

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 535: IL 60
OVER DITCH (1.6 MI. WEST OF PETERSON ROAD)
SECTION 118T(14) "CULVERT REMOVAL"
LAKE COUNTY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
535	118T(14)	LAKE	16	1
		ILLINOIS	CONTRACT NO. 60Y01	

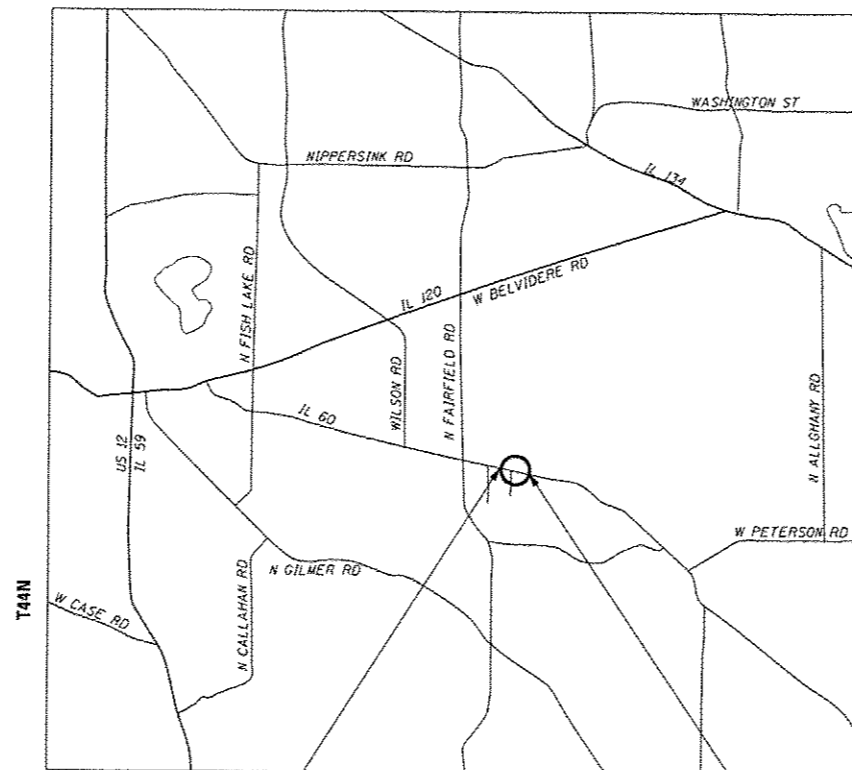
PROJECT LOCATED IN UNINCORPORATED LAKE COUNTY

FOR INDEX OF SHEETS, SEE SHEET NO. 2



C-91-284-14

R-10-E



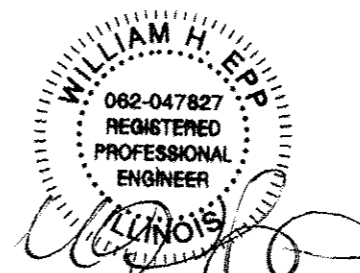
LOCATION MAP

SCALE: NTS

NET AND GROSS LENGTH = 155.7 FT. = 0.03 MILE

END IMPROVEMENT
STA 5+55.71

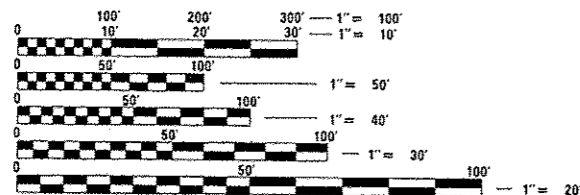
STRUCTURE NO. 049-0568 (EXISTING)



exp 11/30/15

BEGIN IMPROVEMENT
STA 4+00

DESIGN DESIGNATION
MINOR ARTERIAL (URBAN)
ADT 21,200 (2013)
POSTED SPEED LIMIT 50 MPH



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

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

PROJECT ENGINEER: ROBERT BORO (847) 705-4237
PROJECT MANAGER: ISSAM RAYYAN (847)705-4178

CONTRACT NO. 60Y01

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED August 5, 2015

John F. [Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Oct 2, 2015
John D. Baranzelli, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

Oct 2, 2015
Omer Osman, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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STATE STANDARDS

<u>SHEET NO.</u>	<u>TITLE</u>
1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
3-4	SUMMARY OF QUANTITIES
5	TYPICAL SECTIONS
6	IL 60 PLAN AND PROFILE & PAVEMENT MARKING
7	DITCH LINE PLAN AND PROFILE
8	DETOUR PLAN
9	EROSION CONTROL PLAN
10-12	CROSS SECTIONS
13	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
14	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)
15	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
16	DETOUR SIGNING FOR CLOSING STATE HIGHWAYS (TC-21) HIGHWAY STANDARDS

<u>SHEET NO.</u>	<u>TITLE</u>
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
442201-03	CLASS C AND CLASS D PATCHES
630001-10	STEEL PLATE BEAM GUARDRAIL
630101-09	GUARDRAIL MOUNTED ON EXISTING CULVERT
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701011-04	OFF-RD OPERATIONS, MULTILANE 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701301-04	LANE CLOSURE, 2L, 2W SHORT TIME OPERATIONS
701311-03	DAY ONLY MOVING OPERATIONS LANE CLOSURE 2L, 2W
701901-04	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
729001-01	APPLICATION OF TYPES A & B METAL POSTS (FOR SIGN & MARKERS)

GENERAL NOTES

DIMENSIONS ARE IN ENGLISH UNITS UNLESS OTHERWISE NOTED.

ANY REFERENCE TO STANDARDS IN THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE DEPARTMENT LISTED IN THE PLANS WITH THE LATEST NUMBERS.

DURING CONSTRUCTION OPERATIONS, LOOSE MATERIAL DEPOSITS THAT OBSTRUCT THE FLOW OF WATER IN DRAINING THE AREA SHALL BE REMOVED BEFORE THE END OF EACH WORK DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES (NEW AND EXISTING) SHALL BE FREE FROM ALL DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING PROPERTIES.

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

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

ALL PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY REMOVAL AND PATCHING OPERATIONS SHALL BE REPLACED AND PAID FOR IN KIND.

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

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

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

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

THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY, THE AREA TRAFFIC FIELD ENGINEER, AT (847)715-8419 A MINIMUM OF TWO (2) WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF ROUND LAKE IN LAKE COUNTY.

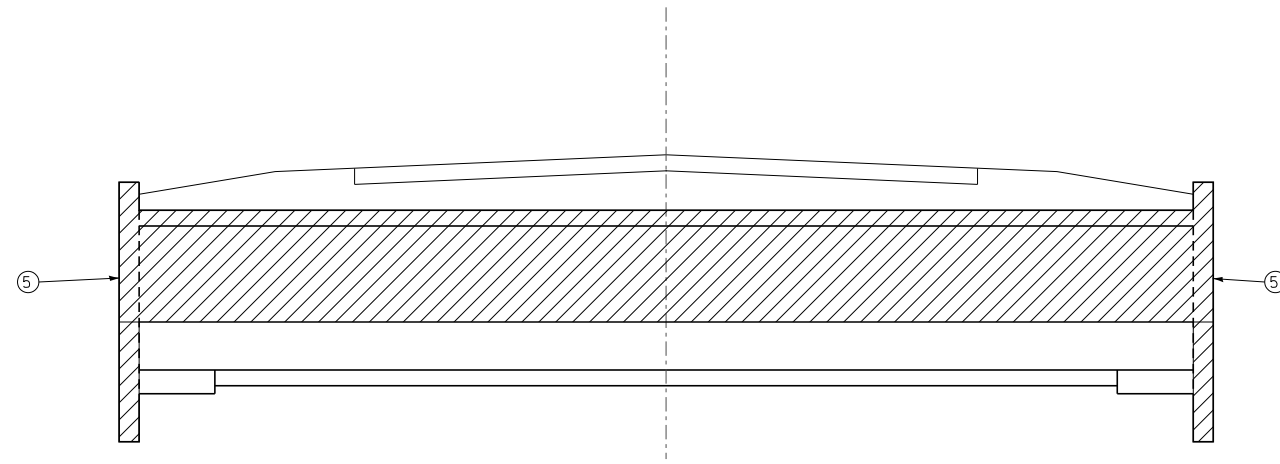
ALL WORK MUST BE COMPLETED WITHIN 20 WORKING DAYS.

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	100% STATE
				ROADWAY 0040 URBAN
20200100	EARTH EXCAVATION	CU YD	88	88
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	50	50
20400800	FURNISHED EXCAVATION	CU YD	284	284
21101815	COMPOST FURNISH AND PLACE, 4"	SQ YD	800	800
25000310	SEEDING, CLASS 4	ACRE	0.2	0.2
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	18	18
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	18	18
25100630	EROSION CONTROL BLANKET	SQ YD	800	800
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	75	75
28000305	TEMPORARY DITCH CHECKS	FOOT	100	100
28000400	PERIMETER EROSION BARRIER	FOOT	500	500
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	90	90
44201747	CLASS D PATCHES, TYPE IV, 8 INCH	SQ YD	74	74

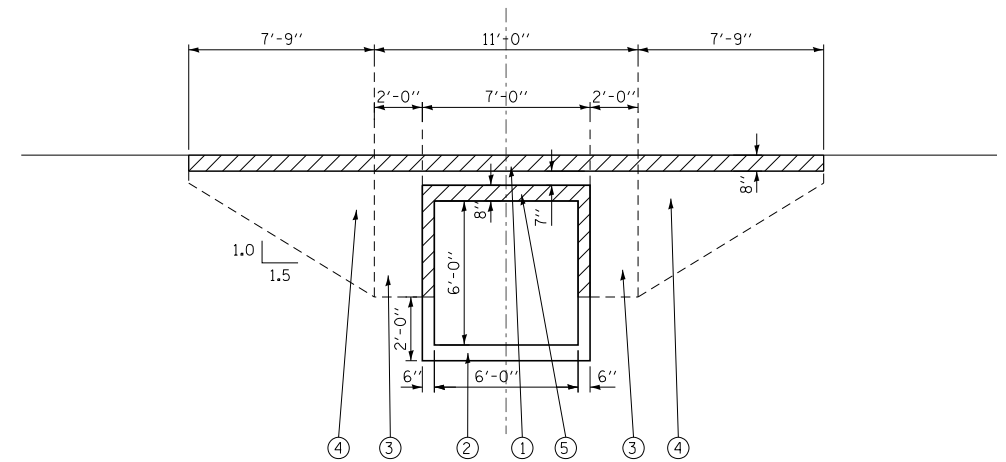
13 • SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	100% STATE
				ROADWAY 0040 URBAN
44000100	PAVEMENT REMOVAL	SQ YD	90	90
50102400	CONCRETE REMOVAL	CU YD	9.34	9.34
50200100	STRUCTURE EXCAVATION	CU YD	74	74
63200310	GUARDRAIL REMOVAL	FOOT	190	190
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3
67100100	MOBILIZATION	L SUM	1	1
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	200	200
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	200	200
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	10	10
* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2	2
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1
X0800003	COARSE AGGREGATE BACKFILL (SPECIAL)	CU YD	350	350
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1

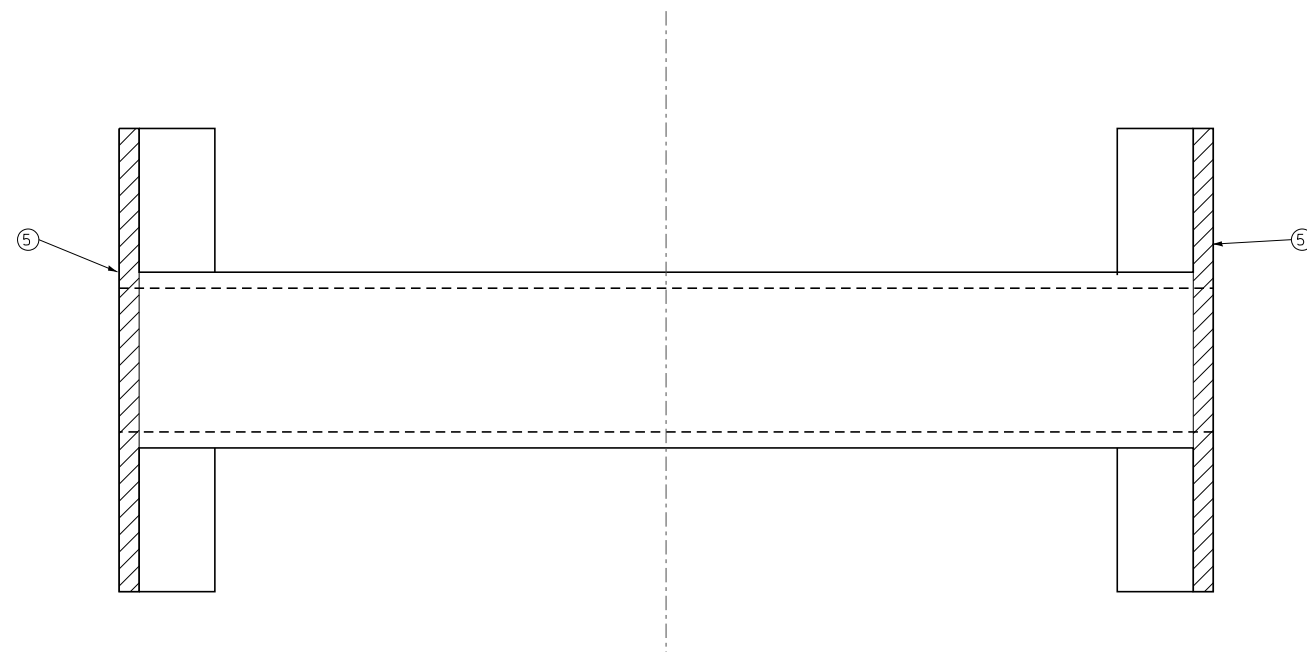
13 • SPECIALTY ITEM



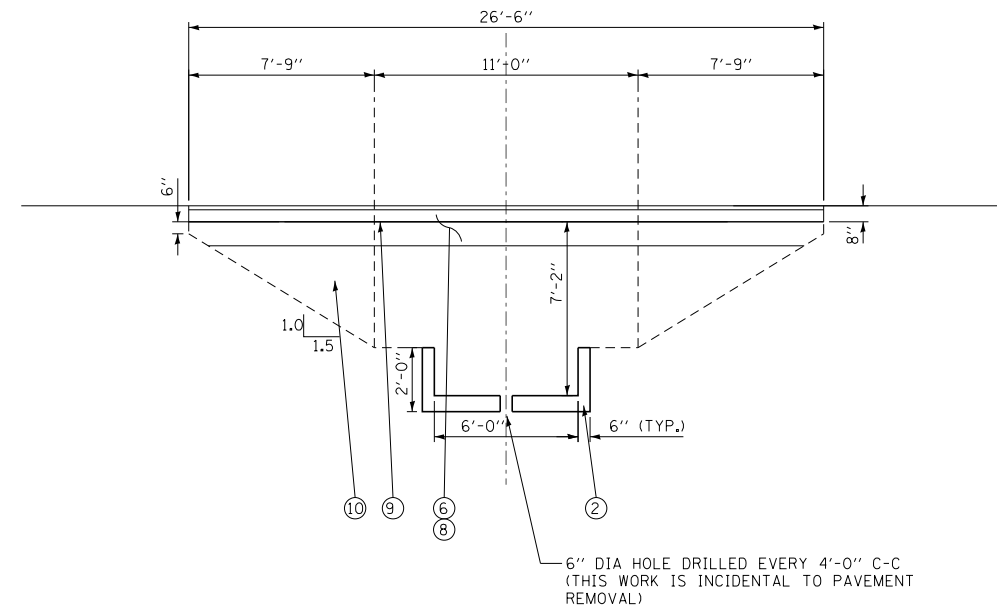
EXISTING CULVERT SECTION LOOKING EAST
NO SCALE



EXISTING BOX CULVERT SECTION LOOKING NORTH
NO SCALE



PLAN VIEW OF EXISTING CULVERT
NO SCALE



PROPOSED BOX CULVERT SECTION LOOKING NORTH
NO SCALE

HOT-MIX ASPHALT MIXTURE REQUIREMENTS			
MIXTURE TYPE	DESIGN AIR VOIDS	THICKNESS	OMP
PAVEMENT CLASS D PATCHES, TYPE IV (HMA BINDER L-19mm)	4% @ 70 GYR	8"	OC/OA
OMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE			

NOTES:

THE UNIT WEIGHT USED TO CALCULATE AL HMA SURFACE COURSE MIXTURES IS 112 LBS/SQ-YD/IN.

FOR "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-28" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

"QUALITY MANAGEMENT PROGRAM (OMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE."

LEGEND

- ① PAVEMENT REMOVAL
- ② EXISTING BOX CULVERT
- ③ STRUCTURE EXCAVATION
- ④ EARTH EXCAVATION
- ⑤ CONCRETE REMOVAL
- ⑥ CLASS D PATCHES, TYPE IV, 8"
- ⑦ NOT USED
- ⑧ AGGREGATE SUBGRADE IMPROVEMENT 12"
- ⑨ BITUMINOUS MATERIALS (PRIME COAT)
- ⑩ COARSE AGGREGATE BACKFILL (SPECIAL)

EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION (CU.YD.)	UNSUITABLE MATERIAL (CU.YD.)	EXCAVATION USED FOR EMBANKMENT 15% SHRINKAGE (CU.YD.)	COARSE AGGREGATE BACKFILL (SPECIAL) (CU.YD.)	EMBANKMENT (CU.YD.)	EARTHWORK BALANCE WASTE (+) SHORTAGE (-) (CU.YD.)
STA. 4+00 TO 5+55.7	88	50	75	50	284	-209



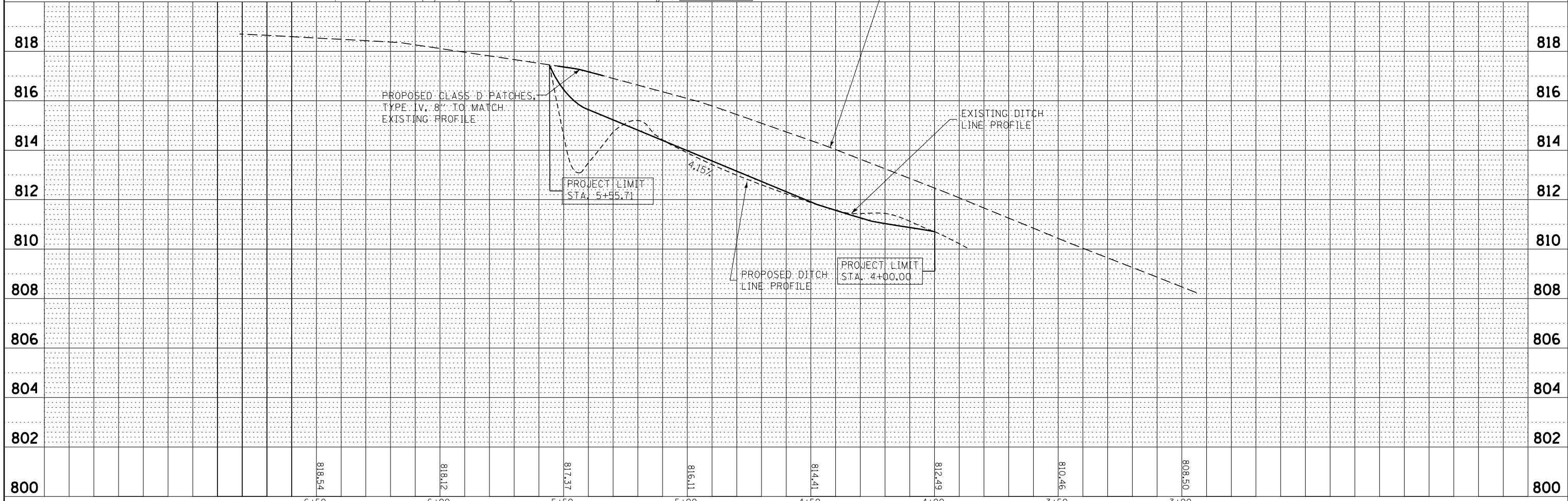
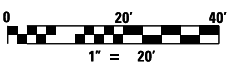
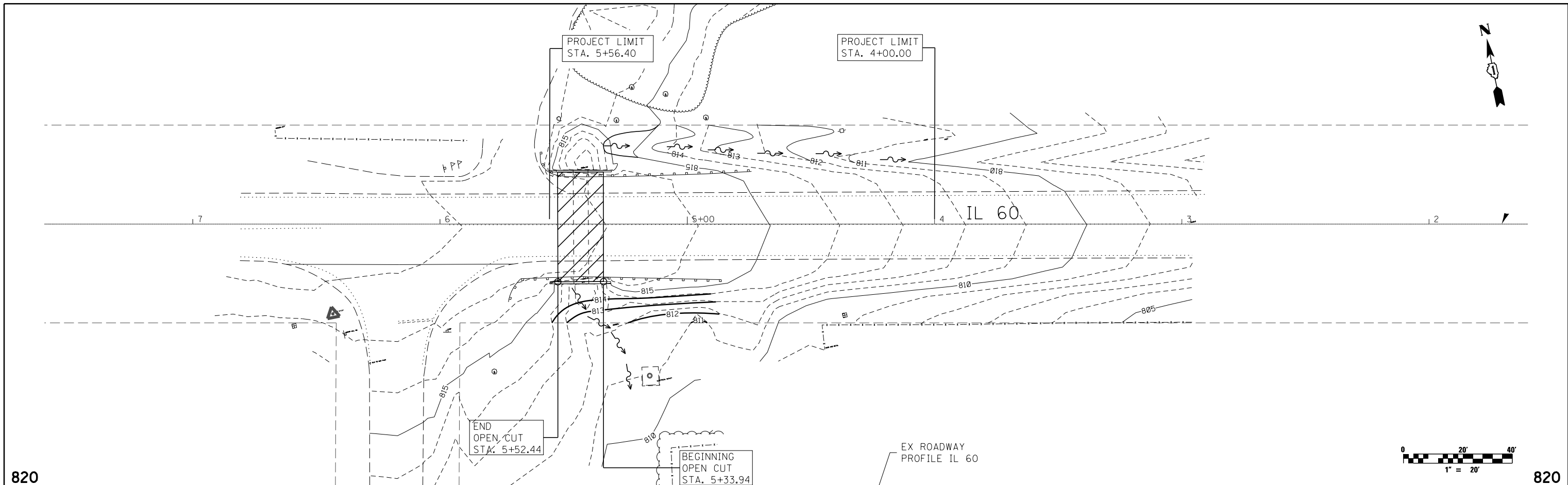
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	DRAWN - ST	REVISED -
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PLOT DATE = 7/31/2015	DATE - 7/31/2015	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTIONS IL 60 CULVERT REMOVAL		F.A.P. RTE. 535	SECTION 118T(14)	COUNTY LAKE	TOTAL SHEETS 16	SHEET NO. 5
SCALE:	SHEET OF SHEETS	STA. TO STA.	CONTRACT NO. 60Y01			
ILLINOIS FED. AID PROJECT						

PLAN	SURVEYED	DATE
	PLOTTED	BY
	NOTE BOOK	
	NO.	
	CHECKED	
	FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	NOTE BOOK	
	NO.	
	CHECKED	
	STRUCTURE	
	NOTATIS	
	CHFD	



	USER NAME = ksnider	DESIGNED - MJY	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DITCH LINE PLAN AND PROFILE IL 60 CULVERT REMOVAL	F.A.P. RTE. 535	SECTION 118T(14)	COUNTY LAKE	TOTAL SHEETS 16	SHEET NO. 7
	PLOT SCALE = *SCALE*	CHECKED - MJY	REVISED -			SCALE:	SHEET OF SHEETS	STA. TO STA.	CONTRACT NO. 60Y01	
	PLOT DATE = 8/7/2015	DATE - 7/31/2015	REVISED -			ILLINOIS FED. AID PROJECT				



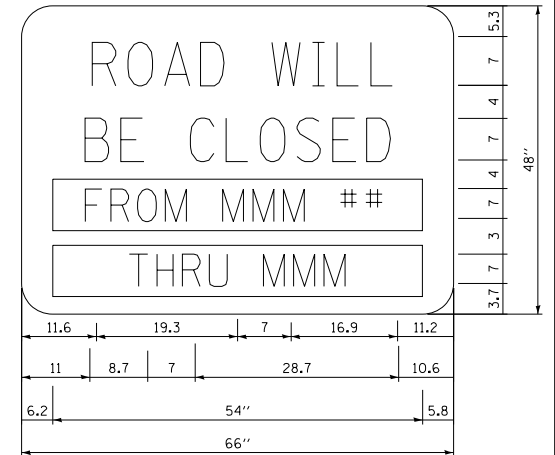
①		R11-2-48	⑥A	DETOUR	M4-8-2412
				ILLINOIS 60	M1-50-2424
				→	M6-1R
②		W20-3-48	⑦	DETOUR	M4-8-2412
				ILLINOIS 60	M1-50-2424
				↶	M5-1-2115
③		W20-2-48	⑦A	DETOUR	M4-8-2412
				ILLINOIS 60	M1-50-2424
				←	M6-1L-2115
④		I211-4-6030	⑧	ROAD CLOSED	R11-2-4830
⑤	DETOUR	M4-8-2412	⑨	NOT USED	
	ILLINOIS 60	M1-50-2424	⑩	END DETOUR	M4-8A
	↑	M6-3	⑪	NOT USED	
⑥	DETOUR	M4-8-2412	⑫	EAST	M3-2-2412
	ILLINOIS 60	M1-50-2424	⑬	WEST	M3-4-2412
	↷	M5-1R-2115	⑭	← DETOUR	M4-10L-4818
			⑮	DETOUR →	M4-10R-4818

LEGEND

- DETOUR ROUTE
- CONSTRUCTION ZONE
- TYPE III BARRICADE WITH TWO FLASHING LIGHTS

NOTES

1. PLACEMENT AND SPACING OF SIGNS AND BARRICADES SHALL BE IN ACCORDANCE WITH TC-21 (DETOUR SIGNING FOR CLOSING STATE HIGHWAYS)
2. THE COST OF SUPPLYING, ERECTING AND MAINTAINING BARRICADES, WARNING LIGHTS AND ALL SIGNS, INCLUDING SIGN PANEL OVERLAYS SHALL BE INCLUDED IN THE CONTRACT COST OF TRAFFIC CONTROL AND PROTECTION (SPECIAL)
3. ACCESS TO ALL PRIVATE ENTRANCES SHALL BE MAINTAINED.



USER NAME = ksnider	DESIGNED - MJY	REVISED -
	DRAWN - ST	REVISED -
PLOT SCALE = *SCALE*	CHECKED - MJY	REVISED -
PLOT DATE = 7/31/2015	DATE - 7/31/2015	REVISED -

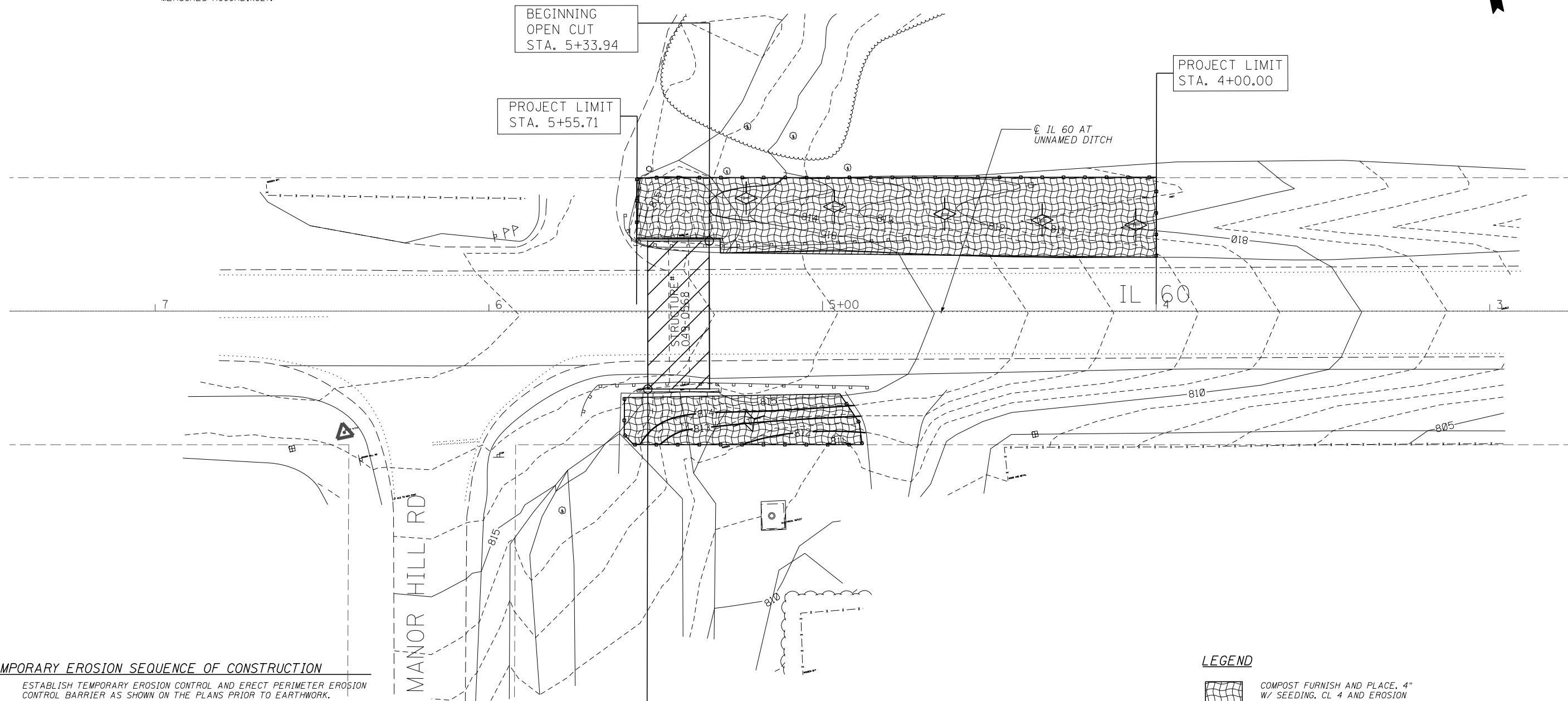
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETOUR PLAN ILL 60 CULVERT REMOVAL		
SCALE: NONE	SHEET NO. OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
535	118T(14)	LAKE	16	8
D-91-284-14		CONTRACT NO. 60Y01		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

TEMPORARY EROSION CONTROL NOTES




1. ALL CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER PERMIT.
2. THE CONTRACTOR SHALL INSTALL PERIMETER EROSION BARRIER PRIOR TO STRIPPING OF VEGETATION.
3. TEMPORARY DITCH CHECKS SHALL BE INSTALLED IMMEDIATELY AFTER GRADING IS COMPLETED. DITCH CHECKS ARE BASED ON ONE (1) INSTALLATION AND THREE (3) REPLACEMENTS OVER THE DURATION OF THE CONTRACT. THESE ITEMS WILL BE PAID FOR AS EACH REGARDLESS OF THE TYPE OF CONFIGURATION USED.
4. RUNOFF FROM EXCAVATION AREAS SHALL LEAVE THE SITE THROUGH SEDIMENT CONTROL DEVICES. THE CONTRACTOR SHALL ADJUST HIS OPERATION AND IMPLEMENT EROSION CONTROL MEASURES ACCORDINGLY.
5. THE CONTRACTOR SHALL SURROUND ANY NECESSARY EARTH STOCKPILES WITH PERIMETER EROSION BARRIER.
6. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL DEVICES AT ALL TIMES. EROSION CONTROL DEVICES SHALL BE INSPECTED EVERY SEVEN CALENDAR DAYS OR WITHIN 24 HOURS AFTER A 13 MM (0.5 INCH) RAINFALL OR SNOWFALL.
7. THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS AS SOON AS PRACTICAL AFTER CONSTRUCTION ACTIVITIES IN THAT AREA HAVE BEEN CONCLUDED. AREAS THAT HAVE STEEP SLOPES OR WILL NOT RECEIVE PERMANENT LANDSCAPING SHALL BE TEMPORARILY SEEDED. ALL FLATTER AREAS OR AREAS WHERE NO FURTHER WORK IS TO OCCUR FOR ONE MONTH OR MORE SHALL BE SEEDED AND EXCELSTOR BLANKET WITHIN SEVEN (7) CALENDAR DAYS.



TEMPORARY EROSION SEQUENCE OF CONSTRUCTION

1. ESTABLISH TEMPORARY EROSION CONTROL AND ERECT PERIMETER EROSION CONTROL BARRIER AS SHOWN ON THE PLANS PRIOR TO EARTHWORK.
2. IMPLEMENT SEDIMENT AND EROSION CONTROL DEVICES FOR STOCKPILE AREAS AS REQUIRED.
3. CONSTRUCT CONSTRUCTION STAGING OF PROPOSED DRAINAGE FACILITIES AND INSTALL TEMPORARY DITCH CHECKS IMMEDIATELY AFTER DITCH GRADING IS COMPLETED.
4. INSTALL PERMANENT LANDSCAPING IN CONJUNCTION WITH CONSTRUCTION STAGING.
5. CLEAN DRAINAGE FACILITIES AND REMOVE TEMPORARY EROSION CONTROL DEVICES WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED.

LEGEND

-  COMPOST FURNISH AND PLACE, 4" W/ SEEDING, CL 4 AND EROSION CONTROL BLANKET
-  PERIMETER EROSION BARRIER
-  TEMPORARY DITCH CHECK (STD 280001-04)



USER NAME = ksnyder	DESIGNED - MJY	REVISED -
	DRAWN - ST	REVISED -
PLOT SCALE = *SCALE*	CHECKED - MJY	REVISED -
PLOT DATE = 7/31/2015	DATE - 7/31/2015	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EROSION CONTROL IL 60 CULVERT REMOVAL	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
535	118T(14)	LAKE	16	9
CONTRACT NO. 60Y01				
ILLINOIS FED. AID PROJECT				

ORIGINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
NO. _____	AREAS CHECKED _____		

FINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
NO. _____	AREAS CHECKED _____		



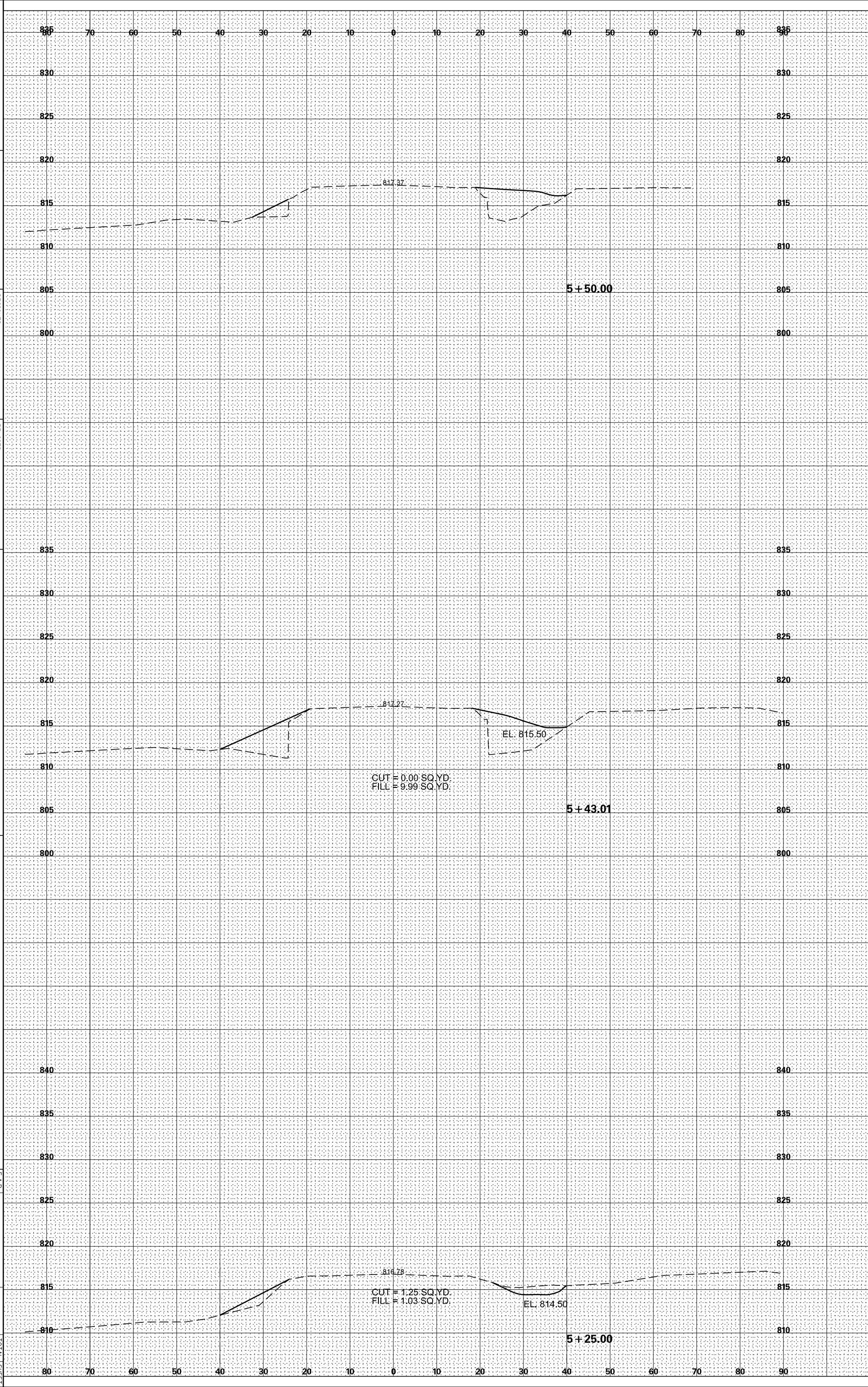
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 DRAWN = ST
 CHECKED = MJY
 DATE = 7/31/2015

DESIGNED = MJY
 DRAWN = ST
 CHECKED = MJY
 DATE = 7/31/2015

REVISOR
 REVISION
 DATE

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
 IL 60 CULVERT REMOVAL
 SHEET OF SHEETS STA. TO STA.
 F.A.P. R.T.E. 535
 SECTION 1181144
 COUNTY LAKE
 TOTAL SHEET SHEETS NO. 16
 CONTRACT NO. 60Y01
 ILLINOIS FED. AID PROJECT



ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

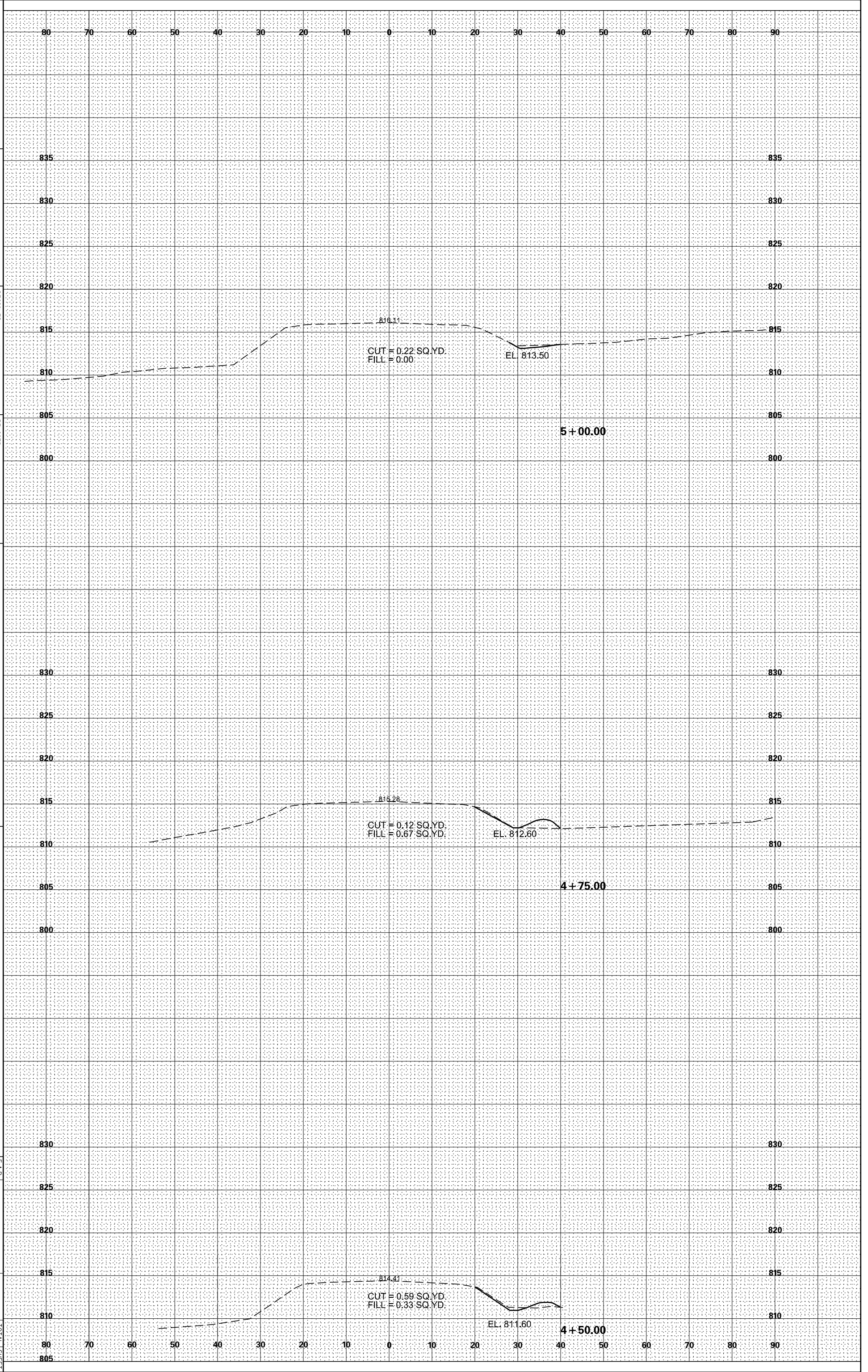


USER NAME: Kander
 DRAWN: ST
 CHECKED: MJY
 DATE: 7/31/2015
 REVISIONS:

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCALE: SHEET OF SHEETS STA. TO STA.

CROSS SECTIONS
 IL 60 CULVERT REMOVAL
 F.A.P. R.T.E. 535
 SECTION 11811(4)
 COUNTY LAKE
 TOTAL SHEET NO. 16
 SHEETS 11
 ILLINOIS FED. AID PROJECT CONTRACT NO. 60Y01



ORIGINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
NO. _____	AREAS CHECKED _____		

FINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
NO. _____	AREAS CHECKED _____		

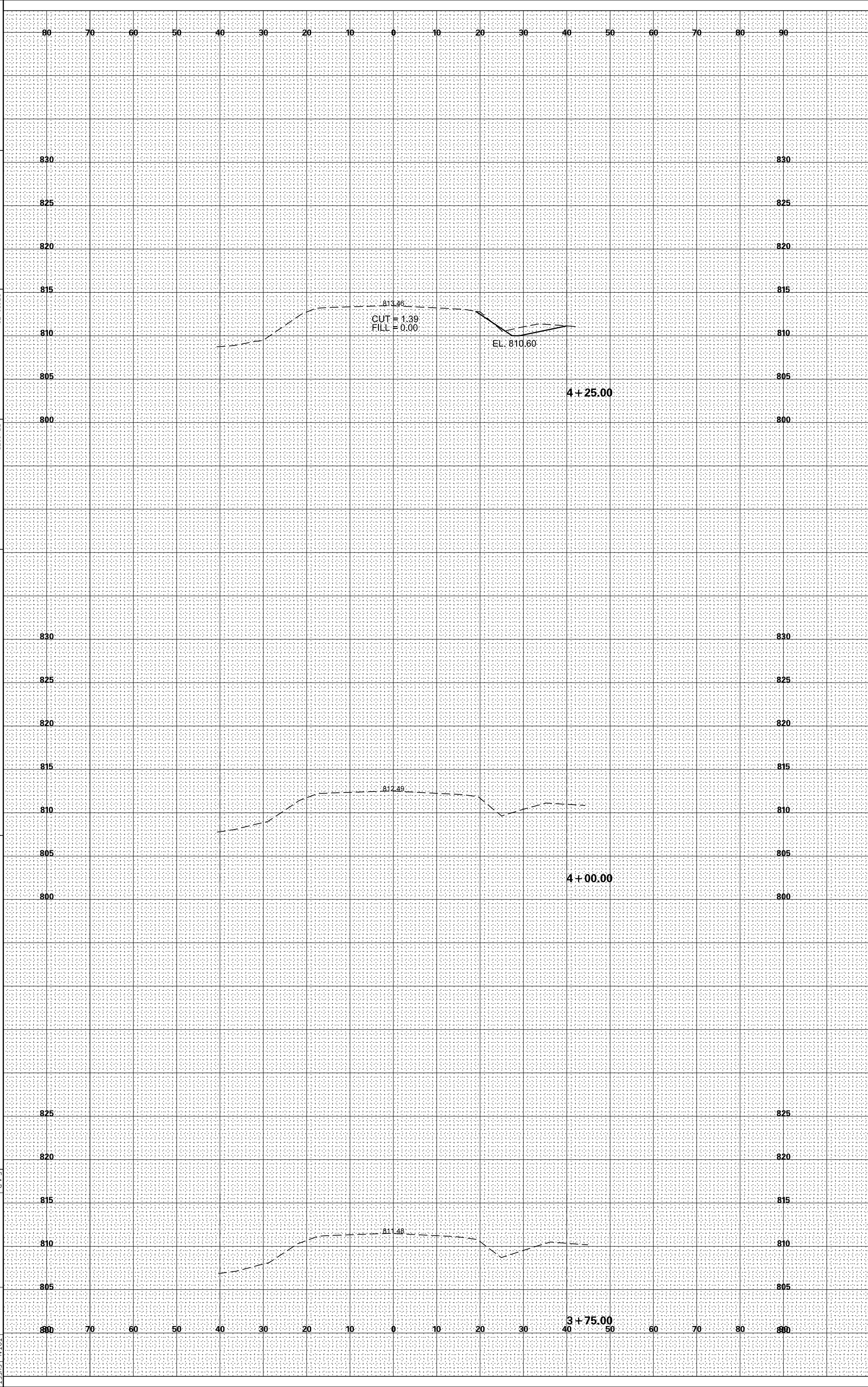


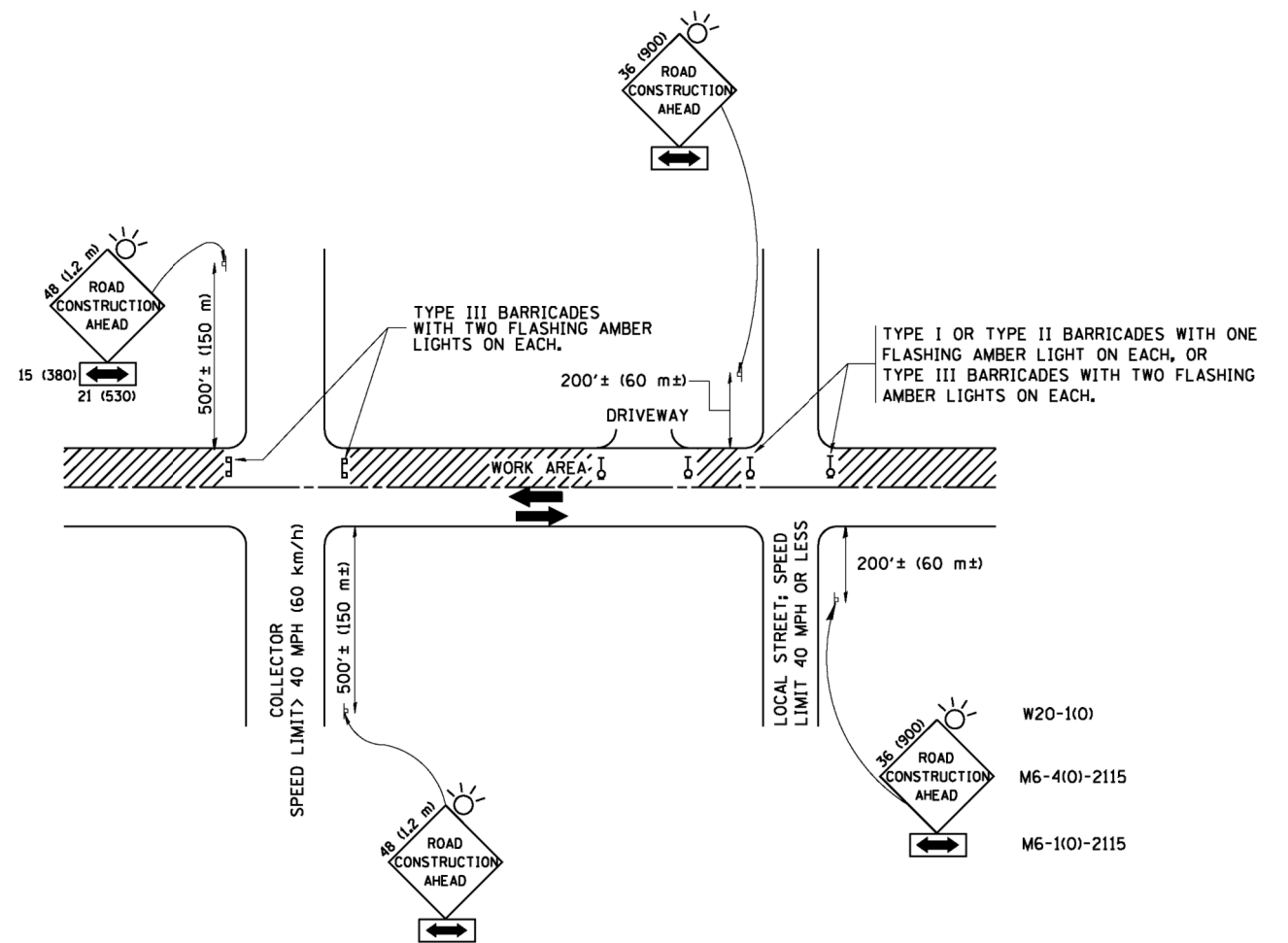
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PLT DATE - 7/31/2015	CHECKED - MJY	2
	DATE - 7/31/2015	3
		4
		5
		6
		7
		8
		9
		10

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
IL 60 CULVERT REMOVAL

F.A.P. R.T.E. 535	SECTION 1181140	COUNTY LAKE	TOTAL SHEET NO. 16
			SHEET NO. 12
			CONTRACT NO. 60Y01
			ILLINOIS FED. AID PROJECT





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

NOTES:

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

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

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

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

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

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

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



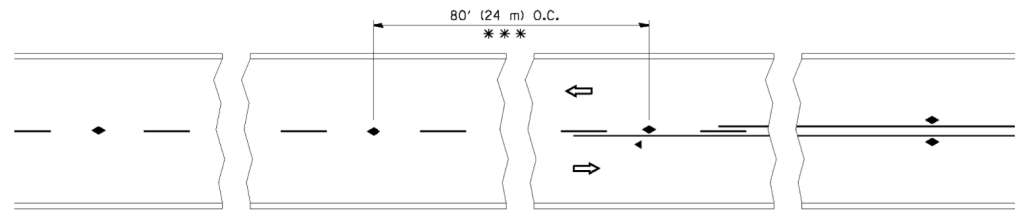
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PLOT SCALE = *SCALE*	CHECKED - MJY	REVISED -
PLOT DATE = 8/13/2015	DATE - 7/31/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

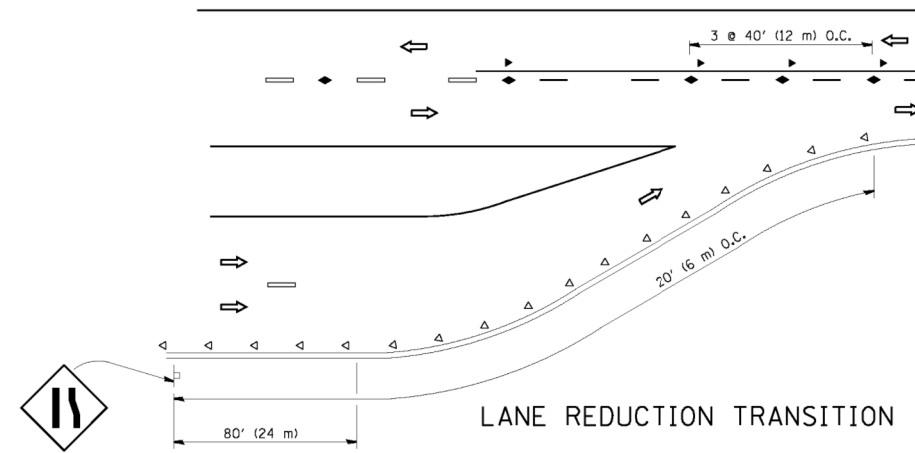
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
535	118T(14)	LAKE	16	13
CONTRACT NO. 60Y01				
ILLINOIS FED. AID PROJECT				

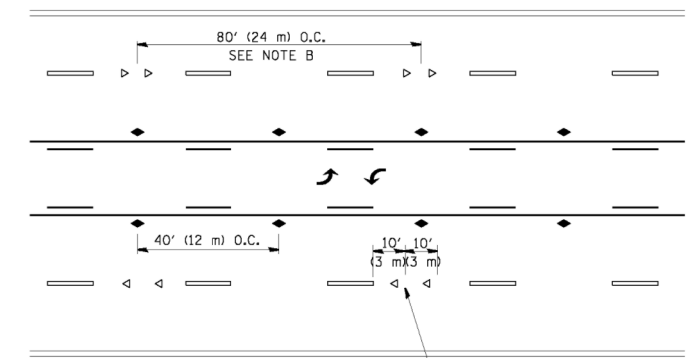


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

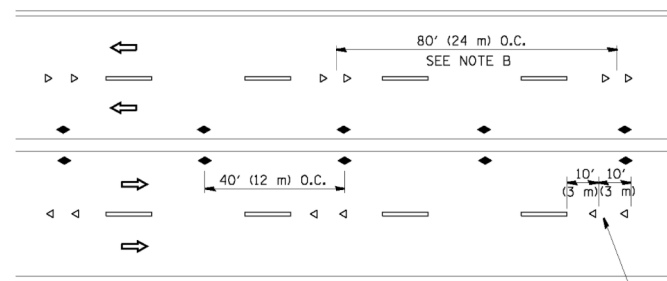


LANE REDUCTION TRANSITION



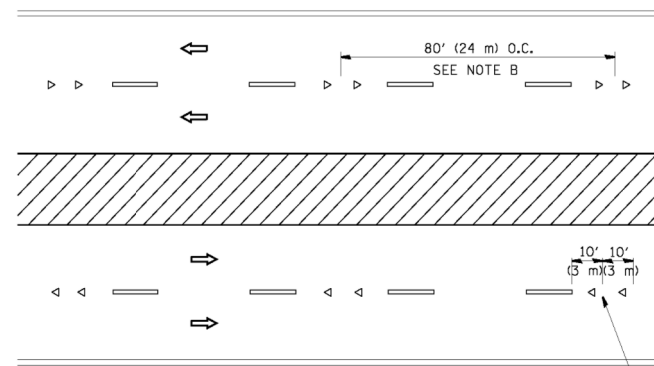
SEE NOTE A

TWO-WAY LEFT TURN



SEE NOTE A

MULTI-LANE/UNDIVIDED



SEE NOTE A

MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

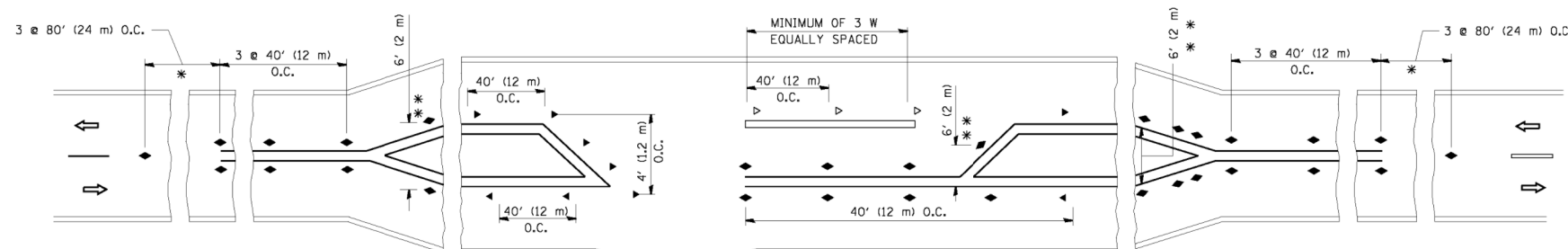
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

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



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

LEFT TURN

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



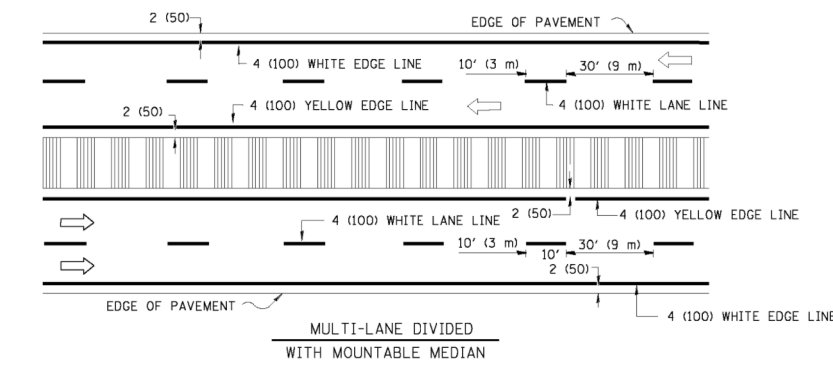
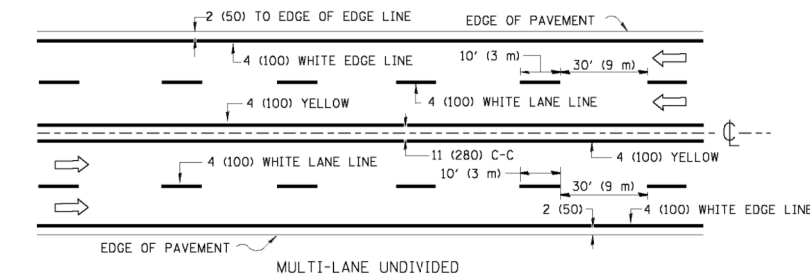
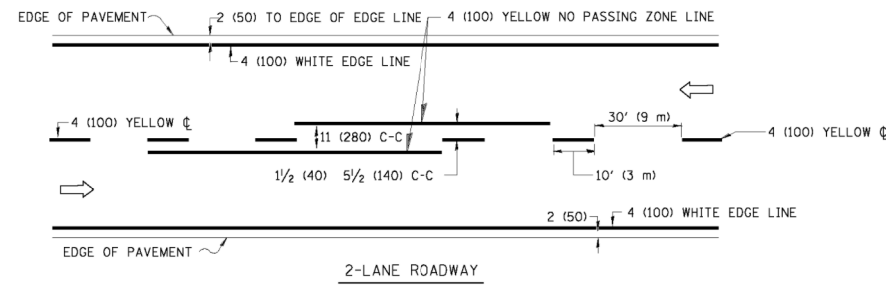
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	DRAWN - ST	REVISED -
PLOT SCALE = *SCALE*	CHECKED - MJY	REVISED -
PLOT DATE = 8/13/2015	DATE - 7/31/2015	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

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

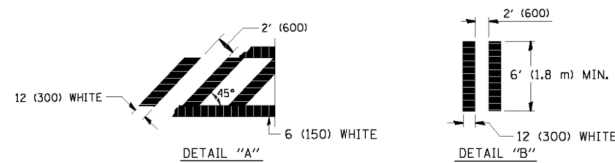
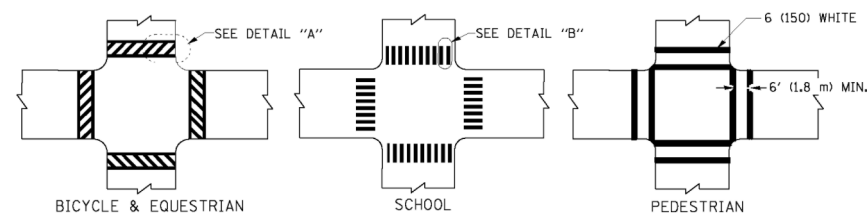
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
535	118T(14)	LAKE	16	14
CONTRACT NO. 60Y01				
ILLINOIS FED. AID PROJECT				

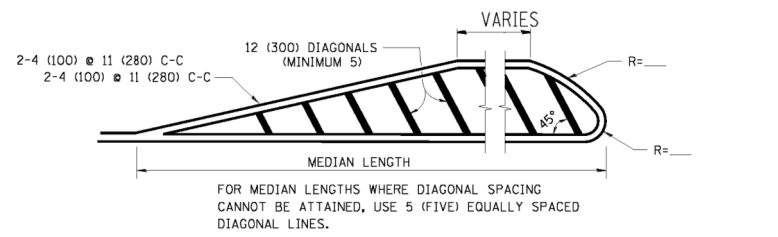
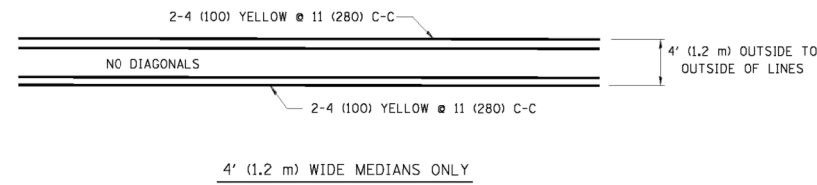


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

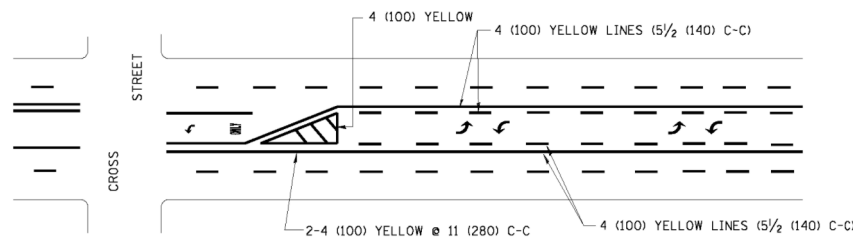


TYPICAL CROSSWALK MARKING

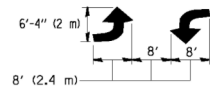


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

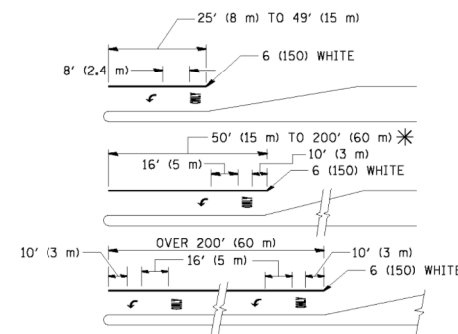


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

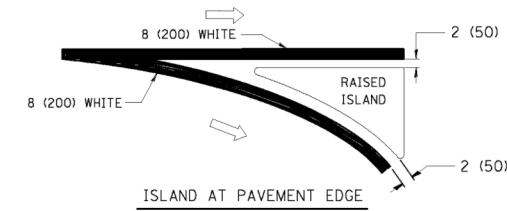
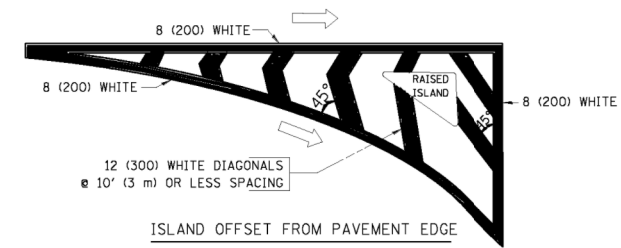


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

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

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING




TYPICAL ISLAND MARKING


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


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

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






ROUTE MARKERS

 FOR U.S. ROUTES
M1-40-2424






 FOR ILLINOIS ROUTES
M1-50-2424

 R.R. UNMARKED ROUTES
SPECIAL 24" x 18" VARIABLE
4" BLACK LETTERS ON WHITE
REFLECTIVE BACKGROUND

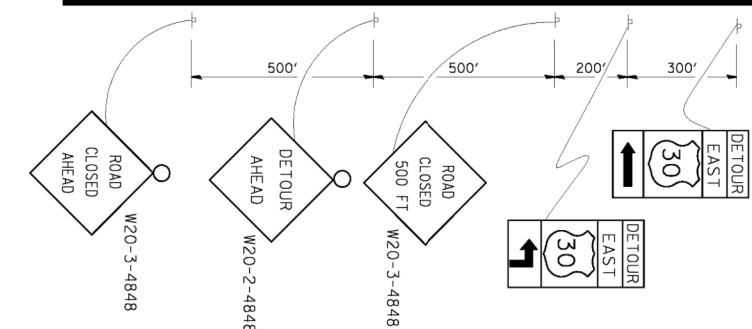
ARROWS SIGNS

-  M5-1L-2115
-  M5-1R-2115
-  M6-1-1-2115
-  M6-1-2-2115
-  M6-3-2115

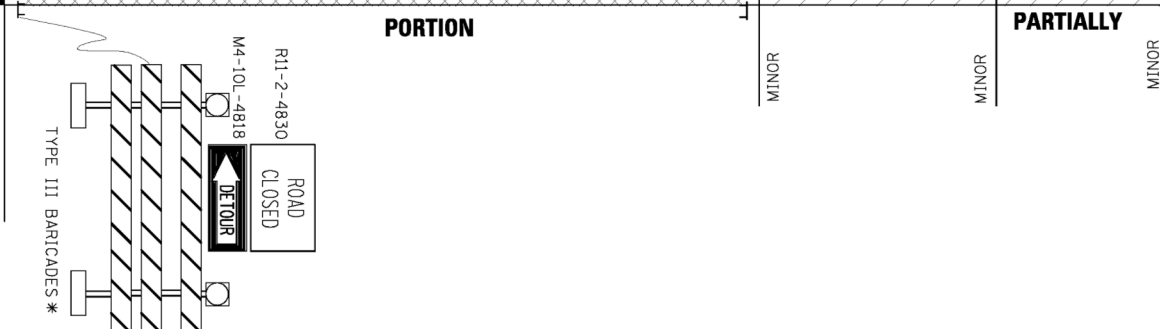
CARDINAL DIRECTION & DETOUR SIGNS

-  NORTH M3-1-2412
-  EAST M3-2-2412
-  SOUTH M3-3-2412
-  WEST M3-4-2412
-  DETOUR M4-8-2412

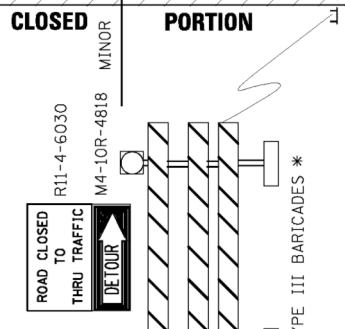
STATE ROUTE



COMPLETELY CLOSED PORTION



PARTIALLY CLOSED PORTION



STATE ROUTE



* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.



USER NAME = ksnider	DESIGNED - MJY	REVISED -
DRAWN - ST	REVISED -	
PLOT SCALE = *SCALE*	CHECKED - MJY	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DETOUR SIGNING
FOR CLOSING STATE HIGHWAYS**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
535	118T(14)	LAKE	16	16
CONTRACT NO. 60Y01				
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