

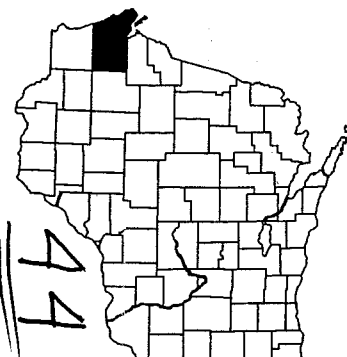
NO PLAN CHANGES

START DATE: 05/06/2002
COMPLETION DATE: 07/20/2002
FINAL CONTRACT COST: \$2,039,298
SUBCONTRACTORS:
BARRICATE FLASHER SERVICE TNC.
BUGA TRUCKING
CENTURY FENCE CO.
CHIPPEWA CONCRETE SERVICES, INC.
HARD ROCK CO. OF WI
HOFFMAN CONSTRUCTION COMPANY
ROFFERS CONSTRUCTION, INC.
TIME, INC.

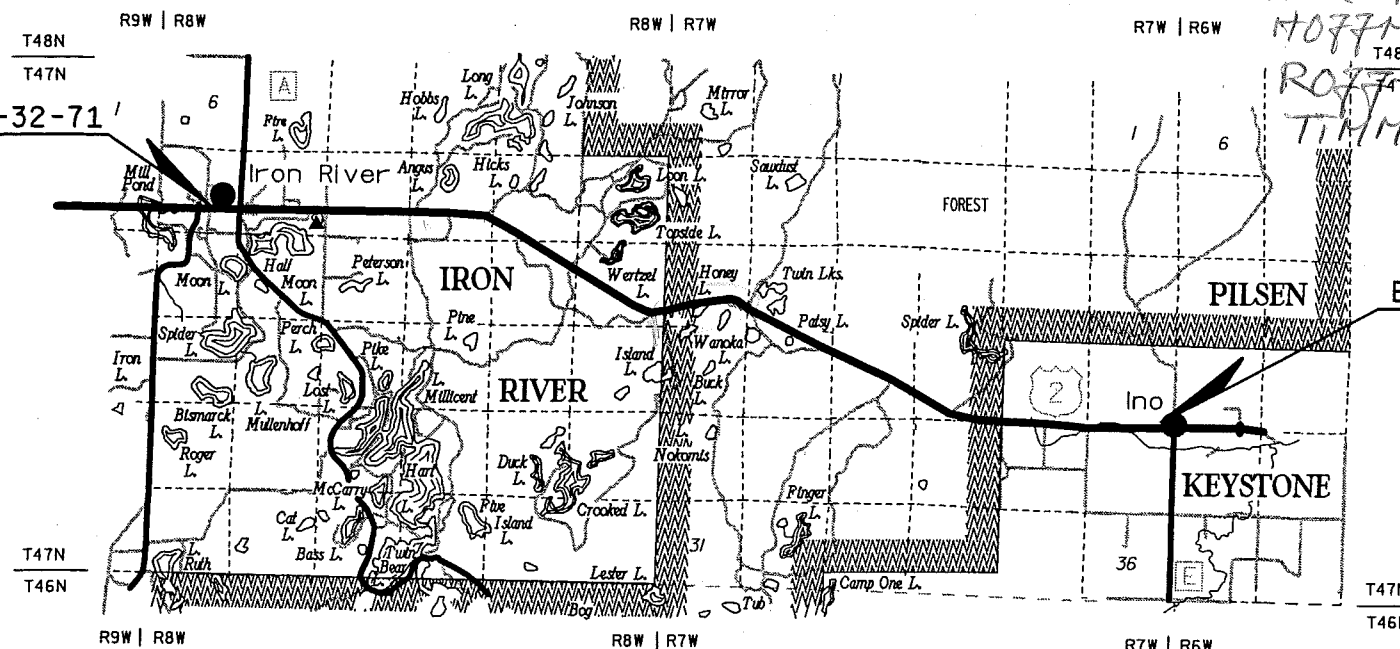
PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT NUMBER
1180-32-71

TOTAL SHEETS = 46



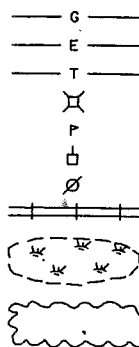
DESIGN	DESIGNATION	URBAN	RURAL
A.D.T.	2002	= 7500	= 4000
A.D.T.	2022	= 10400	= 5600
D.H.V.		= 6.8%	= 6.8%
D.		= 63/37	= 63/37
T.		= 10.1%	= 10.1%
DESIGN SPEED		= 40 M.P.H.	= 55 M.P.H.
ESALS		= 3,496,700	= 1,868,800



1180-32-71, STP 2002(090)
USH 2 Bayfield County
 Iron River - Ino
 Northwoods Paving Co.
 Dan Phu

- | | |
|-----------------------------------|---|
| COUNTY LINE |  |
| CORPORATE LIMITS |  |
| PROPERTY LINE |  |
| LOT LINE |  |
| LIMITED EASEMENT |  |
| EXISTING RIGHT OF WAY |  |
| PROPOSED OR NEW R/W LINE |  |
| SURVEY LINE |  |
| SLOPE INTERCEPT |  |
| ORIGINAL GROUND |  |
| MARSH OR ROCK PROFILE |  |
| EXISTING CULVERT |  |
| PROPOSED CULVERT
(Box or Pipe) |  |
| CULVERT (Profile View) |  |

- COMBUSTIBLE FLUIDS
- UNDERGROUND UTILITIES
GAS
ELECTRIC
TELEPHONE OR TELEGRAPH
SERVICE PEDESTAL
CABLE MARKER
POWER LAKE
TELEPHONE POLE
RAILROAD
MARSH AREA
WOODED OR SHRUB AREA



LAYOUT

SCALE 0 1 MI

ALL COORDINATES ON THIS PLAN ARE
REFERENCED TO THE WISCONSIN STATE
PLANE COORDINATE SYSTEM, NORTH ZONE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor _____

Designer _____ SANDRA PEASE _____

District Examiner _____

District Supervisor _____ MARK HUGHES P.E. _____

Proj. Dev. Engineer _____

C.O. Examiner C. BUTANOWSKI _____

APPROVED FOR DISTRICT OFFICE

DATE: 6/28/01 Mark B Hughes
(Signature)

AUTHORIZED FOR CENTRAL OFFICE DESIGN

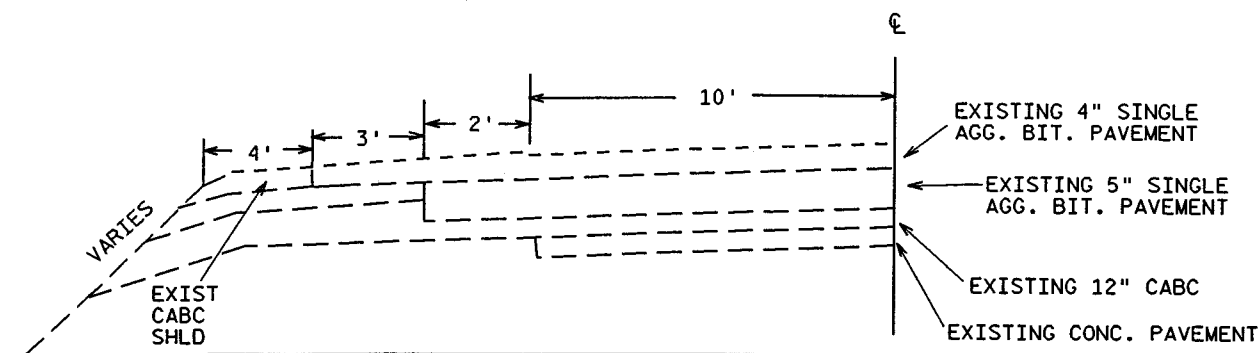
DATE: 7/25/01 [Signature]
(Signature)

BAYFIELD

ORIGINATOR: X; PROJECTS D8 11803200 DGN TITLE.DGN

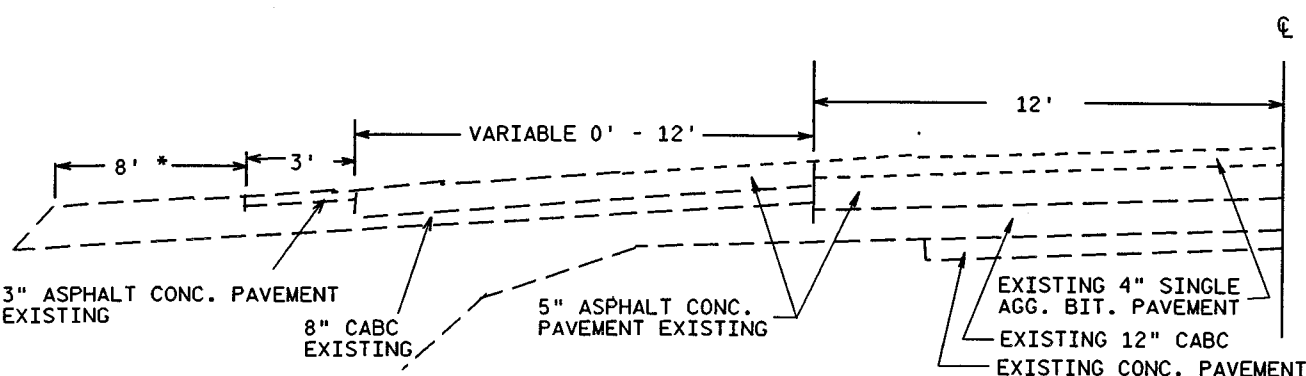
FILE NAME: X PROJECTS DB 11803200 TITLE DGN

WISDOT/CADDIS SHEET 10



TYPICAL EXISTING RURAL HALF SECTION

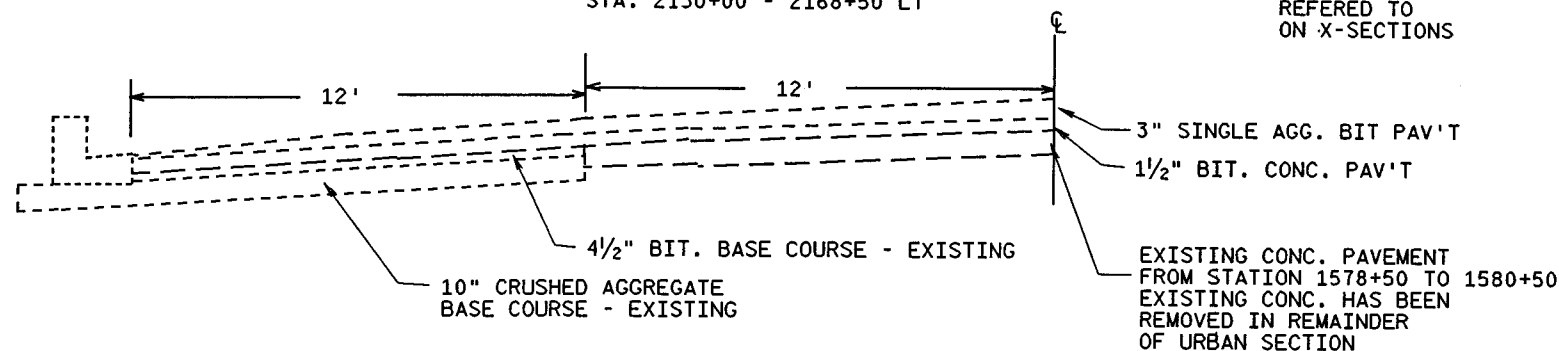
STA. 1557+39.979 - 1579+23 LT&RT	STA. 1829+76 - 1851+35 LT
STA. 1609+41 - 1651+34 LT&RT	STA. 1894+70 - 1908+11 LT
STA. 1660+50 - 1706+32 LT&RT	STA. 1890+60 - 1908+11 RT
STA. 1706+32 - 1711+00 LT	STA. 1908+11 - 1946+55 LT
STA. 1706+32 - 1717+62 RT	STA. 1946+55 - 2074+00 LT&RT
STA. 1717+62 - 1754+50 RT	STA. 2074+00 - 2130+00 LT
STA. 1740+05 - 1762+00 LT	STA. 2128+00 - 2168+50 RT
STA. 1762+00 - 1786+00 LT&RT	STA. 2168+50 - 2213+99 LT&RT



TYPICAL EXISTING HALF SECTION FOR PASSING, BYPASS AND CLIMBING LANES

*CLIMBING LANES HAVE NO CABG SHOULDER.
*PASSING LANES HAVE 8' CABG SHOULDER.

STA. 1651+34 - 1660+50 LT&RT
STA. 1706+32 - 1717+62 RT
STA. 1711+00 - 1717+62 RT
STA. 1711+00 - 1740+05 LT
STA. 1754+50 - 1762+00 RT
STA. 1786+00 - 1829+76 LT
STA. 1786+00 - 1890+60 RT
STA. 1851+35 - 1894+70 LT
STA. 1908+11 - 1946+55 RT
STA. 2074+00 - 2128+00 RT
STA. 2130+00 - 2168+50 LT



TYPICAL EXISTING URBAN HALF SECTION

STA. 1579+23 - 1609+41 LT&RT

GENERAL NOTES

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

THE EXACT LOCATIONS AND LIMITS OF THE PRIVATE ENTRANCE SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD

TACK COAT HAS BEEN ESTIMATED AT A RATE OF 0.025 GAL./ S.Y.

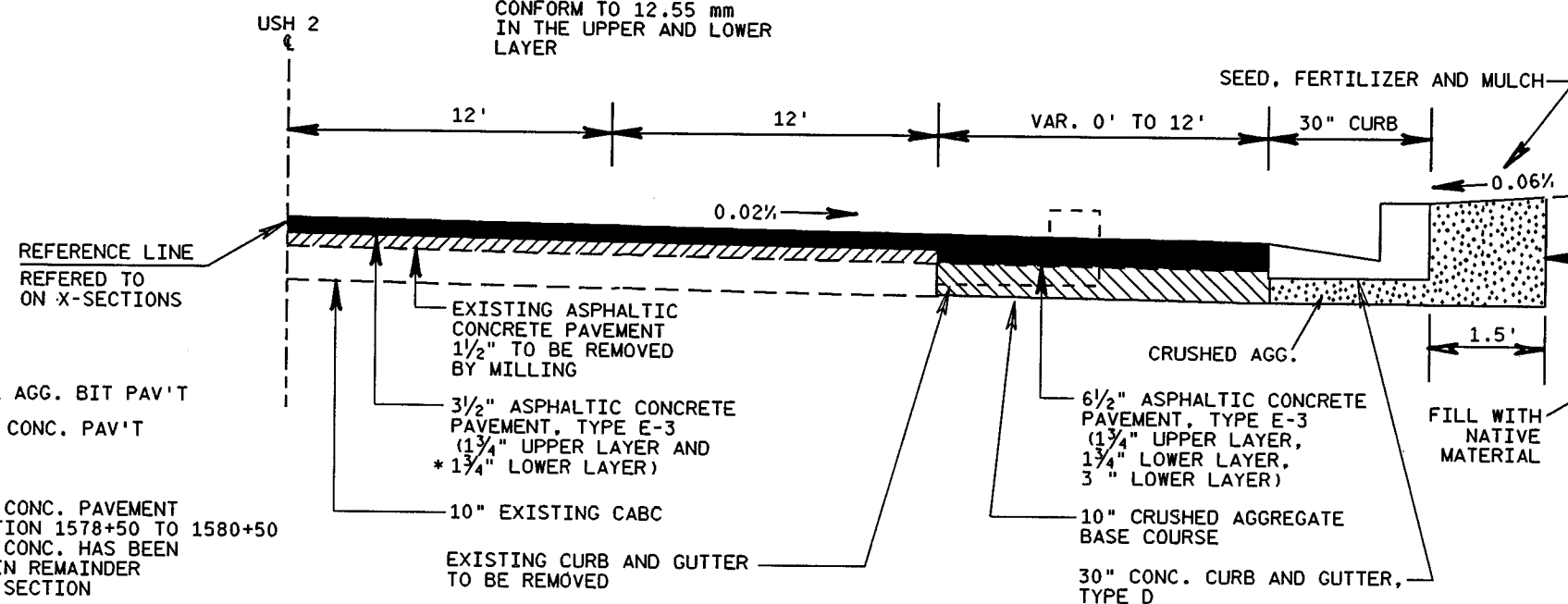
ALL DISTURBED AREAS WITH IN THE RIGHT OF WAY SHALL BE FERTILIZED , SEEDED AND MULCHED.

THE LOCATIONS OF EXISTING UTILITY FACILITIES AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY FACILITIES THAT ARE NOT SHOWN.

STANDARD DETAIL DRAWINGS

CONCRETE CURB, CONCRETE CURB AND GUTTER AND PAVEMENT TIES.....	8 D	1-13
TYPICAL INSTALLATIONS OF EROSION BALES.....	8 E	8-2
SILT FENCE.....	8 E	9-5
STEEL PLATE BEAM GUARD, CLASS A, INSTALLATION & ELEMENTS.....	14 B	15-4a
STEEL PLATE BEAM GUARD, CLASS A INSTALLATION & ELEMENTS.....	14 B	15-4b
STEEL PLATE BEAM GUARD, CLASS A, POST MOUNTING ON PIER FOOTINGS AND CULVERTS.....	14 B	15-4c
STEEL THRIE BEAM STRUCTURE APPROACH.....	14 B	20-5a
STEEL THRIE BEAM STRUCTURE APPROACH, SLOPE END PARAPETS.....	14 B	20-5c
STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL.....	14 B	24-3a, b & c
PAVEMENT MARKING (MAINLINE).....	15 C	8-9a
PAVEMENT MARKING (INTERSECTIONS).....	15 C	8-9b
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS).....	15 C	12-2

* NOMINAL SIZE OF THE AGGREGATE USED IN THE MIXTURE SHALL CONFORM TO 12.55 mm IN THE UPPER AND LOWER LAYER



TYPICAL FINISHED URBAN HALF SECTION FOR TURN LANE

STA. 1602+77 RT - 1604+60 RT

UTILITIES

CHEQUAMEGON TELEPHONE COOPERATIVE
ATTN: JOE LABEREE
PO BOX 67
CABLE, WI 54821
(715) 798-3303

BAYFIELD ELECTRIC COOPERATIVE
ATTN: PHIL BEEKSMA
PO BOX 68
IRON RIVER, WI 54847
(715) 372-4287

XCEL ENERGY
ATTN: BILL TEETERS
310 HICKORY HILL LANE
PHILIPS, WI 54555
(715) 836-1195

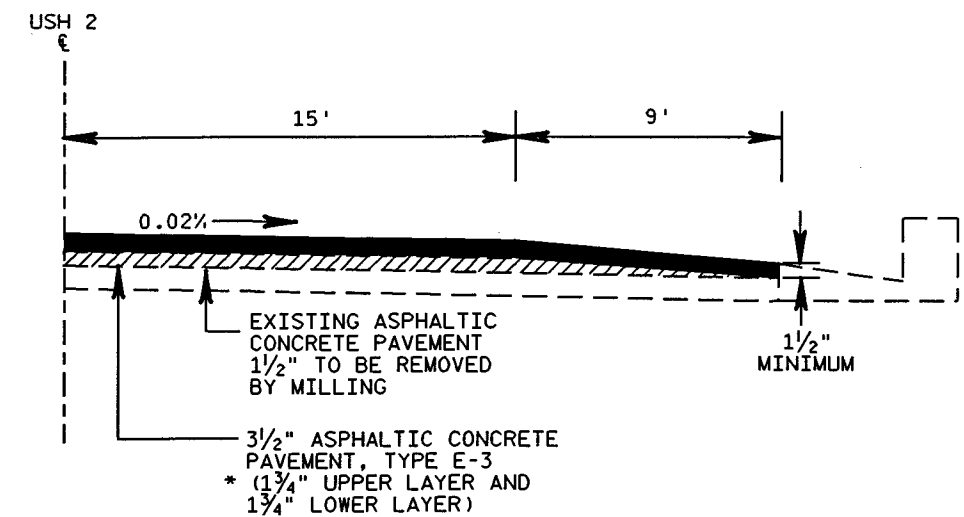
IRON RIVER SANITARY DISTRICT
ATTN: MATT TONN
PO BOX 98
IRON RIVER, WI 54847
(715) 372-4710

DNR LIASON

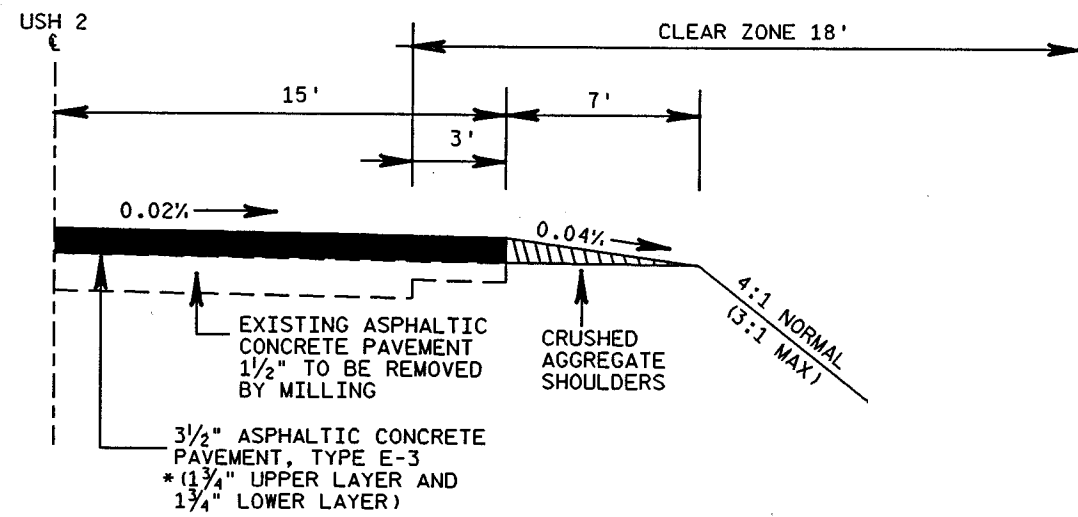
DAN MICHELS
NORTHWEST DISTRICT HEADQUARTERS
SPOONER, WI 54801
(715) 635-4228

DIGGERS HOTLINE

1 (800) 242-8511



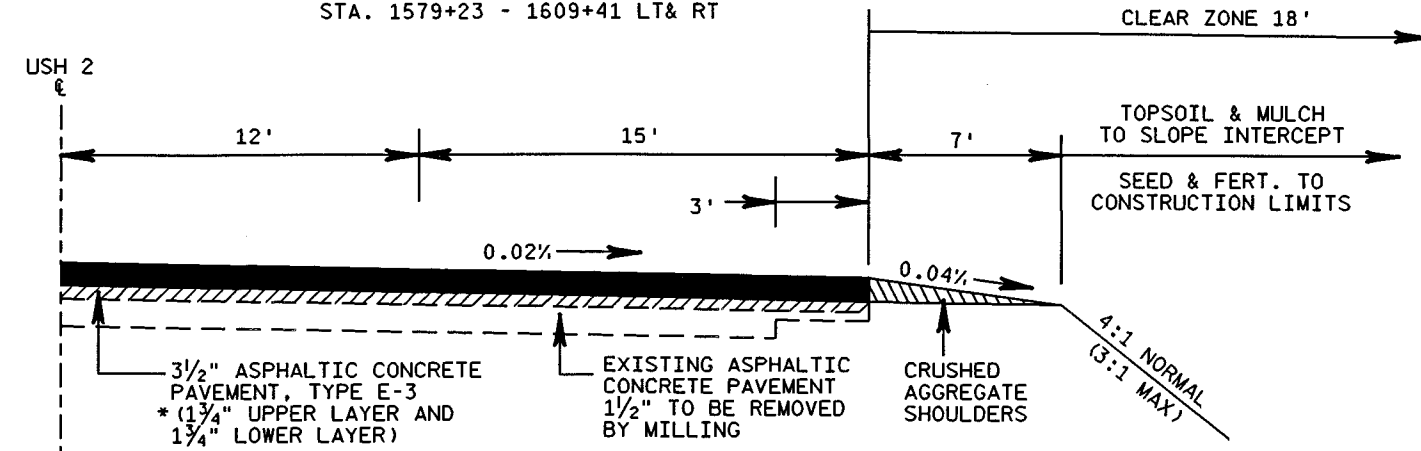
TYPICAL FINISHED HALF SECTION
FOR CURB & GUTTER SECTION
STA. 1579+23 - 1609+41 LT&RT



TYPICAL FINISHED HALF SECTION
FOR RESURFACING

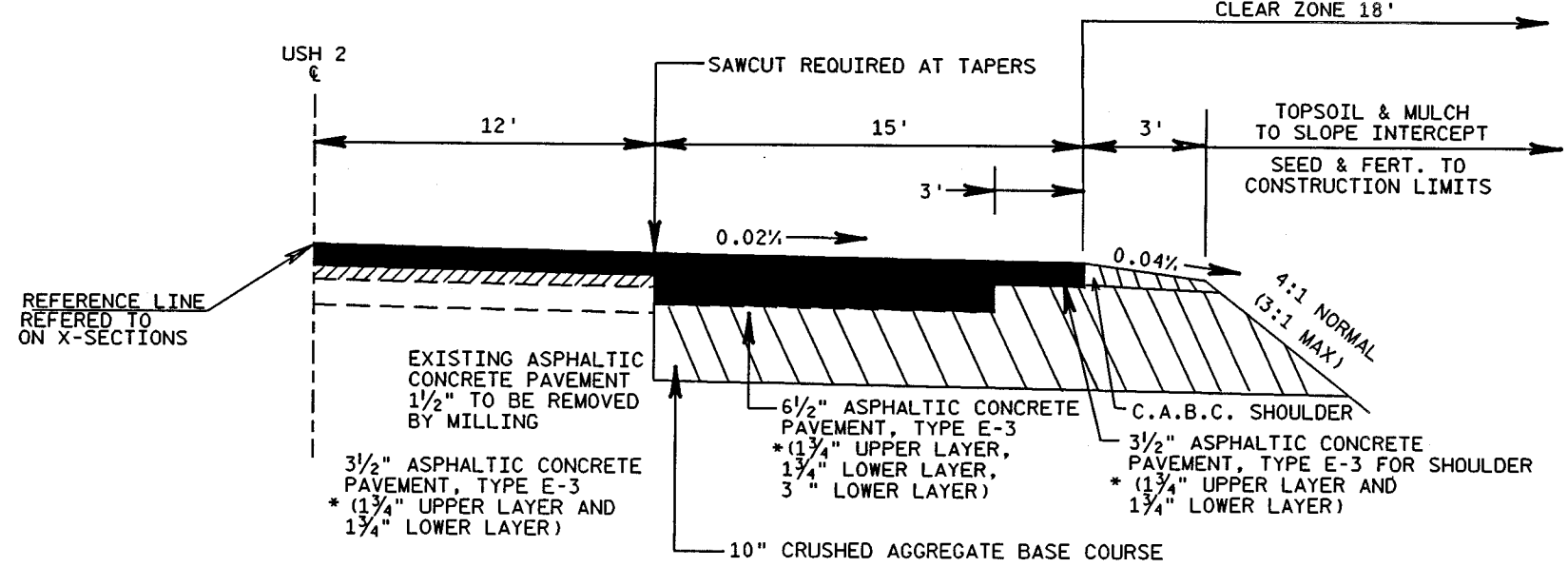
- STA. 1567+39.979 - 1579+23 LT&RT
- STA. 1609+41 - 1651+34 LT&RT
- STA. 1660+50 - 1706+32 LT&RT
- STA. 1706+32 - 1711+00 LT
- STA. 1717+62 - 1754+50 RT
- STA. 1740+05 - 1762+00 LT
- STA. 1762+00 - 1786+00 LT&RT
- STA. 1829+76 - 1851+35 LT
- STA. 1894+70 - 1908+11 LT
- STA. 1908+11 - 1946+55 LT
- STA. 1946+55 - 2074+00 LT&RT
- STA. 2074+00 - 2130+00 LT
- STA. 2128+00 - 2168+50 RT
- STA. 2168+50 - 2213+99 LT&RT

* NOMINAL SIZE OF THE AGGREGATE
USED IN THE MIXTURE SHALL
CONFORM TO 12.55 mm IN THE
UPPER AND LOWER LAYER



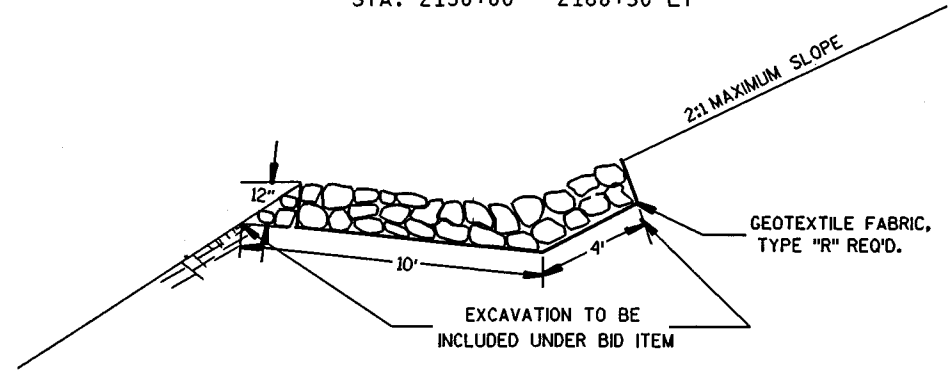
TYPICAL FINISHED HALF SECTION
FOR RESURFACING CLIMBING
PASSING OR BYPASS LANES

- * MATCH EXISTING
10' PAVED SHOULDER
- STA. 1651+34 - 1660+50 LT&RT
- STA. 1706+32 - 1717+62 RT
- STA. 1711+00 - 1740+05 LT
- STA. 1754+50 - 1762+00 RT
- STA. 1786+00 - 1829+76 LT
- STA. 1786+00 - 1887+20 RT
- STA. 1851+35 - 1894+70 LT
- STA. 1908+11 - 1946+55 RT
- STA. 2074+00 - 2128+00 RT
- STA. 2130+00 - 2168+50 LT



TYPICAL FINISHED HALF SECTION
FOR CONSTRUCTING NEW PASSING LANE

STA. 1887+20 - 1911+43 RT



DETAIL FOR RIPRAP IN INTERCEPTING DITCH
STA 1891+50 - 1895+30

LEVELS ON * 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63

PLOT SCALE:

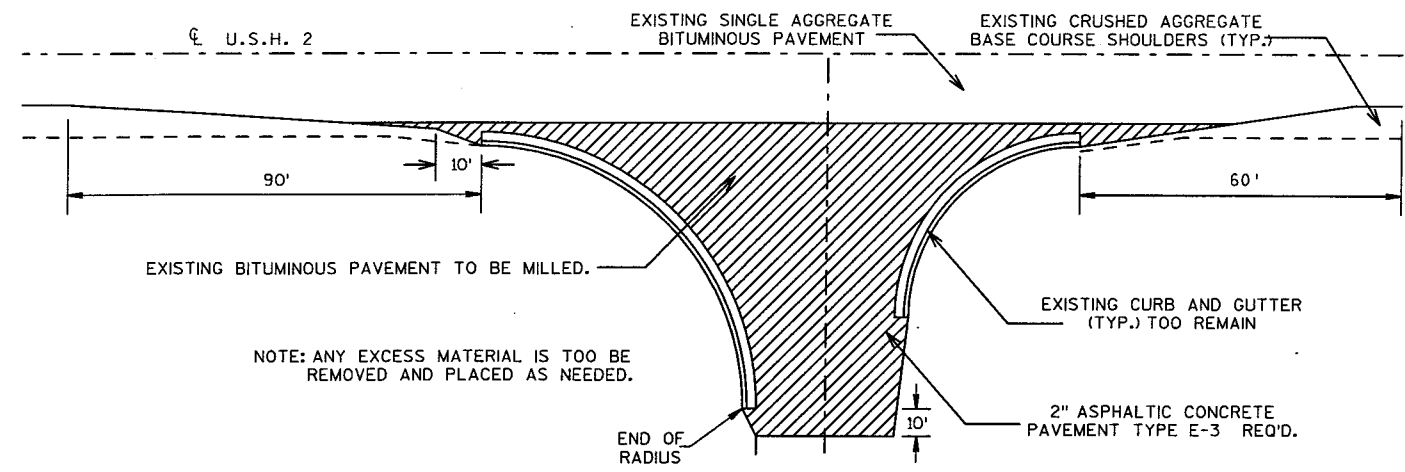
PLOT NAME: 8744-21-TJ/PLAN/TYP/DGN

REV. DATE: 03-20-00

ORIGINATOR: DOTDZA

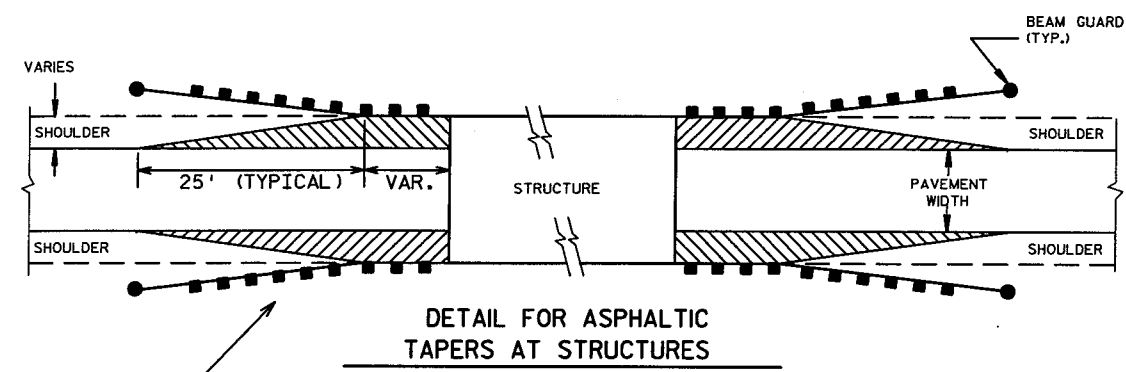
LEVELS ON 142.3, 4.5, 6.7, 8.9, 10.1, 11.2, 13.14, 15.16, 17.18, 19.20, 21.22, 23.24, 25.26, 27.28, 29.30, 31.32, 33.34, 35.36, 37.38, 39.40, 41.42, 43.44, 45.46, 47.48, 49.50, 51.52, 53.54, 55.56, 57.58, 59.60, 61.62, 63

STATE PROJECT NUMBER	1180-32-71	SHEET NO.	2.3
DETAILS			
BAYFIELD COUNTY	U.S.H. 2		

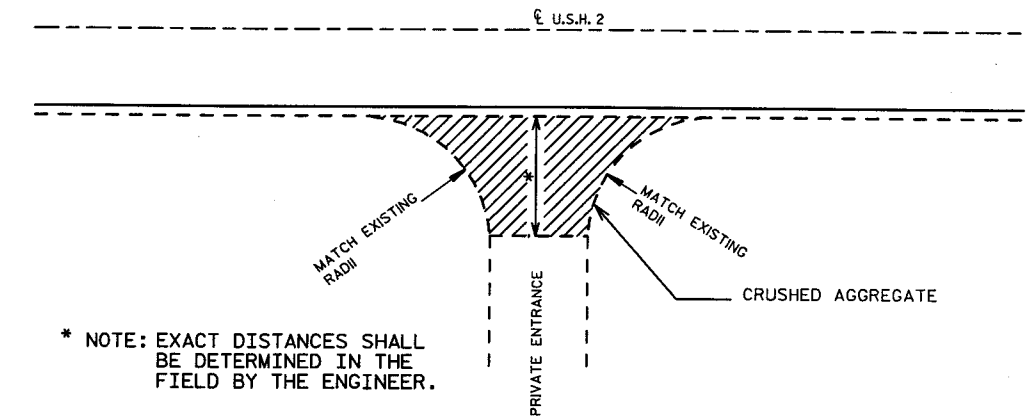


TYPICAL MILLING & PAVING LIMITS FOR SIDEROADS

STA. 1579+70 LT&RT	CTH A & LEA ST.
STA. 1583+22 LT&RT	MAIN ST. (N.& S.)
STA. 1586+72 LT&RT	GEORGE ST. (N.&S.)
STA. 1590+20 LT&RT	BOHN ST. (N.&S.)
STA. 1589+65 RT	MARION ST.
STA. 1604+82 LT&RT	C.T.H. "A" - C.T.H. "H"
STA. 1609+00 LT&RT	FRONT ST. (N.&S.)
STA. 1658+50 RT	WAYSIDE RD.
STA. 1709+56.7 RT	HART LK. RD.
STA. 1713+30 LT.	W. LONG LAKE RD.
STA. 1736+53 RT.	PRIMROSE LN.
STA. 1758+00	E. LONG LAKE RD.
STA. 1883+40 RT.	CROOKED LAKE RD.

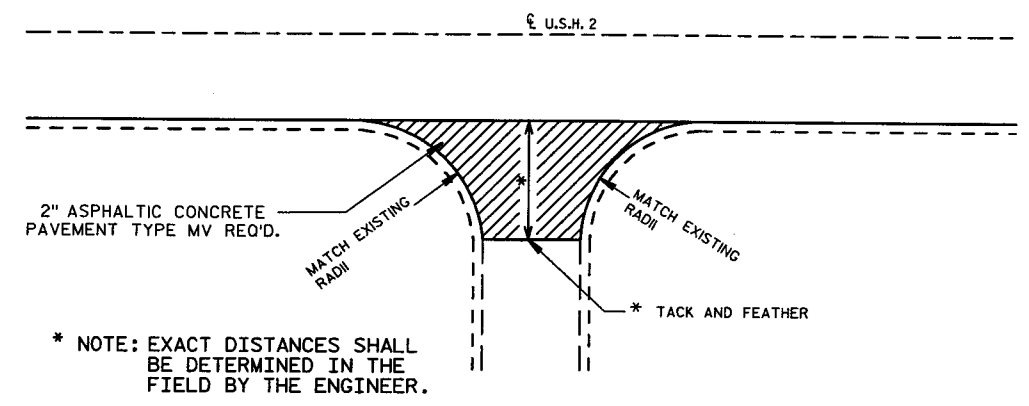


WEST SIDE OF IRON RIVER BRIDGE TO BE CONSTRUCTED UNDER PROJECT # 1180-36-71
BEGIN PROJECT E. SIDE OF IRON RIVER BRIDGE STA. 1567+39.979



C.A.B.C. SIDE RD. & PRIVATE ENTRANCE DETAIL

STA. 1569+78 RT NORWAY RD.	STA. 2032+60 LT(PE)
STA. 1611+11 LT(CE), RT(PE)	STA. 2035+77 RT TOWN RD. #223
STA. 1622+20 RT(CE)	STA. 2060+06 RT(PE)
STA. 1625+90 RT(CE)	STA. 2088+65 RT(SIDE RD.)
STA. 1626+96 LT(CE)	STA. 2113+17 LT(PE)
STA. 1629+60 RT(PE)	STA. 2116+34 RT(PE)
STA. 1633+00 RT(CE)	STA. 2124+26 RT(PE)
STA. 1647+42 LT&RT(PE)	STA. 2126+90 RT(PE)
STA. 1662+72 RT(PE)	STA. 2131+12 RT ?
STA. 1644+78 LT TOPPER RD.	STA. 2143+79 RT(PE)
STA. 1678+04 RT ?	STA. 2144+32 LT(PE)
STA. 1684+90 RT(PE)	STA. 2167+58 LT ?
STA. 1695+46 RT(PE)	STA. 2186+06 LT(PE)
STA. 1830+84 RT(PE)	STA. 2188+70 LT(PE)
STA. 1847+21 RT(PE)	STA. 2194+51 RT(PE)
STA. 1859+35 RT(PE)	STA. 2208+24 RT(PE)
STA. 1921+94 RT(PE)	STA. 2211+41 LT ?
STA. 1953+40 LT(PE)	STA. 2211+94 RT(PE)
STA. 1987+19 RT, FOREST RD. #234	
STA. 1998+28 RT(PE)	

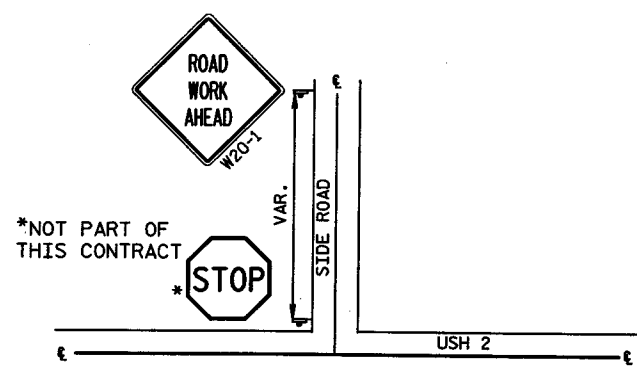
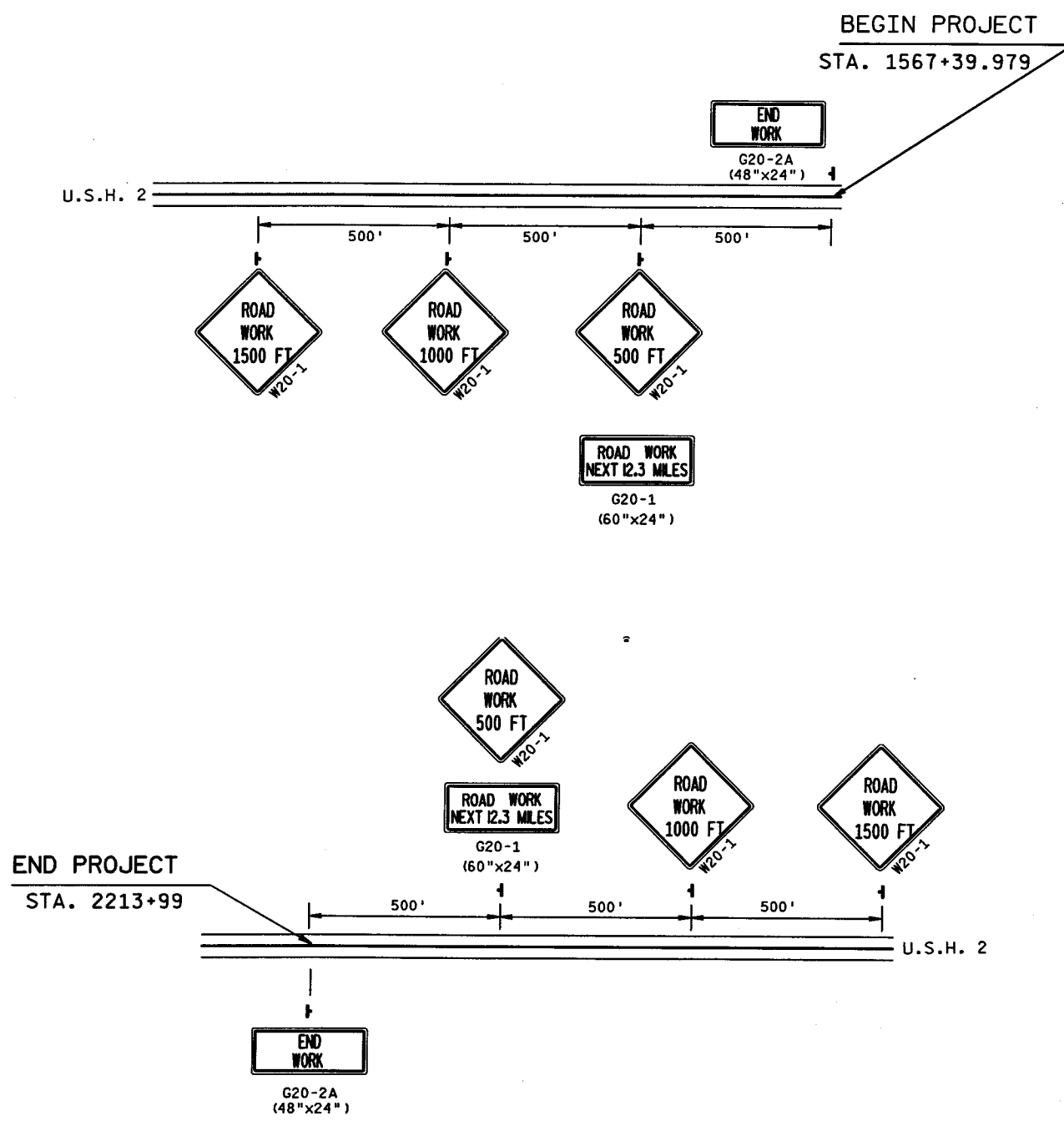


PAVED ENTRANCES DETAIL

STA. 1612+15 RT	DISTRICT ST.	STA. 1658+50 LT.	JACKMAN LK. RD.
STA. 1613+10 LT	DISTRICT ST.	STA. 1779+10 RT.	OLD HWY 2
STA. 1615+60 RT	CIVIC CENTER DR.	STA. 1818+10 RT<	PINE LK. RD. / TOPSIDE RD.
STA. 1618+50 RT	COMMERCIAL ENT.	STA. 1899+30 LT	FOREST RD 417
STA. 1628+54 LT	COMMERCIAL ENT.	STA. 1937+56 LT&RT	OLD USH 2 #214
STA. 1630+90 LT	FIRE LK. RD.	STA. 2039+00	TN RD #223
STA. 1644+78 RT	N. SHORE DR.	STA. 2080+00 LT.	FOR. RD. #419
STA. 1655+19 RT	WAYSIDE	STA. 2136+40 RT	SELKE RD
		STA. 2162+30 RT.	SUSIENKA

ORIGINATOR: D. ANDERSON DISTRICT 8
REV. DATE: 12/01/99
PLOT NAME: TRAFFIC
PLOT SCALE:

LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 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, 61, 62, 63



TYPICAL SIDE ROAD DETAIL

STA. 1569+70 RT	NORWAY RD.
STA. 1579+70 LT & RT	CTH A & LEA ST.
STA. 1583+22 LT & RT	N. MAIN ST - S.MAIN ST.
STA. 1586+72 LT & RT	N. GEORGE ST.- S.GEORGE ST.
STA. 1590+20 LT & RT	N. BOHN ST. - S.Bohn ST.
STA. 1593+65 RT	MARION ST
STA. 1604+82 LT & RT	CTH H & CTH A
STA. 1609+00 LT & RT	FRONT ST.
STA. 1612+15 RT	DISTRICT ST.
STA. 1613+10 LT	DISTRICT ST.
STA. 1615+60 RT	CIVIC CENTER DR.
STA. 1630+90 LT	FIRE LAKE RD.
STA. 1644+78 RT & LT	NORTH SHORE DRIVE - TOPPER RD.
STA. 1658+50 LT & RT	WAYSIDE RD. & JACKMAN LAKE RD.
STA. 1709+56.7 RT	HART LAKE RD
STA. 1713+30 LT	W. LONG LAKE RD
STA. 1736+53 RT	PRIMROSE LN
STA. 1757+12 LT	E. LONG LAKE RD.
STA. 1779+10 RT	OLD USH HWY 2
STA. 1818+10 RT & LT	PINE LAKE RD./TOPSIDE RD
STA. 1883+40 RT	CROOKED LAKE RD.
STA. 1937+56 LT & RT	TOWN RD. OLD USH 2
STA. 1987+19 RT	FOREST RD. #234
STA. 2035+77 RT	TOWN RD. #223
STA. 2080+20 LT	FOREST RD #419
STA. 2110+00 RT	HAVIAR RD.
STA. 2136+40 RT	SELKE RD.
STA. 2162+30 RT	SUSIENKA RD.

GENERAL NOTES:

DRAWINGS NOT TO SCALE. ALL ITEMS NOTED ON THIS SHEET TO BE PAID FOR UNDER "TRAFFIC CONTROL".

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) UNLESS OTHERWISE SHOWN.

ALL SIGNS 48"x48" UNLESS OTHERWISE SHOWN.

TRAFFIC CONTROL SIGNING SHALL BE COORDINATED WITH THE SIGNING FOR PROJECT 1180-36-71

TWO GROOVED PAVEMENT SIGNS W08-52 ARE REQUIRED DURING MILLING OPERATIONS

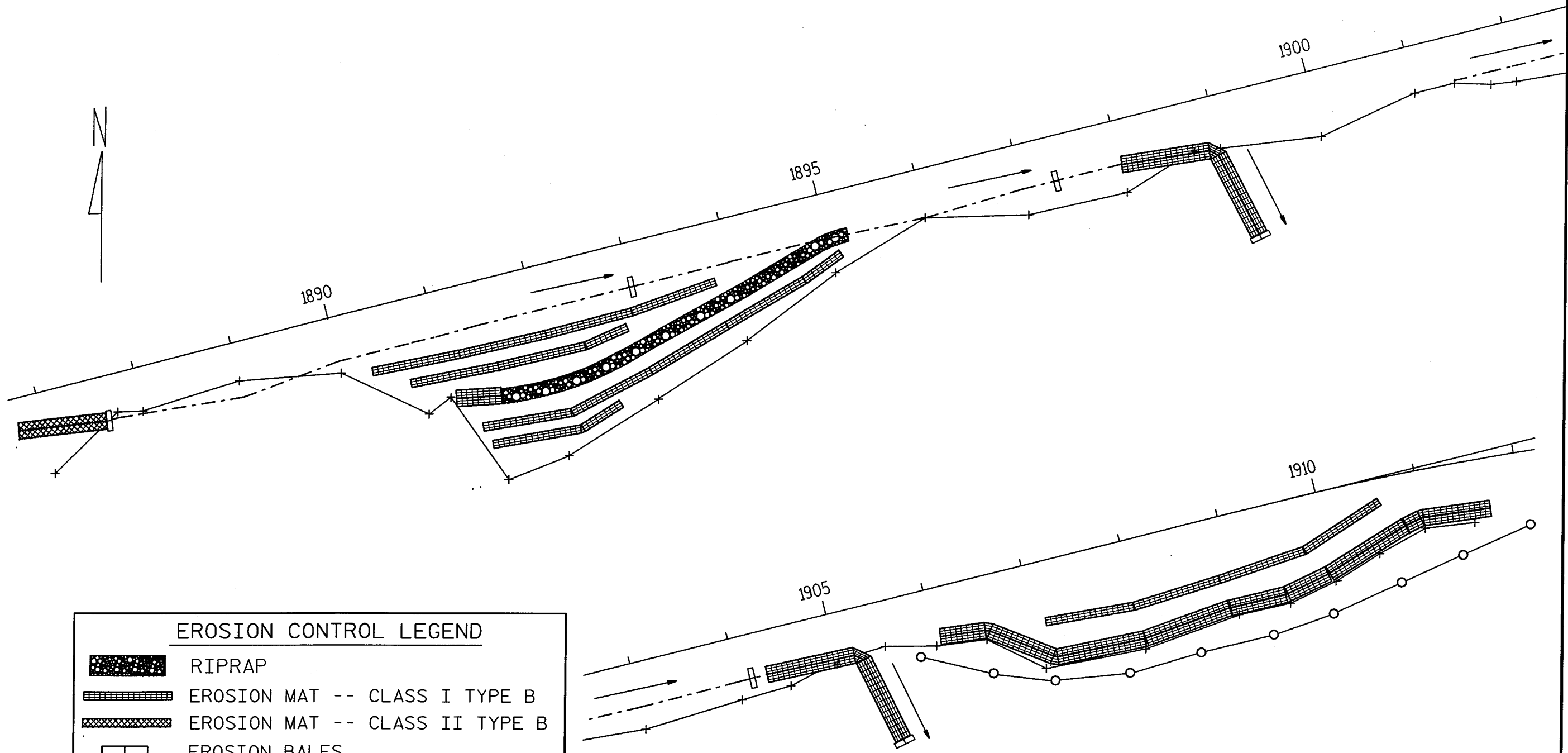
LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

- 1. PAVEMENT MARKING EPOXY
4-INCH YELLOW-SOLID
- 2. PAVEMENT MARKING, DIAGONAL
EPOXY, 8-INCH 45 DEGREES
- 3. PAVEMENT MARKING CHANNELIZING
EPOXY, 8-INCH
- 4. PAVEMENT MARKING ARROWS,
EPOXY, TYPE 2
- 5. PAVEMENT MARKING, WORDS,
EPOXY
- 6. PAVEMENT MARKING EPOXY
4-INCH WHITE - SOLID

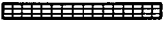
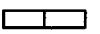
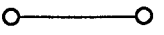
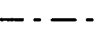
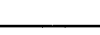
NOTE: EXACT LOCATION OF END OF ISLAND TO
BE DETERMINED BY ENGINEER IN FIELD.

NOTE: DOUBLE YELLOW CENTERLINE PAVEMENT
MARKING SHALL RUN FROM EAST END OF
IRON RIVER BRIDGE TO CTH H. BEGIN STANDARD
SPOTTING AT STA.1609+77 EAST OF LAST PAINTED ISLAND.

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



EROSION CONTROL LEGEND

-  RIPRAP
-  EROSION MAT -- CLASS I TYPE B
-  EROSION MAT -- CLASS II TYPE B
-  EROSION BALES
-  SILT FENCE
-  SLOPE INTERCEPT
-  DITCH
-  FLOW DIRECTION

DATE 24SEP01

ESTIMATE OF QUANTITIES

SHEET: 3.1

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1180-32-71 QUANTITY
0010	20101	CLEARING	STA.	25.00	25.00
0020	20104	GRUBBING	STA.	25.00	25.00
0030	20405	REMOVING CURB AND GUTTER	L.F.	410.00	410.00
0040	20411	REMOVING GUARDRAIL	L.F.	1,976.00	1,976.00
0050	20420	REMOVING ASPHALTIC SURFACE, MILLING	S.Y.	278,772.00	278,772.00
0060	20501	COMMON EXCAVATION	C.Y.	21,205.00	21,205.00
0070	21101	PREPARATION OF FOUNDATION FOR ASPHALTIC PAVING	LS	1.00	1.00
0080	21131	PREPARATION OF FOUNDATION FOR ASPHALTIC SHOULDERS	STA.	160.00	160.00
0090	21301	FINISHING ROADWAY	LS	1.00	1.00
0100	30404	CRUSHED AGGREGATE BASE COURSE	TON	20,684.00	20,684.00
0110	40204	ASPHALTIC MATERIAL FOR TACK COAT	GAL.	14,446.00	14,446.00
0120	40301	QMP, ASPHALTIC MIXTURE	TON	56,863.00	56,863.00
0130	40501	ASPHALTIC MATERIAL FOR PLANT MIXES	TON	3,412.00	3,412.00
0140	40723	ASPHALTIC CONCRETE PAVEMENT, TYPE E-3	TON	56,863.00	56,863.00
0150	40728	DENSITY INCENTIVE, ASPHALTIC CONCRETE PAVEMENT	DOL	36,400.00	36,400.00
0160	40729	PROFILE INDEX INCENTIVE, ASPHALTIC CONCRETE PAVEMENT	DOL	44,880.00	44,880.00
0170	60133	CONCRETE CURB AND GUTTER, 30-INCH, TYPE D	L.F.	410.00	410.00
0180	60601	RIPRAP	C.Y.	206.00	206.00
0190	61182	ADJUSTING MANHOLE COVERS	EACH	13.00	13.00
0200	61407	STEEL THRIE BEAM STRUCTURE APPROACH	L.F.	66.00	66.00
0210	61408	STEEL PLATE BEAM GUARD, CLASS A	L.F.	1,050.00	1,050.00
0220	61435	STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL	EACH	15.00	15.00
0230	61801	MAINTENANCE AND REPAIR OF HAUL ROADS	LS	1.00	1.00
0240	61910	MOBILIZATION	LS	1.00	1.00
0250	62505	SALVAGED TOPSOIL	S.Y.	13,472.00	13,472.00
0260	62702	MULCHING	S.Y.	16,007.00	16,007.00
0270	62811	EROSION BALES, DELIVERED	EACH	78.00	78.00
0280	62812	EROSION BALES, INSTALLED	EACH	78.00	78.00
0290	62815	SILT FENCE, DELIVERED	L.F.	750.00	750.00
0300	62816	SILT FENCE, INSTALLED	L.F.	750.00	750.00
0310	62817	SILT FENCE MAINTENANCE	L.F.	750.00	750.00
0320	62824	EROSION MAT, DELIVERED, CLASS I, TYPE B	S.Y.	3,052.00	3,052.00

DATE 24SEP01

ESTIMATE OF QUANTITIES

SHEET: 3.2

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1180-32-71 QUANTITY
0330	62825	EROSION MAT, INSTALLED, CLASS I, TYPE B	S.Y.	3,052.00	3,052.00
0340	62832	EROSION MAT, DELIVERED, CLASS II, TYPE B	S.Y.	160.00	160.00
0350	62833	EROSION MAT, INSTALLED, CLASS II, TYPE B	S.Y.	160.00	160.00
0360	62905	FERTILIZER, TYPE B	CWT.	16.00	16.00
0370	63003	SEEDING, TEMPORARY	LB.	443.00	443.00
0380	63009	SEEDING, MIXTURE NO. 20	LB.	445.00	445.00
0390	64202	FIELD OFFICE, TYPE B	LS	1.00	1.00
0400	64301	TRAFFIC CONTROL	LS	1.00	1.00
0410	64505	GEOTEXTILE FABRIC, TYPE R	S.Y.	617.00	617.00
0420	64602	PAVEMENT MARKING, 4-INCH, EPOXY	L.F.	127,194.00	127,194.00
0430	64618	PAVEMENT MARKING, CHANNELIZING, 8-INCH, EPOXY	L.F.	897.00	897.00
0440	64626	PAVEMENT MARKING, SAME DAY, 4-INCH, EPOXY	L.F.	104,692.00	104,692.00
0450	64734	PAVEMENT MARKING, ARROWS, TYPE 2, EPOXY	EACH	5.00	5.00
0460	64758	PAVEMENT MARKING, WORDS, EPOXY	EACH	5.00	5.00
0470	64766	PAVEMENT MARKING, DIAGONAL, 8-INCH, EPOXY	L.F.	1,056.50	1,056.50
0480	64901	TEMPORARY PAVEMENT MARKING, 4-INCH	L.F.	98,449.00	98,449.00
0490	66501	SAWING EXISTING PAVEMENT	L.F.	672.00	672.00
0500	90001	MISC 90001A SALVAGE AND RESET TRAIL GATE AND SIGNAGE	NONE	1.00	1.00
0510	90005	MISC 90005A ADJUST WATER SHUTOFF	EACH	11.00	11.00
0520	90329	GRADING, SHAPING AND FINISHING FOR BEAM GUARD TERMINALS AND ANCHORAGES	EACH	15.00	15.00
0530	90365	QMP, BASE COURSES	TON	20,684.00	20,684.00

CLEARING				
			010	
			20101	
STATION TO STATION	LOCATION	STA.		
1887+20 - 1911+53	RT	25		
TOTAL			25	
GRUBBING				
			010	
			20104	
STATION TO STATION	LOCATION	STA.		
1887+20 - 1911+43		25		
TOTAL			25	
REMOVING CURB AND GUTTER				
			010	
			20405	
STATION TO STATION	LOCATION	L.F.	REMARKS	
1580+10 - 1580+60	RT	50	CURB REPAIR	
1595+12 - 1595+32	RT	20	CURB REPAIR	
1602+56 - 1604+36	RT	240	RT.TURN LN.	
1605+40 - 1606+40	RT	100	CURB REPAIR	
TOTAL			410	
REMOVING GUARD RAIL				
			010	
			20411	
STATION TO STATION	LOCATION	L.F.	REMARKS	
1567+40 - 1568+18	IRON RIVER BR. LT.	78	INCLUDING THRIE BEAM	
1567+40 - 1568+18	IRON RIVER BR. RT.	78	INCLUDING THRIE BEAM	
1783+75 - 1786+85	RT	310		
1844+85 - 1851+35	LT	129	REMOVE 64.5' @ EACH END	
1865+90 - 1874+55	RT	865		
1906+20 - 1909+74	RT	129	REMOVE 64.5' @ EACH END	
1907+92 - 1913+80	LT	129	REMOVE 64.5' @ EACH END	
1963+95 - 1967+95	RT	129	REMOVE 64.5' @ EACH END	
1964+64 - 1967+18	LT	129	REMOVE 64.5' @ EACH END	
TOTAL			1,976	
REMOVING ASPHALTIC SURFACE, MILLING				
			20420	
			GROUP_010	GROUP_030
STATION	TO STATION	LOCATION	S.Y.	S.Y.
1567+39.979	- 1579+23	MAINLINE & SHLD.	4,231	
1579+23	- 1609+41	MAINLINE & SHLD.	9,361	8533
1579+75	- 1609+00	SIDE STREETS	1,799	
1609+41	- 1651+34	MAINLINE & SHLD.	14,202	
1612+15	- 2162+30	SIDE ROADS	12,426	
1651+34	- 1706+32	MAINLINE & SHLD.	19,208	
1706+32	- 1762+00	MAINLINE & SHLD.	23,091	
1762+00	- 1786+00	MAINLINE & SHLD.	8,000	
1786+00	- 1946+55	MAINLINE & SHLD.	78,019	
1946+55	- 2074+00	MAINLINE & SHLD.	42,483	
2074+00	- 2168+50	MAINLINE & SHLD.	42,257	
2168+50	- 2213+99	MAINLINE & SHLD.	15,162	
TOTAL			270,239	8533

ASPHALTIC CONCRETE PAVEMENT SUMMARY											
			40723		40501		40204		40301		
			ASPH. CONC.		ASPH. MAT'L		ASPH. MAT'L		QUALITY MGMT		
			PAV., TYPE E-3		FOR PLANT MIX		FOR TACK COAT		PROG. ASPH. MIX.		
			TONS		TONS		GALLONS		TONS		
STATION	TO STATION	LOCATION	GROUP CODE	010	030	010	030	010	030	010	030
1567+39.979	- 1579+23	MAINLINE & SHLD.	721			43		212		721	
1579+23	- 1609+41	MAINLINE & SHLD.	2352		1672	141.1	100	378	427	2352	1672
1579+75	- 1609+00	SIDE STREETS	261			16		68		261	
1609+41	- 1651+34	MAINLINE & SHLD.	2413			145		710		2413	
1630+90	- 2162+90	SIDE ROADS	1832			110		621		1832	
1651+34	- 1706+32	MAINLINE & SHLD.	3275			197		960		3275	
1706+32	- 1762+00	MAINLINE & SHLD.	4477			269		1154		4477	
1762+00	- 1786+00	MAINLINE & SHLD.	1568			94		400		1568	
1786+00	- 1946+55	MAINLINE & SHLD.	18196			1092		4391		18196	
1946+55	- 2074+00	MAINLINE & SHLD.	8552			513		2182		8552	
2074+00	- 2168+50	MAINLINE & SHLD.	8282			497		2113		8282	
2168+50	- 2213+99	MAINLINE & SHLD.	2972			178		758		2972	
1779+20	- 2130+50	TO BEAM GUARD	2972			17		72		2972	
GROUP CODE TOTAL			55191		1672	3312	100	14019	427	55191	1672
JOB TOTAL			56863			3412		14446		56863	

CRUSHED AGGREGATE BASE COURSE				
		010	010	
		30404	90365	
STATION TO	STATION	LOCATION	TON	QMP, BASE COURSES
1567+40 - 1579+23	7'	SH. LT. & RT.	458	458
1602+77 - 1605+87		RT. TURN LANE	150	150
1609+41 - 1652+74	7'	SH. LT. & RT.	1,679	1,679
1652+74 - 1659+50	3'	SH. LT. & RT.	159	159
1659+50 - 1754+50	7'	SH. LT. & RT.	3,680	3,680
1754+50 - 1762+00	4'	SH. LT. & RT.	177	177
1762+00 - 1768+00	7'	SH. LT. & RT.	232	232
1768+00 - 1770+16	7'	SH. RT.	42	42
1770+16 - 1779+20	7'	SH. LT. & RT.	350	350
1779+20 - 1783+75	7'	SH. RT.	88	88
1786+85 - 1821+77	7'	SH. LT. & RT.	871	871
1821+77 - 1828+74	7'	SH. RT.	135	135
1828+74 - 1844+85	7'	SH. LT. & RT.	624	624
1844+85 - 1851+35	7'	SH. RT.	126	126
1851+35 - 1865+90	7'	SH. LT. & RT.	106	106
1865+90 - 1871+10	7'	SH. RT.	101	101
1874+55 - 1881+60	7'	SH. LT.	137	137
1881+60 - 1884+96	7'	SH. LT. & RT.	130	130
1884+96 - 1898+20	7'	SH. RT.	256	256
1898+20 - 1907+92	7'	SH. LT. & RT.	377	377
1909+74 - 1913+80	7'	SH. RT.	79	79
1913+80 - 1920+94	7'	SH. LT. & RT.	54	54
1920+94 - 1929+06	7'	SH. RT.	157	157
1929+06 - 1939+95	7'	SH. LT. & RT.	422	422
1939+95 - 1950+83	7'	SH. LT.	211	211
1950+83 - 1963+95	7'	SH. LT. & RT.	508	508
1967+95 - 2126+45	7'	SH. LT. & RT.	6,141	6,141
2130+50 - 2213+99	7'	SH. LT. & RT.	3,235	3,235
TOTAL			20,684	20,684

COMMON EXCAVATION				
		010		
		20501		
STATION TO STATION	LOCATION	C.Y.	REMARKS	
1602+77 - 1604+35		80	RT. TURN LANE	
1887+00 - 1912+00		21,125	PASSING LANE	
TOTAL		21,205		

CONCRETE CURB AND GUTTER, 30-INCH, TYPE D				
		010		
		60133		
STATION TO STATION	LOCATION	L.F.	REMARKS	
1580+10 - 1580+60	RT	50		
1595+12 - 1595+32	RT	20		
1601+40 - 1603+20	RT	240		
1605+40 - 1606+40	RT	100		
TOTAL		410		

STATE PROJECT NUMBER: 1180-32-71

HWY: U.S.H. 2

COUNTY: BAYFIELD

IRON RIVER - INO

MISCELLANEOUS QUANTITIES

SHEET NO: 3A

E

FILE NAME: W:\DESIGN\QUANTITY\ENG\SHEET2000.PPT

ORIGINATOR:

REV. DATE:

PLOT DATE:

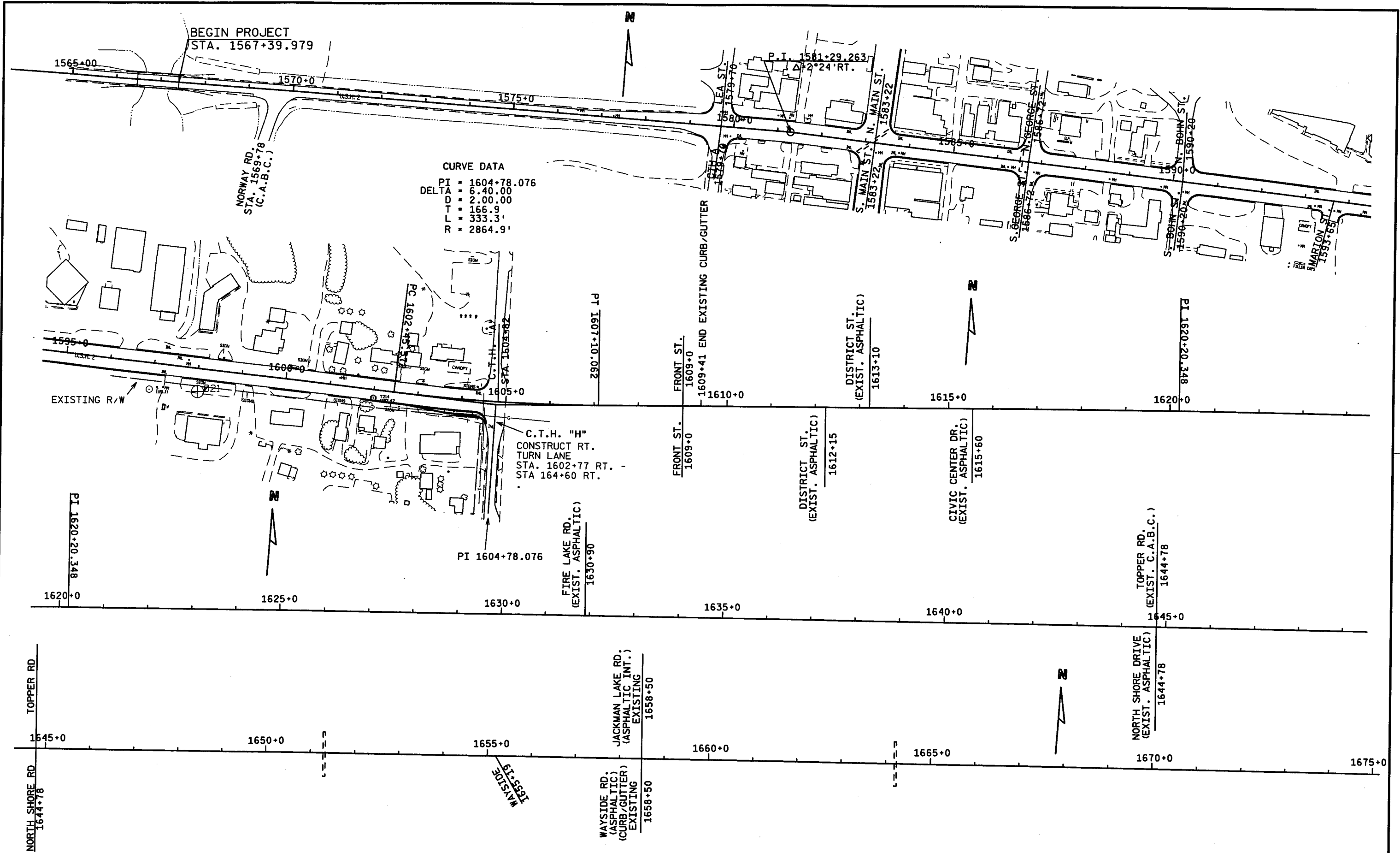
<u>RIPRAP</u>			
<u>010</u>			
<u>60601</u>			
STATION TO STATION	LOCATION	C.Y.	REMARKS
1891+50 - 1895+30		<u>206</u>	SEE EROSION PLAN
TOTAL		<u>206</u>	
<u>GEOTEXTILE FABRIC, TYPE R</u>			
<u>010</u>			
<u>64505</u>			
STATION TO STATION	LOCATION	S.Y.	REMARKS
1891+50 - 1895+30	SEE PLAN	617	WITH RIPRAP
TOTAL		<u>617</u>	

<u>STEEL PLATE BEAM GUARD, CLASS A</u>					
<u>STEEL THRIE BEAM STRUCTURE APPROACH</u>					
<u>010</u>					
<u>010</u>					
STATION TO STATION	LOCATION	L.F.	L.F.	REMARKS	
1567+40 - 1568+18	IRON RIVER BR. LT.		33.0	*THRIE BEAM AT BRIDGE	
1567+73	1568+36	LT	62.5	REPLACE	
1567+40 - 1568+18	IRON RIVER BR. RT.		33.0	*THRIE BEAM AT BRIDGE	
1567+73	1568+36	RT	12.5	REPLACE	
1783+75 - 1786+85		RT	212.5	REPLACE	
1865+90	1874+55	LT	<u>762.5</u>	REPLACE	
TOTAL			<u>1,050</u>	66	
*THE EXISTING BRIDGE RAILING IS CONCRETE PARAPET TYPE B					

<u>SALVAGED TOPSOIL</u>			
<u>010</u>			
<u>62505</u>			
STATION TO STATION	LOCATION	S.Y.	REMARKS
1602+77 - 1605+87	RT.	88	RT. TURN LANE
1887+00 - 1911+50	RT.	13,384	PASSING LANE
TOTAL		<u>13,472</u>	

EROSION MAT, DELIVERED & INSTALLED, CLASS I, TYPE B 010 62824 & 62825 <table><tr><th>STATION TO STATION</th><th>LOCATION</th><th>S.Y.</th><th>REMARKS</th></tr><tr><td>1890+30 - 1910+50</td><td></td><td>3,052</td><td>SEE EROSION CONTROL PLAN</td></tr><tr><td colspan="2">TOTAL</td><td>3,052</td><td></td></tr></table>	STATION TO STATION	LOCATION	S.Y.	REMARKS	1890+30 - 1910+50		3,052	SEE EROSION CONTROL PLAN	TOTAL		3,052		SEEDING, MIXTURE NO. 20 010 63009 <table><tr><th>STATION TO STATION</th><th>LOCATION</th><th>LB.</th></tr><tr><td>1602+77 - 1605+87</td><td></td><td>2</td></tr><tr><td>1887+00 - 1912+00</td><td></td><td>443</td></tr><tr><td colspan="2">TOTAL</td><td>445</td></tr></table>	STATION TO STATION	LOCATION	LB.	1602+77 - 1605+87		2	1887+00 - 1912+00		443	TOTAL		445	PAVEMENT MARKING, CHANNELIZING, 8-INCH, EPOXY 010 64618 <table><tr><th>STATION TO STATION</th><th>LOCATION</th><th>L.F.</th><th>REMARKS</th></tr><tr><td>1567+40 - 1658+50</td><td>RON RIVER</td><td>211</td><td></td></tr><tr><td>1658+50 - 2217+11</td><td>USH 2</td><td>686</td><td></td></tr><tr><td colspan="2">TOTAL</td><td>897</td><td></td></tr></table> PAVEMENT MARKING, WORDS, EPOXY 010 64758 <table><tr><th>STATION</th><th>EACH</th><th>REMARKS</th></tr><tr><td>1580+62</td><td>1</td><td>"ONLY"</td></tr><tr><td>1582+40</td><td>1</td><td>"</td></tr><tr><td>1603+60</td><td>2</td><td>"</td></tr><tr><td>1605+80</td><td>1</td><td>"</td></tr><tr><td colspan="2">TOTAL</td><td>5</td></tr></table> PAVEMENT MARKING, 4-INCH, EPOXY 010 64602 <table><tr><th>STATION TO STATION</th><th>LOCATION</th><th>L.F.</th></tr><tr><td>1567+40 - 1658+50</td><td>RON RIVER</td><td>11,299</td></tr><tr><td>1658+50 - 2217+11</td><td>USH 2</td><td>115,895</td></tr><tr><td colspan="2">TOTAL</td><td>127,194</td></tr></table>	STATION TO STATION	LOCATION	L.F.	REMARKS	1567+40 - 1658+50	RON RIVER	211		1658+50 - 2217+11	USH 2	686		TOTAL		897		STATION	EACH	REMARKS	1580+62	1	"ONLY"	1582+40	1	"	1603+60	2	"	1605+80	1	"	TOTAL		5	STATION TO STATION	LOCATION	L.F.	1567+40 - 1658+50	RON RIVER	11,299	1658+50 - 2217+11	USH 2	115,895	TOTAL		127,194
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EROSION MAT, DELIVERED & INSTALLED, CLASS II, TYPE B 010 62832 & 62833 <table><tr><th>STATION TO STATION</th><th>LOCATION</th><th>S.Y.</th><th>REMARKS</th></tr><tr><td>1886+80 - 1887+75</td><td></td><td>160</td><td></td></tr><tr><td colspan="2">TOTAL</td><td>160</td><td></td></tr></table>	STATION TO STATION	LOCATION	S.Y.	REMARKS	1886+80 - 1887+75		160		TOTAL		160		PAVEMENT MARKING, DIAGONAL, 8-INCH, EPOXY 010 64766 <table><tr><th>STATION TO STATION</th><th>LOCATION</th><th>L.F.</th><th>REMARKS</th></tr><tr><td>1577+65 - 1578+80</td><td></td><td>129.6</td><td>SEE</td></tr><tr><td>1583+18 - 1584+34</td><td></td><td>116.4</td><td>PAVEMENT</td></tr><tr><td>1600+83 - 1604+15</td><td></td><td>479.5</td><td>MARKING</td></tr><tr><td>1605+28 - 1608+60</td><td></td><td>331.0</td><td>PLAN</td></tr><tr><td colspan="2">TOTAL</td><td>1,056.5</td><td></td></tr></table>	STATION TO STATION	LOCATION	L.F.	REMARKS	1577+65 - 1578+80		129.6	SEE	1583+18 - 1584+34		116.4	PAVEMENT	1600+83 - 1604+15		479.5	MARKING	1605+28 - 1608+60		331.0	PLAN	TOTAL		1,056.5																																				
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SILT FENCE, DELIVERED, INSTALLED, & MAINTAINED 010 62815 010 62816 010 62817 <table><tr><th>STATION TO STATION</th><th>LOCATION</th><th>L.F.</th><th>L.F.</th><th>L.F.</th></tr><tr><td>1905+80 - 1912+00</td><td>SEE PLAN</td><td>750</td><td>750</td><td>750</td></tr><tr><td colspan="2">TOTAL</td><td>750</td><td>750</td><td>750</td></tr></table>	STATION TO STATION	LOCATION	L.F.	L.F.	L.F.	1905+80 - 1912+00	SEE PLAN	750	750	750	TOTAL		750	750	750	PAVEMENT MARKING, ARROWS, TYPE 2, EPOXY 010 64734 <table><tr><th>STATION</th><th>LOCATION</th><th>EACH</th><th>REMARKS</th></tr><tr><td>1580+28</td><td></td><td>1</td><td>LEFT TURN</td></tr><tr><td>1582+79</td><td></td><td>1</td><td>LEFT TURN</td></tr><tr><td>1603+90</td><td></td><td>2</td><td>LEFT, RIGHT TURN</td></tr><tr><td>1605+53</td><td></td><td>1</td><td>LEFT TURN</td></tr><tr><td colspan="2">TOTAL</td><td>5</td><td></td></tr></table>	STATION	LOCATION	EACH	REMARKS	1580+28		1	LEFT TURN	1582+79		1	LEFT TURN	1603+90		2	LEFT, RIGHT TURN	1605+53		1	LEFT TURN	TOTAL		5																																	
STATION TO STATION	LOCATION	L.F.	L.F.	L.F.																																																																				
1905+80 - 1912+00	SEE PLAN	750	750	750																																																																				
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TOTAL		5																																																																						
SEEDING, TEMPORARY 010 63003 <table><tr><th>STATION TO STATION</th><th>LOCATION</th><th>LB.</th><th>REMARKS</th></tr><tr><td>1887+20 - 1911+43</td><td></td><td>443</td><td>NEW PASSING LANE AREA</td></tr><tr><td colspan="2">TOTAL</td><td>443</td><td></td></tr></table>	STATION TO STATION	LOCATION	LB.	REMARKS	1887+20 - 1911+43		443	NEW PASSING LANE AREA	TOTAL		443		PAVEMENT MARKING, SAME DAY, 4-INCH, EPOXY 010 64626 <table><tr><th>STATION TO STATION</th><th>LOCATION</th><th>L.F.</th><th>REMARKS</th></tr><tr><td>1567+39.979 - 1658+50</td><td>RON RIVER</td><td>10,589</td><td>YELLOW</td></tr><tr><td>1658+49 - 1103+01</td><td>USH 1</td><td>94,103</td><td>YELLOW</td></tr><tr><td colspan="2">TOTAL</td><td>104,692</td><td></td></tr></table>	STATION TO STATION	LOCATION	L.F.	REMARKS	1567+39.979 - 1658+50	RON RIVER	10,589	YELLOW	1658+49 - 1103+01	USH 1	94,103	YELLOW	TOTAL		104,692																																												
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	TEMPORARY PAVEMENT MARKING, 4-INCH 010 64901 <table><tr><th>STATION TO STATION</th><th>LOCATION</th><th>L.F.</th><th>REMARKS</th></tr><tr><td>1567+40 - 1658+50</td><td>RON RIVER</td><td>7,371</td><td>YELLOW</td></tr><tr><td>1658+50 - 2217+11</td><td>USH 2</td><td>91,078</td><td>YELLOW</td></tr><tr><td colspan="2">TOTAL</td><td>98,449</td><td></td></tr></table>	STATION TO STATION	LOCATION	L.F.	REMARKS	1567+40 - 1658+50	RON RIVER	7,371	YELLOW	1658+50 - 2217+11	USH 2	91,078	YELLOW	TOTAL		98,449																																																								
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		SAWING EXISTING PAVEMENT 010 66501 <table><tr><th>STATION TO STATION</th><th>LOCATION</th><th>L.F.</th><th>REMARKS</th></tr><tr><td>1887+20 - 1890+60</td><td>RT</td><td>340</td><td></td></tr><tr><td>1908+11 - 1911+43</td><td>RT</td><td>332</td><td></td></tr><tr><td colspan="2">TOTAL</td><td>672</td><td></td></tr></table> MISC SALVAGE AND RESET TRAIL GATE AND SIGNAGE 010 90001A <table><tr><th>STATION TO STATION</th><th>LOCATION</th><th>EACH</th><th>REMARKS</th></tr><tr><td>1889+50</td><td>LEFT</td><td>1</td><td>REPLACE REC. TRAIL GATE</td></tr><tr><td colspan="2">TOTAL</td><td>1</td><td></td></tr></table>	STATION TO STATION	LOCATION	L.F.	REMARKS	1887+20 - 1890+60	RT	340		1908+11 - 1911+43	RT	332		TOTAL		672		STATION TO STATION	LOCATION	EACH	REMARKS	1889+50	LEFT	1	REPLACE REC. TRAIL GATE	TOTAL		1																																											
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TOTAL		1																																																																						
		ADJUST WATER SHUTOFF 020 90005 <table><tr><th>STATION</th><th>LOCATION</th><th>EACH</th><th>REMARKS</th></tr><tr><td>1579+50</td><td>CTH A SOUTH</td><td>1</td><td>40' RT.</td></tr><tr><td>1579+50</td><td>LEA ST.</td><td>1</td><td>40' LT.</td></tr><tr><td>1586+62</td><td>GEORGE ST. SOUTH</td><td>1</td><td>40' RT.</td></tr><tr><td>1586+62</td><td>GEORGE ST. NORTH</td><td>3</td><td>18' LT.(2) , 30'LT.(1)</td></tr><tr><td>1604+67</td><td>CTH A NORTH</td><td>2</td><td>8' LT. , 35' LT.</td></tr><tr><td>1604+67</td><td>CTH H SOUTH</td><td>1</td><td>44' RT.</td></tr><tr><td>1608+80</td><td>FRONT ST. NORTH</td><td>1</td><td>20' LT.</td></tr><tr><td>1613+25</td><td>DISTRICT ST.</td><td>1</td><td>27' LT.</td></tr></table>	STATION	LOCATION	EACH	REMARKS	1579+50	CTH A SOUTH	1	40' RT.	1579+50	LEA ST.	1	40' LT.	1586+62	GEORGE ST. SOUTH	1	40' RT.	1586+62	GEORGE ST. NORTH	3	18' LT.(2) , 30'LT.(1)	1604+67	CTH A NORTH	2	8' LT. , 35' LT.	1604+67	CTH H SOUTH	1	44' RT.	1608+80	FRONT ST. NORTH	1	20' LT.	1613+25	DISTRICT ST.	1	27' LT.																																		
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LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



STATE PROJECT NUMBER: 1180-32-71	HWY: USH 2	COUNTY: BAYFIELD	IRON RIVER - INO	PLAN SHEET	SCALE, FEET	SHEET NO: 5.1	E
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FILE NAME : X:\PROJECTS\08\11803200\dgn\plan.dgn

PLOT DATE: 29-JUN-2001 11:08

ORG DATE :

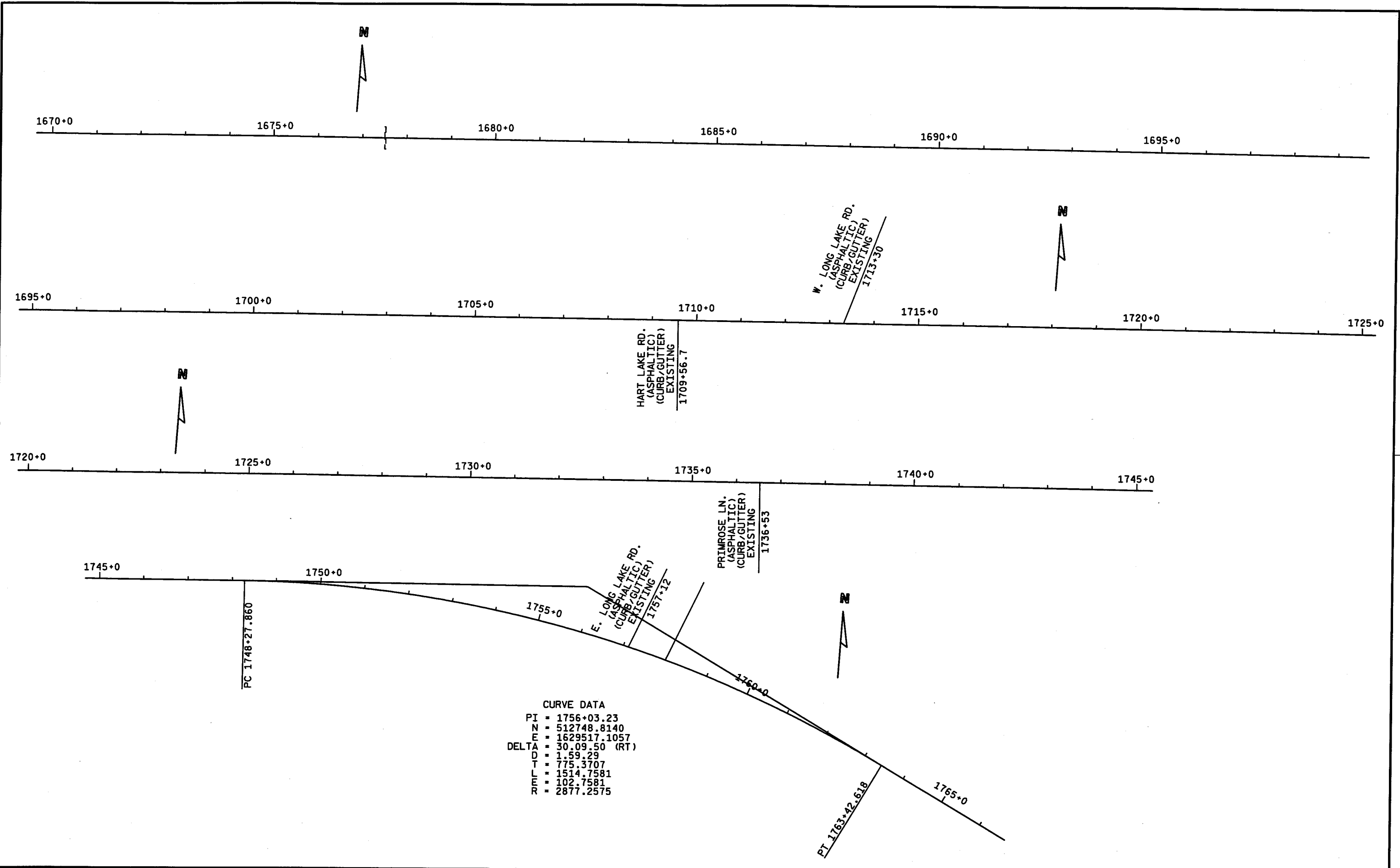
PLOT NAME :

Originator : Dist

PLOT SCALE : 200.000000:1.000000

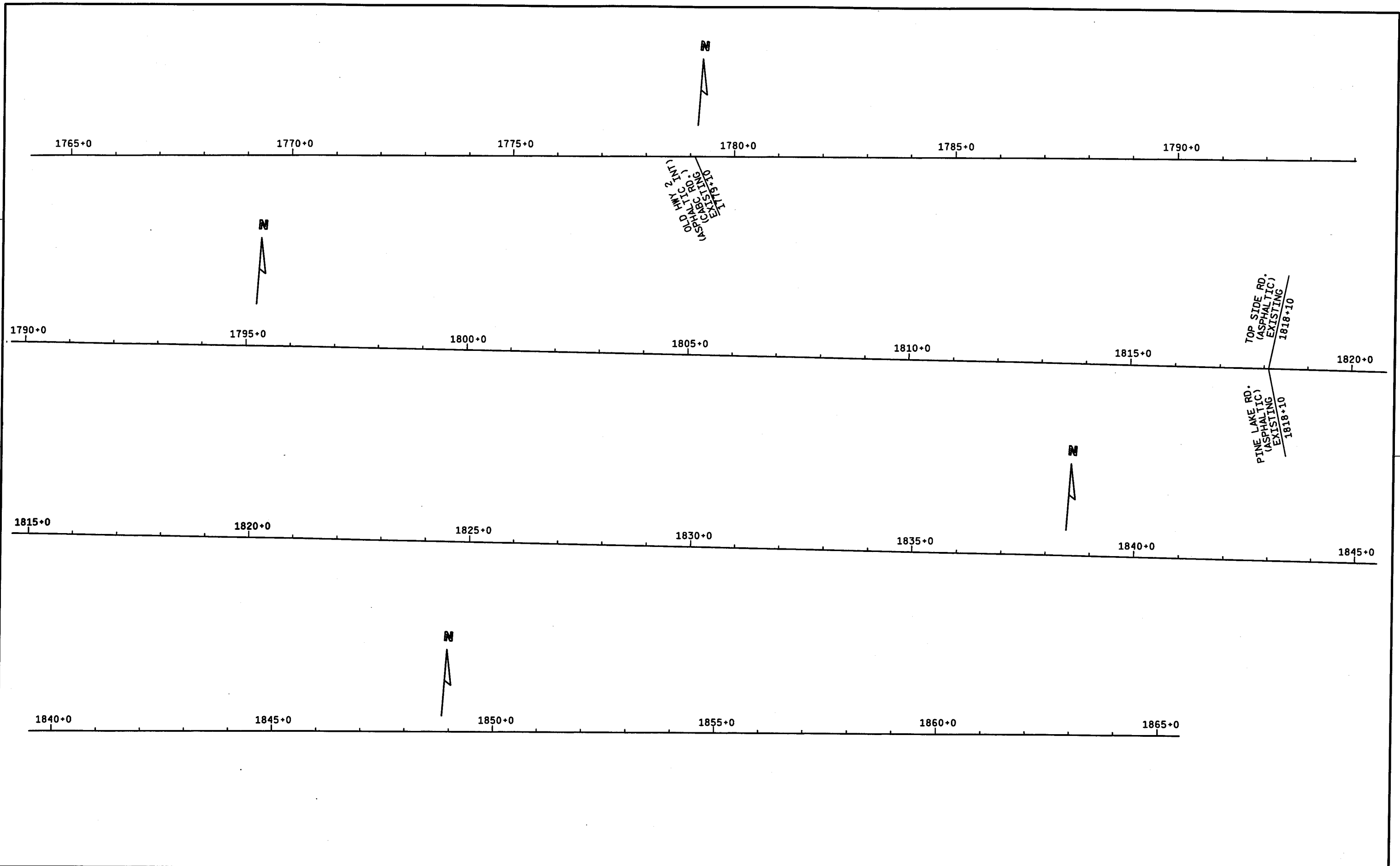
WISDOT/CADDs SHEET 42

LEVELS ON - 1,2,3, 5, 7,8,9,10,11,12,13, 15,16,17, 19,20, 22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

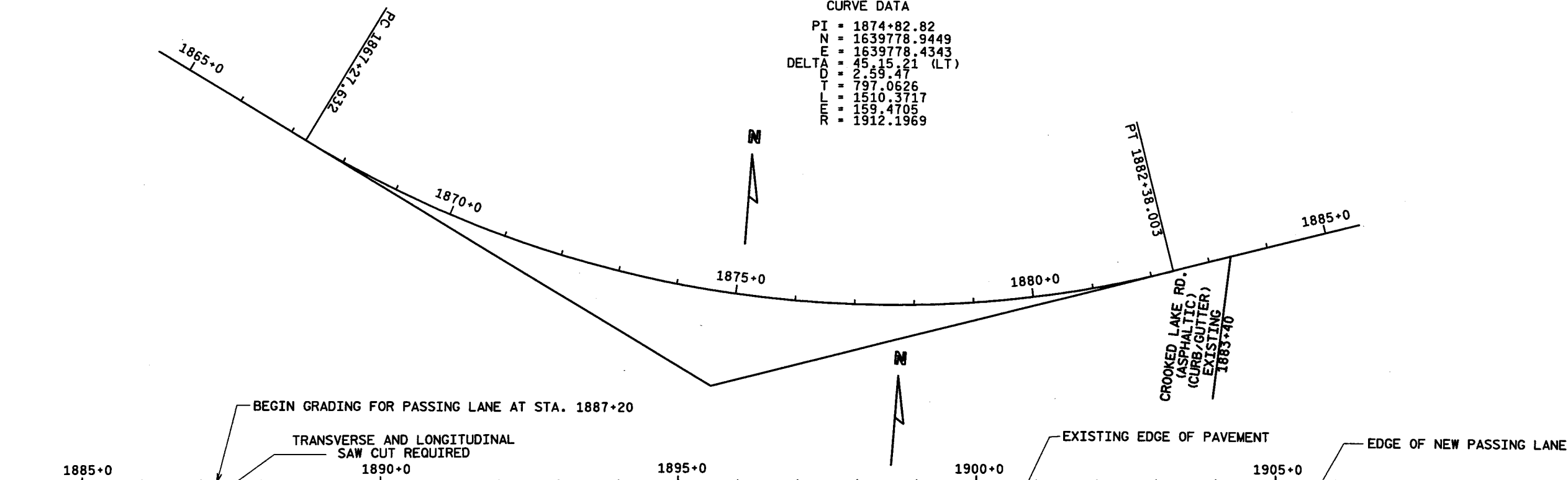


CURVE DATA
PI = 1756+03.23
N = 512748.8140
E = 1629517.1057
DELTA = 30.09.50 (RT)
D = 1.59.29
T = 775.3707
L = 1514.7581
E = 102.7581
R = 2877.2575

LEVELS ON - 1,2,3, 5, 7,8,9,10,11,12,13, 15,16,17, 19,20, 22,23,24,25,26,27, 28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



CURVE DATA
 PI = 1874+82.82
 N = 1639778.9449
 E = 1639778.4343
 DELTA = 45° 15' 21" (LT)
 DT = 2.59.47
 T = 797.0626
 L = 1510.3717
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 R = 1912.1969



BEGIN GRADING FOR PASSING LANE AT STA. 1887+20

TRANSVERSE AND LONGITUDINAL
 SAW CUT REQUIRED

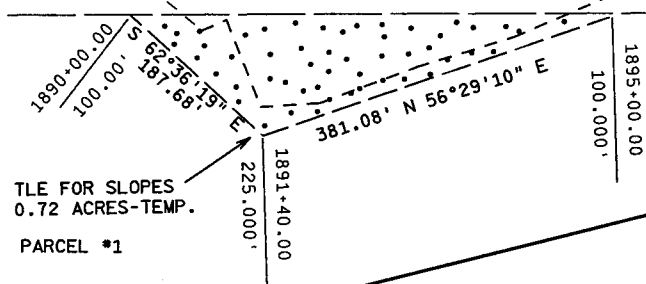
EXISTING EDGE OF PAVEMENT

EDGE OF NEW PASSING LANE

SLOPE INTERCEPTS

100' EXISTING EASEMENT

STATION 1889+50 RIGHT TRAIL GATE TO BE
 REMOVED AND RELOCATED.



TRANSVERSE AND LONGITUDINAL
 SAW CUT REQUIRED
 END GRADING FOR PASSING LANE AT STA. 1911+43

COURSE TABLE

COURSE	DISTANCE	BEARING
PRW44 PRW45	101.98'	N 86° 56' 39" E
PRW45 PRW46	298.87'	N 75° 39' 27" E
PRW46 PRW47	98.20'	N 65° 25' 36" E

COURSE	RADIUS	ARC LENGTH	LONG CHORD	LC BEARING	CENTRAL ANGLE
PRW47 ERW181	2764.79'	122.35'	122.34'	S. 76° 54' 27" W.	2° 32' 08"

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	OWNER	ACRES	NEW R/W	EXISTING R/W	TOTAL ACRES	ACRES REMAINING	TLE ACRES
1	CHEQUAMEGON NATIONAL FOREST		0	0	0		0.89

TLE FOR SLOPES
 0.17 ACRES-TEMP.

PARCEL #1

EXISTING EDGE OF PAVEMENT

STATE PROJECT NUMBER: 1180-32-71

HWY: USH 2

COUNTY: BAYFIELD

IRON RIVER - INO

PLAN SHEET

SCALE, FEET

SHEET NO: 5.4

E

FILE NAME: x:\PROJECTS\11803200\dgn\plan.dgn

PLOT DATE: 29-JUN-2001 11:10

ORG DATE:

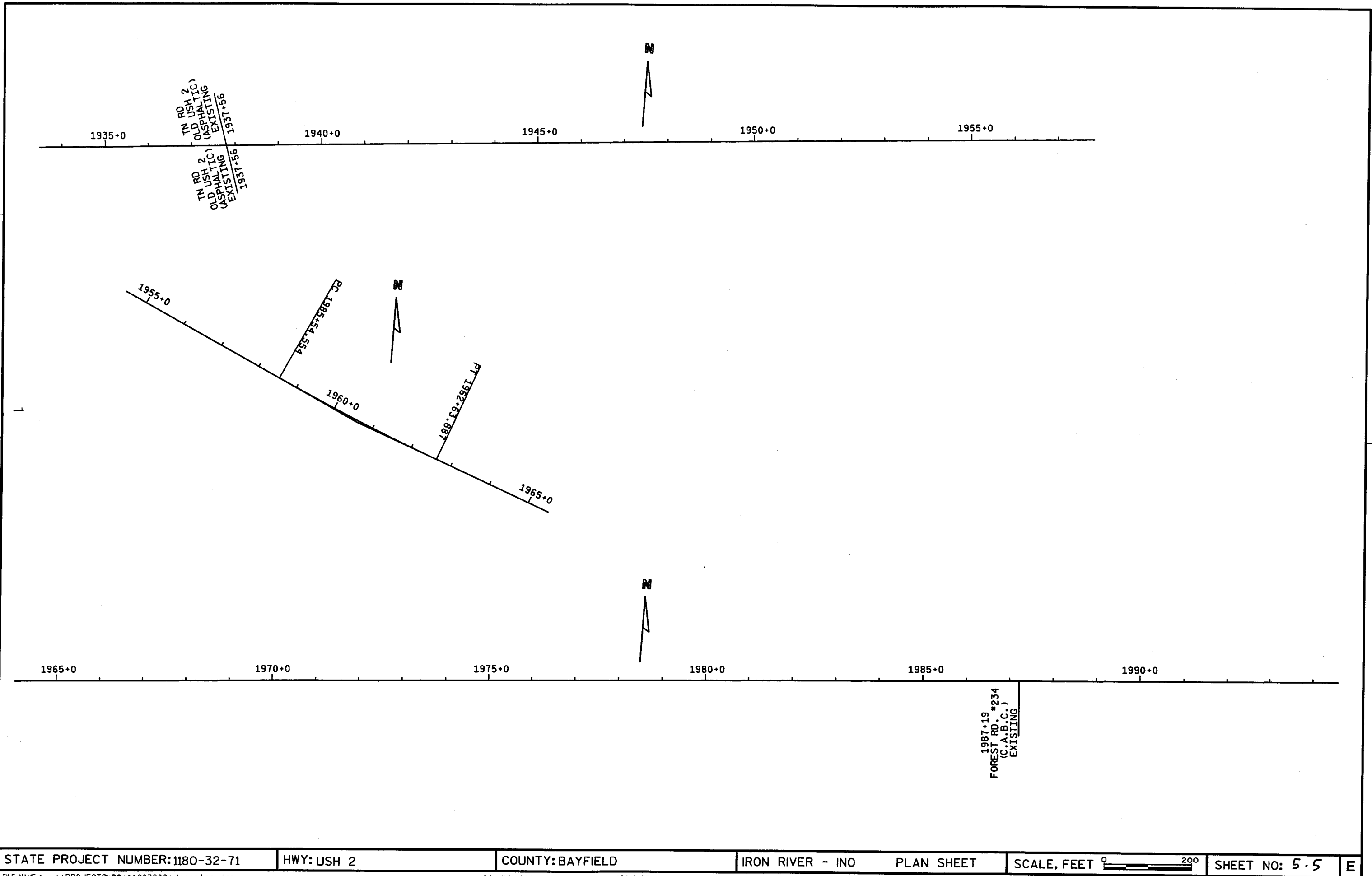
PLOT NAME:

Originator: Dist

PLOT SCALE: 200.000000:1.000000

WISDOT/CADDS SHEET 42

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STATE PROJECT NUMBER: 1180-32-71

HWY: USH 2

COUNTY: BAYFIELD

IRON RIVER - INO

PLAN SHEET

SCALE, FEET 0 200

SHEET NO: 5-5

E

FILE NAME : x:\PROJECTS\1180-32-71\11803200\dgn\plan.dgn

PLOT DATE: 29-JUN-2001 11:12

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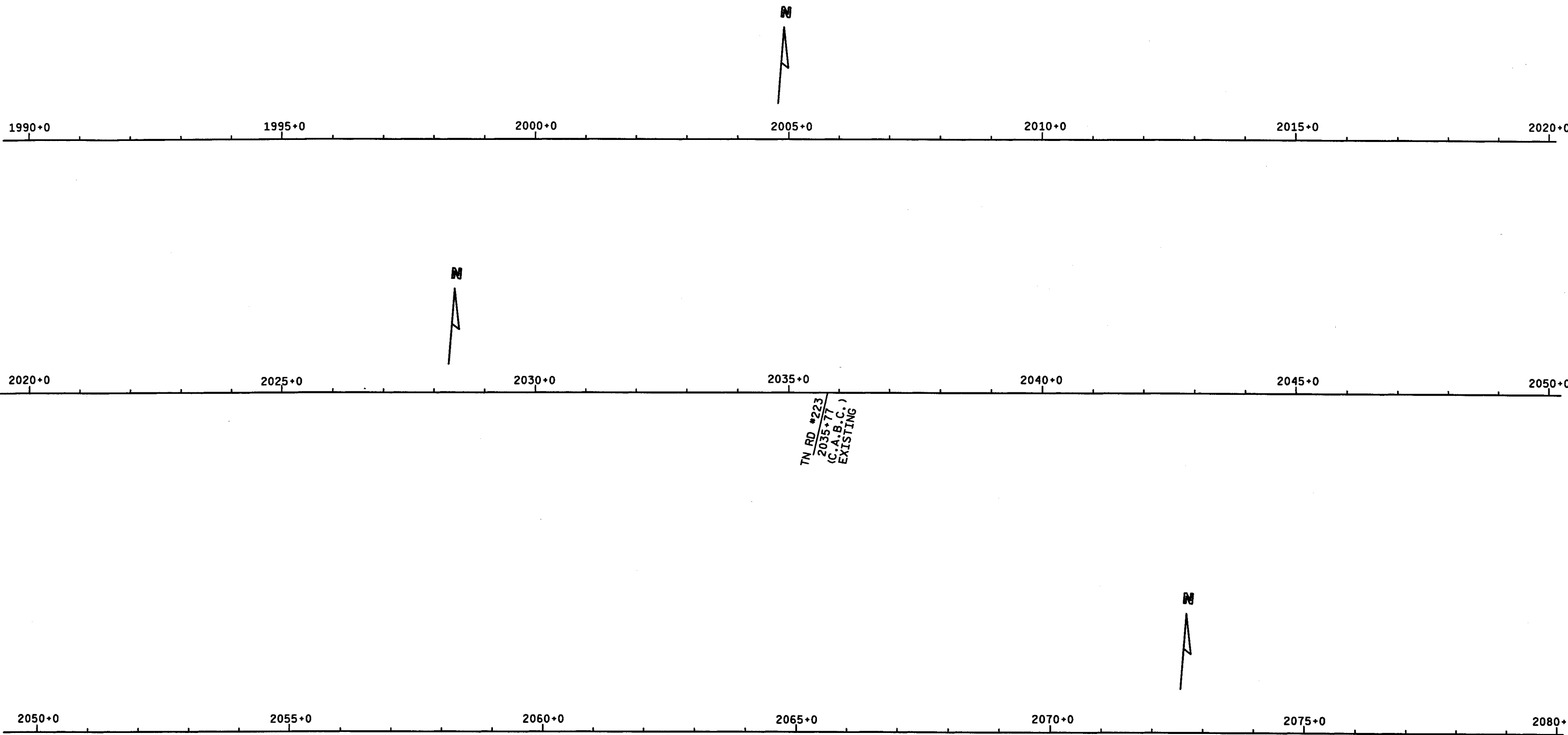
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Originator : Dist

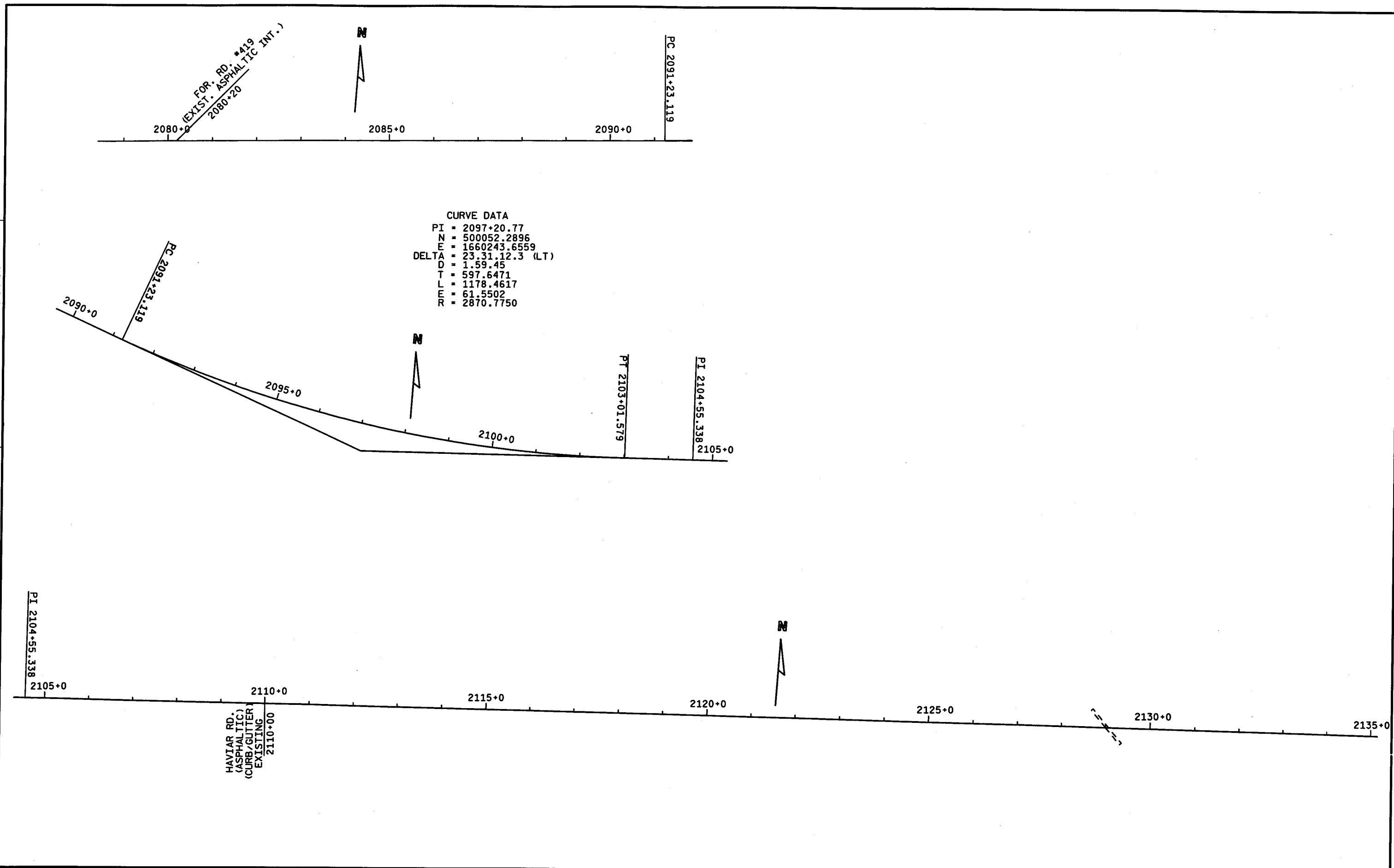
PLOT SCALE : 200.000000:1.000000

WISDOT/CADDs SHEET 42

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LEVELS ON - 1,2,3, 5, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 19, 20, 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, 61, 62, 63



STATE PROJECT NUMBER: 1180-31-71

HWY: USH 2

COUNTY: BAYFIELD

IRON RIVER - INO

PLAN SHEET

SCALE, FEET 0 200

SHEET NO: 5.7

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PLOT DATE: 29-JUN-2001 11:15

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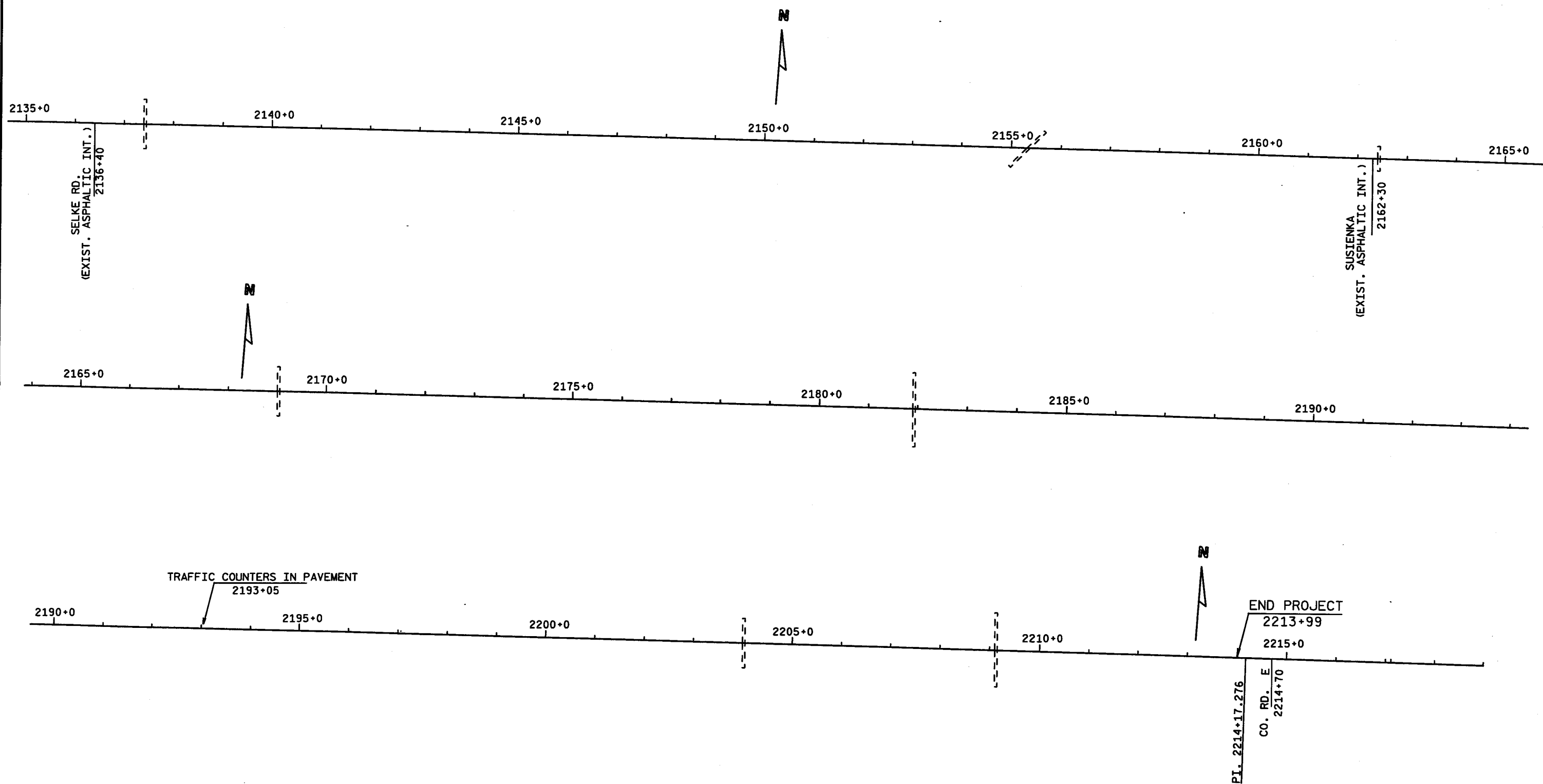
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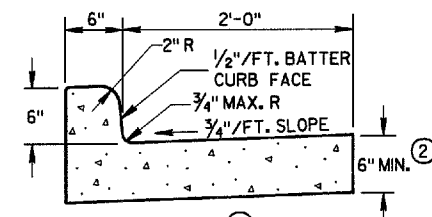
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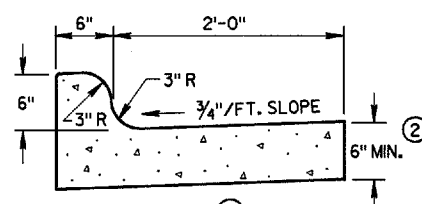
WISDOT/CADDS SHEET 42

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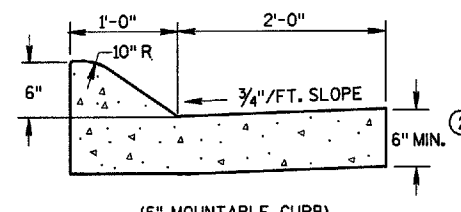




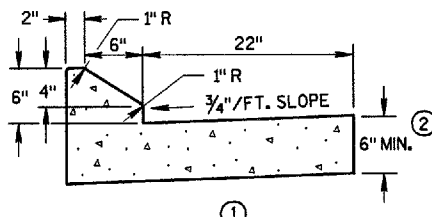
TYPES A & D



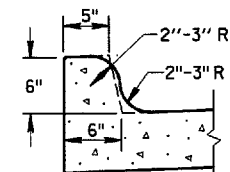
TYPES K & L



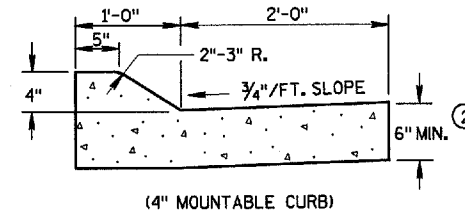
(6" MOUNTABLE CURB)



TYPES G & J



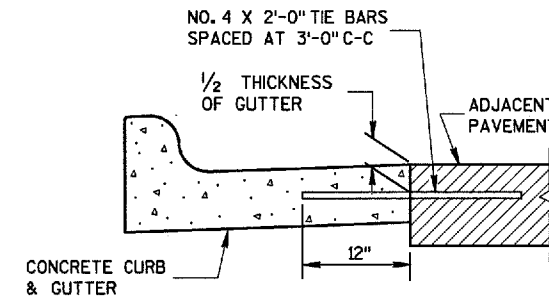
OPTIONAL CURB SHAPE
FOR TYPES K & L



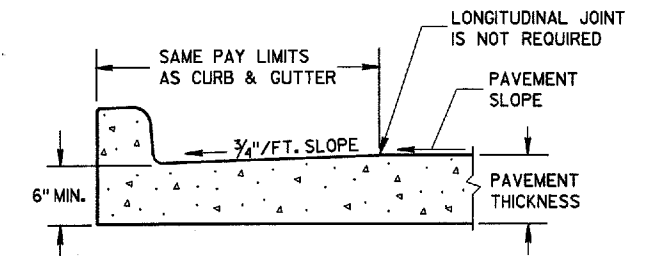
TYPES A & D

CONCRETE CURB & GUTTER 36"

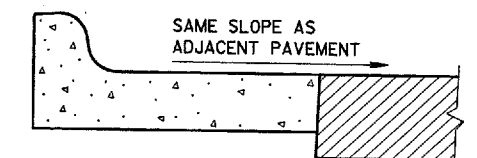
CONCRETE CURB & GUTTER 30"



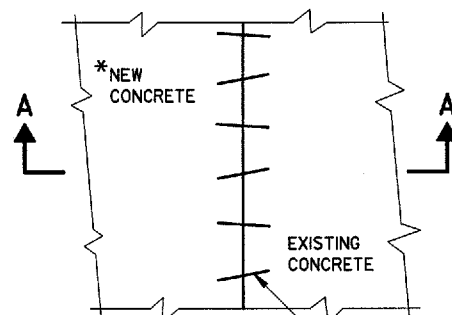
TYPICAL TIE BAR LOCATION



PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER

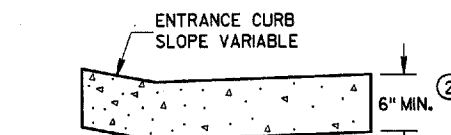


REVERSE SLOPE GUTTER
(TYPICAL FOR ALL CURB & GUTTER TYPES)

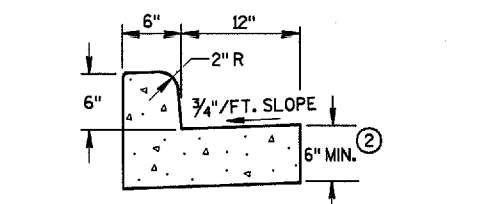


PLAN VIEW

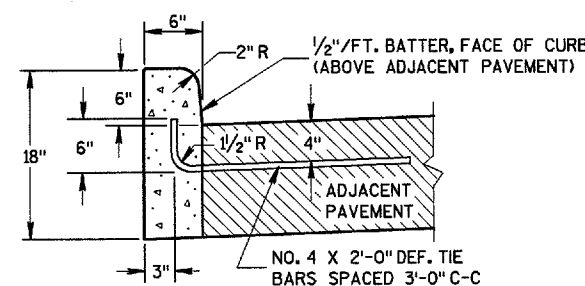
*NEW CURB & GUTTER,
SURFACE DRAINS,
CONCRETE PAVEMENT
OR OTHER NEW CONCRETE.



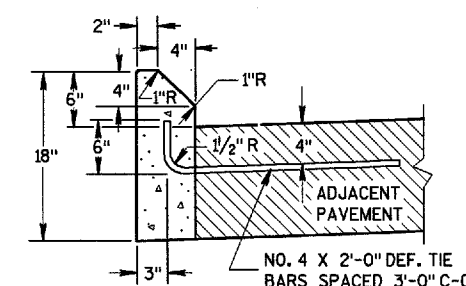
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



TYPES A & D
CONCRETE CURB & GUTTER 18"

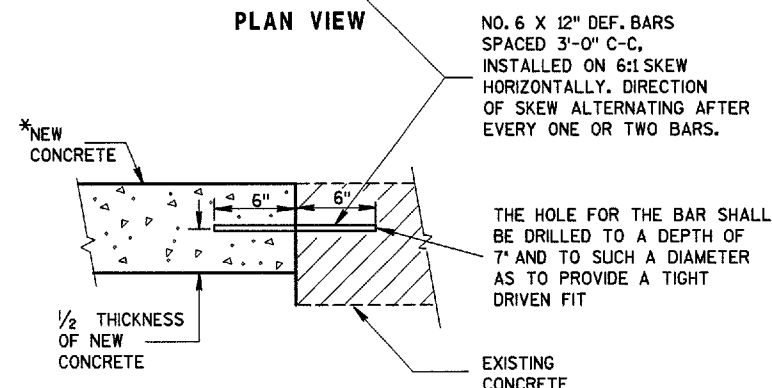


TYPES A & D



TYPES G & J

CONCRETE CURB



SECTION A-A
PAVEMENT TIES

NO. 6 X 12" DEF. BARS
SPACED 3'-0" C-C,
INSTALLED ON 6:1 SKEW
HORIZONTALLY. DIRECTION
OF SKEW ALTERNATING AFTER
EVERY ONE OR TWO BARS.

THE HOLE FOR THE BAR SHALL
BE DRILLED TO A DEPTH OF
7" AND TO SUCH A DIAMETER
AS TO PROVIDE A TIGHT
DRIVEN FIT

EXISTING
CONCRETE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

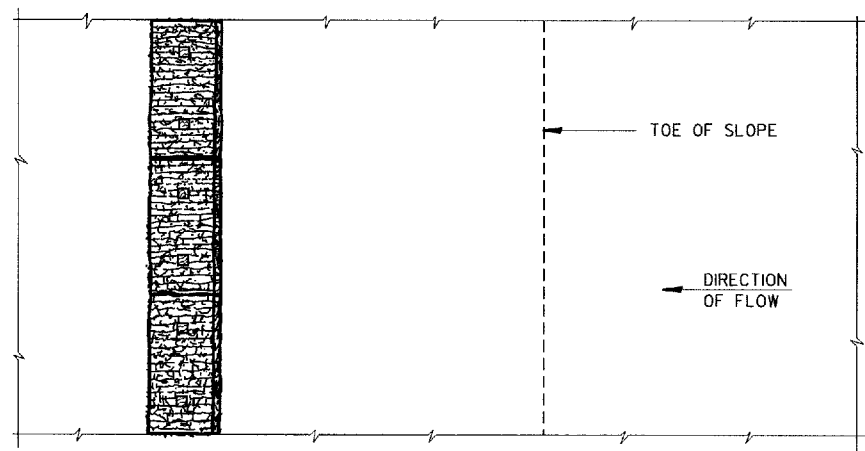
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G AND K.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

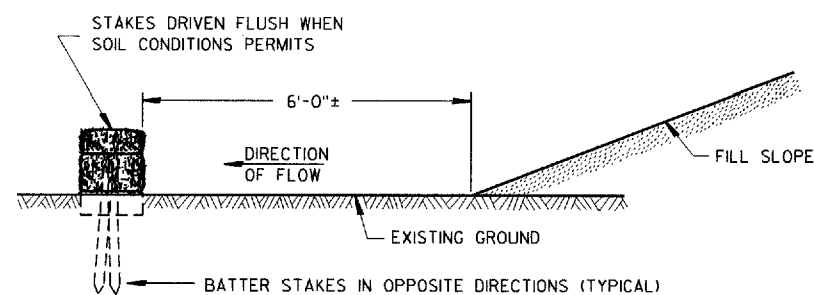
CONCRETE CURB, CONCRETE
CURB & GUTTER AND
PAVEMENT TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
04/14/99
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



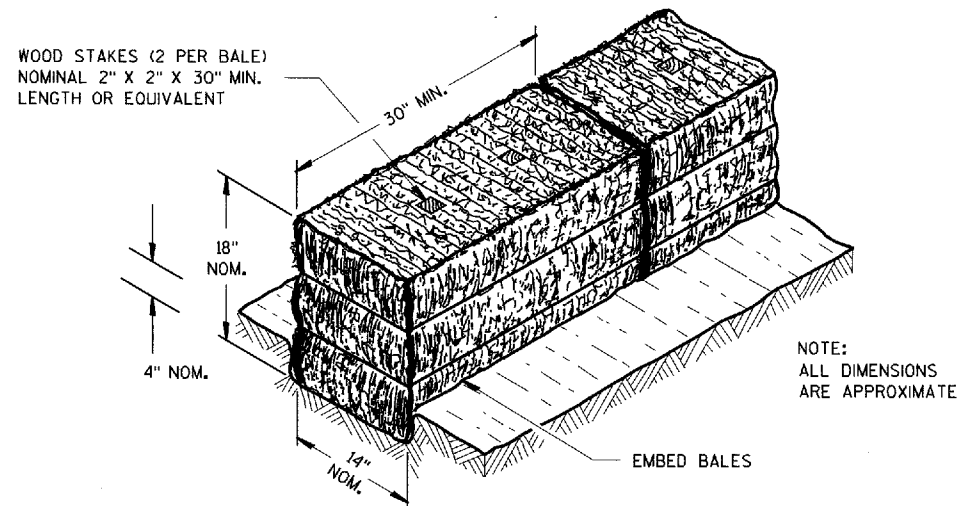
PLAN VIEW



FRONT ELEVATION

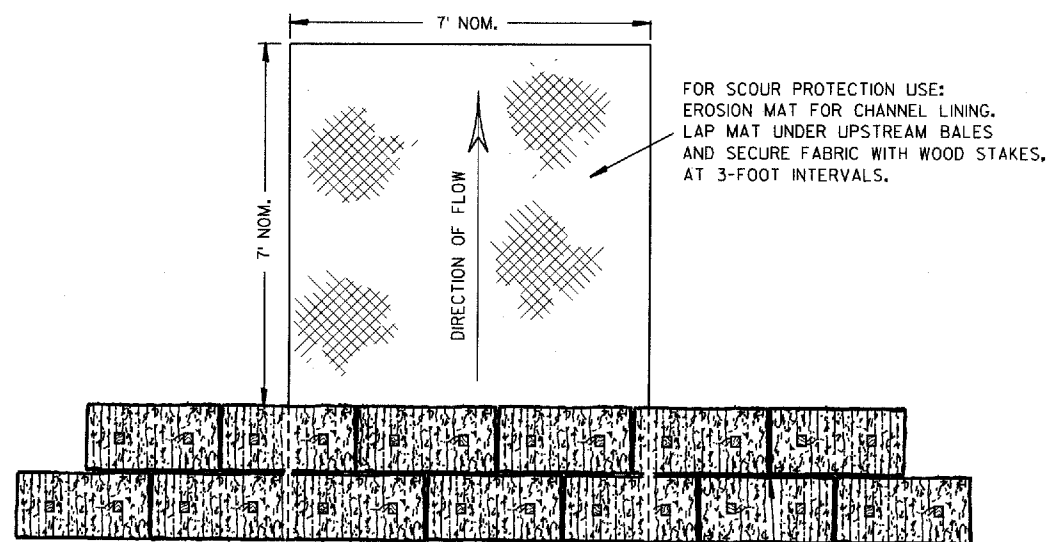
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW



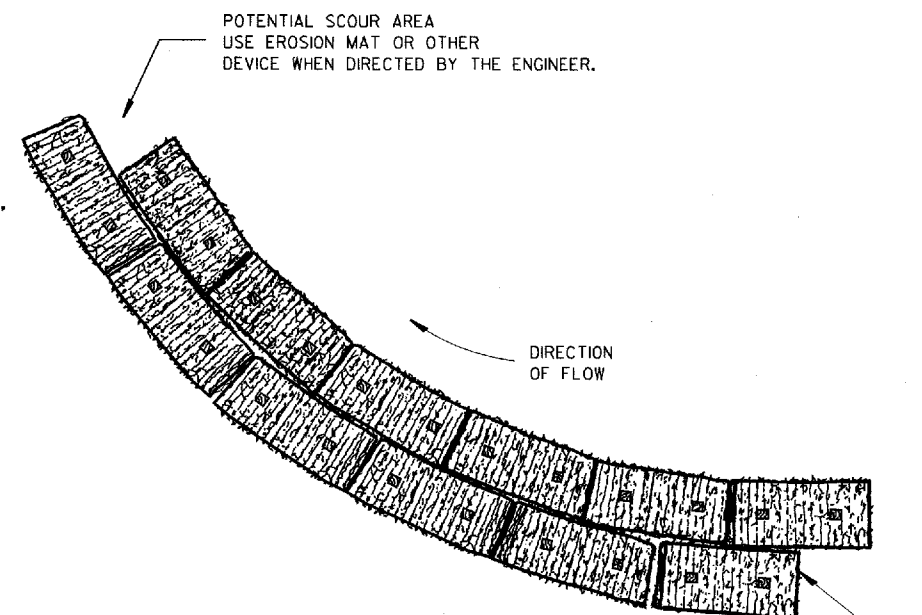
GENERAL NOTES

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.



PLAN VIEW

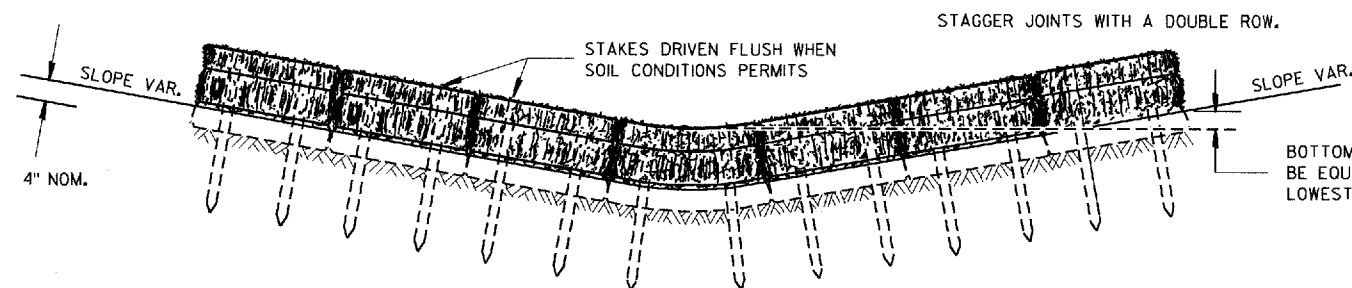
STAGGER JOINTS BETWEEN ADJACENT ROWS OF BALES.



PLAN VIEW

END TREATMENT ON SLOPES TO BE SIMILAR TO CHANNEL FLOW DETAIL.

EROSION BALES WHEN ALTERING THE DIRECTION OF FLOW



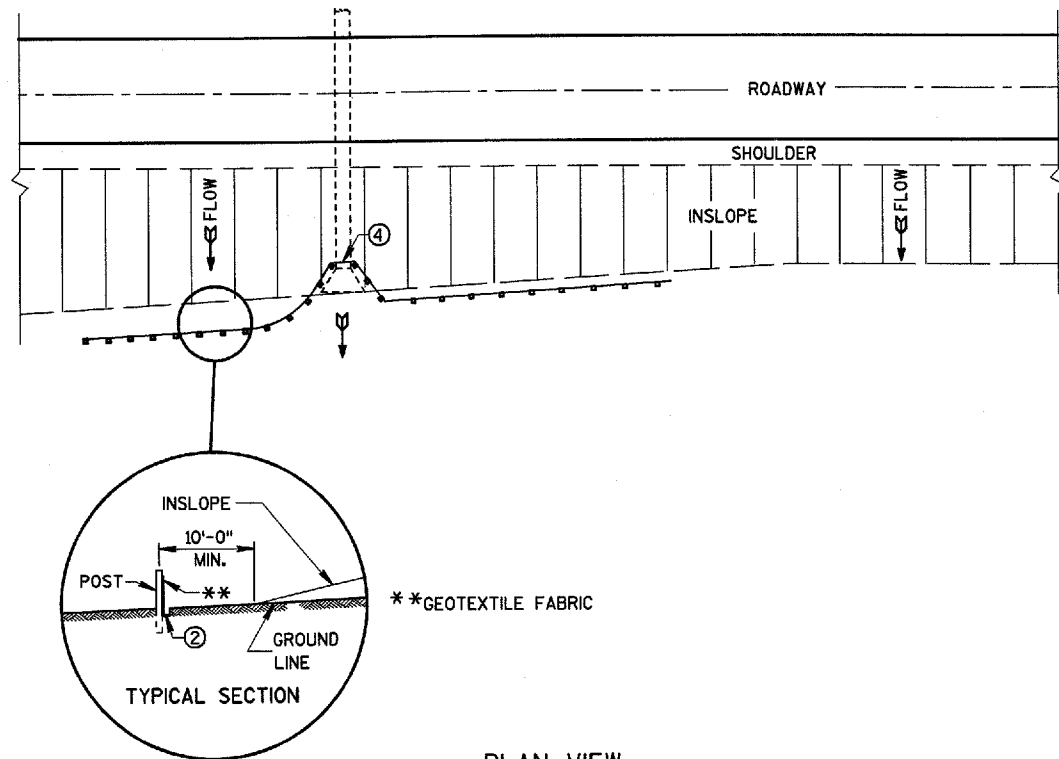
FRONT ELEVATION

EROSION BALES FOR CHANNEL FLOW

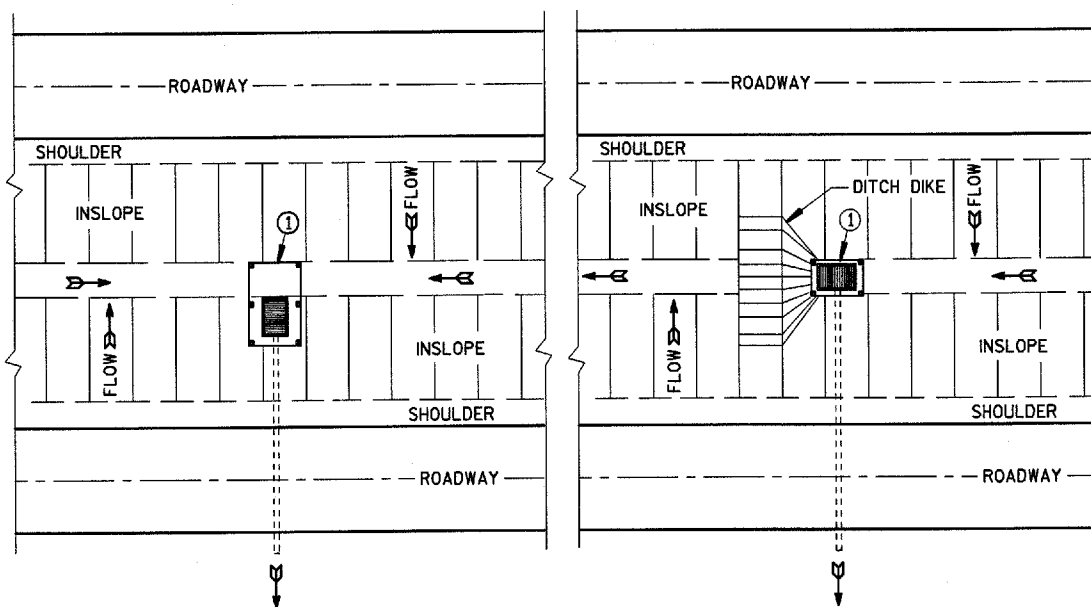
TYPICAL INSTALLATIONS OF EROSION BALES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE 6/29/94
DATE
FHW
CHIEF ROADWAY DEVELOPMENT ENGINEER



PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE

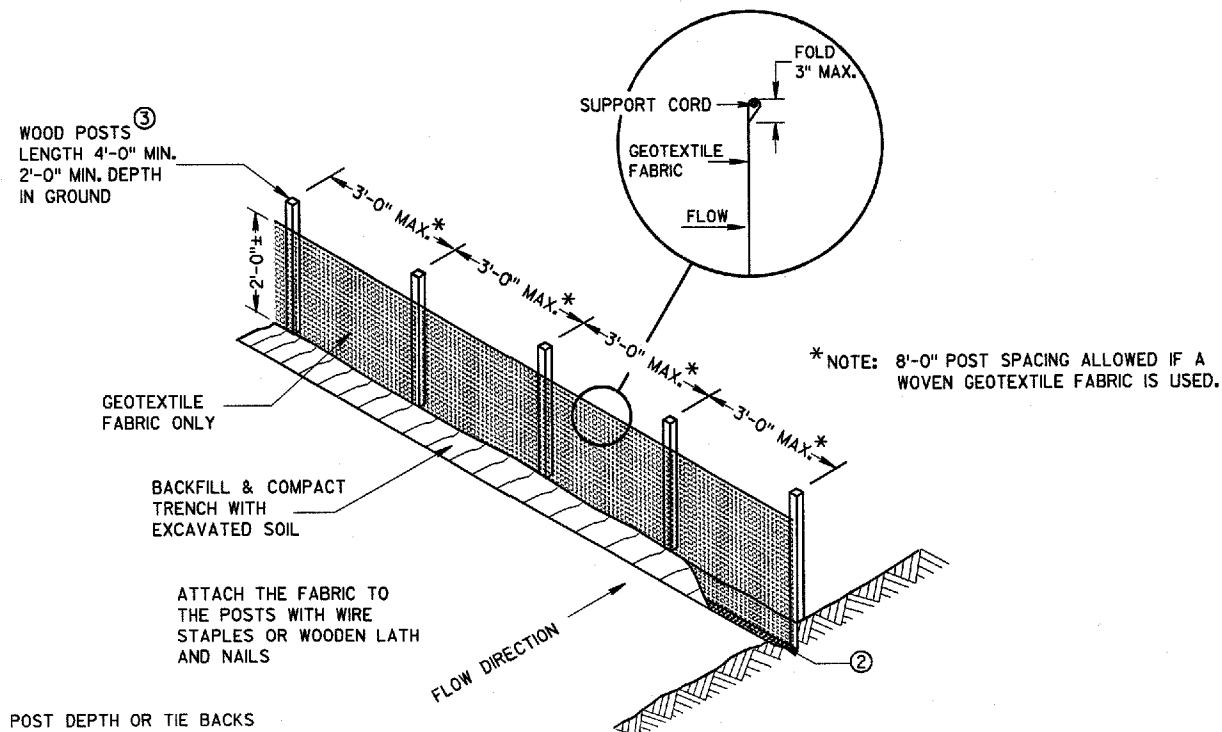


SITUATION 1
SITUATION 2
PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

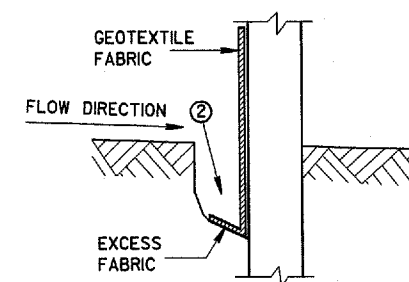
GENERAL NOTES

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

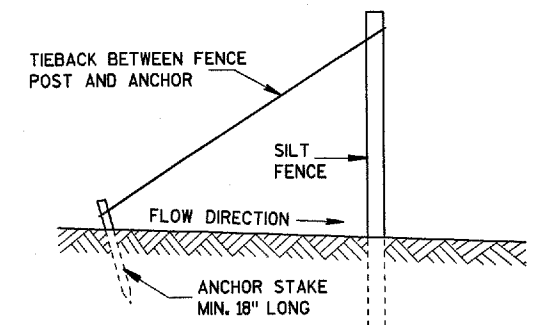
- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.



SILT FENCE



TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

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

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
03/06/00
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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.

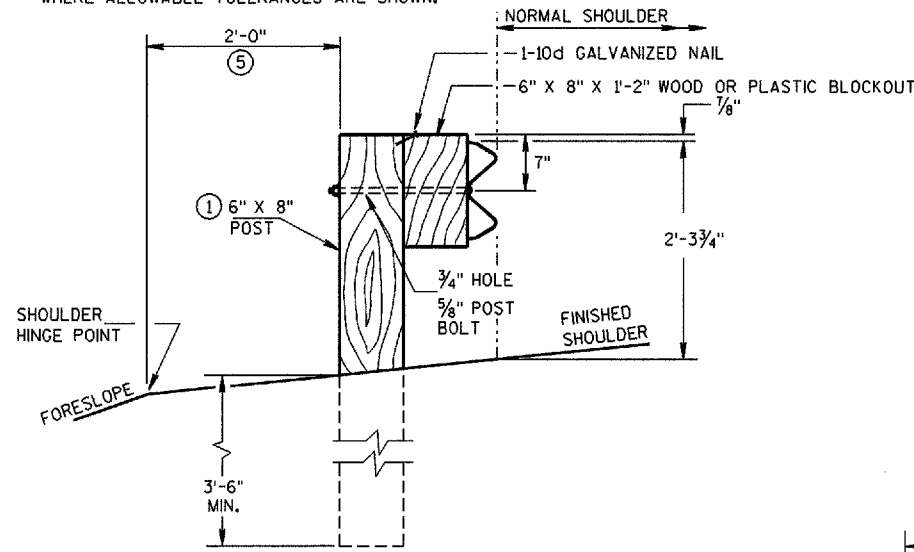
- ① W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.
- ② USE STRUCTURAL STEEL POSTS CONFORMING TO AASHTO M183. GALVANIZE ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPALTER COATING ON GALVANIZED POSTS.
- ③ INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ④ USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.
- ⑤ WHEN SPECIFIED IN THE PLANS, THE 2-FOOT MINIMUM TO HINGE POINT MAY BE REDUCED OR ELIMINATED IF EXISTING CONDITIONS DO NOT PERMIT THE DESIRABLE EARTHWORK.

INCREASE POST LENGTH TO PROVIDE A MINIMUM EMBEDMENT OF 3'-6" IF THE SHOULDER HINGE POINT IS LOCATED IN FRONT OF THE POST.

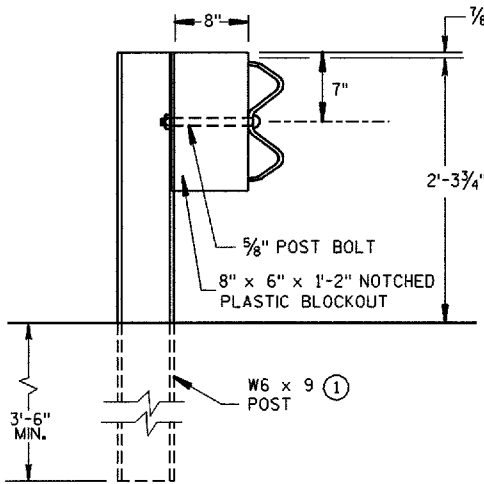
- ⑥ IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2 INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN THE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATELY.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.

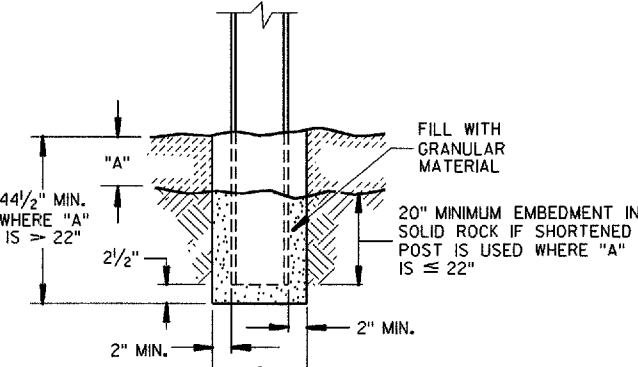
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



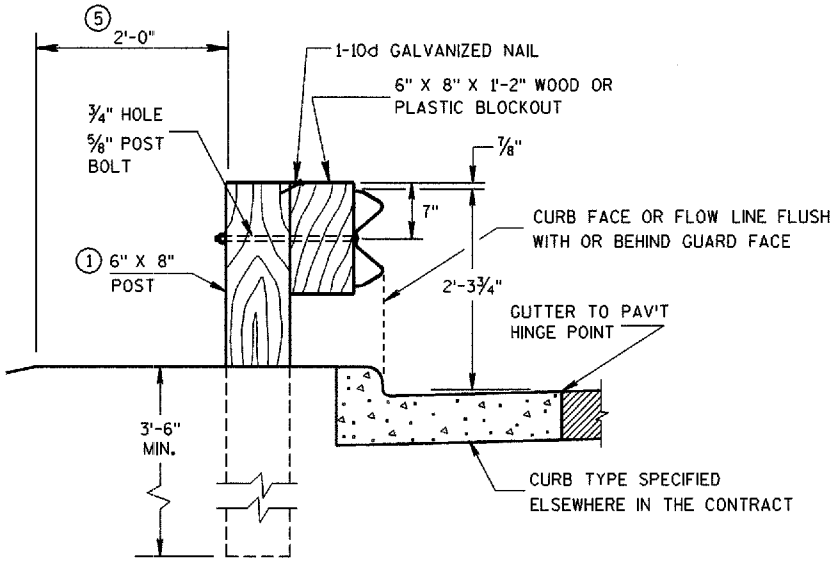
**END VIEW
LOCATED ALONG A ROADWAY SHOULDER**



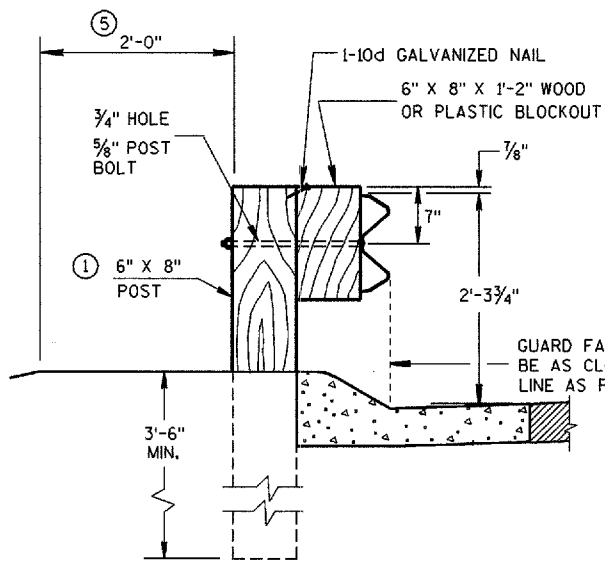
**END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE**



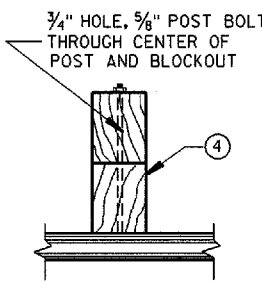
**END VIEW
SETTING STEEL OR WOOD POST IN ROCK ⑥**



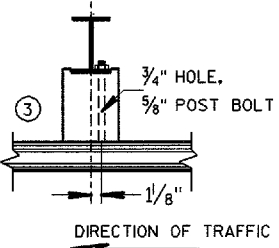
**END VIEW
LOCATED ALONG A CURBED ROADWAY**



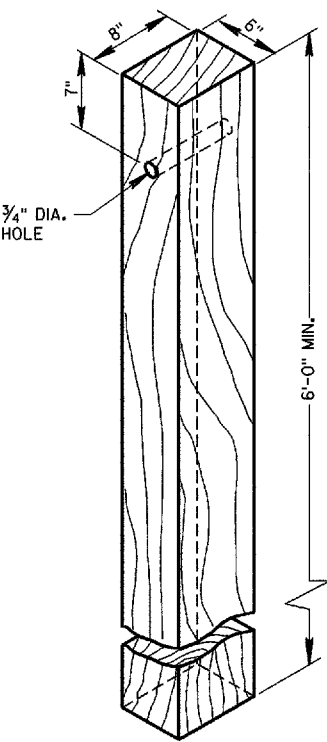
**END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY**



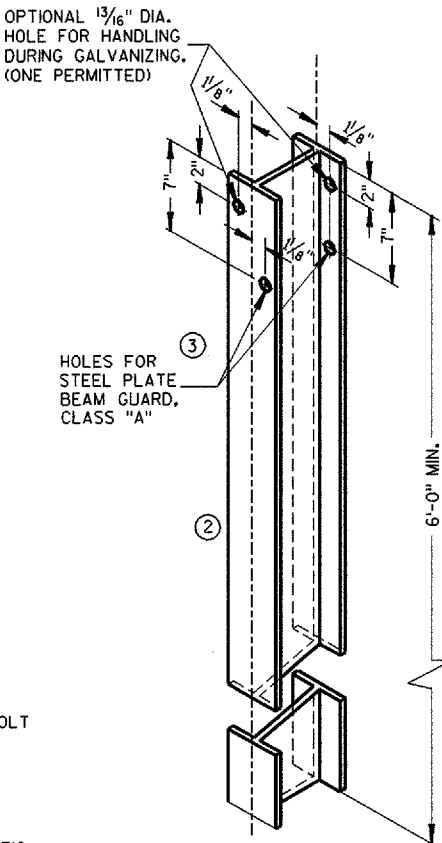
**PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM**



**PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM**

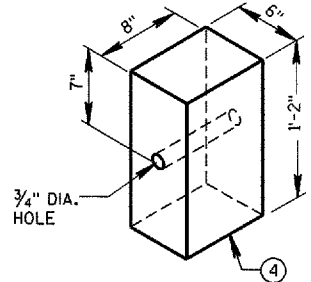


**WOOD POST
(6"X8") NOMINAL**

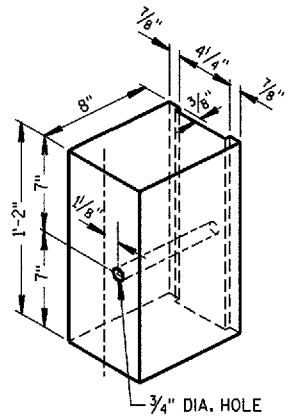


**STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) ①**

ALL HOLES 1 3/16" DIAMETER EXCEPT AS NOTED



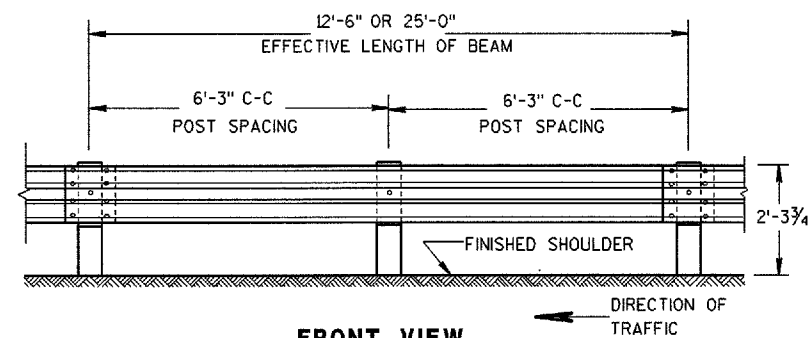
**WOOD OR PLASTIC
BLOCKOUT FOR WOOD POSTS**



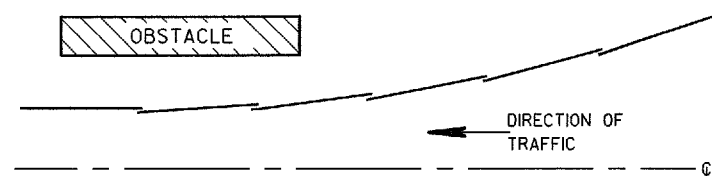
**NOTCHED PLASTIC BLOCKOUT
FOR STEEL POSTS**

STEEL PLATE BEAM GUARD, CLASS 'A' INSTALLATION & ELEMENTS
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

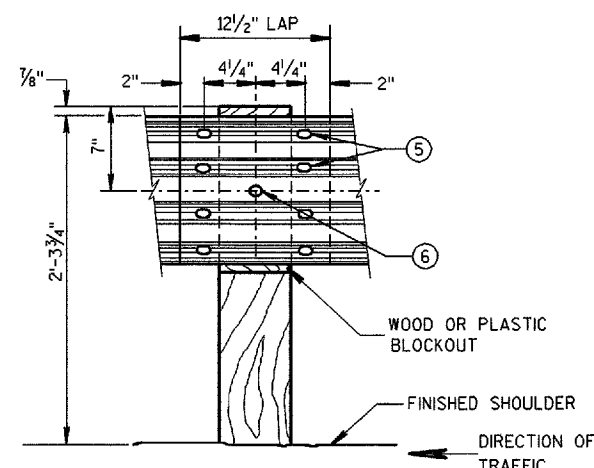
TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD



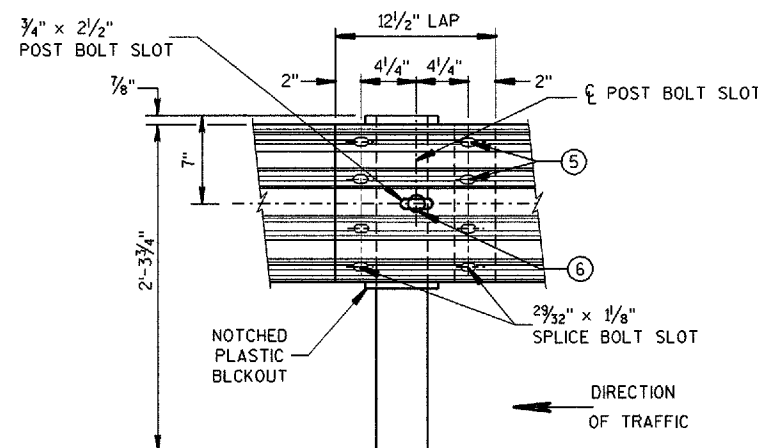
FRONT VIEW



PLAN VIEW
BEAM LAPPING DETAIL



FRONT VIEW
BEAM SPLICE AT WOOD POST
AND POST MOUNTING DETAIL

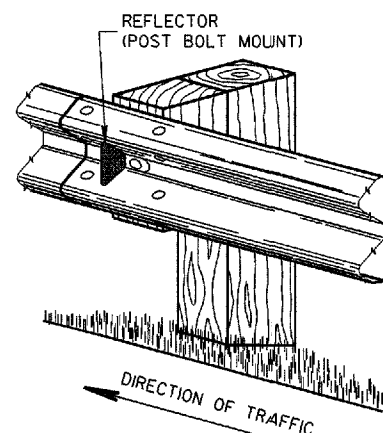


FRONT VIEW
BEAM SPLICE AT STEEL POST

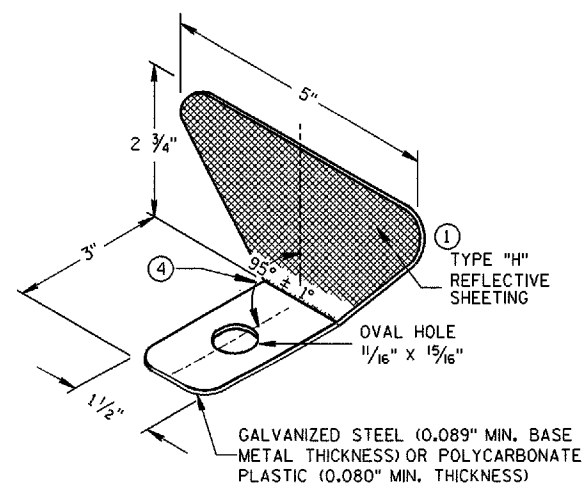
TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

REFLECTOR SPACING^②

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 ③	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2 ④	3
	> 200'	100' C-C	2	

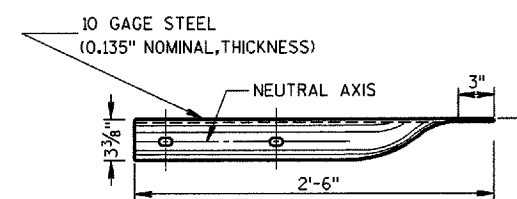


ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION^①

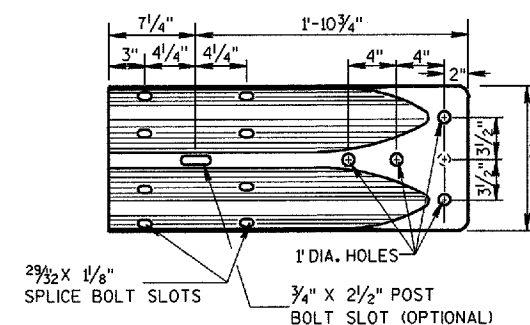


GENERAL NOTES

- ① PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
- ② DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
- ③ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
- ④ PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
- ⑤ 8 - 5/8" ϕ X 1 1/4" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
- ⑥ 5/8" ϕ X 1'-6" BUTTON HEAD BOLT AND AND RECESS NUT WITH ROUND WASHER UNDER NUT.



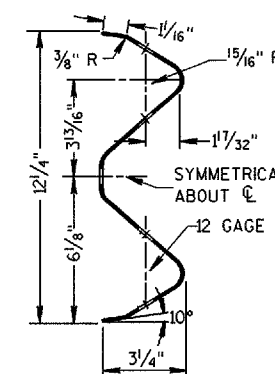
PLAN VIEW



FRONT VIEW

W BEAM TERMINAL CONNECTOR

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

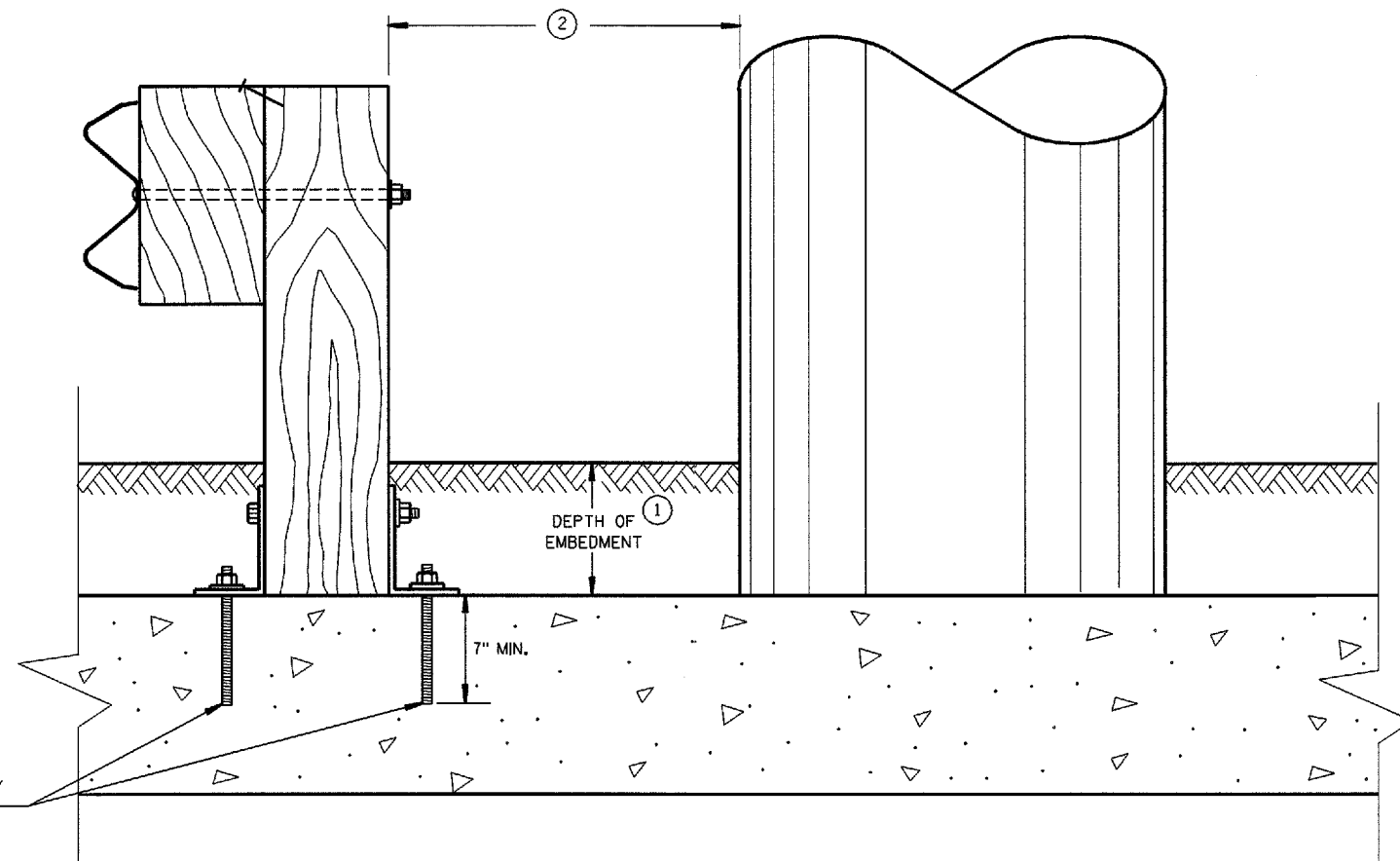


SECTION THRU W BEAM

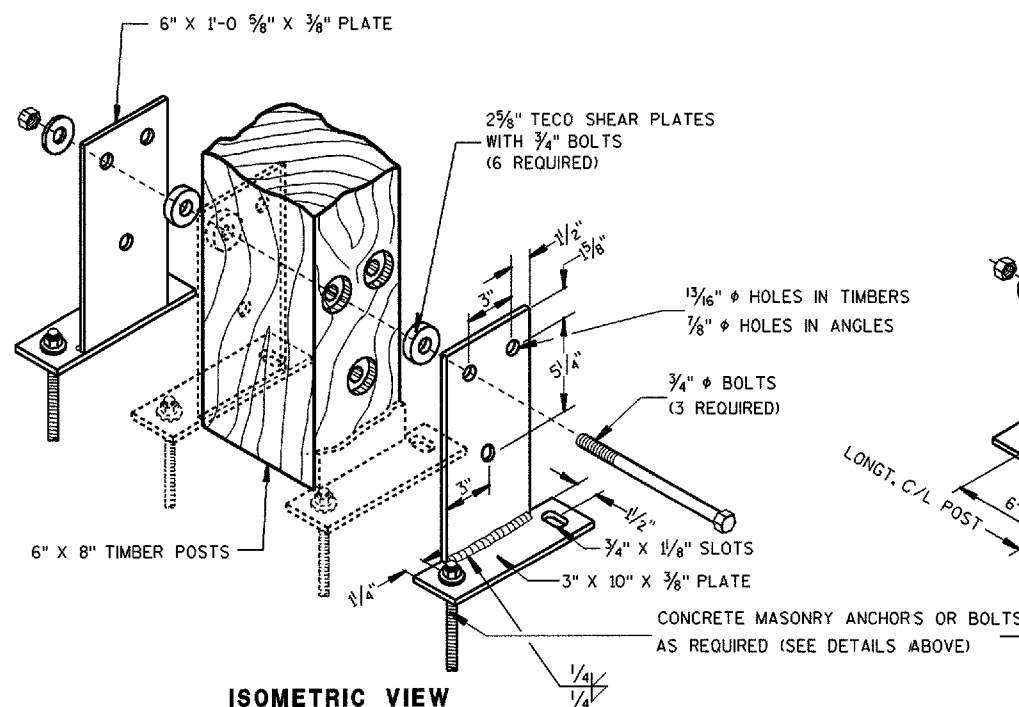
STEEL PLATE BEAM GUARD,
CLASS 'A',
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

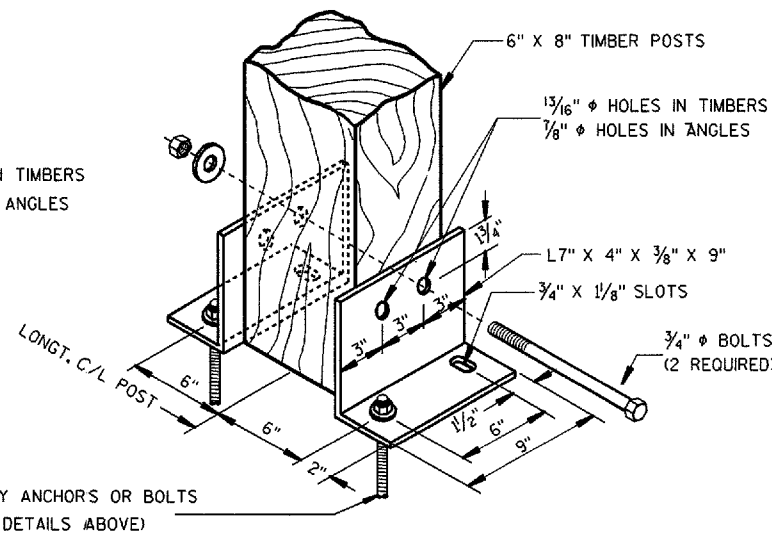
APPROVED
12/08/00
DATE
John Haverberg
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



BEAM GUARD MOUNTED ON PIER FOOTINGS



**ISOMETRIC VIEW
TIMBER GUARD
RAIL POST ANCHORS, TYPE 1**
(POSTS EMBEDDED 2'-0" OR LESS)



**ISOMETRIC VIEW
TIMBER GUARD
RAIL POST ANCHORS, TYPE 2**
(POSTS EMBEDDED OVER 2'-0" BUT LESS THAN 3'-6")

POST MOUNTING DETAILS

GENERAL NOTES

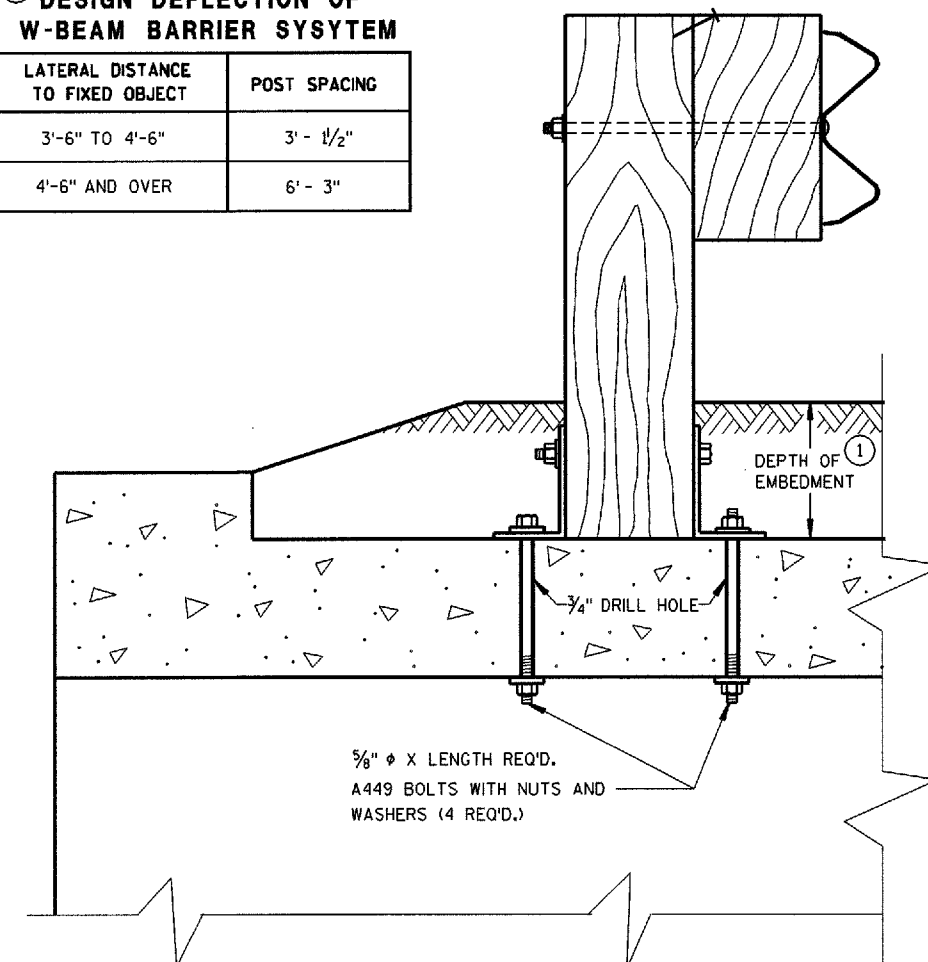
CONCRETE MASONRY ANCHORS SHALL BE CERTIFIED TO PROVIDE A MINIMUM PULLOUT STRENGTH OF 16,000 LBS.

INCLUDE PAYMENTS FOR MISCELLANEOUS HARDWARE WITH THE ITEM STEEL PLATE BEAM GUARD, CLASS "A".

① USE WHEN EMBANKMENT DEPTH IS 3'-6" OR LESS.

**② DESIGN DEFLECTION OF
W-BEAM BARRIER SYSTEM**

LATERAL DISTANCE TO FIXED OBJECT	POST SPACING
3'-6" TO 4'-6"	3' - 1/2"
4'-6" AND OVER	6' - 3"

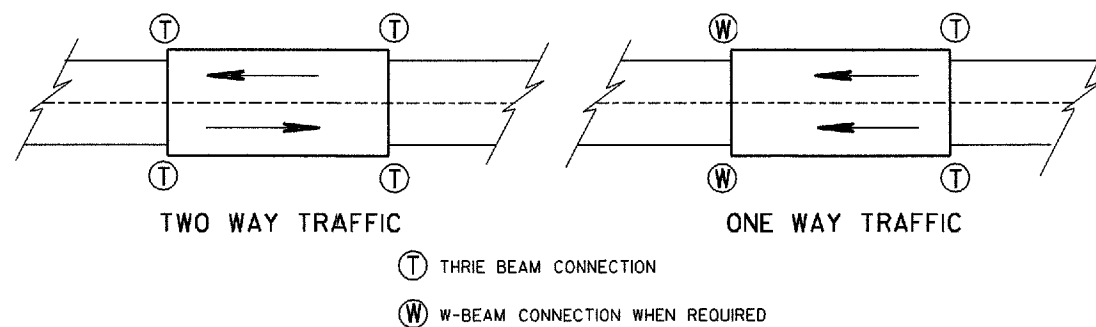
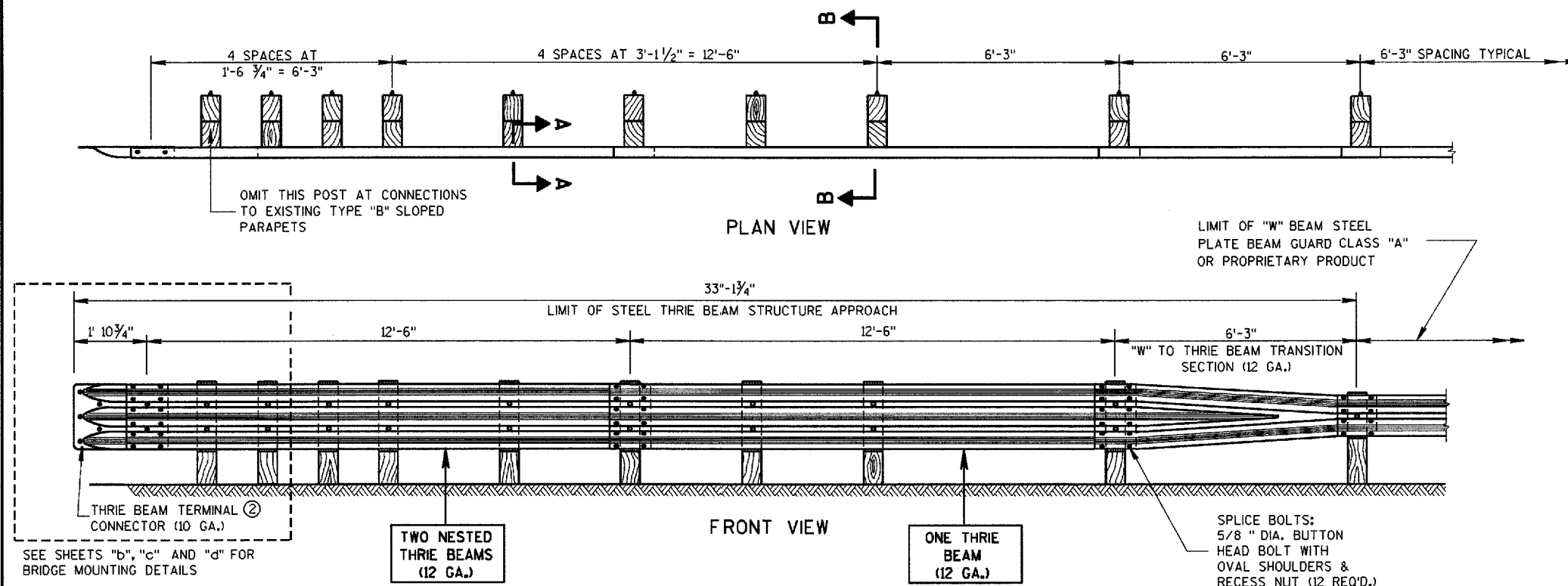


**BEAM GUARD MOUNTED ON
EXISTING BOX CULVERTS**

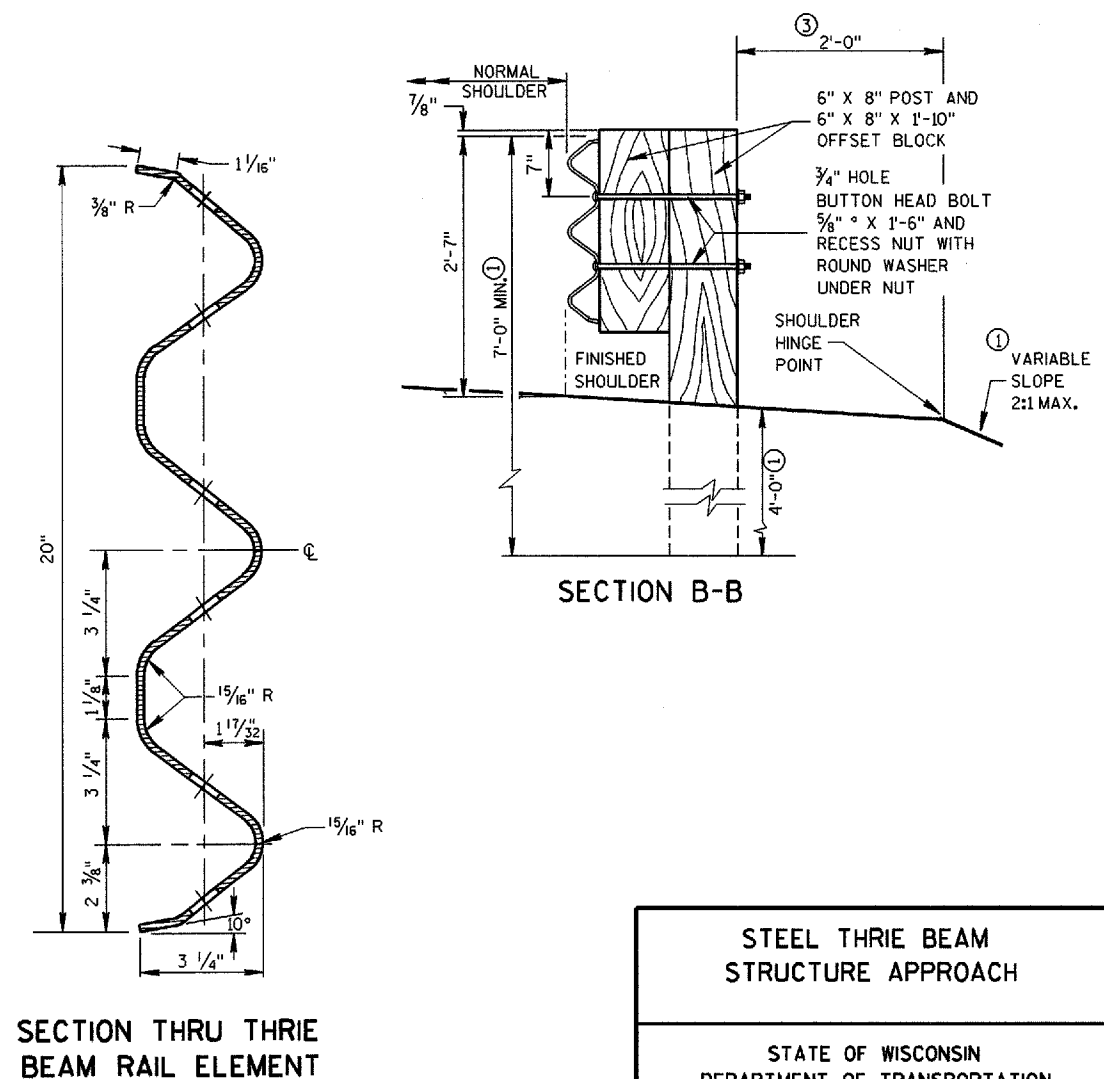
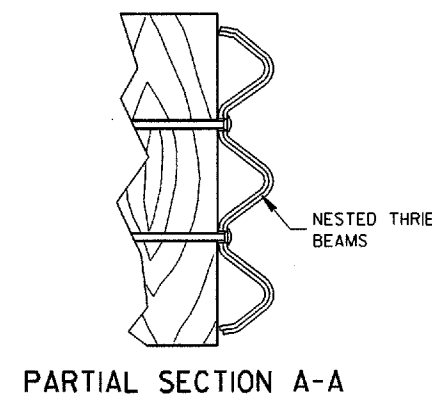
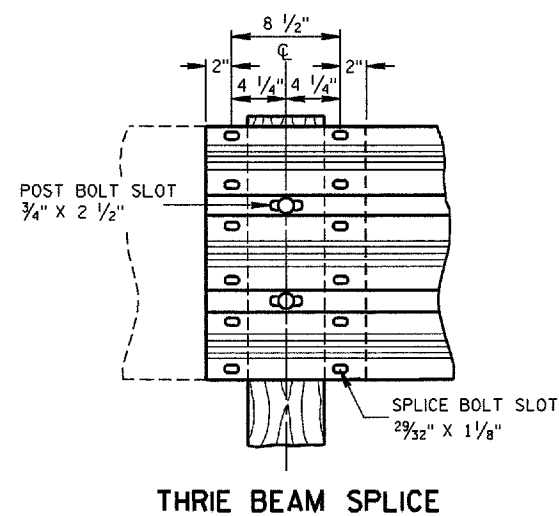
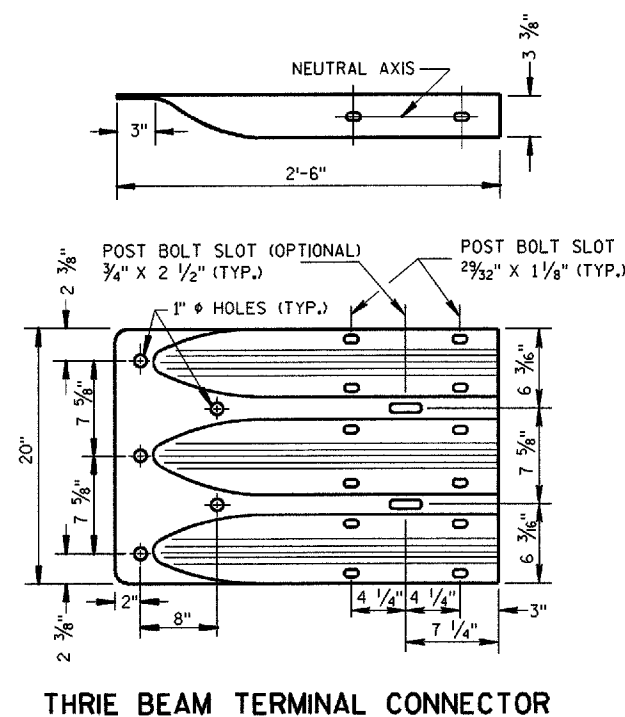
**STEEL PLATE BEAM GUARD,
CLASS "A",
POST MOUNTING ON PIER
FOOTINGS AND CULVERTS**

**STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION**

APPROVED
12/08/00
DATE
John Hansen
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE



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.

FURNISH AND CONSTRUCT THRIE BEAM STRUCTURAL APPROACH ACCORDING TO THE REQUIREMENTS OF SECTION 614 OF THE STANDARD SPECIFICATIONS. THRIE BEAM SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M180, CLASS "A", TYPE 2.

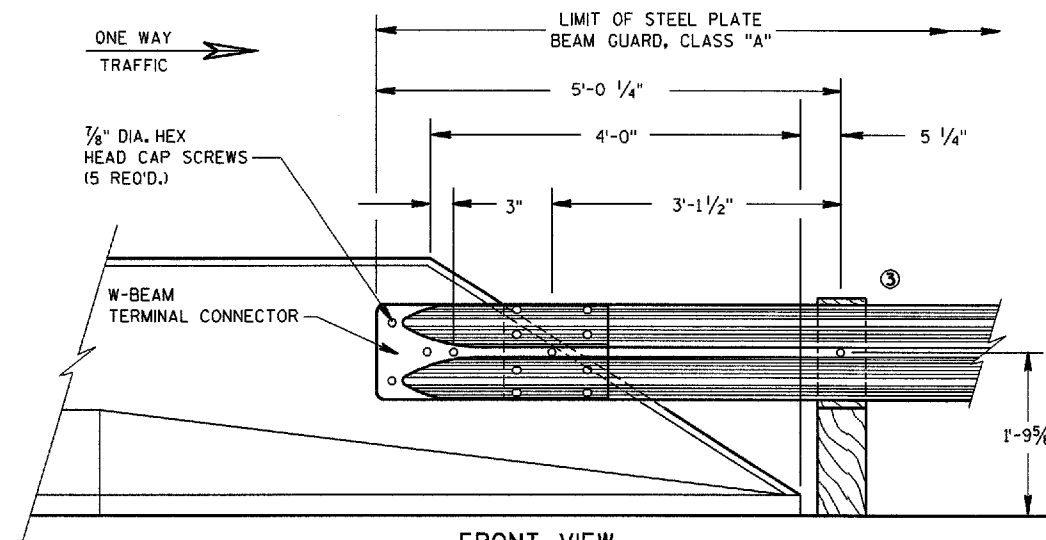
BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3".

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2 INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN THE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATELY.

- ① INCREASE POST LENGTH TO PROVIDE A MINIMUM EMBEDMENT OF 4'-0" IF THE SHOULDER HINGE POINT IS LOCATED IN FRONT OF THE POST.
- ② BRIDGE RAILING TYPE "W" DO NOT REQUIRE A TERMINAL CONNECTOR.
- ③ WHEN SPECIFIED IN THE PLANS, THE CONTRACTOR MAY REDUCE OR ELIMINATE THE 2 FOOT MINIMUM TO HINGE POINT IF EXISTING CONDITIONS DO NOT PERMIT THE DESIRABLE EARTHWORK.

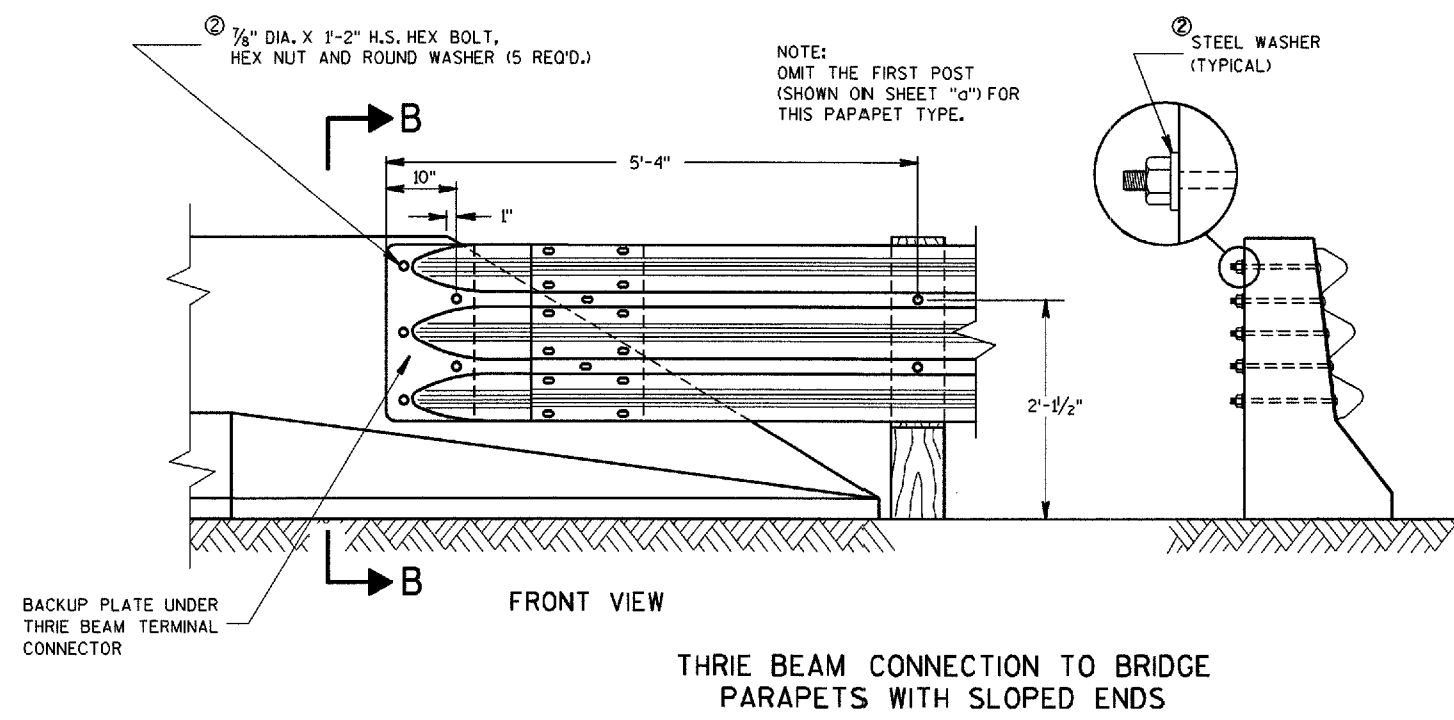
STEEL THRIE BEAM
STRUCTURE APPROACHSTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



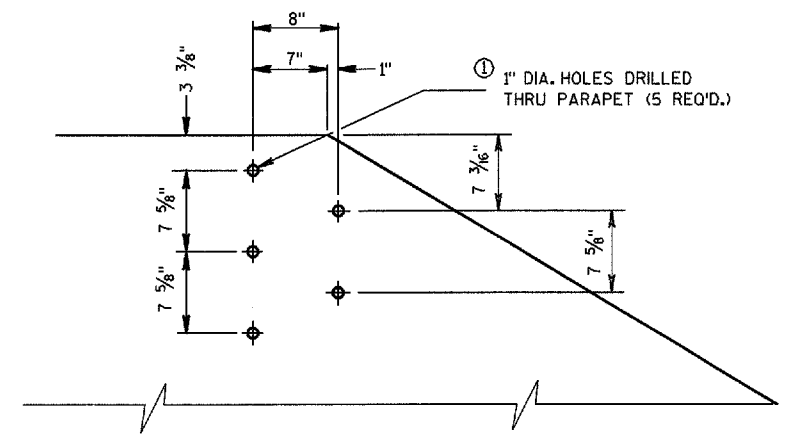
FRONT VIEW
W BEAM CONNECTION TO
PARAPETS WITH SLOPED ENDS
(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

GENERAL NOTES

- THESE ARE TYPICAL CONNECTION DETAILS, ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.
- BOLTS, PLATES, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A 325, AND BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.
- ① INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND THE BACKUP PLATE AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".
 - ② EACH BOLT AT THE BACK FACE OF THE PARAPET REQUIRES A HARDENED ROUND STEEL WASHER WITH A 2 1/4" O.D. X 5/32" THICK.
 - ③ W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.
- DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.



FRONT VIEW
THRIE BEAM CONNECTION TO BRIDGE
PARAPETS WITH SLOPED ENDS

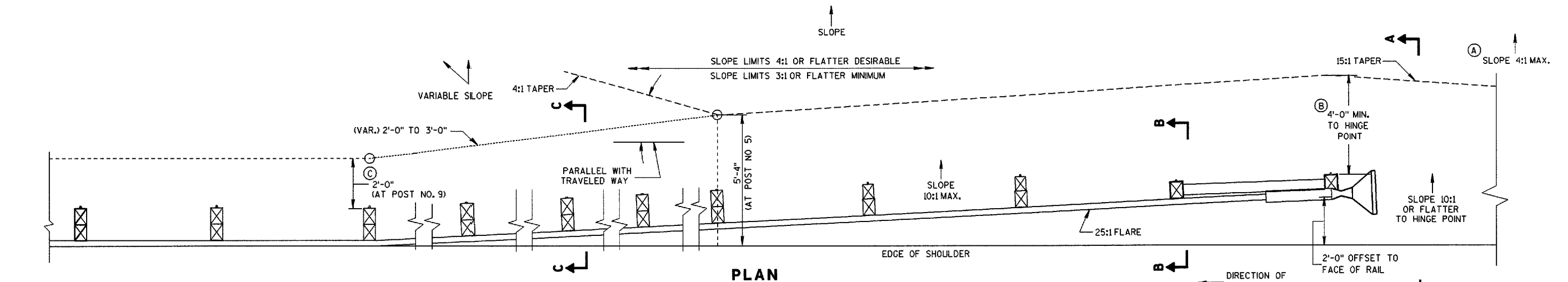


DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION

STEEL THRIE BEAM STRUCTURE
APPROACH, CONNECTION TO
SLOPED END PARAPETS

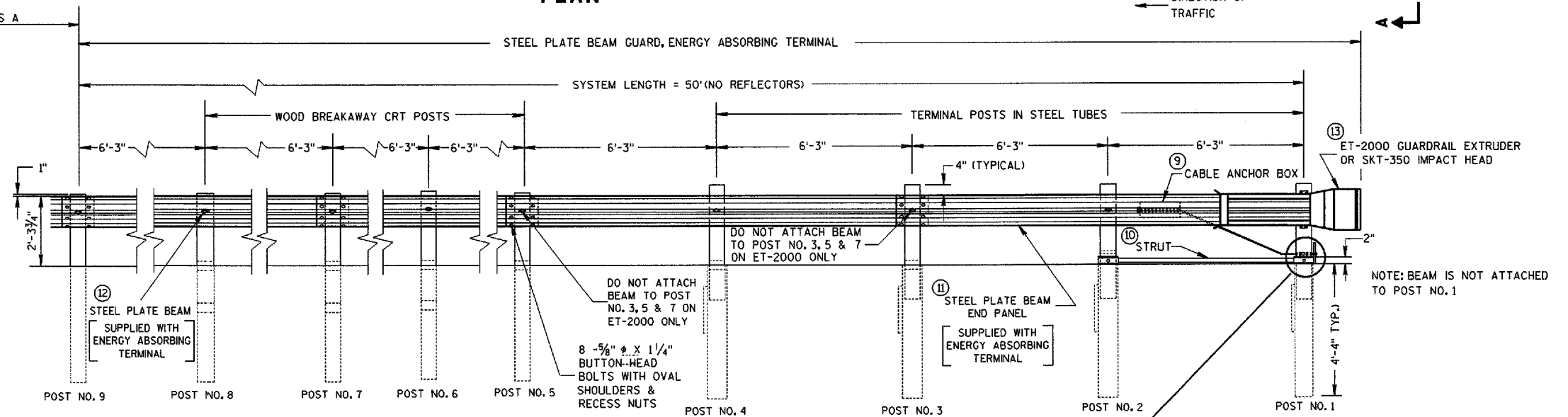
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/08/00
DATE
CHIEF ROADSIDE DEVELOPMENT ENGINEER
FHW

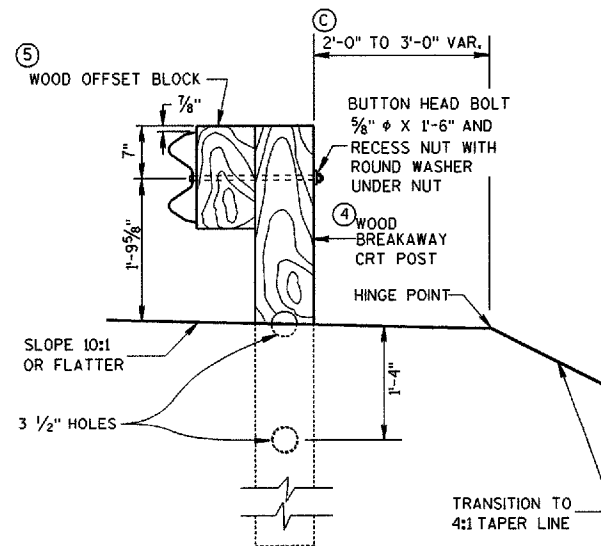


BILL OF MATERIALS

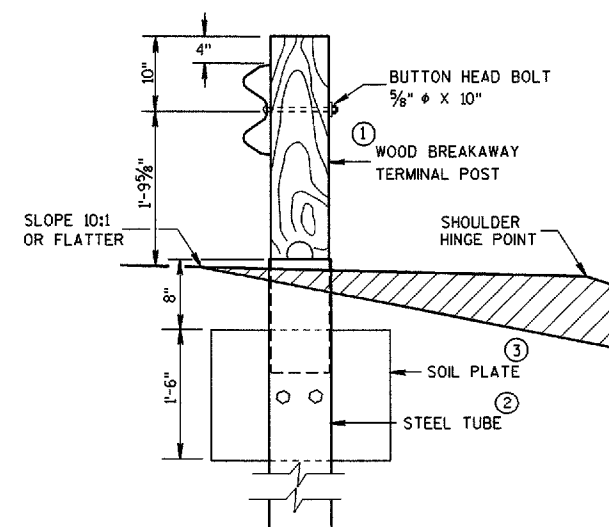
NOTE NO.	QTY.	DESCRIPTION
①	4	WOOD BREAKAWAY TERMINAL POST: 5 1/2" X 7 1/2" X 3'-9"
②	4	STEEL TUBE: TS 8" X 6" X 0.188", 4'-6" LONG
③	4	SOIL PLATE: 2'-0" X 1'-6" X 1/4"
④	4	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	6	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	1	PIPE SLEEVE: 2" X 5 1/2" STANDARD PIPE
⑦	1	BEARING PLATE
⑧	1	BCT CABLE ASSEMBLY
⑨	1	CABLE ANCHOR BOX
⑩	1	STRUT & YOKE
⑪	1	STEEL PLATE BEAM, END PANEL 12 GA. 13'-6 1/2" LONG FOR SKT-350 & ET-2000
⑫	3	STEEL PLATE BEAM: 12 GA. 13'-6 1/2"
⑬	1	ET-2000 GUARDRAIL EXTRUDER OR SKT-350 IMPACT HEAD: AS FURNISHED BY MANUFACTURER
⑭	1	REFLECTIVE SHEETING: 18" X 18"



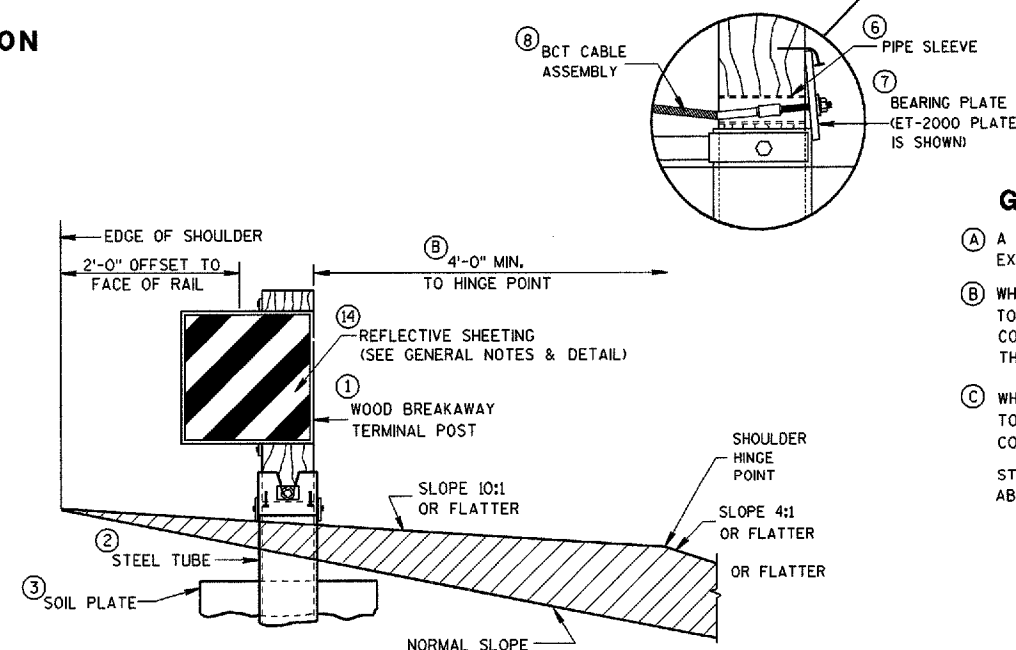
ELEVATION



SECTION C-C
TYPICAL AT POST NOS. 5-8 INC.



SECTION B-B
TYPICAL AT POST NO. 2
(ADD WOOD OFFSET BLOCK AT POST 3 & 4)



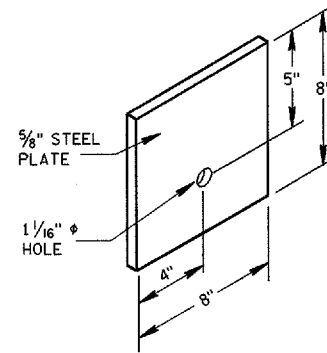
SECTION A-A
TYPICAL AT POST NO. 1

GENERAL NOTES

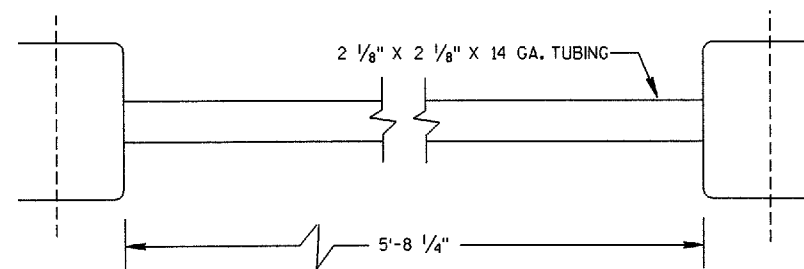
- A 3:1 OR FLATTER SLOPE MAY BE USED FOR INSTALLATION ON EXISTING HIGHWAYS.
- WHEN SPECIFIED ELSEWHERE IN THE CONTRACT THE 4-FOOT MINIMUM TO HINGE POINT, MAY BE REDUCED OR ELIMINATED WHERE EXISTING CONDITIONS WILL NOT PERMIT THE DESIRABLE EARTHWORK. SIMILARLY THE 15:1 TAPER MAY BE REDUCED TO 4:1.
- WHEN SPECIFIED ELSEWHERE IN THE CONTRACT THE 2-FOOT MINIMUM TO HINGE POINT, MAY BE REDUCED OR ELIMINATED WHERE EXISTING CONDITIONS WILL NOT PERMIT THE DESIRABLE EARTHWORK. STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

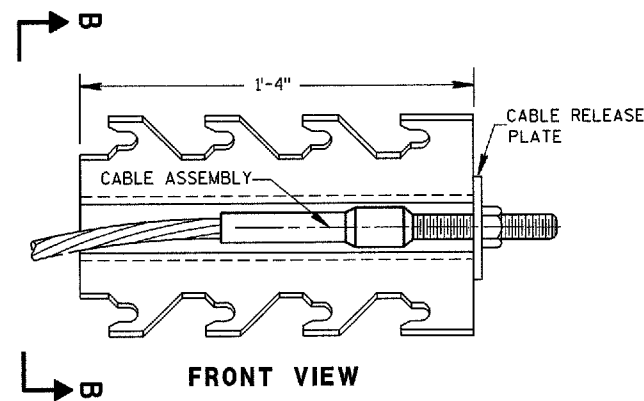
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



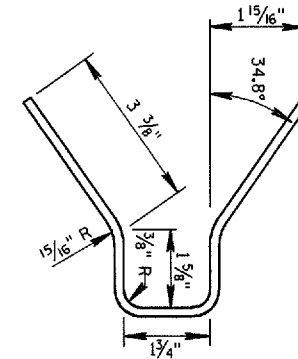
STEEL BEARING PLATE (SKT-350)



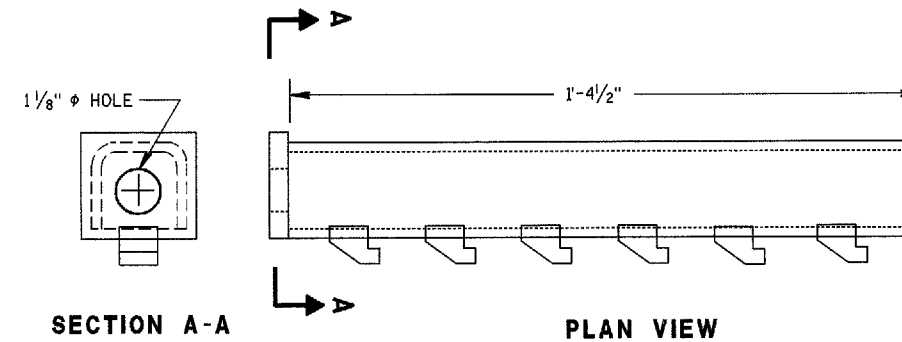
STRUT DETAIL (SKT-350)



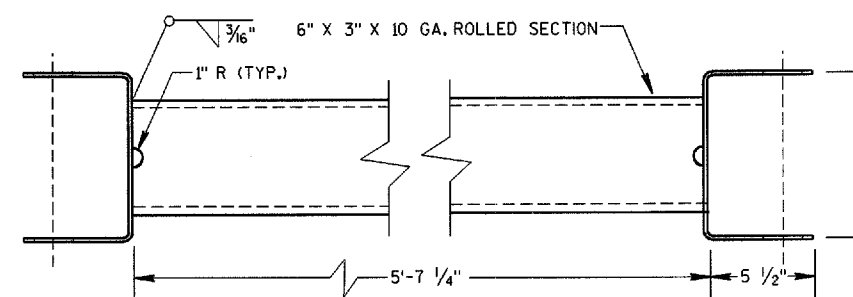
**CABLE ANCHOR BOX (SKT-350)
(SKT-350)**



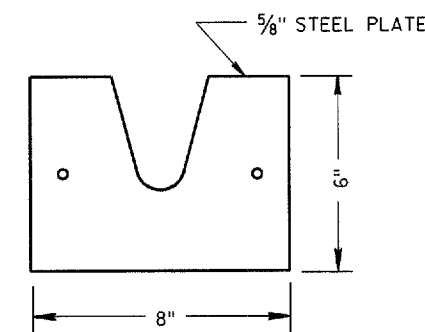
SECTION B-B



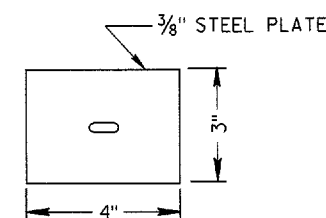
CABLE ANCHOR BOX (ET-2000)



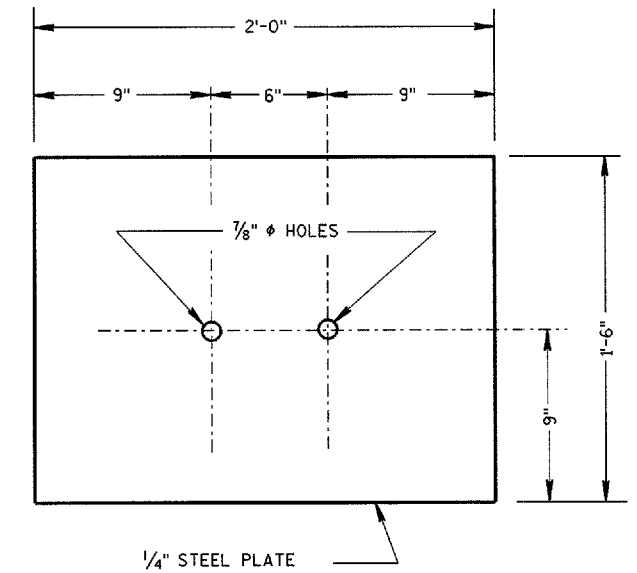
STRUT DETAIL (ET-2000)



STEEL BEARING PLATE (ET-2000)



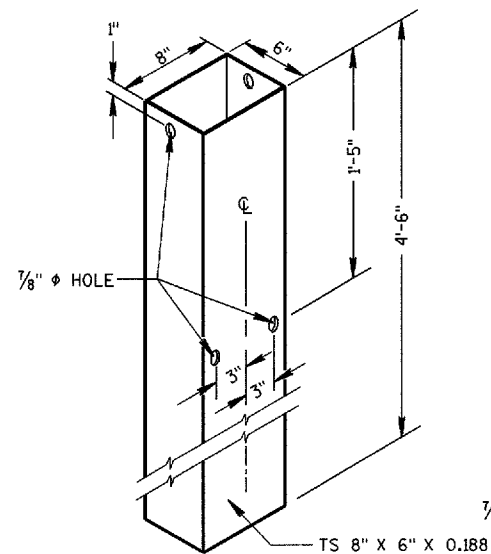
**BEARING PLATE WASHER (ET-2000)
(ET-2000)**



SOIL PLATE (SKT-350 & ET-2000)

**STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL**

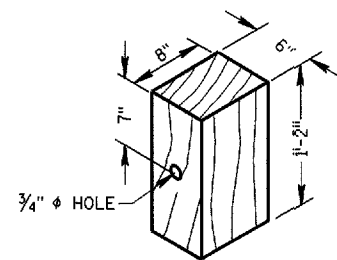
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



STEEL TUBE

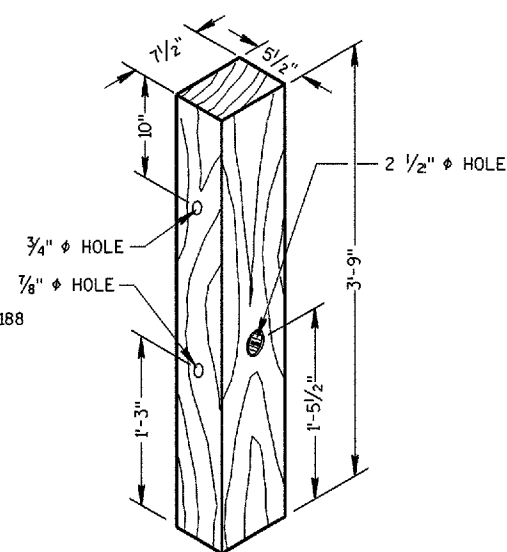
(POSTS NO. 1-4)

THE STEEL TUBE SHALL CONFORM TO REQUIREMENTS OF ASTM A500



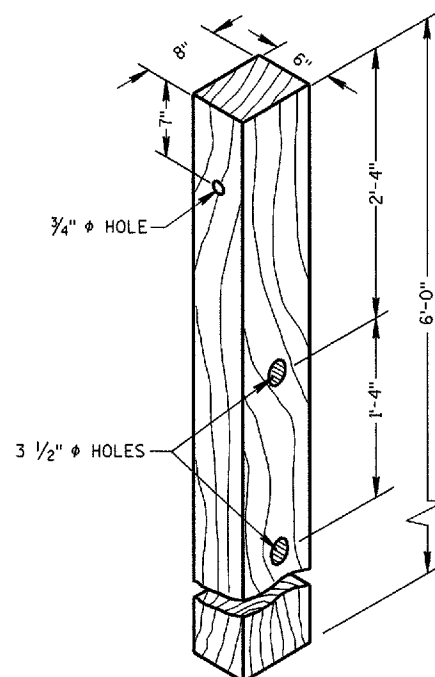
WOOD OFFSET BLOCK

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



TERMINAL POST

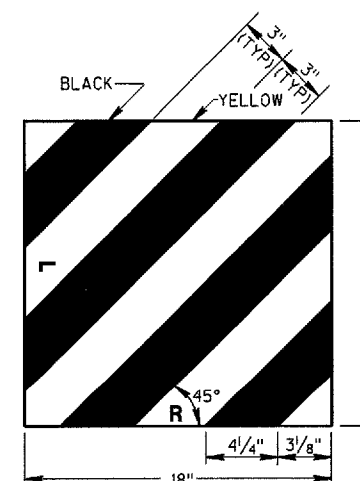
(POSTS NO. 1-4)



CRT POST

(POSTS NO'S 5-8)

WOOD BREAKAWAY POSTS



REFLECTIVE SHEETING DETAIL

GENERAL NOTES

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

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL SHALL BE EITHER THE EXTRUDER TERMINAL (ET-2000), OR THE SEQUENTIAL KINKING TERMINAL (SKT-350). THE CONTRACTOR SHALL NOT INTERMIX PROPRIETARY PRODUCT MATERIALS.

THE "ET-2000" IS AVAILABLE FROM SYRO, INC., 2524 N. STEMMONS FREEWAY, DALLAS TEXAS 75207. TELEPHONE 1-800-835-6086 OR 1-800-644-7976

THE "SKT-350" IS AVAILABLE FROM ROAD SYSTEMS, INC., 7631 NEW CASTLE DRIVE, FRANKFORT, ILLINOIS 60423. TELEPHONE (815) 464-5917

THE ET-2000, AND SKT-350 END TERMINALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH, WHICH SHALL INCLUDE HARDWARE, STEEL PLATE BEAM GUARD, POSTS, REFLECTIVE SHEETING AND INSTALLATION AS SHOWN.

REFLECTIVE SHEETING - SHALL CONFORM TO ASTM SPECIFICATION D4956-93b, REFLECTIVE SHEETING TYPE III, BACKING CLASS 4, PERFORMANCE REQUIREMENT TYPE III. THE MESSAGE AND LINES SHALL BE APPLIED TO THE SIGNS BY THE SILK SCREEN STENCIL PROCESS USING A BLACK OR DARK STENCIL PASTE AS A TYPE APPROVED BY THE MANUFACTURER OF THE FACE MATERIAL TO WHICH IT IS TO BE APPLIED. MESSAGE UNITS CUT FROM NONREFLECTIVE SHEETING AND APPLIED TO THE SIGN FACE ARE NOT ACCEPTABLE. AFTER THE APPROACH END OF THE STEEL PLATE BEAM GUARD INSTALLATION IS COMPLETE, CLEAN THE AREA WHERE THE REFLECTIVE SHEETING WILL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATION. ONCE CLEAN, APPLY REFLECTIVE SHEETING DIRECTLY TO THE STEEL PLATE BEAM GUARD AS SHOWN. THE CONTRACTOR SHALL TURN OVER THE MANUFACTURERS WARRANTY FOR THE REFLECTIVE SHEETING TO THE DEPARTMENT FOR POTENTIAL DEALING WITH THE MANUFACTURER. PAYMENT OF REFLECTIVE SHEETING IS INCIDENTAL TO STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL.

WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/08/00
DATE

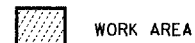
John Haverburg
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

S.D.D. 14 B 24-3c

TWO-LANE ROADWAY

SYMBOLS



WORK AREA



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

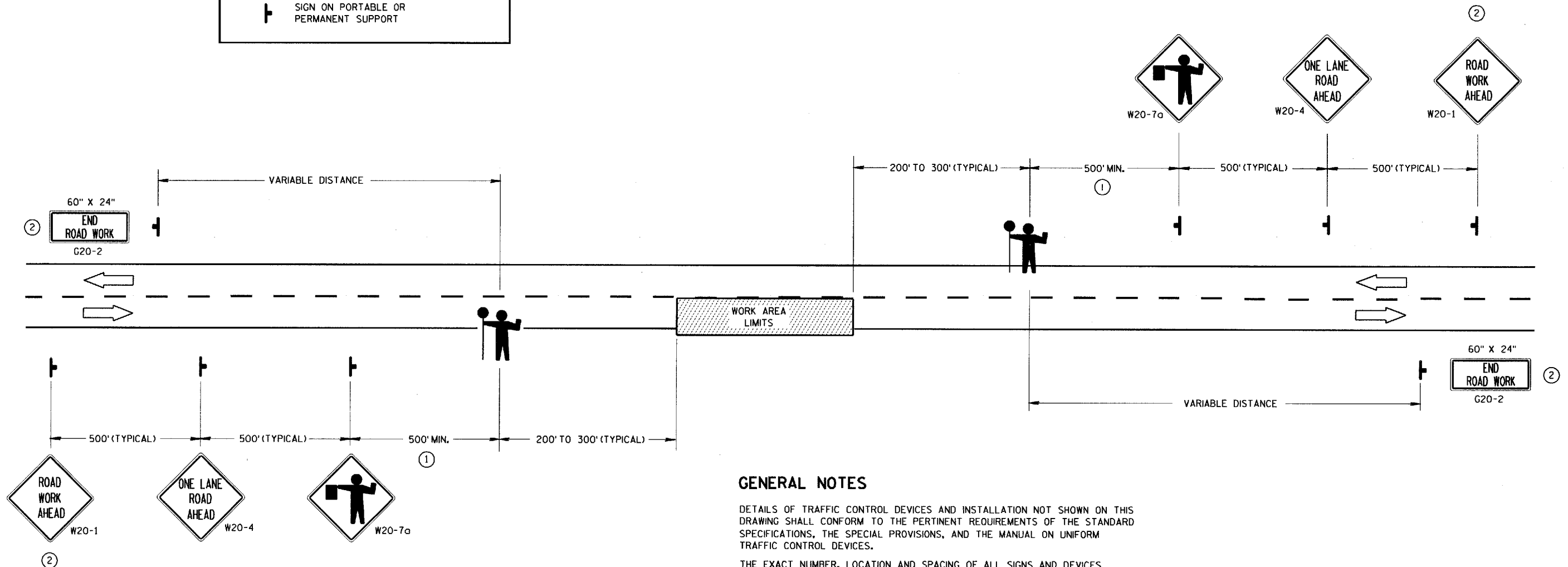


SIGN ON PORTABLE OR PERMANENT SUPPORT



W20-7b

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 WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

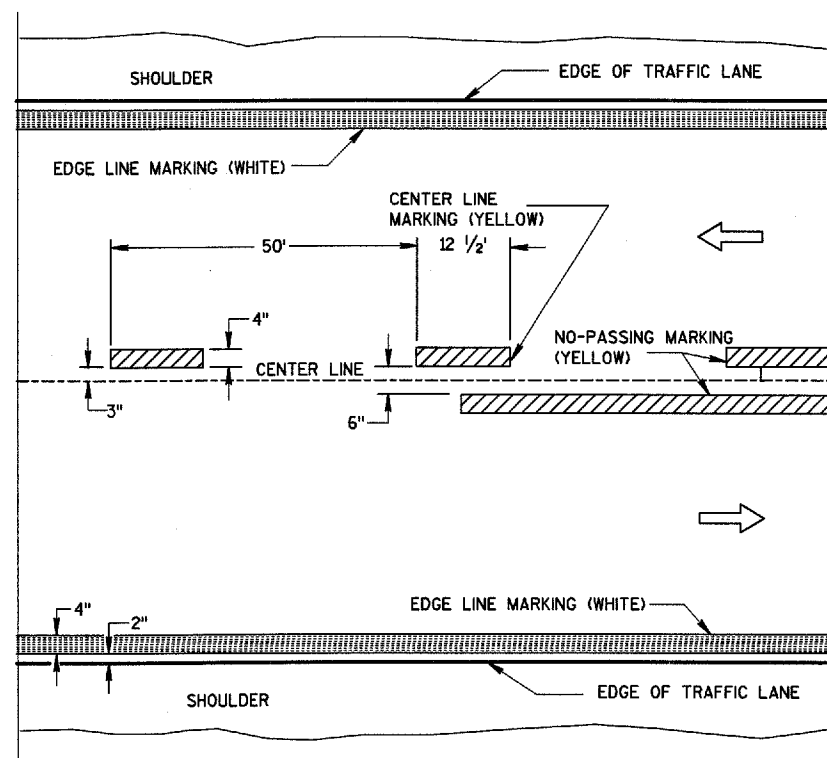
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

- 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 WORK ZONE AREA.

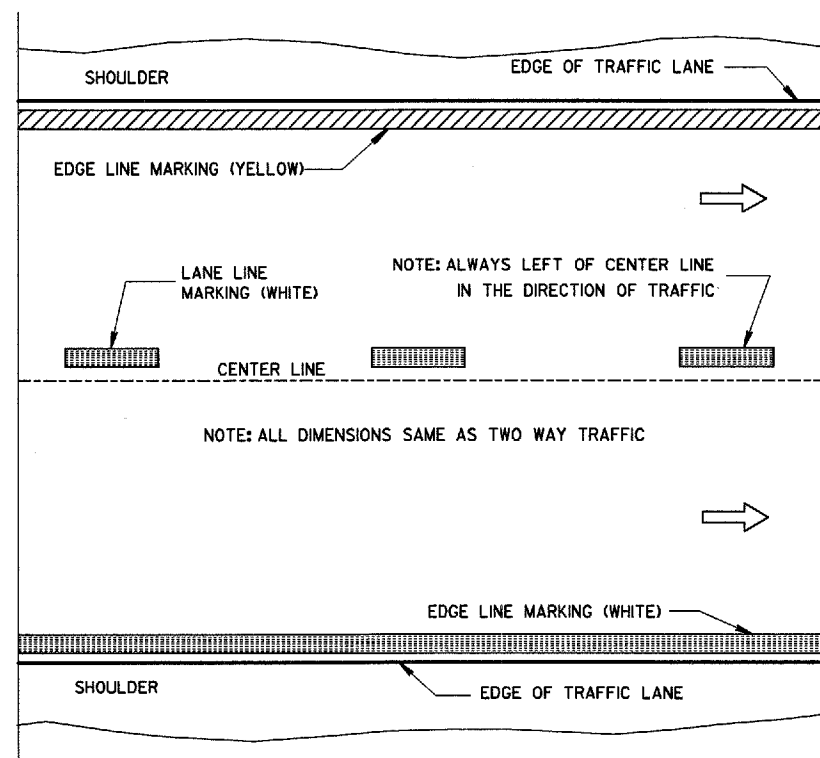
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE 2/17/94
STATE TRAFFIC ENGINEER FOR HWYS
FHWA

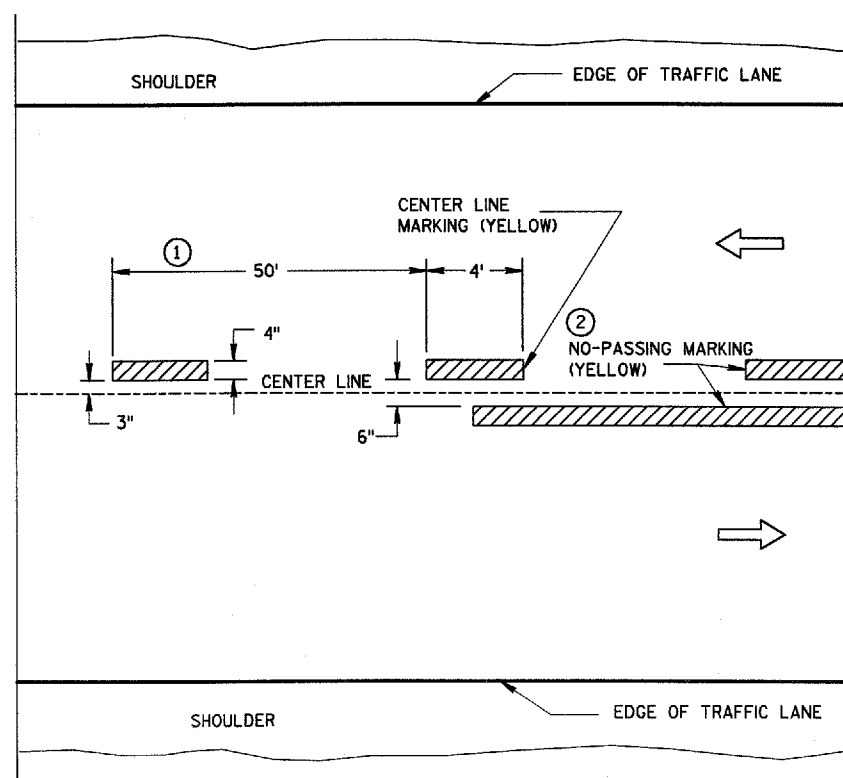


TWO WAY TRAFFIC

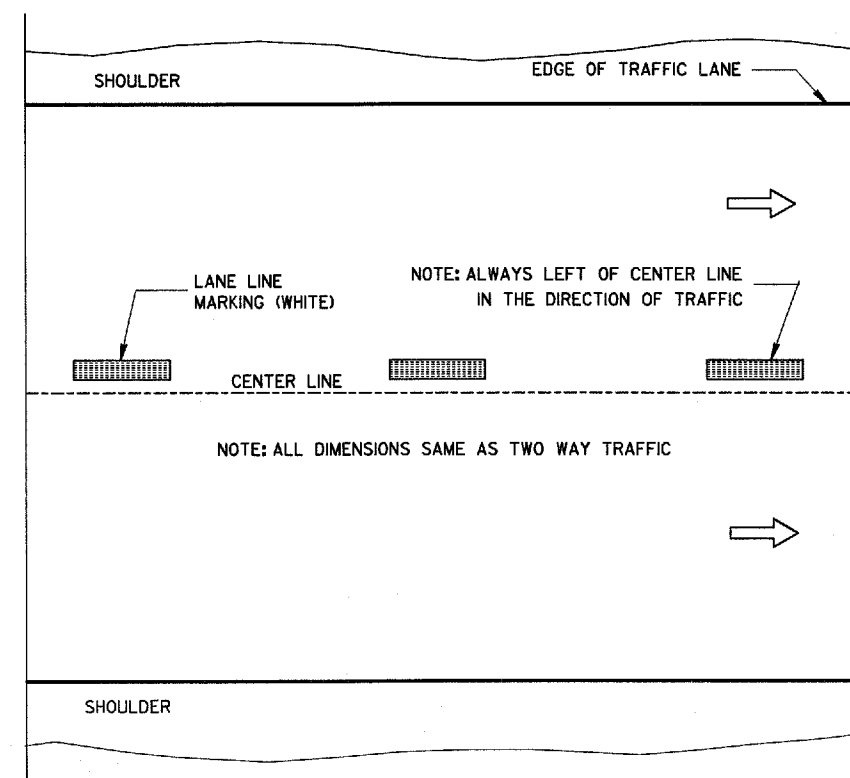


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING (SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

GENERAL NOTES

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

- ① 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.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-17-00
DATE

CHIEF SIGNS AND MARKING ENGINEER

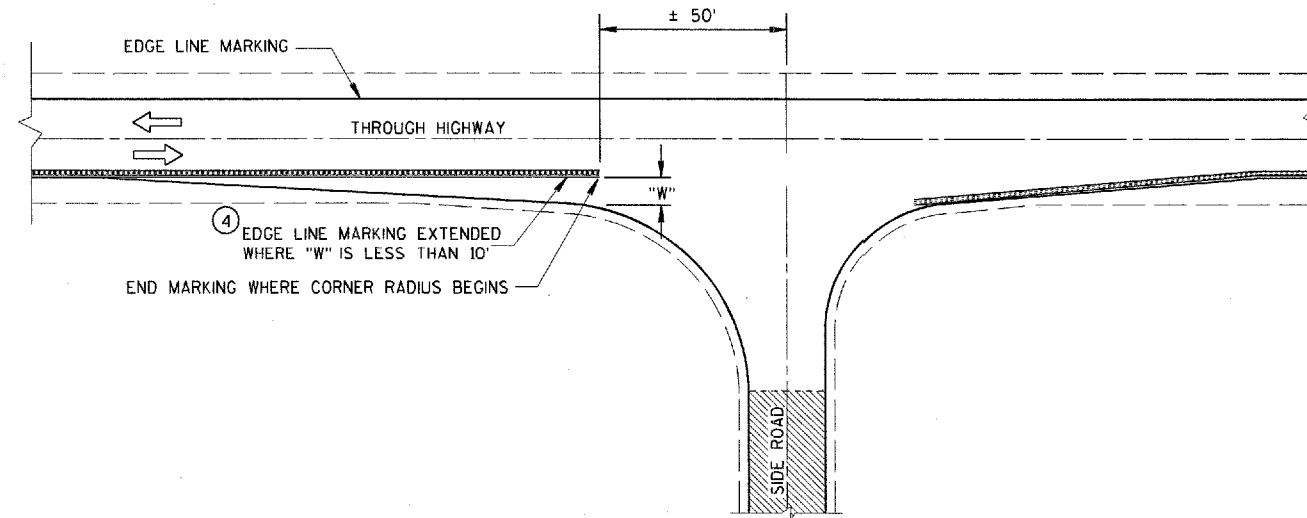
FHWA

NOTES

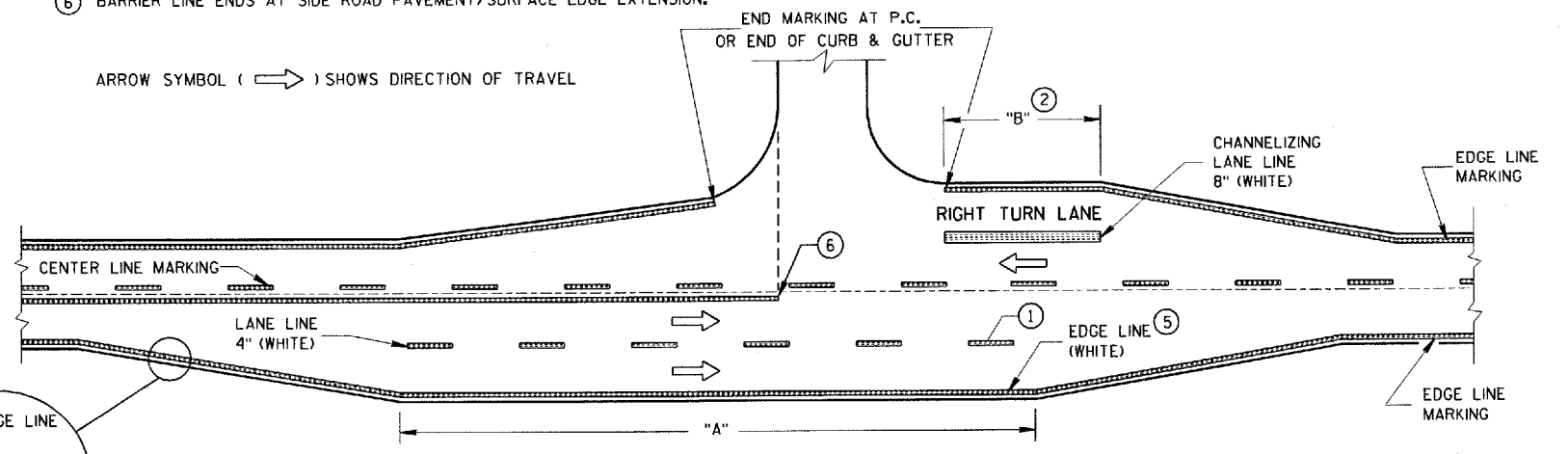
EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
- ④ LOCATE THE EDGE LINE ALONG THE TAPER WHERE "W" IS 10' OR MORE.
- ⑤ THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.
- ⑥ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

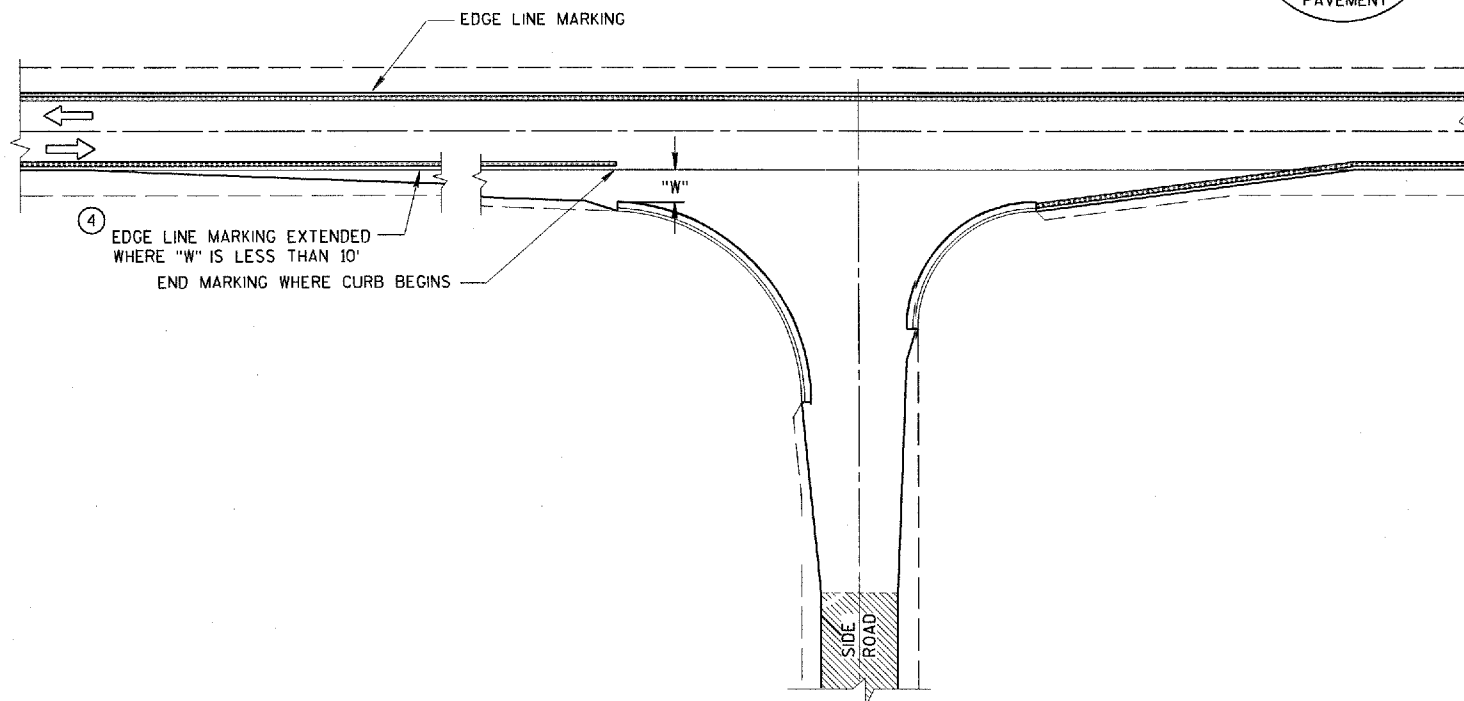
ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



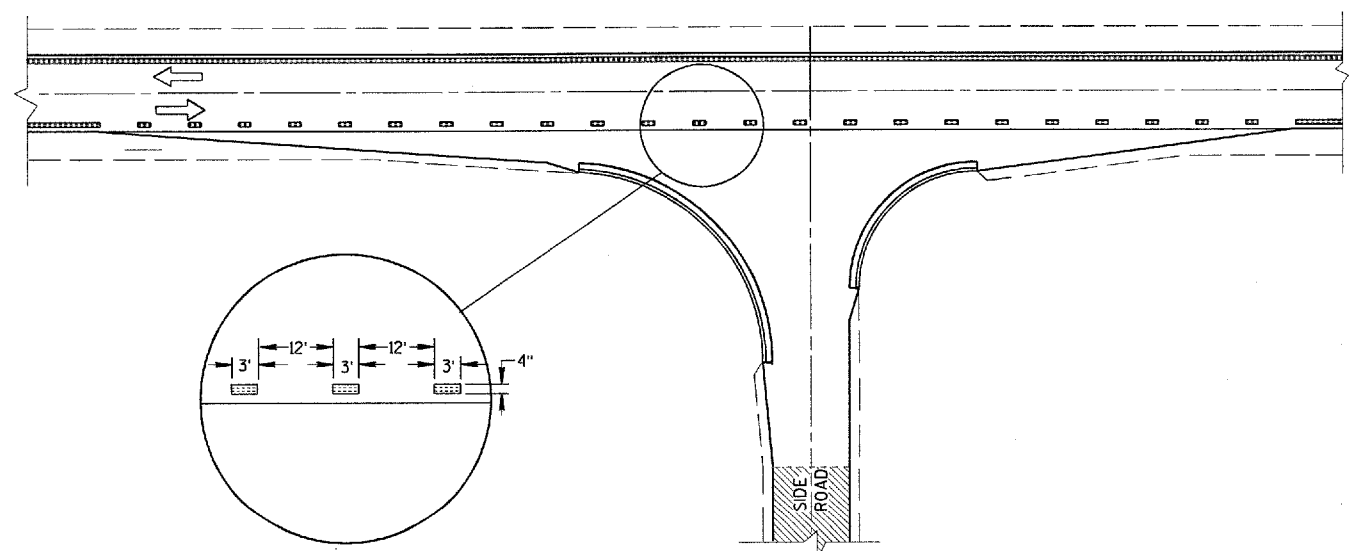
MINOR INTERSECTION WITHOUT CURBS



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)

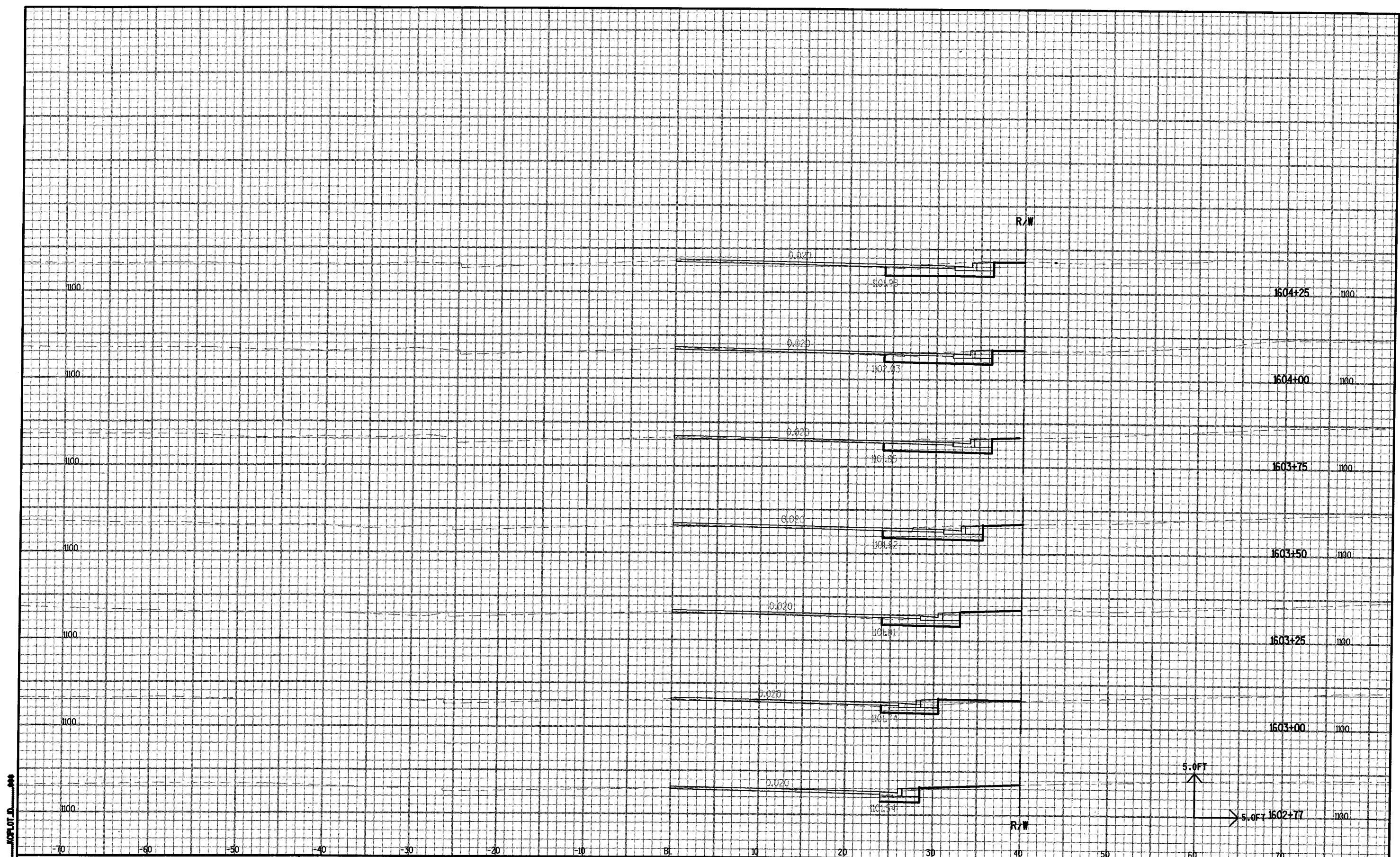


MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

EARTHWORK VOLUMES								
STATION	END-AREA		INCREMENTAL VOLUME		CUMULATIVE VOLUME		MASS HAUL	
	*****		*****		*****		*****	
	CUT	FILL	CUT	FILL*	CUT	FILL		
RIGHT TURN LANE								
1602+77	5.00	4.14						
1603+00	7.00	9.70	5.10	4.73	5.10	4.73		0.37
1603+25	12.50	4.03	9.03	7.07	14.13	11.80		2.33
1603+50	19.00	3.66	13.10	7.30	27.23	19.10		8.13
1603+75	16.50	3.34	16.26	3.93	43.49	23.03		20.46
1604+00	16.50	6.15	15.28	3.57	58.77	26.60		32.17
1604+25	16.50	3.34	15.28	5.06	74.05	31.66		42.39
1604+35	16.50	3.34	6.10	6.49	80.15	38.15		42.00
PASSING LANE								
1887+00	257.25	0.00	476.38	0.00	476.38	0.00		518.38
1887+75	0.00	0.18	357.29	0.29	833.67	0.29		875.39
1888+00	21.27	9.96	9.85	5.39	843.52	5.68		879.84
1889+00	22.78	0.79	81.57	22.90	925.09	28.58		938.52
1890+00	45.62	0.00	126.67	1.68	1051.76	30.26		1063.51
1890+75	712.61	0.00	1053.10	0.00	2104.86	30.26		2116.61
1891+00	545.89	0.00	582.64	0.00	2687.50	30.26		2699.25
1891+40	1470.65	0.00	1493.73	0.00	4181.23	30.26		4192.98
1892+00	1595.77	0.00	3407.13	0.00	7588.36	30.26		7600.11
1893+00	1192.36	0.00	5163.21	0.00	12751.57	30.26		12763.32
1894+00	835.07	0.00	3754.51	0.00	16506.08	30.26		16517.83
1895+00	103.84	2.54	1738.73	5.42	18244.81	35.67		18251.14
1896+00	13.06	30.01	216.49	69.33	18461.30	105.01		18398.30
1897+00	72.16	1.25	157.83	66.56	18619.13	171.57		18489.57
1898+00	165.33	0.00	439.79	2.66	19058.92	174.23		18926.70
1898+75	29.44	6.57	270.51	10.50	19329.43	184.72		19186.71
1899+00	11.86	21.64	19.12	15.02	19348.55	199.74		19190.81
1900+00	11.32	102.07	42.93	263.45	19391.48	463.20		18970.29
1901+00	11.04	18.84	41.40	257.50	19432.88	720.69		18754.19
1901+40	26.63	0.00	27.90	16.05	19460.78	736.75		18766.04
1901+75	77.43	6.29	67.45	4.68	19528.23	741.43		18828.81
1902+00	97.32	5.45	80.90	6.24	19609.13	747.67		18903.46
1903+00	148.97	3.22	456.09	18.46	20065.22	766.13		19341.09
1904+00	87.60	5.96	438.09	19.54	20503.31	785.67		19759.65
1904+50	79.85	7.42	155.05	14.25	20658.36	799.92		19900.45
1905+00	17.10	17.51	89.77	26.54	20748.13	826.46		19963.68
1905+50	14.53	23.56	29.29	43.72	20777.42	870.18		19949.24
1906+00	13.68	62.60	26.12	91.75	20803.54	961.93		19883.62
1906+50	13.24	106.93	24.92	180.53	20828.46	1142.46		19728.01
1907+00	14.01	232.86	25.23	361.82	20853.69	1504.28		19391.41
1908+00	12.41	496.11	48.94	1552.45	20902.63	3056.73		17887.90
1909+00	10.08	376.37	41.65	1858.08	20944.28	4914.81		16071.47
1909+50	12.97	311.11	21.34	732.03	20965.62	5646.85		15360.78
1910+00	19.10	139.66	29.70	479.99	20995.32	6126.83		14910.49
1910+50	22.30	33.95	38.34	184.86	21033.66	6311.69		14763.97
1911+00	20.96	9.31	40.06	46.07	21073.72	6357.76		14757.96
1911+50	17.13	5.55	35.27	15.82	21108.99	6373.59		14777.41
1912+00	0.00	0.00	15.86	5.91	21124.85	6379.50		14787.36
*SRINKAGE FACTOR FOR FILL IS 15%			21205.00	6379.50				



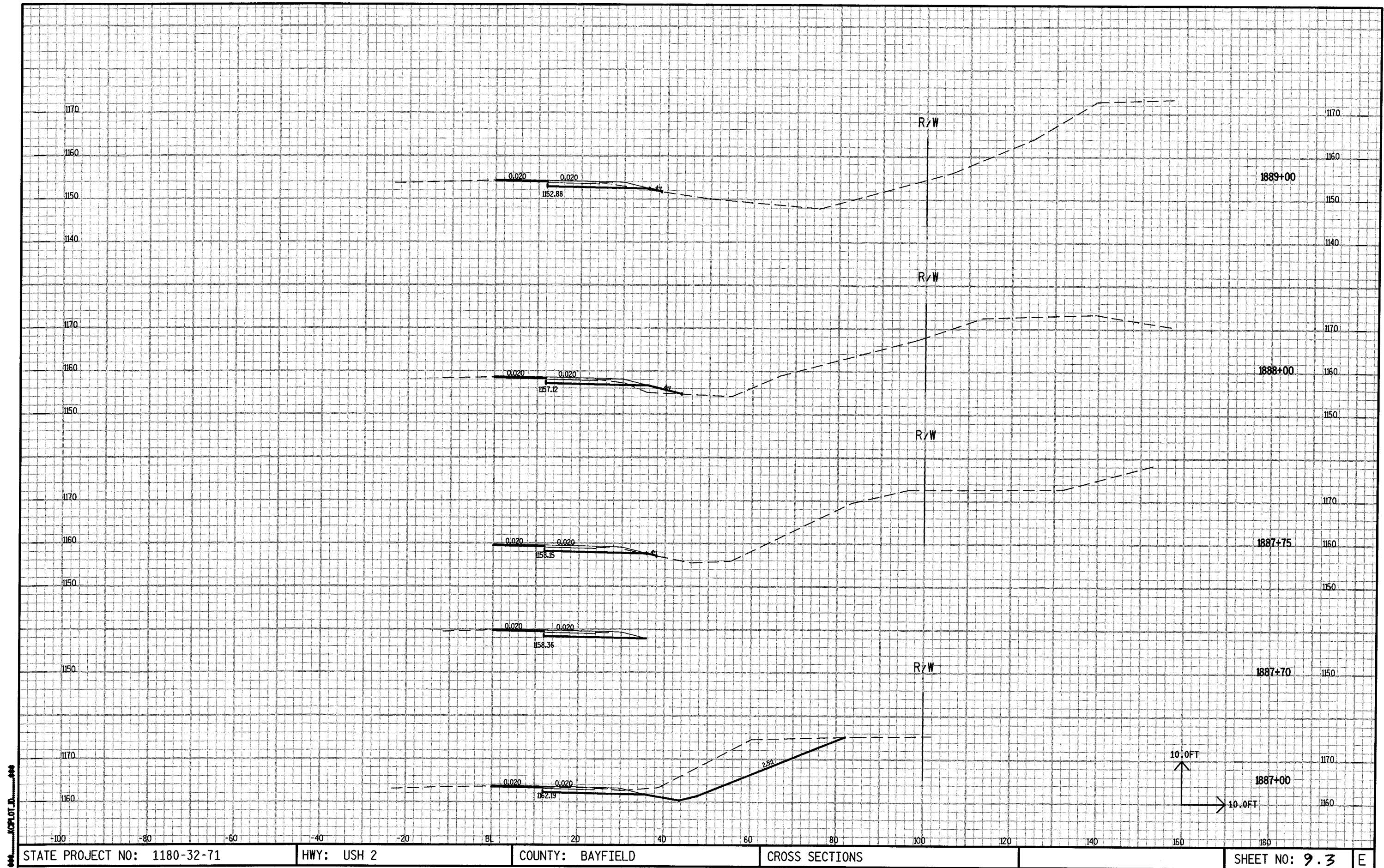
STATE PROJECT NO: 1180-32-71

HWY: USH 2

COUNTY: BAYFIELD

CROSS SECTIONS

SHEET NO: 9.2 E



STATE PROJECT NO: 1180-32-71

HWY: USH 2

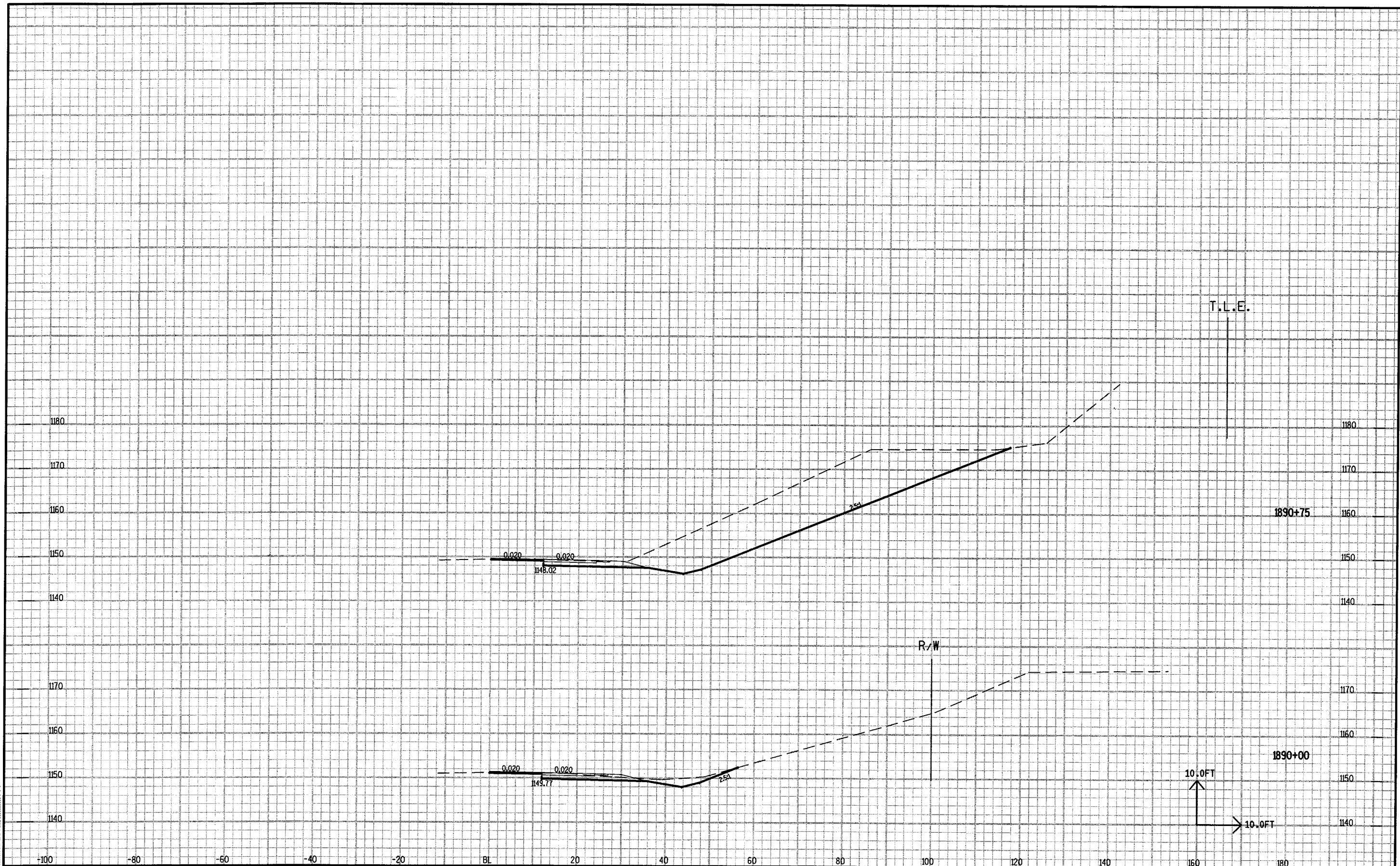
COUNTY: BAYFIELD

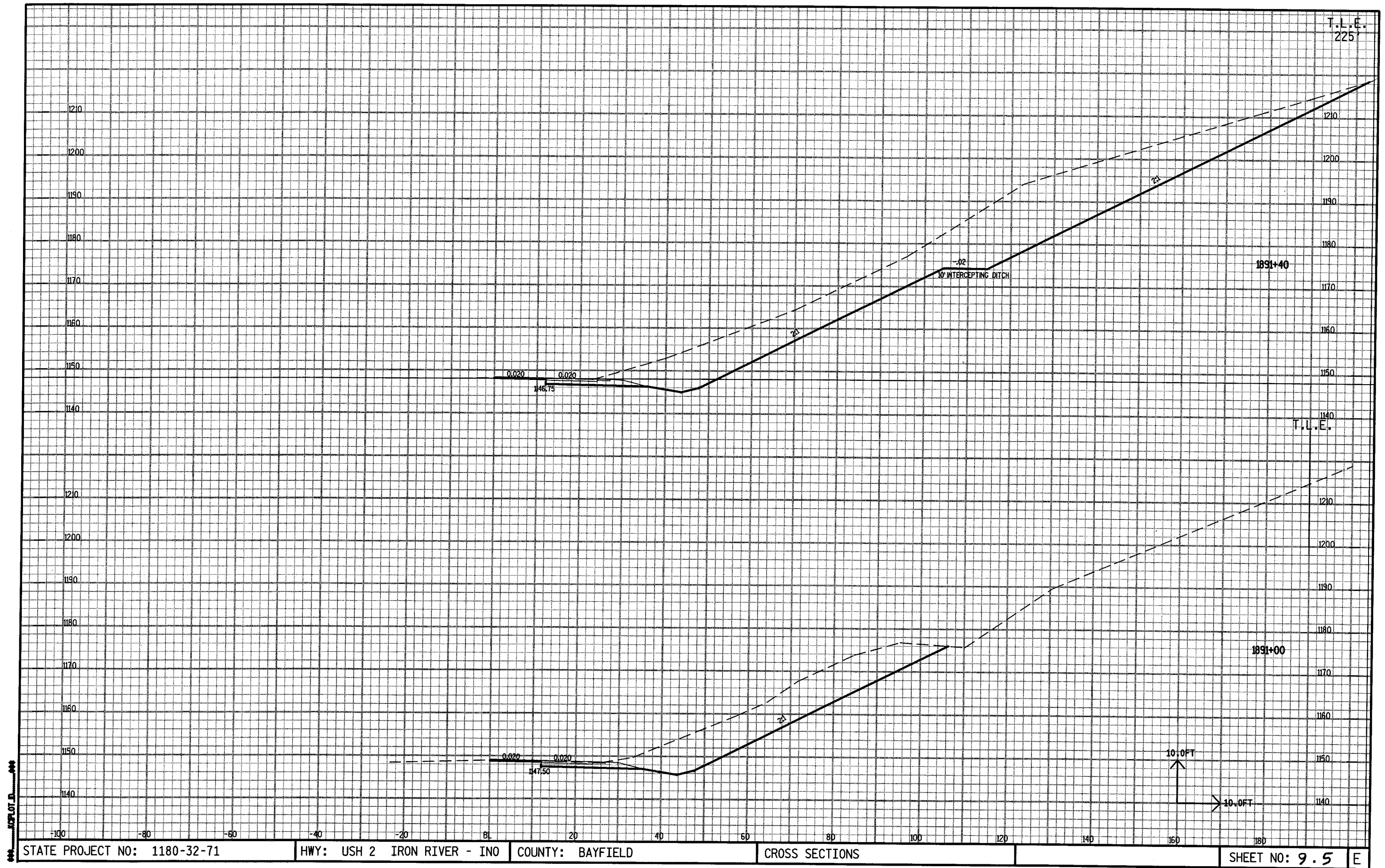
CROSS SECTIONS

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1180-32-71





STATE PROJECT NO: 1180-32-71

HWY: USH 2 IRON RIVER - INO

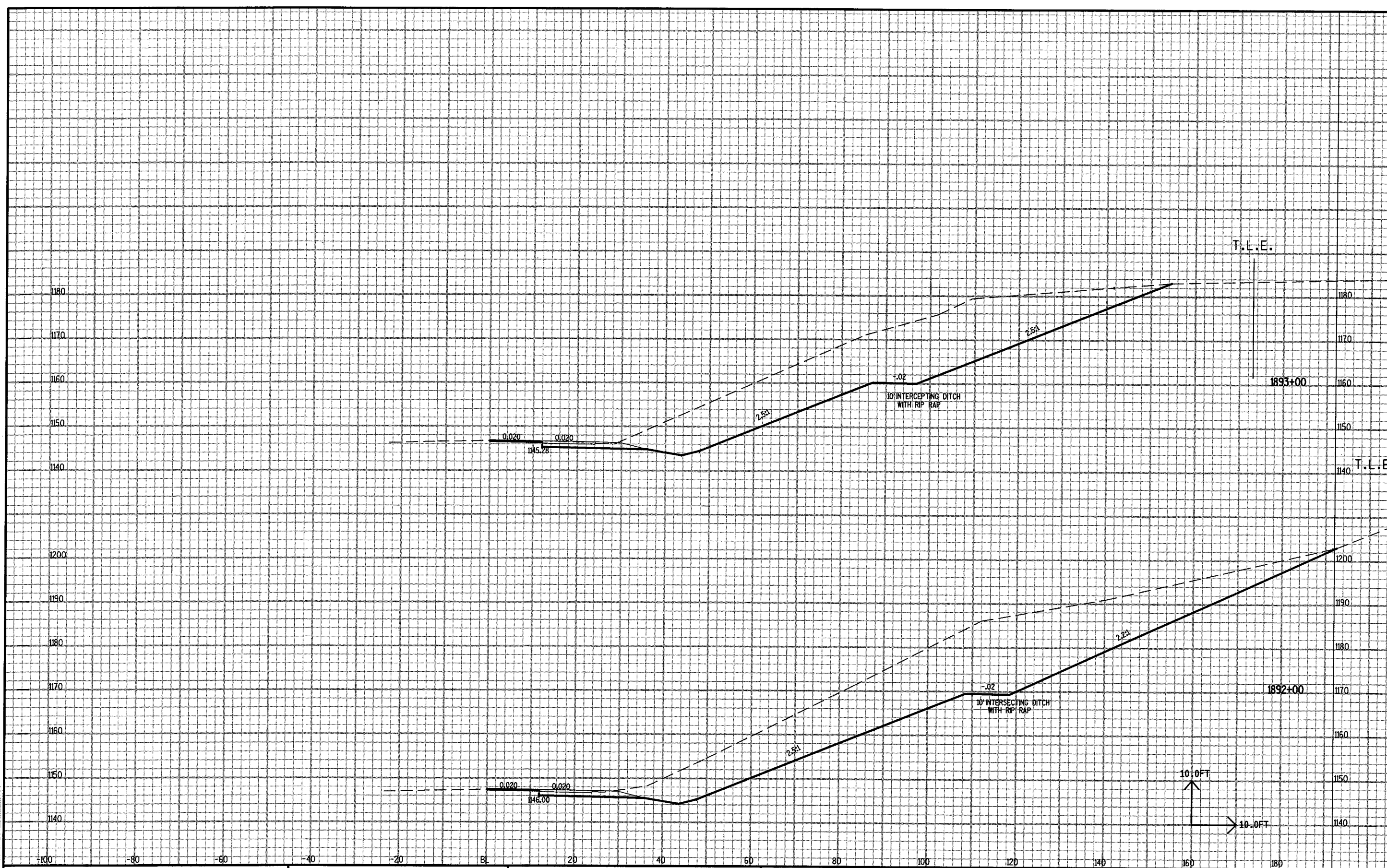
COUNTY: BAYFIELD

CROSS SECTIONS

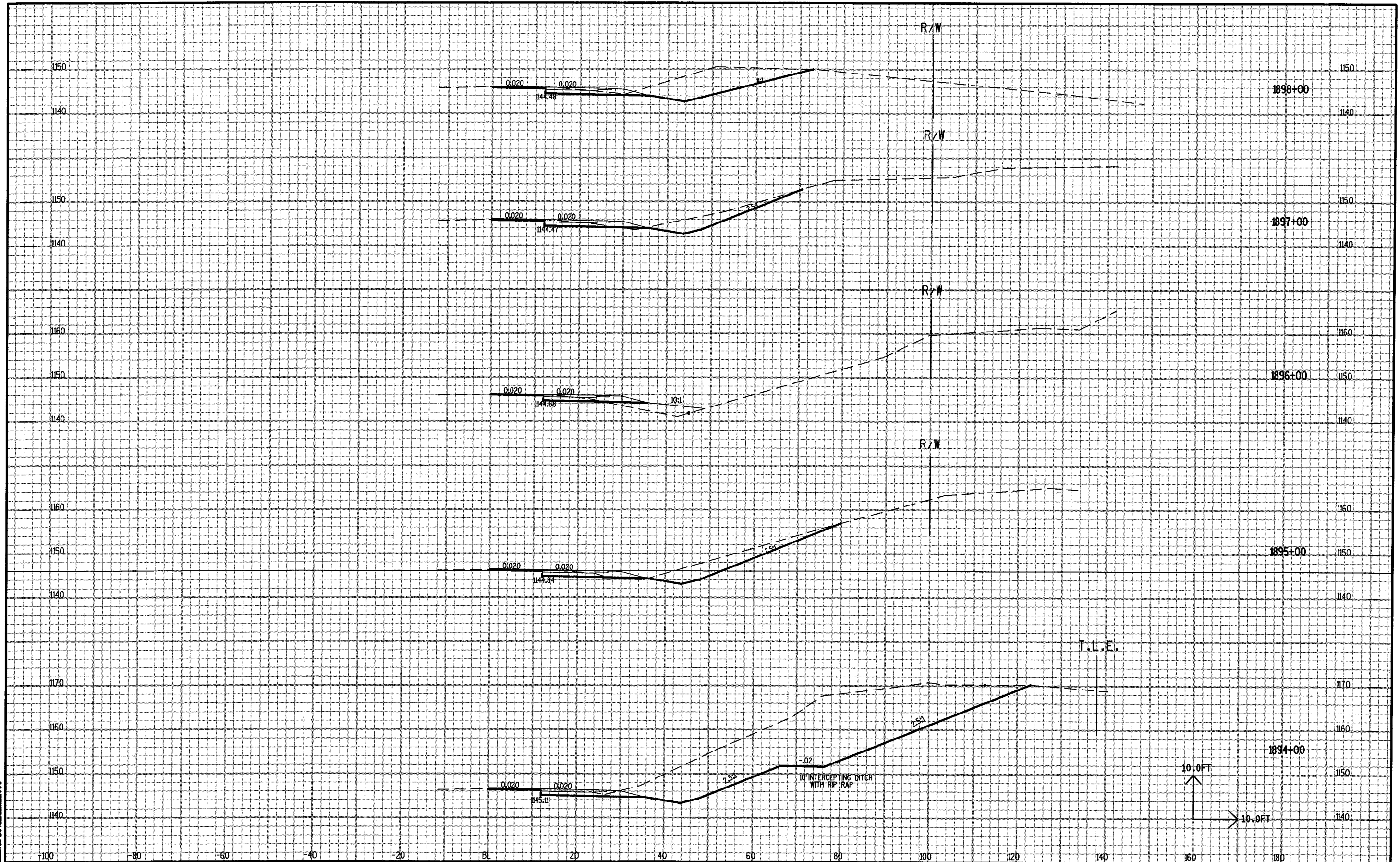
SHEET NO: 9.5

E

100
80
60
40
20
0
-20
-40
-60
-80
-100



*** KCPLOT D. ***

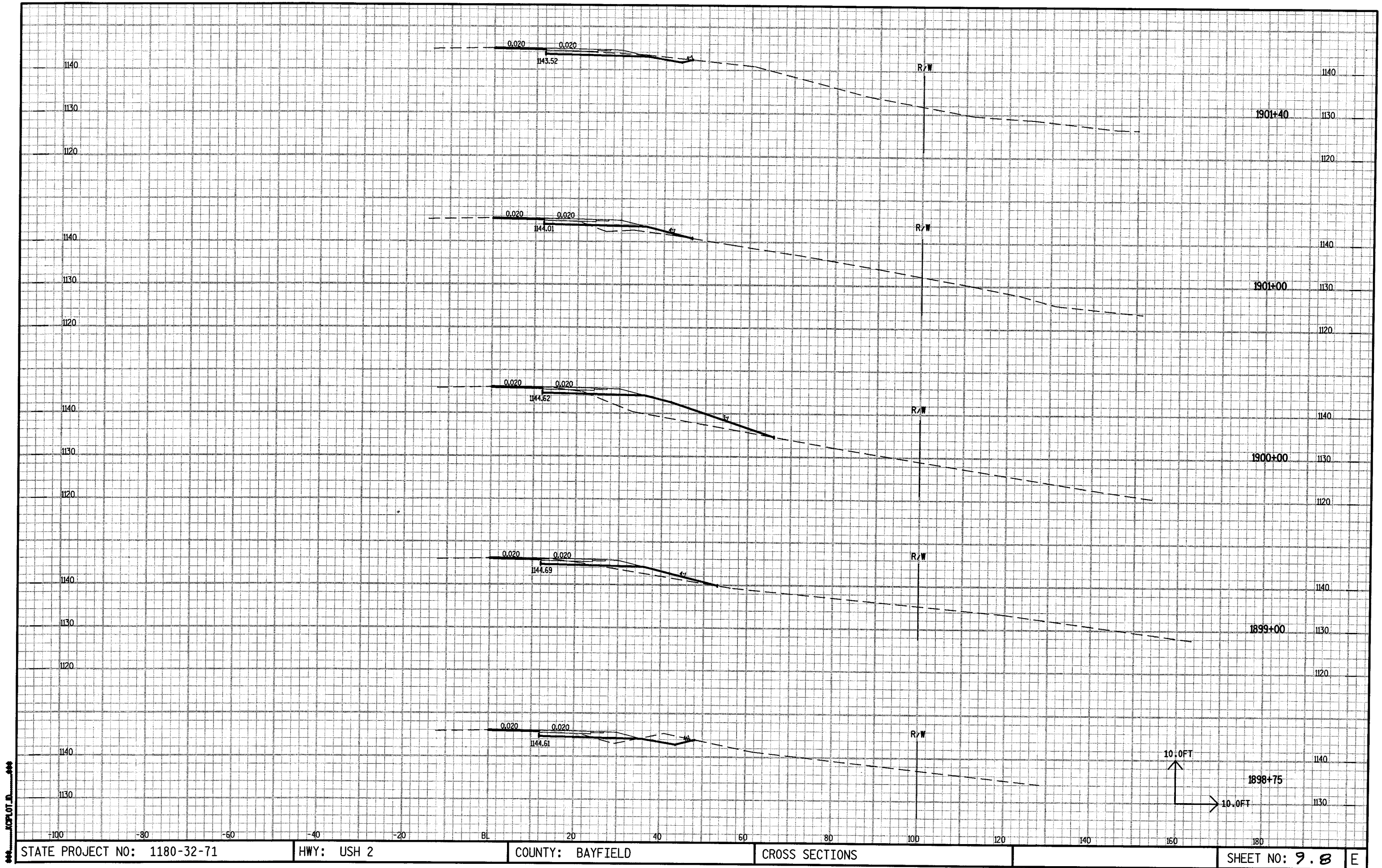


STATE PROJECT NO: 1180-32-71

HWY: USH 2 IRON RIVER - INO COUNTY: BAYFIELD

CROSS SECTIONS

SHEET NO: 9.7 E



*** KCPLOT.D ***

STATE PROJECT NO: 1180-32-71

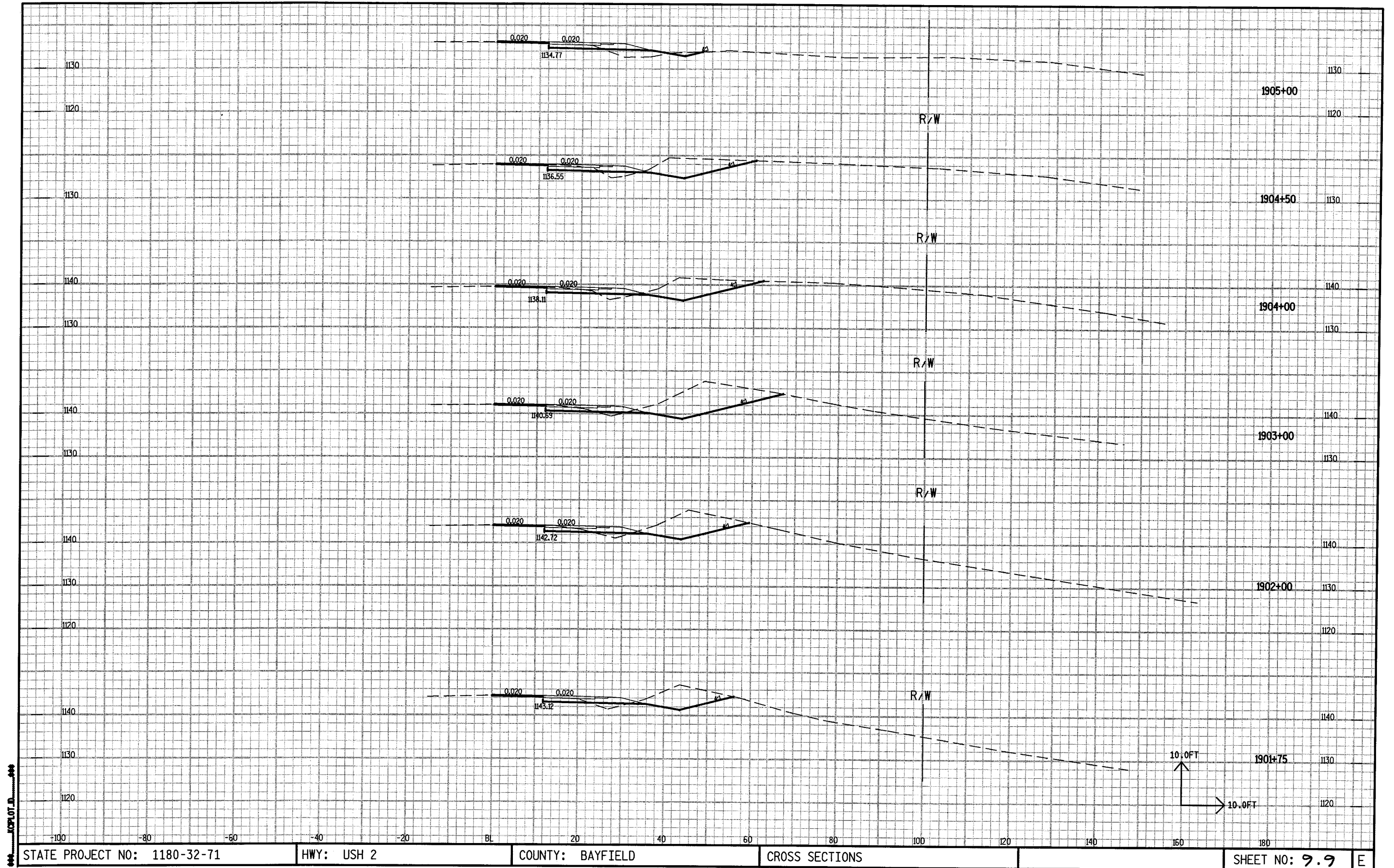
HWY: USH 2

COUNTY: BAYFIELD

CROSS SECTIONS

SHEET NO: 9.8

E



STATE PROJECT NO: 1180-32-71

HWY: USH 2

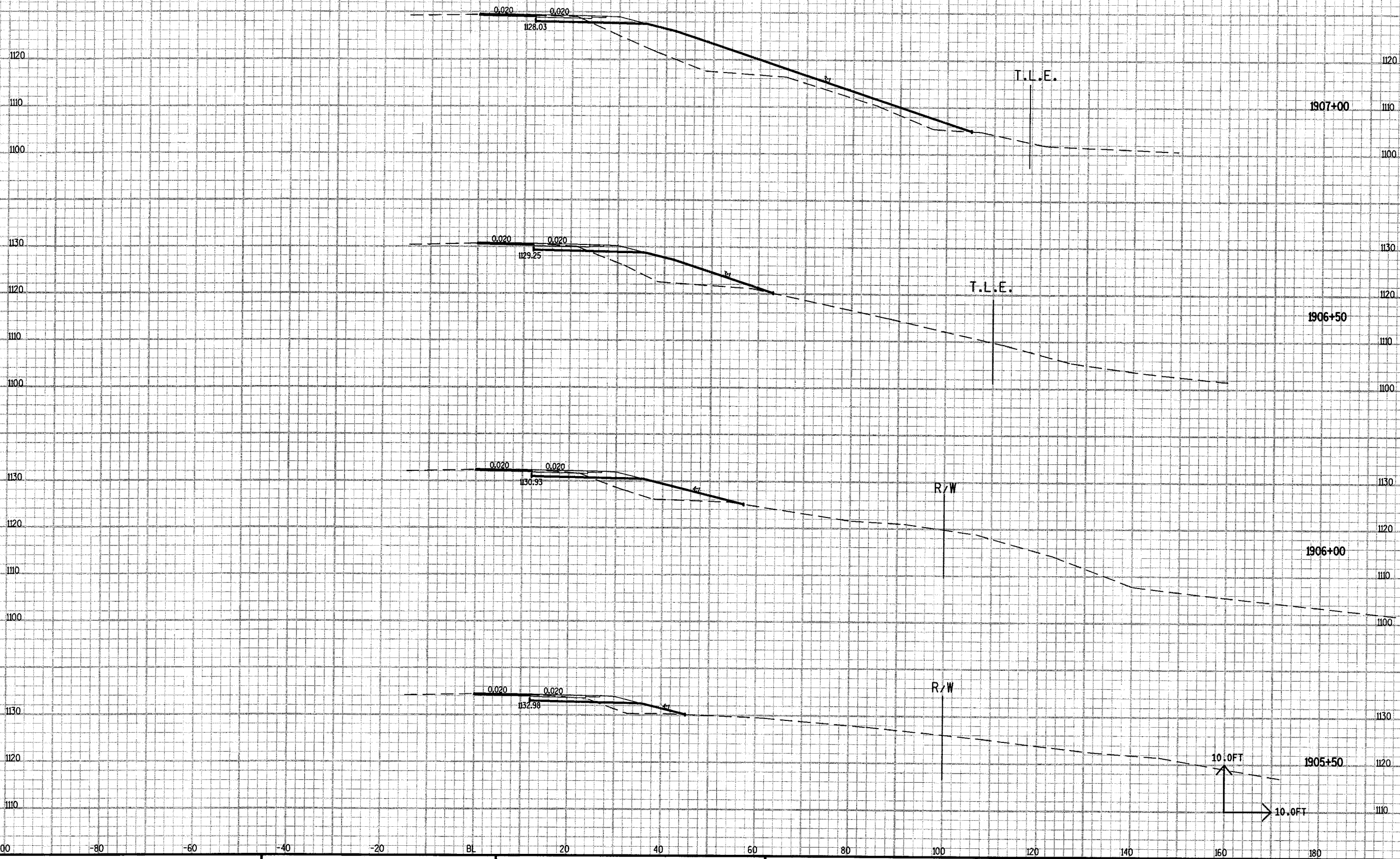
COUNTY: BAYFIELD

CROSS SECTIONS

SHEET NO: 9.9

E

100' 0" 100' 0" 100' 0"



STATE PROJECT NO: 1180-32-71

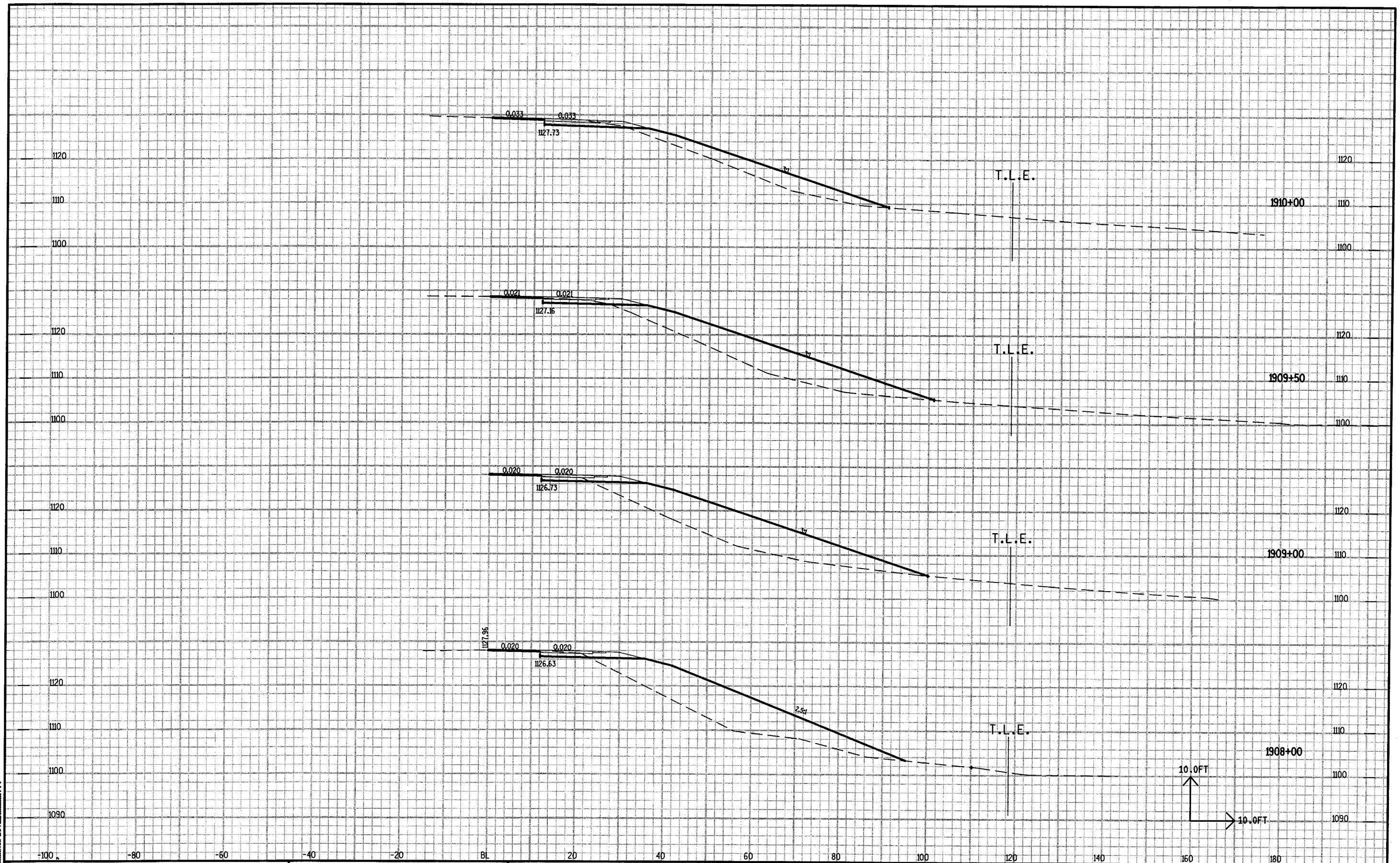
HWY: USH 2

COUNTY: BAYFIELD

CROSS SECTIONS

SHEET NO: 9.10 E

PLOT D



STATE PROJECT NO: 1180-32-71

HWY: USH 2

COUNTY: BAYFIELD

CROSS SECTIONS

SHEET NO: 9.11

E

