LAX

PROJECT ID: 5289-00-72

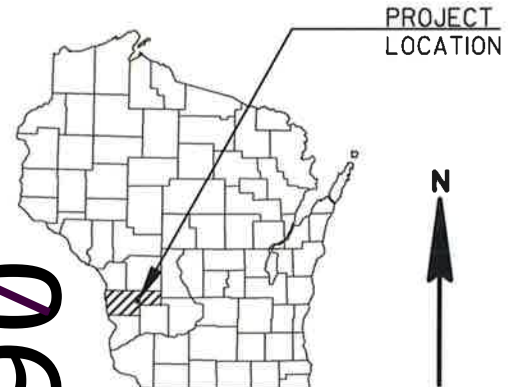
COUNTY: VERNON

06

JANUARY 2018

ORDER OF SHEETS

TOTAL SHEETS = 47



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STH 56 - STH 82

SCOTT HOLLOW CREEK BR B-62-246

CTH S

VERNON COUNTY

STATE PROJECT NUMBER
5289-00-72

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5289-00-72	WISC 2018039	1

Sheets revised: 11, 25, 27, 32, 33

Sheets added: 33a

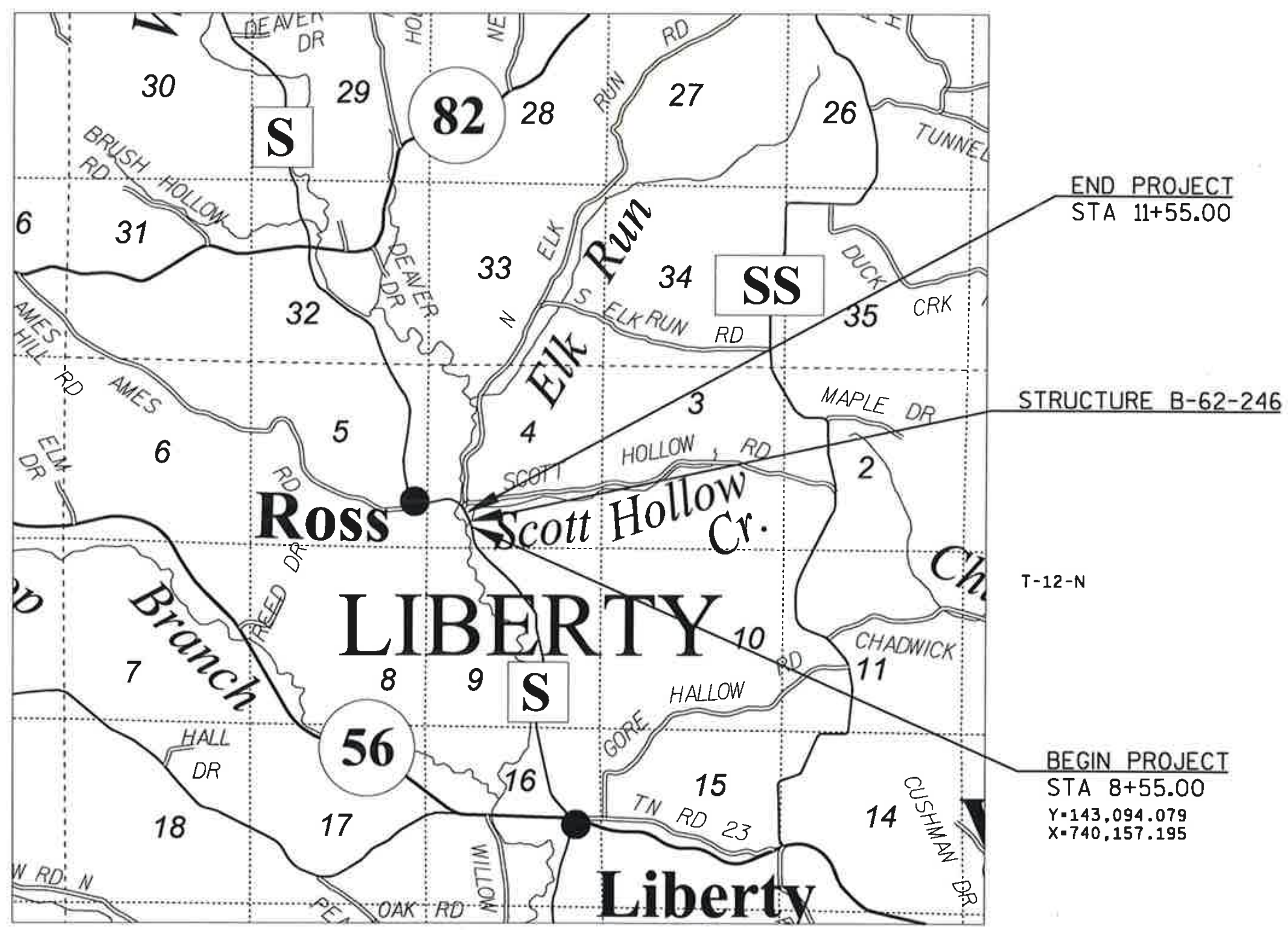
AS-BUILT PLAN

SUPERVISOR: Jim Savoldelli
PROJECT MANAGER: John Bainter
PROJECT ENGINEER: Matt Palkowski
CONTRACTOR: Radtke
WORK STARTED: 4/18/18
WORK COMPLETED: 6/12/18

Subcontractor List

Arbor Green, Inc.
Augelli Concrete & Excavating, L.L.C.
Central State Signing Inc.
Hard Rock Sawing & Drilling Specialist CO.
Jewell Associates Engineers, Inc.
Mathy Construction Company
Wanless Excavating, Inc.

N



LAYOUT

SCALE 0 — 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.057

DESIGN DESIGNATION

A.A.D.T. (2018)	= 240
A.A.D.T. (2038)	= 300
D.H.V.	= 86
D.D.	= 50/50
T.	= 5.0%
DESIGN SPEED	= 40 MPH
ESALS	= 22,000

CONVENTIONAL SYMBOLS

PLAN

CORPORATE LIMITS
PROPERTY LINE
LOT LINE
LIMITED HIGHWAY EASEMENT
EXISTING RIGHT OF WAY
PROPOSED OR NEW R/W LINE
FENCE LINE
SLOPE INTERCEPT
REFERENCE LINE
EXISTING CULVERT
PROPOSED CULVERT (Box or Pipe)
COMBUSTIBLE FLUIDS (CAUTION)
MARSH AREA
WOODED OR SHRUB AREA

PROFILE

GRADE LINE
ORIGINAL GROUND
MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
SPECIAL DITCH (LABEL)
GRADE ELEVATION (95.36)
CULVERT (Profile View)

UTILITIES

OVERHEAD — OH —
ELECTRIC — E —
FIBER OPTIC — FO —
GAS — G —
SANITARY SEWER — SAN —
STORM SEWER — SS —
TELEPHONE — T —
TELEVISION — TV —
WATER — W —
UTILITY PEDESTAL
POWER POLE
TELEPHONE POLE

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, VERNON COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ACCEPTED FOR VERNON COUNTY

DATE: 7-18-17 Phil Hewitt (Signature)
Hwy Commissioner (Title of Offical)

ORIGINAL PLANS PREPARED BY

CORRE

WISCONSIN ERIC T. PRICE E-39027 MADISON WI PROFESSIONAL ENGINEER

DATE: 7-20-17 (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	CORRE, INC.
Designer	CORRE, INC.
Management Consultant	KL ENGINEERING

APPROVED FOR THE DEPARTMENT

DATE: 7/27/17

MANAGEMENT CONSULTANT SIGNATURE

E

GENERAL NOTES

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO NAVD 88.

BEARINGS SHOWN ON THE PLANS ARE GRID BEARINGS TO THE NEAREST SECOND.

CURVE DATA IS BASED ON THE ARC DEFINITION.

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

UTILITY REFERENCE LINES ON THE CROSS SECTIONS ARE FOR HORIZONTAL REFERENCE ONLY.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS, EXACT LOCATIONS WILL BE DETERMINED BY THE E.C.I.P AND APPROVED BY THE ENGINEER IN THE FIELD.

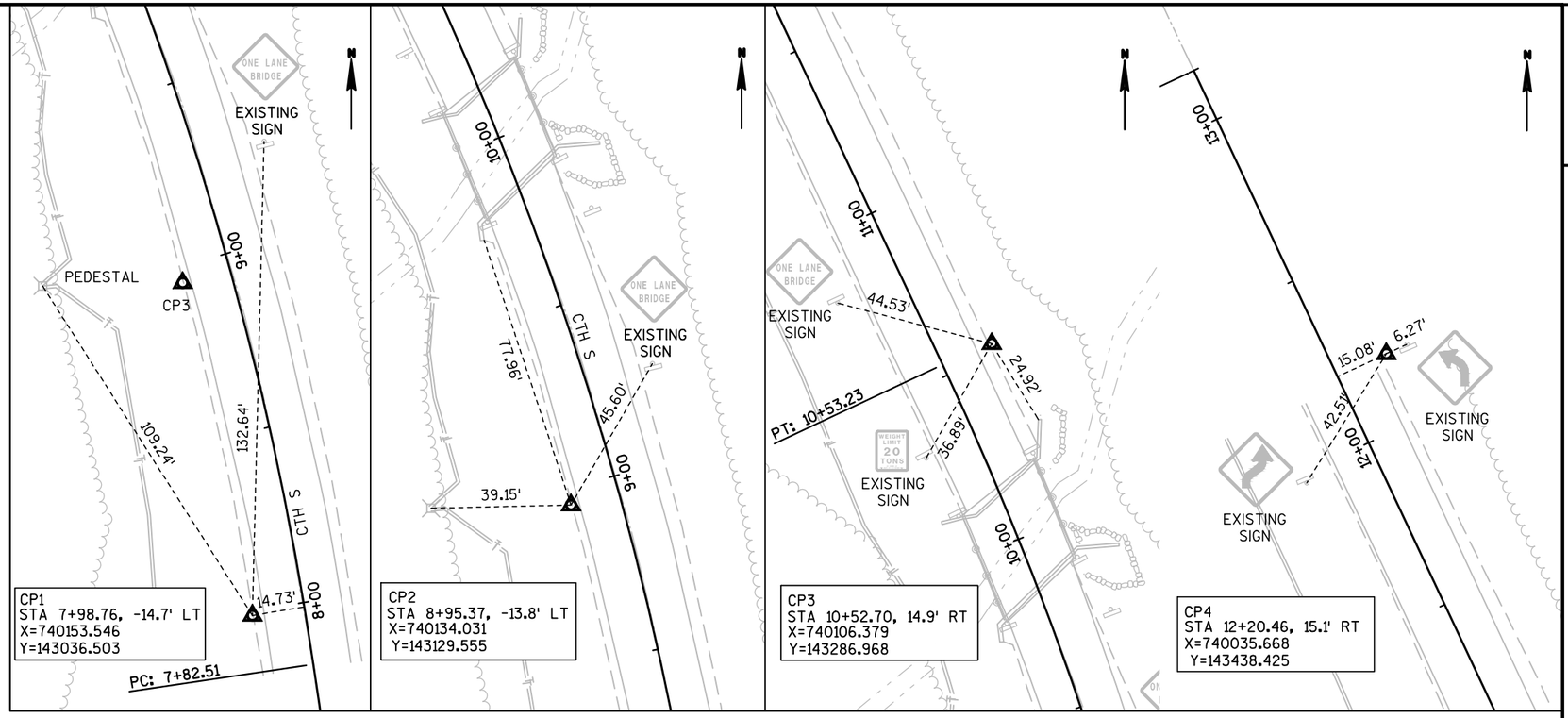
SILT FENCE IS TO BE PLACED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER, AND IN PLACE PRIOR TO REMOVALS.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, ARE TO BE 4-INCH SALVAGED TOPSOILED, FERTILIZED, AND SEEDED AND MULCHED.

A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING PAVEMENTS AT REMOVAL LIMITS.

WETLANDS EXIST WITHIN THE PROJECT LIMITS. DO NOT OPERATE MACHINERY OUTSIDE OF THE SLOPE INTERCEPTS.

4-INCH ASPHALTIC SURFACE SHALL BE CONSTRUCTED WITH 2 EQUAL LIFTS (2-INCH).



CONSTRUCTION TIES FOR CTH S OVER SCOTT HOLLOW CREEK

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 0.44 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.39 ACRES

COUNTY CONTACT

VERNON COUNTY
P.O. BOX 232
VIROQUA, WI 54665

PHIL HEWITT, COMMISSIONER
TELEPHONE: 608-637-5452
EMAIL: PHIL.HEWITT@VERNONCOUNTY.ORG

CONSULTANT CONTACT

CORRE, INC.
6510 GRAND TETON PLAZA, SUITE 314
MADISON, WI 53719

ERIC PRICE, P.E.
TELEPHONE: 608-826-6146
E-MAIL: EPRICE@CORREINC.COM

DNR CONTACT

KAREN KALVELAGE
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601

TELEPHONE: 608-785-9115
E-MAIL: KAREN.KALVELAGE@WISCONSIN.GOV

UTILITY CONTACTS

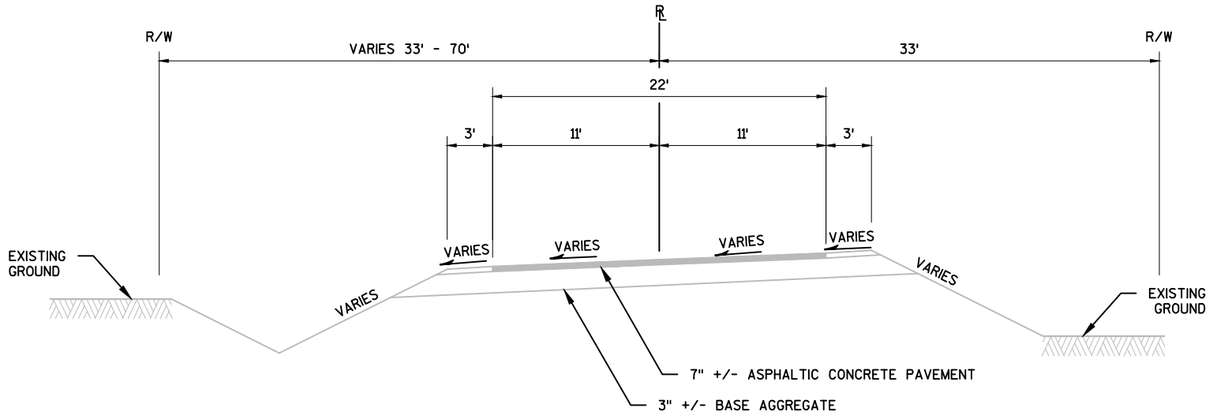
✳ VERNON COMMUNICATIONS COOPERATIVE
COMMUNICATION
TODD TUNKS
214 N MAIN STREET
VIROQUA, WI 54665

TELEPHONE: 608-634-3136
CELL: 608-632-0615
E-MAIL: TTUNKS@VERNONCOM.COOP

✳ DENOTES UTILITIES THAT ARE DIGGERS HOTLINE MEMBERS

DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

PROJECT NO: 5289-00-72	HWY:CTH S	COUNTY: VERNON	GENERAL NOTES	SHEET 2 E

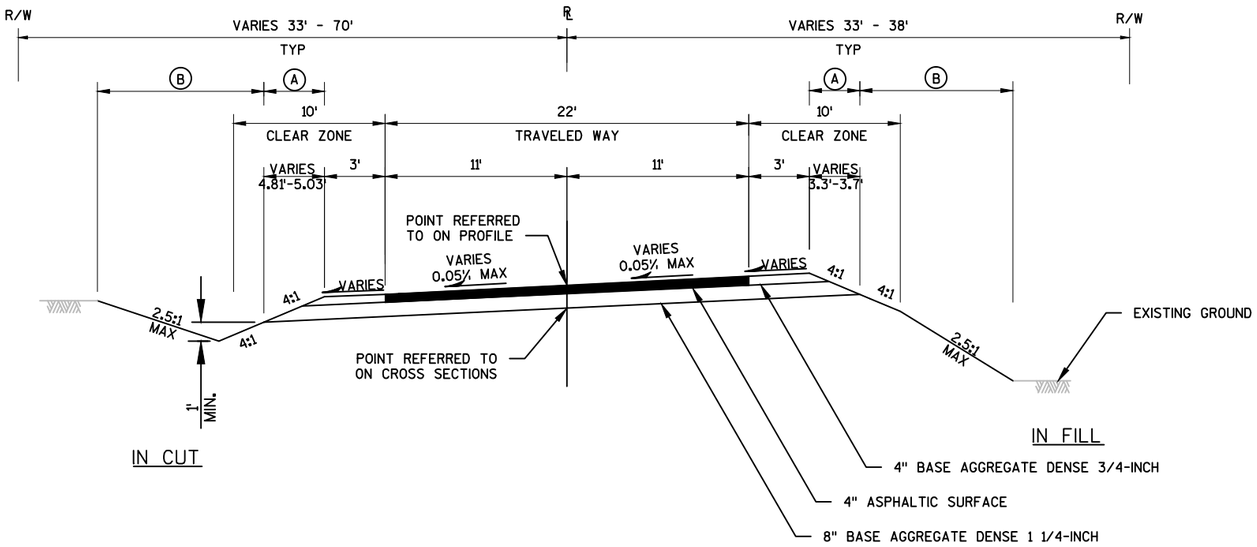


TYPICAL EXISTING SECTION - CTH S
STA 8+55 - STA 9+85
STA 10+15 - STA 11+55

SUPERELEVATION TABLE

SUPERELEVATION CURVE	STATION	LEFT OUTSIDE SHOULDER	LEFT OUTSIDE LANE	RIGHT OUTSIDE LANE	RIGHT OUTSIDE SHOULDER
START PROJECT (MATCH EXIST)	8+55.00	-5.24%	-5.24%	0.80%	-4.00%
LEFT FULL SUPERELEVATION	9+00.00	-5.00%	-5.00%	3.00%	3.00%
RIGHT FULL SUPERELEVATION	9+41.40	-5.00%	-5.00%	5.00%	5.00%
END RIGHT SUPERELEVATION	10+33.30	-5.00%	-5.00%	5.00%	5.00%
END LEFT SUPERELEVATION	10+53.23	-5.00%	-5.00%	4.03%	4.03%
END CURVE	10+53.23				
END PROJECT (MATCH EXIST)	11+55.00	-4.23%	-4.23%	-0.43%	-4.00%

NOTE: CROSS SECTIONS USE 40' CURVE SMOOTHING



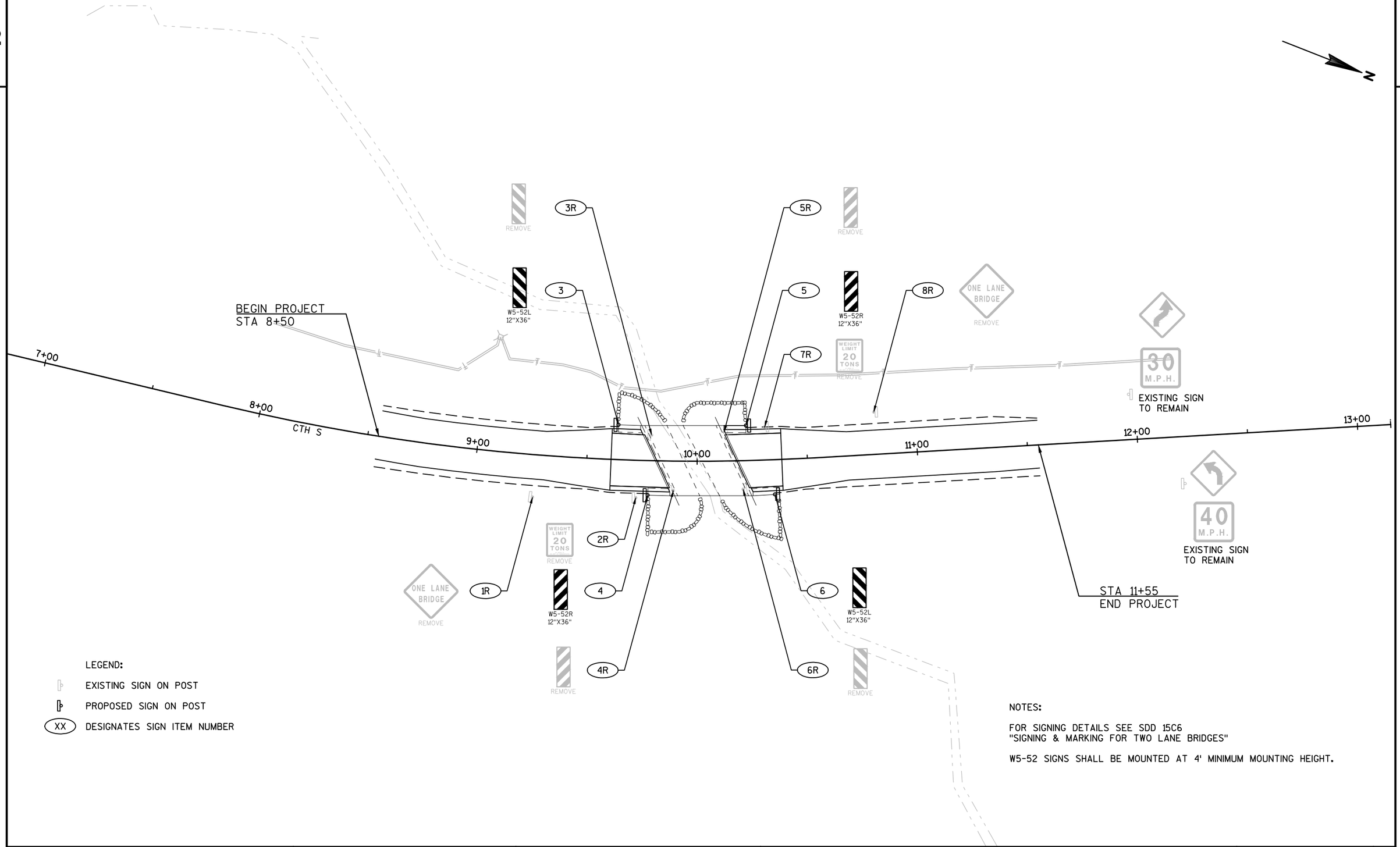
Ⓐ FERTILIZER TYPE B; SEEDING MIXTURE NO. 20; SEEDING TEMPORARY

Ⓑ SALVAGED TOPSOIL; MULCHING; FERTILIZER TYPE B; SEEDING MIXTURE NO. 20; SEEDING TEMPORARY

TYPICAL FINISHED SECTION - CTH S
STA 8+55 - STA 9+81.04
STA 10+18.80 - STA 11+55

PROJECT NO: 5289-00-72	HWY: CTH S	COUNTY: VERNON	TYPICAL SECTIONS: CTH S	SHEET 3 E

2



LEGEND:

- EXISTING SIGN ON POST
- PROPOSED SIGN ON POST
- (XX) DESIGNATES SIGN ITEM NUMBER

NOTES:

FOR SIGNING DETAILS SEE SDD 15C6
"SIGNING & MARKING FOR TWO LANE BRIDGES"

W5-52 SIGNS SHALL BE MOUNTED AT 4' MINIMUM MOUNTING HEIGHT.

PROJECT NO: 5289-00-72	HWY: CTH S	COUNTY: VERNON	SIGNING	SHEET 4	E

FILE NAME : P:\WI - SW REGION\5289-00-02_CTH S_VERNON COUNTY\500_CADD\501_C3D\SHEETSPLAN\023201-PS-PM.DWG
LAYOUT NAME - 023201-PS-PM
PLOT DATE : 7/18/2017 11:17 AM PLOT BY : ERIC ANDRITSCH, PE PLOT NAME :
PLOT SCALE : 1 IN:40 FT

5289-00-72

Line	Item	Item Description	Unit	Total	Qty
0002	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. 10+00	LS	1.000	1.000
0004	205.0100	Excavation Common **P**	CY	206.000	206.000
0006	206.1000	Excavation for Structures Bridges (structure) 01. B-62-0246	LS	1.000	1.000
0008	208.0100	Borrow **P**	CY	125.000	125.000
0010	210.1500	Backfill Structure Type A	TON	350.000	350.000
0012	213.0100	Finishing Roadway (project) 01. 5289-00-72	EACH	1.000	1.000
0014	305.0110	Base Aggregate Dense 3/4-Inch	TON	38.000	38.000
0016	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	445.000	445.000
0018	415.0060	Concrete Pavement 6-Inch	SY	20.000	20.000
0020	415.0410	Concrete Pavement Approach Slab	SY	111.000	111.000
0022	455.0605	Tack Coat	GAL	40.000	40.000
0024	465.0105	Asphaltic Surface	TON	130.000	130.000
0026	502.0100	Concrete Masonry Bridges	CY	137.000	137.000
0028	502.3200	Protective Surface Treatment	SY	165.000	165.000
0030	505.0400	Bar Steel Reinforcement HS Structures	LB	4,810.000	4,810.000
0032	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	18,580.000	18,580.000
0034	513.7083	Railing Steel Type NY3 (structure) 01. B-62-0246	LF	122.000	122.000
0036	516.0500	Rubberized Membrane Waterproofing	SY	18.200	18.200
0038	550.0020	Pre-Boring Rock or Consolidated Materials	LF	185.000	185.000
0040	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	205.000	205.000
0042	606.0300	Riprap Heavy	CY	220.000	220.000
0044	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	210.000	210.000
0046	619.1000	Mobilization	EACH	1.000	1.000
0048	624.0100	Water	MGAL	5.000	5.000
0050	625.0500	Salvaged Topsoil **P**	SY	743.000	743.000
0052	627.0200	Mulching **P**	SY	743.000	743.000
0054	628.1504	Silt Fence	LF	315.000	315.000
0056	628.1520	Silt Fence Maintenance	LF	315.000	315.000
0058	628.1905	Mobilizations Erosion Control	EACH	1.000	1.000
0060	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0062	628.2008	Erosion Mat Urban Class I Type B	SY	110.000	110.000
0064	629.0210	Fertilizer Type B	CWT	0.800	0.800
0066	630.0120	Seeding Mixture No. 20 **P**	LB	25.000	25.000
0068	630.0200	Seeding Temporary **P**	LB	25.000	25.000
0070	633.5100	Markers Row	EACH	4.000	4.000
0072	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0074	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0076	638.2602	Removing Signs Type II	EACH	8.000	8.000

5289-00-72

Line	Item	Item Description	Unit	Total	Qty
0078	638.3000	Removing Small Sign Supports	EACH	8.000	8.000
0080	642.5201	Field Office Type C	EACH	1.000	1.000
0082	643.0420	Traffic Control Barricades Type III	DAY	1,098.000	1,098.000
0084	643.0705	Traffic Control Warning Lights Type A	DAY	1,708.000	1,708.000
0086	643.0900	Traffic Control Signs	DAY	854.000	854.000
0088	643.5000	Traffic Control	EACH	1.000	1.000
0090	645.0111	Geotextile Type DF Schedule A	SY	90.000	90.000
0092	645.0120	Geotextile Type HR	SY	280.000	280.000
0094	650.4500	Construction Staking Subgrade	LF	262.000	262.000
0096	650.5000	Construction Staking Base	LF	262.000	262.000
0098	650.6500	Construction Staking Structure Layout (structure) 01. B-62-0246	LS	1.000	1.000
0100	650.9910	Construction Staking Supplemental Control (project) 01. 5289-00-72	LS	1.000	1.000
0102	650.9920	Construction Staking Slope Stakes	LF	262.000	262.000
0104	690.0150	Sawing Asphalt	LF	44.000	44.000
0106	715.0415	Incentive Strength Concrete Pavement	DOL	500.000	500.000
0108	715.0502	Incentive Strength Concrete Structures	DOL	822.000	822.000

Division	From/To Station	Location	▲ 205.0100 Common Excavation (1)	Salvaged/Unusable Pavement Material (3)	Available Material (4)	Unexpanded Fill	Expanded Fill (5)	Mass Ordinate +/- (6)	Waste	208.0100 Borrow (7)
			Cut (2)				Factor 1.25			
Division 1										
CTH S	08+55/9+87.79	South	98	61	37	63	79	-42	0	42
CTH S	10+12.35/11+55	North	108	62	45	102	128	-83	0	83
Grand Total			206	124	82	166	207	-125	0	125
▲ Total Common Exc			206							

Notes:

(1) Common Excavation is item number 205.0100

(2) Salvaged/Unsuable Pavement Material is included in Cut.

(3) Salvaged/Unsuable Pavement Material

4) Available Material = Cut - Salvaged/Unusuable Pavement Material

(5) Expanded Fill Factor = 1.25

Expanded Fill = (Unexpanded Fill) * Fill Factor

(6) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

(7) Use 82 CY of material from Division 1. Borrow Excavation item number 208.0100

NOTE: ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE.

▲ PAY PLAN QUANTITY

FINISHING ROADWAY (5289-00-72)

	213.0100 EACH
CTH S	1
TOTAL	1

BASE AGGREGATE DENSE

STATION	-	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON
8+55	-	9+61	MAINLINE	17	184
9+61	-	9+88	APPROACH SLAB	1	31
10+12	-	10+38	APPROACH SLAB	1	30
10+38	-	11+55	MAINLINE	19	200
			TOTALS:	38	445

CONCRETE PAVEMENT 6-INCH

LOCATION	415.0060 SY
9+61 - 9+88	10
10+12 - 10+38	10
TOTAL	20

CONCRETE PAVEMENT APPROACH SLAB

STATION	-	STATION	LOCATION	415.0410 SY
9+61	-	9+88	MAINLINE	56
10+13	-	10+39	MAINLINE	55
			TOTAL	111

ASPHALTIC ITEMS

STATION	-	STATION	LOCATION	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON
8+55	-	9+61	CTH S	19	62
10+38	-	11+55	CTH S	21	68
			TOTALS	40	130

WATER

LOCATION	624.0100 MGAL
BASE COMPACTION	5
TOTALS	5

▲ PAY PLAN QUANTITY

LANDSCAPING ITEMS

STATION	-	STATION	LOCATION	▲ 625.0500 SALVAGED TOPSOIL SY	▲ 627.0200 MULCHING SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	▲ 630.0120 SEEDING MIXTURE NO. 20 LB	▲ 630.0200 SEEDING TEMPORARY LB
8+55	-	9+78	RT	185	185	83	0.2	6	6
8+55	-	9+64	LT	165	165	-	0.2	6	6
10+23	-	11+55	RT	215	215	27	0.2	7	7
10+40	-	11+55	LT	178	178	-	0.2	6	6
			TOTALS	743	743	110	0.8	25	25

3

EROSION CONTROL ITEMS

STATION	-	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 MAINTENANCE LF	MOBILIZATIONS 628.1905 EROSION CONTROL EACH	MOBILIZATIONS 628.1910 EMERGENCY EROSION CONTROL EACH
8+53	-	9+71	LT	130	130	0.5	0.5
9+86	-	11+57	LT	185	185	0.5	0.5
			TOTALS	315	315	1	1

SIGNING ITEMS

STATION	LOCATION	SIGN NUMBER	SIGN CODE	SIZE	634.0612 POSTS WOOD 4X6-INCH X 12-FT EACH	637.2230 SIGNS TYPE II REFLECTIVE F SF	SIGN MESSAGE
9+64	LT	4	W5-52L	12 X 36	1	3.00	BRIDGE HASH MARKS
9+78	RT	3	W5-52R	12 X 36	1	3.00	BRIDGE HASH MARKS
10+23	LT	6	W5-52L	12 X 36	1	3.00	BRIDGE HASH MARKS
10+35	RT	5	W5-52R	12 X 36	1	3.00	BRIDGE HASH MARKS
				TOTALS	4	12	

3

REMOVING SIGN ITEMS

STATION	LOCATION	SIGN NUMBER	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	SIGN MESSAGE
9+27	RT	1R	1	1	ONE LANE BRIDGE
9+73	RT	2R	1	1	WEIGHT LIMIT 20 TONS
9+89	RT	3R	1	1	BRIDGE HASH MARKS
9+79	LT	4R	1	1	BRIDGE HASH MARKS
10+21	RT	5R	1	1	BRIDGE HASH MARKS
10+12	LT	6R	1	1	BRIDGE HASH MARKS
10+31	LT	7R	1	1	WEIGHT LIMIT 20 TONS
10+81	LT	8R	1	1	ONE LANE BRIDGE
		TOTALS	8	8	

NOTE: ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE.

TRAFFIC CONTROL ITEMS

LOCATION	643.0420 BARRICADES TYPE III DAY	643.0705 WARNING LIGHTS TYPE A DAY	643.0900 SIGNS DAY	643.5000 TRAFFIC CONTROL EACH
BEG OF PROJECT - BRIDGE	549	854	427	0.5
BRIDGE - END OF PROJECT	549	854	427	0.5
TOTALS	1,098	1,708	854	1

CONSTRUCTION STAKING ITEMS

STATION	-	STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	CAT 0020 650.6500 STRUCTURE LAYOUT B-62-246 LS	650.9910 SUPPLEMENTAL CONTROL 5289-00-72 LS	650.9920 SLOPE STAKES LF
8+55	-	9+81	MAINLINE	126	126	-	-	126
9+81	-	10+19	BRIDGE	-	-	1	1	
10+19	-	11+55	MAINLINE	136	136	-	-	136
			TOTALS	262	262	1	1	262

MARKERS ROW

STATION	LOCATION	633.5100 EACH
9+60	33' RT	1
9+60	38' RT	1
10+50	33' LT	1
10+50	38' LT	1
	TOTALS	4

SAWING PAVEMENT

STATION	LOCATION	690.0150 ASPHALT LF
8+55	MAINLINE	22
11+55	MAINLINE	22
	TOTALS	44

R/W PROJECT NUMBER 5289-00-02	SHEET NUMBER	TOTAL SHEETS
R/W PROJECT NUMBER	4.01	2

PLAT OF RIGHT OF WAY REQUIRED FOR

STH 56 - STH 82

SCOTT HOLLOW CREEK BR B-62-0246

CTH S — VERNON COUNTY

CONSTRUCTION PROJECT NUMBER 5289-00-72

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE (P.L.)
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) (TYPE)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING — TO BE REMOVED
BRIDGE

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN (I-25)

R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) IP

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)

PARCEL NUMBER (25) UTILITY NUMBER (40)

PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC	PROPERTY LINE	PL
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM	REEL / IMAGE	R/I
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RESTICTIVE DEVELOPMENT EASEMENT	RDE
CENTERLINE	C/L	RIGHT	RT
CERTIFIED SURVEY MAP	CSM	RIGHT OF WAY	R/W
CONCRETE	CONC	SECTION	SEC
COUNTY	CO	SEPTIC VENT	SEPV
COUNTY TRUNK HIGHWAY	CTH	SQUARE FEET	SF
DISTANCE	DIST	STATE TRUNK HIGHWAY	STH
CORNER	COR	STATION	STA
DOCUMENT NUMBER	DOC	TELEPHONE PEDESTAL	TP
EASEMENT	EASE	TEMPORARY LIMITED EASEMENT	TLE
EXISTING	EX	TRANSPORTATION PROJECT PLAT	TPP
GAS VALVE	GV	UNITED STATES HIGHWAY	USH
GRID NORTH	GN	VOLUME	V
HIGHWAY EASEMENT	HE		
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		
POINT OF COMPOUND CURVE	PCC		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), VERNON COUNTY, NAD 83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES. GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

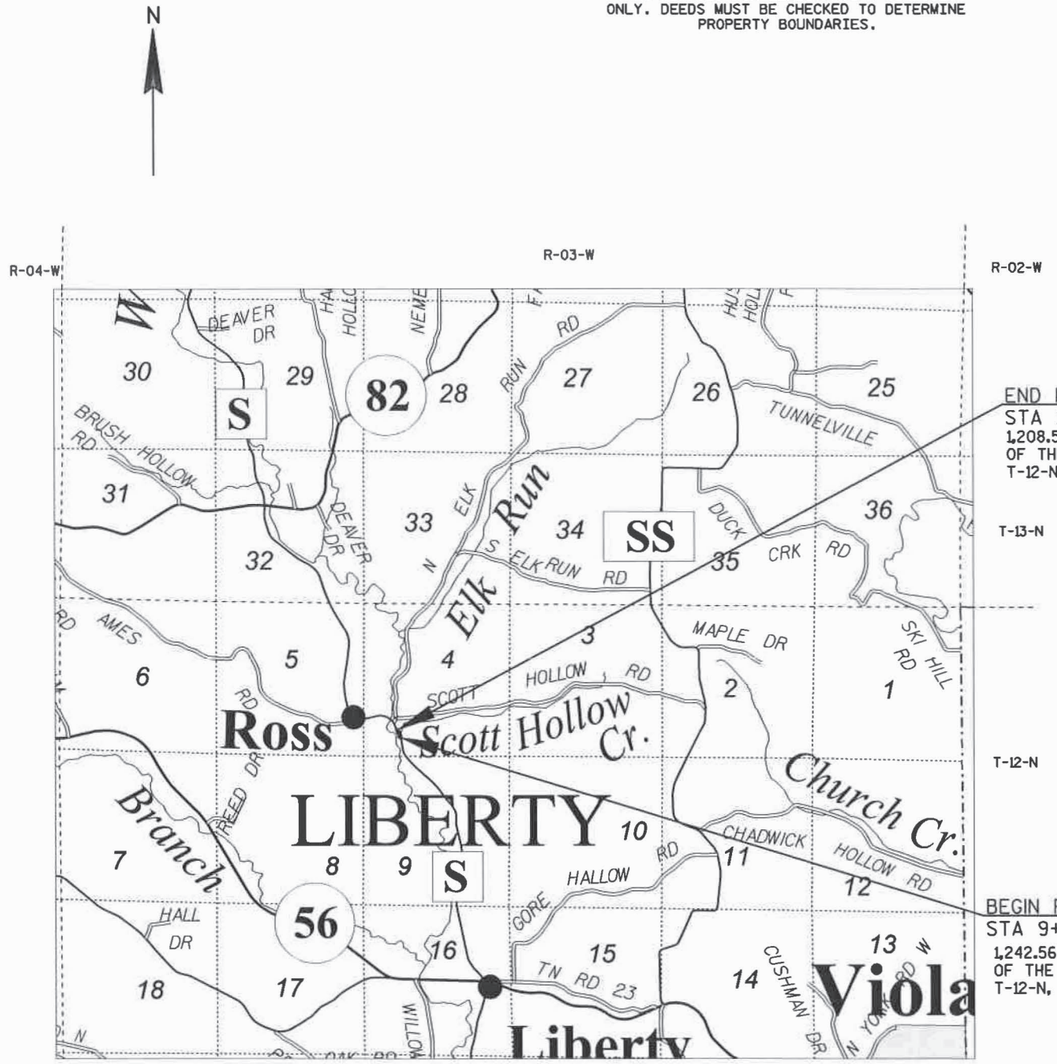
RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY ⅝" x 24" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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.

CONVENTIONAL UTILITY SYMBOLS

WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS

CAUTION
THIS PLAT IS FOR ILLUSTRATIVE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES.



END RELOCATION ORDER
STA 10+50.00
1,208.59' EAST AND 861.03' NORTH OF THE SOUTHWEST CORNER, SEC 4, T-12-N, R-03-W

BEGIN RELOCATION ORDER
STA 9+60.00
1,242.56' EAST AND 777.73' NORTH OF THE SOUTHWEST CORNER, SEC 4, T-12-N, R-03-W

LAYOUT
SCALE 0 — 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.017 MI

CORRE
1802 WARDEN STREET
EAU CLAIRE, WI 54703
(608)828-1011
www.correinc.com

WISCONSIN
BRYON J. MOTSZKO
S-2846
MENOMONIE WI
LAND SURVEYOR

I, BRYON J. MOTSZKO, REGISTERED LAND SURVEYOR, S-2846, HEREBY CERTIFY THAT I HAVE SURVEYED THE LAND DESCRIBED HEREON AND THAT THE MAP HEREON IS A CORRECT REPRESENTATION OF THAT SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE: 5/18/17 Bryon Motszko (Signature)

REVISION DATE

VERNON COUNTY

APPROVED FOR THE COUNTY
DATE: 5/22/17 Gail Hewitt (Signature)

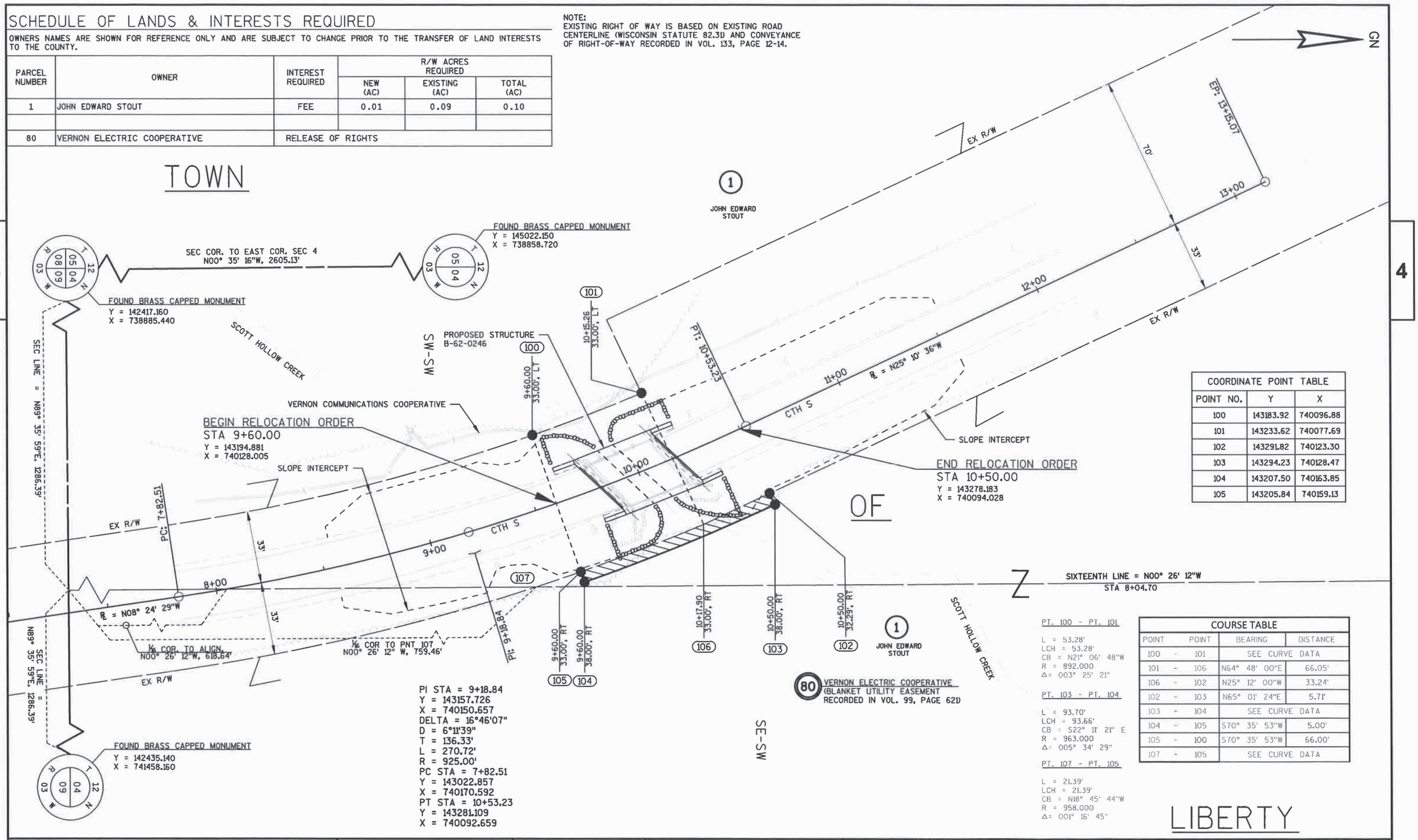
SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE COUNTY.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W ACRES REQUIRED		
			NEW (AC)	EXISTING (AC)	TOTAL (AC)
1	JOHN EDWARD STOUT	FEE	0.01	0.09	0.10
80	VERNON ELECTRIC COOPERATIVE	RELEASE OF RIGHTS			

NOTE:
EXISTING RIGHT OF WAY IS BASED ON EXISTING ROAD CENTERLINE (WISCONSIN STATUTE 82.31) AND CONVEYANCE OF RIGHT-OF-WAY RECORDED IN VOL. 133, PAGE 12-14.

TOWN



PI STA = 9+18.84
Y = 143157.726
X = 740150.657
DELTA = 16°46'07"
D = 6°11'39"
T = 136.33'
L = 270.72'
R = 925.00'
PC STA = 7+82.51
Y = 143022.857
X = 740170.592
PT STA = 10+53.23
Y = 143281.109
X = 740092.659

COORDINATE POINT TABLE		
POINT NO.	Y	X
100	143183.92	740096.88
101	143233.62	740077.69
102	143291.82	740123.30
103	143294.23	740128.47
104	143207.50	740163.85
105	143205.84	740159.13

PT. 100 - PT. 101
L = 53.28'
LCH = 53.28'
CB = N21° 06' 48"W
R = 892.000
Δ= 003° 25' 21"

PT. 103 - PT. 104
L = 93.70'
LCH = 93.66'
CB = S22° 11' 21" E
R = 963.000
Δ= 005° 34' 29"

PT. 107 - PT. 105
L = 21.39'
LCH = 21.39'
CB = N18° 45' 44"W
R = 958.000
Δ= 001° 16' 45"

COURSE TABLE				
POINT		POINT	BEARING	DISTANCE
100	-	101	SEE CURVE DATA	
101	-	106	N64° 48' 00"E	66.05'
106	-	102	N25° 12' 00"W	33.24'
102	-	103	N65° 01' 24"E	5.71'
103	-	104	SEE CURVE DATA	
104	-	105	S70° 35' 53"W	5.00'
105	-	100	S70° 35' 53"W	66.00'
107	-	105	SEE CURVE DATA	

OF

LIBERTY

REVISION DATE	DATE - 5/18/17	SCALE, FEET 0 20 40	HWY: CTH S	STATE R/W PROJECT NUMBER 5289-00-02	PLAT SHEET 4.02	
	GRID FACTOR N/A		COUNTY: VERNON	CONSTRUCTION PROJECT NUMBER 5289-00-72	PS&E SHEET 10	E

FILE NAME : P:\WI - SW REGION\5289-00-02_CTH S_VERNON COUNTY\500_CADD\501_C3D\SHEETSPLAN\040102-RP.DWG
LAYOUT NAME - 040102-RP
PLOT DATE : 4/3/2017 12:24 PM PLOT BY : BRYON MOTSZKO, PE, PLS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 75

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
1	7+98.64	REBAR, 14.93' LT	784.55
2	8+95.27	PK NAIL, 14.01' LT	785.81
3	10+52.65	PK NAIL, 14.68' RT	787.05
4	12+20.40	REBAR, 14.85' RT	785.51

Approach slab and concrete pavement 6-Inch was poured as one 12-Inch slab. A joint was cut to separate the 2 slabs and tie bars were added down the joint.

PI STA = 9+18.84
Y = 143157.726
X = 740150.657
DELTA = 16°46'07"
D = 6°11'39"
T = 136.33'
L = 270.72'
R = 925.00'
PC STA = 7+82.51
PT STA = 10+53.23
SE = 5.0%

EXISTING R/W
PI: 7+82.51
7+00
146.61'
N8° 24' 29"W
X=740,182.657
Y=142,941.234
33'
8+00
℄ CTH S
9+00
10+00
11+00
12+00
261.84'
N25° 10' 36"W
13+00
EXISTING R/W
CONCRETE PAVEMENT 6-INCH
STA 9+60.95 TO STA 9+75.21, LT
STA 9+60.95 TO STA 9+87.80, RT
JOHN EDWARD STOUT
WETLAND BOUNDARY
CONCRETE PAVEMENT 6-INCH
STA 10+12.35 TO STA 10+38.43, LT
STA 10+24.16 TO STA 10+38.43, RT
EXISTING P-62-121
CONCRETE PAVEMENT APPROACH SLAB (TYP)
VERNON COMMUNICATIONS COOPERATIVE
PT: 10+53.23
+30.95 11.0' LT
+68.43 11.0' LT
+30.95 11.0' RT
+68.43 11.0' RT
3'
11'
11'
5'
70'
33'
SLOPE INTERCEPT (TYP)
PI: 9+18.84
+60.00 33.0' RT
+60.00 38.0' RT
PROPOSED B-62-246
PROP R/W
+50.00 32.3' RT
+50.00 38.0' RT
SIXTEENTH LINE
P.L.
SCOTT HOLLOW CREEK
JOHN EDWARD STOUT
JOHN EDWARD STOUT

LEGEND
EROSION MAT URBAN CLASS I TYPE B
SILT FENCE
RIP RAP
WATER FLOW

BEGIN PROJECT
STA 8+55.00
MATCH EXISTING
SAWCUT REQ'D
Y = 143,094.079
X = 740,157.195

END PROJECT
STA 11+55.00
MATCH EXISTING
SAWCUT REQ'D

VCL = 120.00
K = 98.23
VCL = 165.00
K = 105.49
STA 8+55.00 EL 785.97
VPI STA 9+50.00 VPI EL 786.98
VPC STA 10+35.00 VPC EL 786.55
VPT STA 11+55.00 VPT EL 786.69
VPC STA 8+67.50 VPC EL 786.10
VPT STA 10+32.50 VPT EL 786.57
VPI STA 10+95.00 VPI EL 786.25
OBSERVED WATER ELEV 776.14 (4-6-16)
HIGH WATER 100 YR 785.50
PROPOSED PROFILE ON ℄
1.06%
-0.50%
0.72%
EXISTING GROUND
EXISTING ℄ ELEVATION
PROPOSED ℄ ELEVATION
785.63 785.95 786.22 786.40 786.47 786.66 775.28 786.68 786.27 786.49 786.31 786.45 786.64 786.65 787.31
800 790 780 770 765
7+00 8+00 9+00 10+00 11+00 12+00 13+00

STATION 10+00
REMOVE EXISTING STRUCTURE P-62-121
SINGLE SPAN STEEL DECK GIRDER
32.0' OVERALL LENGTH
24.0' CLEAR WIDTH

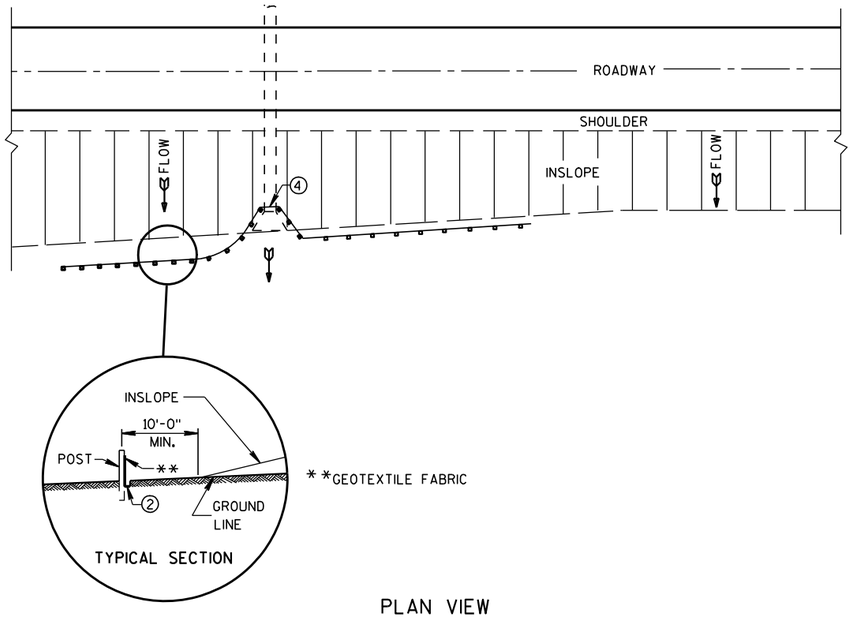
STATION 10+00
NEW STRUCTURE B-62-246 REQ'D
SINGLE SPAN CONCRETE FLAT SLAB
37.75' OVERALL LENGTH
28.5' CLEAR ROADWAY WIDTH
25° SKEW (RHF)

PROJECT NO: 5289-00-72	HWY: CTH S	COUNTY: VERNON	PLAN AND PROFILE: MAINLINE	SHEET 11 E

FILE NAME : P:\WI - SW REGION\5289-00-02_CTH S_VERNON COUNTY\500_CADD\501_C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-PP
PLOT DATE : 7/20/2017 3:12 PM PLOT BY : ERIC ANDRITSCH, PE PLOT NAME :
PLOT SCALE : 1 IN:40 FT

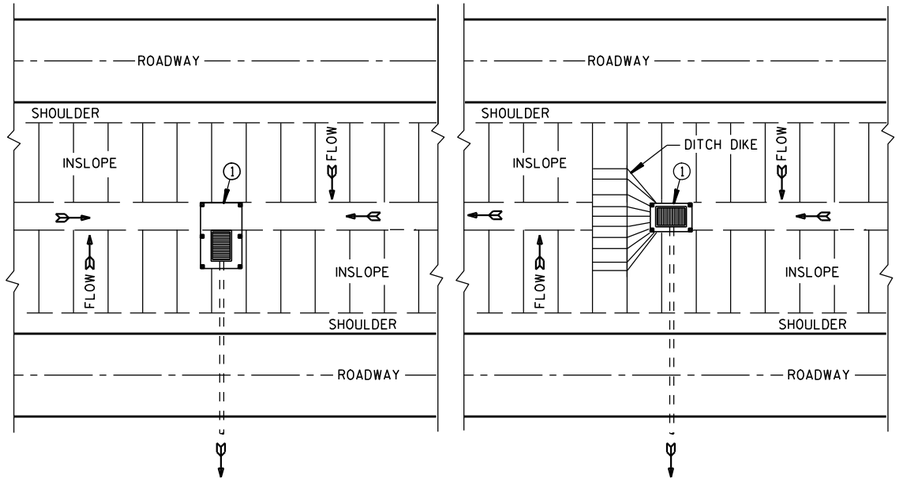
Standard Detail Drawing List

08E09-06	SILT FENCE
12A03-10	NAME PLATE (STRUCTURES)
13B02-08B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
15A01-13A	MARKER POST FOR RIGHT-OF-WAY
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



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.

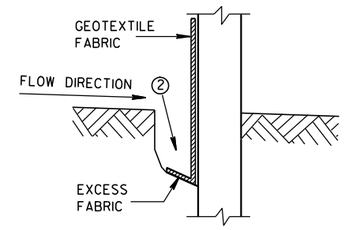
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE 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.

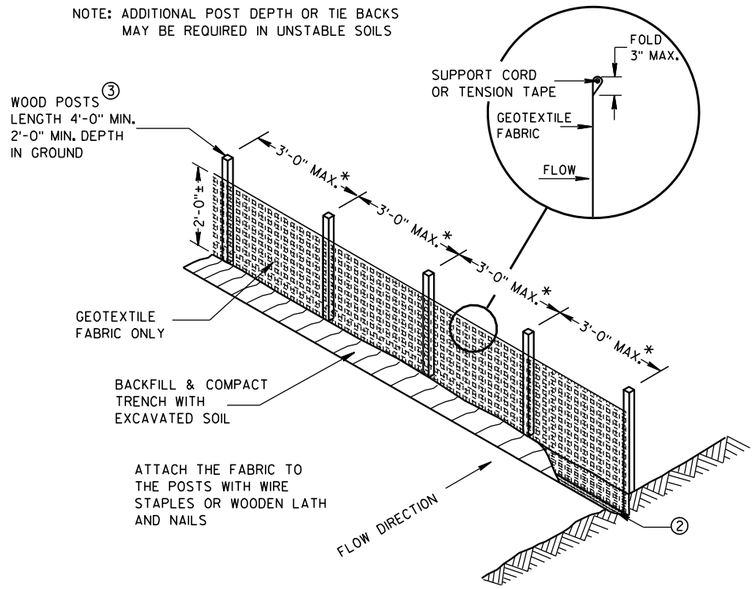
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

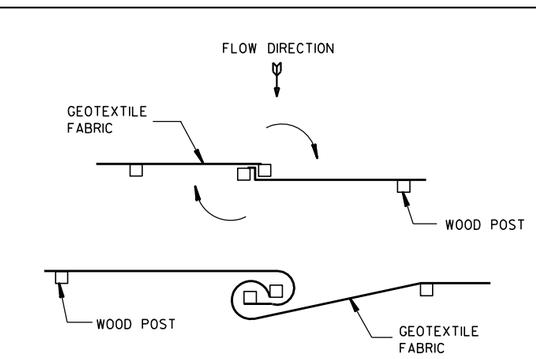
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



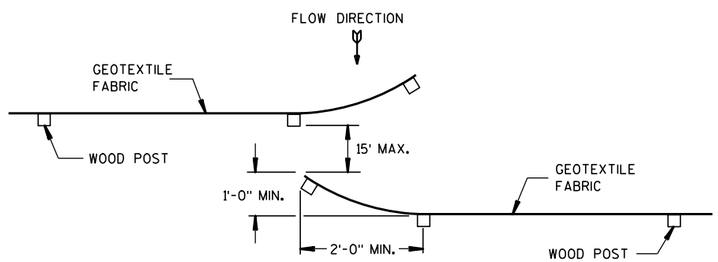
TRENCH DETAIL



SILT FENCE

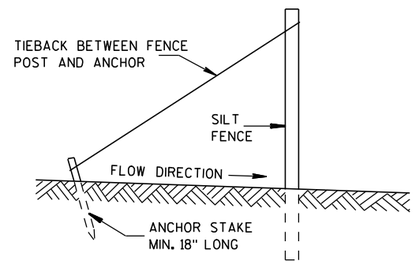


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

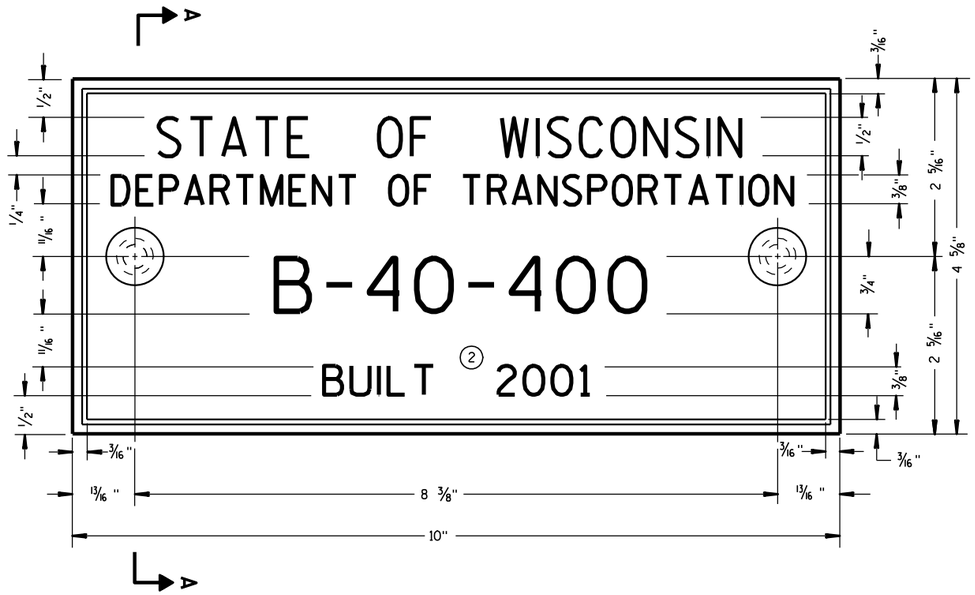
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

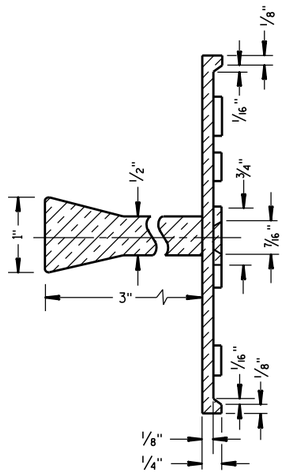
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

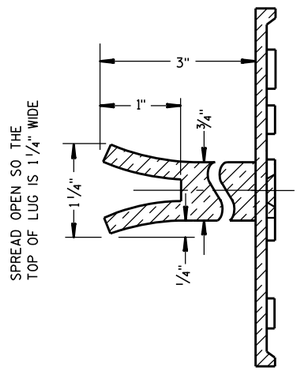
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG

FOR MULTI-UNIT STRUCTURES LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

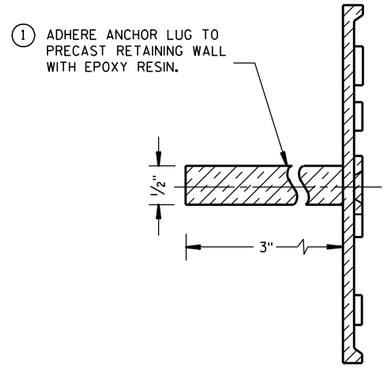
COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/26/10 DATE

/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOPMENT ENGINEER

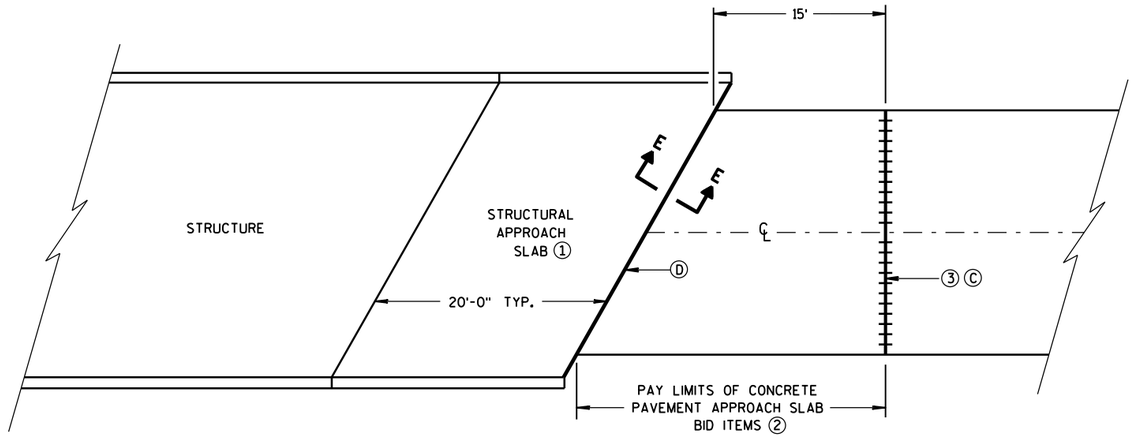
FHWA

6

S.D.D. 12 A 3-10

6

S.D.D. 12 A 3-10



GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

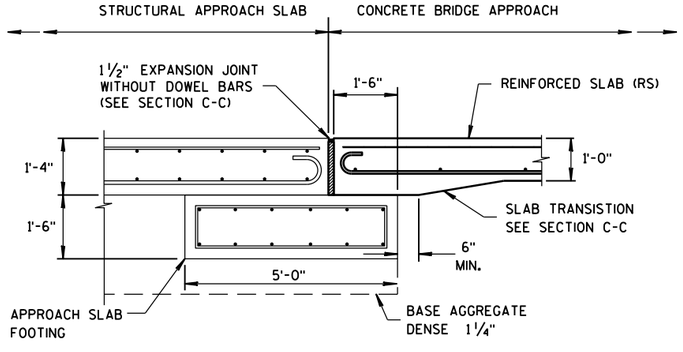
① SEE BRIDGE PLAN.

② CONFORM TO SHEET 13 B 2(A) FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS.

③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄

Ⓓ 1½" EXPANSION JOINT (NO DOWELS)



SECTION E-E

FOOTING DETAIL

STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

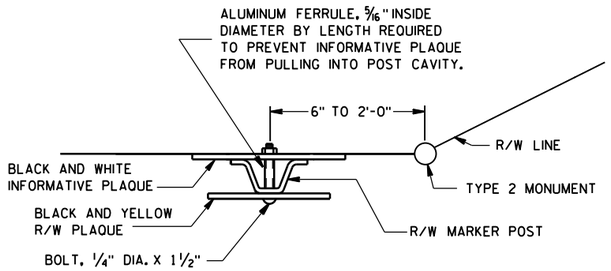
June, 2015
DATE

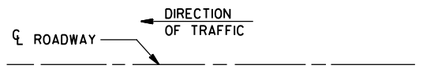
/S/ Peter Kemp, P.E.
PAVEMENT SUPEF

FHWA

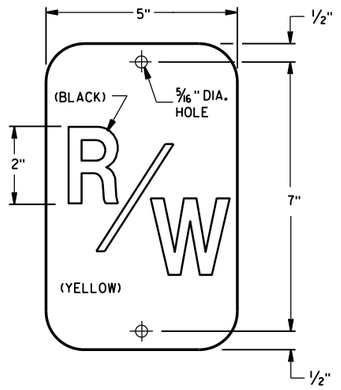
6

S.D.D. 13 B 2-8b



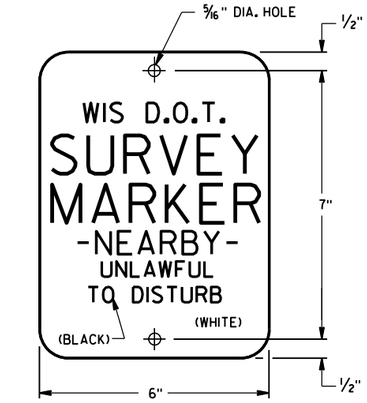


PLAN VIEW



R/W PLAQUE

THE RIGHT-OF-WAY PLAQUE AND INFORMATIVE PLAQUE WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.



INFORMATIVE PLAQUE

GENERAL NOTES

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

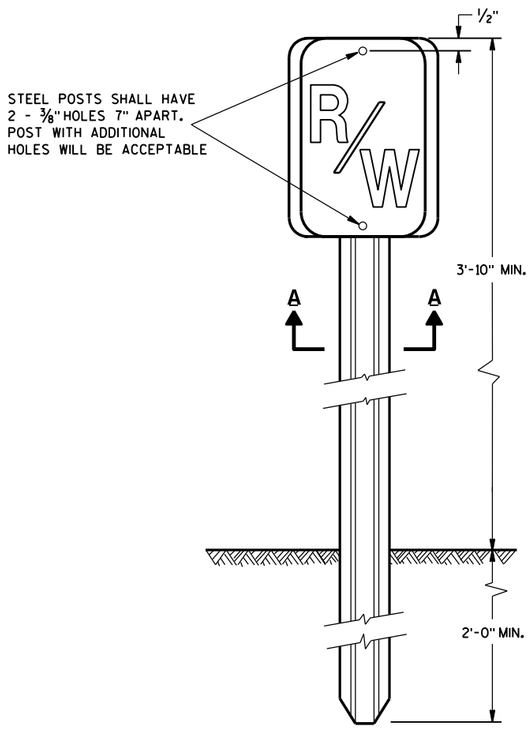
A STEEL MARKER POST FOR RIGHT-OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY, WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE "R/W" PLAQUE SHALL FACE THE ROADWAY AND THE INFORMATIVE PLAQUE SHALL FACE AWAY FROM THE ROADWAY. R/W AND INFORMATIVE PLAQUES WILL BE FURNISHED BY THE DEPARTMENT OF TRANSPORTATION.

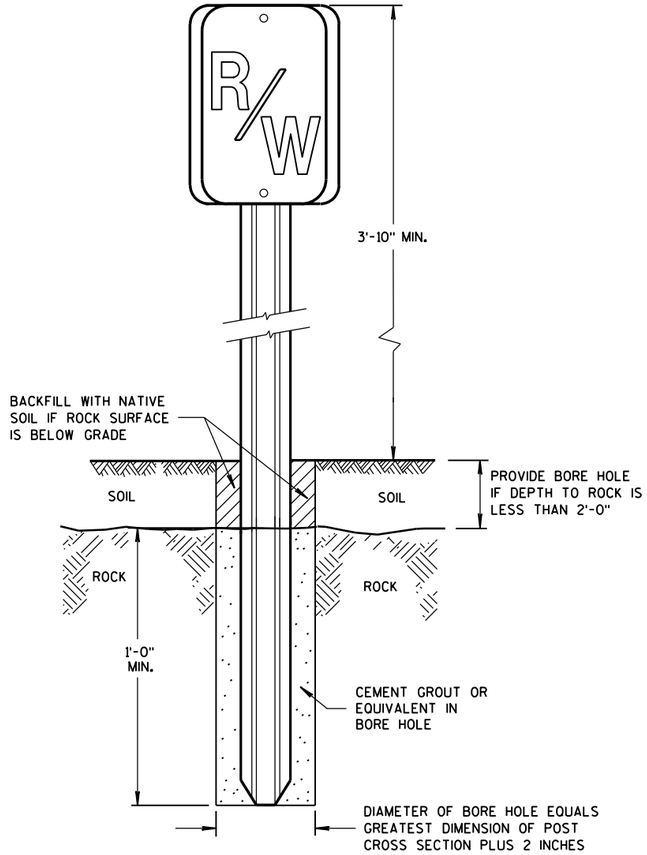
STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

(1) IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK TO A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 3'10" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR.

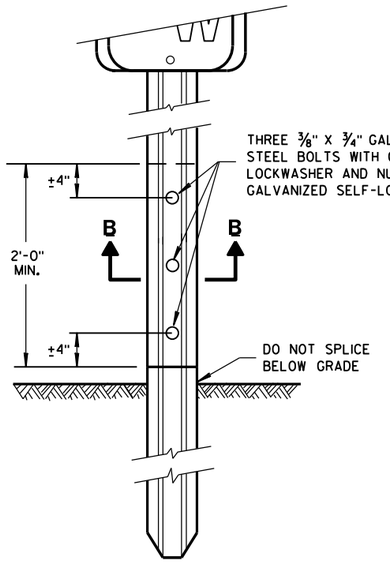
FILL THE BORE HOLE WITH CEMENT GROUT, OR EQUIVALENT. DEPENDING ON THE STABILITY OF THE ROCK.



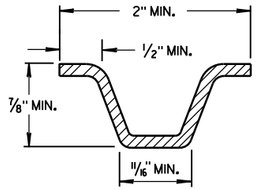
FRONT VIEW
STEEL MARKER POST



FRONT VIEW
ROCK INSTALLATION (1)

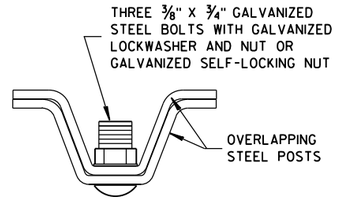


FRONT VIEW
SPLICE DETAIL



MIN. WEIGHT 1.12 LB./FT.

SECTION A-A



SECTION B-B

MARKER POST FOR RIGHT-OF-WAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

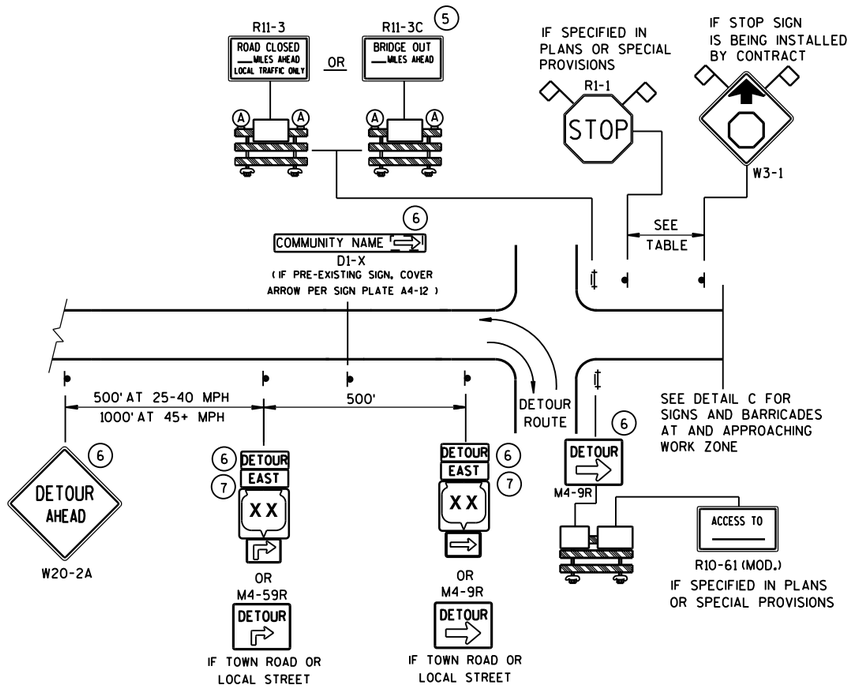
APPROVED
2/18/2016 — DATE
/S/ Ray Kumapayi — CHIEF SURVEYING AND MAPPING ENGINEER
FHWA

6

S.D.D. 15 A 1-13a

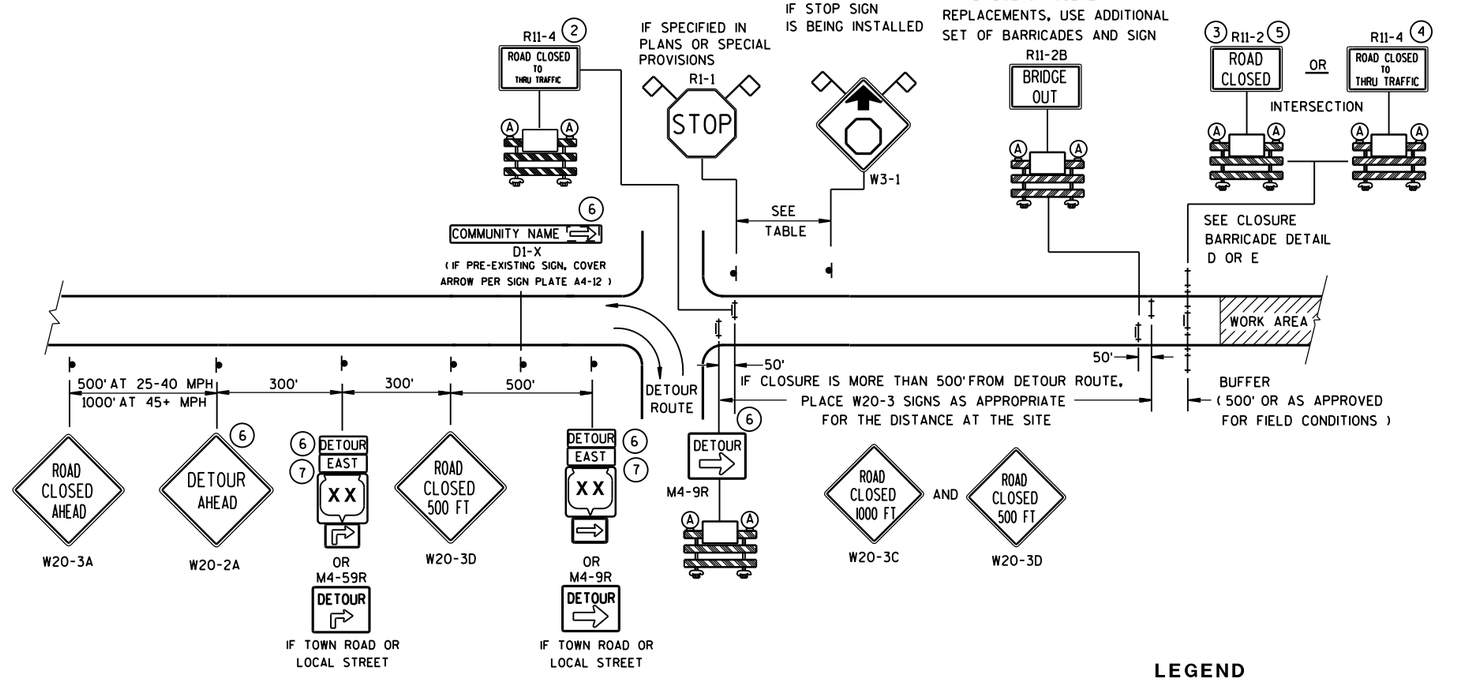
6

S.D.D. 15 A 1-13a



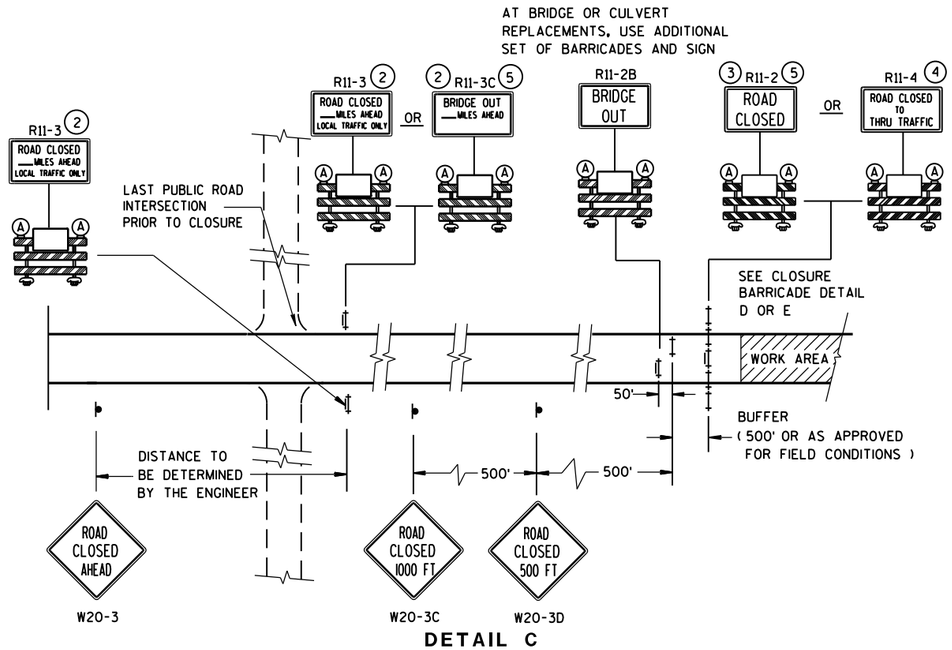
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "**b**"
FOR GENERAL NOTES
AND FOOTNOTES (1) THROUGH (7)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

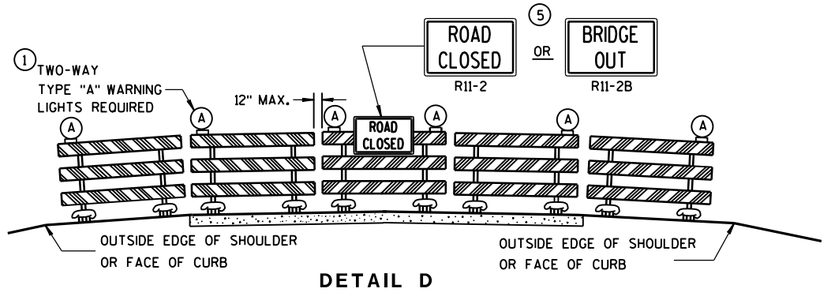
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

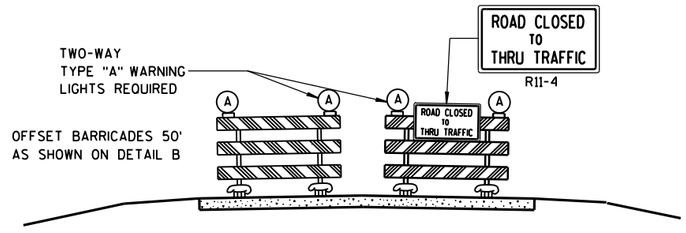
S.D.D. 15 C 2-6a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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 D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF 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 (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

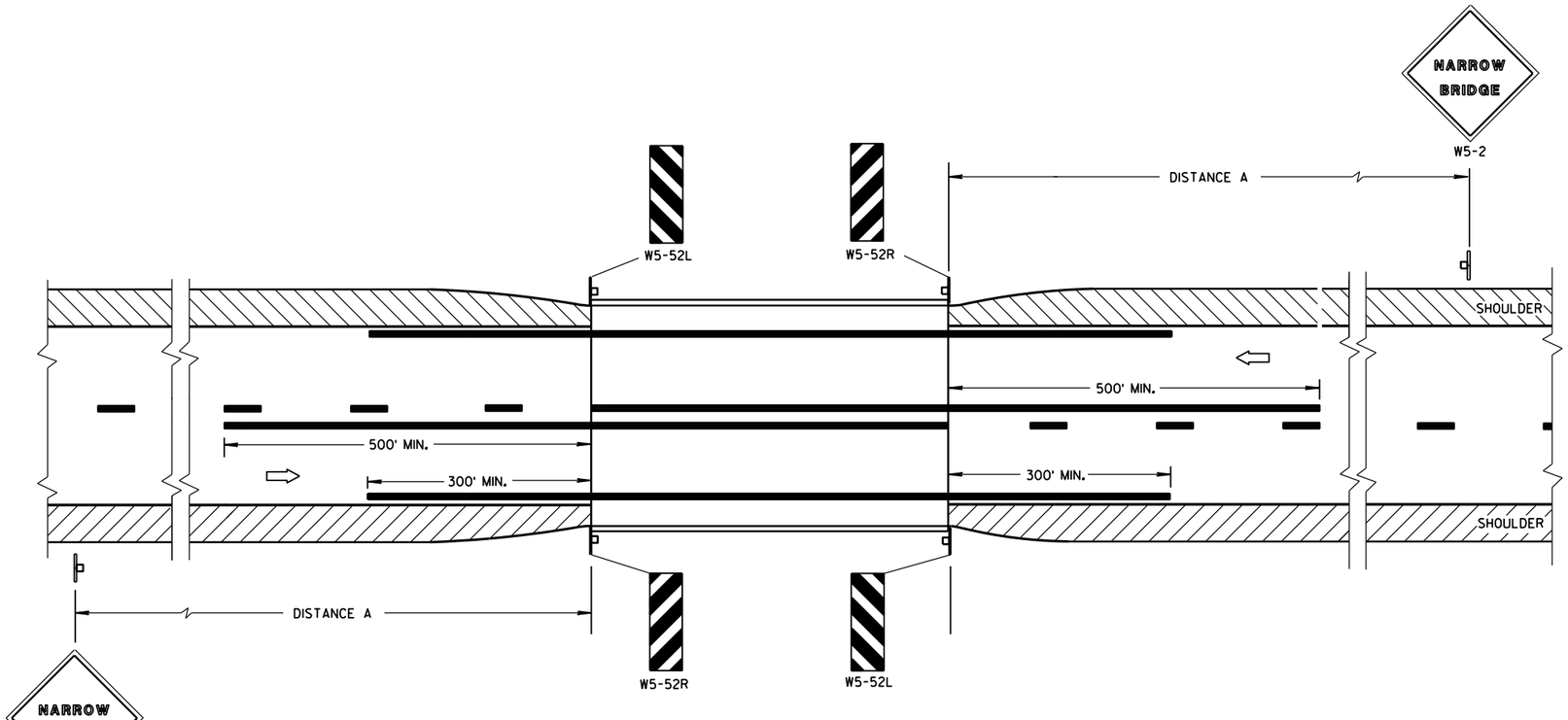
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015	/S/ Peter Amakobe Atepe	
DATE	STATEWIDE WORK ZO SAFETY ENGI	FIC
FHWA		

6

S.D.D. 15 C 2-6b



SITUATION 1

WARRANTING CRITERIA:
BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	750'

GENERAL NOTES

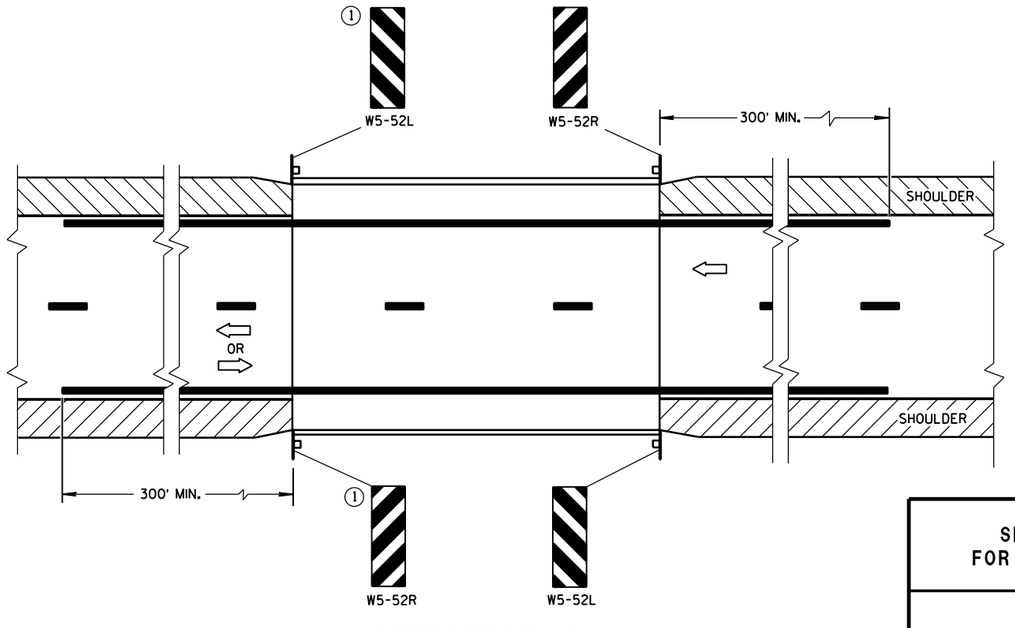
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.

PLACE THE EDGE OF THE W5-52 SIGN IN LINE WITH FACE OF CURB OR PARAPET.

(1) OMIT ON ONE-WAY TRAVELLED WAYS.

⇨ DIRECTION OF TRAFFIC



SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE SHOULDER WIDTH IS LESS THAN 6 FEET.

SIGNING & MARKING FOR TWO LANE BRIDGES

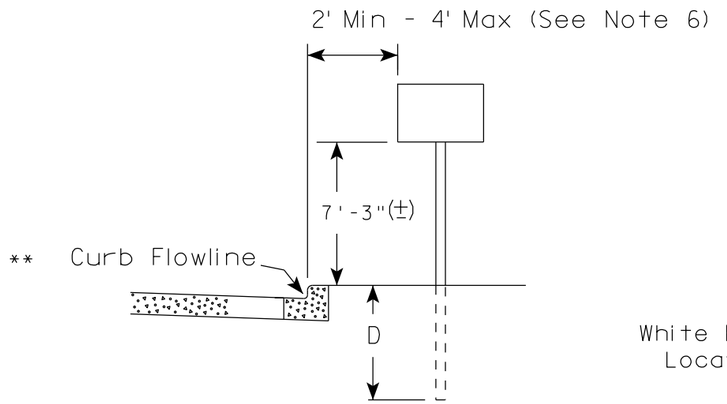
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]EER
FHWA

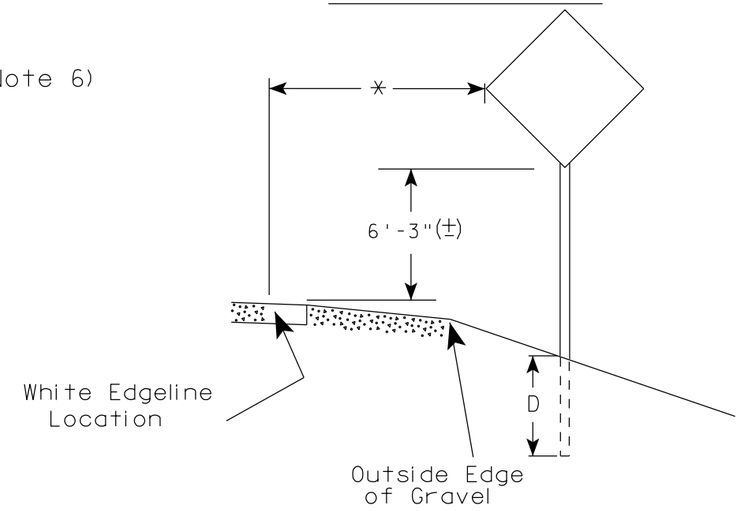
6

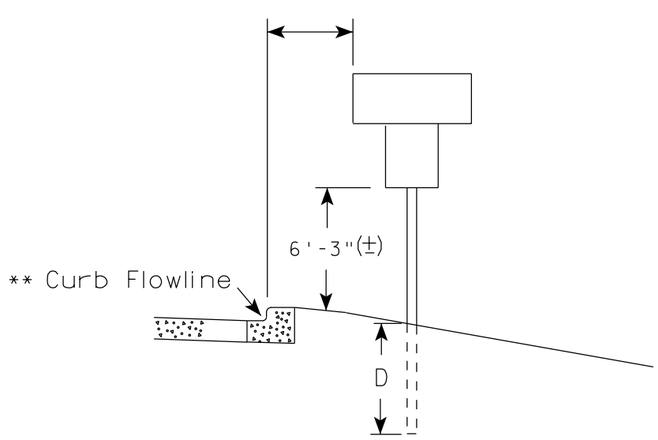
S.D.D. 15 C 6-9

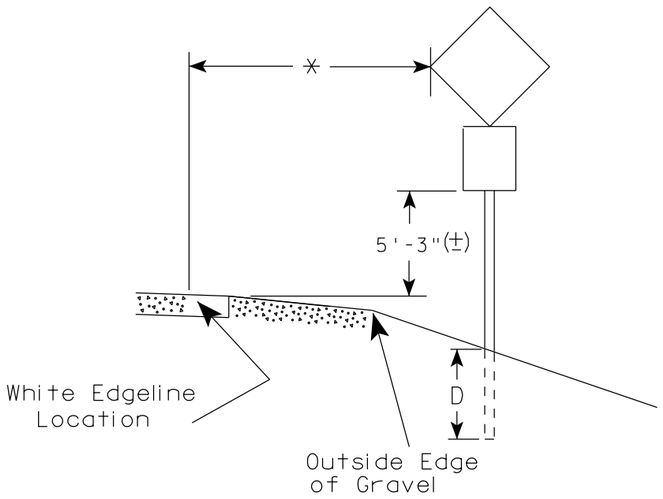
URBAN AREA



RURAL AREA (See Note 2)







GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

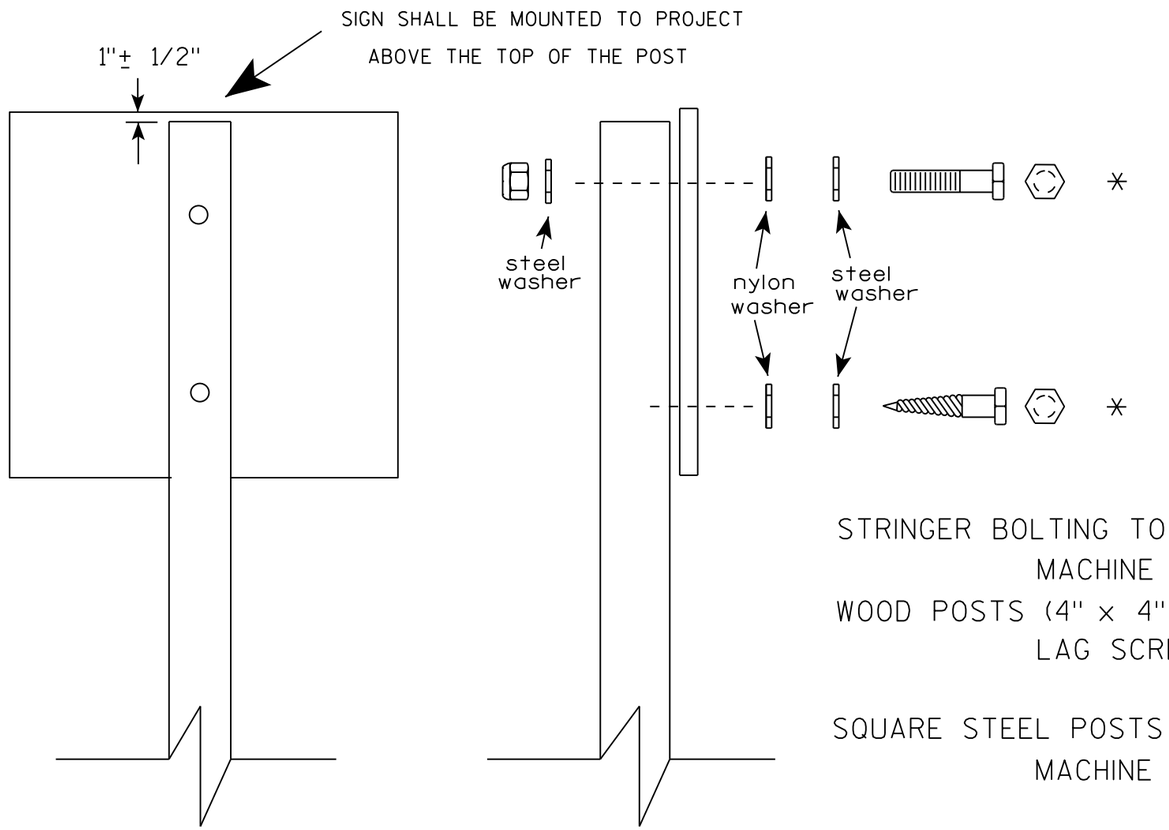
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)

3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)

3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

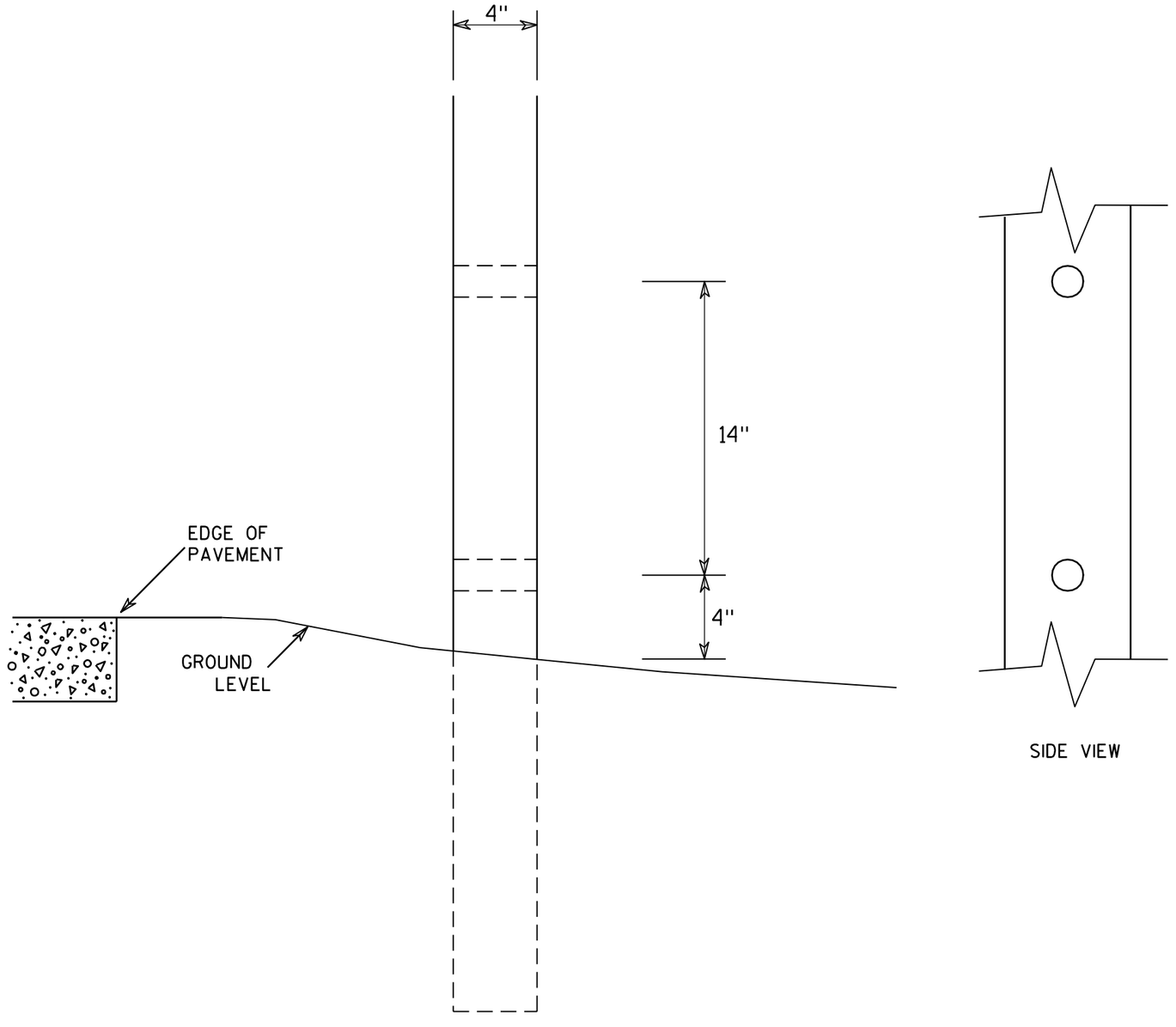
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO:

SHEET NO: E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

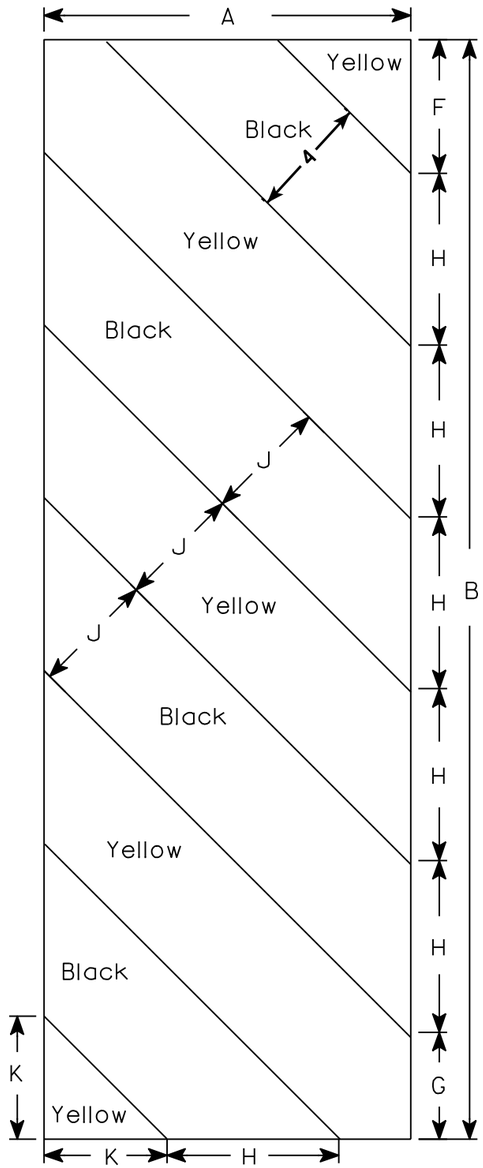
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

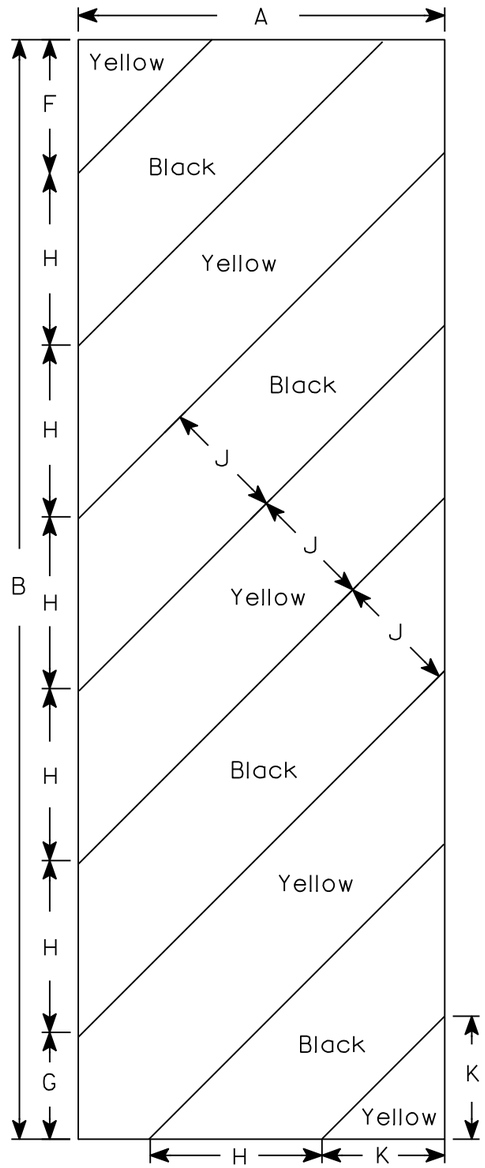
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 22	E



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Alternate colors of stripes as shown.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

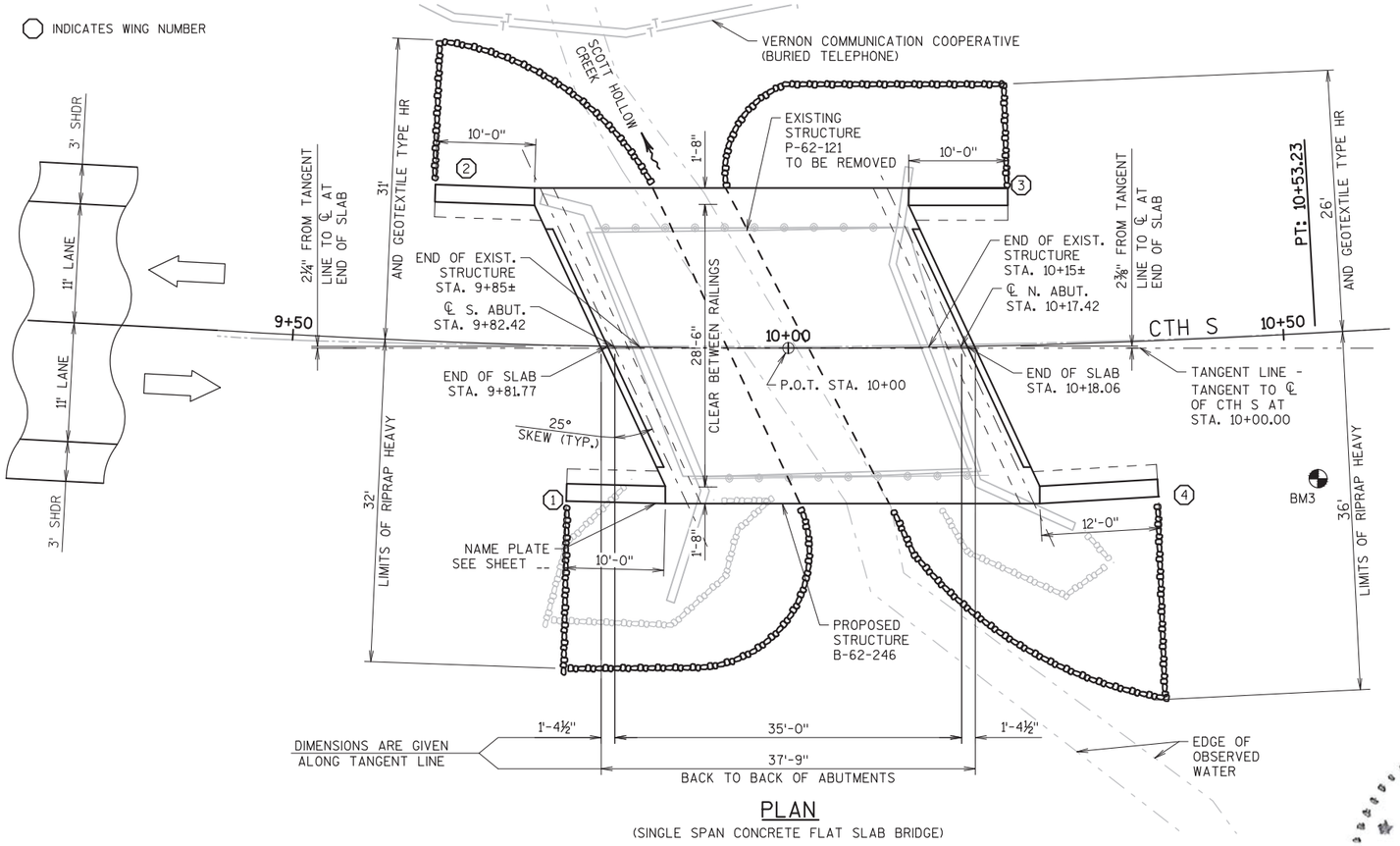
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 23 | E

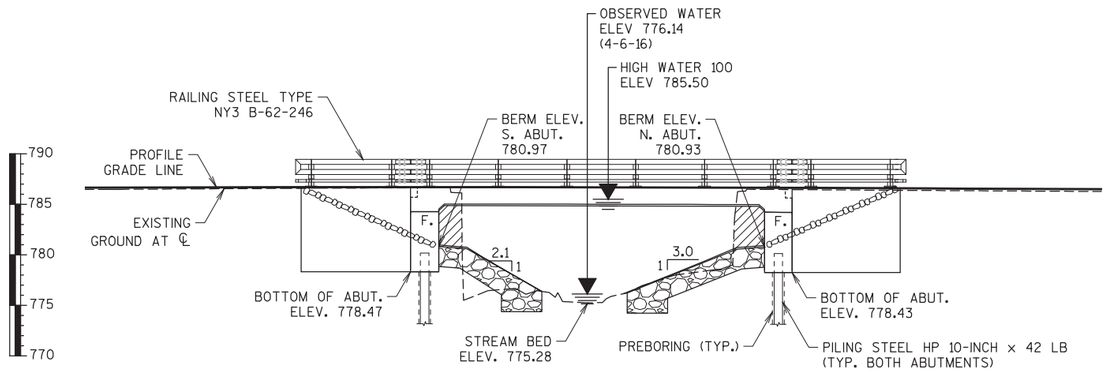
STATE PROJECT NUMBER

5289-00-72



PLAN

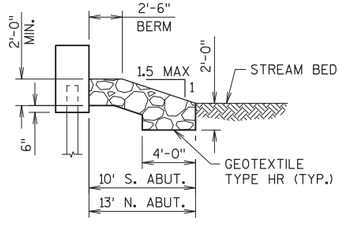
(SINGLE SPAN CONCRETE FLAT SLAB BRIDGE)



ELEVATION

(LOOKING WEST)

AREA TO EXCAVATE INCLUDED IN "EXCAVATION FOR STRUCTURES BRIDGES B-62-246"



RIPRAP DETAIL

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
1	7+98.64	REBAR, 14.93' LT	784.55
2	8+95.27	PK NAIL, 14.01' LT	785.51
3	10+52.65	PK NAIL, 14.68' RT	785.51
4	12+20.40	REBAR, 14.85' RT	787.05

CURVE DATA

PI STA = 9+18.84
Y = 143157.726
X = 740150.657
DELTA = 16°46'07"
D = 6°11'39"
T = 136.33'
L = 270.72'
R = 925.00'
PC STA = 7+82.51
PT STA = 10+53.23
SE = 5.0 %

DESIGN DATA

DESIGN LOADING — HL-93
INVENTORY RATING FACTOR — 1.08
OPERATIONAL RATING FACTOR — 1.40
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) — 250 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 PSF.

MATERIAL PROPERTIES

CONCRETE MASONRY, SLAB — f'c = 4,000 psi
ALL OTHER — f'c = 3,500 psi
HIGH STRENGTH BAR STEEL REINFORCEMENT — fy = 60,000 psi

TRAFFIC DATA

ADT (2018) = 240
ADT (2038) = 300
DESIGN SPEED = 40 MPH

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON PILING STEEL HP 10-INCH X 42 LB AND PREBORED A MINIMUM OF 3' INTO BEDROCK OR CONSOLIDATED MATERIAL. ESTIMATED 18' LONG AT THE SOUTH ABUTMENT AND 23' LONG AT THE NORTH ABUTMENT.

PREBORING SHALL BE REQUIRED TO A MINIMUM ELEVATION OF 762.47 (16') AT THE SOUTH ABUTMENT AND TO A MINIMUM ELEVATION OF 757.43 (21') AT THE NORTH ABUTMENT.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q_{100} — 865 C.F.S.
VELOCITY — 4.2 F.P.S.
HIGH WATER $_{100}$ — EL. 785.50
WATERWAY AREA — 208 SQ. FT.
DRAINAGE AREA — 1.2 SQ. MI.
SCOUR CRITICAL CODE — 5
OVERTOPPING FREQUENCY — N/A

2 YEAR FREQUENCY

Q_2 — 90 C.F.S.
VELOCITY — 4.0 F.P.S.
HIGH WATER $_2$ — EL. 778.57

WISCONSIN ERIC T. PRICE E-39027 MADISON WI PROFESSIONAL ENGINEER

June 1, 2017

LIST OF DRAWINGS

NO.	DATE	REVISION	BY

CORRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 08/28/17
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-62-246

CTH S OVER SCOTT HOLLOW CREEK

COUNTY	TOWN/~~CITY/VILLAGE~~
VERNON	LIBERTY

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
ERA	ETP	PKF	ETP

GENERAL PLAN

SHEET 1 OF 11

24

BRIDGE OFFICE CONTACT
BILL DREHER, P.E.
TELEPHONE: (608) 266-8489

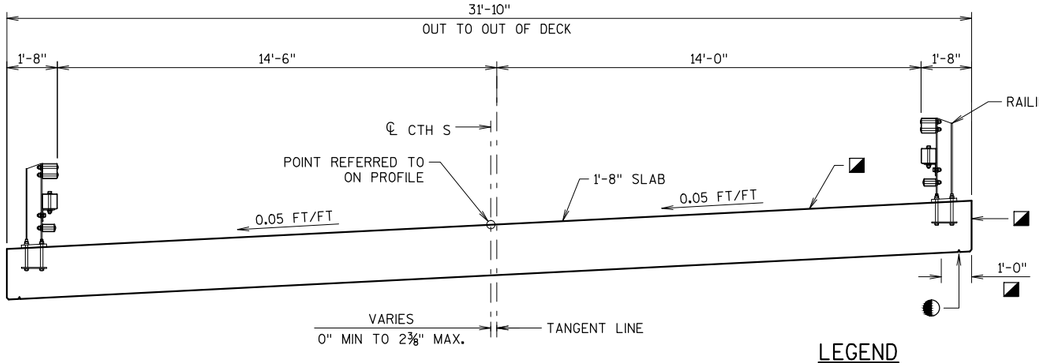
CONSULTANT CONTACT
ERIC PRICE, P.E.
TELEPHONE: (608) 826-6146

8

8

STATE PROJECT NUMBER

5289-00-72



CROSS SECTION THRU BRIDGE

(LOOKING NORTH)

Protective Surface Treatment
Manufacturer: Chemmasters
Product: Aquinil Plus 40

LEGEND

◐ 3/4" V-GROOVE REQ'D. EXTEND TO 6" FROM F.F. OF ABUT. DIAPH.

◪ COAT WITH "PROTECTIVE SURFACE TREATMENT" AS PER THE STANDARD SPECIFICATIONS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M153 TYPE I, II OR III OR AASHTO DESIGNATION M213.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE TYPE HR TO THE EXTENT SHOWN ON THE GENERAL PLAN SHEET AND IN THE ABUTMENT DETAILS.

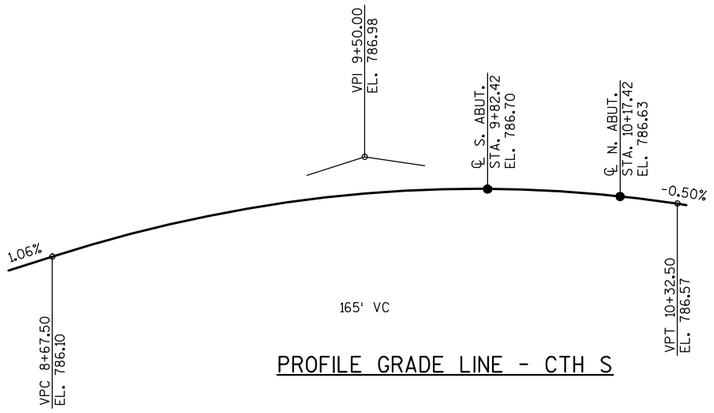
SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

THE EXISTING GROUND LINE SHALL BE THE UPPER LIMIT FOR EXCAVATION FOR STRUCTURES.

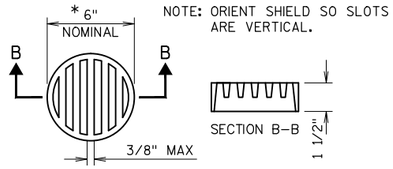
THE EXISTING STRUCTURE P-62-121, TO BE REMOVED, IS A SINGLE SPAN STEEL DECK GIRDER, 30 FT. LONG WITH A 24.0 FT. CLEAR ROADWAY WIDTH.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE TYPE A.

EXCAVATION BELOW THE ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.



PROFILE GRADE LINE - CTH S



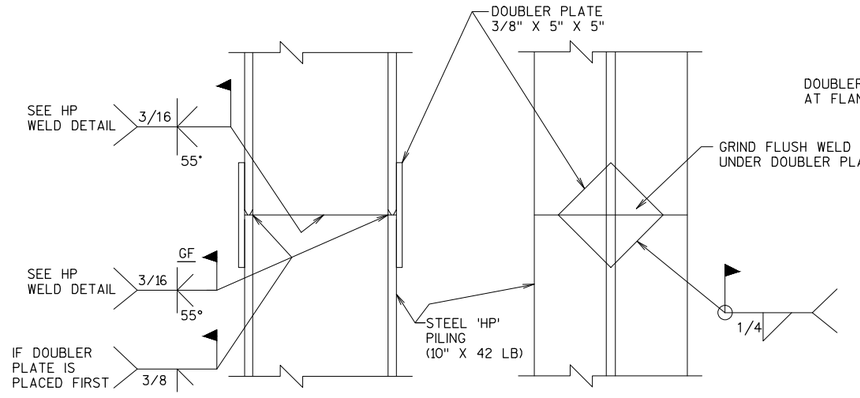
NOTE: ORIENT SHIELD SO SLOTS ARE VERTICAL.

* DIMENSION IS APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

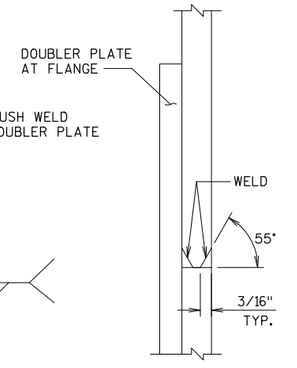
RODENT SHIELD DETAIL

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



STEEL 'HP' PILING



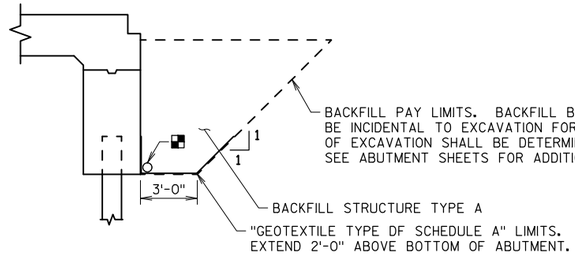
HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE SPLICE DETAILS

TOTAL ESTIMATED QUANTITIES

BID NUMBER	BID ITEM	UNIT	SOUTH ABUT.	NORTH ABUT.	SUPER	TOTALS
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 10+00	LS	-----	-----	-----	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-62-246	LS	-----	-----	-----	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	170	180	-----	350
502.0100	CONCRETE MASONRY BRIDGES	CY	32	33	72	137
502.3200	PROTECTIVE SURFACE TREATMENT	SY	12	14	139	165
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	2410	2400	-----	4810
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1550	1590	15440	18580
513.7083	RAILING STEEL TYPE NY3 B-62-246	LF	22	24	76	122
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	9.1	9.1	-----	18.2
550.0020	PRE-BORING ROCK OR CONSOLIDATED MATERIALS	LF	80	105	-----	185
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	90	115	-----	205
606.0300	RIPRAP HEAVY	CY	100	120	-----	220
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	100	110	-----	210
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	45	45	-----	90
645.0120	GEOTEXTILE TYPE HR	SY	130	150	-----	280
	NON-BID ITEMS					
	FILLER	SIZE	-----	-----	-----	½" & ¾"



STRUCTURE BACKFILL LIMITS

◪ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

ORIGINAL PLAN PREPARED BY CORRE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-246

DRAWN BY PKF | PLANS CK'D. ETP

CROSS SECTION & QUANTITIES

SHEET 2 OF 11

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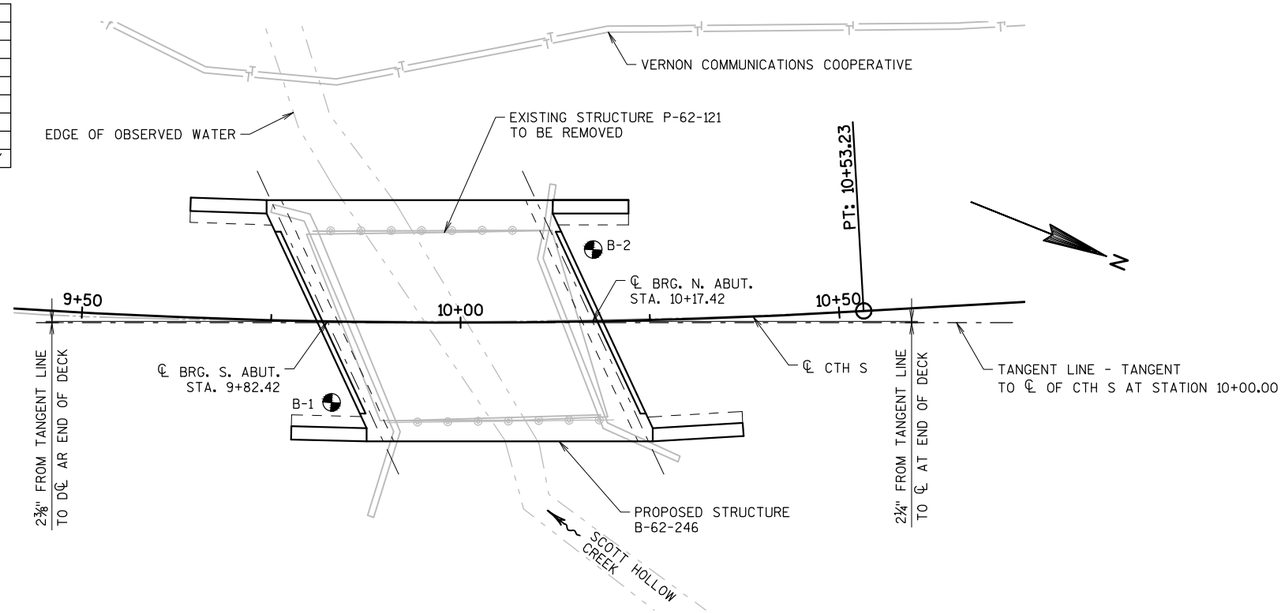
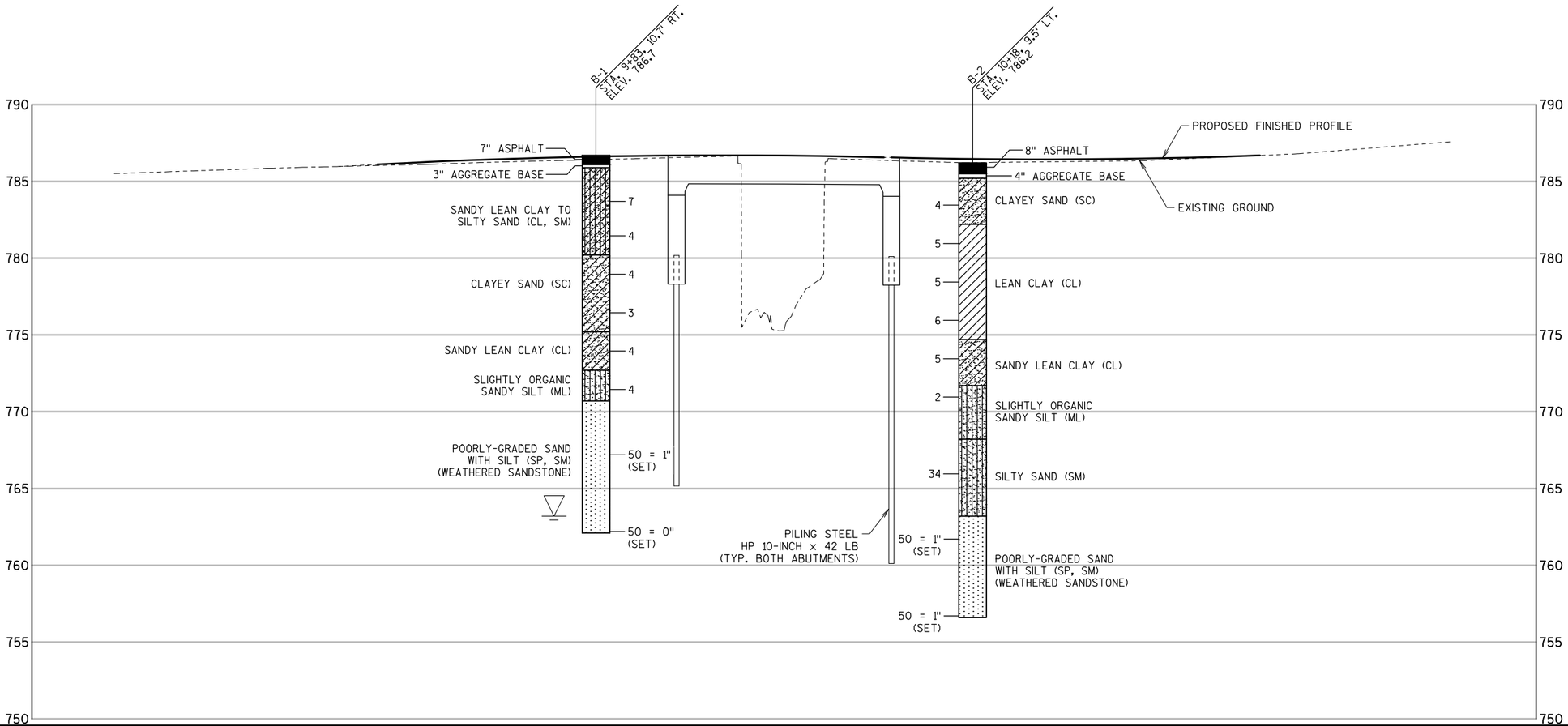
BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	MAY 10, 2016	143220.413	740130.037
2	MAY 10, 2016	143244.950	740098.448
BORINGS COMPLETED BY: CHOSEN VALLEY TESTING			
REPORT COMPLETED BY: CHOSEN VALLEY TESTING			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) VERNON COUNTY			





STATE PROJECT NUMBER

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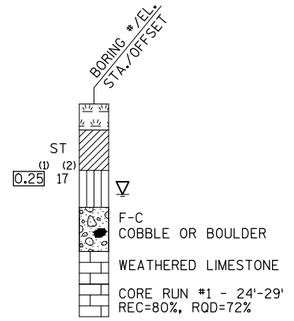
MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-246

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SUBSURFACE EXPLORATION

SHEET 3 OF 11

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8

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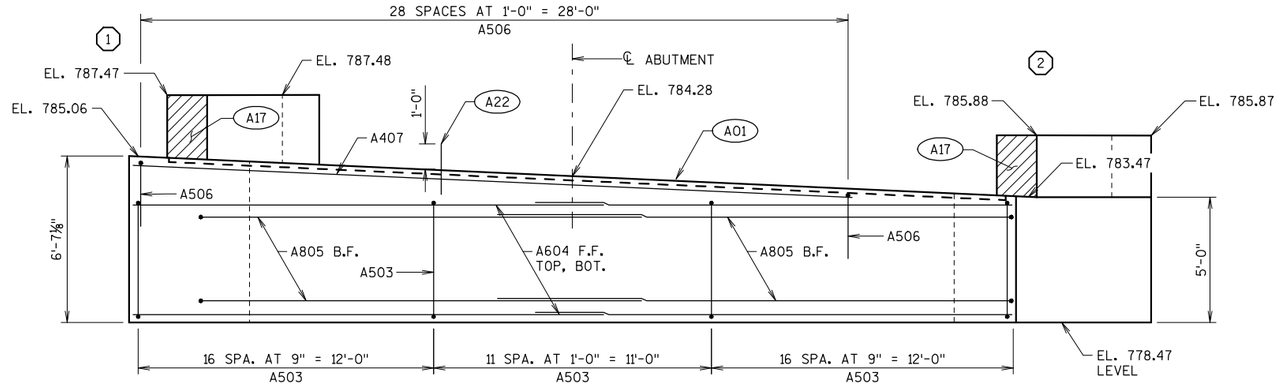
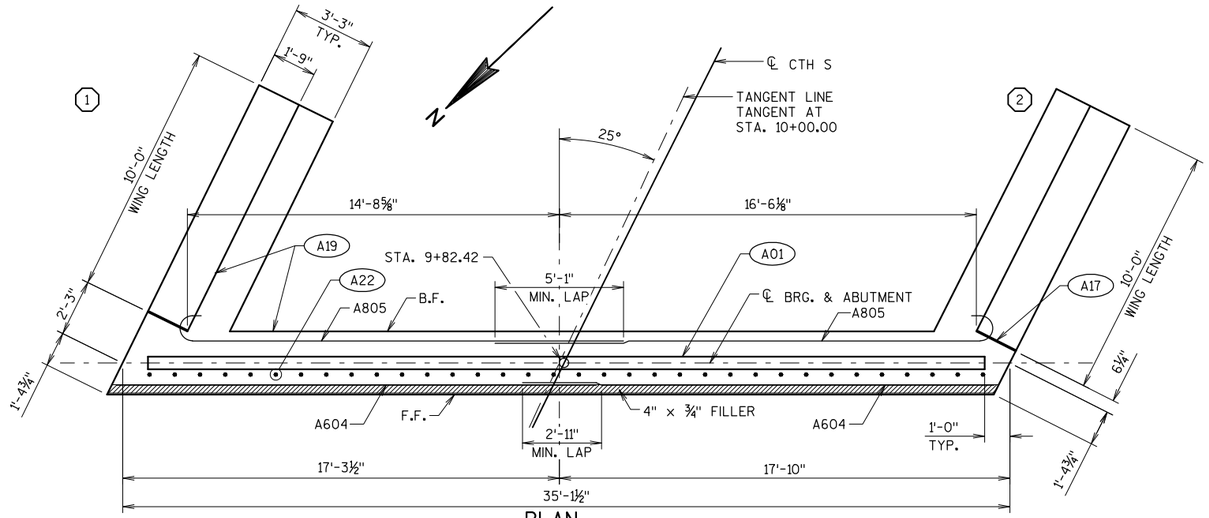
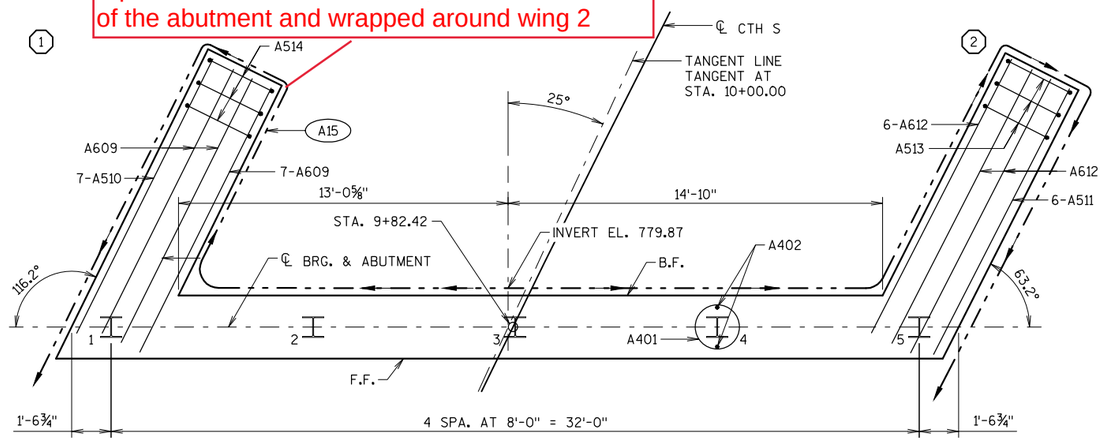


ELEVATION
(LOOKING SOUTH)



PLAN

Pipe Underdrain Started here, followed back face of the abutment and wrapped around wing 2



PILE PLAN

LEGEND

⬡ INDICATES WING NUMBER

A01 KEYED CONST. JOINT FORMED BY BEVELED 2" x 6".

A09 SUPPORT ABUTMENT ON PILING STEEL HP 10-INCH x 42 LB, PREBORED A MINIMUM OF 3' INTO BEDROCK OR CONSOLIDATED MATERIAL. BACKFILL THE BEDROCK CORE WITH CONCRETE IN ACCORDANCE WITH SECTION 550.3.9.3 OF THE STANDARD SPECIFICATIONS. ESTIMATED 18' LONG, INCLUDING AN ESTIMATED PREBORE DEPTH OF 16'.

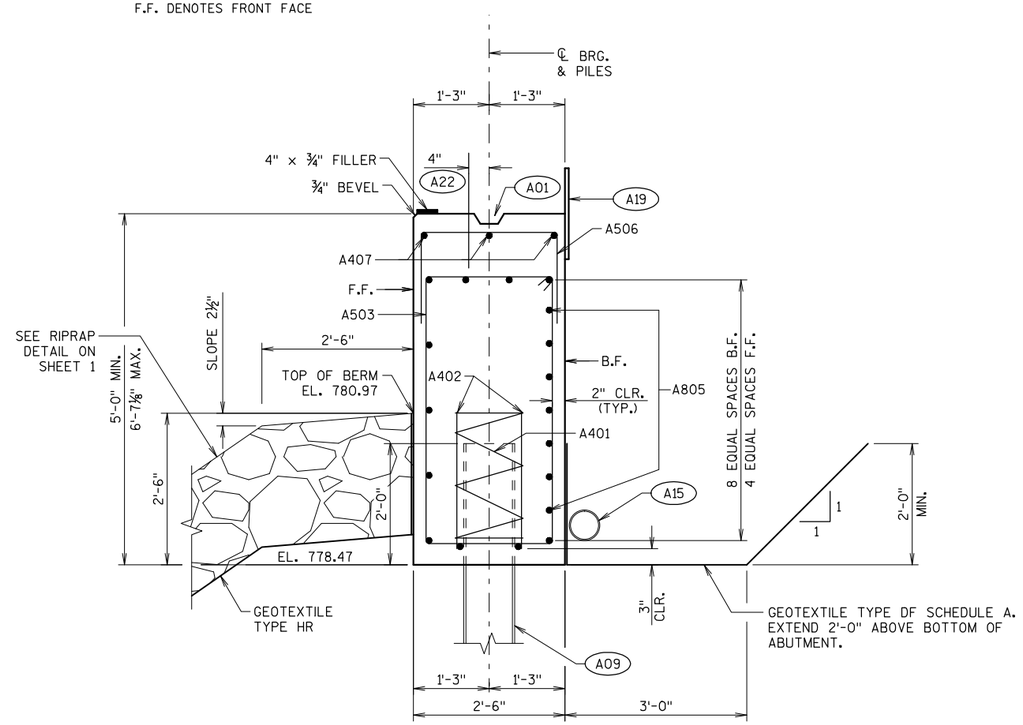
A15 PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".

A17 ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMNOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE.)

A19 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.

A22 A508 BARS AT 1'-0". THESE BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.

B.F. DENOTES BACK FACE
F.F. DENOTES FRONT FACE



SECTION THRU BODY
HORIZONTAL BARS NOT OTHERWISE IDENTIFIED ARE A604 BARS

STATE PROJECT NUMBER
5289-00-72

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-246

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ORIGINAL PLAN PREPARED BY
CORRE

SOUTH ABUTMENT

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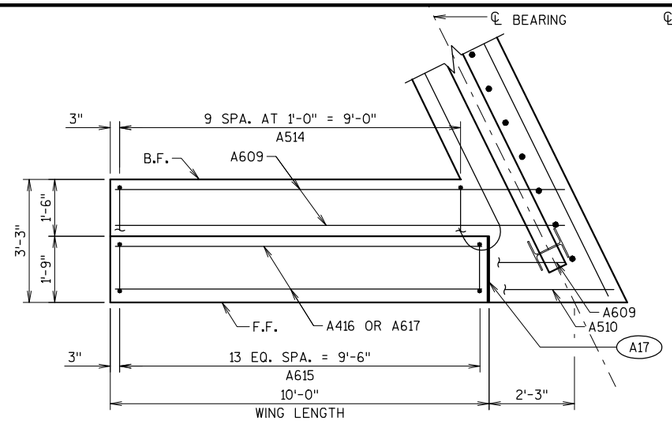
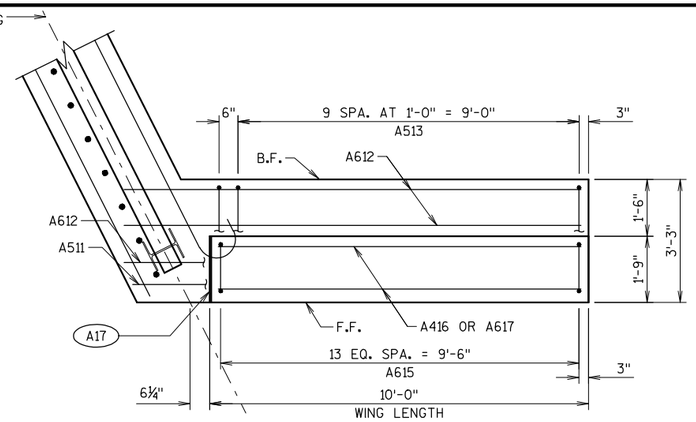
FILE NAME : P:±WI - SW REGION±5289-00-02_CTH S_VERNON COUNTY±500_CADD±503_STRUCTURES±502.4_FINAL±080401 SA_CTH S.DWG PLOT DATE : 6/1/2017 7:43 PM

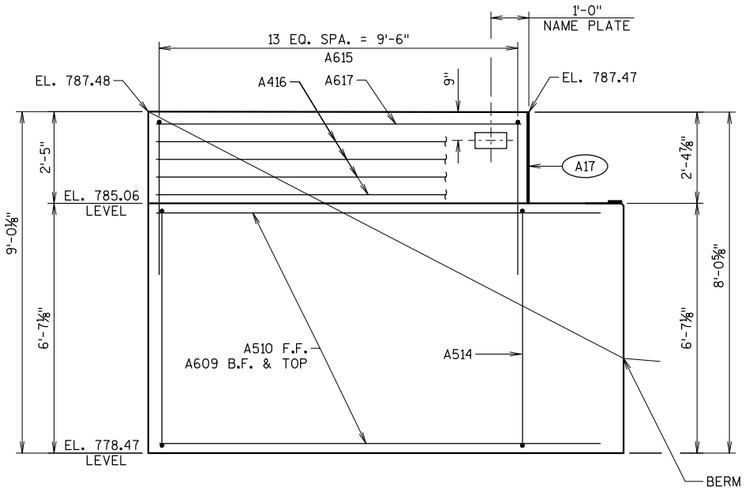
PLOT BY : ERIC ANDRITSCH, PE



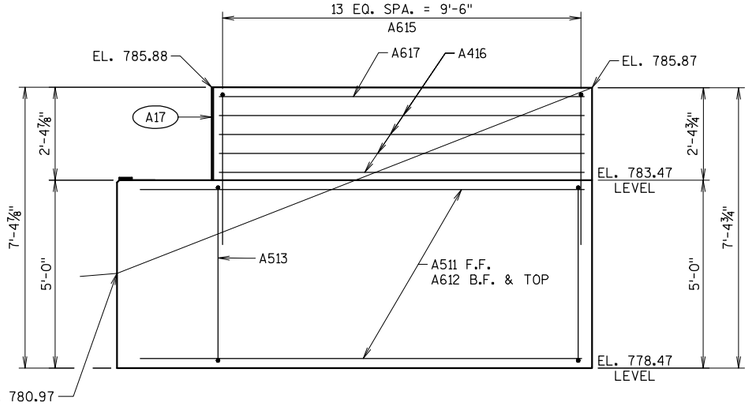
PLAN - WING 1



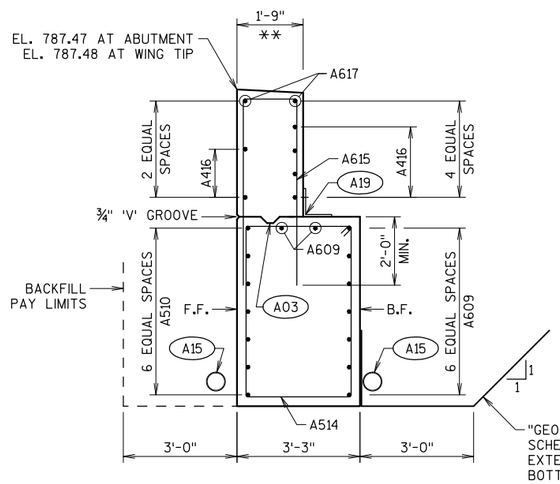
PLAN - WING 2



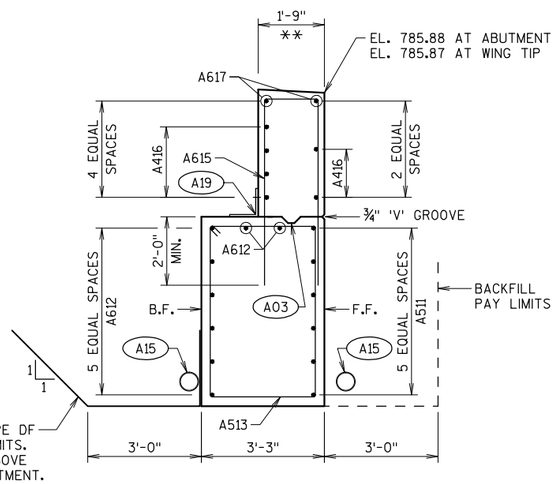
ELEVATION - WING 1



ELEVATION - WING 2



SECTION THRU WING 1



SECTION THRU WING 2

"GEOTEXTILE TYPE DF SCHEDULE A" LIMITS. EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

STATE PROJECT NUMBER

5289-00-72

BILL OF BARS - SOUTH ABUTMENT

DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT OF BAR.

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
NON-COATED BARS					TOTAL WEIGHT = 2,410 LBS
A401	5	28'-0"	X		BODY - AT PILES - 1 PER PILE VERT.
A402	10	2'-3"			BODY - AT PILES - 2 PER PILE VERT.
A503	44	14'-2"	X		BODY - STIRRUPS TRANS.
A604	22	18'-10"			BODY - F.F. TOP, BOT. HORIZ.
A805	14	20'-2"	X		BODY - B.F. HORIZ.
A506	29	7'-1"	X		BODY - ABUT SEAT TRANS.
A407	3	28'-4"			BODY - ABUT SEAT HORIZ.
COATED BARS					TOTAL WEIGHT = 1,550 LBS
A508	34	2'-0"			BODY - TOP VERT.
A609	9	11'-3"			WING 1 - B.F. HORIZ.
A510	7	13'-3"			WING 1 - F.F. HORIZ.
A511	6	11'-7"			WING 2 - F.F. HORIZ.
A612	8	12'-7"			WING 2 - B.F. HORIZ.
A513	11	15'-8"	X		WING 2 - STIRRUPS TRANS.
A514	10	18'-10"	X		WING 1 - STIRRUPS TRANS.
A615	28	9'-7"	X		WINGS 1 & 2 VERT.
A416	12	9'-8"			WINGS 1 & 2 - B.F. & F.F. VERT.
A617	4	9'-8"			WINGS 1 & 2 - TOP HORIZ.

THE FIRST DIGIT OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

LEGEND

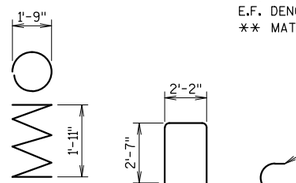
(A03) OPTIONAL KEYED CONST. JOINT FORMED BY BEVELED 2" x 6" (18" RUBBERIZED MEMBRANE WATERPROOFING AT B.F. & ¾" "V" GROOVE AT F.F. IF JOINT IS USED).

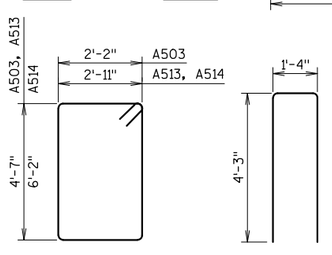
(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".

(A17) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMNOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE.)

(A19) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.

B.F. DENOTES BACK FACE
F.F. DENOTES FRONT FACE
E.F. DENOTES EACH FACE
** MATCH SLOPE OF SLAB





NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-246

DRAWN BY PKF | PLANS CK'D. ETP

ORIGINAL PLAN PREPARED BY CORRE

SOUTH ABUTMENT DETAILS

SHEET 5 OF 11

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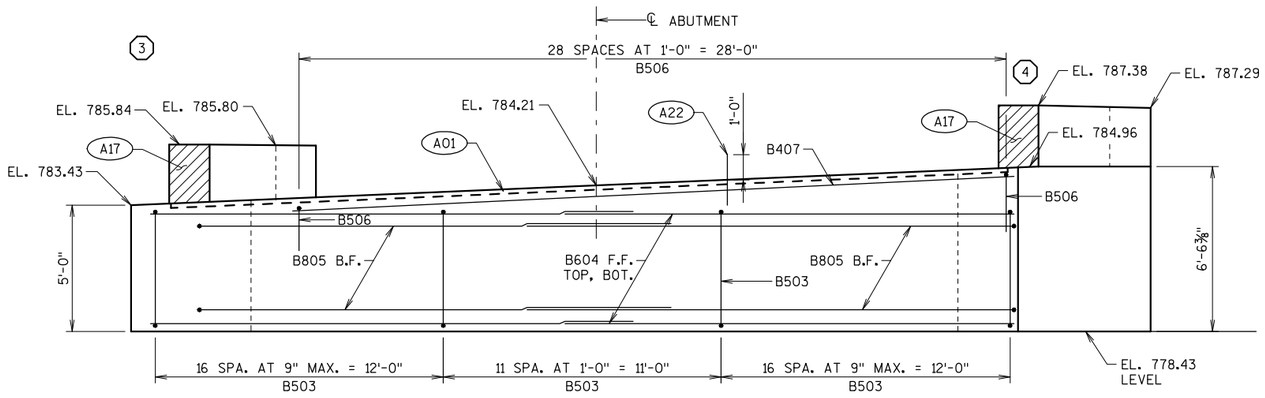
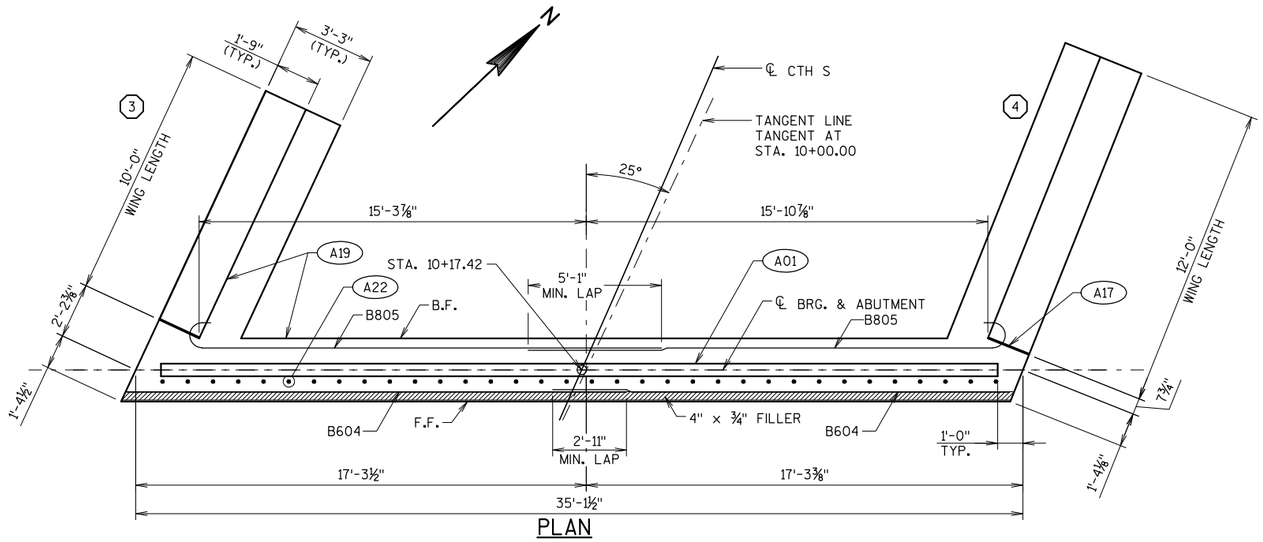
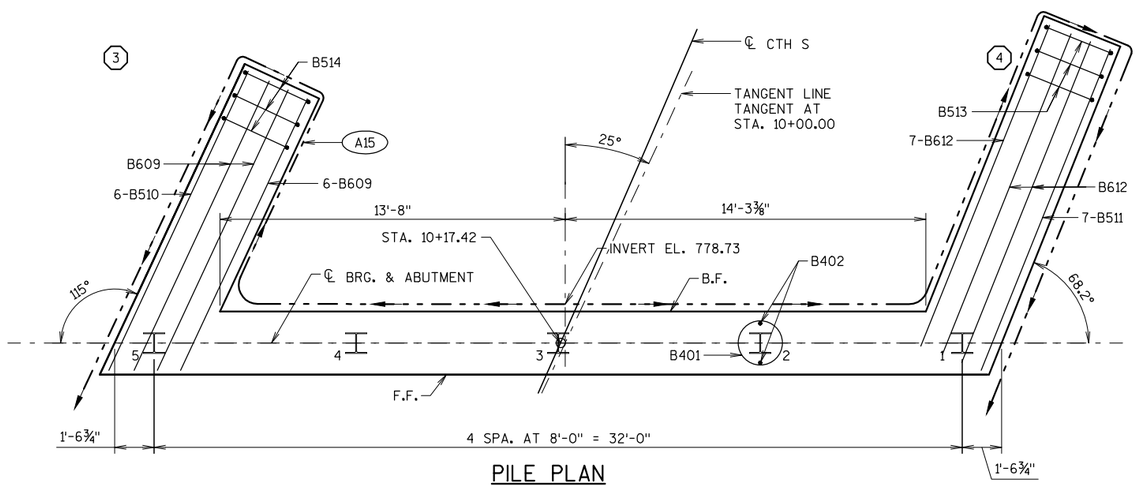


ELEVATION
(LOOKING NORTH)



PLAN



PILE PLAN

LEGEND

⬡ INDICATES WING NUMBER

(A01) KEYED CONST. JOINT FORMED BY BEVELED 2" x 6".

(A09) SUPPORT ABUTMENT ON PILING STEEL HP 10-INCH x 42 LB, PREBORED A MINIMUM OF 3' INTO BEDROCK OR CONSOLIDATED MATERIAL. BACKFILL THE BEDROCK CORE WITH CONCRETE IN ACCORDANCE WITH SECTION 550.3.9.3 OF THE STANDARD SPECIFICATIONS. ESTIMATED 23' LONG, INCLUDING AN ESTIMATED PREBORE DEPTH OF 21'.

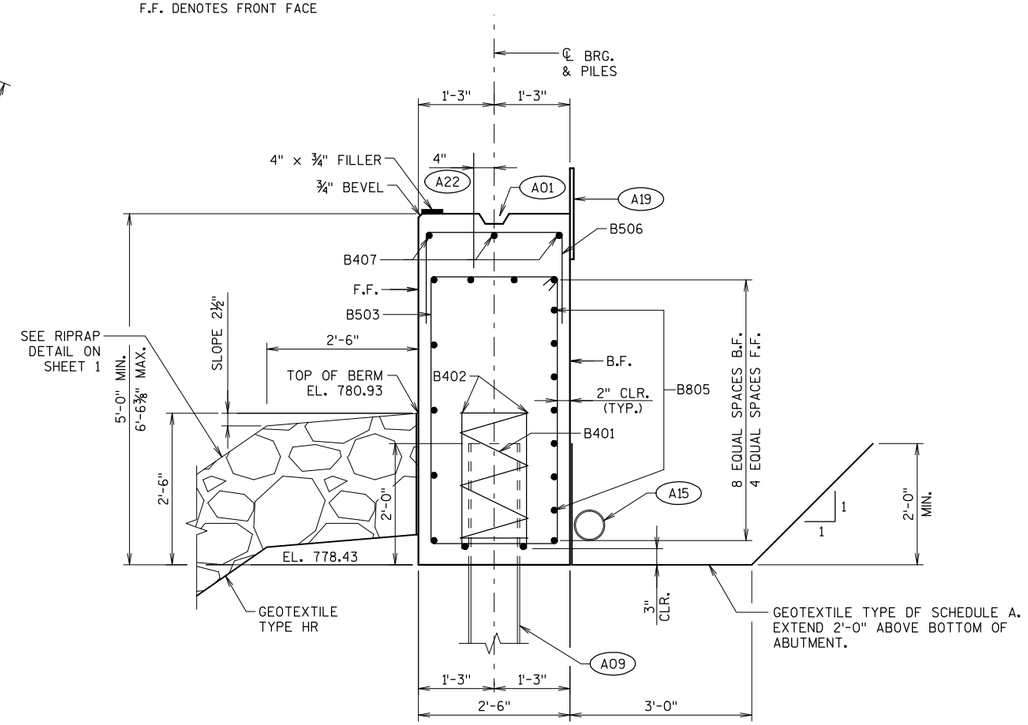
(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".

(A17) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMNOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE.)

(A19) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.

(A22) B508 BARS AT 1'-0". THESE BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.

B.F. DENOTES BACK FACE
F.F. DENOTES FRONT FACE



SECTION THRU BODY
HORIZONTAL BARS NOT OTHERWISE IDENTIFIED ARE A604 BARS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-246

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ORIGINAL PLAN PREPARED BY
CORRE

NORTH ABUTMENT

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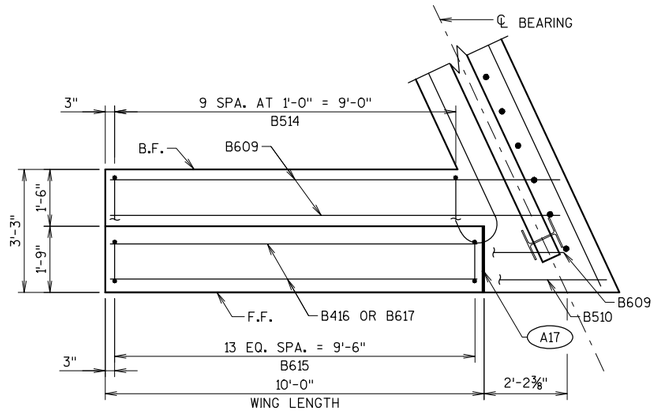
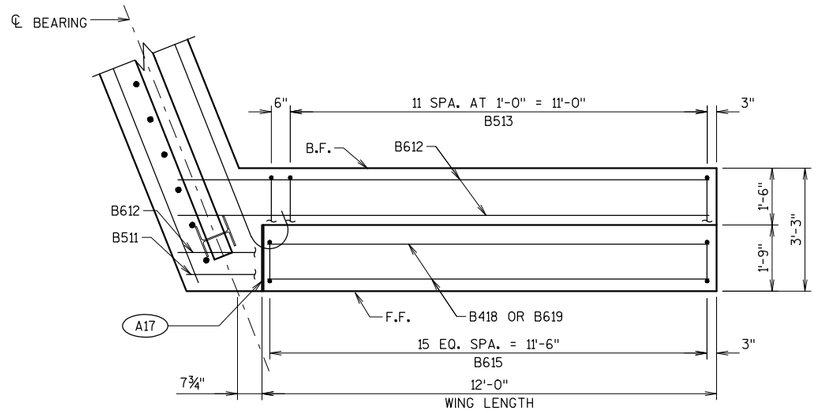
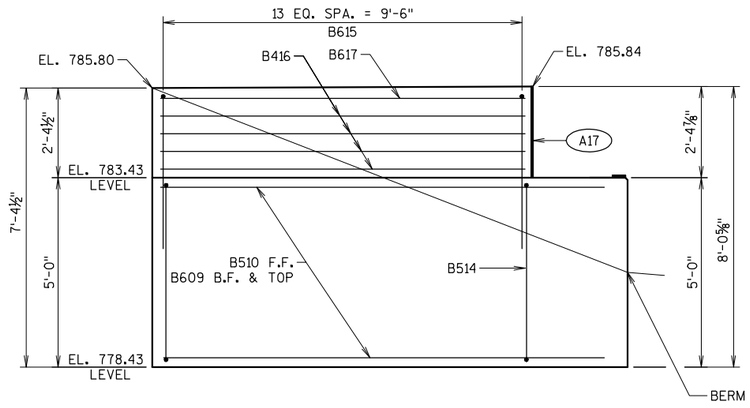


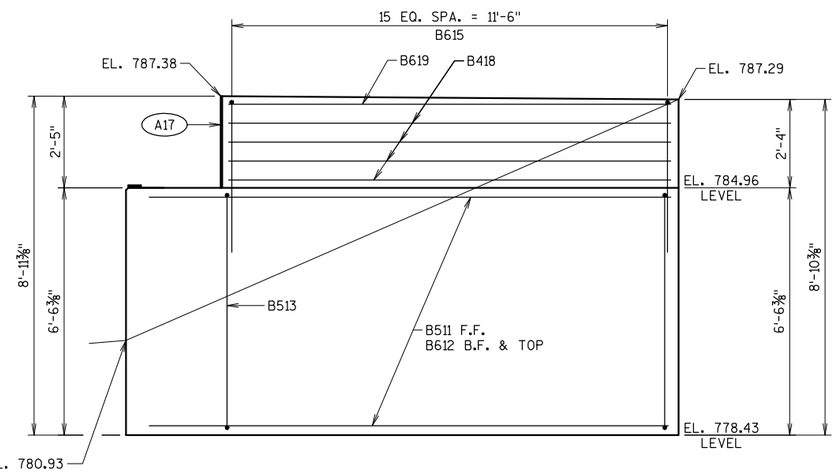
PLAN - WING 3



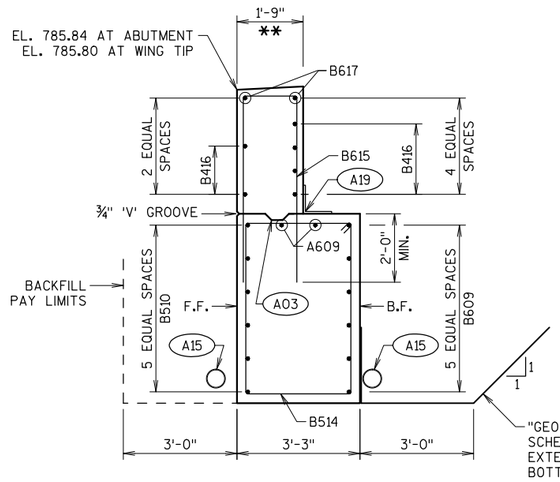
PLAN - WING 4



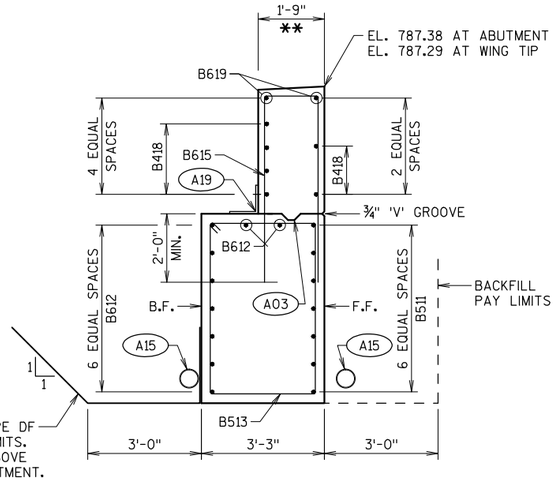
ELEVATION - WING 3



ELEVATION - WING 4



SECTION THRU WING 3



SECTION THRU WING 4

STATE PROJECT NUMBER

5289-00-72

BILL OF BARS - NORTH ABUTMENT

DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT OF BAR.

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
NON-COATED BARS					TOTAL WEIGHT = 2,400 LBS
B401	5	28'-0"	X		BODY - AT PILES - 1 PER PILE VERT.
B402	10	2'-3"			BODY - AT PILES - 2 PER PILE VERT.
B503	44	14'-2"	X		BODY - STIRRUPS TRANS.
B604	22	18'-10'			BODY - F.F. TOP, BOT. HORIZ.
B805	14	20'-2"	X		BODY - B.F. HORIZ.
B506	29	6'-9"	X		BODY - ABUT SEAT TRANS.
B407	3	28'-4"			BODY - ABUT SEAT HORIZ.
COATED BARS					TOTAL WEIGHT = 1,590 LBS
B508	34	2'-0"			BODY - TOP VERT.
B609	8	11'-3"			WING 3 - B.F. HORIZ.
B510	6	13'-3"			WING 3 - F.F. HORIZ.
B511	7	13'-7"			WING 4 - F.F. HORIZ.
B612	9	14'-7"			WING 4 - B.F. HORIZ.
B513	13	18'-8"	X		WING 4 - STIRRUPS TRANS.
B514	10	15'-8"	X		WING 3 - STIRRUPS TRANS.
B615	30	9'-7"	X		WINGS 3 & 4 VERT.
B416	6	9'-8"			WING 3 - B.F. & F.F. VERT.
B617	2	9'-8"			WINGS 3 - TOP HORIZ.
B418	6	11'-8"			WING 4 - B.F. & F.F. VERT.
B619	2	11'-8"			WINGS 4 - TOP HORIZ.

THE FIRST DIGIT OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

LEGEND

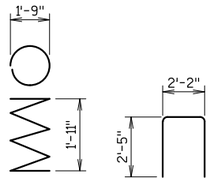
(A03) OPTIONAL KEYED CONST. JOINT FORMED BY BEVELED 2" x 6" (18" RUBBERIZED MEMBRANE WATERPROOFING AT B.F. & ¾" "V" GROOVE AT F.F. IF JOINT IS USED).

(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".

(A17) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMNOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE.)

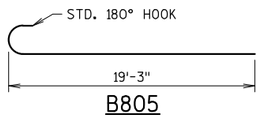
(A19) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.

B.F. DENOTES BACK FACE
F.F. DENOTES FRONT FACE
E.F. DENOTES EACH FACE
** MATCH SLOPE OF SLAB

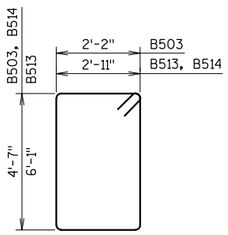


B401

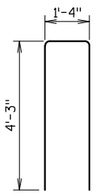
B506



B805



B503, B513, B514



B615

ORIGINAL PLAN PREPARED BY
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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-246

DRAWN BY PKF | PLANS CK'D. ETP

NORTH ABUTMENT DETAILS

SHEET 7 OF 11

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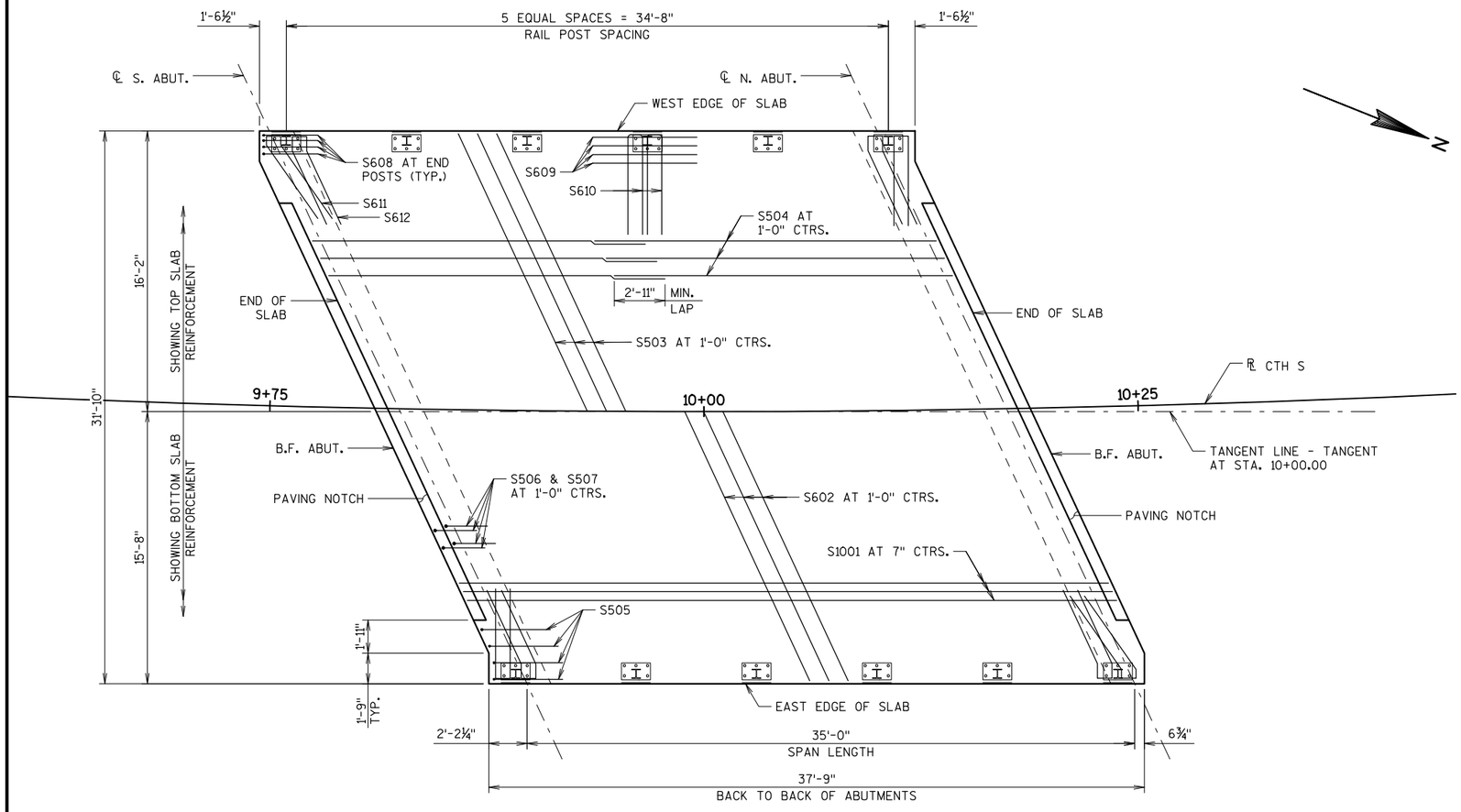
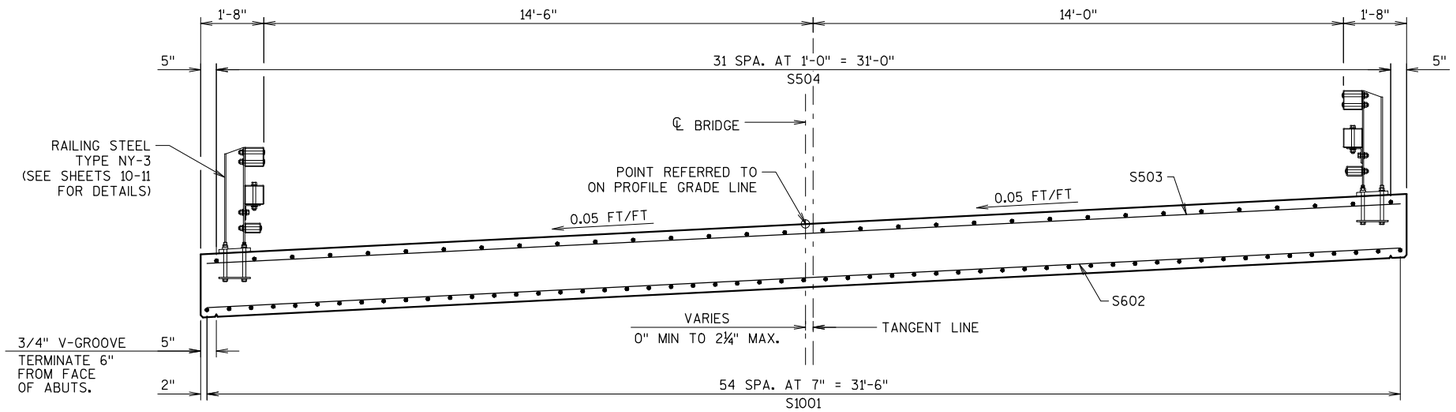


PLAN



TYPICAL SECTION THRU SLAB

NOTES

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

TRANSVERSE BARS SHALL BE PLACED PARALLEL TO THE ℄ OF SUBSTRUCTURE UNITS.

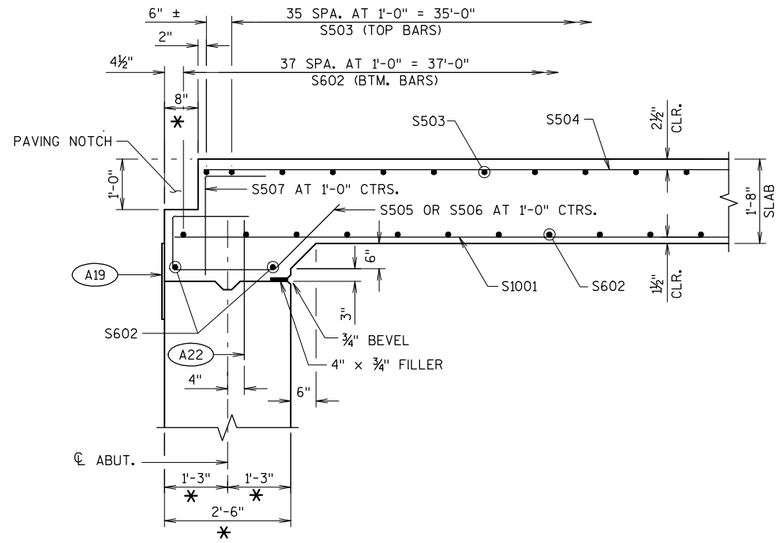
ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

LEGEND

(A19) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.

(A22) A507 OR B509 BARS AT 1'-0". THESE BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.

✳ DIMENSION IS NORMAL TO ℄ SUBSTRUCTURE.



PARTIAL LONGITUDINAL SECTION

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DEPARTMENT OF TRANSPORTATION

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SUPERSTRUCTURE

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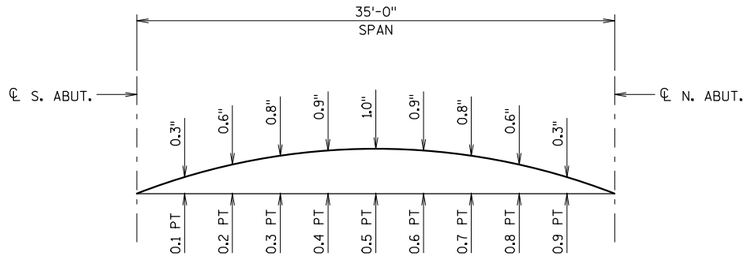


CAMBER DIAGRAM

PROVIDE CAMBER AS SHOWN ABOVE TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. THIS DOES NOT INCLUDE ANY ALLOWANCE FOR FORM SETTLEMENT.

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE ℄ OF ABUTMENTS AND AT 5/10 POINTS TO VERIFY CAMBER. TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN OR ℄.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE FOLLOW THIS PROCEDURE:

	TOP OF SLAB ELEVATION AT FINAL GRADE
LESS	SLAB THICKNESS
PLUS	CAMBER
PLUS	FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)

EQUALS TOP OF SLAB FALSEWORK ELEVATION.

TOP OF DECK ELEVATIONS

LOCATION	℄ OF S. ABUT.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ OF N. ABUT.
WEST EDGE OF SLAB	785.91	785.90	785.90	785.90	785.89	785.88	785.88	785.87	785.87	785.86	785.85
℄ STRUCTURE (ALONG TANGENT LINE)	786.70	786.69	786.69	786.69	786.69	786.68	786.67	786.66	786.65	786.64	786.63
EAST EDGE OF SLAB	787.48	787.48	787.47	787.46	787.46	787.45	787.44	787.43	787.42	787.41	787.39

ELEVATIONS SHOWN ARE FINISHED DECK AND DO NOT INCLUDE ALLOWANCES OF DEAD LOAD DEFLECTION AND FUTURE CREEP.

SURVEY TOP OF SLAB ELEVATIONS

SPAN POINT	W. ABUT.	0.5	E. ABUT.
WEST EDGE OF SLAB	785.87	785.83	785.8
℄ STRUCTURE		786.53	
EAST EDGE OF SLAB	787.48	787.25	787.29

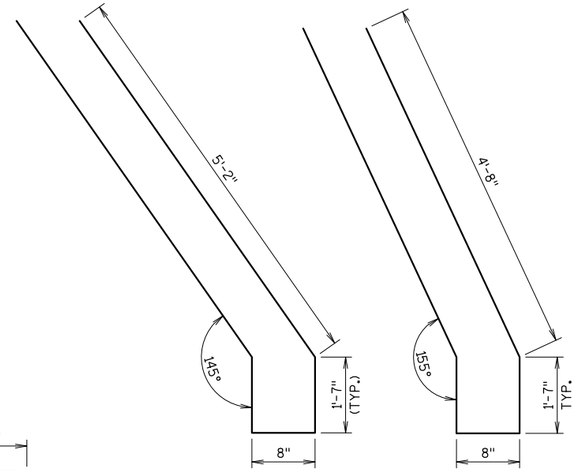
PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE ℄ OF ABUTMENTS AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN OR ℄. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

BILL OF BARS - SUPERSTRUCTURE

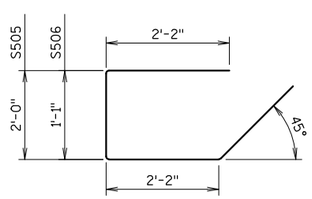
DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT OF BAR.

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
COATED BARS						TOTAL WEIGHT = 15,440 LBS
S1001	55	37'-5"			SLAB - BTM	LONGIT.
S602	42	35'-10"			SLAB - BTM	TRANS.
S503	38	35'-10"			SLAB - TOP	TRANS.
S504	66	19'-6"			SLAB - TOP	LONGIT.
S505	16	7'-10"	X		SLAB - OUTSIDE PAVING NOTCH	TRANS.
S506	50	7'-1"	X		SLAB - AT PAVING NOTCH	TRANS.
S507	50	3'-0"	X		SLAB - AT PAVING NOTCH	VERT.
S608	16	6'-2"	X		SLAB - AT CORNER RAIL POSTS	VERT.
S609	32	6'-0"			SLAB - AT INTERIOR RAIL POSTS	LONGIT.
S610	18	12'-0"	X		SLAB - AT INTERIOR RAIL POSTS	TRANS.
S611	2	13'-8"	X		SLAB - AT CORNERS 2 & 4	TRANS.
S612	4	12'-8"	X		SLAB - AT CORNER RAIL POSTS	TRANS.

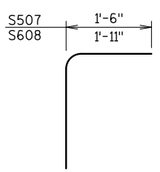
THE FIRST DIGIT OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.



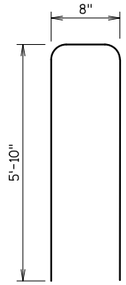
S611 S612



S505, S506



S507, S608



S610

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-246

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SUPERSTRUCTURE DETAILS

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ORIGINAL PLAN PREPARED BY
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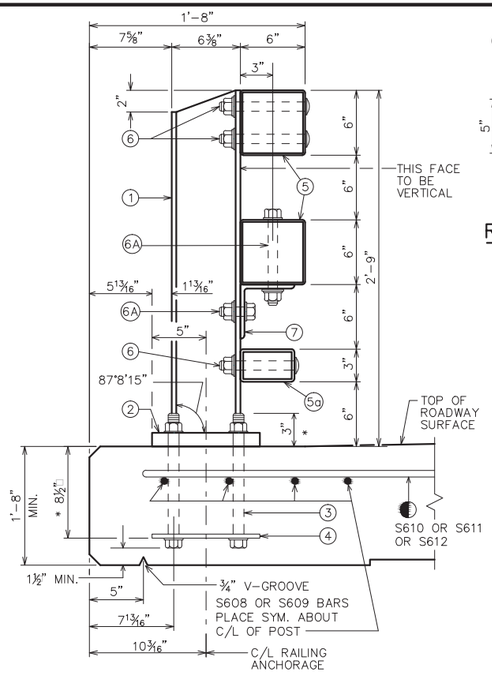
FILE NAME : P:±WI - SW REGION±5289-00-02_CTH S_VERNON COUNTY±500_CADD±503_STRUCTURES±502.4_FINAL±080601 SS_CTH S.DWG

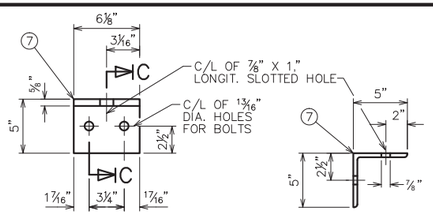
PLOT DATE : 6/1/2017 7:43 PM

PLOT BY : ERIC ANDRITSCH, PE



SECTION THRU RAILING ON SLAB

* NORMAL TO BASE PLATE

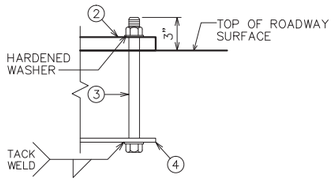


RAILING ANGLE DETAIL

INTERIOR ELEVATION

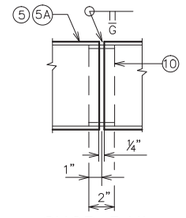
SECTION C–C

ANGLE SECTION



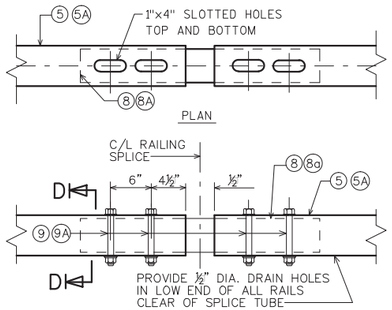
ANCHOR BOLTS

FOR ANCHOR BOLTS IN WINGS, TACK WELD MAY BE USED IN FIELD AFTER ANCHOR PLATE IS IN POSITION IF REQ'D. FOR CONSTRUCTIBILITY.

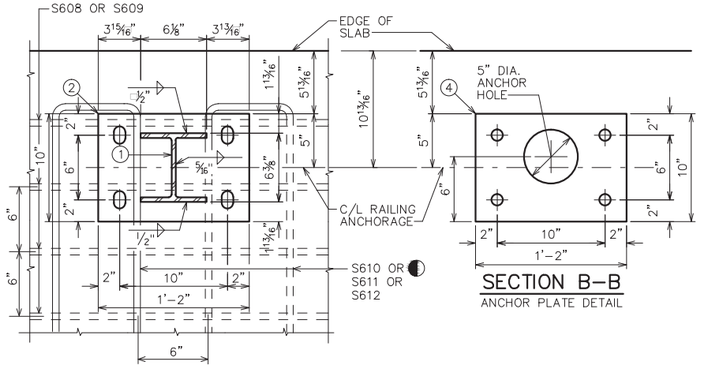


SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



FIELD ERECTION JOINT DETAIL

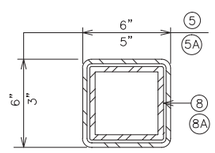


SECTION A–A

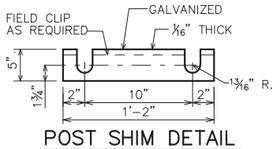
BASE PLATE DETAIL

SECTION B–B

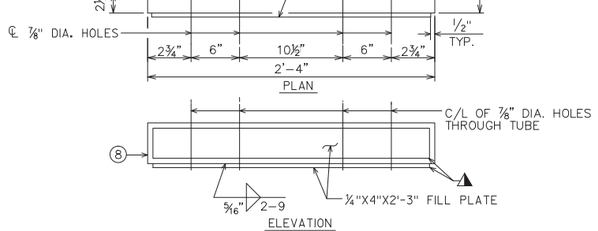
ANCHOR PLATE DETAIL



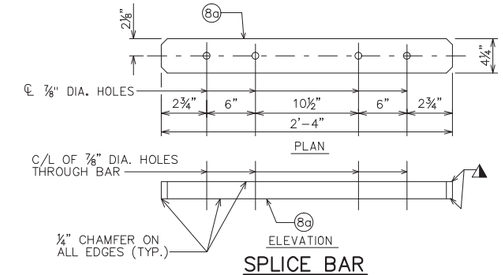
SECTION D–D



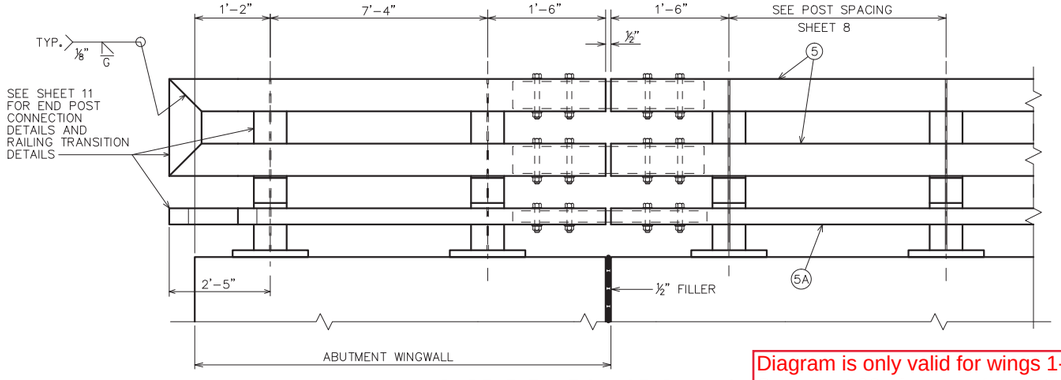
POST SHIM DETAIL



SPLICE TUBE



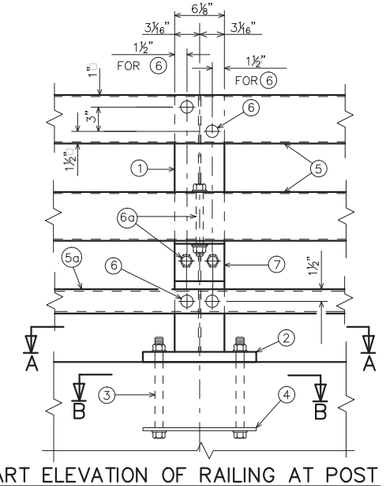
SPLICE BAR



PART ELEVATION OF RAILING

INTERIOR ELEVATION

Diagram is only valid for wings 1-3. See sheet 33a for wing 4's post spacing.



PART ELEVATION OF RAILING AT POST

INTERIOR ELEVATION

STATE PROJECT NUMBER

5289-00-72

LEGEND

(1) W6 X 25 WITH 1⅛" X 1⅜" HORIZONTAL SLOTTED HOLES ON EACH SIDE OF POST FOR BOLT NO. 6 AT NO. 5. USE 1" DIA. HOLES FOR BOLT NO. 6 AT NO. 5A AND FOR BOLT NO. 6A AT NO. 7. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.

(2) PLATE 1¼" X 10" X 1'-2" WITH 1⅛" X 1⁷⁄₁₆" SLOTTED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN. SLOTS PARALLEL TO SHORT SIDE OF PLATE.

(3) ASTM A449 – 1" DIA. ANCHOR BOLTS WITH HEAVY HEX NUT AND 2" O.D. HARDENED WASHER (ALL GALVANIZED). 4 REQUIRED PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 2. CHAMFER TOP OF BOLTS BEFORE THREADING. USE 11" LONG BOLT FOR CONCRETE DECKS. ON CONCRETE SLAB SUPERSTRUCTURES, USE 1'-3" LONG BOLT FOR SLAB THICKNESS > 16" AND 11½" LONG FOR THICKNESS < 16". USE 1'-9" LONG IN ABUTMENT WINGS. (AN EQUIVALENT THREADED ROD WITH HEAVY HEX NUTS AND HARDENED WASHERS MAY BE SUBSTITUTED FOR ANCHOR BOLTS IN WINGS IF REQUIRED FOR CONSTRUCTABILITY.)

(4) ⅜" X 10" X 1'-2" ANCHOR PLATE (GALVANIZED) WITH 1¹³⁄₁₆" DIA. HOLES FOR ANCHOR BOLTS NO. 3.

(5) TS 6 X 6 X ⅜" STRUCTURAL TUBING. USE 1" DIA. HOLES FOR BOLT NO. 6 (FRONT & BACK) & ⅞" DIA. HOLES FOR BOLT NO. 6A (TOP & BOTTOM).

(5A) TS 5 X 3 X ¼" STRUCTURAL TUBING. USE 1⅛" X 1⅜" HORIZONTAL SLOTTED HOLES FOR BOLT NO. 6 (FRONT & BACK) AND A 2" O.D. WASHER UNDER BOLT HEAD.

(6) ⅞" DIA. A325 SLOTTED ROUND HEAD BOLT WITH HEX NUT, ³⁄₁₆" X 1¾" X 1¾" WASHER, AND SPRING LOCK WASHER (2 REQUIRED AT RAIL TO POST LOCATIONS SHOWN).

(6A) ¾" DIA. A325 BOLT WITH HEX NUT & SPRING LOCK WASHER (1 REQUIRED AT RAIL TO ANGLE & 2 REQUIRED AT ANGLE TO POST LOCATIONS SHOWN WITH ³⁄₁₆" X 1¾" X 1¾" WASHER).

(7) L 5 X 5 X ⅝" STRUCTURAL ANGLE. ATTACH TO NO. 1 AND NO. 5 AS SHOWN.

(8) TS 5 X 5 X ⁵⁄₁₆" X 2'-4" LONG SPLICE TUBE. 1 PER RAIL. USED IN NO. 5.

(8A) 4¼" X 2⅛" X 2'-4" LONG SPLICE BAR. 1 PER RAIL. USED IN NO. 5A.

(9) ¾" DIA. A325 FULLY THREADED BOLTS, 7" LONG, WITH 2 WASHERS AND HEAVY HEX NUT ON EACH BOLT. NUT TO BE FINGER TIGHT. (4 REQUIRED PER SPLICE). USE 1" X 4" SLOTTED HOLES IN TOP AND BOTTOM OF NO. 5.

(9A) ¾" DIA. A325 FULLY THREADED BOLTS, 4" LONG, WITH 2 WASHERS AND HEAVY HEX NUT ON EACH BOLT. NUT TO BE FINGER TIGHT. (4 REQUIRED PER SPLICE). USE 1" X 4" SLOTTED HOLES IN TOP AND BOTTOM OF NO. 5A.

(10) SPLICE SLEEVE FABRICATED FROM ¼" PLATE. PROVIDE "SLIDING FIT".

▲ PROTRUSIONS CAUSED BY WELDING OR GALVANIZING ARE NOT PERMITTED ON THE ADJOINING SURFACES OF THE RAILS, SPLICE TUBES AND FILL PLATES.

◐ TIE TO TOP MAT OF STEEL.

NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE NY3 B-62-246", WHICH INCLUDES ALL ITEMS SHOWN.

RAILING SHALL BE CONTINUOUS OVER A MINIMUM OF THREE (3) POSTS WITHOUT SPLICES WHERE POSSIBLE.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT, AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS, ANGLES, SPLICE TUBES, SPLICE BARS AND STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS.

RAIL POST, BASE PLATES, SPLICE BAR, ANGLES AND SPLICE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED f_y =50 KSI. ANCHOR PLATES & SHIMS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 36.

THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL ⅛" TURN.

FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. CAULK AROUND PERIMETER OF NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER PLATE NO. 2 WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

THIS RAILING MEETS NCHRP REPORT 350 EVALUATION CRITERIA FOR TEST LEVEL 4 (TL-4).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-246

DRAWN BY PKF | PLANS CK'D. ETP

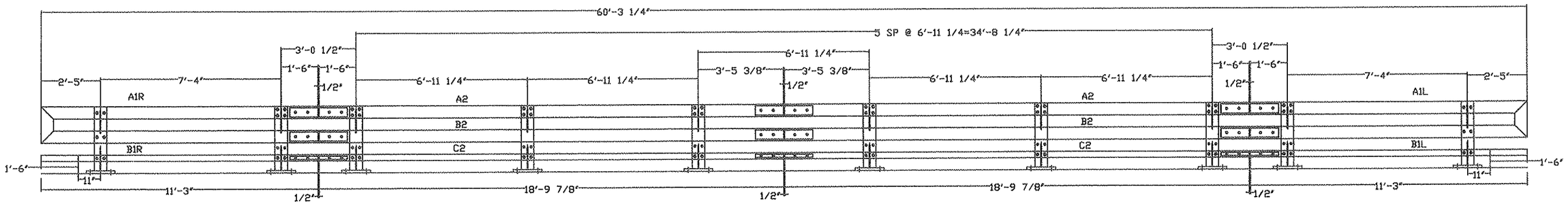
ORIGINAL PLAN PREPARED BY CORRE

TUBULAR STEEL RAILING TYPE NY3

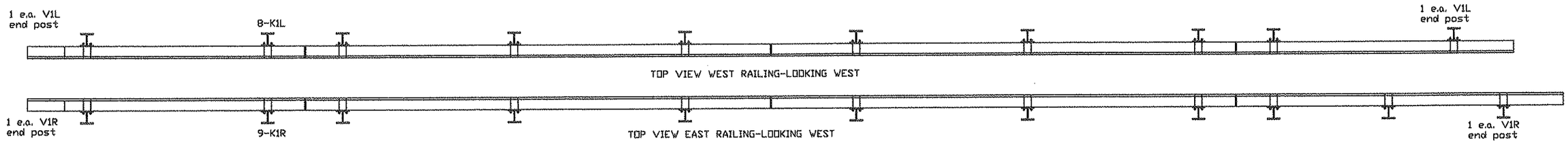
SHEET 10 OF 11

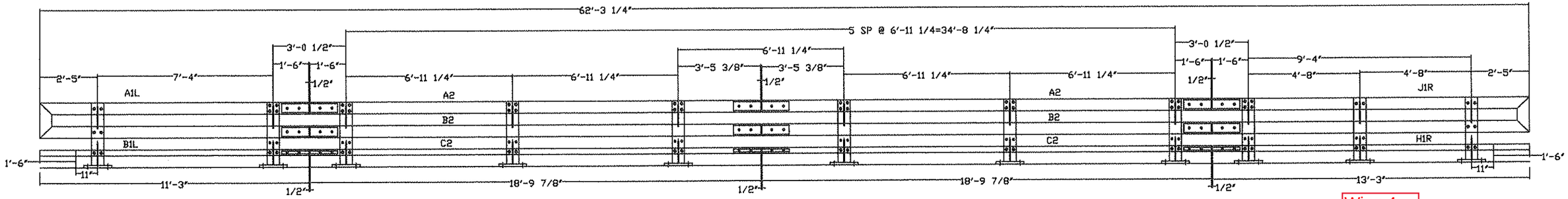
8

8



ELEVATION OF WEST RAILING-LOOKING WEST





ELEVATION OF EAST RAILING-LOOKING WEST

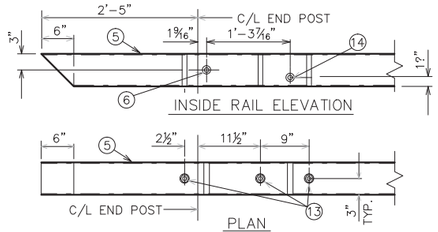
Wing 4

SUMMARY:
-12 EA ANCHOR Y1
-9 EA ANCHOR Y2
-6 EA SLEEVE S1
-12 EA SLEEVE S2
-POST: 9-K1R, 8-K1L, 2-V1L, 2-V1R

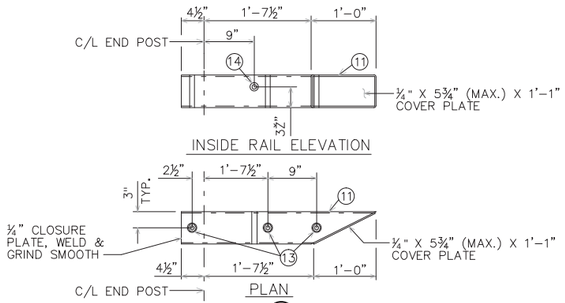
Contractor: RADTKE CONTRACTORS
STATE OF WISCONSIN DOT
SP 5289-00-72
STRUCTURE: B-62-246
CTH S OVER SCOTT HOLLOW CREEK
VERNON COUNTY
Detail: 122 LF STEEL RAILING TYPE NY3
Scale:
Approved By:
Drawn By: C.I.
Date: 3-24-16
Chk'd By: FC
COMMERCIAL FABRICATORS, INC.
7247 S. 78th Ave. BRIDGEVIEW, IL 60455
Drawing No.
JOB# 16-0318
Sheet 33a

STATE PROJECT NUMBER

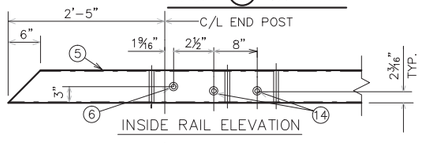
5289-00-72

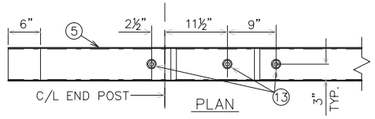


TOP RAIL (5) DETAILS

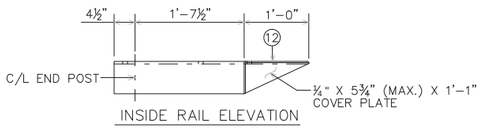


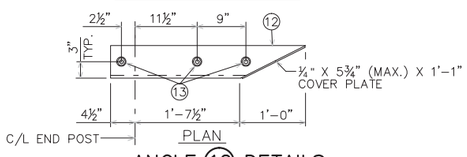
TUBE (11) DETAILS



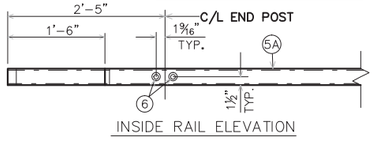


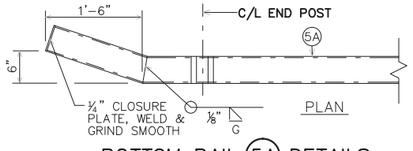
BOTTOM RAIL (5) DETAILS



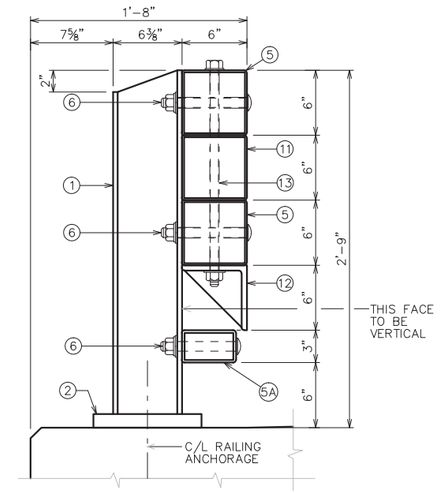


ANGLE (12) DETAILS

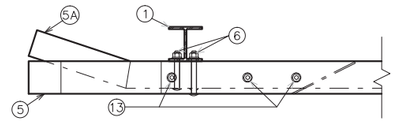




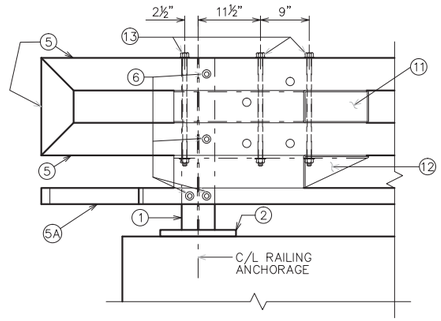
BOTTOM RAIL (5A) DETAILS



SECTION THRU RAILING END POST

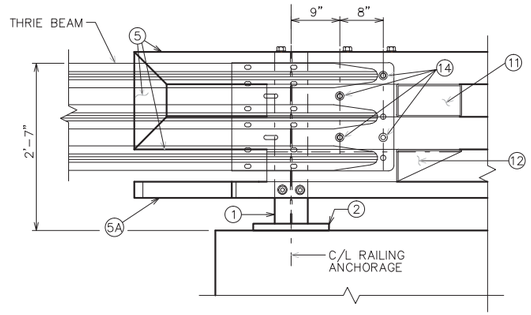


PLAN OF DETAIL AT END POST



ELEVATION DETAIL AT END POST

INTERIOR ELEVATION



ELEVATION OF DETAIL AT END POST

THRIE BEAM RAIL ATTACHMENT

LEGEND

(1) W6 X 25 WITH 1⅛" X 1⅜" HORIZONTAL SLOTTED HOLES ON SIDE OF POST FOR BOLT NO. 6 AT NO. 5. USE 1" DIA. HOLE FOR BOLT NO. 6 AT NO. 5A BOTTOM RAIL. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.

(2) PLATE 1¼" X 10" X 1'-2". SEE SHEET "TUBULAR STEEL RAILING NY3" FOR MORE INFORMATION.

(5) TS 6 X 6 X ⅜" STRUCTURAL TUBING. USE ⅞" DIA. HOLES IN TOP AND BOTTOM OF RAILS FOR BOLT NO. 13 AS SHOWN IN PLAN DETAILS. USE 1" DIA. HOLES IN FRONT AND BACK OF RAILS FOR BOLTS NO. 6 & NO. 14 AS SHOWN IN ELEVATION DETAILS.

(5A) TS 5 X 3 X ¼" STRUCTURAL TUBING. USE 1⅛" X 1⅜" HORIZONTAL SLOTTED HOLES FOR BOLT NO. 6 IN BOTTOM RAIL (FRONT & BACK) AND A 2" O.D. WASHER UNDER BOLT HEAD.

(6) ⅞" DIA. A325 SLOTTED ROUND HEAD BOLT WITH HEX NUT, 3/16" X 1¾" X 1¾" WASHER, AND SPRING LOCK WASHER (1 REQUIRED AT RAIL NO. 5 TO POST NO. 1 CONNECTION LOCATIONS SHOWN. 2 REQUIRED AT RAIL NO. 5A TO POST NO. 1 CONNECTION LOCATIONS SHOWN).

(11) TS 6 X 6 X 3/16" STRUCTURAL TUBING. USE 1" DIA. HOLES IN FRONT AND BACK FOR BOLT NO. 14 & ⅞" DIA. HOLES IN TOP & BOTTOM FOR BOLT NO. 13.

(12) L 6 X 6 X ½" STRUCTURAL ANGLE. USE ⅞" DIA. HOLES IN TOP FLANGE FOR BOLT NO. 13.

(13) ¾" DIA. A325 FULLY THREADED BOLTS, 2 WASHERS AND A HEAVY HEX NUT, ON EACH BOLT. NUT TO BE FINGER TIGHT. 3 BOLTS AT EACH END POST.

(14) ⅞" DIA. A325 SLOTTED ROUND HEAD BOLT WITH HEX NUT AND 3/16" X 2" X 2" WASHER FOR CONNECTION OF THRIE BEAM (4 REQUIRED).

NOTES

STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED Fy=50 KSI. STRUCTURAL ANGLE SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-246

DRAWN BY PKF | PLANS CK'D. ETP

END POST FOR RAILING TYPE NY3

SHEET 11 OF 11

8

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STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		
		Cut	Fill	Salvaged/Unusable Pavement Material (3)	Cut (1,2)	Salvaged/Unusable Pavement Material (3)	Fill	Available Material (4)	Cut 1.00	Expanded Fill 1.25 (5)	Mass Ordinate (6,7)
08+55	0.00	28.38	12.04	12.89	-	-	-	-	-	-	0
08+75	20.00	24.68	18.27	12.96	20	10	11	10	20	14	-4
09+00	25.00	21.30	16.11	12.89	21	12	16	9	41	34	-15
09+25	25.00	19.19	7.76	14.16	19	13	11	6	60	48	-22
09+30.95	5.95	18.88	5.44	13.95	4	3	1	1	64	50	-23
09+50	19.05	18.33	10.59	12.93	13	9	6	4	77	57	-26
09+60.95	10.95	18.90	17.63	12.86	8	5	6	2	85	64	-31
09+75	14.05	19.24	20.38	12.69	10	7	10	3	94	76	-40
09+81.03	6.03	7.50	0.36	6.28	3	2	2	1	97	79	-42
09+87.79	6.77	-	-	0.00	1	1	0	0	98	79	-42
Bridge											
10+12.35	0.00	-	-	0.00	-	-	-	-	98	79	-42
10+18.79	6.44	12.19	-	6.23	1	1	-	1	100	79	-41
10+25.35	6.56	17.69	11.66	11.24	4	2	1	2	103	81	-42
10+38.43	13.08	18.02	64.31	11.54	9	6	18	3	112	104	-62
10+50	11.57	18.08	37.83	11.87	8	5	22	3	120	131	-86
10+68.43	18.43	18.48	23.51	12.48	12	8	21	4	132	157	-108
10+75	6.57	19.20	22.08	12.87	5	3	6	1	137	164	-114
11+00	25.00	21.26	14.48	12.73	19	12	17	7	156	185	-128
11+25	25.00	23.96	8.98	12.69	21	12	11	9	177	199	-132
11+50	25.00	28.16	3.43	12.66	24	12	6	12	201	206	-127
11+55	5.00	28.63	2.58	12.66	5	2	1	3	206	207	-125
					206		166				

Notes:

(1) Common Excavation is item number 205.0100

(2) Salvaged/Unsuable Pavement Material is included in Cut.

(3) Salvaged/Unusable Pavement Material

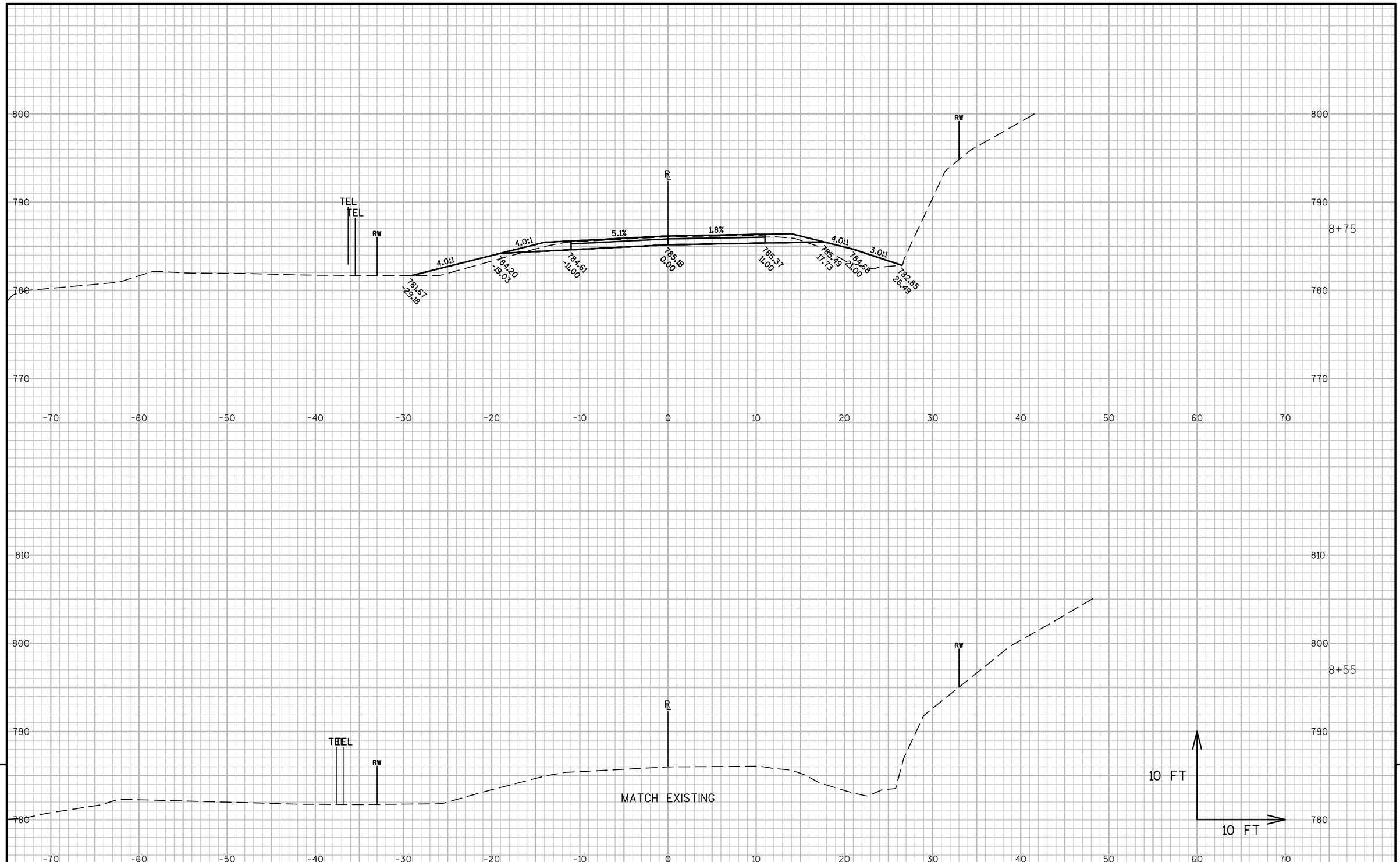
4) Available Material = Cut - Salvaged/Unusuable Pavement Material

(5) Expanded Fill Factor = 1.25

Expanded Fill = (Unexpanded Fill) * Fill Factor

(6) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

(7) Use 82 CY of material from Division 1. Borrow Excavation item number 208.0100

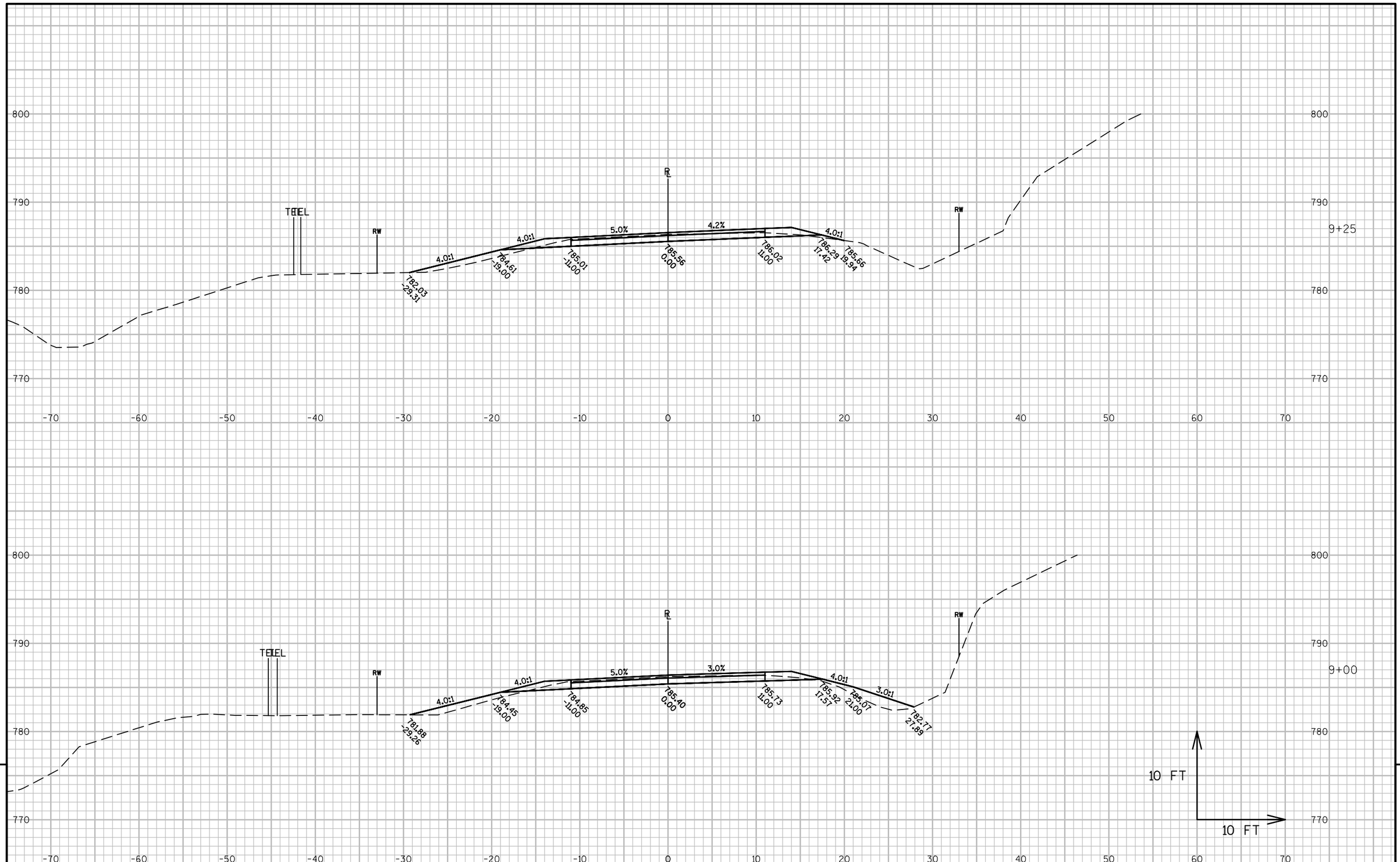


PROJECT NO: 5289-00-72	HWY: CTH S	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET 36	E

FILE NAME : P:\WI - SW REGION\5289-00-02_CTH S_VERNON COUNTY\500_CADD\501_C3D\DESIGN\CORRIDORS\CRDR-CTH S.DWG
LAYOUT NAME - 090101-XS

PLOT DATE : 7/12/2017 12:44 PM PLOT BY : ERIC ANDRITSCH, PE PLOT NAME : PLOT SCALE : 1 IN:10 FT

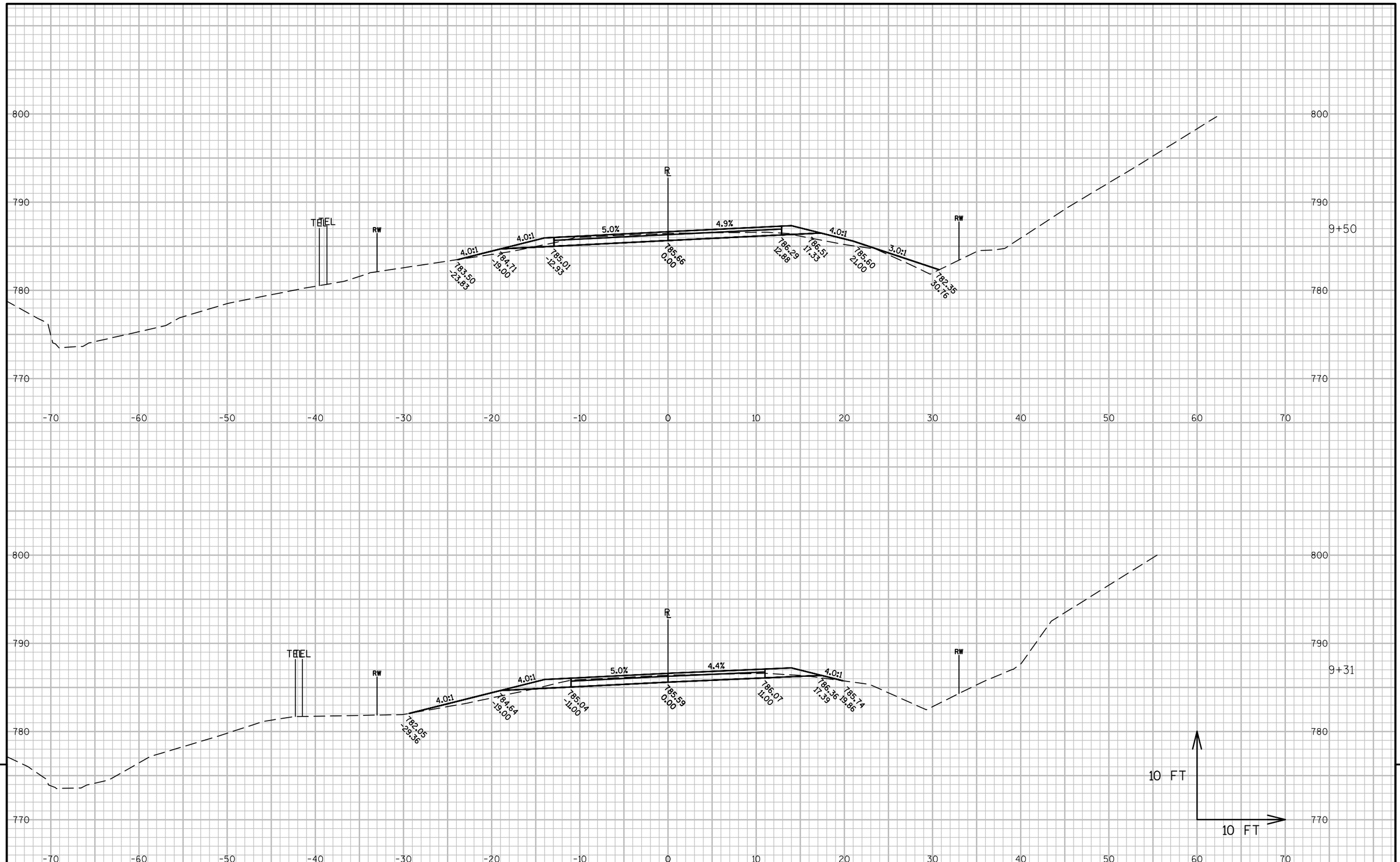
WISDOT/CADDS SHEET 49



PROJECT NO: 5289-00-72	HWY: CTH S	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET 37 E

FILE NAME : P:\WI - SW REGION\5289-00-02_CTH S_VERNON COUNTY\500_CADD\501_C3D\DESIGN\CORRIDORS\CRDR-CTH S.DWG
LAYOUT NAME - 090102-XS

PLOT DATE : 7/12/2017 12:44 PM PLOT BY : ERIC ANDRITSCH, PE PLOT NAME : PLOT SCALE : 1 IN:10 FT

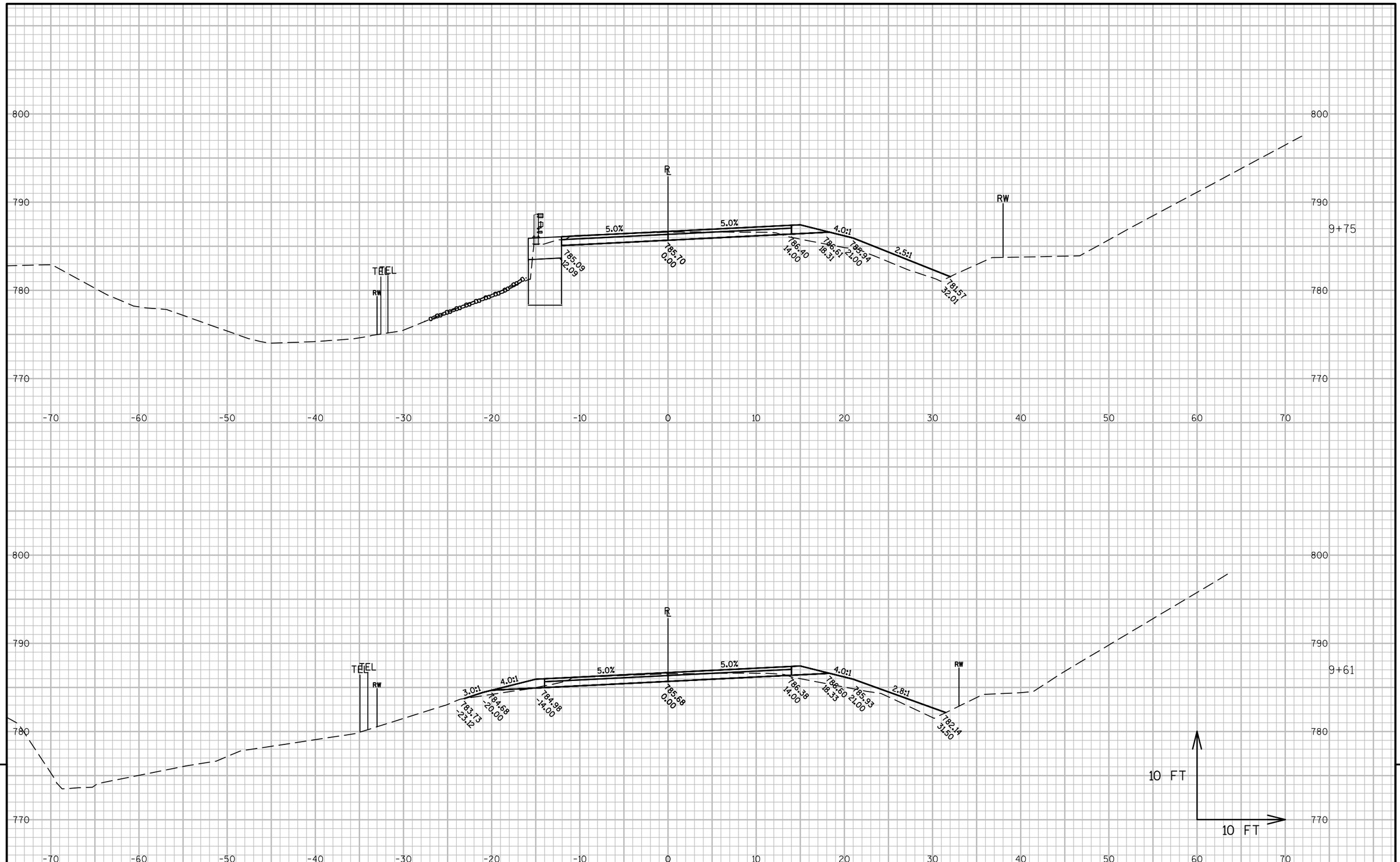


PROJECT NO: 5289-00-72	HWY: CTH S	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET 38	E

FILE NAME : P:\WI - SW REGION\5289-00-02_CTH S_VERNON COUNTY\500_CADD\501_C3D\DESIGN\CORRIDORS\CRDR-CTH S.DWG
LAYOUT NAME - 090103-XS

PLOT DATE : 7/12/2017 12:45 PM PLOT BY : ERIC ANDRITSCH, PE PLOT NAME : PLOT SCALE : 1 IN:10 FT

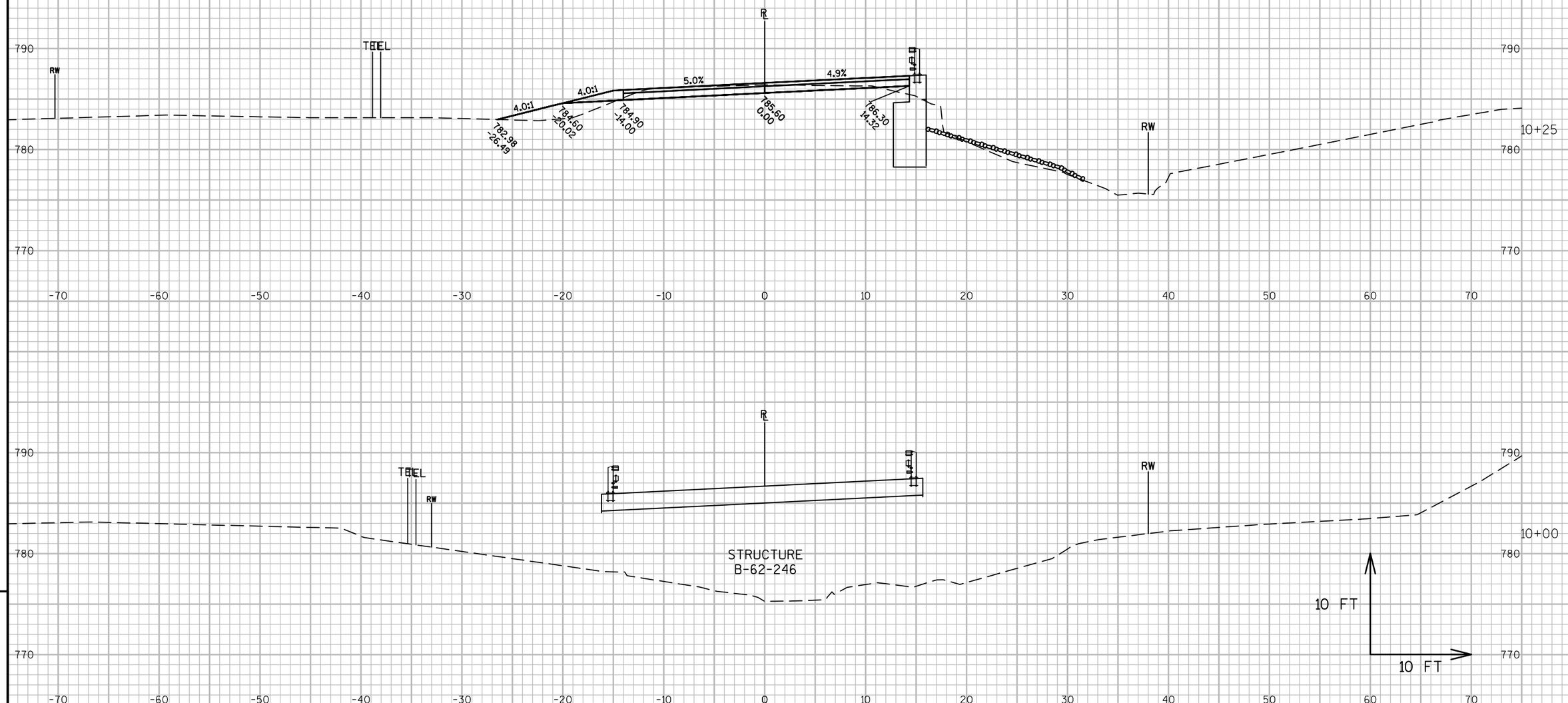
WISDOT/CADDS SHEET 49



PROJECT NO: 5289-00-72	HWY: CTH S	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET 39	E

FILE NAME : P:\WI - SW REGION\5289-00-02_CTH S_VERNON COUNTY\500_CADD\501_C3D\DESIGN\CORRIDORS\CRDR-CTH S.DWG
LAYOUT NAME - 090104-XS

PLOT DATE : 7/12/2017 12:45 PM PLOT BY : ERIC ANDRITSCH, PE PLOT NAME : PLOT SCALE : 1 IN:10 FT



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PROJECT NO: 5289-00-72	HWY: CTH S	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET 40	E

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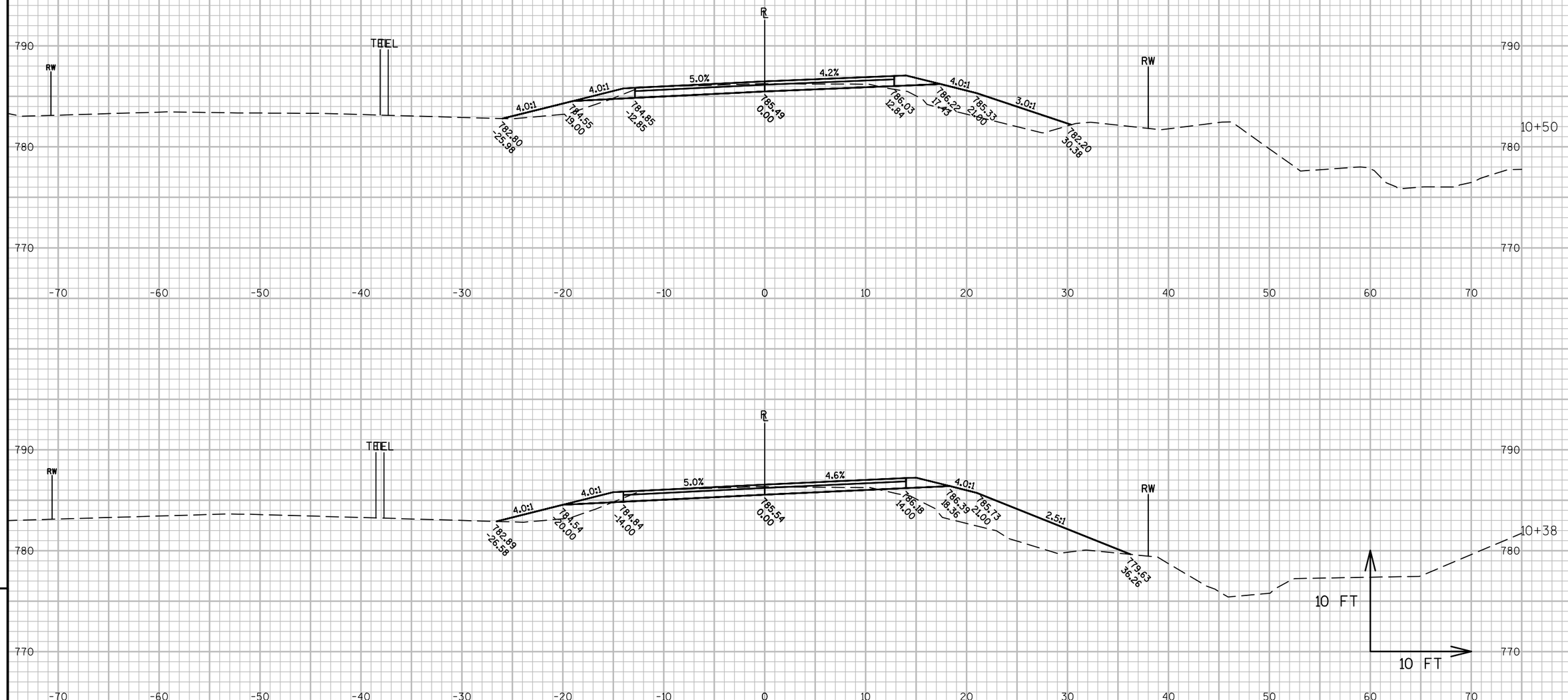
LAYOUT NAME - 090105-XS
PLOT DATE : 7/12/2017 12:45 PM PLOT BY : ERIC ANDRITSCH, PE PLOT NAME :
PLOT SCALE : 1 IN:10 FT



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9

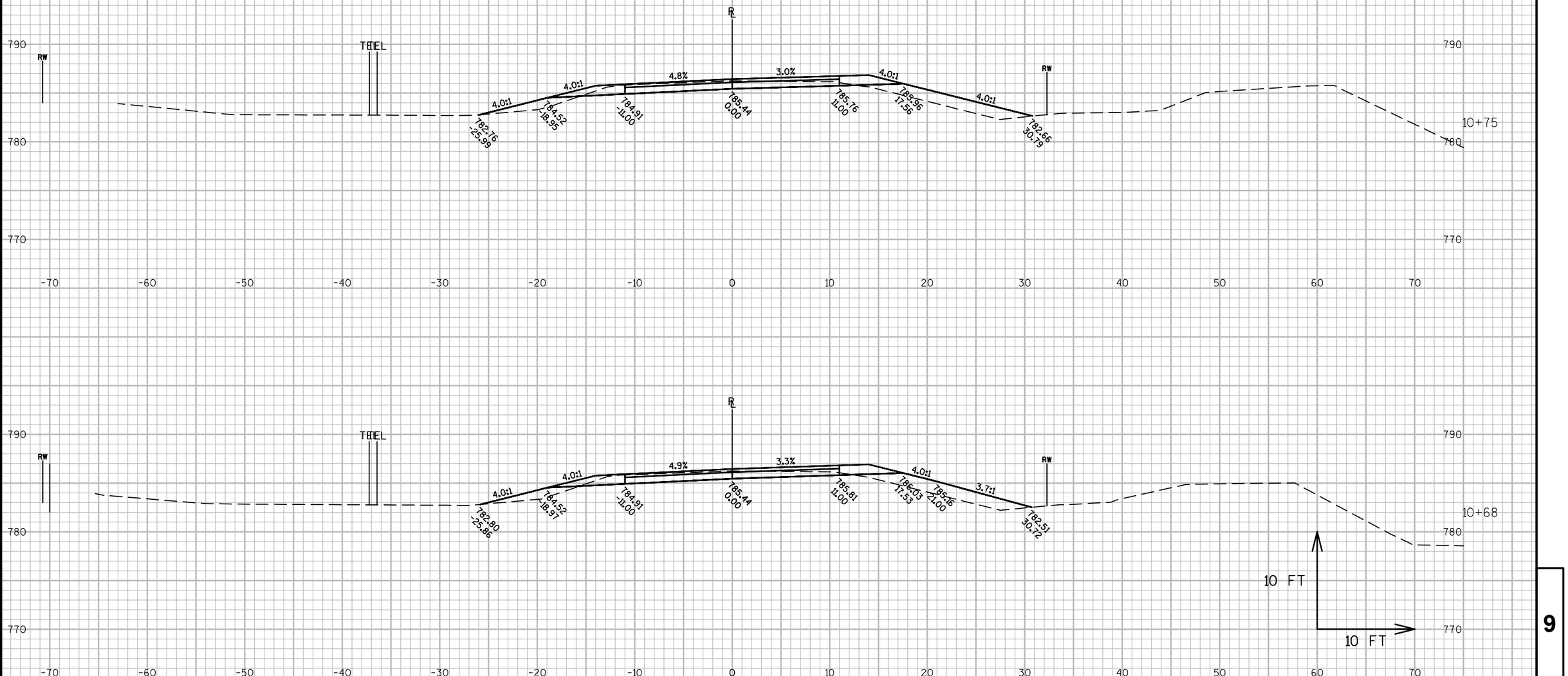
PROJECT NO: 5289-00-72	HWY: CTH S	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET 41	E

FILE NAME : P:\WI - SW REGION\5289-00-02_CTH S_VERNON COUNTY\500_CADD\501_C3D\DESIGN\CORRIDORS\CRDR-CTH S.DWG
LAYOUT NAME - 090106-XS

PLOT DATE : 7/12/2017 12:45 PM PLOT BY : ERIC ANDRITSCH, PE PLOT NAME :

PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 5289-00-72	HWY: CTH S	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET 42	E

FILE NAME : P:\WI - SW REGION\5289-00-02_CTH S_VERNON COUNTY\500_CADD\501_C3D\DESIGN\CORRIDORS\CRDR-CTH S.DWG
LAYOUT NAME - 090107-XS
PLOT DATE : 7/12/2017 12:45 PM PLOT BY : ERIC ANDRITSCH, PE PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

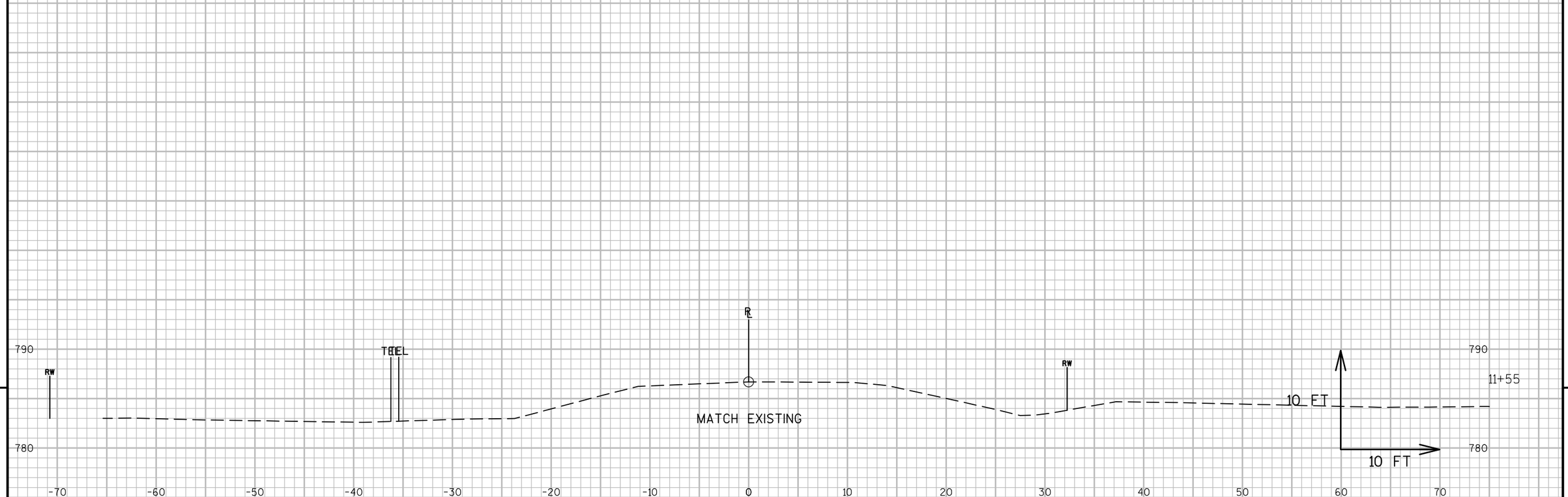
9

9

PROJECT NO: 5289-00-72	HWY: CTH S	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET 43	E

FILE NAME : P:\WI - SW REGION\5289-00-02_CTH S_VERNON COUNTY\500_CADD\501_C3D\DESIGN\CORRIDORS\CRDR-CTH S.DWG
LAYOUT NAME - 090108-XS

PLOT DATE : 7/12/2017 12:45 PM PLOT BY : ERIC ANDRITSCH, PE PLOT NAME : PLOT SCALE : 1 IN:10 FT



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PROJECT NO: 5289-00-72	HWY: CTH S	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET 44	E

FILE NAME : P:\WI - SW REGION\5289-00-02_CTH S_VERNON COUNTY\500_CADD\501_C3D\DESIGN\CORRIDORS\CRDR-CTH S.DWG
LAYOUT NAME - 090109-XS

PLOT DATE : 7/12/2017 12:45 PM PLOT BY : ERIC ANDRITSCH, PE PLOT NAME : PLOT SCALE : 1 IN:10 FT

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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