

033

INDEX OF SHEETS:

07-12-2019 LETTING ITEM 033

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
368	35RS-9	TAZEWELL/WOODFORD	26	1
ILLINOIS			CONTRACT NO. 68C97	

- 1 COVER SHEET
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- 14-15 BOX CULVERT END SECTION DETAILS
- 16 EXISTING CULVERT DETAILS
- 17-25 DISTRICT CADD STANDARDS
- 26 CROSS SECTIONS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

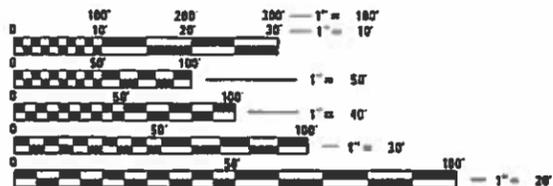
**PROPOSED
HIGHWAY PLANS**

FAS ROUTE 368 (BUS 24)
SECTION 35RS-9
TAZEWELL/WOODFORD COUNTIES
PROJECT STP-QKFV(661)
C-94-002-16

HIGHWAY STANDARDS:

- 442201-03 725001-01
- 630001-12 781001-04
- 630106-02 782006
- 630301-09
- 701201-05
- 701301-04
- 701306-04
- 701311-03
- 701336-07
- 701901-08

ADT = 2488 YEAR 2015
SU = 65 (2.60 %)/2015
MU = 42 (1.69 %)/2015

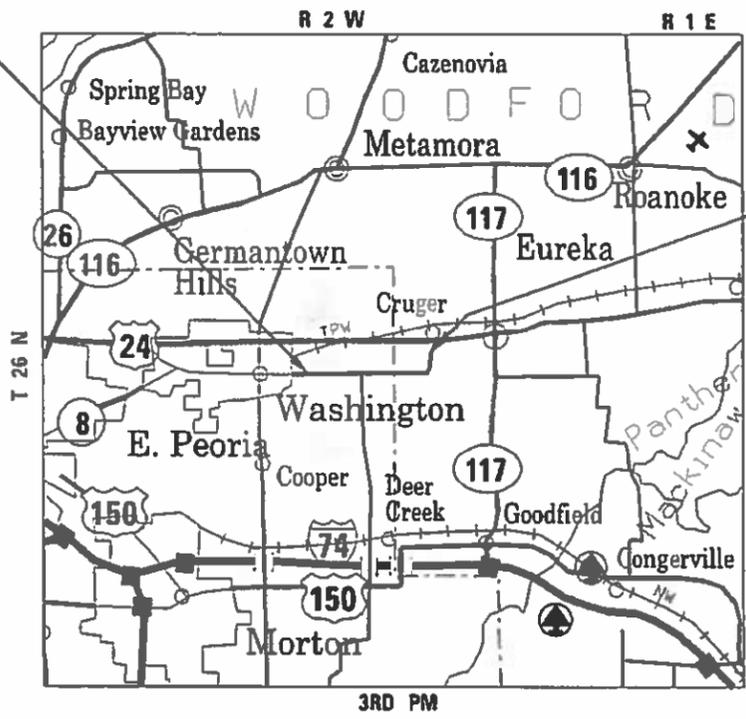


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER MICHAEL JACOBS 309-671-3460
PROJECT MANAGER RICH DOTSON 309-671-3455
CONTRACT NO. 68C97
CATALOG NO. 035332-00D

PROJECT BEGINS
STA. 15+00 (BUS 24)



PROJECT ENDS
STA. 302+00 (BUS 24)

PROJECT CONSISTS OF HMA RESURFACING ON
BUS 24 FROM EAST OF LYNN ST TO WEST OF CRUGER ROAD
IN WOODFORD AND TAZEWELL COUNTY

GROSS LENGTH OF IMPROVEMENT = 5.2 MILES (27,262 FEET)
NET LENGTH OF IMPROVEMENT = 5.2 MILES (27,262 FEET)

D-94-001-16



LOCATION OF SECTION INDICATED THUS: - [Symbol] -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED May 31, 2019
Ronald A. Garnett RSO
REGION THREE ENGINEER

June 14, 2019
E.A. Elk
ENGINEER OF DESIGN AND ENVIRONMENT

June 19, 2019
Paul P. Chy
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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OF THE STATE OF ILLINOIS

GENERAL NOTES

ENVIRONMENTAL REVIEWS

Prior to the use of any proposed borrow areas, use areas (temporary access roads, detours, run-arounds, etc.) and/or waste areas, the Contractor shall file the required environmental resource request surveys according to Section 107.22 of the Standard Specifications. These surveys are required in order for the Department to conduct cultural and biological resource surveys for the proposed site.

Prior to any waste materials being removed from the construction site the required environmental resource surveys will need to be obtained and filed by the Contractor. Excess waste products removed from the construction site shall be disposed of as required in Section 202.03 of the Standard Specifications.

Any protruding metal bars shall be removed prior to the disposal of broken concrete at approved disposal sites.

The required environmental resource documentation shall include the following:

- * BDE Form 2289 (Environmental Survey Request)
- * A location map showing the size limits and location of the use area
- * Signed property owner agreement form-D4 PI0100
- * Color photographs depicting the use area
- * Borrow Area Entry Agreement form-D4 PI0101

Please note that a minimum of two weeks shall be allowed for the District to obtain the required environmental clearances.

PROPERTY OWNER ACCESS REQUIREMENTS

Access must be maintained to all existing properties during construction per Article 107.09 unless arrangements are made in writing by the Contractor with the property owners with a copy to the Engineer for short-term closures.

CONSECUTIVE SIDE STREET (ROAD) CLOSURE – PROHIBITED

1. No two consecutive side streets (roads) may be closed at the same time during construction. The Contractor must alternate streets (roads).
2. Adjacent side roads will not be closed simultaneously. BLR Standard 21 shall be used for all local road closures without any entrances within the closed area. BLR Standard 22 can be used where it is necessary to allow local traffic access.

ENGINEERS FIELD OFFICE

Add the following sentence to the end of paragraph 670.02 (i) and 670.04 (e):
All of the telephone lines provided shall have unpublished numbers.

NO PASSING ZONE VERIFICATION

The resident shall contact Operations to verify the location of no passing zones prior to placement of centerline striping.

The following mixture requirements are applicable for this project:

Mixture Use(s):	Surface Course 1.5"	Binder Course 2.25"	Partial Depth Patching	Full Depth Patching & Shoulder (Lower Lifts)	Shoulders (Surface Lift)	Incidental Surface
AC/PG:	PG 64-22	PG 64-22	PG 64-22	PG 64-22	PG 64-22	PG 64-22
Design Air Voids:	4.0% @ N=50	4.0% @ N=50	4.0% @ N=50	4.0% @ N=50	4.0% @ N=50	4.0% @ N=50
Mixture Composition: (Mixture Gradation)	IL 9.5	IL 9.5	IL 9.5	IL 19.0	IL 9.5FG	IL 9.5
Friction Aggregate:	Mix D	N.A.	N.A.	N.A.	Mix C	Mix C
Quality Management Program:	PFP	PFP	QCQA	QCQA	QCQA	QCQA

- Note: 1) Individual lift thickness of each mix type will be no less than 3 times nominal maximum aggregate size and no more than 6 times nominal maximum aggregate size, unless otherwise approved by the Engineer.
 2) For design purposes, mixture weight for all mixes is determined to be 112.0 lb/s.y./in., unless otherwise noted.
 3) Sublot size for QCP mix will be 700 tons, unless otherwise agreed to by the Engineer and the paving contractor.

PAVING SURFACE COURSE

Continuous paving operations on the main roadway shall be maintained at all times during the construction of the hot-mix asphalt surface. No interruptions for side roads, entrances, turn lanes, etc. will be allowed.

PAVEMENT STATIONING NUMBERS & PLACEMENT

The Contractor shall provide labor and materials required to imprint pavement station numbers in the finished surface of the pavement and/or overlay. The numbers shall be approximately 3/4 inch (20mm) wide, 5 inches (125 mm) high and 5/8 inch (15 mm) deep.

The pavement station numbers shall be installed as specified herein:

Interval – 200 feet (English stationing) or 100 meters (metric stationing)

Bottom of Numbers – 6 inches (150 mm) from the inside edge of the pavement marking

Location:

- * 2,3, & 5 Lane Pavements – right edge of pavement in direction of increasing stations
- * Multi-Lane Divided Roadways – outside edge of pavement in both directions
- * Ramps – along baseline edge of pavement

Position – stations shall be placed so they can be read from the adjacent shoulder

Format – English (Metric) pavement stations shall use this format "XXX (XX + X00)" where X represents the pavement station

This work will not be paid for separately, but will be considered included in the cost of the associated pavement and/or overlay pay items.

POLYMERIZED BITUMINOUS MATERIALS (TACK COAT) RATES

Surface Type	Residual Rate
Milled (HMA or PCC)	0.08 LB/SF
Existing Pavement	0.08 LB/SF
Fog Coat (between lifts)	0.08 LB/SF

Notes: Individual lift thickness of each mix type will be no less than 3 times nominal maximum aggregate size and no more than 6 times nominal aggregate size.

PAVING SURFACE COURSE

Continuous paving operations on the main roadway shall be maintained at all times during the construction of the hot-mix asphalt surface. No interruptions for side roads, entrances, turn lanes, etc. will be allowed.

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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				TAZEWELL	WOODFORD	TAZEWELL	WOODFORD
				0005	0005	07A0	07A0
				80% FED	80% FED		
				20% STATE	20% STATE	100% STATE	100% STATE
RURAL	RURAL	RURAL	RURAL				
* 78009024	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	96	48	48		
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	375	222	153		
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	16	16			
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	375	222	153		
X0300004	BITUMINOUS MATERIALS (TACK COAT), SPECIAL	POUND	146330	84311	62019		
X0556100	PARTIAL DEPTH PATCHING (SPECIAL)	SQ YD	1489	557	932		
X4400196	HOT - MIX ASPHALT SURFACE REMOVAL, SPECIAL	SQ YD	1646	962	684		
X4421000	PARTIAL DEPTH PATCHING	TON	418	156	262		
* X7830070	GROOVING FOR RECESSED PAVEMENT MARKING 5"	FOOT	67195	42528	24667		
* X7830078	GROOVING FOR RECESSED PAVEMENT MARKING 13"	FOOT	100	100			
* X7830090	GROOVING FOR RECESSED PAVEMENT MARKING 25"	FOOT	96	48	48		
XZ013798	CONSTRUCTION STATION LAYOUT	L SUM	1	0.5	0.5		
Z0001002	GUARDRAIL AGGREGATE EROSION CONTROL	TON	216	216			
Z0034105	MATERIAL TRANSFER DEVICE	TON	20448	12205	8243		

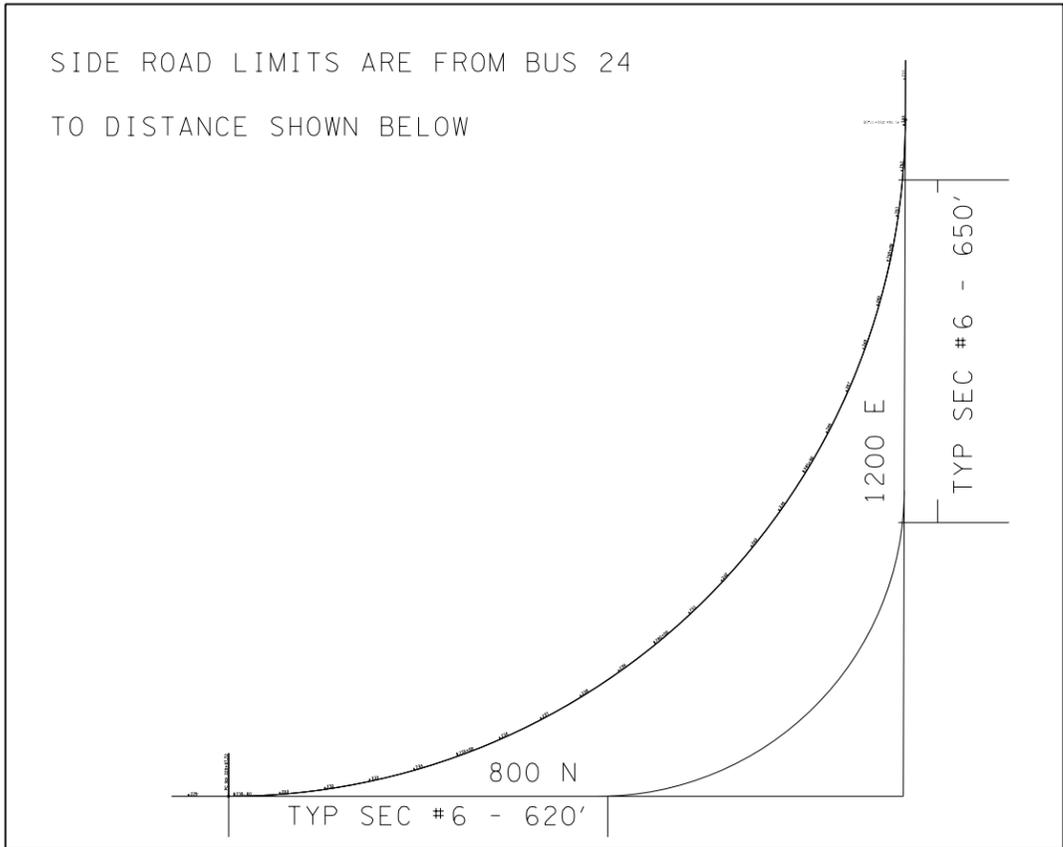
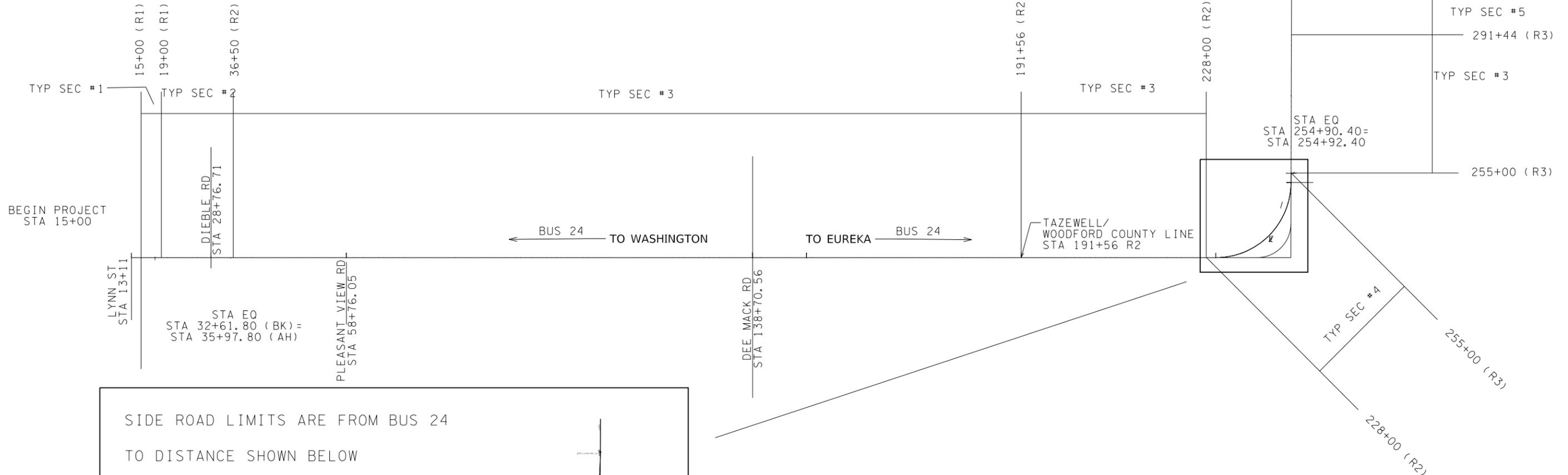
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PLOT DATE = 5/31/2019	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
368	35RS-9	TAZEWELL / WOODFORD	26	6
CONTRACT NO. 68C97				
ILLINOIS FED. AID PROJECT STP-0KRV661				



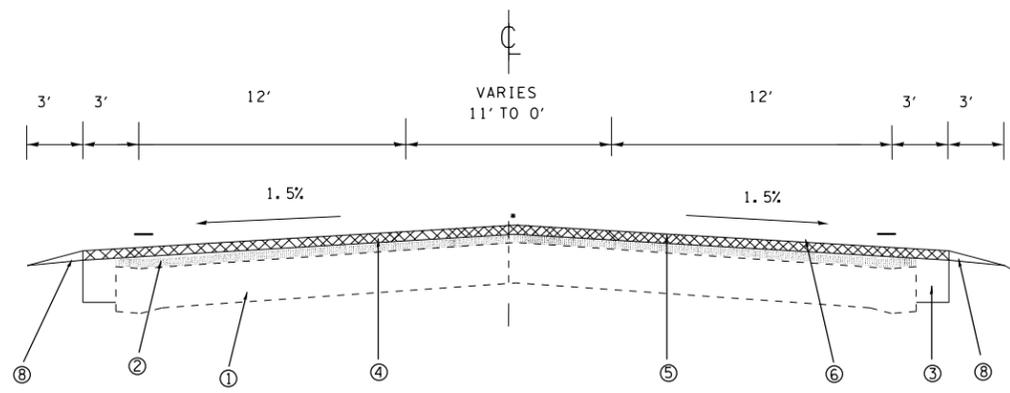
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	DATE -	REVISED -

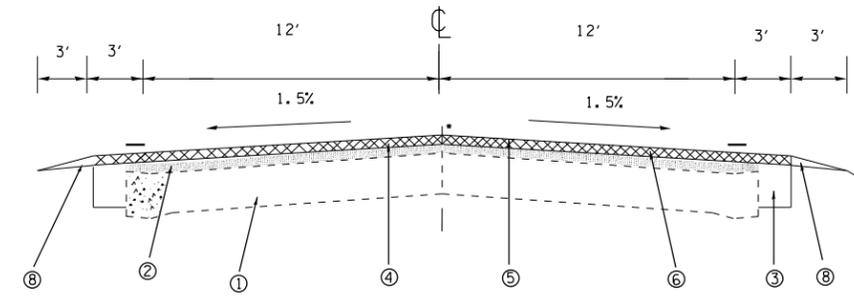
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

LINE DIAGRAM				
SCALE:	SHEET	OF	SHEETS	STA. TO STA.

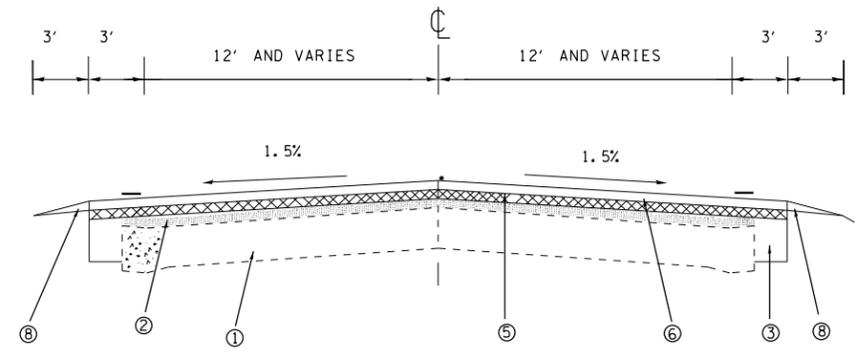
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368	35RS-9	TAZEWELL / WOODFORD	26	7
CONTRACT NO. 68C97				
ILLINOIS FED. AID PROJECT STP-QKFV(661)				



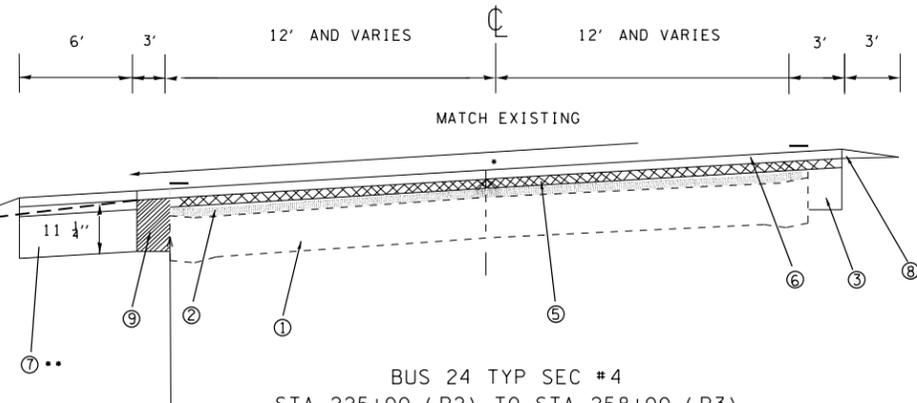
BUS 24 - TYP SEC #1
STA 15+00 (R1) TO STA 19+00 (R1)



BUS 24 TYP SEC #2
STA 19+00 (R1) TO STA 36+50 (R2)

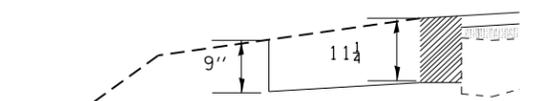


BUS 24 TYP SEC #3
STA 36+50 (R2) TO STA 228+00 (R2)
STA 255+00 (R2) TO STA 291+44 (R3)

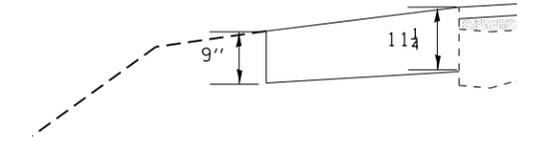


BUS 24 TYP SEC #4
STA 225+00 (R2) TO STA 258+00 (R3)

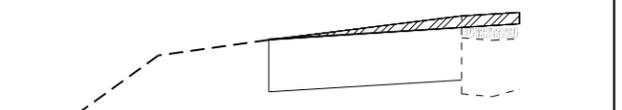
SUGGESTED SEQUENCE OF OPERATIONS FOR SHOULDER WIDENING



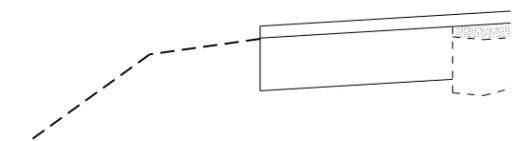
EXC/GRADE EX SHLD + EARTH EXC WI
(11 1/4" FROM EXISTING SURFACE GRADE)



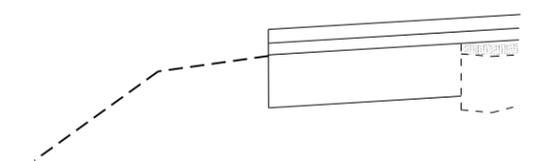
PLACE HMA SHOULDER, TAPERING TOP LEFT
TO MATCH EXISTING HMA SURFACE ELEVATION



MAINLINE HMA SURFACE REMOVAL, 2 1/4"
EXTEND OVER NEW WIDENING TO ELIMINATE TAPER
(TAPER REMOVAL PAID SAME AS MAINLINE)



PLACE HMA BC, MM IL 9.5 2 1/4"
OVER MAINLINE AND WIDENING



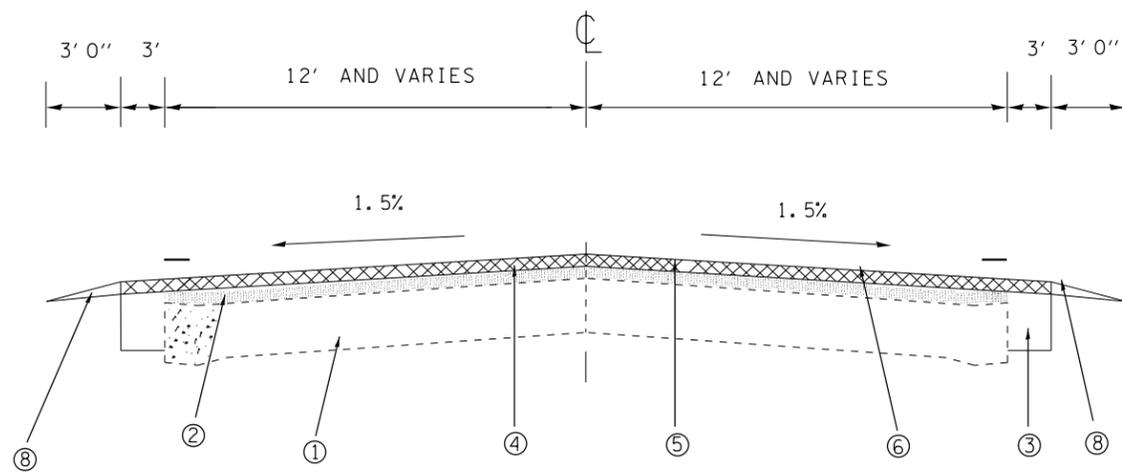
PLACE HMA SC, D, N50, 1 1/2"
OVER MAINLINE AND WIDENING

DRAWING NOT TO SCALE

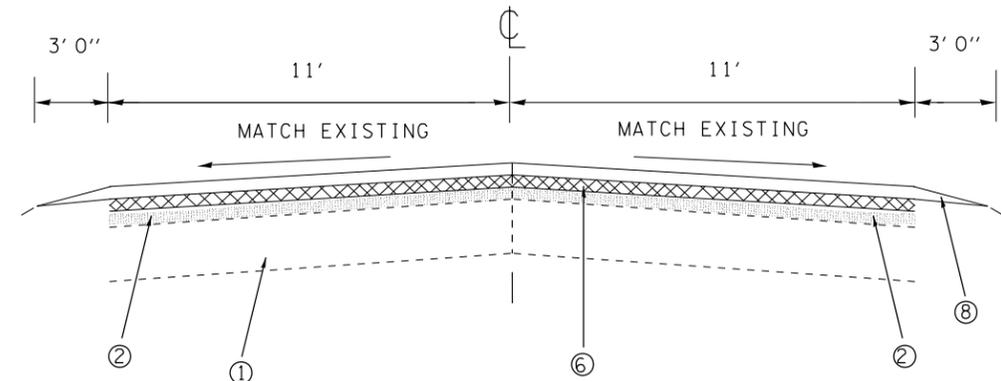
- ① EXISTING PCC PAVEMENT
- ② EXISTING HMA OVERLAYS
- ③ EXISTING HMA WIDENING
- ④ PROPOSED HMA SURF REMOVAL, 2 1/4"
- ⑤ PROPOSED HMA BINDER COURSE, MACHINE METHOD IL 9.5 2 1/4"
- ⑥ PROPOSED SURFACE COURSE, MIX D, N 50, 1 1/2"
- ⑦ PROPOSED HMA SHOULDERS/PROPOSED EARTH EXC WIDENING
- ⑧ PROPOSED AGGREGATE SHOULDERS, TYPE B
- ⑨ EXCAVATING & GRADING EXISTING SHOULDERS

• HMA SURFACE REMOVAL SPECAIL

FILE NAME =	USER NAME = mitchellag	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS			F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default								368	35RS-9	YAZEWELL & WOODFORD	26	8
	PLOT SCALE = 100.0/424' / in.	CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.			CONTRACT NO. 68C97				
	PLOT DATE = 5/31/2019	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							



BUS 24 TYP SEC #5
STA 291+44 (R3) TO STA 302+00 (R3)



BUS 24 TYP SEC #6
800 W AND 1200 E

DRAWING NOT TO SCALE

- ① EXISTING PCC PAVEMENT
- ② EXISTING HMA OVERLAYS
- ③ EXISTING HMA WIDENING
- ④ PROPOSED HMA SURF REMOVAL, 2 1/4"
- ⑤ PROPOSED HMA BINDER COURSE, MACHINE METHOD IL 9.5 2 1/4"
- ⑥ PROPOSED SURFACE COURSE, MIX D, N 50, 1 1/2"
- ⑦ PROPOSED HMA SHOULDERS
- ⑧ PROPOSED AGGREGATE SHOULDERS, TYPE B
- ⑨ EXCAVATING & GRADING EXISTING SHOULDERS

FILE NAME =	USER NAME = mitchellag	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS			F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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Default	PLOT DATE = 5/31/2019	DATE -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT				
CONTRACT NO. 68C97												

EARTHWORK					
LOCATION	EARTH EXCAVATION	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)	FURNISHED EXCAVATION	EARTH EXCAVATION WIDENING
	CU YD	CU YD	CU YD	CU YD	CU YD
TAZEWELL COUNTY					
STA 148+50 TO 150+50	10.4	23.8	13.4	13.4	
WOODFORD COUNTY					
STA 225+00 TO 258+00 LT					611
TAZEWELL COUNTY	10.4	23.8	13.4	13.4	
WOODFORD COUNTY	0	0	0	0	611
TOTAL	10		FOR INFORMATION ONLY	13	611

CLASS D PATCHES, 14 INCH			
LOCATION	TY II	TY III	TY IV
TAZEWELL COUNTY	76	67	2276
WOODFORD COUNTY	11	0	480
TOTAL	87	67	2756

* 20% ADDED TO QUANTITY

CLASS D PATCHES, 14 INCH		
LOCATION	PARTIAL DEPTH PATCHING	PARTIAL DEPTH PATCHING (SPECIAL)
	TON	SQ YD
TAZEWELL COUNTY	156	557
WOODFORD COUNTY	262	932
TOTAL	418	1489

* 20% ADDED TO QUANTITY

SEEDING								
LOCATION	TOPSOIL FURNISH & PLACE 4"	TEMP. EROS. CONTROL SEEDING	SEEDING CLASS 2A	NITROGEN FERTILIZER	PHOSPHORUS FERTILIZER	POTASSIUM FERTILIZER	MULCH METHOD 2	PERIMETER EROSION BARRIER
	SQ YD	POUND	ACRE	POUND	POUND	POUND	ACRE	FOOT
BUS 24 (TAZEWELL COUNTY)								
LT. STA. 149+00 TO 150+50	211.11	56.7	0.04	3.9	3.9	3.9	0.04	150
TOTAL (TAZEWELL COUNTY)	211.0		TO BE INCLUDED IN THE COST OF TOPSOIL FURNISH & PLACE, 4"					150.0

GUARDRAIL REMOVAL	
LOCATION	FOOT
TAZEWELL COUNTY	
RT. Sta. 36+92 to Sta. 39+67	275
LT. Sta. 37+74 to Sta. 40+12	238
RT. Sta. 148+80 to Sta. 149+80	100
TOTAL	613

DRAINAGE SCHEDULE					
LOCATION	PIPE CULVERT REMOVAL	CONCRETE COLLAR	REINFORCEMENT BARS	EXPANSION BOLTS	BOX CULVERT END SECTIONS
	FEET	CY YD	POUND	EACH	EACH
TAZEWELL COUNTY					
STA 148+32	LT	7.0	0.5	40	14
STA 148+32	RT		0.5	40	14
TOTAL		7	1	80	28

GUARDRAIL							
LOCATION	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	LONG-SPAN GUARDRAIL OVER CULVERT, 18 FT 9 IN SPAN	LONG-SPAN GUARDRAIL OVER CULVERT, 12 FT 6 IN SPAN	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	TERMINAL MARKER-DIRECT APPLIED	GUARDRAIL MARKERS, TYPE A	GUARDRAIL AGGREGATE EROSION CONTROL
	FOOT	FOOT	FOOT	EACH	EACH	EACH	TON
BUS. 24 (TAZEWELL COUNTY)							
RT. Sta. 36+87 to Sta. 39+62	131	43.75		2	2	4	65
LT. Sta. 37+74 to Sta. 40+12	94	43.75		2	2	4	57
RT. Sta. 148+37.1 to Sta. 150+26.6	50		37.5	2	2	4	47
LT. Sta. 148+37.8 to Sta. 150+25.3	50		37.5	2	2	4	47
JOB TOTAL (TAZEWELL COUNTY)	325.0	87.5	75.0	8.0	8.0	16.0	216.0

* LENGTH OF NEED DOES NOT INCLUDE 12.5' OF TERMINAL LENGTH PER END

MAINLINE RESURFACING TABLE															
LOCATION	LENGTH	WIDTH	AREA		HMA SURFACE REMOVAL - BUTT JOINT	TEMPORARY RAMP	HMA SURFACE REMOVAL	HMA SURF REM SPL	POLY BITUMINOUS MATERIALS (TACK COAT) 2 APPLICATIONS		HMA BINDER COURSE (MACHINE METHOD) IL-9.5, N50	HMA SURFACE COURSE, MIX "D", N50	HMA SHOULDERS	EXCAVATING AND GRADING EXISTING SHOULDER	MATERIAL TRANSFER DEVICE
					TAPER RATE 1:240	TAPER RATE 1:40	2 1/4"	1 1/2"*	MILLED SURFACE 0.08 LB/SQ. FT.	FOG COAT* 0.08 LB/SQ. FT.	2 1/4"	1 1/2"*			
MAINLINE	FEET	FEET	SQ FT	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	POUND	POUND	TON	TON	TON	UNIT	TON
TAZEWELL COUNTY															
STA 15+00 TO STA 19+00	400.0	30.0	12000.0	1333.3	150.0	25.0	1183.3	22.2	960.0	976.0	168.0	113.9			281.9
STA 19+00 TO STA 32+61.80 BK	1361.8	30.0	40854.0	4539.3			4539.3	75.7	3268.3	3322.8	572.0	387.7			959.6
STA 35+97.80 AH TO STA 36+50	52.2	30.0	1566.0	174.0			174.0	2.9	125.3	127.4	21.9	14.9			36.8
STA 36+50 TO STA 191+56	15506.0	30.0	465180.0	51686.7			51686.7	861.4	37214.4	37834.6	6512.5	4414.0			10926.6
WOODFORD COUNTY															
STA 191+56 TO STA 225+00	3344.0	30.0	100320.0	11146.7			11146.7	185.8	8025.6	8159.4	1404.5	951.9			2356.4
STA 225+00 TO STA 228+00	300.0	36.0	10800.0	1200.0			1200.0	16.7	864.0	876.0	151.2	102.2	141.8	3.0	253.4
STA 228+00 TO 254+90.40 BK	2690.4	36.0	96854.4	10761.6			10761.6	149.5	7748.4	7856.0	1356.0	916.5	1271.2	26.9	2272.5
STA 254+92.40 AH TO STA 258+00	307.6	36.0	11073.6	1230.4			1230.4	17.1	885.9	898.2	155.0	104.8	145.3	3.1	259.8
STA 258+00 TO STA 291+44	3344.0	30.0	100320.0	11146.7			11146.7	185.8	8025.6	8159.4	1404.5	951.9			2356.4
STA 291+44 TO STA 302+00	1056.0	30.0	31680.0	3520.0	150.0	25.0	3370.0	58.7	2534.4	2576.6	443.5	300.6			744.1
COUNTY ROAD 800 N	620.0	22.0	13640.0	1515.6	110.0	18.3	1405.6	34.4	1091.2	1116.0	191.0	130.2			
COUNTY ROAD 1200 E	650.0	22.0	14300.0	1588.9	110.0	18.3	1478.9	36.1	1144.0	1170.0	200.2	136.5			
TAZEWELL COUNTY															
					150	25	57583	962	41568	42261	7274	4930	0		12205
WOODFORD COUNTY															
					370	62	41740	684	30319	30812	5306	3595	1558		8243
MAINLINE TOTAL					520	87	99323	1646	144959		12580	8525	1558	33	20447

*ADDITIONAL QUANTITY FOR MILL WIDE / PAVE WIDE IS INCLUDED IN THE APPLICABLE PAY ITEMS

SIDE ROAD RESURFACING TABLE					
LOCATION	HMA SURFACE REMOVAL- BUTT JOINT	HMA SURFACE REMOVAL- BUTT JOINT	TEMPORARY RAMP	BITUMINOUS MATERIALS (TACK COAT) SPECIAL	INCIDENTAL HMA SURFACING
SIDE ROADS	30'	30'	TAPER RATE 1:40	0.08 LBS/SQ. FT.	1.5"
	SQ. FT.	SQ. YD.	SQ. YD.	POUND	TON
TAZEWELL COUNTY					
DIEBLE RD	1597.5	177.5	17.0	127.8	14.9
PLEASANT VIEW RD	1380.0	153.3	17.0	110.4	12.9
DEE MAC RD	3045.0	338.3	34.0	243.6	28.4
WOODFORD COUNTY					
WEIGH STATION				887.7	83.6
TAZEWELL COUNTY	6023	669	68	482	56
WOODFORD COUNTY	0	0	0	888	84
SIDE ROAD TOTAL					
	6023	669	68	1370	140

AGGREGATE WEDGE SHOULDER, TYPE B				
LOCATION	LENGTH	WIDTH	THICKNESS*	TON
	FOOT	FOOT	INCH	
TAZEWELL COUNTY				
STA 15+00 TO STA 32+61.80 BK	1761.8	3	2.5	167.2
STA 35+97.80 AH TO STA 191+56	15558.2	3	2.5	1476.6
WOODFORD COUNTY				
STA 191+56 TO STA 254+90.40 BK	6334.4	3	2.5	601.2
STA 254+92.40 AH TO STA 302+00	4707.6	3	2.5	446.8
TAZEWELL COUNTY TOTAL				1644
WOODFORD COUNTY TOTAL				1048
GRAND TOTAL				2692

* THICKNESS ACCOUNTS FOR EXISTING AGG SHOULDER BEING LOW

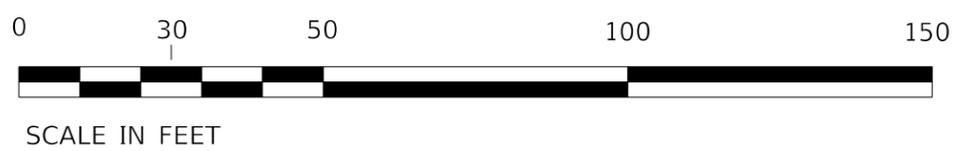
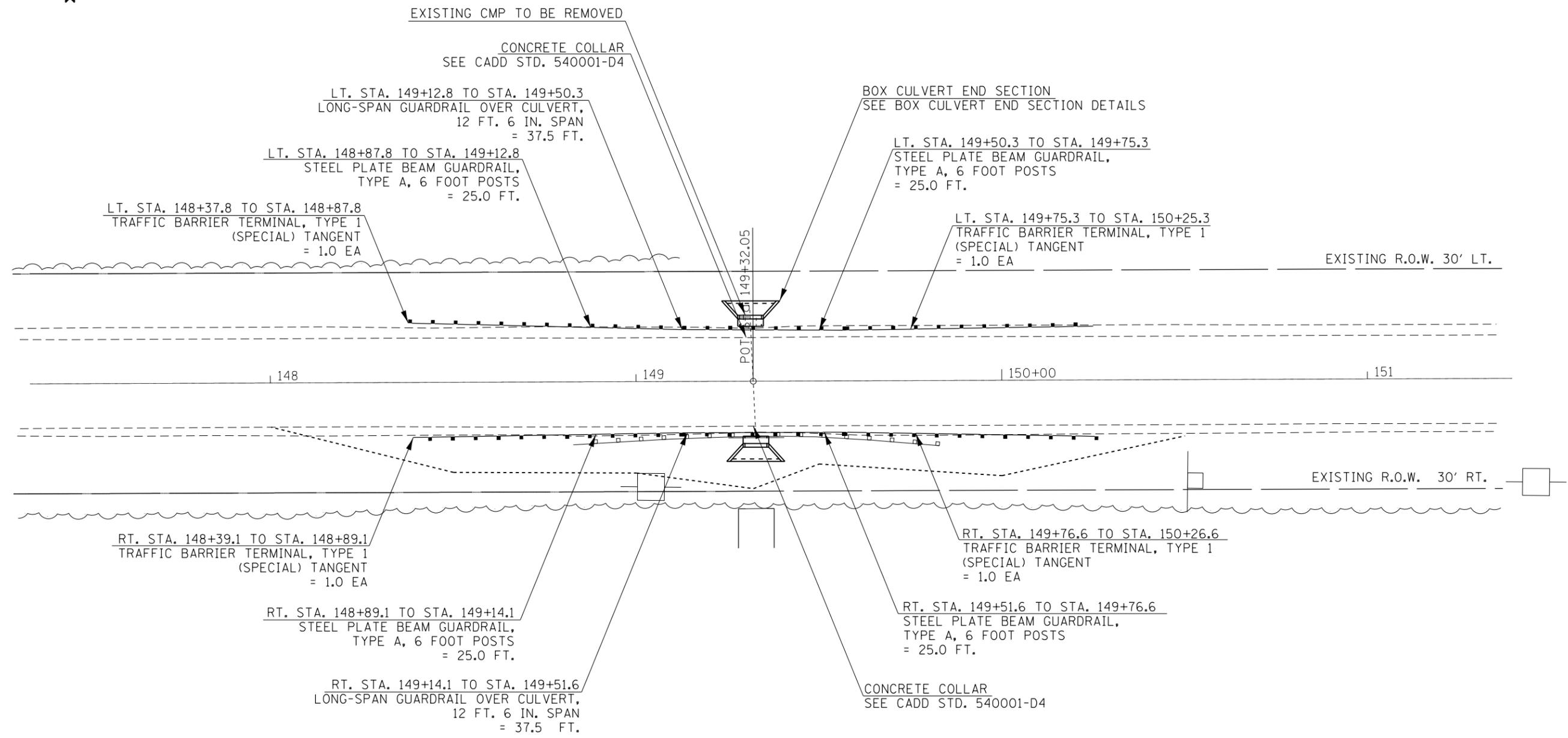
JOBSITE							
LOCATION	ENGINEERS FIELD OFFICE, TYPE A	MOBILIZATION	CONSTRUCTION STATION LAYOUT	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	TRAFFIC CONTROL AND PROTECTION, STANDARD 701336	MOWING
	CAL. MO.	LSUM	LSUM	LSUM	LSUM	LSUM	ACRE
TAZEWELL COUNTY	1	0.5	0.5	1.0	0.5	0.5	2.50
WOODFORD COUNTY	1	0.5	0.5		0.5	0.5	1.25
JOB TOTAL		2	1	1	1	1	4

ENTRANCES AND MAILBOX TURNOUTS		PCC SUR REM-BUTT JOINT(SQ YD)	HMA SUR REM-BUTT JOINT(SQ YD)	INCIDENTAL HMA (TON)	AGG DRIVEWAY ENT (TON)
TAZEWELL COUNTY					
LT. STA. 32+00	C.E.	50.0		4.2	
LT. STA. 58+01	C.E.			8	0.25
LT. STA. 68+66	P.E.			2.5	0.25
LT. STA. 69+61	P.E.			1.5	0.25
LT. STA. 78+68	P.E.			1.5	0.25
LT. STA. 81+66	P.E.			1.6	0.25
LT. STA. 95+29	P.E.			2.5	0.25
LT. STA. 111+22	P.E.		22.8	1.9	
LT. STA. 111+97	P.E.		19.4	1.6	
LT. STA. 113+72	P.E.			0.9	0.25
LT. STA. 114+38	P.E.				0.25
LT. STA. 129+48	C.E.		35	2.9	
LT. STA. 142+03	P.E.			1.7	0.25
LT. STA. 142+49	P.E.			1.4	0.25
LT. STA. 152+50	P.E.			1.5	0.25
LT. STA. 153+50	P.E.			1.2	0.25
LT. STA. 179+84	P.E.				0.25
RT. STA. 18+77	M.T.			1.1	
RT. STA. 57+41	P.E.			1.5	0.25
RT. STA. 87+26	P.E.			1.5	0.25
RT. STA. 88+56	P.E.			1.4	0.25
RT. STA. 100+09	P.E.			1.7	0.25
RT. STA. 101+00	P.E.			1.7	0.25
RT. STA. 112+42	P.E.			2.1	0.25
RT. STA. 113+21	P.E.			1.5	0.25
RT. STA. 113+90	P.E.			1.6	0.25
RT. STA. 117+04	P.E.			2.6	0.25
RT. STA. 117+51	P.E.			2.3	0.25
RT. STA. 127+43	P.E.			2.7	0.25
RT. STA. 129+31	P.E.			1.5	0.25
RT. STA. 130+27	P.E.			1.6	0.25
RT. STA. 133+19	P.E.			1.6	0.25
RT. STA. 135+37	P.E.			1.4	0.25
RT. STA. 135+96	P.E.			1.3	0.25
WOODFORD COUNTY					
LT. STA. 211+75	P.E.				
RT. STA. 208+05	P.E.		20.5	1.7	
RT. STA. 209+65	F.E.			1.7	
RT. STA. 278+57	C.E.			7.9	0.5
RT. STA. 289+77	P.E.		41.7	3.5	
SUB TOTAL			139.4	74.6	7.75
TAZEWELL COUNTY		50.0		64	7.3
WOODFORD COUNTY			62.2	14.8	0.5
GRAND TOTAL		50.0	139	79	7.8

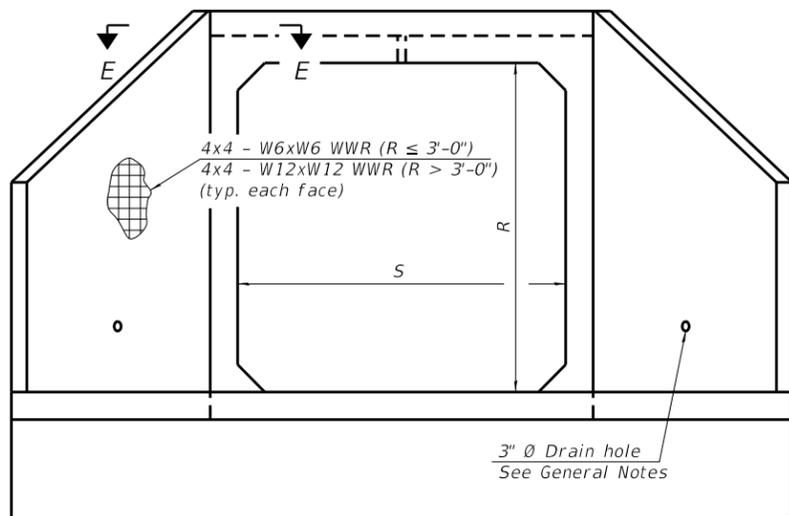
PAVEMENT MARKING SCHEDULE						
GROOVING FOR RECESSED PAVEMENT MARKING	5"		5"	13"	25"	SHORT TERM PM (4")
	4"		4"	12"	24"	
MODIFIED URETHANE PAVEMENT MARKING	LOCATION	WHITE	YELLOW SKIP DASH CENTERLINE	SOLID YELLOW CENTERLINE	WHITE	WHITE
		FOOT			FOOT	FOOT
TAZEWELL COUNTY						
RT. STA. 15+00 TO STA. EQ 32+61.80 BK/ 35+97.80 AH		1762				6928
RT. STA. EQ 32+61.80 BK/ 35+97.80 AH TO STA. 58+48.55		2251				
RT. STA. 59+03.55 TO STA. 138+38.56		7935				
RT. STA. 139+02.56 TO STA. 191+56		5253				
LT. STA. 15+00 TO STA. 28+46.71		1347				
LT. STA. 29+06.71 TO STA. EQ 32+61.80 BK/ 35+97.80 AH		355				
LT. STA. EQ 32+61.80 BK/ 35+97.80 AH TO STA. 138+38.56		10241				
LT. STA. 139+02.56 TO 191+56		5253				
RT. STA. 19+00 TO STA. 24+51				551		
RT. STA. 24+61 TO STA. EQ 32+61.80 BK/ 35+97.80 AH			200			
RT. STA. EQ 32+61.80 BK/ 35+97.80 AH TO STA. 38+29			58			
LT. & RT. STA. 38+39 TO STA. 191+56			3829			
LT. STA. 19+00 TO STA. EQ 32+61.80 BK/35+97.80 AH				1362		
LT. STA. EQ 32+61.80 BK/ 35+97.80 AH TO STA. 38+29				231		
*LT. & RT. STA. 15+00 TO STA. 19+00				1900	100	
Sta. 28+76.71 (Dieble Rd)						12
Sta. 58+76.05 (Pleasant View Rd)						12
Sta. 138+70.56 (Dee Mac Rd)						24
WOODFORD COUNTY						
RT. STA. 191+56 TO STA. 231+94.28		4038				4416
RT. STA. 233+18.14 TO STA. 247+48.62		1430				
RT. STA. 248+94.22 TO STA. EQ 254+90.40 BK/ 254+92.40 AH		596				
RT. STA. EQ 254+90.40 BK/254+92.40 AH TO STA. 291+00		3608				
LT. STA. 191+56 TO STA. EQ 254+90.40 BK/ 254+92.40 AH		6334				
LT. STA. EQ 254+90.40 BK/ 254+92.40 AH TO STA. 291+00		3608				
RT. STA. 276+32 TO STA. 291+00				1468		
LT. & RT. STA. 191+56 TO STA. 276+22			2117			
LT. STA. 276+32 TO STA. 291+00			1468			
Sta. 233+01 (Co Rd 800 N)						12
Sta. 248+33 (Co Rd 1200 E)						12
Sta. 284+11 (Cruger Rd/Co Rd 900 N)						24
TAZEWELL COUNTY SUB-TOTAL		42528		100	48	6928
WOODFORD COUNTY SUB-TOTAL		24667			48	4416
JOB TOTAL		67195		100	96	11344

*REFER TO CADD STD. 780001-D4

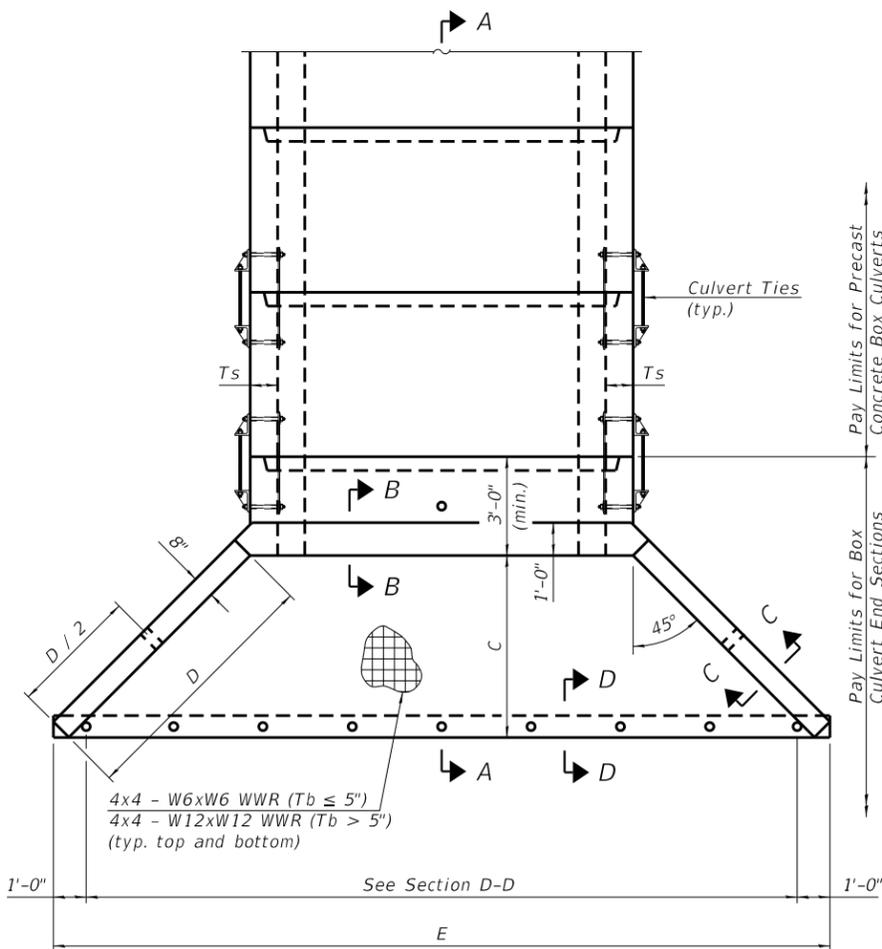
LOCATION	RAISED REFLECTIVE PAVEMENT MARKERS	RAISED REFLECTIVE MARKER REMOVAL
	TWO WAY AMBER	
	EACH	EACH
TAZEWELL COUNTY		
STA. 15+00 TO STA. 19+00	10	10
STA. 19+00 TO STA. EQ 32+61.80 BK/35+97.80 AH	17	17
STA. EQ. 32+61.80 BK/ 35+97.80 AH TO STA. 191+56	195	195
WOODFORD COUNTY		
STA. 191+56 TO STA. 229+87.72	48	48
STA. 229+87.72 TO STA. 253+11	58	58
STA. 253+11 TO STA. EQ. 254+90.40 BK/ 254+92.40 AH	2	2
STA. 254+90.40 BK/ 254+92.40 AH TO STA. 291+00	45	45
TAZEWELL COUNTY SUB-TOTAL		222
WOODFORD COUNTY SUB-TOTAL		153
JOB TOTAL		375



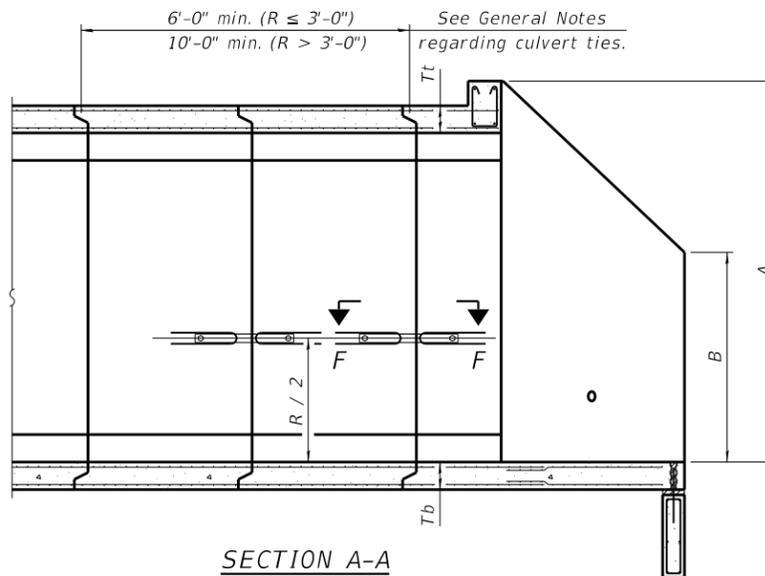
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pw2\planroom\dot\hols.gov\FW\DOT\Documents\IDOT	Office\District 4\Projects\D4_68C97\CADData\CADsheets\D468C97	DRAWN -	REVISED -					368	35RS-9	TAZEWELL & WOODFORD	26	13
Default	PLOT SCALE = 1/8" = 100.00'	CHECKED -	REVISED -		CONTRACT NO. 68C97			ILLINOIS FED. AID PROJECT				
	PLOT DATE = 5/31/2019	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.		



END VIEW



PLAN



SECTION A-A

GENERAL NOTES

Box Culvert End Sections shall be constructed according to the requirements of Section 540 of the Standard Specifications except as modified herein. End sections will be paid for at the contract unit price per each for Box Culvert End Sections.

The Contractor may furnish the end section as a single precast concrete piece or construct the end section in the field using cast-in-place (CIP) construction. For CIP construction, the bottom slab thickness shall be increased by 2" and the clear cover to the bottom mat of reinforcement shall be increased to 3".

Box section dimensions, materials, and reinforcement details for Box Culvert End Sections shall be according to the requirements for ASTM C 1577 as required for the design of the portion of the culvert within the limits of Precast Concrete Box Culverts except as modified herein.

The number of culvert ties shall be sufficient to engage the minimum length of culvert barrel shown within the pay limits for Precast Concrete Box Culverts and will be dependent upon the length of box culvert segments furnished by the Contractor. Culvert ties are not required for box culverts having a rise (R) less than or equal to 3 ft and a span (S) greater than or equal to 10 ft.

All costs associated with furnishing and installing or constructing the toewall and culvert ties will not be measured for payment but shall be included in the unit price for Box Culvert End Sections of the culvert number specified.

Shop drawings that detail slab thickness and reinforcement layout for the Box Culvert End Sections shall be provided to the Engineer for review and approval. Reinforcement bars not detailed herein shall be detailed with a clear distance at the end of the reinforcement not less than 1/2" nor more than 2". For the precast option, it shall be the Contractor's responsibility for determining a method of handling and a construction procedure shall be included on the shop drawings. The Contractor shall determine and detail in the shop drawings any necessary strengthening or stiffening provisions necessary to handle the precast segment. Any required modifications shall be at no extra charge.

The Contractor may use reinforcement bars in lieu of welded wire reinforcement (WWR). Reinforcement bars shall be limited to the sizes of #3 through #5 bars, a maximum spacing of the lesser of 8" or the member thickness, and shall result in an area of reinforcement equal to or greater than that provided by the WWR. Minimum lap lengths detailed herein are applicable to WWR and reinforcement bars.

Reinforcement (circumferential and longitudinal) in the culvert barrel portion of the end section being lapped with reinforcement from the wingwalls or bottom slab of the end section shall not be less than that required by ASTM C 1577 for the design fill height or the reinforcement detailed for the end section, whichever is greater.

One drain hole shall be provided in each wingwall for end sections of box culverts having an opening with a clear rise greater than 3 ft. The drain hole shall be located within the lower 1/3 of the clear rise of the box culvert and shall conform to the requirements of Article 503.11 of the Standard Specifications.

APRON END SECTION DIMENSIONS

Span (S)	Rise (R)	Tt	Tb	Ts	A	B	C	D	E	Concrete Cu. Yd.	Culvert Ties Required
3'-0"	2'-0"	7"	6"	4"	3'-4"	2'-2"	2'-10 3/8"	4'-1"	10'-4 3/8"	2.8	Yes
3'-0"	2'-0"	4"	4"	4"	3'-1"	2'-1"	2'-7 1/8"	3'-9"	9'-11"	2.3	Yes
3'-0"	3'-0"	7"	6"	4"	4'-4"	2'-8"	3'-10 3/8"	5'-6"	12'-4 3/8"	3.7	Yes
3'-0"	3'-0"	4"	4"	4"	4'-1"	2'-7"	3'-7 1/8"	5'-2"	11'-11"	3.1	Yes
4'-0"	2'-0"	7.5"	6"	5"	3'-4 1/2"	2'-2 1/2"	2'-11 3/8"	4'-2"	11'-8"	3.3	Yes
4'-0"	2'-0"	5"	5"	5"	3'-2"	2'-1"	2'-8 1/2"	3'-10"	11'-2 3/8"	2.8	Yes
4'-0"	3'-0"	7.5"	6"	5"	4'-4 1/2"	2'-8 1/2"	3'-11 3/8"	5'-7"	13'-8 1/8"	4.2	Yes
4'-0"	3'-0"	5"	5"	5"	4'-2"	2'-7"	3'-8 1/2"	5'-3"	13'-2 3/8"	3.7	Yes
4'-0"	4'-0"	7.5"	6"	5"	5'-4 1/2"	3'-2 1/2"	4'-11 3/8"	7'-0"	15'-8 3/8"	5.3	Yes
4'-0"	4'-0"	5"	5"	5"	5'-2"	3'-1"	4'-8 3/8"	6'-8"	15'-2 1/2"	4.7	Yes
5'-0"	2'-0"	8"	7"	6"	3'-5"	2'-3"	2'-11 3/8"	4'-2"	12'-10"	3.9	Yes
5'-0"	2'-0"	6"	6"	6"	3'-3"	2'-2"	2'-10"	4'-0"	12'-7 1/4"	3.5	Yes
5'-0"	3'-0"	8"	7"	6"	4'-5"	2'-9"	3'-11 3/8"	5'-7"	14'-10 1/8"	4.9	Yes
5'-0"	3'-0"	6"	6"	6"	4'-3"	2'-8"	3'-10"	5'-5"	14'-7 1/4"	4.5	Yes
5'-0"	4'-0"	8"	7"	6"	5'-5"	3'-3"	4'-11 3/8"	7'-0"	16'-10 1/8"	6.1	Yes
5'-0"	4'-0"	6"	6"	6"	5'-3"	3'-2"	4'-9 1/4"	6'-9"	16'-5 7/8"	5.5	Yes
5'-0"	5'-0"	8"	7"	6"	6'-5"	3'-9"	5'-11 3/8"	8'-5"	18'-10 1/8"	7.4	Yes
5'-0"	5'-0"	6"	6"	6"	6'-3"	3'-8"	5'-9 1/4"	8'-2"	18'-5 7/8"	6.8	Yes
6'-0"	2'-0"	8"	7"	7"	3'-5"	2'-3"	2'-11 3/8"	4'-2"	14'-0"	4.3	Yes
6'-0"	2'-0"	7"	7"	7"	3'-4"	2'-2"	2'-10 3/8"	4'-1"	13'-10 3/8"	4.2	Yes
6'-0"	3'-0"	8"	7"	7"	4'-5"	2'-9"	3'-11 3/8"	5'-7"	16'-0 1/8"	5.4	Yes
6'-0"	3'-0"	7"	7"	7"	4'-4"	2'-8"	3'-10 3/8"	5'-6"	15'-10 3/8"	5.2	Yes
6'-0"	4'-0"	8"	7"	7"	5'-5"	3'-3"	4'-11 3/8"	7'-0"	18'-0 1/8"	6.5	Yes
6'-0"	4'-0"	7"	7"	7"	5'-4"	3'-2"	4'-10 3/4"	6'-11"	17'-10 3/4"	6.5	Yes
6'-0"	5'-0"	8"	7"	7"	6'-5"	3'-9"	5'-11 3/8"	8'-5"	20'-0 1/8"	8.0	Yes
6'-0"	5'-0"	7"	7"	7"	6'-4"	3'-8"	5'-10 3/4"	8'-4"	19'-10 3/4"	7.8	Yes
6'-0"	6'-0"	8"	7"	7"	7'-5"	4'-3"	6'-11 1/2"	9'-10"	22'-0 1/4"	9.5	Yes
6'-0"	6'-0"	7"	7"	7"	7'-4"	4'-2"	6'-10 3/4"	9'-9"	21'-10 3/4"	9.3	Yes
7'-0"	2'-0"	8"	8"	8"	3'-5"	2'-3"	2'-11 3/8"	4'-2"	15'-2"	4.9	Yes
7'-0"	3'-0"	8"	8"	8"	4'-5"	2'-9"	3'-11 3/8"	5'-7"	17'-2 1/8"	6.1	Yes
7'-0"	4'-0"	8"	8"	8"	5'-5"	3'-3"	4'-11 3/8"	7'-0"	19'-2 1/8"	7.4	Yes
7'-0"	5'-0"	8"	8"	8"	6'-5"	3'-9"	5'-11 3/8"	8'-5"	21'-2 1/8"	8.9	Yes
7'-0"	6'-0"	8"	8"	8"	7'-5"	4'-3"	6'-11 1/2"	9'-10"	23'-2 1/4"	10.6	Yes
8'-0"	2'-0"	8"	8"	8"	3'-5"	2'-3"	2'-11 3/8"	4'-2"	16'-2"	5.3	Yes
8'-0"	3'-0"	8"	8"	8"	4'-5"	2'-9"	3'-11 3/8"	5'-7"	18'-2 1/8"	6.5	Yes
8'-0"	4'-0"	8"	8"	8"	5'-5"	3'-3"	4'-11 3/8"	7'-0"	20'-2 1/8"	7.8	Yes
8'-0"	5'-0"	8"	8"	8"	6'-5"	3'-9"	5'-11 3/8"	8'-5"	22'-2 1/8"	9.3	Yes
8'-0"	6'-0"	8"	8"	8"	7'-5"	4'-3"	6'-11 1/2"	9'-10"	24'-2 1/4"	11.0	Yes
9'-0"	2'-0"	9"	9"	9"	3'-6"	2'-3"	3'-0 3/4"	4'-4"	17'-6 7/8"	6.2	Yes
9'-0"	3'-0"	9"	9"	9"	4'-6"	2'-9"	4'-0 3/4"	5'-9"	19'-6 7/8"	7.5	Yes
9'-0"	4'-0"	9"	9"	9"	5'-6"	3'-3"	5'-0 3/4"	7'-2"	21'-6 7/8"	9.0	Yes
9'-0"	5'-0"	9"	9"	9"	6'-6"	3'-9"	6'-0 7/8"	8'-7"	23'-7"	10.6	Yes
9'-0"	6'-0"	9"	9"	9"	7'-6"	4'-3"	7'-0 1/8"	9'-11"	25'-5 5/8"	12.4	Yes
10'-0"	2'-0"	10"	10"	10"	3'-7"	2'-4"	3'-1 1/2"	4'-5"	18'-10 1/4"	7.1	No
10'-0"	3'-0"	10"	10"	10"	4'-7"	2'-10"	4'-1 1/2"	5'-10"	20'-10 1/4"	8.6	No
10'-0"	4'-0"	10"	10"	10"	5'-7"	3'-4"	5'-1 1/2"	7'-3"	22'-10 3/8"	10.2	Yes
10'-0"	5'-0"	10"	10"	10"	6'-7"	3'-10"	6'-1 1/2"	8'-8"	24'-10 3/8"	12.0	Yes
10'-0"	6'-0"	10"	10"	10"	7'-7"	4'-4"	7'-1 1/2"	10'-1"	26'-10 3/8"	13.9	Yes
11'-0"	2'-0"	11"	11"	11"	3'-8"	2'-4"	3'-2 3/8"	4'-7"	20'-3 3/8"	8.2	No
11'-0"	3'-0"	11"	11"	11"	4'-8"	2'-10"	4'-2 3/8"	6'-0"	22'-3 3/8"	9.8	No
11'-0"	4'-0"	11"	11"	11"	5'-8"	3'-4"	5'-2 1/4"	7'-4"	24'-1 3/4"	11.5	Yes
11'-0"	5'-0"	11"	11"	11"	6'-8"	3'-10"	6'-2 1/4"	8'-9"	26'-1 3/4"	13.3	Yes
11'-0"	6'-0"	11"	11"	11"	7'-8"	4'-4"	7'-2 1/4"	10'-2"	28'-1 1/4"	15.5	Yes
12'-0"	2'-0"	12"	12"	12"	3'-9"	2'-5"	3'-3 5/8"	4'-8"	21'-6 1/2"	9.3	No
12'-0"	3'-0"	12"	12"	12"	4'-9"	2'-11"	4'-3 5/8"	6'-1"	23'-6 1/2"	11.1	No
12'-0"	4'-0"	12"	12"	12"	5'-9"	3'-5"	5'-3 5/8"	7'-6"	25'-6 1/2"	13.0	Yes
12'-0"	5'-0"	12"	12"	12"	6'-9"	3'-11"	6'-3 5/8"	8'-11"	27'-6 5/8"	14.1	Yes
12'-0"	6'-0"	12"	12"	12"	7'-9"	4'-5"	7'-3 5/8"	10'-4"	29'-6 5/8"	17.4	Yes

Note:

Two sets of apron end section dimensions are shown above for some box culvert sizes due to the top and bottom slabs having different thicknesses per ASTM C 1577 for design fill heights less than 2 ft.

(Sheet 1 of 2)

SCB-AES

2-17-2017

FILE NAME =	USER NAME = mitchellaj	DESIGNED -	REVISED -
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PLOT DATE = 5/31/2019	DATE -	REVISED -	REVISED -

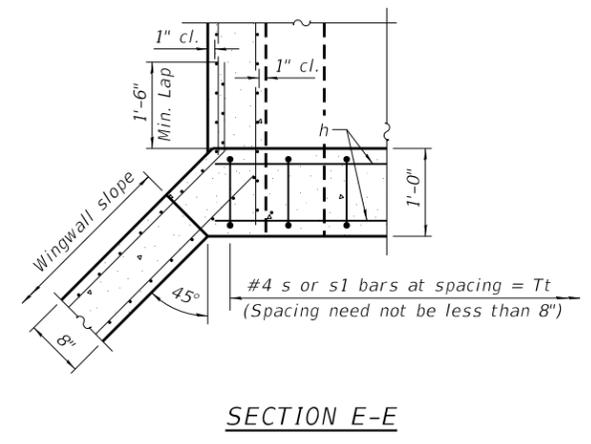
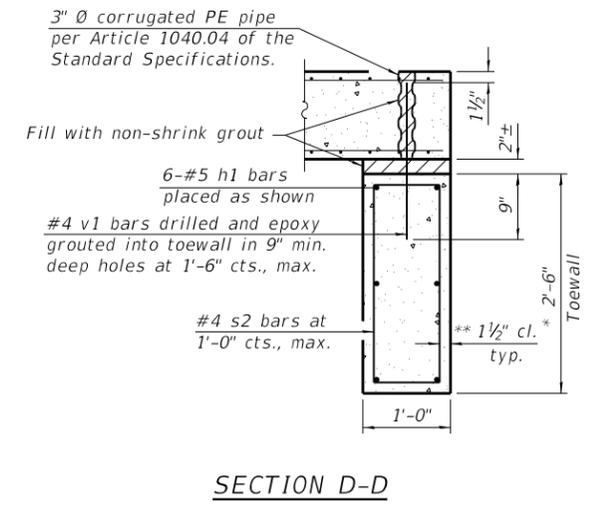
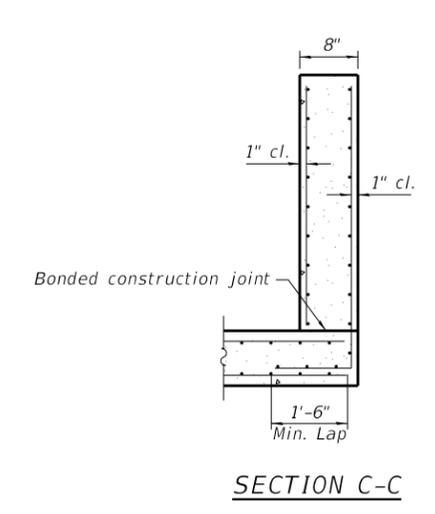
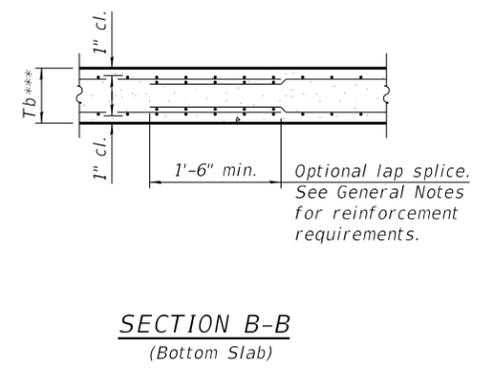
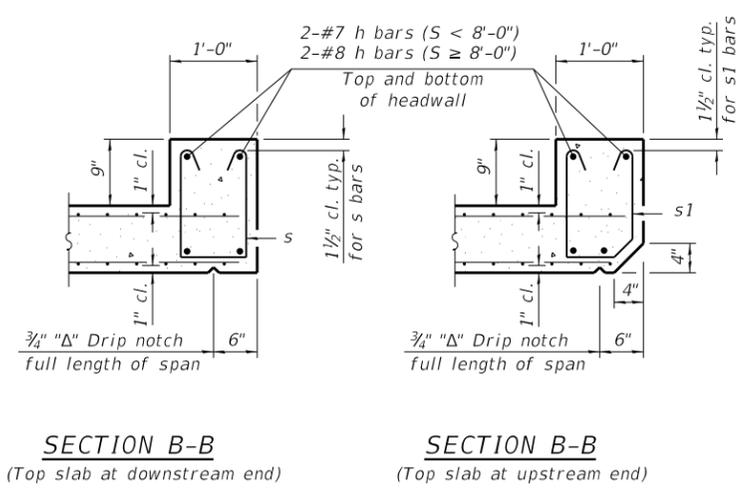
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRECAST CONCRETE BOX CULVERT APRON END

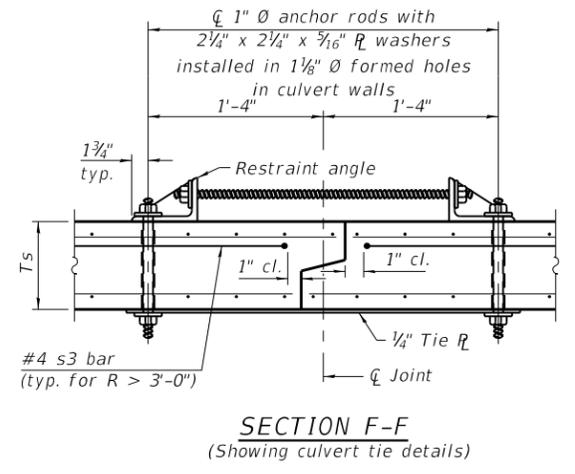
SECTION DETAILS - STA 149 + 32

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						368	35RS-9	TAZEWELL & WOODFORD	26	14
								ILLINOIS	FED. AID PROJECT	

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
368	35RS-9	TAZEWELL & WOODFORD	26	14
CONTRACT NO. 68C97				



*** This dimension shall be increased by 2" for CIP construction.

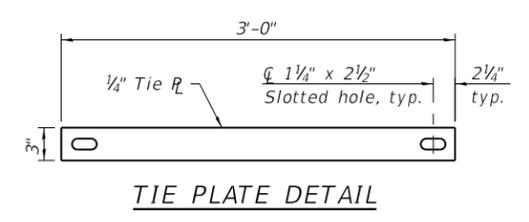
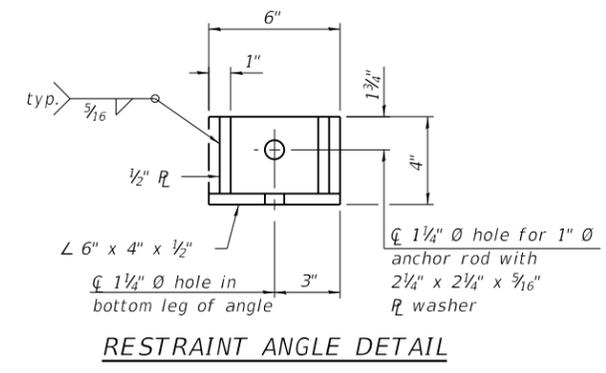
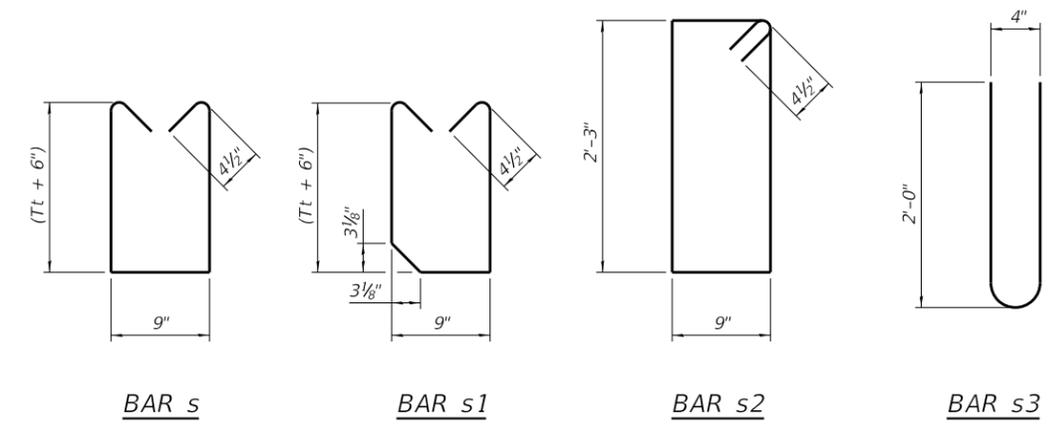


TOEWALL CONSTRUCTION SEQUENCE

1. Perform excavation and construct toewall.
2. Backfill accordingly and place bedding for precast box culvert end sections.
3. Set precast box culvert end section.
4. Drill and epoxy grout reinforcement in toewall in accordance with Section 584 of the Standard Specifications.
5. Pressure grout voids using non-shrink grout conforming to Section 1024 of the Standard Specifications.

* The Contractor may furnish a precast or cast-in-place toewall. The Contractor shall be responsible for the strength and stability of the precast toewall during handling. Additional lifting points may be required depending upon the length of the toewall or the Contractor may need to modify the design of the toewall for the proposed handling method.

** If soil conditions permit, the sides of the toewall may be poured directly against the soil. The clear cover on the sides of the toewall shall be increased to 3" by increasing the thickness of the toewall.

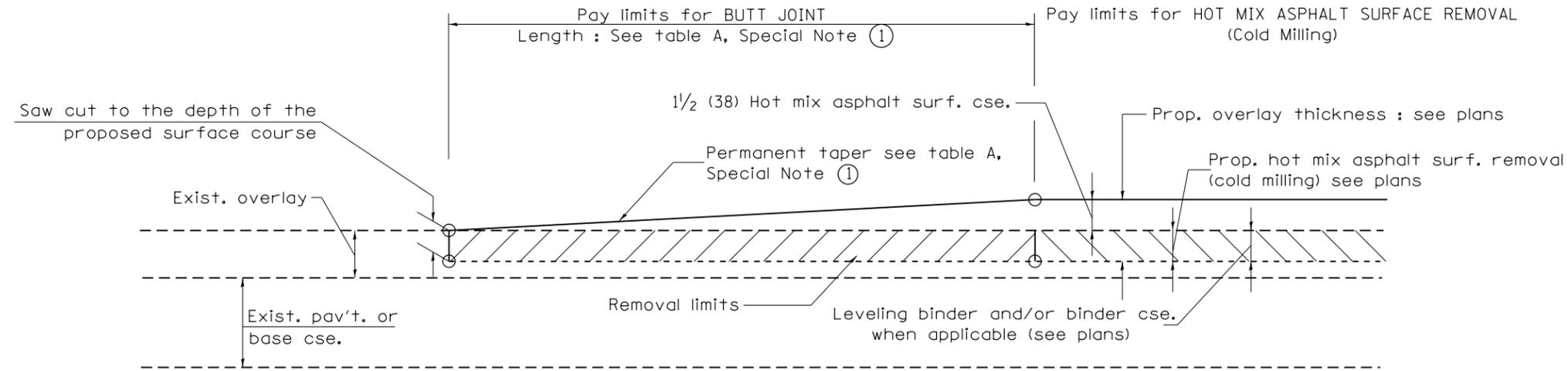


Notes:
 1" Ø anchor rods for the culvert ties shall conform to the requirements of ASTM F1554, Grade 105. Structural steel for the tie plate and restraint angle shall conform to the requirements of Article 1006.04 of the Standard Specifications. All components of the culvert tie detail shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable. 2 1/4" x 2 1/4" x 3/16" plate washers shall be provided under each nut required for the anchor rods. Anchor rods connecting precast sections shall be brought to a snug tight condition followed by an additional 1/2 turn on one of the nuts for anchor rods installed in the walls. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of using formed holes.

SCB-AES 2-17-2017

(Sheet 2 of 2)

FILE NAME =	USER NAME = mitchellag	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PRECAST CONCRETE BOX CULVERT APRON END SECTION DETAILS - STA 149 + 32	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw:\planroom_dot_illinois_gov\PIWIDOT\Documents\DOT Offices\District 4\Projects\D4_68C97\CADDData\CAD\Sheet\DRW\97-sbt-cover.dgn		REVISOR -	REVISOR -			368	35RS-9	TAZEWELL & WOODFORD	26	15	
PLOT SCALE = 100.0424' / in.		CHECKED -	REVISOR -			CONTRACT NO. 68C97					
Default		DATE -	REVISOR -			ILLINOIS FED. AID PROJECT					



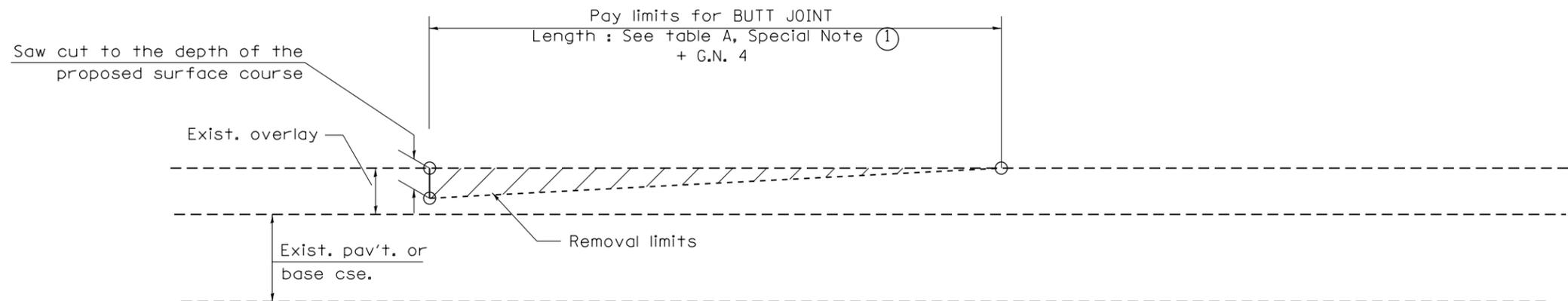
CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

**TABLE A
TAPER RATES**

SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
①	BUTT JOINT TAPER RATE	1:480	1:240
②	TEMPORARY RAMP TAPER RATE	1:80	1:40

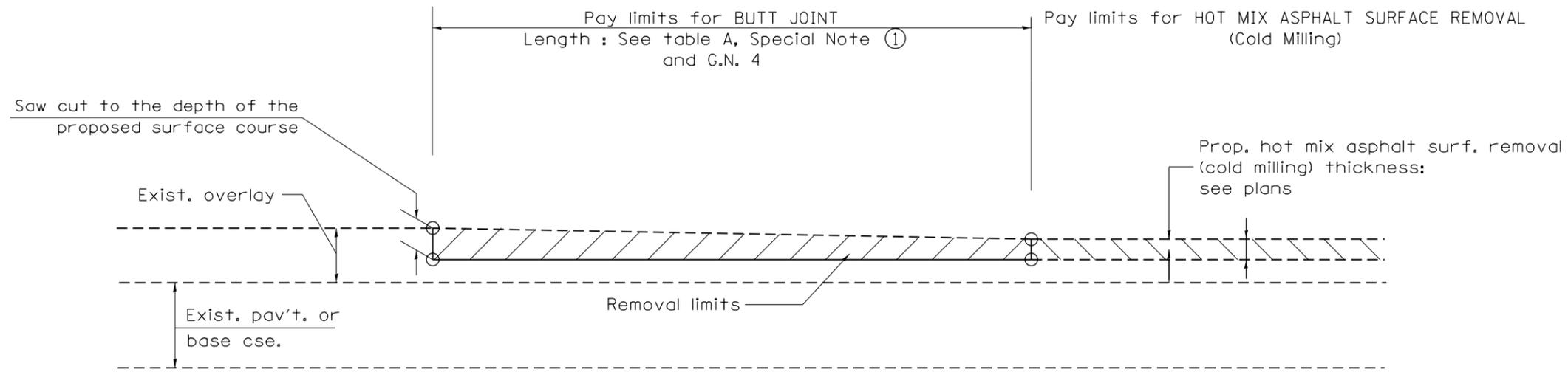
GENERAL NOTES

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.
3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.
4. The length of butt joint is based on the taper rate times change in cold milling depth within the butt joint pay limits, unless otherwise indicated.
5. Temporary ramps are paid for separately and not included in the cost of the butt joints.

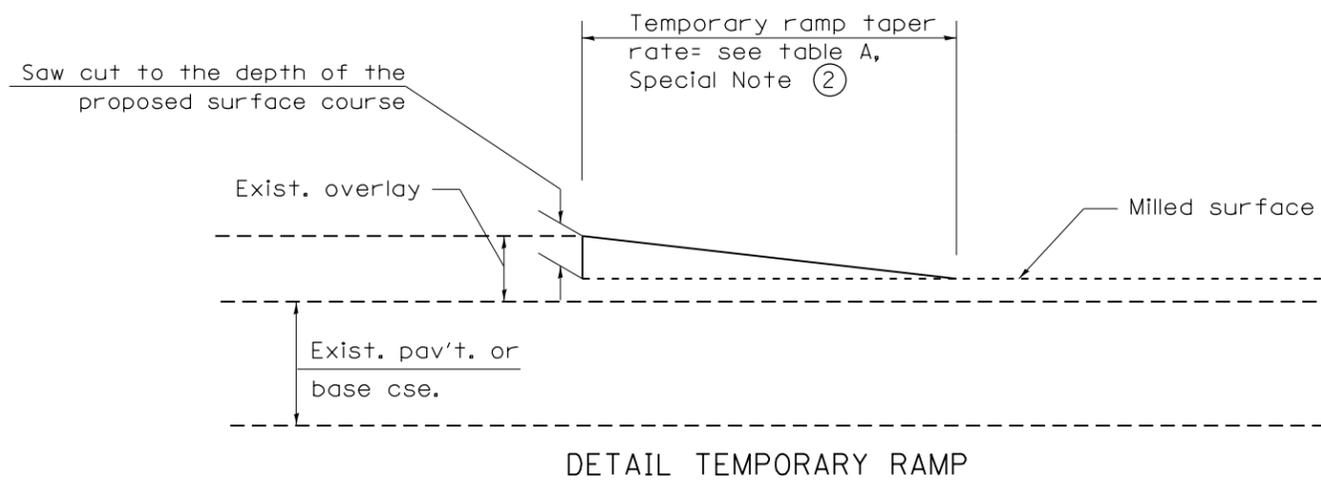


CASE 2 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

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



**CASE 3 : HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER**



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

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

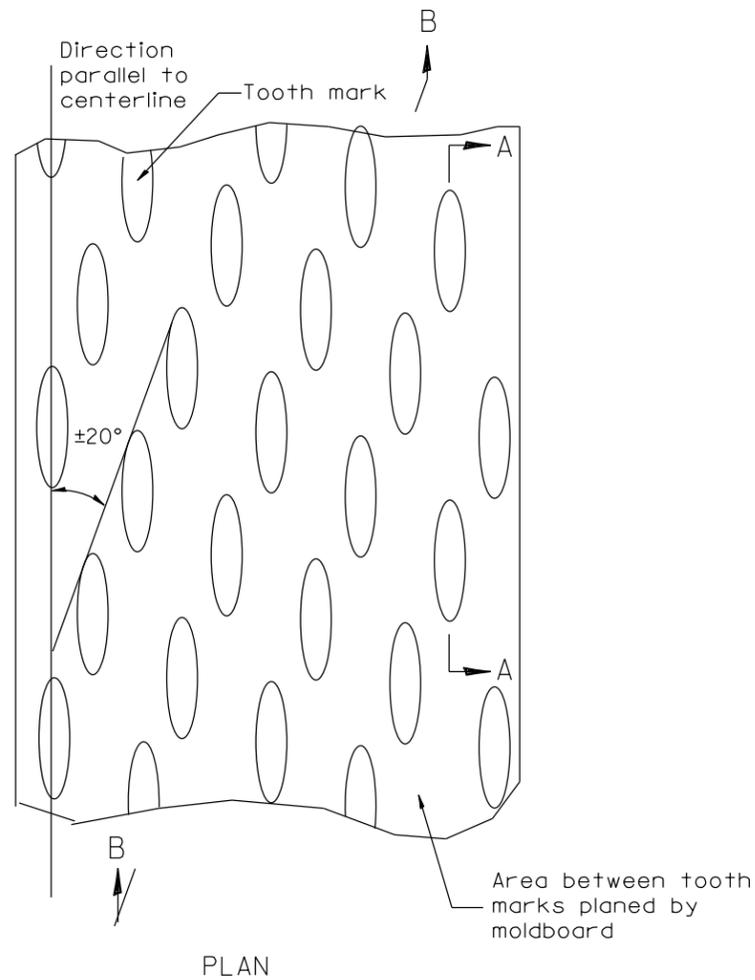
BUTT JOINTS

NOT TO SCALE

SHT. 2 OF 3
CADD STD. 406101-D4

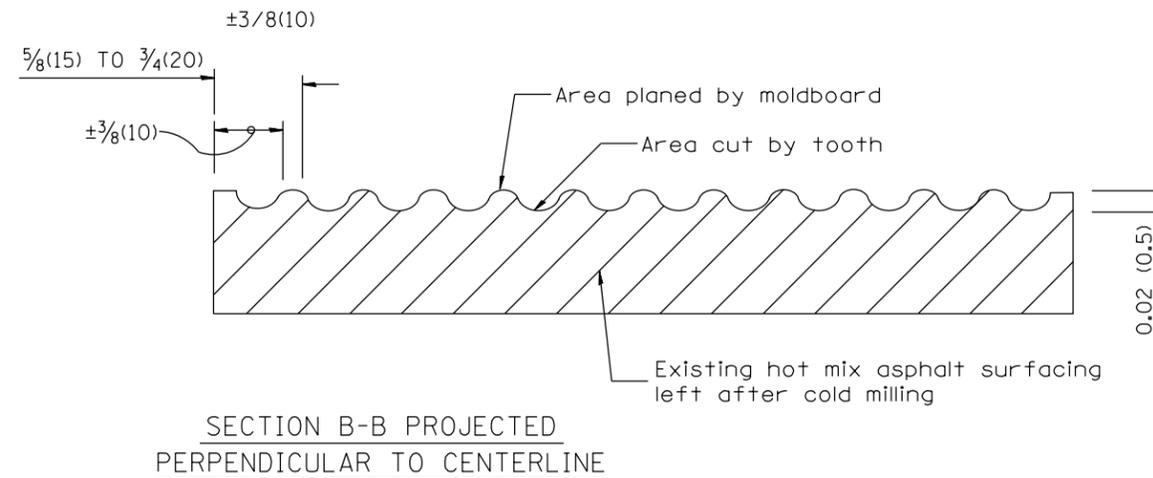
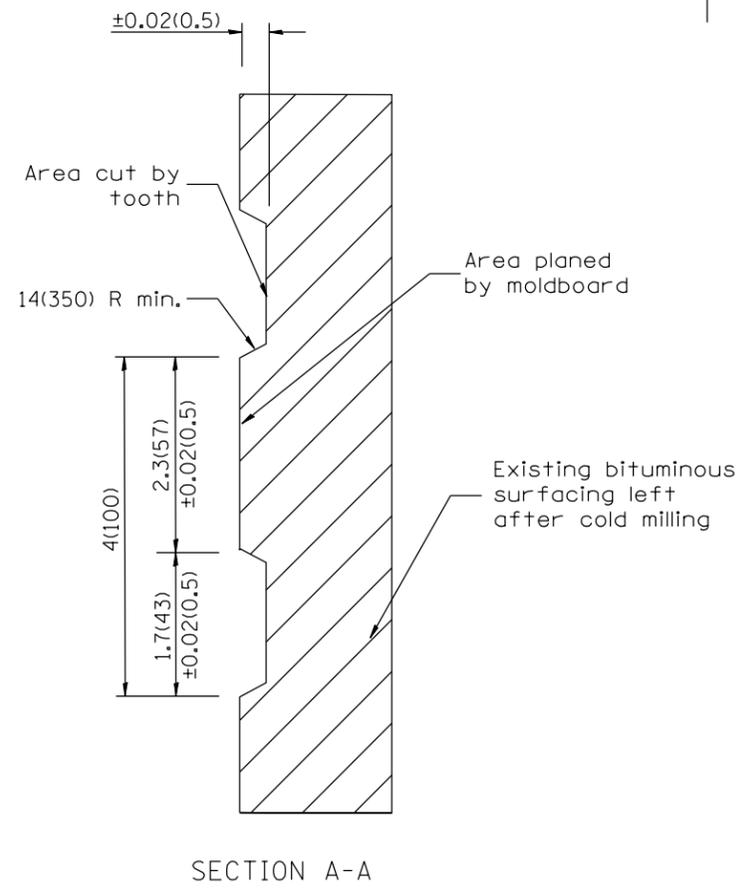
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
368	35RS-9	TAZEWELL & WOODFORD	26	18
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68C97	

DESIGNER NOTES:
1. INCLUDE DISTRICT SPECIAL PROVISION, IF APPLICABLE.



General notes:

1. Coldmilling shall consist of two processes: Cutting with carbide teeth mounted on a rotating drum, and planing with a moldboard mounted immediately behind the cutting drum.
2. Other similar patterns will be acceptable if they consist of a smooth, flat, planed surface interspersed with a pattern of discontinuous longitudinal striations.



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

01-01-97	RENUM. C-104.01, NEW REVISION BOX	T.P.
04-20-98	REMOVED MILLING DETAIL FROM STANDARD	J.A.
09-08-98	CORRECT NOTE LEADER PLACEMENT	R.W.
10-16-06	REVISED TO 2007 SPEC.	M.A.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

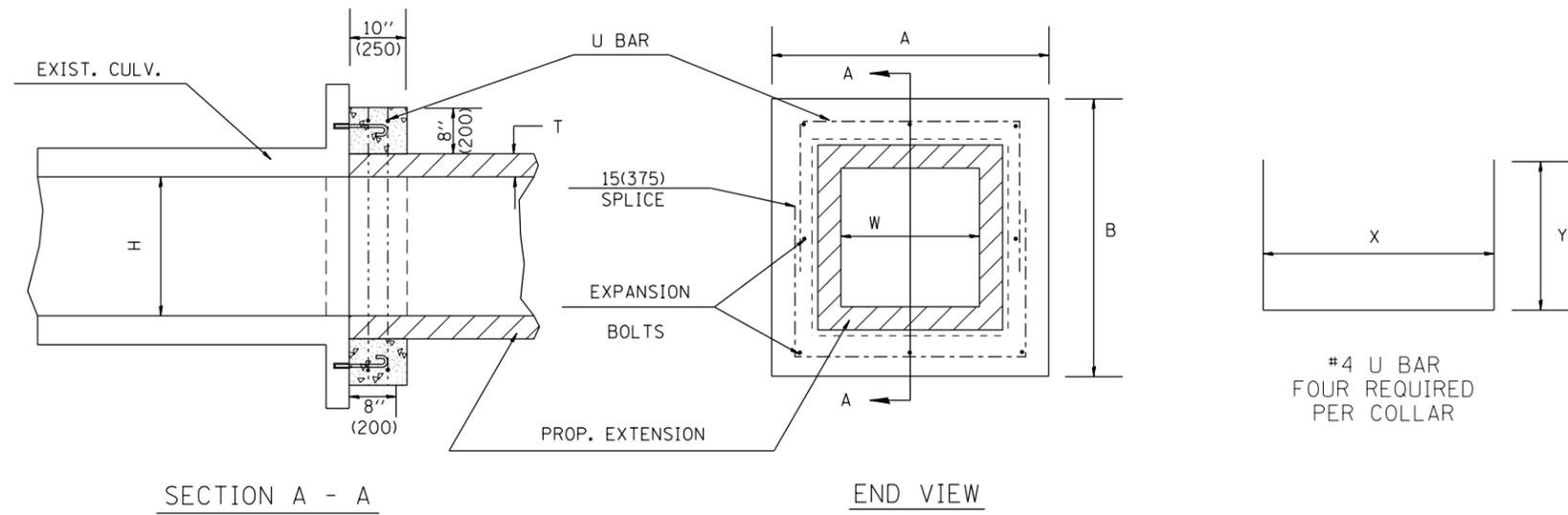
HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

NOT TO SCALE

CADD STD. 440001-D4

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
368	35RS-9	TAZEWELL & WOODFORD	26	20
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 68C97	

• MINIMUM 1' LAP ON U BARS



GENERAL NOTES

1. The collar shall be constructed entirely of class SI concrete and in accordance with the applicable portions of section 503 of the Standard Specifications. Reinforcement bars shall conform to section 508.
2. Expansion bolts shall consist of approved expansions anchors, and 3/4" (M20) hook bolts which conform to Section 1006.09. These bolts shall extend at least 8"(200) into the new concrete.
3. This work will be paid for by the cubic yard (cubic meter) for CONCRETE COLLAR, by the pound (kg) for REINFORCEMENT BARS, and by Each for EXPANSION BOLTS of the size indicated.

DIMENSIONS

EXISTING BOX		A	B	T	EACH COLLAR				
W ft (mm)	H ft (mm)				CL SI CU YD (m ³)	REINFORCEMENT X	BARS Y	EXPANSION BOLTS POUNDS (kg)	NO.
2 (600)	2 (600)	4'-0" (1.22m)	4'-0" (1.22m)	4(100)	0.27(0.21)	3'-4" (1.02m)	27.5(698)	21 (9.5)	8
3 (900)	2 (600)	5'-0" (1.52m)	4'-0" (1.22m)	4(100)	0.32(0.24)	4'-4" (1.32m)	27.5(698)	24 (11)	8
3 (900)	2.5 (750)	5'-0" (1.52m)	4'-6" (1.37m)	4(100)	0.34(0.26)	4'-4" (1.32m)	30.5(774)	25 (11.5)	8
3 (900)	3 (900)	5'-0" (1.52m)	5'-0" (1.52m)	4(100)	0.36(0.28)	4'-4" (1.32m)	33.5(850)	26.5 (12)	8
3 (900)	4 (1200)	5'-2" (1.57m)	6'-2" (1.88m)	5(125)	0.41(0.31)	4'-6" (1.37m)	40.5(1.03m)	30 (13.5)	10
4 (1200)	3 (900)	6'-2" (1.88m)	5'-2" (1.57m)	5(125)	0.41(0.31)	5'-6" (1.68m)	34.5(876)	30 (13.5)	10
4 (1200)	4 (1200)	6'-2" (1.88m)	6'-2" (1.88m)	5(125)	0.45(0.34)	5'-6" (1.68m)	40.5(1.03m)	33 (15)	12
4 (1200)	5 (1500)	6'-4" (1.93m)	7'-4" (2.24m)	6(150)	0.51(0.39)	5'-8" (1.73m)	3'-11.5"(1.21m)	36 (16.5)	14
5 (1500)	4 (1200)	7'-4" (2.24m)	6'-4" (1.93m)	6(150)	0.51(0.39)	6'-8" (2.03m)	3'-5.5"(1.05m)	36 (16.5)	14
5 (1500)	5 (1500)	7'-4" (2.24m)	7'-4" (2.24m)	6(150)	0.55(0.42)	6'-8" (2.03m)	3'-11.5"(1.21m)	39 (17.5)	16
5 (1500)	6 (1800)	7'-6" (2.29m)	8'-6" (2.59m)	7(175)	0.60(0.46)	6'-10" (2.08m)	4'-6.5"(1.38m)	42.5 (19)	16
6 (1800)	4 (1200)	8'-6" (2.59m)	6'-6" (1.98m)	7(175)	0.56(0.43)	7'-10" (2.39m)	3'-6.5"(1.08m)	40 (18)	14
6 (1800)	5 (1500)	8'-6" (2.59m)	7'-6" (2.29m)	7(175)	0.60(0.46)	7'-10" (2.39m)	4'-0.5"(1.23m)	42.5 (19)	16
6 (1800)	6 (1800)	8'-6" (2.59m)	8'-6" (2.59m)	7(175)	0.64(0.49)	7'-10" (2.39m)	4'-6.5"(1.38m)	45 (20.5)	16
6 (1800)	8 (2400)	8'-8" (2.64m)	10'-8" (3.25m)	8(200)	0.74(0.57)	8'-0" (2.44m)	5'-7.5"(1.71m)	51.5 (23)	18
8 (2400)	8 (2400)	10'-8" (3.25m)	10'-8" (3.25m)	8(200)	0.82(0.63)	10'-0" (3.05m)	5'-7.5"(1.71m)	57 (26)	20

QUANTITIES

CALC. BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____

QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

DESIGNER NOTES: 1. IF USING A COLLAR SIZE NOT PROVIDED IN THE TABLE USE THE BLANK ROWS AT THE BOTTOM OF THE TABLE.

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

01-01-97	RENUN. J-12.01, METRICS, NEW REVISION BOX, REVISED	T.P.																		
	TITLE BOX, ADDED QUANTITY CALCULATION BOX																			
10-16-06	REV. TO 2007 SPEC., REINF. BARS COL.	M.A.																		
2-15-11	ADDED GENERAL NOTE #3 & REVISED BAR LAP LENGTH	R.D.																		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

COLLAR FOR BOX CULVERT EXTENSIONS

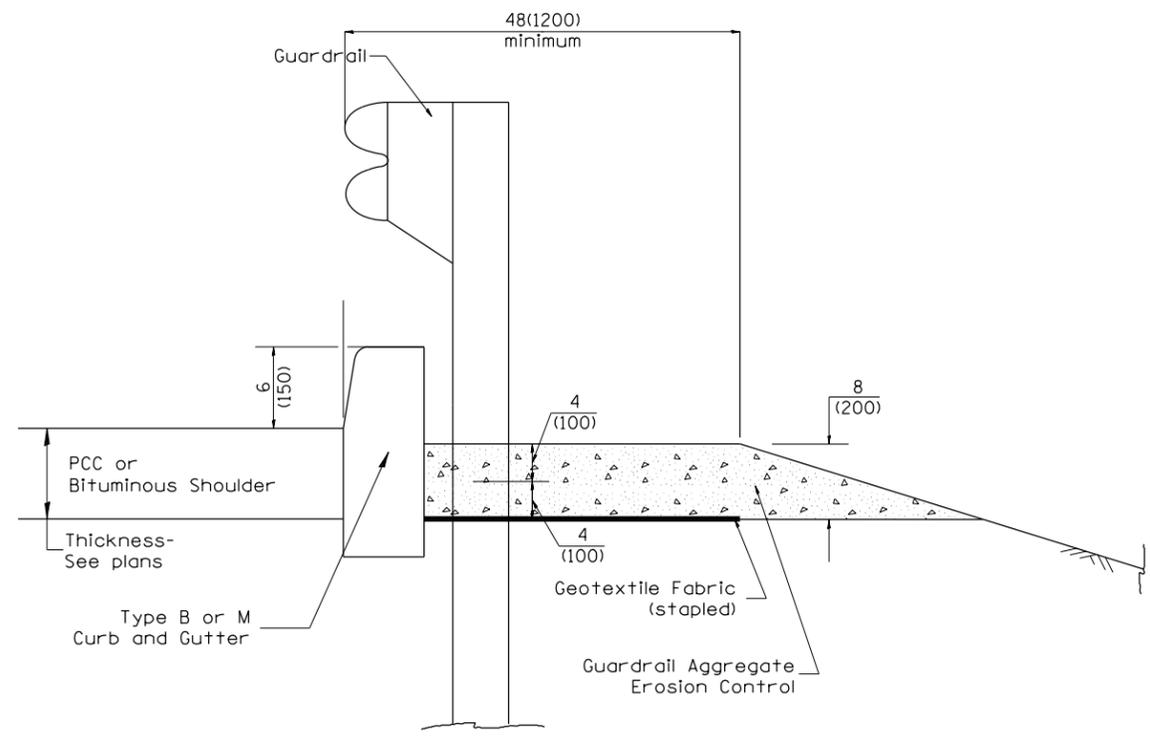
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CADD STD. 540001-D4

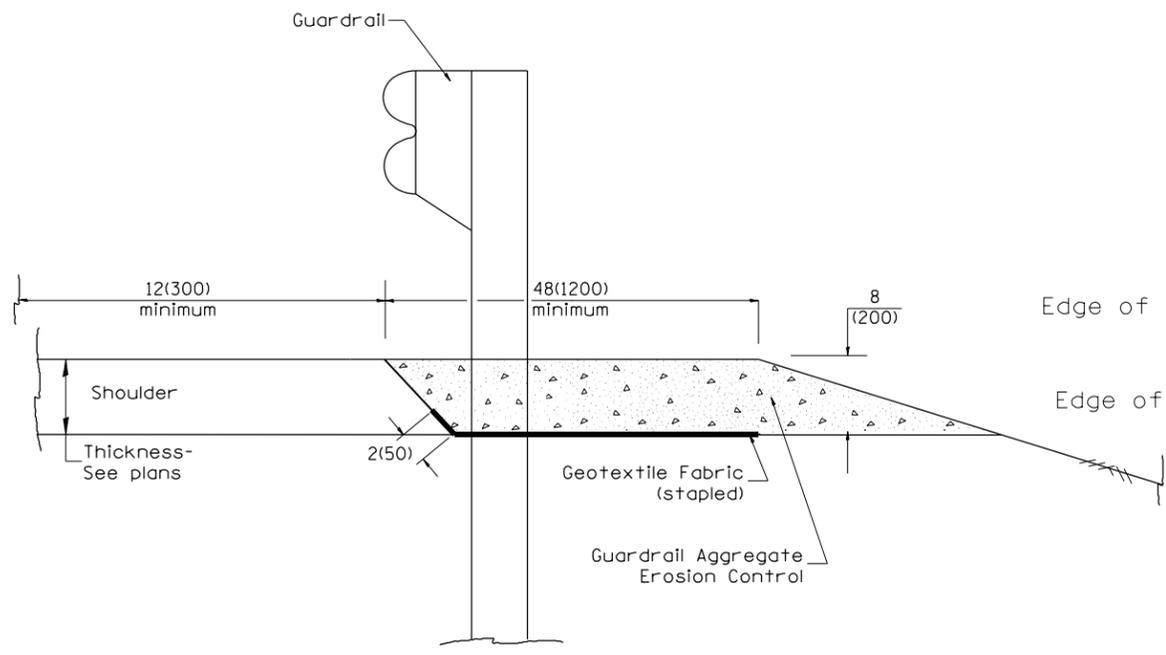
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
368	35RS-9	TAZEWELL & WOODFORD	26	21
CONTRACT NO.68C97				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

DESIGNER NOTES: 1. CONSIDER USING A "B" CURB PAY ITEM AT GUARDRAIL INSTALLATIONS WHERE GRADES ARE EQUAL TO OR GREATER THAN 1% AND AT INLETS. (INCLUDE DISTRICT SPECIAL PROVISION)

USE "GUARDRAIL AGGREGATE EROSION CONTROL" AT GUARDRAIL INSTALLATIONS WHERE GRADES ARE LESS THAN 1% (INCLUDE DISTRICT SPECIAL PROVISION).
 INCLUDE STATE STANDARD 610001 IF APPLICABLE.
 INCLUDE THE FOLLOWING DISTRICT CADD STANDARDS AS NEEDED: SLOPE DRAINS FOR EXPOSED PIPES; SLOPE DRAINS FOR BURIED PIPES; SEEPAGE COLLARS FOR BURIED PIPES
 SEEPAGE COLLARS FOR EXPOSED PIPES; CONCRETE THRU BLOCKS AND PIPE ELBOW.
 INCLUDE DISTRICT SPECIAL PROVISION - "AGGREGATE QUALITY" FOR PROJECTS LOCATED IN THE WESTERN AREA OF THE DISTRICT - APPROX. DIVIDING LINE IS IL 97.
 DELETE DESIGNER NOTES WHEN INSERTING INTO PLAN FILES.
 OPERATIONS PREFERS USE OF PIPE OUTLETTING ONTO FORESLOPE WITH RIPRAP. USE NON-METALLIC PIPE WHEN POSSIBLE BECAUSE OF FUTURE CORROSION ISSUES.
 IF NO OTHER SEEDING IS PAID FOR ON THE CONTRACT, USE DISTRICT SPECIAL PROVISION FOR SEEDING, MINOR AREAS.



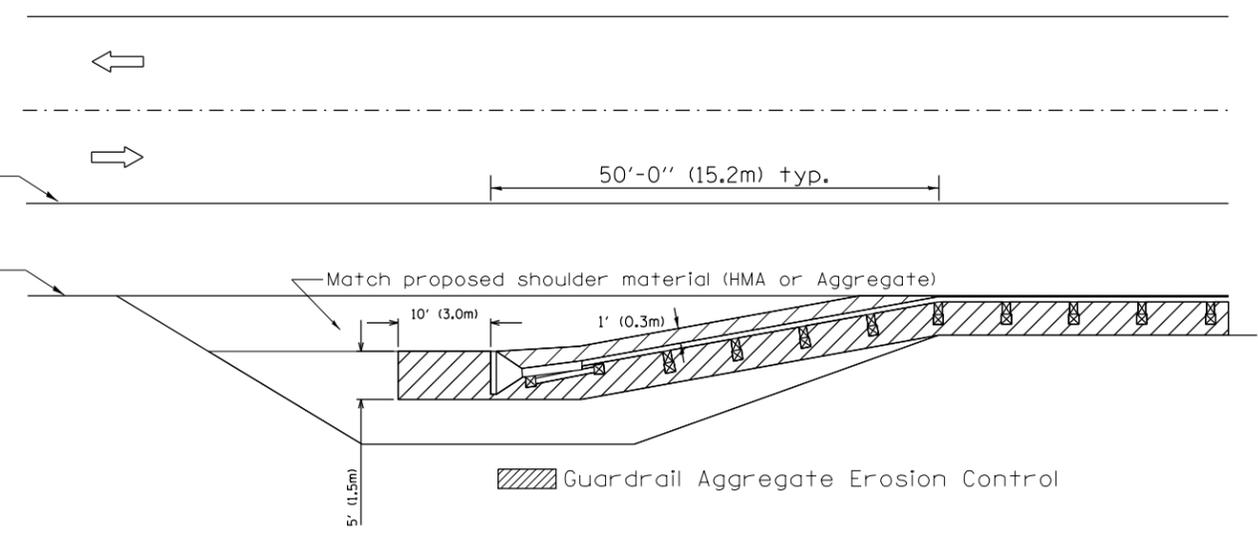
TYPICAL SECTION WITH EROSION CONTROL CURB



TYPICAL SECTION WITHOUT EROSION CONTROL CURB

GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.
2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.
3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.
4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.
5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.
6. Materials shall meet the following requirements:
 - A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.
 - B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.



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

01-01-97	RENUM. C-22.01, NEW REVISION BOX	T.P.	03-07-11	ADDED DETAIL SHOWING PLAN VIEW	R.D.
03-01-97	CORRECT STD. NUMBERS IN NOTES PG. 2	J.A.	08-10-12	REVISED CURB "B" AND AGGREGATE	R.D.
11-03-00	CORRECTION TO NOTES	M.A.	07-15-15	ADDRESSED SHOULDER INLET CURB	R.D.
10-16-06	REVISED TO 2007 SPEC.	M.A.	01-26-17	REVISED	R.D.

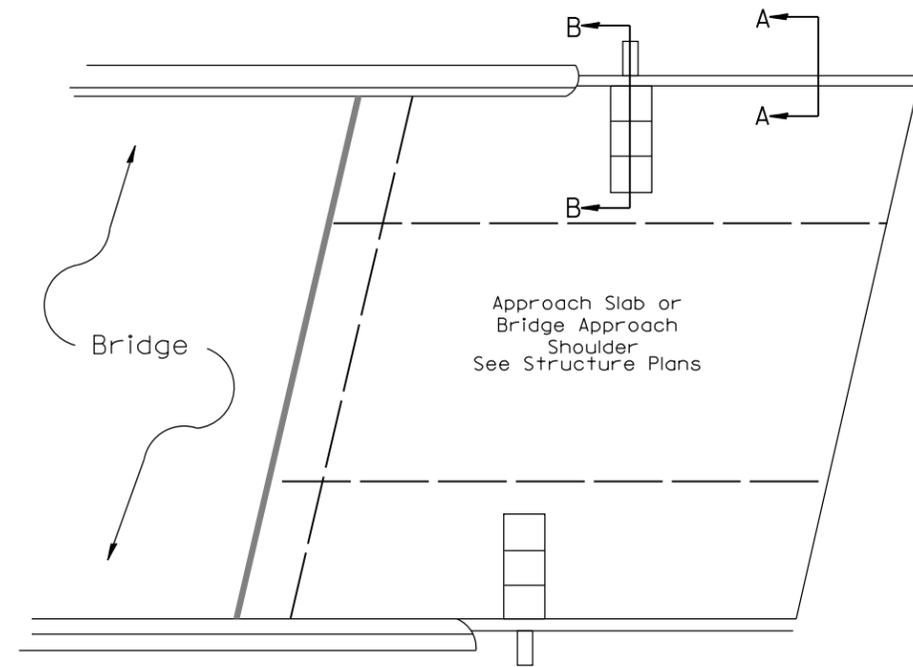
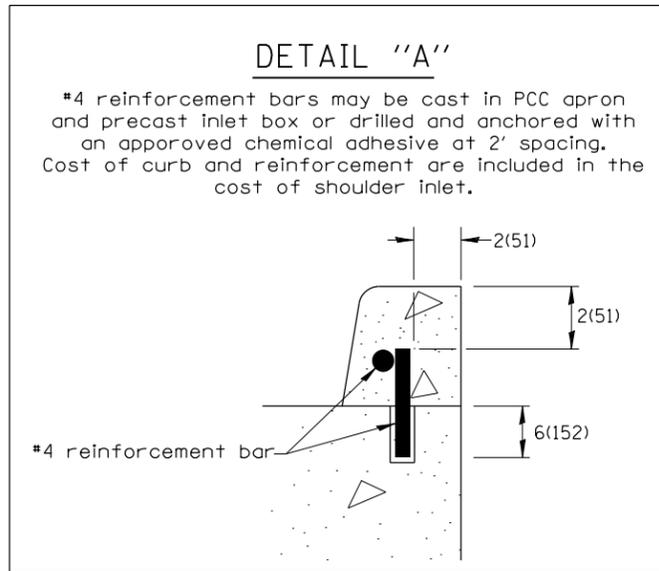
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL EROSION CONTROL TREATMENTS

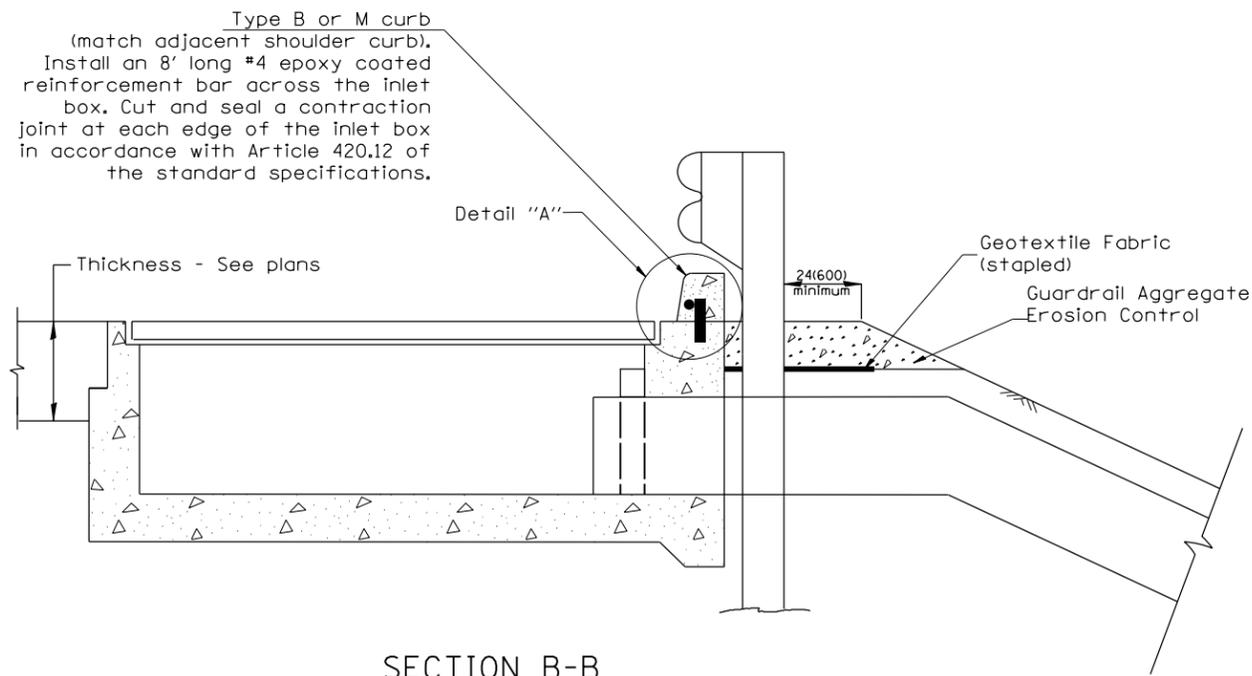
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SHT. 1 OF 2
CADD STD. 630101-D4

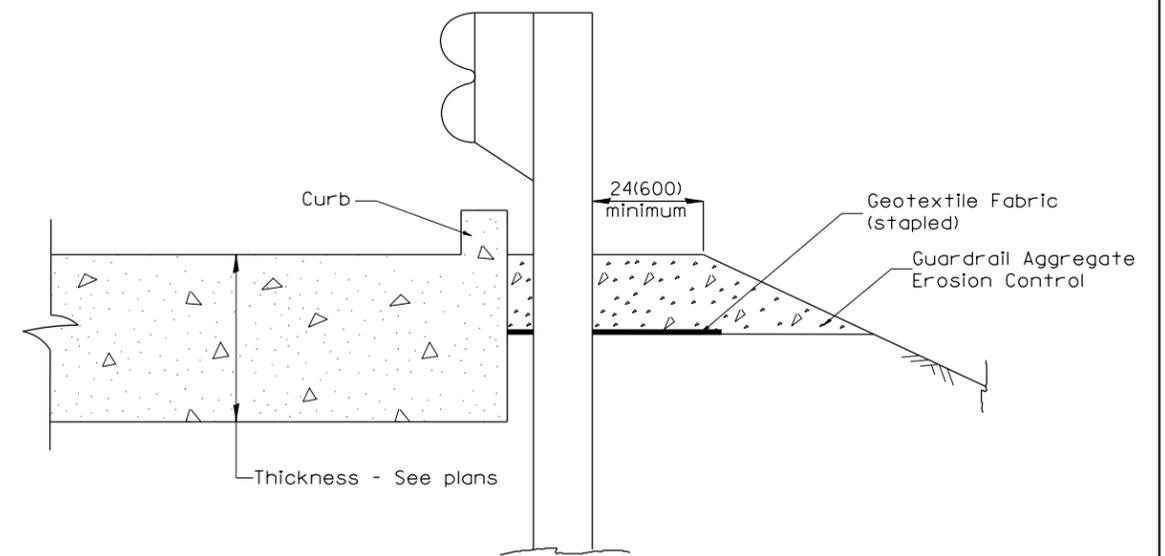
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
368	35RS-9	TAZEWELL & WOODFORD	26	22
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68C97	



PLAN VIEW
APPROACH SLAB OR SHOULDER PLACEMENT



SECTION B-B
TYPICAL SECTION AT INLETS
TYPE E, F & G (HIGHWAY STANDARD 610001)



SECTION A-A
TYPICAL SECTION WITH BRIDGE APPROACH CURB

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

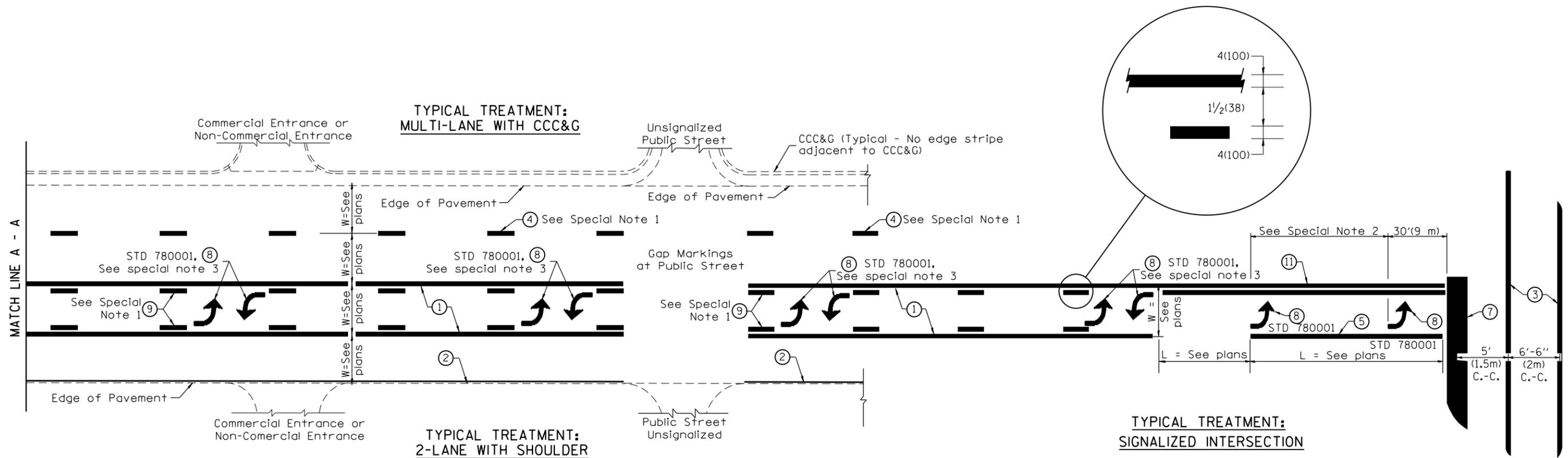
GUARDRAIL EROSION CONTROL TREATMENTS

NOT TO SCALE

SHT. 2 OF 2
CADD STD. 630101-D4

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
368	35RS-9	TAZEWELL & WOODFORD	26	23
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68C97	

DESIGNER NOTES:
1. Include State Standard 780001 (Typical Pavement Markings)



FLUSH PAVED MEDIAN; TWO-WAY LEFT TURN LANE WITH ONE-WAY LEFT TURN LANE AT SIGNALIZED INTERSECTION

TYPICAL PAVEMENT MARKING LEGEND

(Note: This is a District Standard Legend. Some elements may not apply to specific project.)

- ① 4(100) Solid (Yellow)
- ② 4(100) Solid (White)
- ③ 2-6(150) Crosswalk @ 6'-6" (2m)min C.-C. (White)
2-8(200) Crosswalk @ 6'-6" (2m)min C.-C. (White) (When traffic signals are present.)
- ④ 6(150) Skip-Dash (White) (See Special Note 1)
- ⑤ 8(200) Solid (White)
- ⑥ 12(300) Diagonal (White) (Item ⑥ is shown on Std. 780001)
- ⑦ 24(600) Stop Bar (White)
- ⑧ Letters & Arrows (See Std. 780001 and Special Notes 2 & 3)
- ⑨ 4(100) Skip-Dash (Yellow) (See Special Note 1)
- ⑩ 12(300) Diagonal (Yellow) (See Table A) ⑩
- ⑪ 4(100) Double Solid (Yellow) ⑪

SPECIAL NOTES

- Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversely across the pavement.
- The following shall apply to arrows located in one-way left turn lanes:
 - A. A minimum of two (2) arrows is required.
 - B. The maximum spacing between arrows is 80' (24 m).
 - C. Arrows shall be evenly spaced if three (3) or more are required.
- The following shall apply to arrow pairs located in two-way left turn lanes:
 - A. A minimum of two (2) arrow pairs is required.
 - B. The maximum spacing between arrow pairs is 200' (61 m).
 - C. Arrow pairs shall be evenly spaced if three (3) or more are required.
 - D. The spacing between Bi Directional Left Turn Arrows is 33' (10 m).

GENERAL NOTES

- Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
- See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.
- Refer to Article 780.13 for letter, number and symbol areas (sq. ft.)
- Areas are grooved 1" beyond each edge for the following symbols:
Through Arrow= 14.8 sq. ft.
Large Left or Right Arrow= 21.9 sq. ft.
2 Arrow Combination Left (or Right) and Through= 34.9 sq. ft.
Wrong Way Arrow= 29.5 sq. ft.
Railroad Crossing Symbol= 69.8 sq. ft.
(For further information, refer to BDE Special Provision: Grooving for Recessed Pavement Markings)

01-01-97	RENUM. F-8.03, NEW REVISION BOX	T.P.	10-16-06	REVISED TO 2007 SPEC.	
02-07-97	ADD BI DIRECTIONAL DIMENSION	J.A.	2/29/16	ADDED GROOVING AREAS	R.D.
10-97	CORRECT BI DIRECTIONAL DIMENSION	J.A.			
08-02	ADD CROSSWALK DMNS. WITH T.S.	M.A.			

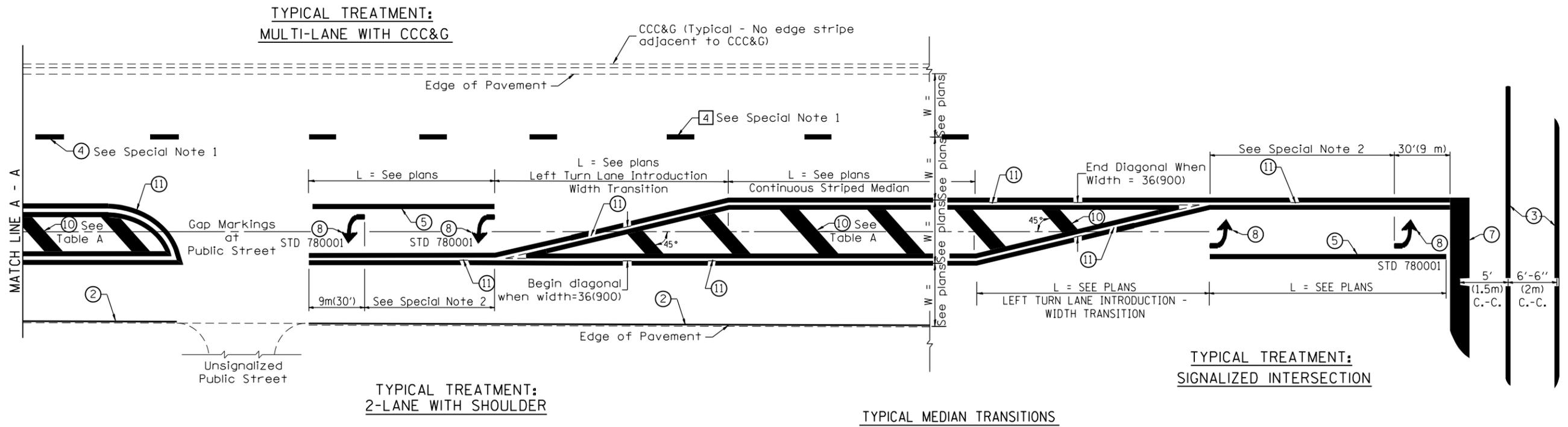
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TYPICAL PAVEMENT MARKINGS

NOT TO SCALE

SHT. 1 OF 2
CADD STD. 780001-D4

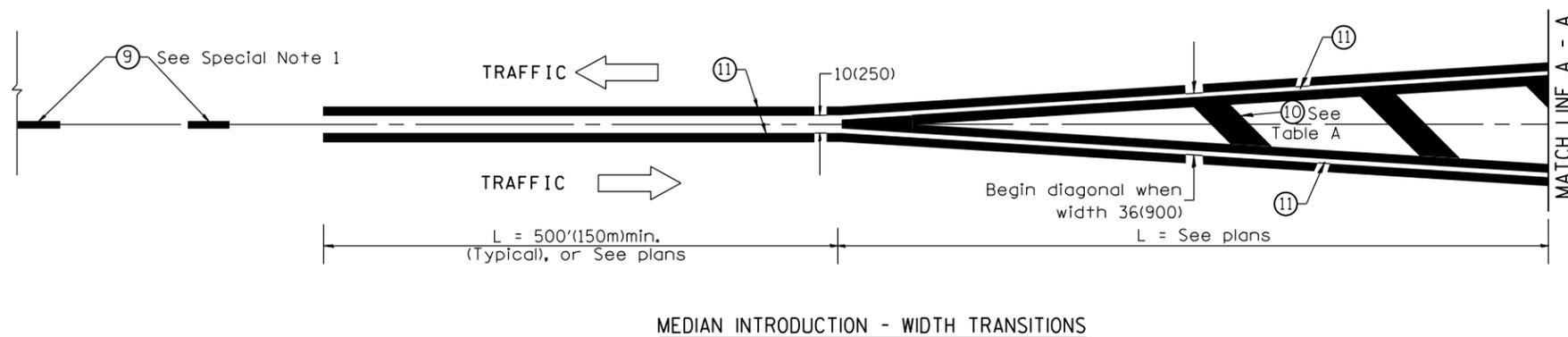
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
368	35RS-9	TAZEWELL & WOODFORD	26	24
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68C97	



FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE

TABLE A
RECOMMENDED SPACING BETWEEN DIAGONAL LINES

SPEED LIMIT RANGE	CONTINUOUS	INTERSECTION CHANNELIZATION
		(Includes Width Transitions for Median and Left Turn Lane Introductions)
Less Than 30 mph (50 km/h)	50' (15m)	15' (5m)
30 - 45 mph (50 - 70 km/h)	75' (23m)	20' (6m)
Over 45 mph (70 km/h)	150' (46m)	30' (9m)



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

