

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
349	16RS-6	WILL/KENDALL	30	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 60A98		

30+1=31

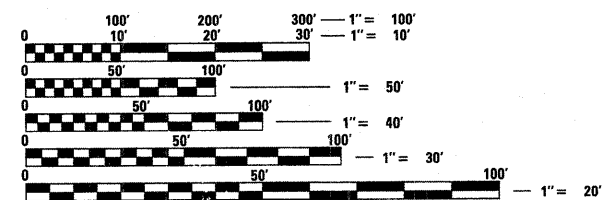
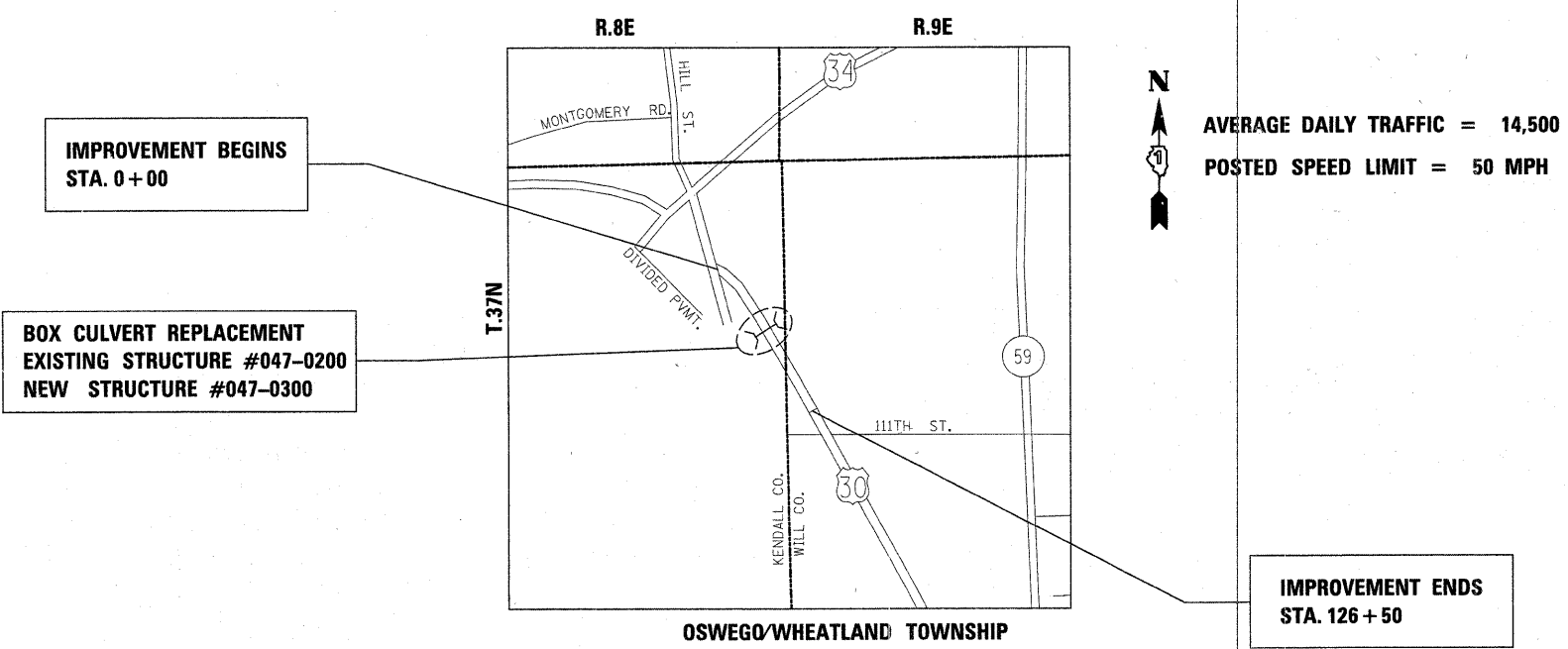
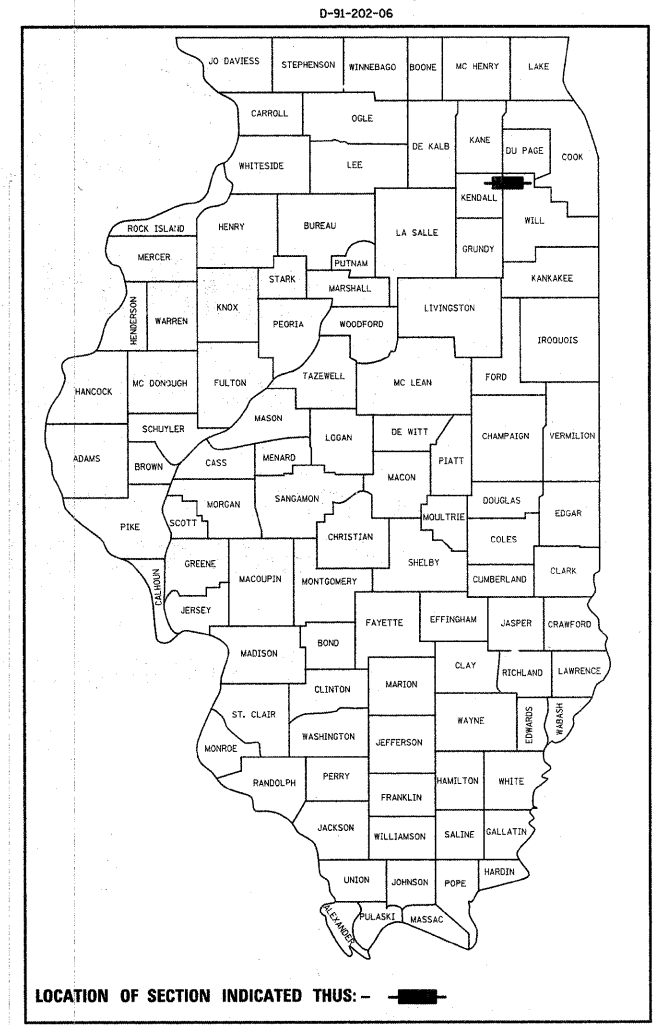
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

F.A.P. ROUTE 349 (U.S. RTE. 30)
SECTION 16RS-6
U.S. RTE. 34 TO 0.3 MILE NORTH OF 111th ST.
RESURFACING (3P) & BOX CULVERT REPLACEMENT
PROJECT: F-0349(012)
WILL AND KENDALL COUNTIES
C-91-202-06

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE IMPROVEMENT IS LOCATED
IN THE VILLAGE OF MONTGOMERY



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

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

PROJECT ENGINEER
PROJECT MANAGER

CONTRACT NO. 60A98

GROSS LENGTH = 12,650 FT. = 2.396 MILE
NET LENGTH = 12,650 FT. = 2.396 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED DECEMBER 22, 20 08

Diane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

January 30, 20 09
Charles G. Ingersoll
ENGINEER OF DESIGN AND ENVIRONMENT

January 30, 20 09
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

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

INDEX OF SHEETS

SHEET NO. DESCRIPTION

1	COVER SHEET
2	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
3-4	SUMMARY OF QUANTITIES
5-7	TYPICAL SECTIONS
8-12	ROADWAY AND PAVEMENT MARKING PLANS
13-18	BOX CULVERT REPLACEMENT
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20	DETOUR PLAN
21	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
22	BUTT JOINT AND HMA TAPER DETAILS
23	TRAFFIC CONTROL AND PROTECTION FOR SIDEROADS, INTERSECTIONS, AND DRIVEWAYS
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26	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
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28	ARTERIAL ROAD INFORMATION SIGN
29	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS
30	DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-03	CLASS C AND D PATCHES
515001-03	
630001-08	STEEL PLATE BEAM GUARDRAIL
630201-06	PCC/ HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
701011-02	OFF-ROAD MOVING OPERATIONS 2L, 2W DAY ONLY FOR SPEED > 45MPH
701201-03	LANE CLOSURE, 2L, 2W, DAY ONLY ON - RD TO (24") OFF - RD FOR SPEED ≥ 45 MPH
701201	LANE CLOSURE, 2L, 2W, DAY ONLY ON - RD TO (24") OFF - RD FOR SPEED ≥ 45 MPH
701201	LANE CLOSURE, 2L, 2W, DAY ONLY ON - RD TO (24") OFF - RD FOR SPEED ≥ 45 MPH
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
701501-05	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701336-05	LANE CLOSURE 2L, 2W, WORK AREAS IN SERIES FOR SPEED ≥ 45 MPH
701901-01	TRAFFIC CONTROL DEVICES
780001-02	TYPICAL PAVEMENT MARKINGS
630001	STEEL PLATE BEAM GUARDRAIL
630201	PCC/BITUMINOUS STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701006-03	OFF-ROAD OPERATIONS, 2L 2W, 4.5 M (15') TO PAVEMENT EDGE, FOR SPEEDS > OR = 45 MPH
701011	OFF-ROAD MOVING OPERATIONS, 2L 2W, DAY ONLY, FOR SPEEDS > OR = 45 MPH
701101-02	OFF-ROAD OPERATIONS, MULTILANE, LESS THAN 4.5 M (15') AWAY, FOR SPEEDS > OR = 45 MPH
701901-01	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 OR "811" FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOURS NOTIFICATION REQUIRED).

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF MONTGOMERY.

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

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1/2" (40 mm) WHERE THE SPEED LIMIT IS 45 MPH (80 KM/H) OR LESS AND WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80 KM/H), WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3" (75 mm) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.

THE RESIDENT ENGINEER SHALL CONTACT DON CHIARUGI AREA TRAFFIC FIELD ENGINEER AT (847) 741-9857 AT LEAST TWO(2) WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKING.

THE RESIDENT ENGINEER MUST CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TRAFFIC CONTROL DEVICES.

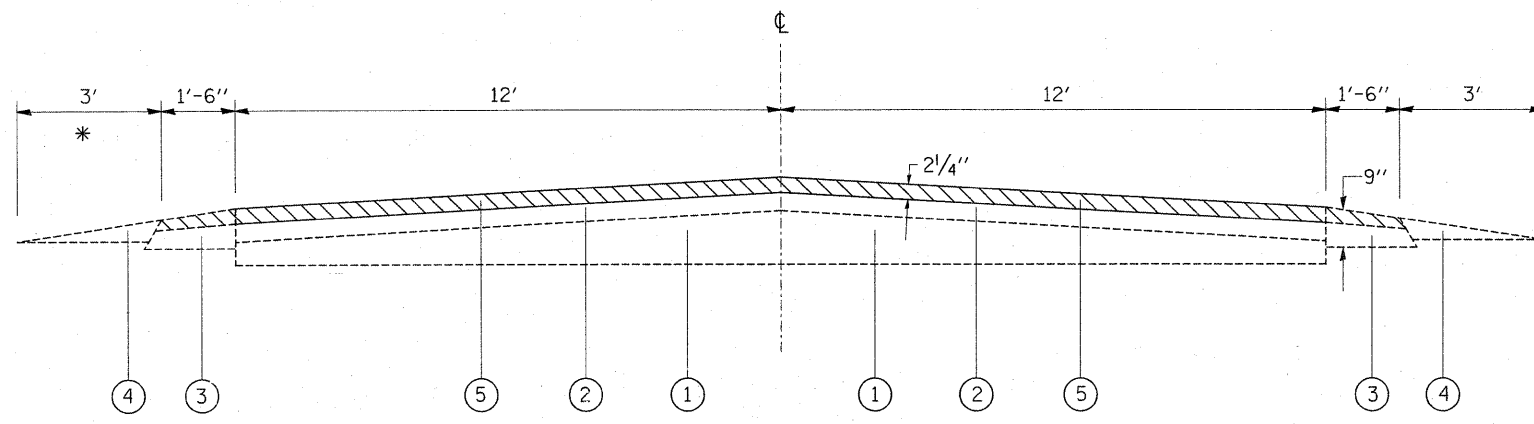
SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE				SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE			
CODE NO	ITEM	UNIT	URBAN 80% FED 20% STATE TOTAL QUANTITIES	URBAN 1000 WILL CO.	URBAN 1000 KENDALL CO.	CULVERT REPLACEMENT X078-2A KENDALL CO.	CODE NO	ITEM	UNIT	URBAN 80% FED 20% STATE TOTAL QUANTITIES	URBAN 1000 WILL CO.	URBAN 1000 KENDALL CO.	CULVERT REPLACEMENT X078-2A KENDALL CO.
20200100	EARTH EXCAVATION	CU YD	206		206		44201745	CLASS D PATCHES, TYPE III, 8 INCH	SQ YD	102	54	48	
20201006	GRADING AND SHAPING SHOULDERS	UNIT	254	106	148		44201747	CLASS D PATCHES, TYPE IV, 8 INCH	SQ YD	532	135	397	
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	267			267	48101200	AGGREGATE SHOULDERS, TYPE B	TON	811	811		
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	119			119	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1			1
21101815	COMPOST FURNISH AND PLACE, 4"	SQ YD	64		64		50200100	STRUCTURE EXCAVATION	CU YD	273			273
25000310	SEEDING, CLASS 4	ACRE	0.01		0.01		50300005	CONCRETE STRUCTURES	CU YD	44.7			44.7
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	1		1		50300300	PROTECTIVE COAT	SQ YD	11			11
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	1		1		50800105	REINFORCEMENT BARS	POUND	3260			3260
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	1		1		50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	490			490
25100630	EROSION CONTROL BLANKET	SQ YD	64		64		51500100	NAME PLATES	EACH	1			1
28000300	TEMPORARY DITCH CHECKS	EACH	2		2		54010606	PRECAST CONCRETE BOX CULVERT 6' X 6'	FOOT	35			35
28000400	PERIMETER EROSION BARRIER	FOOT	420		420		54003000	CONCRETE BOX CULVERTS	CU YD	44.7			44.7
28100107	STONE RIPRAP, CLASS A4	SQ YD	20			20	63000005	STEEL PLATE BEAM GUARD RAIL, TYPE B	FOOT	240		240	
28200200	FILTER FABRIC	SQ YD	46			46	* 63000025	STEEL PLATE BEAM GUARD RAIL, ATTACHED TO STRUCTURES	FOOT	12		12	
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	17	6	11		* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4		4	
40600300	AGGREGATE (PRIME COAT)	TON	81	28	53		63200307	STEEL PLATE BEAM GUARD RAIL REMOVAL, ATTACHED TO STRUCTURE	FOOT	12		12	
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	13	5	8		63200310	GUARDRAIL REMOVAL	FOOT	388		388	
40600895	CONSTRUCTING TEST STRIP	EACH	2	1	1		67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	3	3	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	107	12	95		67100100	MOBILIZATION	L SUM	1	0.5	0.5	
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	423	151	272		70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	0.5	0.5	
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	3365	1179	2186		70100600	TRAFFIC CONTROL AND PROTECTION, STANDARD 701336	L SUM	1	0.5	0.5	
44000100	PAVEMENT REMOVAL	SQ YD	156		156		70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	0.5	0.5	
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	40055	14032	26023		70300100	SHORT-TERM PAVEMENT MARKING	FOOT	3450	1435	2015	
44000189	HOT-MIX ASPHALT SURFACE REMOVAL, 10"	SQ YD	755	269	486		70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	41942	9542	32400	
44201741	CLASS D PATCHES, TYPE II, 8 INCH	SQ YD	99	72	27		70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	1118		1118	
							70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	192		192	
							70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	126		126	
							78200410	GUARDRAIL MARKERS, TYPE A	EACH	42		42	
							X0320044	TEMPORARY CLEAR WATER DIVERSION	L SUM	1		1	
							X0545006	BOX CULVERT REMOVAL	L SUM	1		1	
							XX007025	COARSE AGGREGATE BACKFILL (SPECIAL)	CU YD	715		715	

*SPECIALTY ITEMS

Rev.

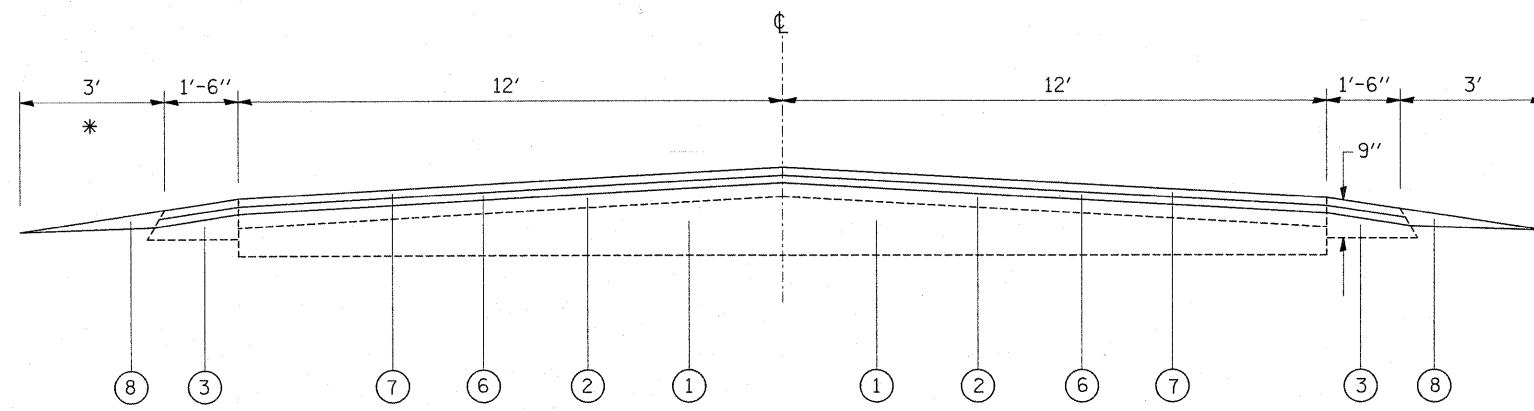
SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE						SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE								
CODE NO	ITEM	UNIT	URBAN 80% FED 20% STATE TOTAL QUANTITIES	URBAN 1000 WILL CO.	URBAN 1000 KENDALL CO.	CULVERT REPLACEMENT X078-2A KENDALL CO.				CODE NO	ITEM	UNIT	URBAN 80% FED 20% STATE TOTAL QUANTITIES	URBAN 1000 WILL CO.	URBAN 1000 KENDALL CO.	CULVERT REPLACEMENT X078-2A KENDALL CO.				
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	113		113															
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	41942	9542	32400															
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1118		1118															
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	192		192															
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	126		126															
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	306	78	228															
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	42		42															
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	306	78	228															
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	519	519																
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	52	26	26															
X0322641	TEMPORARY CLEAR WATER DIVERSION	L SUM	1																	
X0545005	BOX CULVERT REMOVAL	L SUM	1																	
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1683	590	1093															
XX007025	COARSE AGGREGATE BACKFILL (SPECIAL)	CU YD	715																	
0 20076600	TRAINERS	HOUR	500	500																

0 YDBD
*SPECIALTY ITEMS



U.S. 30
EXISTING TYPICAL SECTION
STA. 0+00 TO STA. 126+50

* AGGREGATE SHOULDER
8' WIDE FROM STA. 0+00
TO STA. 2+00 (WESTBOUND ONLY)



U.S. 30
PROPOSED TYPICAL SECTION
STA. 0+00 TO STA. 126+50

LEGEND

- ① EXISTING P.C.C. PAVEMENT, 8"
- ② EXISTING HOT-MIX ASPHALT SURFACE, 7 3/4" (AFTER SURFACE REMOVAL)
- ③ EXISTING HMA SHOULDER
- ④ EXISTING AGGREGATE SHOULDER TYPE "B"
- ⑤ PROPOSED HMA SURFACE REMOVAL, 2 1/4"
- ⑥ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ⑦ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- ⑧ PROPOSED AGGREGATE SHOULDER, TYPE "B", VARIABLE THICKNESS. (WEDGE)

MIXTURE REQUIREMENTS

MIXTURE USE	AC/PG	DESIGN AIR VOIDS	REMARKS
HOT-MIX ASPHALT SURFACE COURSE, SUPERPAVE MIX "D", N70	PG 64-22	4% @ 70 GYR.	IL-9.5 MM
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"	SBS/SBR PG 76-28/-22	4% @ 50 GYR.	
HMA REPLACEMENT OVER PATCHES, 10"	PG 64-22*	4% @ 70 GYR.	BINDER HMA IL-19 MM
CLASS "D" PATCHES, 8"	PG 64-22*	4% @ 70 GYR.	BINDER HMA IL-19 MM

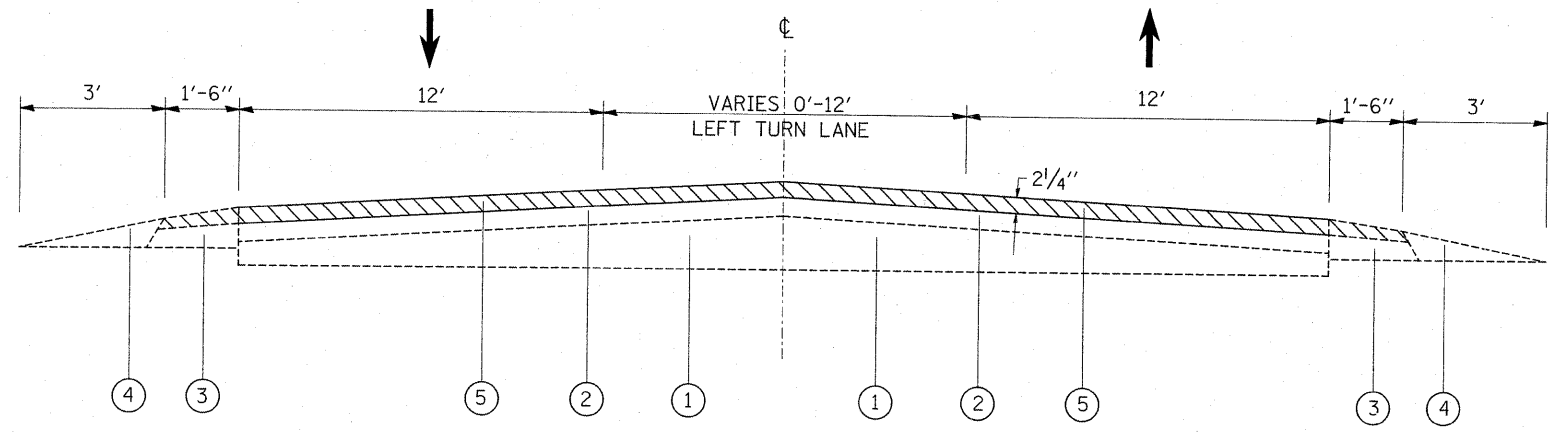
* "WHEN RAP EXCEED 20% THEN NEW ASPHALT IN THE MIX SHALL BE PG 58-22."

NOTE:

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

- NOTE:
- * PROPOSED AGGREGATE SHOULDER 8' WIDE FROM STA. 0+00 TO STA 2+00 (WESTBOUND ONLY).
 - * PROPOSED WHITE EDGE LINE-4" IS 12' FROM C (TYPICAL).

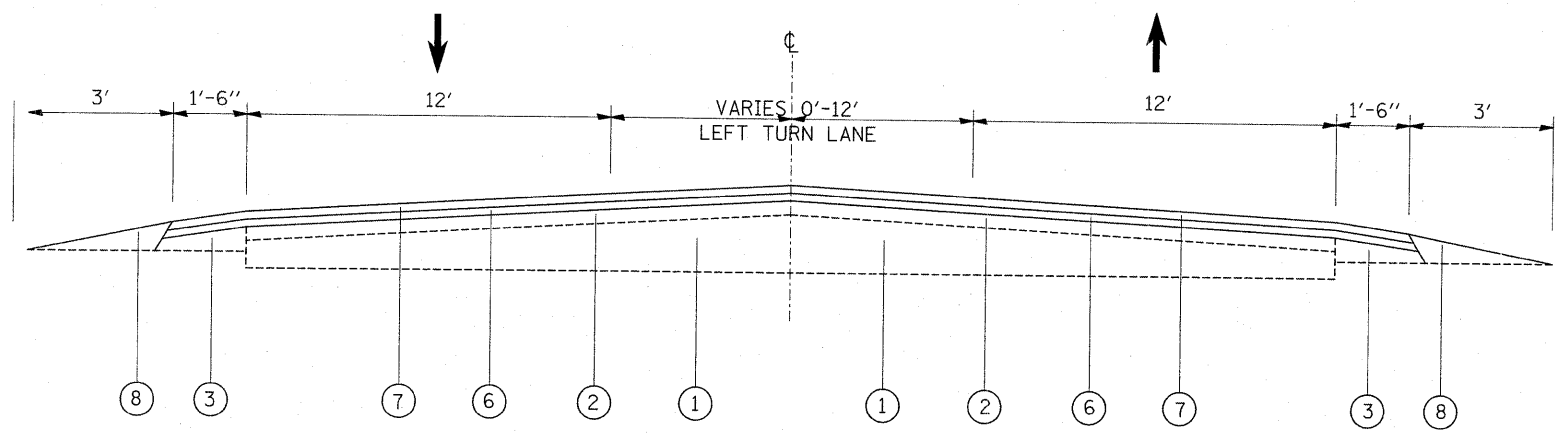
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PLOT DATE = 12/23/2006	DATE -	CHECKED -	REVISED -			CONTRACT NO. 60A98					
						SCALE: NONE	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		



U.S. 30
EXISTING LEFT TURN LANE (TYPICAL)

LEGEND

- ① EXISTING P.C.C. PAVEMENT, 8"
- ② EXISTING HOT-MIX ASPHALT SURFACE, 7³/₄" (AFTER SURFACE REMOVAL)
- ③ EXISTING HMA SHOULDER
- ④ EXISTING AGGREGATE SHOULDER TYPE "B"
- ⑤ PROPOSED HMA SURFACE REMOVAL, 2¹/₄"
- ⑥ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N05, 3³/₄"
- ⑦ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1¹/₂"
- ⑧ PROPOSED AGGREGATE SHOULDER, TYPE "B", VARIABLE THICKNESS. (WEDGE)



U.S. 30
PROPOSED LEFT TURN LANE (TYPICAL)

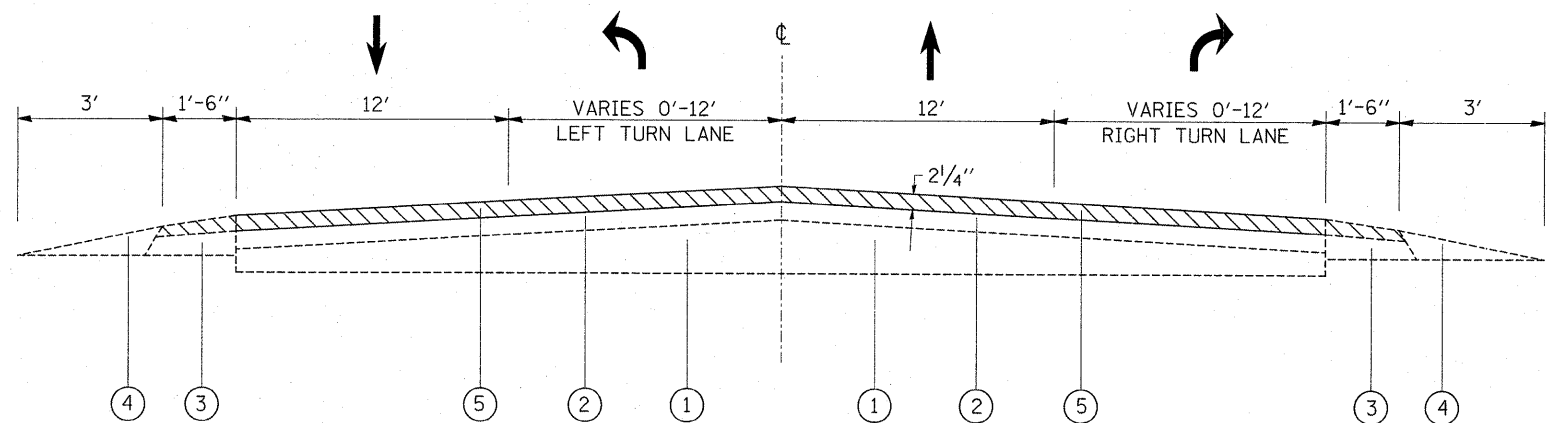
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PLOT DATE = 12/23/2008		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**U.S. RTE. 30 (U.S. RTE. 34 TO 0.30 MILE NORTH OF 111TH STREET)
EXISTING AND PROPOSED TYPICAL SECTIONS**

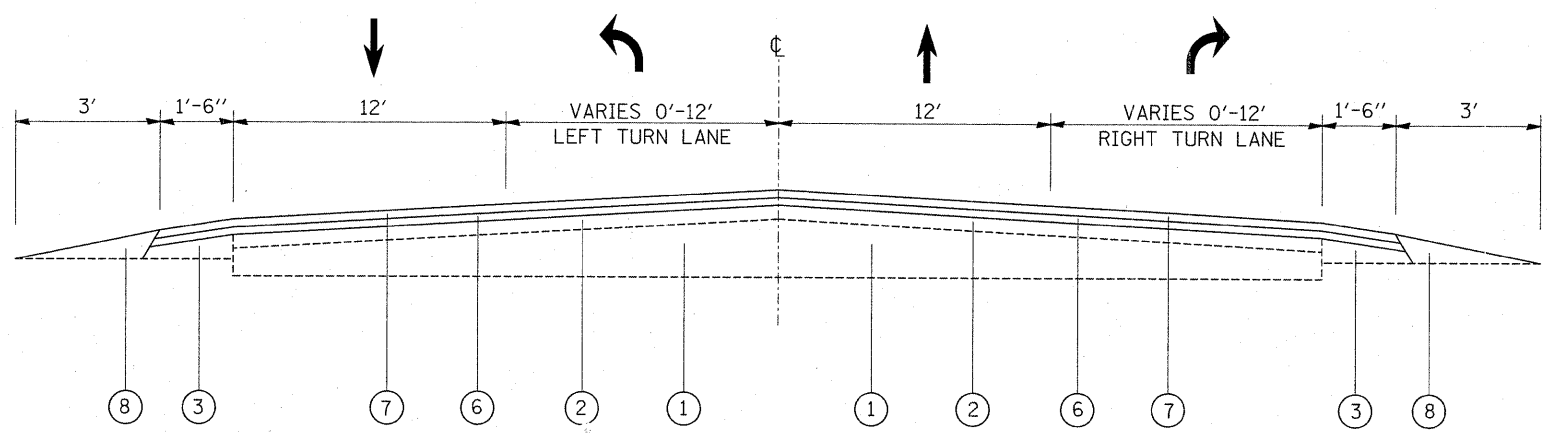
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
349	16RS-6	WILL/KENDALL	30	6
CONTRACT NO. 60A98				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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



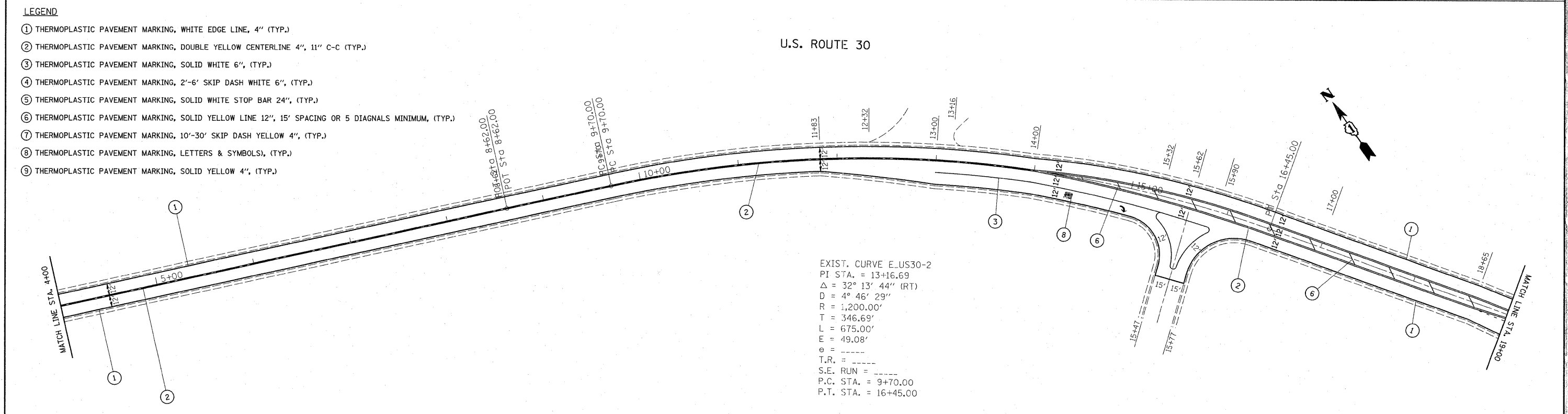
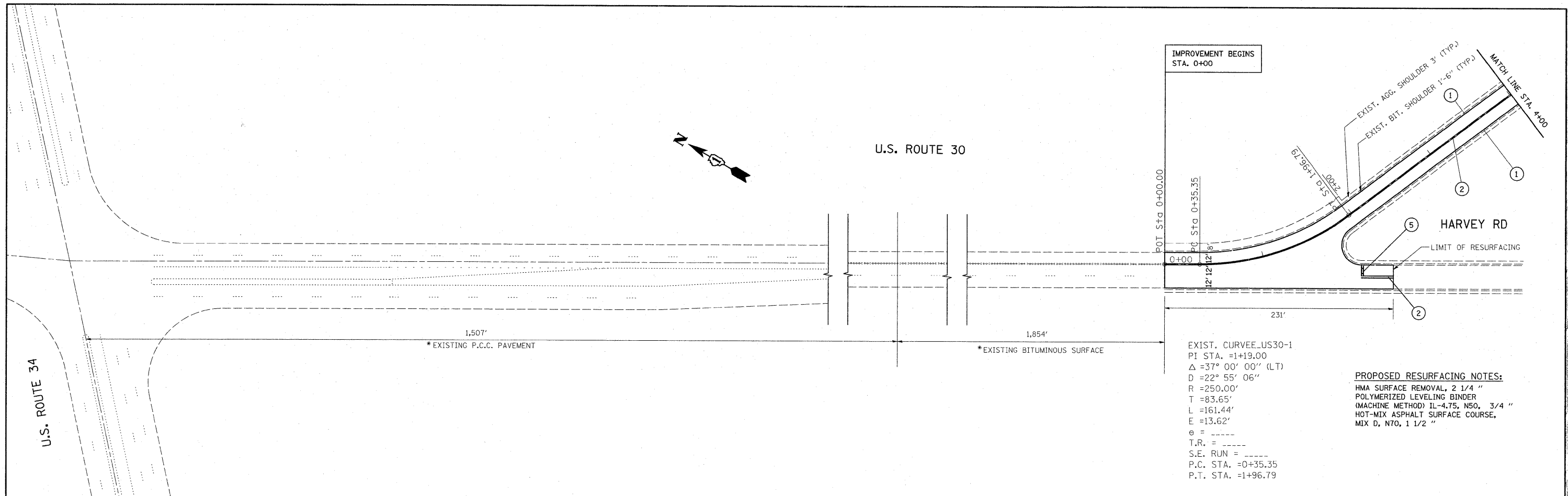
EXISTING TYPICAL SECTION
U.S. 30 (NORTH LEG) AT TREASURE DR/ GASTVILLE ST.

- LEGEND**
- ① EXISTING P.C.C. PAVEMENT, 8"
 - ② EXISTING HOT-MIX ASPHALT SURFACE, 7³/₄" (AFTER SURFACE REMOVAL)
 - ③ EXISTING HMA SHOULDER
 - ④ EXISTING AGGREGATE SHOULDER TYPE "B"
 - ⑤ PROPOSED HMA SURFACE REMOVAL, 2¹/₄"
 - ⑥ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, NO5, 3³/₄"
 - ⑦ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1¹/₂"
 - ⑧ PROPOSED AGGREGATE SHOULDER, TYPE "B", VARIABLE THICKNESS. (WEDGE)



PROPOSED TYPICAL SECTION
U.S. 30 (NORTH LEG) AT TREASURE DR/ GASTVILLE ST.

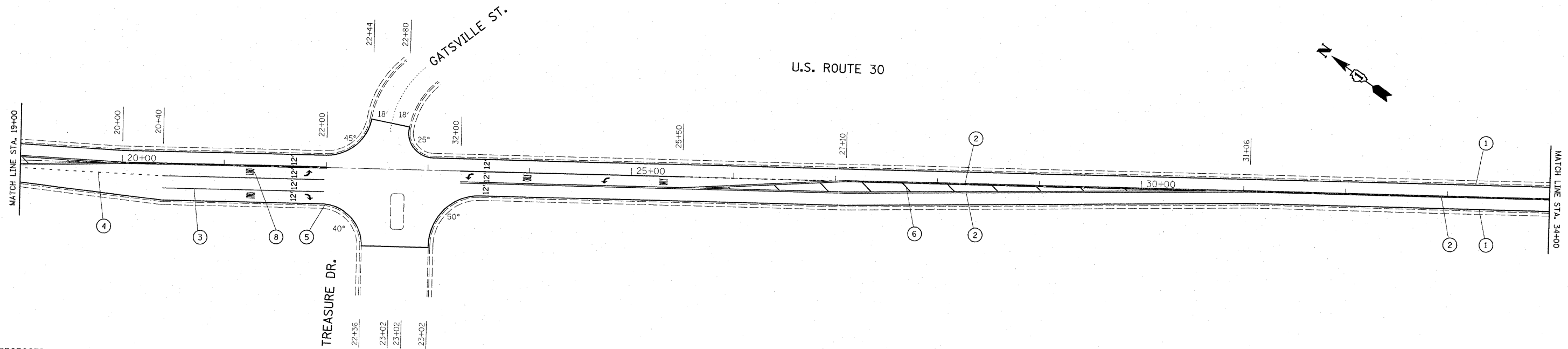
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PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -		SCALE: NONE	SHEET NO. OF	SHEETS	STA.	TO STA.	CONTRACT NO. 60A98	
PLOT DATE = 12/23/2008		DATE -	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						



- LEGEND**
- ① THERMOPLASTIC PAVEMENT MARKING, WHITE EDGE LINE, 4" (TYP.)
 - ② THERMOPLASTIC PAVEMENT MARKING, DOUBLE YELLOW CENTERLINE 4", 11" C-C (TYP.)
 - ③ THERMOPLASTIC PAVEMENT MARKING, SOLID WHITE 6", (TYP.)
 - ④ THERMOPLASTIC PAVEMENT MARKING, 2'-6' SKIP DASH WHITE 6", (TYP.)
 - ⑤ THERMOPLASTIC PAVEMENT MARKING, SOLID WHITE STOP BAR 24", (TYP.)
 - ⑥ THERMOPLASTIC PAVEMENT MARKING, SOLID YELLOW LINE 12", 15' SPACING OR 5 DIAGNALS MINIMUM, (TYP.)
 - ⑦ THERMOPLASTIC PAVEMENT MARKING, 10'-30' SKIP DASH YELLOW 4", (TYP.)
 - ⑧ THERMOPLASTIC PAVEMENT MARKING, LETTERS & SYMBOLS, (TYP.)
 - ⑨ THERMOPLASTIC PAVEMENT MARKING, SOLID YELLOW 4", (TYP.)

PROPOSED RESURFACING NOTES:
 HMA SURFACE REMOVAL, 2 1/4"
 POLYMERIZED LEVELING BINDER
 (MACHINE METHOD) IL-4.75, N50, 3/4"
 HOT-MIX ASPHALT SURFACE COURSE,
 MIX D, N70, 1 1/2"

FILE NAME =	USER NAME = ulrichkd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	U.S. RTE. 30 (U.S. RTE. 34 TO 0.30 MILE NORTH OF 111TH STREET) ROADWAY AND PAVEMENT MARKING PLAN	F.A.P. RTE. 349	SECTION 16RS-6	COUNTY WILL/KENDALL	TOTAL SHEETS 30	SHEET NO. 8		
CONTRACT NO. 60A98	SCALE: 1"= 50'		SHEET NO. 8 OF 31 SHEETS			STA. 00+00.00 TO STA. 19+00.00		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
CONTRACT NO. 60A98	PLOT SCALE = 50.0000' / IN.		CHECKED -			DATE = 12/23/2008						
CONTRACT NO. 60A98	PLOT DATE = 12/23/2008		DATE -									

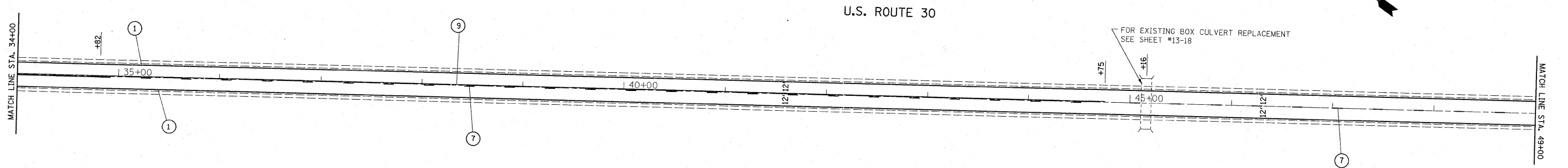


PROPOSED RESURFACING NOTES:

HMA SURFACE REMOVAL, 2 1/4"
 POLYMERIZED LEVELING BINDER
 (MACHINE METHOD) IL-4.75, N50, 3/4"
 HOT-MIX ASPHALT SURFACE COURSE,
 MIX D, N70, 1 1/2"

LEGEND

- ① THERMOPLASTIC PAVEMENT MARKING, WHITE EDGE LINE, 4" (TYP.)
- ② THERMOPLASTIC PAVEMENT MARKING, DOUBLE YELLOW CENTERLINE 4", 11" C-C (TYP.)
- ③ THERMOPLASTIC PAVEMENT MARKING, SOLID WHITE 6", (TYP.)
- ④ THERMOPLASTIC PAVEMENT MARKING, 2'-6" SKIP DASH WHITE 6", (TYP.)
- ⑤ THERMOPLASTIC PAVEMENT MARKING, SOLID WHITE STOP BAR 24", (TYP.)
- ⑥ THERMOPLASTIC PAVEMENT MARKING, SOLID YELLOW LINE 12", 15' SPACING OR 5 DIAGNALS MINIMUM, (TYP.)
- ⑦ THERMOPLASTIC PAVEMENT MARKING, 10'-30' SKIP DASH YELLOW 4", (TYP.)
- ⑧ THERMOPLASTIC PAVEMENT MARKING, LETTERS & SYMBOLS, (TYP.)
- ⑨ THERMOPLASTIC PAVEMENT MARKING, SOLID YELLOW 4", (TYP.)



PROPOSED RESURFACING NOTES:

HMA SURFACE REMOVAL, 2 1/4"
 POLYMERIZED LEVELING BINDER
 (MACHINE METHOD) IL-4.75, N50, 3/4"
 HOT-MIX ASPHALT SURFACE COURSE,
 MIX D, N70, 1 1/2"

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PLOT DATE = 12/23/2008		DATE -	REVISED -

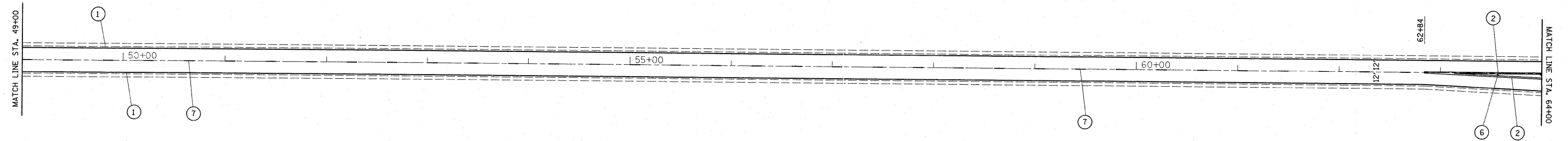
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**U.S. RTE. 30 (U.S. RTE. 34 TO 0.30 MILE NORTH OF 111TH STREET)
 ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1"= 50' SHEET NO. 9 OF 31 SHEETS STA. 19+00.00 TO STA. 49+00.00

F.A.P. RTE. 349	SECTION 16RS-6	COUNTY WILL/KENDALL	TOTAL SHEETS 30	SHEET NO. 9
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60A98	

U.S. ROUTE 30

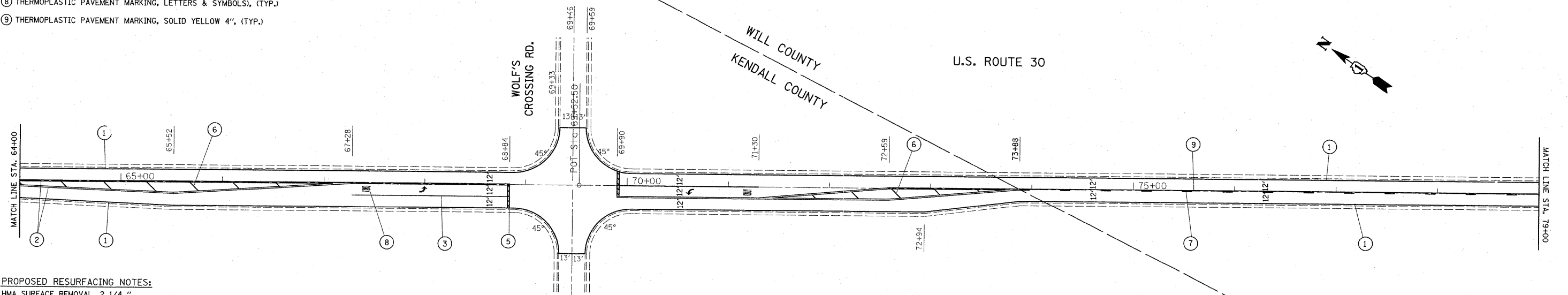


PROPOSED RESURFACING NOTES:

HMA SURFACE REMOVAL, 2 1/4 "
 POLYMERIZED LEVELING BINDER
 (MACHINE METHOD) IL-4.75, N50, 3/4 "
 HOT-MIX ASPHALT SURFACE COURSE,
 MIX D, N70, 1 1/2 "

LEGEND

- ① THERMOPLASTIC PAVEMENT MARKING, WHITE EDGE LINE, 4" (TYP.)
- ② THERMOPLASTIC PAVEMENT MARKING, DOUBLE YELLOW CENTERLINE 4", 11" C-C (TYP.)
- ③ THERMOPLASTIC PAVEMENT MARKING, SOLID WHITE 6", (TYP.)
- ④ THERMOPLASTIC PAVEMENT MARKING, 2'-6" SKIP DASH WHITE 6", (TYP.)
- ⑤ THERMOPLASTIC PAVEMENT MARKING, SOLID WHITE STOP BAR 24", (TYP.)
- ⑥ THERMOPLASTIC PAVEMENT MARKING, SOLID YELLOW LINE 12", 15' SPACING OR 5 DIAGNALS MINIMUM, (TYP.)
- ⑦ THERMOPLASTIC PAVEMENT MARKING, 10'-30' SKIP DASH YELLOW 4", (TYP.)
- ⑧ THERMOPLASTIC PAVEMENT MARKING, LETTERS & SYMBOLS, (TYP.)
- ⑨ THERMOPLASTIC PAVEMENT MARKING, SOLID YELLOW 4", (TYP.)



PROPOSED RESURFACING NOTES:

HMA SURFACE REMOVAL, 2 1/4 "
 POLYMERIZED LEVELING BINDER
 (MACHINE METHOD) IL-4.75, N50, 3/4 "
 HOT-MIX ASPHALT SURFACE COURSE,
 MIX D, N70, 1 1/2 "

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PLOT DATE = 12/23/2008		DATE -	REVISED -

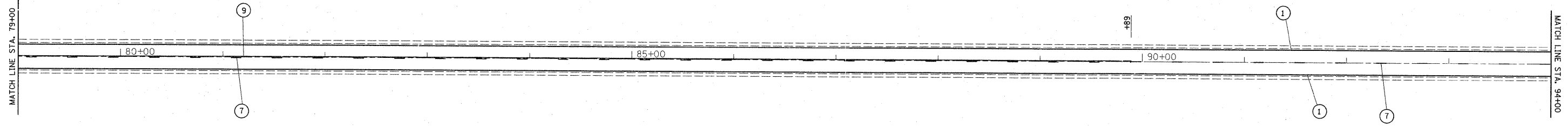
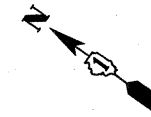
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

U.S. RTE. 30 (U.S. RTE. 34 TO 0.30 MILE NORTH OF 111TH STREET)
 ROADWAY AND PAVEMENT MARKING PLAN

SCALE: 1" = 50' SHEET NO. 10 OF 31 SHEETS STA. 49+00.00 TO STA. 79+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
349	16RS-6	WILL/KENDALL	30	10
CONTRACT NO. 60A98				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

U.S. ROUTE 30

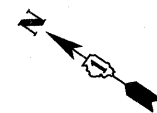


PROPOSED RESURFACING NOTES:

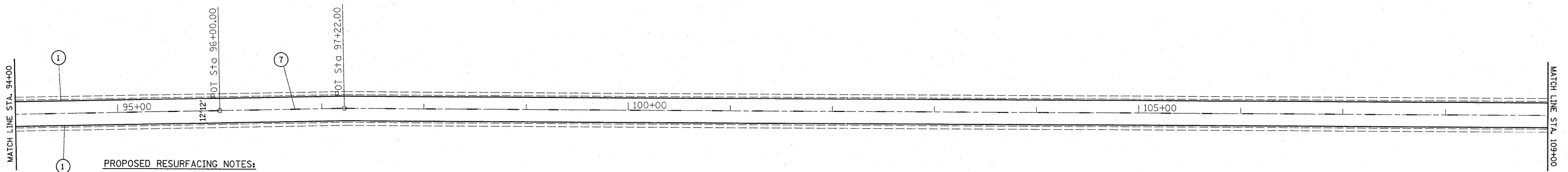
HMA SURFACE REMOVAL, 2 1/4 "
 POLYMERIZED LEVELING BINDER
 (MACHINE METHOD) IL-4.75, N50, 3/4 "
 HOT-MIX ASPHALT SURFACE COURSE,
 MIX D, N70, 1 1/2 "

LEGEND

- ① THERMOPLASTIC PAVEMENT MARKING, WHITE EDGE LINE, 4" (TYP.)
- ② THERMOPLASTIC PAVEMENT MARKING, DOUBLE YELLOW CENTERLINE 4", 11" C-C (TYP.)
- ③ THERMOPLASTIC PAVEMENT MARKING, SOLID WHITE 6", (TYP.)
- ④ THERMOPLASTIC PAVEMENT MARKING, 2'-6" SKIP DASH WHITE 6", (TYP.)
- ⑤ THERMOPLASTIC PAVEMENT MARKING, SOLID WHITE STOP BAR 24", (TYP.)
- ⑥ THERMOPLASTIC PAVEMENT MARKING, SOLID YELLOW LINE 12", 15' SPACING OR 5 DIAGNALS MINIMUM, (TYP.)
- ⑦ THERMOPLASTIC PAVEMENT MARKING, 10'-30' SKIP DASH YELLOW 4", (TYP.)
- ⑧ THERMOPLASTIC PAVEMENT MARKING, LETTERS & SYMBOLS, (TYP.)
- ⑨ THERMOPLASTIC PAVEMENT MARKING, SOLID YELLOW 4", (TYP.)



U.S. ROUTE 30



PROPOSED RESURFACING NOTES:

HMA SURFACE REMOVAL, 2 1/4 "
 POLYMERIZED LEVELING BINDER
 (MACHINE METHOD) IL-4.75, N50, 3/4 "
 HOT-MIX ASPHALT SURFACE COURSE,
 MIX D, N70, 1 1/2 "

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	PLOT DATE = 12/23/2008	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

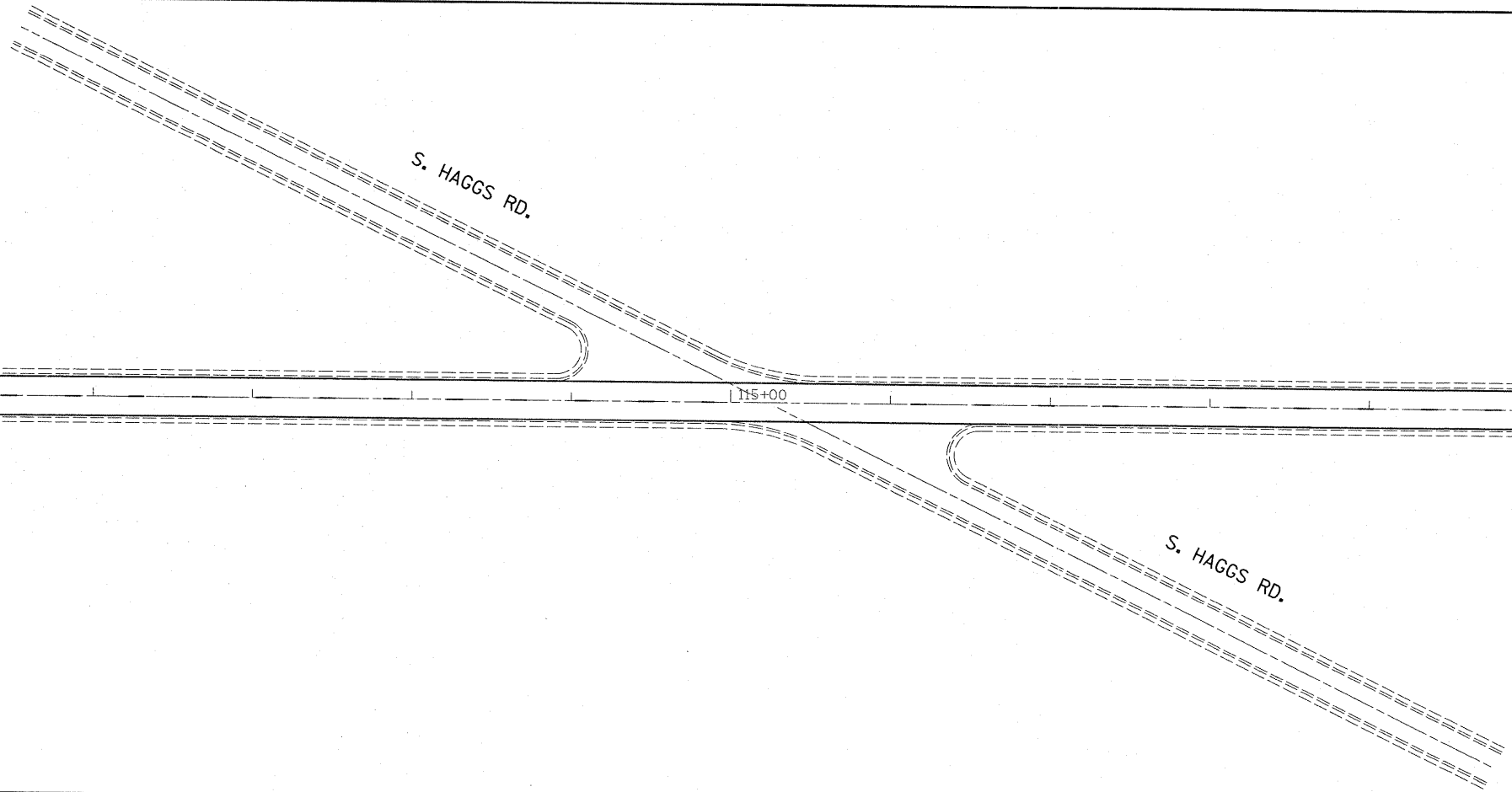
**U.S. RTE. 30 (U.S. RTE. 34 TO 0.30 MILE NORTH OF 111TH STREET)
 ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1" = 50' SHEET NO. 11 OF 31 SHEETS STA. 79+00.00 TO STA. 109+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
349	16RS-6	WILL/KENDALL	30	11
CONTRACT NO. 60A98			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

MATCH LINE STA. 109+00

MATCH LINE STA. 124+00



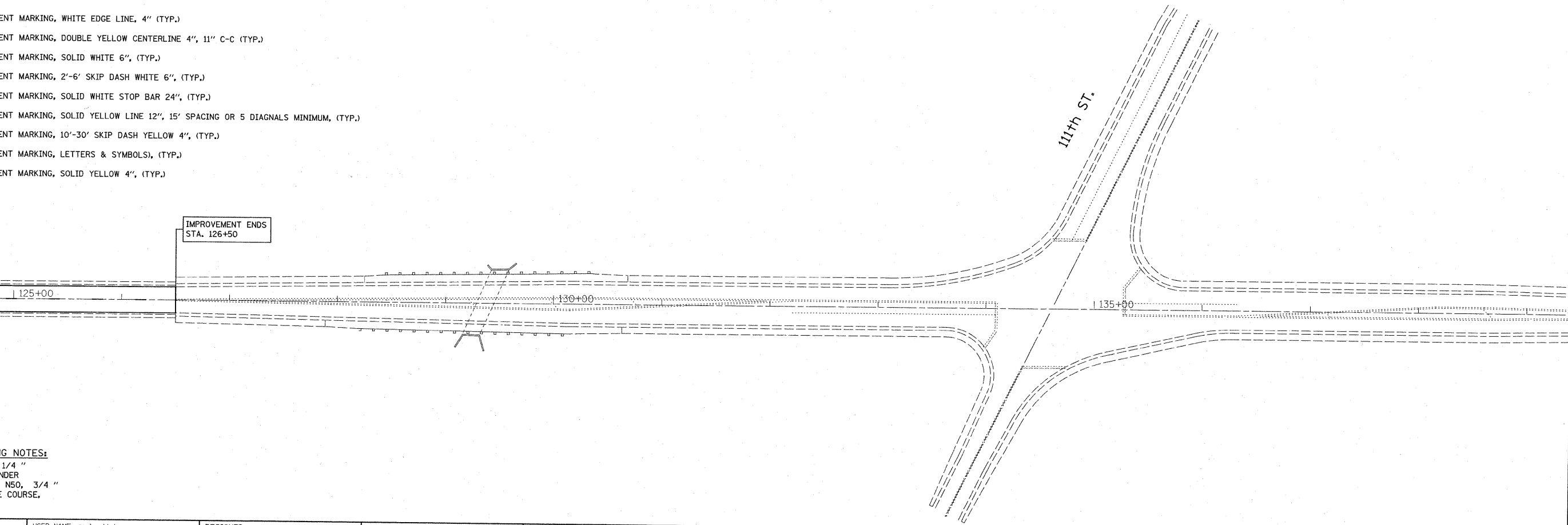
PROPOSED RESURFACING NOTES:
 HMA SURFACE REMOVAL, 2 1/4 "
 POLYMERIZED LEVELING BINDER
 (MACHINE METHOD) IL-4.75, N50, 3/4 "
 HOT-MIX ASPHALT SURFACE COURSE,
 MIX D, N70, 1 1/2 "

LEGEND

- ① THERMOPLASTIC PAVEMENT MARKING, WHITE EDGE LINE, 4" (TYP.)
- ② THERMOPLASTIC PAVEMENT MARKING, DOUBLE YELLOW CENTERLINE 4", 11" C-C (TYP.)
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- ⑤ THERMOPLASTIC PAVEMENT MARKING, SOLID WHITE STOP BAR 24", (TYP.)
- ⑥ THERMOPLASTIC PAVEMENT MARKING, SOLID YELLOW LINE 12", 15' SPACING OR 5 DIAGNALS MINIMUM, (TYP.)
- ⑦ THERMOPLASTIC PAVEMENT MARKING, 10'-30' SKIP DASH YELLOW 4", (TYP.)
- ⑧ THERMOPLASTIC PAVEMENT MARKING, LETTERS & SYMBOLS, (TYP.)
- ⑨ THERMOPLASTIC PAVEMENT MARKING, SOLID YELLOW 4", (TYP.)

MATCH LINE STA. 124+00

IMPROVEMENT ENDS
STA. 126+50



PROPOSED RESURFACING NOTES:
 HMA SURFACE REMOVAL, 2 1/4 "
 POLYMERIZED LEVELING BINDER
 (MACHINE METHOD) IL-4.75, N50, 3/4 "
 HOT-MIX ASPHALT SURFACE COURSE,
 MIX D, N70, 1 1/2 "

FILE NAME =	USER NAME = ulrichkd	DESIGNED -	REVISED -
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		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**U.S. RTE. 30 (U.S. RTE. 34 TO 0.30 MILE NORTH OF 111TH STREET)
 ROADWAY AND PAVEMENT MARKING PLAN**

SCALE: 1"= 50' SHEET NO. 12 OF 31 SHEETS STA. 109+00.00 TO STA. 139+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
349	16RS-6	WILL/KENDALL	30	12
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60A98	

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

INDEX OF STRUCTURAL SHEETS

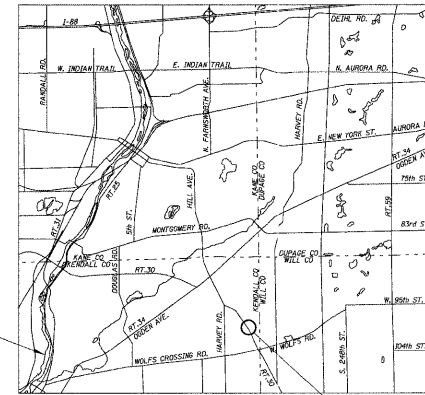
SHT. NO.	DESCRIPTION
S-1	GENERAL PLAN, ELEVATION AND INDEX
S-2	REMOVAL PLAN AND SECTION
S-3	HEADWALL DETAILS
S-4	WINGWALL DETAILS
S-5	CROSS SECTIONS
S-6	BORING LOG

GENERAL NOTES

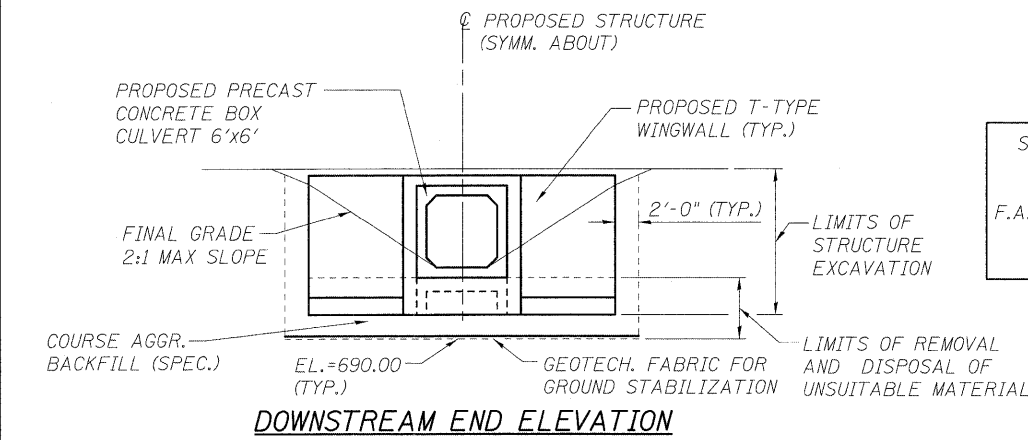
- EXISTING STRUCTURE: 047-0200 NOT SALVAGEABLE. THE NEW STRUCTURE NUMBER IS 047-0300.
- THE PROPOSED PRECAST CONCRETE BOX CULVERT SHALL BE DESIGNED BY THE CONTRACTOR ACCORDING TO THE REQUIREMENTS OF AASHTO M273. COST IS INCLUDED IN PRECAST CONCRETE BOX CULVERT 6'x6' ITEM.
- FLOW OF THE CREEK UNDER US ROUTE 30 IS TO BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION BY PLACING A TEMPORARY STREAM DIVERSION AT THE UPSTREAM END OF THE BOX CULVERT/WINGWALLS AND TEMPORARILY PUMPING OR OTHERWISE CONVEYING THE STREAM FLOW THROUGH THE WORK ZONE. THE DESIGN AND CONSTRUCTION OF THE TEMPORARY DIVERSION SHALL BE THE CONTRACTOR'S RESPONSIBILITY, AND THE COST SHALL BE INCLUDED IN CONCRETE BOX CULVERTS ITEM. THE TEMPORARY STREAM DIVERSION PLAN TO BE USED BY THE CONTRACTOR SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCING WORK.
- LIFTING HOLES SHALL BE FILLED WITH CONCRETE PLUGS AND MASTIC AFTER PRECAST BOX SECTIONS ARE IN PLACE.
- THE INFORMATION SHOWN IN THESE PLANS CONCERNING THE TYPE AND LOCATION OF UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE EXISTENCE, TYPE, SIZE AND LOCATION OF ALL UNDERGROUND AND OVERHEAD UTILITIES AS MAY BE NECESSARY TO AVOID CONFLICT WITH CONSTRUCTION OPERATIONS AND/OR DAMAGE TO THE UTILITY.
- THE CONTRACTOR IS TO PROTECT AND MAINTAIN ALL EXISTING UTILITIES. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED WITH PRECAST CONCRETE BOX CULVERT 6'x6'.
- THE CONTRACTOR IS TO PROTECT AND MAINTAIN ALL TREES WITHIN AND ADJACENT TO THE WORK ZONE FOR THIS PROJECT. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED WITH PRECAST CONCRETE BOX CULVERT 6'x6'.
- REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 706 GR 60. SEE SPECIAL PROVISIONS.
- REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.
- THE LIMITS OF REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL SHALL EXTEND VERTICALLY FROM THE BOTTOM OF THE BOX CULVERT DOWN TO ELEVATION 690.00 AND HORIZONTALLY TO VERTICAL LIMITS LOCATED 2 FEET OUTSIDE THE PERIMETER OF THE BOX CULVERT AND WINGWALL FOOTINGS. ONCE COARSE AGGREGATE BACKFILL (SPECIAL) IS REPLACED UP TO THE BOTTOM ELEVATION OF THE BOX CULVERT, STRUCTURE EXCAVATION WILL OCCUR IN THE NEW FILL FOR THE CUTOFF WALLS AND WINGWALLS. THE SECOND PLACEMENT OF STRUCTURE BACKFILL IN THESE AREAS WILL BE INCLUDED IN THE PAY QUANTITY FOR COARSE AGGREGATE BACKFILL (SPECIAL).

STATION 45+20 (PROJECT)
BUILT 200 BY
STATE OF ILLINOIS
F.A.P. ROUTE 349 SEC. 16RS-6
LOADING HS20
STR. NO. 047-0300

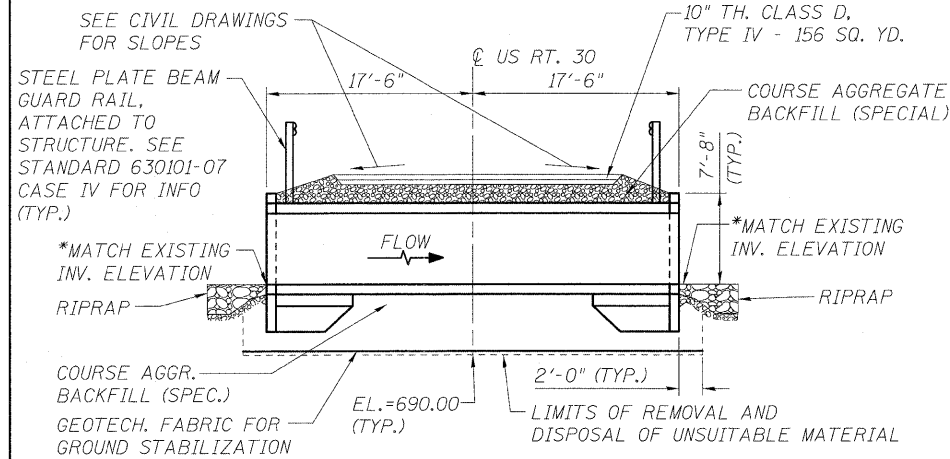
NAME PLATE
See Std. 515001



LOCATION SKETCH

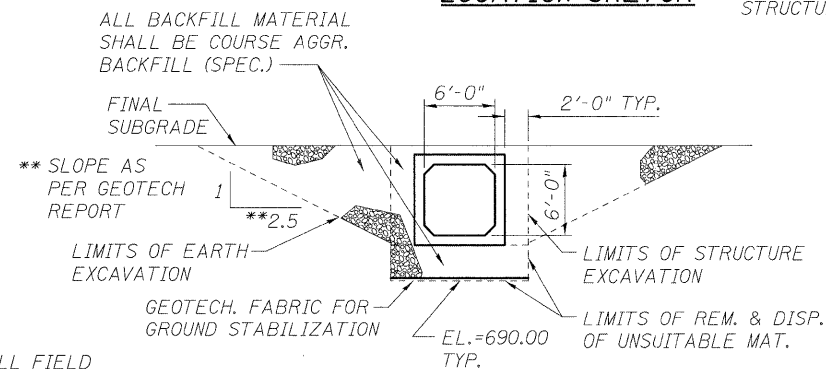


DOWNSTREAM END ELEVATION

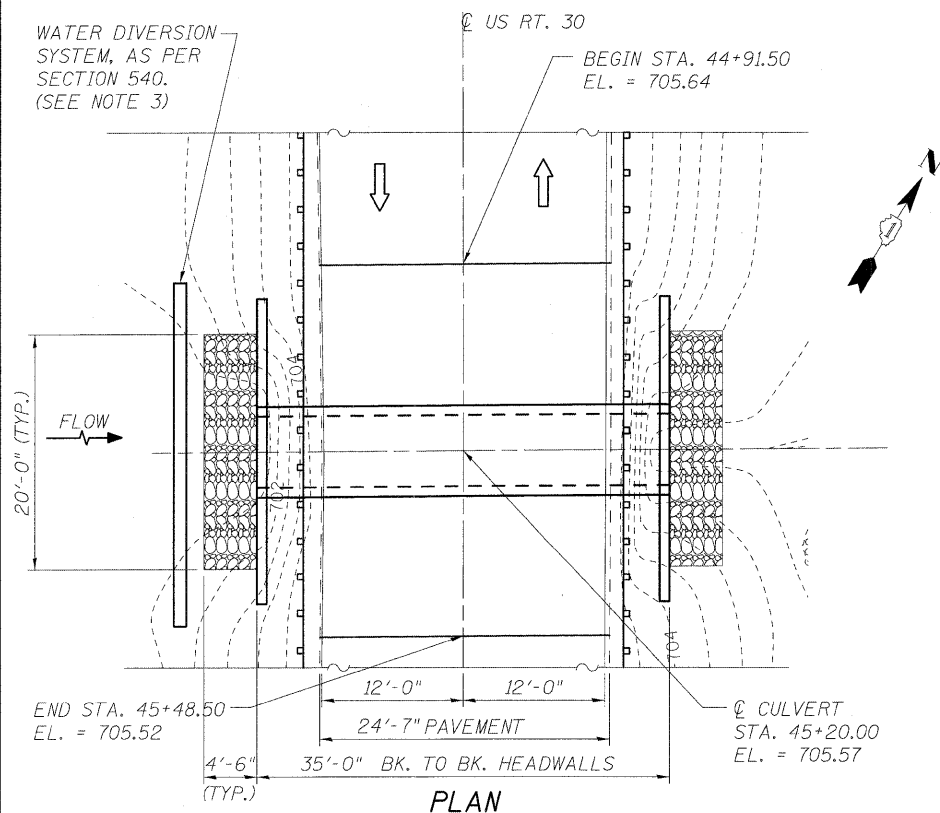


**LONGITUDINAL SECTION
AT CULVERT, LOOKING NORTH**

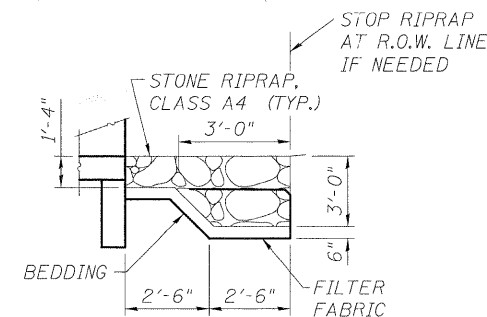
* CONTRACTOR SHALL FIELD VERIFY EXISTING INVERT ELEVATION AT EACH END BEFORE REMOVING EXISTING STRUCTURE



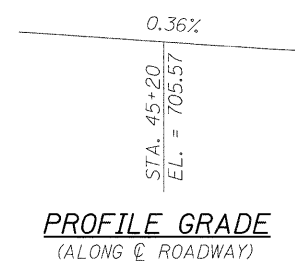
**SECTION THROUGH
PRECAST BARREL**



PLAN



SECTION THRU RIPRAP



**PROFILE GRADE
(ALONG ROADWAY)**

DESIGN LOADING

HS20-44 AND ALTERNATE MILITARY LOADING AND ALLOWANCE FOR 50 P.S.F. FUTURE WEARING SURFACE

DESIGN SPECIFICATIONS

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 2002

DESIGN STRESSES

FIELD UNITS	PRECAST UNITS
$f'_c = 3,500$ psi	$f'_c = 5,000$ psi
$f_y = 60,000$ psi (REINFORCEMENT)	$f_y = 65,000$ psi (WELDED WIRE FABRIC)
	$f_y = 60,000$ psi (REINFORCEMENT)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Horizontal Bedrock Acceleration Coefficient (A) = 3.5%
Site Coefficient (S) = 1.0

LOCO, INC.
CONSULTING ENGINEERS
1560 WALL ST., SUITE 222
NAPERVILLE, ILLINOIS 60563 PH: (630) 517-9100

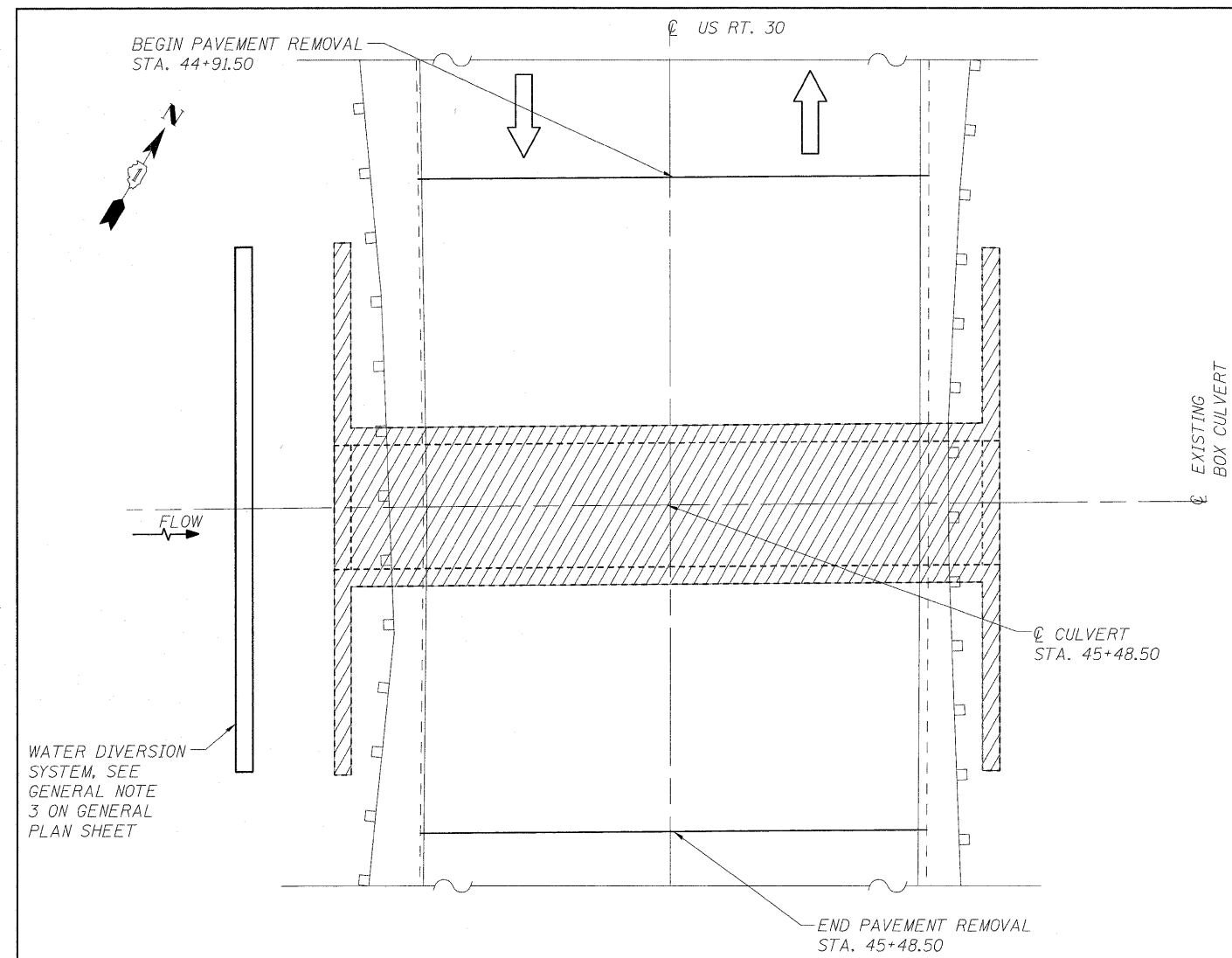
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CHECKED - WHE	REVISED - ---
DATE - 01/19/2009	REVISED - ---

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

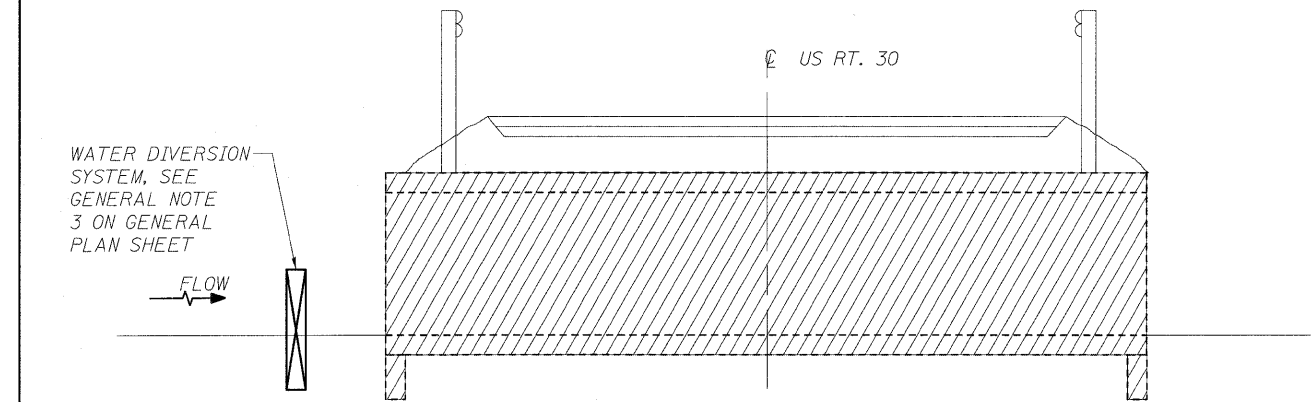
**GENERAL PLAN, ELEVATION AND INDEX
US ROUTE 30 - SN 047-0300**

SCALE: 1/8" = 1'-0" SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
349	16RS-6	WILL	30	13
CONTRACT NO. 60A98				



PLAN - REMOVAL



LONGITUDINAL SECTION - REMOVAL
AT CULVERT, LOOKING NORTH

GENERAL CONSTRUCTION NOTES

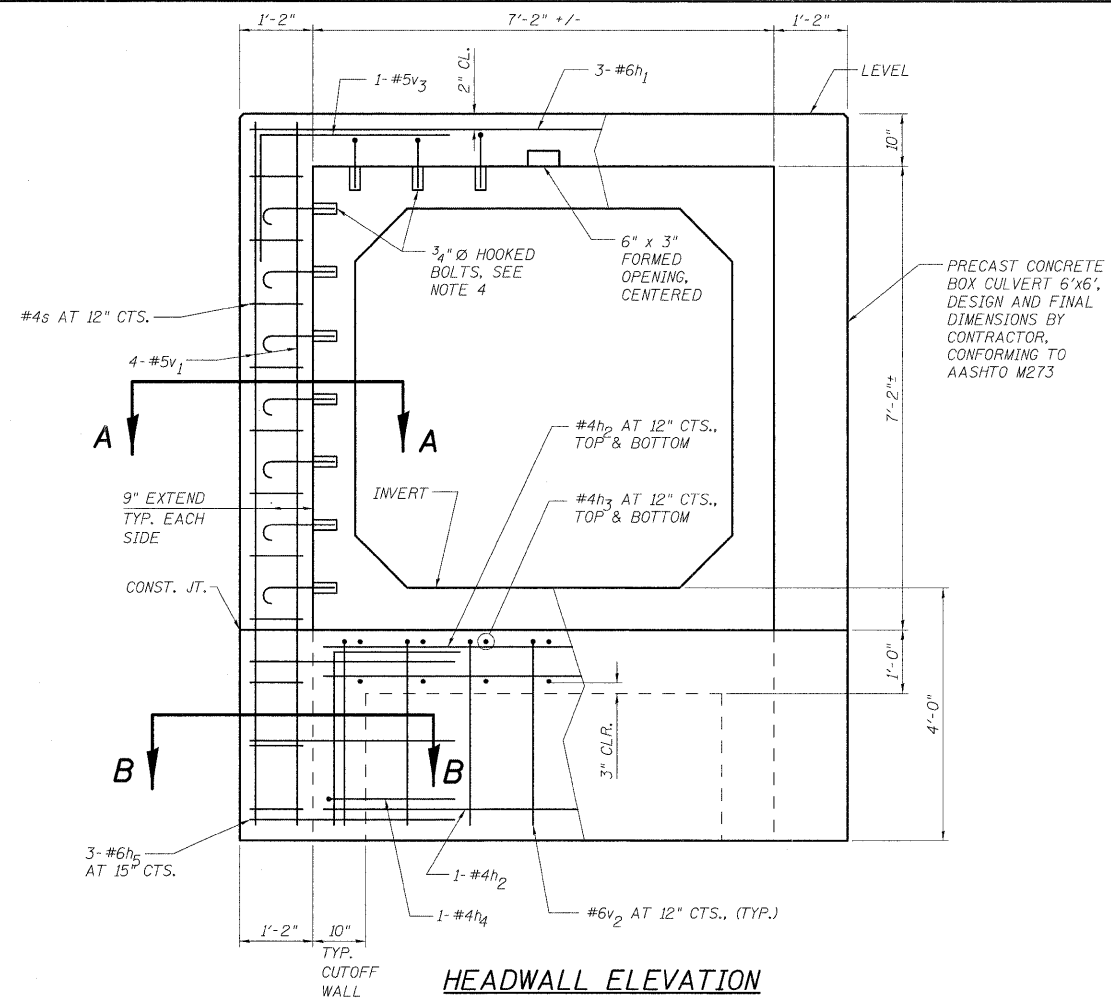
- A. THE CONTRACTOR SHALL SUBMIT A PLAN AND SCHEDULE OF CONSTRUCTION ACTIVITIES TO THE ENGINEER FOR APPROVAL BEFORE STARTING ANY WORK FOR THIS PROJECT.
 - B. AS-BUILT/ACTUAL DETAILS OF EXISTING BOX CULVERT AND WINGWALLS ARE NOT AVAILABLE. CONTRACTOR SHALL FIELD VERIFY ACTUAL EXISTING STRUCTURE TO BE REMOVED.
 - C. FOR TRAFFIC CONTROL DURING CONSTRUCTION, INCLUDING ITEMS NOT SHOWN HERE, SEE ROADWAY DRAWINGS.
 - D. REFER TO ROADWAY DRAWINGS, CROSS SECTIONS AND STRUCTURE DRAWINGS FOR ADDITIONAL INFORMATION.
 - E. TO COMPLETE THE WORK FOR THE BOX CULVERT REMOVAL ITEM, OTHER REMOVALS AND EXCAVATION WORK IS REQUIRED (NOT SHOWN). THAT WORK AND COST IS INCLUDED IN THE FOLLOWING PAY ITEMS:
 - STRUCTURE EXCAVATION
 - EARTH EXCAVATION
 - PAVEMENT REMOVAL*
 - STEEL PLATE BEAM GUARDRAIL REMOVAL*
 - STEEL PLATE BEAM GUARDRAIL REMOVAL, ATTACH TO STRUCTURE*
- (* COORDINATE WITH ROADWAY PLANS)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
REMOVAL OF EXISTING STRUCTURES	EACH	1

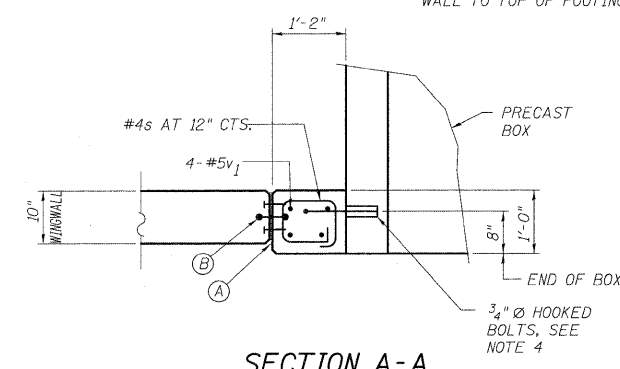
LEGEND

- APPROXIMATE LIMITS OF REMOVAL OF EXISTING STRUCTURES.

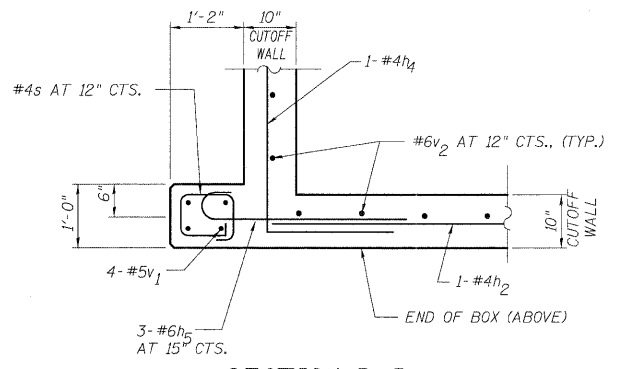


HEADWALL ELEVATION

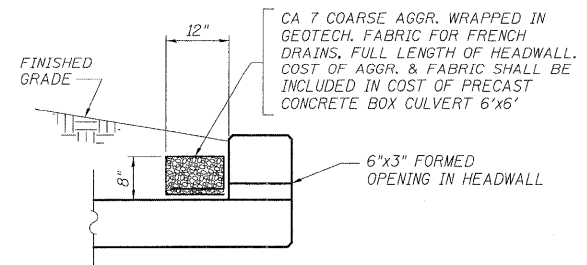
- (A) 1/2" PREMOULDED JOINT FILLER, INSTALL w/ 2 COLUMNS OF CONC. NAILS (FLAT HD. C.S.), 1" LONG, AT 12" CTS., VERTICAL.
- (B) 6" HOLLOW BULB TYPE NONMETALLIC WATER SEAL (6" FROM TOP OF WALL TO TOP OF FOOTING).



SECTION A-A



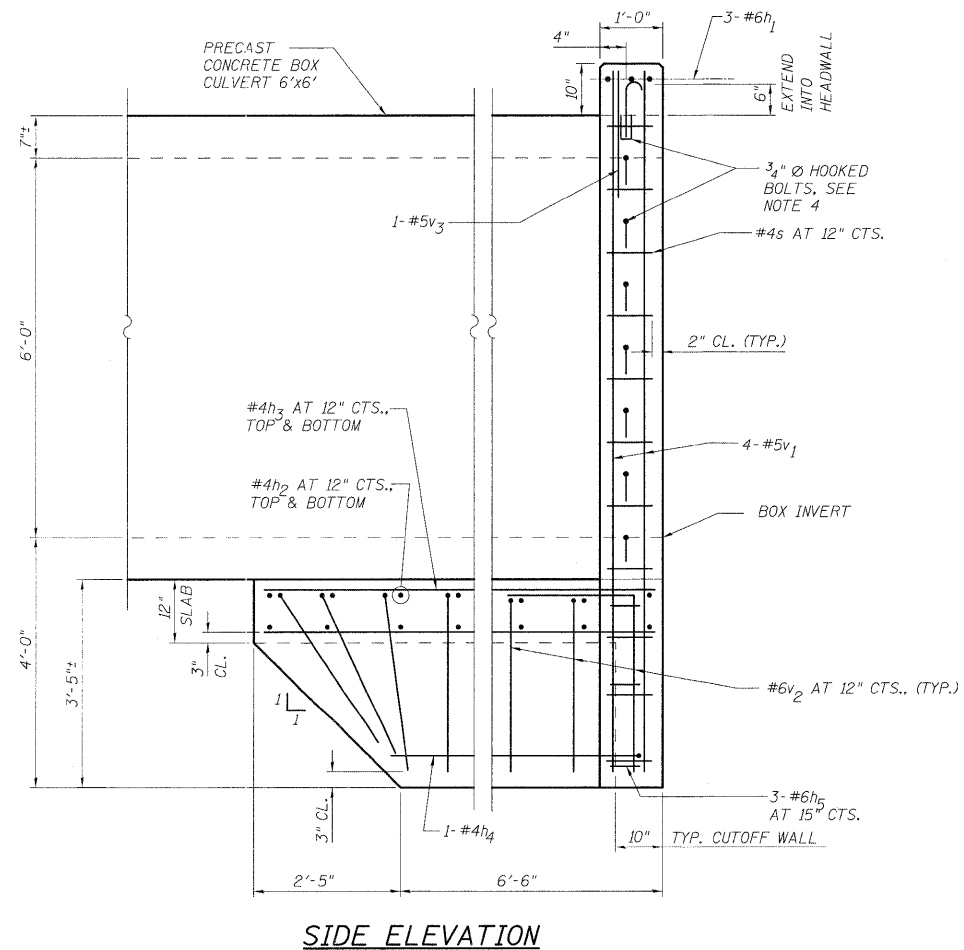
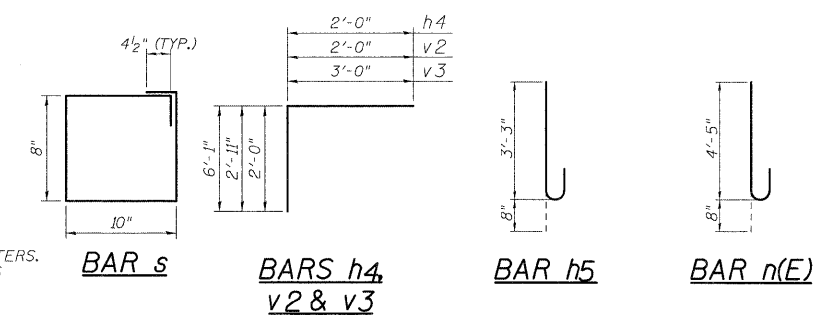
SECTION B-B



DRAINAGE DETAIL

NOTES

1. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS BEFORE ORDERING MATERIALS.
2. ALL EDGES SHALL HAVE STANDARD 3/4" CHAMFERS, EXCEPT AS NOTED.
3. REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.
4. TO CONNECT CAST-IN-PLACE COLLAR TO PRECAST BOX, PROVIDE 3/4" Ø HOOKED BOLTS WITH EMBEDDED INSERTS AT 12" MAXIMUM CENTERS. HOOKED BOLTS SHALL EXTEND 6" INTO HEADWALL AND 9" INTO SIDES OF COLLAR. COST SHALL BE INCLUDED IN THE PRECAST CONCRETE BOX CULVERT 6'x6' ITEM.
5. PROVIDE PROTECTIVE COAT ON TOP HORIZONTAL SURFACES AND TOP 6" ON SIDE FACES OF HEADWALLS.

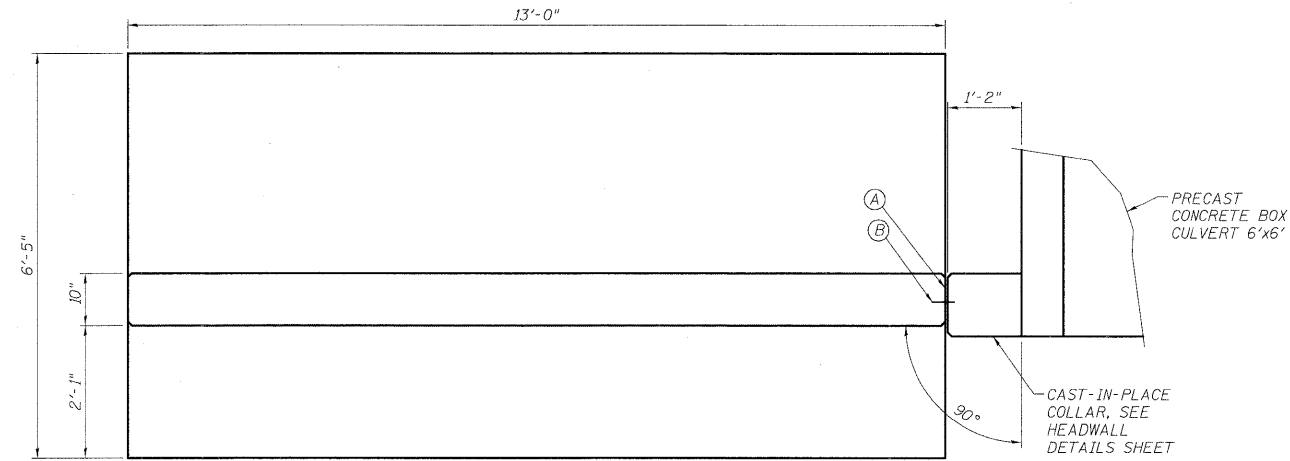


SIDE ELEVATION

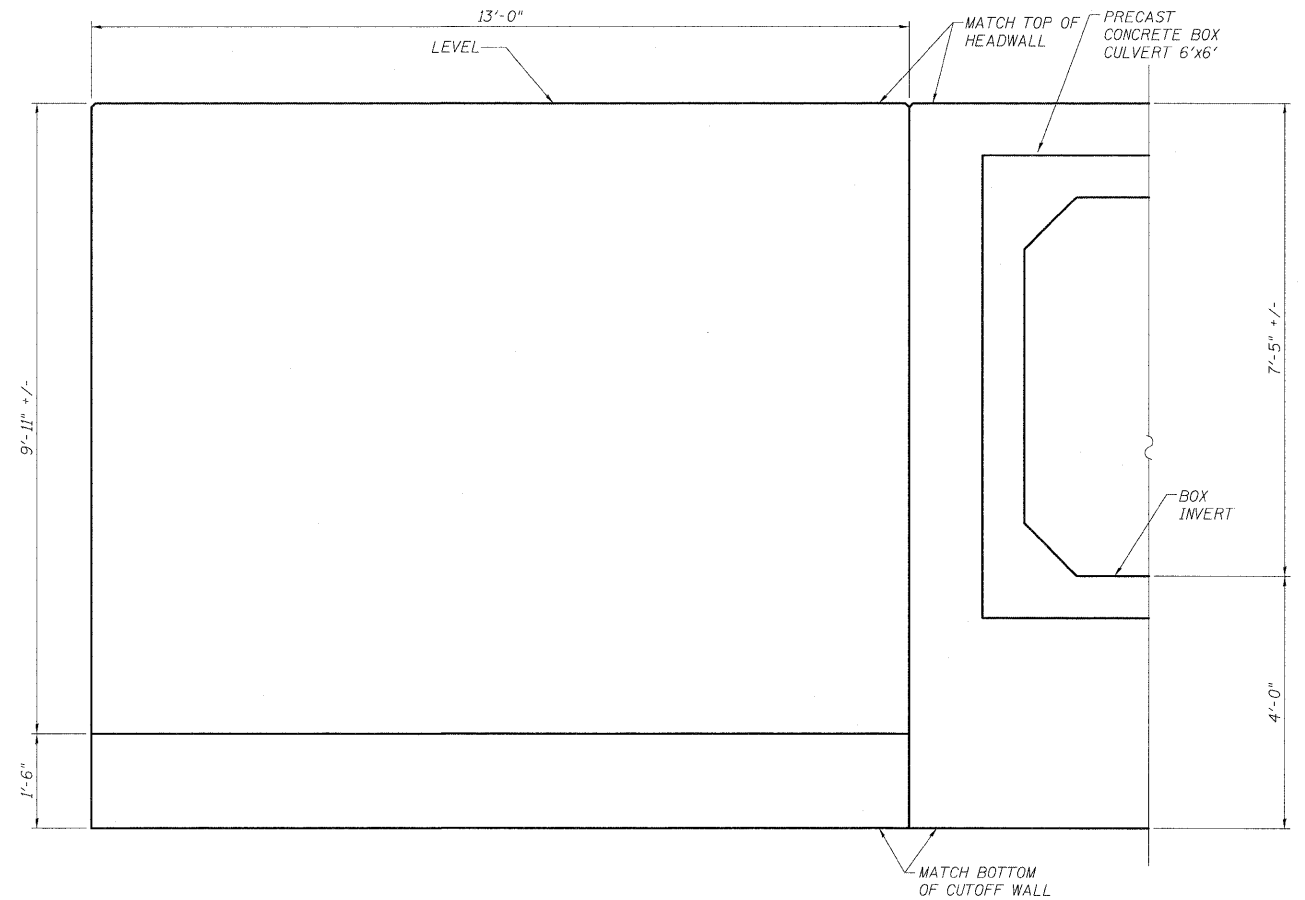
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	68	#4	12'-8"	—
h ₁	6	#6	9'-2"	—
h ₂	42	#4	6'-10"	—
h ₃	32	#4	8'-7"	—
h ₄	4	#4	8'-1"	—
h ₅	12	#6	3'-11"	—
n(E)	64	#6	5'-1"	—
s	48	#4	3'-9"	□
t	128	#4	6'-1"	—
v	64	#4	9'-9"	—
v ₁	16	#5	11'-0"	—
v ₂	46	#6	4'-11"	—
v ₃	4	#5	5'-0"	—
w	40	#5	12'-8"	—
Item	Unit	Quantity		
CONCRETE BOX CULVERTS	CU YD	44.7		
REINFORCEMENT BARS	POUND	3260		
REINFORCEMENT BARS, EPOXY COATED	POUND	490		
STRUCTURE EXCAVATION	CU YD	273		
EARTH EXCAVATION	CU YD	206		
GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	119		
COURSE AGGREGATE BACKFILL (SPECIAL)	CU YD	715		
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	267		
FILTER FABRIC	SQ YD	46		
STONE RIPRAP, CLASS A4	SQ YD	20		
PRECAST CONCRETE BOX CULVERT 6'x6'	FOOT	35		
PROTECTIVE COAT	SQ YD	11		

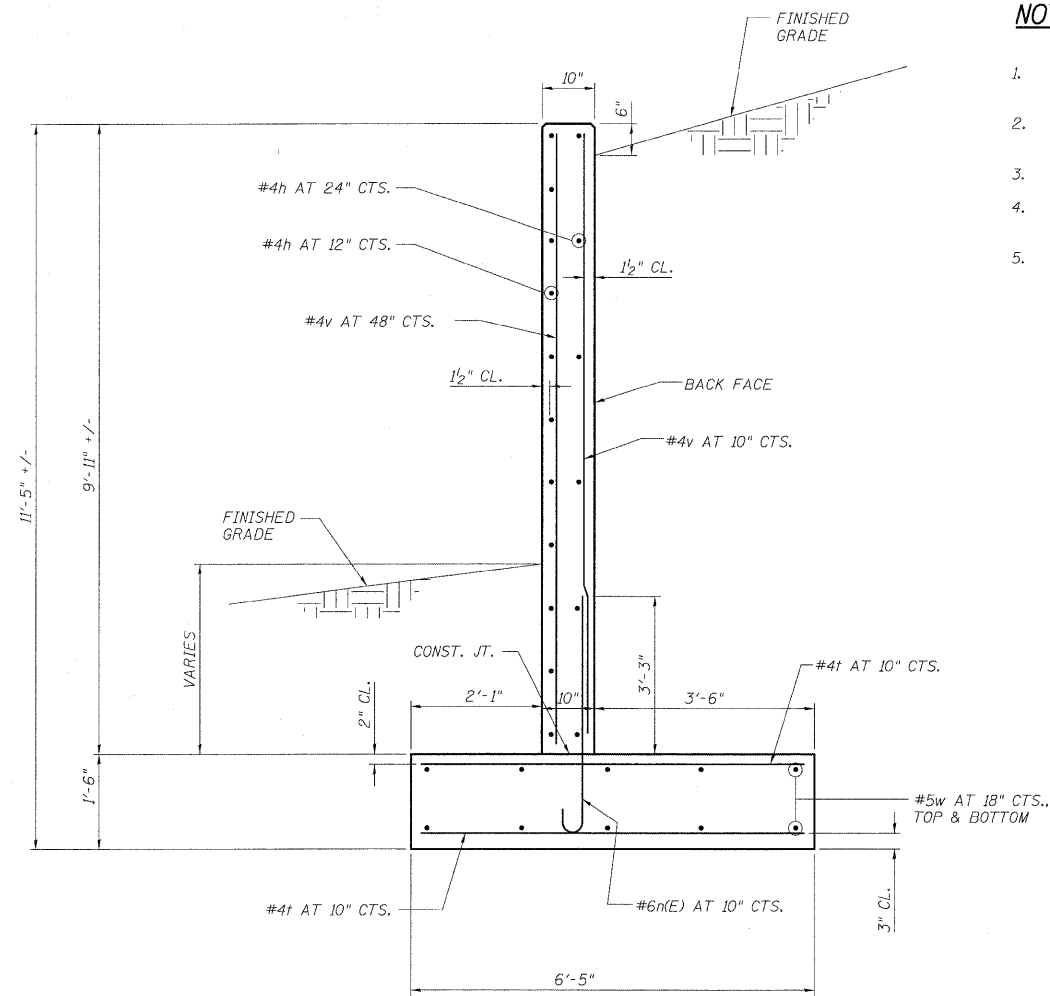
- (A) 1/2" PREMOULDED JOINT FILLER, INSTALL w/ 2 COLUMNS OF CONC. NAILS (FLAT HD. C.S.), 1" LONG, AT 12" CTS., VERTICAL.
- (B) 6" HOLLOW BULB TYPE NONMETALLIC WATER SEAL (6" FROM TOP OF WALL TO TOP OF FOOTING).



PLAN



ELEVATION



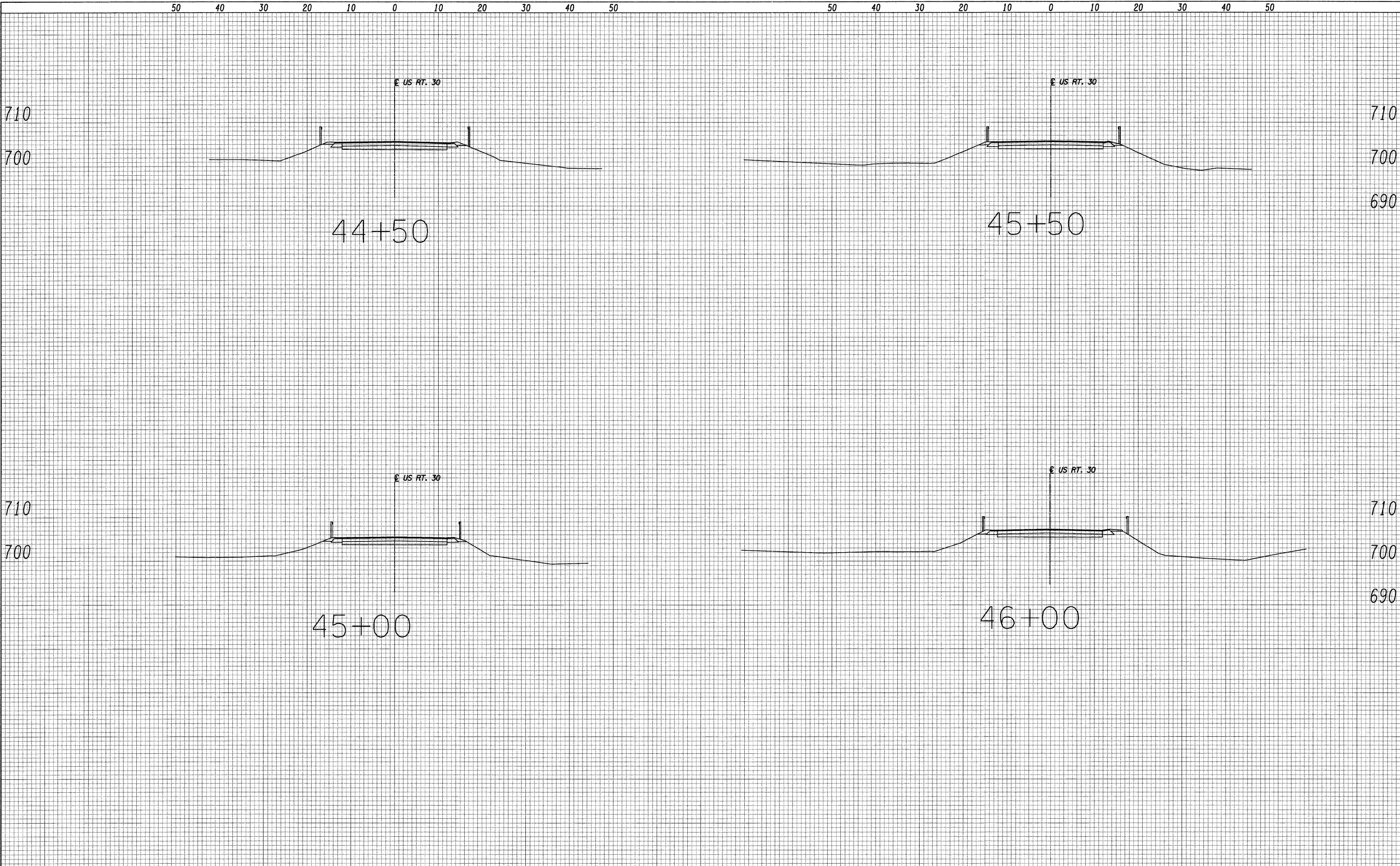
CROSS SECTION

NOTES

1. ALL EDGES SHALL HAVE STANDARD 3/4" CHAMFERS, EXCEPT AS NOTED.
2. REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.
3. SEE HEADWALL DETAILS SHEET FOR BILL OF MATERIAL.
4. PROVIDE PROTECTIVE COAT ON TOP HORIZONTAL SURFACES AND TOP 6" ON INSIDE FACES OF WINGWALLS.
5. THE MAXIMUM DESIGN SOIL BEARING PRESSURE AT THE TOE OF THE WINGWALL FOOTING IS 2556 PSF.

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

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



 1560 WALL ST. SUITE 222 NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100	DESIGNED - ST	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS US RT. 30		F.A.P. RTE. 349	SECTION 16RS-6	COUNTY WILL	TOTAL SHEETS 30	SHEET NO. 17	S-5	
	DRAWN - ST	REVISED -		SCALE: _____ SHEET NO. _____ OF _____ SHEETS STA. 44+50 TO STA. 46+00		FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT		CONTRACT NO. 60A98				
CHECKED - WHE	REVISED -											
DATE - 01/19/2009	REVISED -											


Wang Engineering, INC.
 Consulting Geotechnical and
 Environmental Engineers
 wangeng3@wangeng.com
 1145 Main Street
 Lombard, IL 60148
 Telephone: 630 953-9928
 Fax: 630 953-9938

BORING LOG BC-01

WEI Job No.: 563-01-01

Client: **Lonco, Inc.**
 Project: **US Route 30 Box Culvert**
 Location: **Kendall County, Illinois**

Datum: NGVD
 Elevation: 706.30 ft
 North: 1833920.87 ft
 East: 1002813.33 ft
 Station:
 Offset:

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	705.3	12-inch thick ASPHALT --PAVEMENT--															
		Medium stiff, black SILTY CLAY --FILL--	1	X	1	3 2 2	0.75 P	27				11	X	11	3 5 8	2.62 B	16
			2	X	2	1 1 2	0.75 P	36				30	X	12	3 5 8		NR
	700.8	Very soft to stiff, brown and gray CLAY, with organic matter	3	X	3	1 1 3	0.50 P	44					X	13	3 5 8	1.50 P	18
			4	X	4	2 2 2	1.00 P	46					X	14	2 4 7	1.64 B	17
			5	X	5	0 1 2	0.82 B	94									
		--LL=97%, PL=65%--	6	X	6	0 0 1	0.25 B	61									
	690.8	Medium stiff, gray SILTY CLAY LOAM	7	X	7	1 1 2	0.50 P	24									
	688.3	Medium stiff to very stiff, gray CLAY	8	X	8	1 2 3	0.82 B	20									
			9	X	9	3 3 4	1.07 B	17									
			10	X	10	3 3 3	2.21 B	16									
			25	X													
										671.3	Boring terminated at 35.00 ft						

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	09-25-2008	Complete Drilling	09-25-2008	While Drilling	▽	DRY	
Drilling Contractor	WTS	Drill Rig	B-57 TMR	At Completion of Drilling	▽	DRY	
Driller	K&J	Logger	H. Suhail	Checked by	N. Davis	Time After Drilling	NA
Drilling Method	3.25 HSA; Backfilled upon Completion			Depth to Water	▽	NA	
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.							

WANGENG INC. 5630101.GPJ WANGENG.GDT 10/17/08

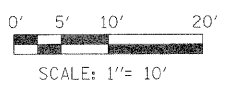
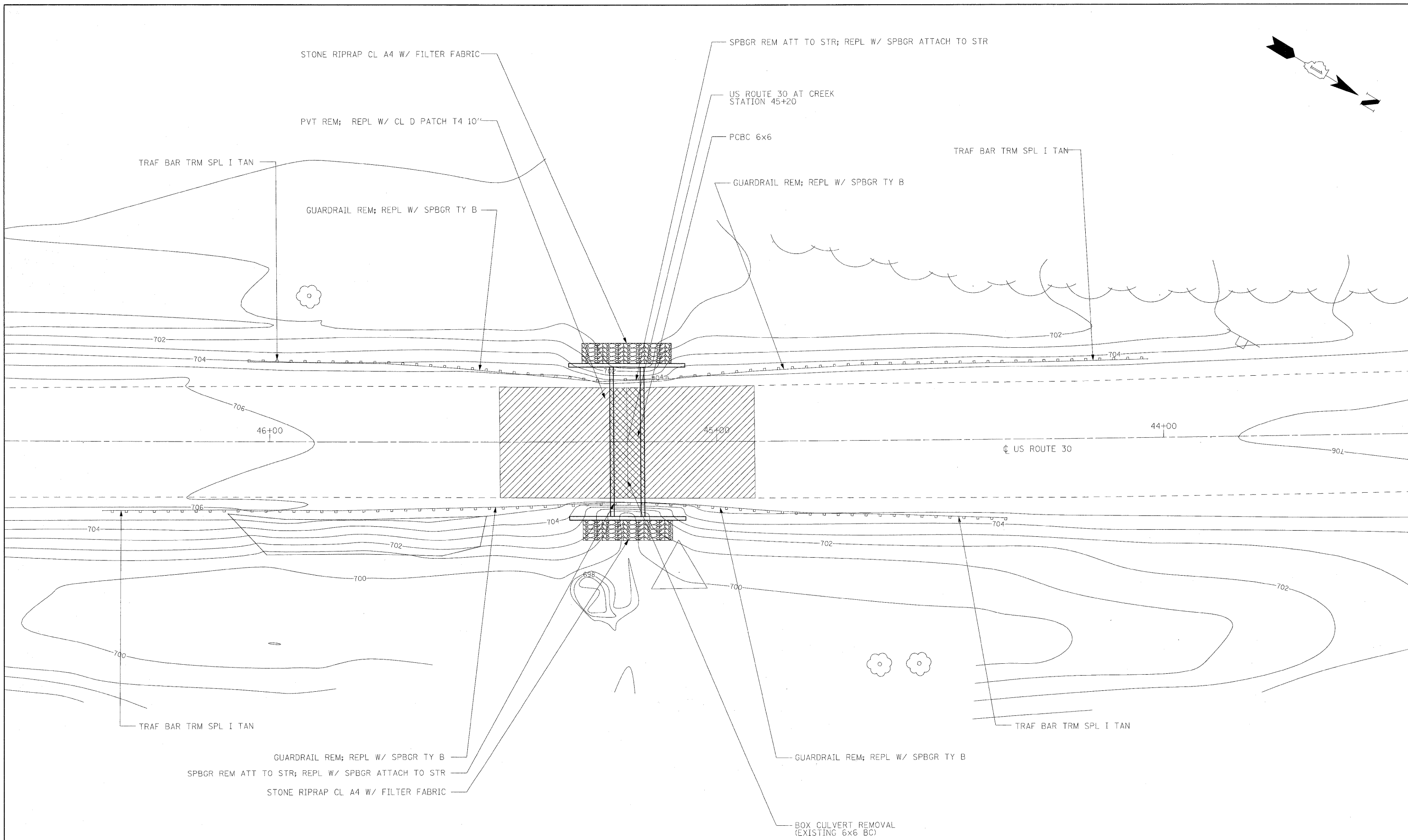
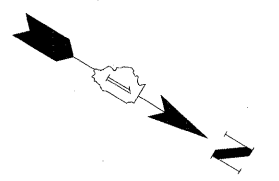

 CONSULTING ENGINEERS
 1560 WALL ST., SUITE 222
 NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100

DESIGNED - MJY	REVISED -
DRAWN - ST	REVISED -
CHECKED - MJY	REVISED -
DATE - 01/19/2009	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BORING LOG			
US ROUTE 30			
SCALE: NONE	SHEET NO. OF SHEETS	STA. TO STA.	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
349	16RS-6	WILL	30	17a
CONTRACT NO. 60A98				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				



LOVCO, INC.
 CONSULTING ENGINEERS
 1560 WALL ST., SUITE 222
 NAPERVILLE, ILLINOIS 60563 PH 630/577-9100

DESIGNED - MJY	REVISED -
DRAWN - MJY & ST	REVISED -
CHECKED - MJY	REVISED -
DATE - 12/19/2008	REVISED -

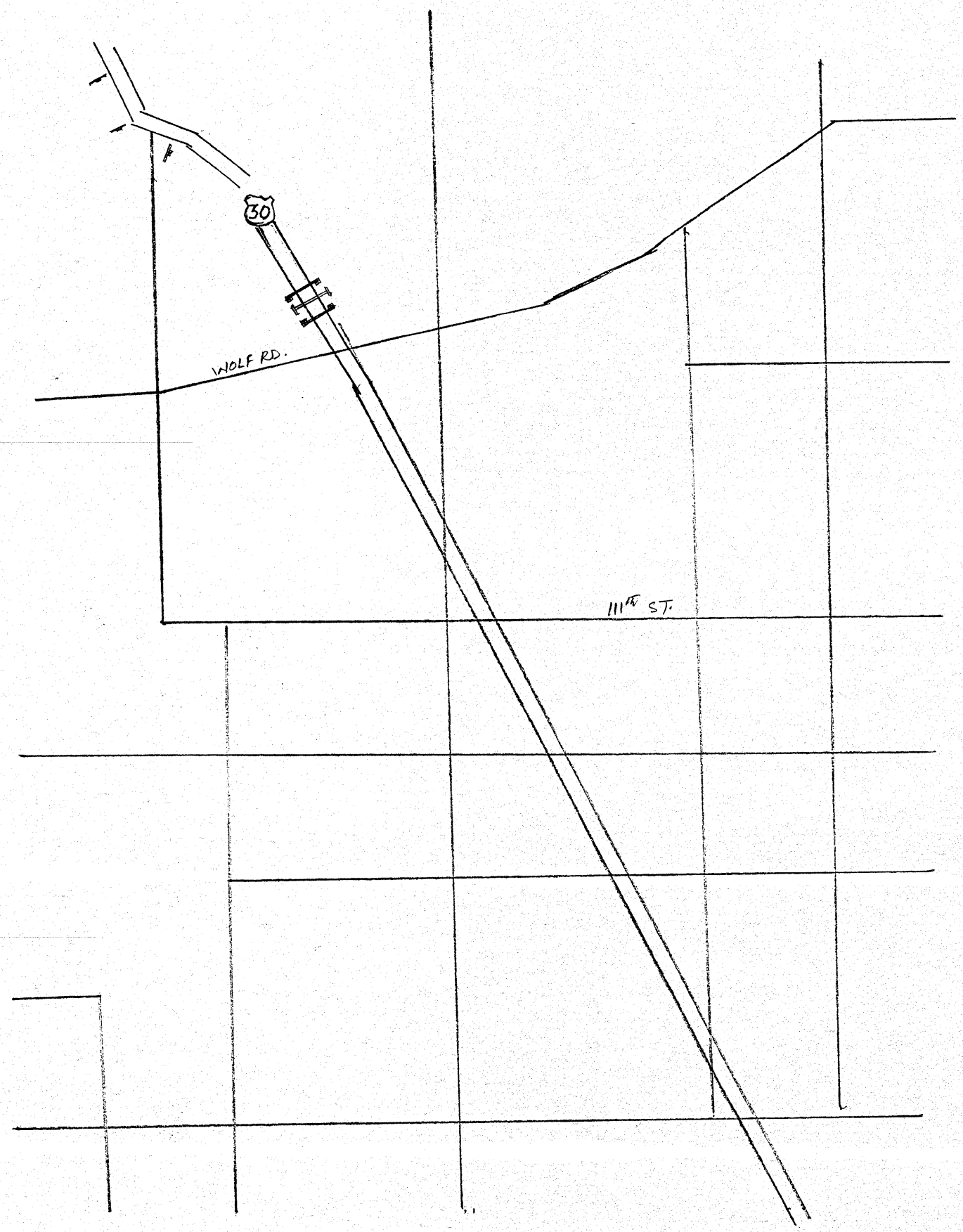
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PLAN AND PROFILE
 US ROUTE 30**

SCALE: 1" = 10' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
349	16RS-6	WILL	30	18
CONTRACT NO. 60A98				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

F.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
349	16 RS-6	WILL/KENDALL	30	20
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SIGN LEGEND

<p>① US RTE 30</p>		
<p>② </p>	<p>⑧ </p>	<p>⑭ </p>
<p>③ </p>	<p>⑨ </p>	<p>⑮ </p>
<p>④ </p>	<p>⑩ </p>	<p>⑯ </p>
<p>⑤ </p>	<p>⑪ </p>	<p>⑰ </p>
<p>⑥ </p>	<p>⑫ </p>	<p>⑱ </p>
<p>⑦ </p>	<p>⑬ </p>	<p>⑲ </p>
		<p>⑳ </p>

NOTE:
THE LOCAL ROUTE AND TRUCK ROUTE DETOURS SHALL
BE PAID FOR AS TRAFFIC CONTROL AND PROTECTION
FOR TEMPORARY DETOUR.
(TOTAL 1 EACH)

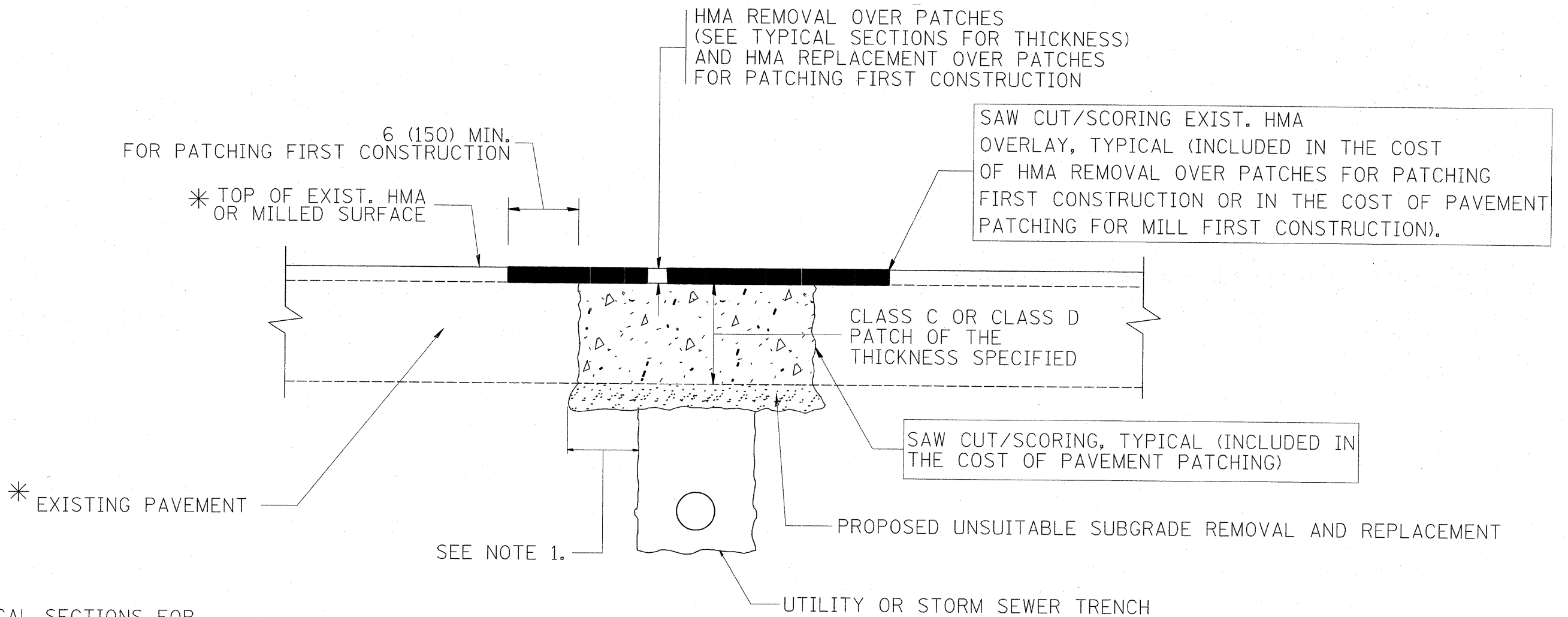
ILLINOIS DEPARTMENT OF TRANSPORTATION

DETOUR PLAN

U.S. ROUTE 30 AT
BOX CULVERT REPLACEMENT

SCALE: NONE
DATE: 11/20/03

DRAWN BY: JPH, MAF
CHECKED BY: CBF



* 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)

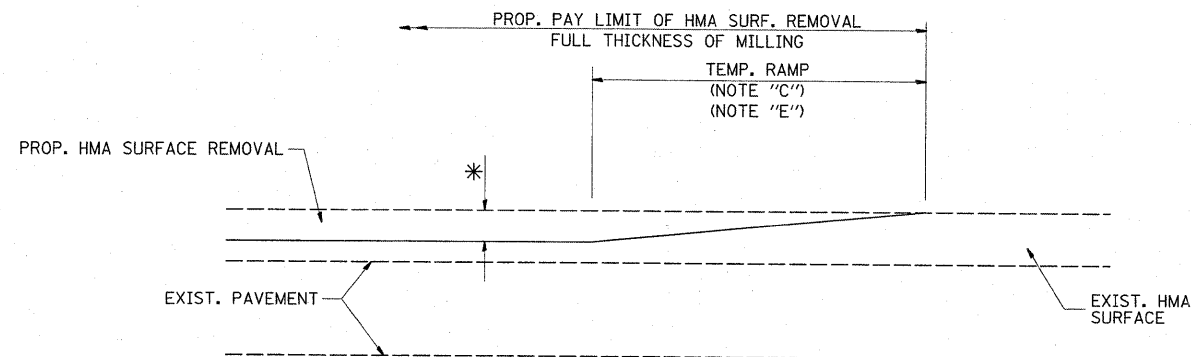
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

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.

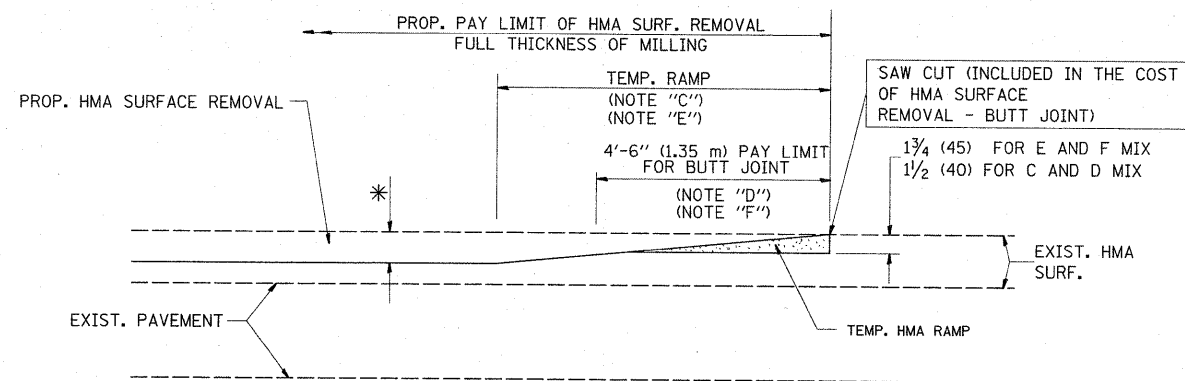
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = ulrichkd	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\pw\work\VPWIDOT\ULRICHKD\dms90448\DisStd.dgn	DRAWN -	REVISED - R. BORO 01-01-07	349				16RS-6	WILL/KINDALL	30	21	
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - R. BORO 09-04-07	BD400-04 (BD-22)				CONTRACT NO. 60A98				
PLOT DATE = 12/22/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08	SCALE: NONE		SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



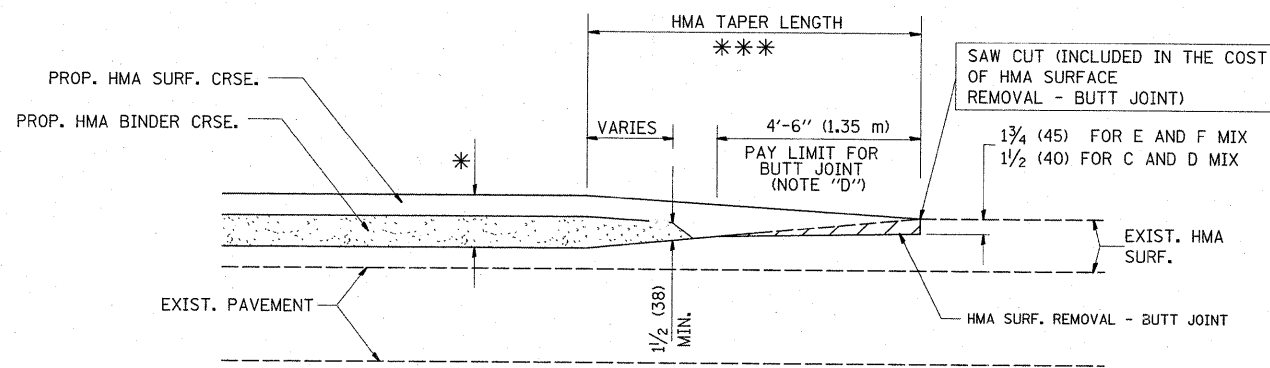
MILLED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

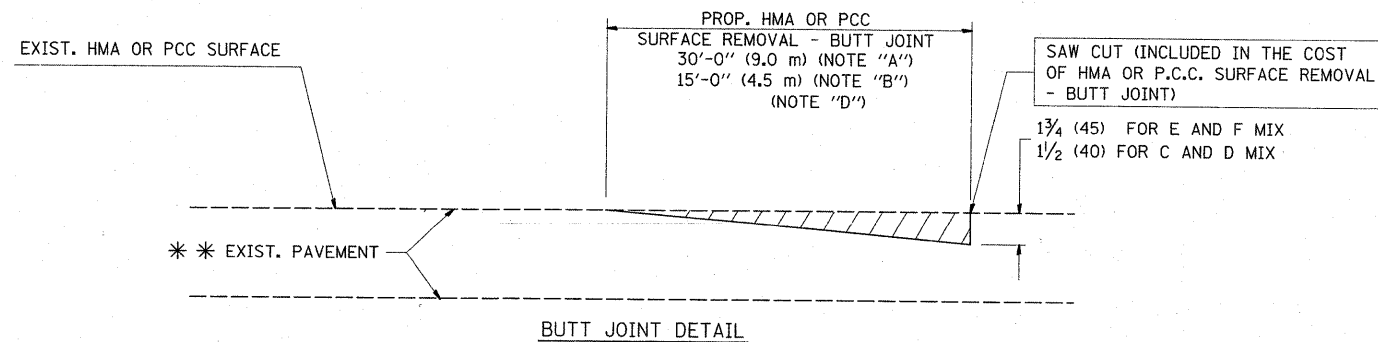


HMA CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

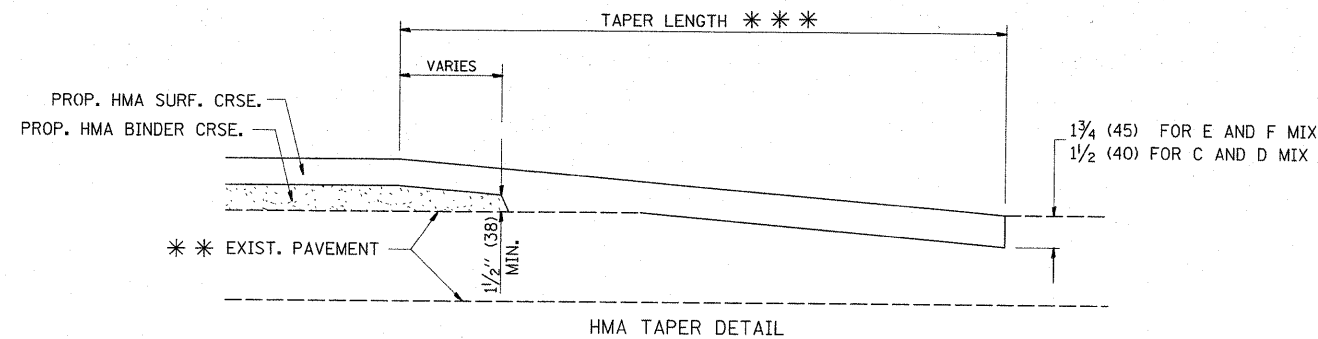
OPTION 2
TYPICAL TEMPORARY RAMP



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



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

NOTES

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

BASIS OF PAYMENT:

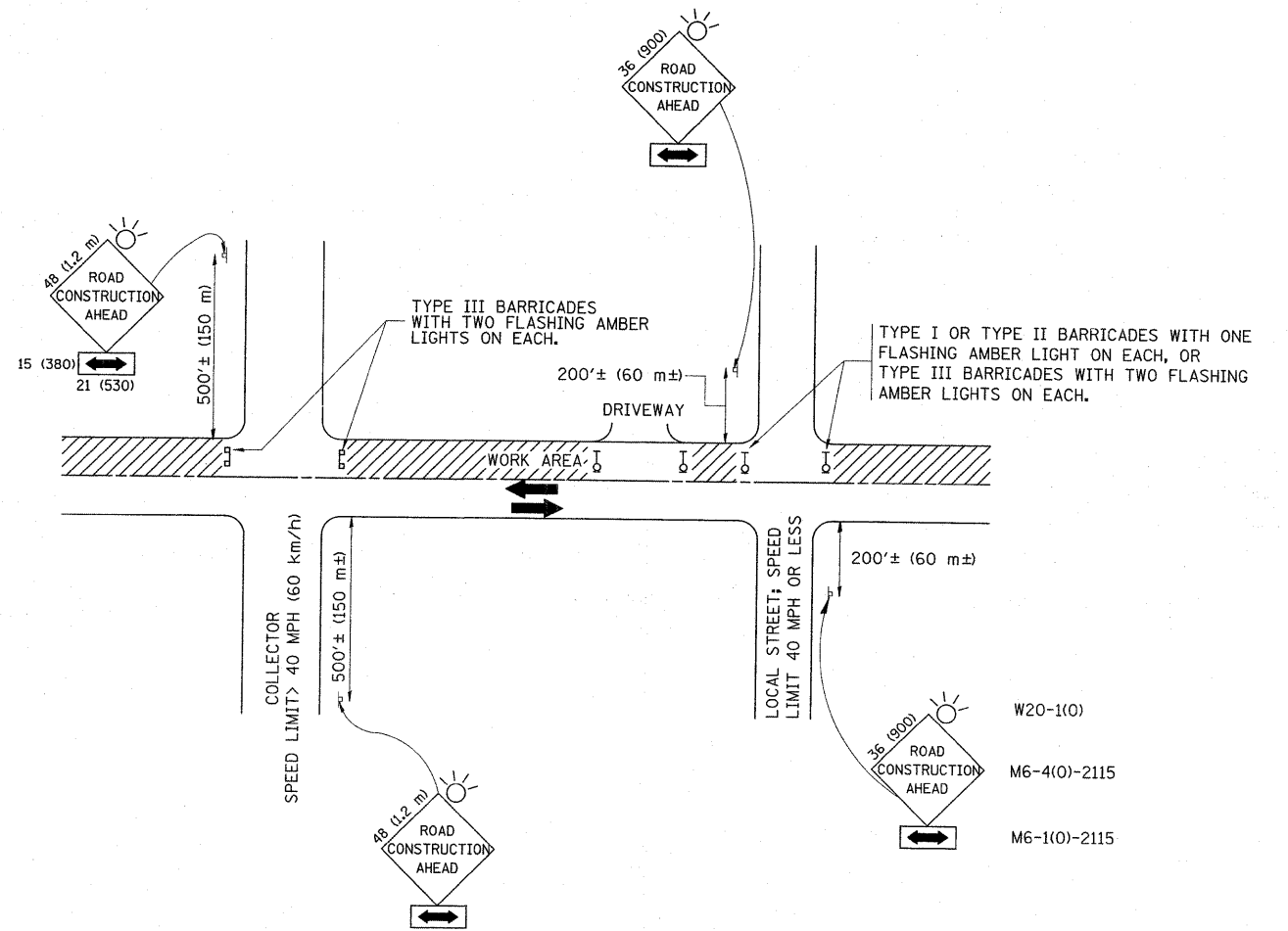
THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

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

FILE NAME =	USER NAME = ulrichkd	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
os:\pwwork\p\WIDOT\ULRICHKD\dms90448\DrawStd.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97
PLOT SCALE = 50,0000 1/ IN.		CHECKED -	REVISED - M. GOMEZ 04-06-01
PLOT DATE = 12/22/2008		DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BUTT JOINT AND HMA TAPER DETAILS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	349	16RS-6	WILL/KINDALL	30	22
STA. TO STA.		BD400-05 BD32		CONTRACT NO. 60A98		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 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:
 - 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.
 - 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.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - 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.
 - 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.
 - WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

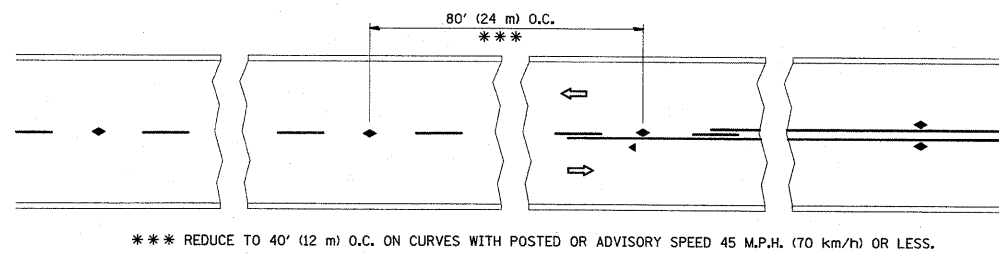
FILE NAME =	USER NAME = ulrichkd	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
std.dgn		DRAWN -	REVISED - A. HOUSEH 03-06-96
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED - A. HOUSEH 10-15-96
PLOT DATE = 12/22/2008		DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

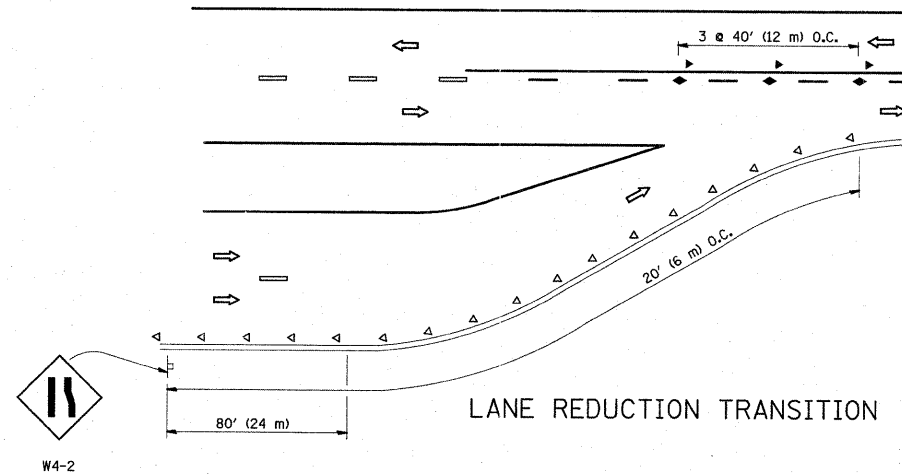
TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

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

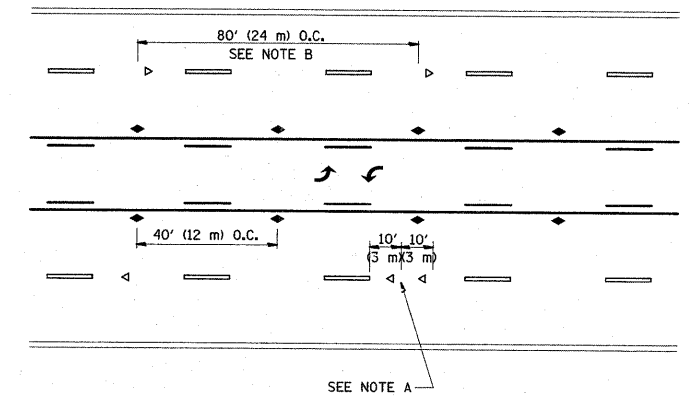
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
349	16RS-6	WILL/KINDALL	30	23
TC-10			CONTRACT NO. 60A98	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



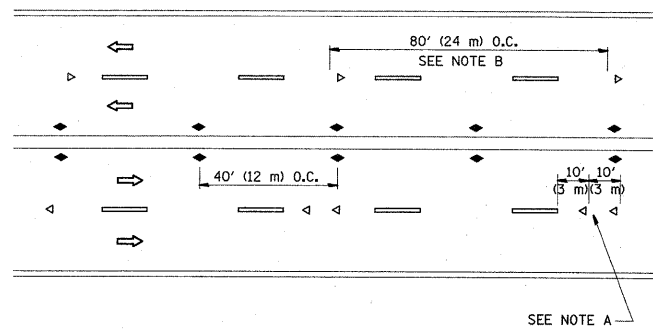
TWO-LANE/TWO-WAY



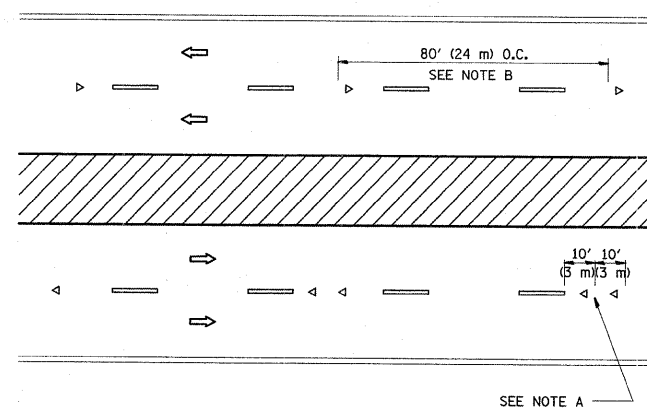
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

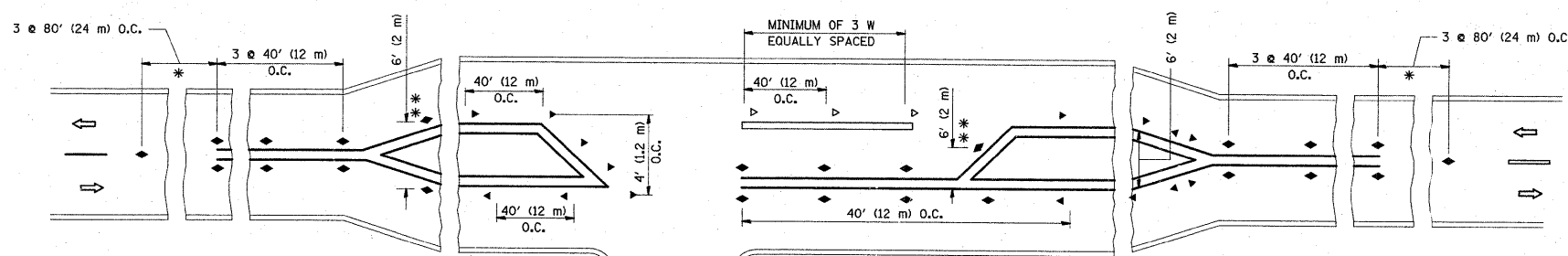
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

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 SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



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

LEFT TURN

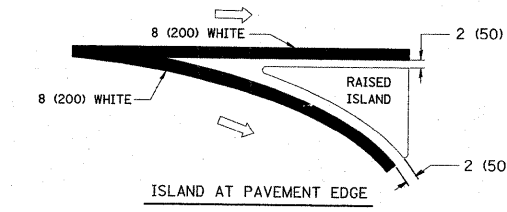
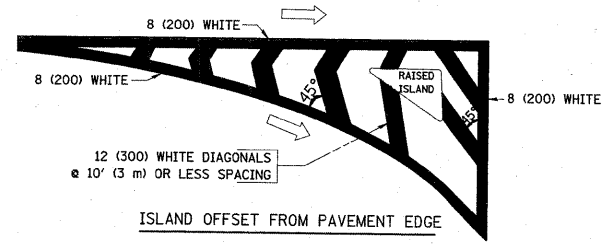
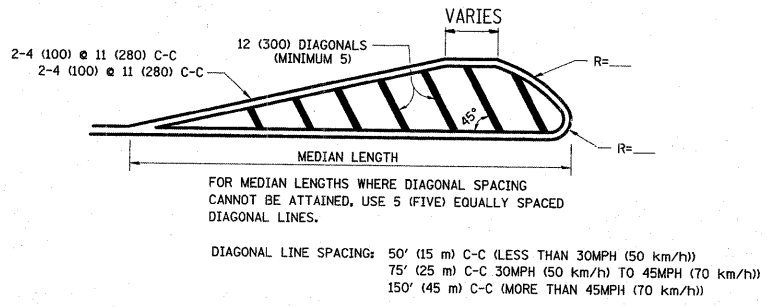
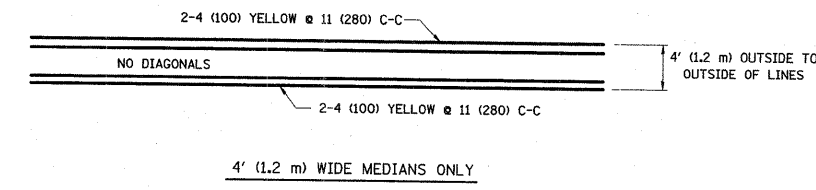
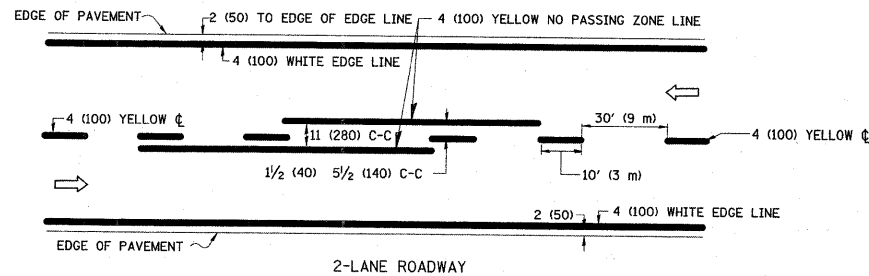
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = ulrichkd	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
ci:\pwork\PWIDOT\ULRICHKD\dms90448\DrawStd.dgn		DRAWN -	REVISED - T. RAMMACHER 03-12-99
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED - T. RAMMACHER 01-06-00
PLOT DATE = 12/22/2008		DATE -	REVISED -

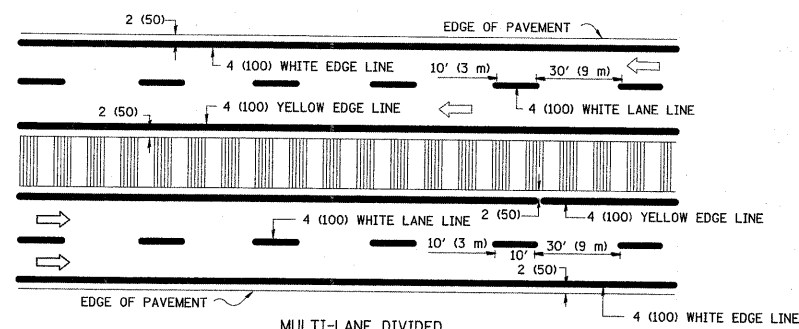
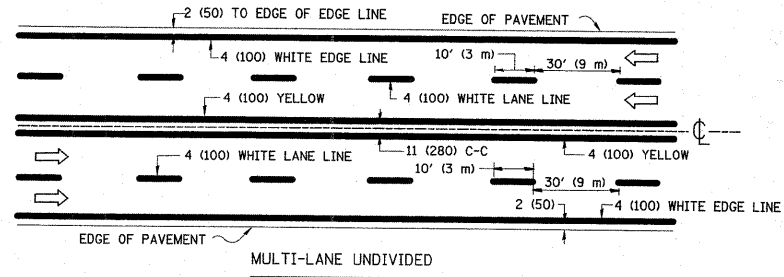
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

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.
349	16RS-6	WILL/KINDALL	30	24
TC-11			CONTRACT NO. 60A98	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

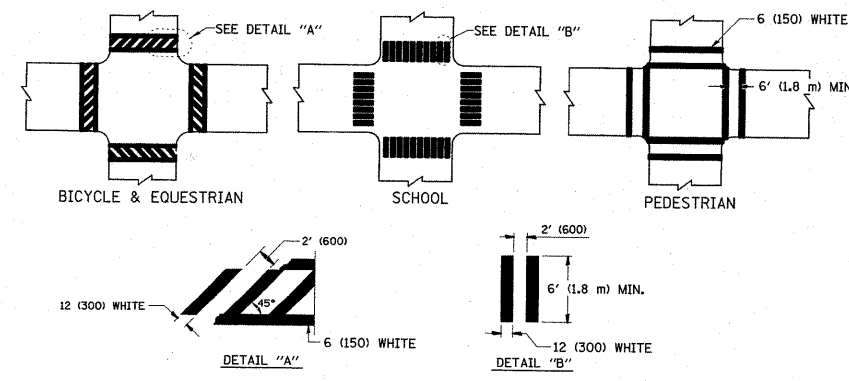


TYPICAL ISLAND MARKING

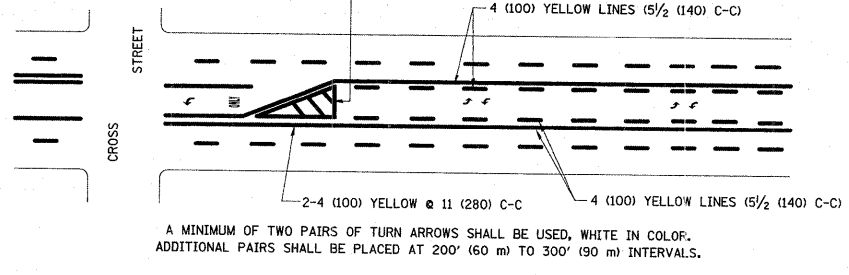


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

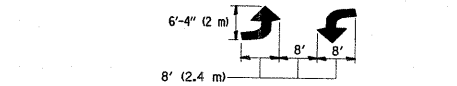
TYPICAL LANE AND EDGE LINE MARKING



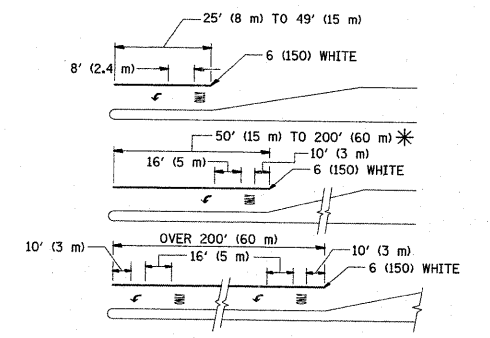
TYPICAL CROSSWALK MARKING



TYPICAL PAINTED MEDIAN MARKING



TYPICAL TURN LANE MARKING



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

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

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

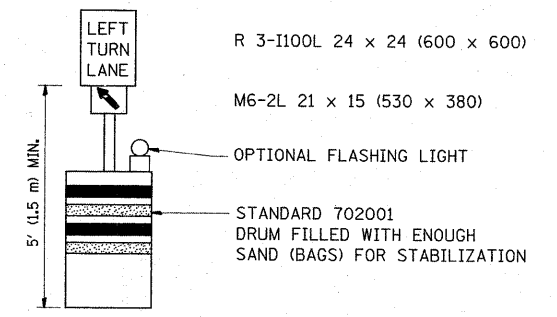
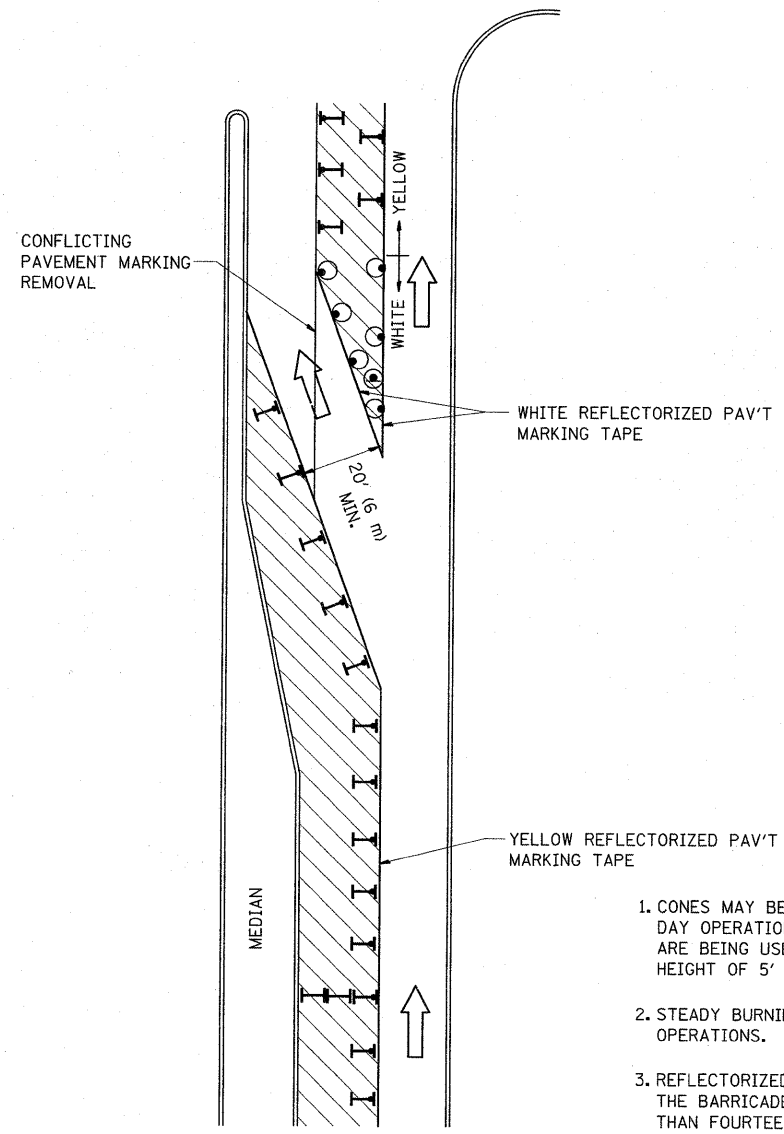
All dimensions are in inches (millimeters) unless otherwise shown.

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	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -A. HOUSEH 10-17-96
	PLOT DATE = 12/22/2006	DATE - 03-19-90	REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL PAVEMENT MARKINGS		349	16RS-6	WILL/KINDALL	30	25
SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA. TO STA.		
		TC-13		CONTRACT NO. 60A98		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						


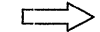




F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
349	16RS-6	WILL/KINDALL	30	25
TC-13		CONTRACT NO. 60A98		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



GENERAL NOTES

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

LEGEND

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

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

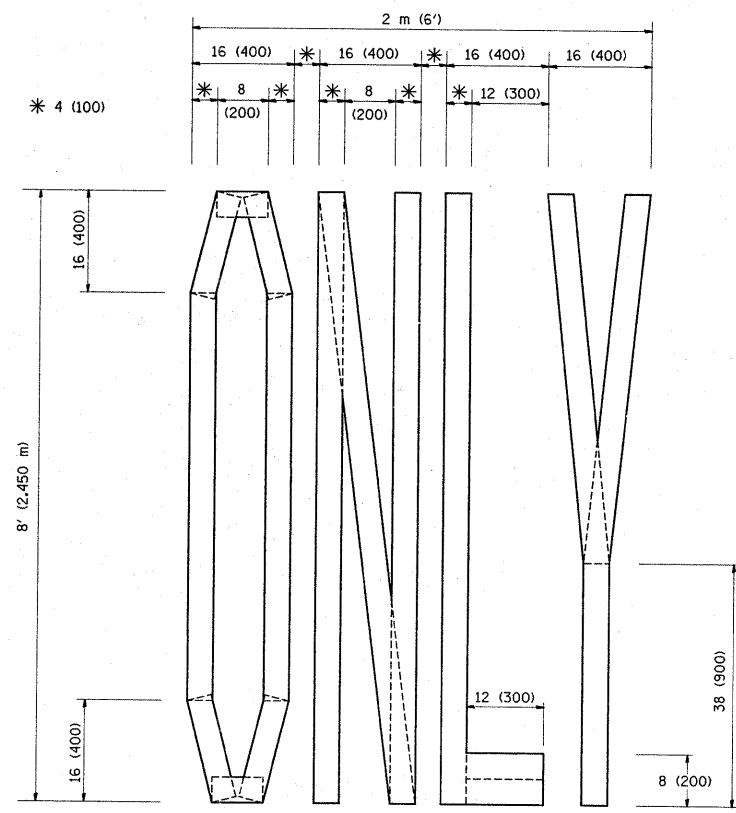
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	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-12-96
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

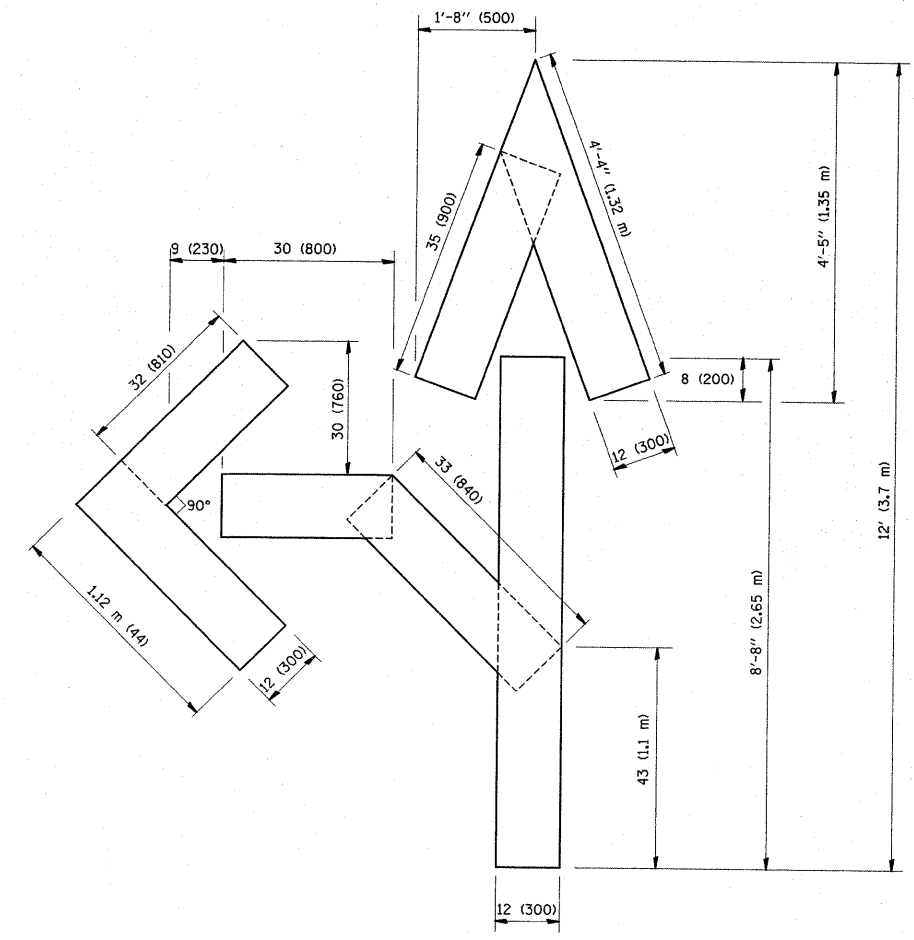
**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
(TO REMAIN OPEN TO TRAFFIC)**

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

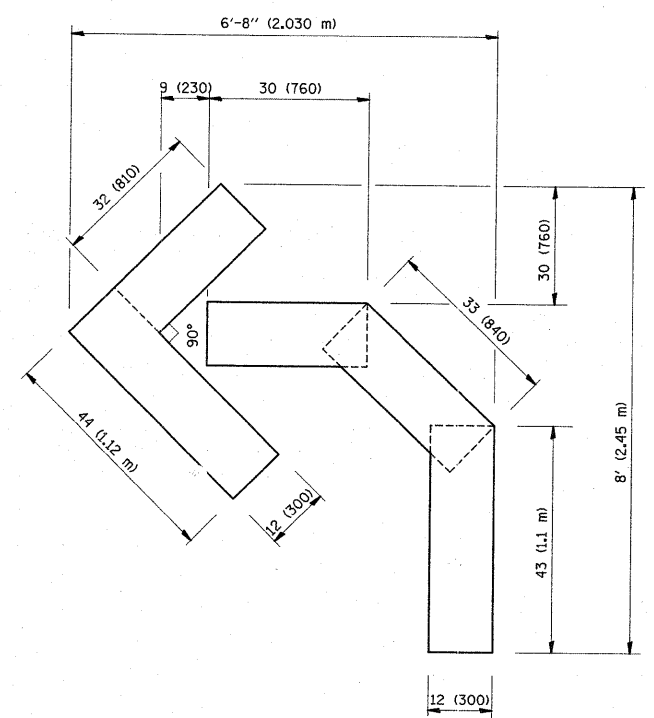
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
349	16RS-6	WILL/KINDALL	30	26
TC-14			CONTRACT NO. 60A98	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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



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



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

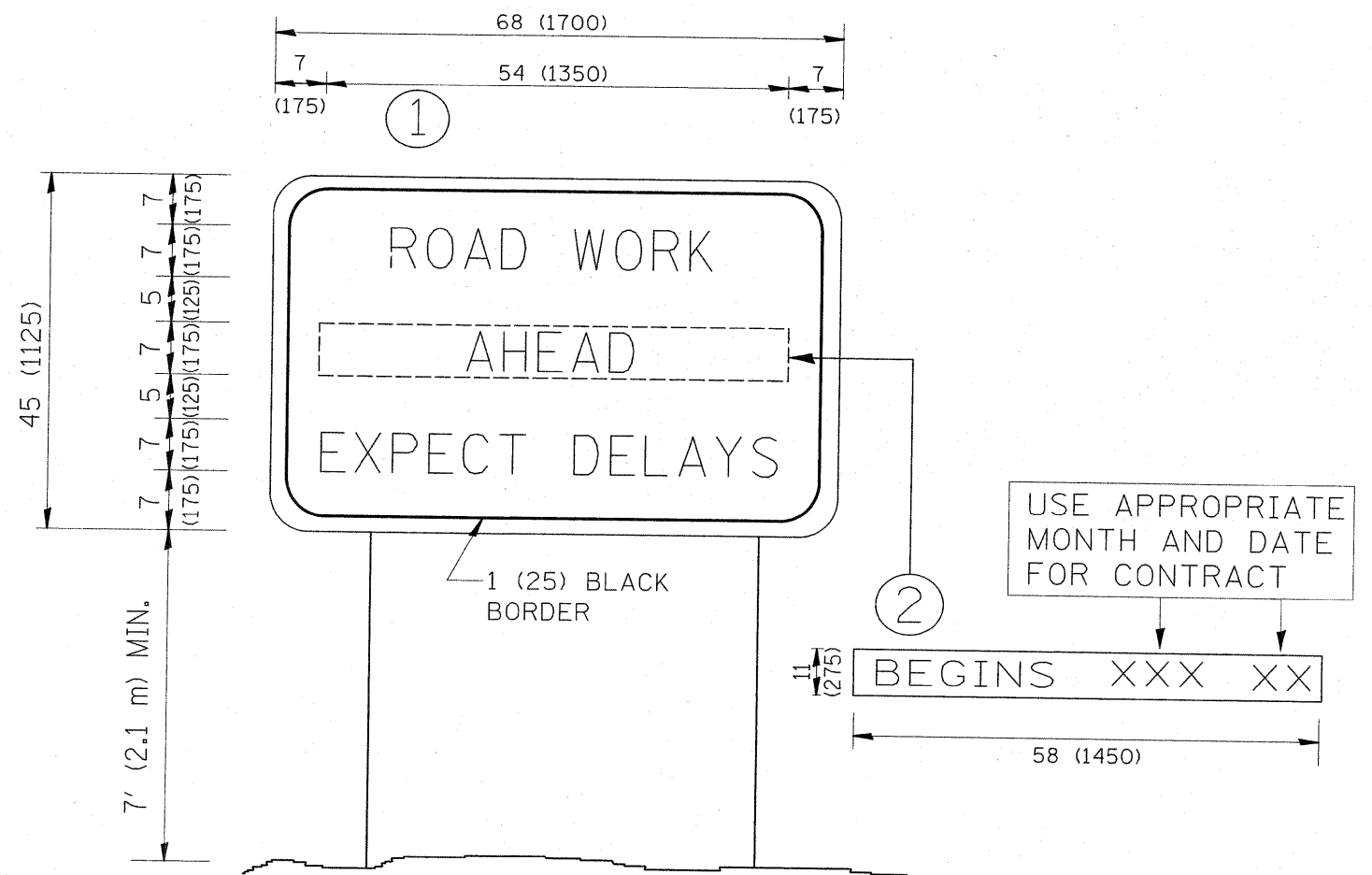
All dimensions are in Inches (millimeters) unless otherwise shown.

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cr\pw_work\PWIDOT\ULRICH\0\dms90448\Dis	Std.dgn	DRAWN -	REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 12/22/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
349	16RS-6	WILL/KINDALL	30	27
TC-16			CONTRACT NO. 60A98	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

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

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

FILE NAME =	USER NAME = ulrchkd	DESIGNED -	REVISED - R. MIRS 09-15-97
cr\pw_work\VPWIDOT\ULRCHKD\dms90448\Dis	Std.dgn	DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 12/22/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

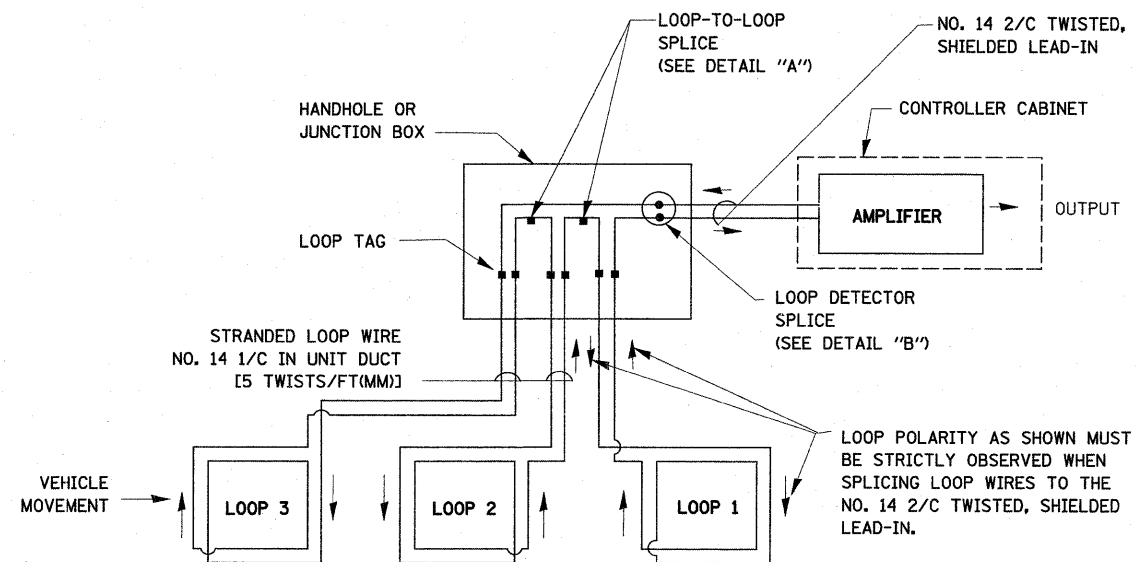
**ARTERIAL ROAD
INFORMATION SIGN**

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

F.A.P. RTE. 349	SECTION 16RS-6	COUNTY WILL/KINDALL	TOTAL SHEETS 30	SHEET NO. 28
TC-22			CONTRACT NO. 60A98	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LOOP DETECTOR NOTES

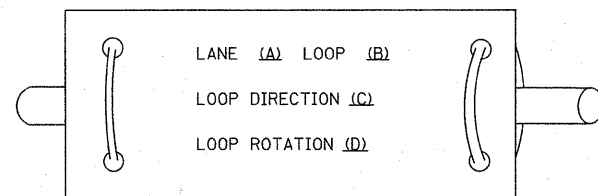
1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED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



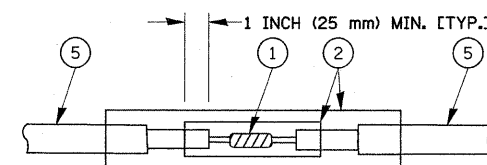
DETECTOR LOOP WIRING SCHEMATIC

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

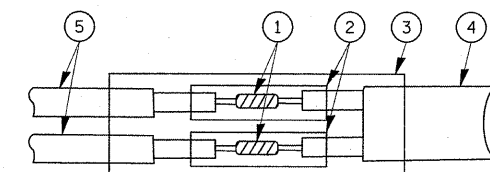
LOOP LEAD-IN CABLE TAG



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



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



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

LOOP DETECTOR SPLICE

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

FILE NAME =	USER NAME = ulrichkd	DESIGNED - D.A.D.	REVISED - 11-12-01
ct:\pw_work\FWIDOT\ULRICHKD\dms90448\Dis	Std.dgn	DRAWN - R.W.P.	REVISED - BUR. TRAFFIC 01-01-02
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	PLOT DATE = 12/23/2008	DATE - 05-30-00	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

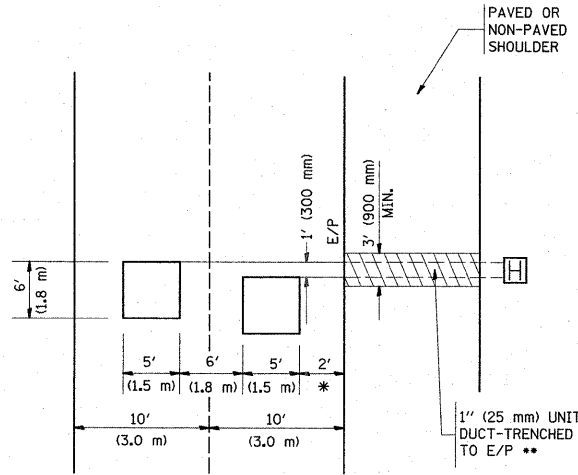
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
349	16RS-6	WILL/KINDALL	30	29
TS-05			CONTRACT NO. 60A98	
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.



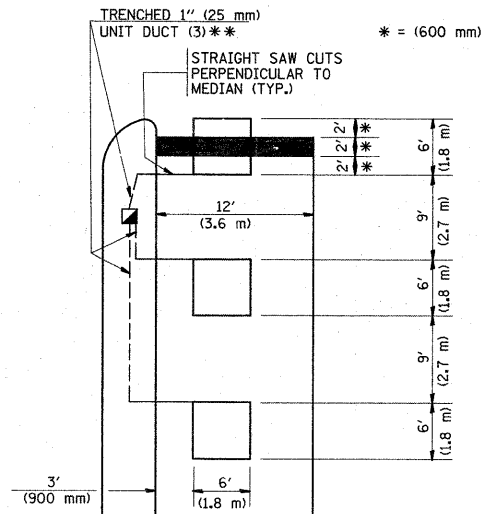
* = (600 mm)

** 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.

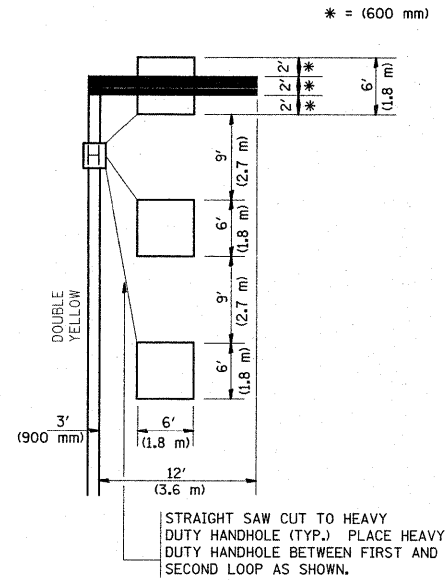


** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

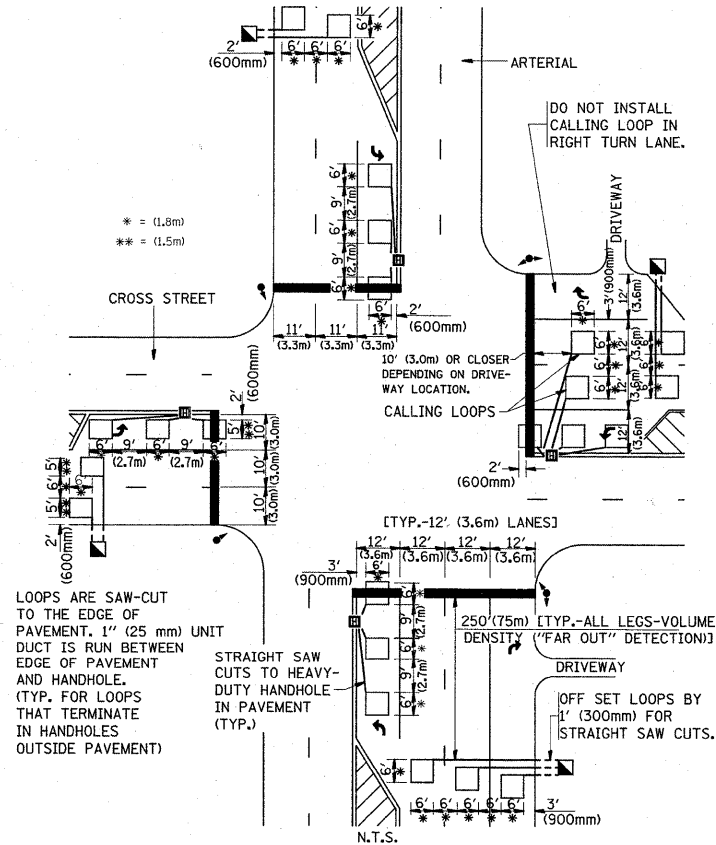
**LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH**

(PROTECTED / PERMITTED LEFT TURN PHASING)



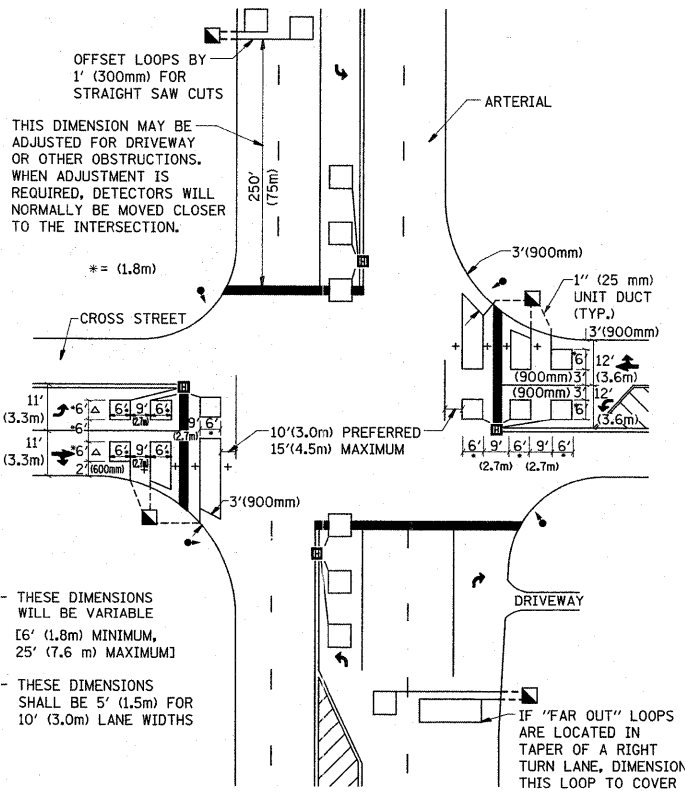
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



DETAIL 1
N.T.S.

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



DETAIL 2
N.T.S.

NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATELY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- * WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DIMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

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

FILE NAME =	USER NAME = ulr1chkd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
es:\pwwork\pwidot\ulr1chkd\dms\98448\03	Std.dgn	DRAWN -	REVISED -		349	16RS-6	WILL/KINDALL	30	30		
PLOT SCALE = 50.0000' / IN.	CHECKED - R.K.F.	REVISED -	REVISED -		TS-07			CONTRACT NO. 60A98			
PLOT DATE = 12/22/2008	DATE -	REVISED -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS/FED. AID PROJECT			