

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

F.A.U. 2697 (FLAVIN ROAD)
SECTION 3117 RS-3
107TH STREET TO 95TH STREET
RESURFACING (3P)

COOK COUNTY
C-91-540-09

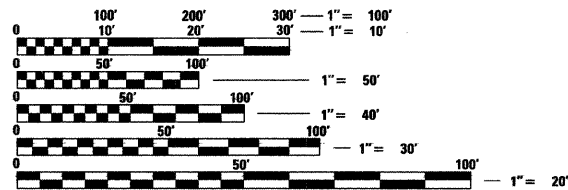
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	3117 RS-3	COOK	16	1
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT NO. 60G84		

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THESE IMPROVEMENTS ARE LOCATED
WITHIN THE CITY OF PALOS HILLS

TRAFFIC DATA

2002 ADT - 7,500
POSTED SPEED LIMIT - 50 MPH



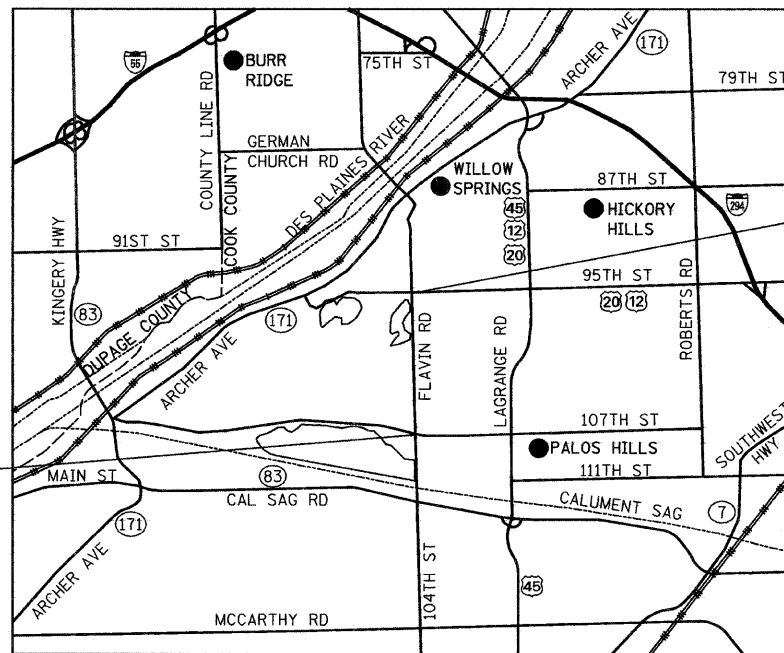
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

Ciorba Group, Inc.

DESIGN FIRM
REGISTRATION NUMBER
184-001016

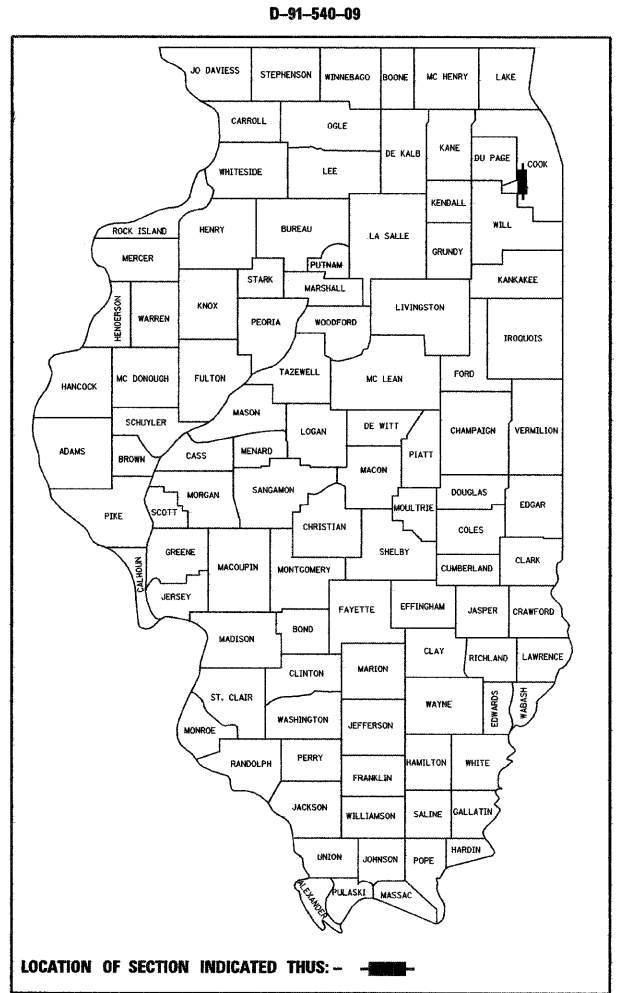
CONSULTING ENGINEERS
SUITE 402, 5507 NORTH CUMBERLAND AVE
CHICAGO, ILLINOIS 60656 ☎ (773) 775-4009



R 11E | R 12E

PALOS TOWNSHIP
LOCATION MAP
1" = 5,000'

GROSS AND NET LENGTH OF PROJECT = 8,045 FT = 1.52 MI.



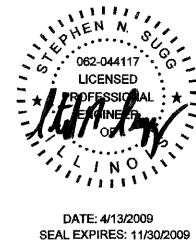
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED APRIL 14, 2009

Diana M. O'Meara DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 1, 2009
Charles J. Ingersoll ENGINEER OF DESIGN AND ENVIRONMENT

May 1, 2009
Christine M. Reed DIRECTOR OF HIGHWAYS, CHIEF ENGINEER



PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

DISTRICT 1 DESIGN PLAN PREPARATION ENGINEER: K. ENG (847)705-4247

CONTRACT NO. 60G84

DATE: 4/13/2009
SEAL EXPIRES: 11/30/2009

INDEX OF SHEETS

SHEET NO DESCRIPTION

- 1 COVER SHEET
- 2 INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4 TYPICAL SECTIONS
- 5-7 PROPOSED ROADWAY AND PAVEMENT MARKING PLAN
- 8 DETECTOR LOOP REPLACEMENT PLAN
- 9 PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)
- 10 BUTT JOINT AND HMA TAPER DETAILS (BD-32)
- 11 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
- 12 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT) (TC-11)
- 13 DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
- 14 PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16)
- 15 ARTERIAL ROAD INFORMATION SIGN (TC-22)
- 16 DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)

STATE STANDARDS

- 000001-05 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
- 442201-03 CLASS C AND D PATCHES
- 701201-03 LANE CLOSURE FOR 2L, 2W, DAY ONLY FOR SPEEDS ≥ 45 MPH
- 701301-03 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701306-02 LANE CLOSURE FOR 2L, 2W, SLOW MOVING OPERATIONS, DAY ONLY, SPEEDS ≥ 45 MPH
- 701311-03 LANE CLOSURE, 2L, 2W, MOVING DAY OPERATIONS-DAY ONLY
- 701701-06 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701901-01 TRAFFIC CONTROL DEVICES
- 780001-02 TYPICAL PAVEMENT MARKINGS
- 886001-01 DETECTOR LOOP INSTALLATIONS
- 886006-01 TYPICAL LAYOUTS FOR DETECTION LOOPS

GENERAL NOTES

1. 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)
2. 10 FEET (3 METER) TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURB AND GUTTER AND MEDIANS IN THE FIELD UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
4. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
5. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
6. THE FOLLOWING RATES OF APPLICATION HAVE BEEN ASSUMED IN CALCULATING PLAN QUANTITIES:

BITUMINOUS MATERIALS (PRIME COAT)	0.0004 TONS/SQ YD
HOT-MIX ASPHALT SURFACE COURSE	112 LBS/SQ YD/INCH
POLYMERIZED LEVELING BINDER (MACHINE METHOD)	105 LBS/SQ YD/INCH
7. THE ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISORS AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE START OF WORK.
8. TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS THE ENGINEER SHALL CONTACT MS. PATRICE HARRIS, AREA TRAFFIC FIELD TECHNICIAN, AT (847) 705-4420.
9. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2" (40 MM) WHERE THE SPEED LIMIT IS 45 MPH (80 KM/H) OR LESS AND 1" (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" (75 MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 3:1 (H:V).
10. BUTT JOINTS WILL BE INSTALLED AT THE END 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.
11. FOR PAVEMENT MARKING, REFER TO DISTRICT ONE TYPICAL MARKINGS FOR DETAILS SHOWN.
12. MATCH EXISTING PAVEMENT MARKINGS AT PROJECT LIMITS AND OMISSIONS.
13. NO OVERNIGHT LANE CLOSURES SHALL BE ALLOWED
14. ALL PATCHES OPENED ON A PARTICULAR DAY MUST BE FILLED THAT DAY TO THE TOP OF THE EXISTING PAVEMENT SURFACE.

15. IDOT TRAFFIC SIGNAL AND SYSTEM DETECTION LOOPS ARE PRESENT AT 107TH STREET. THE CONTRACTOR MUST NOTIFY THE IDOT AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER AT (847) 705-4139 AND THE DEPARTMENT'S ELECTRICAL MAINTENANCE CONTRACTOR PRIOR TO BEGINNING WORK, AT WHICH TIME ARRANGEMENTS WILL BE MADE TO ADJUST THE TRAFFIC CONTROLLER TIMING TO COMPENSATE FOR THE ABSENCE OF DETECTION. REPLACEMENT OF LOOPS DOES NOT REQUIRE MAINTENANCE TRANSFER, BUT DOES REQUIRE NOTIFICATION OF WORK AND INSPECTION. COORDINATION WITH THE DISTRICT IS CONSIDERED INCIDENTAL TO THIS CONTRACT.
16. PLEASE CONTACT STEVE LIPKIC AT (847) 705-4173 IN THE ROADSIDE DEVELOPMENT UNIT 48 HOURS PRIOR TO PRUNING AND SELECTIVE CLEARING WORK.

FILE NAME = N:\PROJ\3386\3386_16\Design\Proposed\Plan\3386_16_02-General Notes.dgn

CG **Ciorba Group, Inc.**
 CONSULTING ENGINEERS
 5507 North Cumberland Avenue, Suite 402
 Chicago, Illinois 60656
 Tel. 773.775.4009 Fax 773.775.4014

USER NAME = alou	DESIGNED - RJR	REVISED -
	DRAWN - RJR	REVISED -
PLOT SCALE = 1:8000' / IN.	CHECKED - WBL	REVISED -
PLOT DATE = 4/16/2009	DATE - 4/22/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FLAVIN ROAD
107TH STREET TO 95TH STREET
INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES

SCALE: SHEET NO. 2 OF 16 SHEETS STA. TO STA.

F.A.U. RTE. 2697	SECTION 3117 RS-3	COUNTY COOK	TOTAL SHEETS 16	SHEET NO. 2
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60G84	

SUMMARY OF QUANTITIES				URBAN 100% STATE	CONSTRUCTION TYPE CODE
CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	ROADWAY 1000	
20201006	GRADING AND SHAPING SHOULDERS	UNIT	160	160	
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	20	20	
40600300	AGGREGATE (PRIME COAT)	TON	96	96	
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	4	4	
40600535	LEVELING BINDER (HAND METHOD), N70	TON	2	2	
40600895	CONSTRUCTING TEST STRIP	EACH	2	2	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	265	265	
40600990	TEMPORARY RAMP	SQ YD	380	380	
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	90	90	
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	2,100	2,100	
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	23,600	23,600	
44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"	SQ YD	550	550	
44201749	CLASS D PATCHES, TYPE I, 9 INCH	SQ YD	10	10	
44201753	CLASS D PATCHES, TYPE II, 9 INCH	SQ YD	90	90	
44201757	CLASS D PATCHES, TYPE III, 9 INCH	SQ YD	100	100	
44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQ YD	100	100	
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	680	680	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2	2	
67100100	MOBILIZATION	L SUM	1	1	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1	

* DENOTES SPECIALTY ITEM

SUMMARY OF QUANTITIES				URBAN 100% STATE	CONSTRUCTION TYPE CODE
CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	ROADWAY 1000	
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1	
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1	
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	4,850	4,850	
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	330	330	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	31,100	31,100	
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	1,500	1,500	
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	1,300	1,300	
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	400	400	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	4,500	4,500	
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	110	110	
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	26,100	26,100	
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	500	500	
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	420	420	
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	130	130	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	220	220	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	200	200	
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	110	110	
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	52	52	
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1,300	1,300	
* X0326478	TREE PRUNING, SPECIAL	UNIT	100	100	

FILE NAME = m:\pco\3388\3388-16\design\proposedplan\3388-16-03-Quantities.dgn



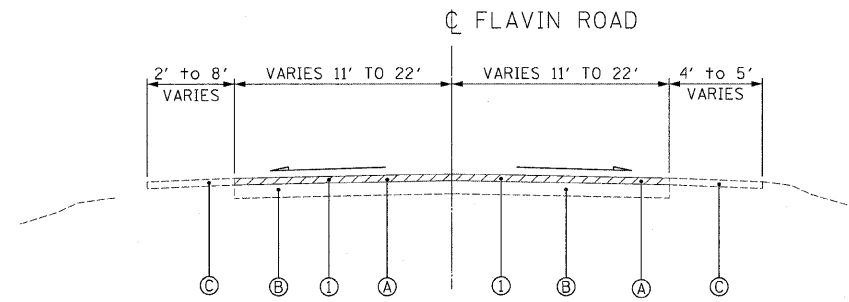
Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014

USER NAME = alou	DESIGNED - RJR	REVISED -
	DRAWN - RJR	REVISED -
PLOT SCALE = 1:2000' / IN.	CHECKED - WBL	REVISED -
PLOT DATE = 4/16/2009	DATE - 4/22/2009	REVISED -

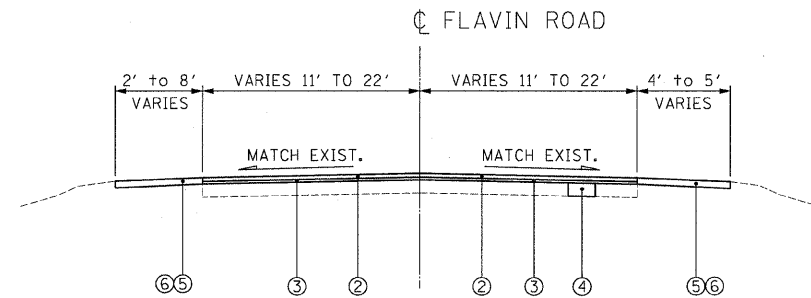
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

FLAVIN ROAD 107TH STREET TO 95TH STREET SUMMARY OF QUANTITIES	
SCALE:	SHEET NO. 3 OF 16 SHEETS STA. TO STA.

F.A.I.L. RTE. 2697	SECTION 3117 RS-3	COUNTY COOK	TOTAL SHEETS 16	SHEET NO. 3
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60G84	



EXISTING TYPICAL SECTION
STA. 102+56 TO STA. 183+01



PROPOSED TYPICAL SECTION
STA. 102+56 TO STA. 183+01

EXISTING CONDITIONS:

- Ⓐ HOT-MIX ASPHALT SURFACE AND BINDER COURSE, 3" AND VARIES
- Ⓑ PORTLAND CEMENT CONCRETE BASE COURSE, 9"
- Ⓒ AGGREGATE SHOULDER

PROPOSED IMPROVEMENTS:

- ① HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- ② HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- ③ POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ④ CLASS D PATCHES, 9" (DETERMINED BY ENGINEER IN FIELD)
- ⑤ AGGREGATE WEDGE SHOULDER, TYPE B
- ⑥ GRADING AND SHAPING SHOULDERS

A QUANTITY FOR LEVELING BINDER (HAND METHOD) HAS BEEN PROVIDED FOR USE AT ENTRANCES AFTER GRINDING OF EXISTING PAVEMENT.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS CHART

OPERATIONS	MIXTURE TYPE	AC TYPE	PERCENT AIR VOIDS
ROADWAY RESURFACING	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5MM)	PG 64-22	4% @ 70 GYR
	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	SBS/SBR PG 76-28/-22	4% @ 50 GYR
MAINTENANCE OF TRAFFIC	LEVELING BINDER (HAND METHOD), N50 (IL-9.5MM)	PG 64-22 *	4% @ 70 GYR
PAVEMENT PATCHING	CLASS D PATCHES, 9" (HMA BINDER IL-19 MM)	PG 64-22 *	4% @ 50 GYR
	HMA REPLACEMENT OVER PATCHES (HMA BINDER, IL-19 MM)	PG 64-22 *	4% @ 70 GYR

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

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

FILE NAME = m:\proj\3386A\3386A\16\des\gn\proposals\plan\3386A_16_04-Typical Sections.dgn

Ciorba Group, Inc.
CONSULTING ENGINEERS
5607 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014

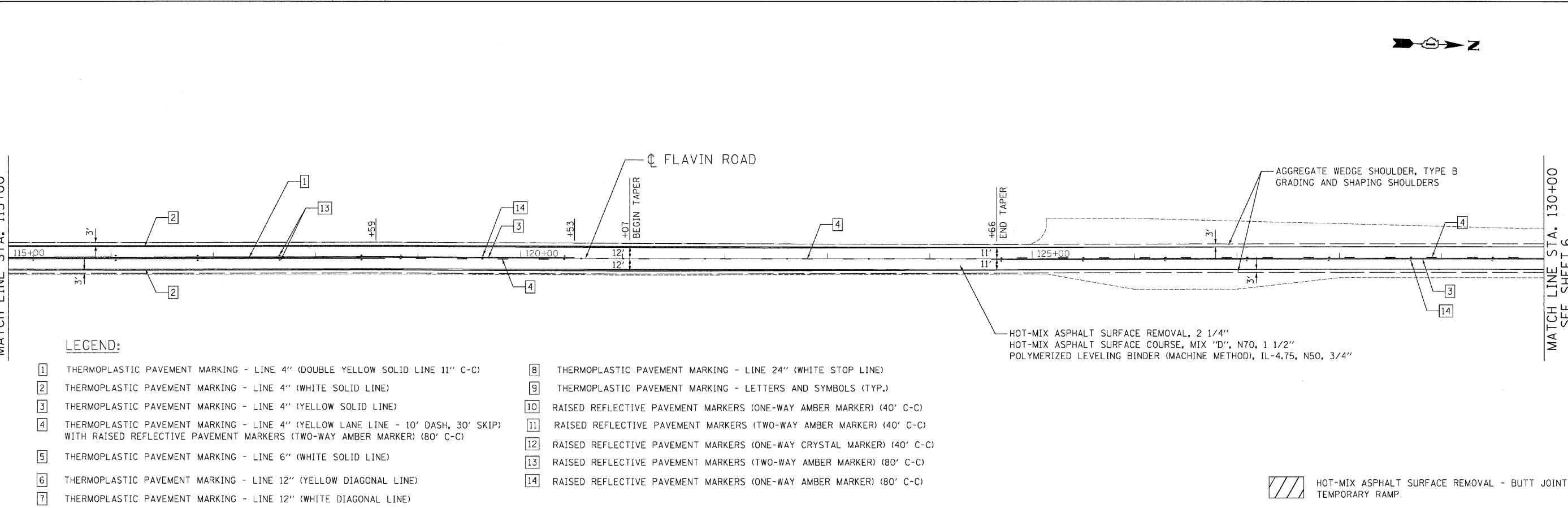
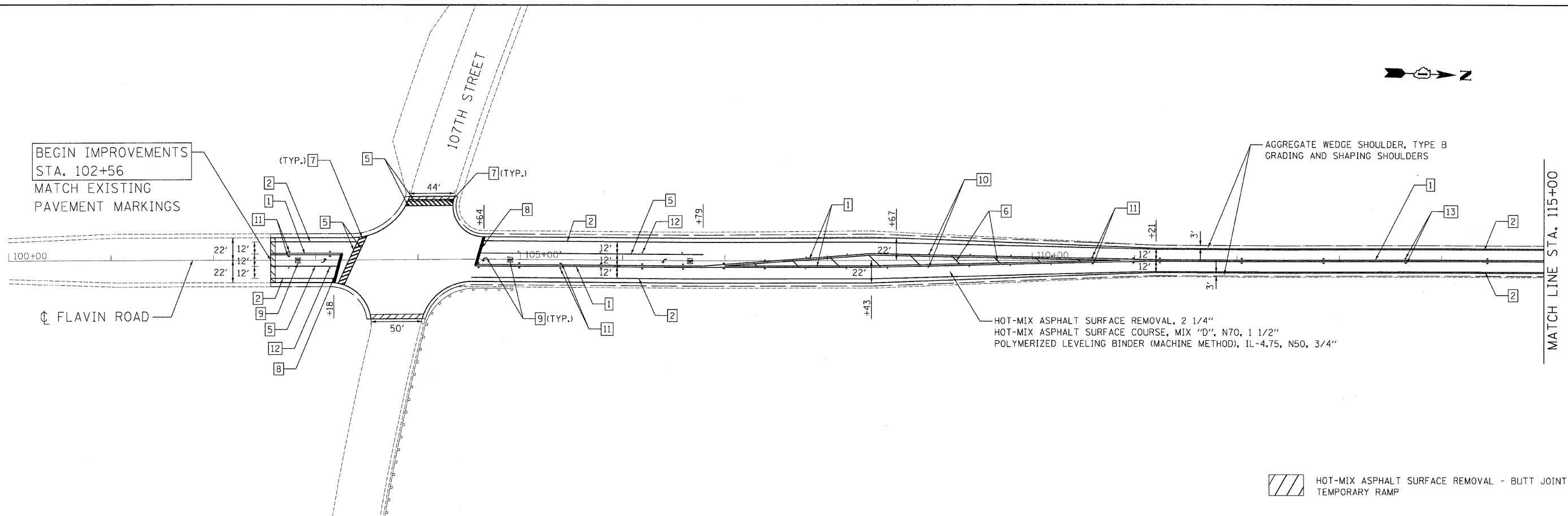
USER NAME = elou	DESIGNED - RJR	REVISED -
PLOT SCALE = 5.0000' / IN.	DRAWN - RJR	REVISED -
PLOT DATE = 4/16/2009	CHECKED - WBL	REVISED -
	DATE - 4/22/2009	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FLAVIN ROAD
107TH STREET TO 95TH STREET
TYPICAL SECTIONS**

SCALE: N.T.S. SHEET NO. 4 OF 16 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	3117 RS-3	COOK	16	4
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60G84	



LEGEND:

- | | |
|---|--|
| <ul style="list-style-type: none"> 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE 11" C-C) 2 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE SOLID LINE) 3 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE) 4 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW LANE LINE - 10' DASH, 30' SKIP) WITH RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER MARKER) (80' C-C) 5 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE) 6 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL LINE) 7 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE DIAGONAL LINE) | <ul style="list-style-type: none"> 8 THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP LINE) 9 THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.) 10 RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY AMBER MARKER) (40' C-C) 11 RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER MARKER) (40' C-C) 12 RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY CRYSTAL MARKER) (40' C-C) 13 RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER MARKER) (80' C-C) 14 RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY AMBER MARKER) (80' C-C) |
|---|--|

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
TEMPORARY RAMP

FILE NAME = nt:\pco\3368\3368_16\design\proposals\ben\3368_16-PropR.dgn

Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014

USER NAME = alou	DESIGNED - RJR	REVISED -
PLOT SCALE = 58.0000' / IN.	DRAWN - RJR	REVISED -
PLOT DATE = 4/16/2009	CHECKED - WBL	REVISED -
	DATE - 4/22/2009	REVISED -

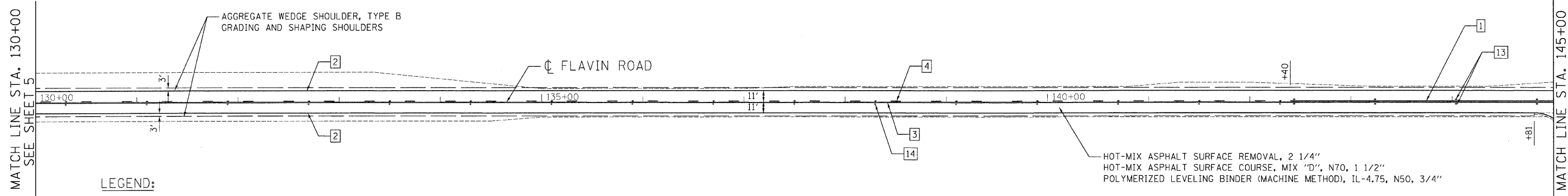
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FLAVIN ROAD
107TH STREET TO 95TH STREET
PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET NO. 5 OF 16 SHEETS STA. TO STA.

F.A.J. RTE. 2697	SECTION 3117 RS-3	COUNTY COOK	TOTAL SHEETS 16	SHEET NO. 5
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60G84	

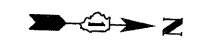
MATCH LINE STA. 130+00
SEE SHEET 5



LEGEND:

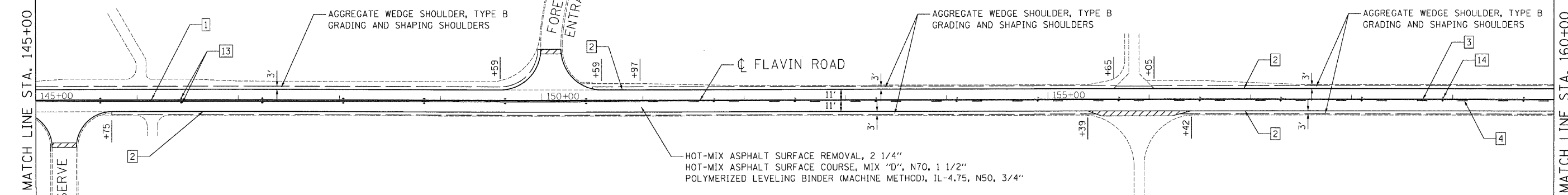
- | | | | |
|---|---|----|---|
| 1 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE 11" C-C) | 8 | THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP LINE) |
| 2 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE SOLID LINE) | 9 | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.) |
| 3 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE) | 10 | RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY AMBER MARKER) (40' C-C) |
| 4 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW LANE LINE - 10' DASH, 30' SKIP) WITH RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER MARKER) (80' C-C) | 11 | RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER MARKER) (40' C-C) |
| 5 | THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE) | 12 | RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY CRYSTAL MARKER) (40' C-C) |
| 6 | THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL LINE) | 13 | RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER MARKER) (80' C-C) |
| 7 | THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE DIAGONAL LINE) | 14 | RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY AMBER MARKER) (80' C-C) |

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
TEMPORARY RAMP



MATCH LINE STA. 145+00

MATCH LINE STA. 145+00



HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
TEMPORARY RAMP



MATCH LINE STA. 160+00
SEE SHEET 7

FILE NAME = n:\proj\33860\33860_16\design\proposals\plan\16-P-Prop02.dgn

Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4000 Fax 773.775.4014

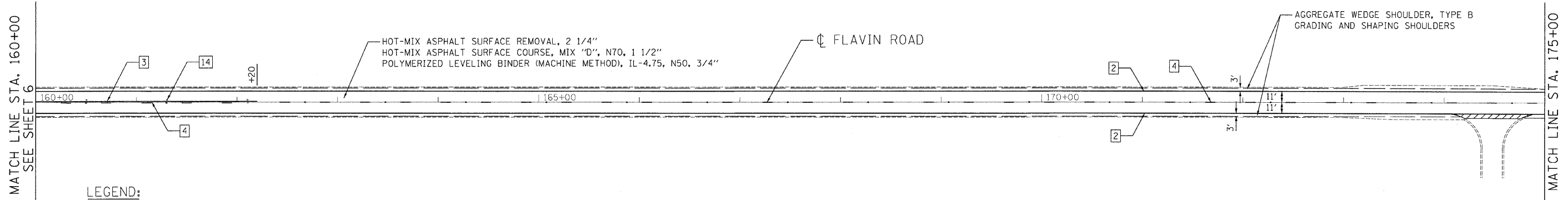
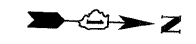
USER NAME = olau	DESIGNED - RJR	REVISED -
PLOT SCALE = 50.0000' / IN.	DRAWN - RJR	REVISED -
PLOT DATE = 4/16/2009	CHECKED - WBL	REVISED -
	DATE - 4/22/2009	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FLAVIN ROAD
107TH STREET TO 95TH STREET
PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET NO. 6 OF 16 SHEETS STA. TO STA.

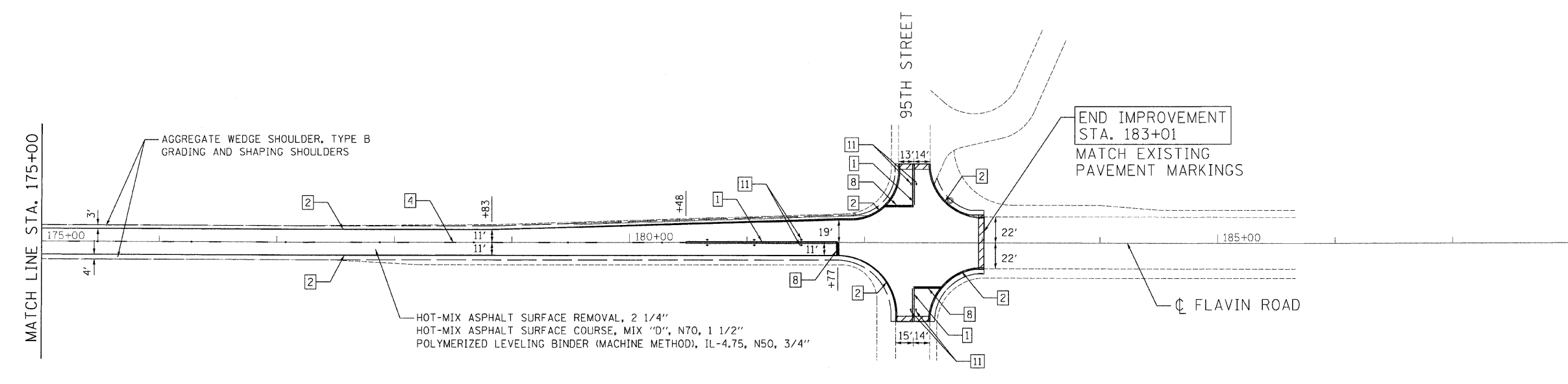
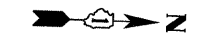
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	3117 RS-3	COOK	16	6
CONTRACT NO. 60G84			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	



LEGEND:

- | | |
|---|--|
| <ul style="list-style-type: none"> 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE 11" C-C) 2 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE SOLID LINE) 3 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE) 4 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW LANE LINE - 10' DASH, 30' SKIP) WITH RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER MARKER) (80' C-C) 5 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE) 6 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL LINE) 7 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE DIAGONAL LINE) | <ul style="list-style-type: none"> 8 THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP LINE) 9 THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.) 10 RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY AMBER MARKER) (40' C-C) 11 RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER MARKER) (40' C-C) 12 RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY CRYSTAL MARKER) (40' C-C) 13 RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER MARKER) (80' C-C) 14 RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY AMBER MARKER) (80' C-C) |
|---|--|

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT TEMPORARY RAMP



HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT TEMPORARY RAMP

FILE NAME = nt:\p\03368\3368_16\design\proposals\16-Prop#2.dgn

Ciorba Group, Inc.
 CONSULTING ENGINEERS
 5507 North Cumberland Avenue, Suite 402
 Chicago, Illinois 60656
 Tel. 773.775.4009 Fax 773.775.4014

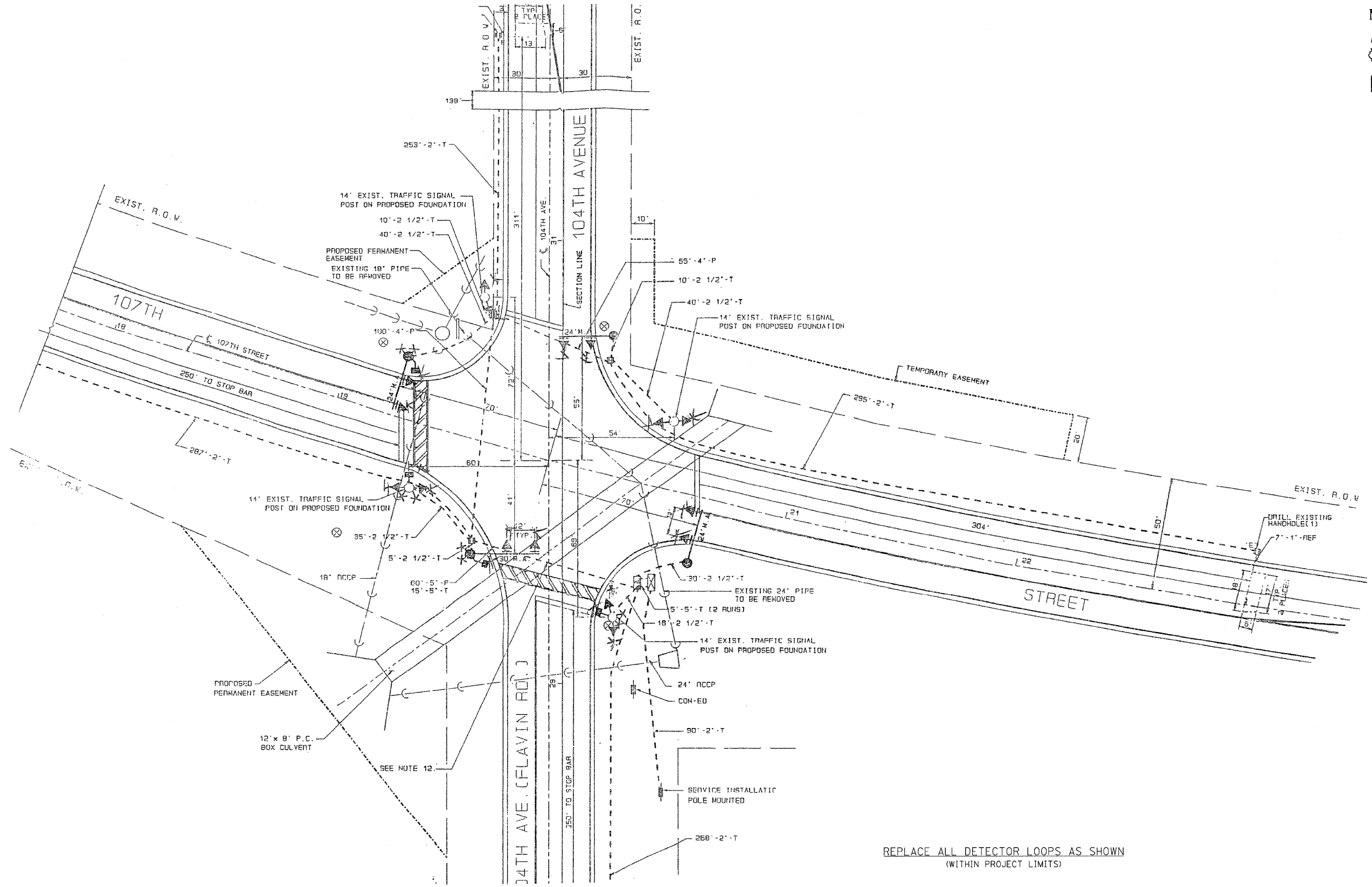
USER NAME = e1au	DESIGNED - RJR	REVISED -
PLOT SCALE = 50.0000' / IN.	DRAWN - RJR	REVISED -
PLOT DATE = 4/16/2009	CHECKED - WBL	REVISED -
	DATE - 4/22/2009	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FLAVIN ROAD
 107TH STREET TO 95TH STREET
 PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET NO. 7 OF 16 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	3117 RS-3	COOK	16	7
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60G84	



REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN PROJECT LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
86600600	110	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME = nt:\proj\33688\33688_16\design\signals\33688_16-Loop8.dgn

Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014

USER NAME = alou	DESIGNED - RJR	REVISED -
PLOT SCALE = 1/8" = 1' IN.	DRAWN - RJR	REVISED -
PLOT DATE = 4/16/2009	CHECKED - WBL	REVISED -
	DATE - 4/22/2009	REVISED -

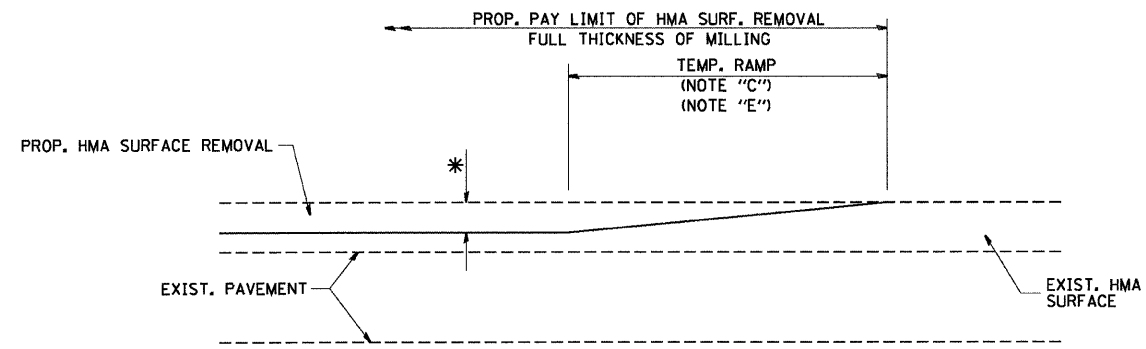
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FLAVIN ROAD
107TH STREET TO 95TH STREET
DETECTOR LOOP REPLACEMENT PLAN**

SCALE: N.T.S. SHEET NO. 8 OF 16 SHEETS STA. TO STA.

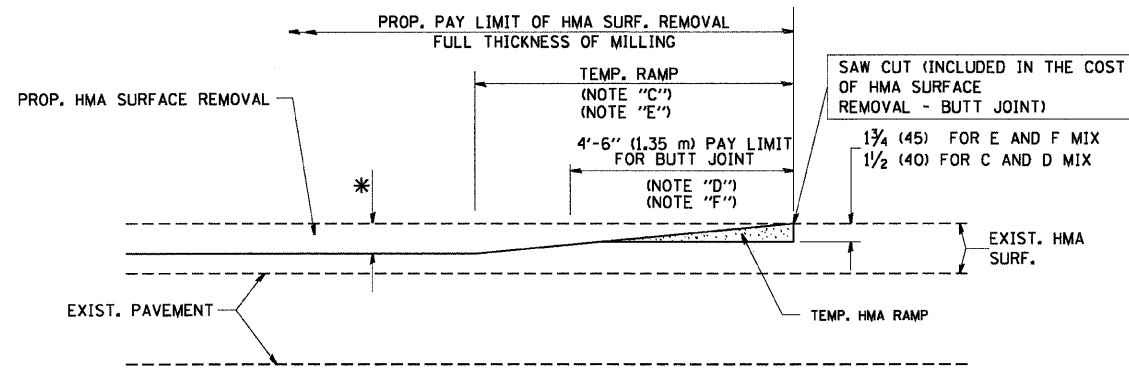
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	3117 RS-3	COOK	16	8

CONTRACT NO. 60G84
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



MILLED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

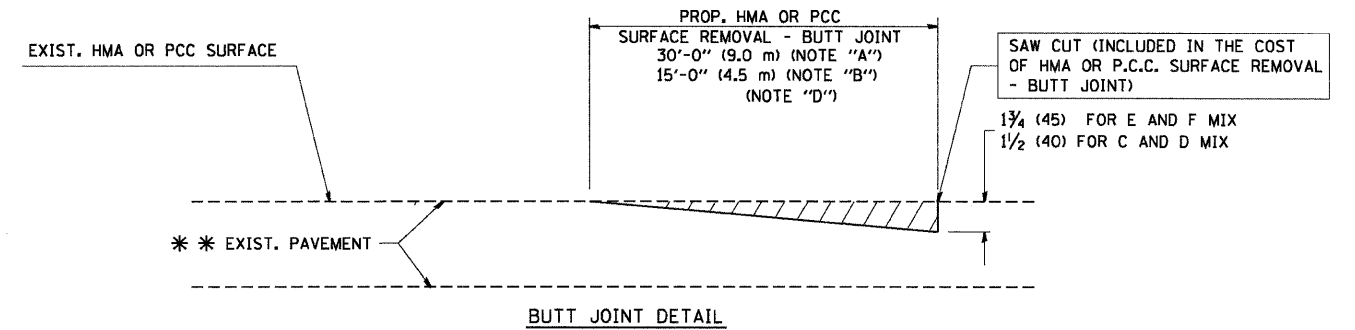
OPTION 1



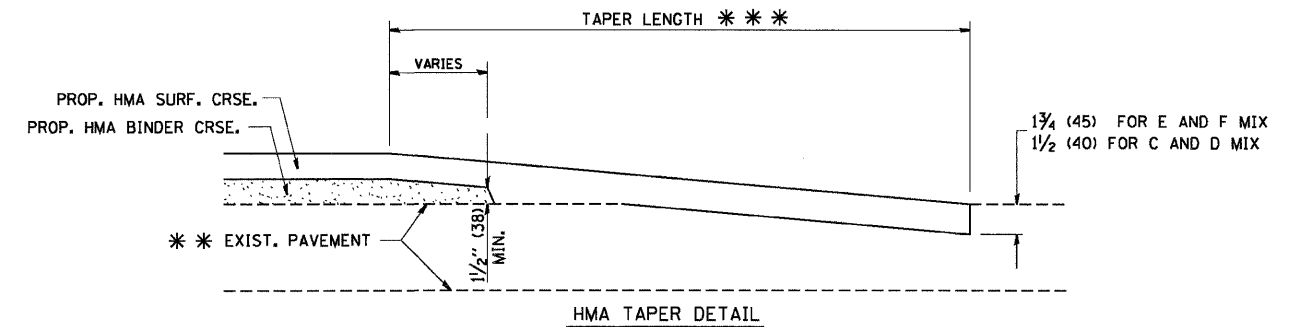
HMA CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2

TYPICAL TEMPORARY RAMP



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

NOTES

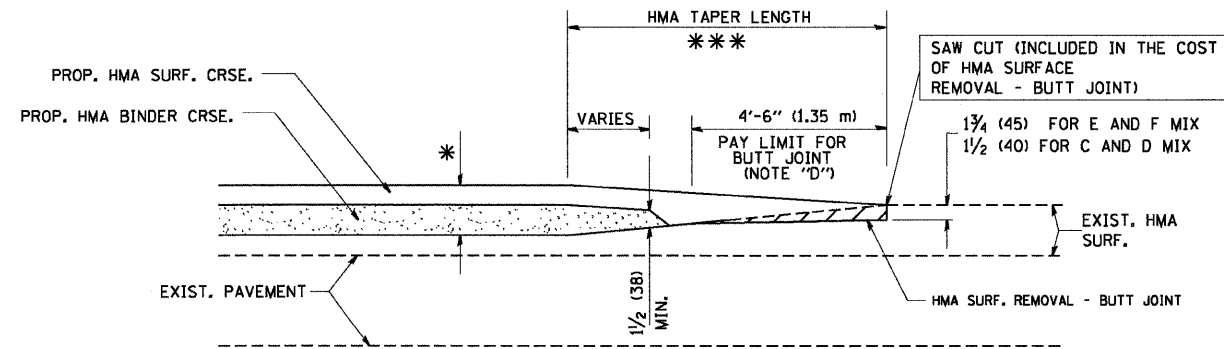
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (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.

*** 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.



BUTT JOINT AND HMA TAPER

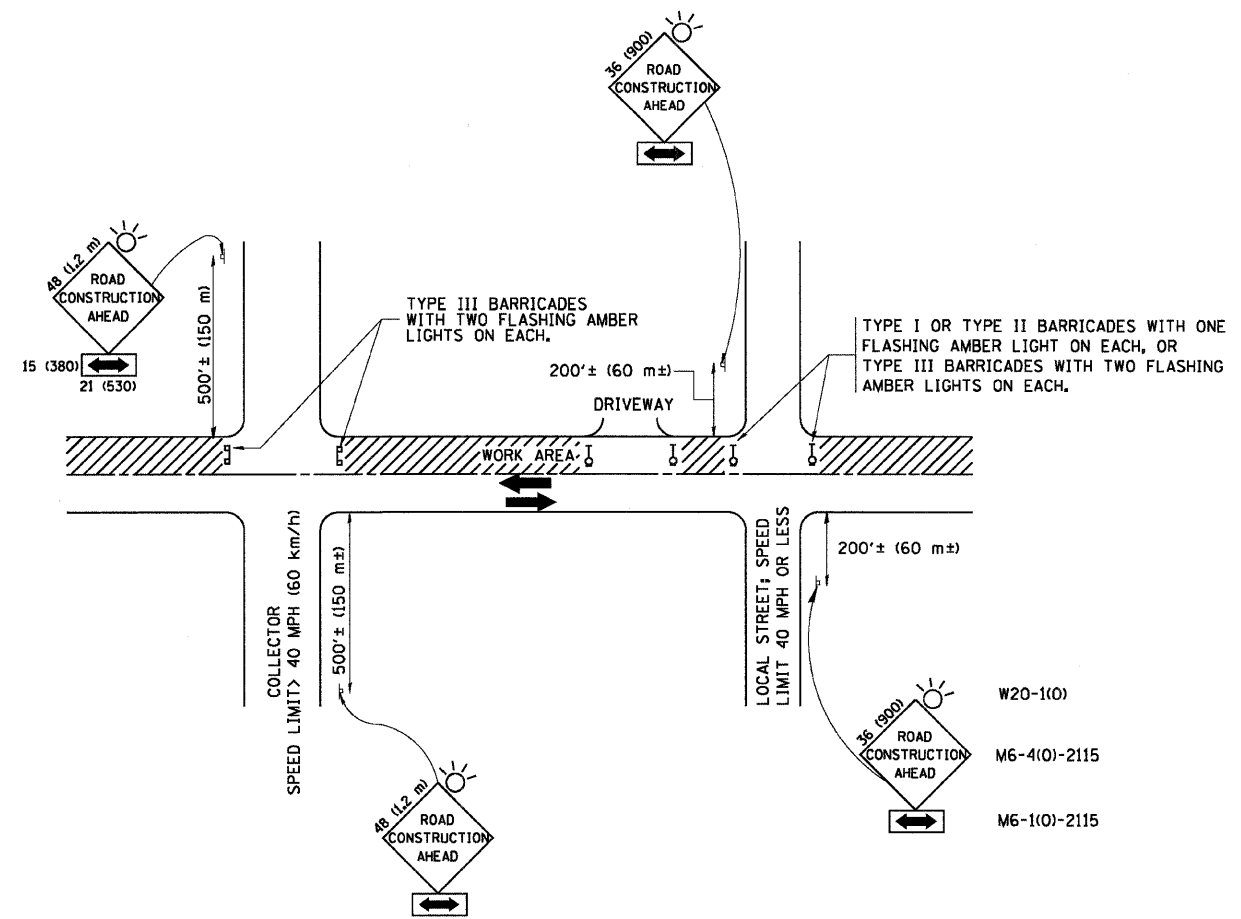
TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

FILE NAME = W:\diststd\22x34\ba32.dgn	USER NAME = gogisenobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	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.	TO STA.

F.A.U. RTE. 2697	SECTION 3117 RS-3	COUNTY COOK	TOTAL SHEETS 16	SHEET NO. 10
BD400-05 BD32			CONTRACT NO. 60G84	
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.

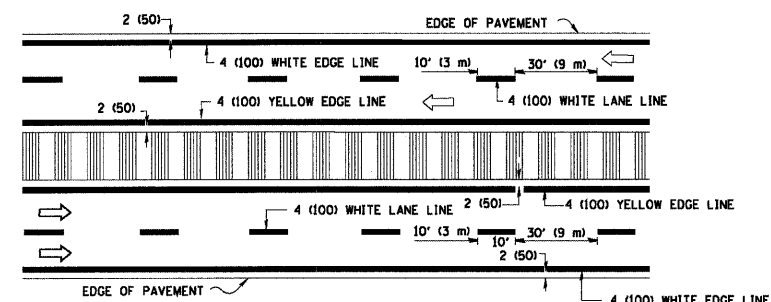
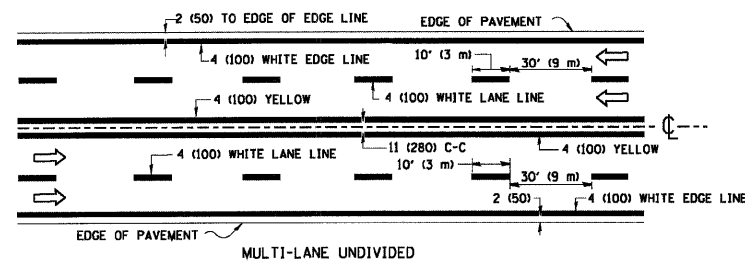
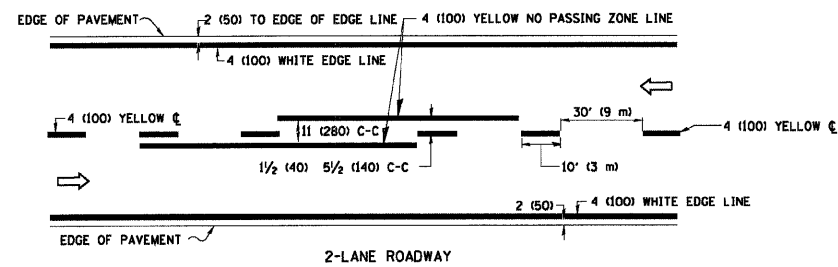
All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME = W:\dstatd\22x34\to10.dgn	USER NAME = gog12nobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 / / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

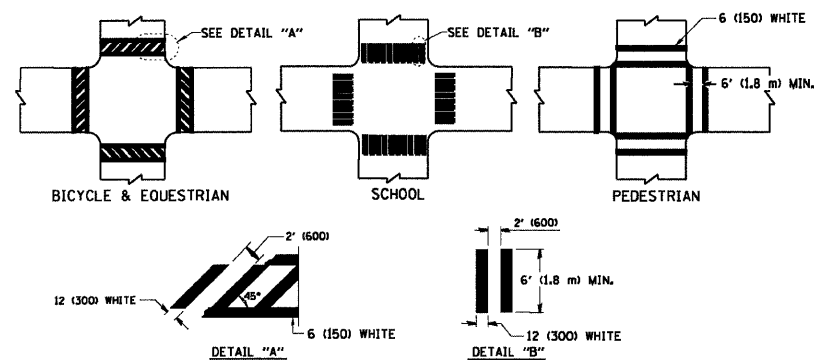
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.U. RTE. 2697	SECTION 3117 RS-3	COUNTY COOK	TOTAL SHEETS 16	SHEET NO. 11
TC-10			CONTRACT NO. 60G84	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

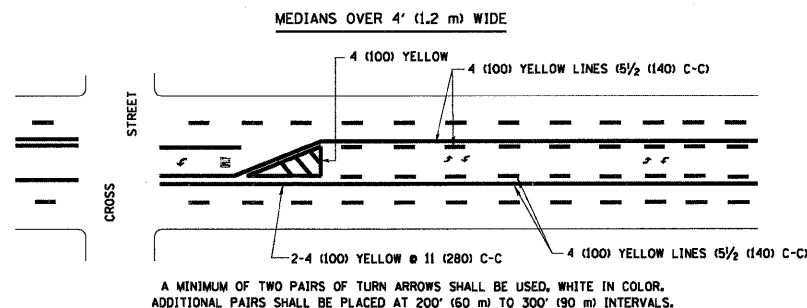
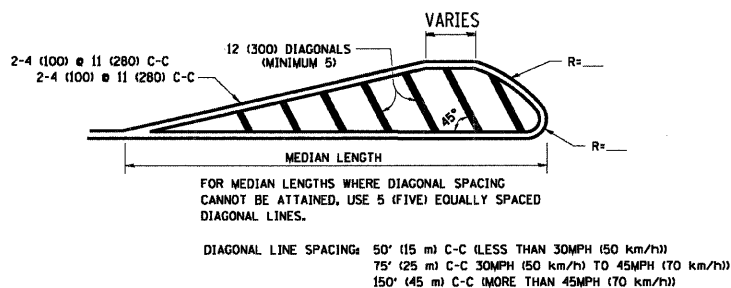
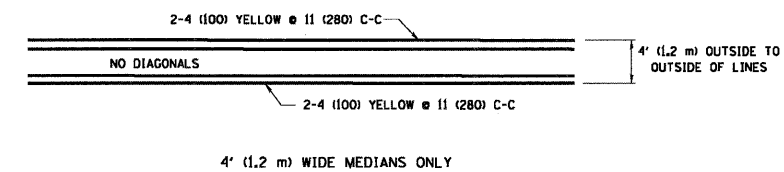


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

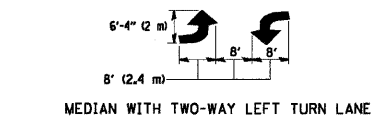
TYPICAL LANE AND EDGE LINE MARKING



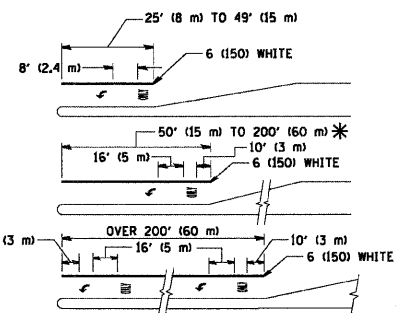
TYPICAL CROSSWALK MARKING



TYPICAL PAINTED MEDIAN MARKING

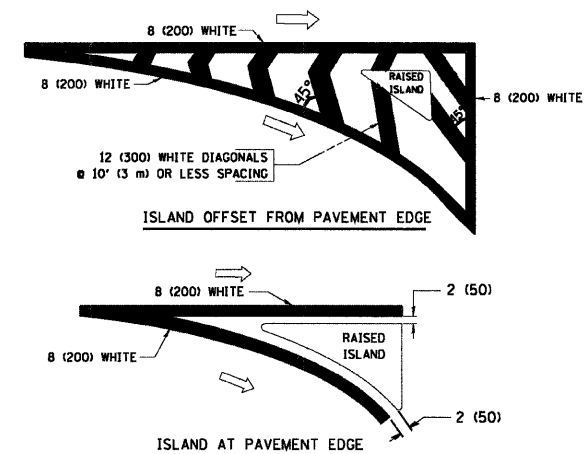


TYPICAL TURN LANE MARKING



FULL SIZE LETTERS 8" (2.4 m) AND ARROWS SHALL BE USED.
 AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)
 * TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

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

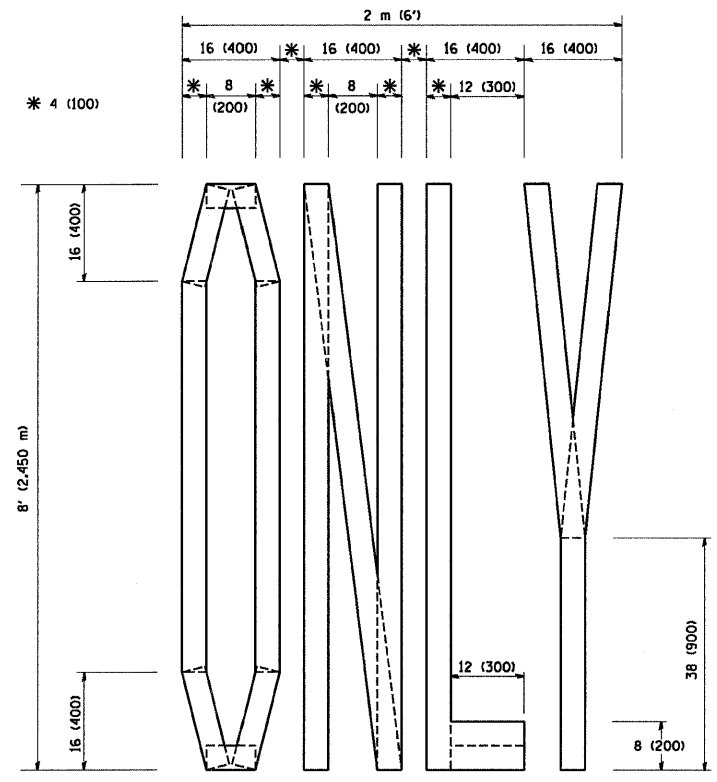
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

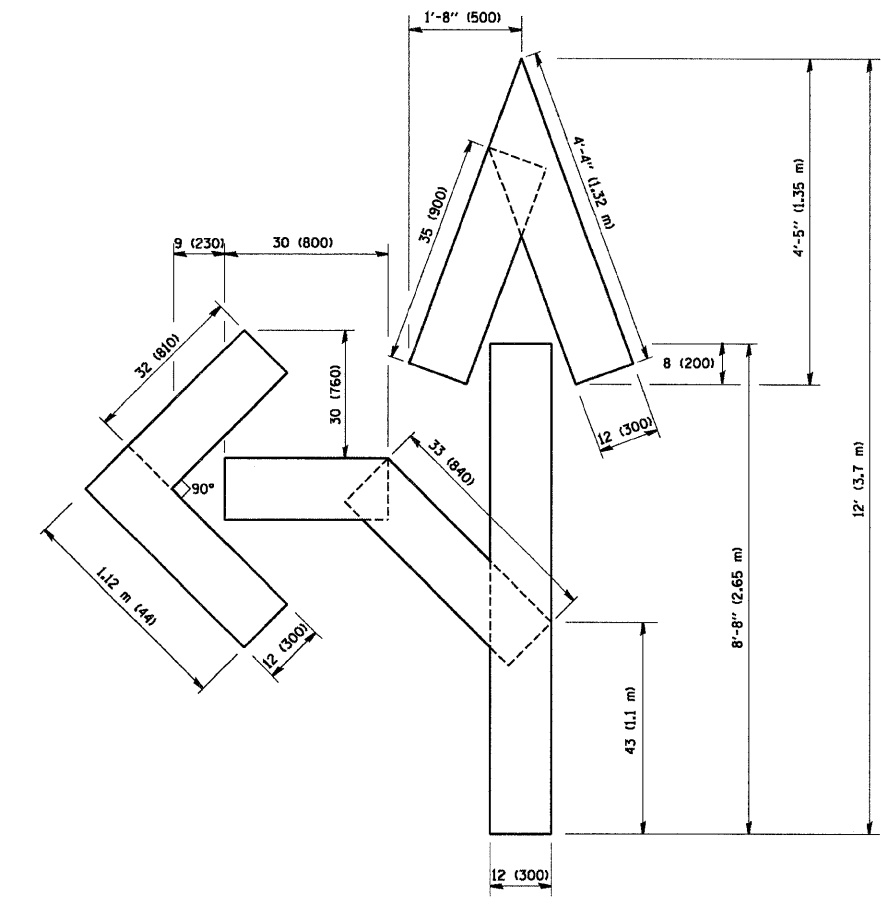
FILE NAME = W:\data\td\22x34\to13.dgn	USER NAME = geglienobt	DESIGNED - EVERS	REVISED - T, RAMMACHER 10-27-94
	PLOT SCALE = 50,000' / IN.	DRAWN -	REVISED - A, HOUSEH 10-09-96
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - A, HOUSEH 10-17-96
		DATE - 03-19-90	REVISED - T, RAMMACHER 01-06-00

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

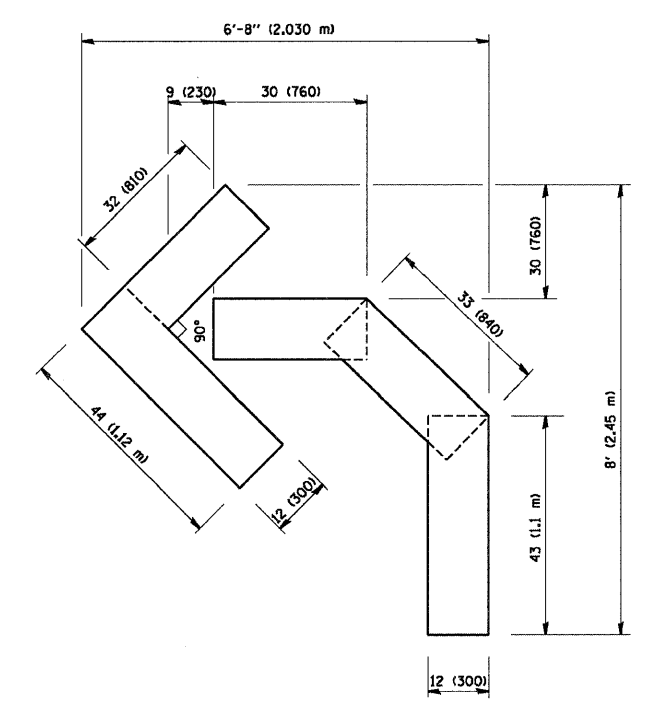
DISTRICT ONE		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL PAVEMENT MARKINGS		2697	3117 RS-3	COOK	16	13
SCALE: NONE		TC-13		CONTRACT NO. 60684		
SHEET NO. 1 OF 1 SHEETS		STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		



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.

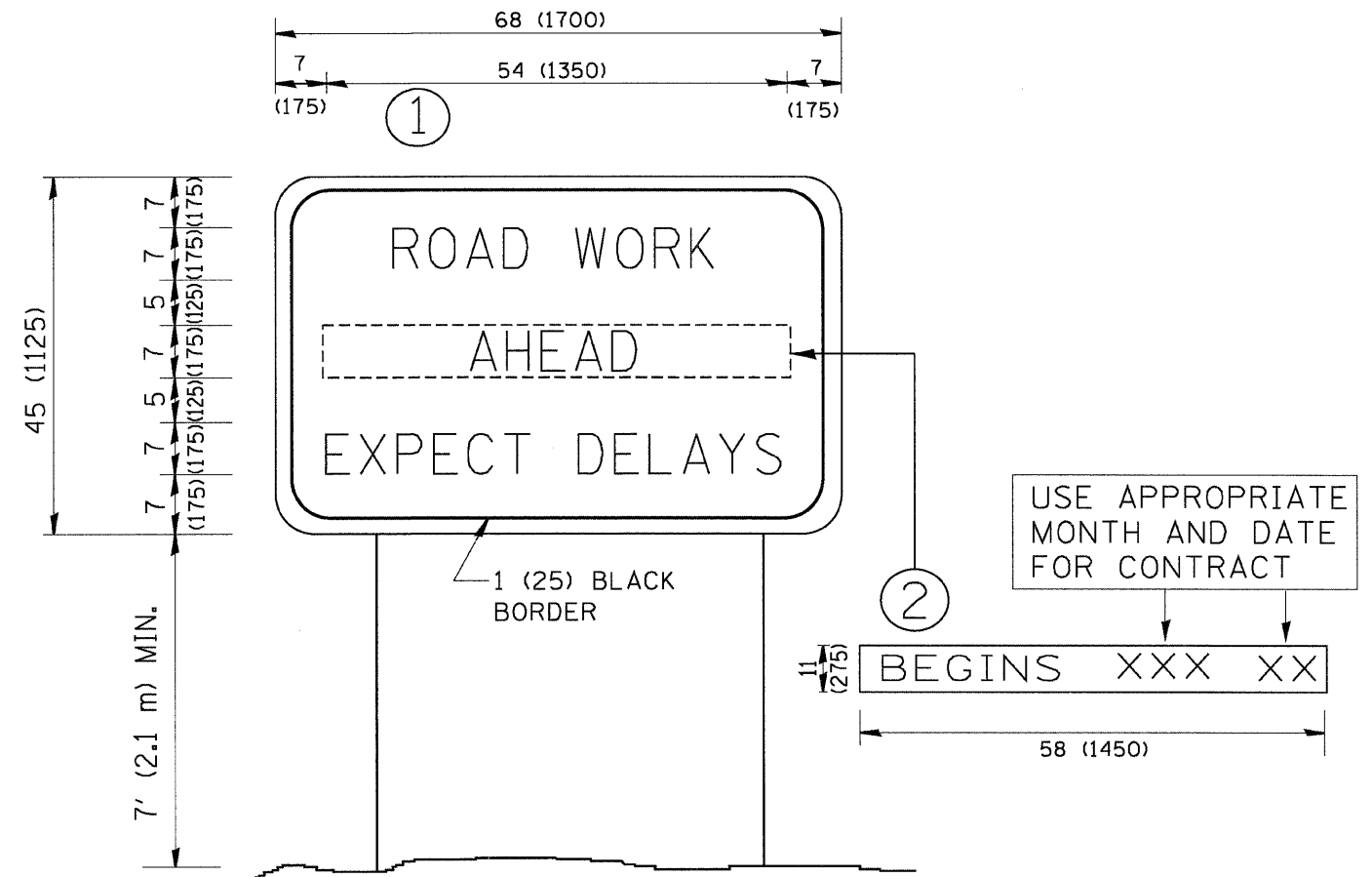
FILE NAME = W:\distatd\22x34\tol16.dgn	USER NAME = geglienobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
		DRAWN -	REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 50.0000 "/ IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

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.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	3117 RS-3	COOK	16	14
TC-16			CONTRACT NO. 60GB4	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

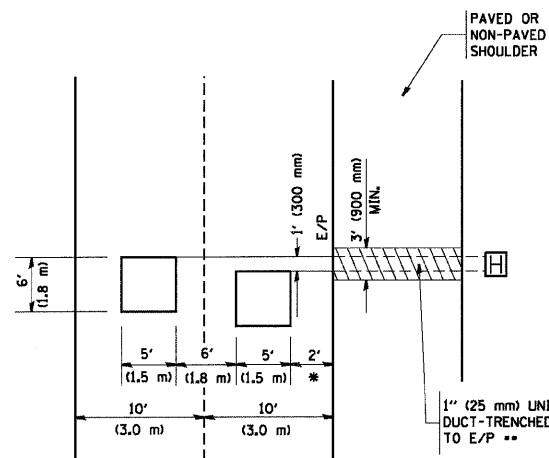
1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
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 = W:\distsd\22x34\to22.dgn	USER NAME = goglienobt	DESIGNED -	REVISED - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN			F.A.L. RTE. 2697	SECTION 3117 RS-3	COUNTY COOK	TOTAL SHEETS 16	SHEET NO. 15
	PLOT SCALE = 50.000' / IN.	DRAWN -	REVISED - R. MIRS 12-11-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	TC-22		CONTRACT NO. 60G84	
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - T. RAMMACHER 02-02-99		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
		DATE -	REVISED - C. JUCIUS 01-31-07									

LOOPS NEXT TO SHOULDERS

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



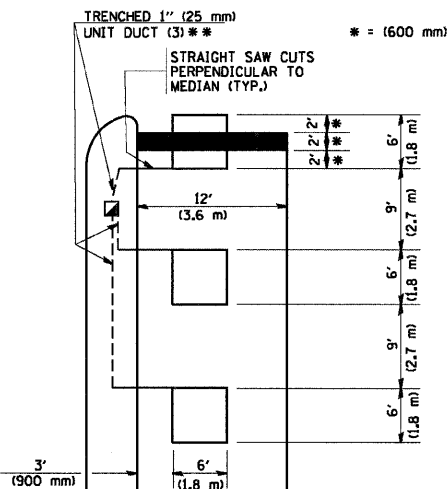
* = (600 mm)

** 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.



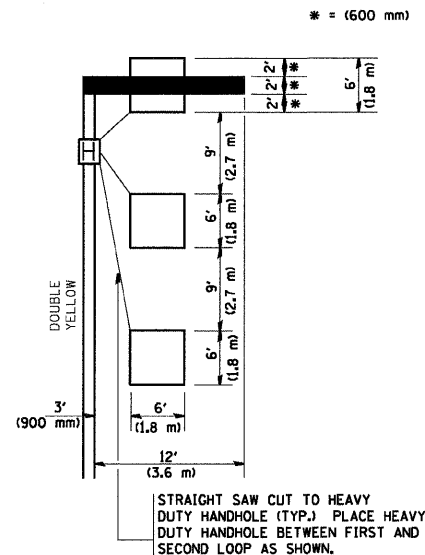
* = (600 mm)

** 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**

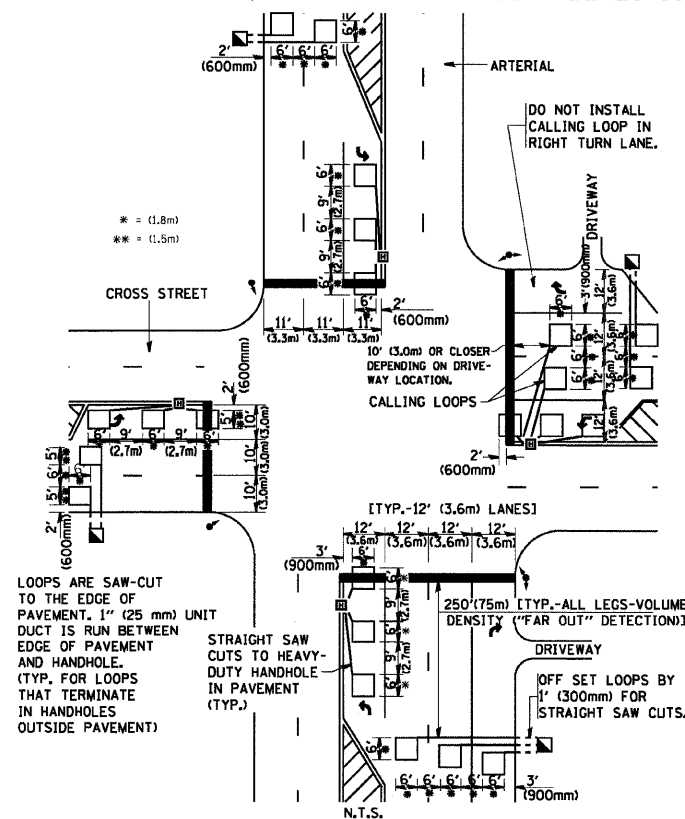
(PROTECTED / PERMITTED LEFT TURN PHASING)



* = (600 mm)

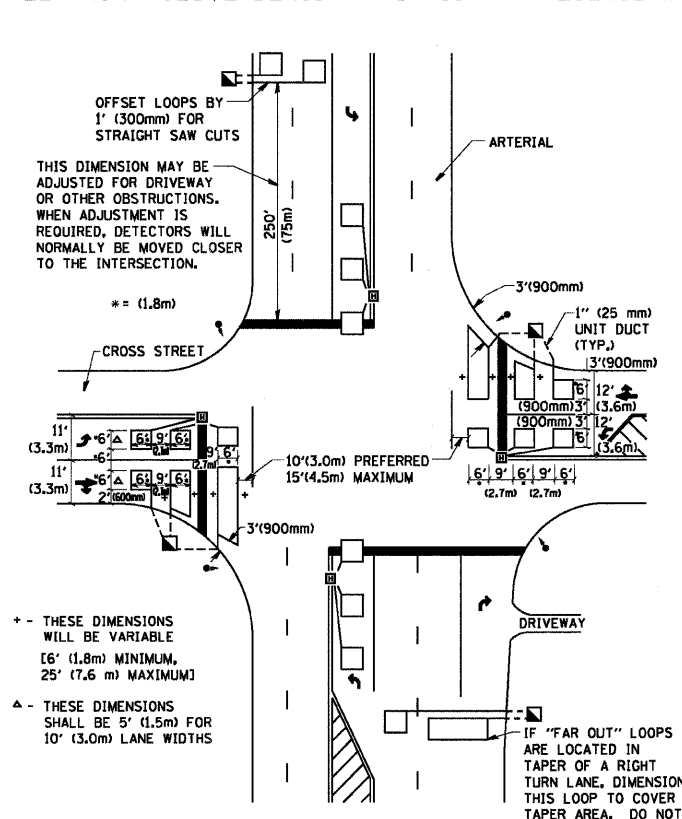
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



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 =
W:\dist\td\22x34\ts07.dgn

USER NAME = geglennob
DESIGNED -
DRAWN -
PLOT SCALE = 5/8"=1'-0"
PLOT DATE = 1/4/2008

DESIGNED -
DRAWN -
CHECKED - R.K.F.
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT 1 - DETECTOR LOOP INSTALLATION
DETAILS FOR ROADWAY RESURFACING**

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

F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	3117 R5-3	COOK	16	16
TS-07			CONTRACT NO. 60G84	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				