

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
3512	86Y-RS-3	COOK	35
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 6	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

F.A.U. ROUTE 3512: BUSSE HIGHWAY
SECTION 86Y-RS-3
U.S. 14 (DEMPSTER STREET) TO TOUHY AVENUE
RESURFACING (MAINTENANCE), LOOP DETECTORS
COOK COUNTY
C-91-313-01
Proj. ACM-3512(001)

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THIS IMPROVEMENT IS LOCATED IN THE CITIES OF DES PLAINES AND PARK RIDGE.

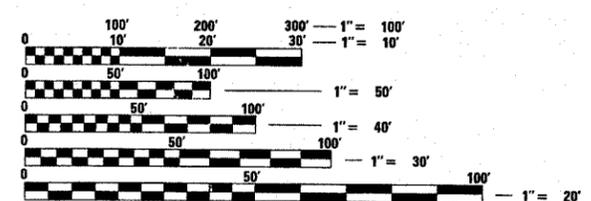
D-91-313-01



LOCATION OF SECTION INDICATED THUS: - [shaded area] -

TRAFFIC DATA
2005 ADT: 12,000
SPEED LIMIT: 35 MPH

DISTRICT ONE - DESIGN & PLAN PREPARATION ENGINEER - K. ENG (847) 705-4247



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

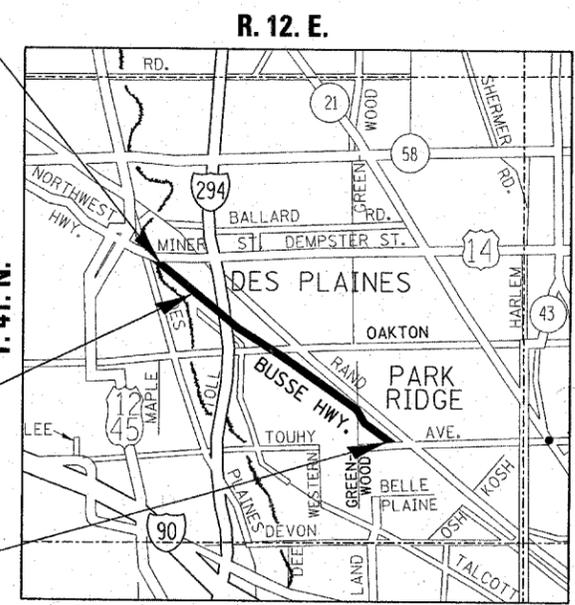
PROJECT ENGINEER
PROJECT MANAGER

CONTRACT NO. 62272

IMPROVEMENT BEGINS
STA. 0+23

OMISSION STA. 20+30
TO STA. 20+60

IMPROVEMENT ENDS
STA. 166+50



MAINE TOWNSHIP
(NOT TO SCALE)

GROSS LENGTH OF IMPROVEMENT = 16,627 FEET = 3.15 MILE
NET LENGTH OF IMPROVEMENT = 16,597 FEET = 3.14 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED MARCH 25 20 08
[Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 9, 20 08
[Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

May 9, 20 08
[Signature]
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS:

SHEET NO.	DESCRIPTION:
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5-8	TYPICAL SECTIONS
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20	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
21	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
22	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
23	BUTT JOINT AND HMA TAPER DETAILS
24	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
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31-34	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS
35	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

STATE STANDARDS:

000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-03	CLASS C & D PATCHES
482011-03	HMA SHLD STRIPS/SHLDS WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
604001-02	FRAMES AND LIDS, TYPE 1
606001-03	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
630001-07	STEEL PLATE BEAM GUARDRAIL
701301-02	LANE CLOSURE, 2L,2W SHORT TIME OPERATIONS
701426-02	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS, FOR SPEED > 45 MPH
701606-05	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-05	URBAN LANE CLOSURE, MULTILANE, INTERSECTION
701801-03	LANE CLOSURE MULTILANE, 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901	TRAFFIC CONTROL DEVICES
886001	DETECTOR LOOP INSTALLATIONS
886006	TYPICAL LAYOUTS FOR DETECTION LOOPS
635006-02	
635011-01	

GENERAL NOTES:

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED)
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITIES OF DES PLAINES AND PARK RIDGE.
- THE CONTRACTOR WILL NOT BE ABLE TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1/2" (40 mm) WHERE THE SPEED LIMIT IS 45 MPH (80 KPH) OR LESS AND 1" (25 mm) WHERE THE SPEED IS OVER 45 MPH (80 KPH). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3" (75 mm) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 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 BITUMINOUS TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING.
- THE RESIDENT ENGINEER SHALL CONTACT MR. WALTER CZARNY AREA TRAFFIC FIELD ENGINEER AT (773) 685-8386, A MINIMUM OF TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- EXISTING DRAINAGE STRUCTURES TO BE ADJUSTED, ADJUSTED (SPECIAL), OR RECONSTRUCTED SHALL BE CLEANED. THE COST OF CLEANING IS TO BE INCLUDED IN THE COST OF FRAME AND LID ADJ., ADJUST (SPECIAL), OR RECONSTRUCTION.
- PAVEMENT MARKING TAPE, TYPE III WILL BE USED FOR TEMPORARY PAVEMENT MARKINGS ON ALL FINAL SURFACES.
- AT LOCATIONS WHERE DRIVEWAY REMOVAL AND REPLACEMENT IS NEEDED THE HMA SURFACE COURSE WILL BE OF THE SAME MIX USED THROUGHOUT THE ROADWAY RESURFACING IMPROVEMENT (SUPERPAVE, MIX "D", N70) AT THE THICKNESS SPECIFIED IN THE DRIVEWAY DETAIL.
- IMPROVEMENT LIMITS SHOULD END WHERE THE CITY OF PARK RIDGE'S IMPROVEMENT LIMITS BEGIN, ALLOWING NO GAPS, JUST NORTHWEST OF THE INTERSECTION OF BUSSE HIGHWAY AND TOUHY AVENUE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL OVERHEAD, SURFACE, AND UNDERGROUND UTILITIES WITHIN THE PROJECT LIMITS WHETHER OR NOT THE UTILITIES ARE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE.
- THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
86Y-RS-3	COOK	35	3
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT	

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	URBAN TOTAL QUANTITIES	80% FED. 20% STATE 1000	50% STATE 50% CITY PARK RIDGE Y025	100% CITY PARK RIDGE Y025	
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	600	600			
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	825	825			
20200100	EARTH EXCAVATION	CU YD	450	450			
20201006	GRADING AND SHAPING SHOULDERS	UNIT	90	90			
35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SO YD	13	13			
35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SO YD	13	13			
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	44	37	7		
40600300	AGGREGATE (PRIME COAT)	TON	216	188	28		
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	47	37	10		
40600895	CONSTRUCTING TEST STRIP	EACH	2	2			
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	3200	3200			
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	355	314		41	
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	161	161			
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	9041	7915	1126		
42001300	PROTECTIVE COAT	SO YD	250	250			
44000124	BITUMINOUS REMOVAL OVER PATCHES 6"	SO YD	1030	910		120	
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SO YD	5592	5592			
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SO YD	101217	87820	13397		
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	2230	1830		400	
44002224	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 6"	SO YD	1030	910		120	
44004610	SIDEWALK REMOVAL AND REPLACEMENT (SPECIAL)	SO FT	500	500			
44201761	CLASS D PATCHES, TYPE I, 10 INCH	SO YD	100	100			
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SO YD	1050	950		100	
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SO YD	500	430		70	
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SO YD	1900	1900			
48101200	AGGREGATE SHOULDERS, TYPE B	TON	325	325			

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	URBAN TOTAL QUANTITIES	80% FED. 20% STATE 1000	50% STATE 50% CITY PARK RIDGE Y025	100% CITY PARK RIDGE Y025	
55039700	STORM SEWERS TO BE CLEANED	FOOT	500	500			
60250200	CATCH BASINS TO BE ADJUSTED	EACH	20	20			
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	6	6			
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	116	116			
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	25	25			
63200310	GUARDRAIL REMOVAL	FOOT	200	200			
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6			
67100100	MOBILIZATION	L SUM	1	1			
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1			
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1			
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1			
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	30	30			
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	27804	15720		12084	
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	700	700			
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	50830	50830			
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	4000	4000			
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	250	250			
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	190	190			
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	735	735			
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	22225	22225			
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	30093	26065		4028	
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	635	635			
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	53858	49830		4028	
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	4000	4000			

NP= Non-Participating
 ● SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUMMARY OF QUANTITIES
 FAU 3512 BUSSE HIGHWAY

PLOT DATE: 3/11/2008

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	86Y-RS-3	COOK	35	4
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
				80% FED. 20% STATE	50% STATE 50% CITY PARK RIDGE Y025	100% CITY PARK RIDGE Y025		
78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	250	250				
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	190	190				
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	735	735				
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	1900	1900				
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4				
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	1600	1600				
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2	2				
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	3229	3229				
87900200	DRILL EXISTING HANDHOLE	EACH	18	18				
88500100	INDUCTIVE LOOP DETECTOR	EACH	11	11				
88600100	DETECTOR LOOP, TYPE I	FOOT	294	294				
88600600	DETECTOR LOOP REPLACEMENT	FOOT	2118	2118				
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2853	2853				
K1004595	PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE	L SUM	1	1				
X0322256	TEMPORARY INFORMATION SIGNING	SO FT	283	283				
X0656100	DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT	SO YD	25	25				
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	6	3		3		
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	6	3		3		
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	4683	4120	563			
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4				
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	60	55		5		
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1				
Z0076600	TRAINERS	HOOR	3000	3000				

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				

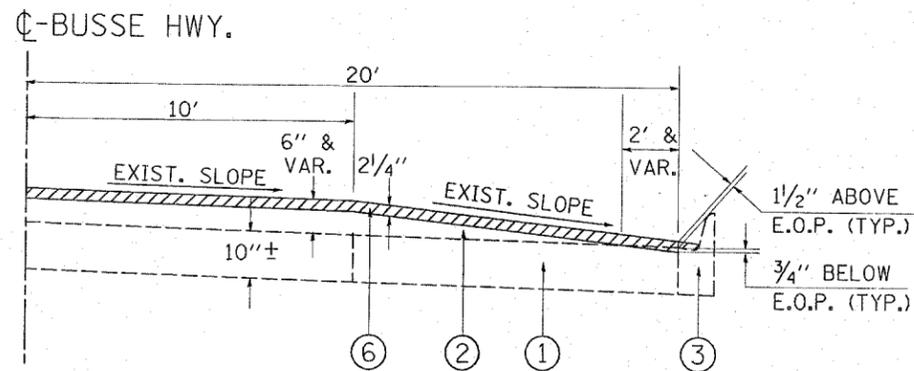
© - Y080
 NP = Non-participating
 ● SPECIALTY ITEMS

REVISIONS	
NAME	DATE

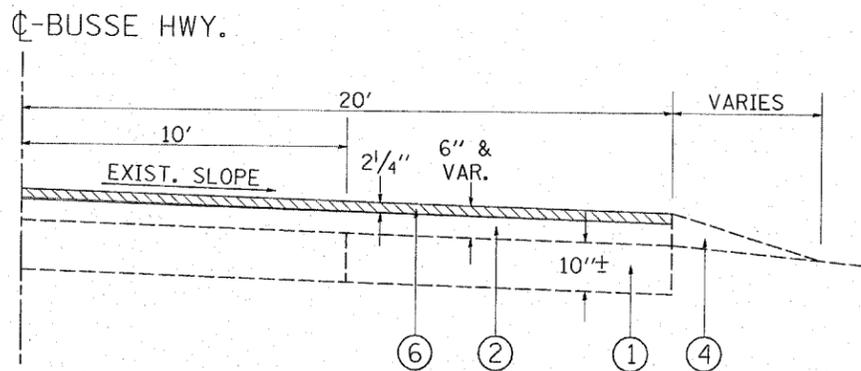
ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUMMARY OF QUANTITIES
 FAU 3512 BUSSE HIGHWAY

PLOT DATE: 3/11/2008

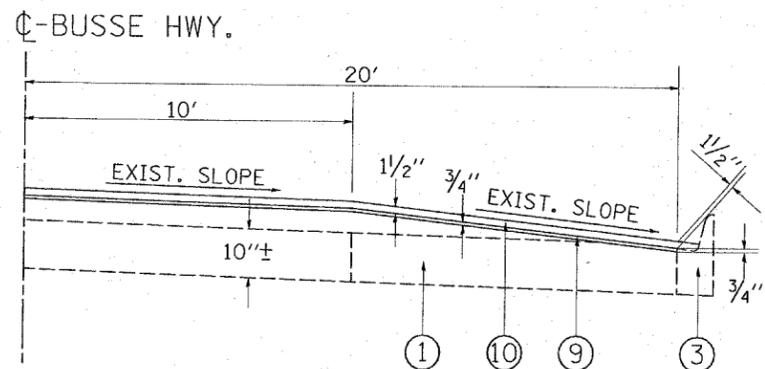
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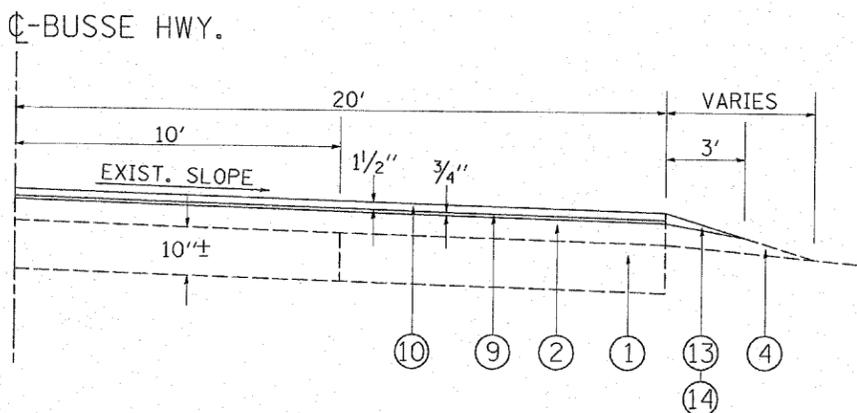
EXISTING TYPICAL CROSS SECTION - BUSSE HWY.
CURB SECTIONS FROM STA. 0+23 TO STA. 56+00
(SEE NOTE A)



EXISTING TYPICAL CROSS SECTION - BUSSE HWY.
SECTIONS WITH EXISTING MIN. 1' HMA SHOULDER
AND MIN. 3' AGGREGATE SHOULDER
FROM STA. 0+23 TO STA. 56+00
(SEE NOTE A)



PROPOSED TYPICAL CROSS SECTION - BUSSE HWY.
CURB SECTIONS FROM STA. 0+23 TO STA. 56+00



PROPOSED TYPICAL CROSS SECTION - BUSSE HWY.
SECTIONS WITH EXISTING MIN. 1' HMA SHOULDER
AND MIN. 3' AGGREGATE SHOULDER
FROM STA. 0+23 TO STA. 56+00

LEGEND

- ① EXIST. P.C.C. PAVEMENT, ±10"
- ② EXIST. HMA SURFACE 6" & VARIES
- ③ EXIST. COMB. C&G, TYPE B-6.12
- ④ EXIST. AGG. SHOULDER
- ⑤ DELETED
- ⑥ PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- ⑦ DELETED
- ⑧ PROP. EARTH EXCAVATION
- ⑨ PROP. POLY. LEVELING BINDER, (MACHINE METHOD), IL-4.75, N50, 3/4"
- ⑩ PROP. HOT-MIX ASPHALT SURFACE CSE., MIX D, N70, 1 1/2"
- ⑪ PROP. PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE
- ⑫ PROP. TREE REMOVAL
- ⑬ PROP. AGG. SHOULDERS, TYPE B
- ⑭ PROP. SHAPING AND GRADING SHOULDERS
- ⑮ PROP. HOT-MIX ASPHALT BINDER CRSE., IL-19, N70, 4 1/2", (IN 2 LIFTS)

NOTES

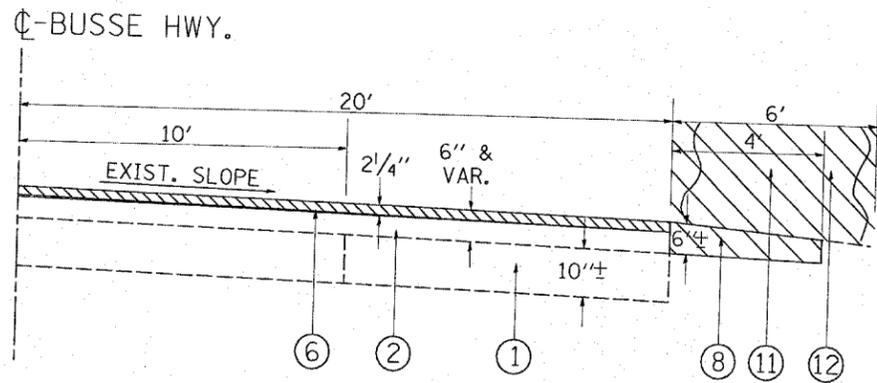
A. STA. 0+23 TO STA. 13+00 SHALL BE MILLED 1 1/2"

MIXTURE REQUIREMENTS

MIXTURE USES	AC/PG	DESIGN AIR VOIDS	REMARKS
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"	PG 64-22 *	4% @ 70 GYR	IL. 9.5 mm
POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4"	SBS/SBR PG 76-28/-22	4% @ 50 GYR	
PATCHING: - CLASS D PATCHES, TYPE I - IV, 10", - HMA REPLACEMENT OVER PATCHES, 6"	PG 64-22 * PG 64-22 *	4% @ 70 GYR 4% @ 70 GYR	HMA BINDER IL.-19 mm HMA BINDER IL.-19 mm
HMA SHOULDER: - HMA BINDER COURSE, IL-19, N70, 4 1/2"	PG 64-22 *	4% @ 70 GYR	
DRIVEWAY PAVEMENT R&R: - HMA BASE COURSE, 6" & 8" - HMA SURFACE COURSE, MIX "D", N70, 2"	PG 64-22 * PG 64-22 *	4% @ 70 GYR 4% @ 70 GYR	HMA BINDER IL.-9.5 mm IL.-19 mm

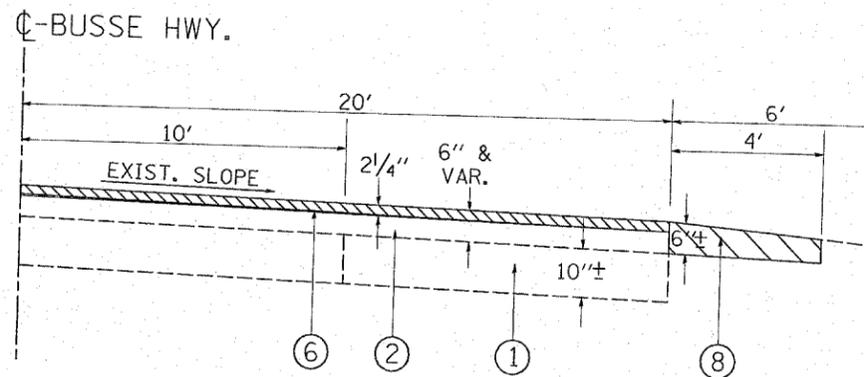
* "WHEN RAP EXCEEDS 20%, THEN NEW ASPHALT BINDER IN THE MIX SHALL BE PG58-22".

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



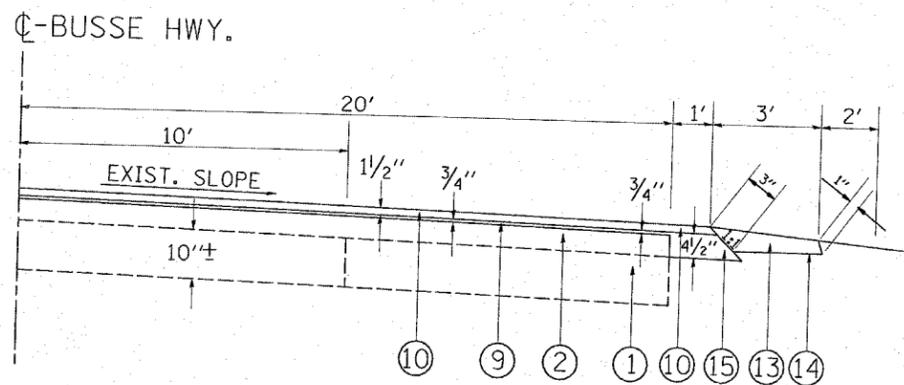
EXISTING TYPICAL CROSS SECTION - BUSSE HWY.

SECTIONS WITHOUT EXISTING MIN. 1' HMA SHOULDER
ADJACENT TO FOREST PRESERVE DISTRICT
FROM STA. 0+23 TO STA. 56+00
(SEE NOTE A)



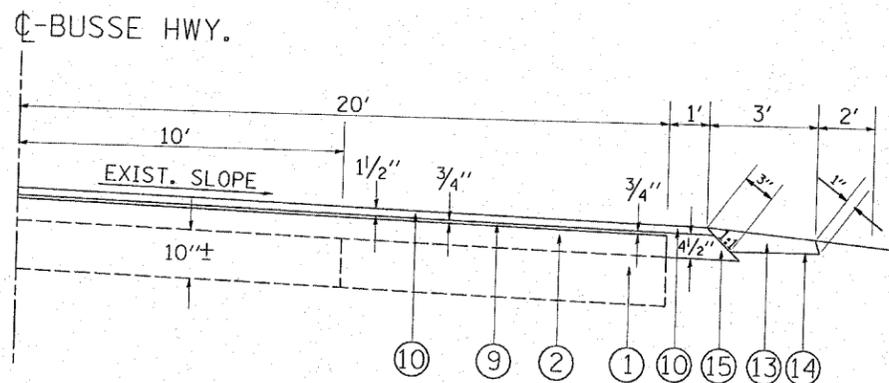
EXISTING TYPICAL CROSS SECTION - BUSSE HWY.

SECTIONS WITHOUT EXISTING MIN. 1' HMA SHOULDER
FROM STA. 0+23 TO STA. 56+00
(SEE NOTE A)



PROPOSED TYPICAL CROSS SECTION - BUSSE HWY.

SECTIONS WITHOUT EXISTING MIN. 1' HMA SHOULDER
ADJACENT TO FOREST PRESERVE DISTRICT
FROM STA. 0+23 TO STA. 56+00



PROPOSED TYPICAL CROSS SECTION - BUSSE HWY.

SECTIONS WITHOUT EXISTING MIN. 1' HMA SHOULDER
FROM STA. 0+23 TO STA. 56+00

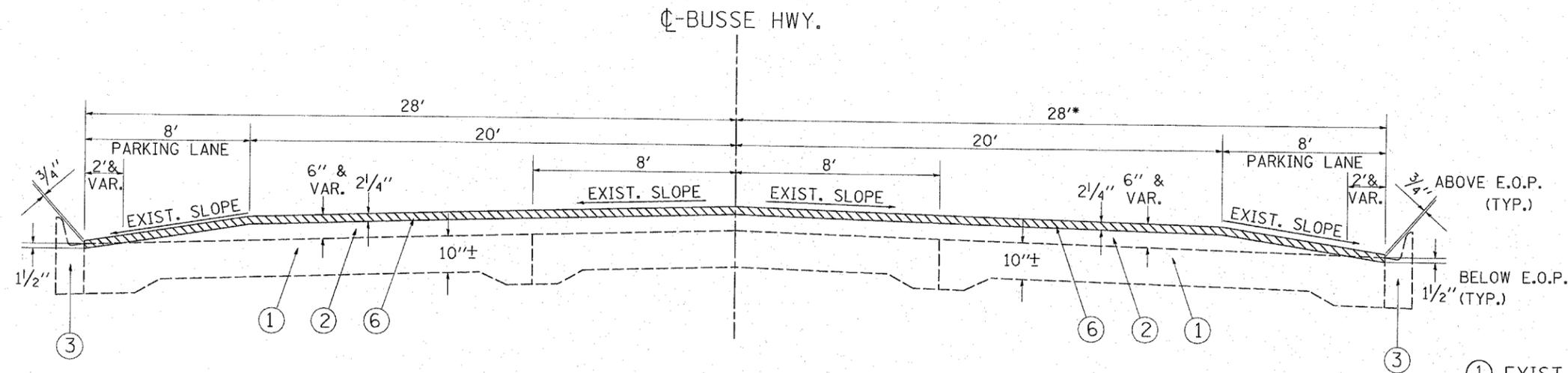
LEGEND

- ① EXIST. P.C.C. PAVEMENT, ±10"
- ② EXIST. HMA SURFACE 6" & VARIES
- ③ EXIST. COMB. C&G, TYPE B-6.12
- ④ EXIST. AGG. SHOULDER
- ⑤ DELETED
- ⑥ PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- ⑦ DELETED
- ⑧ PROP. EARTH EXCAVATION
- ⑨ PROP. POLY. LEVELING BINDER, (MACHINE METHOD), IL-4.75, N50, 3/4"
- ⑩ PROP. HOT-MIX ASPHALT SURFACE CSE., MIX D, N70, 1 1/2"
- ⑪ PROP. PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE
- ⑫ PROP. TREE REMOVAL
- ⑬ PROP. AGG. SHOULDERS, TYPE B
- ⑭ PROP. SHAPING AND GRADING SHOULDERS
- ⑮ PROP. HOT-MIX ASPHALT BINDER CRSE., IL-19, N70, 4 1/2", (IN 2 LIFTS)

NOTES

A. STA. 0+23 TO STA. 13+00 SHALL BE MILLED 1 1/2"

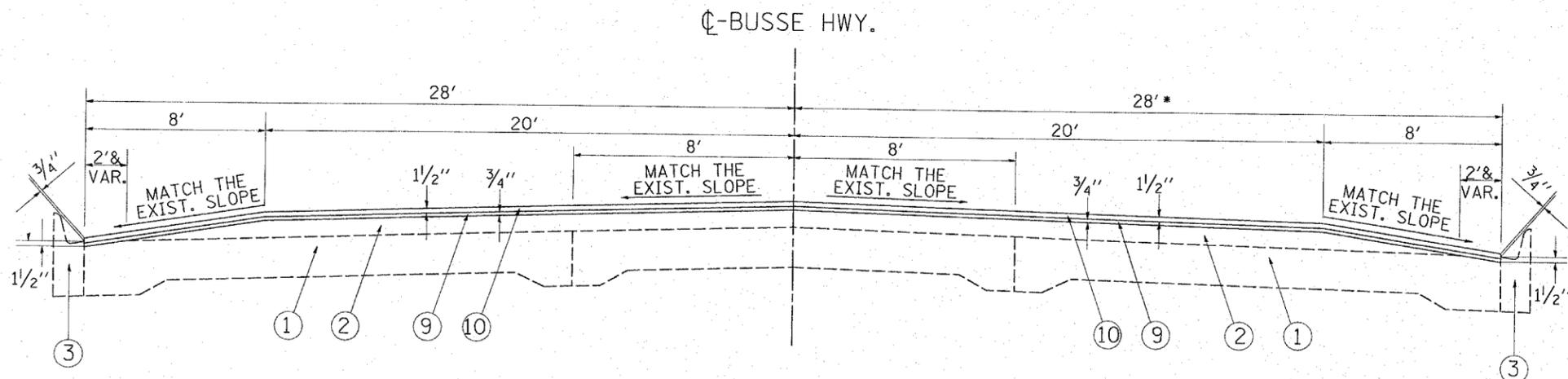
FILE NAME = c:\projects\131301\sh_rdw.dgn	USER NAME = bawerdl	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAU 3512 BUSSE HIGHWAY TYPICAL CROSS SECTIONS	FAU RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED -	3512			86Y-RS-3	COOK	35	6	
PLOT DATE = 3/11/2008	CHECKED -	REVISED -	CONTRACT NO. 62272							
	DATE -	REVISED -	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
					SCALE: NONE	SHEET NO. 2 OF 4 SHEETS		STA.	TO STA.	



EXISTING TYPICAL CROSS SECTION - BUSSE HWY.
STA. 56+00 TO STA. 145+34

LEGEND

- ① EXIST. P.C.C. PAVEMENT, ±10"
- ② EXIST. HMA SURFACE 6" & VARIES
- ③ EXIST. COMB. C&G, TYPE B-6.12
- ④ EXIST. AGG. SHOULDER
- ⑤ DELETED
- ⑥ PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
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- ⑪ PROP. PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE
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- ⑬ PROP. AGG. SHOULDERS, TYPE B
- ⑭ PROP. SHAPING AND GRADING SHOULDERS
- ⑮ PROP. HOT-MIX ASPHALT BINDER CRSE., IL-19, N70, 4 1/2", (IN 2 LIFTS)

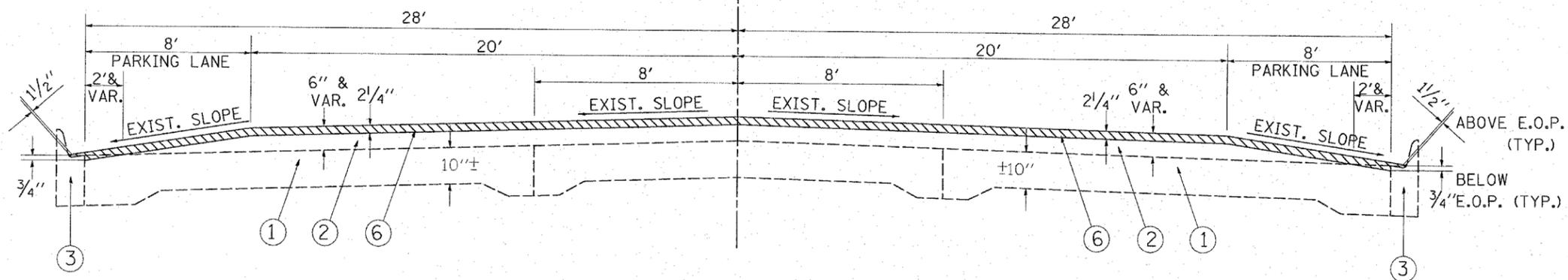


PROPOSED TYPICAL CROSS SECTION - BUSSE HWY.
STA. 56+00 TO STA. 145+34

*WIDENS TO 40' STA. 87+69 TO STA. 90+00

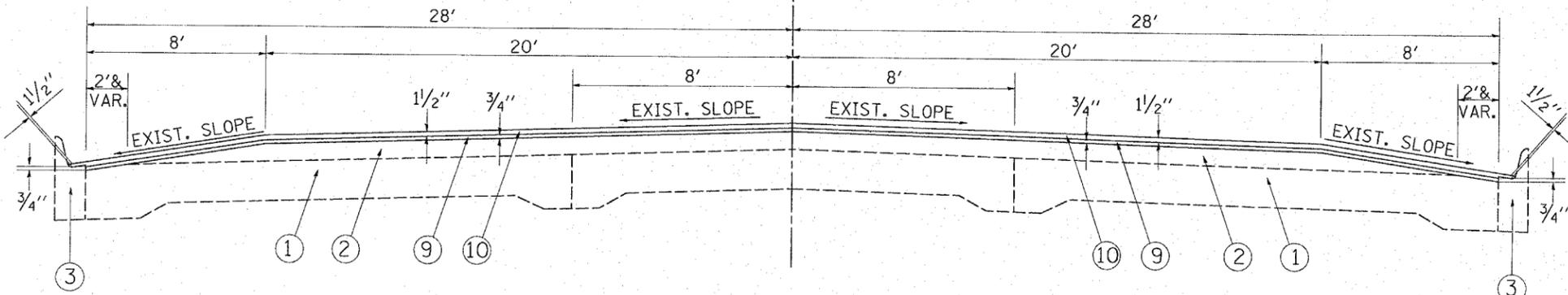
FILE NAME = e:\projects\31301\sh_rdw.dgn	USER NAME = bauerdl	DESIGNED - DRAWN -	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAU 3512 BUSSE HIGHWAY TYPICAL CROSS SECTIONS		F.A.U. RTE. 3512	SECTION 86Y-RS-3	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 7	
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -	REVISED -		SCALE: NONE	SHEET NO. 3 OF 4 SHEETS	STA.	TO STA.	CONTRACT NO. 62272			
PLOT DATE = 3/11/2008	DATE -	REVISED -	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							

CL-BUSSE HWY.



EXISTING TYPICAL CROSS SECTION - BUSSE HWY.
STA. 145+34 TO STA. 166+50

CL-BUSSE HWY.

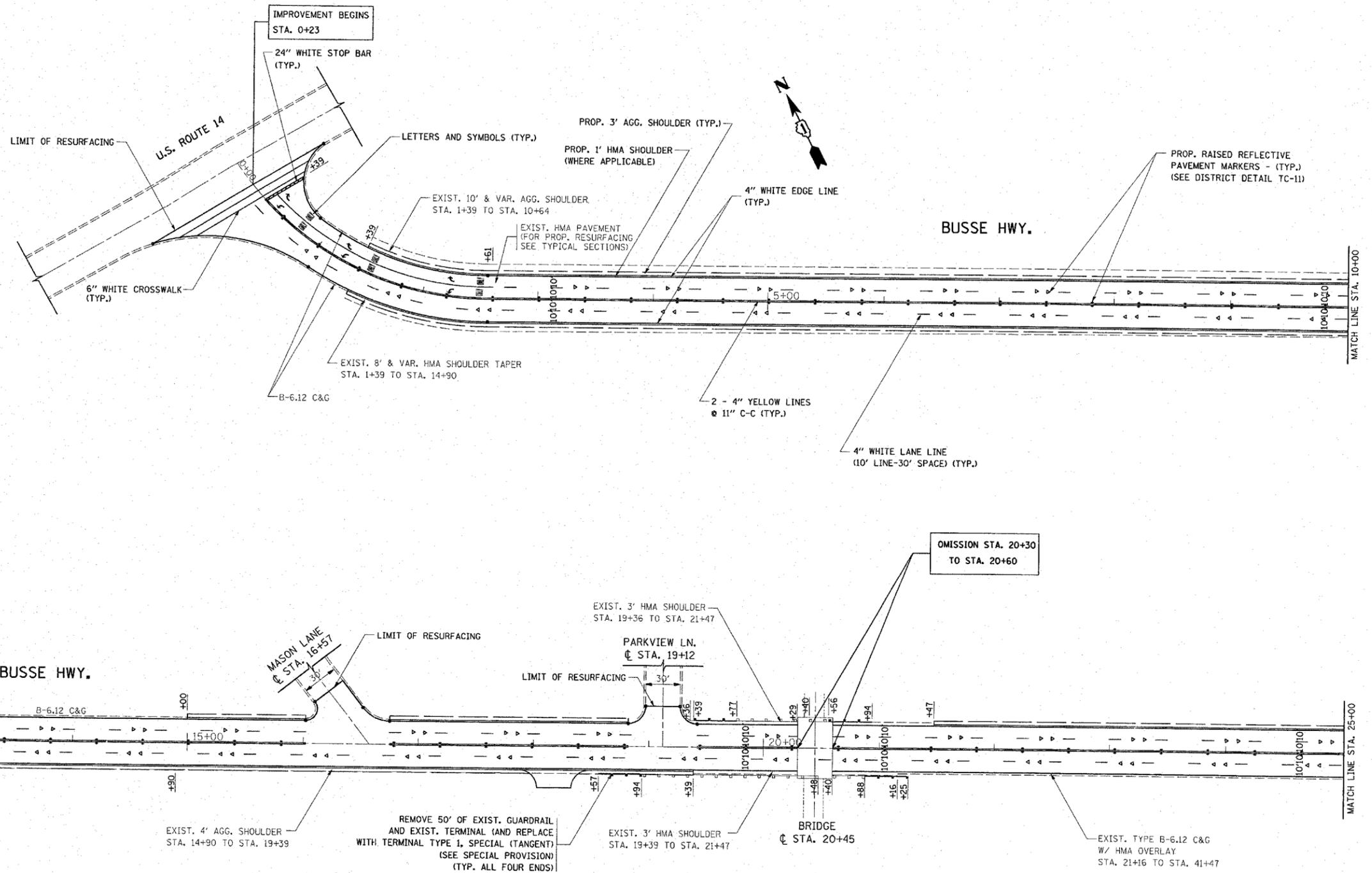


PROPOSED TYPICAL CROSS SECTION - BUSSE HWY.
STA. 145+34 TO STA. 166+50

LEGEND

- ① EXIST. P.C.C. PAVEMENT, ±10"
- ② EXIST. HMA SURFACE 6" & VARIES
- ③ EXIST. COMB. C&G, TYPE B-6.12
- ④ EXIST. AGG. SHOULDER
- ⑤ DELETED
- ⑥ PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- ⑦ DELETED
- ⑧ PROP. EARTH EXCAVATION
- ⑨ PROP. POLY. LEVELING BINDER, (MACHINE METHOD), IL-4.75, N50, 3/4"
- ⑩ PROP. HOT-MIX ASPHALT SURFACE CSE., MIX D, N70, 1 1/2"
- ⑪ PROP. PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE
- ⑫ PROP. TREE REMOVAL
- ⑬ PROP. AGG. SHOULDERS, TYPE B
- ⑭ PROP. SHAPING AND GRADING SHOULDERS
- ⑮ PROP. HOT-MIX ASPHALT BINDER CRSE., IL-19, N70, 4 1/2" (IN 2 LIFTS)

FILE NAME = c:\projects\131301\ah_rdwj.dgn	USER NAME = bauerdl	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAU 3512 BUSSE HIGHWAY TYPICAL CROSS SECTIONS	F.A.U. RTE. 3512	SECTION 86Y-RS-3	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 8		
	PLOT SCALE = 50.0000' / 1" IN.	DRAWN -	REVISED -			SCALE: NONE	SHEET NO. 4 OF 4 SHEETS	STA.	TO STA.	CONTRACT NO. 62272		
	PLOT DATE = 3/11/2008	CHECKED -	REVISED -			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						
		DATE -	REVISED -									



NOTES

1. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT OR LANE.
2. ALL FINAL PAVEMENT MARKINGS ARE THERMOPLASTIC
3. FOR PAVEMENT MARKING DETAILS ALONG PARKING LANES, SEE "TYPICAL PAVEMENT MARKING FOR PARKING SPACES" ON SHEET NO. 11.
4. FOR DETAILS OF RAISED REFLECTIVE PAVEMENT MARKERS, SEE "DISTRICT ONE TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)," DUAL ONE-WAY CRYSTAL MARKERS SHALL BE USED ON SKIP-DASH LANE LINES.
5. AT LOCATIONS WHERE DRIVEWAY REMOVAL AND REPLACEMENT IS NEEDED THE HOT-MIX ASPHALT SURFACE COURSE WILL BE OF THE SAME MIX USED THROUGHOUT THE ROADWAY RESURFACING IMPROVEMENT (MIX "D", N70) AT THE THICKNESS SPECIFIED IN THE DRIVEWAY DETAIL.
6. IMPROVEMENT LIMITS SHOULD END WHERE THE CITY OF PARK RIDGE'S IMPROVEMENT LIMITS BEGIN, ALLOWING NO GAPS, JUST NORTHWEST OF THE INTERSECTION OF BUSSE HIGHWAY AND TOUHY AVENUE.

FILE NAME =
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USER NAME = bauerdl	DESIGNED -	REVISED -
PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED -
PLOT DATE = 3/11/2008	CHECKED -	REVISED -
	DATE -	REVISED -

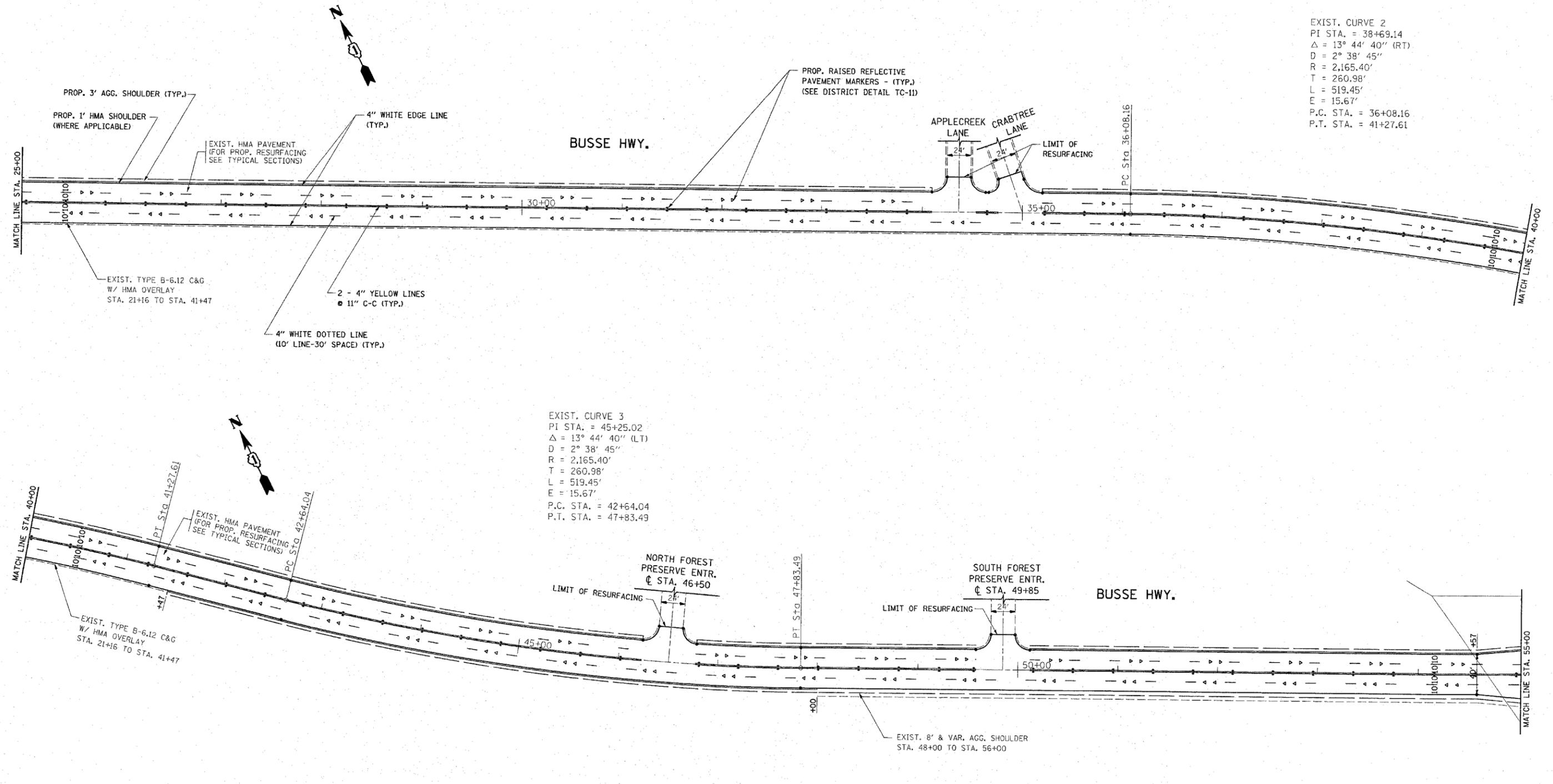
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FAU 3512 BUSSE HIGHWAY
 RESURFACING ROADWAY PLAN & PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET NO. 1 OF 6 SHEETS STA. TO STA.

F.A.U. RTE. 3512	SECTION 86Y-RS-3	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 9
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				

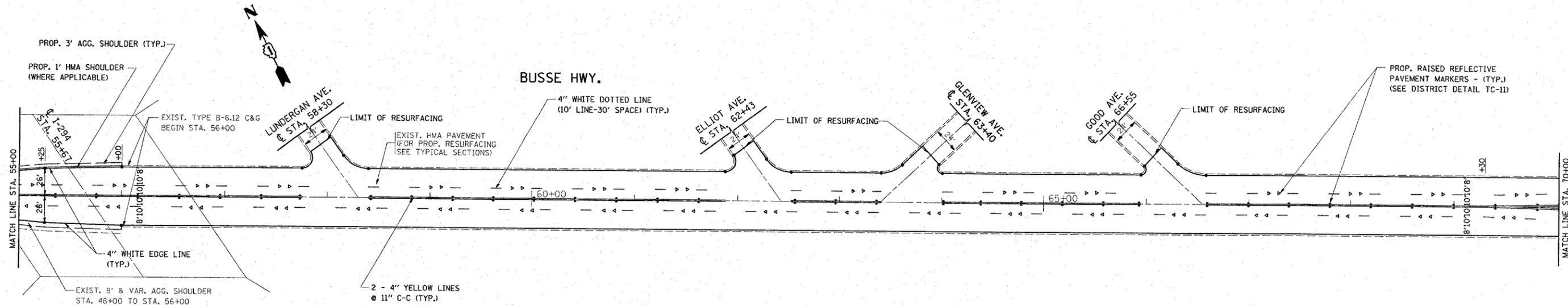
CONTRACT NO. 62272



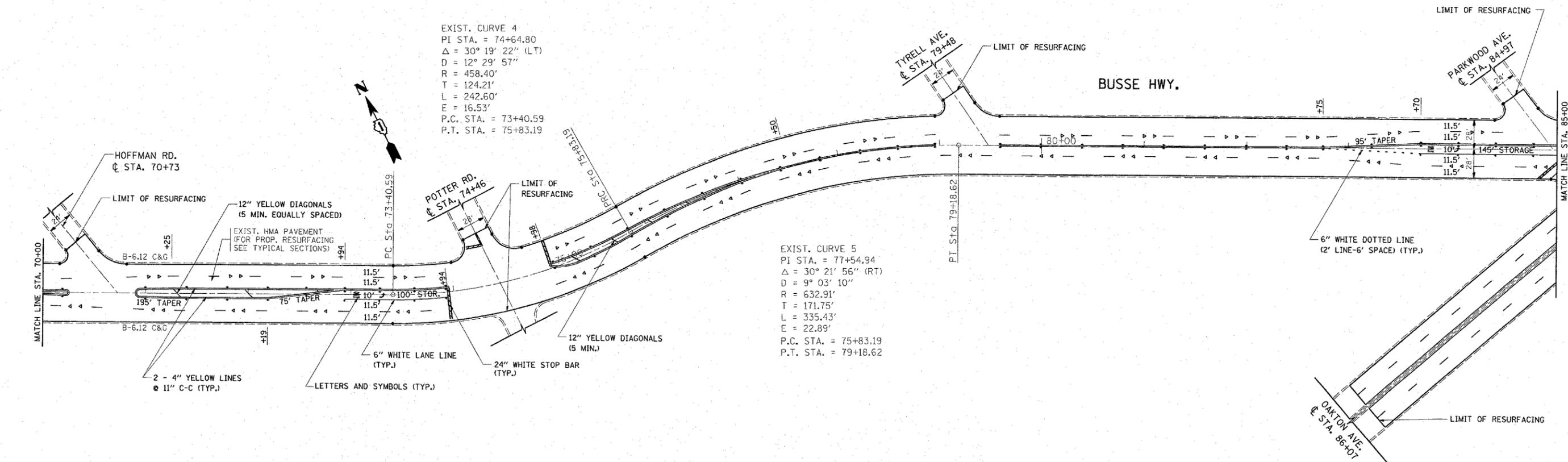
NOTES

- ALL DIMENSIONS ARE TO EDGE OF PAVEMENT OR LANE.
- ALL FINAL PAVEMENT MARKINGS ARE THERMOPLASTIC
- FOR PAVEMENT MARKING DETAILS ALONG PARKING LANES, SEE "TYPICAL PAVEMENT MARKING FOR PARKING SPACES" ON SHEET NO. 11.
- FOR DETAILS OF RAISED REFLECTIVE PAVEMENT MARKERS, SEE "DISTRICT ONE TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)." DUAL ONE-WAY CRYSTAL MARKERS SHALL BE USED ON SKIP-DASH LANE LINES.
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- IMPROVEMENT LIMITS SHOULD END WHERE THE CITY OF PARK RIDGE'S IMPROVEMENT LIMITS BEGIN, ALLOWING NO GAPS, JUST NORTHWEST OF THE INTERSECTION OF BUSSE HIGHWAY AND TOUHY AVENUE.

FILE NAME = c:\projects\dl31381\sh_rdw.dgn	USER NAME = bauerd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAU 3512 BUSSE HIGHWAY RESURFACING ROADWAY PLAN & PAVEMENT MARKING PLAN	F.A.U. RTE. 3512	SECTION 86Y-RS-3	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 10
PLOT SCALE = 50,000 / IN.	CHECKED -	REVISED -	SCALE: 1"=50'			SHEET NO. 2 OF 6 SHEETS	STA. TO STA.	CONTRACT NO. 62272		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT
PLOT DATE = 3/11/2008	DATE -	REVISED -								



EXIST. CURVE 4
 PI STA. = 74+64.80
 $\Delta = 30^\circ 19' 22''$ (LT)
 $D = 12^\circ 29' 57''$
 $R = 458.40'$
 $T = 124.21'$
 $L = 242.60'$
 $E = 16.53'$
 P.C. STA. = 73+40.59
 P.T. STA. = 75+83.19



EXIST. CURVE 5
 PI STA. = 77+54.94
 $\Delta = 30^\circ 21' 56''$ (RT)
 $D = 9^\circ 03' 10''$
 $R = 632.91'$
 $T = 171.75'$
 $L = 335.43'$
 $E = 22.89'$
 P.C. STA. = 75+83.19
 P.T. STA. = 79+18.62

NOTES

- ALL DIMENSIONS ARE TO EDGE OF PAVEMENT OR LANE.
- ALL FINAL PAVEMENT MARKINGS ARE THERMOPLASTIC
- FOR PAVEMENT MARKING DETAILS ALONG PARKING LANES, SEE "TYPICAL PAVEMENT MARKING FOR PARKING SPACES" ON SHEET NO. 11.
- FOR DETAILS OF RAISED REFLECTIVE PAVEMENT MARKERS, SEE "DISTRICT ONE TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)," DUAL ONE-WAY CRYSTAL MARKERS SHALL BE USED ON SKIP-DASH LANE LINES.
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FILE NAME =
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USER NAME = bauerdl
 PLOT SCALE = 50,0000' / IN.
 PLOT DATE = 3/11/2008

DESIGNED -	REVISED -
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CHECKED -	REVISED -
DATE -	REVISED -

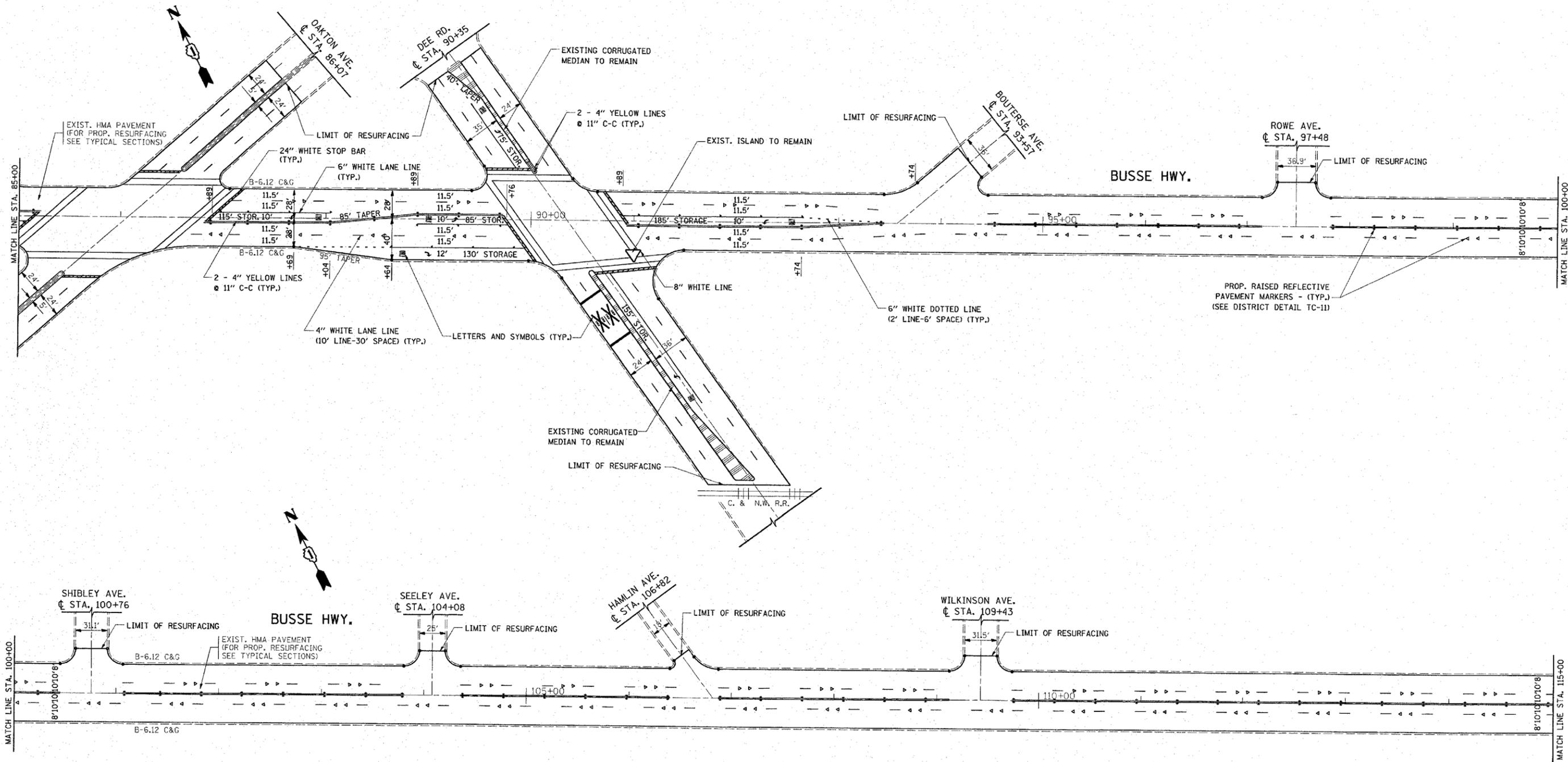
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FAU 3512 BUSSE HIGHWAY
 RESURFACING ROADWAY PLAN & PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET NO. 3 OF 6 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	86Y-RS-3	COOK	35	11
CONTRACT NO. 62272				

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



NOTES

1. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT OR LANE.
2. ALL FINAL PAVEMENT MARKINGS ARE THERMOPLASTIC
3. FOR PAVEMENT MARKING DETAILS ALONG PARKING LANES, SEE "TYPICAL PAVEMENT MARKING FOR PARKING SPACES" ON SHEET NO. 11.
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5. AT LOCATIONS WHERE DRIVEWAY REMOVAL AND REPLACEMENT IS NEEDED THE HOT-MIX ASPHALT SURFACE COURSE WILL BE OF THE SAME MIX USED THROUGHOUT THE ROADWAY RESURFACING IMPROVEMENT (MIX "D", N70) AT THE THICKNESS SPECIFIED IN THE DRIVEWAY DETAIL.
6. IMPROVEMENT LIMITS SHOULD END WHERE THE CITY OF PARK RIDGE'S IMPROVEMENT LIMITS BEGIN, ALLOWING NO GAPS, JUST NORTHWEST OF THE INTERSECTION OF BUSSE HIGHWAY AND TOUHY AVENUE.

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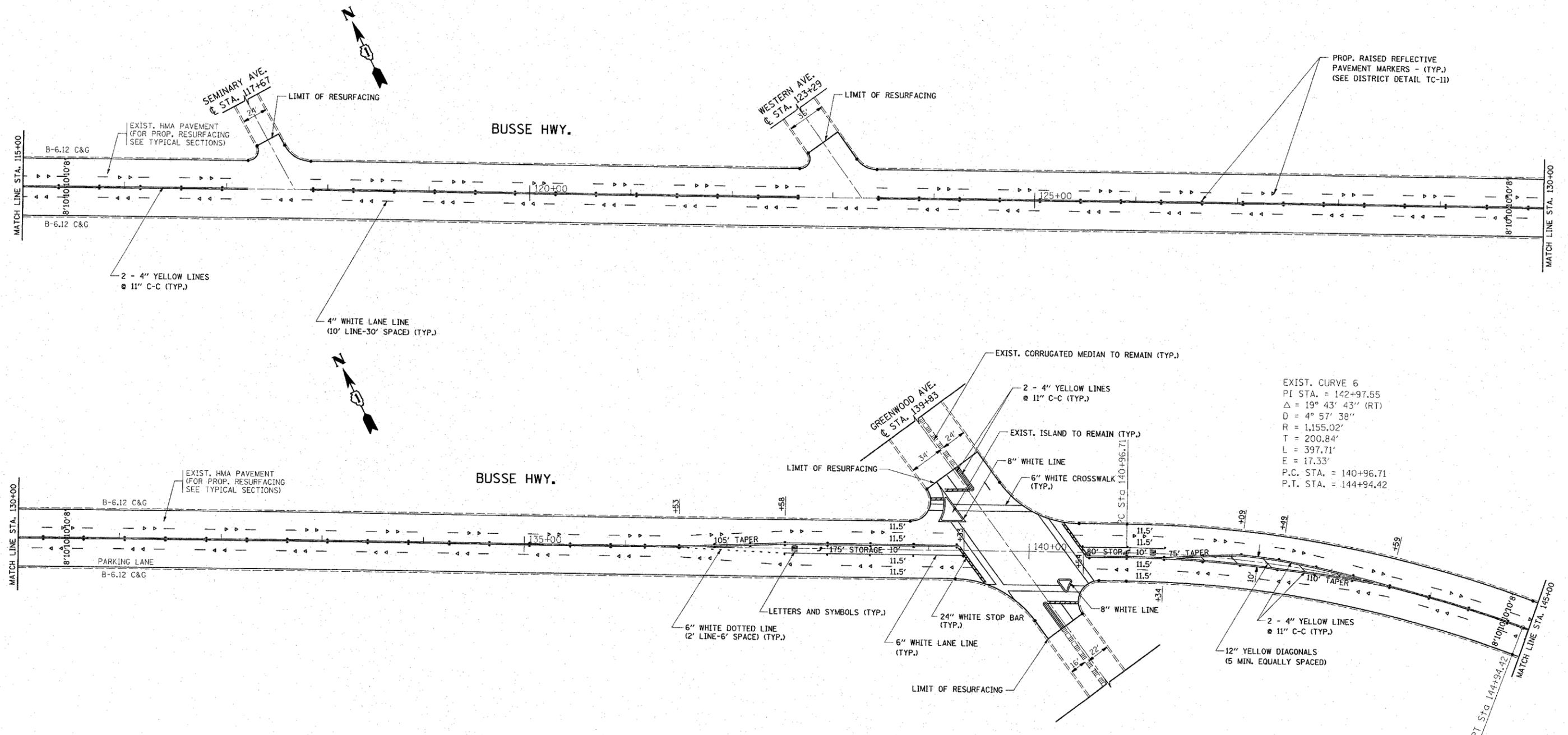
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PLOT SCALE = 58.0000' / IN.	DRAWN -	REVISED -
PLOT DATE = 3/11/2008	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FAU 3512 BUSSE HIGHWAY
 RESURFACING ROADWAY PLAN & PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET NO. 4 OF 6 SHEETS STA. TO STA.

F.A.U. RTE. 3512	SECTION 86Y-RS-3	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 12
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 62272	



NOTES

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- IMPROVEMENT LIMITS SHOULD END WHERE THE CITY OF PARK RIDGE'S IMPROVEMENT LIMITS BEGIN, ALLOWING NO GAPS, JUST NORTHWEST OF THE INTERSECTION OF BUSSE HIGHWAY AND TOUHY AVENUE.

FILE NAME =
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PLOT DATE = 3/11/2008	CHECKED -	REVISED -
	DATE -	REVISED -

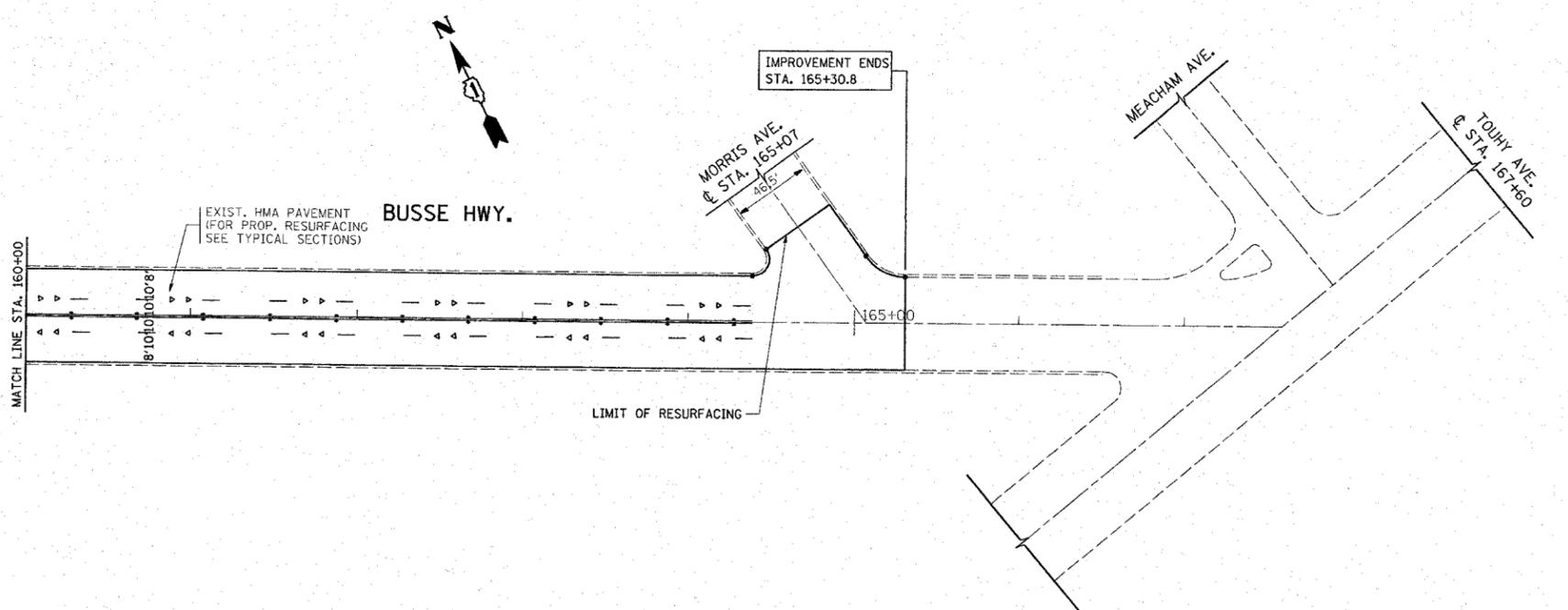
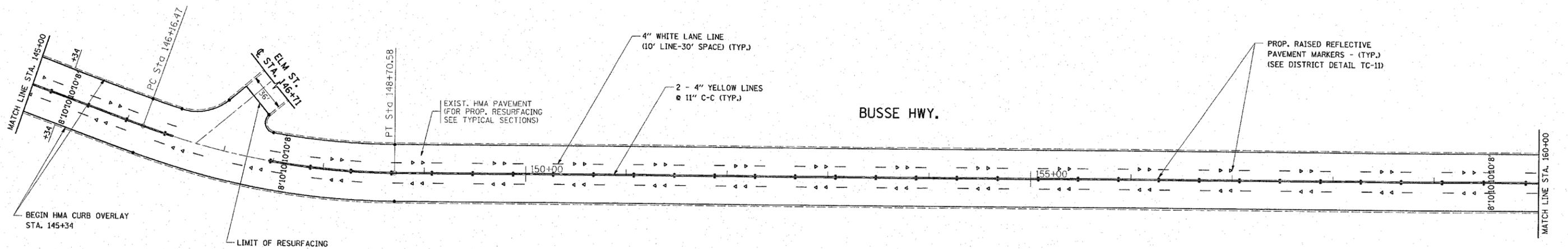
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FAU 3512 BUSSE HIGHWAY
 RESURFACING ROADWAY PLAN & PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET NO. 5 OF 6 SHEETS STA. TO STA.

F.A.U. RTE. 3512	SECTION 86Y-RS-3	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 13
CONTRACT NO. 62272				
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				

EXIST. CURVE 7
 PI STA. = 147+44.80
 $\Delta = 19^\circ 44' 19''$ (LT)
 $D = 7^\circ 46' 04''$
 $R = 737.61'$
 $T = 128.33'$
 $L = 254.11'$
 $E = 11.08'$
 P.C. STA. = 146+16.47
 P.T. STA. = 148+70.58



NOTES

1. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT OR LANE.
2. ALL FINAL PAVEMENT MARKINGS ARE THERMOPLASTIC
3. FOR PAVEMENT MARKING DETAILS ALONG PARKING LANES, SEE "TYPICAL PAVEMENT MARKING FOR PARKING SPACES" ON SHEET NO. 11.
4. FOR DETAILS OF RAISED REFLECTIVE PAVEMENT MARKERS, SEE "DISTRICT ONE TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)." DUAL ONE-WAY CRYSTAL MARKERS SHALL BE USED ON SKIP-DASH LANE LINES.
5. AT LOCATIONS WHERE DRIVEWAY REMOVAL AND REPLACEMENT IS NEEDED THE HOT-MIX ASPHALT SURFACE COURSE WILL BE OF THE SAME MIX USED THROUGHOUT THE ROADWAY RESURFACING IMPROVEMENT (MIX "D", N70) AT THE THICKNESS SPECIFIED IN THE DRIVEWAY DETAIL.
6. IMPROVEMENT LIMITS SHOULD END WHERE THE CITY OF PARK RIDGE'S IMPROVEMENT LIMITS BEGIN, ALLOWING NO GAPS, JUST NORTHWEST OF THE INTERSECTION OF BUSSE HIGHWAY AND TOUHY AVENUE.

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PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED -
PLOT DATE = 3/11/2008	CHECKED -	REVISED -
	DATE -	REVISED -

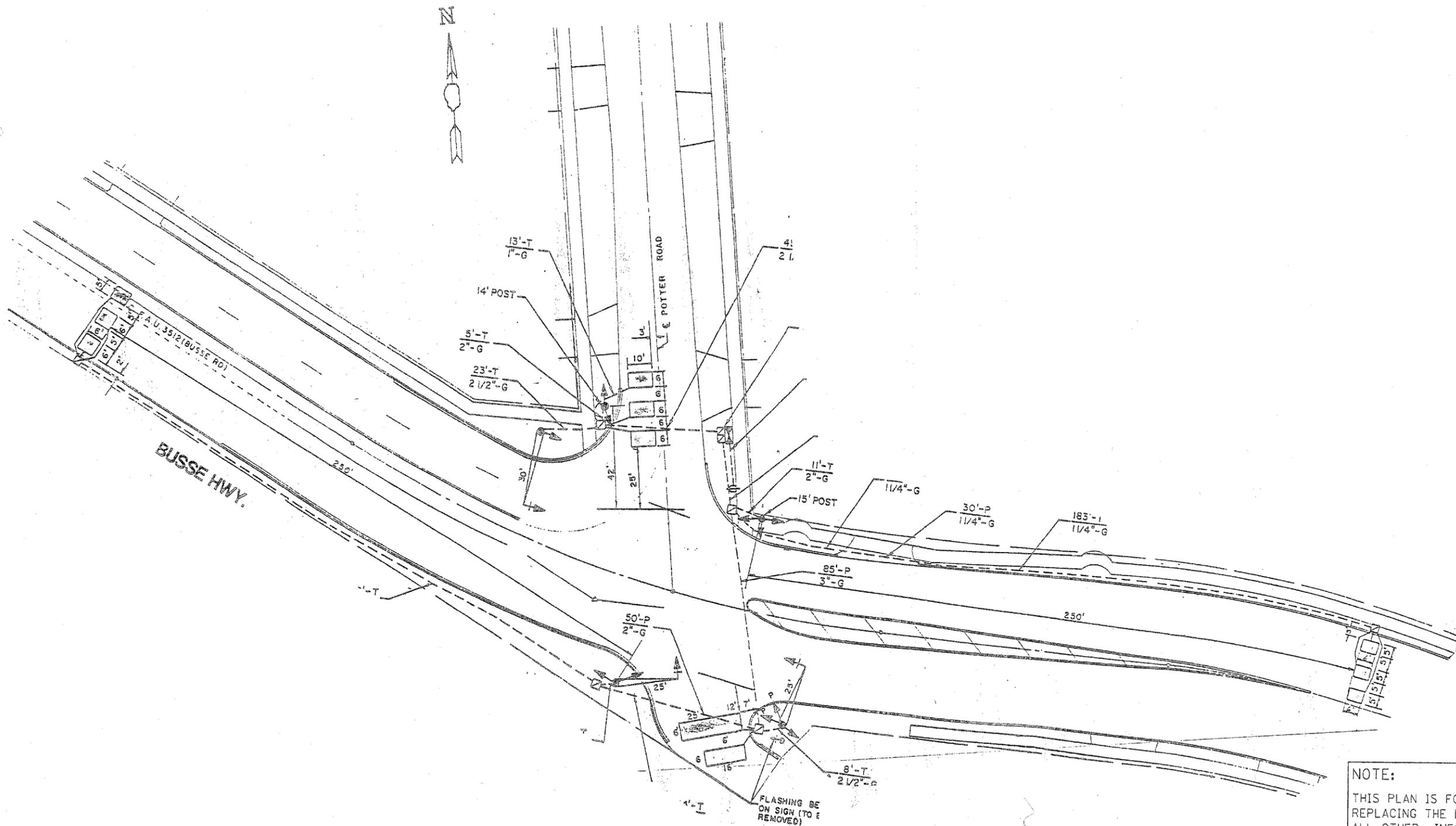
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FAU 3512 BUSSE HIGHWAY
 RESURFACING ROADWAY PLAN & PAVEMENT MARKING PLAN**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	86Y-RS-3	COOK	35	14
CONTRACT NO. 62272				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SCALE: 1"=50' SHEET NO. 6 OF 6 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	86Y-RS-3	COOK	35	15
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



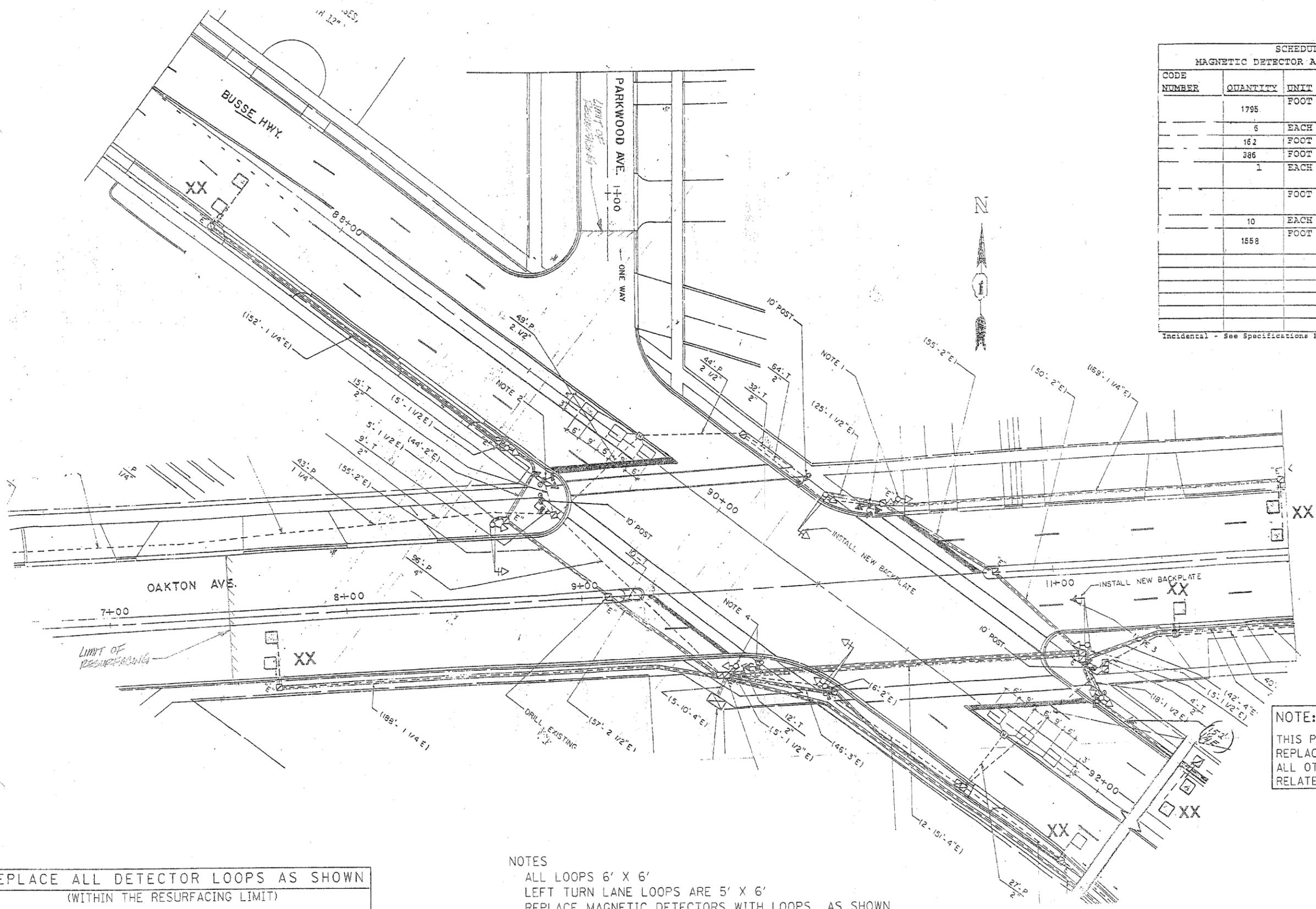
NOTE:
 THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMIT)			
CODE NO.	QUANTITY	UNIT	ITEM
	459'	FOOT	DETECTOR LOOP REPLACEMENT

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETECTOR LOOP REPLACEMENT
 BUSSE HWY & POTTER RD

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	86Y-RS-3	COOK	35	16
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SCHEDULE OF QUANTITIES MAGNETIC DETECTOR AND LOOP DETECTOR REPLACEMENT			
CODE NUMBER	QUANTITY	UNIT	PAY ITEM
	1795	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
	6	EACH	INDUCTIVE LOOP DETECTOR
	162	FOOT	DETECTOR LOOP, TYPE I
	386	FOOT	DETECTOR LOOP REPLACEMENT
	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
		FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
	10	EACH	DRILL EXISTING HANDHOLE
	1558	FOOT	REMOVE ELECTRICAL CABLE FROM CONDUIT
Incidental - See Specifications Provided			



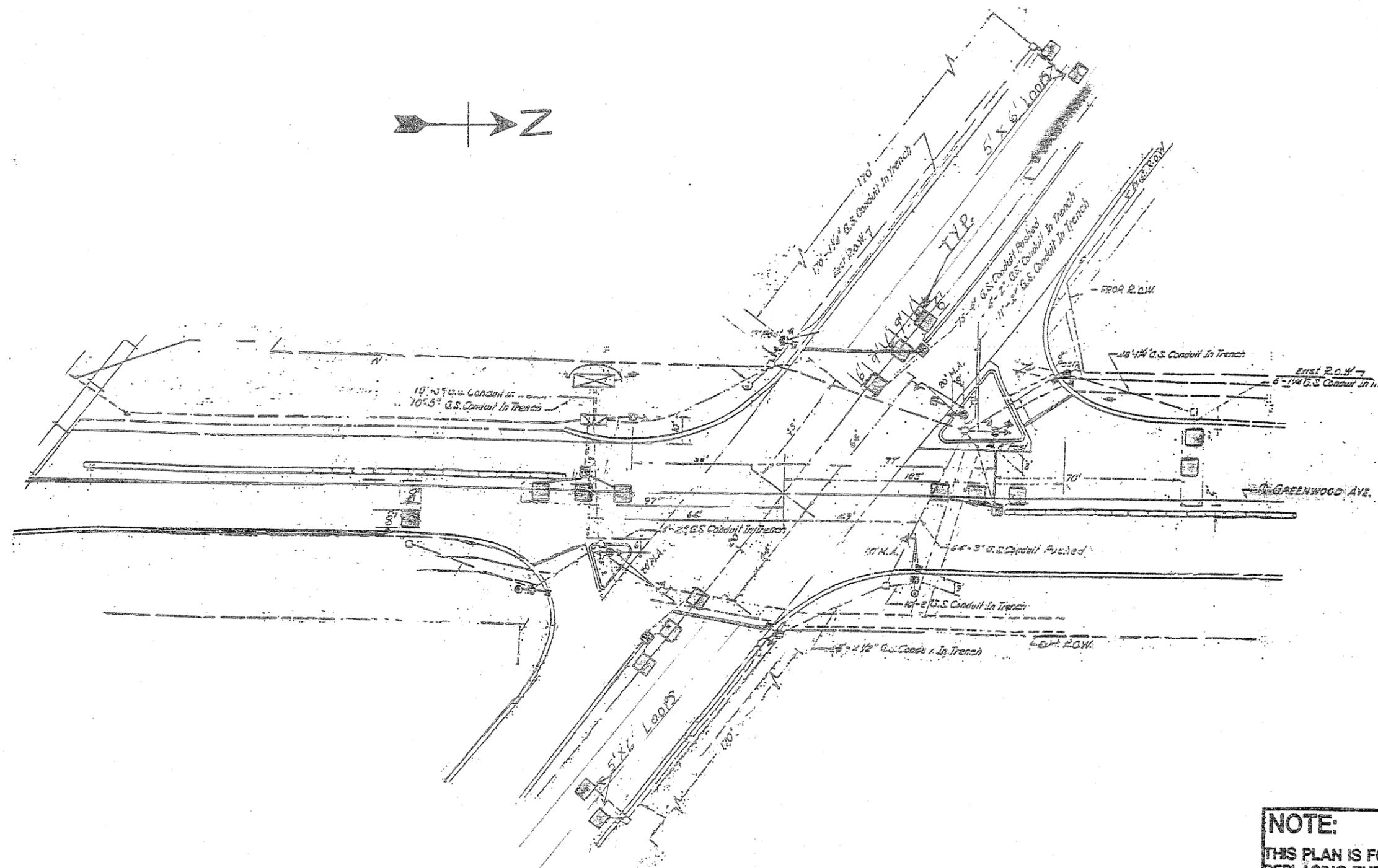
NOTE:
THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

NOTES
ALL LOOPS 6' X 6'
LEFT TURN LANE LOOPS ARE 5' X 6'
REPLACE MAGNETIC DETECTORS WITH LOOPS AS SHOWN
DOUBLE XX LOCATIONS

REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMIT)			
CODE NO.	QUANTITY	UNIT	ITEM
	SEE UPPER RIGHT	FOOT	DETECTOR LOOP REPLACEMENT

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETECTOR LOOP REPLACEMENT
BUSSE HWY & OAKTON

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	86Y-RS-3	COOK	35	18
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



NOTE:
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REPLACE ALL DETECTOR LOOPS AS SHOWN

(WITHIN THE RESURFACING LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
	685'	FOOT	DETECTOR LOOP REPLACEMENT

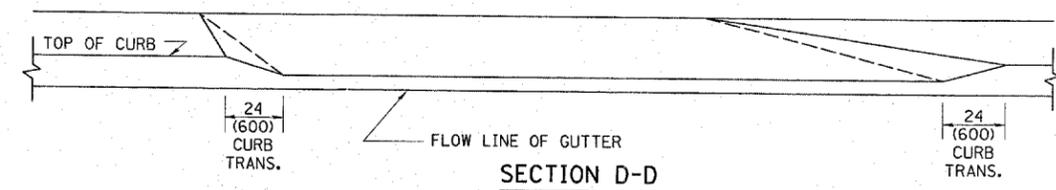
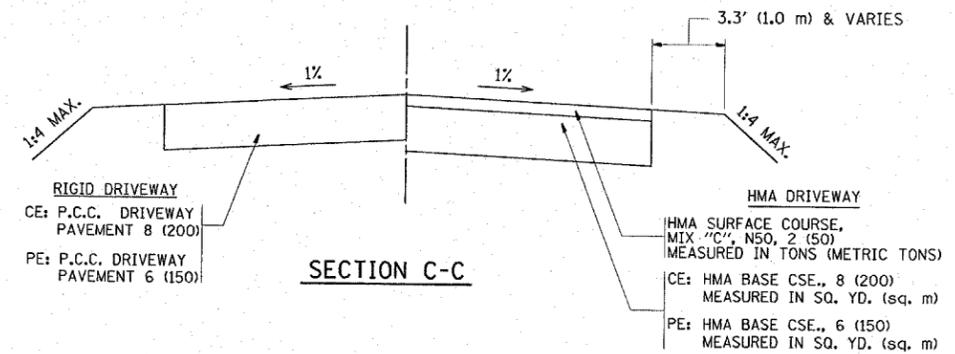
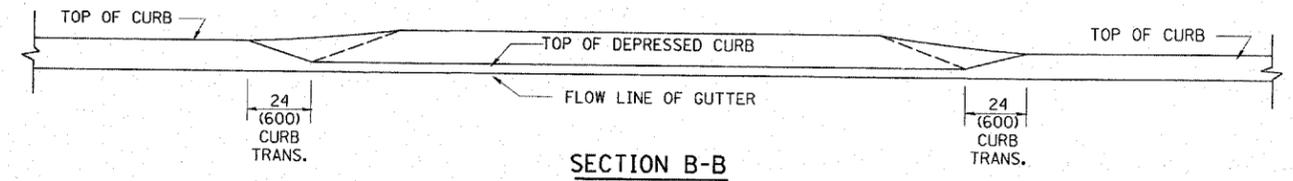
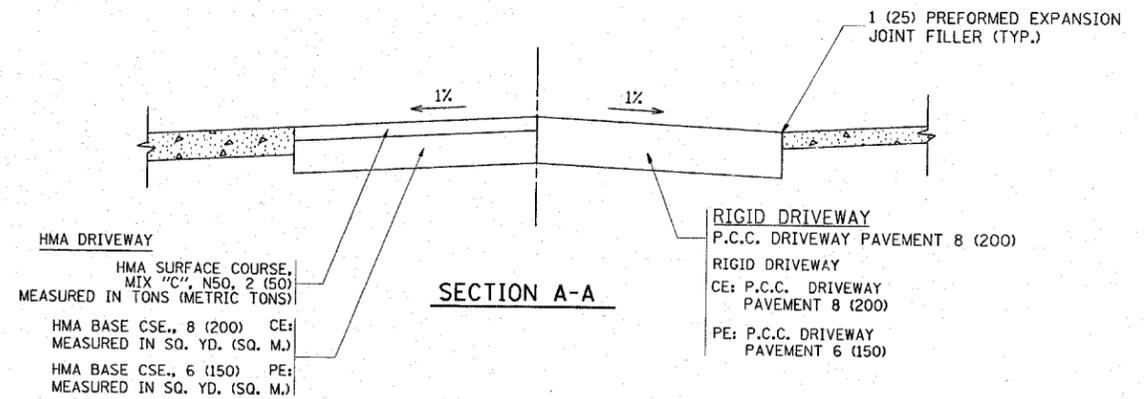
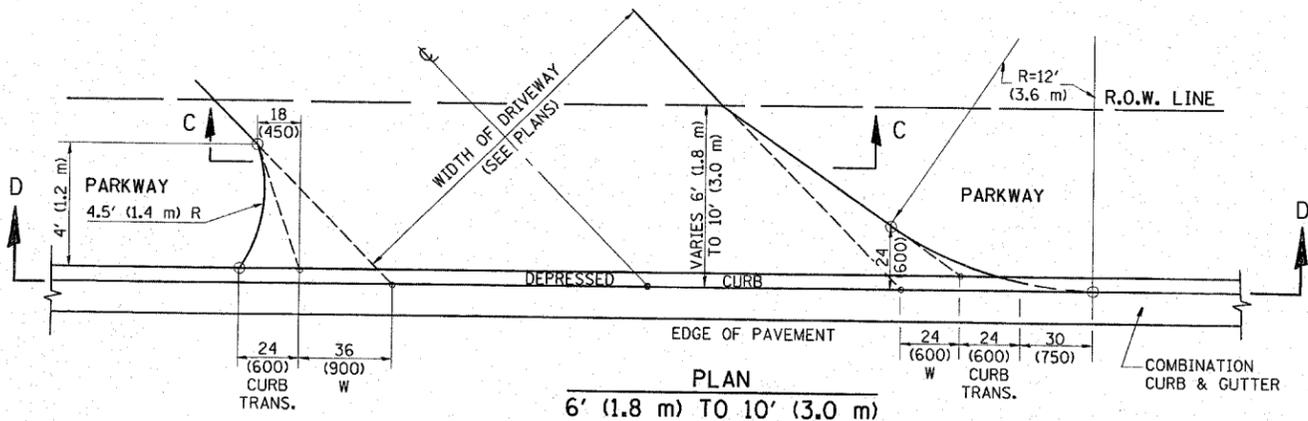
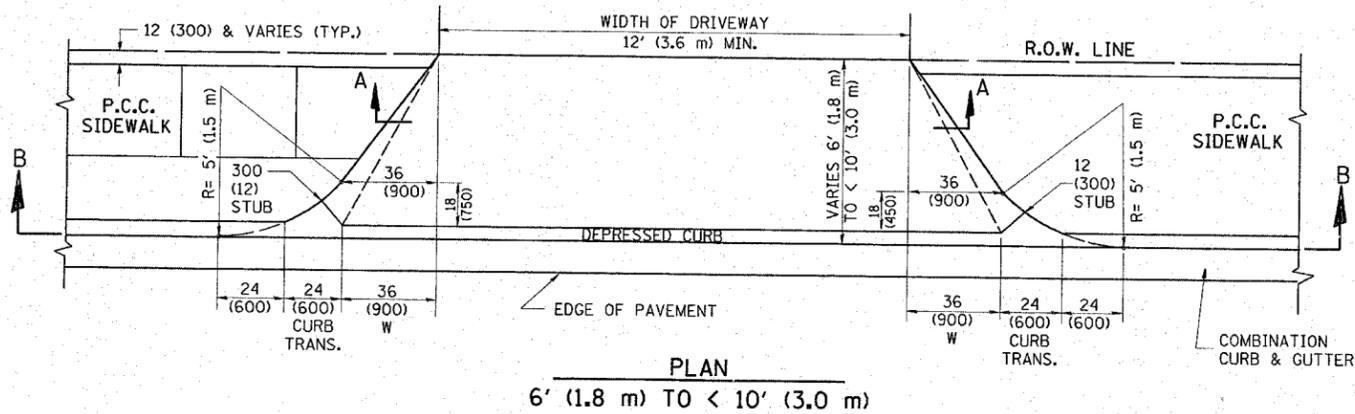
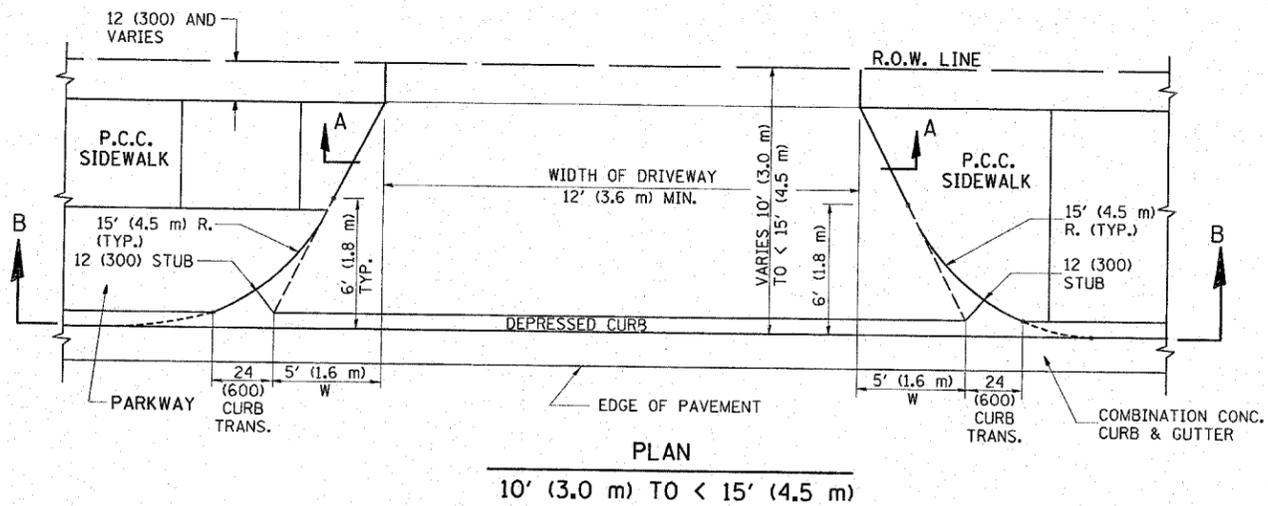
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**DETECTOR LOOP REPLACEMENT
 BUSSE HWY. & GREENWOOD AVE.**

SCALE: VERT. _____
 HORIZ. _____

DATE _____ DRAWN BY _____
 CHECKED BY _____



GENERAL NOTES

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

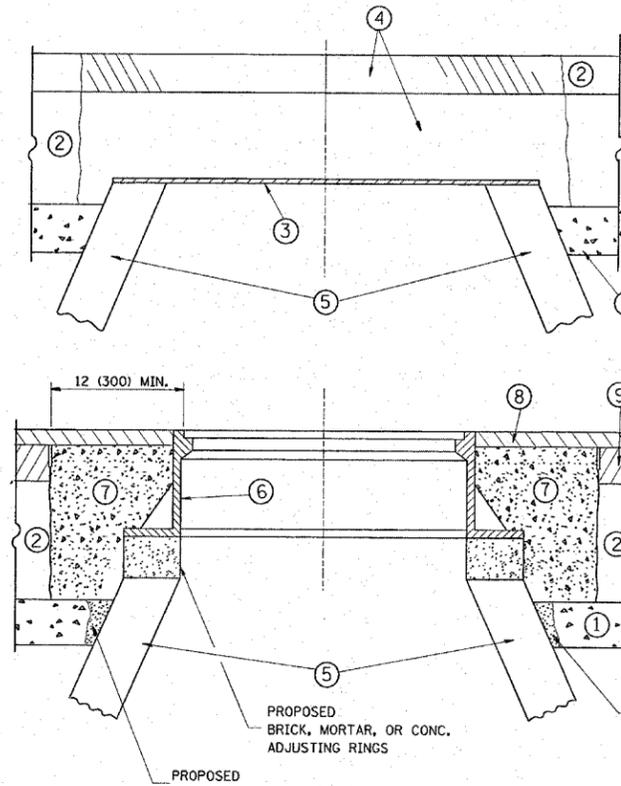
COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

THE 1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

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

FILE NAME = K:\dist\22x34\bd02.dgn	USER NAME = bawordl	DESIGNED - R. SHAH	REVISED - T. HOLTZ 04-08-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRIVEWAY DETAILS		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLDT SCALE = 50,0000' / IN.	DRAWN -	REVISED - M. GOMEZ 04-06-01		DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)		3512	86-RS-3	COOK	35	19
	PLDT DATE = 3/11/2008	CHECKED -	REVISED - P. LaFLEUR 04-15-03		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.		BD400-02 (BD-02)		CONTRACT NO.		
		DATE - 11-06-95	REVISED - R. BORO 01-01-07		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

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

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

LEGEND

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

NOTES:

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

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

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

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

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

LOCATION OF STRUCTURES:

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

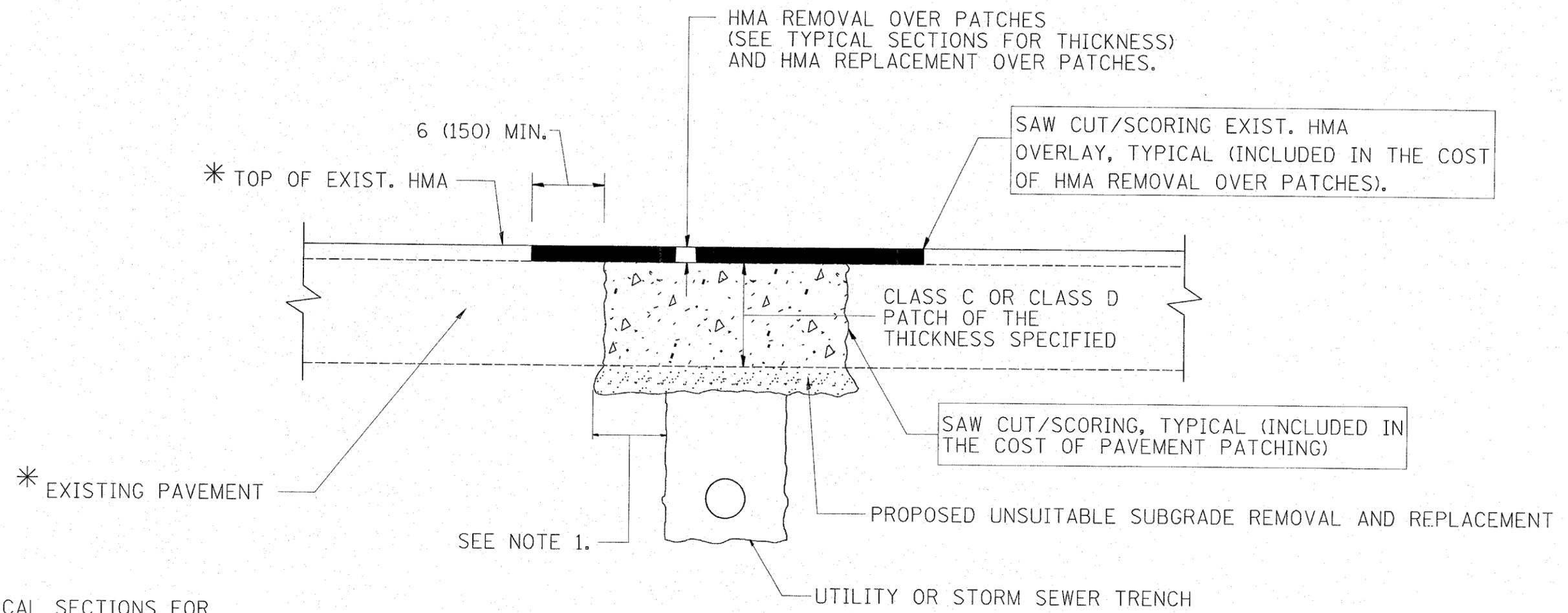
BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

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

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = K:\diststd22x34\bd08.dgn	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - R. SHAH 03-10-95	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING		F.A.I. RTE. 3512	SECTION 86Y-RS-3	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 20	
		DRAWN -	REVISED - A. ABBAS 03-21-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	BD600-03 (BD-8)		CONTRACT NO.		
		PLOT SCALE = 50.0000 / IN.	REVISED - R. WIEDEMAN 05-14-04		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
		PLOT DATE = 3/11/2008	DATE - 10-25-94		REVISED - R. BORO 01-01-07							



NOTES:

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

SEQUENCE OF CONSTRUCTION

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

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

FILE NAME = K:\diststd22x34\bd22.dgn	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 01-20-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT	F.A.U. RTE. 3512	SECTION 86-RS-3	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 21		
PLOT SCALE = 50,000' / IN.	CHECKED -	REVISED - R. BORO 01-01-07	REVISED - A. ABBAS 04-27-98			BD400-04 (BD-22)		CONTRACT NO.				
PLDT DATE = 3/11/2008	DATE - 10-25-94	REVISED - R. BORO 09-04-07	SCALE: NONE			SHEET NO. 1 OF 1 SHEETS		STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

18" (450) MAX.

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SALT TOLERANT SOD AND TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

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 USABLE 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".

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

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

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

② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

④ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑤ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

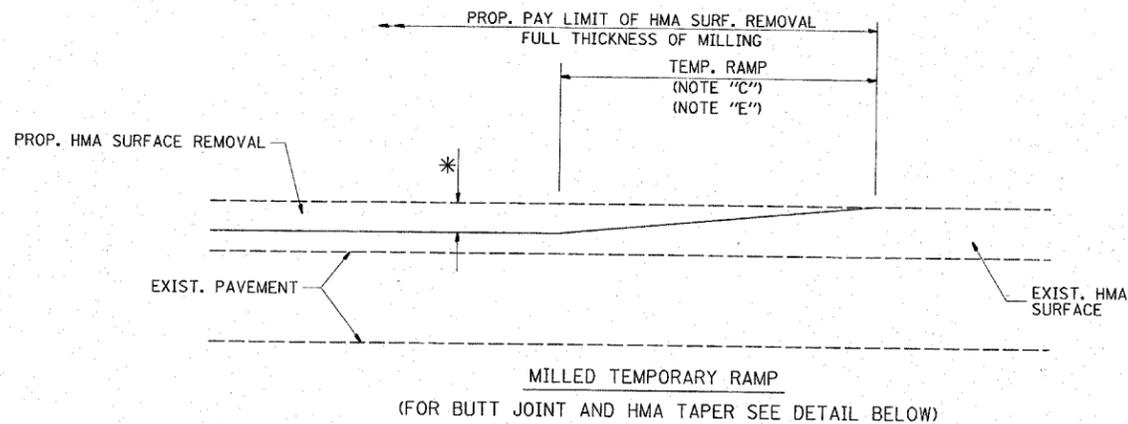
⑥ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑦ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

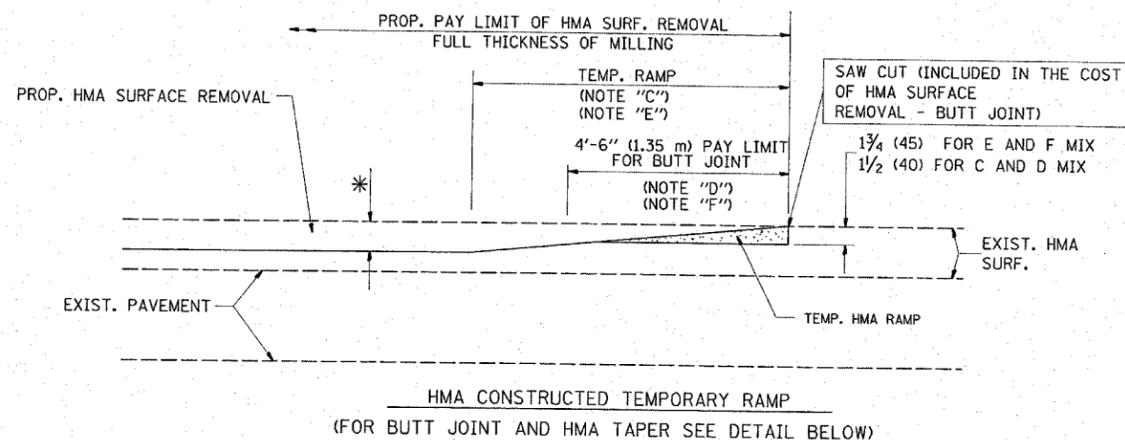
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME = K:\distatd22x34\bd24.dgn	USER NAME = bouardl	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	F.A.I. RATE:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 50,000' / IN.	DRAWN -	REVISED - A. ABBAS 03-21-97			3512	86Y-RS-3	COOK	35	22	
	PLOT DATE = 3/11/2008	CHECKED -	REVISED - M. GOMEZ 01-22-01			BD600-06 (BD-24)		CONTRACT NO.			
		DATE - 03-11-94	REVISED - R. BORO 01-01-07			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

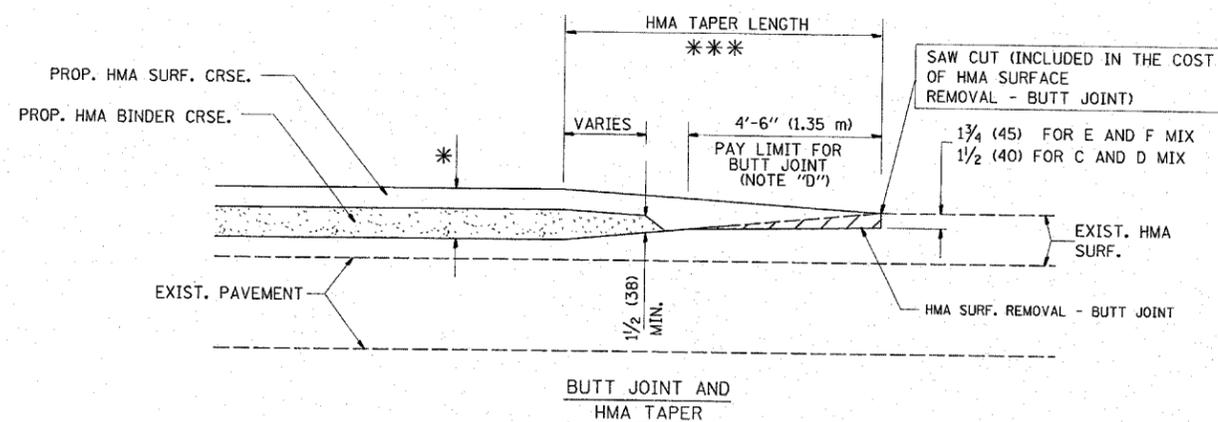


OPTION 1

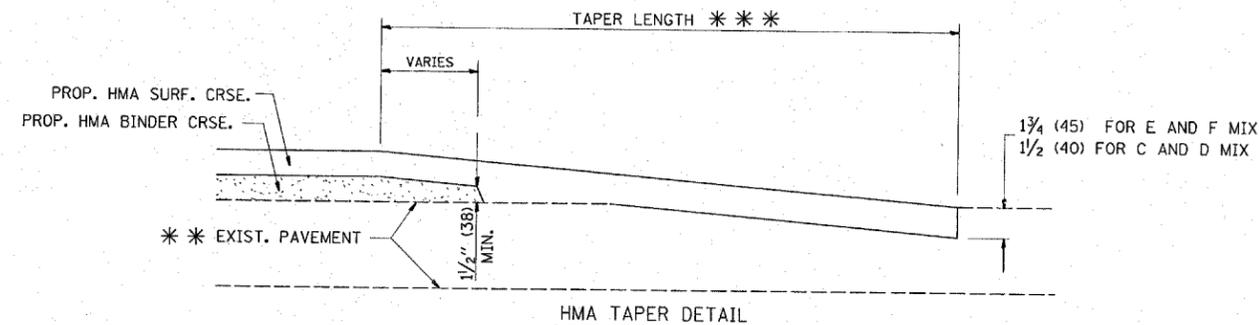
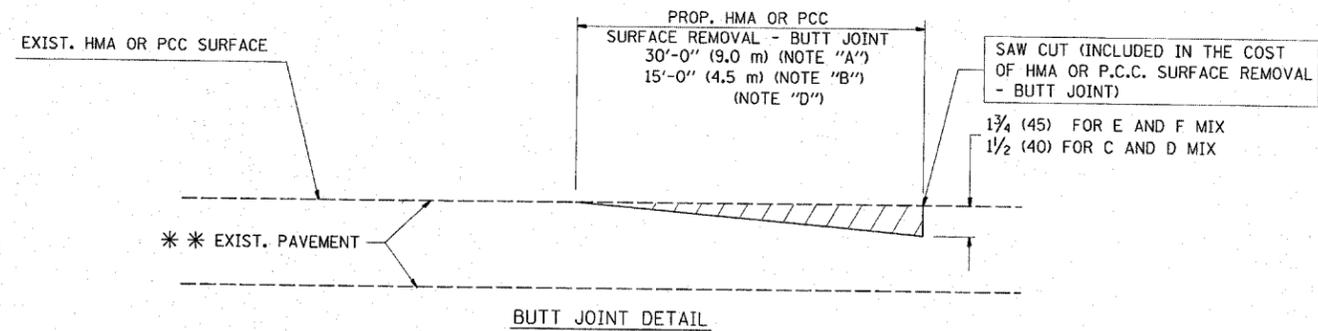


OPTION 2

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

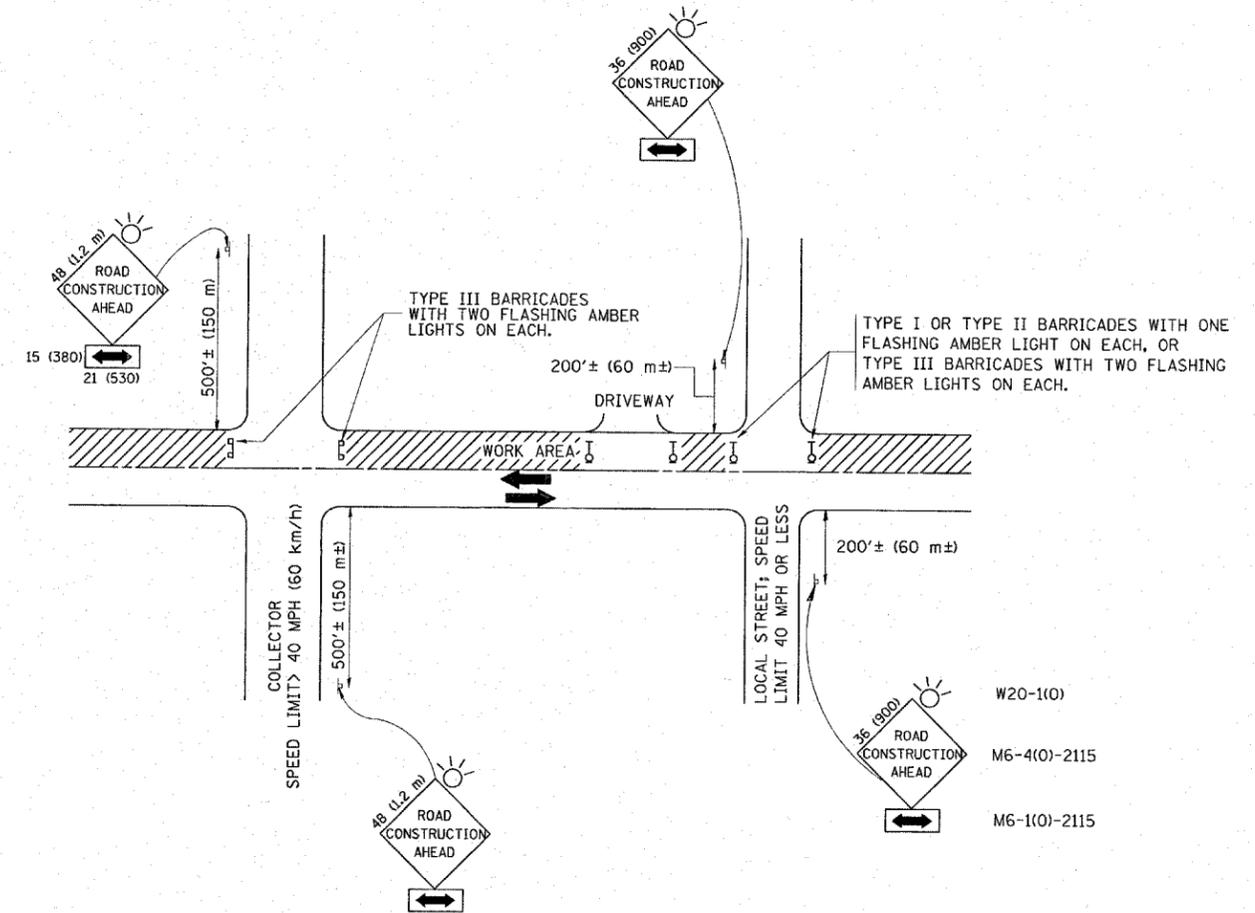
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
 - B: MINOR SIDE ROADS.
 - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
 - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
 - E: TAPER THE TEMP. RAMP AT A RATE OF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

FILE NAME = K:\data\td22x34\bd32.dgn	USER NAME = bward1	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BUTT JOINT AND HMA TAPER DETAILS		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED - A. ABBAS 03-21-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	3512	86-RS-3	COOK	35 23
		CHECKED -	REVISED - M. GOMEZ 04-06-01							BD400-05 BD32		
		DATE - 06-13-90	REVISED - R. BORO 01-01-07								CONTRACT NO.	



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

NOTES:

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

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

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

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

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

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

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

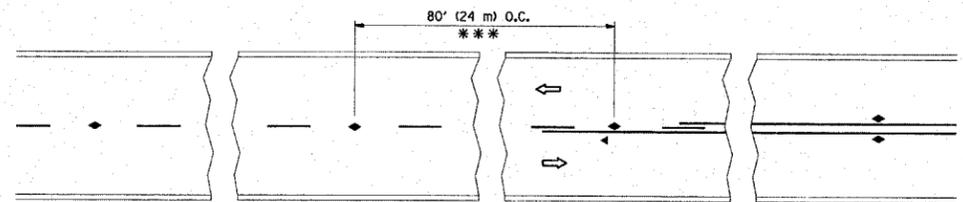
FILE NAME = K:\dist\td22x34\td10.dgn	USER NAME = bauerdl	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50,000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 3/11/2000	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

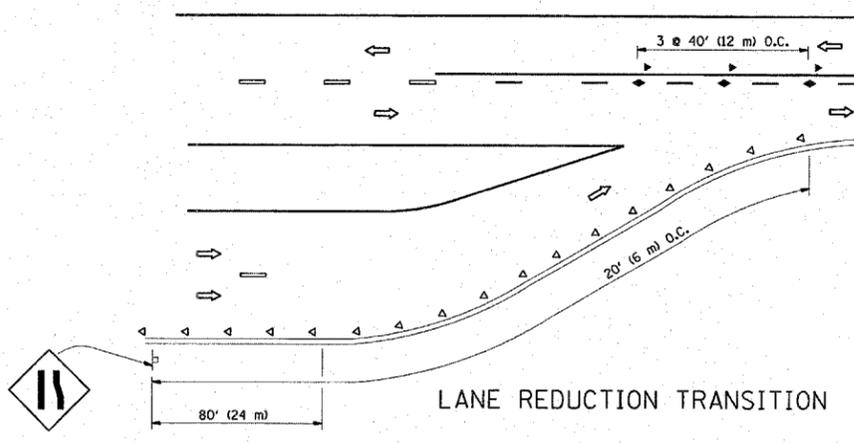
TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

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

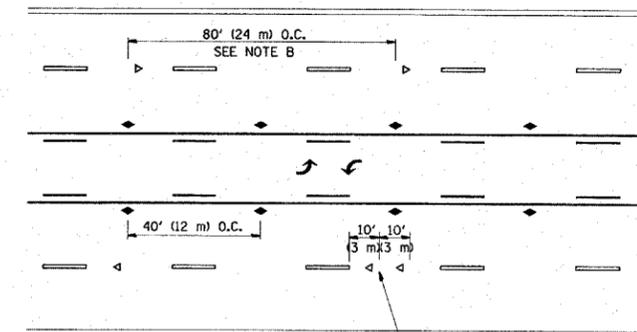
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	86Y-RS-3	COOK	35	24
TC-10		CONTRACT NO.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



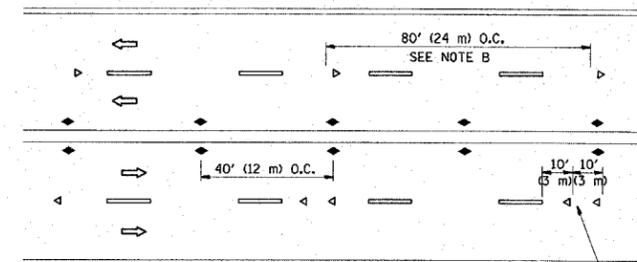
TWO-LANE/TWO-WAY



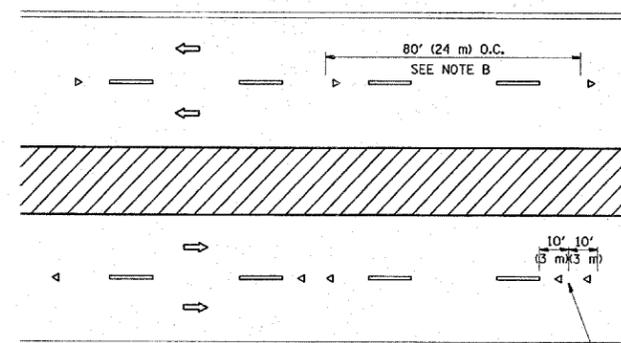
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

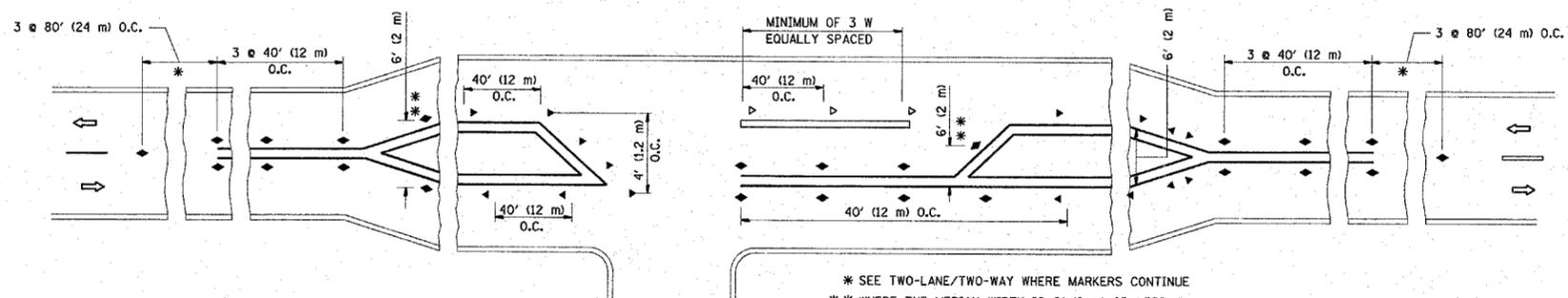
1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE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

SYMBOLS

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

LANE MARKER NOTES

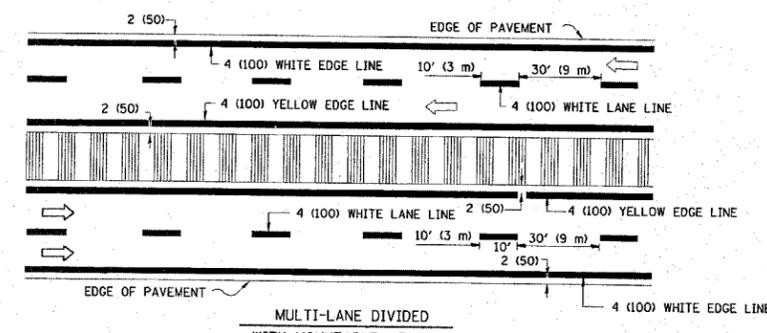
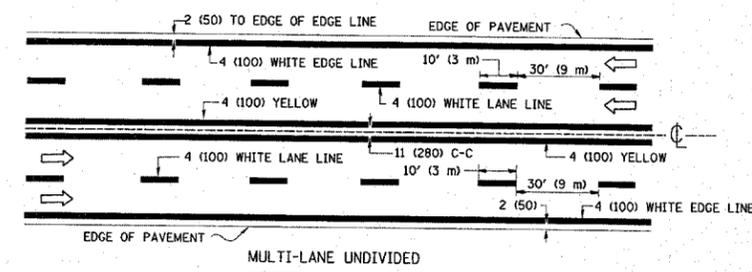
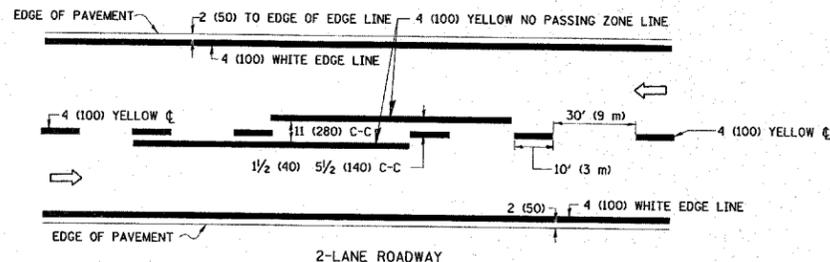
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.



LEFT TURN

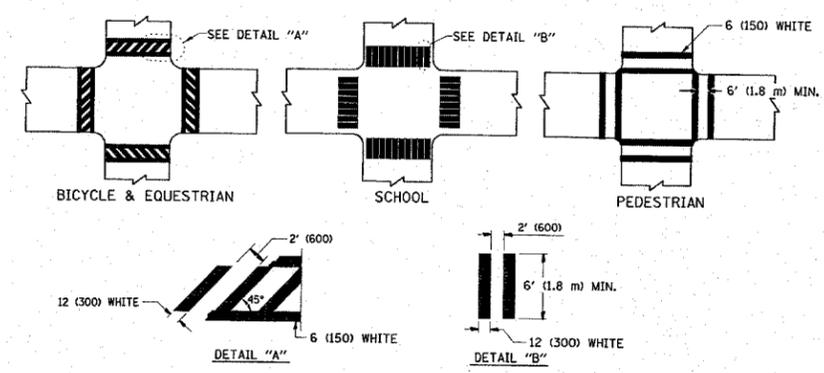
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME = K:\dist\td22x34\te11.dgn	USER NAME = bowardl	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL APPLICATIONS		F.A.U. RTE. 3512	SECTION 86-RS-3	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 25
	PLOT SCALE = 50,000' / IN.	CHECKED -	REVISED - T. RAMMACHER 03-12-99		RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)						
PLOT DATE = 3/11/2008	DATE -	REVISED - T. RAMMACHER 01-06-00	REVISED -	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				

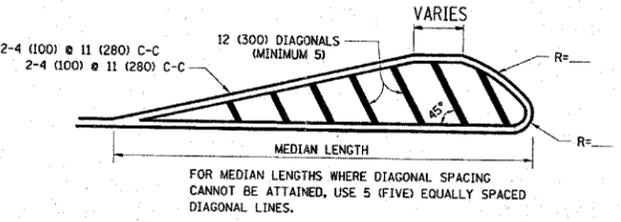
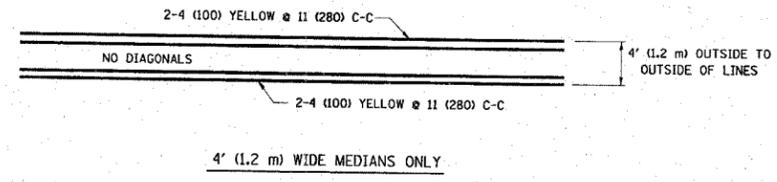


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



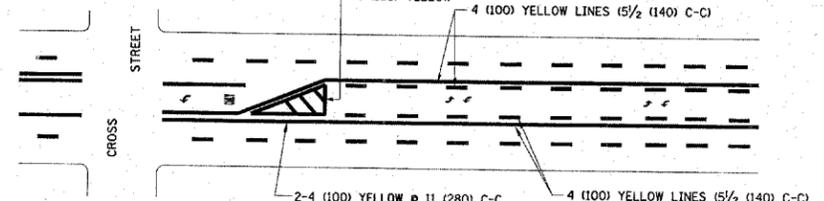
TYPICAL CROSSWALK MARKING



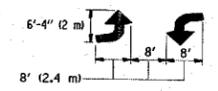
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

MEDIANS OVER 4' (1.2 m) WIDE

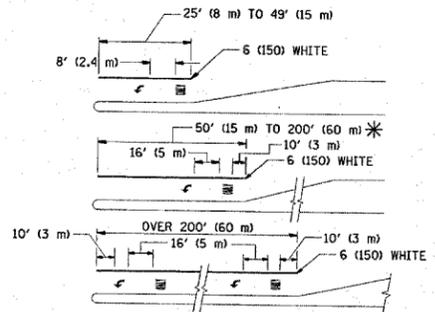


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

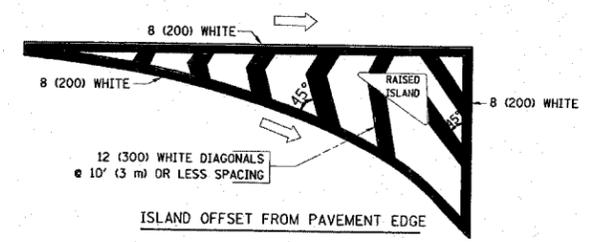


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

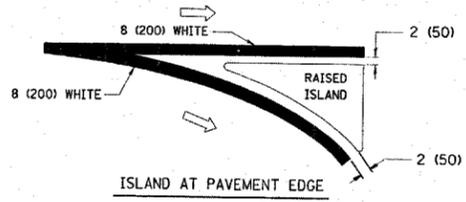
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



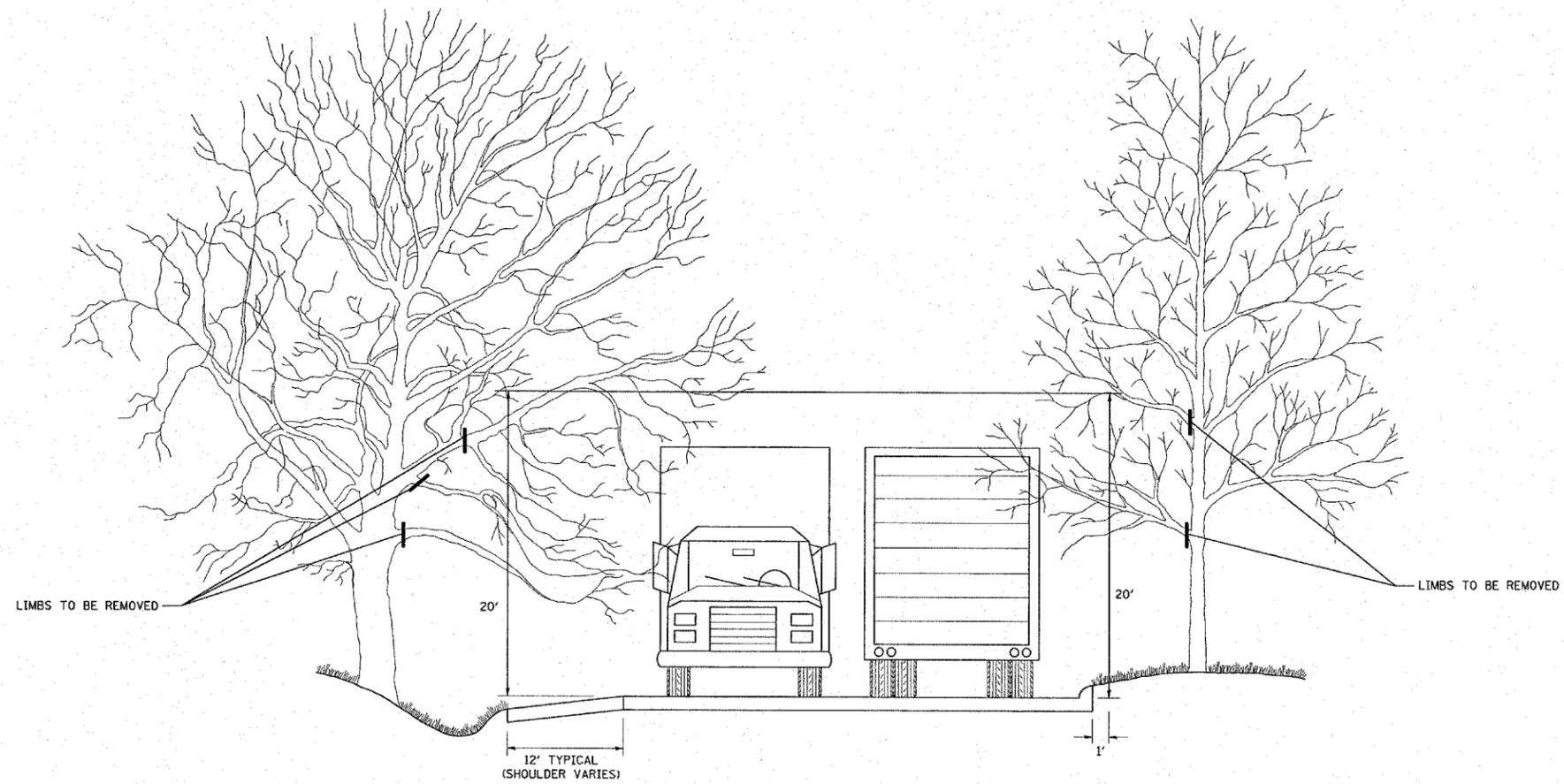
ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

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



FILE NAME =
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 PLOT DATE = 3/11/2008

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

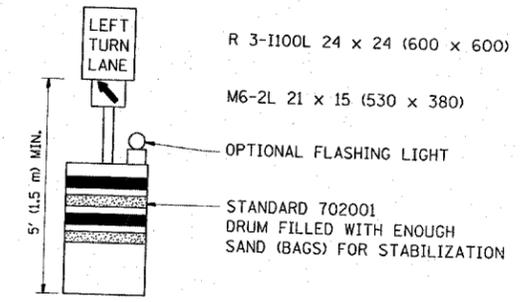
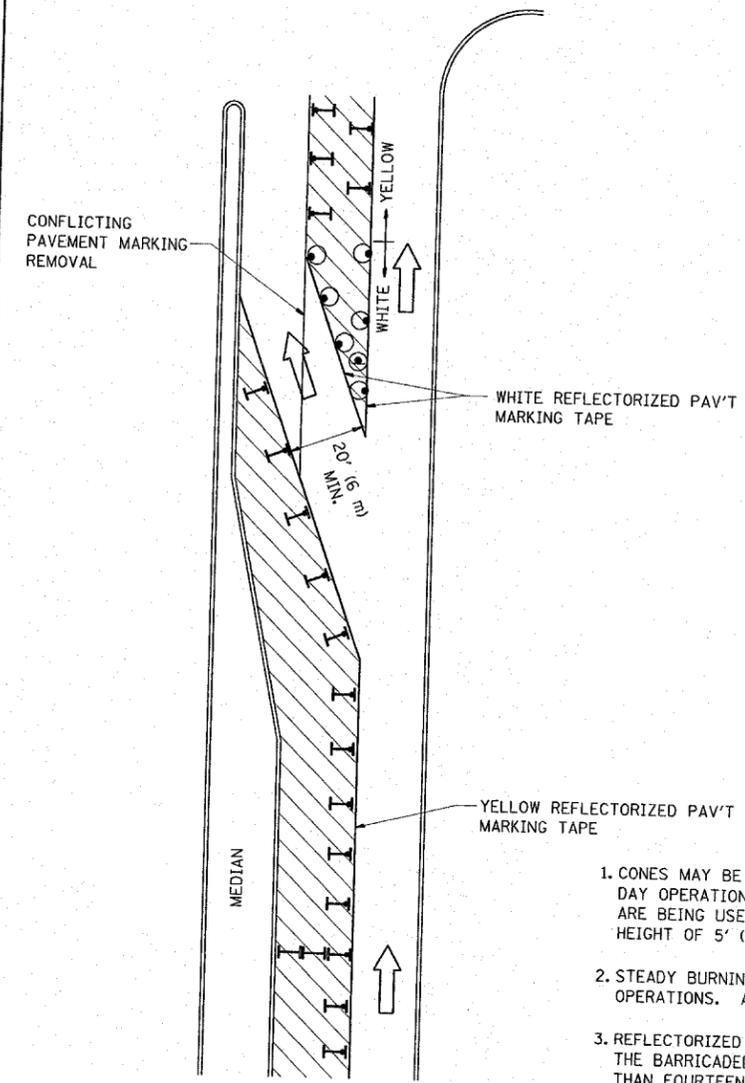
REVISED - R. BORO 10-31-06
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PRUNING FOR SAFETY AND
 EQUIPMENT CLEARANCE**

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

F.A. RTE. 3512	SECTION 86-RS-3	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 27
BM-20		CONTRACT NO.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



GENERAL NOTES

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

LEGEND

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

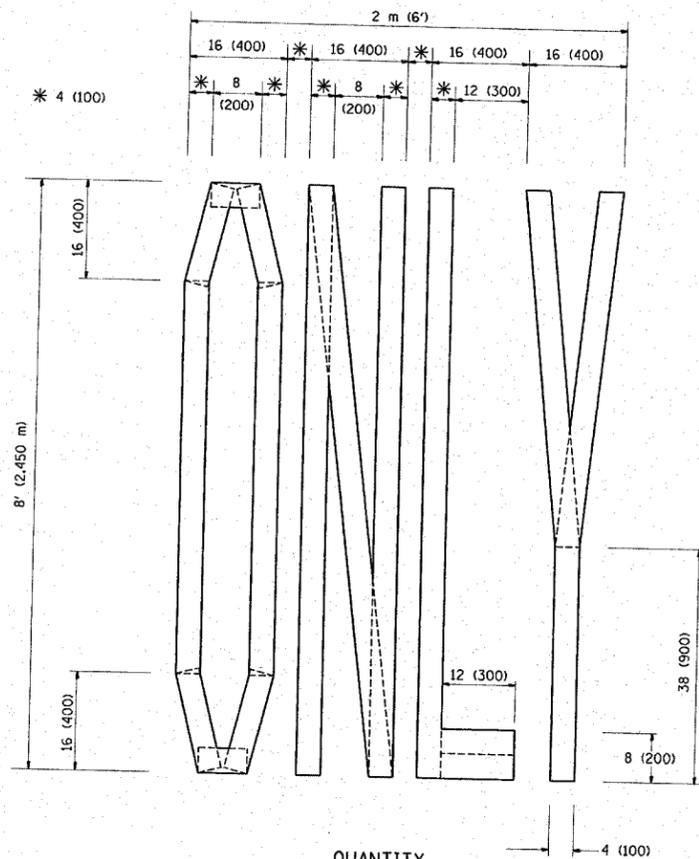
All dimensions are in Inches (millimeters) unless otherwise shown.

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		DRAWN -	REVISED - A. HOUSEH 11-07-95
	PLOT SCALE = 50,0000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-12-96
	PLOT DATE = 3/11/2008	DATE -	REVISED - T. RAMMACHER 01-06-00

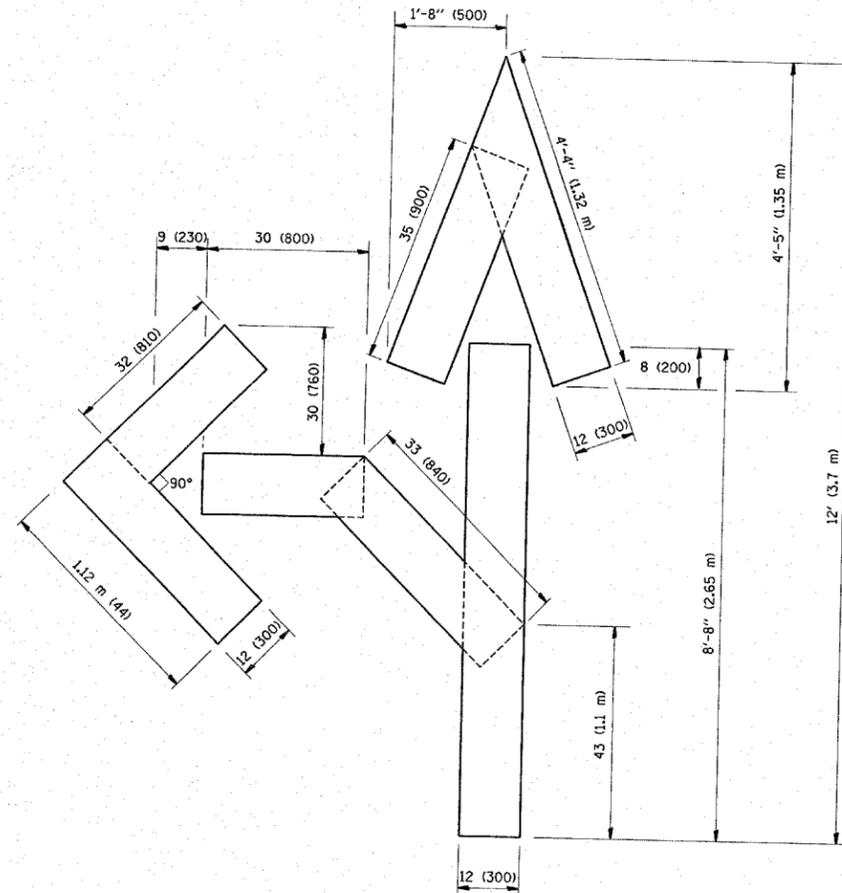
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

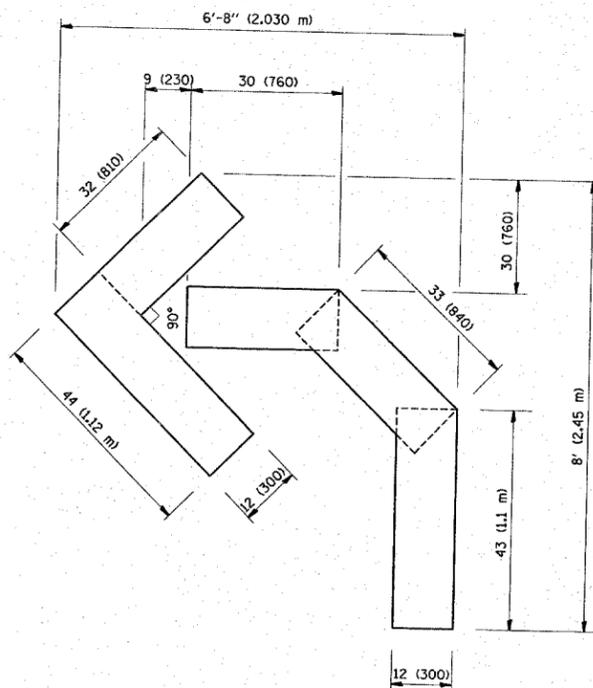
F. ALL RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	86Y-RS-3	COOK	35	28
	TC-14	CONTRACT NO.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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



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



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

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

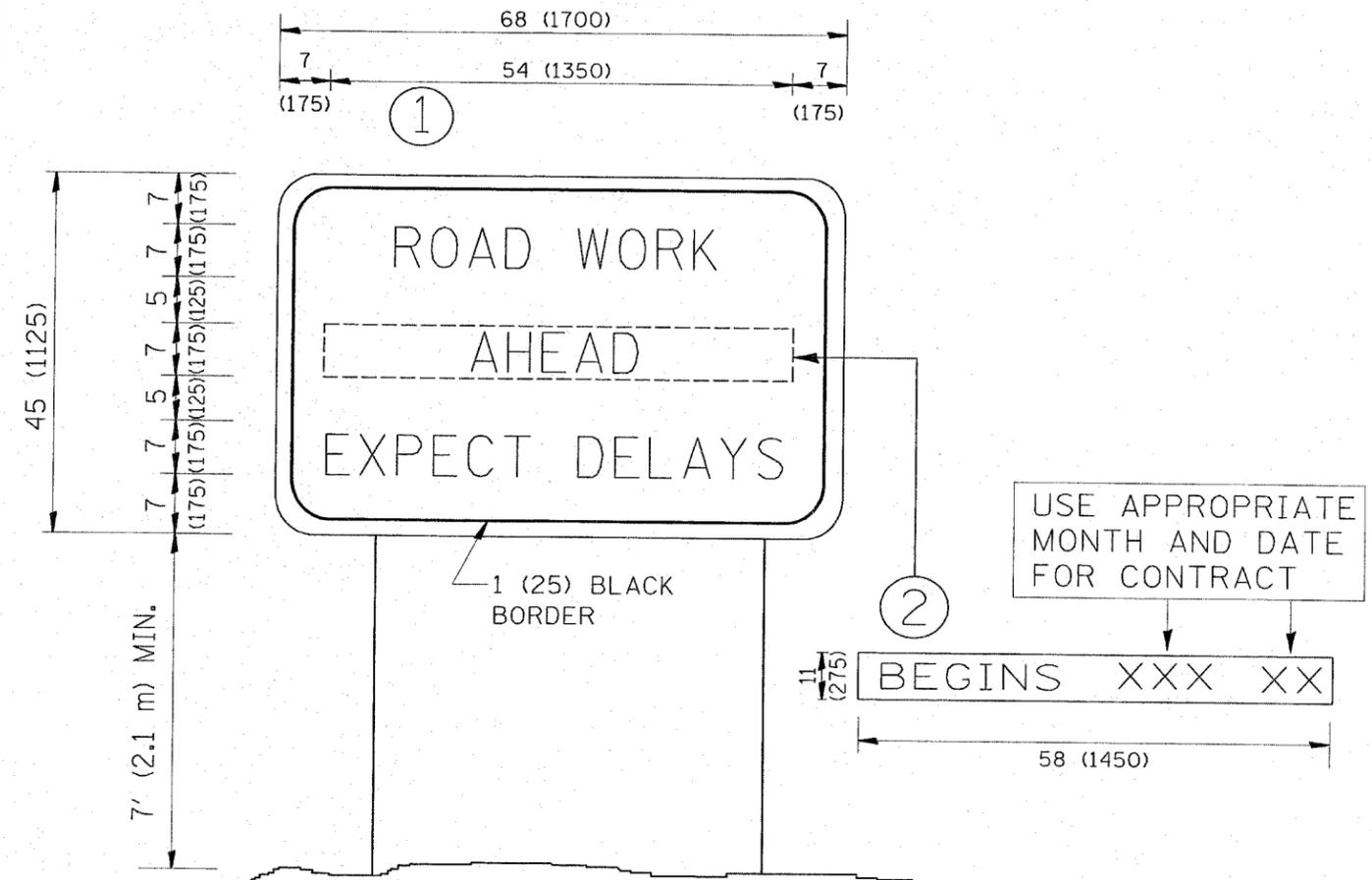
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		DRAWN -	REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 50,0000 "/ IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 3/11/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	86-RS-3	COOK	35	29
TC-16		CONTRACT NO.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

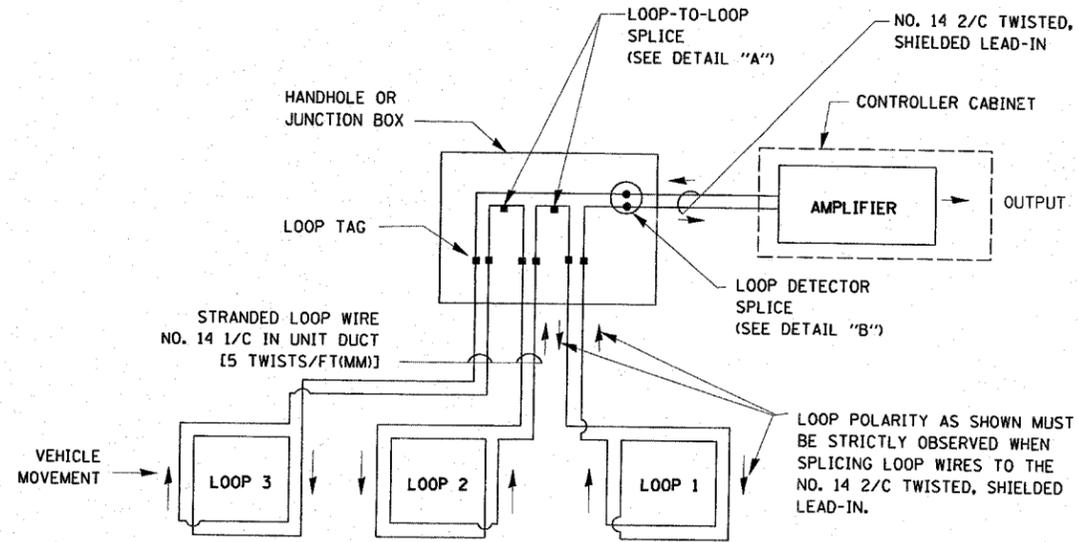
1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.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

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

FILE NAME = K:\dstatd22x34\to22.dgn	USER NAME = bauerdl	DESIGNED -	REVISED - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN	F.A.U. RTE. 3512	SECTION 86Y-RS-3	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 30		
	PLOT SCALE = 58,000 // IN.	DRAWN -	REVISED - R. MIRS 12-11-97			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		
	PLOT DATE = 3/11/2008	CHECKED -	REVISED - T. RAMMACHER 02-02-99			CONTRACT NO.						
		DATE -	REVISED - C. JUCIUS 01-31-07									

LOOP DETECTOR NOTES

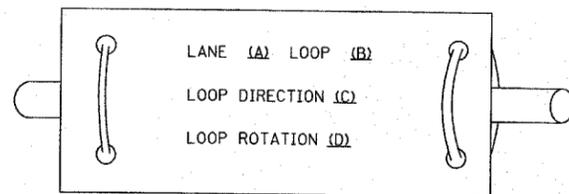
1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED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



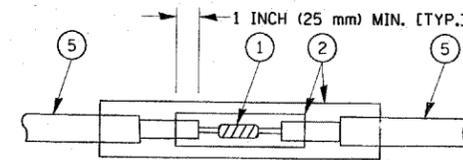
DETECTOR LOOP WIRING SCHEMATIC

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

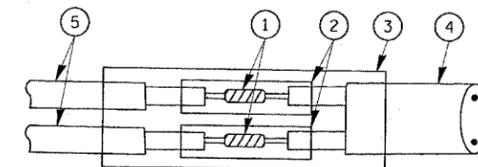
LOOP LEAD-IN CABLE TAG



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



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

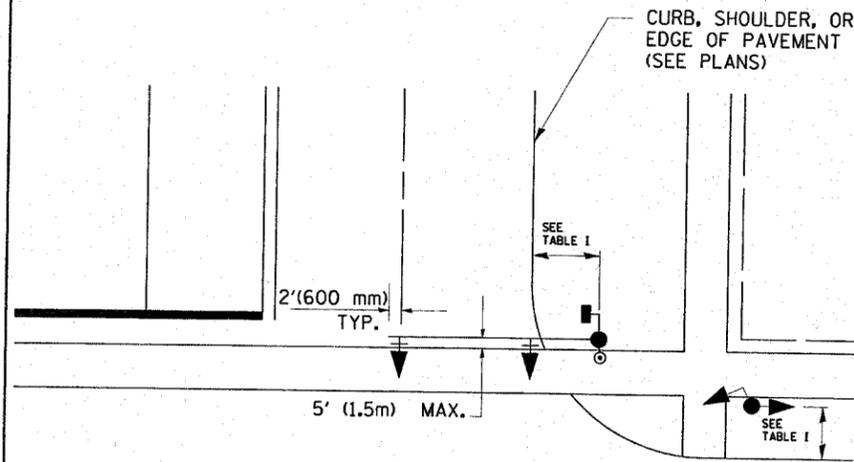
LOOP DETECTOR SPLICE

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

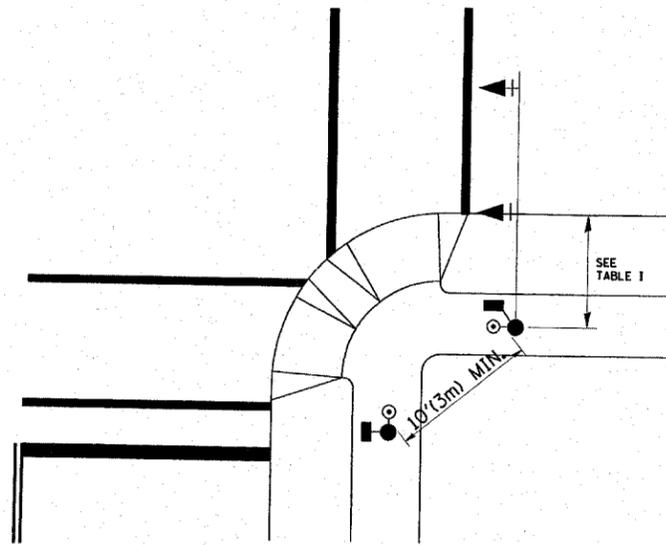
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PLOT SCALE = 50,00000' / IN.	CHECKED - D.A.Z.	REVISED - BUR. TRAFFIC 01-01-02	REVISED -			SCALE: NONE	SHEET NO. 1 OF 4 SHEETS	STA.	TO STA.	CONTRACT NO.	FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT
PLOT DATE = 3/11/2008	DATE = 05-30-00	REVISED -	REVISED -								

TRAFFIC SIGNAL MAST ARM AND POST

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



PEDESTRIAN SIGNAL PUSHBUTTON



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

NOTES:

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.

AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.

PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:
 A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
 B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
 C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
 D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
 E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK.
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

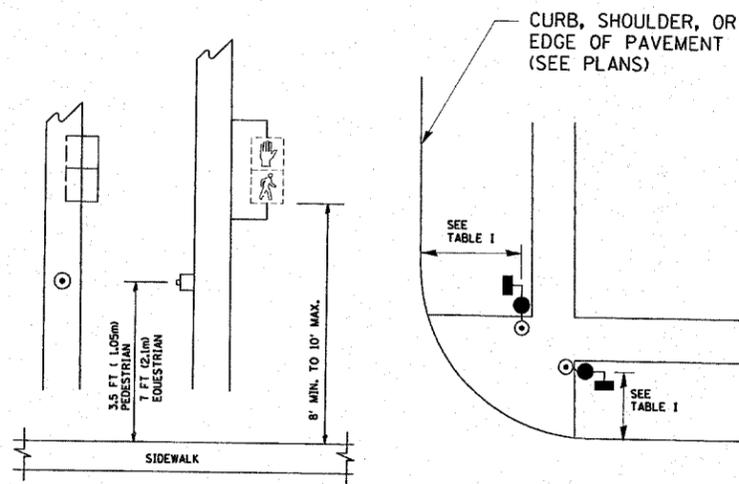


TABLE I

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

FILE NAME = K:\dsts\td22x34\ts05.dgn	USER NAME = bauerdl	DESIGNED - D.A.D.	REVISED - BUR. TRAFFIC 01-01-02
		DRAWN - R.W.P.	REVISED -
		CHECKED - D.A.Z.	REVISED -
		DATE -	REVISED -

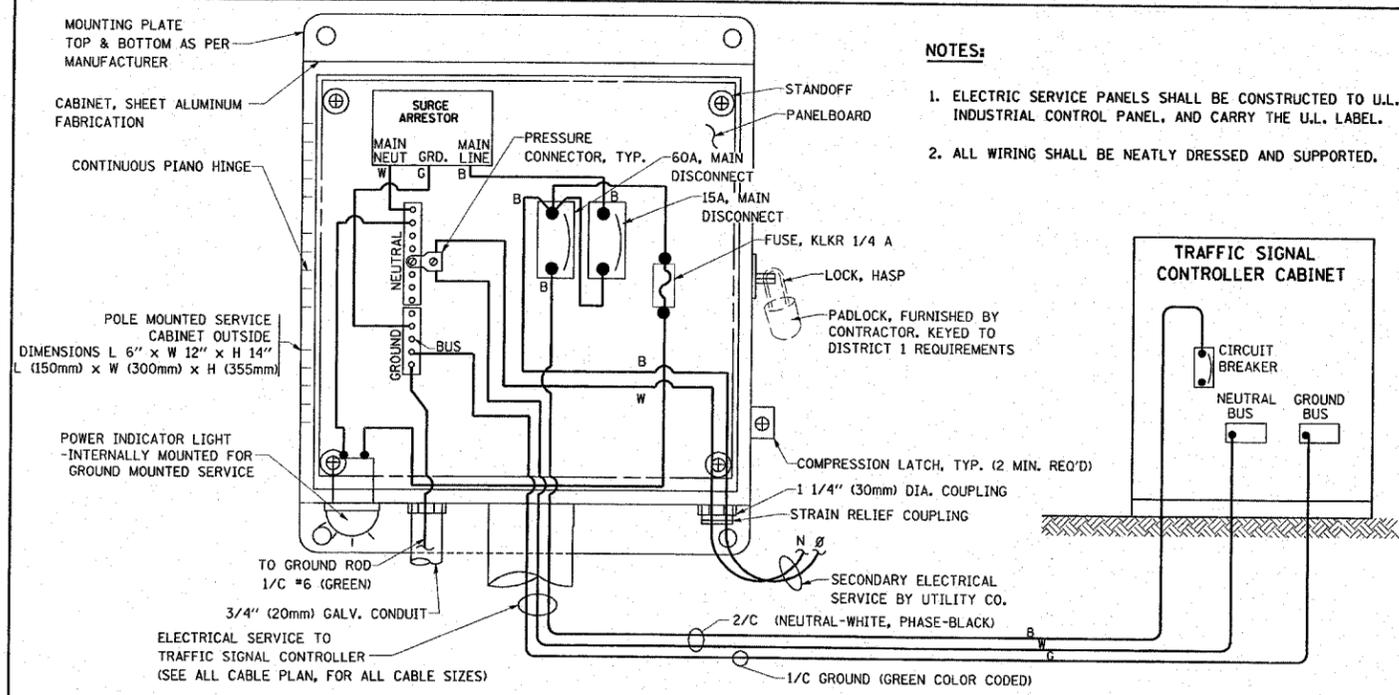
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

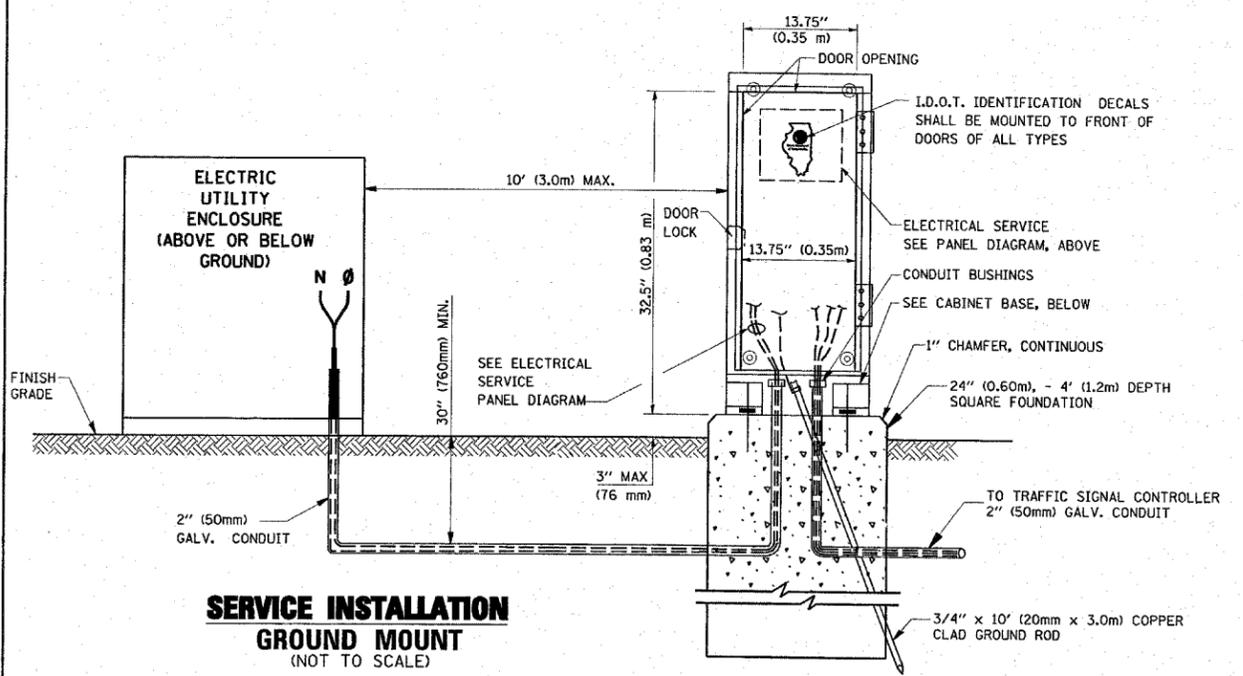
F.A.U. RTE. 3512	SECTION 86Y-RS-3	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 32
TS-05		CONTRACT NO.		

SCALE: NONE SHEET NO. 2 OF 4 SHEETS STA. TO STA.

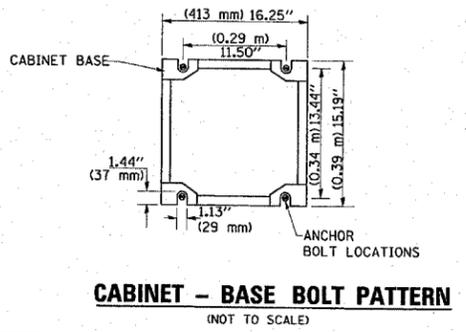
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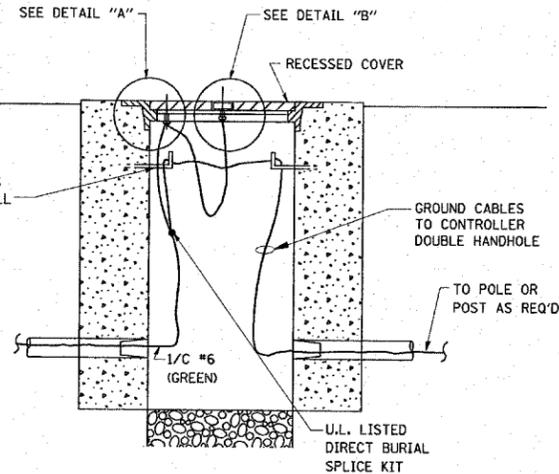
ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



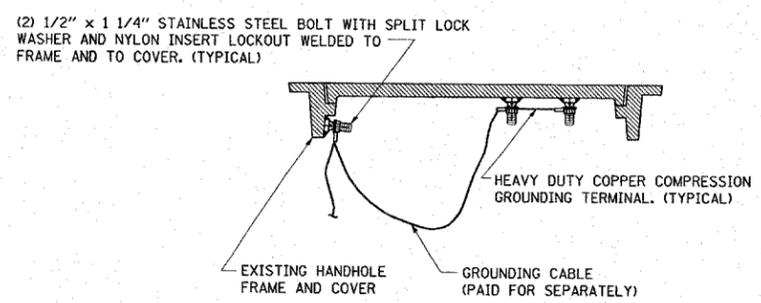
SERVICE INSTALLATION GROUND MOUNT
 (NOT TO SCALE)



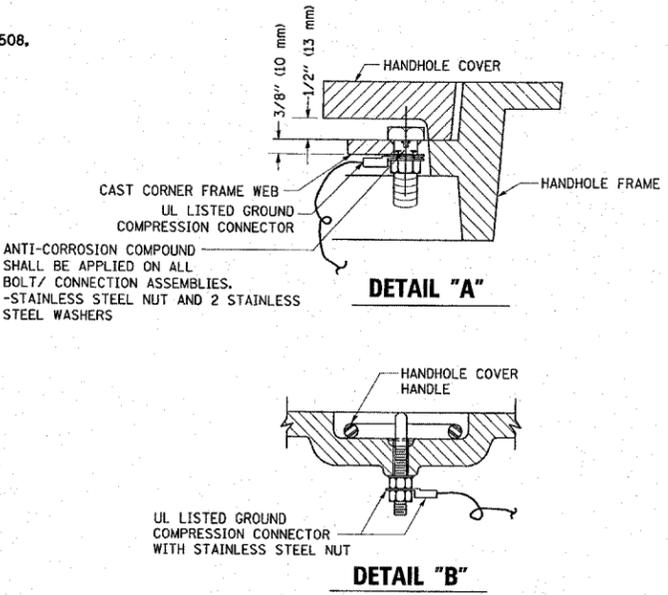
CABINET - BASE BOLT PATTERN
 (NOT TO SCALE)



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

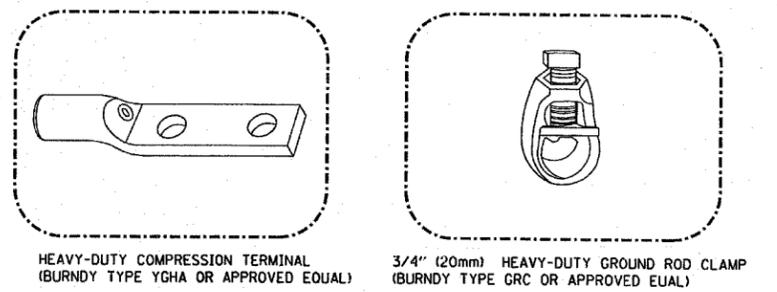


EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)

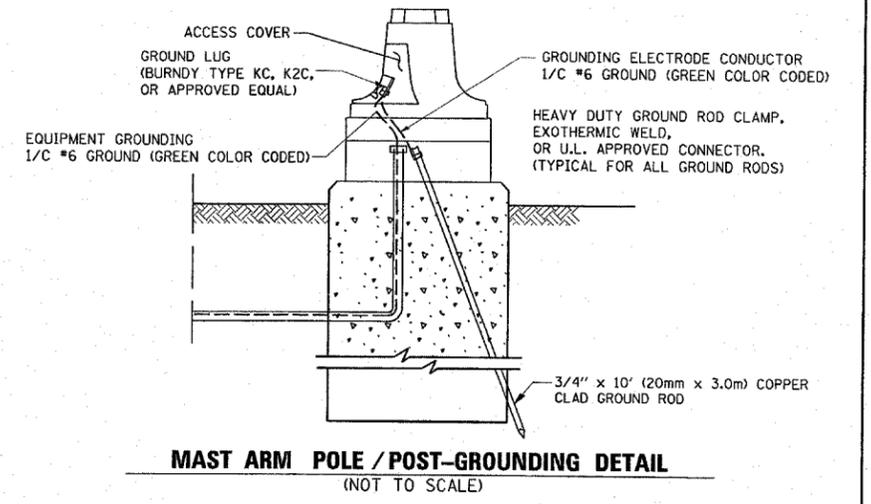


NOTES:
GROUNDING SYSTEM

- 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.
- 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.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

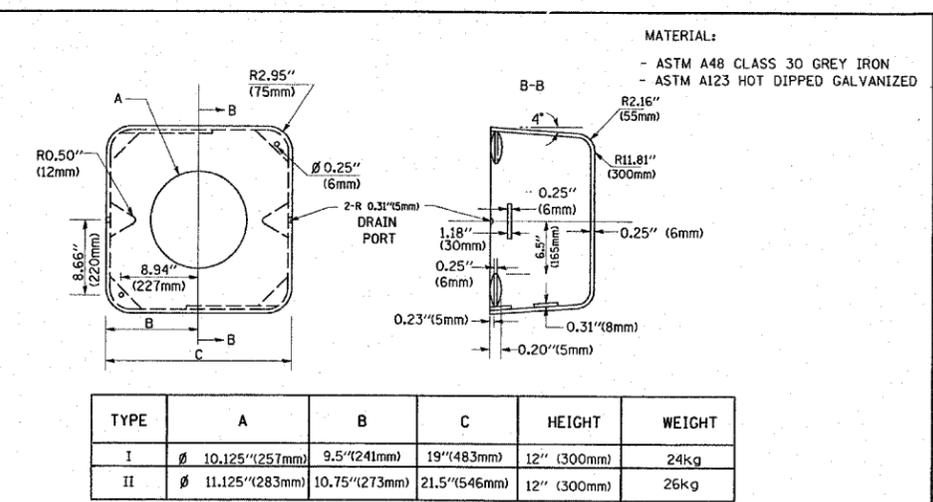
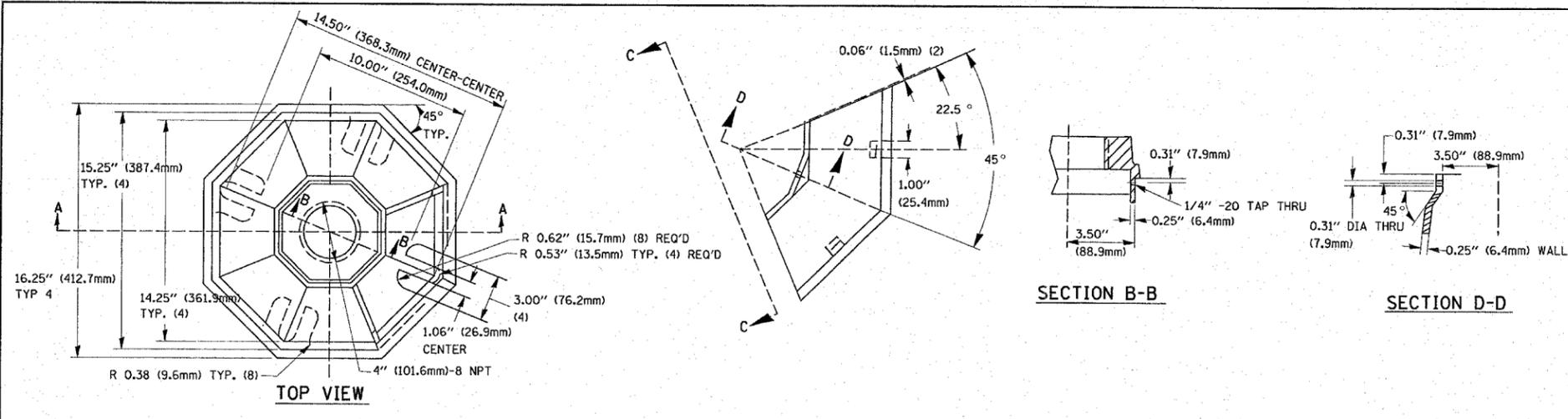


- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
 - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

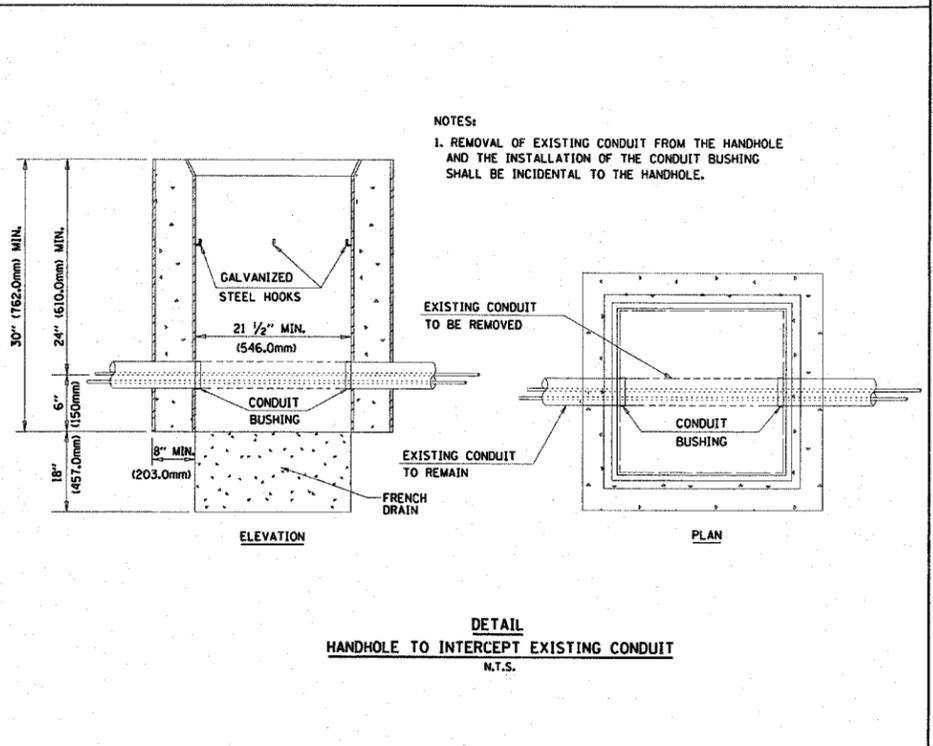
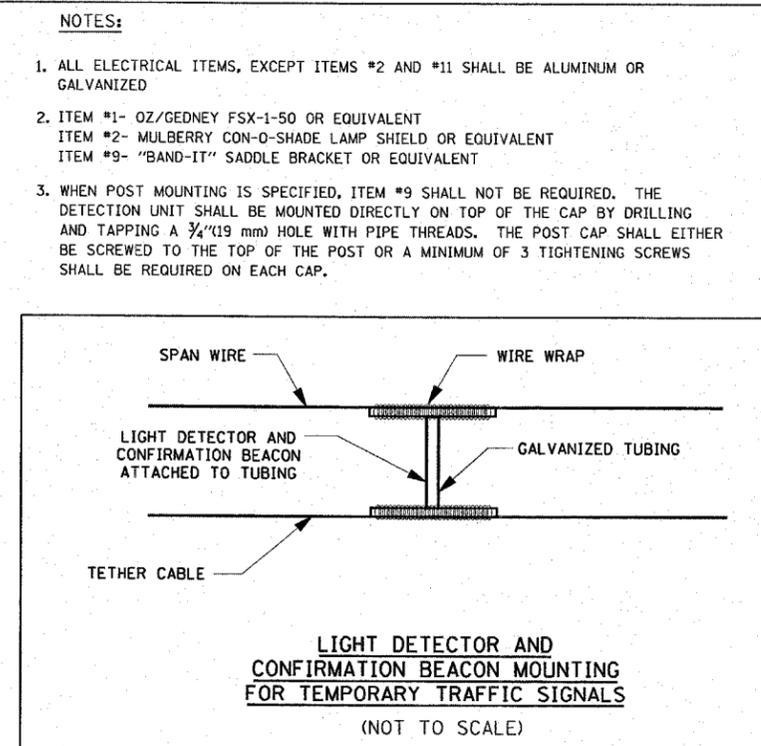
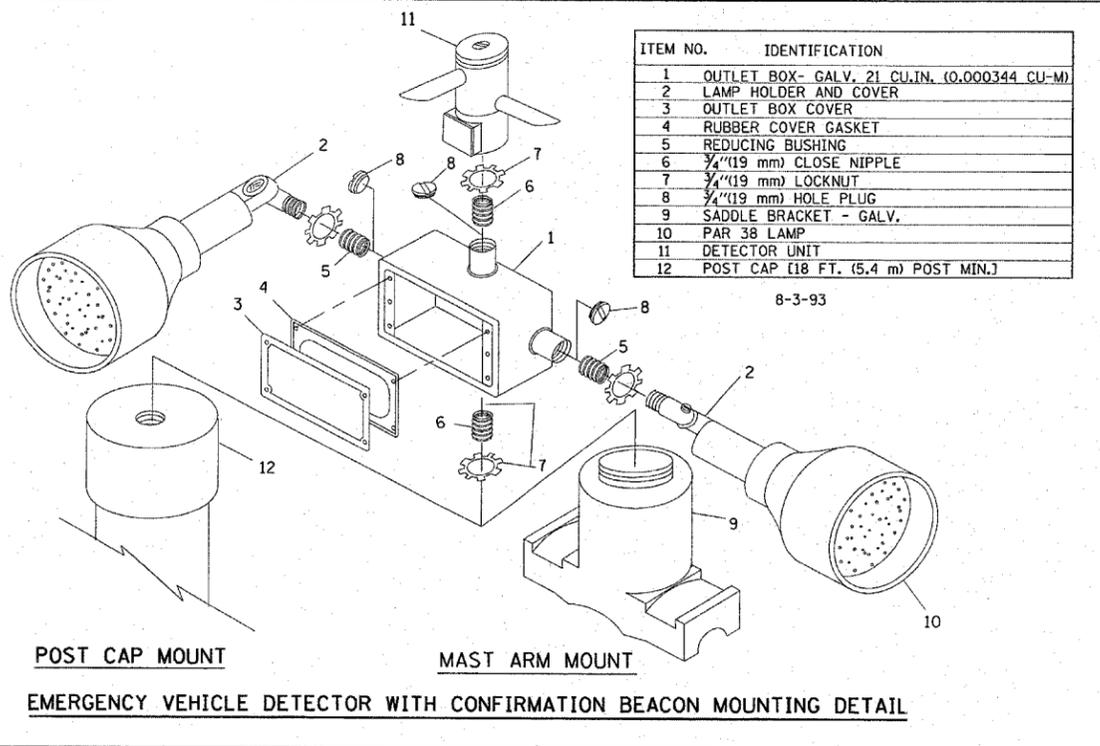
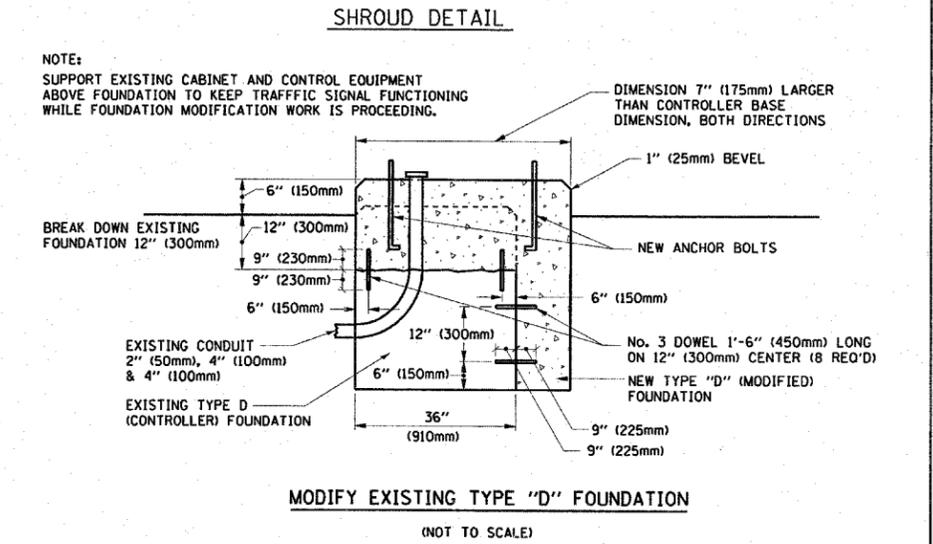
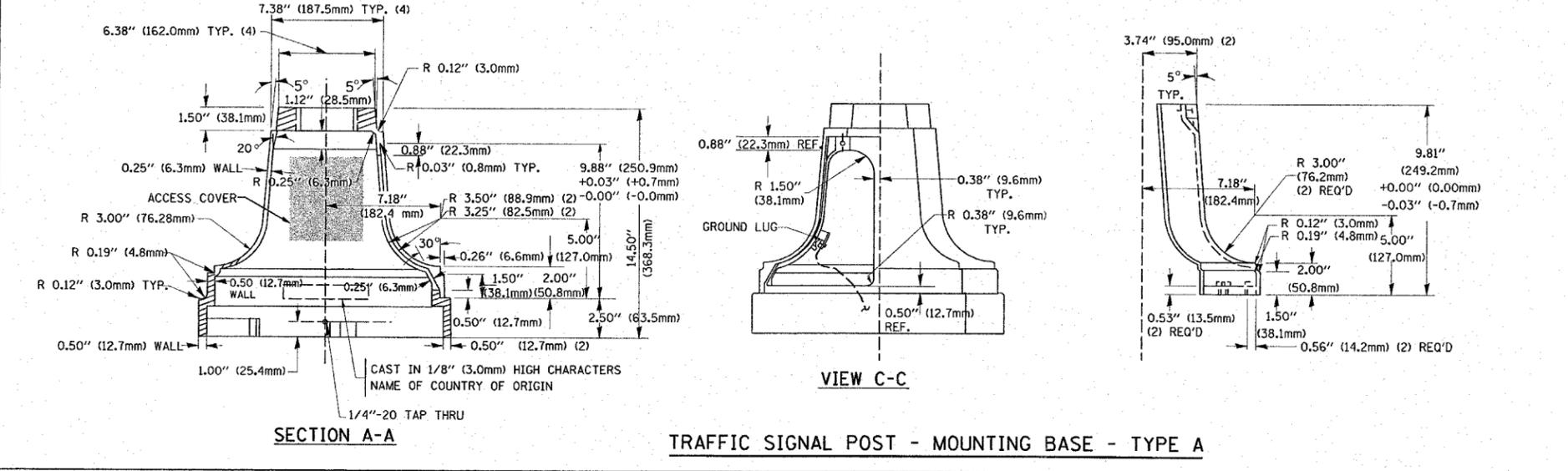


MAST ARM POLE / POST-GROUNDING DETAIL
 (NOT TO SCALE)

FILE NAME = K:\diststd22x34\ts05.dgn	USER NAME = bauerdl	DESIGNED - D.A.D.	REVISED - 03-15-01	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A.U. RTE. 3512	SECTION 86-RS-3	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 33	
PLOT SCALE = 50.0000' / IN.	DRAWN - R.W.P.	CHECKED - D.A.Z.	REVISED - BUR. TRAFFIC 01-01-02			SCALE: NONE	SHEET NO. 3 OF 4 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS	FED. AID PROJECT	CONTRACT NO.
PLOT DATE = 3/11/2008	DATE - 05-30-00	REVISED -	REVISED -								

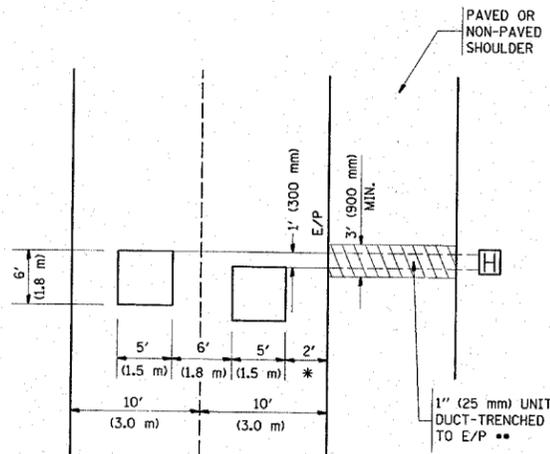


TYPE	A	B	C	HEIGHT	WEIGHT
I	∅ 10.125\"(257mm)	9.5\"(241mm)	19\"(483mm)	12\"(300mm)	24kg
II	∅ 11.125\"(283mm)	10.75\"(273mm)	21.5\"(546mm)	12\"(300mm)	26kg



LOOPS NEXT TO SHOULDERS

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

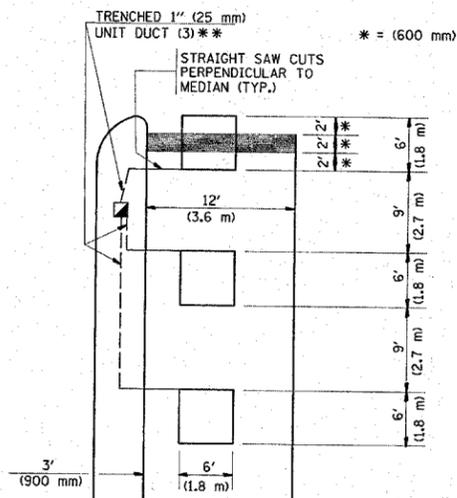


* = (600 mm)

** 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)**

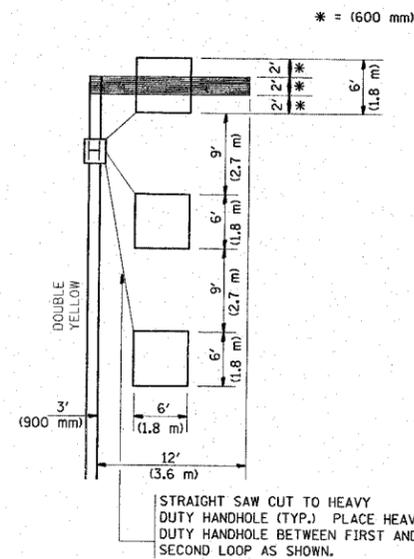
HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
8:4001 TO ENSURE THAT HANDHOLE
FITS IN MEDIAN.



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

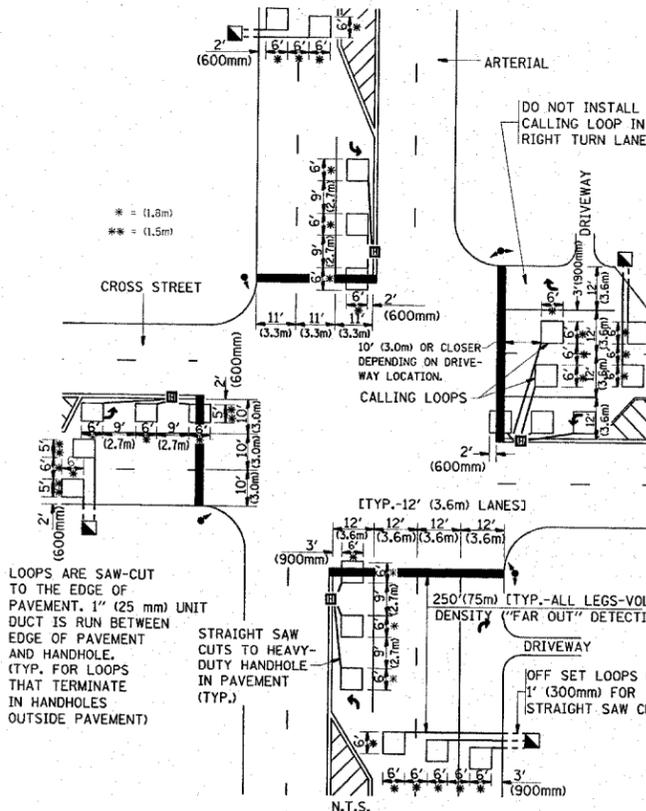
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



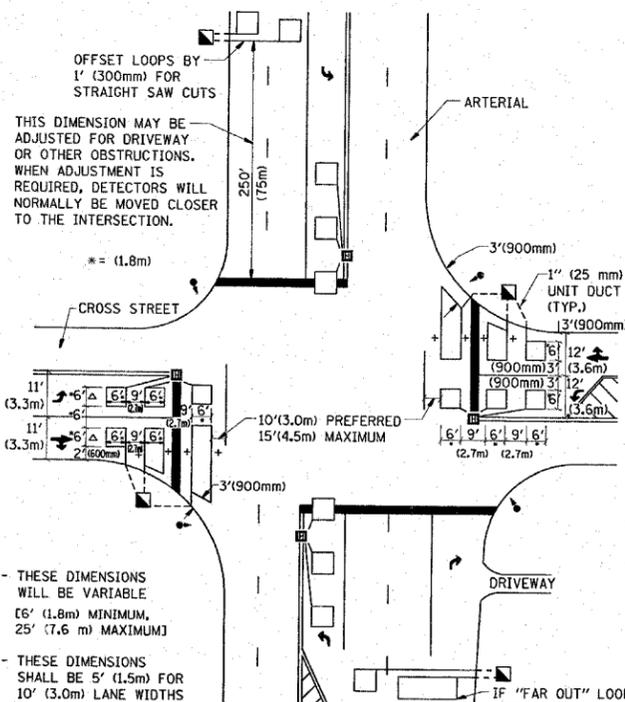
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**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 = K:\dist\td22x34\td07.dgn	USER NAME = bauerdl	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING		F.A.I. RTE. 3512	SECTION 86-RS-3	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 35
PLOT SCALE = 49.9999 / IN.	CHECKED - R.K.F.	DRAWN -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	TS-07		CONTRACT NO.	
PLOT DATE = 3/11/2008	DATE	REVISOR	REVISOR		FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT						