

F.A.P. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	1

(0101,0203B & 0303) RS-10

54+2=56

D-91-205-02

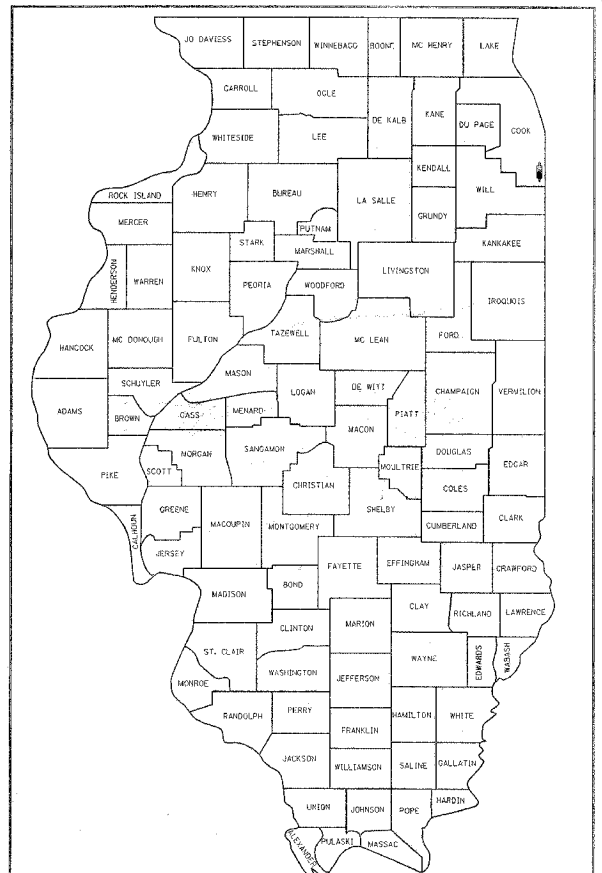
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

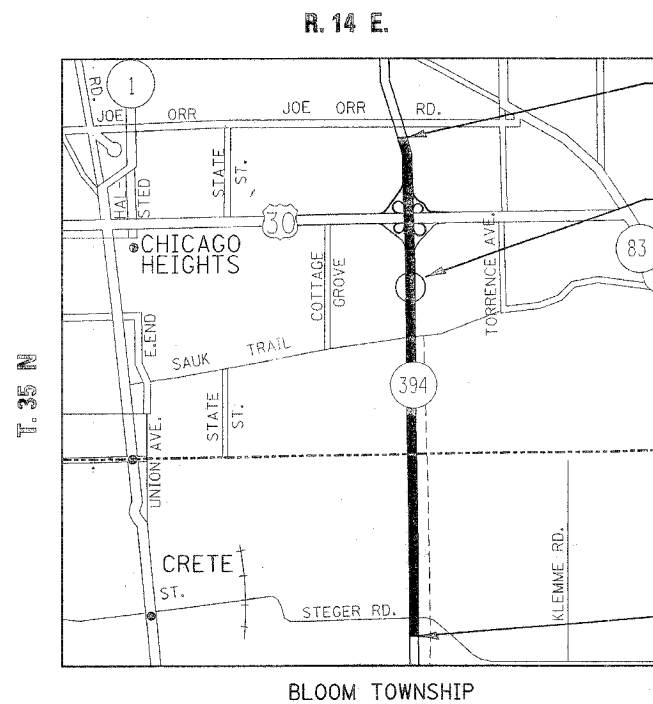
**F.A.P. 332 (IL-394)
JOE ORR ROAD TO STEGER ROAD
SECTION: (0101, 0203B & 0303) RS-10
RESURFACING (MAINTENANCE) AND BRIDGE REPAIR
COOK COUNTY
C-91-205-02**

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE IMPROVEMENT IS LOCATED IN
THE VILLAGES OF SAUK VILLAGE
AND FORD HEIGHTS



LOCATION OF SECTION INDICATED THUS: -



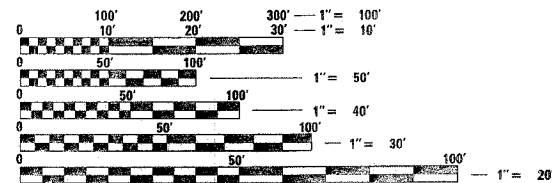
IMPROVEMENT BEGINS
STA. 247+10

IL 394 OVER EJB&RR
SN 016-0456 (NB)
SN 016-1041 (SB)
OMISSION:
STA. 320+84
TO STA. 324+33

AVERAGE DAILY TRAFFIC
2006 ADT = 48,600

POSTED SPEED LIMIT
55MPH

IMPROVEMENT ENDS
STA. 434+06



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

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

CONTRACT NO. 62481

GROSS LENGTH OF IMPROVEMENT = 18,696 FT (3.54 MILES)
NET LENGTH OF IMPROVEMENT = 16,347 FT (3.48 MILES)

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED July 16 2007

Diane O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

August 17, 2007
Eric E. Abramo
ENGINEER OF DESIGN AND ENVIRONMENT

August 17, 2007
William R. See, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

DISTRICT 1 DESIGN - PLAN PREP ENGINEER: KEN ENG/LONG TRAN - (847) 705-4240

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332		COOK	54	2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
*(0101,0203B & 0303) RS-10				

INDEX OF SHEETS

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7 - 9	SEQUENCE OF OPERATIONS
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20	BRIDGE REPAIR PLANS
20A	TRAFFIC CONTROL PLAN
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50 - 53	DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS
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000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-02	CLASS C AND D PATCHES
482011-02	BITUMINOUS SHOULDER STRIPS SHOULDERS WITH RESURFACING OR WIDENING & RESURFACING PROJECTS
630001-07	STEEL PLATE BEAM GUARDRAIL
631011-03	TRAFFIC BARRIER TERMINAL, TYPE 2
631026-03	TRAFFIC BARRIER TERMINAL, TYPE 5
642001	RUMBLE STRIP FOR PCC OR BITUMINOUS SHOULDER
701400-02	APPROACH TO LANE CLOSURE, FREEWAY EXPRESSWAY
701401-03	LANE CLOSURE, FREEWAY EXPRESSWAY
701411-03	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS ≥ 45 MPH.
701426-02	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≥ 45 MPH
701701-04	URBAN LANE CLOSURE, MULTI LANE INTERSECTION
702001-06	TRAFFIC CONTROL DEVICES
635006-02	

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.

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

BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SANDBAGS ON EACH TYPE I OR TYPE II BARRICADE USED ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL.

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PARVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED. THE LENGTH OF THE BUTT JOINT AND THE TEMPORARY HOT-MIX ASPHALT RAMPS SHALL BE INCREASED TO 8' FOR ALL MAINLINE ON IL-394 AND RAMPS LOCATIONS AS SHOWN IN THE PLANS.

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES WHERE THE POSTED SPEED IS 45 MPH OR LESS AND 1 INCH WHERE THE POSTED SPEED IS GREATER THAN 45 MPH. WITH WRITTEN APROVAL FROM THE ENGINNER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED AT A MINIMUM OF 1:3 (V:H).

PIPE UNDERDRAINS ARE PRESENT. CONTRACTOR SHALL PROTECT THE PIPE UNDERDRAINS DURING PATCHING. ANY DAMAGE TO THE PIPE UNDERDRAINS BY PATCHING OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

THE RESIDENT ENGINEER SHALL CONTACT MS. CORA MATHIS, AREA TRAFFIC ENGINEER, AT (815) 485-6475 A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKING.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4151 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGENING WORK.

PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKING 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.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES
SCALE:	VERT. HORIZ.	DRAWN BY
DATE		CHECKED BY

Rev.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	52	3
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	
* (0101,0203B & 0303) RS-10				

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		URBAN COOK CO. IL-394 STATE 100% 1000	IL-394 OVER EJE R.R. X631-2A				
20201006	GRADING AND SHAPING SHOULDERS	UNIT	915	915					
21400100	GRADING AND SHAPING DITCHES	FOOT	1400	1400					
25000210	SEEDING, CLASS 2A	ACRE	0.4	0.4					
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	29.4	29.4					
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	18.2	18.2					
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	12.6	12.6					
25100630	EROSION CONTROL BLANKET	SQ YD	1583	1583					
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	82	82					
40600300	AGGREGATE (PRIME COAT)	TON	402	402					
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGWAYS	TON	61	61					
40600825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	TON	940	940					
40600895	CONSTRUCTING TEST STRIP	EACH	2	2					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	386	386					
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	567	567					
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	8305	8305					
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	7410	7410					
44000156	HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"	SQ YD	65900	65900					
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	111240	111240					
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	22305	22305					
44002216	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 4"	SQ YD	1682	1682					
44002218	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 4 1/2"	SQ YD	751	751					
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	1073	1073					
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	180	180					

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		URBAN COOK CO. IL-394 STATE 100% 1000	IL-394 OVER EJE R.R. X631-2A				
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SQ YD	826	826					
44201843	CLASS D PATCHES, TYPE III, 16 INCH	SQ YD	355	355					
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	2421	2421					
60255600	MANHOLES TO BE ADJUSTED (SPECIAL)	EACH	2	2					
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	1	1					
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	8	8					
* 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	637	637					
* 63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	2	2					
* 63100070	TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	2	2					
63200310	GUARDRAIL REMOVAL	FOOT	150	150					
64200105	SHOULDER RUMBLE STRIP	FOOT	69760	69760					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6					
67100100	MOBILIZATION	L SUM	1	1					
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	1	1					
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1	1					
70100800	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	L SUM	1	1					
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1					
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	12	12					
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	93,685	93,685					
70300230	TEMPORARY PAVEMENT MARKING - LINE 5"	FOOT	9,361	9,361					
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	3030	3030					
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	2860	2860					
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	990	990					
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	245,230	245,230					
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	728	728					

* SPECIALTY ITEMS

* SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUMMARY OF QUANTITIES
 IL ROUTE 394
 FROM JOE ORR RD TO STEGER RD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	"	COOK	54	4
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	
* (0101,0203B & 0303) RS-10				

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		URBAN COOK CO. IL-394 STATE 100% 1000	IL-394 OVER EJE R.R. X631-2A				
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	606	606					
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	4180	4180					
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	728	728					
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	91405	91405					
* 78000300	THERMOPLASTIC PAVEMENT MARKING - LINE 5"	FOOT	9076	9076					
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	3030	3030					
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	2860	2860					
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	990	990					
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	606	606					
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	900	900					
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	2	2					
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	510	510					
* 81400115	HANDHOLE TO BE ADJUSTED	EACH	10	10					
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	3361	3361					
X0320887	POLYMER CONCRETE	CU FT	14.5		14.5				
X0321744	SILICONE JOINT SEALER, 2"	FOOT	172		172				
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	128	128					
X0322729	MATERIAL TRANSFER DEVICE	TON	25,590	25,590					
X4063000	PRELIMINARY TEST STRIP (STONE MATRIX ASPHALT)	EACH	2	2					
X4066580	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, N80	TON	12795	12795					
X4066685	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, STONE MATRIX ASPHALT, N80	TON	12795	12795					
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1					

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		URBAN COOK CO. IL-394 STATE 100% 1000	IL-394 OVER EJE R.R. X631-2A				
X7013820	TRAFFIC CONTROL SURVEILLANCE, EXPRESSWAYS	CAL DA	60	60					
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	30		30				
Z0014800	CULVERT TO BE CLEANED	FOOT	1225	1225					
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	19	19					
Z0037620	PAVEMENT RELIEF JOINT, REMOVE AND REPLACE	SQ FT	3195	3195					
78300105	PAVEMENT MARKING REMOVAL	FOOT	790	790					
78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	10	10					
78006110	PERFORMED THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	700	700					
78006120	PERFORMED THERMOPLASTIC PAVEMENT MARKING - LINE 5"	FOOT	88	88					

* SPECIALTY ITEMS

REVISIONS	
NAME	DATE

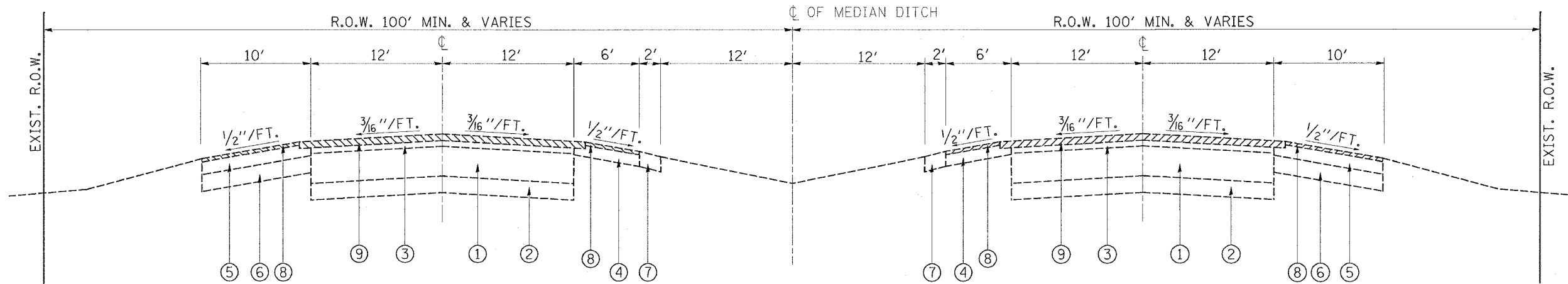
ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUMMARY OF QUANTITIES
 IL ROUTE 394
 FROM JOE ORR RD TO STEGER RD

Rev:

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	5
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

*(0101, 0203B & 0303) RS-10



IL-394
EXISTING TYPICAL CROSS SECTION
STA. 247+10 TO STA. 434+06

LEGEND

- ① EXISTING P.C.C. PAVEMENT, 10"
- ② EXISTING GRANULAR SUB BASE, 6"
- ③ EXISTING HOT-MIX ASPHALT SURFACE (AFTER MILLING), 2"
- ④ EXISTING HOT-MIX ASPHALT BINDER COURSE MIX. "B" TYPE 2, 1 3/4"
- ⑤ EXISTING HOT-MIX ASPHALT SURFACE COURSE MIX. "D" TYPE 2, 1 1/2"
- ⑥ EXISTING HOT-MIX ASPHALT SHOULDER, 8"
- ⑦ EXISTING AGGREGATE SHOULDER TYPE "B"
- ⑧ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"
- ⑨ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- ⑩ PROPOSED POLYMERIZED STONE MATRIX ASPHALT (SMA) BINDER COURSE, 2"
- ⑪ PROPOSED POLYMERIZED STONE MATRIX ASPHALT (SMA) SURFACE COURSE, 2"
- ⑫ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19, N70, 2 1/4"
- ⑬ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX. "D", N70, 1 1/2"
- ⑭ PROPOSED SHOULDER RUMBLE STRIP
- ⑮ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE "B"
- ⑯ PROPOSED GRADING AND SHAPING SHOULDER

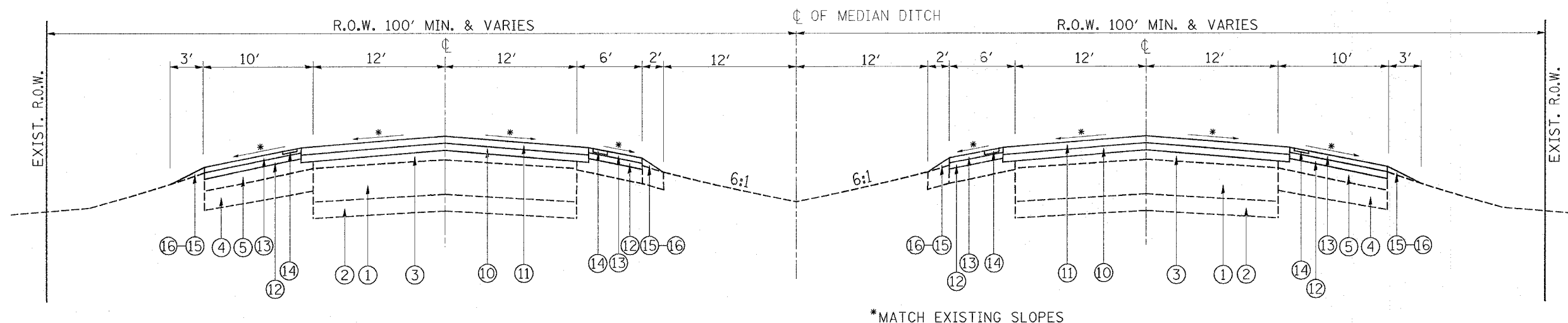
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**IL. ROUTE 394
TYPICAL CROSS SECTIONS
EXISTING**

SCALE
7/14/2007

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	6
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
*(101, 0203B & 0303) RS-10				



IL-394
PROPOSED TYPICAL CROSS SECTION
STA. 247+10 TO STA. 434+06

LEGEND

- ① EXISTING P.C.C. PAVEMENT, 10"
- ② EXISTING GRANULAR SUB BASE, 6"
- ③ EXISTING HOT-MIX ASPHALT SURFACE (AFTER MILLING), 2"
- ④ EXISTING HOT-MIX ASPHALT BINDER COURSE MIX. "B" TYPE 2, 1 3/4"
- ⑤ EXISTING HOT-MIX ASPHALT SURFACE COURSE MIX. "D" TYPE 2, 1 1/2"
- ⑥ EXISTING HOT-MIX ASPHALT SHOULDER, 8"
- ⑦ EXISTING AGGREGATE SHOULDER TYPE "B"
- ⑧ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"
- ⑨ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- ⑩ PROPOSED STONE MATRIX ASPHALT (SMA) BINDER COURSE, 2"
- ⑪ PROPOSED STONE MATRIX ASPHALT (SMA) SURFACE COURSE, 2"
- ⑫ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19, N70, 2 1/4"
- ⑬ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX. "D", N70, 1 1/2"
- ⑭ PROPOSED SHOULDER RUMBLE STRIP
- ⑮ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE "B"
- ⑯ PROPOSED GRADING AND SHAPING SHOULDER

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AC TYPE	AIR VOIDS(%)
PAVEMENT RESURFACING (MAINLINE)		
POLYMERIZED HMA SURFACE COURSE, STONE MATRIX ASPHALT, N80	SBS/SBR PG 76-28/-22	4% @ 80 GYR.
POLYMERIZED HMA BINDER COURSE, STONE MATRIX ASPHALT, N80	SBS/SBR PG 76-28/-22	4% @ 80 GYR.
SHOULDER RESURFACING		
HOT-MIX ASPHALT SURFACE COURSE, (IL 9.5 mm)	PG 64-22	4% @ 70 GYR.
HOT-MIX ASPHALT BINDER COURSE, (IL-19.0 mm)	PG 64-22*	4% @ 70 GYR.
PATCHING		
CLASS D PATCHES 10" (HMA BINDER IL-25 mm)	PG 64-22	4% @ 105 GYR.
CLASS D PATCHES 16" (HMA BINDER IL-25 mm)	PG 64-22	4% @ 105 GYR.
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19 mm)	PG 64-22*	4% @ 70 GYR.

* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

NOTE: THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN. USE 135 LBS/SQ YD/IN FOR STONE MATRIX ASPHALT.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL. ROUTE 394
TYPICAL CROSS SECTIONS
PROPOSED

SCALE
8/6/2007

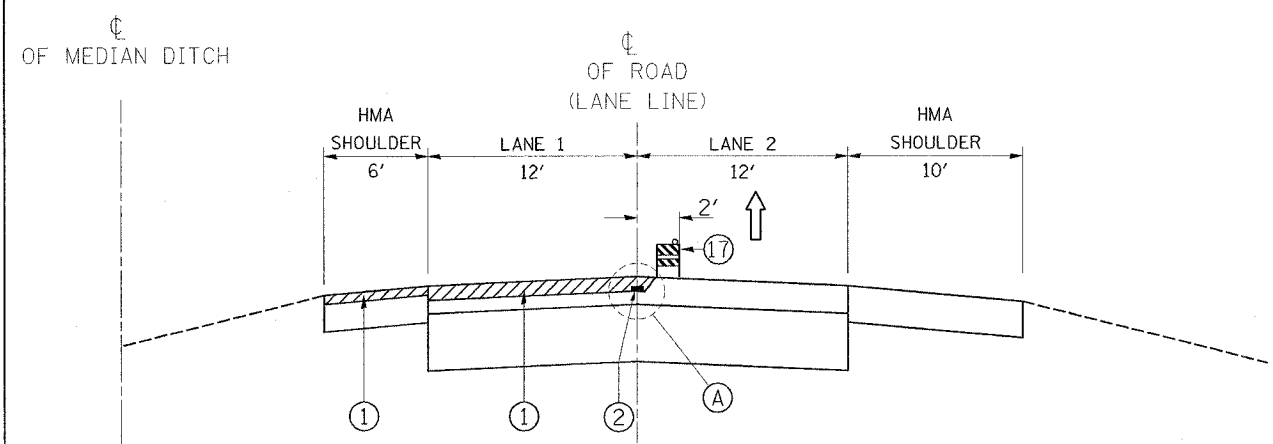
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
* (0101, 0203B & 0303) RS-10				

PRE-OPERATION 1

PATCHING AND RELIEF JOINT REMOVAL AND REPLACEMENT

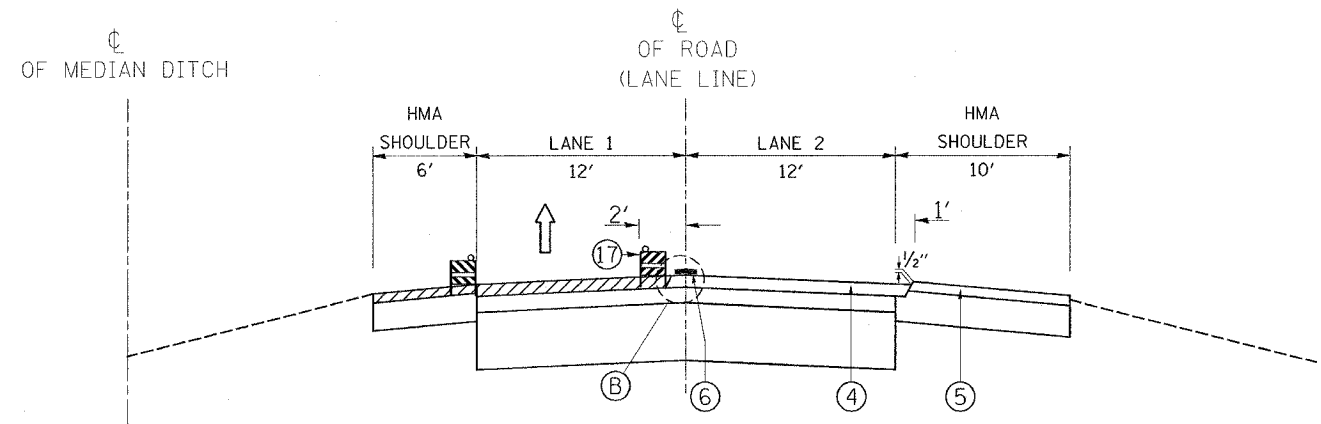
IL.-394 (SOUTH BOUND) & (NORTH BOUND)



OPERATION 1

- ① MILL 2" LANE 1 & MILL 1 3/4" INNER SHOULDER.
- ② TEMPORARY PAVEMENT MARKING, 5" WHITE LANE LINE (30'-10' SKIP-DASH)

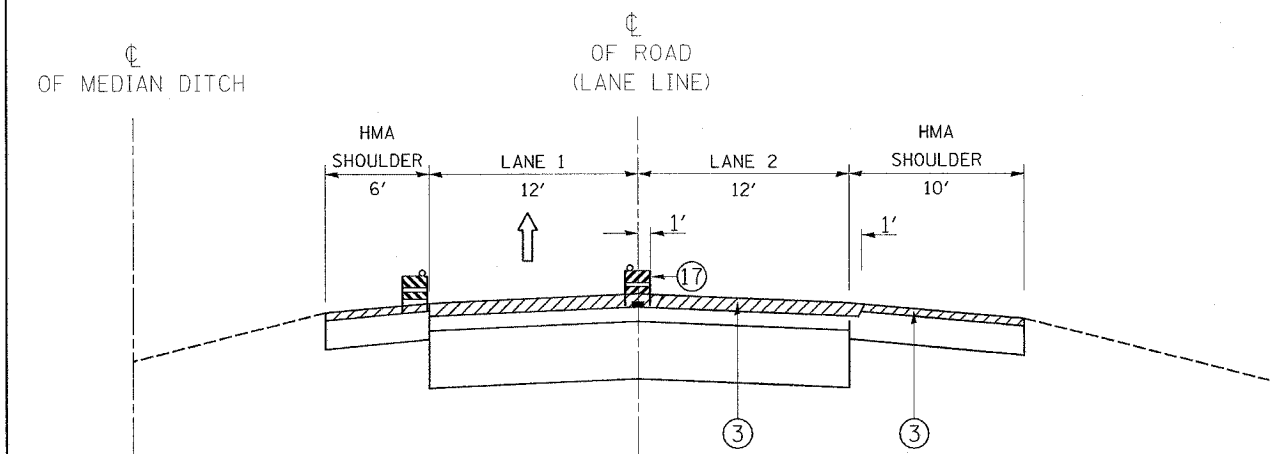
IL.-394 (SOUTH BOUND) & (NORTH BOUND)



OPERATION 3

- ④ PLACE POLYMERIZED SMA BINDER COURSE 2" ON LANE 2
- ⑤ PLACE HMA BINDER COURSE 2 1/4" ON OUTER SHOULDER
- ⑥ TEMPORARY PAVEMENT MARKING, 5" WHITE LANE LINE (30'-10' SKIP-DASH)

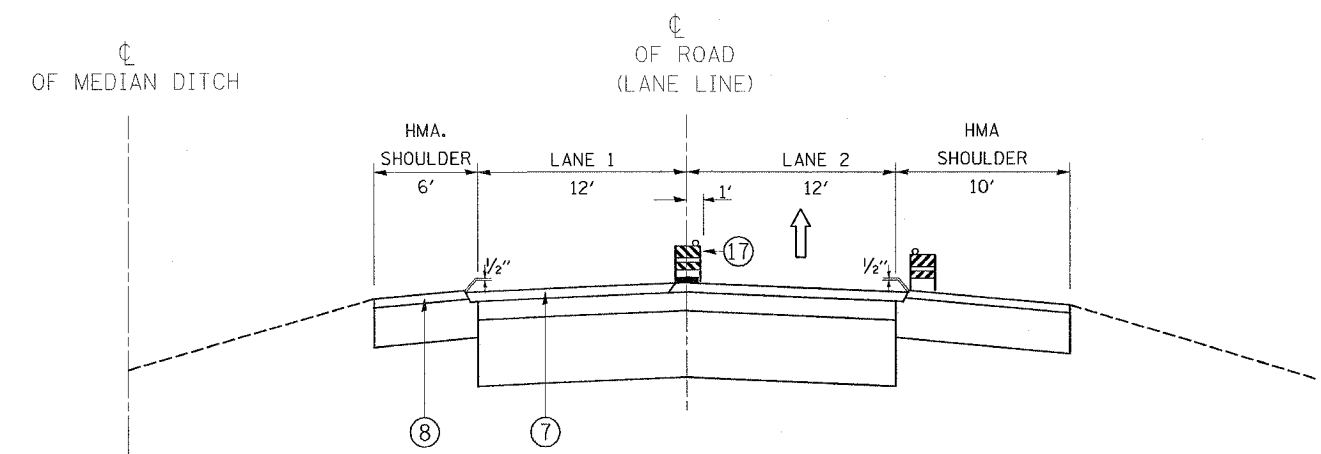
IL.-394 (SOUTH BOUND) & (NORTH BOUND)



OPERATION 2

- ③ MILL 2" LANE 2 & MILL 1 3/4" OUTER SHOULDER.

IL.-394 (SOUTH BOUND) & (NORTH BOUND)



OPERATION 4

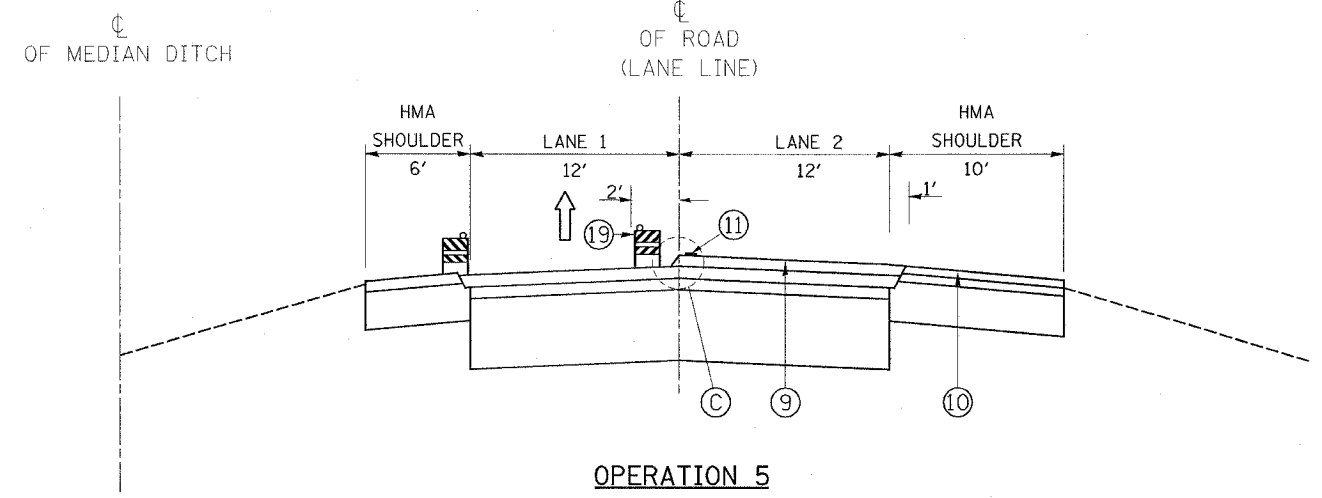
- ⑦ PLACE POLYMERIZED SMA BINDER COURSE 2" ON LANE 1
- ⑧ PLACE HMA BINDER COURSE 2 1/4" ON INNER SHOULDER

NOTE: BARRICADES/DRUMS TO BE PLACED ON THE SHOULDER WITHIN 2' OF THE EDGE OF THE PAVEMENT DURING NON-WORKING HOURS.

REVISIONS	
NAME	DATE

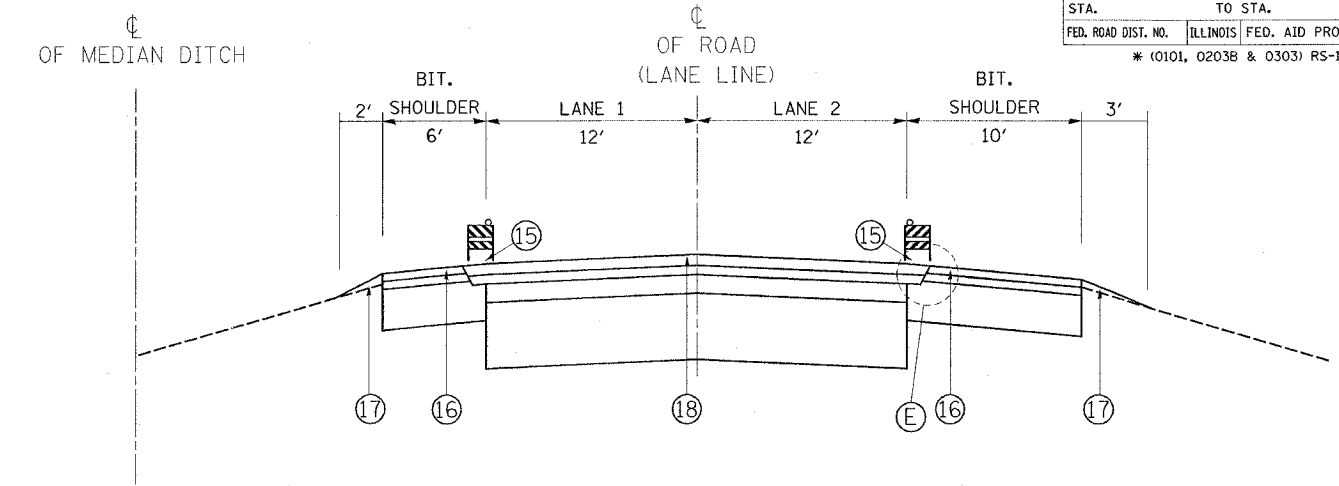
ILLINOIS DEPARTMENT OF TRANSPORTATION
 IL. ROUTE 394
 SUGGESTED SEQUENCE
 OF OPERATIONS
 SCALE 7/14/2007
 DRAWN BY
 CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	52	8
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
* (0101, 02038 & 0303) RS-10				



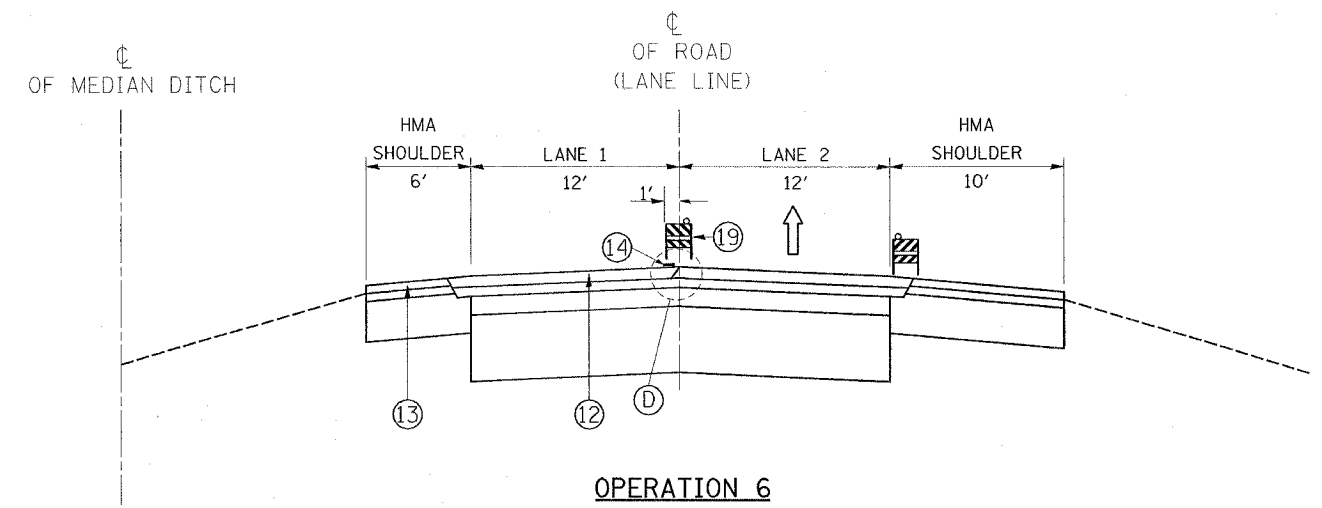
OPERATION 5

- ⑨ RESURFACING WITH SMA SURFACE COURSE 2" ON LANE 2.
- ⑩ RESURFACING WITH HOT-MIX ASPHALT SURFACE COURSE 1 1/2" ON THE OUTER SHOULDER.
- ⑪ TEMPORARY PAVEMENT MARKING



OPERATION 7

- ⑮ FINAL PAVEMENT MARKING WITH THERMOPLASTIC PAVEMENT MARKING, LINE 4"
- ⑯ INSTALL RUMBLE STRIPS ON INNER AND OUTER SHOULDER AS PER DETAIL ON PLAN.
- ⑰ PLACE AGGREGATE WEDGE SHOULDER, TYPE B.
- ⑱ PLACE RAISED REFLECTIVE PAVEMENT MARKERS AT LANE LINE AND RAMPS.
- ⑲ DRUMS WITH STEADY BURN LIGHTS AS PER TC-06 AND GENERAL NOTE 5 (DRUMS/BARRICADES SHALL BE PLACED ON SHOULDER WITHIN 2' OF EDGE OF PAVEMENT DURING NON-WORKING HOURS).



OPERATION 6

- ⑫ RESURFACING WITH SMA SURFACE COURSE 2" ON LANE 1
- ⑬ RESURFACING WITH HOT-MIX ASPHALT SURFACE COURSE 1 1/2" ON THE INNER SHOULDER
- ⑭ FINAL PAVEMENT MARKING WITH THERMOPLASTIC PAVEMENT MARKING, LINE 5"

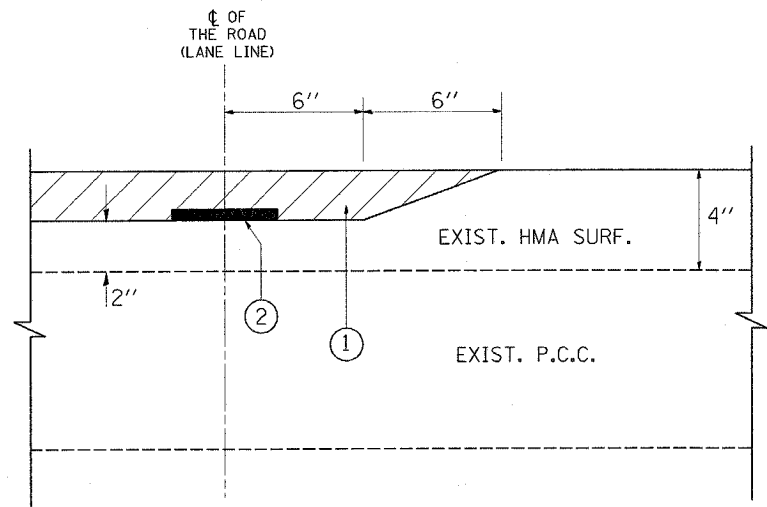
NOTE: BARRICADES/DRUMS TO BE PLACED ON THE SHOULDER WITHIN 2' OF THE EDGE OF THE PAVEMENT DURING NON-WORKING HOURS.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		IL. ROUTE 394 SUGGESTED SEQUENCE OF OPERATIONS
SCALE		DRAWN BY
7/14/2007		CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	52	9
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

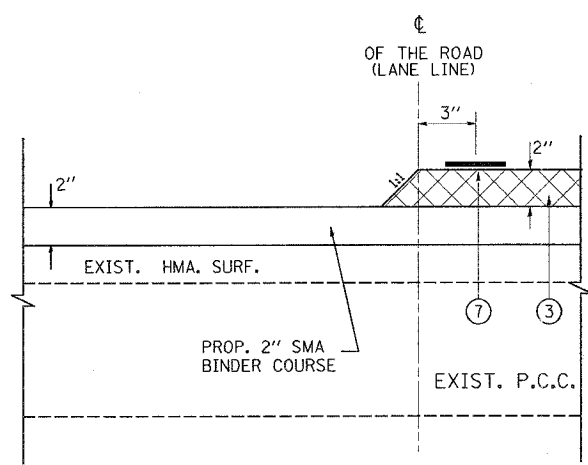
* (0101, 0203B & 0303) RS-10

MILLING DETAIL



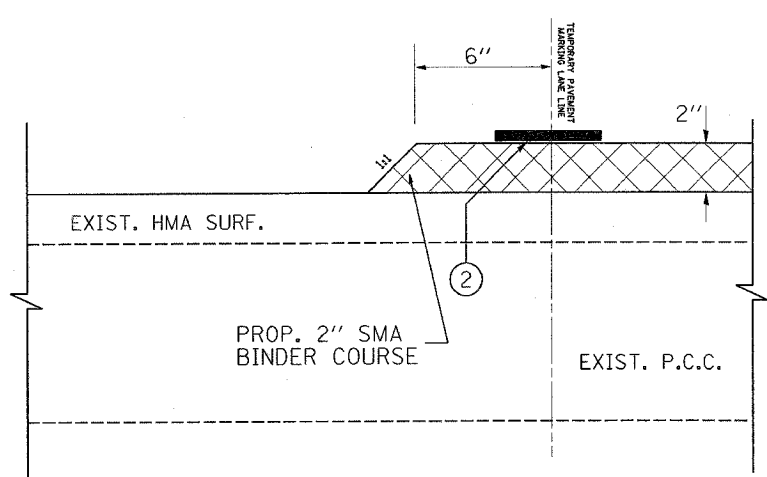
DETAIL 'A' (TYPICAL)

PAVING DETAILS

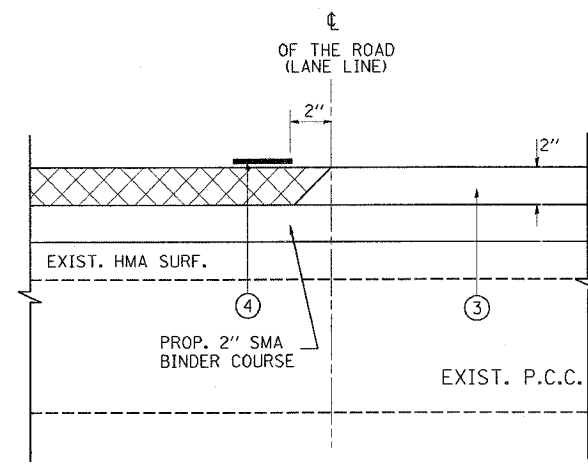


DETAIL 'C' (TYPICAL)

PAVING DETAILS



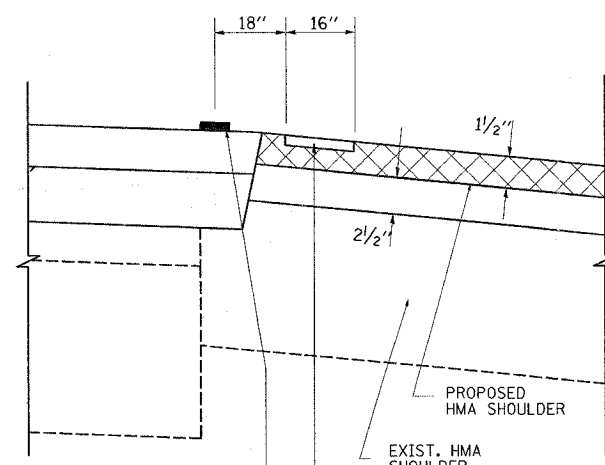
DETAIL 'B' (TYPICAL)



DETAIL 'D' (TYPICAL)

LEGEND FOR DETAILS A, B, C & D

- ① PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- ② PROPOSED TEMPORARY PAVEMENT MARKING, LINE 5"
- ③ PROPOSED SMA SURFACE COURSE, 2"
- ④ PROPOSED THERMOPLASTIC PAVEMENT MARKINGS, LINE 5"
- ⑤ PROPOSED THERMOPLASTIC PAVEMENT MARKING, LINE 4"
- ⑥ PROPOSED RUMBLE STRIP ON SHOULDER
- ⑦ TEMPORARY PAVEMENT MARKING, 5" , 10' - 30' (SKIP - DASH)

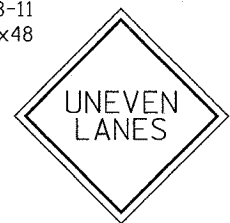


DETAIL 'E' (TYPICAL)

GENERAL NOTES - TRAFFIC CONTROL

1. THE CONTRACTOR SHALL PLACE AND MAINTAIN DRUMS WITH MONO-DIRECTIONAL STEADY BURNING LIGHTS AT 100-FOOT C-C ON THE SHOULDER ADJACENT TO MILLED AREAS. DRUMS WILL REMAIN IN PLACE UNTIL THE PROPOSED SURFACE HAS BEEN PLACED AND EDGE LINES HAVE BEEN INSTALLED.
2. AT THE END OF EACH NIGHTLY SHIFT, THE CONTRACTOR SHALL SWEEP THE PAVEMENT SURFACE CLEAN, PLACE TEMPORARY PAVEMENT MARKING AND REMOVE TRAFFIC CONTROL FOR LANE CLOSURE.
3. ALL DRAINAGE WORK SHOWN IN THE PLANS CAN BE ACCOMPLISHED WITH DAYTIME SHOULDER CLOSURES.
4. DRUMS SHALL NOT BE PLACED IN THE LANE WHICH IS OPEN TO TRAFFIC. THE CONTRACTOR SHALL USE ONE FOOT WIDE VERTICAL BARRICADES WITH STEADY BURN LIGHTS ALONG THE MILLING AND PAVING OPERATIONS. DRUMS OR TYPE II BARRICADES SHALL BE USED TO DELINEATE ALL OPEN RAMPS THROUGH THE WORK ZONE.
5. THE MILLING REQUIRED TO PLACE A TAPER BETWEEN LANES (SEE DETAILS A, B, C AND D) WILL BE INCLUDED IN THE COST OF HOT-MIX ASPHALT SURFACE REMOVAL 2".
6. GRADE DIFFERENTIAL BETWEEN PAVED LANES SHALL NOT EXCEED 2".

W8-11
48x48



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL. ROUTE 394
SUGGESTED SEQUENCE OF
OPERATIONS, DETAILS & GENERAL
NOTES-TRAFFIC CONTROL

SCALE: NONE
DATE 8/3/2007

DRAWN BY
CHECKED BY

REF
REF
REF

CONTRACT NO. 62481

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332		COOK	54	10
STA. 247+10		TO STA. 275+00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
• (0101,0203B & 0303) RS-10				



BEGINNING OF IMPROVEMENT
STA 247+10

PROP. AGGREGATE WEDGE SHOULDER, TYPE B

PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
PROP. 2" POLYMERIZED HMA SURFACE COURSE, SMA, N80
PROP. 2" POLYMERIZED HMA BINDER COURSE, SMA, N80

IL-394

PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"
PROP. 1 1/2" HMA SURFACE COURSE, MIX "D", N70
PROP. 2/4" HMA BINDER COURSE, IL-19.0, N70

MATCH LINE STA. 260+00

MATCH LINE STA. 260+00

IL-394

MATCH LINE STA. 275+00

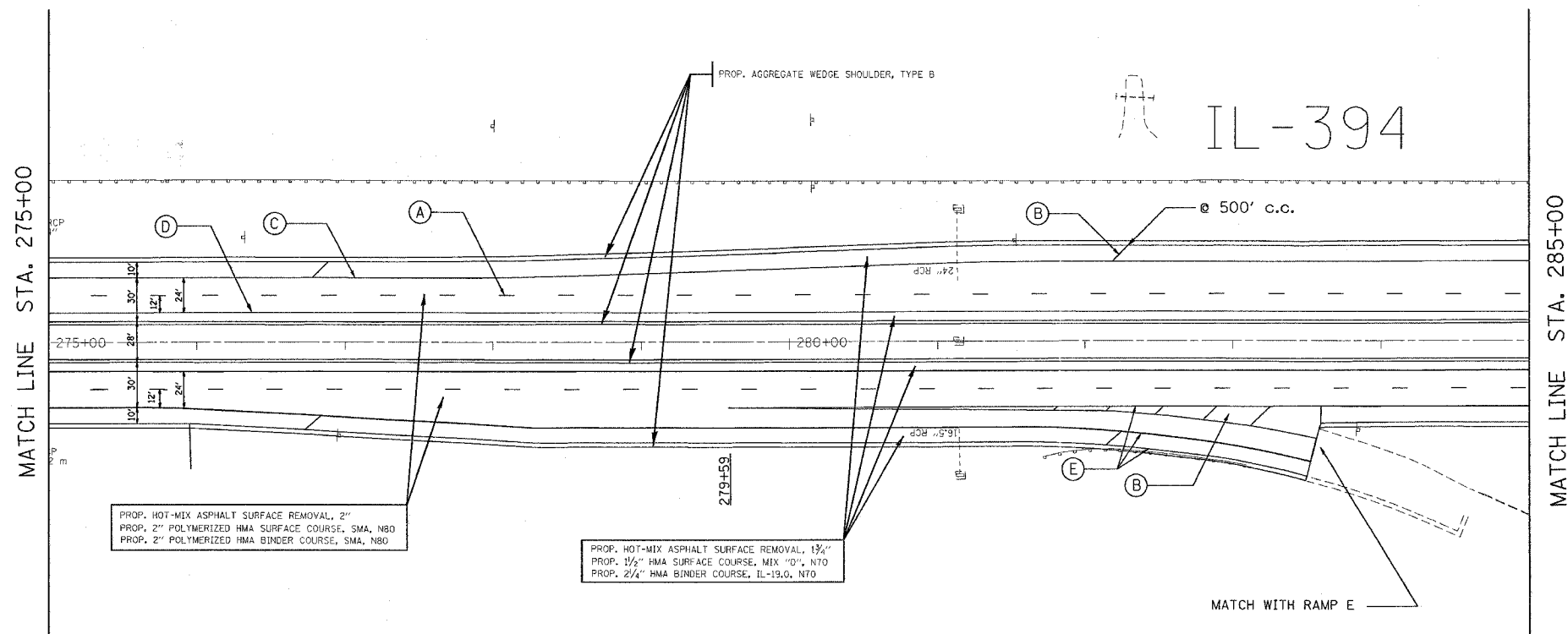
- (A) THERMOPLASTIC PAVEMENT MARKING-LINE 5", WHITE
- (B) THERMOPLASTIC PAVEMENT MARKING-LINE 12", WHITE
- (C) THERMOPLASTIC PAVEMENT MARKING-LINE 4", WHITE
- (D) THERMOPLASTIC PAVEMENT MARKING-LINE 4", YELLOW
- (E) THERMOPLASTIC PAVEMENT MARKING-LINE 8", WHITE

REVISIONS	
NAME	DATE

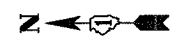
ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 394
JOE ORR RD TO STEGER RD
RESURFACING AND PAVEMENT MARKING
PLANS

SCALE: VERT. N/A
HORIZ. 1" = 50'
DATE 8/3/2007
DRAWN BY
CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	11
STA. 275+00		TO STA. 285+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
* (0101,0203B & 0303) RS-10				



- (A) THERMOPLASTIC PAVEMENT MARKING-LINE 5", WHITE
- (B) THERMOPLASTIC PAVEMENT MARKING-LINE 12", WHITE
- (C) THERMOPLASTIC PAVEMENT MARKING-LINE 4", WHITE
- (D) THERMOPLASTIC PAVEMENT MARKING-LINE 4", YELLOW
- (E) THERMOPLASTIC PAVEMENT MARKING-LINE 8", WHITE



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 394
 JOE ORR RD TO STEGER RD
 RESURFACING AND PAVEMENT MARKING PLANS

SCALE: VERT. N/A
 HORIZ. 1" = 50'
 DATE 7/14/2007

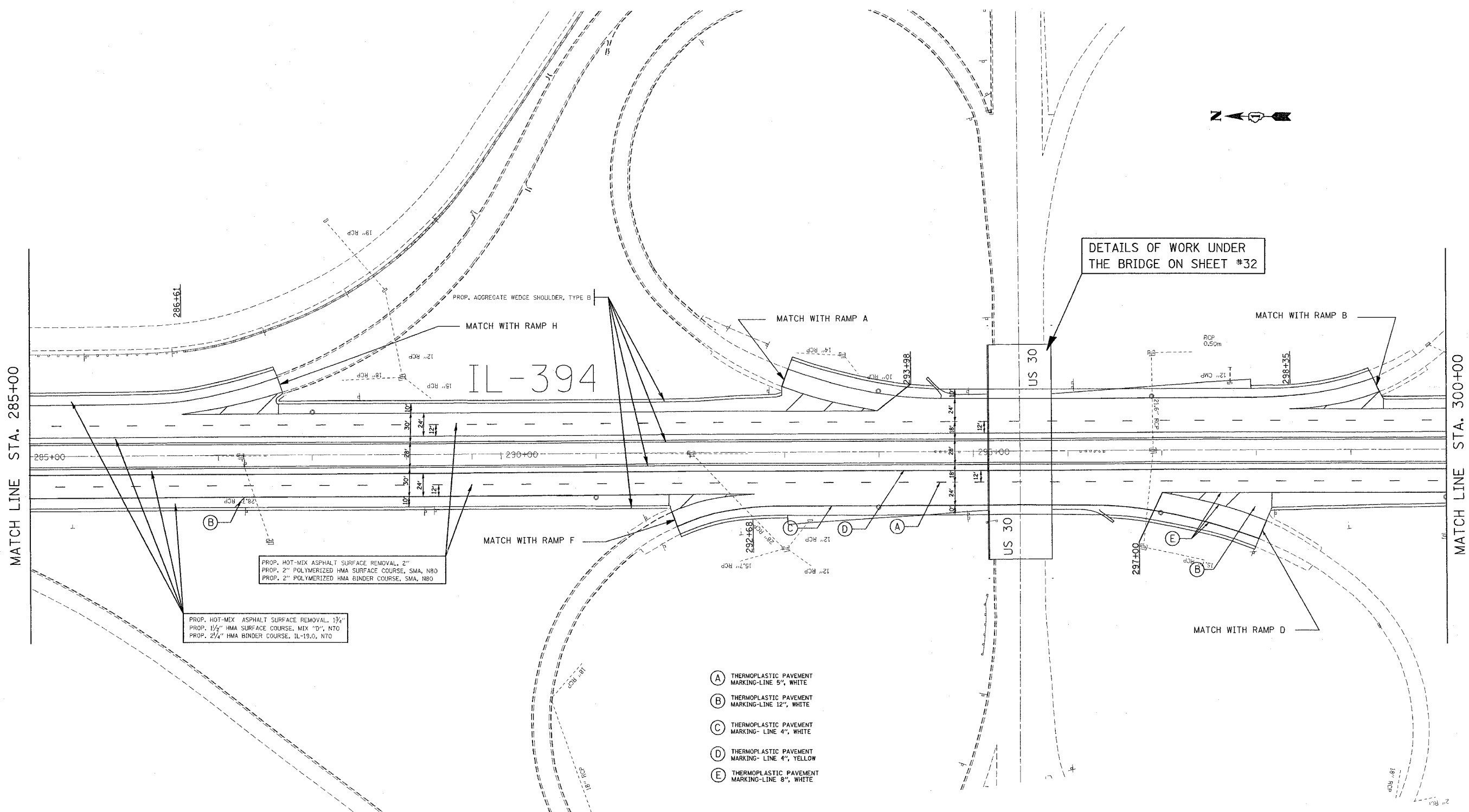
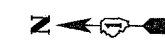
DRAWN BY
 CHECKED BY

*REF-
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REF-

CONTRACT NO. 62481

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	12
STA. 285+00		TO STA. 300+00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
* (0101,0203B & 0303) RS-10				



PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
PROP. 2" POLYMERIZED HMA SURFACE COURSE, SMA, N80
PROP. 2" POLYMERIZED HMA BINDER COURSE, SMA, N80

PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/4"
PROP. 1 1/2" HMA SURFACE COURSE, MIX "D", N70
PROP. 2 1/4" HMA BINDER COURSE, IL-19.0, N70

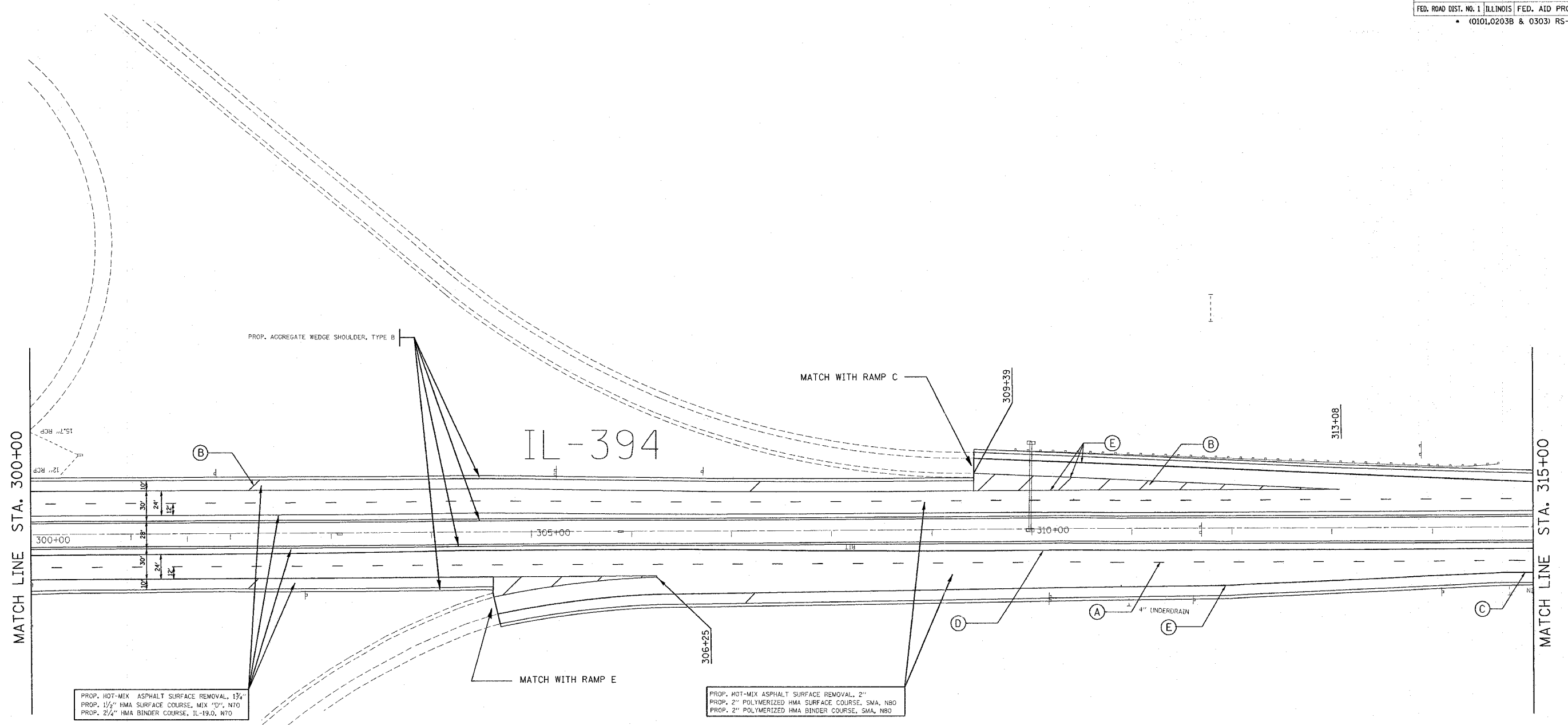
- (A) THERMOPLASTIC PAVEMENT MARKING-LINE 5", WHITE
- (B) THERMOPLASTIC PAVEMENT MARKING-LINE 12", WHITE
- (C) THERMOPLASTIC PAVEMENT MARKING-LINE 4", WHITE
- (D) THERMOPLASTIC PAVEMENT MARKING-LINE 4", YELLOW
- (E) THERMOPLASTIC PAVEMENT MARKING-LINE 8", WHITE

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 394
 JOE ORR RD TO STEGER RD
 RESURFACING AND PAVEMENT MARKING
 PLANS
 SCALE: VERT. N/A
 HORIZ. 1" = 50'
 DATE 8/3/2007
 DRAWN BY
 CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332		COOK	54	13
STA. 300+00		TO STA. 315+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (0101,0203B & 0303) RS-10				

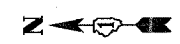
REF-
REF-
REF-



PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"
PROP. 1 1/2" HMA SURFACE COURSE, MIX "D", N70
PROP. 2 1/4" HMA BINDER COURSE, IL-19.0, N70

PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
PROP. 2" POLYMERIZED HMA SURFACE COURSE, SMA, N80
PROP. 2" POLYMERIZED HMA BINDER COURSE, SMA, N80

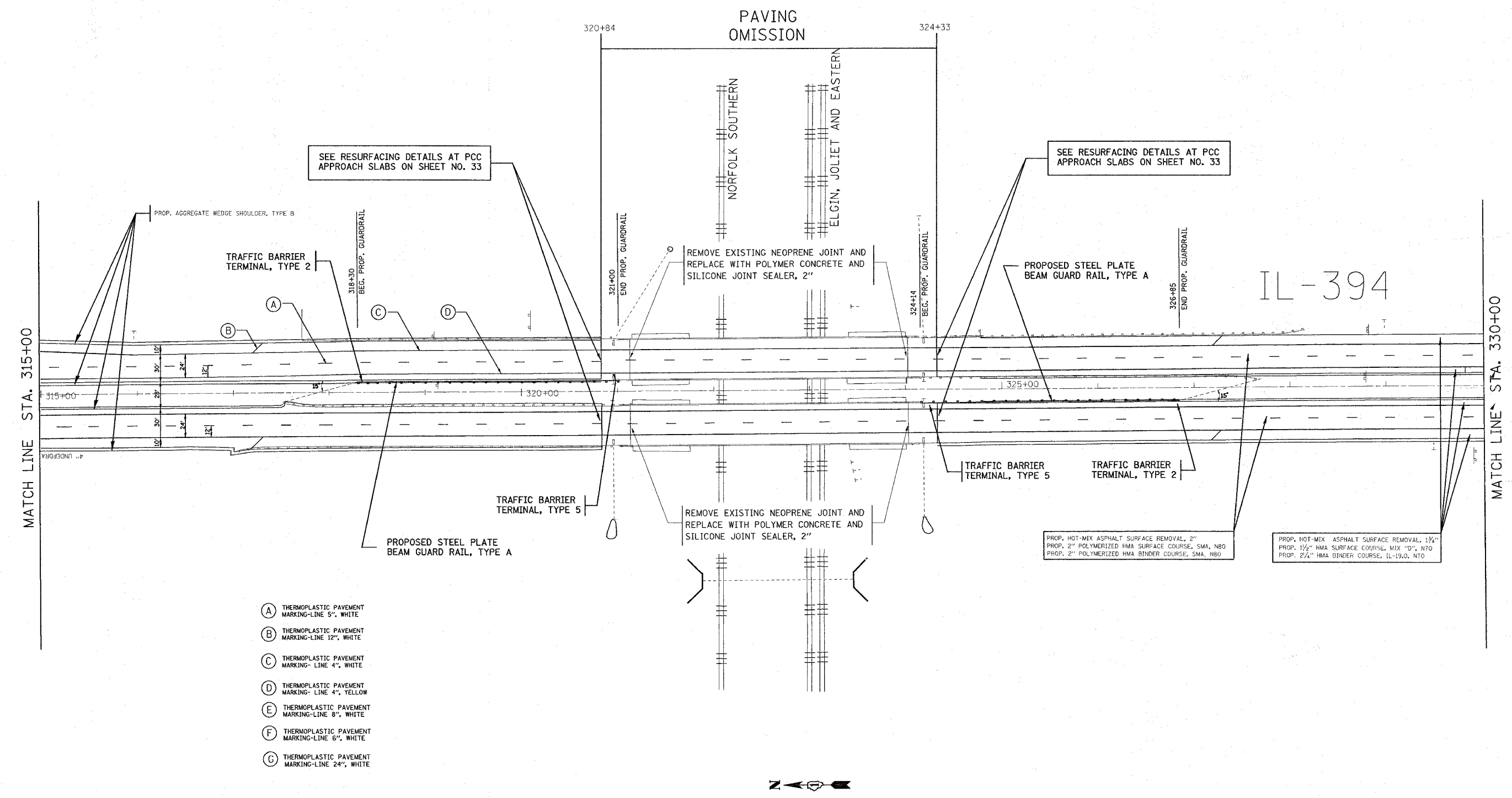
- (A) THERMOPLASTIC PAVEMENT MARKING-LINE 5", WHITE
- (B) THERMOPLASTIC PAVEMENT MARKING-LINE 12", WHITE
- (C) THERMOPLASTIC PAVEMENT MARKING-LINE 4", WHITE
- (D) THERMOPLASTIC PAVEMENT MARKING-LINE 4", YELLOW
- (E) THERMOPLASTIC PAVEMENT MARKING-LINE 8", WHITE



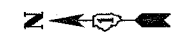
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 394
 JOE ORR RD TO STEGER RD
 RESURFACING AND PAVEMENT MARKING PLANS
 SCALE: VERT. N/A
 HORIZ. 1" = 50'
 DATE 7/14/2007
 DRAWN BY
 CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332		COOK	54	14
STA. 315+00		TO STA. 330+00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
• (0101,0203B & 0303) RS-10				



- (A) THERMOPLASTIC PAVEMENT MARKING-LINE 5", WHITE
- (B) THERMOPLASTIC PAVEMENT MARKING-LINE 12", WHITE
- (C) THERMOPLASTIC PAVEMENT MARKING-LINE 4", WHITE
- (D) THERMOPLASTIC PAVEMENT MARKING-LINE 4", YELLOW
- (E) THERMOPLASTIC PAVEMENT MARKING-LINE 8", WHITE
- (F) THERMOPLASTIC PAVEMENT MARKING-LINE 6", WHITE
- (G) THERMOPLASTIC PAVEMENT MARKING-LINE 24", WHITE



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 394
 JOE ORR RD TO STEGER RD
 RESURFACING AND PAVEMENT MARKING
 PLANS

SCALE: VERT. N/A
 HORIZ. 1" = 50'
 DATE 8/6/2007

DRAWN BY
 CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332		COOK	54	15
STA. 330+00		TO STA. 360+00		
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				
* (0101,0203B & 0303) RS-10				

IL-394

MATCH LINE STA. 330+00

MATCH LINE STA. 345+00

PROP. GRADING AND SHAPING DITCHES (100 FT)
 PROP. EROSION CONTROL BLANKET (112 SY)
 PROP. SEEDING CLASS 2A (0.02 ACRES)
 PROP. FURNISHING & PLACING TOP SOIL 4" (112 SY)
 PROP. PHOSPHOROUS FERT. NUTRIENTS (1.3 LBS)
 PROP. NITROGEN FERT. NUTRIENTS (2.1 LBS)
 PROP. POTASSIUM FERT. NUTRIENTS (0.9 LBS)
 CULVERT TO BE CLEANED

PROP. GRADING AND SHAPING DITCHES (100 FT)
 PROP. EROSION CONTROL BLANKET (112 SY)
 PROP. SEEDING CLASS 2A (0.02 ACRES)
 PROP. FURNISHING & PLACING TOP SOIL 4" (112 SY)
 PROP. PHOSPHOROUS FERT. NUTRIENTS (1.3 LBS)
 PROP. NITROGEN FERT. NUTRIENTS (2.1 LBS)
 PROP. POTASSIUM FERT. NUTRIENTS (0.9 LBS)
 CULVERT TO BE CLEANED

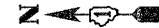
PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
 PROP. 2" POLYMERIZED HMA SURFACE COURSE, SMA, N80
 PROP. 2" POLYMERIZED HMA BINDER COURSE, SMA, N80

PROP. GRADING AND SHAPING DITCHES (100 FT)
 PROP. EROSION CONTROL BLANKET (112 SY)
 PROP. SEEDING CLASS 2A (0.02 ACRES)
 PROP. FURNISHING & PLACING TOP SOIL 4" (112 SY)
 PROP. PHOSPHOROUS FERT. NUTRIENTS (1.3 LBS)
 PROP. NITROGEN FERT. NUTRIENTS (2.1 LBS)
 PROP. POTASSIUM FERT. NUTRIENTS (0.9 LBS)

PROP. GRADING AND SHAPING DITCHES (100 FT)
 PROP. EROSION CONTROL BLANKET (112 SY)
 PROP. SEEDING CLASS 2A (0.02 ACRES)
 PROP. FURNISHING & PLACING TOP SOIL 4" (112 SY)
 PROP. PHOSPHOROUS FERT. NUTRIENTS (1.3 LBS)
 PROP. NITROGEN FERT. NUTRIENTS (2.1 LBS)
 PROP. POTASSIUM FERT. NUTRIENTS (0.9 LBS)

PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/4"
 PROP. 1 1/2" HMA SURFACE COURSE, MIX "D", N70
 PROP. 2 1/4" HMA BINDER COURSE, IL-19.0, N70

- (A) THERMOPLASTIC PAVEMENT MARKING - LINE 5", WHITE
- (B) THERMOPLASTIC PAVEMENT MARKING - LINE 12", WHITE
- (C) THERMOPLASTIC PAVEMENT MARKING - LINE 4", WHITE
- (D) THERMOPLASTIC PAVEMENT MARKING - LINE 4", YELLOW
- (E) THERMOPLASTIC PAVEMENT MARKING - LINE 8", WHITE



PROP. GRADING AND SHAPING DITCHES (100 FT)
 PROP. EROSION CONTROL BLANKET (112 SY)
 PROP. SEEDING CLASS 2A (0.02 ACRES)
 PROP. FURNISHING & PLACING TOP SOIL 4" (112 SY)
 PROP. PHOSPHOROUS FERT. NUTRIENTS (1.3 LBS)
 PROP. NITROGEN FERT. NUTRIENTS (2.1 LBS)
 PROP. POTASSIUM FERT. NUTRIENTS (0.9 LBS)
 CULVERT TO BE CLEANED

IL-394

MATCH LINE STA. 345+00

MATCH LINE STA. 360+00

PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
 PROP. 2" POLYMERIZED HMA SURFACE COURSE, SMA, N80
 PROP. 2" POLYMERIZED HMA BINDER COURSE, SMA, N80

PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/4"
 PROP. 1 1/2" HMA SURFACE COURSE, MIX "D", N70
 PROP. 2 1/4" HMA BINDER COURSE, IL-19.0, N70

PROP. GRADING AND SHAPING DITCHES (100 FT)
 PROP. EROSION CONTROL BLANKET (112 SY)
 PROP. SEEDING CLASS 2A (0.02 ACRES)
 PROP. FURNISHING & PLACING TOP SOIL 4" (112 SY)
 PROP. PHOSPHOROUS FERT. NUTRIENTS (1.3 LBS)
 PROP. NITROGEN FERT. NUTRIENTS (2.1 LBS)
 PROP. POTASSIUM FERT. NUTRIENTS (0.9 LBS)

REVISIONS	
NAME	DATE

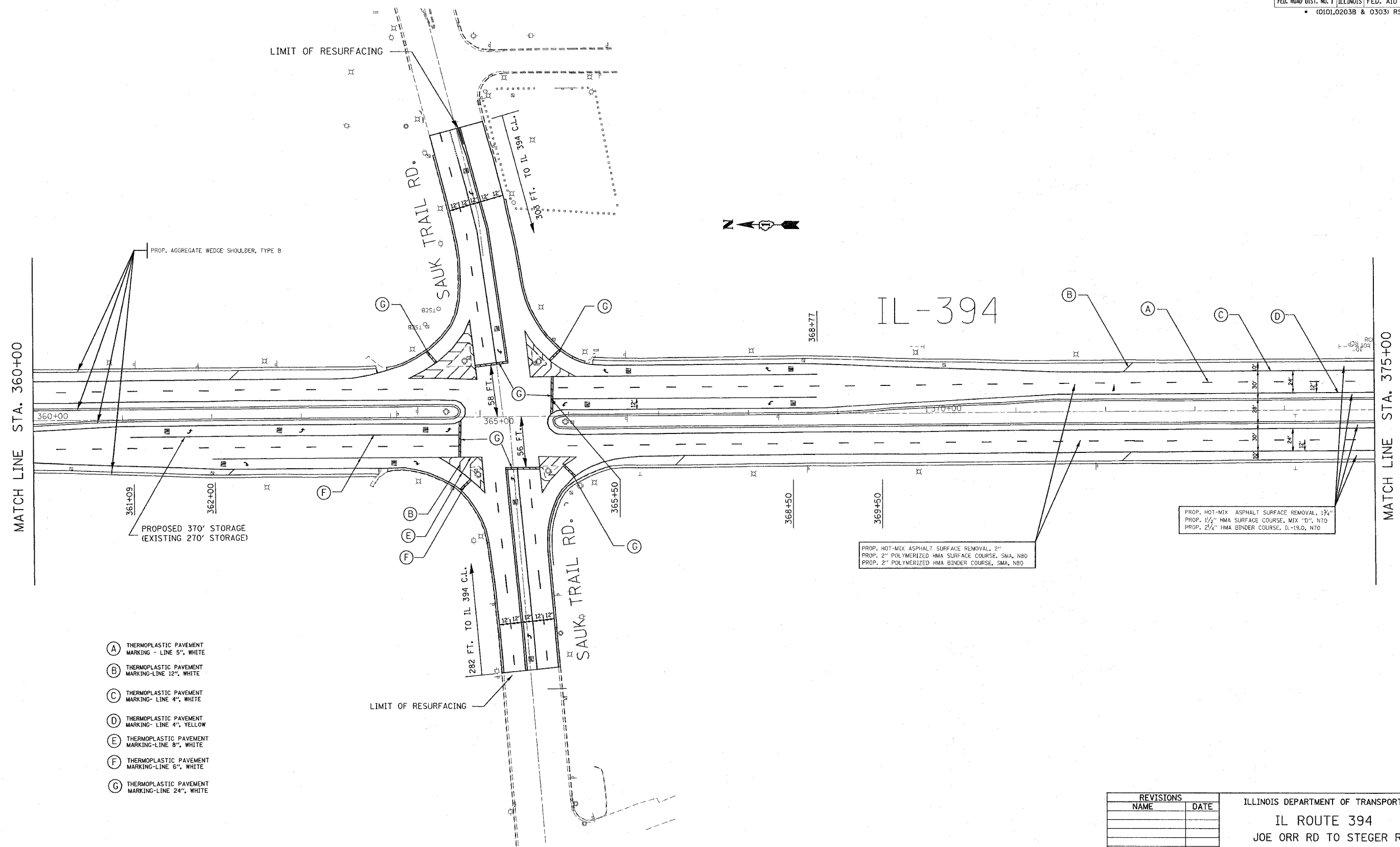
ILLINOIS DEPARTMENT OF TRANSPORTATION
 IL ROUTE 394
 JOE ORR RD TO STEGER RD
 RESURFACING AND PAVEMENT MARKING
 PLANS

SCALE: VERT. N/A
 HORIZ. 1" = 50'
 DATE 7/14/2007

DRAWN BY
 CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	16
STA. 360+00		TO STA. 375+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
* (0101,0203B & 0303) RS-10				

REF
REF
REF



- (A) THERMOPLASTIC PAVEMENT MARKING - LINE 5", WHITE
- (B) THERMOPLASTIC PAVEMENT MARKING - LINE 12", WHITE
- (C) THERMOPLASTIC PAVEMENT MARKING - LINE 4", WHITE
- (D) THERMOPLASTIC PAVEMENT MARKING - LINE 4", YELLOW
- (E) THERMOPLASTIC PAVEMENT MARKING - LINE 8", WHITE
- (F) THERMOPLASTIC PAVEMENT MARKING - LINE 6", WHITE
- (G) THERMOPLASTIC PAVEMENT MARKING - LINE 24", WHITE

PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
PROP. 2" POLYMERIZED HMA SURFACE COURSE, SMA, N80
PROP. 2" POLYMERIZED HMA BINDER COURSE, SMA, N80

PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"
PROP. 1 1/2" HMA SURFACE COURSE, MIX "D", N70
PROP. 2 3/4" HMA BINDER COURSE, IL-19.0, N70

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 394
 JOE ORR RD TO STEGER RD
 RESURFACING AND PAVEMENT MARKING
 PLANS
 SCALE: VERT. N/A
 HORIZ. 1" = 50'
 DATE 8/1/2007
 DRAWN BY
 CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332		COOK	54	17
STA. 375+00		TO STA. 405+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (0101,0203B & 0303) RS-10				

*REF-
*REF-
*REF-



MATCH LINE STA. 375+00

MATCH LINE STA. 390+00

IL-394

PROP. GRADING AND SHAPING DITCHES (100 FT)
PROP. EROSION CONTROL BLANKET (112 SY)
PROP. SEEDING CLASS 2A (0.02 ACRES)
PROP. FURNISHING & PLACING TOP SOIL 4" (112 SY)
PROP. PHOSPHOROUS FERT. NUTRIENTS (1.3 LBS)
PROP. NITROGEN FERT. NUTRIENTS (2.1 LBS)
PROP. POTASSIUM FERT. NUTRIENTS (0.9 LBS)
CULVERT TO BE CLEANED

PROP. AGGREGATE WEDGE SHOULDER, TYPE B

PROP. GRADING AND SHAPING DITCHES (100 FT)
PROP. EROSION CONTROL BLANKET (112 SY)
PROP. SEEDING CLASS 2A (0.02 ACRES)
PROP. FURNISHING & PLACING TOP SOIL 4" (112 SY)
PROP. PHOSPHOROUS FERT. NUTRIENTS (1.3 LBS)
PROP. NITROGEN FERT. NUTRIENTS (2.1 LBS)
PROP. POTASSIUM FERT. NUTRIENTS (0.9 LBS)

- (A) THERMOPLASTIC PAVEMENT MARKING-LINE 5", WHITE
- (B) THERMOPLASTIC PAVEMENT MARKING-LINE 12", WHITE
- (C) THERMOPLASTIC PAVEMENT MARKING-LINE 4", WHITE
- (D) THERMOPLASTIC PAVEMENT MARKING-LINE 4", YELLOW
- (E) THERMOPLASTIC PAVEMENT MARKING-LINE 8", WHITE
- (F) THERMOPLASTIC PAVEMENT MARKING-LINE 6", WHITE
- (G) THERMOPLASTIC PAVEMENT MARKING-LINE 24", WHITE

PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
PROP. 2" POLYMERIZED HMA SURFACE COURSE, SMA, N80
PROP. 2" POLYMERIZED HMA BINDER COURSE, SMA, N80

PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/4"
PROP. 1 1/2" HMA SURFACE COURSE, MIX "D", N70
PROP. 2 1/4" HMA BINDER COURSE, IL-19.0, N70

PROP. GRADING AND SHAPING DITCHES (100 FT)
PROP. EROSION CONTROL BLANKET (112 SY)
PROP. SEEDING CLASS 2A (0.02 ACRES)
PROP. FURNISHING & PLACING TOP SOIL 4" (112 SY)
PROP. PHOSPHOROUS FERT. NUTRIENTS (1.3 LBS)
PROP. NITROGEN FERT. NUTRIENTS (2.1 LBS)
PROP. POTASSIUM FERT. NUTRIENTS (0.9 LBS)
CULVERT TO BE CLEANED

PROP. GRADING AND SHAPING DITCHES (100 FT)
PROP. EROSION CONTROL BLANKET (112 SY)
PROP. SEEDING CLASS 2A (0.02 ACRES)
PROP. FURNISHING & PLACING TOP SOIL 4" (112 SY)
PROP. PHOSPHOROUS FERT. NUTRIENTS (1.3 LBS)
PROP. NITROGEN FERT. NUTRIENTS (2.1 LBS)
PROP. POTASSIUM FERT. NUTRIENTS (0.9 LBS)
CULVERT TO BE CLEANED

MATCH LINE STA. 390+00

MATCH LINE STA. 405+00

IL-394

PROP. GRADING AND SHAPING DITCHES (100 FT)
PROP. EROSION CONTROL BLANKET (112 SY)
PROP. SEEDING CLASS 2A (0.02 ACRES)
PROP. FURNISHING & PLACING TOP SOIL 4" (112 SY)
PROP. PHOSPHOROUS FERT. NUTRIENTS (1.3 LBS)
PROP. NITROGEN FERT. NUTRIENTS (2.1 LBS)
PROP. POTASSIUM FERT. NUTRIENTS (0.9 LBS)

PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
PROP. 2" POLYMERIZED HMA SURFACE COURSE, SMA, N80
PROP. 2" POLYMERIZED HMA BINDER COURSE, SMA, N80

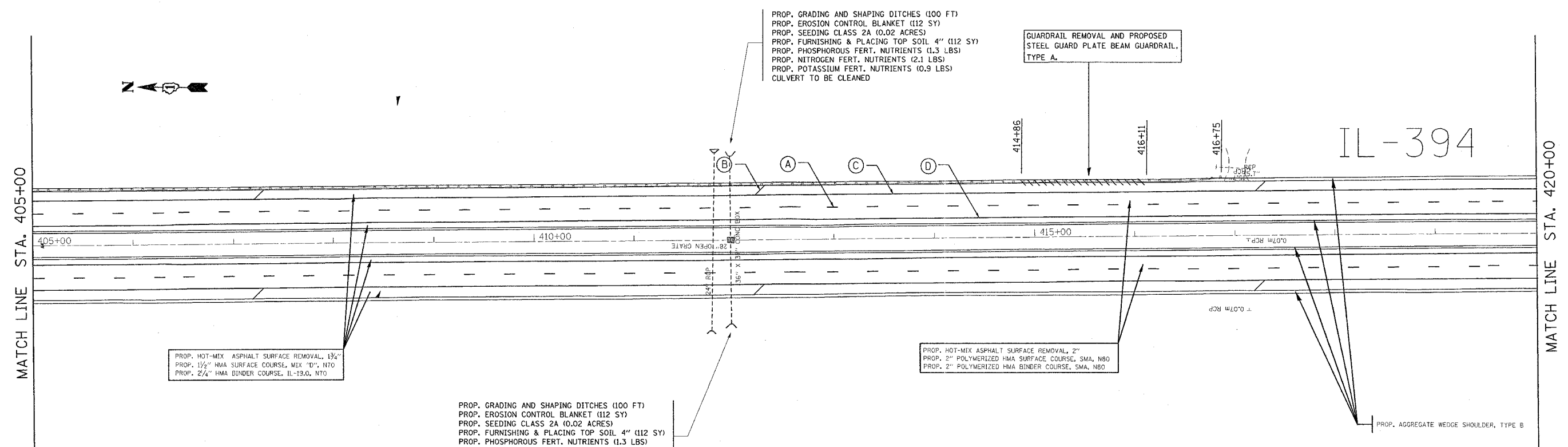
PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/4"
PROP. 1 1/2" HMA SURFACE COURSE, MIX "D", N70
PROP. 2 1/4" HMA BINDER COURSE, IL-19.0, N70

PROP. GRADING AND SHAPING DITCHES (100 FT)
PROP. EROSION CONTROL BLANKET (112 SY)
PROP. SEEDING CLASS 2A (0.02 ACRES)
PROP. FURNISHING & PLACING TOP SOIL 4" (112 SY)
PROP. PHOSPHOROUS FERT. NUTRIENTS (1.3 LBS)
PROP. NITROGEN FERT. NUTRIENTS (2.1 LBS)
PROP. POTASSIUM FERT. NUTRIENTS (0.9 LBS)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 394
JOE ORR RD TO STEGER RD
RESURFACING AND PAVEMENT MARKING PLANS
SCALE: VERT. N/A
HORIZ. 1" = 50'
DATE 7/14/2007
DRAWN BY
CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332		COOK	54	18
STA. 405+00		TO STA. 420+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (0101,0203B & 0303) RS-10				



PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"
 PROP. 1 1/2" HMA SURFACE COURSE, MIX 'D', NTO
 PROP. 2 1/4" HMA BINDER COURSE, IL-19.0, NTO

PROP. GRADING AND SHAPING DITCHES (100 FT)
 PROP. EROSION CONTROL BLANKET (112 SY)
 PROP. SEEDING CLASS 2A (0.02 ACRES)
 PROP. FURNISHING & PLACING TOP SOIL 4" (112 SY)
 PROP. PHOSPHOROUS FERT. NUTRIENTS (1.3 LBS)
 PROP. NITROGEN FERT. NUTRIENTS (2.1 LBS)
 PROP. POTASSIUM FERT. NUTRIENTS (0.9 LBS)

PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
 PROP. 2" POLYMERIZED HMA SURFACE COURSE, SMA, N80
 PROP. 2" POLYMERIZED HMA BINDER COURSE, SMA, N80

- (A) THERMOPLASTIC PAVEMENT MARKING-LINE 5", WHITE
- (B) THERMOPLASTIC PAVEMENT MARKING-LINE 12", WHITE
- (C) THERMOPLASTIC PAVEMENT MARKING-LINE 4", WHITE
- (D) THERMOPLASTIC PAVEMENT MARKING-LINE 4", YELLOW
- (E) THERMOPLASTIC PAVEMENT MARKING-LINE 8", WHITE
- (F) THERMOPLASTIC PAVEMENT MARKING-LINE 6", WHITE
- (G) THERMOPLASTIC PAVEMENT MARKING-LINE 24", WHITE

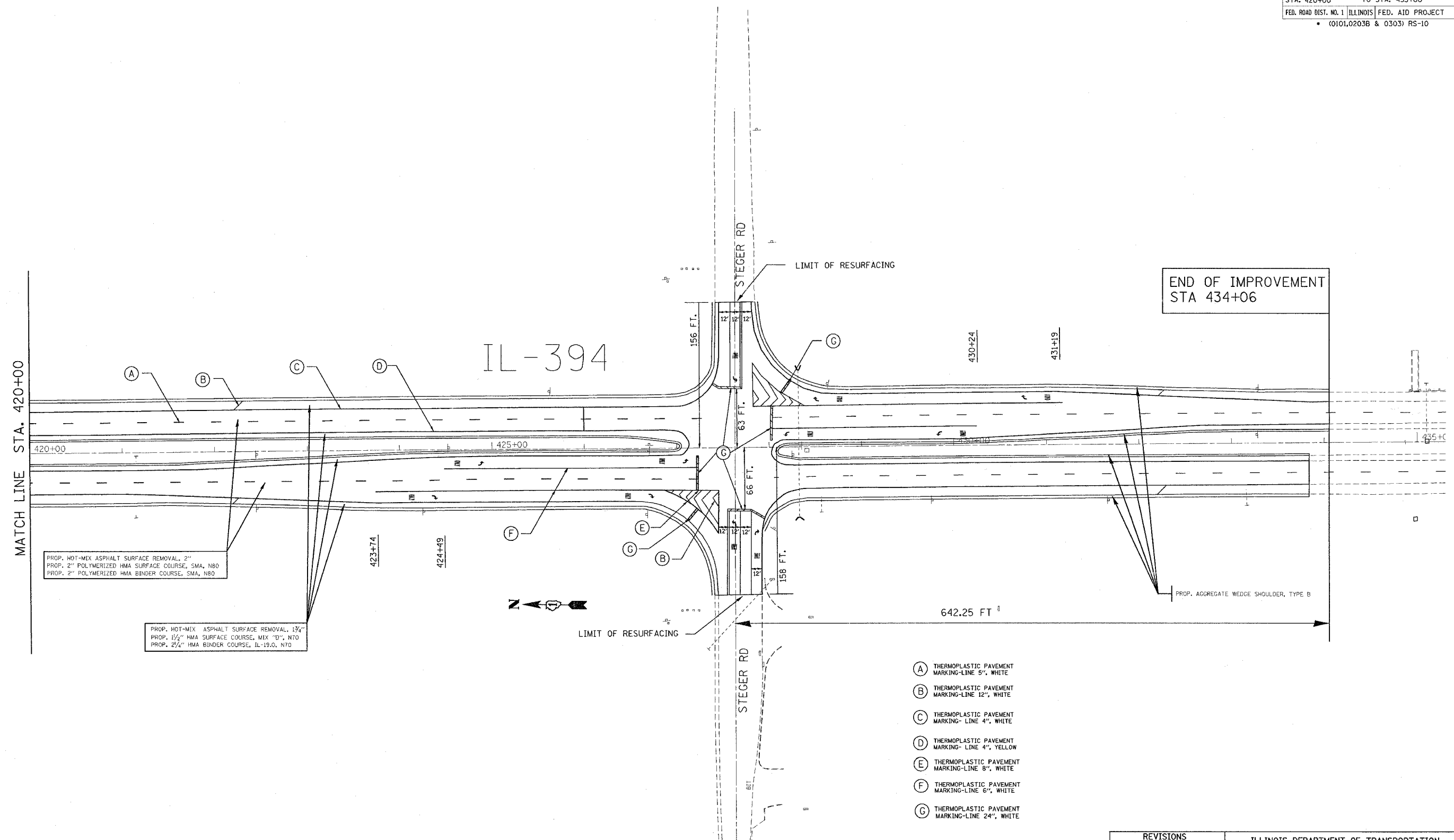
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 IL ROUTE 394
 JOE ORR RD TO STEGER RD
 RESURFACING AND PAVEMENT MARKING PLANS
 SCALE: VERT. N/A
 HORIZ. 1" = 50'
 DATE 7/14/2007
 DRAWN BY
 CHECKED BY

REF-
REF-
REF-

CONTRACT NO. 62481

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	.	COOK	54	19
STA. 420+00		TO STA. 435+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (0101,0203B & 0303) RS-10				



PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
PROP. 2" POLYMERIZED HMA SURFACE COURSE, SMA, N80
PROP. 2" POLYMERIZED HMA BINDER COURSE, SMA, N80

PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/4"
PROP. 1 1/2" HMA SURFACE COURSE, MIX "D", N70
PROP. 2 1/4" HMA BINDER COURSE, IL-19.0, N70

- (A) THERMOPLASTIC PAVEMENT MARKING-LINE 5", WHITE
- (B) THERMOPLASTIC PAVEMENT MARKING-LINE 12", WHITE
- (C) THERMOPLASTIC PAVEMENT MARKING-LINE 4", WHITE
- (D) THERMOPLASTIC PAVEMENT MARKING-LINE 4", YELLOW
- (E) THERMOPLASTIC PAVEMENT MARKING-LINE 8", WHITE
- (F) THERMOPLASTIC PAVEMENT MARKING-LINE 6", WHITE
- (G) THERMOPLASTIC PAVEMENT MARKING-LINE 24", WHITE

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 394
 JOE ORR RD TO STEGER RD
 RESURFACING AND PAVEMENT MARKING PLANS
 VERT. N/A
 SCALE: HORIZ. 1" = 50'
 DATE 8/1/2007
 DRAWN BY
 CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	20
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

* (0101, 0203B & 0303) RS-10

GENERAL NOTES

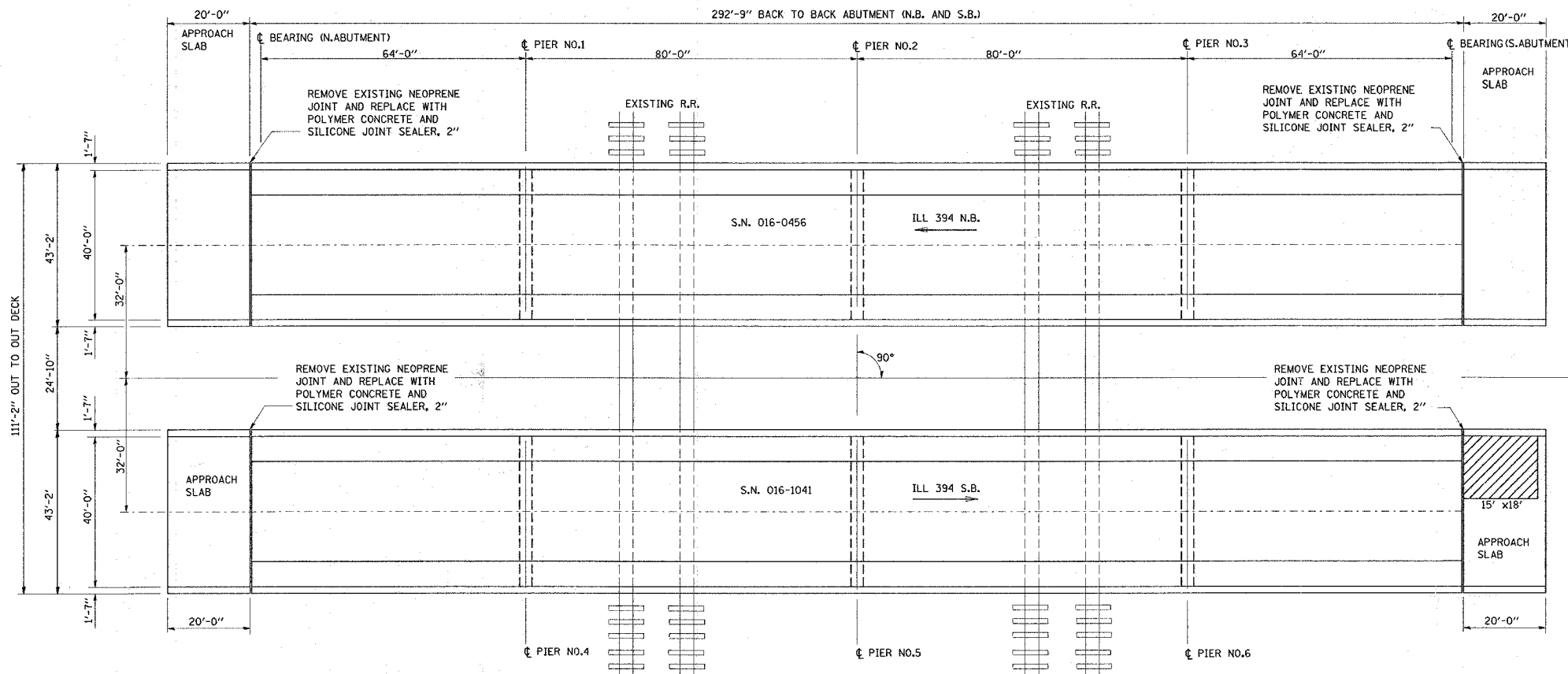
PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT BID PRICE OR THE WORK.

REMOVAL OF THE EXISTING 2" NEOPRENE EXPANSION JOINTS INCLUDED WITH THE COST OF POLYMER CONCRETE.

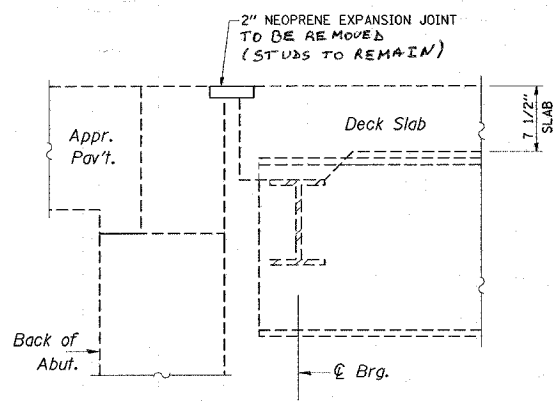
BILL OF MATERIALS

ITEM	UNIT	QUANTITY
X0321744 SILICONE JOINT SEALER, 2"	FOOT	172
X0320887 POLYMER CONCRETE	CU.FT.	14.5
Z0001800 APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ.YD.	30

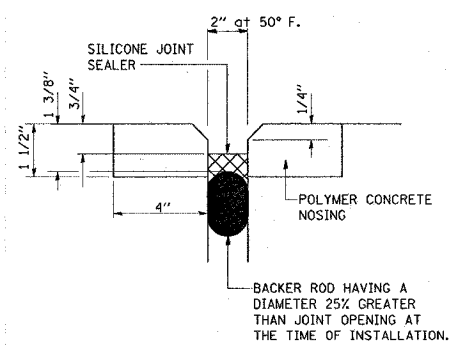
DISTRICT ONE - DESIGN PREPARATION ENGINEER JOSE A. DOMINGUEZ / RUSS SINHA (847) 705-4209 / ATTENTION MARK V. TINIAKOS (847) 705-4266



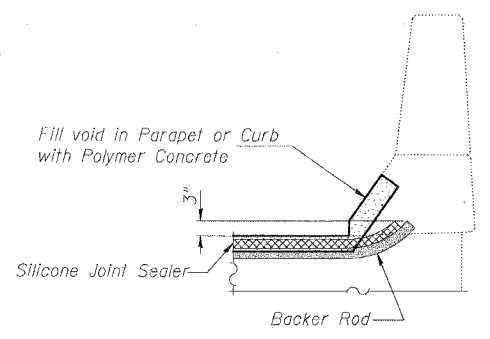
PLAN



EXISTING SECTION TRHU JOINT



SILICONE JOINT SEALER TO REPLACE EXISTING 2" NEOPRENE JOINT



TYPICAL END OF SEAL TREATMENT

LEGEND:

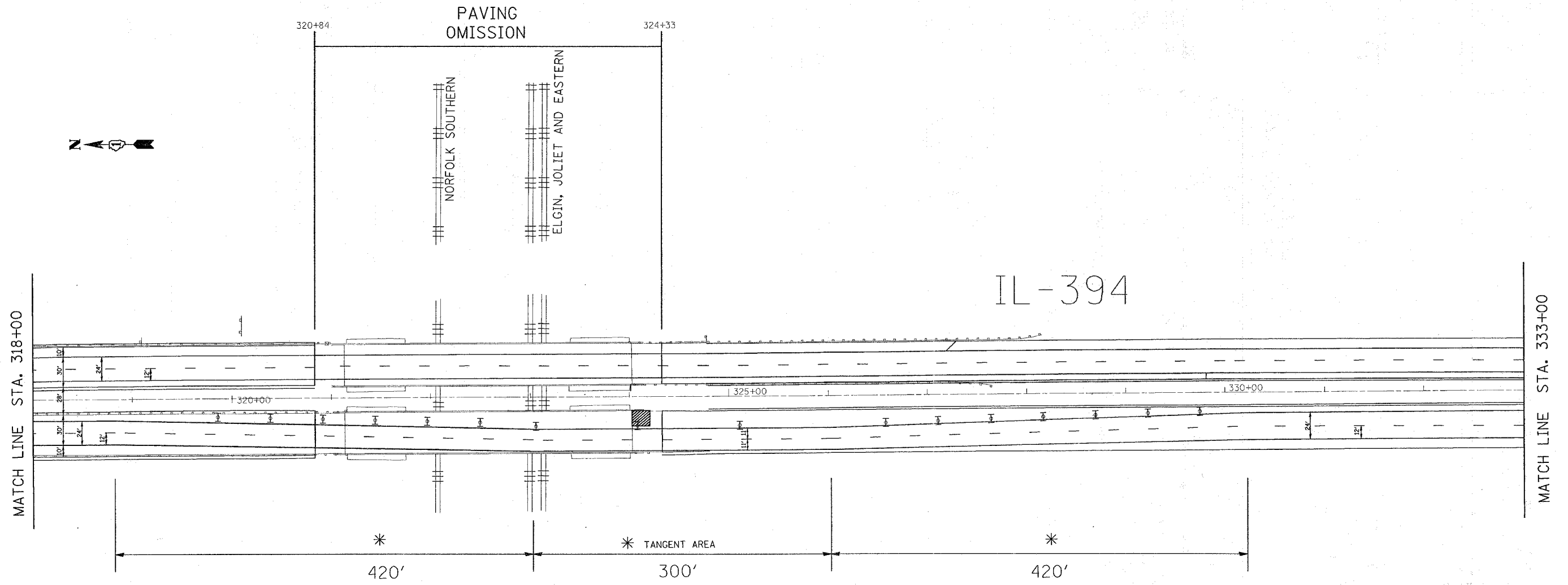


REVISIONS	
NAME	DATE

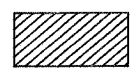
ILLINOIS DEPARTMENT OF TRANSPORTATION
 ILL. ROUTE 394 OVER E.J. AND E. RAILROAD BRIDGE REHABILITATION
 S.N. 016-0456
 S.N. 016-1041
 SCALE: VERT. DATE: JUNE, 2007
 DRAWN BY: MVT
 CHECKED BY: RSS

PLOT DATE = 7/14/2007
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 USER NAME = jdominguez

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332		COOK	54	20A
STA. 315+00		TO STA. 330+00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
(0101,0203B & 0303) RS-10				



LEGEND:



APPROACH SLAB REPAIR
(PARTIAL DEPTH)



WEAVE LANES INTO SHOULDER IN ACCORDANCE WITH TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE & MULTI-LANE WEAVE

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 IL ROUTE 394
 JOE ORR RD TO STEGER RD
 TRAFFIC CONTROL PLAN

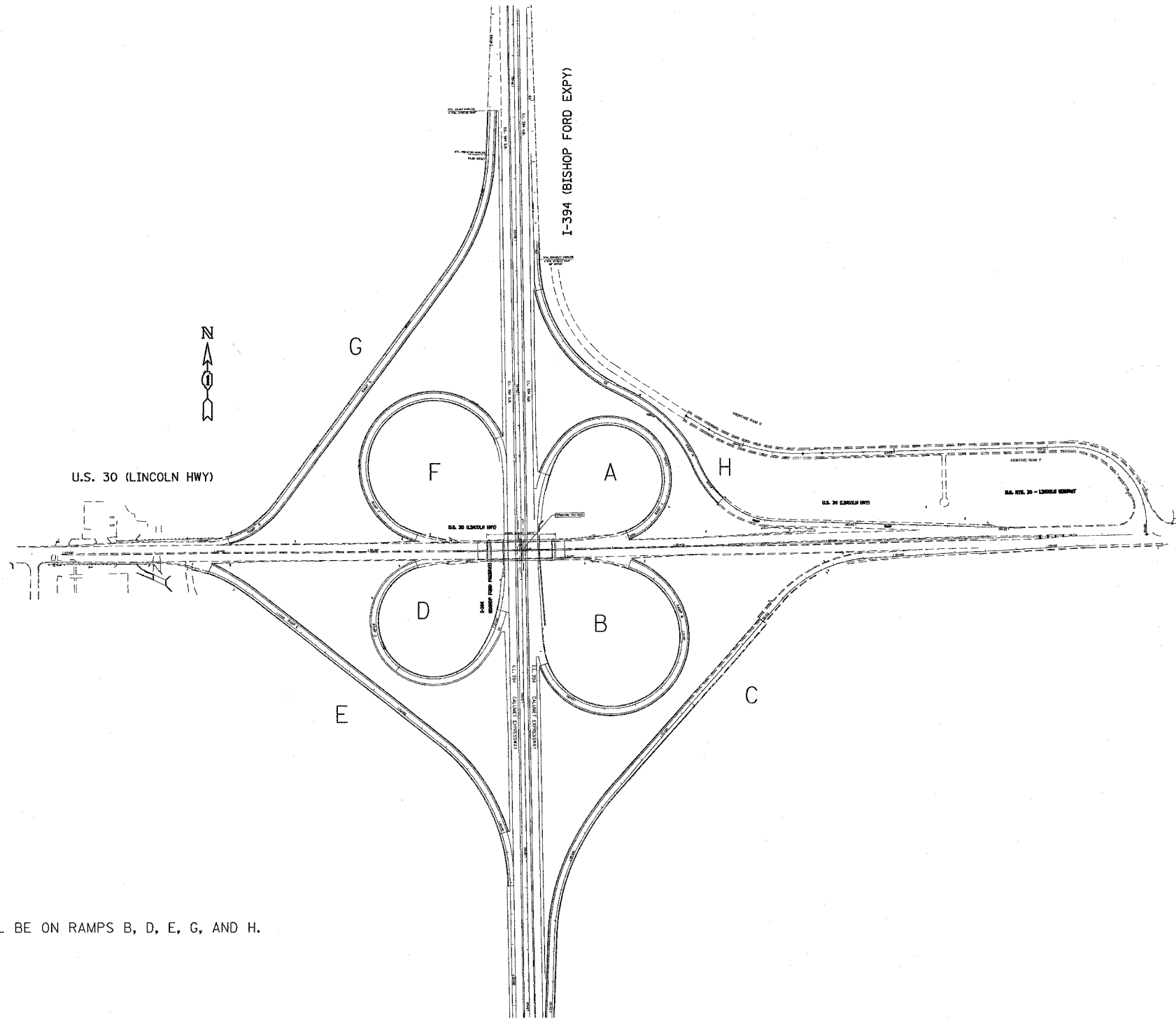
SCALE: VERT. N/A
 HORIZ. 1" = 50'
 DATE 8/24/2007

DRAWN BY
 CHECKED BY

CONTRACT NO. 62481

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	21
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

• (0101, 0203B & 0303) RS-10



NOTE: THE AREAS OF PATCHING SHALL BE ON RAMPS B, D, E, G, AND H.

PLOT DATE = 8/1/2007
 FILE NAME = c:\projects\1120802\1120802.dwg
 PLOT SCALE = 50.000 Ft / IN.
 USER NAME = csmc\m

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 IL 394 (BISHOP FORD MEMORIAL EXPWY)
 RAMPS AT US 30

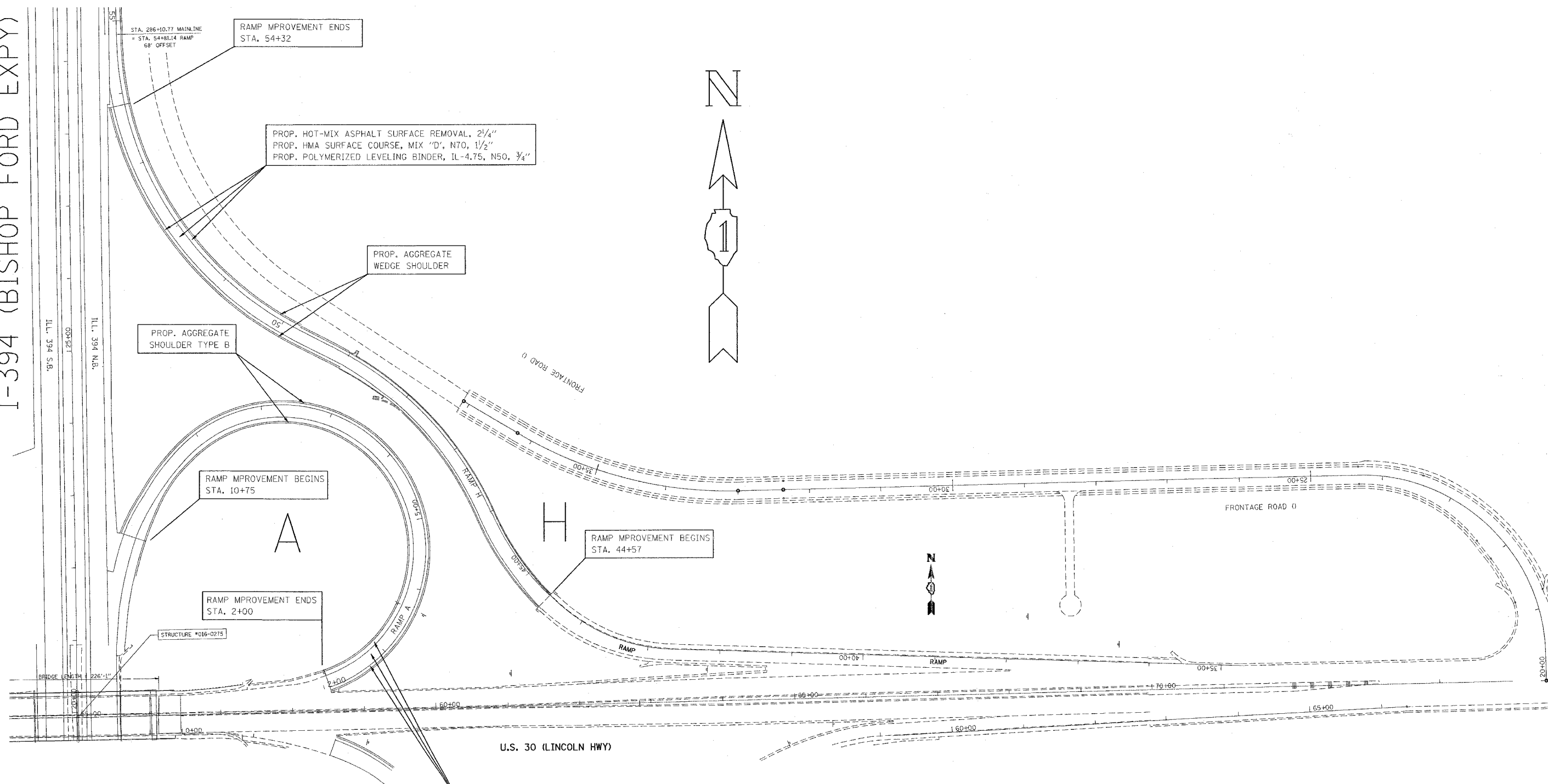
SCALE: VERT. 1" = 800'
 HORIZ. DATE

DRAWN BY
 CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332		COOK	54	23
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		

• (0101, 0203B & 0303) RS-10

I-394 (BISHOP FORD EXPY)



RAMP IMPROVEMENT ENDS
STA. 54+32

PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
PROP. HMA SURFACE COURSE, MIX "D", N70, 1 1/2"
PROP. POLYMERIZED LEVELING BINDER, IL-4.75, N50, 3/4"

PROP. AGGREGATE
WEDGE SHOULDER

PROP. AGGREGATE
SHOULDER TYPE B

RAMP IMPROVEMENT BEGINS
STA. 10+75

RAMP IMPROVEMENT BEGINS
STA. 44+57

RAMP IMPROVEMENT ENDS
STA. 2+00

STRUCTURE #015-0275

PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
PROP. HMA SURFACE COURSE, MIX "D", N70, 1 1/2"
PROP. POLYMERIZED LEVELING BINDER, IL-4.75, N50, 3/4"

REVISIONS	
NAME	DATE

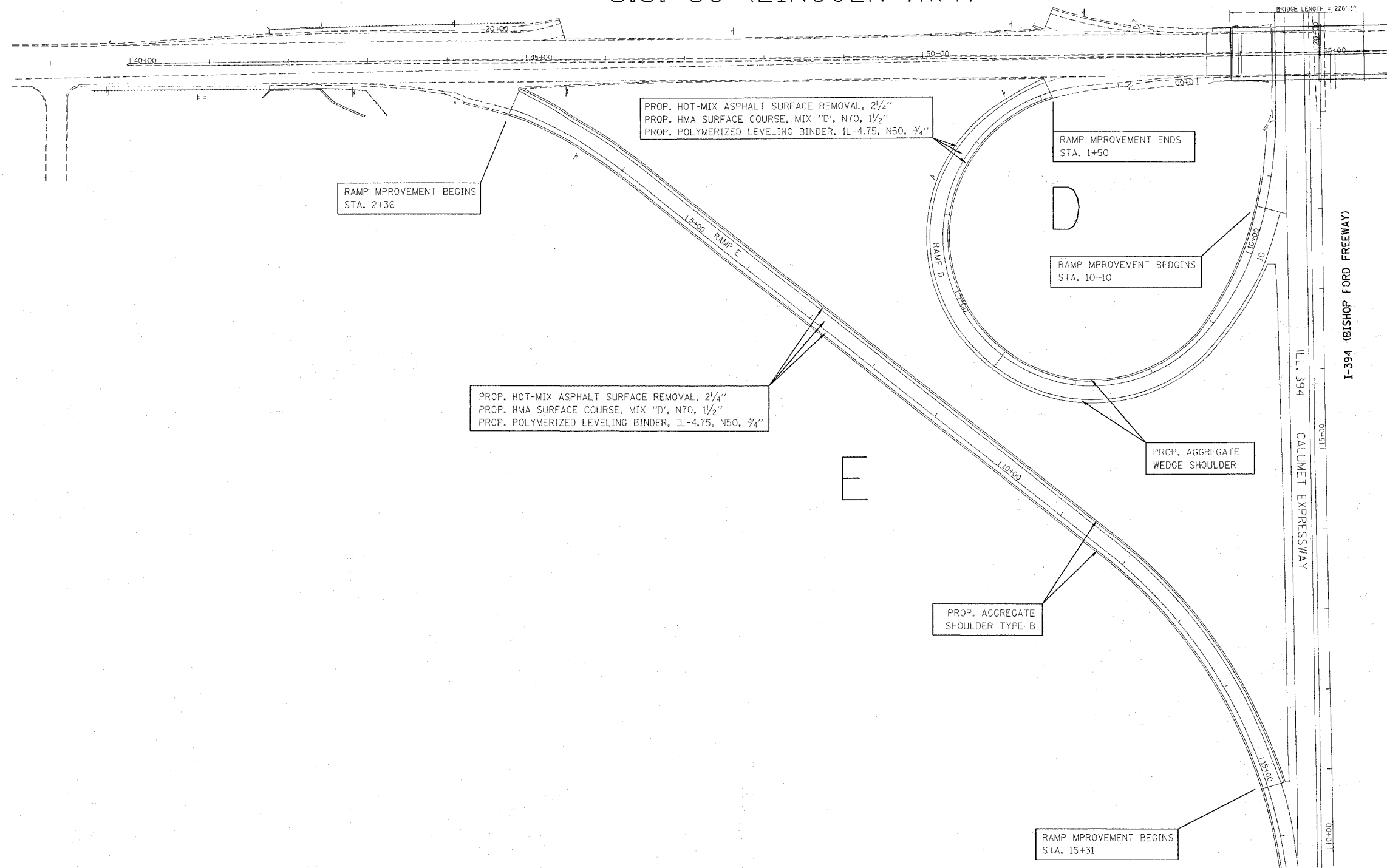
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP 332 IL 394
IL 394 (BISHOP FORD MEMORIAL EXPWY)
RAMPS AT US 30
SCALE: N.T.S. DRAWN BY

8/6/2007
C:\p1\ref\020502\020502.dwg
REF.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	24
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		

• (0101, 0203B & 0303) RS-10

U.S. 30 (LINCOLN HWY)



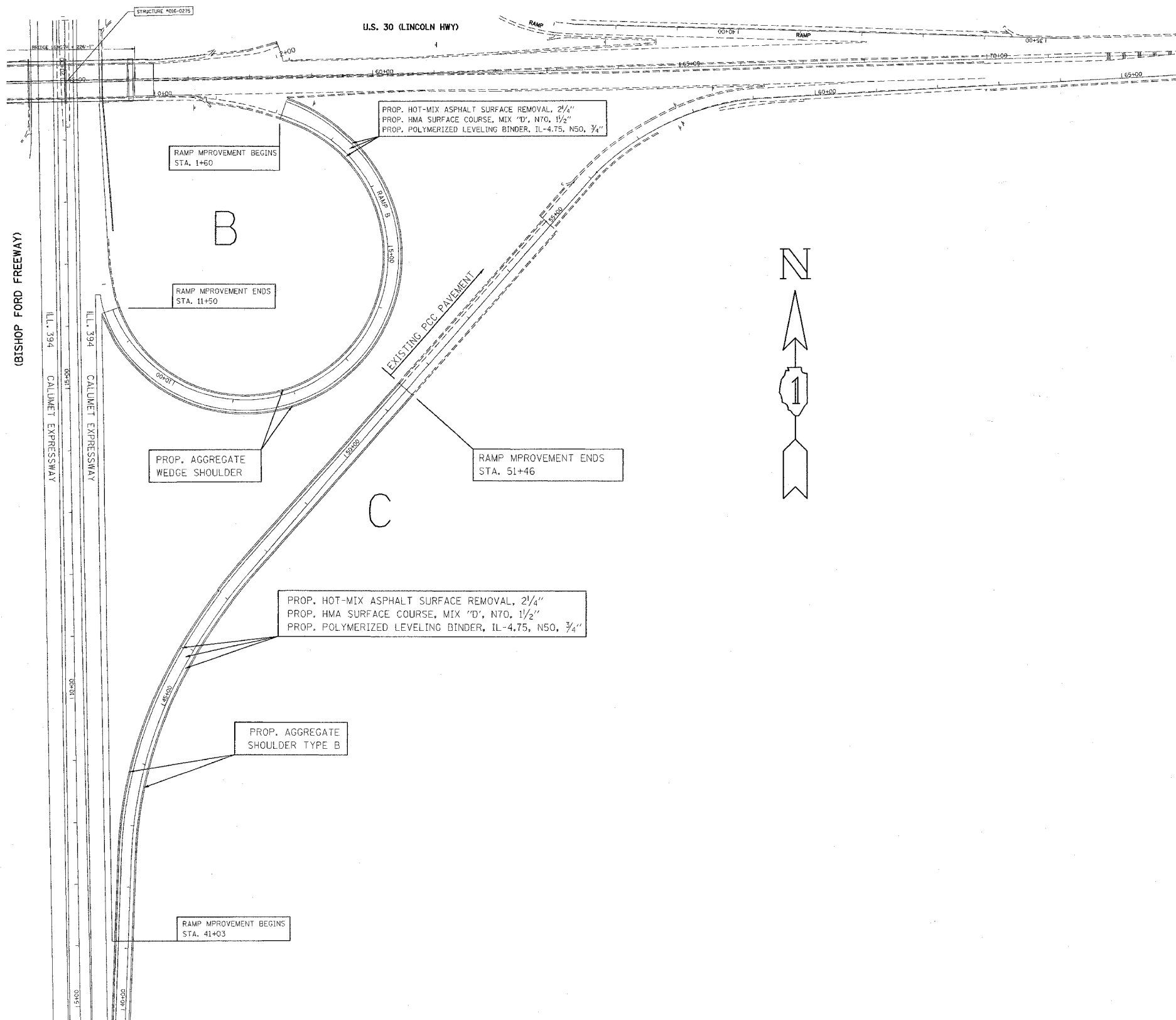
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 FAP 332; IL 394
 IL 394 (BISHOP FORD MEMORIAL EXPWY)
 RAMPS AT US 30
 SCALE: N.T.S. DRAWN BY: _____

8/6/2007
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 REF.
 VI=

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332		COOK	54	25
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		

• (0101, 0203B & 0303) RS-10



PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
 PROP. HMA SURFACE COURSE, MIX "D", N70, 1 1/2"
 PROP. POLYMERIZED LEVELING BINDER, IL-4.75, N50, 3/4"

PROP. AGGREGATE WEDGE SHOULDER

PROP. AGGREGATE SHOULDER TYPE B

RAMP IMPROVEMENT ENDS STA. 51+46

RAMP IMPROVEMENT BEGINS STA. 1+60

RAMP IMPROVEMENT ENDS STA. 11+50

RAMP IMPROVEMENT BEGINS STA. 41+03

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 FAP 332: IL 394
 IL 394 (BISHOP FORD MEMORIAL EXPWY)
 RAMPS AT US 30
 SCALE: N.T.S. DRAWN BY

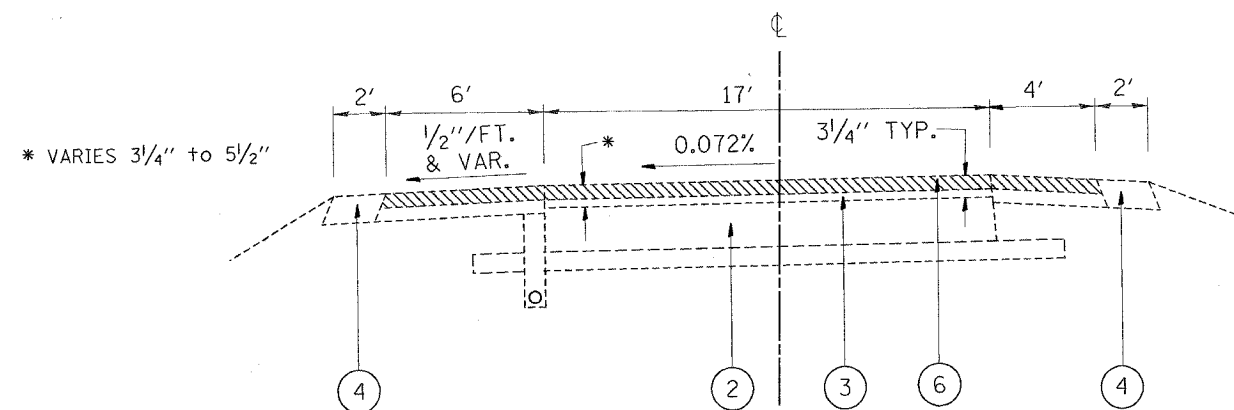
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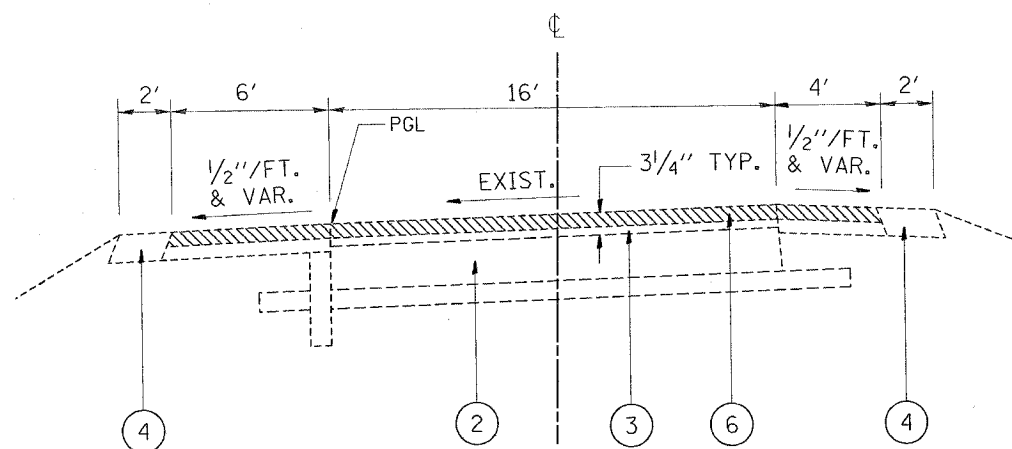
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	26

STA.	TO STA.
FED. ROAD DIST. NO. 1	ILLINOIS HIGHWAY PROJECT

• (0101, 0203B & 0303) RS-10



EXISTING TYPICAL SECTION
 RAMP A : STA. 2+00 TO STA. 10+75
 RAMP D : STA. 1+50 TO STA. 10+10



EXISTING TYPICAL SECTION
 RAMP C : STA. 41+03 TO STA. 51+46
 RAMP G : STA. 21+00 TO STA. 37+88

LEGEND

- ① EXIST. CURB AND GUTTER
- ② EXIST. 10" CRC PAVEMENT
- ③ EXIST. HOT-MIX ASPHALT BINDER COURSE (AFTER MILLING), 1 3/4" & VARIES
- ④ EXIST. AGGREGATE SHOULDER TYPE A, 8"
- ⑤ EXIST. PCC BASE COURSE, 10"
- ⑥ PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- ⑦ PROP. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- ⑧ PROP. POLYMERIZED LEVELING BINDER, IL-4.75, N50, 3/4"
- ⑨ PROP. AGGREGATE WEDGE SHOULDER, TYPE B
- ⑩ PROP. GRADING AND SHAPING SHOULDER

REVISIONS	
NAME	DATE

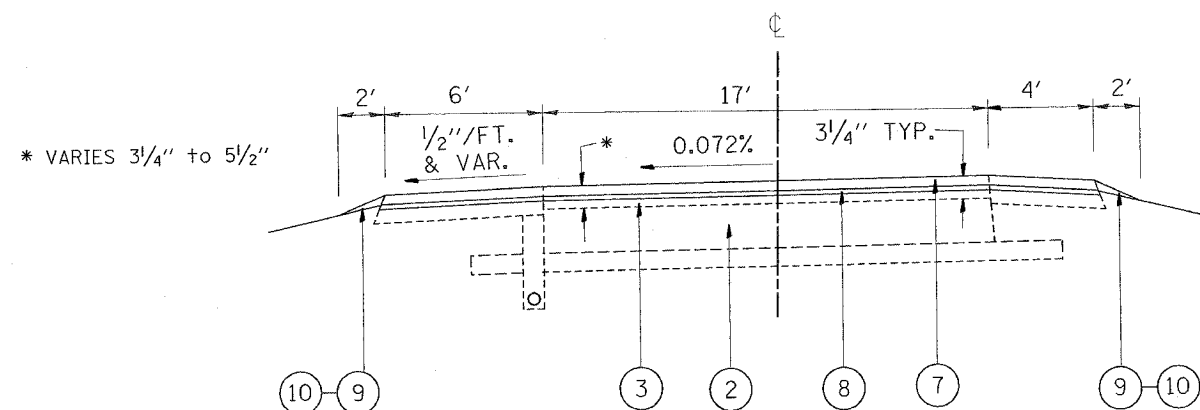
ILLINOIS DEPARTMENT OF TRANSPORTATION
 FAP 332: IL 394
 EXISTING TYPICAL SECTIONS
 RAMPS A,D,C&G

SCALE: N.T.S. DRAWN BY

7/17/2007
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 REF-
 REF-
 VI=

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	27
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	HIGHWAY PROJECT		

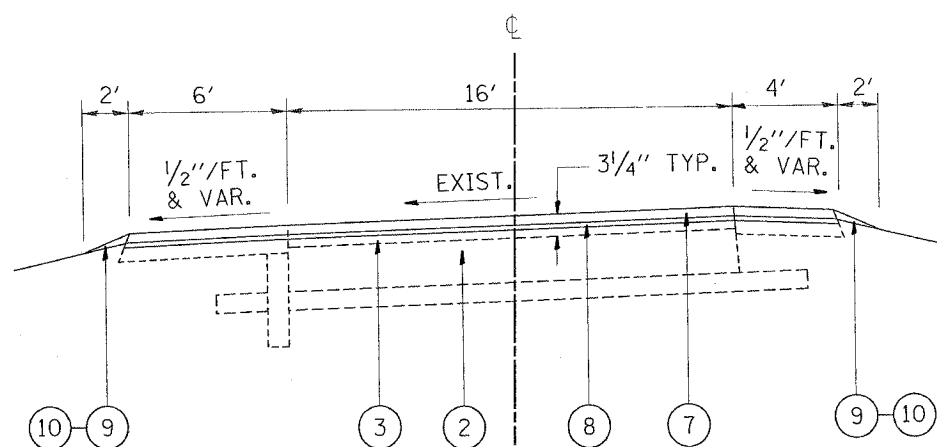
* (0101, 0203B & 0303) RS-10



PROP. TYPICAL SECTION
 RAMP A : STA. 2+00 TO STA. 10+75
 RAMP D : STA. 1+50 TO STA. 10+10

LEGEND

- ① EXIST. CURB AND GUTTER
- ② EXIST. 10" CRC PAVEMENT
- ③ EXIST. HOT-MIX ASPHALT BINDER COURSE (AFTER MILLING), 1 3/4" & VARIES
- ④ EXIST. AGGREGATE SHOULDER TYPE A, 8"
- ⑤ EXIST. PCC BASE COURSE, 10"
- ⑥ PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- ⑦ PROP. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- ⑧ PROP. POLYMERIZED LEVELING BINDER, IL-4.75, N50, 3/4"
- ⑨ PROP. AGGREGATE WEDGE SHOULDER, TYPE B
- ⑩ PROP. GRADING AND SHAPING SHOULDER



PROP. TYPICAL SECTION
 RAMP C : STA. 41+03 TO STA. 51+46
 RAMP G : STA. 21+00 TO STA. 37+18

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AC TYPE	AIR VOIDS(%)
PAVEMENT RESURFACING (RAMPS)		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm)	PG 64-22	4% @ 70 GYR.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	SBS/SBR PG 76-28/-22	4% @ 50 GYR.
PATCHING ON RAMPS		
CLASS D PATCHES 10" (HMA BINDER IL-25 mm)	PG 64-22*	4% @ 105 GYR.
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19 mm)	PG 64-22	4% @ 70 GYR.

* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

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

REVISIONS	
NAME	DATE

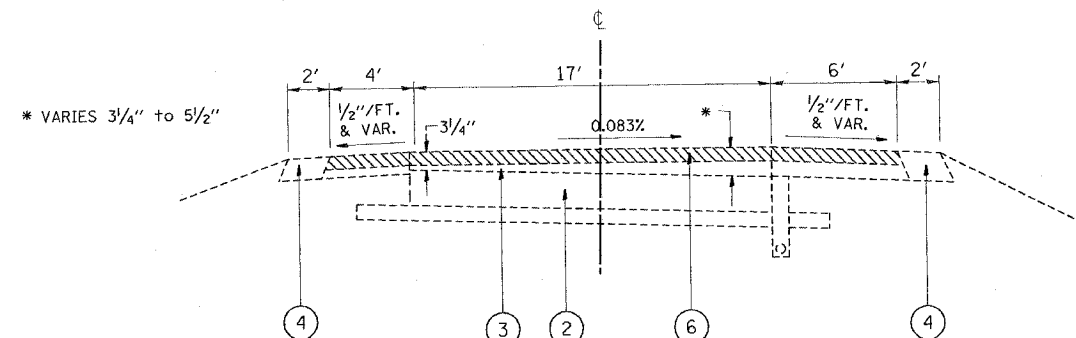
ILLINOIS DEPARTMENT OF TRANSPORTATION
 FAP 332: IL 394
 EXISTING TYPICAL SECTIONS
 RAMPS A,D,C&G

SCALE: N.T.S. DRAWN BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	28

STA.	TO STA.
FED. ROAD DIST. NO. 1 ILLINOIS	HIGHWAY PROJECT

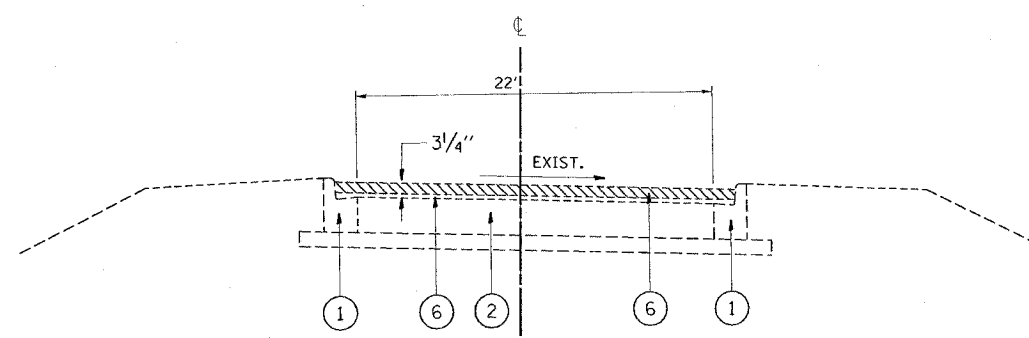
• (0101, 0203B & 0303) RS-10



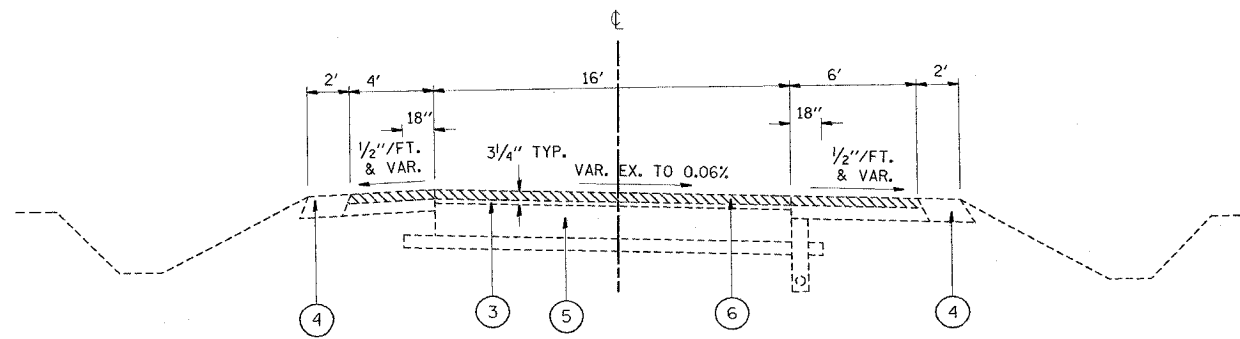
EXISTING TYPICAL SECTION
 RAMP B : STA. 2+10 TO STA. 11+00
 RAMP F : STA. 1+90 TO STA. 11+25
 RAMP E : STA. 2+36 TO STA. 15+31

LEGEND

- ① EXIST. CURB AND GUTTER
- ② EXIST. 10" CRC PAVEMENT
- ③ EXIST. HOT-MIX ASPHALT BINDER COURSE (AFTER MILLING), 1 3/4" & VARIES
- ④ EXIST. AGGREGATE SHOULDER TYPE A, B"
- ⑤ EXIST. PCC BASE COURSE, 10"
- ⑥ PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- ⑦ PROP. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- ⑧ PROP. POLYMERIZED LEVELING BINDER, IL-4.75, N50, 3/4"
- ⑨ PROP. AGGREGATE WEDGE SHOULDER, TYPE B
- ⑩ PROP. GRADING AND SHAPING SHOULDER



EXISTING TYPICAL SECTION
 RAMP H : STA 40+00 TO STA 49+00



EXISTING TYPICAL SECTION
 RAMP H : STA 49+00 TO STA 54+15
 RAMP E : STA 10+32 TO STA 15+12

REVISIONS	
NAME	DATE

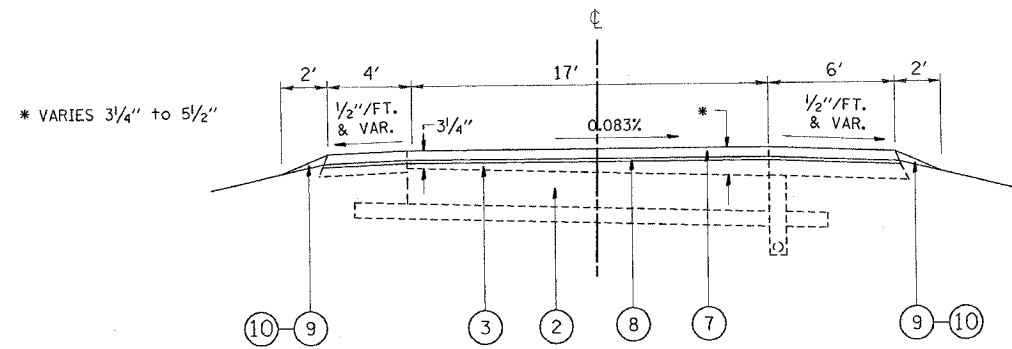
ILLINOIS DEPARTMENT OF TRANSPORTATION
 FAP 332: IL 394
 EXISTING TYPICAL SECTIONS
 RAMPS B,F,E&H
 SCALE: N.T.S. DRAWN BY

7/17/2007
 C:\PROJ\62481\62481\62481\62481.m32
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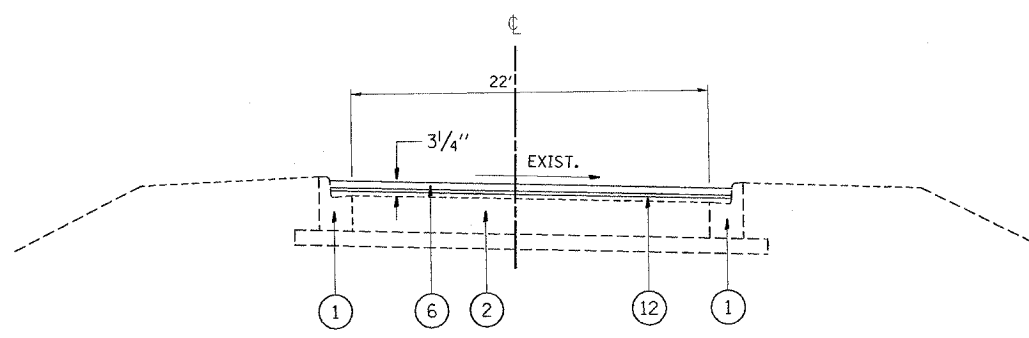
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	29

STA.	TO STA.
FED. ROAD DIST. NO. 1	ILLINOIS HIGHWAY PROJECT

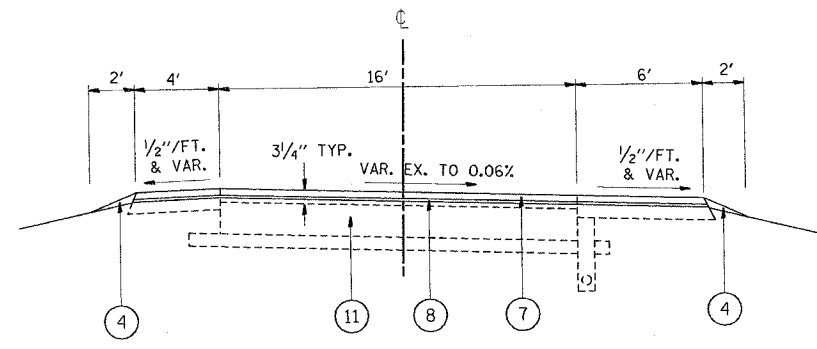
• (0101, 0203B & 0303) RS-10



PROP. TYPICAL SECTION
 RAMP B: STA. 2+10 TO STA. 11+00
 RAMP F: STA. 1+90 TO STA. 11+25
 RAMP E: STA. 2+36 TO STA. 15+31



PROP. TYPICAL SECTION
 RAMP H : STA 40+00 TO STA 49+00



PROP. TYPICAL SECTION
 RAMP H : STA 49+00 TO STA 54+15
 RAMP E : STA 10+32 TO STA 15+12

LEGEND

- ① EXIST. CURB AND GUTTER
- ② EXIST. 10" CRC PAVEMENT
- ③ EXIST. HOT-MIX ASPHALT BINDER COURSE (AFTER MILLING), 1 3/4" & VARIES
- ④ EXIST. AGGREGATE SHOULDER TYPE A, 8"
- ⑤ EXIST. PCC BASE COURSE, 10"
- ⑥ PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- ⑦ PROP. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- ⑧ PROP. POLYMERIZED LEVELING BINDER, IL-4.75, N50, 3/4"
- ⑨ PROP. AGGREGATE WEDGE SHOULDER, TYPE B
- ⑩ PROP. GRADING AND SHAPING SHOULDER

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 FAP 332: IL 394
 EXISTING TYPICAL SECTIONS
 RAMPS B,F,E&H
 SCALE: N.T.S. DRAWN BY

• (0101, 0203B & 0303) RS-10

SOUTHBOUND IL 394 TO EASTBOUND US 30 LOOP RAMP D

PATCH LOCATION #	STATION	SIZE (NORTHBOUND) (L X W)	AREA (SQ. YD)	TYPE
1	7 + 37	25 x 5	20	TYPE III
2	7 + 80	4 x 50	22	TYPE III
3	7 + 84	114 x 10	127	TYPE IV
4	9 + 08	17 x 20	38	TYPE IV
5	9 + 54	16 x 10	18	TYPE III
6	10 + 16	28 x 22	68	TYPE IV

SOUTHBOUND IL 394 TO WESTBOUND US 30 LONG ARM RAMP G

PATCH LOCATION #	STATION	SIZE (NORTHBOUND) (L X W)	AREA (SQ. YD)	TYPE
1	21 + 25	11 x 36	44	TYPE IV
2	21 + 75	20 x 6	14	TYPE II
3	22 + 40	6 x 37	25	TYPE IV
4	22 + 79	34 x 12	46	TYPE IV

EASTBOUND US 30 TO NORTHBOUND IL 394 LOOP RAMP B

PATCH LOCATION #	STATION	SIZE (NORTHBOUND) (L X W)	AREA (SQ. YD)	TYPE
1	10 + 79	33 x 18	66	TYPE IV
2	11 + 85	20 x 20	45	TYPE IV

EASTBOUND US 30 TO SOUTHBOUND IL 394 LONG ARM RAMP E

PATCH LOCATION #	STATION	SIZE (NORTHBOUND) (L X W)	AREA (SQ. YD)	TYPE
1	3 + 25	10 x 6	7	TYPE II
2	7 + 72	10 x 6	7	TYPE II
3	9 + 87	8 x 20	18	TYPE III
4	11 + 07	4 x 20	9	TYPE II

WESTBOUND US 30 TO NORTHBOUND IL 394 LONG ARM RAMP H

PATCH LOCATION #	STATION	SIZE (NORTHBOUND) (L X W)	AREA (SQ. YD)	TYPE
1	45 + 05	122 x 12	163	TYPE IV
2	48 + 25	20 x 6	14	TYPE II

NOTE:

FOR INFORMATION ONLY. ACTUAL PATCHING LOCATION AND LIMITS TO BE DETERMINED IN THE FILED

SCHEDULE TOTALS

CLASS D PATCHES, TYPE II	51 SY
CLASS D PATCHES, TYPE III	78 SY
CLASS D PATCHES, TYPE IV	622 SY

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP 332: IL 394

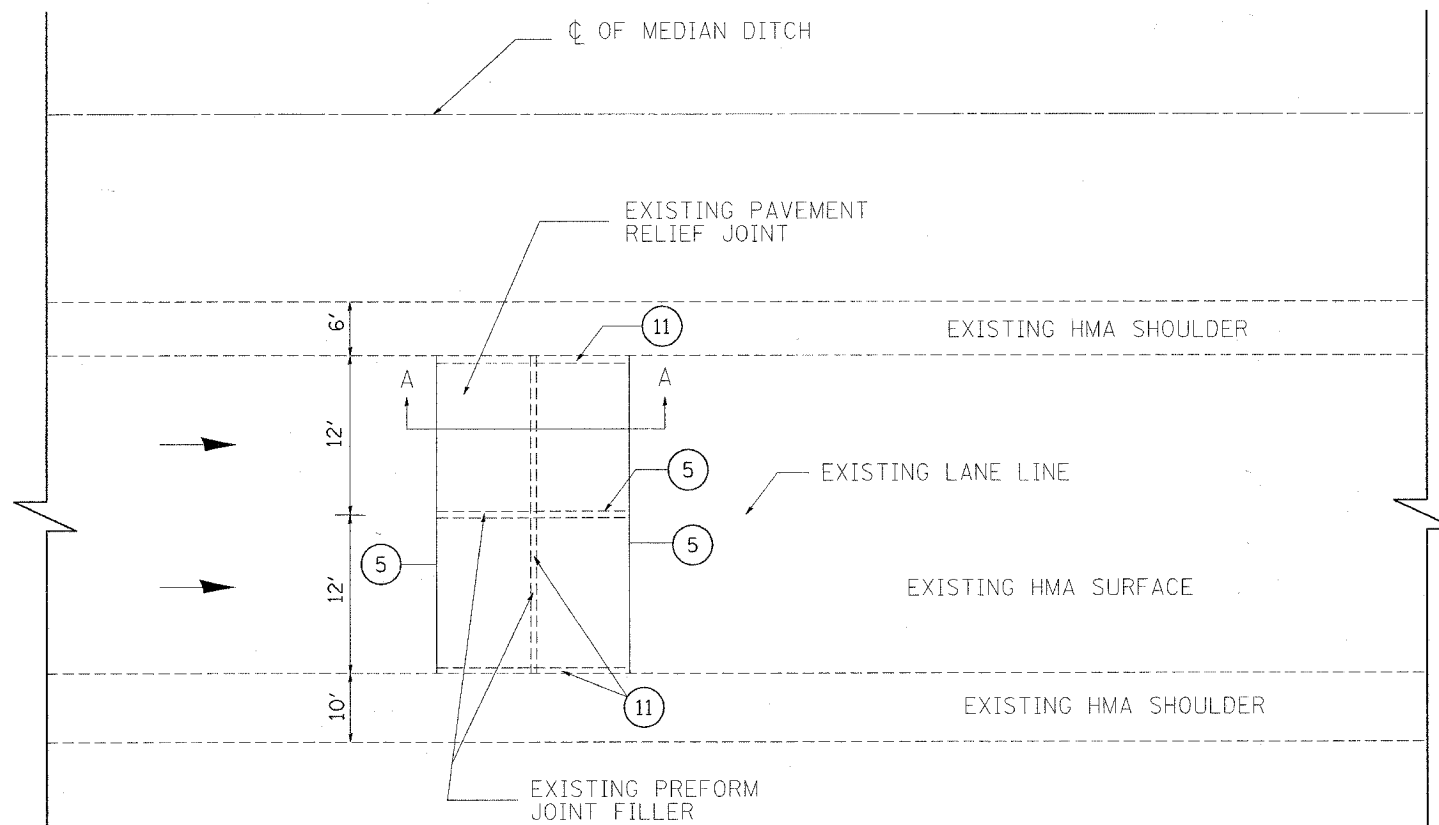
PAVEMENT PATCHING SCHEDULE

SCALE: N.T.S. DRAWN BY

8/13/2007
c:\proj\pav\il394\02\020502m32
-REF-
-REF-

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	•	COOK	54	31
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

• (0101,0203B & 0303) RS-10

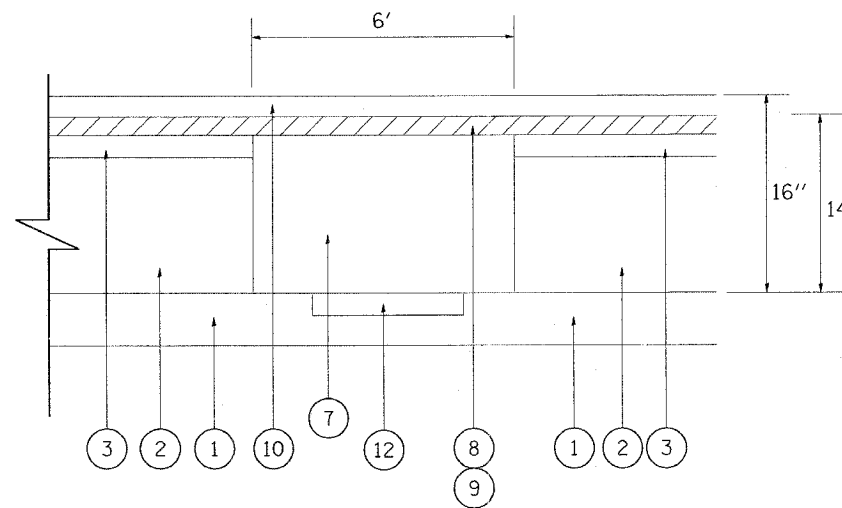
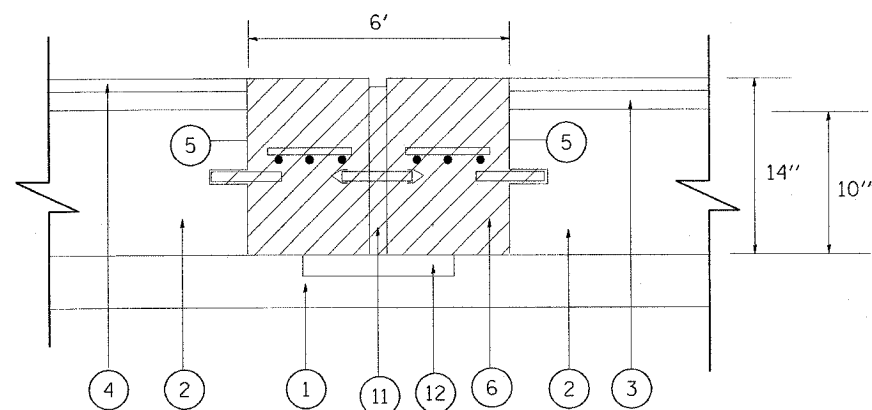


LEGEND

- ① EXISTING SUB-BASE
- ② EXISTING P.C.C. PAVEMENT, 10"
- ③ EXISTING HOT-MIX ASPHALT CONCRETE BINDER COURSE, 2"
- ④ EXISTING HOT-MIX ASPHALT SURFACE COURSE, 2"
- ⑤ SAW CUT (FULL DEPTH)
- ⑥ EXISTING PAVEMENT RELIEF JOINT REMOVAL
- ⑦ PROPOSED CLASS D PATCHES, 16 INCH
- ⑧ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- ⑨ PROPOSED STONE MATRIX ASPHALT, BINDER COURSE, 2"
- ⑩ PROPOSED STONE MATRIX ASPHALT, SURFACE COURSE, 2"
- ⑪ WHEEL SAW CUT
- ⑫ SLEEPER SLAB (NOT TO BE REMOVED OR DAMAGED)

NOTE:

THIS WORK IS TO BE COMPLETED BEFORE MILLING OF ROADWAY

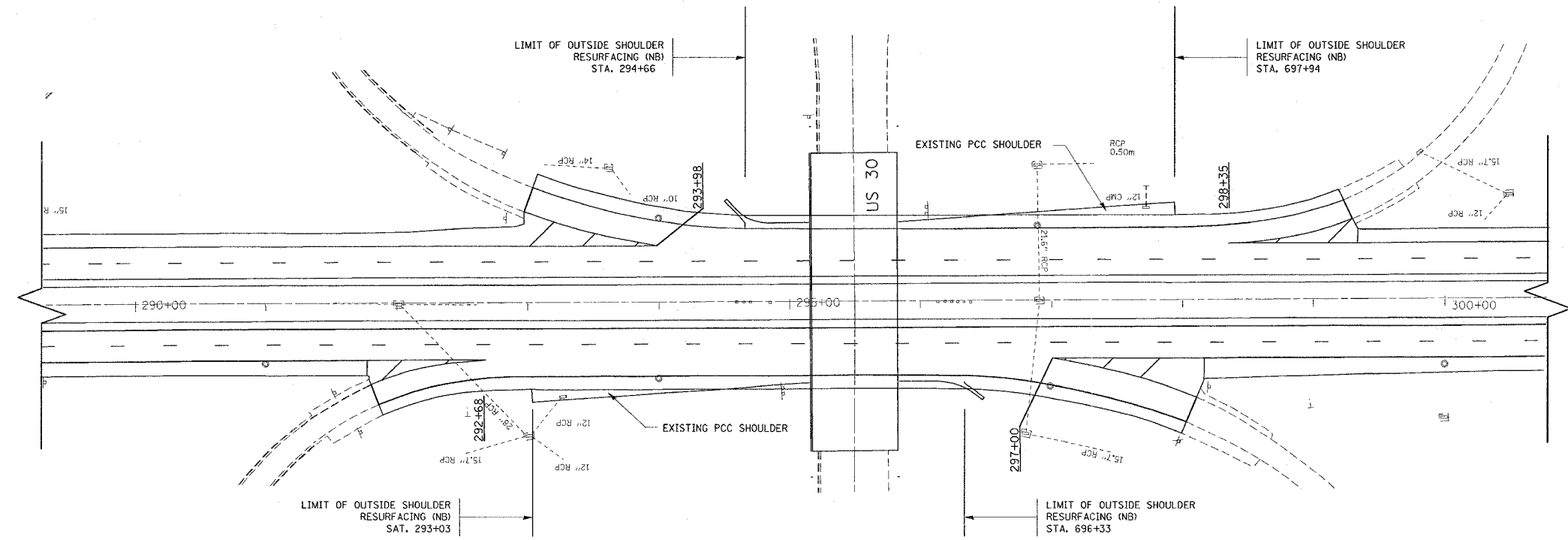


REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION IL. ROUTE 394 PAVEMENT RELIEF JOINT REMOVAL AND REPLACEMENT (TYPICAL)
NAME	DATE	

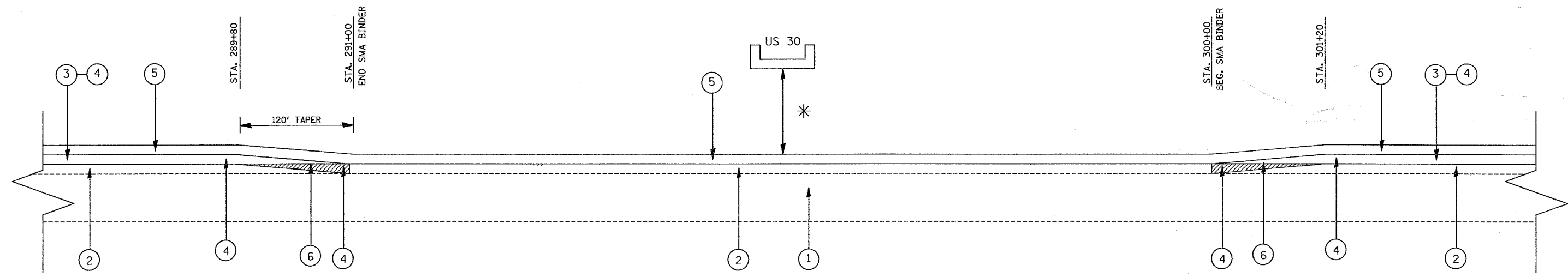
SCALE: VERT. NONE
HORIZ. DATE 8/6/2007
DRAWN BY
CHECKED BY

REF-
REF-
REF-

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332		COOK	54	32
STA. 275+00		TO STA. 285+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (0101,0203B & 0303) RS-10				
D-91-205-02				



PROPOSED
RESURFACING DETAILS UNDER BRIDGE (US 30)
FOR SOUTHBOUND AND NORTHBOUND LANES
(NOT TO SCALE)



LEGEND

- 1 EXISTING PCC PAVEMENT, 10"
- 2 EXISTING HOT-MIX ASPHALT CONCRETE SURFACE (AFTER MILLING), 2"
- 3 PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- 4 PROPOSED STONE MATRIX ASPHALT, BINDER COURSE- 2"
- 5 PROPOSED STONE MATRIX ASPHALT, SURFACE COURSE- 2"
- 6 120' BUTT JOINT MILLED AT THE TIME THE SMA BINDER IS PLACED.

* THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE EXISTING ROADWAY CLEARANCE UNDER THE U.S. 30 UNDERPASS. ANY EXTRA WORK REQUIRED TO DO THIS WILL NOT BE PAID SEPARATELY. THIS SHALL BE INCLUDED IN THE COST OF STONE MATRIX ASPHALT, SURFACE COURSE.

REVISIONS	
NAME	DATE

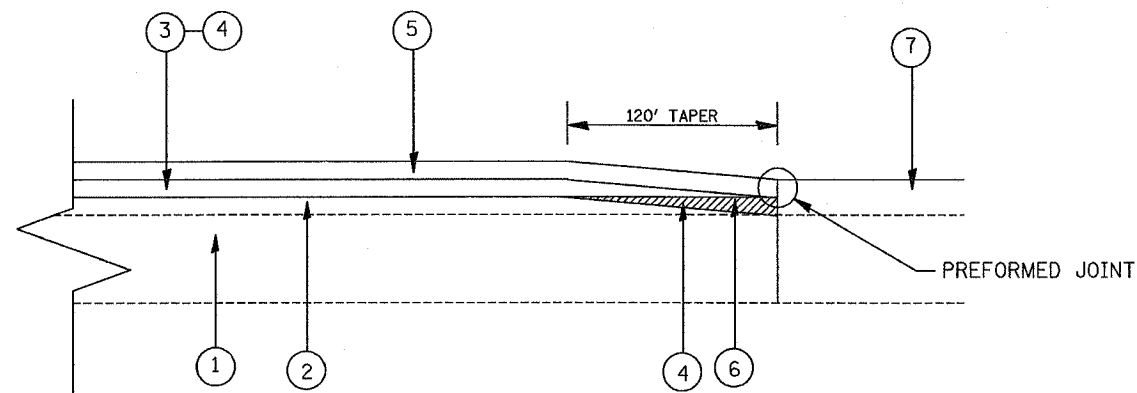
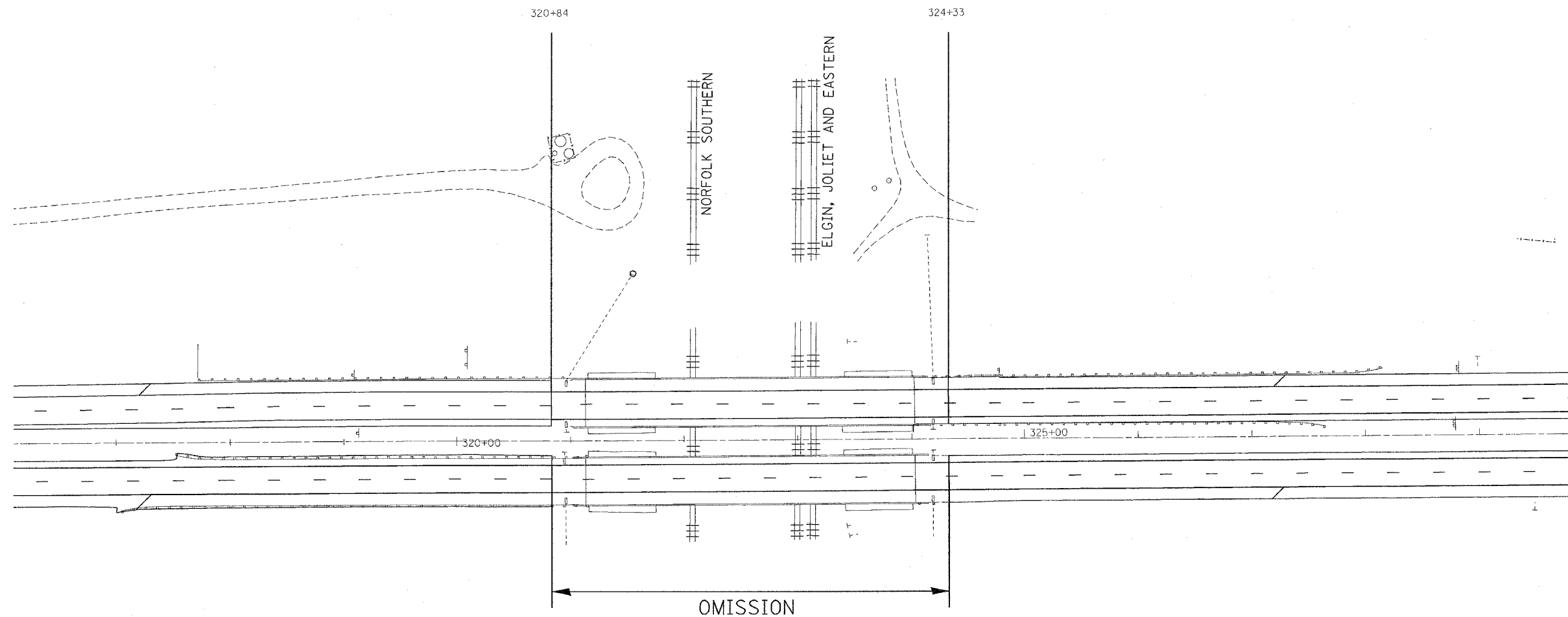
ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 394
RESURFACING DETAILS UNDER
U.S. 30 OVERPASS
(NOT TO SCALE)

SCALE: VERT.
HORIZ.
DATE 8/23/2007

DRAWN BY
CHECKED BY

*REF-
*REF-
*REF-

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332		COOK	54	33
STA. 275+00		TO STA. 285+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
*(0101,0203B & 0303) RS-10				
D-91-205-02				



LEGEND

- 1 EXISTING PCC PAVEMENT, 10"
- 2 EXISTING HOT-MIX ASPHALT CONCRETE SURFACE (AFTER MILLING), 2"
- 3 PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- 4 PROPOSED STONE MATRIX ASPHALT, BINDER COURSE- 2"
- 5 PROPOSED STONE MATRIX ASPHALT, SURFACE COURSE- 2"
- 6 120' BUTT JOINT MILLED BEFORE PLACEMENT OF SMA BINDER.
- 7 EXISTING PCC APPROACH SLAB

THIS WORK IS THE SAME ON BOTH ENDS OF THE PCC APPROACH SLABS.
THE DETAIL ONLY SHOWS THE NORTH SIDE OF THE BRIDGE.

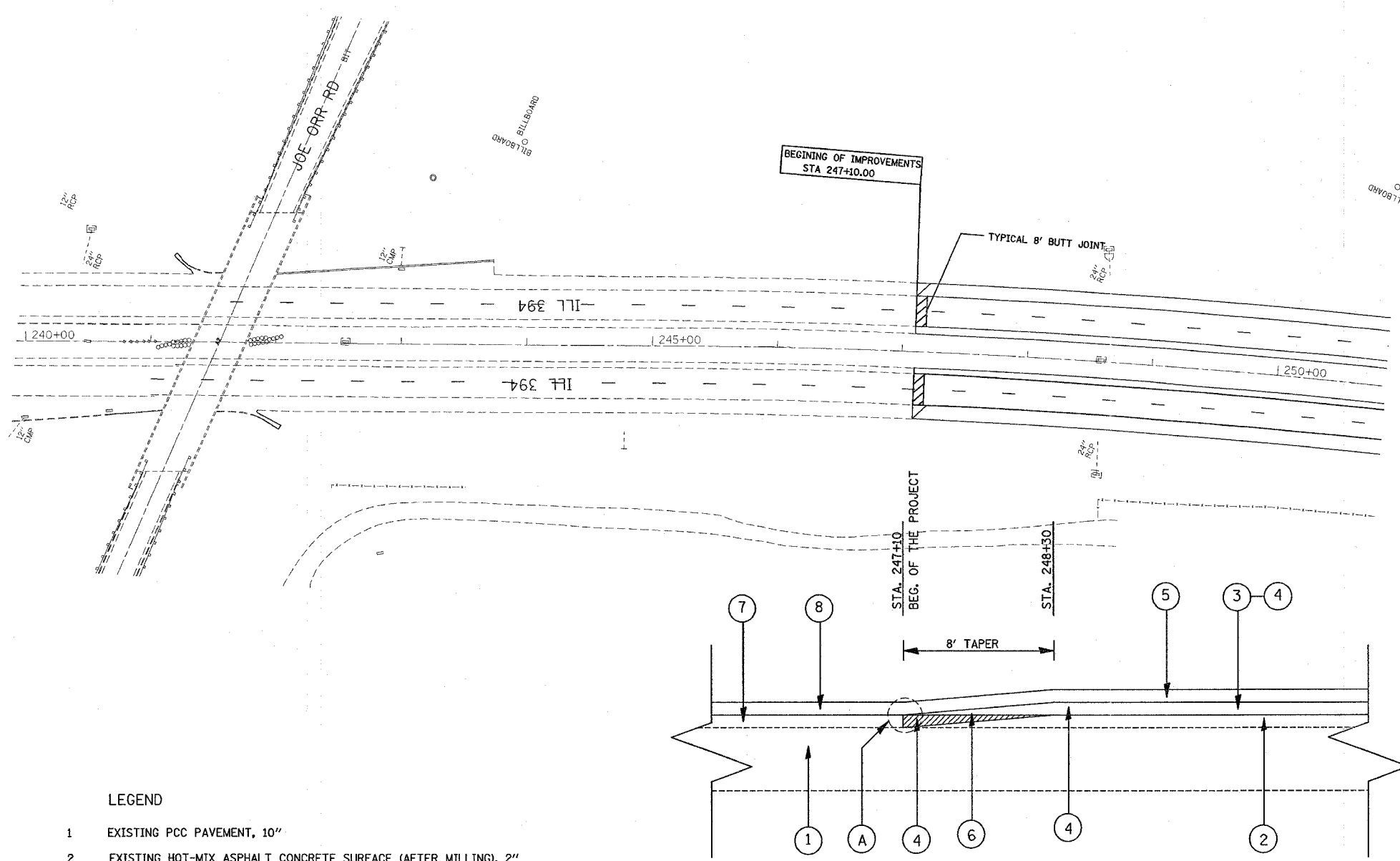
THE CONTRACTOR SHALL BE REQUIRED TO PROTECT THE EXISTING PCC
PCC APPROACH SLABS. IF ANY DAMAGE OCCUR TO THEM, IT WILL BE THE
RESPONSABILITY OF THE CONTRACTOR TO FIX THE DAMAGE AND WILL NOT
BE PAID SEPARATELY.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL ROUTE 394
 RUSURFACING DETAILS AT THE
 PCC APPROACH SLABS
 (NOT TO SCALE)
 SCALE: VERT. _____
 HORIZ. _____
 DATE 7/14/2007
 DRAWN BY _____
 CHECKED BY _____

REF-
REF-
REF-

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332		COOK	54	34
STA. 275+00		TO STA. 285+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



LEGEND

- 1 EXISTING PCC PAVEMENT, 10"
- 2 EXISTING HOT-MIX ASPHALT CONCRETE SURFACE (AFTER MILLING), 2"
- 3 PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- 4 PROPOSED STONE MATRIX ASPHALT, BINDER COURSE- 2"
- 5 PROPOSED STONE MATRIX ASPHALT, SURFACE COURSE- 2"
- 6 8' BUTT JOINT MILLED AT THE TIME THE SMA BINDER IS PLACED.
- 7 EXISTING HOT-MIX ASPHALT CONCRETE BINDER.
- 8 EXISTING HOT-MIX ASPHALT CONCRETE SURFACE.

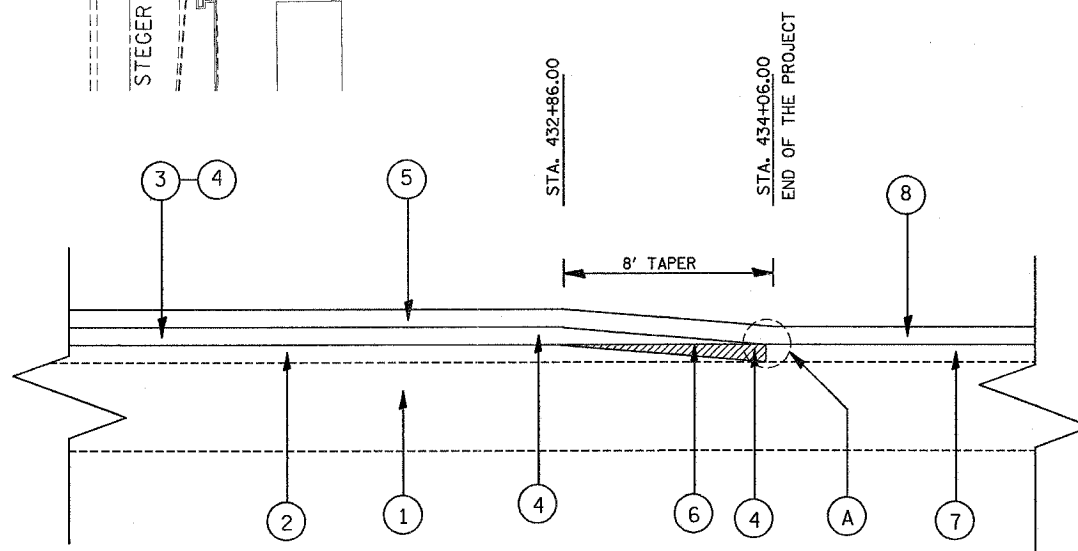
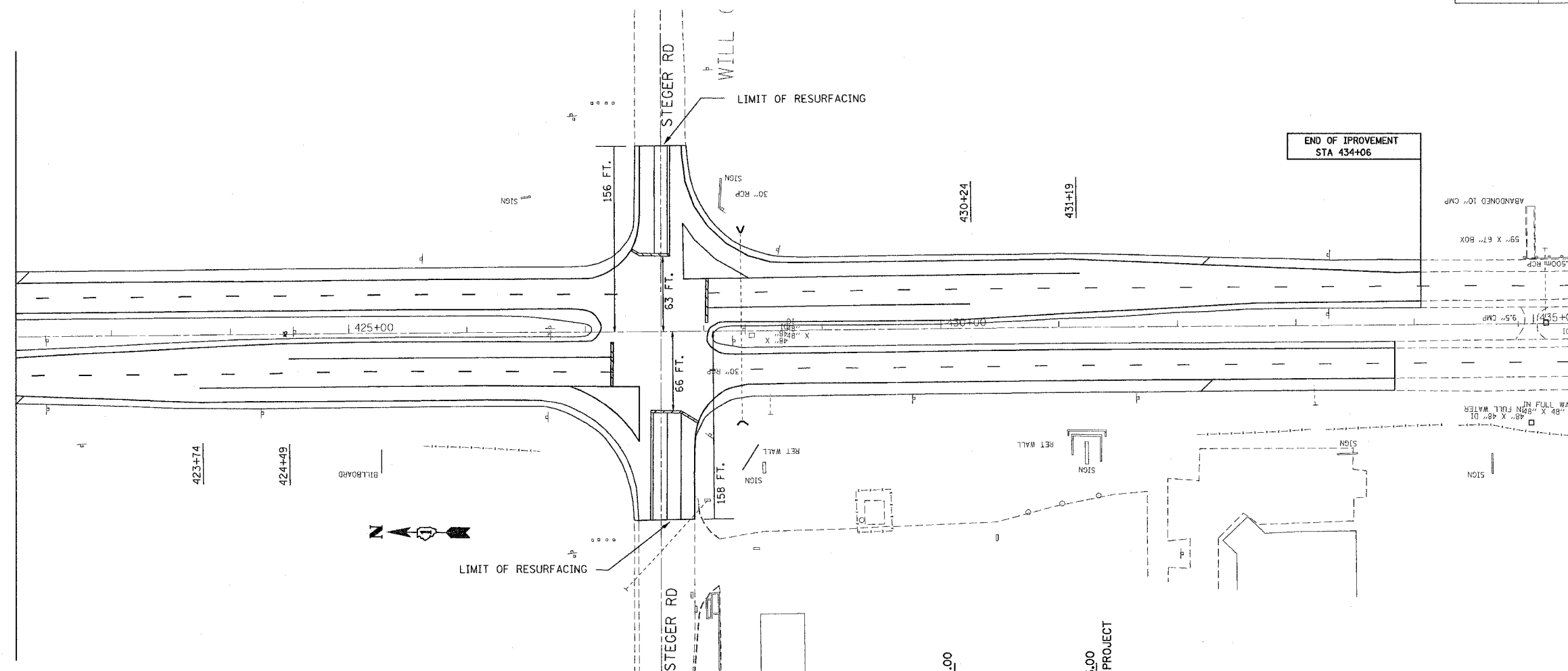
(A) MATCH THE EXISTING ELEVATION AT THE BEGINNING OF THE BUTT JOINT

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 IL ROUTE 394
 DETAILS FOR BUTT JOINT
 AT THE BEG. OF
 PROJECT - STA. 247+10
 SCALE: VERT. _____
 HORIZ. _____
 DATE 7/14/2007
 DRAWN BY _____
 CHECKED BY _____

REF-
REF-
REF-

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332		COOK	54	35
STA. 275+00		TO STA. 285+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



LEGEND

- 1 EXISTING PCC PAVEMENT, 10"
- 2 EXISTING HOT-MIX ASPHALT SURFACE (AFTER MILLING), 2"
- 3 PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- 4 PROPOSED STONE MATRIX ASPHALT, BINDER COURSE- 2"
- 5 PROPOSED STONE MATRIX ASPHALT, SURFACE COURSE- 2"
- 6 8' BUTT JOINT MILLED AT THE TIME THE SMA BINDER IS PLACED.
- 7 EXISTING HOT-MIX ASPHALT BINDER.
- 8 EXISTING HOT-MIX ASPHALT SURFACE.

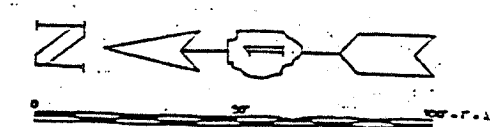
(A) MATCH THE EXISTING ELEVATION AT THE END OF THE BUTT JOINT

REVISIONS	
NAME	DATE

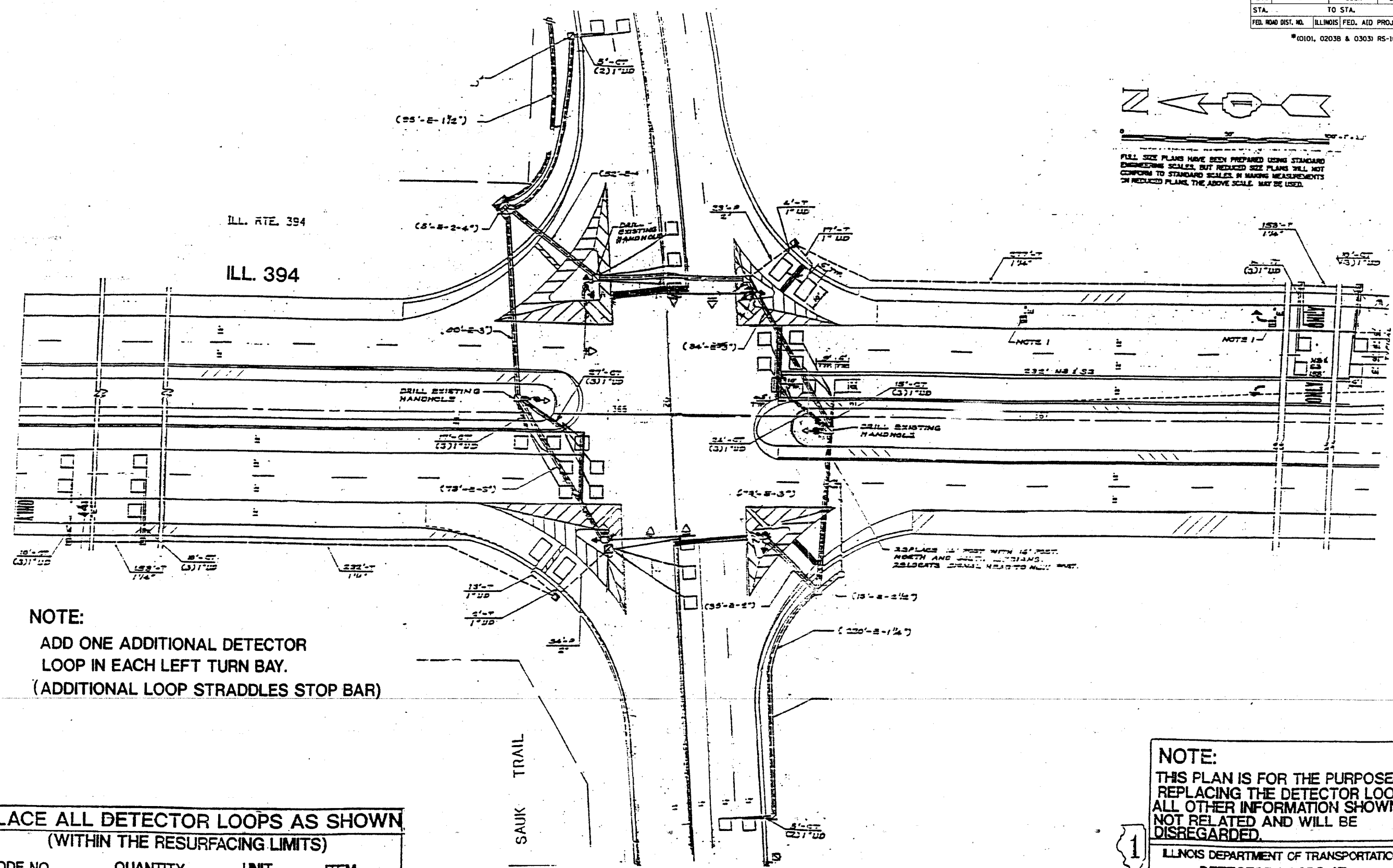
ILLINOIS DEPARTMENT OF TRANSPORTATION
 IL ROUTE 394
 DETAILS FOR BUTT JOINT
 AT THE END OF
 PROJECT - STA. 434+06
 SCALE: VERT. _____
 HORIZ. _____
 DATE 7/14/2007
 DRAWN BY _____
 CHECKED BY _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	37
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

10101, 02038 & 03031 RS-10



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



NOTE:
 ADD ONE ADDITIONAL DETECTOR LOOP IN EACH LEFT TURN BAY.
 (ADDITIONAL LOOP STRADDLES STOP BAR)

15 PLACE 1 1/2" POST WITH 1 1/2" POST NORTH AND SOUTH SIDINGS. 25 LOCATE SIGNAL HEADS TO NEW WPT.

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

CODE NO.	QUANTITY	UNIT	ITEM
88600600	1788	FOOT	DETECTOR LOOP REPLACEMENT

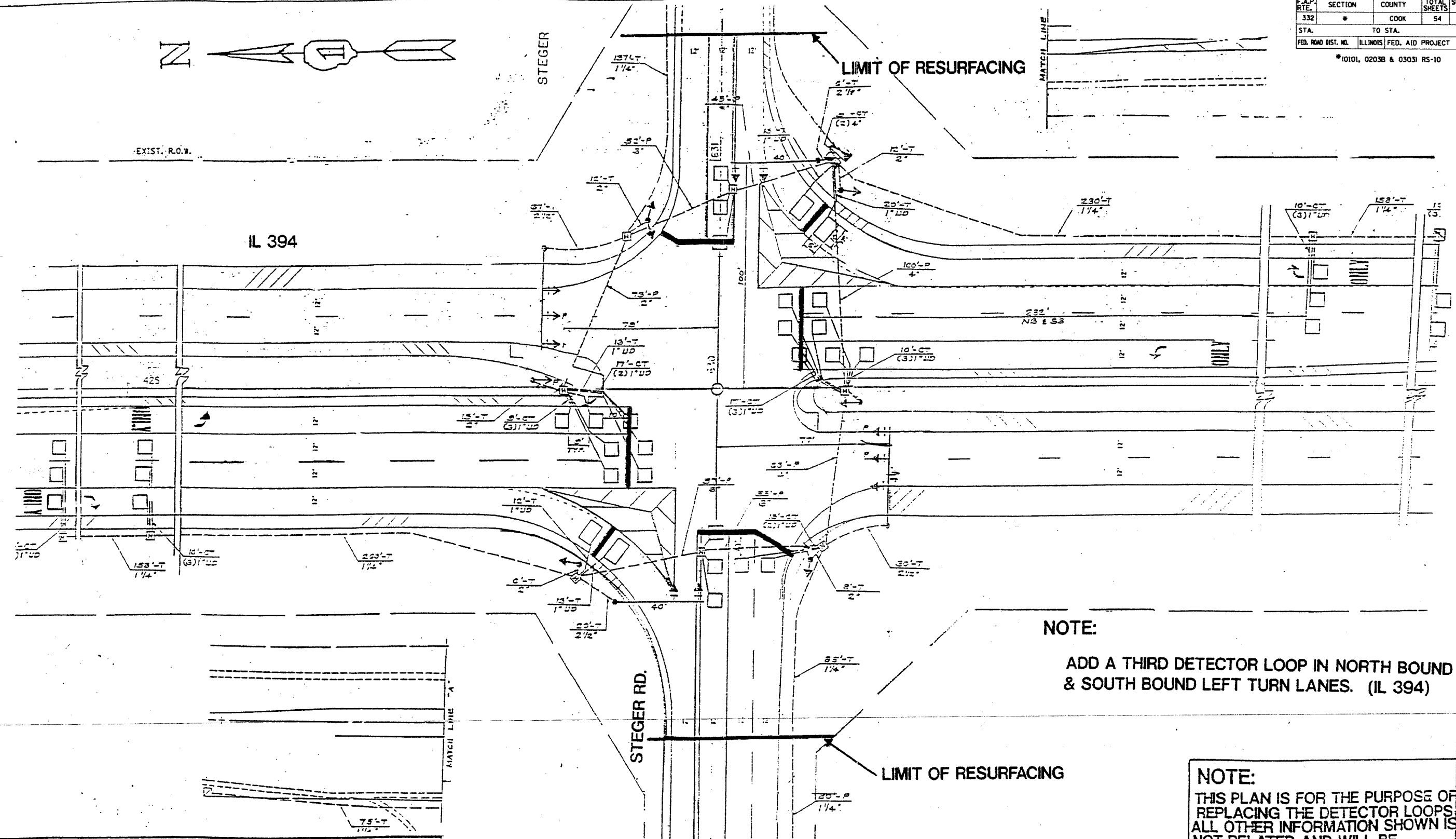


NOTE:
 THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DETECTOR LOOPS AT:
 IL 394 & SAUK TRAIL

SCALE 1" = 40'
 DATE DESIGNED BY:
 DRAWN BY:
 CHECKED BY:

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	#	COOK	54	38
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
#10101, 0203B & 03031 RS-10				



NOTE:
 ADD A THIRD DETECTOR LOOP IN NORTH BOUND & SOUTH BOUND LEFT TURN LANES. (IL 394)

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

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

CODE NO.	QUANTITY	UNIT	ITEM
88600600	1573	FOOT	DETECTOR LOOP REPLACEMENT

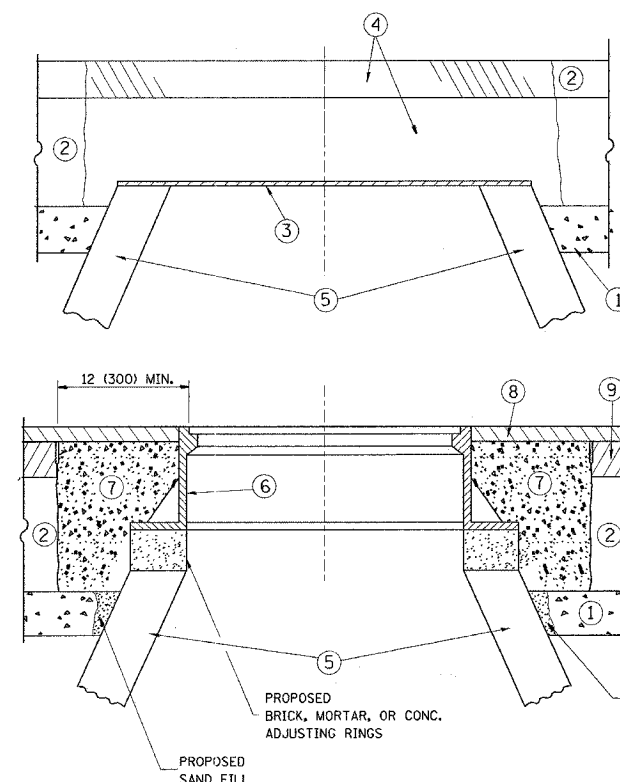
SCALE: 1" =
 DATE
 DESIGNED BY:
 DRAWN BY:
 CHECKED BY:



ILLINOIS DEPARTMENT OF TRANSPORTATION
 DETECTOR LOOPS AT:
 IL 394 & STEGER RD.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	39
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

* (0101, 0203b, & 0303) RS-10



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

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

STAGE 2 (AFTER PAVEMENT MILLING)

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

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

LEGEND

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

LOCATION OF STRUCTURES:

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

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

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

NOTES:

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

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

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

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

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

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

REVISIONS	
NAME	DATE
R. SHAH	10/25/94
R. SHAH	01/30/95
R. SHAH	03/10/95
A. ABBAS	03/21/97
R. WIEDEMAN	05/14/04
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

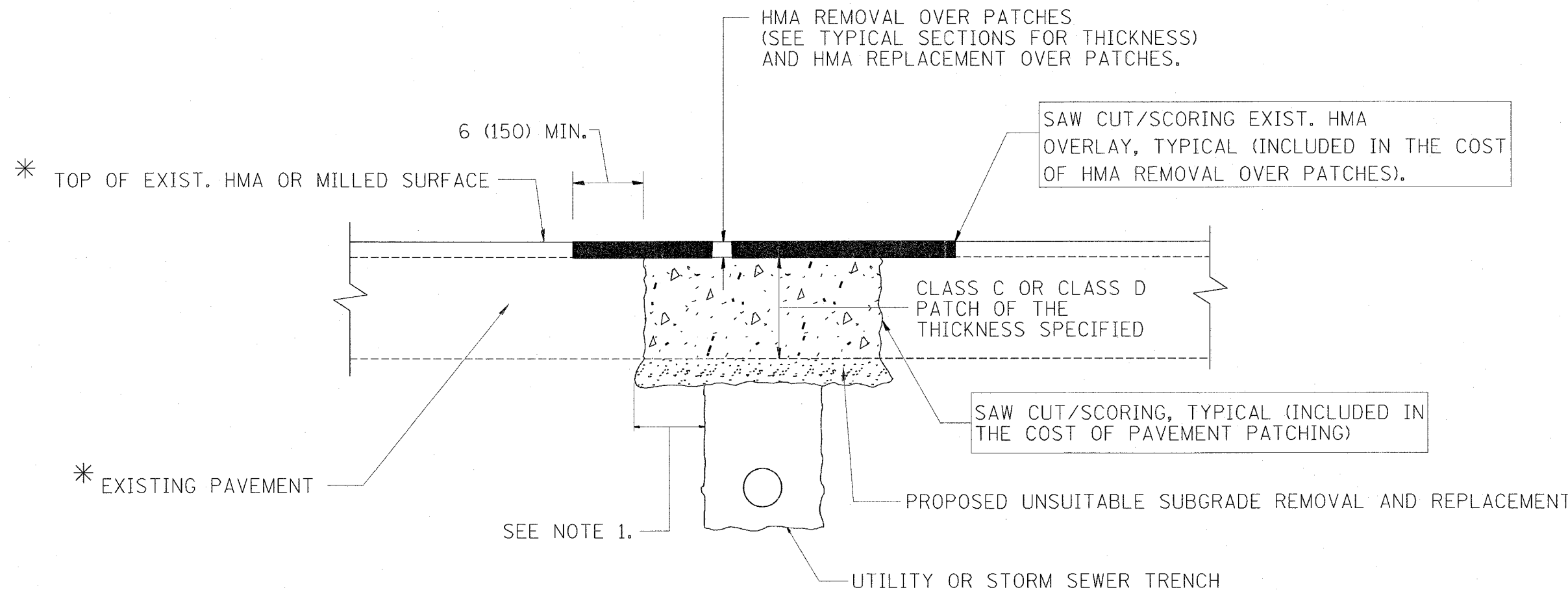
SCALE: VERT. NONE
HORIZ. NONE
PLOT DATE: 7/14/2007

DRAWN BY
CHECKED BY

BD600-03 (BD-8)
REVISION DATE: 01/01/07

PLOT DATE = 7/14/2007
PLOT NAME = P:\11\1104\1104088.dgn
PLOT SCALE = 49.9999 / IN.
USER NAME = eamantim

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	40
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
* (0101, 0203B & 0303) RS-10				



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

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

SEQUENCE OF CONSTRUCTION

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

SCALE: VERT. NONE
HORIZ. NONE
PLOT DATE: 7/14/2007

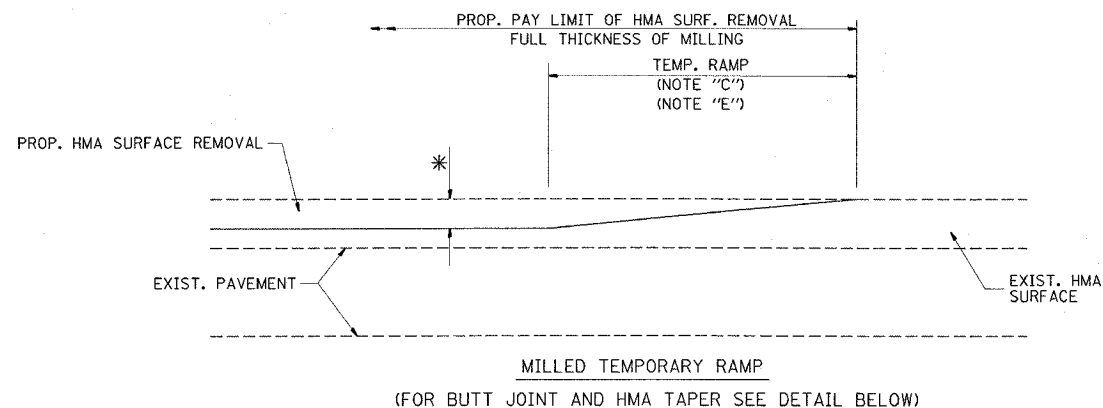
DRAWN BY

CHECKED BY

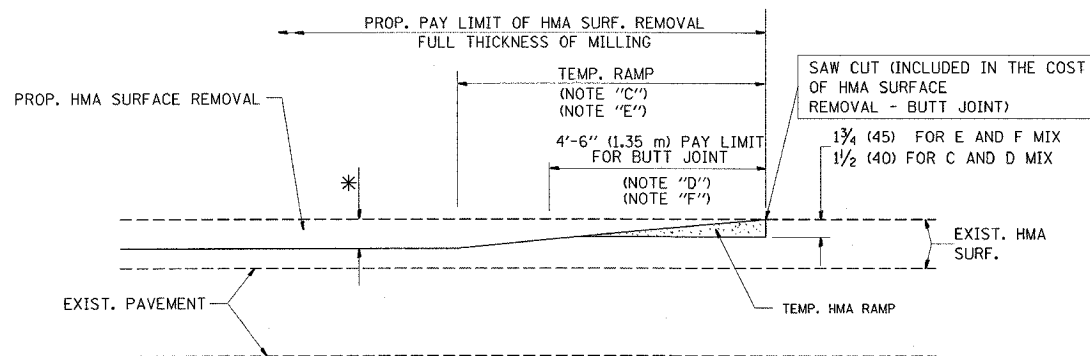
BD400-04 (BD-22)

REVISION DATE: 01/01/07

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	41
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

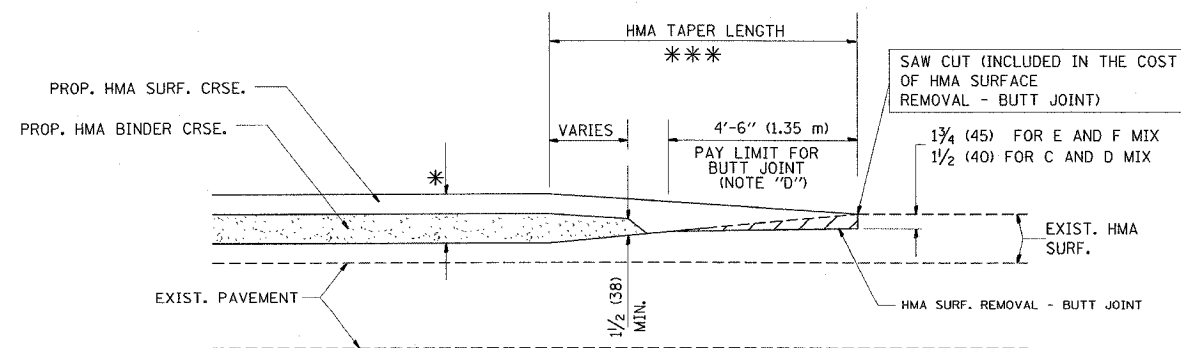


OPTION 1



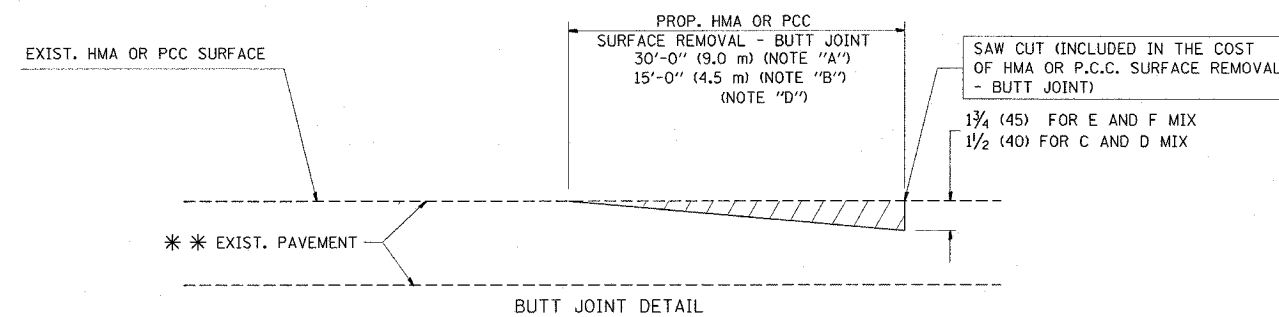
OPTION 2

TYPICAL TEMPORARY RAMP

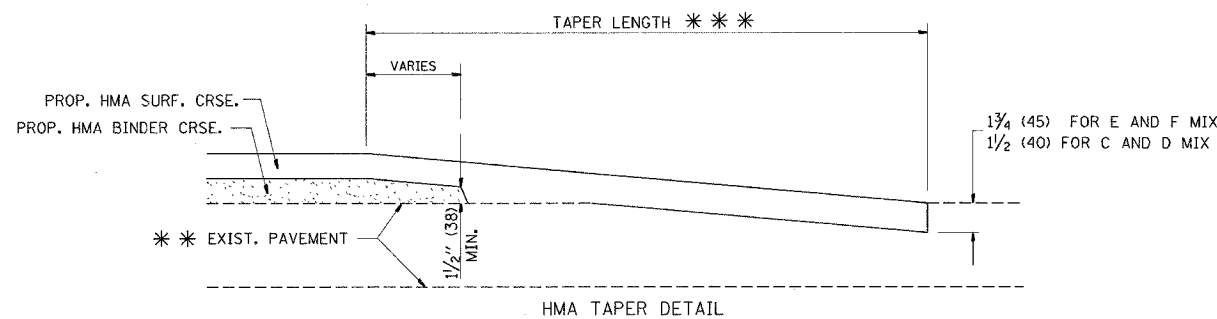


BUTT JOINT AND HMA TAPER

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")

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

BASIS OF PAYMENT:

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

SCALE: VERT. NONE
HORIZ. 1" = 20'
PLOT DATE: 7/14/2007

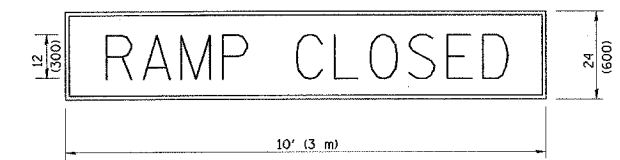
DRAWN BY
CHECKED BY

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	42
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

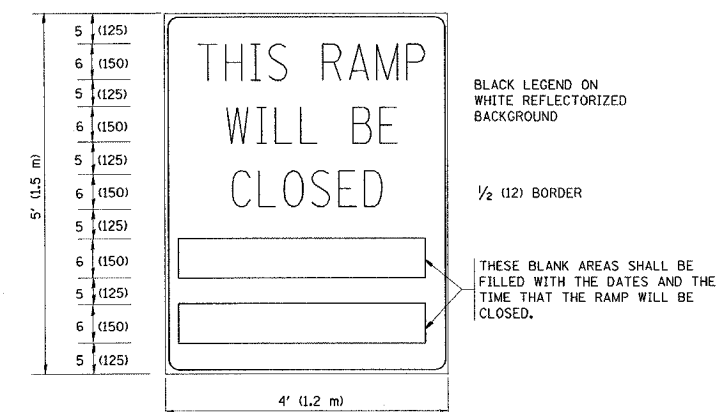
• (101L 02038 & 0303) RS-10

RAMP CLOSURE ADVANCE WARNING SIGN



BLACK LEGEND ON ORANGE REFLECTORIZED BACKGROUND
1 (25) BORDER
THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR THE CLOSED EXIT RAMP.

RAMP CLOSURE ADVANCE INFORMATION SIGN



BLACK LEGEND ON WHITE REFLECTORIZED BACKGROUND
1/2 (12) BORDER
THESE BLANK AREAS SHALL BE FILLED WITH THE DATES AND THE TIME THAT THE RAMP WILL BE CLOSED.
THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

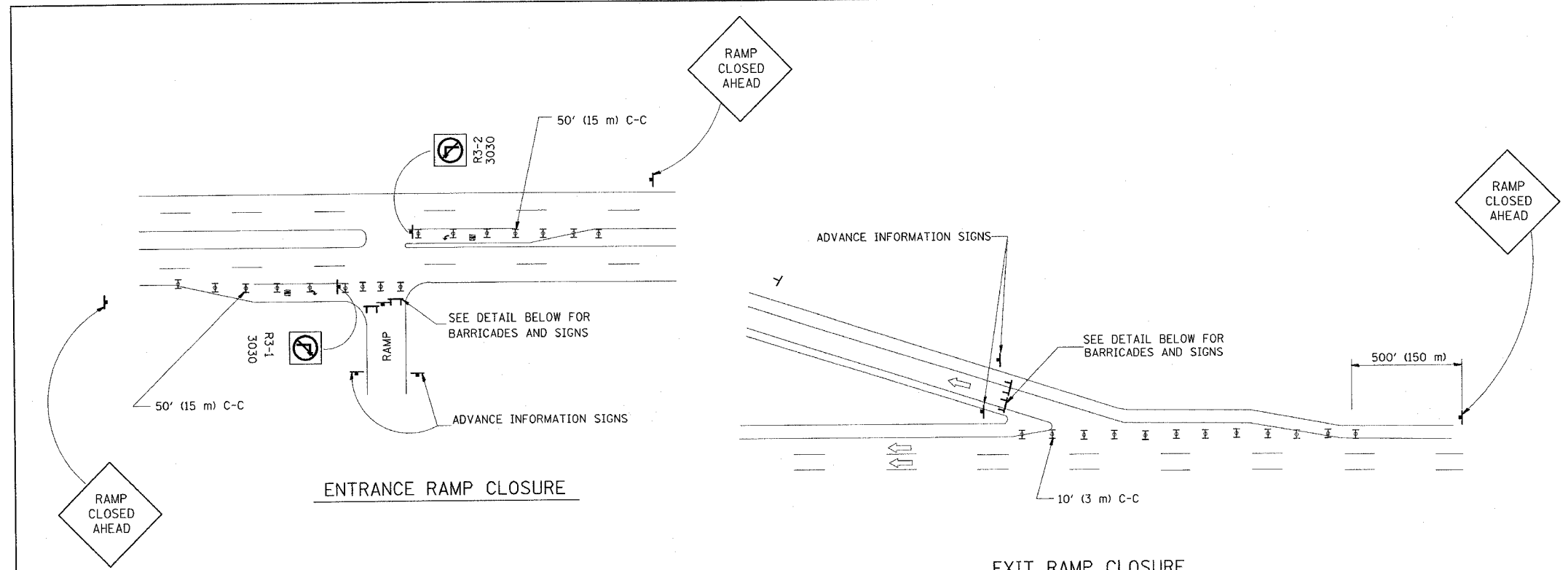
GENERAL NOTES:

1. CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
2. STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
3. A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES.
4. ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED.
5. THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
7. THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED TWENTY-FOUR (24) HOURS IN LENGTH.

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

REVISIONS	
NAME	DATE
DWS	2-83
DWS	1/90
DWS	9/94
DWS	12/94
DWS/JAF	12/02
JAF	2/06
SPB	1/07
Revise devices to meet NCHRP 350	4/03

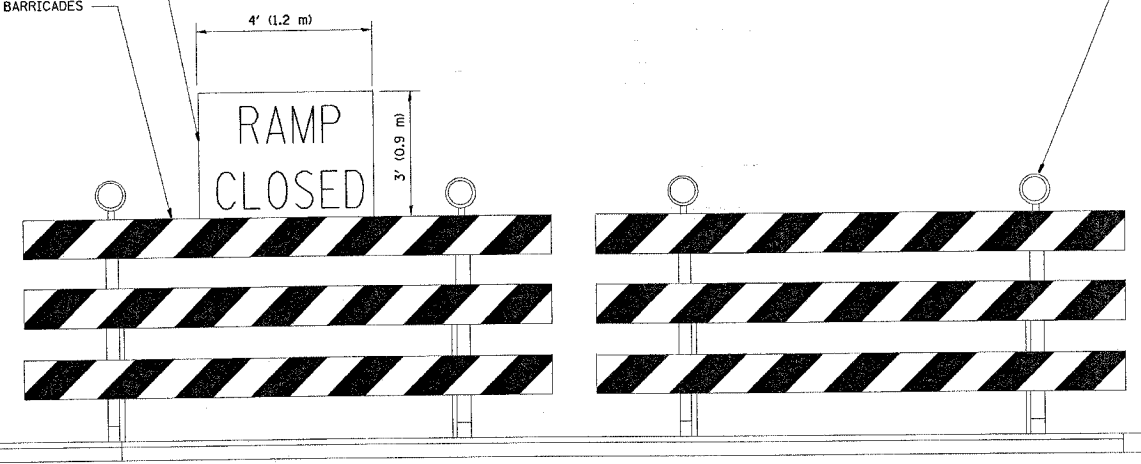
ILLINOIS DEPARTMENT OF TRANSPORTATION
FREWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS
SCALE: DATE: 7/14/2007
DRAWN BY: CHECKED BY: TC-8
REVISION DATE: 01/01/07



THE "RAMP CLOSED" SIGN SHALL BE B/W WITH 8 (200) CAPS. IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORTS DIRECTLY IN FRONT OF THE BARRICADE.

FLASHER UNIT AMBER BOTH SIDES OF EACH TYPE III BARRICADE

TYPE III BARRICADES



DETAIL FOR REQUIRED BARRICADES & SIGNS

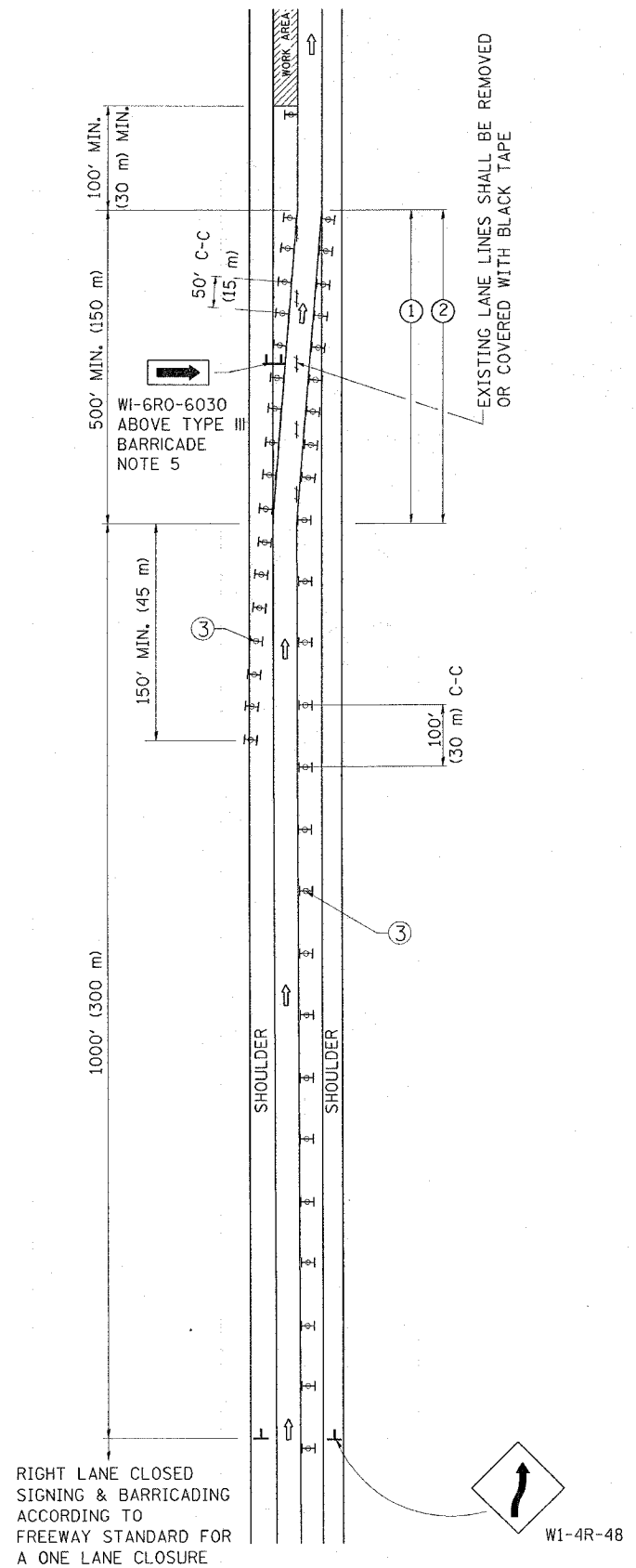
- SYMBOLS**
- ▬ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
 - ▬ TYPE III BARRICADE WITH FLASHING LIGHT

PLOT DATE = 7/14/2007
FILE NAME = P:\distr\62481.dgn
PLOT SCALE = 50.000' / 1" IN.
USER NAME = camanin

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332		COOK	54	42A
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

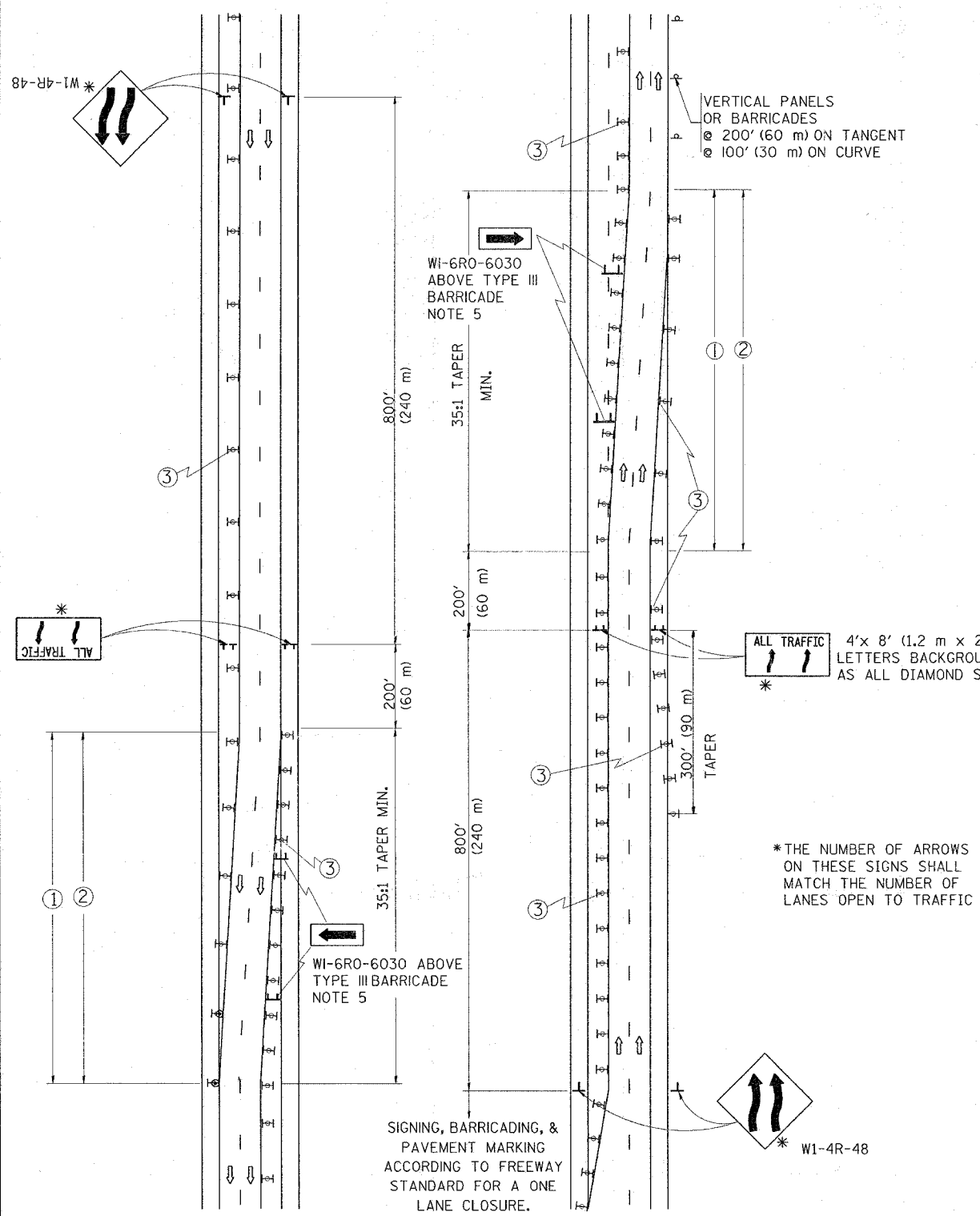
(0101, 0203B & 0303) RS-10

SINGLE LANE WEAVE



RIGHT LANE CLOSED
SIGNING & BARRICADING
ACCORDING TO
FREEWAY STANDARD FOR
A ONE LANE CLOSURE

MULTI-LANE WEAVE



SIGNING, BARRICADING, &
PAVEMENT MARKING
ACCORDING TO FREEWAY
STANDARD FOR A ONE
LANE CLOSURE.

GENERAL NOTES

- EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED OR COVERED WITH BLACK TAPE. PAVEMENT MARKING REMOVAL OR BLACK TAPE SHALL NOT BE REQUIRED FOR LANE CLOSURES UNDER 24 HOURS IN DURATION.
- CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVE LANE LINES SHALL BE 10'-30' (3 m-9 m) SKIP DASH, WHITE.
- PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORTS DIRECTLY IN FRONT OF THE BARRICADE.
- IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.

SYMBOLS

- ↑ DIRECTION OF TRAFFIC
- ▨ WORK AREA
- ┆ SIGN ON PORTABLE OR PERMANENT SUPPORT
- ⊥ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH MONO-DIRECTIONAL STEADY BURNING LIGHT

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN

REVISIONS	
NAME	DATE
DWS	2/87
DWS	1/90
DWS	12/27/94
DWS	11/96
JAF	4/03
JAF	2/06
SPB	1/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL DETAILS
FOR FREEWAY
SINGLE & MULTI-LANE WEAVE

SCALE:
DATE: 8/23/2007

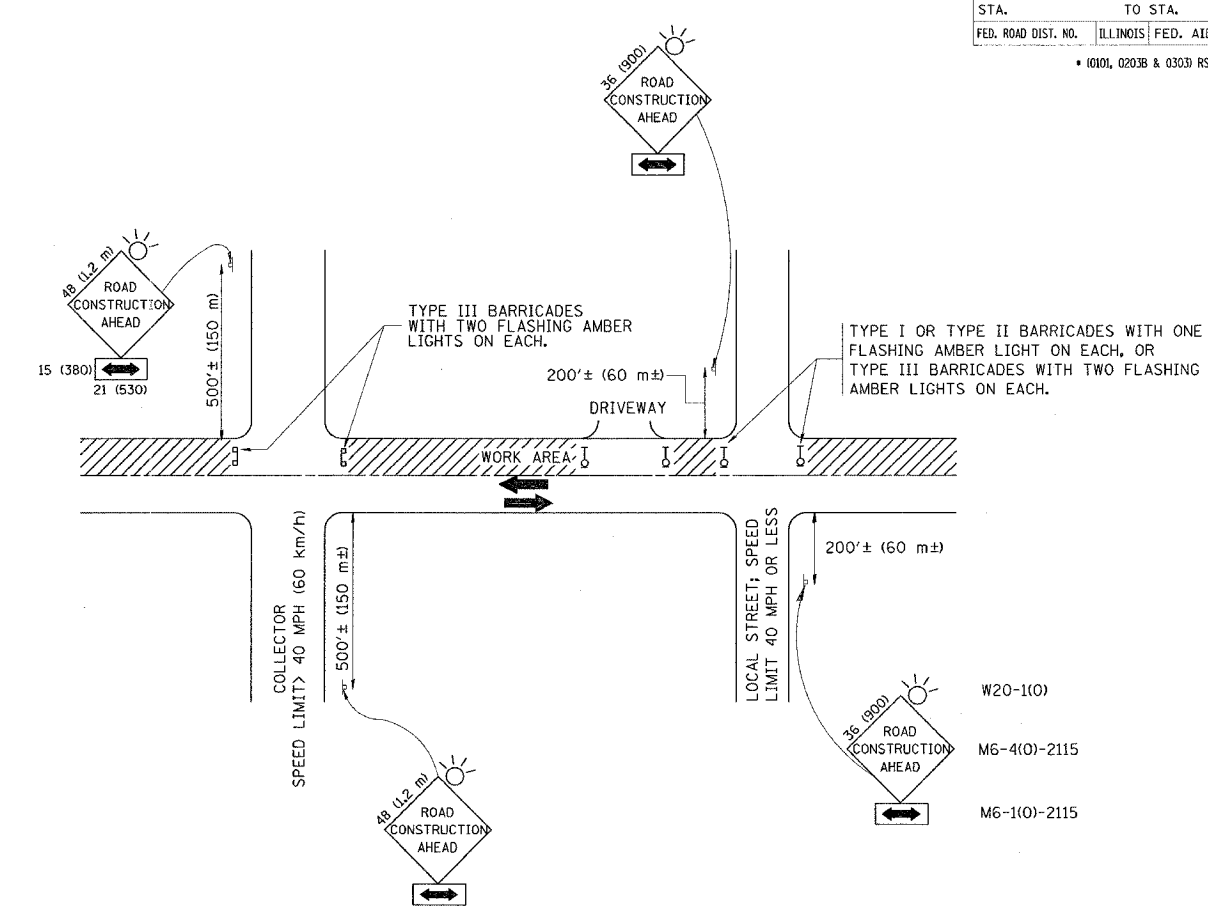
DRAWN BY R.H.
CHECKED BY

TC-9
REVISION DATE: 01/01/07

PLOT DATE = 8/23/2007
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PLOT SCALE = 0.01000 / IN.
USER NAME = csmrhm

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	43
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

• (1010, 0203B & 0303) RS-10



W20-1(0)
M6-4(0)-2115
M6-1(0)-2115

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 60 km/h (40 MPH) 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.
- 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.

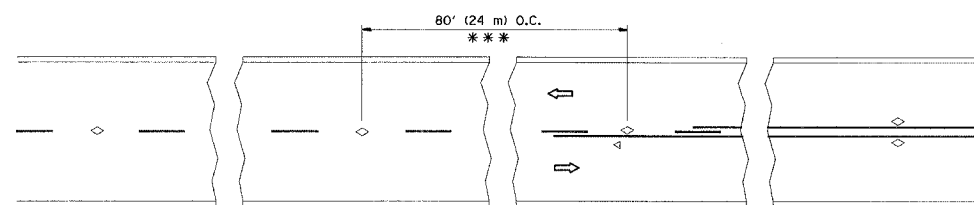
REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL AND PROTECTION
FOR
SIDE ROADS, INTERSECTIONS, AND
DRIVEWAYS

SCALE: DATE: 7/14/2007
DRAWN BY: CHECKED BY: TC-10

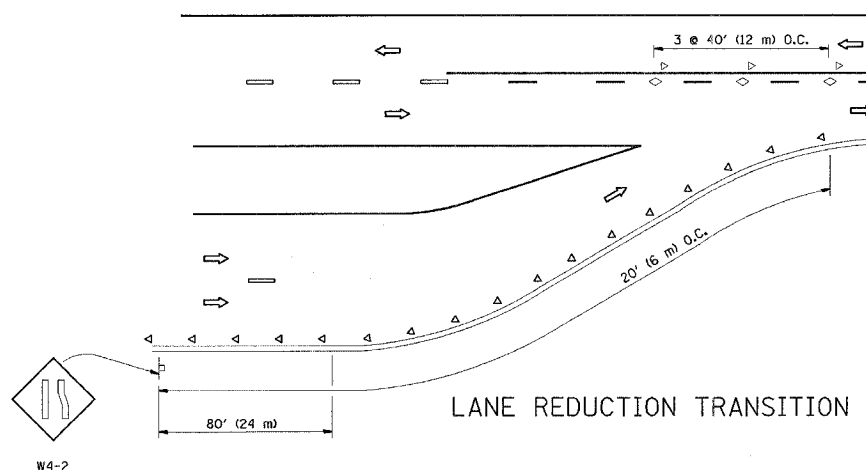
PLOT DATE = 7/14/2007
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USER NAME = cconrhn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332		COOK	54	44
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

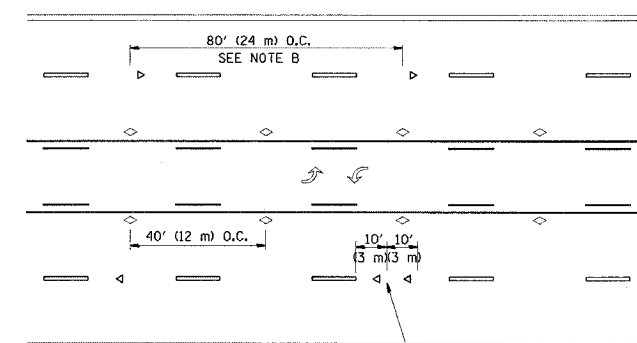


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

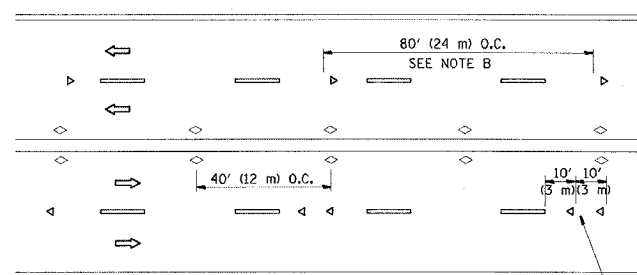
TWO-LANE/TWO-WAY



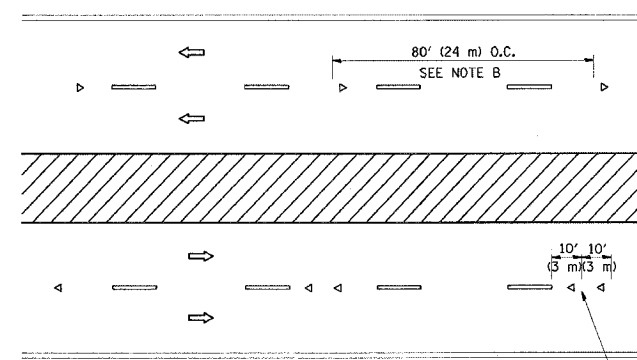
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

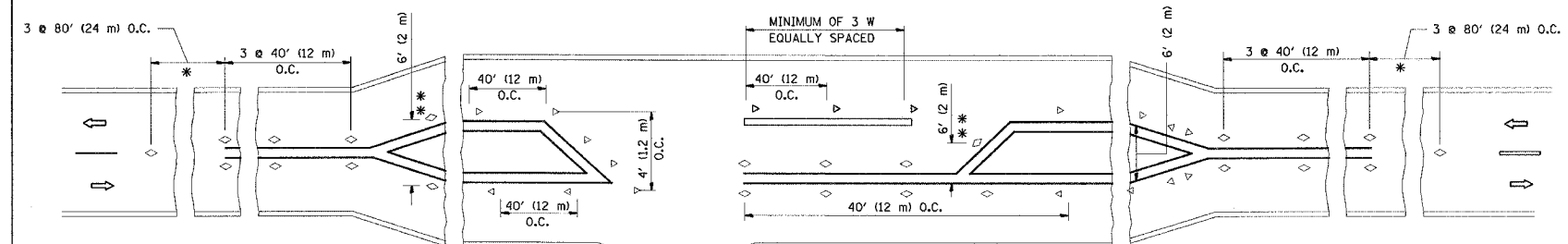
1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE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

SYMBOLS

- YELLOW STRIPE
- WHITE STRIPE
- ◁ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◊ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- 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.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.



* 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 millimeters (Inches) unless otherwise shown.

REVISIONS	
NAME	DATE
T. RAMMACHER	09-19-94
T. RAMMACHER	03-12-99
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TYPICAL APPLICATIONS
 RAISED REFLECTIVE PAVEMENT
 MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE
 DATE: 7/14/2007

DRAWN BY CADD
 CHECKED BY
 TC-11

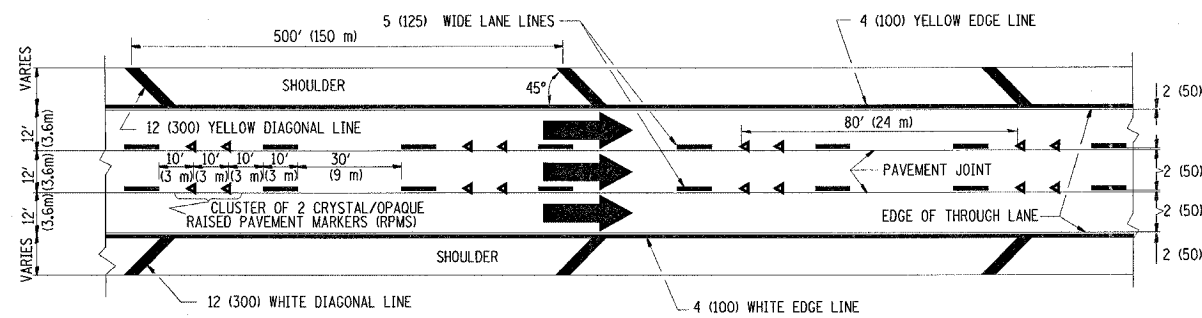
REVISION DATE: 01/06/00

PLOT DATE = 7/14/2007
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 USER NAME = cameron

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	45
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

* (0101, 02038 & 0303) RS-10

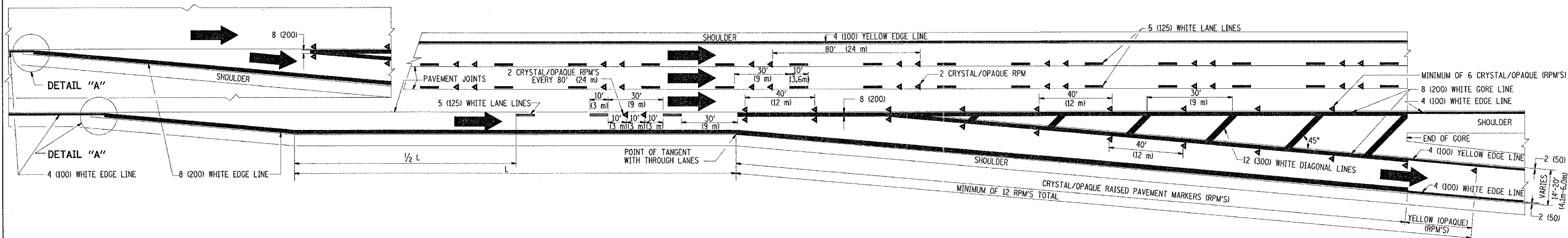
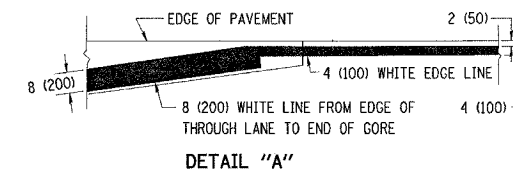
THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH
THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH



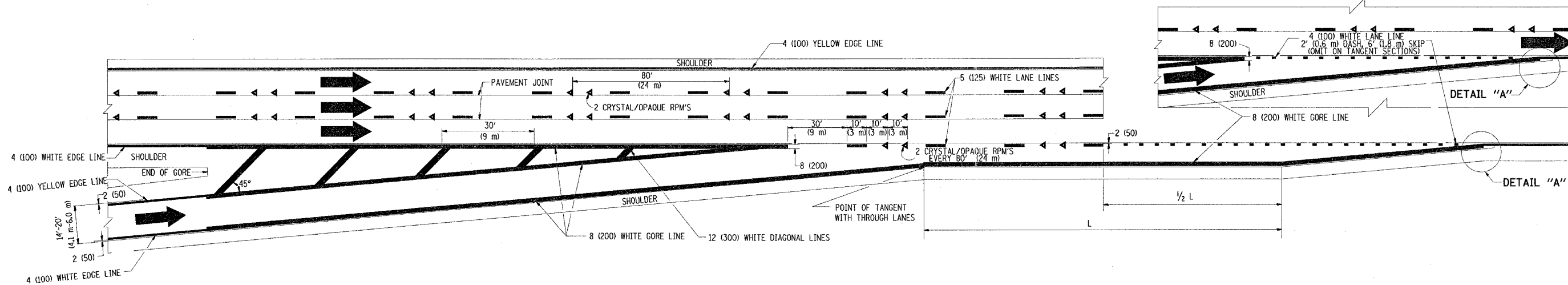
TYPICAL EDGE LINES & LANE LINES

NOTES:

1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
2. PREFORMED PLASTIC TYPE B PAVEMENT MARKING LINE SHALL BE USED FOR ALL LANE LINES ON BITUMINOUS PAVEMENT
3. POLYUREA PAVEMENT MARKING SHALL BE USED FOR ALL MARKINGS ON PCC



TYPICAL EXIT RAMP PAVEMENT MARKINGS



TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS

REVISIONS	
NAME	DATE
DWS	1/90
DWS	5/91
AH	3/96
DWS	7/96
JAF	2/06
SPB	1/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

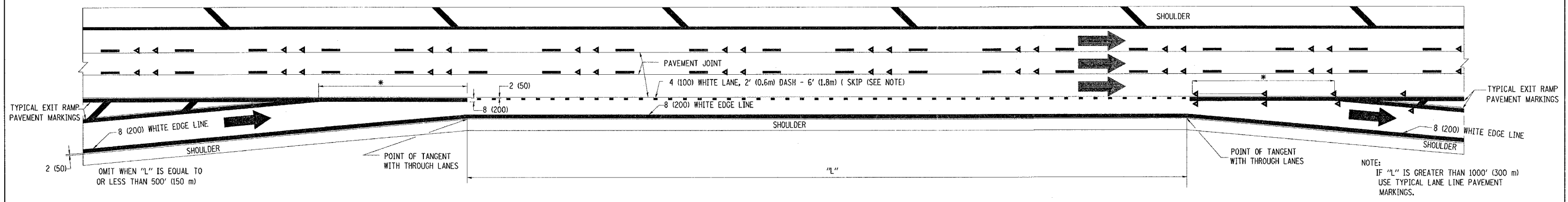
MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS

SCALE: NONE
DATE: 7/14/2007

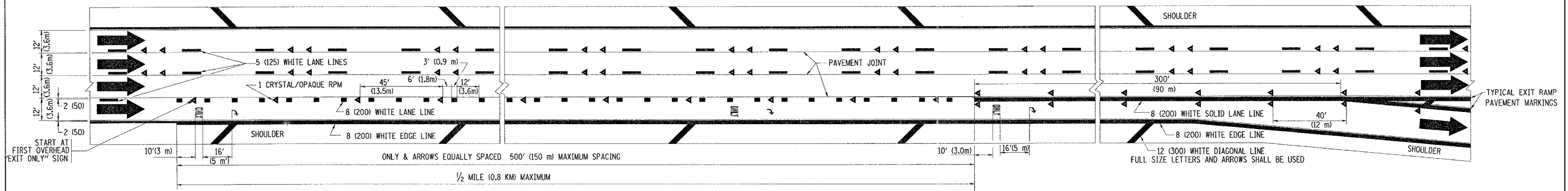
DRAWN BY C.A.D.D.
CHECKED BY

TC12 SHEET 1 OF 2
REVISION DATE: 01/01/07

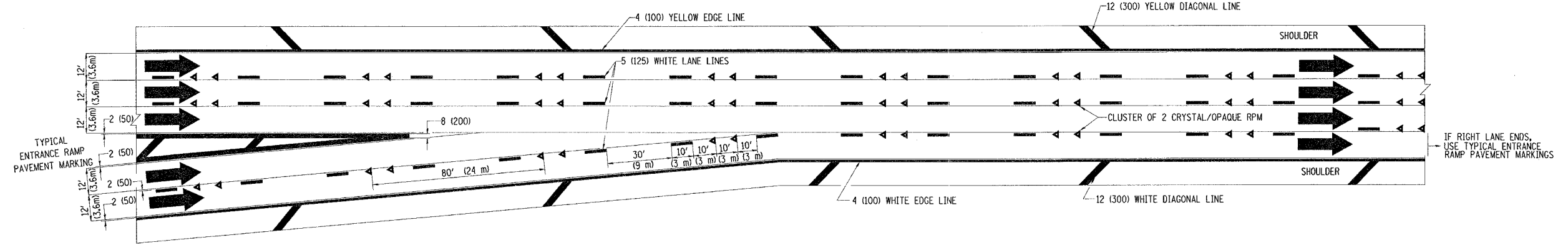
CONTRACT NO. 62481				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332		COOK	54	46
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• 40101, 02038 & 0303 RS-10				



TYPICAL ENTRANCE/EXIT RAMP COMBINATION PAVEMENT MARKINGS



TYPICAL EXIT ONLY LANE PAVEMENT MARKINGS



TYPICAL TWO LANE ENTRANCE RAMP PAVEMENT MARKINGS

REVISIONS	
NAME	DATE
DWS	1/90
DWS	5/91
SPB	1/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS

SCALE: NONE

DATE: 7/14/2007

DRAWN BY C.A.D.D.

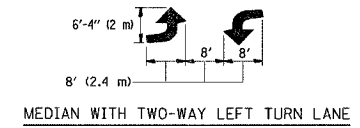
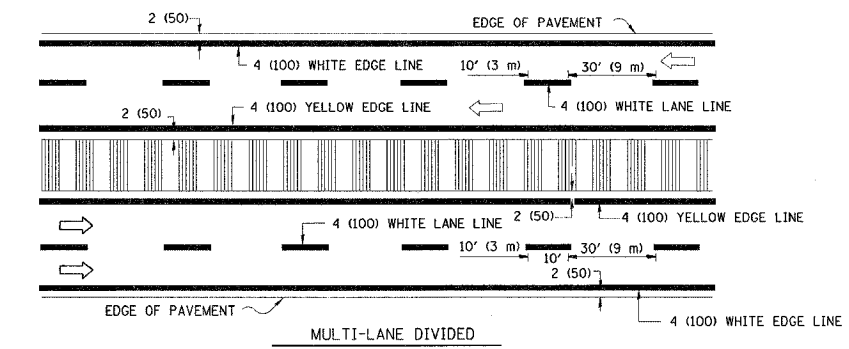
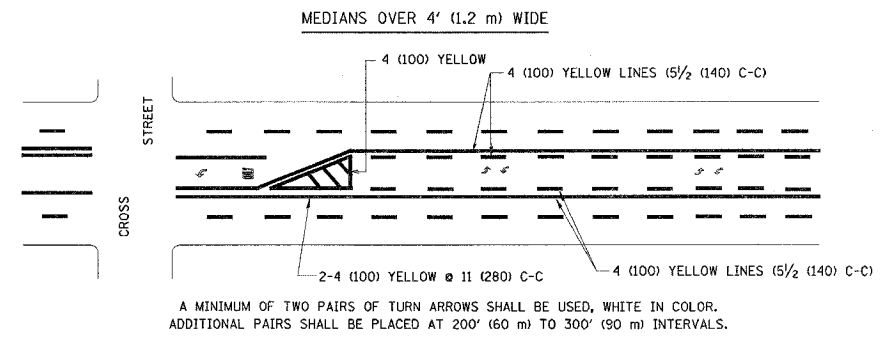
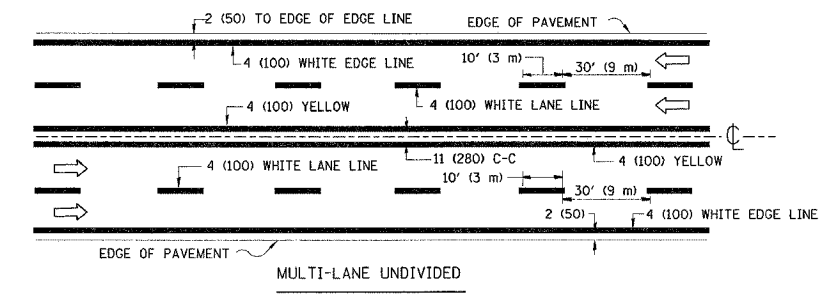
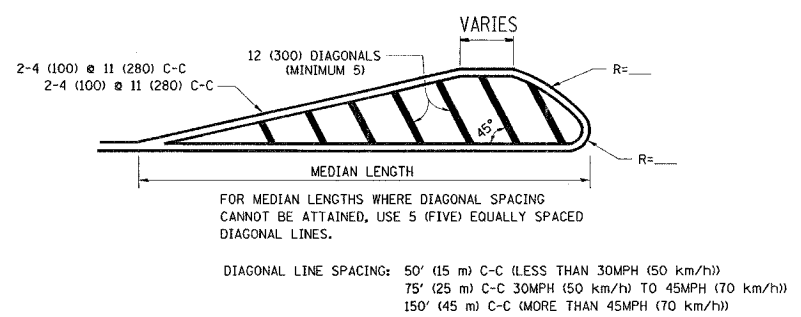
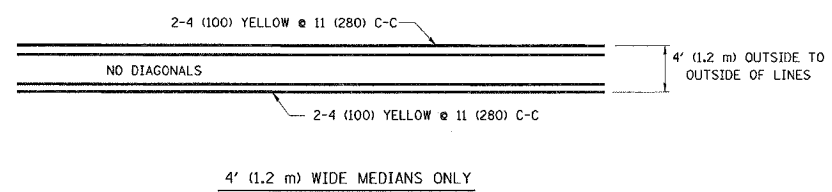
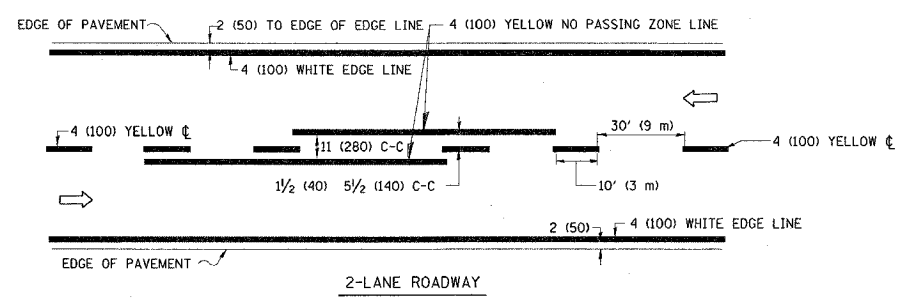
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TC12 SHEET 2 OF 2

REVISION DATE: 01/01/07

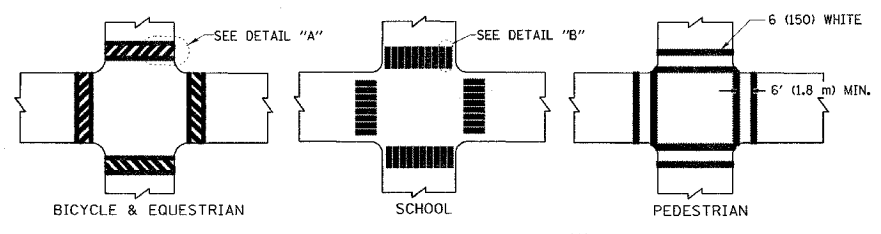
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 USER NAME = cconner

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332		COOK	54	47
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

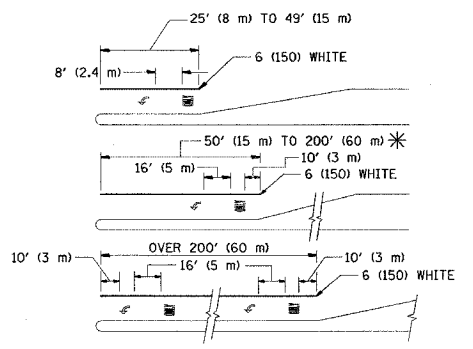


TYPICAL PAINTED MEDIAN MARKING

TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

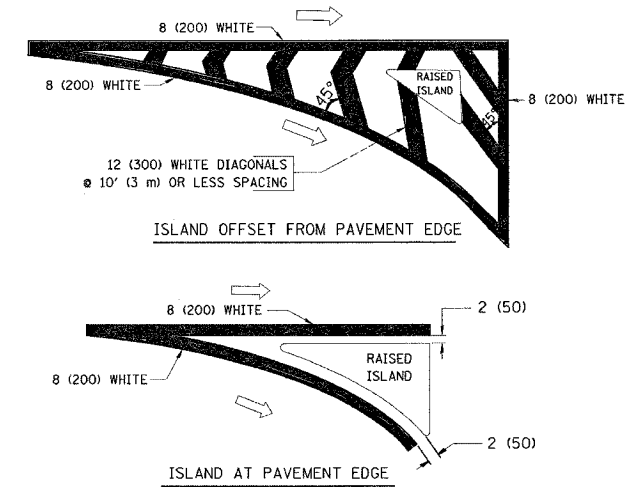


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

* 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



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	4 (100)	SOLID	YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES: FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100)	SKIP-DASH	WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
LANE LINES	5 (125) ON FREEWAYS	SKIP-DASH	WHITE	
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' (2.4 m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
TWO WAY LEFT TURN MARKING	8' (2.4 m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN)	2 @ 6 (150)	SOLID	WHITE	NOT LESS THAN 6' (1.8 m) APART
A. DIAGONALS (BIKE & EQUESTRIAN)	12 (300) @ 45°	SOLID	WHITE	2' (600) APART
B. LONGITUDINAL BARS (SCHOOL)	12 (300) @ 90°	SOLID	WHITE	2' (600) APART
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45°	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	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 millimeters (inches) unless otherwise shown.

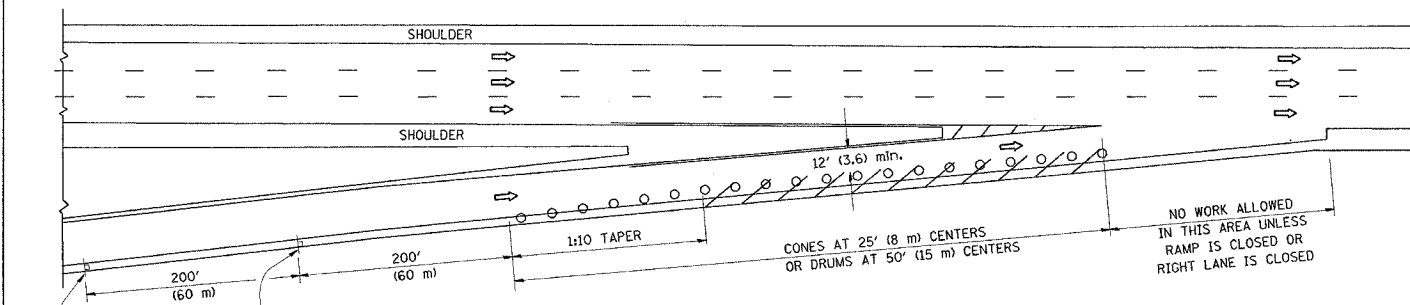
REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

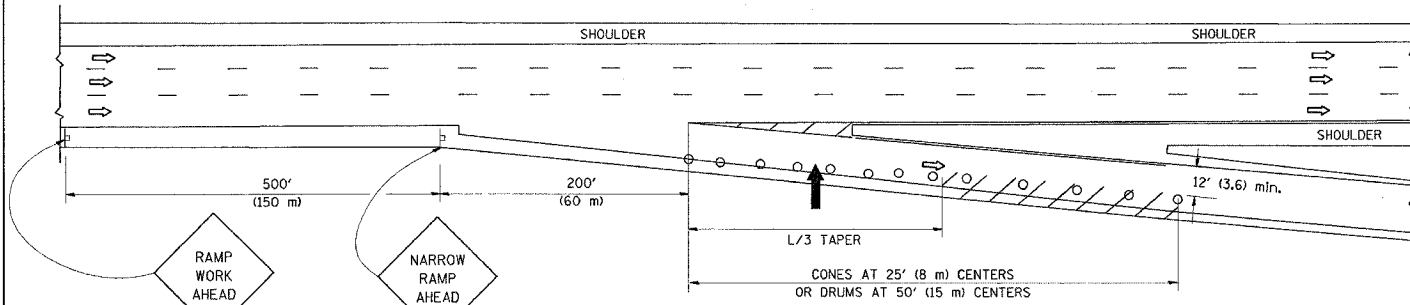
SCALE: NONE
DATE: 7/14/2007
DRAWN BY CADD
CHECKED BY

ROUTE	SECTION	COUNTY	TOTAL SHEET NO.
332	*	COOK	54 48
STA.		TO STA.	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	
• (0101, 0203B & 0303) RS-10			

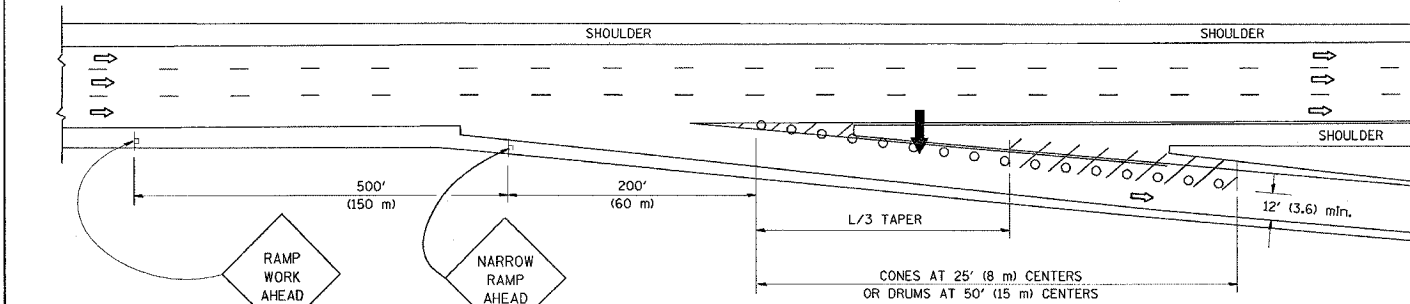
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

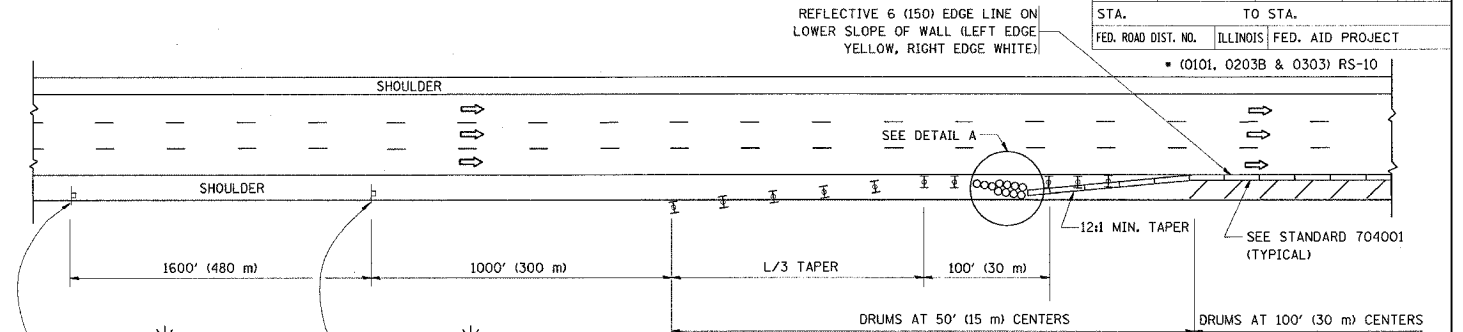
SYMBOLS

- ARROWBOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

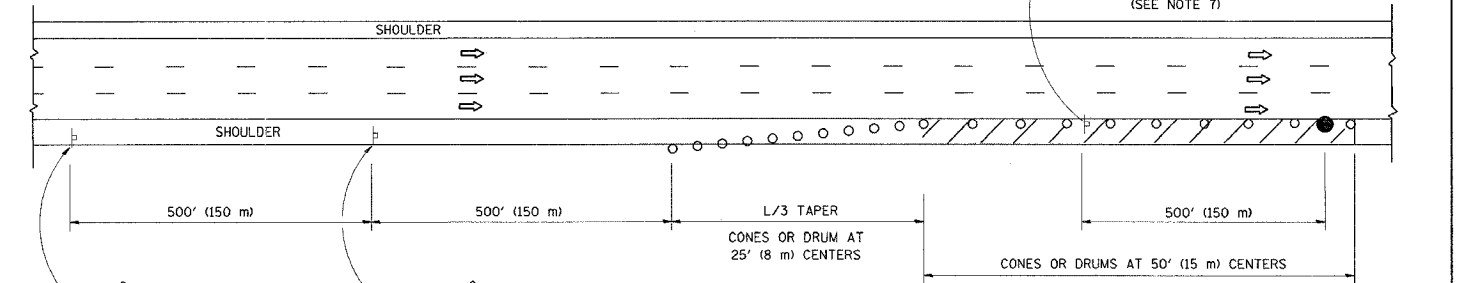
GENERAL NOTES

1. THE "L" DISTANCE EQUALS:
SPEED LIMIT FORMULAS
45 mph (80 km/h) METRIC ENGLISH
OR GREATER: L=0.65(W/S) L=(W/S)
- W = WIDTH OF OFFSET IN FEET (METERS)
S = NORMAL POSTED SPEED MPH (KM/H)
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

SHOULDER CLOSURE DETAILS



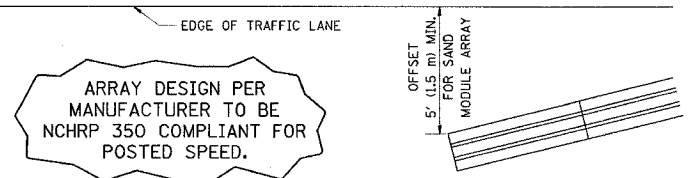
PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

OR WHEN SPECIFIED INSTALL TEMPORARY CONCRETE BARRIER WALL WITH BARRIER WALL REFLECTORS PER TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)

THIS DETAIL IS USED WHERE:
1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCRUCH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



DETAIL "A"
IMPACT ATTENUATOR, TEMPORARY
(SEE NOTE 5)

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

REVISIONS	
NAME	DATE
DWS	11/96
JAF	12/02
NCHRP 350	04/03
JAF	2/06
SPB	1/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL DETAILS
FOR FREEWAY
SHOULDER CLOSURES
PARTIAL RAMP CLOSURES

SCALE: NONE
DATE: 7/14/2007

DESIGNED BY: DWS
DRAWN BY
CHECKED BY
TC-17

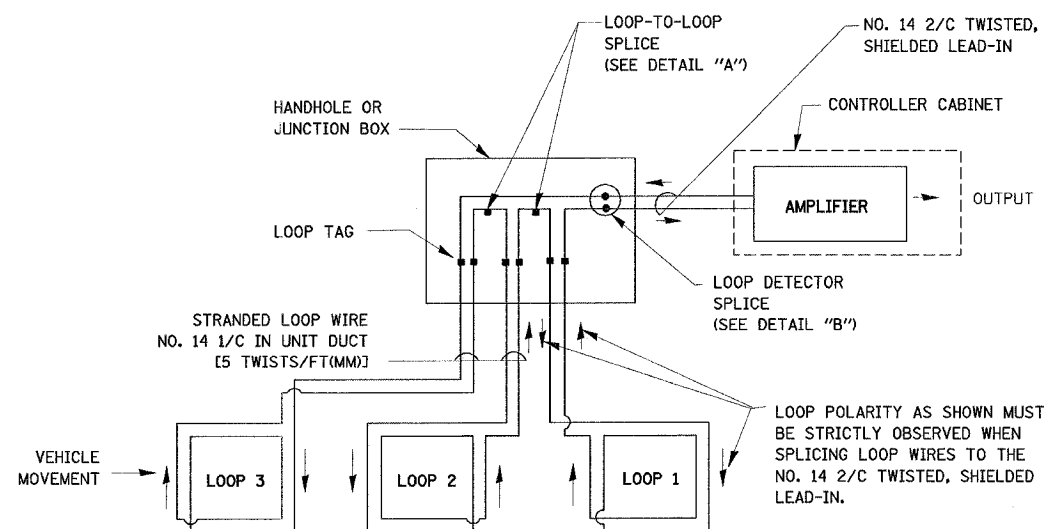
REVISION DATE: 01/01/07

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	50
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* 0101, 0203B & 0303 RS-10

LOOP DETECTOR NOTES

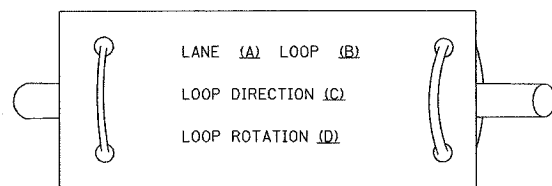
1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED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



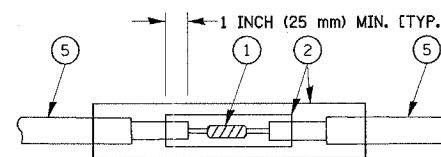
DETECTOR LOOP WIRING SCHEMATIC

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

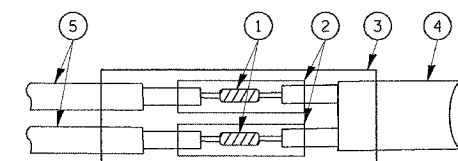
LOOP LEAD-IN CABLE TAG



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



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



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

LOOP DETECTOR SPLICE

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

REVISIONS	
NAME	DATE
CADD	5/30/00
ADD NOTE NO. 8	11/12/01
BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS**

SCALE: NONE
DATE: 7/14/2007

DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 1 OF 4

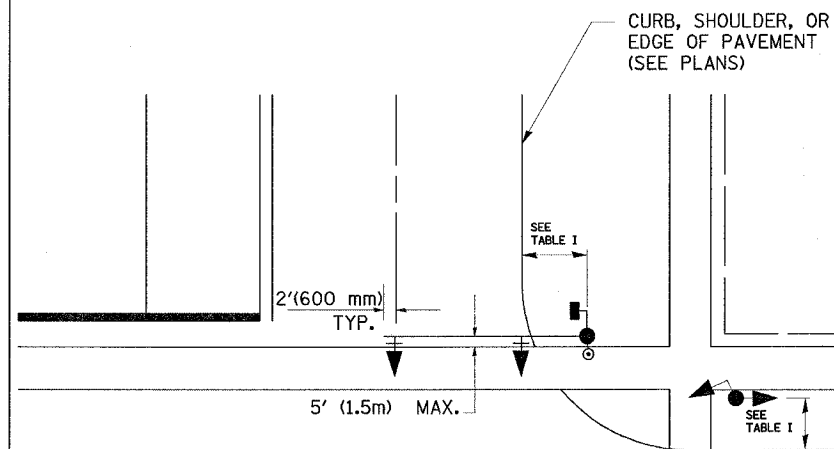
TS05
REVISION DATE: 01/01/02

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	51
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

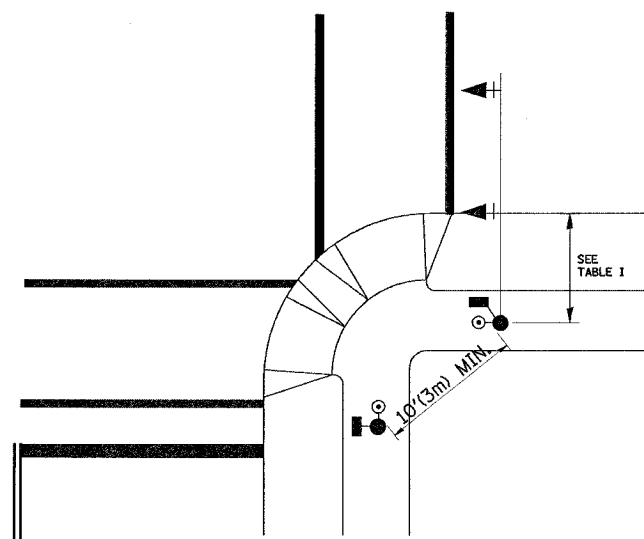
• (0101, 0203B & 0303) RS-10

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

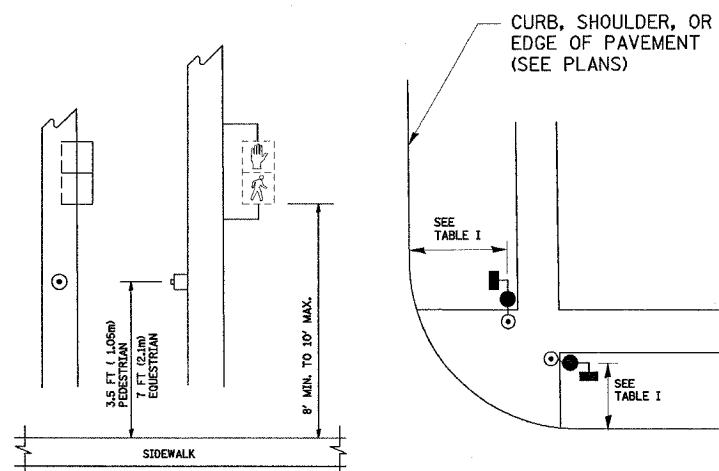


TABLE I

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

PLOT DATE = 7/14/2007
 FILE NAME = P:\chris\mca\td05.dgn
 PLOT SCALE = 50.0000 / 1 IN.
 USER NAME = csmahm

REVISIONS	
NAME	DATE
BUREAU OF TRAFFIC	1/01/02

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT 1
 STANDARD TRAFFIC SIGNAL
 DESIGN DETAILS

SCALE: NONE
 DATE: 7/14/2007

DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 2 OF 4

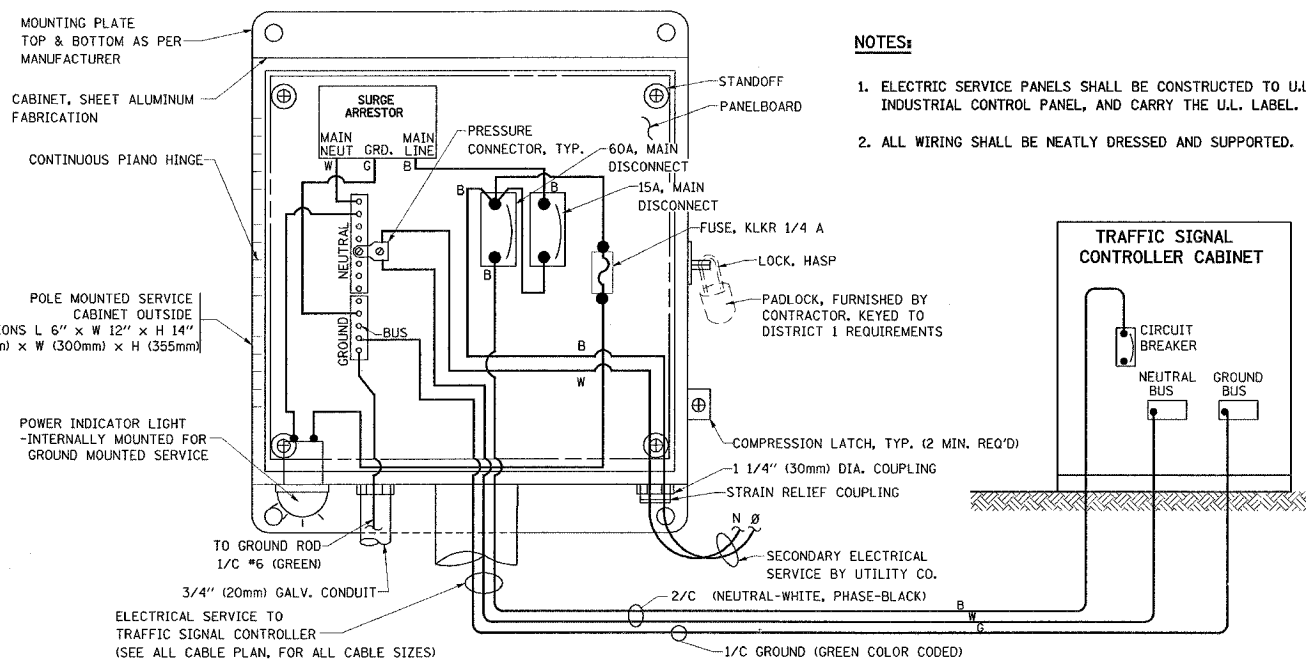
TS05
 REVISION DATE: 01/01/02

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	52
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
* (101, 0203B & 0303) RS-10				

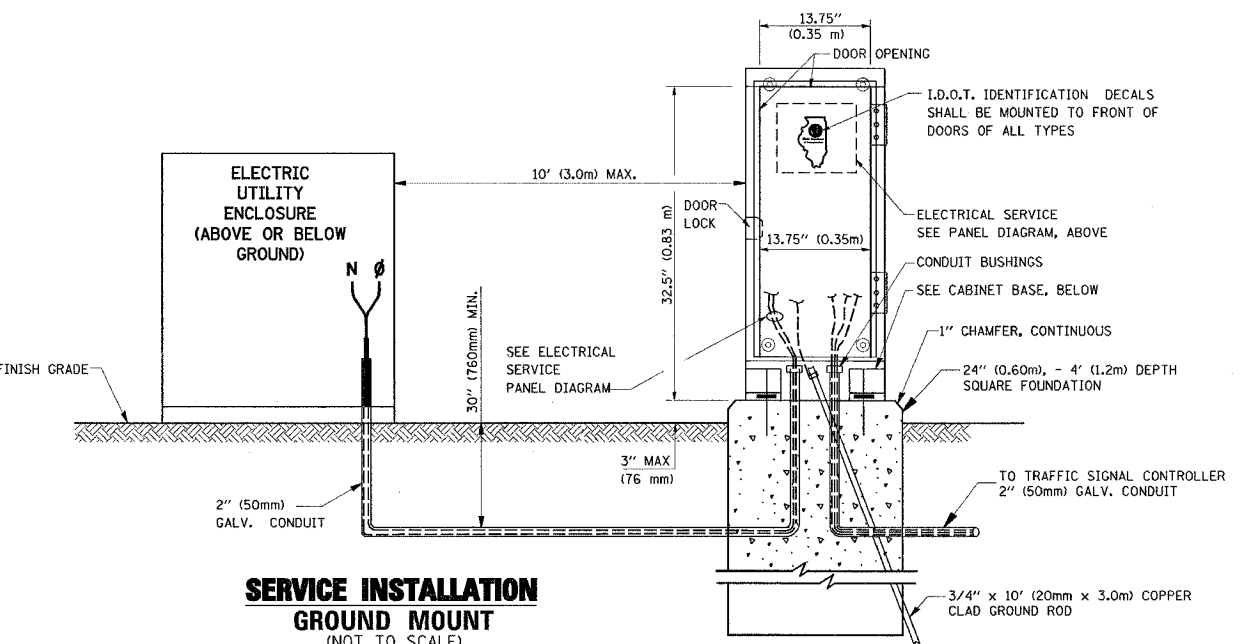
NOTES:

GROUNDING SYSTEM

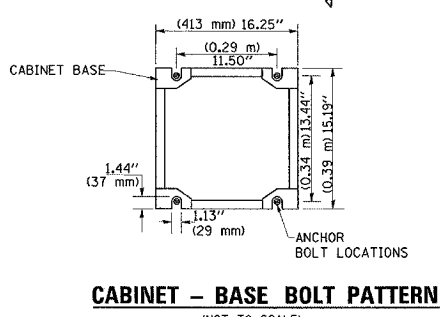
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE,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



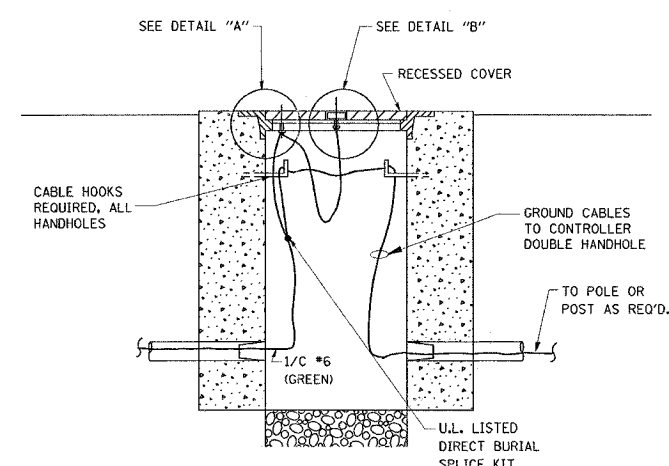
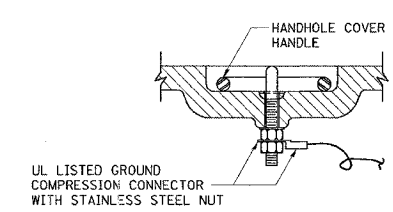
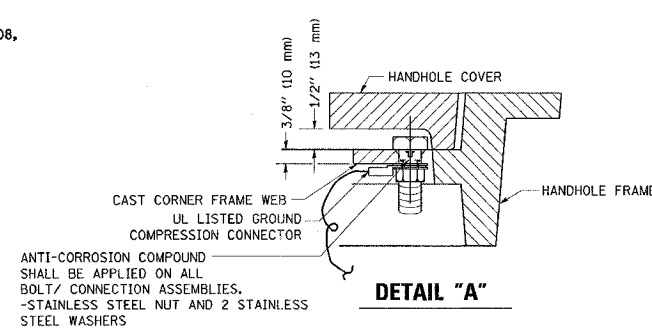
ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



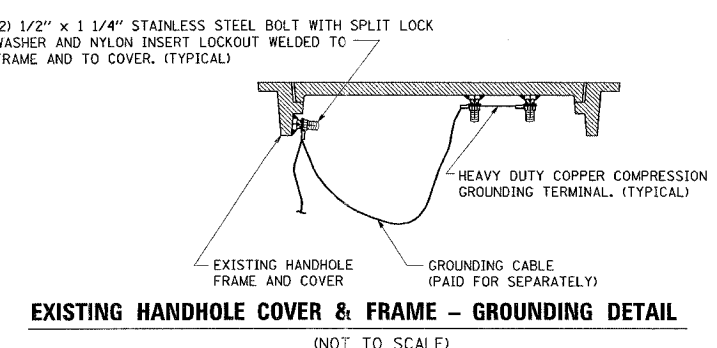
SERVICE INSTALLATION GROUND MOUNT
 (NOT TO SCALE)



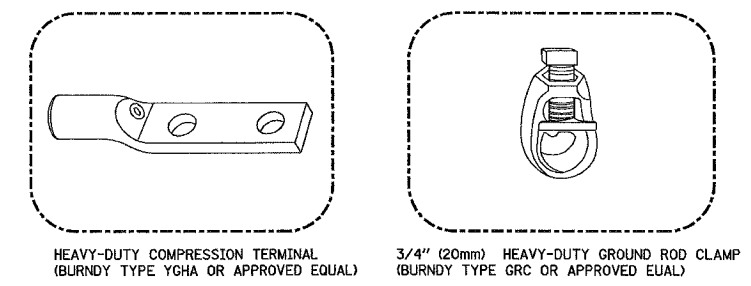
CABINET - BASE BOLT PATTERN
 (NOT TO SCALE)



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

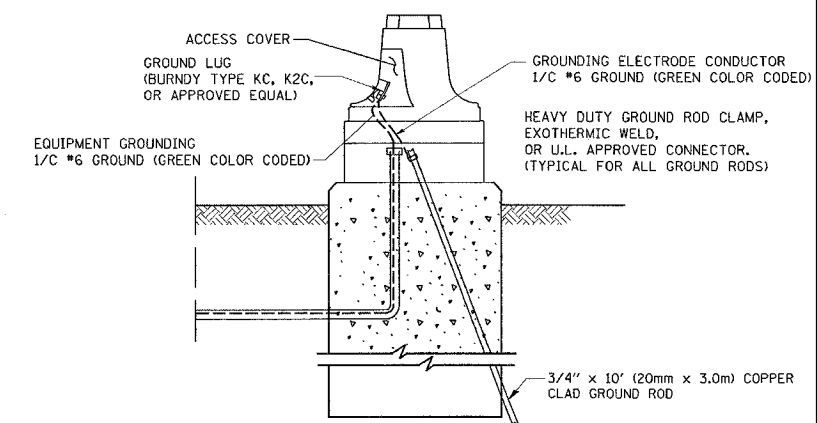


EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)



NOTES:

- 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)

REVISIONS		DATE
NAME		
CADD		5/30/00
CADD		3/15/01
BUREAU OF TRAFFIC		1/01/02

ILLINOIS DEPARTMENT OF TRANSPORTATION

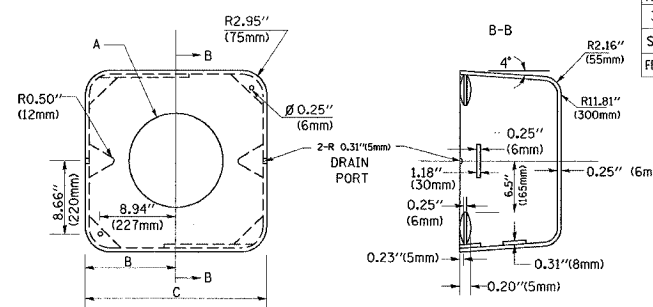
DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE
 DATE: 7/14/2007

DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 3 OF 4

TS05
 REVISION DATE: 01/01/02

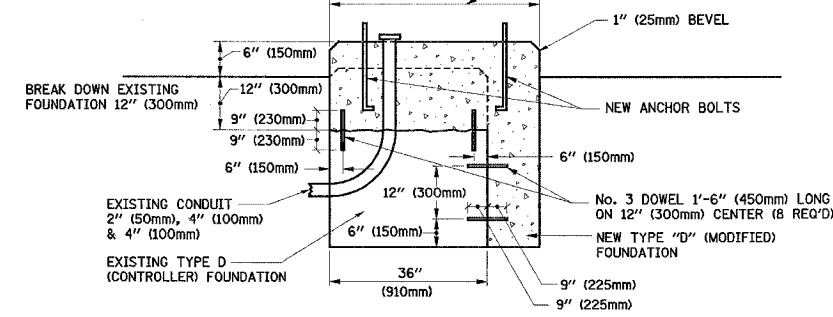
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	53
STA. TO STA.		ILLINOIS FED. AID PROJECT		
FED. ROAD DIST. NO.		* (010L 02038 & 0303) RS-10		



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

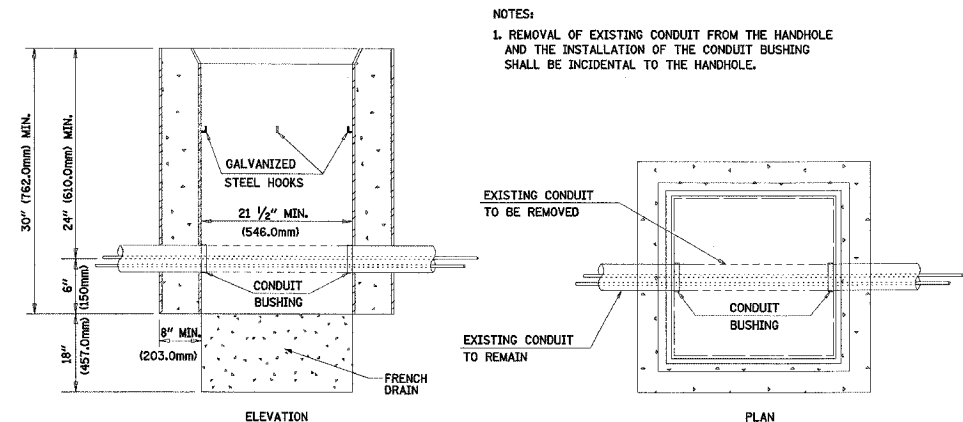
SHROUD DETAIL

NOTE:
SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION

(NOT TO SCALE)



DETAIL
HANDHOLE TO INTERCEPT EXISTING CONDUIT
N.T.S.

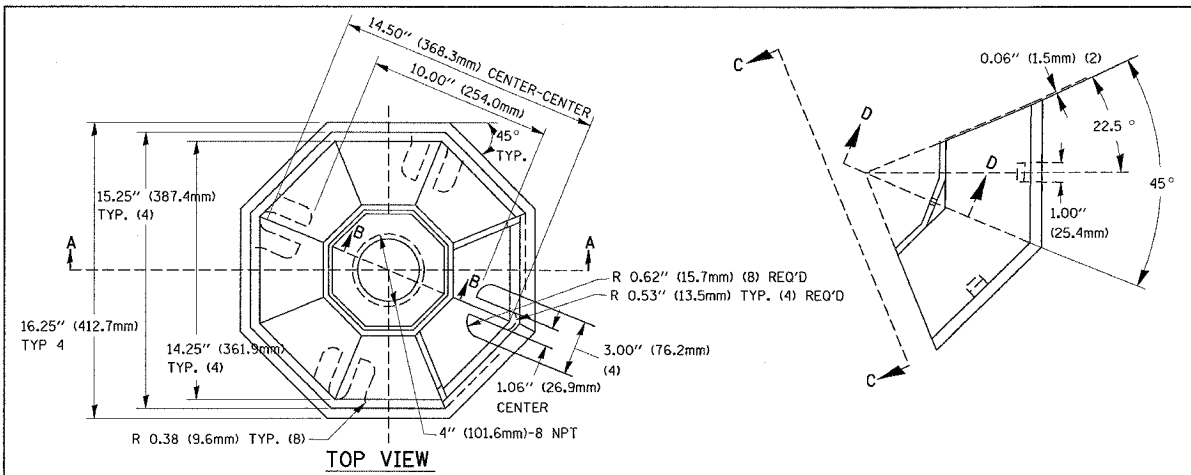
REVISIONS	NAME	DATE
1	BUREAU OF TRAFFIC	5/30/00
2	BUREAU OF TRAFFIC	3/15/01
3	BUREAU OF TRAFFIC	11/12/01
4	BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

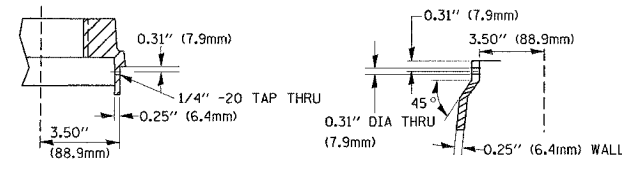
SCALE: NONE
DATE: 7/14/2007

DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 4 OF 4

TS05
REVISION DATE: 01/01/02

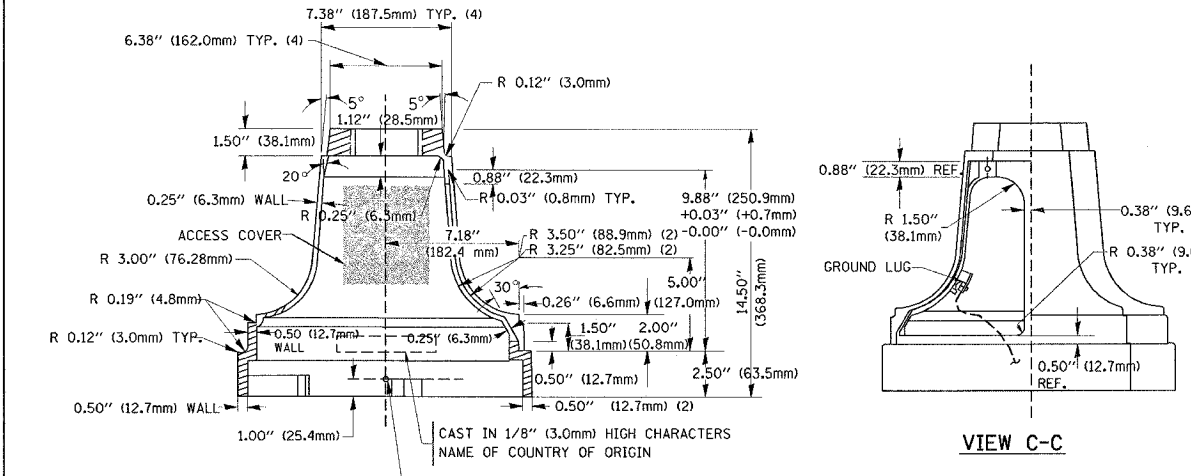


TOP VIEW



SECTION B-B

SECTION D-D



SECTION A-A

VIEW C-C

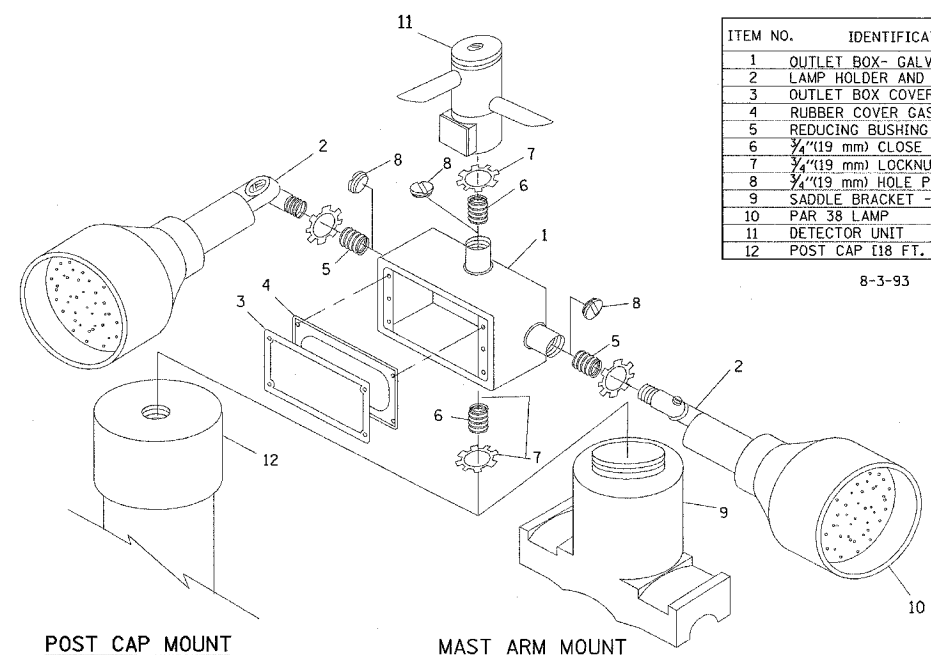
TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

NOTES:

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

ITEM NO.	IDENTIFICATION
1	OUTLET BOX - GALV. 21 CU. IN. (0,000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

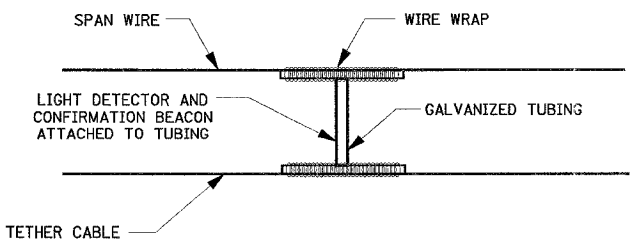
8-3-93



POST CAP MOUNT

MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



LIGHT DETECTOR AND
CONFIRMATION BEACON MOUNTING
FOR TEMPORARY TRAFFIC SIGNALS

(NOT TO SCALE)

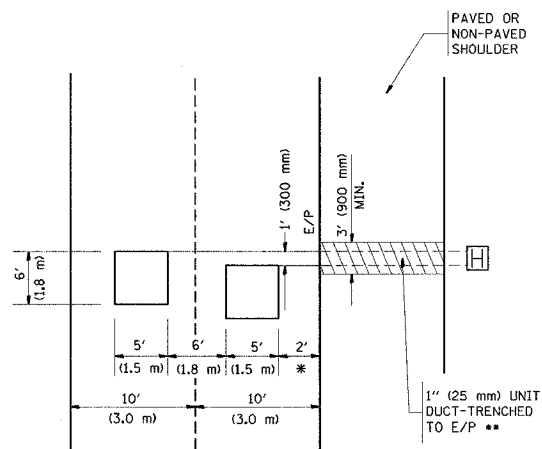
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	*	COOK	54	54
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

* (0101, 02036 & 0303) RS-10

LOOPS NEXT TO SHOULDERS

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

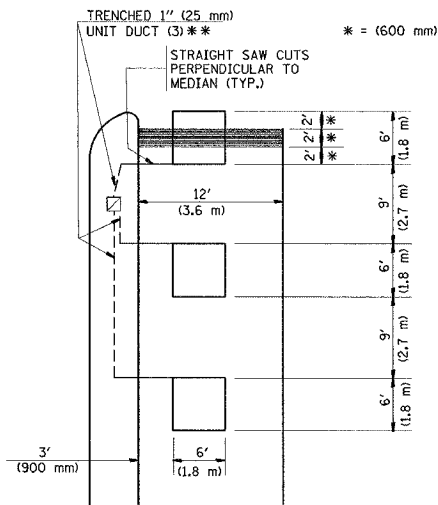


* = (600 mm)

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

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

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

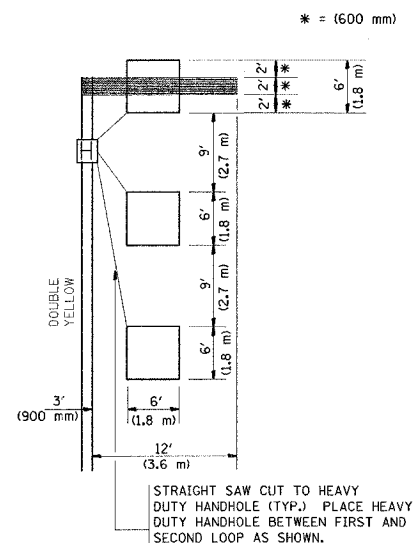


* = (600 mm)

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

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

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



* = (600 mm)

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

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

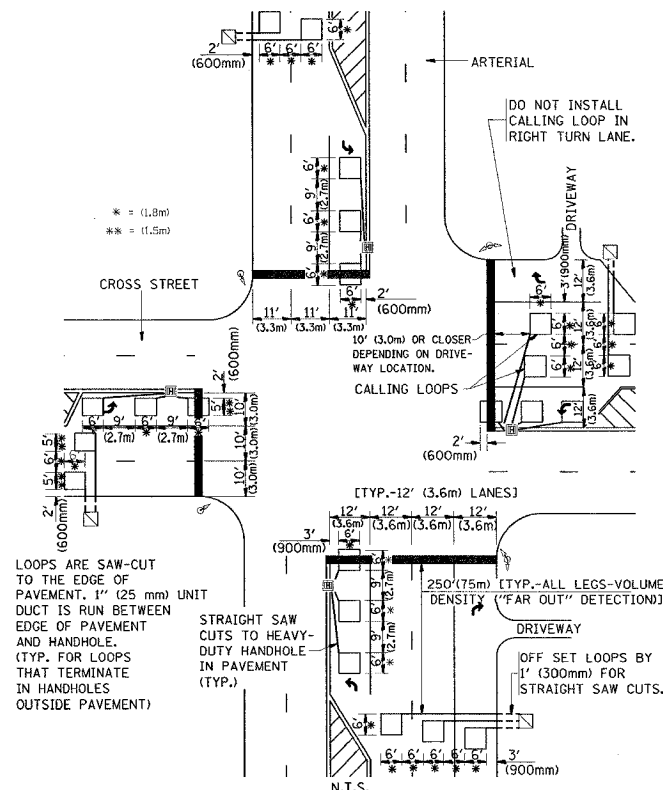
THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 1
DETECTOR LOOP
INSTALLATION DETAILS
FOR ROADWAY RESURFACING
DESIGNED BY
DRAWN BY CADD
CHECKED BY R.K.F.
TSOT
REVISION DATE:

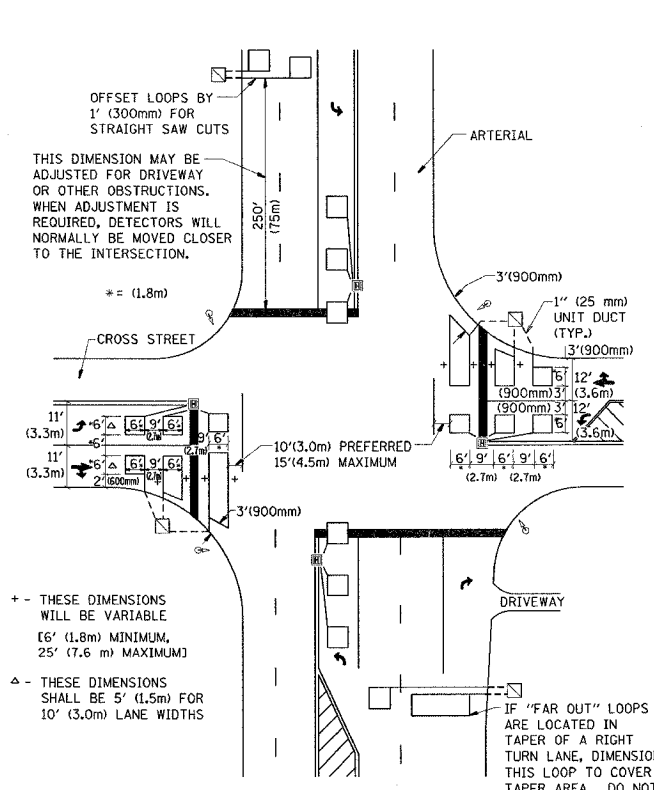
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**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)**



DETAIL 1
N.T.S.

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



DETAIL 2
N.T.S.

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