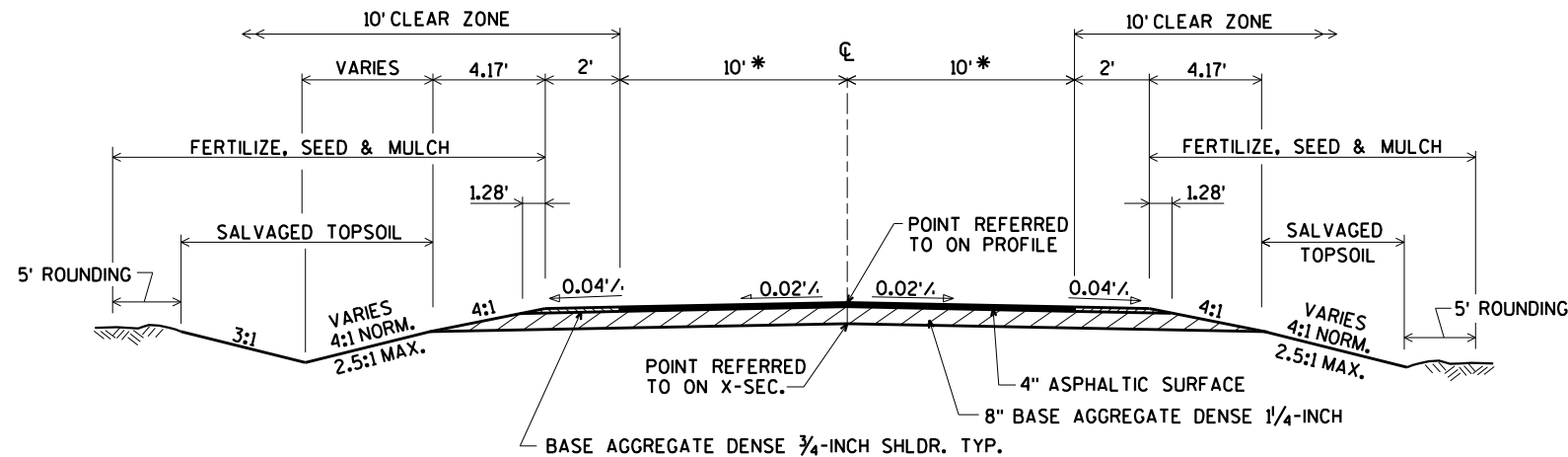
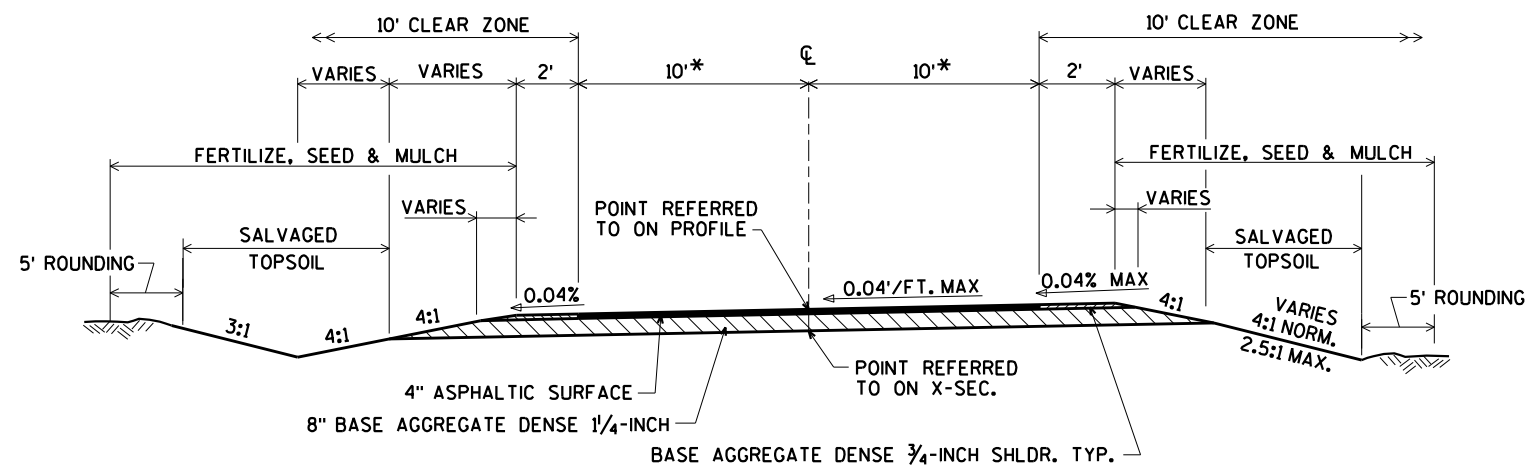
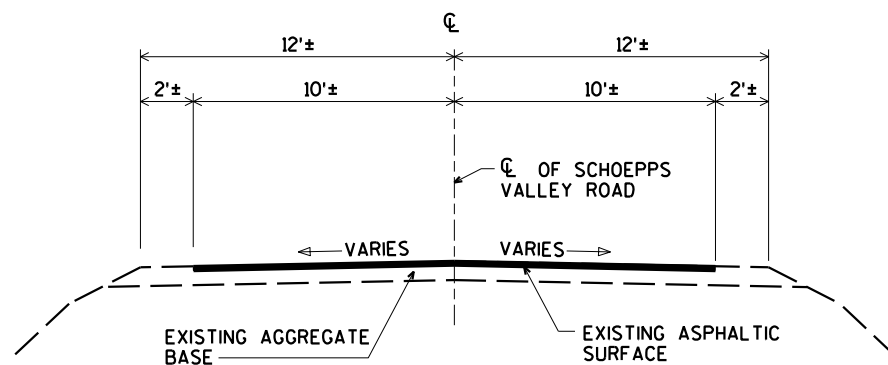


BUFFALO

**TYPICAL FINISHED SECTION**

STA. 8+00 TO STA. 8+61

* ASPHALTIC SURFACE SHALL BE PLACED 24'-4" WIDE AT ENDS OF BRIDGE AND TAPER TO 20' WIDE AT 50' FROM THE ENDS OF THE BRIDGE.

**TYPICAL FINISHED SECTION AT SUPERELEVATION**STA. 8+61 TO STA. 9+74.67
STA. 10+25.33 TO STA. 11+50**TYPICAL EXISTING SECTION****GENERAL NOTES**

EROSION CONTROL ITEMS TO BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER.

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

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

THE DEPARTMENT OF TRANSPORTATION WILL FURNISH THE CONTRACTOR WITH A MONUMENT TO BE INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCLUSIVE OF THE ROADBED, SHALL BE FERTILIZED, SEEDED, AND MULCHED AS DIRECTED BY THE ENGINEER.

SEED MIXTURE NO. 20 AND SEEDING TEMPORARY SHALL BE USED IN THE PROJECT AND SHALL BE PLACED AS SHOWN IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM (NAVD) 1988.

ASPHALTIC SURFACE SHALL BE CONSTRUCTED WITH A 2" UPPER LAYER AND A 2" LOWER LAYER. ASPHALTIC SURFACE SHALL USE 12.5 mm NOMINAL AGGREGATE SIZE.

UTILITIES

COCHRANE COOPERATIVE
TELEPHONE COMPANY
P.O. BOX 189
COCHRANE, WI 54622
ATTN: MATT BIESTERVELD
608-248-2323
mbeastie@mwf.net

RIVERLAND ENERGY COOPERATIVE
P.O. BOX 277
ARCADIA, WI 54612
ATTN: DAVE WOYICKI
608-323-3381
dwoyicki@riverlandenergy.com

ABBREVIATIONS

AC	ACRES
CHIS	CHISELED
CL	CENTERLINE
COR	CORNER
CWT	COUNT
CY	CUBIC YARD
EL	ELEVATION
GAL	GALLON
H	HOUSE
IP	IRON PIPE
LB	POUND
LF	LINEAR FEET
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
MON	MONUMENT
NORM	NORMAL
OAL	OVERALL LENGTH
PC	POINT OF CURVATURE
PD	PEDESTAL
PI	POINT OF INTERSECTION
PK	PARKER-KALON
PL	PROPERTY LINE
PLE	PERMANENT LIMITED EASEMENT
PP	POWER POLE
PT	POINT OF TANGENCY
R	RADIUS
REQ'D	REQUIRED
RT	RIGHT
R/W	RIGHT-OF-WAY
SF	SQUARE FEET
SHLDR	SHOULDER
STA	STATION
SY	SQUARE YARD
TLE	TEMPORARY LIMITED EASEMENT
VAR	VARIES
WL	WELL

** DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS

DIGGERS HOTLINE

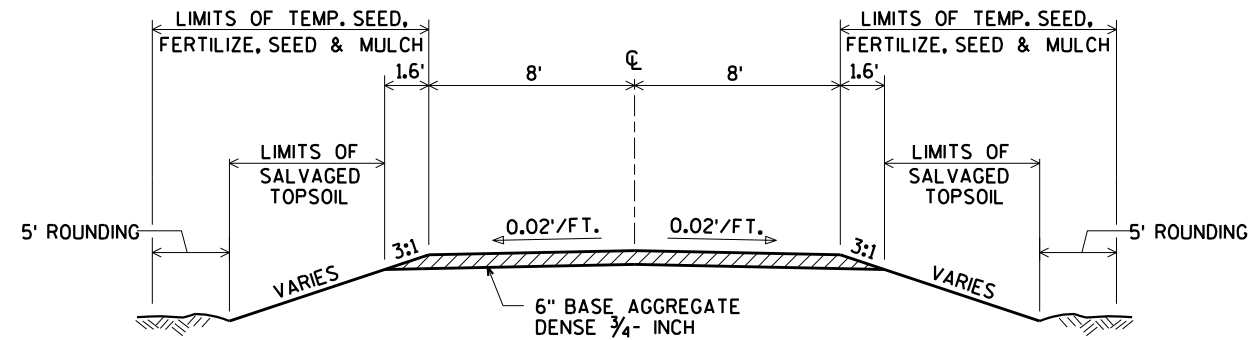
Dial **811** or (800) 242-8511
www.DiggersHotline.com

**WISCONSIN DEPARTMENT OF
NATURAL RESOURCES CONTACT:**

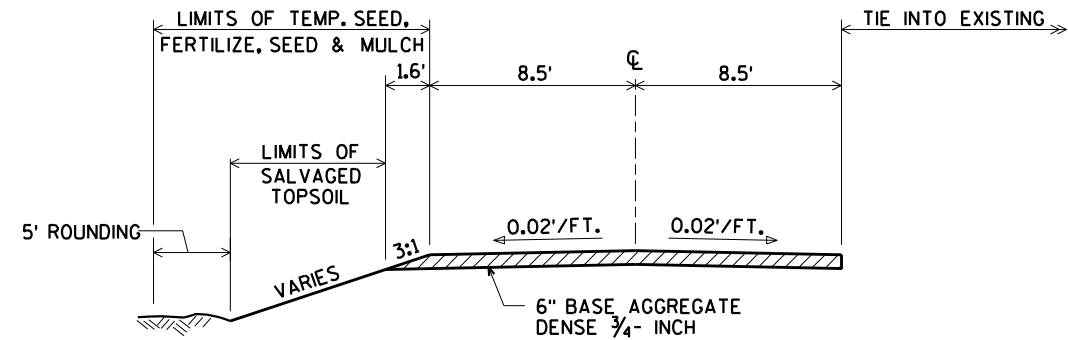
KAREN KALVELAGE
3550 MORMON COULEE RD.
LACROSSE, WI. 54601
608-785-9115
karen.kalvelage@wisconsin.gov

DESIGNER

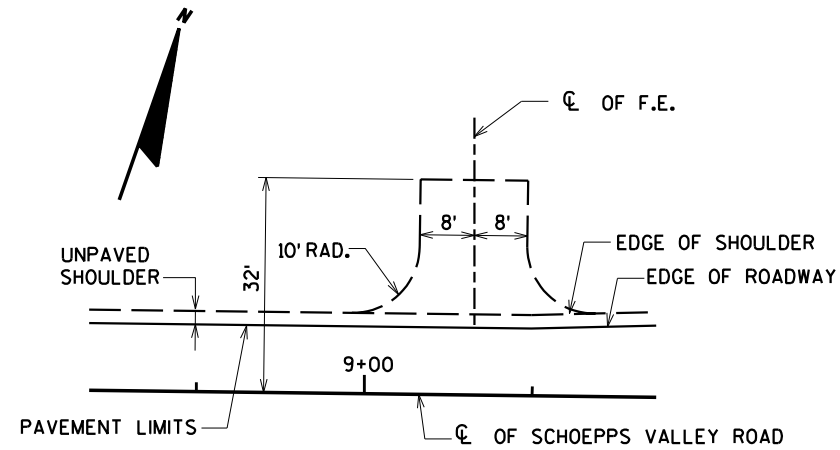
AYRES ASSOCIATES
3433 OAKWOOD HILLS PARKWAY
EAU CLAIRE, WI 54701
ATTN: DANIEL N. SYDOW
715-834-3161
sydowd@ayresassociates.com



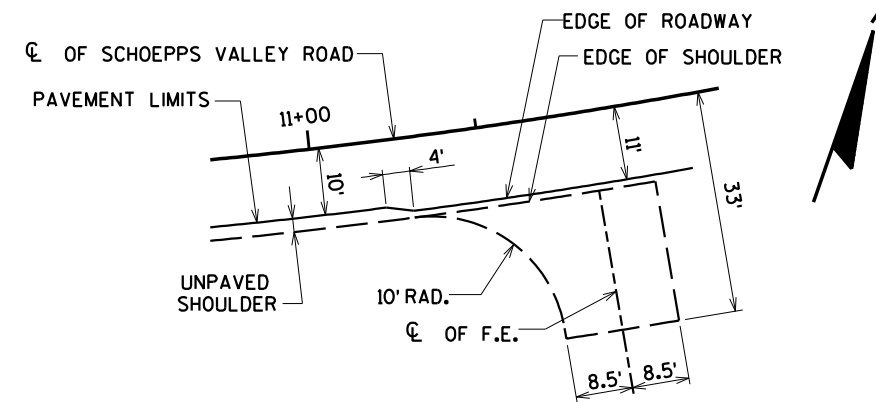
TYPICAL SECTION FOR FIELD ENTRANCE
(STA. 9+16 F.E. LT.)



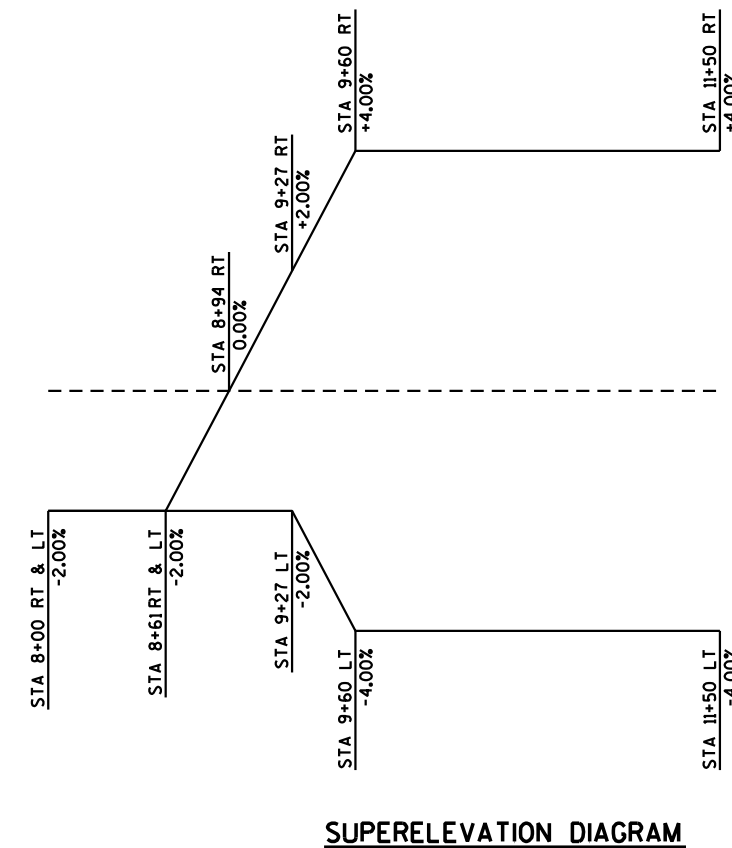
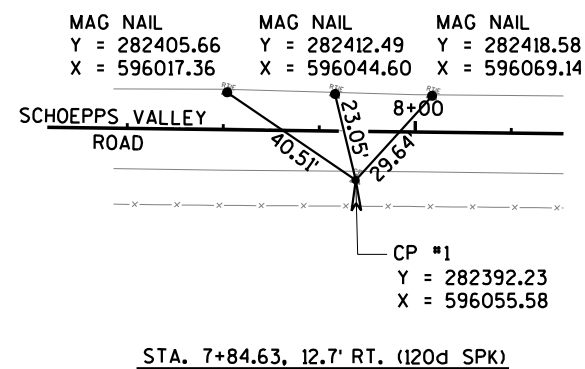
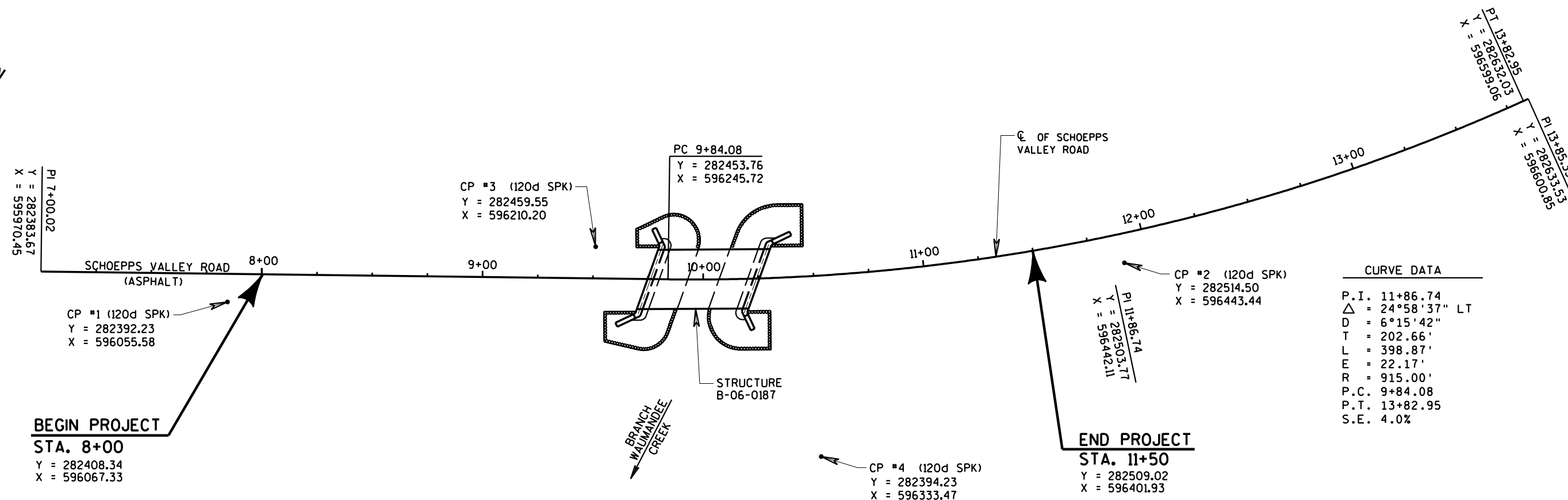
TYPICAL SECTION FOR PRIVATE ENTRANCE
(STA. 11+42 P.E. RT.)

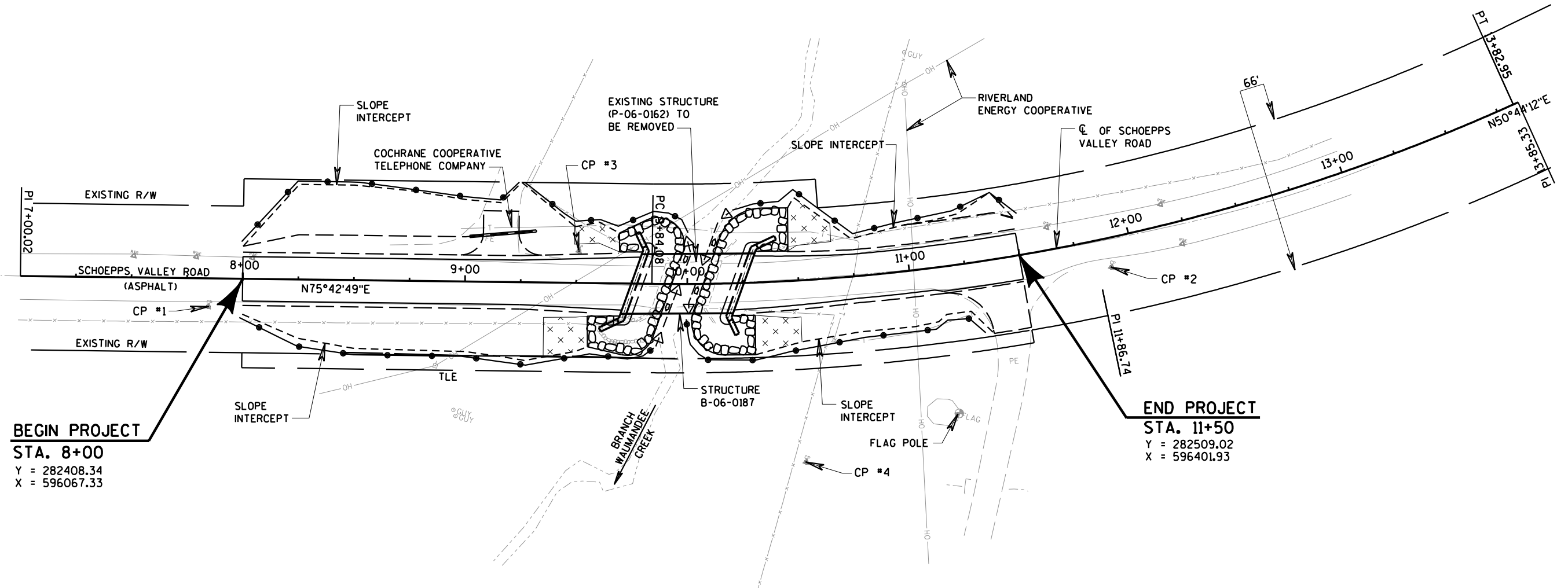


FIELD ENTRANCE PLAN
(STA. 9+16 F.E. LT.)



PRIVATE ENTRANCE PLAN
(STA. 11+42 P.E. RT.)





	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 = 0.530 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.443 ACRES

LEGEND

-  EROSION MAT CLASS II TYPE C
-  TEMPORARY DITCH CHECKS (UNDISTRIBUTED)
-  SILT FENCE
-  RIPRAP HEAVY
-  TURBIDITY BARRIERS

HIGH WATER 2 EL. 757.2

DATE 18SEP14		E S T I M A T E O F Q U A N T I T I E S			
LINE		7238-00-71			
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	201.0105	CLEARING	STA	1.000	1.000
0020	201.0205	GRUBBING	STA	1.000	1.000
0030	203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS (STATION) 01. 10+00	LS	1.000	1.000
0040	205.0100	EXCAVATION COMMON	CY	359.000	359.000
0050	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 01. B-06-0187	LS	1.000	1.000
0060	208.0100	BORROW	CY	58.000	58.000
0070	210.0100	BACKFILL STRUCTURE	CY	260.000	260.000
0080	213.0100	FINISHING ROADWAY (PROJECT) 01. 7238-00-71	EACH	1.000	1.000
0090	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	80.000	80.000
0100	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	440.000	440.000
0110	455.0605	TACK COAT	GAL	18.000	18.000
0120	465.0105	ASPHALTIC SURFACE	TON	160.000	160.000
0130	502.0100	CONCRETE MASONRY BRIDGES	CY	115.000	115.000
0140	502.3200	PROTECTIVE SURFACE TREATMENT	SY	175.000	175.000
0150	503.0128	PRESTRESSED GIRDER TYPE I 28-INCH	LF	196.000	196.000
0160	505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	4,770.000	4,770.000
0170	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	11,760.000	11,760.000
0180	506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	8.000	8.000
0190	506.4000	STEEL DIAPHRAGMS (STRUCTURE) 01. B-06-0187	EACH	3.000	3.000
0200	513.4060	RAILING TUBULAR TYPE M (STRUCTURE) 01. B-06-0187	LS	1.000	1.000
0210	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	20.000	20.000
0220	521.0112	CULVERT PIPE CORRUGATED STEEL 12-INCH	LF	30.000	30.000
0230	521.1012	APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH	EACH	2.000	2.000
0240	550.0500	PILE POINTS	EACH	10.000	10.000
0250	550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	650.000	650.000
0260	606.0300	RIPRAP HEAVY	CY	255.000	255.000
0270	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	150.000	150.000
0280	619.1000	MOBILIZATION	EACH	1.000	1.000
0290	625.0500	SALVAGED TOPSOIL	SY	1,025.000	1,025.000
0300	627.0200	MULCHING	SY	1,195.000	1,195.000
0310	628.1504	SILT FENCE	LF	865.000	865.000
0320	628.1520	SILT FENCE MAINTENANCE	LF	1,730.000	1,730.000
0330	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	4.000	4.000
0340	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	2.000	2.000
0350	628.2027	EROSION MAT CLASS II TYPE C	SY	190.000	190.000
0360	628.6005	TURBIDITY BARRIERS	SY	115.000	115.000
0370	628.7504	TEMPORARY DITCH CHECKS	LF	40.000	40.000
0380	629.0210	FERTILIZER TYPE B	CWT	1.000	1.000
0390	630.0120	SEEDING MIXTURE NO. 20	LB	45.000	45.000
0400	630.0200	SEEDING TEMPORARY	LB	40.000	40.000
0410	634.0612	POSTS WOOD 4X6-INCH X 12-FT	EACH	4.000	4.000
0420	637.2230	SIGNS TYPE II REFLECTIVE F	SF	12.000	12.000
0430	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000
0440	643.0100	TRAFFIC CONTROL (PROJECT) 01. 7238-00-71	EACH	1.000	1.000
0450	645.0120	GEOTEXTILE FABRIC TYPE HR	SY	160.000	160.000
0460	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	300.000	300.000
0470	650.5000	CONSTRUCTION STAKING BASE	LF	300.000	300.000
0480	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	1.000	1.000

DATE 18SEP14			E S T I M A T E O F Q U A N T I T I E S		
LINE					7238-00-71
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0490	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. B-06-0187	LS	1.000	1.000
0500	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 7238-00-71	LS	1.000	1.000
0510	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	300.000	300.000
0520	690.0150	SAWING ASPHALT	LF	44.000	44.000
0530	715.0502	INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL	690.000	690.000
0540	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT \$5.00/HR	HRS	1,200.000	1,200.000
0550	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT \$5.00/HR	HRS	300.000	300.000

CLEARING AND GRUBBING (CATEGORY 0010)

STATION TO STATION	201.0105	201.0205
	CLEARING STA	GRUBBING STA
Undistributed	1	1

EARTHWORK SUMMARY (CATEGORY 0010)

DIVISION	STATION TO STATION	LOCATION	205.0100		SALVAGED/ UNUSEABLE	AVAILABLE MATERIAL (5) CY	UNEXPANDED FILL CY	EXPANDED FILL (6) CY	MASS ORDINATE ±(7) CY	WASTE CY	208.0100 BORROW CY	COMMENTS:
			EXCAVATION COMMON		PAVEMENT MATERIAL							
			CUT (2) CY	EBS (3) CY	(4) CY							
1	8+00 TO 9+74.67	SCHOEPPS VALLEY ROAD	287	0	0	287	180	234	53	53	0	
	10+25.33 TO 11+50	SCHOEPPS VALLEY ROAD	72	0	0	72	100	130	-58	0	58	
GRANDTOTAL			359	0	0	359	280	364	-5	53	58	
TOTAL EXCAVATION COMMON			359							TOTAL BORROW	58	

NOTES:
1) EXCAVATION COMMON IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
2) SALVAGED/UNUSEABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
3) EBS EXCAVATION TO BE BACKFILLED WITH BORROW MATERIAL.
4) SALVAGED/UNUSEABLE PAVEMENT MATERIAL
5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSEABLE PAVEMENT MATERIAL
6) EXPANDED FILL FACTOR = 1.30
EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR
7) THE MASS ORDINATE ± QTY CALCUTATED FOR THE DIVISION.
PLUS (+) QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION.
MINUS (-) QUANTITY INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

213.0100 FINISHING ROADWAY (CATEGORY 0010)

LOCATION	EACH
PROJECT 7238-00-71	1

BASE AGGREGATE DENSE (CATEGORY 0010)

STATION TO STATION	LOCATION	305.0110	305.0120
		3/4-INCH TON	1 1/4-INCH TON
Sta. 8+00 to Sta. 9+74.67	Shoulders	30	---
Sta. 10+25.33 to Sta. 11+50	Shoulders	20	---
Sta. 9+16 LT	FE	15	---
Sta. 11+42 RT	PE	15	---
Sta. 8+00 to Sta. 9+24.73	Mainline	---	173.5
Sta. 9+24.73 to Sta. 9+78.87	Mainline	---	81
Sta. 10+19.5 to Sta. 10+75.61	Mainline	---	82
Sta. 10+75.61 to Sta. 11+50	Mainline	---	103.5
TOTALS		80	440

455.0605 TACK COAT (CATEGORY 0010)

STATION TO STATION	LOCATION	GAL
Sta. 8+00 to Sta. 9+74.67	Mainline	10
Sta. 10+25.33 to Sta. 11+50	Mainline	8
TOTAL		18

465.0105 ASPHALTIC SURFACE (CATEGORY 0010)

STATION TO STATION	LOCATION	TON
Sta. 8+00 to Sta. 9+74.67	Mainline	92
Sta. 10+25.33 to Sta. 11+50	Mainline	68
TOTAL		160

521.0112 CULVERT PIPE CORRUGATED STEEL 12-INCH (CATEGORY 0010)

LOCATION	LF
FE Sta. 9+16 LT	30

521.1012 APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH (CATEGORY 0010)

LOCATION	EACH
FE Sta. 9+16 LT	2

619.1000 MOBILIZATION

LOCATION	EACH
PROJECT 7238-00-71 (CATEGORY 0010)	0.2
PROJECT 7238-00-71 (CATEGORY 0020)	0.8
TOTAL	1

SALVAGED TOPSOIL, MULCHING, FERTILIZER, SEED & TEMPORARY SEED (CATEGORY 0010)

STATION TO STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING NO. 20 LB	630.0200 SEEDING TEMPORARY LB
Sta. 8+00 to Sta. 11+50	Mainline	1,025	1,095	0.9	38	32
Undistributed		---	100	0.1	7	8
TOTALS		1,025	1,195	1.0	45	40

SILT FENCE & SILT FENCE MAINTENANCE (CATEGORY 0010)

STATION TO STATION	LOCATION	628.1504 LF	628.1520 MAINTENANCE LF
Sta. 8+00 to Sta. 10+00	LT	206	412
Sta. 8+00 to Sta. 9+86	RT	192	384
Sta. 10+00 to 11+30	RT	152	304
Sta. 10+22 to Sta. 11+50	LT	141	282
Undistributed		174	348
TOTALS		865	1,730

MOBILIZATIONS EROSION CONTROL & EMERGENCY EROSION CONTROL (CATEGORY 0010)

LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
PROJECT 7238-00-71	4	2

628.2027 EROSION MAT CLASS II TYPE C (CATEGORY 0010)		
STATION TO STATION	LOCATION	SY
Sta. 9+35 to Sta. 9+55	RT	44
Sta. 9+49 to Sta. 9+69	LT	25
Sta. 10+30 to Sta. 10+50	RT	40
Sta. 10+46 to Sta. 10+66	LT	41
Undistributed		40
TOTAL		190

628.6005 TURBIDITY BARRIERS (CATEGORY 0010)	
LOCATION	SY
West Abutment	47
East Abutment	44
Undistributed	24
TOTAL	115

628.7504 TEMPORARY DITCH CHECKS (CATEGORY 0010)	
LOCATION	LF
UNDISTRIBUTED	40

634.0612 POSTS WOOD 4X6 INCH X 12 FT (CATEGORY 0010)		
STATION	LOCATION	EACH
Sta. 9+70	RT (Object Marker)	1
Sta. 9+79	LT (Object Marker)	1
Sta. 10+20	RT (Object Marker)	1
Sta. 10+31	LT (Object Marker)	1
TOTAL		4

637.2230 SIGNS TYPE II REFLECTIVE F (CATEGORY 0010)			
STATION			SF
Sta. 9+70	RT (Object Marker)	W5-52R	3
Sta. 9+79	LT (Object Marker)	W5-52L	3
Sta. 10+20	RT (Object Marker)	W5-52L	3
Sta. 10+31	LT (Object Marker)	W5-52R	3
TOTAL			12

642.5001 FIELD OFFICE TYPE B (CATEGORY 0010)	
LOCATION	EACH
PROJECT 7238-00-71	1

643.0100 TRAFFIC CONTROL (CATEGORY 0010)	
LOCATION	EACH
PROJECT 7238-00-71	1

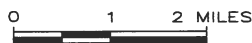
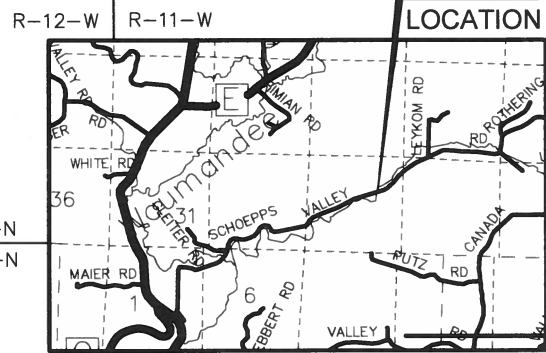
CONSTRUCTION STAKING							
CATEGORY	LOCATION	650.4500	650.5000	650.6000	650.6500	650.9910	650.9920
		SUBGRADE	BASE	PIPE	STRUCTURE	SUPPLEMENTAL	SLOPE
		LF	LF	CULVERTS	LAYOUT	CONTROL	STAKES
				EACH	LS	LS	LF
0010	Sta. 8+00 to 11+50	300	300	---	---	1	300
0010	FE Sta. 9+16 LT	---	---	1	---	---	---
0020	B-06-0187	---	---	---	1	---	---
TOTALS		300	300	1	1	1	300

690.0150 SAWING ASPHALT (CATEGORY 0010)		
STATION	LOCATION	LF
Sta. 8+00	Mainline	21
Sta. 11+50	Mainline	23
TOTAL		44

CONVENTIONAL SYMBOLS
FOUND IRON PIPE/PIN
R/W MONUMENT
R/W STANDARD
SIGN
SECTION CORNER MONUMENT
SECTION CORNER SYMBOL
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT
PARCEL NUMBER
UTILITY PARCEL NUMBER
SIGN NUMBER (OFF PREMISE)
BUILDING

CONVENTIONAL UTILITY SYMBOLS
WATER
GAS
TELEPHONE
OVERHEAD
TRANSMISSION LINES
ELECTRIC
CABLE TELEVISION
FIBER OPTIC
SANITARY SEWER
STORM SEWER
POWER POLE
TELEPHONE POLE
TELEPHONE PEDESTAL
ELECTRIC TOWER

CONVENTIONAL ABBREVIATIONS
ACCESS POINT/ DRIVEWAY CONNECTION
ACCESS RIGHTS
ACRES
AND OTHERS
CENTERLINE
CERTIFIED SURVEY MAP
CORNER
DOCUMENT
EASEMENT
HIGHWAY EASEMENT
LAND CONTRACT
MONUMENT
PAGE
PERMANENT LIMITED EASEMENT
PROPERTY LINE
RECORDED AS
REFERENCE LINE
RELEASE OF RIGHTS
REMAINING
RIGHT-OF-WAY
SECTION
STATION
TEMPORARY LIMITED EASEMENT
TILE
VOLUME
CURVE DATA
LONG CHORD
H.E.
LC
MON.
P.
PLE
PL
(100')
R/L
ROR
REM.
R/W
SEC.
STA.
TILE
V.
LCH
LCB
R
D
DELTA
L
TAN



TOTAL NET LENGTH OF RELOCATION ORDER=0.066 MILES

NOTES

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, BUFFALO COUNTY, NAD83 (2011) IN U.S. 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 (TYPICALLY 1" X 24" IRON PIPE) 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 SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

EXISTING RIGHT-OF-WAY FOR SCHOEPPS VALLEY ROAD WAS DETERMINED BY BEST FIT FROM EXISTING CENTERLINE OF THE ROAD. WIDTH WAS PRESUMED TO BE 66' WIDE BASED ON STATE STATUTE 82.31 (2).

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	OWNERSHIP	INTEREST REQUIRED	TOTAL ACRES	R/W (ACRES)			TOTAL ACRES REMAINING	TLE ACRES
				NEW	EXISTING	TOTAL		
1	BAKERS ACRES INC.	FEE & TLE	70.08	0.07	0.19	0.26	69.82	0.05
100	COCHRANE COOPERATIVE TELEPHONE COMPANY	RELEASE						
101	RIVERLAND ENERGY COOPERATIVE	RELEASE						

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE TOWN.

TOWN

CURVE TABLE

CURVE	CHORD DISTANCE	CHORD BEARING	RADIUS	ARC LENGTH	PT COORDINATES Y	X	BACK TANGENT	AHEAD TANGENT
C1	89.11'	S68°06'54"W	915.00'	89.14'	282490.40	596361.39	S65°19'27"W	S70°54'21"W
C2	76.76'	S73°18'35"W	915.00'	76.78'	282463.24	596282.95	S70°54'21"W	S75°42'49"W
C3	72.98'	N73°18'35"E	870.00'	73.00'	282506.39	596270.01	N75°42'49"E	N70°54'21"E
C4	172.94'	S70°31'08"W	955.00'	173.17'	282436.43	596339.73	S65°19'27"W	S75°42'49"W
C5	164.92'	N70°33'17"E	908.00'	165.15'	282443.42	596340.94	N75°45'55"E	N65°20'39"E

COCHRANE COOPERATIVE TELEPHONE COMPANY
RIGHT OF WAY EASEMENT
V.11ED P.710 DOC.*223787

BAKERS ACRES INC.
WARRANTY DEED
V.146 P.282
DOC. *148848

RIVERLAND ENERGY COOPERATIVE
RIGHT OF WAY EASEMENT
V.1ED P.102 DOC.*83170

STA. 7+00.02
SCHOEPPS VALLEY ROAD
Y = 282383.667
X = 595970.446

BEGIN RELOCATION ORDER
STA.8+00.00
Y = 282408.339
X = 596067.332
LOCATED 1920.63 FEET SOUTH & 1600.63 FEET WEST OF THE NORTHEAST CORNER OF SECTION 33, T 21 N, R 11 W.

PARCEL 1 FEE

COURSE	BEARING	DISTANCE	PT NO	Y	X
300-301	S00° 36' 19"W	1833.22'	300	284328.965	597667.965
301-302 PC	N89° 23' 41"W	1246.74'	301	282495.849	597648.595
302 PC-303 PT	S68° 06' 54"W	89.11'	302	282509.022	596401.927
303 PC-304 PT	S73° 18' 35"W	76.76'	303	282475.808	596319.243
304 PT-306	S75° 42' 49"W	184.08'	304	282453.764	596245.721
306-307	N14° 17' 11"W	32.72'	306	282408.339	596067.332
307-308	N14° 17' 11"W	12.28'	307	282440.049	596059.257
308-309 PC	N75° 42' 49"E	184.08'	308	282451.947	596056.228
309 PC-311 PT	N73° 18' 35"E	72.98'	309	282497.372	596234.616
311 PT-312	S19° 05' 39"E	12.95'	311	282518.333	596304.523
312-303	S19° 05' 39"E	32.05'	312	282506.099	596308.758

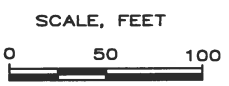
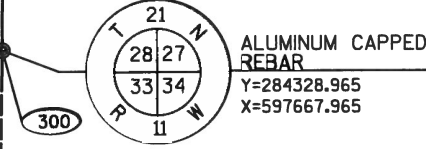
PARCEL 1 TLE

COURSE	BEARING	DISTANCE	PT NO	Y	X
300-301	S00° 36' 19"W	1833.22'	300	284328.965	597667.965
301-302	N89° 23' 41"W	1246.74'	301	282495.849	597648.595
302-313	S24° 40' 33"E	34.18'	302	282509.022	596401.927
313-314 PC	S24° 40' 33"E	5.82'	313	282477.960	596416.198
314 PC-316 PT	S70° 31' 08"W	172.94'	314	282472.674	596418.626
316 PT-317	S75° 42' 49"W	184.08'	316	282415.001	596255.591
317-318	N14° 17' 11"W	6.72'	317	282369.576	596077.203
318-319 PC	N75° 45' 55"E	191.00'	318	282376.090	596075.544
319 PC-313 PT	N70° 33' 17"E	164.92'	319	282423.056	596260.682

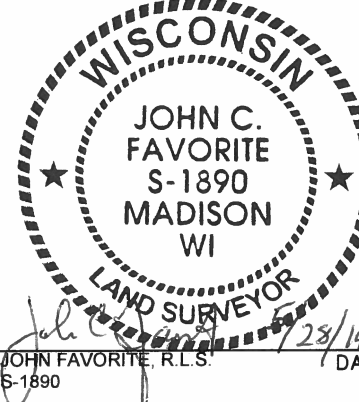
REVISION DATE

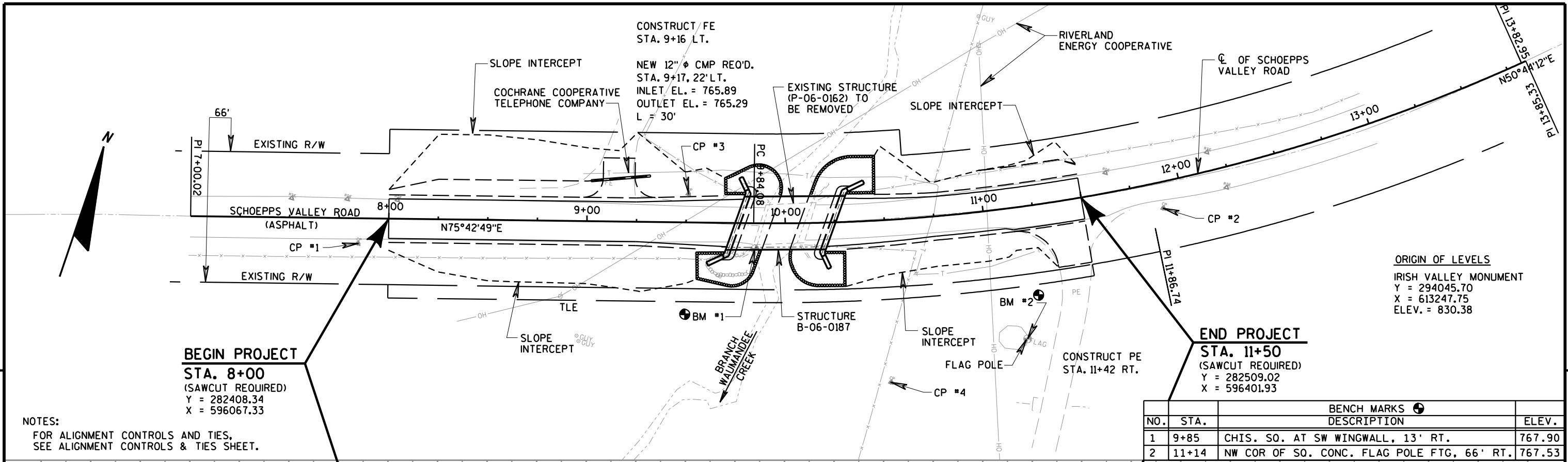
WAUMANDEE

R/W PROJECT NUMBER 7238-00-01	SHEET NUMBER	TOTAL SHEETS
FEDERAL PROJECT NUMBER	4.01	1
PLAT OF RIGHT-OF-WAY REQUIRED FOR TOWN OF WAUMANDEE WAUMANDEE CREEK BRIDGE B-06-0187		
SCHOEPPS VALLEY ROAD	BUFFALO COUNTY	
CONSTRUCTION PROJECT NUMBER 7238-00-71		



ACCEPTED FOR
BUFFALO COUNTY
6/05/14
DATE
COUNTY COMMISSIONER
PLAT PREPARED BY
AYRES ASSOCIATES
THIS SURVEY IS PREPARED AT THE REQUEST OF BUFFALO COUNTY HIGHWAY DEPARTMENT THE FIELD SURVEY WAS PERFORMED AUGUST 2013
THIS SURVEY IS ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF





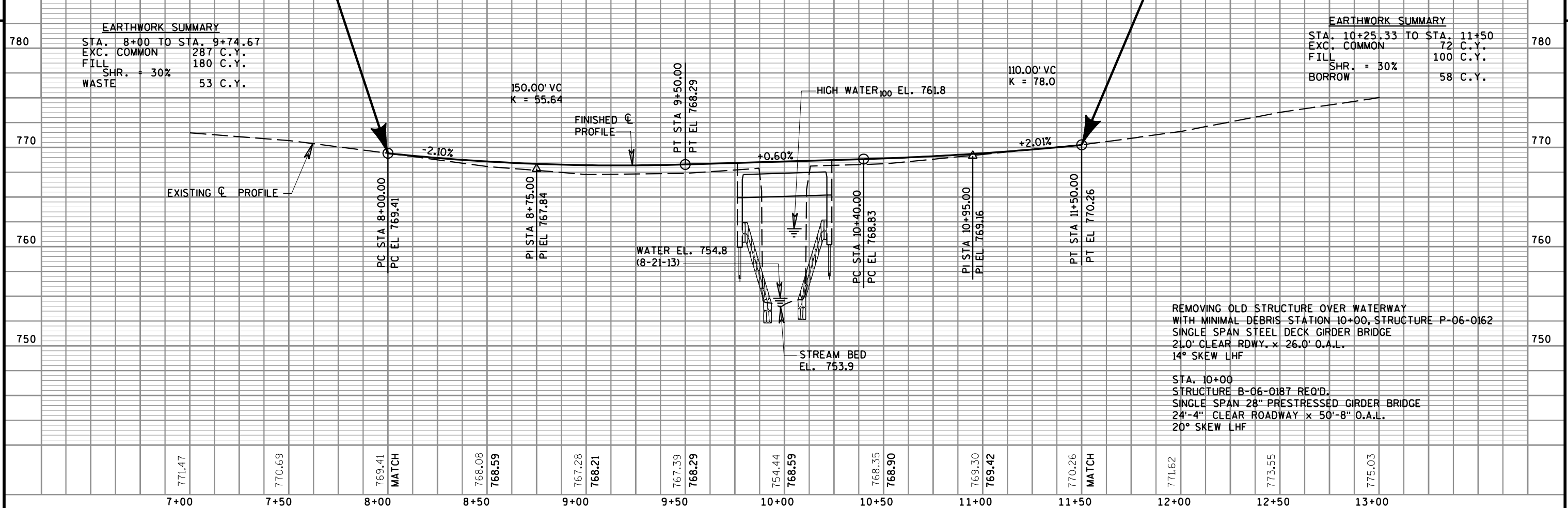
BEGIN PROJECT
STA. 8+00
(SAWCUT REQUIRED)
Y = 282408.34
X = 596067.33

END PROJECT
STA. 11+50
(SAWCUT REQUIRED)
Y = 282509.02
X = 596401.93

ORIGIN OF LEVELS
IRISH VALLEY MONUMENT
Y = 294045.70
X = 613247.75
ELEV. = 830.38

NOTES:
FOR ALIGNMENT CONTROLS AND TIES,
SEE ALIGNMENT CONTROLS & TIES SHEET.

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
1	9+85	CHIS. SO. AT SW WINGWALL, 13' RT.	767.90
2	11+14	NW COR OF SO. CONC. FLAG POLE FTG, 66' RT.	767.53



EARTHWORK SUMMARY
STA. 8+00 TO STA. 9+74.67
EXC. COMMON 287 C.Y.
FILL 180 C.Y.
SHR. = 30%
WASTE 53 C.Y.

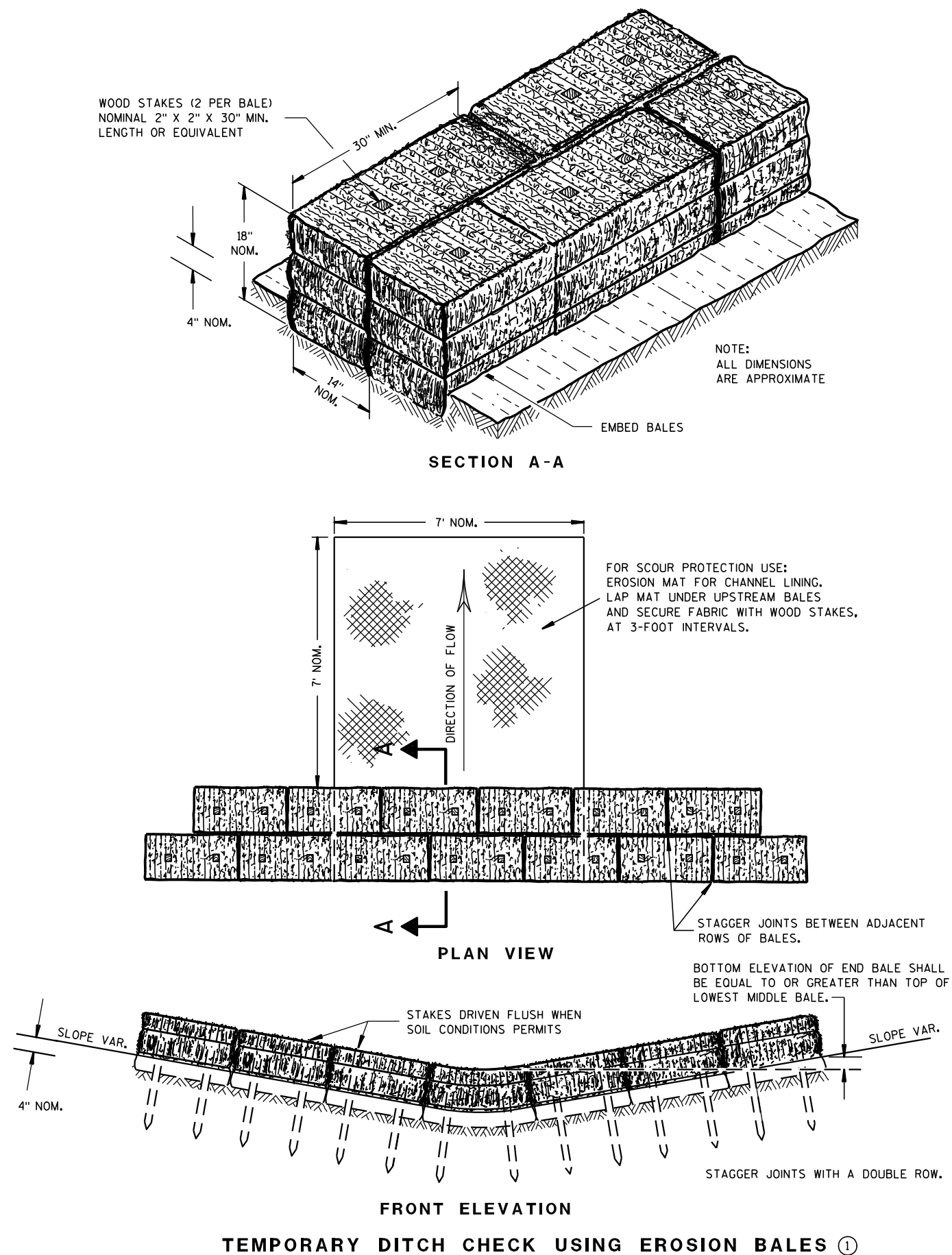
EARTHWORK SUMMARY
STA. 10+25.33 TO STA. 11+50
EXC. COMMON 72 C.Y.
FILL 100 C.Y.
SHR. = 30%
BORROW 58 C.Y.

REMOVING OLD STRUCTURE OVER WATERWAY
WITH MINIMAL DEBRIS STATION 10+00, STRUCTURE P-06-0162
SINGLE SPAN STEEL DECK GIRDER BRIDGE
21.0' CLEAR RDWY. x 26.0' O.A.L.
14° SKEW LHF

STA. 10+00
STRUCTURE B-06-0187 REQ'D.
SINGLE SPAN 28" PRESTRESSED GIRDER BRIDGE
24'-4" CLEAR ROADWAY x 50'-8" O.A.L.
20° SKEW LHF

Standard Detail Drawing List

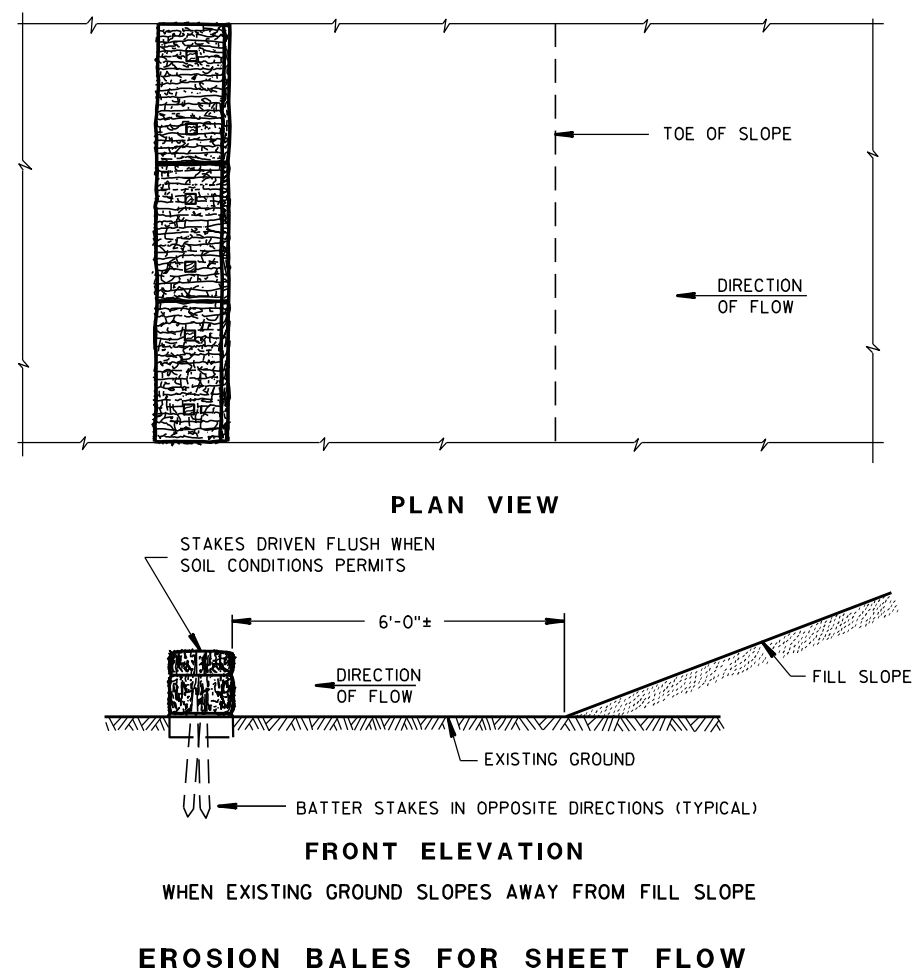
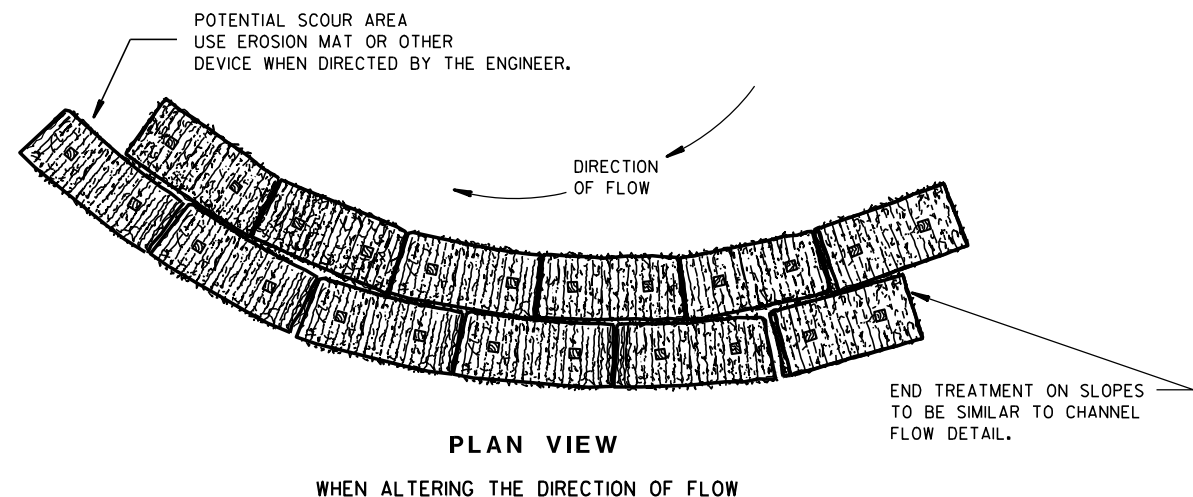
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
12A03-10	NAME PLATE (STRUCTURES)
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C06-07	SIGNING & MARKING FOR TWO LANE BRIDGES



GENERAL NOTES

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

- ① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

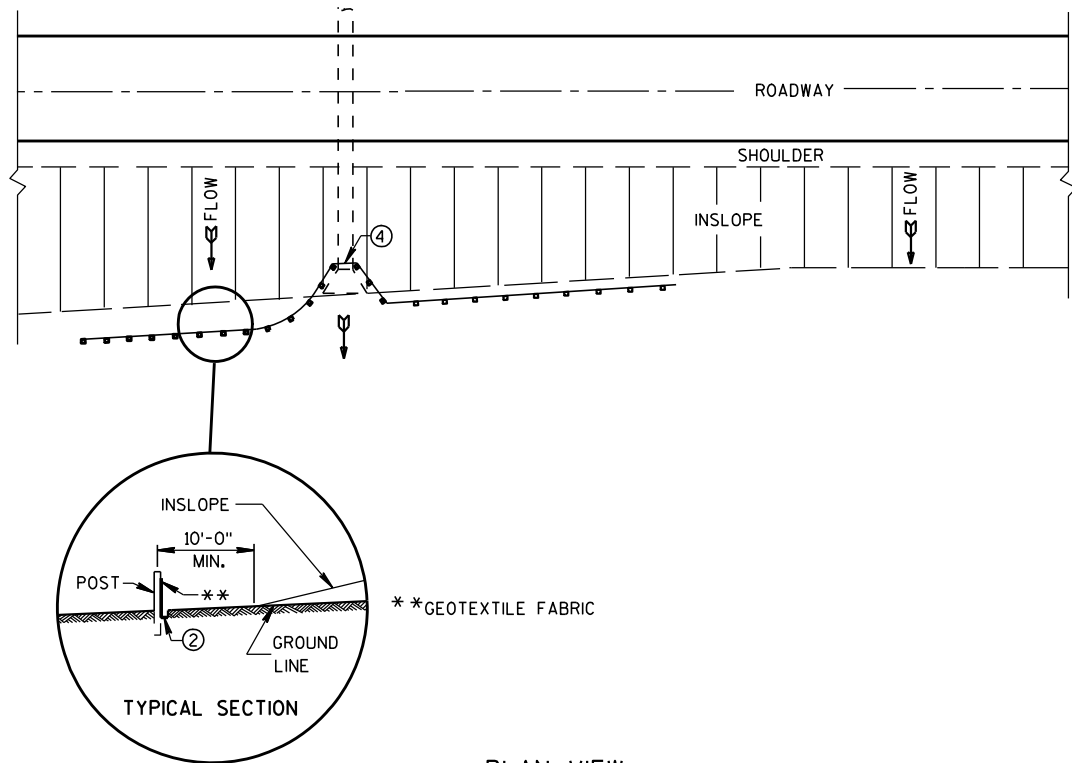
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

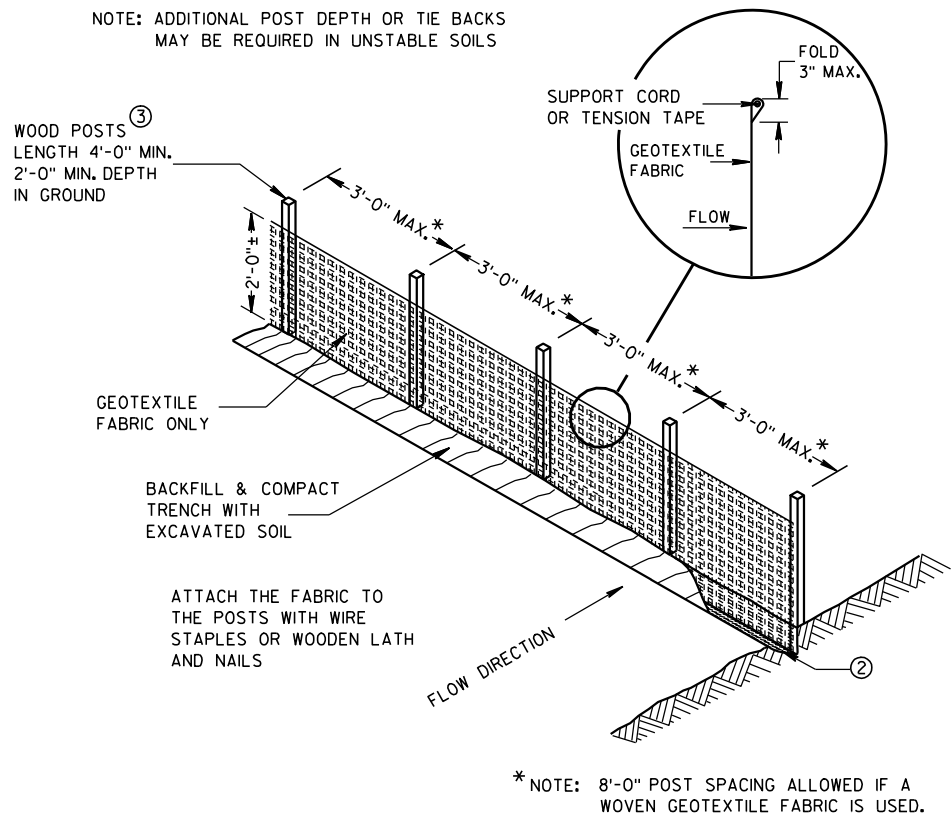
6/04/02
DATE

FHWA

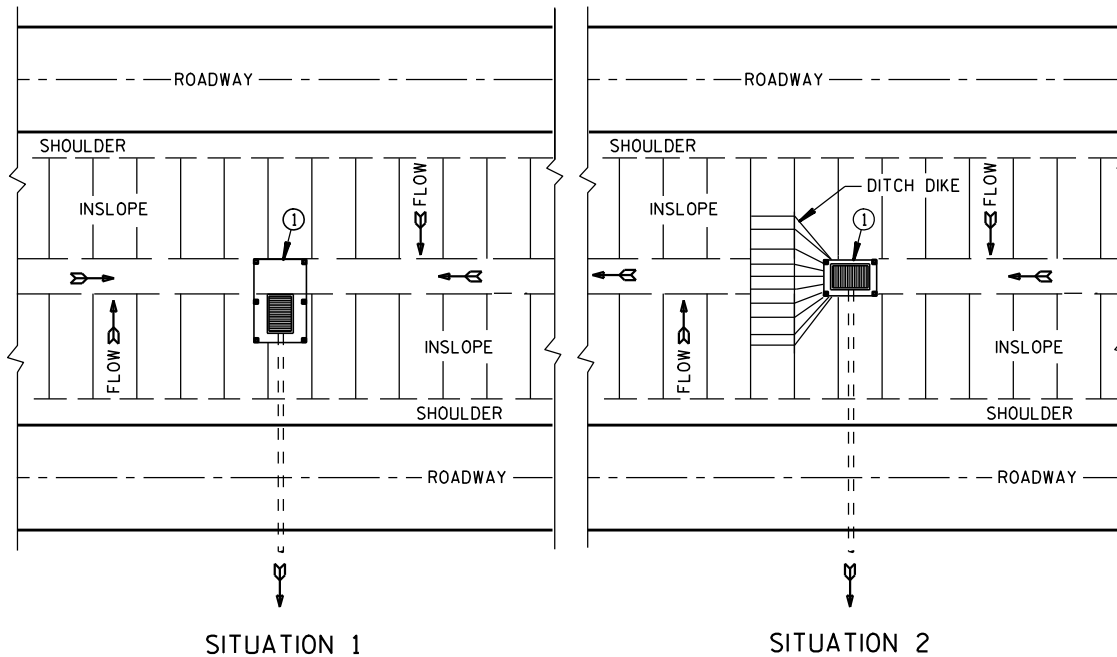
/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



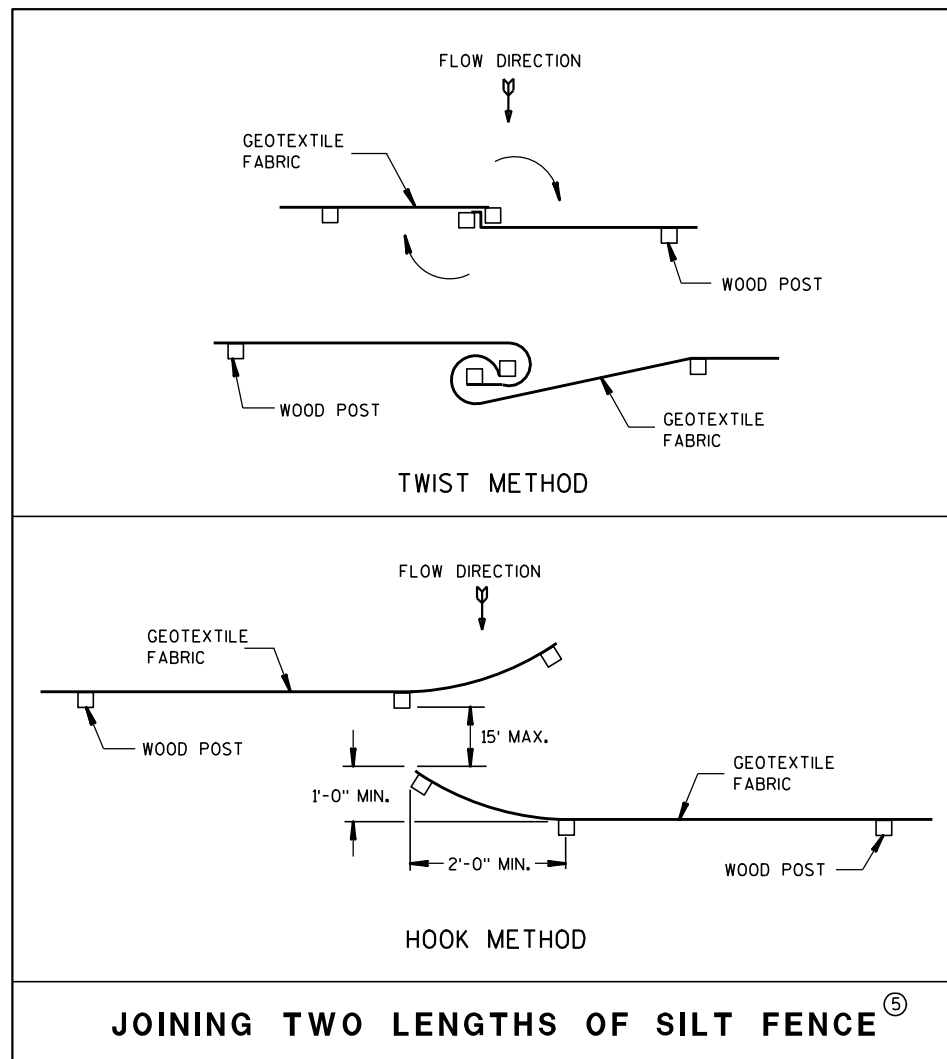
PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE



SILT FENCE



PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

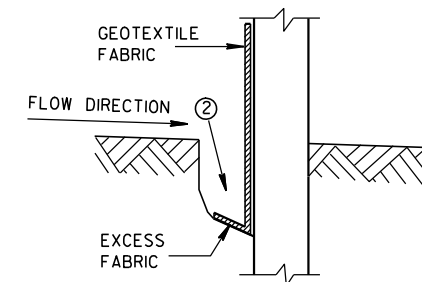


JOINING TWO LENGTHS OF SILT FENCE (5)

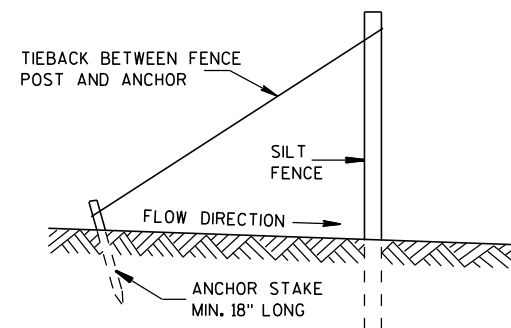
GENERAL NOTES

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 1 1/8" X 1 1/8" 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.

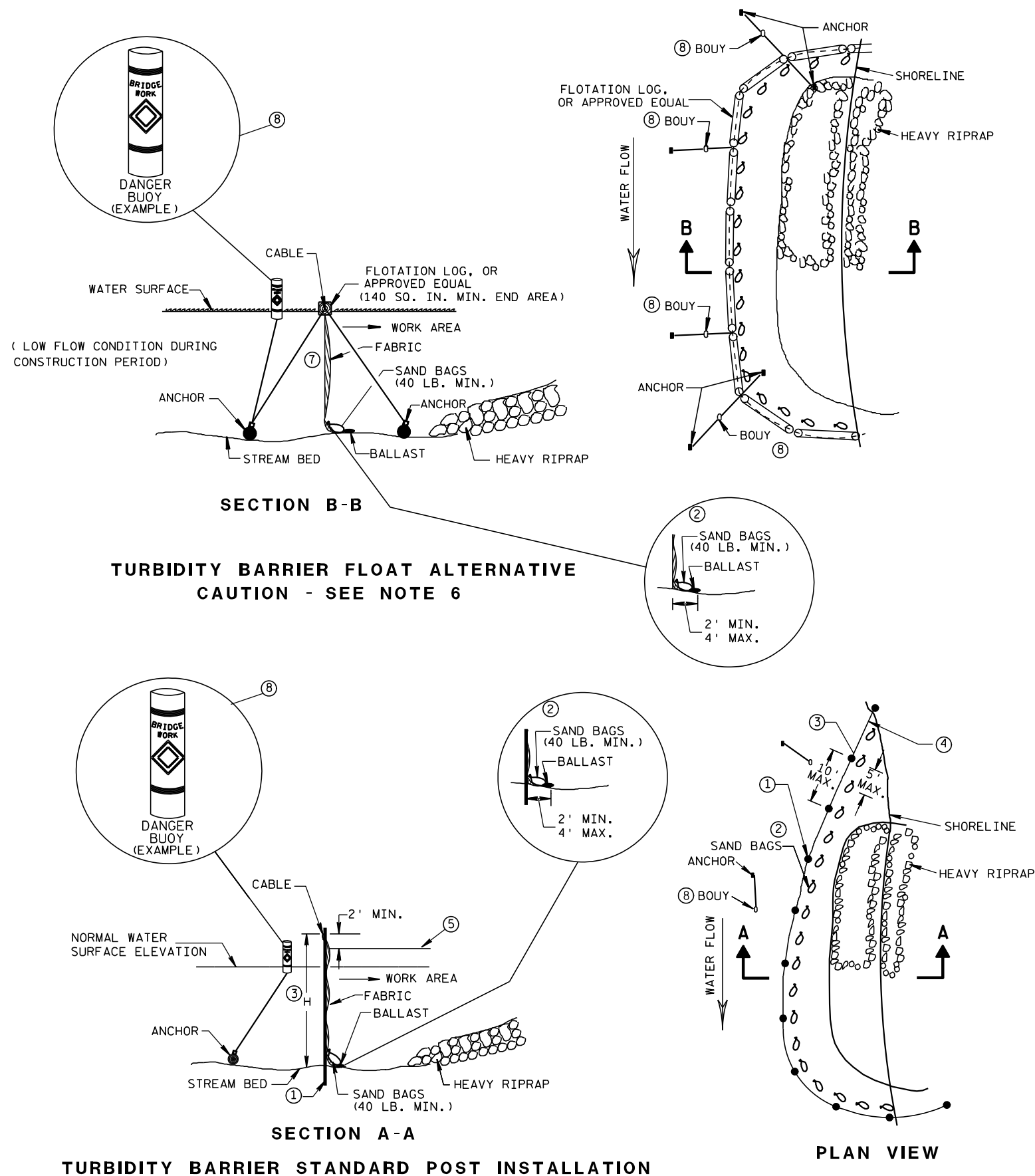


TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 DATE	/S/ Beth Canestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

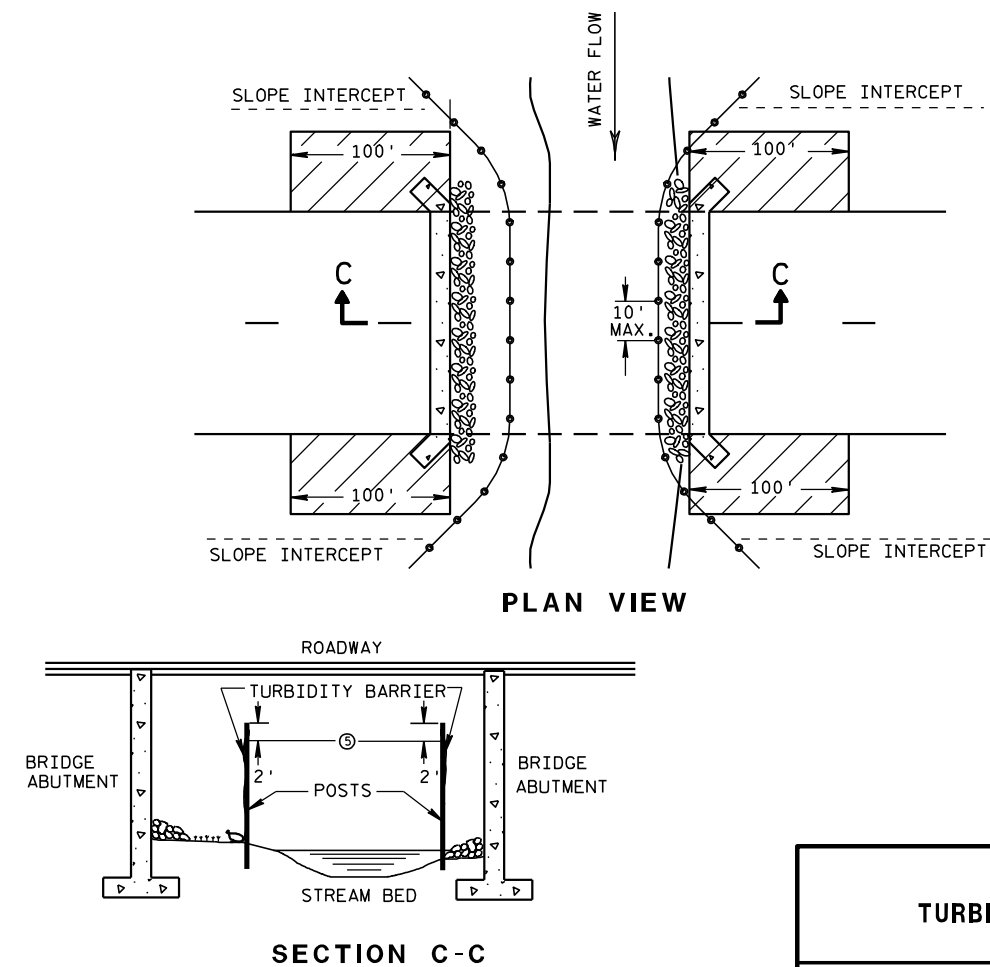


GENERAL NOTES

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

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

- ① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.
- ② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.
- ③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.
- ④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.
- ⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE 02 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.
- ⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.
- ⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.
- ⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

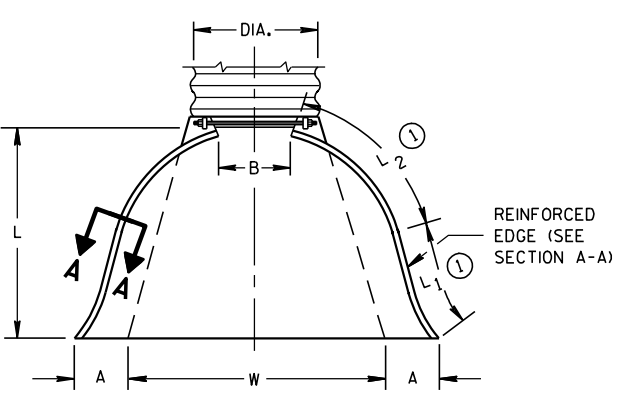
6/04/02
DATE

FHWA

/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

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

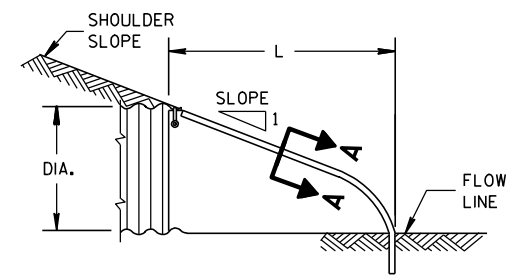
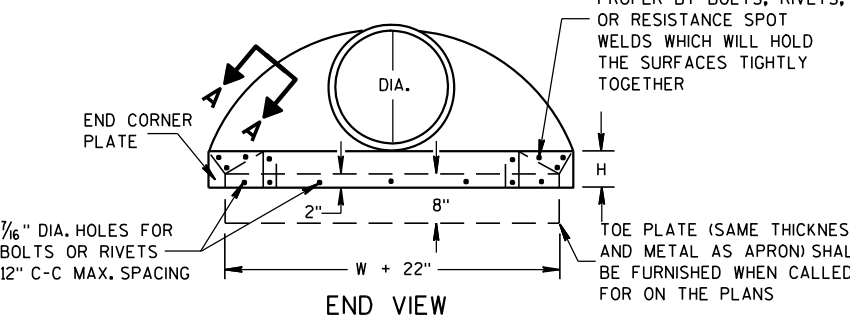
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



REINFORCED
EDGE (SEE
SECTION A-A)

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

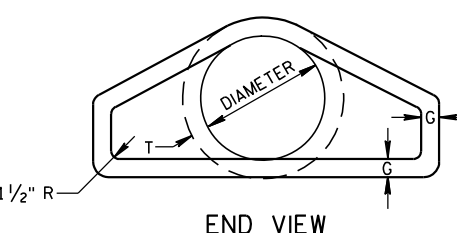
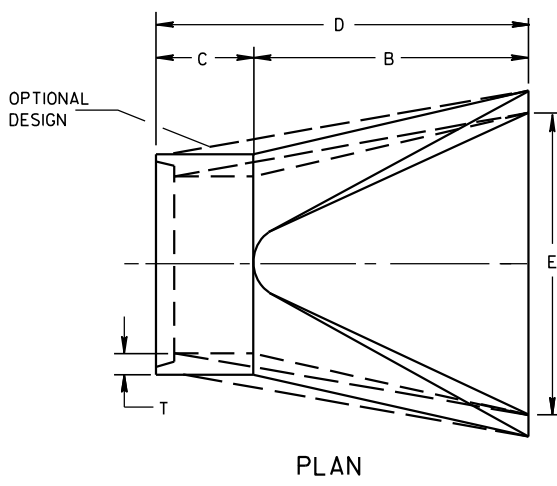
TOE PLATE (SAME THICKNESS
AND METAL AS APRON) SHALL
BE FURNISHED WHEN CALLED
FOR ON THE PLANS



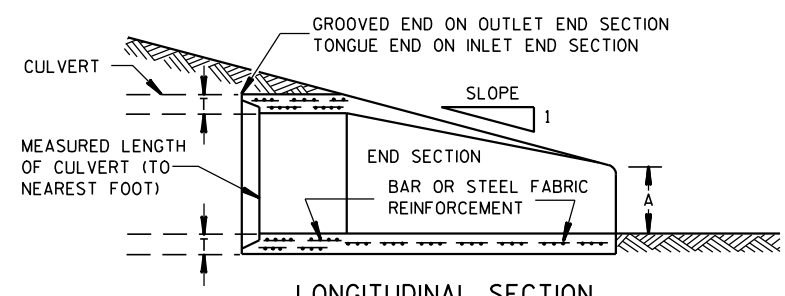
SIDE ELEVATION
METAL ENDWALLS

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

* MINIMUM
** MAXIMUM

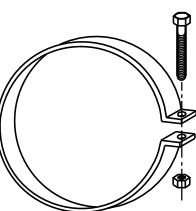


END VIEW

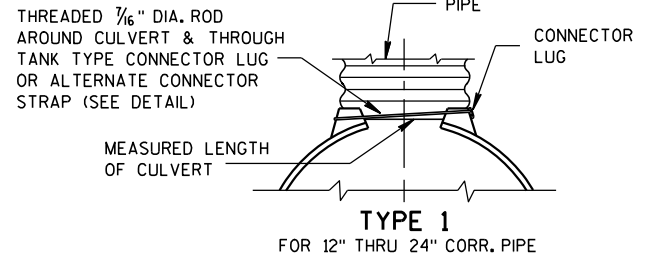


LONGITUDINAL SECTION
CONCRETE ENDWALLS

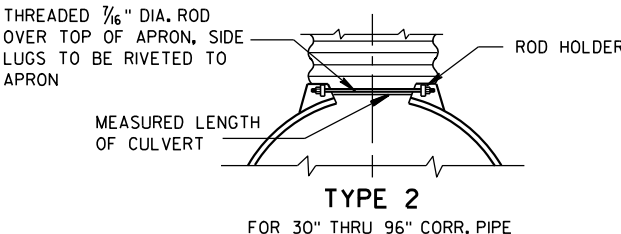
1" WIDE, 12 GA. (0.109"
THICK) GALVANIZED STRAP
WITH STANDARD 6" X 1/2"
BAND BOLT AND NUT



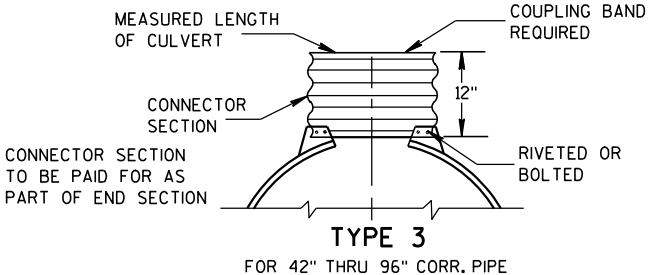
ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



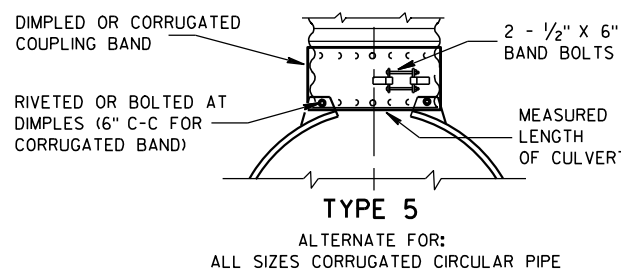
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



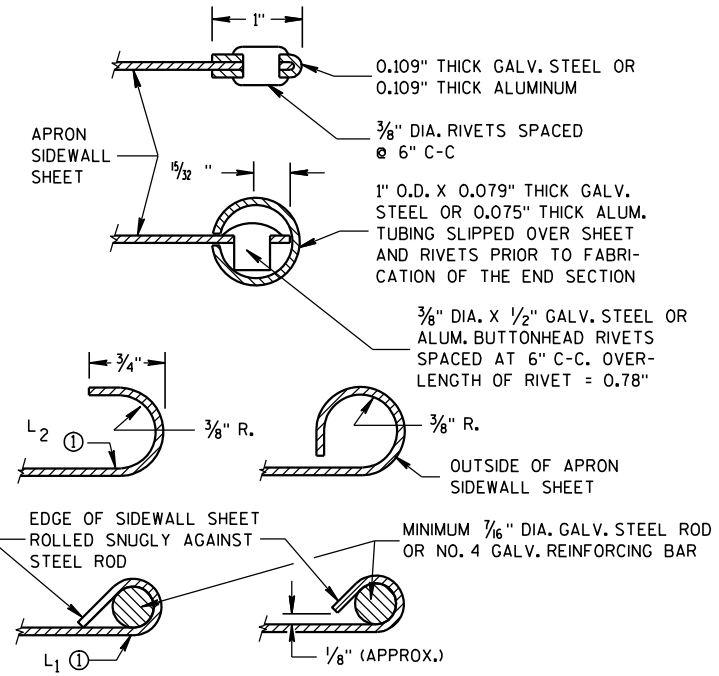
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL,
AND CORRUGATED BAND FITS INSIDE ENDWALL.
DIMPLED BAND MAY BE USED WITH HELICALLY
CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

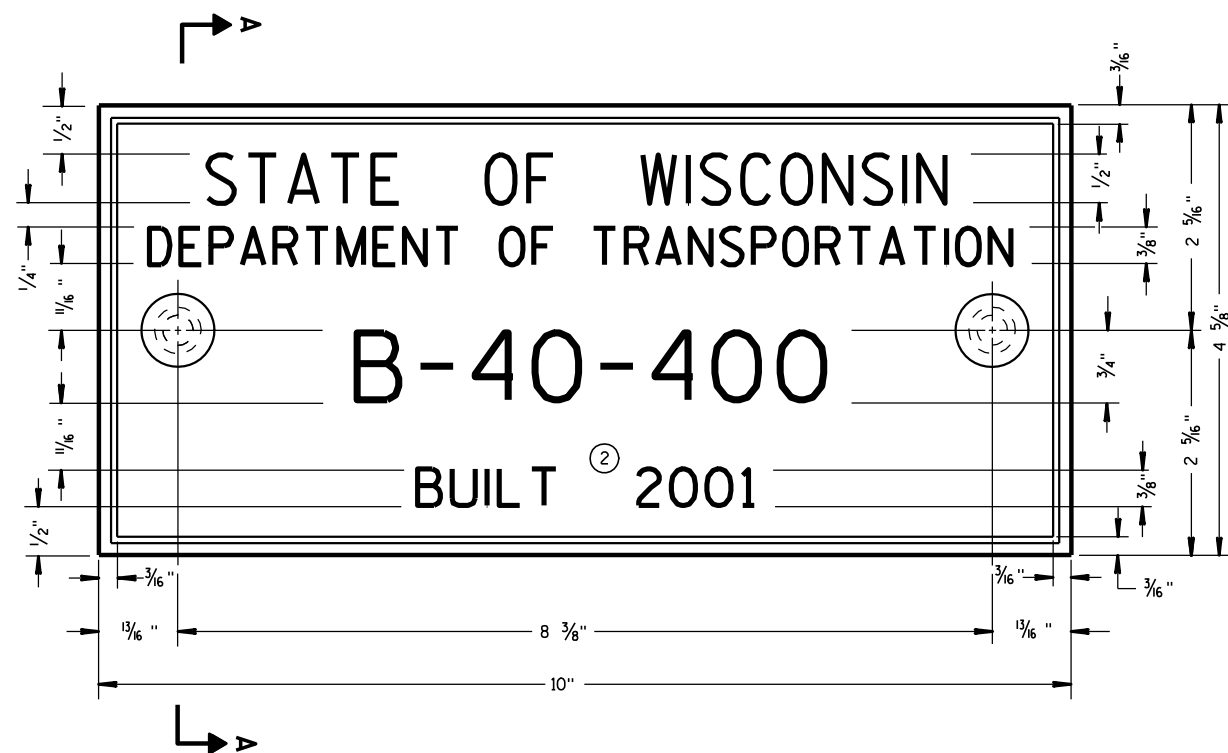
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT
TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT
TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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

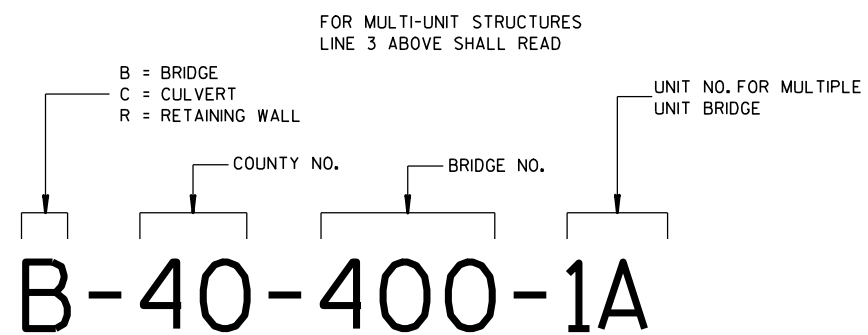
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94
DATE /S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



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



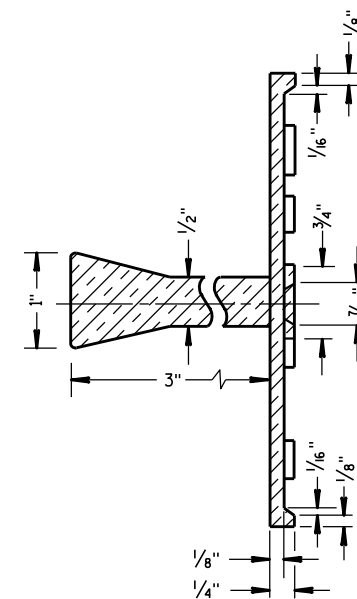
**NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES**

GENERAL NOTES

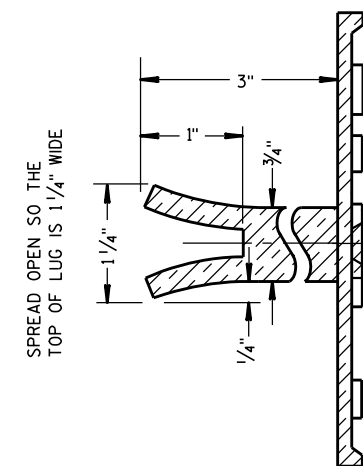
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

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.

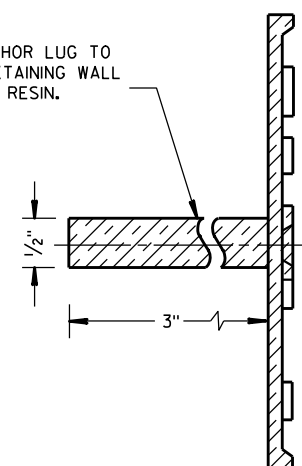


SECTION A-A



ALTERNATE LUG

- ① ADHERE ANCHOR LUG TO PRECAST RETAINING WALL WITH EPOXY RESIN.



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

**NAME PLATE
(STRUCTURES)**

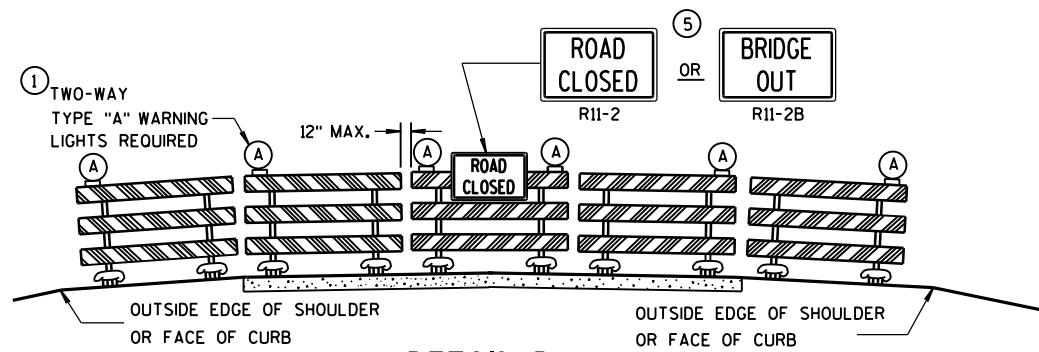
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

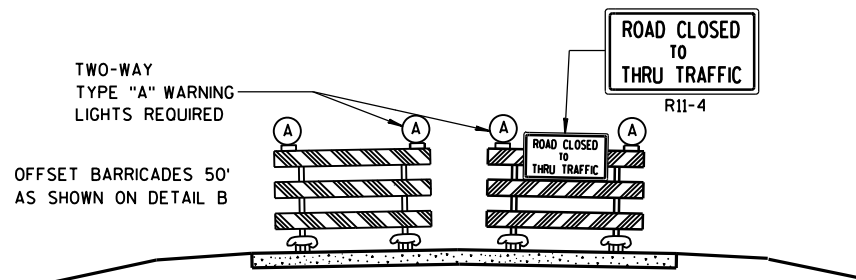
3/26/10
DATE

FHWA

/S/ Scot Becker
CHIEF STRUCTURAL DEVELOPMENT ENGINEER



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.

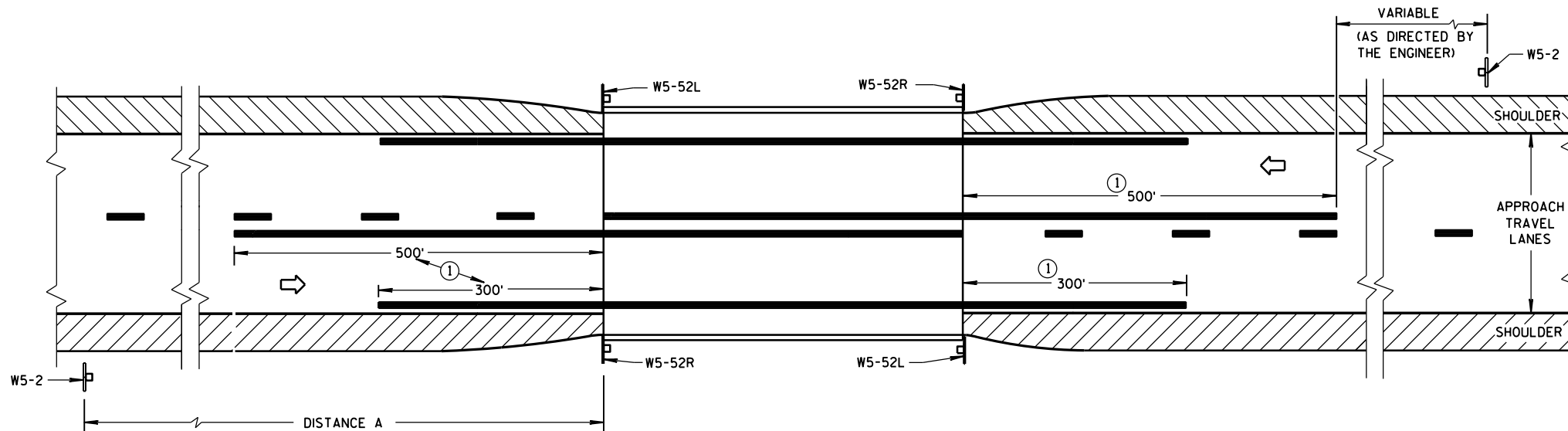
"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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	
8/2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



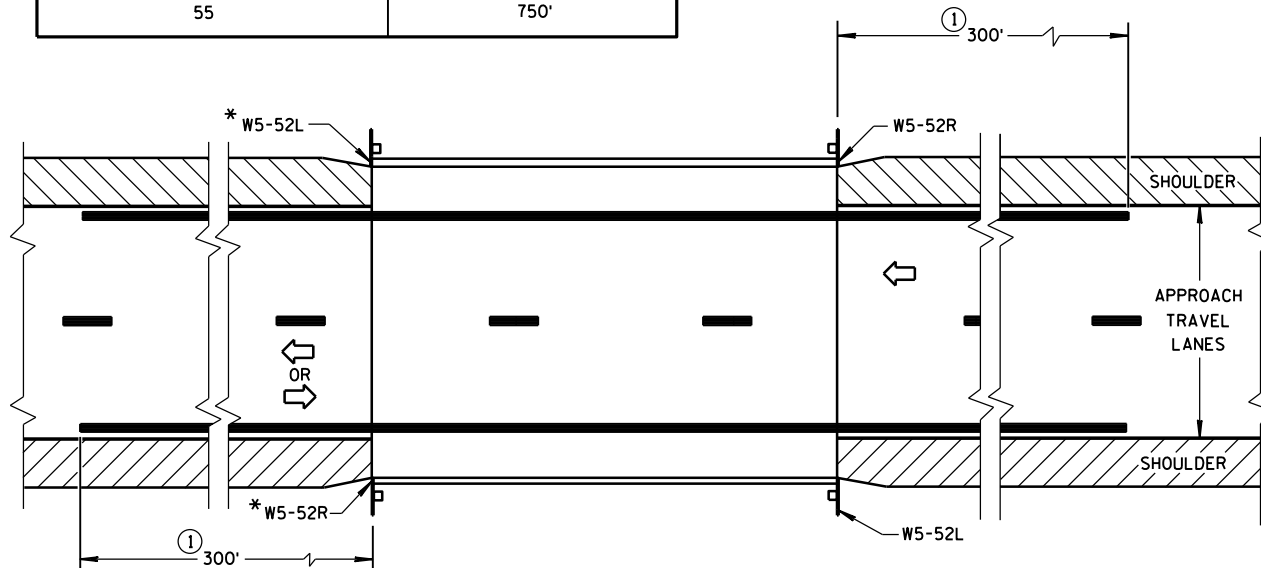
SITUATION 1

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'

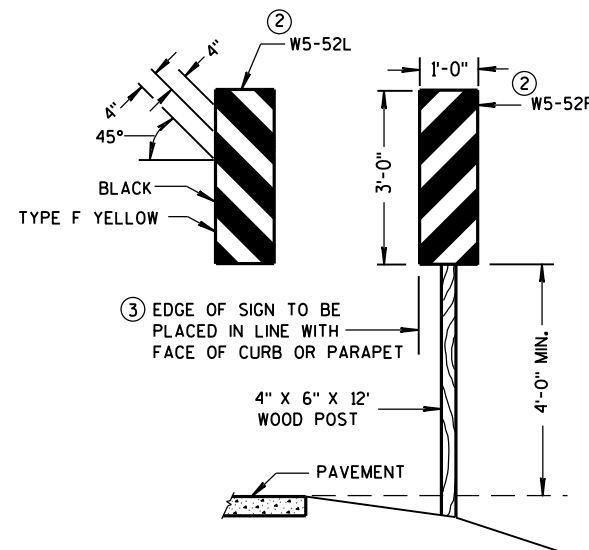


*OMIT ON ONE-WAY TRAVELLED WAYS

SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE IS LESS THAN 6 FEET WIDER (ON EACH SIDE) THAN APPROACH TRAVEL LANES.



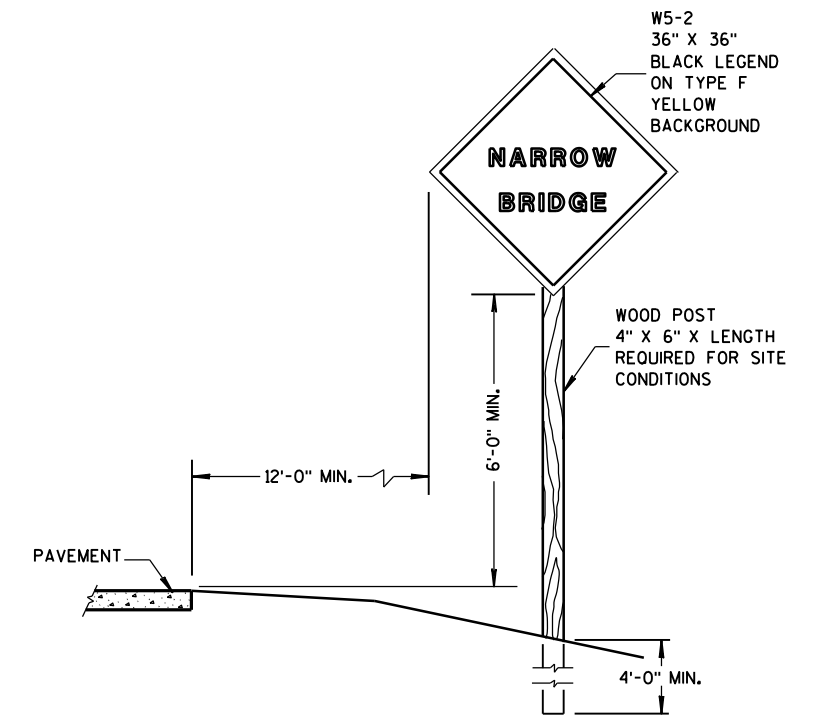
OBJECT MARKER PLACEMENT

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.

PAVEMENT MARKING SHOWN ON THIS DRAWING IS NOT REQUIRED UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. WHEN SPECIFIED, PAVEMENT MARKING SHALL CONFORM TO THIS DRAWING AND OTHER CONTRACT REQUIREMENTS.

- ① MINIMUM DISTANCE UNLESS OTHERWISE SHOWN ON THE PLAN.
- ② FACE OF OBJECT MARKERS W5-52R, AND W5-52L SHALL BE COVERED WITH TYPE F REFLECTIVE SHEETING.
- ③ LOCATE OBJECT MARKER POST(S) BEHIND GUARDRAIL WHEN PRESENT.



SIGN PLACEMENT

SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

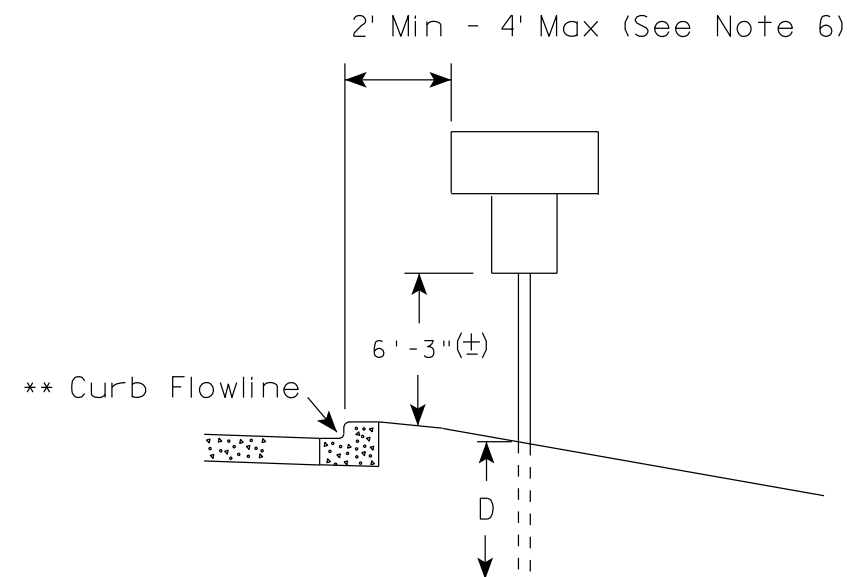
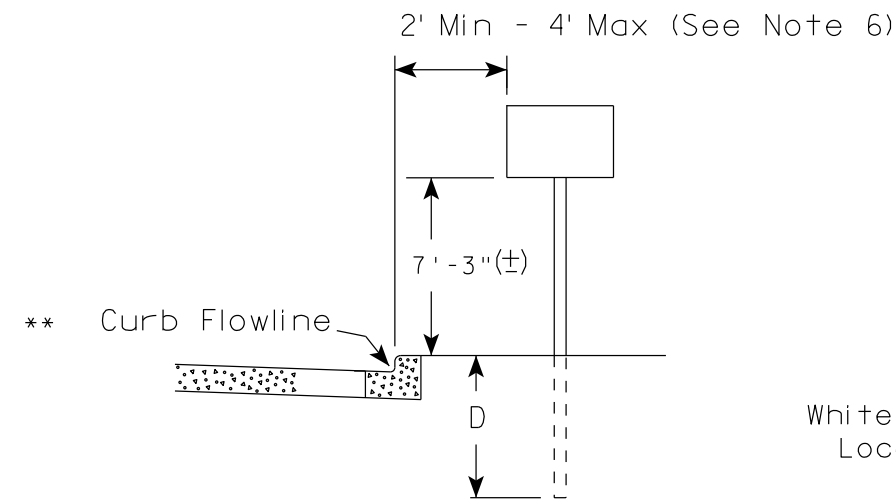
APPROVED

3-2014
DATE

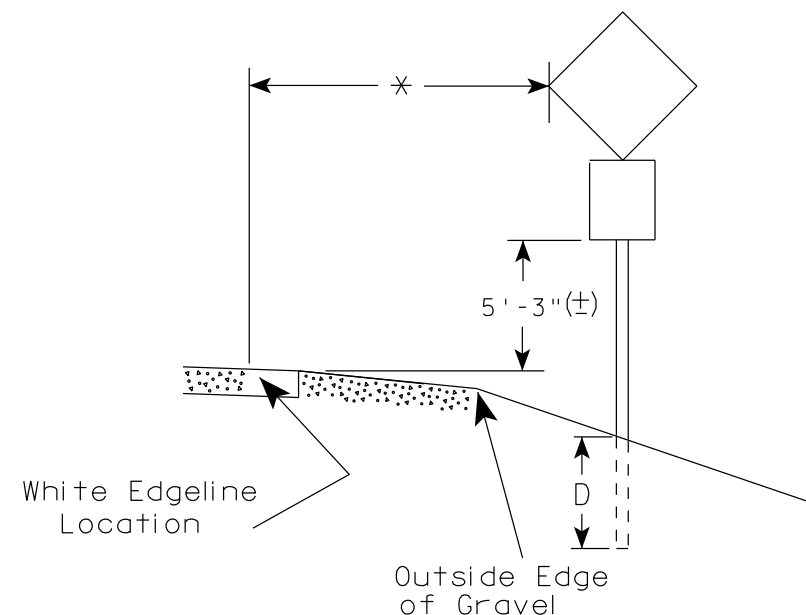
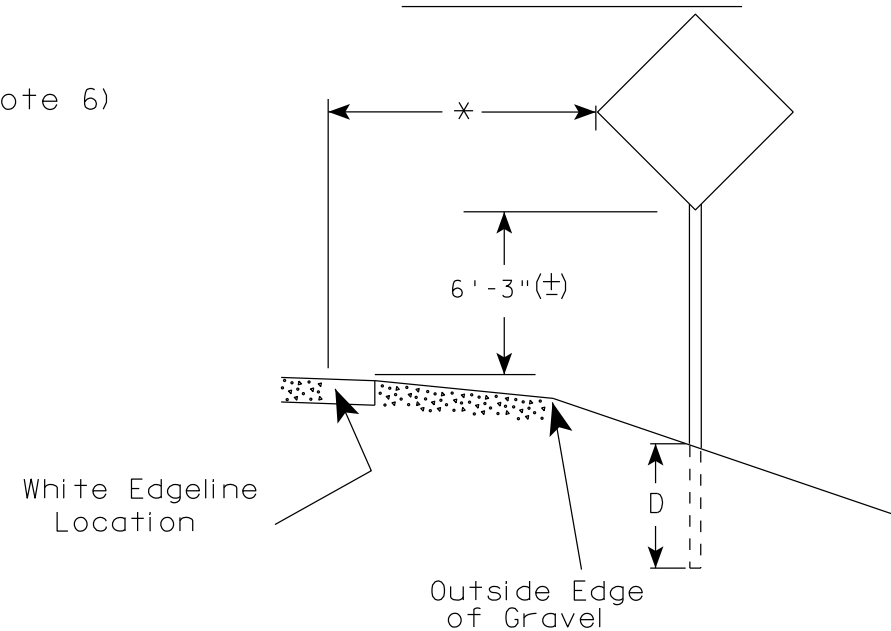
FHWA

/S/ Travis Fettes
STATE TRAFFIC ENGINEER OF DESIGN

URBAN AREA



RURAL AREA (See Note 2)



- ### GENERAL NOTES
1. Signs wider than 4 feet, 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 (A4-5) 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 stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed 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) & End of Road Markers (W5-56 & W5-56A) 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.

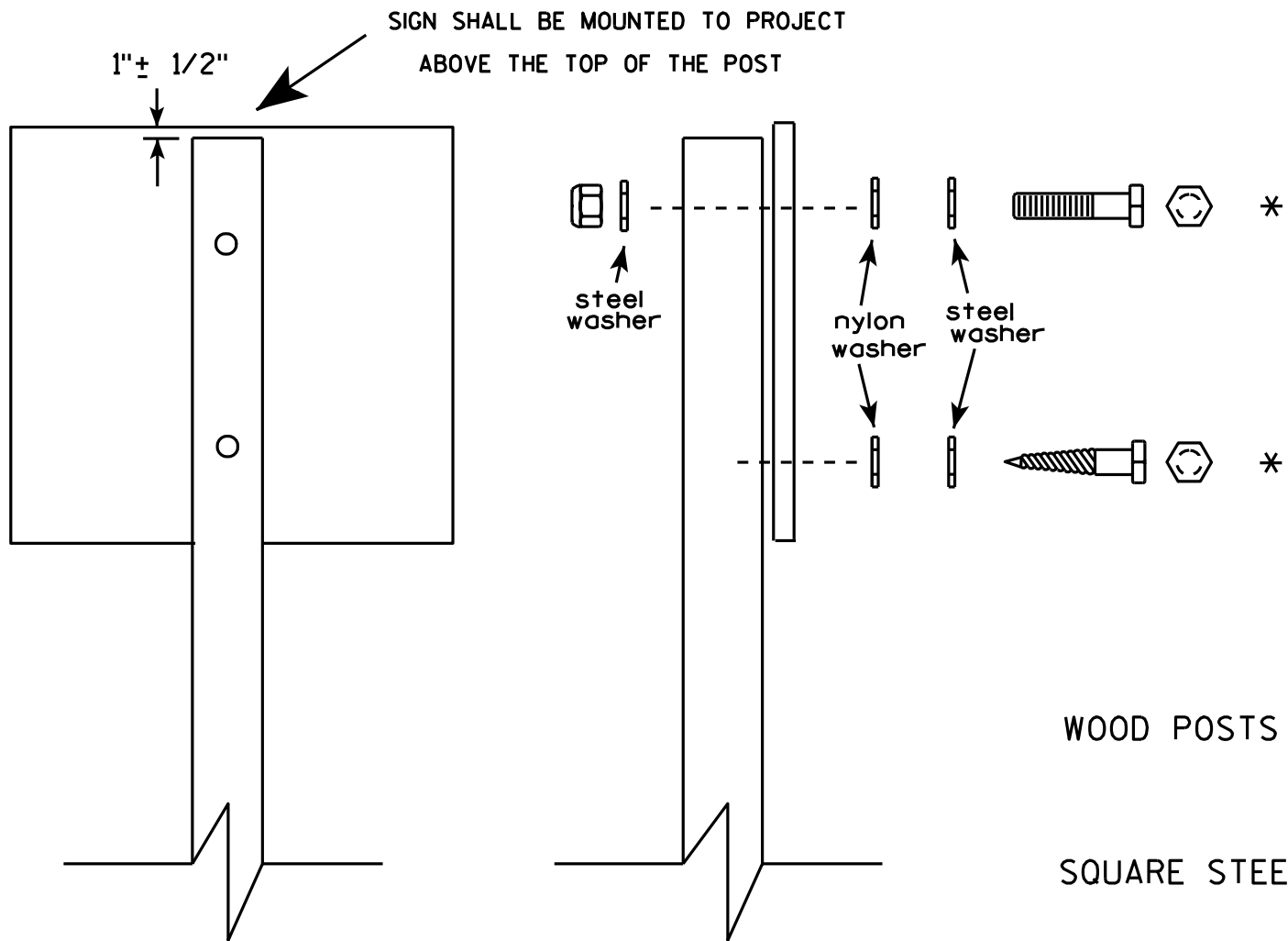
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/30/13 PLATE NO. A4-3.18

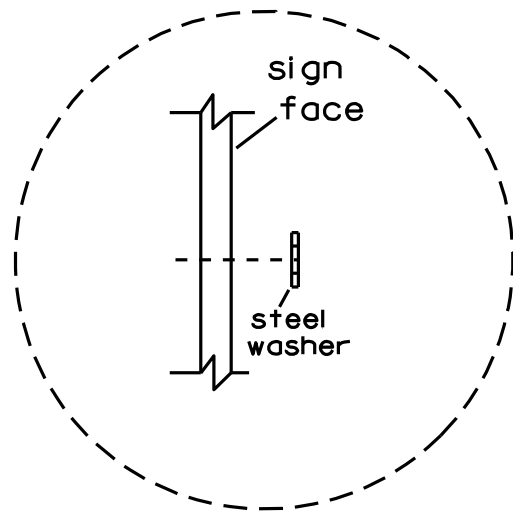


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- 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.

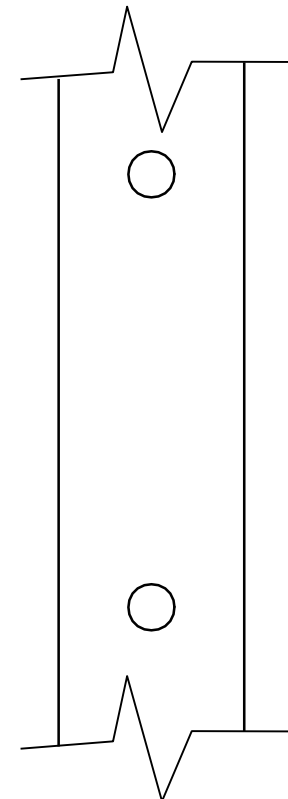
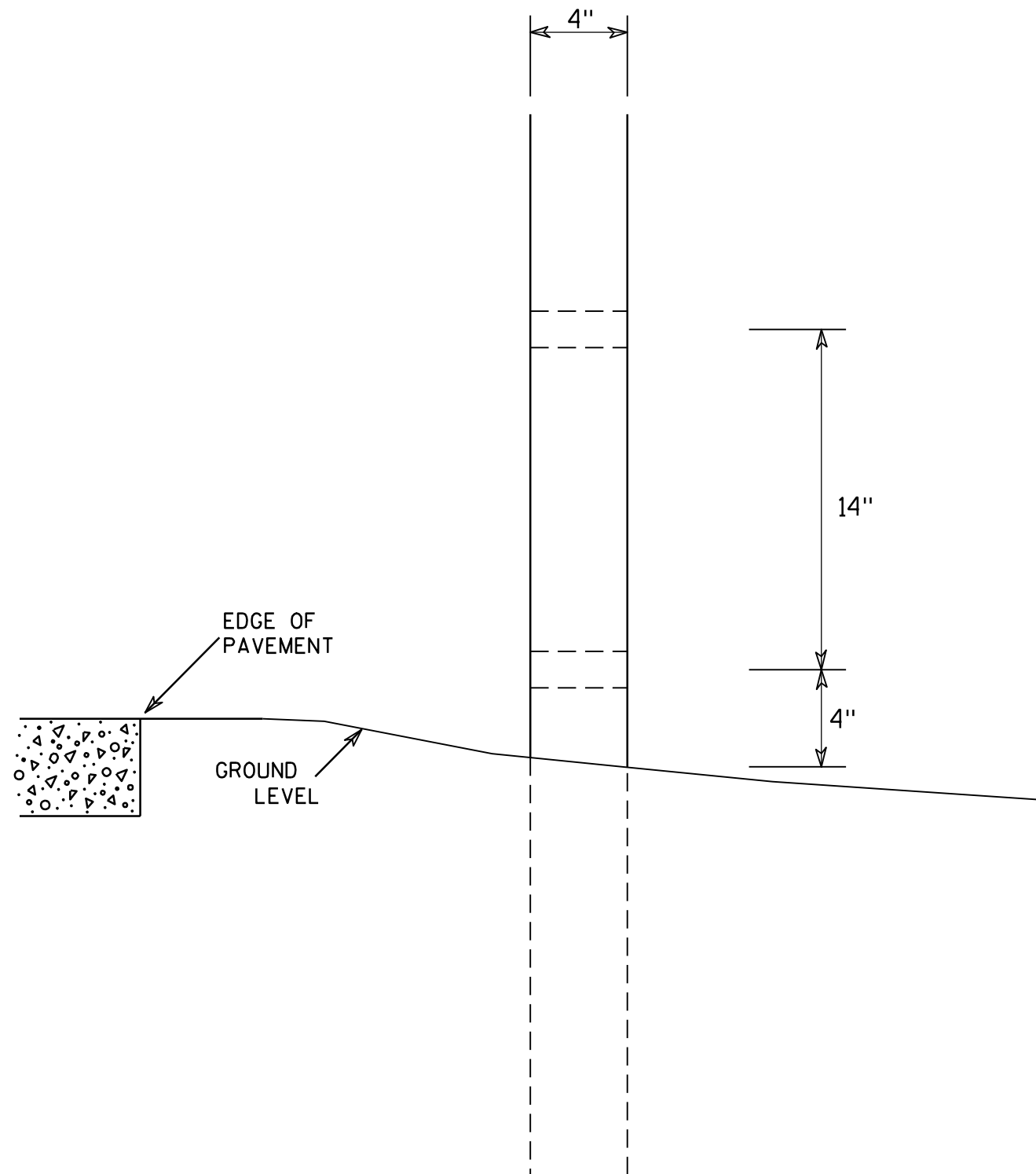
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3"
- MACHINE BOLTS - $\frac{5}{16}$ " X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts
- RIVETS - $\frac{9}{32}$ " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
- O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
- 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

* 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	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/23/10	PLATE NO. A4-8.7



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1 1/2" 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

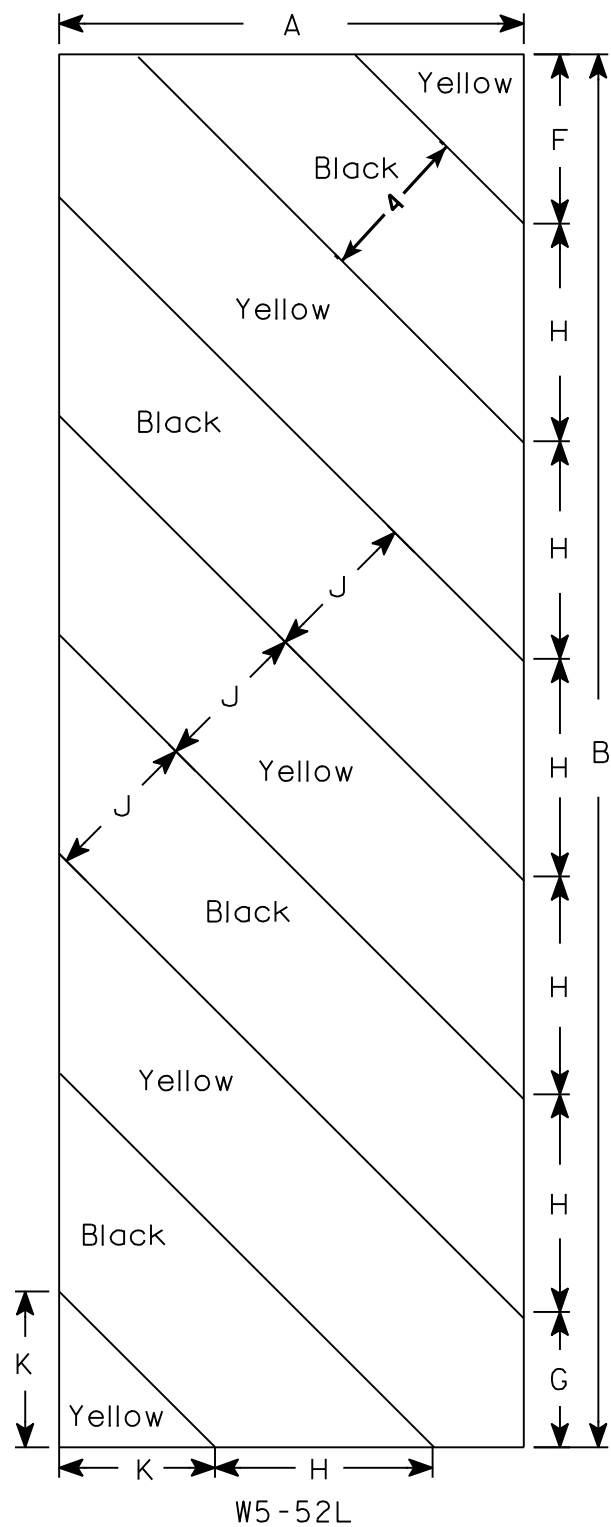
PROJECT NO: 7238-00-71

HWY: SCHOEPPS VALLEY ROAD

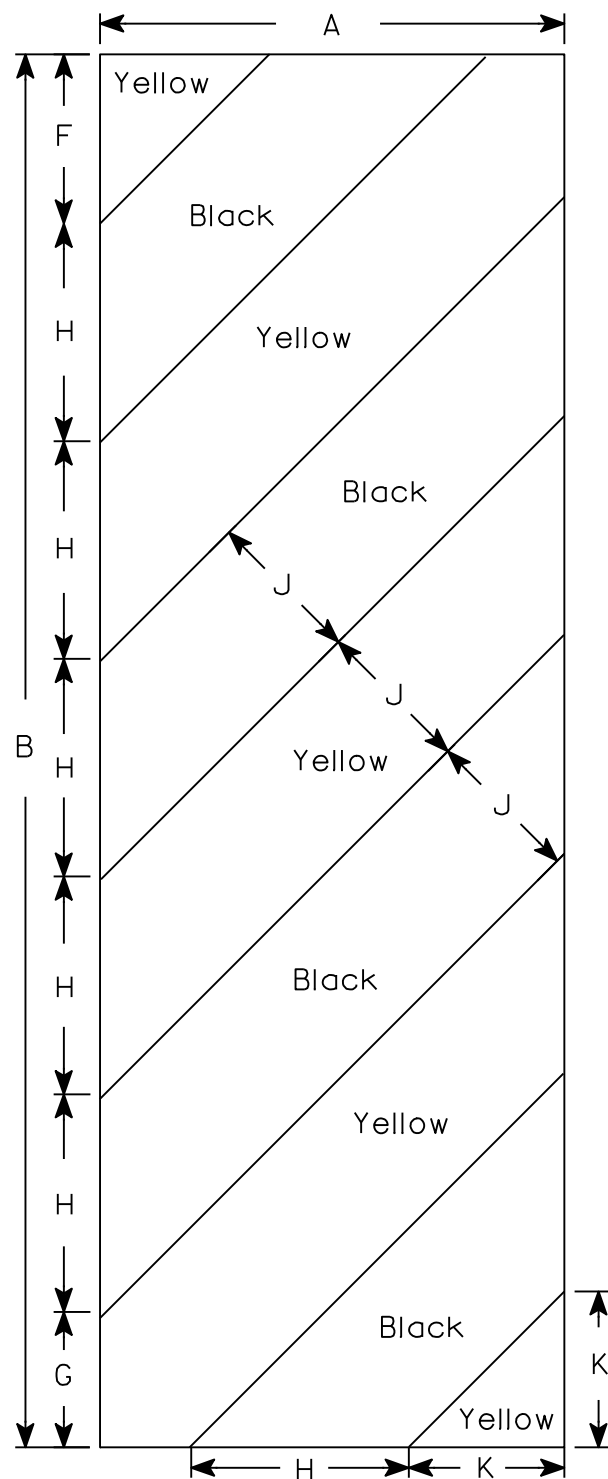
COUNTY: BUFFALO

SHEET NO:

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 5⁄16																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

DESIGN DATA

LIVE LOAD:

DESIGN RATING: HL-93
 INVENTORY RATING FACTOR: 1.30
 OPERATING RATING FACTOR: 1.68
 WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING
 SURFACE OF 20 "/S.F.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY SLAB $f'_c = 4,000$ p.s.i.
 ALL OTHER $f'_c = 3,500$ p.s.i.
 HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60) $f_y = 60,000$ p.s.i.

28" PRESTRESSED GIRDER
 CONCRETE MASONRY $f'_c = 8,000$ p.s.i.
 STRANDS - 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF $= 270,000$ p.s.i.

HYDRAULIC DATA:

100 YEAR FLOOD

DRAINAGE AREA = 5.0 sq. mi.
 WATERWAY AREA = 152 sq. ft.
 $V = 6.6$ f.p.s.
 $Q_{100} = 1,000$ c.f.s.
 HIGH WATER₁₀₀ EL. 761.8
 HIGH WATER₂ EL. 757.2
 RDWY. OVERFLOW = N/A
 SCOUR CRITICAL CODE = 8
 NAVD 88 DATUM

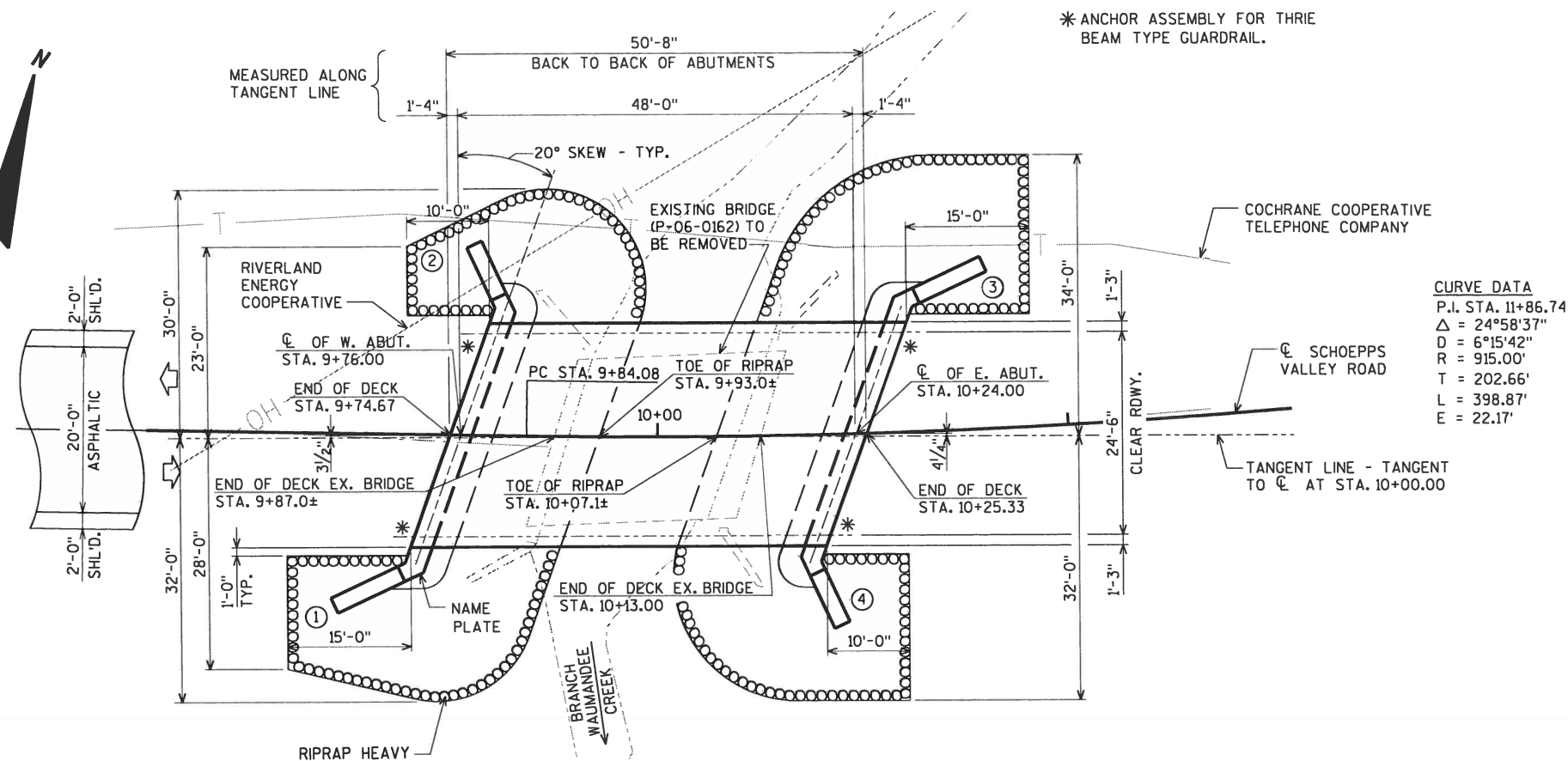
FOUNDATION DATA:

ABUTMENTS TO BE SUPPORTED ON HP 10 x 42 STEEL PILING WITH PILE
 POINTS DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 135 TONS ± PER
 PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
 ESTIMATED LENGTH 65'-0".

*THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN
 IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF
 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

TRAFFIC DATA:

A.D.T. = 150 (2015)
 A.D.T. = 200 (2035)
 R.D.S. = 35 M.P.H.

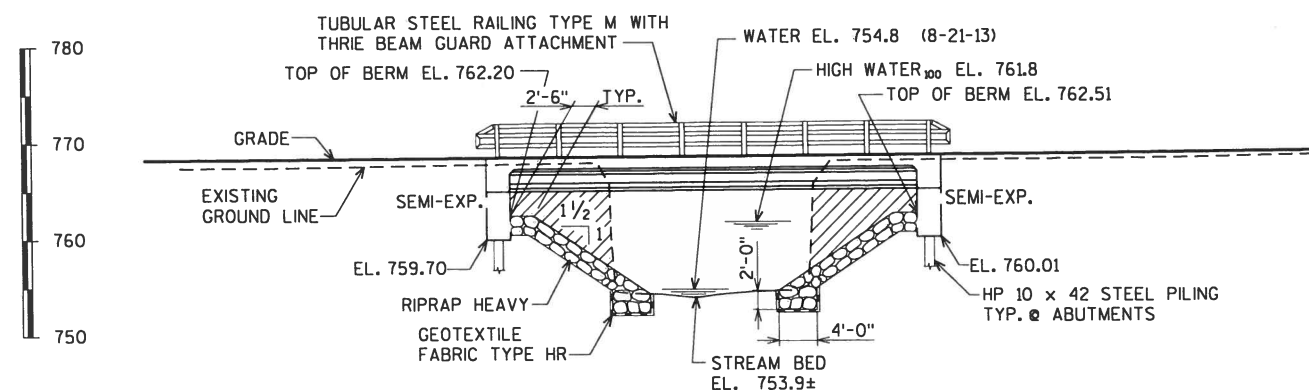


CURVE DATA
 P.I. STA. 11+86.74
 $\Delta = 24^\circ 58' 37''$
 $D = 6^\circ 15' 42''$
 $R = 915.00'$
 $T = 202.66'$
 $L = 398.87'$
 $E = 22.17'$

○ DENOTES WING NUMBER

PLAN

SINGLE SPAN, 28" PRESTRESSED CONCRETE GIRDER BRIDGE



ELEVATION

(NORMAL TO CL OF CREEK)

COST OF EXCAVATION AND FILL IN THE HATCHED AREAS SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR "EXCAVATION FOR STRUCTURES BRIDGES B-06-0187".

LIST OF DRAWINGS

1. GENERAL PLAN
2. QUANTITIES AND NOTES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. WEST ABUTMENT WING 1 DETAILS
6. WEST ABUTMENT WING 2 DETAILS & BILL OF BARS
7. EAST ABUTMENT
8. EAST ABUTMENT WING 3 DETAILS
9. EAST ABUTMENT WING 4 DETAILS & BILL OF BARS
10. INTERM. STEEL DIAPHS. DETAILS
11. 28" PRESTRESSED GIRDER DETAILS
12. SUPERSTRUCTURE
13. SUPERSTRUCTURE PLAN
14. TUBULAR STEEL RAILING TYPE M



BRIDGE OFFICE CONTACT:
 WILLIAM DREHER
 (608)-266-8489

CONSULTANT CONTACT:
 DAN SYDOW
 (715)-834-3161

NO.	DATE	REVISION	BY
ORIGINAL PLANS PREPARED BY AYRES ASSOCIATES 3433 Oakwood Hills Parkway Eau Claire, WI 54701 www.AyresAssociates.com			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION ACCEPTED <i>William C. Dreher</i> KAR 08/05/14 CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-06-0187			
SCHOEPPE VALLEY RD. OVER BR. WAUMANDEE CREEK			
COUNTY	BUFFALO	TOWN/CITY/VILLAGE	WAUMANDEE
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY	CJM	DESIGN CKD.	JCK
DRAWN BY	CJM/CLS	PLANS CKD.	DNS
GENERAL PLAN			SHEET 1 OF 14

11X17-5200.plt
 420905 gp.dgn

DATE: 5/19/14
 DATE: 5/21/14

CHECKED BY: JCK
 BACK CHECKED BY: CJM
 CORRECTED BY: CJM

8

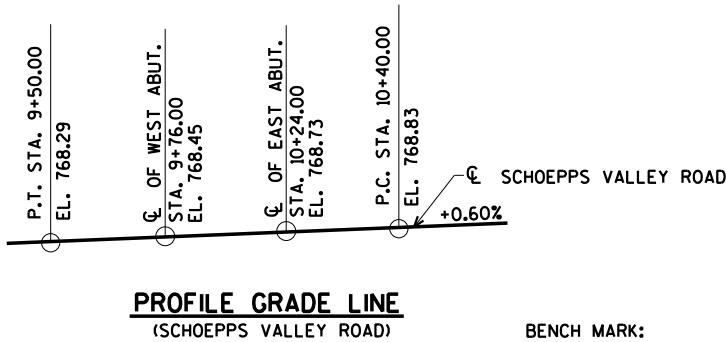
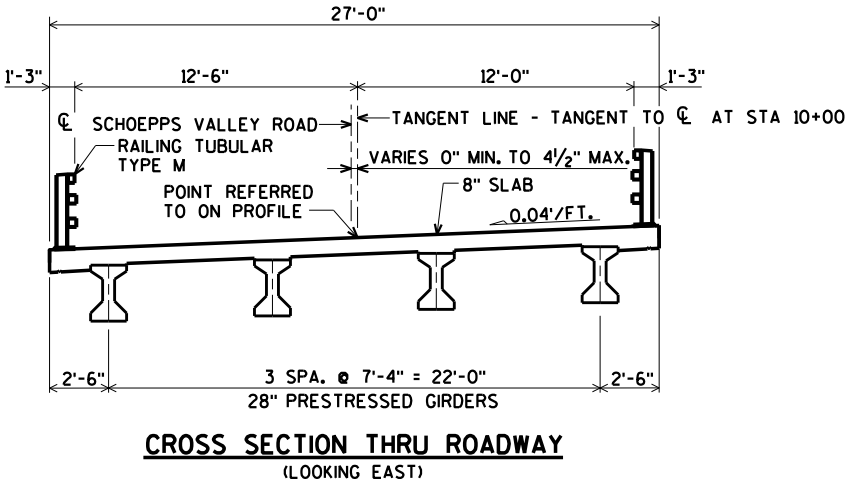
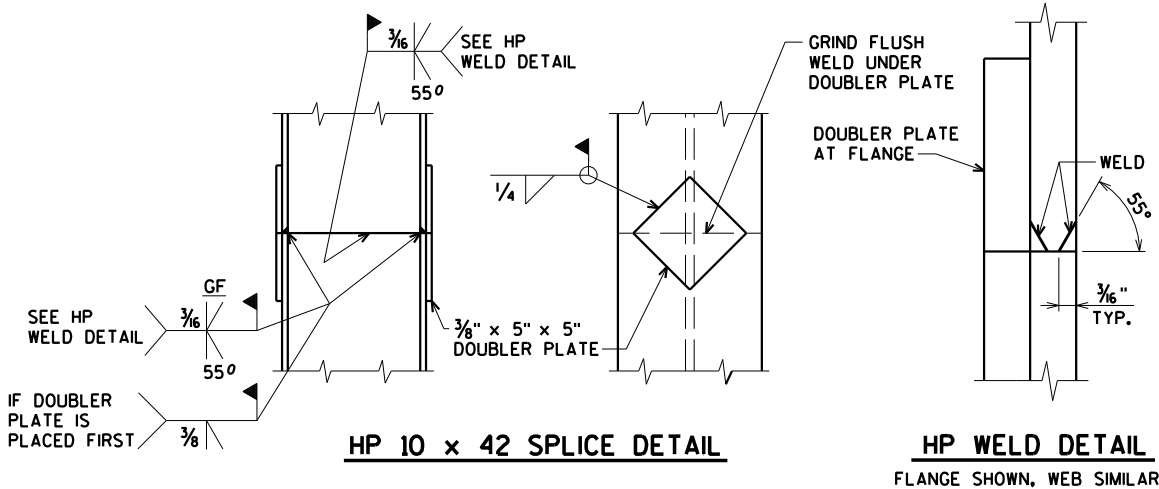
8

TOTAL ESTIMATED QUANTITIES

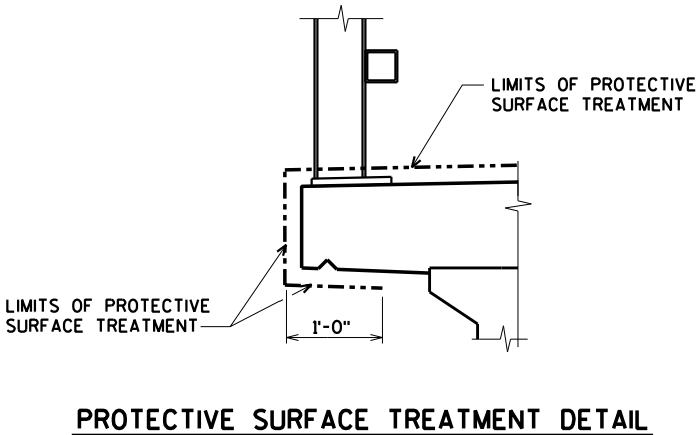
BID ITEM NUMBER	BID ITEMS	UNIT	W. ABUT.	E. ABUT.	SUPER.	TOTAL
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STATION 10+00	LS	-----	-----	-----	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-06-0187	LS	-----	-----	-----	1
210.0100	BACKFILL STRUCTURE	CY	130	130	-----	260
502.0100	CONCRETE MASONRY BRIDGES	CY	29	29	57	115
502.3200	PROTECTIVE SURFACE TREATMENT	SY	-----	-----	175	175
503.0128	PRESTRESSED GIRDER TYPE I 28-INCH	LF	-----	-----	196	196
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	2,380	2,390	-----	4,770
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	810	800	10,150	11,760
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	-----	-----	8	8
506.4000	STEEL DIAPHRAGMS B-06-0187	EACH	-----	-----	3	3
513.4060	RAILING TUBULAR TYPE M B-06-0187	LS	-----	-----	-----	1
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	10	10	-----	20
550.0500	PILE POINTS	EACH	5	5	-----	10
550.1100	PILING STEEL HP 10-INCH x 42 LB	LF	325	325	-----	650
606.0300	RIPRAP HEAVY	CY	120	135	-----	255
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	75	75	-----	150
645.0120	GEOTEXTILE FABRIC TYPE HR	SY	80	80	-----	160
	NON-BID ITEMS					
	FILLER	SIZE	-----	-----	-----	1/2" & 3/4"

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 A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.
THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY TO THE EXTENT SHOWN ON THE GENERAL PLAN SHEET AND IN THE ABUTMENT DETAILS.
GEOTEXTILE FABRIC TYPE HR SHALL ONLY BE PLACED AT THE TOE OF SLOPE IN FRONT OF THE ABUTMENTS AS SHOWN ON THE GENERAL PLAN SHEET.
PROTECTIVE SURFACE TREATMENT IS TO BE APPLIED AS SHOWN IN DETAIL ON THIS SHEET.
ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.
THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMIT FOR EXCAVATION FOR STRUCTURES.
THE EXISTING STRUCTURE, P-06-0162, TO BE REMOVED, IS A SINGLE SPAN STEEL GIRDER BRIDGE, 26.0 FT. LONG WITH A 21 FT. CLEAR ROADWAY WIDTH.
AT BACKFACE OF ABUTMENTS ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE.



BENCH MARK:
CHIS. SQ. AT SW WINGWALL
STA. 9+85, 13' RT.
EL. 767.90

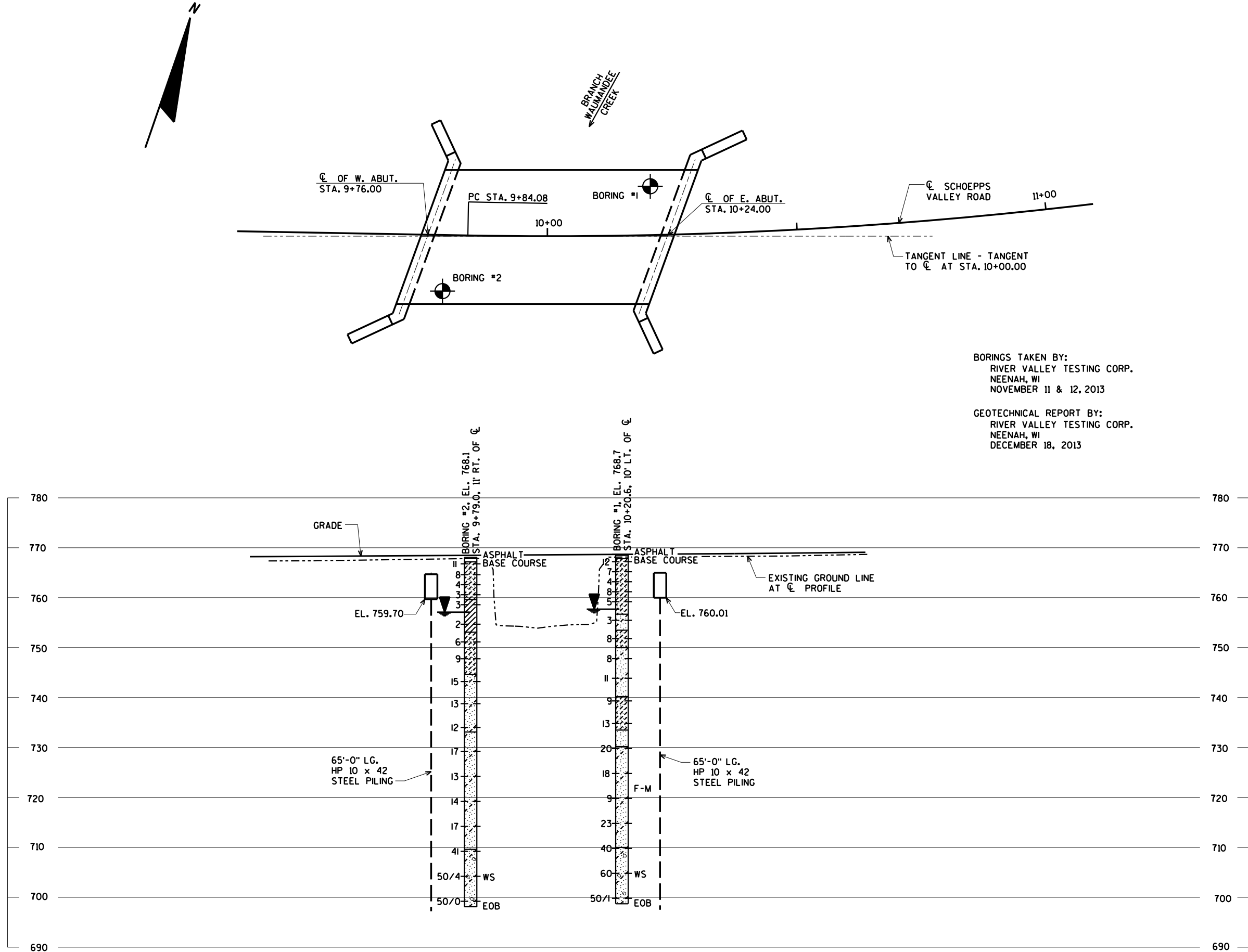


ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-06-0187			
DRAWN BY CJM/CLS		PLANS CK'D. JCK	
QUANTITIES AND NOTES		SHEET 2 OF 14	

\$PRNAME\$
U:\42-0905.00 - Buffalo County, Town of Waumandee, Schoepps Valley Road\BRIDGE\420905 soils.dgn

8



BORINGS TAKEN BY:
RIVER VALLEY TESTING CORP.
NEENAH, WI
NOVEMBER 11 & 12, 2013

GEOTECHNICAL REPORT BY:
RIVER VALLEY TESTING CORP.
NEENAH, WI
DECEMBER 18, 2013

STATE PROJECT NUMBER

7238-00-71

ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

MATERIAL SYMBOLS

TOPSOIL SILT SANDSTONE
SAND PEAT LIMESTONE
GRAVEL CLAY IGNEOUS ROCK

LEGEND OF PROBING

PROBING NO.
STA.
ELEVATION
95/6=95 BLOWS FOR 6"
PENETRATION
PROBING TAKEN WITH
A 350# WT.
FALLING 18" ON A 2"
O.D. POINT.
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

LEGEND OF BORING

ELEV. BORING NO.
STA.
UNCONFINED STRENGTH 7.7
BLOWS PER FT. USING 140# WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE — S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO
LIMESTONE

UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CAGED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

8

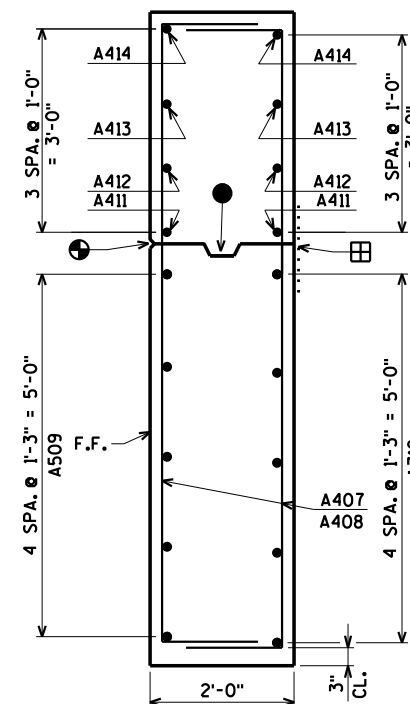
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-06-0187			
DRAWN BY		CLS	PLANS CK'D. JCK
SUBSURFACE EXPLORATION		SHEET 3 OF 14	

SPRNFAMES
:42-0905.00 - Buffalo County, Town of Waumande, Schoenps Valley Road+BRIDGE+420905 wa.DGN

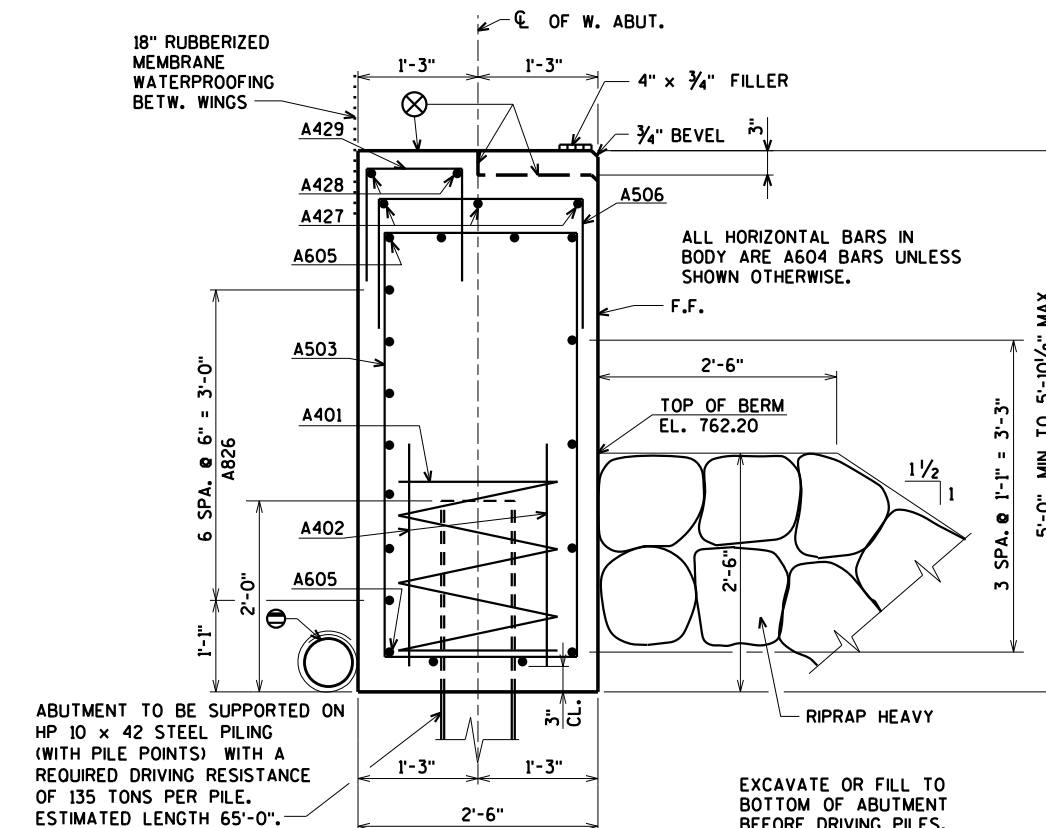


- WORK THIS SHEET WITH SHEETS 5 & 6

NO.	DATE	REVISION		BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION				
STRUCTURE B-06-0187				
		DRAWN BY	CJM	PLANS CK'D. JCK
WEST ABUTMENT			SHEET 4 OF	



SECTION A



TYPICAL SECTION THRU BODY

⊖ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SDD REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".

☐ 18" RUBBERIZED MEMBRANE WATERPROOFING
ON BACK FACE. NOT REQUIRED IF CONST.
JT. IS NOT USED.

● OPT. KEYED CONST. JOINT - FORMED BY A BEVELED 2" x 6" WITH RUBBERIZED MEMBRANE WATERPROOFING ON B.F.

⊕ 3/4" 'V' GROOVE ON F.F. OF WING WALL
NOT REQUIRED IF CONST. JT. IS NOT USED.

■ VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM BRIDGE SEAT TO TOP OF WING WALL.

FOR PILE SPLICE DETAIL SEE SHEET 2.

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

F.F. DENOTES FRONT FACE

⊗ STEEL TROWEL TOP SURFACE
OF ABUTMENT. PLACE MULTIPLE
LAYERS OF POLYETHYLENE SHEETS
OVER ENTIRE ABUTMENT TOP
BEFORE PLACING BEARING PADS
AND SUPERSTRUCTURE. TOTAL
THICKNESS OF SHEETS SHALL
BE AT LEAST 0.003".

WORK THIS SHEET WITH SHEETS 4 & 6.

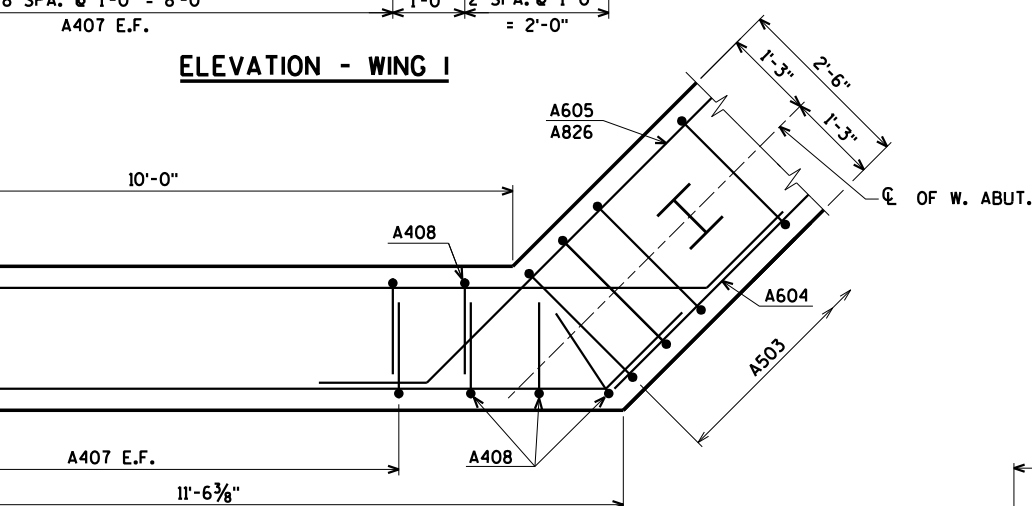
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-06-0187

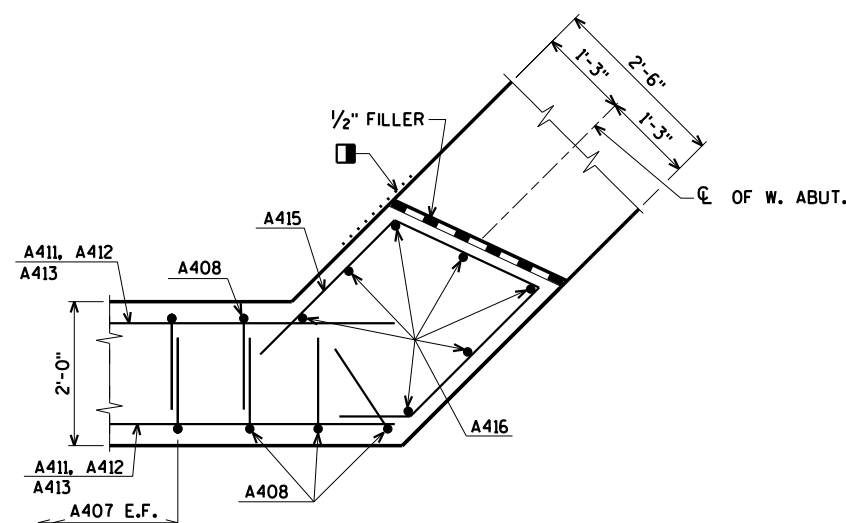
WEST ABUTMENT SHEET 5 OF

WEST ABUTMENT
WING 1 DETAILS

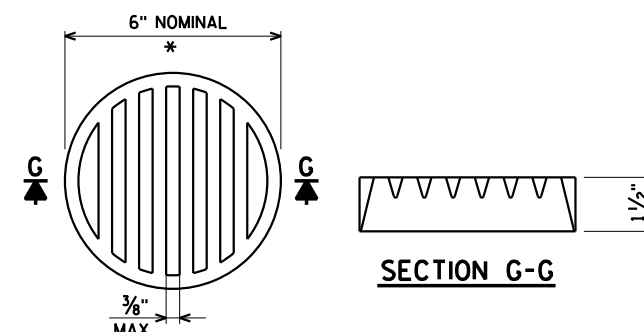
SHEET 5 OF 14



SECTION B



SECTION C



SECTION G-G

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

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

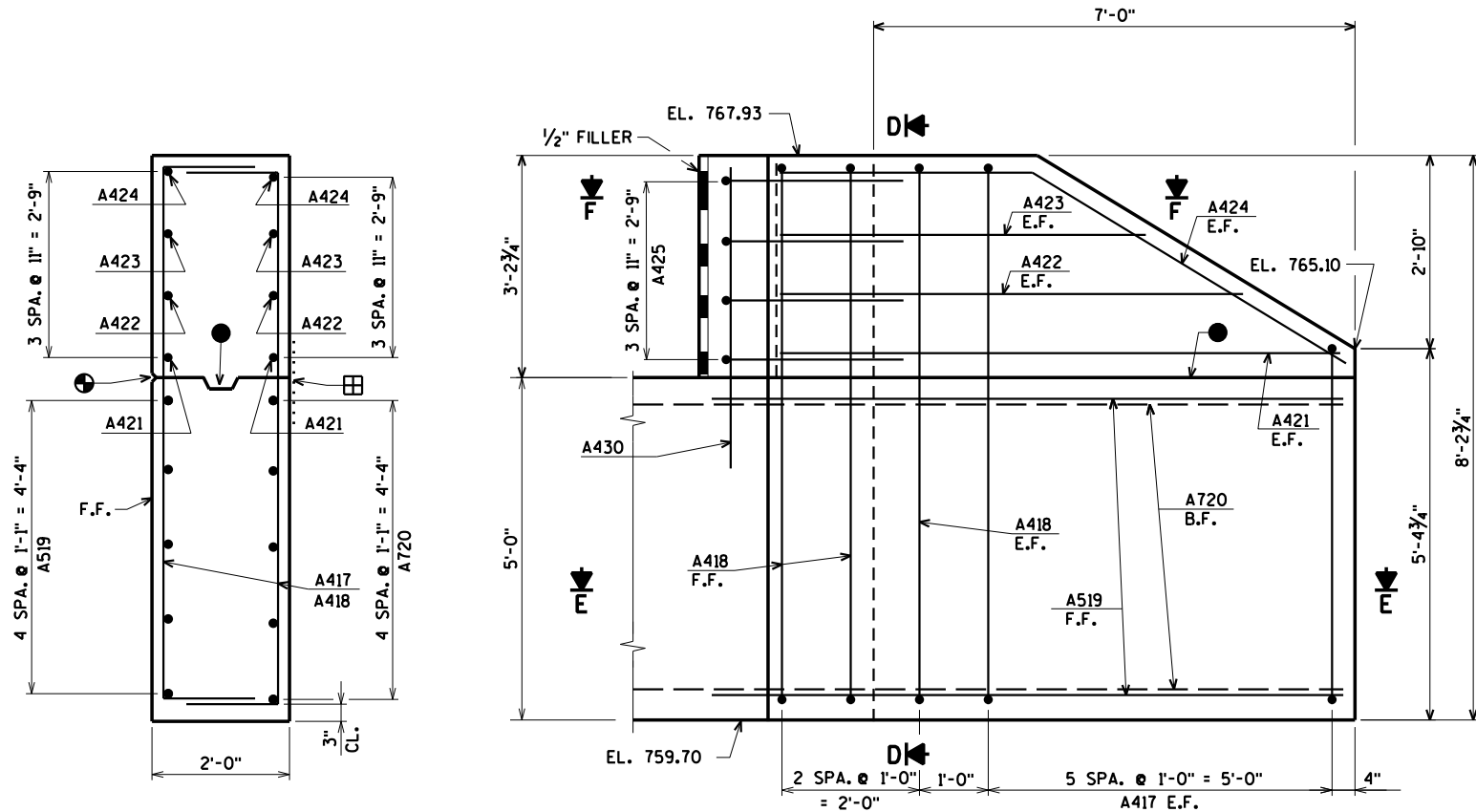
THE RODENT SHIELD SHALL BE PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SCREEN TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 x 1-INCH SHEET METAL SCREWS.

RODENT SHIELD DETAIL

ORIGINAL PLANS PREPARED BY

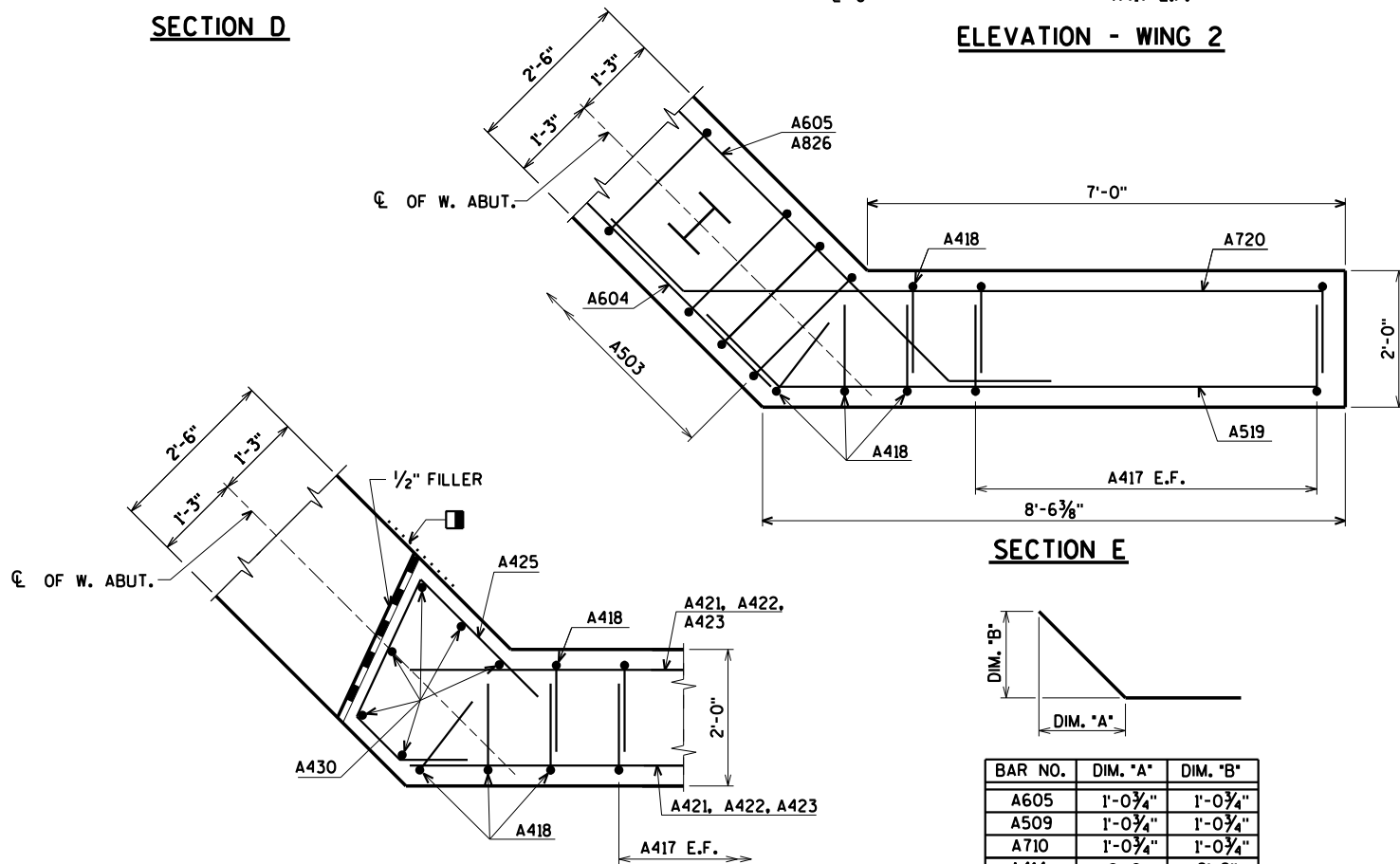
AYRES
ASSOCIATES

**3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com**



SECTION D

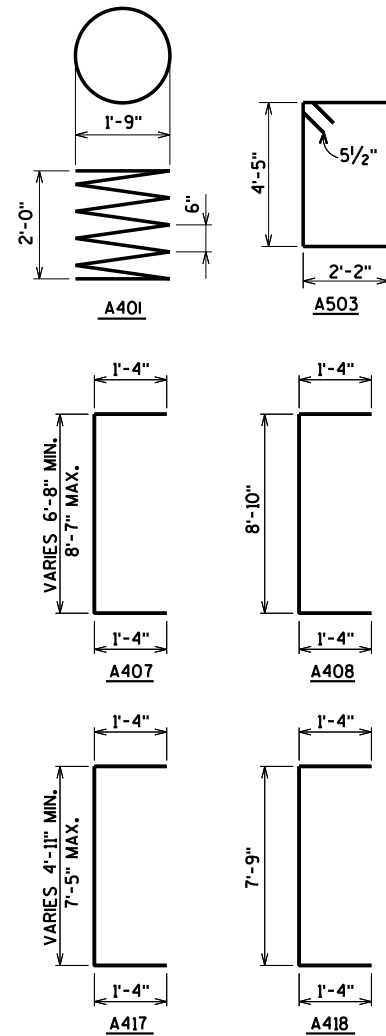
ELEVATION - WING 2



SECTION E

SECTION F

BAR NO.	DIM. "A"	DIM. "B"
A605	1'-0 3/4"	1'-0 3/4"
A509	1'-0 3/4"	1'-0 3/4"
A710	1'-0 3/4"	1'-0 3/4"
A414	8'-9"	2'-2"
A519	1'-0 3/4"	1'-0 3/4"
A720	1'-0 3/4"	1'-0 3/4"
A424	5'-9"	2'-10"
A826	1'-0 3/4"	1'-0 3/4"



BILL OF BARS

BAR NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLE	BAR SERIES	2,380* UNCOATED 810* COATED
							LOCATION
A401		5	28-0	X			BODY @ PILES
A402		10	2-3				BODY @ PILES
A503		42	13-9	X			BODY VERT.
A604		9	33-2				BODY HORIZ. F.F.
A605		4	21-7	X			BODY HORIZ. B.F.
A506		20	5-9	X			BODY VERT. TOP
A407	X	18	10-2	X			WING 1 VERT. E.F.
A408	X	4	11-4	X			WING 1 VERT. E.F.
A509	X	5	12-8	X			WING 1 HORIZ. F.F.
A710	X	5	14-4	X			WING 1 HORIZ. B.F.
A411	X	2	11-4				WING 1 HORIZ. E.F.
A412	X	2	11-2				WING 1 HORIZ. E.F.
A413	X	2	7-0				WING 1 HORIZ. E.F.
A414	X	2	11-7	X			WING 1 DIAG. E.F.
A415	X	4	9-10	X			WING 1 HORIZ.
A416	X	7	4-6				WING 1 VERT.
A417	X	12	8-8	X			WING 2 VERT. E.F.
A418	X	4	10-3	X			WING 2 VERT. E.F.
A519	X	5	9-9	X			WING 2 HORIZ. F.F.
A720	X	5	11-4	X			WING 2 HORIZ. B.F.
A421	X	2	8-3				WING 2 HORIZ. E.F.
A422	X	2	6-5				WING 2 HORIZ. E.F.
A423	X	2	4-6				WING 2 DIAG. E.F.
A424	X	2	8-10	X			WING 2 HORIZ. E.F.
A425	X	4	8-0				WING 2 HORIZ.
A826		14	22-1				BODY HORIZ. B.F.
A427		3	19-0				BODY HORIZ. TOP
A428		4	17-4				BODY HORIZ. TOP
A429		23	4-5				BODY VERT. TOP
A430	X	6	4-4				WING 2 VERT.

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

⊗ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

BAR MARK	NO REQ'D.	LENGTH
A407	2 SERIES OF 9	9'-2" TO 11'-1"
A417	2 SERIES OF 6	7'-5" TO 9'-11"

BUNDLE AND TAG EACH SERIES SEPARATELY.

WORK THIS SHEET WITH SHEETS 4 & 5

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-06-0187			
		DRAWN BY CJM	PLANS CK'D. JCK
WEST ABUTMENT WING 2 DETAILS & BILL OF BARS		SHEET 6 OF 14	

18" RUBBERIZED MEMBRANE WATERPROOFING ON BACK FACE. NOT REQUIRED IF CONST. JT. IS NOT USED.

OPT. KEYED CONST. JOINT - FORMED BY A BEVELED 2" x 6" WITH RUBBERIZED MEMBRANE WATERPROOFING ON B.F.

3/4" V-GROOVE ON F.F. OF WING WALL NOT REQUIRED IF CONST. JT. IS NOT USED.

VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM BRIDGE SEAT TO TOP OF WING WALL.

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

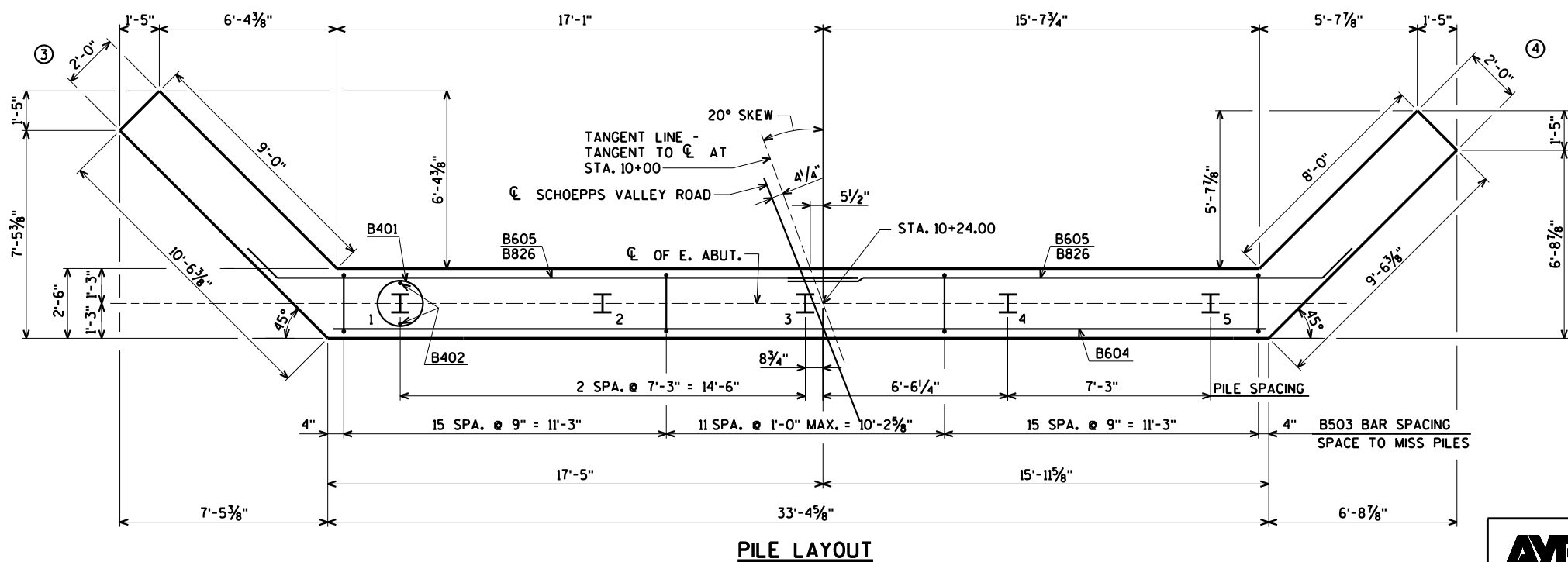
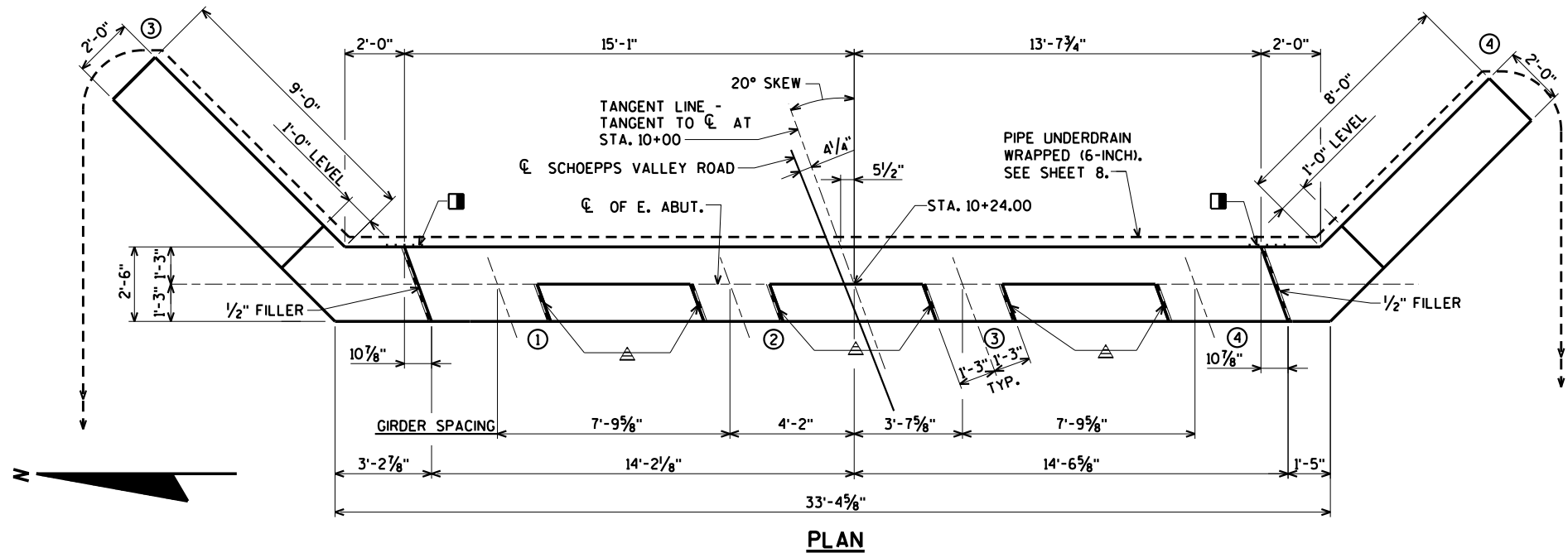
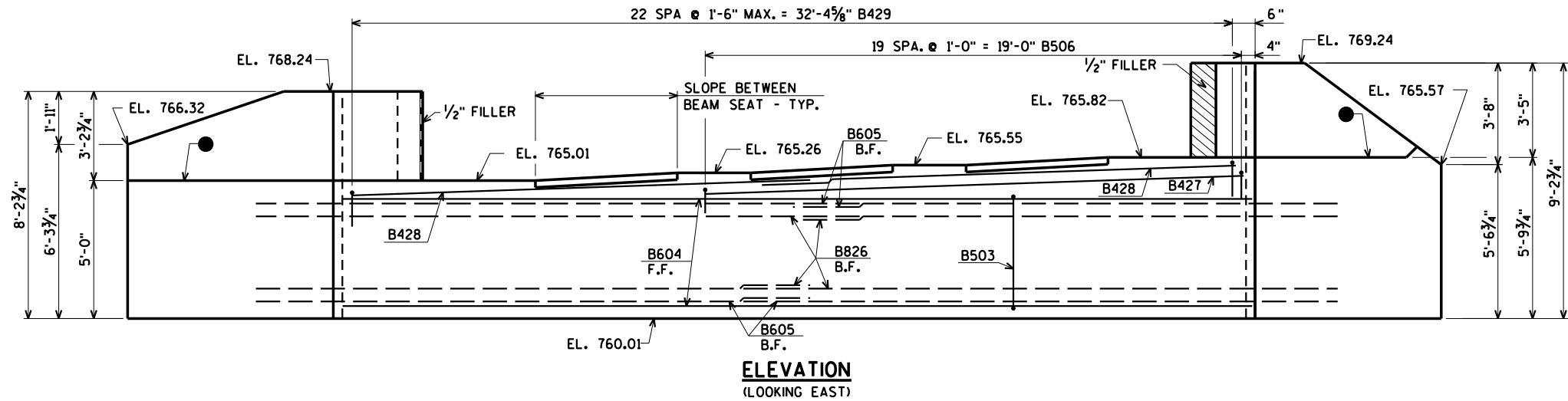
F.F. DENOTES FRONT FACE

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

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Ut±42-0905.00 - Buffalo County, Town of Waumandee, Schoepps Valley Road±BRIDGE±420905 ea.DGN

STATE PROJECT NUMBER

7238-00-71



- OPT. KEYED CONST. JOINT - FORMED BY A BEVELED 2" x 6" WITH RUBBERIZED MEMBRANE WATERPROOFING ON B.F.
 - △ 3/4" CORK FILLER ON VERTICAL FACE ONLY.
 - VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM BRIDGE SEAT TO TOP OF WING WALL.
- FOR PILE SPICE DETAIL SEE SHEET 2.
- B.F. DENOTES BACK FACE
F.F. DENOTES FRONT FACE

WORK THIS SHEET WITH SHEETS 8 & 9

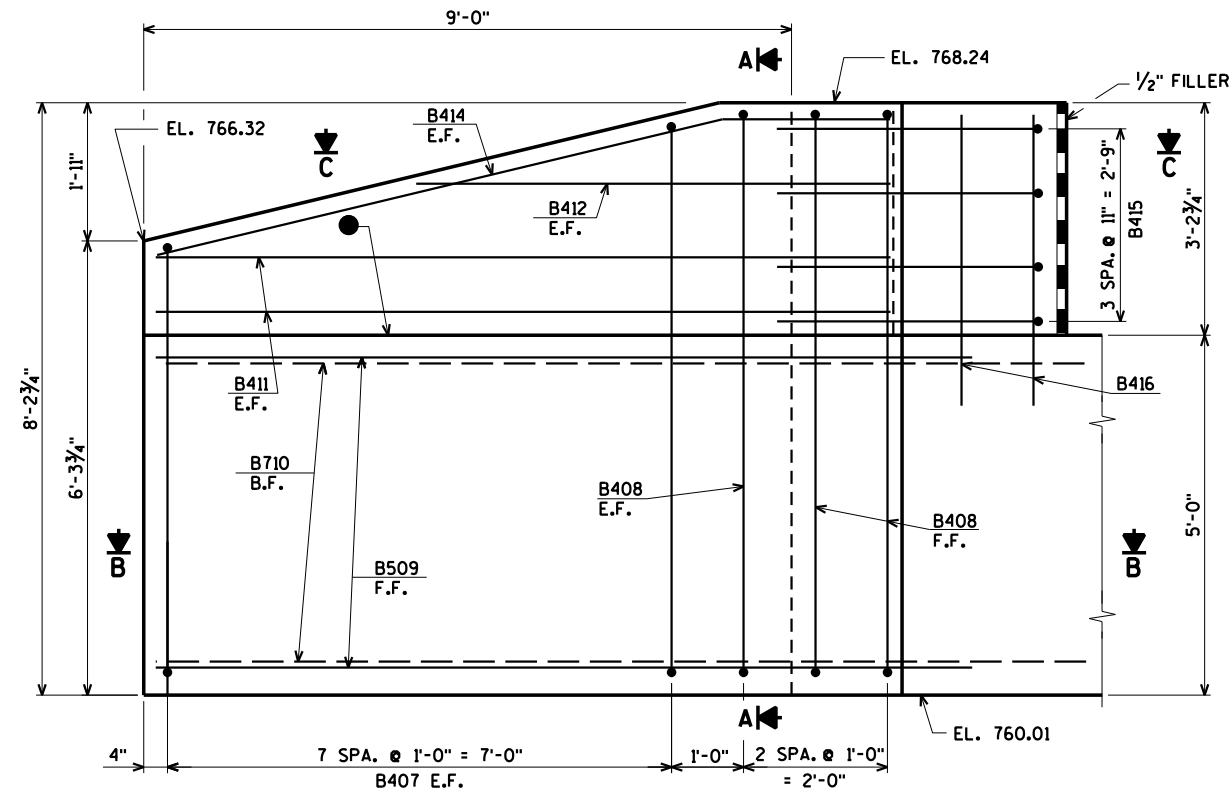
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-06-0187			
DRAWN BY CJM		PLANS CK'D. JCK	
EAST ABUTMENT		SHEET 7 OF 14	

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Eau Claire, WI 54701
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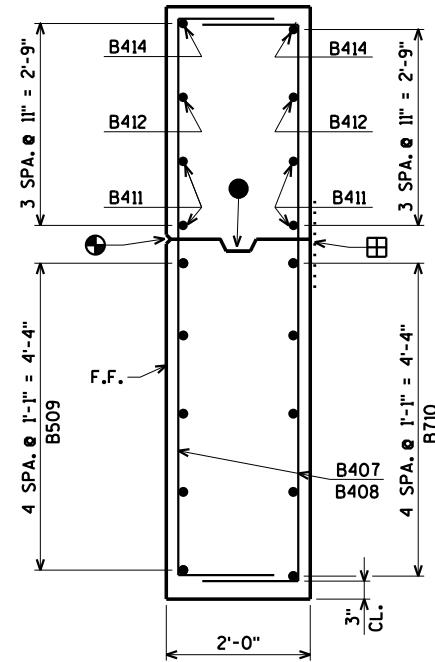
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U:\42-0905.00 - Buffalo County, Town of Waumandee, Schoeppe Valley Road\BRIDGE\420905 ea.DGN

STATE PROJECT NUMBER

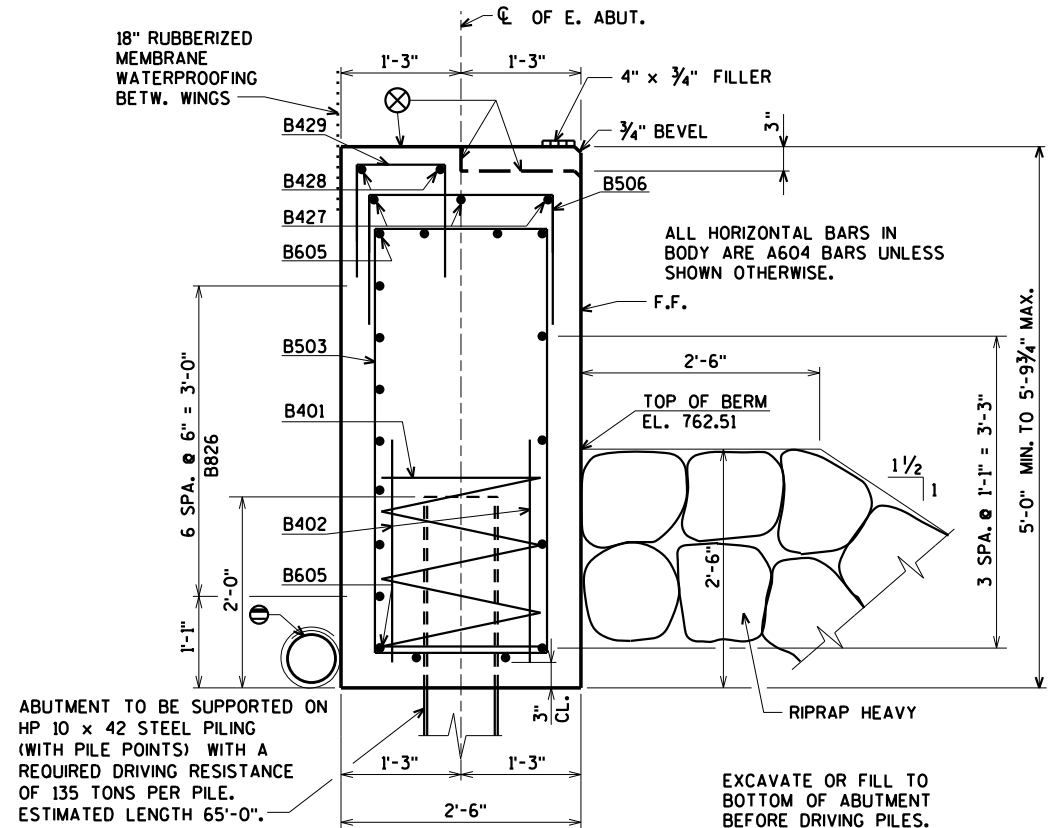
7238-00-71



ELEVATION - WING 3



SECTION A



TYPICAL SECTION THRU BODY

⊖ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SDD REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".

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● OPT. KEYED CONST. JOINT - FORMED BY A BEVELED 2" x 6" WITH RUBBERIZED MEMBRANE WATERPROOFING ON B.F.

⊕ 3/4" 'V' GROOVE ON F.F. OF WING WALL NOT REQUIRED IF CONST. JT. IS NOT USED.

⊞ VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM BRIDGE SEAT TO TOP OF WING WALL.

FOR PILE SPLICE DETAIL SEE SHEET 2.

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

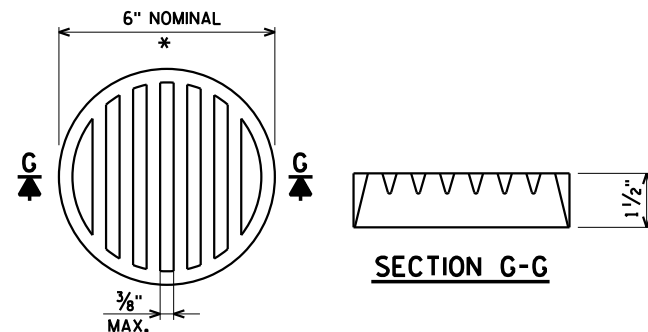
F.F. DENOTES FRONT FACE

⊗ STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.003".

WORK THIS SHEET WITH SHEETS 7 & 9

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-06-0187			
DRAWN BY CJM		PLANS CK'D. JCK	
EAST ABUTMENT WING 3 DETAILS			SHEET 8 OF 14

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Eau Claire, WI 54701
www.AyresAssociates.com



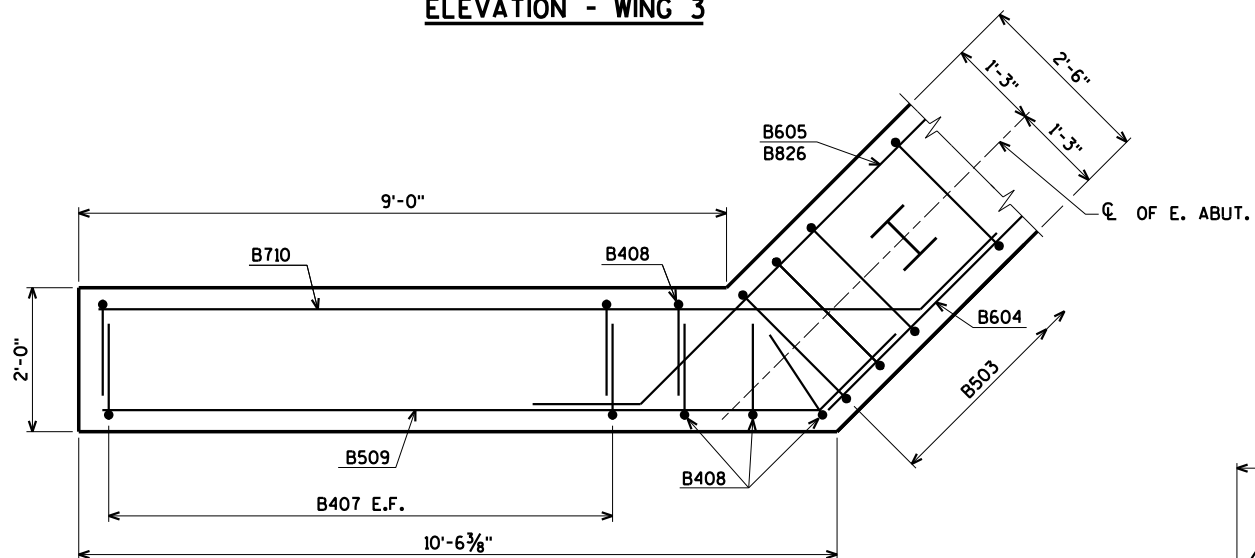
SECTION G-G

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

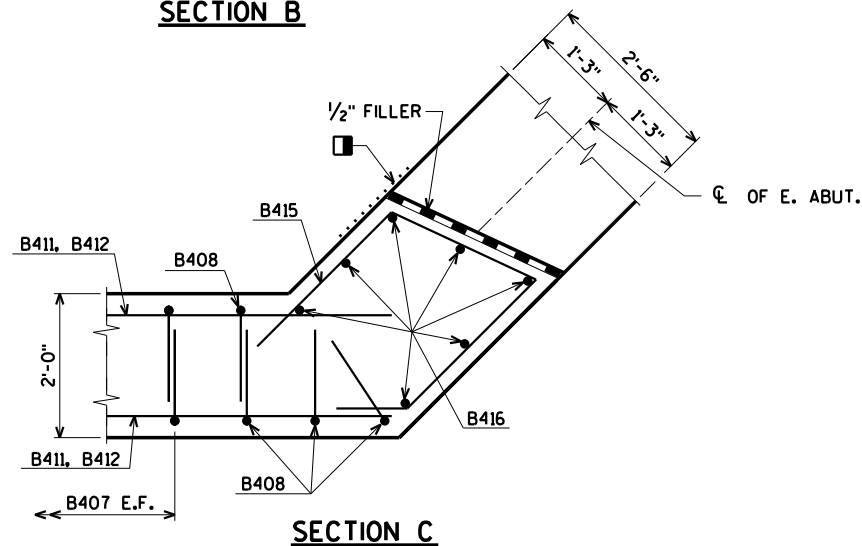
THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SCREEN TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 x 1-INCH SHEET METAL SCREWS.

RODENT SHIELD DETAIL



SECTION B



SECTION C

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED	BAR SERIES	2,390# UNCOATED 800# COATED
							LOCATION
B401		5	28-0	X			BODY @ PILES
B402		10	2-3				BODY @ PILES
B503		42	13-9	X			BODY VERT.
B604		9	33-2				BODY HORIZ. F.F.
B605		4	21-7	X			BODY HORIZ. B.F.
B506		20	5-9	X			BODY VERT. TOP
B407	X	16	9-4	X		⊗	WING 3 VERT. E.F.
B408	X	4	10-3	X			WING 3 VERT. E.F.
B509	X	5	11-9	X			WING 3 HORIZ. F.F.
B710	X	5	13-4	X			WING 3 HORIZ. B.F.
B411	X	4	10-3				WING 3 HORIZ. E.F.
B412	X	2	6-9				WING 3 HORIZ. E.F.
B413	X	6	4-9				WING 4 VERT.
B414	X	2	10-6	X			WING 3 DIAG. E.F.
B415	X	4	9-9	X			WING 3 HORIZ.
B416	X	7	4-6				WING 3 VERT.
B417	X	14	9-4	X		⊗	WING 4 VERT. E.F.
B418	X	4	11-4	X			WING 4 VERT. E.F.
B519	X	5	10-9	X			WING 4 HORIZ. F.F.
B720	X	5	12-4	X			WING 4 HORIZ. B.F.
B421	X	2	7-4				WING 4 HORIZ. E.F.
B422	X	2	6-11				WING 4 HORIZ. E.F.
B423	X	2	5-0				WING 4 HORIZ. E.F.
B424	X	2	9-10				WING 4 DIAG. E.F.
B425	X	4	8-0				WING 4 HORIZ.
B826		14	22-1				BODY HORIZ. B.F.
B427		3	19-0				BODY HORIZ. TOP
B428		4	17-4				BODY HORIZ. TOP
B429		23	4-5				BODY HORIZ. TOP

⊗ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

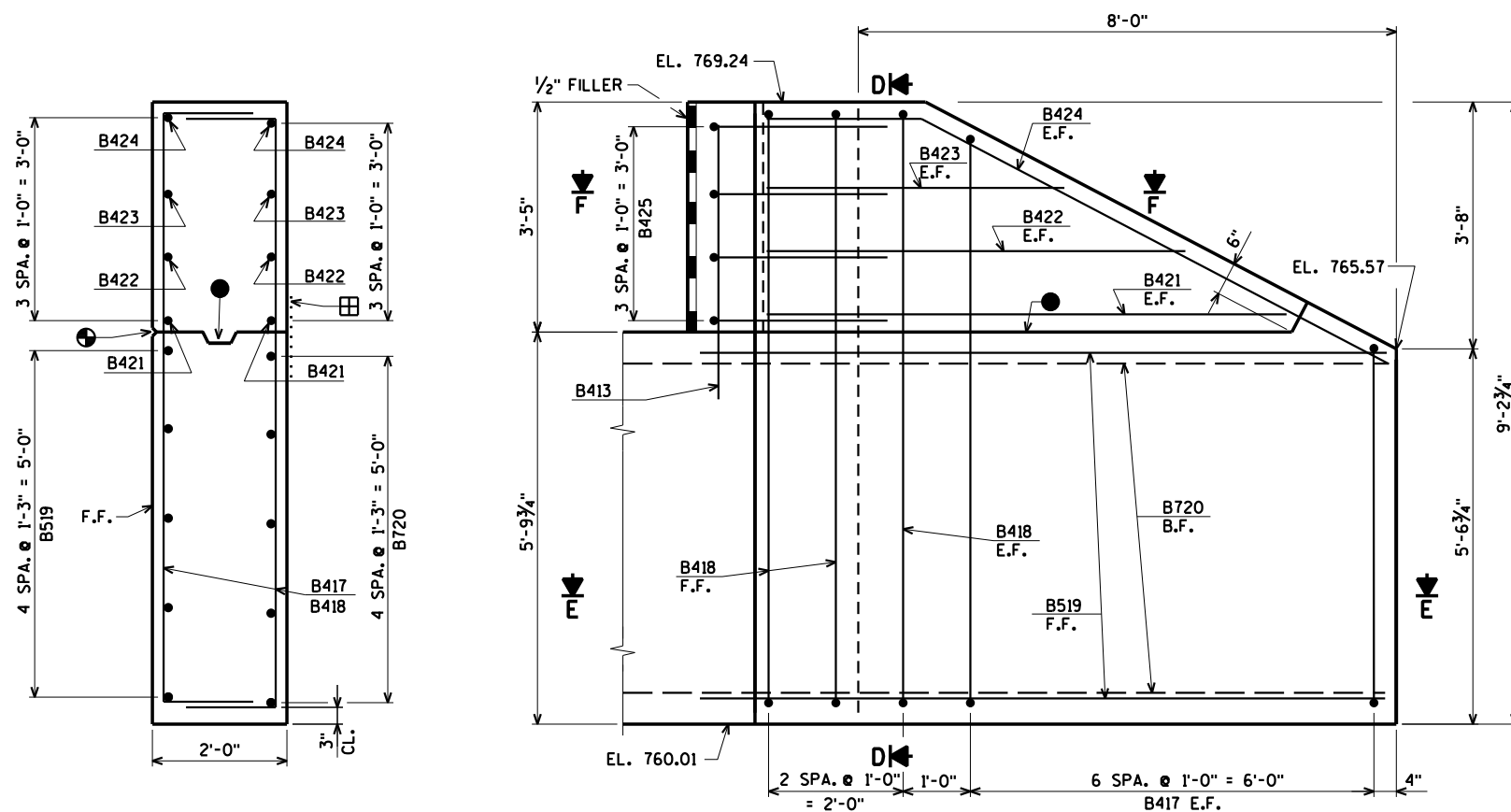
BAR MARK	NO REQ'D.	LENGTH
B407	2 SERIES OF 8	8' - 5" TO 10' - 2"
B417	2 SERIES OF 7	7' - 8" TO 10' - 1"

WORK THIS SHEET WITH SHEETS 7 & 8

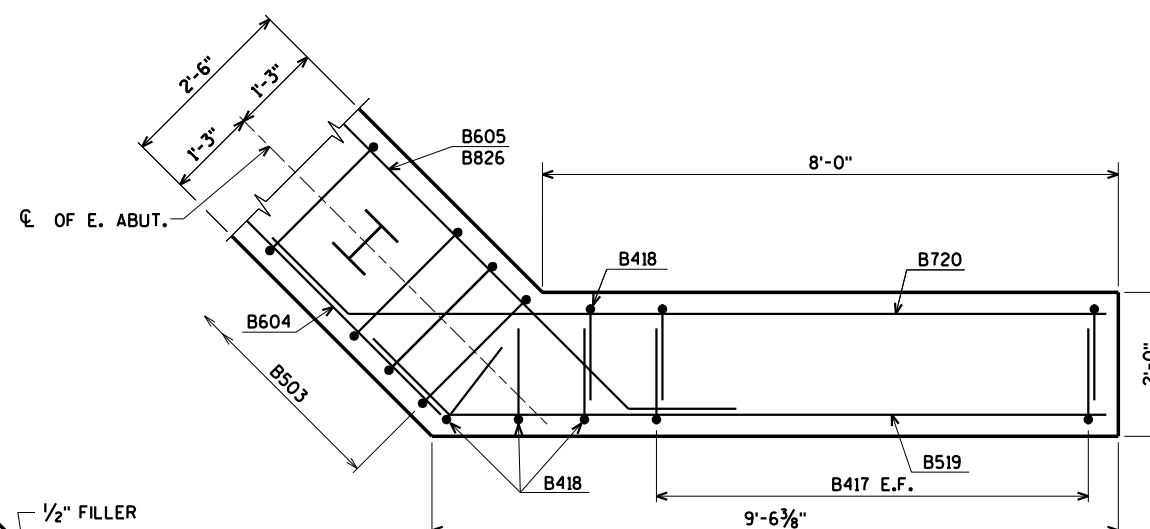
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

DRAWN BY	CJM	PLANS CHK'D	JCK
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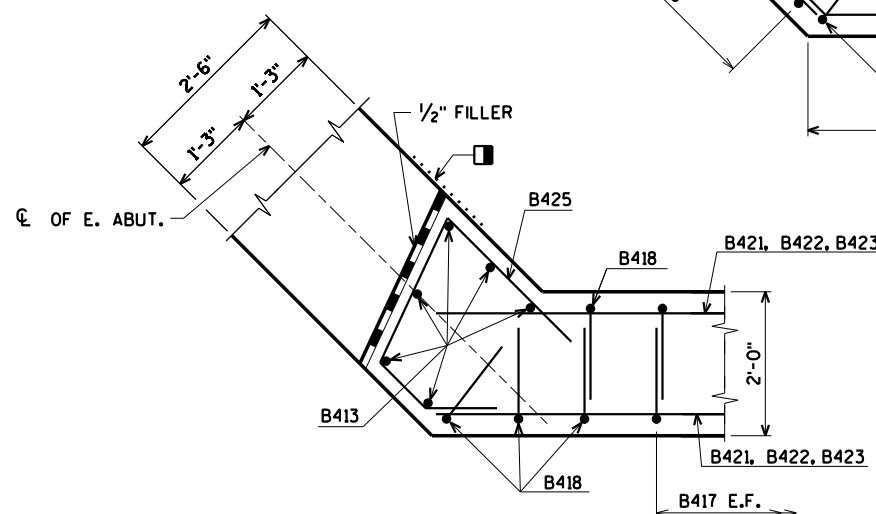
T SHEET 9 OF 14



ELEVATION - WING 4



SECTION E



SECTION F

BAR NO.	DIM. "A"	DIM. "B"
B605	1'-0 $\frac{3}{4}$ "	1'-0 $\frac{3}{4}$ "
B509	1'-0 $\frac{3}{4}$ "	1'-0 $\frac{3}{4}$ "
B710	1'-0 $\frac{3}{4}$ "	1'-0 $\frac{3}{4}$ "
B414	7'-9"	1'-11"
B519	1'-0 $\frac{3}{4}$ "	1'-0 $\frac{3}{4}$ "
B720	1'-0 $\frac{3}{4}$ "	1'-0 $\frac{3}{4}$ "
B424	6'-9"	3'-8"
B826	1'-0 $\frac{3}{4}$ "	1'-0 $\frac{3}{4}$ "

F.F. DENOTES FRONT FACE

ORIGINAL PLANS PREPARED BY

AYRES
ASSOCIATES

**3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com**

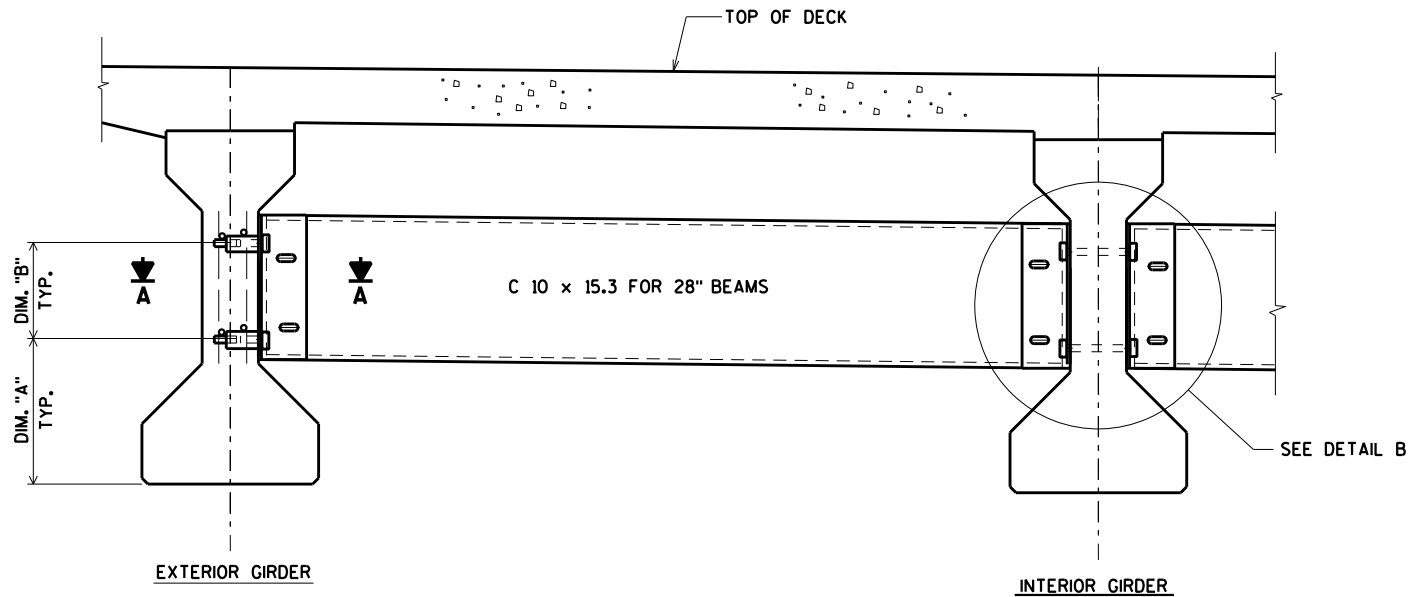
\$PRNAME\$
U:\42-0905.00 - Buffalo County, Town of Waumandee, Schoepps Valley Road\BRIDGE\420905 dia.dgn

STATE PROJECT NUMBER

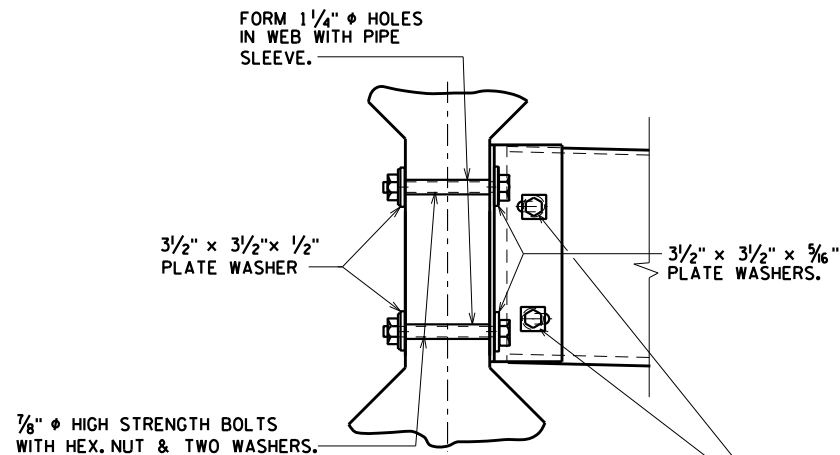
7238-00-71

TABLE

GIRDER HEIGHT	DIM. "A"	DIM. "B"	DIM. "L"	*DIM. "X"
28"	1'-0 ⁷ / ₈ "	5 ⁷ / ₈ "	9 ¹ / ₂ "	2 ¹ / ₄ "

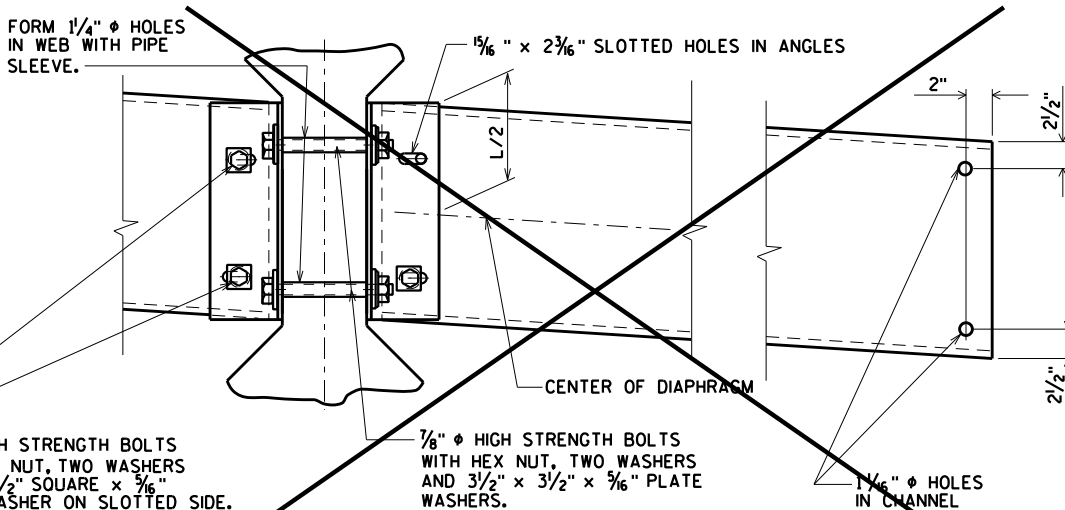


PART TRANSVERSE SECTION AT DIAPHRAGM

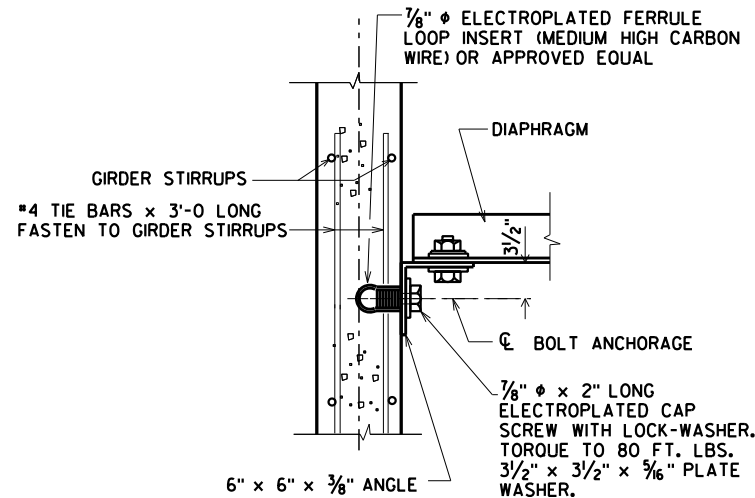


(FOR STAGGERED DIAPHRAGM)

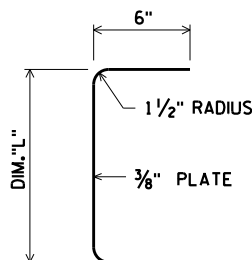
DETAIL B



(FOR CONTINUOUS LINE OF DIAPHRAGMS)

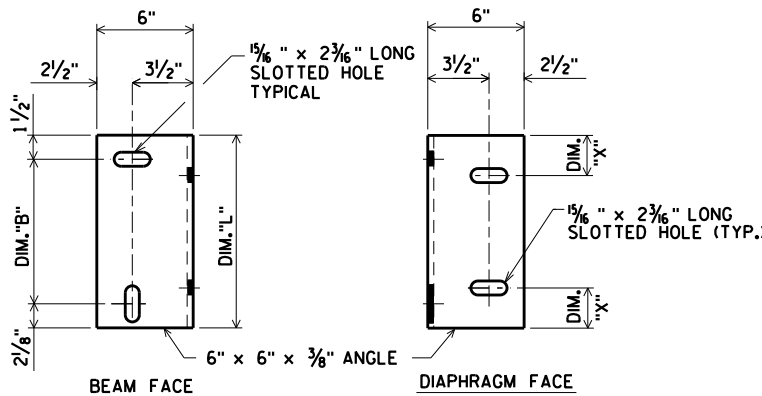


SECT. A-A
(FOR EXTERIOR ATTACHMENT)



SECTION THRU ALTERNATE DIAPHRAGM

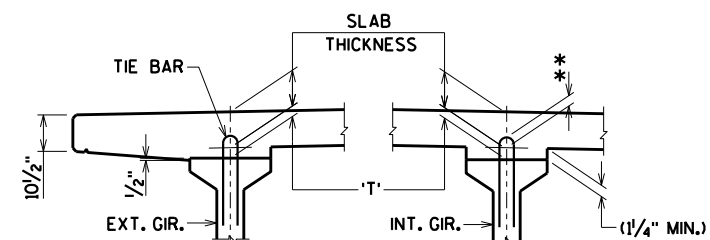
*DIM. "X" = 2 1/2" FOR ALTERNATE PLATE DIAPHRAGM



DIAPHRAGM SUPPORT

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AYRES ASSOCIATES
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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-06-0187			
DRAWN BY CJM		PLANS CK'D. JCK	
INTERM. STEEL DIAPHS. DETAILS			SHEET 10 OF 14



IF 1/4" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN 1/2" OR.

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- SLAB THICKNESS

= HAUNCH HEIGHT 'T'

SIDE VIEW & TYP. SECTION IN SPAN

(B) 2- #5 BARS BEND DOWN 16 BAR DIA. AT ENDS

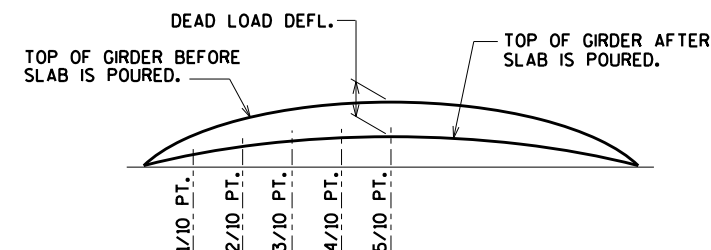


UNDRAPED PATTERN
0.6"φ STRANDS

* THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) *
1	1.5

THESE VALUES ARE NOT TO
BE USED IN DETERMINING 'T'.
USE ACTUAL GIRDER SHOTS.
THESE VALUES ARE FOR
INFORMATIONAL PURPOSES ONLY.



DEAD LOAD DEFLECTION DIAGRAM

* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

[illegible]

ORIGINAL PLANS PREPARED BY

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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-06-0187			
DRAWN BY CJM		PLANS CK'D. JCK	
28" PRESTRESSED GIRDER DETAILS		SHEET 11 OF 14	

BAR. NO.	COATED BAR	NO. REO'D.	LENGTH	BENT BAR	BUNDLED	BAR SERIES	10,150" COATED
							LOCATION
S501	X	60	10-2	X			DIAPH. @ ABUT. VERT.
S602	X	12	1-5				DIAPH. @ ABUT. HORIZ. @ EXT. GDRS.
S603	X	18	5-10				DIAPH. @ ABUT. HORIZ. BETW. GDRS.
S604	X	10	28-4				DIAPH. @ ABUT. HORIZ.
S505	X	76	28-4				SLAB TRANS. BOT.
S506	X	77	28-4				SLAB TRANS. TOP
S407	X	76	26-0				SLAB LONG BOT.
S408	X	78	26-4				SLAB LONG. TOP
S609	X	36	12-0	X			SLAB AT INT. RAIL POST
S610	X	56	6-0				SLAB @ INT. RAIL POSTS
S611	X	16	6-0	X			SLAB @ END RAIL POSTS
S612	X	8	12-0	X			SLAB @ END RAIL POSTS
S413	X	12	4-9				DIAPH. @ ABUT. HORIZ. @ NOTCH
S414	X	48	3-5	X			DIAPH. @ ABUT. VERT. @ NOTCH
S515	X	16	6-0				DIAPH. @ ABUT. HORIZ. THRU GDR.

Technical drawing of a bridge cross-section showing dimensions, materials, and structural details.

Overall Dimensions:

- Total width: 27'-0"
- Top flange width: 12'-6"
- Bottom flange width: 12'-0"
- Top flange thickness: 1'-3"
- Bottom flange thickness: 1'-3"
- Top flange height: 3"
- Bottom flange height: 7"

Reinforcement:

- Top flange: 38 SPA. @ 8 1/2" MAX. = 26'-6" S408
- Bottom flange: 37 SPA. @ 8 1/2" MAX. = 25'-10" S407
- Bottom flange: 3 SPA. @ 7'-4" = 22'-0" 28" PRESTRESSED CONCRETE GIRDERS

Structural Details:

- RAILING TUBULAR TYPE M FOR DETAILS, SEE SHEET 14.
- 8" SLAB
- S505
- S506
- SLOPE 0.04'/FT.
- CL SCHOEPPS VALLEY ROAD
- TANGENT LINE - TANGENT TO CL AT STA. 10+00
- VARIES 0" MIN. TO 4 1/4" MAX.
- 3/4" CONT. DRIP GROOVE TERMINATE 3" FROM FACE OF ABUTMENTS - TYP.
- 5"
- 2'-6"
- C 10 x 15.3 STEEL DIAPHRAGM SEE SHEET 10 FOR DETAILS.
- CONCRETE INSERTS TO BE CAST IN GIRDERS. SEE SHEET 10 FOR DETAILS.

Labels:

- ①
- ②
- ③
- ④

Technical drawings of five structural shapes with their dimensions:

- S501:** Square shape with overall dimensions of 2'-2" (width) and 2'-9" (height). A diagonal dimension of 5 1/2" is shown.
- S609:** Channel shape with a total height of 5'-9" and a base width of 10".
- S611:** Angle shape with a horizontal leg of 5'-0" and a vertical leg of 10".
- S612:** Z-shape with a total height of 4'-8" and a base width of 1'-8". A vertical dimension of 10" is shown for the lower section.
- S414:** Channel shape with a total height of 1'-4" and a base width of 11".

2 - S515 BARS THRU GIRDER

2 - S515 BARS THRU GIRDER

S604

S602

S603

S413

3 1/2"

2 SPA. @ 7" = 1'-2" S501

1'-0 1/2"

1'-0 1/2"

7 SPA. @ 9" = 5'-3" S501

1'-0 1/2"

1'-8"

4 SPA. @ 1'-0" = 4'-0" S501

1'-8"

TYP. BETWEEN GIRDERS

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-06-0187			
DRAWN BY		CJM	PLANS CK'D. JCH
SUPERSTRUCTURE		SHEET 12 OF 1	



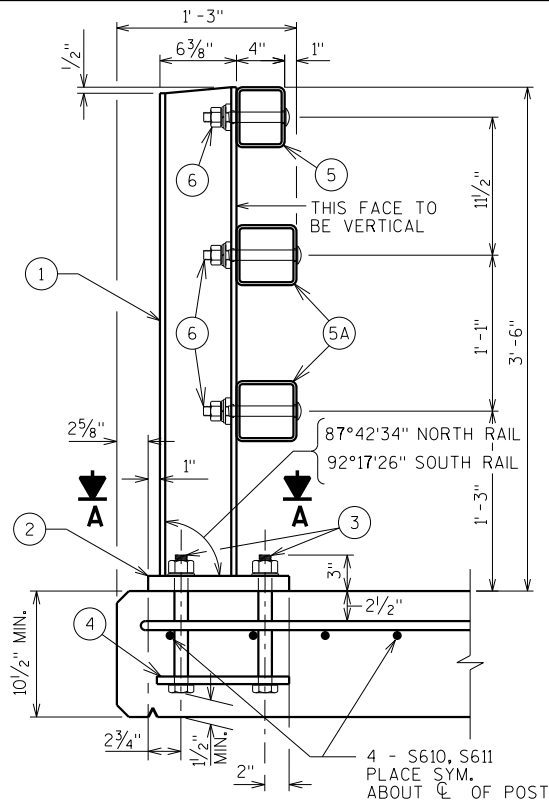
LOCATION	℄ OF W. ABUT.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ OF E. ABUT.
N. EDGE OF DECK	767.93	767.96	767.98	768.01	768.04	768.07	768.10	768.13	768.17	768.20	768.24
GIRDER 1	768.03	768.05	768.08	768.11	768.14	768.17	768.20	768.23	768.26	768.29	768.33
GIRDER 2	768.31	768.33	768.36	768.39	768.41	768.44	768.47	768.50	768.53	768.57	768.60
℄ SCHOEPPS VALLEY ROAD	768.45	768.47	768.50	768.53	768.56	768.59	768.62	768.65	768.68	768.71	768.73
GIRDER 3	768.59	768.61	768.64	768.66	768.69	768.72	768.75	768.78	768.78	768.84	768.87
GIRDER 4	768.87	768.89	768.92	768.94	768.97	769.00	769.03	769.05	769.08	769.12	769.15
S. EDGE OF DECK	768.96	768.99	769.01	769.04	769.07	769.09	769.12	769.12	769.18	769.21	769.24



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-06-0187			
DRAWN BY		CJM	PLANS CK'D. JCK
SUPERSTRUCTURE PLAN		SHEET 13 OF 14	

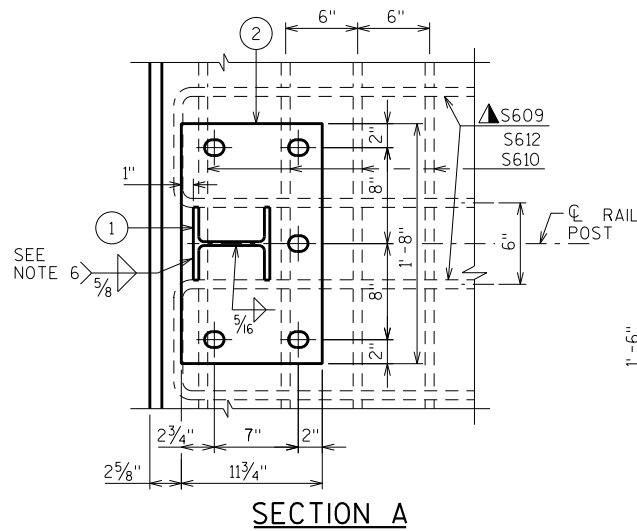
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8

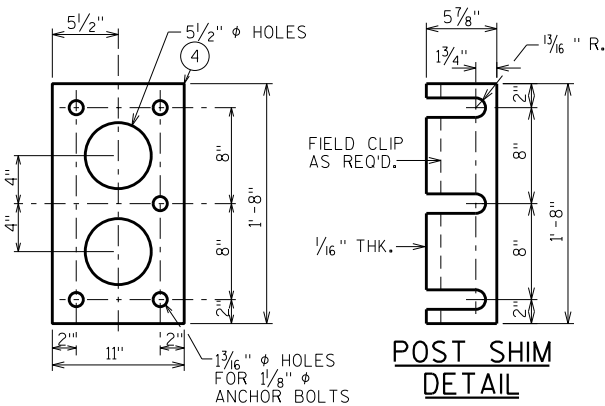


SECTION THRU RAILING ON DECK

▲ TIE TO TOP MAT OF STEEL.

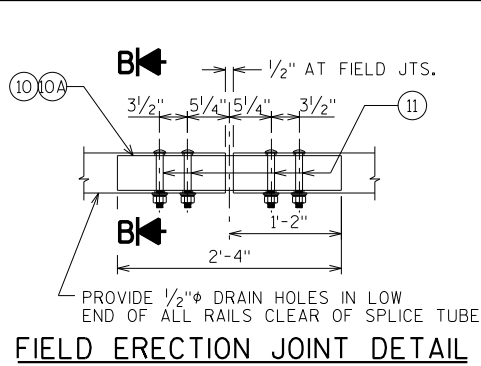


SECTION A

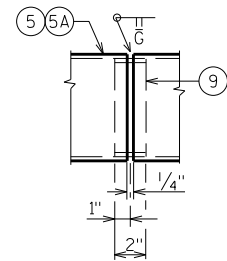


ANCHOR PLATE

AT RAIL TO DECK CONNECTION

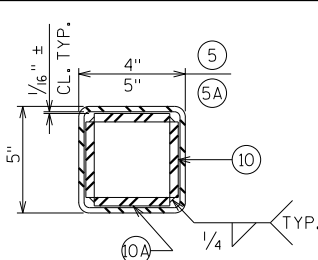


FIELD ERECTION JOINT DETAIL

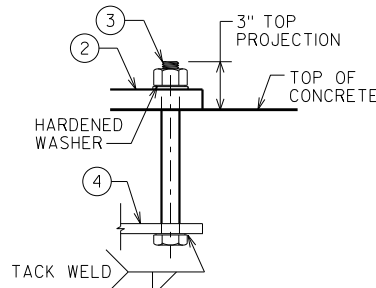


SHOP RAIL SPLICE DETAIL

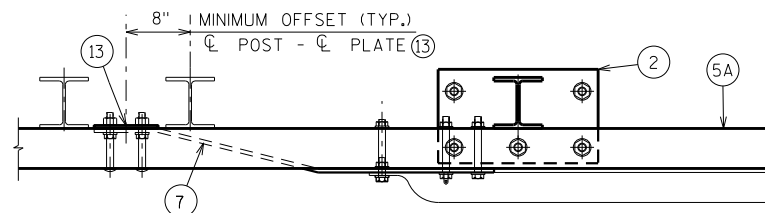
LOCATION MUST BE SHOWN ON SHOP DRAWINGS



SECTION B

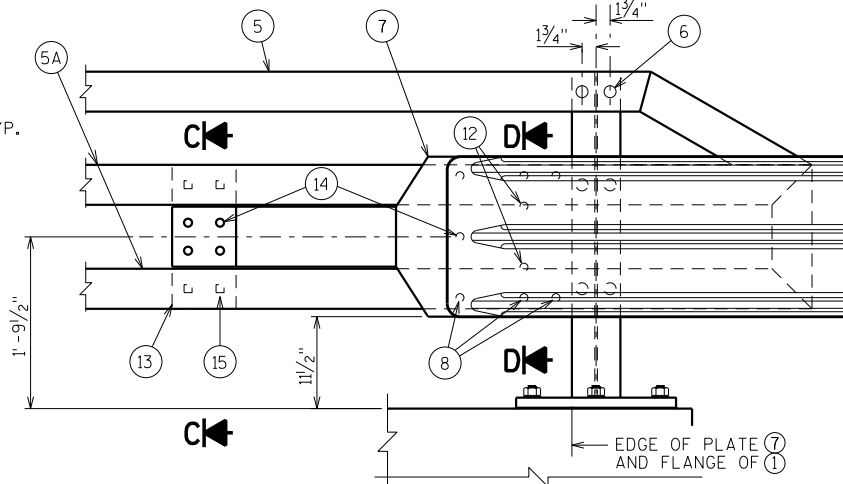


ANCHOR BOLTS



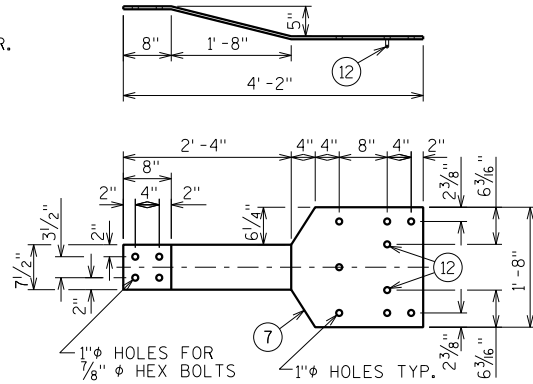
TOP VIEW AT END POST

THRIE BEAM RAIL ATTACHMENT



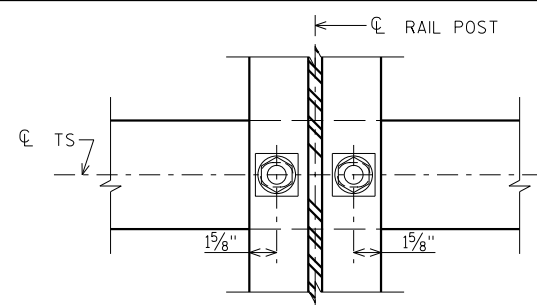
DETAIL AT END POST

THRIE BEAM RAIL ATTACHMENT

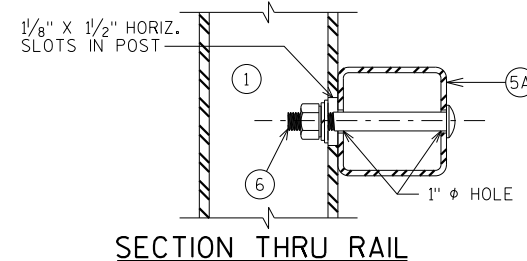


BACK-UP PLATE DETAIL

AT BEAM GUARD ATTACHMENT



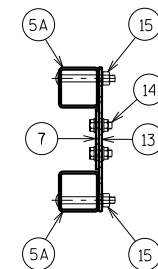
SECTION THRU POST WEB



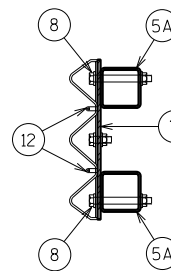
SECTION THRU RAIL

NOTE: CONNECTIONS AT LOWER RAILS SHOWN. CONNECTIONS AT TOP RAIL SIMILAR.

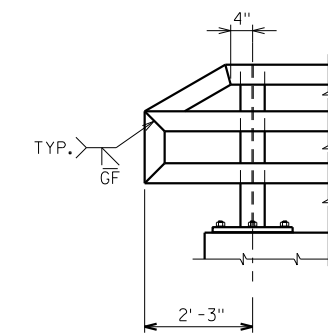
TYPICAL RAIL TO POST CONNECTIONS



SECTION C



SECTION D



PART ELEVATION OF RAILING

STATE PROJECT NUMBER

7238-00-71

LEGEND

- W6 x 25 WITH 1/8" X 1/2" HORIZ. SLOTS ON EACH SIDE OF POST FOR BOLT NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO TANGENT LINE.
- PLATE 1/4" X 11 3/4" X 1'-8" WITH 1 5/8" X 1 5/8" SLOTTED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN. SLOTS PARALLEL TO SHORT SIDE OF PLATE.
- ASTM A449 - 1/8" DIA. ANCHOR BOLTS WITH NUT AND HARDENED WASHER (ALL GALVANIZED), 5 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 2. CHAMFER TOP OF BOLTS BEFORE THREADING. USE 10 3/4" LONG. (AN EQUIVALENT THREADED ROD WITH NUTS AND HARDENED WASHERS MAY BE SUBSTITUTED FOR ANCHOR BOLTS IN WINGS IF REQ'D. FOR CONSTRUCTIBILITY.)
- 5/8" X 11" X 1'-8" ANCHOR PLATE (GALVANIZED) WITH 1 5/8" DIA. HOLES FOR ANCHOR BOLTS NO. 3
- TS 5 x 4 x 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
- TS 5 x 5 x 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
- 7/8" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, 3/8" X 1 5/8" X 1 5/8" WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION.)
- 1/2" THK. BACK-UP PLATE WITH 2 - 7/8" X 1/2" THREADED SHOP WELDED STUDS (NO. 12). BOLT TO RAIL AS SHOWN IN DETAIL. REQUIRED AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYMMETRICALLY ABOUT TUBES NO. 5A.
- 1" DIA. HOLES IN PLATE NO. 7 & TUBES NO. 5A FOR 7/8" DIA. A325 BOLTS WITH HEX NUTS AND WASHERS. 6 HOLES IN TUBES AND PLATE NO. 7.
- SPLICE SLEEVE FABRICATED FROM 1/4" PLATE. PROVIDE "SLIDING FIT".
- 3/8" X 3 5/8" X 2'-4" PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.
- 3/8" X 2 5/8" X 2'-4" PLATE USED IN NO. 5, 3/8" X 3 5/8" X 2'-4" PLATE USED IN NO. 5A. 2 PER RAIL.
- 7/8" φ A325 ROUND HEAD BOLT WITH NUT, WASHER, AND LOCK WASHER. USE 1 5/8" X 1/4" LONGIT. SLOTTED HOLES AT FIELD JOINTS IN PLATE NO. 10A.
- 7/8" DIA. X 1/2" LONG THREADED SHOP WELDED STUDS (2 REQ'D).
- 3/8" X 8" X 1'-6" PLATE. BOLT TO RAIL AS SHOWN IN DETAIL. REQ'D. AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYM. ABOUT TUBES NO. 5A.
- 7/8" DIA. X 2" LONG A325 HEX BOLT WITH NUT AND WASHER (5 REQ'D.).
- 1" φ HOLES IN TUBES NO. 5A FOR 7/8" DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER AND LOCK WASHER (4 REQ'D.). 4 HOLES IN TUBES.

GENERAL NOTES

- BID ITEM SHALL BE "RAILING TUBULAR TYPE M B-06-0187" WHICH INCLUDES ALL ITEMS SHOWN.
- RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. HOLLOW RAILING STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED FY = 50 KSI. ANCHOR PLATES, AND SPLICE TUBE PLATES 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 1/8 TURN.
- RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF THREE (3) POSTS WITHOUT SPLICES WHERE POSSIBLE.
- ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
- WELD IS THE SAME ON BOTH FLANGES. FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING.
- FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 2 AND CAULK AROUND PERIMETER OF PLATE NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.
- 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 & STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY SSPC SPECIFICATIONS.
- THIS RAILING MEETS NCHRP REPORT 350 EVALUATION CRITERIA FOR TEST LEVEL 4 (TL-4).
- PLACE FIRST BOTTOM LONGITUDINAL BAR CLEAR OF DRIP GROOVE.

8

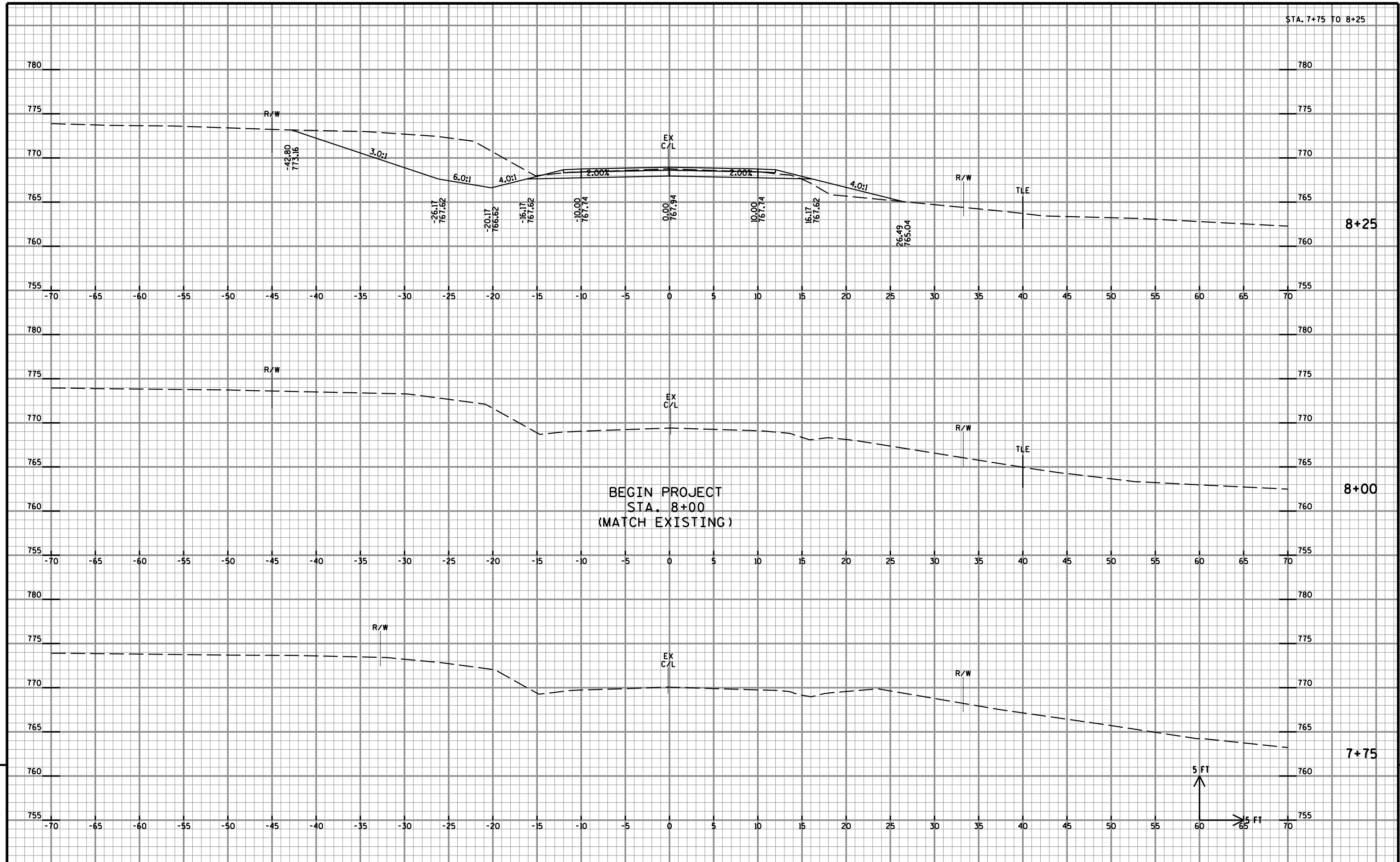
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-06-0187			
DRAWN BY CJM		PLANS CK'D. JCK	
TUBULAR STEEL RAILING TYPE M			SHEET 14 OF 14

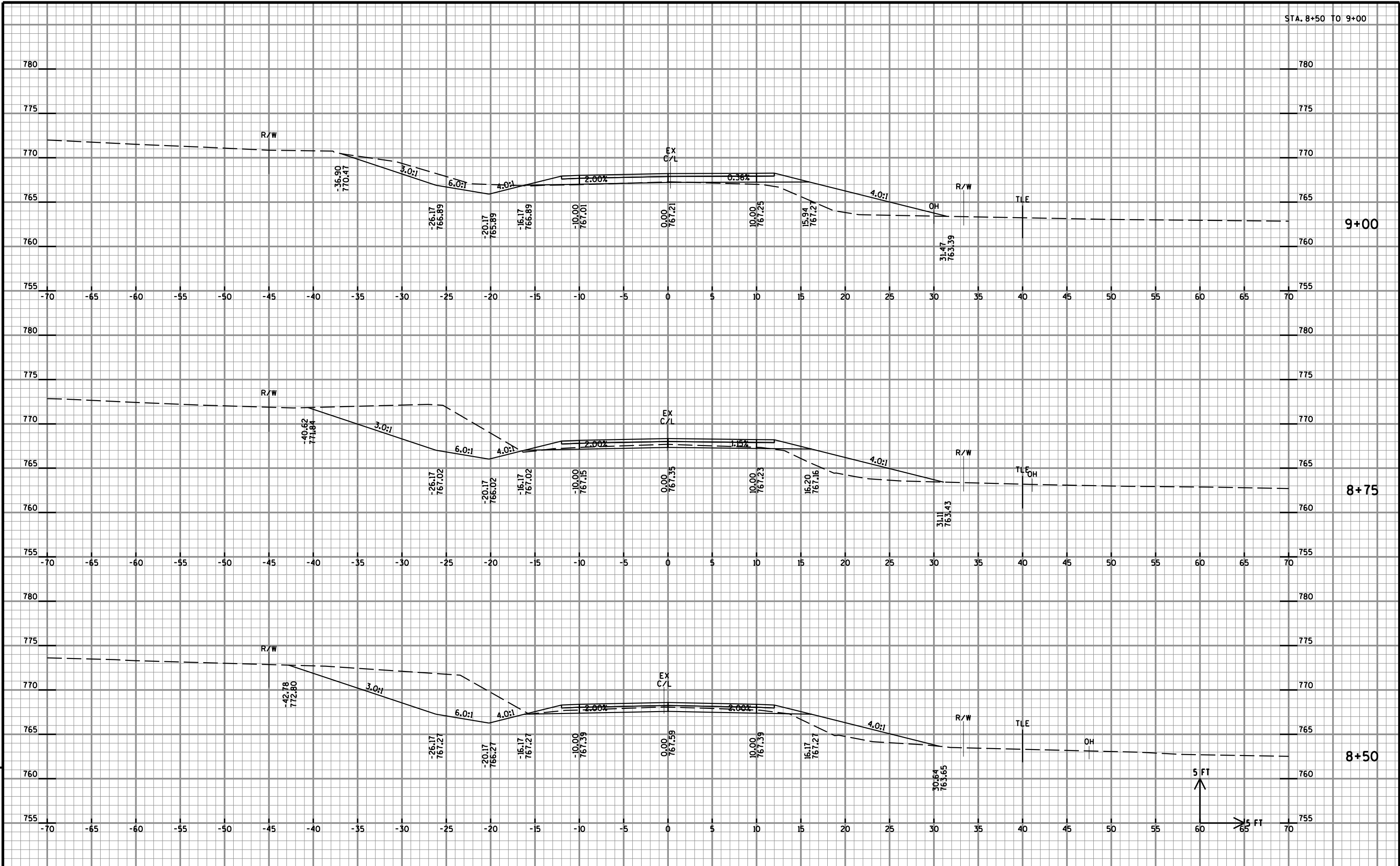
ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

EARTHWORK SUMMARY (CATEGORY 0010)										
DIVISION	STATION	AREA			INCREMENTAL VOLUME			CUMULATIVE VOLUME		
		CUT SF	SALVAGED/ UNUSEABLE PAVEMENT MATERIAL SF	FILL SF	CUT (1) CY	SALVAGED/ UNUSEABLE PAVEMENT MATERIAL (2) CY	FILL (3) CY	CUT (1) 1.00 CY	EXPANDED FILL (4) 1.30 CY	MASS ORDNATE ±(5) CY
1 SCHOEPPS VALLEY RD	8+00	20	0	0						
	8+25	108	0	8	59	0	3	59	4	55
	8+50	84	0	17	89	0	11	148	18	130
	8+75	74	0	23	73	0	18	221	42	179
	9+00	17	0	31	43	0	25	264	74	190
	9+16	14	0	41	9	0	21	273	101	172
	9+25	13	0	47	5	0	15	278	121	157
	9+50	1	0	58	7	0	48	285	183	102
	9+74.67	3	0	26	2	0	39	287	234	53
	STRUCTURE (B-6-187)									
	10+25.33	2	0	40	4	0	49	4	64	-60
	10+50	6	0	65	9	0	36	13	111	-98
	10+75	12	0	14	14	0	11	27	125	-98
	11+00	17	0	10	19	0	4	46	130	-84
	11+25	23	0	0	18	0	0	64	130	-66
	11+42	32	0	0	8	0	0	72	130	-58
	11+50	20	0	0						
TOTALS					359	0	280			
205.0100 EXCAVATION COMMON =					SAY 359		208.0100 BORROW =			
							SAY 58			

NOTES:
1) EXCAVATION COMMON IS THE SUM OF THE CUT COLUMN. ITEM NUMBER 205.0100
2) SALVAGED/UNUSEABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
3) DOES NOT INCLUDE UNUSABLE PAVEMENT EXCAVATION VOLUME.
4) EXPANDED FILL FACTOR = 1.30 EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR
5) THE MASS ORDNATE ± QTY CALCULATED FOR THE DIVISION.

PLUS (+) QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION.
MINUS (-) QUANTITY INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.





PROJECT NO: 7238-00-71

HWY: SCHOEPPE VALLEY ROAD

COUNTY: BUFFALO

CROSS SECTIONS

SHEET

E

FILE NAME : U:\42-0905.00 - Buffalo County, Town of Waumandee, Schoeppe Valley Road\InRoads\420905_xs.dgn

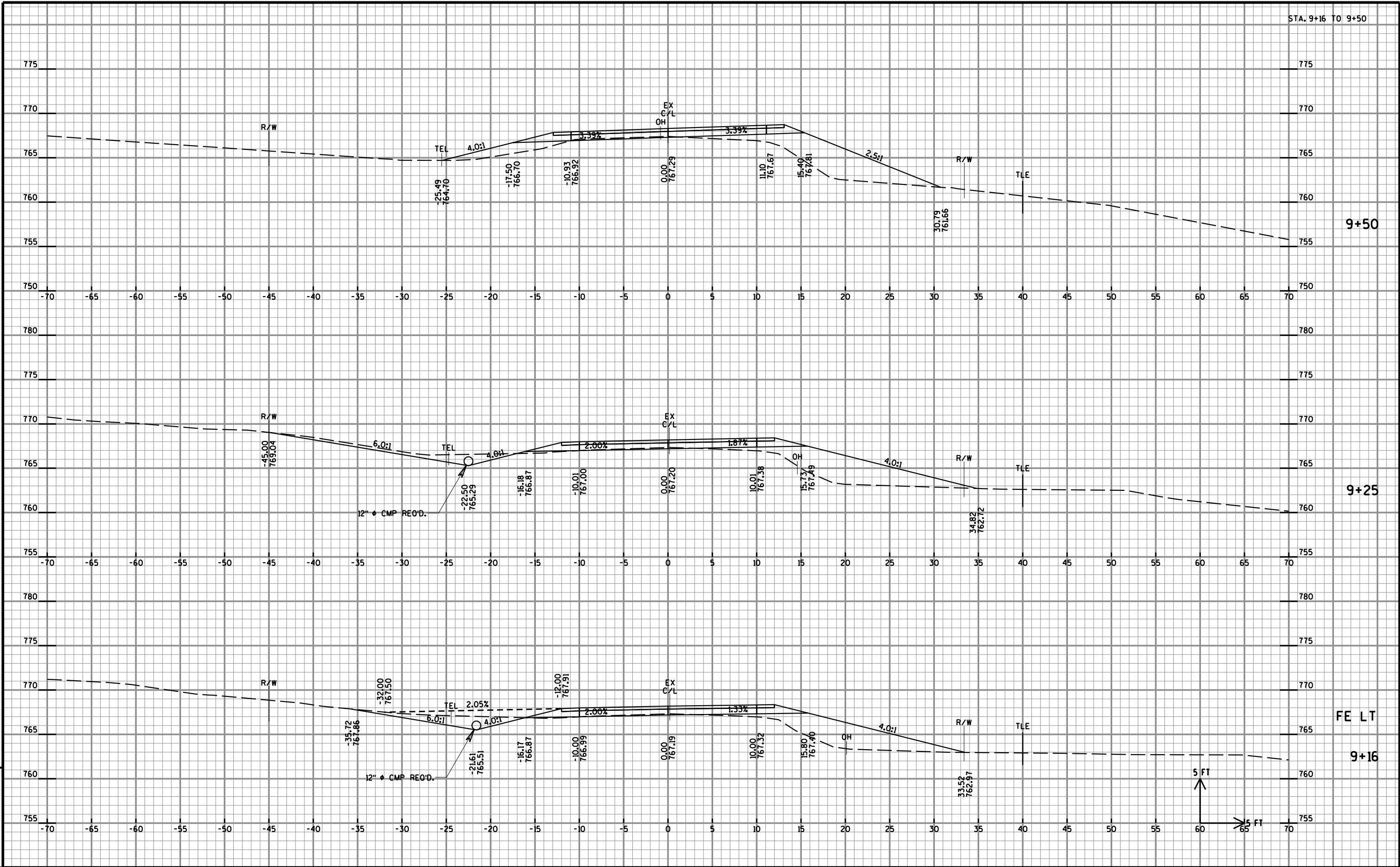
PLOT DATE : 7/7/2014

PLOT BY : AYRES-EC

PLOT NAME :

PLOT SCALE : 1:10

WISDOT/CADDs SHEET 21



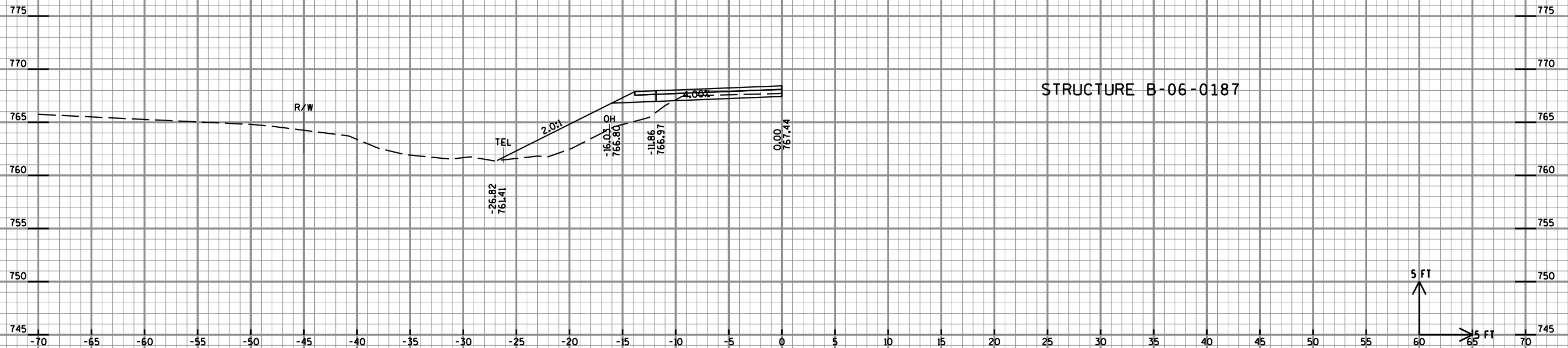
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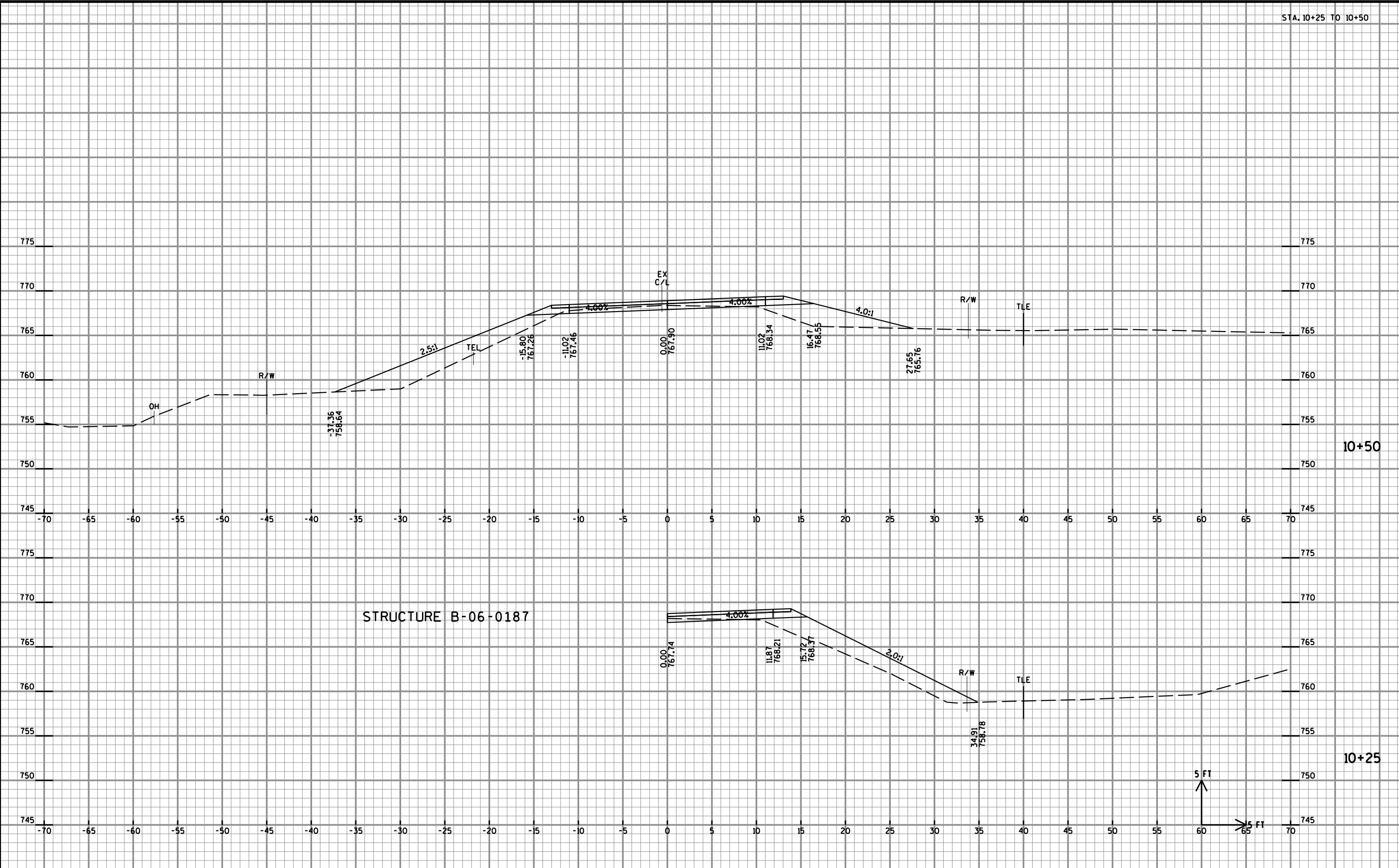
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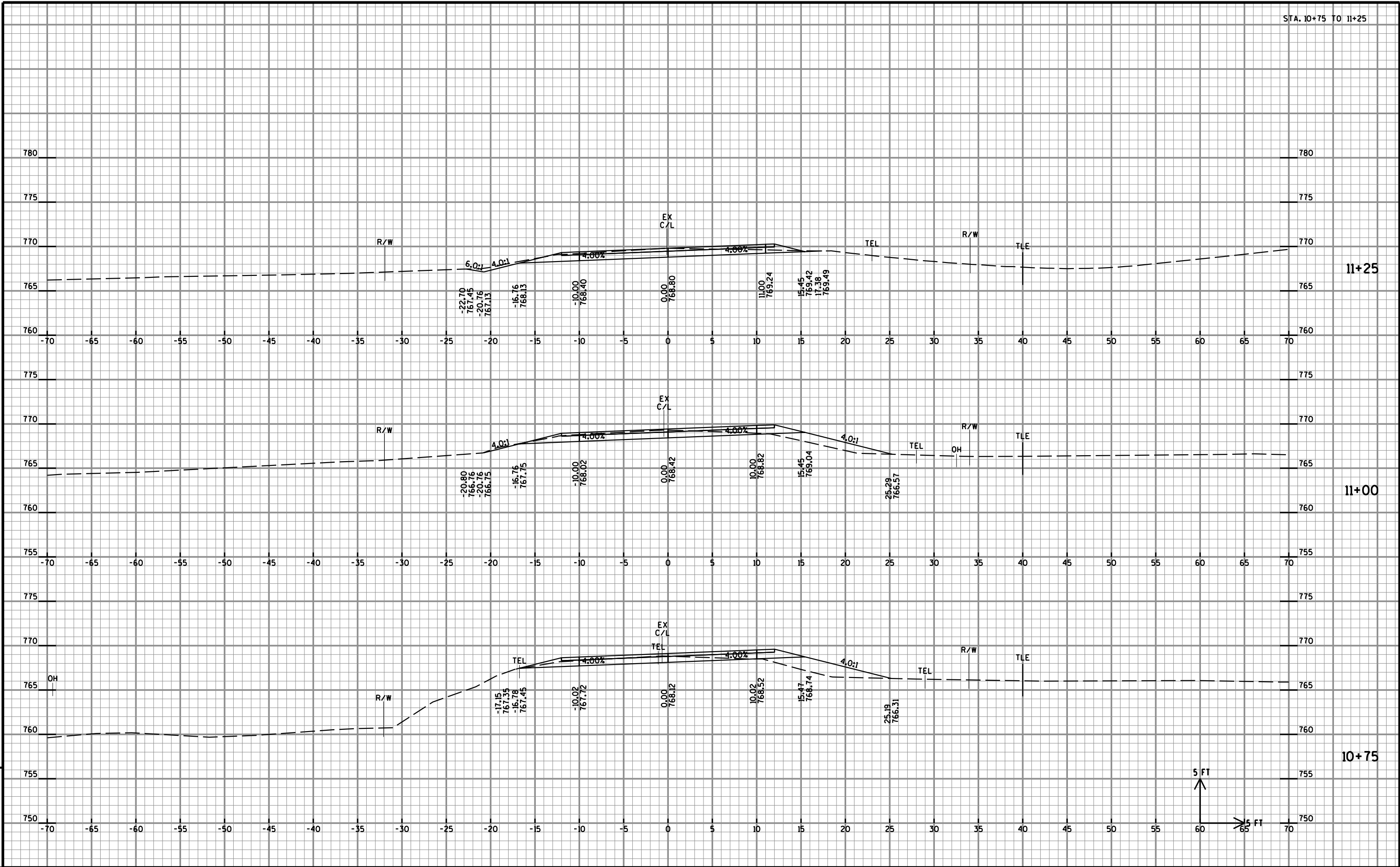
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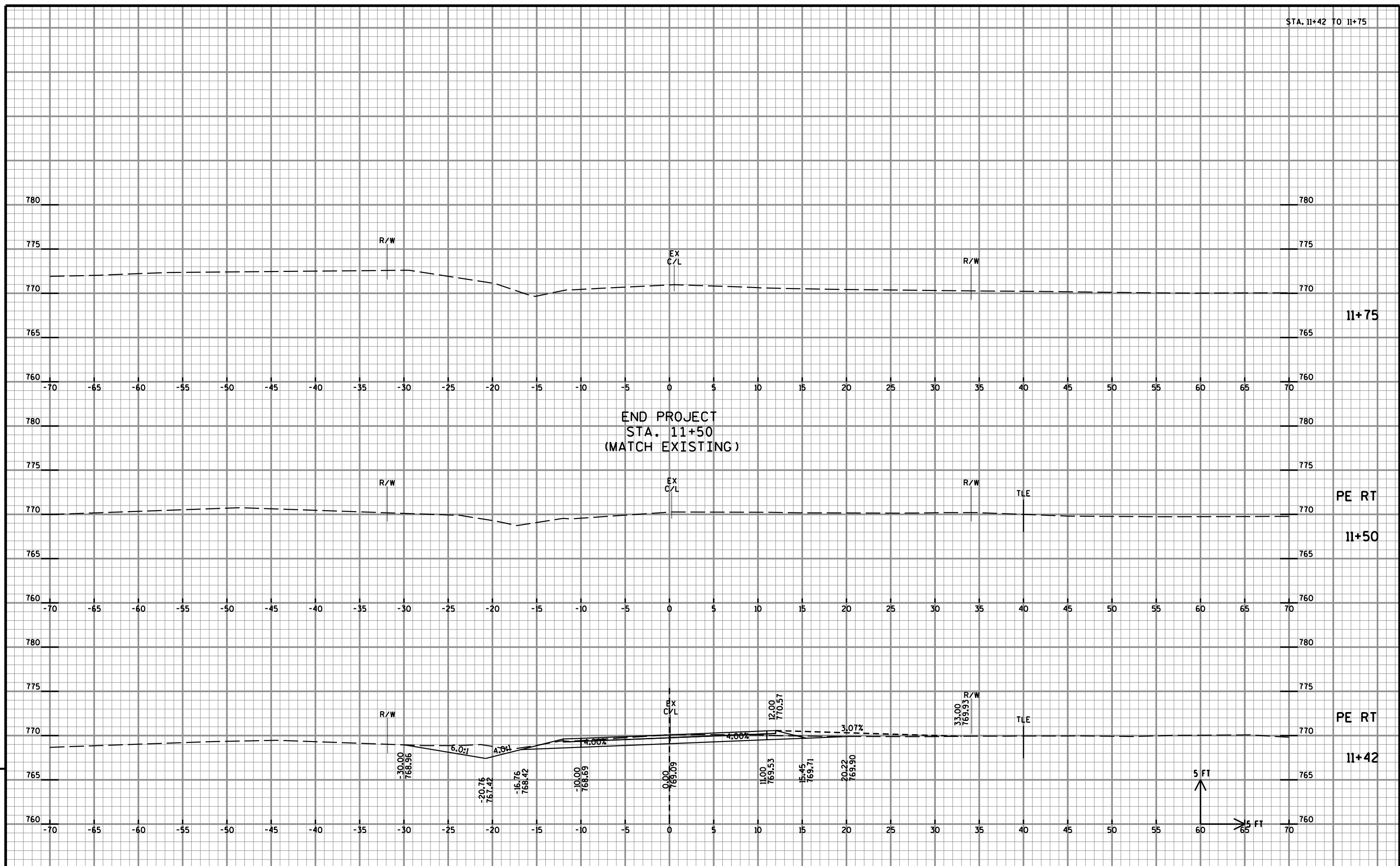
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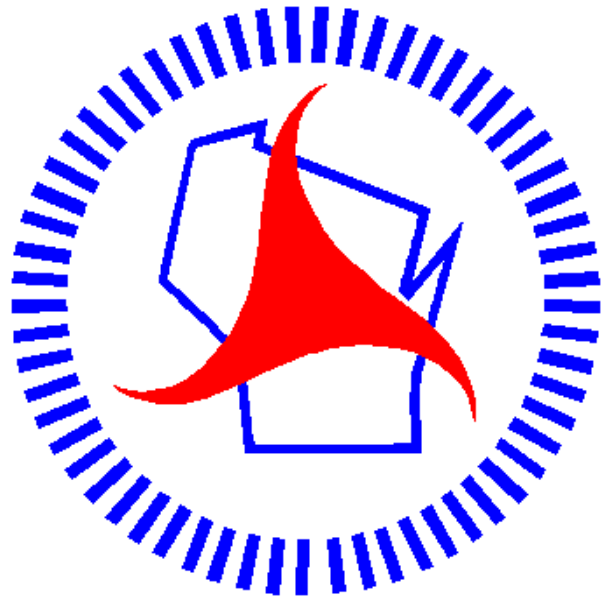
9











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