

FAU RTE 1369	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCHICK RD.	09-00057-00-RS	DUPAGE	15	1
F.H.W.A. REG. ILLINOIS	PROJECT NO. ARA-9003(440)			

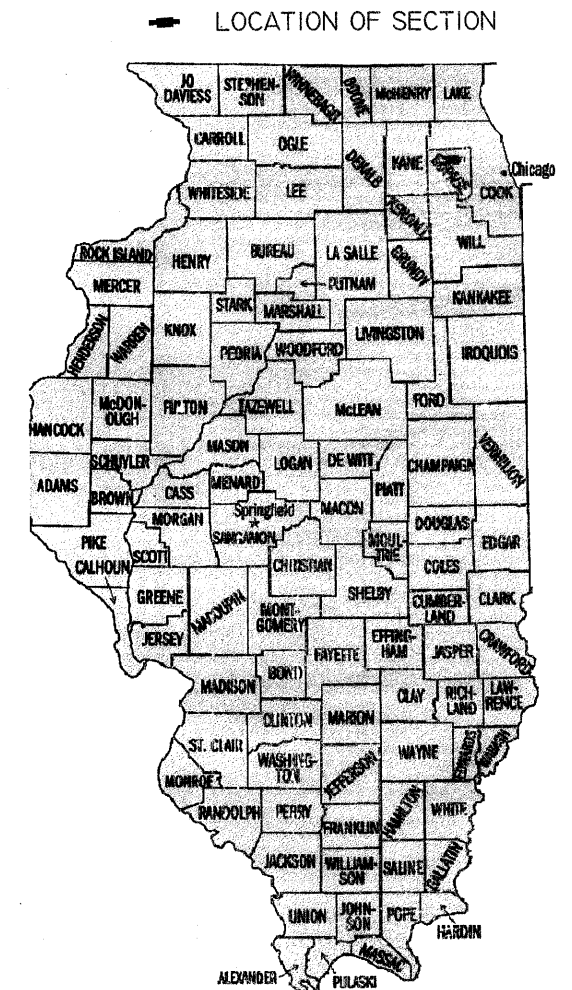
CONTRACT NO. 63252

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANS FOR PROPOSED FEDERAL AID HIGHWAY

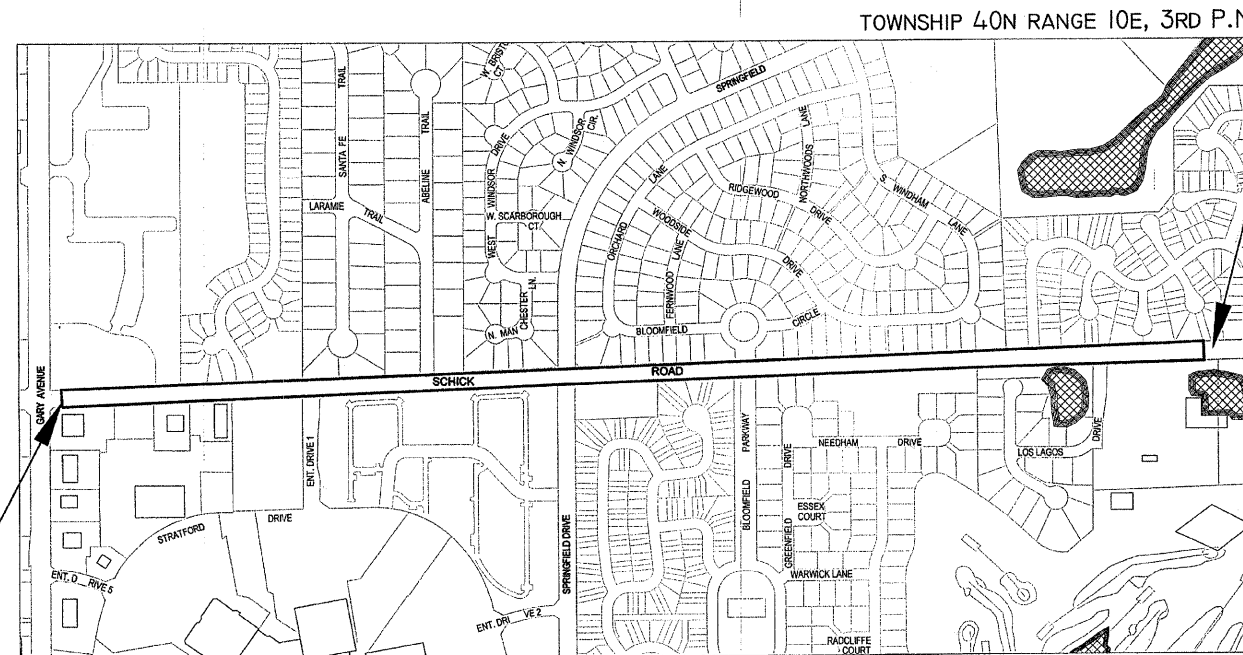
SCHICK ROAD (FAU 1369)  
[FROM LORRAINE CIRCLE (FAU 2575) TO GARY AVE]  
LAPP RESURFACING  
PROJECT NO. ARA-9003(440)  
SECTION NO. 09-00057-00-RS  
VILLAGE OF BLOOMINGDALE  
DUPAGE COUNTY  
JOB NO. C-91-871-09

**INDEX OF SHEETS**

- 1) COVER SHEET, INDEX OF SHEETS, LOCATION MAP
- 2) GENERAL NOTES
- 3) TYPICAL SECTIONS
- 4) SUMMARY OF QUANTITIES
- 5) SCHICK ROAD OVERLAY & STORM SEWER PLAN(STA. 5+50 TO 34+89)
- 6) SCHICK ROAD OVERLAY & STORM SEWER PLAN (STA. 34+89 TO 63+75)
- 7) SCHICK ROAD STRIPING PLAN(STA. 5+50 TO 34+89)
- 8) SCHICK ROAD STRIPING PLAN (STA. 34+89 TO 63+75)
- 9) CURB AND GUTTER REMOVAL AND REPLACEMENT
- 10) DISTRICT ONE TYPICAL PAVEMENT MARKINGS
- 11) TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS INTERSECTIONS AND DRIVEWAYS
- 12) DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
- 13) BUTT JOINT AND HMA TAPER DETAILS
- 14) PAVEMENT MARKING LETTERS AND SYMBOLS
- 15) DISTRICT I - DETECTOR LOOP INSTALLATION



IMPROVEMENT BEGINS  
STA. 5+50



IMPROVEMENT ENDS  
STA. 63+75

LOCATION MAP NOT TO SCALE

LENGTH OF IMPROVEMENT  
GROSS AND NET = 5922 FT. = 1.12 MILES  
2008 ADT = 25,000  
DESIGN & POSTED SPEED LIMIT = 35 MPH

FOR UNDERGROUND UTILITY  
LOCATIONS CALL  
J.U.L.I.E.  
TOLL FREE  
TEL 1-800-892-0123

REDUCED SIZE PLANS WILL NOT  
CONFORM TO STANDARD  
SCALES.

**CONTRACT NO. 63252**

PREPARED BY: **VILLAGE OF BLOOMINGDALE**

201 S. BLOOMINGDALE RD.  
BLOOMINGDALE ILLINOIS 60108  
(630) 893-7073

<b>ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	
APPROVED	<i>[Signature]</i> VILLAGE OF BLOOMINGDALE
PASSED	July 22, 2009 <i>[Signature]</i> DISTRICT ONE ENGINEER OF LOCAL ROADS AND STREETS
RELEASING FOR BID BASED ON LIMITED REVIEW	July 22, 2009 <i>[Signature]</i> DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER

**PROFESSIONAL ENGINEER'S SIGN & SEAL**

PRINTED BY THE AUTHORITY OF  
THE STATE OF ILLINOIS

FIELD ENGINEER: MARILIN SOLOMON 847-705-4407

FAU RTE 1369	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCHICK RD.	09-00057-00-RS	DUPAGE	15	2
F.H.W.A. REG.	ILLINOIS	PROJECT NO.	ARA-9003(440)	

**CONTRACT NO. 63252**

### GENERAL NOTES

- ALL REFERENCES TO THE "VILLAGE" IN THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN THE VILLAGE OF BLOOMINGDALE.
- ALL REFERENCES TO "STANDARD SPECIFICATIONS" IN THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION ON JANUARY 1, 2007.
- **PAVEMENT GRADES.** THE ELEVATIONS SHOWN ON THE PLANS ARE FINISHED GRADES OF PROPOSED PAVEMENT, UNLESS OTHERWISE INDICATED.
- **PUBLIC OR PRIVATE UTILITIES.** THE LOCATIONS OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THE VILLAGE AND ITS ENGINEER DO NOT GUARANTEE THEIR ACCURACY. THE CONTRACTOR WILL BE REQUIRED TO ASCERTAIN THE EXACT LOCATION OF SUCH UTILITIES AND EXERCISE CARE DURING HIS CONSTRUCTION OPERATIONS SO AS NOT TO DAMAGE THEM. IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND ARTICLE 105.07 OF THE "STANDARD SPECIFICATIONS" THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING UTILITIES SO THAT THEIR FACILITIES MAY BE LOCATED AND ADJUSTED OR MOVED, IF NECESSARY, PRIOR TO THE START OF THE CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE "STANDARD SPECIFICATIONS".
- **SIGNS.** ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS AND THE SPECIAL PROVISION ENTITLED "TRAFFIC CONTROL AND PROTECTION".
- **LOCATIONS OF DRAINAGE STRUCTURES.** THE STATION/OFFSET/ELEVATION NOTED FOR ALL PROPOSED DRAINAGE STRUCTURES LOCATED IN THE CURB LINE REFER TO THE POSITION OF THE ADJACENT PROPOSED EDGE OF PAVEMENT. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING THE OFFSET NECESSARY FOR EACH STRUCTURE TO SET THE FRAME IN ITS PROPER LOCATION. ALL OTHER STRUCTURE OFFSETS ARE TO THE CENTER OF STRUCTURE.
- **TOP OF FRAME ELEVATIONS.** PROPOSED TOP OF FRAME (T/F) ELEVATIONS GIVEN ON THE PLANS ARE ONLY TO ASSIST THE CONTRACTOR IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF EACH STRUCTURE. FRAMES ON ALL NEW STRUCTURES SHALL BE ADJUSTED TO THE FINAL ELEVATIONS OF THE AREAS IN WHICH THEY ARE LOCATED, AS PART OF THE COST OF THE STRUCTURE.
- **DAMAGE TO SEWER AND WATER SERVICES.** ALL SEWER AND WATER SERVICES CROSSED BY NEW STORM SEWERS SHALL BE PROPERLY LOCATED AND PROTECTED DURING CONSTRUCTION. ANY DAMAGE TO SAID SEWERS NOT CONSIDERED TO BE IN CONFLICT WITH THE PROPOSED STORM SEWER SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.
- **CONCRETE BREAKERS**  
When removing curb, curb and gutter, pavement, sidewalk or any other structure, the Contractor shall take every precaution necessary to ensure he will not damage underground public or private utilities. Under no circumstances will the use of a frost ball concrete breaker be allowed.
- **DISPOSAL OF SURPLUS MATERIAL**  
The Contractor is prohibited from burning any material within or adjacent to the improvement.  
All excess or waste material shall either be hauled away from the site of the improvement by the Contractor and deposited at locations provided by him, or disposed of within the right of way in a manner other than burning, subject to the approval of the Engineer.  
No extra compensation will be allowed the Contractor for any expense incurred by complying with the requirements of this Special Provision.
- **ACCESS TO ABUTTING PROPERTY.** THE CONTRACTOR SHALL MAINTAIN ACCESS TO ABUTTING PROPERTY DURING THE CONSTRUCTION OF THIS PROJECT EXCEPT FOR PERIODS OF SHORT DURATION, AS APPROVED BY THE ENGINEER.
- **PERSONNEL SAFETY.** ALL CONSTRUCTION PERSONNEL WILL BE REQUIRED TO WEAR A FLUORESCENT ORANGE VEST AT ALL TIMES WHILE ON THE CONSTRUCTION SITE. COMPLIANCE WITH THIS REQUIREMENT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- **PROTECTIVE COAT.** PROTECTIVE COAT SHALL BE APPLIED TO ALL GUTTER FLAGS, FACES AND TOPS OF CURBS, SIDEWALKS, AND P.C.C. DRIVEWAYS.
- **MONUMENTS.** WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.
- **EXISTING SIGNS.** THE CONTRACTOR SHALL REMOVE EXISTING SIGNS IN CONFLICT WITH PROPOSED CONSTRUCTION, STORE THEM IN PROTECTED LOCATIONS DURING CONSTRUCTION, AND REINSTALL THEM AFTER CONSTRUCTION AT THE DIRECTION OF THE ENGINEER AND AT NO ADDITIONAL COST TO THE CONTRACT. DAMAGE TO EXISTING SIGNS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- **DEPRESSED CURB.** PROPOSED CURB SHALL BE DEPRESSED AT ALL SIDEWALK AND DRIVEWAY LOCATIONS AS DETERMINED BY THE ENGINEER.

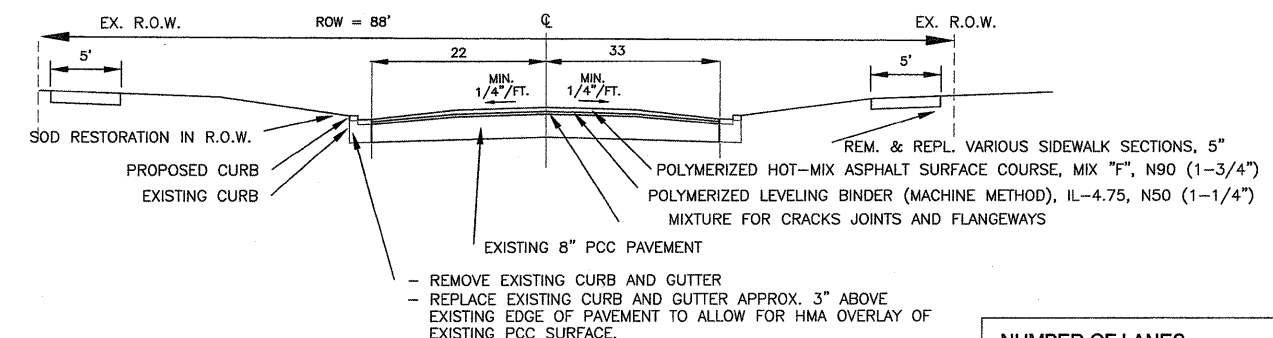
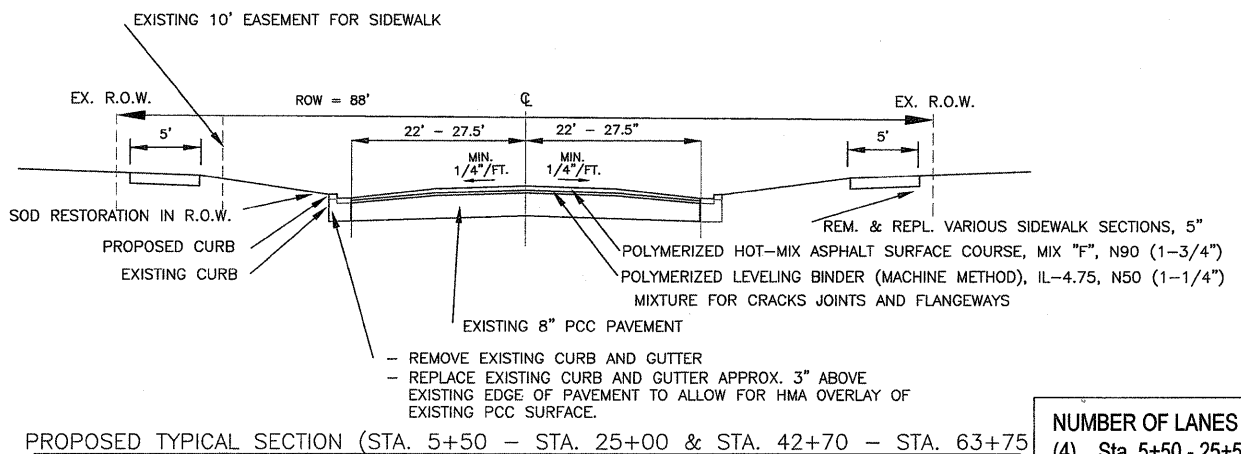
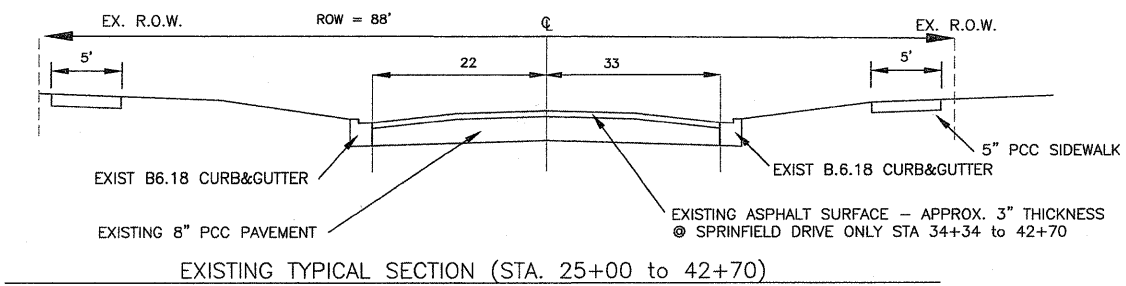
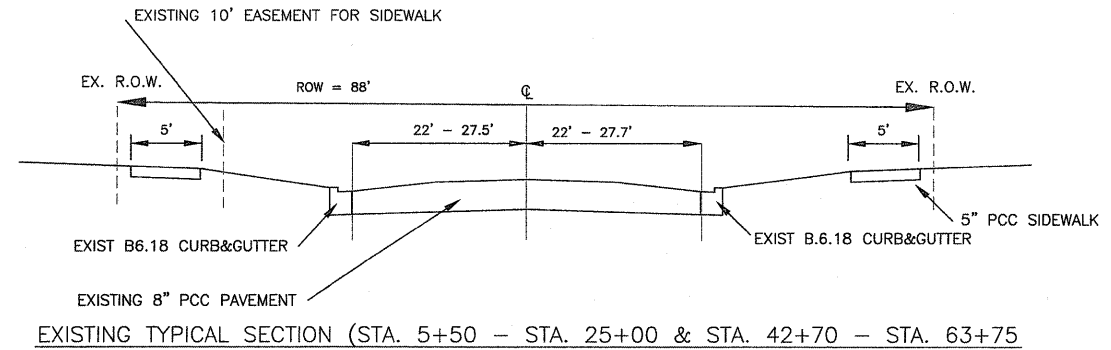
### GENERAL NOTES

- ALL CURB & GUTTER, SIDEWALK, PCC DRIVEWAY REMOVAL AND REPLACEMENT SECTIONS AND CLASS B PATCH AREAS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER, HOWEVER THEY ARE NOT TO EXCEED THE QUANTITY LISTED IN THE SUMMARY OF QUANTITIES.
- **SAWING ASPHALT OR CONCRETE FOR REMOVAL ITEMS**  
The work shall consist of sawing joints in the existing roadway, hma surface, driveway pavement, curb and gutter and sidewalk in order to separate those portions to be removed from those which will remain in place. This work shall be performed at the locations specified on the plans and/or as otherwise designated by the Engineer. In areas of full depth removal, the saw cuts shall also be full depth. The Contractor will be required to saw vertical cuts so as to form clean vertical joints. Should the Contractor deface any edge, a new sawed joint shall be provided and any additional work, including removal and replacement, will be done at the Contractor's expense.  
It is the Contractor's responsibility to determine the thickness of the existing pavement and whether or not it contains reinforcement. This work will not be paid for separately, but shall be considered incidental to the removal items for which the sawing is required.
- **RESPONSIBILITY FOR VANDALISM**  
The Contractor shall be responsible for the defacement of any concrete pours before they have set up. Concrete sidewalk, driveway pavement or curb and gutter that has been defaced, in the opinion of the Engineer, shall be repaired or removed and replaced by the Contractor at his expense.
- **WATER FOR CONSTRUCTION & USE OF FIRE HYDRANTS**  
Any use or attempt to access a fire hydrant within the Village without the engineers consent is strictly prohibited. Water may be obtained using a hydrant meter, and an account shall be arranged with the Village Services Department prior to obtaining water.
- **INLET TYPE A and STORM SEWER TYPE 1 RCP**  
Quantity for these pay items have been provided if it is determined during construction that an additional drainage structure will be necessary
- **PROJECT STATIONING**  
The Project Stationing increases from East to West.

### HIGHWAY STANDARDS

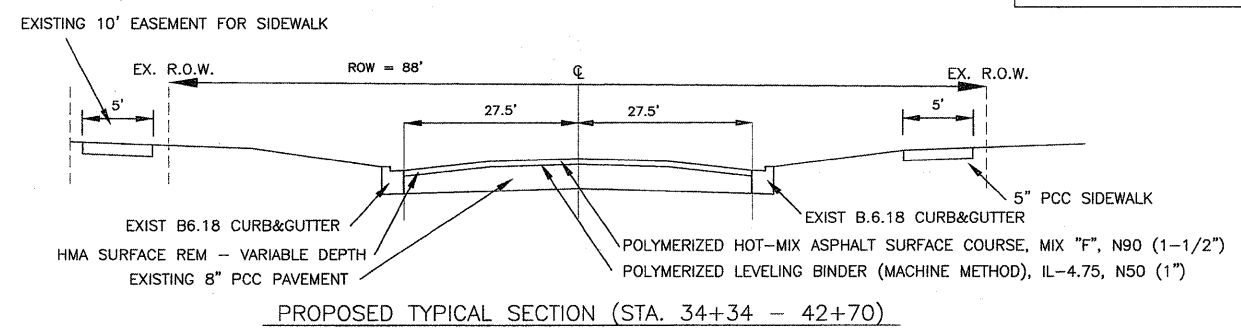
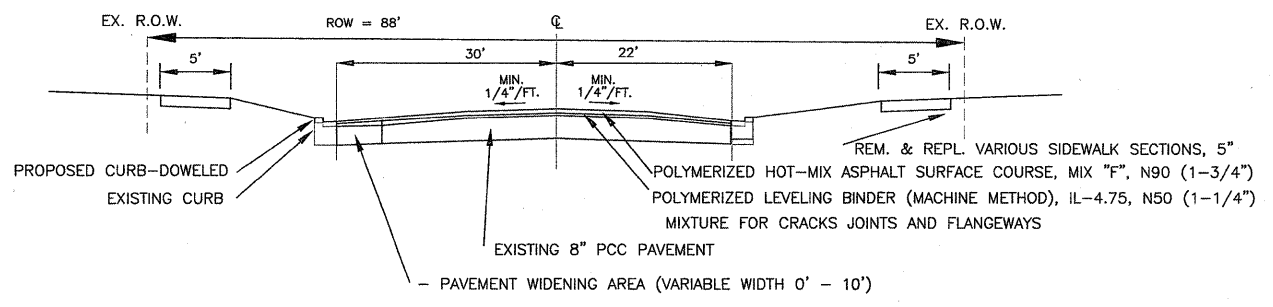
000001-05	STANDARD SYMBOLS, ABB. & PATTERNS
424001-05	CURB RAMPS FOR SIDEWALKS
442101-07	CLASS B PATCHES
602301-02	INLET, TYPE A
604001-03	FRAME & LID, TYPE 1
604016-02	FRAME & GRATE, TYPE 4
606001-04	CONCRETE CURB AND COMBINATION CONC. CURB AND GUTTER
701606-06	URBAN LANE CLOSURE, MULTI LN 2W
701801-04	LANE CLOSURE, MULTILANE, 1W OR 2W, CROSSWALK OR SIDEWALK CLOSURE
701901-01	TRAFFIC CONTROL DEVICES
780001-02	TYPICAL PAVEMENT MARKINGS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

CONTRACT NO. 63252



NUMBER OF LANES	
(4)	Sta. 5+50 - 25+50
(5)	Sta. 25+50 - 56+00, 61+00 - 63+75
(6)	Sta. 56+00 - 61+00

NUMBER OF LANES	
(4)	Sta. 5+50 - 25+50
(5)	Sta. 25+50 - 56+00, 61+00 - 63+75
(6)	Sta. 56+00 - 61+00

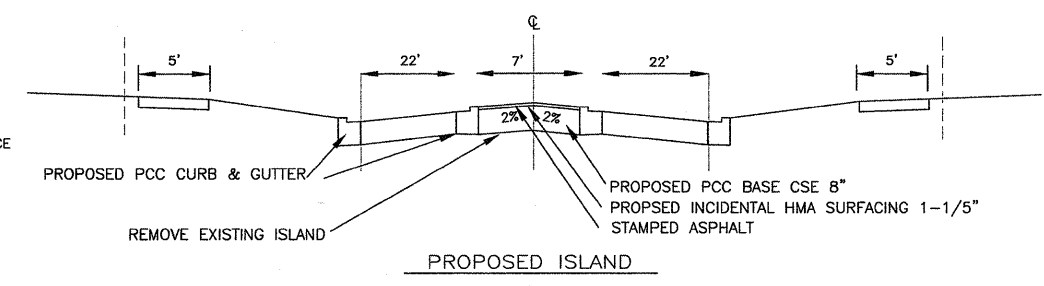
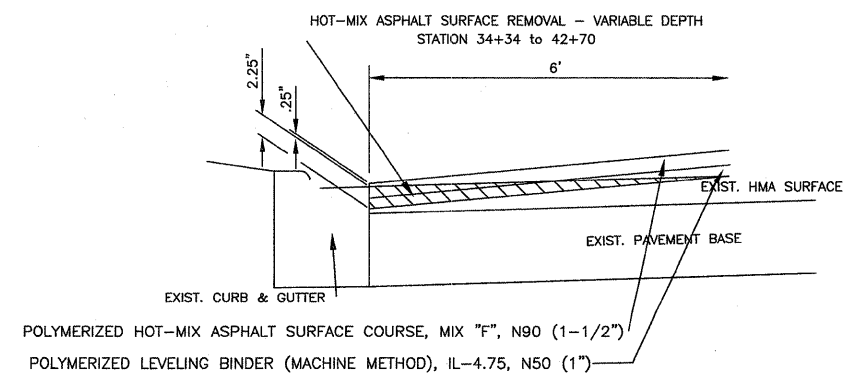


PROPOSED TYPICAL SECTION OF WIDENING (STA. 27+00 - 25+00)

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

RESURFACING	AC TYPE	VOIDS
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	SBS/SBR 70-22	4% @ 90 Gyr.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75,N50	SBS/SBR PG 76-28/22	4% @ 50 Gyr.
INCIDENTAL HMA SURFACING	AC TYPE	VOIDS
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	PG 64-22	4% @ 50 Gyr.

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

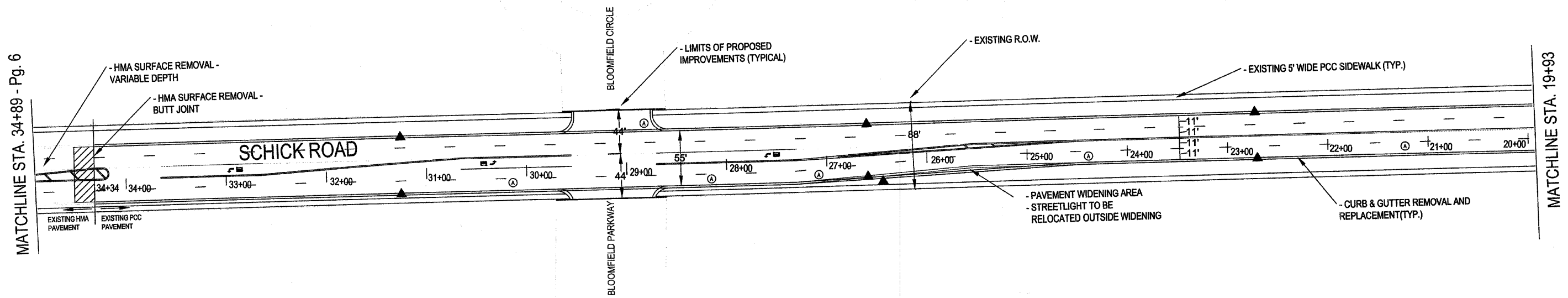
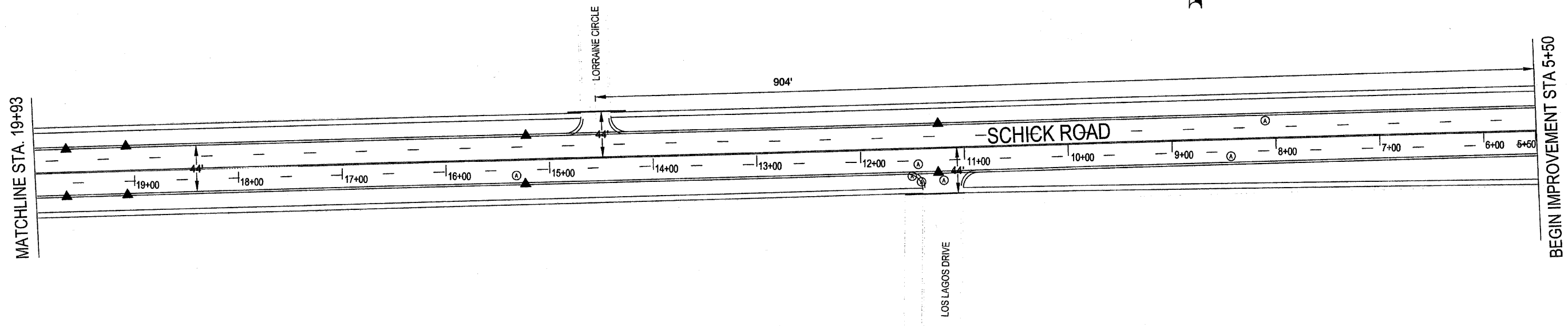


NOTE:  
SIDEWALK R&R AND PATCHING LOCATIONS TO BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE RE.

DETECTABLE WARNING ARE PROPOSED AT EACH CROSSWALK



FAU RTE 1369	SECTION 09-00057-00-RS	COUNTY DUPAGE	TOTAL SHEETS 15	SHEET NO. 5
SCHICK RD.			PROJECT NO. ARA-9003(440)	
F.H.W.A. REG.	ILLINOIS	CONTRACT NO. 63252		



- LEGEND**
- ▲ = FRAME & GRATES TO BE ADJUSTED
  - Ⓐ = FRAME & LID TO BE ADJUSTED, SPECIAL

PREPARED BY: **VILLAGE OF BLOOMINGDALE**  
 201 S. BLOOMINGDALE RD.  
 BLOOMINGDALE ILLINOIS 60108  
 (630) 893-7073

PROJECT NAME: **2009 SCHICK ROAD RESURFACING  
 STORM SEWER & PAVING PLAN**

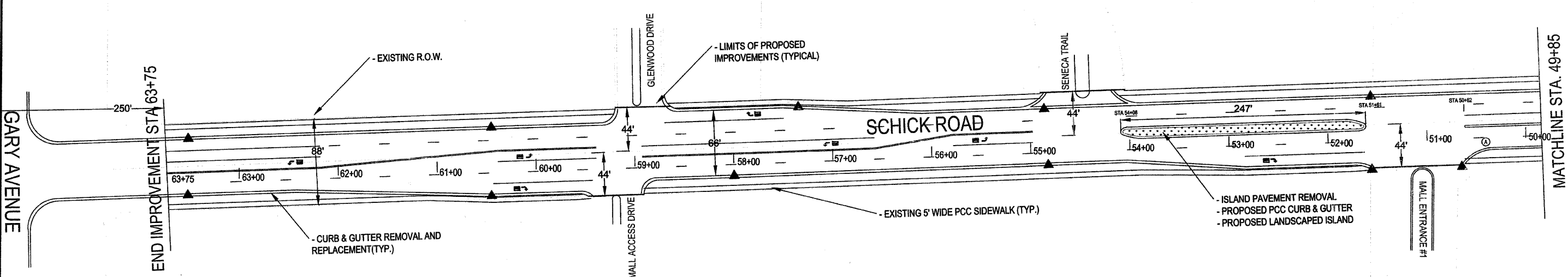
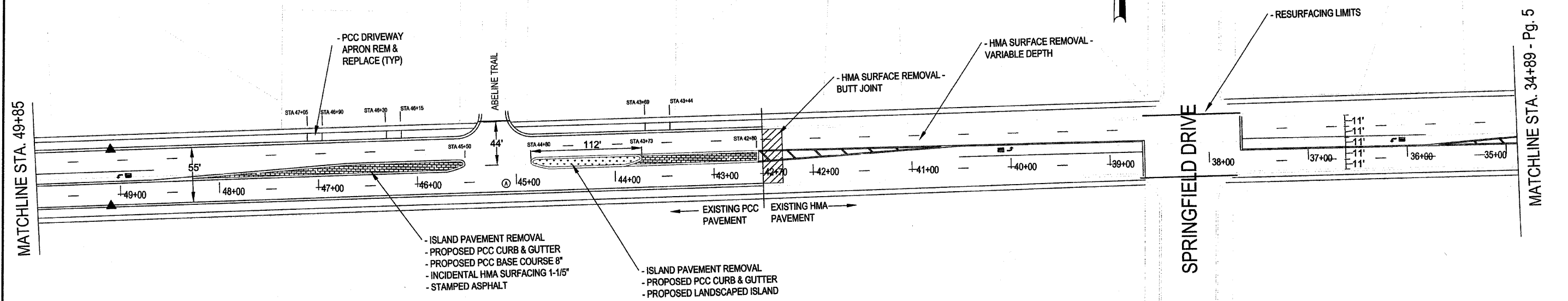
DATE: 12-12-08  
 SCALE: 1" = 50'  
 DRAWN BY: B.P.S.  
 APPROVED BY:

REVISIONS	
1. _____	4. _____
2. _____	5. _____
3. _____	6. _____

SHEET NO.  
**5**  
 15

FAU RTE 1369	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCHICK RD.	09-00057-00-RS	DUPAGE	15	6
F.H.W.A. REG. ILLINOIS	PROJECT NO. ARA-9003(440)			

CONTRACT NO. 63252



- LEGEND**
- = FRAME & GRATES TO BE ADJUSTED
  - = FRAME & LID TO BE ADJUSTED, SPECIAL

PREPARED BY: **VILLAGE OF BLOOMINGDALE**  
 201 S. BLOOMINGDALE RD.  
 BLOOMINGDALE ILLINOIS 60108  
 (630) 893-7073

PROJECT NAME: **2009 SCHICK ROAD RESURFACING  
 STORM SEWER & PAVING PLAN**

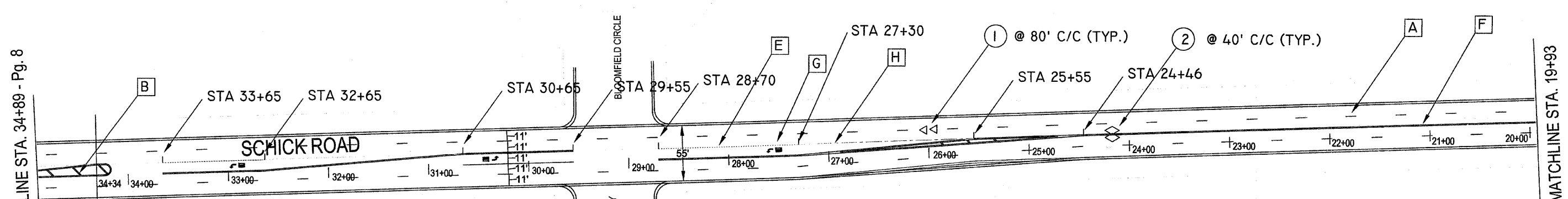
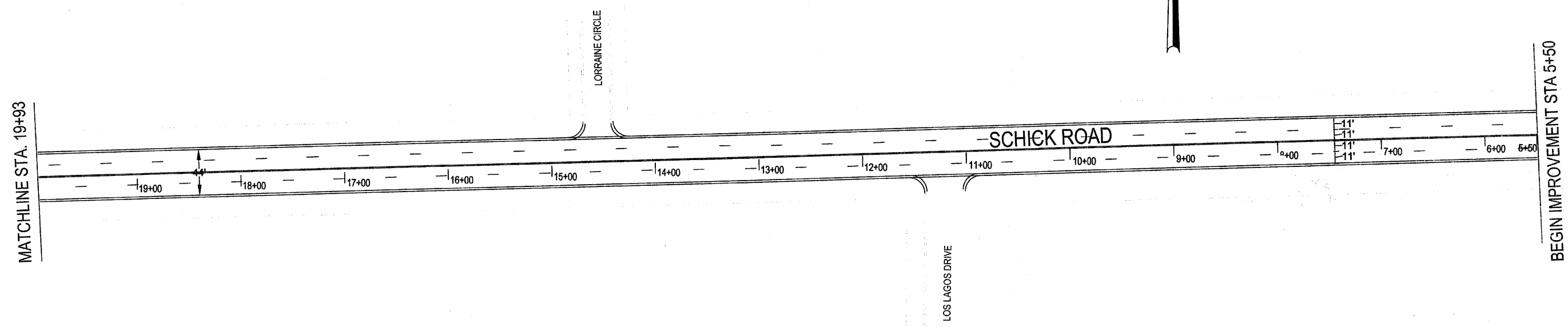
DATE: 12-12-08  
 SCALE: 1" = 50'  
 DRAWN BY: B.P.S.  
 APPROVED BY:

REVISIONS	
1. _____	4. _____
2. _____	5. _____
3. _____	6. _____

SHEET NO.  
**6**  
 15

FAU RTE 1369	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCHICK RD.	09-00057-00-RS	DUPAGE	15	7
F.H.W.A. REG. ILLINOIS	PROJECT NO. ARA-9003(440)			

CONTRACT NO. 63252



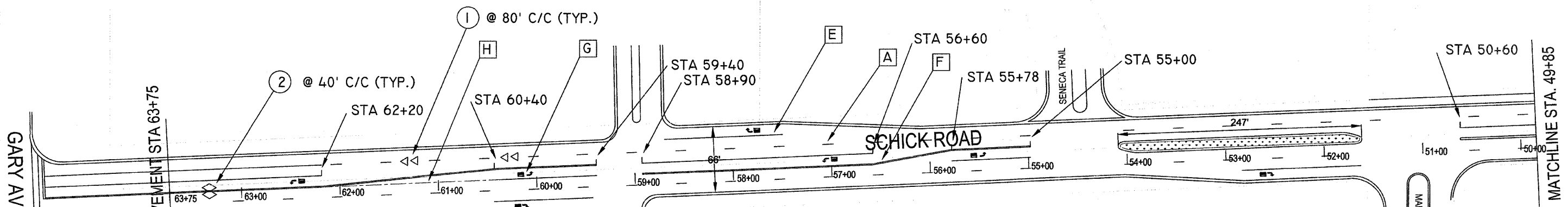
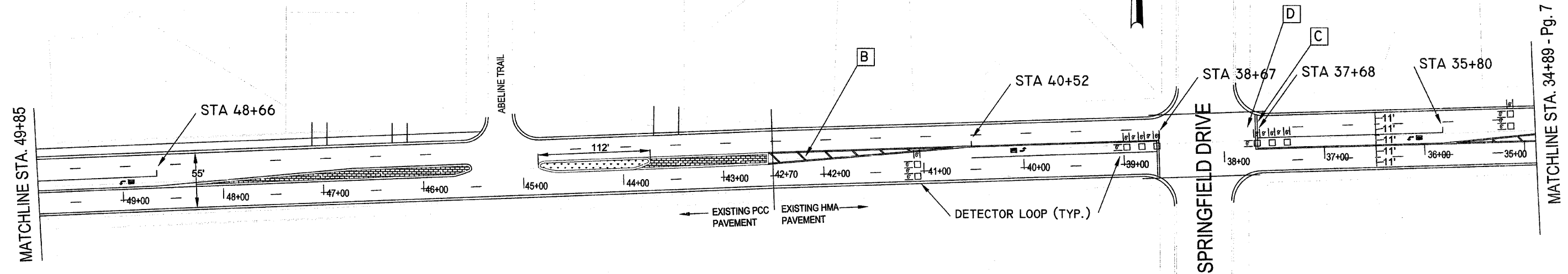
- ① ◁ RECESSED PAVEMENT MARKER - CRYSTAL, 1-WAY (TYP.)
- ② ◊ RECESSED PAVEMENT MARKER - AMBER, 2-WAY (TYP.)

**THERMOPLASTIC STRIPING LEGEND**

- A** SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LINE 4" (SKIP DASH - 10' @ 30' SPACING) TYP.
- B** SOLID YELLOW THERMOPLASTIC PAVEMENT MARKING - LINE 12" (CROSS HATCH - 45 DEG. @ 20' C-C) TYP.
- C** SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LINE 24" (STOP BAR) TYP.
- D** SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LINE 6" (CROSSWALK, 2 @ 6' SPACING) TYP.
- E** SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LINE 6" (LANE LINE) TYP.
- F** DOUBLE SOLID YELLOW THERMOPLASTIC PAVEMENT MARKING - LINE 4" (CENTERLINE - 2 @ 11" C-C) TYP.
- G** SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS
- H** SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LINE 6" (DOTTED LINE - 2' @ 4' SPACING) TYP.

FAU RTE 1369	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCHICK RD.	09-00057-00-RS	DUPAGE	15	8
F.H.W.A. REG. ILLINOIS	PROJECT NO. ARA-9003(440)			

CONTRACT NO. 63252

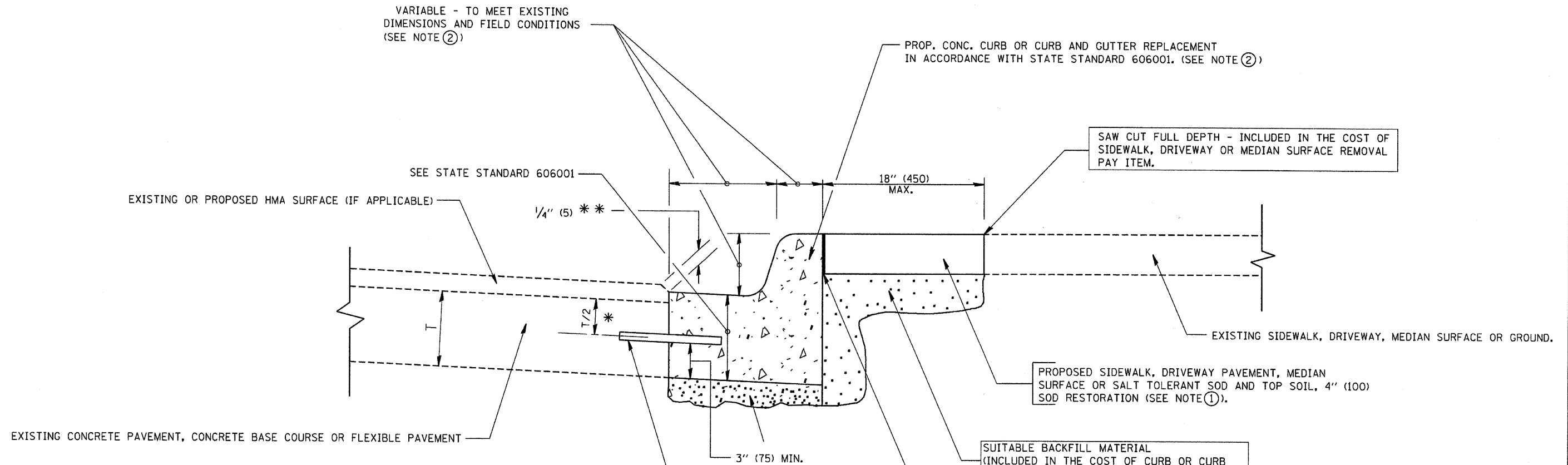


- ① ◁ RECESSED PAVEMENT MARKER - CRYSTAL, I-WAY (TYP.)
- ② ◇ RECESSED PAVEMENT MARKER - AMBER, 2-WAY (TYP.)

**THERMOPLASTIC STRIPING LEGEND**

- A** SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LINE 4" (SKIP DASH - 10' @ 30' SPACING) TYP.
- B** SOLID YELLOW THERMOPLASTIC PAVEMENT MARKING - LINE 12" (CROSS HATCH - 45 DEG. @ 20' C-C) TYP.
- C** SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LINE 24" (STOP BAR) TYP.
- D** SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LINE 6" (CROSSWALK, 2 @ 6' SPACING) TYP.
- E** SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LINE 6" (LANE LINE) TYP.
- F** DOUBLE SOLID YELLOW THERMOPLASTIC PAVEMENT MARKING - LINE 4" (CENTERLINE - 2 @ 11" C-C) TYP.
- G** SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS
- H** SOLID WHITE THERMOPLASTIC PAVEMENT MARKING - LINE 6" (DOTTED LINE - 2' @ 4' SPACING)





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

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

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

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

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

**BASIS OF PAYMENT:**

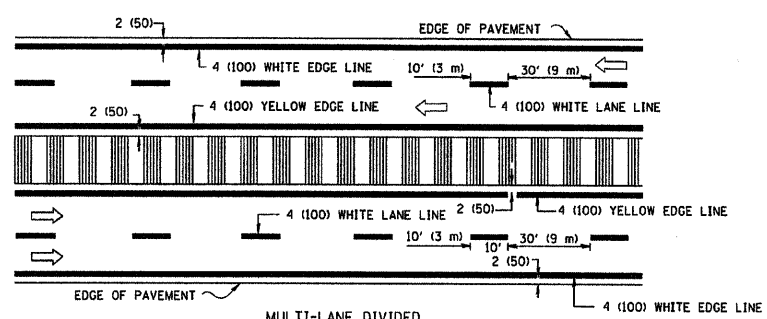
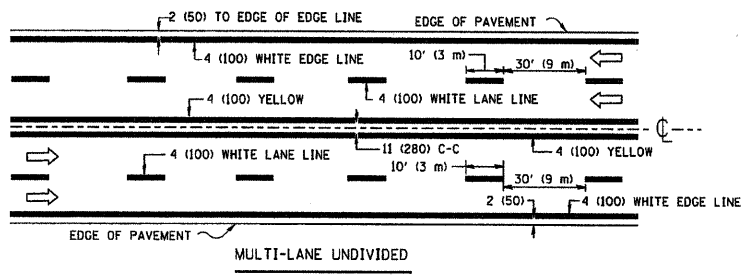
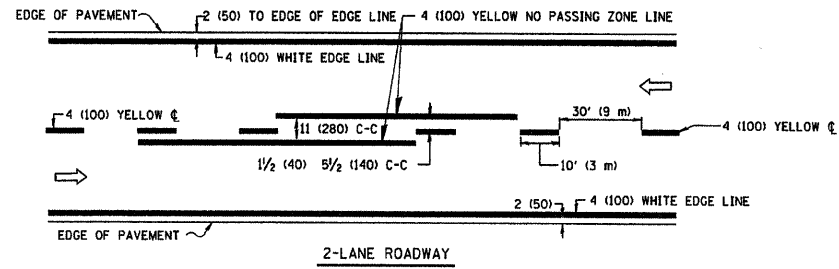
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

## CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

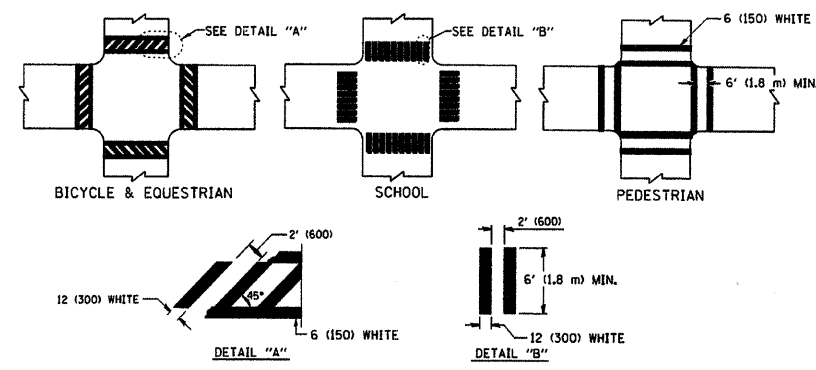
FILE NAME = W:\statstd\22x34\bd24.dgn	USER NAME = geglianobt	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b>	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
		DRAWN -	REVISED - A. ABBAS 03-21-97								09-00057-00-R5		15	9	
		CHECKED -	REVISED - M. GOMEZ 01-22-01								BD600-06 (BD-24)				
		DATE - 03-11-94	REVISED - R. BORO 01-01-07												

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

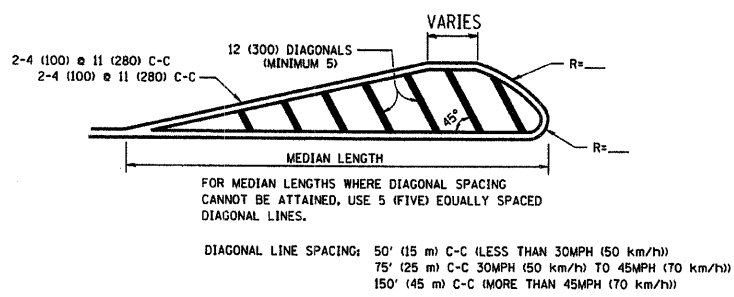
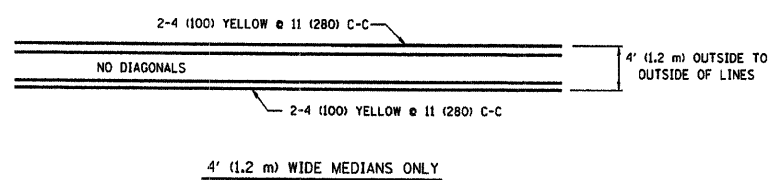


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

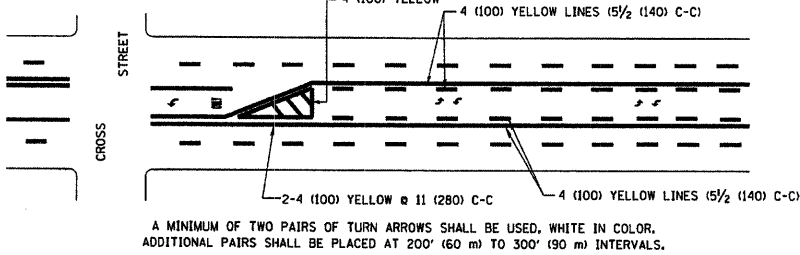
TYPICAL LANE AND EDGE LINE MARKING



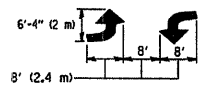
TYPICAL CROSSWALK MARKING



MEDIANS OVER 4' (1.2 m) WIDE

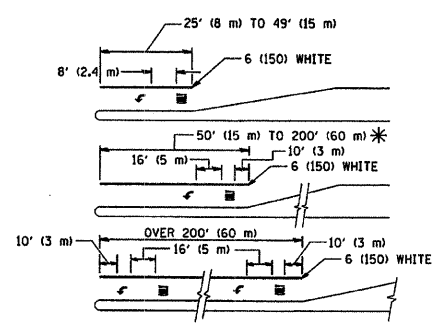


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

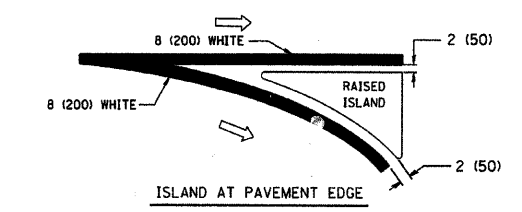
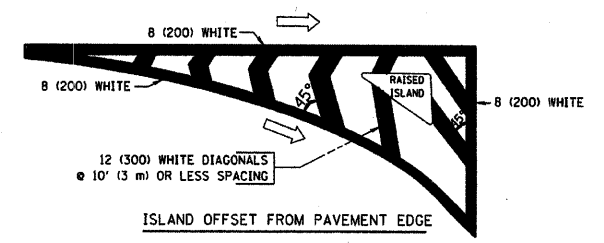


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

\* 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 LEFT (OR RIGHT) TURN LANE

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	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH 5/2 (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.
CORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C (30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <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.

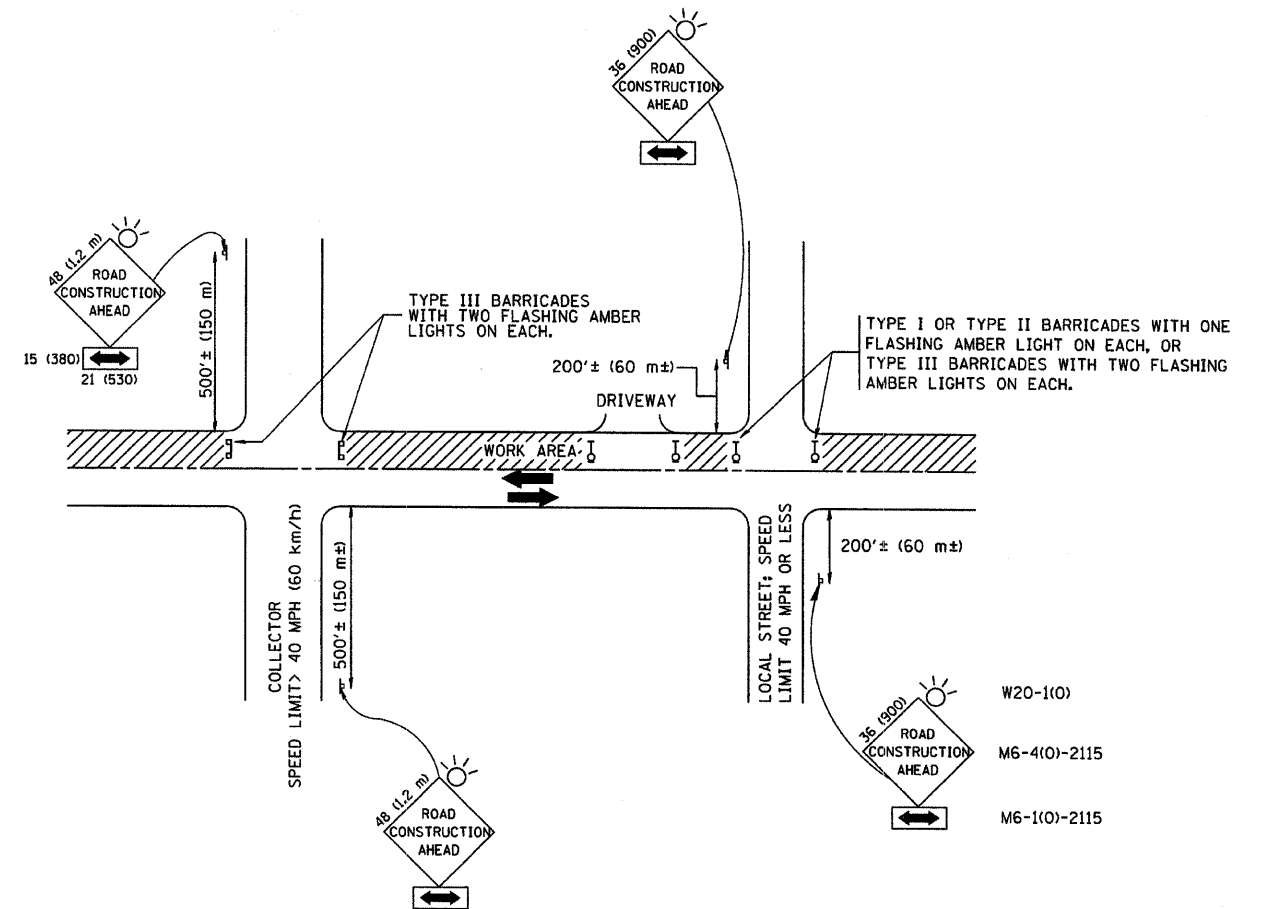
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME = W:\dotatd\22x34\1c13.dgn	USER NAME = gegliano	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
	PLOT SCALE = 50.000' / IN.	DRAWN -	REVISED -A. HOUSEH 10-09-96
	PLOT DATE = 1/4/2008	CHECKED -	REVISED -A. HOUSEH 10-17-96
		DATE - 03-19-90	REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL PAVEMENT MARKINGS			04-00097-00-RS		15	10
SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA.	TO STA.	
		FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	04-00097-00-RS		15	10
TC-13		CONTRACT NO.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

**NOTES:**

**A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS**

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

**B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:**

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

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

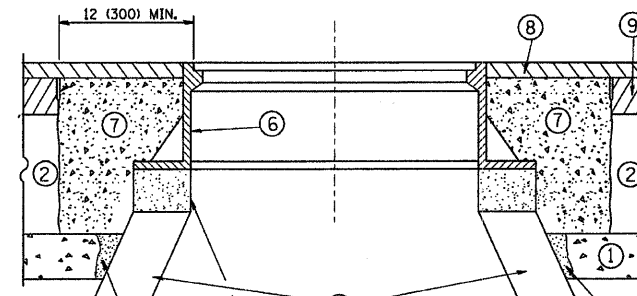
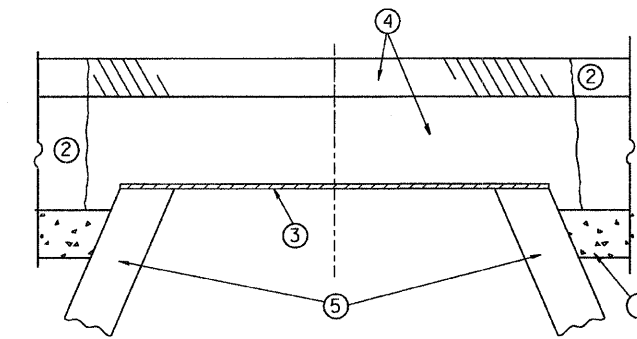
FILE NAME = W:\ds\std\22x34\tcl0.dgn	USER NAME = geglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	0A-00057-00-R5		15	11
TC-10			CONTRACT NO.	
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 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

**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.

**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**

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

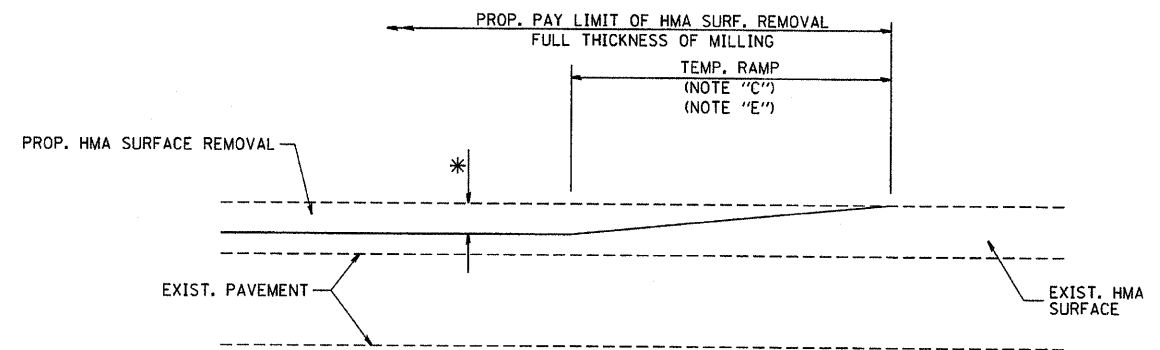
FILE NAME = W:\dststd\22x34\bd08.dgn	USER NAME = gaglionob	DESIGNED - R. SHAH	REVISED - R. SHAH 03-10-95
		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50,0000 ' / IN.	CHECKED -	REVISED - R. WIEDEMAN 05-14-04
	PLOT DATE = 1/4/2008	DATE - 10-25-94	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

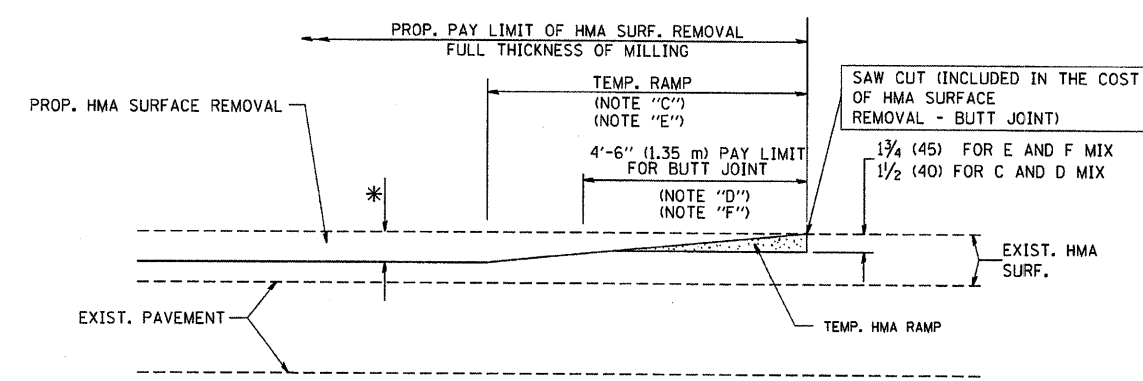
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	09-00057-00-RS		15	12
BD600-03 (BD-8)			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



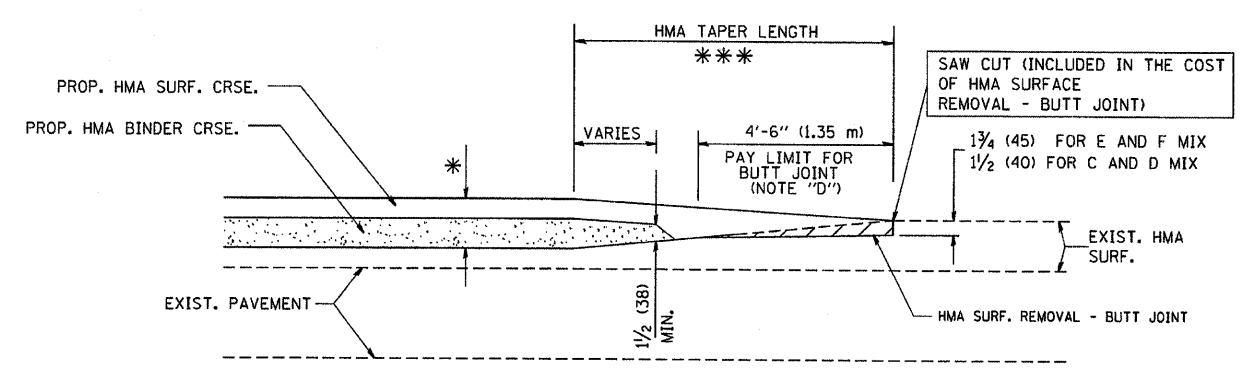
MILLED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 1**



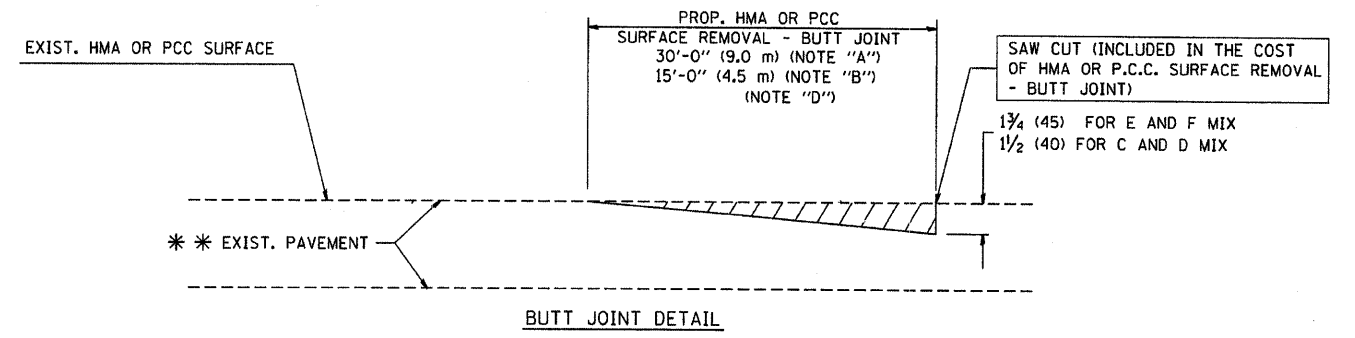
HMA CONSTRUCTED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 2  
TYPICAL TEMPORARY RAMP**

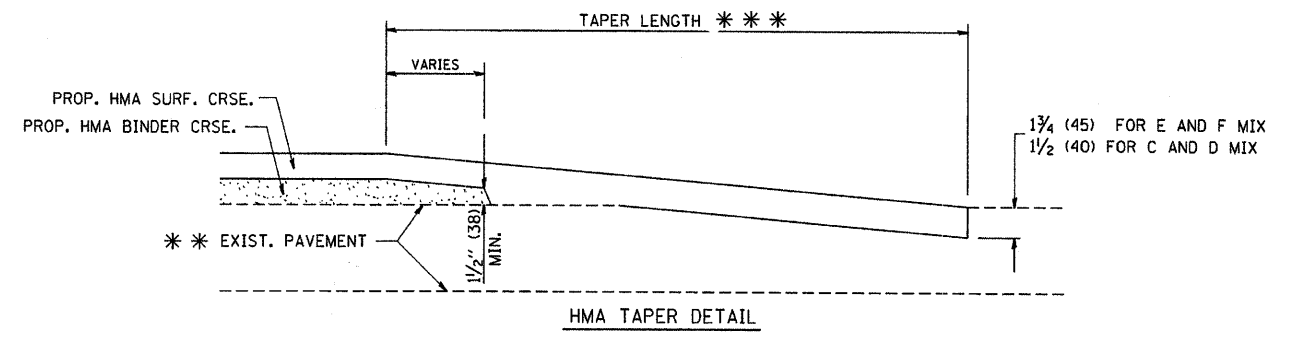


BUTT JOINT AND  
HMA TAPER

**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".

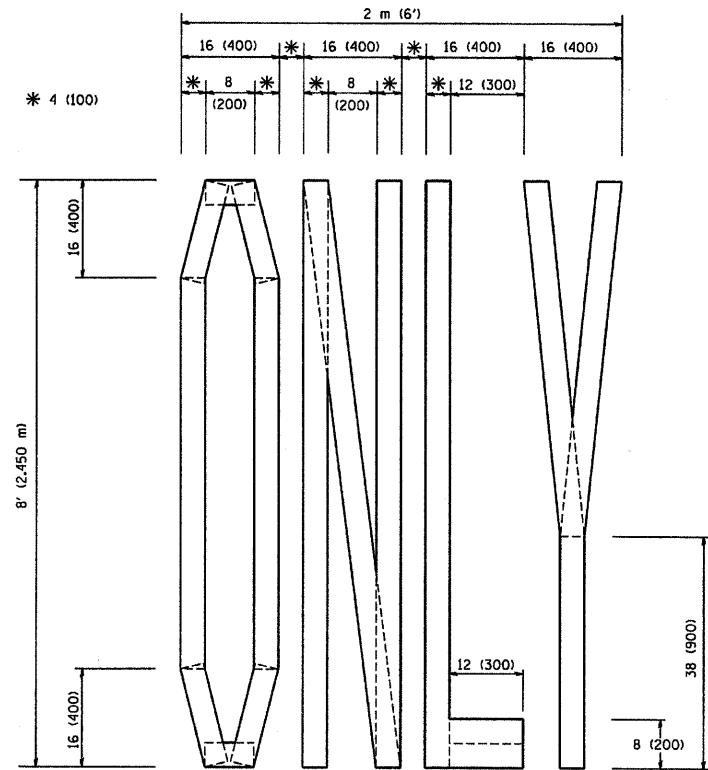
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\bd32.dgn	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
		DRAWN -	REVISED - A. ABBAS 03-21-97
		CHECKED -	REVISED - M. GOMEZ 04-06-01
		DATE - 06-13-90	REVISED - R. BORO 01-01-07

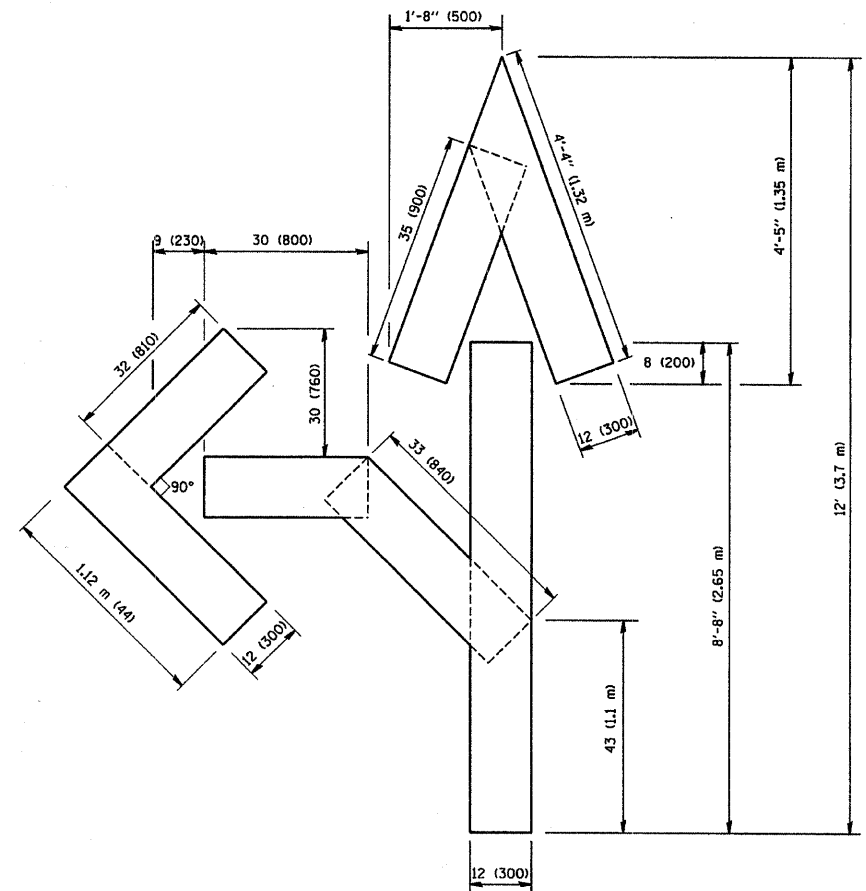
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>BUTT JOINT AND HMA TAPER DETAILS</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

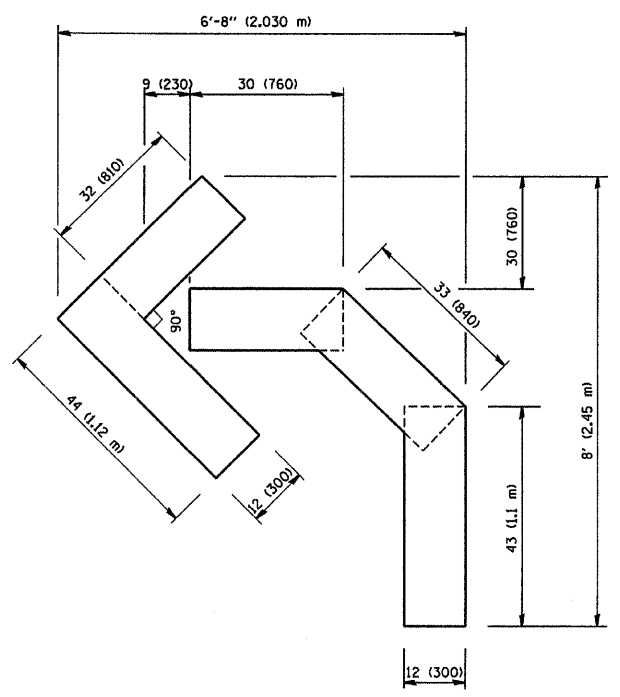
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	09-00057-00-RS		15	13
BD400-05 BD32		CONTRACT NO.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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



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



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

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

FILE NAME = W:\diststd\22x34\to16.dgn	USER NAME = gaglianobt	DESIGNED - DRAWN -	REVISED -T. RAMMACHER 06-05-96 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

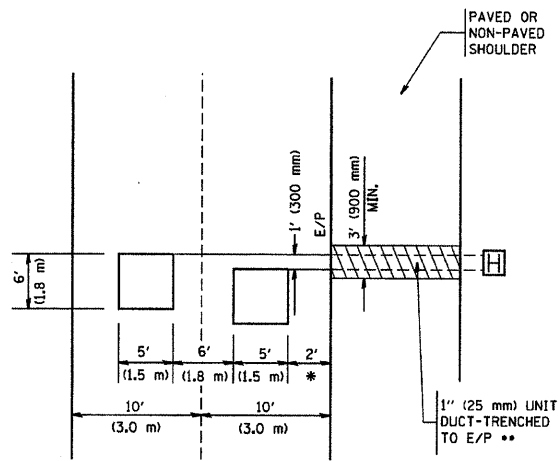
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	09-00057-00-RS		15	14
TC-16			CONTRACT NO.	
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.



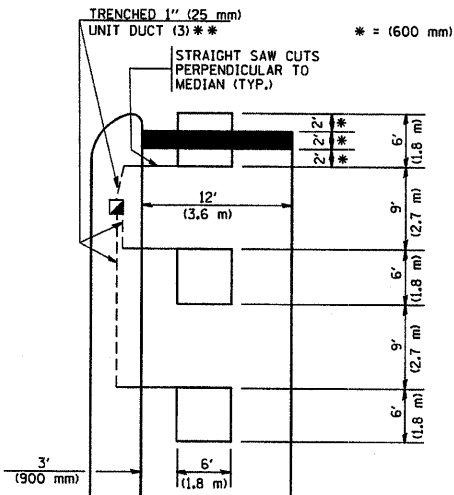
\* = (600 mm)

\*\* 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.



\* = (600 mm)

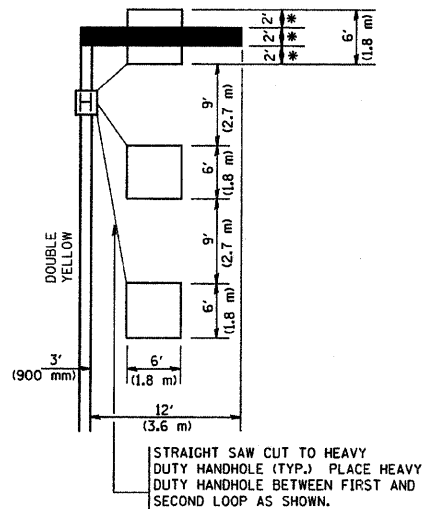
\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

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

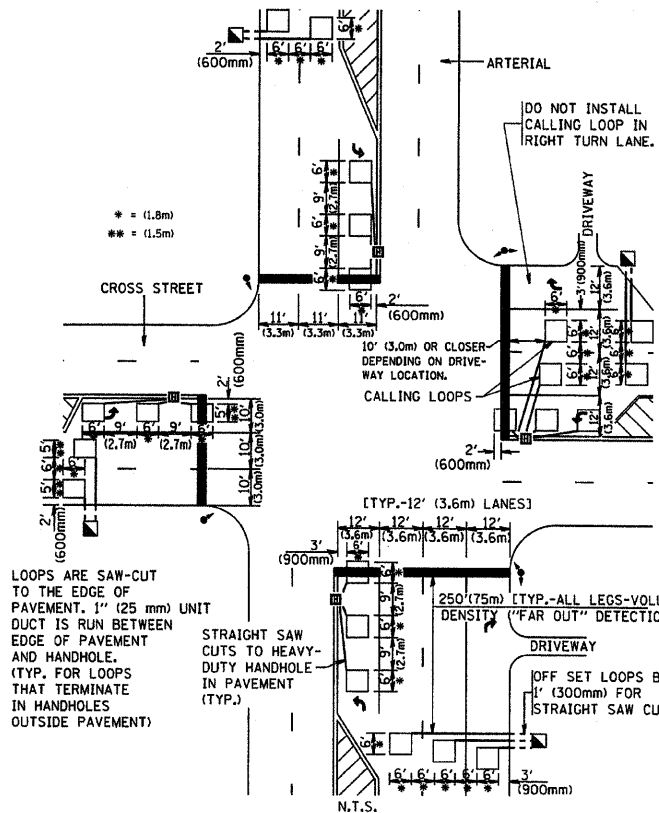
(PROTECTED / PERMITTED LEFT TURN PHASING)

\* = (600 mm)



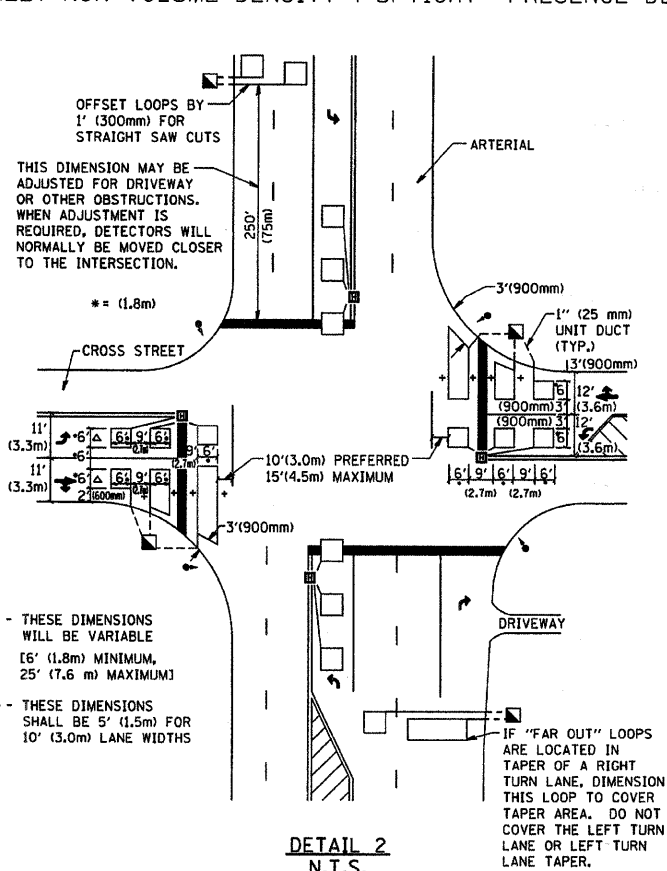
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



**DETAIL 1  
N.T.S.**

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



**DETAIL 2  
N.T.S.**

**NOTES:**

**VEHICLES LOOP DETECTORS**

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

**PLACEMENT OF DETECTORS**

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

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

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

**NOTE:**

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

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

FILE NAME = W:\dstatd\22x34\ts07.dgn

USER NAME = geglionobt	DESIGNED -	REVISED -
PLOT SCALE = 50.0000' / IN.	DRAWN - R.K.F.	REVISED -
PLOT DATE = 1/4/2008	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	09-00097-00-25		15	15
TS-07			CONTRACT NO.	
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				