

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	1

D-91-270-17

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE PROJECT IS LOCATED IN THE VILLAGES  
OF GURNEE AND LAKE VILLA

TRAFFIC DATA

2015 ADT = 37,900

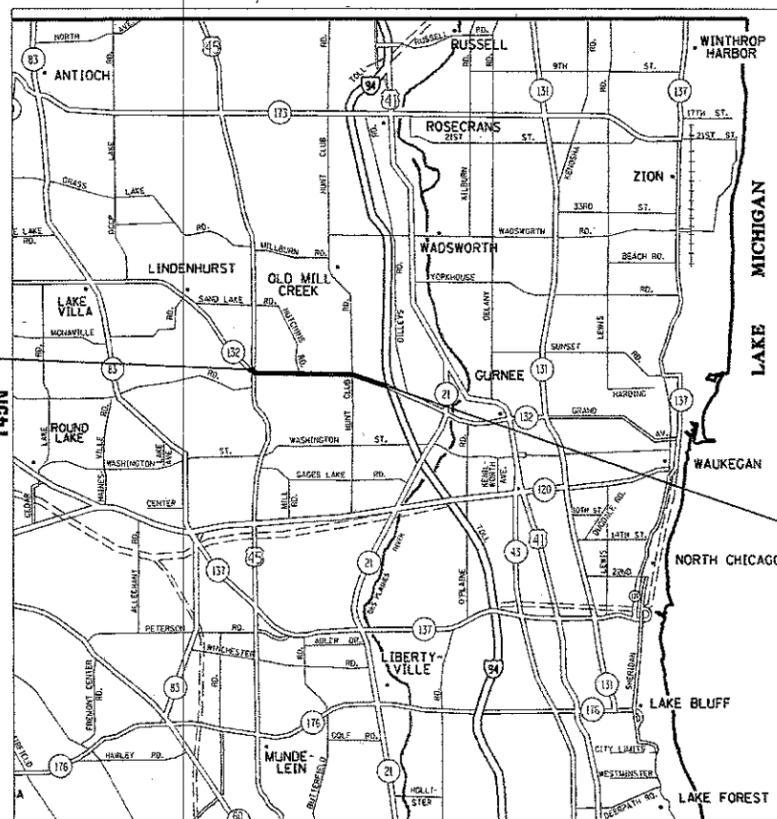
POSTED SPEED = 45-50 MPH

# PROPOSED HIGHWAY PLANS

FAP ROUTE 541: IL-132 (GRAND AVE.)  
US-45 (LAKE ST.) TO WEST OF I-94 (TRI-STATE TOLLWAY)  
SECTION: X-R-RS-2  
PROJECT: NHPP-7ATN(788)  
RESURFACING (3P) / PEDESTRIAN RAMPS  
LAKE COUNTY

C-91-270-17

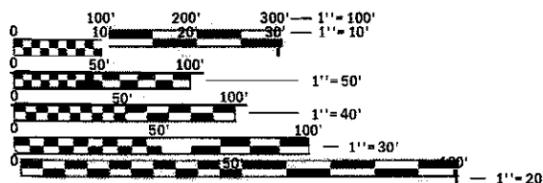
R10E | R11E



PROJECT BEGINS  
STA 86+93

OMISSION  
STA 193+65 TO 210+65

PROJECT ENDS  
STA 240+76



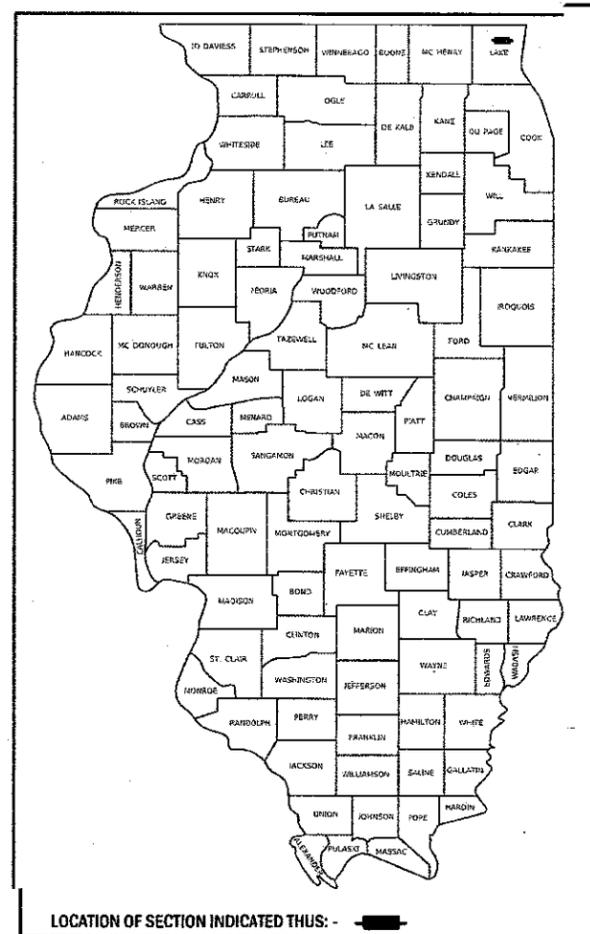
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD  
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT  
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS  
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: J. ALAIN MIDY (847) 221-3056  
PROJECT MANAGER: FAWAD AQUEEL (847) 705-4247

CONTRACT NO. 62F26

GROSS = 15,383 FT. = 2.913 MILES  
NET = 13,683 FT. = 2.59 MILES



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED: January 24 20 18  
*Anthony A. Quigley* / *AS*  
REGIONAL ENGINEER

Mar 23 20 18  
*Paul P. [Signature]*  
ENGINEER OF DESIGN AND ENVIRONMENT

Mar 23 20 18  
*Paul P. [Signature]*  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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OF THE STATE OF ILLINOIS

## INDEX OF SHEETS

SHEET NO.	DESCRIPTION
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6 - 8.	TYPICAL SECTIONS
9 - 14.	ROADWAY AND PAVEMENT MARKING PLANS
15 - 24.	PROPOSED SIDEWALK RAMP DETAILS
25 - 32.	DETECTOR LOOP REPLACEMENT PLANS
33 - 36.	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL (BM-21)
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39.	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)
40.	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)
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42.	ENTRANCE AND EXIT RAMP CLOSURE DETAILS (TC-08)
43.	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
44.	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)
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46.	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)
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48.	ARTERIAL ROAD INFORMATION SIGN (TC-22)
49.	DRIVEWAY ENTRANCE SIGNING (TC-26)
50.	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)

## STATE HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
424001-04	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424021-04	DEPRESSED CORNER FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
604091-03	FRAME AND GRATE TYPE 24
606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606211-04	PC CONCRETE ISLANDS AND MEDIANS
630001-12	STEEL PLATE BEAM GUARDRAIL
635001-02	DELINEATORS
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701011-04	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS ≥ 45 MPH
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS, FOR SPEEDS ≥ 45 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W UNDIVIDED
701601-09	URBAN SINGLE LANE CLOSURE, MULTILANE, 1W OR 2W WITH NON TRAVERSABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-07	TRAFFIC CONTROL DEVICES
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

8. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
9. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
10. DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
11. FRAME AND GRATES/LIDS ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.
12. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847)705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
13. THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY, ARTERIAL TRAFFIC FIELD ENGINEER VIA E-MAIL AT WALTER.CZARNY@ILLINOIS.GOV, A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
14. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
15. THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED OR PLATED STRUCTURES ACCORDING TO THE STATION AND OFFSET LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.
16. 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 ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
17. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) ACCORDING TO THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
18. WHEN THE MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40mm) WHERE THE SPEED LIMIT IS 40 MPH (80 km/h) OR LESS AND 1 INCH (25 mm) WHERE THE SPEED LIMIT IS GREATER THAN 40 MPH (80 km/h). WITH WRITTEN APPROVAL OF THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 mm) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H) OR A NOTCHED LONGITUDINAL WEDGE IS USED.
19. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.
20. UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURES AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT LANE CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING.
21. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
22. CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES DURING CONSTRUCTION.
23. REMOVED GUARDRAIL MUST BE REPLACED ON THE SAME DAY UNLESS AUTHORIZED BY THE RESIDENT ENGINEER. NO LOCATIONS WILL BE LEFT WITHOUT EITHER LIGHTED BARRICADES OR RESTORED GUARDRAIL AT ANY TIME.
24. REMOVAL OF EXISTING IMPACT ATTENUATORS SHALL BE PAID AS GUARDRAIL REMOVAL.
25. ANY DEBRIS REMOVAL UNDER GUARDRAIL WILL BE PAID AS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL.

## GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
2. TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTER AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, AND THE VILLAGES OF GURNEE AND LAKE VILLA.
4. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
5. ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
6. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

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	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 2/2/2018	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

GENERAL NOTES		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL. RTE. 132 (GRAND AVE.) (US RTE. 45 (LAKE ST.) TO I-94 (TRI-STATE TOLLWAY))		541	X-RS-2	LAKE	50	2
SCALE: 1"= 50'		SHEET 1 OF 1 SHEETS		STA. TO STA.	CONTRACT NO. 62F26	
ILLINOIS FED. AID PROJECT						

URBAN

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE	
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	80% FED 20% STATE 0005
20200100	EARTH EXCAVATION	CU YD	45	45
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	18	18
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	180	180
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	2	2
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	2	2
25200110	SODDING, SALT TOLERANT	SO YD	180	180
25200200	SUPPLEMENTAL WATERING	UNIT	2	2
35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SO YD	230	230
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	100710	100710
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	224	224
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	8210	8210
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	1155	1155
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	1124	1124

URBAN

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE	
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	80% FED 20% STATE 0005
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	52	52
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	2135	2135
42001300	PROTECTIVE COAT	SO YD	2590	2590
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SO YD	115	115
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	2822	2822
42400800	DETECTABLE WARNINGS	SO FT	406	406
44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	SO YD	149200	149200
44000200	DRIVEWAY PAVEMENT REMOVAL	SO YD	230	230
44000600	SIDEWALK REMOVAL	SO FT	2822	2822
44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"	SO YD	6700	6700
44003100	MEDIAN REMOVAL	SO FT	17480	17480
44004250	PAVED SHOULDER REMOVAL	SO YD	10	10
44201749	CLASS D PATCHES, TYPE I, 9 INCH	SO YD	475	475

\* SPECIALTY ITEMS  
△ NON-PARTICIPATION ITEMS

FILE NAME =	USER NAME = gdlkumf	DESIGNED -	REVISED -
OFFICE/DISTRICT/PROJECT/CAUTION/DESIGN/DATE	OFFICE/DISTRICT/PROJECT/CAUTION/DESIGN/DATE	CHECKED -	REVISED -
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>SUMMARY OF QUANTITIES</b>	
SCALE:	SHEET NO. 1 OF 3 SHEETS STA. TO STA.

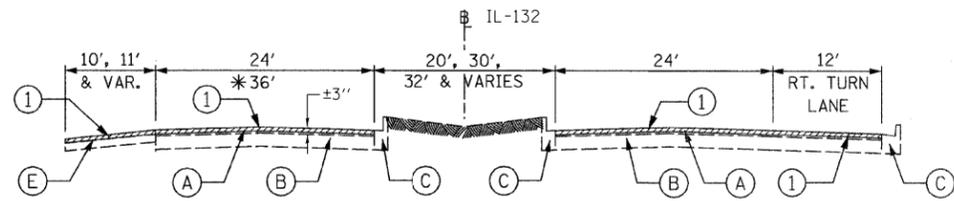
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CONTRACT NO. 62F26				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



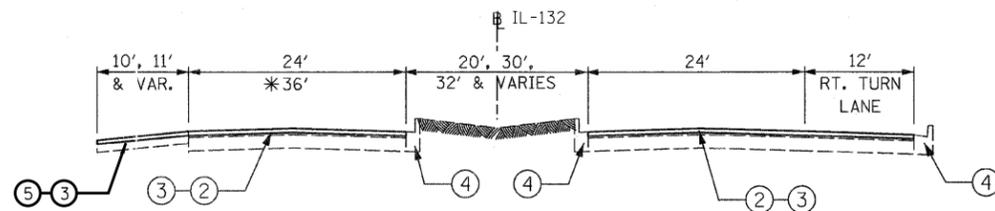




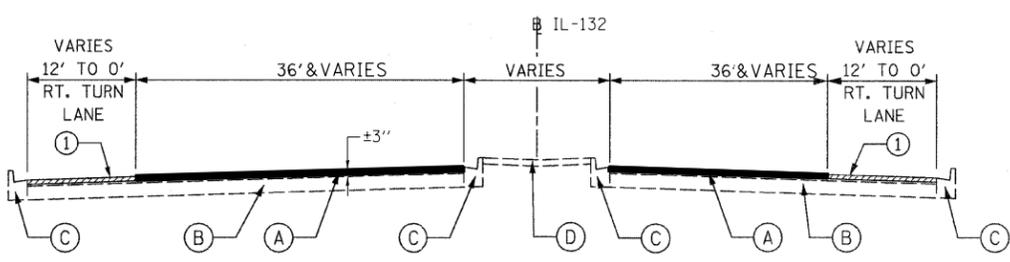




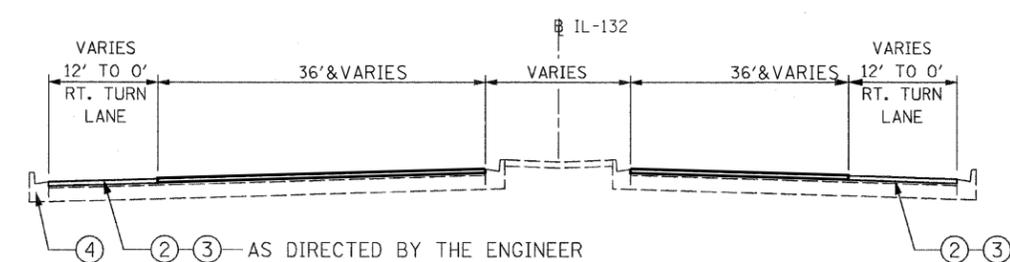
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 STA. 111+47 TO STA. 114+57  
 STA. 124+62 TO STA. 127+12  
 \*STA. 188+42 TO STA. 190+87



**PROPOSED TYPICAL SECTION**  
 STA. 111+47 TO STA. 114+57  
 STA. 124+62 TO STA. 127+12  
 \*STA. 188+42 TO STA. 190+87



**EXISTING TYPICAL SECTION**  
 STA. 190+87 TO STA. 240+76



**PROPOSED TYPICAL SECTION**  
 STA. 190+87 TO STA. 240+76

**EXISTING CONDITIONS:**

- (A) HOT-MIX ASPHALT SURFACE, ±3"
- (B) P.C.C. BASE COURSE, 9", P.C.C. PAVEMENT, 10", HMA PAVEMENT, 12" (FULLDEPTH)
- (C) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 OR TYPE B-6.12
- (D) CONCRETE MEDIAN, BARRIER, TYPE B-6.24
- (D1) CONCRETE MEDIAN SURFACE, 4" & VARIES
- (E) HMA SHOULDERS / HMA SHOULDERS, FULL DEPTH
- (F) GUARDRAIL

**PROPOSED IMPROVEMENTS:**

- (1) HOT-MIX ASPHALT SURFACE REMOVAL, 3"
- (2) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, S.M.A., 9.5, N80, 2"
- (3) POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 1"
- (4) COMB. CONC. CURB AND GUTTER REMOVAL AND REPLACEMENT (AS DETERMINED BY THE ENGINEER)
- (5) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"

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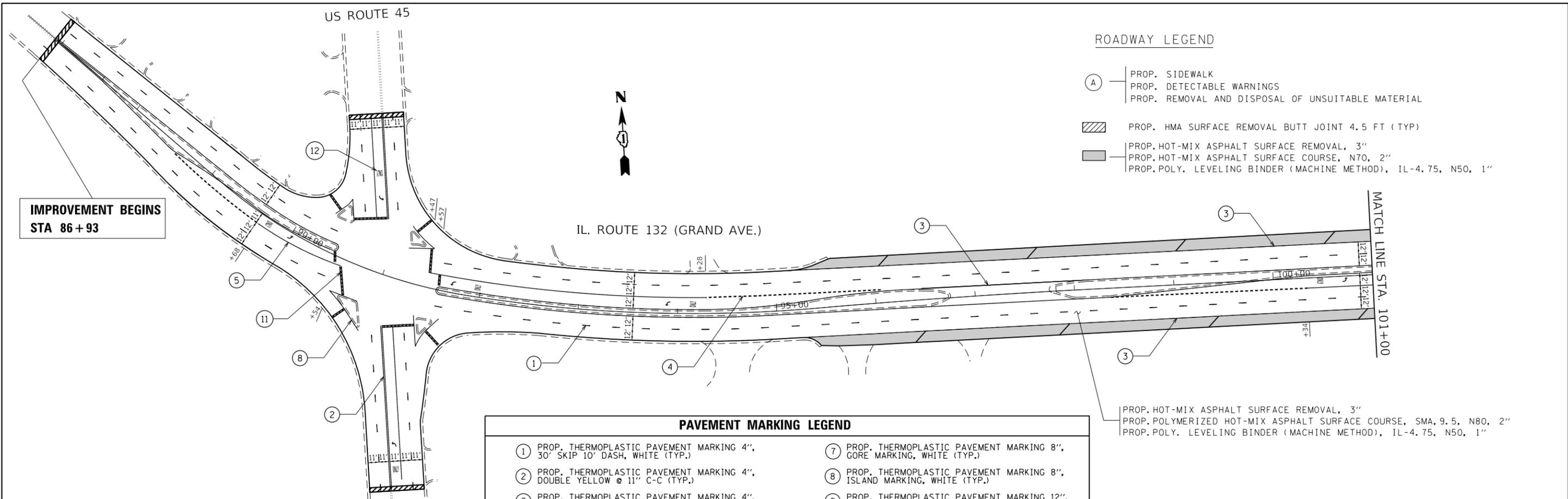
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**EXISTING & PROPOSED TYPICAL SECTIONS  
 IL. RTE. 132 (GRAND AVE.) (US RTE. 45 (LAKE ST.) TO I-94 (TRI-STATE TOLLWAY))**

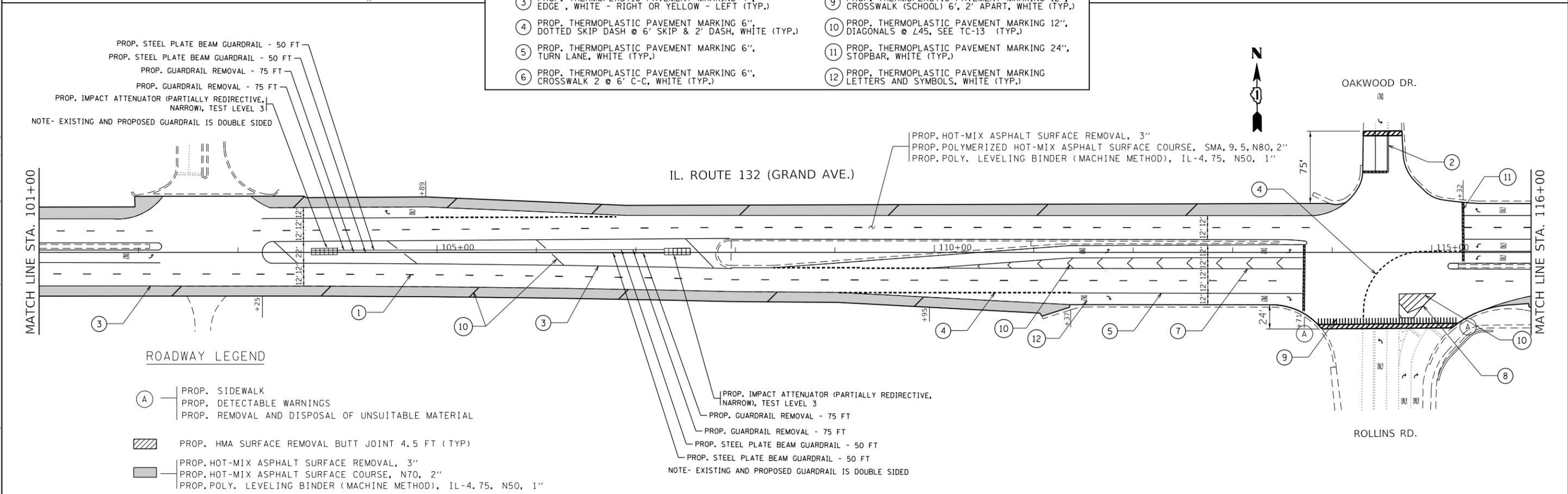
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-R5-2	LAKE	50	8
CONTRACT NO. 62F26				
ILLINOIS FED. AID PROJECT				



**PAVEMENT MARKING LEGEND**

<p>① PROP. THERMOPLASTIC PAVEMENT MARKING 4", 30' SKIP 10' DASH, WHITE (TYP.)</p> <p>② PROP. THERMOPLASTIC PAVEMENT MARKING 4", DOUBLE YELLOW @ 11" C-C (TYP.)</p> <p>③ PROP. THERMOPLASTIC PAVEMENT MARKING 4", EDGE, WHITE - RIGHT OR YELLOW - LEFT (TYP.)</p> <p>④ PROP. THERMOPLASTIC PAVEMENT MARKING 6", DOTTED SKIP DASH @ 6' SKIP &amp; 2' DASH, WHITE (TYP.)</p> <p>⑤ PROP. THERMOPLASTIC PAVEMENT MARKING 6", TURN LANE, WHITE (TYP.)</p> <p>⑥ PROP. THERMOPLASTIC PAVEMENT MARKING 6", CROSSWALK 2 @ 6' C-C, WHITE (TYP.)</p>	<p>⑦ PROP. THERMOPLASTIC PAVEMENT MARKING 8", GORE MARKING, WHITE (TYP.)</p> <p>⑧ PROP. THERMOPLASTIC PAVEMENT MARKING 8", ISLAND MARKING, WHITE (TYP.)</p> <p>⑨ PROP. THERMOPLASTIC PAVEMENT MARKING 12", CROSSWALK (SCHOOL) 6', 2' APART, WHITE (TYP.)</p> <p>⑩ PROP. THERMOPLASTIC PAVEMENT MARKING 12", DIAGONALS @ 45, SEE TC-13 (TYP.)</p> <p>⑪ PROP. THERMOPLASTIC PAVEMENT MARKING 24", STOPBAR, WHITE (TYP.)</p> <p>⑫ PROP. THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS, WHITE (TYP.)</p>
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**ROADWAY LEGEND**

<p>(A) PROP. SIDEWALK</p> <p>PROP. DETECTABLE WARNINGS</p> <p>PROP. REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL</p>	<p>PROP. HMA SURFACE REMOVAL BUTT JOINT 4.5 FT (TYP.)</p> <p>PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 3"</p> <p>PROP. HOT-MIX ASPHALT SURFACE COURSE, N70, 2"</p> <p>PROP. POLY. LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 1"</p>
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ROADWAY PLAN  
IL. RTE. 132 (GRAND AVE.) (US RTE. 45 (LAKE ST.) TO I-94 (TRI-STATE TOLLWAY))**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-R5-2	LAKE	50	9
CONTRACT NO. 62F26				
ILLINOIS FED. AID PROJECT				

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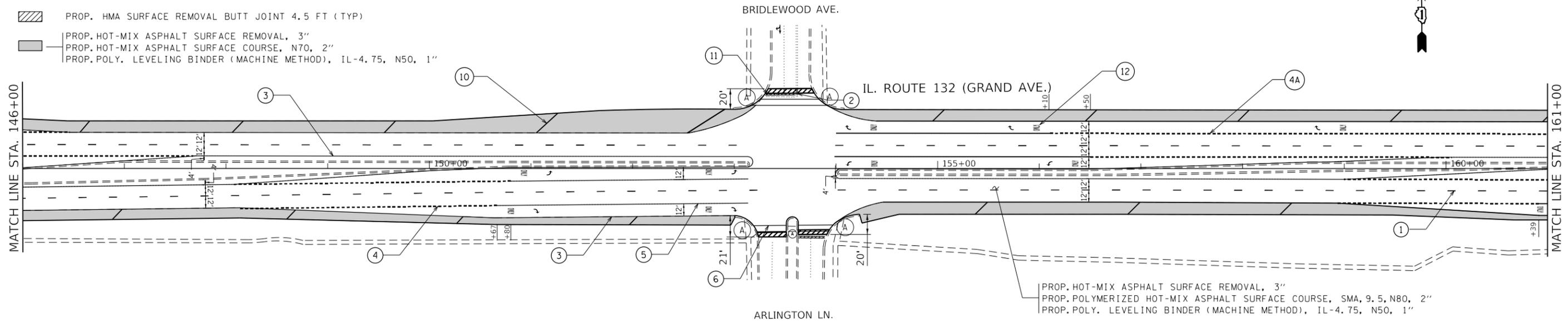
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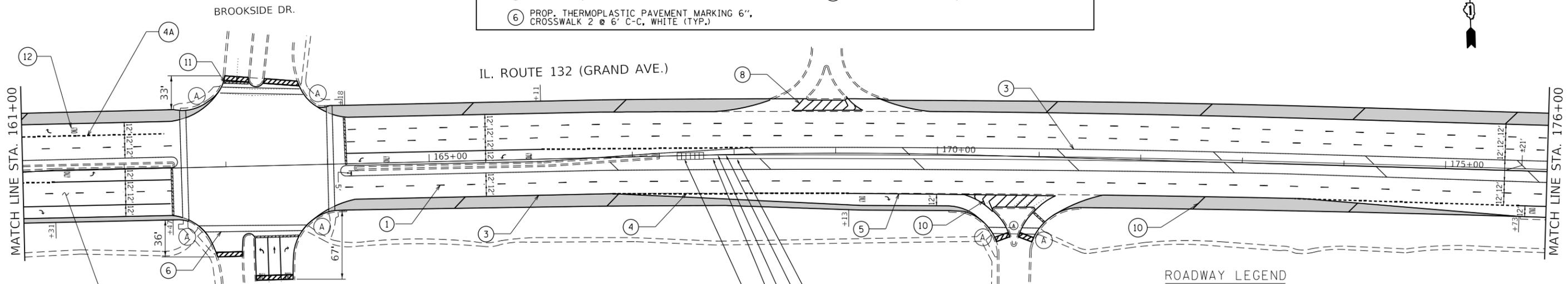
**ROADWAY LEGEND**

- (A) PROP. SIDEWALK  
PROP. DETECTABLE WARNINGS  
PROP. REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL
- PROP. HMA SURFACE REMOVAL BUTT JOINT 4.5 FT (TYP)
- PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 3"  
PROP. HOT-MIX ASPHALT SURFACE COURSE, N70, 2"  
PROP. POLY. LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 1"



**PAVEMENT MARKING LEGEND**

- 1 PROP. THERMOPLASTIC PAVEMENT MARKING 4", 30' SKIP 10' DASH, WHITE (TYP.)
- 2 PROP. THERMOPLASTIC PAVEMENT MARKING 4", DOUBLE YELLOW @ 11" C-C (TYP.)
- 3 PROP. THERMOPLASTIC PAVEMENT MARKING 4", EDGE, WHITE - RIGHT OR YELLOW - LEFT (TYP.)
- 4 PROP. THERMOPLASTIC PAVEMENT MARKING 6", DOTTED SKIP DASH @ 6' SKIP & 2' DASH, WHITE (TYP.)
- 4A PROP. THERMOPLASTIC PAVEMENT MARKING 6", DOTTED SKIP DASH @ 9' SKIP & 3' DASH, WHITE
- 5 PROP. THERMOPLASTIC PAVEMENT MARKING 6", TURN LANE, WHITE (TYP.)
- 6 PROP. THERMOPLASTIC PAVEMENT MARKING 6", CROSSWALK 2 @ 6' C-C, WHITE (TYP.)
- 7 PROP. THERMOPLASTIC PAVEMENT MARKING 8", GORE MARKING, WHITE (TYP.)
- 8 PROP. THERMOPLASTIC PAVEMENT MARKING 8", ISLAND MARKING, WHITE (TYP.)
- 9 PROP. THERMOPLASTIC PAVEMENT MARKING 12", CROSSWALK (SCHOOL) 6', 2' APART, WHITE (TYP.)
- 10 PROP. THERMOPLASTIC PAVEMENT MARKING 12", DIAGONALS @ 45, SEE TC-13 (TYP.)
- 11 PROP. THERMOPLASTIC PAVEMENT MARKING 24", STOPBAR, WHITE (TYP.)
- 12 PROP. THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS, WHITE (TYP.)



**ROADWAY LEGEND**

- (A) PROP. SIDEWALK  
PROP. DETECTABLE WARNINGS  
PROP. REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL
- PROP. HMA SURFACE REMOVAL BUTT JOINT 4.5 FT (TYP)
- PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 3"  
PROP. HOT-MIX ASPHALT SURFACE COURSE, N70, 2"  
PROP. POLY. LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 1"
- PROP. GUARDRAIL REMOVAL - 75 FT
- PROP. STEEL PLATE BEAM GUARDRAIL - 50 FT
- PROP. IMPACT ATTENUATOR (PARTIALLY REDIRECTIVE, NARROW), TEST LEVEL 3

NOTE- EXISTING AND PROPOSED GUARDRAIL IS DOUBLE SIDED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ROADWAY PLAN  
IL. RTE. 132 (GRAND AVE.) (US RTE. 45 (LAKE ST.) TO I-94 (TRI-STATE TOLLWAY))**

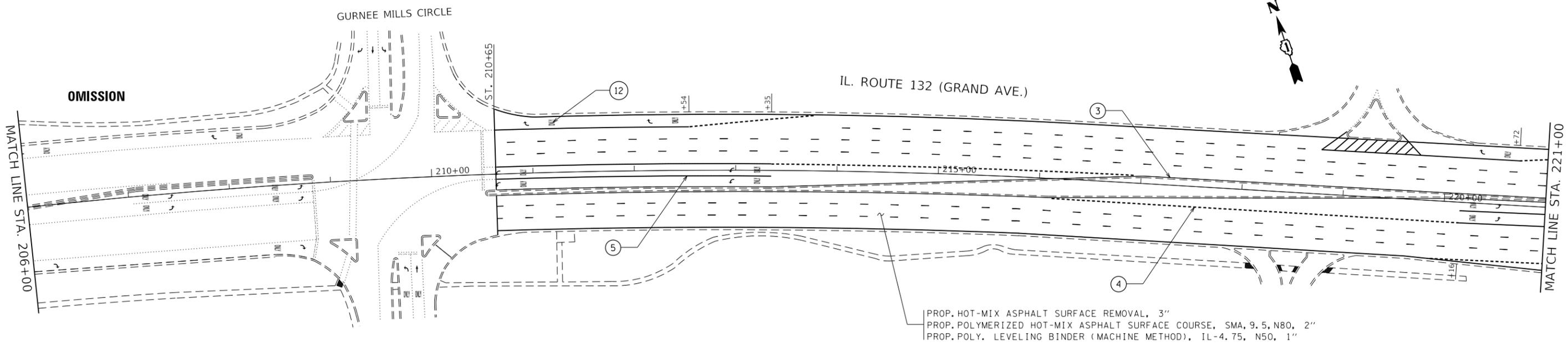
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-R5-2	LAKE	50	11
CONTRACT NO. 62F26				

SCALE: 1"= 50' SHEET 3 OF 6 SHEETS STA. TO STA.

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PLOT DATE = 2/2/2018	CHECKED -	REVISED -
	DATE -	REVISED -

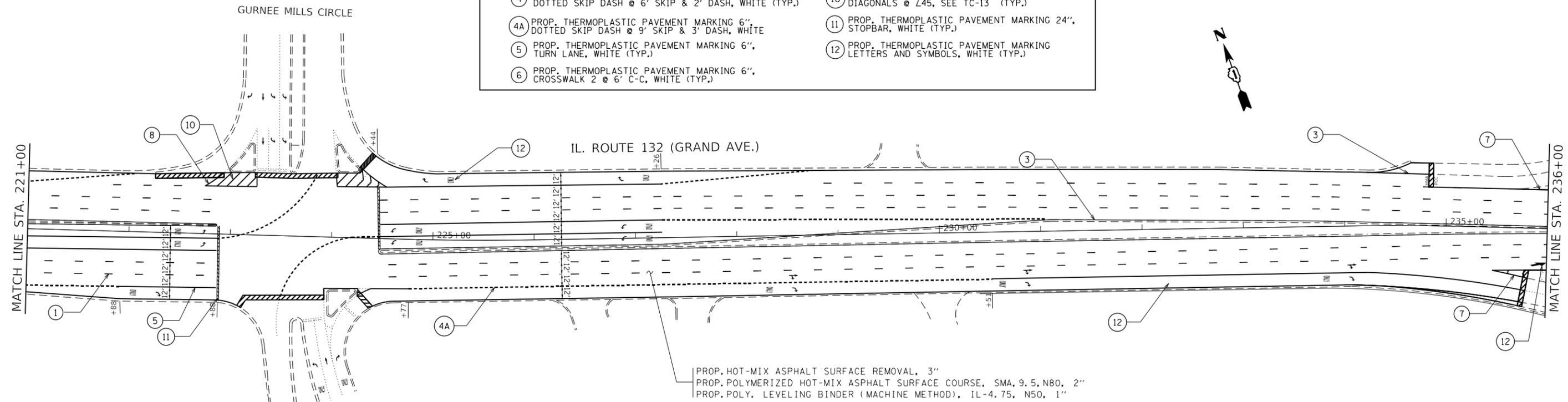
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PAVEMENT MARKING LEGEND	
①	PROP. THERMOPLASTIC PAVEMENT MARKING 4", 30' SKIP 10' DASH, WHITE (TYP.)
②	PROP. THERMOPLASTIC PAVEMENT MARKING 4", DOUBLE YELLOW @ 11" C-C (TYP.)
③	PROP. THERMOPLASTIC PAVEMENT MARKING 4", EDGE, WHITE - RIGHT OR YELLOW - LEFT (TYP.)
④	PROP. THERMOPLASTIC PAVEMENT MARKING 6", DOTTED SKIP DASH @ 6' SKIP & 2' DASH, WHITE (TYP.)
④A	PROP. THERMOPLASTIC PAVEMENT MARKING 6", DOTTED SKIP DASH @ 9' SKIP & 3' DASH, WHITE
⑤	PROP. THERMOPLASTIC PAVEMENT MARKING 6", TURN LANE, WHITE (TYP.)
⑥	PROP. THERMOPLASTIC PAVEMENT MARKING 6", CROSSWALK 2 @ 6' C-C, WHITE (TYP.)
⑦	PROP. THERMOPLASTIC PAVEMENT MARKING 8", GORE MARKING, WHITE (TYP.)
⑧	PROP. THERMOPLASTIC PAVEMENT MARKING 8", ISLAND MARKING, WHITE (TYP.)
⑨	PROP. THERMOPLASTIC PAVEMENT MARKING 12", CROSSWALK (SCHOOL) 6', 2' APART, WHITE (TYP.)
⑩	PROP. THERMOPLASTIC PAVEMENT MARKING 12", DIAGONALS @ 45, SEE TC-13 (TYP.)
⑪	PROP. THERMOPLASTIC PAVEMENT MARKING 24", STOPBAR, WHITE (TYP.)
⑫	PROP. THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS, WHITE (TYP.)

PROP. HMA SURFACE REMOVAL BUTT JOINT 4.5 FT (TYP)



PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 3"  
 PROP. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, SMA, 9.5, N80, 2"  
 PROP. POLY. LEVELING BINDER (MACHINE METHOD), 1L-4.75, N50, 1"

ROADWAY LEGEND  
 PROP. HMA SURFACE REMOVAL BUTT JOINT 4.5 FT (TYP)

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	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

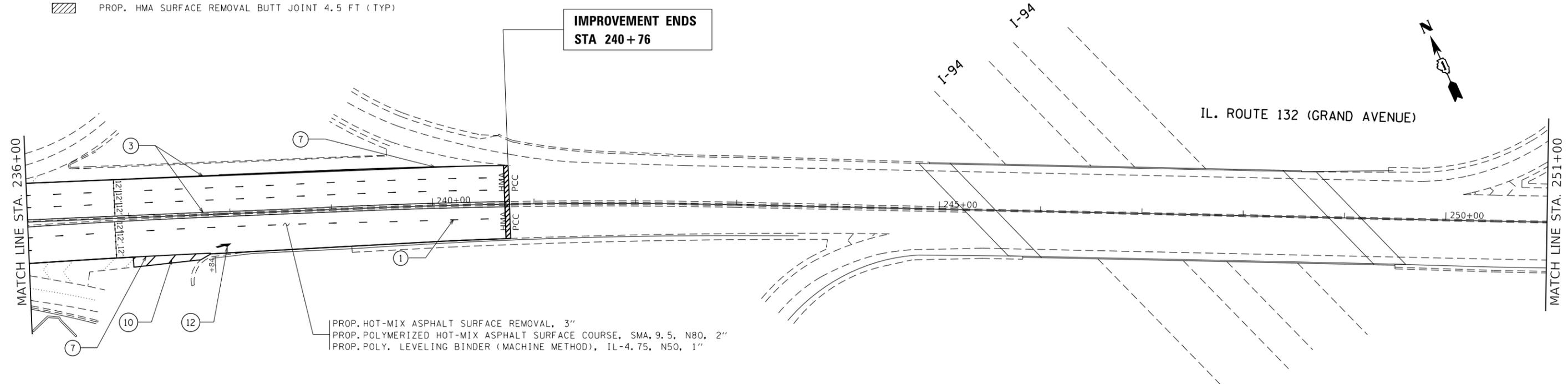
ROADWAY PLAN	
IL. RTE. 132 (GRAND AVE.) (US RTE. 45 (LAKE ST.) TO I-94 (TRI-STATE TOLLWAY))	
SCALE: 1"= 50'	SHEET 5 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-R5-2	LAKE	50	13
CONTRACT NO. 62F26				
ILLINOIS FED. AID PROJECT				

**ROADWAY LEGEND**

 PROP. HMA SURFACE REMOVAL BUTT JOINT 4.5 FT ( TYP)

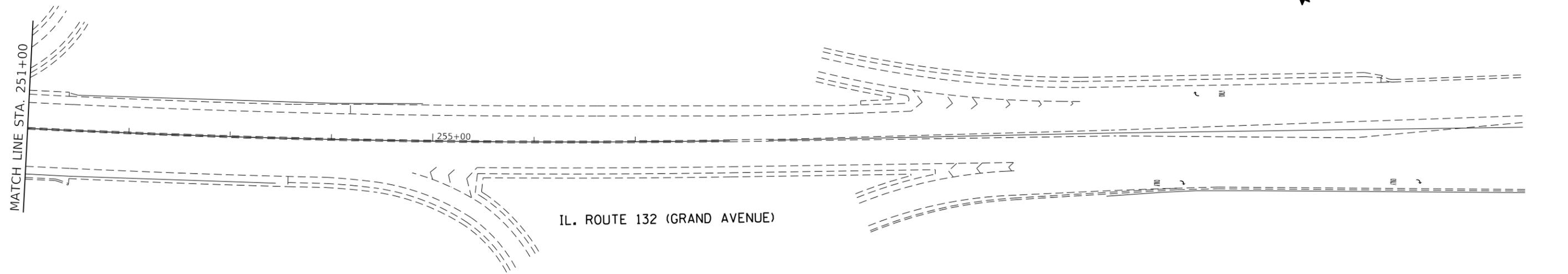
**IMPROVEMENT ENDS  
STA 240+76**



PROP. HOT-MIX ASPHALT SURFACE REMOVAL, 3"  
PROP. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, SMA, 9.5, N80, 2"  
PROP. POLY. LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 1"

**PAVEMENT MARKING LEGEND**

- |   |   |
|---|---|
| ① PROP. THERMOPLASTIC PAVEMENT MARKING 4", 30' SKIP 10' DASH, WHITE (TYP.)                    | ⑦ PROP. THERMOPLASTIC PAVEMENT MARKING 8", GORE MARKING, WHITE (TYP.)                     |
| ② PROP. THERMOPLASTIC PAVEMENT MARKING 4", DOUBLE YELLOW @ 11" C-C (TYP.)                     | ⑧ PROP. THERMOPLASTIC PAVEMENT MARKING 8", ISLAND MARKING, WHITE (TYP.)                   |
| ③ PROP. THERMOPLASTIC PAVEMENT MARKING 4", EDGE, WHITE - RIGHT OR YELLOW - LEFT (TYP.)        | ⑨ PROP. THERMOPLASTIC PAVEMENT MARKING 12", CROSSWALK (SCHOOL) 6', 2' APART, WHITE (TYP.) |
| ④ PROP. THERMOPLASTIC PAVEMENT MARKING 6", DOTTED SKIP DASH @ 6' SKIP & 2' DASH, WHITE (TYP.) | ⑩ PROP. THERMOPLASTIC PAVEMENT MARKING 12", DIAGONALS @ 45, SEE TC-13 (TYP.)              |
| ⑤ PROP. THERMOPLASTIC PAVEMENT MARKING 6", TURN LANE, WHITE (TYP.)                            | ⑪ PROP. THERMOPLASTIC PAVEMENT MARKING 24", STOPBAR, WHITE (TYP.)                         |
| ⑥ PROP. THERMOPLASTIC PAVEMENT MARKING 6", CROSSWALK 2 @ 6' C-C, WHITE (TYP.)                 | ⑫ PROP. THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS, WHITE (TYP.)                  |



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PLOT DATE = 2/2/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ROADWAY PLAN**  
**IL. RTE. 132 (GRAND AVE.) (US RTE. 45 (LAKE ST.) TO I-94 (TRI-STATE TOLLWAY))**  
SCALE: 1"= 50' SHEET 6 OF 6 SHEETS STA. TO STA.

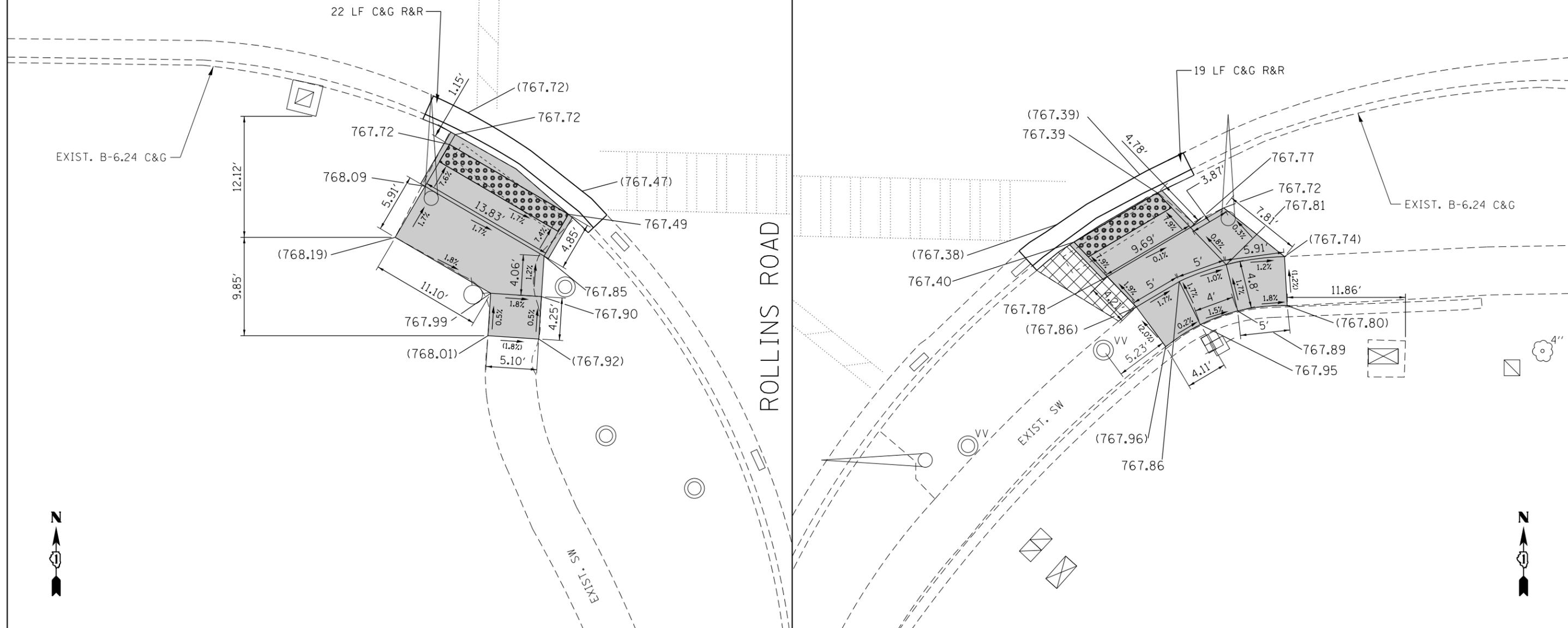
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-R5-2	LAKE	50	14
CONTRACT NO. 62F26				
ILLINOIS FED. AID PROJECT				

IL. ROUTE 132  
(GRAND AVENUE)

IL. ROUTE 132  
(GRAND AVENUE)

ROLLINS ROAD

ROLLINS ROAD



REFERENCE BENCHMARK ELEV 769.83

BENCHMARK : NORTHWEST BOLT ON FIRE HYDRANT

LOCATION : SOUTHWEST CORNER OF ROLLINS RD. AND IL-132

REFERENCE BENCHMARK ELEV 769.83

BENCHMARK : NORTHWEST BOLT ON FIRE HYDRANT

LOCATION : SOUTHWEST CORNER OF ROLLINS RD. AND IL-132

**LEGEND**

xx.xx'

EXISTING LENGTH

==

PROPOSED SIDE CURB

( )

EXISTING ELEVATION/SLOPE



PROPOSED SIDEWALK



DETECTABLE WARNINGS



SIDEWALK REMOVAL  
REPLACE W/TOPSOIL & SOD

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	PLOT DATE = 2/2/2018	DATE -	REVISÉ -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ADA RAMP DETAILS**  
**IL. RTE. 132 (GRAND AVE.) (US RTE. 45 (LAKE ST.) TO I-94 (TRI-STATE TOLLWAY))**

SCALE: SHEET 1 OF 15 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	15
CONTRACT NO. 62F26				
ILLINOIS FED. AID PROJECT				

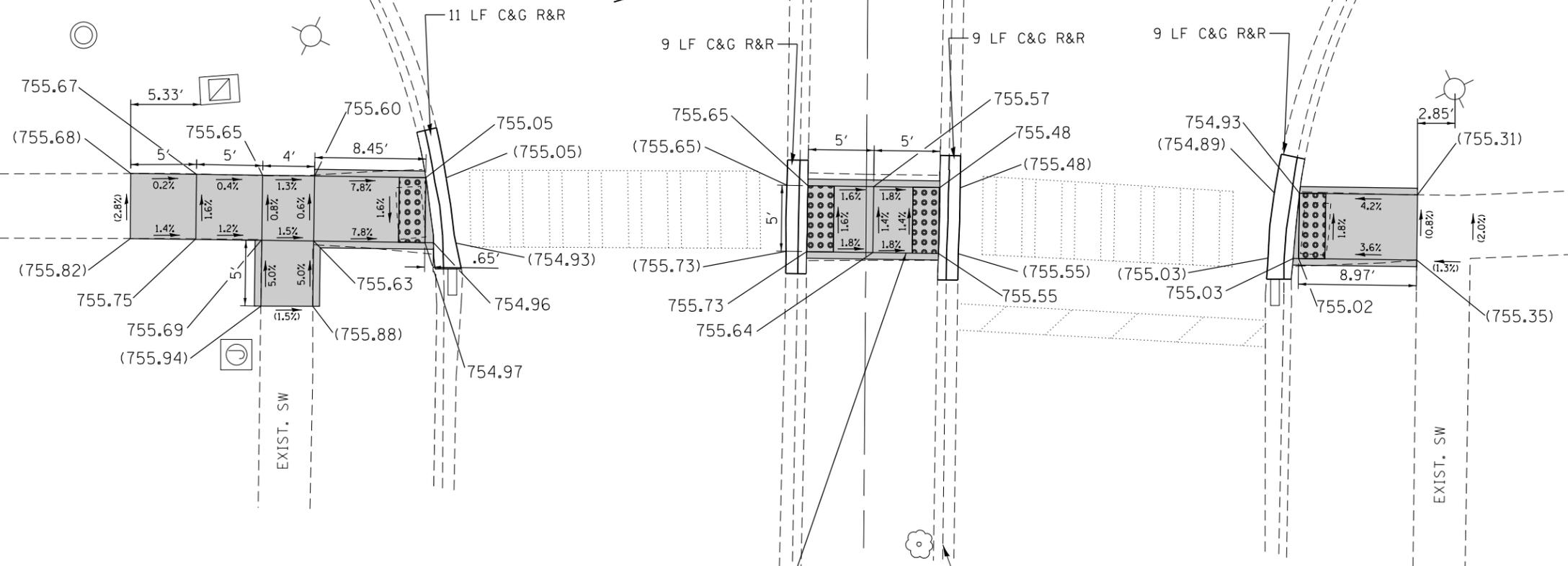
IL. ROUTE 132  
(GRAND AVENUE)



VINEYARD DRIVE

EXIST. B-6.12 C&G

EXIST. B-6.12 C&G



PROP. MEDIAN REMOVAL  
PROP. CONCRETE MEDIAN SURFACE, 4"

EXIST. B-6.12 C&G

REFERENCE BENCHMARK ELEV 755.55  
BENCHMARK : CUT SQUARE SOUTHEAST SIDE OF LIGHT POLE BASE  
LOCATION : SOUTHEAST CORNER OF VINEYARD DR. AND IL-132

**LEGEND**

- xx.xx' EXISTING LENGTH
- PROPOSED SIDE CURB
- ( ) EXISTING ELEVATION/SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL  
REPLACE W/TOPSOIL & SOD

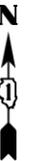
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	PLOT DATE = 2/2/2018	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ADA RAMP DETAILS**  
**IL. RTE. 132 (GRAND AVE.) (US RTE. 45 (LAKE ST.) TO I-94 (TRI-STATE TOLLWAY))**  
SCALE: SHEET 2 OF 15 SHEETS STA. TO STA.

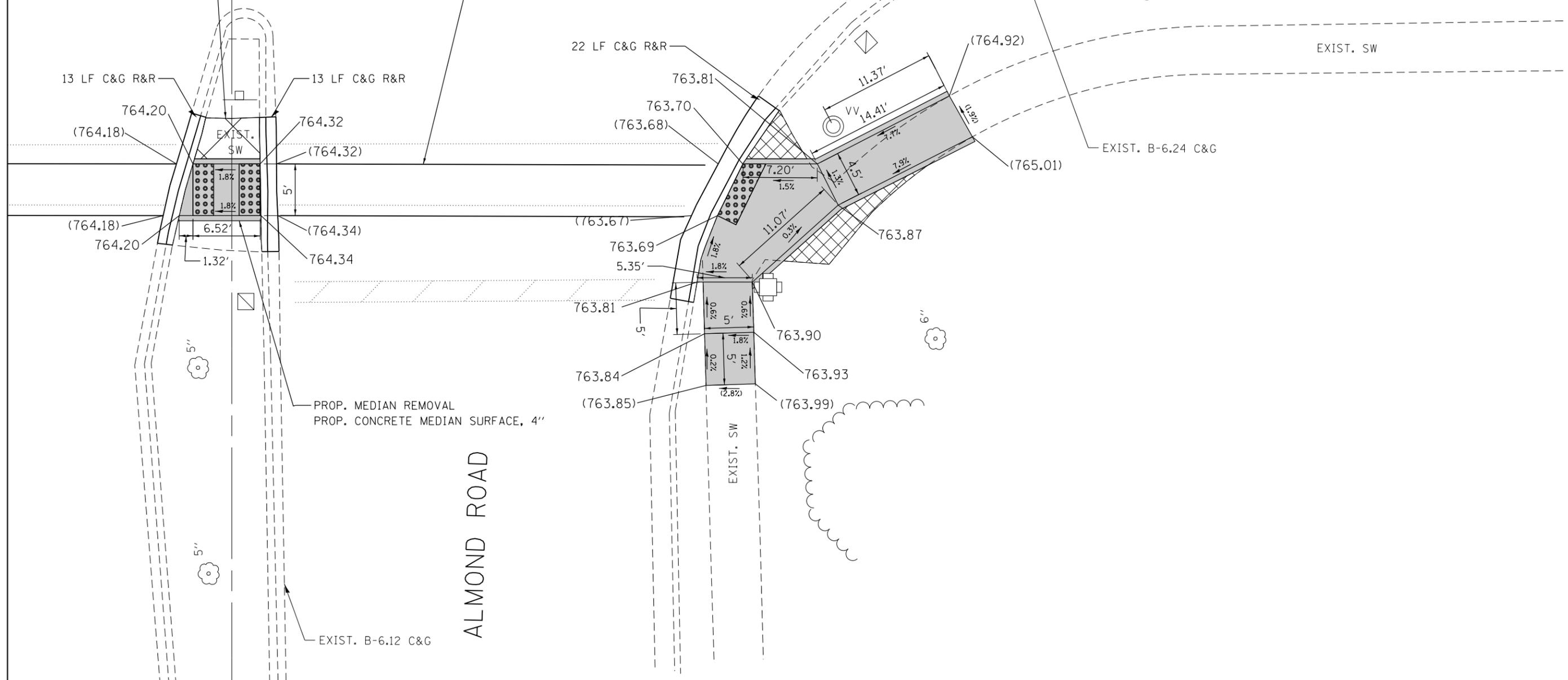
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	16
CONTRACT NO. 62F26				
ILLINOIS FED. AID PROJECT				





PROP. MEDIAN REMOVAL  
REPLACE WITH TOPSOIL & SOD

PROP. THERMOPLASTIC PAVEMENT MARKING 6",  
CROSSWALK 2 @ 6' C-C, WHITE (TYP.)



REFERENCE BENCHMARK ELEV 767.01

BENCHMARK : SOUTHWEST BOLT OF FIRE HYDRANT

LOCATION : SOUTHWEST CORNER OF ALMOND RD. AND IL-132

**LEGEND**



EXISTING LENGTH



PROPOSED SIDE CURB



EXISTING ELEVATION/SLOPE



PROPOSED SIDEWALK



DETECTABLE WARNINGS



SIDEWALK REMOVAL  
REPLACE W/TOPSOIL & SOD

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ADA RAMP DETAILS**  
**IL. RTE. 132 (GRAND AVE.) (US RTE. 45 (LAKE ST.) TO I-94 (TRI-STATE TOLLWAY))**  
SCALE: SHEET 4 OF 15 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	18
CONTRACT NO. 62F26				
ILLINOIS FED. AID PROJECT				



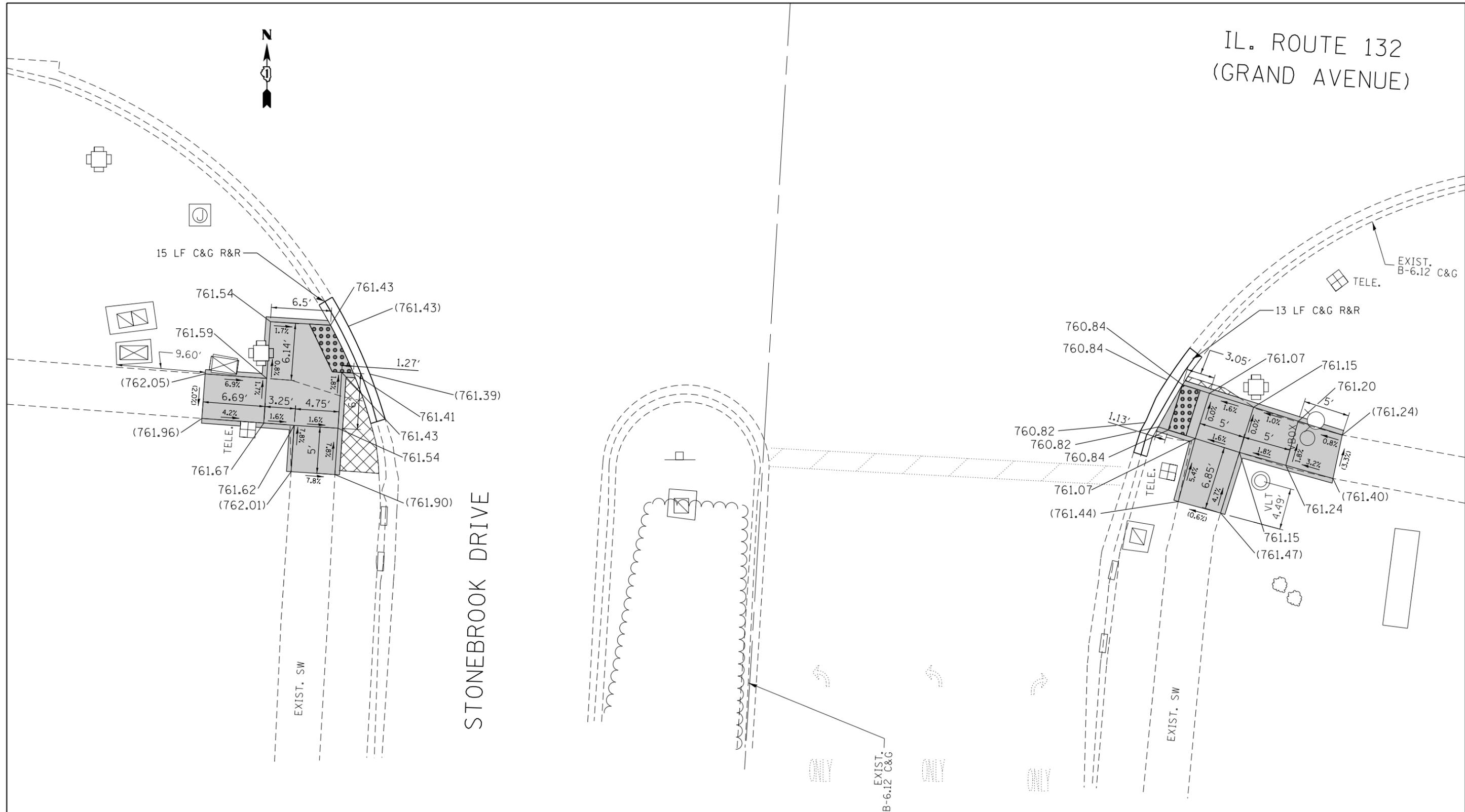








IL. ROUTE 132  
(GRAND AVENUE)



REFERENCE BENCHMARK ELEV 762.516  
 BENCHMARK : CUT SQUARE ON THE NORTHWEST SIDE OF THE TRAFFIC SIGNAL BASE  
 LOCATION : SOUTHWEST CORNER OF STONEBROOK DR. AND IL-132

LEGEND	
xx.xx'	EXISTING LENGTH
=====	PROPOSED SIDE CURB
( )	EXISTING ELEVATION/SLOPE
	PROPOSED SIDEWALK
	DETECTABLE WARNINGS
	SIDEWALK REMOVAL REPLACE W/TOPSOIL & SOD

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

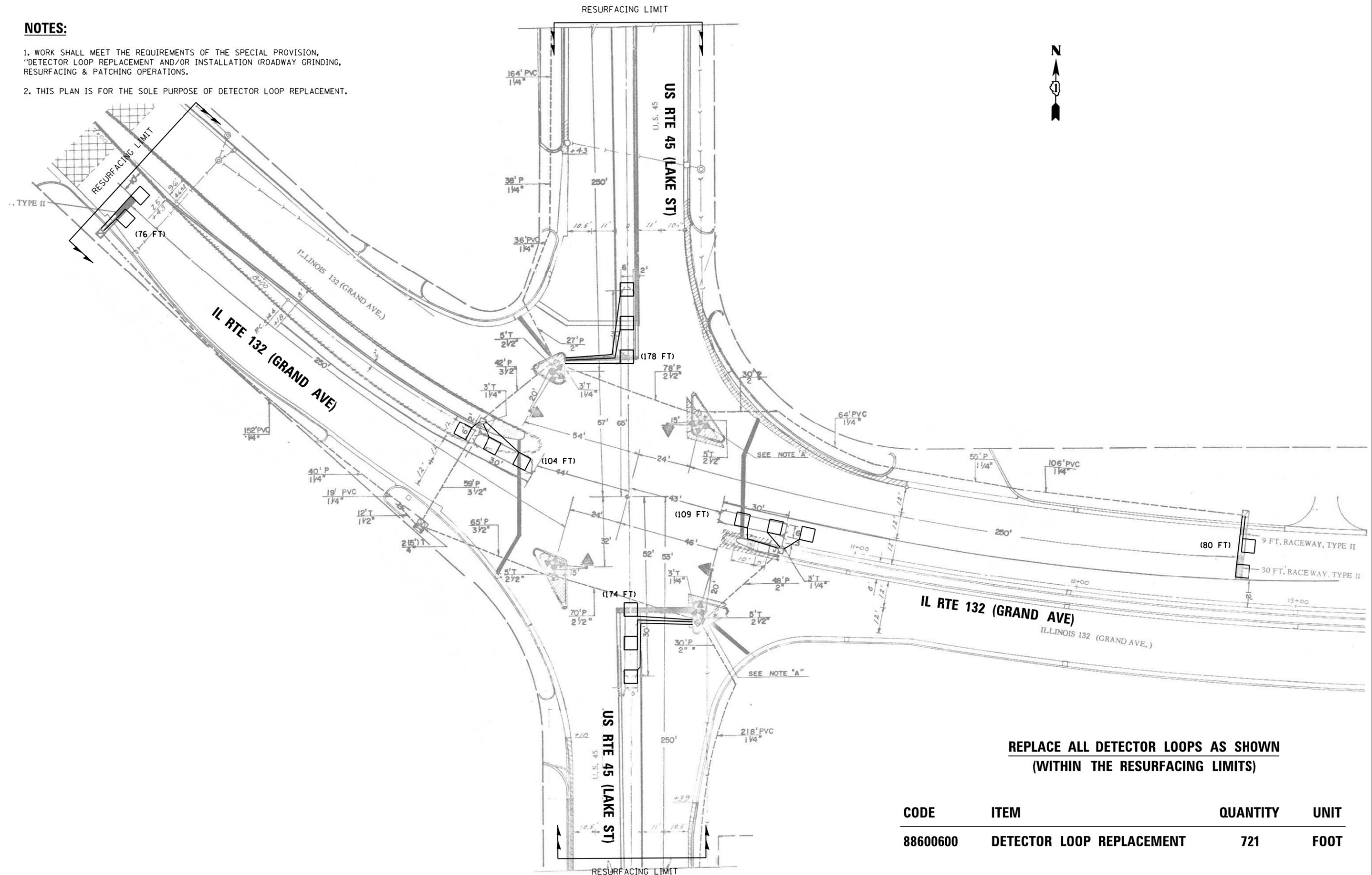
**ADA RAMP DETAILS**  
**IL. RTE. 132 (GRAND AVE.) (US RTE. 45 (LAKE ST.) TO I-94 (TRI-STATE TOLLWAY))**

SCALE: SHEET 10 OF 15 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	24
CONTRACT NO. 62F26				
ILLINOIS FED. AID PROJECT				

**NOTES:**

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.



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

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT	721	FOOT

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PLOT DATE = 12/11/2017		DATE - 12/05/2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETECTOR LOOP REPLACEMENT PLAN  
IL RTE 132 (GRAND AVE) AT US RTE 45 (LAKE ST)**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	25
CONTRACT NO. 62F26				
ILLINOIS FED. AID PROJECT				

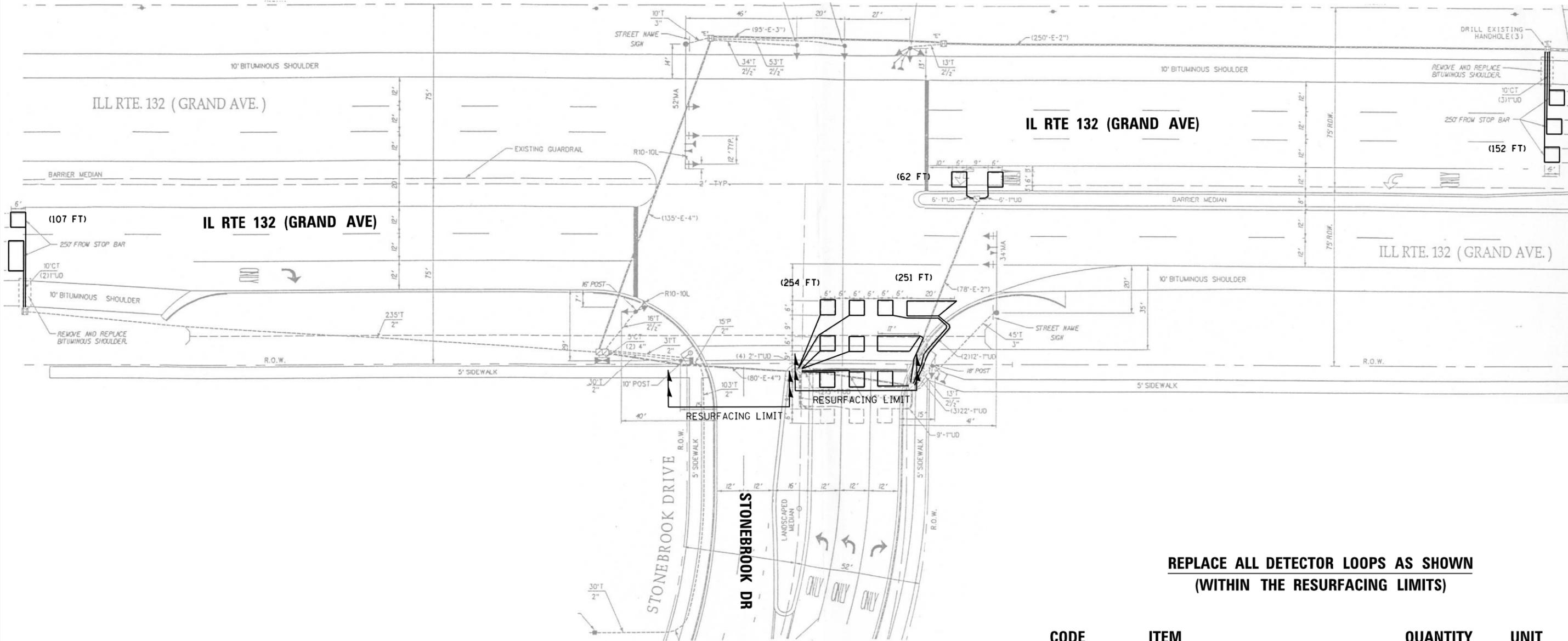






**NOTES:**

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.



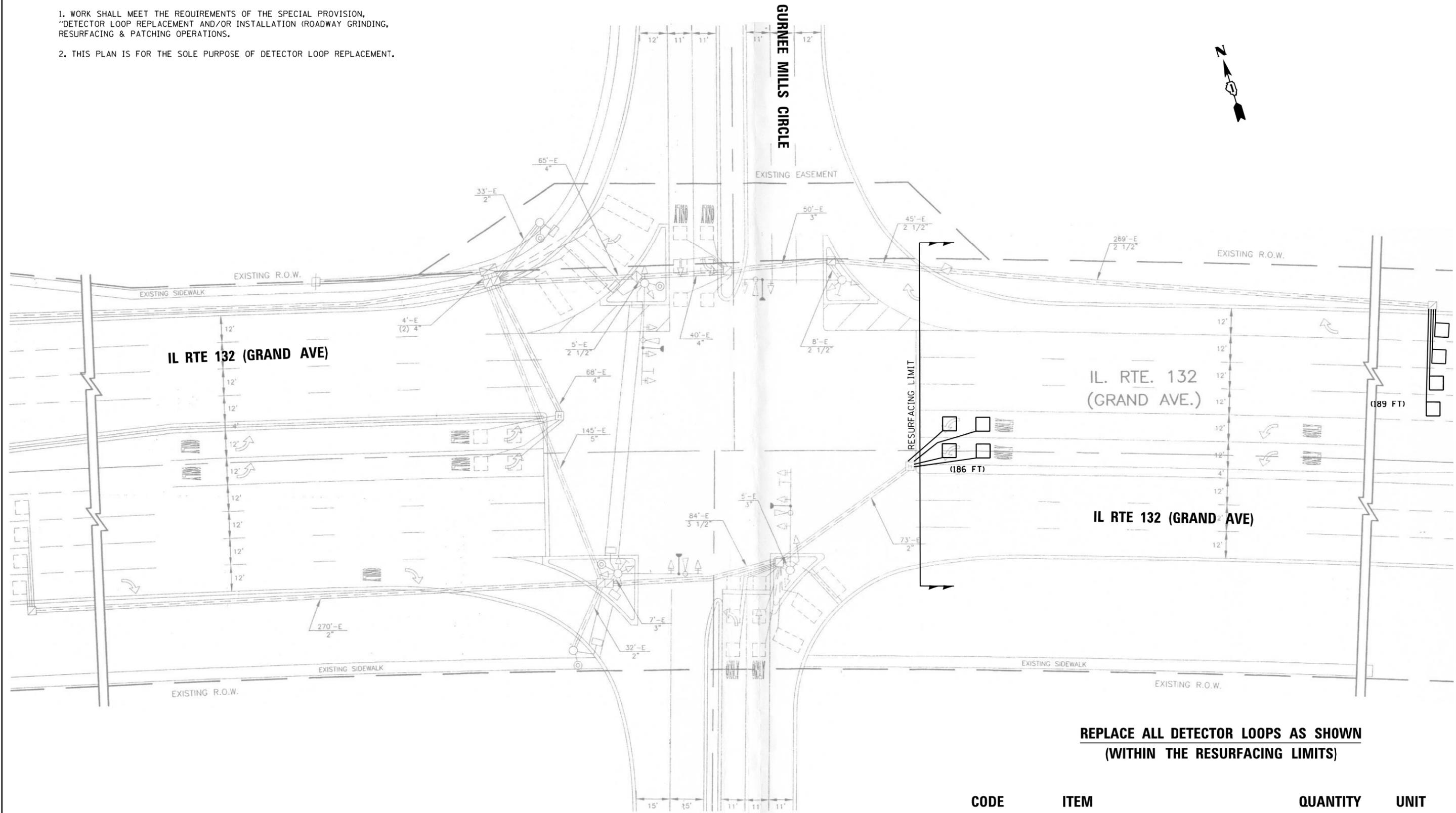
**REPLACE ALL DETECTOR LOOPS AS SHOWN  
(WITHIN THE RESURFACING LIMITS)**

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT	736	FOOT



**NOTES:**

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.



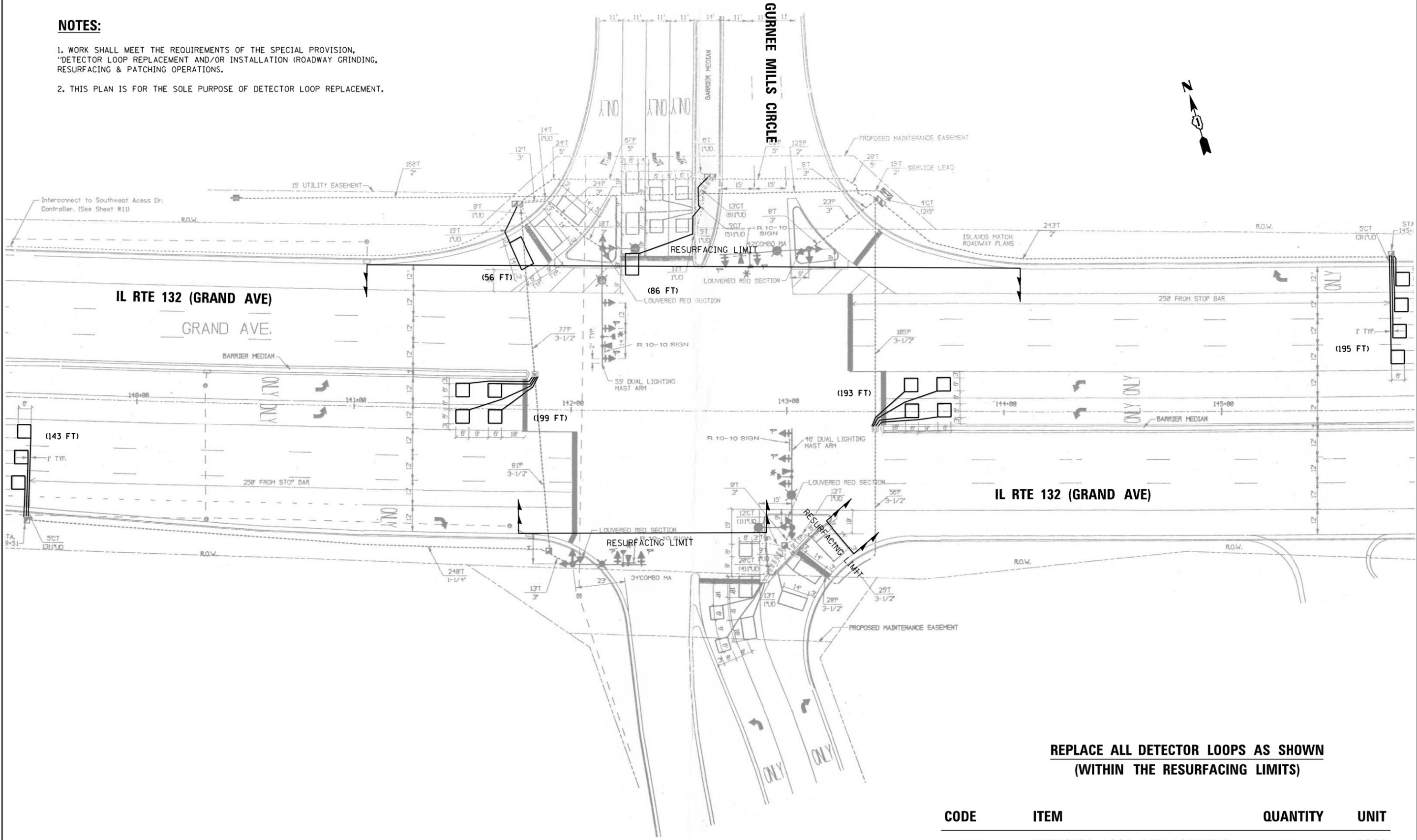
**REPLACE ALL DETECTOR LOOPS AS SHOWN  
(WITHIN THE RESURFACING LIMITS)**

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT	375	FOOT

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TS 21000 - IL RTE 132 AT GURNEE MILLS	CIRCLE SW_07172017.dgn	DRAWN - BAS	REVISED -		541	X-R-RS-2	LAKE	50	31				
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**NOTES:**

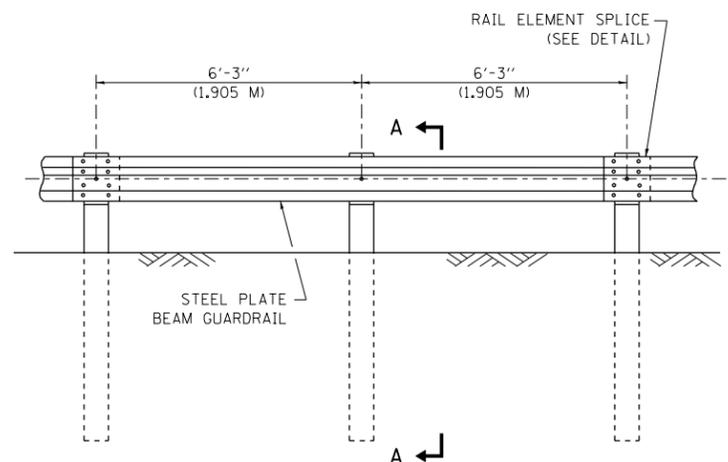
1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.



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

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT	872	FOOT

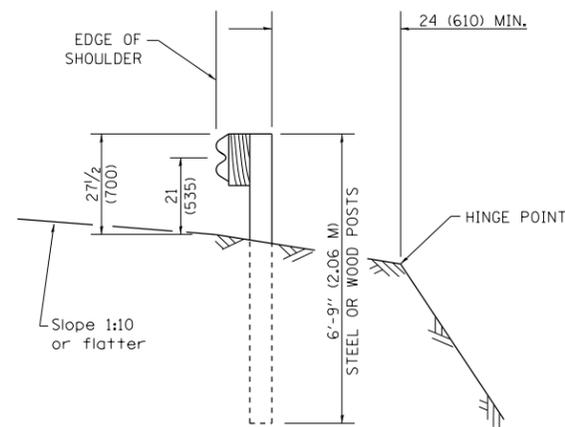
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	PLOT DATE = 7/17/2017	DATE - 07/17/2017	REVISED -			ILLINOIS FED. AID PROJECT					



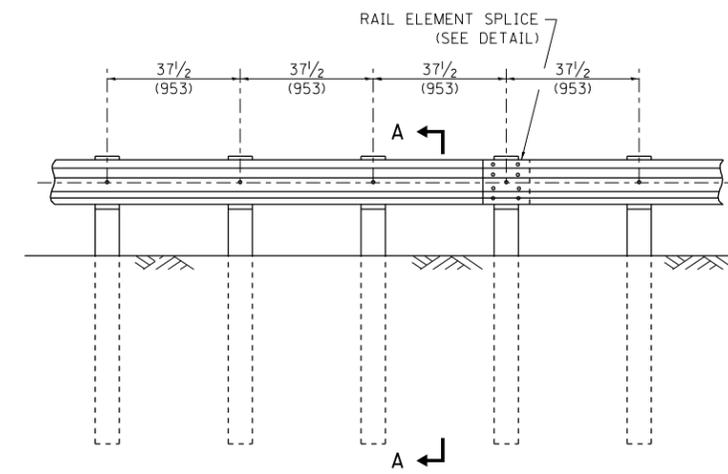
ELEVATION

**TYPE A**

6'-3" (1.905 M) TYPICAL POST SPACING



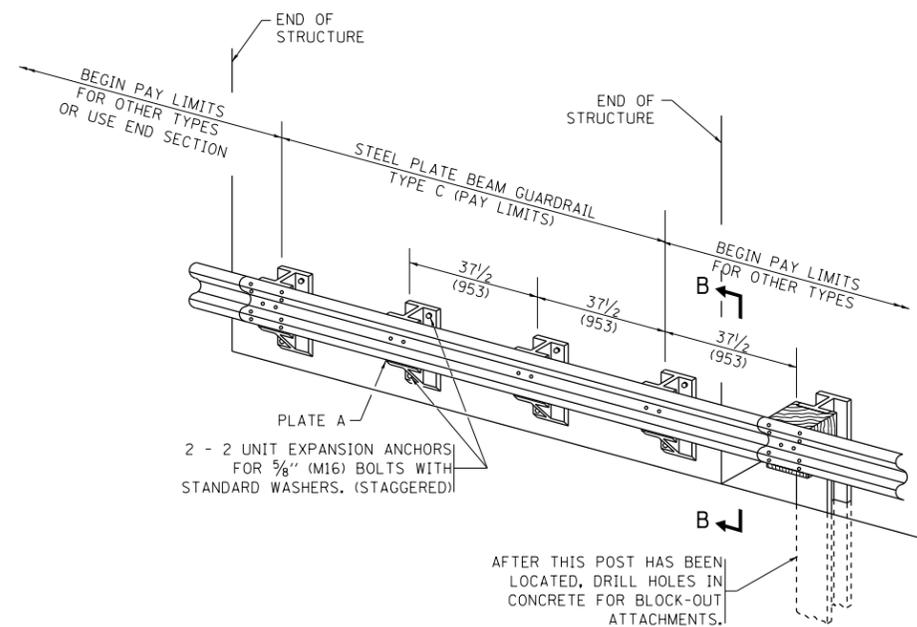
SECTION A-A



ELEVATION

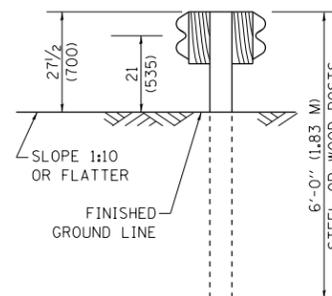
**TYPE A**

37 1/2 (953) CLOSED POST SPACING

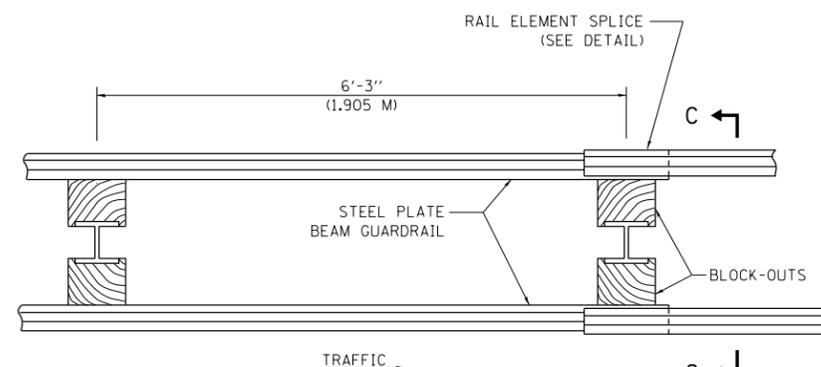


**TYPE C**

37 1/2 (953) BLOCK-OUT SPACING



SECTION C-C

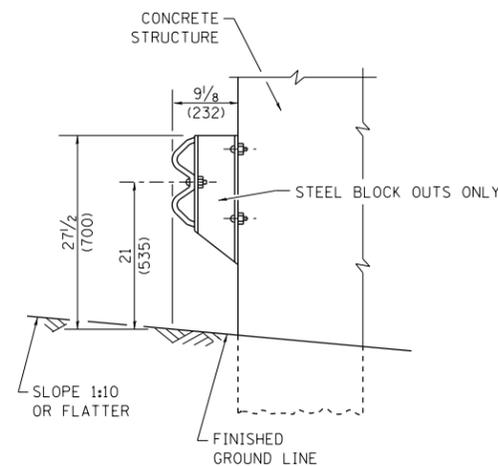


TRAFFIC

PLAN

**TYPE D**

DOUBLE STEEL PLATE BEAM GUARDRAIL  
6'-3" (1.905 M) TYPICAL POST SPACING



SECTION B-B

**GENERAL NOTES**

ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

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

THE EXISTING STEEL POSTS MAY BE DRILLED TO MATCH THE BOLT PATTERN SHOWN HEREIN FOR THE WOOD BLOCK-OUT, OR A NEW STEEL POST SHALL BE PROVIDED.

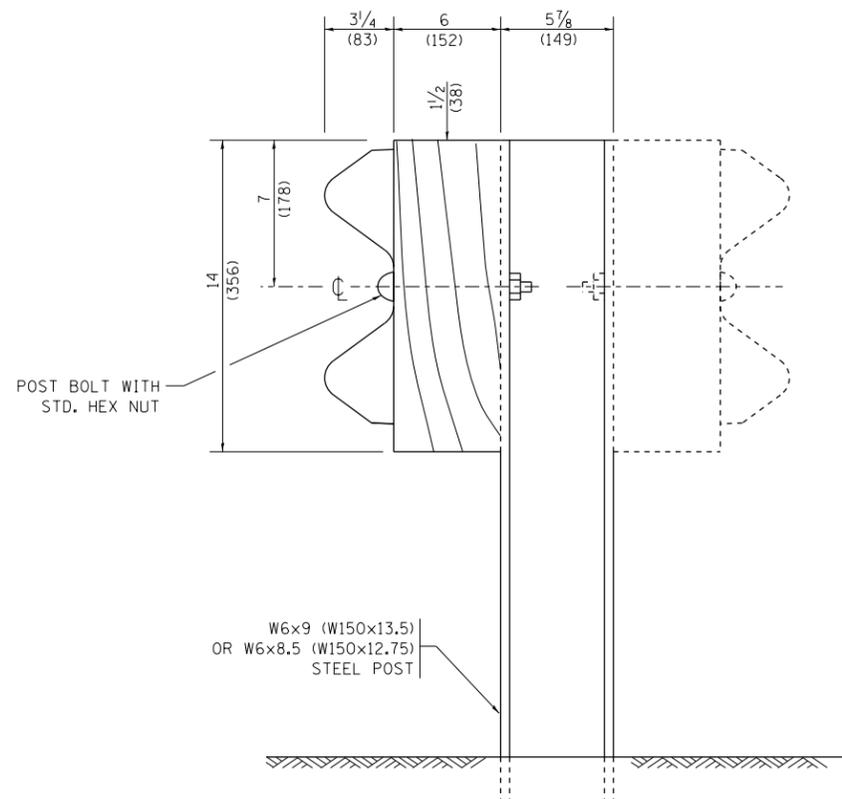
THIS DETAIL IS APPLICABLE TO THE GUARDRAIL SYSTEM USED PRIOR TO JANUARY 1, 2007. FOR DETAILS ON THE MIDWEST GUARDRAIL SYSTEM, SEE STANDARD 630001.

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		DATE -	REVISED -

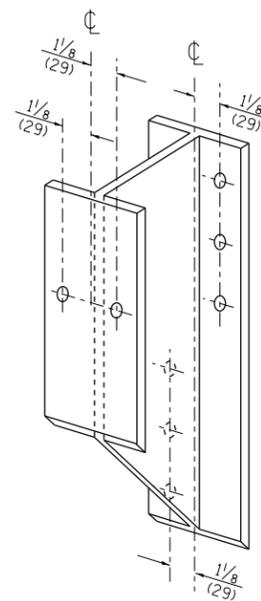
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL</b>			
SCALE: NONE	SHEET NO. 1 OF 4 SHEETS	STA.	TO STA.

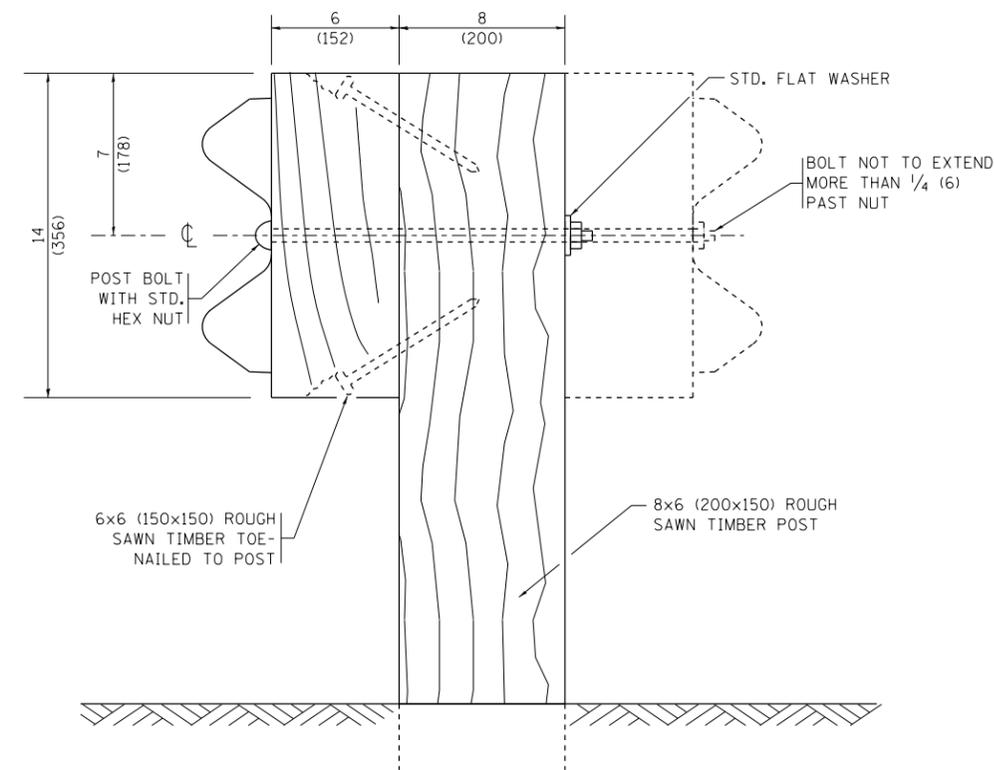
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	33
<b>BM-21</b>			<b>CONTRACT NO. 62F26</b>	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



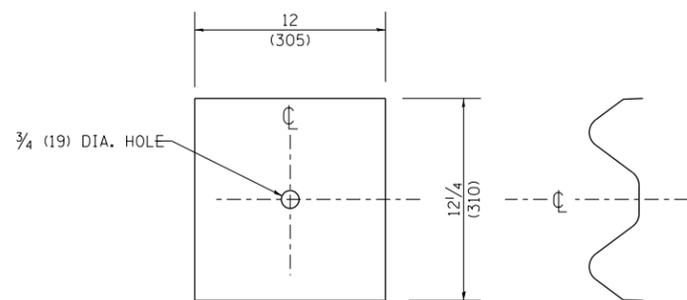
STEEL POST CONSTRUCTION



STEEL BLOCK-OUT DETAIL



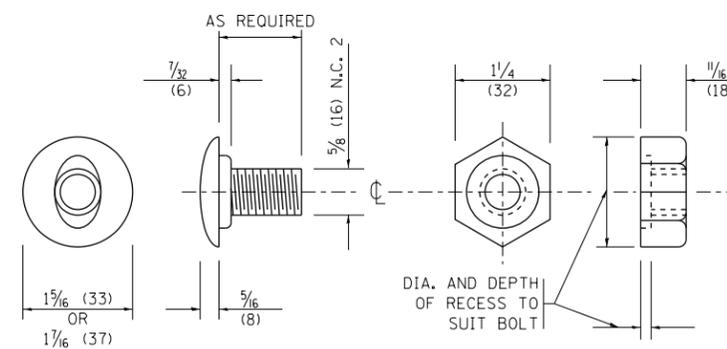
WOOD POST CONSTRUCTION



NOTE:

PLATE A SHALL BE PLACED BETWEEN RAIL ELEMENT AND BLOCK-OUT AT NON-SPLICE MOUNTING POINTS ONLY WHEN STEEL BLOCK-OUTS ARE USED.

PLATE A



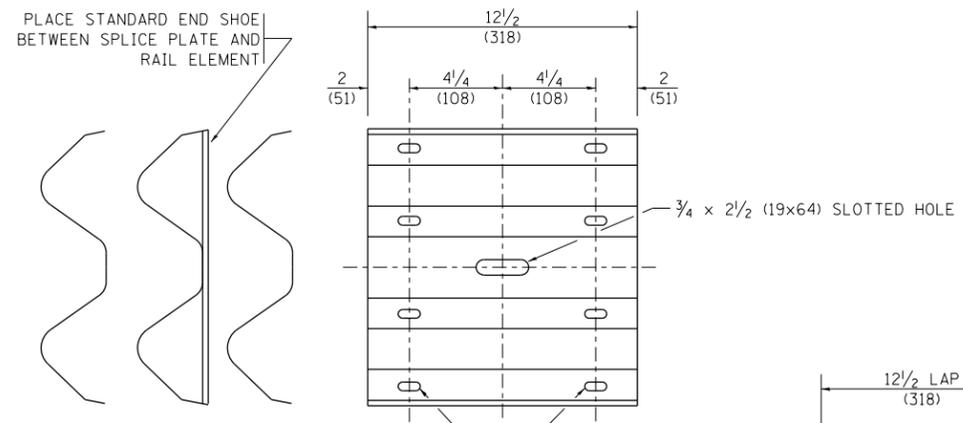
POST OR SPLICE BOLT & NUT

FILE NAME =	USER NAME = guillaumejp	DESIGNED -	REVISED - 10-31-06
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		DATE -	REVISED -

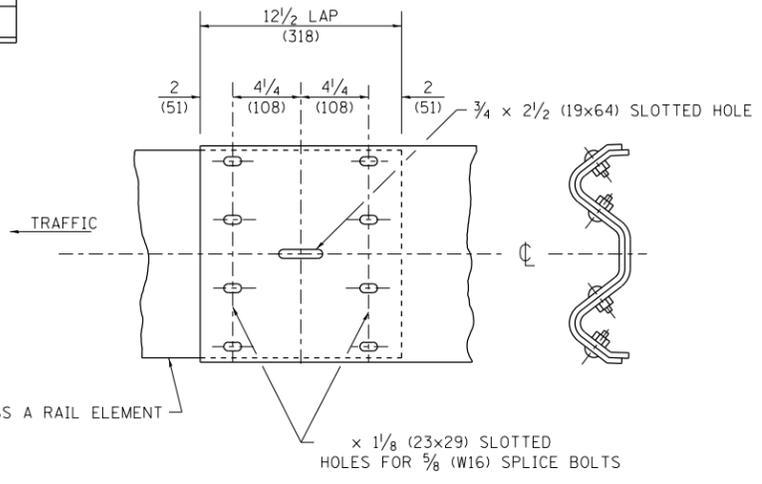
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL			
SCALE: NONE	SHEET NO. 2 OF 4 SHEETS	STA.	TO STA.

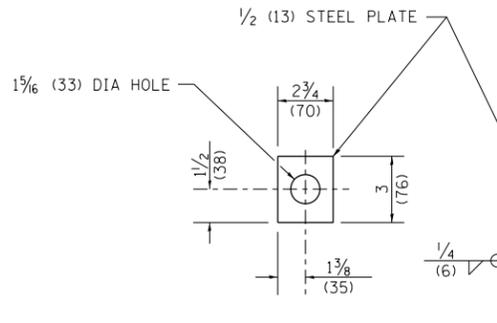
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	34
BM-21		CONTRACT NO. 62F26		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**SPLICE PLATE**



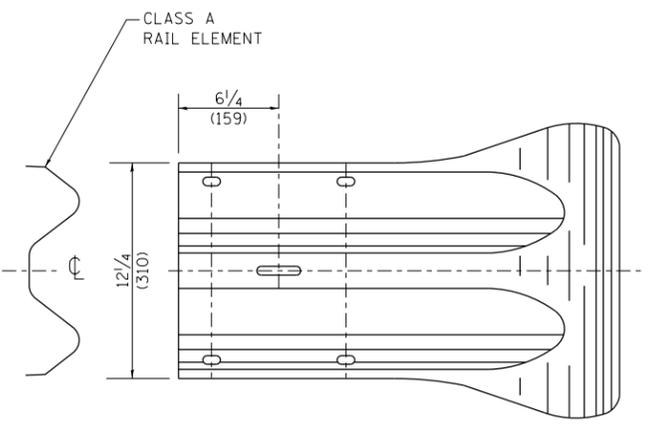
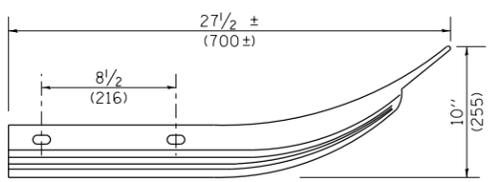
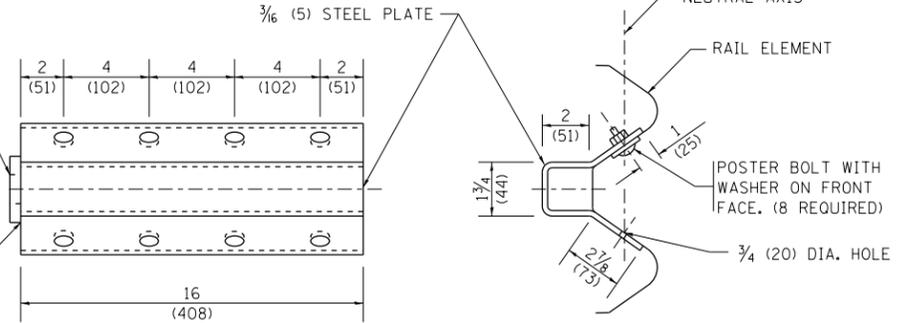
**RAIL ELEMENT SPLICE**



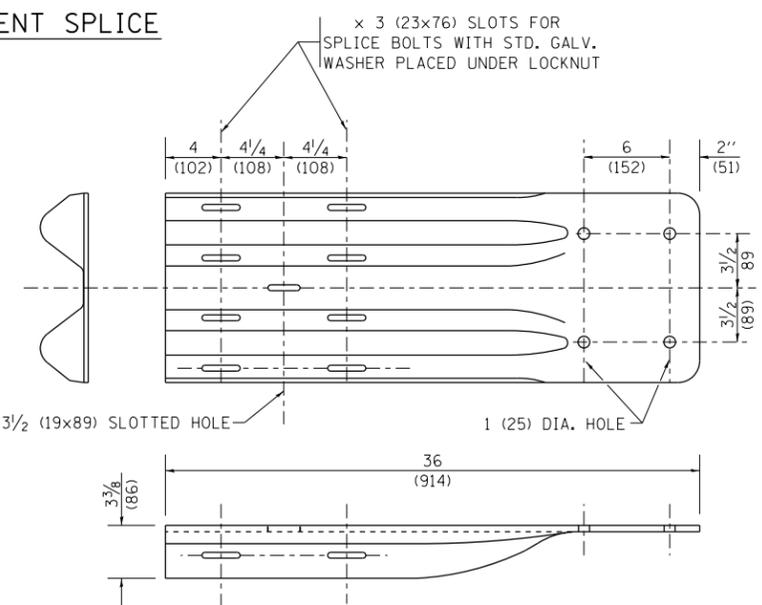
**NOTE:**

ANCHOR PLATE T SHALL BE USED TO ATTACH CABLE ASSEMBLY TO GUARDRAIL WHEN REQUIRED ON TRAFFIC BARRIER TERMINALS.

**ANCHORE PLATE T DETAILS**



**END SECTION**



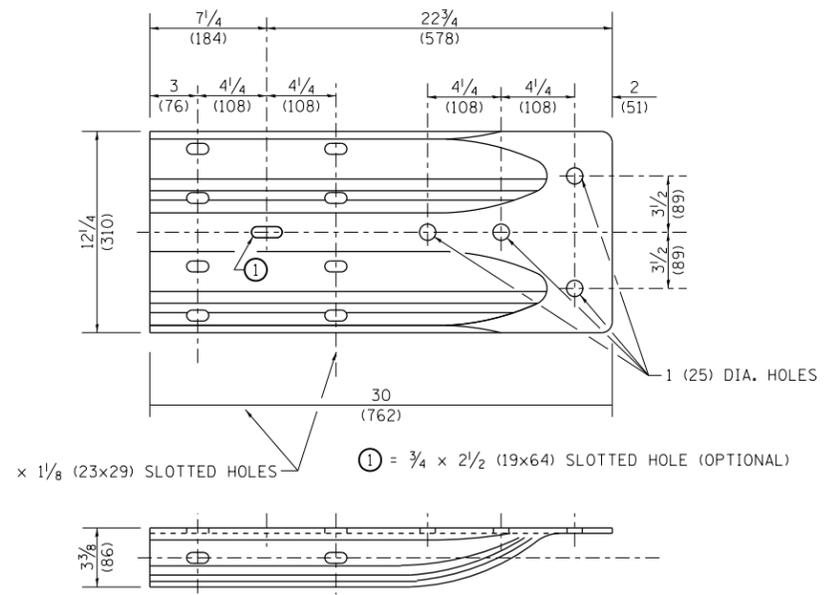
**END SHOE**

**NOTE:**

WHEN END SHOE IS ATTACHED TO A BRIDGE PARAPET WHICH HAS AN EXPANSION JOINT, THE BOLTS SHALL BE PROVIDED WITH A LOCKNUT OR DOUBLE NUT AND SHALL BE TIGHTENED ONLY TO A POINT THAT WILL ALLOW GUARDRAIL MOVEMENT.

THE STANDARD END SHOE SHALL BE ATTACHED TO THE CONCRETE WITH PRE-DRILLED OR SELF-DRILLING ANCHOR BOLTS. THE ANCHOR CONE SHALL BE SET FLUSH WITH THE SURFACE OF THE CONCRETE.

EXTERNALLY THREADED STUDS PROTRUDING FROM THE SURFACE OF THE CONCRETE WILL NOT BE PERMITTED.



**ALTERNATE END SHOE**

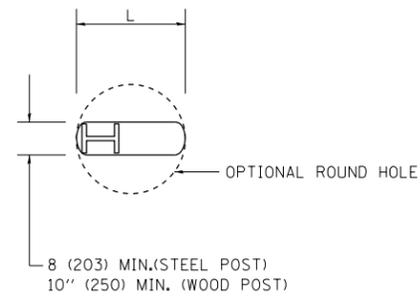
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		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

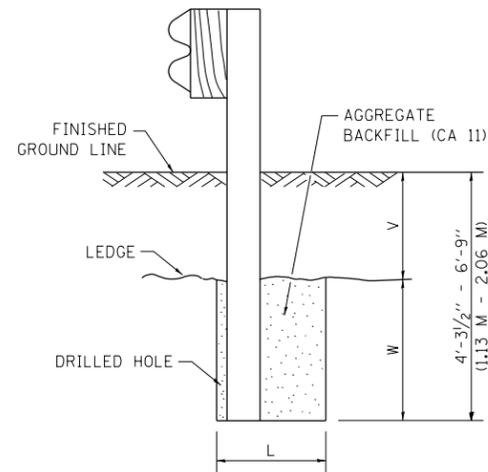
**REMOVE AND REERECT  
STEEL PLATE BEAM GUARDRAIL**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	35
<b>BM-21</b>		<b>CONTRACT NO. 62F26</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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



PLAN

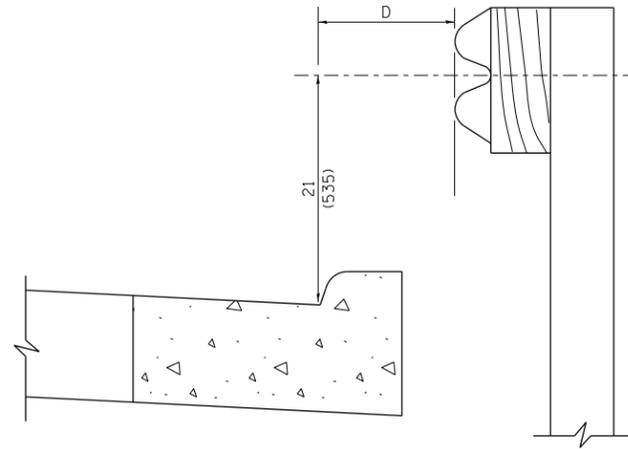


NOTE:

LEDGE LINE IS TOP OF ROCK LEDGE OR HARD SLAG FILL.

ELEVATION

**FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED**



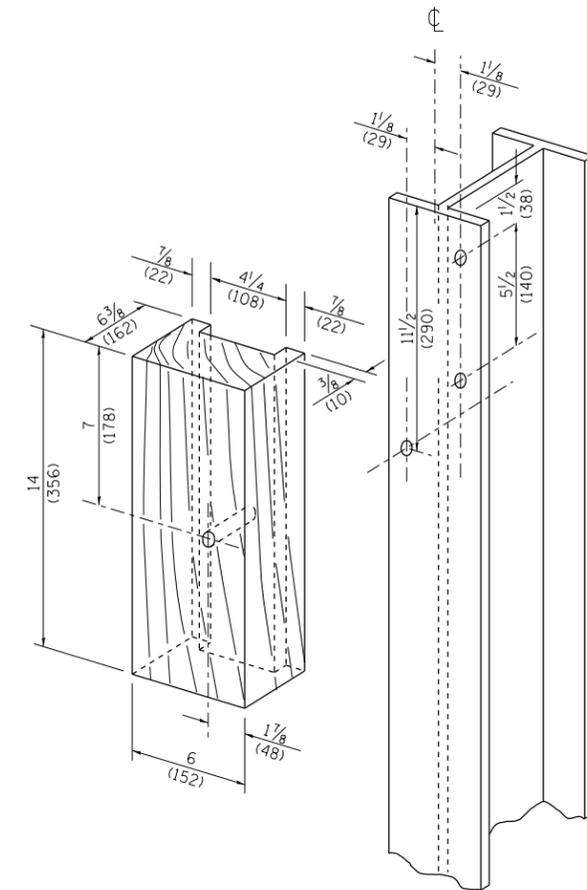
NOTE:

IF IT IS NECESSARY FOR D TO BE MORE THAN 12 (300) AND LESS THAN 10'-0" (3.0 M) TYPE M-2 (M-5) CURB AND GUTTER (STD. 606001) SHALL BE USED IN FRONT OF AND IN ADVANCE OF THE GUARDRAIL.

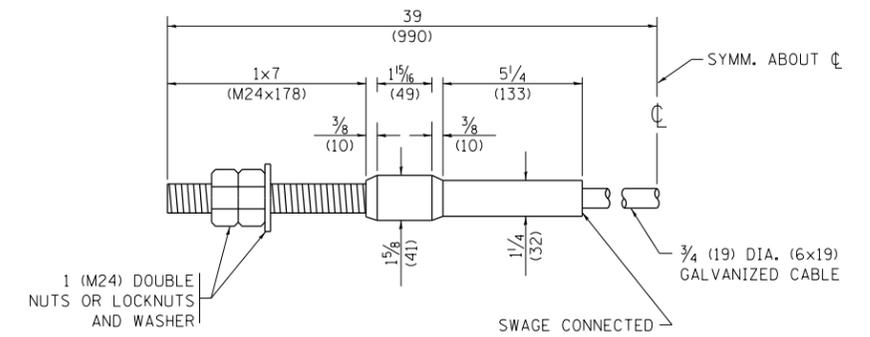
**GUARDRAIL PLACED BEHIND CURB**

(D = 0 DESIRABLE TO 12 (300) MAXIMUM)

V	W	L	
		STEEL POST	WOOD POST
0 - 18 (0 - 460)	24 (610)	21 (530)	23 (580)
>18 - 41.5 (> 460 - 825)	12 (305)	8 (203)	10 (250)
>41.5 - 53.5 (> 825 - 1.13 M)	12 - 0 (350 - 0)	8 (203)	10 (250)



**WOOD BLOCK-OUT AND STEEL POST DETAILS**



**CABLE ASSEMBLY**

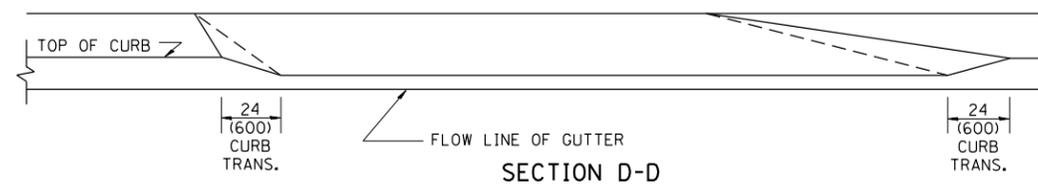
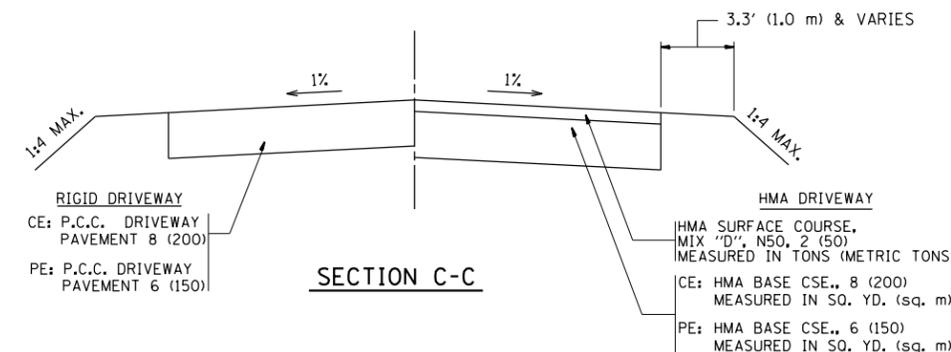
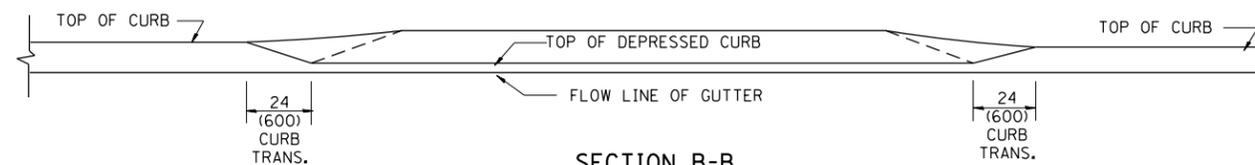
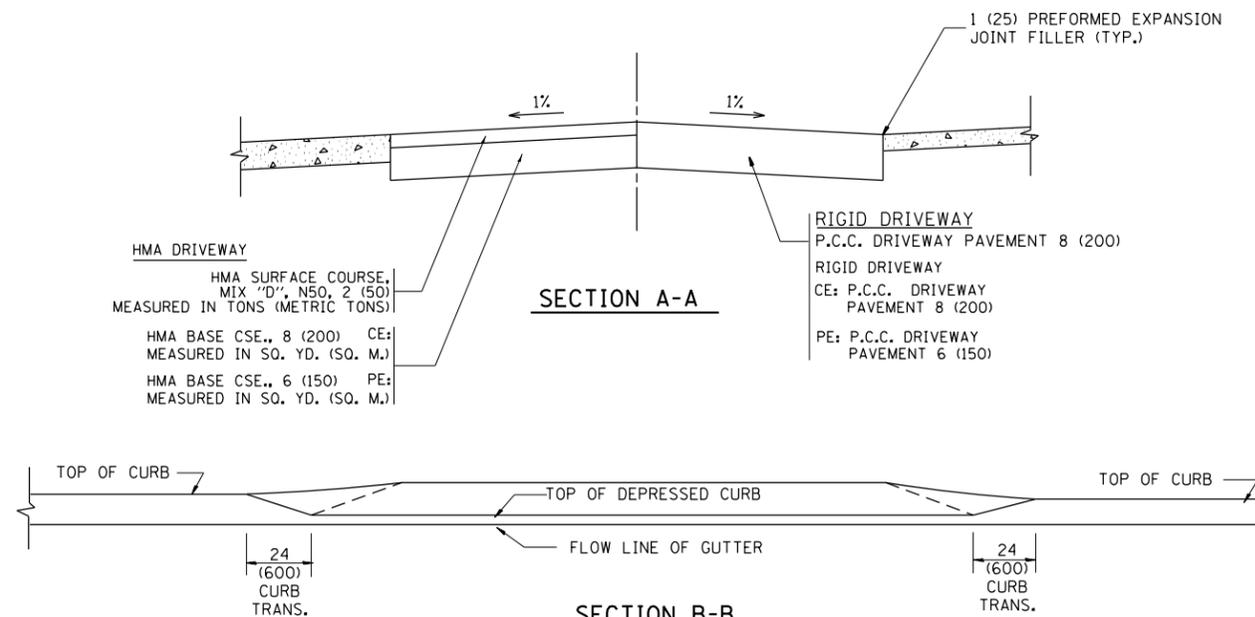
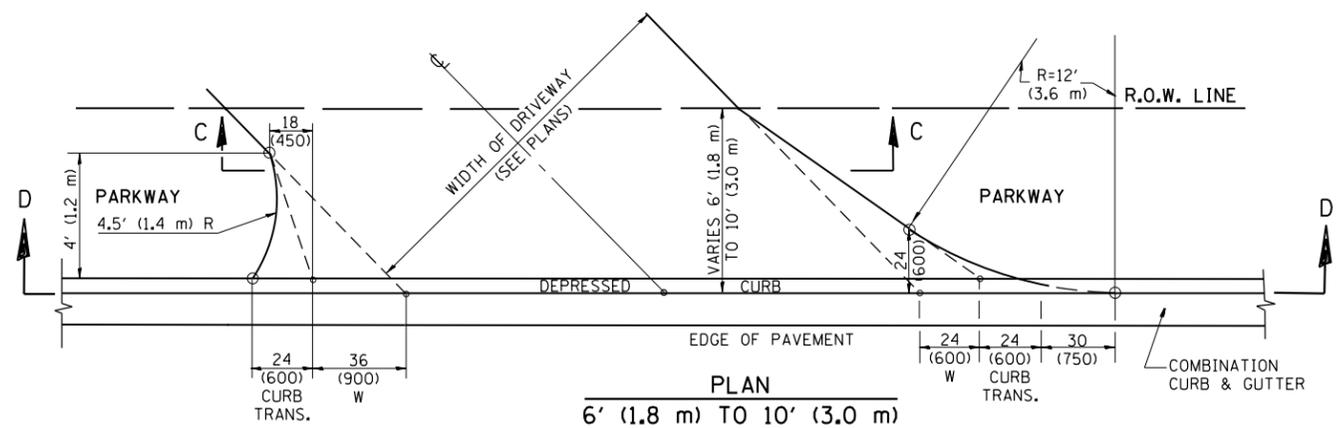
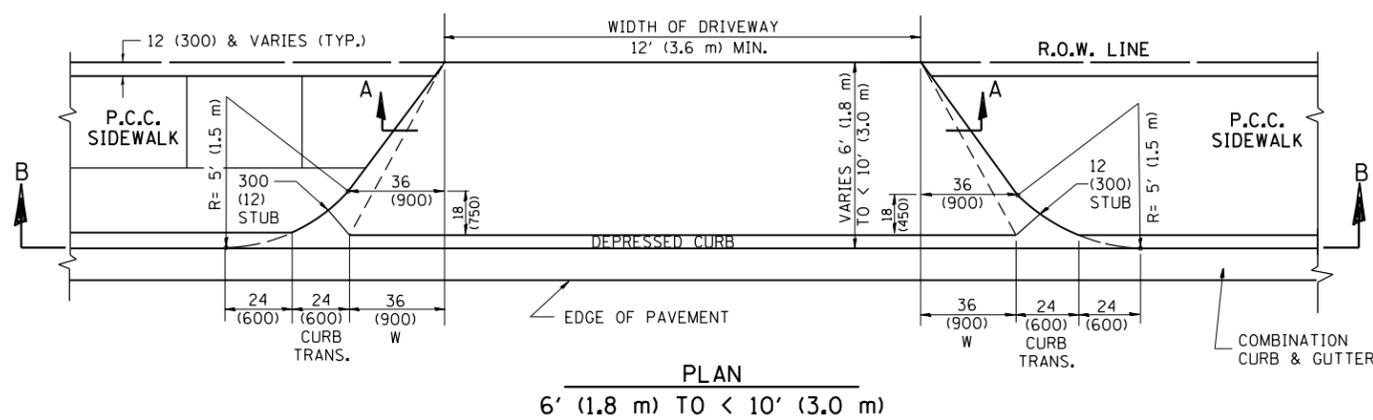
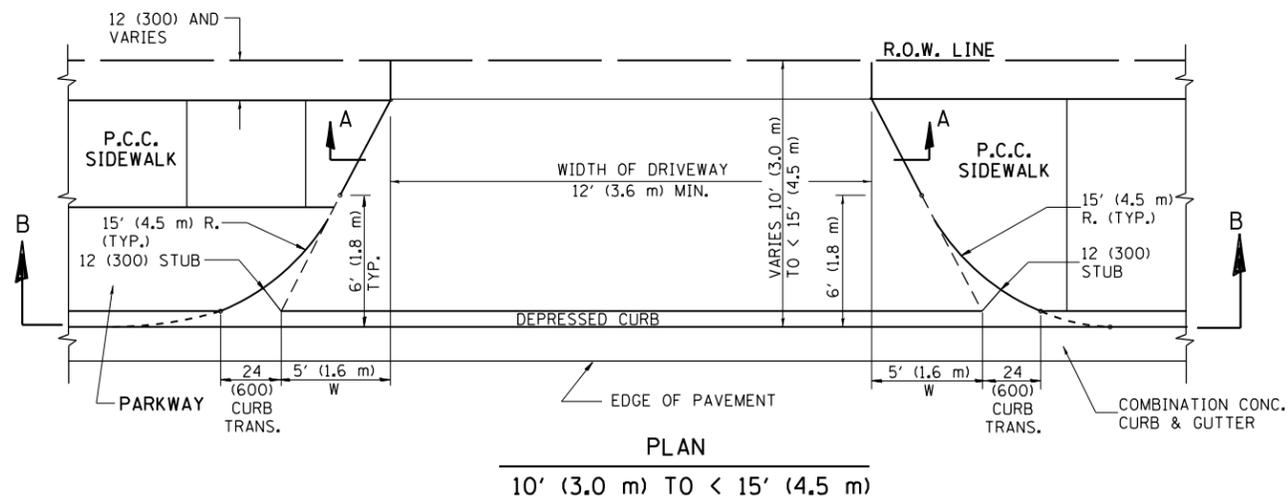
(40,000 LBS (18,100 KG) MIN. BREAKING STRENGTH)  
TIGHTEN TO TAUT TENSION

FILE NAME =	USER NAME = guillaumejp	DESIGNED -	REVISED - 10-31-06
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PLOT SCALE = 100.0000' / in.		DATE -	REVISED -
PLOT DATE = 2/2/2018			

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL</b>			
SCALE: NONE	SHEET NO. 4 OF 4 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	36
<b>BM-21</b>		<b>CONTRACT NO. 62F26</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**GENERAL NOTES**

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

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

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

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

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

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

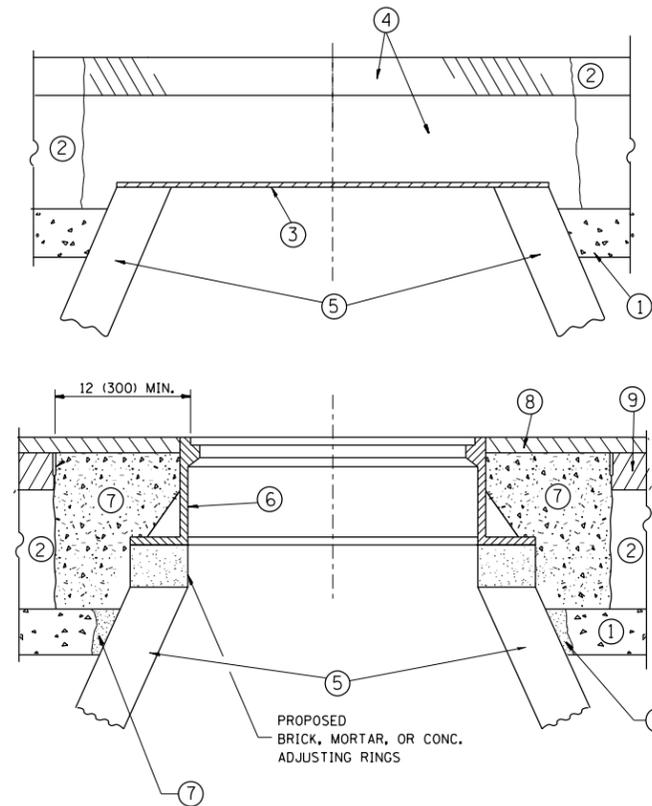
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED.

FILE NAME =	USER NAME = guillaumejp	DESIGNED - R. SHAH	REVISED - M. GOMEZ 04-06-01
pw\1\084EBIDINTEG.illinois.gov\PI\DOT\Documents\DOT Offices\District 1\Projects\DI270\Drawings\Design\DistStd.dgn		CHECKED -	REVISED - P. LaFLEUR 04-15-03
		DATE - 11-06-95	REVISED - R. BORO 01-01-07
			REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

DRIVEWAY DETAILS			
DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	37
BD400-02 (BD-02)		CONTRACT NO. 62F26		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

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

**STAGE 2 (AFTER PAVEMENT MILLING)**

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1\* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

\* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

**LEGEND**

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

**LOCATION OF STRUCTURES:**

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

**BASIS OF PAYMENT:**

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

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

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

**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**

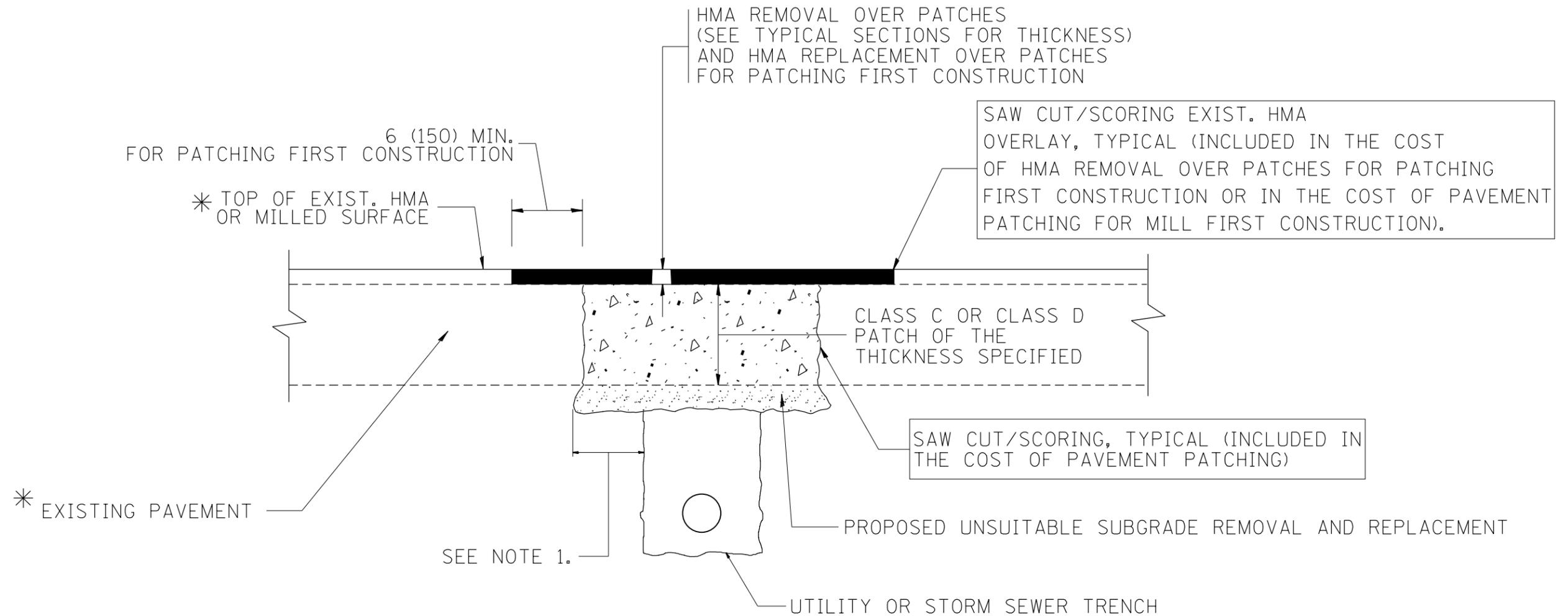
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = guillaumejp	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
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	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - R. BORO 03-09-11
	PLOT DATE = 2/2/2018	DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	38
<b>BD600-03 (BD-8)</b>		<b>CONTRACT NO. 62F26</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**NOTES:**

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

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

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

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

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

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

FILE NAME =	USER NAME = guillaumejp	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98
pw\11084EBIDINTEG\illinois.gov\PWIDOT\Documents\DOT Offices\District 1\Projects\DI270\Drawings\Design\DistStd.dgn			REVISED - R. BORO 01-01-07
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED - R. BORO 09-04-07
	PLOT DATE = 2/2/2018	DATE - 10-25-94	REVISED - K. ENG 10-27-08

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT PATCHING FOR  
HMA SURFACED PAVEMENT**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	39
<b>BD400-04 (BD-22)</b>		<b>CONTRACT NO. 62F26</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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

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

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

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

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

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

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

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

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

**BASIS OF PAYMENT:**  
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

SEE STATE STANDARD 606001  
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)  
1/4" (5) \*\*

18" (450) MAX.

3" (75) MIN.

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

\* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

\*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

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

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY.

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

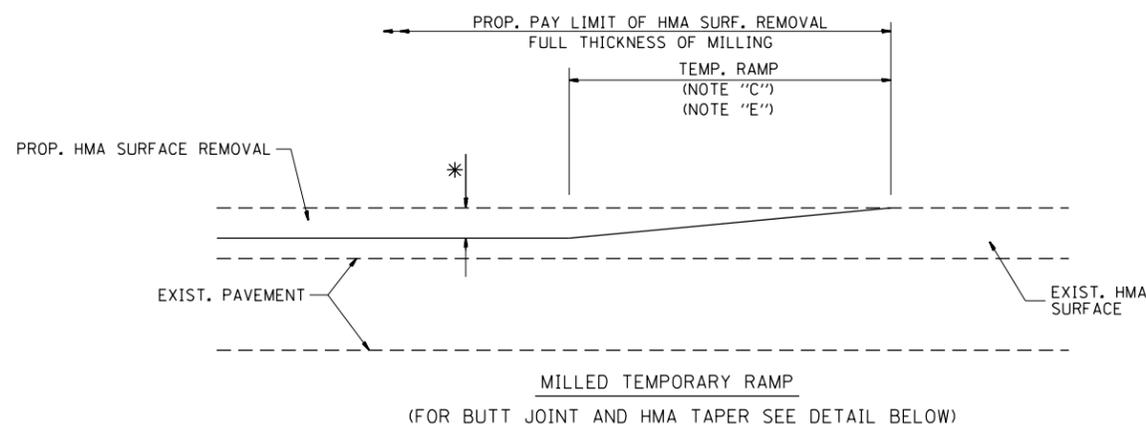
⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

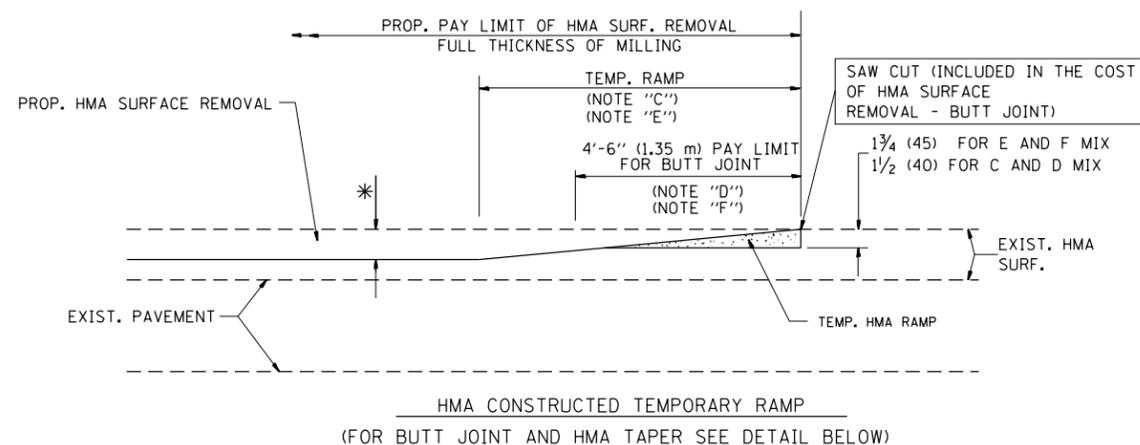
# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = guillaumejp	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\1\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\DI270\Drawings\Design\DistStd.dgn	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - A. ABBAS 03-21-97			541	X-R-RS-2	LAKE	50	40
PLOT DATE = 2/2/2018	DATE - 03-11-94	REVISED - M. GOMEZ 01-22-01	REVISED - R. BORO 12-15-09			BD600-06 (BD-24)		CONTRACT NO. 62F26		
						SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

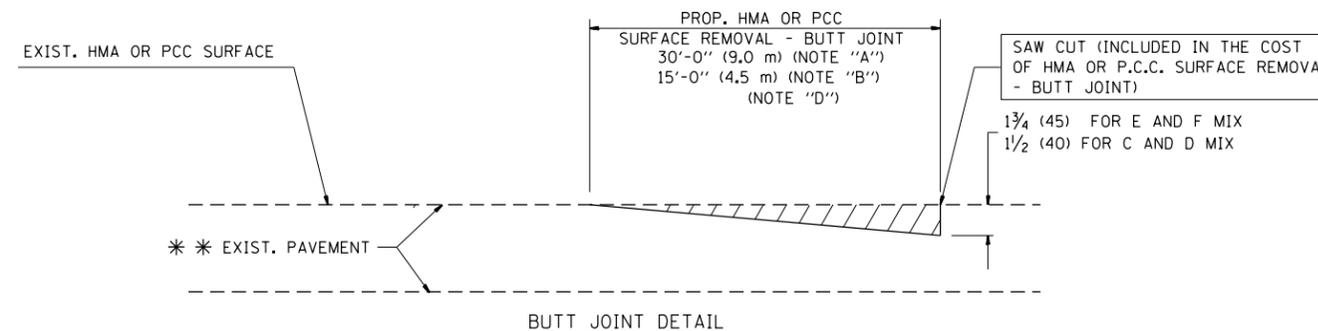


**OPTION 1**

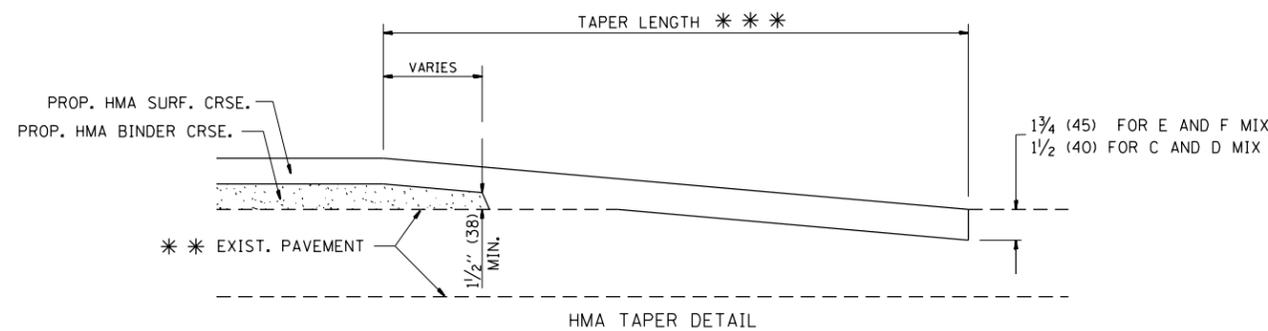


**OPTION 2**

**TYPICAL TEMPORARY RAMP**



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

**TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY**

\*\* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

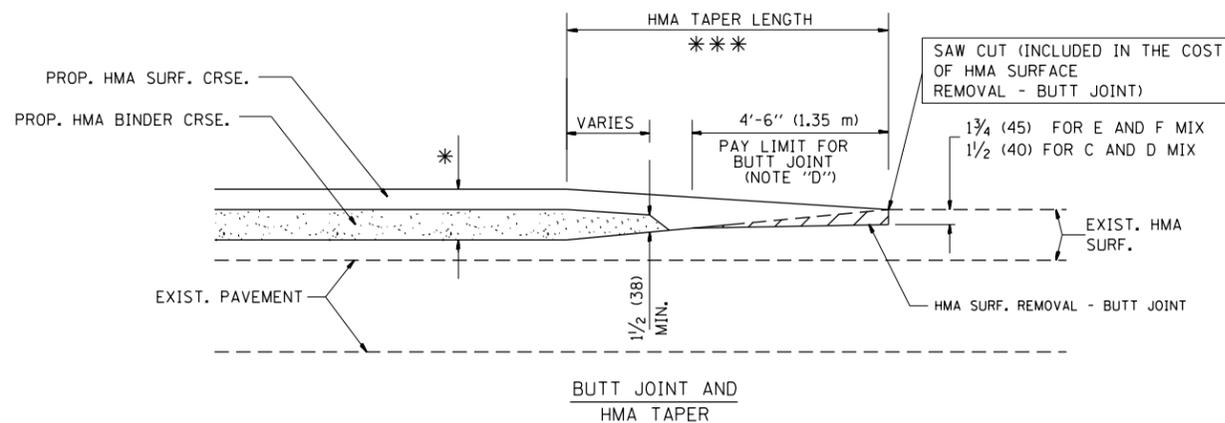
**NOTES**

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
  - B: MINOR SIDE ROADS.
  - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
  - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
  - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
  - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
  - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- \*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")  
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

**BASIS OF PAYMENT:**

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

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



**TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING**

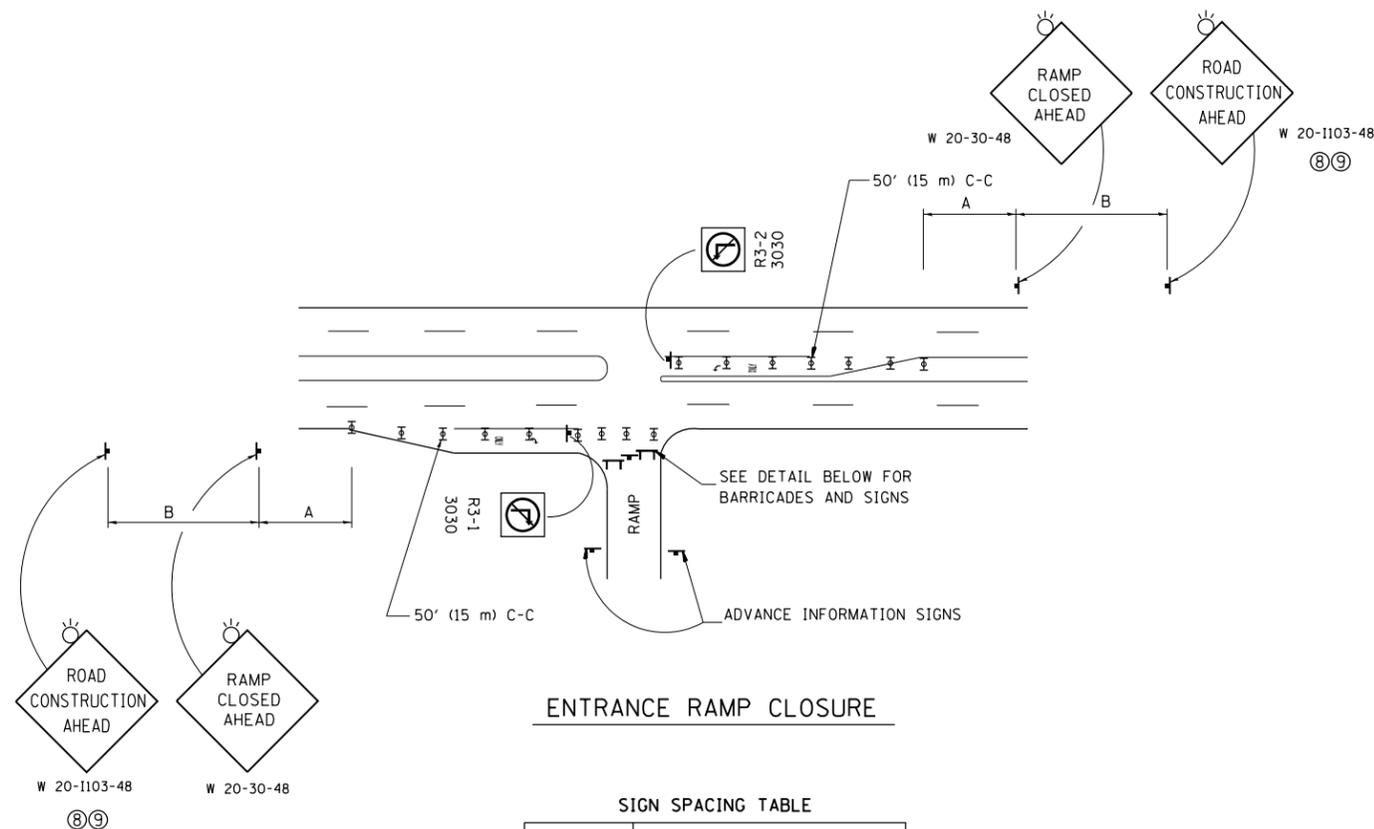
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p:\1\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI270\Drawings\Design\DistStd.dgn			REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 2/2/2018	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND  
HMA TAPER DETAILS**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	41
BD400-05 BD32		CONTRACT NO. 62F26		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

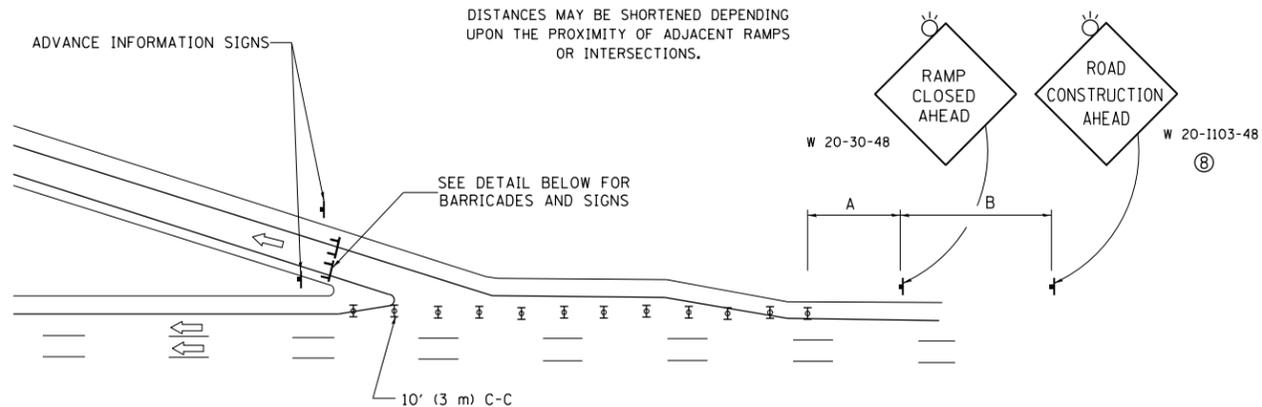


ENTRANCE RAMP CLOSURE

SIGN SPACING TABLE

FACILITY	DISTANCE BETWEEN SIGNS	
	A	B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY <24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL 55 MPH	500' (150 m)	500' (150 m)
ARTERIAL 50-45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	200' (60 m)	200' (60 m)

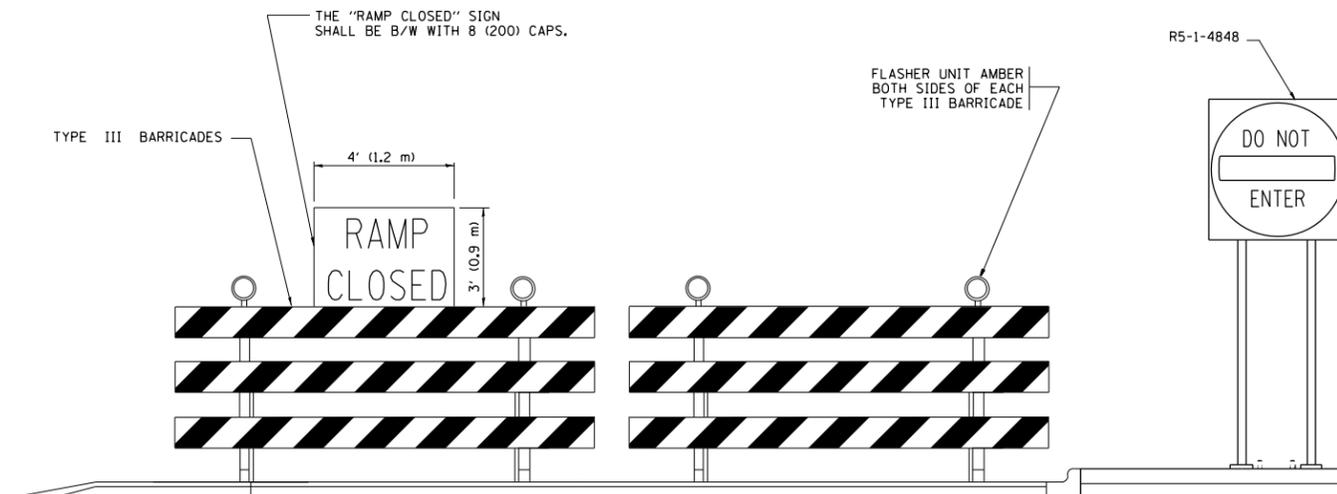
DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.



EXIT RAMP CLOSURE

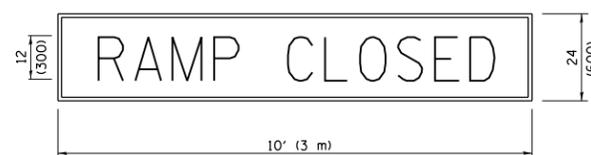
**SYMBOLS**

- ⊥ TYPE II BARRICADE OR DRUM
- ⊥ TYPE III BARRICADE WITH 2 FLASHING LIGHTS



DETAIL FOR REQUIRED BARRICADES & SIGNS

RAMP CLOSURE ADVANCE WARNING SIGN

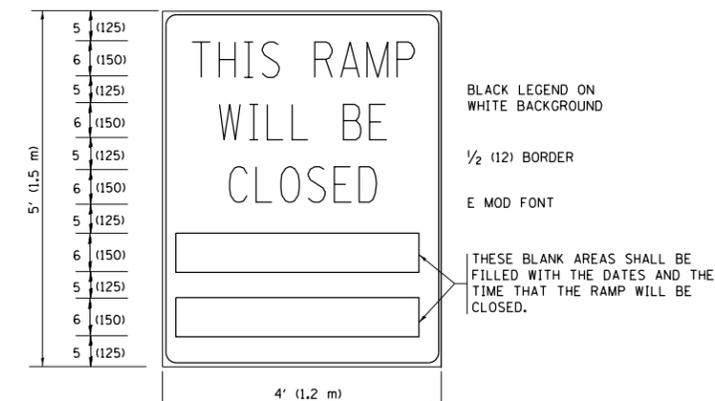


BLACK LEGEND ON ORANGE BACKGROUND MOUNTED DIAGONALLY E MOD FONT 1 (25) BORDER  
 THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.

THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

RAMP CLOSURE ADVANCE INFORMATION SIGN



BLACK LEGEND ON WHITE BACKGROUND

1/2 (12) BORDER

E MOD FONT

THESE BLANK AREAS SHALL BE FILLED WITH THE DATES AND THE TIME THAT THE RAMP WILL BE CLOSED.

**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 VERTICAL BARRICADES SHALL NOT BE USED FOR RAMP CLOSURES.
- ③ A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEDED BY A W20-7 FLAGGER WARNING SIGN.
- ④ ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
- 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 FOUR (4) DAYS IN LENGTH.
- ⑧ ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
- ⑨ ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

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

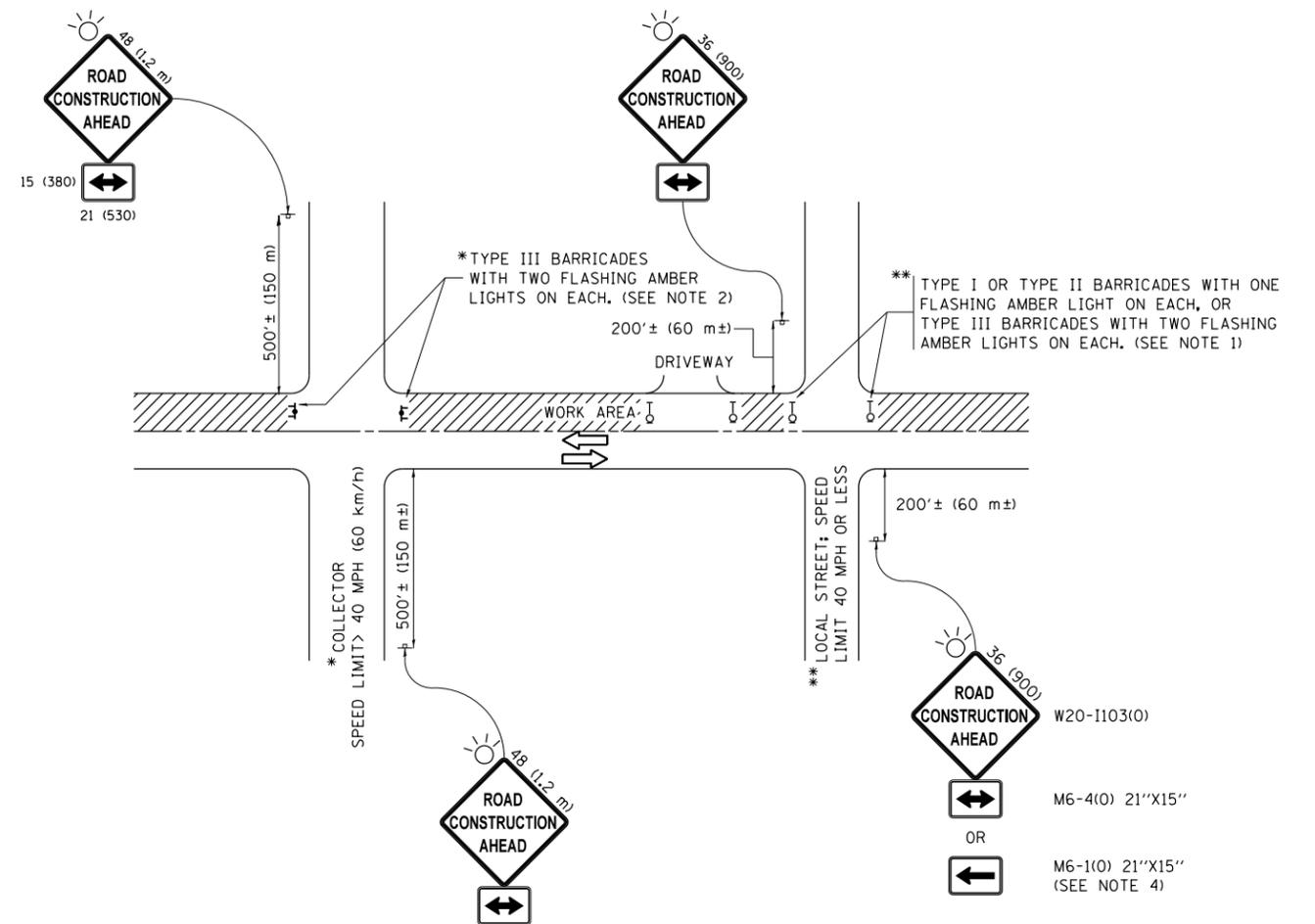
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Default	PLOT SCALE = 100.0000' / in.	DATE - 02-83	REVISED - M.D. 06-13
	PLOT DATE = 2/2/2018		REVISED - M.D. 01-18

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ENTRANCE AND EXIT RAMP  
CLOSURE DETAILS

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	42
TC-08		CONTRACT NO. 62F26		
ILLINOIS FED. AID PROJECT				



**NOTES:**

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 MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

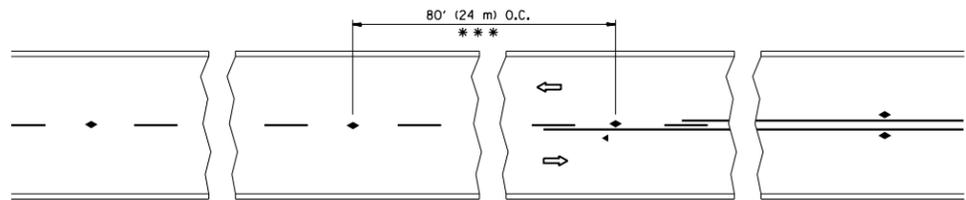
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	PLOT DATE = 2/2/2018	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

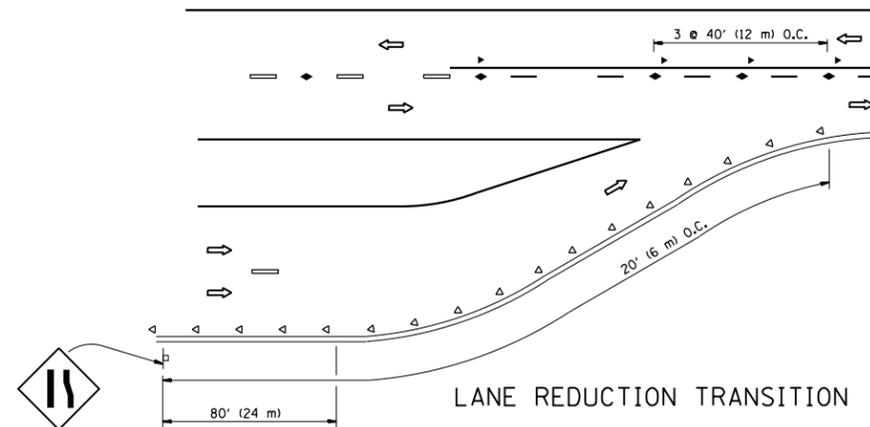
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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<b>TC-10</b>			<b>CONTRACT NO. 62F26</b>	
ILLINOIS FED. AID PROJECT				

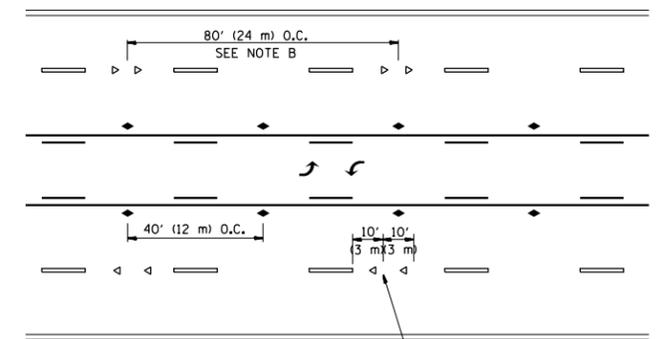


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

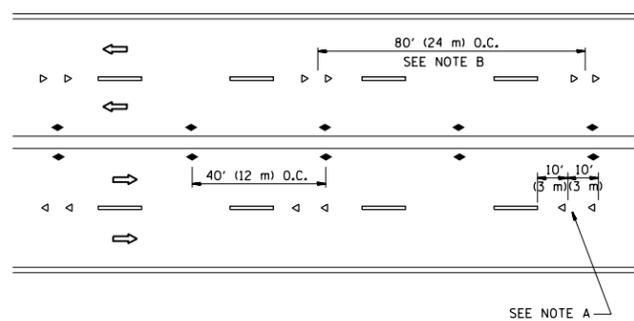
TWO-LANE/TWO-WAY



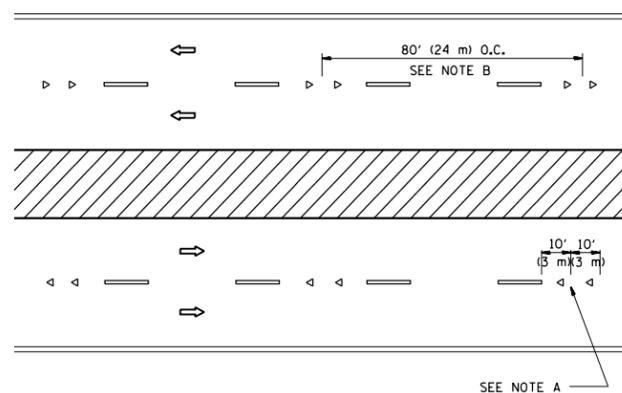
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

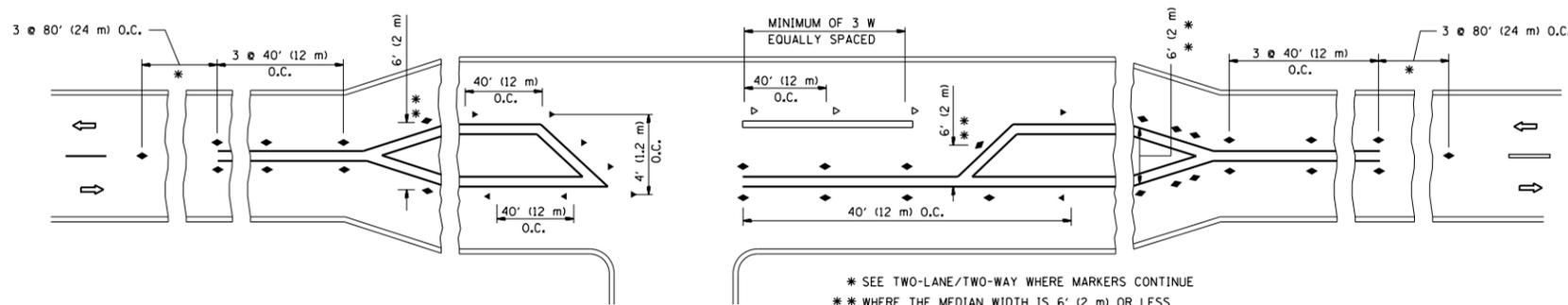
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

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



LEFT TURN

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

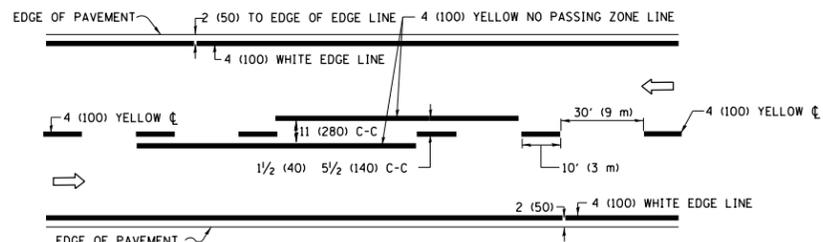
All dimensions are in inches (millimeters) unless otherwise shown.

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			REVISED - C. JUCIUS 09-09-09

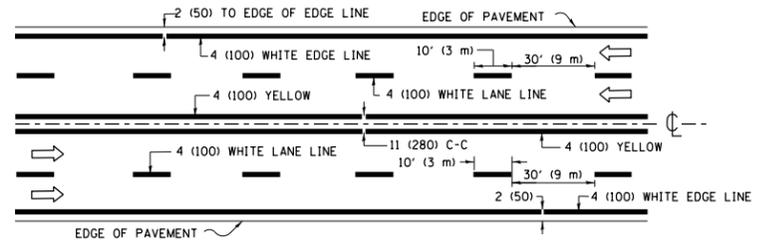
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS			
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

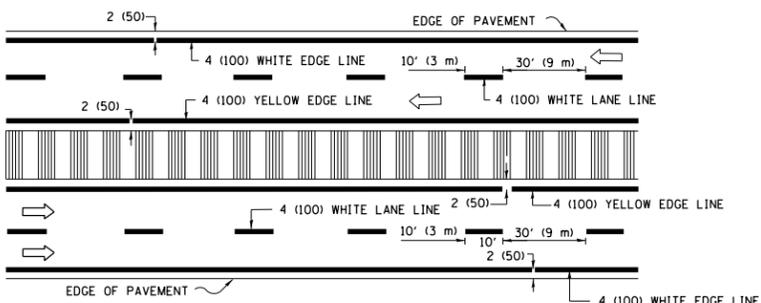
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	44
TC-11		CONTRACT NO. 62F26		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**2-LANE ROADWAY**

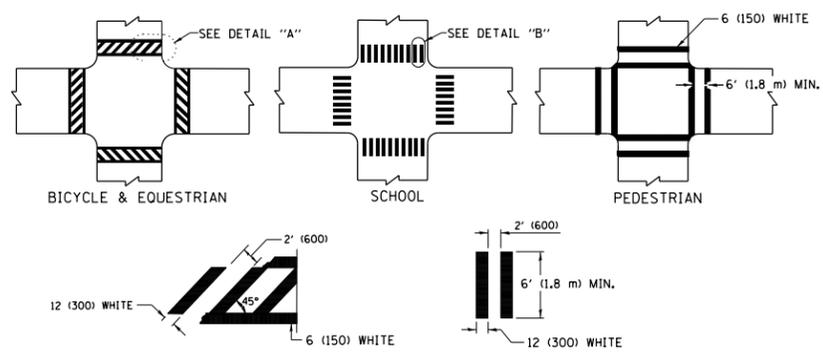


**MULTI-LANE UNDIVIDED**



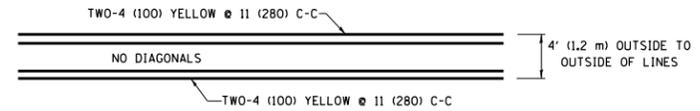
**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

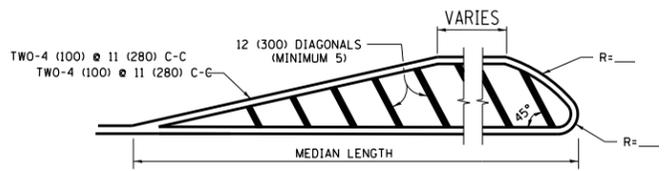


**TYPICAL CROSSWALK MARKING**

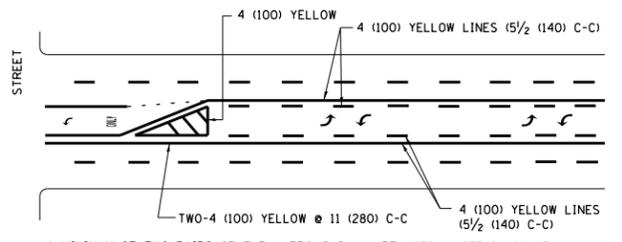
\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



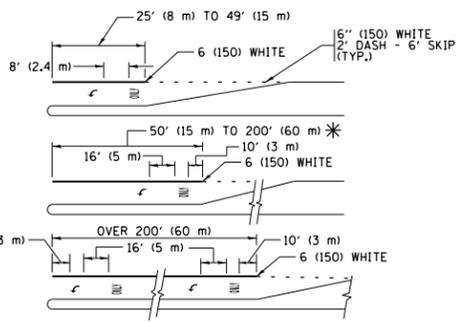
**4' (1.2 m) WIDE MEDIANS ONLY**



**MEDIANS OVER 4' (1.2 m) WIDE**



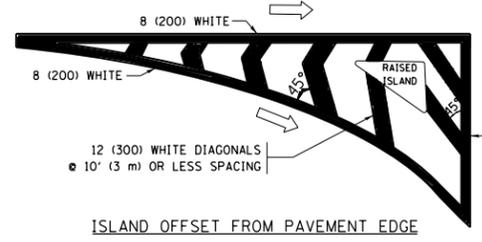
**MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING**



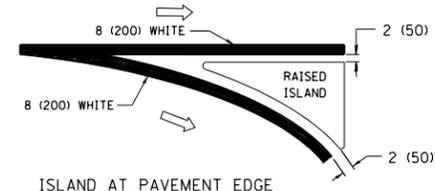
**TYPICAL LEFT (OR RIGHT) TURN LANE TYPICAL TURN LANE MARKING**

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

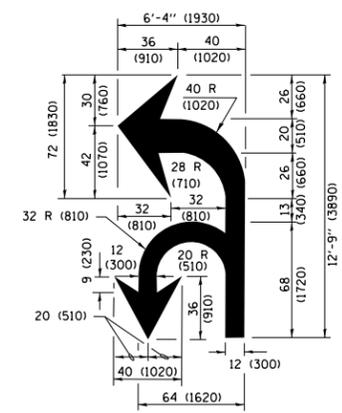
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".



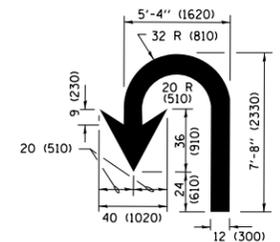
**ISLAND OFFSET FROM PAVEMENT EDGE**



**ISLAND AT PAVEMENT EDGE TYPICAL ISLAND MARKING**



**COMBINATION LEFT AND U-TURN**



**U-TURN**

**LANE REDUCTION TRANSITION**

\* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE.
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (22.5 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

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

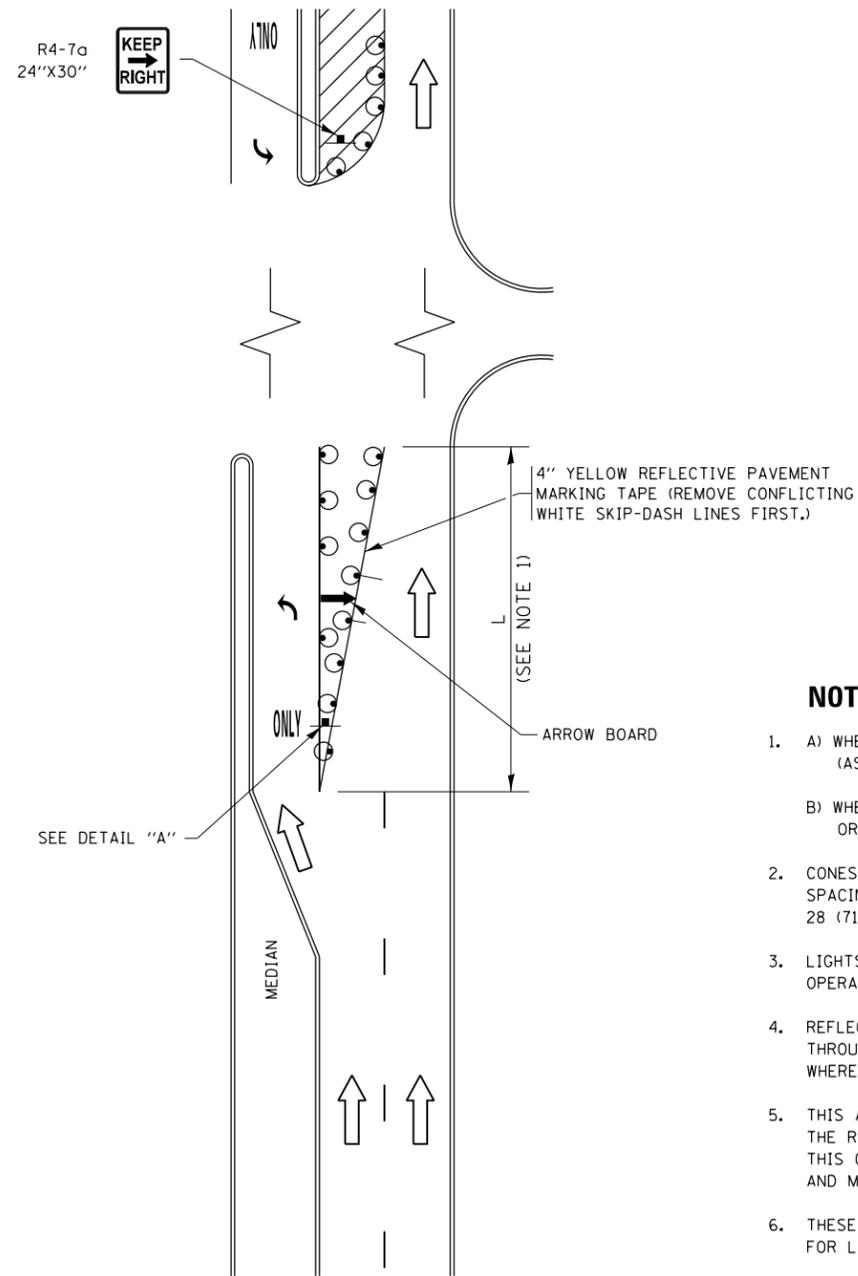
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pw\1\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\DI270\Drawings\Design\DistStd.dgn		CHECKED -	REVISED - C. JUCIUS 07-01-13
Default	PLOT SCALE = 100.0000' / in.	DATE - 03-19-90	REVISED - C. JUCIUS 12-21-15
	PLOT DATE = 2/2/2018		REVISED - C. JUCIUS 04-12-16

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

<b>DISTRICT ONE TYPICAL PAVEMENT MARKINGS</b>			
SCALE: NONE	SHEET 1	OF 1 SHEETS	STA. TO STA.

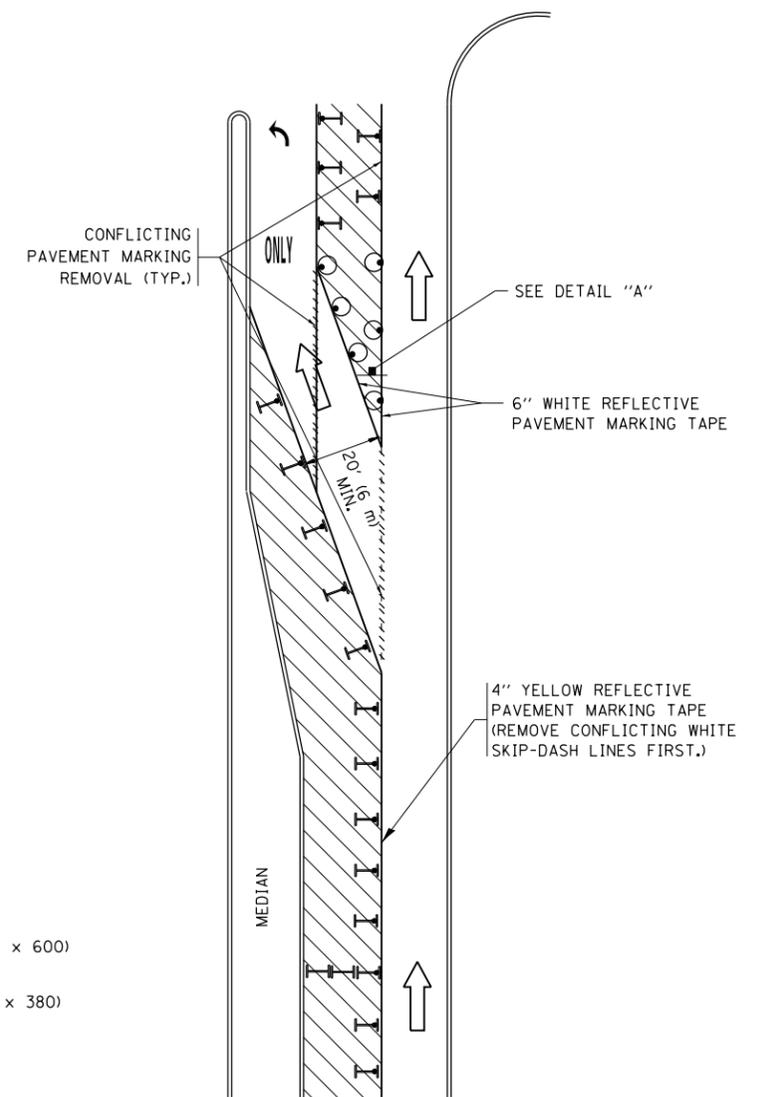
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	45
<b>TC-13</b>		<b>CONTRACT NO. 62F26</b>		
ILLINOIS FED. AID PROJECT				

# TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

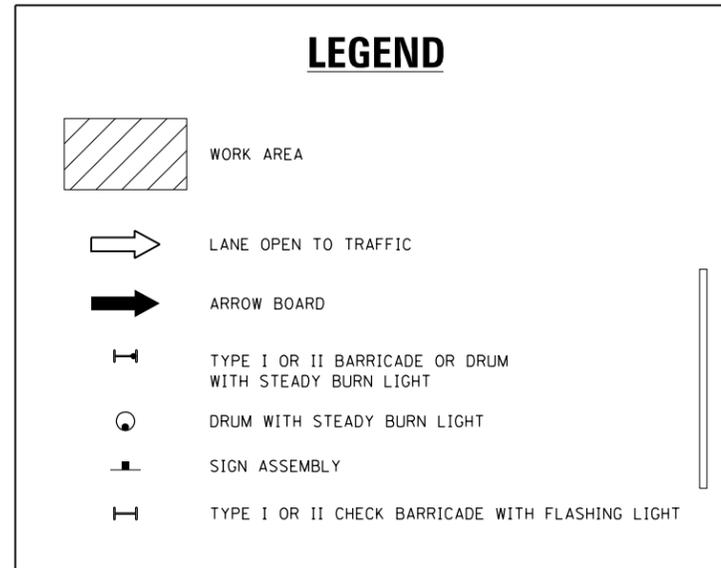


**FIGURE 1**

# TURN BAY ENTRANCE WITHIN A LANE CLOSURE

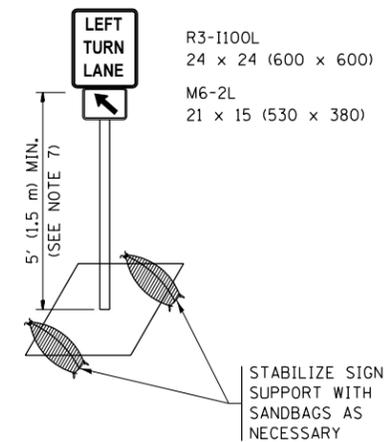


**FIGURE 2**



### NOTES:

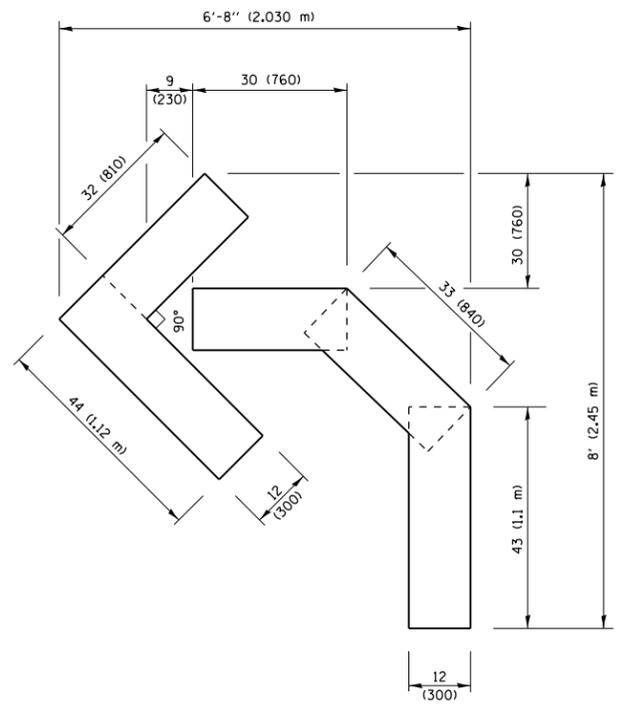
1. A) WHEN "L" IS  $\leq$  THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.  
B) WHEN "L" IS  $>$  THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-I100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



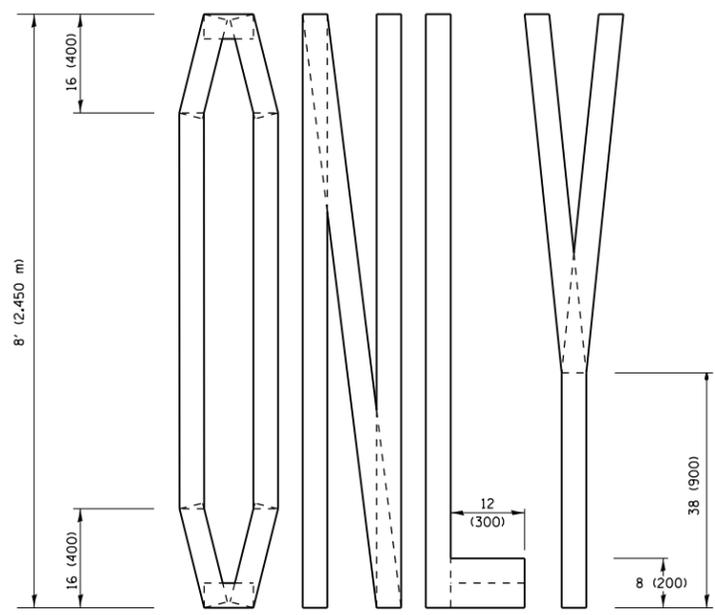
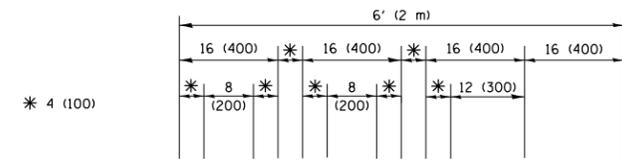
**DETAIL A**

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

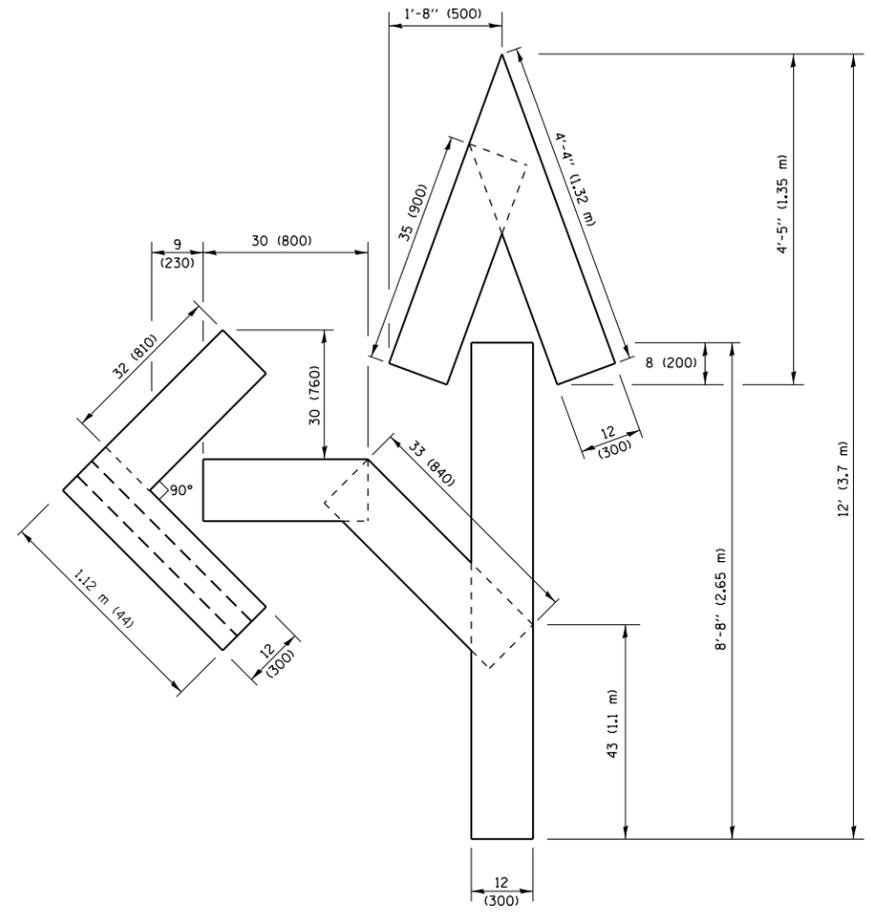
FILE NAME =	USER NAME = guillaumejp	REVISED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)</b>			F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default		REVISED - A. HOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13					541	X-R-RS-2	LAKE	50	46
	PLOT SCALE = 100.0000' / in.	REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16		<b>TC-14</b>			<b>CONTRACT NO. 62F26</b>				
	PLOT DATE = 2/2/2018	REVISED - T. RAMMACHER 01-06-00	REVISED -		SCALE: NONE	SHEET 1	OF 1 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		



**QUANTITY**  
 4 (100) LINE = 45.5 ft. (13.9 m)  
 15.2 sq. ft. (1.41 sq. m)

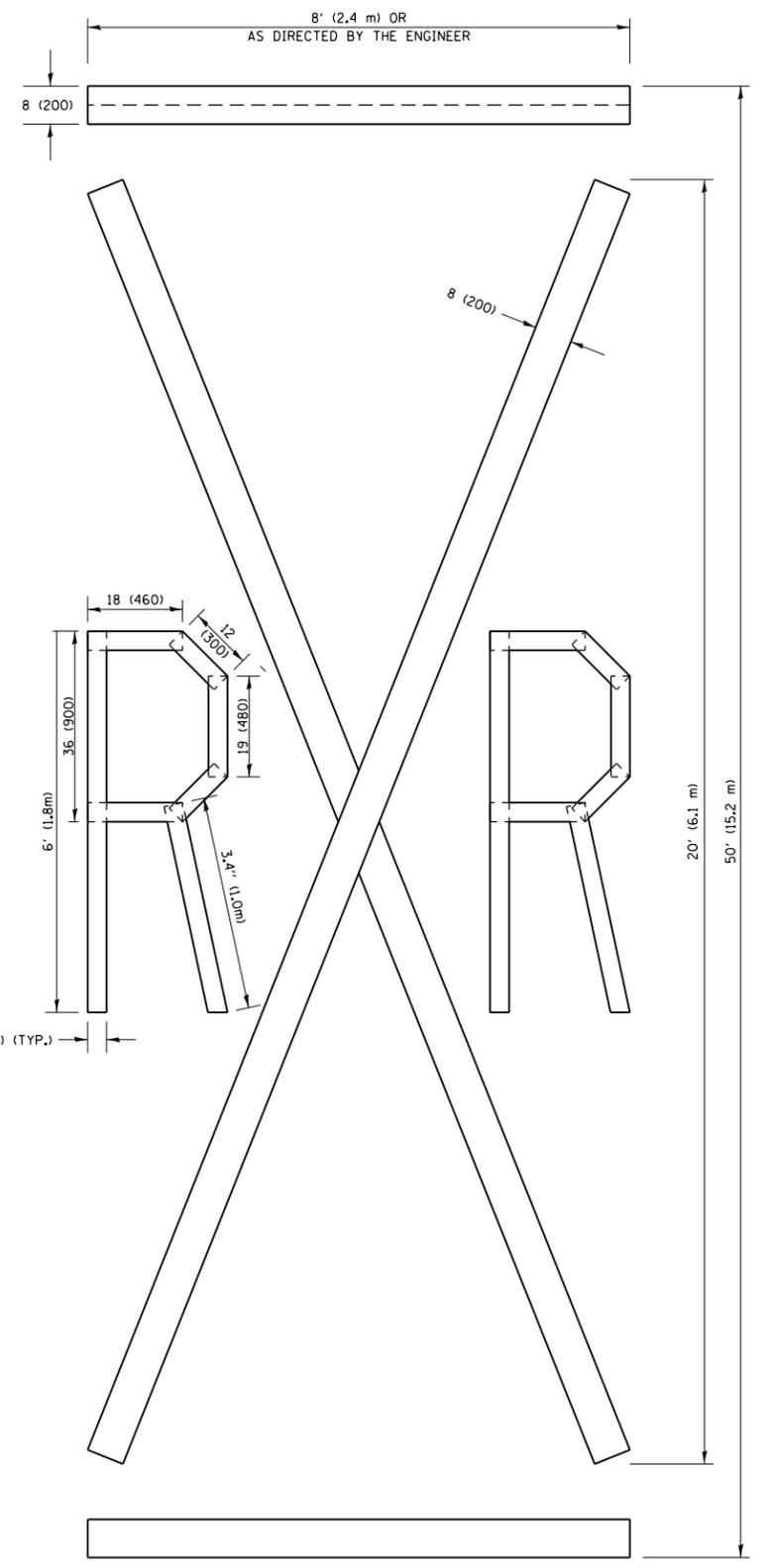


**QUANTITY**  
 4 (100) LINE = 64.1 ft. (19.5 m)  
 21.4 sq. ft. (1.99 sq. m)



**QUANTITY**  
 4 (100) LINE = 82.5 ft. (25.1 m)  
 27.5 sq. ft. (2.53 sq. m)

**NOTE:**  
 ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



**QUANTITY**  
 4 (100) LINE = 225.9 ft. (68.9 m)  
 75.3 sq. ft. (6.99 sq. m)

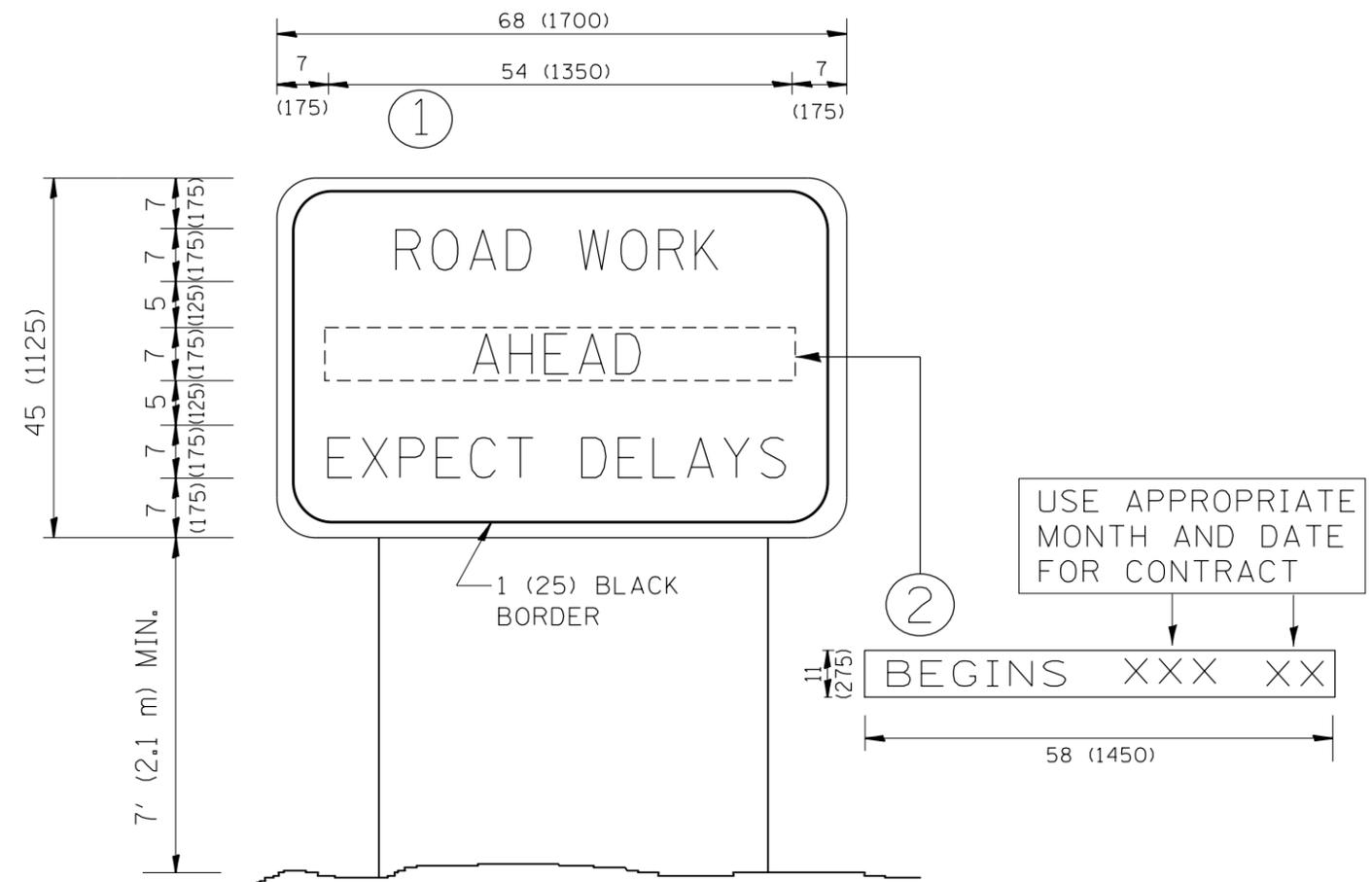
All dimensions are in inches (millimeters) unless otherwise shown.

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		DATE -	REVISED -E. GOMEZ 08-28-00
			REVISED -A. SCHUETZE 09-15-16

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	47
<b>TC-16</b>		<b>CONTRACT NO. 62F26</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**NOTES:**

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

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

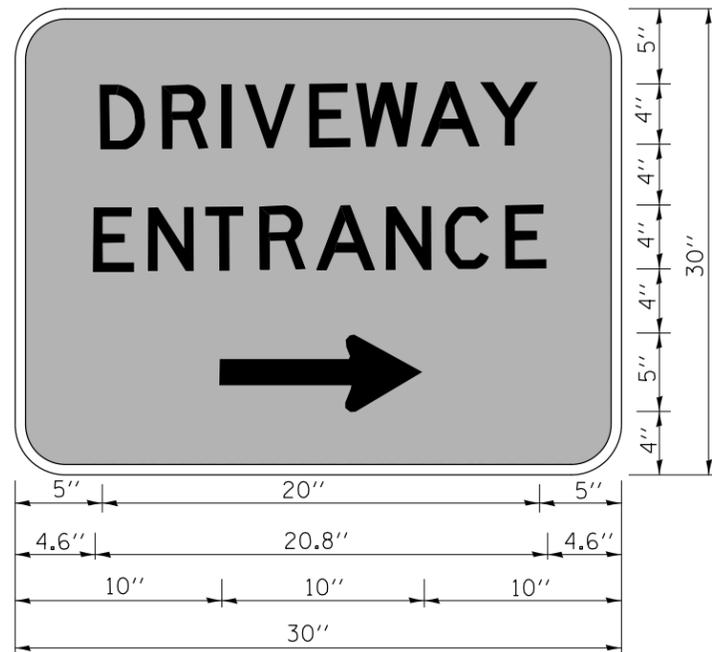
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		DATE -	REVISED - T. RAMMACHER 02-02-99
			REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	48
TC-22		CONTRACT NO. 62F26		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED  
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

**NOTES:**

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE  
 PLACED BACK-TO-BACK; ONE WITH A RIGHT HAND ARROW (SHOWN)  
 SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY  
 AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE  
 FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME =	USER NAME = guillaumejp	DESIGNED -	REVISED - C. JUCIUS 02-15-07
p:\11\084EBIDINTEG.illinois.gov\PWIDOT\Documents\DOT Offices\District 1\Projects\DI270\Drawings\Design\DistStd.dgn			REVISED -
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/2/2018	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

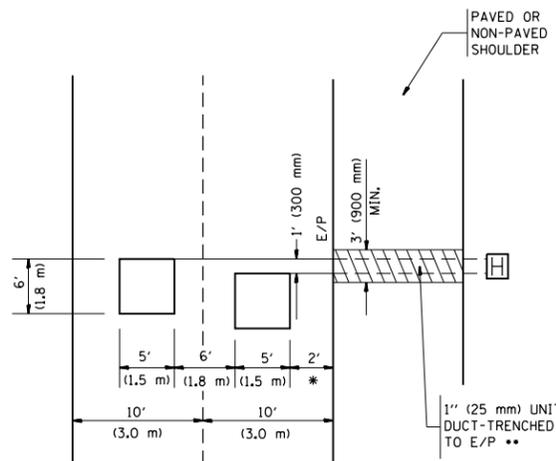
**DRIVEWAY ENTRANCE SIGNING**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	49
<b>TC-26</b>			<b>CONTRACT NO. 62F26</b>	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LOOPS NEXT TO SHOULDERS

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



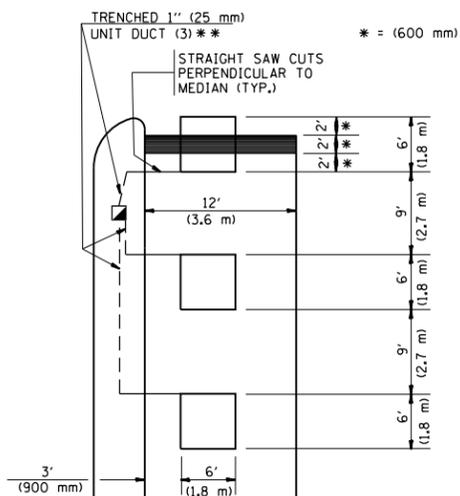
\* = (600 mm)

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

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

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

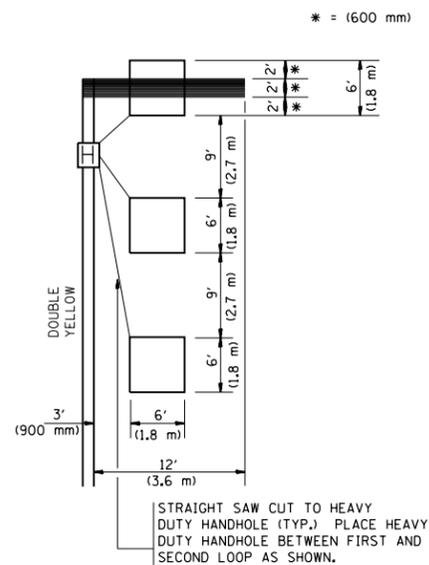


\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

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

(PROTECTED / PERMITTED LEFT TURN PHASING)



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.

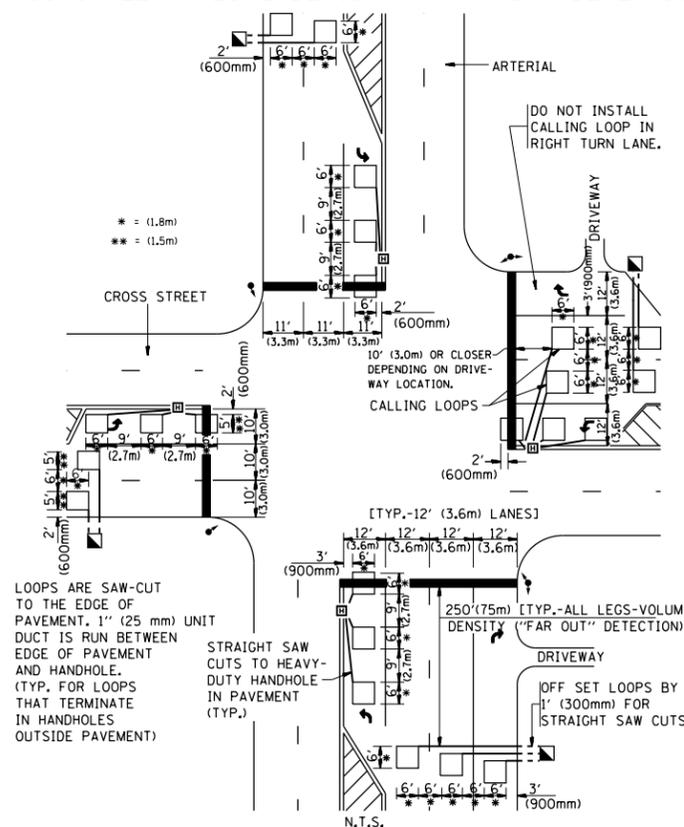
"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 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

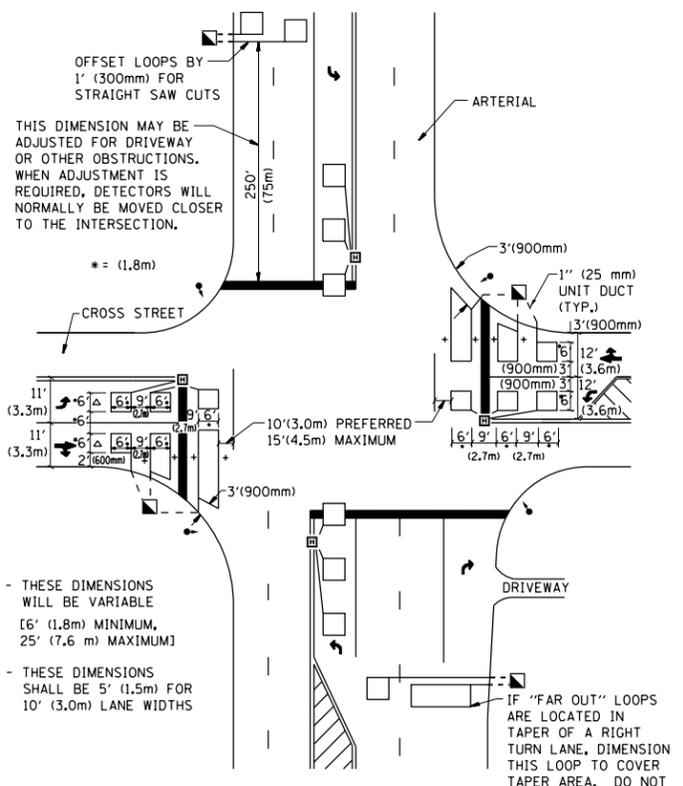
THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

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.

FILE NAME =	USER NAME = guillaumejp	DESIGNED -	REVISED -
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PLOT SCALE = 100.0000' / in.		DATE -	REVISED -
PLOT DATE = 2/2/2018			

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION  
DETAILS FOR ROADWAY RESURFACING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	X-R-RS-2	LAKE	50	50
TS-07		CONTRACT NO. 62F26		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				