

PLOT SCALE: 5280
PLOT NAME: 100

WINNEBAGO

4120-5-71

REV. DATE: 01-24-00

1 AUP
2/11/00
25.0
30.7

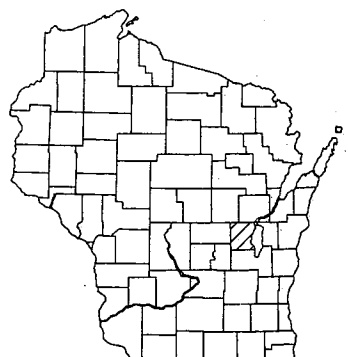
STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION
 PLAN OF PROPOSED IMPROVEMENT
SOUTH COUNTY LINE - OSHKOSH
 (0.25 MILES NORTH OF C.T.H. "Z")
 (S.T.H. 175) CTH 'R'
 WINNEBAGO COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4120-5-71	HES 1000 (1)	1

INDEX OF SHEETS

Sheet No. 1	Title
Sheet No. 2-2.1	Typical Sections and Details
Sheet No. 3	Estimate of Quantities
Sheet No. 3A	Miscellaneous Quantities
Sheet No. 4	Right of Way Plat
Sheet No. 5	Plan and Profile
Sheet No. 6-6.6	Standard Detail Drawings
Sheet No. -	Sign Plates
Sheet No. -	Structure Plans
Sheet No. 9	Computer Earthwork Data
Sheet No. 9.1-9.2	Cross Sections

TOTAL SHEETS = 17



STATE PROJECT NUMBER
4120-5-71



DESIGN DESIGNATION

A.D.T. 1993	=	2,300
A.D.T. 2013	=	3,650
D.H.V.	=	507
D.	=	60-40
T.	=	7.7%
V.	=	60 M.P.H.
ESALS	=	N/A

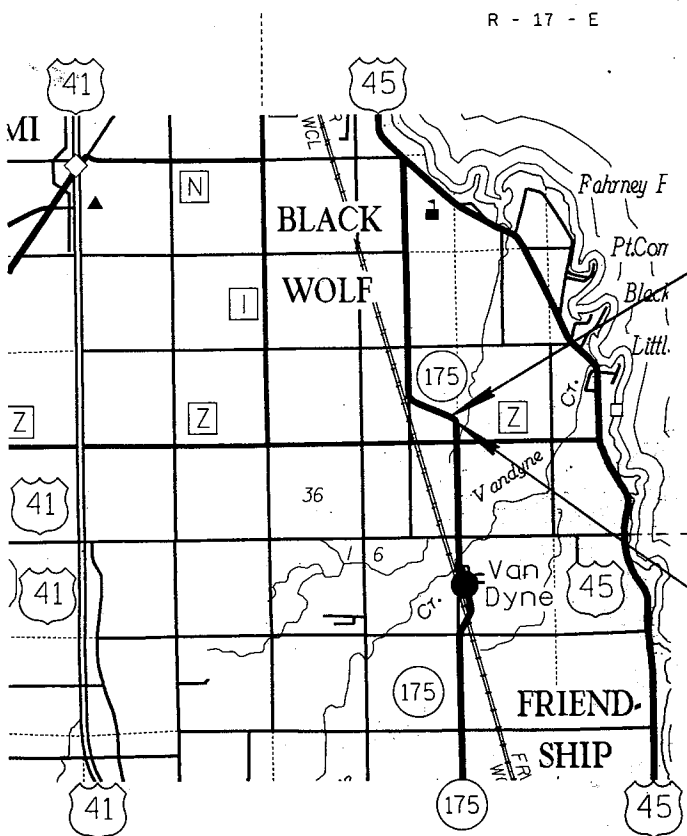
CONVENTIONAL SIGNS

COUNTY LINE		COMBUSTIBLE FLUIDS (UNDER PRESSURE)	
CORPORATE LIMITS		UNDERGROUND UTILITIES	
PROPERTY LINE		GAS	
LOT LINE		ELECTRIC	
LIMITED EASEMENT		TELEPHONE	
EXISTING RIGHT-OF-WAY		SERVICE PEDESTAL	
NEW RIGHT-OF-WAY		CABLE MARKER	
REFERENCE LINE		POWER POLE	
SLOPE INTERCEPT		TELEPHONE POLE	
ORIGINAL GROUND		RAILROADS	
MARSH OR ROCK PROFILE		MARSH	
CULVERT IN PLACE		WOODED AREA	
CULVERT REQUIRED			
CULVERT REQUIRED (Profile)			



T
17
N

WINNEBAGO CO.
FOND DU LAC CO.



LAYOUT
 SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.189 MI.

END PROJECT
STA. 305+50

BEGIN PROJECT
STA. 295+50
X = 2,394,342.656
Y = 700,317.996

ALL COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE SYSTEM SOUTH ZONE.

SURVEY BOOK NO. 1464

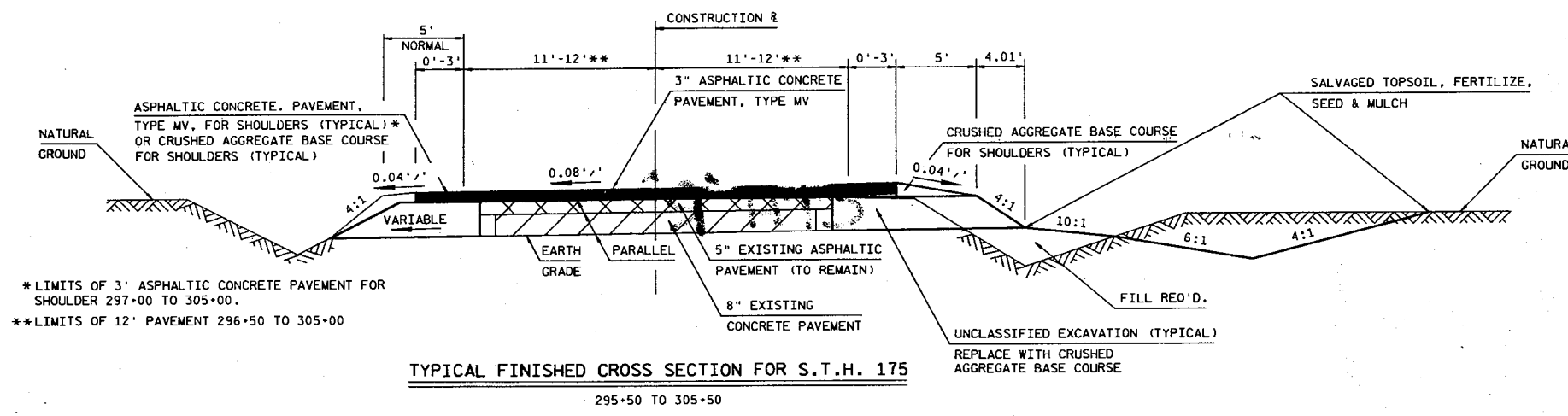
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	DISTRICT 3
Designer	M. W. DOBSON
District Examiner	D. LAID
District Supervisor	J. C. LAMERS
C.O. Coordinator	D. L. LAFORD
C.O. Examiner	R. CALHOUN

APPROVED FOR DISTRICT OFFICE
 DATE: 1-12-93 *Mark W. Dobson P.E.*
 (Signature)

AUTHORIZED FOR CENTRAL OFFICE DESIGN
 DATE: 3/31/93 *Harold C. Anderson*
 (Signature)



* LIMITS OF 3' ASPHALTIC CONCRETE PAVEMENT FOR SHOULDER 297+00 TO 305+00.
 ** LIMITS OF 12' PAVEMENT 296+50 TO 305+00

TYPICAL FINISHED CROSS SECTION FOR S.T.H. 175
 295+50 TO 305+50

GENERAL NOTES

ALL COORDINATES SHOWN ON THIS PLAN ARE GRID COORDINATES REFERENCED TO THE WISCONSIN COORDINATE SYSTEM, SOUTH ZONE. CURVE DATA SHOWN ON THE PLAN IS "ARC DEFINITION". ALL DISTANCES AND STATIONING SHOWN ON THIS PLAN ARE GROUND VALUES. GRID VALUES ARE OBTAINED BY MULTIPLYING GROUND VALUES BY 0.999931.

ALL SILT FENCE REQUIRED FOR THIS PROJECT SHALL MEET THE REQUIREMENTS OF SILT FENCE FOR SILTY SOILS.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY FACILITIES AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

THE ITEM "REMOVING OLD CULVERTS" WILL PERTAIN ONLY TO THOSE CULVERTS ENUMERATED IN THE SUMMARY OF MISCELLANEOUS QUANTITIES. ALL OTHER CULVERTS TO BE REMOVED WILL BE INCIDENTAL TO CULVERT INSTALLATION OR UNCLASSIFIED EXCAVATION.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ON THE PLAN ARE APPROXIMATE AND SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

WHEN THE QUANTITY OF CRUSHED AGGREGATE BASE COURSE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS AS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND UPON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

NO TREE SHALL BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

FILL AS SHOWN ON THE PLAN PERTAINS TO EMBANKMENT CONSTRUCTED FROM UNCLASSIFIED EXCAVATION. THE ALLOWANCE USED FOR EXPANDING THE FILLS TO COMPUTE THE VOLUME OF MATERIAL REQUIRED IS 15%.

ALL DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS BETWEEN THE SUBGRADE SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED AND MULCHED.

THE QUANTITY OF SALVAGED TOPSOIL WAS COMPUTED FROM MEASUREMENTS BETWEEN THE FINISHED SUBGRADE POINTS AND THE SLOPE INTERCEPTS AS SHOWN ON THE CROSS SECTIONS PLUS 5 FEET PER STATION FOR ROUNDING.

UTILITIES

DIGGER'S HOTLINE 1-800-242-8511 (TOLL FREE)

WISCONSIN BELL, INC.
 TOM SCHOENKE
 70 EAST DIVISION STREET
 FOND DU LAC, WISCONSIN 54935
 CABLE LOCATE 1-800-242-8511 (TOLL FREE)

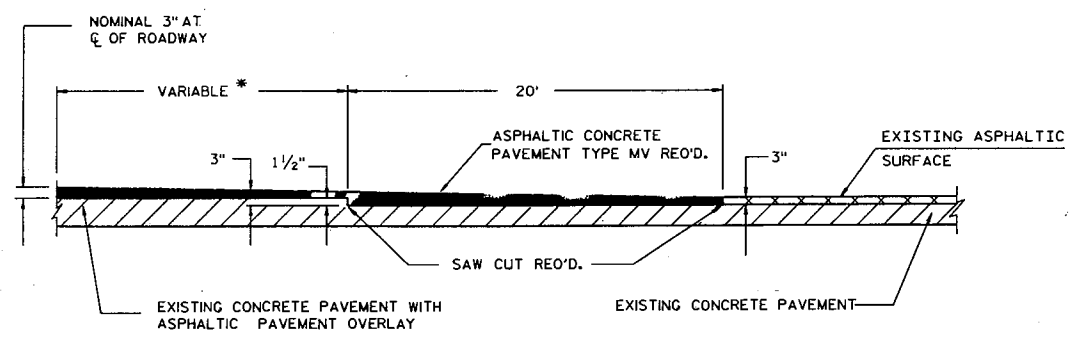
WISCONSIN PUBLIC SERVICE CORPORATION
 JEROME O. TEWS 414-433-1389
 P.O. BOX 19002
 GREEN BAY, WISCONSIN 54307-9002

STANDARD DETAIL DRAWINGS

EROSION MAT	8E7-1
SILT FENCE	8E9-3
APRON ENDWALLS FOR CULVERT PIPE	8F1-10a
ASPHALTIC SHOULDER RUMBLE STRIPS	13A4-3
BARRICADES AND TRAFFIC CONTROL FOR ROAD CLOSURES	15C2-2
PAVEMENT MARKING (MAINLINE & INTERSECTIONS)	15C8-4a
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)	15C12-1

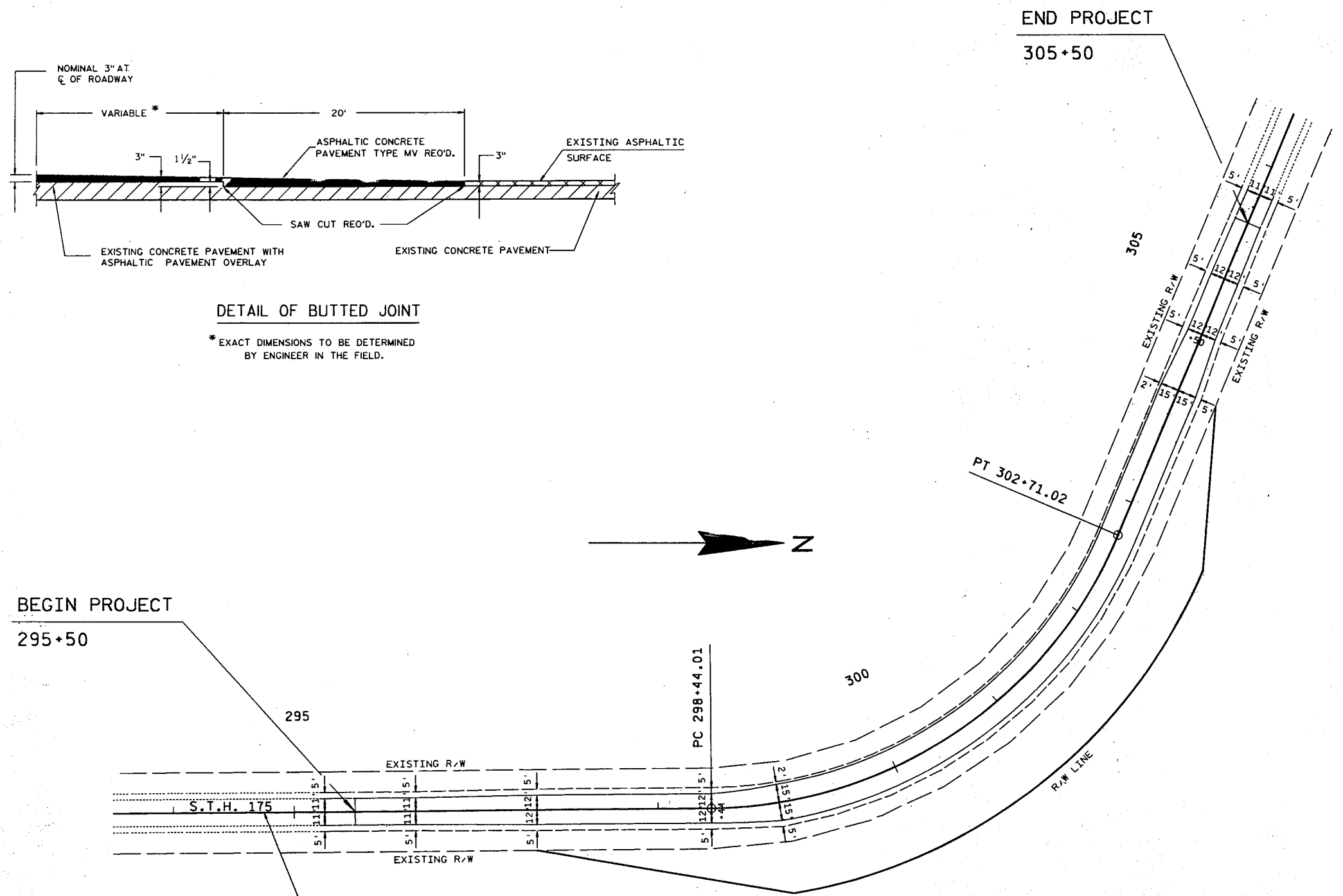
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LEVELS ON =



DETAIL OF BUTTED JOINT

* EXACT DIMENSIONS TO BE DETERMINED BY ENGINEER IN THE FIELD.



SURVEY & CONSTRUCTION

PAVING DETAIL

22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60.
 LEVELS ON =
 12-8-92

DATE 04/12/93

ESTIMATE OF QUANTITIES

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4120-05-71 QUANTITY
20102	CLEARING	I.D.	35.00	35.00
20105	GRUBBING	I.D.	35.00	35.00
20301	REMOVING OLD CULVERT, STATION 300+54	L.S.	1.00	1.00
20401	REMOVING PAVEMENT	S.Y.	20.00	20.00
20419	REMOVING ASPHALTIC SURFACE, BUTT JOINTS	S.Y.	48.00	48.00
20503	UNCLASSIFIED EXCAVATION	C.Y.	1,410.00	1,410.00
21301	FINISHING ROADWAY	L.S.	1.00	1.00
30404	CRUSHED AGGREGATE BASE COURSE	TON	1,550.00	1,550.00
40204	ASPHALTIC MATERIAL FOR TACK COAT	GAL.	61.00	61.00
40501	ASPHALTIC MATERIAL FOR PLANT MIXES	TON	43.00	43.00
40713	ASPHALTIC CONCRETE PAVEMENT, TYPE MV	TON	720.00	720.00
52007	CULVERT PIPE, CLASS III, 30-INCH	L.F.	74.00	74.00
52065	APRON ENDWALLS FOR CULVERT PIPE, 30-INCH	EACH	2.00	2.00
61910	MOBILIZATION	L.S.	1.00	1.00
62202	ASPHALTIC SHOULDER RUMBLE STRIP	L.F.	1,000.00	1,000.00
62401	WATER	MGAL	16.00	16.00
62505	SALVAGED TOPSOIL	S.Y.	4,700.00	4,700.00
62702	MULCHING	S.Y.	4,700.00	4,700.00
62803	EROSION MAT, DELIVERED	S.Y.	475.00	475.00
62804	EROSION MAT, INSTALLED	S.Y.	475.00	475.00
62815	SILT FENCE, DELIVERED	L.F.	50.00	50.00
62816	SILT FENCE, INSTALLED	L.F.	50.00	50.00
62817	SILT FENCE MAINTENANCE	L.F.	50.00	50.00
62819	MOBILIZATIONS, EROSION CONTROL	EACH	1.00	1.00
62905	FERTILIZER, TYPE B	CWT.	2.95	2.95
63002	SEEDING	LB.	85.50	85.50
64301	TRAFFIC CONTROL	L.S.	1.00	1.00
64401	PAVEMENT MARKING, HOT PAINT	L.F.	4,000.00	4,000.00
64601	SAVING EXISTING PAVEMENT	L.F.	44.00	44.00
64602	SAVING CONCRETE PAVEMENT, FULL DEPTH	L.F.	40.00	40.00

Sheet 3

EARTHWORK SUMMARY			
STATION TO STATION	LOCATION	UNCLASSIFIED EXCAVATION CU. YD.	FILL CU. YD.
295+50 - 305+50	S.T.H. 175	1,410	914

REMOVING ASPHALTIC SURFACE, BUTT JOINTS		
STATION	LOCATION	SQ. YD.
295+50	S.T.H. 175	24
305+50	S.T.H. 175	24
TOTAL		48

SAWING SUMMARY			
STATION	LOCATION	SAWING EXISTING PAVEMENT LIN. FT.	SAWING CONCRETE PAVEMENT, FULL DEPTH LIN. FT.
295+50	S.T.H. 175	22	
300+44	S.T.H. 175		20
300+64	S.T.H. 175		20
305+50	S.T.H. 175	22	
TOTALS		44	40

CLEARING AND GRUBBING			
STATION TO STATION	LOCATION	CLEARING IN. DIA.	GRUBBING IN. DIA.
295+50 - 305+50	S.T.H. 175 RT.	35	35

REMOVING PAVEMENT			
STATION	LOCATION	SO. YD.	REMARKS
300+54	S.T.H. 175	20	EXISTING CONCRETE

REMOVING OLD CULVERT			
STATION	LOCATION	LIN. FT.	REMARK
300+54	S.T.H. 175	50	EXISTING 30-INCH C.M.C.P.

CRUSHED AGGREGATE BASE COURSE AND WATER				
STATION TO STATION	LOCATION	ROADWAY TON	SHOULDER TON	WATER M. GAL.
295+50 - 305+50	S.T.H. 175	1,490		15
299+00 - 304+00	S.T.H. 175		60	1
TOTALS		1,490	60	16

CROSS DRAIN PIPE									
STATION	LOCATION	DIAMETER INCHES	LENGTH FEET	TYPE	CLASS	APRON ENDWALLS EACH	INLET ELEVATION	DISCHARGE ELEVATION	
300+54	S.T.H. 175	30	74	C.P.	III	2	770.77	769.69	

ASPHALTIC SHOULDER RUMBLE STRIPS			
STATION TO STATION	LOCATION	LIN. FT.	
299+00 - 304+00	S.T.H. 175 LT.	500	
299+00 - 304+00	S.T.H. 175 RT.	500	
TOTAL		1,000	

ASPHALTIC SUMMARY				
STATION TO STATION	LOCATION	ASPHALTIC CONCRETE PAVEMENT, TYPE MV (ROADWAY) TON	ASPHALTIC MATERIAL FOR PLANT MIX (AC 85-100) TON	ASPHALTIC MATERIAL FOR TACK COAT GAL.
295+50 - 305+50	S.T.H. 175	647	73	61

SILT FENCE		
STATION	LOCATION	LIN. FT.
300+52	S.T.H. 175 LT.	25
300+56	S.T.H. 175 LT.	25
TOTAL		50

SALVAGED TOPSOIL, SEED, FERTILIZER, AND MULCH					
STATION TO STATION	LOCATION	SALVAGED TOPSOIL SO. YD.	SEED NO. 30 LBS.	FERTILIZER TYPE B CWT.	MULCH SQ. YD.
295+50 - 305+50	S.T.H. 175	4,700	85.5	2.9	4,700

EROSION MAT		
STATION TO STATION	LOCATION	SO. YD.
298+50 - 302+75	S.T.H. 175 LT.	475

PAVEMENT MARKING, HOT PAINT			
STATION TO STATION	LOCATION	CENTERLINE SOLID, YELLOW LIN. FT.	EDGE LINE, SOLID, WHITE LIN. FT.
295+50 - 305+50	S.T.H. 175	2,000	2,000

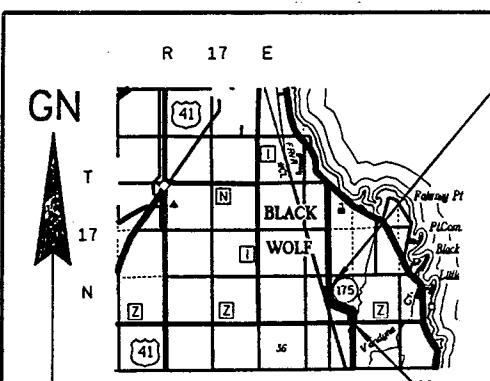
PLOT SCALE: 100

PLOT NAME: D300B

REV. DATE: 12-29-92

UNIFORM FOR COUNTR

LEVELS ON



END RELOCATION ORDER
PROJECT 4120-05-21
STATION 305+48.40
 1,468.84 FEET NORTH OF AND 490.28 FEET WEST OF
 THE SOUTHEAST CORNER OF SECTION 30,
 TOWNSHIP 17 NORTH, RANGE 17 EAST.
 Y 700,467.395
 X 2,393,865.570

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL ACRES	R/W ACRES REQUIRED			TOTAL ACRES REM.	T.L.E. ACRES
					NEW	EXISTING	TOTAL		
1	4.0	DAVID P. & YRENE D. JACOBS	FEE	117.84	0.22	0.18	0.40	117.44	-
2	4.0	WIS. PUBLIC SERVICE CORP.	RELEASE OF RIGHTS	-	-	-	-	-	-
3	4.0	DENNIS E. & GLORIA J. RASMUSSEN	FEE	14.37	0.46	0.47	0.93	13.44	-

R/W PROJECT NUMBER 4120-05-21	SHEET NUMBER 4.0	TOTAL SHEETS
FEDERAL PROJECT NUMBER		
PLAT OF RIGHT OF WAY REQUIRED FOR SOUTH COUNTY LINE - OSHKOSH (0.25 MI. N. OF C.T.H. "Z")		
SCALE 0 100 200		
S.T.H. 175 WINNEBAGO COUNTY		

LAYOUT
0 2 MI.
SCALE
TOTAL NET LENGTH OF CENTERLINE = 0.161 MI.

TOWN OF BLACK WOLF

S.T.H. 175 CURVE NOTES
 P.I. = 300+85.26
 Y = 700,265.242
 X = 2,394,343.134
 Δ = 113°-27'-43"
 Δ = 66°-32'-17"
 D = 15°-34'-56"
 T = 241.25'
 L = 427.01'
 R = 367.70'

BEGIN RELOCATION ORDER
PROJECT 4120-05-21
STATION 297+00
 881.93 FEET NORTH OF AND 9.20 FEET WEST OF
 THE SOUTHEAST CORNER OF SECTION 30,
 TOWNSHIP 17 NORTH, RANGE 17 EAST.
 Y 699,880.027
 X 2,394,346.623

END RELOCATION ORDER
PROJECT 4120-05-21
STATION 305+48.40
 Y 700,467.395
 X 2,393,865.570

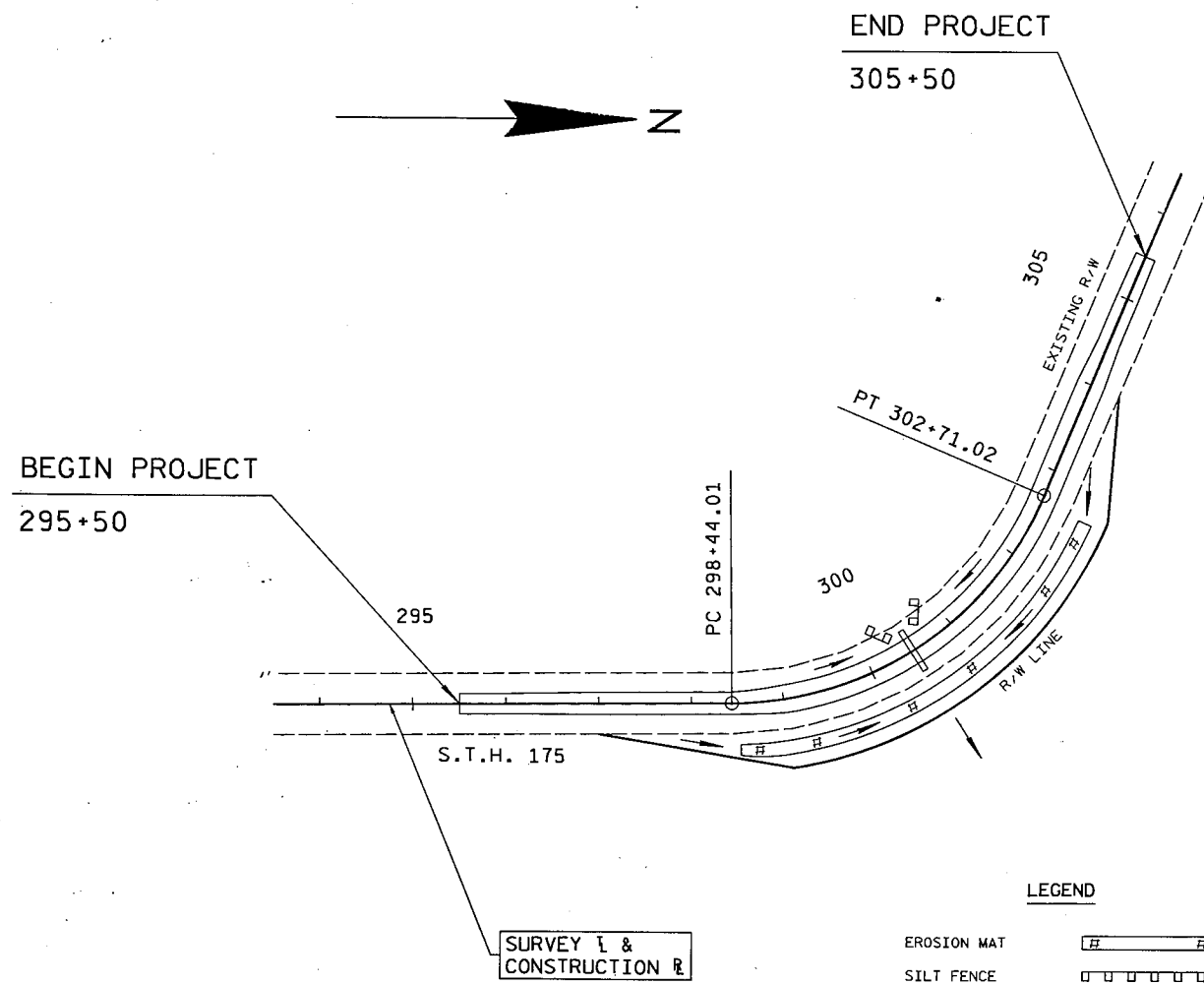
COUNTY MONUMENT
Y 698,998.656
X 2,394,355.821

NOTES
 COORDINATES AND BEARINGS ON THIS PLAT ARE ORIENTED TO THE WISCONSIN COORDINATE SYSTEM SOUTH ZONE. ALL PLAT DISTANCES ARE GROUND LENGTH AND MAY BE CONVERTED TO GRID LENGTH BY MULTIPLYING THE DISTANCE BY THE GRID FACTOR PROVIDED 0.999931.
 RIGHT OF WAY MONUMENTS ARE TYPE 2 AND ARE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.
 RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

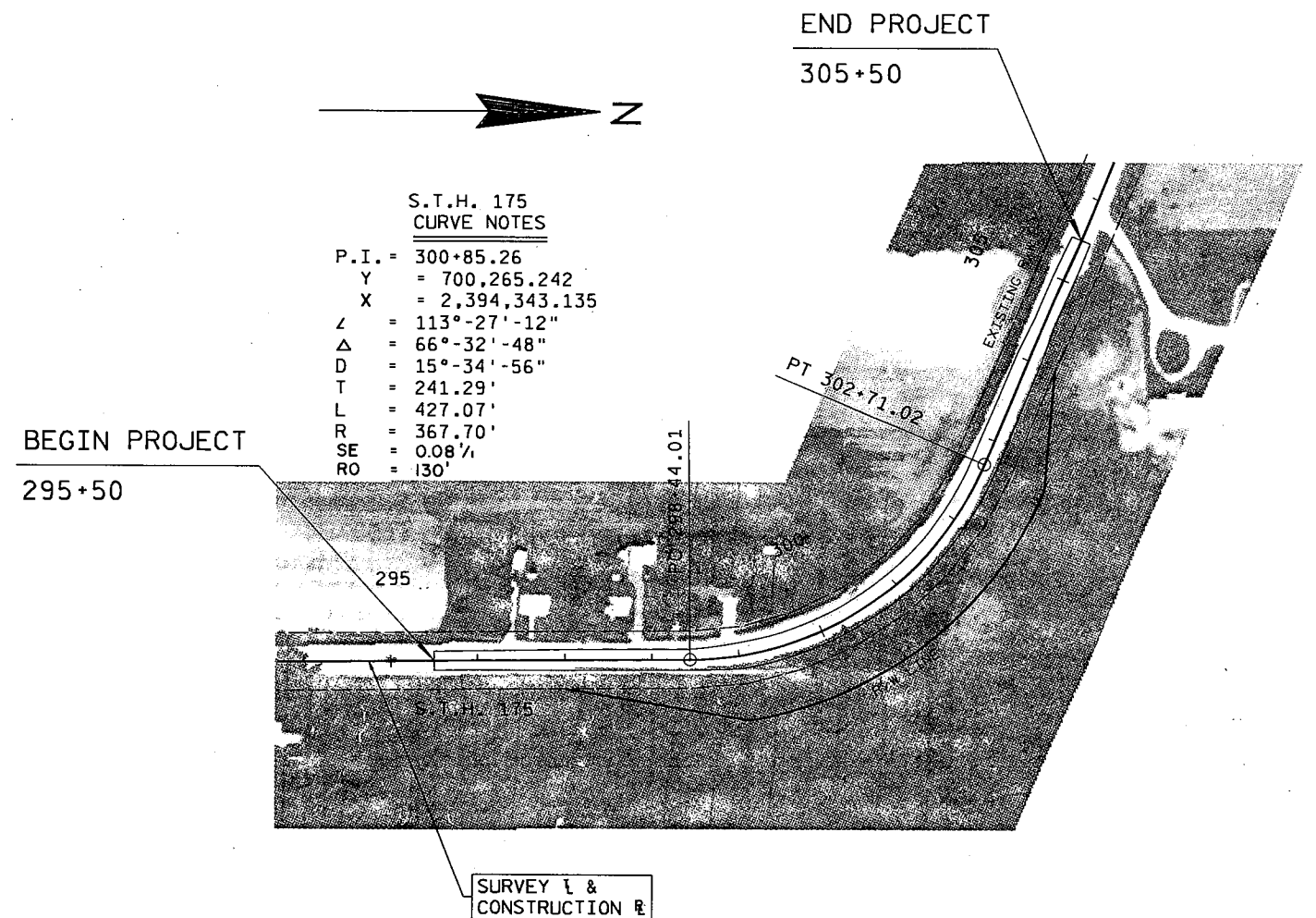
ARC = 446.70'
 L.C. = 427.99'
 L.C.P. = N 38°-09'-01" W
 R = 442.70'

COUNTY MONUMENT
Y 701,637.414
X 2,394,332.887

REVISION DATE	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
	APPROVED: <i>James L. [Signature]</i> DISTRICT DIRECTOR
	DATE: 6/1/92



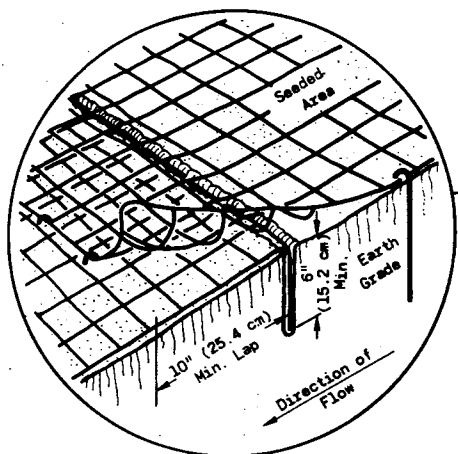
EROSION CONTROL DETAIL



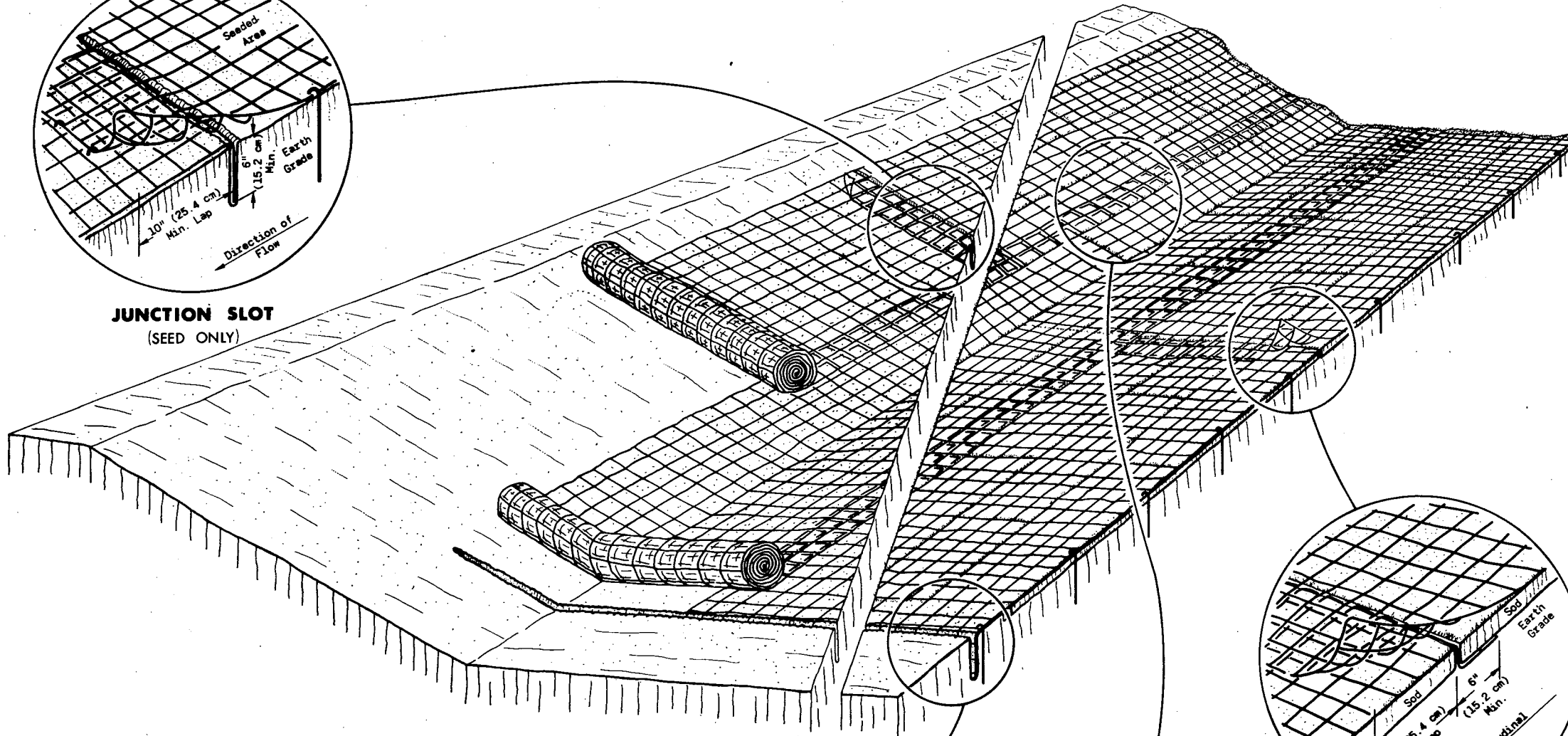
S.T.H. 175
CURVE NOTES
P.I. = 300+85.26
Y = 700,265.242
X = 2,394,343.135
 Δ = 113°-27'-12"
 Δ = 66°-32'-48"
D = 15°-34'-56"
T = 241.29'
L = 427.07'
R = 367.70'
SE = 0.08%
RO = 130'

22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,

LEVELS ON =



JUNCTION SLOT
(SEED ONLY)



GENERAL NOTES

Details of construction, materials and workmanship not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

Variations in the dimensions or materials shown hereon shall be permitted if they provide equivalent protection and material strength and if prior approval of the Engineer is obtained.

Lap Joints shall not be placed in the bottom of V-shaped ditches.

Junction Slots on adjacent strips of Matting shall be staggered a minimum of 4 feet (1.219 m) apart.

Edges of the Erosion Mat shall be impressed in the soil.

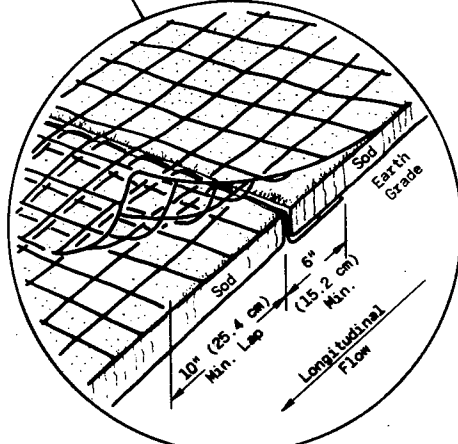
Erosion Mat shall be measured and paid for in accordance with the Standard Specifications.

EROSION MAT OVER SOD

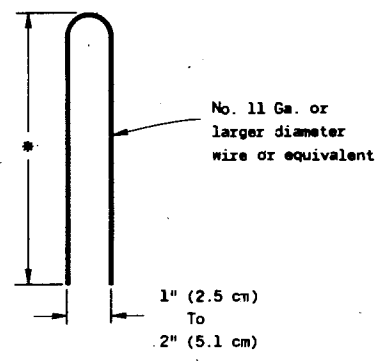
- a. Only Jute Fabric will be permitted over sod.
- b. Wood Stakes for Sod may be omitted by the Engineer if the existing slope and soil conditions so warrant.
- c. The width of Erosion Mat shall always equal the Sod width.
- d. Sod strips may be placed either longitudinally or transversely to the flow line of the Ditch.

EROSION MAT OVER SEEDING

Junction or Anchor Slots shall be at minimum intervals of 100 feet (30.48 m) on grades up to and including 3 percent, and 50 feet (15.24 m) on grades exceeding 3 percent.

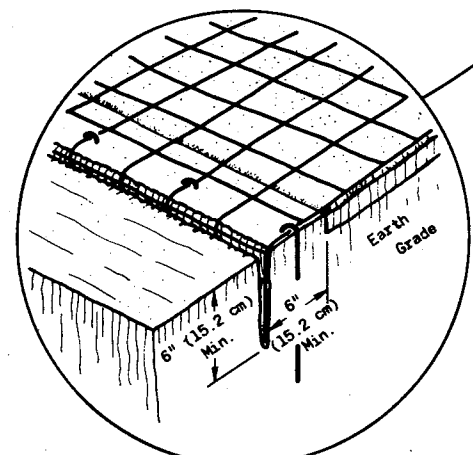


JUNCTION SLOT
(SOD ONLY)

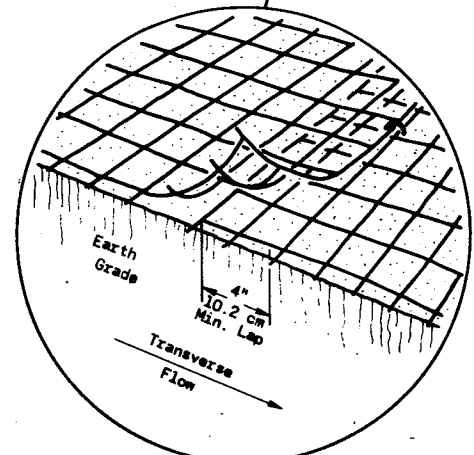


DETAIL OF TYPICAL STAPLE

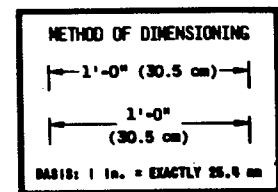
- * 6" (15.2 cm) Min. for firm soils
- 12" (30.5 cm) Min. for loose soils
- 8" (20.3 cm) Min. where both sod and mats are being used.



ANCHOR SLOT
AT BEGINNING AND END OF EROSION MAT
(SEED AND SOD)



LAP JOINT
(SEED AND SOD)



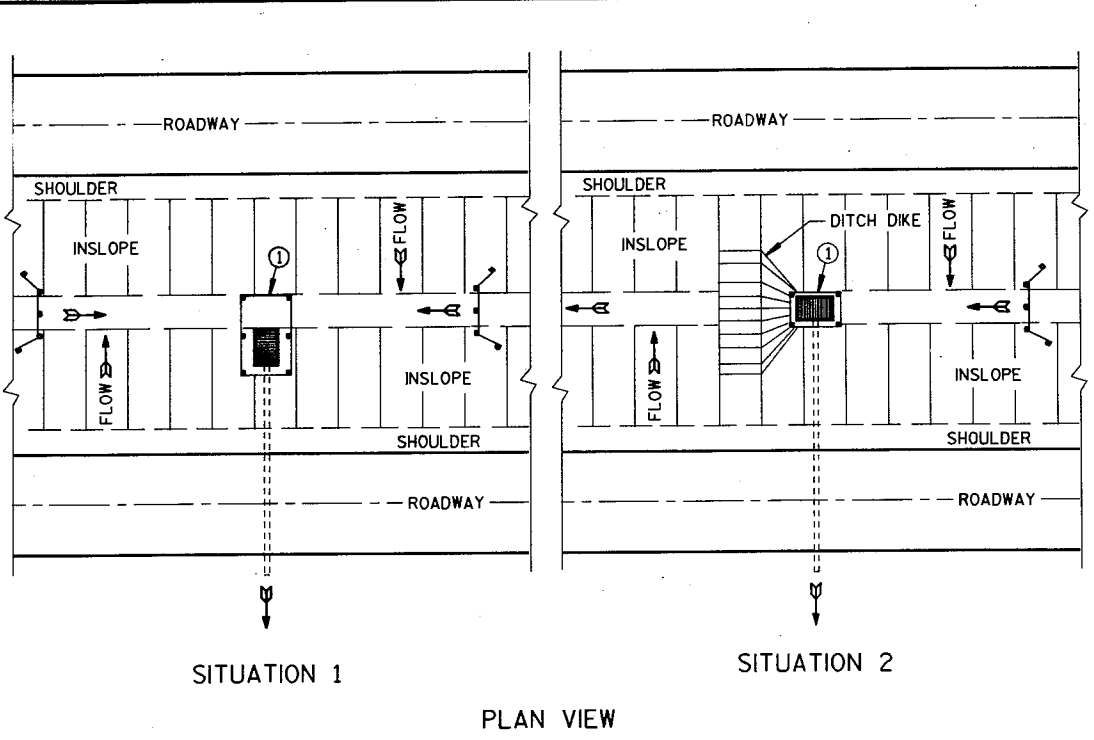
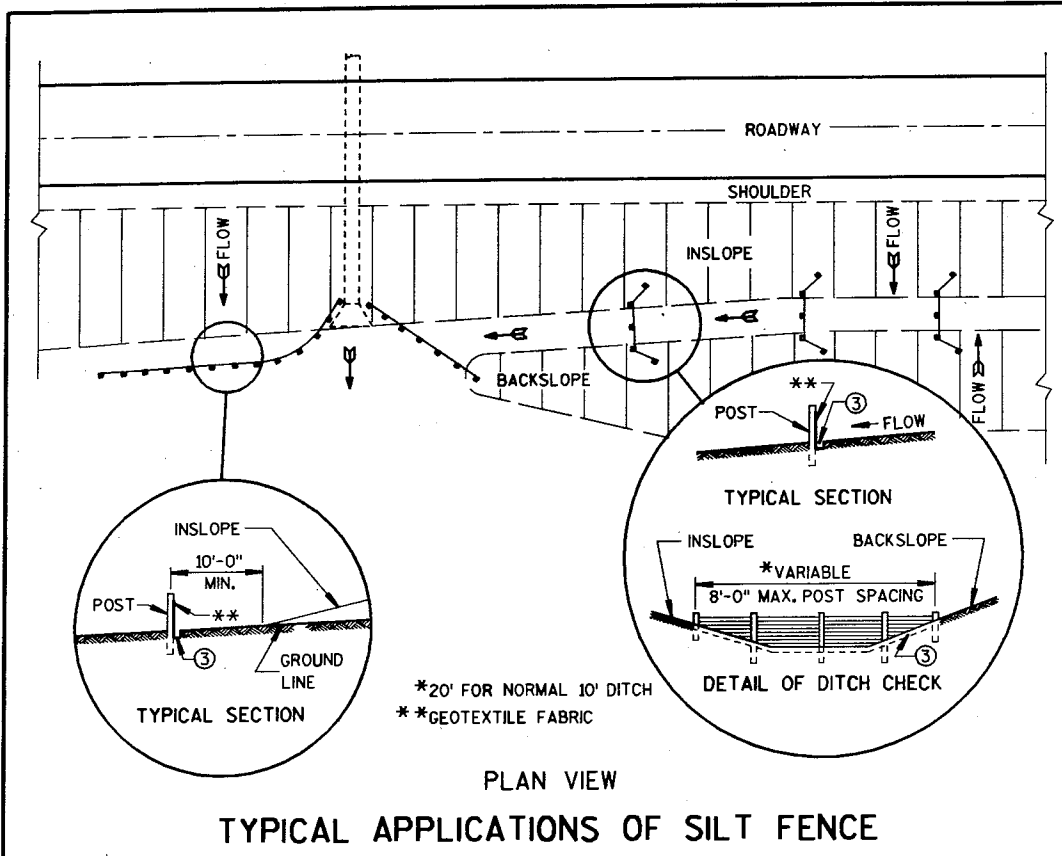
EROSION MAT

State of Wisconsin
Department of Transportation
Division of Highways

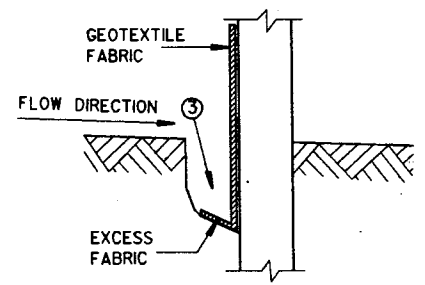
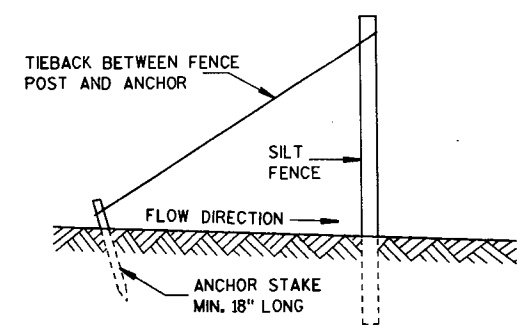
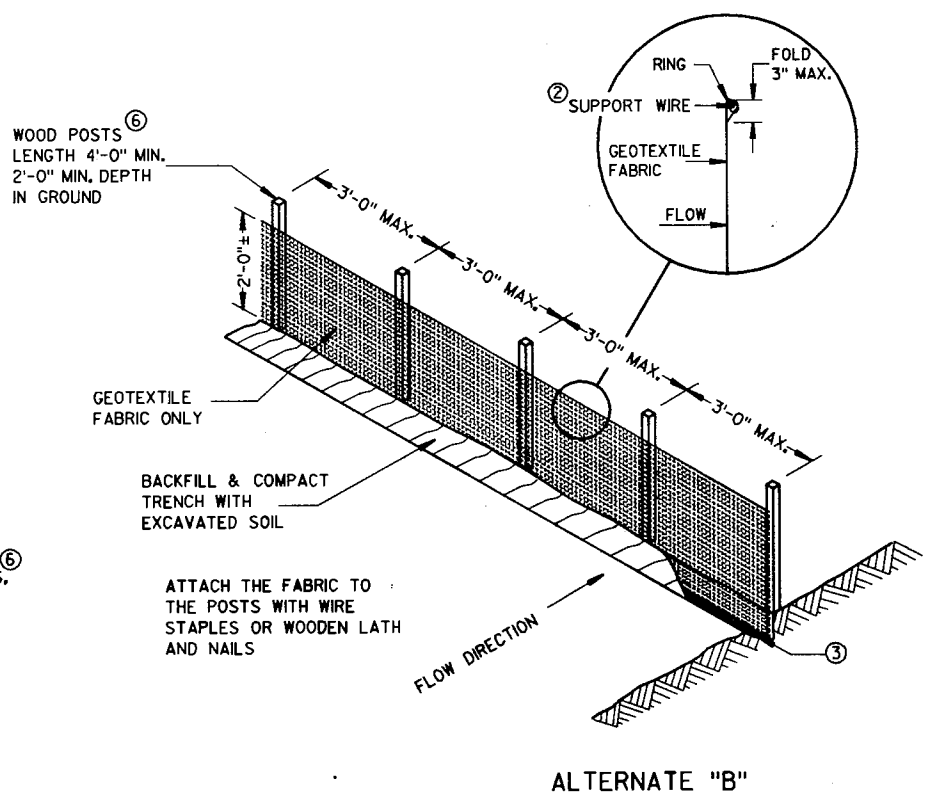
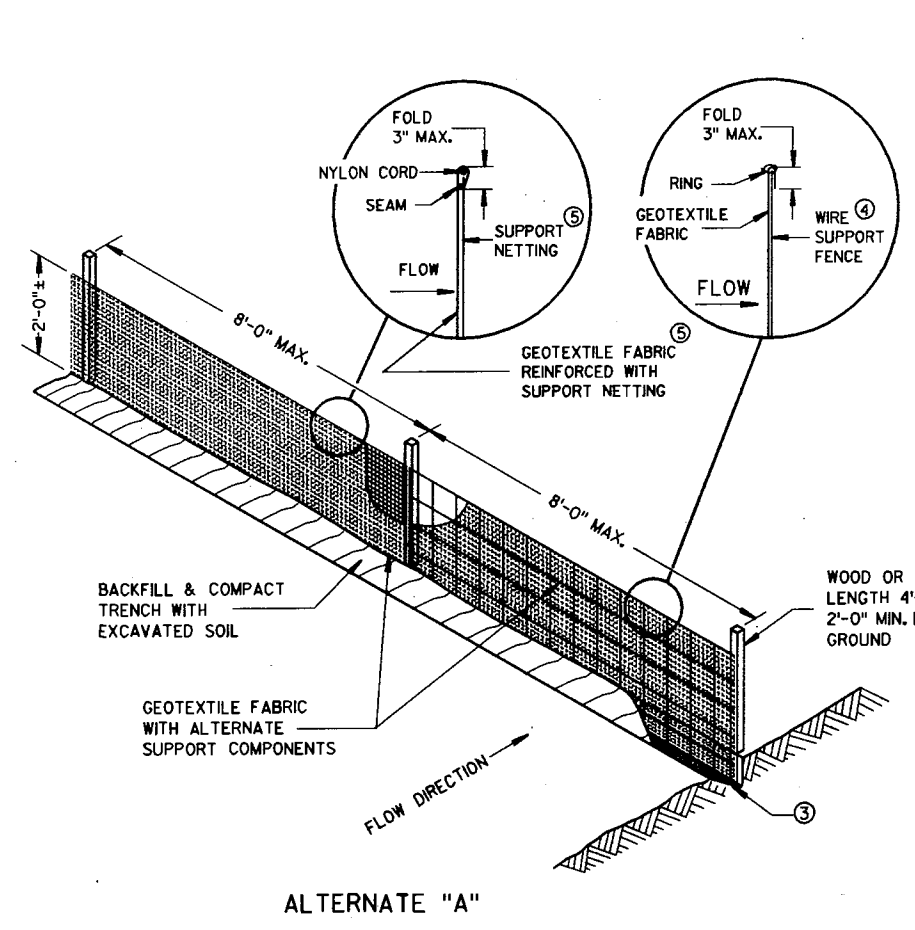
RECOMMENDED FOR APPROVAL:
 12-3-73
 DATE
 APPROVED
 1-15-74
 DATE

J.C. Herlihy
CHIEF OF FACILITIES DEVELOPMENT

H.S. Sudler
STATE HIGHWAY ENGINEER



- GENERAL NOTES**
- DETAIL OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.
- WHEN POSSIBLE THE SILT FENCE SHOULD BE CONSTRUCTED IN AN ARC OR HORSESHOE SHAPE, WITH THE ENDS POINTING UPSLOPE TO MAXIMIZE BOTH STRENGTH AND EFFECTIVENESS.
- CROSS BRACE WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS AS DIRECTED BY THE ENGINEER.
 - MINIMUM 14 GAGE WIRE REQUIRED, FOLD FABRIC 3" OVER THE WIRE AND STAPLE OR PLACE WIRE RINGS ON 12" C-C.
 - EXCAVATE A TRENCH A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC, FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
 - WIRE SUPPORT FENCE SHALL BE 14 GAGE MINIMUM WOVEN WIRE WITH A MAXIMUM MESH SPACING OF 6". SECURE TOP OF GEOTEXTILE FABRIC TO TOP OF FENCE WITH STAPLES OR WIRE RINGS AT 12" C-C.
 - GEOTEXTILE FABRIC SHALL BE REINFORCED WITH AN INDUSTRIAL POLYPROPYLENE NETTING WITH A MAXIMUM MESH SPACING OF 3/4" OR EQUAL. A HEAVY DUTY NYLON TOP SUPPORT CORD OR EQUIVALENT IS REQUIRED.
 - STEEL POSTS SHALL BE STUDDED "TEE" OR "U" TYPE WITH A MINIMUM WEIGHT OF 1.28 LBS/LINEAL FOOT (WITHOUT ANCHOR), FIN ANCHORS SUFFICIENT TO RESIST POST MOVEMENT ARE REQUIRED. WOOD POSTS SHALL BE A MINIMUM SIZE OF 4" DIA. OR 1 1/2" X 3 1/2" EXCEPT WOOD POSTS FOR GEOTEXTILE FABRIC REINFORCED WITH NETTING SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OAK OR HICKORY.
- ALTERNATES A & B ARE EQUAL AND EITHER MAY BE USED.



NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

SILT FENCE

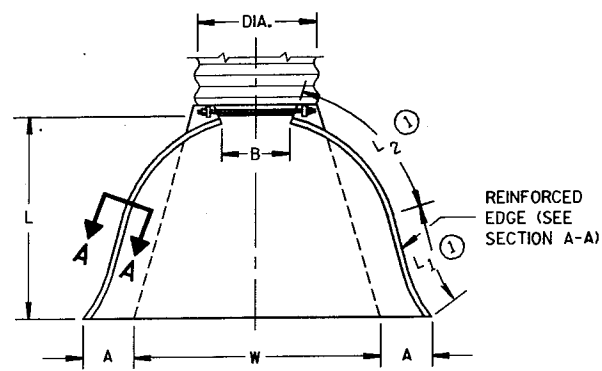
SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8-31-88 DATE	 STATE DESIGN ENGINEER FOR HWYS
FHWA	

METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1	L2	W (±2")		
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 3/4	42	2 1/2 to 1	1 Pc.
24	.079	.075	10	13	6	41	18	31 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.109	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/2 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/2 to 1	3 Pc.
60	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

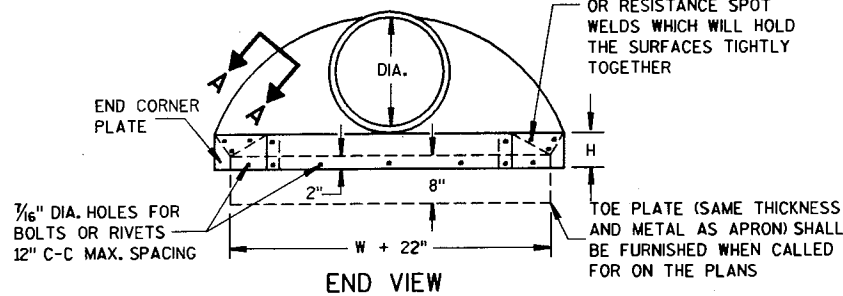
REINFORCED CONCRETE APRON ENDWALLS									
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE	
	T	A	B	C	D	E	G		
12	2	4	24	48 1/8	72 1/8	24	2	3 to 1	
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1	
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1	
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1	
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1	
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1	
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1	
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1	
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1	
48	5	24	72	26	98	84	5	3 to 1	
54	5 1/2	27	65	33 1/4-35	98 1/4-100	90	5 1/2	2 3/5 to 1	
60	6	30-35	60	39	99	96	5	2 to 1	
66	6 1/2	30-35	72-78	21-27	99	102	5 1/2	2 to 1	
72	7	30-35	78	21	99	108	6	2 to 1	
78	7 1/2	30-35	78	21	99	114	6 1/2	2 to 1	
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1	
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1	

* MINIMUM
** MAXIMUM

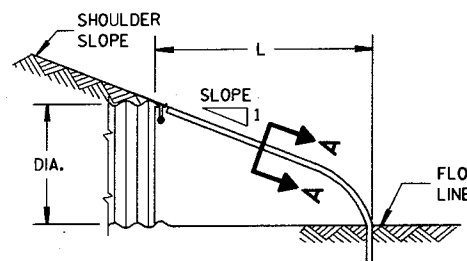


PLAN VIEW

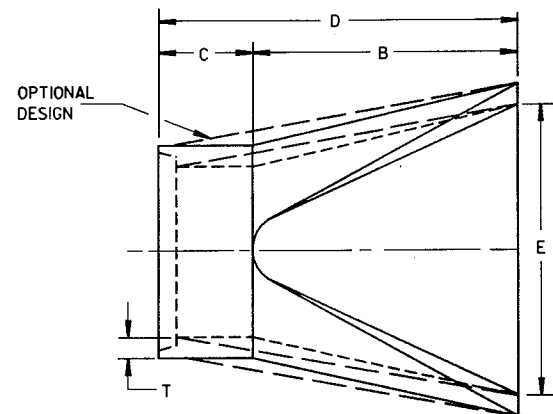
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER



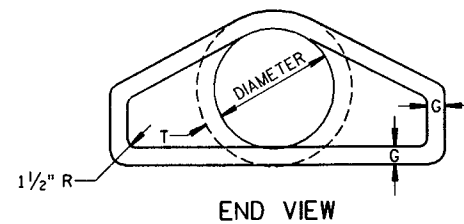
END VIEW



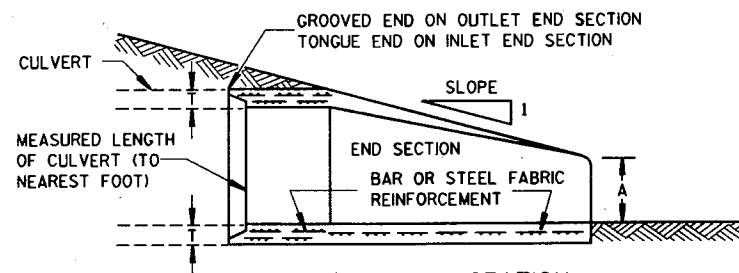
SIDE ELEVATION
METAL ENDWALLS



PLAN

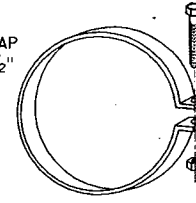


END VIEW



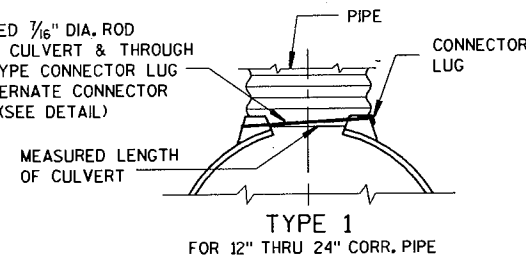
LONGITUDINAL SECTION
CONCRETE ENDWALLS

1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



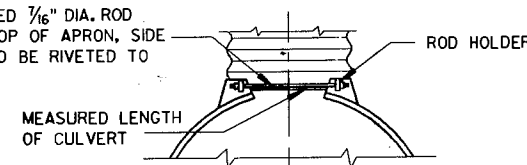
ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP

THREADED 7/16" DIA. ROD AROUND CULVERT & THROUGH TANK TYPE CONNECTOR LUG OR ALTERNATE CONNECTOR STRAP (SEE DETAIL)



TYPE 1
FOR 12" THRU 24" CORR. PIPE

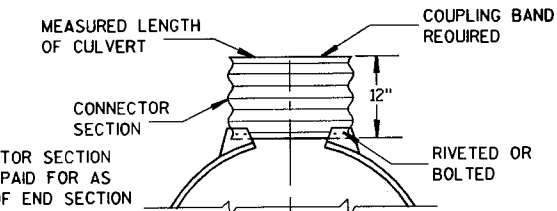
THREADED 7/16" DIA. ROD OVER TOP OF APRON, SIDE LUGS TO BE RIVETED TO APRON



TYPE 2
FOR 30" THRU 96" CORR. PIPE

MEASURED LENGTH OF CULVERT

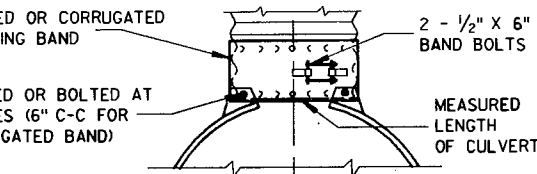
CONNECTOR SECTION TO BE PAID FOR AS PART OF END SECTION



TYPE 3
FOR 42" THRU 96" CORR. PIPE

DIMPLED OR CORRUGATED COUPLING BAND

RIVETED OR BOLTED AT DIMPLES (6" C-C FOR CORRUGATED BAND)



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

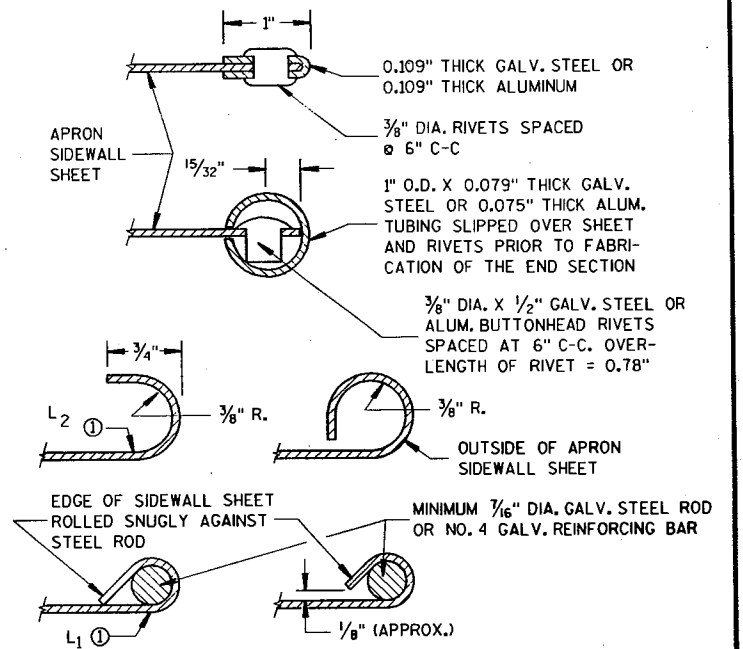
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VICE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

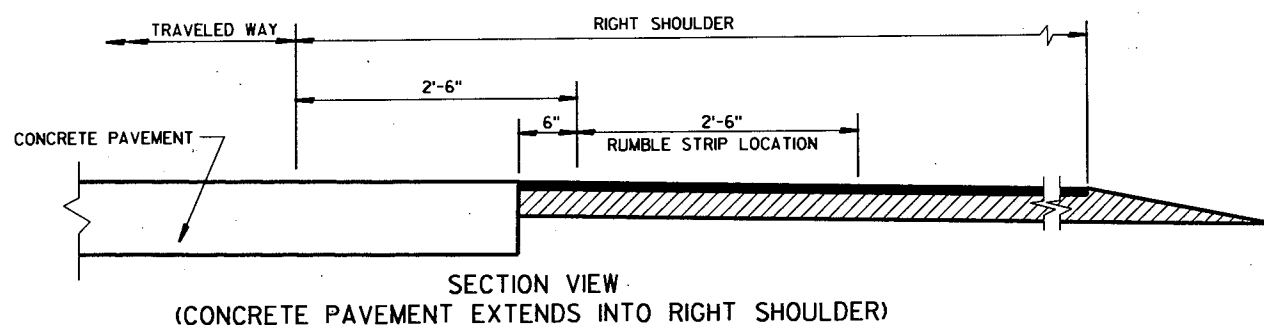
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/17/87
DATE

R.C. Col
STATE DESIGN ENGINEER FOR HWYS

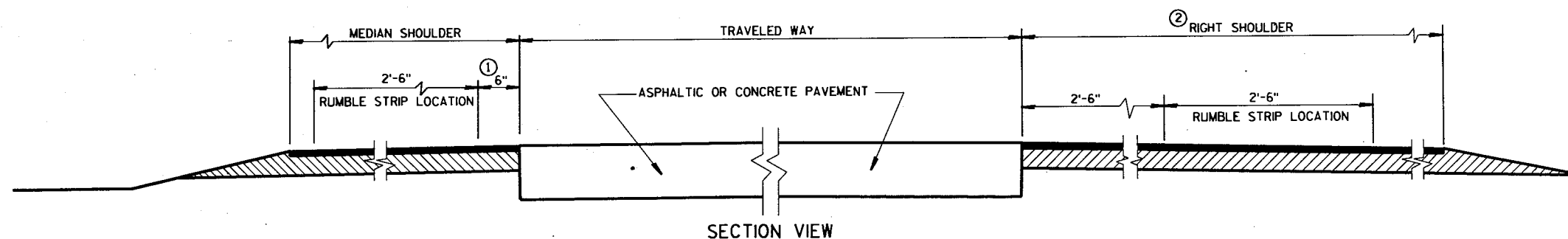
FHWA



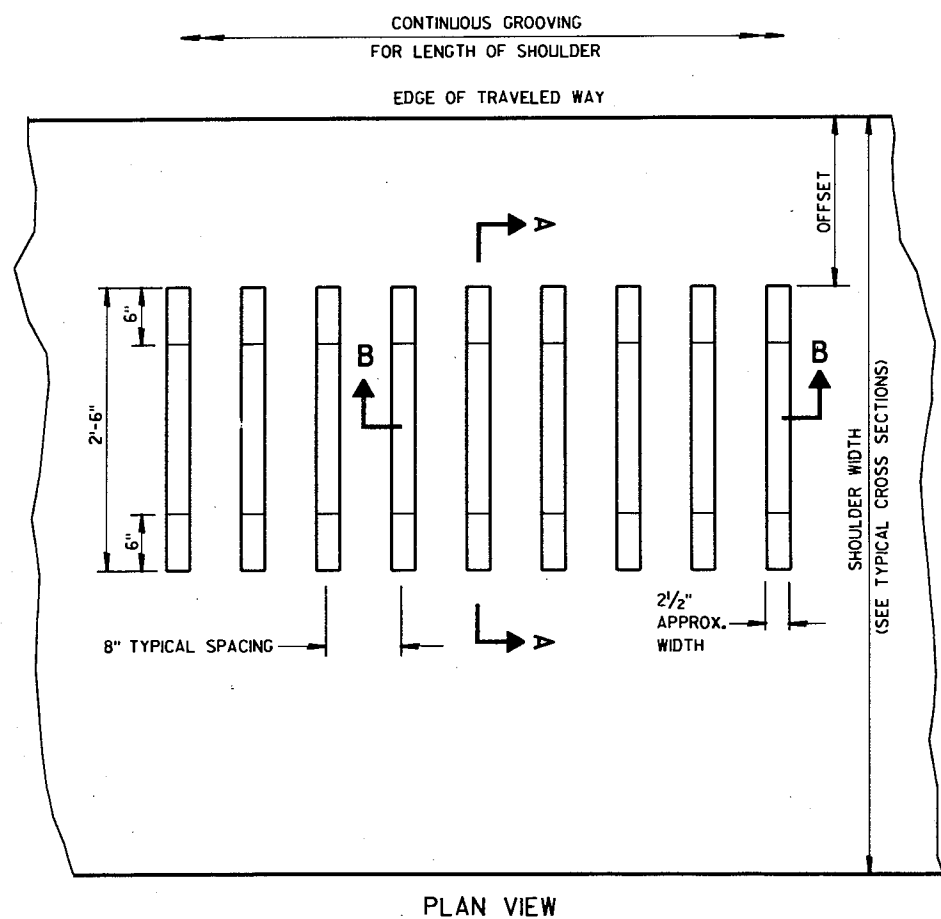
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.
 FINISH ROLLING OF THE ASPHALTIC SHOULDER SHALL INCLUDE THE SURFACE OVER THE RUMBLE STRIP DEPRESSIONS.

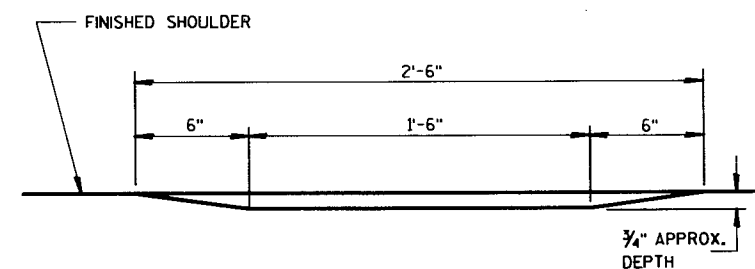
- ① 2'-6" FOR MEDIAN SHOULDERS THAT HAVE A PAVED WIDTH OF 5'-0" OR MORE.
- ② DIMENSIONS ALSO APPLY WHEN RUMBLE STRIPS ARE REQUIRED IN THE RIGHT SHOULDER OF RAMPS.



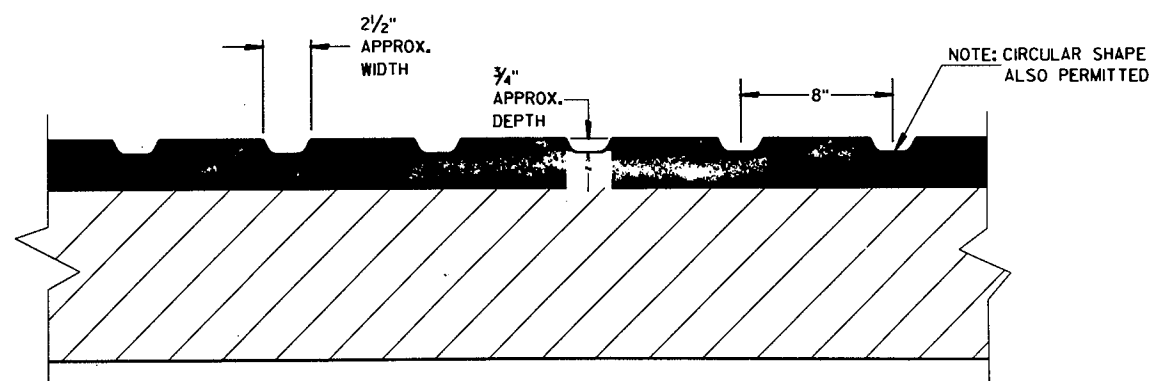
**TYPICAL LOCATIONS OF ASPHALTIC SHOULDER RUMBLE STRIPS
 IN RURAL DIVIDED HIGHWAYS
 (ONE ROADWAY IS SHOWN)**



PLAN VIEW



SECTION A-A



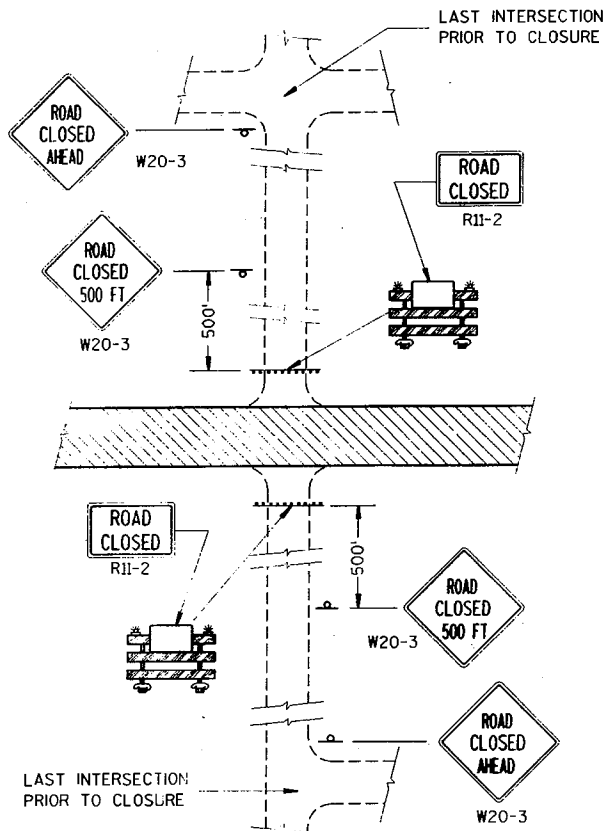
SECTION B-B

**ASPHALTIC SHOULDER
 RUMBLE STRIPS**

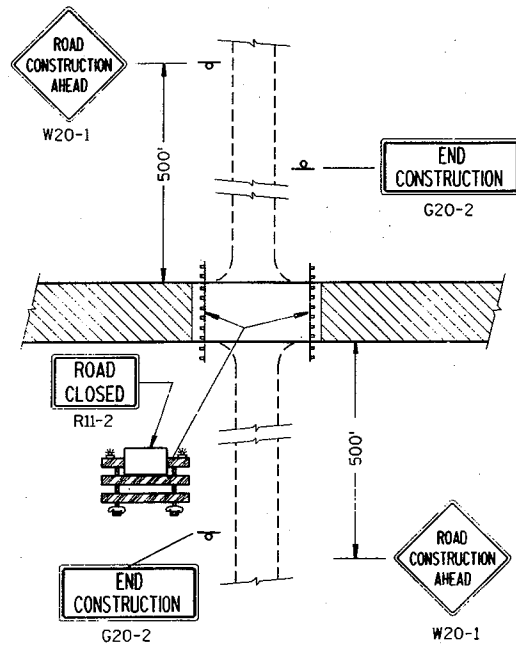
STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED
 2/8/91
 DATE

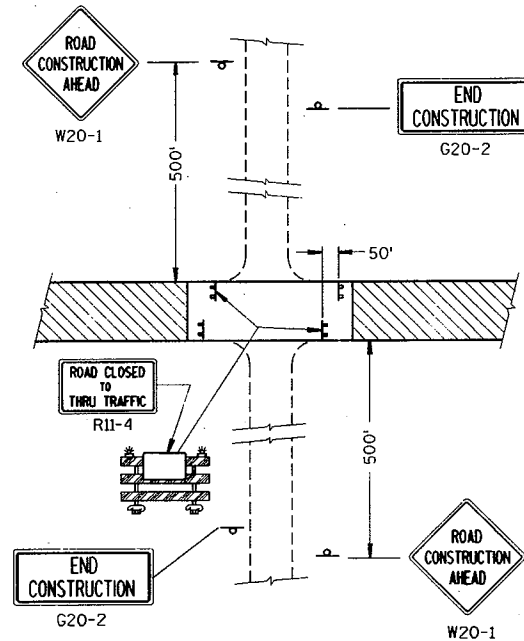
[Signature]
 STATE DESIGN ENGINEER FOR HWYS
 FHWA



DETAIL 1
(NO ACCESS TO PROJECT)

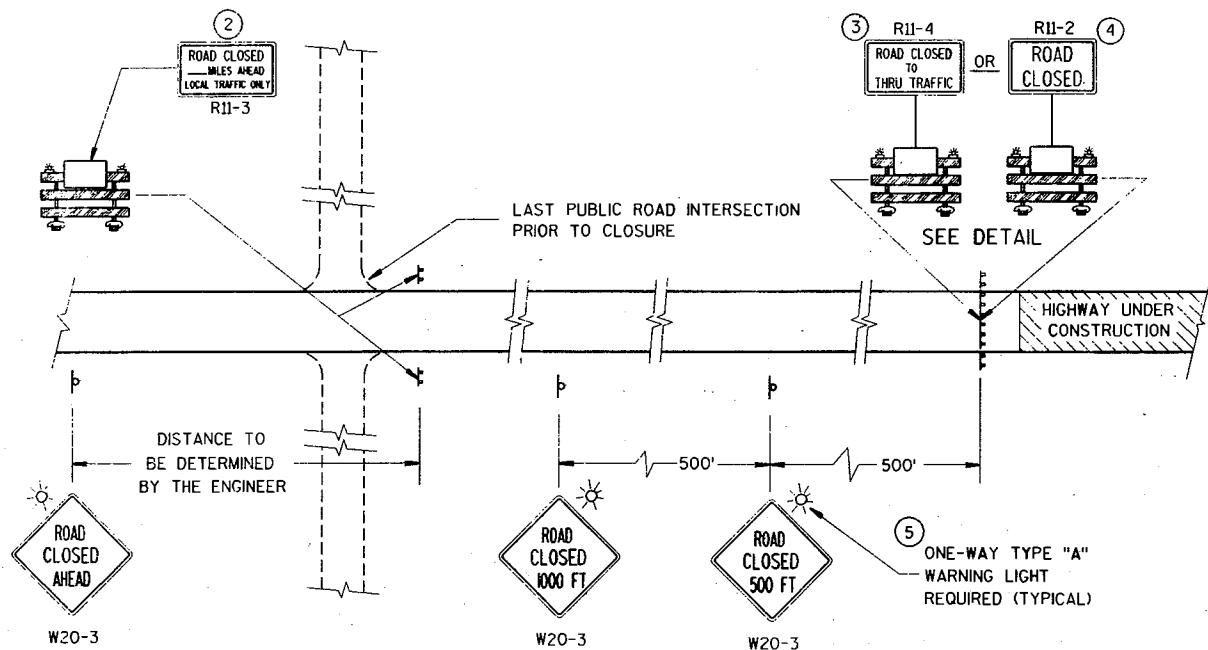


DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED,
NO ACCESS TO PROJECT).

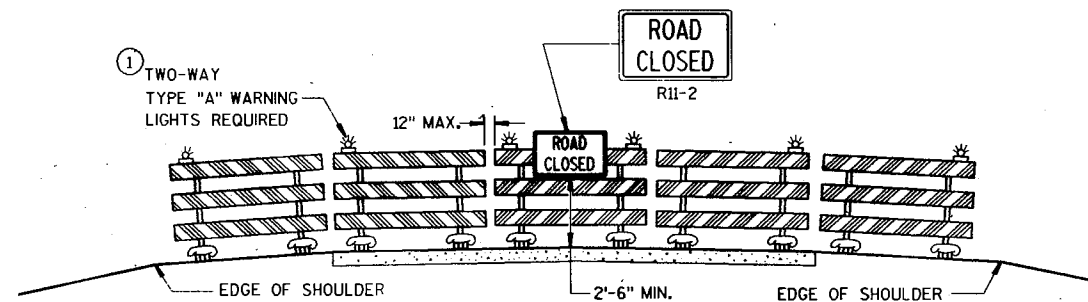


DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED, CONTRACTOR,
LOCAL BUSINESS AND RESIDENT ACCESS).

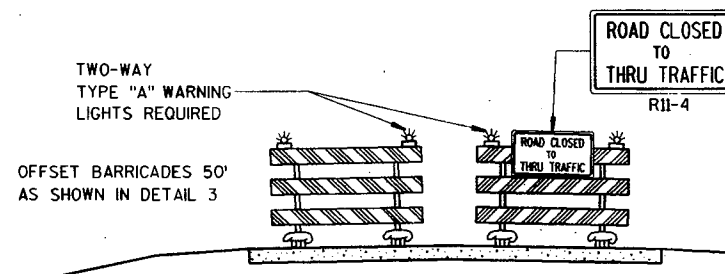
SIDEROAD CLOSURES



MAINLINE CLOSURE



ROAD CLOSURE BARRICADE DETAIL



LANE CLOSURE BARRICADE DETAIL

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND THEIR LOCATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN MANUAL OF TRAFFIC CONTROL DEVICES, THE PLANS, SPECIFICATIONS AND CONTRACT.

SIGN AND BARRICADE LOCATIONS MAY BE ADJUSTED IN THE FIELD AS DIRECTED BY THE ENGINEER. ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS WORK SHALL BE COVERED AS DIRECTED BY THE ENGINEER. ALL "STOP" OR OTHER REGULATORY SIGNS ON THE SIDE ROADS SHALL NOT BE DISTURBED, EXCEPT WHEN NECESSARY TO COMPLETE THE WORK. THE SIGNS MUST THEN BE IMMEDIATELY REESTABLISHED.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL FOR FULL ROAD CLOSURES. TYPE "A" LOW INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE ROAD CLOSED SIGN (R11-2), ROAD CLOSED _____ MILES AHEAD SIGN (R11-3) AND THE ROAD CLOSED TO THRU TRAFFIC SIGN (R11-4) SHALL BE ATTACHED ONLY TO THE TOP RAIL OF THE TYPE III BARRICADE. THE SIGNS SHALL NOT COVER MIDDLE RAIL.

TYPE "H" REFLECTIVE SHEETING SHALL BE USED ON ALL BARRICADES, TYPE I, II AND III, AND ON ALL R11-2, R11-3 AND R11-4 SIGNS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2, "ROAD CLOSED" SIGNS SHALL BE 48" X 30".

R11-3, AND R11-4 SIGNS SHALL BE 60" X 30".

G20-2 SIGNS SHALL BE 60" X 24".

- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND AT LEAST ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN.
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- ③ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT. SEE LANE CLOSURE BARRICADE DETAIL.
- ④ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT. SEE ROAD CLOSURE BARRICADE DETAIL.
- ⑤ ONE-WAY LIGHTS SHALL BE PROVIDED ON ALL ADVANCE WARNING SIGNS. THE UNIT SHALL BE POSITIONED SUCH THAT THE LIGHT SOURCE IS OUTSIDE THE SIGN FACE AND AT THE TOP OF THE SIGN.

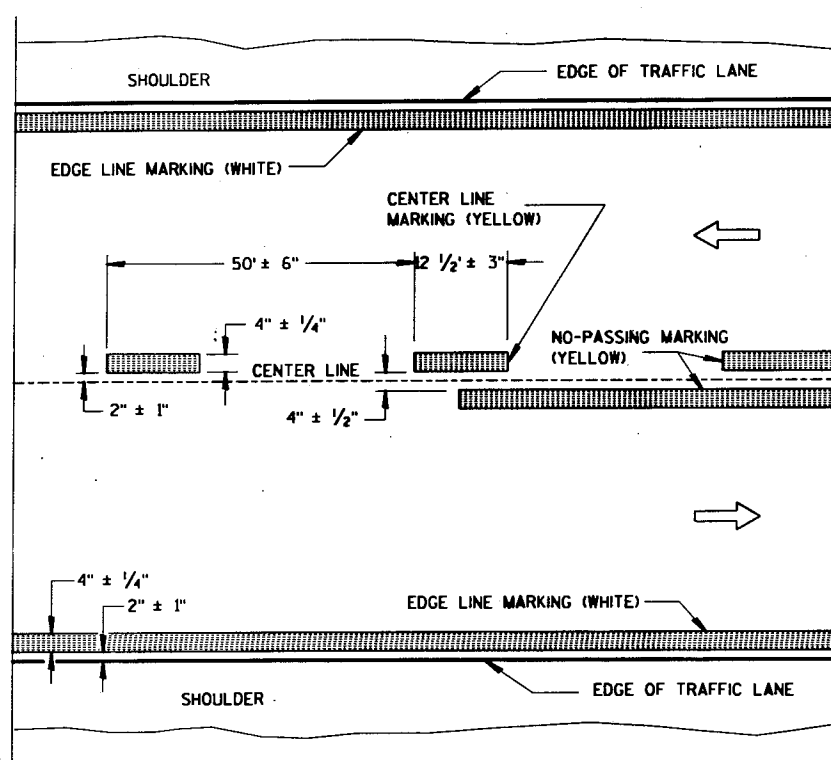
LEGEND

- ⊥ POST MOUNTED WARNING SIGN
- ⊥ TYPE III BARRICADES WITH TYPE "H" REFLECTIVE SHEETING
- ☀ TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- ▨ WORK AREA

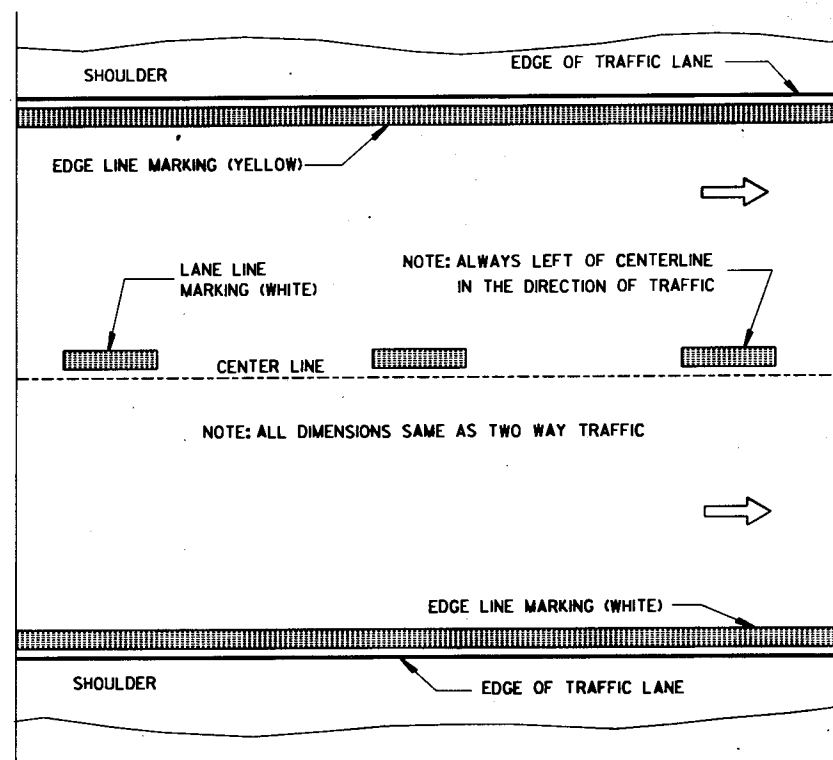
BARRICADES AND TRAFFIC CONTROL FOR ROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10-31-89 DATE
STATE TRAFFIC ENGINEER FOR HWYS
FHWA

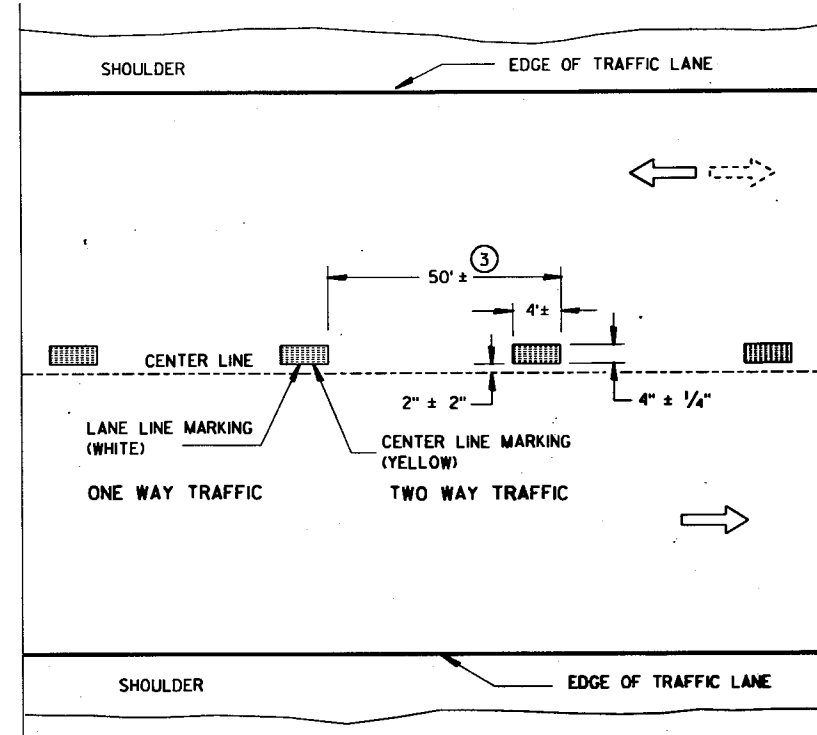


TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



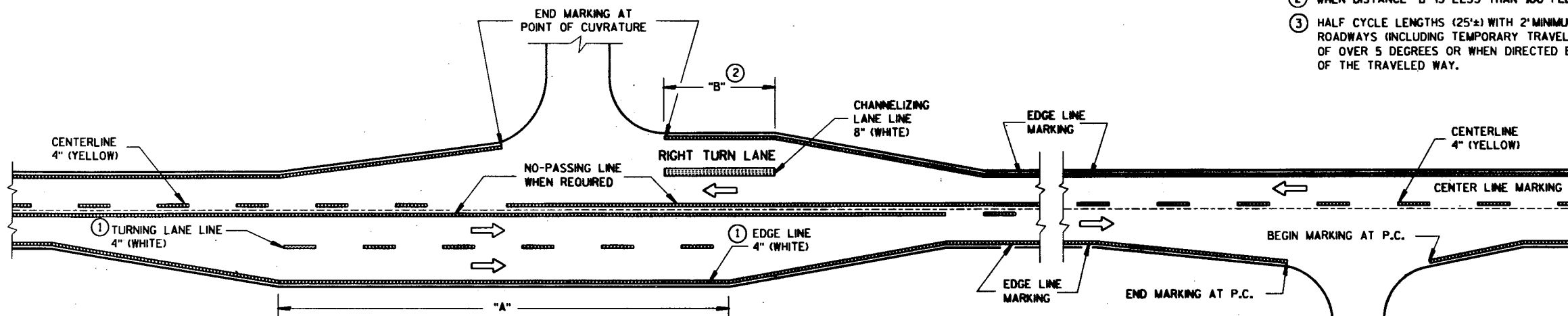
TEMPORARY PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT TURNING LANE MARKING.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ HALF CYCLE LENGTHS (25'±) WITH 2" MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.



MAJOR INTERSECTION

MINOR INTERSECTION

TYPICAL PAVEMENT MARKING FOR RURAL INTERSECTIONS

NOTE: WHEN APPLICABLE, INCLUDE SDD 15C8-4b WITH THIS DRAWING IN PLANS.


PAVEMENT MARKING
(MAINLINE & INTERSECTIONS)


STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION


APPROVED
DATE 3/17/98
STATE TRAFFIC ENGINEER FOR HWYS
FHW

TWO-LANE ROADWAY

SYMBOLS

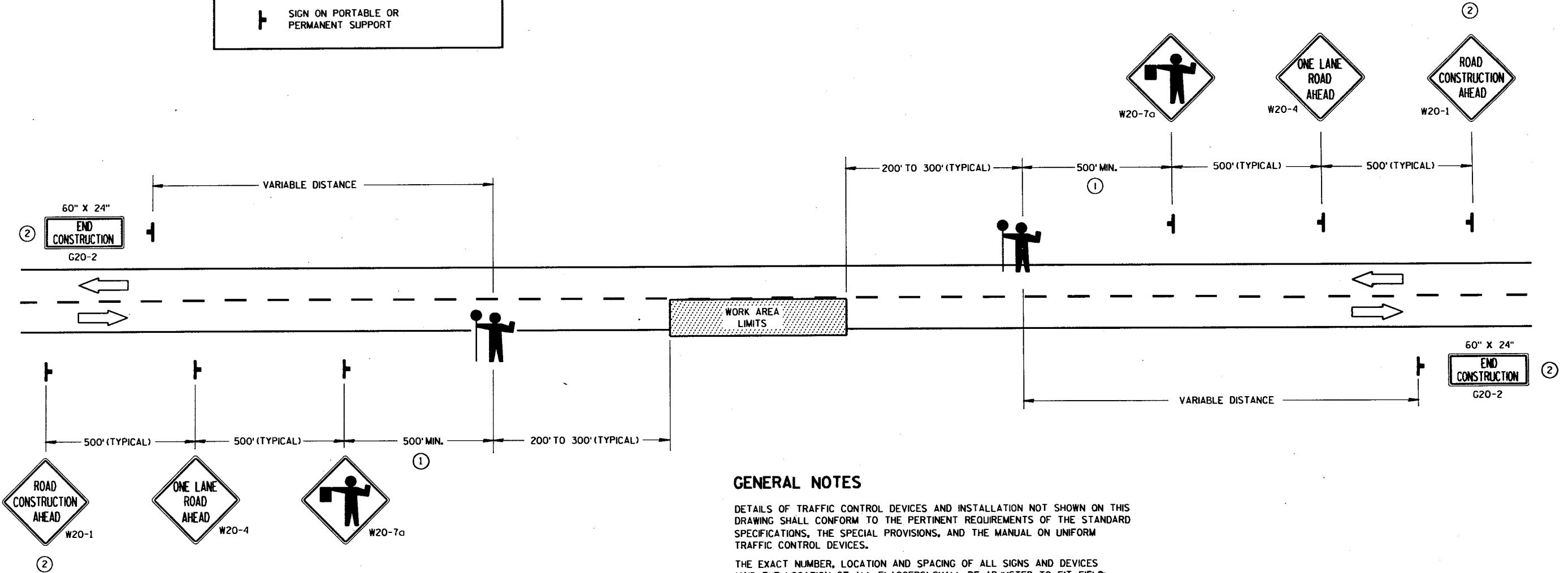
 WORK AREA

 FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

 SIGN ON PORTABLE OR PERMANENT SUPPORT



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD CONSTRUCTION AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

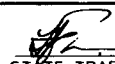
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS DIRECTED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD CONSTRUCTION WORK ZONE AREA.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-12-91
DATE


STATE TRAFFIC ENGINEER FOR HWYS

FHWA

S.D.D. 15 C 12-1

DETAIL
SUMMARY OF MISCELLANEOUS QUANTITIES

YARDAGE SUMMARY

STATION	UNCLASSIFIED EXCAVATION CU. YD.	FILL CU. YD.
295+50	41	4
296	74	2
297	81	20
298	130	94
299	144	144
300	170	80
301	187	115
302	165	174
303	144	111
304	130	85
305	144	85
305+50		
TOTALS	1,410	914

PLOT SCALE: 100

PLOT NAME: D300A

REV. DATE:

59.

51.

LEVELS ON

100

50

CONSTRUCTION R

50

100

Clear Zone for 60 mph = 45' →

303+00.0
780

STATE PROJECT NUMBER	SHEET NUMBER
4120-5-71	9.1

STH. 175

302+00.0
780

301+00.0
780

300+00.0
780

299+00.0
780

298+00.0
780

297+00.0
780

296+40.0
780

296+00.0
780

295+00.0
780

100

50

50

100

1" = 10' HOR
1" = 10' VER
SHEET NO 1 3292

100

50

50

100

STATE PROJECT NUMBER	SHEET NUMBER
4120-5-71	9.2

ST.H. 175

CONSTRUCTION

306+00.0

780

305+00.0

780

304+00.0

780

R/W

R/W

772.0

771.5

100

50

50

100

1" = 10' HOR
 1" = 10' VER
 SHEET NO. 2 3292

