

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	111 R-RS	MCHENRY	27	1
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT NO. 60H46		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

F.A.P. 336 (IL 31)  
SECTION 111 R-RS  
JOHNSBURG ROAD TO US 12 (TRYON GROVE ROAD)  
RESURFACING (3P)

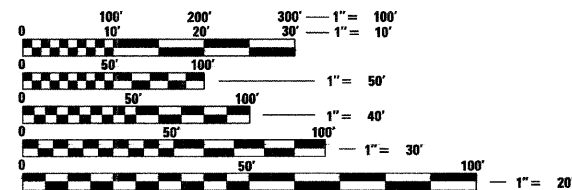
MCHENRY COUNTY  
C-91-637-09

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THESE IMPROVEMENTS ARE LOCATED WITHIN  
THE VILLAGES OF JOHNSBURG, RINGWOOD AND RICHMOND

**TRAFFIC DATA**

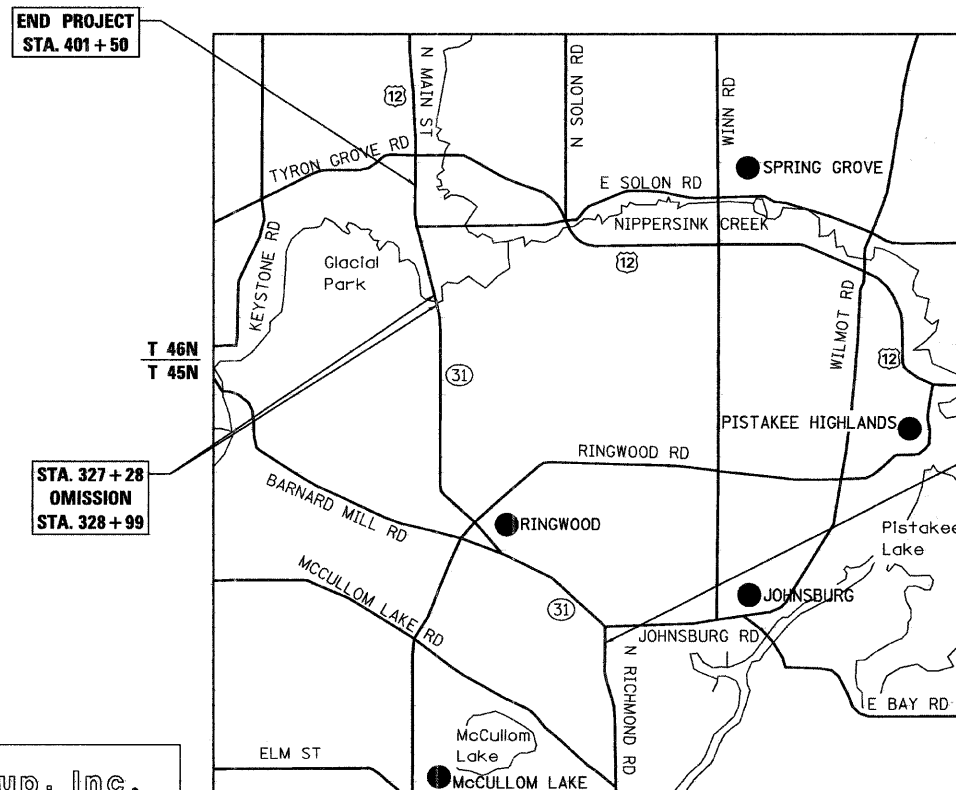
2007 ADT - 10,400  
POSTED SPEED LIMIT - 55 MPH



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

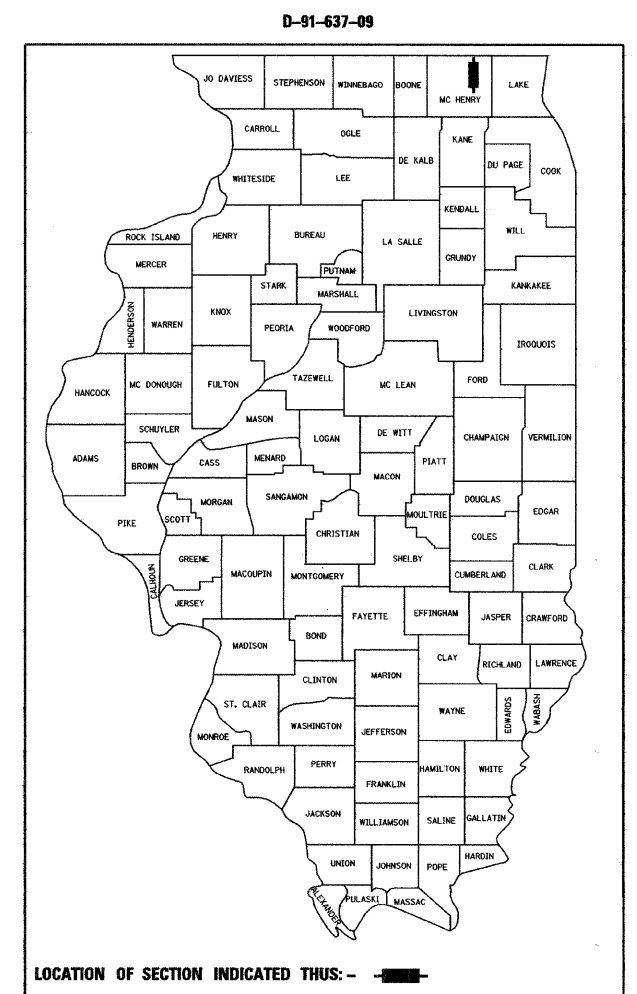
**Ciorba Group, Inc.**  
DESIGN FIRM  
REGISTRATION NUMBER  
184-001016  
CONSULTING ENGINEERS  
SUITE 402, 5507 NORTH CUMBERLAND AVE  
CHICAGO, ILLINOIS 60656 :: (773) 775-4009



MCHENRY AND RICHMOND TOWNSHIP  
LOCATION MAP  
1" = 5000'  
GROSS LENGTH OF PROJECT = 29,789 FT = 5.64 MI.  
NET LENGTH OF PROJECT = 29,618 FT = 5.61 MI.



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



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
SUBMITTED APRIL 14, 2009  
Diana M. O'Keefe  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER  
May 1, 2009  
Charles S. Ingersoll  
ENGINEER OF DESIGN AND ENVIRONMENT  
May 1, 2009  
Christine M. Reed  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

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

CONTRACT NO. 60H46

INDEX OF SHEETS

SHEET NO	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
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4	TYPICAL SECTIONS
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24	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)
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26	ARTERIAL ROAD INFORMATION SIGN (TC-22)
27	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
482011-03	HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
604001-03	FRAME AND LIDS, TYPE 1
701006-03	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701201-03	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-02	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS > 45 MPH
701311-03	LANE CLOSURE, 2L, 2W, MOVING DAY OPERATIONS-DAY ONLY
701701-00	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

- 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)
- 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.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 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.
- 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
- THE ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISORS AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE START OF WORK.
- TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS THE ENGINEER SHALL CONTACT DEBBIE HANLON, AREA TRAFFIC FIELD ENGINEER, AT (847) 438-2300.
- 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).
- 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.
- FOR PAVEMENT MARKING, REFER TO DISTRICT ONE TYPICAL MARKINGS FOR DETAILS SHOWN.
- MATCH EXISTING PAVEMENT MARKINGS AT PROJECT LIMITS AND OMISSIONS.
- ALL PATCHES OPENED ON A PARTICULAR DAY MUST BE FILLED THAT DAY TO THE TOP OF THE MILLED PAVEMENT SURFACE.
- IDOT TRAFFIC SIGNAL AND SYSTEM DETECTION LOOPS ARE PRESENT AT JOHNSBURG ROAD AND RINGWOOD ROAD. 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.
- NO OVERNIGHT CLOSURES WILL BE ALLOWED

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**Ciorba Group, Inc.**  
 CONSULTING ENGINEERS  
 5507 North Cumberland Avenue, Suite 402  
 Chicago, Illinois 60658  
 Tel. 773.775.4009 Fax 773.775.4014

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**IL 31  
 JOHNSBURG ROAD TO US 12 (TYRON GROVE ROAD)  
 INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES**

SCALE: SHEET NO. 2 OF 27 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	111 R-RS	MCHENRY	27	2
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60H46	

SUMMARY OF QUANTITIES			URBAN 100% STATE	CONSTRUCTION TYPE CODE
CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	ROADWAY 1000
20201006	GRADING AND SHAPING SHOULDERS	UNIT	484	484
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	98	98
40600300	AGGREGATE (PRIME COAT)	TON	488	488
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	14	14
40600535	LEVELING BINDER (HAND METHOD), N70	TON	20	20
40600895	CONSTRUCTING TEST STRIP	EACH	2	2
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	800	800
40600990	TEMPORARY RAMP	SQ YD	910	910
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	10,600	10,600
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	121,700	121,700
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	1,850	1,850
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	550	550
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	2,990	2,990
55039700	STORM SEWERS TO BE CLEANED	FOOT	200	200
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	3	3
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	5	5
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	5	5
67100100	MOBILIZATION	L SUM	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1

\* DENOTES SPECIALTY ITEM

SUMMARY OF QUANTITIES			URBAN 100% STATE	CONSTRUCTION TYPE CODE
CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	ROADWAY 1000
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	17,780	17,780
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	2,100	2,100
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	173,900	173,900
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	8,700	8,700
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	2,400	2,400
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	600	600
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	22,700	22,700
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	700	700
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	116,000	116,000
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2,900	2,900
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	800	800
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	400	400
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	940	940
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	894	894
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	1,150	1,150
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	51	51
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	6,600	6,600
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	5	5

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

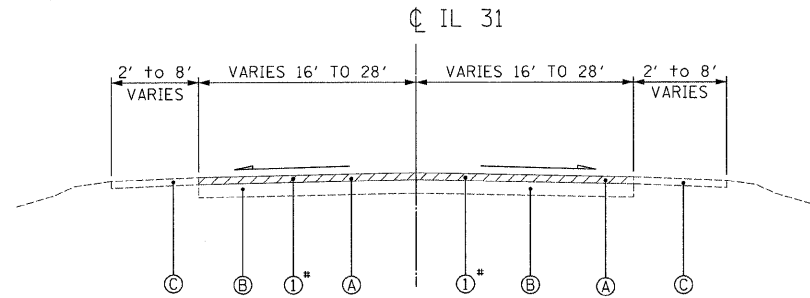
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

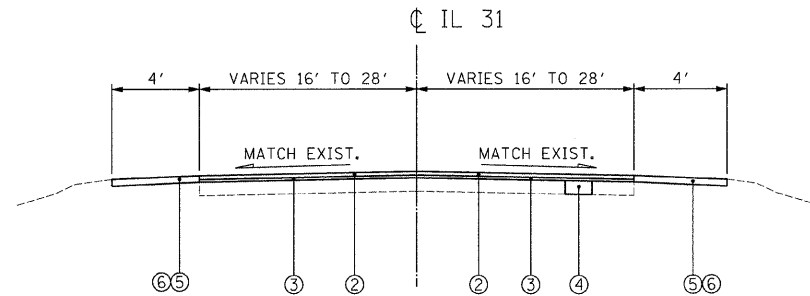
**IL 31  
JOHNSBURG ROAD TO US 12 (TYRON GROVE ROAD)  
SUMMARY OF QUANTITIES**

SCALE: SHEET NO. 3 OF 27 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	111 R-RS	MCHENRY	27	3
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60H46	



EXISTING TYPICAL SECTION  
 STA. 103+61 TO STA. 327+28  
 STA. 328+99 TO STA. 401+50



PROPOSED TYPICAL SECTION  
 STA. 103+61 TO STA. 327+28  
 STA. 328+99 TO STA. 401+50

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), N70 (IL-9.5MM)	PG 64-22 *	4% @ 70 GYR
PAVEMENT PATCHING	CLASS D PATCHES, 10" (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.

EXISTING CONDITIONS:

- Ⓐ HOT-MIX ASPHALT SURFACE AND BINDER COURSE, 3" AND VARIES
- Ⓑ HOT-MIX ASPHALT 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, 10" (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.

\* THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING

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 CONSULTING ENGINEERS  
 5507 North Cumberland Avenue, Suite 402  
 Chicago, Illinois 60655  
 Tel. 773.775.4009 Fax 773.775.4014

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

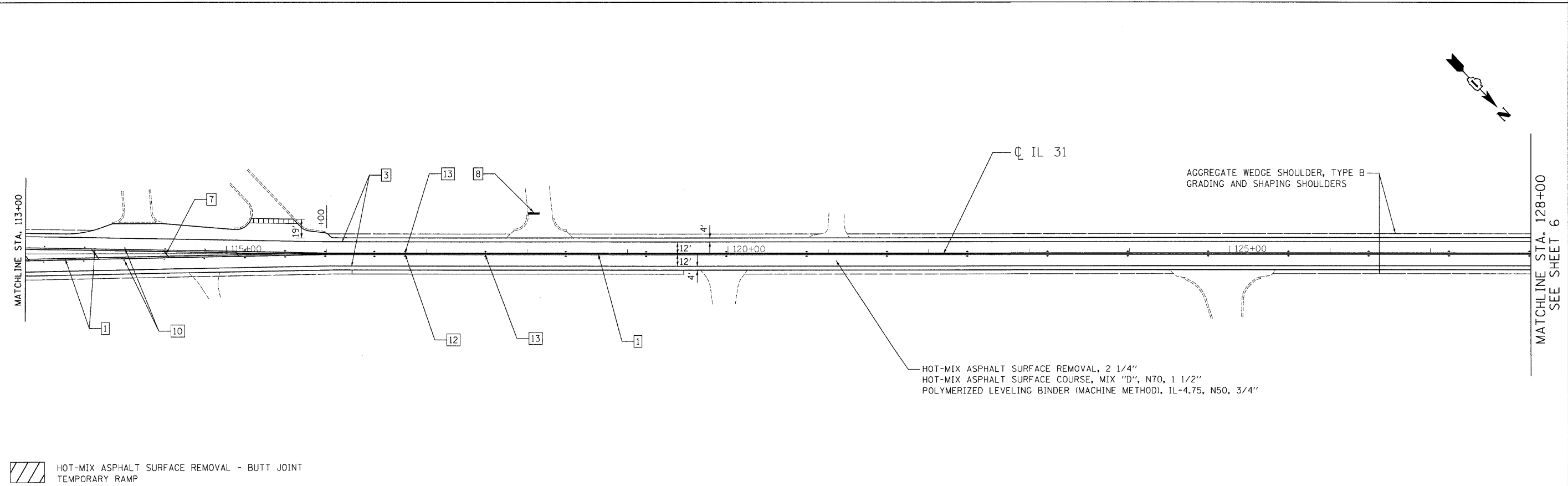
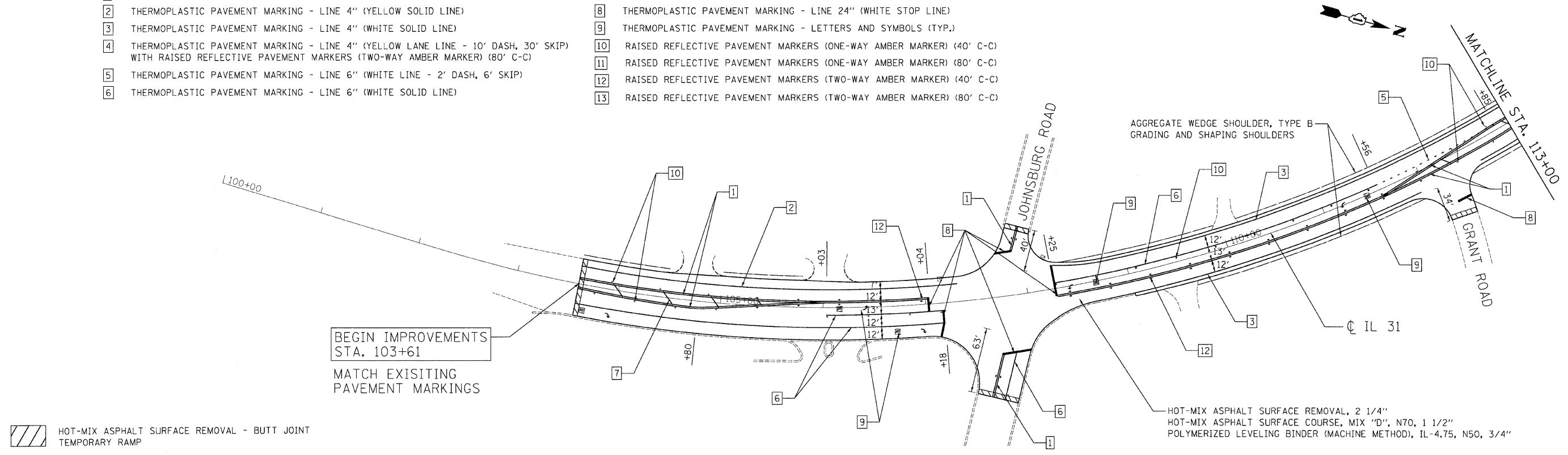
**IL 31  
 JOHNSBURG ROAD TO US 12 (TYRON GROVE ROAD)  
 TYPICAL SECTIONS**

SCALE: N.T.S. SHEET NO. 4 OF 27 SHEETS STA. TO STA.

F.A.P. RTE. 336	SECTION 111 R-RS	COUNTY MCHENRY	TOTAL SHEETS 27	SHEET NO. 4
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60H46	

**LEGEND:**

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



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

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

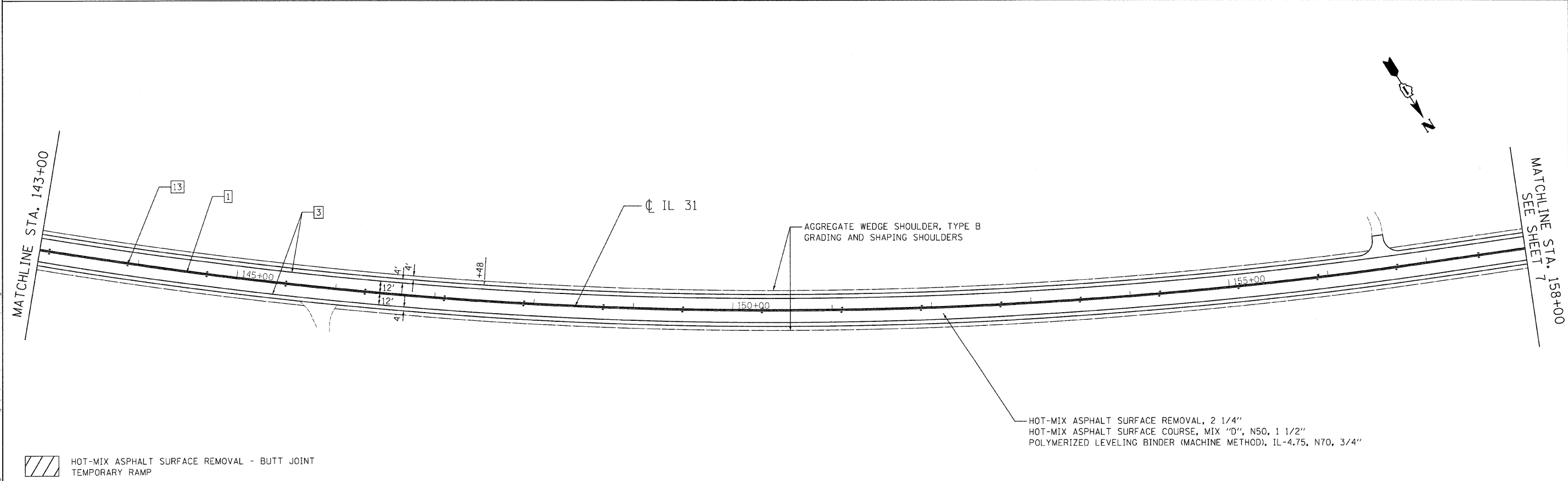
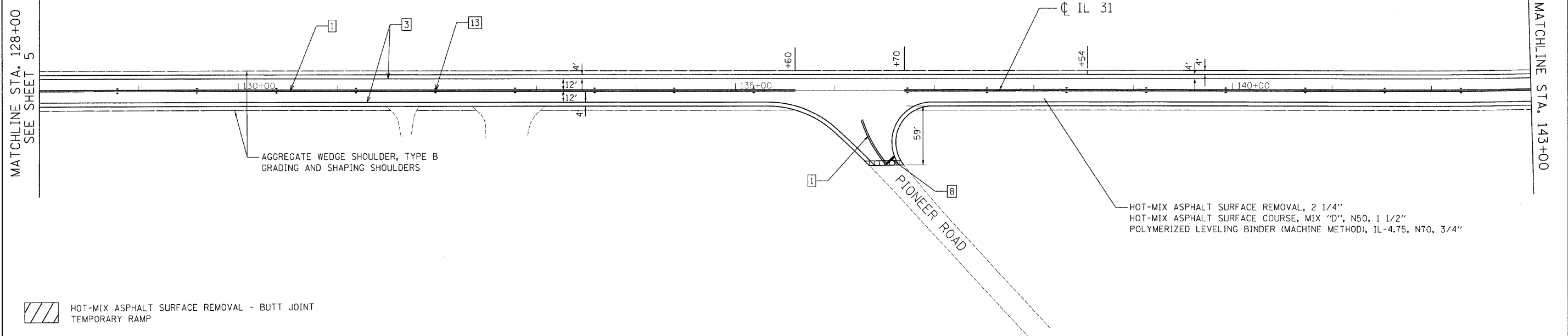
**IL 31  
JOHNSBURG ROAD TO US 12 (TYRON GROVE ROAD)  
PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET NO. 5 OF 27 SHEETS STA. 103+61 TO STA. 128+00

F.A.P. RTE. 336	SECTION 111 R-RS	COUNTY MCHENRY	TOTAL SHEETS 27	SHEET NO. 5
CONTRACT NO. 60H46			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

**LEGEND:**

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



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

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

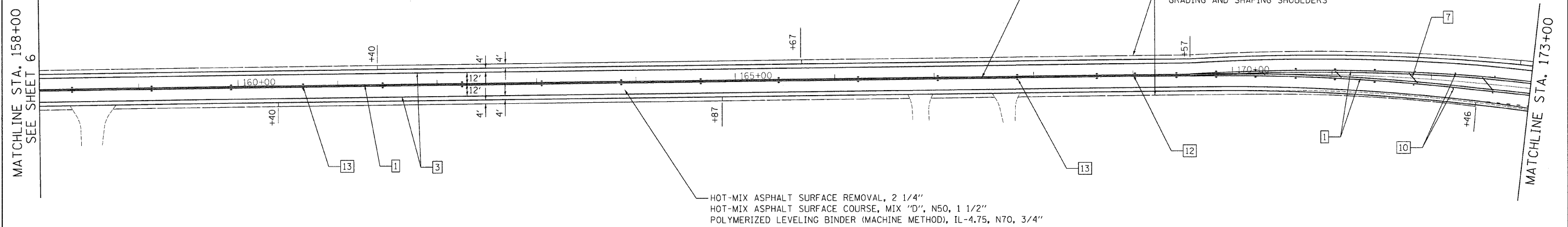
**IL 31  
 JOHNSBURG ROAD TO US 12 (TYRON GROVE ROAD)  
 PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET NO. 6 OF 27 SHEETS STA. 128+00 TO STA. 158+00

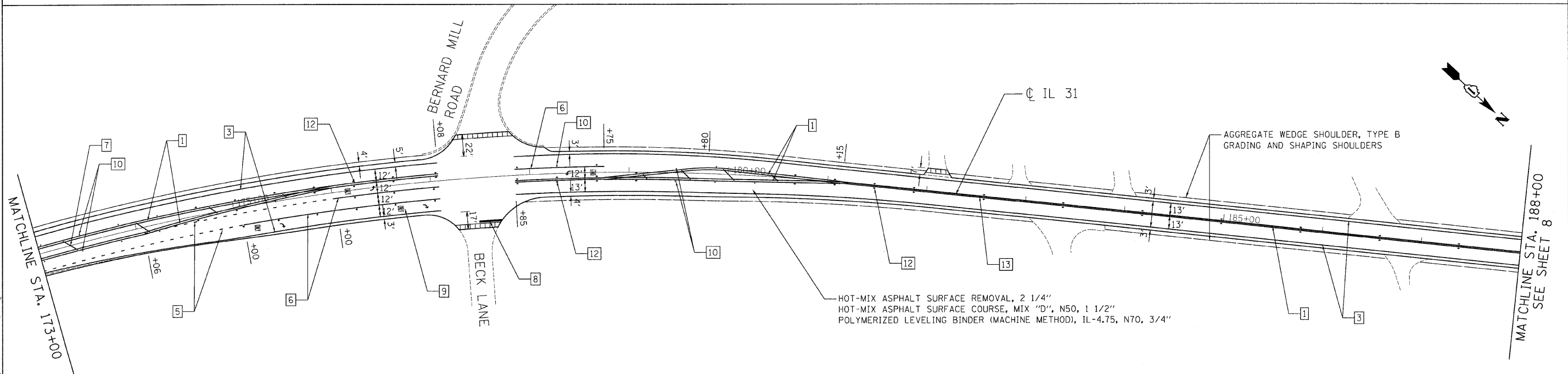
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	111 R-RS	MCHENRY	27	6
CONTRACT NO. 60H46			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

**LEGEND:**

- |   |   |    |   |
|---|---|----|---|
| 1 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE 11" C-C)   | 7  | THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW LINE)             |
| 2 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE)  | 8  | THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP LINE)         |
| 3 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE SOLID LINE)   | 9  | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.)         |
| 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) | 10 | RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY AMBER MARKER) (40' C-C) |
| 5 | THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE LINE - 2' DASH, 6' SKIP)  | 11 | RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY AMBER MARKER) (80' C-C) |
| 6 | THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE)   | 12 | RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER MARKER) (40' C-C) |
|   |   | 13 | RAISED REFLECTIVE PAVEMENT MARKERS (TWO-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: \\s:\proj\13268\13268\_13\rdm\gn\proposals\p1\3268\_13\p-03.dgn

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

USER NAME = alou	DESIGNED - NT	REVISED -
PLCT SCALE = 50.0000' / IN.	DRAWN - NT	REVISED -
PLCT DATE = 4/20/2009	CHECKED - WBL	REVISED -
	DATE - 4/22/09	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**IL 31  
 JOHNSBURG ROAD TO US 12 (TYRON GROVE ROAD)  
 PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET NO. 7 OF 27 SHEETS STA. 158+00 TO STA. 188+00

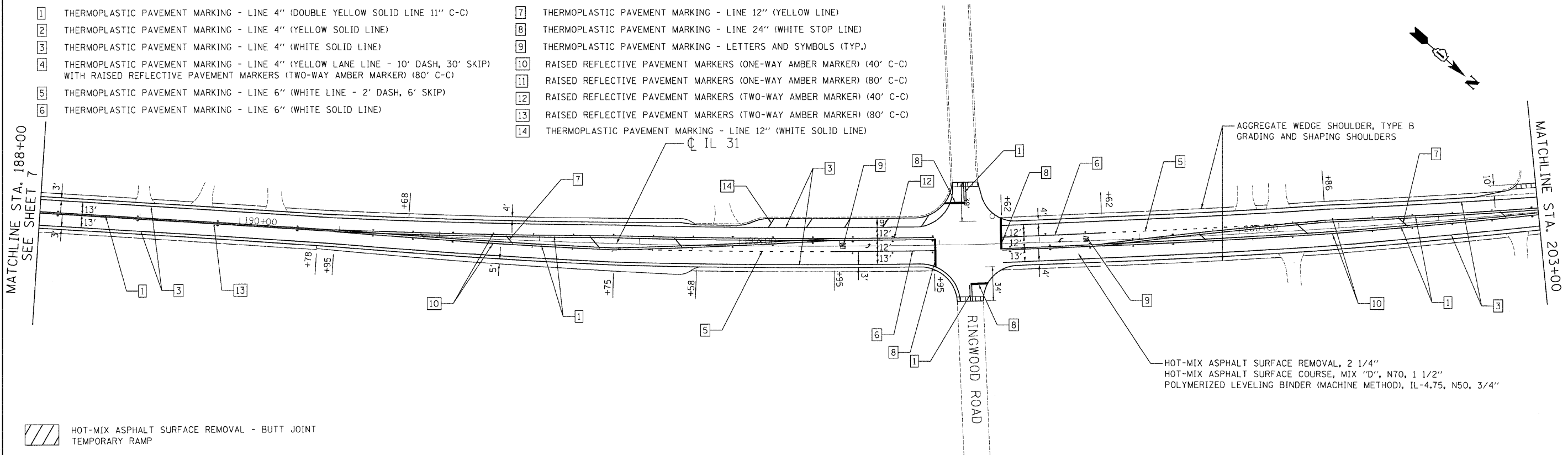
F.A.P. RTE. 336	SECTION 111 R-RS	COUNTY MCHENRY	TOTAL SHEETS 27	SHEET NO. 7
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60H46	

**LEGEND:**

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

MATCHLINE STA. 188+00  
SEE SHEET 7

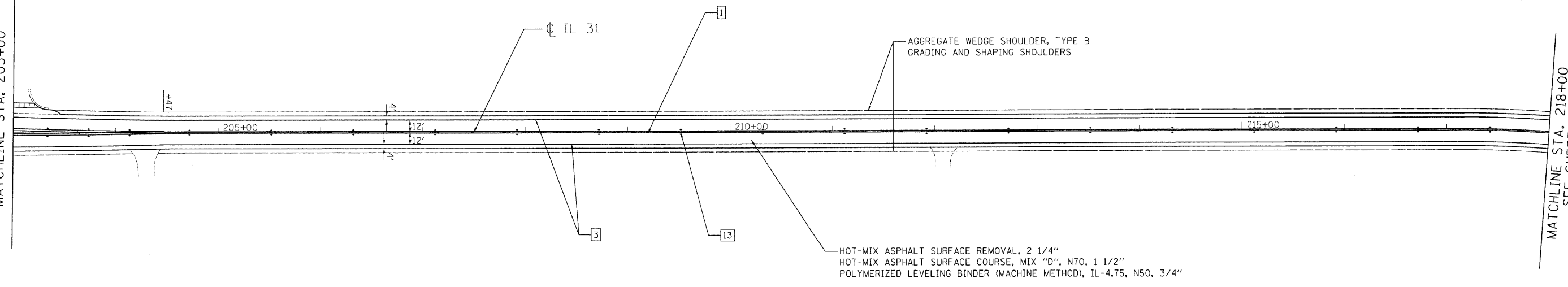
MATCHLINE STA. 203+00



HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT  
TEMPORARY RAMP

MATCHLINE STA. 203+00

MATCHLINE STA. 218+00  
SEE SHEET 9



HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT  
TEMPORARY RAMP

FILE NAME: s:\projects\3358\19\design\proposals\pl\3358\_19\_Prop9a.dgn

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Chicago, Illinois 60656  
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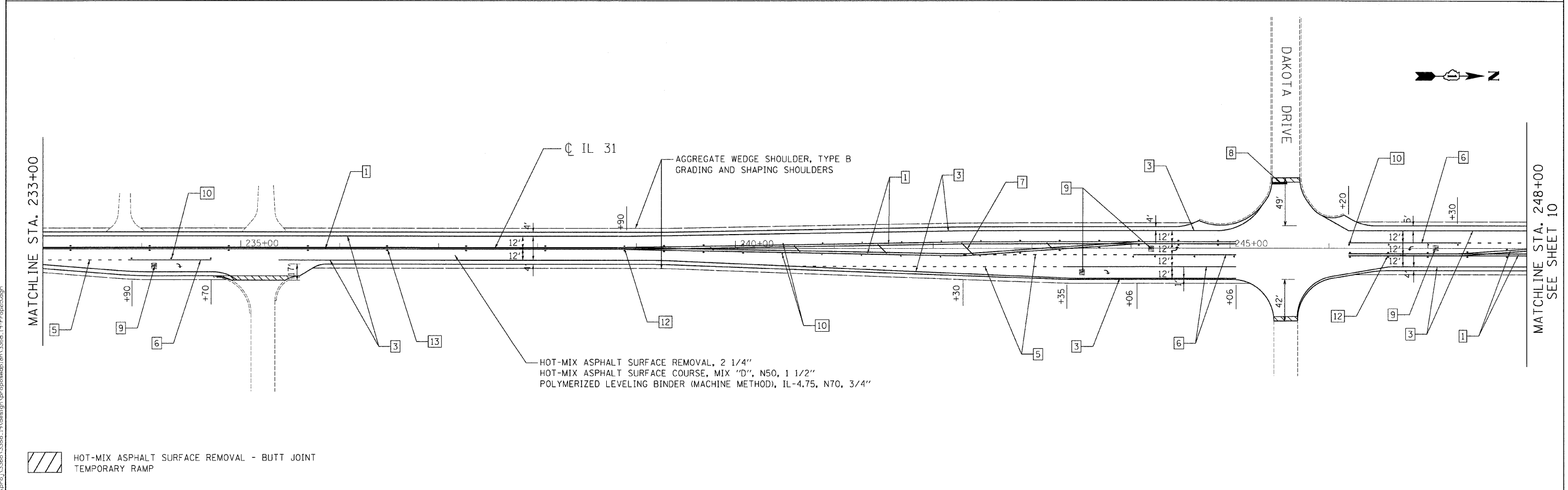
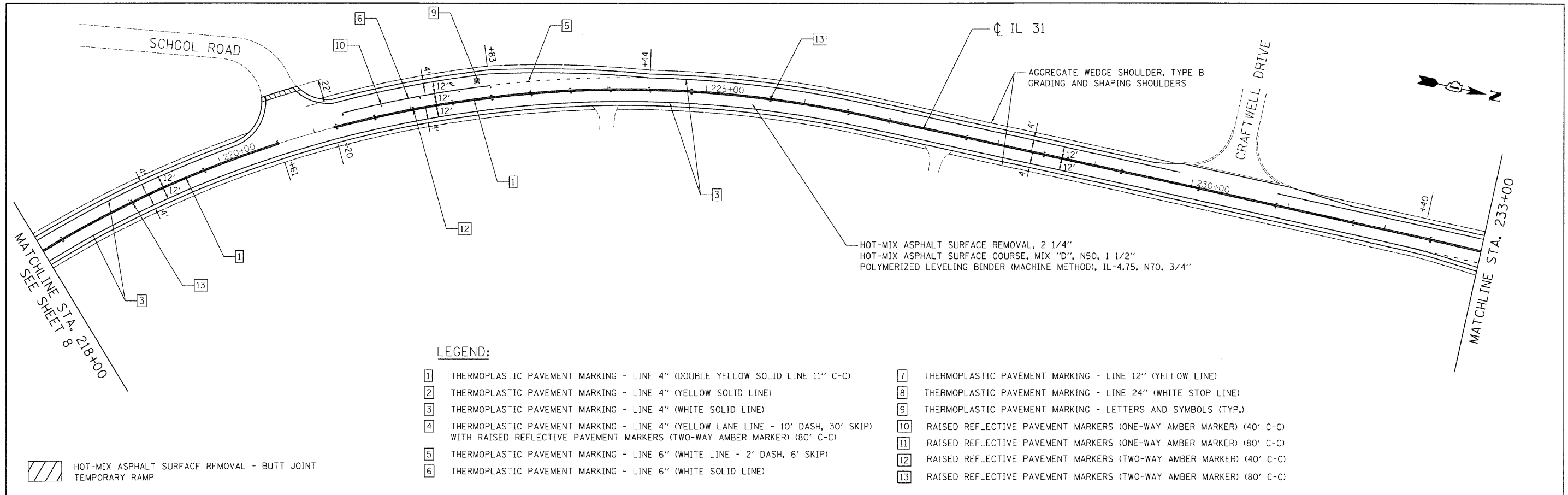
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PLOT SCALE = 50.0000' / IN.	DRAWN - NT	REVISED -
PLOT DATE = 4/28/2009	CHECKED - WBL	REVISED -
	DATE - 4/22/09	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL 31  
JOHNSBURG ROAD TO US 12 (TYRON GROVE ROAD)  
PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**  
SCALE: 1"=50' SHEET NO. 8 OF 27 SHEETS STA. 188+00 TO STA. 218+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	111 R-RS	MCHENRY	27	8
CONTRACT NO. 60H46				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				





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

USER NAME = oiaou	DESIGNED - NT	REVISED -
PLOT SCALE = 5/8" = 1' / IN.	DRAWN - NT	REVISED -
PLOT DATE = 4/28/2009	CHECKED - WBL	REVISED -
	DATE - 4/22/09	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**IL 31  
 JOHNSBURG ROAD TO US 12 (TYRON GROVE ROAD)  
 PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET NO. 9 OF 27 SHEETS STA. 218+00 TO STA. 248+00

F.A.P. RTE. 336	SECTION 111 R-RS	COUNTY MCHENRY	TOTAL SHEETS 27	SHEET NO. 9
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60H46	

FILE NAME: s:\proj\3366\3366\_19\Drawings\Proposed\shl\en\3366\_19\_Prop05.dgn

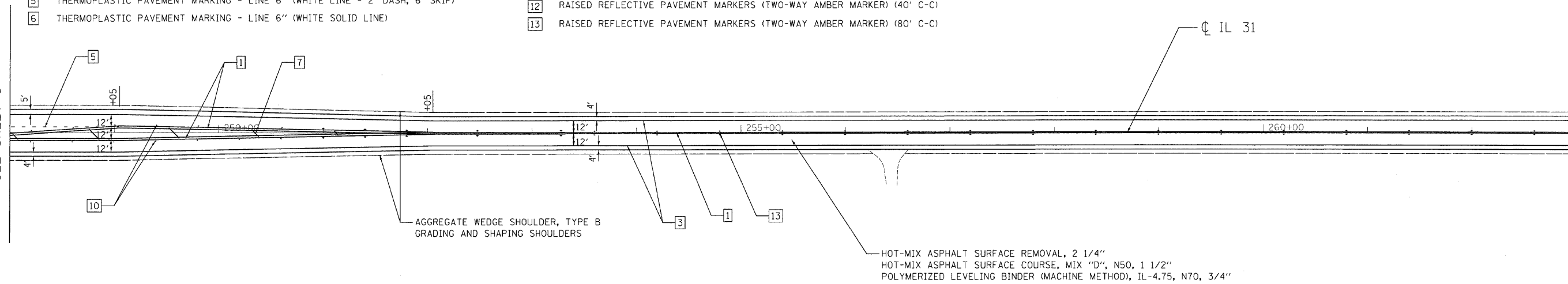
**LEGEND:**

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



MATCHLINE STA. 248+00  
SEE SHEET 9

MATCHLINE STA. 263+00

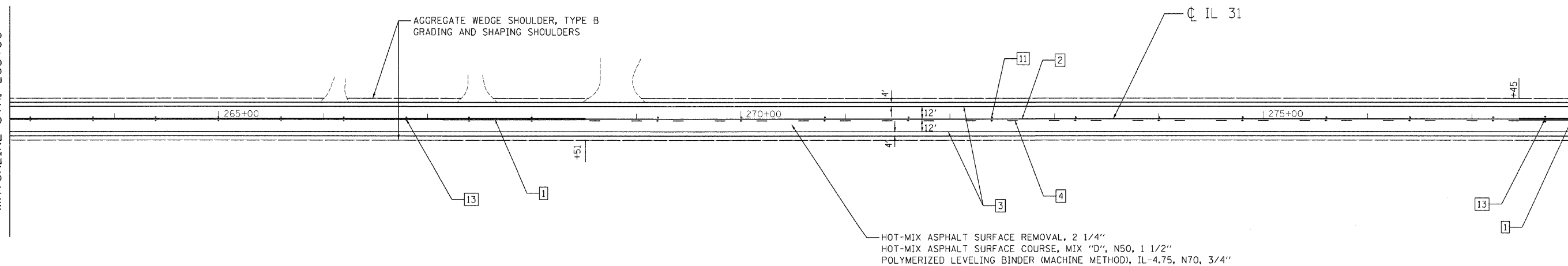


HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT  
TEMPORARY RAMP



MATCHLINE STA. 263+00

MATCHLINE STA. 278+00  
SEE SHEET 11



HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT  
TEMPORARY RAMP

FILE NAME: s:\n\proj\33265\33265\_19\design\p\road\asph\plan\33265\_19\_Prop06.dgn

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CONSULTING ENGINEERS  
6507 North Cumberland Avenue, Suite 402  
Chicago, Illinois 60656  
Tel. 773.775.4009 Fax 773.775.4014

USER NAME = oiau	DESIGNED - NT	REVISED -
PLOT SCALE = 50.0000' / IN.	DRAWN - NT	REVISED -
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	DATE - 4/22/09	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

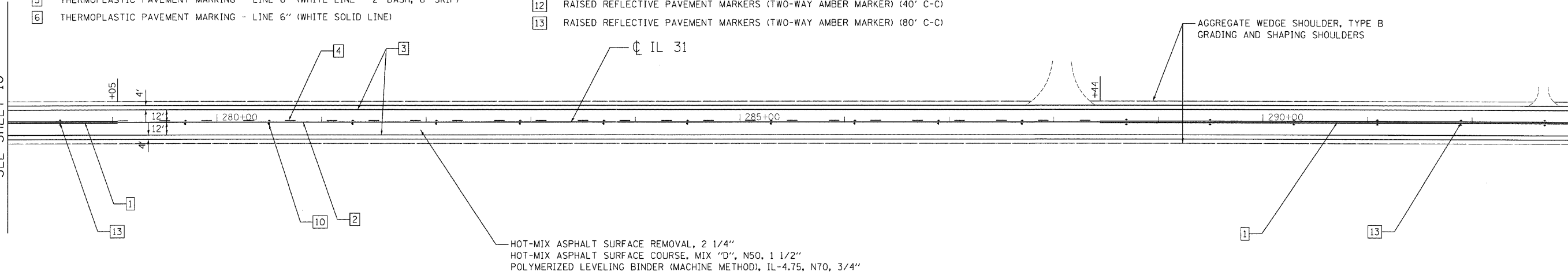
**IL 31  
JOHNSBURG ROAD TO US 12 (TYRON GROVE ROAD)  
PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**  
SCALE: 1"=50' SHEET NO. 10 OF 27 SHEETS STA. 248+00 TO STA. 278+00

F.A.P. RTE. 336	SECTION 111 R-RS	COUNTY MCHENRY	TOTAL SHEETS 27	SHEET NO. 10
CONTRACT NO. 60H46			ILLINOIS FED. AID PROJECT	

**LEGEND:**

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

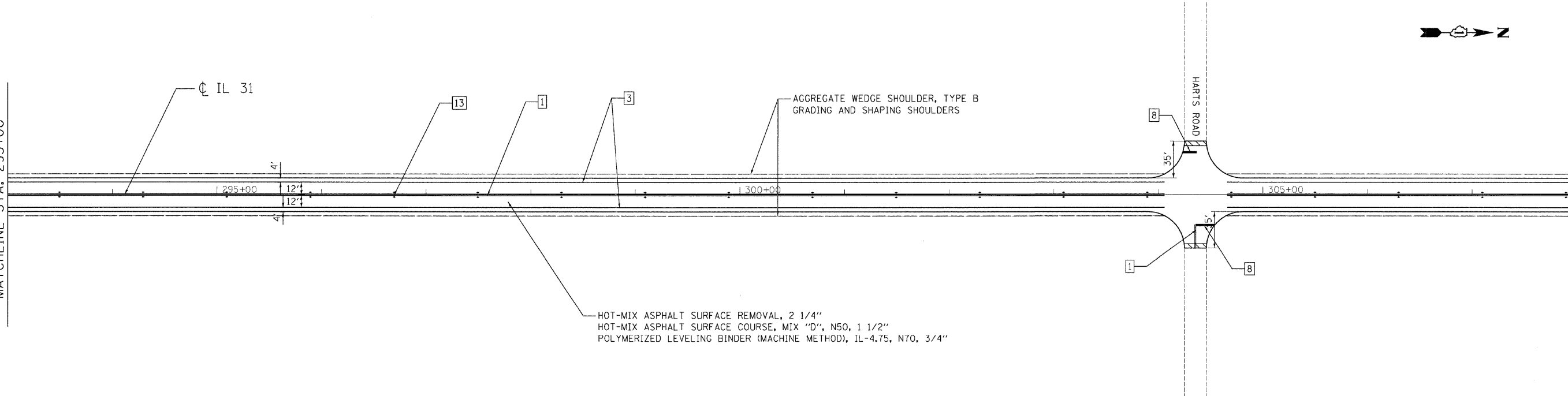
MATCHLINE STA. 278+00  
SEE SHEET 10



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

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT  
 TEMPORARY RAMP

MATCHLINE STA. 293+00



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

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT  
 TEMPORARY RAMP

FILE NAME: c:\p\03366\3366\_19\Drawings\Proposed\plan\3366\_19-Prop07.dgn

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CONSULTING ENGINEERS  
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Chicago, Illinois 60658  
Tel. 773.775.4009 Fax 773.775.4014

USER NAME = alau	DESIGNED - NT	REVISED -
PLOT SCALE = 50.0000' / IN.	DRAWN - NT	REVISED -
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	DATE - 4/22/09	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

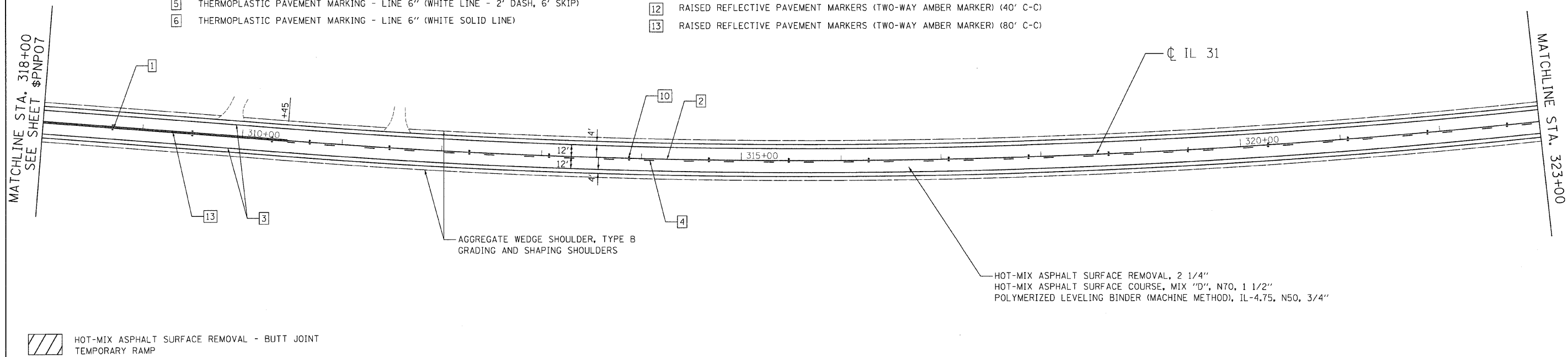
**IL 31  
JOHNSBURG ROAD TO US 12 (TYRON GROVE ROAD)  
PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET NO. 11 OF 27 SHEETS STA. 278+00 TO STA. 308+00

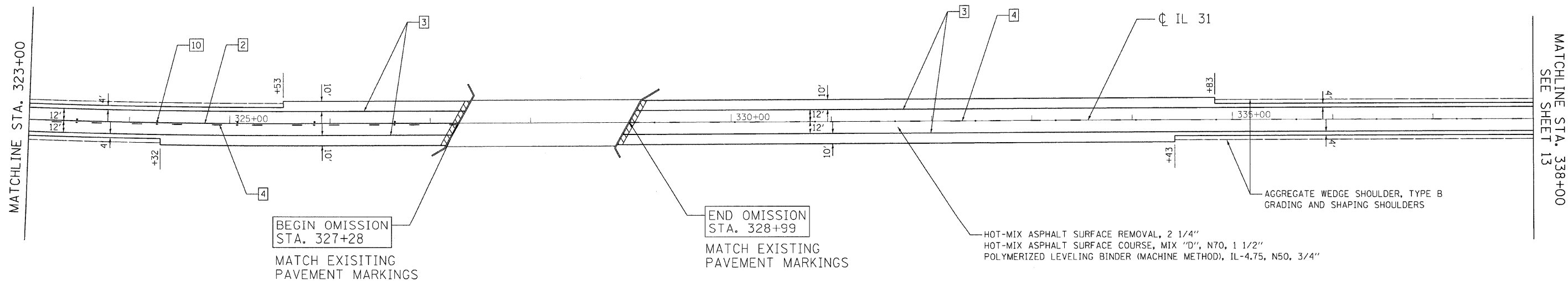
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	111 R-RS	MCHENRY	27	11
CONTRACT NO. 60H46			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

**LEGEND:**

- |   |  |
|---|--|
| 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE 11" C-C)   | 7 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW LINE)              |
| 2 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE)  | 8 THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP LINE)          |
| 3 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE SOLID LINE)   | 9 THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.)          |
| 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) | 10 RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY AMBER MARKER) (40' C-C) |
| 5 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE LINE - 2' DASH, 6' SKIP)  | 11 RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY AMBER MARKER) (80' C-C) |
| 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE)   | 12 RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER MARKER) (40' C-C) |
|   | 13 RAISED REFLECTIVE PAVEMENT MARKERS (TWO-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: c:\pwork\3368\_13\design\proposed\plan\3368\_13\_P-Prop08.dgn

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 CONSULTING ENGINEERS  
 5507 North Cumberland Avenue, Suite 402  
 Chicago, Illinois 60655  
 Tel. 773.775.4009 Fax 773.775.4014

USER NAME = oia	DESIGNED - NT	REVISED -
PLOT SCALE = 50,0000' / IN.	DRAWN - NT	REVISED -
PLOT DATE = 4/20/2009	CHECKED - WBL	REVISED -
	DATE - 4/22/09	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**IL 31  
 JOHNSBURG ROAD TO US 12 (TYRON GROVE ROAD)  
 PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**

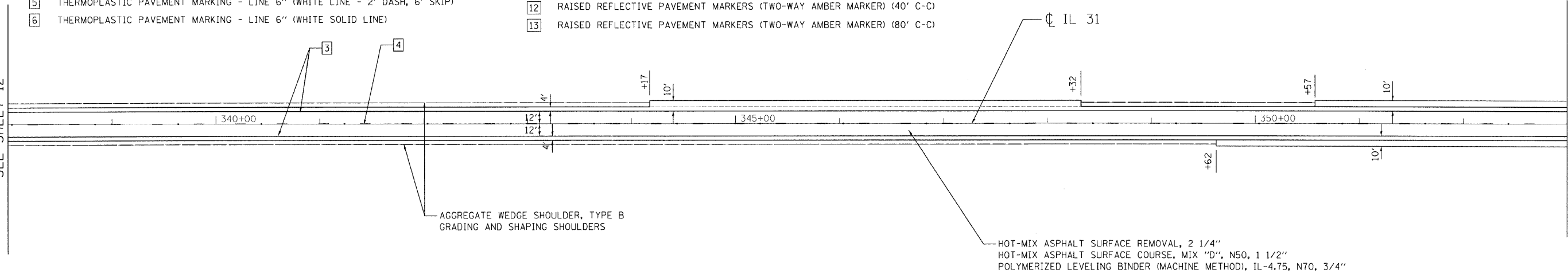
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F.A.P. RTE. 336	SECTION 111 R-RS	COUNTY MCHENRY	TOTAL SHEETS 27	SHEET NO. 12
CONTRACT NO. 60H46				FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT

**LEGEND:**

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

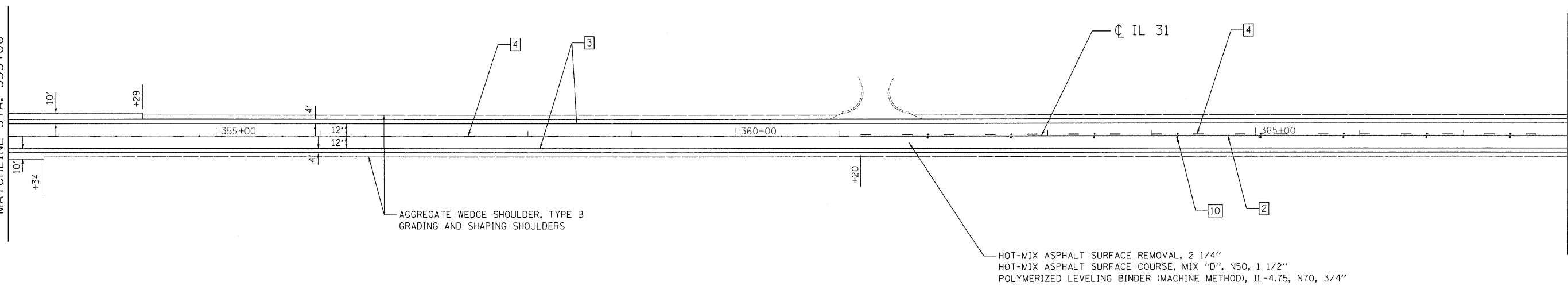
MATCHLINE STA. 338+00  
SEE SHEET 12



MATCHLINE STA. 353+00

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT  
TEMPORARY RAMP

MATCHLINE STA. 353+00



MATCHLINE STA. 368+00  
SEE SHEET 14

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT  
TEMPORARY RAMP

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5507 North Cumberland Avenue, Suite 402  
Chicago, Illinois 60656  
Tel. 773.775.4009 Fax 773.775.4014

USER NAME = elau	DESIGNED - NT	REVISED -
PLOT SCALE = 50.0000' / IN.	DRAWN - NT	REVISED -
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	DATE - 4/22/09	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

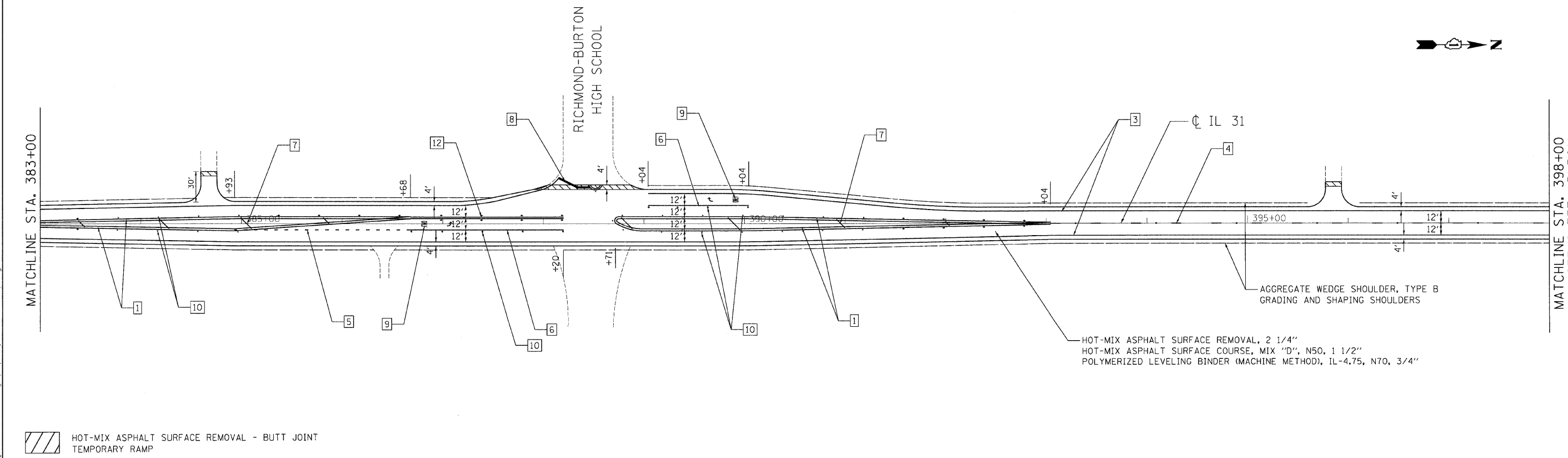
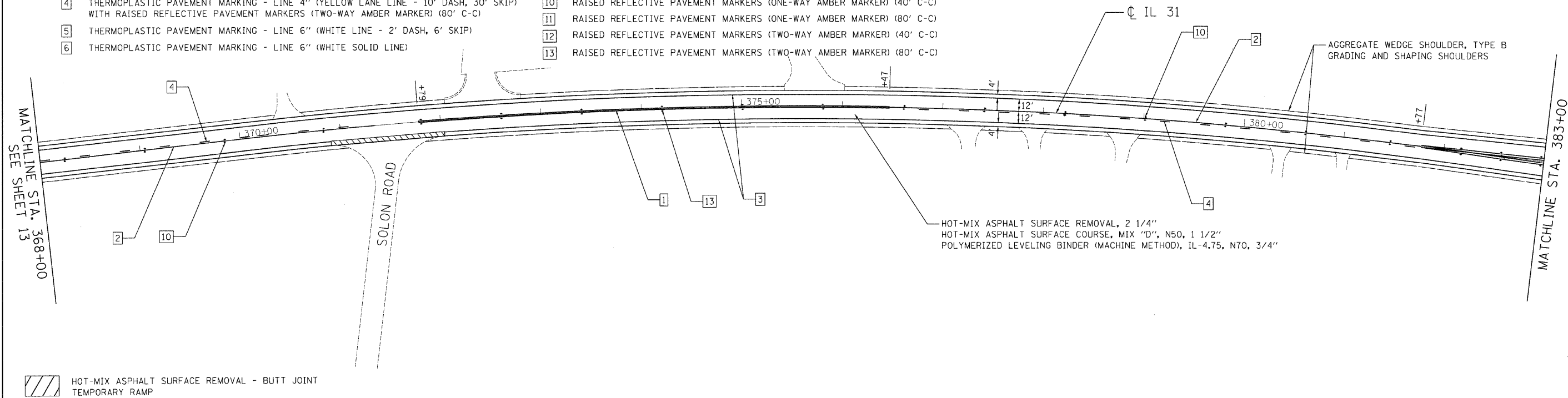
**IL 31  
JOHNSBURG ROAD TO US 12 (TYRON GROVE ROAD)  
PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET NO. 13 OF 27 SHEETS STA. 338+00 TO STA. 368+00

F.A.P. RTE. 336	SECTION 111 R-RS	COUNTY MCHENRY	TOTAL SHEETS 27	SHEET NO. 13
FED. ROAD DIST. NO. 1				ILLINOIS FED. AID PROJECT
CONTRACT NO. 60H46				

**LEGEND:**

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



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 5507 North Cumberland Avenue, Suite 402  
 Chicago, Illinois 60656  
 Tel. 773.775.4009 Fax 773.775.4014

USER NAME = alou	DESIGNED - NT	REVISED -
PLOT SCALE = 50.0000' / IN.	DRAWN - NT	REVISED -
PLOT DATE = 4/20/2009	CHECKED - WBL	REVISED -
	DATE - 4/22/09	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

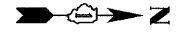
**IL 31**  
**JOHNSBURG ROAD TO US 12 (TYRON GROVE ROAD)**  
**PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**  
 SCALE: 1"=50' SHEET NO. 14 OF 27 SHEETS STA. 368+00 TO STA. 398+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60H46			FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT	

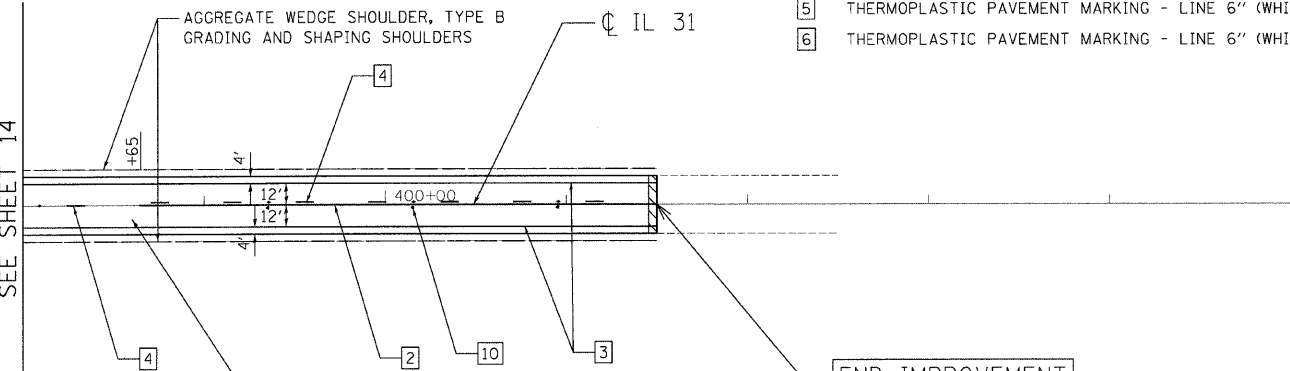
LEGEND:

- 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE 11" C-C)
- 2 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE)
- 3 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE 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 LINE - 2' DASH, 6' SKIP)
- 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE)

- 7 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW LINE)
- 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 (ONE-WAY AMBER MARKER) (80' C-C)
- 12 RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER MARKER) (40' C-C)
- 13 RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER MARKER) (80' C-C)



MATCHLINE STA. 398+00  
SEE SHEET 14



END IMPROVEMENT  
STA. 401+50  
MATCH EXISTING  
PAVEMENT MARKINGS

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

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT  
TEMPORARY RAMP

FILE NAME = s:\proj\33681\33681\19\delays\propose\plan\33681\_19\_Prop1.dgn

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

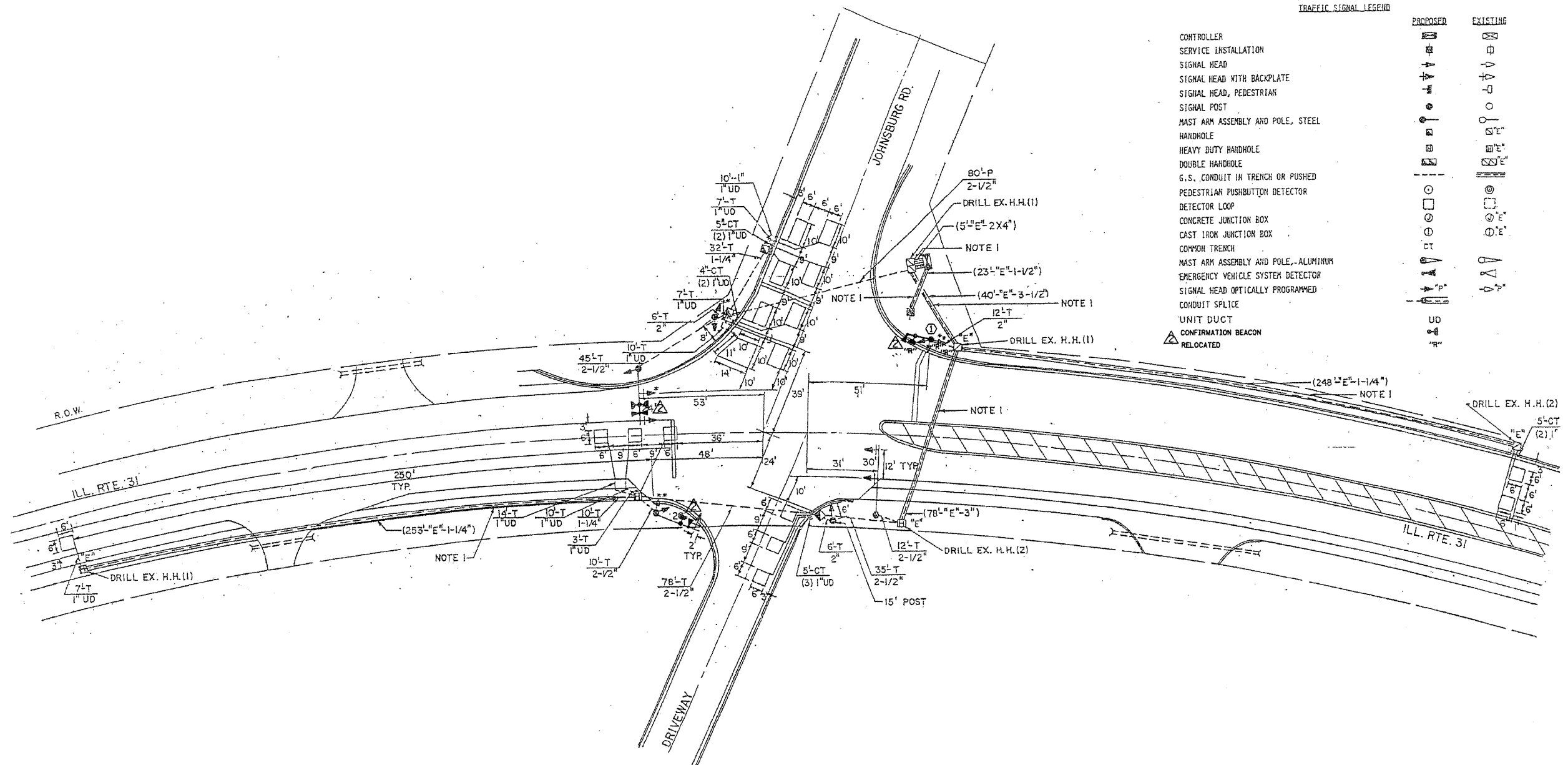
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PLOT DATE = 4/20/2009	DATE - 4/22/09	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL 31  
JOHNSBURG ROAD TO US 12 (TYRON GROVE ROAD)  
PROPOSED ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1"=50'    SHEET NO. 15 OF 27 SHEETS    STA. 398+00 TO STA. 405+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	111 R-RS	MCHENRY	27	15
FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				CONTRACT NO. 60H46



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]
G.S. 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 DETECTOR	[Symbol]	[Symbol]
SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
CONDUIT SPLICE	[Symbol]	[Symbol]
UNIT DUCT	[Symbol]	[Symbol]
CONFIRMATION BEACON	[Symbol]	[Symbol]
RELOCATED	[Symbol]	[Symbol]

REPLACE ALL DETECTOR LOOPS AS SHOWN  
(WITHIN PROJECT LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
86600600	770	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME: s:\projects\3368\3368.dwg; USER: jlp; DATE: 4/22/09

**CG** Ciorba Group, Inc.  
CONSULTING ENGINEERS  
5507 North Cumberland Avenue, Suite 402  
Chicago, Illinois 60655  
Tel. 773.775.4009 Fax 773.775.4014

USER NAME = jlp	DESIGNED - NT	REVISED -
PLOT SCALE = 1/8" = 1' IN.	DRAWN - NT	REVISED -
PLOT DATE = 4/20/2009	CHECKED - WBL	REVISED -
	DATE - 4/22/09	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

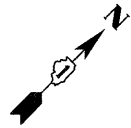
**IL 31  
JOHNSBURG ROAD TO US 12 (TYRON GROVE ROAD)  
DETECTOR LOOP REPLACEMENT PLAN**

SCALE: N.T.S. SHEET NO. 16 OF 27 SHEETS STA. TO STA.

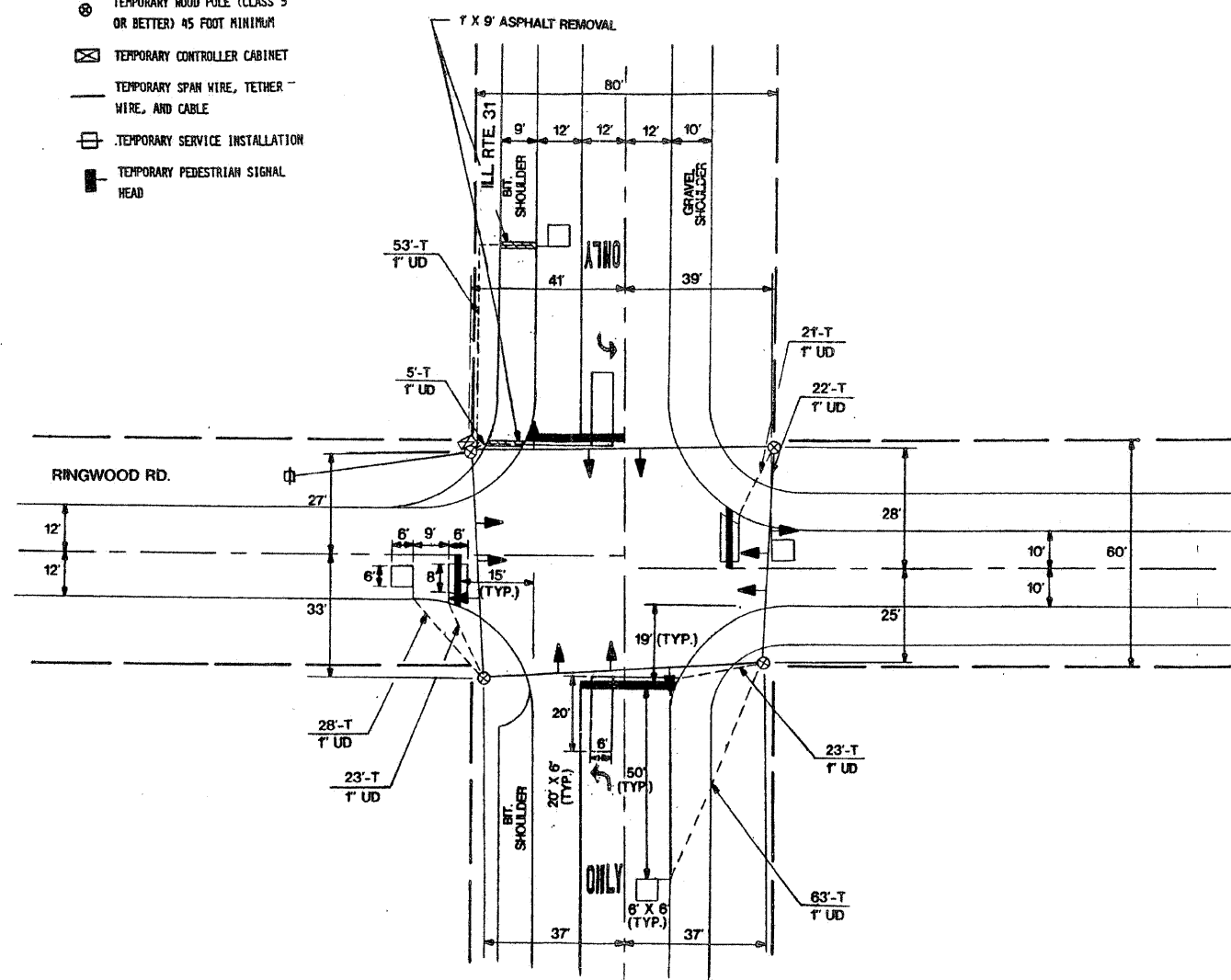
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	111 R-RS	MCHENRY	27	16

CONTRACT NO. 60H46  
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT





- TEMPORARY TRAFFIC SIGNAL LEGEND**
- ← TEMPORARY TRAFFIC SIGNAL HEAD
  - ← SPAN WIRE MOUNTED ORIGINAL LOCATION.
  - ← TEMPORARY TRAFFIC SIGNAL HEAD
  - ← SPAN WIRE MOUNTED SECONDARY LOCATION.
  - ⊕ TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT MINIMUM
  - ☒ TEMPORARY CONTROLLER CABINET
  - TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
  - ☐ TEMPORARY SERVICE INSTALLATION
  - TEMPORARY PEDESTRIAN SIGNAL HEAD



REPLACE ALL DETECTOR LOOPS AS SHOWN  
(WITHIN PROJECT LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
86600600	340	FOOT	DETECTOR LOOP REPLACEMENT

FILE NAME: s:\proj\3386\3386\_19\adms\gr\Signals\3386\_19\_1\loop22.dgn

**Ciorba Group, Inc.**  
CONSULTING ENGINEERS  
6507 North Cumberland Avenue, Suite 402  
Chicago, Illinois 60656  
Tel. 773.775.4000 Fax 773.775.4014

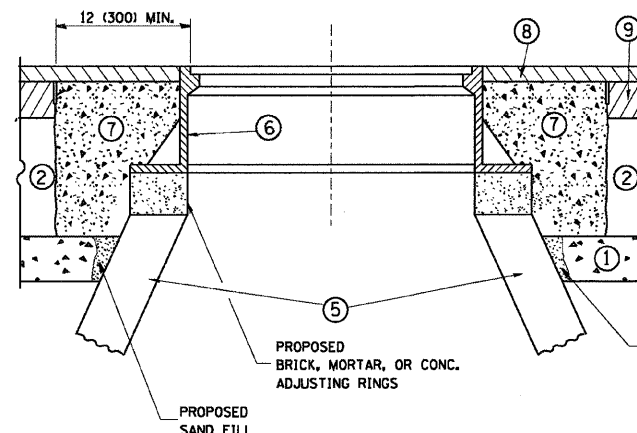
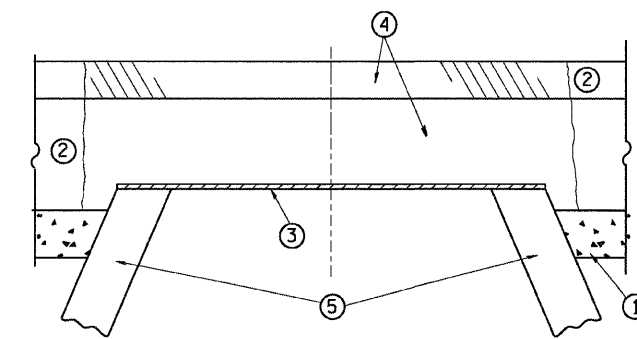
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PLOT DATE = 4/28/2009	DATE - 4/22/09	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL 31  
JOHNSBURG ROAD TO US 12 (TYRON GROVE ROAD)  
DETECTOR LOOP REPLACEMENT PLAN**

SCALE: N.T.S. SHEET NO. 17 OF 27 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	111 R-RS	MCHENRY	27	17
CONTRACT NO. 60H46			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	



**CONSTRUCTION PROCEDURES**

- STAGE 1 (BEFORE PAVEMENT MILLING)**
- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
  - B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
  - C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
  - D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.
- STAGE 2 (AFTER PAVEMENT MILLING)**
- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
  - B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
  - C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS SI CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

**LEGEND**

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

**NOTES:**

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

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

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

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

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

**LOCATION OF STRUCTURES:**

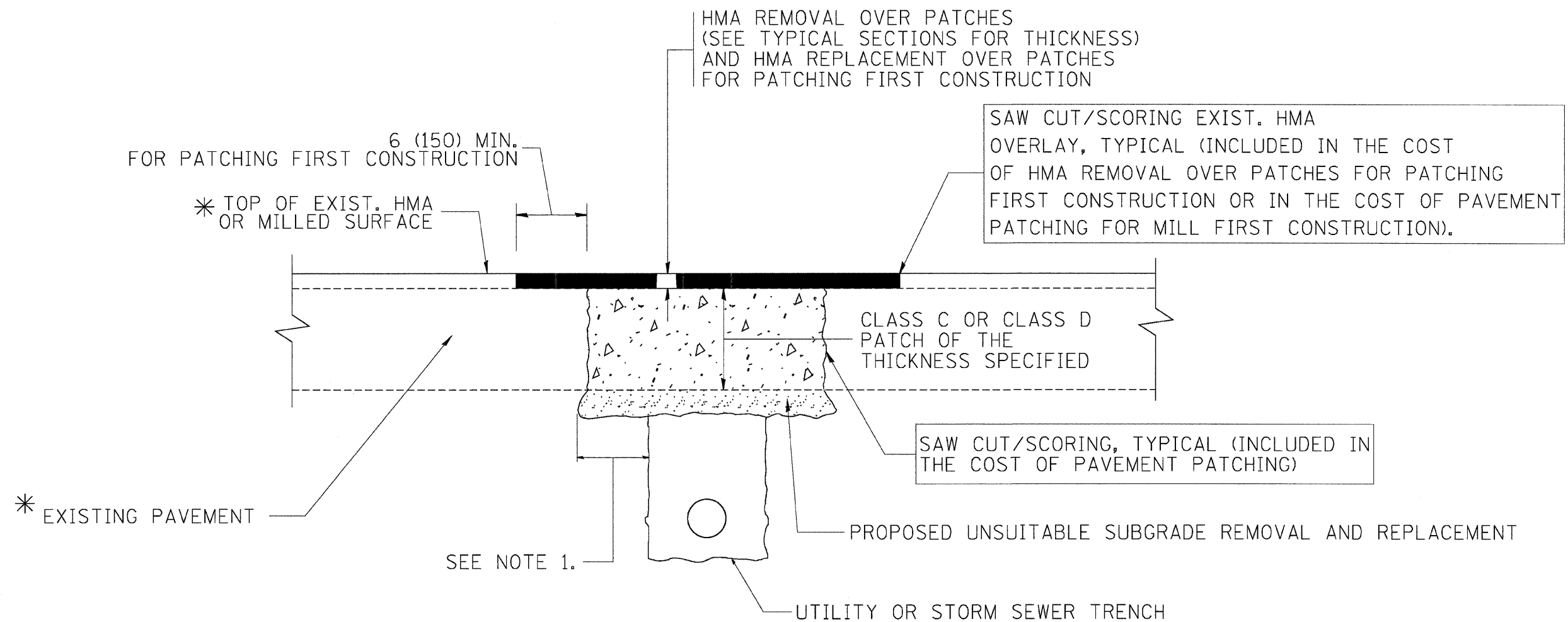
THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

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

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

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = W:\distatd\22x34\bd08.dgn	USER NAME = gaglienabt	DESIGNED - R. SHAH	REVISED - R. SHAH 03-10-95	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING</b>		F.A.P. RTE. 336	SECTION 111 R-RS	COUNTY MCHENRY	TOTAL SHEETS 27	SHEET NO. 18
	PLOT SCALE = 50,0000 ' / IN.	DRAWN -	REVISED - A. ABBAS 03-21-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	CONTRACT NO. 60H46		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - R. WIEDEMAN 05-14-04				TO STA.				
		DATE - 10-25-94	REVISED - R. BORO 01-01-07								



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

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

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

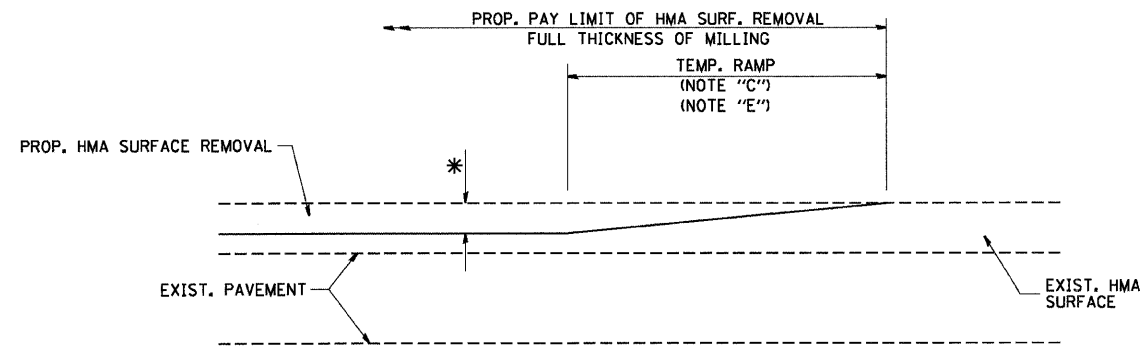
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

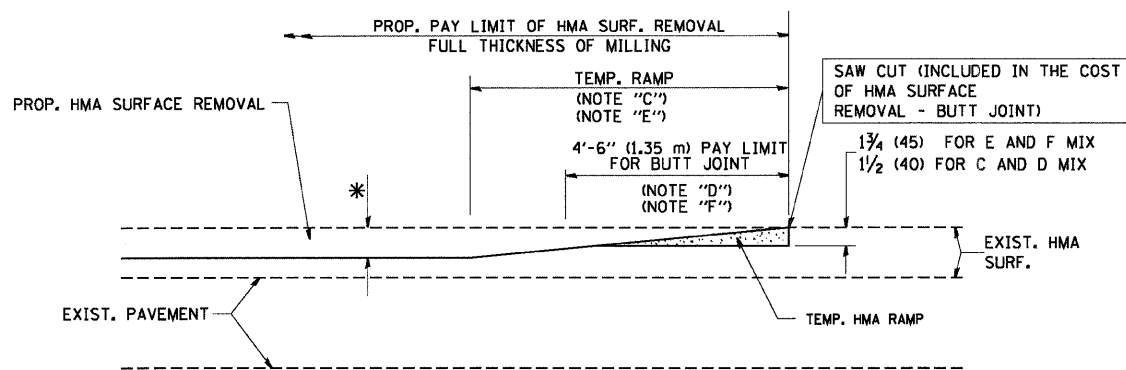
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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	PLOT SCALE = 50,000 / IN.	CHECKED -	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	<b>BD400-04 (BD-22)</b>			
	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - R. BORO 09-04-07		FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT							
			REVISED - K. ENG 10-27-08		CONTRACT NO. 60H46							



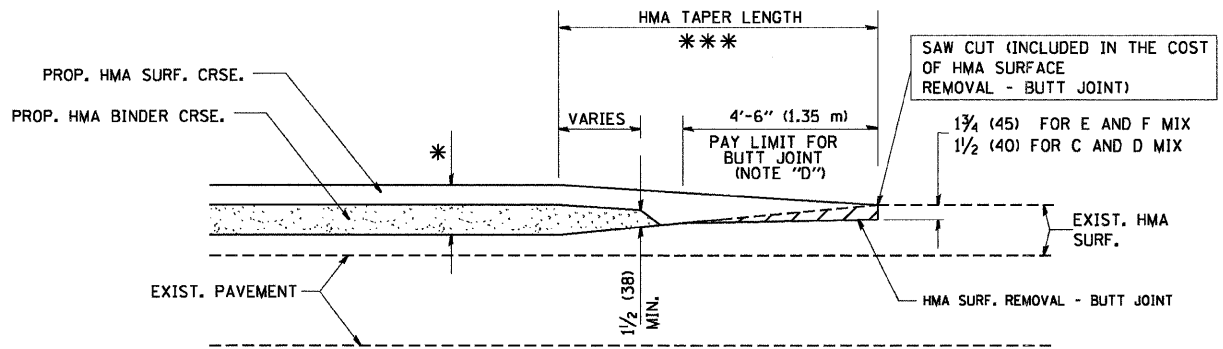
MILLED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1



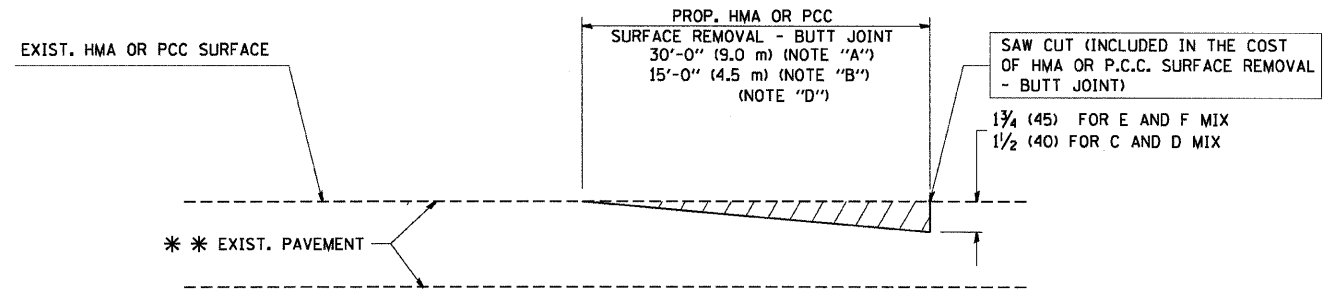
HMA CONSTRUCTED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2  
TYPICAL TEMPORARY RAMP

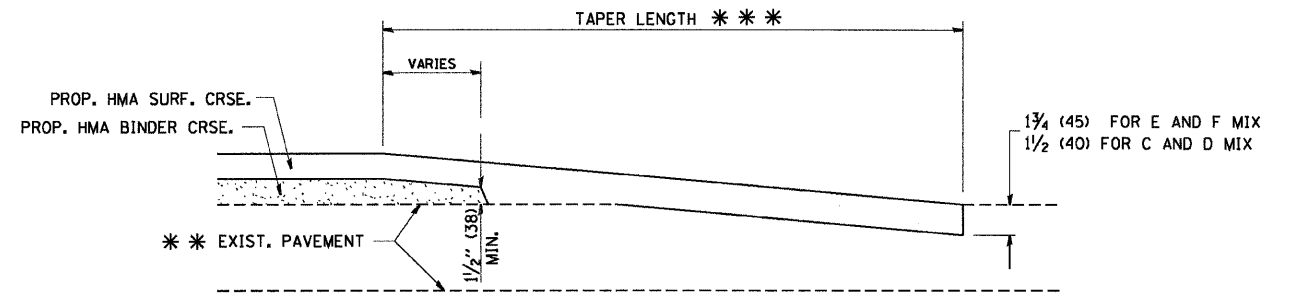


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER  
FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER  
FOR RESURFACING ONLY

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

NOTES

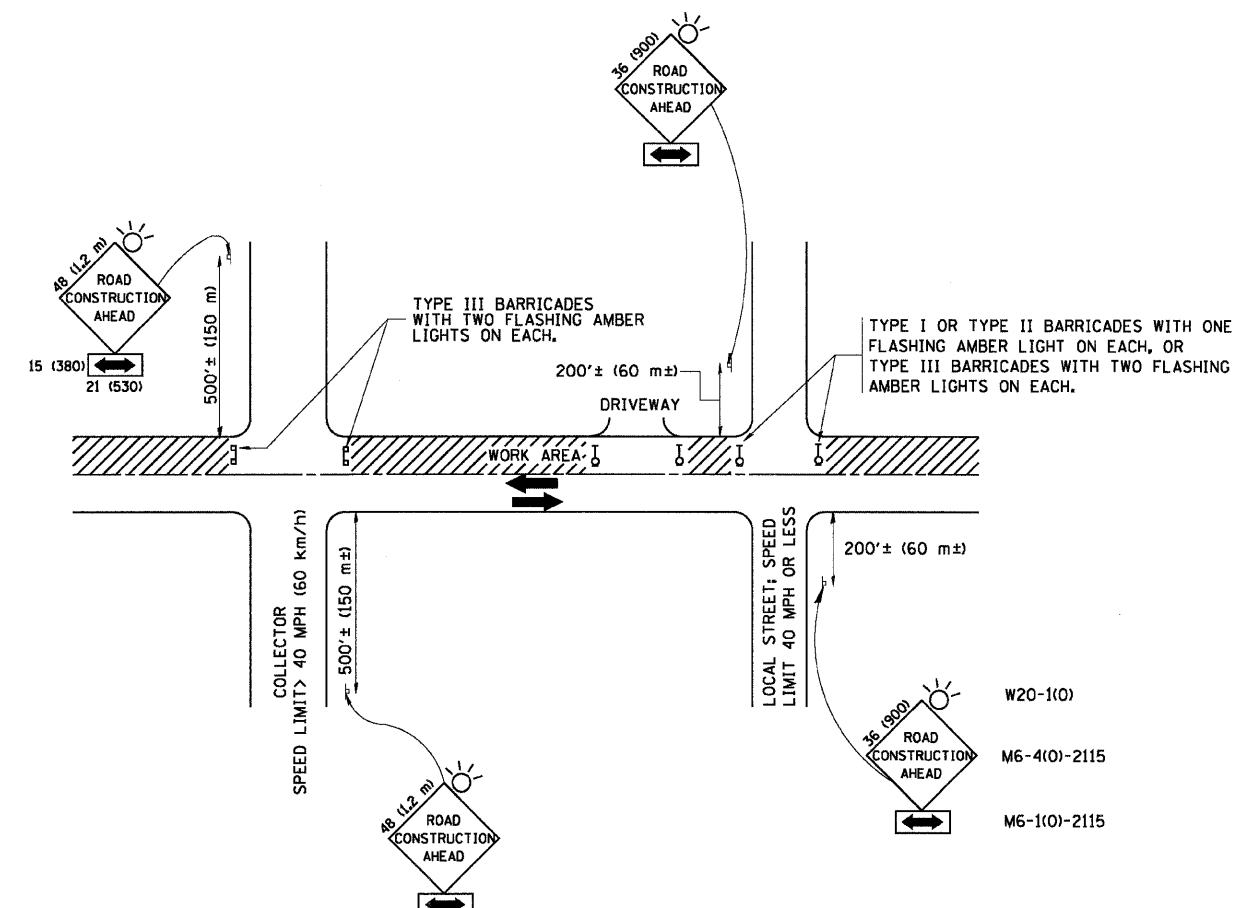
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0"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

FILE NAME = W:\diststd\22x34\ba32.dgn	USER NAME = goglienobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>BUTT JOINT AND HMA TAPER DETAILS</b>		F.A.P. RTE.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED - A. ABBAS 03-21-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	336	111 R-RS	MCHENRY	27	20
		CHECKED -	REVISED - M. GOMEZ 04-06-01				TO STA.	<b>BD400-05 BD32</b>		CONTRACT NO.	60H46	
		DATE - 06-13-90	REVISED - R. BORO 01-01-07					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.

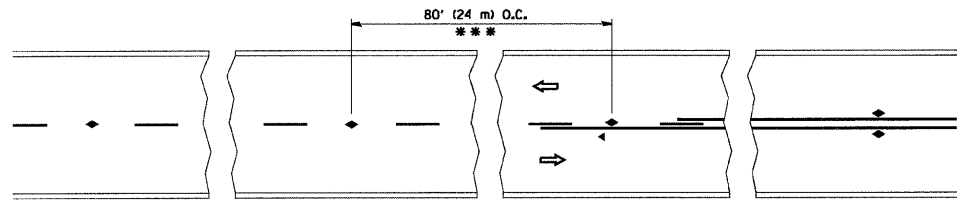
All dimensions are in millimeters (inches) unless otherwise shown.

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		DRAWN -	REVISED - A. HOUSEH 03-06-96
	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

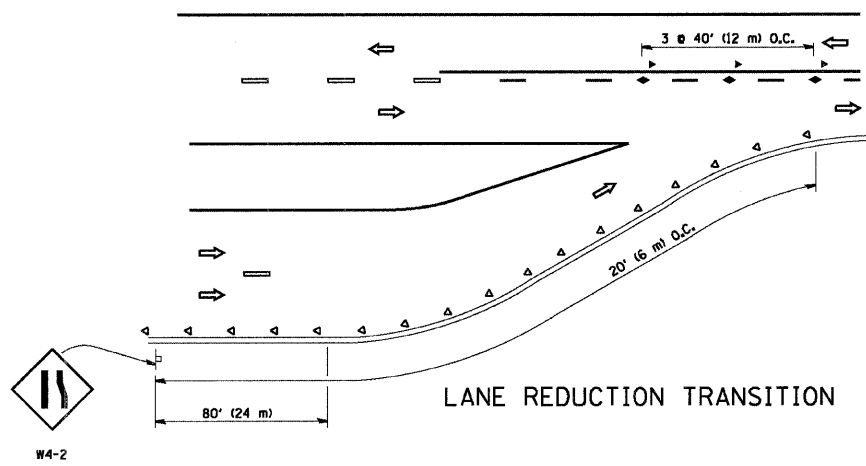
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE. 336	SECTION 111 R-RS	COUNTY MCHENRY	TOTAL SHEETS 27	SHEET NO. 21
TC-10			CONTRACT NO. 60H46	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

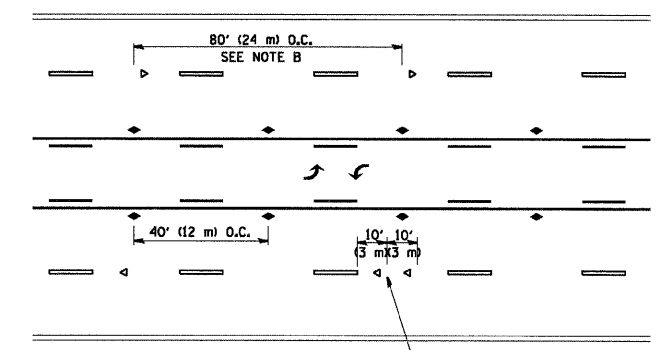


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

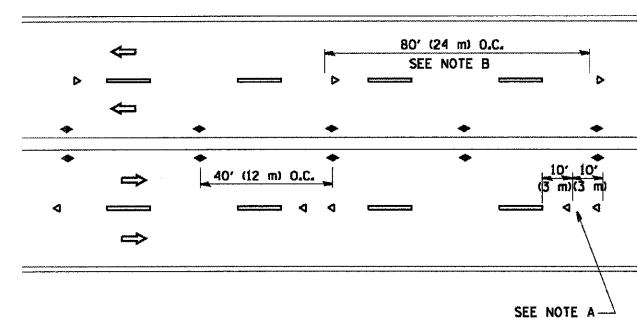
TWO-LANE/TWO-WAY



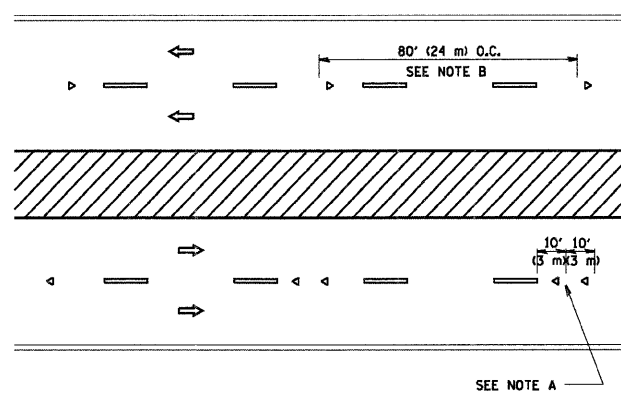
LANE REDUCTION TRANSITION



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

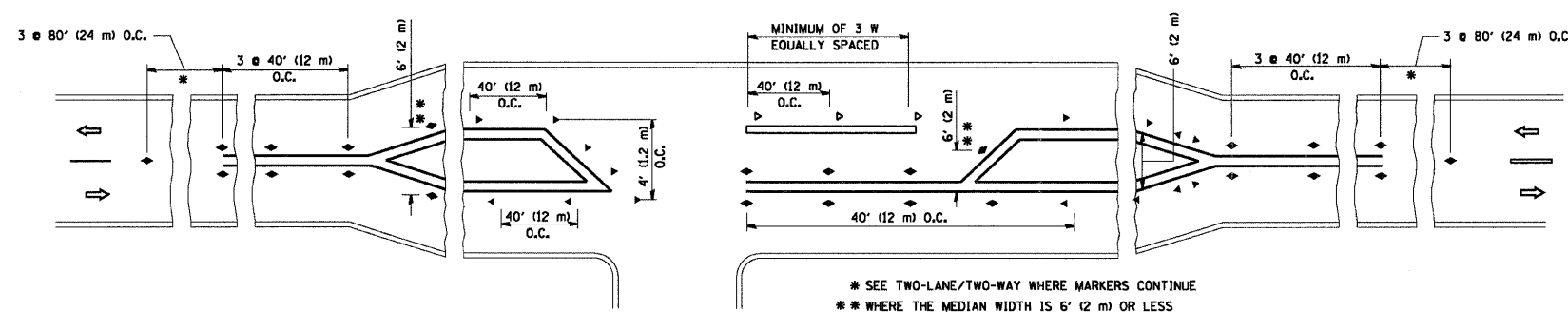
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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.

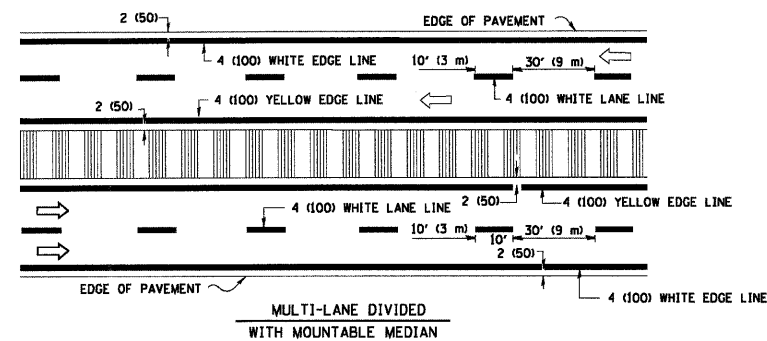
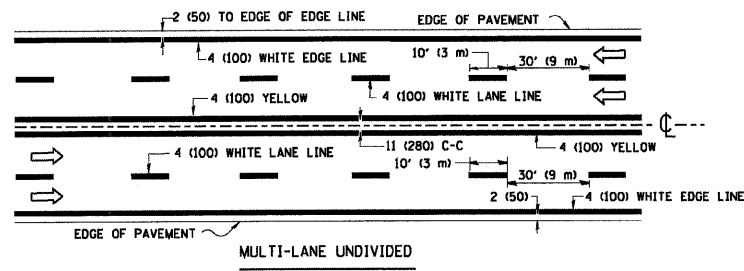
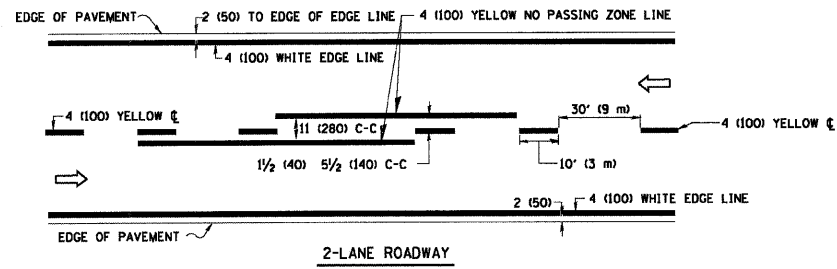


LEFT TURN

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

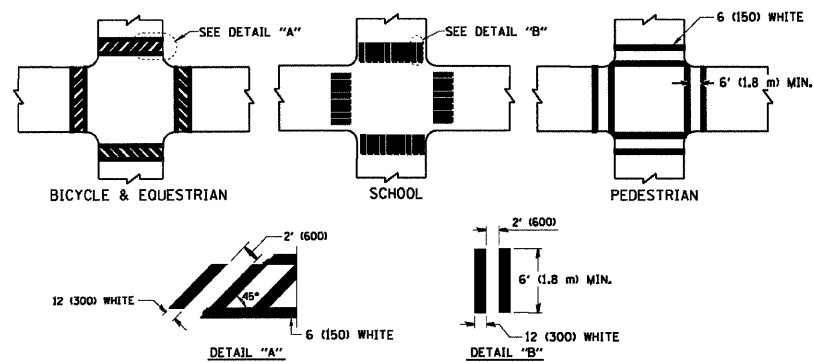
All dimensions are in inches (millimeters) unless otherwise shown.

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	PLOT SCALE = 50.000' / IN.	DRAWN -	REVISED - T. RAMMACHER 03-12-99		<b>RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)</b>		336	111 R-RS	MCHENRY	27	22
PLOT DATE = 1/4/2008	CHECKED -	REVISED - T. RAMMACHER 01-06-00	REVISED -	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TC-11		CONTRACT NO. 60H46		
	DATE -					TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				

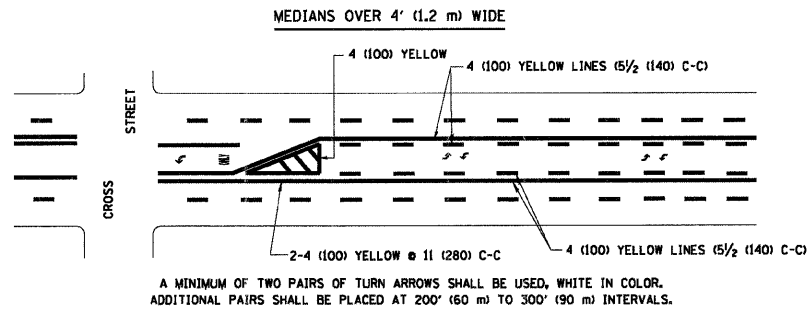
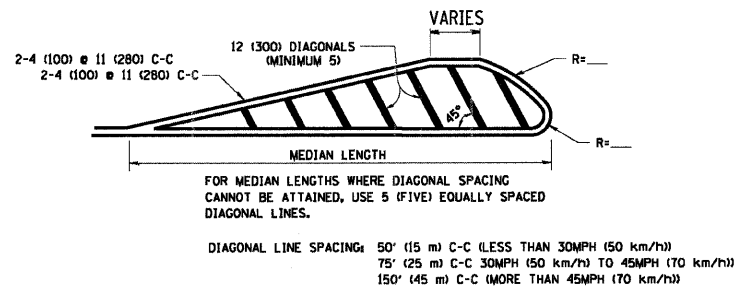
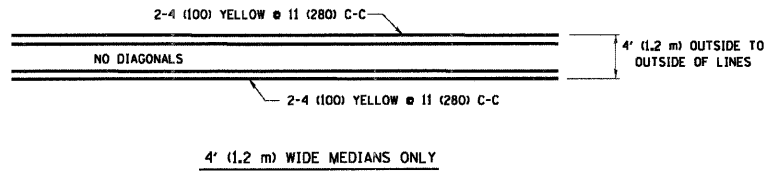


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

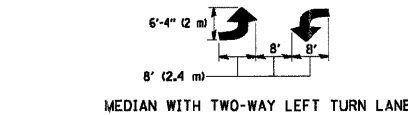
### TYPICAL LANE AND EDGE LINE MARKING



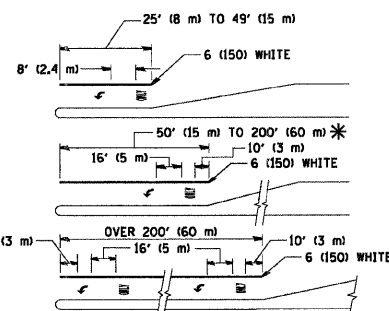
### TYPICAL CROSSWALK MARKING



### TYPICAL PAINTED MEDIAN MARKING

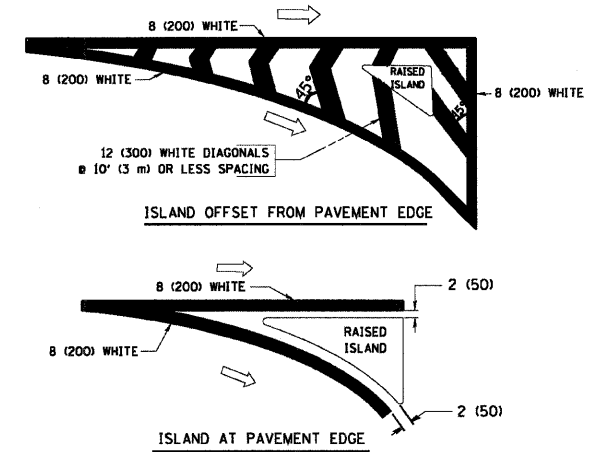


### TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
 AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
 \* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

### TYPICAL TURN LANE MARKING

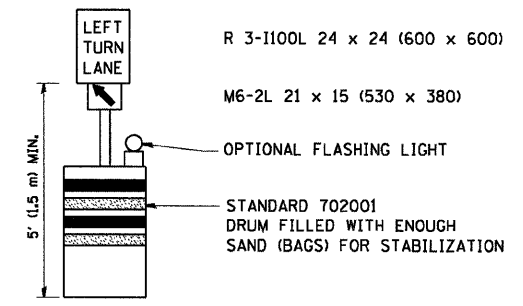
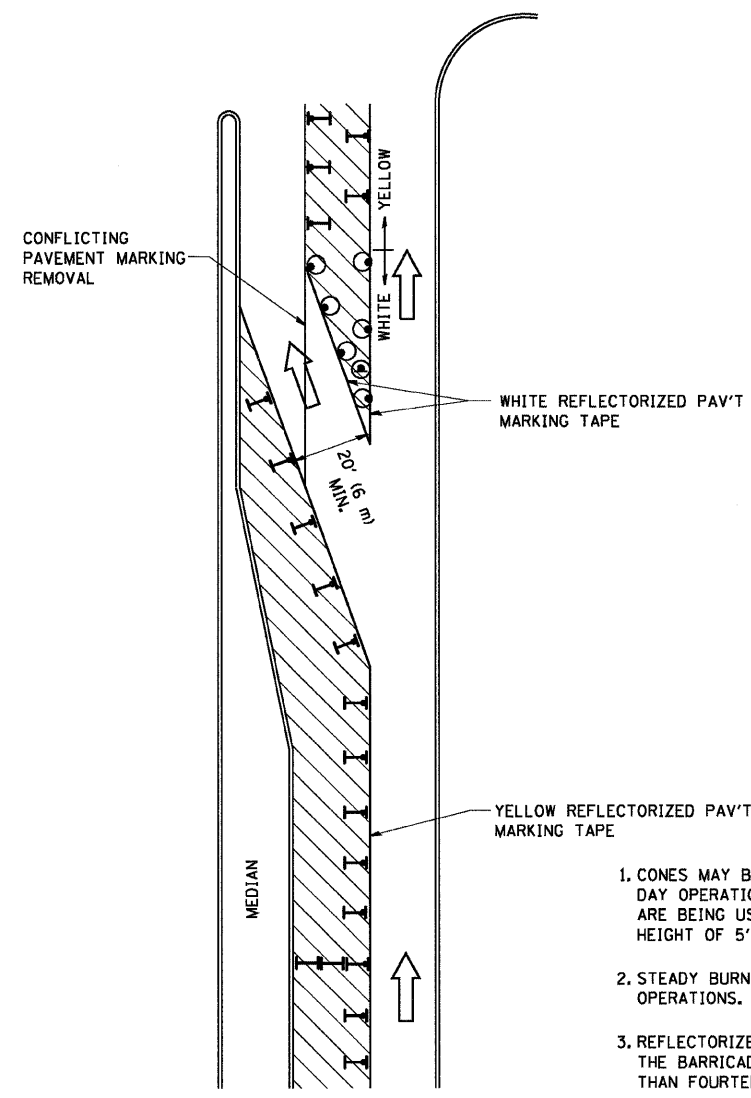


### TYPICAL ISLAND MARKING

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 18" (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 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" 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 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

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

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



**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.

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

**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

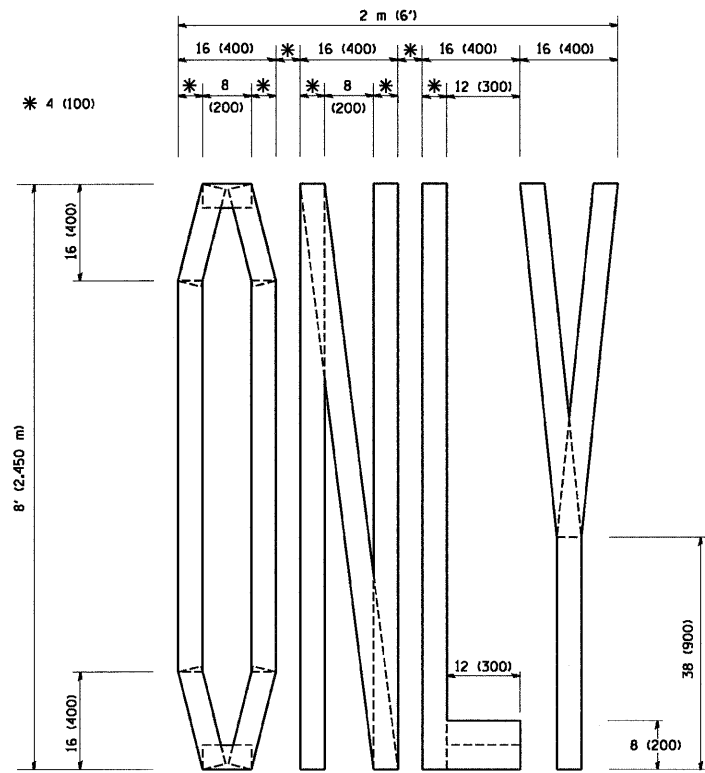
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		DRAWN -	REVISED - A. HOUSEH 11-07-95
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - A. HOUSEH 10-12-96
	PLOT DATE = 1/4/2008	DATE -	REVISED -T. RAMMACHER 01-06-00

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

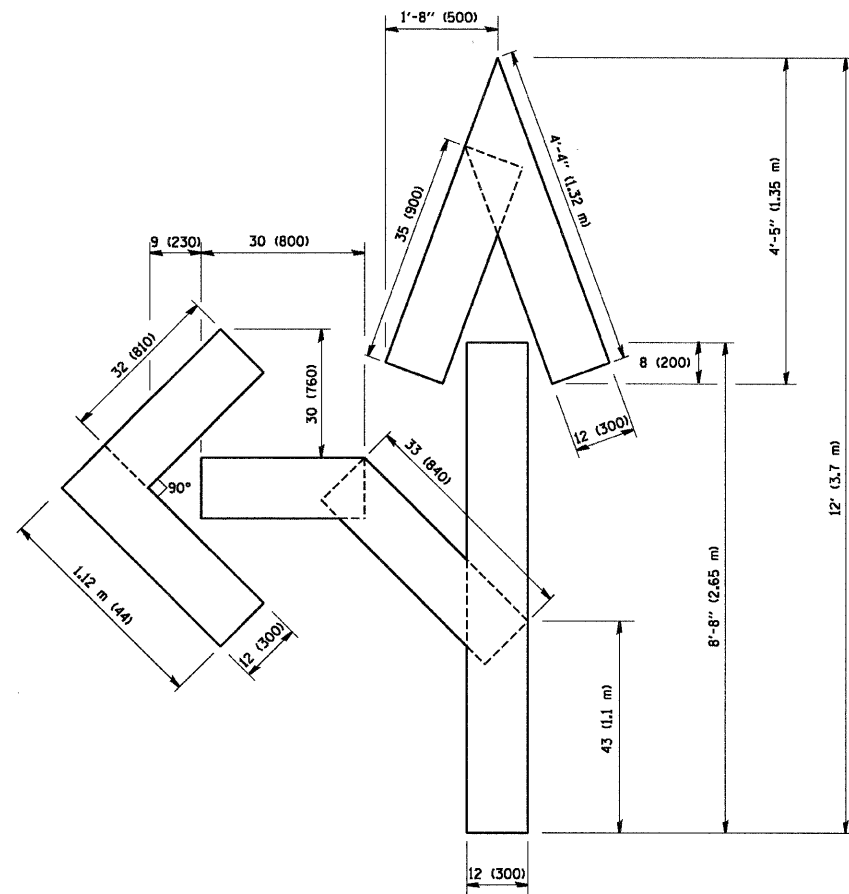
TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	111 R-RS	MCHENRY	27	24
<b>TC-14</b>		<b>CONTRACT NO. 60H46</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

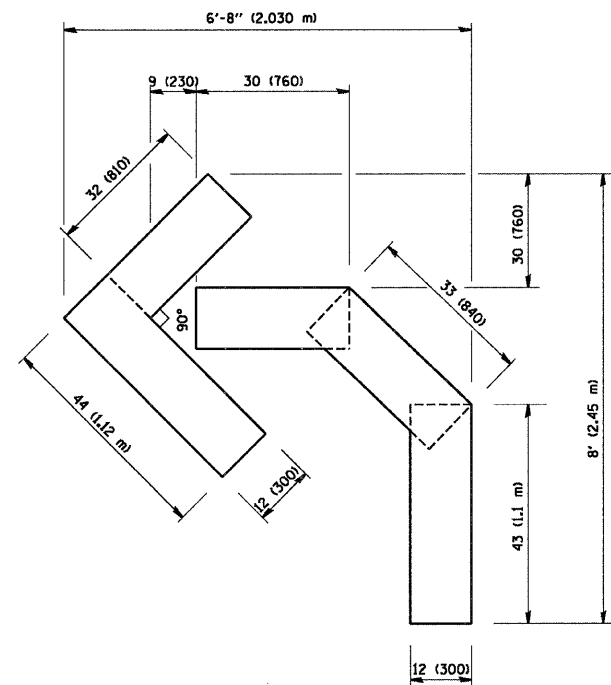




QUANTITY  
4 (100) LINE = 64.1 ft. (19.7 m)  
21.1 sq. ft. (1.97 sq. m)



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.

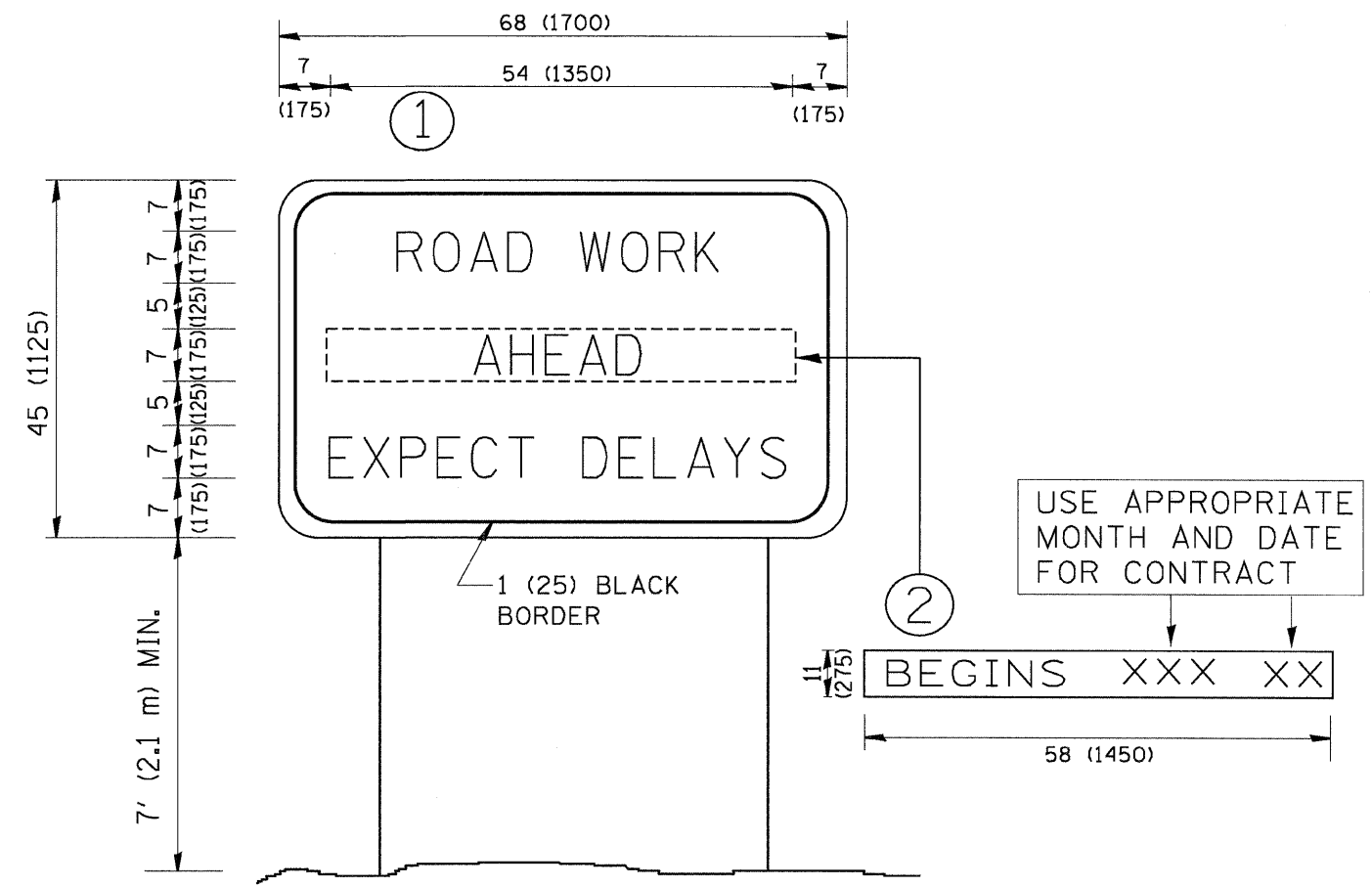
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		DRAWN -	REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

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.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	111 R-RS	MCHENRY	27	25
TC-16			CONTRACT NO. 60H46	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**NOTES:**

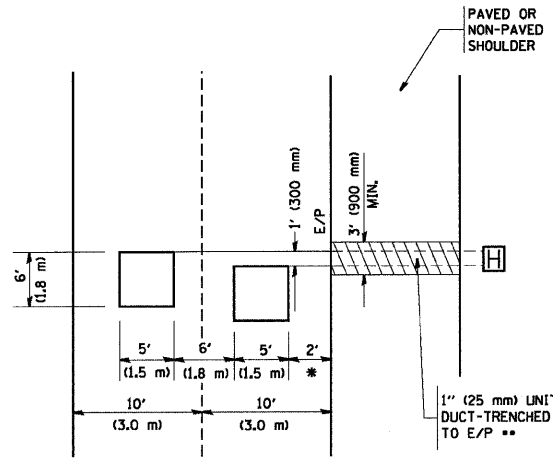
1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
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:\diststd\22x34\to22.dgn	USER NAME = geglienobt	DESIGNED - DRAWN -	REVISED - REVISED -	R. MIRS 09-15-97 R. MIRS 12-11-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ARTERIAL ROAD INFORMATION SIGN</b>		F.A.P. RTE. 336	SECTION 111 R-RS	COUNTY MCHENRY	TOTAL SHEETS 27	SHEET NO. 26
PLOT SCALE = 50,000' / IN.	CHECKED -	REVISED -	T. RAMMACHER 02-02-99	SCALE: NONE		SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	<b>TC-22</b>		CONTRACT NO.	60H46
PLOT DATE = 1/4/2008	DATE -	REVISED -	C. JUCIUS 01-31-07	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.

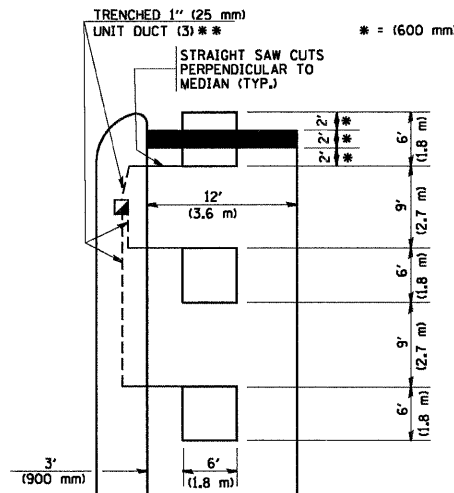


\* = (600 mm)

\*\* 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)**

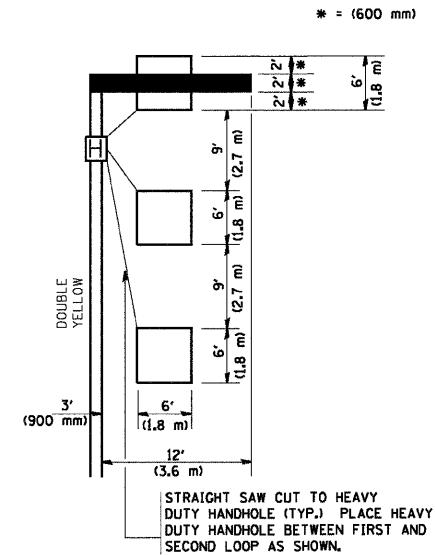
HANDHOLE LOCATION MAY  
VARY DEPENDING ON GEOMETRICS  
AND DESIGN OF TRAFFIC SIGNALS.  
HEAVY-DUTY HANDHOLES TO BE  
USED WHEN THE MEDIAN IS  
MOUNTABLE. REFER TO STANDARD  
814001 TO ENSURE THAT HANDHOLE  
FITS IN MEDIAN.



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

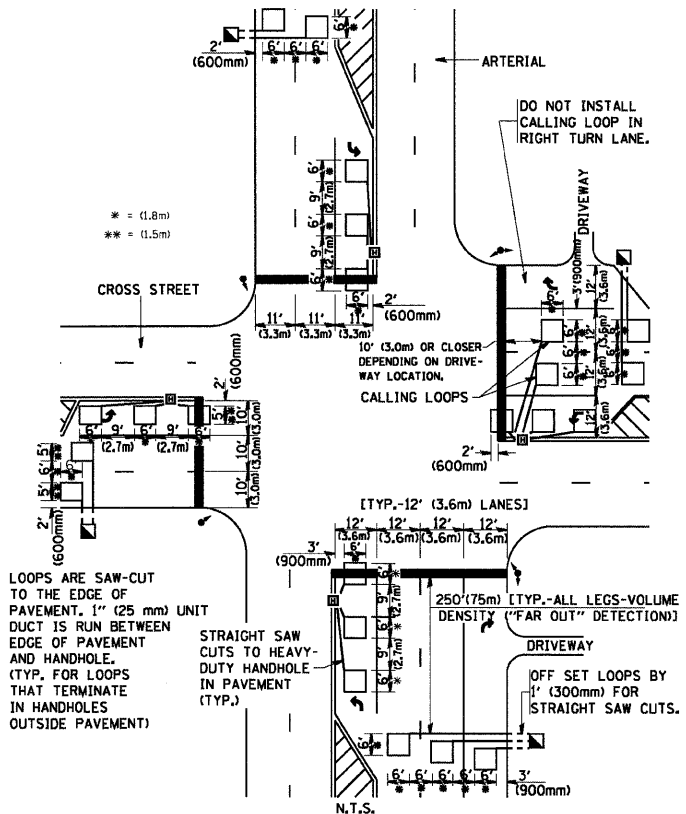
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO  
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



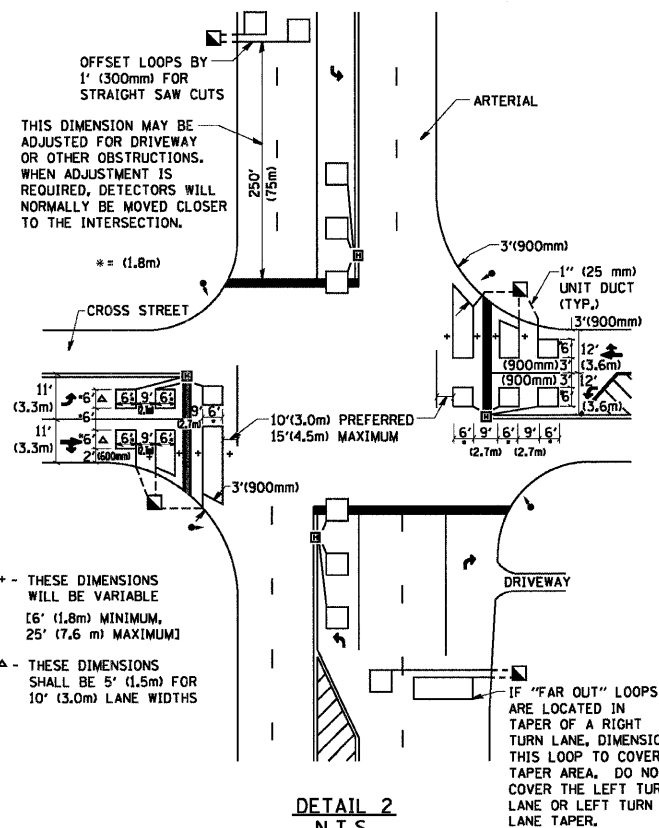
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO  
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**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 DIMENSIONS 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:\dststd\22x34\ts07.dgn	USER NAME = geglennob	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING</b>				F.A.P. RTE. 336	SECTION 111 R-RS	COUNTY MCHENRY	TOTAL SHEETS 27	SHEET NO. 27
PLOT SCALE = 5/8" = 1' / IN.	PLOT DATE = 1/4/2008	DRAWN -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	<b>TS-07</b>		CONTRACT NO. 60H46			
		CHECKED - R.K.F.	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT								
		DATE	REVISED -										