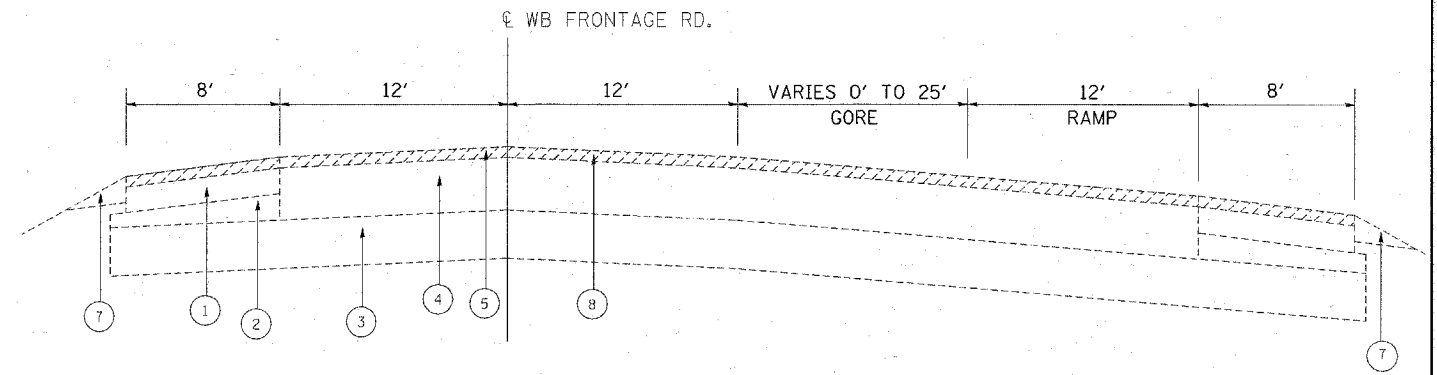
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	16-2-1-K-RS	COOK	31	4

CONTRACT NO. 60E26
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT

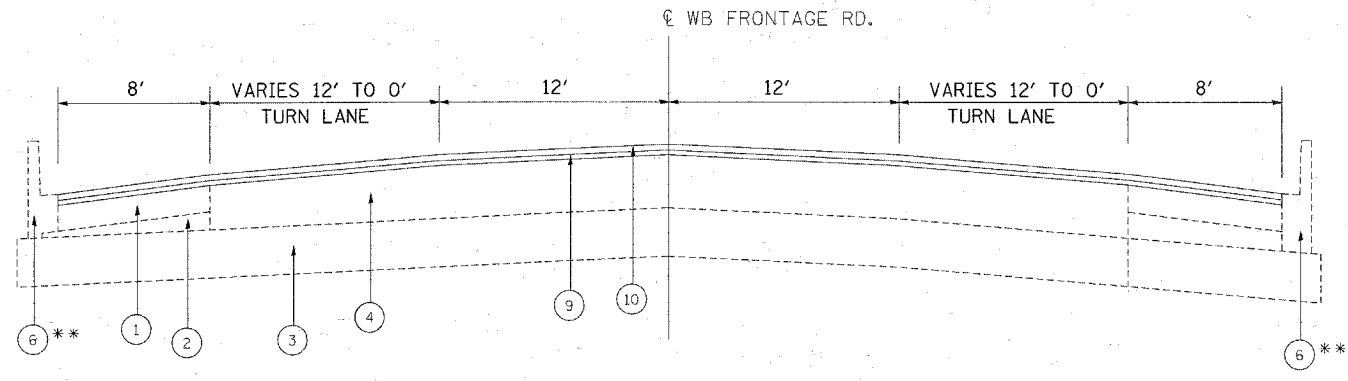


EXISTING TYPICAL SECTION
W/B ELGIN-O'HARE (FRONTAGE ROAD)
STA. 16+34 TO STA. 20+75
STA. 38+00 TO STA. 42+96

**REFER TO PLAN FOR LOCATIONS OF CURB & GUTTER

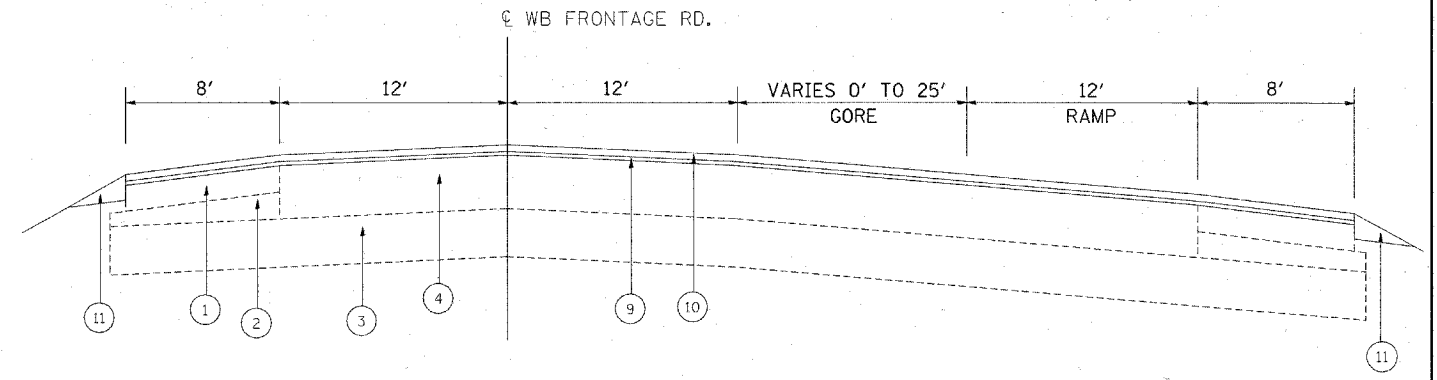


EXISTING TYPICAL SECTION
W/B ELGIN-O'HARE (FRONTAGE ROAD)
STA. 20+75 TO STA. 25+64



PROPOSED TYPICAL SECTION
W/B ELGIN-O'HARE (FRONTAGE ROAD)
STA. 16+34 TO STA. 20+75
STA. 38+00 TO STA. 42+96

**REFER TO PLAN FOR LOCATIONS OF CURB & GUTTER

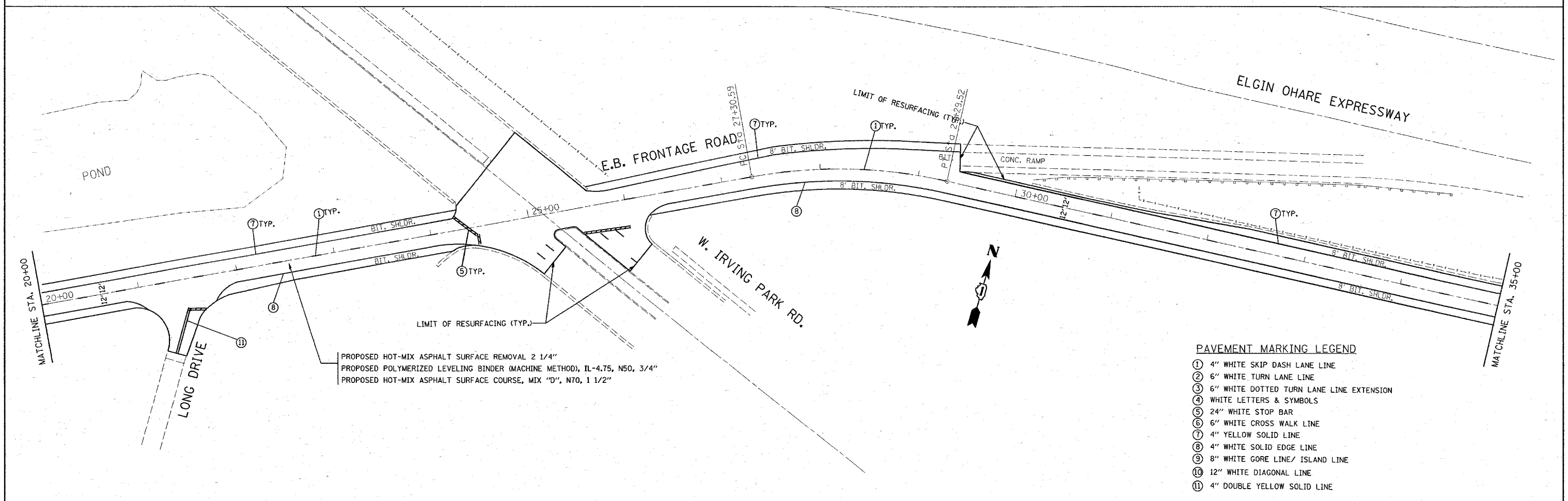
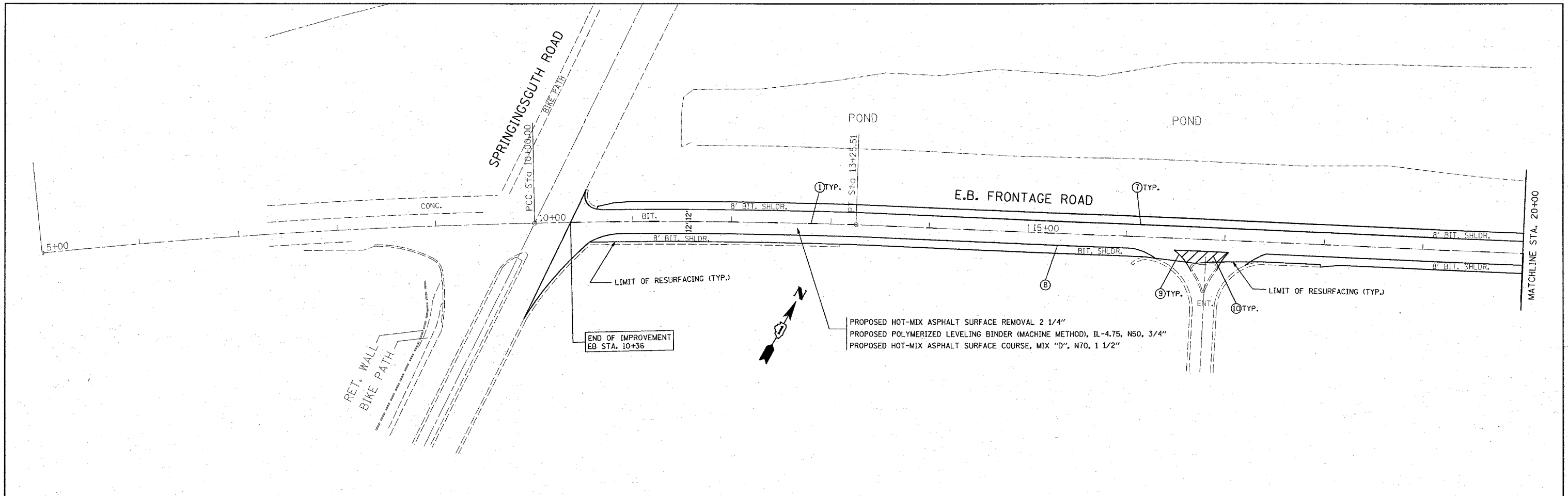


PROPOSED TYPICAL SECTION
W/B ELGIN-O'HARE (FRONTAGE ROAD)
STA. 20+75 TO STA. 25+64

LEGEND

- ① EXISTING HMA SHOULDER 8"
- ② EXISTING SUB-BASE GRANULAR MATERIAL, TYPE B
- ③ EXISTING AGGREGATE SUBGRADE, 12"
- ④ EXISTING HMA BINDER COURSE, TYPE 2, 12"
- ⑤ EXISTING HMA SURFACE COURSE, 1 1/2"
- ⑥ EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- ⑦ EXISTING AGGREGATE SHOULDER TYPE B
- ⑧ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- ⑨ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ⑩ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- ⑪ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B

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PLOT SCALE = 50.0000' / IN.	PLOT DATE = 4/1/2008	DRAWN -	REVISD -	SCALE: NTS	SHEET NO. OF SHEETS	STA. X	TO STA. X	CONTRACT NO. 60E26		
		CHECKED -	REVISD -					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		
		DATE -	REVISD -							



- PAVEMENT MARKING LEGEND**
- ① 4" WHITE SKIP DASH LANE LINE
 - ② 6" WHITE TURN LANE LINE
 - ③ 6" WHITE DOTTED TURN LANE LINE EXTENSION
 - ④ WHITE LETTERS & SYMBOLS
 - ⑤ 24" WHITE STOP BAR
 - ⑥ 6" WHITE CROSS WALK LINE
 - ⑦ 4" YELLOW SOLID LINE
 - ⑧ 4" WHITE SOLID EDGE LINE
 - ⑨ 8" WHITE GORE LINE/ ISLAND LINE
 - ⑩ 12" WHITE DIAGONAL LINE
 - ⑪ 4" DOUBLE YELLOW SOLID LINE

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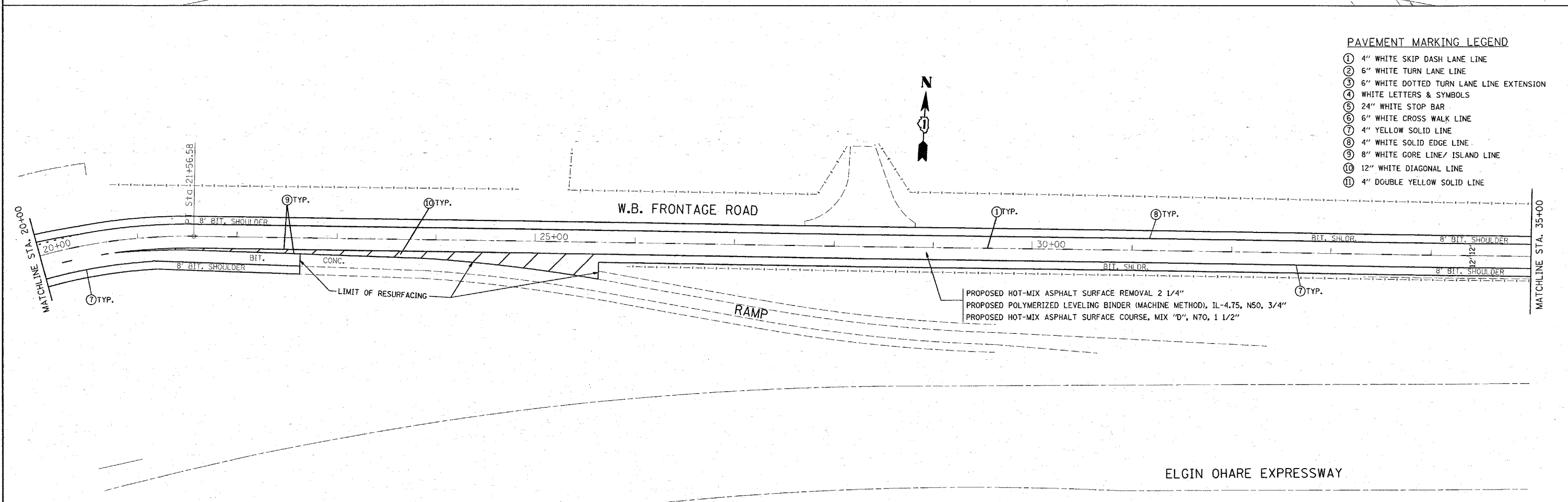
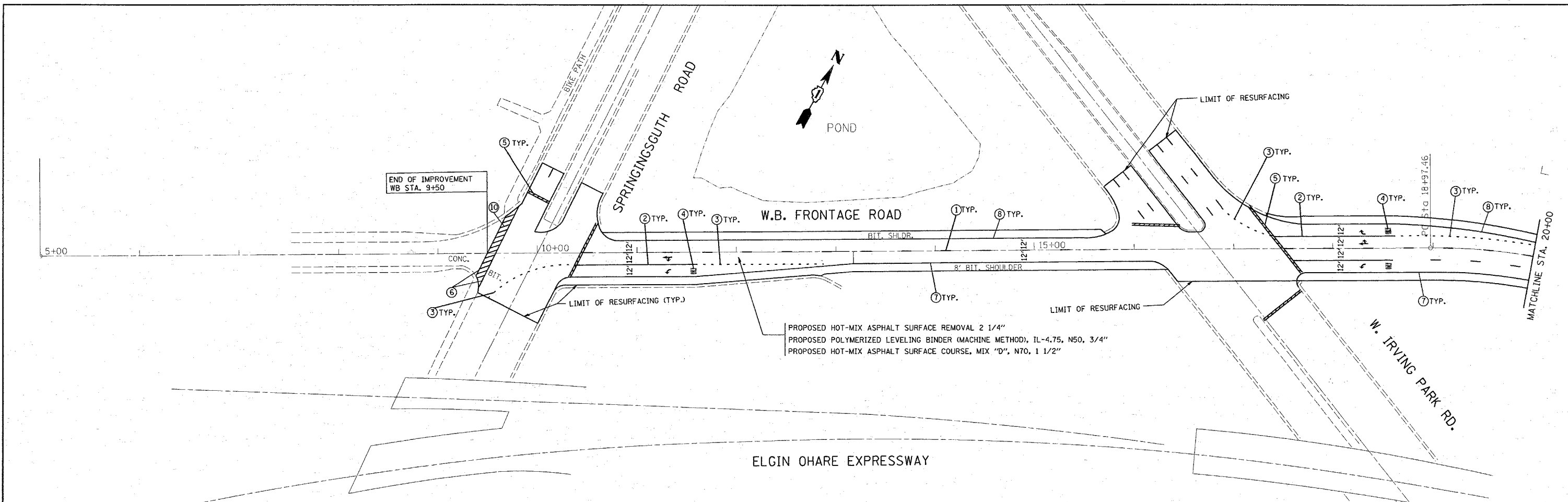
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ELGIN - OHARE FRONTAGE ROAD
 EASTBOUND**

SCALE: 1" = 50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	16-2-1-K-RS	COOK	31	7
CONTRACT NO. 60E26				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- PAVEMENT MARKING LEGEND**
- ① 4" WHITE SKIP DASH LANE LINE
 - ② 6" WHITE TURN LANE LINE
 - ③ 6" WHITE DOTTED TURN LANE LINE EXTENSION
 - ④ WHITE LETTERS & SYMBOLS
 - ⑤ 24" WHITE STOP BAR
 - ⑥ 6" WHITE CROSS WALK LINE
 - ⑦ 4" YELLOW SOLID LINE
 - ⑧ 4" WHITE SOLID EDGE LINE
 - ⑨ 8" WHITE GORE LINE/ ISLAND LINE
 - ⑩ 12" WHITE DIAGONAL LINE
 - ⑪ 4" DOUBLE YELLOW SOLID LINE

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

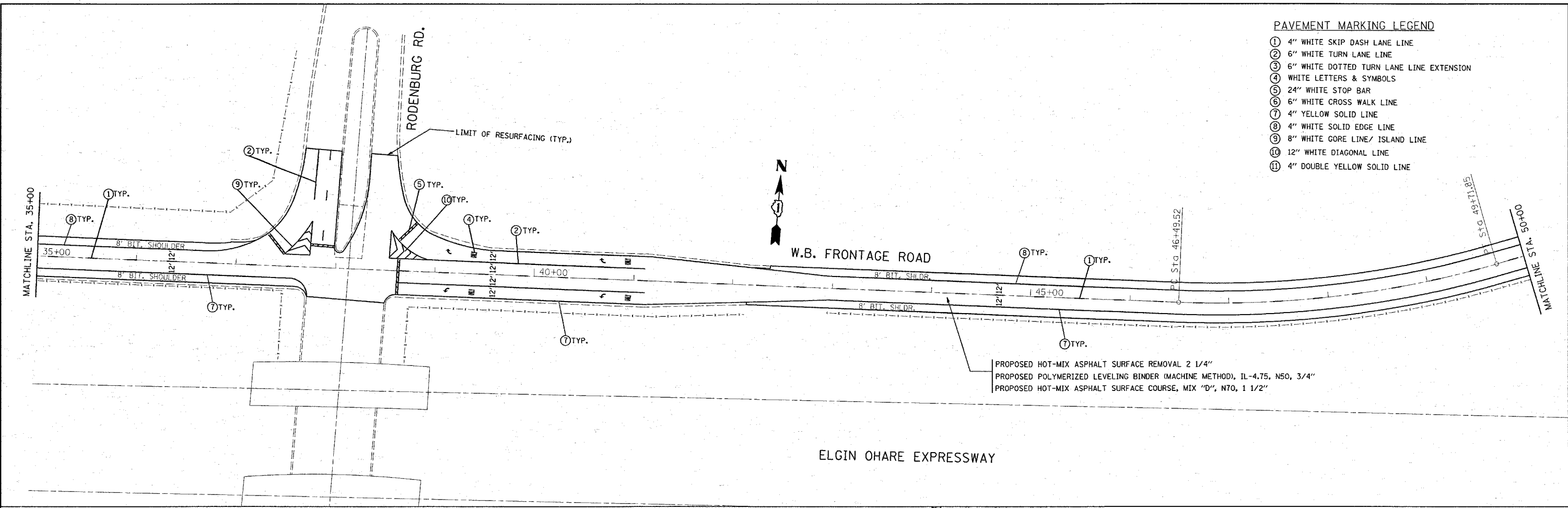
**ELGIN - OHARE FRONTAGE ROAD
WESTBOUND**

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	PLOT DATE = 4/7/2008	DATE -	REVISED -

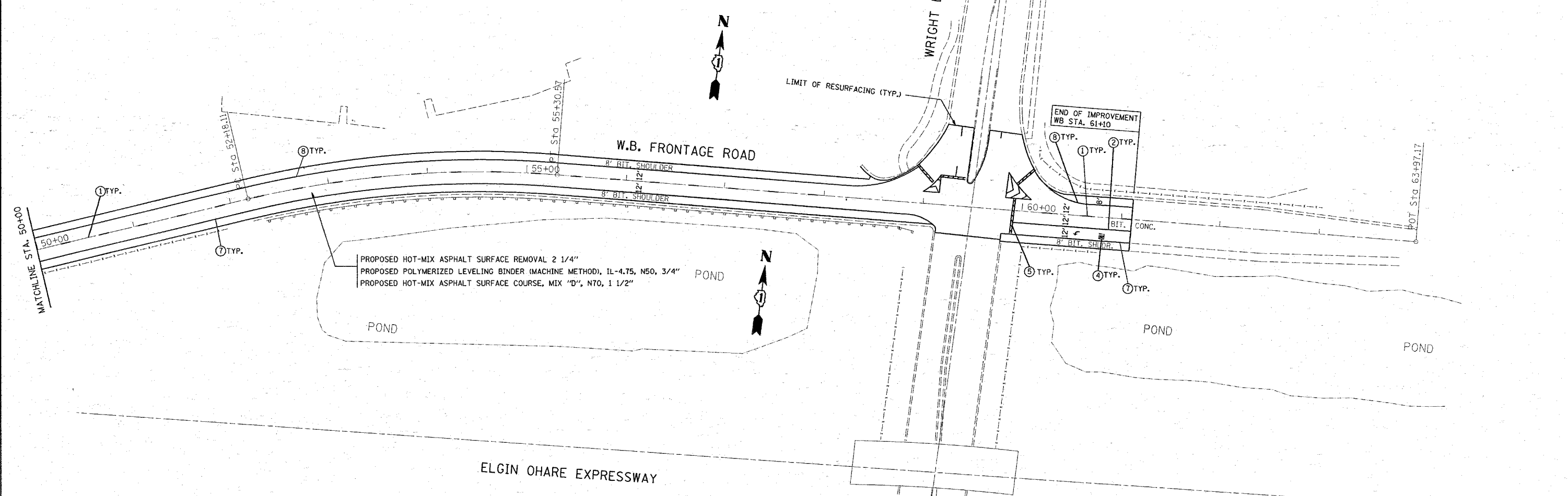
SCALE: 1" = 50'	SHEET NO.	OF	SHEETS	STA.	TO STA.	F.A.P. RTE. 345	SECTION 16-2-1-K-RS	COUNTY COOK	TOTAL SHEETS 31	SHEET NO. 9
								CONTRACT NO. 60E26		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT										

PAVEMENT MARKING LEGEND

- ① 4" WHITE SKIP DASH LANE LINE
- ② 6" WHITE TURN LANE LINE
- ③ 6" WHITE DOTTED TURN LANE LINE EXTENSION
- ④ WHITE LETTERS & SYMBOLS
- ⑤ 24" WHITE STOP BAR
- ⑥ 6" WHITE CROSS WALK LINE
- ⑦ 4" YELLOW SOLID LINE
- ⑧ 4" WHITE SOLID EDGE LINE
- ⑨ 8" WHITE GORE LINE/ ISLAND LINE
- ⑩ 12" WHITE DIAGONAL LINE
- ⑪ 4" DOUBLE YELLOW SOLID LINE



PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL 2 1/4"
 PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
 PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"



PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL 2 1/4"
 PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
 PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"

FILE NAME =	USER NAME = stoadpa	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ELGIN - OHARE FRONTAGE ROAD WESTBOUND	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PROJECTS\dl34788\sh_rdwj.dgn		DRAWN -	REVISED -			345	16-2-1-K-RS	COOK	31	10	
		CHECKED -	REVISED -			CONTRACT NO. 60E26					
		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

RESURFACING - TRAFFIC SIGNAL SCHEDULE OF QUANTITIES

The "Pay Items" below are paid separately as per the attached "Specification" for MAGNETIC DETECTOR REMOVAL AND DETECTOR LOOP INSTALLATION.

Code No.	Pay Item	Unit	Quantity
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	
88500100	INDUCTIVE LOOP DETECTOR	EACH	
88600100	DETECTOR LOOP, TYPE 1	FOOT	

NOTE:

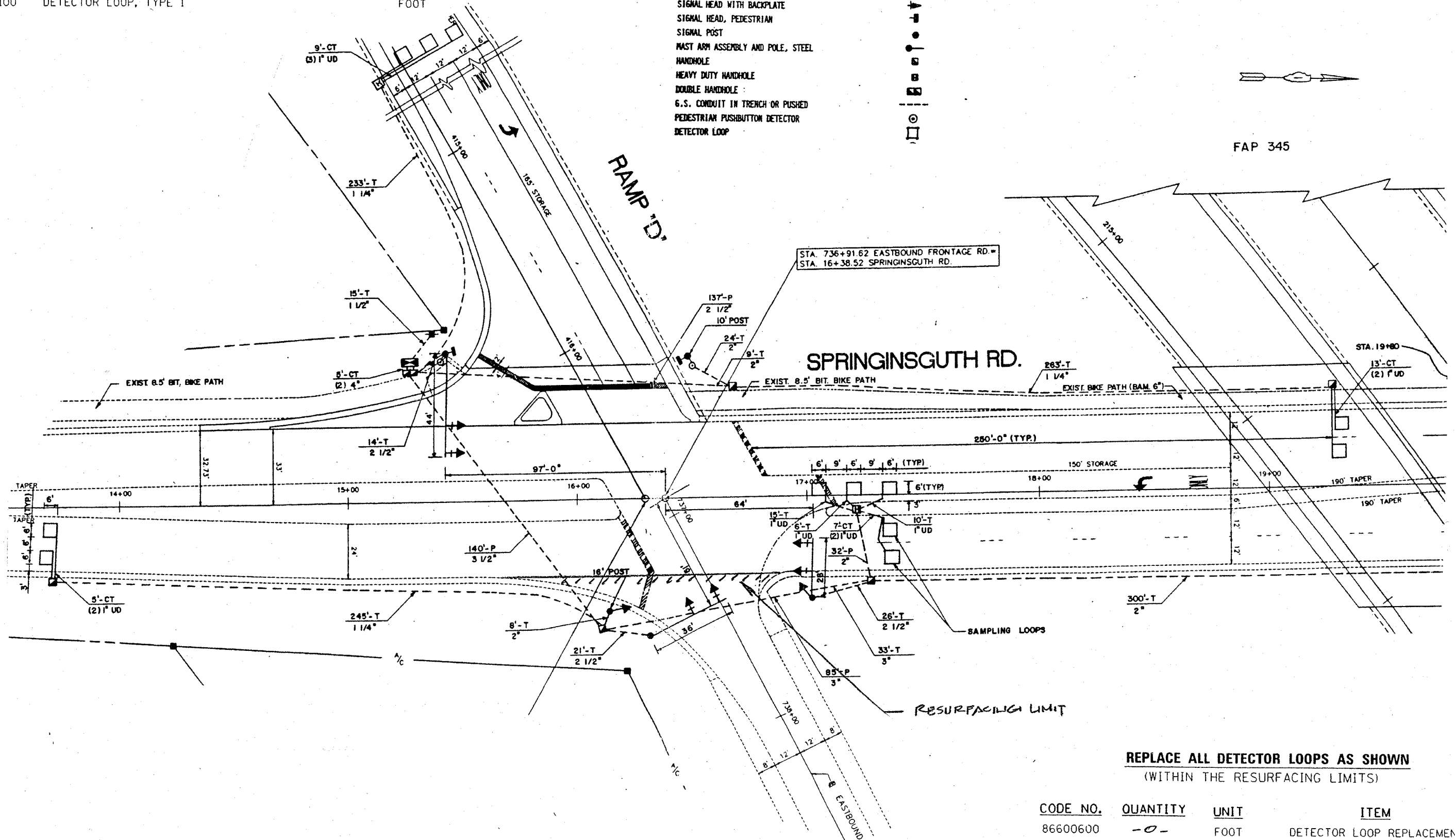
THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

TRAFFIC SIGNAL LEGEND

- PROPOSED
- CONTROLLER
- SERVICE INSTALLATION
- SIGNAL HEAD
- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD, PEDESTRIAN
- SIGNAL POST
- MAST ARM ASSEMBLY AND POLE, STEEL
- HANDHOLE
- HEAVY DUTY HANDHOLE
- DOUBLE HANDHOLE
- G.S. CONDUIT IN TRENCH OR PUSHED
- PEDESTRIAN PUSHBUTTON DETECTOR
- DETECTOR LOOP



FAP 345



CODE NO.	QUANTITY	UNIT	ITEM
86600600	- 0 -	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME =	USER NAME = konthapixeybc	DESIGNED -	REVISED -
c:\projects\trcf\1070027\us12.20.45.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT
ELGIN/O'HARE FRONTAGE (EB) SPRINGINGUTH

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	16-2-LK-RS	Cook	31	11
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		CONTRACT NO. 60E26

SCALE: SHEET NO. OF SHEETS STA. TO STA.

c:\projects\trcf\1070027\us12.20.45.dgn 2/29/2008 1:37:00 PM User:konthapixeybc

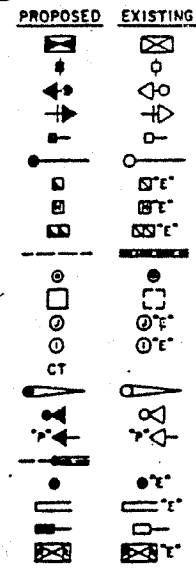
RESURFACING - TRAFFIC SIGNAL SCHEDULE OF QUANTITIES

The "Pay Items" below are paid separately as per the attached "Specification" for MAGNETIC DETECTOR REMOVAL AND DETECTOR LOOP INSTALLATION.

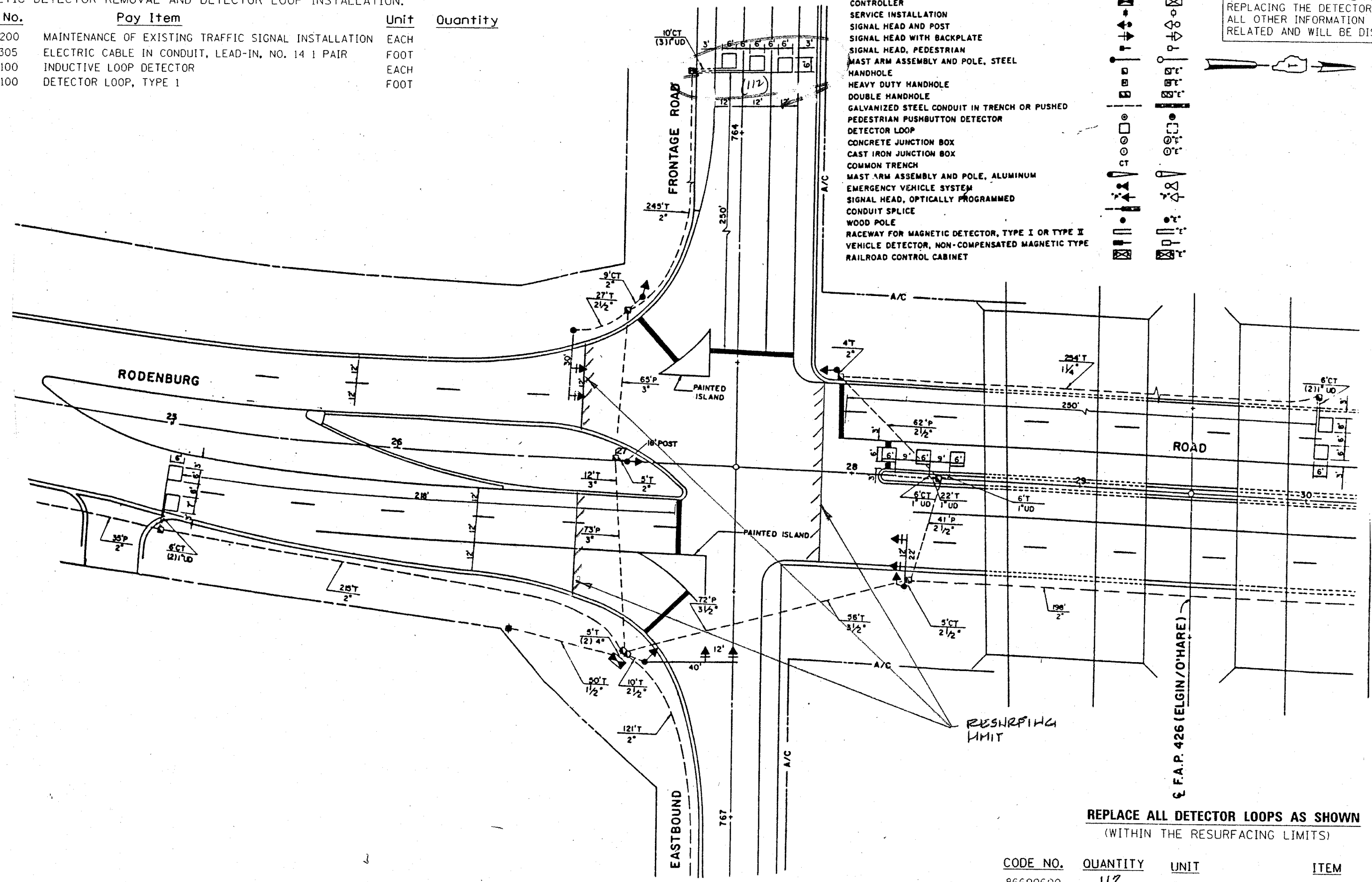
Code No.	Pay Item	Unit	Quantity
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	
88500100	INDUCTIVE LOOP DETECTOR	EACH	
88600100	DETECTOR LOOP, TYPE 1	FOOT	

TRAFFIC SIGNAL LEGEND

- CONTROLLER
- SERVICE INSTALLATION
- SIGNAL HEAD AND POST
- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD, PEDESTRIAN
- MAST ARM ASSEMBLY AND POLE, STEEL
- HANDHOLE
- HEAVY DUTY HANDHOLE
- DOUBLE HANDHOLE
- GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED
- PEDESTRIAN PUSHBUTTON DETECTOR
- DETECTOR LOOP
- CONCRETE JUNCTION BOX
- CAST IRON JUNCTION BOX
- COMMON TRENCH
- MAST ARM ASSEMBLY AND POLE, ALUMINUM
- EMERGENCY VEHICLE SYSTEM
- SIGNAL HEAD, OPTICALLY PROGRAMMED
- CONDUIT SPLICE
- WOOD POLE
- RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II
- VEHICLE DETECTOR, NON-COMPENSATED MAGNETIC TYPE
- RAILROAD CONTROL CABINET



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	ITEM
88600600	112	FOOT	DETECTOR LOOP REPLACEMENT

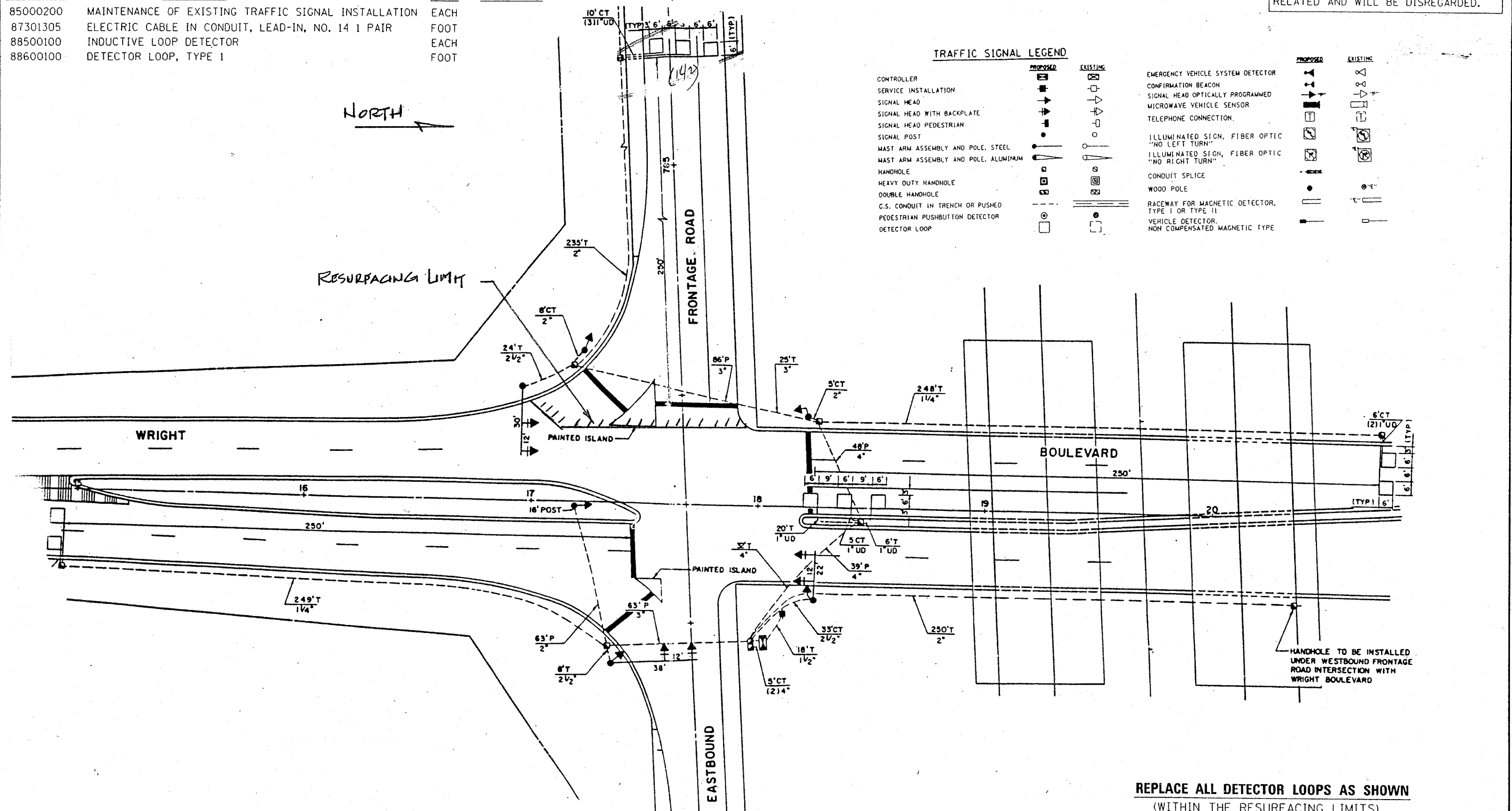
FILE NAME: \\projects\tr\of\c\187\027\us12.20.45.dgn	USER NAME: kanthapixybc	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT ELGIN/O'HARE FRONTAGE (EB) @ RODENBURG	F.A.P. RTE.:	SECTION:	COUNTY:	TOTAL SHEETS:	SHEET NO.:
PLDT SCALE: 1/8" = 1' IN.	DRAWN: -	REVISED: -	345			16-2-1-K-RS	LOOK	31	13	
PLDT DATE: 2/29/2008	CHECKED: -	REVISED: -	CONTRACT NO. 60E26							
	DATE: -	REVISED: -	FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT							

RESURFACING - TRAFFIC SIGNAL SCHEDULE OF QUANTITIES

The "Pay Items" below are paid separately as per the attached "Specification" for MAGNETIC DETECTOR REMOVAL AND DETECTOR LOOP INSTALLATION.

Code No.	Pay Item	Unit	Quantity
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	
88500100	INDUCTIVE LOOP DETECTOR	EACH	
88600100	DETECTOR LOOP, TYPE 1	FOOT	

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	ITEM
86600600	142	FOOT	DETECTOR LOOP REPLACEMENT

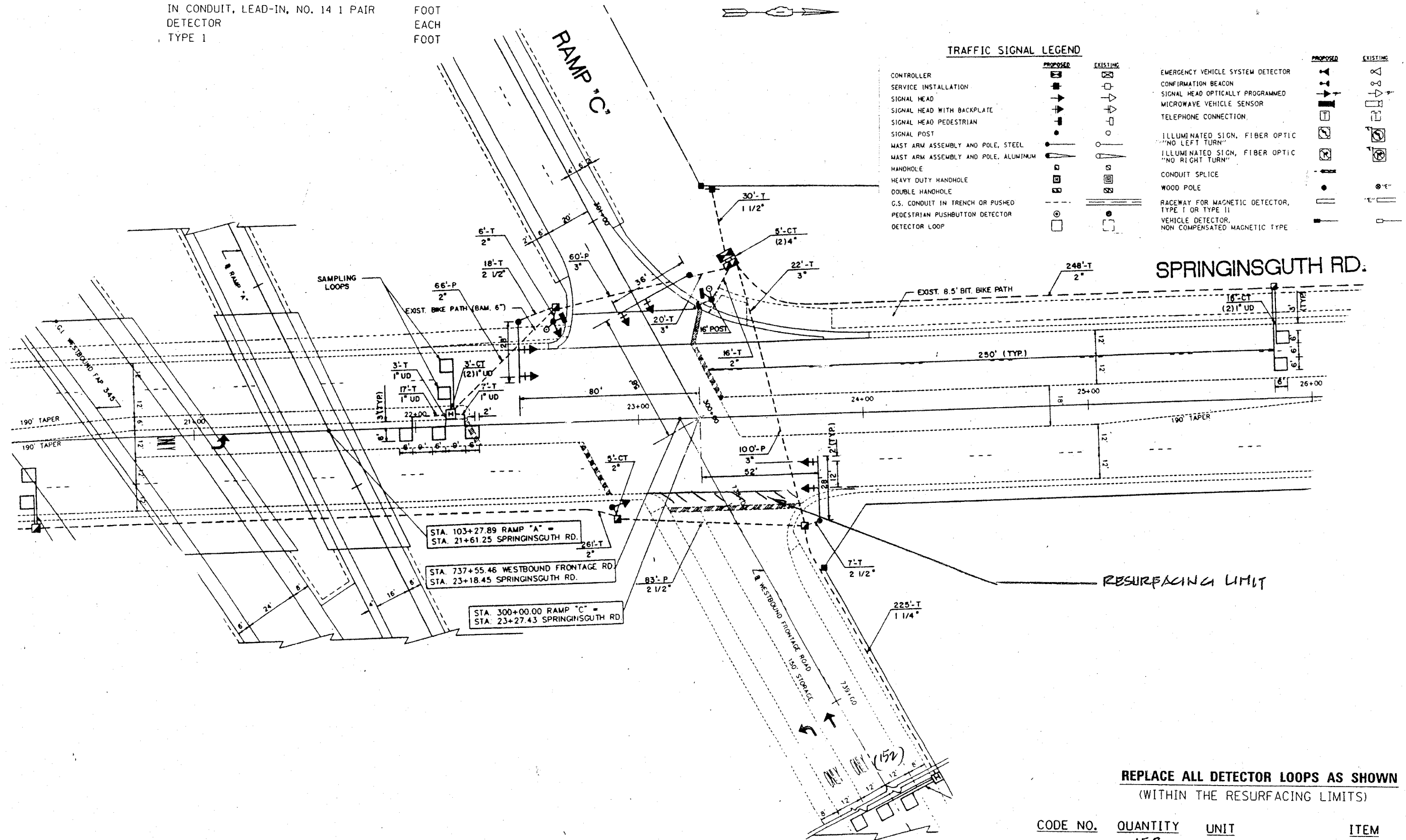
FILE NAME: \\projects\traffic\1078027\us12.20.45.dgn	USER NAME: kanthaphixaybc	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT ELGIN/O'HARE FRONTAGE (EB) @ WRIGHT	F.A.P. RTE.:	SECTION:	COUNTY:	TOTAL SHEETS:	SHEET NO.:	
		DRAWN: -	REVISED: -			345	16-2-1-K-RS	LOOK	31	14	
		CHECKED: -	REVISED: -			CONTRACT NO. 60E26					
		DATE: -	REVISED: -			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

RESURFACING - TRAFFIC SIGNAL SCHEDULE OF QUANTITIES

are paid separately as per the attached "Specification" for
VAL AND DETECTOR LOOP INSTALLATION.

Item	Unit	Quantity
EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	
IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	
DETECTOR	EACH	
TYPE I	FOOT	

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



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]	EMERGENCY VEHICLE SYSTEM DETECTOR	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]	CONFIRMATION BEACON	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]	SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	MICROWAVE VEHICLE SENSOR	[Symbol]	[Symbol]
SIGNAL HEAD PEDESTRIAN	[Symbol]	[Symbol]	TELEPHONE CONNECTION	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]	ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	CONDUIT SPLICE	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]	WOOD POLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
G.S. CONDUIT IN TRENCH OR PUSHED	[Symbol]	[Symbol]			
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]			
DETECTOR LOOP	[Symbol]	[Symbol]			

**REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN THE RESURFACING LIMITS)**

CODE NO.	QUANTITY	UNIT	ITEM
86600600	152	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME :	USER NAME : kanthapixeybc	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT ELGIN / O'HARE FRONTAGE (WB) SPRINGSGUTH	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
e:\projects\traffic\070027\usl2.20.45.dwg		DRAWN -	REVISED -			345	16-2-1-K-RS	Cook	31	15	
PLOT SCALE : 40.0000" / IN.		CHECKED -	REVISED -			CONTRACT NO. 60E26					
PLOT DATE : 2/29/2008		DATE -	REVISED -			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

RESURFACING - TRAFFIC SIGNAL SCHEDULE OF QUANTITIES

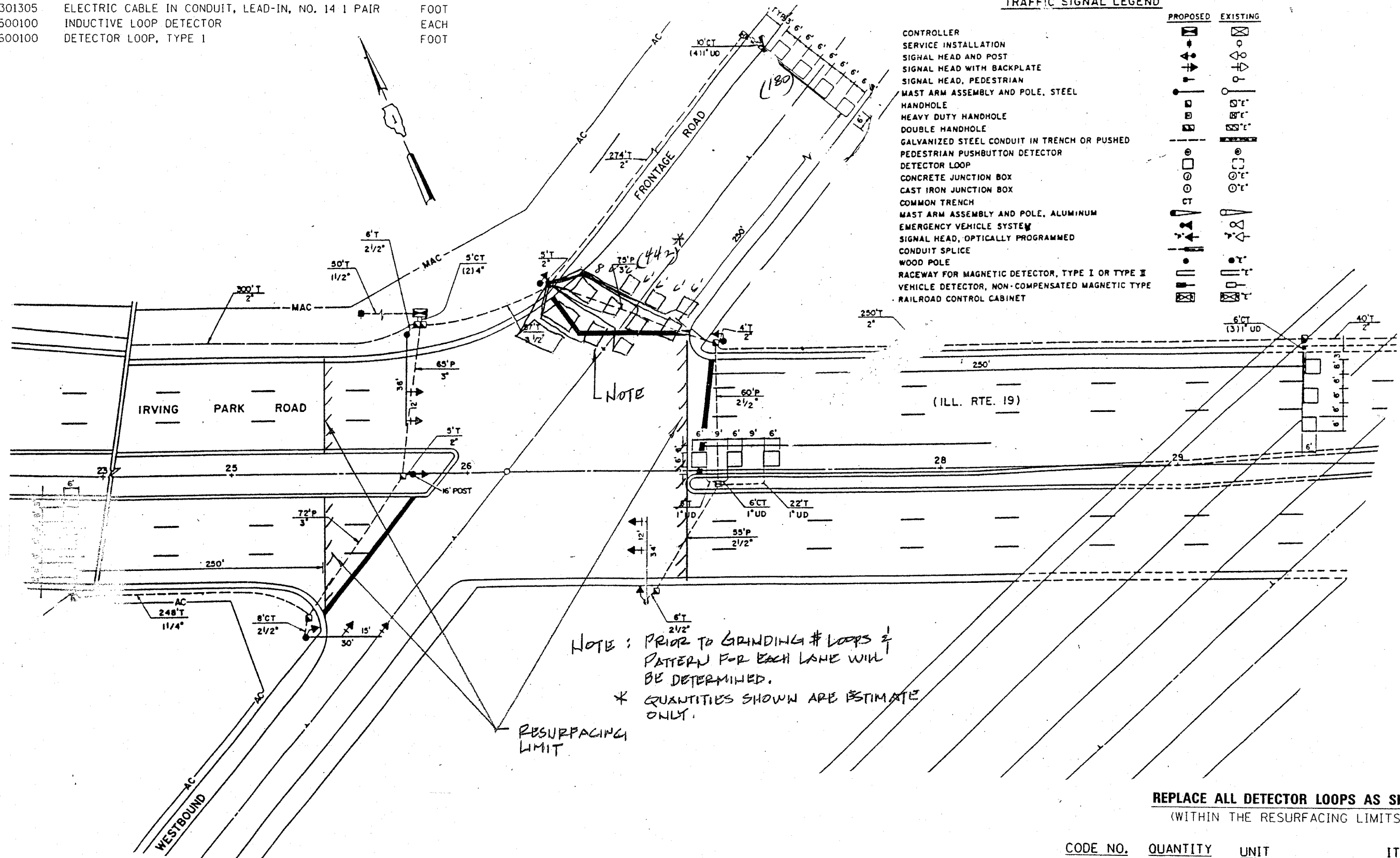
The "Pay Items" below are paid separately as per the attached "Specification" for MAGNETIC DETECTOR REMOVAL AND DETECTOR LOOP INSTALLATION.

Code No.	Pay Item	Unit	Quantity
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	
88500100	INDUCTIVE LOOP DETECTOR	EACH	
88600100	DETECTOR LOOP, TYPE I	FOOT	

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

TRAFFIC SIGNAL LEGEND

- | | PROPOSED | EXISTING |
|--|----------|----------|
| CONTROLLER | [Symbol] | [Symbol] |
| SERVICE INSTALLATION | [Symbol] | [Symbol] |
| SIGNAL HEAD AND POST | [Symbol] | [Symbol] |
| SIGNAL HEAD WITH BACKPLATE | [Symbol] | [Symbol] |
| SIGNAL HEAD, PEDESTRIAN | [Symbol] | [Symbol] |
| MAST ARM ASSEMBLY AND POLE, STEEL | [Symbol] | [Symbol] |
| HANDHOLE | [Symbol] | [Symbol] |
| HEAVY DUTY HANDHOLE | [Symbol] | [Symbol] |
| DOUBLE HANDHOLE | [Symbol] | [Symbol] |
| GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED | [Symbol] | [Symbol] |
| PEDESTRIAN PUSHBUTTON DETECTOR | [Symbol] | [Symbol] |
| DETECTOR LOOP | [Symbol] | [Symbol] |
| CONCRETE JUNCTION BOX | [Symbol] | [Symbol] |
| CAST IRON JUNCTION BOX | [Symbol] | [Symbol] |
| COMMON TRENCH | [Symbol] | [Symbol] |
| MAST ARM ASSEMBLY AND POLE, ALUMINUM | [Symbol] | [Symbol] |
| EMERGENCY VEHICLE SYSTEM | [Symbol] | [Symbol] |
| SIGNAL HEAD, OPTICALLY PROGRAMMED | [Symbol] | [Symbol] |
| CONDUIT SPLICE | [Symbol] | [Symbol] |
| WOOD POLE | [Symbol] | [Symbol] |
| RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II | [Symbol] | [Symbol] |
| VEHICLE DETECTOR, NON-COMPENSATED MAGNETIC TYPE | [Symbol] | [Symbol] |
| RAILROAD CONTROL CABINET | [Symbol] | [Symbol] |



NOTE: PRIOR TO GRINDING # LOOPS & PATTERN FOR EACH LANE WILL BE DETERMINED.
* QUANTITIES SHOWN ARE ESTIMATE ONLY.

RESURFACING LIMIT

REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN THE RESURFACING LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
86600600	622	FOOT	DETECTOR LOOP REPLACEMENT

RESURFACING - TRAFFIC SIGNAL SCHEDULE OF QUANTITIES

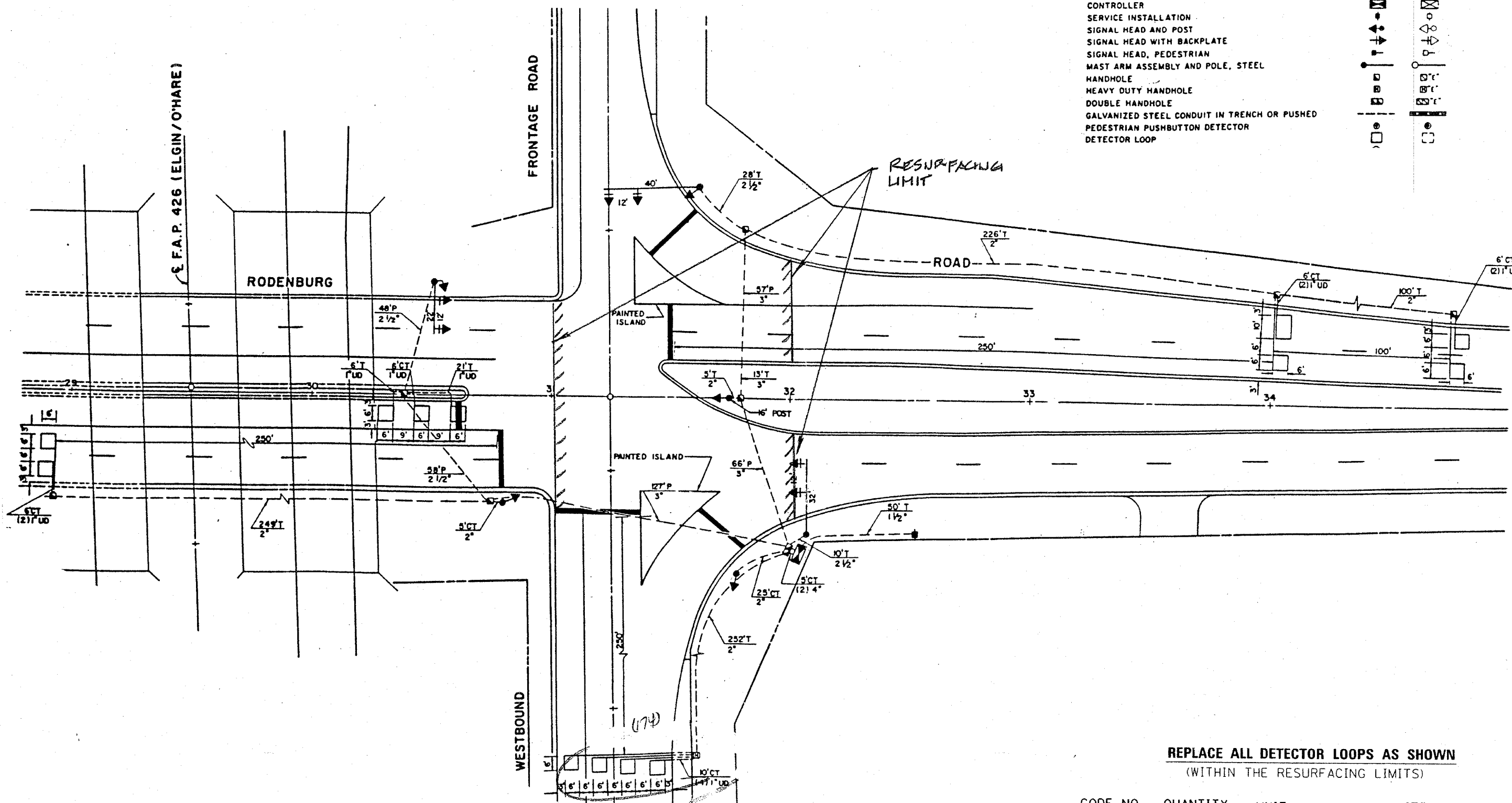
The "Pay Items" below are paid separately as per the attached "Specification" for MAGNETIC DETECTOR REMOVAL AND DETECTOR LOOP INSTALLATION.

Code No.	Pay Item	Unit	Quantity
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	
88500100	INDUCTIVE LOOP DETECTOR	EACH	
88600100	DETECTOR LOOP, TYPE 1	FOOT	

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

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]
SIGNAL HEAD AND POST	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]
GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED	[Symbol]	[Symbol]
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]
DETECTOR LOOP	[Symbol]	[Symbol]



REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN THE RESURFACING LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
86600600	174	FOOT	DETECTOR LOOP REPLACEMENT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT
ELGIN/O'HARE FRONTAGE (WB) @ RODENBURG

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	16-2-1-K-RS	Cook	31	17
CONTRACT NO. 60E26				

FILE NAME: c:\projects\trf\trf\1078827\us12.20.45.dgn
USER NAME: kanthephixoybc
PLDT SCALE: 40.0000" / IN.
PLDT DATE: 2/29/2008

DESIGNED	REVISOR
-	-
DRAWN	REVISOR
-	-
CHECKED	REVISOR
-	-
DATE	REVISOR
-	-

SCALE: SHEET NO. OF SHEETS STA. TO STA. FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT

RESURFACING - TRAFFIC SIGNAL SCHEDULE OF QUANTITIES

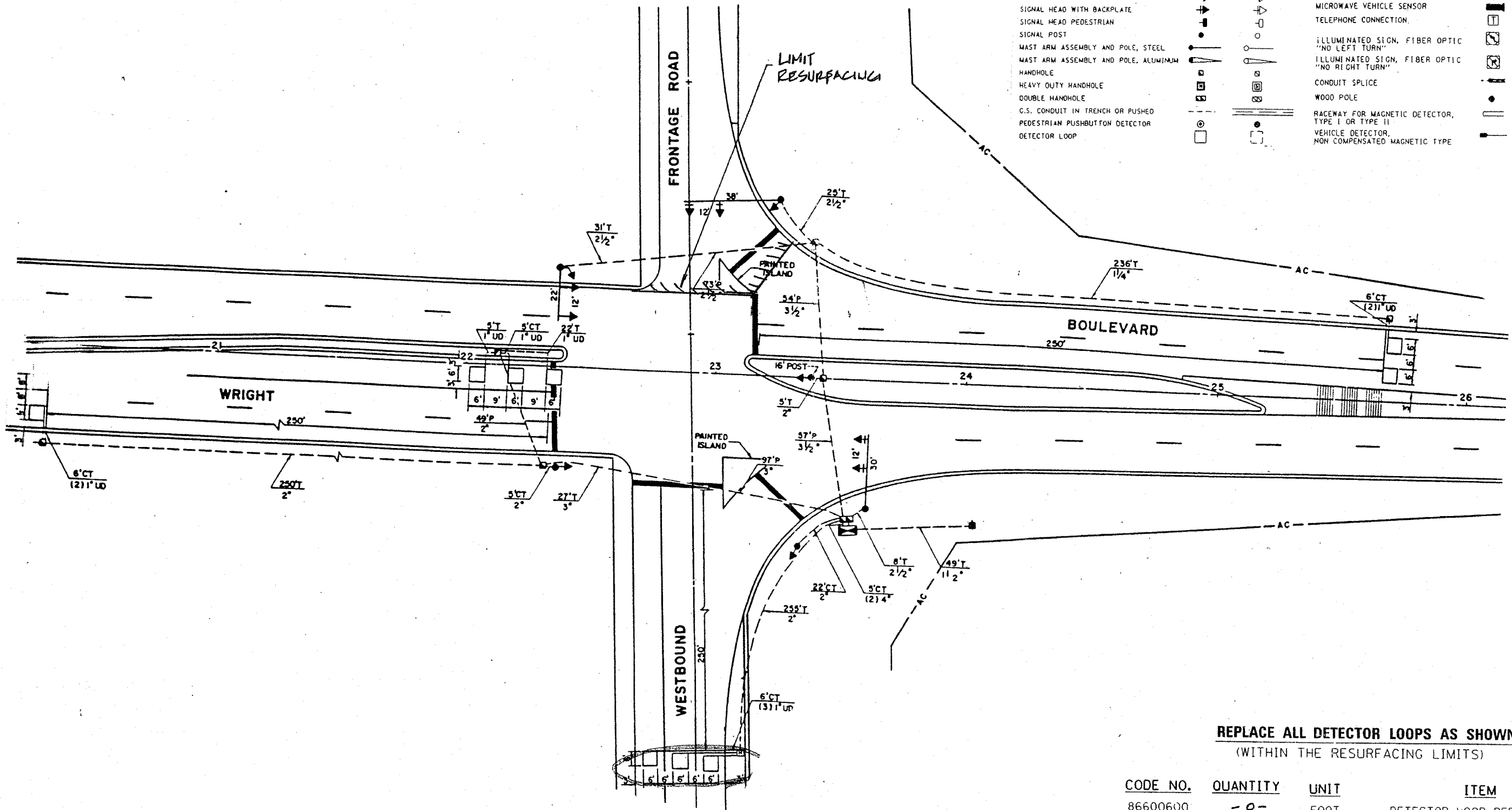
The "Pay Items" below are paid separately as per the attached "Specification" for MAGNETIC DETECTOR REMOVAL AND DETECTOR LOOP INSTALLATION.

Code No.	Pay Item	Unit	Quantity
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	
88500100	INDUCTIVE LOOP DETECTOR	EACH	
88600100	DETECTOR LOOP, TYPE I	FOOT	

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

TRAFFIC SIGNAL LEGEND

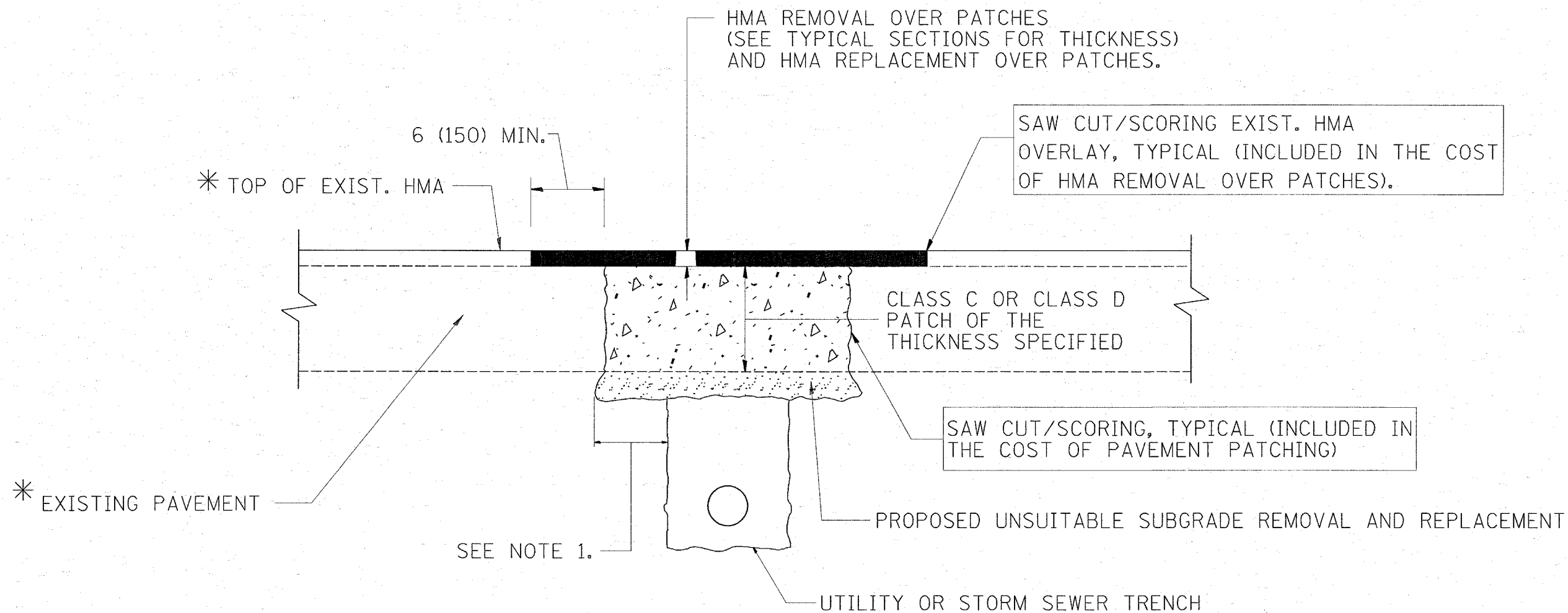
	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]	EMERGENCY VEHICLE SYSTEM DETECTOR	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]	CONFIRMATION BEACON	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]	SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	MICROWAVE VEHICLE SENSOR	[Symbol]	[Symbol]
SIGNAL HEAD PEDESTRIAN	[Symbol]	[Symbol]	TELEPHONE CONNECTION	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]	ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	CONDUIT SPLICE	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]	WOOD POLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
C.S. CONDUIT IN TRENCH OR PUSHED	[Symbol]	[Symbol]			
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]			
DETECTOR LOOP	[Symbol]	[Symbol]			



REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN THE RESURFACING LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
86600600	- 0 -	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME =	USER NAME = kanthaphaybc	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT EGLIN/O'HARE FRONTAGE(WB) @ WRIGHT	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\projects\traffic\1070027\us12.20.45.d		DRAWN -	REVISED -			345	16-2-1-K-RS	COOK	31	18	
PLOT SCALE = 40.0000 / IN.		CHECKED -	REVISED -			CONTRACT NO. 60E 26					
PLOT DATE = 2/29/2008		DATE -	REVISED -			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

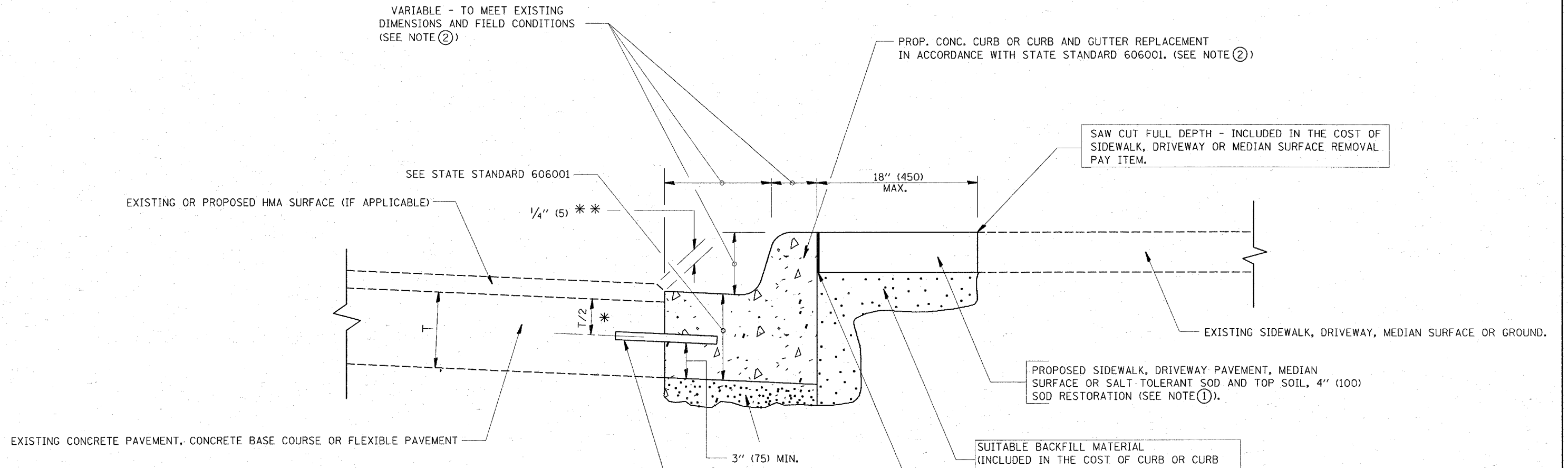
1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION

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

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

FILE NAME = c:\projects\dl34708\dl34708.dgn	USER NAME = abreugh	DESIGNED - R. SHAH	REVISED - A. ABBAS 01-20-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT	F.A.P. RTE. 345	SECTION 16-2-1-K-RS	COUNTY COOK	TOTAL SHEETS 31	SHEET NO. 19	
		DRAWN -	REVISED - A. ABBAS 04-27-98			BD400-04 (BD-22)		CONTRACT NO. 60E26			
		CHECKED -	REVISED - R. BORO 01-01-07			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	
		DATE - 10-25-94	REVISED - R. BORO 09-04-07								



- * 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
- ** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

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

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

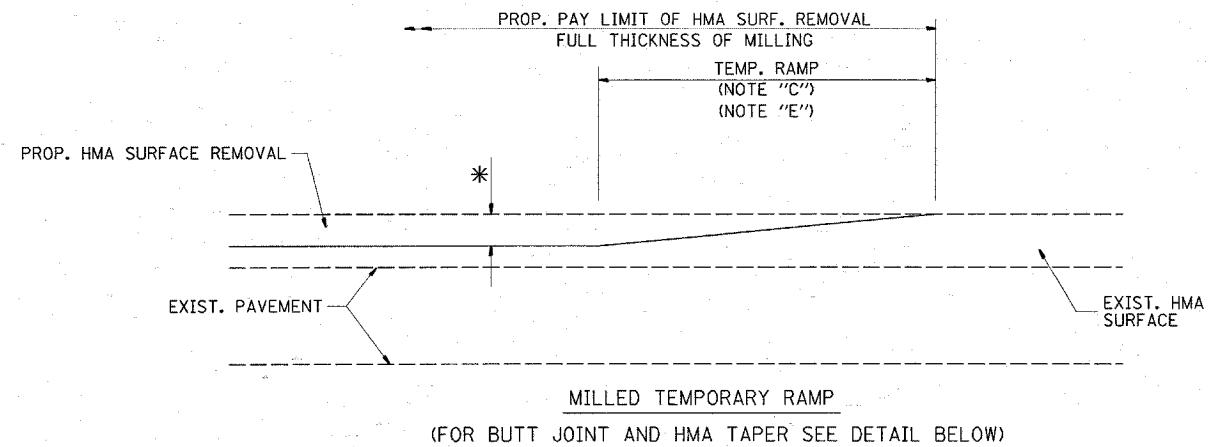
- ② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.
- ③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.
- ④ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ⑤ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ⑥ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.
- ⑦ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

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

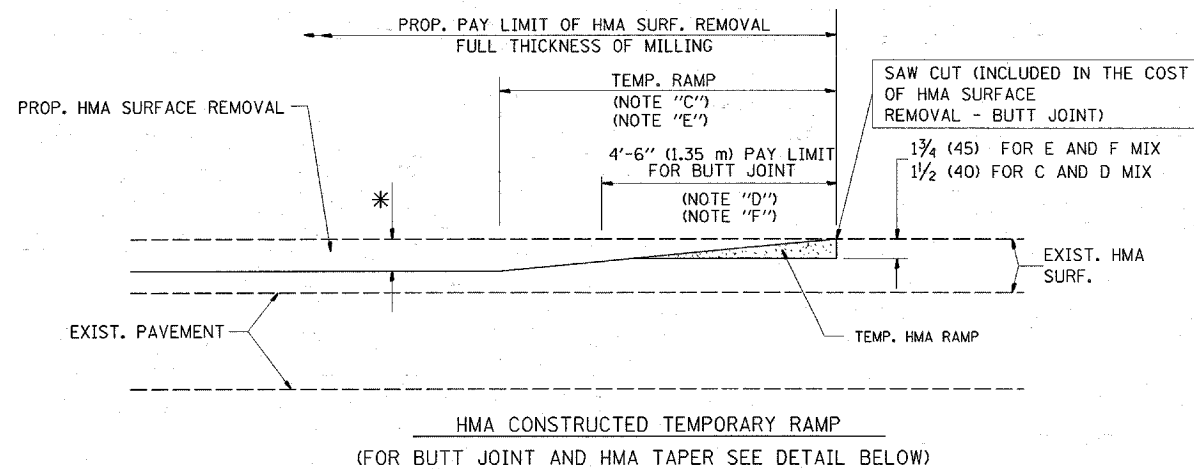
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = abrauh	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	F.A.P. RTE. 345	SECTION 16-2-1-K-RS	COUNTY COOK	TOTAL SHEETS 20	SHEET NO. 20
PROJECTS\dl34708\dl34708aedgn		DRAWN -	REVISED - A. ABBAS 03-21-97			BD600-06 (BD-24)		CONTRACT NO. 60E26		
		CHECKED -	REVISED - M. GOMEZ 01-22-01		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	
		DATE - 03-11-94	REVISED - R. BORO 01-01-07							

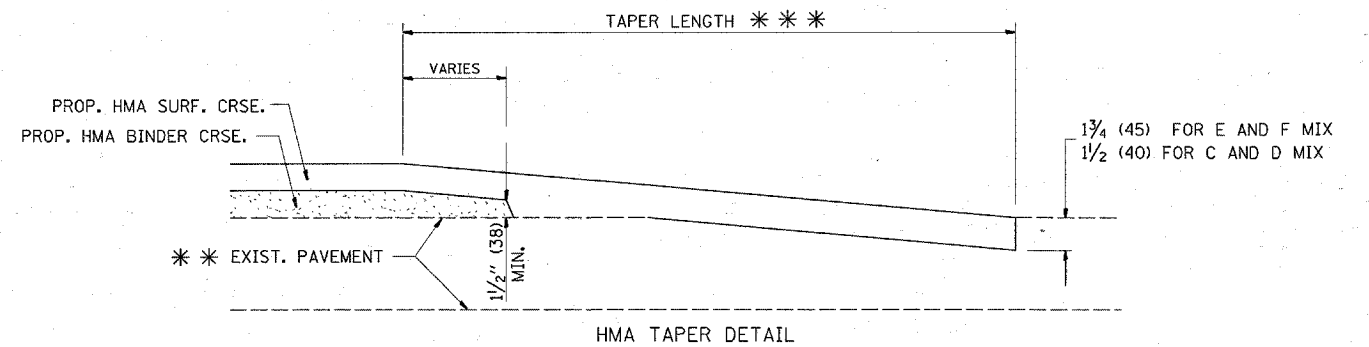
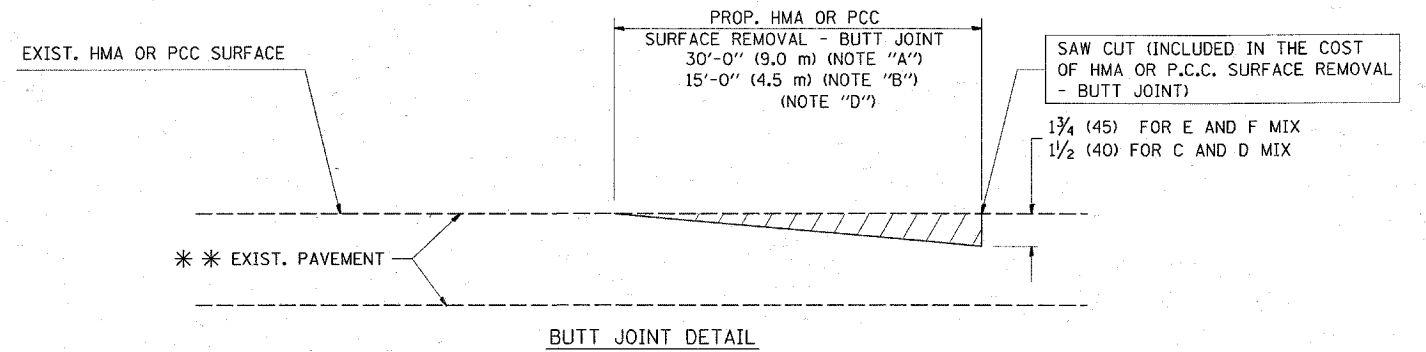


OPTION 1



OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

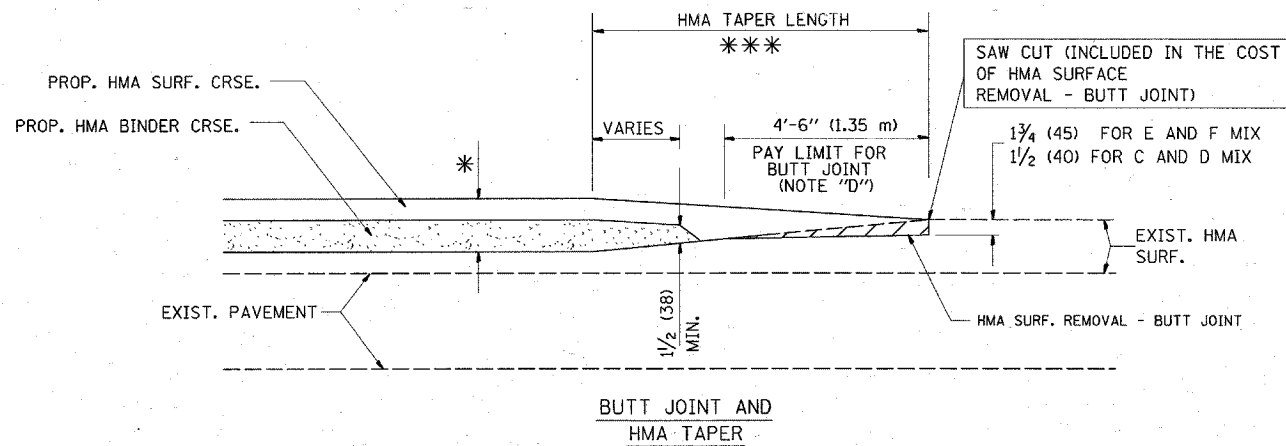
NOTES

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

BASIS OF PAYMENT:

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

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



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

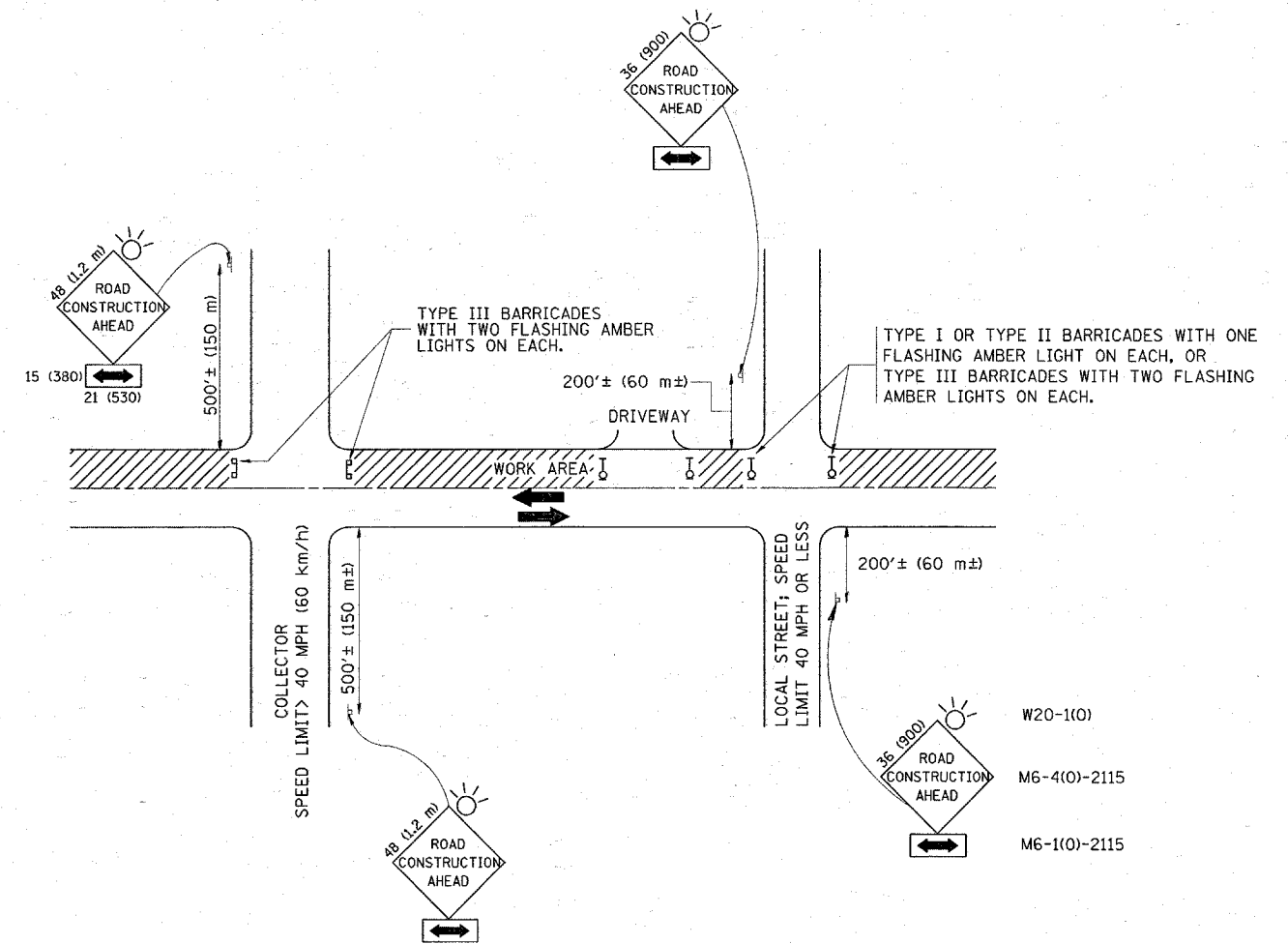
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	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 3/27/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND
HMA TAPER DETAILS**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 60E08 TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	16-2-1-K-RS	COOK	31	21
BD400-05 BD32			CONTRACT NO. 60E26	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

NOTES:

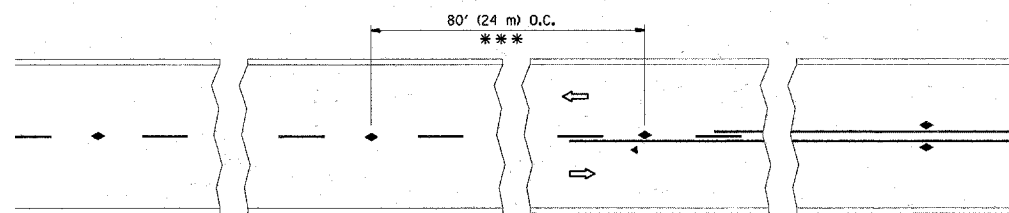
- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN 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 (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

 - C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
 - D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

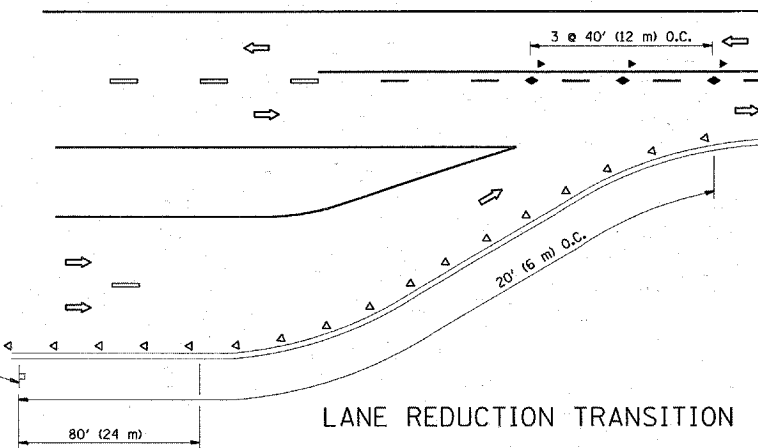
All dimensions are in millimeters (inches) unless otherwise shown.

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		DRAWN -	REVISED - A. HOUSEH 03-06-96		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	345	16-2-1-K-RS	COOK	31	22
		CHECKED -	REVISED - A. HOUSEH 10-15-96					TC-10		CONTRACT NO. 60E26		
		DATE - 06-89	REVISED - T. RAMMACHER 01-06-00					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

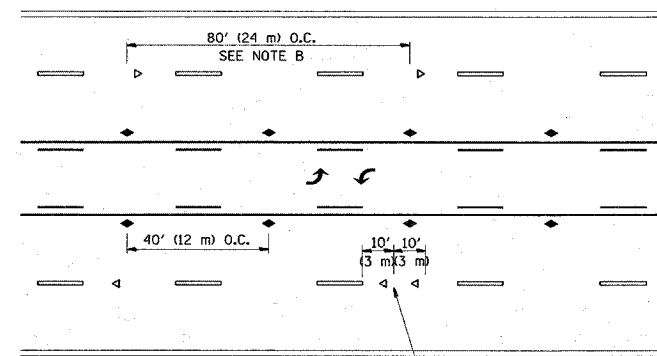


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

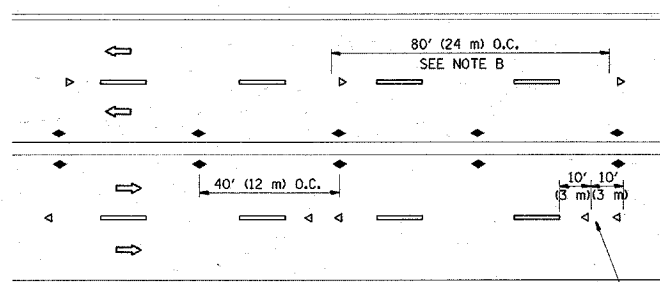
TWO-LANE/TWO-WAY



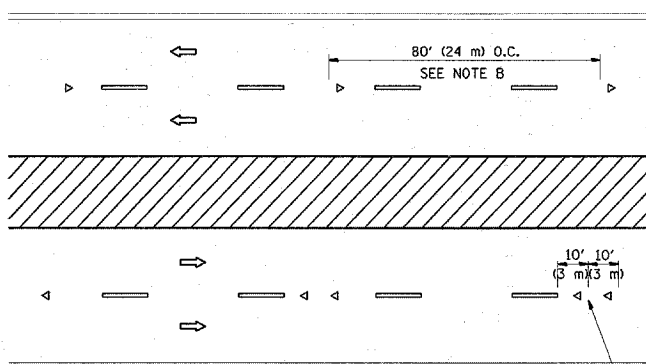
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

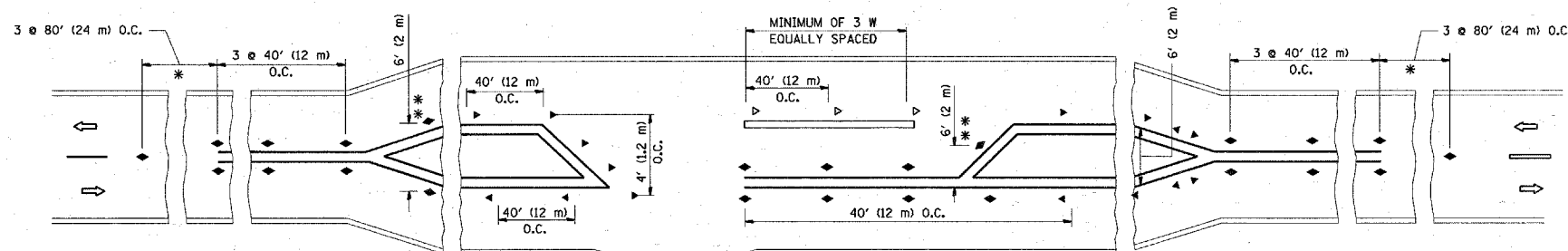
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. 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.



LEFT TURN

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

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

FILE NAME =
 c:\projects\dl34708\dl34708.dgn

USER NAME = obreaux
 PLOT SCALE = 50,0000 / IN.
 PLOT DATE = 3/27/2008

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

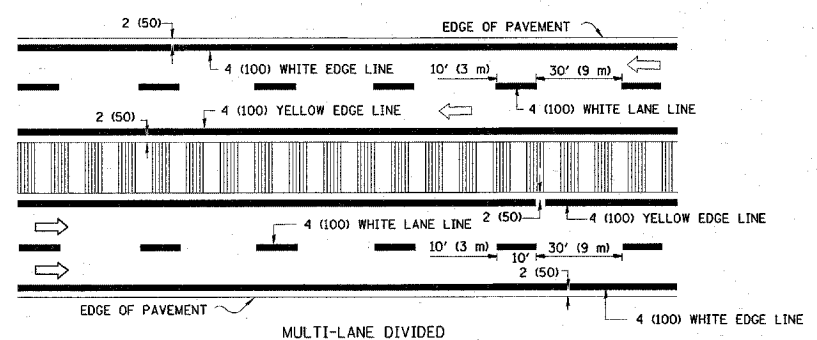
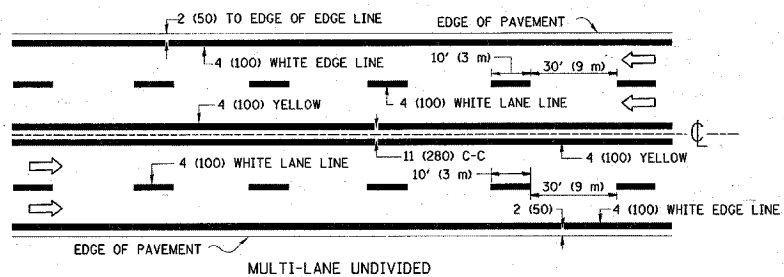
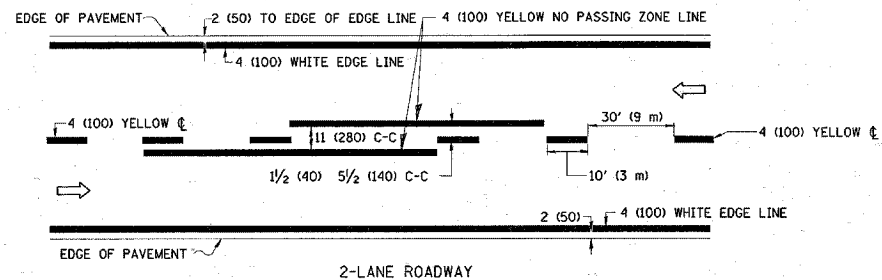
REVISED - T. RAMMACHER 09-19-94
 REVISED - T. RAMMACHER 03-12-99
 REVISED - T. RAMMACHER 01-06-00
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

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

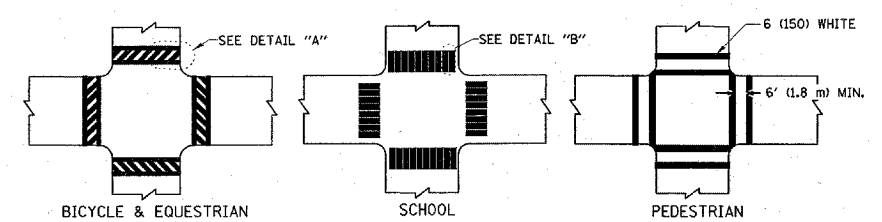
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	16-2-1-K-RS	COOK	31	25
TC-11			CONTRACT NO. 60E26	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

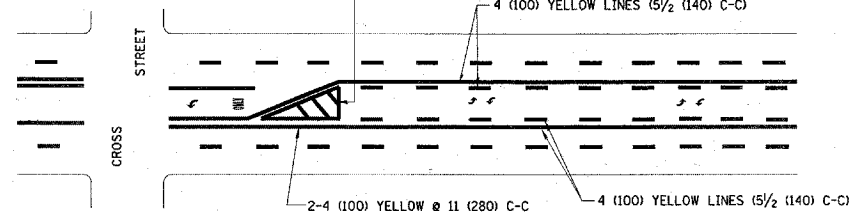
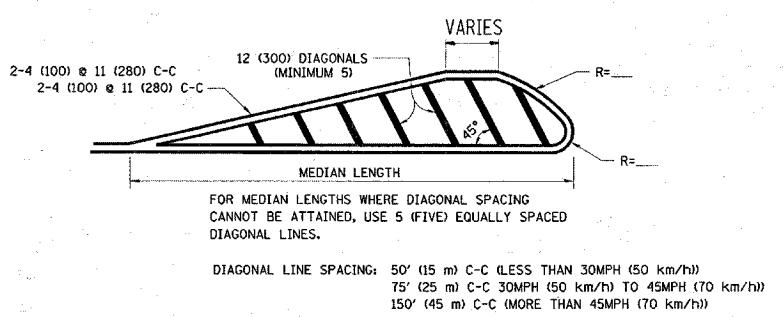
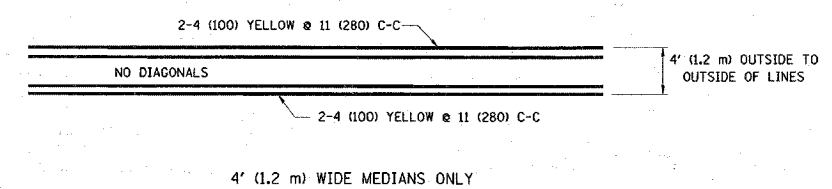


NOTE: MEDIANS WITH BARRIER CURBS DO NOT REQUIRE AN EDGE LINE

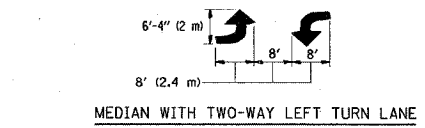
TYPICAL LANE AND EDGE LINE MARKING



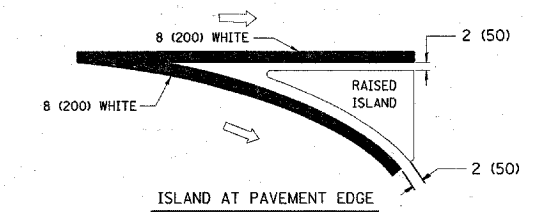
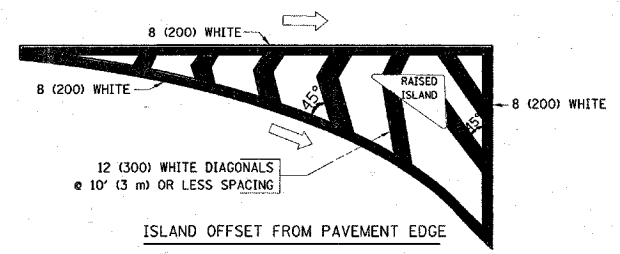
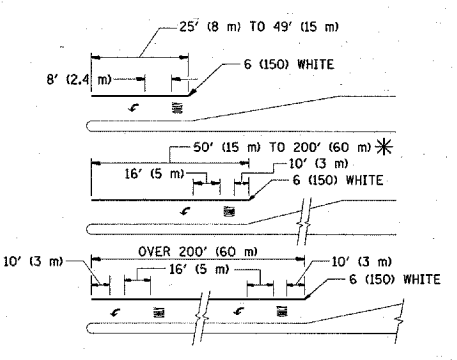
TYPICAL CROSSWALK MARKING



TYPICAL PAINTED MEDIAN MARKING



TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	4 (100)	SOLID	YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES: FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	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; 5/2 (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)	2 @ 6 (150)	SOLID	WHITE	NOT LESS THAN 6' (1.8 m) APART
A. DIAGONALS (BIKE & EQUESTRIAN)	12 (300) @ 45°	SOLID	WHITE	2' (600) APART
B. LONGITUDINAL BARS (SCHOOL)	12 (300) @ 90°	SOLID	WHITE	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°	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS				
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15 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"=94.0 SQ. FT. (8.7 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 (OVER 45MPH (70 km/h))

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

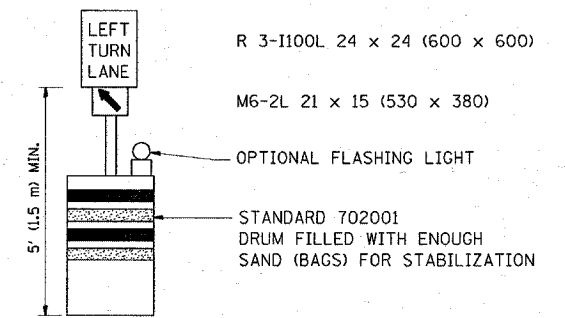
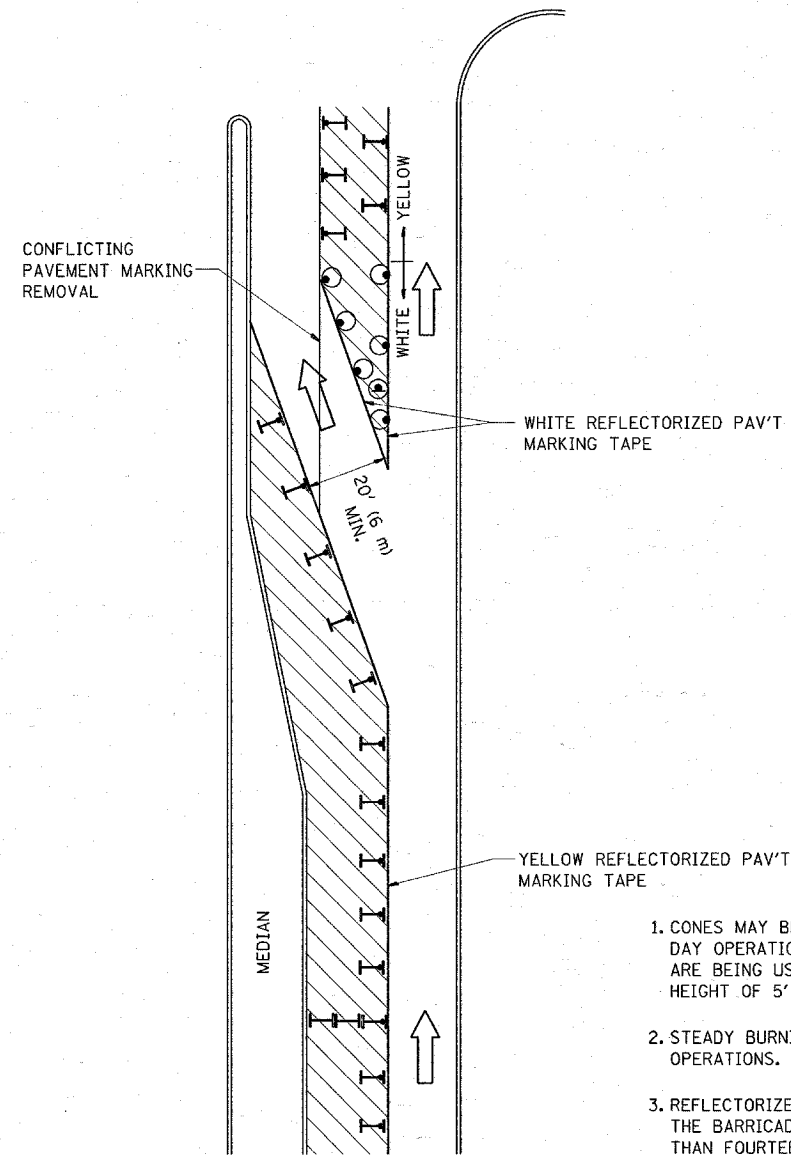
All dimensions are in inches (millimeters) unless otherwise shown.

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
TYPICAL PAVEMENT MARKINGS**

FILE NAME =	USER NAME = abreusch	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
os:\projects\dl134708\dl134708.dgn		DRAWN -	REVISED - A. HOUSEH 10-09-96
	PLDT SCALE = 58.0000" / IN.	CHECKED -	REVISED - A. HOUSEH 10-17-96
	PLDT DATE = 3/27/2008	DATE - 03-19-90	REVISED - T. RAMMACHER 01-06-00

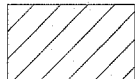





SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	F.A.P. RTE. 345	SECTION 16-2-1-K-RS	COUNTY COOK	TOTAL SHEETS 31	SHEET NO. 24
			TC-13		CONTRACT NO. 60E26		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							



GENERAL NOTES

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

LEGEND

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

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

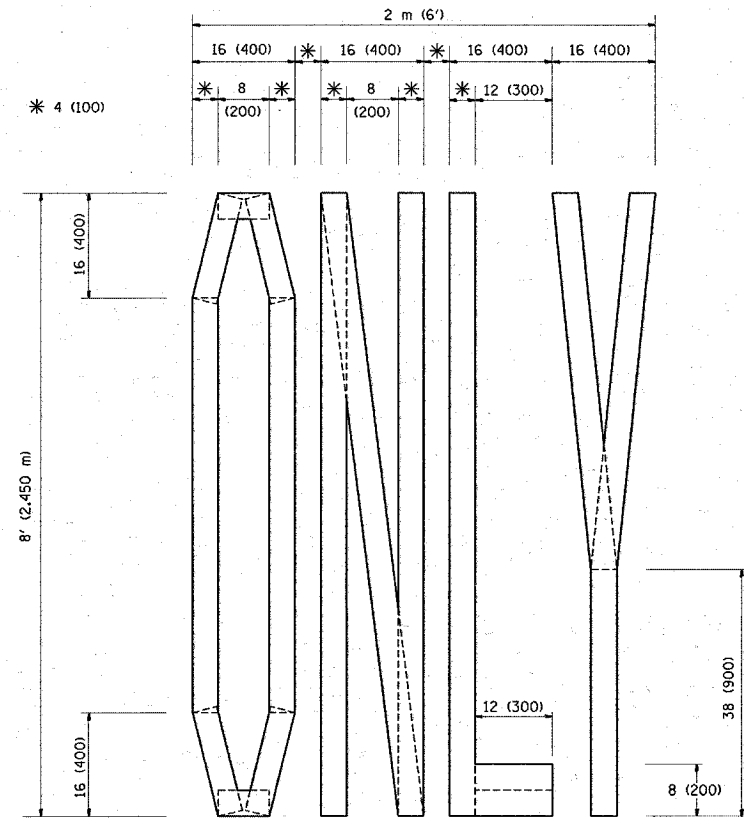
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PROJECT NO. =		DRAWN -	REVISED - A. HOUSEH 11-07-95
PLLOT SCALE = 50,0000' / IN.		CHECKED -	REVISED - A. HOUSEH 10-12-96
PLLOT DATE = 3/27/2008		DATE -	REVISED - T. RAMMACHER 01-06-00

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

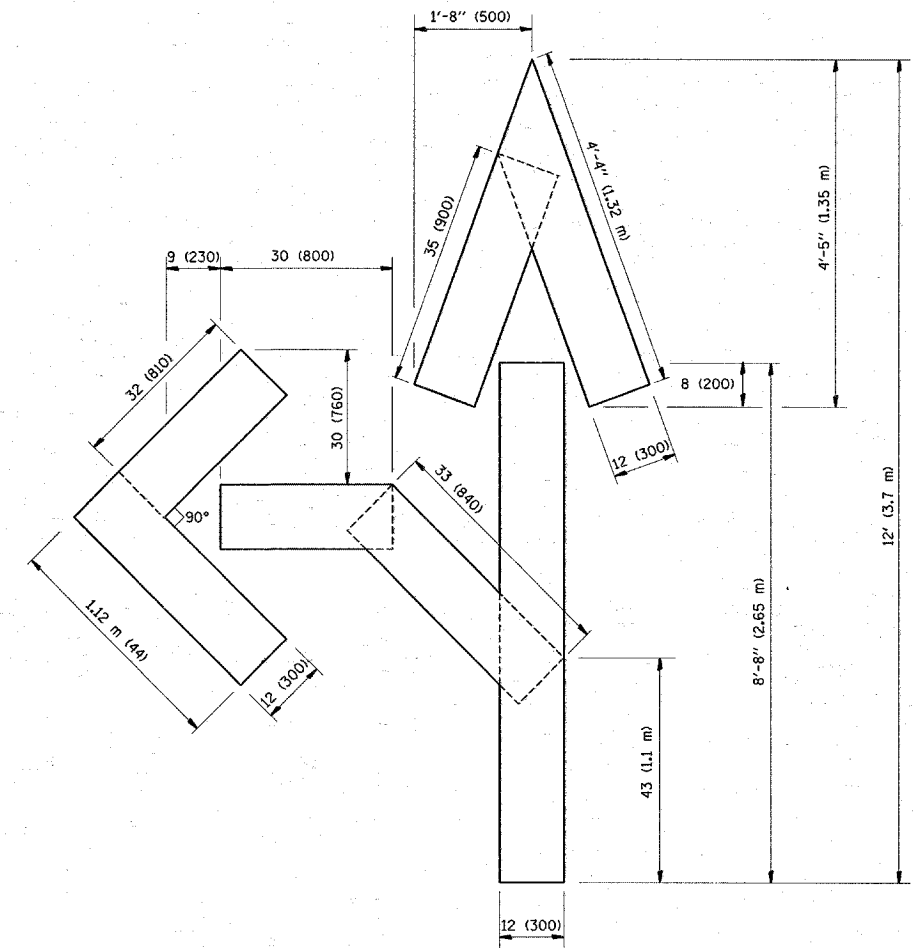
**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
(TO REMAIN OPEN TO TRAFFIC)**

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

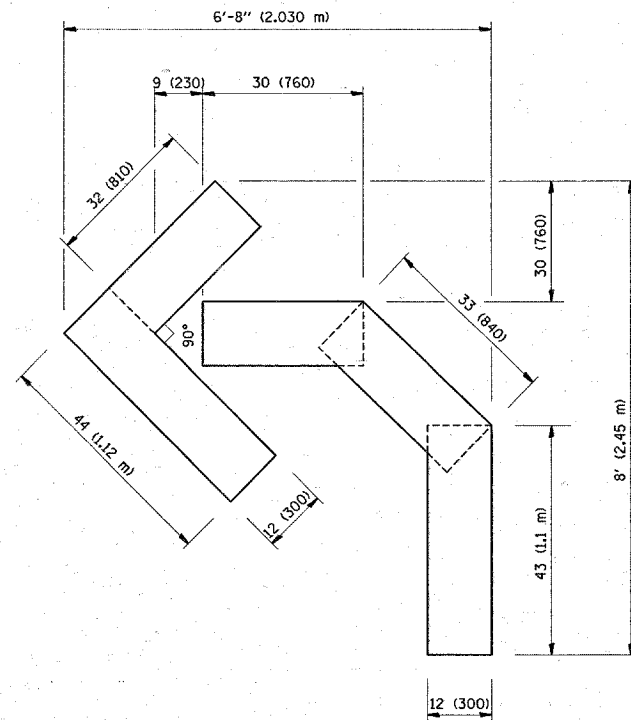
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	16-2-1-K-RS	COOK	31	25
TC-14		CONTRACT NO. 60E26		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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



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



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

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

FILE NAME =	USER NAME = obreuah	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
c:\projects\dl34708\dl34708a.dgn		DRAWN -	REVISED -T. RAMMACHER 11-04-97
		PLOT SCALE = 50.0000' / IN.	REVISED -T. RAMMACHER 03-02-98
		PLOT DATE = 3/27/2008	DATE - 09-18-94
			REVISED -E. GOMEZ 08-28-00

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

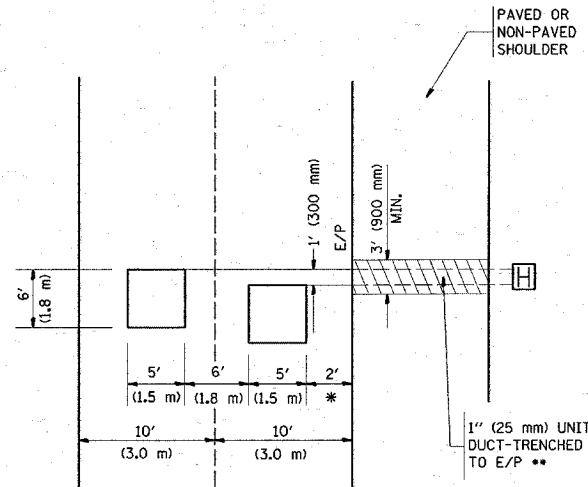
PAVEMENT MARKING LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	16-2-1-K-RS	COOK	21	26
TC-16		CONTRACT NO. 60E26		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LOOPS NEXT TO SHOULDERS

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



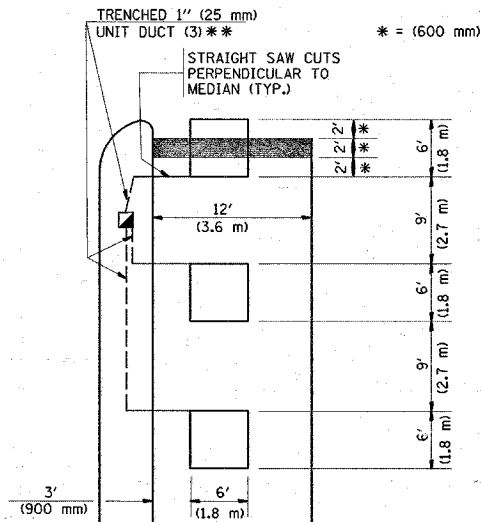
* = (600 mm)

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

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

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

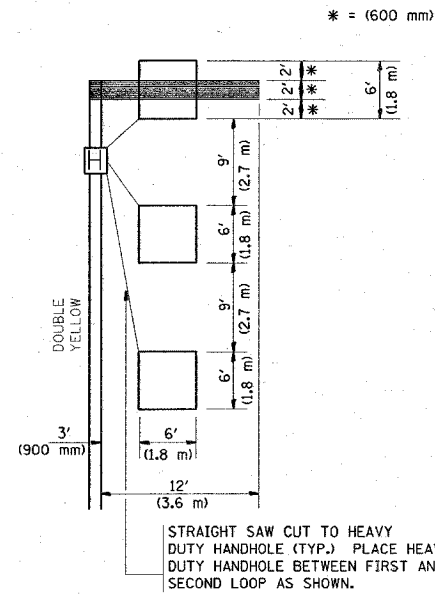


** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

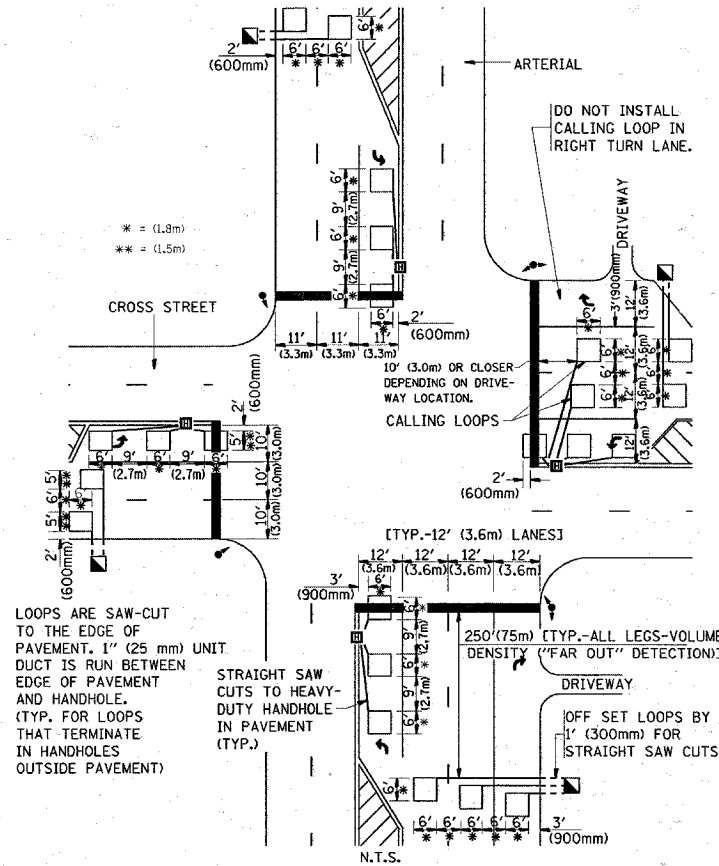
**LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH**

(PROTECTED / PERMITTED LEFT TURN PHASING)



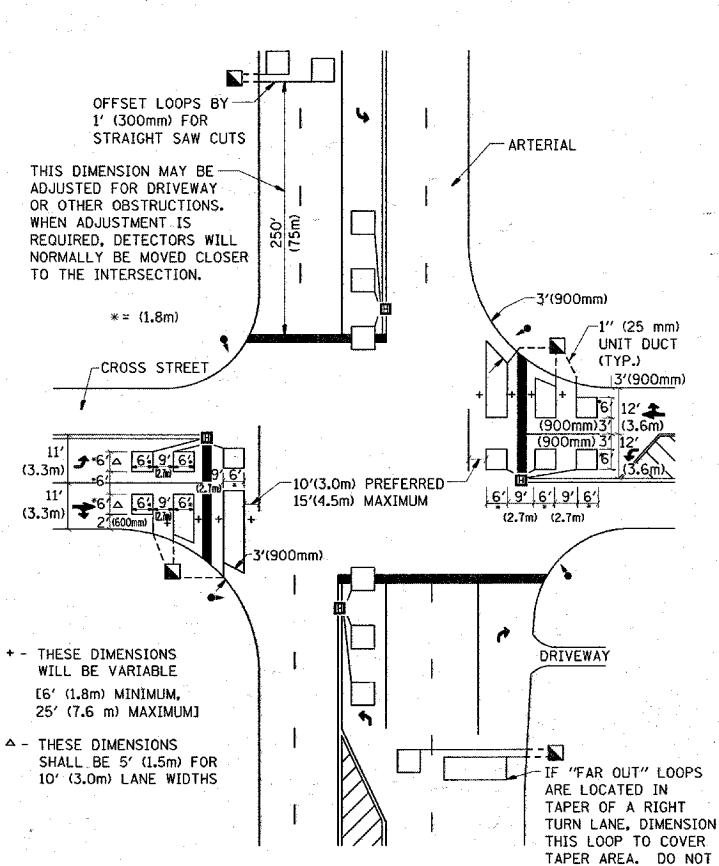
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



DETAIL 1
N.T.S.

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



DETAIL 2
N.T.S.

NOTES:

VEHICLES LOOP DETECTORS

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

PLACEMENT OF DETECTORS

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

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

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

NOTE:

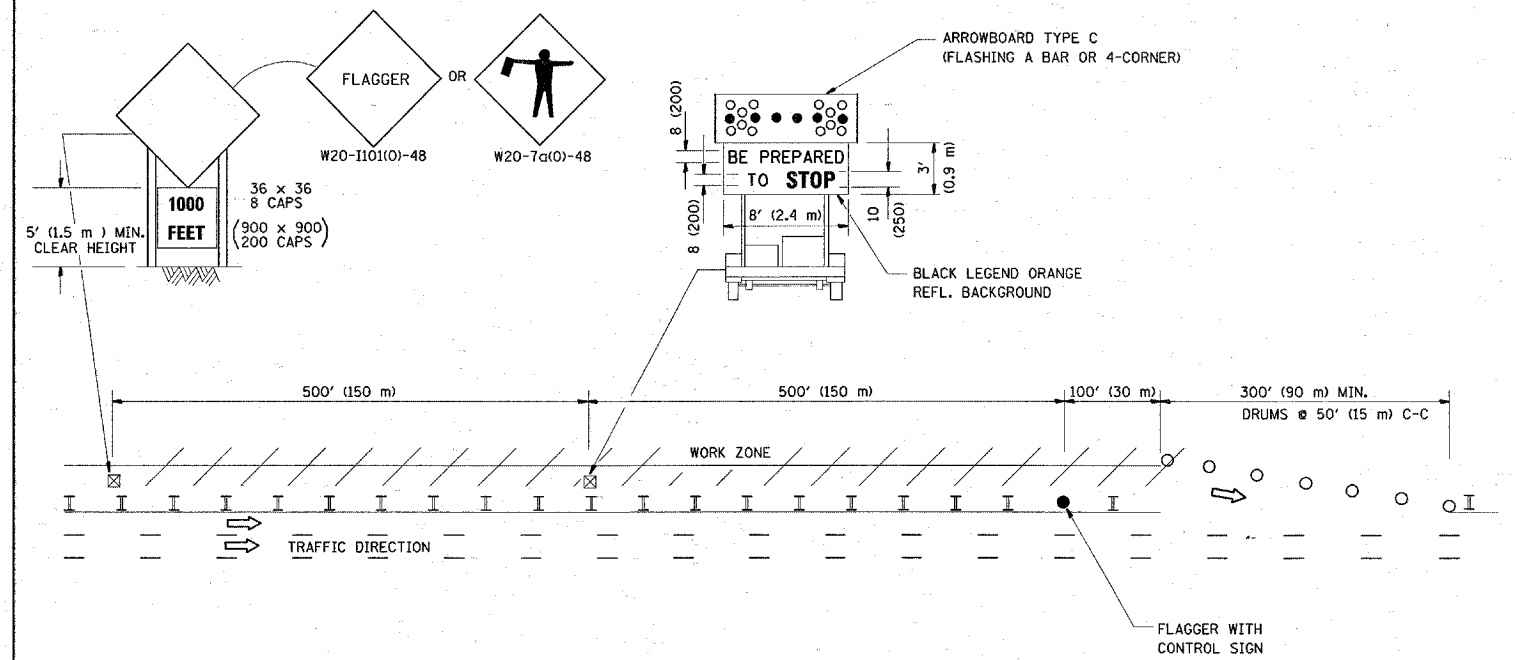
ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

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

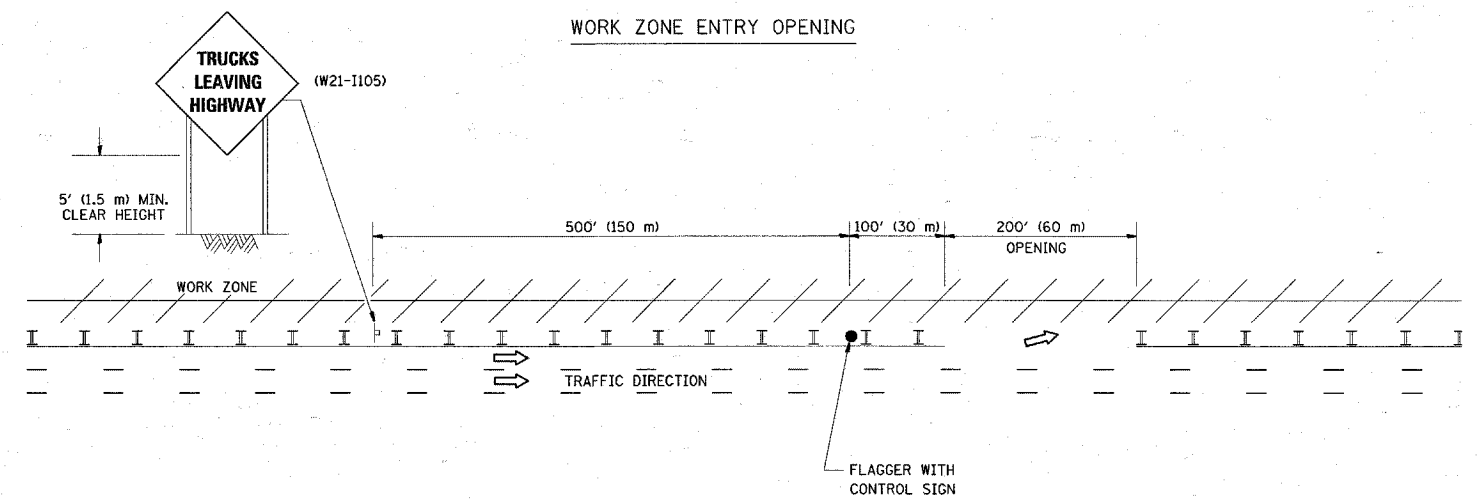
FILE NAME = c:\projects\dl34788\dl34788a.dgn	USER NAME = abreuah	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING		F.A.P. RTE. 345	SECTION 16-2-1-K-RS	COUNTY COOK	TOTAL SHEETS 31	SHEET NO. 27
PLOT SCALE = 50.0000 / IN.	CHECKED - R.K.F.	DRAWN -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	TS-07		CONTRACT NO. 60E26	
PLOT DATE = 3/27/2008	DATE -	REVISIONS -	REVISIONS -				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING

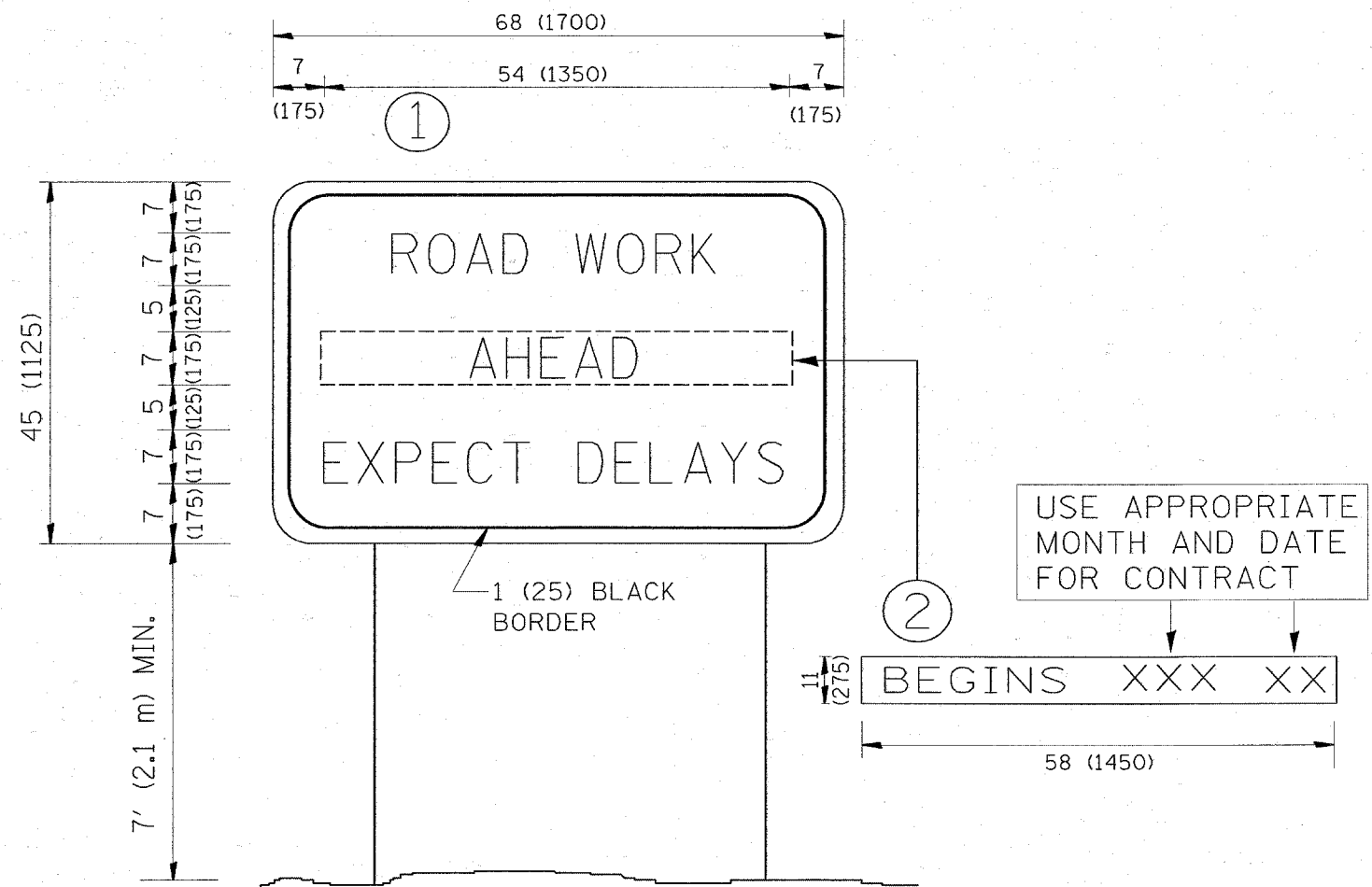


NOTES:

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

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = c:\projects\dl34788\dl34788aedgn	USER NAME = abr-euah	DESIGNED - DRAWN	REVISED - REVISED	D.W.S. 08-98 J.A.F. 04-03	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS		F.A.P. RTE. 345	SECTION 16-2-1-K-RS	COUNTY COOK	TOTAL SHEETS 31	SHEET NO. 28
PLOT SCALE = 50.0000 / / IN.	CHECKED -	REVISED -	J.A.F. 02-06	SCALE: NONE		SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	TC-18		CONTRACT NO. 60E26	
PLOT DATE = 3/27/2008	DATE -	REVISED -	S.P.B. 01-07	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT								



NOTES:

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

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

FILE NAME = c:\projects\134708\134708a.dgn	USER NAME = abreuh	DESIGNED - DRAWN -	REVISED - R. MIRS 09-15-97
PLOT SCALE = 50,0000' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99	
PLOT DATE = 3/27/2006	DATE -	REVISED - C. JUCIUS 01-31-07	

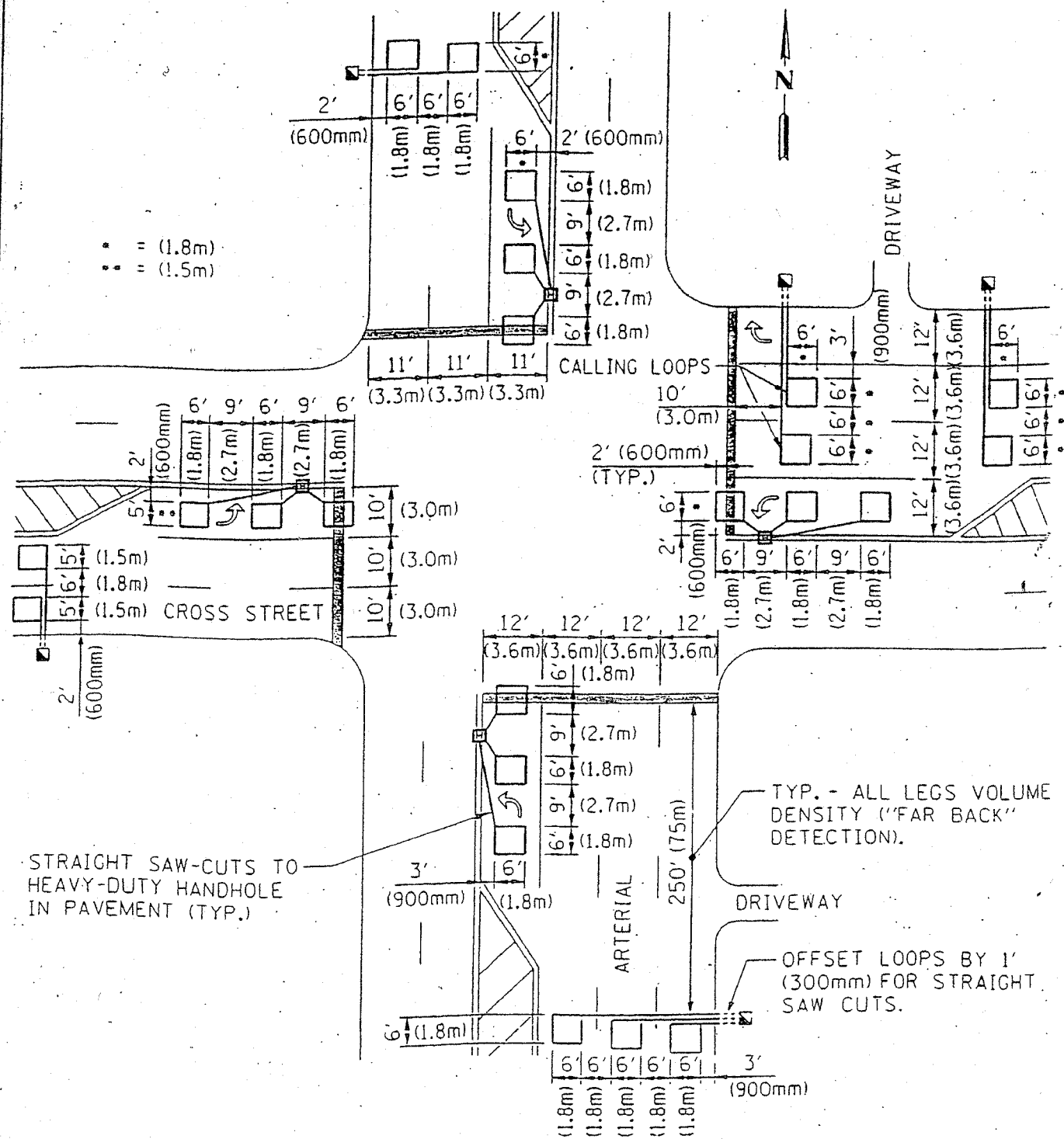
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

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

F.A.P. RTE. 345	SECTION 16-2-1-K-RS	COUNTY COOK	TOTAL SHEETS 31	SHEET NO. 29
TC-22		CONTRACT NO. 60E26		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

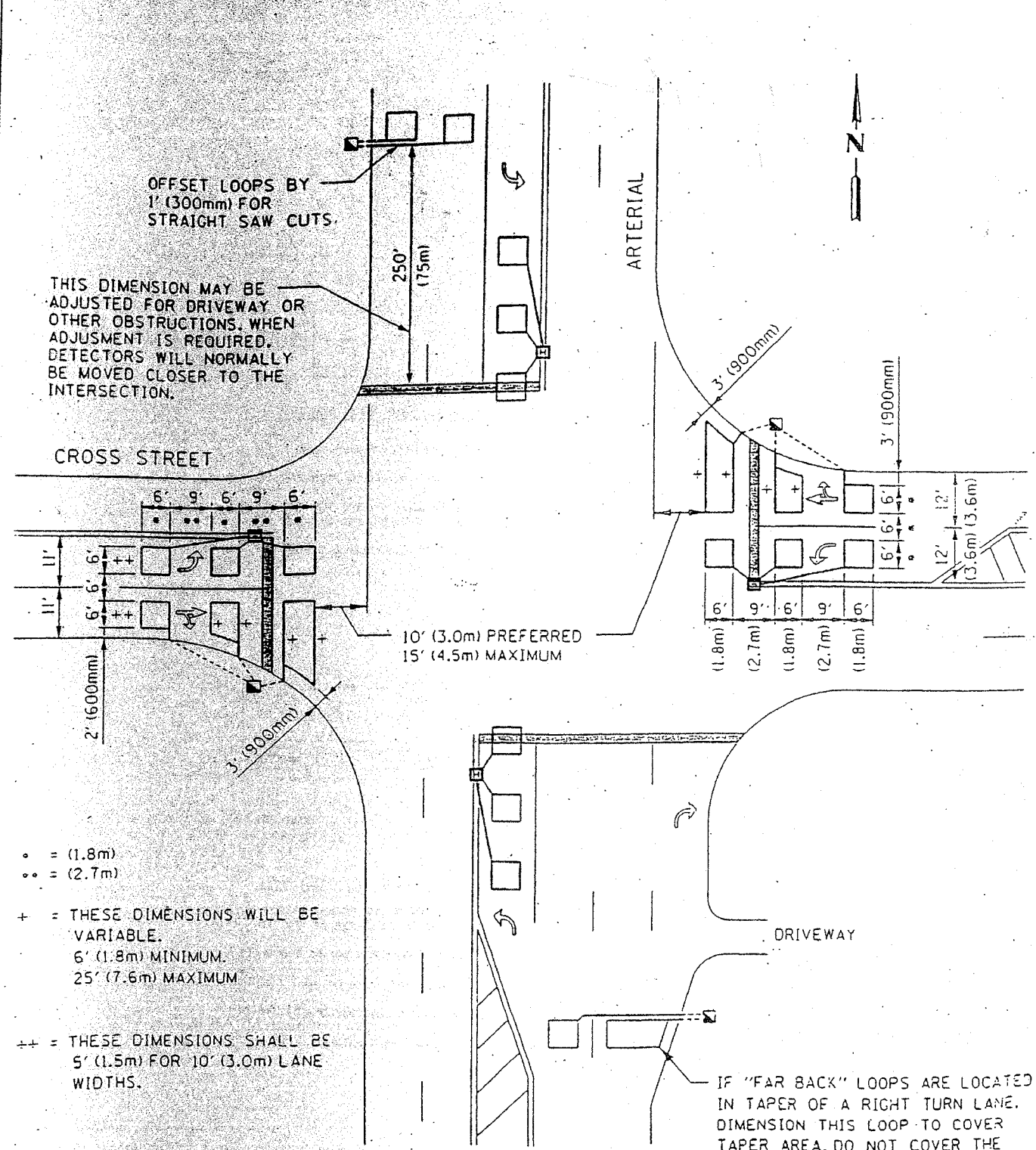
ARTERIAL-VOLUME DENSITY ("FAR BACK" DETECTION)
 CROSS STREET-VOLUME DENSITY ("FAR BACK" DETECTION)



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

N.T.S.

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



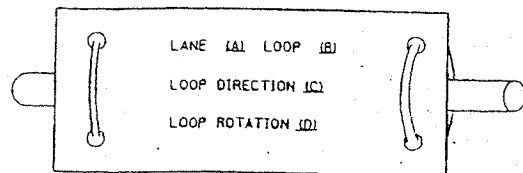
IF "FAR BACK" LOOPS ARE LOCATED IN TAPER OF A RIGHT TURN LANE, DIMENSION THIS LOOP TO COVER TAPER AREA. DO NOT COVER THE LEFT TURN LANE OR LEFT TURN LANE TAPER.

N.T.S.

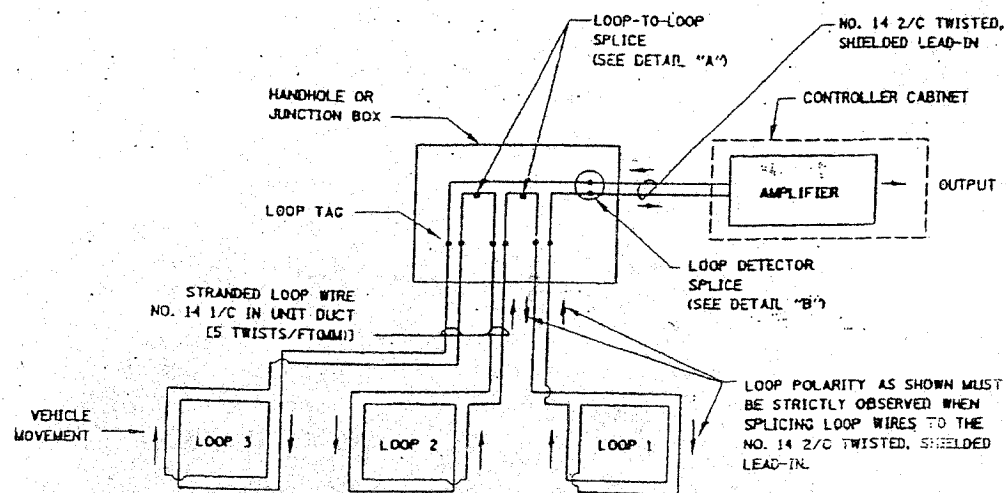
LOOP DETECTOR NOTES

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 DIVESHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

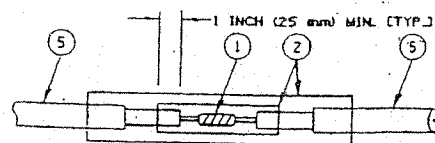


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

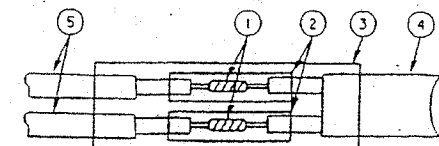


DETECTOR LOOP WIRING SCHEMATIC

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



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



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

LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- 2 WCSM# 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

REVISIONS	
NAME	DATE

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

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

DRAWN BY: RFP
 DESIGNED BY: DAD
 CHECKED BY: JAZ
 SHEET OF

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS
STA.	TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	