1-18-13 LETTING ITEM 107

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	1
	ILLINOIS	CONTRACT NO. 60M44		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

FAU RTE. 2937: TORRENCE AVE.
IL RTE. 83 (GLENWOOD DYER RD.) TO STEGER RD.
SECTION 2010–112–RS
PROJECT : HD-2937(050)
RESURFACING (3P)
COOK COUNTY

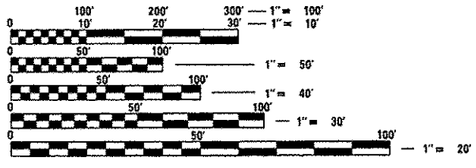
C–91–111–11

FOR INDEX OF SHEETS, SEE SHEET NO. 2

D–91–111–11

LOCATION OF SECTION INDICATED THUS:–

THE PROJECT IS LOCATED IN THE VILLAGE OF LYNWOOD, VILLAGE OF FORD HEIGHTS AND THE VILLAGE OF SAUK VILLAGE IN COOK COUNTY.

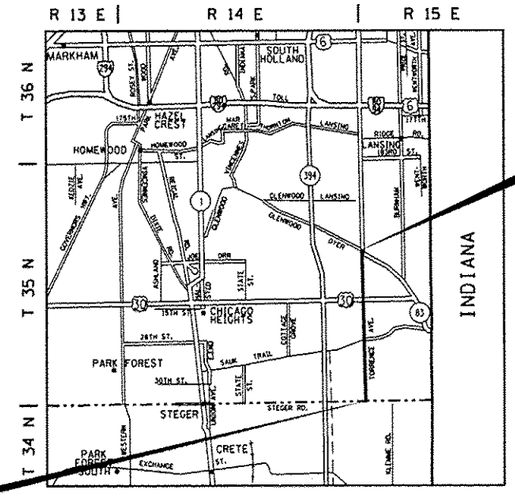


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

RESURFACING OMISSIONS

STA. 103+97 TO STA. 104+42
STA. 105+16 TO STA. 105+24
STA. 125+38 TO STA. 139+47
STA. 159+16 TO STA. 184+06



PROJECT BEGINS
STA. 00+16

PROJECT ENDS
STA. 198+09

BLOOM TOWNSHIP

GROSS LENGTH OF PROJECT= 19,793 FT. = 3.749 MILE
NET LENGTH OF PROJECT= 15,842 FT. = 3.000 MILE

TRAFFIC DATA

2010 ADT = 6,700
POSTED SPEED LIMIT = 35 – 50 MPH

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED October 19 20 12
John Fortmann for
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
Dec 7 20 12
John D. Baranzelli P.E. for
acting ENGINEER OF DESIGN AND ENVIRONMENT
Dec 7 20 12
William R. Frey for
acting DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PROJECT ENGINEER: KARI SMITH (847) 705–4437
PROJECT MANAGER: KEN ENG (847) 705–4247

CONTRACT NO. 60M44

INDEX OF SHEETS

HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-03	CLASS C AND D PATCHES
482011-03	HMA SHOULDER STRIPS/SHOULDERS WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
701011-02	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-05	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701901-03	TRAFFIC CONTROL DEVICES
780001-03	TYPICAL PAVEMENT MARKINGS

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, THE VILLAGE OF LYNWOOD, VILLAGE OF FORD HEIGHTS AND THE VILLAGE OF SAUK VILLAGE.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.

ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

LOCATION OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (OR COMBINATION CURB AND GUTTER (THE TYPE SPECIFIED ON THE PLANS)), WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE ENGINEER SHALL CONTACT MS. PATRICE HARRIS, AREA TRAFFIC FIELD ENGINEER, AT (708) 597-9800 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM THE BUREAU OF CONSTRUCTION.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

FOR FRAMES AND LIDS ADJUSTMENT WITHOUT MILLING, REUSE EXISTING FRAME AND LID UNLESS OTHERWISE SPECIFIED IN THE PLANS.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN THE PLANS.

PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE, TYPE III AND ITS REMOVAL SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKING.

WHEN THE MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1½INCHES (40 mm) WHERE THE SPEED LIMIT IS 40 MPH (80 km/h) OR LESS AND 1 INCH (25 mm) WHERE THE SPEED LIMIT IS GREATER THAN 40 MPH (80 km/h). WITH WRITTEN APPROVAL OF THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 mm) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) ACCORDING TO THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TORRENCE AVE. (IL RTE. 83 (GLENWOOD DYER RD.) TO STEGER RD.)
INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	2
		CONTRACT NO. 60M44		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		85% FEDERAL 15% STATE 0005					
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	60	60					
25200110	SODDING, SALT TOLERANT	SQ YD	60	60					
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	57	57					
40600300	AGGREGATE (PRIME COAT)	TON	285	285					
40600400	MIXTURE FOR CRACKS, JOINTS,	TON	107	107					
	AND FLANGEWAYS								
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	239	239					
40600827	POLYMERIZED LEVELING BINDER (MACHINE	TON	2694	2694					
	METHOD), IL-4.75, N50								
40600895	CONSTRUCTING TEST STRIP	EACH	2	2					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT	SQ YD	1216	1216					
	JOINT								
40600985	PORTLAND CEMENT CONCRETE SURFACE	SQ YD	580	580					
	REMOVAL - BUTT JOINT								
40601005	HOT-MIX ASPHALT REPLACEMENT OVER	TON	71	71					
	PATCHES								
40603335	HOT-MIX ASPHALT SURFACE COURSE,	TON	6172	6172					
	MIX "D", N50								
	* SPECIALTY ITEMS								

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		85% FEDERAL 15% STATE 0005					
42001300	PROTECTIVE COAT	SQ YD	198	198					
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	234	234					
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	54383	54383					
44000600	SIDEWALK REMOVAL	SQ FT	234	234					
44002216	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 4"	SQ YD	915	915					
44003510	MEDIAN REMOVAL PARTIAL DEPTH	SQ FT	4538	4538					
44022029	PARTIAL DEPTH REMOVAL 3"	SQ YD	1213	1213					
44201753	CLASS D PATCHES, TYPE II, 9 INCH	SQ YD	721	721					
44201757	CLASS D PATCHES, TYPE III, 9 INCH	SQ YD	200	200					
44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQ YD	655	655					
44201803	CLASS D PATCHES, TYPE II, 13 INCH	SQ YD	200	200					
44201807	CLASS D PATCHES, TYPE III, 13 INCH	SQ YD	300	300					
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	445	445					
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	24	24					

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TORRENCE AVE. (IL RTE. 83 (GLENWOOD DYER RD.) TO STEGER RD.)
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 1 OF 3 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	3
		CONTRACT NO. 60M44		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE: 85% FEDERAL 15% STATE 0005				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6				
67100100	MOBILIZATION	L SUM	1	1				
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1				
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1				
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	1				
70300100	SHORT TERM PAVEMENT MARKING	FOOT	11819	11819				
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SQ FT	939	939				
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	55343	55343				
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	2515	2515				
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	368	368				
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	888	888				
	* SPECIALTY ITEMS							

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE: 85% FEDERAL 15% STATE 0005					
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	539	539					
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	22838	22838					
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	939	939					
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	55343	55343					
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2515	2515					
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	368	368					
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	888	888					
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	539	539					
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	685	685					
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	685	685					
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	1164	1164					

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE: 85% FEDERAL 15% STATE 0005					
* 89502378	REBUILD EXISTING HANDHOLE TO HEAVY-DUTY HANDHOLE	EACH	2	2					
X2020110	GRADING AND SHAPING SHOULDERS	UNIT	219	219					
X4400100	PORTLAND CEMENT CONCRETE SURFACE REMOVAL (VARIABLE DEPTH)	SQ YD	3463	3463					
Δ X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	2000	2000					
X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	4	4					
XZ043900	PREFORMED JOINT FILLER REMOVAL	FOOT	3638	3638					
Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	515	515					
Δ Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	30	30					
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	154.2	154.2					
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1					

* SPECIALTY ITEMS
Δ 100% STATE

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE: 85% FEDERAL 15% STATE 0005					

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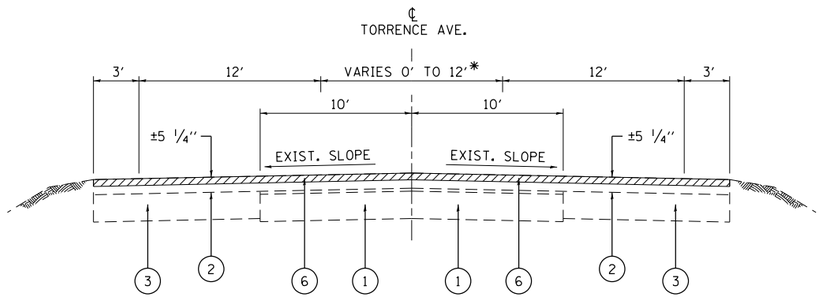
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TORRENCE AVE. (IL RTE. 83 (GLENWOOD DYER RD.) TO STEGER RD.)
SUMMARY OF QUANTITIES

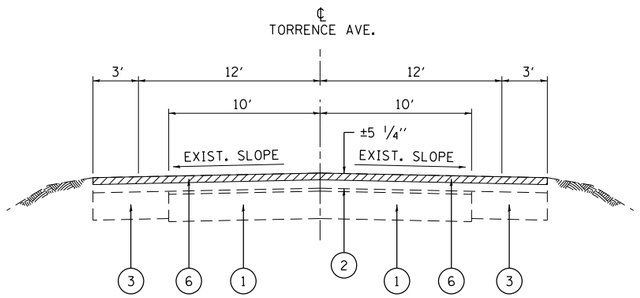
SCALE: | SHEET NO. 3 OF 3 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	5
		CONTRACT NO. 60M44		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



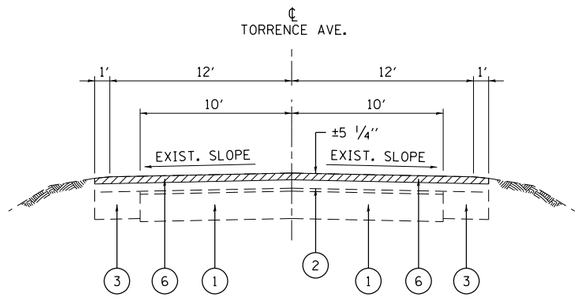
EXISTING TYPICAL CROSS SECTION
TORRENCE AVE. (STEGER RD. TO SAUK TRAIL)

STA. 0+16 TO STA. 4+93
STA. 47+47 TO STA. 67+23



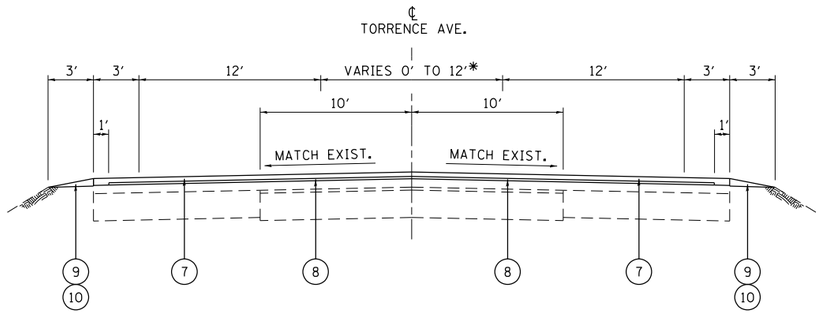
EXISTING TYPICAL CROSS SECTION
TORRENCE AVE. (STEGER RD. TO SAUK TRAIL)

STA. 4+93 TO STA. 47+47



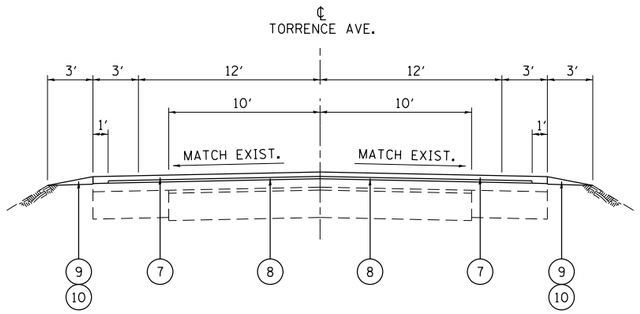
EXISTING TYPICAL CROSS SECTION
TORRENCE AVE. (SAUK TRAIL TO LINCOLN HWY.)

STA. 93+20 TO STA. 125+38



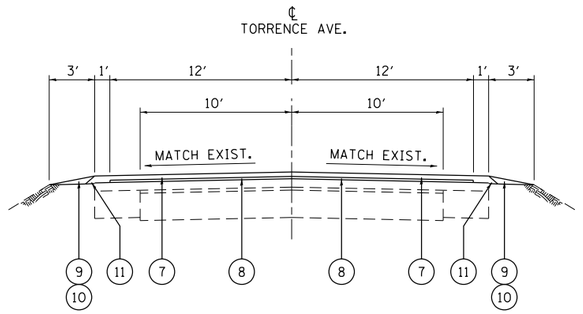
PROPOSED TYPICAL CROSS SECTION
TORRENCE AVE. (STEGER RD. TO SAUK TRAIL)

STA. 0+16 TO STA. 4+93
STA. 47+47 TO STA. 67+23



PROPOSED TYPICAL CROSS SECTION
TORRENCE AVE. (STEGER RD. TO SAUK TRAIL)

STA. 4+93 TO STA. 47+47



PROPOSED TYPICAL CROSS SECTION
TORRENCE AVE. (SAUK TRAIL TO LINCOLN HWY.)

STA. 93+20 TO STA. 125+38

LEGEND

1. EXISTING P.C.C. PAVEMENT, ± 9″
2. EXISTING H.M.A. PAVEMENT, ± 5 1/4″
3. EXISTING H.M.A. BASE COURSE WIDENING, 9″
4. EXISTING H.M.A. PAVEMENT, ± 4″
5. EXISTING AGGREGATE SHOULDER
6. PROPOSED H.M.A. SURFACE REMOVAL, 2 1/4″
7. PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1 1/2″
8. PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4″
9. PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
10. PROPOSED GRADING AND SHAPING SHOULDERS
11. PROPOSED SAFETY EDGE SHOULDER

NOTES

* SEE ROADWAY AND PAVEMENT MARKING PLAN SHEETS FOR THE LOCATIONS OF THE PAINTED MEDIANS, LEFT TURN / BIDIRECTIONAL LEFT TURN LANES.

** RIGHT TURN LANE FROM STA. 146+66 TO STA. 148+27. SEE ROADWAY AND PAVEMENT MARKING PLAN SHEETS FOR MORE INFORMATION.

*** 8′ HMA SHOULDER FROM APPROX. STA. 182+81, RT TO APPROX. STA. 187+51, RT.

OMISSION

FROM STA. 125+38 TO STA. 139+47.

FROM STA. 159+16 TO STA. 184+06.

PATCHING SEQUENCE OF CONSTRUCTION

(PATCHING FIRST - FROM STA. 139+47 TO STA. 195+30)
(MILLING FIRST - FROM STA. 0+16 TO STA. 125+38)

HOT–MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS
PAVEMENT RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, (IL-9.5 mm)	4% @ 50 GYR.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	3.5% @ 50 GYR.
SHOULDER RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, (IL-9.5 mm), 1 1/2″	4% @ 50 GYR.
LEVELING BINDER (MM), N70 (IL-9.5mm), 2″	
PATCHING	
CLASS D PATCHES (HMA BINDER IL-19 mm), 9″ & 13″	4% @ 70 GYR.
LEVELING BINDER (MM), N70 (IL-9.5mm), 3″	4% @ 70 GYR.
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19mm)	4% @ 70 GYR.

NOTES:

FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS

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

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" 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 SPECIAL PROVISIONS.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

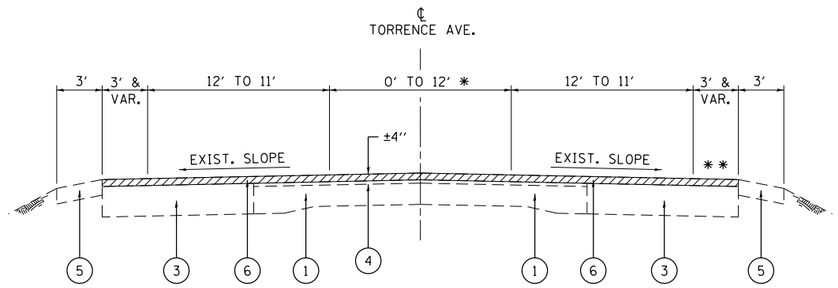
TORRENCE AVE. (IL RTE. 83 (GLENWOOD DYER RD.) TO STEGER RD.)
TYPICAL SECTIONS

SCALE: NONE | SHEET NO. 1 OF 4 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	6

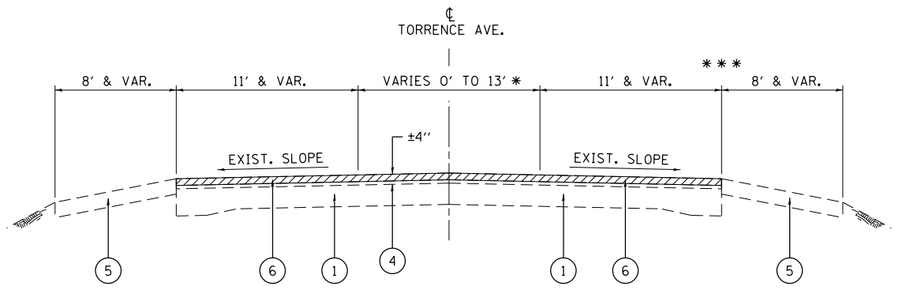
CONTRACT NO. 60M44

ILLINOIS FED. AID PROJECT



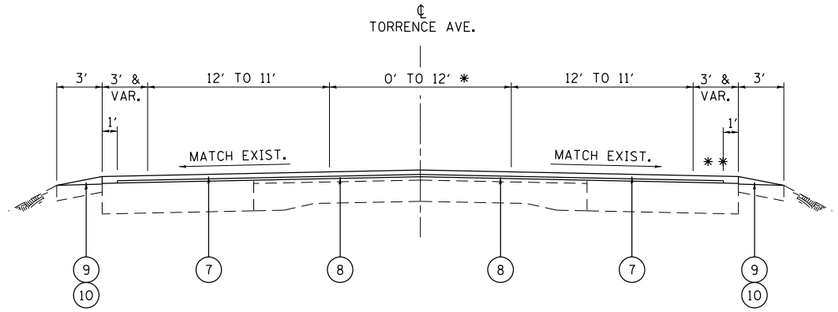
EXISTING TYPICAL CROSS SECTION
TORRENCE AVE. (LINCOLN HWY. TO GLENWOOD DYER RD.)

STA. 139+47 TO STA. 157+45



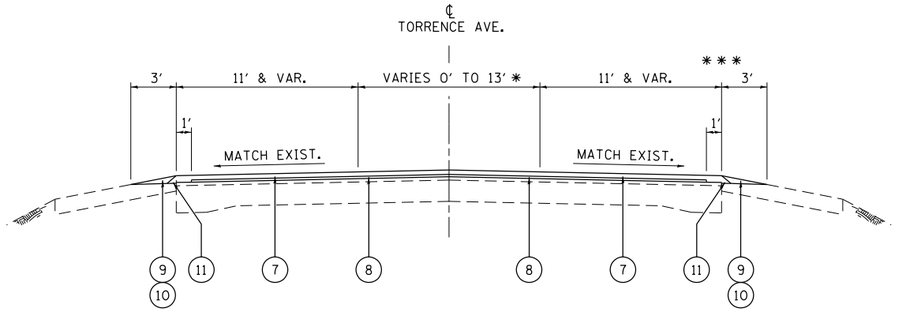
EXISTING TYPICAL CROSS SECTION
TORRENCE AVE. (LINCOLN HWY. TO GLENWOOD DYER RD.)

STA. 157+45 TO STA. 159+16
STA 184+06 TO STA. 195+30



PROPOSED TYPICAL CROSS SECTION
TORRENCE AVE. (LINCOLN HWY. TO GLENWOOD DYER RD.)

STA. 139+47 TO STA. 157+45



PROPOSED TYPICAL CROSS SECTION
TORRENCE AVE. (LINCOLN HWY. TO GLENWOOD DYER RD.)

STA. 157+45 TO STA. 159+16
STA 184+06 TO STA. 195+30

LEGEND

1. EXISTING P.C.C. PAVEMENT, ± 9″
2. EXISTING H.M.A. PAVEMENT, ± 5 1/4″
3. EXISTING H.M.A. BASE COURSE WIDENING, 9″
4. EXISTING H.M.A. PAVEMENT, ± 4″
5. EXISTING AGGREGATE SHOULDER
6. PROPOSED H.M.A. SURFACE REMOVAL, 2 1/4″
7. PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1 1/2″
8. PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4″
9. PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
10. PROPOSED GRADING AND SHAPING SHOULDERS
11. PROPOSED SAFETY EDGE SHOULDER

NOTES

* SEE ROADWAY AND PAVEMENT MARKING PLAN SHEETS FOR THE LOCATIONS OF THE PAINTED MEDIANS, LEFT TURN / BIDIRECTIONAL LEFT TURN LANES.

* * RIGHT TURN LANE FROM STA. 146+66 TO STA. 148+27. SEE ROADWAY AND PAVEMENT MARKING PLAN SHEETS FOR MORE INFORMATION.

* * * 8′ HMA SHOULDER FROM APPROX. STA. 182+81, RT TO APPROX. STA. 187+51, RT.

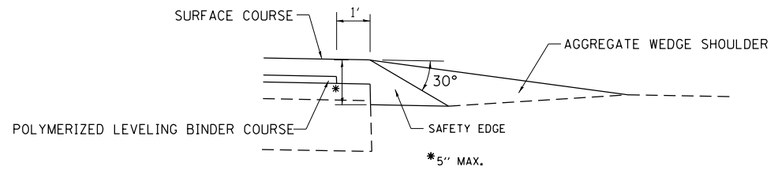
OMISSION

FROM STA. 125+38 TO STA. 139+47.

FROM STA. 159+16 TO STA. 184+06.

PATCHING SEQUENCE OF CONSTRUCTION

(PATCHING FIRST - FROM STA. 139+47 TO STA. 195+30)
(MILLING FIRST - FROM STA. 0+16 TO STA. 125+38)



SAFETY EDGE DETAIL

SAFETY EDGE TREATMENT SHALL BE APPLIED TO PAVED SHOULDER OF 1 FT OR LESS THAT IS ADJACENT TO AGGREGATE / EARTH SHOULDER.

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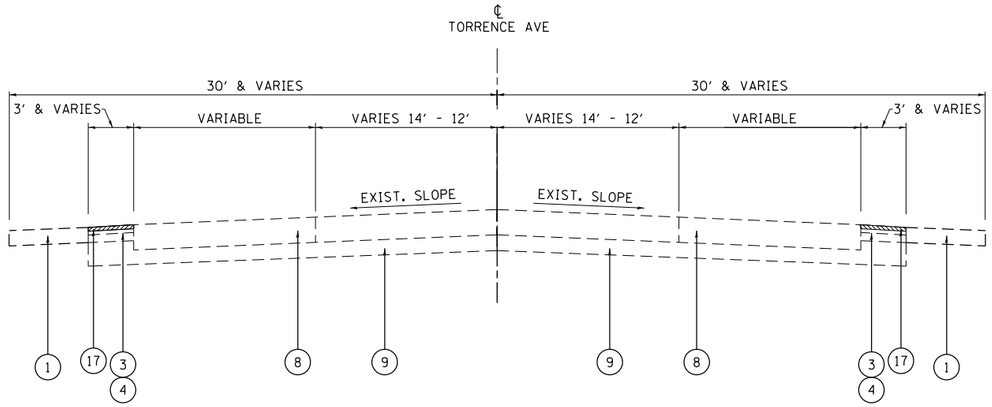
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TORRENCE AVE. (IL RTE. 83 (GLENWOOD DYER RD.) TO STEGER RD.)
TYPICAL SECTIONS

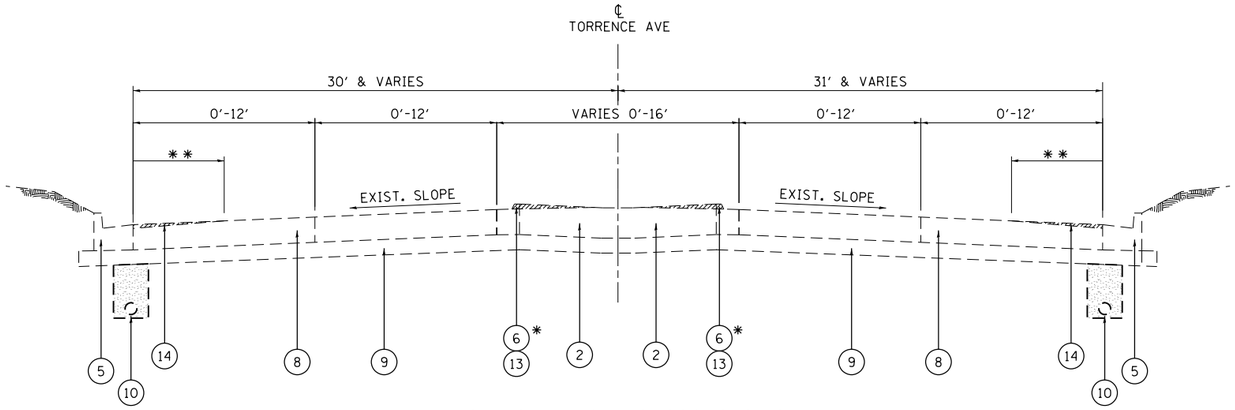
SCALE: NONE | SHEET NO. 2 OF 4 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	7
		CONTRACT NO. 60M44		
	ILLINOIS FED. AID PROJECT			



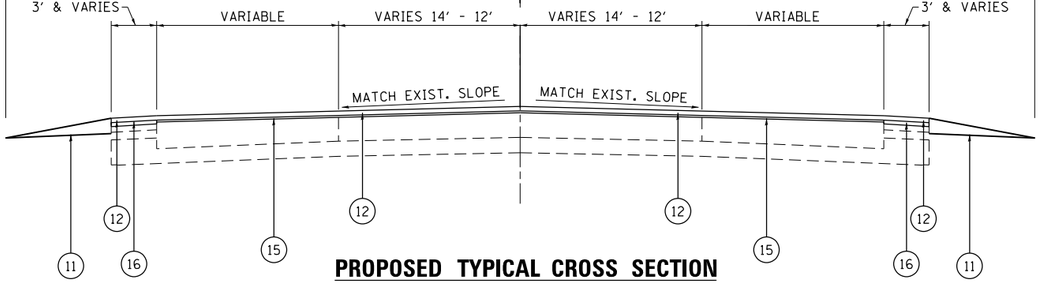
EXISTING TYPICAL CROSS SECTION
TORRENCE AVE. (IL–83 [GLENWOOD DYER RD.] TO STEGER RD.)

STA. 67+23 TO STA. 70+16



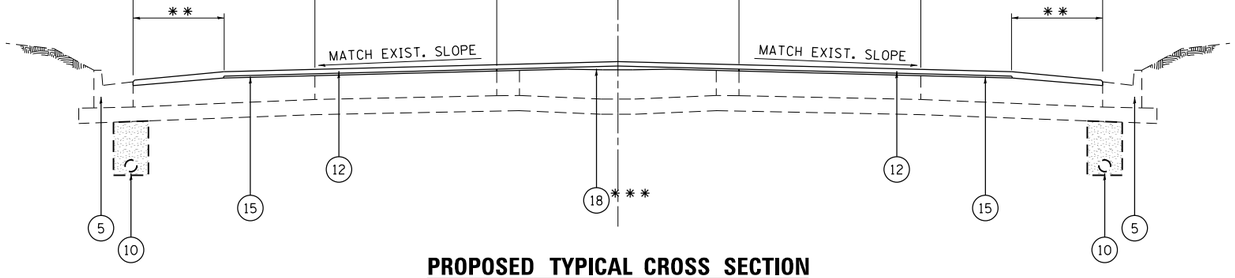
EXISTING TYPICAL CROSS SECTION
TORRENCE AVE. (IL–83 [GLENWOOD DYER RD.] TO STEGER RD.)

STA. 70+16 TO STA. 74+94



PROPOSED TYPICAL CROSS SECTION
TORRENCE AVE. (IL–83 [GLENWOOD DYER RD.] TO STEGER RD.)

STA. 67+23 TO STA. 70+16



PROPOSED TYPICAL CROSS SECTION
TORRENCE AVE. (IL–83 [GLENWOOD DYER RD.] TO STEGER RD.)

STA. 70+16 TO STA. 74+94

LEGEND

(1)	EXISTING 7' AGGREGATE SHOULDER, TYPE B, ± 6"	(10)	EXISTING 6" PIPE UNDERDRAINS
(2)	EXISTING BITUMINOUS BASE COURSE, ± 12"	(11)	PROPOSED 3' AGGREGATE WEDGE SHOULDER, TYPE B
(3)	EXISTING BITUMINOUS SURFACE COARSE, ± 1½"	(12)	PROPOSED H.M.A. SURFACE COURSE, MIX "D", N50, 1 ½"
(4)	EXISTING BITUMINOUS BINDER COURSE, ± 1½"	(13)	PROPOSED MEDIAN REMOVAL, PARTIAL DEPTH
(5)	EXISTING COMB. CONC. CURB & GUTTER, TYPE B-6.24	(14)	PROPOSED P.C.C. SURFACE REMOVAL (VAR. DEPTH)
(6)	EXISTING COMB. CONC. CURB & GUTTER, TYPE M-2.12	(15)	PROPOSED POLY LEVEL BINDER (MACHINE METHOD), IL-4.75, N50, 1"
(7)	EXISTING CONCRETE MEDIAN TYPE C-4	(16)	PROPOSED LEVELING BINDER (MM), N70, 2"
(8)	EXISTING P.C.C. PAVEMENT, ± 9"	(17)	PROPOSED H.M.A. SURFACE REMOVAL, 1"
(9)	EXISTING SUB-BASE GRANULAR MATERIAL, TYPE B, 6"	(18)	PROPOSED LEVELING BINDER (MM), N70, VAR. DEPTH

NOTES

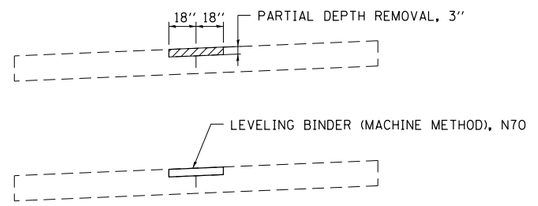
* COST OF REMOVAL OF PORTION OF P.C.C. CURB ABOVE GUTTER TO BE INCLUDED WITH MEDIAN REMOVAL, PARTIAL DEPTH. THE CONTRACTOR SHALL MATCH THE EXIST. ADJACENT PAVEMENT CROSS SLOPE FOR MEDIAN REMOVAL, PARTIAL DEPTH.

** SEE DETAIL HMA TAPER AT EDGE OF P.C.C. PAVEMENT (BD-33)

*** COST OF LEVELING BINDER (MM), N70, VARIABLE DEPTH SHALL BE INCLUDED IN THE PAY ITEM LEVELING BINDER (MM), N70

DETAIL A
LONGITUDINAL JOINT REPAIR (TYP.)

(LOCATIONS TO BE DETERMINED BY ENGINEER)



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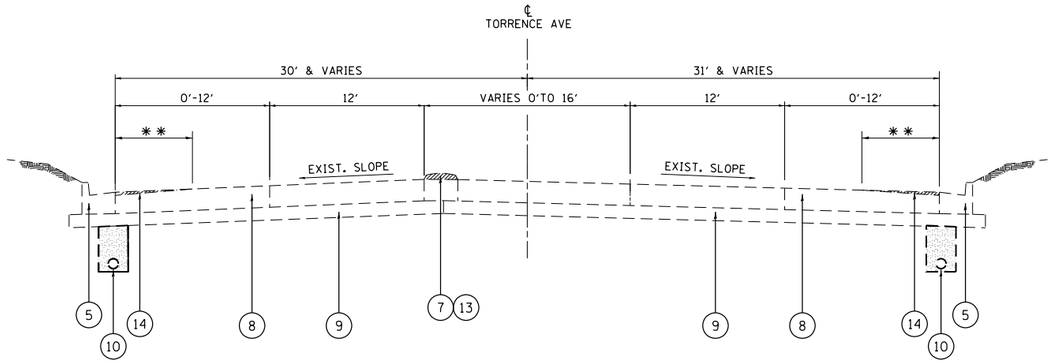
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TORRENCE AVE. (IL RTE. 83 (GLENWOOD DYER RD.) TO STEGER RD.)
TYPICAL SECTIONS

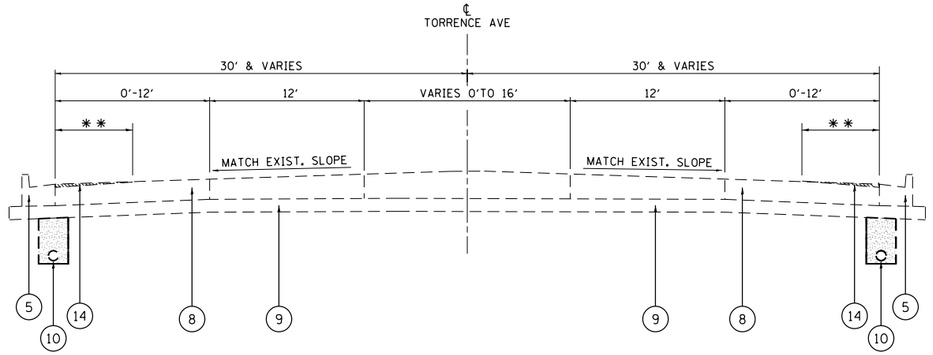
SCALE: NONE | SHEET NO. 3 OF 4 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	8
		CONTRACT NO. 60M44		
		ILLINOIS	FED. AID PROJECT	



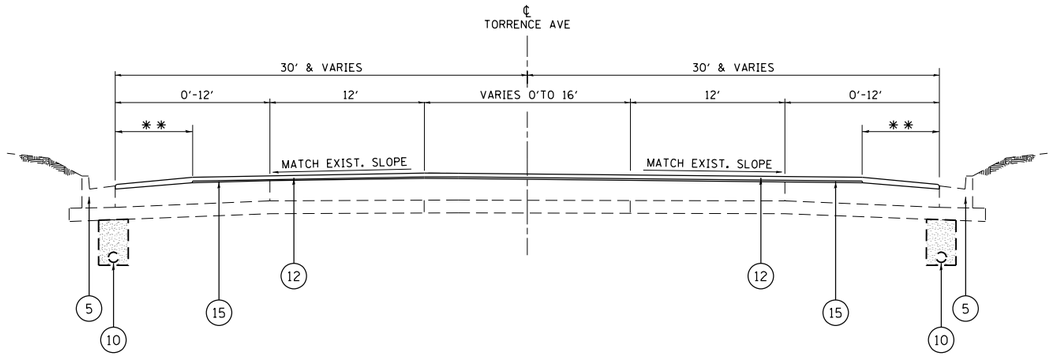
EXISTING TYPICAL CROSS SECTION
TORRENCE AVE. (IL–83 [GLENWOOD DYER RD.] TO STEGER RD.)

STA. 74+94 TO STA. 76+75
STA. 78+17 TO STA. 79+96



EXISTING TYPICAL CROSS SECTION
TORRENCE AVE. (IL–83 [GLENWOOD DYER RD.] TO STEGER RD.)

STA. 76+75 TO STA. 78+17
STA. 79+96 TO STA. 93+20



PROPOSED TYPICAL CROSS SECTION
TORRENCE AVE. (IL–83 [GLENWOOD DYER RD.] TO STEGER RD.)

STA. 74+94 TO STA. 93+20

LEGEND

1. EXISTING 7' AGGREGATE SHOULDER, TYPE B, ± 6''
2. EXISTING BITUMINOUS BASE COURSE, ± 12''
3. EXISTING BITUMINOUS SURFACE COARSE, ± 1½''
4. EXISTING BITUMINOUS BINDER COURSE, ± 1½''
5. EXISTING COMB. CONC. CURB & GUTTER, TYPE B-6.24
6. EXISTING COMB. CONC. CURB & GUTTER, TYPE M-2.12
7. EXISTING CONCRETE MEDIAN TYPE C-4
8. EXISTING P.C.C. PAVEMENT, ± 9''
9. EXISTING SUB-BASE GRANULAR MATERIAL, TYPE B, 6''
10. EXISTING 6'' PIPE UNDERDRAINS
11. PROPOSED 3' AGGREGATE WEDGE SHOULDER, TYPE B
12. PROPOSED H.M.A. SURFACE COURSE, MIX ''D'', N50, 1 ½''
13. PROPOSED MEDIAN REMOVAL, PARTIAL DEPTH
14. PROPOSED P.C.C. SURFACE REMOVAL (VAR. DEPTH)
15. PROPOSED POLY LEVEL BINDER (MACHINE METHOD), IL-4.75, N50, 1''
16. PROPOSED LEVELING BINDER (MM), N70, 2''
17. PROPOSED H.M.A. SURFACE REMOVAL, 1''
18. PROPOSED LEVELING BINDER (MM), N70, VAR. DEPTH

NOTES

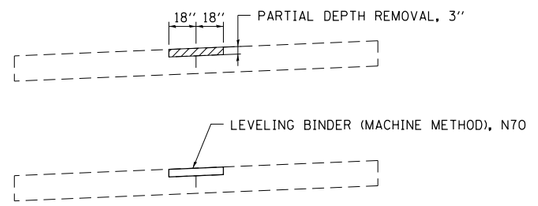
* COST OF REMOVAL OF PORTION OF P.C.C. CURB ABOVE GUTTER TO BE INCLUDED WITH MEDIAN REMOVAL, PARTIAL DEPTH.
THE CONTRACTOR SHALL MATCH THE EXIST. ADJACENT PAVEMENT CROSS SLOPE FOR MEDIAN REMOVAL, PARTIAL DEPTH.

** SEE DETAIL HMA TAPER AT EDGE OF P.C.C. PAVEMENT (BD-33)

*** COST OF LEVELING BINDER (MM), N70, VARIABLE DEPTH SHALL BE INCLUDED IN THE PAY ITEM LEVELING BINDER (MM), N70

DETAIL A
LONGITUDINAL JOINT REPAIR (TYP.)

(LOCATIONS TO BE DETERMINED BY ENGINEER)



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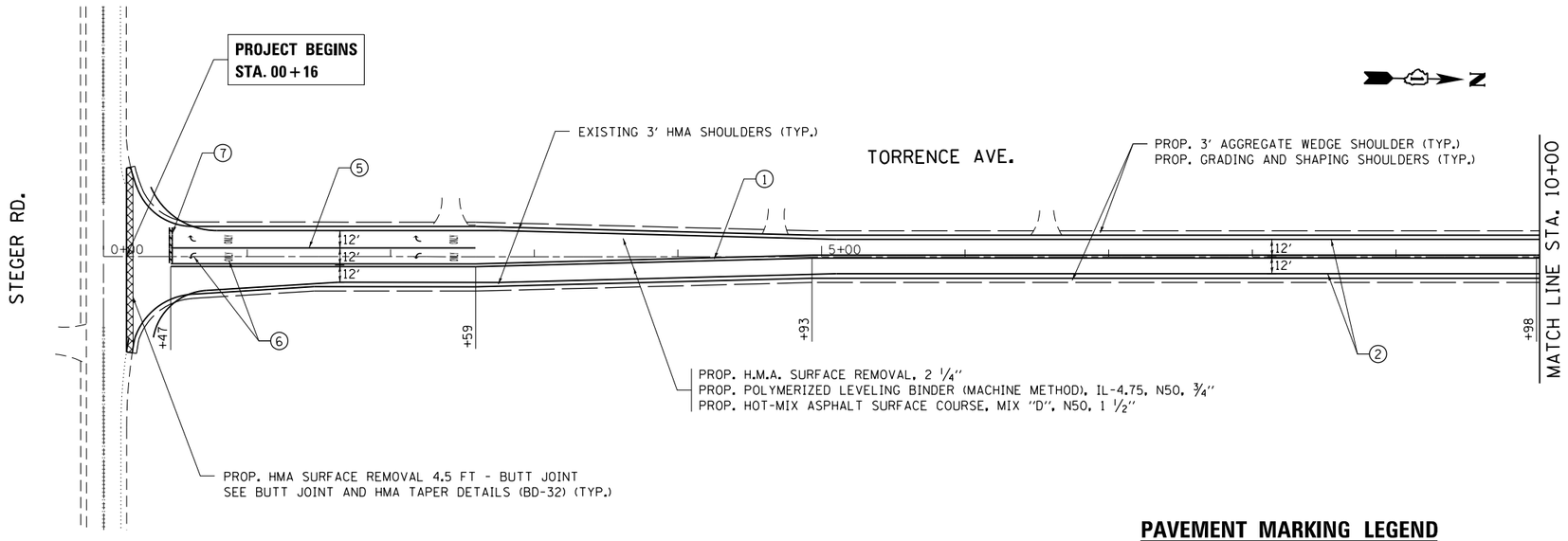
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TORRENCE AVE. (IL RTE. 83 (GLENWOOD DYER RD.) TO STEGER RD.)
TYPICAL SECTIONS

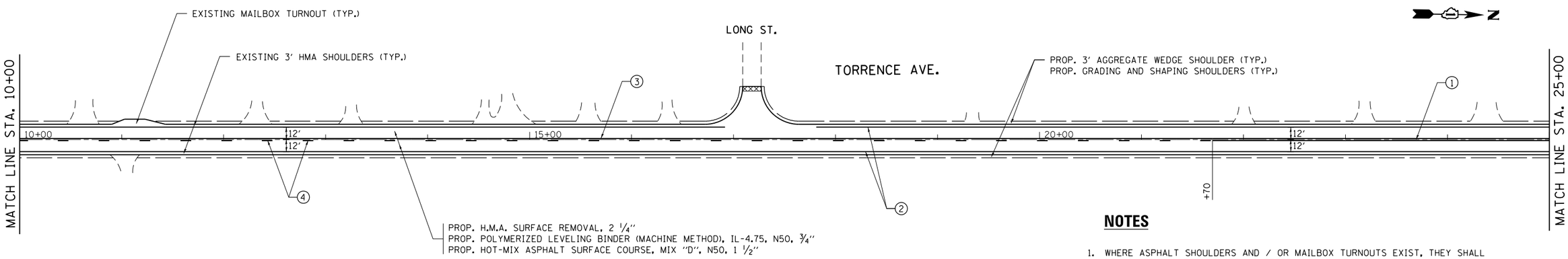
SCALE: NONE | SHEET NO. 4 OF 4 SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	9
		CONTRACT NO. 60M44		
	ILLINOIS	FED. AID PROJECT		



PAVEMENT MARKING LEGEND

1. THPL PAVT MK, 4" DOUBLE YELLOW LINE, 11" C-C (TYP.)
2. THPL PAVT MK, 4" WHITE EDGE LINE (TYP.)
3. THPL PAVT MK, 4" YELLOW LINE (TYP.)
4. THPL PAVT MK, 4" YELLOW LINE (30' SKIP 10' DASH) (TYP.)
5. THPL PAVT MK, 6" WHITE LINE (TYP.)
6. THPL PAVT MK, LETTERS & SYMBOLS (TYP.)
7. THPL PAVT MK, 24" WHITE STOP BAR (TYP.)
8. THPL PAVT MK, 6" WHITE DOTTED LINE (6' SKIP 2' DASH) (TYP.)
9. THPL PAVT MK, 12" WHITE CROSSWALK LINE (TYP.)
10. THPL PAVT MK, 12" YELLOW DIAGONALS (TYP.), (SEE TC-13 FOR SPACING)
11. THPL PAVT MK, 8" WHITE LINE (TYP.)
12. THPL PAVT MK, 4" WHITE LANE LINE (30' SKIP 10' DASH) (TYP.)



NOTES

1. WHERE ASPHALT SHOULDERS AND / OR MAILBOX TURNOUTS EXIST, THEY SHALL BE MILLED AND RESURFACED AS DETERMINED BY THE ENGINEER.
2. ALL FINAL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13) DETAIL.
3. ALL FINAL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH THE DISTRICT ONE RAISED REFLECTIVE PAVEMENT MARKERS (TC-11) DETAIL.

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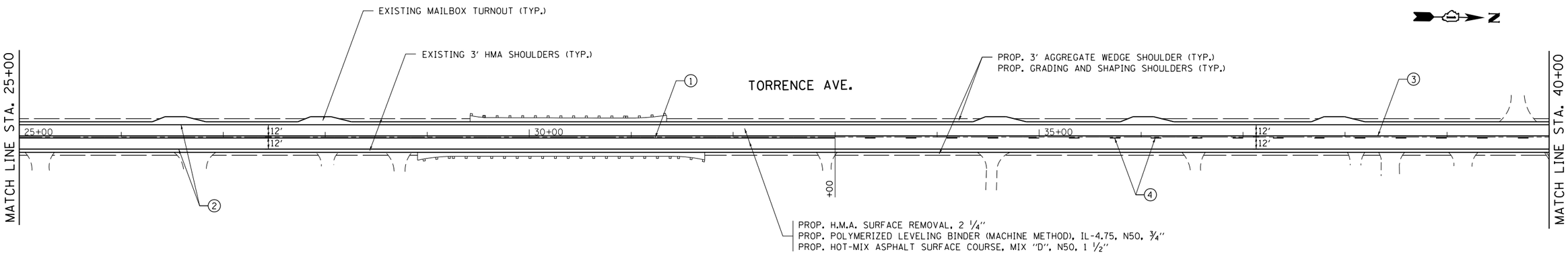
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TORRENCE AVE. (IL RTE. 83 (GLENWOOD DYER RD.) TO STEGER RD.)
ROADWAY AND PAVEMENT MARKING PLAN

SCALE: 1"=50' | SHEET NO. 1 OF 7 SHEETS | STA. 00+16 TO STA. 25+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	10
		CONTRACT NO. 60M44		
	ILLINOIS FED. AID PROJECT			

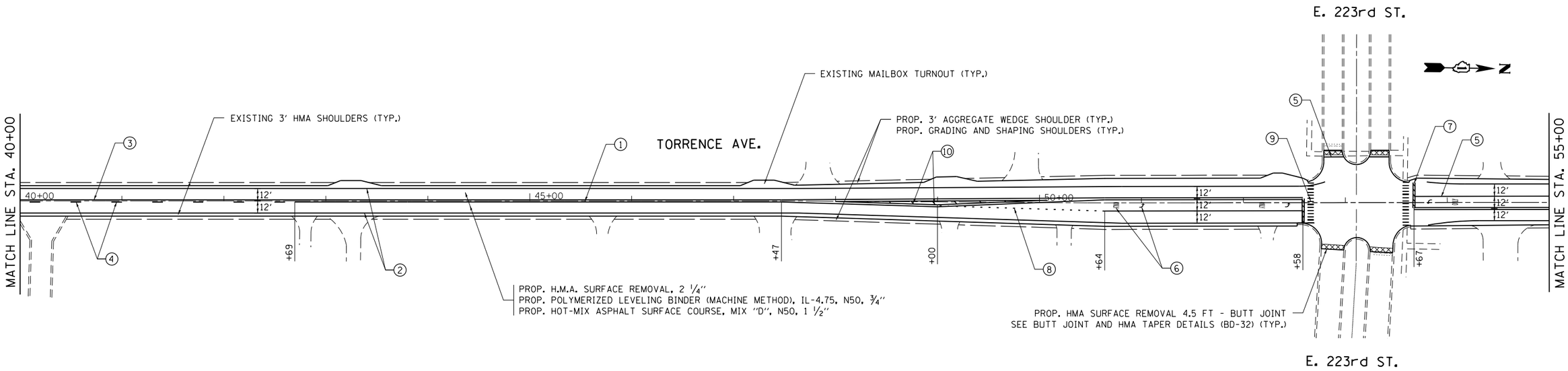


PAVEMENT MARKING LEGEND

1. THPL PAVT MK, 4" DOUBLE YELLOW LINE, 11" C-C (TYP.)
2. THPL PAVT MK, 4" WHITE EDGE LINE (TYP.)
3. THPL PAVT MK, 4" YELLOW LINE (TYP.)
4. THPL PAVT MK, 4" YELLOW LINE (30' SKIP 10' DASH) (TYP.)
5. THPL PAVT MK, 6" WHITE LINE (TYP.)
6. THPL PAVT MK, LETTERS & SYMBOLS (TYP.)
7. THPL PAVT MK, 24" WHITE STOP BAR (TYP.)
8. THPL PAVT MK, 6" WHITE DOTTED LINE (6' SKIP 2' DASH) (TYP.)
9. THPL PAVT MK, 12" WHITE CROSSWALK LINE (TYP.)
10. THPL PAVT MK, 12" YELLOW DIAGONALS (TYP.), (SEE TC-13 FOR SPACING)
11. THPL PAVT MK, 8" WHITE LINE (TYP.)
12. THPL PAVT MK, 4" WHITE LANE LINE (30' SKIP 10' DASH) (TYP.)

NOTES

1. WHERE ASPHALT SHOULDERS AND / OR MAILBOX TURNOUTS EXIST, THEY SHALL BE MILLED AND RESURFACED AS DETERMINED BY THE ENGINEER.
2. ALL FINAL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13) DETAIL.
3. ALL FINAL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH THE DISTRICT ONE RAISED REFLECTIVE PAVEMENT MARKERS (TC-11) DETAIL.



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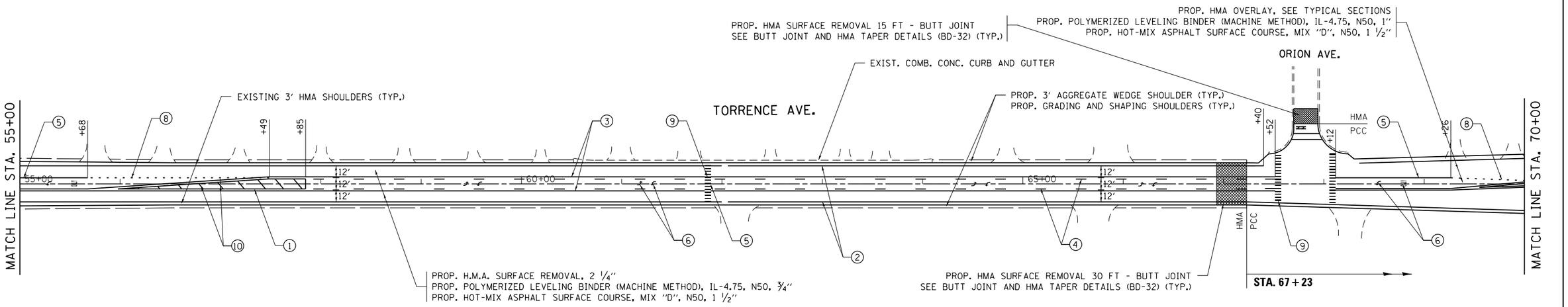
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TORRENCE AVE. (IL RTE. 83 (GLENWOOD DYER RD.) TO STEGER RD.)
ROADWAY AND PAVEMENT MARKING PLAN

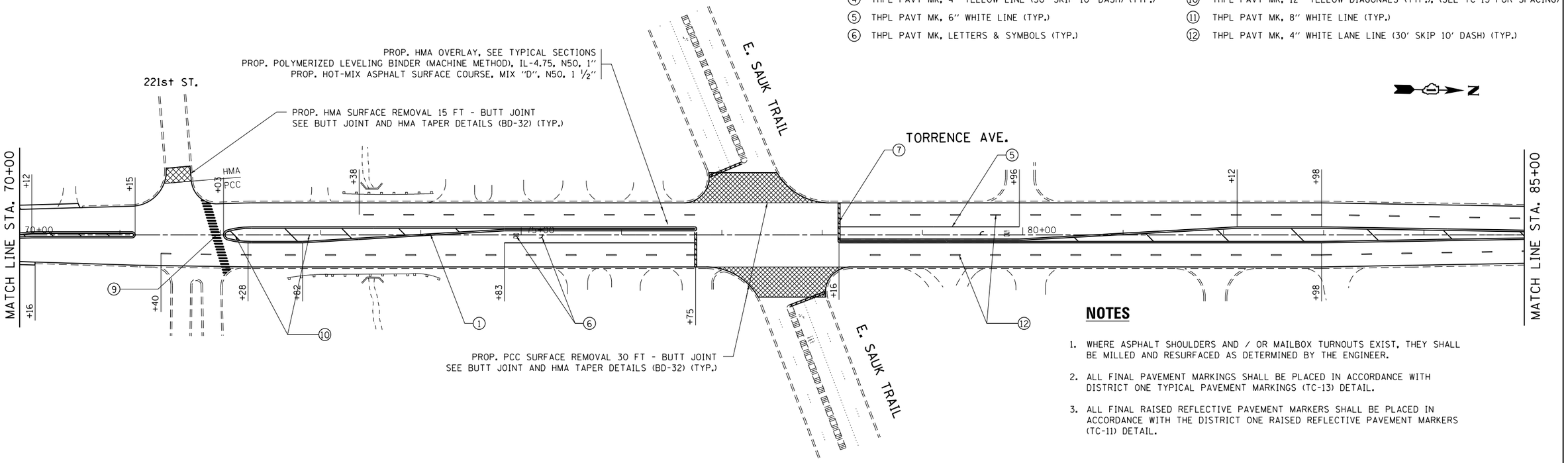
SCALE: 1"=50' | SHEET NO. 2 OF 7 SHEETS | STA. 25+00 TO STA. 55+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	11
		CONTRACT NO. 60M44		
	ILLINOIS FED. AID PROJECT			



PAVEMENT MARKING LEGEND

1. THPL PAVT MK, 4" DOUBLE YELLOW LINE, 11" C-C (TYP.)
2. THPL PAVT MK, 4" WHITE EDGE LINE (TYP.)
3. THPL PAVT MK, 4" YELLOW LINE (TYP.)
4. THPL PAVT MK, 4" YELLOW LINE (30' SKIP 10' DASH) (TYP.)
5. THPL PAVT MK, 6" WHITE LINE (TYP.)
6. THPL PAVT MK, LETTERS & SYMBOLS (TYP.)
7. THPL PAVT MK, 24" WHITE STOP BAR (TYP.)
8. THPL PAVT MK, 6" WHITE DOTTED LINE (6' SKIP 2' DASH) (TYP.)
9. THPL PAVT MK, 12" WHITE CROSSWALK LINE (TYP.)
10. THPL PAVT MK, 12" YELLOW DIAGONALS (TYP.), (SEE TC-13 FOR SPACING)
11. THPL PAVT MK, 8" WHITE LINE (TYP.)
12. THPL PAVT MK, 4" WHITE LANE LINE (30' SKIP 10' DASH) (TYP.)



NOTES

1. WHERE ASPHALT SHOULDERS AND / OR MAILBOX TURNOUTS EXIST, THEY SHALL BE MILLED AND RESURFACED AS DETERMINED BY THE ENGINEER.
2. ALL FINAL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13) DETAIL.
3. ALL FINAL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH THE DISTRICT ONE RAISED REFLECTIVE PAVEMENT MARKERS (TC-11) DETAIL.

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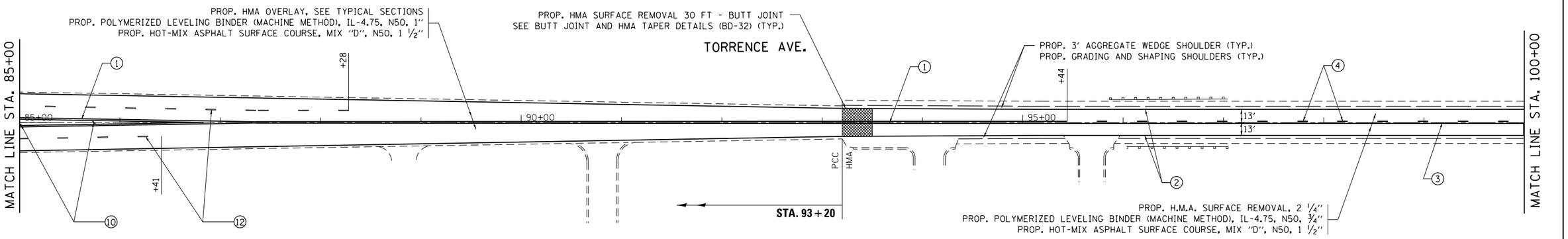
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TORRENCE AVE. (IL RTE. 83 (GLENWOOD DYER RD.) TO STEGER RD.)
ROADWAY AND PAVEMENT MARKING PLAN

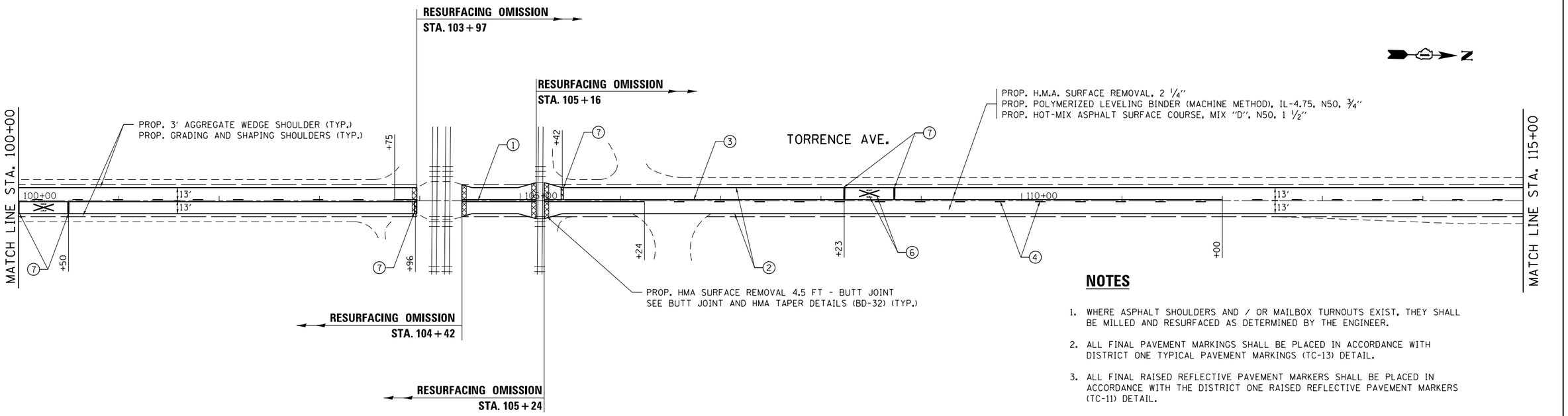
SCALE: 1"=50' | SHEET NO. 3 OF 7 SHEETS | STA. 55+00 TO STA. 85+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	12
		CONTRACT NO. 60M44		
	ILLINOIS	FED. AID PROJECT		



PAVEMENT MARKING LEGEND

1. THPL PAVT MK, 4" DOUBLE YELLOW LINE, 11" C-C (TYP.)
2. THPL PAVT MK, 4" WHITE EDGE LINE (TYP.)
3. THPL PAVT MK, 4" YELLOW LINE (TYP.)
4. THPL PAVT MK, 4" YELLOW LINE (30' SKIP 10' DASH) (TYP.)
5. THPL PAVT MK, 6" WHITE LINE (TYP.)
6. THPL PAVT MK, LETTERS & SYMBOLS (TYP.)
7. THPL PAVT MK, 24" WHITE STOP BAR (TYP.)
8. THPL PAVT MK, 6" WHITE DOTTED LINE (6' SKIP 2' DASH) (TYP.)
9. THPL PAVT MK, 12" WHITE CROSSWALK LINE (TYP.)
10. THPL PAVT MK, 12" YELLOW DIAGONALS (TYP.), (SEE TC-13 FOR SPACING)
11. THPL PAVT MK, 8" WHITE LINE (TYP.)
12. THPL PAVT MK, 4" WHITE LANE LINE (30' SKIP 10' DASH) (TYP.)



NOTES

1. WHERE ASPHALT SHOULDERS AND / OR MAILBOX TURNOUTS EXIST, THEY SHALL BE MILLED AND RESURFACED AS DETERMINED BY THE ENGINEER.
2. ALL FINAL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13) DETAIL.
3. ALL FINAL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH THE DISTRICT ONE RAISED REFLECTIVE PAVEMENT MARKERS (TC-11) DETAIL.

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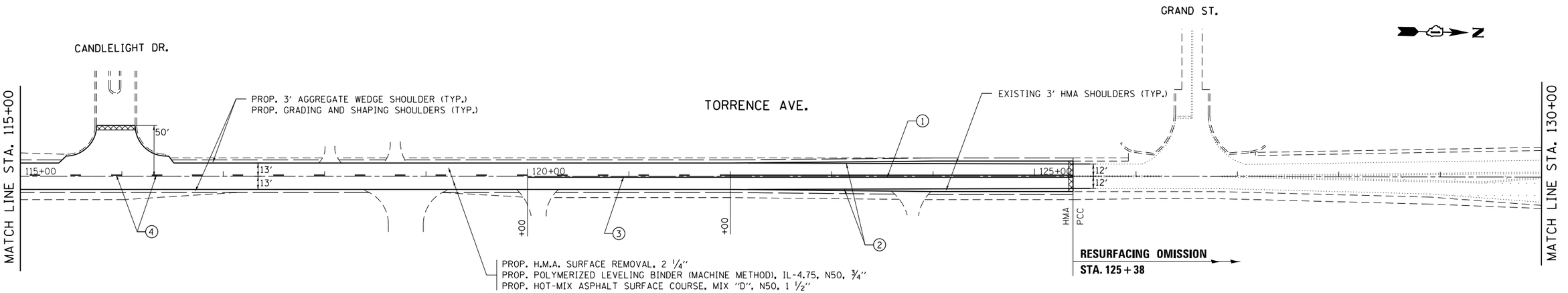
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TORRENCE AVE. (IL RTE. 83 (GLENWOOD DYER RD.) TO STEGER RD.)
ROADWAY AND PAVEMENT MARKING PLAN

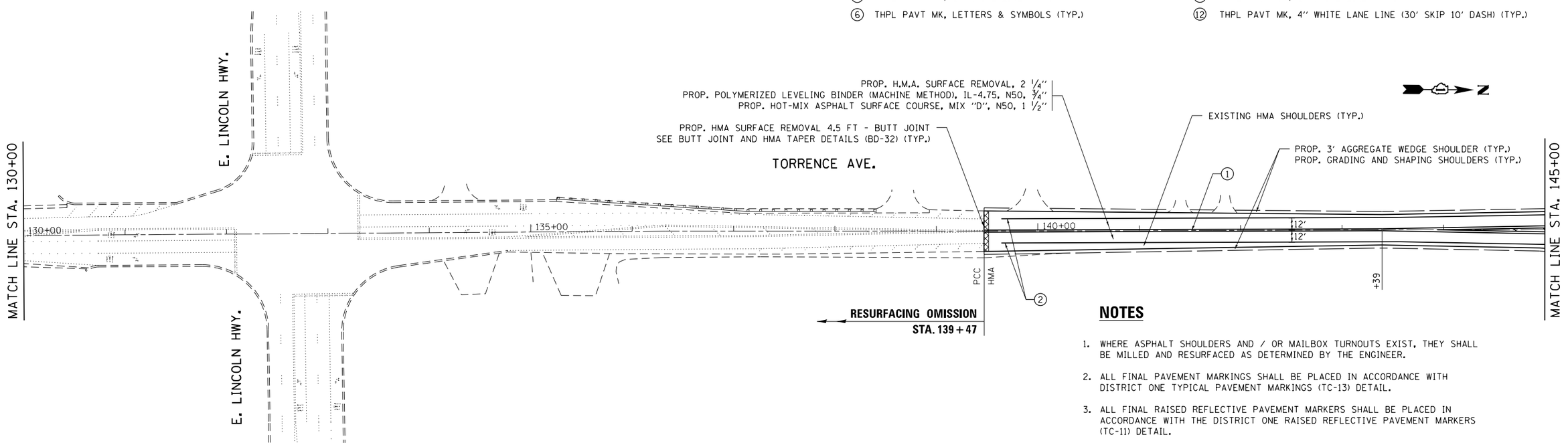
SCALE: 1"=50' | SHEET NO. 4 OF 7 SHEETS | STA. 85+00 TO STA. 115+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	13
		CONTRACT NO. 60M44		
		ILLINOIS	FED. AID PROJECT	



PAVEMENT MARKING LEGEND

1. THPL PAVT MK, 4" DOUBLE YELLOW LINE, 11" C-C (TYP.)
2. THPL PAVT MK, 4" WHITE EDGE LINE (TYP.)
3. THPL PAVT MK, 4" YELLOW LINE (TYP.)
4. THPL PAVT MK, 4" YELLOW LINE (30' SKIP 10' DASH) (TYP.)
5. THPL PAVT MK, 6" WHITE LINE (TYP.)
6. THPL PAVT MK, LETTERS & SYMBOLS (TYP.)
7. THPL PAVT MK, 24" WHITE STOP BAR (TYP.)
8. THPL PAVT MK, 6" WHITE DOTTED LINE (6' SKIP 2' DASH) (TYP.)
9. THPL PAVT MK, 12" WHITE CROSSWALK LINE (TYP.)
10. THPL PAVT MK, 12" YELLOW DIAGONALS (TYP.), (SEE TC-13 FOR SPACING)
11. THPL PAVT MK, 8" WHITE LINE (TYP.)
12. THPL PAVT MK, 4" WHITE LANE LINE (30' SKIP 10' DASH) (TYP.)



NOTES

1. WHERE ASPHALT SHOULDERS AND / OR MAILBOX TURNOUTS EXIST, THEY SHALL BE MILLED AND RESURFACED AS DETERMINED BY THE ENGINEER.
2. ALL FINAL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13) DETAIL.
3. ALL FINAL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH THE DISTRICT ONE RAISED REFLECTIVE PAVEMENT MARKERS (TC-11) DETAIL.

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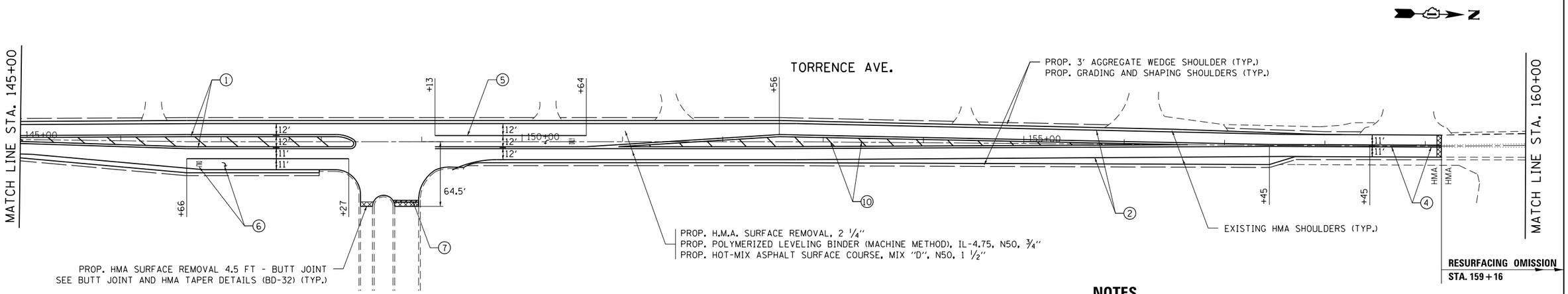
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TORRENCE AVE. (IL RTE. 83 (GLENWOOD DYER RD.) TO STEGER RD.)
ROADWAY AND PAVEMENT MARKING PLAN

SCALE: 1"=50' | SHEET NO. 5 OF 7 SHEETS | STA. 115+00 TO STA. 145+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	14
		CONTRACT NO. 60M44		
	ILLINOIS FED. AID PROJECT			



PAVEMENT MARKING LEGEND

1. THPL PAVT MK, 4" DOUBLE YELLOW LINE, 11" C-C (TYP.)
2. THPL PAVT MK, 4" WHITE EDGE LINE (TYP.)
3. THPL PAVT MK, 4" YELLOW LINE (TYP.)
4. THPL PAVT MK, 4" YELLOW LINE (30' SKIP 10' DASH) (TYP.)
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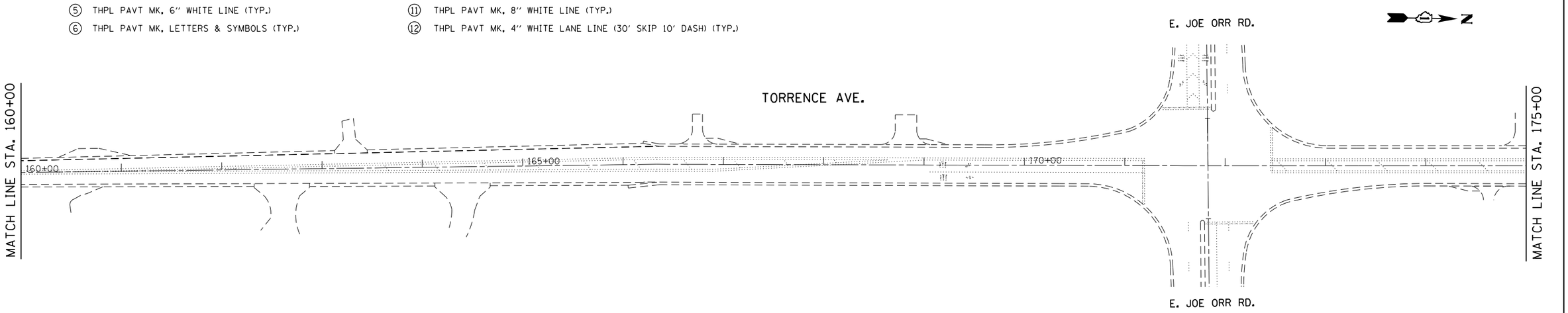

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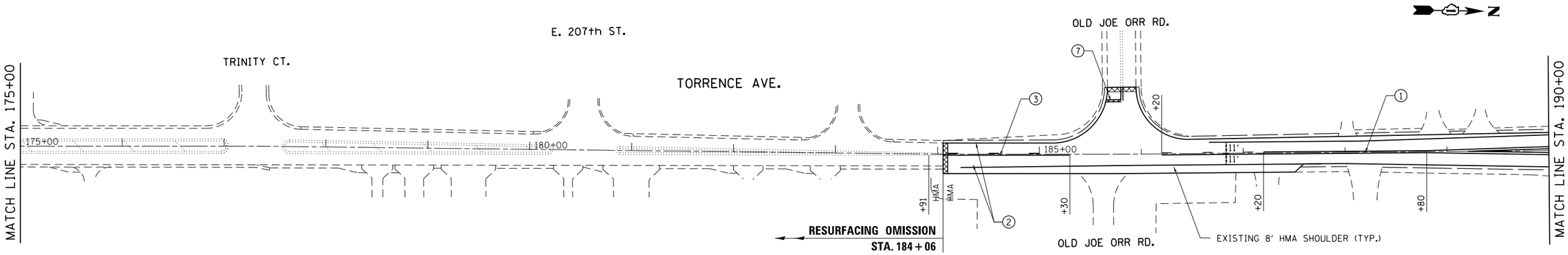
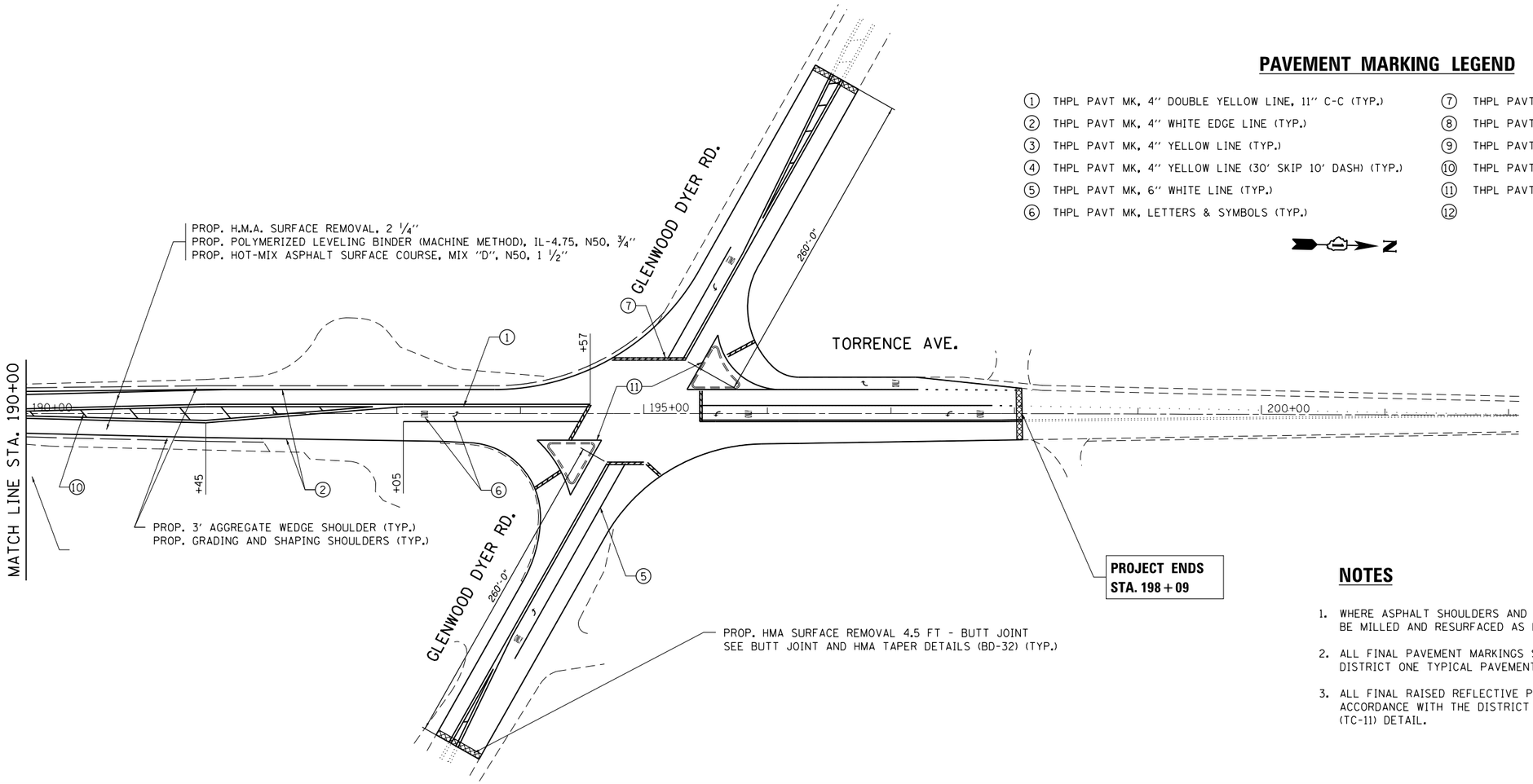
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TORRENCE AVE. (IL RTE. 83 (GLENWOOD DYER RD.) TO STEGER RD.)
ROADWAY AND PAVEMENT MARKING PLAN

SCALE: 1"=50' | SHEET NO. 6 OF 7 SHEETS | STA. 145+00 TO STA. 175+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	15
		CONTRACT NO. 60M44		
	ILLINOIS FED. AID PROJECT			





PAVEMENT MARKING LEGEND

1. THPL PAVT MK, 4" DOUBLE YELLOW LINE, 11" C-C (TYP.)
2. THPL PAVT MK, 4" WHITE EDGE LINE (TYP.)
3. THPL PAVT MK, 4" YELLOW LINE (TYP.)
4. THPL PAVT MK, 4" YELLOW LINE (30' SKIP 10' DASH) (TYP.)
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6. THPL PAVT MK, LETTERS & SYMBOLS (TYP.)
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12.

NOTES

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TORRENCE AVE. (IL RTE. 83 (GLENWOOD DYER RD.) TO STEGER RD.)
ROADWAY AND PAVEMENT MARKING PLAN

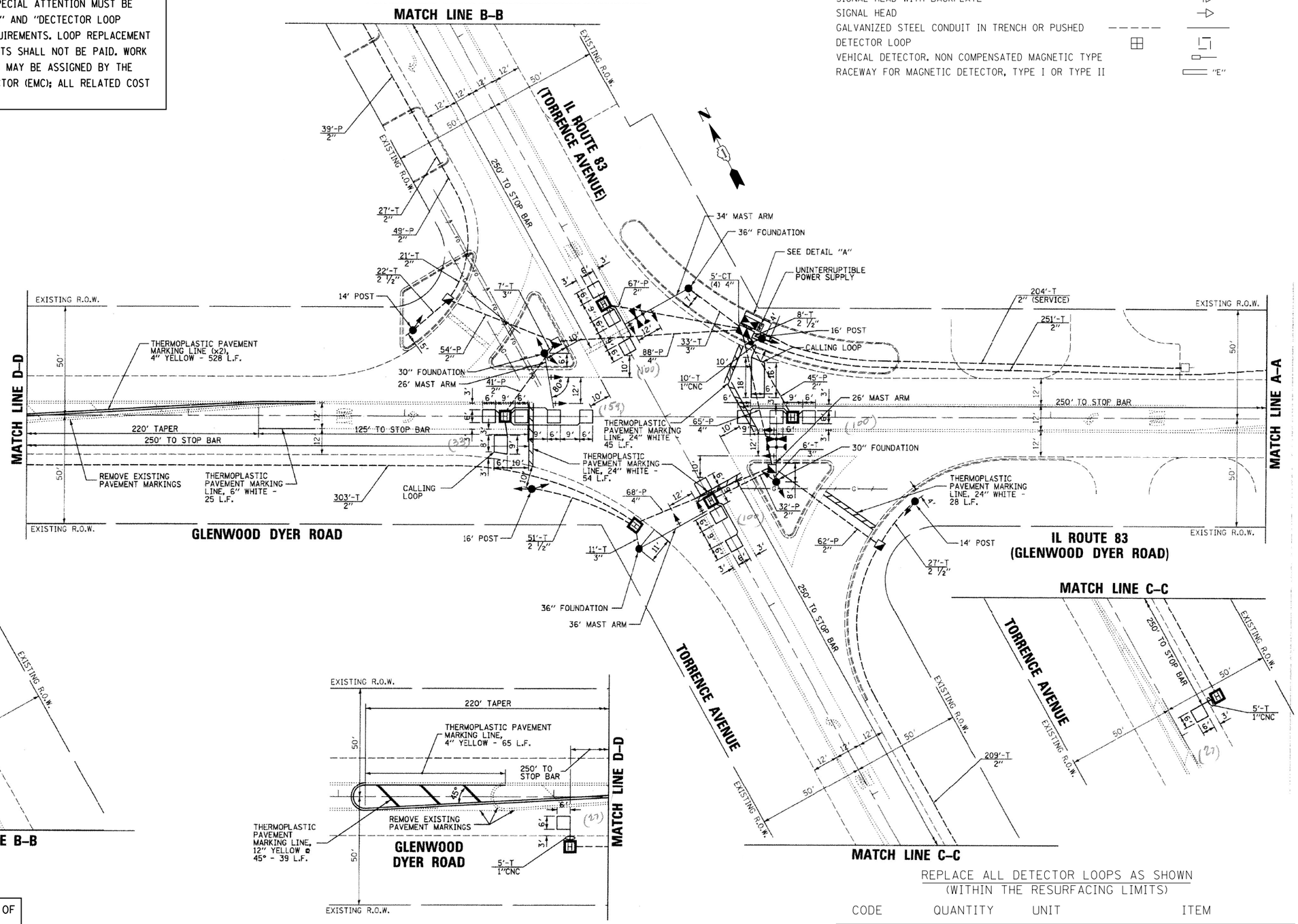
SCALE: 1"=50' | SHEET NO. 7 OF 7 SHEETS | STA. 175+00 TO STA. 195+30

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	16
		CONTRACT NO. 60M44		
		ILLINOIS FED. AID PROJECT		

WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION. "TRAFFIC SIGNAL SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DECTECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COST WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD		
GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED		
DETECTOR LOOP		
VEHICAL DETECTOR, NON COMPENSATED MAGNETIC TYPE		
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	"E"	



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

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

CODE	QUANTITY	UNIT	ITEM
88600600	700	FOOT	DETECTOR LOOP, REPLACEMENT

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE – DETECTOR LOOP REPLACEMENT
TORRENCE AVE AT GLENWOOD DYER RD.

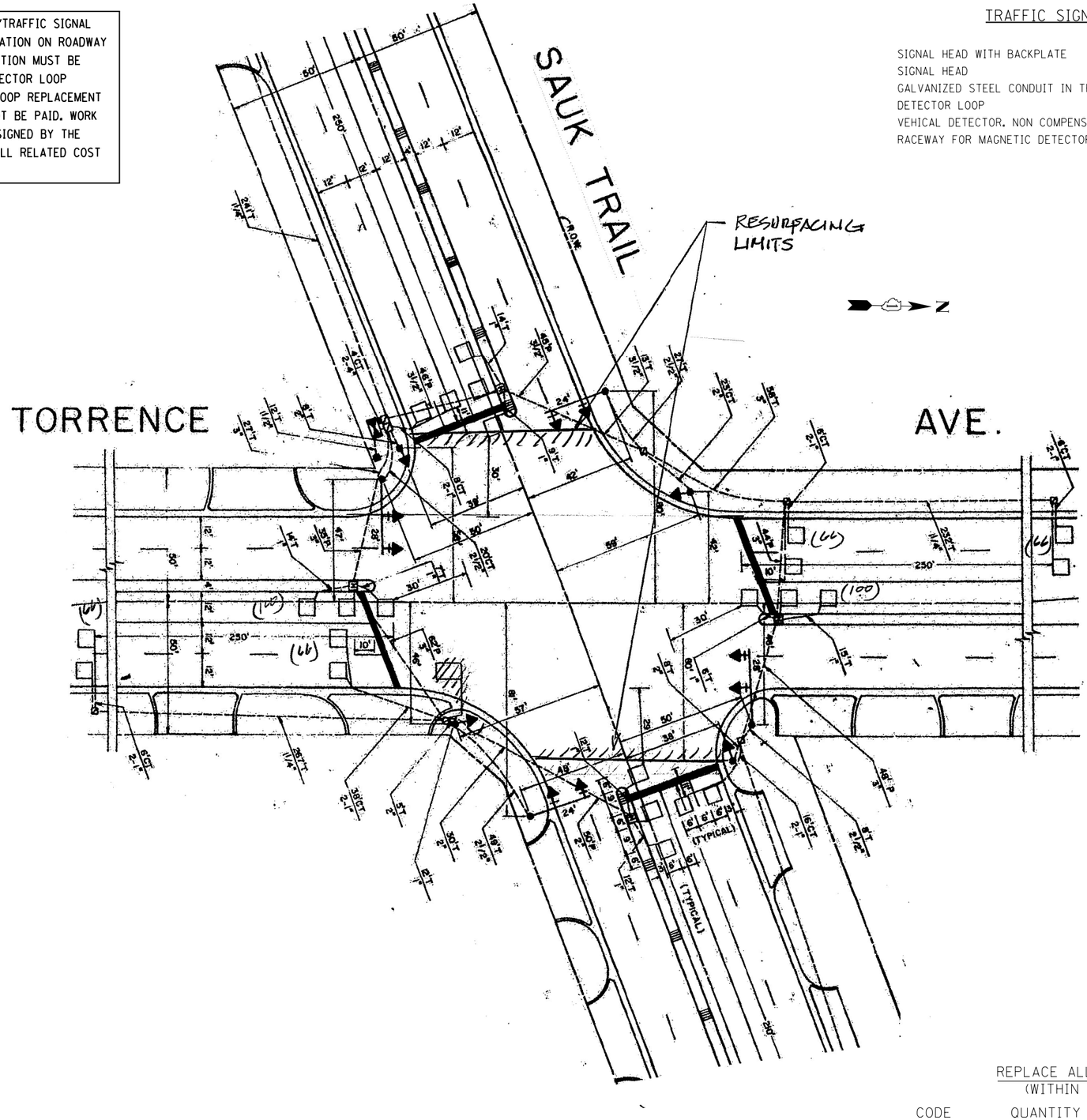
SCALE: N.T.S. | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-RS-RS	COOK	32	17
		CONTRACT NO. 60M44		
		ILLINOIS FED. AID PROJECT		

WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION. "TRAFFIC SIGNAL SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DECTECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COST WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD		
GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED		
DETECTOR LOOP		
VEHICAL DETECTOR, NON COMPENSATED MAGNETIC TYPE		
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		"E"



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

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

CODE	QUANTITY	UNIT	ITEM
88600600	464	FOOT	DETECTOR LOOP, REPLACEMENT

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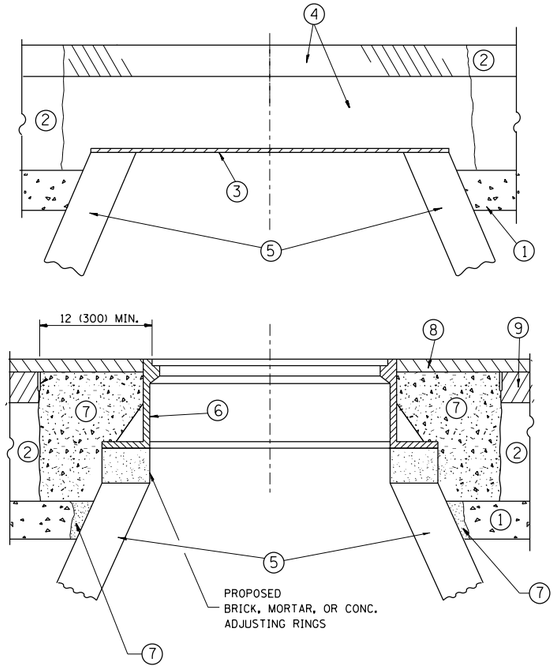
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE – DETECTOR LOOP REPLACEMENT
TORRENCE AVE AT SAUK TRAIL

SCALE: N.T.S. | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-RS-RS	COOK	32	18
		CONTRACT NO. 60M44		
	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 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 EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

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

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:

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

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

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		DRAWN -	REVISED - R. BORO 01-01-07
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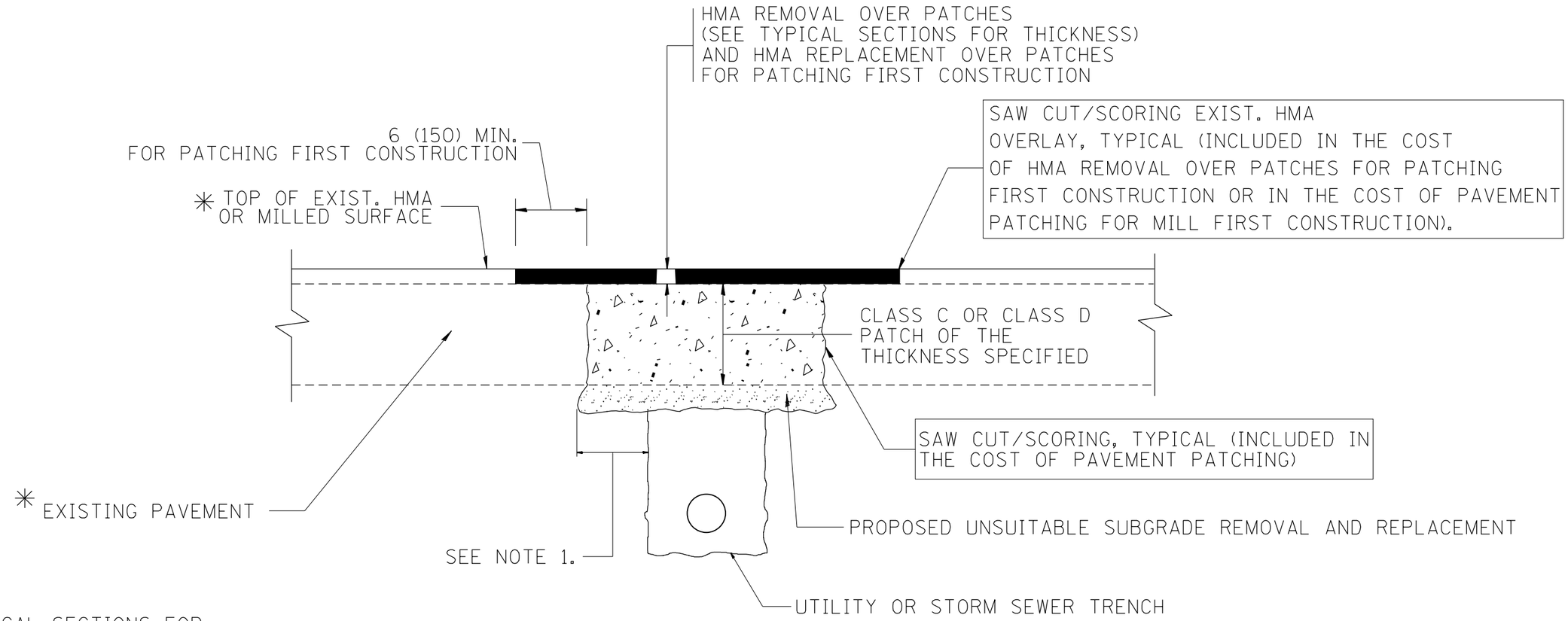
	PLOT DATE = 10/22/2012	DATE - 10-25-94	REVISED - R. BORO 12-06-11

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS FOR
FRAMES AND LIDS ADJUSTMENT WITH MILLING

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	31	19
	BD600-03 (BD-8)	CONTRACT NO. 60M44		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



✳ 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 $4\frac{1}{2}$ 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.

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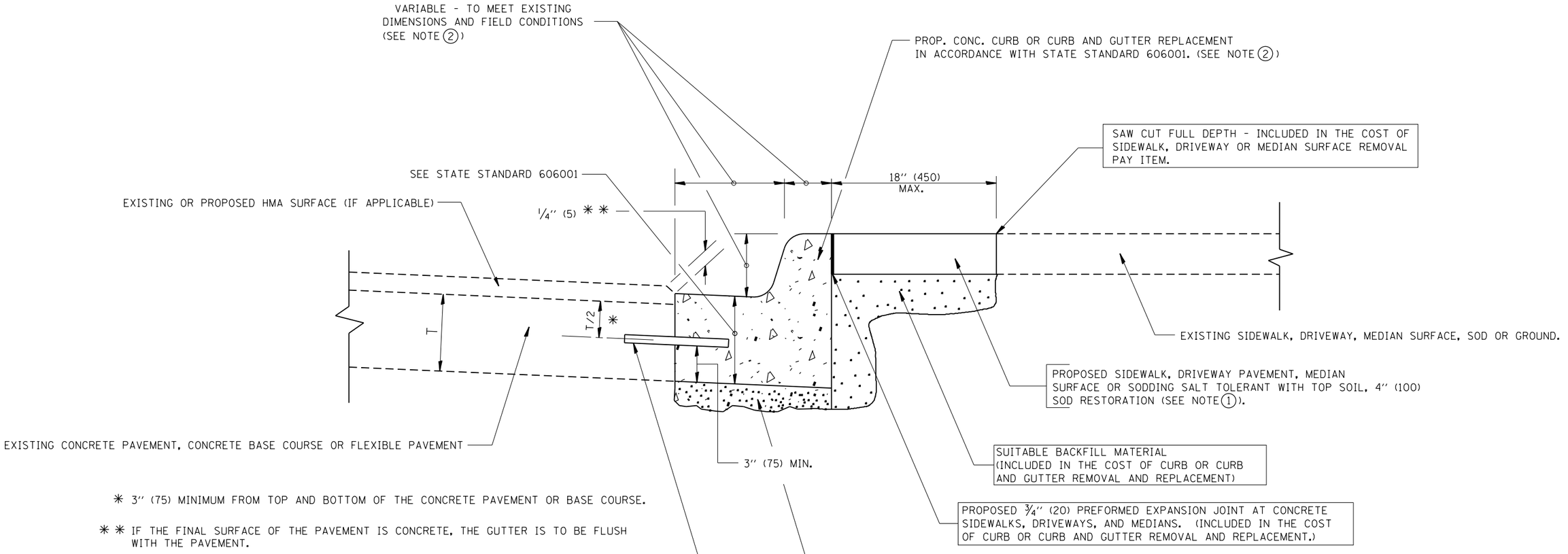
	PLOT DATE = 10/22/2012	DATE - 10-25-94	REVISED - K. ENG 10-27-08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	20
	BD400-04 (BD-22)	CONTRACT NO. 60M44		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



* 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.

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.

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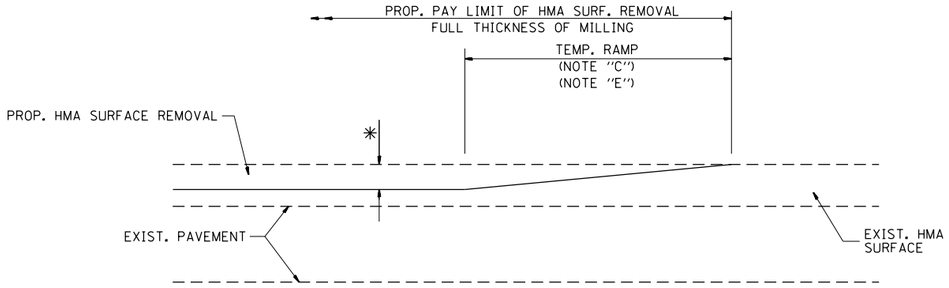
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

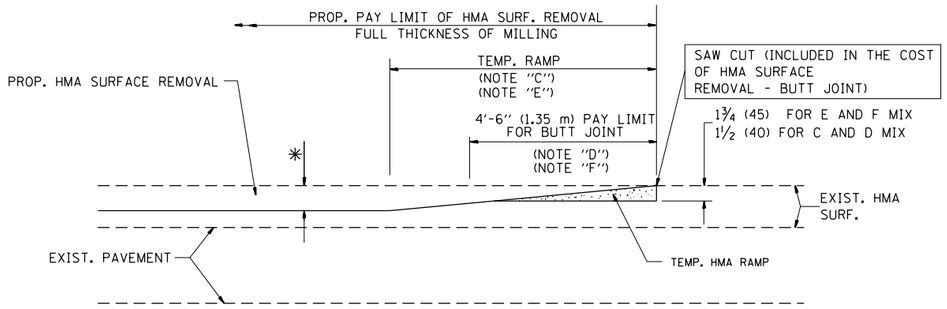
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	21
	BD600-06 (BD-24)	CONTRACT NO. 60M44		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

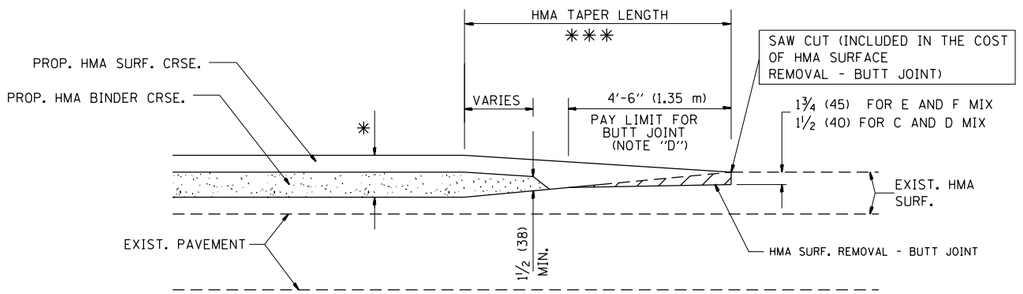


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

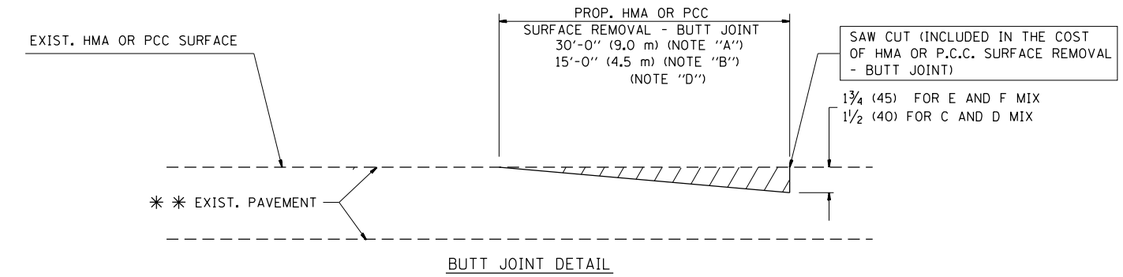
OPTION 2

TYPICAL TEMPORARY RAMP

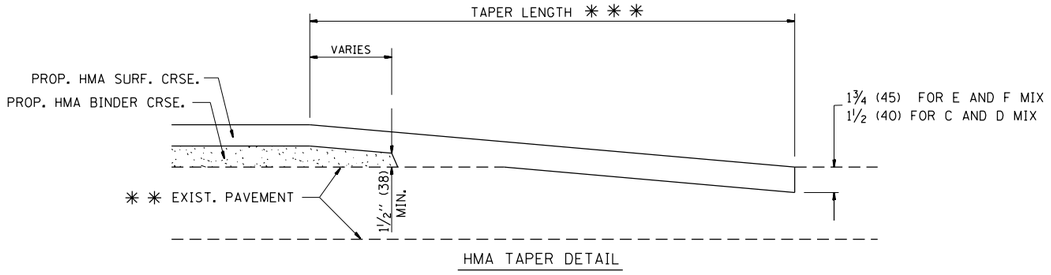


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

B: MINOR SIDE ROADS.

C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.

D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.

E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.

F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT

G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

*** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

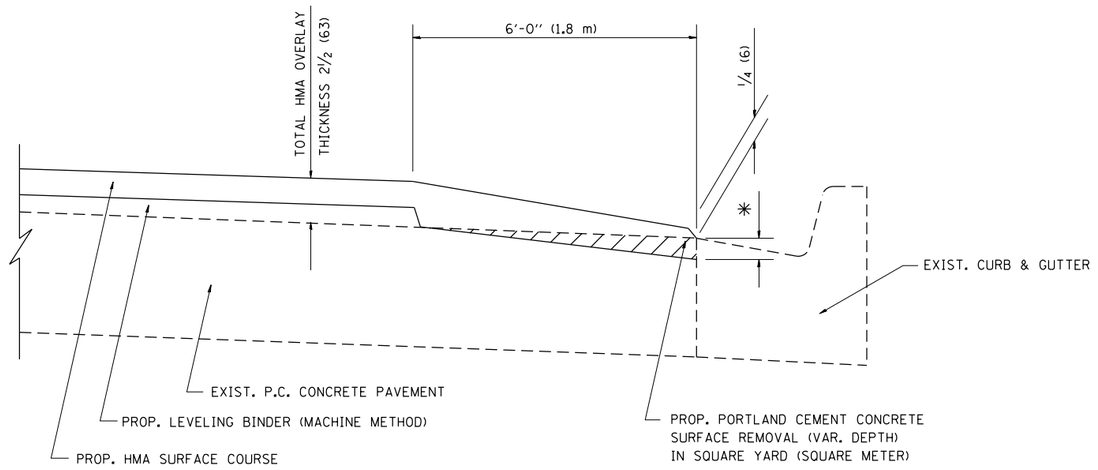
BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

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

FILE NAME = c:\pw_work\pwidot\pughst\d0246874\DistStd.dgn	USER NAME = pughst	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BUTT JOINT AND HMA TAPER DETAILS
		DRAWN -	REVISED - A. ABBAS 03-21-97		
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - M. GOMEZ 04-06-01		
	PLOT DATE = 10/22/2012	DATE - 06-13-90	REVISED - R. BORO 01-01-07		SCALE: NONE / SHEET NO. 1 OF 1 SHEETS / STA. / TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	22
	BD400-05 BD32	CONTRACT NO. 60M44		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



HMA TAPER AT
EDGE OF P.C.C PAVEMENT

HMA SURFACE		LEVELING BINDER	
MIX	THICKNESS	THICKNESS	* MILLING AT GUTTER FLAG
C OR D	1½ (38)	1 (25)	1¼ (33)
F	1¾ (44)	¾ (19)	1½ (38)

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

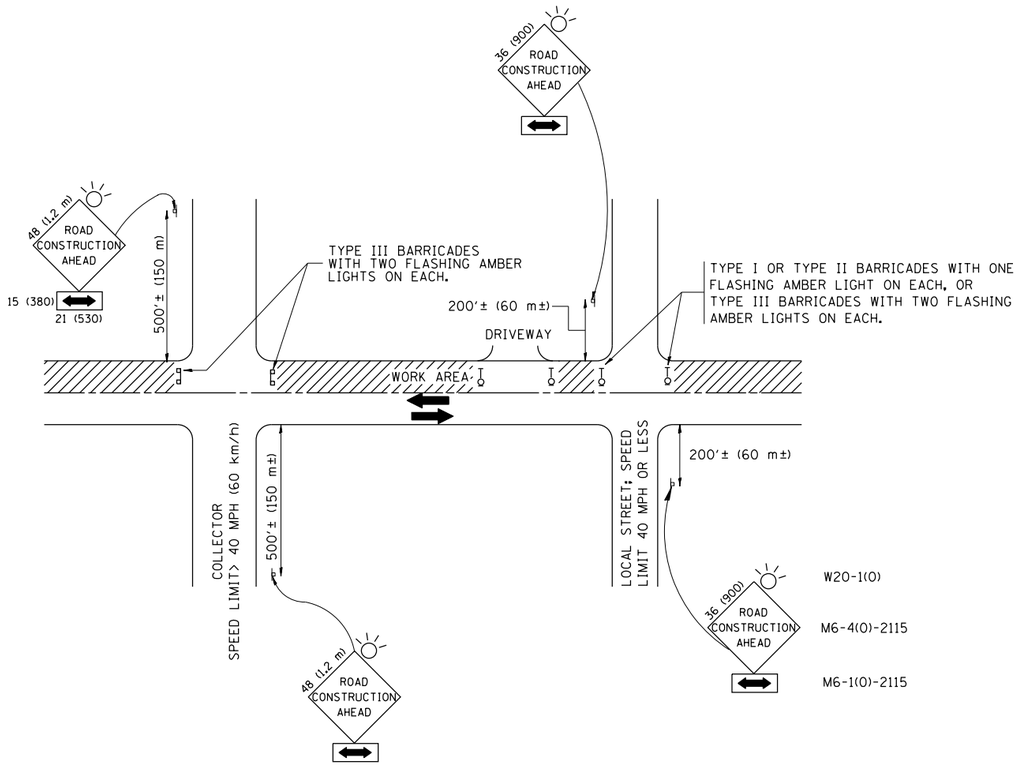
FILE NAME = c:\pw_work\pwidot\pughst\d0246874\DistStd.dgn	USER NAME = pughst	DESIGNED - R. SHAH	REVISED - R. SHAH 10-25-94
		DRAWN - JIS	REVISED - A. ABBAS 05-05-99
	PLOT SCALE = 100.0000 ' / in.	CHECKED - A. ABBAS	REVISED - E. GOMEZ 12-21-00
	PLOT DATE = 10/22/2012	DATE - 09-10-94	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HMA TAPER AT
EDGE OF P.C.C. PAVEMENT

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	23
	BD400-06 (BD33)	CONTRACT NO. 60M44		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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

NOTES:

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

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

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

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

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

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

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

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

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

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

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

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

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

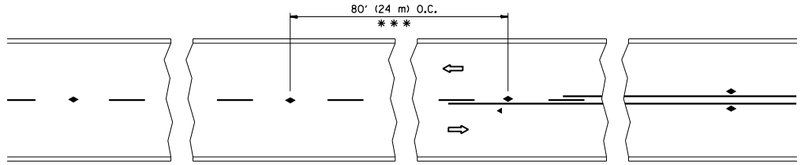
FILE NAME = c:\pw_work\pwidot\pughst\d0246874\DistStd.dgn	USER NAME = pughst	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 10/22/2012	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

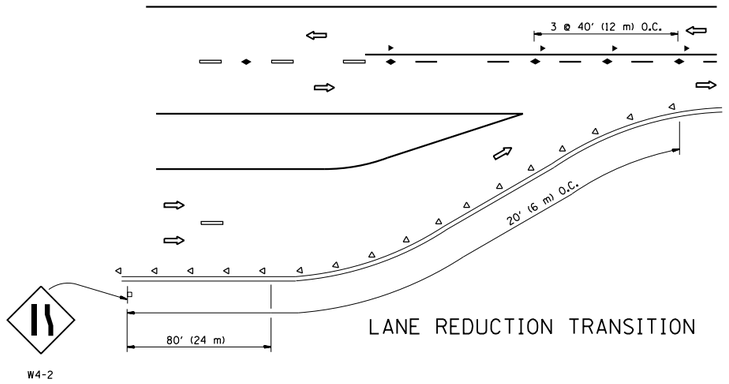
SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	24
	TC-10	CONTRACT NO. 60M44		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

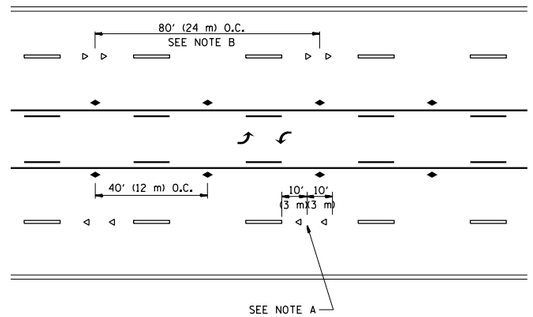


* * * REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

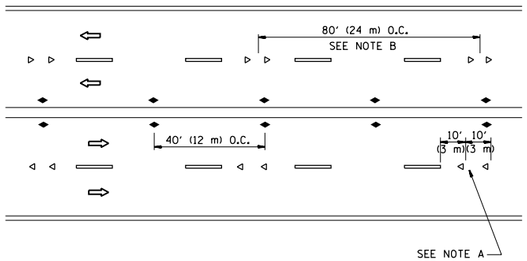
TWO-LANE/TWO-WAY



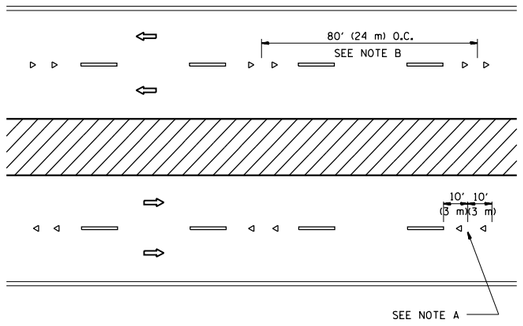
LANE REDUCTION TRANSITION



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

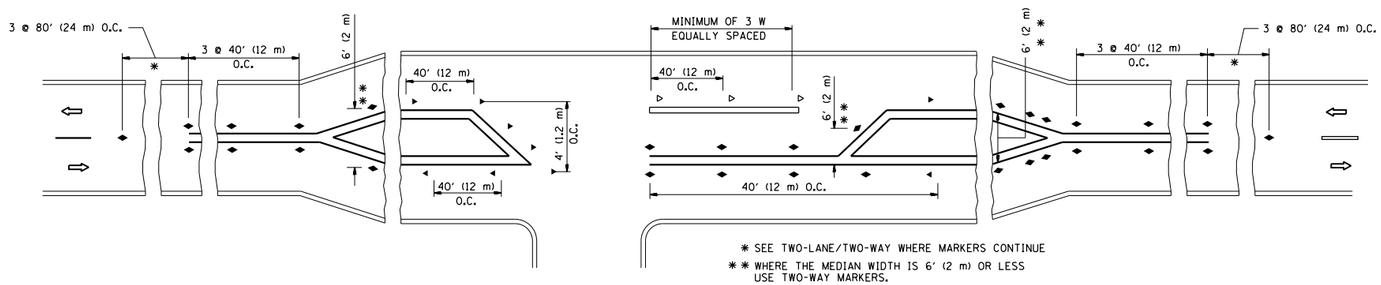
LANE MARKER NOTES

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.

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.



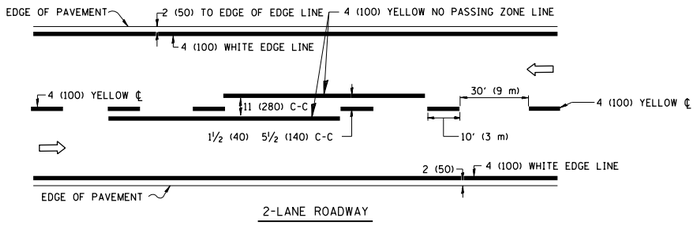
* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

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

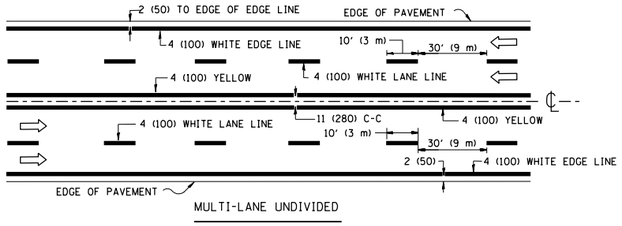
LEFT TURN

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

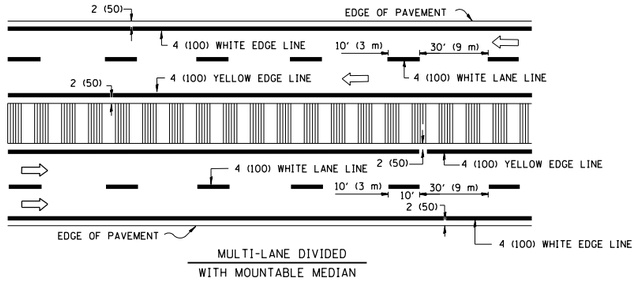
FILE NAME = c:\pw_work\pwidot\pughst\d0246874\DistStd.dgn	USER NAME = pughst	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - T. RAMMACHER 03-12-99					2937	2010-112-RS	COOK	32	25
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - T. RAMMACHER 01-06-00						TC-11		CONTRACT NO. 60M44	
	PLOT DATE = 10/22/2012	DATE -	REVISED - C. JUCIUS 09-09-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.		FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	



2-LANE ROADWAY



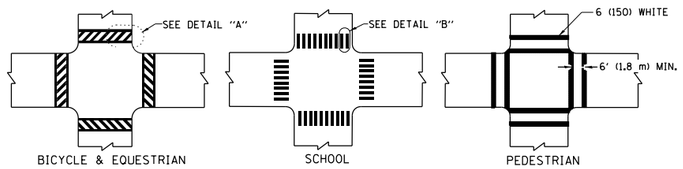
MULTI-LANE UNDIVIDED



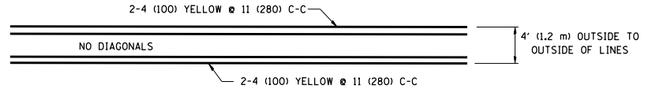
MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN

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

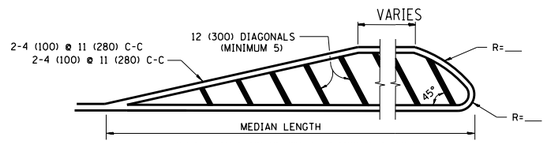
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



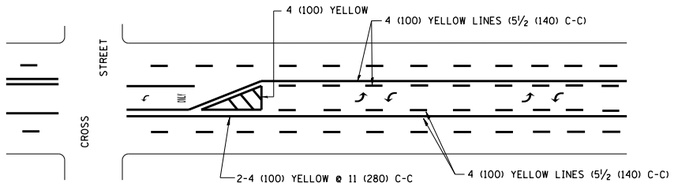
4' (1.2 m) WIDE MEDIANS ONLY



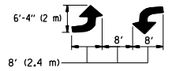
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

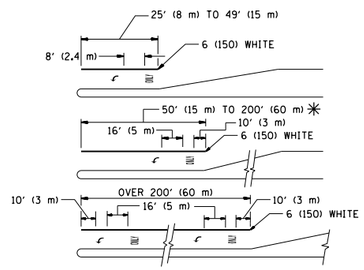


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

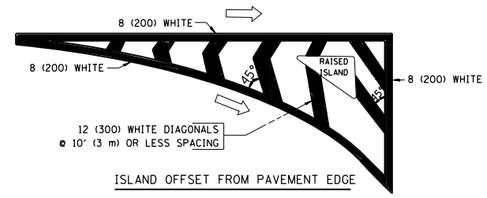


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m^2) **ONLY** AREA = 20.8 SQ. FT. (1.9 m^2)

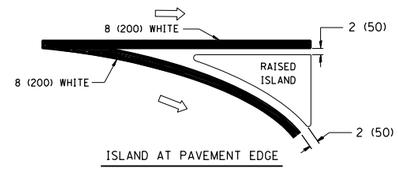
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

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	5½ (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; 5½ (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; "R" 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.

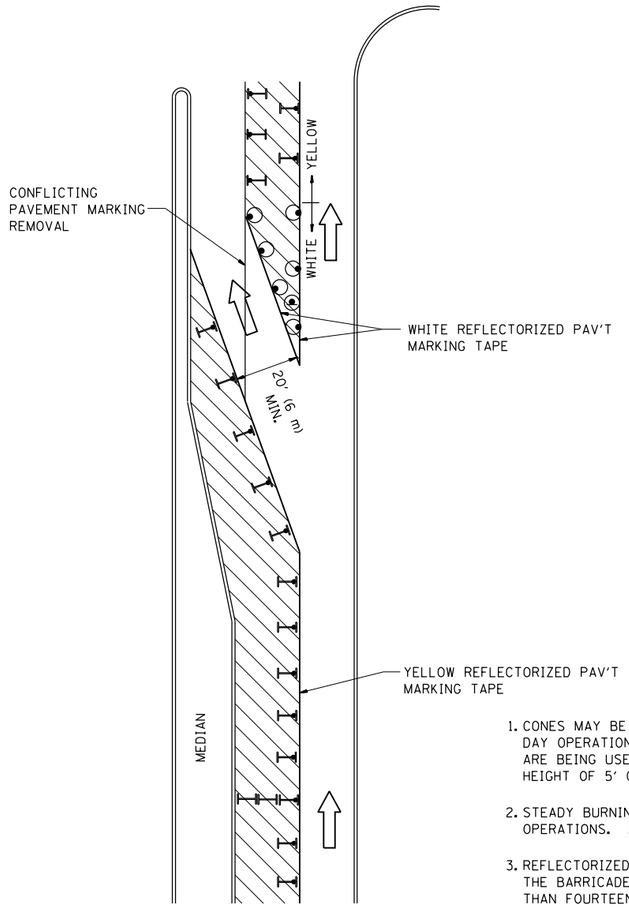
FILE NAME = c:\pw_work\pwidot\pughst\d0246874\DistStd.dgn	USER NAME = pughst	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
		DRAWN -	REVISED -C. JUCIUS 09-09-09
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 10/22/2012	DATE - 03-19-90	REVISED -

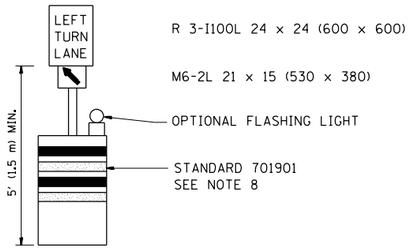
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	26
	TC-13	CONTRACT NO. 60M44		
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 OPER 725 IS REQUIRED.
8. IF A DRUM OR TYPE II BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHR 350 PREQUIREMENTS.
9. 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.

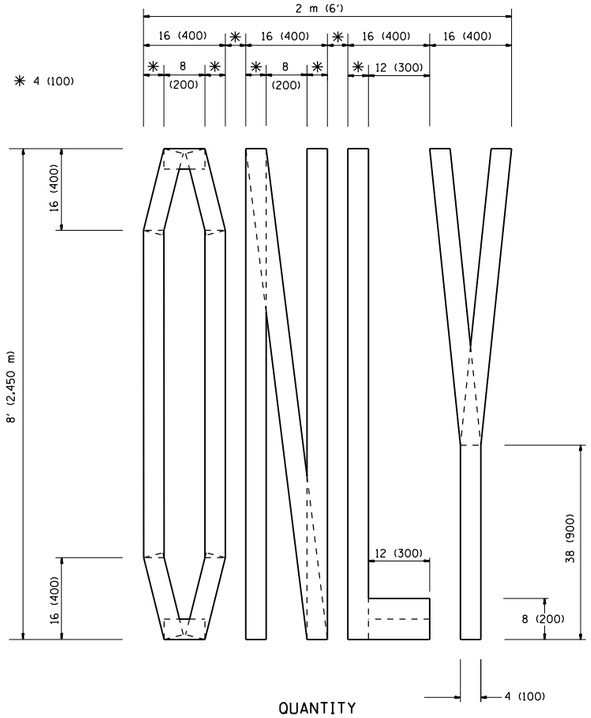
FILE NAME = c:\pw_work\pwidot\pughst\d0246874\DistStd.dgn	USER NAME = pughst	REVISED -T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09
	PLOT SCALE = 100.0000 ' / in.	REVISED - A. HOUSEH 11-07-95	REVISED -
	PLOT DATE = 10/22/2012	REVISED -T. RAMMACHER 01-06-00	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

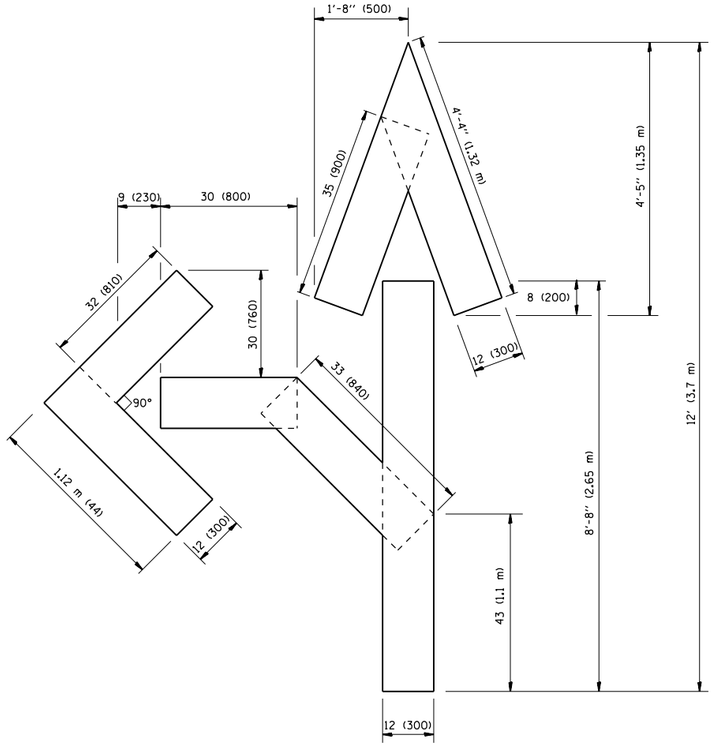
TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
(TO REMAIN OPEN TO TRAFFIC)

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

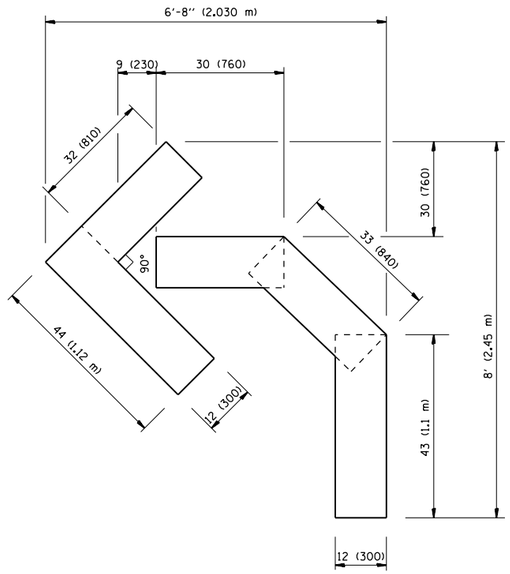
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	27
	TC-14	CONTRACT NO. 60M44		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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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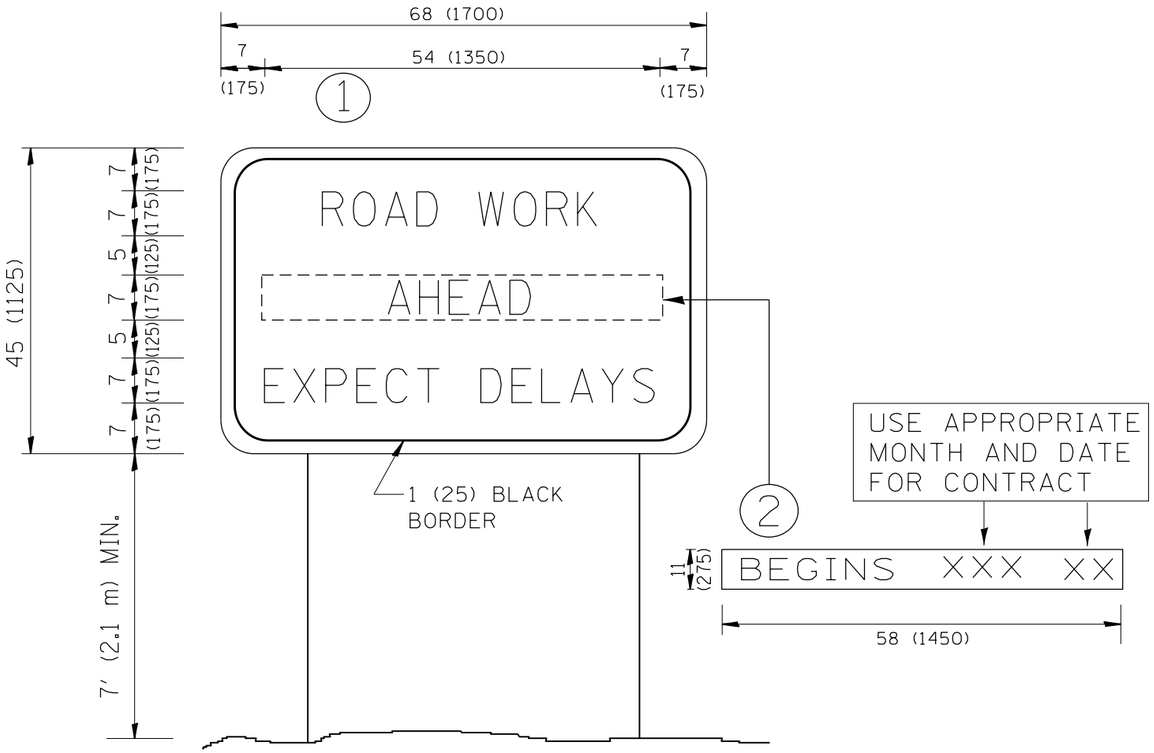
		DRAWN -	REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 10/22/2012	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

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.
2937	2010-112-RS	COOK	32	28
	TC-16	CONTRACT NO. 60M44		
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 = c:\pw_work\pwidot\pughst\d0246874\DistStd.dgn	USER NAME = pughst	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 10/22/2012	DATE -	REVISED - C. JUCIUS 01-31-07

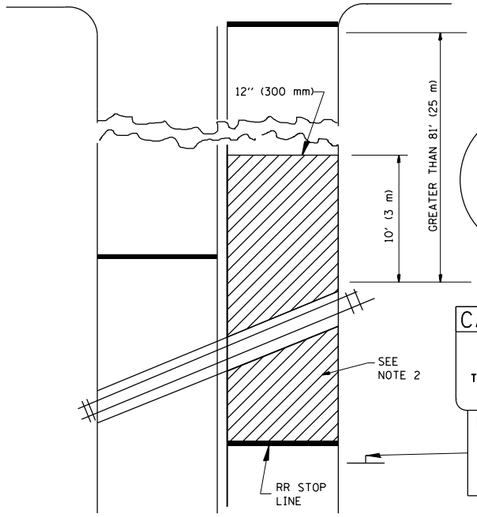
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

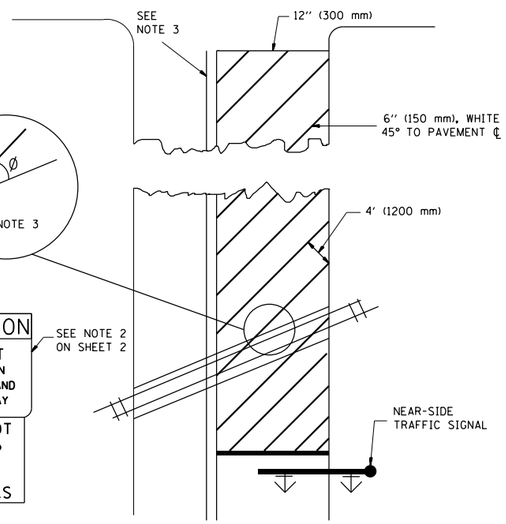
SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	29
	TC-22	CONTRACT NO. 60M44		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

WITH INTERSECTION TRAFFIC SIGNALS



WITH NEAR-SIDE TRAFFIC SIGNALS

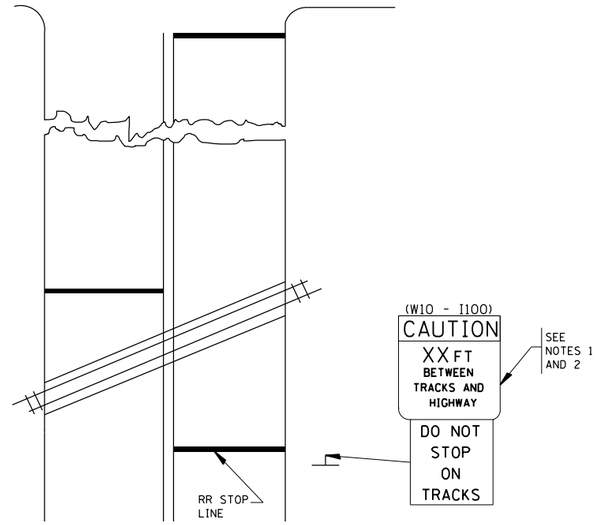


NOTES:

1. PAVEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.
2. WHERE NEAR-SIDE TRAFFIC SIGNALS ARE USED, THE PAVEMENT MARKINGS EXTENDS TO THE INTERSECTION.
3. WHERE THE ANGLE BETWEEN THE DIAGONAL STRIPES AND THE TRACK (Ø) WOULD BE LESS THAN APPROXIMATELY 20°, THE STRIPES SHOULD BE SLOPED IN THE OPPOSITE DIRECTION FROM THAT SHOWN.

WITH NONSIGNALIZED INTERSECTION

81' (25 m) OR LESS TO CLOSEST RAIL



NOTE :

1. DISTANCE TO BE SHOWN ON SIGN MEASURED FROM A POINT 6 FEET (1.8 m) FROM THE RAIL CLOSEST TO THE INTERSECTION TO THE STOP LINE OR CROSSWALK, WHICHEVER IS CLOSEST, ROUNDED DOWN TO THE NEAREST 5 FEET (1.5 m). WHERE THERE IS NO STOP LINE, MEASURE TO POINT WHERE THE DRIVER HAS A VIEW OF APPROACHING TRAFFIC.
2. THE CLEARANCE SIGN IS ALSO TO BE USED AS AN INTERIM MEASURE AT LOCATIONS WITH INTERCONNECTED INTERSECTION TRAFFIC SIGNALS WHERE IT IS PLANNED TO CHANGE THEM TO NEAR-SIDE SIGNALS AT A FUTURE TIME. IN THIS CASE, THE DISTANCE TO BE SHOWN ON THE SIGN IS MEASURED FROM THE EDGE OF THE STRIPED-OUT AREA INSTEAD OF 6-FEET FROM THE RAIL. THE SIGN IS TO BE REMOVED WHEN THE NEAR-SIDE SIGNALS ARE INSTALLED AND THE PAVEMENT MARKINGS EXTEND TO THE INTERSECTION.

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

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	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 10/22/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	30
	TC-23	CONTRACT NO. 60M44		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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.

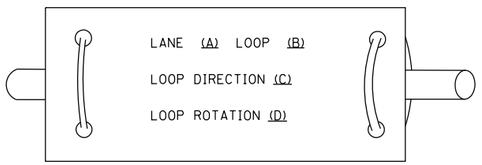
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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

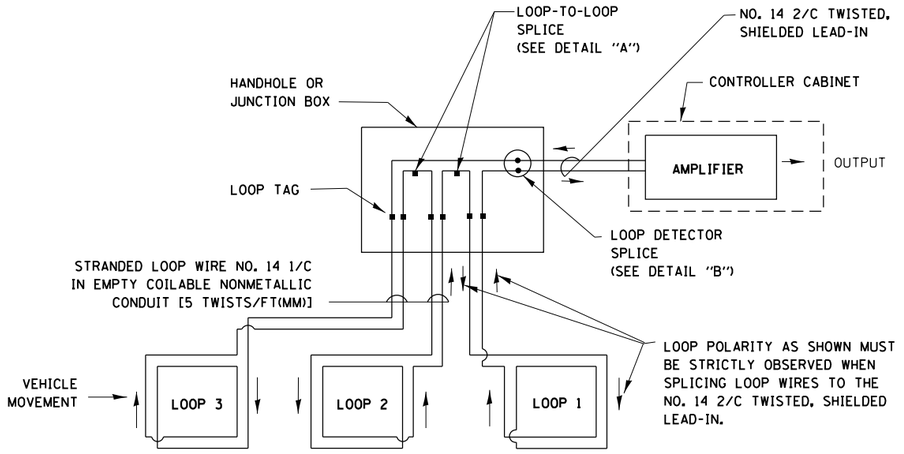


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

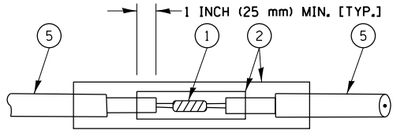
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

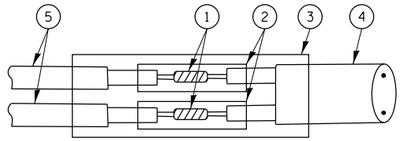


DETECTOR LOOP WIRING SCHEMATIC

- 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.

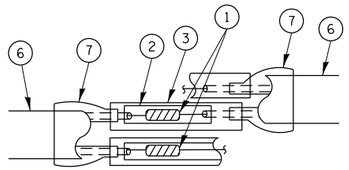


DETAIL "A"
LOOP-TO-LOOP SPLICE



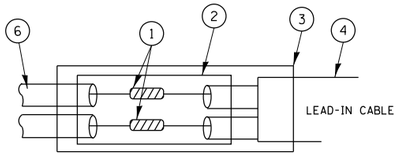
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



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 LENGHT 6" (150 mm), UNDERWATER GRADE.

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

(6) PRE-FORMED LOOP

(7) XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

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		DRAWN - BCK	REVISED -
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	PLOT DATE = 10/22/2012	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

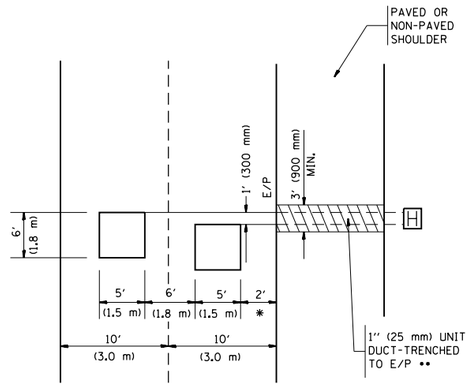
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	31
	TS-05	CONTRACT NO. 60M44		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

LOOPS NEXT TO SHOULDERS

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

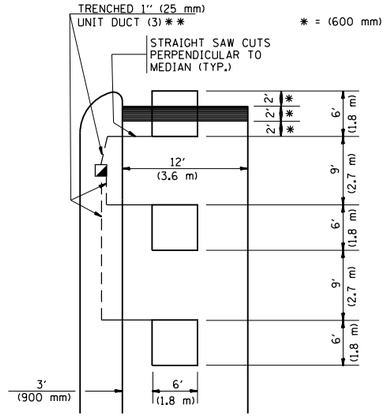


* = (600 mm)

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

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

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

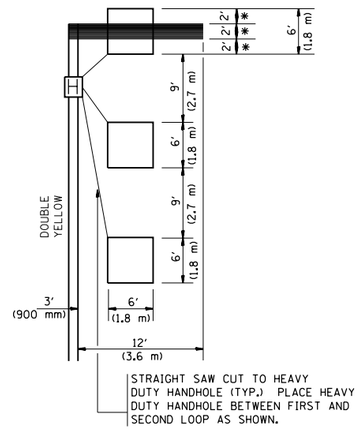


** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

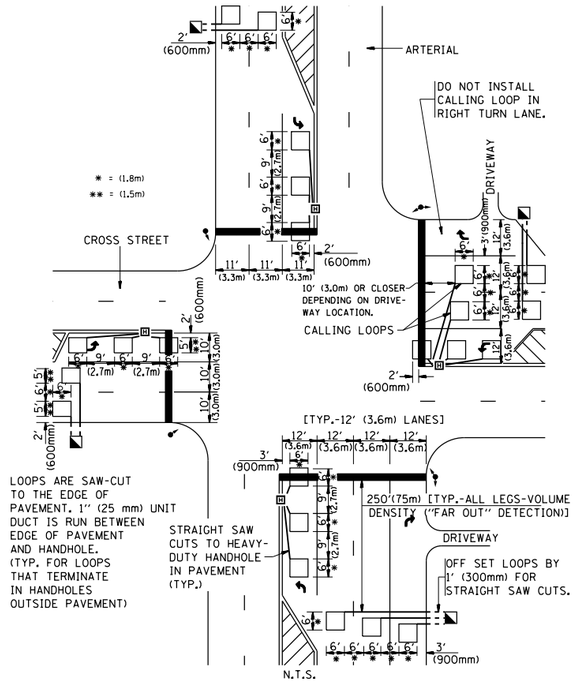
LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)

* = (600 mm)



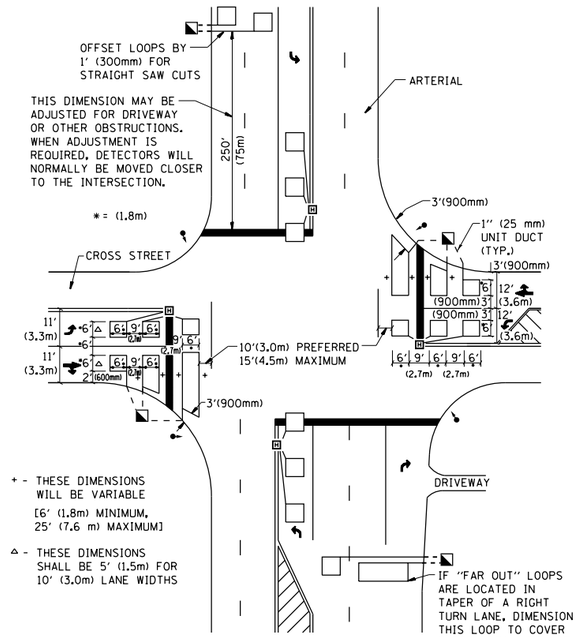
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



DETAIL 1
N.T.S.

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



DETAIL 2
N.T.S.

NOTES:

VEHICLES LOOP DETECTORS

* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. 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.

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	PLOT DATE = 10/22/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 – DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2937	2010-112-RS	COOK	32	32
	TS-07	CONTRACT NO. 60M44		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		