

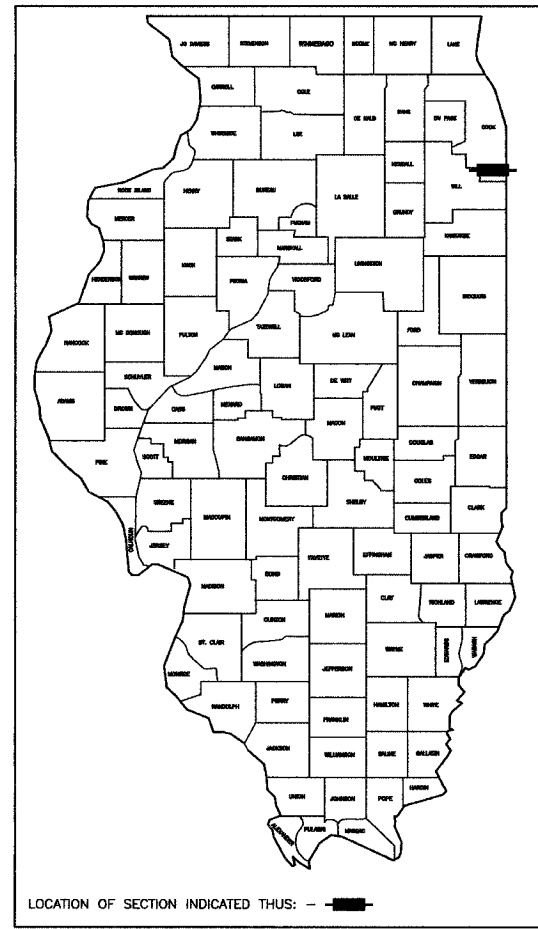
F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1629	07-00220-00-RS	COOK	20	01
STA.		TO STA.		
FED. ROAD DIST. NO.	KLINGBE	FED. AID PROJECT		

CONTRACT #83934

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

# PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAU 1629 / VOLLMER ROAD  
HALSTED STREET TO DIXIE HIGHWAY  
LOCAL AGENCY PAVEMENT PRESERVATION  
STREET RESURFACING  
PROJECT: M-8003(793)  
SECTION NO.: 07-00220-00-RS  
JOB NO.: C-91-181-07  
CITY OF CHICAGO HEIGHTS  
COOK COUNTY



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

APPROVED: Anthony De Luca MAYOR, CITY OF CHICAGO HEIGHTS  
PASSED: MAY 31 2007  
CHRISTOPHER HOLT REGION ONE ENGINEER OF LOCAL ROADS & STREETS

RELEASED FOR BID BASED ON LIMITED REVIEW: June 1 2007  
Diane O'Keefe DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER

PRINTED BY THE AUTHORITY OF  
THE STATE OF ILLINOIS

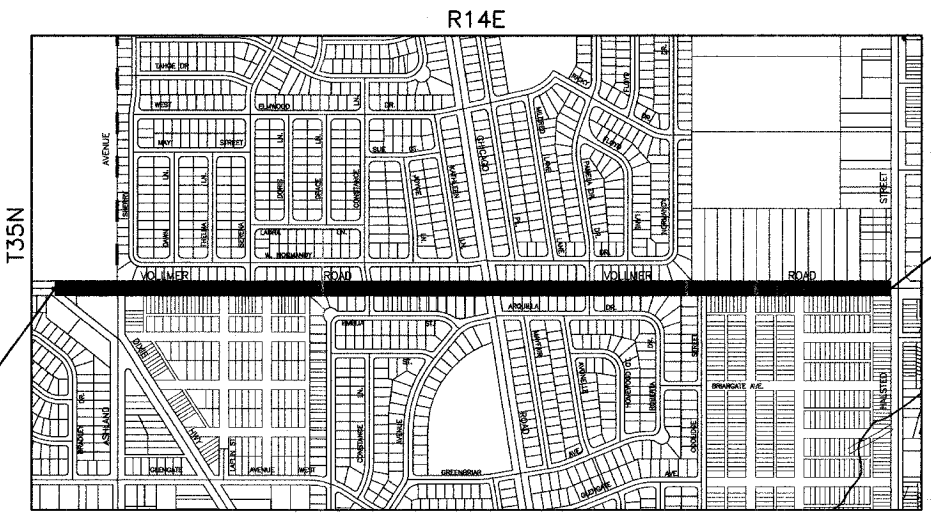
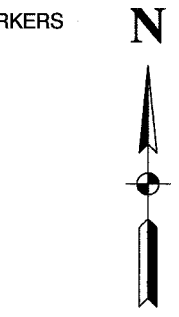
PREPARED BY OR UNDER THE DIRECT SUPERVISION OF:  
Josh M. Dal  
4/9/07

**INDEX OF SHEETS**

- 1 COVER SHEET, INDEX OF SHEETS, LOCATION MAP
- INDEX OF STATE STANDARDS
- 2 SUMMARY OF QUANTITIES & GENERAL NOTES
- 3 TYPICAL CROSS SECTION
- 4-6 PAVEMENT PLAN
- 7-9 STRIPING PLAN
- 10-20 DISTRICT 1 STANDARD DETAILS

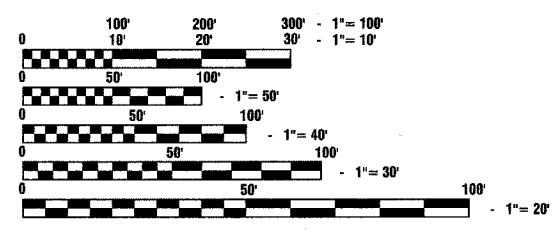
**STATE STANDARDS**

- 000001-04 STANDARD STANDARDS, ABBREVIATIONS AND PATTERNS
- 280001-03 TEMPORARY EROSION CONTROL SYSTEMS
- 424001-04 CURB RAMPS FOR SIDEWALK
- 442201-02 CLASS C AND D PATCHES
- 606001-03 CONCRETE CURB AND COMBINATION CONCRETE CURB & GUTTER
- 701501-03 URBAN LANE CLOSURE 2-L, 2-W, UNDIVIDED
- 701601-04 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701701-04 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701801-03 LANE CLOSURE, MULTILANE, 1W OR 2W, CROSSWALK OR SIDEWALK CLOSURE,
- 702001-06 TRAFFIC CONTROL DEVICES
- 780001-01 TYPICAL PAVEMENT MARKINGS
- 781001-02 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
- 886001 DETECTOR LOOP INSTALLATIONS
- 886006 TYPICAL LAYOUT FOR DETECTION LOOPS



PROJECT VOLLMER ROAD ENDS STA 66+85

PROJECT VOLLMER ROAD BEGINS STA 11+57.89



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

CONTRACT NO. 83934

**LOCATION MAP**

— INDICATES PROPOSED IMPROVEMENT  
GROSS LENGTH= 5,529 FEET = 1.05 MILES  
NET LENGTH= 5,529 FEET = 1.05 MILES

VOLLMER ROAD ARTERIAL  
ADT=12,100 (2007)  
=12,100 (2030)  
DESIGN SPEED=30 MPH  
SPEED LIMIT= 30 MPH

I.D.O.T. FEDERAL AID DESIGN ENGINEER: KEVIN STALLWORTH 847-705-4169  
CONSULTANTS: ROBINSON ENGINEERING, LTD. 708-331-6700  
CONTACT ENGINEER: RON SMITH

SECTION 8, TOWNSHIP 35, RANGE 14  
SECTION 17, TOWNSHIP 35, RANGE 14

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1629	07-00220-00-RS	COOK	20	02
STA.		TO STA.		
FED. ROAD DIST. NO.	BLK/MI	FED. RD PROJECT		

CONTRACT #83934

SUMMARY OF QUANTITIES				1000	
S.I.	CODE NO.	PAY ITEM	UNIT	QUAN	
	35800200	AGGREGATE BASE REPAIR	TON	100	
	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	2	
	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	2	
	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	2	
	25200110	SODDING, SALT TOLERANT	SQ YD	150	
	40300100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	4200	
	40600300	AGGREGATE (PRIME COAT)	TON	50	
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	840	
	40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	1700	
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5"	SQ FT	270	
	42400800	DETECTABLE WARNINGS	SQ FT	65	
	44000161	HOT-MIX ASPHALT SURFACE REMOVAL 3"	SQ YD	19000	
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1000	
	44000600	SIDEWALK REMOVAL	SQ FT	270	
	44201777	CLASS D PATCHES, TYPE II, 11 INCH	SQ YD	130	
	44201781	CLASS D PATCHES, TYPE III, 11 INCH	SQ YD	160	
	44201783	CLASS D PATCHES, TYPE IV, 11 INCH	SQ YD	910	
	44300100	AREA REFLECTIVE CRACK CONTROL TREATMENT	SQ YD	19000	
	60250200	CATCH BASINS TO BE ADJUSTED	EACH	47	
	60255500	MANHOLE TO BE ADJUSTED	EACH	16	
	60300205	FRAMES AND GRATES TO BE ADJUSTED (SPECIAL)	EACH	2	
	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	1300	
	67100100	MOBILIZATION	L SUM	1	
	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	
	70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	640	
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	280	
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	11270	
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1400	
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	190	
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	140	
*	88600100	DETECTOR LOOP, TYPE 1	FOOT	150	
	X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1000	
	X7200400	WORK ZONE PUBLIC INFORMATION SIGNS	EACH	2	
	XX003168	WORK ZONE PAVEMENT MARKING REMOVAL, SPECIAL	FOOT	640	
	XX006948	HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT	SQ YD	530	

\* - INDICATES SPECIALTY ITEMS

**GENERAL NOTES:**

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED).
- UTILITIES INDICATED ON THE PLANS ARE PROVIDED FOR THE CONTRACTOR'S USE AND ARE BASED UPON INFORMATION AVAILABLE AT THE TIME OF THE ADVERTISEMENT FOR BIDS. THE OWNER AND ENGINEER DO NOT GUARANTEE THE ACCURACY OF UTILITIES INFORMATION.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- SCHEDULES INCLUDED IN THE PLANS HAVE BEEN PREPARED FROM FIELD NOTES. EXACT LOCATIONS FOR PATCHING SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION.
- THE NOMINAL THICKNESS OF BITUMINOUS MIXTURE STATED IN THE SPECIFICATIONS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE BITUMINOUS SURFACE IS PLACED.

REVISIONS	
NAME	DATE

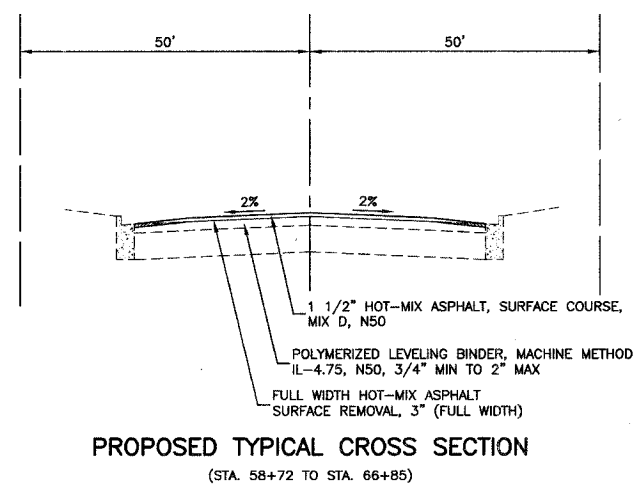
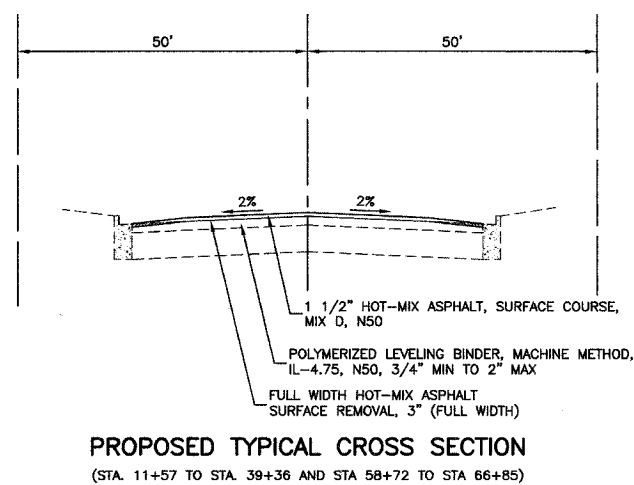
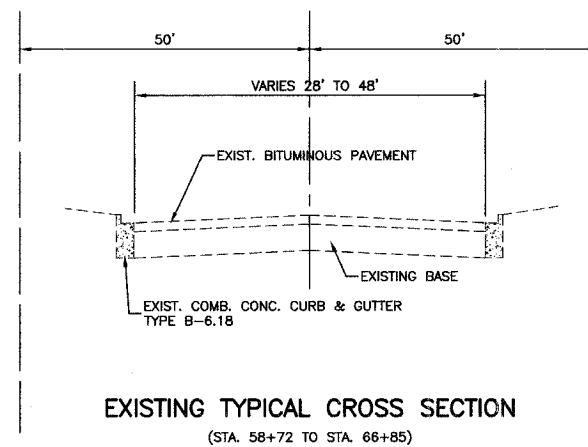
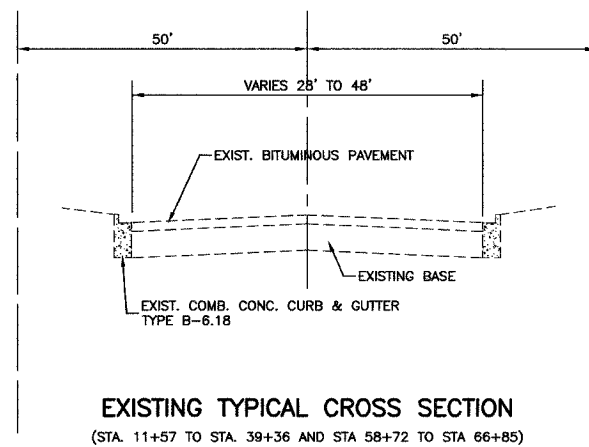
ILLINOIS DEPARTMENT OF TRANSPORTATION

**VOLLMER ROAD  
STREET RESURFACING  
SUMMARY OF QUANTITIES  
AND GENERAL NOTES**

SCALE: VERT. NA      DRAWN BY RG  
 HORIZ. NA              CHECKED BY JMN  
 DATE 02/09/07

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1629	07-00220-00-RS	COOK	20	03
STA.		TO STA.		
FED. ROAD DIST. NO.	ALRDS	FED. AID PROJECT		

CONTRACT #83934



**HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

ITEM	AC TYPE	VOIDS
HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50 (L-9.5 mm), 1 1/2"	PG 64-22	4% @ 50 GYR
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75 N50 (IL-19 mm), 3/4" min to 2" max	SBS/SBR PG 76-28/22	4% @ 50 GYR
DRIVEWAYS		
HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50 (L-9.5 mm), 2"	PG 64-22	4% @ 50 GYR
HOT-MIX ASPHALT BASE COURSE, (HMA Binder IL-19mm), PE-6", CE-8"	PG 64-22	4% @ 50 GYR
PATCHING		
CLASS D PATCHES, TYPE I, II, III, 7" (HMA BINDER IL-19 mm)	PG 64-22/58-22	4% @70 GYR

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**VOLLMER ROAD  
STREET RESURFACING  
TYPICAL CROSS SECTIONS**

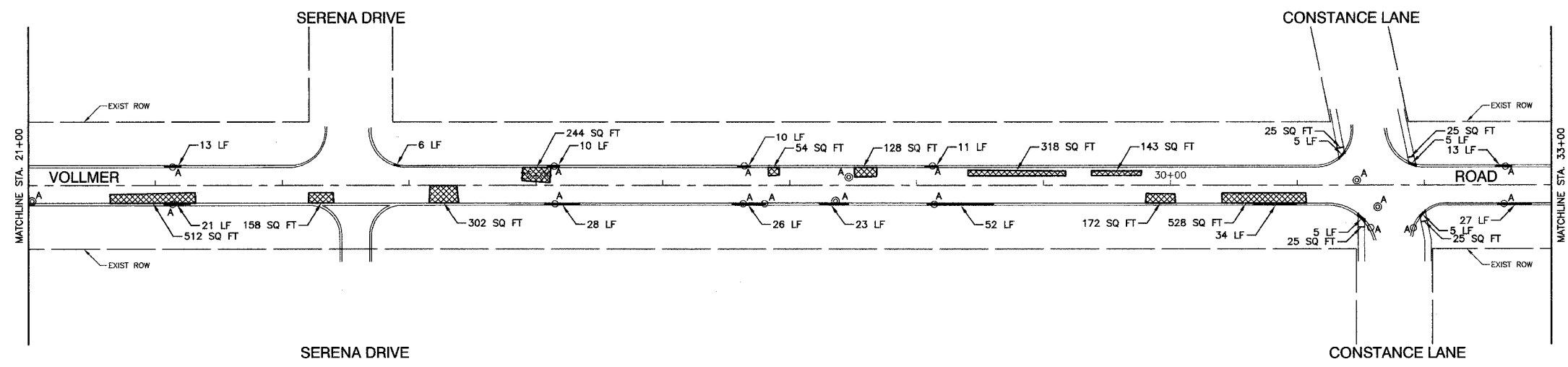
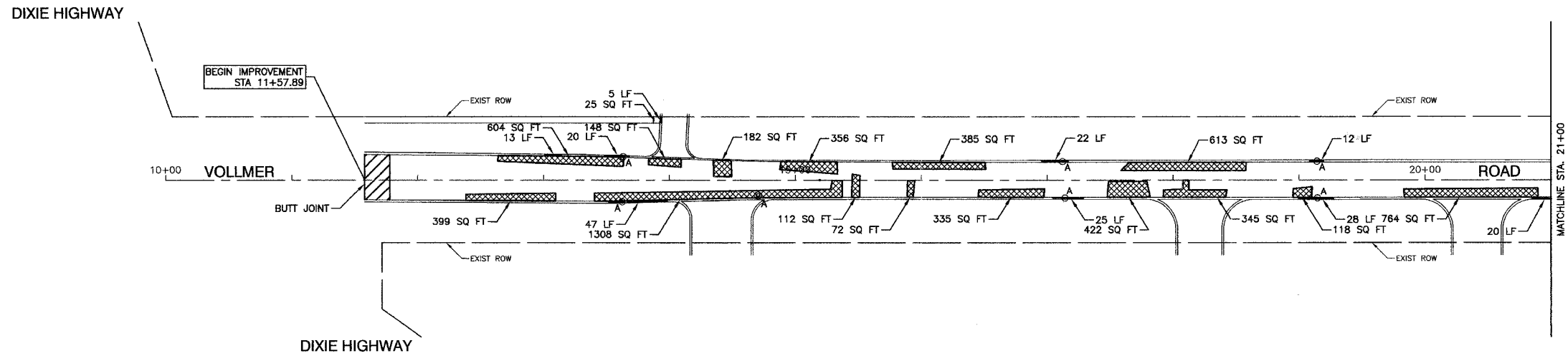
SCALE: VERT. NA  
HORIZ. NA  
DATE 02/09/07

DRAWN BY RG  
CHECKED BY JMN

SECTION 8, TOWNSHIP 35, RANGE 14  
SECTION 17, TOWNSHIP 35, RANGE 14

F. A. S. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1629	07-00220-00-RS	COOK	20	04
STA. 11+57.89		TO STA. 33+00		
FED. ROAD DIST. NO.	LINE NO.	FED. RD PROJECT		

CONTRACT #83934



**NOTE:**  
LIMIT OF CONSTRUCTION ON ALL SIDE STREETS IS THE RADIUS RETURN PLUS 10' BUTT JOINT

**LEGEND**

- BITUMINOUS PAVEMENT REPAIR
- CURB REMOVAL
- STRUCTURE TO BE ADJUSTED

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**VOLLMER ROAD  
STREET RESURFACING  
PLAN SHEET**

SCALE: VERT. NA  
HORIZ. 1"=50'  
DATE 02/09/07

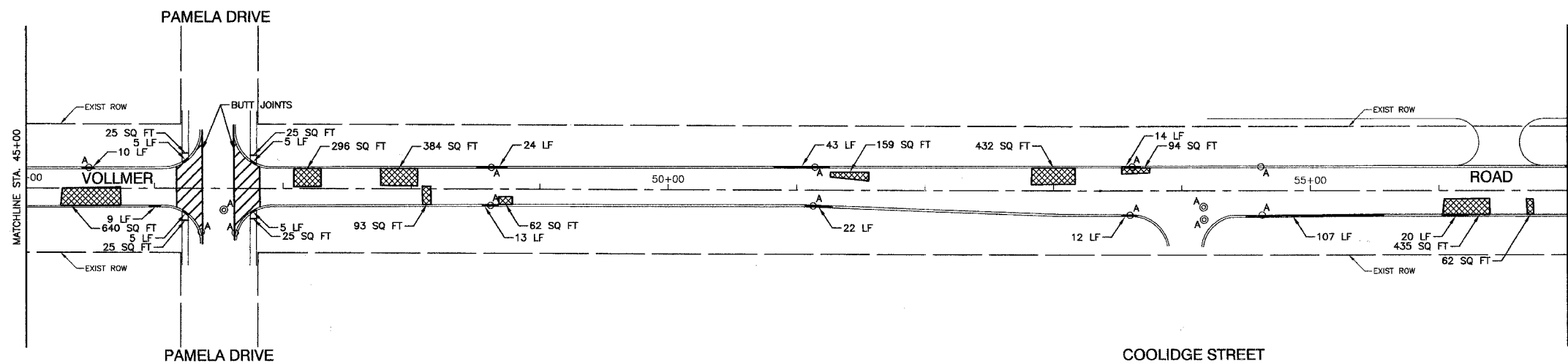
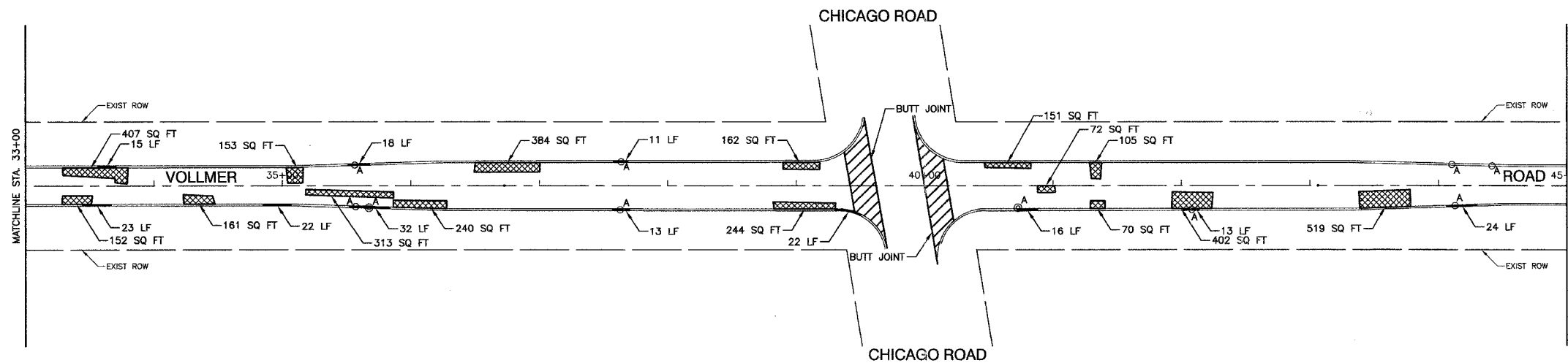
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CHECKED BY JMN

ROBINSON ENGINEERING, LTD.  
1700 SOUTH FRANK AVENUE, SOUTH HAVEN, ILLINOIS 62424  
(708) 381-8700 FAX (708) 381-3828  
ILLINOIS DESIGN FIRM REGISTRATION NO. 154601120 06171-PLAN-01

SECTION 8, TOWNSHIP 35, RANGE 14  
SECTION 17, TOWNSHIP 35, RANGE 14

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1629	07-00220-00-RS	COOK	20	05
STA. 33+00		TO STA. 57+00		
FED. ROAD DIST. NO.	BLK/MS	FID. NO. PROJECT		

CONTRACT #83934



**NOTE:**  
LIMIT OF CONSTRUCTION ON ALL SIDE STREETS  
IS THE RADIUS RETURN PLUS 10' BUTT JOINT

**LEGEND**

- BITUMINOUS PAVEMENT REPAIR
- CURB REMOVAL
- STRUCTURE TO BE ADJUSTED

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**VOLLMER ROAD  
STREET RESURFACING  
PLAN SHEET**

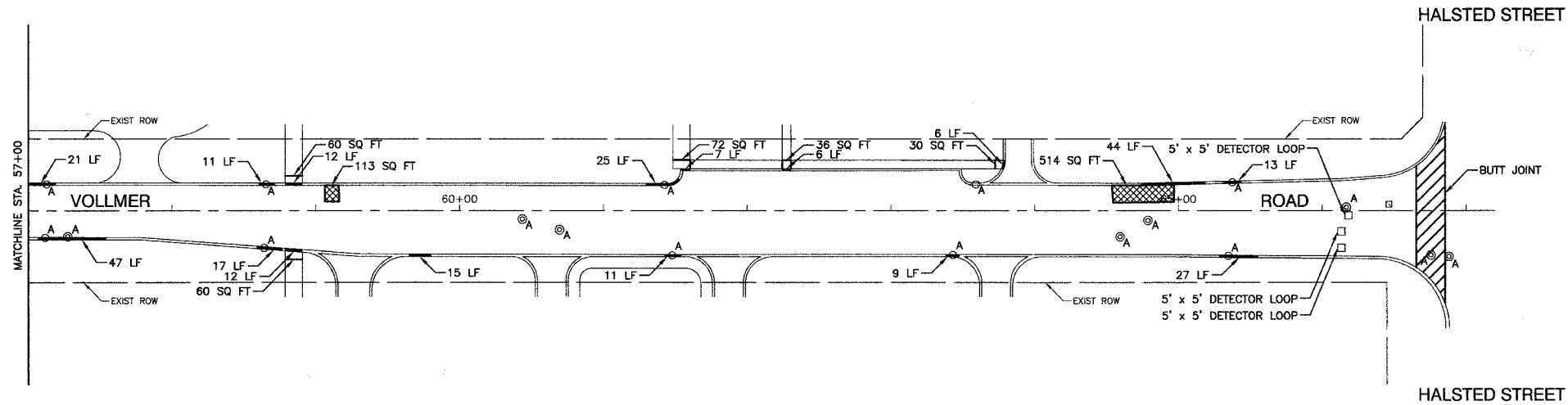
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DATE 02/09/07

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SECTION 8, TOWNSHIP 35, RANGE 14  
SECTION 17, TOWNSHIP 35, RANGE 14

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1629	07-00220-00-RS	COOK	20	06
STA. 57+00	TO STA. 66+85			
FED. ROAD DIST. NO.	CLASS	FED. AID PROJECT		

CONTRACT #83934



**NOTE:**  
LIMIT OF CONSTRUCTION ON ALL SIDE STREETS  
IS THE RADIUS RETURN PLUS 10' BUTT JOINT

**LEGEND**

- BITUMINOUS PAVEMENT REPAIR
- CURB REMOVAL
- STRUCTURE TO BE ADJUSTED

REVISIONS	
NAME	DATE

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

**VOLLMER ROAD  
STREET RESURFACING  
PLAN SHEET**

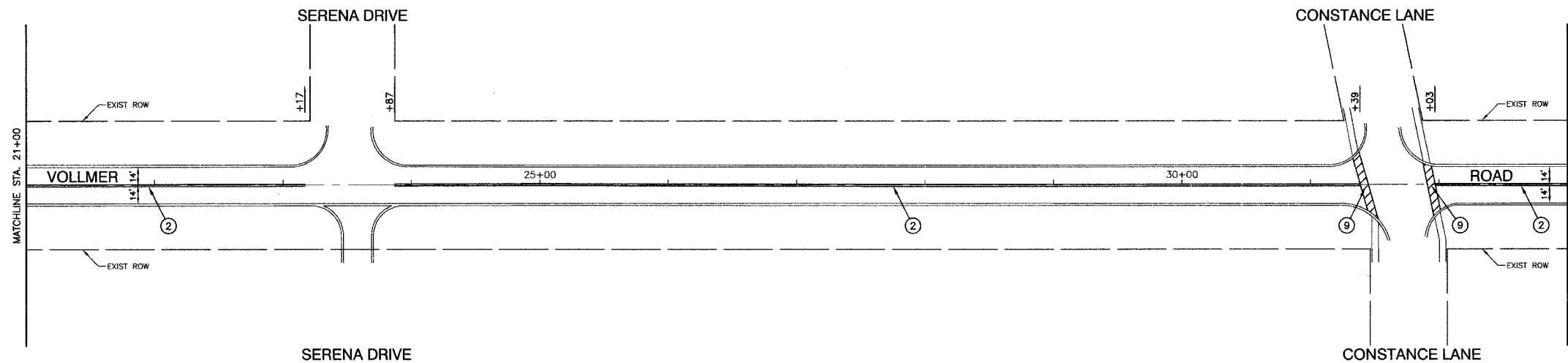
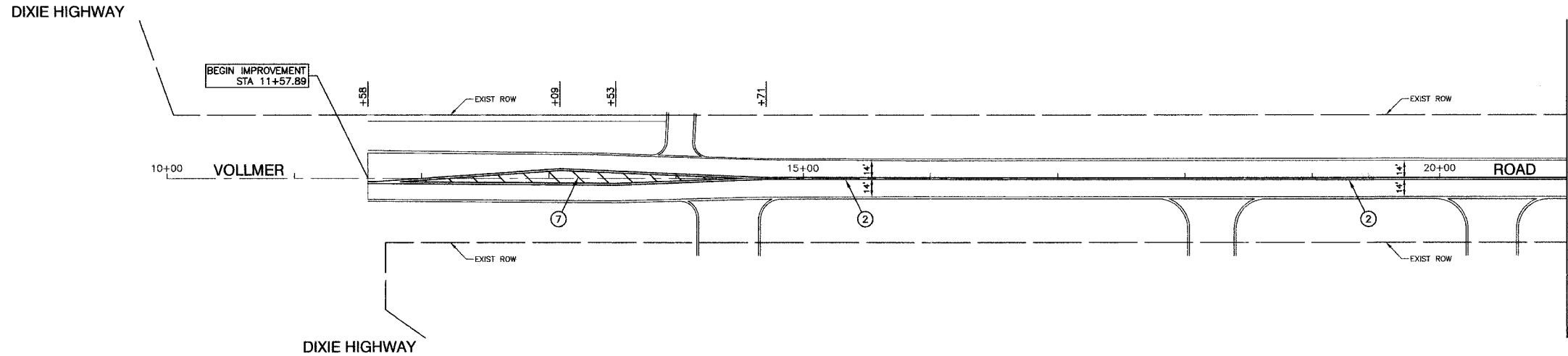
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DATE 02/09/07

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SECTION 8, TOWNSHIP 35, RANGE 14  
SECTION 17, TOWNSHIP 35, RANGE 14

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1629	07-00220-00-RS	COOK	20	07
STA. 11+57.89		TO STA. 33+00		
FED. ROAD DIST. NO.	BLKMS	FED. RD PROJECT		

CONTRACT #83934



**NOTE:**  
ALL LEGEND ITEMS ARE THERMOPLASTIC PAVEMENT MARKING OF THE WIDTH AND TYPE SPECIFIED

**PAVEMENT MARKING LEGEND**

- ① WHITE LETTERS & SYMBOLS
- ② DOUBLE 4" YELLOW CENTERLINE (11" C/C)
- ③ DOUBLE YELLOW MEDIAN OUTLINE (11" C/C)
- ④ 4" YELLOW LINE
- ⑤ 4" WHITE EDGE LINE
- ⑥ 6" WHITE LANE LINE
- ⑦ 6" WHITE SKIP-DASH LINE (2' LINE - 6' SPACE)
- ⑧ 12" YELLOW DIAGONAL LINE (20' C/C)
- ⑨ 24" WHITE STOP BAR
- ⑩ 6" WHITE CROSSWALK (6' C/C)
- ⑪ 6" WHITE CROSSWALK (10' C/C)
- ⑫ 12" WHITE LINE (45° ANGLE, 20' C/C)
- ⑬ 4" WHITE SKIP - DASH LINE (10' LINE - 30' SPACE)
- ⑭ 4" YELLOW SKIP - DASH LINE (10' LINE - 30' SPACE)
- ◀ ONE-WAY AMBER MARKER  
40' C/C UNLESS OTHERWISE INDICATED
- ◀ ONE-WAY CRYSTAL MARKER  
80' C/C UNLESS OTHERWISE INDICATED
- ◀ TWO-WAY AMBER MARKER  
40' C/C UNLESS OTHERWISE INDICATED
- ◀ TRAFFIC SIGN

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

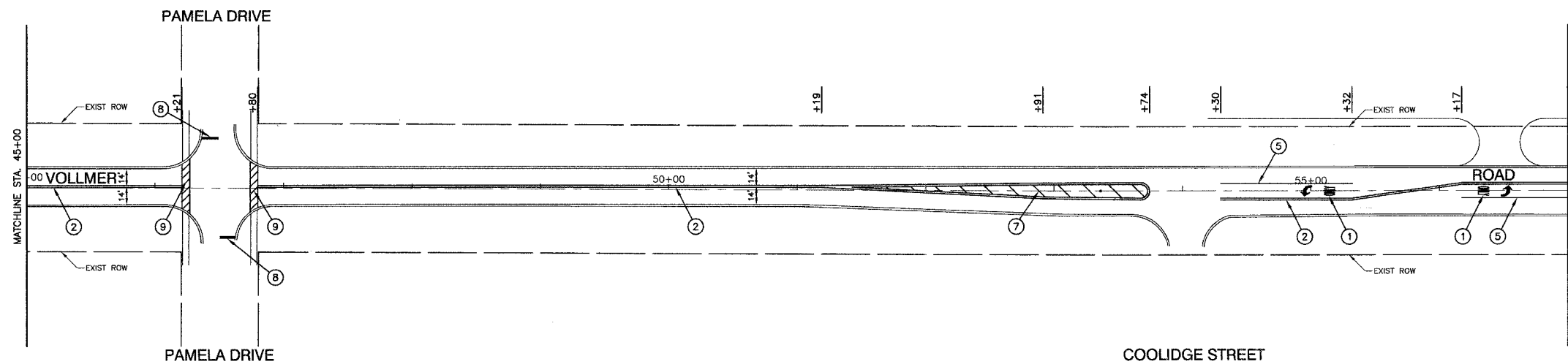
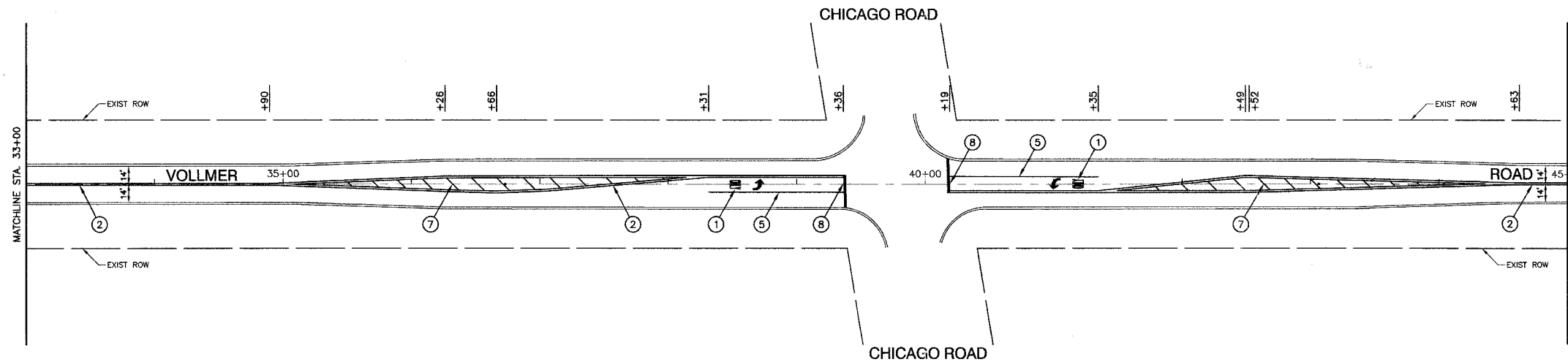
**VOLLMER ROAD  
STREET RESURFACING  
PAVEMENT MARKINGS**

SCALE: VERT. NA  
HORIZ. 1"=50'  
DATE 02/09/07  
DRAWN BY RG  
CHECKED BY JMN

SECTION 8, TOWNSHIP 35, RANGE 14  
SECTION 17, TOWNSHIP 35, RANGE 14

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1629	07-00220-00-RS	COOK	20	08
STA. 33+00	TO STA. 57+00			
FED. ROAD DIST. NO.	SLIPPER	FED. AID PROJECT		

CONTRACT #83934



**NOTE:**  
ALL LEGEND ITEMS ARE THERMOPLASTIC  
PAVEMENT MARKING OF THE WIDTH AND TYPE SPECIFIED

**PAVEMENT MARKING LEGEND**

- ① WHITE LETTERS & SYMBOLS
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- ③ DOUBLE YELLOW MEDIAN OUTLINE (11" C/C)
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80' C/C UNLESS OTHERWISE INDICATED
- ◆ TWO-WAY AMBER MARKER  
40' C/C UNLESS OTHERWISE INDICATED
- ⊠ TRAFFIC SIGN

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**VOLLMER ROAD  
STREET RESURFACING  
PAVEMENT MARKINGS**

SCALE: VERT. NA  
HORIZ. 1"=50'

DATE: 02/09/07

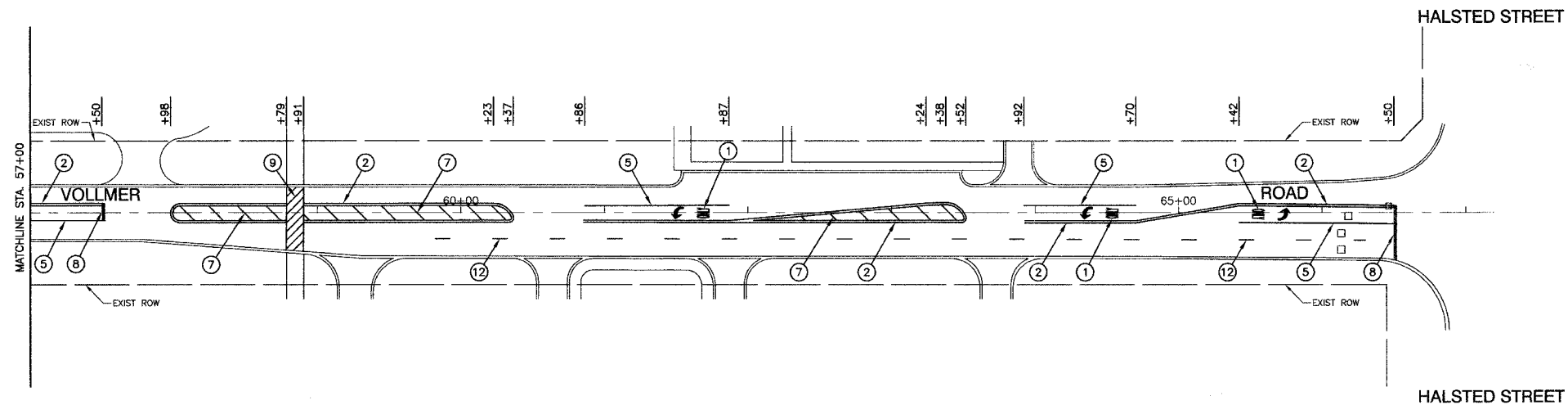
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SECTION 8, TOWNSHIP 35, RANGE 14  
SECTION 17, TOWNSHIP 35, RANGE 14

F. A. U. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1628	07-00220-00-RS	COOK	20	09
STA. 57+00	TO STA. 66+85			
FED. ROAD DIST. NO.	NUMBER	FED. AID PROJECT		

CONTRACT #83934



**NOTE:**  
ALL LEGEND ITEMS ARE THERMOPLASTIC  
PAVEMENT MARKING OF THE WIDTH AND TYPE SPECIFIED

**PAVEMENT MARKING LEGEND**

- ① WHITE LETTERS & SYMBOLS
- ② DOUBLE 4" YELLOW CENTERLINE (11" C/C)
- ③ DOUBLE YELLOW MEDIAN OUTLINE (11" C/C)
- ④ 4" YELLOW LINE
- ⑤ 4" WHITE EDGE LINE
- ⑥ 6" WHITE LANE LINE
- ⑦ 6" WHITE SKIP-DASH LINE (2' LINE - 6' SPACE)
- ⑧ 12" YELLOW DIAGONAL LINE (20' C/C)
- ⑨ 24" WHITE STOP BAR
- ⑩ 6" WHITE CROSSWALK (6' C/C)
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80' C/C UNLESS OTHERWISE INDICATED
- ◆ TWO-WAY AMBER MARKER  
40' C/C UNLESS OTHERWISE INDICATED
- ▬ TRAFFIC SIGN

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**VOLLMER ROAD  
STREET RESURFACING  
PAVEMENT MARKINGS**

SCALE: VERT. NA  
HORIZ. 1"=50'  
DATE 02/09/07

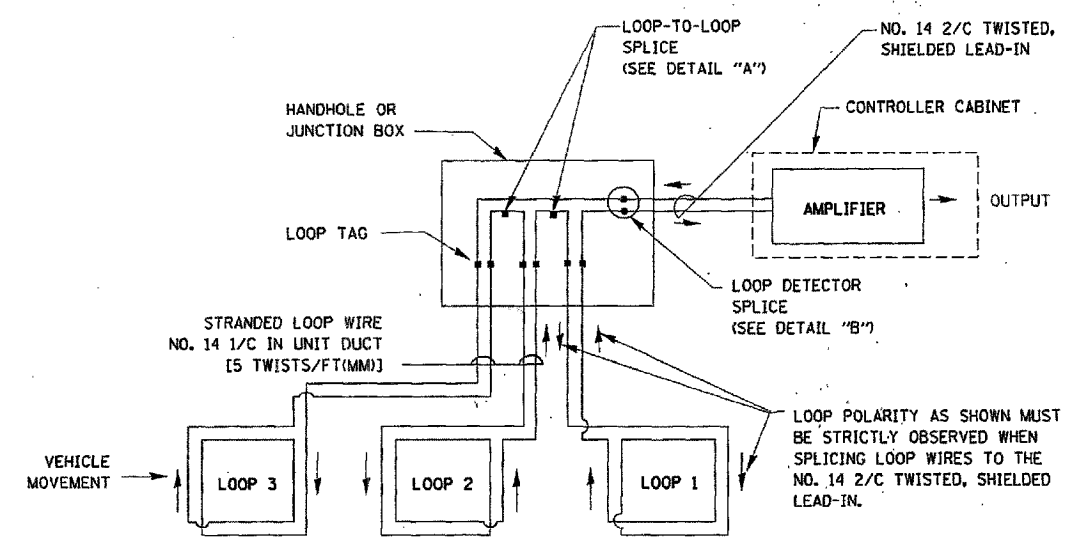
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CHECKED BY JMN

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1629	07-00220-00-RS	COOK	20	10
STA.	TO STA.			
FED. ROAD DIST. NO.	BLANKS	FED. AID PROJECT		

CONTRACT #83934

**LOOP DETECTOR NOTES**

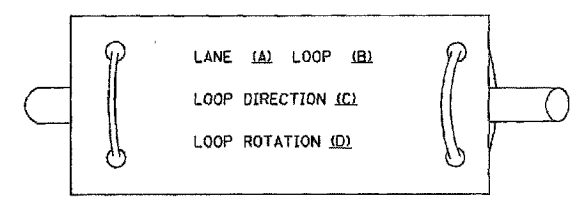
1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.



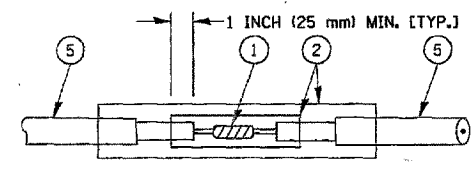
**DETECTOR LOOP WIRING SCHEMATIC**

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

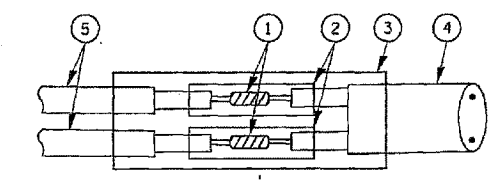
**LOOP LEAD-IN CABLE TAG**



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



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



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

**LOOP DETECTOR SPLICE**

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT ONE  
STANDARD TRAFFIC SIGNAL  
DESIGN DETAILS

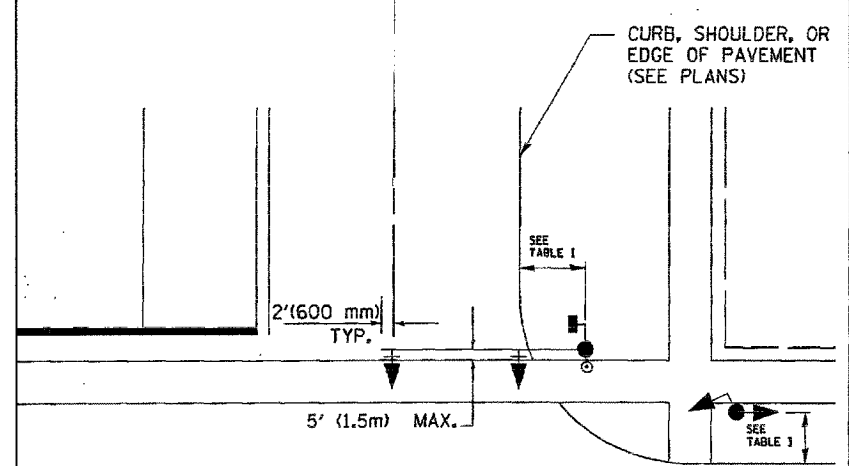
SCALE: VERT. NONE  
HORIZ. DATE 1-01-02  
DRAWN BY: RWP  
DESIGNED BY: DAD  
CHECKED BY: OAZ  
SHEET 1 OF 4

F. A. D. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.		TO STA.		
FED. ROAD DIST. NO.	KLINGS	FED. RD PROJECT		

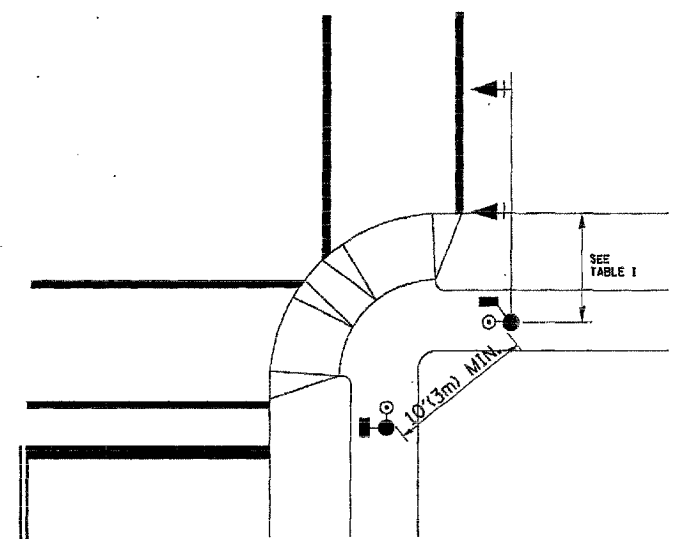
CONTRACT #83934

**TRAFFIC SIGNAL MAST ARM AND POST**

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



**PEDESTRIAN SIGNAL PUSHBUTTON**



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

**NOTES:**

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.  
  
AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.  
  
PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:  
 A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.  
 B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.  
 C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.  
 D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).  
 E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK.
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

**PEDESTRIAN SIGNAL POST**

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

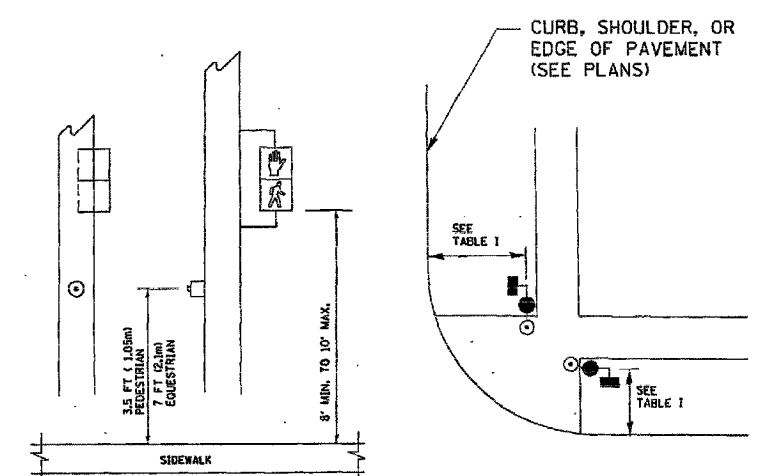


TABLE I

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DISTRICT 1  
 STANDARD TRAFFIC SIGNAL  
 DESIGN DETAILS  
 VERT. SCALE: NONE  
 HORIZ. SCALE: 1"=10'  
 DATE 1-01-02  
 DRAWN BY: RWP  
 DESIGNED BY: DAD  
 CHECKED BY: DAZ  
 SHEET 2 OF 4

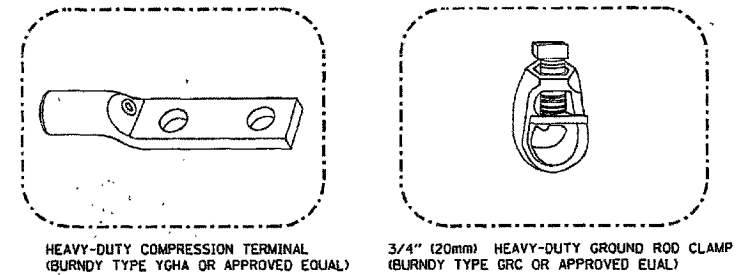
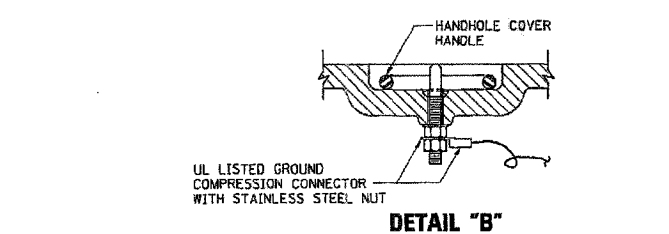
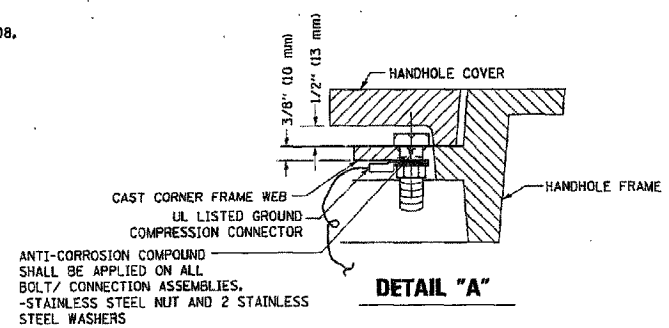
F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1629	07-00220-00-RS	COOK	20	12
STA.	TO STA.			
FED. ROAD DIST. NO.	SLAB NO.	FED. AID PROJECT		

CONTRACT #83934

**NOTES:**

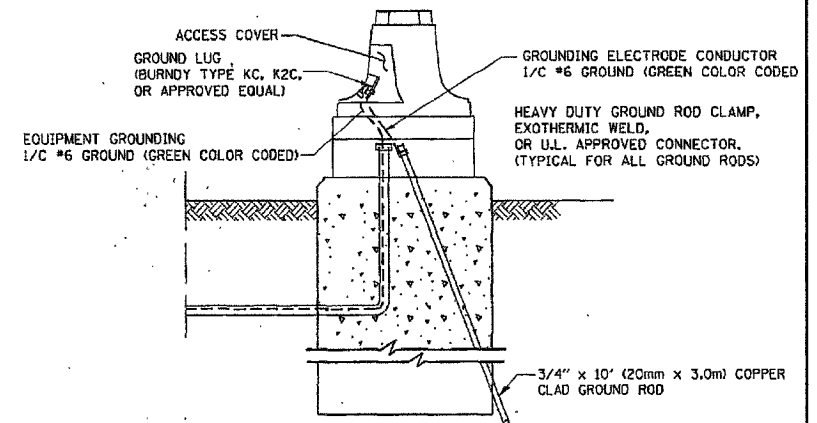
**GROUNDING SYSTEM**

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



**NOTES:**

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



**REVISIONS**

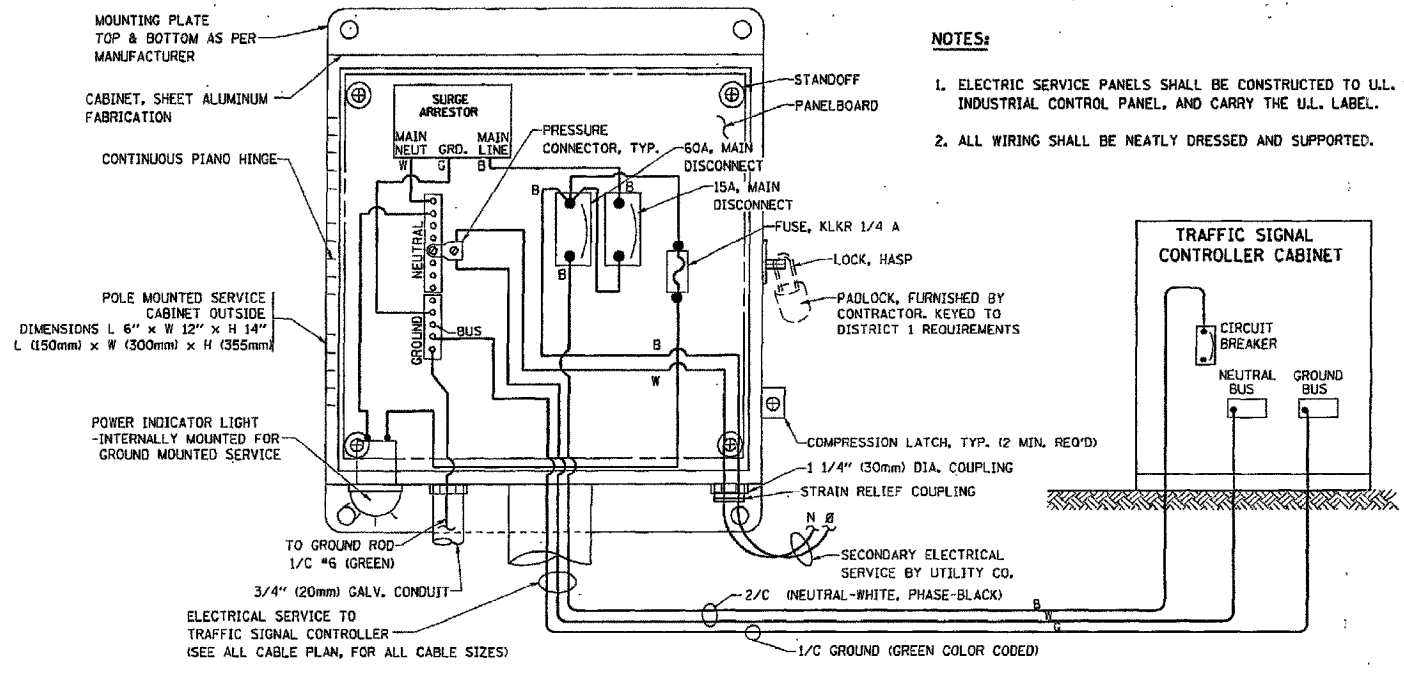
NO.	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT 1  
STANDARD TRAFFIC SIGNAL  
DESIGN DETAILS

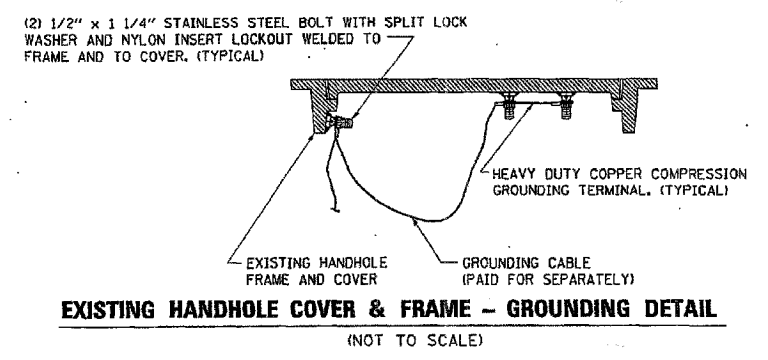
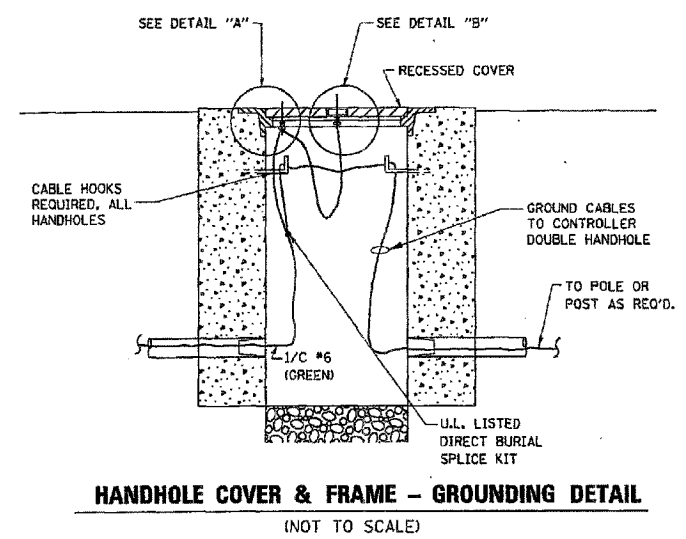
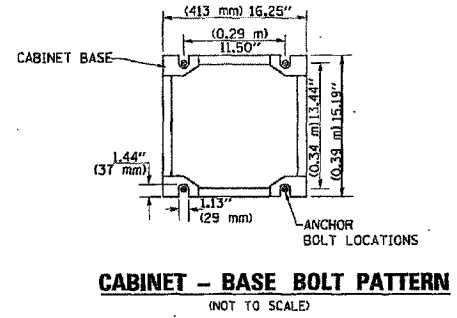
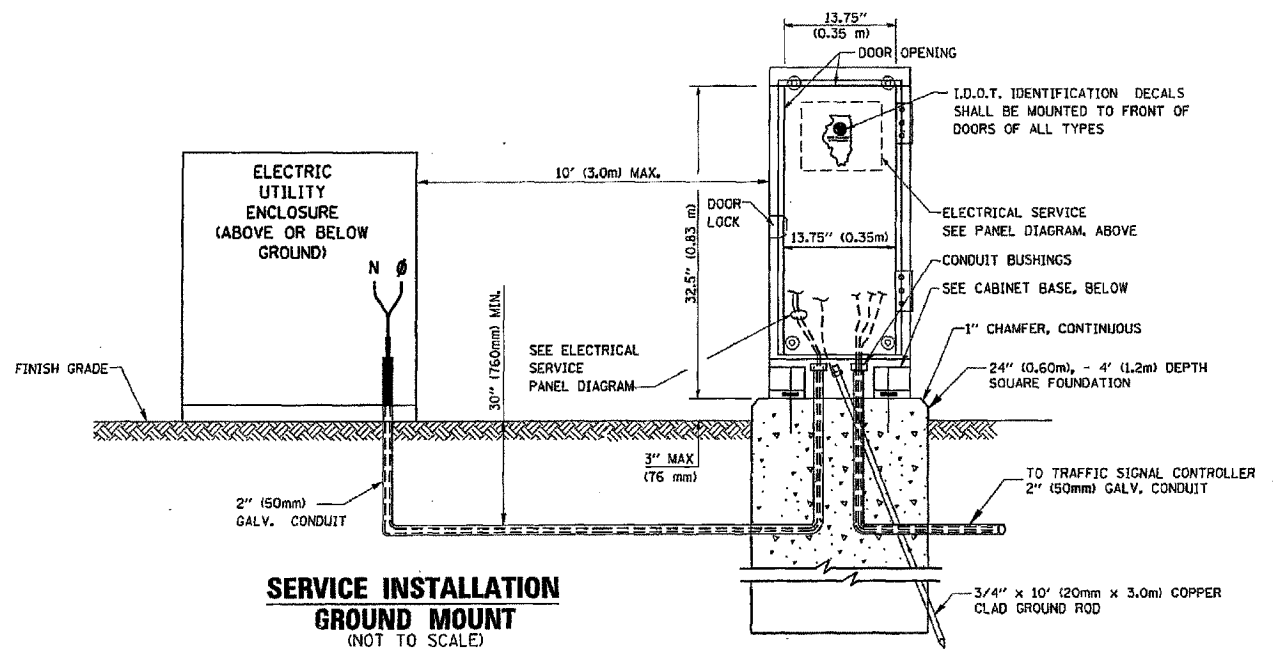
SCALE: VERT. NONE  
HORIZ. 1-01-02  
DRAWN BY: RWP  
DESIGNED BY: DAD  
CHECKED BY: DAZ  
SHEET 3 OF 4

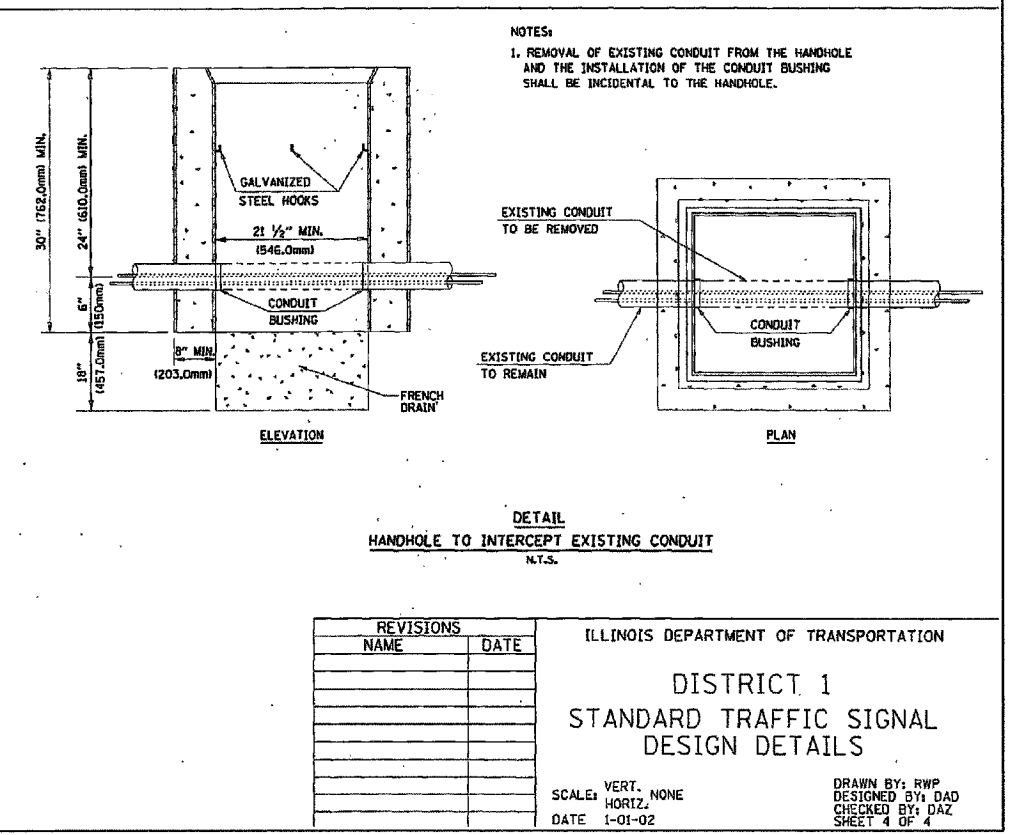
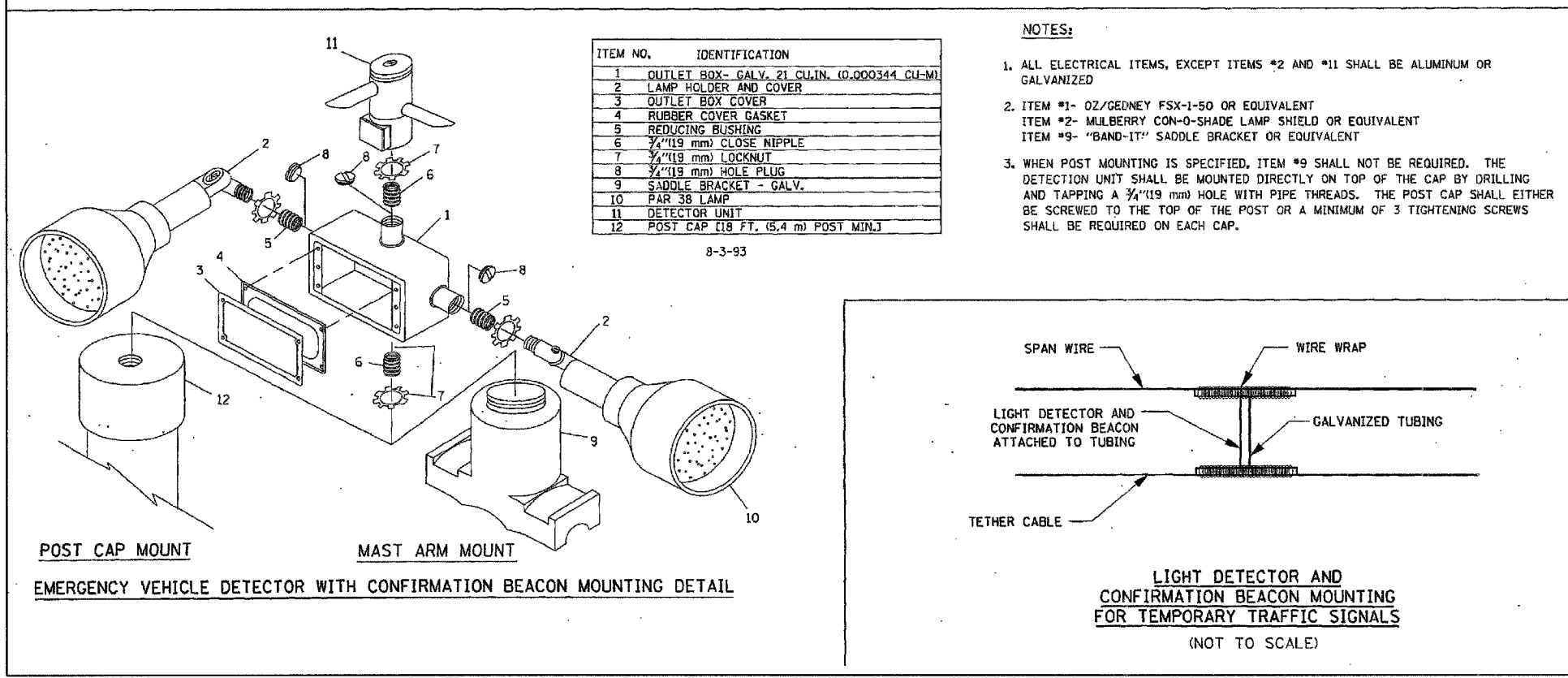
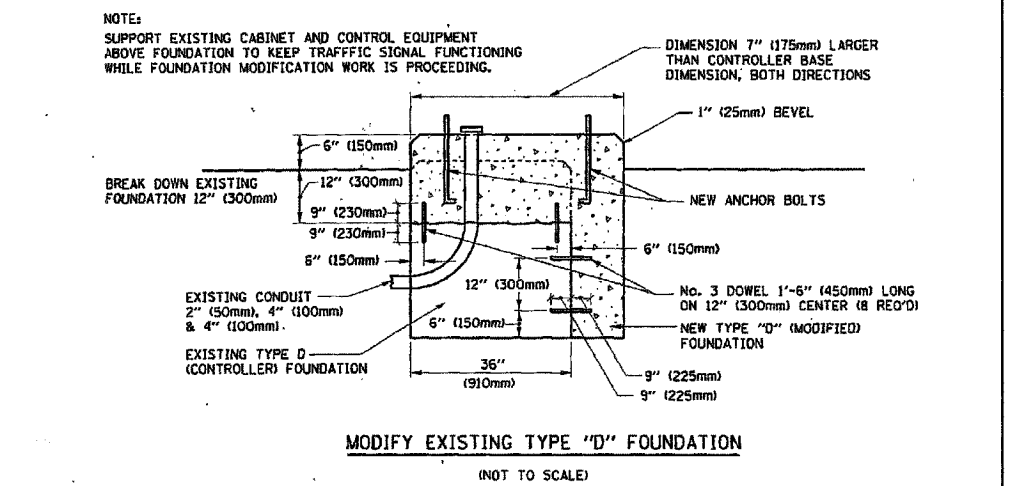
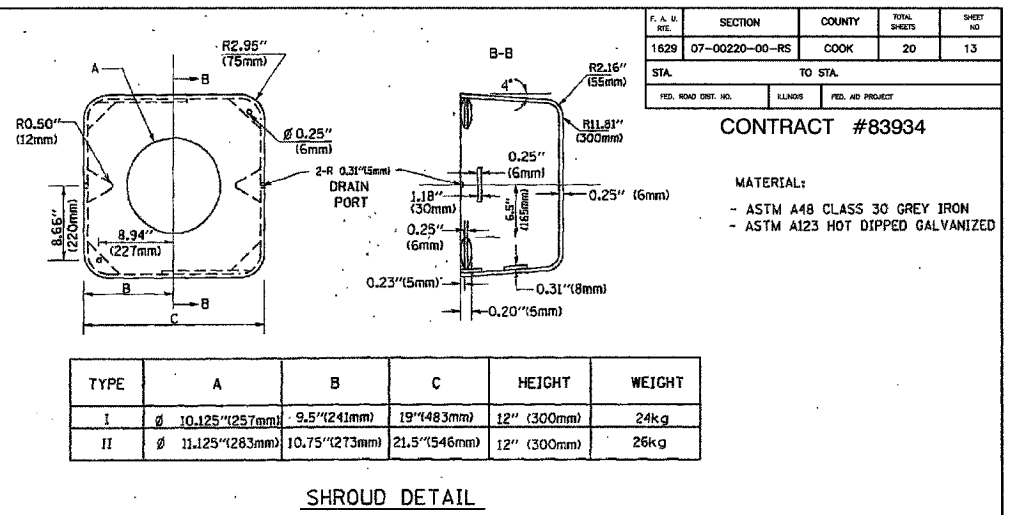
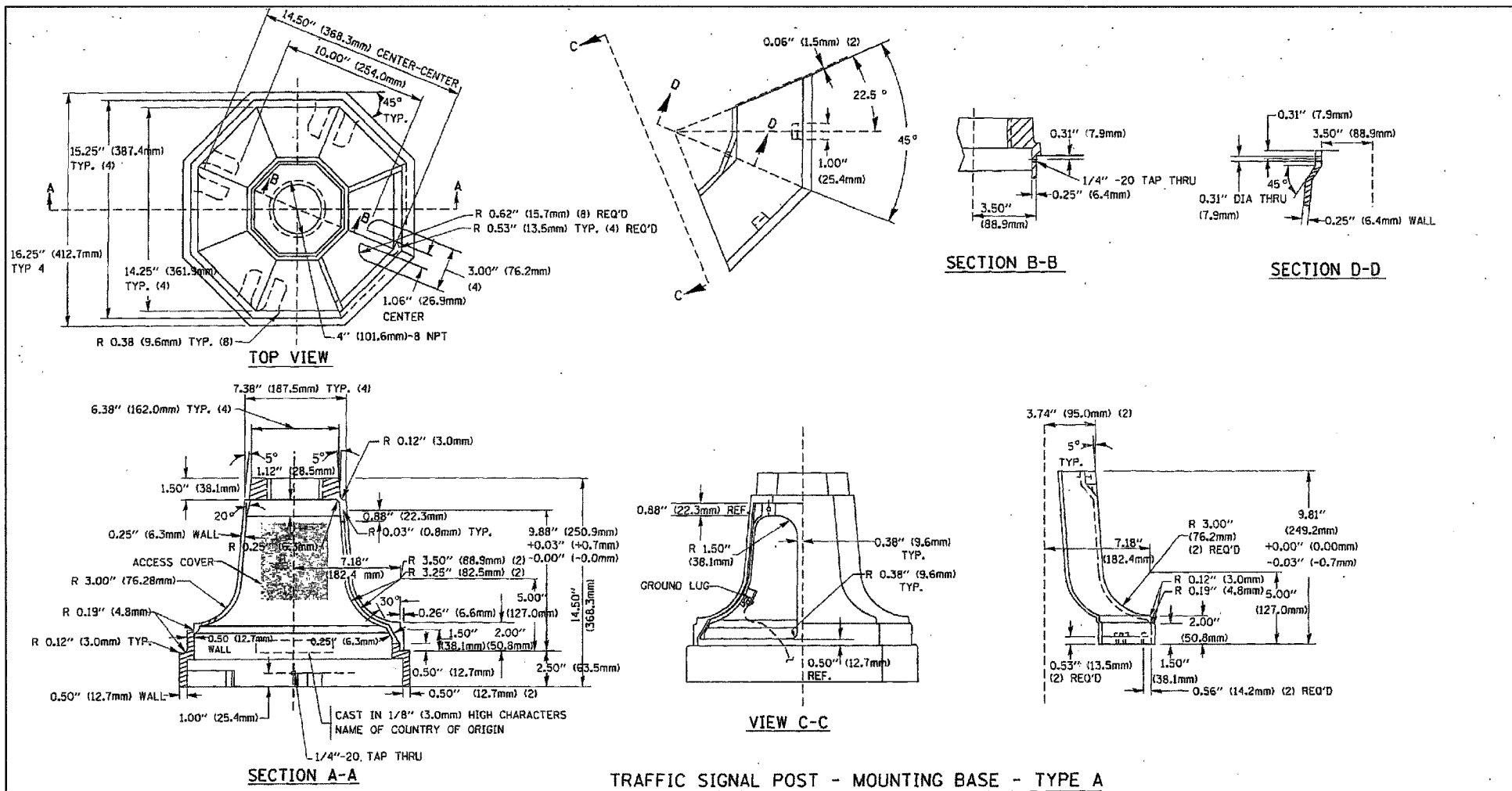
**NOTES:**

1. ELECTRICAL SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



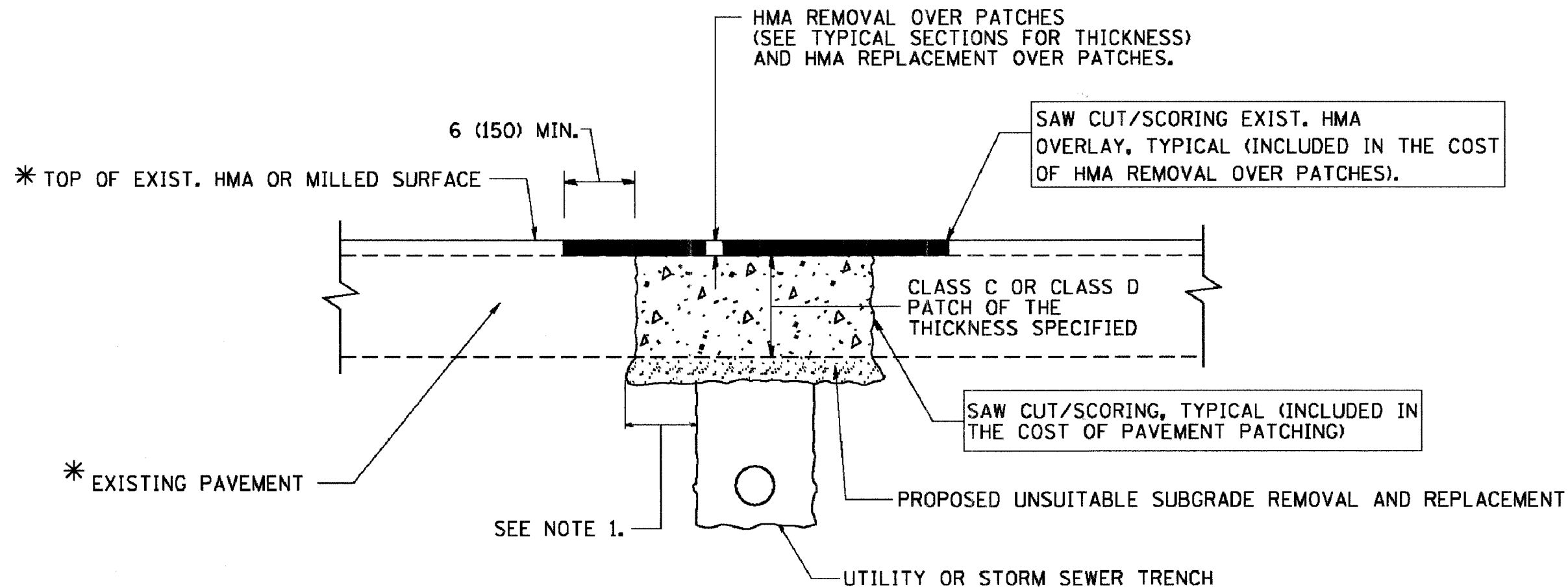
**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN) (NOT TO SCALE)**





F. A. D. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1629	07-00220-00-RS	COOK	20	14
STA.	TO STA.			
FED. ROAD DIST. NO.	CLASS	FED. AID PROJECT		

CONTRACT #83934



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**NOTES:**

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

**SEQUENCE OF CONSTRUCTION**

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

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

REVISIONS	NAME	DATE
	R. SHAH	10/25/94
	R. SHAH	01/14/95
	R. SHAH	03/23/95
	R. SHAH	04/24/95
	A. HOUSEH	03/15/96
	A. ABBAS	03/21/97
	A. ABBAS	01/20/98
	ART ABBAS	04/27/98
	R. BORG	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

**PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT**

SCALE: VERT. NONE  
HORIZ. 1/16"=1'-0"  
PLOT DATE: 1/19/2007

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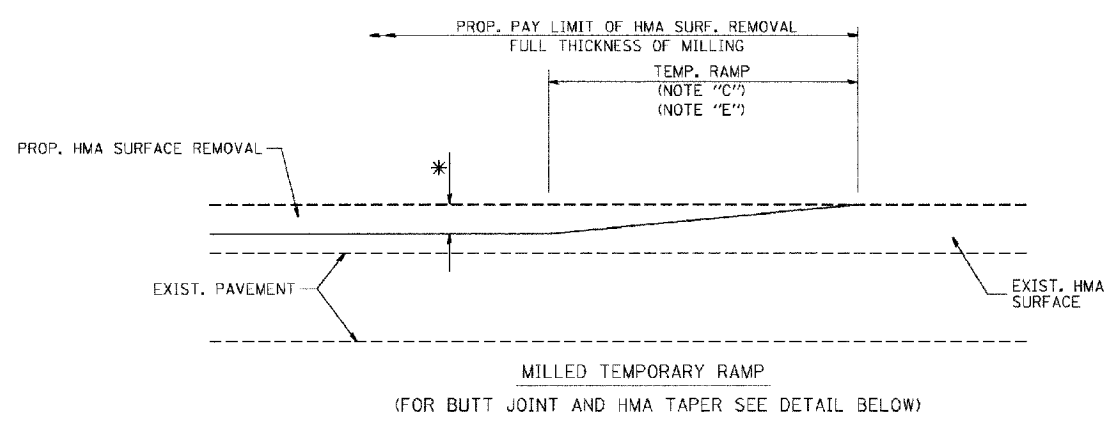
CHECKED BY

BD400-04 (BD-22)

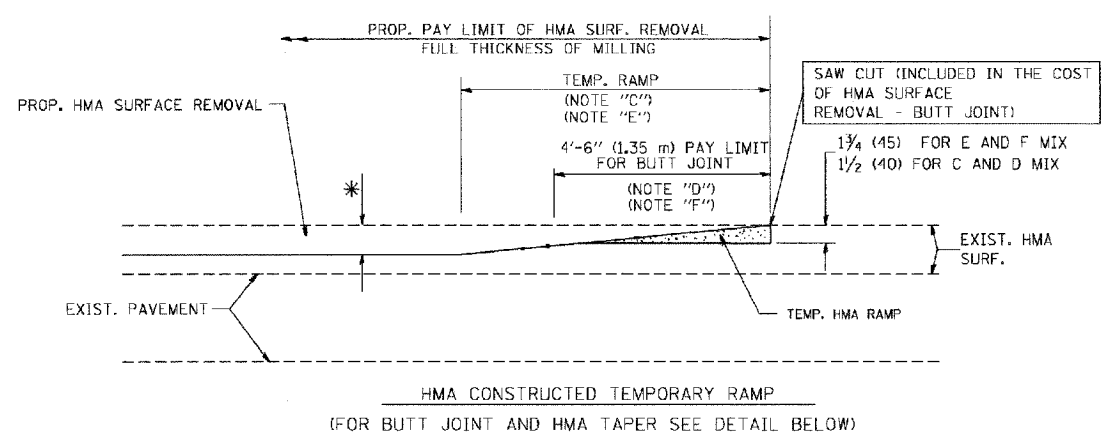
REVISION DATE: 01/01/07

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.		TO STA.		
FED. ROAD DIST. NO.	BLANKS	FED. NO. PROJECT		

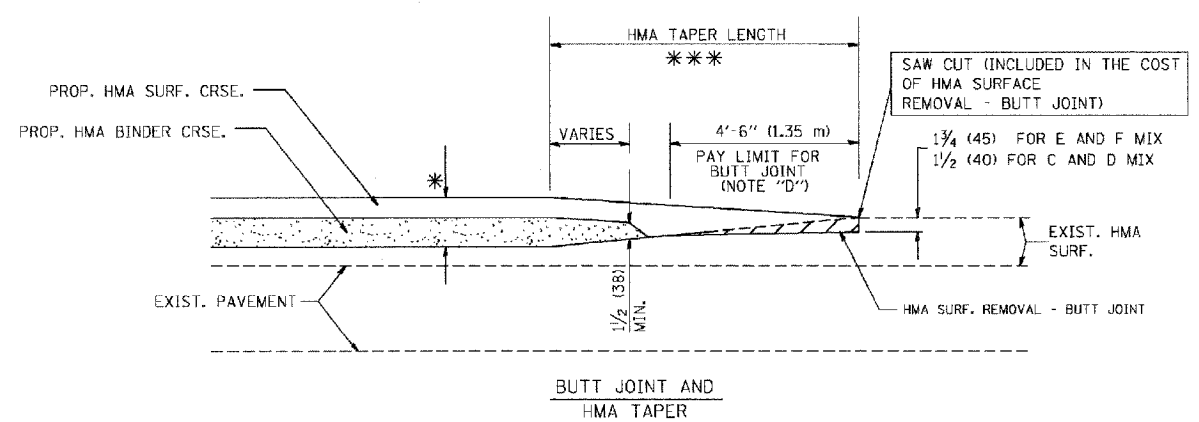
CONTRACT #83934



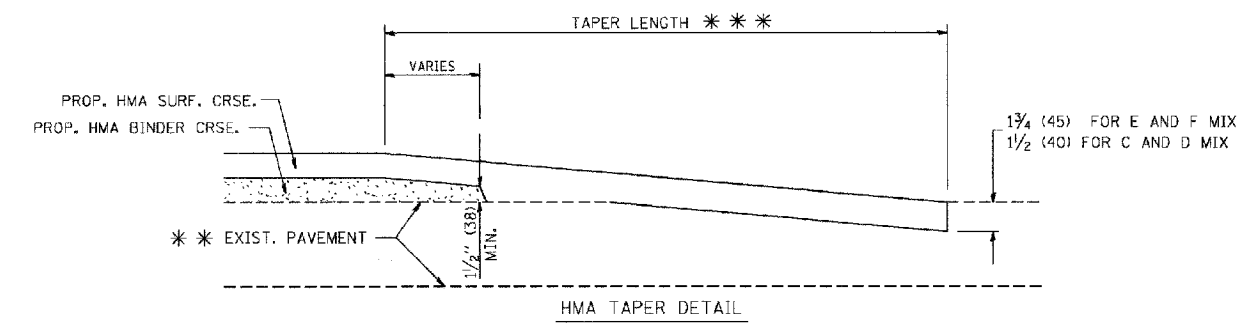
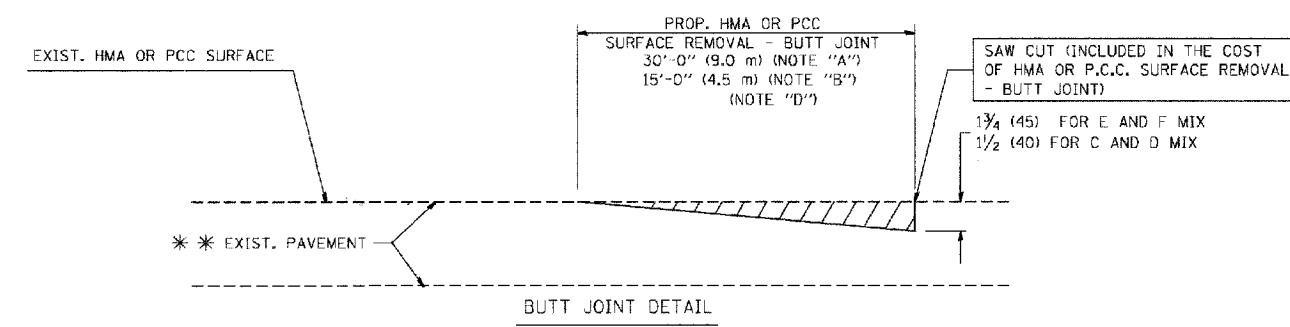
OPTION 1



OPTION 2  
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



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")

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

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".

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

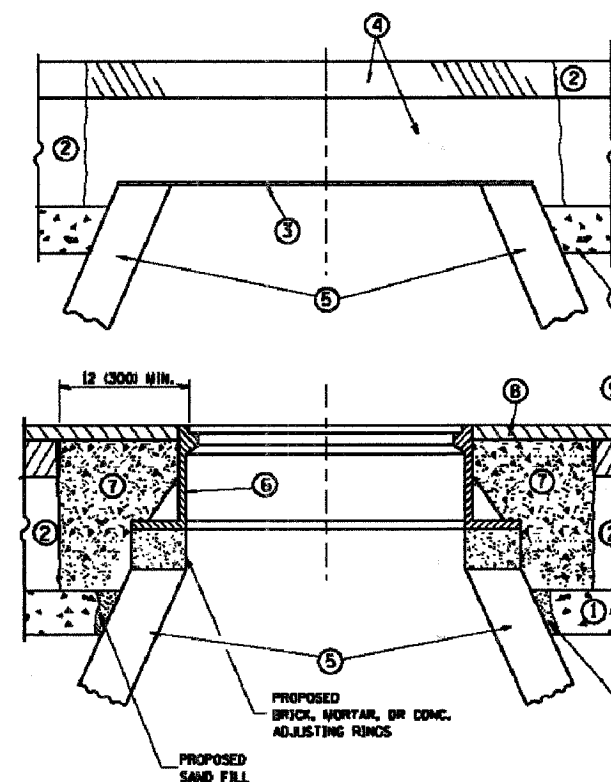
SCALE: VERT. NONE  
HORIZ. 1"=20'  
PLOT DATE: 10/31/2006

DRAWN BY  
CHECKED BY

BD400-05 (VI-BD32)  
REVISION DATE: 01/01/07

P. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1629	07-00220-00-RS	COOK	20	16
STA.	TO STA.			
FED. ROAD DIST. NO.	LLINK	FED. RD. PROJECT		

CONTRACT #83934



**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 S1 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 S1 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

REVISIONS	DATE
R. SHAN	10/28/24
R. SHAN	01/30/25
R. SHAN	03/10/25
A. ABRAS	03/21/27
R. WIEDEMAN	08/14/04
R. BOND	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

VERT. SCALE: NONE  
HORIZ. SCALE: 1/8"=1'-0"  
PLOT DATE: 1/29/2007

DRAWN BY

CHECKED BY

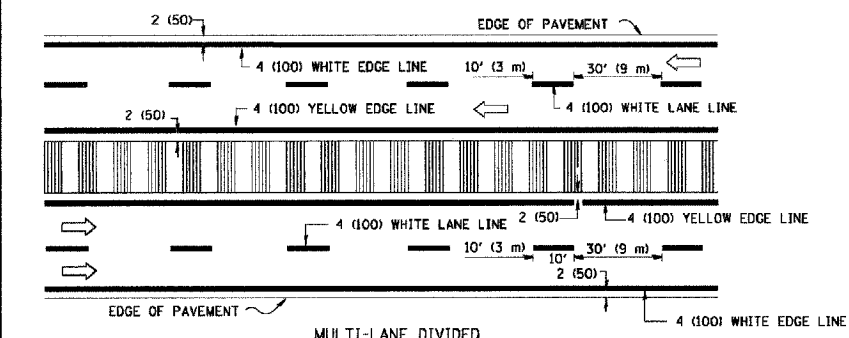
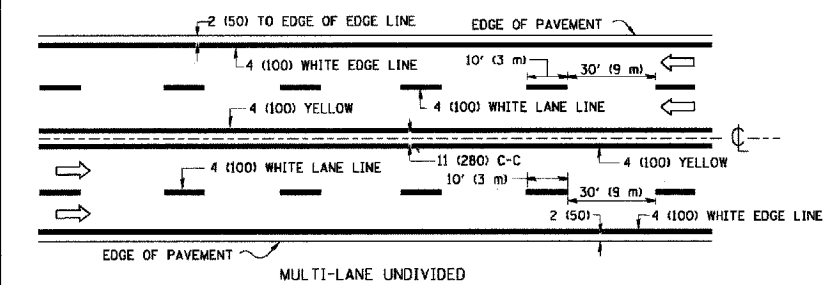
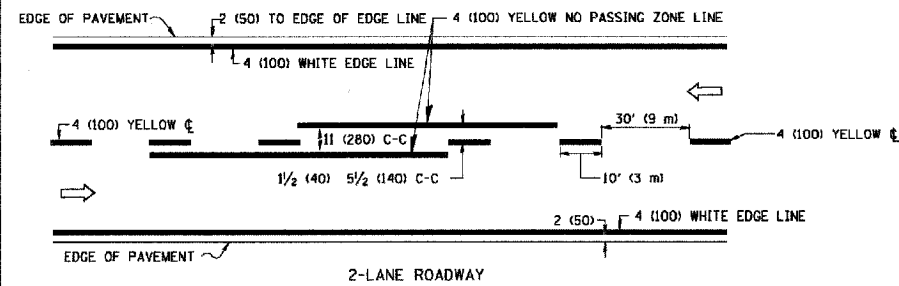
BD600-03 (SD-B)

REVISION DATE: 01/01/07



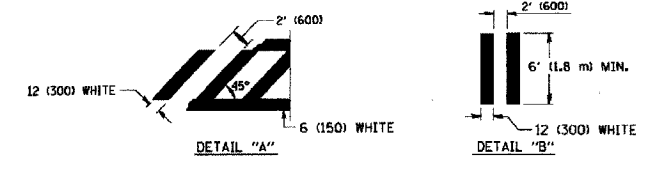
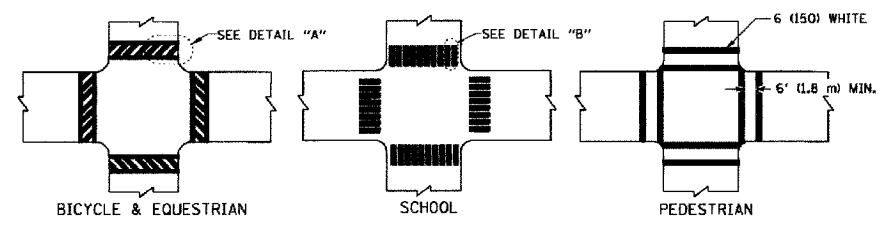


CONTRACT #83934

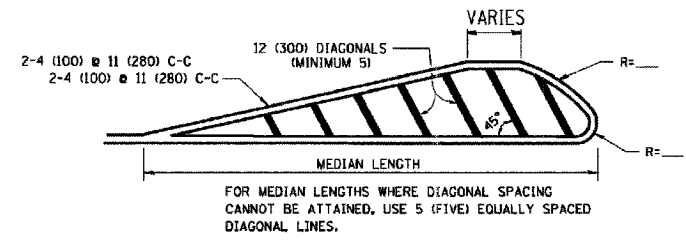
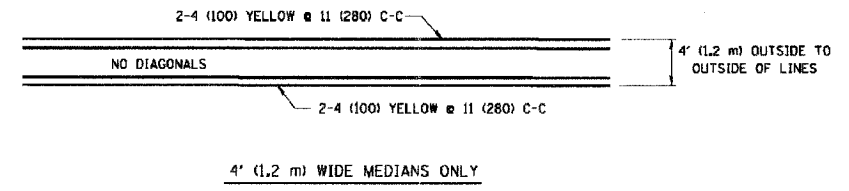


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



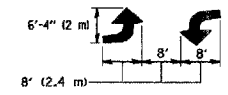
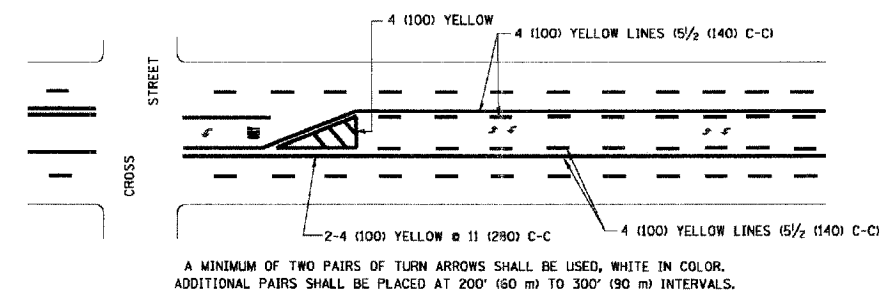
TYPICAL CROSSWALK MARKING



FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

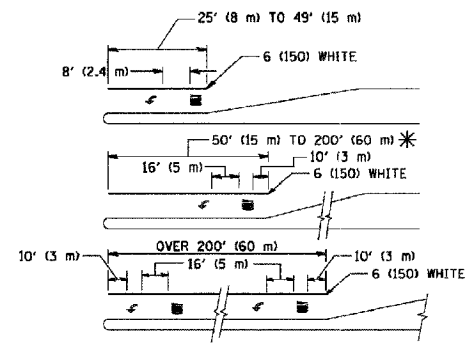
DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

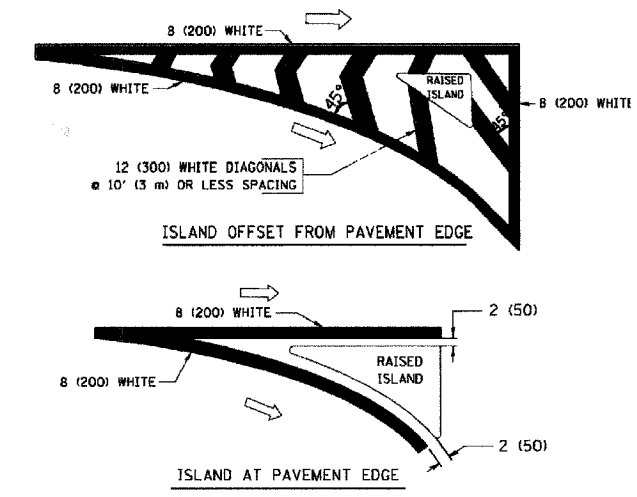


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

\* 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 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.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <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.

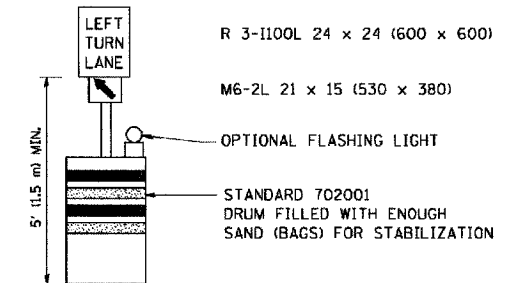
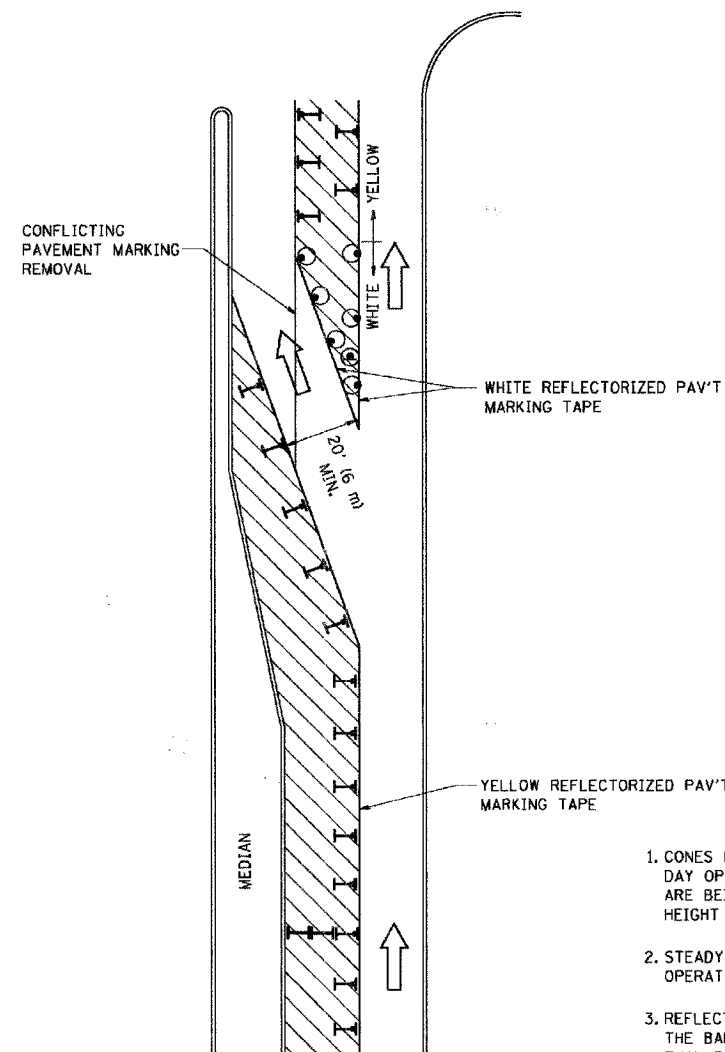
REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DISTRICT ONE  
TYPICAL PAVEMENT MARKINGS

SCALE: NONE  
DRAWN BY CADD  
CHECKED BY

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1829	07-00220-00-RS	COOK	20	19
STA.		TO STA.		
FED. ROAD DIST. NO.	BLIND	FED. NO. PROJECT		







CONTRACT #83934



**GENERAL NOTES**

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

**LEGEND**

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

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

REVISIONS	
NAME	DATE
T. RAMMACHER	09/08/94
A. HOUSEH	11/07/95
A. HOUSEH	10/12/96
T. RAMMACHER	01/06/00

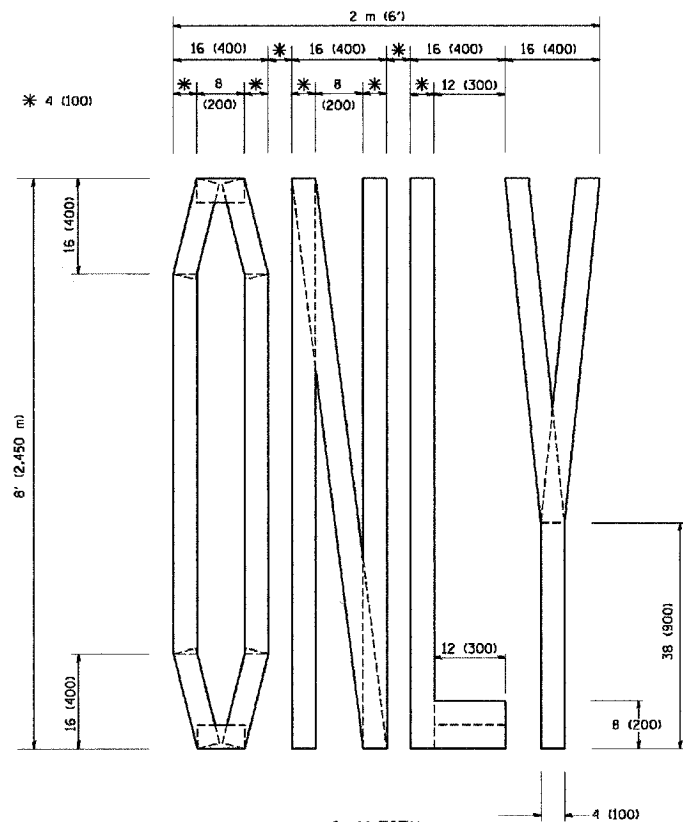
ILLINOIS DEPARTMENT OF TRANSPORTATION  
**TRAFFIC CONTROL AND PROTECTION  
 AT TURN BAYS  
 (TO REMAIN OPEN TO TRAFFIC)**

SCALE: NONE

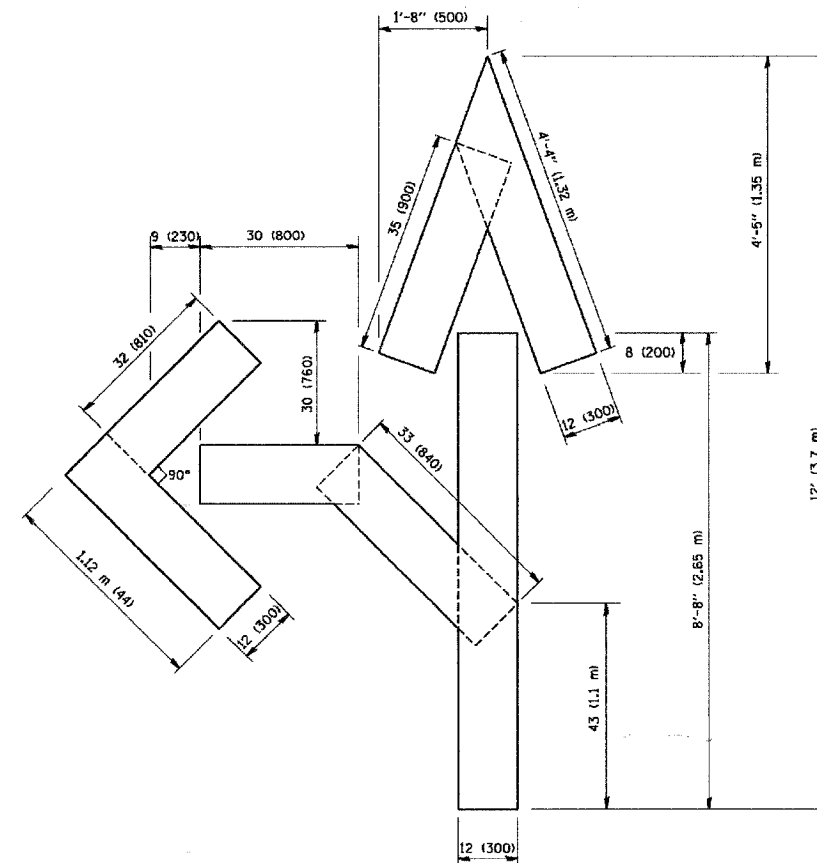
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 TC-14

F. A. U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1629	07-00220-00-RS	COOK	20	20
STA.	TO STA.			
FED. ROAD DIST. NO.	SLAB	FED. AID PROJECT		

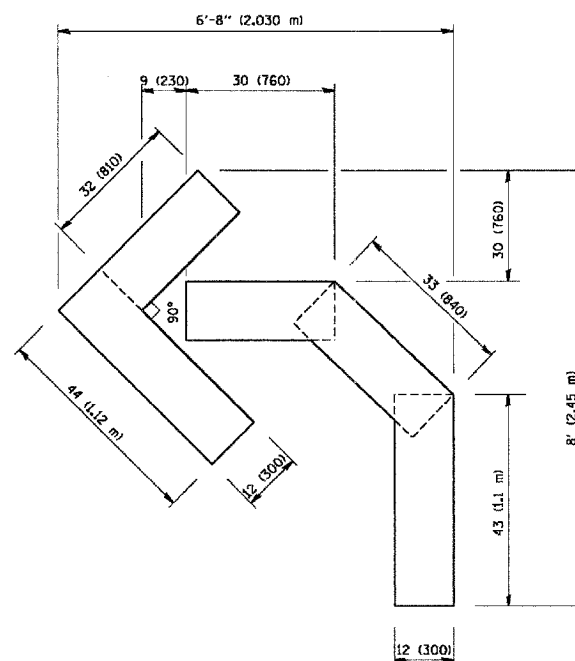
CONTRACT #83934



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.

REVISIONS	
NAME	DATE
T. RAMMACHER	09/18/94
L. OBERLE	06/01/96
T. RAMMACHER	06/05/96
T. RAMMACHER	11/04/97
T. RAMMACHER	03/02/98
E. GOMEZ	08/28/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING  
LETTERS AND SYMBOLS  
FOR TRAFFIC STAGING

SCALE: NONE

DRAWN BY CADD

CHECKED BY

TC-16