

1-20-2012 LETTING ITEM 022

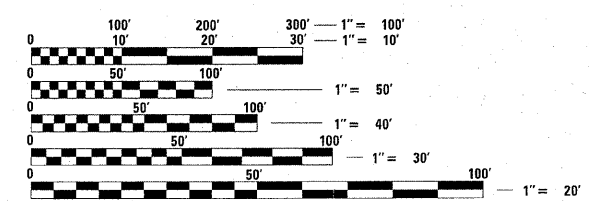
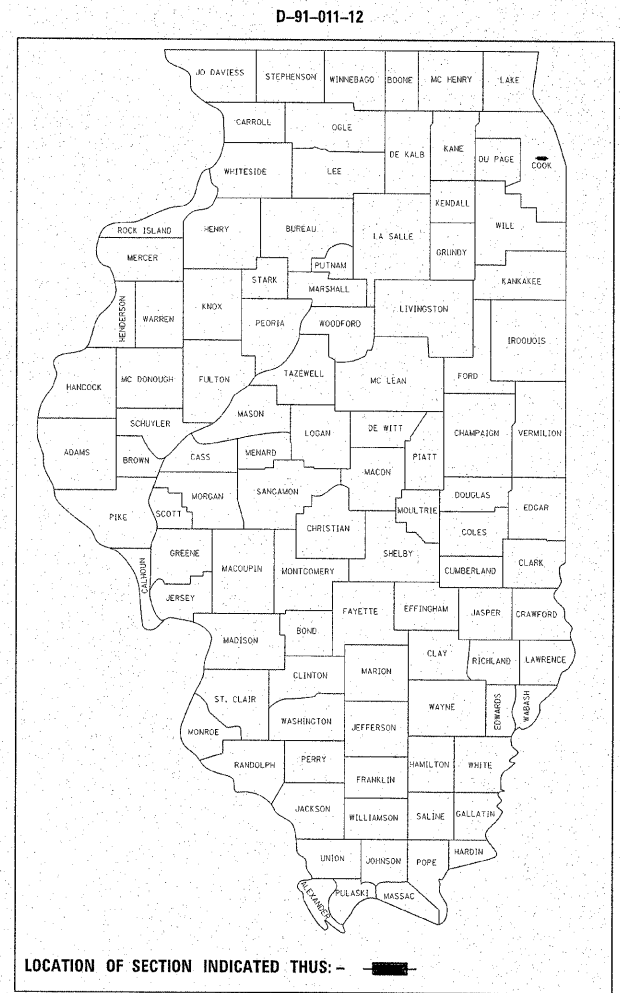
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**PROPOSED
HIGHWAY PLANS**
F.A.P. 307 /IL 64 (NORTH AVE.)
ELMWOOD AVE. TO RIDGELAND AVE. &
AUSTIN AVE. TO CENTRAL AVE.
RESURFACING (3P)
SECTION: 2011-076-RS
COOK COUNTY
C-91-011-12

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	2011-076-RS	COOK	34	1
FED. ROAD DIST. NO. 1		ILLINOIS	CONTRACT NO. 60R02	

IMPROVEMENT LOCATED IN THE VILLAGE
OF OAK PARK AND THE CITY OF CHICAGO

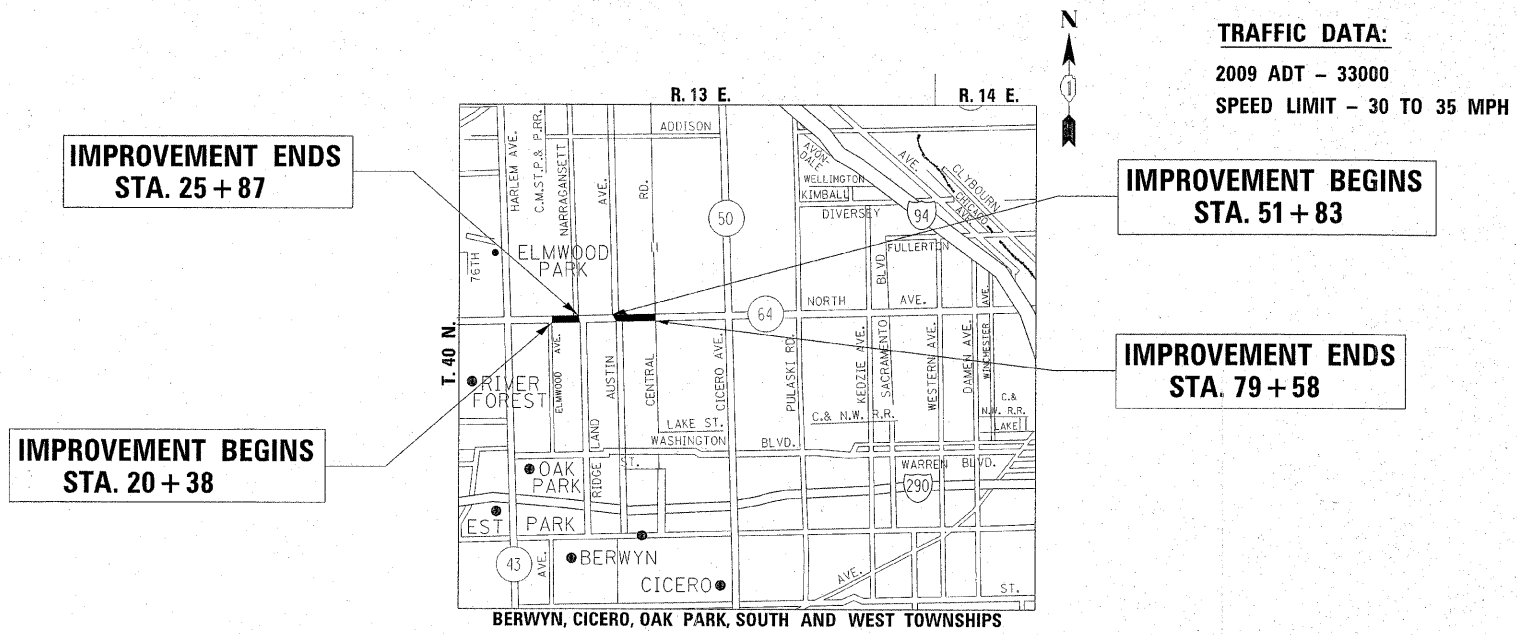


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: JENPAI CHANG (847) 705-4432
PROJECT MANAGER: KEN ENG (847) 705-4247

CONTRACT NO. 60R02



GROSS LENGTH OF IMPROVEMENT = 5920 LIN FT = 1.12 MILES
NET LENGTH OF IMPROVEMENT = 3324 LIN FT = .63 MILES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED OCTOBER 21 20 11

Debra M. D'Amico
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

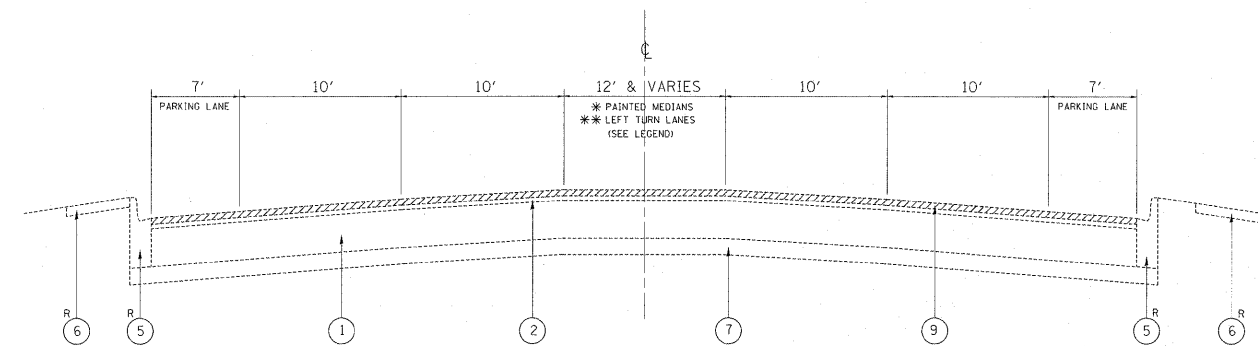
December 9 20 11
Scott E. Still, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

December 9 20 11
William B. Frenzel
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

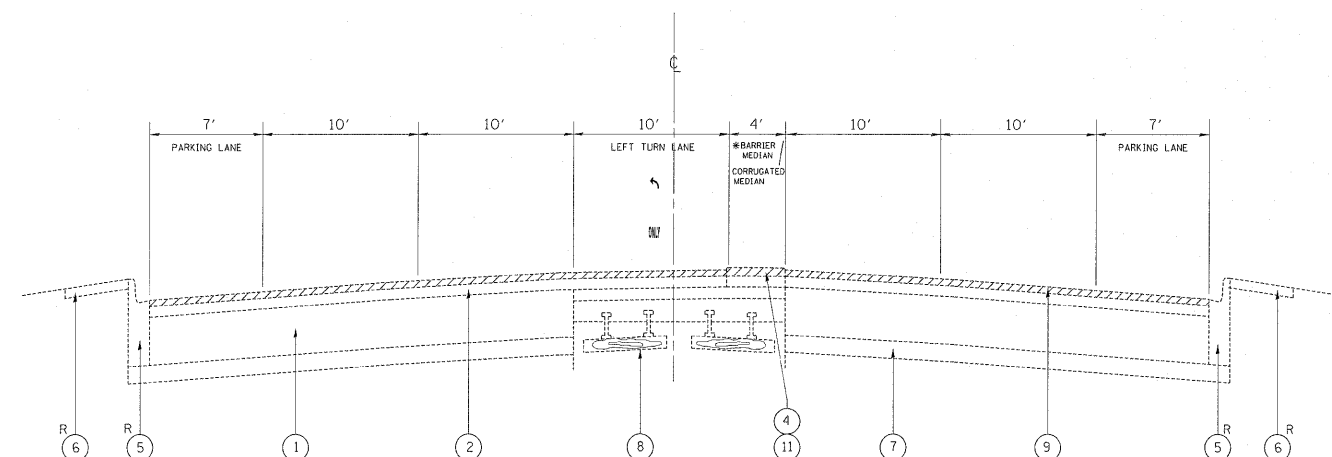
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INDEX OF SHEETS

SHEET NO.	DESCRIPTION	STATE STANDARDS	GENERAL NOTES
1	COVER SHEET	000001- 06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS	
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES	442201- 03 CLASS C AND D PATCHES	BEFORE STARTING ANY EXCAVATION THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 OR "CUAN" (CHICAGO UTILITY ALERT NETWORK) AT 312-744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES, (48 HOURS NOTIFICATION IS REQUIRED).
3	SUMMARY OF QUANTITIES	424001- 06 PERPENDICULAR CURB RAMPS FOR SIDEWALKS	
4-7	EXISTING AND PROPOSED TYPICAL SECTIONS	424021 DEPRESSED CORNER FOR SIDEWALKS	10 FEET (3 METERS) TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTERS AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITION SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
8-10	ROADWAY AND PAVEMENT MARKING PLANS	424031 MEDIAN PEDESTRIAN CROSSINGS	
11	PEDESTRIAN REFUGE MEDIAN DETAIL (NORTH AVE. - BETWEEN MAJOR AVE. AND PARKSIDE AVE.)	604011- 04 FRAME AND LIDS, TYPE 1	THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE UTILITY COMPANIES AND THE CITY OF CHICAGO AND THE VILLAGE OF OAK PARK.
12	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING	606001- 04 CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER	
13	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT	606301- 04 PCC CONCRETE ISLANDS AND MEDIANS	
14	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	701601- 07 LANE CLOSURE, MULTILANE, 1-W OR 2-W, WITH NON TRANSVERSABLE MEDIAN	THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
15	BUTT JOINT AND HMA TAPER DETAILS	701606- 08 URBAN LANE CLOSURE, MULTILANE 2-W WITH MOUNTABLE MEDIAN	
16	CITY OF CHICAGO CATCH BASIN, INLET AND MANHOLE DETAILS	701701- 08 LANE CLOSURE, MULTILANE, INTERSECTION, FOR SPEEDS < 45 MPH	THE CONTRACTOR SHALL CONTRACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR CORY JUCIUS AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO START OF WORK.
17	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	701801- 05 LANE CLOSURE, MULTILANE, 1W OR 2W, CROSSWALK OR SIDEWALK CLOSURE	
18	TYPICAL APPLICATIONS FOR RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)	701901- 02 TRAFFIC CONTROL DEVICES	WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40MM) WHERE THE SPEED LIMIT IS 45 MPH (80 KM/H). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H) BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
19	DISTRICT ONE TYPICAL PAVEMENT MARKINGS	720001- 01 SIGN PANEL MOUNTING DETAILS	
20-21	CITY OF CHICAGO TYPICAL PAVEMENT MARKINGS	720006- 03 SIGN PANEL ERECTION DETAILS	PERMANENT PAVEMENT MARKINGS SHALL BE THERMOPLASTIC (OF THE EXTRUDED TYPE) AND SHOULD BE PLACED IN ACCORDANCE WITH THE "CITY OF CHICAGO TYPICAL PAVEMENT MARKINGS" DETAIL. (TC-24) RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE IN ACCORDANCE WITH THE DISTRICT ONE "TYPICAL APPLICATION RAISED REFLECTIVE PAVEMENT MARKERS" DETAIL.
22	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS	720011- 01 METAL POST FOR SIGNS, MARKERS & DELINEATORS	
23	TEMPORARY PAVEMENT MARKING--LETTERS AND SYMBOLS FOR TRAFFIC STAGING	729001- 01 APPLICATION FOR TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)	THE RESIDENT ENGINEER SHALL CONTACT MR. WALLY CZARNY, AREA TRAFFIC FIELD ENGINEER, AT (847) 715-8419 AT LEAST 2 WEEKS PRIOR TO PLACING ANY PERMANENT PAVEMENT MARKINGS.
24-29	STANDARD TRAFFIC SIGNAL DESIGN DETAILS	780001- 03 TYPICAL PAVEMENT MARKINGS	
30	DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING	886001- 01 DETECTOR LOOP INSTALLATIONS	
31-33	DETECTOR LOOP LOCATION DETAILS	886006- 01 TYPICAL LAYOUT FOR DETECTION LOOPS	
34	ARTERIAL ROAD INFORMATION SIGNING		
GENERAL NOTES - CITY OF CHICAGO			
ALL CATCH BASINS IN THE CITY OF CHICAGO MUST MEET THE DEPARTMENT OF SEWER STANDARDS.			
IN CASE OF DAMAGE TO THE CITY OF CHICAGO SEWER, PRIVATE AND PUBLIC DRAINS, SEWER STRUCTURES AND/OR BENCH MONUMENTS, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE DEPARTMENT OF SEWERS AT 312-747-7892 OR 312-747-7893.			
BENCH MONUMENT LOCATIONS WITHIN THE LIMITS OF THE IMPROVEMENT CAN BE OBTAINED FROM THE DEPARTMENT OF SEWERS AT 333 SOUTH STATE STREET, SUITE 410, CHICAGO, IL 60604-3971. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF REPLACING ANY BENCH MONUMENT DAMAGED OR DESTROYED DURING CONSTRUCTION.			
ALL BROKEN, CRACKED, WORN OR OTHERWISE DAMAGED OR BICYCLE UNSAFE FRAMES AND GRATES OR LIDS ON SEWER STRUCTURES SHALL BE REPLACED WITH NEW DEPARTMENT OF SEWERS' STANDARD FRAMES AND GRATES OR LIDS. OLD FRAMES AND GRATES OR LIDS SHALL BE DELIVERED TO THE DEPARTMENT OF SEWERS AT 39TH STREET AND ASHLAND AVE.			
CITY OC CHICAGO WATER VALVE VAULTS AND SEWER STRUCTURES SHALL NOT BE CLOSED, COVERED OR OTHERWISE OBSTRUCTED DURING CONSTRUCTION WITHOUT WRITTEN PERMISSION FROM THE CITY OF CHICAGO DEPARTMENT OF WATER AND/OR DEPARTMENT OF SEWERS.			
CURB AND GUTTER CONSTRUCTION SHALL PROVIDE A MINIMUM CURB HEIGHT OF 75MM (3").			
PAVEMENT REPLACEMENT AROUND FRAMES AND GRATES OR LIDS WHERE DRAINAGE, WATER MAIN OR ELECTRICAL STRUCTURES ARE ADJUSTED OR RECONSTRUCTED SHALL BE WITH CLASS SI CONCRETE.			
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	PLOT DATE = 10/24/2011	DATE -	REVISED -
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION			
INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES IL 64 (NORTH AVE.)--ELMWOOD AVE. TO RIDGELAND AVE.; AUSTIN AVE. TO CENTRAL AVE.			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.
	307	2011-076-RS	
F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS
		COOK	34
			2
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 60R02

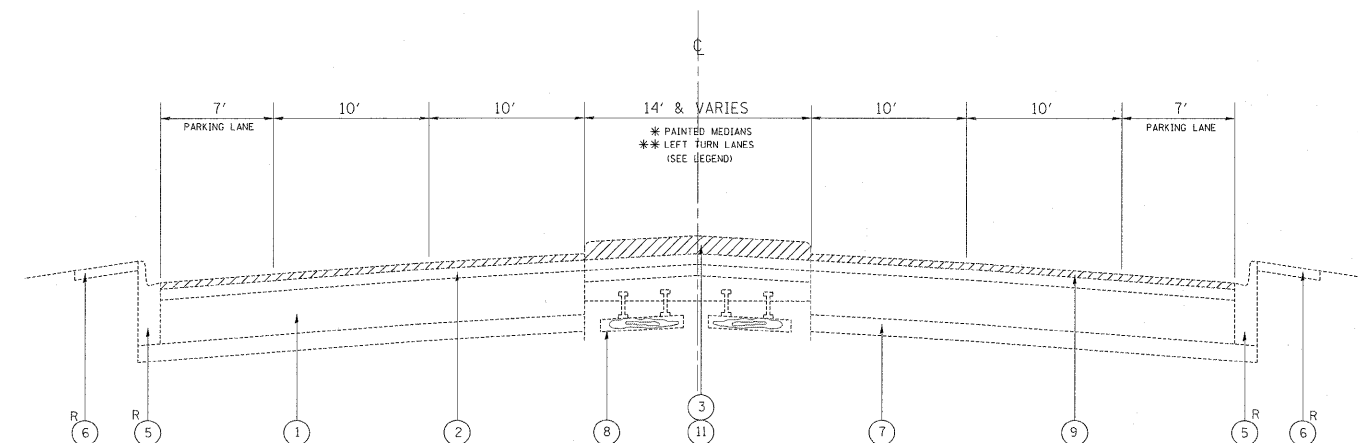


EXISTING TYPICAL CROSS SECTION
ELMWOOD AVE. TO NARRANGANSETT AVE.
STA. 20+38 TO 25+87



EXISTING TYPICAL CROSS SECTION
IL 64 (NORTH AVE.) AT AUSTIN AVE.
STA. 51+83 TO 53+62

LEGEND:
* RAISED BARRIER MEDIAN
STA. 52+55 TO 52+75
CORRUGATED MEDIAN
STA. 52+75 TO 53+62



EXISTING TYPICAL CROSS SECTION
AUSTIN AVE. TO CENTRAL AVE.
STA. 53+62 TO 77+47

LEGEND:

- 1 EXIST. P.C.C. PAVEMENT, $\pm 9''$
 - 2 EXIST. HOT-MIX ASPHALT SURFACE, $\pm 3''$
 - 3 EXIST. CONCRETE BARRIER MEDIAN
 - 4 EXIST. CORRUGATED MEDIAN
 - 5 EXIST. COMB. CONC. CURB AND GUTTER, TYPE B-6.12
 - 6 EXIST. P.C.C. SIDEWALK
 - 7 EXIST. STABILIZED SUB-BASE
 - 8 EXIST. CTA TRACKS
 - 9 PROP. HOT-MIX ASPHALT SURFACE REMOVAL, $2\frac{1}{2}''$
 - 10 PROP. MEDIAN REMOVAL
 - 11 PROP. MEDIAN REMOVAL PARTIAL DEPTH
 - 12 PROP. CONCRETE MEDIAN, TYPE SB-6
 - 13 PROP. POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50, $\frac{3}{4}''$
 - 14 PROP. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, $1\frac{3}{4}''$
- R SIDEWALK, CURB AND GUTTER REMOVAL AND REPLACEMENT
(LOCATION AS DIRECTED BY THE ENGINEER)

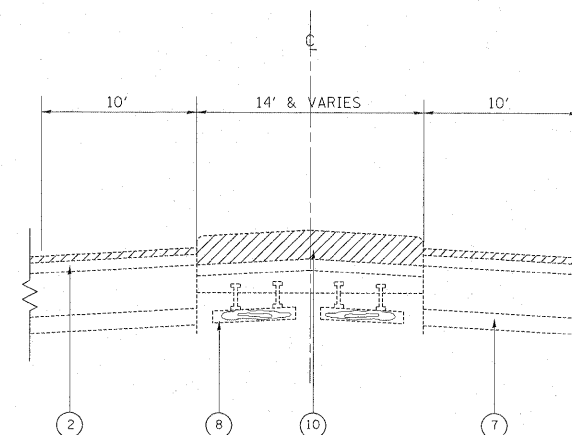
LEGEND:

EXISTING PAINTED MEDIAN LOCATIONS:

*STA. 20+38 TO 24+70
STA. 65+42 TO 66+18
STA. 72+01 TO 72+73

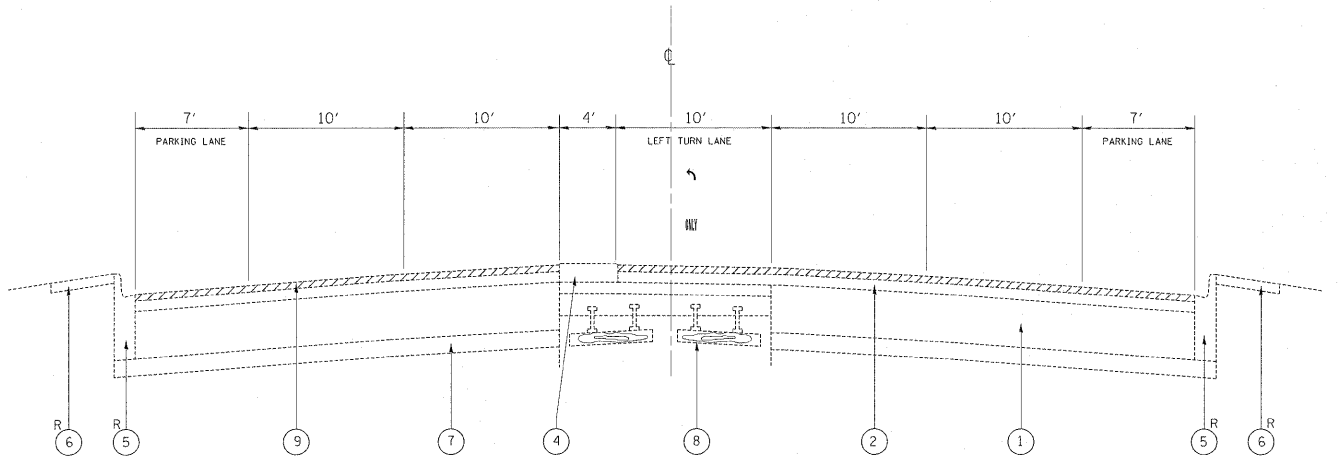
EXISTING LEFT TURN LANE LOCATIONS:

**STA. 24+70 TO 25+87
STA. 52+52 TO 53+62
STA. 55+58 TO 56+08
STA. 58+90 TO 59+66
STA. 62+18 TO 62+91
STA. 77+47 TO 78+42

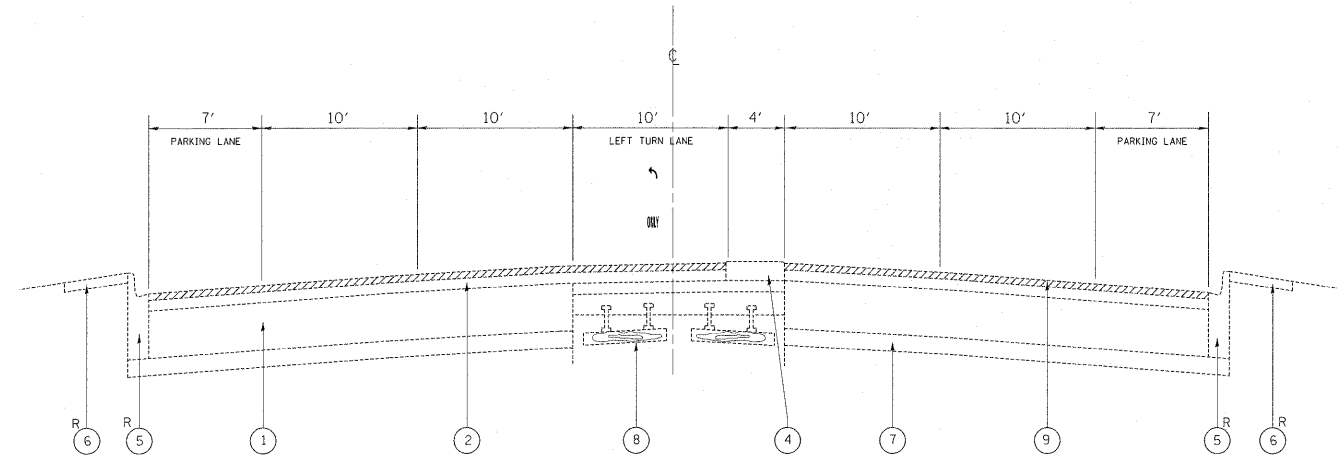


EXISTING TYPICAL CROSS SECTION
MAJOR AVE. TO PARKSIDE AVE.
STA. 73+01 TO 74+93

FILE NAME =	USER NAME = steedpa	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING AND PROPOSED TYPICAL SECTIONS IL 64 (NORTH AVE.)--ELMWOOD AVE. TO RIDGELAND AVE.; AUSTIN AVE. TO CENTRAL AVE.		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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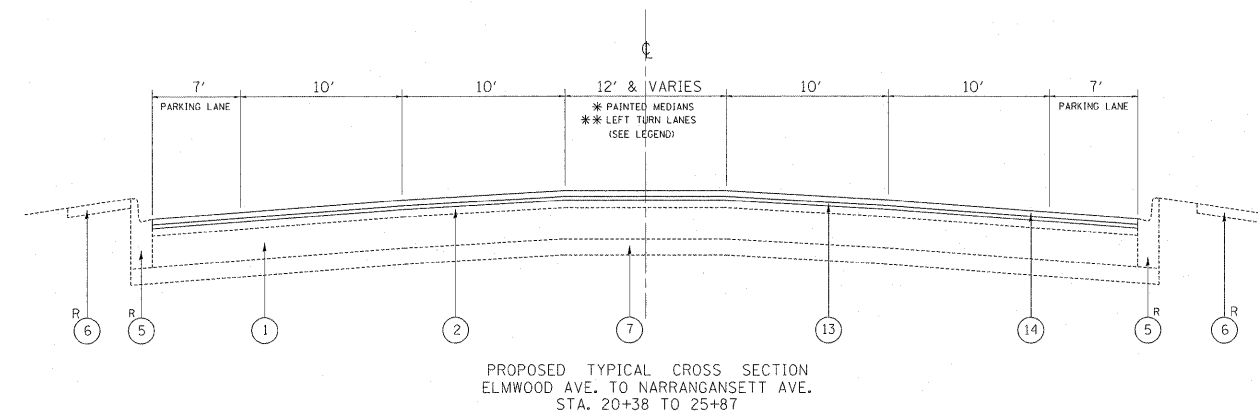
EXISTING TYPICAL CROSS SECTION
IL 64 (NORTH AVE.) AT CENTRAL AVE.
STA. 77+47 TO 79+20



EXISTING TYPICAL CROSS SECTION
IL 64 (NORTH AVE.) AT CENTRAL AVE.
STA. 79+20 TO 79+58

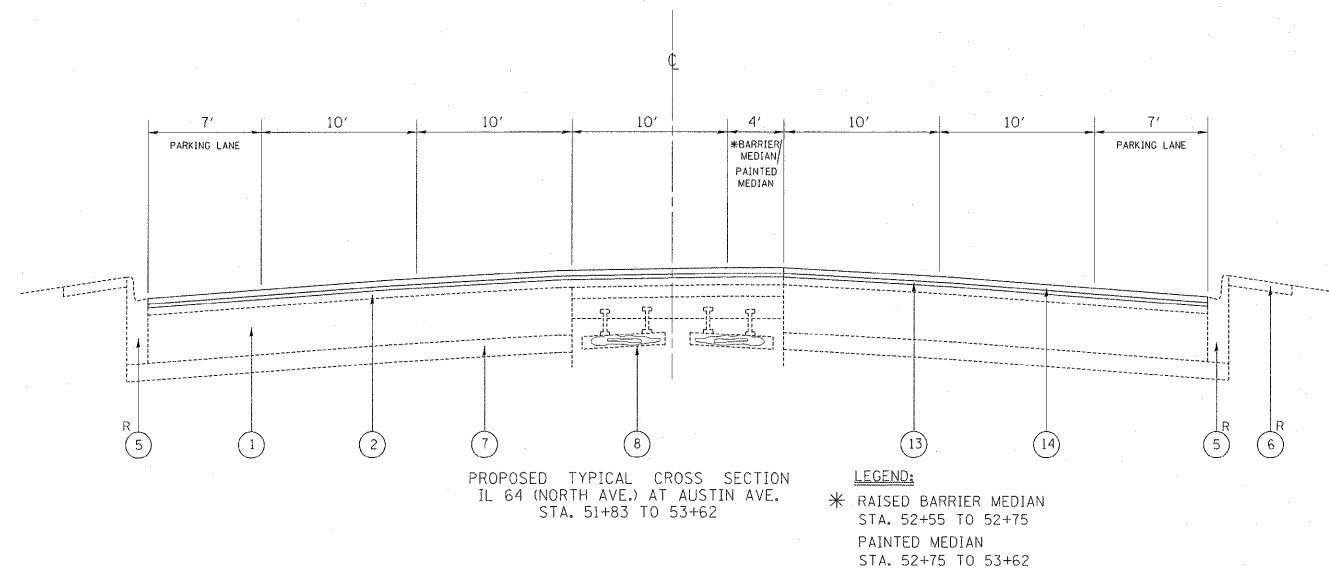
LEGEND:

- 1 EXIST. P.C.C. PAVEMENT, $\pm 9''$
- 2 EXIST. HOT-MIX ASPHALT SURFACE, $\pm 3''$
- 3 EXIST. CONCRETE BARRIER MEDIAN
- 4 EXIST. CORRUGATED MEDIAN
- 5 EXIST. COMB. CONC. CURB AND GUTTER, TYPE B-6.12
- 6 EXIST. P.C.C. SIDEWALK
- 7 EXIST. STABILIZED SUB-BASE
- 8 EXIST. CTA TRACKS
- 9 PROP. HOT-MIX ASPHALT SURFACE REMOVAL, $2\frac{1}{2}''$
- 10 PROP. MEDIAN REMOVAL
- 11 PROP. MEDIAN REMOVAL PARTIAL DEPTH
- 12 PROP. CONCRETE MEDIAN, TYPE SB-6
- 13 PROP. POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50, $\frac{3}{4}''$
- 14 PROP. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, $1\frac{3}{4}''$
- R SIDEWALK, CURB AND GUTTER REMOVAL AND REPLACEMENT
(LOCATION AS DIRECTED BY THE ENGINEER)



LEGEND:

- ① EXIST. P.C.C. PAVEMENT, ±9"
 - ② EXIST. HOT-MIX ASPHALT SURFACE, ±3"
 - ③ EXIST. CONCRETE BARRIER MEDIAN
 - ④ EXIST. CORRUGATED MEDIAN
 - ⑤ EXIST. COMB. CONC. CURB AND GUTTER, TYPE B-6.12
 - ⑥ EXIST. P.C.C. SIDEWALK
 - ⑦ EXIST. STABILIZED SUB-BASE
 - ⑧ EXIST. CTA TRACKS
 - ⑨ PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2½"
 - ⑩ PROP. MEDIAN REMOVAL
 - ⑪ PROP. MEDIAN REMOVAL PARTIAL DEPTH
 - ⑫ PROP. CONCRETE MEDIAN, TYPE SB-6
 - ⑬ PROP. POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50, ¾"
 - ⑭ PROP. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1¾"
- R SIDEWALK, CURB AND GUTTER REMOVAL AND REPLACEMENT
(LOCATION AS DIRECTED BY THE ENGINEER)



LEGEND:

- PROPOSED PAINTED MEDIAN LOCATIONS:**
- * STA. 20+38 TO 24+70
 - STA. 52+75 TO 55+00
 - STA. 56+74 TO 58+23
 - STA. 60+15 TO 61+54
 - STA. 63+53 TO 64+86
 - STA. 65+42 TO 66+18
 - STA. 66+72 TO 68+14
 - STA. 68+80 TO 69+35
 - STA. 69+93 TO 71+42
 - STA. 72+01 TO 72+73
 - STA. 73+17 TO 74+77
 - STA. 75+33 TO 75+78
- PROPOSED LEFT TURN LANE LOCATIONS:**
- ** STA. 24+70 TO 25+87
 - STA. 52+52 TO 53+62
 - STA. 55+58 TO 56+08
 - STA. 58+90 TO 59+66
 - STA. 77+47 TO 78+42
 - STA. 62+18 TO 62+91

MIXTURE REQUIREMENTS

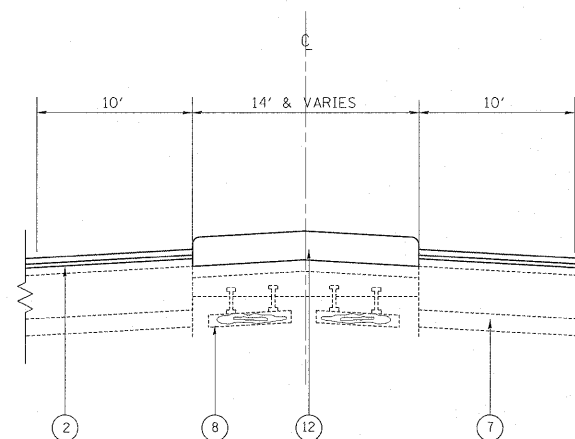
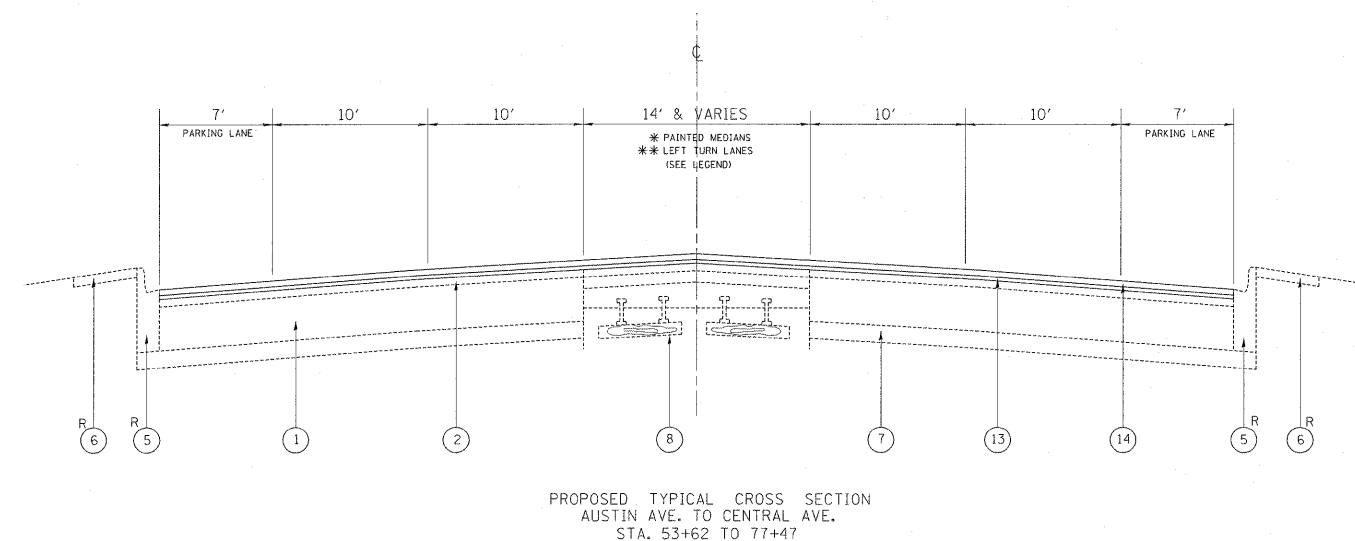
MIXTURE USE	DESIGN AIR VOIDS
CLASS "D" PATCHES, 13" HMA BINDER COURSE, IL-19MM	4% @ 70
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	4% @ 50
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, IL-9.5MM	4% @ 90

NOTE:

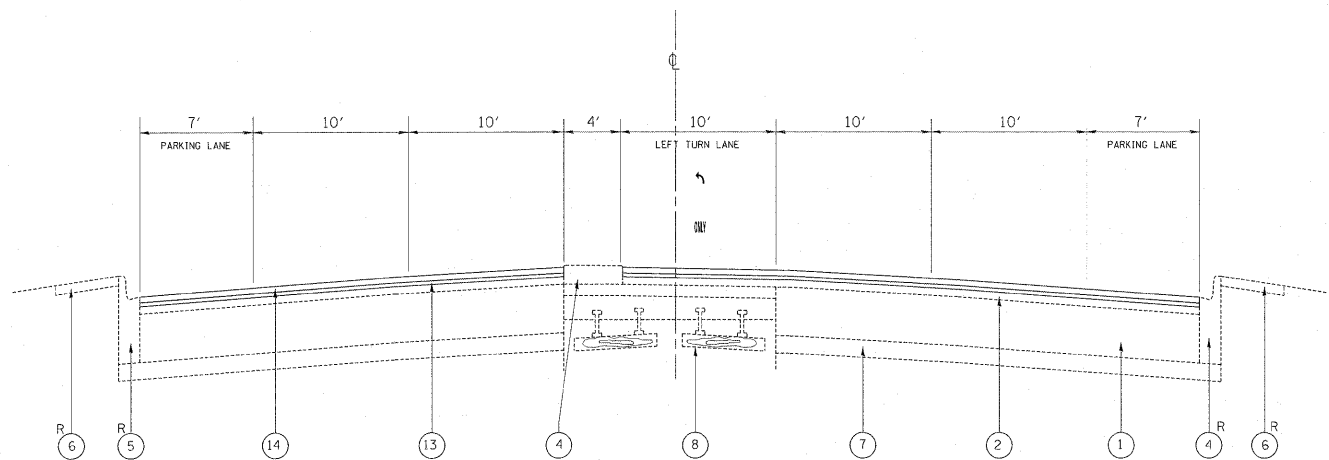
THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT QUANTITIES IS 112 LBS./SQ. YD./ IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70 -22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

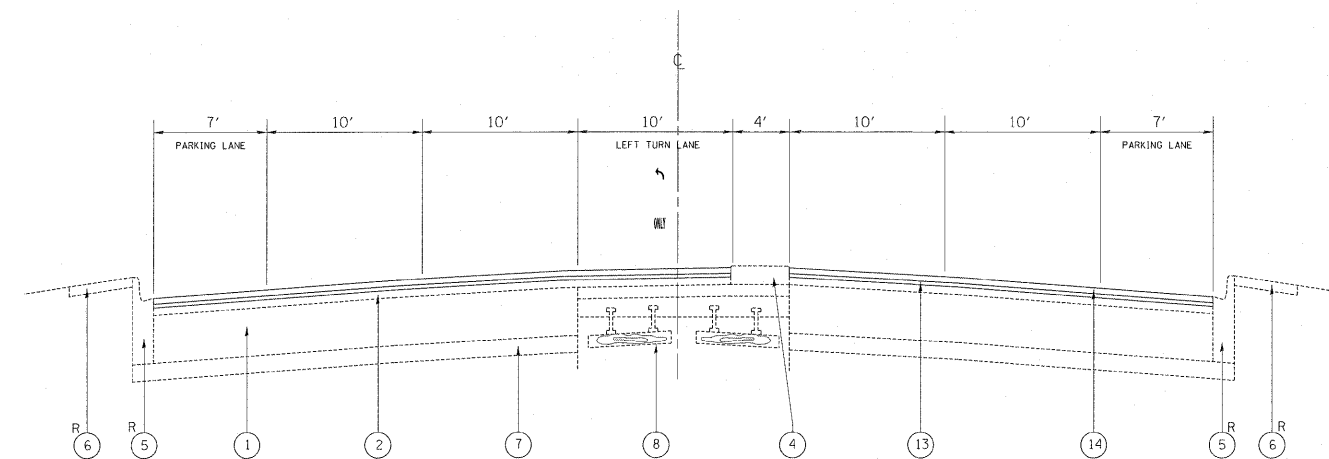
THE MILLING SHALL BE DONE PRIOR TO PATCHING



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PLOT SCALE = 49.9999 ' / in.		CHECKED -	REVISED -					CONTRACT NO. 60R02				
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						SCALE:		SHEET NO.	OF	SHEETS	STA.	TO STA.



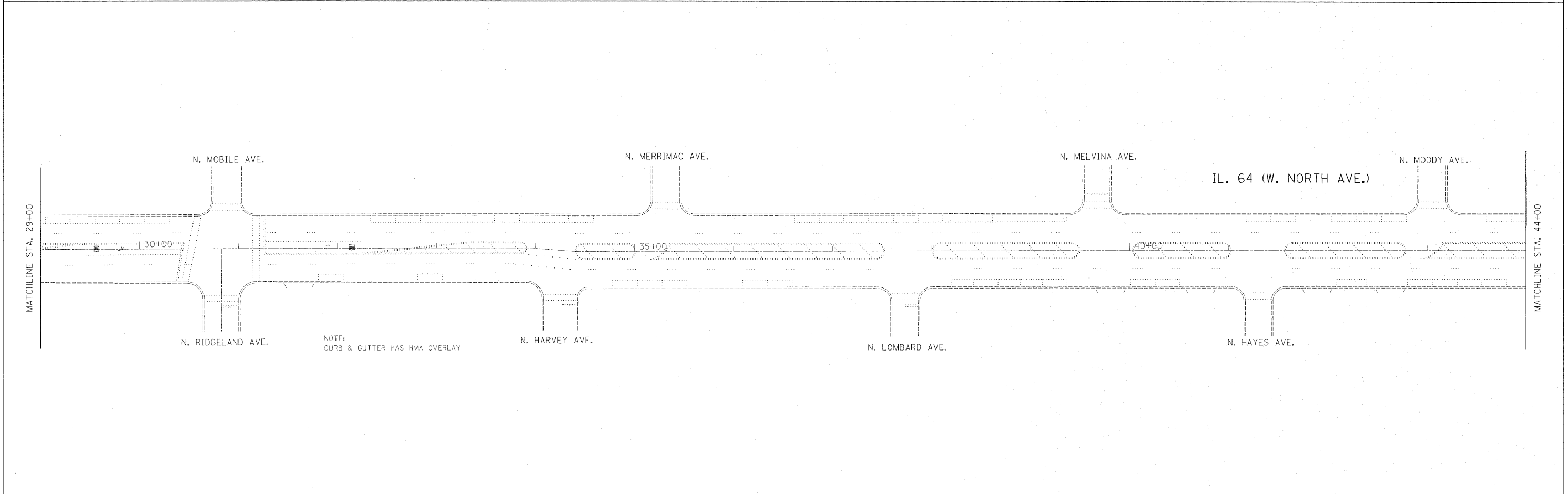
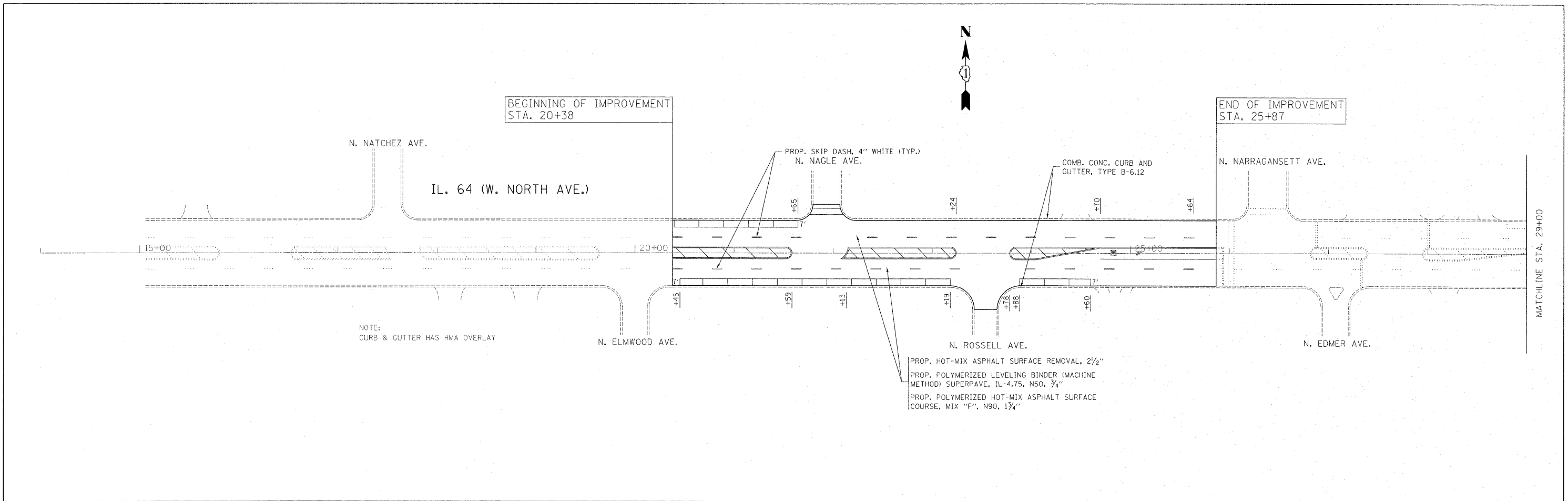
PROPOSED TYPICAL CROSS SECTION
IL 64 (NORTH AVE.) AT CENTRAL AVE.
STA. 77+47 TO 79+20



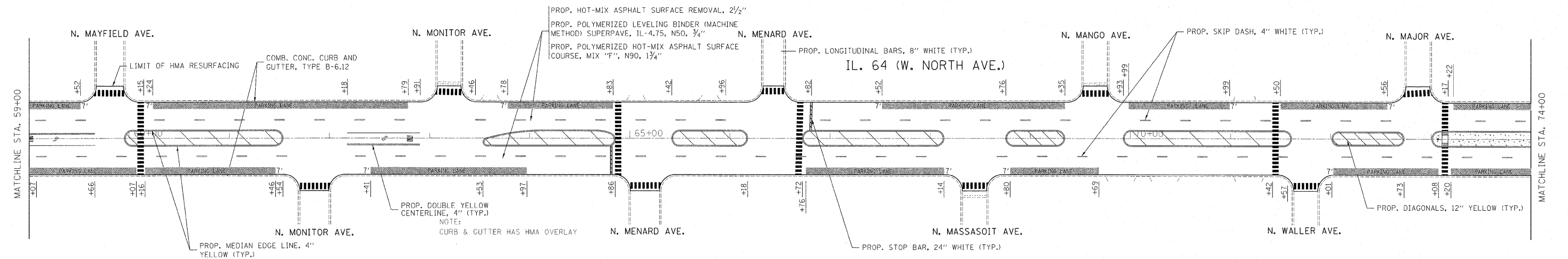
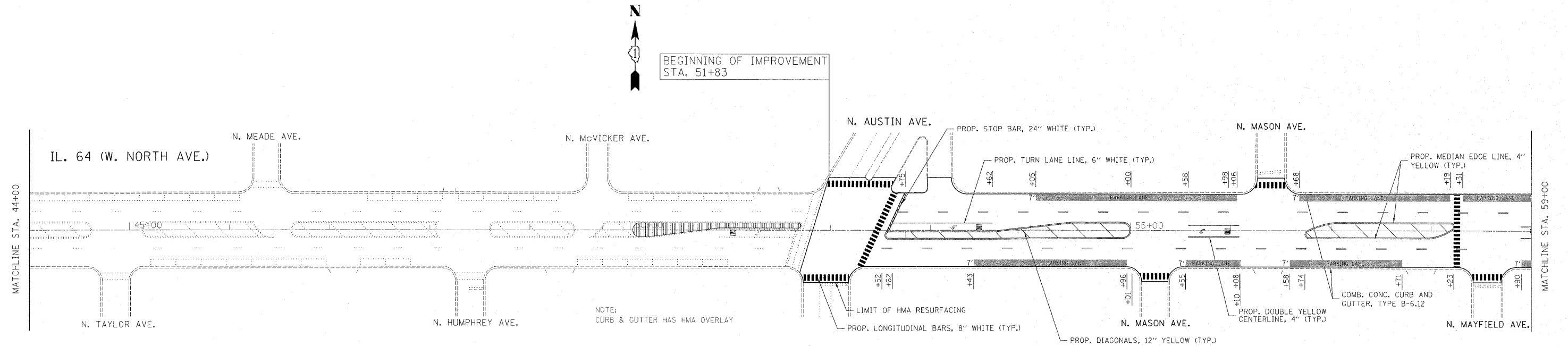
PROPOSED TYPICAL CROSS SECTION
IL 64 (NORTH AVE.) AT CENTRAL AVE.
STA. 79+20 TO 79+58

LEGEND:

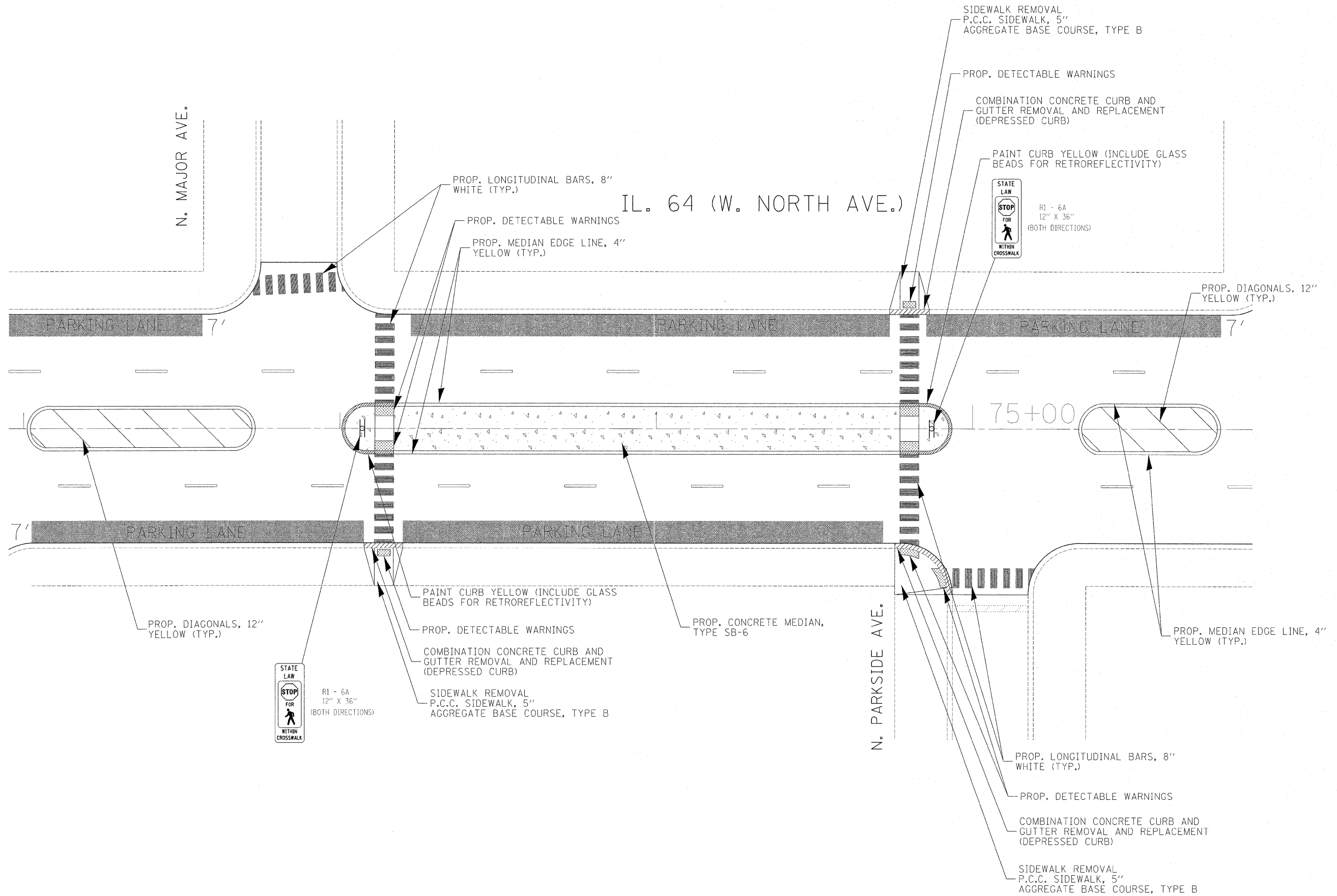
- ① EXIST. P.C.C. PAVEMENT, ±9"
- ② EXIST. HOT-MIX ASPHALT SURFACE, ±3"
- ③ EXIST. CONCRETE BARRIER MEDIAN
- ④ EXIST. CORRUGATED MEDIAN
- ⑤ EXIST. COMB. CONC. CURB AND GUTTER, TYPE B-6.12
- ⑥ EXIST. P.C.C. SIDEWALK
- ⑦ EXIST. STABILIZED SUB-BASE
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- ⑨ PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2½"
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- ⑪ PROP. MEDIAN REMOVAL PARTIAL DEPTH
- ⑫ PROP. CONCRETE MEDIAN, TYPE SB-6
- ⑬ PROP. POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50, ¾"
- ⑭ PROP. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1¾"
- R SIDEWALK, CURB AND GUTTER REMOVAL AND REPLACEMENT
(LOCATION AS DIRECTED BY THE ENGINEER)



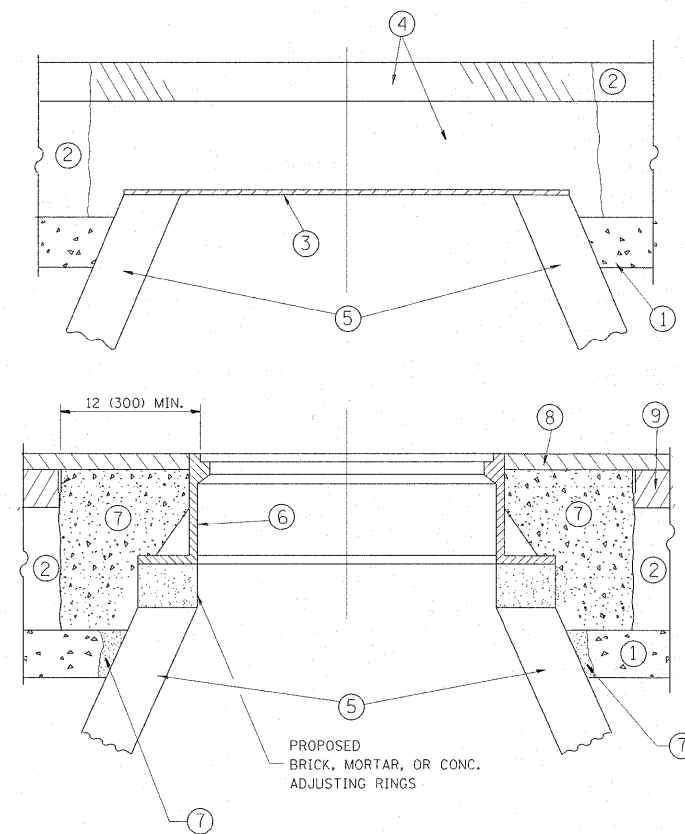
FILE NAME =	USER NAME = steedpa	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROADWAY AND PAVEMENT MARKING PLANS				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr:\pw\work\pwwdot\steadpa\d0145963\0185909-sht-plan.dgn		DRAWN -	REVISED -		IL 64 (NORTH AVE.)--ELMWOOD AVE. TO RIDGELAND AVE.;				307	2011-076-RS	COOK	34	8
PLOT SCALE = 50.0000' / 1"		CHECKED -	REVISED -		AUSTIN AVE. TO CENTRAL AVE.				CONTRACT NO. 60R02				
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ct:\pw\work\pxidot\steedpa\d0145963\0.85909-sht-plan.dgn		DRAWN -	REVISED -		IL 64 (NORTH AVE.)--ELMWOOD AVE. TO RIDGELAND AVE.;				307	2011-076-RS	COOK	34	9
	PLOT SCALE = 50.0000' / 1"	CHECKED -	REVISED -		AUSTIN AVE. TO CENTRAL AVE.				CONTRACT NO. 60R02				
	PLOT DATE = 10/19/2011	DATE -	REVISED -										
					SCALE:	SHEET NO.	OF	SHEETS	STA. 51+83	TO STA. 74+00	ILLINOIS FED. AID PROJECT		



FILE NAME =	USER NAME = steedpa	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PEDESTRIAN REFUGE MEDIAN DETAIL BETWEEN MAJOR AVE. AND PARKSIDE AVE.		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cd\pw_work\pwwork\stedpa\0145963\0185399-sht-plan.dgn		DRAWN -	REVISED -		IL 64 (NORTH AVE.)--ELMWOOD AVE. TO RIDGELAND AVE.;		307	2011-076-R5	COOK	34	11
PLOT SCALE = 50.0001' / in.		CHECKED -	REVISED -		AUSTIN AVE. TO CENTRAL AVE.		CONTRACT NO. 60R02				
PLOT DATE = 10/19/2011		DATE -	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		



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.

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 1½ (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 PP-1* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

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 PP-1* CONCRETE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES:

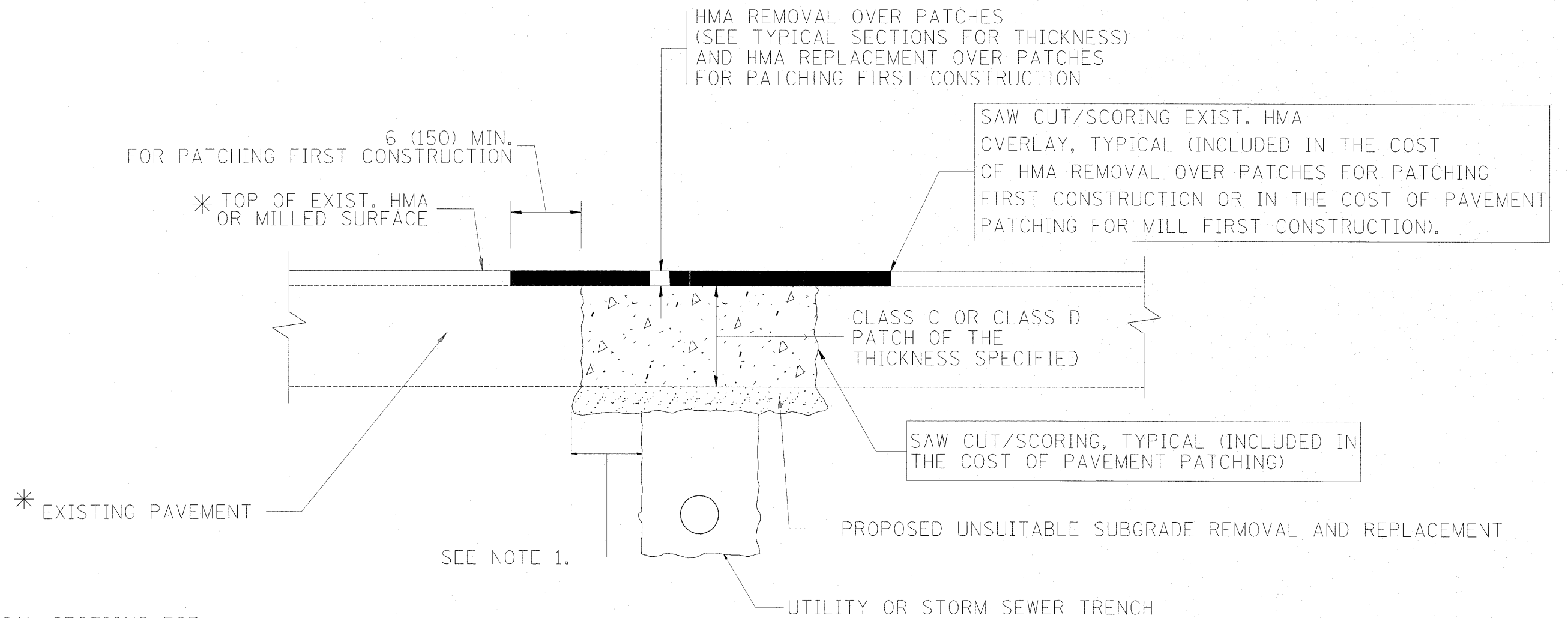
THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

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.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = steedpa	DESIGNED - R. SHAH	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw_work\p\dot\steedpa\d0145963\Diststd.dgn		DRAWN -	REVISED - R. WIEDEMAN 05-14-04						307	2011-076-RS	COOK	34	12
PLOT SCALE = 50.0000' / in.		CHECKED -	REVISED - R. BORO 01-01-07		BD600-03 (BD-8)		CONTRACT NO. 60R02						
PLOT DATE = 10/19/2011		DATE - 10-25-94	REVISED - R. BORO 03-09-11		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT								
					SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.					



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

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

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

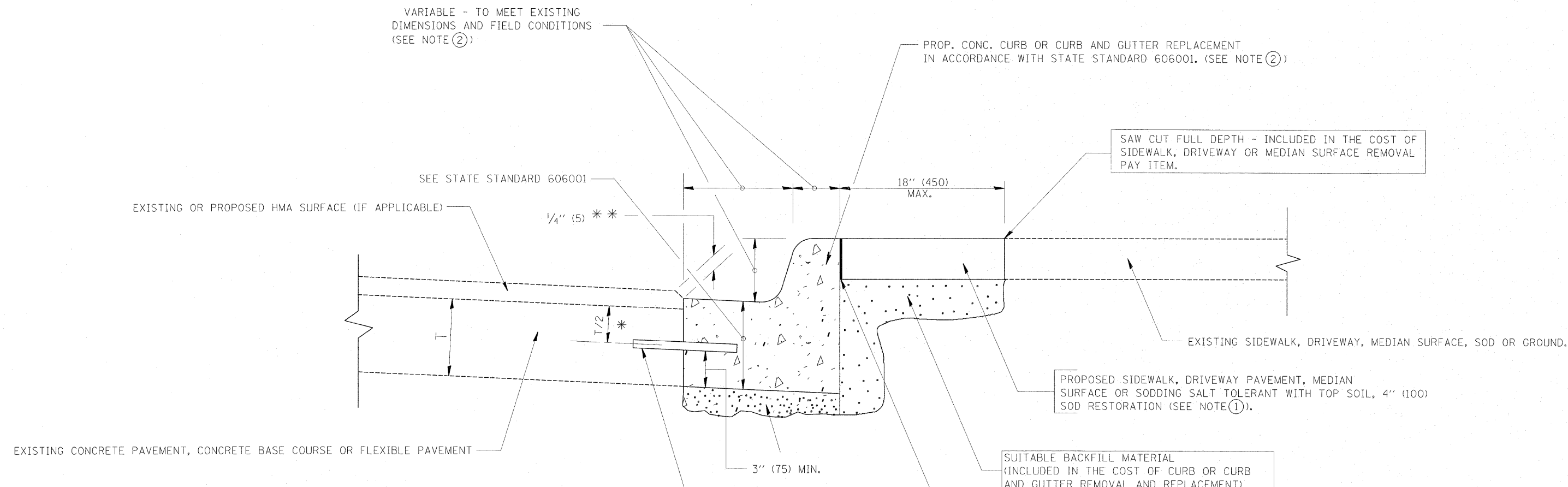
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

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

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

FILE NAME =	USER NAME = steedpa	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\pw\work\p\idots\steedpa\d0145963\01ststd.dgn		DRAWN -	REVISED - R. BORO 01-01-07					307	2011-076-RS	COOK	34	13
PLOT SCALE = 50.0000' / 1in.		CHECKED -	REVISED - R. BORO 09-04-07					BD400-04 (BD-22)				
PLOT DATE = 10/19/2011		DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT CONTRACT NO. 60R02			



- * 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.
SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY.
- ② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED
- ③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.
- ④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.
- ⑤ 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.
- ⑥ 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.
- ⑦ 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.
- ⑧ 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.

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

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.

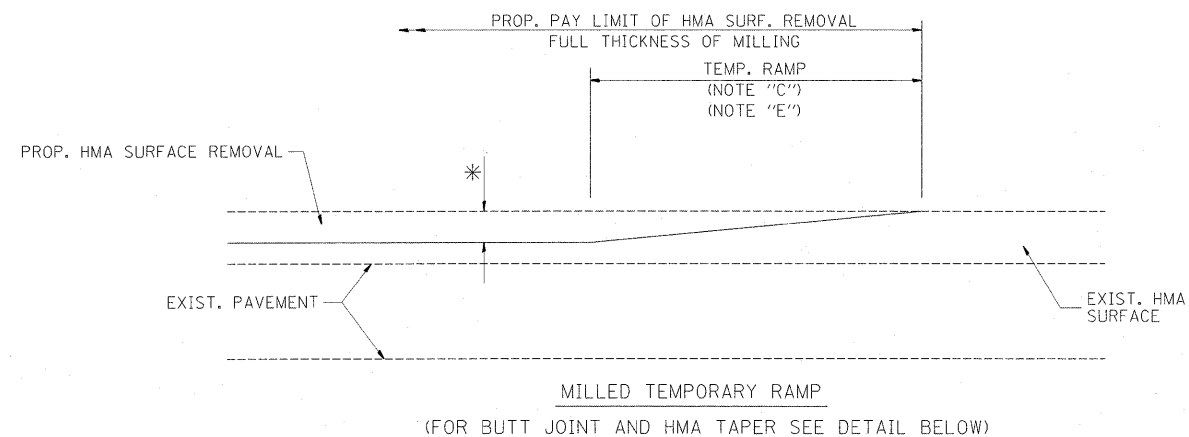
PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

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".

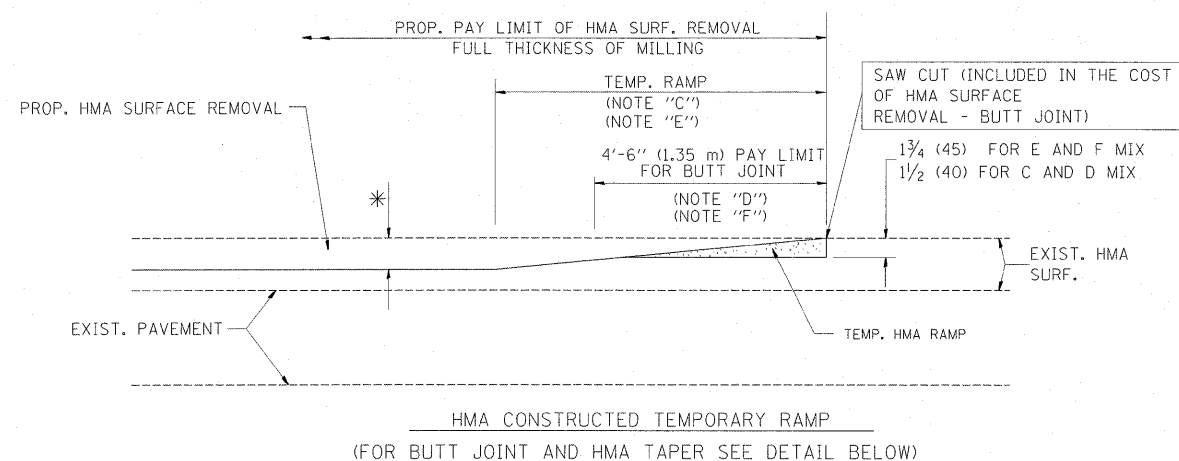
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME = c:\pw_work\pwsdot\steedpa\d0145963\Diststd.dgn	USER NAME = steedpa	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - A. ABBAS 03-21-97						307	2011-067-RS	COOK	34	14
	PLOT SCALE = 50,0000 ' / in.	CHECKED -	REVISED - M. GOMEZ 01-22-01						BD600-06 (BD-24)		CONTRACT NO. 60R02		
	PLOT DATE = 10/19/2011	DATE - 03-11-94	REVISED - R. BORO 12-15-09						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

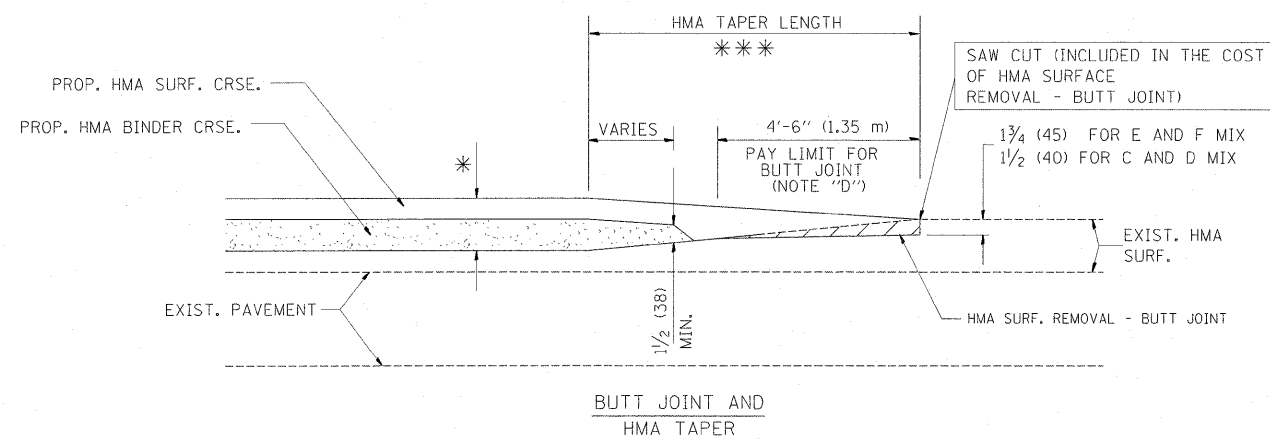


OPTION 1

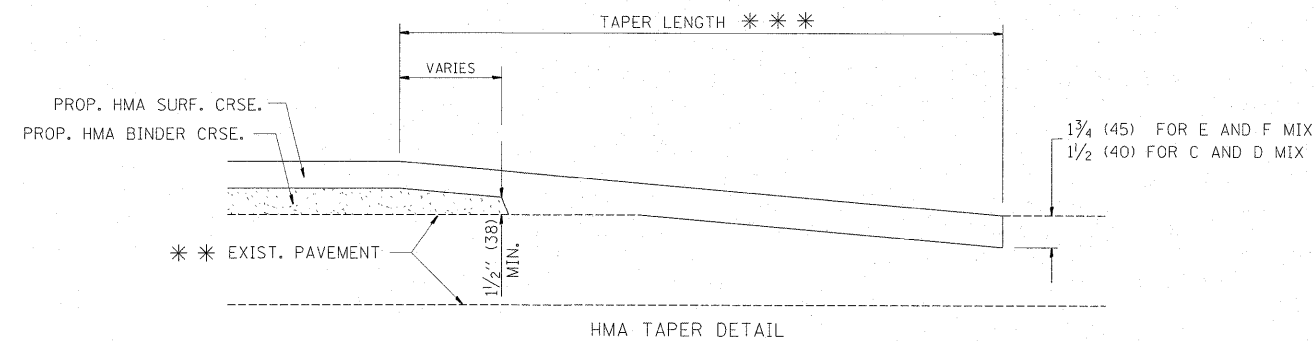
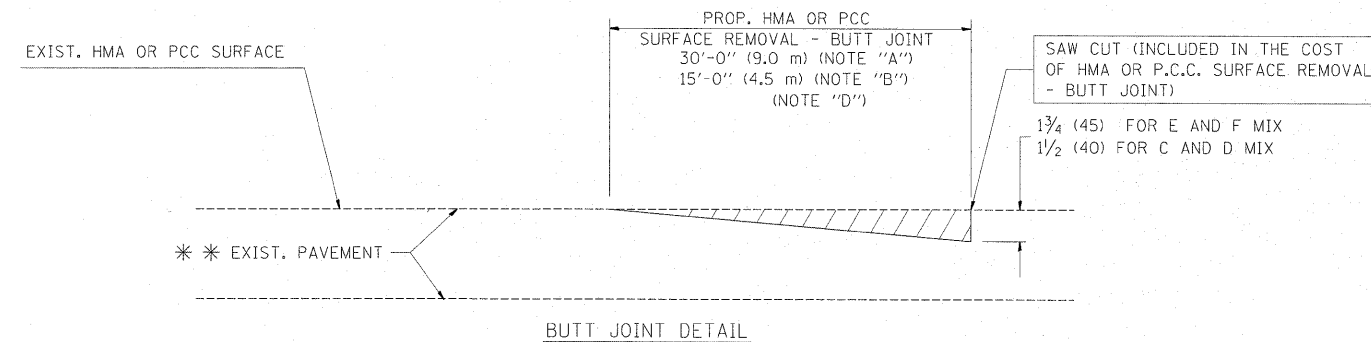


OPTION 2

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")

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.

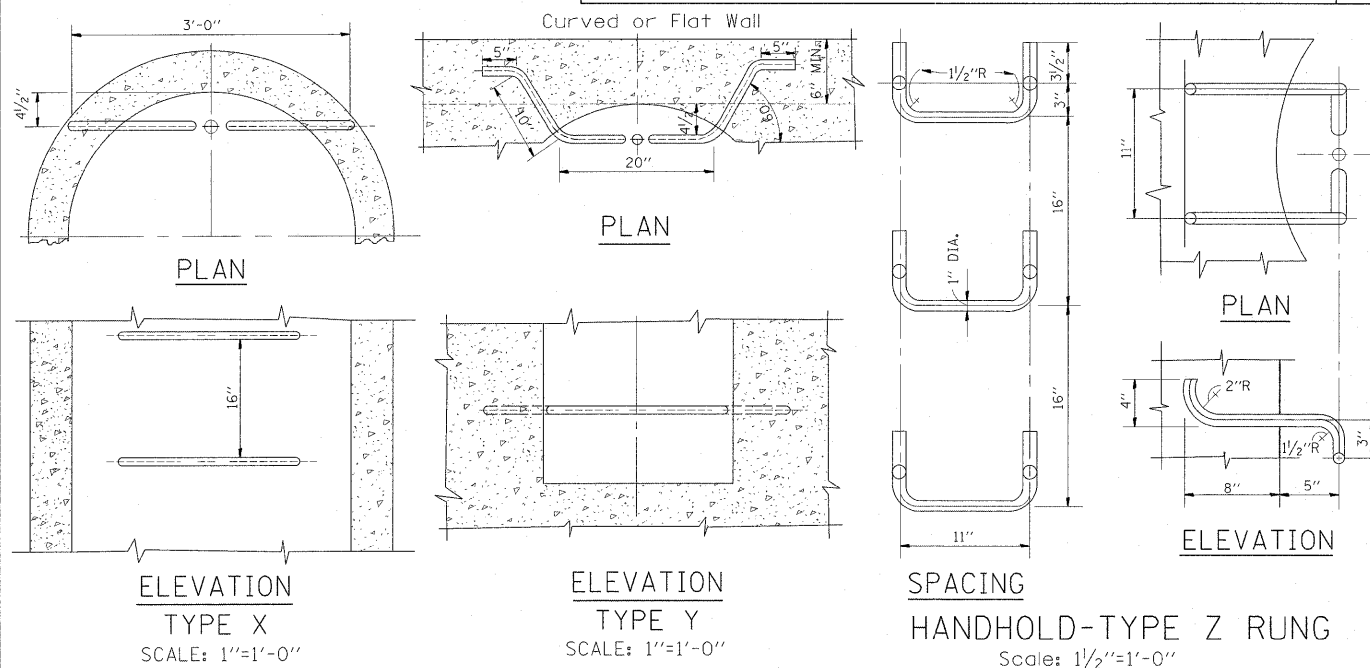
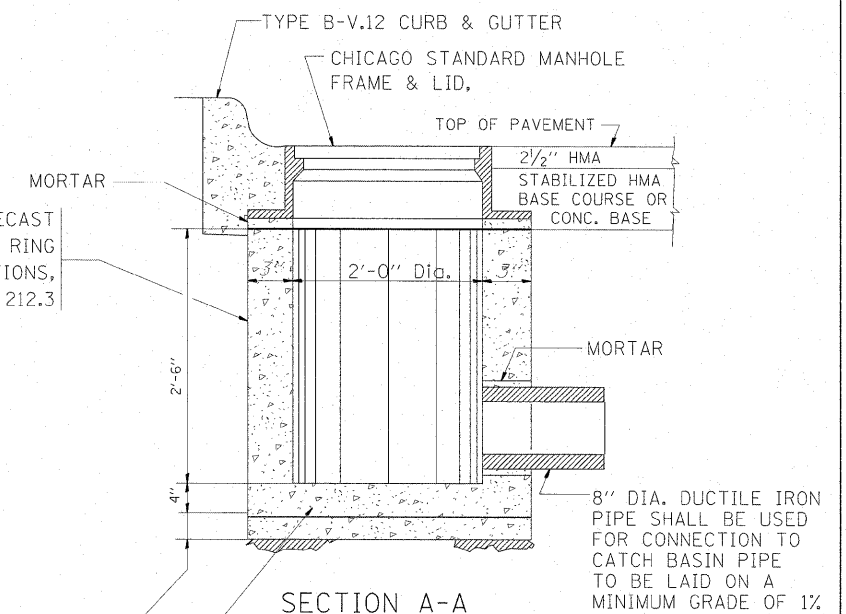
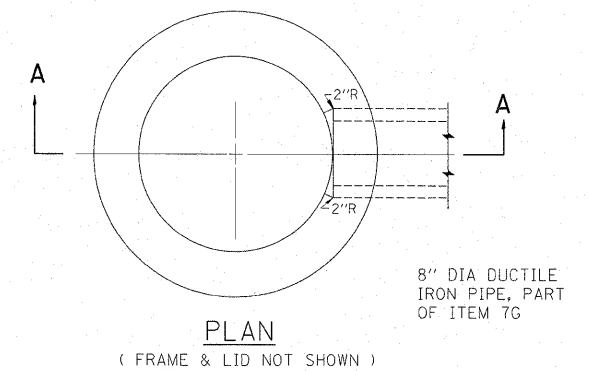
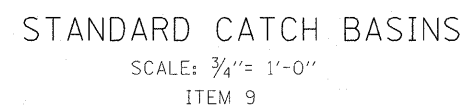
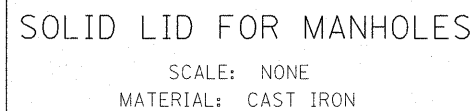
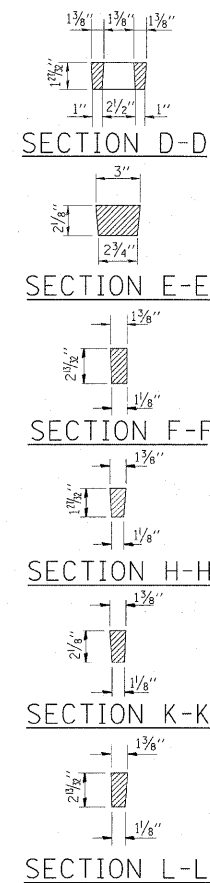
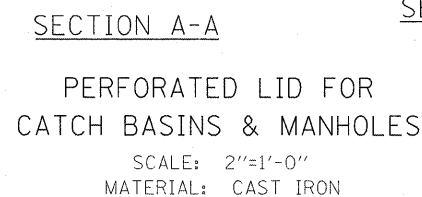
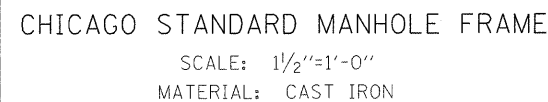
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PLOT SCALE = 50.0000' / in.		CHECKED -	REVISED - M. GOMEZ 04-06-01
PLOT DATE = 10/19/2011		DATE - 06-13-90	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	2011-076-RS	COOK	34	15
BD400-05 BD32		CONTRACT NO. 60R02		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



ALL LADDER RUNGS SHALL BE ALUMINUM OR GALVANIZED WROUGHT IRON AS SPECIFIED IN THE SPECIFICATIONS, PART 2, ARTICLE 214.2. RUNGS SHALL BE 1" DIAMETER OR OF A SHAPE HAVING AN EQUIVALENT CROSS-SECTIONAL AREA.

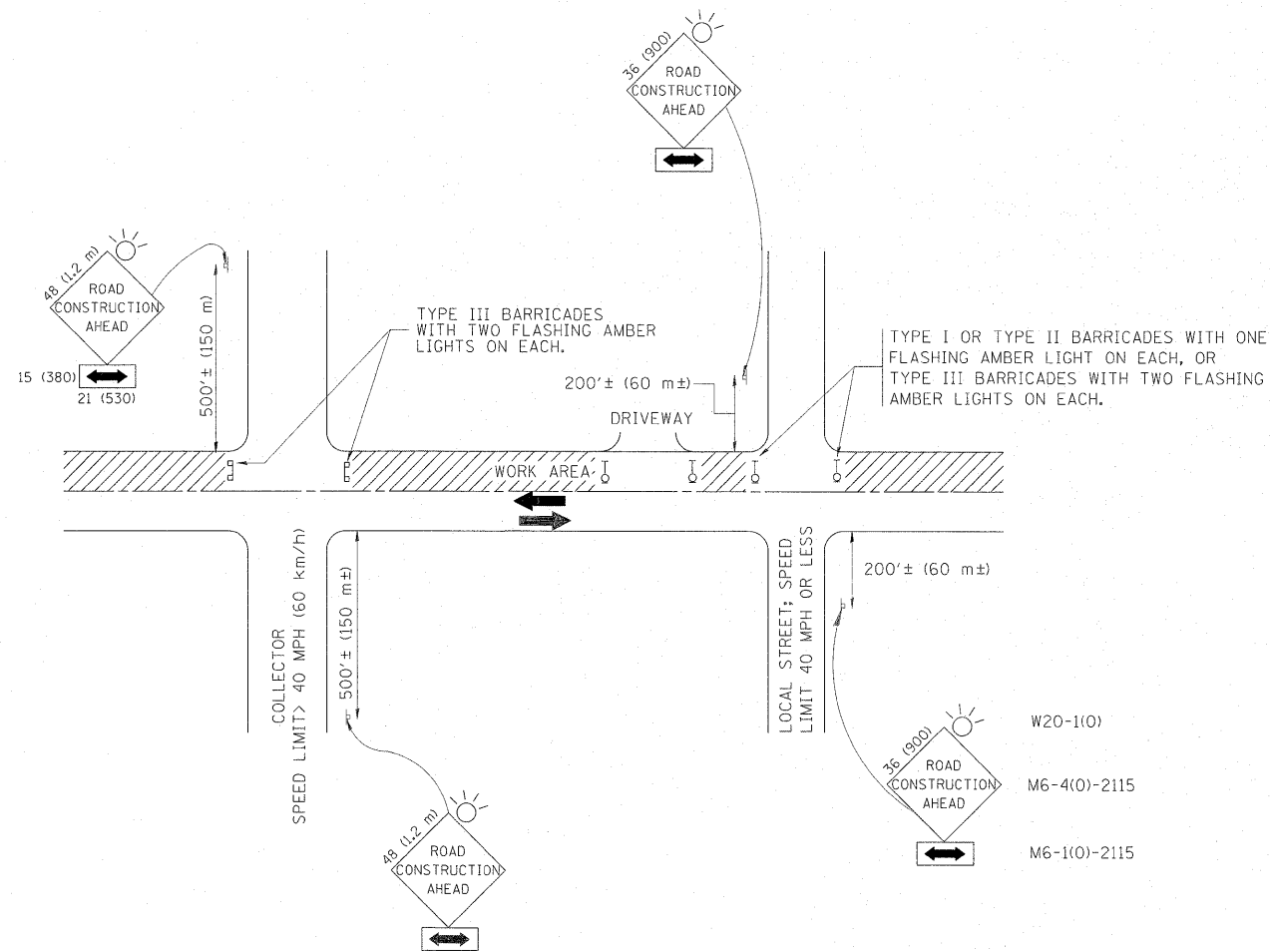
NOTE:
INLETS SHALL NOT BE CONSTRUCTED
UNLESS IT IS IMPOSSIBLE TO CONSTRUCT
A CATCH BASIN. THE CONTRACTOR SHALL
HAVE THE DEPARTMENT OF SEWERS
APPROVAL BEFORE CONSTRUCTING INLETS.

STANDARD INLETS
SCALE 1"= 1'-0"
ITEM 12

THIS INLET DETAIL IS SOMETIMES REFERRED TO AS
"CHICAGO STANDARD INLET, TYPE A"

CITY OF CHICAGO
DEPARTMENT OF SEWERS
ENGINEERING DIVISION

FILE NAME =	USER NAME = steedpe	DESIGNED - M. GOMEZ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CITY OF CHICAGO CATCH BASIN, INLET AND MANHOLE DETAILS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw\work\p1dwt\steedpe\d014563\DistStd.dgn		DRAWN -	REVISED -		307	2011-076-RS	COOK	34	16			
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PLOT DATE = 10/19/2011	DATE = 01-25-01	REVISED -			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	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

- 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:
 - 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.
 - 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.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - 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.
 - 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.
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

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

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

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

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

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

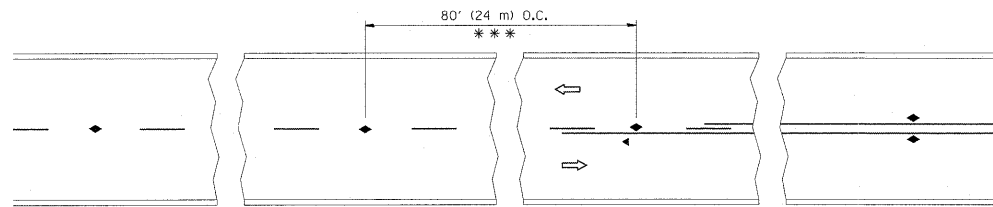
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	PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 10/19/2011	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

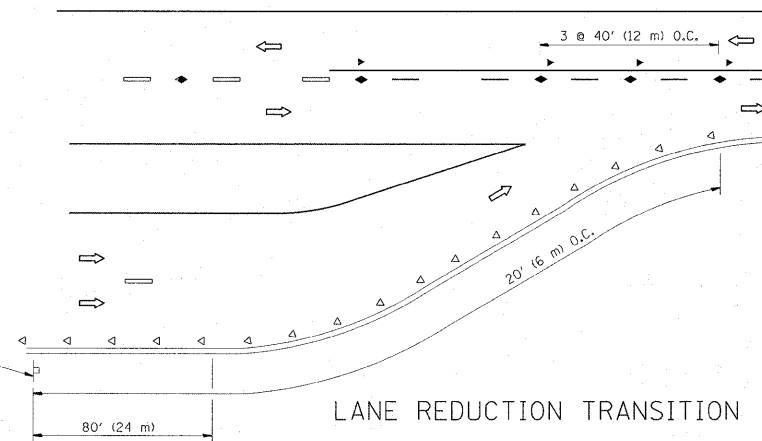
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	2011-076-RS	COOK	34	17
TC-10		CONTRACT NO. 60R02		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

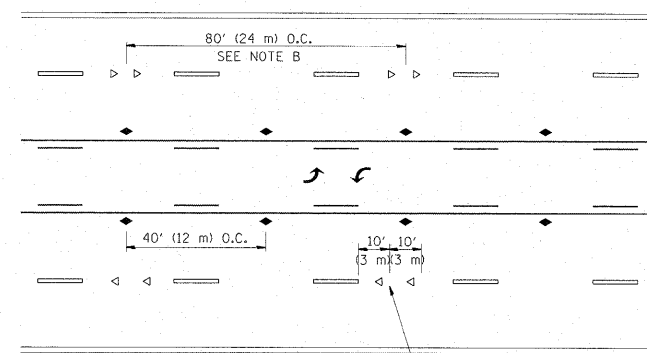


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

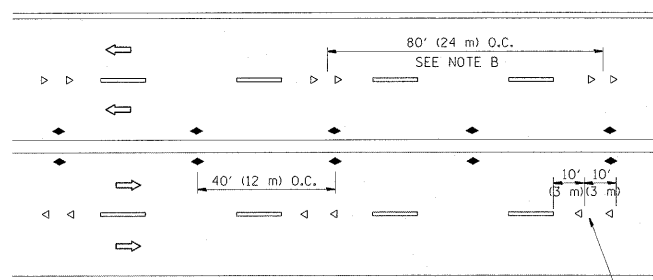


LANE REDUCTION TRANSITION



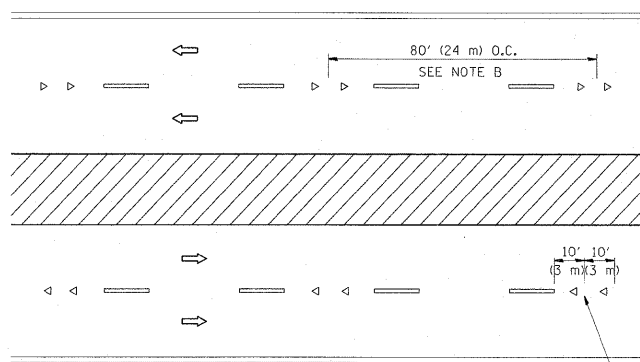
SEE NOTE A

TWO-WAY LEFT TURN



SEE NOTE A

MULTI-LANE/UNDIVIDED



SEE NOTE A

MULTI-LANE/DIVIDED

GENERAL NOTES

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

LANE MARKER NOTES

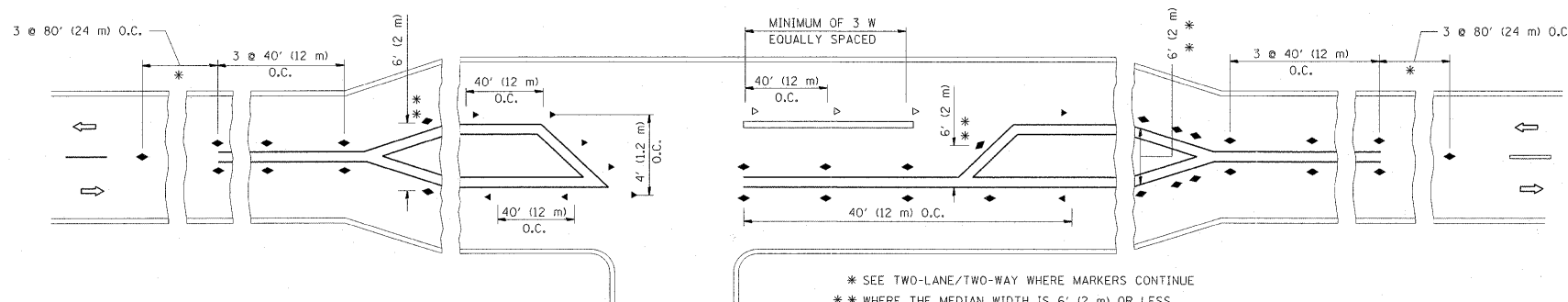
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H. (20 km/h) LOWER THAN POSTED SPEEDS.

SYMBOLS

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

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



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

LEFT TURN

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

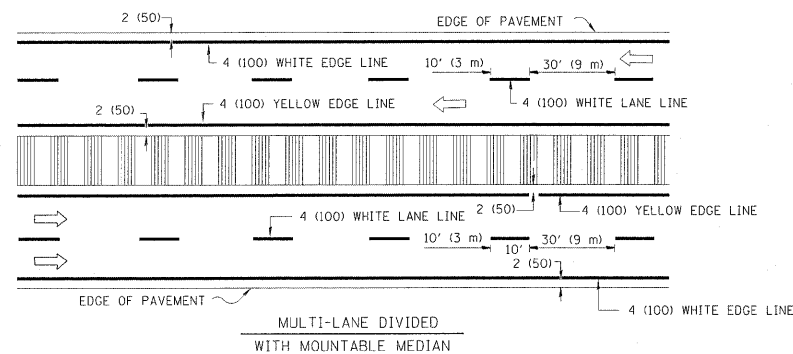
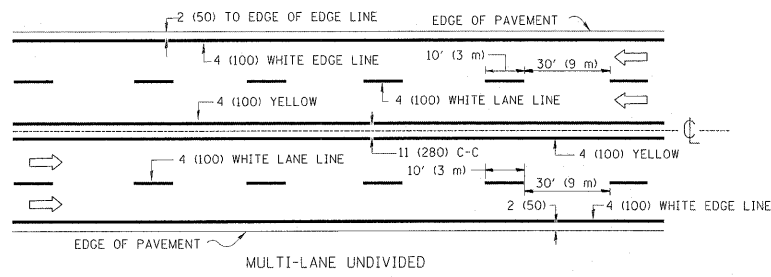
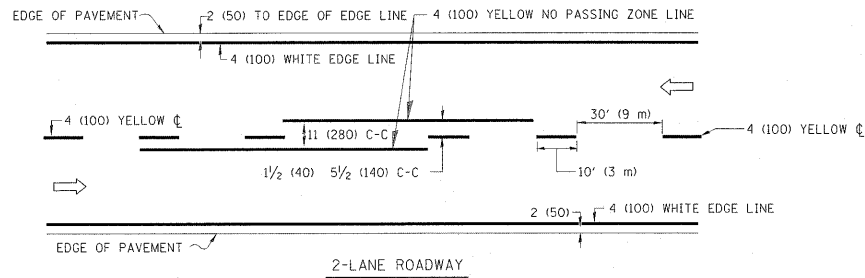
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

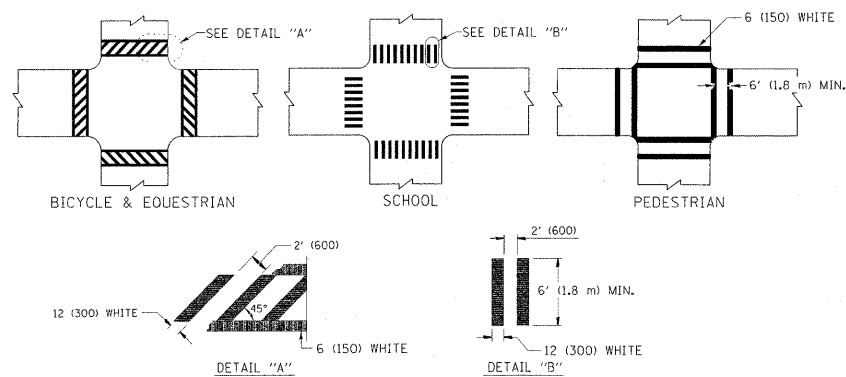
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-11		CONTRACT NO. 60R02		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

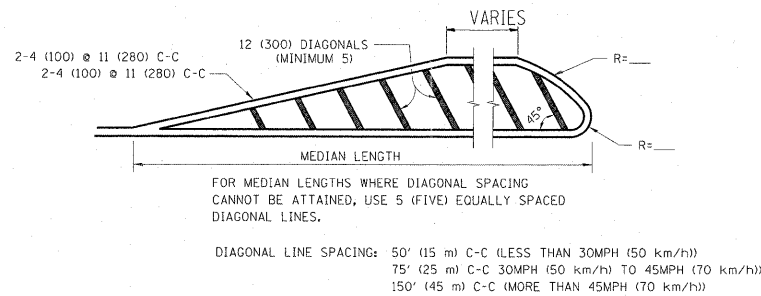
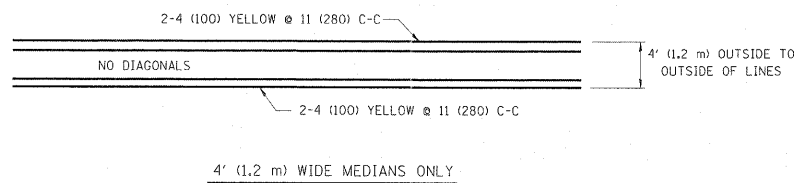


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

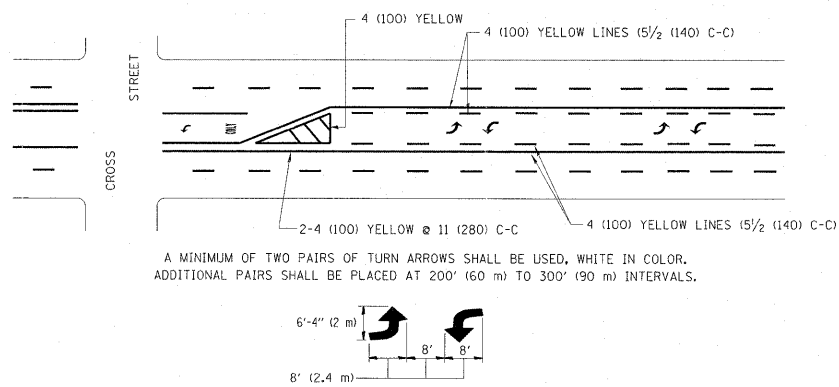
TYPICAL LANE AND EDGE LINE MARKING



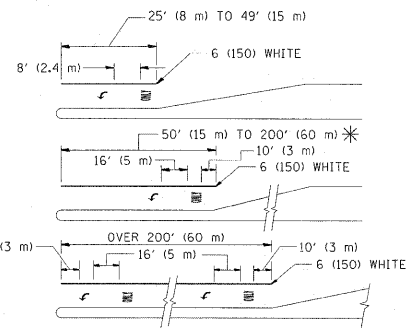
TYPICAL CROSSWALK MARKING



MEDIANS OVER 4' (1.2 m) WIDE



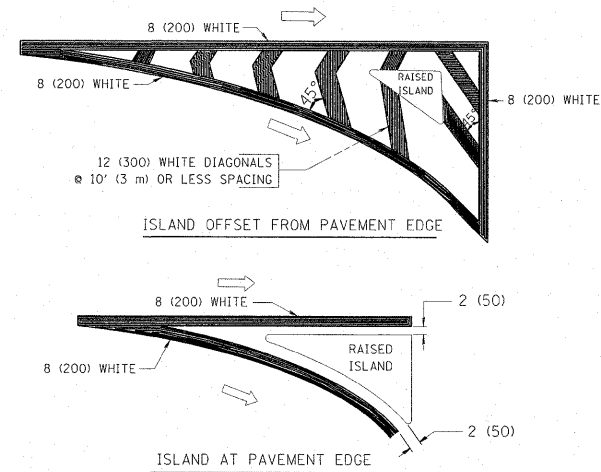
TYPICAL PAINTED MEDIAN MARKING



TYPICAL LEFT (OR RIGHT) TURN LANE

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

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

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

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

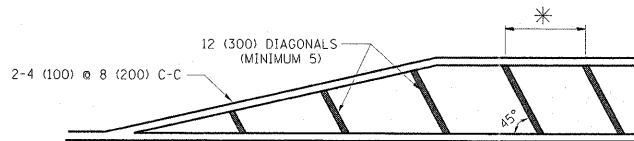
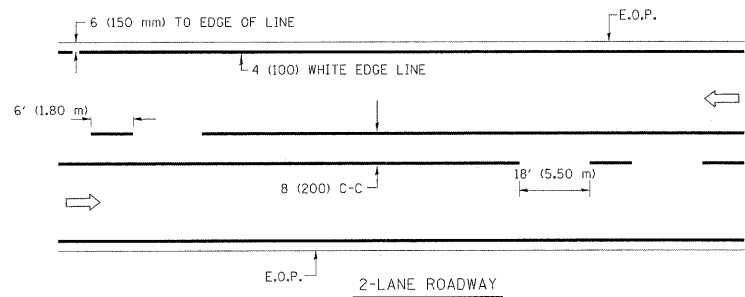
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

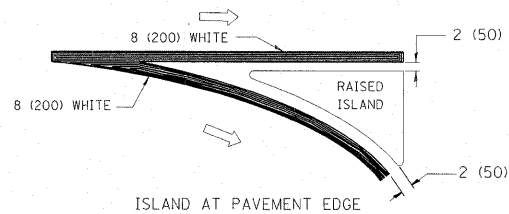
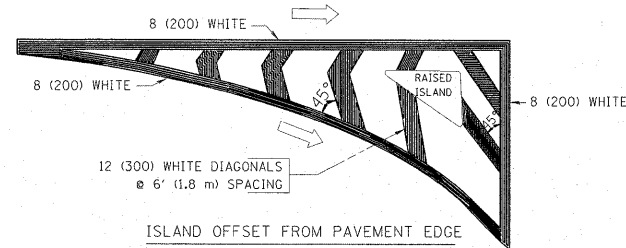
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-13		CONTRACT NO. 60R02		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

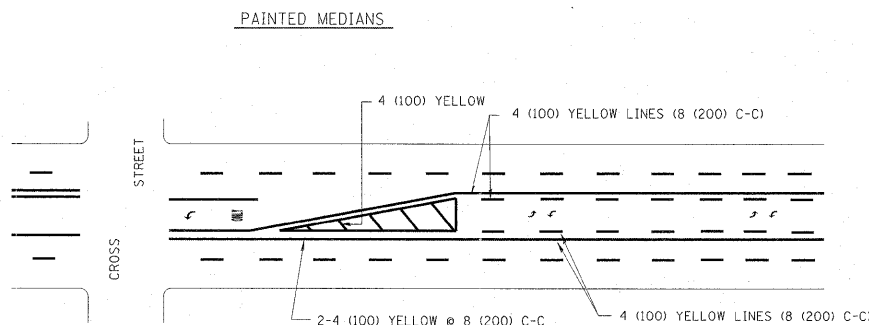
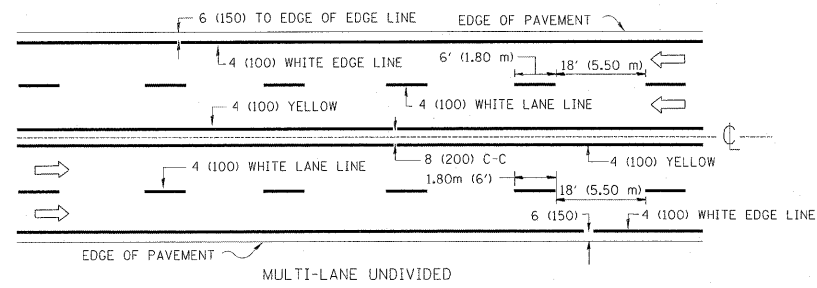


*FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

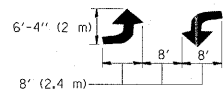
* DIAGONAL LINE SPACING: 20' (6.1 m) C-C



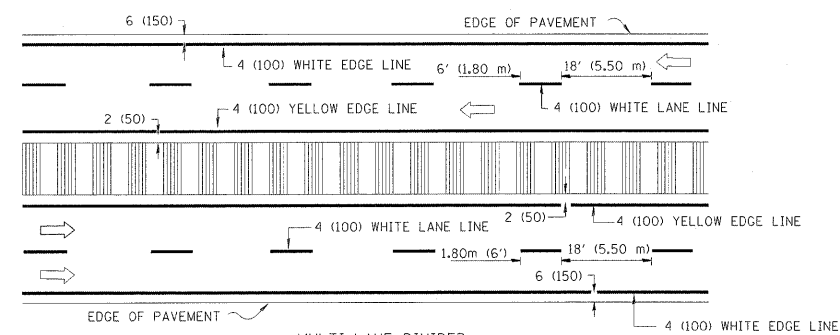
TYPICAL ISLAND MARKING



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.

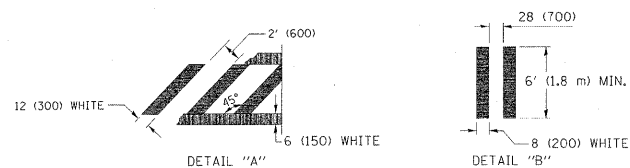
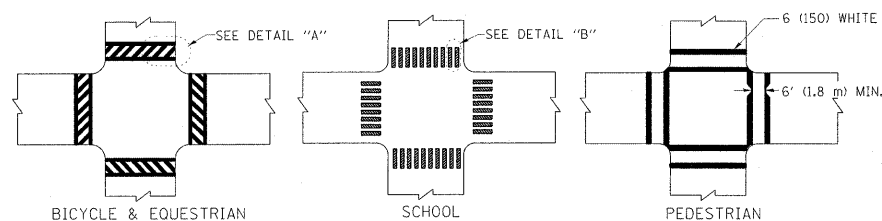


TYPICAL PAINTED MEDIAN MARKING

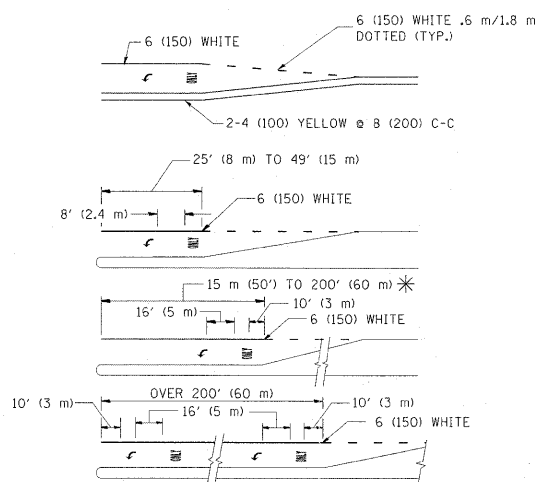


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.8 SQ. FT. (1.47 m²) ONLY AREA = 22.9 SQ. FT. (2.13 m²)

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	6' (1.80 m) LINE WITH 18' (5.50 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	8 (200) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	8 (200) C-C
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	6' (1.80 m) LINE WITH 18' (5.50 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) 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' (2.4 m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4 m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	6' (1.8 m) LINE WITH 18' (5.50 m) SPACE FOR SKIP-DASH; 8 (200) 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° 8 (200) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2'-4" (700) 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°	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	8 (200) 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: 20' (6.1 m) (LESS THAN 30 MPH (50 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. (0.33m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STREET MARKING STANDARDS. PRINTED BY CITY OF CHICAGO, DEPARTMENT OF TRANSPORTATION, BUREAU OF TRAFFIC.

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

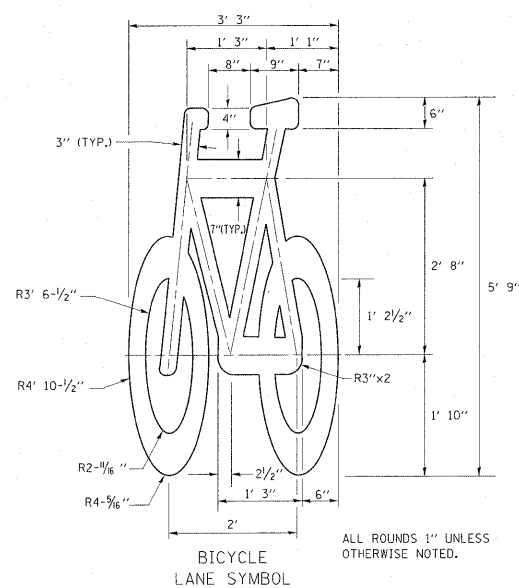
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		CHECKED -	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
TYPICAL PAVEMENT MARKINGS

SCALE: NONE SHEET NO. 1 OF 2 SHEETS STA. TO STA.

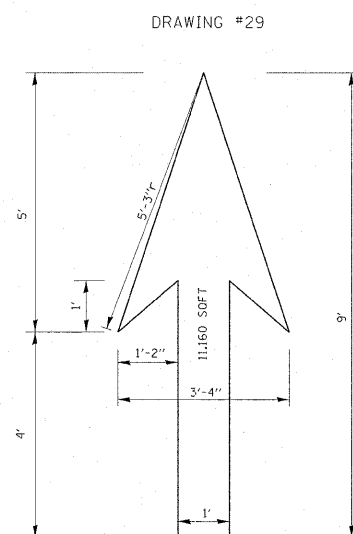
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TC-24		CONTRACT NO. 60R02		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



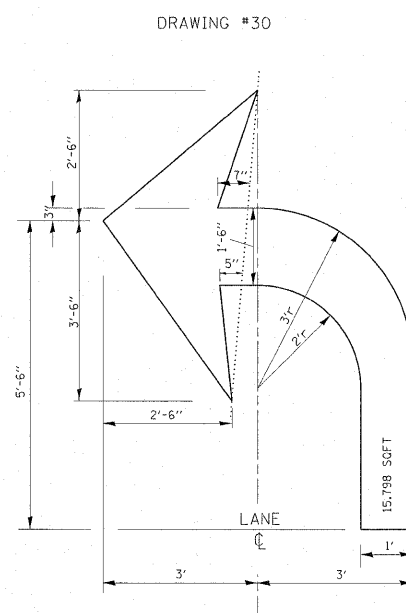
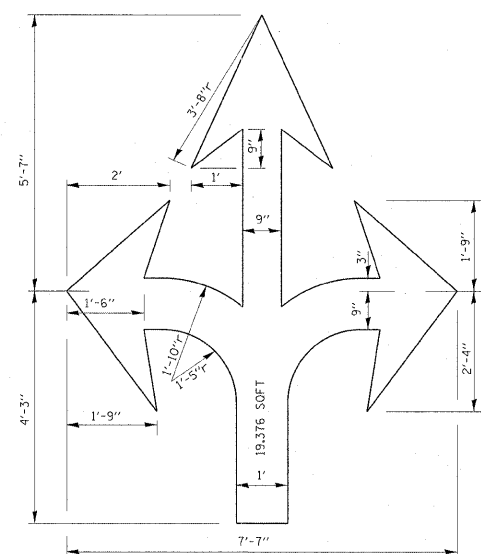
NOTE:

- 1.) FOR BIKE LANE SYMBOLS ONLY,
USE PRE-FORMED THERMOPLASTIC
WITH A MINIMUM THICKNESS OF 90 MILS,
MINIMUM SKID RESISTANCE VALUE OF 60 BPN,
& A MINIMUM INDEX OF REFRACTION OF 1.50.
- 2.) THE RESIDENT ENGINEER SHALL CONTACT
MR. BEN GOMBERG AT 312-744-8093 AT
LEAST ONE CALENDAR WEEK PRIOR TO
INSTALLING BIKE LANE SYMBOLS.

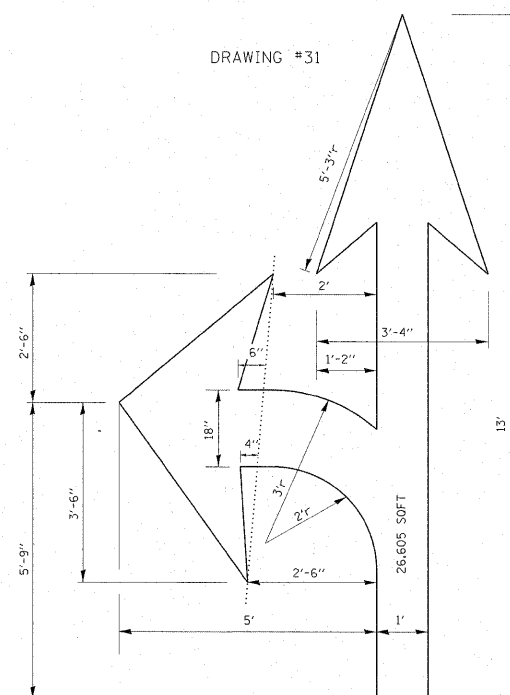
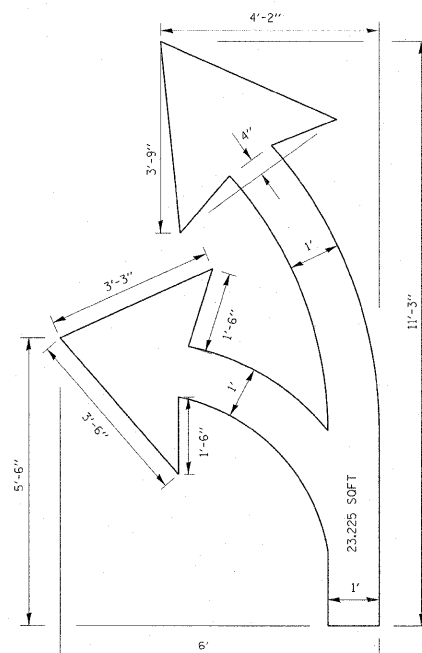
TYPICAL BIKE LANE SYMBOLS
DRAWING #28



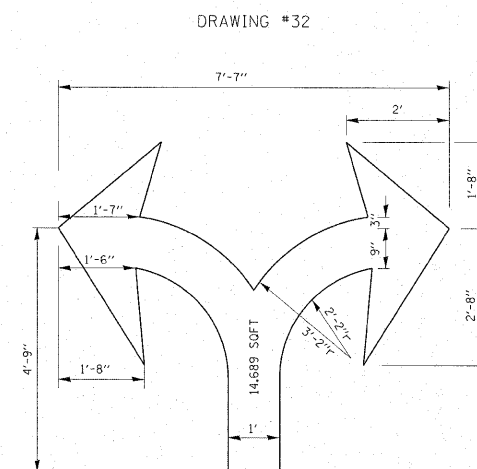
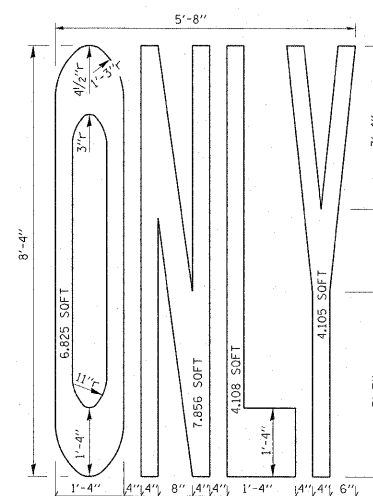
DRAWING #33



DRAWING #34



DRAWING #35



NOTE:

ALL MARKINGS SHALL BE SOLID WHITE UNLESS OTHERWISE NOTED IN THE PLANS

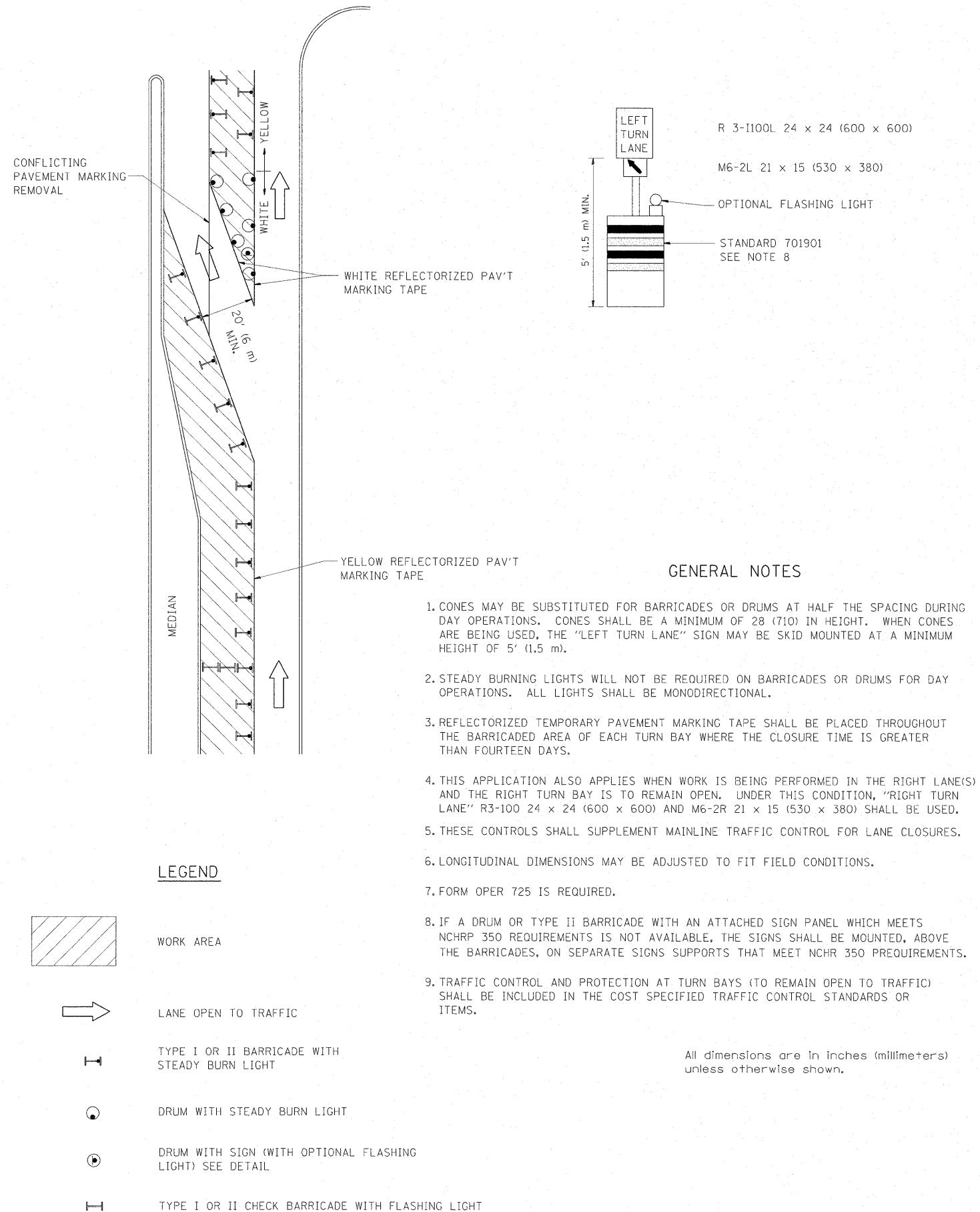
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

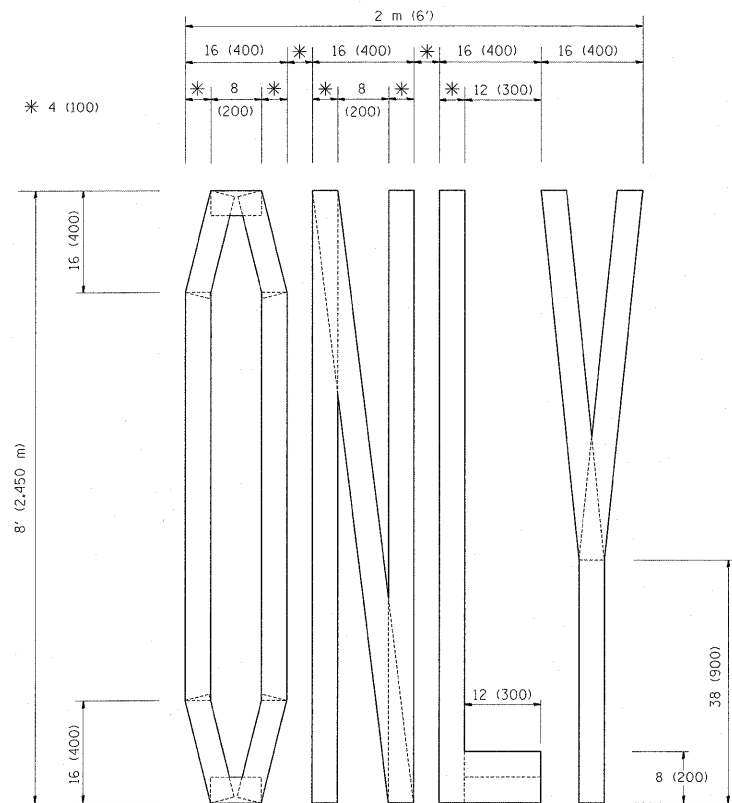
CITY OF CHICAGO TYPICAL PAVEMENT MARKINGS

SCALE: NONE	SHEET NO. 2 OF 2 SHEETS	STA.	TO STA.
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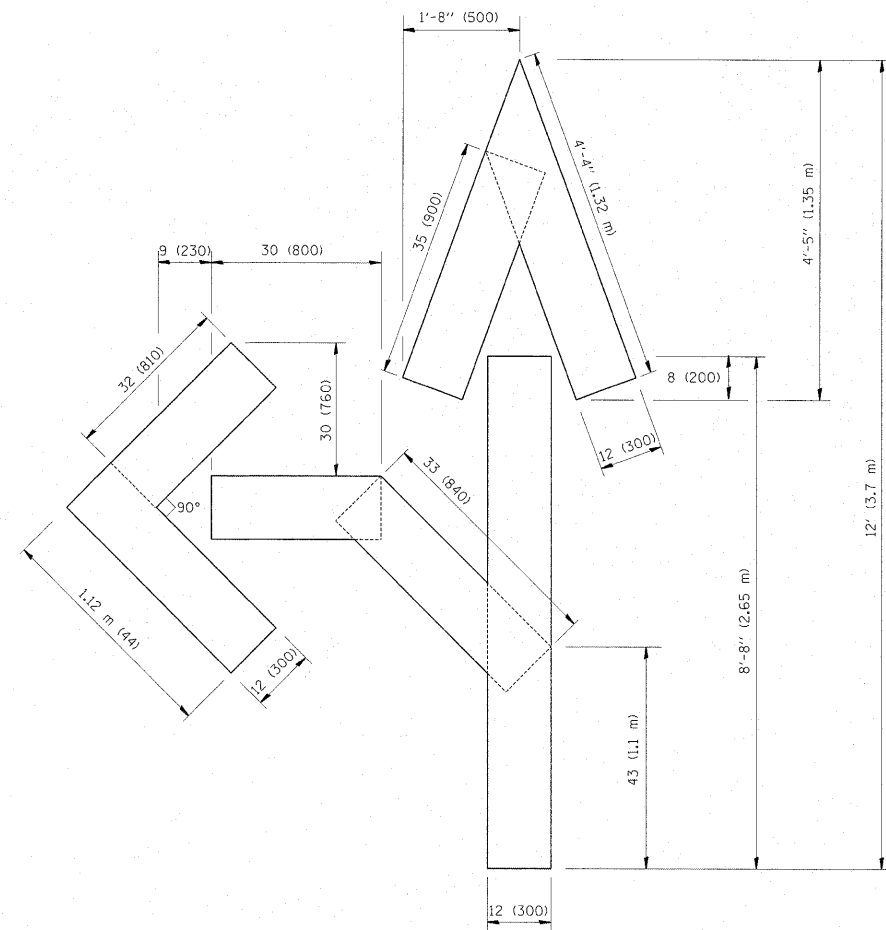
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FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



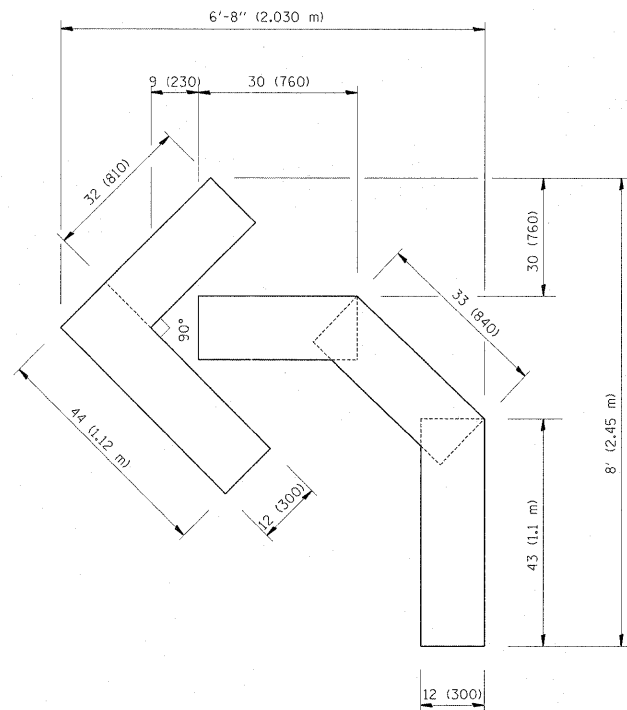
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QUANTITY
4 (100) LINE = 64.1 ft. (19.7 m)
21.1 sq. ft. (1.97 sq. m)



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



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

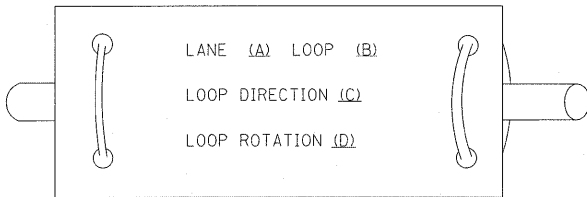
All dimensions are in inches (millimeters)
unless otherwise shown.

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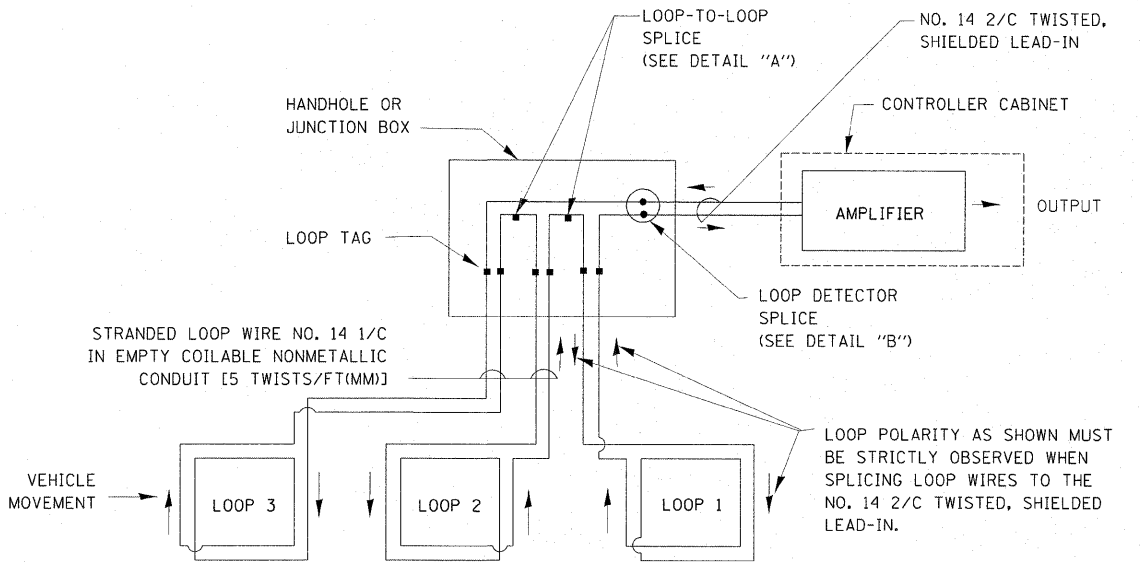
LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT 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.

LOOP LEAD-IN CABLE TAG

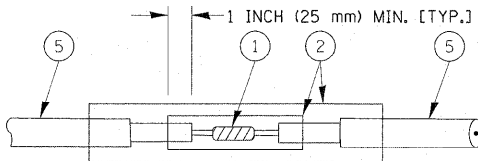


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

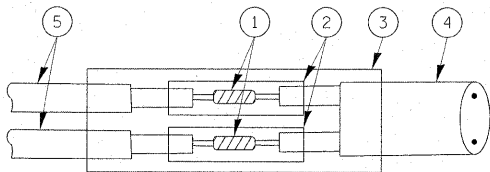


DETECTOR LOOP WIRING SCHEMATIC

- 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.

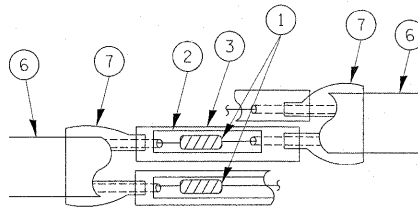


DETAIL "A"
LOOP-TO-LOOP SPLICE

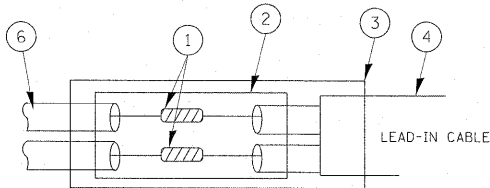


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PREFORMED LOOP

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 LENGHT 6" (150 mm), UNDERWATER GRADE.
- ④ NO. 14 2/C TWISTED, SHIELDED CABLE.
- ⑤ LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- ⑥ PREFORMED LOOP
- ⑦ XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

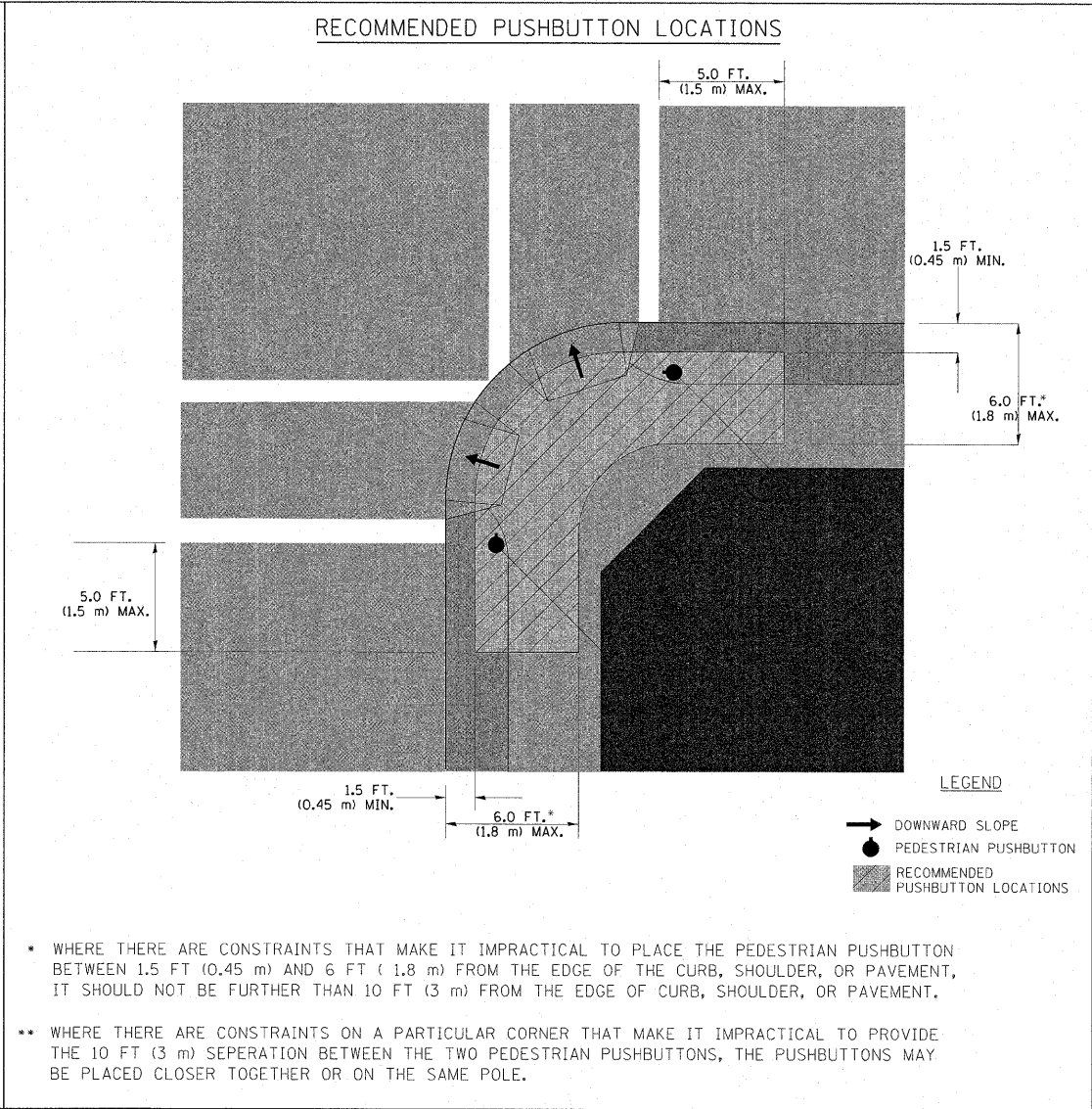
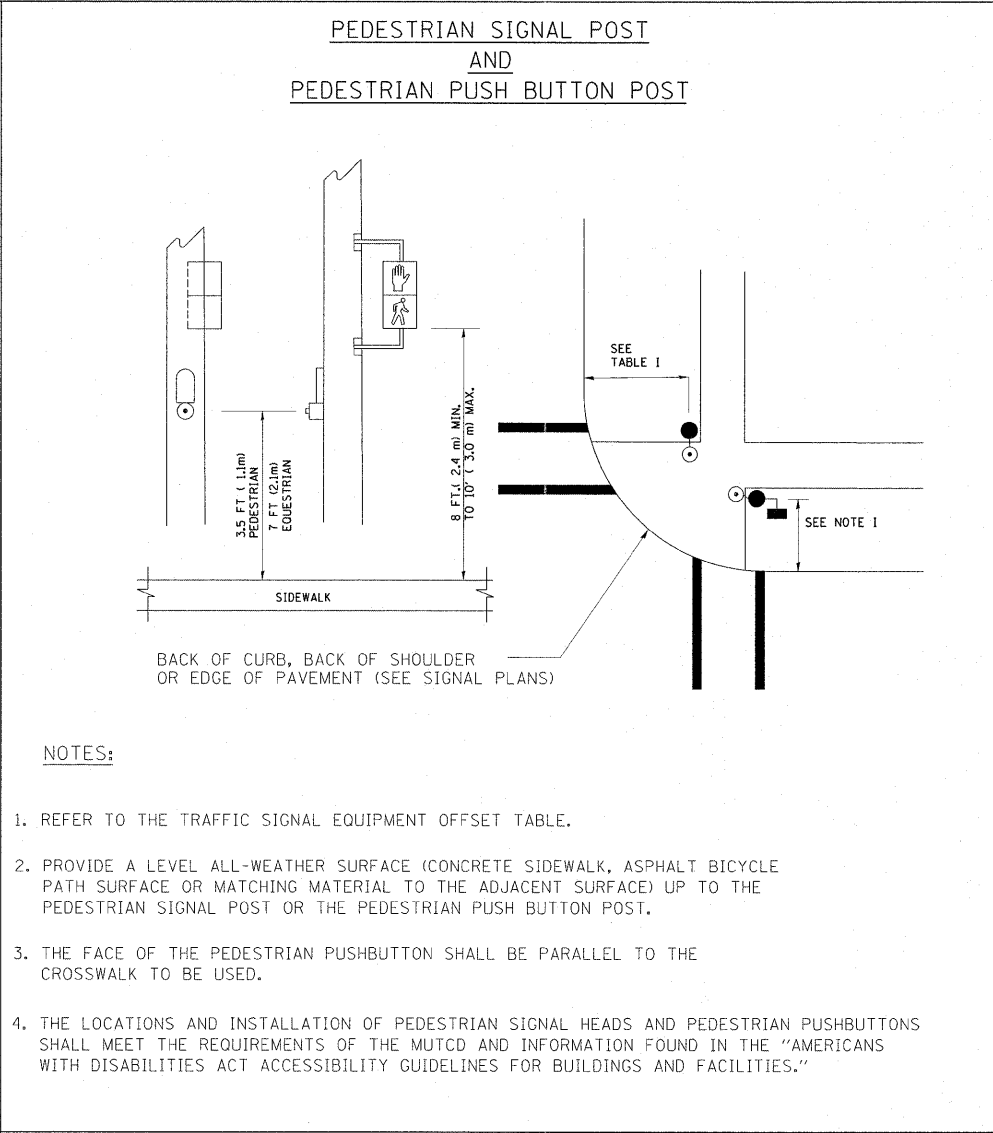
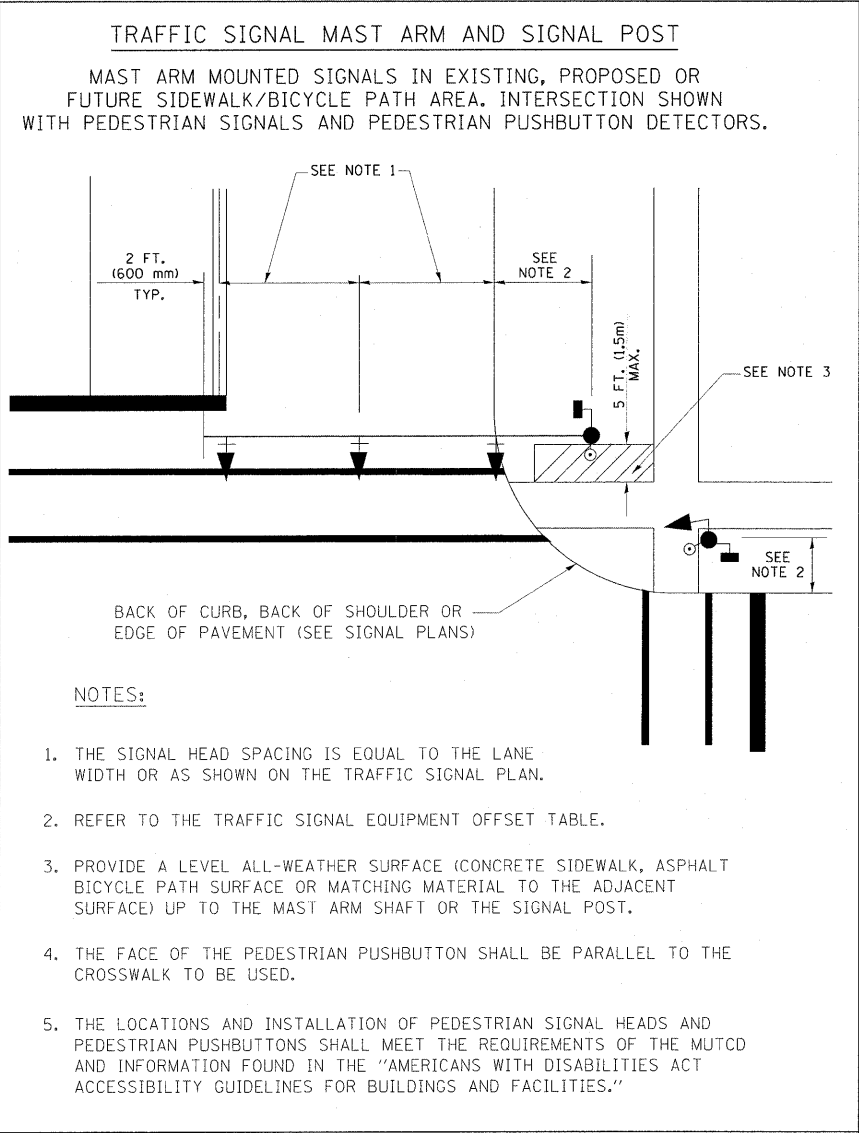
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	PLOT SCALE = 50.0000 "/in.	CHECKED - DAD	REVISED -
	PLOT DATE = 10/15/2011	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE SHEET NO. 1 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	2011-076-RS	COOK	34	24
TS-05		CONTRACT NO. 60R02		
FED. ROAD DIST. NO. 1 ILLINOIS		FED. AID PROJECT		



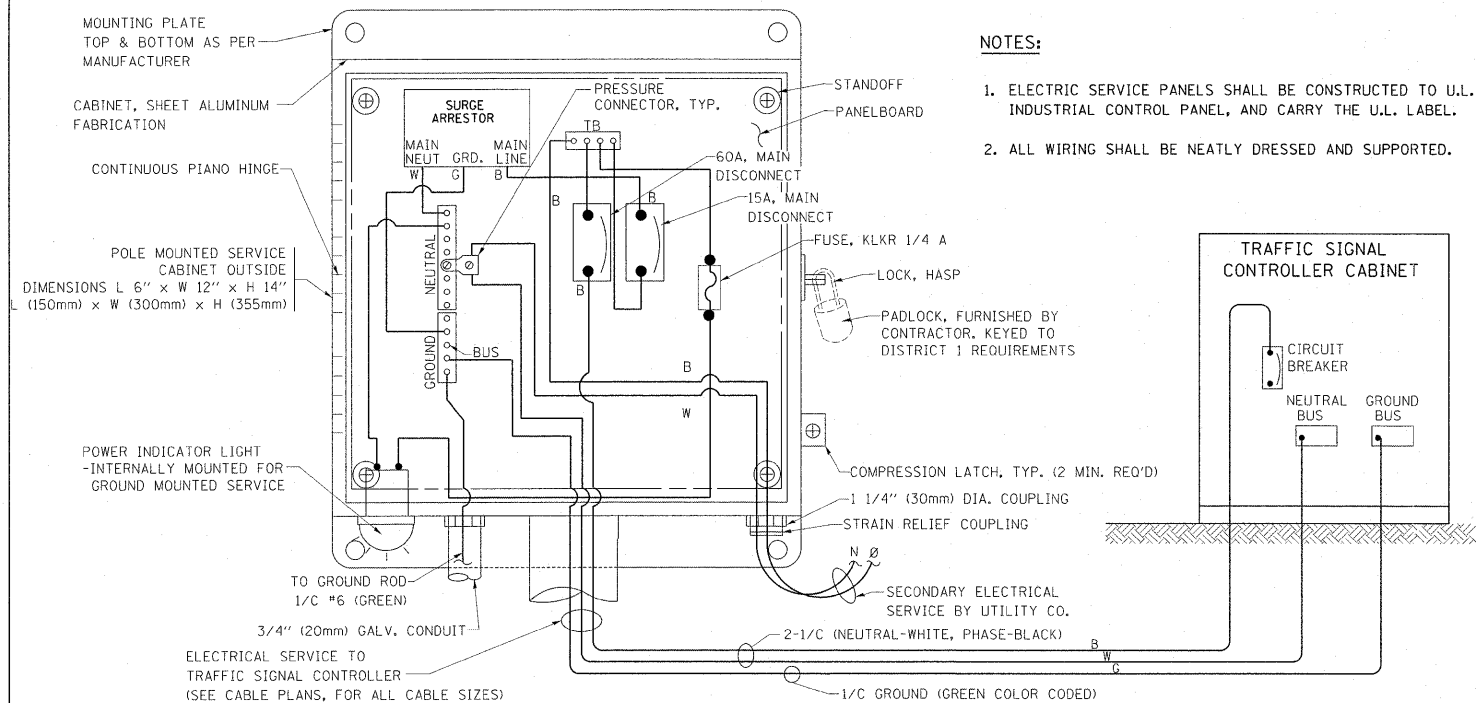
NOTES:

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

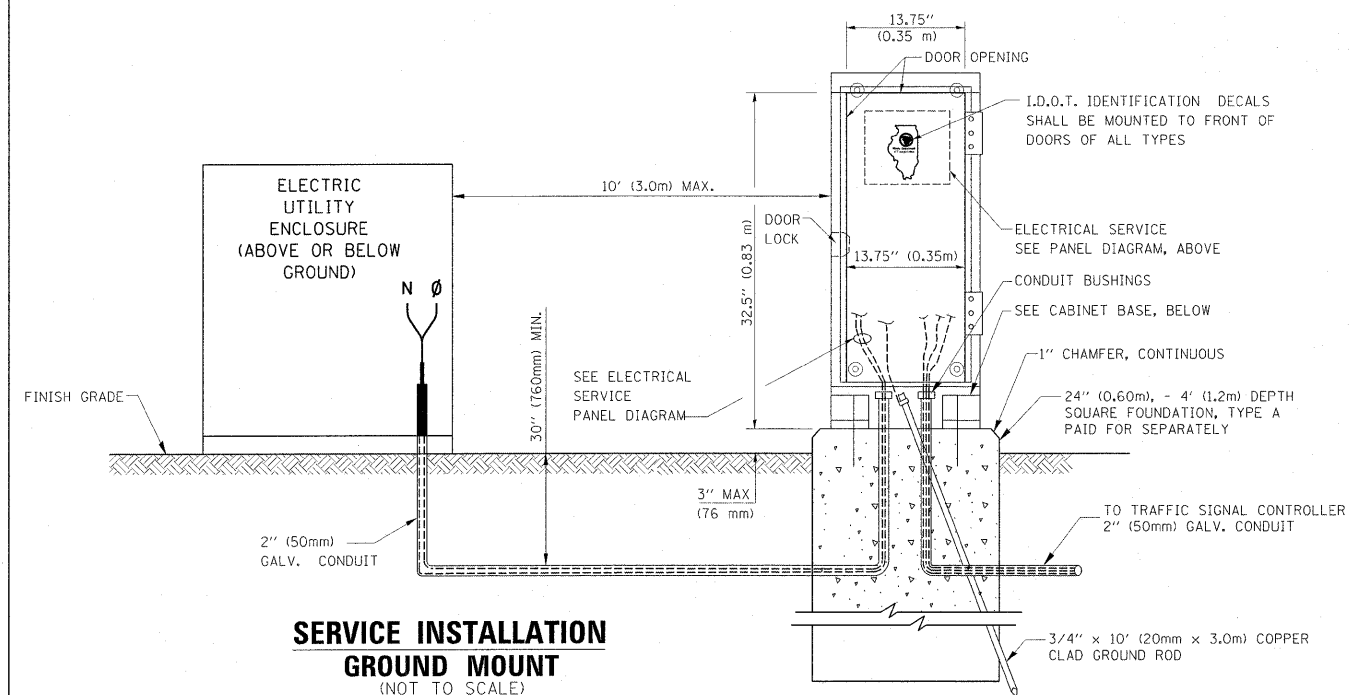
TRAFFIC SIGNAL EQUIPMENT OFFSET		
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

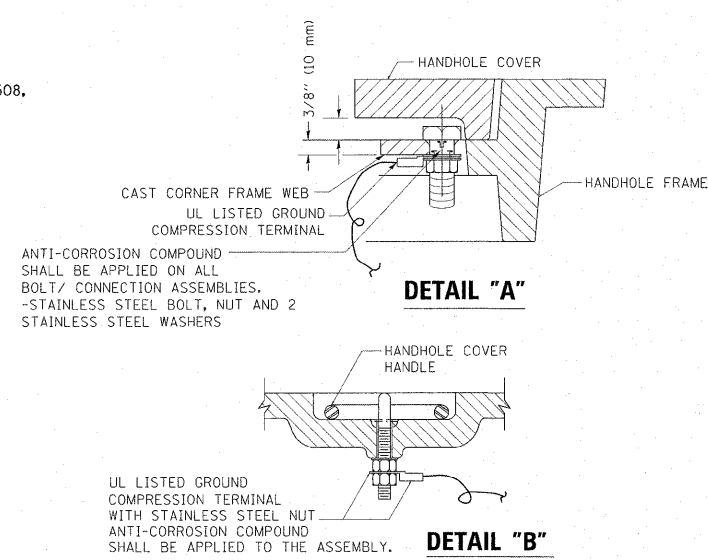
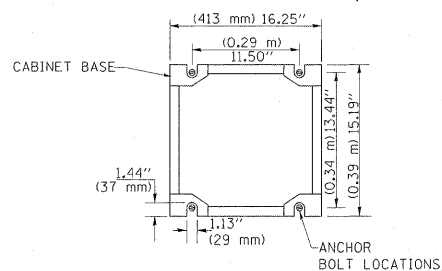
1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.



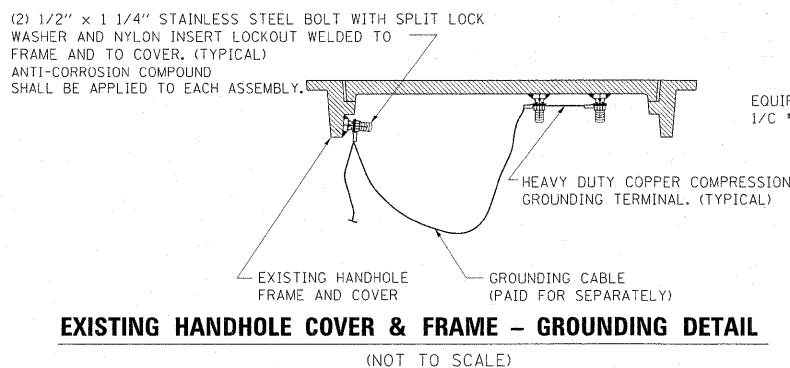
ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



CABINET – BASE BOLT PATTERN
 (NOT TO SCALE)



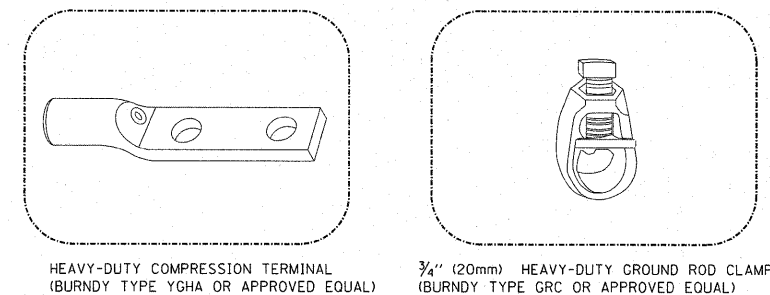
HANDHOLE COVER & FRAME – GROUNDING DETAIL
 (NOT TO SCALE)



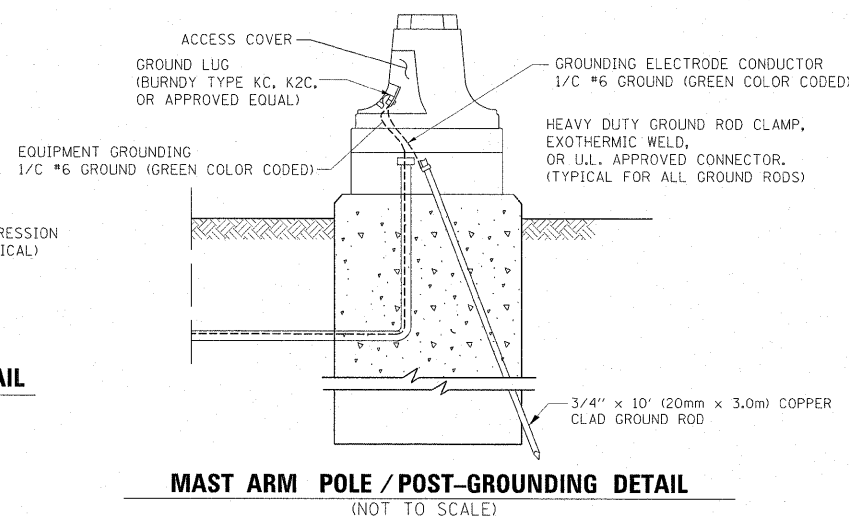
NOTES:

GROUNDING SYSTEM

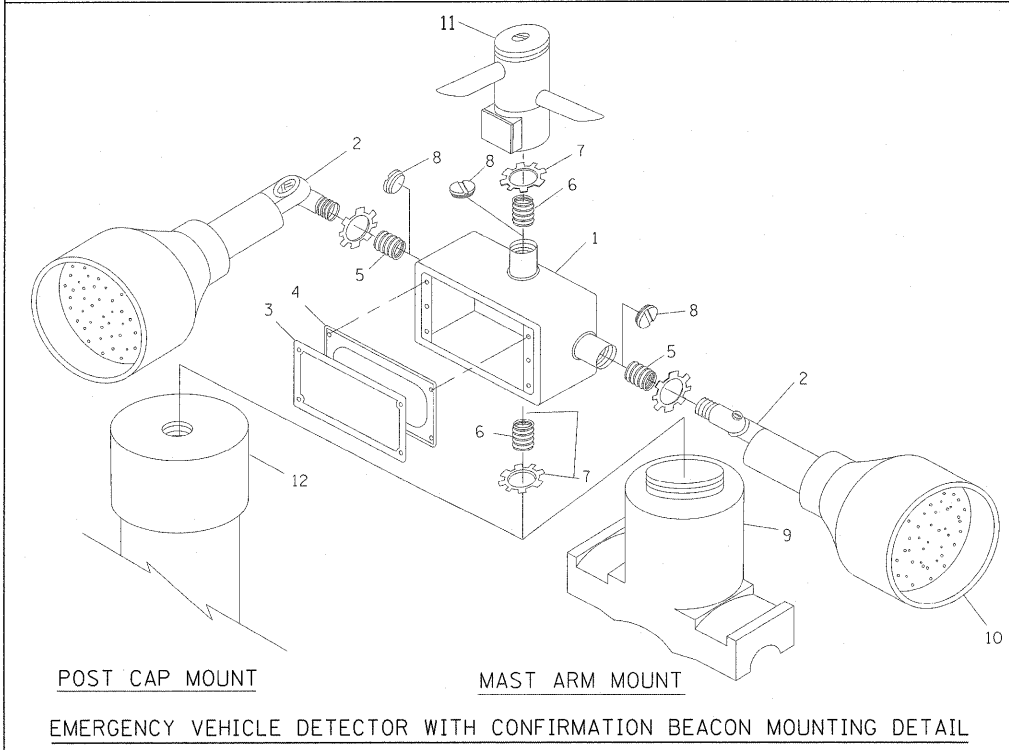
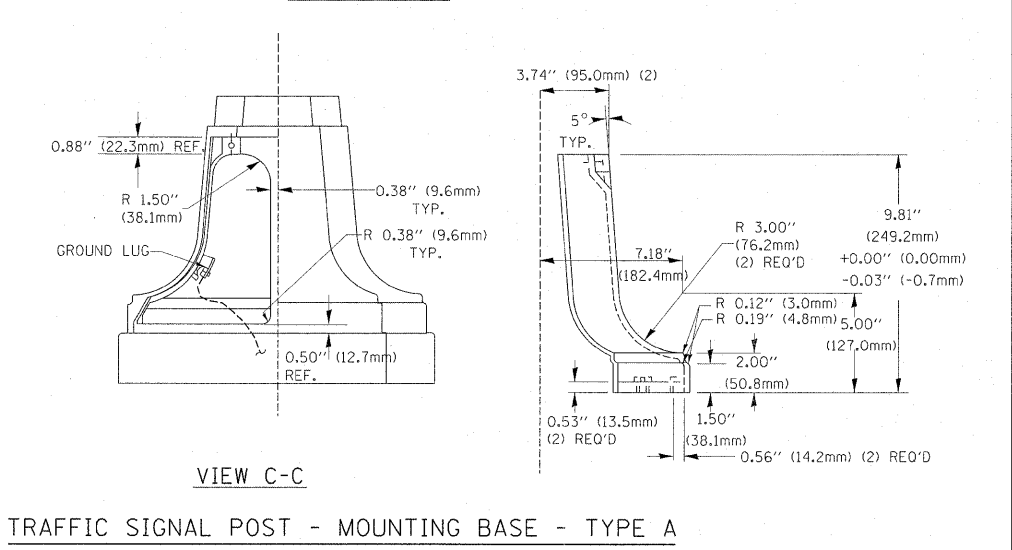
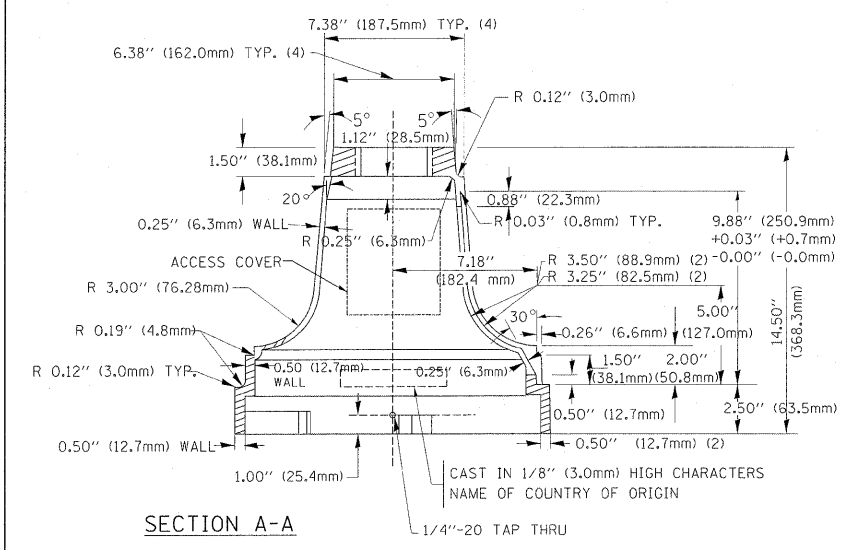
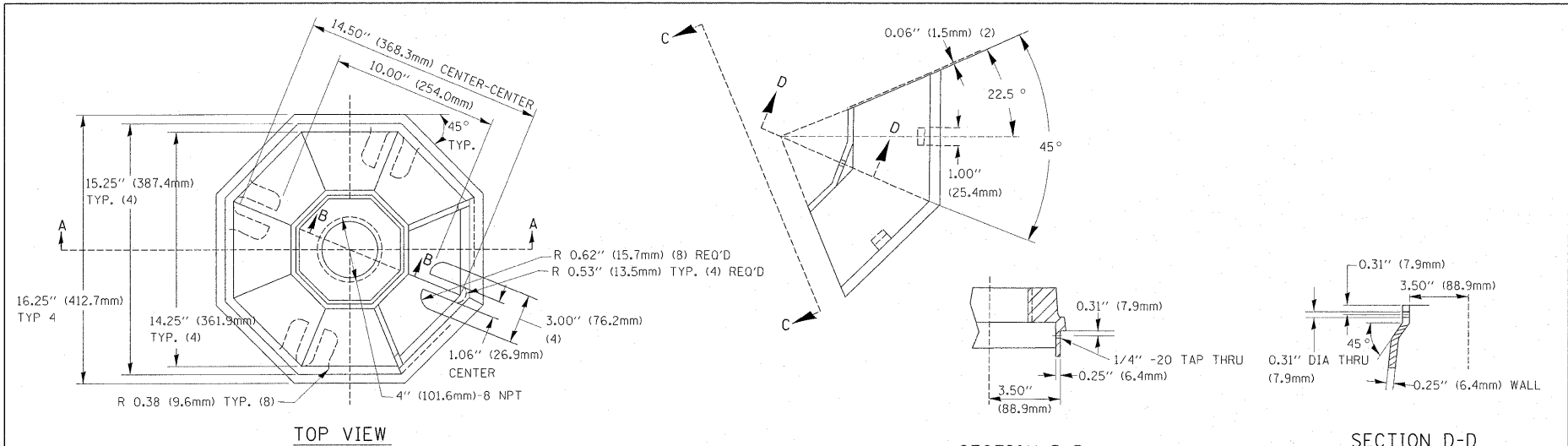
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, 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.

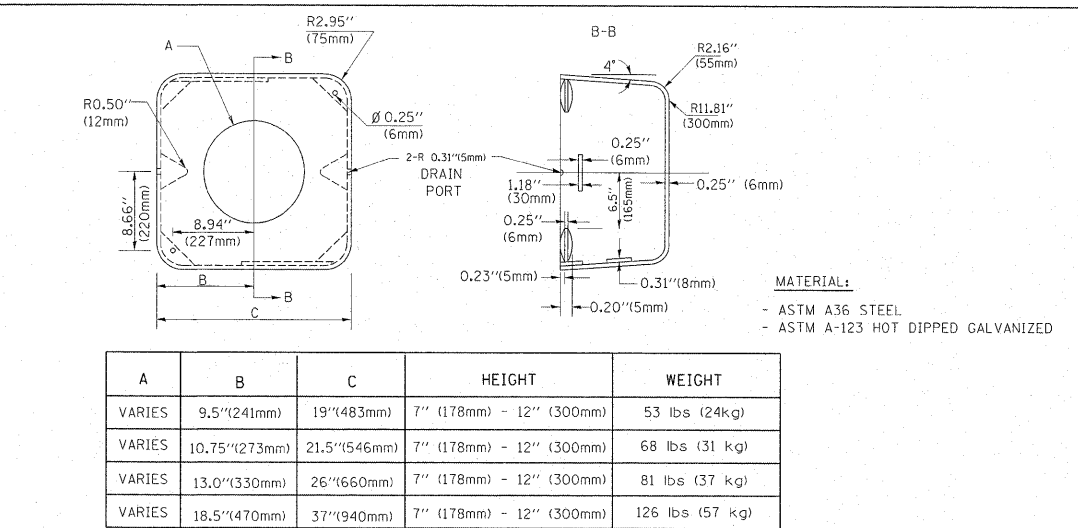


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PLOT SCALE = 50.0000' / 1"		CHECKED - DAD	REVISED -			TS-05		CONTRACT NO. 60R02		
PLOT DATE = 10/19/2011		DATE - 10-28-09	REVISED -			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
				SCALE: NONE		SHEET NO. 3 OF 6 SHEETS		STA. TO STA.		

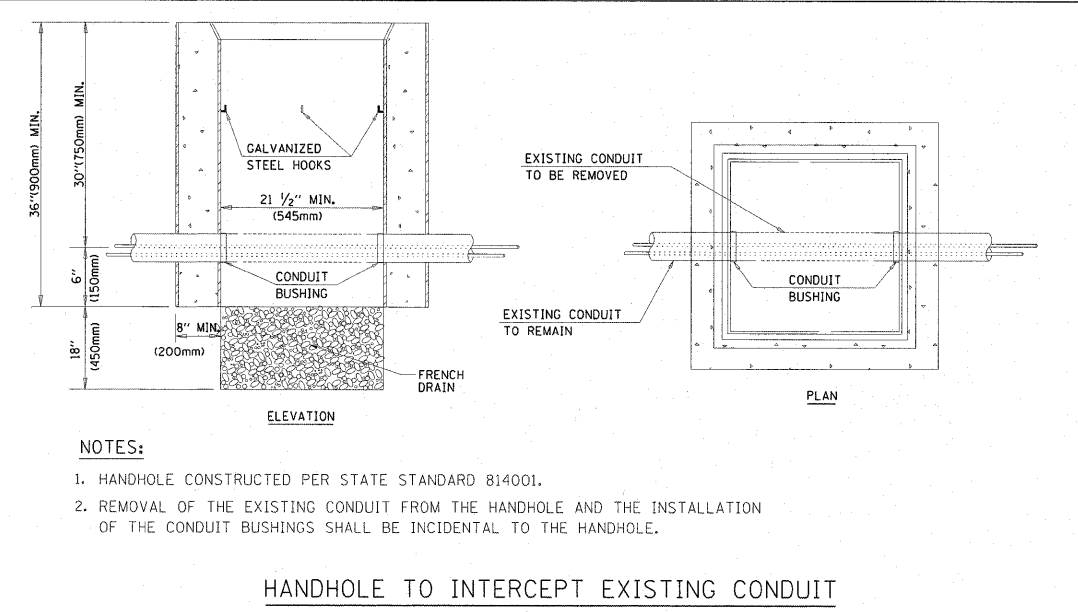
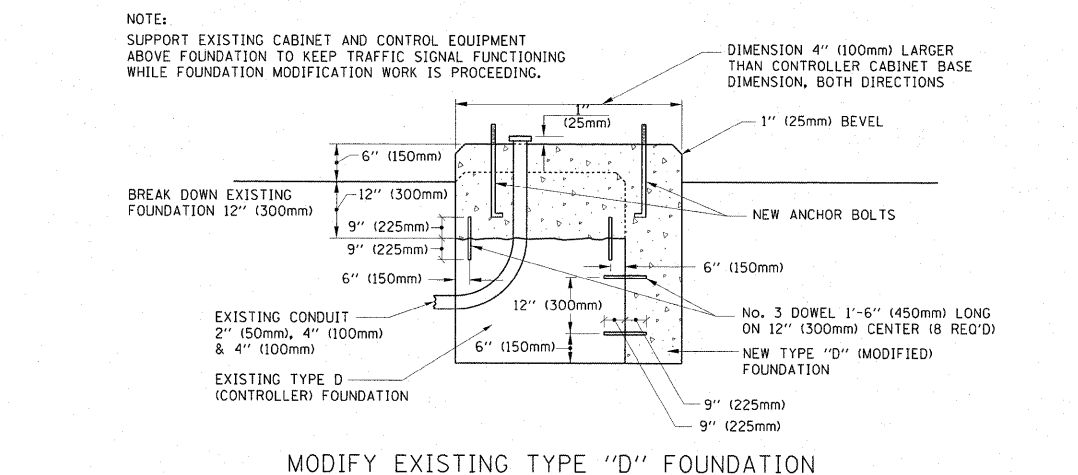


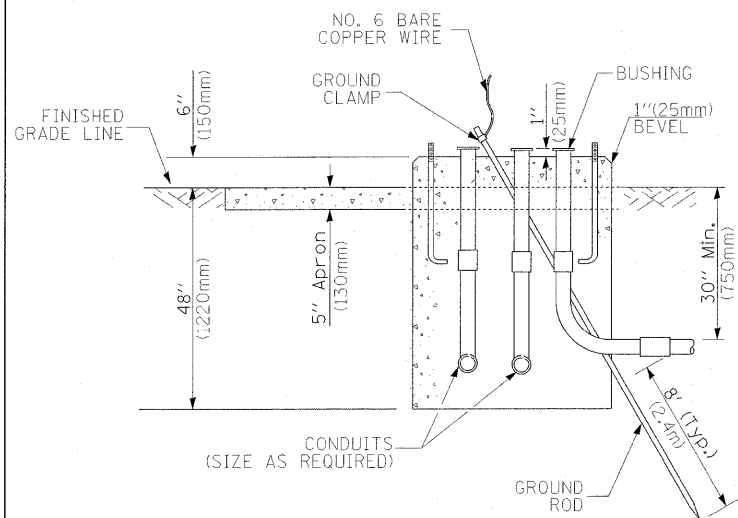
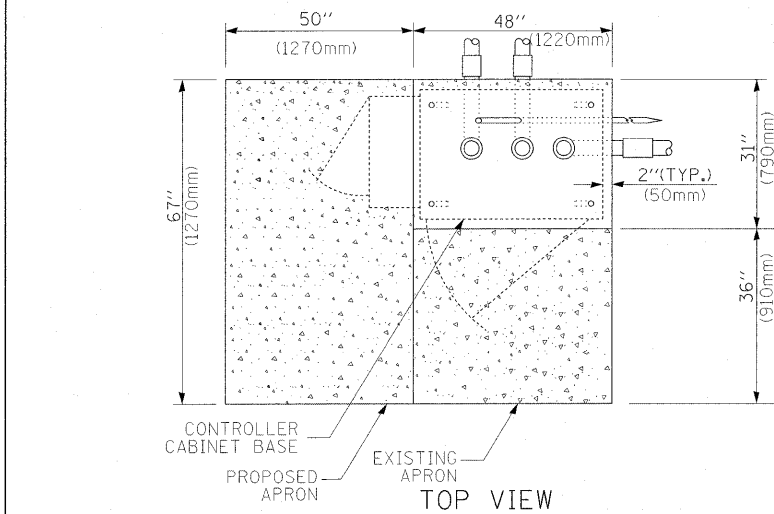
ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\"(19 mm) CLOSE NIPPLE
7	3/4\"(19 mm) LOCKNUT
8	3/4\"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

- NOTES:**
- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
 - ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
 - WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4\"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

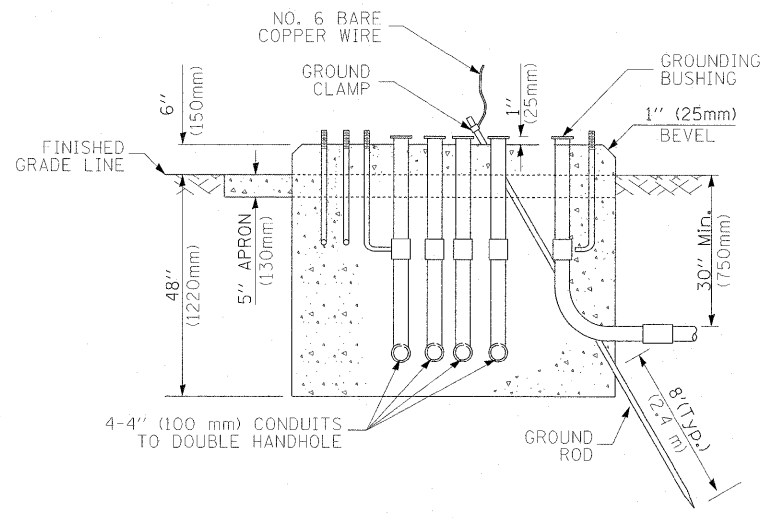
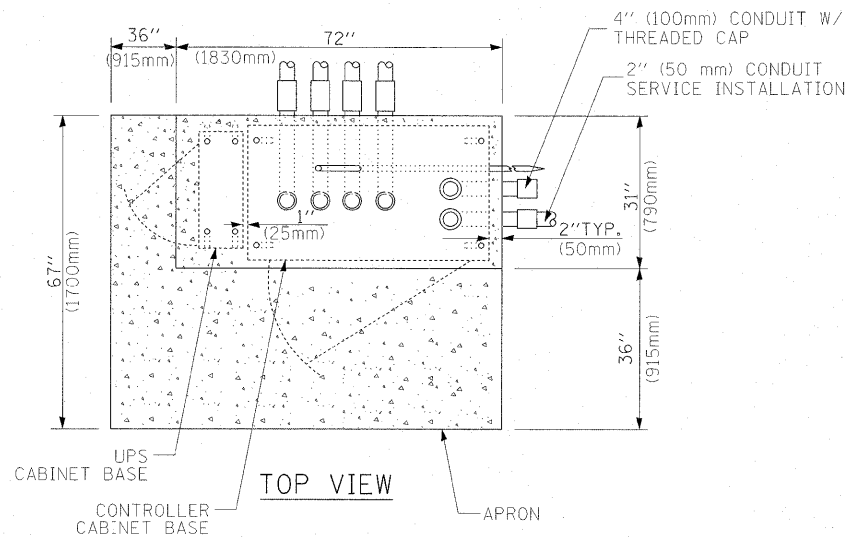


- NOTES:**
- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
 - THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
 - THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

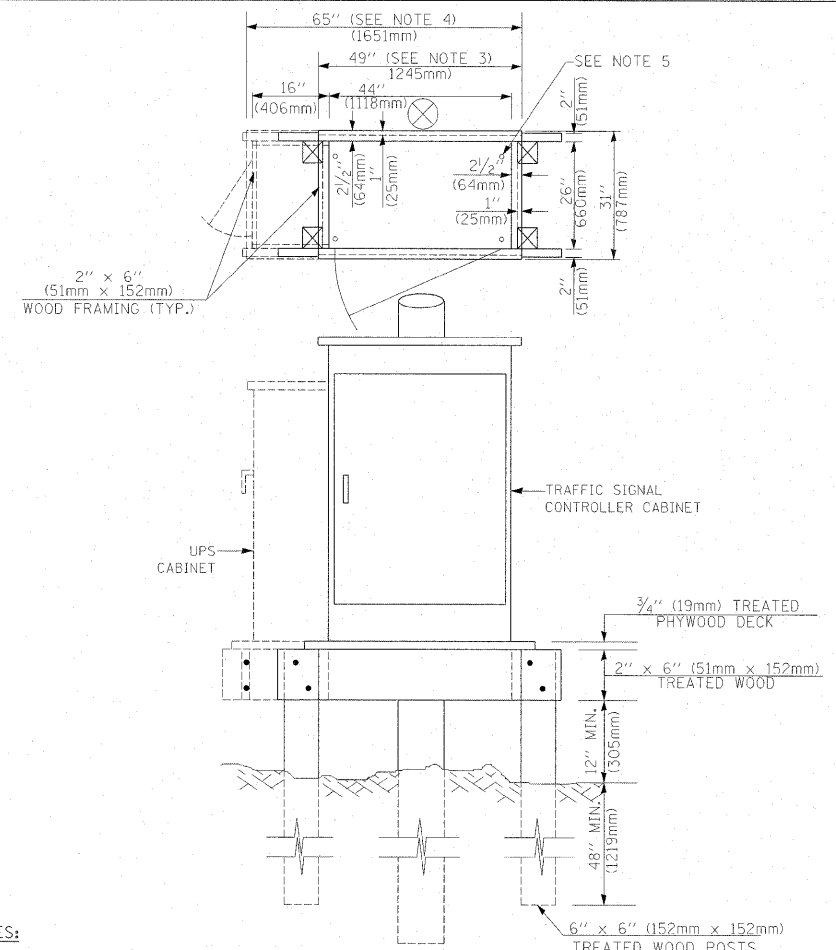




**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



**TYPE C
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and up to 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m) and up to 85' (25.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME -	USER NAME - steedpo	DESIGNED - DAG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwork\stedpo\08145963\DistStd.dgn		DRAWN - BCK	REVISED -			307	2011-076-RS	COOK	34	28
PLOT SCALE = 50.0000' / in.		CHECKED - DAD	REVISED -			TS-05		CONTRACT NO. 60R02		
PLOT DATE = 10/19/2011		DATE - 10-28-09	REVISED -			FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
				SCALE: NONE	SHEET NO. 5 OF 6 SHEETS	STA.	TO STA.			

TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE			
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA			
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED			
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F			
UNINTERRUPTIBLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F			
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)				FIBER OPTIC CABLE NO. 62.5/125, MM12F 5M12F			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)			
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH			CT	GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)			CNC	CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM		S	S	STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM		I	IP	ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM	R			STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM	RL			SIGNAL POST AND FOUNDATION TO BE REMOVED			
GUY WIRE				ABANDON ITEM	A			INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				EXISTING INTERSECTION LOOP DETECTOR			
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				EXISTING PREFORMED INTERSECTION LOOP DETECTOR			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID				PREFORMED SAMPLING (SYSTEM) DETECTOR			
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER							
ILLUMINATED SIGN "NO LEFT TURN"				RADIO INTERCONNECT							
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO REPEATER							
DETECTOR LOOP, TYPE I				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED							
PREFORMED DETECTOR LOOP				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)							
MICROWAVE VEHICLE SENSOR											
VIDEO DETECTION CAMERA											
VIDEO DETECTION ZONE											
PAN, TILT, ZOOM CAMERA											
WIRELESS DETECTOR SENSOR											
WIRELESS ACCESS POINT											

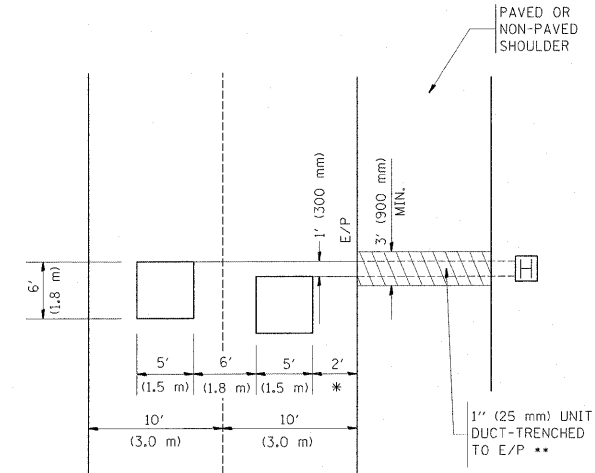
RAILROAD SYMBOLS

	EXISTING	PROPOSED
RAILROAD CONTROL CABINET		
RAILROAD CANTILEVER MAST ARM		
FLASHING SIGNAL		
CROSSING GATE		
CROSSBUCK		

FILE NAME =	USER NAME = steedpa	DESIGNED - DAG/BCK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw\work\pwwdot\steedpa\0145963\DistStd.dgn		DRAWN - BCK	REVISED -					307	2011-076-RS	COOK	34	29
PLOT SCALE = 50.0000' / in.		CHECKED - DAD	REVISED -					TS-05		CONTRACT NO. 60R02		
PLOT DATE = 10/19/2011		DATE - 10-28-09	REVISED -					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
				SCALE: NONE		SHEET NO. 6 OF 6 SHEETS		STA.		TO STA.		

LOOPS NEXT TO SHOULDERS

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

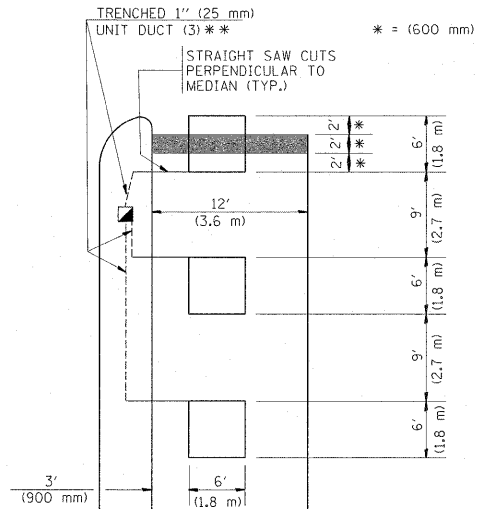


* = (600 mm)

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

LEFT TURN LANES WITH MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)

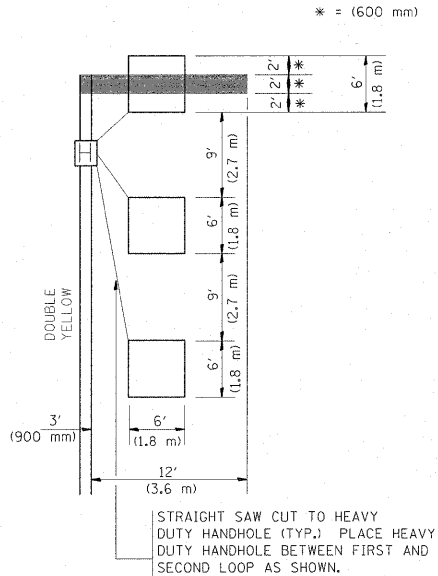
HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
814001 TO ENSURE THAT HANDHOLE
FITS IN MEDIAN.



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

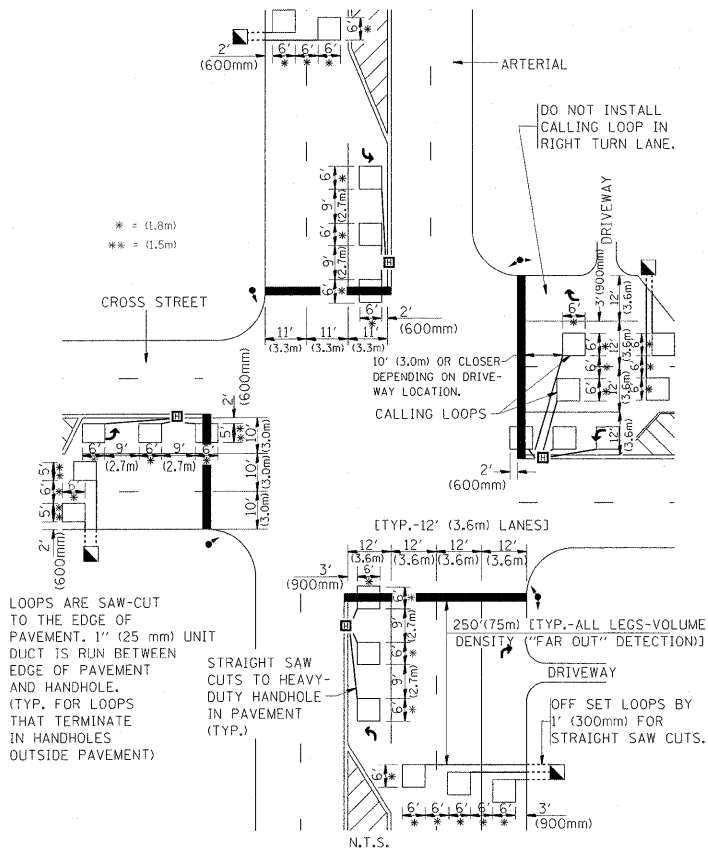
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



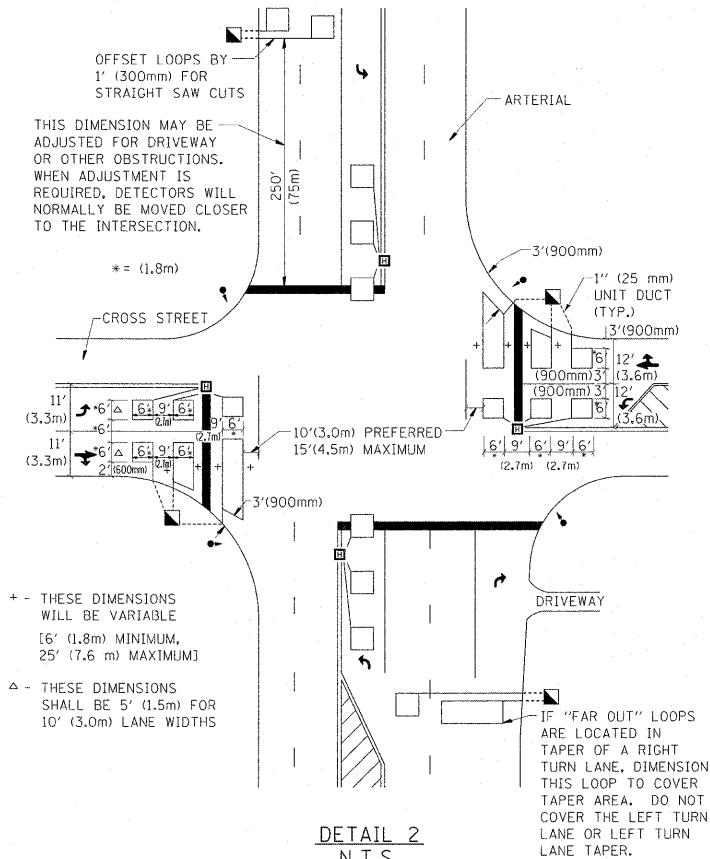
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



DETAIL 1
N.T.S.

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



DETAIL 2
N.T.S.

NOTES:

VEHICLES LOOP DETECTORS

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

PLACEMENT OF DETECTORS

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

LOCATIONS AND 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 =	USER NAME = steedpa	DESIGNED -	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.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\p\work\p\wdot\steedpa\08145963\Dist5\sd.dgn		DRAWN -	REVISED -							307	2011-076-RS	COOK	34	30
		CHECKED - R.K.F.	REVISED -							TS-07		CONTRACT NO. 60R02		
		DATE -	REVISED -							FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL LEGEND

PROPOSED EXISTING

DETECTOR LOOP

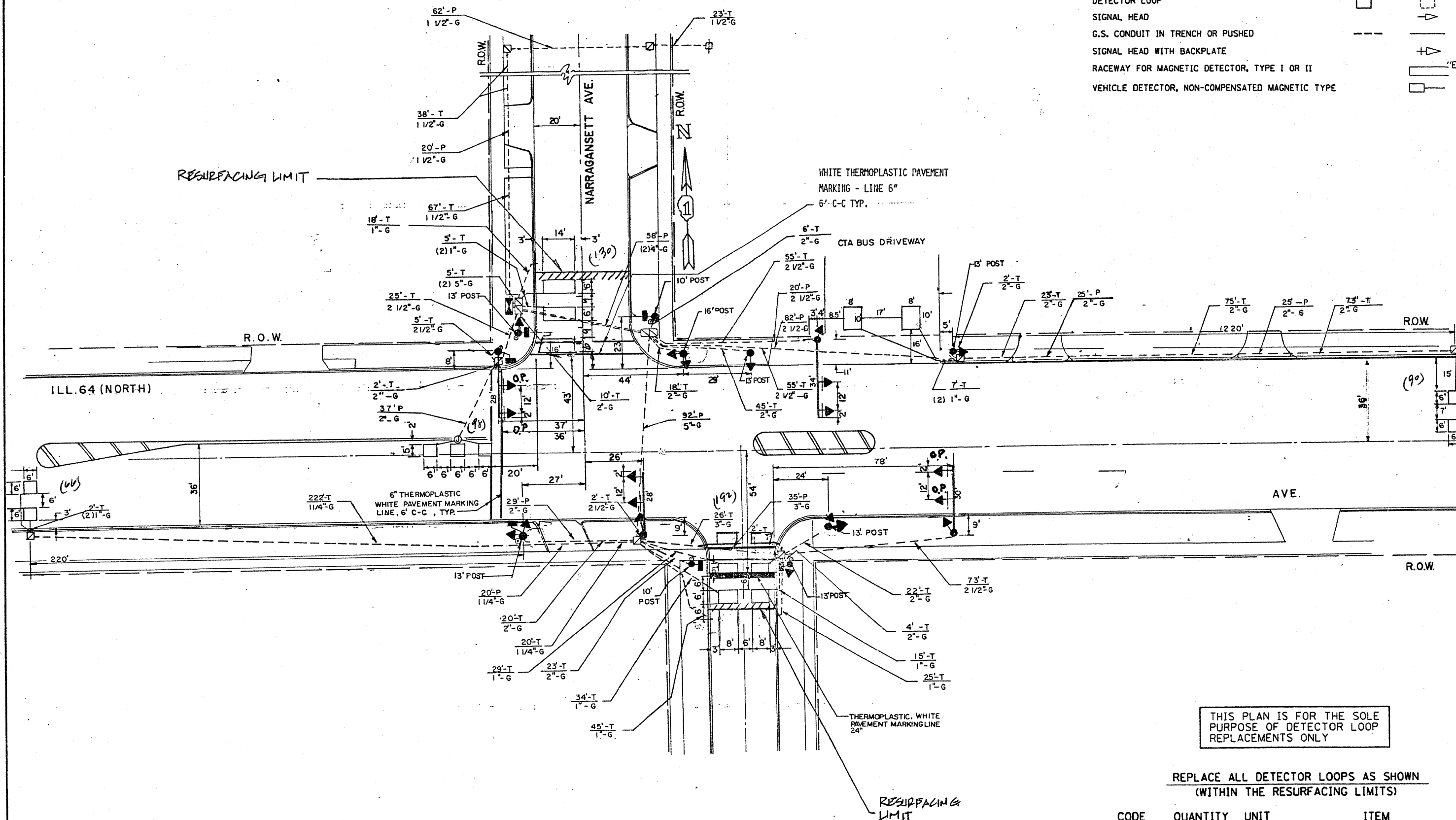
SIGNAL HEAD

G.S. CONDUIT IN TRENCH OR PUSHED

SIGNAL HEAD WITH BACKPLATE

RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR II

VEHICLE DETECTOR, NON-COMPENSATED MAGNETIC TYPE



THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)

CODE	QUANTITY	UNIT	ITEM
86600600	576	FOOT	DETECTOR LOOP, REPLACEMENT

FILE NAME =	USER NAME = kanthophixaybo	DESIGNED - BCK	REVISED -
c:\pwork\pwork\DOT\KANTHAPHIXAYBO\1126	1126\TrafficLegend.v7.dgn	DRAWN - BCK	REVISED -
	PLOT SCALE = 3/4" = 1/8" IN.	CHECKED - DAD	REVISED -
	PLOT DATE = 4/3/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE - DETECTOR LOOP REPLACEMENT
ILL. RTE. 64 (NORTH AV.) @ NARRAGANSETT AV.

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307		COOK		31
CONTRACT NO.				

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

TRAFFIC SIGNAL LEGEND

PROPOSED

EXISTING

DETECTOR LOOP

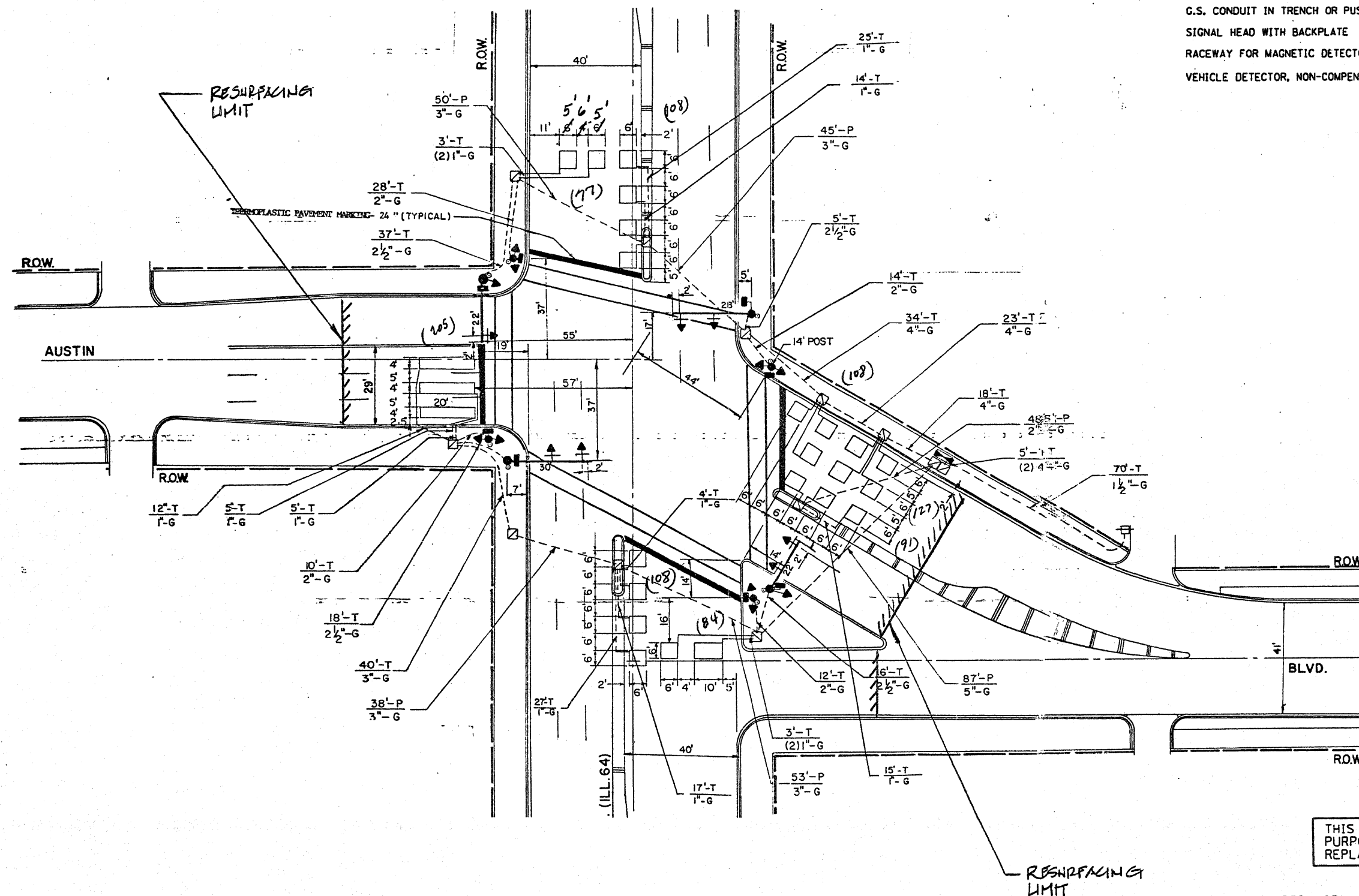
SIGNAL HEAD

G.S. CONDUIT IN TRENCH OR PUSHED

SIGNAL HEAD WITH BACKPLATE

RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR II

VEHICLE DETECTOR, NON-COMPENSATED MAGNETIC TYPE



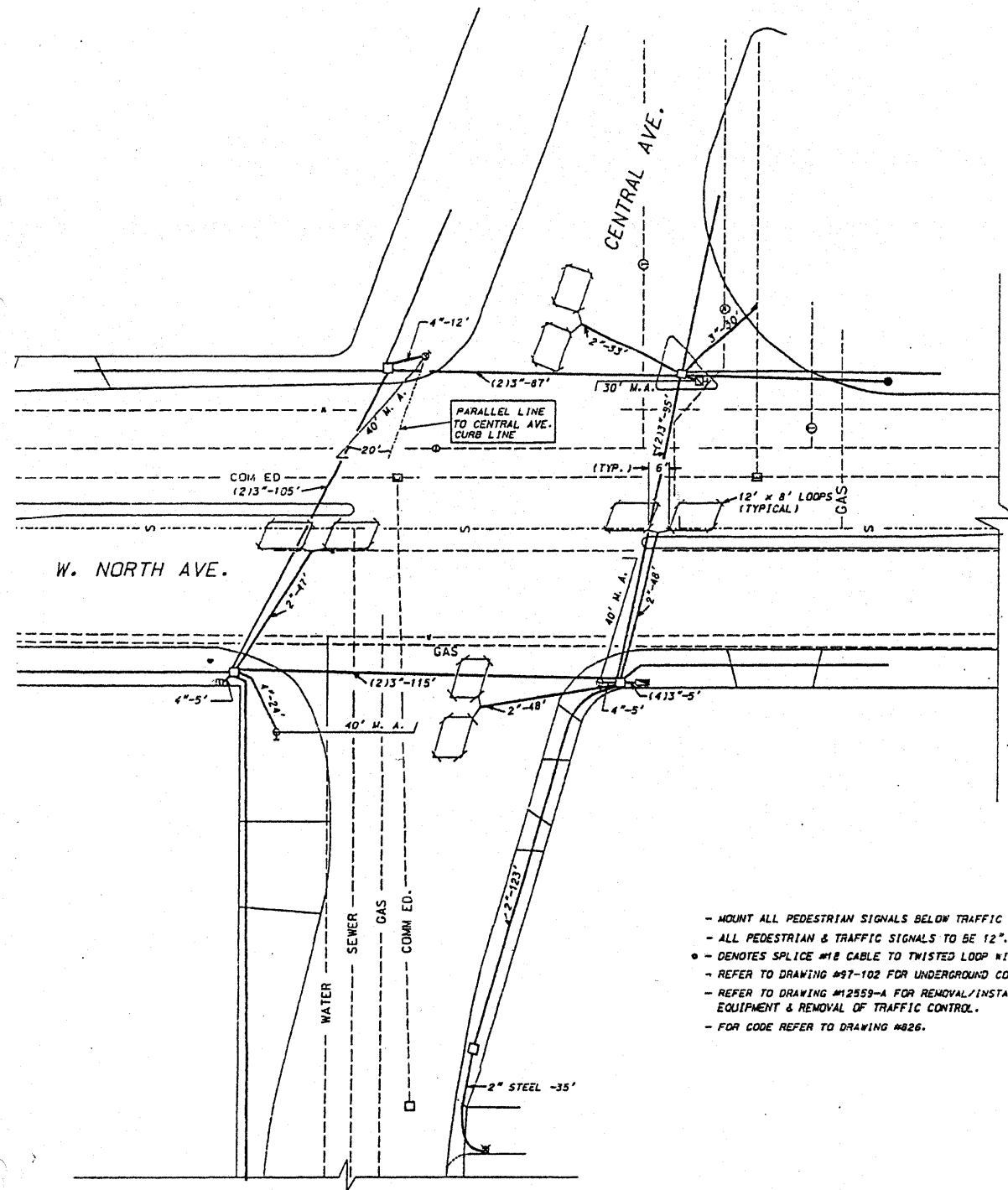
THIS PLAN IS FOR THE SOLE
PURPOSE OF DETECTOR LOOP
REPLACEMENTS ONLY

REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN THE RESURFACING LIMITS)

CODE	QUANTITY	UNIT	ITEM
86600600	908	FOOT	DETECTOR LOOP, REPLACEMENT

FILE NAME *	USER NAME = kanthaphi:aybc	DESIGNED - BCK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT ILL. RTE. 64 (NORTH A.) @ AUSTIN BOULEVARD	F.A. - RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
as:\pwork\PIWIDOT\KANTHAPHIYABC\01126	4\traffle.legend.v7.dgn	DRAWN - BCK	REVISED -			307		COOK		32
	PLOT SCALE = 3/4"=68' / IN.	CHECKED - DAD	REVISED -							
	PLOT DATE = 4/3/2009	DATE	REVISED -							
						SCALE: NONE		SHEET NO. OF SHEETS		STA. TO STA.
						FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
						CONTRACT NO.				

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307		COOK	23	23
CONTRACT NO.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

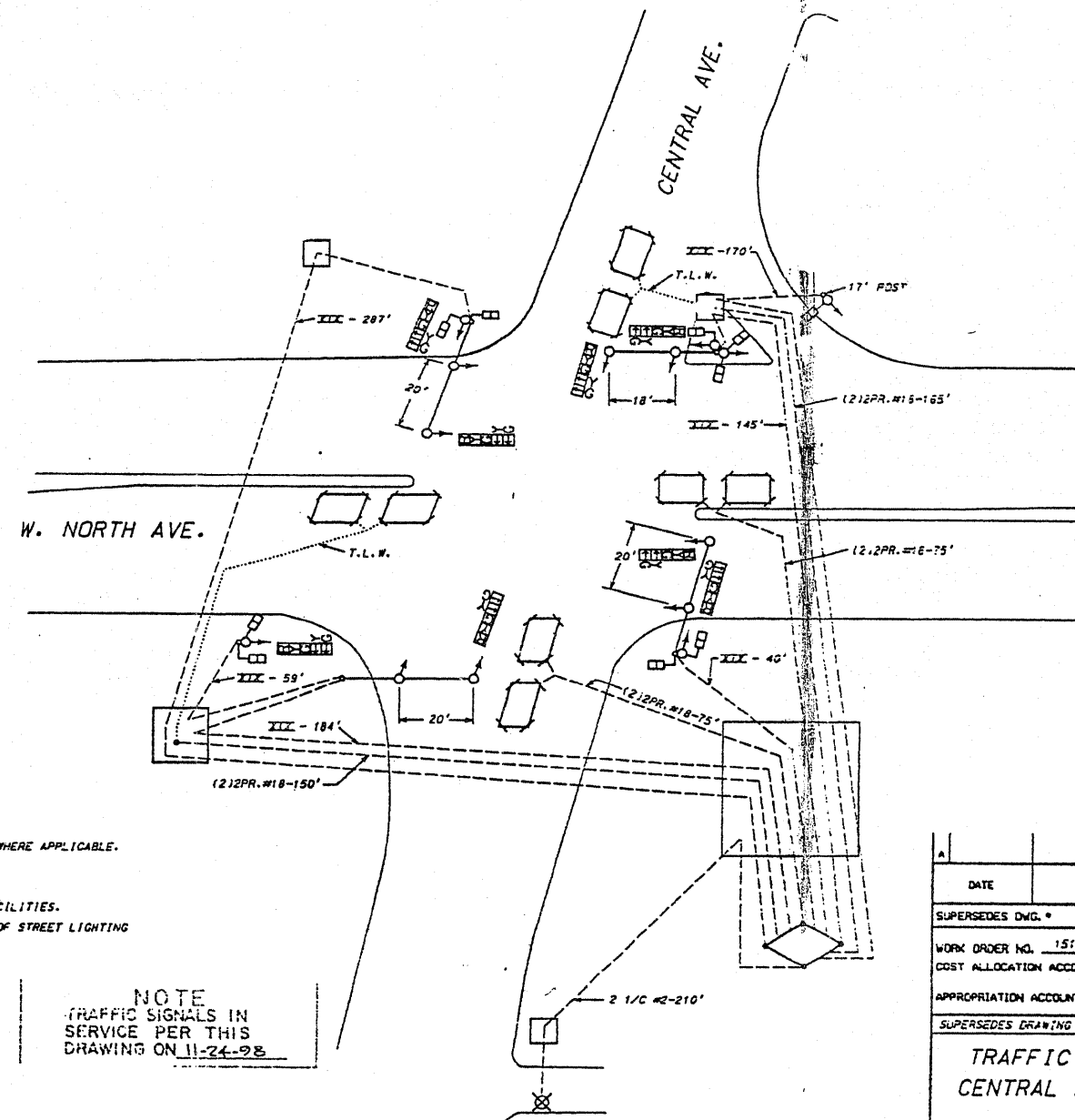


FOUNDATION & CONDUIT PLAN

SCALE: 1"=20'

- MOUNT ALL PEDESTRIAN SIGNALS BELOW TRAFFIC SIGNALS WHERE APPLICABLE.
- ALL PEDESTRIAN & TRAFFIC SIGNALS TO BE 12".
- DENOTES SPLICE #18 CABLE TO TWISTED LOOP WIRE.
- REFER TO DRAWING #97-102 FOR UNDERGROUND CONDUIT FACILITIES.
- REFER TO DRAWING #12559-A FOR REMOVAL/INSTALLATION OF STREET LIGHTING EQUIPMENT & REMOVAL OF TRAFFIC CONTROL.
- FOR CODE REFER TO DRAWING #826.

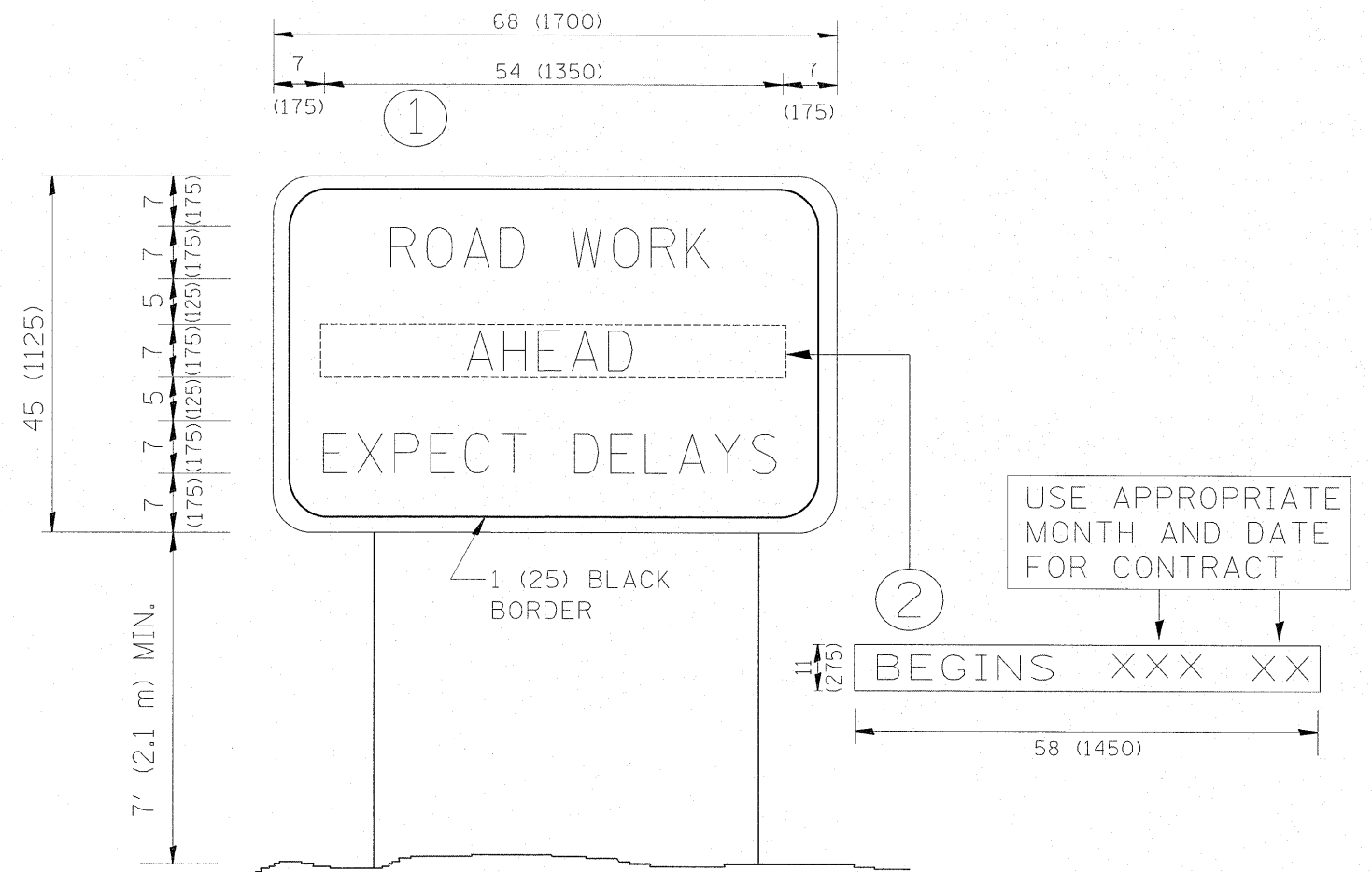
NOTE
TRAFFIC SIGNALS IN
SERVICE PER THIS
DRAWING ON 11-24-98



CABLE & SIGNAL PLAN

NOT TO SCALE

DATE	REVISION
SUPERSEDES DWG. #	
WORK ORDER NO. 1510155	DATE 8-14-97
COST ALLOCATION ACCOUNT	
APPROPRIATION ACCOUNT (MATERIAL LABOR)	
SUPERSEDES DRAWING #12559 DATED 8-27-74	
TRAFFIC CONTROL SIGNALS CENTRAL AVE. & NORTH AVE.	
CITY OF CHICAGO DEPT. OF STREETS AND SANITATION BUREAU OF ELECTRICITY DIVISION OF ELECTRICAL ENGINEERING	
DESIGNED BY ARMANDO VIVIANO	ENGINEER ROBERT CARTER
SUPERVISING ENGINEER ELECT. DESIGN ENGR.	CHIEF ENGINEER OTTO LETAMENDI
ENGINEER OF ELECTRICITY CHIEF OF ELECTRICITY	DWG. NO. 12559
DEPUTY ENGINEER	DATE 8-14-97
SIZE 22" x 36"	SCALE: AS NOTED



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

FILE NAME =	USER NAME = sreedpa	DESIGNED -	REVISED - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwork\steepe\0145963\Dist	td.dgn	DRAWN -	REVISED - R. MIRS 12-11-97					307	2011-076-RS	COOK	34	34
PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED - T. RAMMACH 02-02-99	REVISED - C. JUCIUS 01-31-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.			TC-22 CONTRACT NO. 60R02				
PLOT DATE = 10/19/2011	DATE -							FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				