### STATE OF ILLINOIS

# DEPARTMENT OF TRANSPORTATION

**DIVISION OF HIGHWAYS** 

FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT LOCATED IN THE

VILLAGES OF LANSING AND LYNWOOD

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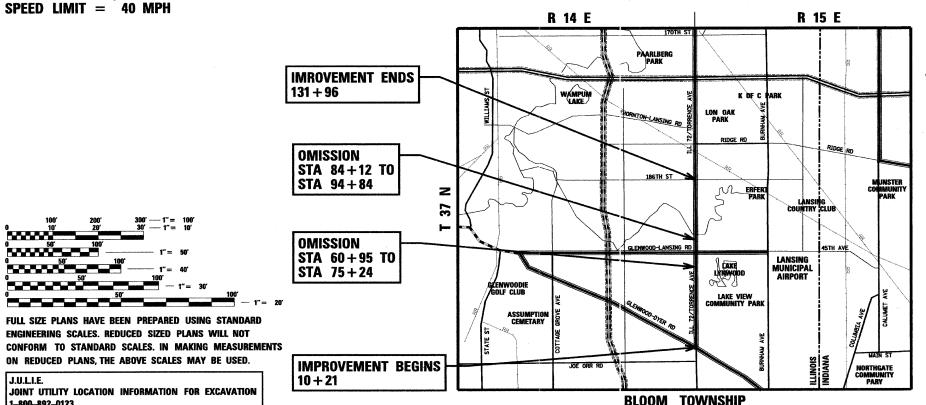
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# **PROPOSED HIGHWAY PLANS**

FAU ROUTE 2937: ILL 83 (TORRENCE AVE) 186TH STREET TO GLENWOOD-DYER ROAD SECTION: 3077-RS **RESURFACING (3P) COOK COUNTY** 

C-91-606-09

2007 ADT = 13,900 VEHICLES PER DAY



1-800-892-0123

PROJECT ENGINEER: MICHELLE AQUINO

PROJECT MANAGER: LONG TRAN

(847) 705-4606

(847) 705-4232

GROSS LENGTH OF PROJECT = 12175 FT. = 2.31 MILES NET LENGTH OF PROJECT = 9674 FT. = 1.83 MILES

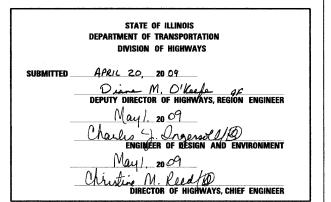
**LOCATION MAP** 

NOT TO SCALE

2937 3077-RS соок FED. ROAD DIST. NO. 1 ILLINOIS CONTRACT NO. 60H36

### D-91-606-09







200 West Front Street Wheaton, #60187

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

**CONTRACT NO. 60H36** 

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10 - 12.	DETECTOR LOOP REPLACEMENT PLANS
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16.	BUTT JOINT AND HMA TAPER DETAILS
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18.	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
19.	DISTRICT ONE - TYPICAL PAVEMENT MARKINGS
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21.	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
22.	ARTERIAL ROAD / INFORMATION SIGN
23.	DRIVEWAY ENTRANCE SIGNING
24.	DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

### STATE STANDARDS

STANDARD	NO. DESCRIPTION
000001-05	SYMBOLS, ABRIEVIATIONS AND PATTERNS
442201-03	CLASS C AND D PATCHES
482011-03	HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
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 $\geq$ 45 MPH
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701501-05	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION

701901-01 TRAFFIC CONTROL DEVICES

- 1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL J.U.L.I.E. AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
- 2. ALL PAVEMENT MARKING SHALL BE PLACED THROUGHOUT THE PROJECT ACCORDING TO DISTRICT 1 TYPICAL PAVEMENT MARKING.
- 3. ALL HMA PATCHING SHALL BE CLASS D.
- 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. ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
- 6. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.
- 7. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
- 8. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 9. DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 10. FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.
- 11. THE RESIDENT ENGINEER SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847)705-4151 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.

### **GENERAL NOTES**

- 12. THE ENGINEER SHALL CONTACT MS. PATRICE HARRIS. TRAFFIC FIELD ENGINEER, AT (708) 897-9800 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE START OF THIS PROJECT SO THAT EXACT STATIONING OF NO PASSING ZONES AND OTHER PERMANENT PAVEMENT MARKINGS MAY BE ESTABLISHED.
- 13. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABBUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- 14. 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.
- 15. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 16. DOUBLE LAND MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL FOR TYPICAL APPLICATION OF RAISED REFELCTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) SHOWN IN THE PLANS.
- 17. 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.
- 18. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC. THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40 MM) WHERE THE SPEED LIMIT IS 45 MPH (80 KM/H) OR LESS AND 1 INCH (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80 KM/H). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H)
- 19. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH DISTRICT ONE STANDARD BD-32.
- 20. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 21. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.

	SUMMARY OF QUANTITIES		100% STATE TOTAL	CONSTRUCTION TYPE CODE
CODE NO.	ITEM DESCRIPTION	UNIT	QUANTITY	
20201006	GRADING AND SHAPING SHOULDERS	UNIT	98	98
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	21	21
40600300	AGGREGATE (PRIME COAT)	TON	103	103
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	324	324
40600895	CONSTRUCTING TEST STRIP	EACH	2	2
40600982	HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT	SQ YD	376	376
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	570	570
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	2,880	2,880
42001300	PROTECTIVE COAT	SQ YD	44	•44
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	34,254	34,254
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	200	200
44002216	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 4"	SQ YD	2,532	2,532
44201761	CLASS D PATCHES, TYPE I, 10 INCH	SQ YD	100	100
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	683	683
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	200	200
44201771	CLASS D PATCHES, TYPE IN, 10 INCH	SQ YD	1,549	1,549
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	392	392
55039700	STORM SEWERS TO BE CLEANED	FOOT	500	500
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	8	8
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	37	37
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6
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
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	4,248	4,248
70300210	TEMPORARY PAVEMENT MARKING-LETTERS AND SYMBOLS	SQ FT	291	291
70300220	TEMPORARY PAVEMENT MARKING-LINE 4"	FOOT	20,878	20,878
70300240	TEMPORARY PAVEMENT MARKING-LINE 6"	FOOT	1,396	1,396
70300250	TEMPORARY PAVEMENT MARKING-LINE 8"	FOOT	249	249
70300260	TEMPORARY PAVEMENT MARKING-LINE 12"	FOOT	279	279
1,0000200	TEM VIVILLE PARENT MAINTING LINE IZ	1 001	1 613	213

<sup>\*</sup> SPECIALTY ITEM

				URBAH	
		SUMMARY OF QUANTITIES		100% STATE TOTAL	CONSTRUCTION TYPE CODE
	CODE NO.	ITEM DESCRIPTION  PRVEMENT		QUANTITY	1000
	70301000	WORK ZONE MARKING REMOVAL	SQ FT	1,416	1,416
*	78000100	THERMOPLASTIC PAVEMENT MARKING-LETTERS AND SYMBOLS	SQ FT	292	292
*	78000200	THERMOPLASTIC PAVEMENT MARKING-LINE 4"	FOOT	20,878	20,878
*	78000400	THERMOPLASTIC PAVEMENT MARKING-LINE 6"	FOOT	1,396	1,396
*	78000500	THERMOPLASTIC PAVEMENT MARKING-LINE 8"	FOOT	249	249
*	78000600	THERMOPLASTIC PAVEMENT MARKING-LINE 12"	FOOT	279	279
*	78000650	THERMOPLASTIC PAVEMENT MARKING-LINE 24"	FOOT	261	261
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	338	338
	78300200	RAISED REFECTIVE PAVEMENT MARKER REMOVAL	EACH	300	300
*	88600600	DETECTOR LOOP REPLACEMENT	FOOT	658	658
	X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	52	52
	X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL 4.75, N50	TON	1,440	1,440
	Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	20	20

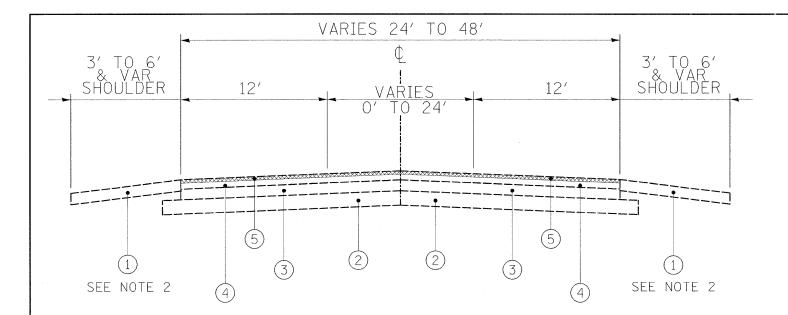
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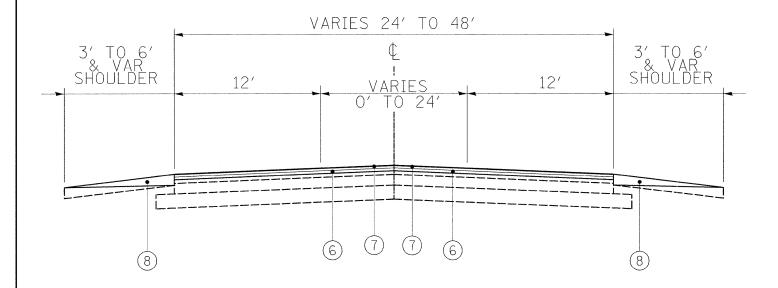
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TORRENCE AVENUE					F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	SUMI	2937	3077-RS	COOK	24	3			
SUMMARY OF QUANTITIES							CONTRAC	T NO. 6	60H36
SCALE: NONE	SHEET NO. 1 OF	1 SHEETS	STA.	TO STA.	FED. ROAD DI	IST. NO. 1   ILLINOIS FED	. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



# **EXISTING TYPICAL SECTION TORRENCE AVENUE**



## PROPOSED TYPICAL SECTION TORRENCE AVENUE

### NOTES:

- 1. PAVEMENT CROSS SECTION IS 24' AT FOLLOWING LOCATIONS:
  - STA. 18+71 TO STA. 28+64 STA. 40+78 TO STA. 51+09 STA. 94+84 TO STA. 119+92
- 2. CURB AND GUTTER IN LIEU OF AGGREGATE SHOULDER AT THE FOLLOWING LOCATIONS:
  - STA. 75+24 (LT) TO STA. 84+12 STA. 123+76 TO STA. 131+96

# **LEGEND**

- (1) EXISTING AGGREGATE SHOULDER
- (2) EXISTING AGGREGATE BASE COURSE
- (3) EXISTING PCC PAVEMENT, ±10"
- (4) EXISTING HOT-MIX ASPHALT PAVEMENT, ±4" (BEFORE SURFACE REMOVAL)
- (5) HOT-MIX ASPHALT SURFACE REMOVAL,  $2\frac{1}{4}$
- 6 PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50,  $\frac{3}{4}$ "
- (7) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, "MIX D", N70,  $1\frac{1}{2}$ "
- 8 PROPOSED GRADING AND SHAPING SHOULDERS PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B

### **HOT-MIX ASPHALT MIXTURE**

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

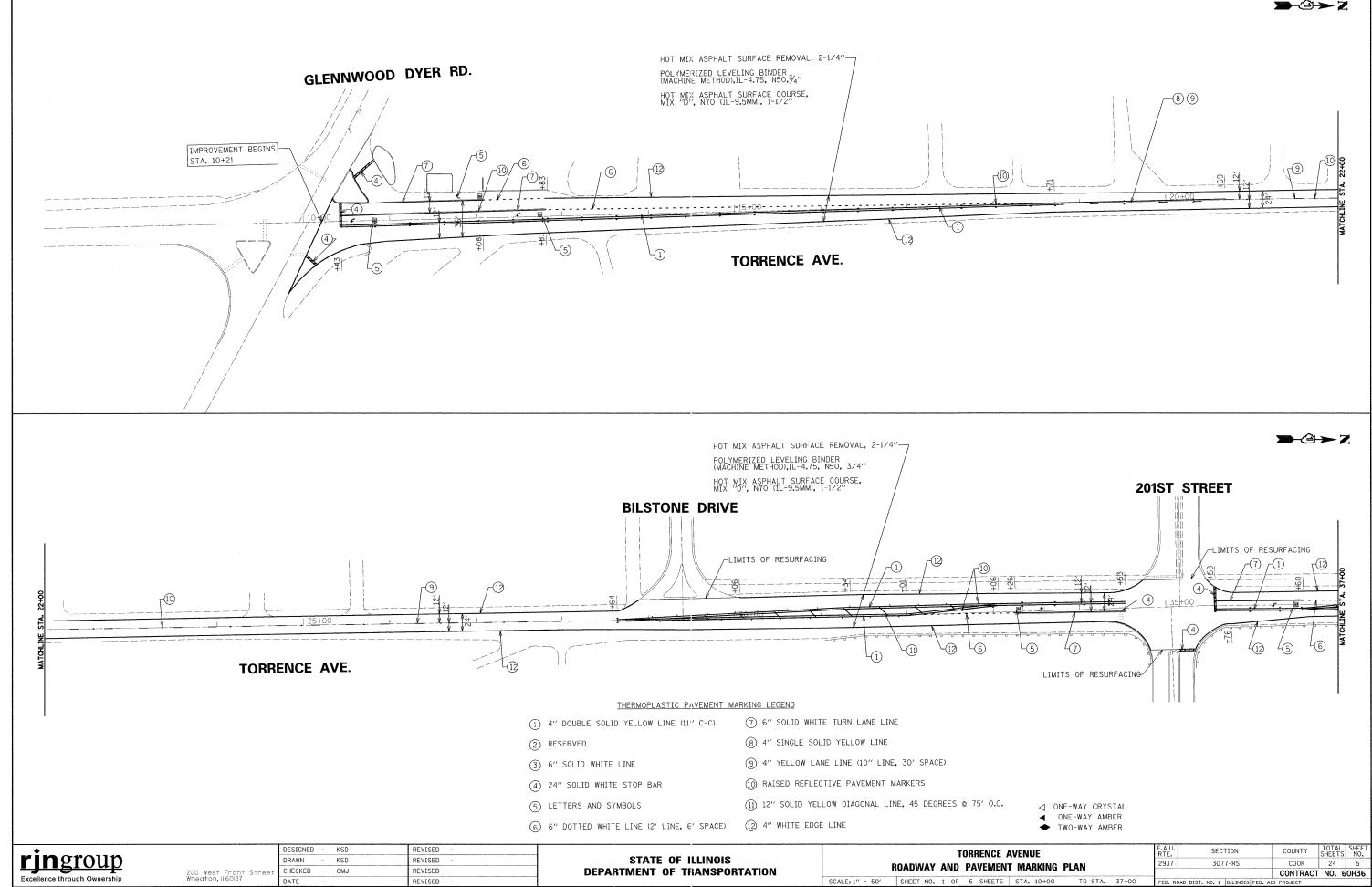
THE UNIT WEIGHT TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112LBS/SY/IN \*WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

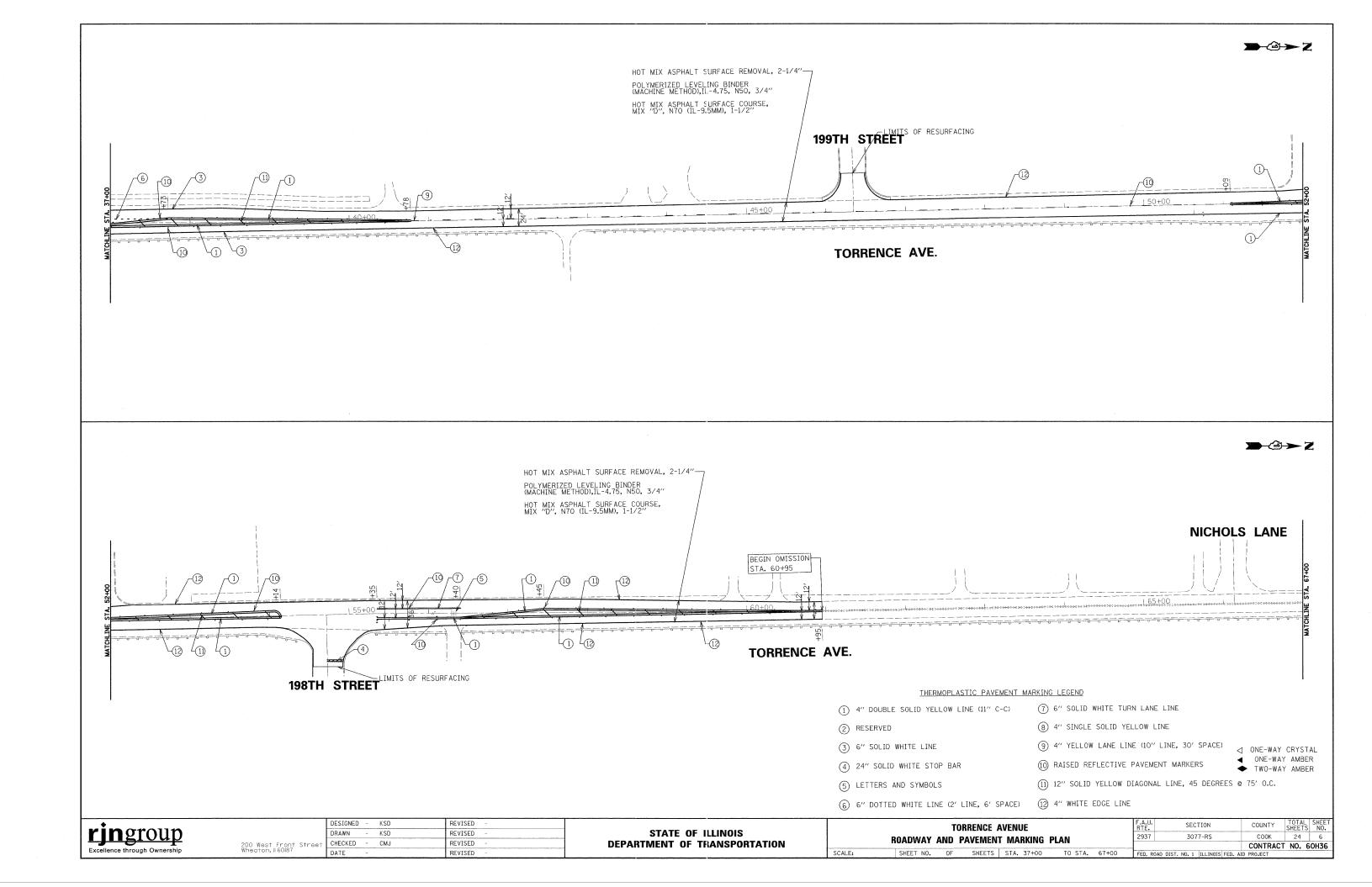


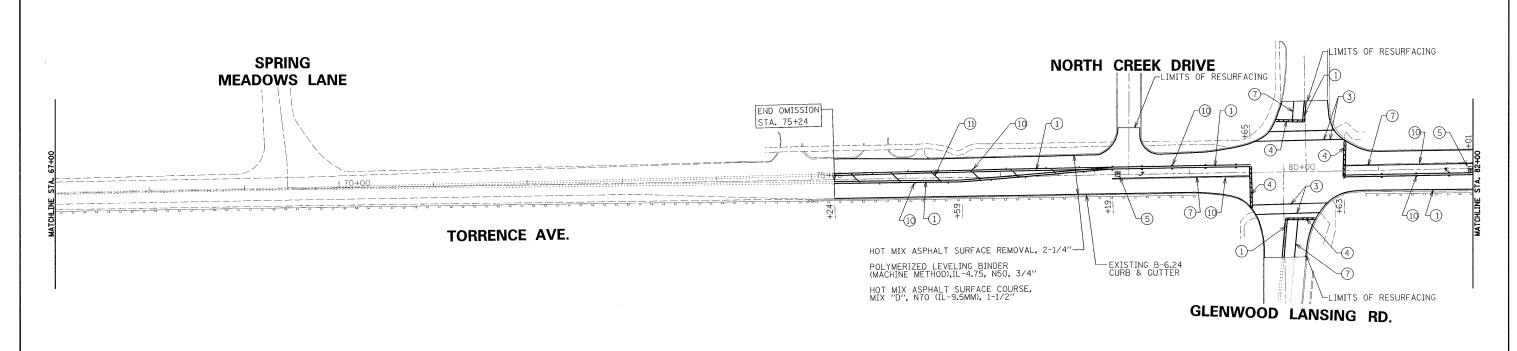
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STATE	OF	ILLINOIS
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_		TORRENCE A	VENUE		F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
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			IIIIOAL 3				CONTRACT	NO. 6	SOH36
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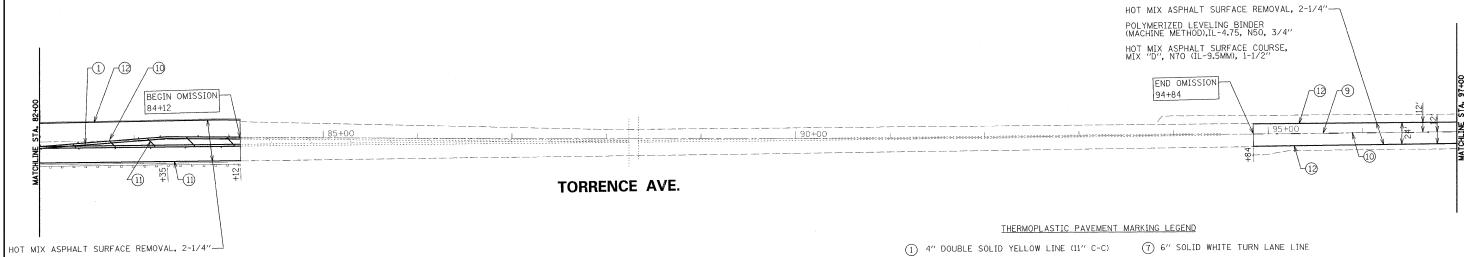








→ ONE-WAY CRYSTAL



HOT MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5MM), 1-1/2"

1 4" DOUBLE SOLID YELLOW LINE (11" C-C)

6 6" DOTTED WHITE LINE (2' LINE, 6' SPACE)

7 6" SOLID WHITE TURN LANE LINE

2 RESERVED

- 8 4" SINGLE SOLID YELLOW LINE
- (3) 6" SOLID WHITE LINE

- 9 4" YELLOW LANE LINE (10" LINE, 30' SPACE)
- 4 24" SOLID WHITE STOP BAR
- 10 RAISED REFLECTIVE PAVEMENT MARKERS
- (5) LETTERS AND SYMBOLS
  - (1) 12" SOLID YELLOW DIAGONAL LINE, 45 DEGREES @ 75' O.C.

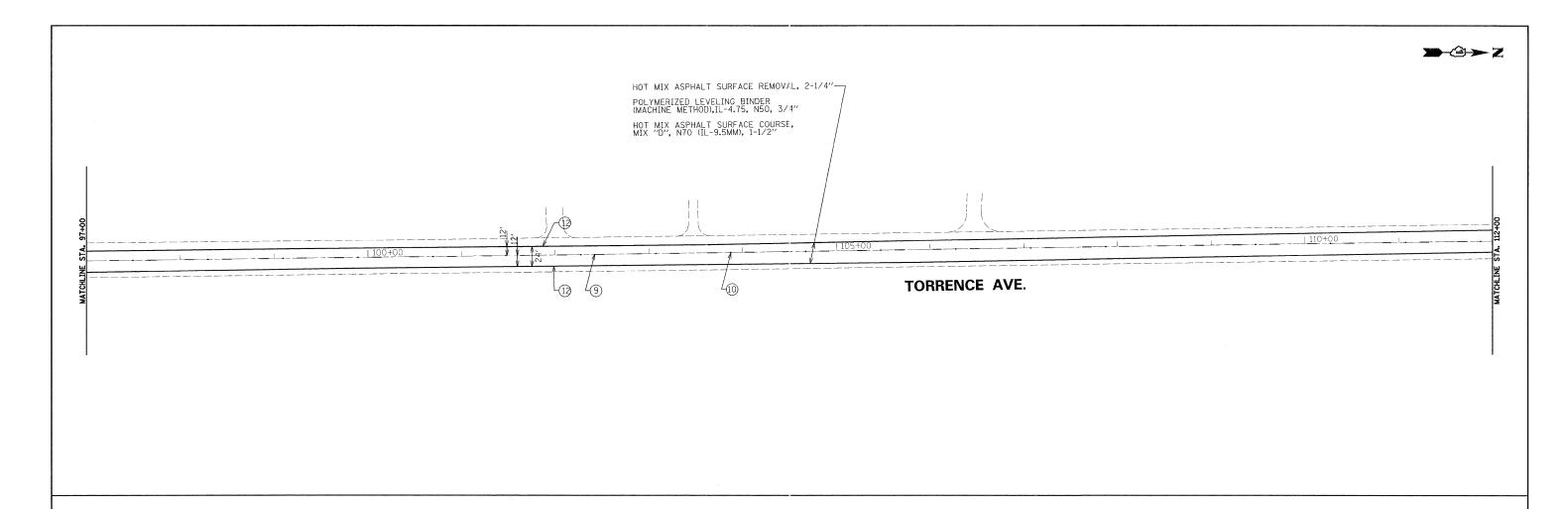
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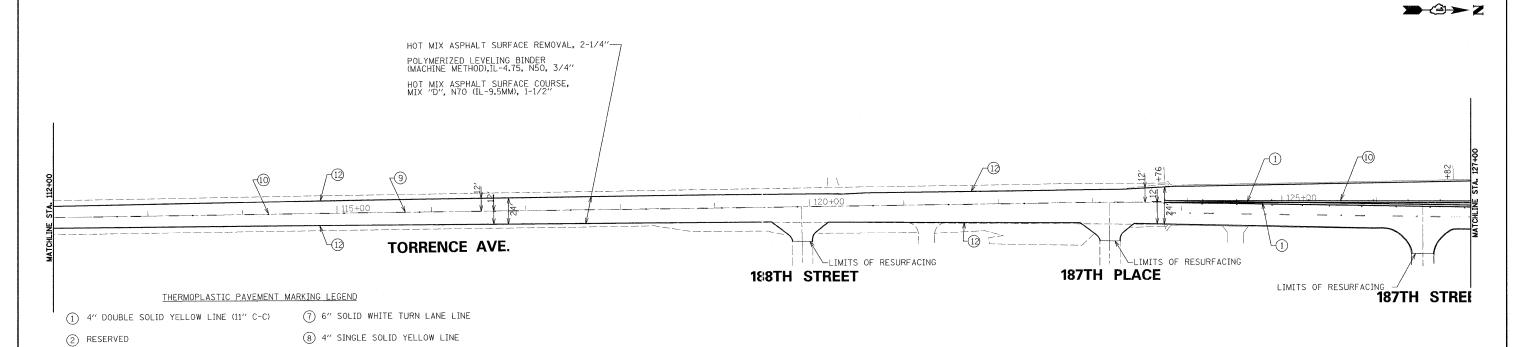
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									CONTRACT	NO. 6	50H36
CALE: 1" = 50'	SHEET NO.	3 OF	5 SHEETS	STA. 67+00	TO STA.	97+00	FED. ROAD	DIST, NO. 1 ILLINOIS FED. AI	D PROJECT		

12 4" WHITE EDGE LINE





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Excellence through Ownership	

3 6" SOLID WHITE LINE4 24" SOLID WHITE STOP BAR

5 LETTERS AND SYMBOLS

6 6" DOTTED WHITE LINE (2' LINE, 6' SPACE)

200 West Front Street Wheaton, II 60187

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1) 12" SOLID YELLOW DIAGONAL LINE, 45 DEGREES @ 75' O.C.

9 4" YELLOW LANE LINE (10" LINE, 30' SPACE)

(10) RAISED REFLECTIVE PAVEMENT MARKERS

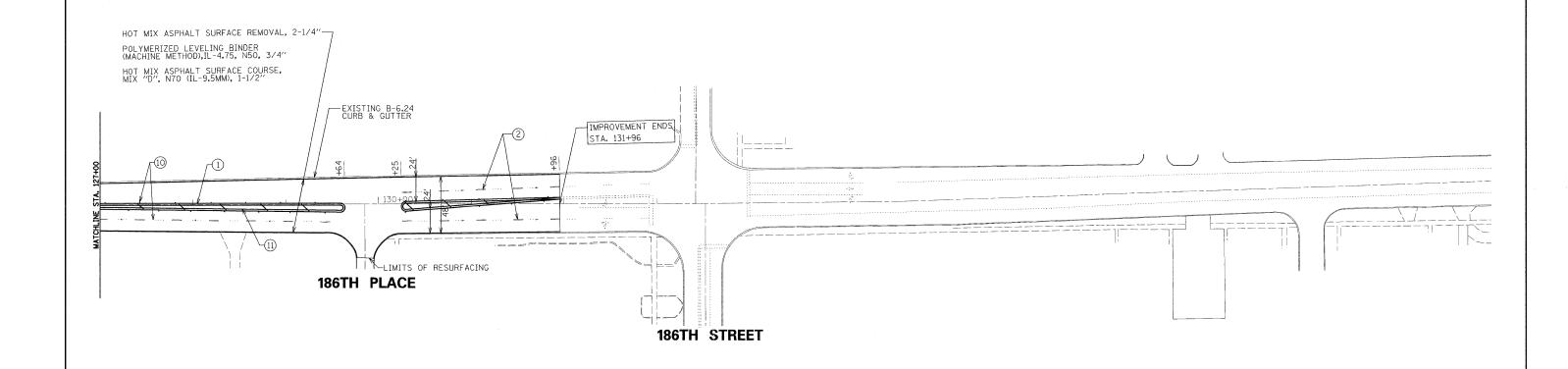
12 4" WHITE EDGE LINE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ONE-WAY CRYSTAL
 ONE-WAY AMBER

TWO-WAY AMBER

TORRENCE AVENUE	F.A.U. RTE.	SECTION	COUNTY	TOTAL SH SHEETS N	SHEET NO.
ROADWAY AND PAVEMENT MARKING PLAN	2937	3077-RS	соок	24	8
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CALE: 1" = 50'   SHEET NO. 3 OF 5 SHEETS   STA. 97+00 TO STA. 127-	00 FED. F	ROAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		



### THERMOPLASTIC PAVEMENT MARKING LEGEND

- 1 4" DOUBLE SOLID YELLOW LINE (11" C-C)
- 7 6" SOLID WHITE TURN LANE LINE
- 2 4" WHITE LANE LINE (10' LINE, 30' SPACE) 8 4" SINGLE SOLID YELLOW LINE

3 6" SOLID WHITE LINE

- 9 4" YELLOW LANE LINE (10" LINE, 30' SPACE)
- 4 24" SOLID WHITE STOP BAR
- 10 RAISED REFLECTIVE PAVEMENT MARKERS
- 5 LETTERS AND SYMBOLS
- ① 12" SOLID YELLOW DIAGONAL LINE, 45 DEGREES @ 75' O.C.

   ONE-WAY CRYSTAL

  ONE-WAY AMBER

  TWO-WAY AMBER

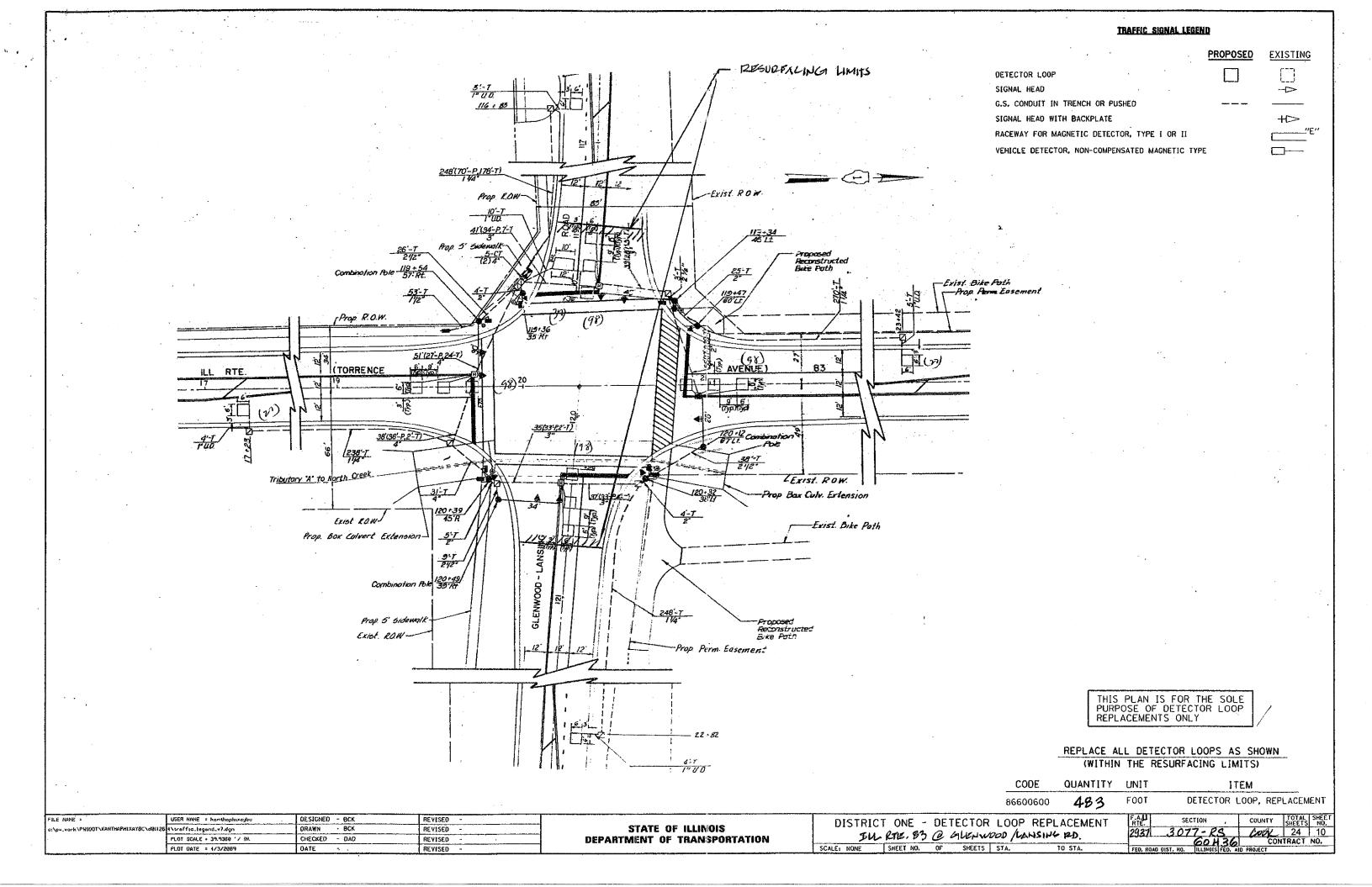
- 6 6" DOTTED WHITE LINE (2' LINE, 6' SPACE) (2) 4" WHITE EDGE LINE

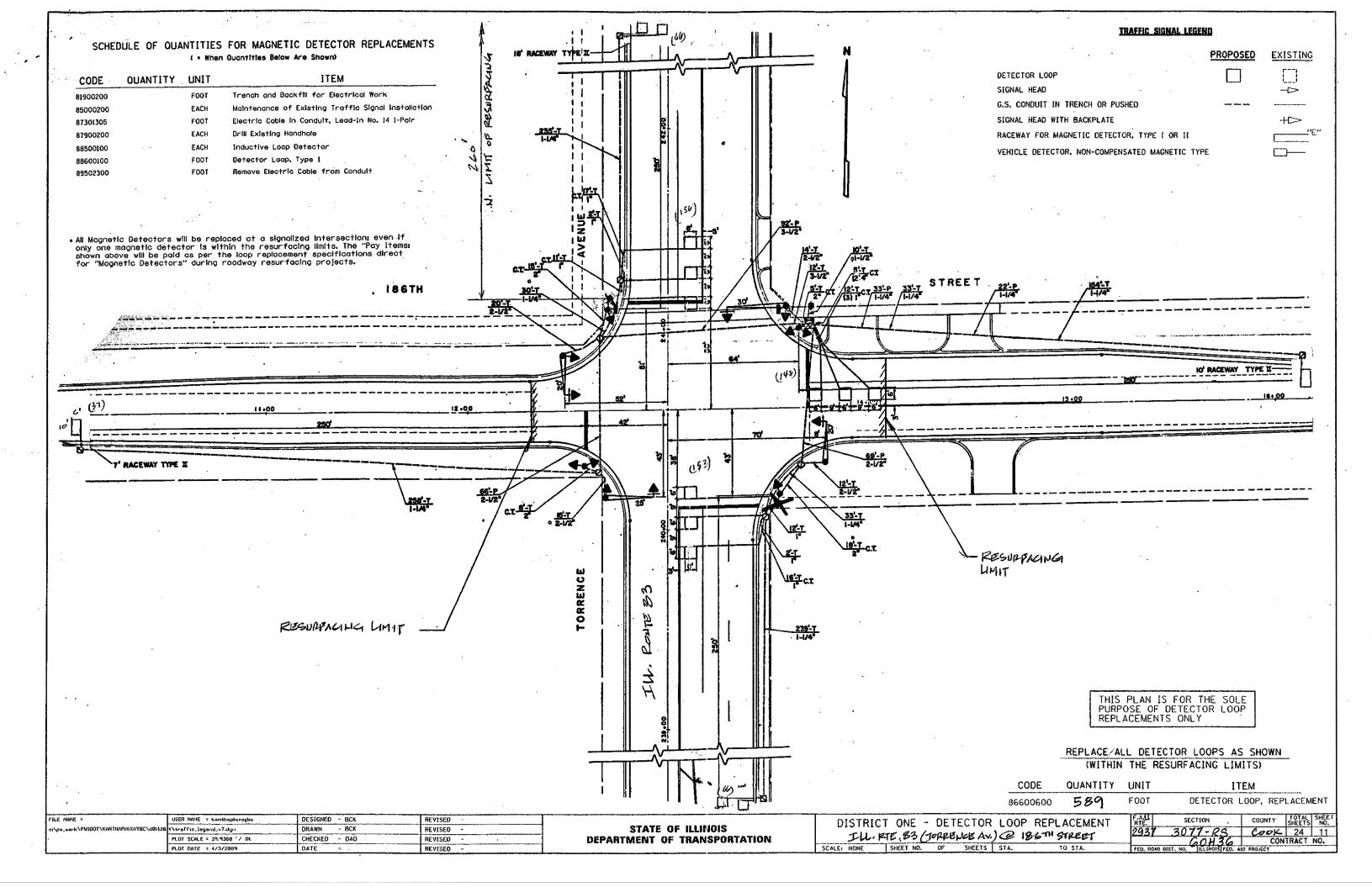
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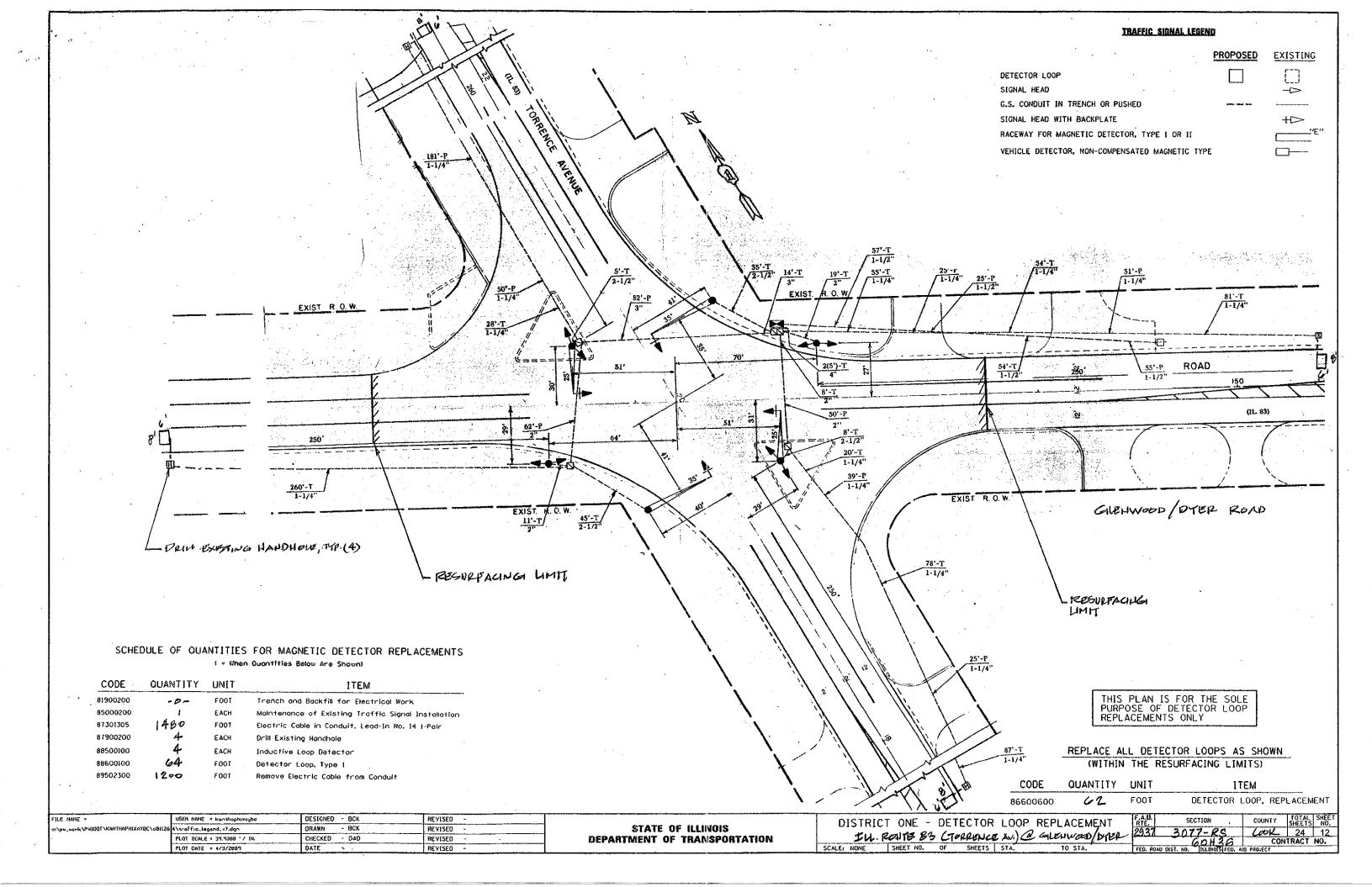
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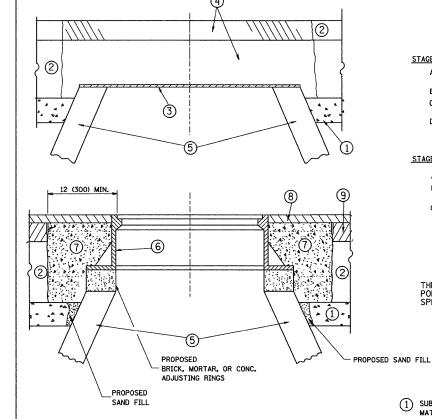
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ROADWAY AND PAVEMENT	MARKING PLAN	Li	2937	3077-RS	COOK	24	9
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SCALE: 1" = 50' SHEET NO. 3 OF 5 SHEETS	133+42	FED. ROAD DIST.	NO. 1 ILLINOIS FED. AI	D PROJECT			









### 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 11/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

### STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS SI CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

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

### LEGEN

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

### LOCATION OF STRUCTURES:

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

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

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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.

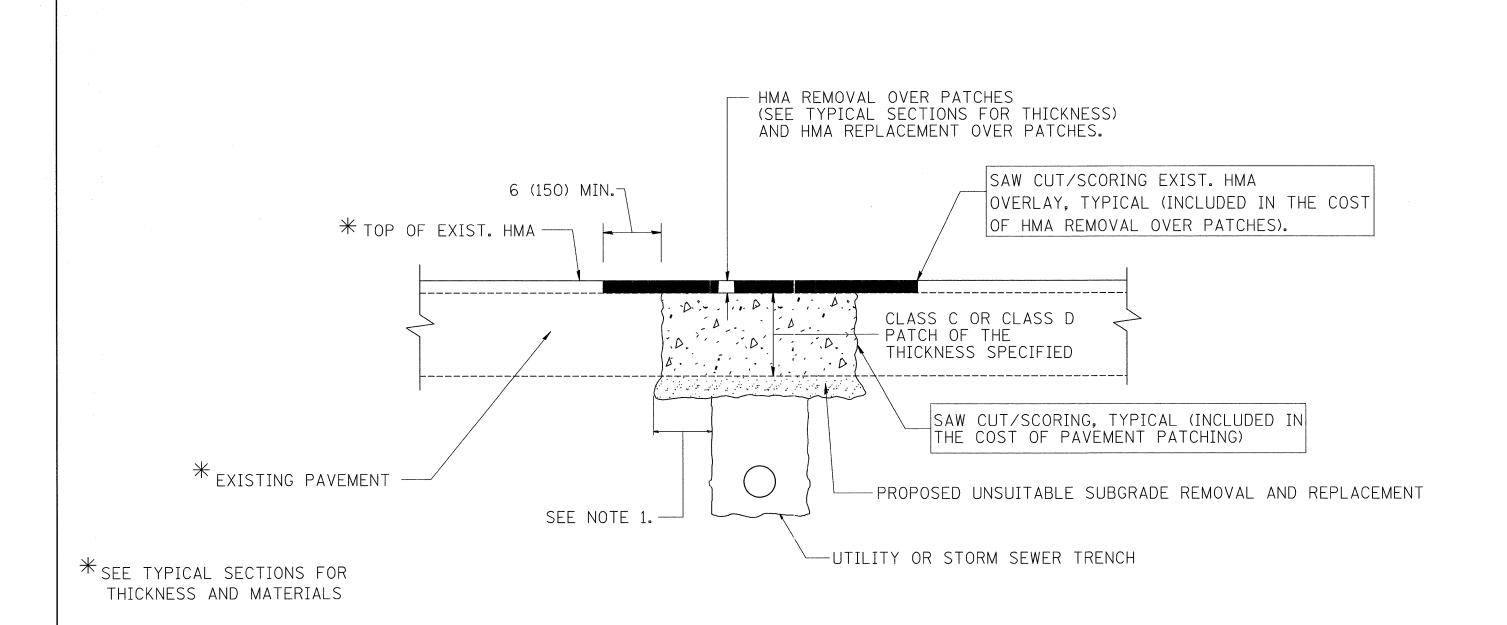
THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

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.

 DETAILS FOR

 FRAMES AND LIDS ADJUSTMENT WITH MILLING

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



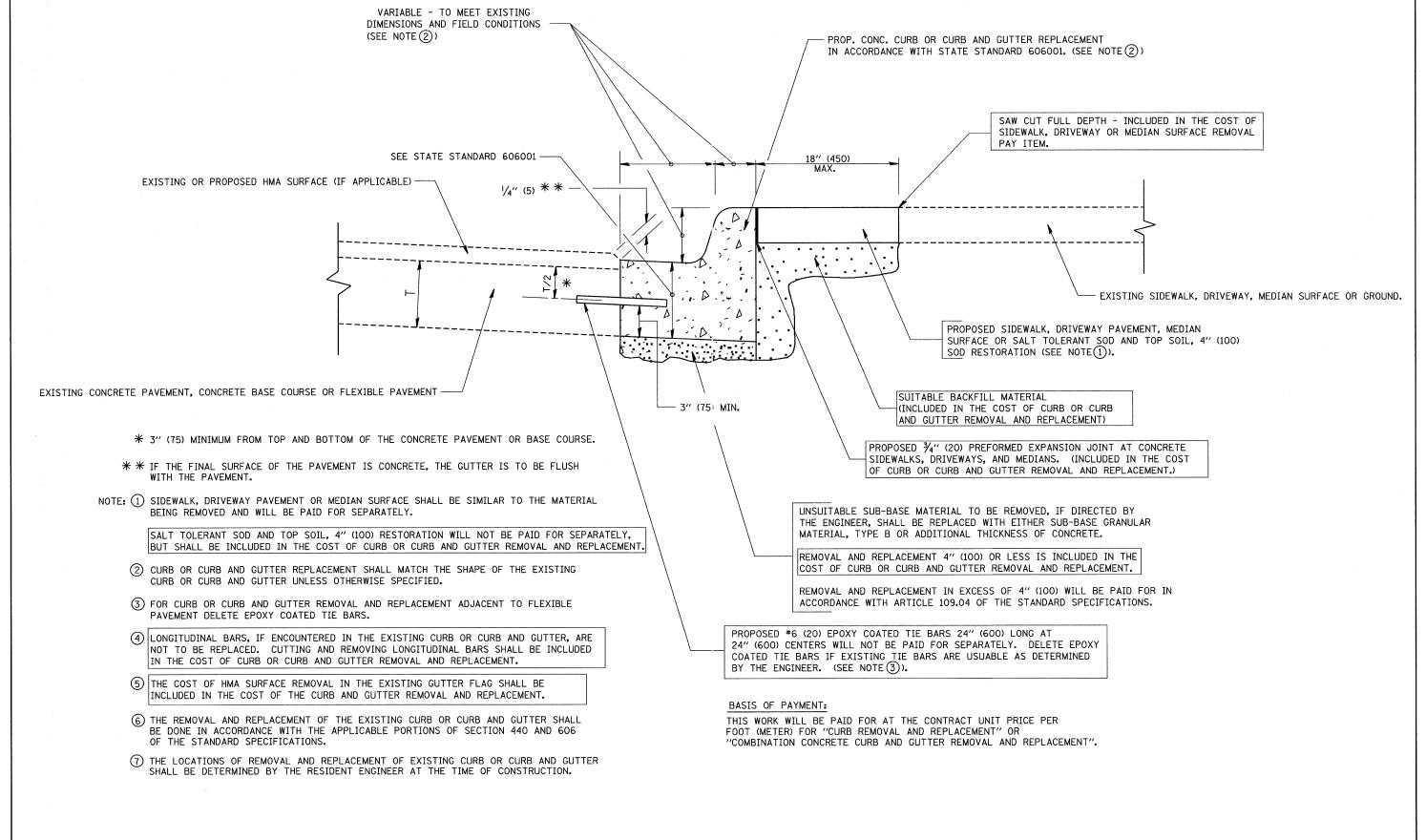
### NOTES:

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

### SEQUENCE OF CONSTRUCTION

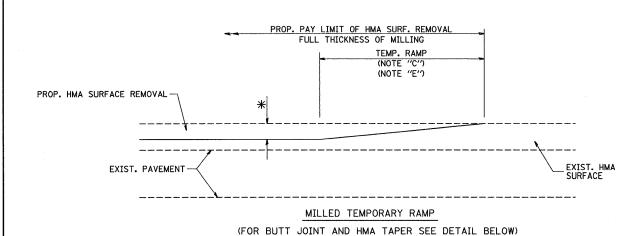
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE FULL DEPTH PATCHES
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

FILE NAME =	USER NAME = gaglianobt	DESIGNED - R. SHAH	REVISED - A. ABBAS 01-20-98			PAVEMENT PATCHING FOR	RTE. SECTION	COUNTY SHEETS NO.
W:\diststd\22x34\bd22.dgn		DRAWN -	REVISED - A. ABBAS 04-27-98	STATE OF ILLINOIS			2937 3077-RS	COOK 24 14
1	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - R. BORO 01-01-07	DEPARTMENT OF TRANSPORTATION		HMA SURFACED PAVEMENT	BD400-04 (BD-22)	CONTRACT NO. 60H36
	PLOT DATE = 1/4/2008	DATE - 10-25-94	REVISED - R. BORO 09-04-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED.	AID PROJECT

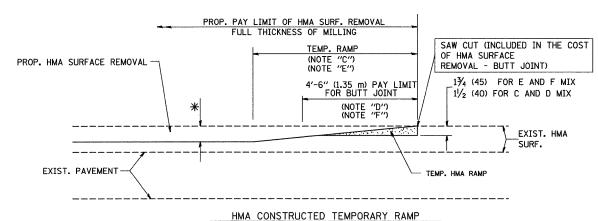


# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

FILE NAME =	USER NAME = gaglianobt	DESIGNED - A. HOUSEH	REVISED -	R. SHAH 10-03-96			CURB OR CURB A	ND GUTTER		F.A.U.	SECTION	COUNTY	TOTAL	SHEET
W:\diststd\22x34\bd24.dgn		DRAWN -	REVISED -	A. ABBAS 03-21-97	STATE OF ILLINOIS	REMOVAL AND REPLACEMENT		2937	3077-RS	соок	24	15		
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -	M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION	REMOVAL AND REPLACEMENT					BD600-06 (BD-24)	CONTRACT	T NO. 60	Н36
	PLOT DATE = 1/4/2008	DATE - 03-11-94	REVISED -	R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. R	OAD DIST. NO. 1   ILLINOIS FED. A	ID PROJECT		



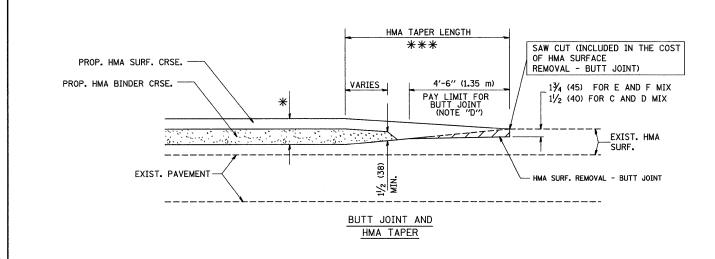
### OPTION 1



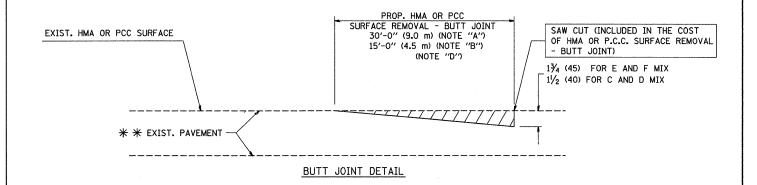
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

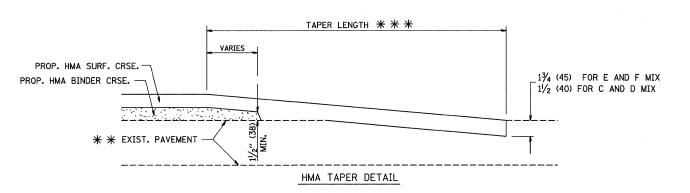
### OPTION 2

### TYPICAL TEMPORARY RAMP



# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

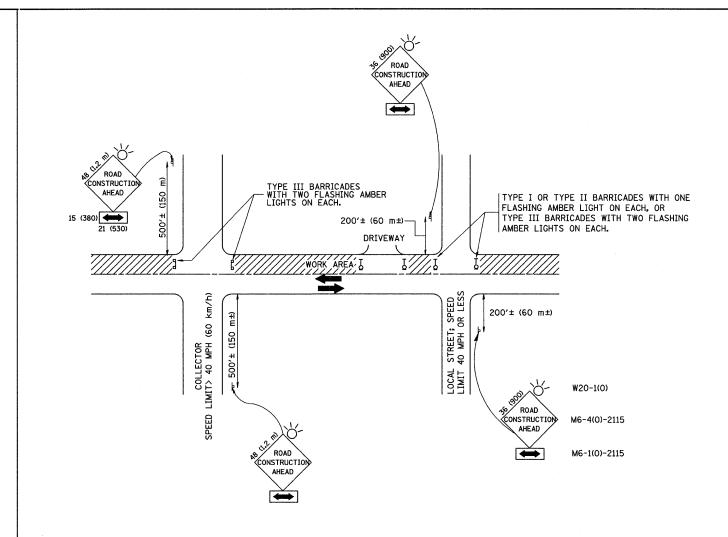
### NOTES

- 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.

### 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".

Ī	FILE NAME =	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94		BUTT JOINT AND	F.A.U. SECTION	ON COUNTY TOTAL SHEET
- 1	W:\diststd\22x34\bd32.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS		2937 3077-R	
- 1		PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01	DEPARTMENT OF TRANSPORTATION	HMA TAPER DETAILS	BD400-05 BI	D32 CONTRACT NO. 60H36
- 1		PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILL	LINOIS 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:
- d) ONE ROAD CONSTRUCTION AHEAD SIGN  $36\times36$  (900 $\times$ 900) 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  $\times$  48 (1.2 m  $\times$  1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500° (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

SCALE: NONE

- 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.

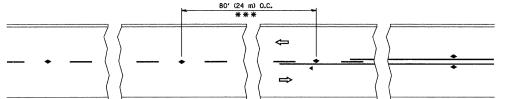
All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME = USER NAME = gaglanobt DESIGNED - LHA REVISED - J. OBERLE 10-18-95

Which stated \( \) \( \

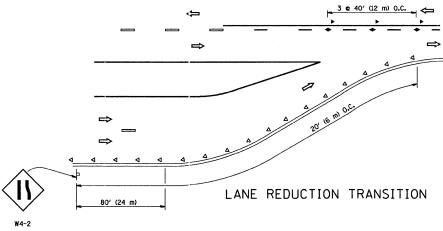
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

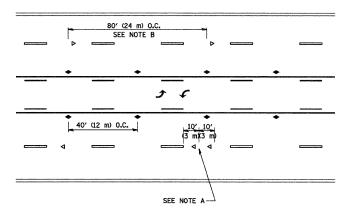
TR	AFFI	C	CON	TR	OL AND	PROTEC	TION	FOR		
SIDE	ROA	DS	, IN	TE	RSECTIO	NS, AND	DRIV	EWAYS	;	
SHEET	NO.	1	OF	1	SHEETS	STA.			то	ST



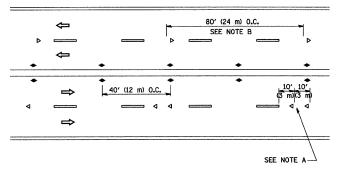
\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

### TWO-LANE/TWO-WAY

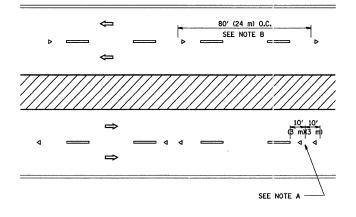




TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

### GENERAL NOTES

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

### LANE MARKER NOTES

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

### SYMBOLS

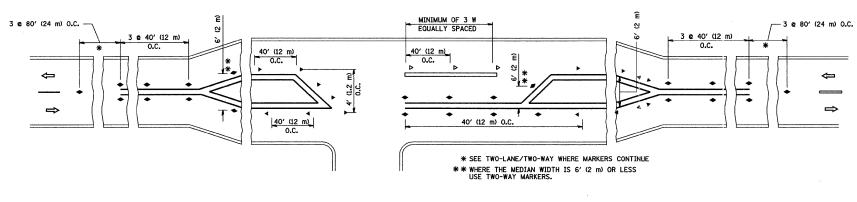
---- YELLOW STRIPE

WHITE STRI

- ONE-WAY AMBER MARKER
- ✓ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

### 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.
- MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



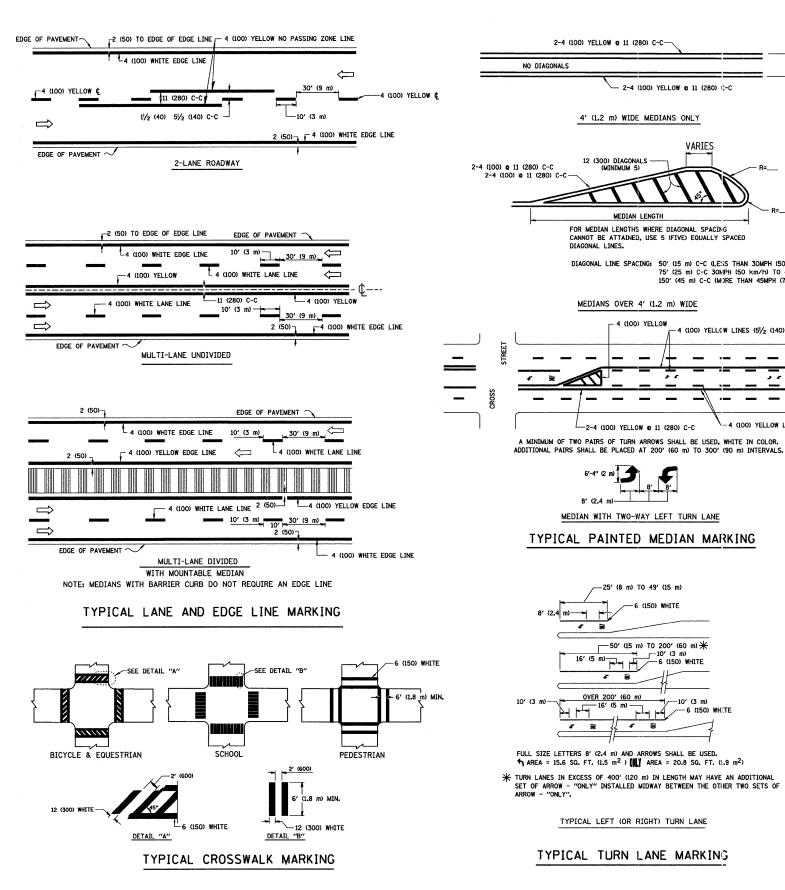
LEFT TURN

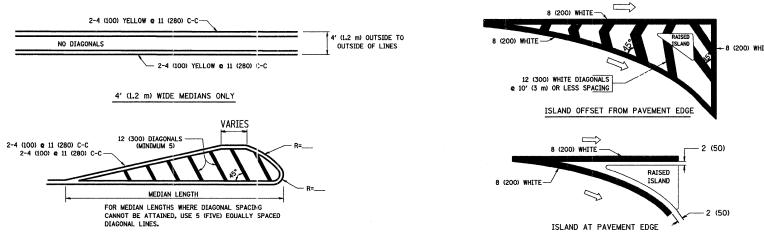
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
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1			
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 01-06-00
	PLOT DATE = 1/4/2008	DATE -	REVISED -

STATE	OF	ILLINOIS	
DEPARTMENT	OF 1	<b>TRANSPORTATION</b>	

٦	TYPICAL APPLICATIONS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ı	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW	2937	3077-RS	соок	24	18	
	UMISED VELFECTIAE LAAFIAICAT IAMUKEUS (SMOAA-LFOAA		TC-11	CONTRACT	NO. 6	0H36	
	SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. R	OAD DIST. NO. 1   ILLINOIS FED. AI	D PROJECT		





### TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 & 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 <b>Q</b> 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	INES 4 (100) SKIP-DASH WHITE 10' (3 m) LINE WITH 30' (9 m) SPACE SKIP-DASH WHITE			
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW: EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 & 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART 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 (0VER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) <b>@</b> 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.

TYPICAL TURN LANE MARKING

TYPICAL LEFT (OR RIGHT) TURN LANE

FILE NAME =	USER NAME = gaglianobt	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94		DISTRICT ONE TYPICAL PAVEMENT MARKINGS		F.A.U. RTE.	SECTION	COUNTY TOTAL SH
W:\diststd\22x34\to13.dgn		DRAWN -	REVISED -A. HOUSEH 10-09-96	STATE OF ILLINOIS			2937	3077-RS	COOK 24 1
1	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -A. HOUSEH 10-17-96	DEPARTMENT OF TRANSPORTATION				TC-13	CONTRACT NO. 60H
	PLOT DATE = 1/4/2008	DATE - 03-19-90	REVISED -T. RAMMACHER 01-06-00		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. F	ROAD DIST. NO. 1 ILLINOIS F	

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

4 (100) YELLOW LINES (51/2 (140) C-C)

1-4 (100) YELLOW LINES (51/2 (140) C-C)

MEDIANS OVER 4' (1.2 m) WIDE

-2-4 (100) YELLOW & 11 (280) C-C

MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING

> \_\_\_50' (15 m) T0 200' (60 m) <del>\*</del> 16' (5 m) 10' (3 m) 16' (150) WHITE

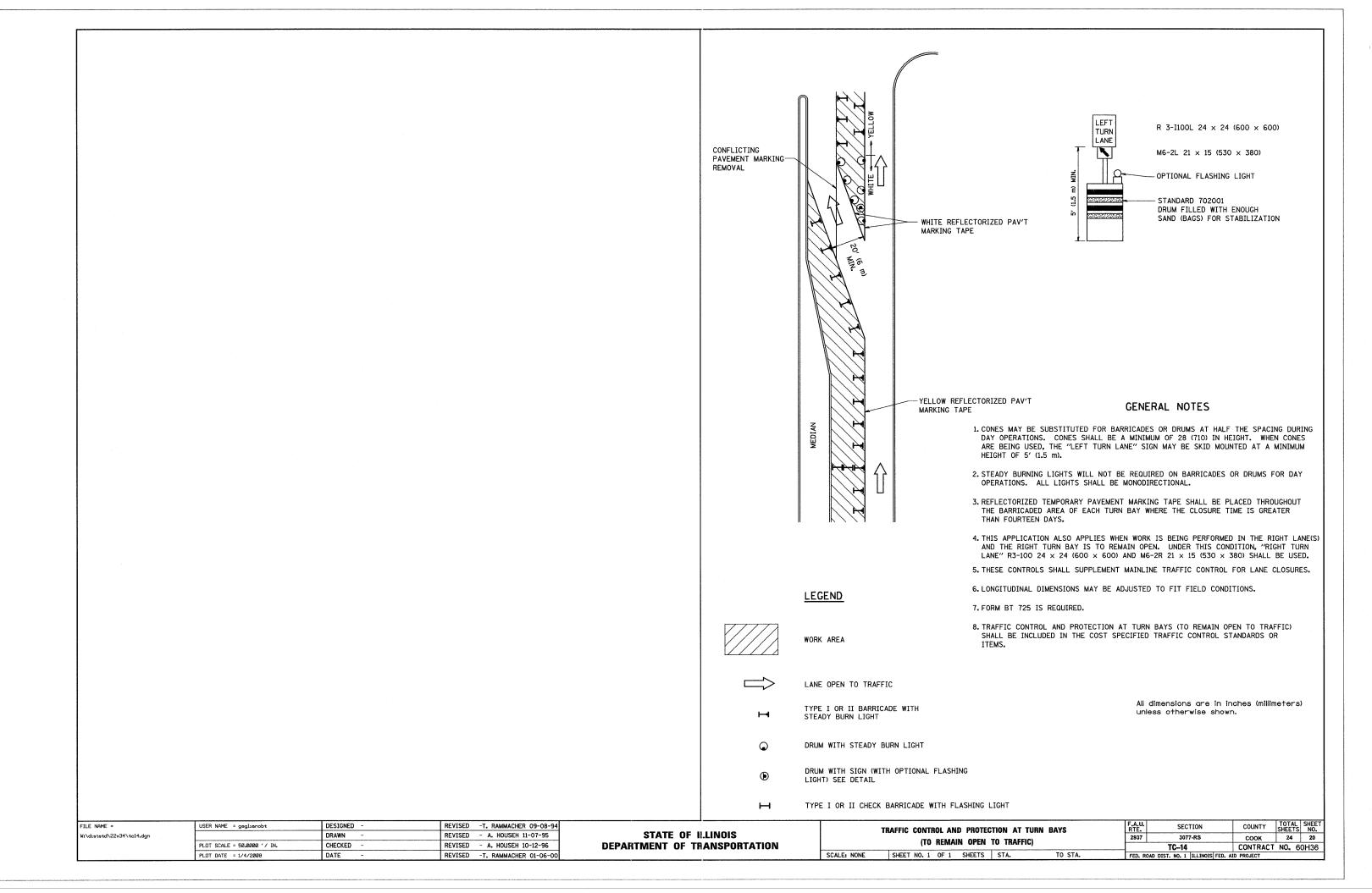
OVER 200' (60 m) 10' (3 m) 6 (150) WH.TE

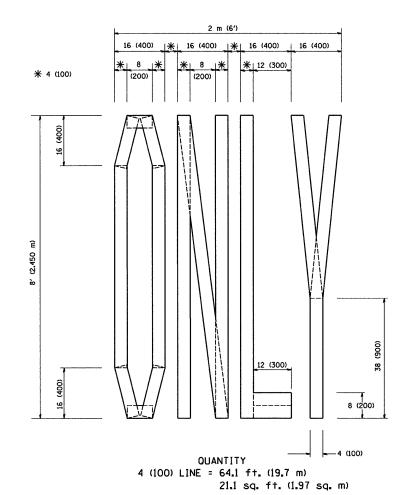
€ 1

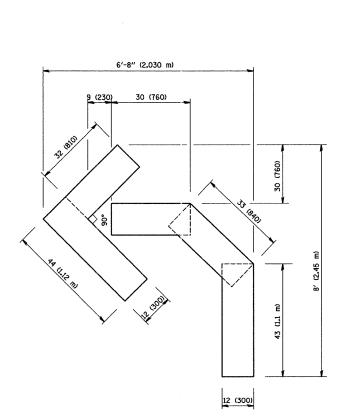
6'-4" (2 m)

8' (2.4 m)-

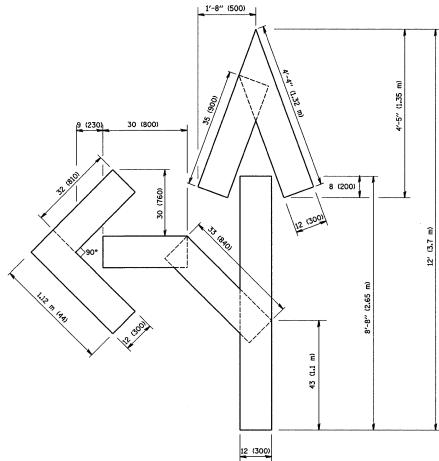
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OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



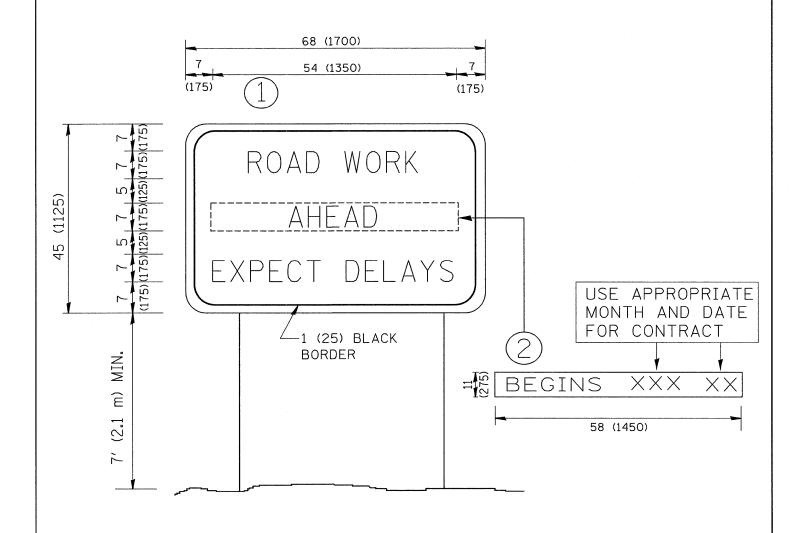
OUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED	-T. RAMMACHER 06-05-96
W:\diststd\22x34\tc16.dgn		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

STATI	E O	F II.LINOIS	
DEPARTMENT	0F	TRANSPORTATION	

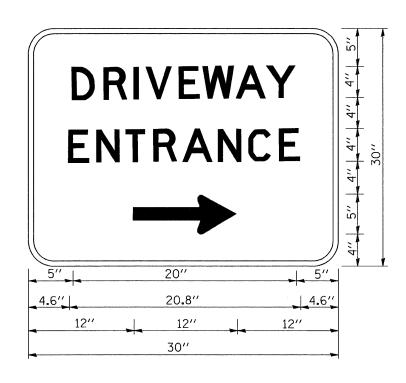
	PAVEMENT	MAR	KING LETTE	RS AND	SYMBOLS		F.A.U. RTE. SECTION		TOTAL SHEETS	SHEET NO.
FOR TRAFFIC STAGING							3077-RS	соок	24	21
		run	INAFFIC 3	TC-16 CONTRACT NO. 60H				0H36		
SCALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	FED. R	DAD DIST. NO. 1   ILLINOIS FED. A	D PROJECT		



# 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.

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED	- R. MIRS 09-15-97			ARTERIAL R	ΠΑΙ	F.A.U.	SECTION	COUNTY	TOTAL SHEET
Wi\diststd\22x34\tc22.dgn		DRAWN -	REVISED	- R. MIRS 12-11-97	STATE OF ILLINOIS				2937	3077-RS	соок	24 22
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED	-T. RAMMACHER 02-02-9	DEPARTMENT OF TRANSPORTATION	INFORMATION SIGN		_	TC-22	CONTRAC	CT NO. 60H36	
	PLOT DATE = 1/4/2008	DATE -	REVISED	- C. JUCIUS 01-31-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. R	OAD DIST. NO. 1   ILLINOIS FED.	AID PROJECT	



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

### NOTES:

- 1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
- 2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
- 3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - C. JUCIUS 02-15-07
Wi\diststd\22x34\to26.dgn		DRAWN -	REVISED -
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

STATE	OF	: ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

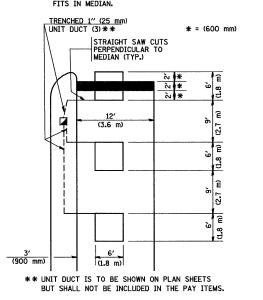
DRIVEWAY ENTRANCE SIGNING	F.A.U. SECTION COUNTY TOTAL SHEETS NO.
	2937 3077-RS COOK 24 23
	TC-26 CONTRACT NO. 60H36
E: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

# PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER PAVED OR NON-PAVED SHOULDER 1' (25 mm) UNIT DUCT TRENCHED TO E/P \*\* \* \* 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
BI4001 TO ENSURE THAT HANDHOLE



PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

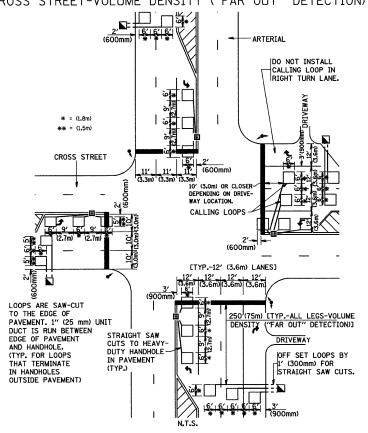
# = (600 mm)

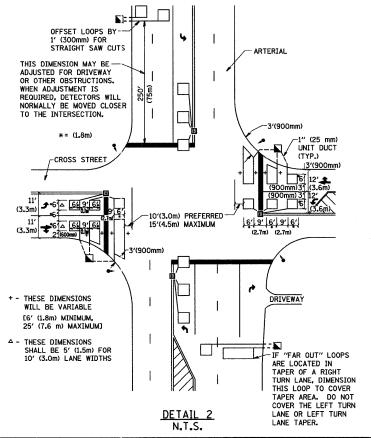
| Tanon | First and | First

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

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

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





### NOTES:

### VEHICLES LOOP DETECTORS

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, 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 SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF <u>ALL</u> 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
  (1.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 <u>ALL</u> 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.

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DETAIL 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION			F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.			
I	DETAILS FOR ROADWAY RESURFACING			2937	3077-RS	соок	24	24		
l	DETAILS FUR RUADWAT RESURFACING					TS-07	CONTRACT	NO. 6	0H36	
I	SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				