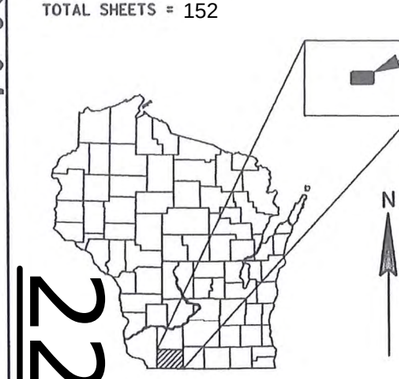
MAD NOVEMBER 2014

PROJECT ID: 5944-03-84
WITH: N/A

ORDER OF SHEETS

TOTAL SHEETS = 152



COUNTY: LAFAYETTE

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5944-03-84	———	—

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

DARLINGTON - ARGYLE

(WELLS STREET - CLAY STREET)

STH 81

LAFAYETTE COUNTY

STATE PROJECT NUMBER
5944-03-84

BEGIN PROJECT
STA 6+75
Y = 166,017.36
X = 483,355.44

END PROJECT
STA 23+25
Y = 166,170.74
X = 484,968.09

T-2-N

R-3-E

LAYOUT
SCALE 0 500 FT.
TOTAL NET LENGTH OF CENTERLINE = 0.000 MI.

"COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), LAFAYETTE COUNTY."

DESIGN DESIGNATION

A.A.D.T. (2015)	=	2,750
A.A.D.T. (2035)	=	3,050
D.H.V. (2035)	=	403
D.D.	=	60/40
T.	=	17.3%
DESIGN SPEED	=	25 MPH
ESALS	=	N/A

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W 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
- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

ORIGINAL PLANS PREPARED BY

KNIGHT
Engineers & Architects
700 N Third Street
Suite 104
La Crosse, WI 54601-3382
Phone: (608) 519-1455

WISCONSIN
RYAN B. McKANE
E-37669
HOLMEN, WI
PROFESSIONAL ENGINEER

Ryan B. McKane

3/27/2014 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
- Surveyor
- Designer: KNIGHT E/A, INC.
- Project Manager: MAHESH SHRESTHA
- Regional Examiner
- Regional Supervisor: WILLIAM STROBEL
- C.O. Examiner

APPROVED FOR THE DEPARTMENT
DATE: 3/27/14 William Strobel (Signature)

E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 10

GENERAL NOTES

- NO TREES OR SHRUBS SHALL BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE BEEN DESIGNATED FOR REMOVAL BY THE ENGINEER.
- DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE SALVAGED TOPSOILED, FERTILIZED, AND SEEDED AS DIRECTED BY THE ENGINEER.
- WHEN PORTIONS OF EXISTING ASPHALTIC SURFACES ARE TO BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION, THE LINE OF SUCH REMOVAL SHALL BE NEATLY DELINEATED WITH A SAW CUT JOINT THROUGH THE ASPHALTIC SURFACE SO THAT REMOVAL OF THE ASPHALT SHALL BE ACCOMPLISHED WITHOUT DAMAGE TO REMAINING PORTIONS. THE LOCATION OF SAW JOINTS AND THE AMOUNT REMOVED AT SIDE ROADS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- PAVING LIMITS ARE TO BE DETERMINED BY THE ENGINEER.
- CROSS SLOPES AS SHOWN ON THE TYPICAL SECTION WILL VARY AT THE INTERSECTIONS.
- THE LOCATIONS OF UTILITIES SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT THAT ARE NOT SHOWN.
- UTILITIES ARE SHOWN AS EXISTED PRIOR TO RELOCATION ACTIVITIES.
- WISDOT MONUMENTS WILL BE SUPPLIED BY THE STATE AND INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.

UTILITY CONTACTS

STEVE BISHOP
CENTURYLINK - COMMUNICATION LINE
130 4TH STREET
BARABOO, WI 53913
(608) 355-7501 (OFFICE)
(608) 963-8594 (CELL)
STEVEN.BISHOP@CENTURYLINK.COM

JASON HOGAN
ALLIANT ENERGY- ELECTRICITY/ GAS/ PETROLEUM
4902 N BILTMORE LANE
SUITE 1000
MADISON, WI 53718
(608) 395-7395
JASONHOGAN@ALLIANTENERGY.COM

JEREMY WILLIAMS
CITY OF DARLINGTON - SEWER & WATER
627 MAIN ST
P.O. BOX 207
DARLINGTON, WI 53530
(608) 482-3431
JEREMY.WILLIAMS@CITYOFDARLINGTONWI.ORG

JASON HEMING
ALLIANT ENERGY- ELECTRICITY/ GAS/ PETROLEUM
490 SHAKERAG STREET
MINERAL POINT, WI 53565
(608) 458-4542 (OFFICE)
(608) 295-9730 (CELL)
JASONHEMING@ALLIANTENERGY.COM

MATT FORGAS
MEDIACOM LLC WISCONSIN - COMMUNICATION LINE
808 E. NORTH ST
ELBURN, IL 60119
(815) 597-5103
MFORGAS@MEDIACOMCC.COM

AREA CONTACTS

WisDOT SW REGION (MADISON)
MAHESH SHRESTHA
2101 WRIGHT ST
MADISON, WI 53704
PHONE: (608) 245-2674
MAHESH.SHRESTHA@DOT.WI.GOV

DESIGN CONTACT
KNIGHT E/A
HEIDI SCHWARZ
700 N THIRD ST., SUITE 104
LA CROSSE, WI 54601
PHONE: (608) 519-1455 EXT. #2
HSCHWARZ@KNIGHTEA.COM

WisDNR CONTACT
LAURA BUB
3911 FISH HATCHERY RD
FITCHBURG, WI 53711
(608) 275-3485
LAURA.BUB@WISCONSIN.GOV

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

STANDARD ABBREVIATIONS

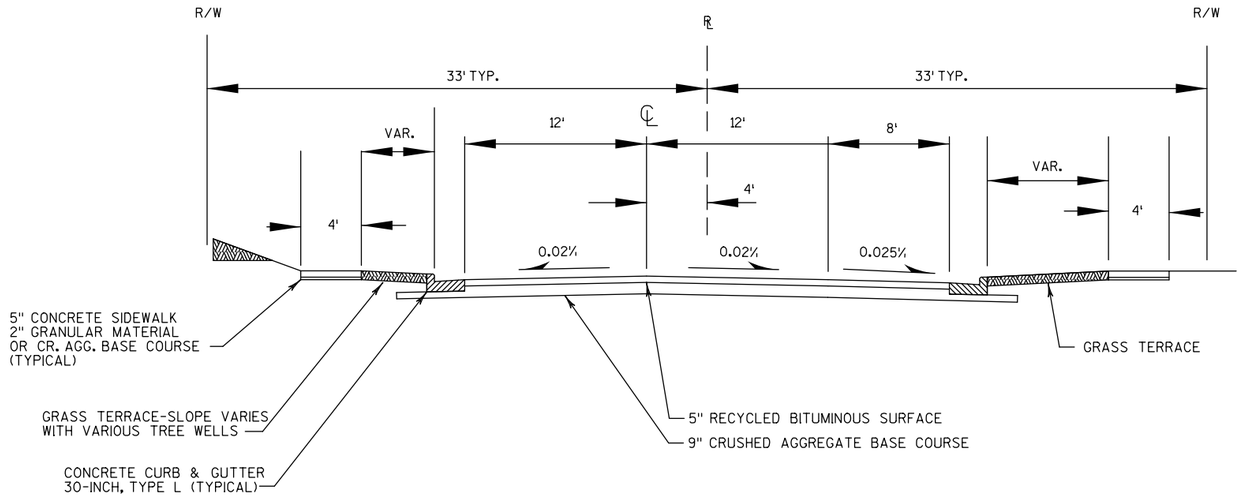
AC	ACRE	INL	INLET
AGG	AGGREGATE	INV	INVERT
AH	AHEAD	JCT	JUNCTION
AADT	ANNUAL AVERAGE DAILY TRAFFIC	LT	LEFT
ASPH	ASPHALTIC	L	LENGTH OF CURVE
AVG	AVERAGE	LIN FT or LF	LINEAR FOOT
BK	BACK	LS	LUMP SUM
BAD	BASE AGGREGATE DENSE	NC	NORMAL CROWN
BM	BENCH MARK	N	NORTH
BR	BRIDGE	NB	NORTHBOUND
CL or C/L	CENTER LINE	NO	NUMBER
CE	COMMERCIAL ENTRANCE	PT	POINT
CONC	CONCRETE	PC	POINT OF CURVATURE
CO	COUNTY	PI	POINT OF INTERSECTION
CTH	COUNTY TRUNK HIGHWAY	PT	POINT OF TANGENCY
CR	CREEK	PCC	PORTLAND CEMENT CONCRETE
CABC	CRUSHED AGGREGATE BASE COURSE	LB	POUND
CY or CUYD	CUBIC YARD	PE	PRIVATE ENTRANCE
CULV	CULVERT	R	RADIUS
CP	CULVERT PIPE	RL or R/L	REFERENCE LINE
C & G	CURB AND GUTTER	RT	RIGHT
D	DEGREE OF CURVE	R/W	RIGHT-OF-WAY
DIA	DIAMETER	RD	ROAD
DISCH	DISCHARGE	SHLDR	SHOULDER
E	EAST	SB	SOUTHBOUND
EB	EASTBOUND	SF or SQ FT	SQUARE FEET
EL or ELEV	ELEVATION	SY or SQ YD	SQUARE YARD
EW	ENDWALL	SDD	STANDARD DETAIL DRAWINGS
ENT	ENTRANCE	STH	STATE TRUNK HIGHWAYS
EXC	EXCAVATION	SE	SUPERELEVATION
EX	EXISTING	T	TANGENT
FERT	FERTILIZER	TEMP	TEMPORARY
FE	FIELD ENTRANCE	USH	UNITED STATES HIGHWAY
FL or F/L	FLOW LINE	V	VELOCITY OR DESIGN SPEED
FT	FOOT	VC	VERTICAL CURVE
HMA	HOT MIX ASPHALT	WB	WESTBOUND
CWT	HUNDREDWEIGHT	YD	YARD

2

STATE PROJECT NO: 5944-03-84	HWY: STH 81	COUNTY: LAFAYETTE	GEN NOTES, STAND ABBR, & CONTACTS	SHEET NO: 2	E

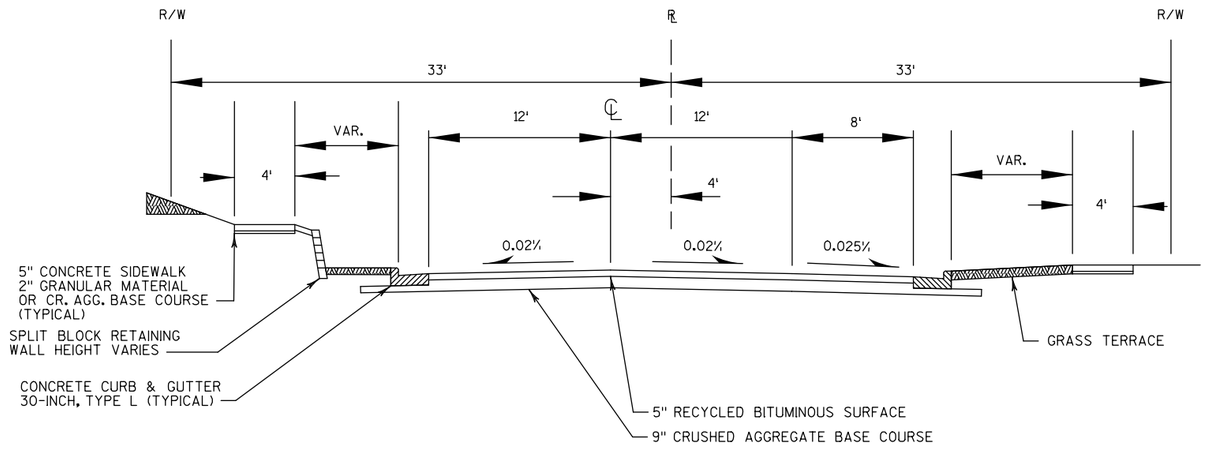
FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

2



TYPICAL EXISTING SECTION

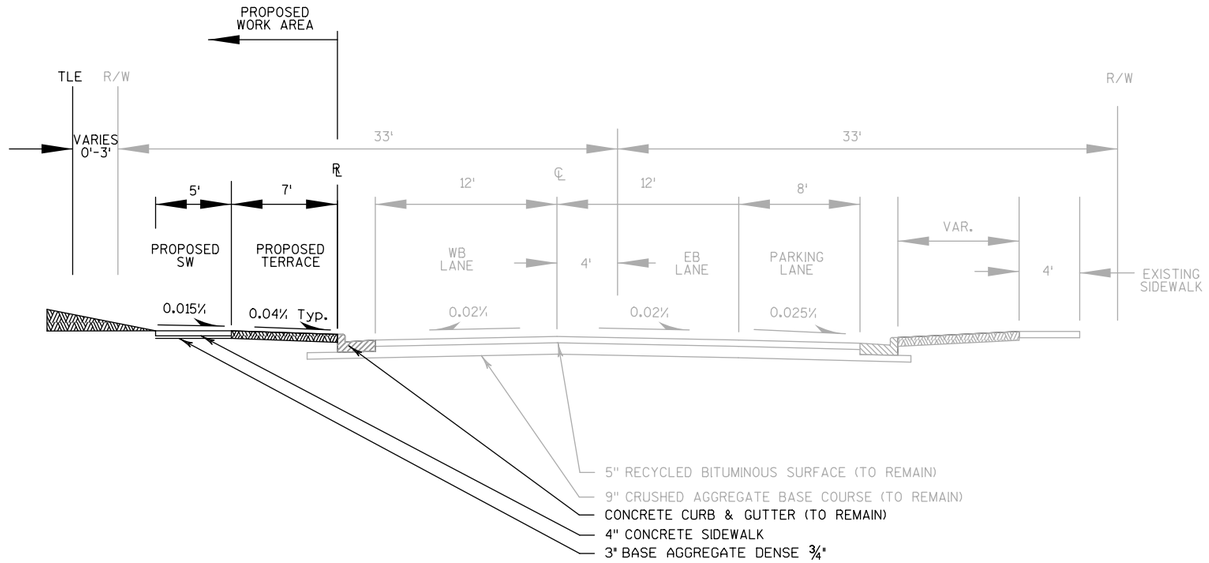
STA. 6+90 TO STA. 9+50
STA. 21+00 TO STA. 23+00



TYPICAL EXISTING SECTION

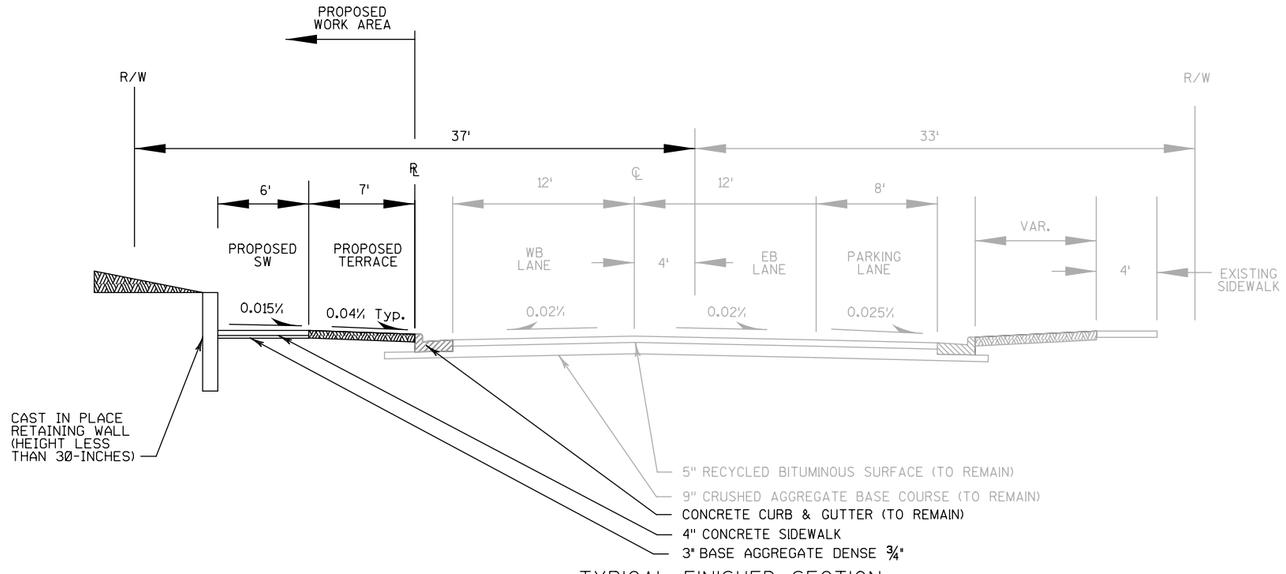
STA. 10+13 TO STA. 21+00

2



TYPICAL FINISHED SECTION

STA. 6+90 TO STA. 9+00

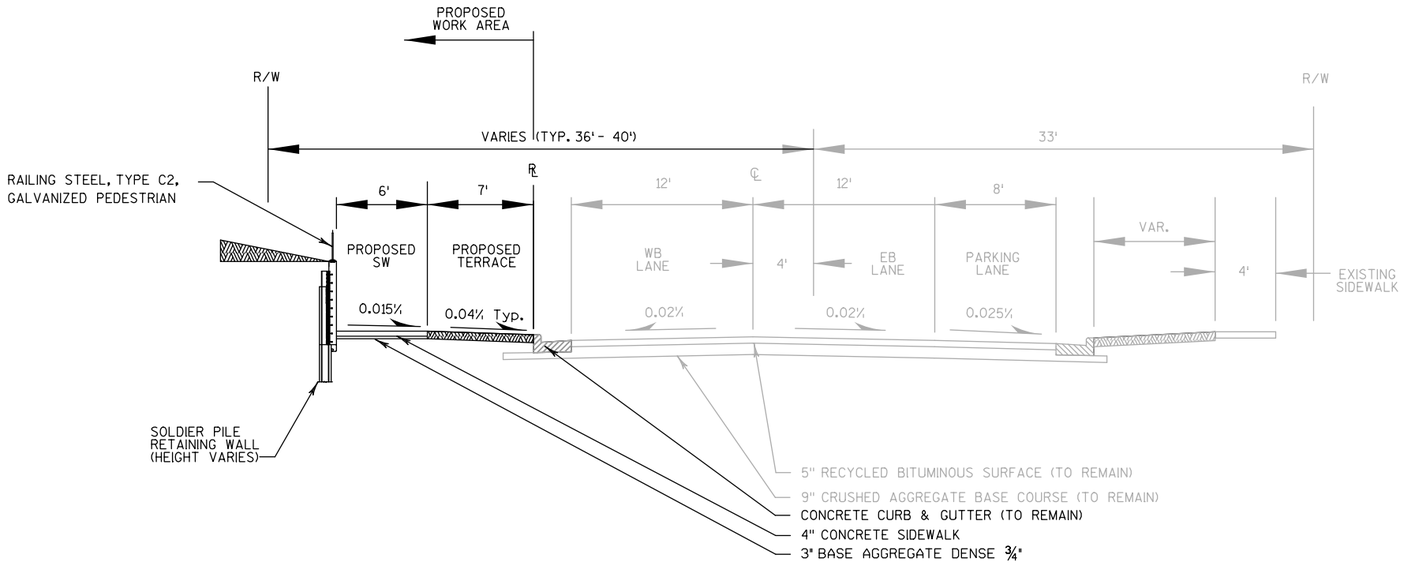


TYPICAL FINISHED SECTION

STA. 9+29 TO STA. 9+55

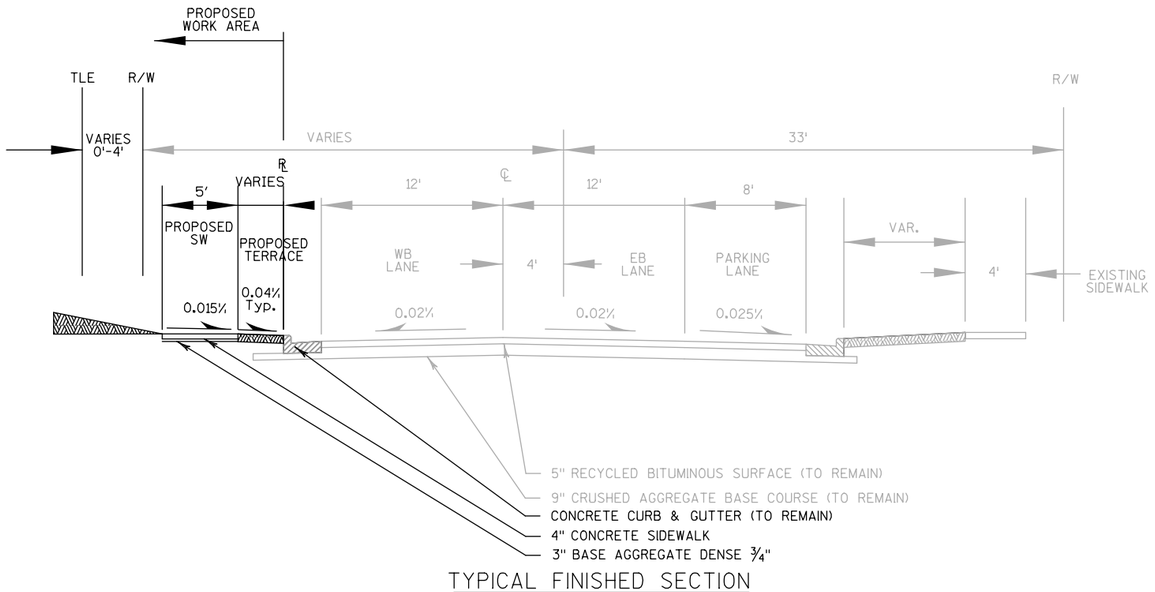
PROJECT NO: 5944-03-84	HWY: STH 81	COUNTY: LAFAYETTE	TYPICAL SECTIONS	SHEET 4	E

2



TYPICAL FINISHED SECTION

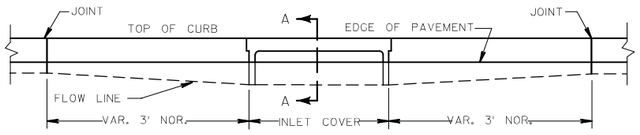
STA. 10+13 TO STA. 21+25



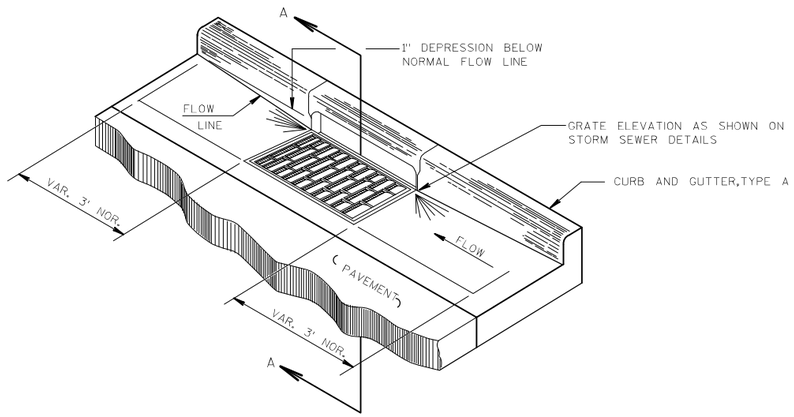
TYPICAL FINISHED SECTION

STA. 22+00 TO STA. 23+00

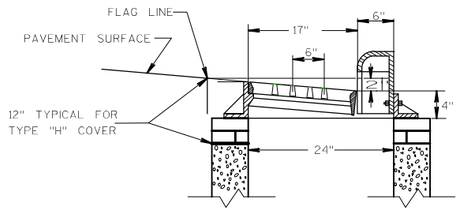
PROJECT NO: 5944-03-84	HWY: STH 81	COUNTY: LAFAYETTE	TYPICAL SECTIONS	SHEET 5	E



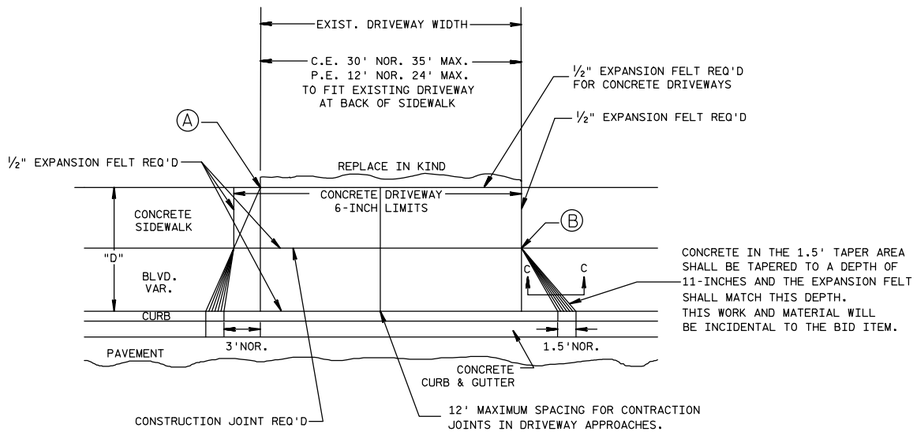
ELEVATION



DETAIL OF CURB AND GUTTER AT INLETS
(TYPE 3-H INLET SHOWN)



SECTION A-A

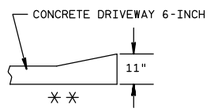


PLAN VIEW

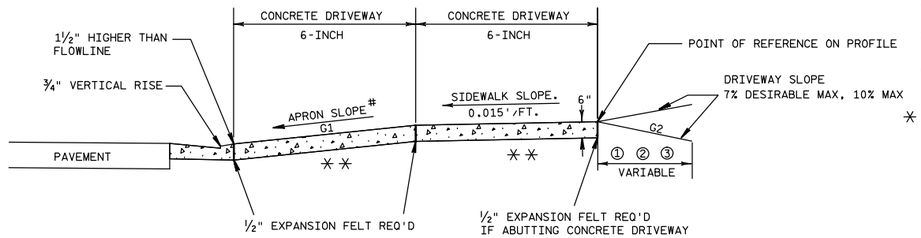
STA 8+10
STA 8+32
STA 14+80

Ⓐ WHEN "D" IS 13' OR LESS, ALIGN TAPER WITH BACK OF SIDEWALK

Ⓑ WHEN "D" IS GREATER THAN 13', ALIGN TAPER WITH FRONT OF SIDEWALK



SECTION C-C



TYPICAL SIDEWALK SECTION

①—6" CONCRETE DRIVEWAY OR H.E.S. CONCRETE DRIVEWAY

②— 6" BASE AGG. DENSE 3/4-INCH

③— 4" BASE AGG. DENSE 3/4-INCH BASE WITH 3" ASPHALTIC SURFACE

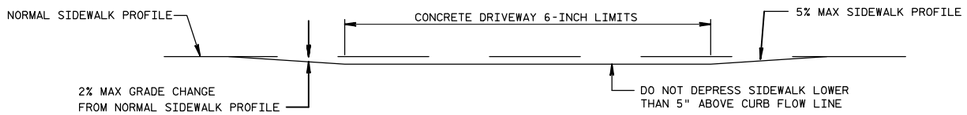
✳✳ = 6" BASE AGG. DENSE 3/4-INCH REQ'D UNDER CONCRETE DRWY

\#

TERRACE WIDTH	APRON SLOPE (G1)		
	MIN %	DESIRABLE %	MAX %
3 FT	7.0	8.5	9.0
4 FT	5.0	7.0	9.0
5 FT	4.0	7.0	9.0
6 FT	4.0	7.0	9.0
7 FT	3.5	7.0	9.0
8 FT	3.0	7.0	9.0

NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE

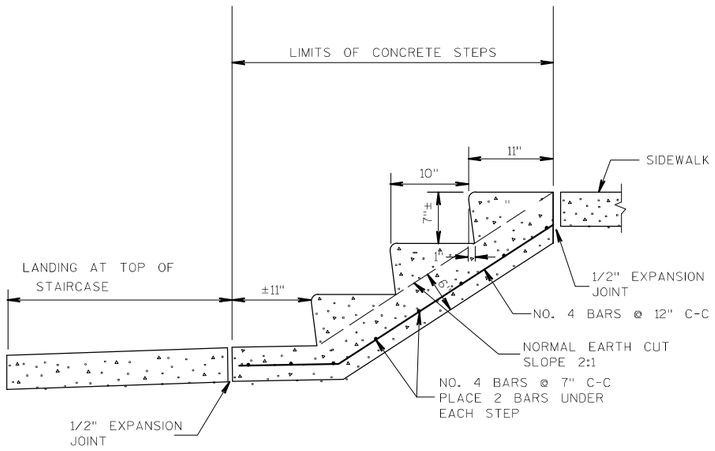


DEPRESSED SIDEWALK PROFILE DETAIL

DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER

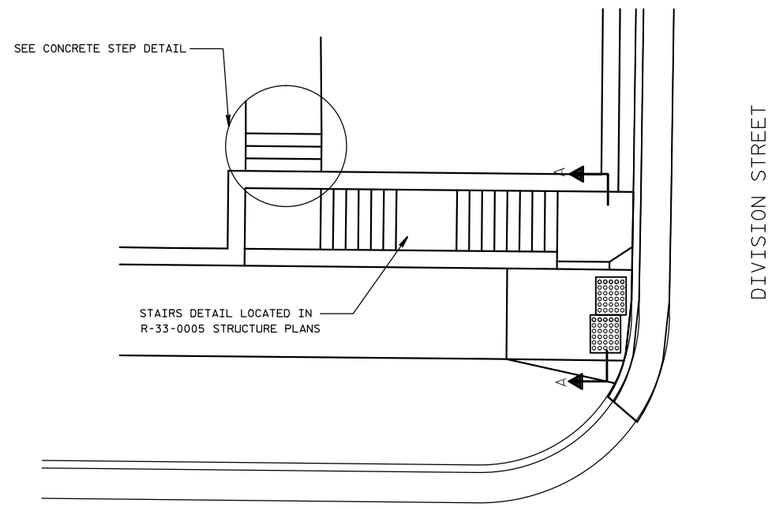
PROJECT NO: 5944-03-84	HWY: STH 81	COUNTY: LAFAYETTE	CONSTRUCTION DETAIL	SHEET 6	E

NOTE: THE EXACT LOCATION, WIDTHS & NUMBER OF STEPS TO BE DETERMINED BY THE ENGINEER IN FIELD.

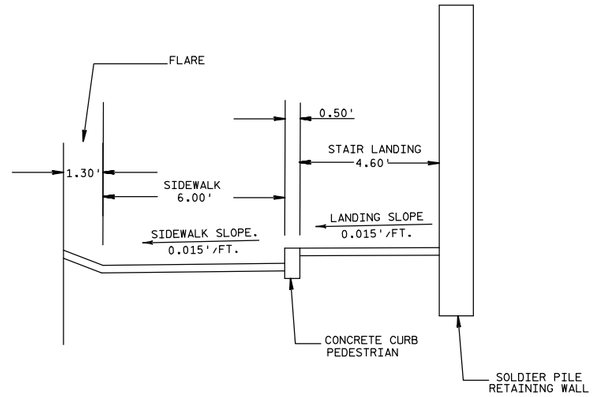


CONCRETE STEP DETAIL

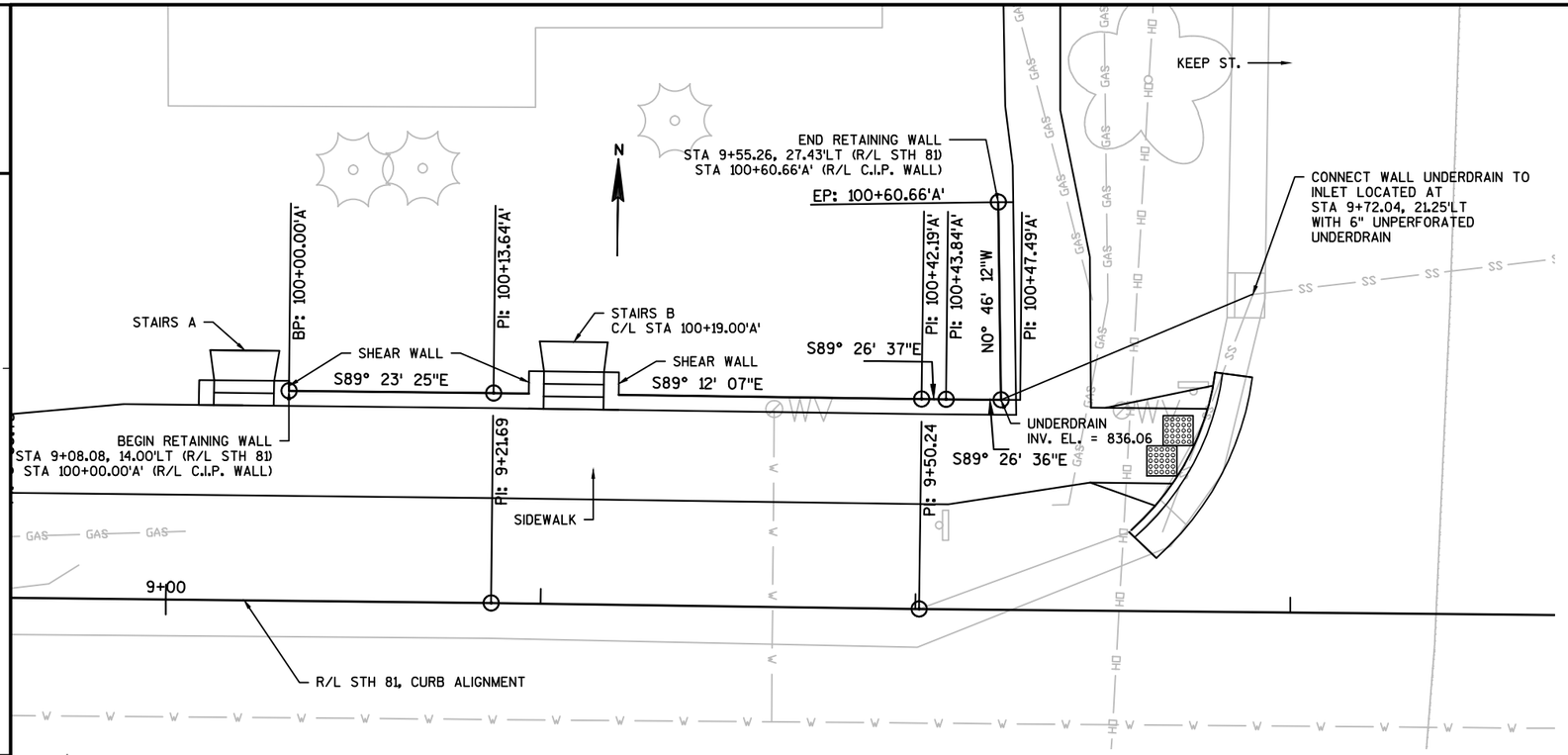
STA 15+98, 19' LT



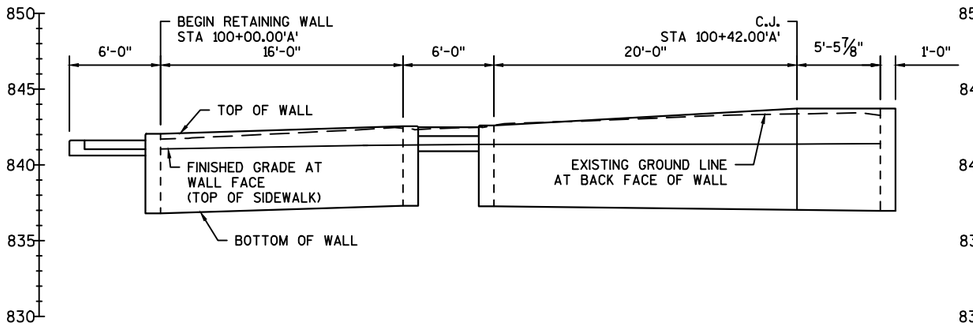
DIVISON ST/ STH 81 CURB RAMP/ STAIRWAY ACCESS DETAIL



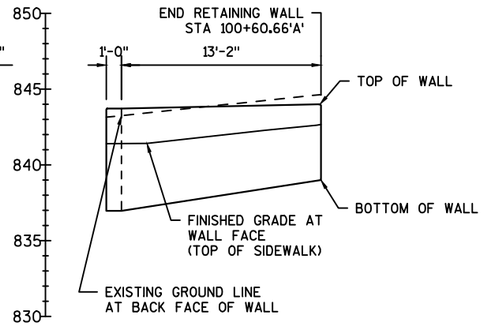
SECTION VIEW A-A



PLAN
(CORNER OF LOUISA ST. & KEEP ST.)



ELEVATION
(LOOKING NORTH AT FRONT FACE OF WALL)
(DISTANCES AND STATIONS ARE GIVEN ALONG BACK FACE OF WALL)



ELEVATION
(LOOKING WEST AT FRONT FACE OF WALL)
(DISTANCES AND STATIONS ARE GIVEN ALONG BACK FACE OF WALL)

DESIGN DATA
LIVE LOAD:
LIVE LOAD SURCHARGE: 100 P.S.F.

MATERIAL PROPERTIES:
CONCRETE MASONRY f'c = 4,000 P.S.I.
BAR STEEL REINFORCEMENT (GRADE 60)
fy = 60,000 P.S.I.

GENERAL NOTES:
DRAWINGS SHALL NOT BE SCALED.

BEVELED EXPOSED EDGES OF CONCRETE IS ¾-INCH, UNLESS OTHERWISE NOTED.

ALL DIMENSIONS ARE IN FEET AND INCHES, UNLESS OTHERWISE NOTED.

ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

ALL REINFORCEMENT SHALL HAVE A MINIMUM OF 2-INCHES CLEAR COVER UNLESS SHOWN OTHERWISE. REINFORCEMENT IN FACES CAST PERMANENTLY AGAINST EARTH SHALL HAVE A MINIMUM OF 3-INCHES CLEAR COVER.

6" DRAINAGE PIPE HAS A MINIMUM SLOPE OF 0.5%.

BACK FACE OF WALL FOLLOWS STH 81 CURB ALIGNMENT, 14'-0" TYPICAL OFFSET.

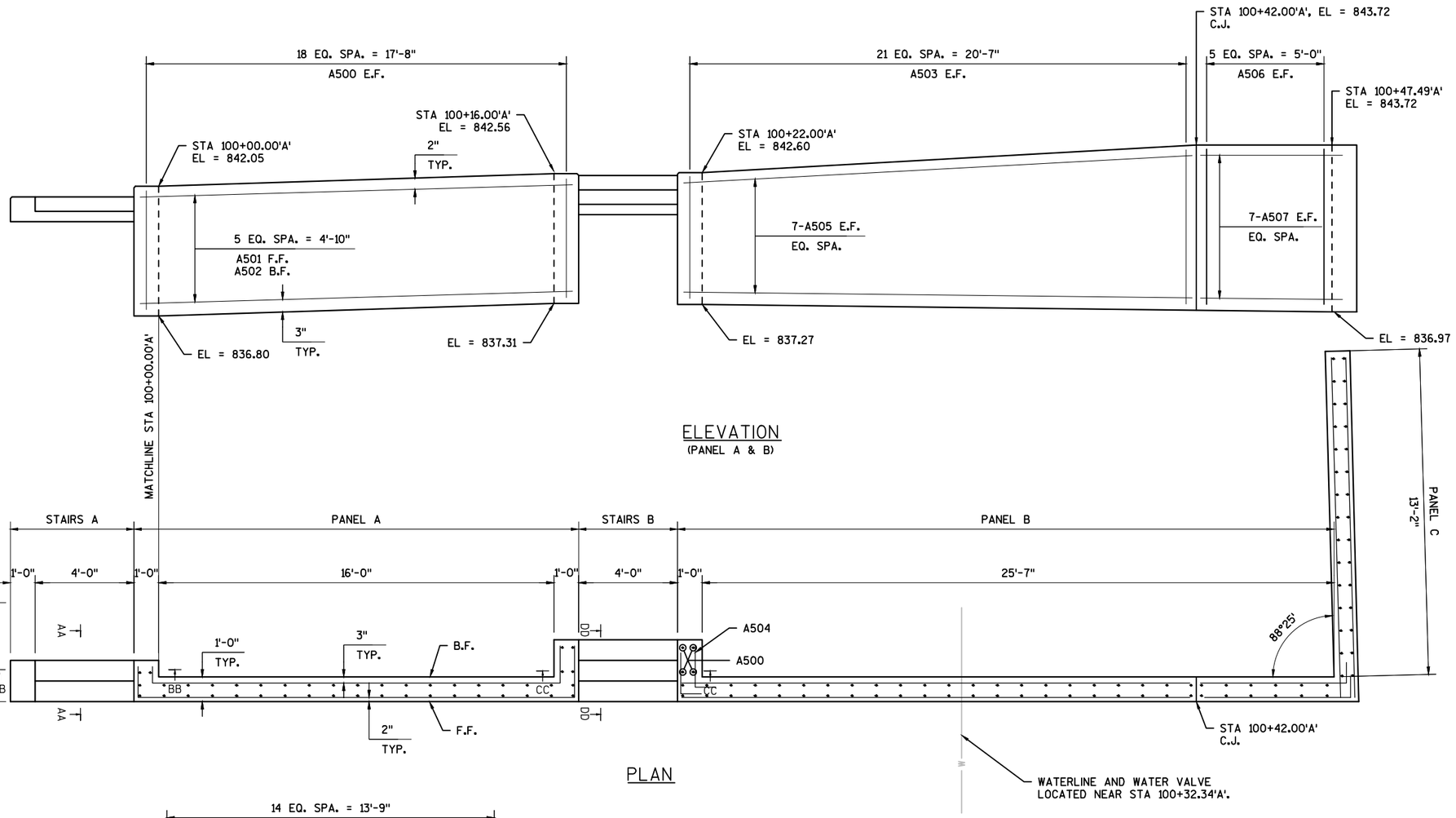
BACKFILL THE FACES OF THE WALL EQUALLY.

CONNECT THE UNDERDRAIN PIPE BENEATH THE SHEAR WALLS TO THE UNDERDRAIN PIPE BENEATH THE WALL ALONG STH 81.

CONNECTION FROM UNPERFORATED PIPE TO INLET IS INCIDENTAL TO PIPE UNDERDRAIN.

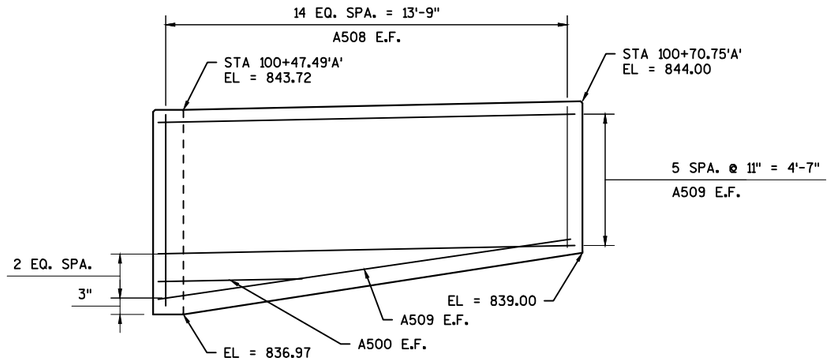
LEGEND
C.J. = CONTRACTION JOINT
INV. EL. = INVERT ELEVATION
C.I.P. = CAST IN PLACE

PROJECT NO: 5994-03-84	HWY: STH 81	COUNTY: LAFAYETTE	CONSTRUCTION DETAILS - CIP WALL	SHEET 8	E



ELEVATION
(PANEL A & B)

PLAN



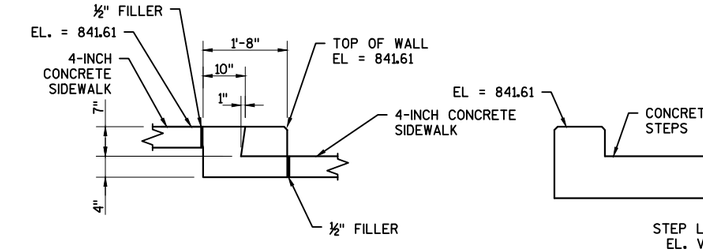
ELEVATION
(PANEL C)

LEGEND
E.F. = EACH FACE
B.F. = BACK FACE
F.F. = FRONT FACE
C.J. = CONTRACTION JOINT

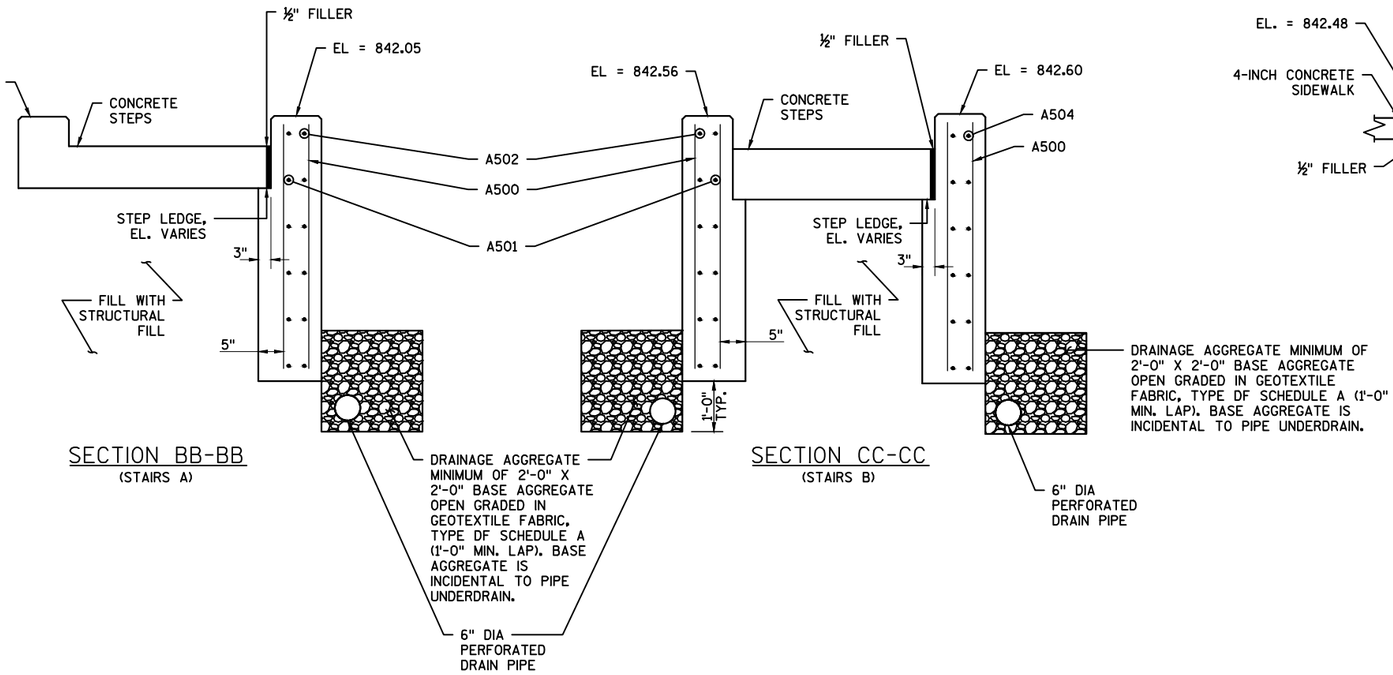
PROJECT NO: 5994-03-84	HWY: STH 81	COUNTY: LAFAYETTE	CONSTRUCTION DETAILS - CIP WALL	SHEET 9	E

FILE NAME : W:\7059.02\CAD\TEMP\59440304\WALL\CIP WALL.DWG PLOT DATE : 4/1/2014 7:25 AM PLOT BY : DWORAK, ALEX PLOT NAME :

WISDOT/CADDS SHEET 42

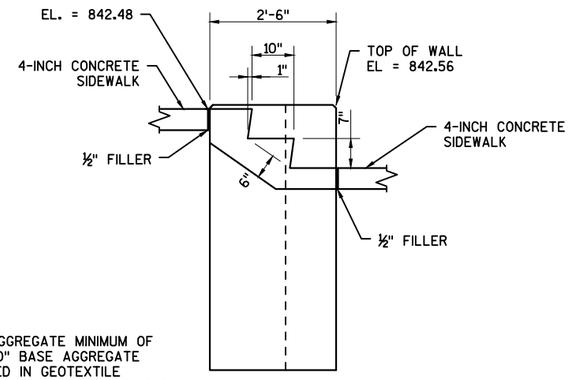


SECTION AA-AA
(STAIRS A)

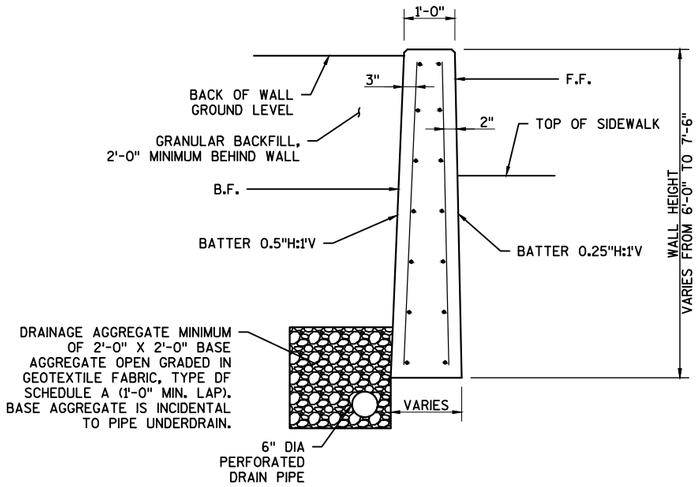


SECTION BB-BB
(STAIRS A)

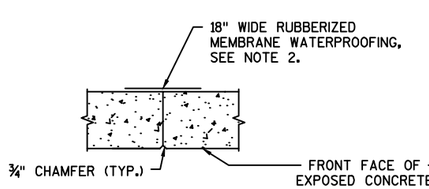
SECTION CC-CC
(STAIRS B)



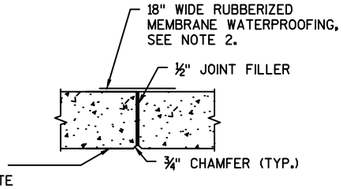
SECTION DD-DD
(STAIRS B)



TYPICAL SECTION
CAST IN PLACE CONCRETE WALL



C.I.P. WALL CONTRACTION
JOINT DETAIL



C.I.P. WALL EXPANSION
JOINT DETAIL

NOTES
PLACE 2-FT STRUCTURAL BACKFILL BELOW BOTTOM OF STEPS.

RUBBERIZED MEMBRANE WATERPROOFING RUNS FROM GROUND LEVEL DOWN TO BOTTOM OF WALL, COST INCIDENTAL TO "CONCRETE MASONRY RETAINING WALLS."

LEGEND
E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE

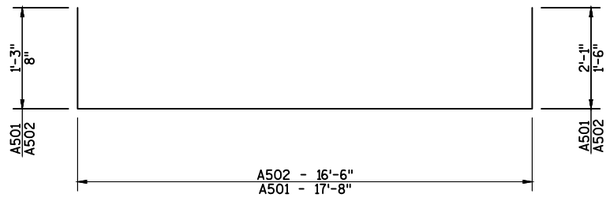
PROJECT NO:5994-03-84	HWY: STH 81	COUNTY:LAFAYETTE	CONSTRUCTION DETAILS - CIP WALL	SHEET 10	E

BILL OF BARS

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
A500	X	50	4'-10"			PAN. A & B VERT., PAN. C HORI.
A501	X	6	20'-9"	X		PANEL A HORIZONTAL
A502	X	6	18'-4"	X		PANEL A HORIZONTAL
A503	X	42	5'-7"		▲	PANEL B VERTICAL
A504	X	10	2'-5"	X		PANEL B HORIZONTAL
A505	X	14	20'-7"			PANEL B HORIZONTAL
A506	X	12	6'-4"			PANEL B VERTICAL
A507	X	14	6'-6"	X		PANEL B HORIZONTAL
A508	X	30	5'-6"		▲	PANEL C VERTICAL
A509	X	14	13'-9"			PANEL C HORIZONTAL

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

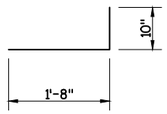
NOTE: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS FOR BENDING ARE OUT TO OUT OF BAR.



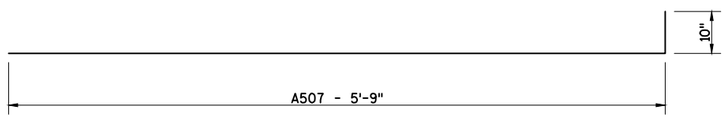
A501 & A502

SERIES OF BARS

BAR MARK	NO. REQ'D	LENGTH
A503	2 SERIES OF 21	4'-11" TO 6'-3"
A508	2 SERIES OF 15	4'-8" TO 6'-4"



A504

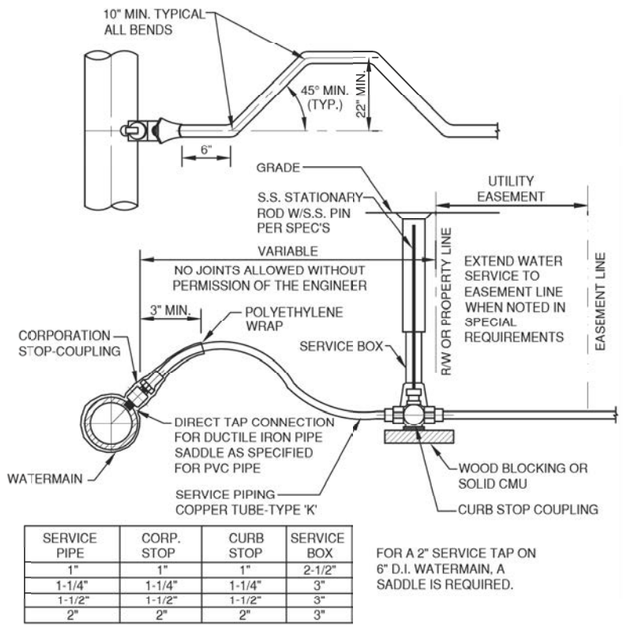


A507

2

WISCONSIN
LEE G.
NOVAK
E-23661
Green Bay,
PROFESSIONAL ENGINEER
SURVEYOR

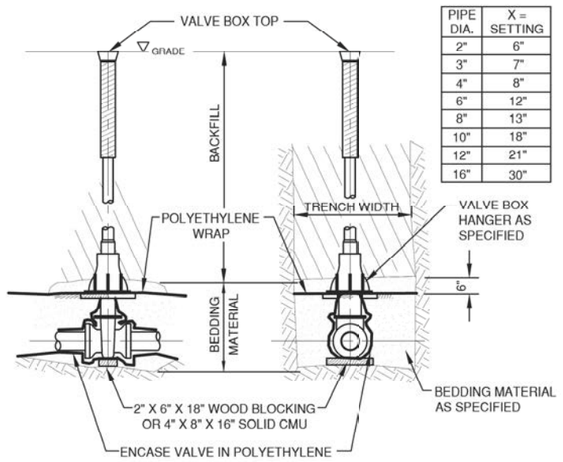
03/25/2014



SERVICE PIPE	CORP. STOP	CURB STOP	SERVICE BOX
1"	1"	1"	2-1/2"
1-1/4"	1-1/4"	1-1/4"	3"
1-1/2"	1-1/2"	1-1/2"	3"
2"	2"	2"	3"

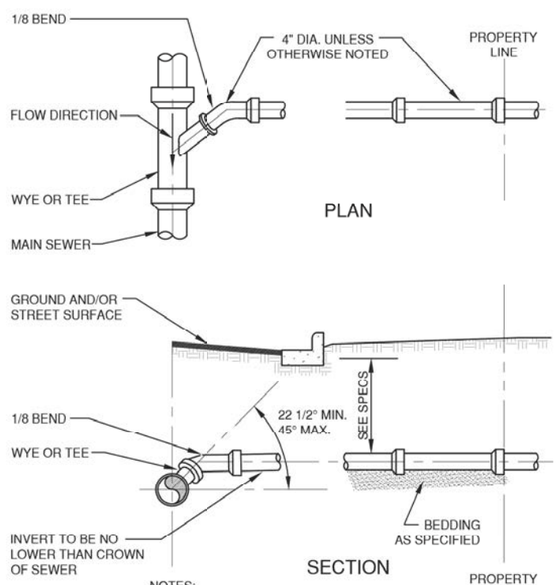
FOR A 2" SERVICE TAP ON 6" D.I. WATERMAIN, A SADDLE IS REQUIRED.

TAP SERVICE PIPING (COPPER)



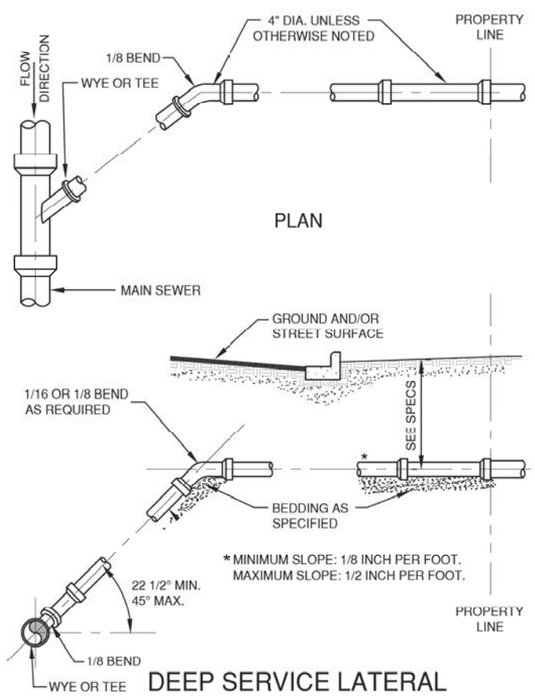
PIPE DIA.	X = SETTING
2"	6"
3"	7"
4"	8"
6"	12"
8"	13"
10"	18"
12"	21"
16"	30"

VALVE BOX SETTING

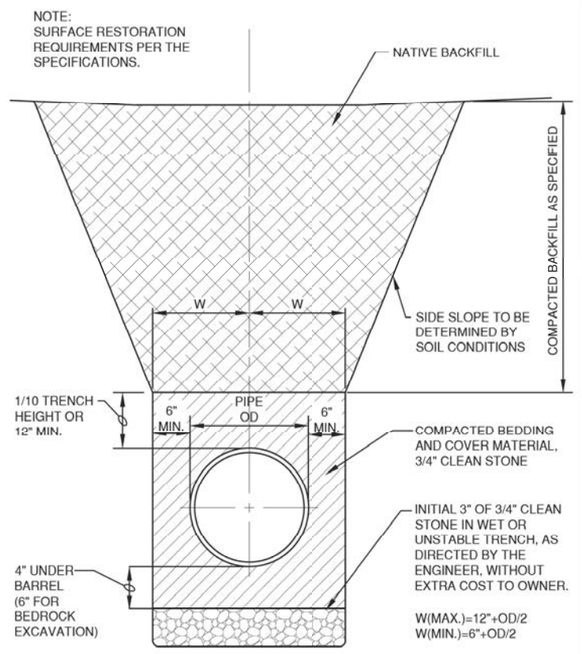


NOTES:
1. SADDLE CONNECTIONS NOT PERMITTED.
2. BACKFILL TO CONFORM TO MAIN SEWER.
3. MINIMUM SLOPE: 1/8 INCH PER FOOT.
4. MAXIMUM SLOPE: 1/2 INCH PER FOOT.

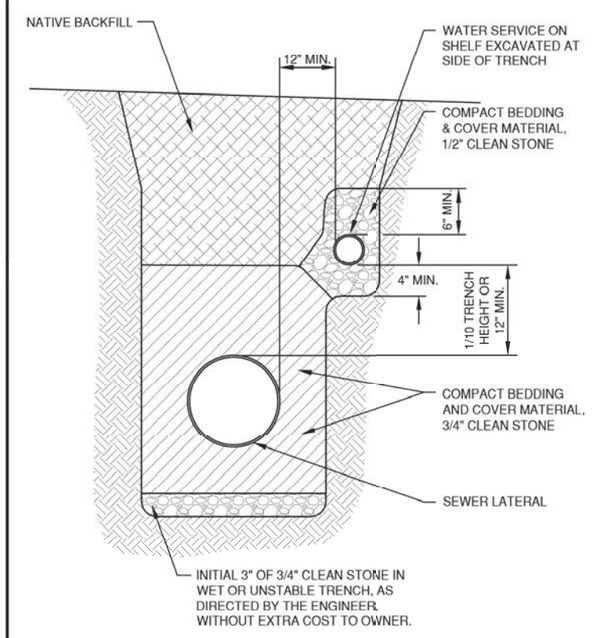
STANDARD SERVICE LATERAL



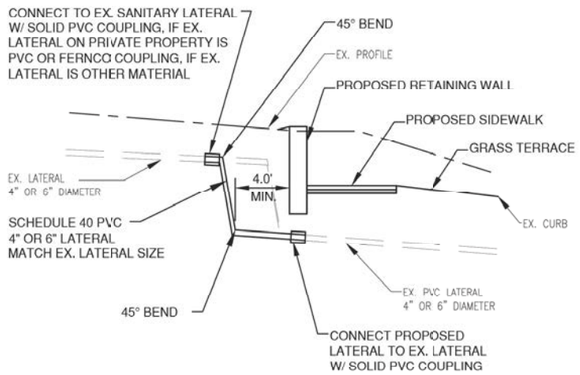
DEEP SERVICE LATERAL



PVC SEWER & WATERMAIN BEDDING & TRENCH SECTION

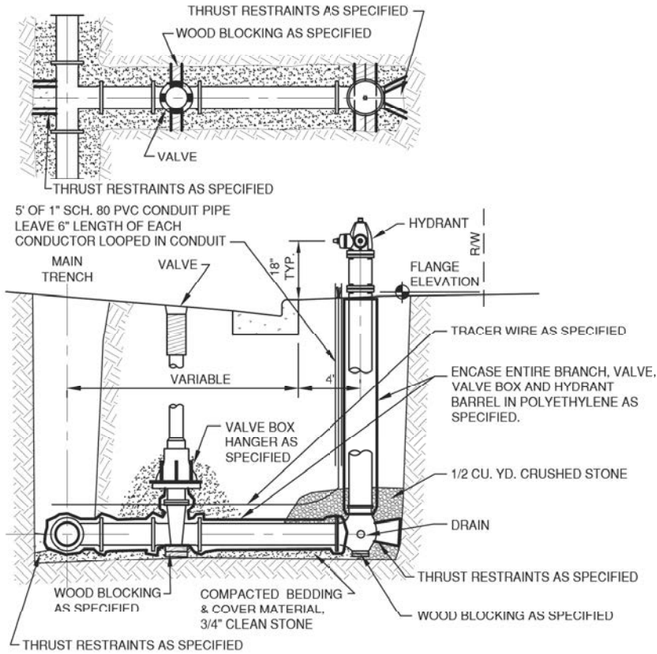


SEWER & WATER LATERALS IN COMMON TRENCH



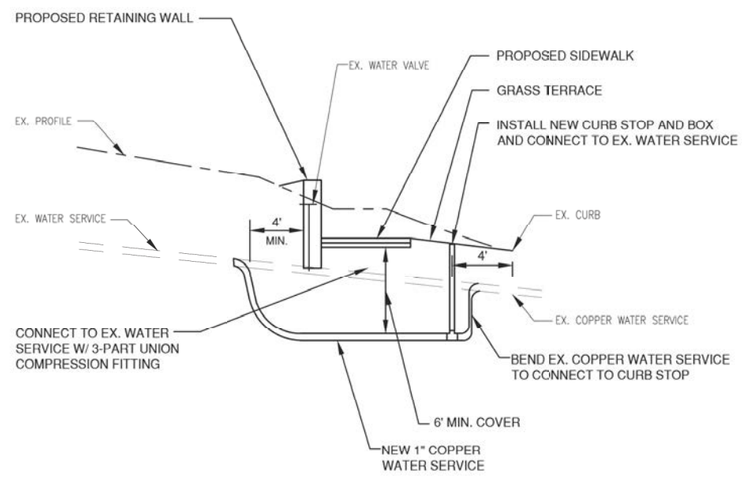
SANITARY SEWER LATERAL RELOCATION DETAIL
ITEM SPV. 0060.01

STATION	LOCATION	HOUSE NUMBER
11+66	Louisa Street, Lt	Parking Lot/#308
12+15	Louisa Street, Lt	Parking Lot
14+26	Louisa Street, Lt	#404
15+33	Louisa Street, Lt	#430
15+72	Louisa Street, Lt	#442
17+31	Louisa Street, Lt	#504
17+69	Louisa Street, Lt	Between #504 and #530
18+37	Louisa Street, Lt	#530
19+71	Louisa Street, Lt	#600
20+68	Louisa Street, Lt	#604



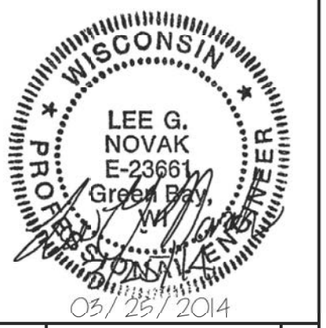
WATER MAIN, HYDRANT RELOCATION DETAIL
ITEM SPV. 0060.02

STATION	LOCATION
10+16	Louisa Street, Lt
13+53	Louisa Street, Lt



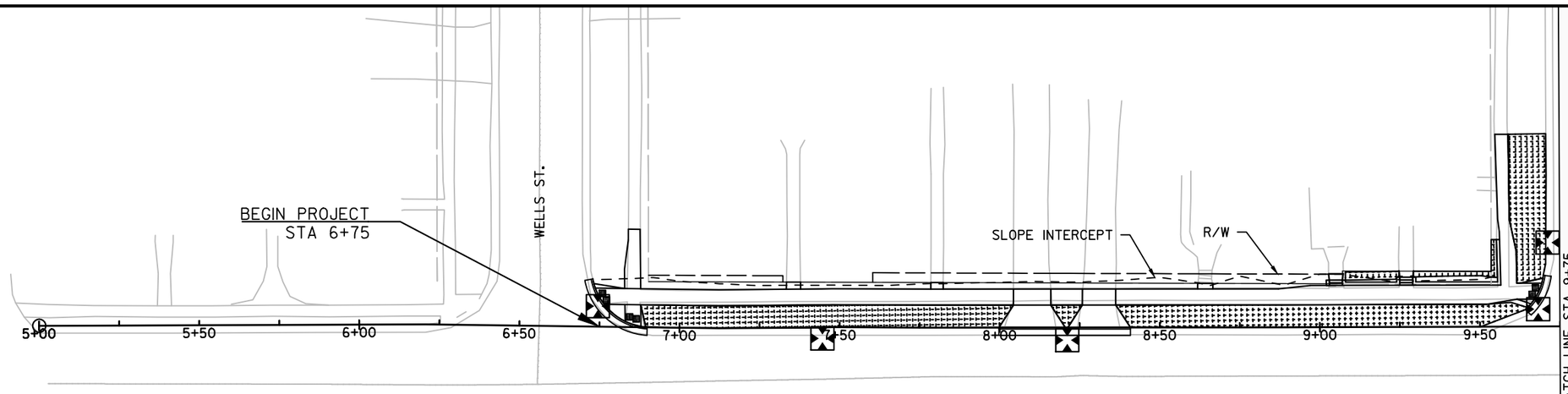
WATER MAIN, WATER SERVICE RELOCATION DETAIL
ITEM SPV. 0060.3

STATION	LOCATION	HOUSE NUMBER
9+40	Louisa Street, Lt	#244
10+17	Louisa Street, Lt	#308
14+67	Louisa Street, Lt	#404
15+31	Louisa Street, Lt	#430
18+37	Louisa Street, Lt	#530
19+06	Louisa Street, Lt	#544
19+78	Louisa Street, Lt	#600
20+38	Louisa Street, Lt	#604



PROJECT NO:5944-03-84	HWY: S.T.H. 81	COUNTY:LAFAYETTE	NOTES, TYPICAL SECTIONS & UTILITIES	SHEET	E

FILE NAME : R:\5000\5002\5002032\DWG\SKETCHES.DWG | PLOT DATE : | PLOT BY : RANDAL L. ROETHLE | WISDOT/CADDS SHEET 42



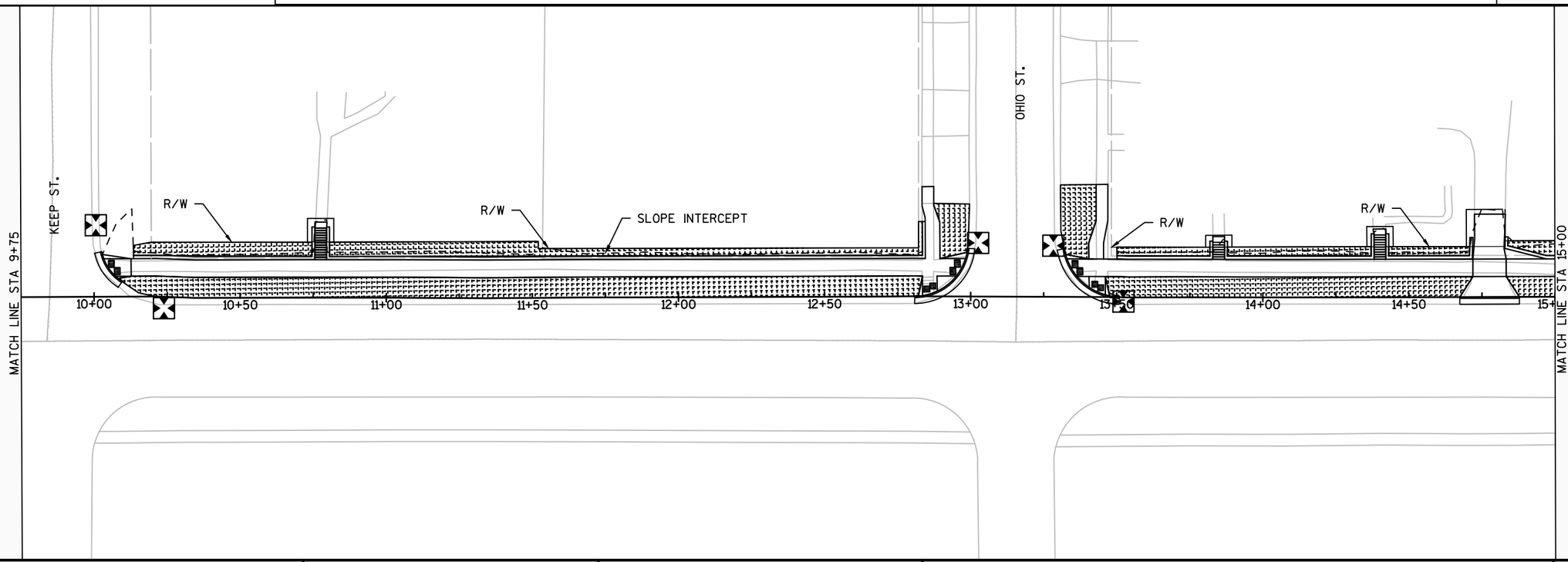
2

N

LEGEND

- EROSION MAT, URBAN CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION

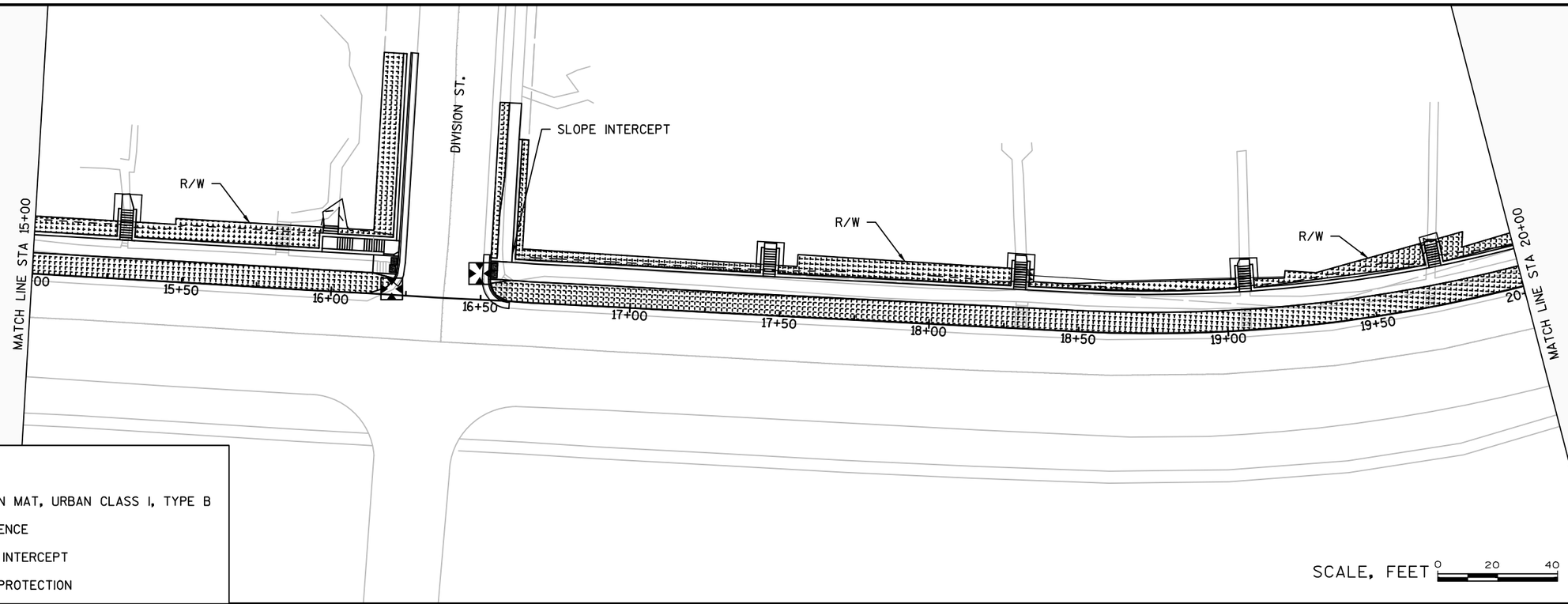
SCALE, FEET 0 20 40



N

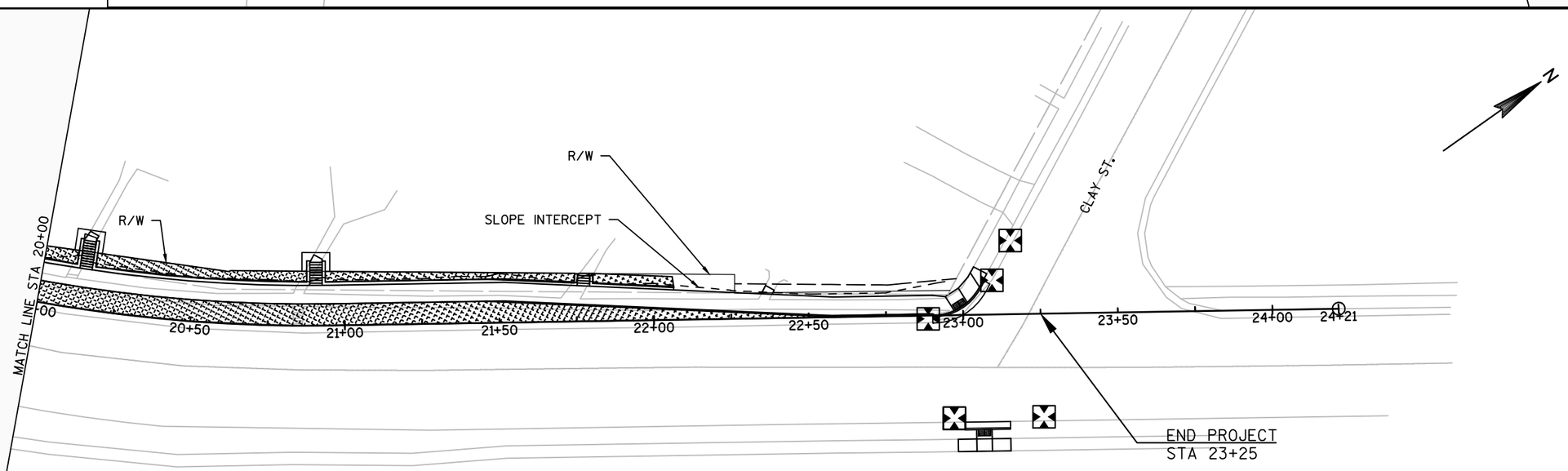
PROJECT NO:5944-03-84	HWY: STH 81	COUNTY:LAFAYETTE	EROSION CONTROL PLAN	SHEET 14	E

2

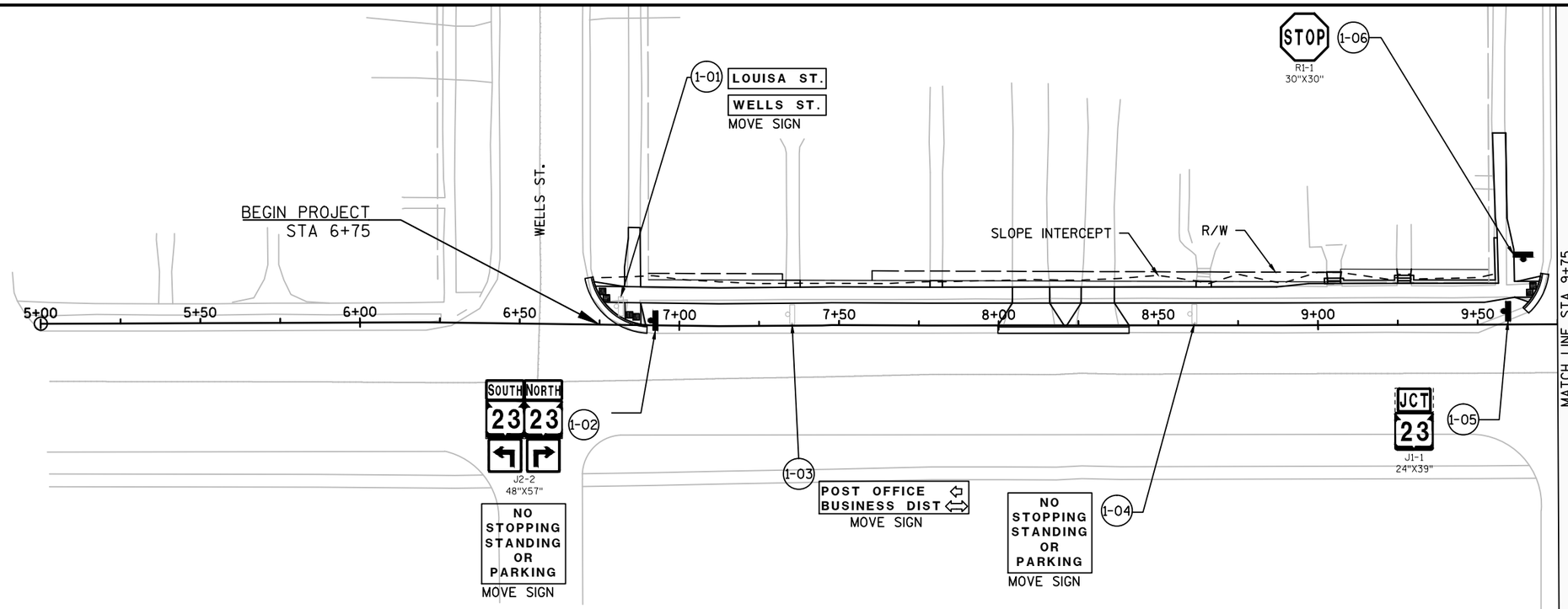


LEGEND

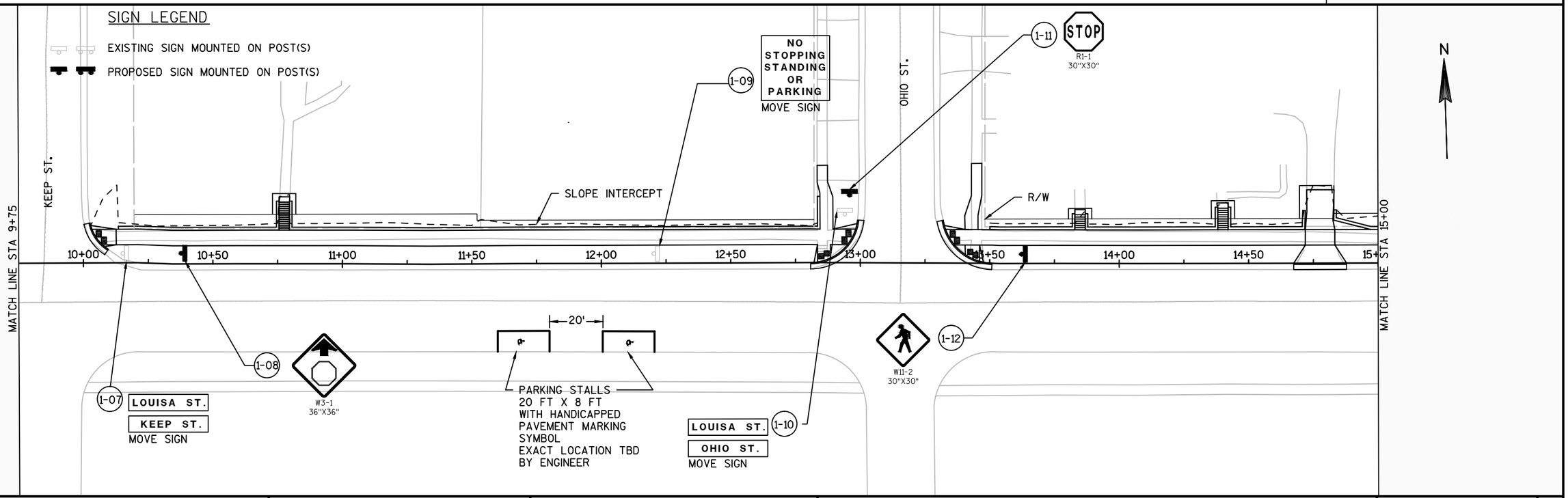
- EROSION MAT, URBAN CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION



PROJECT NO:5944-03-84	HWY: STH 81	COUNTY: LAFAYETTE	EROSION CONTROL PLAN	SHEET 15	E

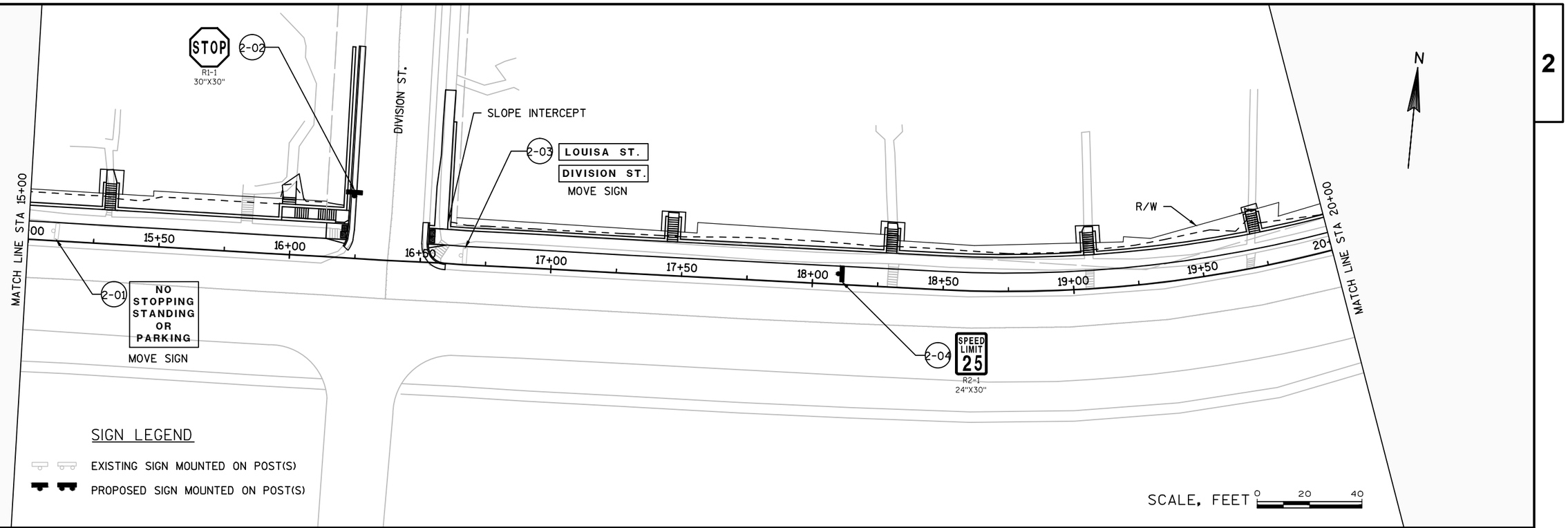


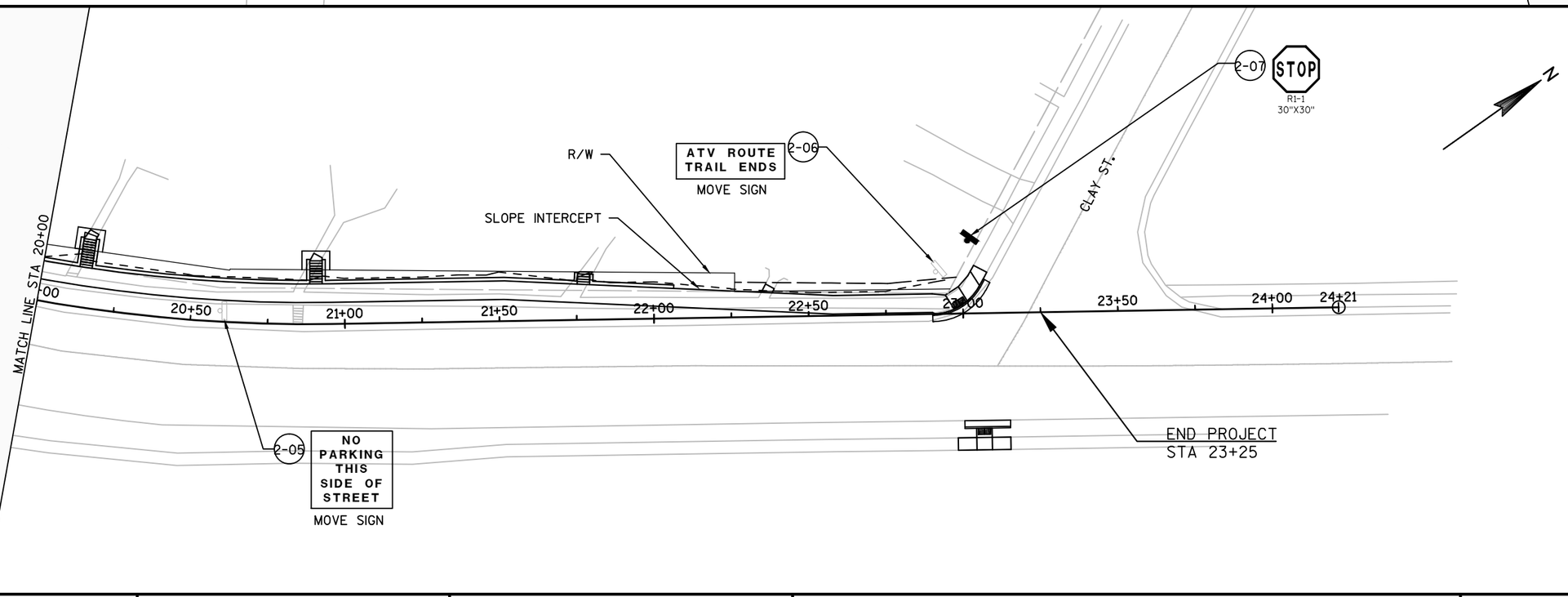
2



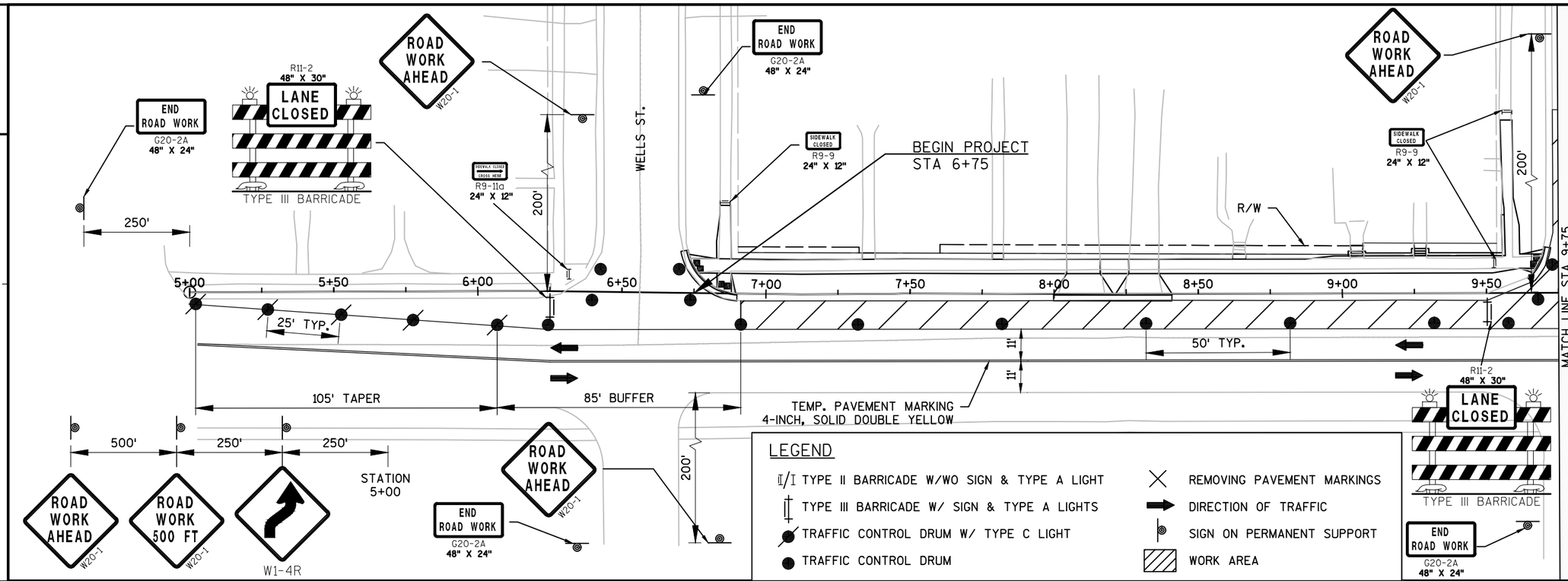
PROJECT NO:5944-03-84	HWY: STH 81	COUNTY: LAFAYETTE	SIGNING & PAVEMENT MARKING PLAN	SHEET 16	E

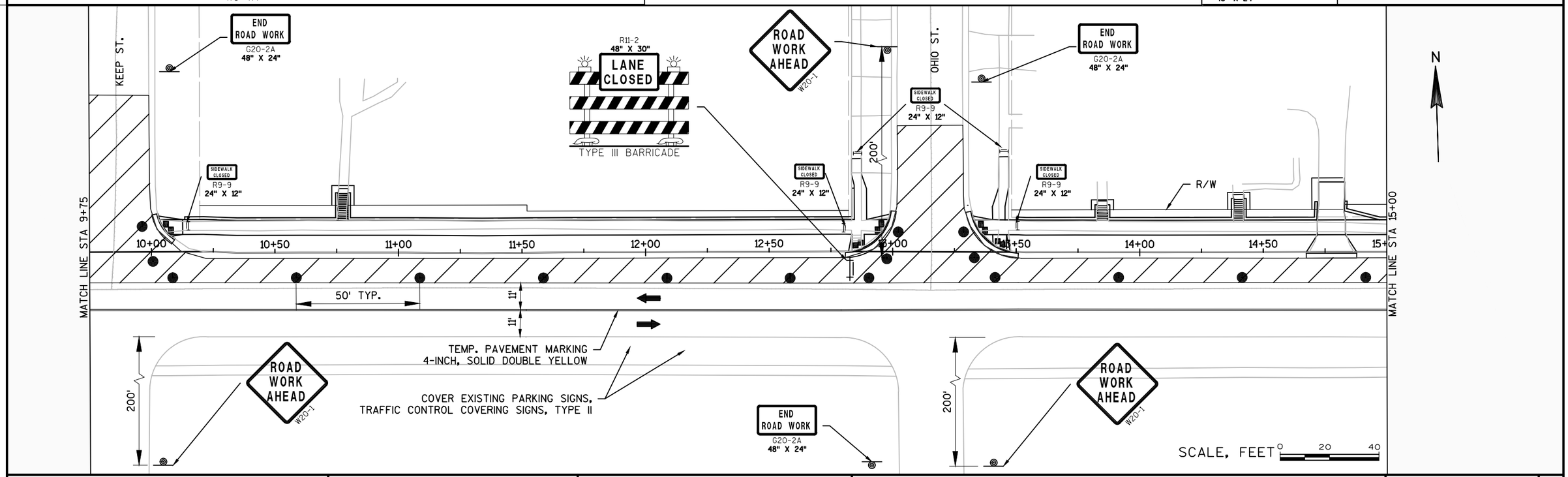
FILE NAME : W:\7059.02\CAD\TEMP\59440304\SHEETSPLAN\023201_PS.DWG PLOT DATE : 4/10/2014 9:38 AM PLOT BY : SCHWARZ, HEIDI PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 44



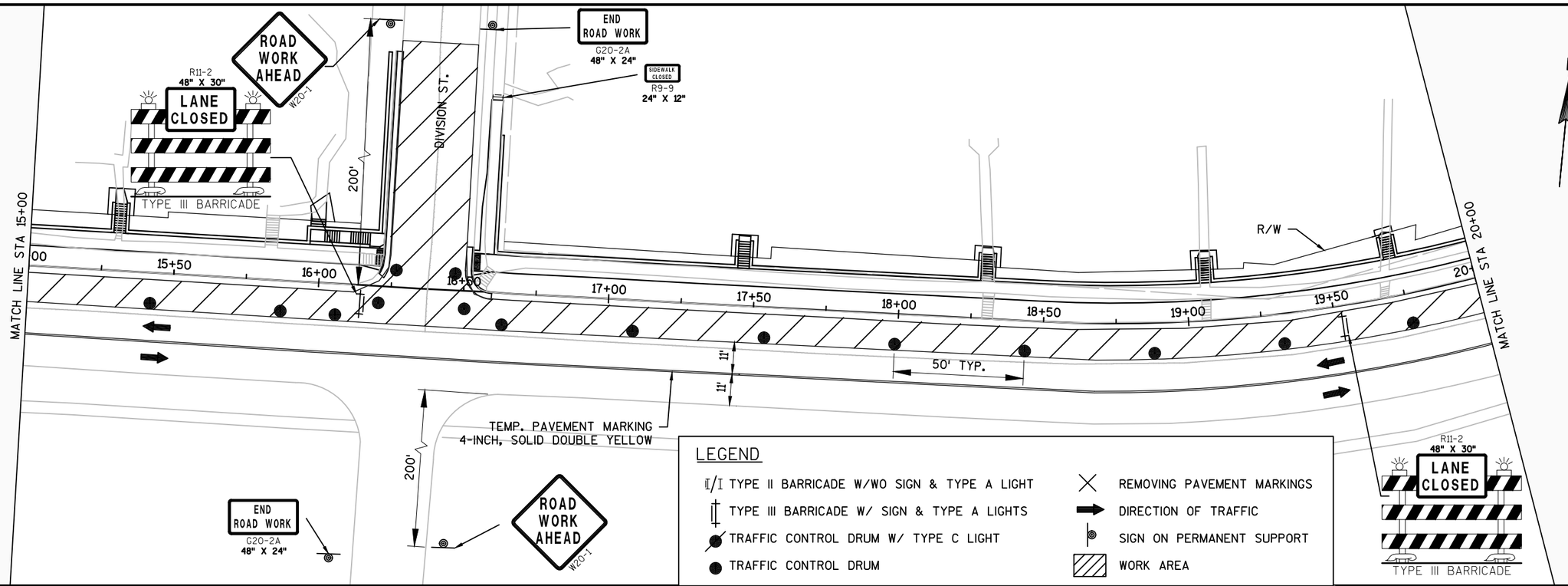


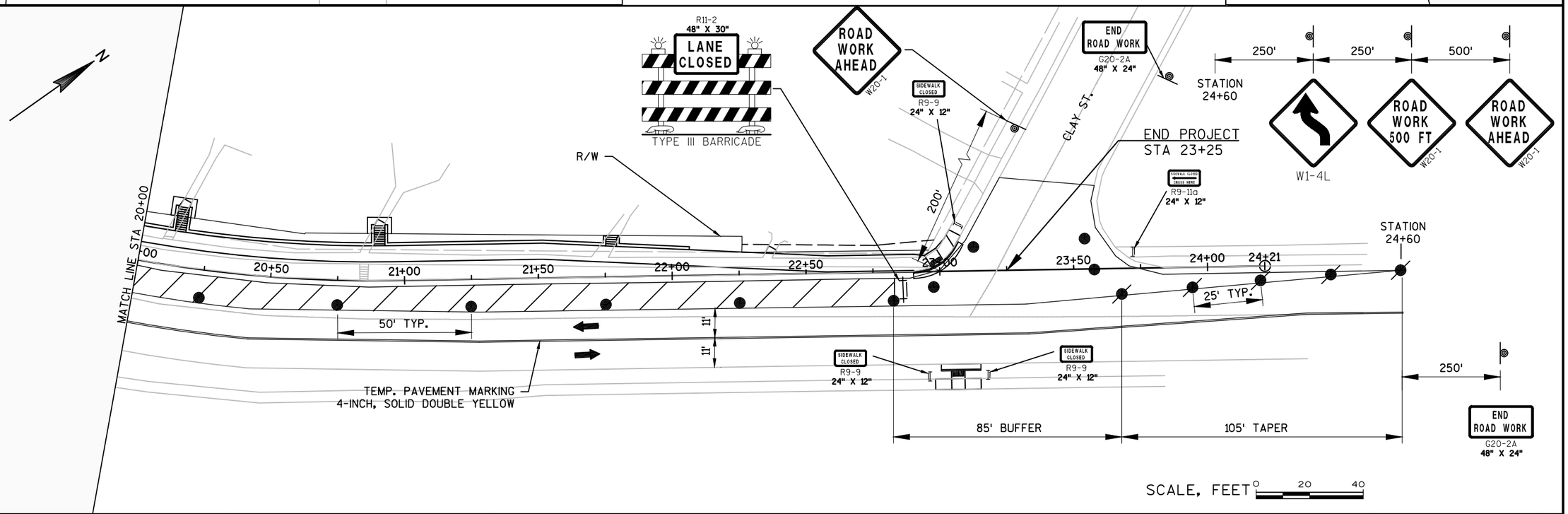
PROJECT NO:5944-03-84	HWY: STH 81	COUNTY: LAFAYETTE	SIGNING & PAVEMENT MARKING PLAN	SHEET 17	E



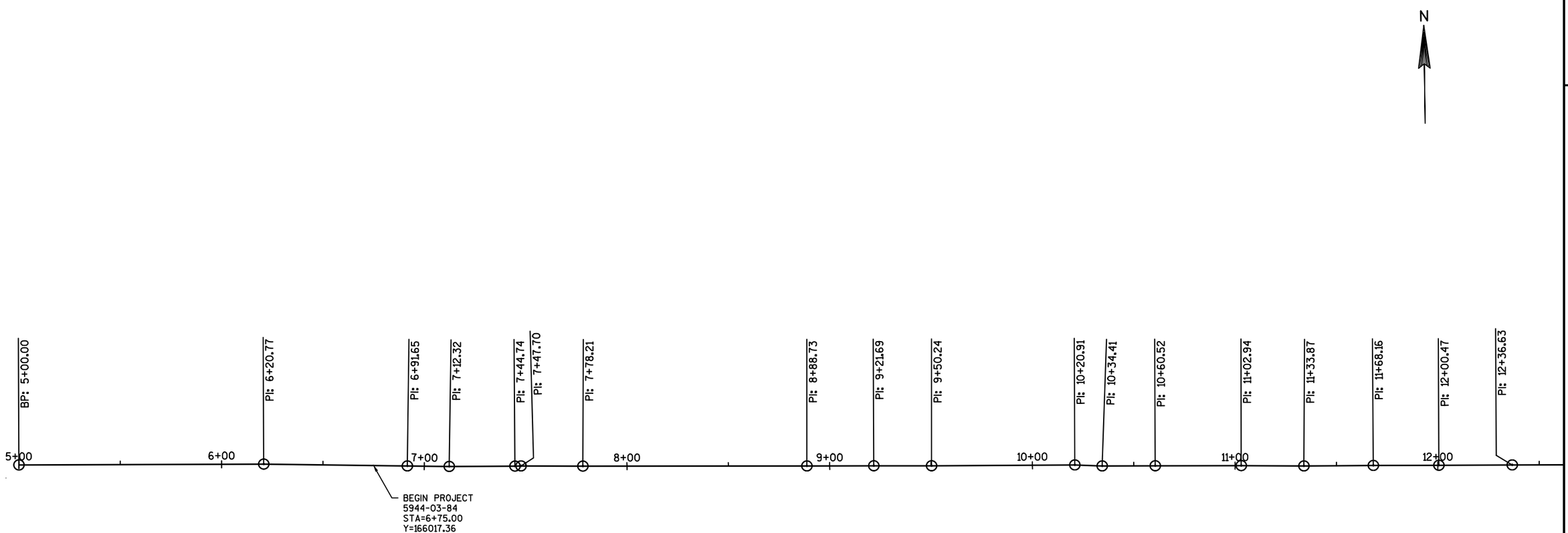


PROJECT NO:5944-03-84	HWY: STH 81	COUNTY: LAFAYETTE	TRAFFIC CONTROL PLAN	SHEET 18	E





PROJECT NO:5944-03-84	HWY: STH 81	COUNTY: LAFAYETTE	TRAFFIC CONTROL PLAN	SHEET 19	E



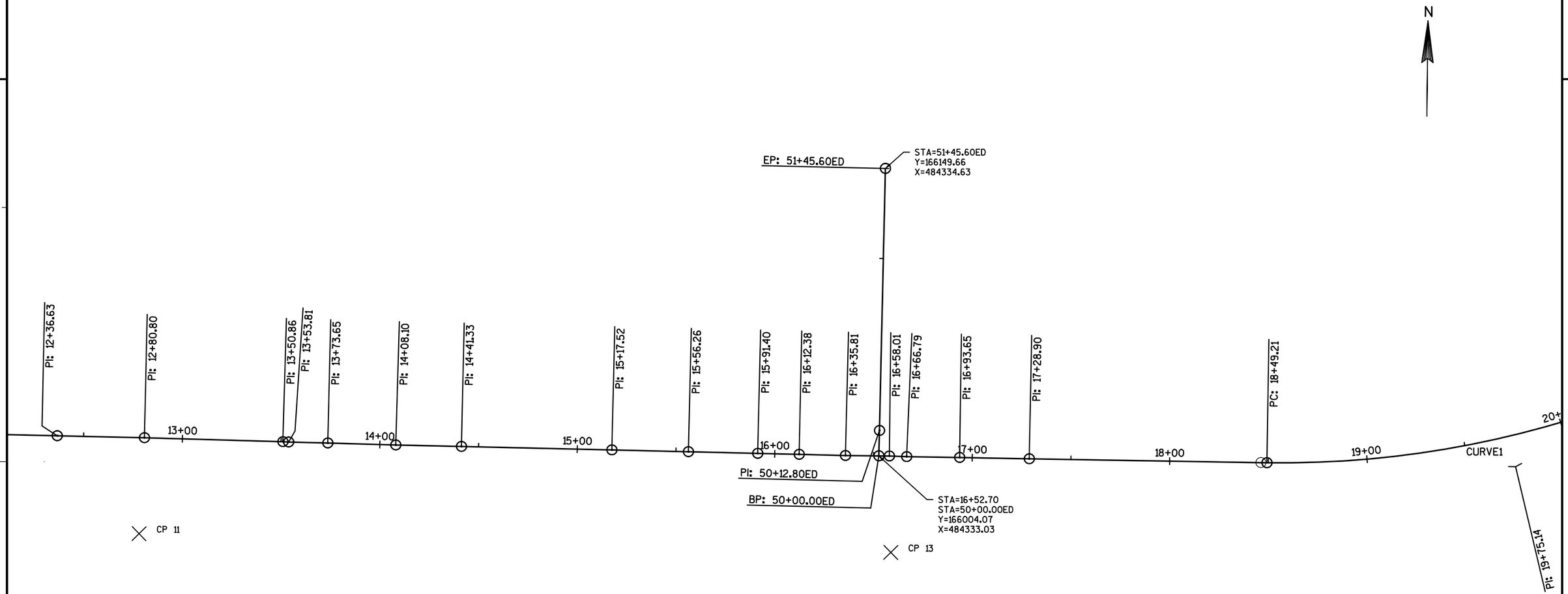
PI STA	DISTANCE	DIRECTION
5+00.00		
	120.775'	S89° 22' 15.93"E
6+20.77		
	70.871'	S88° 23' 45.24"E
6+91.65		
	20.674'	S88° 22' 29.58"E
7+12.32		
	32.416'	S89° 33' 52.14"E
7+44.74		
	2.964'	N89° 17' 19.13"E
7+47.70		
	30.513'	S88° 55' 41.25"E
7+78.21		
	110.521'	S89° 11' 32.97"E
8+88.73		

PI STA	DISTANCE	DIRECTION
8+88.73		
	32.952'	S89° 23' 25.38"E
9+21.69		
	28.557'	S89° 12' 06.59"E
9+50.24		
	70.663'	S89° 26' 37.23"E
10+20.91		
	13.505'	S87° 10' 14.63"E
10+34.41		
	26.114'	S89° 22' 20.16"E
10+60.52		
	42.417'	S89° 12' 06.47"E
11+02.94		
	30.931'	S88° 52' 03.31"E
11+33.87		

PI STA	DISTANCE	DIRECTION
11+33.87		
	34.288'	S89° 34' 06.76"E
11+68.16		
	32.309'	S89° 21' 24.42"E
12+00.47		
	36.156'	S89° 25' 06.30"E
12+36.63		

PROJECT NO:5944-03-84	HWY: STH 81	COUNTY: LAFAYETTE	ALIGNMENT PLAN	SHEET 20	E

2



PI STA	DISTANCE	DIRECTION
12+36.63		
	44.170'	S89° 22' 24.00"E
12+80.80		
	70.061'	S89° 00' 33.36"E
13+50.86		
	2.951'	S86° 56' 48.51"E
13+53.81		
	19.845'	S89° 17' 16.76"E
13+73.65		
	34.450'	S89° 02' 27.53"E
14+08.10		
	33.222'	S89° 21' 41.49"E
14+41.33		

PI STA	DISTANCE	DIRECTION
14+41.33		
	76.192'	S89° 20' 13.84"E
15+17.52		
	38.746'	S89° 18' 38.14"E
15+56.26		
	35.132'	S89° 18' 23.54"E
15+91.40		
	20.982'	S89° 27' 34.46"E
16+12.38		
	23.429'	S89° 15' 37.69"E
16+35.81		
	22.205'	S89° 58' 50.23"E
16+58.01		

PI STA	DISTANCE	DIRECTION
16+58.01		
	8.777'	S88° 12' 49.31"E
16+66.79		
	26.864'	S89° 50' 34.88"E
16+93.65		
	35.244'	S89° 32' 34.86"E
17+28.90		
50+00.00ED		
	12.80'	N0° 44' 46.47"E
50+12.80ED		
	132.80'	N0° 37' 08.95"E
51+45.60ED		

CURVE1
PI STA = 19+75.14
Y = 166002.361
X = 484655.463
DELTA = 28°33'27"
D = 11°34'45"
T = 125.93'
L = 246.63'
R = 494.82'
PC STA = 18+49.21
Y = 166002.9123
X = 484529.5311
PT STA = 20+95.84
Y = 166062.0771
X = 484766.3378

2

N

18+00

PC: 18+49.21

19+00

CURVE1

20+00

PT: 20+95.84

21+00

22+00

23+00

24+00

EP: 24+21.41

END PROJECT
5944-03-84
STA=23+25.00
Y=166170.74
X=484968.09

PI: 19+75.14

CP 15

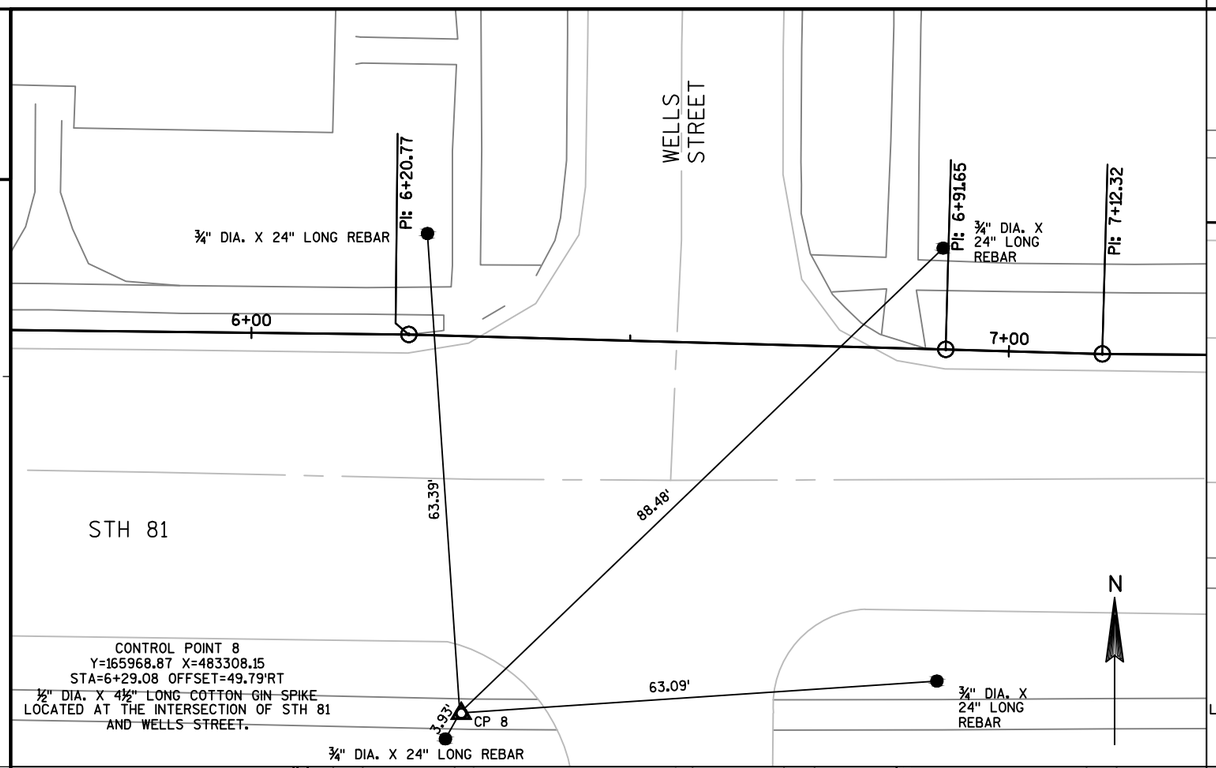
CP 16

PI STA	DISTANCE	DIRECTION
17+28.90		
	246.247'	S89° 44' 56.80"E
19+75.14		
	451.500'	N61° 41' 36.18"E
24+21.41		

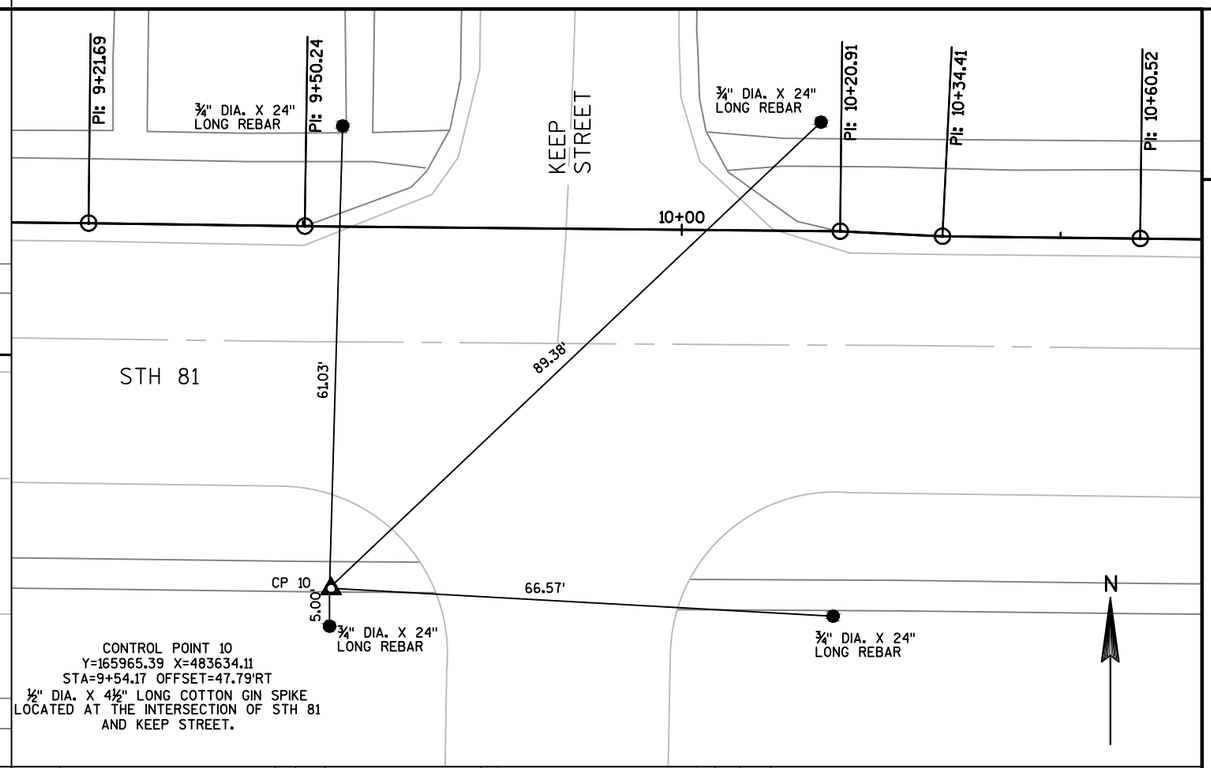
PROJECT NO:5944-03-84	HWY: STH 81	COUNTY:LAFAYETTE	ALIGNMENT PLAN	SHEET 22	E

FILE NAME : W:\7059.02\CAD\TEMP\59440304\SHEETSPLAN\027201_AD.DWG PLOT DATE : 3/31/2014 1:02 PM PLOT BY : SCHWARZ, HEIDI PLOT NAME : PLOT SCALE : 1 IN:50 FT

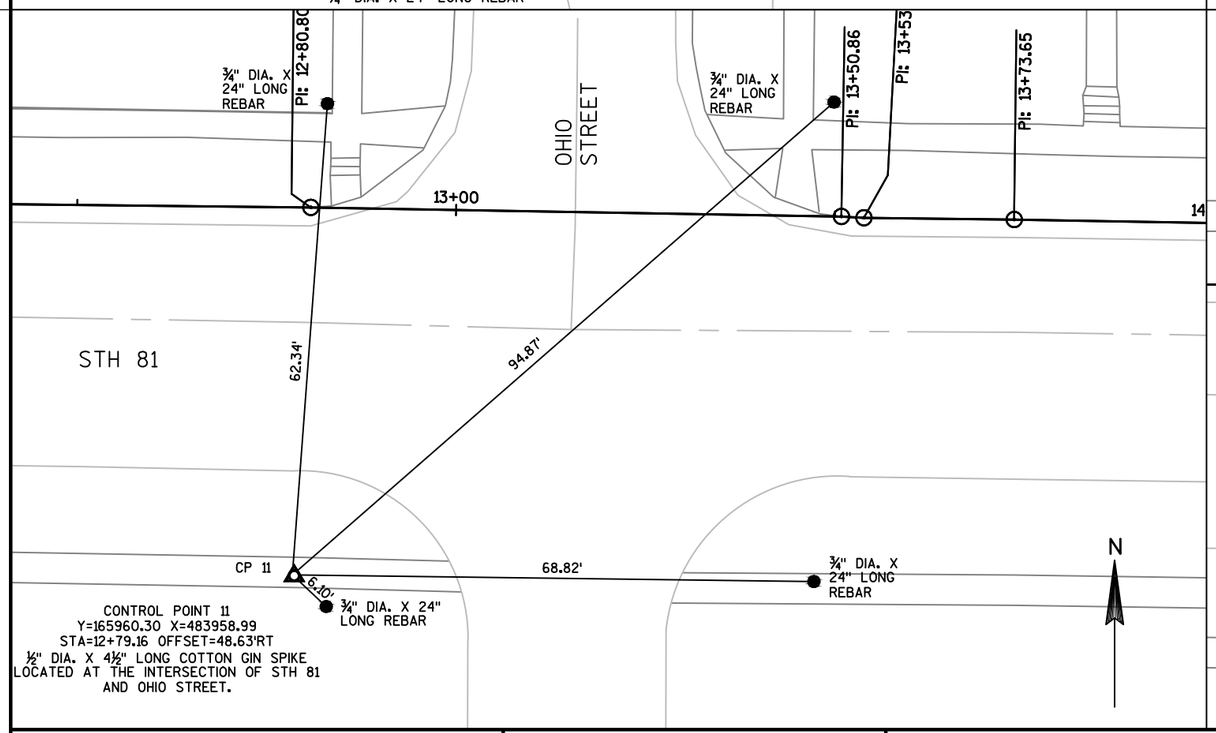
WISDOT/CADDS SHEET 42



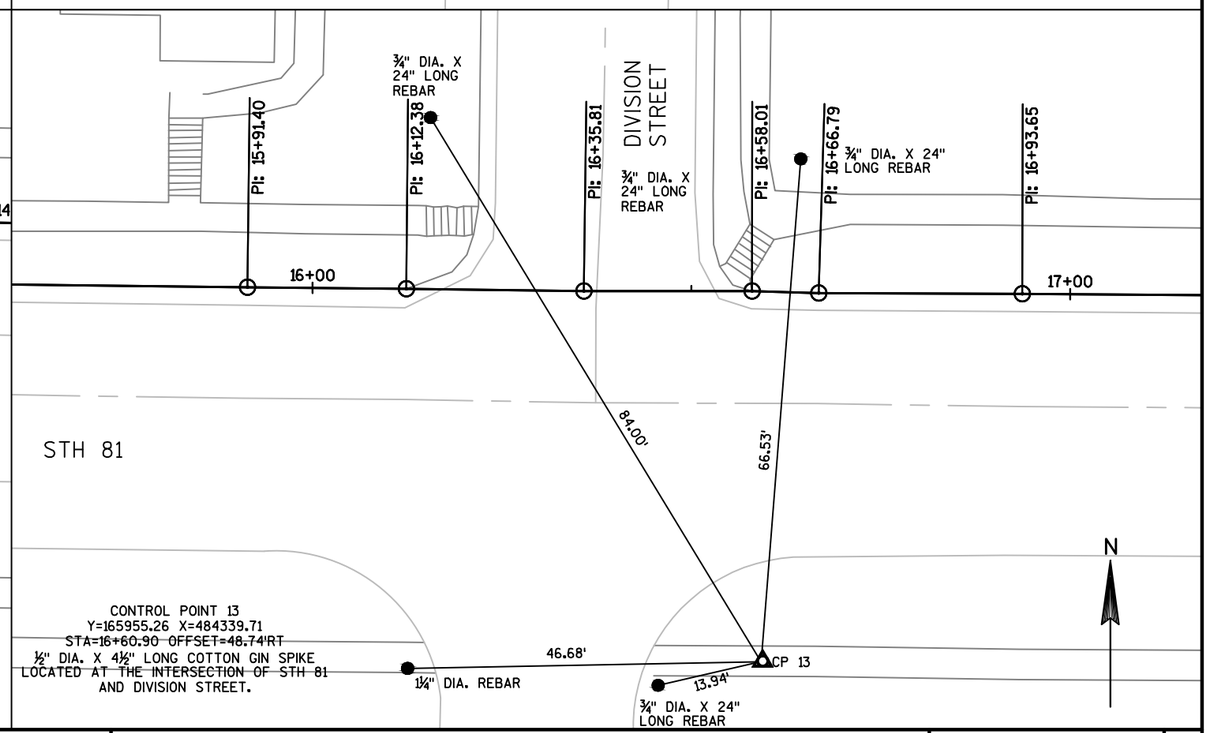
CONTROL POINT 8
Y=165968.87 X=483308.15
STA=6+29.08 OFFSET=49.79'RT
½" DIA. X 4½" LONG COTTON GIN SPIKE
LOCATED AT THE INTERSECTION OF STH 81
AND WELLS STREET.



CONTROL POINT 10
Y=165965.39 X=483634.11
STA=9+54.17 OFFSET=47.79'RT
½" DIA. X 4½" LONG COTTON GIN SPIKE
LOCATED AT THE INTERSECTION OF STH 81
AND KEEP STREET.

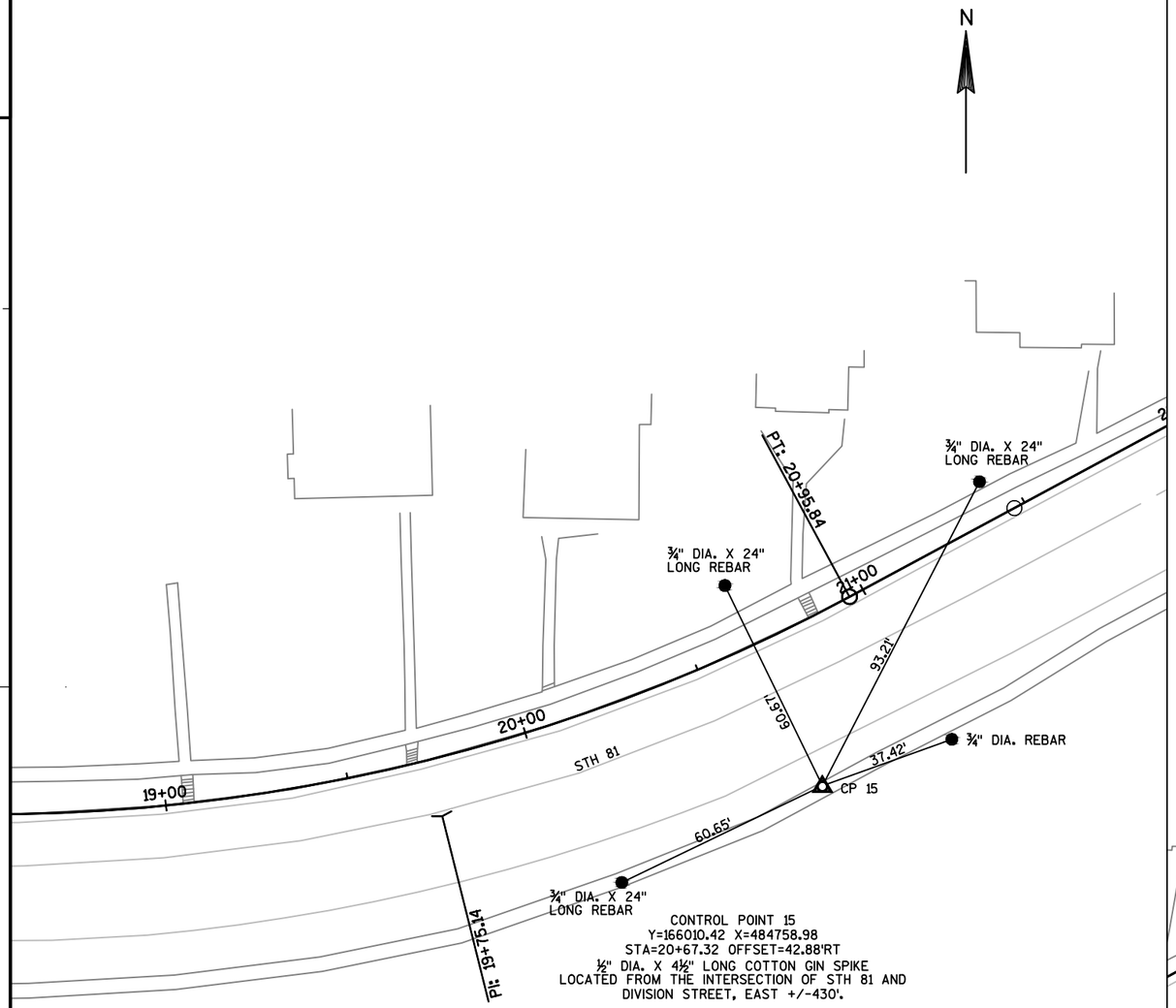


CONTROL POINT 11
Y=165960.30 X=483958.99
STA=12+79.16 OFFSET=48.63'RT
½" DIA. X 4½" LONG COTTON GIN SPIKE
LOCATED AT THE INTERSECTION OF STH 81
AND OHIO STREET.

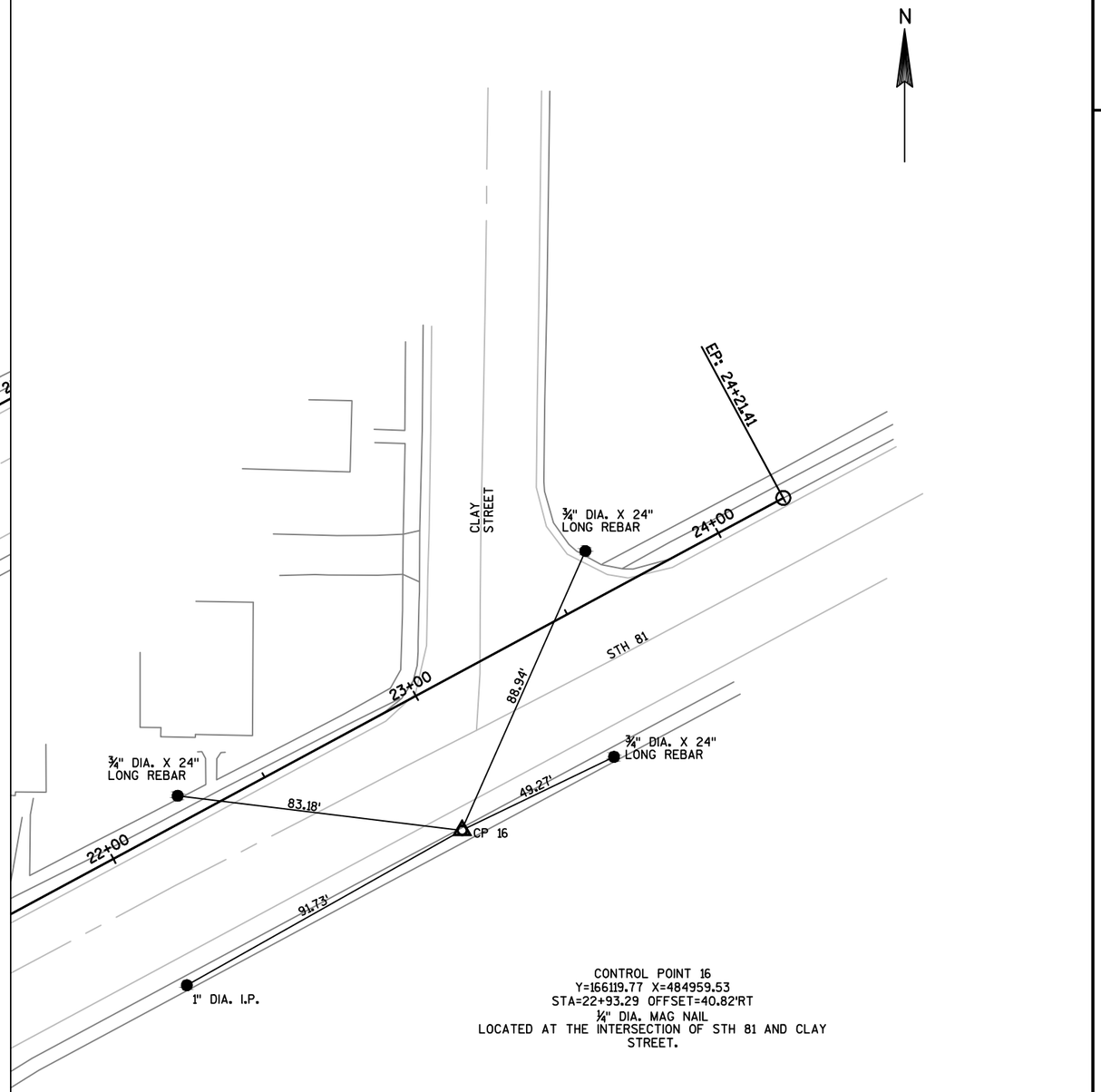


CONTROL POINT 13
Y=165955.26 X=484339.71
STA=16+60.90 OFFSET=48.74'RT
½" DIA. X 4½" LONG COTTON GIN SPIKE
LOCATED AT THE INTERSECTION OF STH 81
AND DIVISION STREET.

PROJECT NO:5944-03-84	HWY: STH 81	COUNTY:LAFAYETTE	ALIGNMENT PLAN - CONTROL POINTS	SHEET 23	E



CONTROL POINT 15
Y=166010.42 X=484758.98
STA=20+67.32 OFFSET=42.88'RT
½" DIA. X 4½" LONG COTTON GIN SPIKE
LOCATED FROM THE INTERSECTION OF STH 81 AND DIVISION STREET, EAST +/-430'.



CONTROL POINT 16
Y=166119.77 X=484959.53
STA=22+93.29 OFFSET=40.82'RT
¼" DIA. MAG NAIL
LOCATED AT THE INTERSECTION OF STH 81 AND CLAY STREET.

DATE 29AUG14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	5944-03-84 QUANTITY
0010	201.0120	CLEARING	ID	74.000	74.000
0020	201.0220	GRUBBING	ID	74.000	74.000
0030	204.0100	REMOVING PAVEMENT	SY	53.000	53.000
0040	204.0110	REMOVING ASPHALTIC SURFACE	SY	24.000	24.000
0050	204.0150	REMOVING CURB & GUTTER	LF	302.000	302.000
0060	204.0155	REMOVING CONCRETE SIDEWALK	SY	862.000	862.000
0070	204.0165	REMOVING GUARDRAIL	LF	128.000	128.000
0080	204.9105.S	REMOVING (ITEM DESCRIPTION) 01. MODULAR BLOCK RETAINING WALL (STA 15+50)	LS	1.000	1.000
0090	204.9105.S	REMOVING (ITEM DESCRIPTION) 02. MODULAR BLOCK RETAINING WALL (STA 20+00)	LS	1.000	1.000
0100	205.0100	EXCAVATION COMMON	CY	1,709.000	1,709.000
0110	205.0300	EXCAVATION STONE PILES AND STONE FENCES	CY	45.000	45.000
0120	206.3000	EXCAVATION FOR STRUCTURES RETAINING WALLS (STRUCTURE) 01. 9+50	LS	1.000	1.000
0130	206.3000	EXCAVATION FOR STRUCTURES RETAINING WALLS (STRUCTURE) 02. R-33-004	LS	1.000	1.000
0140	206.3000	EXCAVATION FOR STRUCTURES RETAINING WALLS (STRUCTURE) 03. R-33-005	LS	1.000	1.000
0150	206.3000	EXCAVATION FOR STRUCTURES RETAINING WALLS (STRUCTURE) 04. R-33-006	LS	1.000	1.000
0160	210.0100	BACKFILL STRUCTURE	CY	68.500	68.500
0170	213.0100	FINISHING ROADWAY (PROJECT) 01. 5944-03-84	EACH	1.000	1.000
0180	305.0115	BASE AGGREGATE DENSE 3/4-INCH	CY	167.000	167.000
0190	416.0160	CONCRETE DRIVEWAY 6-INCH	SY	60.000	60.000
0200	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	6.000	6.000
0210	504.0500	CONCRETE MASONRY RETAINING WALLS	CY	422.000	422.000
0220	505.0615	BAR STEEL REINFORCEMENT HS COATED RETAINING WALLS	LB	39,780.000	39,780.000
0230	506.0605	STRUCTURAL STEEL HS	LB	127,400.000	127,400.000
0240	506.3014	WELDED STUD SHEAR CONNECTORS 3/4X6-INCH	EACH	1,736.000	1,736.000
0250	517.1010.S	CONCRETE STAINING (STRUCTURE) 01. R-33-004	SF	612.000	612.000
0260	517.1010.S	CONCRETE STAINING (STRUCTURE) 02. R-33-005	SF	972.000	972.000
0270	517.1010.S	CONCRETE STAINING (STRUCTURE) 03. R-33-006	SF	1,704.000	1,704.000
0280	517.1050.S	ARCHITECTURAL SURFACE TREATMENT (STRUCTURE) 01. R-33-004	SF	612.000	612.000
0290	517.1050.S	ARCHITECTURAL SURFACE TREATMENT (STRUCTURE) 02. R-33-005	SF	972.000	972.000
0300	517.1050.S	ARCHITECTURAL SURFACE TREATMENT (STRUCTURE) 03. R-33-006	SF	1,704.000	1,704.000
0310	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	302.000	302.000
0320	601.0600	CONCRETE CURB PEDESTRIAN	LF	4.000	4.000
0330	602.0405	CONCRETE SIDEWALK 4-INCH	SF	9,934.000	9,934.000
0340	602.0515	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA	SF	106.000	106.000
0350	602.1500	CONCRETE STEPS	SF	85.000	85.000
0360	611.8115	ADJUSTING INLET COVERS	EACH	2.000	2.000
0370	612.0106	PIPE UNDERDRAIN 6-INCH	LF	1,454.000	1,454.000
0380	612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	185.000	185.000
0390	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 5944-03-84	EACH	1.000	1.000
0400	619.1000	MOBILIZATION	EACH	1.000	1.000

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DATE 29AUG14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	5944-03-84 QUANTITY
0410	624.0100	WATER	MGAL	5.000	5.000
0420	625.0500	SALVAGED TOPSOIL	SY	6,660.000	6,660.000
0430	628.1504	SILT FENCE	LF	100.000	100.000
0440	628.1520	SILT FENCE MAINTENANCE	LF	100.000	100.000
0450	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	5.000	5.000
0460	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	5.000	5.000
0470	628.2008	EROSION MAT URBAN CLASS I TYPE B	SY	1,623.000	1,623.000
0480	628.7005	INLET PROTECTION TYPE A	EACH	1.000	1.000
0490	628.7015	INLET PROTECTION TYPE C	EACH	17.000	17.000
0500	629.0210	FERTILIZER TYPE B	CWT	1.040	1.040
0510	630.0140	SEEDING MIXTURE NO. 40	LB	29.240	29.240
0520	630.0200	SEEDING TEMPORARY	LB	43.850	43.850
0530	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	9.000	9.000
0540	637.2210	SIGNS TYPE II REFLECTIVE H	SF	51.220	51.220
0550	637.2230	SIGNS TYPE II REFLECTIVE F	SF	15.250	15.250
0560	638.2102	MOVING SIGNS TYPE II	EACH	15.000	15.000
0570	638.2602	REMOVING SIGNS TYPE II	EACH	15.000	15.000
0580	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	9.000	9.000
0590	638.4000	MOVING SMALL SIGN SUPPORTS	EACH	10.000	10.000
0600	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000
0610	643.0100	TRAFFIC CONTROL (PROJECT) 01. 5944-03-84	EACH	1.000	1.000
0620	643.0300	TRAFFIC CONTROL DRUMS	DAY	8,250.000	8,250.000
0630	643.0410	TRAFFIC CONTROL BARRICADES TYPE II	DAY	1,750.000	1,750.000
0640	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	750.000	750.000
0650	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	3,250.000	3,250.000
0660	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	1,250.000	1,250.000
0670	643.0900	TRAFFIC CONTROL SIGNS	DAY	5,750.000	5,750.000
0680	643.0920	TRAFFIC CONTROL COVERING SIGNS TYPE II	EACH	2.000	2.000
0690	645.0111	GEOTEXTILE FABRIC TYPE DF SCHEDULE A	SY	1,152.000	1,152.000
0700	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	5,340.000	5,340.000
0710	646.0600	REMOVING PAVEMENT MARKINGS	LF	5,340.000	5,340.000
0720	647.0256	PAVEMENT MARKING SYMBOLS EPOXY	EACH	2.000	2.000
0730	649.0100	TEMPORARY PAVEMENT MARKING 4-INCH	LF	5,260.000	5,260.000
0740	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. STA 9+50	LS	1.000	1.000
0750	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 02. R-33-004	LS	1.000	1.000
0760	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 03. R-33-005	LS	1.000	1.000
0770	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 04. R-33-006	LS	1.000	1.000
0780	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 5944-03-84	LS	1.000	1.000
0790	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	1,650.000	1,650.000
0800	690.0150	SAWING ASPHALT	LF	33.000	33.000
0810	690.0250	SAWING CONCRETE	LF	155.000	155.000
0820	715.0502	INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL	2,430.000	2,430.000
0830	SPV.0035	SPECIAL 01. CONCRETE MASONRY SOLDIER PILE FOOTINGS	CY	129.000	129.000
0840	SPV.0060	SPECIAL 01. SANITARY SEWER LATERAL RELOCATION	EACH	10.000	10.000
0850	SPV.0060	SPECIAL 02. WATER MAIN, HYDRANT RELOCATION	EACH	2.000	2.000

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DATE 29AUG14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	5944-03-84 QUANTITY
0860	SPV.0060	SPECIAL 03. WATER MAIN, WATER SERVICE RELOCATION	EACH	9.000	9.000
0870	SPV.0090	SPECIAL 01. FOUNDATION DRILLING 24-INCH DIAMETER	LF	1,094.000	1,094.000
0880	SPV.0090	SPECIAL 02. RAILING PIPE GALVANIZED	LF	280.000	280.000
0890	SPV.0105	SPECIAL 01. RAILING STEEL TYPE C2 GALVANIZED PEDESTRIAN R-33-004	LS	1.000	1.000
0900	SPV.0105	SPECIAL 02. RAILING STEEL TYPE C2 GALVANIZED PEDESTRIAN R-33-005	LS	1.000	1.000
0910	SPV.0105	SPECIAL 03. RAILING STEEL TYPE C2 GALVANIZED PEDESTRIAN R-33-006	LS	1.000	1.000
0920	SPV.0110	SPECIAL 01. TIMBER LAGGING	MBM	19.980	19.980
0930	SPV.0165	SPECIAL 01. GEOCOMPOSITE DRAIN BOARD	SF	7,254.000	7,254.000

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CLEARING AND GRUBBING

STA	LOCATION	201.0120 CLEARING ID	201.0220 GRUBBING ID	REMARKS
14+10	STH 81 LT	20	20	TREE IN TERRACE
18+00	STH 81 LT	48	48	PINE
20+85	STH 81 LT	6	6	2 LARGE SHRUBS
	PROJECT TOTALS =	74	74	

REMOVING PAVEMENT

STA	TO	STA	LOCATION	204.0100 SY	REMARKS
8+00	-	8+16	STH 81 LT	18	DRIVEWAY
8+23	-	8+36	STH 81 LT	16	DRIVEWAY
14+63	-	14+86	STH 81 LT	19	DRIVEWAY
			TOTAL =	53	

REMOVING ASPHALTIC SURFACE

STA	TO	STA	LOCATION	204.0110 SY	REMARKS
8+00	-	8+16	STH 81 LT	3	DRIVEWAY
8+23	-	8+36	STH 81 LT	2	DRIVEWAY
14+63	-	14+86	STH 81 LT	19	DRIVEWAY
			TOTAL =	24	

REMOVING CURB & GUTTER

STA	TO	STA	LOCATION	204.0150 LF	REMARKS
6+70	-	6+90	STH 81 LT	25	E. WELLS ST RAMPS
8+00	-	8+41	STH 81 LT	41	DRIVEWAY
9+64	-	9+70	STH 81 LT	13	W. KEEP ST RAMPS
10+02	-	10+09	STH 81 LT	13	E. KEEP ST RAMPS
12+81	-	13+01	STH 81 LT	28	W. OHIO ST RAMPS
13+31	-	13+51	STH 81 LT	28	E. OHIO ST RAMPS
14+67	-	14+88	STH 81 LT	20	DRIVEWAY
16+20	-	16+22	STH 81 LT	77	W. DIVISION
16+52	-	16+52	STH 81 LT	20	E. DIVISION RAMP
22+90	-	23+07	STH 81 LT	22	W. CLAY RAMP
23+00	-	23+15	STH 81 RT	15	S. LOUISA ST RAMP
			TOTAL =	302	

REMOVING CONCRETE SIDEWALK

STA	TO	STA	LOCATION	204.0155 SY	REMARKS
6+84	-	8+04	STH 81 LT	54	
6+76	-	-	STH 81 LT	5	CURB RAMP TO WELLS
6+85	-	-	STH 81 LT	4	CURB RAMP TO STH 81
6+85	-	-	STH 81 LT	9	WELLS ST
7+35	-	-	STH 81 LT	2	PRIVATE SIDEWALK
7+80	-	-	STH 81 LT	1	PRIVATE SIDEWALK
8+16	-	8+26	STH 81 LT	5	
8+36	-	9+59	STH 81 LT	55	
8+64	-	-	STH 81 LT	1	PRIVATE SIDEWALK
9+05	-	-	STH 81 LT	3	PRIVATE SIDEWALK/STEPS
9+26	-	-	STH 81 LT	3	PRIVATE SIDEWALK/STEPS
9+57	-	-	STH 81 LT	20	KEEP ST
9+60	-	-	STH 81 LT	5	CURB RAMP TO KEEP
10+13	-	12+87	STH 81 LT	122	
10+02	-	-	STH 81 LT	5	CURB RAMP TO KEEP
10+76	-	-	STH 81 LT	6	PRIVATE SIDEWALK/STEPS
12+85	-	-	STH 81 LT	4	CURB RAMP TO STH 81/STEPS
12+88	-	-	STH 81 LT	6	CURB RAMP TO OHIO
12+85	-	-	STH 81 LT	12	W. OHIO ST
13+43	-	14+72	STH 81 LT	58	
13+43	-	-	STH 81 LT	5	CURB RAMP TO OHIO
13+43	-	-	STH 81 LT	5	CURB RAMP TO STH 81
13+43	-	-	STH 81 LT	12	E. OHIO ST
13+84	-	-	STH 81 LT	5	PRIVATE SIDEWALK/STEPS
14+39	-	-	STH 81 LT	5	PRIVATE SIDEWALK/STEPS
14+83	-	16+13	STH 81 LT	58	
15+30	-	-	STH 81 LT	5	PRIVATE SIDEWALK/STEPS
15+82	-	-	STH 81 LT	6	PRIVATE SIDEWALK/STEPS
16+13	-	-	STH 81 LT	4	CURB RAMP TO DIVISION/STEPS
16+52	-	16+70	STH 81 LT	8	
16+55	-	-	STH 81 LT	4	STEPS TO STH 81
16+56	-	-	STH 81 LT	24	DIVISION ST
16+70	-	22+96	STH 81 LT	279	
18+29	-	-	STH 81 LT	9	PRIVATE SIDEWALK/STEPS
19+05	-	-	STH 81 LT	7	PRIVATE SIDEWALK/STEPS
19+70	-	-	STH 81 LT	7	PRIVATE SIDEWALK/STEPS
20+13	-	-	STH 81 LT	6	PRIVATE SIDEWALK/STEPS
20+84	-	-	STH 81 LT	7	PRIVATE SIDEWALK/STEPS
21+75	-	-	STH 81 LT	6	PRIVATE SIDEWALK
22+34	-	-	STH 81 LT	1	PRIVATE SIDEWALK
22+96	-	23+08	STH 81 LT	9	CLAY ST
22+95	-	23+13	STH 81 RT	10	RT SIDE FOR RAMP INSTALL
			TOTAL =	862	

REMOVING GUARDRAIL

STA	TO	STA	LOCATION	204.0165 LF	REMARKS
11+55	-	12+83		128	
			TOTAL =	128	

REMOVING MODULAR BLOCK RETAINING WALL SUMMARY

STA	TO	STA	LOCATION	REMOVING MODULAR BLOCK RETAINING WALL (STA 15+50) 204.9105.S.01 LS	REMOVING MODULAR BLOCK RETAINING WALL (STA 20+00) 204.9105.S.02 LS	REMARKS
14+90	-	16+19	LT	1	-	
16+63	-	21+56	LT	-	1	
			TOTALS =	1	1	

EXCAVATION STONE PILES AND STONE FENCES

STA	TO	STA	LOCATION	205.0300 CY	REMARKS
7+68	-	7+97	STH 81 LT	1	TREE WELL
8+42	-	8+57	STH 81 LT	1	TREE WELL
8+80	-	8+94	STH 81 LT	1	TREE WELL
10+21	-	11+71	STH 81 LT	11	UNDER 5 FT
13+58	-	14+62	STH 81 LT	6	UNDER 5 FT
14+42	-	14+71	STH 81 LT	1	BLOCK SECTION BEHIND EXIST. SW
14+71	-	14+73	STH 81 LT	1	W. SIDE DRIVEWAY
14+82	-	14+83	STH 81 LT	2	E. SIDE DRIVEWAY
14+82	-	15+26	STH 81 LT	3	BLOCK SECTION BEHIND EXIST. SW
16+05	-	16+20	STH 81 LT	5	UPPER BLOCK WALL W. SIDE DIVISION
16+12	-	16+22	STH 81 LT	8	LOWER BLOCK WALL W. SIDE DIVISION
16+58	-	16+61	STH 81 LT	2	UPPER BLOCK WALL E. SIDE DIVISION
16+61	-	17+56	STH 81 LT	3	UPPER BLOCK WALL
			TOTAL =	45	

EXCAVATION FOR STRUCTURES RETAINING WALLS

CAT	LOCATION	206.3000.01 EXCAVATION FOR STRUCTURES RETAINING WALL (STA 9+50) LS	REMARKS
0010	STA 9+02 TO STA 9+56	1	
	TOTAL =	1	

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

EARTHWORK SUMMARY

Station	Common Excavation								Fill				
	Area		Area	Volume		Cum. Volume			Area	Volume	Expanded	Cum Volume	Mass
	Salvaged Unusable Pavement Material (SF)	Cut (Unclassified) (SF)	Total (SF)	Salvaged Unusable Pavement Material (CY)	Cut (Unclassified) (CY)	Salvaged Unusable Pavement Material (CY)	Cut (unclass-ified) (CY)	Total (CY)	Unclass-ified (SF)	Unclassified (CY)	Vol. (1.25) (CY)	Unclassified (CY)	Ordinate (CY)
6+75	1.33	3.00	4.33	0	0	0	0	0	0	0	0	0	0
7+00	1.33	4.57	5.90	1	3	1	3	5	0	0	0	0	3
7+25	1.33	3.25	4.59	1	4	2	7	10	0	0	0	0	7
7+50	1.33	2.68	4.01	1	3	4	10	13	0	0	0	0	10
7+75	1.33	5.55	6.89	1	4	5	14	19	0	0	0	0	14
8+00	1.33	4.59	5.92	1	5	6	18	24	0	0	0	0	18
8+25	1.33	3.68	5.01	1	4	7	22	30	0	0	0	0	22
8+50	1.33	7.45	8.78	1	5	9	27	36	0	0	0	0	27
8+75	1.33	3.40	4.73	1	5	10	32	42	0	0	0	0	32
9+00	1.33	6.00	7.33	1	4	11	37	48	0	0	0	0	37
9+07	1.33	6.38	7.72	0	2	11	38	50	0	0	0	0	38
9+25	1.33	14.24	15.57	1	7	12	45	57	0	0	0	0	45
9+55	1.33	18.61	19.94	1	18	14	63	77	0	0	0	0	63
9+65	1.33	3.00	4.33	0	4	14	67	82	0	0	0	0	67
10+03	1.33	3.00	4.33	0	0	14	67	82	0	0	0	0	67
10+14	1.33	16.50	17.83	1	4	15	71	86	0	0	0	0	71
10+25	1.33	35.13	36.46	1	11	15	82	98	0	0	0	0	82
10+50	1.33	46.49	47.82	1	38	17	120	137	0	0	0	0	120
10+75	1.33	52.15	53.48	1	46	18	166	183	0	0	0	0	166
11+00	1.33	50.93	52.26	1	48	19	213	232	0	0	0	0	213
11+25	1.33	47.33	48.66	1	45	20	259	279	0	0	0	0	259
11+50	1.33	44.36	45.69	1	42	22	301	323	0	0	0	0	301
11+75	1.33	31.30	32.64	1	35	23	336	359	0	0	0	0	336
12+00	1.33	30.44	31.78	1	29	24	365	389	0	0	0	0	365
12+25	1.33	24.42	25.76	1	25	25	390	416	0	0	0	0	390
12+50	1.33	18.24	19.57	1	20	26	410	437	0	0	0	0	410
12+75	1.33	14.12	15.46	1	15	28	425	453	0	0	0	0	425
12+84	1.33	12.00	13.33	0	4	28	429	458	0	0	0	0	429
13+00	1.33	3.00	4.33	1	4	29	434	463	0	0	0	0	434
13+30	1.33	3.00	4.33	0	0	29	434	463	0	0	0	0	434
13+50	1.33	6.59	7.93	1	4	30	437	467	0	0	0	0	437
13+50	1.33	8.40	9.74	0	0	30	437	467	0	0	0	0	437
13+75	1.33	24.72	26.06	1	15	31	453	484	0	0	0	0	453
14+00	1.33	31.63	32.96	1	26	32	479	511	0	0	0	0	479
14+25	1.33	35.55	36.89	1	31	34	510	544	0	0	0	0	510
14+50	1.33	28.73	30.06	1	30	35	540	575	0	0	0	0	540
14+71	1.33	8.41	9.74	1	14	36	554	590	0	0	0	0	554

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

TABLE CONTINUED ON NEXT PAGE

TABLE CONTINUED FROM PREVIOUS PAGE

Station	Common Excavation								Fill					Summary			
	Area		Area	Volume		Cum. Volume			Area	Volume	Expanded	Cum Volume	Mass	Borrow	Waste		
	Salvaged Unusable Pavement Material (SF)	Cut (Unclassified) (SF)	Total (SF)	Salvaged Unusable Pavement Material (CY)	Cut (Unclassified) (CY)	Salvaged Unusable Pavement Material (CY)	Cut (unclassified) (CY)	Total (CY)	Unclassified (SF)	Unclassified (CY)	Vol. (1.25) (CY)	Unclassified (CY)	Ordinate (CY)	(CY)	Salvaged Unusable Pavement Material (CY)	Cut (Unclassified) (CY)	Total (CY)
14+84	1.33	16.68	18.02	0	0	36	554	590	0	0	0	0	554	0	83	1,709	1,792
15+00	1.33	21.12	22.45	1	11	37	565	602	0	0	0	0	565				
15+25	1.33	43.37	44.70	1	30	38	595	633	0	0	0	0	595				
15+50	1.33	44.92	46.25	1	41	39	636	675	0	0	0	0	636				
15+75	1.33	42.96	44.30	1	41	40	677	717	0	0	0	0	677				
15+96	1.33	41.12	42.46	1	33	41	709	751	0	0	0	0	709				
15+96	1.33	109.79	111.12	0	0	41	709	751	0	0	0	0	709				
16+19	1.33	77.63	78.96	1	80	43	789	832	0	0	0	0	789				
16+53	1.33	36.63	37.97	0	0	43	789	832	0	0	0	0	789				
16+61	1.33	32.18	33.52	0	10	43	799	842	0	0	0	0	799				
17+00	1.33	28.15	29.48	2	44	45	843	888	0	0	0	0	843				
17+25	1.33	36.12	37.45	1	30	46	873	919	0	0	0	0	873				
17+50	1.33	36.54	37.87	1	34	47	906	954	0	0	0	0	906				
17+75	1.33	40.82	42.15	1	36	49	942	991	0	0	0	0	942				
18+00	1.33	30.49	31.83	1	33	50	975	1,025	0	0	0	0	975				
18+25	1.33	31.60	32.93	1	29	51	1,004	1,055	0	0	0	0	1,004				
18+50	1.33	30.08	31.41	1	29	52	1,033	1,085	0	0	0	0	1,033				
18+75	1.33	33.33	34.66	1	29	54	1,062	1,115	0	0	0	0	1,062				
19+00	1.33	34.23	35.56	1	31	55	1,093	1,148	0	0	0	0	1,093				
19+25	1.33	42.78	44.11	1	36	56	1,129	1,185	0	0	0	0	1,129				
19+50	1.33	44.72	46.06	1	41	57	1,169	1,227	0	0	0	0	1,169				
19+75	1.33	43.82	45.16	1	41	58	1,210	1,269	0	0	0	0	1,210				
20+00	1.33	44.04	45.37	1	41	60	1,251	1,311	0	0	0	0	1,251				
20+25	1.33	43.76	45.10	1	41	61	1,292	1,353	0	0	0	0	1,292				
20+50	1.33	43.04	44.38	1	40	62	1,332	1,394	0	0	0	0	1,332				
20+75	1.33	41.90	43.24	1	39	63	1,371	1,435	0	0	0	0	1,371				
21+00	1.33	39.85	41.18	1	38	65	1,409	1,474	0	0	0	0	1,409				
21+25	1.33	37.24	38.57	1	36	66	1,445	1,511	0	0	0	0	1,445				
21+50	1.33	28.03	29.37	1	30	67	1,475	1,542	0	0	0	0	1,475				
21+75	1.33	20.39	21.73	1	22	68	1,497	1,566	0	0	0	0	1,497				
22+06	1.33	9.00	10.33	2	17	70	1,514	1,584	0	0	0	0	1,514				
22+06	1.33	9.90	11.24	0	0	70	1,514	1,584	0	0	0	0	1,514				
22+25	1.33	4.36	5.69	1	5	71	1,519	1,590	0	0	0	0	1,519				
22+50	1.33	2.42	3.75	1	3	72	1,522	1,594	0	0	0	0	1,522				
22+75	1.33	3.23	4.57	1	3	73	1,525	1,598	0	0	0	0	1,525				
22+94	1.33	8.67	10.01	1	4	74	1,529	1,603	0	0	0	0	1,529				
Wells Street				1	9	75	1,538	1,613	0	0	0	0	1,538				
Keep Street				2	26	78	1,564	1,641	0	0	0	0	1,564				
Ohio Street				2	22	80	1,586	1,666	0	0	0	0	1,586				
Division Street				3	23	83	1,609	1,692	0	0	0	0	1,609				
Undistributed				0	100	83	1,709	1,792	0	0	0	0	1,709				

NOTES

1) COMMON EXCAVATION ITEM NUMBER 205.0100

2) AVAILABLE MATERIAL= CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL

3) THE MASS ORDINATE + OR - QUANTITY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

BASE AGGREGATE DENSE 3/4-INCH

305.0115

STA	TO	STA	LOCATION	CY	REMARKS
6+70	-	6+90	STH 81 LT	2	CURB & GUTTER
6+72	-	6+88	STH 81 LT	2	CURB RAMP
6+83	-	6+88	STH 81 LT	1	WELLS STREET
6+88	-	8+04	STH 81 LT	7	
7+34	-	7+38	STH 81 LT	1	PRIVATE SIDEWALK
7+79	-	7+82	STH 81 LT	1	PRIVATE SIDEWALK
8+00	-	8+16	STH 81 LT	4	CONCRETE DRIVEWAY
8+00	-	8+41	STH 81 LT	2	CURB & GUTTER
8+03	-	8+15	STH 81 LT	1	ASPHALT DRIVEWAY
8+16	-	8+25	STH 81 LT	1	
8+23	-	8+36	STH 81 LT	4	CONCRETE DRIVEWAY
8+25	-	8+35	STH 81 LT	1	ASPHALT DRIVEWAY
8+36	-	9+57	STH 81 LT	7	
8+62	-	8+67	STH 81 LT	1	PRIVATE SIDEWALK
9+02	-	9+57	STH 81 LT	10	CAST IN PLACE WALL
9+03	-	9+07	STH 81 LT	1	PRIVATE SIDEWALK
9+25	-	9+29	STH 81 LT	1	PRIVATE SIDEWALK
9+57	-	9+70	STH 81 LT	1	CURB RAMP
9+57	-	9+62	STH 81 LT	2	KEEP STREET
9+64	-	9+70	STH 81 LT	1	CURB & GUTTER
10+02	-	10+09	STH 81 LT	1	CURB & GUTTER
10+03	-	10+13	STH 81 LT	1	CURB RAMP
10+13	-	12+83	STH 81 LT	15	
10+76	-	10+80	STH 81 LT	1	PRIVATE SIDEWALK
12+81	-	13+01	STH 81 LT	2	CURB & GUTTER
12+83	-	12+99	STH 81 LT	2	CURB RAMP
12+84	-	12+89	STH 81 LT	2	OHIO STREET
13+31	-	13+51	STH 81 LT	2	CURB & GUTTER
13+32	-	13+46	STH 81 LT	2	CURB RAMP
13+40	-	13+45	STH 81 LT	2	OHIO STREET
13+46	-	14+72	STH 81 LT	7	
13+83	-	13+87	STH 81 LT	1	PRIVATE SIDEWALK
14+38	-	14+42	STH 81 LT	1	PRIVATE SIDEWALK
14+63	-	14+86	STH 81 LT	4	CONCRETE DRIVEWAY
14+67	-	14+88	STH 81 LT	1	CURB & GUTTER
14+71	-	14+83	STH 81 LT	2	ASPHALT DRIVEWAY
14+83	-	16+14	STH 81 LT	8	
15+29	-	15+33	STH 81 LT	1	PRIVATE SIDEWALK
15+96	-	16+01	STH 81 LT	1	PRIVATE SIDEWALK
16+14	-	16+22	STH 81 LT	1	CURB RAMP
16+17	-	16+22	STH 81 LT	1	
16+20	-	16+22	STH 81 LT	4	CURB & GUTTER
16+52	-	16+52	STH 81 LT	1	CURB & GUTTER
16+53	-	16+60	STH 81 LT	1	CURB RAMP
16+53	-	16+59	STH 81 LT	3	DIVISION STREET
16+60	-	22+90	STH 81 LT	35	
			SUBTOTAL #1 =	153	

CONTINUED ON NEXT COLUMN

BASE AGGREGATE DENSE 3/4 - INCH (CONTINUED FROM PREVIOUS COLUMN)

305.0115

STA	TO	STA	LOCATION	CY	REMARKS
17+44	-	17+48	STH 81 LT	1	PRIVATE SIDEWALK
18+28	-	18+32	STH 81 LT	1	PRIVATE SIDEWALK
19+05	-	19+09	STH 81 LT	1	PRIVATE SIDEWALK
19+70	-	19+74	STH 81 LT	1	PRIVATE SIDEWALK
20+12	-	20+16	STH 81 LT	1	PRIVATE SIDEWALK
20+89	-	20+93	STH 81 LT	1	PRIVATE SIDEWALK
21+76	-	21+80	STH 81 LT	1	PRIVATE SIDEWALK
22+35	-	22+38	STH 81 LT	1	PRIVATE SIDEWALK
22+90	-	23+04	STH 81 LT	2	CURB RAMP
22+90	-	23+07	STH 81 LT	2	CURB & GUTTER
22+98	-	23+15	STH 81 RT	1	CURB RAMP
23+00	-	23+15	STH 81 RT	1	CURB & GUTTER
			SUBTOTAL #2 =	14	

TOTALS

SUBTOTAL #1	153
SUBTOTAL #2	14
TOTAL	167

BACKFILL STRUCTURAL

210.0100

STA	TO	STA	CY	REMARKS
9+02.08	-	9+07.08	0.6	Stairs A
9+07.08	-	9+25	4.9	
9+25	-	9+29	0.7	Stairs B
9+29	-	9+53.44	7.5	
9+53.44	-	9+55	3.8	Keep St
UNDISTRIBUTED			1.0	
		TOTAL	18.5	

FINISHING ROADWAY (PROJECT) 01. 5944-03-84

213.0100

LOCATION	EACH	REMARKS
PROJECT 5944-03-84	1	
TOTAL =	1	

CONCRETE DRIVEWAY 6-INCH

416.0160

STA	TO	STA	LOCATION	SY	REMARKS
8+00	-	8+16	STH 81 LT	21	
8+23	-	8+36	STH 81 LT	19	
14+63	-	14+86	STH 81 LT	20	
			TOTAL =	60	

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

465.0120

STA	TO	STA	LOCATION	TON	REMARKS
8+03	-	8+15	STH 81 LT	1	
8+25	-	8+35	STH 81 LT	1	
14+71	-	14+83	STH 81 LT	4	
			TOTAL =	6	

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

CONCRETE MASONRY RETAINING WALLS

STA	TO	STA	LOCATION	504.0500 CY	REMARKS
9+02	-	9+03	STH 81 LT	1	CIP WALL
9+07	-	9+25	STH 81 LT	4	CIP WALL
9+29	-	9+50	STH 81 LT	5	CIP WALL
9+50	-	9+56	STH 81 LT	2	CIP WALL
9+56	-	9+57	STH 81 LT	4	CIP WALL
			UNDISTRIBUTED	1	CIP WALL
			TOTAL =	17	

BAR STEEL REINFORCEMENT HS COATED RETAINING WALLS

BAR MARK	COAT	NO. REQ'D	LENGTH (FT)	LENGTH (IN)	BENT	BAR SERIES	SIZE	WT./FT	505.0615 LB	REMARKS
A500	X	50	4	10			5	1.04	252	CAST IN PLACE WALL
A501	X	6	20	9	X		5	1.04	130	CAST IN PLACE WALL
A502	X	6	18	4	X		5	1.04	115	CAST IN PLACE WALL
A503	X	42	5	7		X	5	1.04	245	CAST IN PLACE WALL
A504	X	10	2	5	X		5	1.04	25	CAST IN PLACE WALL
A505	X	14	20	7			5	1.04	301	CAST IN PLACE WALL
A506	X	12	6	4			5	1.04	79	CAST IN PLACE WALL
A507	X	14	6	6	X		5	1.04	95	CAST IN PLACE WALL
A508	X	30	5	6		X	5	1.04	172	CAST IN PLACE WALL
A509	X	14	13	9			5	1.04	201	CAST IN PLACE WALL
A410	X	3	5	5	X				INCIDENTAL	STAIRS
A411	X	6	1	9	X				INCIDENTAL	STAIRS
A412	X	4	3	9					INCIDENTAL	STAIRS
A413	X	5	2	6	X				INCIDENTAL	STAIRS
							TOTAL =		1615	

*SEE CONSTRUCTION DETAIL - CIP WALL FOR ADDITIONAL INFORMATION

CONCRETE CURB AND GUTTER ITEMS

STA	TO	STA	LOCATION	CONCRETE CURB & GUTTER 30-INCH TYPE D 601.0411 LF	CONCRETE CURB PEDESTRIAN 601.0600 LF	REMARKS
6+72	-	6+90	STH 81 LT	25	-	E. WELLS ST RAMPS
8+00	-	8+40	STH 81 LT	41	-	DRIVEWAY
9+64	-	9+70	STH 81 LT	13	-	W. KEEP ST RAMPS
10+02	-	10+09	STH 81 LT	13	-	E. KEEP ST RAMPS
12+80	-	12+99	STH 81 LT	28	-	W. OHIO ST RAMPS
13+29	-	13+50	STH 81 LT	28	-	E. OHIO ST RAMPS
14+67	-	14+87	STH 81 LT	20	-	DRIVEWAY
16+17	-	16+21	STH 81 LT	-	4	CURB RAMP
16+20	-	16+24	STH 81 LT	77	-	W. SIDE DIVISION
16+50	-	16+59	STH 81 LT	20	-	E. DIVISION RAMP
22+90	-	23+09	STH 81 LT	22	-	W. CLAY RAMP
23+00	-	23+15	STH 81 RT	15	-	S. LOUISA ST RAMP
			TOTAL =	302	4	

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

STA	LOCATION	602.0515 SF	REMARKS
6+75	STH 81 LT	8	TYPE 2 CURB RAMP
6+85	STH 81 LT	8	TYPE 2 CURB RAMP
9+65	STH 81 LT	8	TYPE 2 CURB RAMP
10+05	STH 81 LT	10	TYPE 2 CURB RAMP
12+85	STH 81 LT	8	TYPE 2 CURB RAMP
12+94	STH 81 LT	10	TYPE 2 CURB RAMP
13+35	STH 81 LT	10	TYPE 2 CURB RAMP
13+44	STH 81 LT	8	TYPE 2 CURB RAMP
16+19	STH 81 LT	10	TYPE 2 CURB RAMP
16+53	STH 81 LT	10	TYPE 2 CURB RAMP
23+00	STH 81 LT	8	TYPE 1-A CURB RAMP
23+00	STH 81 RT	8	TYPE 7-B CURB RAMP*
	TOTAL =	106	

*VERIFY LOCATION AND SLOPES WITH CONSTRUCTION ENGINEER

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

3

CONCRETE SIDEWALK

STA	TO	STA	LOCATION	CONCRETE SIDEWALK 4-INCH 602.0405 SF	REMARKS
6+72	-	6+88	STH 81 LT	123	CURB RAMP
6+83	-	6+88	STH 81 LT	83	WELLS STREET
6+88	-	8+04	STH 81 LT	580	
7+34	-	7+38	STH 81 LT	10	PRIVATE SIDEWALK
7+79	-	7+82	STH 81 LT	8	PRIVATE SIDEWALK
8+16	-	8+25	STH 81 LT	45	
8+36	-	8+97	STH 81 LT	310	
8+62	-	8+67	STH 81 LT	8	PRIVATE SIDEWALK
8+97		9+57	STH 81 LT	360	
9+03	-	9+07	STH 81 LT	5	PRIVATE SIDEWALK
9+25	-	9+29	STH 81 LT	5	PRIVATE SIDEWALK
9+57	-	9+70	STH 81 LT	77	CURB RAMP
9+57	-	9+62	STH 81 LT	197	KEEP STREET
10+03	-	10+13	STH 81 LT	56	CURB RAMP
10+13	-	12+83	STH 81 LT	1629	
10+76	-	10+80	STH 81 LT	5	PRIVATE SIDEWALK
12+83	-	12+99	STH 81 LT	142	CURB RAMP
12+84	-	12+89	STH 81 LT	113	OHIO STREET
13+32	-	13+46	STH 81 LT	116	CURB RAMP
13+40	-	13+45	STH 81 LT	112	OHIO STREET
13+46	-	14+72	STH 81 LT	759	
13+83	-	13+87	STH 81 LT	5	PRIVATE SIDEWALK
14+38	-	14+42	STH 81 LT	5	PRIVATE SIDEWALK
14+83	-	16+14	STH 81 LT	783	
15+29	-	15+33	STH 81 LT	15	PRIVATE SIDEWALK
15+96	-	16+01	STH 81 LT	19	PRIVATE SIDEWALK
16+14	-	16+22	STH 81 LT	54	CURB RAMP
16+17	-	16+22	STH 81 LT	22	STAIRCASE BOTTOM LANDING
16+53	-	16+60	STH 81 LT	48	CURB RAMP
16+53	-	16+59	STH 81 LT	237	DIVISION STREET
16+60	-	22+90	STH 81 LT	3762	
17+44	-	17+48	STH 81 LT	5	PRIVATE SIDEWALK
18+28	-	18+32	STH 81 LT	5	PRIVATE SIDEWALK
19+05	-	19+09	STH 81 LT	5	PRIVATE SIDEWALK
19+70	-	19+74	STH 81 LT	3	PRIVATE SIDEWALK
20+12	-	20+16	STH 81 LT	6	PRIVATE SIDEWALK
20+89	-	20+93	STH 81 LT	3	PRIVATE SIDEWALK
21+76	-	21+80	STH 81 LT	8	PRIVATE SIDEWALK
22+35	-	22+38	STH 81 LT	8	PRIVATE SIDEWALK
22+90	-	23+04	STH 81 LT	113	CURB RAMP
22+98	-	23+15	STH 81 RT	85	CURB RAMP
TOTAL	=			9,934	

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

CONCRETE STEPS

STA	LOCATION	602.1500 SF	REMARKS
9+05	STH 81 LT	16	
9+26	STH 81 LT	15	
10+77	STH 81 LT	4	STEP AT TOP OF STAIRCASE
13+85	STH 81 LT	4	STEP AT TOP OF STAIRCASE
14+40	STH 81 LT	4	STEP AT TOP OF STAIRCASE
15+30	STH 81 LT	4	STEP AT TOP OF STAIRCASE
15+98	STH 81 LT	10	STAIRS ABOVE STAIRCASE TO PRIVATE SIDEWALK
17+45	STH 81 LT	4	STEP AT TOP OF STAIRCASE
18+30	STH 81 LT	4	STEP AT TOP OF STAIRCASE
19+07	STH 81 LT	4	STEP AT TOP OF STAIRCASE
19+72	STH 81 LT	4	STEP AT TOP OF STAIRCASE
20+14	STH 81 LT	4	STEP AT TOP OF STAIRCASE
20+91	STH 81 LT	4	STEP AT TOP OF STAIRCASE
21+77	STH 81 LT	4	STEP AT TOP OF STAIRCASE
TOTAL =		85	

ADJUSTING INLET COVERS

STA	LOCATION	611.8115 EACH	REMARKS
6+78	LT	1	
16+52	LT	1	
		2	

PIPE UNDERDRAIN SUMMARY

STA	TO	STA	LOCATION	PIPE UNDERDRAIN 6-INCH 612.0106 LF	PIPE UNDERDRAIN UNPERFORATED 6-INCH 612.0206 LF	REMARKS
9+08	-	9+24	STH 81 LT	16	-	PIPE BEHIND WALL
9+30	-	9+56	STH 81 LT	26	-	PIPE BEHIND WALL
9+56	-	9+57	KEEP ST	13	-	PIPE BEHIND WALL
9+24	-	9+25	STH 81 LT	1	-	PIPE SLEEVE REQUIRED
9+29	-	9+30	STH 81 LT	1	-	PIPE SLEEVE REQUIRED
9+56	-	9+57	STH 81 LT	1	-	PIPE SLEEVE REQUIRED
9+25	-	9+29	STH 81 LT	4	-	PERFORATED PIPE CONNECTING PIPE SLEEVES
9+57	-	9+66	STH 81 LT	-	16	
TOTAL =				62	16	

3

MAINTENANCE AND REPAIR OF HAUL ROADS (5944-03-84)

LOCATION	618.0100 EACH	REMARKS
PROJECT	1.00	
TOTAL =	1	

MOBILIZATION

CATEGORY	LOCATION	619.1000 EACH	REMARKS
0010	ROADWAY	0.25	
0020	STRUCTURES	0.75	R-33-0004, R-33-0005, R-33-0006
TOTAL =		1	

WATER

STA TO STA	LOCATION	624.0100 MGAL	REMARKS
	UNDISTRIBUTED	5	
	TOTAL =	5	

INLET PROTECTION SUMMARY

STA	LOCATION	INLET PROTECTION TYPE A 628.7005 EACH	INLET PROTECTION TYPE C 628.7015 EACH	REMARKS
6+77	STH 81 LT	-	1	
7+46	STH 81 RT	-	1	
8+21	STH 81 LT	1	-	
9+66	STH 81 LT	-	1	
9+72	STH 81 LT	-	1	
10+00	STH 81 LT	-	1	
10+22	STH 81 RT	-	1	
13+00	STH 81 LT	-	1	
13+30	STH 81 LT	-	1	
13+52	STH 81 RT	-	1	
16+20	STH 81 LT	-	1	
16+52	STH 81 LT	-	1	
22+88	STH 81 RT	-	1	
22+98	STH 81 RT	-	1	
23+09	STH 81 LT	-	1	
23+15	STH 81 LT	-	1	
23+16	STH 81 LT	-	1	
23+31	STH 81 RT	-	1	
TOTAL =		1	17	

MOBILIZATION EROSION CONTROL

LOCATION	MOBILIZATIONS EROSION CONTROL 628.1905 EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL 628.1910 EACH	REMARKS
PROJECT 5944-03-84	5	5	
TOTALS =	5	5	

EROSION CONTROL SUMMARY

LOCATION	TO	LOCATION	SALVAGED TOPSOIL 625.0500 SY	SILT FENCE 628.1504 LF	SILT FENCE MAINTENANCE 628.1520 LF	EROSION MAT URBAN CLASS I TYPE B 628.2008 SY	FERTILIZER TYPE B 629.0210 CWT	SEEDING MIXTURE NO. 40 630.0140 LB	SEEDING TEMPORARY 630.0200 LB
WELLS ST	-	KEEP ST	1,100	-	-	252	0.16	4.54	6.81
KEEP ST	-	OHIO ST	2,315	-	-	339	0.22	6.11	9.16
OHIO ST	-	DIVISION ST	1,889	-	-	379	0.24	6.83	10.24
DIVISION ST	-	CLAY ST	1,356	-	-	653	0.42	11.76	17.64
UNDISTRIBUTED			-	100	100	-	0.00	0.00	0
		TOTAL =	6,660	100	100	1,623	1.04	29.24	43.85

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

SIGN SUMMARY

SIGN #	SIGN CODE	SIGN MESSAGE	STATION	LOCATION	SIGN SIZE	POSTS WOOD 4X6-INCH X 14-FT 634.0614 EACH	SIGNS TYPE II REFLECTIVE H 637.2210 SF	SIGNS TYPE II REFLECTIVE F 637.2230 SF	MOVING SIGNS TYPE II 638.2102 EACH	REMOVING SIGNS TYPE II 638.2602 EACH	REMOVING SMALL SIGN SUPPORTS 638.3000 EACH	MOVING SMALL SIGN SUPPORTS 638.4000 EACH	REMARKS
1-01	-	LOUISA ST/ WELLS ST	6+80	STH 81 LT		-	-	-	2	-	-	1	
1-02	J2-2		6+90	STH 81 LT	48 X 57	1	19.00	-	-	-	1	-	
-	M1-6	STH 23	6+90	STH 81 LT	24 X 24	-	-	-	-	1	-	-	
-	M1-6	STH 23	6+90	STH 81 LT	24 X 24	-	-	-	-	1	-	-	
-	M3-1	NORTH	6+90	STH 81 LT	24 X 12	-	-	-	-	1	-	-	
-	M3-3	SOUTH	6+90	STH 81 LT	24 X 12	-	-	-	-	1	-	-	
-	M5-1L	LEFT ARROW	6+90	STH 81 LT	21 X 21	-	-	-	-	1	-	-	
-	M5-1R	RIGHT ARROW	6+90	STH 81 LT	21 X 21	-	-	-	-	1	-	-	
-	-	NO STOPPING STANDING OR PARKING	6+90	STH 81 LT		-	-	-	1	-	-	-	MOUNT WITH ASSEMBLY
1-03	-	POST OFFICE/BUSINESS DIST.	7+30	STH 81 LT		-	-	-	1	-	-	1	
1-04	-	NO STOPPING STANDING OR PARKING	8+55	STH 81 LT		-	-	-	1	-	-	1	
1-05	J1-1	-	9+50	STH 81 LT	24 X 39	1	6.50	-	-	-	1	-	
-	M1-6	STH 23	9+50	STH 81 LT	24 X 24	-	-	-	-	1	-	-	
-	M2-1	JCT	9+50	STH 81 LT	21 X 15	-	-	-	-	1	-	-	
1-06	R1-1	STOP	9+50	KEEP ST.	30 X 30	1	5.18	-	-	1	1	-	
1-07	-	LOUISA ST/ KEEP ST	10+10	STH 81 LT		-	-	-	2	-	-	1	
1-08	W3-1	STOP AHEAD	10+35	STH 81 LT	36 X 36	1	-	9.00	-	1	1	-	
1-09	-	NO STOPPING STANDING OR PARKING	12+15	STH 81 LT		-	-	-	1	-	-	1	
1-10	-	LOUISA ST/ OHIO ST	13+00	STH 81 LT		-	-	-	2	-	-	1	
1-11	R1-1	STOP	13+00	OHIO ST	30 X 30	1	5.18	-	-	1	1	-	
1-12	W11-2	CROSSWALK	13+50	STH 81 LT	30 X 30	1	-	6.25	-	1	1	-	
2-01	-	NO STOPPING STANDING OR PARKING	15+10	STH 81 LT		-	-	-	1	-	-	1	
2-02	R1-1	STOP	16+20	DIVISION ST	30 X 30	1	5.18	-	-	1	1	-	
2-03	-	LOUISA ST/ DIVISION ST	16+62	STH 81 LT		-	-	-	2	-	-	1	
2-04	R2-1	SPEED LIMIT 25	18+00	STH 81 LT	24 X 30	1	5.00	-	-	1	1	-	
2-05	-	NO PARKING THIS SIDE OF STREET	20+50	STH 81 LT		-	-	-	1	-	-	1	
2-06	-	ATV TRAIL ROUTE ENDS	23+00	STH 81 LT		-	-	-	1	-	-	1	
2-07	R1-1	STOP	23+00	CLAY ST.	30 X 30	1	5.18	-	-	1	1	-	
				TOTAL =		9	51.22	15.25	15.00	15	9	10.00	

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

FIELD OFFICE TYPE B

LOCATION	642.5001 EACH	REMARKS
PROJECT 5944-03-84	1	
TOTAL =	1	

TRAFFIC CONTROL (PROJECT) 01. 5944-03-84

LOCATION	643.0100 EACH	REMARKS
PROJECT 5944-03-84	1	
TOTAL =	1	

GEOTEXTILE FABRIC TYPE DF SCHEDULE A

STATION	TO	STATION	LOCATION	645.0111 SY	REMARKS
9+08	-	9+57	STH 81 LT	28	
TOTAL =				28	

TRAFFIC CONTROL SIGNS

STATION	LOCATION	SIGN CODE	DESCRIPTION	QTY	643.0900 DAYS	REMARKS
START	STH 81 EB	W20-1A	ROAD WORK AHEAD	1	125	
0+00	STH 81 EB	W20-1D	ROAD WORK 500 FT	1	125	
2+50	STH 81 EB	WO1-4R	ROAD CURVES AHEAD	1	125	
2+50	STH 81 WB	G20-2A	END ROAD WORK	1	125	
6+25	TYPE III BARRICADE	R11-2	LANE CLOSED	1	125	
6+40	TYPE II BARRICADE	R9-11A	SIDEWALK CLOSED, CROSS HERE (RT)	1	125	
6+80	TYPE II BARRICADE	R9-9	SIDEWALK CLOSED	1	125	E.SIDE WELLS ST
9+50	TYPE III BARRICADE	R11-2	LANE CLOSED	1	125	
9+55	TYPE II BARRICADE	R9-9	SIDEWALK CLOSED	1	125	
9+60	TYPE II BARRICADE	R9-9	SIDEWALK CLOSED	1	125	W. SIDE KEEP ST
10+15	TYPE II BARRICADE	R9-9	SIDEWALK CLOSED	1	125	
12+80	TYPE II BARRICADE	R9-9	SIDEWALK CLOSED	1	125	
12+80	TYPE III BARRICADE	R11-2	LANE CLOSED	1	125	
12+85	TYPE II BARRICADE	R9-9	SIDEWALK CLOSED	1	125	W. SIDE OHIO ST
13+45	TYPE II BARRICADE	R9-9	SIDEWALK CLOSED	1	125	E. SIDE OHIO ST
13+50	TYPE II BARRICADE	R9-9	SIDEWALK CLOSED	1	125	
16+15	TYPE III BARRICADE	R11-2	LANE CLOSED	1	125	
16+55	TYPE II BARRICADE	R9-9	SIDEWALK CLOSED	1	125	
19+50	TYPE III BARRICADE	R11-2	LANE CLOSED	1	125	
22+85	TYPE III BARRICADE	R11-2	LANE CLOSED	1	125	
22+95	TYPE II BARRICADE	R9-9	SIDEWALK CLOSED	1	125	S. SIDE DIVISION
23+15	TYPE II BARRICADE	R9-9	SIDEWALK CLOSED	1	125	S. SIDE DIVISION
23+70	TYPE II BARRICADE	R9-11A	SIDEWALK CLOSED, CROSS HERE (LT)	1	125	
23+05	TYPE II BARRICADE	R9-9	SIDEWALK CLOSED	1	125	
27+10	STH 81 EB	G20-2A	END ROAD WORK	1	125	
27+10	STH 81 WB	WO1-4R	ROAD CURVES AHEAD	1	125	
29+60	STH 81 WB	W20-1D	ROAD WORK 500 FT	1	125	
34+60	STH 81 WB	W20-1A	ROAD WORK AHEAD	1	125	
-	WELLS ST NB	W20-1A	ROAD WORK AHEAD	1	125	
-	WELLS ST NB	G20-2A	END ROAD WORK	1	125	
-	WELLS ST SB	W20-1A	ROAD WORK AHEAD	1	125	
-	WELLS ST SB	W20-1A	END ROAD WORK	1	125	
-	KEEP ST NB	W20-1A	ROAD WORK AHEAD	1	125	
-	KEEP ST NB	G20-2A	END ROAD WORK	1	125	
-	KEEP ST SB	W20-1A	ROAD WORK AHEAD	1	125	
-	KEEP ST SB	G20-2A	END ROAD WORK	1	125	
-	OHIO ST NB	W20-1A	ROAD WORK AHEAD	1	125	
-	OHIO ST NB	G20-2A	END ROAD WORK	1	125	
-	OHIO ST SB	W20-1A	ROAD WORK AHEAD	1	125	
-	OHIO ST SB	G20-2A	END ROAD WORK	1	125	
-	DIVISION ST NB	W20-1A	ROAD WORK AHEAD	1	125	
-	DIVISION ST NB	G20-2A	END ROAD WORK	1	125	
-	DIVISION ST SB	W20-1A	ROAD WORK AHEAD	1	125	
-	DIVISION ST SB	G20-2A	END ROAD WORK	1	125	
-	CLAY ST SB	W20-1A	ROAD WORK AHEAD	1	125	
-	CLAY ST NB	G20-2A	END ROAD WORK	1	125	
			TOTAL =	5750		

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

TRAFFIC CONTROL SUMMARY

LOCATION	TO	LOCATION	TRAFFIC CONTROL DRUMS 643.0300 DAYS	TRAFFIC CONTROL BARRICADES TYPE II 643.0410 DAYS	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 DAYS	TRAFFIC CONTROL WARNING LIGHTS TYPE A 643.0705 DAYS	TRAFFIC CONTROL WARNING LIGHTS TYPE C 643.0715 DAYS	TRAFFIC CONTROL COVERING SIGNS TYPE II 643.0920 EACH	REMARKS
BEGIN	-	KEEP ST	2,375	500	250	1,000	625	-	STAGE 1
KEEP ST	-	OHIO ST	1,375	375	125	625	-	2	STAGE 1
OHIO ST	-	DIVISION ST	1,375	250	125	500	-	-	STAGE 1
DIVISION ST	-	END	3,125	625	250	1,125	625	-	STAGE 1
		TOTALS =	8,250	1,750	750	3,250	1,250	2	

PAVEMENT MARKING SUMMARY

STATION	TO	STATION	LOCATION	PAVEMENT MARKING EPOXY 4-INCH 646.0106 LF	REMOVING PAVEMENT MARKINGS 646.0600 LF	PAVEMENT MARKING SYMBOLS (EPOXY) 647.0256 EACH	TEMPORARY PAVEMENT MARKING 4-INCH 649.0100 LF	REMARKS
11+60	-	18+10	STH 81	1300	1300	-	1300	STAGE 1 SOLID DOUBLE YELLOW
5+00	-	24+80	STH 81	3960	3960	-	3960	STAGE 2 SOLID DOUBLE YELLOW
11+58	-	11+81		40	40	1	-	PARKING LINES/ SYMBOL
11+98	-	12+21		40	40	1	-	PARKING LINES/ SYMBOL
			TOTAL =	5,340	5,340	2	5,260	

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 5944-03-84

LOCATION	650.9910 LS	REMARKS
PROJECT 5944-03-84	1	
TOTAL =	1	

CONSTRUCTION STAKING SLOPE STAKES

STATION	TO	STATION	LOCATION	650.9920 LF	REMARKS
6+75	-	23+25	LT STH 81	1,650	
			TOTAL =	1,650	

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

CONSTRUCTION STAKING STRUCTURE LAYOUT SUMMARY

CATEGORY	LOCATION	CONSTRUCTION STAKING STRUCTURE LAYOUT 01. STA 9+50 650.6500.01 LS	CONSTRUCTION STAKING STRUCTURE LAYOUT 02. R-33-004 650.6500.02 LS	CONSTRUCTION STAKING STRUCTURE LAYOUT 03. R-33-005 650.6500.03 LS	CONSTRUCTION STAKING STRUCTURE LAYOUT 04. R-33-006 650.6500.04 LS
0010	STA 9+50	1	-	-	-
0020	STA 11+50	-	1	-	-
0020	STA 15+00	-	-	1	-
0020	STA 19+00	-	-	-	1
	TOTAL =	1	1	1	1

SAWING ASPHALT

STA	TO	STA	LOCATION	690.0150 LF	REMARKS
8+04	-	8+16	STH 81 LT	12	
8+26	-	8+36	STH 81 LT	10	
14+72	-	14+83	STH 81 LT	11	
			TOTAL =	33	

SAWING CONCRETE

STA	TO	STA	LOCATION	690.0250 LF	REMARKS
6+72	-	6+90	STH 81 LT	5	CURB & GUTTER
6+84	-	6+87	STH 81 LT	4	SIDEWALK
7+34	-	7+38	STH 81 LT	4	PRIVATE SIDEWALK
7+79	-	7+82	STH 81 LT	4	PRIVATE SIDEWALK
8+00	-	8+41	STH 81 LT	5	CURB & GUTTER
8+62	-	8+66	STH 81 LT	5	PRIVATE SIDEWALK
9+03	-	9+07	STH 81 LT	5	PRIVATE SIDEWALK
9+25	-	9+29	STH 81 LT	5	PRIVATE SIDEWALK
9+55	-	9+59	STH 81 LT	4	SIDEWALK
9+65	-	9+70	STH 81 LT	5	CURB & GUTTER
10+00	-	10+09	STH 81 LT	5	CURB & GUTTER
10+76	-	10+80	STH 81 LT	4	PRIVATE SIDEWALK
12+81	-	13+01	STH 81 LT	5	CURB & GUTTER
12+83	-	12+87	STH 81 LT	4	SIDEWALK
13+29	-	13+51	STH 81 LT	5	CURB & GUTTER
13+43	-	13+47	STH 81 LT	4	SIDEWALK
13+83	-	13+87	STH 81 LT	4	PRIVATE SIDEWALK
14+38	-	14+42	STH 81 LT	4	PRIVATE SIDEWALK
14+67	-	14+88	STH 81 LT	5	CURB & GUTTER
15+29	-	15+31	STH 81 LT	3	PRIVATE SIDEWALK
15+81	-	15+85	STH 81 LT	4	PRIVATE SIDEWALK
16+20	-	16+22	STH 81 LT	5	CURB & GUTTER
16+52	-	16+60	STH 81 LT	5	CURB & GUTTER
16+55	-	16+59	STH 81 LT	4	SIDEWALK
18+28	-	18+31	STH 81 LT	4	PRIVATE SIDEWALK
19+05	-	19+09	STH 81 LT	3	PRIVATE SIDEWALK
19+71	-	19+74	STH 81 LT	3	PRIVATE SIDEWALK
20+14	-	20+17	STH 81 LT	3	PRIVATE SIDEWALK
20+90	-	20+93	STH 81 LT	3	PRIVATE SIDEWALK
21+78	-	21+81	STH 81 LT	4	PRIVATE SIDEWALK
22+36	-	22+39	STH 81 LT	3	PRIVATE SIDEWALK
22+90	-	23+09	STH 81 LT	5	CURB & GUTTER
22+97	-		STH 81 RT	5	SIDEWALK
23+00	-	23+15	STH 81 RT	5	CURB & GUTTER
23+04	-		STH 81 LT	5	SIDEWALK
23+15	-		STH 81 RT	5	SIDEWALK
			TOTAL =	155	

ITEMS ASSOCIATED WITH UTILITY ADJUSTMENTS

SANITARY SEWER LATERAL RELOCATION

SPV. 0060.01

CATEGORY	STATION	LOCATION	HOUSE NUMBER	EACH	COMMENTS
0030	11+66	Louisa Street, Lt	Parking Lot/#308	1	
0030	12+15	Louisa Street, Lt	Parking Lot	1	
0030	14+26	Louisa Street, Lt	#404	1	
0030	15+33	Louisa Street, Lt	#430	1	Relocate lateral to east of new stairs
0030	15+72	Louisa Street, Lt	#442	1	
0030	17+31	Louisa Street, Lt	#504	1	
0030	17+69	Louisa Street, Lt	Between #504 and #530	1	
0030	18+37	Louisa Street, Lt	#530	1	
0030	19+71	Louisa Street, Lt	#600	1	Relocate lateral to west of new stairs
0030	20+68	Louisa Street, Lt	#604	1	
			PROJECT TOTAL	10	

WATER MAIN, HYDRANT RELOCATION

SPV. 0060.02

CATEGORY	STATION	LOCATION	EACH	COMMENTS
0050	10+16	Louisa Street, Lt	1	Install new hydrant, 6-inch diameter resilient wedge valve, and 6-inch diameter pvc hydrant lead
0050	13+53	Louisa Street, Lt	1	Install new hydrant, 6-inch diameter resilient wedge valve, and 6-inch diameter pvc hydrant lead
		PROJECT TOTAL	2	

WATER MAIN, WATER SERVICE RELOCATION

SPV. 0060.03

CATEGORY	STATION	LOCATION	HOUSE NUMBER	EACH	COMMENTS
0040	9+40	Louisa Street, Lt	#244	1	
0040	10+17	Louisa Street, Lt	#308	1	
0040	14+67	Louisa Street, Lt	#404	1	Connect to existing curb stop
0040	15+31	Louisa Street, Lt	#430	1	Relocate lateral to east of new stairs and connect to existing curb stop
0040	18+37	Louisa Street, Lt	#530	1	
0040	19+06	Louisa Street, Lt	#544	1	Relocate lateral to east of new stairs and connect to existing curb stop
0040	19+78	Louisa Street, Lt	#600	1	
0040	20+38	Louisa Street, Lt	#604	1	
0040	21+27	Louisa Street, Lt	#636	1	
			PROJECT TOTAL	9	

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

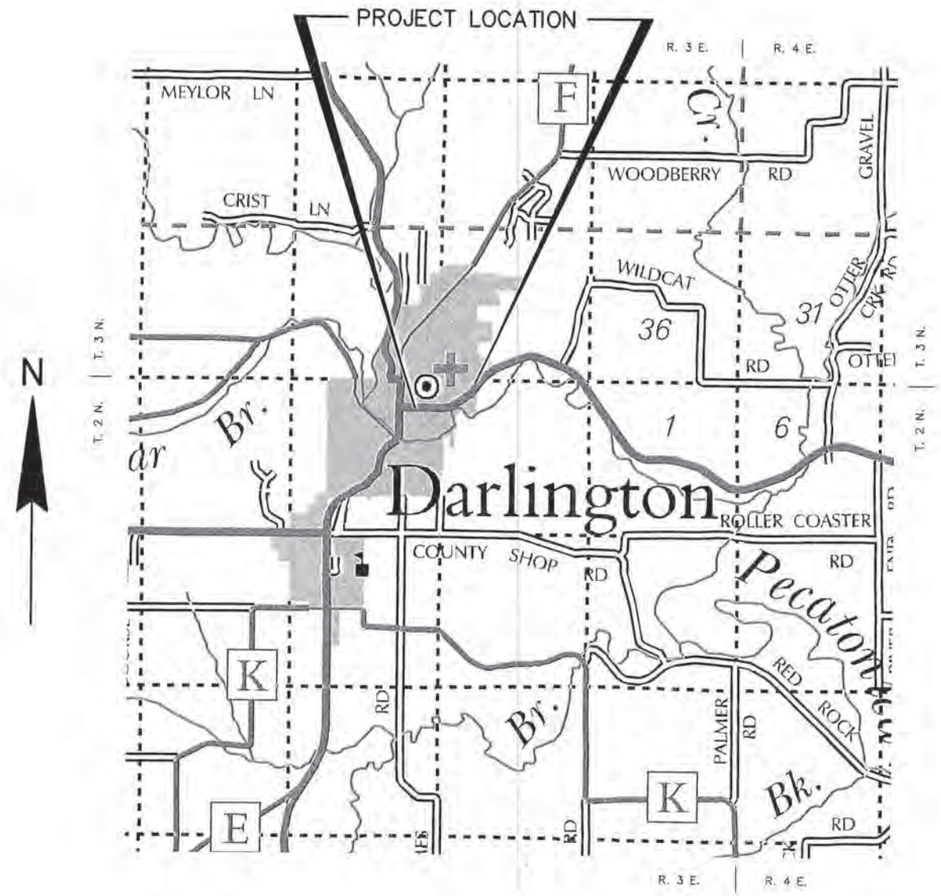
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJECT 5944-03-24

DARLINGTON - ARGYLE

(WELLS STREET TO CLAY STREET)

STH 81
LAFAYETTE COUNTY



THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 5944-03-24

NOTES:

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

RIGHT-OF-WAY LINES 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 HIGHWAY RIGHT-OF-WAY SHOWN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR E. LOUISA STREET (S.T.H. 81) ESTABLISHED FROM THE ORIGINAL PLAT CITY OF DARLINGTON AND FROM PRIVATE SURVEYS OF RECORD "PLAT OF SURVEY" BY BRUCE D. BOWDEN DATED MARCH 31, 1991 AND REVISED JULY 30, 1992 AND ANOTHER DATED JULY 30, 1992, CERTIFIED SURVEY MAP NO. 107 AND "PLAT OF SURVEY" BY MICHAEL R. LAROSA DATED NOVEMBER 30, 1999.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY LINE IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT TO INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (T.L.E.s) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF THE EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, LAFAYETTE COUNTY, NAD 83, 2007 IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. .GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER DOCUMENTS, OR FROM CENTERLINE OF PAVEMENTS.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.

CONVENTIONAL SYMBOLS AND ABBREVIATIONS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
NATIONAL GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT

SECTION CORNER
NOTATION FOR COMBUSTABLE FLUIDS
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES
BRIDGE

R/W MONUMENT
NON-MONUMENTED R/W POINT
FOUND IRON PIN
VALVE (GAS, WATER, ETC.)
SIGN
OFF-PREMISE SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	■	□
TELEPHONE POLE	●	⌀
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)	✖	✖

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

PARCEL NUMBER (25)
UTILITY NUMBER (40)

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

CURVE DATE

LONG CHORD	L.C.
LONG CHORD BEARING	L.C.B.
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	Δ
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

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

TPP NUMBER 5944-03-24-4.01
SHEET 2 OF 2

FILE NAME: 5444-03-24 COVER SHT
PLOT DATE: 10-9-13
PLOT BY: TJG
PLOT NAME:
PLOT SCALE:1=1

KNIGHT
700 N Third Street
Suite 104
La Crosse, WI 54601
Engineers & Architects Phone: (608) 519-1455

I, THEODORE J. GREENHECK, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISION OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 5944-03-24-4.01 AMENDMENT NO. 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN THEODORE J. GREENHECK S-2431-008 SPRING GREEN, WI LAND SURVEYOR

2/7/14
THEODORE J. GREENHECK DATE
AGENT FOR KNIGHT E/A INC.
R.L.S. #2431

2/10/14
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION. DATE

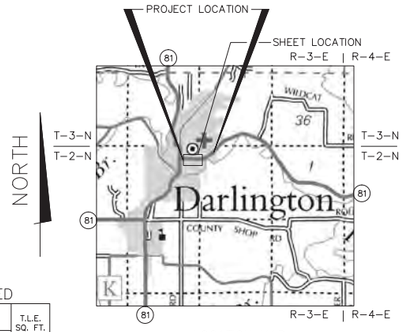
UTILITY SCHEDULE AND INTERESTS REQUIRED

UTILITY NUMBER	OWNER (S)	INTERESTS REQUIRED
40	ALLIANT ENERGY	RELEASE OF RIGHTS
41	CENTURYLINK	RELEASE OF RIGHTS
42	CITY OF DARLINGTON – WATER UTILITY	RELEASE OF RIGHTS
43	CITY OF DARLINGTON – SEWER UTILITY	RELEASE OF RIGHTS
–	–	–

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTERESTS REQUIRED	R/W REQUIRED SQUARE FEET NEW	EXISTING	TOTAL	T.L.E. SQ. FT. TEMP.
1	LESLIE C. & SUSAN M. TORSTENSON	TLE	–	–	–	84
2	DONALD & DIANNE OSTERDAY	TLE	–	–	–	185
3	NAOMI I. JENSON	TLE	–	–	–	198
4	DAVID T. & LORRIE K. REED	FEE/TLE	186	–	186	58
5	SHEILA A. (MERRITT) JOHNSON	FEE/TLE	729	–	729	72
6	IMMANUAL UNITED CHURCH OF CHRIST	FEE	391	–	391	–

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO D.O.T.



LOCATION MAP
(NOT TO SCALE)

TRANSPORTATION PROJECT PLAT NO: 5944-03-24-4.01 AMENDMENT NO. 1 AMENDS UTILITY NUMBERS 40 AND ADDS UTILITY NUMBERS 41, 42 AND 43 OF TRANSPORTATION PROJECT PLAT NO. 5944-03-24-4.01 RECORDED AS DOCUMENT NO. 338961.

THAT PART OF LOTS 7 AND 8, BLOCK 10 AND THAT PART OF LOTS 7 AND 8 OF BLOCK 25 OF THE ORIGINAL PLAT OF THE CITY OF DARLINGTON, BEING LOCATED IN GOVERNMENT LOT 1 OF SECTION 3, ALL IN TOWN 2 NORTH, RANGE 3 EAST, CITY OF DARLINGTON, LAFAYETTE COUNTY, WISCONSIN.

RELOCATION ORDER STH 81 DARLINGTON–ARGYLE (WELLS STREET TO CLAY STREET)

TO PROPERLY ESTABLISHED, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEM IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3)AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OF RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2). WISCONSIN STATUTES.

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEED IN LAFAYETTE COUNTY, WISCONSIN AT 8:30 AM ON FEBRUARY 17, 2014 AS DOCUMENT 339908 AND FILED ENVELOPE 4 CABINET 2

Joseph G Boll
SIGNATURE OF REGISTER OF DEEDS

THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE COUNTY REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER:
5944-03-24-4.01
AMENDMENT NO: 1

ALLIANT ENERGY
NO RECORD OF EASEMENTS – PARCEL 6

CENTURYLINK
NO RECORD OF EASEMENT – PARCEL 5

CITY OF DARLINGTON – WATER UTILITY
NO RECORD OF EASEMENT – PARCEL 4

CITY OF DARLINGTON – SEWER UTILITY
NO RECORD OF EASEMENT – PARCEL 6

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN LAFAYETTE COUNTY AS SHEET 2 OF 2 DOCUMENT NUMBER 338961 AND FILED IN ENVELOPE 2, CABINET 2, LAFAYETTE COUNTY.

AND TRANSPORTATION PROJECT PLAT SHEET 4.01 RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS AS DOCUMENT NUMBER 338961 AND FILED IN ENVELOPE 2, CABINET 2, LAFAYETTE COUNTY.

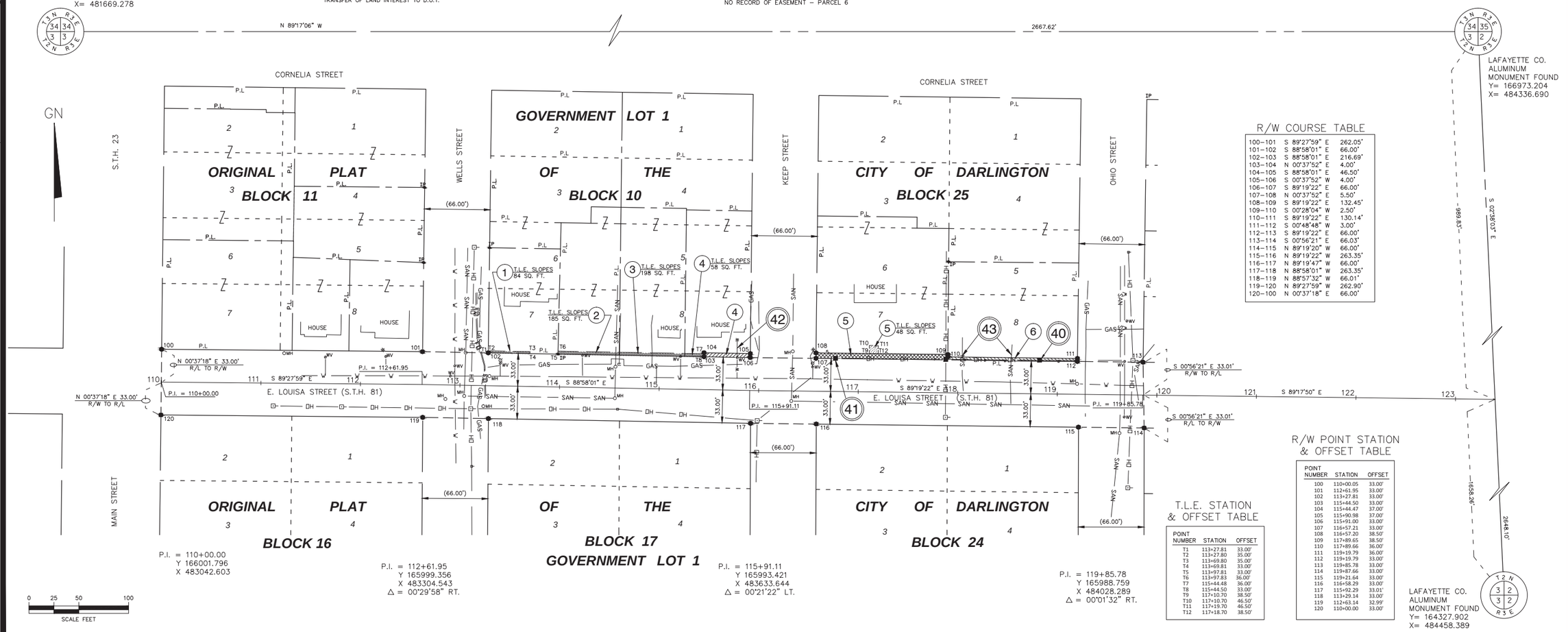
NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, LAFAYETTE COUNTY, NAD 83, 2007 IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR E. LOUISA STREET (S.T.H. 81) ESTABLISHED FROM THE ORIGINAL PLAT CITY OF DARLINGTON.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER DOCUMENTS, OR FROM CENTERLINE OF PAVEMENTS.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.



P.I. = 110+00.00
Y 166001.796
X 483042.603

P.I. = 112+61.95
Y 165999.356
X 483304.543
Δ = 00°29'58" RT.

P.I. = 115+91.11
Y 165993.421
X 483633.644
Δ = 00°21'22" LT.

P.I. = 119+85.78
Y 165988.759
X 484028.289
Δ = 00°01'32" RT.

R/W COURSE TABLE

100–101	S 89°27'59" E	262.05'
101–102	S 88°58'01" E	66.00'
102–103	S 88°58'01" E	216.69'
103–104	N 00°37'52" E	4.00'
104–105	S 88°58'01" E	46.50'
105–106	S 00°37'52" W	4.00'
106–107	S 89°19'22" E	66.00'
107–108	N 00°37'52" E	5.50'
108–109	S 89°19'22" E	132.45'
109–110	S 00°28'04" W	2.50'
110–111	S 89°19'22" E	130.14'
111–112	S 00°48'48" W	3.00'
112–113	S 89°19'22" E	66.00'
113–114	S 00°56'21" E	66.03'
114–115	N 89°19'20" W	66.00'
115–116	N 89°19'22" W	263.35'
116–117	N 89°19'47" W	66.00'
117–118	N 88°58'01" W	263.35'
118–119	N 88°57'32" W	66.01'
119–120	N 89°27'59" W	262.90'
120–100	N 00°37'18" E	66.00'

T.L.E. STATION & OFFSET TABLE

POINT NUMBER	STATION	OFFSET
T1	113+27.81	33.00'
T2	113+27.80	35.00'
T3	113+69.80	35.00'
T4	113+69.81	33.00'
T5	113+97.81	33.00'
T6	113+97.83	36.00'
T7	115+44.48	36.00'
T8	115+44.50	33.00'
T9	117+10.70	38.50'
T10	117+10.70	46.50'
T11	117+19.70	46.50'
T12	117+18.70	38.50'

R/W POINT STATION & OFFSET TABLE

POINT NUMBER	STATION	OFFSET
100	110+00.05	33.00'
101	112+61.95	33.00'
102	113+27.81	33.00'
103	115+44.50	33.00'
104	115+44.47	37.00'
105	115+90.98	37.00'
106	115+91.00	33.00'
107	116+57.21	33.00'
108	116+57.20	38.50'
109	117+89.65	38.50'
110	117+89.66	36.00'
111	119+19.79	36.00'
112	119+19.79	33.00'
113	119+85.78	33.00'
114	119+87.66	33.00'
115	119+21.64	33.00'
116	116+58.29	33.00'
117	115+92.29	33.01'
118	113+29.14	33.00'
119	112+63.14	32.99'
120	110+00.00	33.00'

LAFAYETTE CO. ALUMINUM MONUMENT FOUND Y= 164327.902 X= 484458.389

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTERESTS REQUIRED	R/W REQUIRED SQUARE FEET			T.L.E. SQ. FT. TEMP.
			NEW	EXISTING	TOTAL	
7	LDW HOLDINGS, LLC	FEE/TLE	677	–	677	238
8	BLAKE C. PRINE/CASSIE L. TAYLOR	FEE/TLE	331	–	331	82
9	LONA A. PARKINSON	FEE/TLE	464	–	464	56
10	NATHAN J. & REBECCA I. WIEGEL	FEE	276	–	276	68
11	BRIAN C. & KATHERINE M. FINDLEY	FEE/TLE	404	–	404	49
12	ROBERT J. & MARLENE FINLEY	FEE/TLE	425	–	425	59
13	EDWIN J. EDWARDS & VICKI L. SELJE TRUST	FEE/TLE	684	–	684	12
14	PATRICK H. & JANE M. KLEIBER	FEE/TLE	472	–	472	62
15	KATIE R. KIEFFER	FEE/TLE	446	–	446	54
16	CONSTANCE M. WIEGEL	FEE	371	–	371	–
17	JANET E. GEORGE	FEE	171	–	171	232

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO D.O.T.

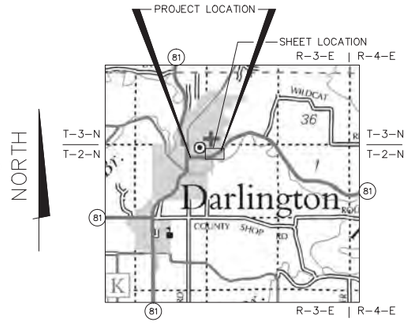
NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, LAFAYETTE COUNTY, NAD 83, 2007 IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR E. LOUISA STREET (S.T.H. 81) ESTABLISHED FROM THE ORIGINAL PLAT CITY OF DARLINGTON AND FROM PRIVATE SURVEYS OF RECORD "PLAT OF SURVEY" BY BRUCE D. BOWDEN DATED MARCH 31, 1991 AND REVISED JULY 30, 1992 AND ANOTHER DATED JULY 30, 1992.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER DOCUMENTS, OR FROM CENTERLINE OF PAVEMENTS.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.



LOCATION MAP
(NOT TO SCALE)

TRANSPORTATION PROJECT PLAT NO: 5944-03-24-4.02 AMENDMENT NO. 1 AMENDS UTILITY NUMBERS 40 AND ADDS UTILITY NUMBERS 42 AND 43 OF TRANSPORTATION PROJECT PLAT NO: 5944-03-24-4.02 RECORDED AS DOCUMENT NO. 339156.

THAT PART OF LOTS 7 AND 8 OF BLOCK 30 OF THE ORIGINAL PLAT OF THE CITY OF DARLINGTON, AND THAT PART OF LOT 8 OF BLOCK 3 OF RUSSELL'S ADDITION TO THE CITY OF DARLINGTON, BEING LOCATED IN GOVERNMENT LOT 1 OF SECTION 3, PART OF LOT 1, CERTIFIED SURVEY MAP NO. 107 AND THAT PART OF LOTS 5, 6, 7 AND 8 OF BLOCK 3 OF RUSSELL'S ADDITION TO THE CITY OF DARLINGTON BEING LOCATED IN GOVERNMENT LOT 6 OF SECTION 2, AND PART OF OTHER UNPLATTED LANDS BEING LOCATED IN GOVERNMENT LOT 6 OF SECTION 2, ALL IN TOWN 2 NORTH, RANGE 3 EAST, CITY OF DARLINGTON, LAFAYETTE COUNTY, WI.

RELOCATION ORDER STH 81 DARLINGTON-ARGYLE (WELLS STREET TO CLAY STREET)

TO PROPERLY ESTABLISHED, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEM IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3)AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OF RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2). WISCONSIN STATUTES.

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEED IN LAFAYETTE COUNTY, WISCONSIN AT 8:30 AM ON FEBRUARY 17, 2014 AS DOCUMENT 339909 AND FILED ENVELOPE 4 CABINET 2

Joseph G Boll
SIGNATURE OF REGISTER OF DEEDS

THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE COUNTY REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER:
5944-03-24-4.02
AMENDMENT NO: 1

4

LAFAYETTE CO.
ALUMINUM
MONUMENT FOUND
Y= 167006.488
X= 481669.278

N89°17'06"W 2667.62'

LAFAYETTE CO.
ALUMINUM
MONUMENT FOUND
Y= 166973.204
X= 484336.690

S89°54'38"W 2665.20'

LAFAYETTE CO.
ALUMINUM
MONUMENT FOUND
Y=166977.367
X=487001.890

UTILITY SCHEDULE AND INTERESTS REQUIRED

UTILITY NUMBER	OWNER (S)	INTERESTS REQUIRED
40	ALLIANT ENERGY	RELEASE OF RIGHTS
42	CITY OF DARLINGTON – WATER UTILITY	RELEASE OF RIGHTS
43	CITY OF DARLINGTON – SEWER UTILITY	RELEASE OF RIGHTS
–	–	–

ALLIANT ENERGY
NO RECORD OF EASEMENTS – PARCEL 7, 8, 12, 16, 17

CITY OF DARLINGTON – WATER UTILITY
NO RECORD OF EASEMENT – PARCEL 7, 8, 10, 11, 12, 13, 14, 15

CITY OF DARLINGTON – SEWER UTILITY
NO RECORD OF EASEMENT – PARCEL 7, 8, 9, 10, 11, 13, 14

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN LAFAYETTE COUNTY AS SHEET 2 OF 2 DOCUMENT NUMBER 338961 AND FILED IN ENVELOPE 2, CABINET 2, LAFAYETTE COUNTY.

AND TRANSPORTATION PROJECT PLAT SHEET 4.02 RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS AS DOCUMENT NUMBER 339156 AND FILED IN ENVELOPE 3, CABINET 2, LAFAYETTE COUNTY.

GN

0 25 50 100
SCALE FEET

ORIGINAL PLAT OF THE CITY OF DARLINGTON BLOCK 30

RUSSELL'S ADDN. BLOCK 3

ORIGINAL PLAT OF THE CITY OF DARLINGTON BLOCK 31

GOVERNMENT LOT 1

GOVERNMENT LOT 6

OHIO STREET

DIVISION STREET

E. LOUISA ST. (S.T.H. 81)

CORNELIA STREET

CLAY STREET

N 00°56'21" W 33.01' R/L TO R/W

S 89°17'22" E 84.87'

P.I. = 119+85.78

N 00°56'21" W 33.01' R/W TO R/L

S 89°17'01" E 352.98'

1 1/4"? REBAR FD.

STA. 123+39.70

S 20°28'07" E 953.16'

49.90' NO RECORDED WIDTH

S 89°17'01" E 229.05'

S 00°51'23" W 25.10' R/W TO R/L

S 00°51'23" W 30.74' R/L TO R/W

N 62°48'06" E 30.74'

P.I. = 130+03.90
Y 166171.087
X 485004.759

3/4"? REBAR

1"? I.P.

SURVEY BY MICHAEL R. LAROSA DATED 11-30-1999

SURVEY BY BRUCE D. BOWDEN DATED 3-31-1991 AND REVISED 7-30-1992

SURVEY BY BRUCE D. BOWDEN DATED 7-30-1992

P.I. = 19+85.78
Y 165988.759
X 484028.289
△ = 00°01'32" RT.

P.I. = 126+00.62
Y 165981.217
X 484643.086
△ = 28°24'04" LT.
D. = 11°27'33"
T. = 126.53'
L. = 247.85'
R. = 500.00'

LAFAYETTE CO.
ALUMINUM
MONUMENT FOUND
Y= 164327.902
X= 484458.389

T.L.E. STATION & OFFSET TABLE

POINT NUMBER	STATION	OFFSET
T50	120+18.03	36.00'
T51	120+18.03	40.00'
T52	120+27.03	40.00'
T53	120+27.03	36.00'
T54	120+73.22	36.00'
T55	120+72.22	43.00'
T56	120+82.22	43.00'
T57	120+82.22	36.00'
T58	121+07.30	36.00'
T59	121+07.30	49.00'
T60	121+20.55	49.00'
T61	121+20.55	38.00'
T62	121+63.62	38.00'
T63	121+63.62	47.00'
T64	121+72.62	47.00'
T65	121+72.62	38.00'
T66	122+34.13	40.00'
T67	122+33.29	45.07'
T68	122+39.50	49.85'
T69	122+41.84	40.00'
T70	123+78.84	36.50'
T71	123+78.84	44.00'
T72	123+87.84	44.00'
T73	123+87.84	36.50'
T74	124+62.58	40.00'
T75	124+62.58	45.00'
T76	124+71.60	45.00'
T77	124+71.60	38.00'
T78	125+42.61	36.83'
T79	125+42.75	43.41'
T80	125+52.59	42.81'
T81	125+52.31	36.26'
T82	126+12.32	39.00'
T83	126+12.32	41.00'
T84	126+18.83	41.30'
T85	126+18.83	39.30'
T86	126+54.20	35.13'
T87	126+54.39	42.01'
T88	126+64.21	41.82'
T89	126+63.88	34.99'
T90	127+32.53	31.90'
T91	127+32.53	38.00'
T92	127+41.53	38.00'
T93	127+41.53	31.78'
T94	128+72.36	24.00'
T95	128+72.36	27.00'
T96	129+21.89	26.32'
T97	129+44.12	28.23'
T98	129+41.31	23.06'

R/W POINT STATION & OFFSET TABLE

POINT NUMBER	STATION	OFFSET
200	119+85.78	33.00'
201	119+85.78	36.00'
202	121+18.23	36.00'
203	121+18.23	38.00'
204	121+84.46	38.00'
205	121+84.46	40.00'
206	122+50.68	40.00'
207	122+50.69	33.00'
208	123+00.59	33.77'
209	123+00.59	36.77'
210	123+92.56	36.37'
211	123+92.56	40.37'
212	124+69.62	40.04'
213	124+69.61	38.04'
214	125+00.53	37.27'
215	125+61.85	35.53'
216	125+62.23	37.50'
217	125+73.22	35.53'
218	126+28.09	39.59'
219	126+26.38	34.58'
220	127+08.44	32.05'
221	127+83.59	31.21'
222	128+45.45	30.36'
223	128+72.43	30.00'
224	128+72.40	27.00'
225	129+21.89	26.32'
226	129+44.12	28.23'
227	129+41.31	23.06'
228	130+03.90	25.10'
229	129+89.21	27.00'
230	129+48.62	30.43'
231	127+48.49	34.32'
232	126+55.74	36.70'
233	125+63.86	40.79'
234	122+84.03	32.90'
235	122+51.03	33.00'
236	119+87.66	33.00'

R/W COURSE TABLE

200-201	N 00°48'48" E	3.00'
201-202	S 89°17'50" E	132.46'
202-203	N 00°43'21" E	2.00'
203-204	S 89°17'50" E	66.23'
204-205	N 00°40'37" E	2.00'
205-206	S 89°17'50" E	66.23'
206-207	S 00°37'54" W	7.00'
207-208	N 89°49'08" E	49.91'
208-209	N 00°37'54" E	3.00'
209-210	S 89°02'58" E	91.98'
210-211	N 00°37'54" E	4.00'
211-212	S 89°02'58" E	77.06'
212-213	S 00°57'02" W	2.00'
213-214	S 89°02'58" E	28.94'
214-215	N 85°54'18" E	56.85'
215-216	N 00°37'39" E	2.00'
216-217	S 89°02'58" E	10.38'
217-218	N 71°37'40" E	50.88'
218-219	S 00°37'40" W	5.25'

219-220	N 70°26'14" E	76.55'
220-221	N 63°04'56" E	74.29'
221-222	N 63°05'02" E	61.86'
222-223	N 63°04'44" E	26.91'
223-224	S 27°41'54" E	6.00'
224-225	N 63°04'56" E	68.96'
225-226	N 63°04'56" E	74.59'
226-227	S 00°51'23" W	55.84'
227-228	S 60°54'17" W	140.63'
228-229	S 60°04'40" W	100.21'
229-230	S 63°39'47" W	97.43'
230-231	S 72°47'47" W	98.95'
231-232	N 89°27'27" W	286.63'
232-233	N 89°28'17" W	33.00'
233-234	N 89°17'50" W	263.36'
234-200	N 00°56'21" W	66.03'

KNIGHT
700 N Third Street
Suite 104
La Crosse, WI 54601
Engineers & Architects Phone: (608) 519-1455

I, THEODORE J. GREENHECK, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISION OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 5944-03-24-4.02 AMENDMENT NO. 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN THEODORE J. GREENHECK S-2431-008 SPRING GREEN, WI LAND SURVEYOR

2/7/14
THEODORE J. GREENHECK — DATE
AGENT FOR KNIGHT E/A INC.
R.L.S. #2431

2/10/14
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION. — DATE

FILE NAME: 5944-03-24 DETAIL SHT 2 AMENDMENT 1
APPRAISAL PLAT DATE: FEBRUARY 7, 2014
PLOT DATE: 2-7-14
PLOT BY: TJG
PLOT NAME:
PLOT SCALE: 1=50

DATE: OCTOBER 9, 2013

REVISION DATE

TRANSPORTATION PROJECT PLAT NO: 5944-03-24-4.03

RELOCATION ORDER STH 81 DARLINGTON-ARGYLE (WELLS STREET TO CLAY STREET)

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE

4

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE

POINT	Y	X
100	166034.794	483042.961
101	166032.353	483304.995
102	166031.163	483370.985
103	166027.256	483587.643
104	166031.256	483587.687
105	166030.418	483634.181
106	166026.418	483634.136
107	166025.638	483700.132
108	166031.138	483700.192
109	166029.573	483832.628
110	166027.073	483832.608
111	166025.535	483962.733
112	166022.535	483962.691
113	166021.755	484028.686
114	165955.737	484029.768
115	165956.518	483963.770
116	165959.630	483700.434
117	165960.402	483634.437
118	165965.150	483371.130
119	165966.349	483305.136
120	165968.798	483042.245

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE

POINT	Y	X
200	166021.755	484028.686
201	166024.755	484028.729
202	166023.130	484161.174
203	166025.130	484161.199
204	166024.318	484227.420
205	166026.318	484227.444
206	166025.506	484293.663
207	166018.506	484293.586
208	166018.664	484343.494
209	166021.664	484343.527
210	166020.138	484435.489
211	166024.138	484435.533
212	166022.859	484512.587
213	166020.860	484512.554
214	166020.380	484541.485
215	166024.440	484598.189
216	166026.440	484598.211
217	166026.267	484608.587
218	166042.305	484656.877
219	166037.054	484656.819
220	166062.685	484728.949
221	166096.317	484795.191
222	166124.321	484850.352
223	166136.507	484874.349
224	166131.194	484877.138
225	166162.411	484938.622
226	166196.180	485005.135
227	166140.347	485004.300
228	166071.966	484881.420
229	166021.980	484794.570
230	165978.756	484707.255
231	165949.489	484612.729
232	165952.203	484326.113
233	165952.507	484293.113
234	165955.737	484029.768

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE

POINT	Y	X

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE

POINT	Y	X

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE

POINT	Y	X

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE

POINT	Y	X

4

FILE NAME: 5944-03-24 COORD SHT

PLOT DATE: 10-9-13

PLOT BY: TJG

PLOT NAME:

PLOT SCALE: 1=1

P.I. STA
6+20.77
6+91.65
7+12.32
7+44.74
7+47.70
7+78.21
8+88.73
9+21.69
9+50.24

N

ALLIANT ENERGY GAS

ALLIANT ENERGY

MATCH EXISTING SAW CUT REQ'D STA 6+84 - 6+87 30.55' LT

TYPE 2 RAMP; DETECTABLE WARNING FIELD REQ'D

R/W

TLE

SLOPE INTERCEPT

5-FT SIDEWALK

7-FT TERRACE

BM #1

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
1	7+02.19	HYDRANT	839.0412

BEGIN PROJECT
STA 6+75
Y = 166017.36
X = 483355.44

WELLS ST.

STA 7+68 - STA 7+97
REMOVE EXISTING STONE TREEWELL BLOCKS; GRADE AND SHAPE; TREES TO REMAIN

CONCRETE CURB & GUTTER TYPE D REQ'D

MATCH EXISTING SAW CUT REQ'D

STA 8+05 - STA 8+15
ASPHALTIC SURFACE DRIVEWAY

STA 8+05 - STA 8+15
CONCRETE DRIVEWAY

CENTURYLINK

MATCH EXISTING SAW CUT REQ'D

STA 8+25 - STA 8+37
ASPHALTIC SURFACE DRIVEWAY

STA 8+25 - STA 8+37
CONCRETE DRIVEWAY

CONCRETE CURB & GUTTER TYPE D REQ'D

TIE INTO EXISTING STEPS; MAINTAIN EXISTING WHITE RAIL

10-FT TAPER STA 8+85

ALLIANT ENERGY GAS

STA 8+42 - STA 8+57
REMOVE EXISTING STONE TREEWELL BLOCKS; GRADE AND SHAPE; TREES TO REMAIN

ALLIANT ENERGY GAS

CAST IN PLACE RETAINING WALL

6-FT SIDEWALK

STAIR DETAIL- SEE CONSTRUCTION DETAIL-CIP WALL

STA 8+80 - STA 8+94
REMOVE EXISTING STONE TREEWELL BLOCKS; GRADE AND SHAPE

CENTURYLINK

ALLIANT ENERGY

ALLIANT ENERGY

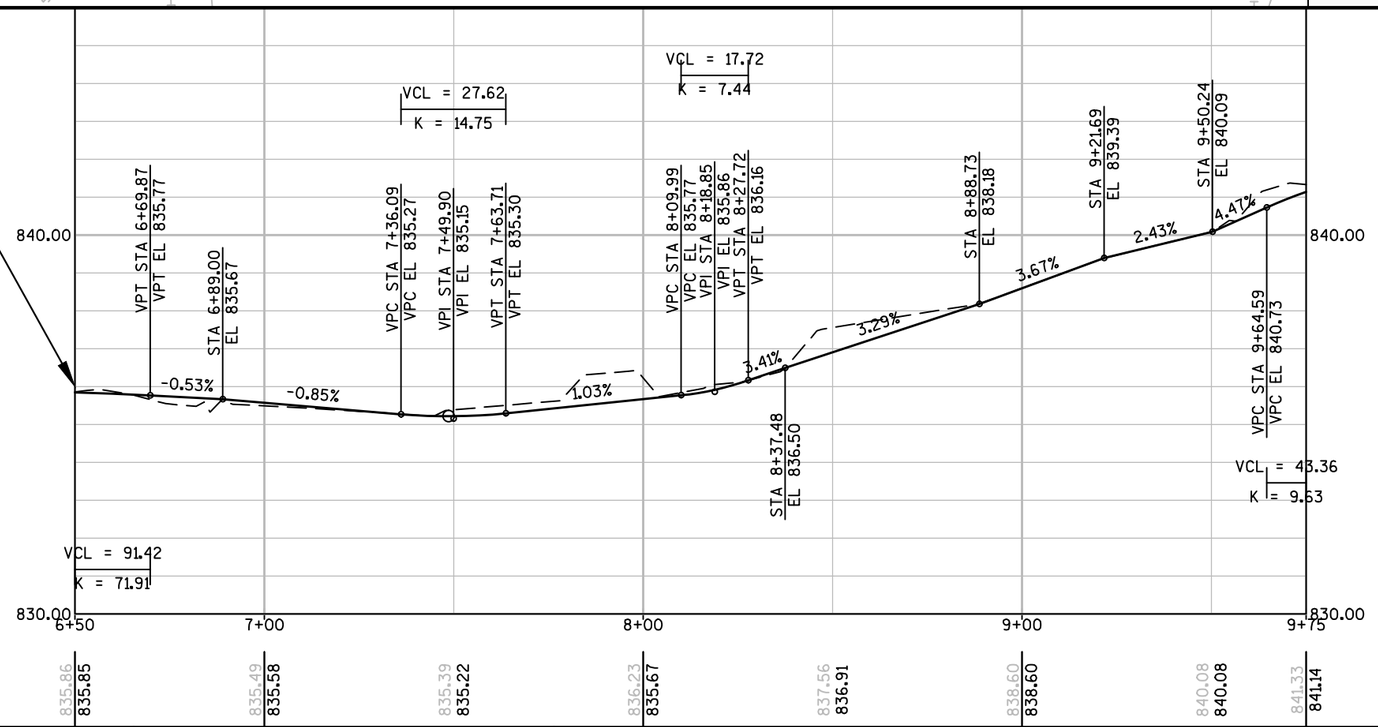
MATCH EXISTING SAW CUT REQ'D STA 9+55 - 9+59 60' LT

CONCRETE CURB & GUTTER TYPE D REQ'D

TYPE 2 RAMP; DETECTABLE WARNING FIELD REQ'D

MATCH LINE STA 9+75

5



PROJECT NO: 5944-03-84	HWY: STH 81	COUNTY: LAFAYETTE	PLAN AND PROFILE: WELLS ST - CLAY ST	SHEET 43	E

P.I. STA
10+20.91
10+34.41
10+60.52
11+02.94
11+33.87
11+68.16
12+00.47
12+36.63
12+80.80
13+50.86
13+53.81
13+73.65
14+08.10
14+41.33

MATCH LINE STA 9+75

START R-33-0004

R/W

TYPE 2 RAMP;
DETECTABLE WARNING
FIELD REQ'D

SOLDIER PILE
RETAINING WALL

CENTURYLINK

TLE

*

R/W

R/W

ALLIANT
ENERGY

R/W

ALLIANT ENERGY
CENTURYLINK
MEDIACOM

END R-33-0004

6-FT SIDEWALK

7-FT TERRACE

10+00

11+00

12+00

13+00

14+00

15+

BM #2

STA 10+21 - STA 11+71
REMOVE EXISTING
STONE WALL

CONCRETE CURB
& GUTTER
TYPE D REQ'D

KEEP ST.

CITY OF DARLINGTON
SANITARY LATERAL

CITY OF DARLINGTON

MATCH EXISTING
SAW CUT REQ'D
STA 13+43 - 13+47
38.50' LT

ALLIANT ENERGY
GAS

MATCH EXISTING
SAW CUT REQ'D
STA 12+83 - 12+87
37.61' LT

ALLIANT
ENERGY

CONCRETE CURB
& GUTTER
TYPE D REQ'D

TYPE 2 RAMP;
DETECTABLE WARNING
FIELD REQ'D

OHIO ST.

R/W

CITY OF DARLINGTON
SANITARY LATERAL

START R-33-0005

ALLIANT
ENERGY GAS

ALLIANT ENERGY
CENTURYLINK
MEDIACOM

BM #3

TLE

R/W

6-FT SIDEWALK

7-FT TERRACE

STA 14+70 - STA 14+85
ASPHALTIC SURFACE DRIVEWAY;
MATCH EXISTING
SAW CUT REQ'D

STA 14+71 - STA 14+73
STA 14+82 - STA 14+83
REMOVE EXISTING
STONE WALLS

TLE

TLE

*

STA 14+42 - STA 14+71
REMOVE EXISTING
STONE WALL

STA 13+58 - STA 14+62
REMOVE EXISTING
STONE WALL

CITY OF DARLINGTON
SANITARY LATERAL

ALLIANT
ENERGY
GAS

CONCRETE CURB
& GUTTER
TYPE D REQ'D

CENTURYLINK

ALLIANT ENERGY

ALLIANT
ENERGY GAS

N

STA 14+70 - STA 14+85
CONCRETE DRIVEWAY

STA 14+82 - STA 15+26
REMOVE EXISTING
STONE WALL

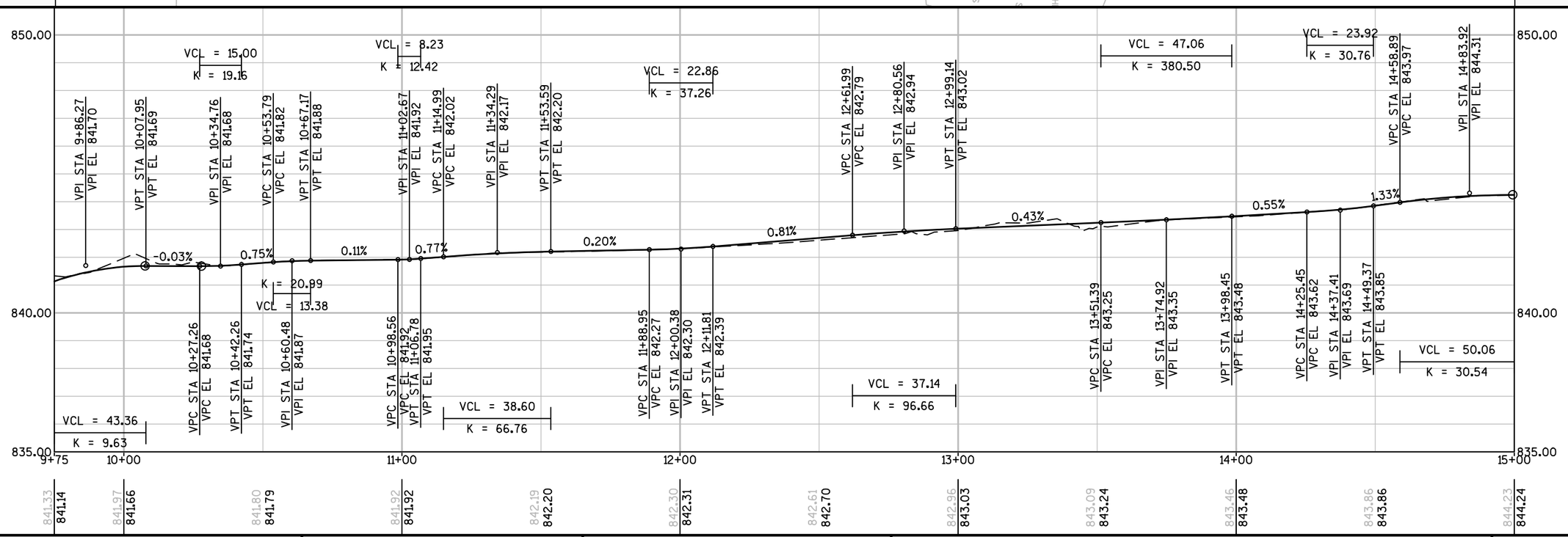
MATCH LINE STA 15+00

STA 14+90 - STA 16+19
REMOVE EXISTING
MODULAR BLOCK WALL

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
2	10+16.29	HYDRANT, LT	845.51
3	13+51.48	HYDRANT LT	846.49

* STAIR DETAILS - SEE
STRUCTURE PLANS



PROJECT NO: 5944-03-84	HWY: STH 81	COUNTY: LAFAYETTE	PLAN AND PROFILE: WELLS ST - CLAY ST	SHEET 44	E

P.I. STA
15+17.52
15+56.26
15+91.40
16+12.38
16+35.81
16+58.01
16+66.79
16+93.65
17+28.90

END R-33-0005
CONCRETE CURB & GUTTER TYPE D REQ'D
SEE CONSTRUCTION DETAIL DIVISION ST STAIRWAY ACCESS/STEPS
CITY OF DARLINGTON SANITARY LATERAL
TLE
R/W
MATCH LINE STA 15+00
DIVISION ST.
MATCH EXISTING SAW CUT REQ'D STA 16+55 - 16+59 65' LT
ALLIANT ENERGY GAS
START R-33-0006
CITY OF DARLINGTON SANITARY LATERAL
CITY OF DARLINGTON WATER LATERAL
MEDIACOM
CITY OF DARLINGTON WATER LATERAL
ALLIANT ENERGY GAS
CITY OF DARLINGTON WATER LATERAL
ALLIANT ENERGY GAS
MATCH LINE STA 20+00
6-FT SIDEWALK
7-FT TERRACE
15+00
16+00
17+00
18+00
19+00
20+00
CITY OF DARLINGTON SANITARY LATERAL
TYPE 4B RAMP MODIFIED-SEE CONSTRUCTION DETAILS; DETECTABLE WARNING FIELD REQ'D
STA 16+05 - STA 16+22 REMOVE EXISTING 2-TIERED STONE FENCE
STA 16+63 - STA 21+56 REMOVE EXISTING MODULAR BLOCK WALL
STA 16+58 - STA 17+56 REMOVE EXISTING STONE FENCE
ALLIANT ENERGY CENTURYLINK MEDIACOM
TYPE 4B1 RAMP; DETECTABLE WARNING FIELD REQ'D
CONCRETE CURB & GUTTER TYPE D REQ'D
MEDIACOM
CITY OF DARLINGTON SANITARY LATERAL
BM #4
ALLIANT ENERGY MEDIACOM
CITY OF DARLINGTON SANITARY LATERAL
ALLIANT ENERGY/ CENTURYLINK
MEDIACOM
ALLIANT ENERGY/ CENTURYLINK
CITY OF DARLINGTON SANITARY LATERAL
CENTURYLINK/ MEDIACOM
PI STA 19+75.14
*STAIR DETAILS - SEE STRUCTURE PLANS

PI STA = 19+75.14
Y = 166002.36
X = 484655.46
DELTA = 28°33'27"
D = 11°34'45"
T = 125.93
L = 246.63
R = 494.82
PC STA = 18+49.21
PT STA = 20+95.84

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
4	15+95.99	HYDRANT, RT	845.89

-0.31%
-1.27%
-3.33%
-1.52%

VPT STA 15+08.95 VPT EL 844.23
VPC STA 15+42.43 VPC EL 844.12
VPI STA 15+73.83 VPI EL 844.03
VPT STA 16+05.23 VPT EL 843.63
VPC STA 16+21.46 VPC EL 843.42
VPI STA 16+81.25 VPI EL 842.66
VPT STA 17+41.05 VPT EL 840.67
VPC STA 18+47.92 VPC EL 837.11
VPI STA 18+72.70 VPI EL 836.29
VPT STA 18+97.48 VPT EL 835.91
VPC STA 19+36.85 VPC EL 835.31
VPI STA 19+67.79 VPI EL 834.84
VPT STA 19+98.72 VPT EL 833.87

VCL = 50.06
K = 30.54
VCL = 62.80
K = 65.45
VCL = 119.59
K = 58.16
VCL = 49.55
K = 27.46
VCL = 61.87
K = 38.32

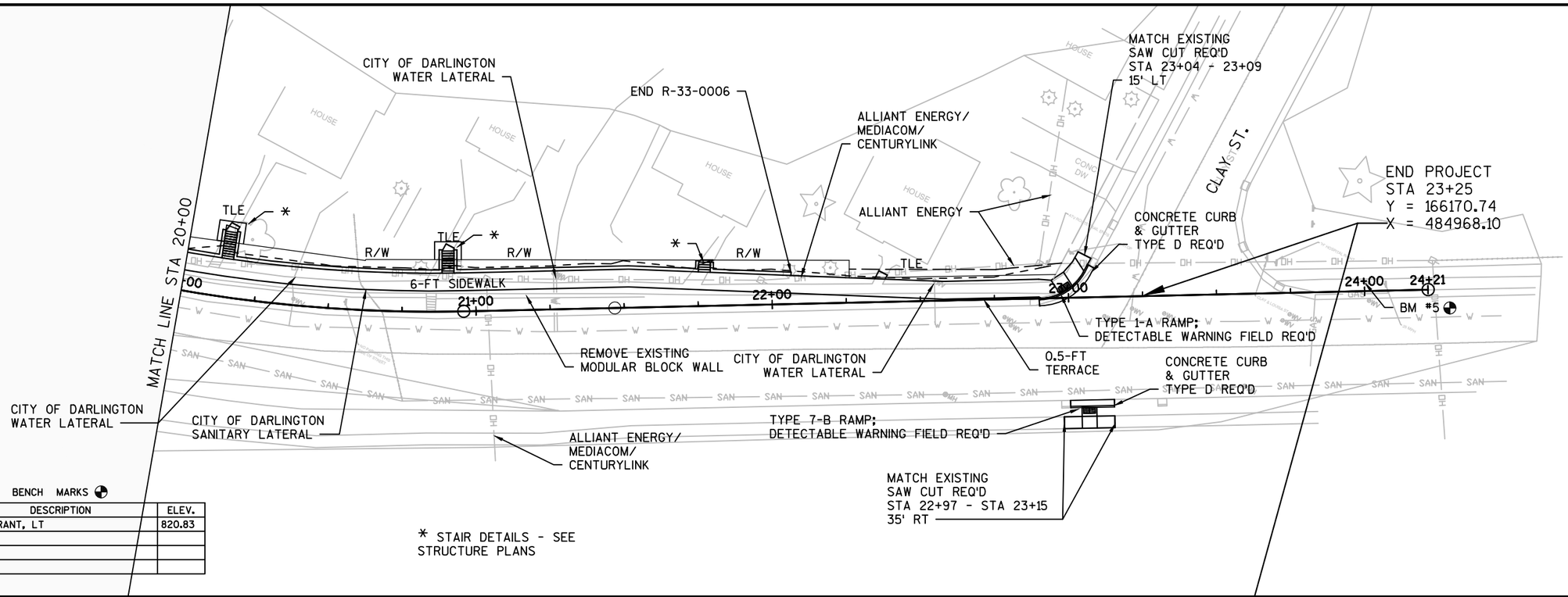
840.00
830.00
15+00
16+00
17+00
18+00
19+00
20+00

844.23 844.24
844.10 844.10
843.68 843.69
842.82 842.99
841.89 841.89
840.38 840.37
838.72 838.71
837.05 837.04
835.94 835.87
835.05 835.09
833.88 833.83

PROJECT NO: 5944-03-84	HWY: STH 81	COUNTY: LAFAYETTE	PLAN AND PROFILE: WELLS ST - CLAY ST	SHEET 45	E

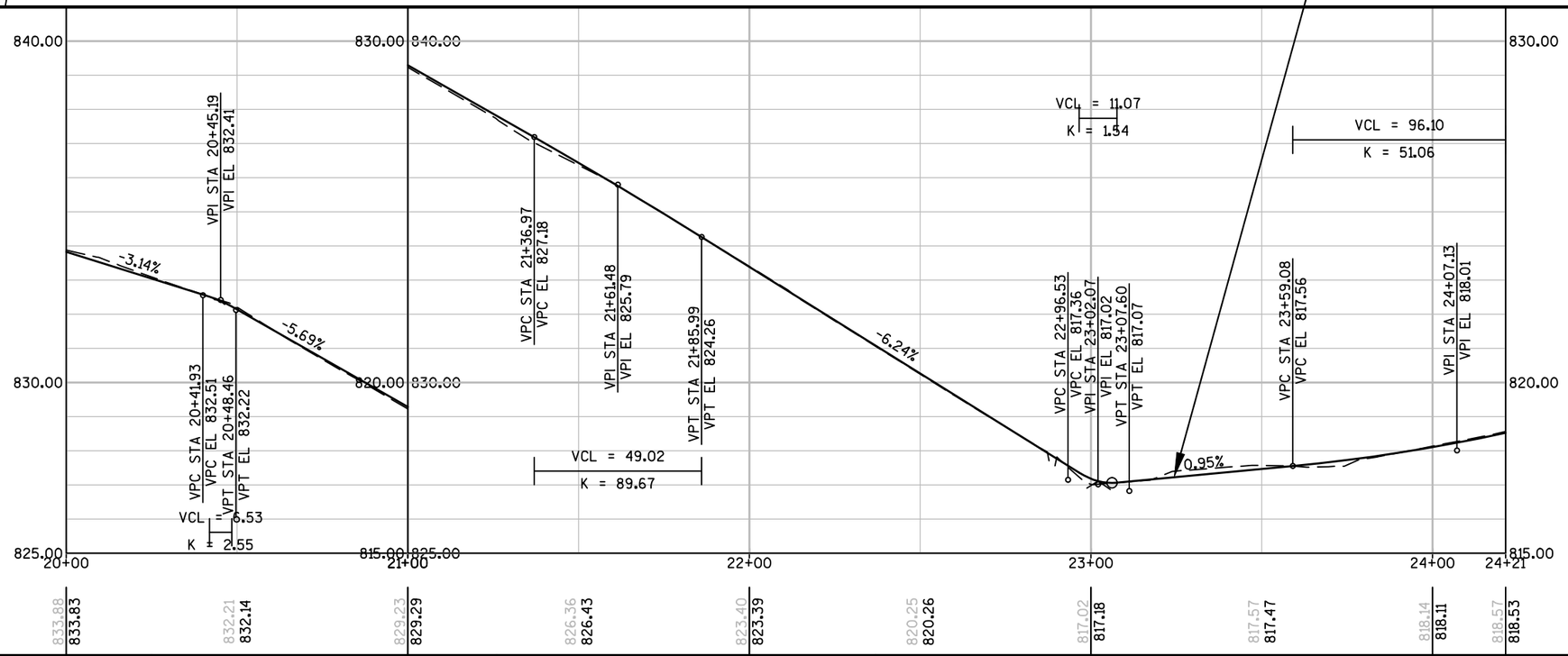
FILE NAME : W:\7059.02\CAD\TEMP\59440304\SHEETSPLAN\050101_PP.DWG PLOT DATE : 4/10/2014 9:56 AM PLOT BY : SCHWARZ, HEIDI PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44



BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
5	24+00.55	HYDRANT, LT	820.83



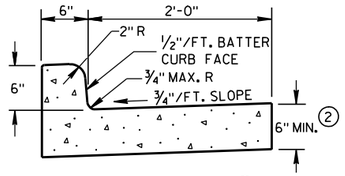
PROJECT NO: 5944-03-84	HWY: STH 81	COUNTY: LAFAYETTE	PLAN AND PROFILE: WELLS ST - CLAY ST	SHEET 46 E

Standard Detail Drawing List

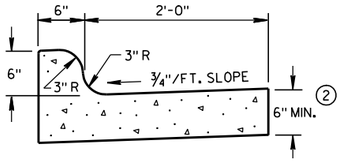
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-15A	CURB RAMPS TYPES 1 AND 1-A
08D05-15B	CURB RAMPS TYPES 2 AND 3
08D05-15C	CURB RAMPS TYPES 4A AND 4A1
08D05-15D	CURB RAMPS TYPE 4B AND 4B1
08D05-15E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
12A03-10	NAME PLATE (STRUCTURES)
15C05-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-12A	PAVEMENT MARKING SYMBOLS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15D28-02	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE

6

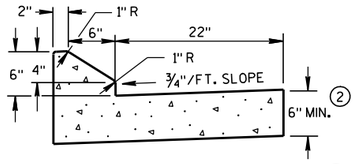
6



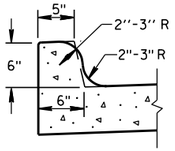
TYPES A & D (1)



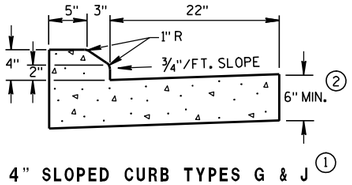
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

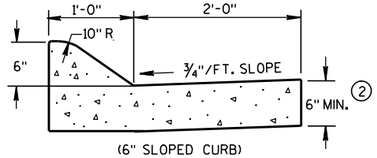


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

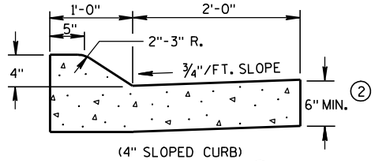


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

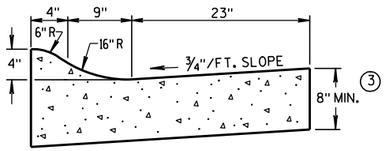


(6" SLOPED CURB)



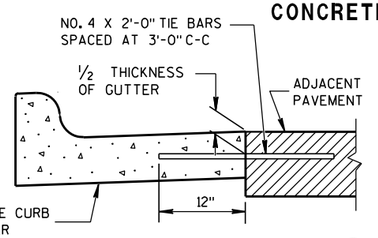
(4" SLOPED CURB)

TYPES A & D (1)

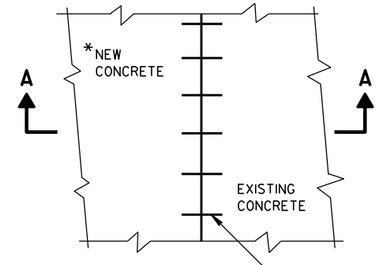


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

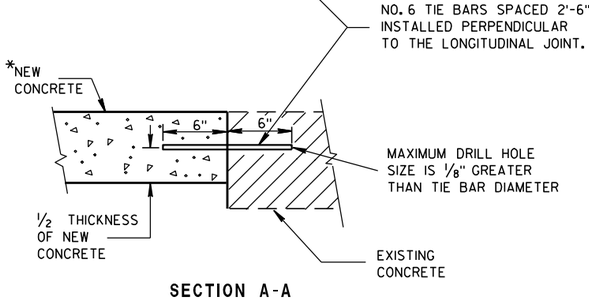


TYPICAL TIE BAR LOCATION (1)



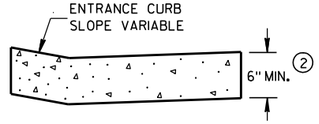
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW

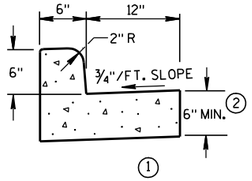


SECTION A-A

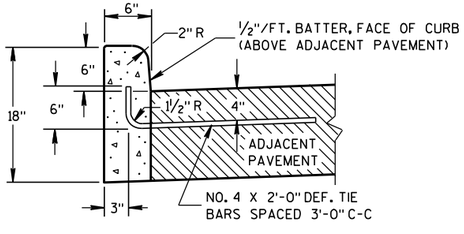
TIE BARS DRILLED INTO EXISTING PAVEMENT



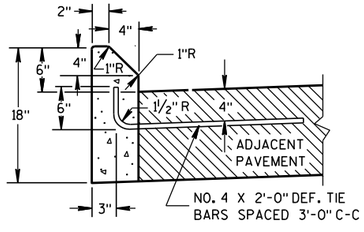
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



(1)
TYPES A & D
CONCRETE CURB & GUTTER 18"



(1)
TYPES A & D



(1)
TYPES G & J

GENERAL NOTES

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

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

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

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

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

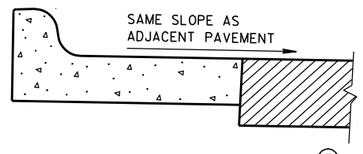
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

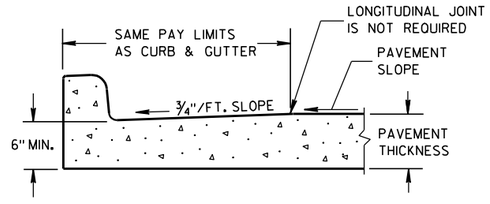
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(4) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

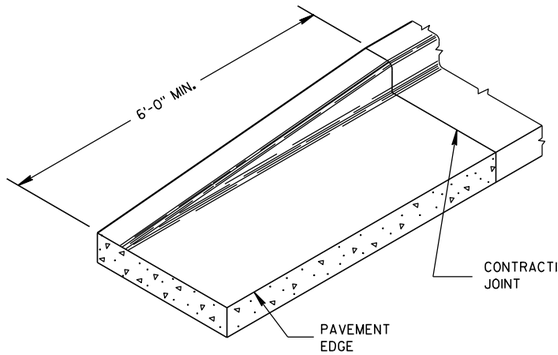
(5) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



REVERSE SLOPE GUTTER (5)
(TYPICAL FOR ALL CURB & GUTTER TYPES)



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

CONCRETE CURB

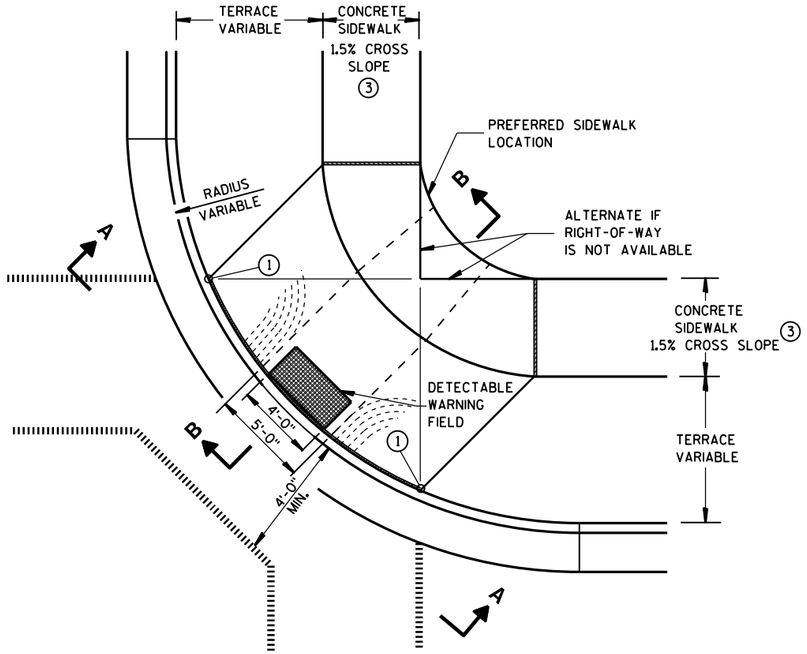
CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
FHWA

6

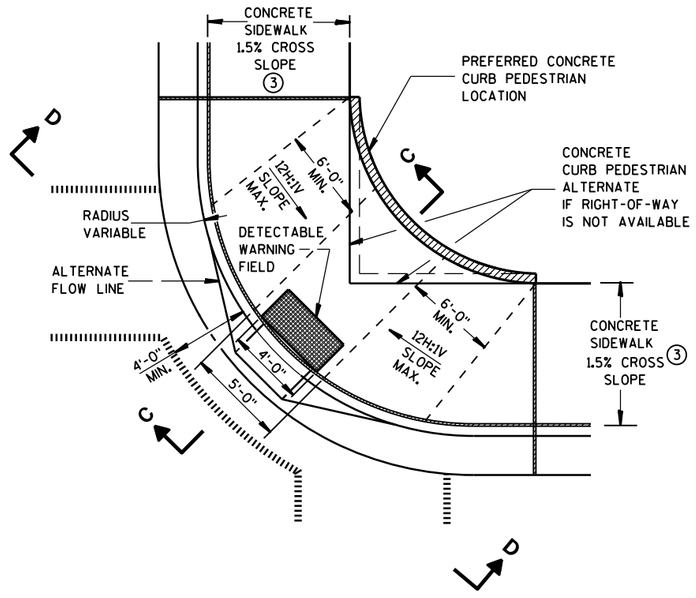
S.D.D. 8 D 1-17



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

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.

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

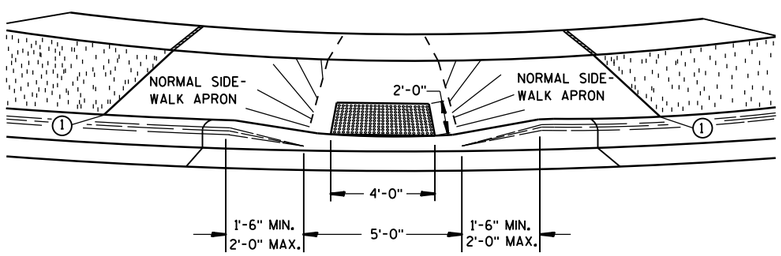
① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

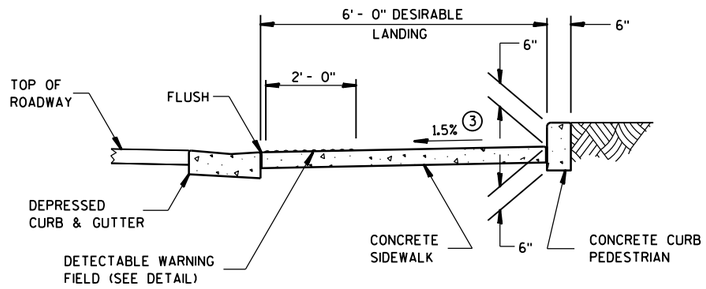
③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

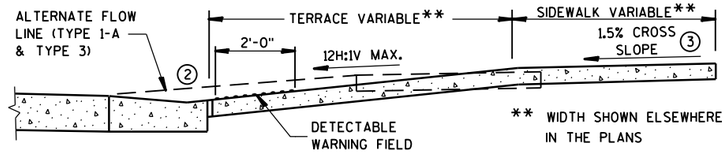
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



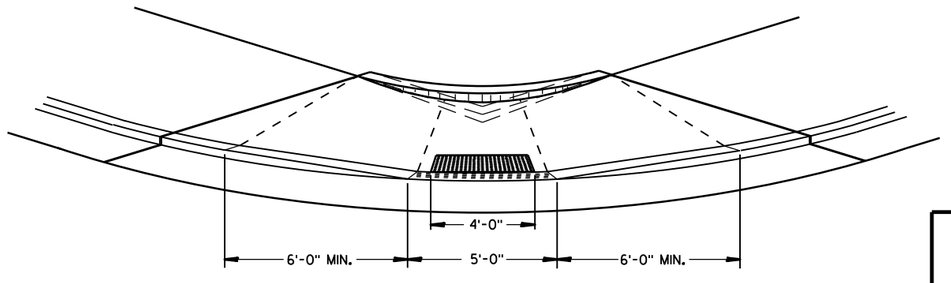
VIEW A-A



SECTION C-C



SECTION B-B



VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

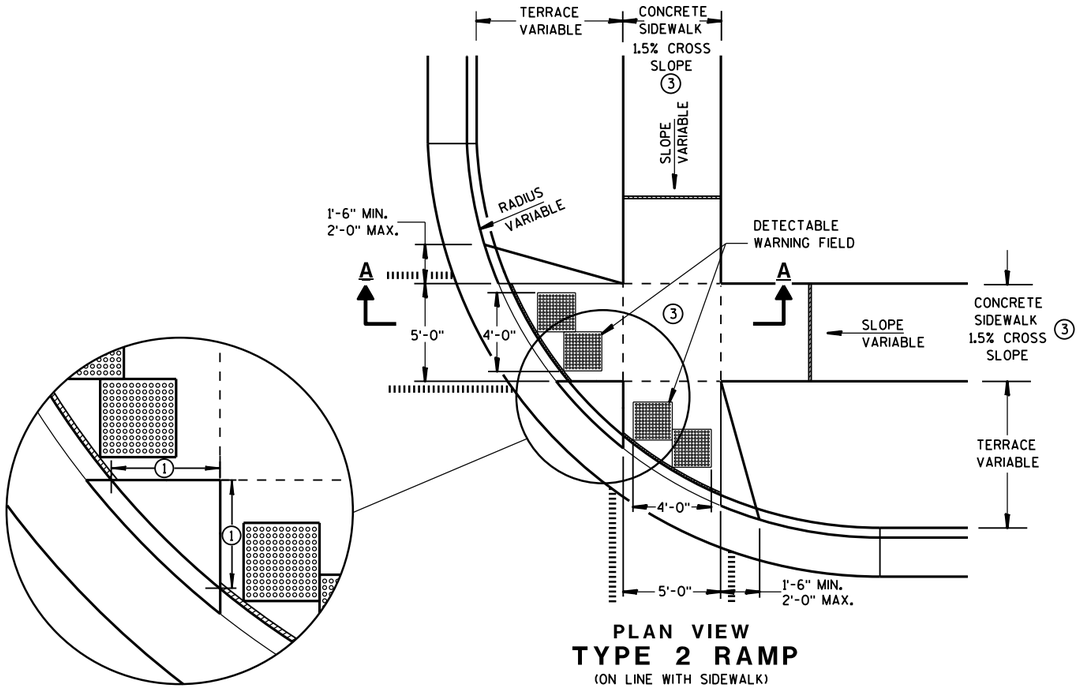
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-15a

6

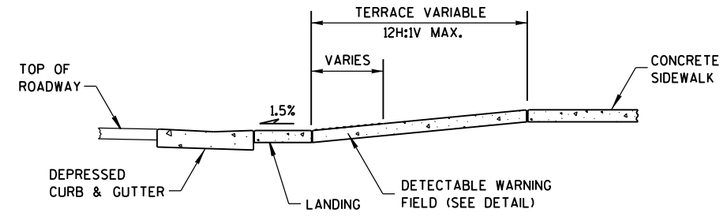
S.D.D. 8 D 5-15a



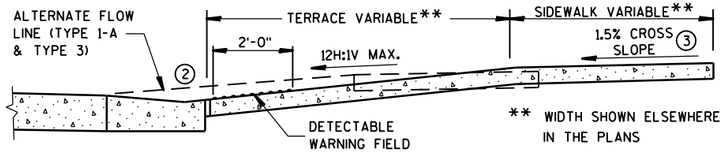
PLAN VIEW

TYPE 2 RAMP

(ON LINE WITH SIDEWALK)



SECTION A-A



SECTION B-B

GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

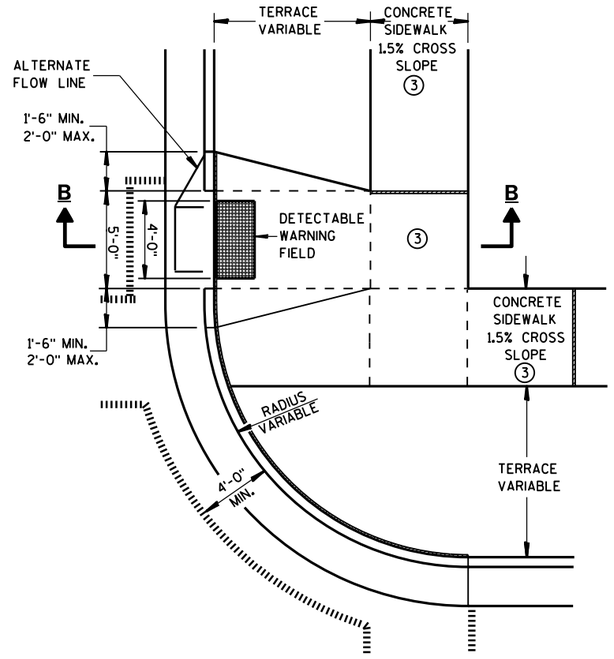
① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW

TYPE 3 RAMP

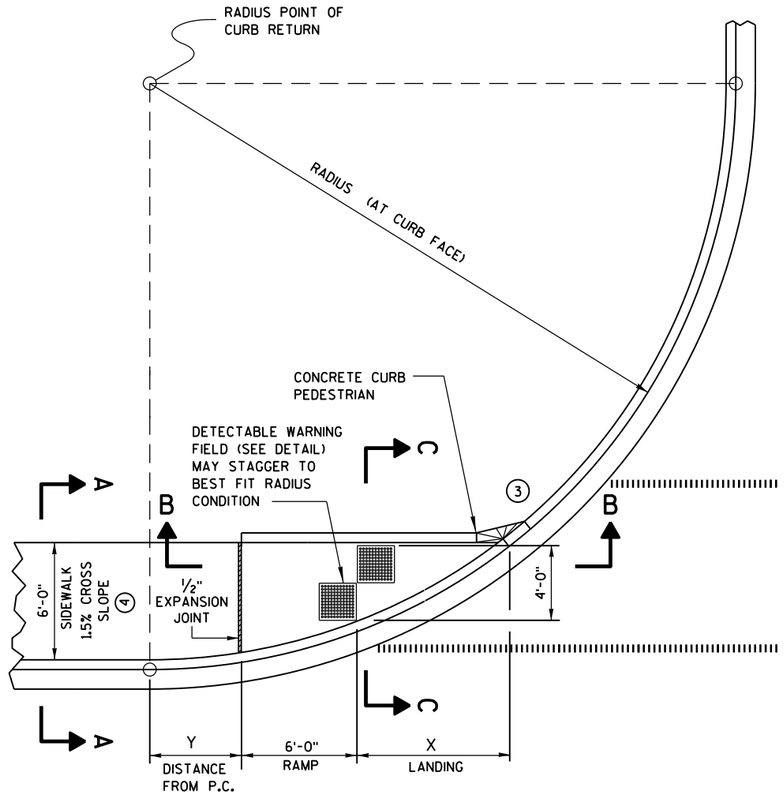
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

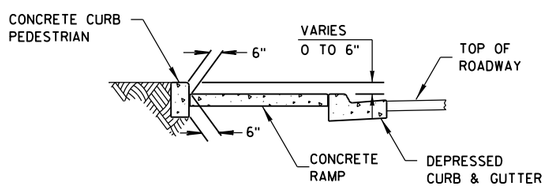
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

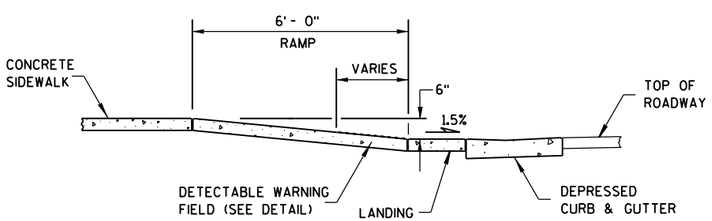
S.D.D. 8 D 5-15b



CURB RAMP TYPE 4A
PLAN VIEW



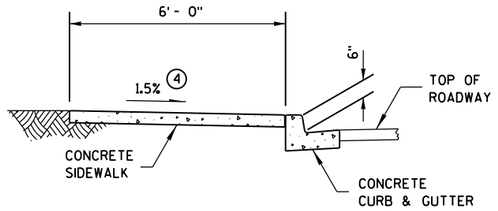
SECTION C-C FOR TYPE 4A



SECTION B-B FOR TYPE 4A

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1¾"	2'-7¼"
30 FEET	7'-11¾"	4'-8¼"
40 FEET	9'-5¼"	6'-5"
50 FEET	10'-8¾"	7'-11¼"
60 FEET	11'-10¼"	9'-3½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

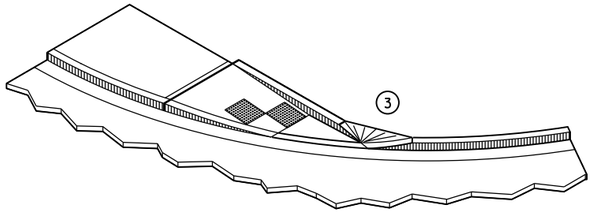
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

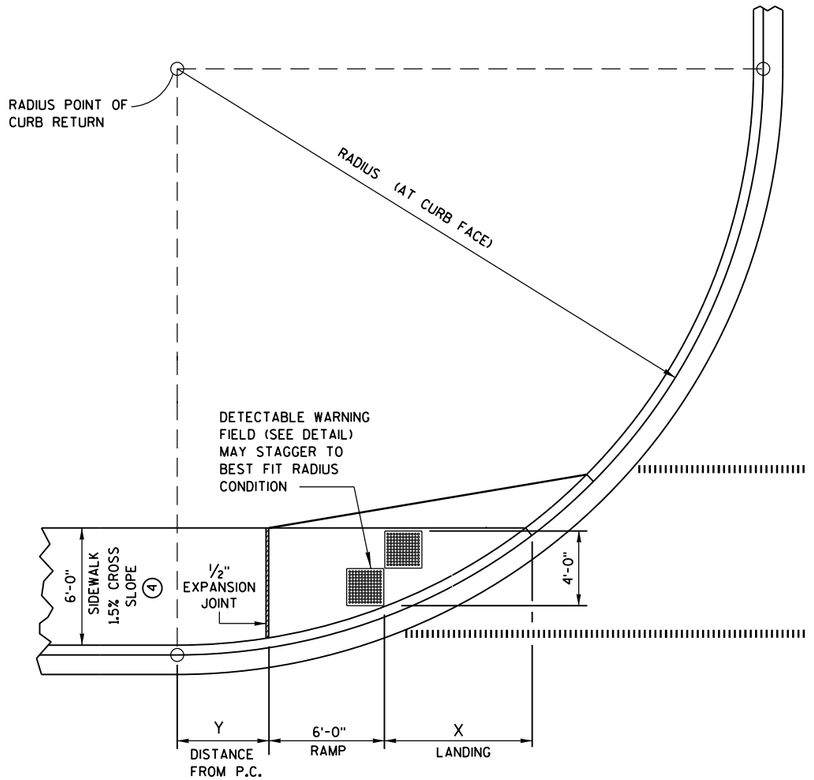
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

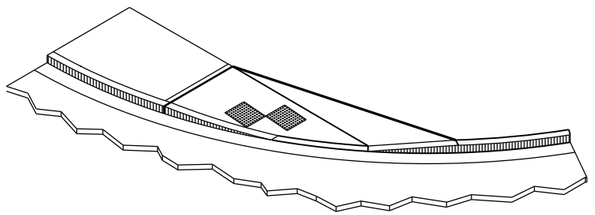
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



ISOMETRIC VIEW FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

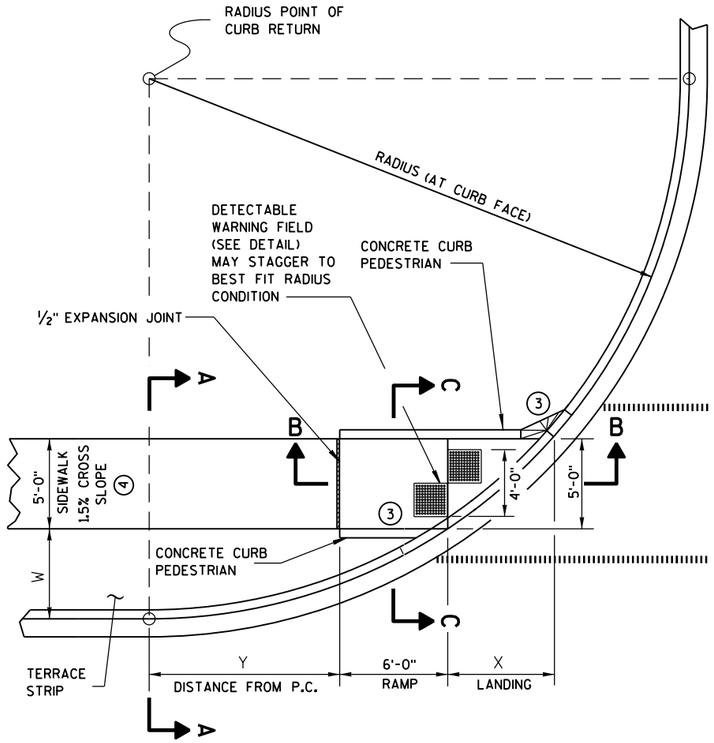
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPES 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-15c



CURB RAMP TYPE 4B
PLAN VIEW

LEGEND

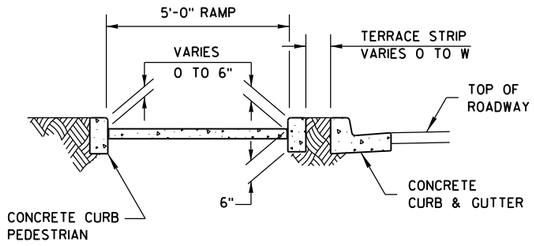
½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION C-C FOR TYPE 4B

GENERAL NOTES

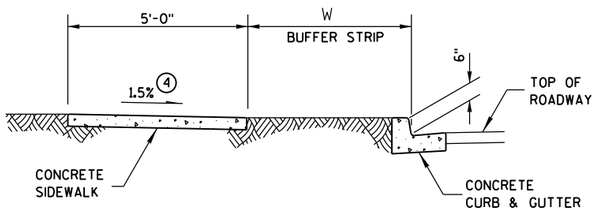
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

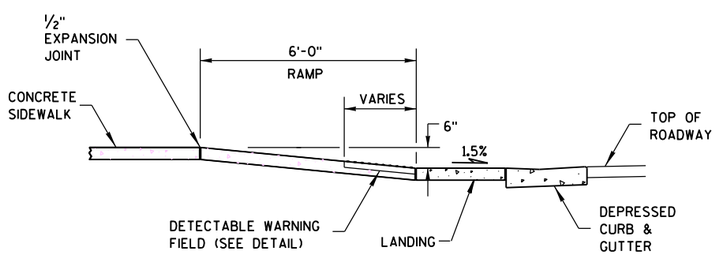
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

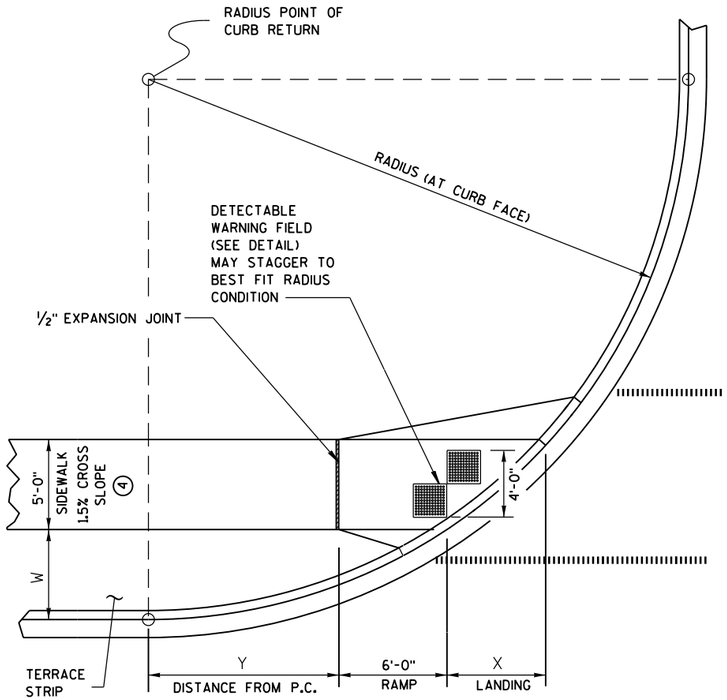
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



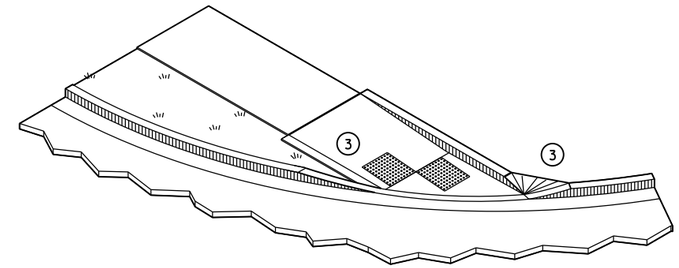
SECTION A-A FOR TYPE 4B



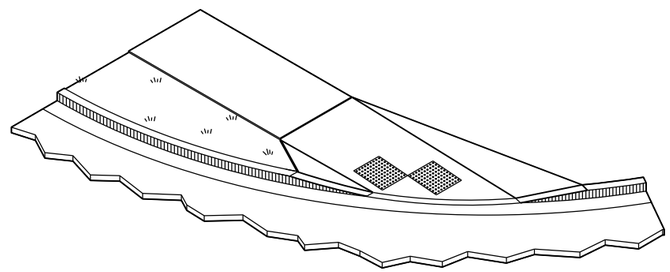
SECTION B-B FOR TYPE 4B



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



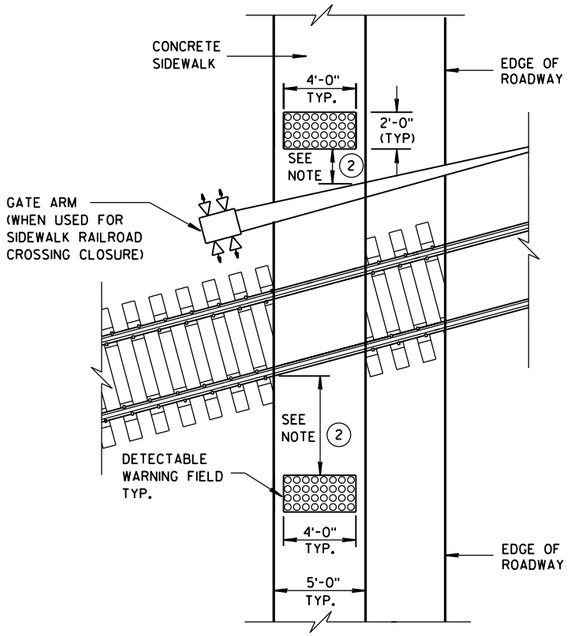
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS
TYPE 4B AND 4B1

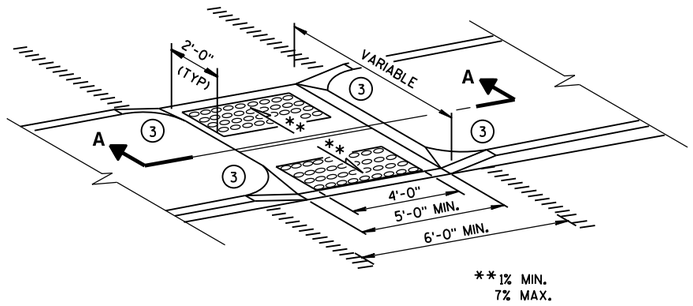
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-15d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

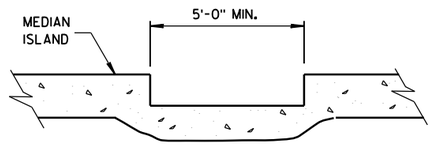
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(1) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

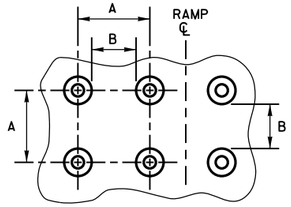
(2) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



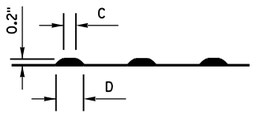
SECTION A-A



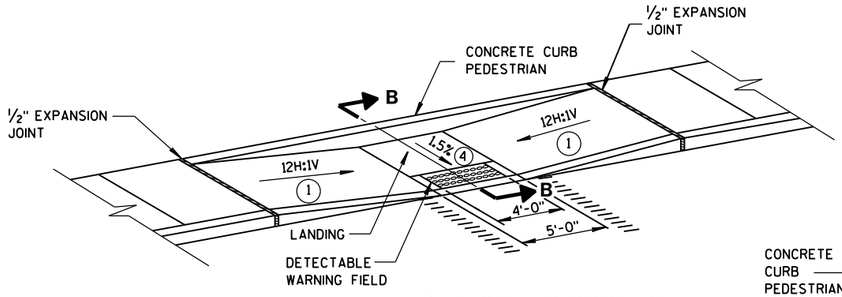
PLAN VIEW

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

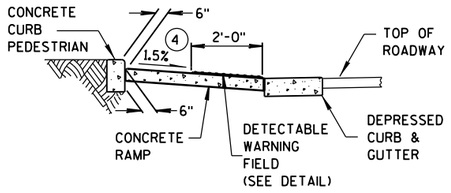
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

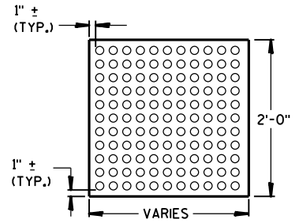


MID-BLOCK CROSSING
TYPE 7A



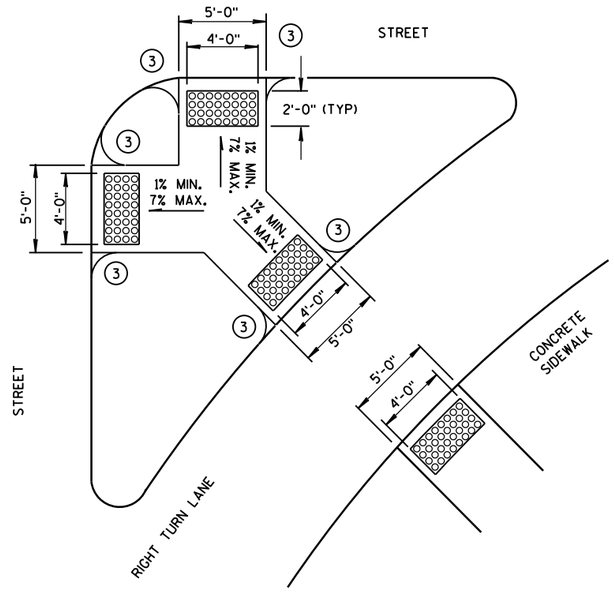
SECTION B-B

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

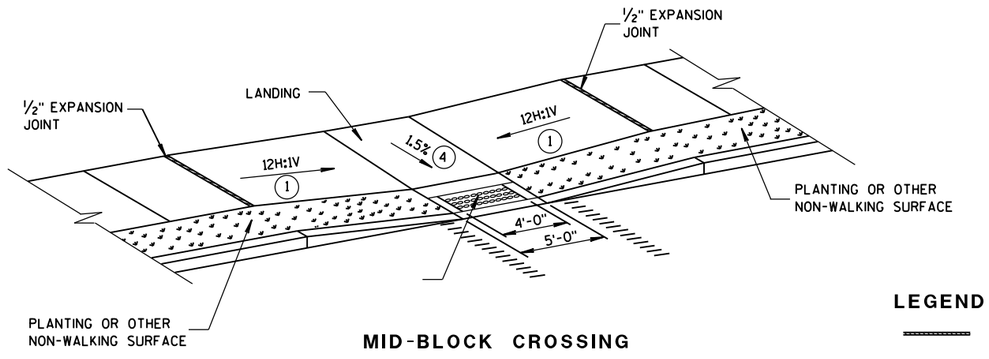


PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

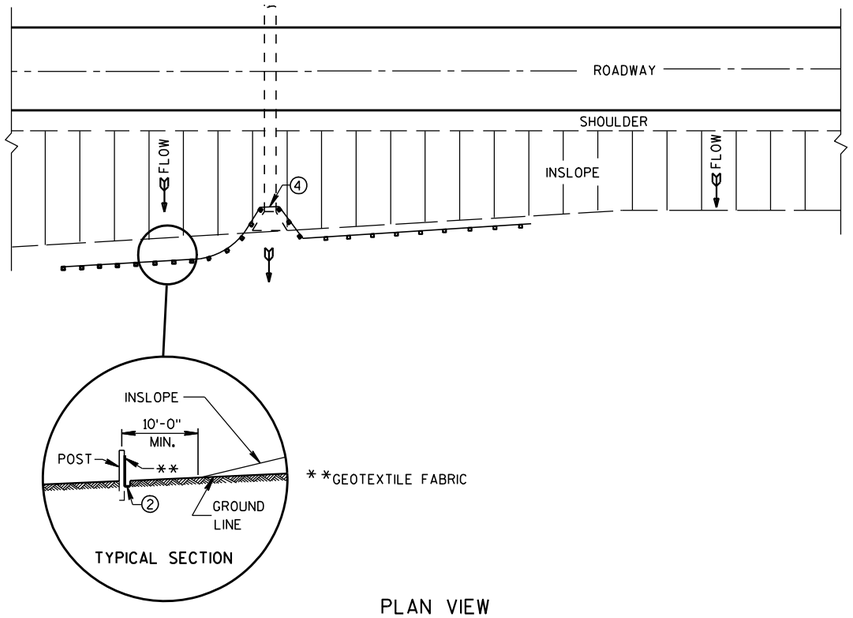
APPROVED
2-6-2013 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS [illegible] ENGINEER
FHWA

6

S.D.D. 8 D 5-15e

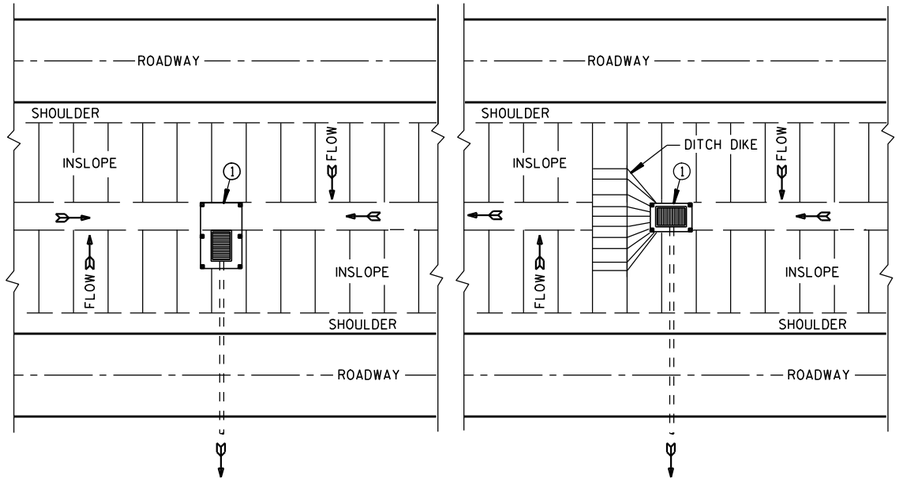
6

S.D.D. 8 D 5-15e



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.

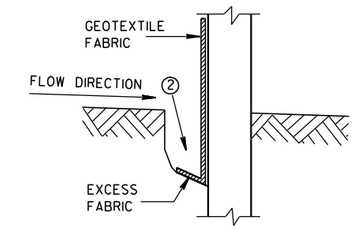
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

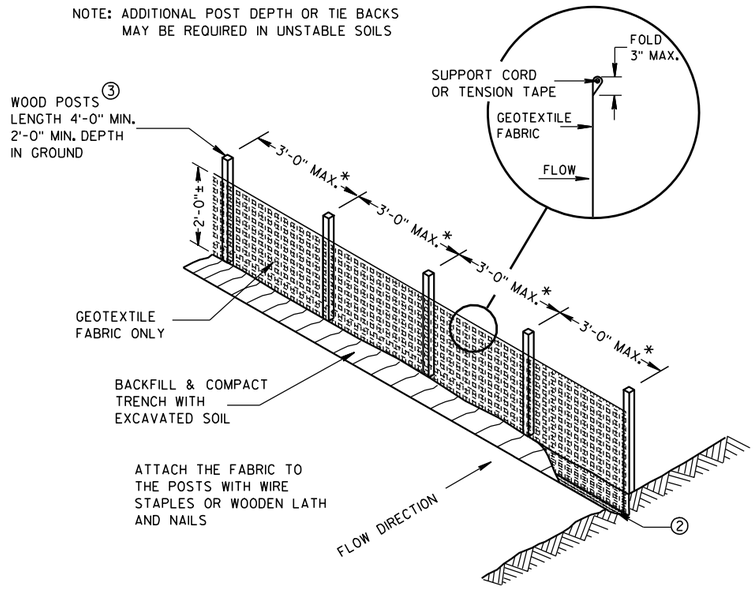
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

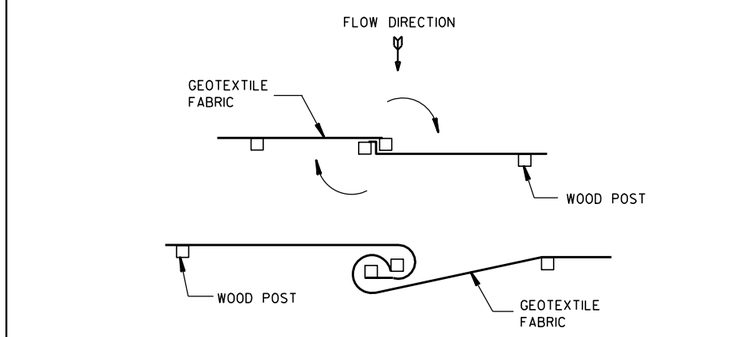
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



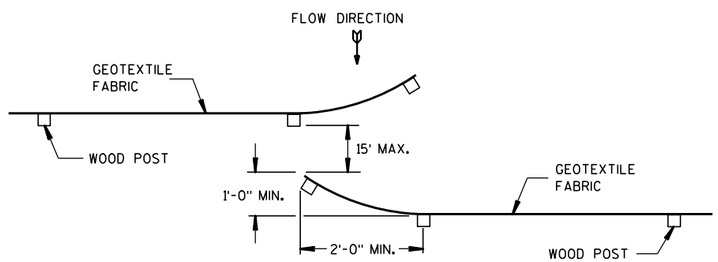
TRENCH DETAIL



SILT FENCE

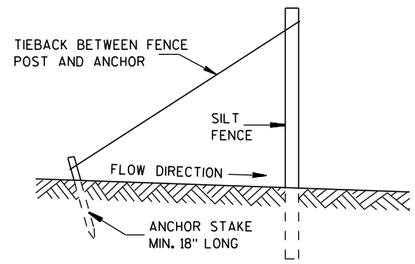


TWIST METHOD



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

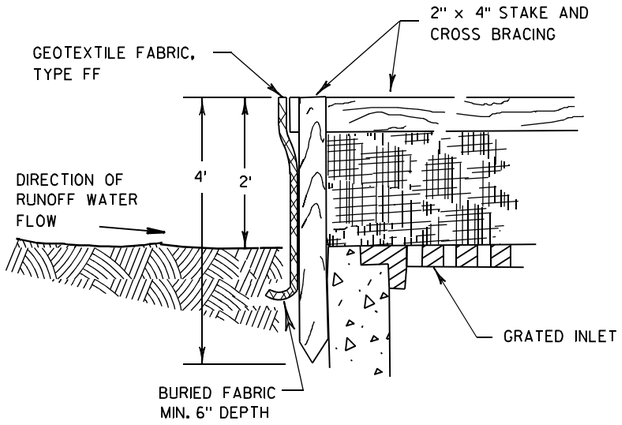
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

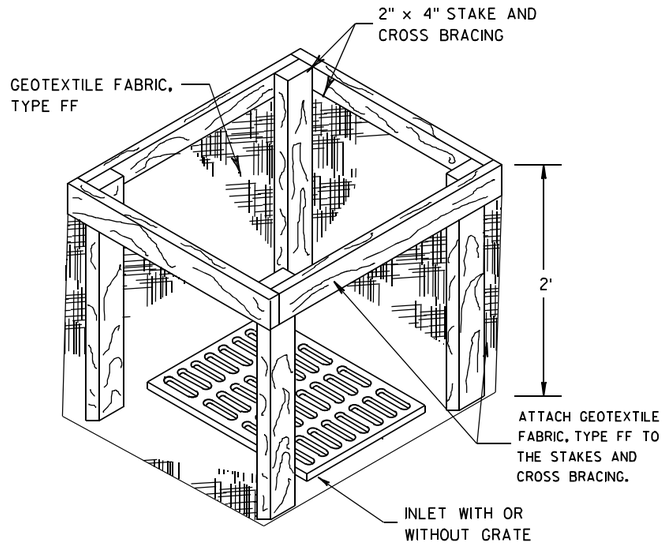
6

S.D.D. 8 E 9-6

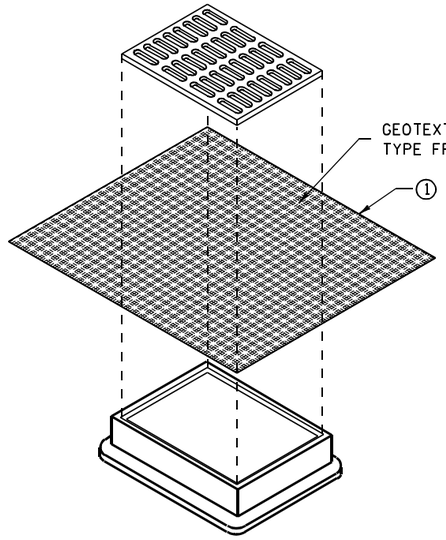
6

S.D.D. 8 E 9-6



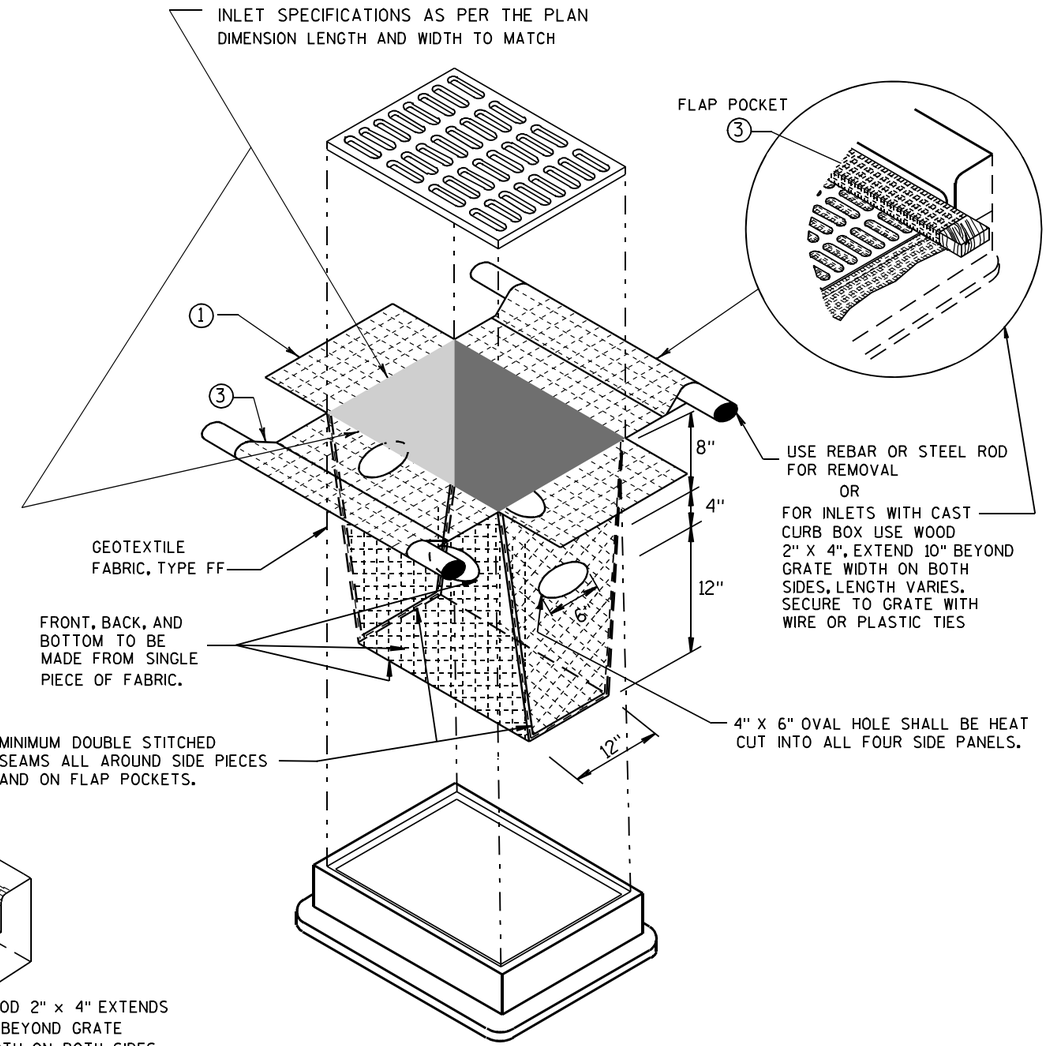


INLET PROTECTION, TYPE A



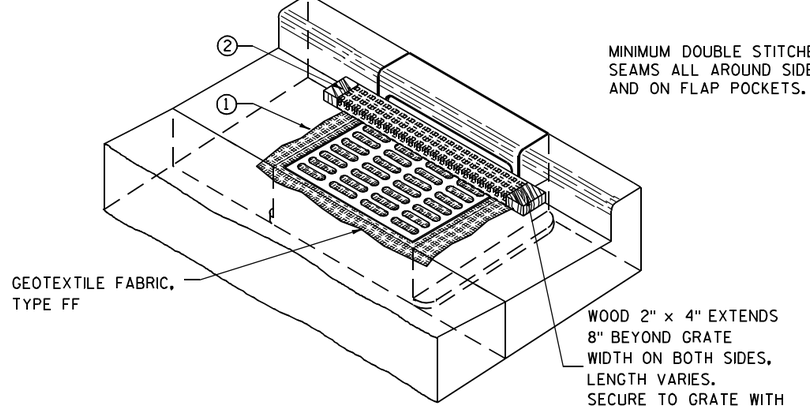
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

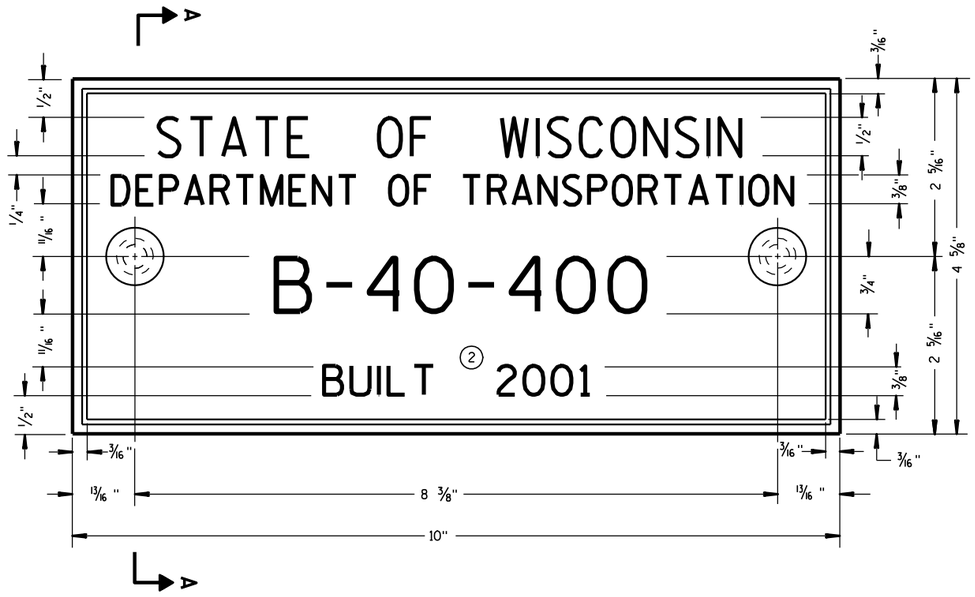
APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6
S.D.D. 8 E 10-2



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

NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

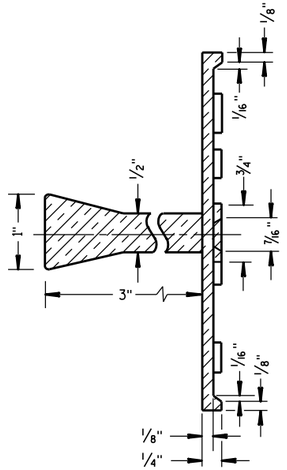
GENERAL NOTES

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.

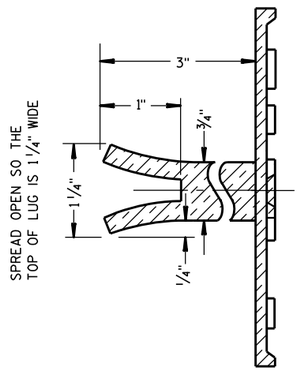
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

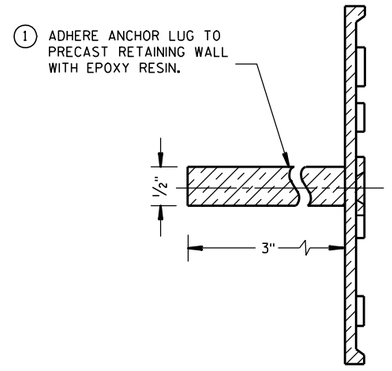
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

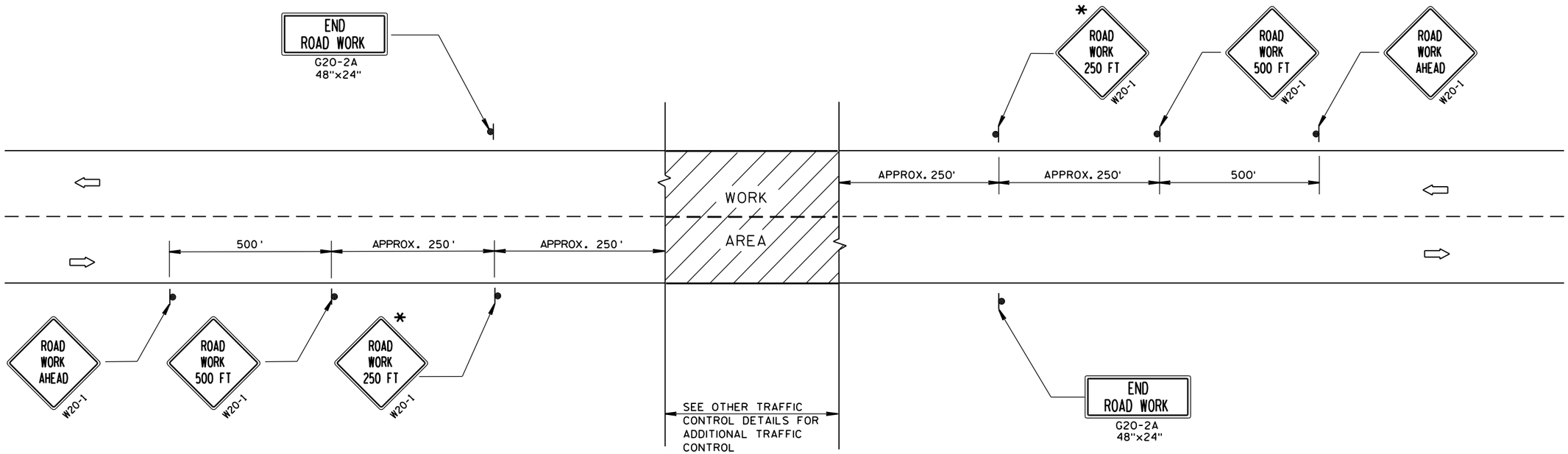
APPROVED

3/26/10 DATE

/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP ENGINEER

FHWA

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

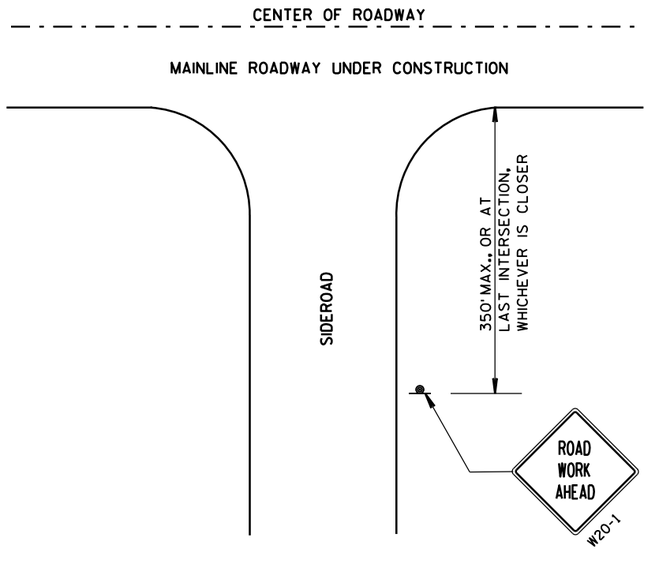
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

SIGN

6

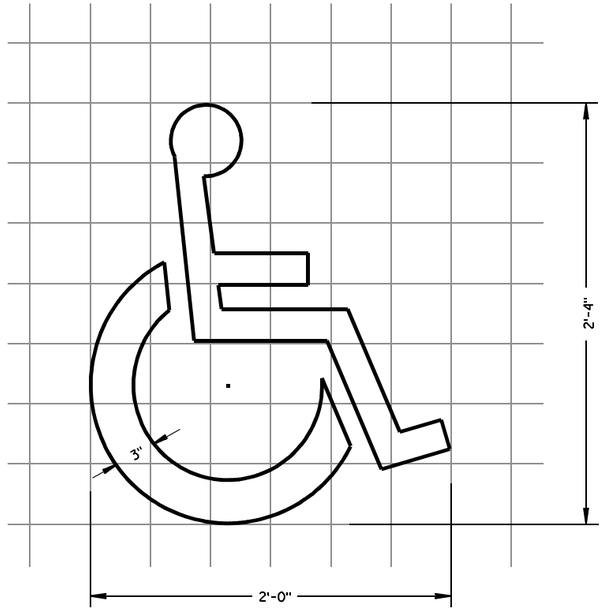
S.D.D. 15 C 5-2

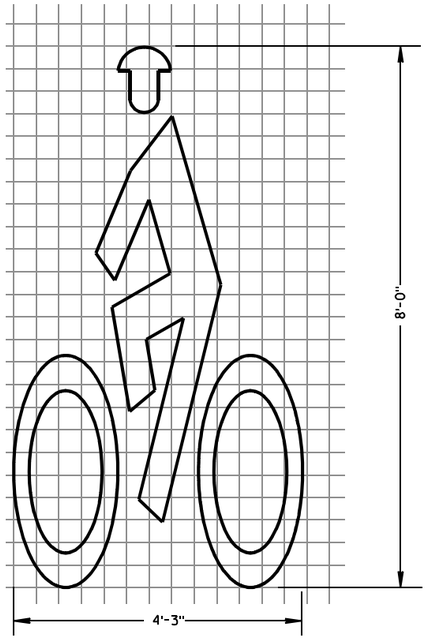
GENERAL NOTES

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

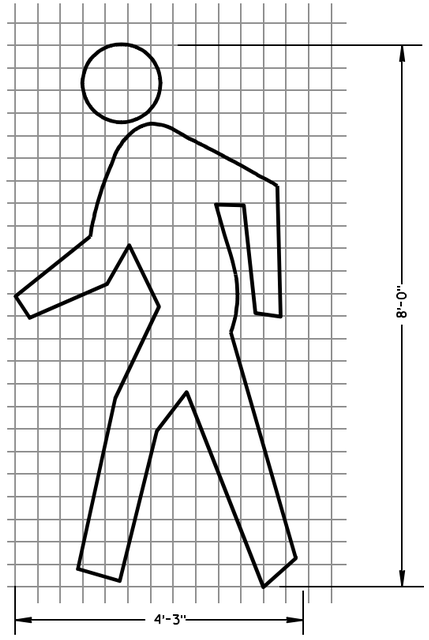
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

A DETAILED DRAWING OF THE HANDICAPPED PARKING SYMBOL IS ILLUSTRATED IN THE "STANDARD HIGHWAY SIGNS MANUAL" BY THE FEDERAL HIGHWAY ADMINISTRATION.

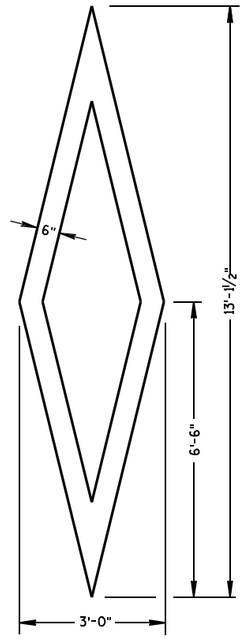




BIKE CROSSING SYMBOL



PEDESTRIAN SYMBOL



PREFERENTIAL LANE SYMBOL

6

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S.D.D. 15 C 7-12a

S.D.D. 15 C 7-12a

PAVEMENT MARKING SYMBOLS

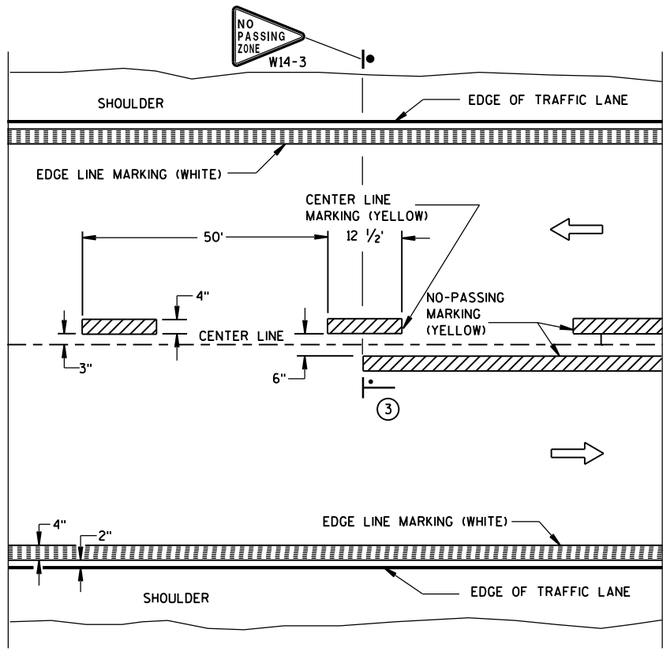
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

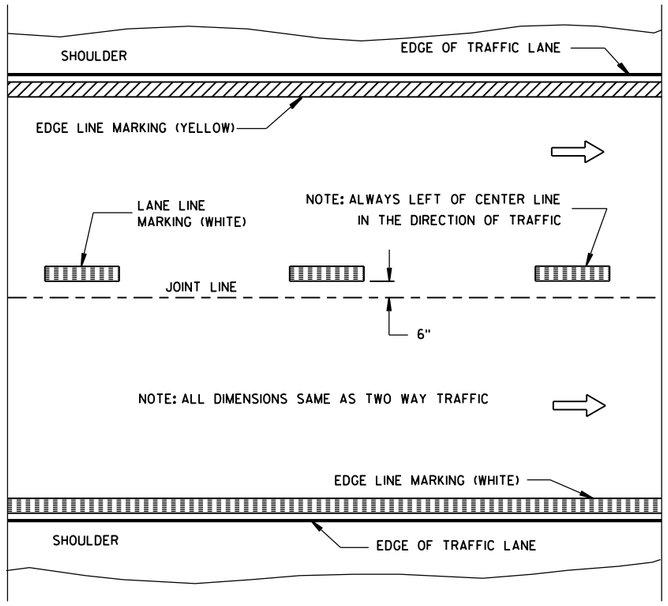
7/1/11 DATE

/S/ Thomas N Nathan STATE TRAFFIC ENGINEER

FHWA

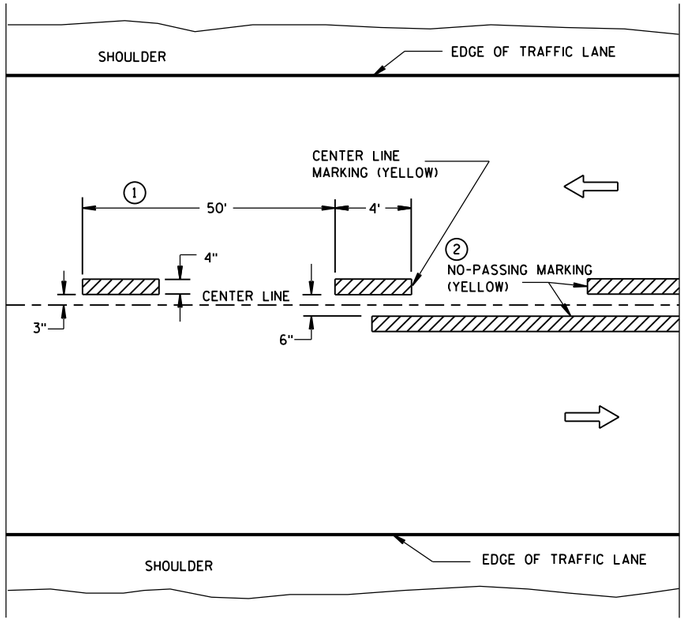


TWO WAY TRAFFIC

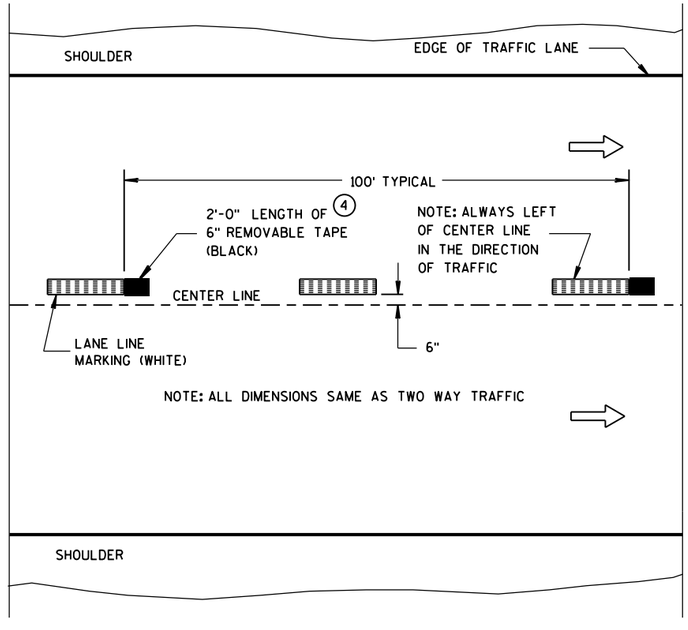


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

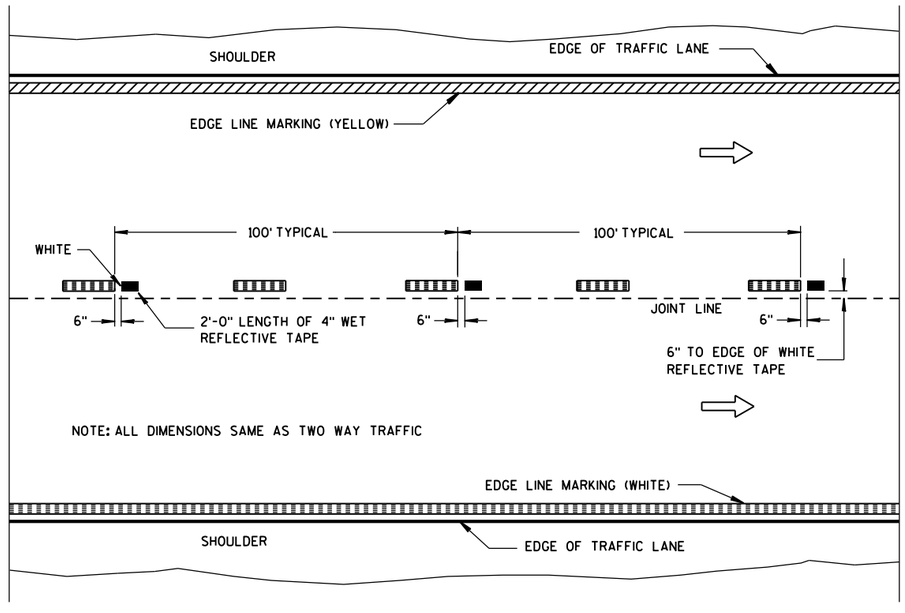
GENERAL NOTES

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

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013 DATE

/S/ Travis Feltes STATE TRAFFIC E

FHWA

6

S.D.D. 15 C 8-16a

6

S.D.D. 15 C 8-16a

GENERAL NOTES

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

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.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

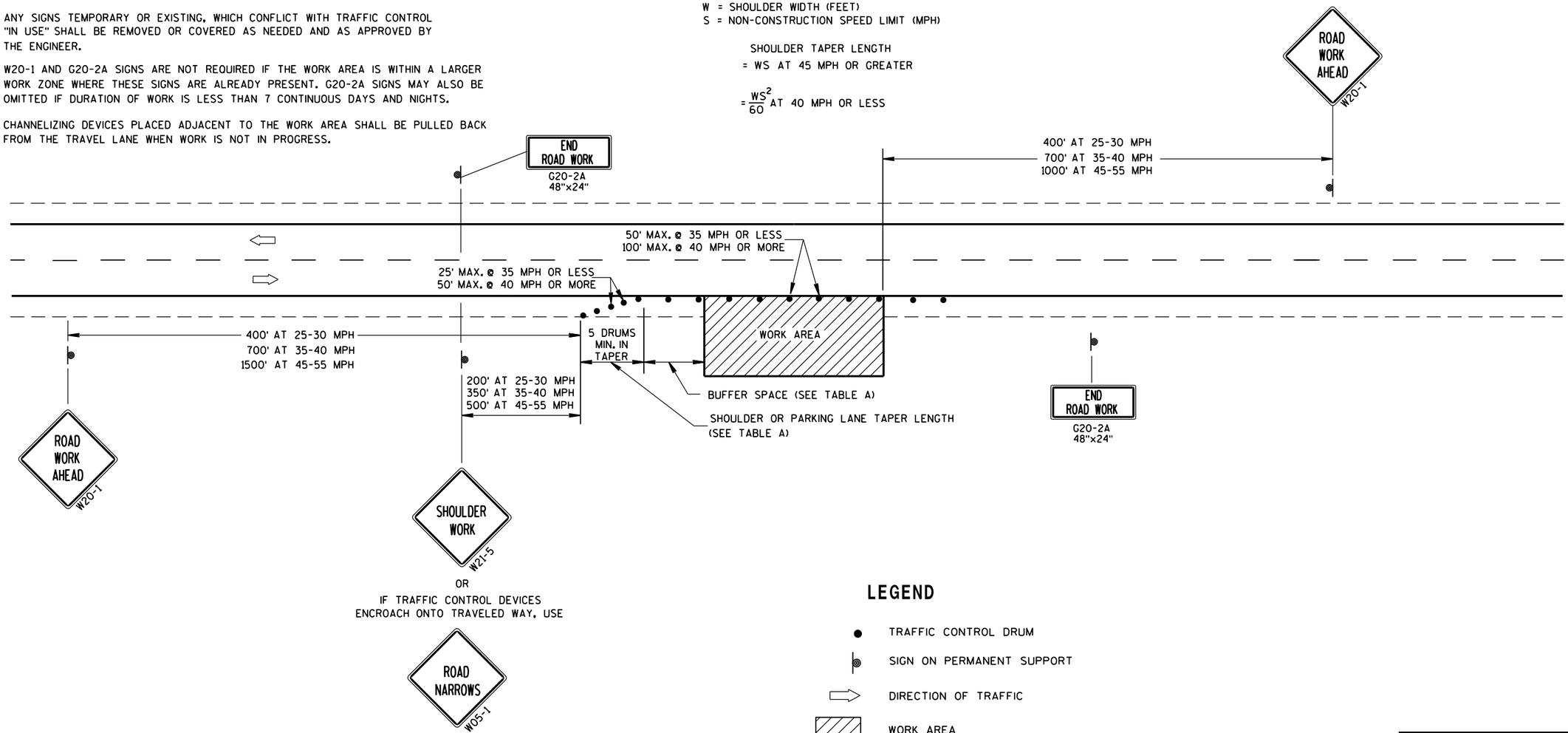
TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

SHOULDER TAPER LENGTH
= WS AT 45 MPH OR GREATER

$= \frac{WS^2}{60}$ AT 40 MPH OR LESS



LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

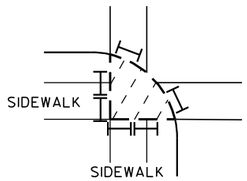
6

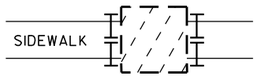
S.D.D. 15 D 28-2

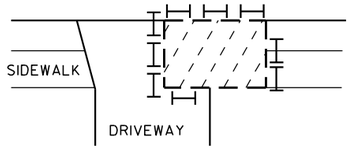
6

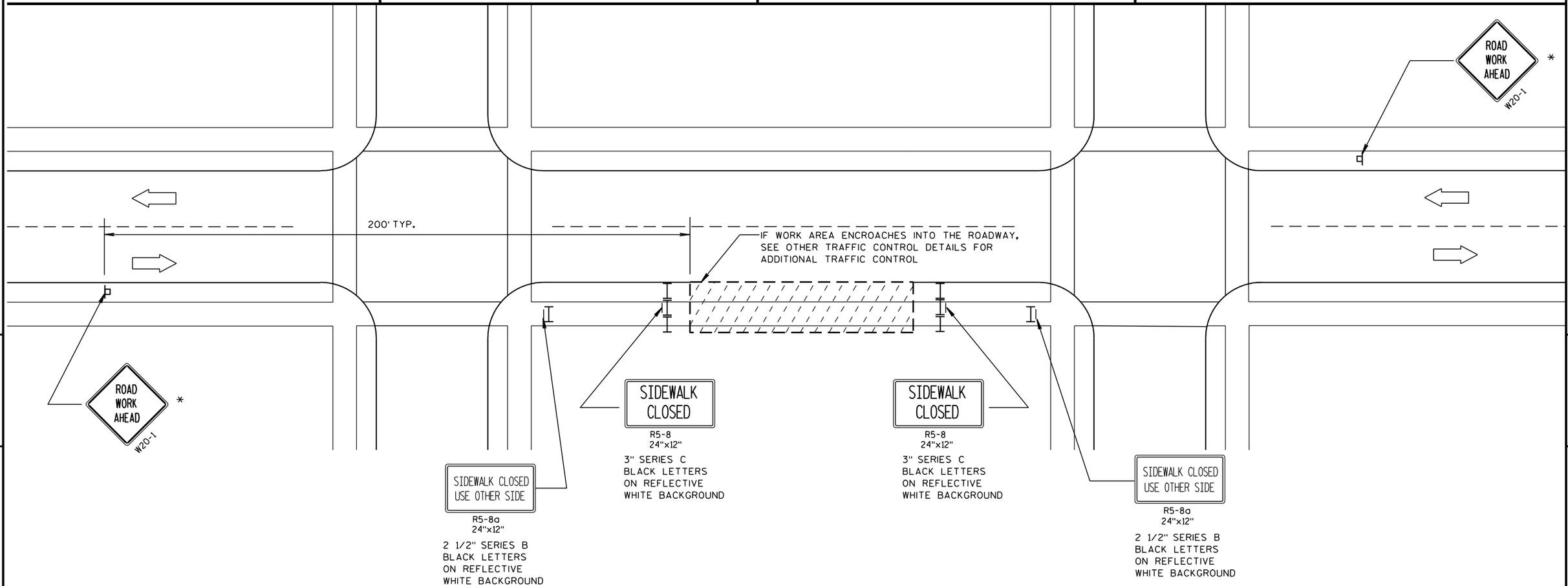
S.D.D. 15 D 28-2

WARNING OF LOCALIZED SIDEWALK WORK AREAS









LEGEND

- POST MOUNTED SIGN
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- WORK AREA
- DIRECTION OF TRAFFIC FLOW

GENERAL NOTES :

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

THE EXACT LOCATION AND PLACEMENT OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

* "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

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

TRAFFIC CONTROL, SIDEWALK CLOSURE

TRAFFIC CONTROL, SIDEWALK CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/23/2000 DATE

/S/ Chester J. [illegible] CHIEF SIGNS AND MARK[illegible] [illegible]NEER

FHWA

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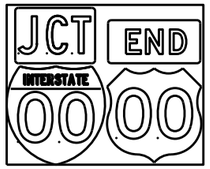
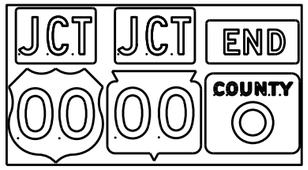
S.D.D. 15 D 30-1

TYPICAL ASSEMBLIES

J1-1

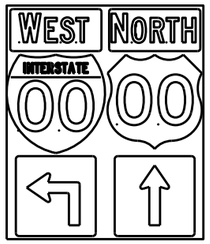


J1-2

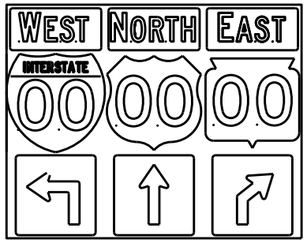


J1-3

J2-1



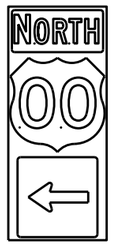
J2-2



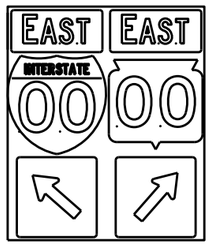
J2-3

JV

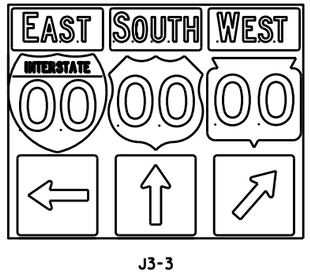
(Typical Vertical J-Assembly
See Note 10 and 11)



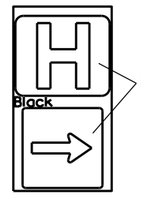
J3-1



J3-2

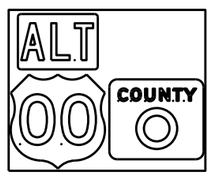


J3-3

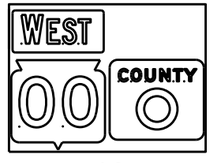


JH-1

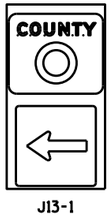
J4-1



J4-2



J4-2



J13-1

J12-1

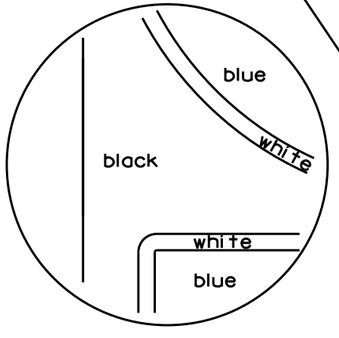
J32-1

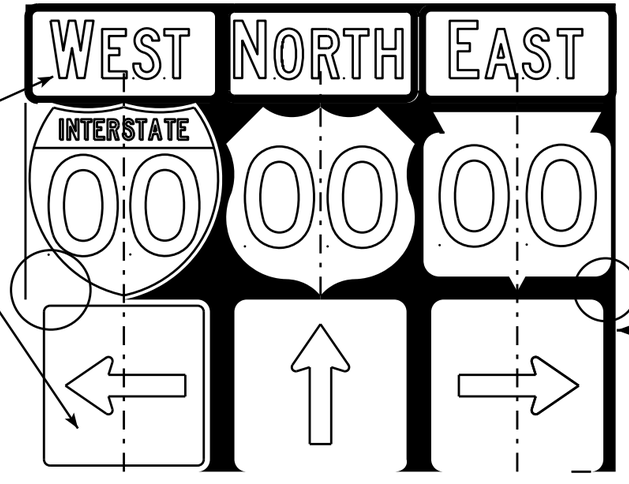
J33-1

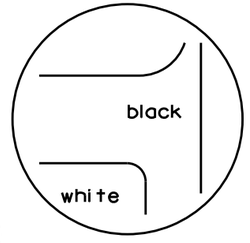
J23-1

J22-1

[blue background with interstate]







[black background]

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

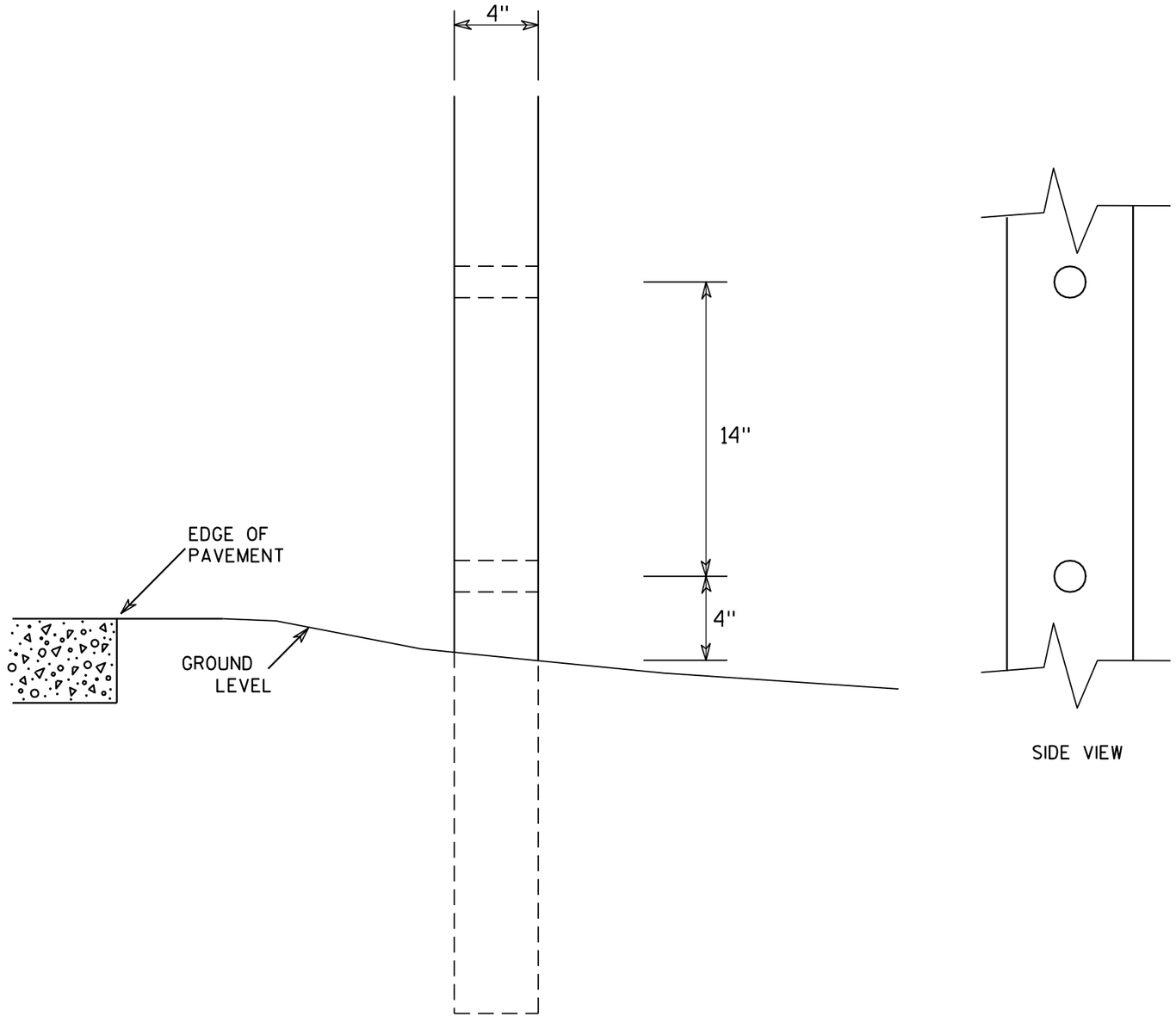
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

PROJECT NO: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

WISDOT/CADDS SHEET 42



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.

7

7

4 X 6 WOOD POST MODIFICATIONS

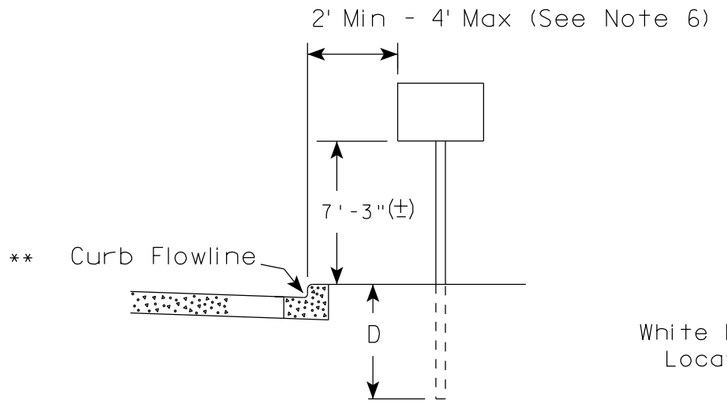
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

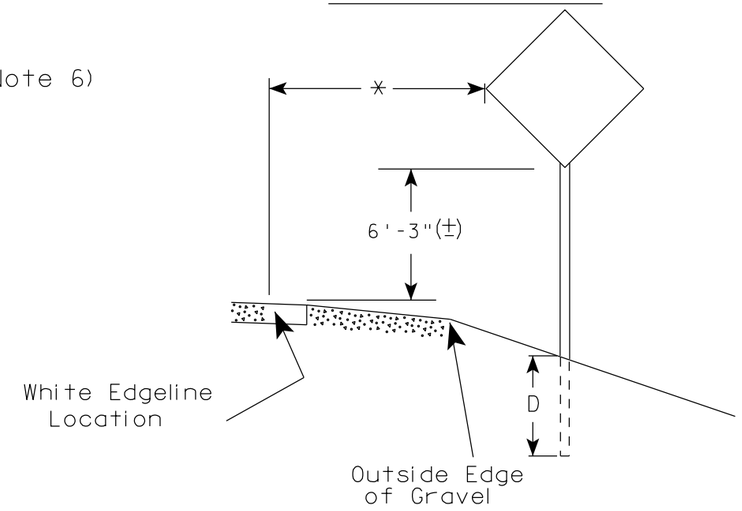
DATE 3/27/97 PLATE NO. A4-11.2

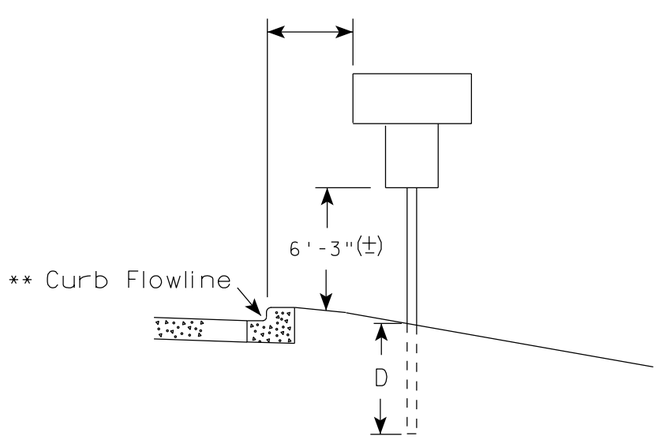
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 63	E

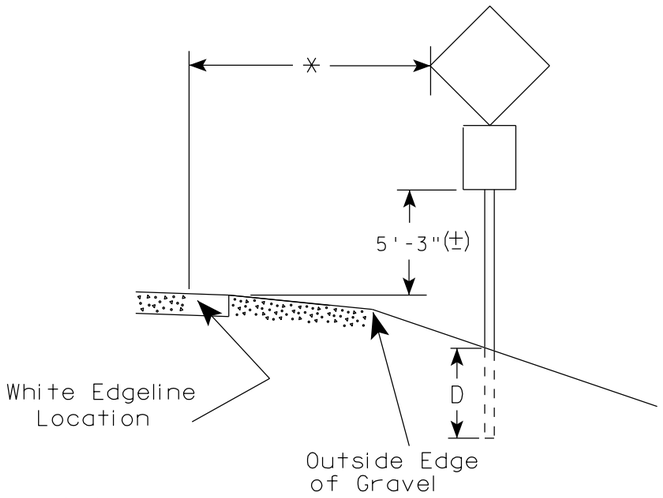
URBAN AREA



RURAL AREA (See Note 2)







** 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.

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 Rod 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'

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

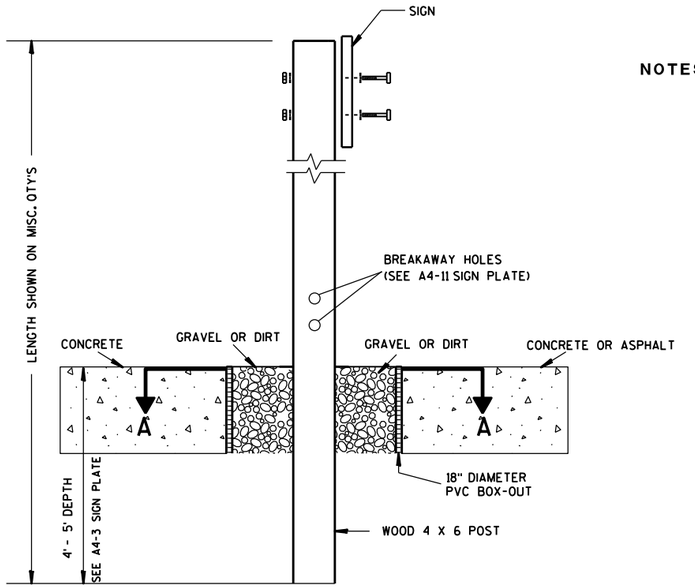
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

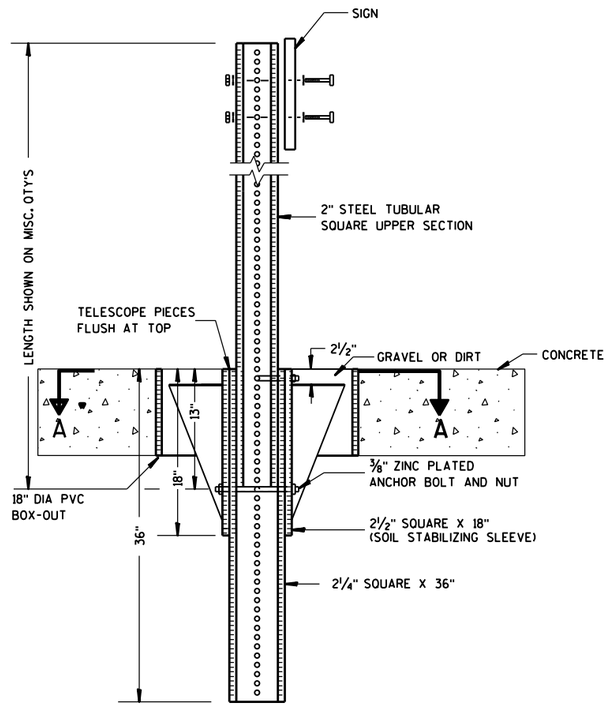
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A43.DGN PLOT DATE : 30-SEP-2013 13:25 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 99.237937:1.000000 WISDOT/CADDS SHEET 42



ELEVATION VIEW

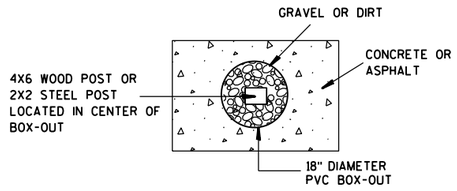
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

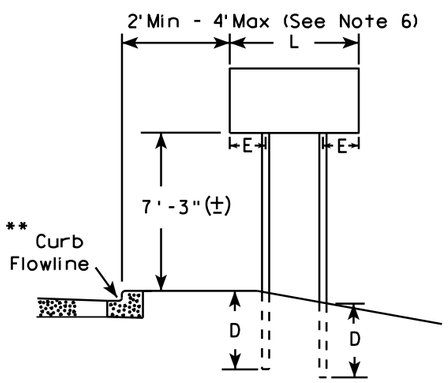
APPROVED Matthew R Rauch
for State Traffic Engineer

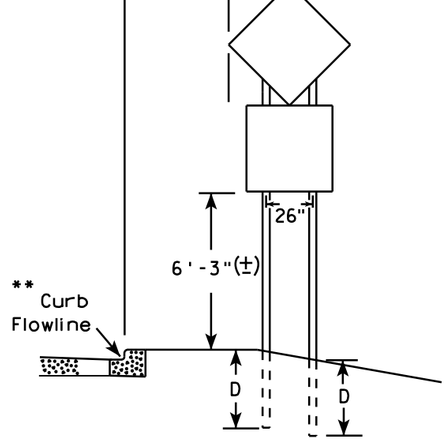
DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

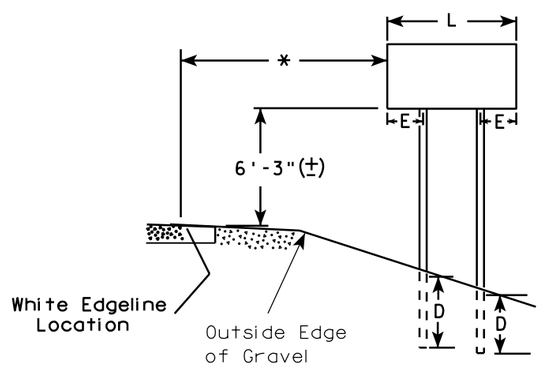
URBAN AREA

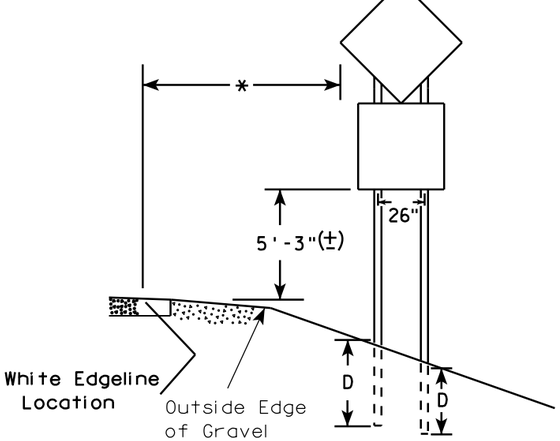




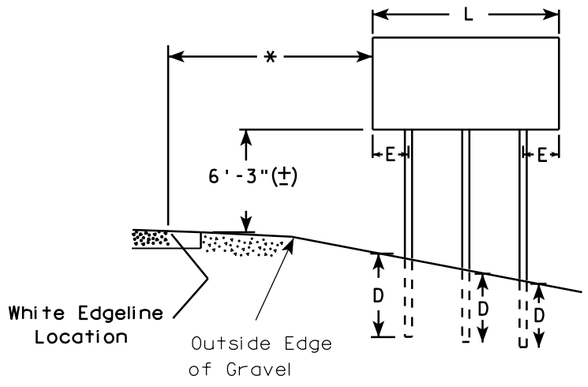
48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)





48" DIAMOND WARNING SIGN



GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. 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), 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" (±).

* 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.

** 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.

*** See A4-3 sign plate for signs 4' or less in width or 20 S.F. or less in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
*** Greater than 48" Less than 60"	12"
60" to 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

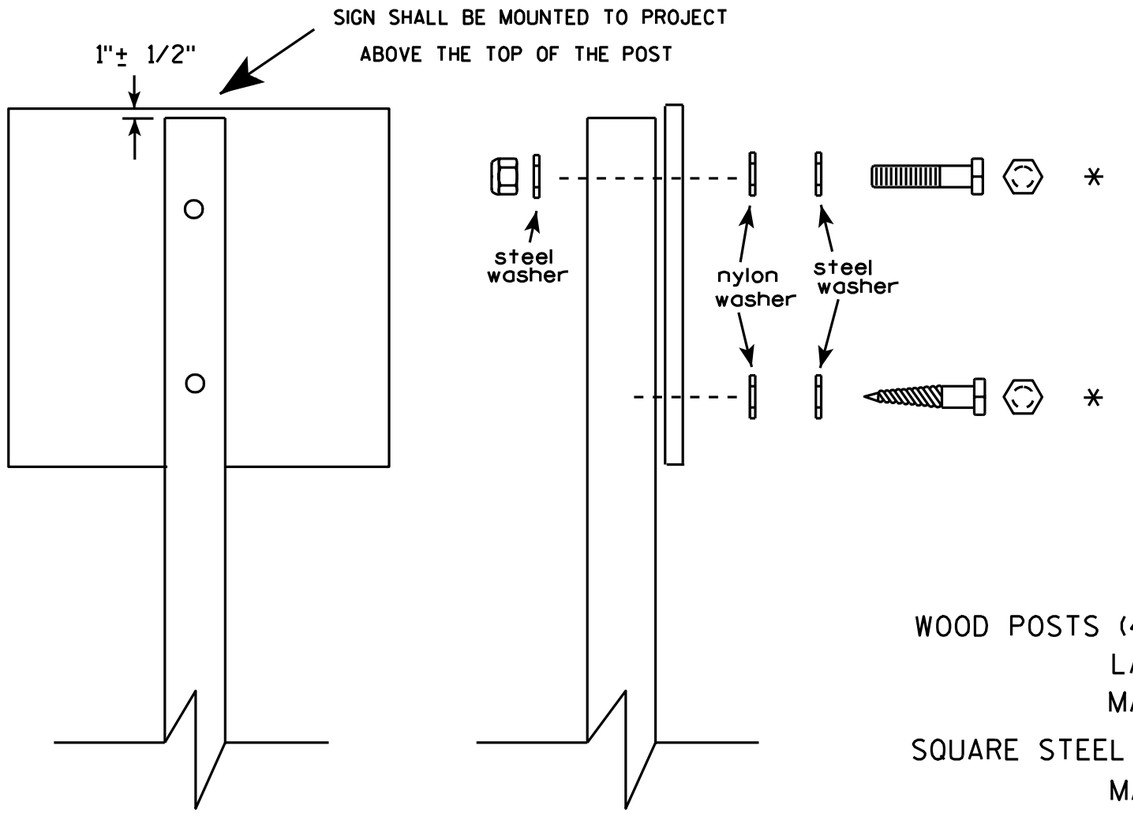
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/13 PLATE NO. A4-4 12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A44.DGN PLOT DATE : 30-SEP-2013 13:27 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 107.021305:1.000000 WISDOT/CADDS SHEET 42



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

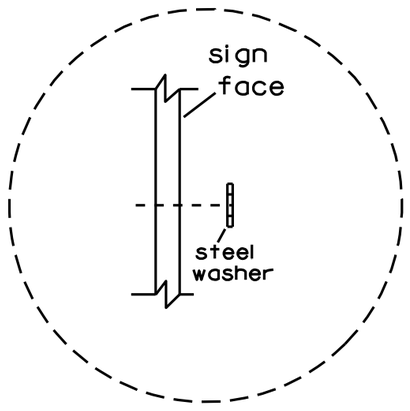
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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 - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
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 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 Matthew R Rauch
for State Traffic Engineer

DATE 3/23/10 PLATE NO. A4-8.7

7

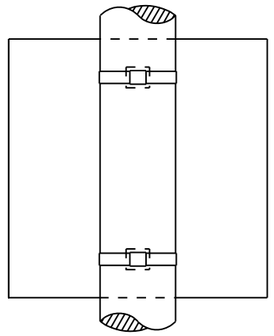
7

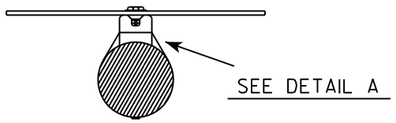
PROJECT NO:

SHEET NO: 67 E

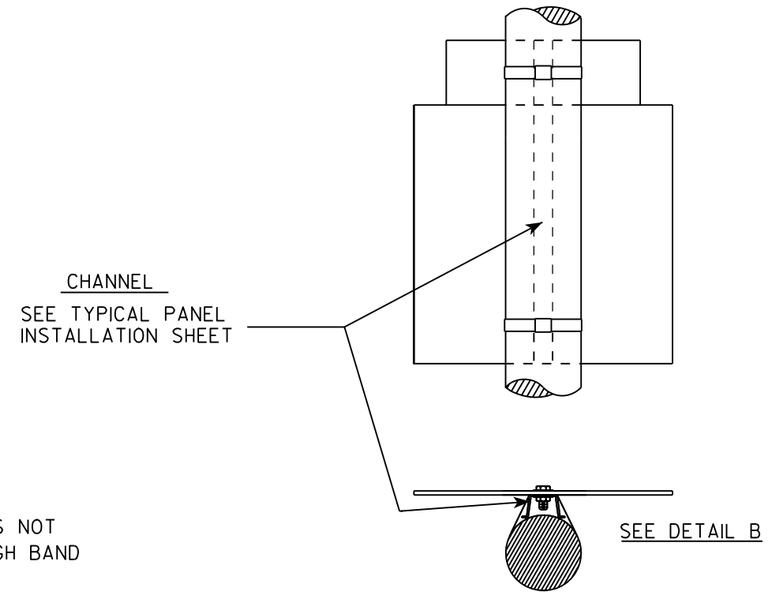
BANDING

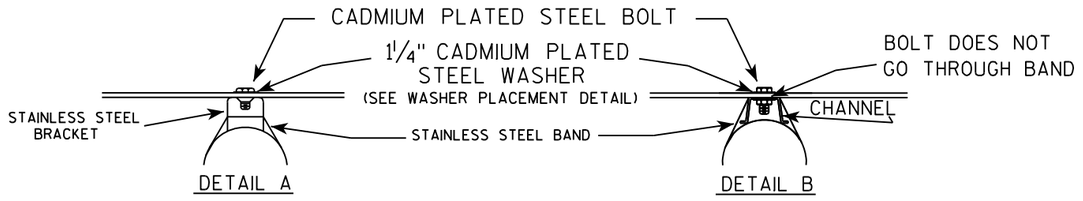
SINGLE SIGN



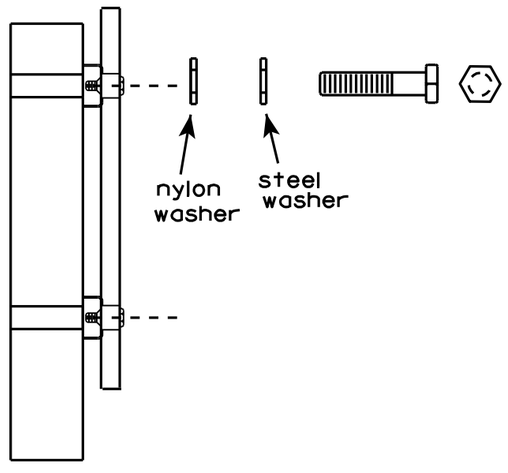


"J" ASSEMBLY





WASHER PLACEMENT



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
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

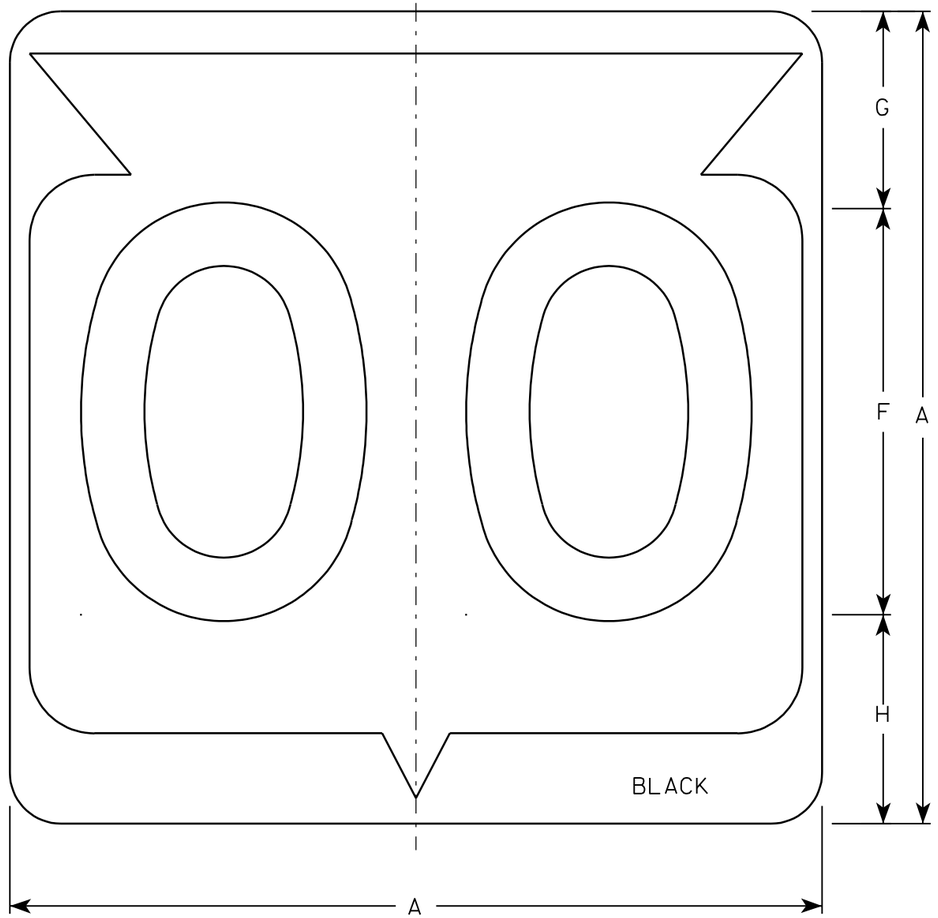
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

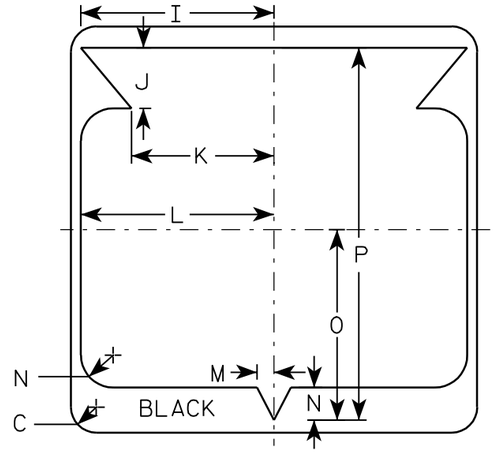
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 68	E



M1-6

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. 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.
5. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective



Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

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.	Area m2
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

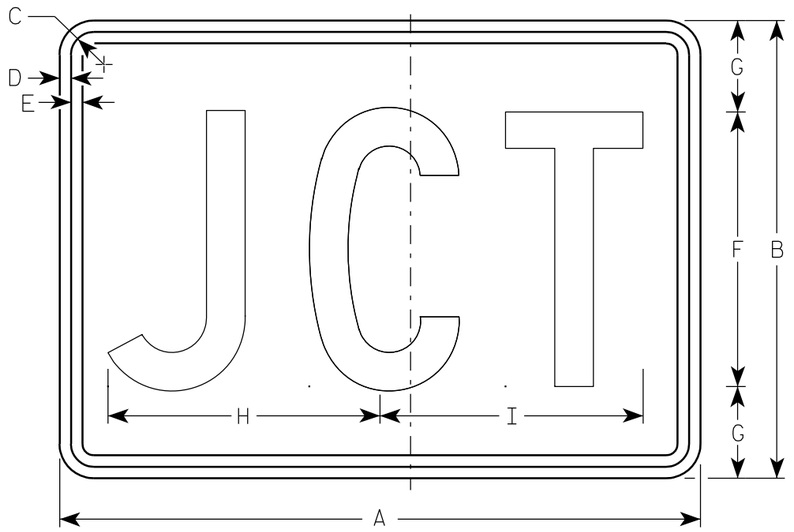
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

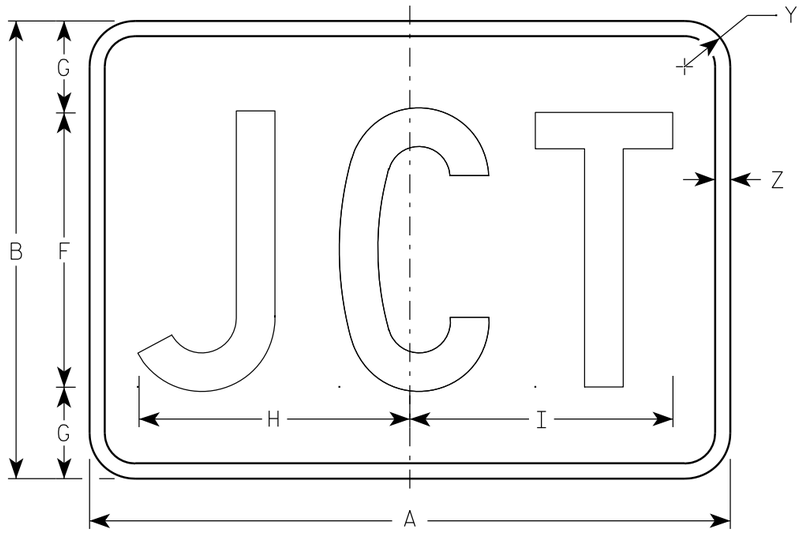
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 69	E



M2-1
MK2-1
MM2-1
MR2-1



MB2-1
MG2-1
MN2-1

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. 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.
5. M2-1 Background - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   Message - Black
   MB2-1 Background - Blue
   Message - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   MG2-1 Background - Green
   Message - White - Type H Reflective
   MK2-1 Background - Green
   Message - White - Type H Reflective
   MM2-1 Background - White - Type H Reflective
   Message - Green
   MN2-1 Background - Brown
   Message - White - Type H Reflective
   MR2-1 Background - Brown
   Message - Yellow - Type H Reflective

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 mm

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.	Area m2
1																												
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20	0.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20

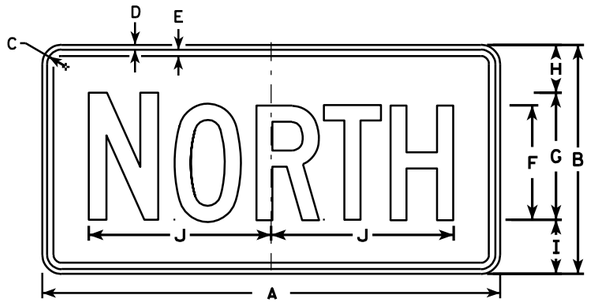
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

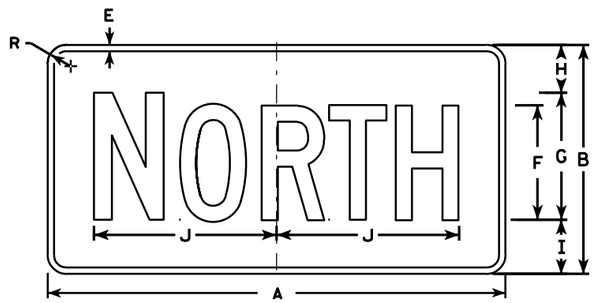
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M2-1.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 70	E



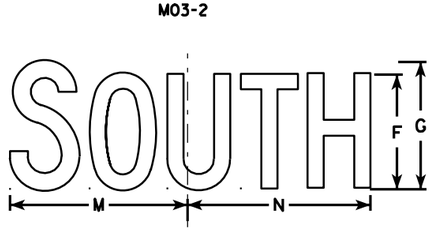
M3-1
MK3-1
MO3-1



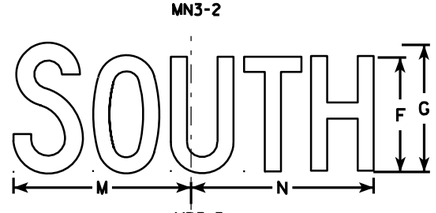
MB3-1
MG3-1
MM3-1
MN3-1

M3-2
MK3-2
MO3-2

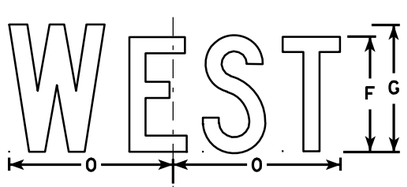
MB3-2
MG3-2
MM3-2
MN3-2



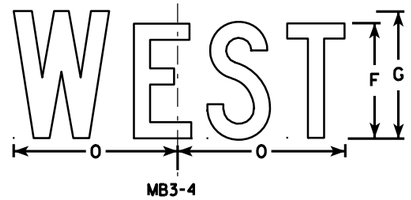
M3-3
MK3-3
MO3-3



MB3-3
MG3-3
MM3-3
MN3-3



M3-4
MK3-4
MO3-4



MB3-4
MG3-4
MM3-4
MN3-4

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. 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.
5. M3-1 thru M3-4 Background - White - Type H Reflective
   (Detour or temporary signs - Reflective)
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White - Type H Reflective
   (Detour or temporary signs - Reflective)
   MG3-1 thru MG3-4 Background - Green
   Message - White - Type H Reflective
   MK3-1 thru MK3-4 Background - Green
   Message - White - Type H Reflective
   MM3-1 thru MM3-4 Background - White - Type H Reflective
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White - Type H Reflective
   M03-1 thru M03-4 Background - Orange - Reflective
   Message - Black
6. Note the first letter of each direction is larger than the remainder of the message.

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																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

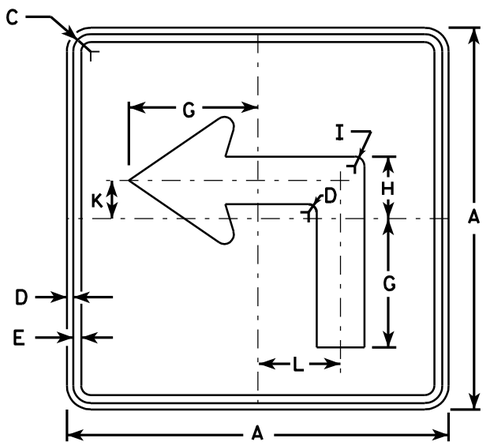
STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

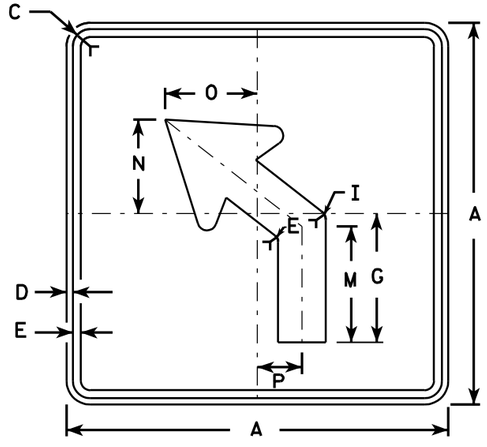
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 11/10/10 PLATE NO. M3-1.12

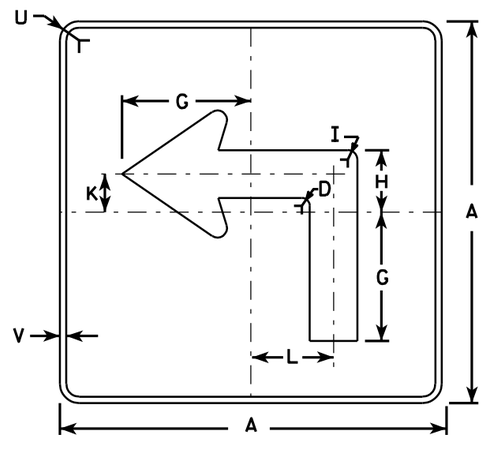
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 71	E



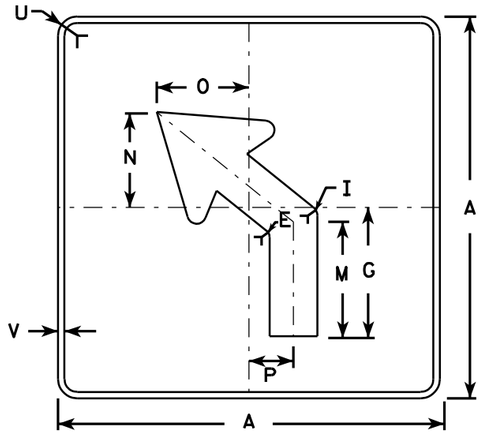
M5-1L
MK5-1L
MM5-1L
MO5-1L
MP5-1L
MR5-1L



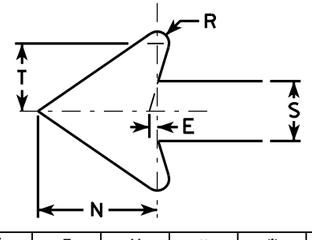
M5-2L
MK5-2L
MM5-2L
MO5-2L
MP5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
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. M5-1 and M5-2 Background - White - Type H Reflective
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White - Type H Reflective
   MG5-1 and MG5-2 Background - Green
   Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green
   Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White - Type H Reflective
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow - Type H Reflective
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

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																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

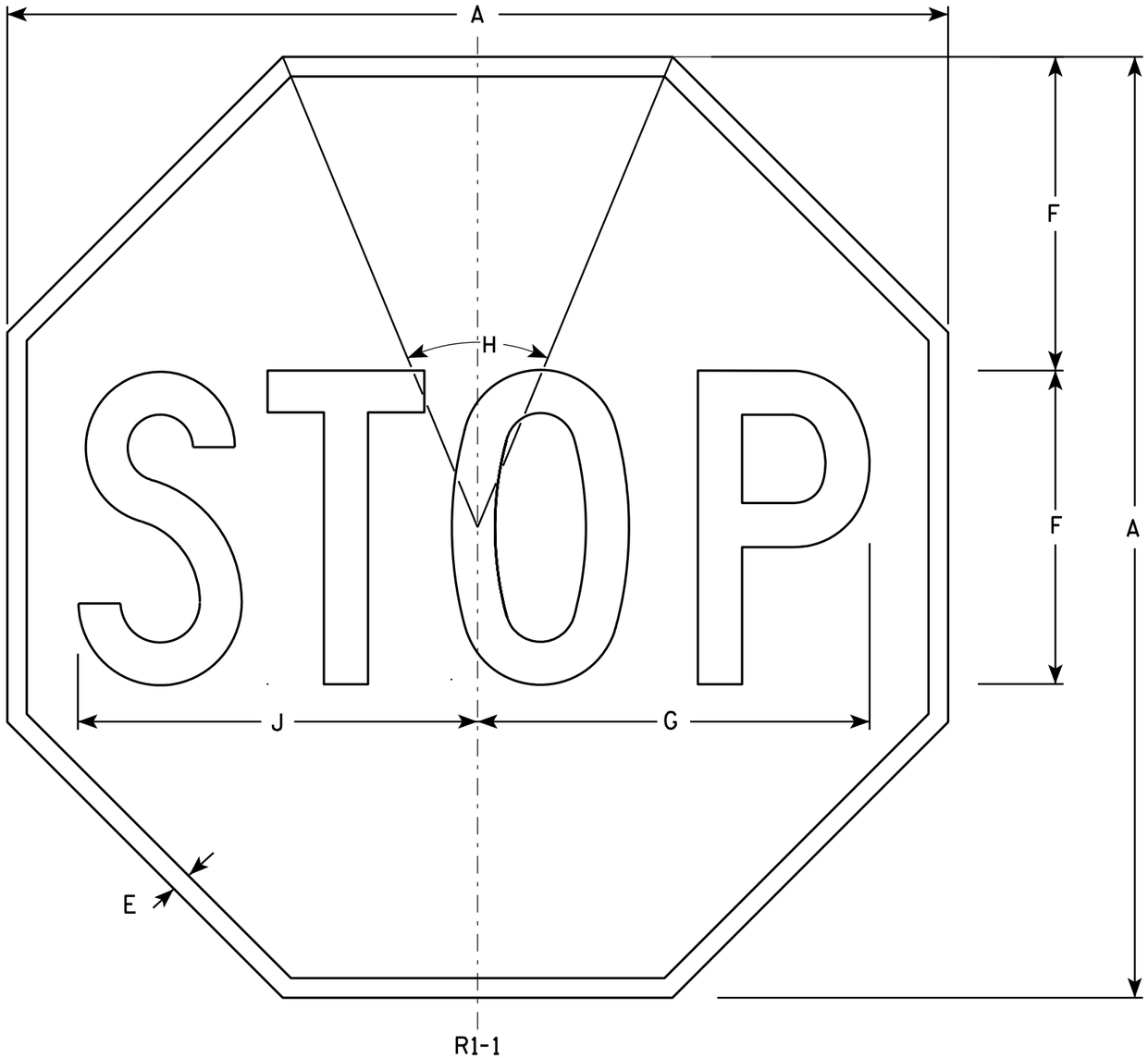
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M5-1.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 72 | E

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 29-JUL-2013 13:34 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.908552:1.000000
WISDOT/CADDS SHEET 42



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

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	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

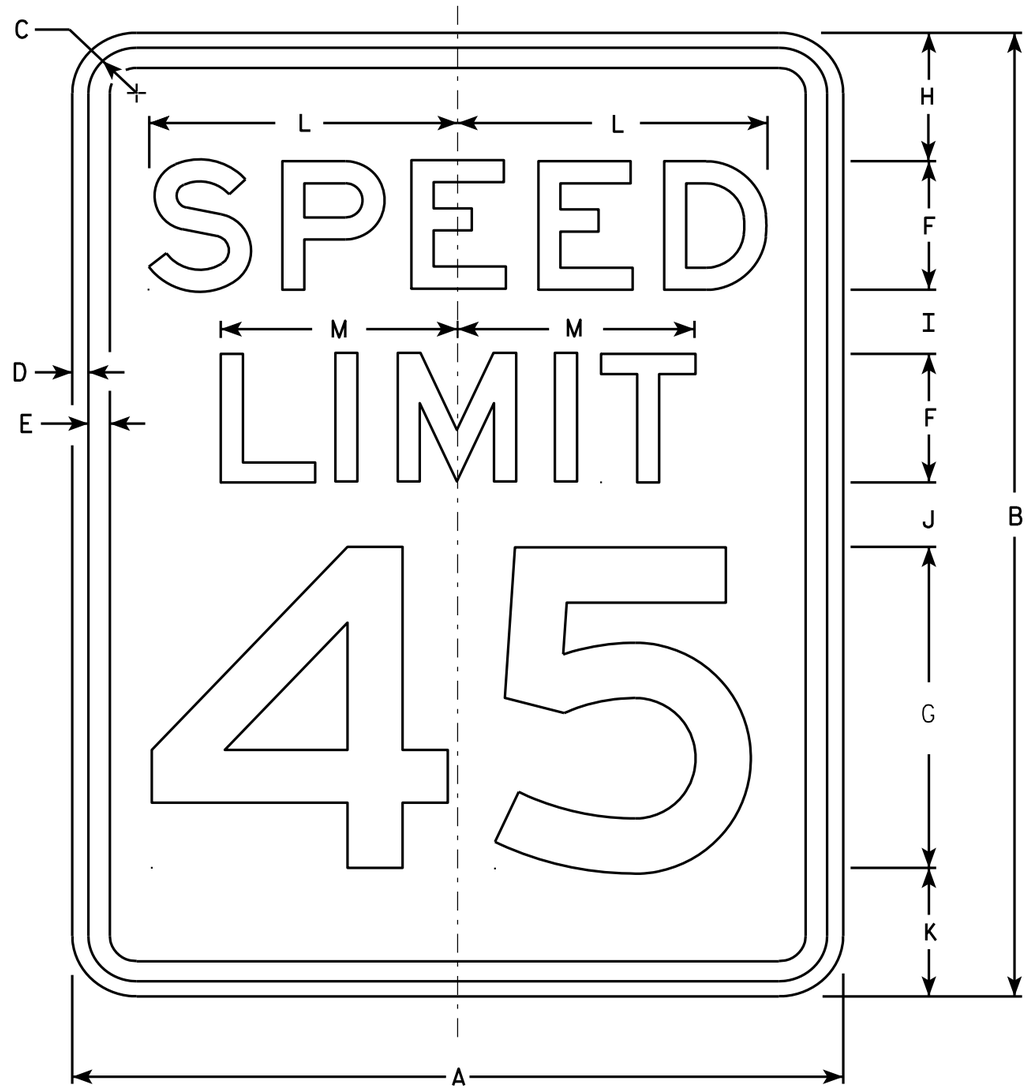
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 73	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. 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.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

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	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

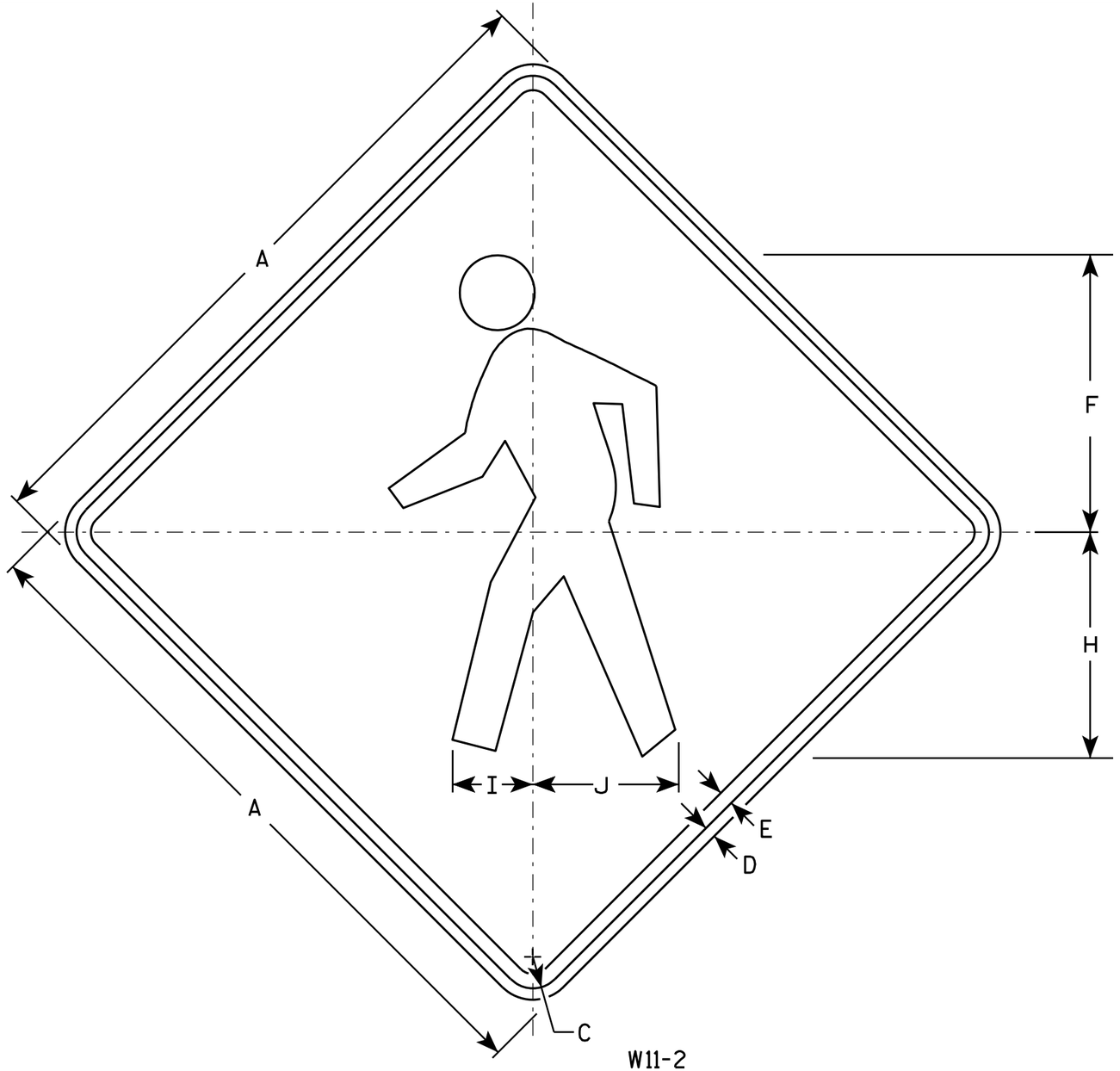
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 74 | E



W11-2

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.

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	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

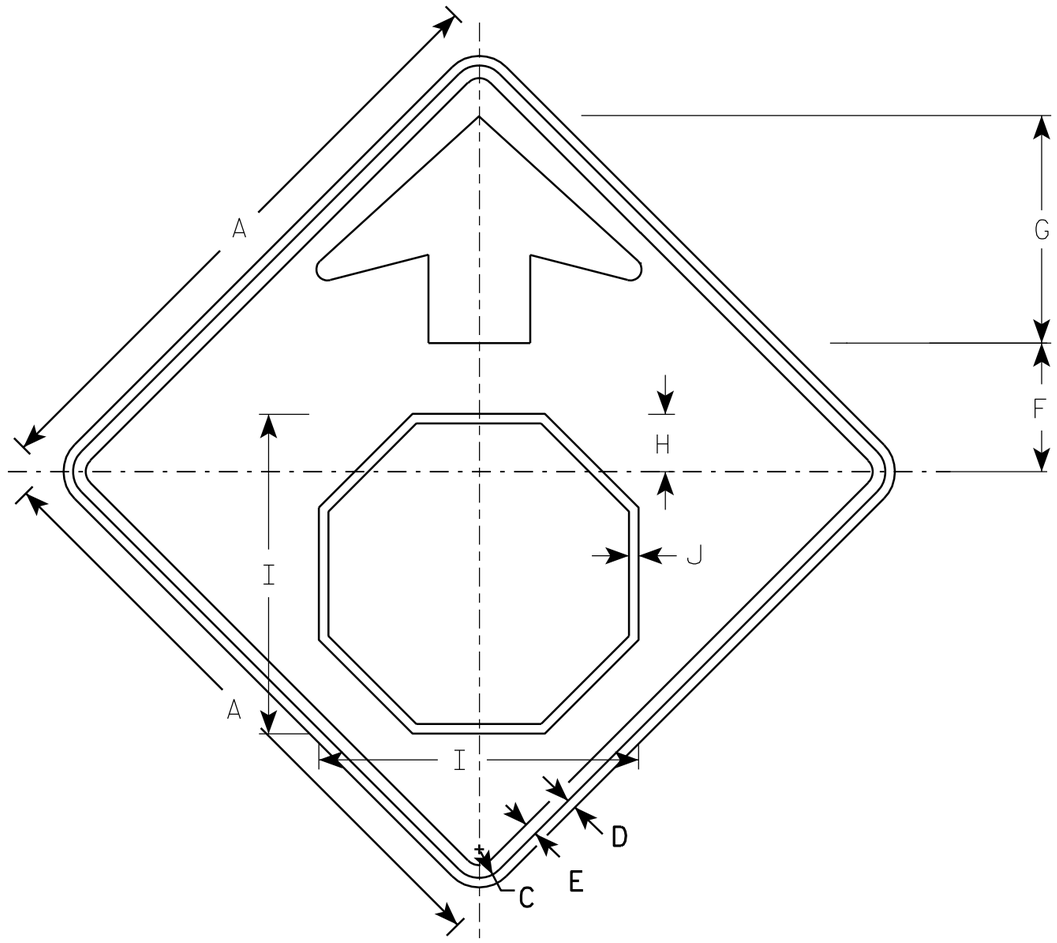
STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W11-2.7

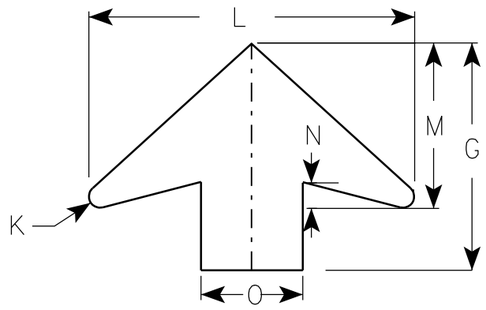
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 75	E



W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

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	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

WISCONSIN DEPT OF TRANSPORTATION

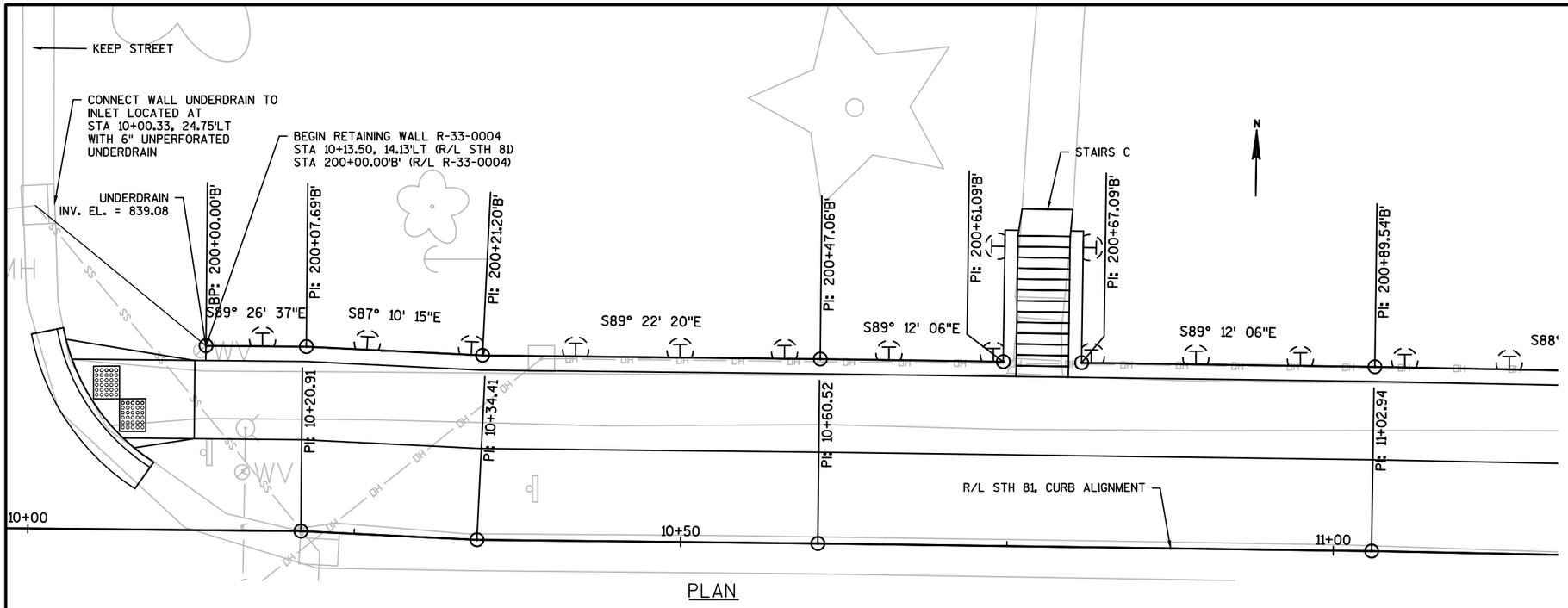
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

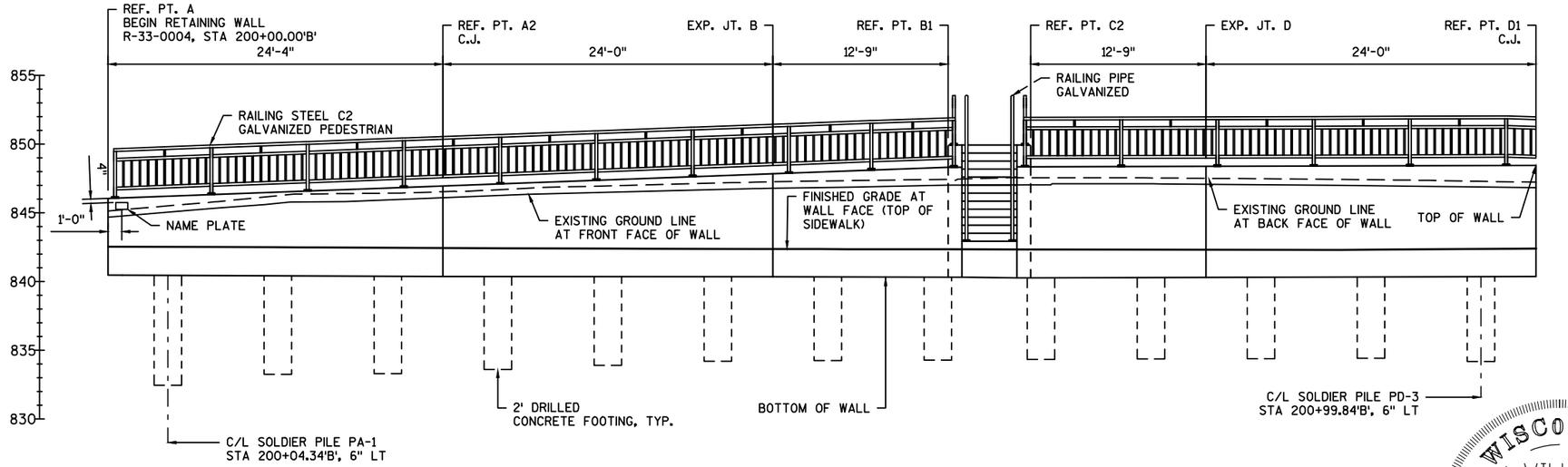
PROJECT NO:

SHEET NO: 76 E

STATE PROJECT NUMBER
5944-03-84



PLAN



ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)
(DISTANCES AND STATIONS ARE GIVEN ALONG THE BACK FACE OF WALL)

LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT
P"X"-"*" = PILE IDENTIFICATION

NOTES

CONNECT THE UNDERDRAIN PIPE BENEATH THE STAIRCASE SHEAR WALLS TO THE UNDERDRAIN PIPE BENEATH THE WALL ALONG STH 81.

CONNECTION FROM UNPERFORATED PIPE TO INLET IS INCIDENTAL TO PIPE UNDERDRAIN.

DESIGN DATA

LIVE LOAD:

LIVE LOAD SURCHARGE: 100 P.S.F.

MATERIAL PROPERTIES:

CONCRETE MASONRY	f'c = 4,000 P.S.I.
BAR STEEL REINFORCEMENT (GRADE 60)	fy = 60,000 P.S.I.
STRUCTURAL STEEL HS	fy = 50,000 P.S.I.
PILE FOOTINGS	f'c = 3,500 P.S.I.
*TIMBER LAGGING	E = 1,800,000 P.S.I.
	fbo = 1,000 P.S.I.

* MATERIAL VALUES BASED ON DOUGLAS FIR-LARCH NO. 1, 3" NOMINAL THICKNESS, REFERENCE AASHTO LRFD SPECIFICATIONS TABLE 8.4.1.1.4-1.

STRUCTURE DESIGN CONTACTS

BRIDGE OFFICE: WILLIAM DREHER
(608)-266-8489
CONSULTANT: WILLIAM MURPHY
(312)-577-3327

LIST OF DRAWINGS

WISCONSIN
WILLIAM P. MURPHY
E-40244
CHICAGO IL
PROFESSIONAL ENGINEER

DATE: 7/11/2014

NO.	DATE	REVISION	BY

KNIGHT
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700 N Third Street
Suite 104
La Crosse, WI 54601
Phone: (608) 519-1455

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 07/14/14
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE **R-33-0004**

STH 81 ALONG LOUISA STREET

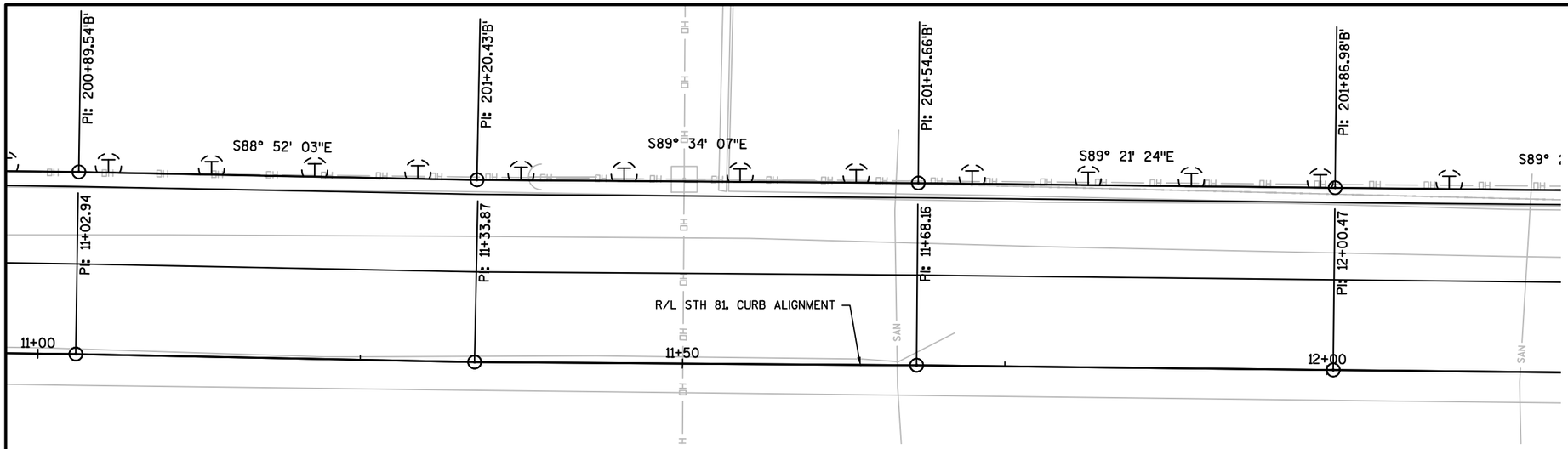
COUNTY	CITY
LAFAYETTE	DARLINGTON

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN 2012 SIXTH EDITION

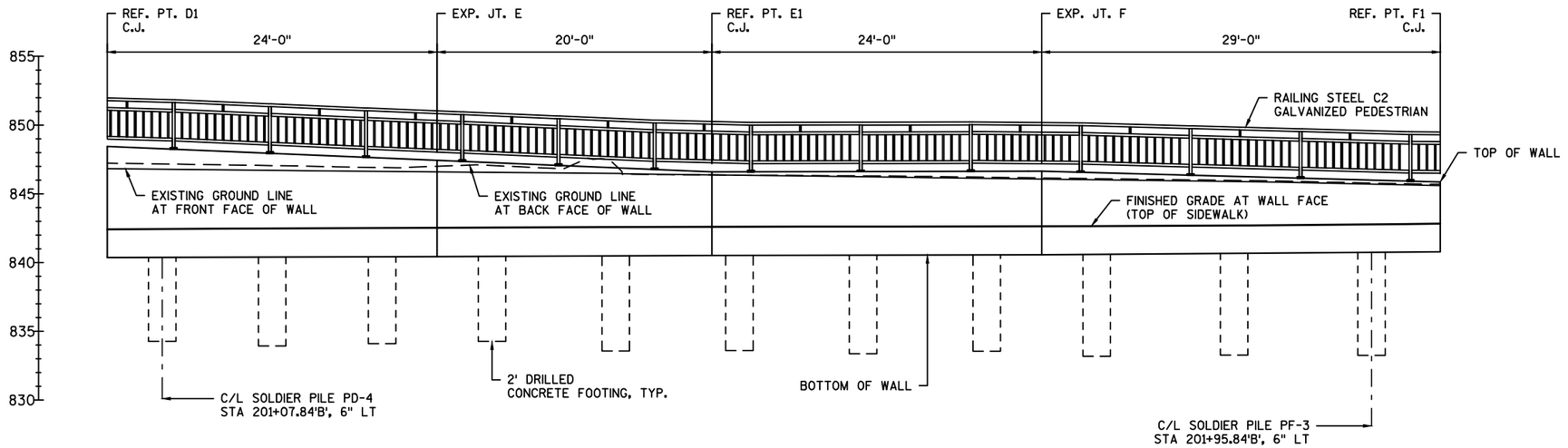
DESIGNED	DESIGN	DRAWN	PLANS
BY AFD	CK'D. WPM	BY AFD	CK'D. JDG

GENERAL PLAN AND ELEVATION

SHEET 1 OF 14



PLAN



ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)
(DISTANCES AND STATIONS ARE GIVEN ALONG THE BACK FACE OF WALL)

STATE PROJECT NUMBER

5944-03-84

LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONSTRUCTION JOINT
EXP. JT. = EXPANSION JOINT
P"x"-"#" = PILE IDENTIFICATION

NO.	DATE	REVISION	BY

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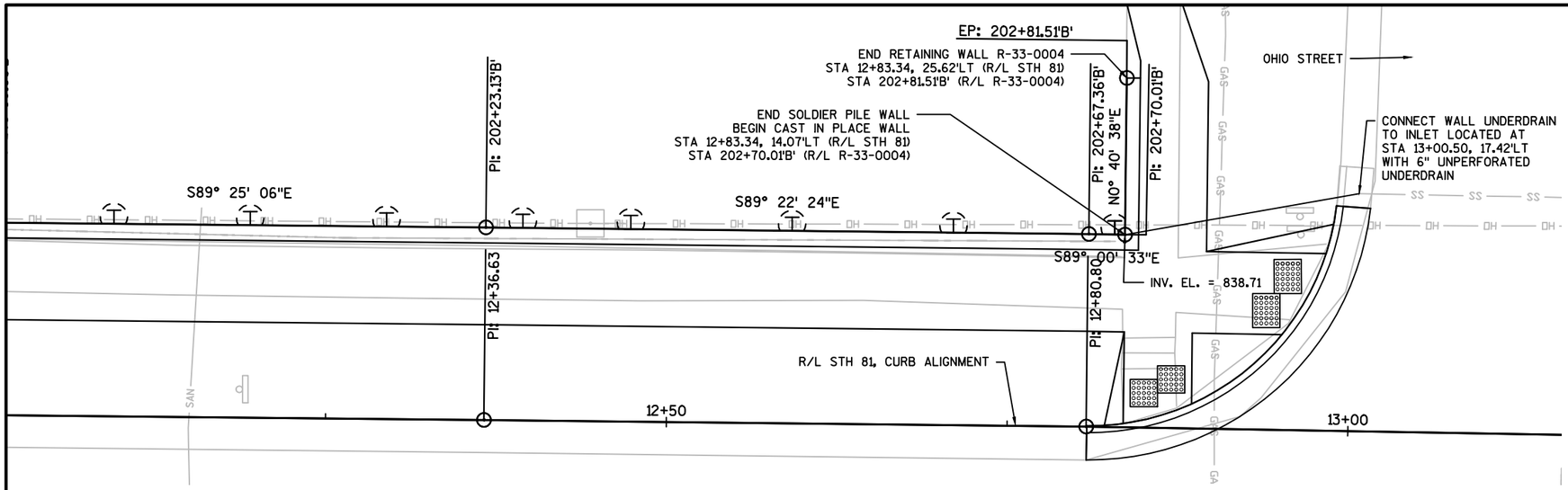
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0004**

DRAWN BY AFD | PLANS CK'D. JDG

GENERAL PLAN & ELEVATION

SHEET 2 OF 14



PLAN

STATE PROJECT NUMBER
5944-03-84

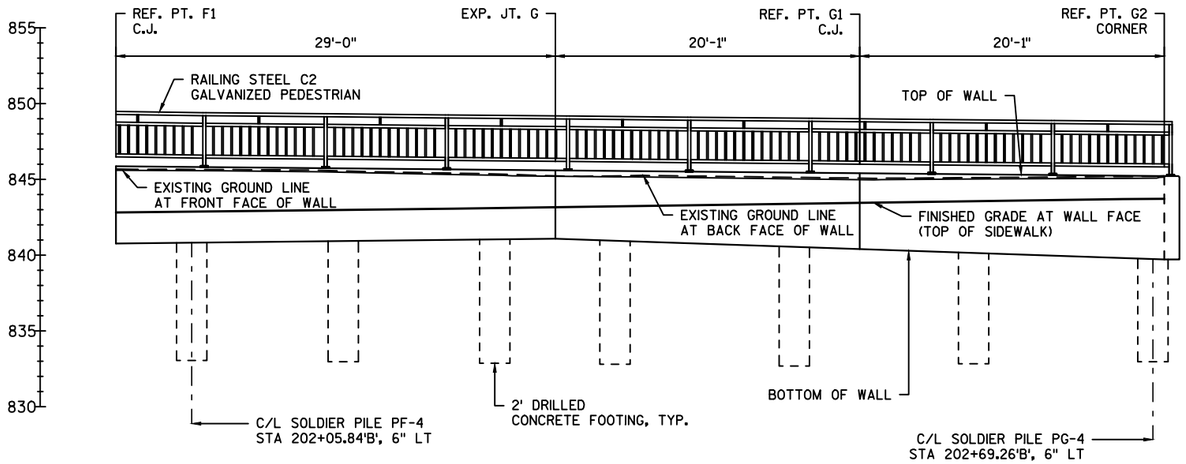
NOTES

CONNECT UNDERDRAIN PIPE FROM THE C.I.P. WALL PRIOR TO CONVERTING THE PERFORATED PIPE TO UNPERFORATED PIPE.

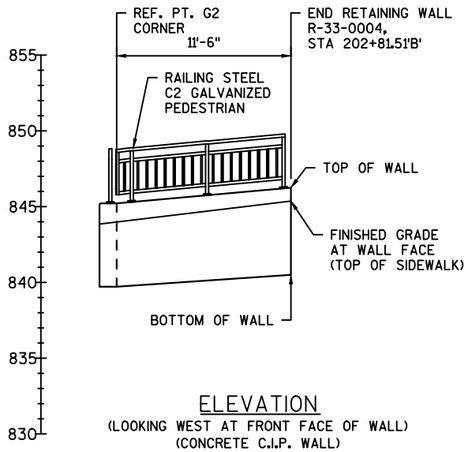
CONNECTION FROM UNPERFORATED PIPE TO INLET IS INCIDENTAL TO PIPE UNDERDRAIN.

LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT
INV. EL. = INVERT ELEVATION
P"X"-"#" = PILE IDENTIFICATION
C.I.P = CAST IN PLACE



ELEVATION
(LOOKING NORTH AT FRONT FACE OF WALL)
(DISTANCES AND STATIONS ARE GIVEN ALONG THE BACK FACE OF WALL)



ELEVATION
(LOOKING WEST AT FRONT FACE OF WALL)
(CONCRETE C.I.P. WALL)

ALIGNMENT INFORMATION

PI STA	NORTHING	EASTING
200+00.00	166026.73	483694.04
200+07.69	166026.66	483701.72
200+21.20	166025.99	483715.22
200+47.06	166025.70	483741.08
200+61.09	166025.51	483755.10
200+67.09	166025.43	483761.10
200+89.54	166025.12	483783.56
201+20.43	166024.50	483814.44
201+54.66	166024.25	483848.67
201+86.98	166023.88	483880.99
202+23.13	166023.52	483917.14
202+67.36	166023.03	483961.36
202+70.01	166022.99	483964.02
202+81.51	166034.49	483964.15

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0004**

DRAWN BY AFD | PLANS CK'D. JDG

GENERAL PLAN & ELEVATION

SHEET 3 OF 14

PILE/ REFERENCE INFORMATION

STA	REFERENCE/ PILE NUMBER	OFFSET SEE NOTE 12	FINISH GRADE AT WALL FACE	WALL HEIGHT (FT)	TOP OF WALL	BOTTOM OF WALL	TOP OF PILE	TOP OF FOOTING	BOTTOM OF FOOTING	FOOTING LENGTH	SOLDIER PILE SECTION	SOLDIER PILE LENGTH (FT)	NO. OF STUDS
200+00.00'B'	REF. PT. A	START	842.54	5.58	846.04	840.45	START	START	START	START	START	START	START
200+04.34'B'	PA-1	6"	842.53	5.76	846.20	840.44	844.70	840.44	832.45	7.99	HP-12X63	12.25	8
200+12.34'B'	PA-2	6"	842.49	6.09	846.49	840.40	844.99	840.40	833.24	7.16	HP-12X63	11.75	8
200+20.34'B'	PA-3	6"	842.45	6.42	846.79	840.37	845.29	840.37	833.29	7.08	HP-12X63	12.00	8
200+24.34'B'	REF. PT. A1	C.J.	842.44	6.58	846.94	840.36	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.
200+28.34'B'	PA-4	6"	842.42	6.74	847.09	840.35	845.59	840.35	833.59	6.76	HP-12X63	12.00	10
200+36.34'B'	PA-5	6"	842.39	7.04	847.38	840.34	845.88	840.34	833.88	6.46	HP-12X63	12.00	10
200+44.34'B'	PA-6	6"	842.37	7.35	847.68	840.33	846.18	840.33	834.18	6.15	HP-12X63	12.00	10
200+48.34'B'	REF. PT. B	E.J.	842.36	7.50	847.83	840.33	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
200+52.34'B'	PB-1	6"	842.35	7.66	847.98	840.32	846.48	840.32	834.23	6.09	HP-12X63	12.25	10
200+60.34'B'	PB-2	6"	842.34	7.97	848.27	840.30	846.77	840.30	834.27	6.03	HP-12X63	12.50	20
200+60.34'B'	PB-3	8'-10"	842.34	2.89	849.88	846.99	848.38	846.99	834.38	12.61	HP-12X63	14.00	4
200+61.09'B'	REF. PT. B1	STAIRS	842.34	8.00	848.30	840.30	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
200+61.09'B'	REF. PT. B2	10'-1"	842.34	2.00	849.88	847.88	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
200+67.09'B'	REF. PT. C1	10'-1"	842.33	2.00	849.88	847.88	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
200+67.09'B'	REF. PT. C2	STAIRS	842.33	8.08	848.33	840.25	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
200+67.84'B'	PC-1	8'-10"	842.33	2.89	849.88	846.99	848.38	846.99	834.38	12.61	HP-12X63	14.00	4
200+67.84'B'	PC-2	6"	842.33	8.08	848.33	840.25	846.83	840.25	834.33	5.92	HP-12X63	12.50	24
200+75.84'B'	PC-3	6"	842.32	8.08	848.35	840.27	846.85	840.27	834.35	5.92	HP-12X63	12.50	12
200+79.84'B'	REF. PT. D	E.J.	842.31	8.08	848.37	840.28	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
200+83.84'B'	PD-1	6"	842.31	8.08	848.38	840.29	846.88	840.29	834.38	5.92	HP-12X63	12.50	12
200+91.84'B'	PD-2	6"	842.31	8.08	848.40	840.32	846.90	840.32	834.40	5.92	HP-12X63	12.50	12
200+99.84'B'	PD-3	6"	842.37	8.08	848.43	840.34	846.93	840.34	834.18	6.17	HP-12X63	12.75	12
201+03.84'B'	REF. PT. D1	C.J.	842.40	8.08	848.44	840.35	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.
201+07.84'B'	PD-4	6"	842.43	7.90	848.27	840.37	846.77	840.37	834.27	6.10	HP-12X63	12.50	10
201+15.84'B'	PD-5	6"	842.47	7.54	847.93	840.39	846.43	840.39	834.18	6.21	HP-12X63	12.25	10
201+23.84'B'	PD-6	6"	842.51	7.18	847.60	840.42	846.10	840.42	834.10	6.32	HP-12X63	12.00	10
201+27.84'B'	REF. PT. E	E.J.	842.52	7.00	847.43	840.43	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
201+31.84'B'	PE-1	6"	842.54	6.82	847.26	840.44	845.76	840.44	834.26	6.18	HP-12X63	11.50	10
201+40.84'B'	PE-2	6"	842.57	6.40	846.88	840.48	845.38	840.48	834.13	6.35	HP-12X63	11.25	8
201+47.84'B'	REF. PT. E1	C.J.	842.59	6.08	846.59	840.51	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.
201+49.84'B'	PE-3	6"	842.59	6.08	846.59	840.51	845.09	840.51	833.59	6.92	HP-12X63	11.50	8
201+58.84'B'	PE-4	6"	842.61	6.08	846.61	840.53	845.11	840.53	833.61	6.92	HP-12X63	11.50	8
201+67.84'B'	PE-5	6"	842.63	6.08	846.63	840.55	845.13	840.55	833.38	7.17	HP-12X63	11.75	8
201+71.84'B'	REF. PT. F	E.J.	842.64	6.08	846.64	840.55	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
201+75.84'B'	PF-1	6"	842.64	5.95	846.53	840.58	845.03	840.58	833.53	7.05	HP-12X63	11.50	8
201+85.84'B'	PF-2	6"	842.69	5.60	846.26	840.66	844.76	840.66	833.26	7.40	HP-12X63	11.50	8
201+95.84'B'	PF-3	6"	842.77	5.26	845.99	840.74	844.49	840.74	833.24	7.49	HP-12X63	11.25	8
202+00.84'B'	REF. PT. F1	C.J.	842.82	5.08	845.86	840.77	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.
202+05.84'B'	PF-4	6"	842.87	4.98	845.81	840.83	844.31	840.83	833.06	7.77	HP-12X63	11.25	6
202+15.84'B'	PF-5	6"	842.99	4.78	845.72	840.94	844.22	840.94	832.97	7.97	HP-12X63	11.25	6
202+25.84'B'	PF-6	6"	843.11	4.58	845.62	841.04	844.12	841.04	832.87	8.17	HP-12X63	11.25	6
202+29.84'B'	REF. PT. G	E.J.	843.17	4.50	845.59	841.09	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
202+33.76'B'	PG-1	6"	843.22	4.60	845.55	840.95	844.05	840.95	832.80	8.15	HP-12X63	11.25	6
202+45.59'B'	PG-2	6"	843.39	4.89	845.44	840.55	843.94	840.55	832.69	7.86	HP-12X63	11.25	6
202+49.92'B'	REF. PT. G1	C.J.	843.46	5.00	845.40	840.40	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.
202+57.43'B'	PG-3	6"	843.56	5.19	845.33	840.14	843.83	840.14	832.83	7.31	HP-12X63	11.00	8
202+69.26'B'	PG-4	6"	843.71	5.48	845.22	839.74	843.72	839.74	832.97	6.77	HP-12X63	10.75	16
202+70.01'B'	REF. PT. G2	CORNER	843.71	5.50	845.21	839.71	CORNER	CORNER	CORNER	CORNER	CORNER	CORNER	CORNER
202+81.51'B'	REF. PT. H	END	845.43	5.50	846.25	840.75	END	END	END	END	END	END	END

STATE PROJECT NUMBER

5944-03-84

GENERAL NOTES:

ALL STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M270 GRADE 50 EXCEPT AS NOTED ON PLANS.

THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND PERFORMANCE OF THE TIMBER LAGGING.

DRAWINGS SHALL NOT BE SCALED.

BEVELED EXPOSED EDGES OF CONCRETE IS ¾-INCH, UNLESS OTHERWISE NOTED.

ALL DIMENSIONS ARE IN FEET AND INCHES, UNLESS OTHERWISE NOTED.

ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

ARCHITECTURAL SURFACE TREATMENT SHALL ACCURATELY DUPLICATE "RUSTIC ASHLAR" LIMESTONE. THE STONE SHALL BE 8-INCH TO 32-INCH WITH A MAXIMUM RELIEF OF 1 ½-INCH. SEE SPECIAL PROVISIONS.

ALL REINFORCEMENT SHALL HAVE A MINIMUM OF 2-INCHES CLEAR COVER UNLESS SHOWN OTHERWISE. REINFORCEMENT IN FACES CAST PERMANENTLY AGAINST EARTH SHALL HAVE A MINIMUM OF 3-INCHES CLEAR COVER.

IF THE UNDERGROUND UTILITY CONFLICTS WITH A PILE, THAT PILE MAY BE RELOCATED WITHIN 1'-0" FROM THE CALLED OUT LOCATION. DO NOT LOCATE A PILE LESS THAN 1'-0" FROM A CONTRACTION JOINT. PILES LOCATED AT CORNERS OF THE RETAINING WALL SHALL ONLY BE ADJUSTED WITH ENGINEER'S APPROVAL.

THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES RETAINING WALLS R-33-0004."

OFFSET IS BASED OFF OF BACK FACE OF WALL ALIGNMENT TO CENTER OF PILE.

CONTROLLED LOW STRENGTH MATERIAL AND FLOWABLE BACKFILL ARE INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS R-33-0004." SEE SPECIAL PROVISIONS FOR DESCRIPTION OF CONTROLLED LOW STRENGTH MATERIAL AND FLOWABLE BACKFILL.

6" DRAINAGE PIPE HAS A MINIMUM SLOPE OF 0.5%.

STAINING CONCRETE SHALL ACCURATELY DUPLICATE WEATHERED LIMESTONE COLORATION. COLOR IS MEDIUM TAN * 33446. SEE SPECIAL PROVISIONS.

BACK FACE OF WALL FOLLOWS STH 81 CURB ALIGNMENT, 14'-1½" TYPICAL OFFSET. SEE ROADWAY PLAN FOR CURB ALIGNMENT DETAILS.

BACKFILL THE FACES OF THE WALL EQUALLY.

SHAFT EXCAVATION FOR ALL PILES ARE 2'-0" DIAMETER.

CONSTRUCT A TYPICAL SOLDIER PILE WALL FROM STA 200+00.00'B' TO STA 202+70.01'B'. CONSTRUCT A TYPICAL CAST IN PLACE CONCRETE WALL FROM STA 202+70.01'B' TO STA 202+80.51'B'.

SOIL PARAMETERS

SOIL UNIT	TOTAL UNIT WEIGHT, PCF	UNDRAINED, DISTURBED			DRAINED	
		UNDRAINED SHEAR STRENGTH, SU, PSF	FRICTION ANGLE, Φ, DEG	COHESION, C' PSF	COHESION, C', PSF	FRICTION ANGLE, Φ, DEG
LEAN CLAY	130	3800	6	200	0	30
WEATHERED DOLOMITE BEDROCK	140				0	45

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNITS	TOTAL QUANTITY
206.3000.02	EXCAVATION FOR STRUCTURES RETAINING WALL (R-33-0004)	LS	1
210.0100	BACKFILL STRUCTURAL	CY	4
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	80
505.0615	BAR STEEL REINFORCEMENT HS COATED RETAINING WALLS	LB	7691
506.0605	STRUCTURAL STEEL HS	LB	24822
506.3014	WELDED STUD SHEAR CONNECTORS 3/4x6-INCH	EACH	314
517.1010.S.01	CONCRETE STAINING R-33-0004	SF	612
517.1050.S.01	ARCHITECTURAL SURFACE TREATMENT R-33-0004	SF	612
612.0106	PIPE UNDERDRAIN 6-INCH	LF	308
612.0204	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	35
645.0111	GEOTEXTILE FABRIC TYPE DF SCHEDULE A	SY	249
SPV.0035.01	CONCRETE MASONRY SOLDIER PILE FOOTINGS	CY	28
SPV.0090.01	FOUNDATION DRILLING 24-INCH DIAMETER	LF	237
SPV.0090.02	RAILING PIPE GALVANIZED	LF	29
SPV.0105.01	RAILING STEEL TYPE C2 GALVANIZED PEDESTRIAN R-33-0004	LS	1
SPV.0110.01	TIMBER LAGGING	MBM	4.06
SPV.0165.01	GEOCOMPOSITE DRAIN BOARD	SF	1496

NO.	DATE	REVISION	BY

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0004**

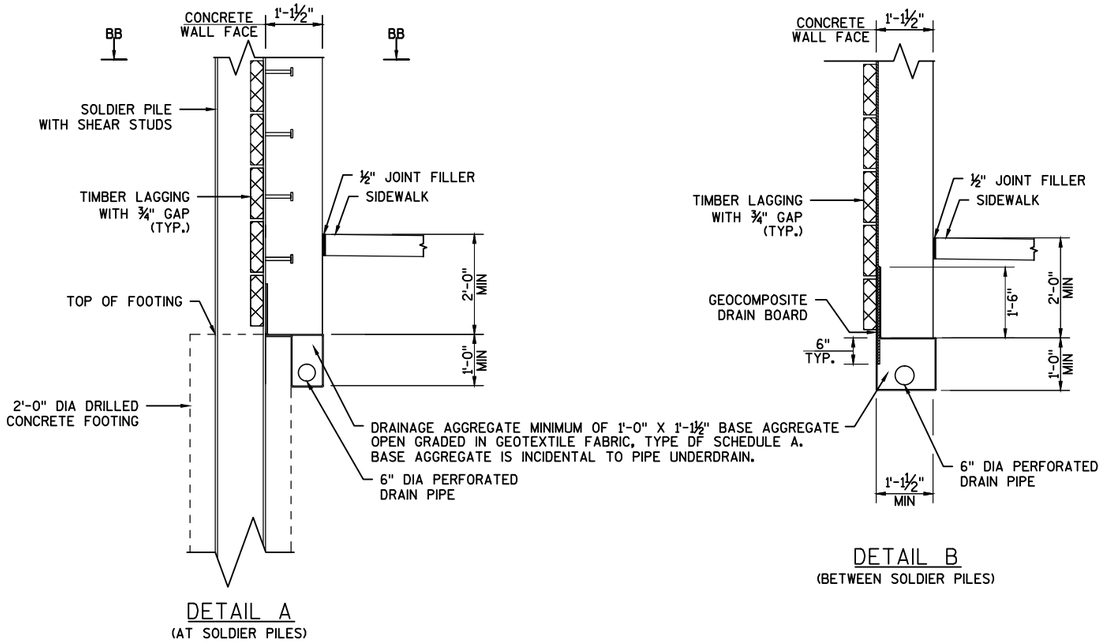
DRAWN BY AFD | PLANS CK'D. JDG

GENERAL NOTES, PILE/ REF. PT. INFORMATION, AND EST. QUANTITIES

SHEET 4 OF 14

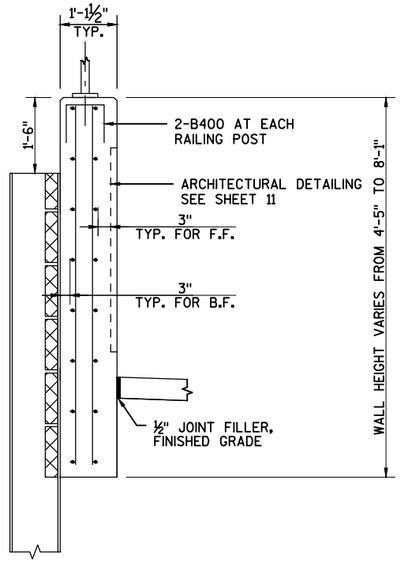
STATE PROJECT NUMBER

5944-03-84



DETAIL A
(AT SOLDIER PILES)

DETAIL B
(BETWEEN SOLDIER PILES)



TYP. REINFORCEMENT LAYOUT

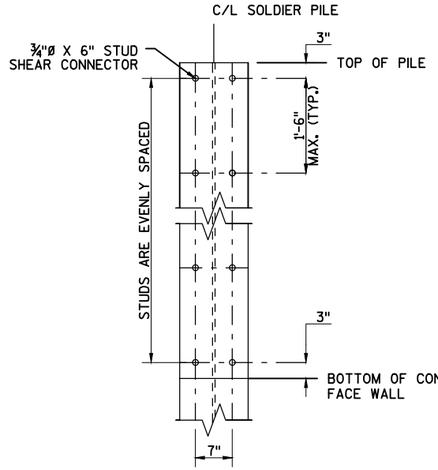
NOTES

PAINT PILE FROM TOP OF PILE TO 1'-0" BELOW TOP OF FOOTING WITH A PRIME COAT OF ORGANIC ZINC-RICH PAINT. PREPARE THE SURFACE AND APPLY THE PAINT AS SPECIFIED IN SECTION 517 OF THE STANDARD SPECIFICATIONS. PAINTING OF PILE IS INCIDENTAL TO THE BID ITEM "STRUCTURAL STEEL HS."

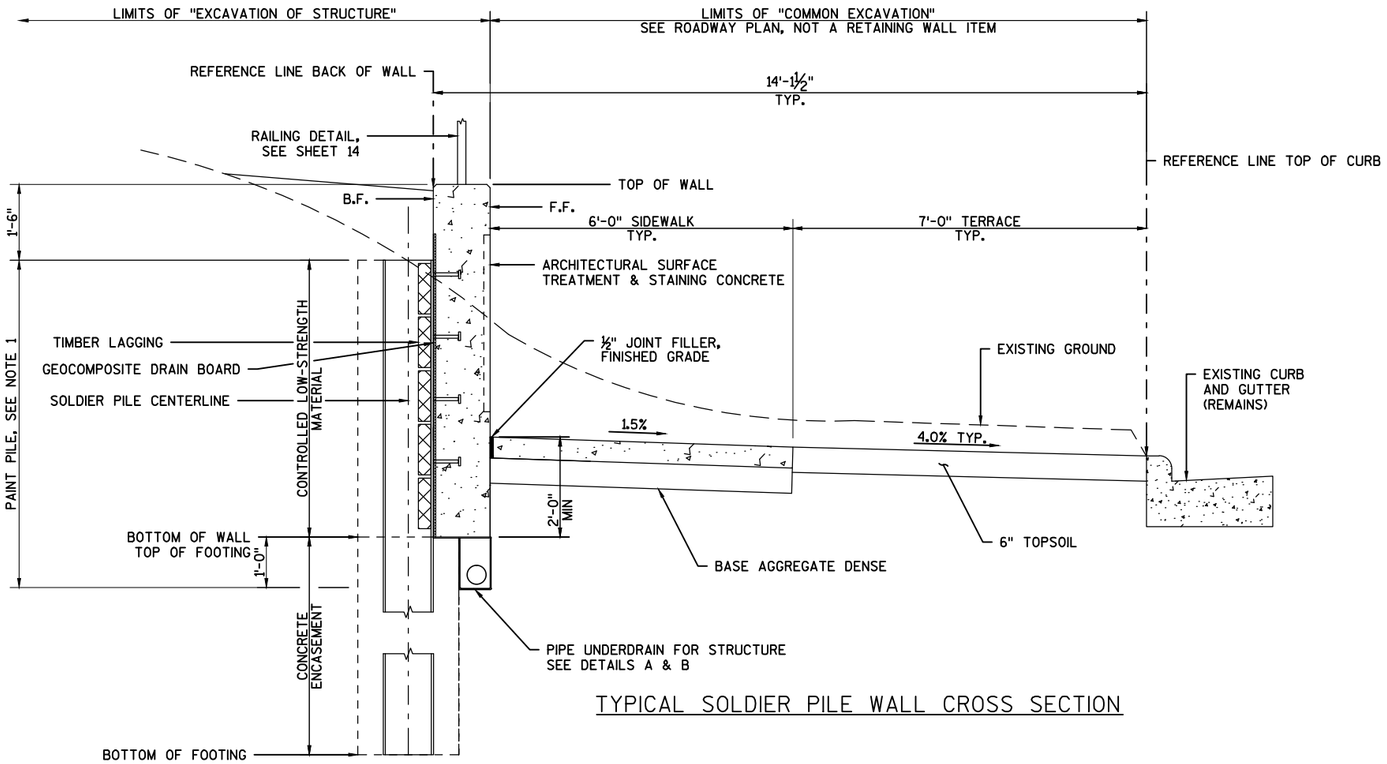
PILES SHOULD BE SET WITH A ¼"H:1'V BATTER.

LEGEND

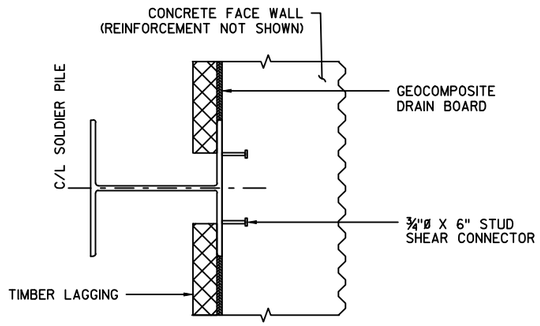
E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT



STUD SHEAR CONNECTION LAYOUT



TYPICAL SOLDIER PILE WALL CROSS SECTION



SECTION BB-BB

NO.	DATE	REVISION	BY

KNIGHT
700 N Third Street
Suite 104
La Crosse, WI 54601
Engineers & Architects Phone: (608) 519-1455

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0004**

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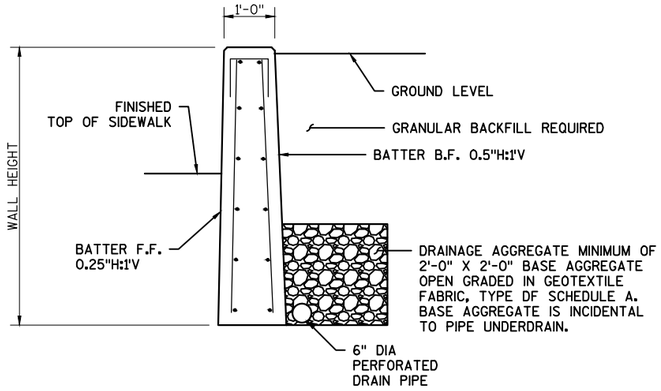
TYPICAL SECTIONS

SHEET 5 OF 14

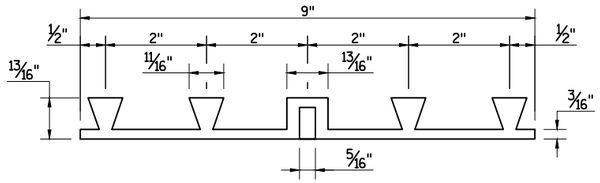
STATE PROJECT NUMBER

5944-03-84



TYPICAL C.I.P. CONCRETE WALL CROSS SECTION

(STA 202+70.01'B' TO STA 202+81.51'B')

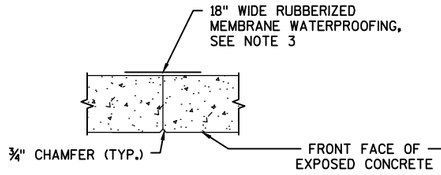


P.C.W. "TYPE B" DETAIL

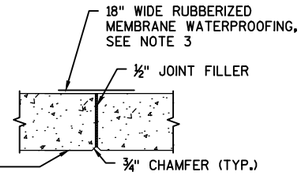
(POLYVINYL CHLORIDE WATERSTOP)

(INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY RETAINING WALLS")

P.C.W. SHALL BE BUTT SPLICED AT ALL INTERSECTION BY USING A HEATED SPLICING IRON. HOLD P.C.W. FLUSH WITH CONCRETE. SEAL ALL VERTICAL ENDS OF P.C.W. WITH NON-STAINING BITUMINOUS JOINT SEALER.



C.I.P. WALL CONTRACTION JOINT DETAIL



C.I.P. WALL EXPANSION JOINT DETAIL

NOTES

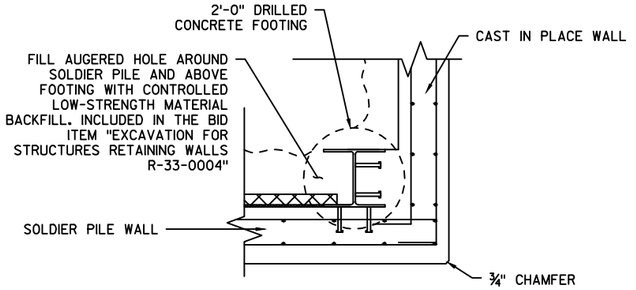
PAINT PILE & ANGLED STEEL FROM TOP OF PILE TO 1'-0" BELOW TOP OF FOOTING WITH A PRIME COAT OF ORGANIC ZINC-RICH PAINT. PREPARE THE SURFACE AND APPLY THE PAINT AS SPECIFIED IN SECTION 517 OF THE STANDARD SPECIFICATIONS. PAINTING OF PILE IS INCIDENTAL TO THE BID ITEM "STRUCTURAL STEEL HS."

ANGLED STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M270M/ M270 GRADE 36. WHERE REQUIRED, THE ANGLED STEEL SPANS FROM THE TOP OF THE PILE TO THE BOTTOM OF THE WALL. ANGLED STEEL IS INCIDENTAL IN THE BID ITEM "STRUCTURAL STEEL HS."

RUBBERIZED MEMBRANE WATERPROOFING RUNS FROM GROUND LEVEL DOWN TO BOTTOM OF WALL, COST INCIDENTAL TO "CONCRETE MASONRY RETAINING WALLS."

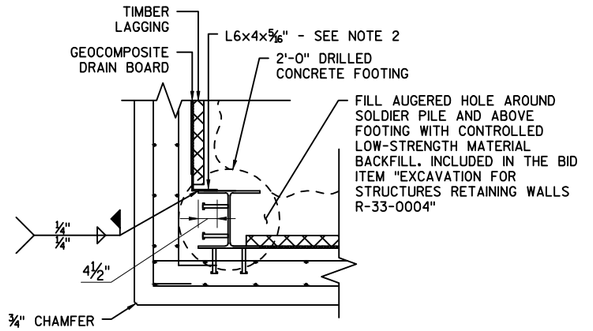
LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT
C.I.P. = CAST IN PLACE



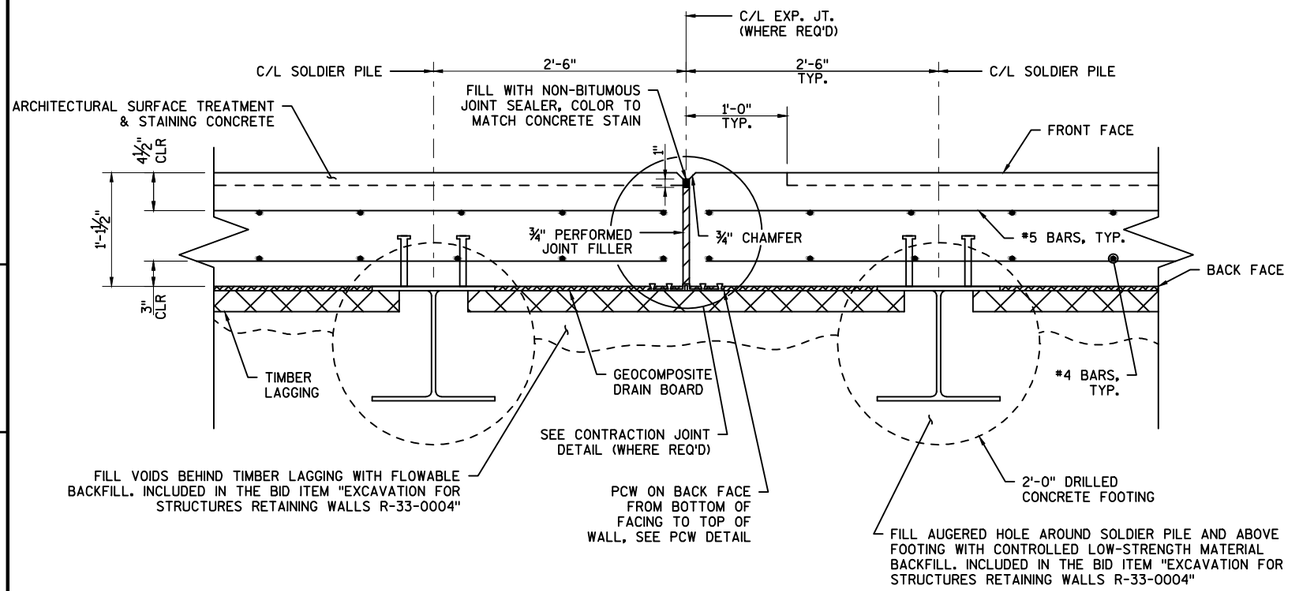
CORNER PILE DETAIL

STA. 202+70.01'B'



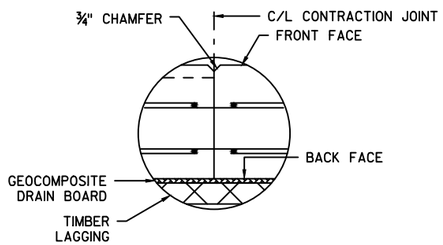
CORNER PILE DETAIL

STA. 200+61.09'B' & STA. 200+67.09'B'



SOLDIER PILE JOINT DETAIL

(SEE PILE INFORMATION SHEETS FOR LOCATION OF CONTRACTION & EXPANSION JOINTS)



CONTRACTION JOINT DETAIL

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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TYPICAL SECTIONS

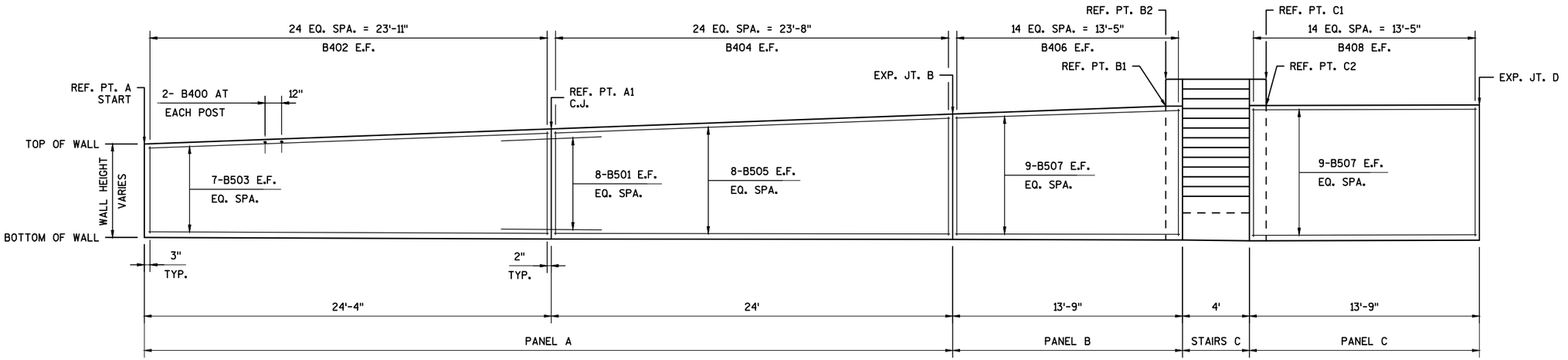
SHEET 6 OF 14

8

8

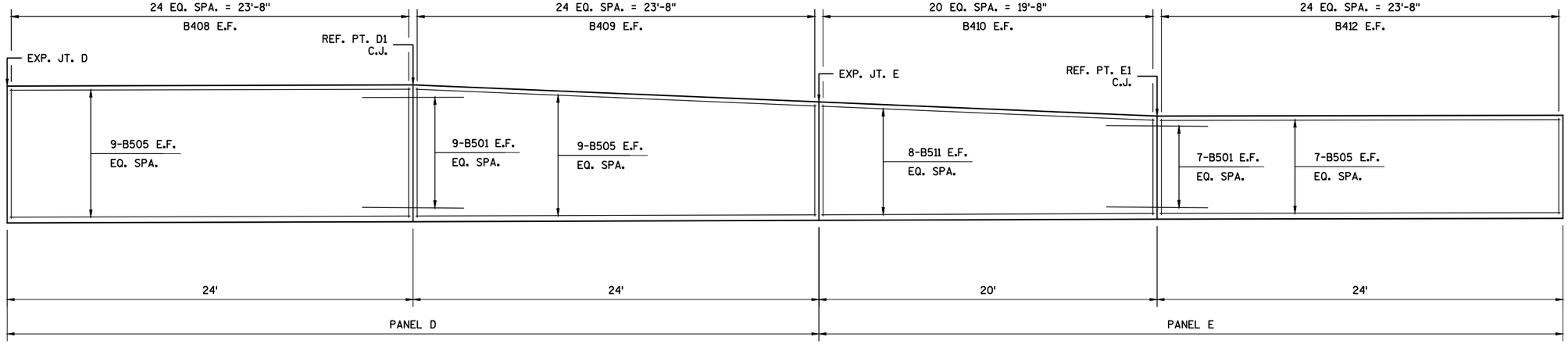
STATE PROJECT NUMBER

5944-03-84



PARTIAL WALL FACING ELEVATION

(PANELS A, B & C)



PARTIAL WALL FACING ELEVATION

(PANELS D & E)

LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT

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STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0004**

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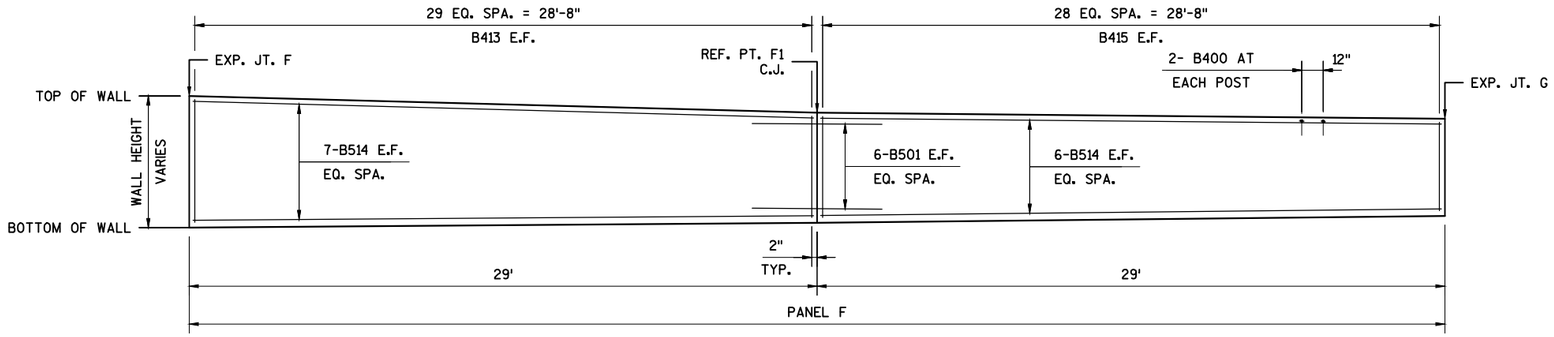
REINFORCEMENT LAYOUT

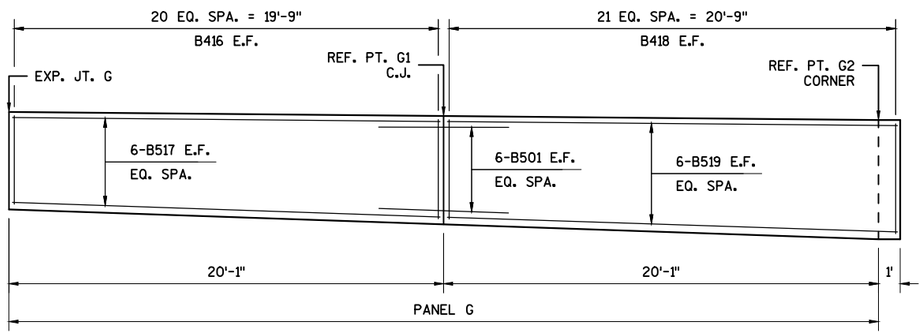
SHEET 7 OF 14

STATE PROJECT NUMBER

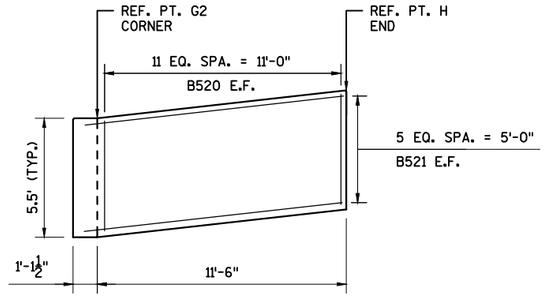
5944-03-84



PARTIAL WALL FACING ELEVATION
(PANEL F)



PARTIAL WALL FACING ELEVATION
(PANEL G)



PARTIAL WALL FACING ELEVATION
(CONCRETE C.I.P. WALL)

LEGEND
E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT
C.I.P = CAST IN PLACE

NO.	DATE	REVISION	BY

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STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0004**

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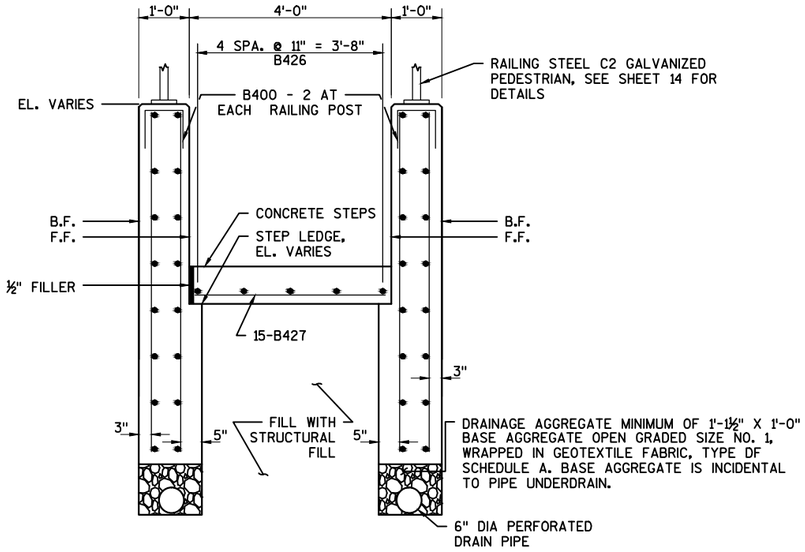
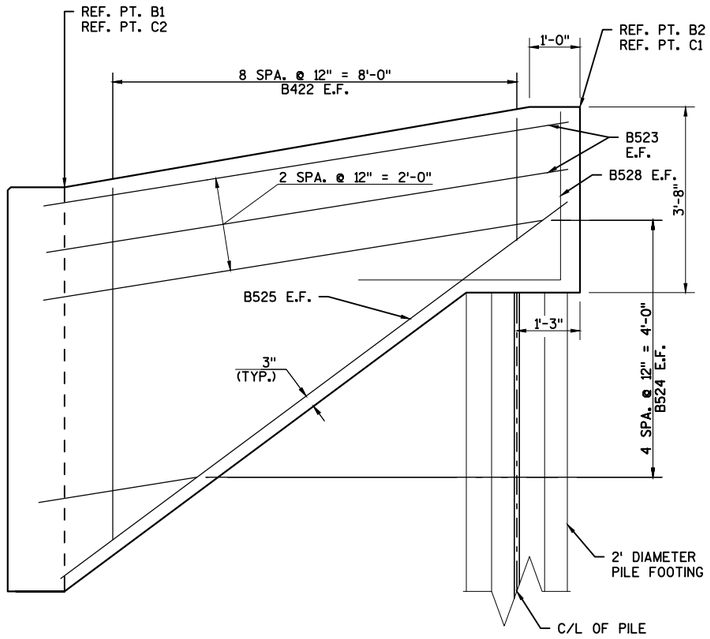
REINFORCEMENT LAYOUT

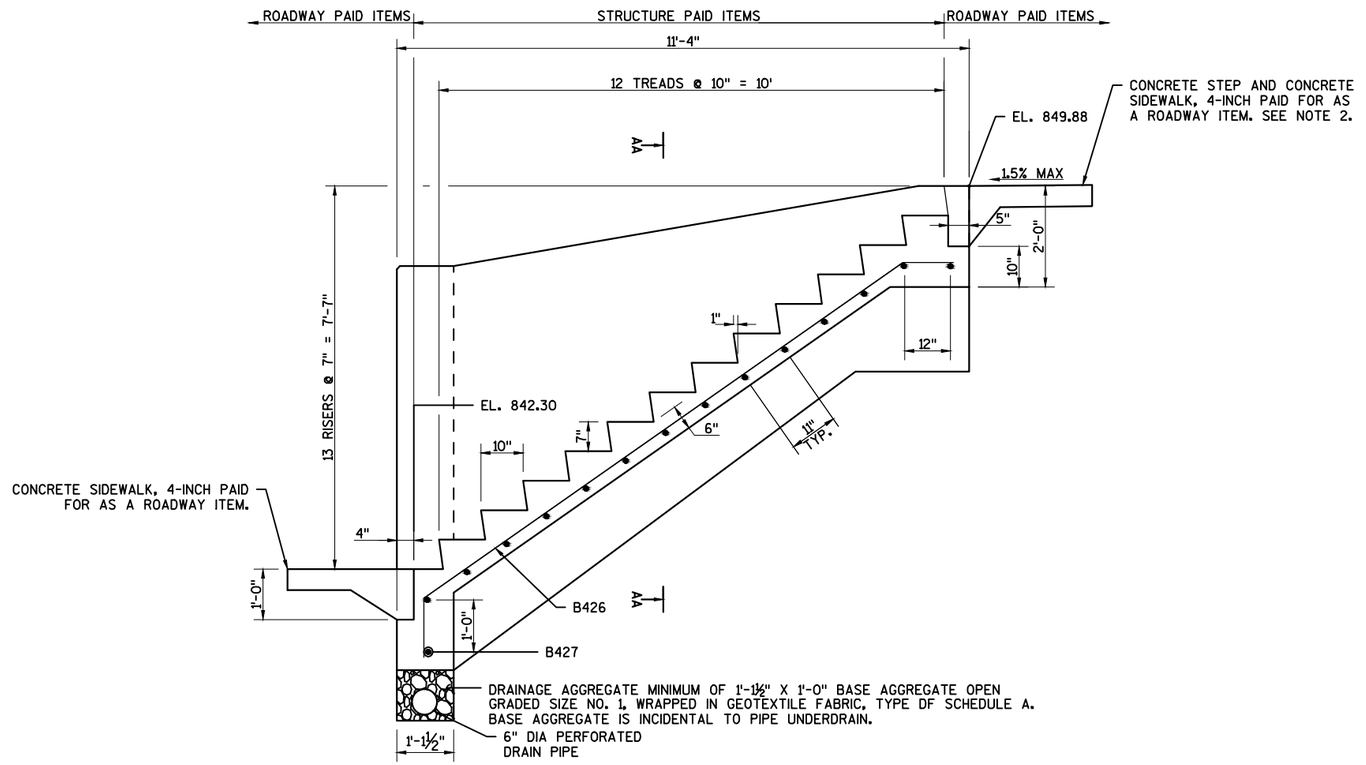
SHEET 8 OF 14



SECTION AA-AA



TYPICAL SHEAR WALL BAR LAYOUT
STAIRS C



STAIRS C CROSS SECTION
(STA 200+64.09'B')

NOTES
PLACE 2-FT STRUCTURAL BACKFILL BELOW BOTTOM OF STEPS.

CONCRETE STEP IS MEASURED FROM THE FRONT FACE OF THE TOP RISER TO 10-INCH BACK FROM FRONT FACE OF THE TOP RISER. CONCRETE BEYOND THAT MARK IS PAID AS "CONCRETE SIDEWALK 4-INCH."

CONCRETE FOR STAIRS SHALL BE INCLUDED IN THE QUANTITY FOR "CONCRETE MASONRY, RETAINING WALL."

CONNECT THE UNDERDRAIN PIPE BENEATH THE STAIRCASE SHEAR WALLS TO THE UNDERDRAIN PIPE BENEATH THE WALL ALONG STH 81.

LEGEND
E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE

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STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0004**

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STAIRS C DETAILS

SHEET 9 OF 14

STATE PROJECT NUMBER

5944-03-84

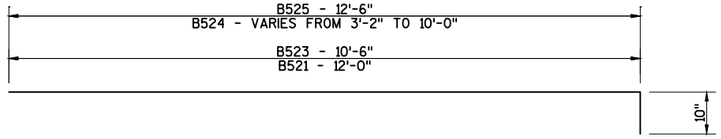
BILL OF BARS

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
B400	X	90	2'-1"	X		AT TOP OF WALL NEAR FENCE POSTS
B501	X	70	6'-1"			AT CONTRACTION JOINTS
B402	X	50	5'-8"		▲	PANEL A VERTICAL
B503	X	14	24'-0"			PANEL A HORIZONTAL
B404	X	50	6'-8"		▲	PANEL A VERTICAL
B505	X	66	23'-8"			PANELS A, D, & E HORIZONTAL
B406	X	30	7'-4"		▲	PANEL B VERTICAL
B507	X	36	13'-5"			PANELS B & C HORIZONTAL
B408	X	80	8'-1"			PANELS C & D VERTICAL
B409	X	50	7'-2"		▲	PANEL D VERTICAL
B410	X	42	6'-2"		▲	PANEL E VERTICAL
B511	X	16	19'-8"			PANEL E HORIZONTAL
B412	X	50	5'-8"			PANEL E VERTICAL
B413	X	60	5'-2"		▲	PANEL F VERTICAL
B514	X	26	28'-8"			PANEL F HORIZONTAL
B415	X	58	4'-5"		▲	PANEL F VERTICAL
B416	X	42	4'-4"		▲	PANEL G VERTICAL
B517	X	12	19'-9"			PANEL G HORIZONTAL
B418	X	44	4'-10"		▲	PANEL G VERTICAL
B519	X	12	20'-9"			PANEL G HORIZONTAL
B520	X	24	5'-1"			C.I.P. WALL VERTICAL
B521	X	12	12'-9"	X		C.I.P. WALL HORIZONTAL
B422	X	36	4'-5"		▲	STAIR SHEAR WALL VERTICAL
B523	X	8	11'-3"	X		STAIR SHEAR WALL HORIZONTAL
B524	X	20	7'-4"	X	▲	STAIR SHEAR WALL HORIZONTAL
B525	X	4	13'-3"	X		STAIR SHEAR WALL HORIZONTAL
B426	X	5	13'-9"	X		STAIRS C
B427	X	15	3'-8"			STAIRS C
B528	X	2	7'-3"	X		STAIRS C SHEAR WALL

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

BAR SERIES TABLE

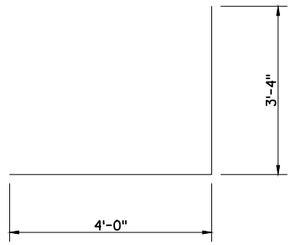
BAR MARK	NO. REQ'D	LENGTH
B402	2 SETS OF 25	5'-2" TO 6'-2"
B404	2 SETS OF 25	6'-2" TO 7'-1"
B406	2 SETS OF 15	7'-1" TO 7'-7"
B409	2 SETS OF 25	6'-7" TO 7'-8"
B410	2 SETS OF 21	5'-8" TO 6'-7"
B413	2 SETS OF 30	4'-8" TO 5'-8"
B415	2 SETS OF 29	4'-1" TO 4'-8"
B416	2 SETS OF 21	4'-1" TO 4'-7"
B418	2 SETS OF 22	4'-7" TO 5'-1"
B422	4 SETS OF 9	2'-5" TO 6'-11"
B524	4 SETS OF 5	3'-11" TO 10'-9"



B521, B523, B524, B525

B400

B426



B528

NO.	DATE	REVISION	BY

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0004**

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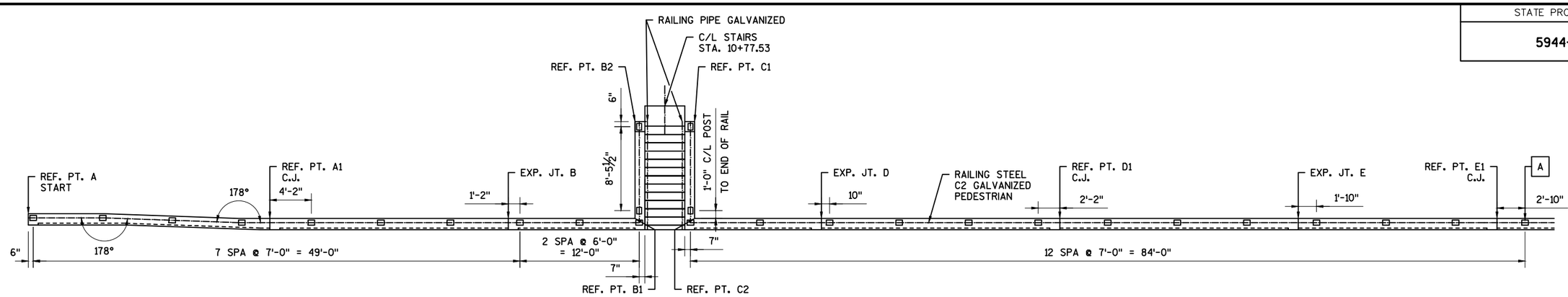
REINFORCEMENT SCHEDULE

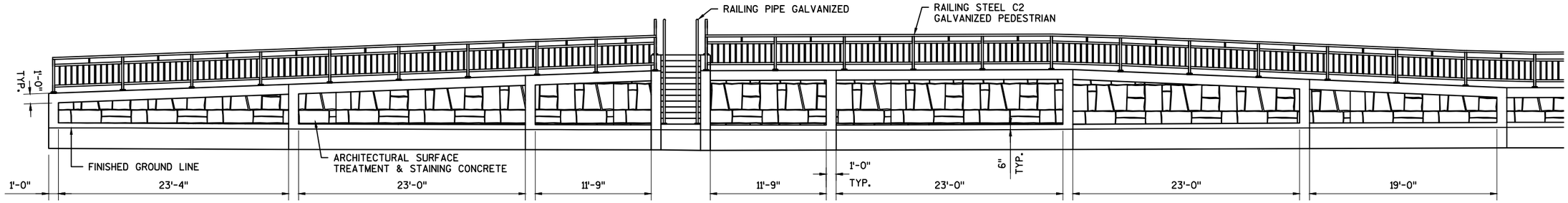
SHEET 10 OF 14

STATE PROJECT NUMBER

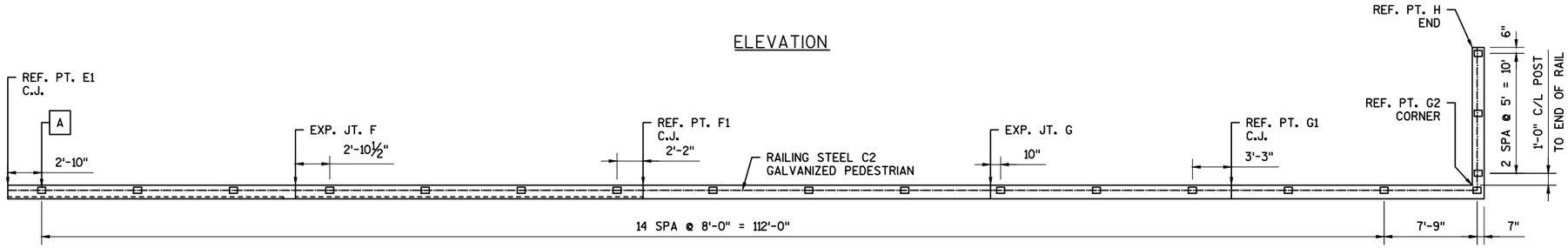
5944-03-84



STEEL RAILING PLAN



ELEVATION

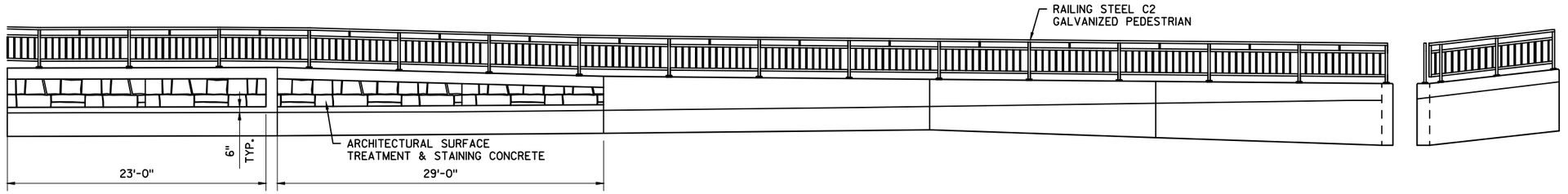


NOTES:

"A" REPRESENTS THE SAME RAILING POST

ALL POST SPACES ARE TAKEN HORIZONTALLY ALONG C/L RAILING

STEEL RAILING PLAN



ELEVATION

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0004**

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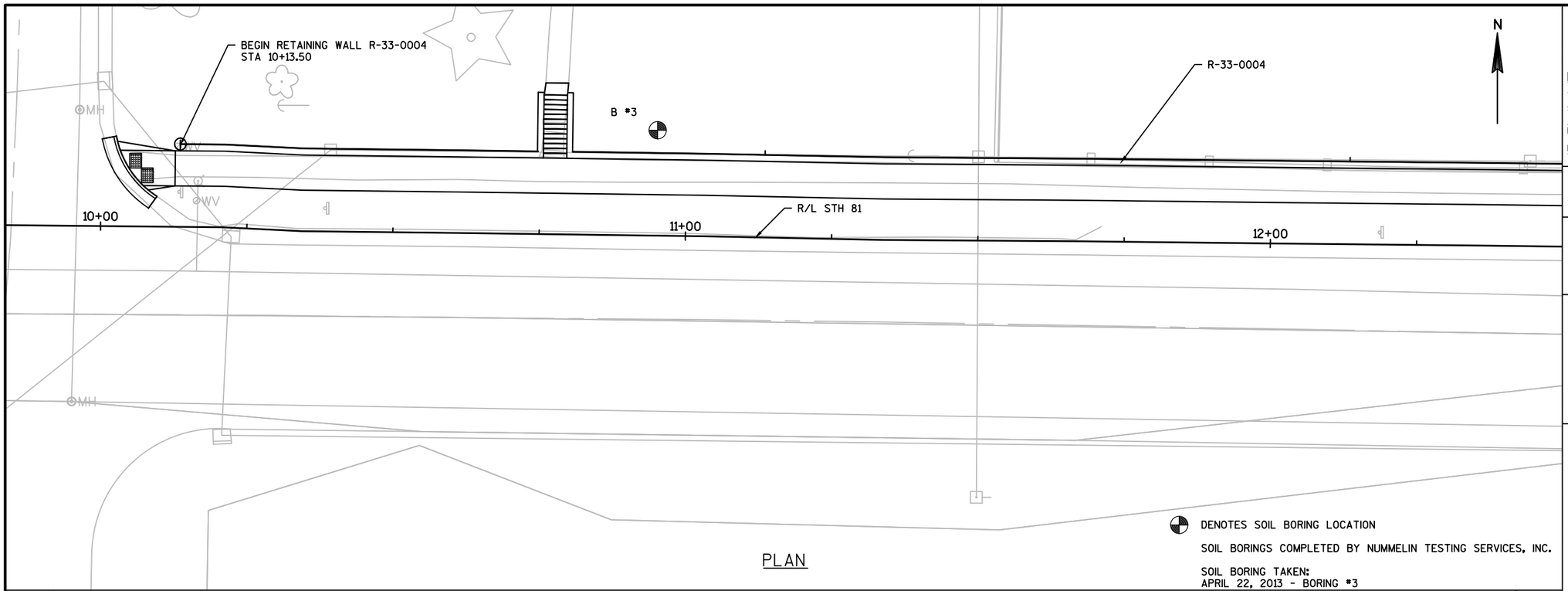
RAILING AND ARCHITECTURAL DETAILS

SHEET 11 OF 14

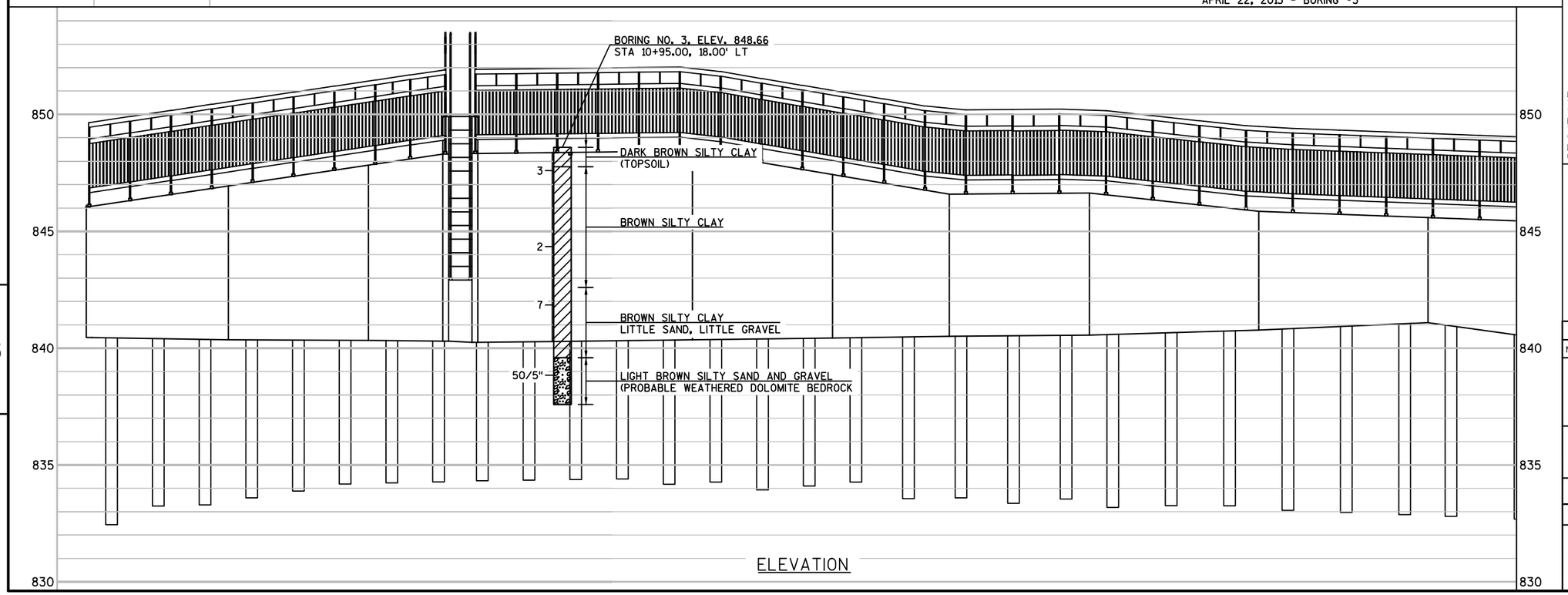


PLAN

DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY NUMMELIN TESTING SERVICES, INC.

SOIL BORING TAKEN:
APRIL 22, 2013 - BORING #3



ELEVATION

STATE PROJECT NUMBER

5944-03-84

NOTE:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITION SUBSURFACE INFORMATION.

BORING STATIONS AND OFFSETS ARE BASED ON STH 81 TOP OF CURB ℄.

ABBREVIATIONS

F— Fine M—Medium C— Coarse
Ws— Weathered So— Sound

MATERIAL SYMBOLS

TOPSOIL/ FILL, Sand, Gravel, Silt, Peat, Clay, Sandstone, Limestone, Igneous Rock

LEGEND OF PROBING

Probing No.
Sta.
Elevation
7 Average Blows Per Foot
Refusal

LEGEND OF BORING

Boring No.
Sta.
Elev.
Unconfined STRENGTH → 7.7 7
Blows Per 6-IN. USING 10# WT. FALLING 24"
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 6-INCH AT THE LOCATIONS INDICATED ARE BASED ON DCP TESTING. THE DCP TESTS WERE PREFORMED USING A SOLID METAL ROD FITTED WITH A 1-3/8-INCH DIAMETER CONICAL POINT. THE POINT IS DRIVEN INTO THE SOIL WITH A 10-POUND WEIGHT FALLING 24-INCHES. THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE.

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.

NO.	DATE	REVISION	BY

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

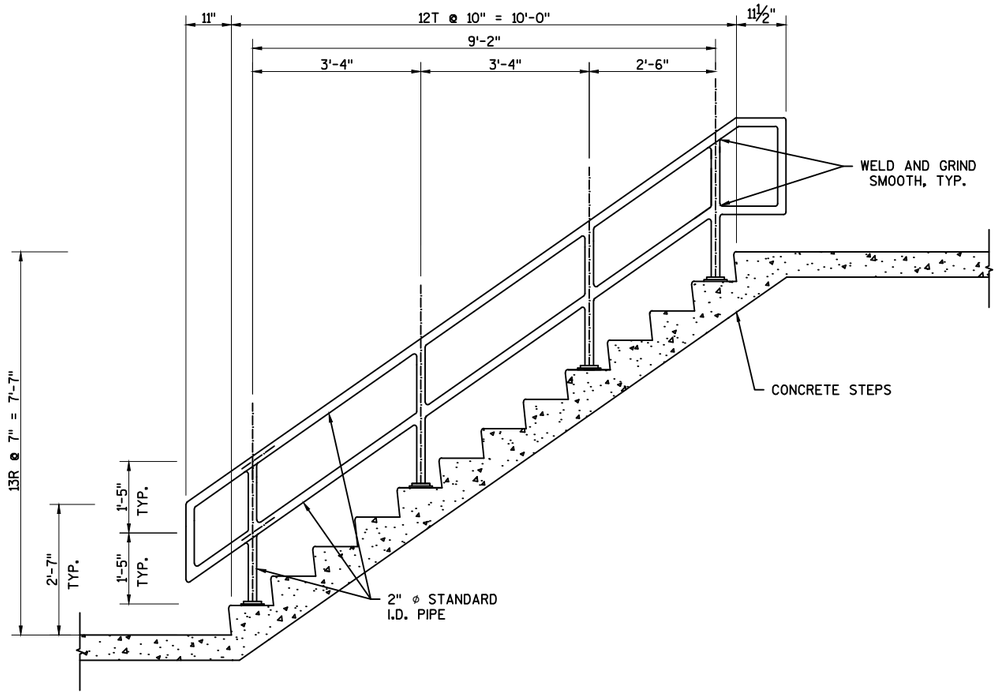
STRUCTURE **R-33-0004**

DRAWN BY KPM | PLANS CK'D. Name

SUBSURFACE EXPLORATION

SHEET 12 OF 14

STATE PROJECT NUMBER
5944-03-84



STAIRS C AT STA 200+64.09'B'

NOTES

BID ITEM SHALL BE 'RAILING PIPE GALVANIZED' WHICH INCLUDES ALL ITEMS SHOWN AND PAINTING.

RAILING TO BE PLACED ON BOTH SIDES OF STEPS.

ALL SPACING ARE TAKEN HORIZONTALLY ALONG CENTER LINE OF RAILING.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

RAILS AND POSTS TO BE ASTM A500, GRADE B. ALL GALVANIZED AFTER FABRICATION.

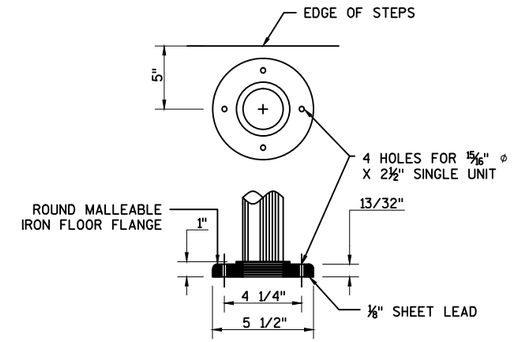
ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE GIVEN A #6 BLAST CLEANING BY SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE SPECIAL PROVISIONS. THE FINISH COLOR SHALL BE BLACK, FED-STD. COLOR NO. 27038.

RAILING SHALL BE FABRICATED IN LENGTHS AS SHOWN.

TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.

ALL POSTS AND RAILS SHALL BE WELDED TOGETHER WITH MIN. 3/16" FILLET WELDS ALL AROUND AND GROUND SMOOTH.

REFER TO R-33-0004 STRUCTURE DRAWINGS FOR CONCRETE STEP DETAILS.



FLANGE DETAIL

NO.	DATE	REVISION	BY

KNIGHT
700 N Third Street
Suite 104
La Crosse, WI 54601
Engineers & Architects Phone: (608) 519-1455

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0004**

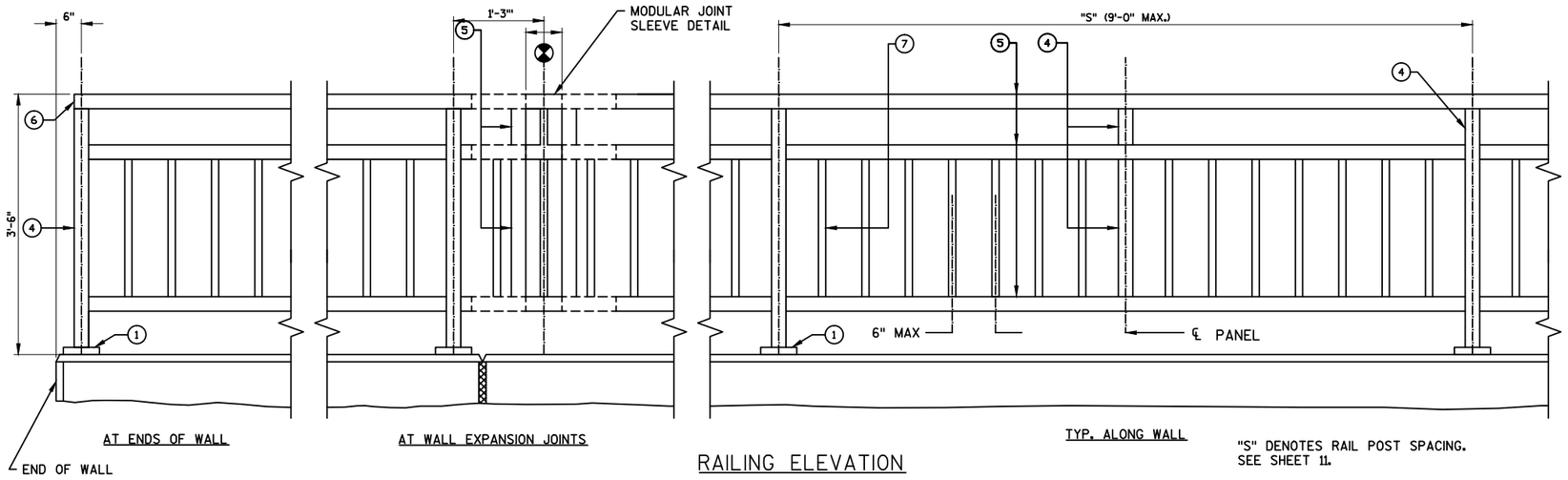
DRAWN BY AFD | PLANS CK'D. JDG

RAILING PIPE GALVANIZED DETAIL

SHEET 13 OF 14

STATE PROJECT NUMBER

5944-03-84



RAILING ELEVATION

"S" DENOTES RAIL POST SPACING. SEE SHEET 11.

⊗ RAILING OPENING TO BE 6" AT 45°F. MOVEMENT ADJUSTMENT SHALL BE MADE AT A RATE OF 1" PER 20°F.

NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE C2 GALVANIZED PEDESTRIAN R-33-0004", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN AND PAINTING.

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 CUTS.

NO. 1, 2, 6, 9, AND NO. 10 SHALL CONFORM TO A.S.T.M. A709 GRADE 36. STRUCTURAL TUBING SHALL CONFORM TO A.S.T.M. A500 GRADE B (NO. 4,5,7,8).

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT.

FILL BOLT SLOT OPENINGS IN SHIMS AND PLATE NO. 1 AND CAULK AROUND PERIMETER OF PLATE NO. 1 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL JOINTS IN C.I.P. CONCRETE RETAINING WALL ARE TO BE VERTICAL.

AFTER FABRICATION, ALL MATERIAL, EXCEPT ANCHORAGE (NO. 2 & 3) AND SHIMS SHALL BE PAINTED PER SPECIAL PROVISIONS. THE FINISH COLOR SHALL BE FEDERAL COLOR NO. 27038, BLACK.

¼"⌀ VENT HOLES LOCATED IN TOP RAIL OVER RAIL POSTS AND AT LOW END OF OTHER RAILS.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.

LEGEND

(1) PLATE ⅝" X 6" X 8" WITH ¾" X 1½" SLOTTED HOLES.

(2) ¼" X 5" X 7" ANCHOR PLATE WITH 11/16" ⌀ HOLES FOR ANCHOR BOLTS NO. 3.

(3) ⅝" DIA. X 7½" LONG ASTM F593 TYPE 316 STAINLESS STEEL ANCHOR BOLTS WITH NUT AND WASHERS OF SAME ALLOY GROUP. (ALTERNATE RAIL POST ANCHORAGE - 4 EQUIV. STAINLESS STEEL CONCRETE MASONRY ANCHORS, TYPE S (EPOXY) ⅜" ⌀, MINIMUM PULLOUT CAPACITY OF 15 KIPS. EMBED A MIN. OF 7" FOR RAIL POSTS)

(4) STRUCTURAL TUBING 3" X 1½" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.

(5) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 4.

(6) PLATE 3/16" X 3" X 1½" END CAP. WELD TO NO. 5 AND GRIND SMOOTH.

(7) STRUCTURAL TUBING 1" X 1" X ⅛" PICKETS. WELD TO NO. 5 SPACE AT 6" MAX. ℄ TO ℄ SPACING. PLACE VERTICAL.

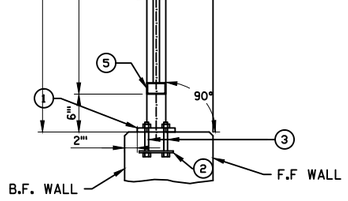
(8) STRUCTURAL TUBING 1" X 1½" X ⅛" PICKETS. WELD TO NO. 11. PLACE VERTICAL.

(9) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".

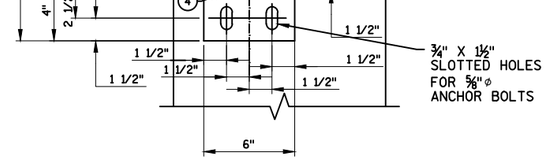
(10) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JOINTS).

(11) BAR 2½" X 1" X 2'-0"

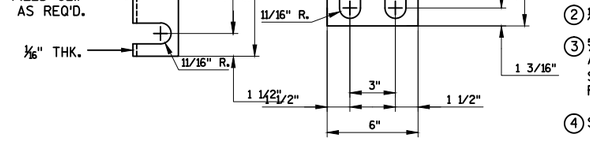
(12) ½" DIA. STAINLESS STEEL BOLT WITH NUT AND LOCKWASHER.



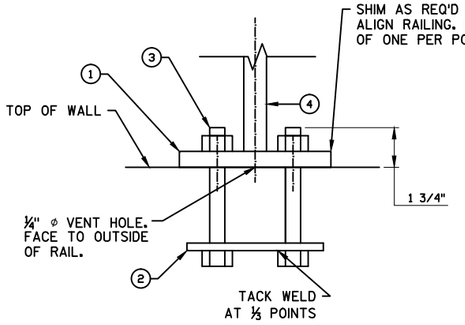
SECTION THRU RAILING



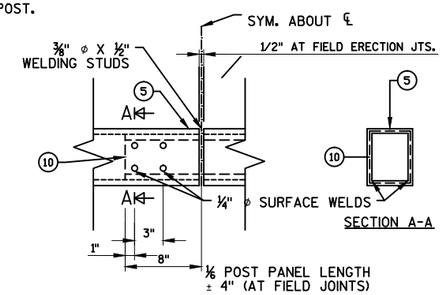
TYPICAL RAIL POST BASE PLATE



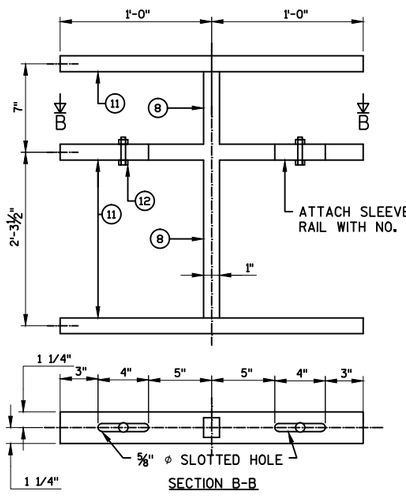
RAIL POST SHIM DETAIL
(2 SETS PER POST)



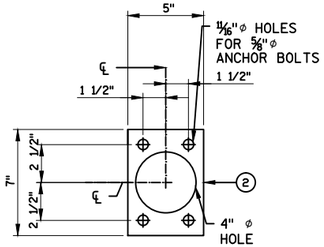
ANCHOR BOLTS FOR RAIL POSTS
NOTE: ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED



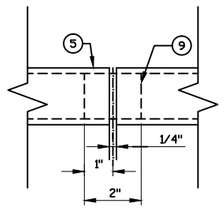
FIELD ERECTION JOINT DETAIL
*MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



MODULAR JOINT SLEEVE DETAIL



ANCHOR PLATE



SHOP RAIL SPLICE DETAIL
(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)

NO.	DATE	REVISION	BY

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Engineers & Architects Phone: (608) 519-1455

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0004**

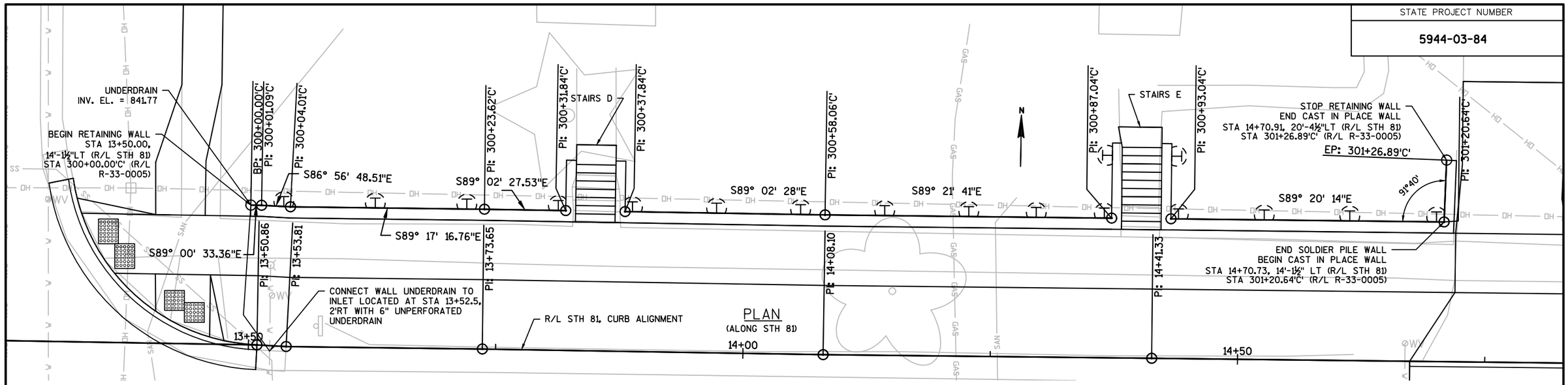
DRAWN BY AFD | PLANS CK'D. JDG

STEEL RAILING DETAILS

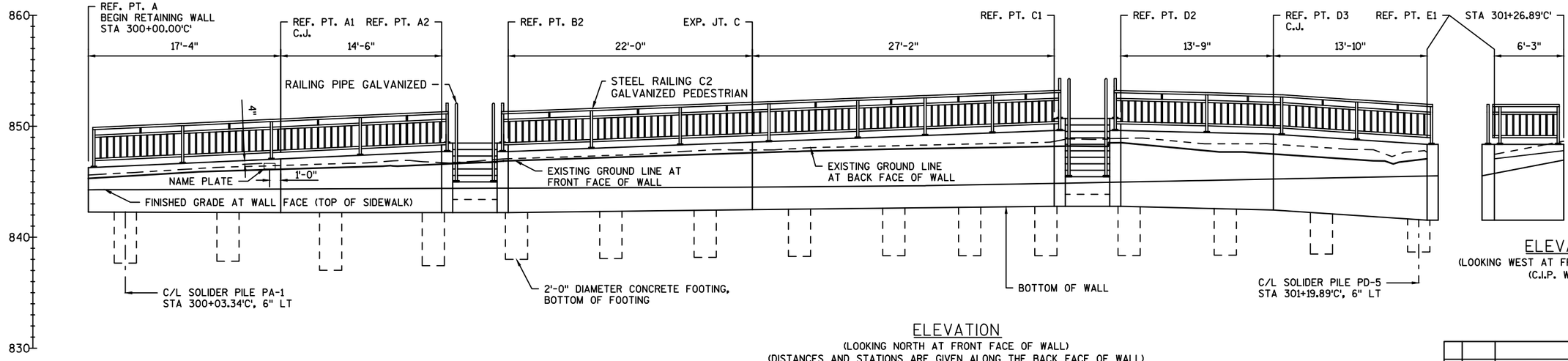
SHEET 14 OF 14

STATE PROJECT NUMBER

5944-03-84



PLAN
(ALONG STH 81)



ELEVATION
(LOOKING NORTH AT FRONT FACE OF WALL)
(DISTANCES AND STATIONS ARE GIVEN ALONG THE BACK FACE OF WALL)

ELEVATION
(LOOKING WEST AT FRONT FACE OF WALL)
(C.I.P. WALL #1)

NOTES

CONNECT THE UNDERDRAIN PIPE BENEATH THE SHEAR WALLS TO THE UNDERDRAIN PIPE BENEATH THE WALL ALONG STH 81.

CONNECTION FROM UNPERFORATED PIPE TO INLET IS INCIDENTAL TO PIPE UNDERDRAIN.

LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT
C.I.P. = CAST IN PLACE
P"X"-"#" = PILE INDENTIFICATION

LIST OF DRAWINGS

DESIGN DATA

LIVE LOAD:
LIVE LOAD SURCHARGE: 100 P.S.F.

MATERIAL PROPERTIES:

CONCRETE MASONRY	f'c = 4,000 P.S.I.
BAR STEEL REINFORCEMENT (GRADE 60)	fy = 60,000 P.S.I.
STRUCTURAL STEEL HS	fy = 50,000 P.S.I.
PILE FOOTINGS	f'c = 3,500 P.S.I.
*TIMBER LAGGING	E = 1,800,000 P.S.I.
	fbo = 1,000 P.S.I.

* MATERIAL VALUES BASED ON DOUGLAS FIR-LARCH NO. 1, 3" NOMINAL THICKNESS, REFERENCE AASHTO LRFD SPECIFICATIONS TABLE 8.4.1.1.4-1.

STRUCTURE DESIGN CONTACTS

BRIDGE OFFICE: WILLIAM DREHER
(608)-266-8489
CONSULTANT: WILLIAM MURPHY
(312)-577-3327

WISCONSIN
WILLIAM P. MURPHY
E-40244
CHICAGO IL
PROFESSIONAL ENGINEER

DATE: 7/11/2014

NO.	DATE	REVISION	BY

KNIGHT
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700 N Third Street
Suite 104
La Crosse, WI 54601
Phone: (608) 519-1455

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 07/14/14
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-33-0005

STH 81 ALONG LOUISA STREET

COUNTY	CITY
LAFAYETTE	DARLINGTON

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN 2012 SIXTH EDITION

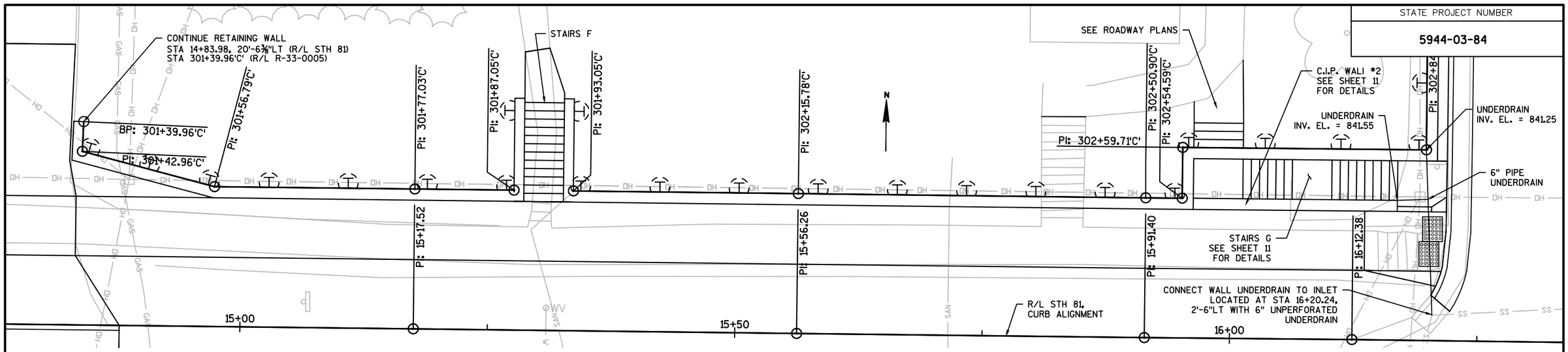
DESIGNED BY AFD	DESIGN CK'D. WPM	DRAWN BY AFD	PLANS CK'D. JDG

GENERAL PLAN AND ELEVATION

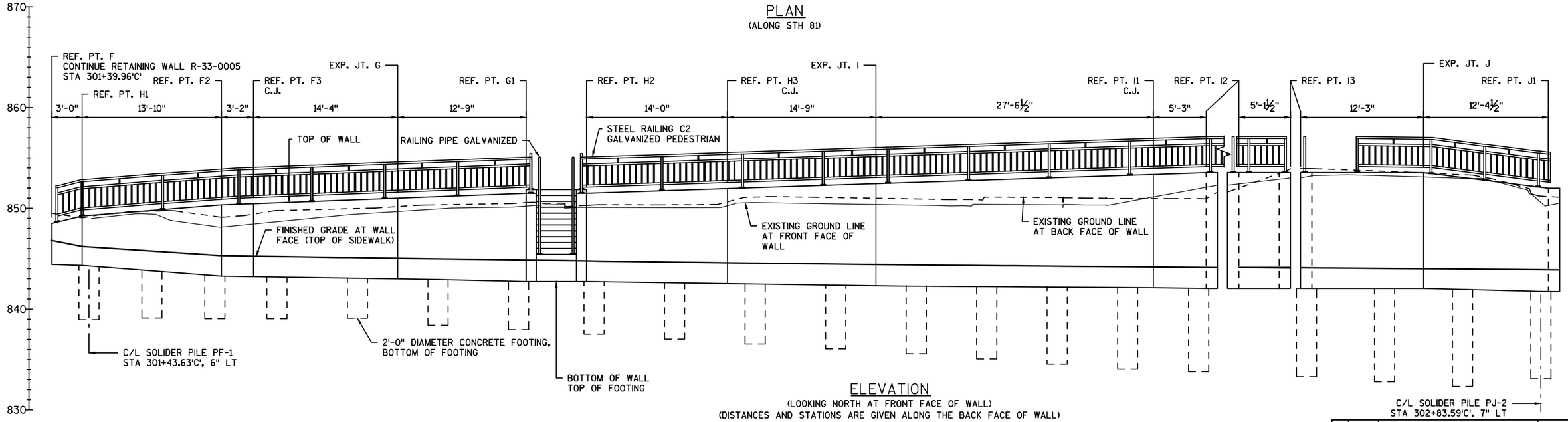
SHEET 1 OF 21

STATE PROJECT NUMBER

5944-03-84



PLAN
(ALONG STH 81)



ELEVATION
(LOOKING NORTH AT FRONT FACE OF WALL)
(DISTANCES AND STATIONS ARE GIVEN ALONG THE BACK FACE OF WALL)

8

NOTES

CONNECT THE UNDERDRAIN PIPE BENEATH THE SHEAR WALLS TO THE UNDERDRAIN PIPE BENEATH THE WALL ALONG STH 81.

CONNECTION FROM UNPERFORATED PIPE TO INLET IS INCIDENTAL TO PIPE UNDERDRAIN.

LEGEND

E.F. = EACH FACE
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P"X"-"#" = PILE INDENTIFICATION

NO.	DATE	REVISION	BY

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

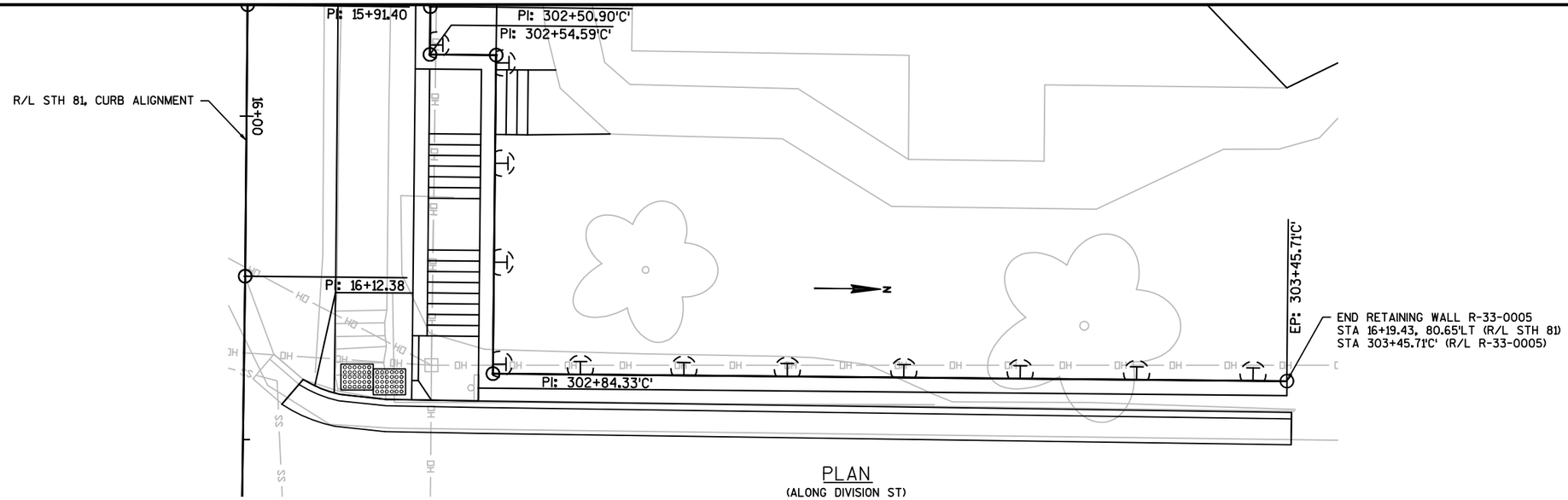
STRUCTURE **R-33-0005**

DRAWN BY AFD | PLANS CK'D. JDG

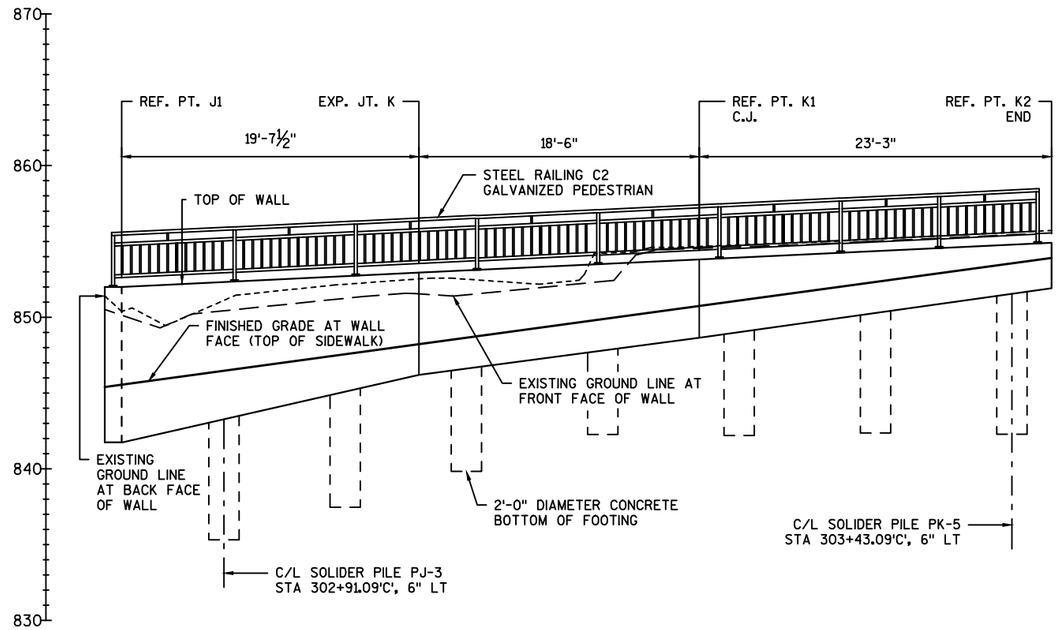
GENERAL PLAN AND ELEVATION

SHEET 2 OF 21

STATE PROJECT NUMBER
5944-03-84



PLAN
(ALONG DIVISION ST)



ELEVATION
(LOOKING WEST AT FRONT FACE OF WALL)
(DISTANCES AND STATIONS ARE GIVEN ALONG THE BACK FACE OF WALL)

ALIGNMENT INFORMATION

PI STA	NORTHING	EASTING
301+39.96	166026.39	484164.55
301+42.96	166023.40	484164.42
301+56.79	166019.82	484177.78
301+77.03	166019.59	484198.02
301+87.05	166019.47	484208.03
301+93.05	166019.40	484214.03
302+15.78	166019.12	484236.77
302+50.90	166018.70	484271.88
302+54.59	166018.66	484275.57
302+59.71	166023.79	484275.62
302+84.33	166023.54	484300.24
303+45.71	166084.91	484300.82

LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT
C.I.P. = CAST IN PLACE
P"X"-"#" = PILE INDENTIFICATION

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0005**

DRAWN BY	PLANS CK'D.
AFD	JDG

GENERAL PLAN AND ELEVATION

SHEET 3 OF 21

STATE PROJECT NUMBER
5944-03-84

PILE/ REFERENCE INFORMATION

STA	REFERENCE/ PILE NUMBER	OFFSET SEE NOTE 12	FINISH GRADE AT WALL FACE	WALL HEIGHT (FT)	TOP OF WALL	BOTTOM OF WALL	TOP OF PILE	TOP OF FOOTING	BOTTOM OF FOOTING	FOOTING LENGTH	SOLDIER PILE SECTION	SOLDIER PILE LENGTH (FT)	NO. OF STUDS
300+00.00'C'	REF. PT. A	START	844.274	4.00	846.27	842.27	START	START	START	START	START	START	START
300+03.34'C'	PA-1	6"	844.286	4.16	846.43	842.26	844.93	842.26	837.68	4.59	HP-12X63	7.25	6
300+12.59'C'	PA-2	6"	844.323	4.60	846.84	842.24	845.34	842.24	837.84	4.40	HP-12X63	7.50	6
300+17.34'C'	REF. PT. A1	C.J.	844.343	4.83	847.06	842.23	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.
300+21.84'C'	PA-3	6"	844.361	5.05	847.26	842.21	845.76	842.21	837.01	5.20	HP-12X63	8.75	8
300+31.09'C'	PA-4	6"	844.398	5.47	847.68	842.21	846.18	842.21	837.43	4.78	HP-12X63	8.75	16
300+31.84'C'	REF. PT. A2	STAIRS	844.401	5.50	847.72	842.22	REF. PT. A2	REF. PT. A2	REF. PT. A2	REF. PT. A2	REF. PT. A2	REF. PT. A2	REF. PT. A2
300+31.84'C'	REF. PT. A3	5'-1 ½"	844.401	2.00	848.48	846.48	REF. PT. A3	REF. PT. A3	REF. PT. A3	REF. PT. A3	REF. PT. A3	REF. PT. A3	REF. PT. A3
300+37.84'C'	REF. PT. B1	5'-1 ½"	844.425	2.00	848.48	846.48	REF. PT. B1	REF. PT. B1	REF. PT. B1	REF. PT. B1	REF. PT. B1	REF. PT. B1	REF. PT. B1
300+37.84'C'	REF. PT. B2	STAIRS	844.425	5.50	847.72	842.22	REF. PT. B2	REF. PT. B2	REF. PT. B2	REF. PT. B2	REF. PT. B2	REF. PT. B2	REF. PT. B2
300+38.59'C'	PB-1	6"	844.428	5.52	847.74	842.22	846.24	842.22	837.99	4.23	HP-12X63	8.25	16
300+47.09'C'	PB-2	6"	844.461	5.76	848.07	842.31	846.57	842.31	838.07	4.24	HP-12X63	8.50	8
300+55.59'C'	PB-3	6"	844.510	6.00	848.40	842.40	846.90	842.40	838.15	4.25	HP-12X63	8.75	8
300+58.85'C'	EXP. JT. C	E.J.	844.531	6.09	848.53	842.44	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
300+64.09'C'	PC-1	6"	844.565	6.23	848.73	842.49	847.23	842.49	838.23	4.27	HP-12X63	9.00	8
300+72.59'C'	PC-2	6"	844.620	6.46	849.06	842.60	847.56	842.60	838.31	4.29	HP-12X63	9.25	8
300+79.42'C'	PC-3	6"	844.711	6.63	849.32	842.69	847.82	842.69	838.32	4.37	HP-12X63	9.50	10
300+86.29'C'	PC-4	6"	844.832	6.81	849.59	842.78	848.09	842.78	838.34	4.44	HP-12X63	9.75	20
300+86.29'C'	PC-5	6'-4 ⅛"	844.832	2.91	850.66	847.75	849.16	847.75	838.41	9.34	HP-12X63	10.75	4
300+87.04'C'	REF. PT. C1	STAIRS	844.845	6.83	849.62	842.79	REF. PT. C1	REF. PT. C1	REF. PT. C1	REF. PT. C1	REF. PT. C1	REF. PT. C1	REF. PT. C1
300+87.04'C'	REF. PT. C2	7'- 7 ½"	844.845	2.00	850.66	848.66	REF. PT. C2	REF. PT. C2	REF. PT. C2	REF. PT. C2	REF. PT. C2	REF. PT. C2	REF. PT. C2
300+93.04'C'	REF. PT. D1	7'- 7 ½"	844.963	2.00	850.66	848.66	REF. PT. D1	REF. PT. D1	REF. PT. D1	REF. PT. D1	REF. PT. D1	REF. PT. D1	REF. PT. D1
300+93.04'C'	REF. PT. D2	STAIRS	844.963	6.83	849.62	842.79	REF. PT. D2	REF. PT. D2	REF. PT. D2	REF. PT. D2	REF. PT. D2	REF. PT. D2	REF. PT. D2
300+93.79'C'	PD-1	6'-4 ⅛"	844.978	2.91	850.66	847.75	849.16	847.75	838.41	9.34	HP-12X63	10.75	4
300+93.79'C'	PD-2	6"	844.978	6.83	849.62	842.79	848.12	842.79	838.37	4.42	HP-12X63	9.75	20
301+02.46'C'	PD-3	6"	845.153	6.83	849.62	842.79	848.12	842.79	838.62	4.17	HP-12X63	9.50	10
301+06.79'C'	REF. PT. D3	C.J.	845.240	6.83	849.35	842.51	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.
301+11.12'C'	PD-4	6"	845.327	6.83	849.04	842.21	847.54	842.21	838.54	3.67	HP-12X63	9.00	10
301+19.89'C'	PD-5	6"	845.504	6.83	848.43	841.59	846.93	841.59	838.43	3.17	HP-12X63	8.50	20
301+20.64'C'	REF. PT. E1	CORNER	845.519	6.83	848.37	841.54	CORNER	CORNER	CORNER	CORNER	CORNER	CORNER	CORNER
301+26.89'C'	REF. PT. E2	STOP	844.102	6.83	848.37	841.54	STOP	STOP	STOP	STOP	STOP	STOP	STOP

GENERAL NOTES:

ALL STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M270 GRADE 50 EXCEPT AS NOTED ON PLANS.

THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND PERFORMANCE OF THE TIMBER LAGGING.

DRAWINGS SHALL NOT BE SCALED.

BEVELED EXPOSED EDGES OF CONCRETE IS ¾-INCH, UNLESS OTHERWISE NOTED.

ALL DIMENSIONS ARE IN FEET AND INCHES, UNLESS OTHERWISE NOTED.

ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

ARCHITECTURAL SURFACE TREATMENT SHALL ACCURATELY DUPLICATE "RUSTIC ASHLAR" LIMESTONE. THE STONE SHALL BE 8-INCH TO 32-INCH WITH A MAXIMUM RELIEF OF 1 ½-INCH. SEE SPECIAL PROVISIONS.

ALL REINFORCEMENT SHALL HAVE A MINIMUM OF 2-INCHES CLEAR COVER UNLESS SHOWN OTHERWISE. REINFORCEMENT IN FACES CAST PERMANENTLY AGAINST EARTH SHALL HAVE A MINIMUM OF 3-INCHES CLEAR COVER.

IF THE UNDERGROUND UTILITY CONFLICTS WITH A PILE, THAT PILE MAY BE RELOCATED WITHIN 1'-0" FROM THE CALLED OUT LOCATION. DO NOT LOCATE A PILE LESS THAN 1'-0" FROM A CONTRACTION JOINT. PILES LOCATED AT CORNERS OF THE RETAINING WALL SHALL ONLY BE ADJUSTED WITH ENGINEER'S APPROVAL.

THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES RETAINING WALLS R-33-0005."

OFFSET IS BASED OFF OF BACK FACE OF WALL ALIGNMENT TO CENTER OF PILE.

CONTROLLED LOW STRENGTH MATERIAL AND FLOWABLE BACKFILL ARE INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS R-33-0005." SEE SPECIAL PROVISIONS FOR DESCRIPTION OF CONTROLLED LOW STRENGTH MATERIAL AND FLOWABLE BACKFILL.

6" DRAINAGE PIPE HAS A MINIMUM SLOPE OF 0.5%.

STAINING CONCRETE SHALL ACCURATELY DUPLICATE WEATHERED LIMESTONE COLORATION. COLOR IS MEDIUM TAN # 33446. SEE SPECIAL PROVISIONS.

BACK FACE OF WALL FOLLOWS STH 81 CURB ALIGNMENT, 14'-1½" TYPICAL OFFSET. SEE ROADWAY PLAN FOR CURB ALIGNMENT DETAILS.

BACKFILL THE FACES OF THE WALL EQUALLY.

SHAFT EXCAVATION FOR ALL PILES ARE 2'-0" DIAMETER.

CONSTRUCT A TYPICAL SOLDIER PILE WALL FROM STA 300+00.00'C' TO STA 301+20.64'C' AND STA 301+39.96'C' TO STA 303+45.71'C'. CONSTRUCT A TYPICAL CAST IN PLACE CONCRETE WALL FROM STA 301+20.64'C' TO STA 301+26.89'C' AND A CAST IN PLACE CONCRETE WALL WITH FOOTING FROM STA 15+96.24 TO STA 16+16.81.

SOIL PARAMETERS

SOIL UNIT	TOTAL UNIT WEIGHT, PCF	UNDRAINED, DISTURBED			DRAINED	
		UNDRAINED SHEAR STRENGTH, SU, PSF	FRICTION ANGLE, Φ, DEG	COHESION, C' PSF	COHESION, C', PSF	FRICTION ANGLE, Φ, DEG
LEAN CLAY	130	3800	6	200	0	30
WEATHERED DOLOMITE BEDROCK	140				0	45

NO.	DATE	REVISION	BY

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0005**

DRAWN BY AFD | PLANS CK'D. JDG

GENERAL NOTES & PILE/ REFERENCE POINT INFORMATION

SHEET 4 OF 21

STATE PROJECT NUMBER
5944-03-84

PILE/ REFERENCE INFORMATION

STA	REFERENCE/ PILE NUMBER	OFFSET SEE NOTE 12	FINISH GRADE AT WALL FACE	WALL HEIGHT (FT)	TOP OF WALL	BOTTOM OF WALL	TOP OF PILE	TOP OF FOOTING	BOTTOM OF FOOTING	FOOTING LENGTH	SOLDIER PILE SECTION	SOLDIER PILE LENGTH (FT)	NO. OF STUDS
301+39.96'C'	REF. PT. F	CONTINUE	846.847	4.08	848.53	844.44	REF. PT. F	REF. PT. F	REF. PT. F	REF. PT. F	REF. PT. F	REF. PT. F	REF. PT. F
301+42.96'C'	REF. PT. F1	CORNER	846.240	5.08	849.25	844.17	CORNER	CORNER	CORNER	CORNER	CORNER	CORNER	CORNER
301+43.63'C'	PF-1	6"	846.240	5.18	849.30	844.12	847.80	844.12	838.80	5.32	HP-12X63	9.00	8
301+49.88'C'	PF-2	6"	845.757	6.08	849.80	843.72	848.30	843.72	839.05	4.67	HP-12X63	9.25	8
301+56.13'C'	PF-3	6"	845.274	6.99	850.30	843.31	848.80	843.31	839.05	4.26	HP-12X63	9.75	10
301+56.79'C'	REF. PT. F2	CORNER	845.223	7.08	850.35	843.27	CORNER	CORNER	CORNER	CORNER	CORNER	CORNER	CORNER
301+59.96'C'	REF. PT. F3	C.J.	845.192	7.33	850.47	843.14	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.
301+62.30'C'	PF-4	6"	845.159	7.46	850.58	843.12	849.08	843.12	839.08	4.04	HP-12X63	10.00	10
301+70.30'C'	PF-5	6"	845.046	7.87	850.95	843.07	849.45	843.07	839.20	3.88	HP-12X63	10.25	10
301+74.30'C'	EXP. JT. G	E.J.	844.990	8.08	851.13	843.05	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
301+78.30'C'	PG-1	6"	844.934	8.29	851.25	842.96	849.75	842.96	838.50	4.46	HP-12X63	11.25	12
301+86.30'C'	PG-2	6"	844.822	8.71	851.48	842.77	849.98	842.77	837.98	4.79	HP-12X63	12.00	24
301+86.30'C'	PG-3	8'-1"	844.822	2.93	851.78	848.85	850.28	848.85	838.03	10.82	HP-12X63	12.25	4
301+87.05'C'	REF. PT. G1	STAIRS	844.811	8.75	851.50	842.75	REF. PT. G1	REF. PT. G1	REF. PT. G1	REF. PT. G1	REF. PT. G1	REF. PT. G1	REF. PT. G1
301+87.05'C'	REF. PT. G2	9'- 4 ⅜"	844.811	2.00	851.78	849.78	REF. PT. G2	REF. PT. G2	REF. PT. G2	REF. PT. G2	REF. PT. G2	REF. PT. G2	REF. PT. G2
301+93.05'C'	REF. PT. H1	9'- 4 ⅜"	844.726	2.00	851.78	849.78	REF. PT. H1	REF. PT. H1	REF. PT. H1	REF. PT. H1	REF. PT. H1	REF. PT. H1	REF. PT. H1
301+93.05'C'	REF. PT. H2	STAIRS	844.726	8.75	851.50	842.75	REF. PT. H2	REF. PT. H2	REF. PT. H2	REF. PT. H2	REF. PT. H2	REF. PT. H2	REF. PT. H2
301+93.80'C'	PH-1	8'-1"	844.715	2.93	851.78	848.85	850.28	848.85	837.53	11.32	HP-12X63	12.75	4
301+93.80'C'	PH-2	7"	844.715	8.79	851.52	842.74	850.02	842.74	837.52	5.21	W-14X90	12.50	24
302+01.80'C'	PH-3	7"	844.604	9.17	851.79	842.62	850.29	842.62	837.04	5.58	W-14X90	13.25	12
302+07.05'C'	REF. PT. H3	C.J.	844.535	9.42	851.97	842.55	REF. PT. J3	REF. PT. J3	REF. PT. J3	REF. PT. J3	REF. PT. J3	REF. PT. J3	REF. PT. J3
302+09.80'C'	PH-4	7"	844.501	9.54	852.06	842.52	850.56	842.52	836.56	5.96	W-14X90	14.00	14
302+17.80'C'	PH-5	7"	844.405	9.90	852.32	842.42	850.82	842.42	836.07	6.35	W-14X90	14.75	14
302+21.80'C'	EXP. JT. I	E.J.	844.361	10.08	852.46	842.37	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
302+25.80'C'	PI-1	7"	844.318	10.25	852.59	842.34	851.09	842.34	835.59	6.75	W-14X90	15.50	14
302+32.80'C'	PI-2	7"	844.249	10.55	852.82	842.28	851.32	842.28	835.07	7.20	W-14X90	16.25	14
302+39.80'C'	PI-3	7"	844.186	10.85	853.06	842.21	851.56	842.21	834.56	7.65	W-14X90	17.00	14
302+46.80'C'	PI-4	7"	844.130	11.14	853.29	842.15	851.79	842.15	834.04	8.11	W-14X90	17.75	16
302+49.34'C'	REF. PT. I1	C.J.	844.111	11.25	853.38	842.13	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.
302+53.84'C'	PI-5	7"	844.078	11.46	853.53	842.06	852.03	842.06	833.78	8.29	W-14X90	18.25	32
302+54.59'C'	REF. PT. I2	CORNER	844.072	11.50	853.55	842.05	CORNER	CORNER	CORNER	CORNER	CORNER	CORNER	CORNER
302+59.71'C'	REF. PT. I3	CORNER	844.059	11.50	853.55	842.05	CORNER	CORNER	CORNER	CORNER	CORNER	CORNER	CORNER
302+60.31'C'	PI-6	7"	844.060	11.50	853.55	842.05	852.05	842.05	833.30	8.75	W-14X90	18.75	16
302+68.06'C'	PI-7	7"	844.070	11.50	853.55	842.05	852.05	842.05	832.80	9.25	W-14X90	19.25	16
302+71.95'C'	EXP. JT. J	E.J.	844.055	11.50	853.55	842.05	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
302+75.71'C'	PJ-1	7"	844.028	11.12	853.08	841.96	851.58	841.96	832.33	9.63	W-14X90	19.25	16
302+83.59'C'	PJ-2	7"	843.982	10.32	852.09	841.77	850.59	841.77	833.09	8.68	W-14X90	17.50	28
302+84.34'C'	REF. PT. J1	CORNER	845.067	10.25	852.00	841.75	CORNER	CORNER	CORNER	CORNER	CORNER	CORNER	CORNER
302+91.09'C'	PJ-3	6"	846.330	9.04	852.32	843.28	850.82	843.28	835.32	7.96	HP-12X63	15.50	12
302+99.09'C'	PJ-4	6"	847.704	7.62	852.70	845.08	851.20	845.08	837.45	7.63	HP-12X63	13.75	10
303+03.96'C'	EXP. JT. K	E.J.	848.496	6.75	852.94	846.19	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
303+07.09'C'	PK-1	6"	849.049	6.48	853.08	846.60	851.58	846.60	839.83	6.77	HP-12X63	11.75	8
303+16.09'C'	PK-2	6"	850.655	5.71	853.51	847.80	852.01	847.80	842.26	5.54	HP-12X63	9.75	8
303+22.46'C'	REF. PT. K1	C.J.	851.769	5.17	853.81	848.64	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.
303+25.09'C'	PK-3	6"	851.087	4.92	853.94	849.01	852.44	849.01	842.19	6.83	HP-12X63	10.25	6
303+34.09'C'	PK-4	6"	852.312	4.08	854.36	850.28	852.86	850.28	842.36	7.92	HP-12X63	10.50	6
303+43.09'C'	PK-5	6"	853.535	3.24	854.79	851.54	853.29	851.54	842.29	9.26	HP-12X63	11.00	4
303+45.71'C'	REF. PT. K2	END	853.917	3.00	854.91	851.91	END	END	END	END	END	END	END

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNITS	TOTAL QUANTITY
206.3000.03	EXCAVATION FOR STRUCTURES RETAINING WALL (R-33-0005)	LS	1
210.0100	BACKFILL STRUCTURAL	CY	31
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	135
505.0615	BAR STEEL REINFORCEMENT HS COATED RETAINING WALLS	LB	12907
506.0605	STRUCTURAL STEEL HS	LB	40208
506.3014	WELDED STUD SHEAR CONNECTORS 3/4x6-INCH	EACH	556
517.1010.S.02	CONCRETE STAINING R-33-0005	SF	972
517.1050.S.02	ARCHITECTURAL SURFACE TREATMENT R-33-0005	SF	972
612.0106	PIPE UNDERDRAIN 6-INCH	LF	386
612.0204	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	36
645.0111	GEOTEXTILE FABRIC TYPE DF SCHEDULE A	SY	313
SPV.0035.01	CONCRETE MASONRY SOLDIER PILE FOOTINGS	CY	34
SPV.0090.01	FOUNDATION DRILLING 24-INCH DIAMETER	LF	287
SPV.0090.02	RAILING PIPE GALVANIZED	LF	105
SPV.0105.02	RAILING STEEL TYPE C2 GALVANIZED PEDESTRIAN R-33-0005	LS	1
SPV.0110.01	TIMBER LAGGING	MBM	6.00
SPV.0165.01	GEOCOMPOSITE DRAIN BOARD	SF	2147

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0005**

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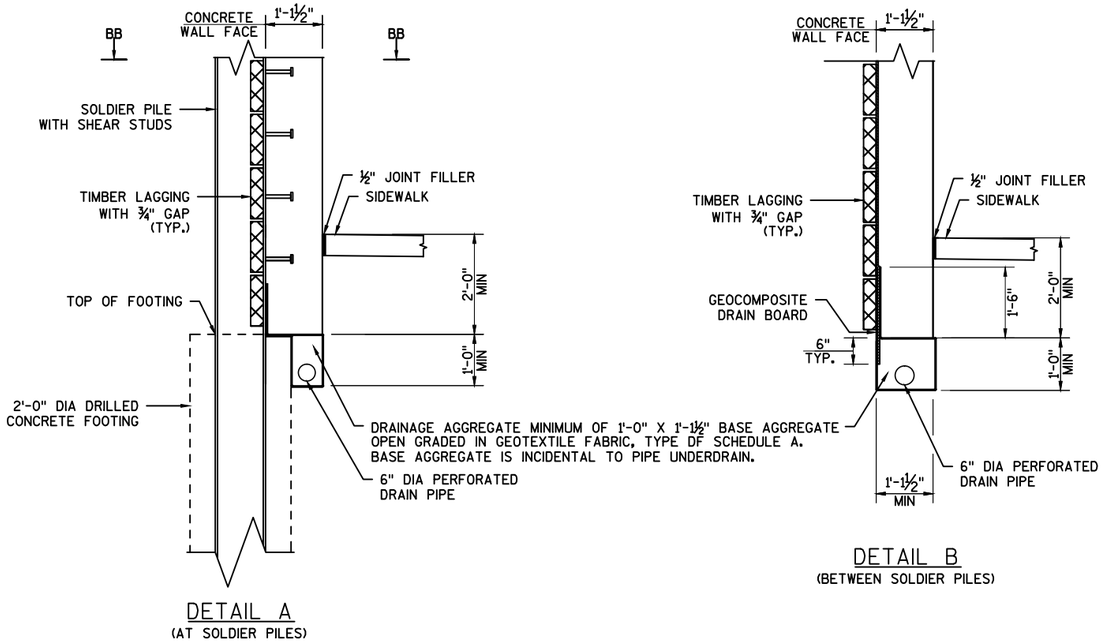
ESTIMATED QUANTITIES & PILE/ REFERENCE INFORMATION

SHEET 5 OF 21

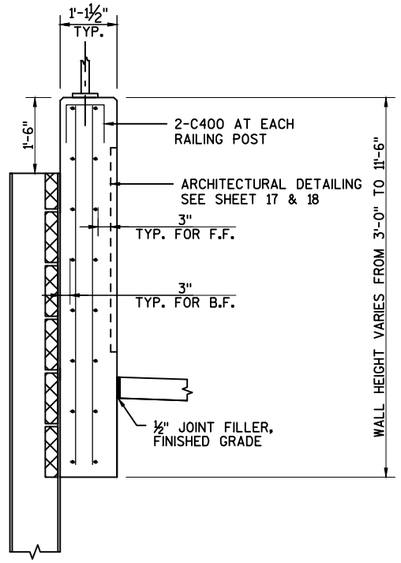
STATE PROJECT NUMBER

5944-03-84



DETAIL A
(AT SOLDIER PILES)

DETAIL B
(BETWEEN SOLDIER PILES)



TYP. REINFORCEMENT LAYOUT

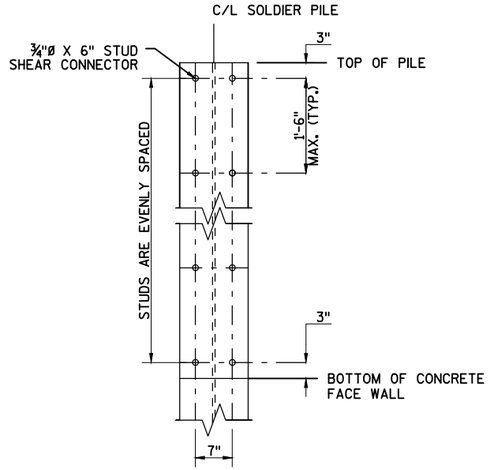
NOTES

PAINT PILE FROM TOP OF PILE TO 1'-0" BELOW TOP OF FOOTING WITH A PRIME COAT OF ORGANIC ZINC-RICH PAINT. PREPARE THE SURFACE AND APPLY THE PAINT AS SPECIFIED IN SECTION 517 OF THE STANDARD SPECIFICATIONS. PAINTING OF PILE IS INCIDENTAL TO THE BID ITEM "STRUCTURAL STEEL HS."

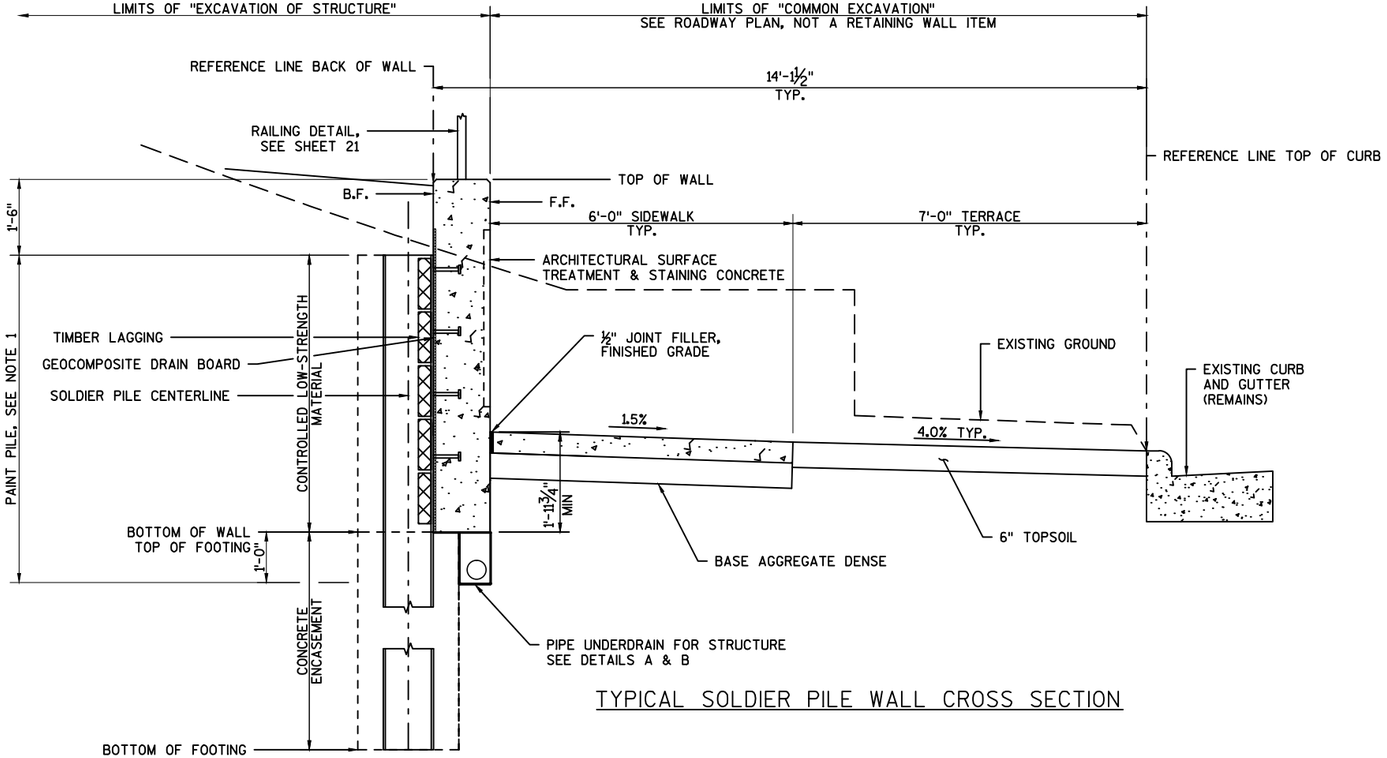
PILES SHOULD BE SET WITH A ¼"H:1'V BATTER.

LEGEND

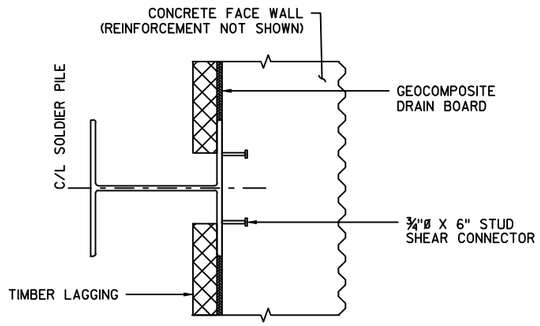
E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT



STUD SHEAR CONNECTION LAYOUT



TYPICAL SOLDIER PILE WALL CROSS SECTION



SECTION BB-BB

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0005**

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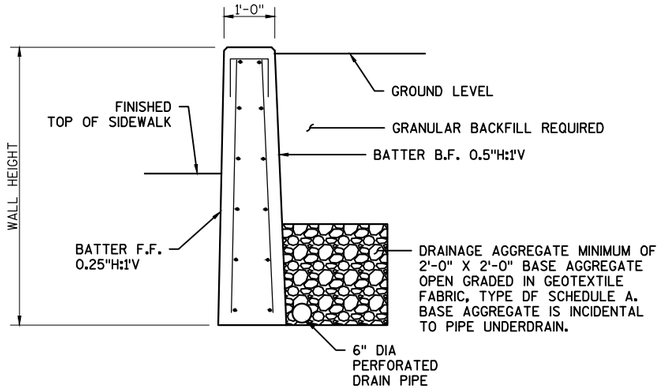
TYPICAL SECTIONS

SHEET 6 OF 21

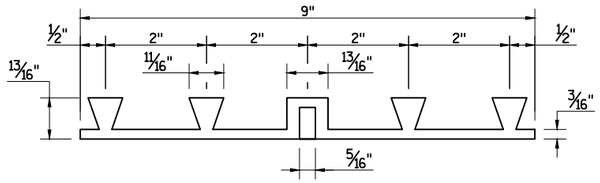
STATE PROJECT NUMBER

5944-03-84



TYPICAL C.I.P. CONCRETE WALL CROSS SECTION

(STA 301+20.64'C' TO STA 301+26.89'C')

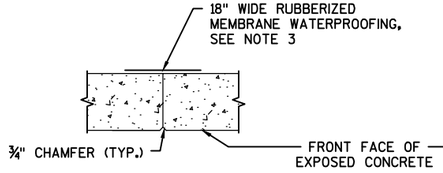


P.C.W. "TYPE B" DETAIL

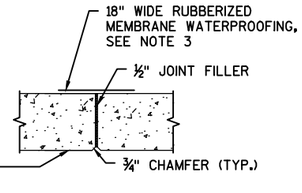
(POLYVINYL CHLORIDE WATERSTOP)

(INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY RETAINING WALLS")

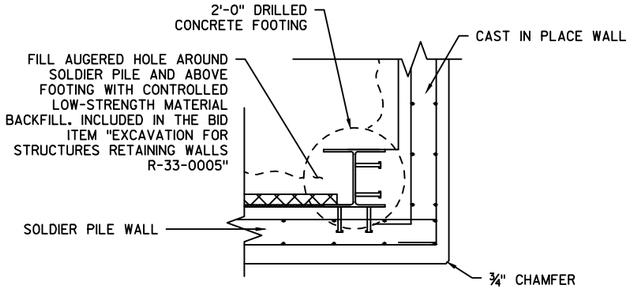
P.C.W. SHALL BE BUTT SPLICED AT ALL INTERSECTION BY USING A HEATED SPLICING IRON. HOLD P.C.W. FLUSH WITH CONCRETE. SEAL ALL VERTICAL ENDS OF P.C.W. WITH NON-STAINING BITUMINOUS JOINT SEALER.



C.I.P. WALL CONTRACTION JOINT DETAIL

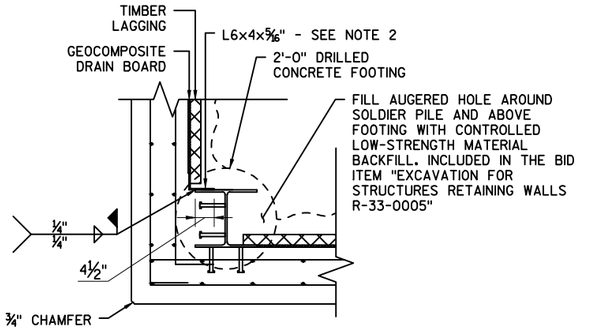


C.I.P. WALL EXPANSION JOINT DETAIL



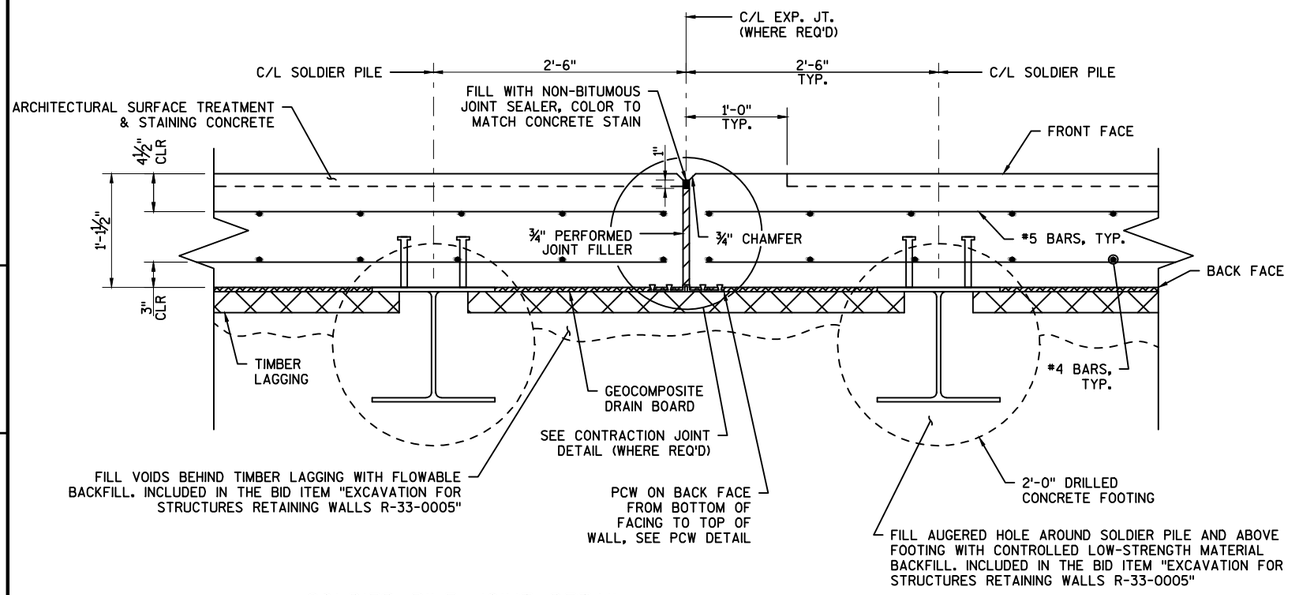
CORNER PILE DETAIL

STA. 301+20.64'C'



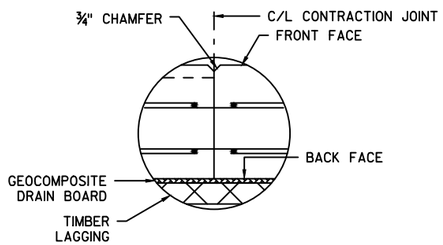
CORNER PILE DETAIL

STA. 300+87.04'C', STA. 300+93.04'C', STA. 300+31.84'C', STA 300+37.84'C',
STA. 301+87.05'C', STA. 301+93.05'C', STA. 302+54.59'C', & STA. 302+84.33'C'



SOLDIER PILE JOINT DETAIL

(SEE PILE INFORMATION SHEETS FOR LOCATION OF CONTRACTION & EXPANSION JOINTS)



CONTRACTION JOINT DETAIL

NOTES

PAINT PILE & ANGLED STEEL FROM TOP OF PILE TO 1'-0" BELOW TOP OF FOOTING WITH A PRIME COAT OF ORGANIC ZINC-RICH PAINT. PREPARE THE SURFACE AND APPLY THE PAINT AS SPECIFIED IN SECTION 517 OF THE STANDARD SPECIFICATIONS. PAINTING OF PILE IS INCIDENTAL TO THE BID ITEM "STRUCTURAL STEEL HS."

ANGLED STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M270M/ M270 GRADE 36. WHERE REQUIRED, THE ANGLED STEEL SPANS FROM THE TOP OF THE PILE TO THE BOTTOM OF THE WALL. ANGLED STEEL IS INCIDENTAL IN THE BID ITEM "STRUCTURAL STEEL HS."

RUBBERIZED MEMBRANE WATERPROOFING RUNS FROM GROUND LEVEL DOWN TO BOTTOM OF WALL, COST INCIDENTAL TO "CONCRETE MASONRY RETAINING WALLS."

LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT
C.I.P. = CAST IN PLACE

NO.	DATE	REVISION	BY

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0005**

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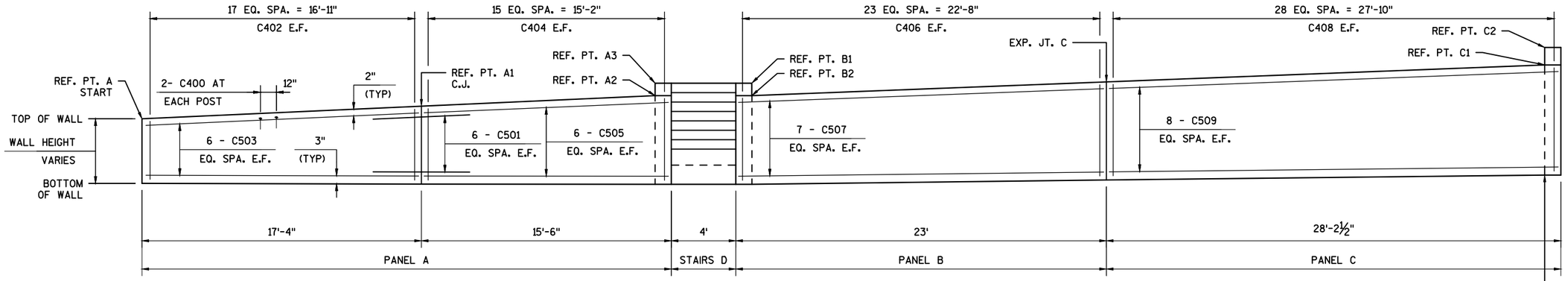
TYPICAL SECTIONS

SHEET 7 OF 21

8

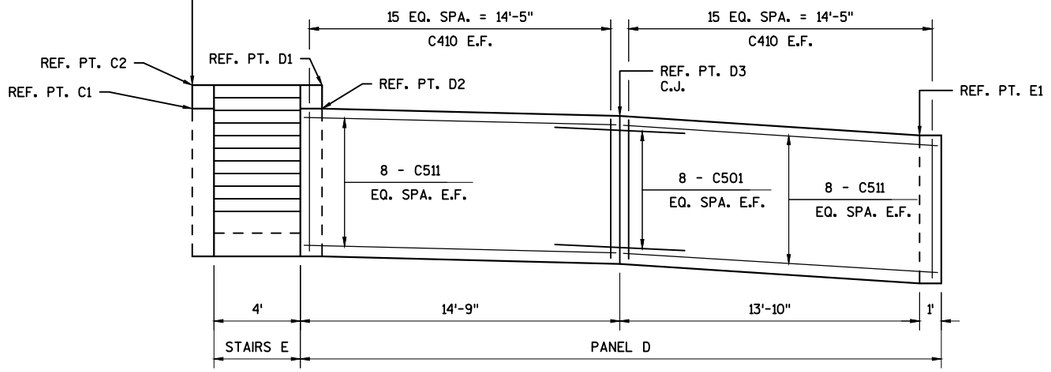
STATE PROJECT NUMBER

5944-03-84

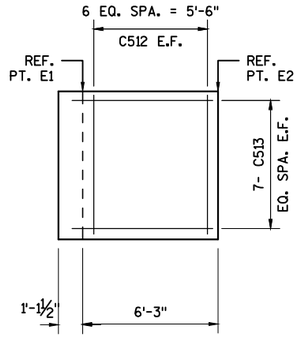


PARTIAL WALL FACING ELEVATION
(PANELS A TO C)

MATCHLINE STA 300+87.04'C'



PARTIAL WALL FACING ELEVATION
(PANEL D)



PARTIAL WALL FACING ELEVATION
(C.I.P. WALL *1)

LEGEND
E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT
C.I.P. = CAST IN PLACE

NO.	DATE	REVISION	BY

KNIGHT
Engineers & Architects
700 N Third Street
Suite 104
La Crosse, WI 54601
Phone: (608) 519-1455

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0005**

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REINFORCEMENT LAYOUT

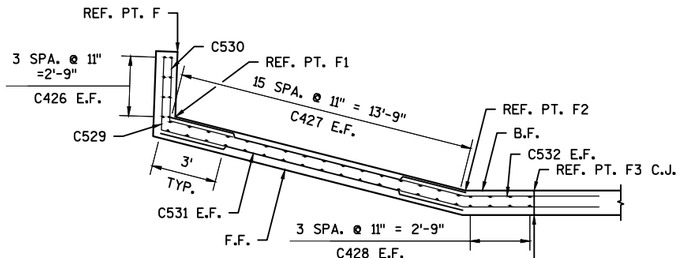
SHEET 8 OF 21

8

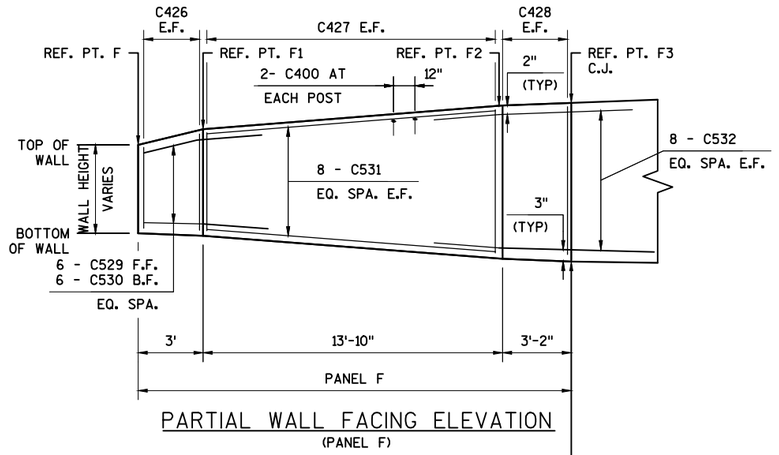
8

STATE PROJECT NUMBER

5944-03-84

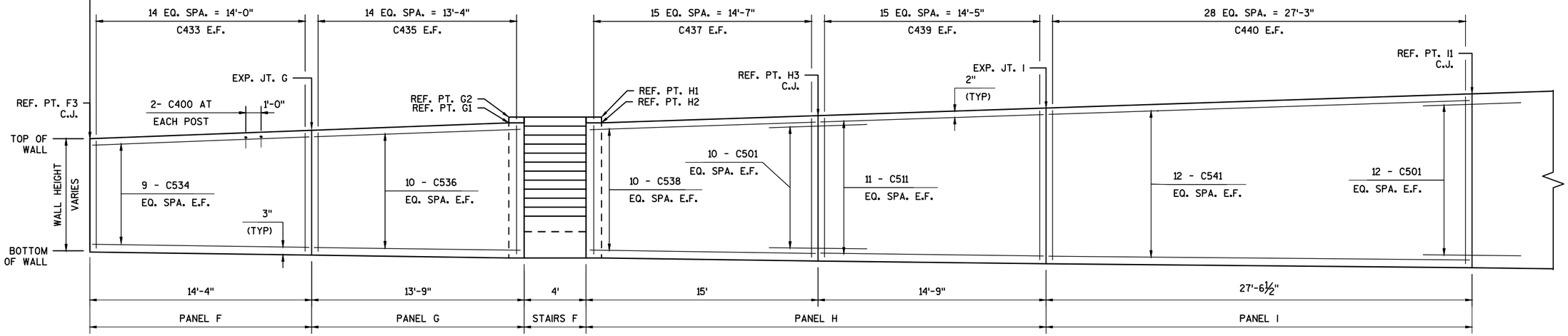


PARTIAL WALL FACING PLAN
(PANEL F)



PARTIAL WALL FACING ELEVATION
(PANEL F)

MATCHLINE STA 301+56.79'C'



PARTIAL WALL FACING ELEVATION
(PANELS F THROUGH I)

LEGEND
E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT

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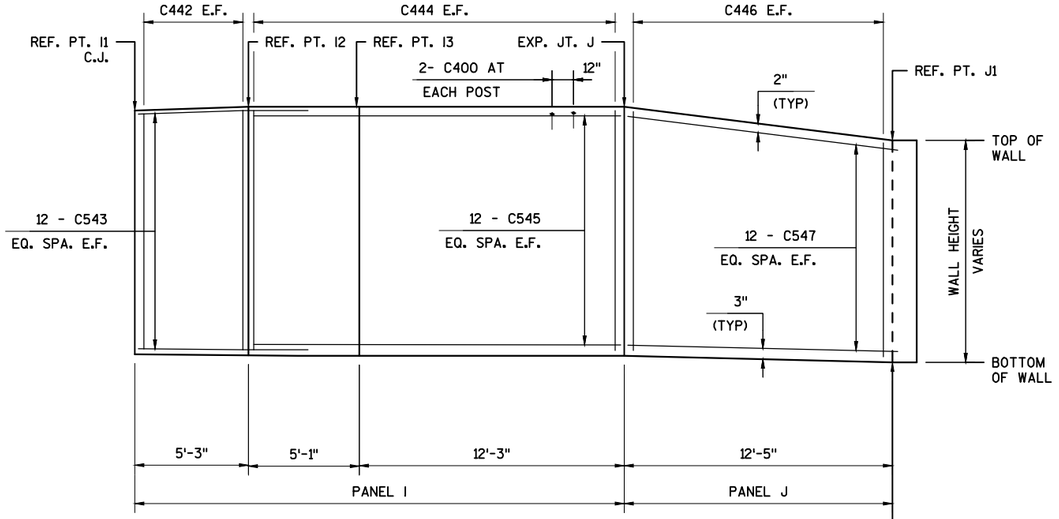
REINFORCEMENT LAYOUT

SHEET 9 OF 21

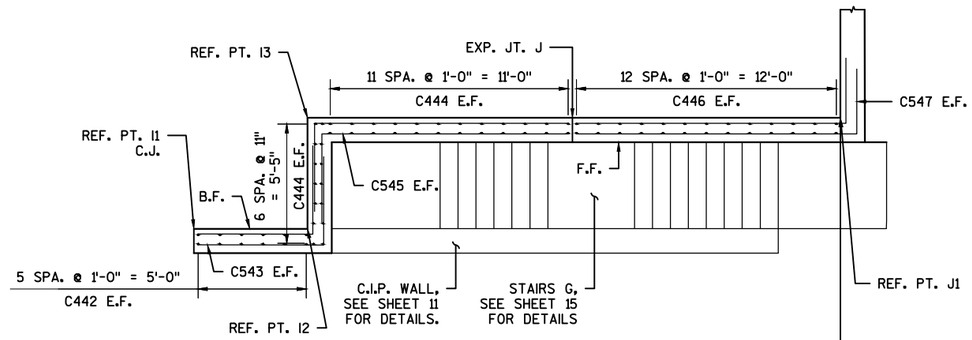
STATE PROJECT NUMBER

5944-03-84



PARTIAL WALL FACING ELEVATION

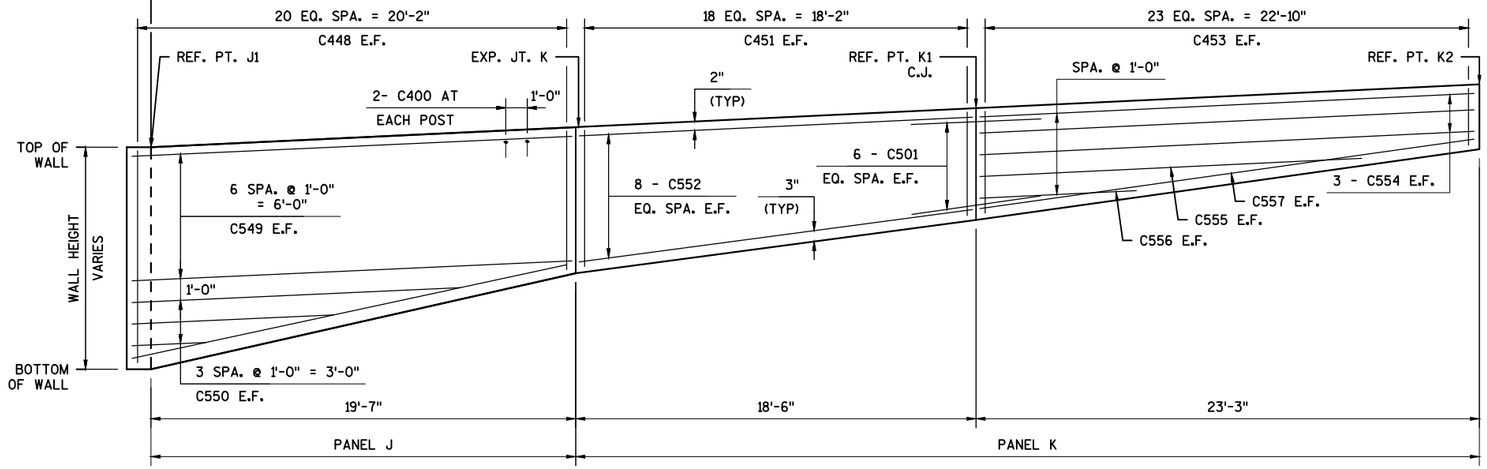
(PANELS I & J)



PARTIAL WALL FACING PLAN

(PANELS I & J)

MATCHLINE STA 302+84.34'C'



PARTIAL WALL FACING ELEVATION

(PANELS J & K)

LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT
C.I.P. = CAST IN PLACE

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REINFORCEMENT LAYOUT

SHEET 10 OF 21

STATE PROJECT NUMBER

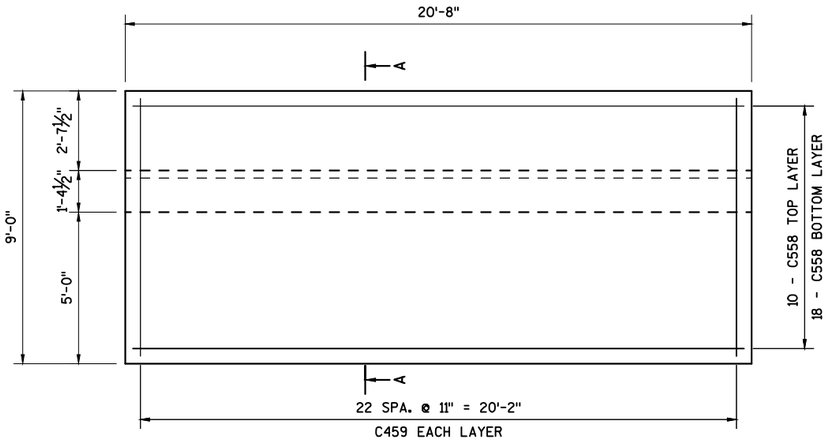
5944-03-84

NOTES

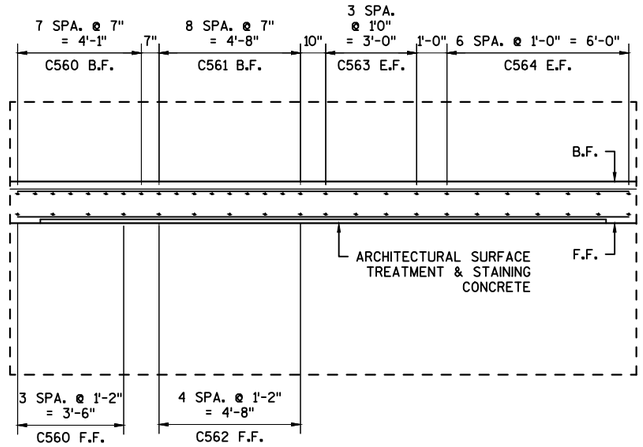
EXCAVATION FOR C.I.P. WALL #2 IS TO BE PAID AS "COMMON EXCAVATION," ROADWAY ITEM.

LEGEND

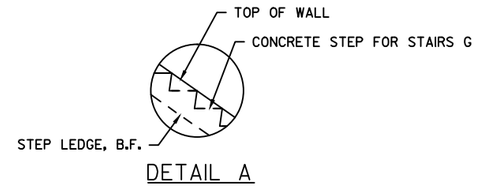
E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.I.P = CAST IN PLACE



FOOTING PLAN

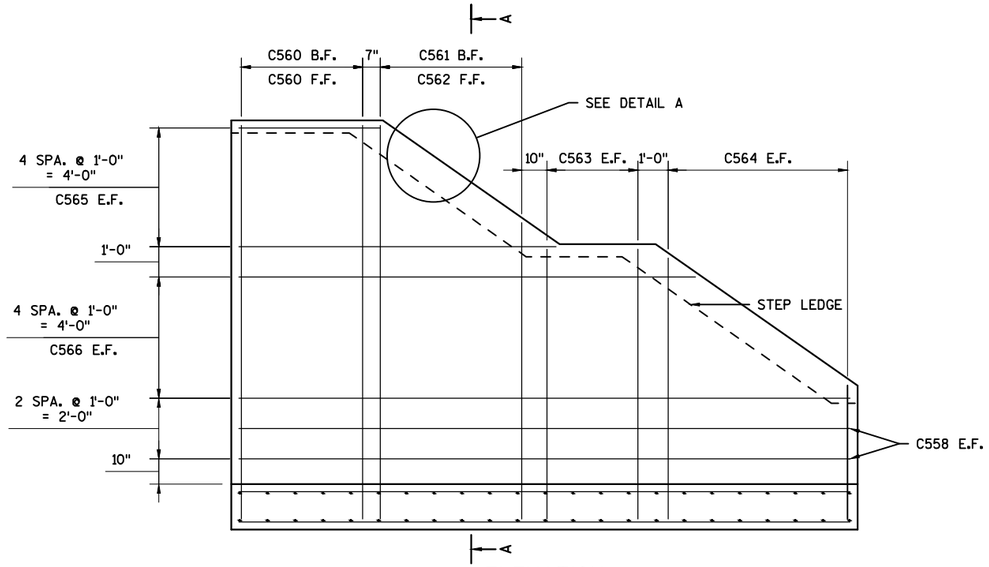


STEM PLAN



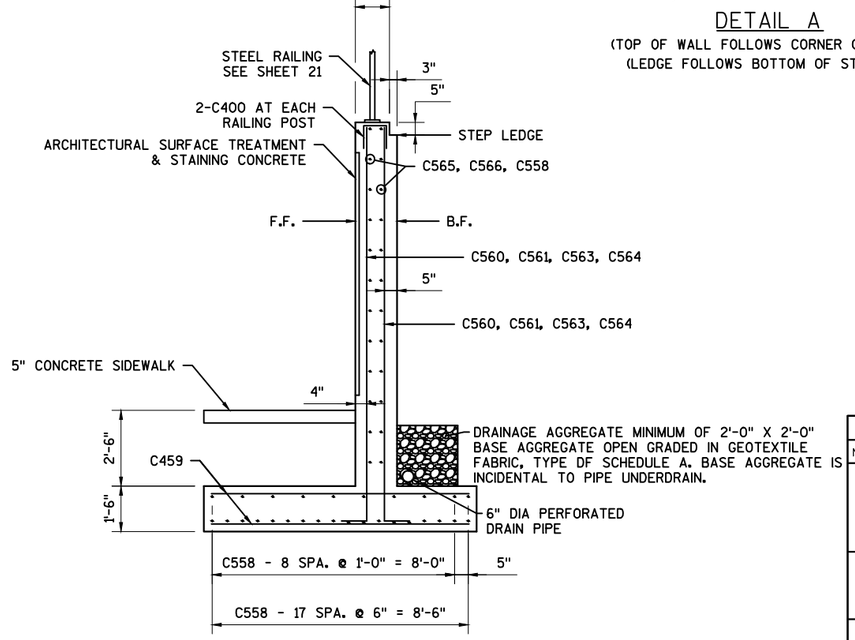
DETAIL A

(TOP OF WALL FOLLOWS CORNER OF STEPS)
(LEDGE FOLLOWS BOTTOM OF STAIRS G)



ELEVATION

(VIEW FROM FRONT OF WALL
SEE STAIR G DETAILS, SHEET 15 FOR ADDITIONAL DETAILS)



TYPICAL CROSS SECTION A-A

(C.I.P. WALL #2 WITH FOOTING)

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0005**

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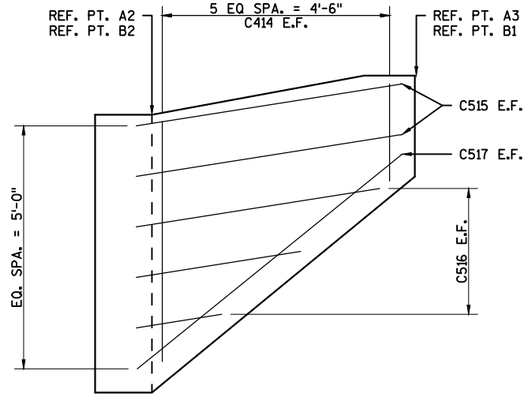
REINFORCEMENT LAYOUT

SHEET 11 OF 21

STATE PROJECT NUMBER

5944-03-84



SHEAR WALL BAR LAYOUT
(STAIRS D)

NOTES

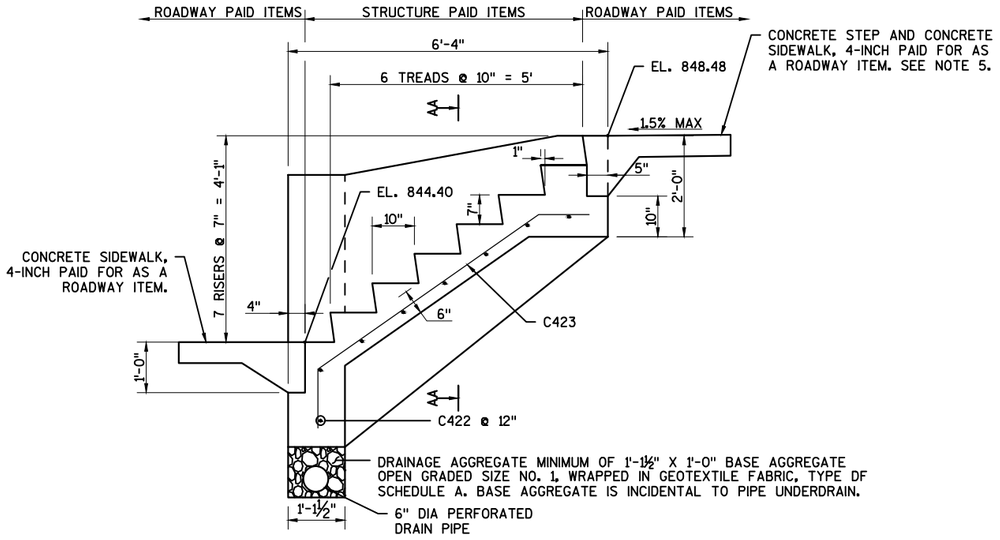
PLACE 2-FT STRUCTURAL BACKFILL BELOW BOTTOM OF STEPS.

CONCRETE STEP IS MEASURED FROM THE FRONT FACE OF THE TOP RISER TO 1-FT BACK FROM FRONT FACE OF THE TOP RISER. CONCRETE BEYOND THAT MARK IS PAID AS "CONCRETE SIDEWALK 4-INCH."

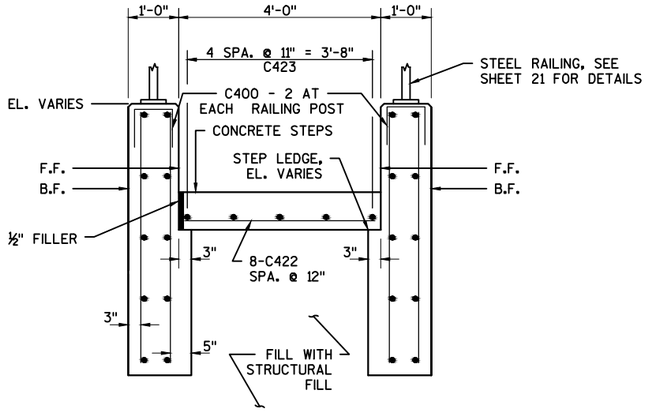
CONCRETE FOR STAIRS SHALL BE INCLUDED IN THE QUANTITY FOR "CONCRETE MASONRY, RETAINING WALL."

LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE



STAIRS D CROSS SECTION
(STA 300+34.84'C')



SECTION AA-AA

NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0005**

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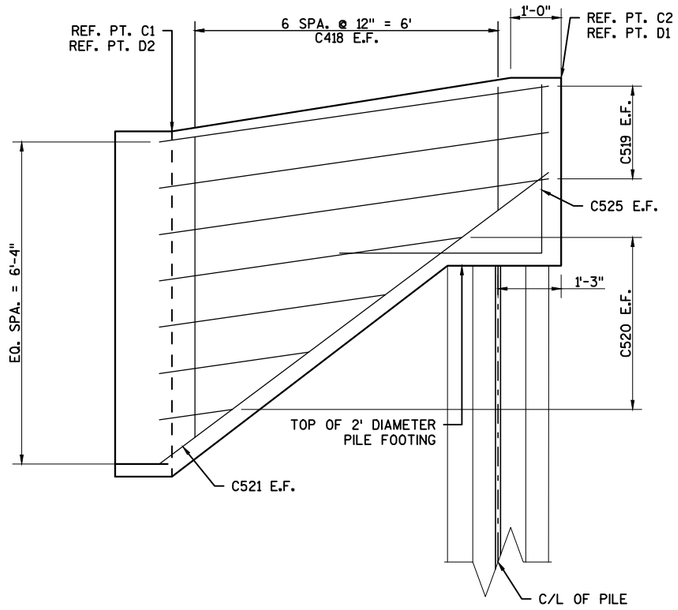
STAIRS D DETAILS

SHEET 12 OF 21

STATE PROJECT NUMBER
5944-03-84



NOTES

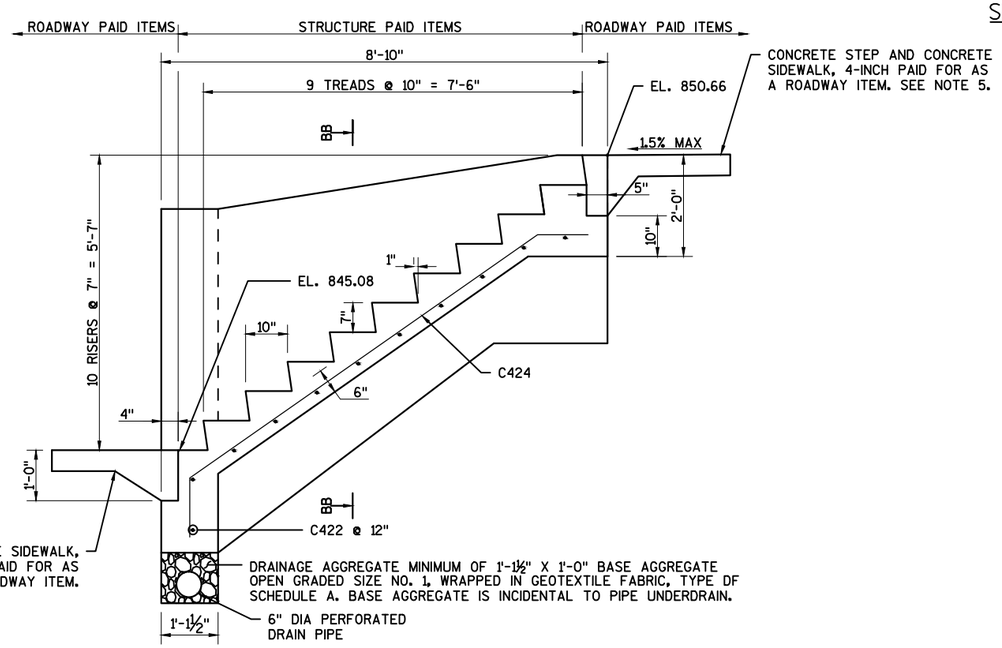
PLACE 2-FT STRUCTURAL BACKFILL BELOW BOTTOM OF STEPS.

CONCRETE STEP IS MEASURED FROM THE FRONT FACE OF THE TOP RISER TO 1-FT BACK FROM FRONT FACE OF THE TOP RISER. CONCRETE BEYOND THAT MARK IS PAID AS "CONCRETE SIDEWALK 4-INCH."

CONCRETE FOR STAIRS SHALL BE INCLUDED IN THE QUANTITY FOR "CONCRETE MASONRY, RETAINING WALL."

LEGEND

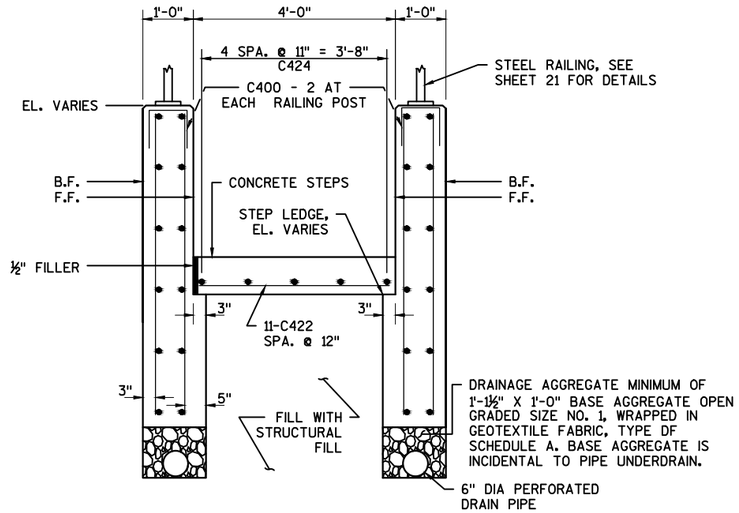
E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE



STAIRS E CROSS SECTION
(STA 300+90.04'C')

SHEAR WALL BAR LAYOUT

(STAIRS E)



SECTION BB-BB

NO.	DATE	REVISION	BY

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La Crosse, WI 54601
Engineers & Architects Phone: (608) 519-1455

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0005**

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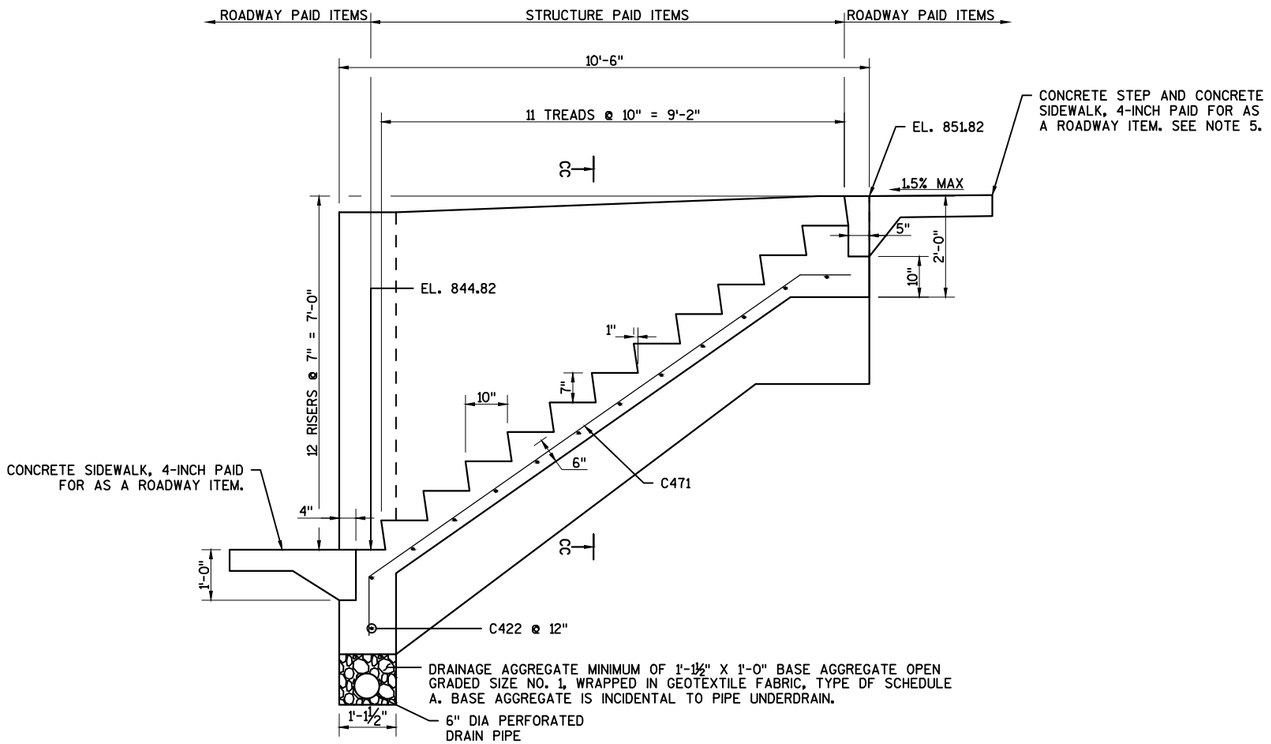
STAIRS E DETAILS

SHEET 13 OF 21

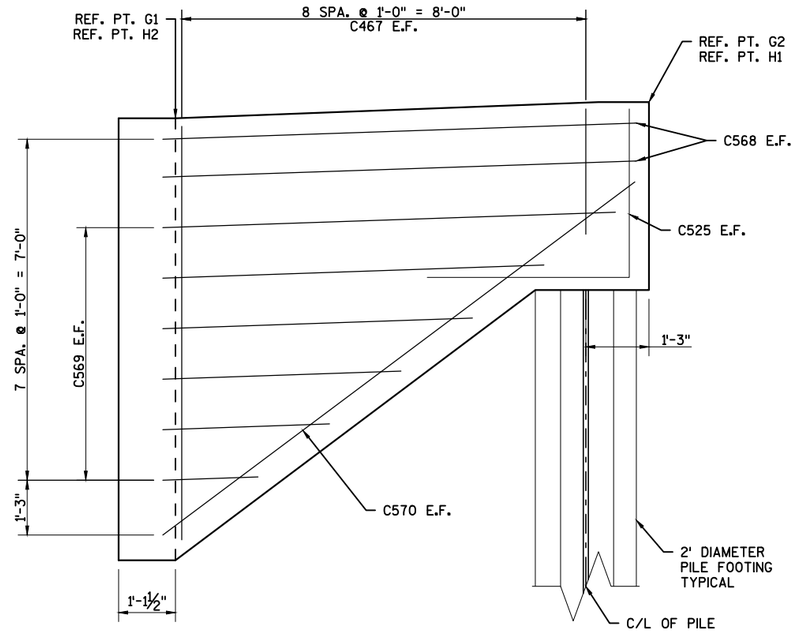
STATE PROJECT NUMBER

5944-03-84



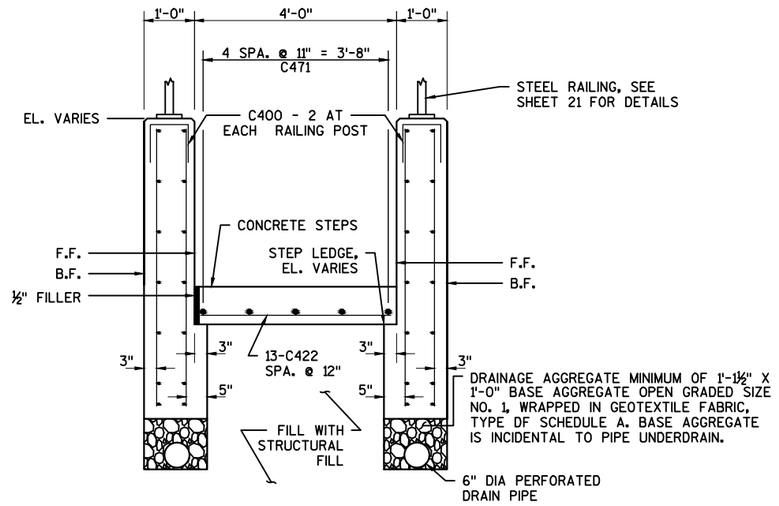
STAIRS F CROSS SECTION

(STA 301+90.05'C')



SHEAR WALL BAR LAYOUT

(STAIRS F)



SECTION CC-CC

NOTES

PLACE 2-FT STRUCTURAL BACKFILL BELOW BOTTOM OF STEPS.

CONCRETE STEP IS MEASURED FROM THE FRONT FACE OF THE TOP RISER TO 1-FT BACK FROM FRONT FACE OF THE TOP RISER. CONCRETE BEYOND THAT MARK IS PAID AS "CONCRETE SIDEWALK 4-INCH."

CONCRETE FOR STAIRS SHALL BE INCLUDED IN THE QUANTITY FOR "CONCRETE MASONRY, RETAINING WALL."

LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE

NO.	DATE	REVISION	BY

KNIGHT
700 N Third Street
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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0005**

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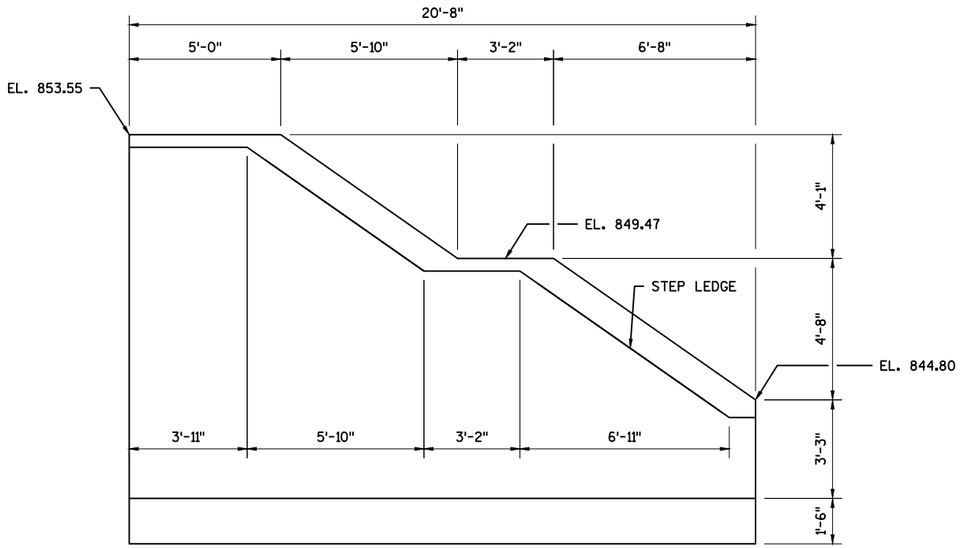
STAIRS F DETAILS

SHEET 14 OF 21

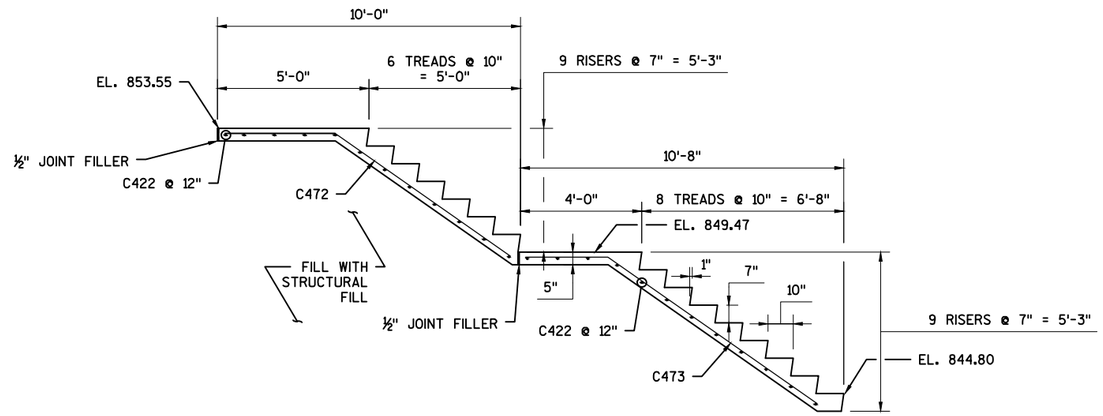
STATE PROJECT NUMBER

5944-03-84



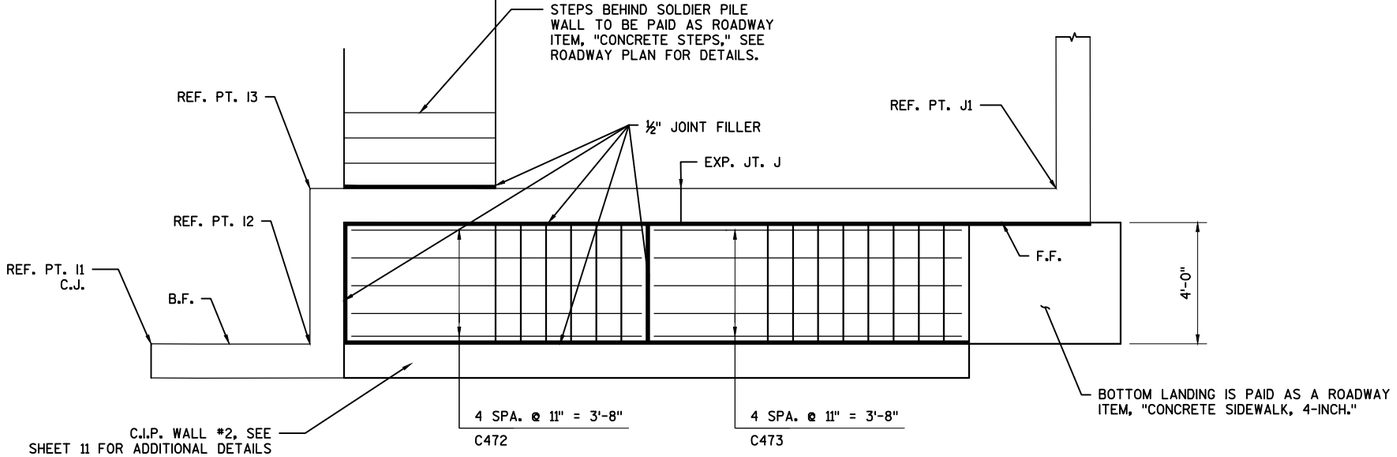
WALL ELEVATION

(C.I.P. WALL #2 WITH FOOTING)



STAIRS G BAR LAYOUT ELEVATION

(STA 302+72.82'C')



STAIRS BAR LAYOUT PLAN

(STAIRS G)

NOTES

PLACE STRUCTURAL BACKFILL FROM BOTTOM OF STEPS TO TOP OF FOOTING.

CONCRETE FOR STAIRS SHALL BE INCLUDED IN THE QUANTITY FOR "CONCRETE MASONRY, RETAINING WALL."

LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.I.P. = CAST IN PLACE

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STRUCTURE **R-33-0005**

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STAIRS G DETAILS

SHEET 15 OF 21

STATE PROJECT NUMBER

5944-03-84

BILL OF BARS

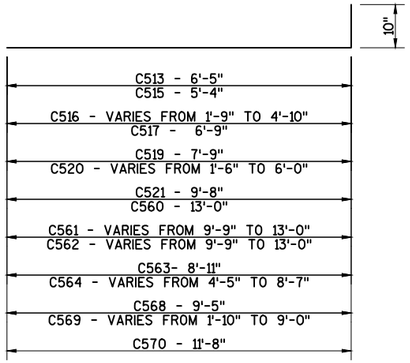
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
C400	X	130	2'-1"	X		TOP OF WALL NEAR FENCE POSTS
C501	X	84	6'-0"			CONTRACTION JOINTS
C402	X	36	4'-0"		▲	PANEL A VERTICAL
C503	X	12	16'-11"			PANEL A HORIZONTAL
C404	X	32	4'-9"		▲	PANEL A VERTICAL
C505	X	12	15'-2"			PANEL A HORIZONTAL
C406	X	48	5'-5"		▲	PANEL B VERTICAL
C507	X	14	22'-8"			PANEL B HORIZONTAL
C408	X	58	6'-1"		▲	PANEL C VERTICAL
C509	X	16	27'-10"			PANEL C HORIZONTAL
C410	X	64	6'-5"			PANEL D VERTICAL
C511	X	54	14'-5"			PANELS D & H HORIZONTAL
C512	X	14	6'-5"			C.I.P. #1 VERTICAL
C513	X	14	7'-3"	X		C.I.P. #1 HORIZONTAL
C414	X	24	3'-3"		▲	STAIRS D SHEAR WALL VERTICAL
C515	X	8	6'-1"	X		STAIRS D SHEAR WALL HORIZONTAL
C516	X	12	4'-1"	X	▲	STAIRS D SHEAR WALL HORIZONTAL
C517	X	4	7'-6"	X		STAIRS D SHEAR WALL HORIZONTAL
C418	X	28	4'-3"		▲	STAIRS E SHEAR WALL VERTICAL
C519	X	12	8'-6"	X		STAIRS E SHEAR WALL VERTICAL
C520	X	16	4'-6"	X	▲	STAIRS E SHEAR WALL VERTICAL
C521	X	4	10'-5"	X		STAIRS E SHEAR WALL VERTICAL
C422	X	56	3'-8"			STAIRS D, E, F, & G HORIZONTAL
C423	X	5	7'-6"	X		STAIRS D VERTICAL
C424	X	5	10'-7"	X		STAIRS E VERTICAL
C525	X	8	7'-3"	X		STAIRS E & F SHEAR WALL
C426	X	8	4'-1"		▲	PANEL F VERTICAL
C427	X	32	5'-7"		▲	PANEL F VERTICAL
C428	X	8	6'-9"		▲	PANEL F VERTICAL
C529	X	6	6'-4"	X		PANEL F HORIZONTAL
C530	X	6	6'-0"	X		PANEL F HORIZONTAL
C531	X	16	13'-4"			PANEL F HORIZONTAL
C532	X	16	9'-3"	X		PANEL F HORIZONTAL
C433	X	30	7'-4"		▲	PANEL F VERTICAL
C534	X	18	14'-0"			PANEL F HORIZONTAL
C435	X	30	8'-0"		▲	PANEL G VERTICAL
C536	X	20	13'-4"			PANEL G HORIZONTAL
C437	X	32	8'-8"		▲	PANEL H VERTICAL
C538	X	20	14'-7"			PANEL H HORIZONTAL
C439	X	32	9'-4"		▲	PANEL H VERTICAL
C440	X	58	10'-3"		▲	PANEL I VERTICAL
C541	X	24	27'-3"			PANEL I HORIZONTAL
C442	X	12	10'-11"		▲	PANEL I VERTICAL
C543	X	24	9'-6"	X		PANEL I HORIZONTAL
C444	X	38	11'-1"			PANEL I VERTICAL
C545	X	24	13'-7"	X		PANEL I HORIZONTAL
C446	X	26	10'-6"		▲	PANEL J VERTICAL
C547	X	24	15'-8"	X		PANEL J HORIZONTAL
C448	X	42	8'-1"		▲	PANEL J VERTICAL
C549	X	14	20'-4"			PANEL J HORIZONTAL
C550	X	8	9'-4"		▲	PANEL J HORIZONTAL
C451	X	38	5'-7"		▲	PANEL K VERTICAL
C552	X	16	18'-3"			PANEL K HORIZONTAL
C453	X	48	3'-9"		▲	PANEL K VERTICAL
C554	X	6	22'-10"			PANEL K HORIZONTAL
C555	X	2	17'-8"			PANEL K HORIZONTAL
C556	X	2	7'-3"			PANEL K HORIZONTAL
C557	X	2	23'-1"			PANEL K HORIZONTAL
C558	X	28	20'-2"			C.I.P. #2 HORIZONTAL FOOTING
C459	X	46	8'-6"			C.I.P. #2 TRANSVERSE FOOTING
C560	X	12	13'-9"	X		C.I.P. #2 STEM VERTICAL
C561	X	9	12'-2"	X	▲	C.I.P. #2 STEM VERTICAL
C562	X	5	12'-2"	X	▲	C.I.P. #2 STEM VERTICAL
C563	X	8	9'-8"	X		C.I.P. #2 STEM VERTICAL
C564	X	14	7'-3"	X	▲	C.I.P. #2 STEM VERTICAL
C565	X	10	7'-7"		▲	C.I.P. #2 STEM HORIZONTAL
C566	X	10	17'-8"		▲	C.I.P. #2 STEM HORIZONTAL
C467	X	36	5'-4"		▲	STAIRS F SHEAR WALL VERTICAL
C568	X	8	10'-2"	X		STAIRS F SHEAR WALL HORIZONTAL
C569	X	24	6'-2"	X	▲	STAIRS F SHEAR WALL HORIZONTAL
C570	X	4	12'-5"	X		STAIRS F SHEAR WALL HORIZONTAL
C471	X	5	12'-7"	X		STAIRS F VERTICAL
C472	X	5	10'-9"	X		STAIRS G VERTICAL
C473	X	5	11'-2"	X		STAIRS G VERTICAL

SERIES OF BARS

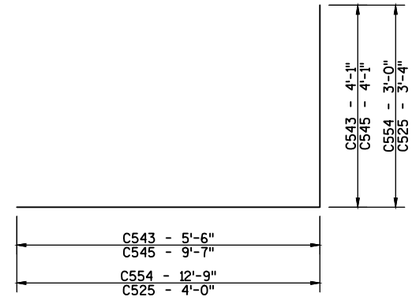
BAR MARK	NO. REQ'D	LENGTH
C402	2 SERIES OF 18	3'-7" TO 4'-5"
C404	2 SERIES OF 16	4'-5" TO 5'-1"
C406	2 SERIES OF 24	5'-1" TO 5'-8"
C408	2 SERIES OF 29	5'-8" TO 6'-5"
C414	4 SERIES OF 6	1'-9" TO 4'-9"
C516	4 SERIES OF 3	2'-6" TO 5'-7"
C418	4 SERIES OF 7	2'-6" TO 6'-0"
C520	4 SERIES OF 4	2'-3" TO 6'-9"
C426	2 SERIES OF 4	3'-9" TO 4'-5"
C427	2 SERIES OF 16	4'-6" TO 6'-8"
C428	2 SERIES OF 4	6'-8" TO 6'-10"
C433	2 SERIES OF 15	6'-11" TO 7'-8"
C435	2 SERIES OF 15	7'-8" TO 8'-4"
C437	2 SERIES OF 16	8'-4" TO 9'-0"
C439	2 SERIES OF 16	9'-0" TO 9'-8"
C440	2 SERIES OF 29	9'-8" TO 10'-10"
C442	2 SERIES OF 6	10'-10" TO 11'-1"
C446	2 SERIES OF 13	9'-11" TO 11'-1"
C448	2 SERIES OF 21	6'-5" TO 9'-9"
C550	2 SERIES OF 3	3'-5" TO 15'-2"
C451	2 SERIES OF 19	4'-9" TO 6'-4"
C453	2 SERIES OF 24	2'-8" TO 4'-9"
C561	2 SERIES OF 9	10'-6" TO 13'-9"
C562	2 SERIES OF 5	10'-6" TO 13'-9"
C564	2 SERIES OF 7	5'-2" TO 9'-4"
C565	2 SERIES OF 5	4'-8" TO 10'-5"
C566	2 SERIES OF 5	15'-1" TO 20'-2"
C467	4 SERIES OF 9	2'-6" TO 8'-2"
C569	4 SERIES OF 6	2'-7" TO 9'-9"

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

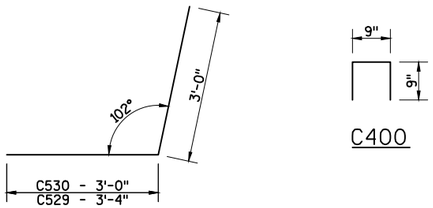
NOTE: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE. DIMENSIONS FOR BENDING ARE OUT TO OUT OF BAR.



C513, C515, C516, C517, C519, C520, C521, C560, C561, C562, C563, C564, C568, C569, & C570

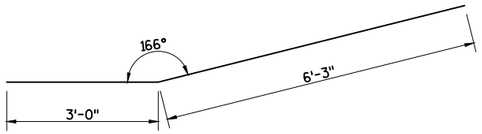


C525, C543, C545, & C547

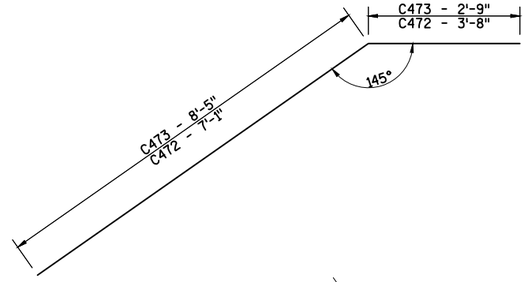


C529 & C530

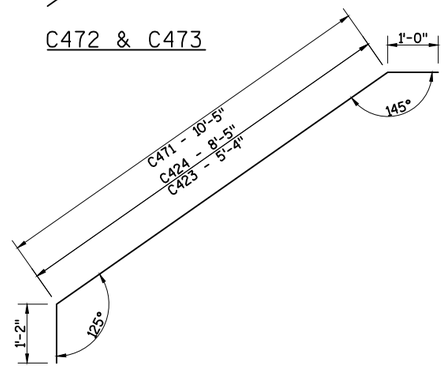
C400



C532



C472 & C473



C423, C424, & C471

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0005**

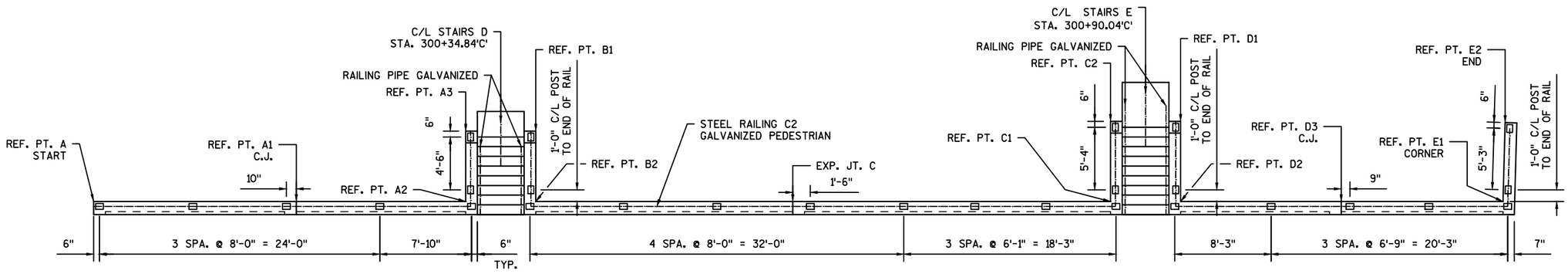
DRAWN BY AFD | PLANS CK'D. JDG

REINFORCEMENT SCHEDULE

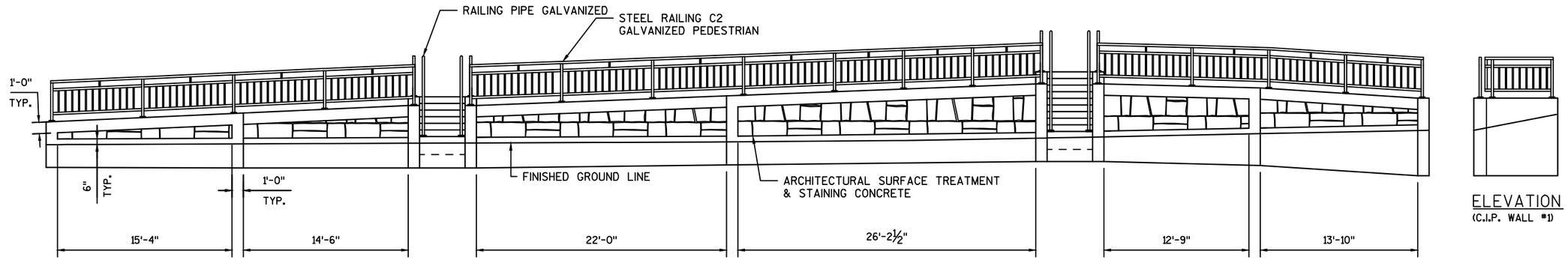
SHEET 16 OF 21

STATE PROJECT NUMBER

5944-03-84



STEEL RAILING PLAN



ELEVATION

ELEVATION
(C.I.P. WALL #1)

NOTES:

ALL POST SPACES ARE TAKEN HORIZONTALLY ALONG C/L RAILING.

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STRUCTURE **R-33-0005**

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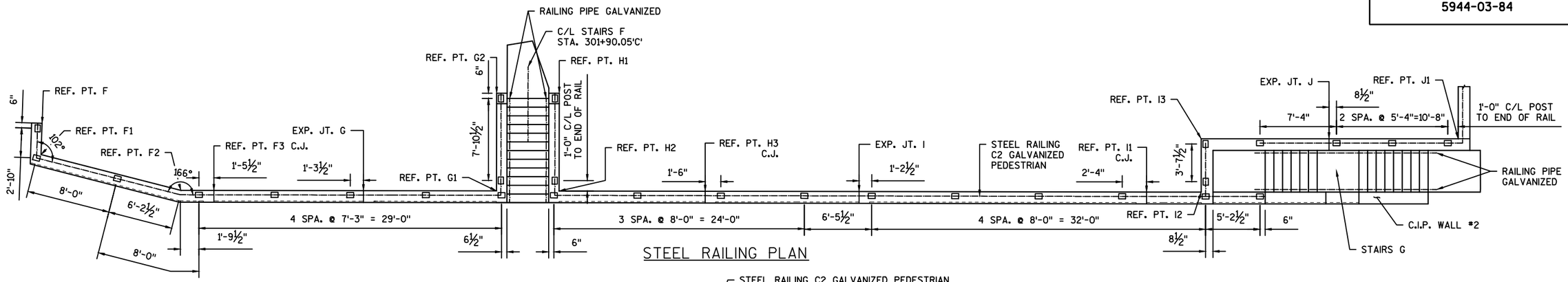
RAILING AND ARCHITECTURAL DETAILS

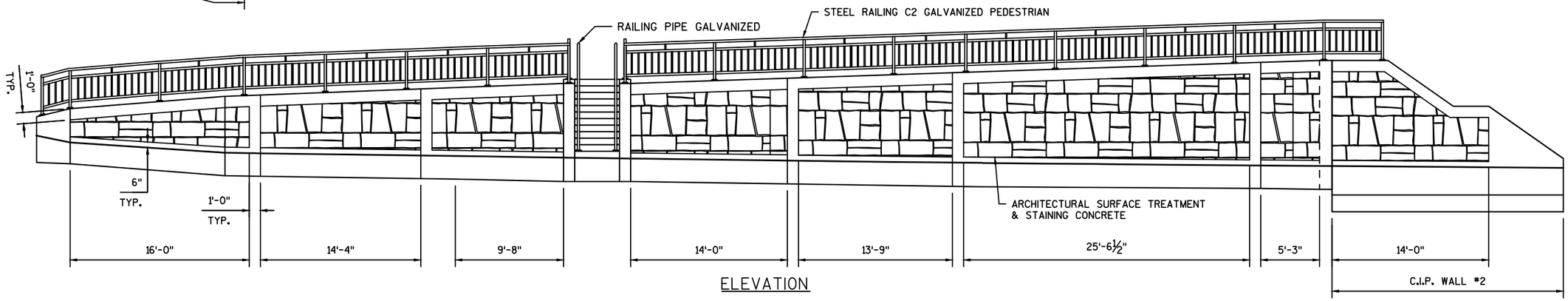
SHEET 17 OF 21

STATE PROJECT NUMBER

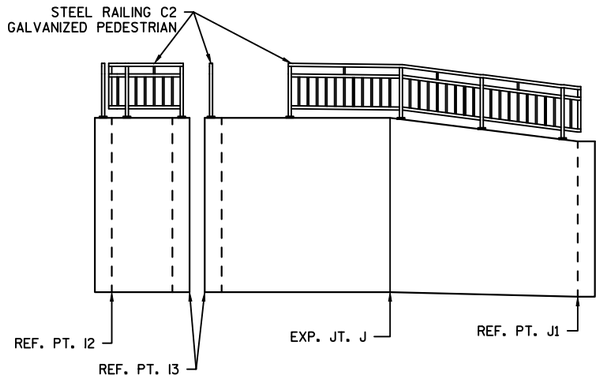
5944-03-84



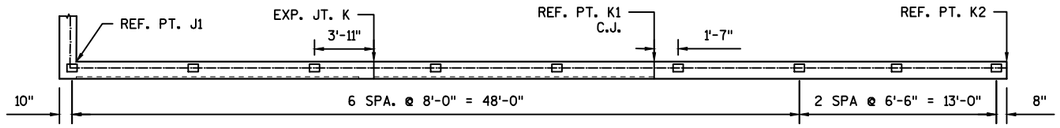
STEEL RAILING PLAN



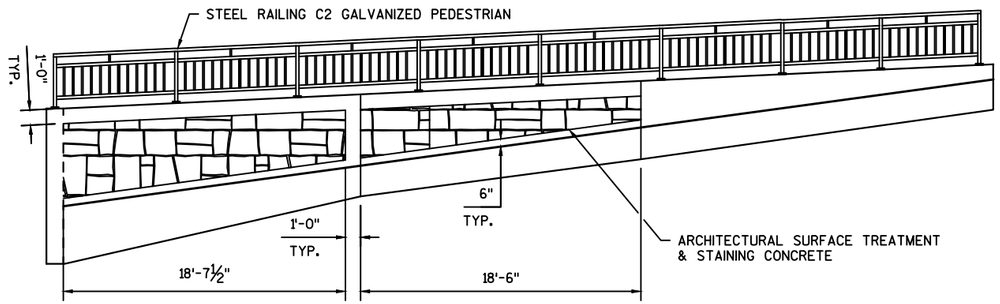
ELEVATION



ELEVATION



STEEL RAILING PLAN



ELEVATION

NOTES:

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STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0005**

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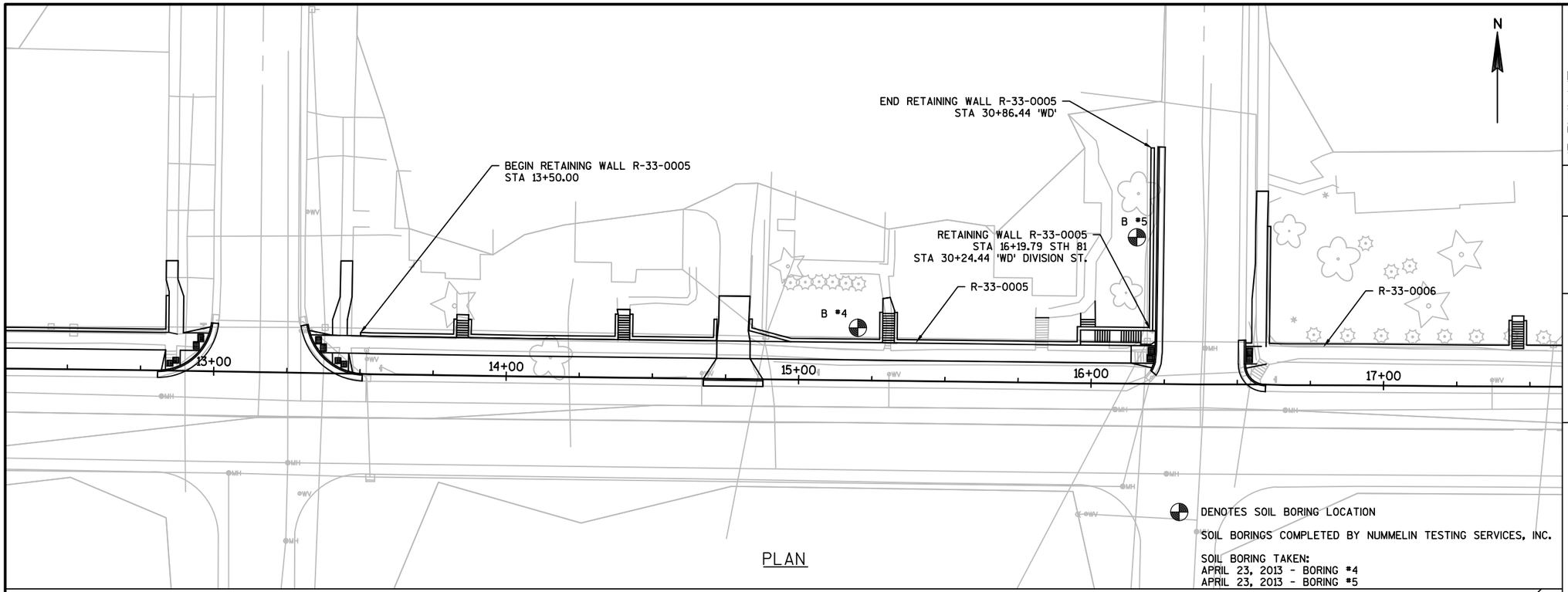
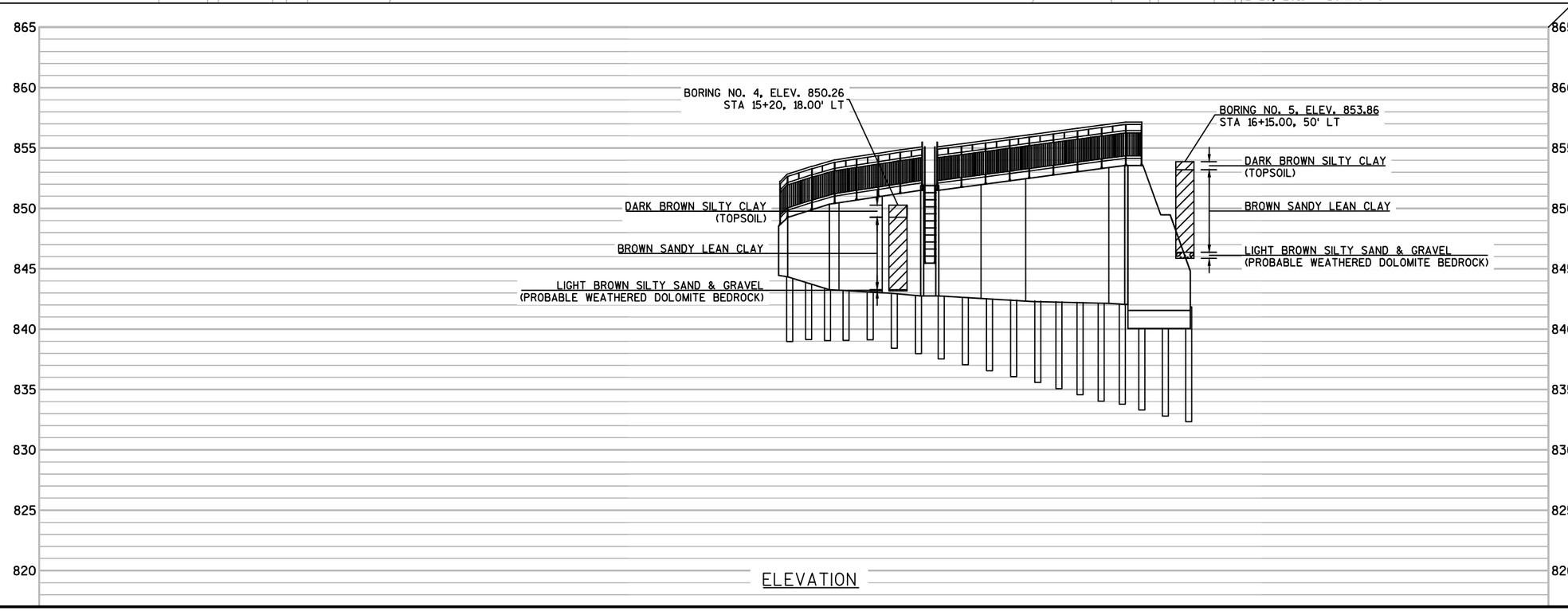
RAILING AND ARCHITECTURAL DETAILS

SHEET 18 OF 21



PLAN



ELEVATION

STATE PROJECT NUMBER

5944-03-84

NOTE:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITION SUBSURFACE INFORMATION.

BORING STATIONS AND OFFSETS ARE BASED ON STH 81 TOP OF CURB R.

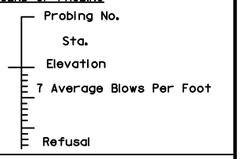
ABBREVIATIONS

F— Fine M—Medium C— Coarse
Ws— Weathered So— Sound

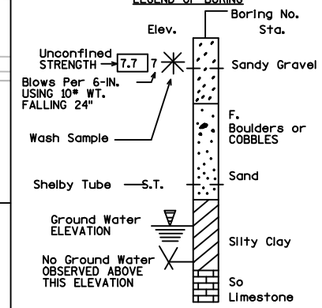
MATERIAL SYMBOLS

TOPSOIL/ FILL, Sand, Gravel, Silt, Peat, Clay, Sandstone, Limestone, Igneous Rock

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER 6-INCH AT THE LOCATIONS INDICATED ARE BASED ON DCP TESTING. THE DCP TESTS WERE PREFORMED USING A SOLID METAL ROD FITTED WITH A 1-3/8-INCH DIAMETER CONICAL POINT. THE POINT IS DRIVEN INTO THE SOIL WITH A 10-POUND WEIGHT FALLING 24-INCHES. THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE.

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.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0005**

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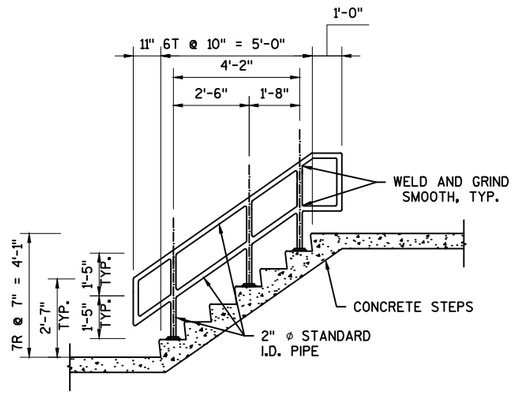
SUBSURFACE EXPLORATION

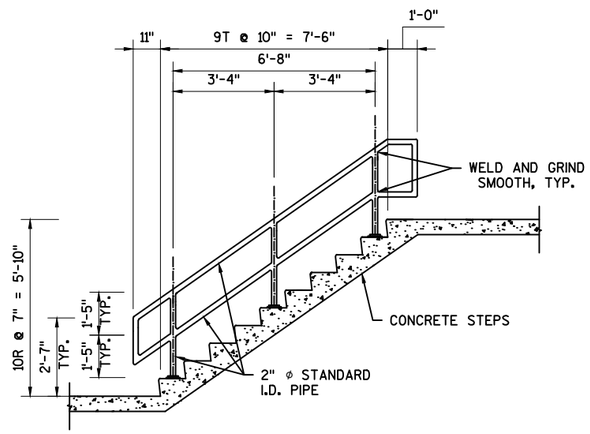
SHEET 19 OF 21

STATE PROJECT NUMBER

5944-03-84



STAIRS D AT STA 300+34.84'C'



STAIRS E AT STA 300+90.04'E'

NOTES

BID ITEM SHALL BE 'RAILING PIPE GALVANIZED' WHICH INCLUDES ALL ITEMS SHOWN AND PAINTING.

RAILING TO BE PLACED ON BOTH SIDES OF STEPS.

ALL SPACING ARE TAKEN HORIZONTALLY ALONG CENTER LINE OF RAILING.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

RAILS AND POSTS TO BE ASTM A500, GRADE B. ALL GALVANIZED AFTER FABRICATION.

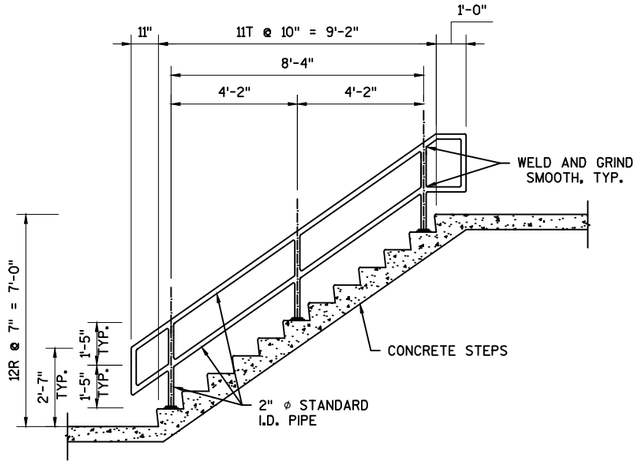
ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE A #6 BLAST CLEANING BY SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE SPECIAL PROVISIONS. THE FINISH COLOR SHALL BE BLACK, FED-STD. COLOR NO. 27038.

RAILING SHALL BE FABRICATED IN LENGTHS AS SHOWN.

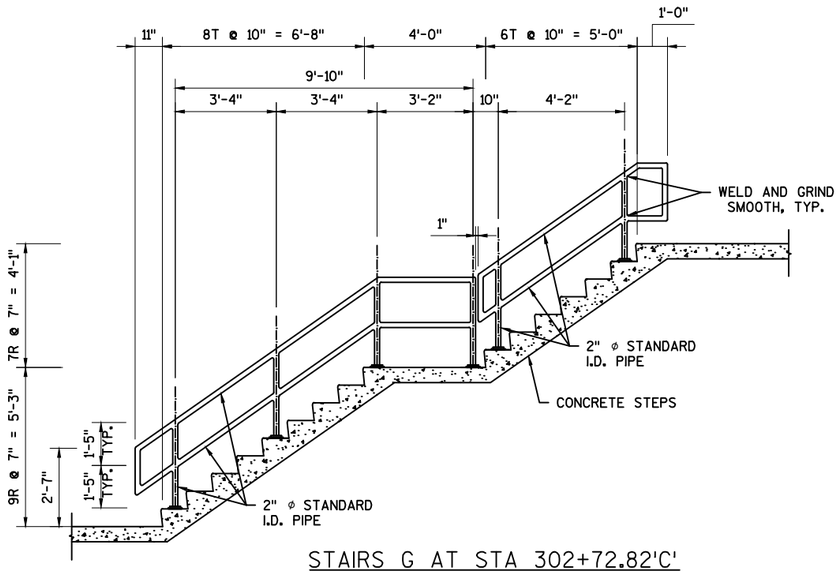
TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.

ALL POSTS AND RAILS SHALL BE WELDED TOGETHER WITH MIN. 3/16" FILLET WELDS ALL AROUND AND GROUND SMOOTH.

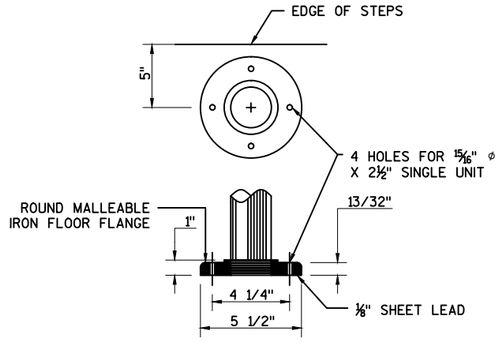
REFER TO R-33-0005 STRUCTURE DRAWINGS FOR CONCRETE STEP DETAILS.



STAIRS F AT STA 301+90.05'C'



STAIRS G AT STA 302+72.82'C'



FLANGE DETAIL

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0005**

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RAILING PIPE GALVANIZED DETAILS

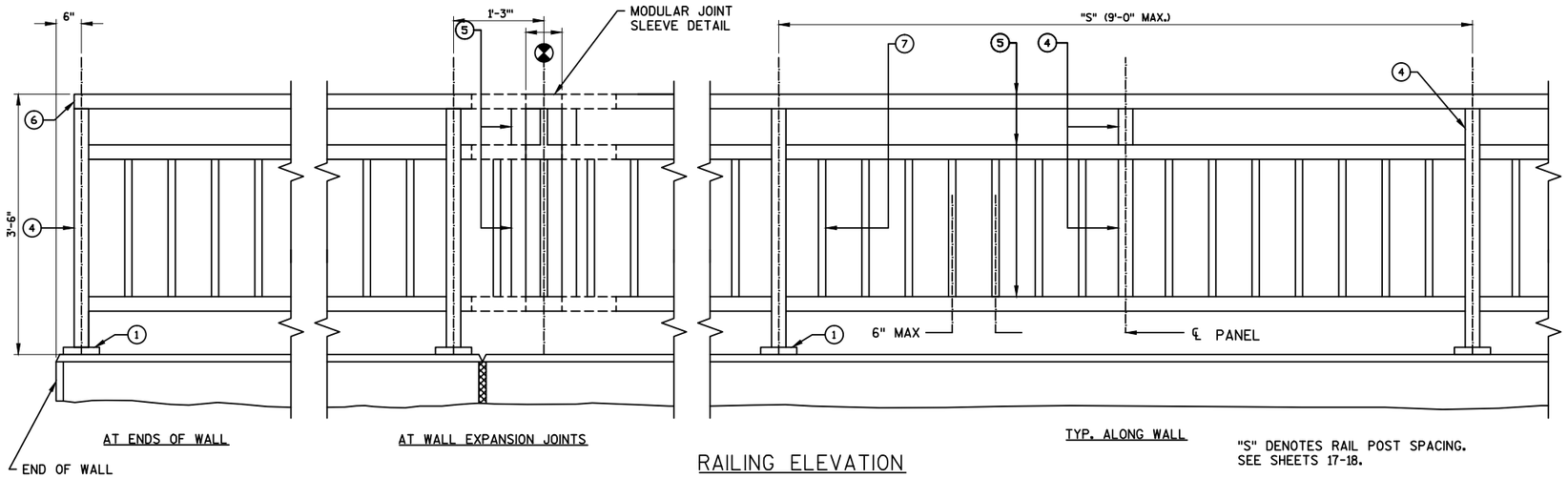
SHEET 20 OF 21

8

8

STATE PROJECT NUMBER

5944-03-84



RAILING ELEVATION

"S" DENOTES RAIL POST SPACING. SEE SHEETS 17-18.

⊗ RAILING OPENING TO BE 6" AT 45°F. MOVEMENT ADJUSTMENT SHALL BE MADE AT A RATE OF 1" PER 20°F.

NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE C2 GALVANIZED PEDESTRIAN R-33-0005", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN AND PAINTING

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 CUTS.

NO. 1, 2, 6, 9, AND NO. 10 SHALL CONFORM TO A.S.T.M. A709 GRADE 36. STRUCTURAL TUBING SHALL CONFORM TO A.S.T.M. A500 GRADE B (NO. 4,5,7,8).

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT.

FILL BOLT SLOT OPENINGS IN SHIMS AND PLATE NO. 1 AND CAULK AROUND PERIMETER OF PLATE NO. 1 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

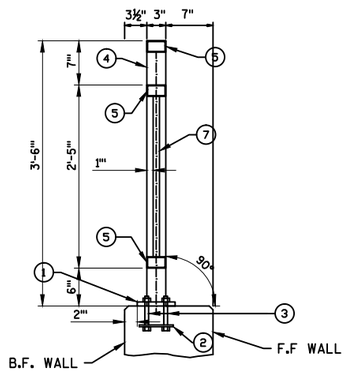
ALL JOINTS IN C.I.P. CONCRETE RETAINING WALL ARE TO BE VERTICAL.

AFTER FABRICATION, ALL MATERIAL, EXCEPT ANCHORAGE (NO. 2 & 3) AND SHIMS SHALL BE PAINTED PER SPECIAL PROVISIONS. THE FINISH COLOR SHALL BE FEDERAL COLOR NO. 27038, BLACK.

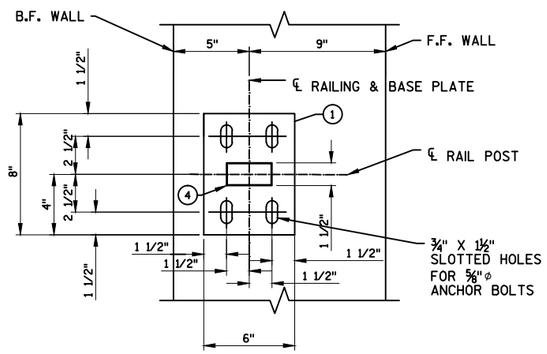
¼"ø VENT HOLES LOCATED IN TOP RAIL OVER RAIL POSTS AND AT LOW END OF OTHER RAILS.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

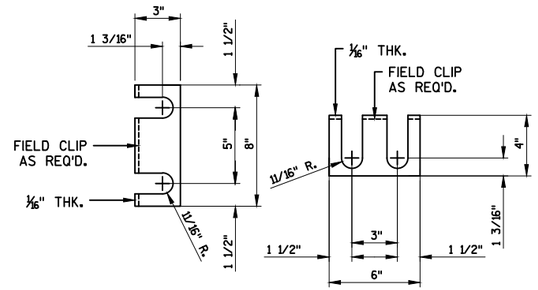
TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.



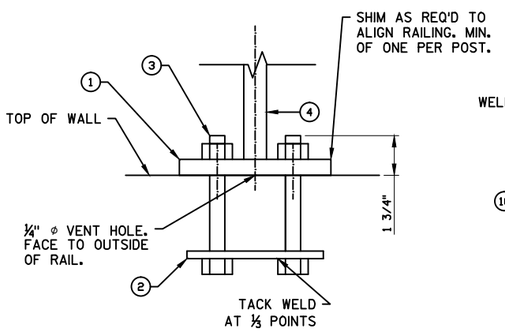
SECTION THRU RAILING



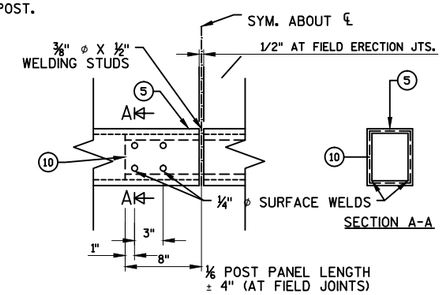
TYPICAL RAIL POST BASE PLATE



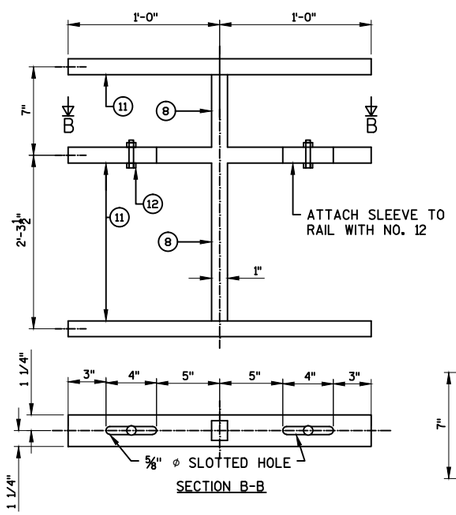
RAIL POST SHIM DETAIL
(2 SETS PER POST)



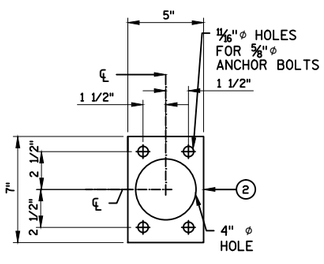
ANCHOR BOLTS FOR RAIL POSTS
NOTE: ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED



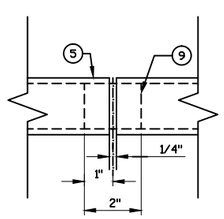
FIELD ERECTION JOINT DETAIL
*MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



MODULAR JOINT SLEEVE DETAIL



ANCHOR PLATE



SHOP RAIL SPLICE DETAIL
(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)

LEGEND

(1) PLATE ⅝" X 6" X 8" WITH ¾" X 1½" SLOTTED HOLES.

(2) ¼" X 5" X 7" ANCHOR PLATE WITH ⅛" ø HOLES FOR ANCHOR BOLTS NO. 3.

(3) ⅝" DIA. X 7½" LONG ASTM F593 TYPE 316 STAINLESS STEEL ANCHOR BOLTS WITH NUT AND WASHERS OF SAME ALLOY GROUP. (ALTERNATE RAIL POST ANCHORAGE - 4 EQUIV. STAINLESS STEEL CONCRETE MASONRY ANCHORS, TYPE S (EPOXY) ⅝" ø, MINIMUM PULLOUT CAPACITY OF 15 KIPS. EMBED A MIN. OF 7" FOR RAIL POSTS)

(4) STRUCTURAL TUBING 3" X 1½" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.

(5) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 4.

(6) PLATE 3/16" X 3" X 1½" END CAP. WELD TO NO. 5 AND GRIND SMOOTH.

(7) STRUCTURAL TUBING 1" X 1" X ⅛" PICKETS. WELD TO NO. 5 SPACE AT 6" MAX. ℄ TO ℄ SPACING. PLACE VERTICAL.

(8) STRUCTURAL TUBING 1" X 1½" X ⅛" PICKETS. WELD TO NO. 11. PLACE VERTICAL.

(9) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".

(10) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JOINTS).

(11) BAR 2½" X 1" X 2'-0"

(12) ½" DIA. STAINLESS STEEL BOLT WITH NUT AND LOCKWASHER.

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STRUCTURE **R-33-0005**

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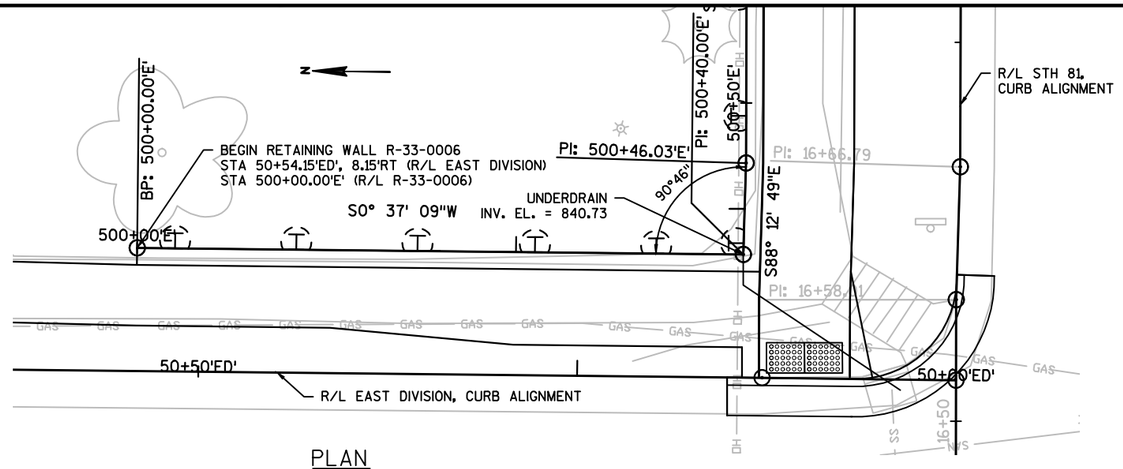
AFD	JDG

STEEL RAILING DETAILS

SHEET 21 OF 21

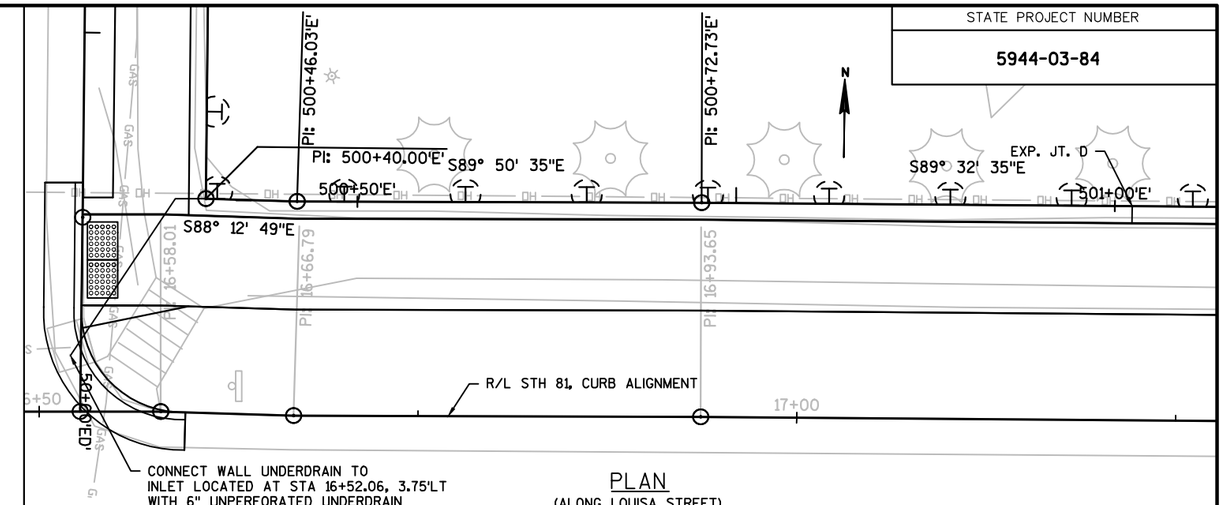
STATE PROJECT NUMBER

5944-03-84



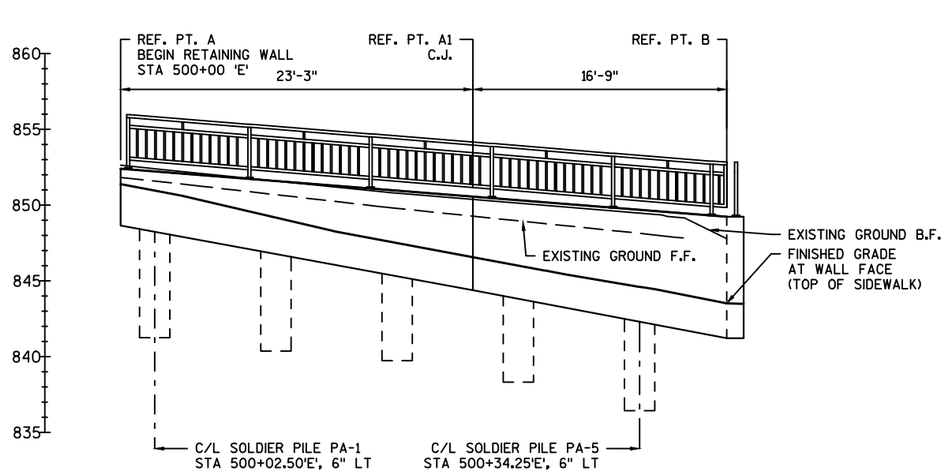
PLAN

(ALONG EAST DIVISION STREET)



PLAN

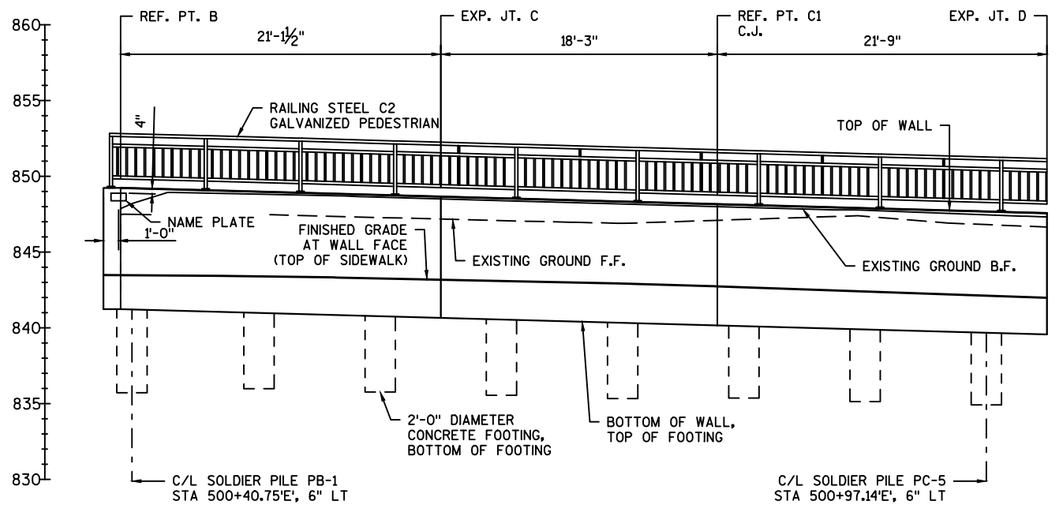
(ALONG LOUISA STREET)



ELEVATION

(LOOKING EAST AT FRONT FACE OF WALL)

(DISTANCES AND STATIONS ARE GIVEN ALONG THE BACK FACE OF WALL)



ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)

(DISTANCES AND STATIONS ARE GIVEN ALONG THE BACK FACE OF WALL)

8

NOTES

CONNECTION FROM UNPERFORATED PIPE TO INLET IS INCIDENTAL TO PIPE UNDERDRAIN.

LEGEND

F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT
P"X"-"#" = PILE IDENTIFICATION

LIST OF DRAWINGS

DESIGN DATA

LIVE LOAD:

LIVE LOAD SURCHARGE: 100 P.S.F.

MATERIAL PROPERTIES:

CONCRETE MASONRY	f'c = 4,000 P.S.I.
BAR STEEL REINFORCEMENT (GRADE 60)	fy = 60,000 P.S.I.
STRUCTURAL STEEL HS	fy = 50,000 P.S.I.
PILE FOOTINGS	f'c = 3,500 P.S.I.
*TIMBER LAGGING	E = 1,800,000 P.S.I.
	fbo = 1,000 P.S.I.

* MATERIAL VALUES BASED ON DOUGLAS FIR-LARCH NO. 1, 3" NOMINAL THICKNESS, REFERENCE AASHTO LRFD SPECIFICATIONS TABLE 8.4.1.1.4-1.

WISCONSIN
WILLIAM P. MURPHY
E-40244
CHICAGO IL
PROFESSIONAL ENGINEER

DATE: 7/11/2014

STRUCTURE DESIGN CONTACTS

BRIDGE OFFICE: WILLIAM DREHER
(608)-266-8489
CONSULTANT: WILLIAM MURPHY
(312)-577-3327

NO.	DATE	REVISION	BY

KNIGHT
700 N Third Street
Suite 104
La Crosse, WI 54601
Engineers & Architects Phone: (608) 519-1455

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 07/14/14
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-33-0006

STH 81 ALONG LOUISA STREET

COUNTY	CITY
LAFAYETTE	DARLINGTON

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN 2012 SIXTH EDITION

DESIGNED BY AFD	DESIGN CK'D. WPM	DRAWN BY AFD	PLANS CK'D. JDG

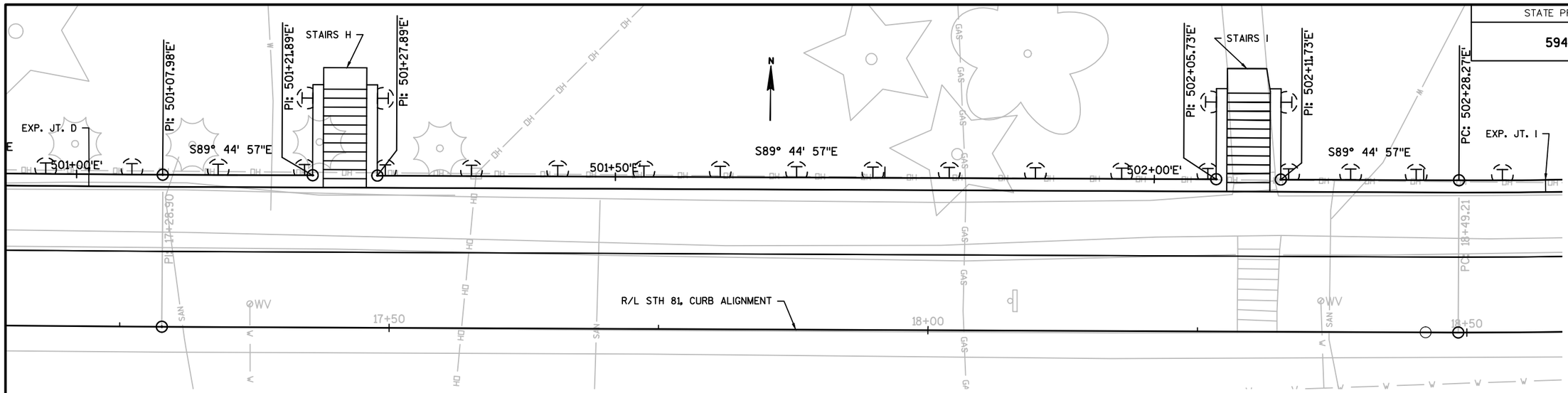
GENERAL PLAN AND ELEVATION

SHEET 1 OF 28

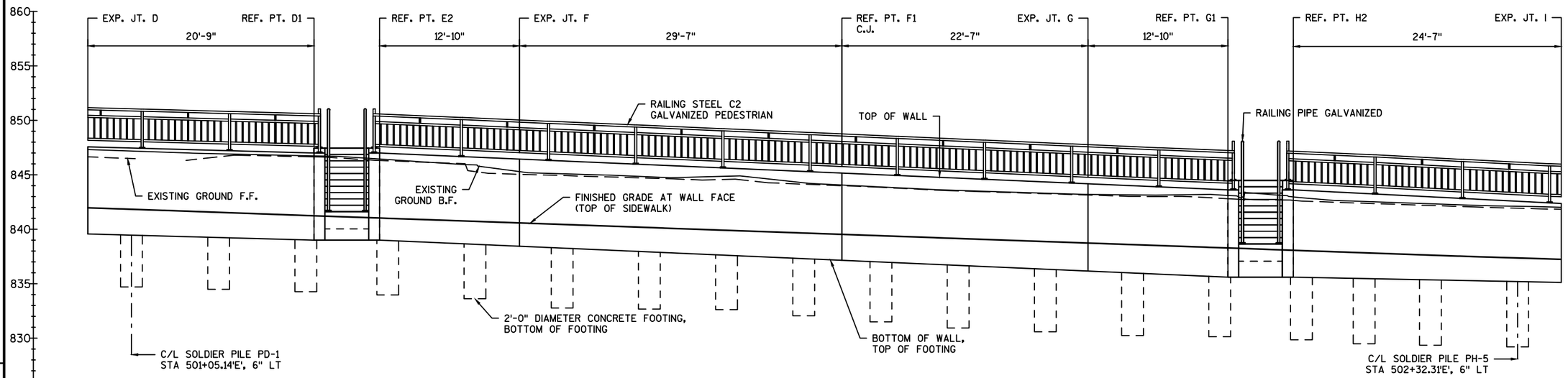
8

STATE PROJECT NUMBER

5944-03-84



PLAN



ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)
(DISTANCES AND STATIONS ARE GIVEN ALONG THE BACK FACE OF WALL)

NOTES

CONNECT THE UNDERDRAIN PIPE BENEATH THE STAIRCASE SHEAR WALLS TO THE UNDERDRAIN PIPE BENEATH THE WALL ALONG STH 81.

LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT
P"X"-"#" = PILE IDENTIFICATION

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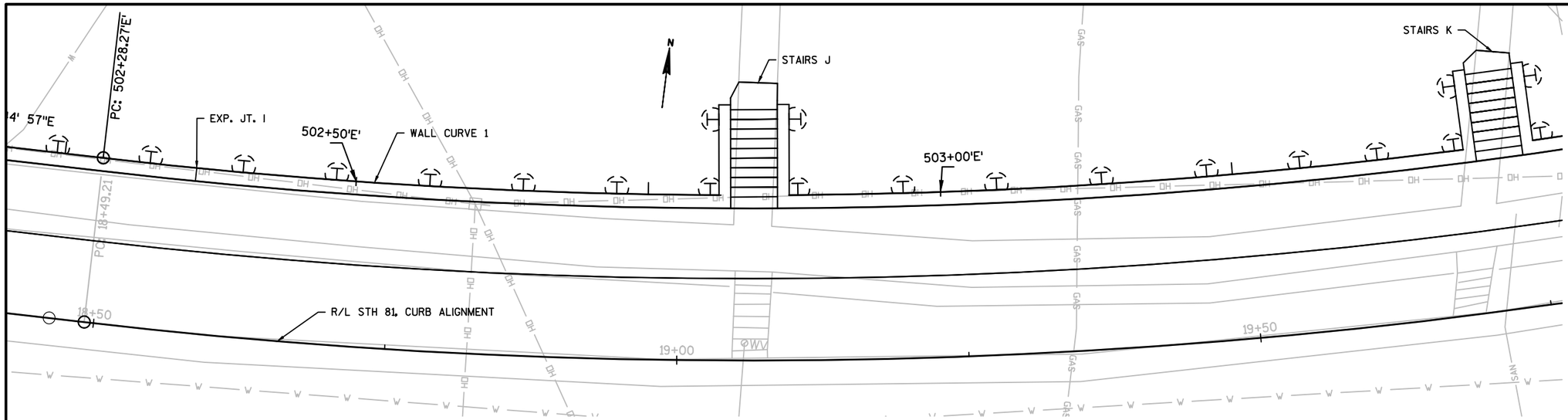
STRUCTURE **R-33-0006**

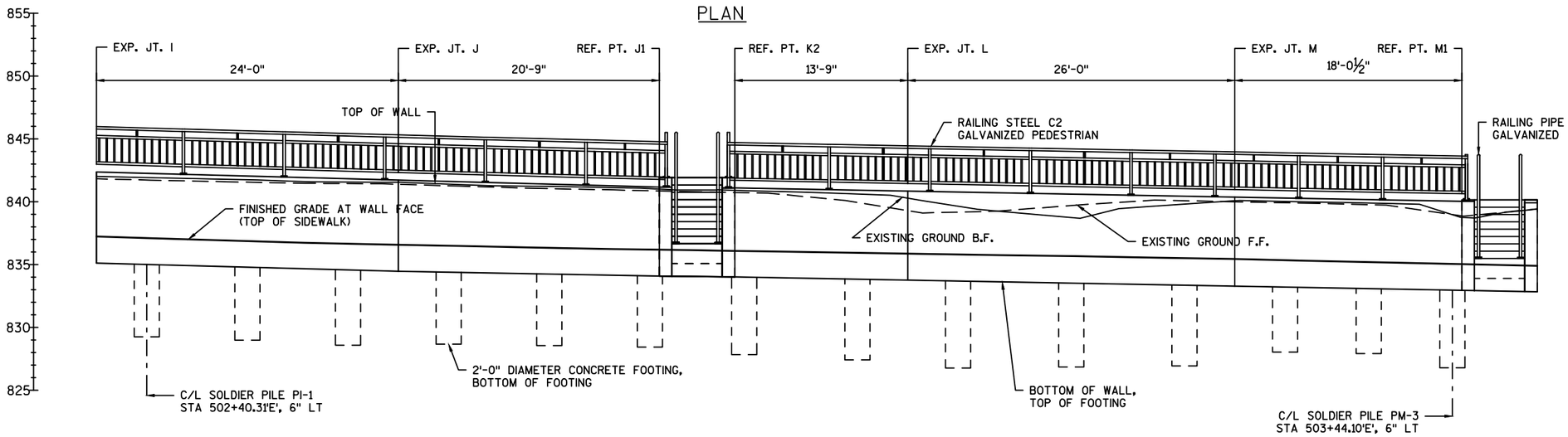
DRAWN BY AFD | PLANS CK'D. JDG

GENERAL PLAN & ELEVATION

SHEET 2 OF 28



PLAN



ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)
(DISTANCES AND STATIONS ARE GIVEN ALONG THE BACK FACE OF WALL)

STATE PROJECT NUMBER

5944-03-84

NOTES

CONNECT THE UNDERDRAIN PIPE BENEATH THE STAIRCASE SHEAR WALLS TO THE UNDERDRAIN PIPE BENEATH THE WALL ALONG STH 81.

LEGEND

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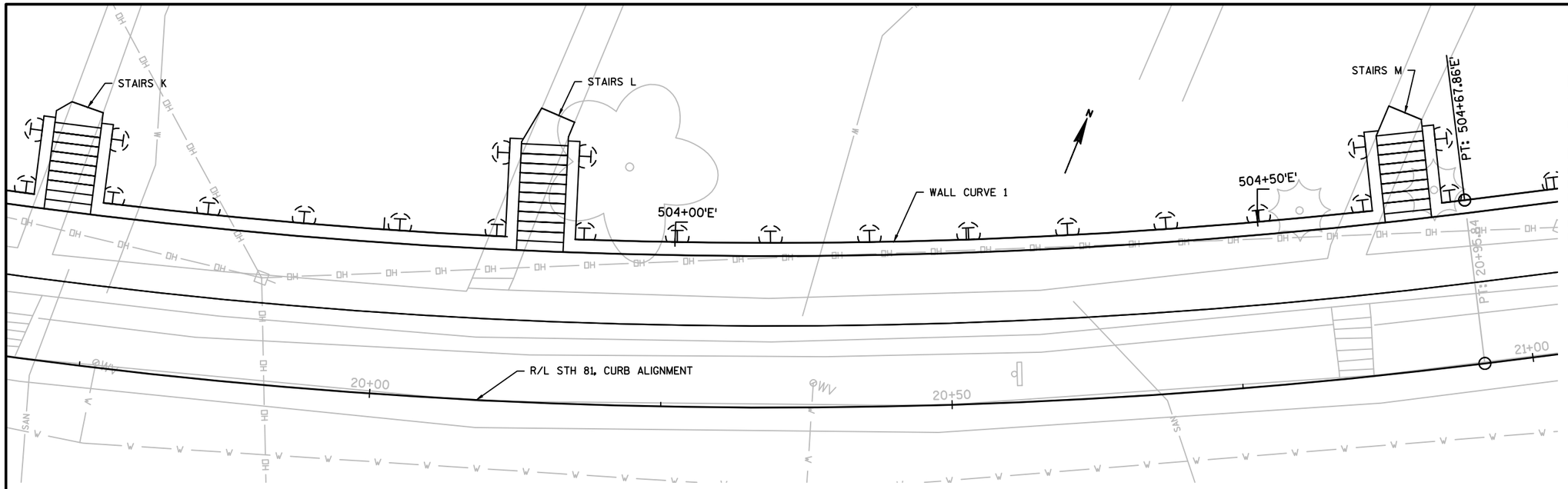
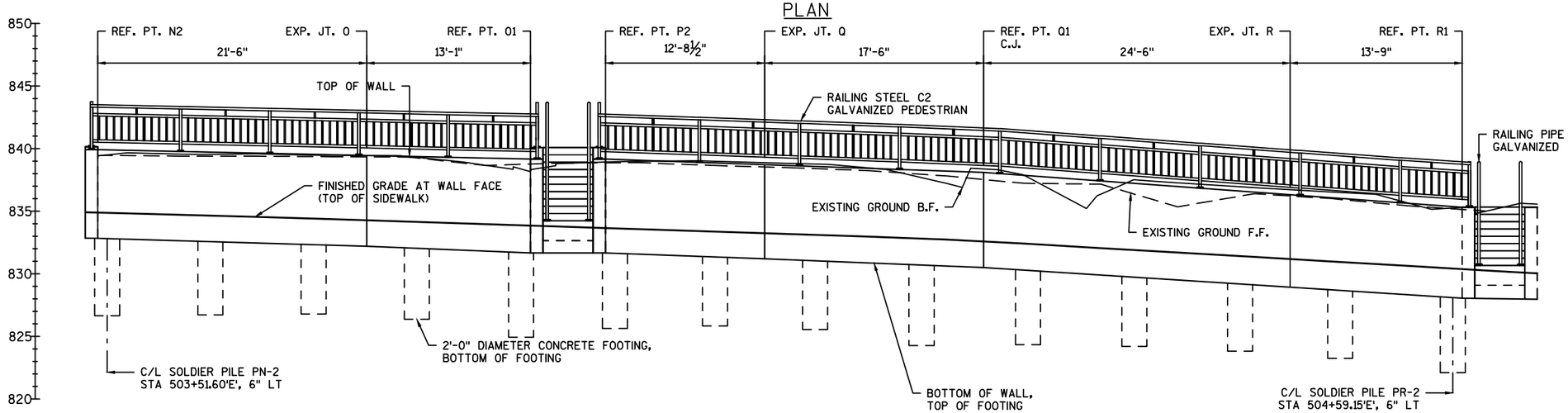
GENERAL PLAN & ELEVATION

SHEET 3 OF 28



PLAN



ELEVATION

(LOOKING NORTH AT FRONT FACE OF WALL)
(DISTANCES AND STATIONS ARE GIVEN ALONG THE BACK FACE OF WALL)

STATE PROJECT NUMBER
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NOTES

CONNECT THE UNDERDRAIN PIPE BENEATH THE STAIRCASE SHEAR WALLS TO THE UNDERDRAIN PIPE BENEATH THE WALL ALONG STH 81.

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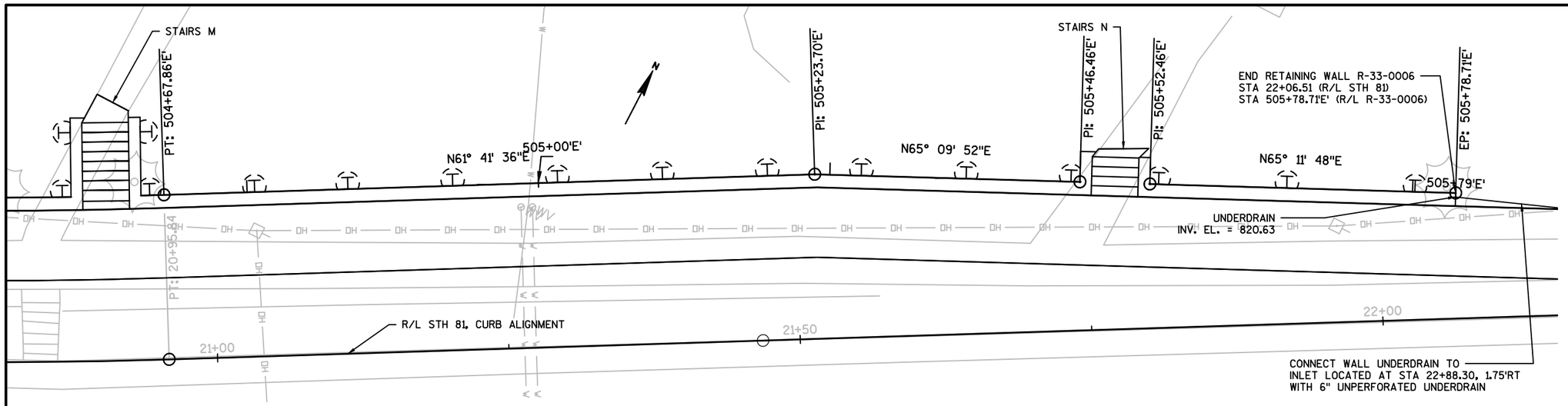
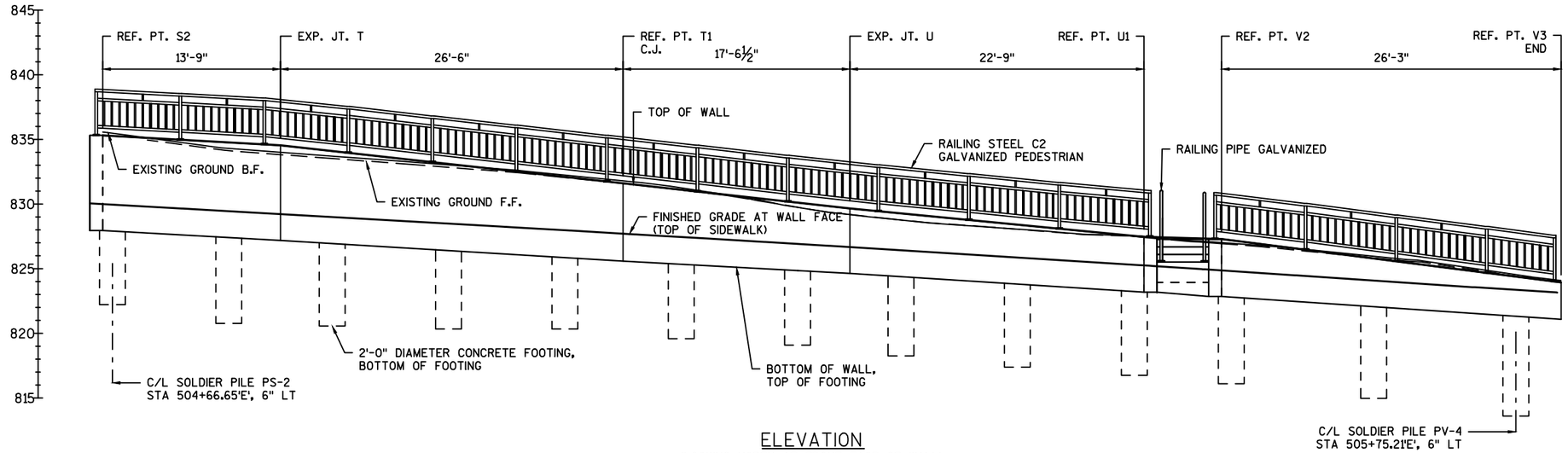
GENERAL PLAN & ELEVATION

SHEET 4 OF 28



PLAN



ELEVATION

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STATE PROJECT NUMBER
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NOTES

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P"X"-"#" = PILE IDENTIFICATION

ALIGNMENT INFORMATION

PI STA	NORTHING	EASTING
500+00.00	166058.10	484341.76
500+40.00	166018.11	484341.33
500+46.03	166017.92	484347.35
500+72.73	166017.85	484374.05
501+07.98	166017.56	484409.31
501+21.89	166017.50	484423.22
501+27.89	166017.48	484429.22
502+05.73	166017.14	484507.05
502+11.73	166017.11	484513.05
503+50.61	166016.50	484651.93
505+23.70	166100.99	484808.80
505+46.46	166110.55	484829.45
505+52.46	166113.07	484834.90
505+78.71	166124.08	484858.73

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STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0006**

DRAWN BY AFD	PLANS CK'D. JDG

GENERAL PLAN & ELEVATION

SHEET 5 OF 28

STATE PROJECT NUMBER

5944-03-84

PILE/ REFERENCE INFORMATION

STATION	REFERENCE/ PILE NUMBER	OFFSET SEE NOTE 12	FINISHED GRADE AT WALL FACE	WALL HEIGHT (FT)	TOP OF WALL	BOTTOM OF WALL	TOP OF PILE	TOP OF FOOTING	BOTTOM OF FOOTING	FOOTING LENGTH	SOLDIER PILE SECTION	SOLDIER PILE LENGTH (FT)	NO. OF STUDS
500+00.00	REF. PT. A	START	851.39	3.75	852.41	848.66	START	START	START	START	START	START	START
500+02.50	PA-1	6"	849.09	4.01	852.21	848.20	850.71	848.20	840.71	7.49	HP-12X63	10.00	6
500+10.50	PA-2	6"	846.86	4.84	851.58	846.73	850.08	846.73	839.83	6.91	HP-12X63	10.25	6
500+18.50	PA-3	6"	845.93	5.67	850.94	845.27	849.44	845.27	838.94	6.33	HP-12X63	10.50	8
500+23.25	REF. PT. A1	C.J.	845.37	6.17	850.56	844.39	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.
500+26.25	PA-4	6"	845.03	6.50	850.32	843.83	848.82	843.83	838.07	5.75	HP-12X63	10.75	8
500+34.25	PA-5	6"	844.07	7.37	849.69	842.32	848.19	842.32	836.44	5.88	HP-12X63	11.75	10
500+40.00	REF. PT. B	CORNER	843.48	8.00	849.23	841.23	CORNER	CORNER	CORNER	CORNER	CORNER	CORNER	CORNER
500+40.75	PB-1	6"	843.48	8.00	849.21	841.21	847.71	841.21	834.96	6.25	HP-12X63	12.75	20
500+49.14	PB-2	6"	843.39	8.00	848.98	840.98	847.48	840.98	834.98	6.00	HP-12X63	12.50	10
500+57.14	PB-3	6"	843.26	8.00	848.76	840.76	847.26	840.76	834.76	6.00	HP-12X63	12.50	10
500+61.14	REF. PT. C	E.J.	843.18	8.00	848.65	840.65	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
500+65.14	PC-1	6"	843.09	8.00	848.55	840.55	847.05	840.55	834.55	6.00	HP-12X63	12.50	10
500+73.14	PC-2	6"	842.92	8.00	848.33	840.33	846.83	840.33	834.33	6.00	HP-12X63	12.50	10
500+79.14	REF. PT. C1	C.J.	842.74	8.00	848.16	840.16	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.
500+81.14	PC-3	6"	842.67	8.00	848.11	840.11	846.61	840.11	834.11	6.00	HP-12X63	12.50	10
500+89.14	PC-4	6"	842.39	8.00	847.89	839.89	846.39	839.89	833.89	6.00	HP-12X63	12.50	10
500+97.14	PC-5	6"	842.11	8.00	847.67	839.67	846.17	839.67	833.42	6.25	HP-12X63	12.75	10
501+01.14	REF. PT. D	E.J.	841.97	8.00	847.57	839.57	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
501+05.14	PD-1	6"	841.83	8.00	847.46	839.46	845.96	839.46	833.21	6.25	HP-12X63	12.75	10
501+13.14	PD-2	6"	841.55	8.00	847.24	839.24	845.74	839.24	832.99	6.25	HP-12X63	12.75	10
501+21.14	PD-3	6"	841.27	8.00	847.02	839.02	845.52	839.02	832.77	6.25	HP-12X63	12.75	20
501+21.14	PD-4	6'-9"	841.27	2.88	847.45	844.57	845.95	844.57	832.70	11.87	HP-12X63	13.25	4
501+21.89	REF. PT. D1	STAIRS	841.24	8.00	847.00	839.00	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
501+21.89	REF. PT. D2	8'-0"	841.24	2.00	847.45	845.45	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
501+27.89	REF. PT. E1	8'-0"	841.03	2.00	847.45	845.45	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
501+27.89	REF. PT. E2	STAIRS	841.03	8.00	847.00	839.00	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
501+28.64	PE-1	6'-9"	841.00	2.88	847.45	844.57	845.95	844.57	832.45	12.12	HP-12X63	13.50	4
501+28.64	PE-2	6"	841.00	8.00	846.97	838.97	845.47	838.97	832.22	6.75	HP-12X63	13.25	20
501+36.64	PE-3	6"	840.72	8.00	846.62	838.62	845.12	838.62	831.87	6.75	HP-12X63	13.25	10
501+40.72	REF. PT. F	E.J.	840.58	8.00	846.44	838.44	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
501+44.64	PF-1	6"	840.44	8.00	846.27	838.27	844.77	838.27	831.02	7.25	HP-12X63	13.75	10
501+52.64	PF-2	6"	840.16	8.00	845.92	837.92	844.42	837.92	830.67	7.25	HP-12X63	13.75	10
501+59.73	PF-3	6"	839.91	8.00	845.61	837.61	844.11	837.61	830.86	6.75	HP-12X63	13.25	10
501+66.81	PF-4	6"	839.66	8.00	845.31	837.31	843.81	837.31	830.31	7.00	HP-12X63	13.50	10
501+70.31	REF. PT. F1	C.J.	839.53	8.00	845.15	837.15	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.
501+73.90	PF-5	6"	839.41	8.00	845.00	837.00	843.50	837.00	829.75	7.25	HP-12X63	13.75	10
501+80.98	PF-6	6"	839.16	8.00	844.69	836.69	843.19	836.69	829.69	7.00	HP-12X63	13.50	10
501+88.98	PF-7	6"	838.87	8.00	844.34	836.34	842.84	836.34	829.34	7.00	HP-12X63	13.50	10
501+92.89	REF. PT. G	E.J.	838.74	8.00	844.17	836.17	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
501+96.98	PG-1	6"	838.59	8.00	843.99	835.99	842.49	835.99	829.24	6.75	HP-12X63	13.25	10
502+04.98	PG-2	6"	838.31	8.00	843.64	835.64	842.14	835.64	829.39	6.25	HP-12X63	12.75	20
502+04.98	PG-3	6'-9"	838.31	2.88	844.49	841.61	842.99	841.61	829.24	12.37	HP-12X63	13.75	4
502+05.73	REF. PT. G1	STAIRS	838.28	8.00	843.61	835.61	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
502+05.73	REF. PT. G2	8'-0"	838.28	2.00	844.49	842.49	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
502+11.73	REF. PT. H1	8'-0"	838.07	2.00	844.49	842.49	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
502+11.73	REF. PT. H2	STAIRS	838.07	8.00	843.61	835.61	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
502+12.48	PH-1	6'-9"	838.04	2.88	844.49	841.61	842.99	841.61	828.99	12.62	HP-12X63	14.00	4
502+12.48	PH-2	6"	838.04	8.00	843.57	835.57	842.07	835.57	829.07	6.50	HP-12X63	13.00	20
502+18.22	PH-3	6"	837.84	8.00	843.28	835.28	841.78	835.28	828.78	6.50	HP-12X63	13.00	10
502+24.31	PH-4	6"	837.63	8.00	842.97	834.97	841.47	834.97	828.72	6.25	HP-12X63	12.75	10
502+32.31	PH-5	6"	837.36	8.00	842.57	834.57	841.07	834.57	828.32	6.25	HP-12X63	12.75	10
502+36.31	REF. PT. I	E.J.	837.24	8.00	842.37	834.37	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
502+40.31	PI-1	6"	837.12	8.00	842.16	834.16	840.66	834.16	828.16	6.00	HP-12X63	12.50	10
502+48.31	PI-2	6"	836.87	7.95	841.82	833.87	840.32	833.87	828.07	5.80	HP-12X63	12.25	10
502+56.31	PI-3	6"	836.66	7.74	841.66	833.93	840.16	833.93	827.91	6.01	HP-12X63	12.25	10
502+60.31	REF. PT. J	E.J.	836.58	7.63	841.58	833.95	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
502+64.31	PJ-1	6"	836.50	7.53	841.50	833.98	840.00	833.98	828.25	5.72	HP-12X63	11.75	10
502+72.31	PJ-2	6"	836.34	7.31	841.34	834.03	839.84	834.03	828.34	5.69	HP-12X63	11.50	10
502+80.31	PJ-3	6"	836.20	7.10	841.18	834.08	839.68	834.08	828.43	5.65	HP-12X63	11.25	20
502+80.31	PJ-4	6'-0½"	836.20	2.82	841.91	839.09	840.41	839.09	829.41	9.68	HP-12X63	11.00	4
502+81.06	REF. PT. J1	STAIRS	836.19	7.08	841.17	834.09	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
502+81.06	REF. PT. J2	7'-3½"	836.19	2.00	841.91	839.91	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS

GENERAL NOTES:

ALL STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M270 GRADE 50 EXCEPT AS NOTED ON PLANS.

THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND PERFORMANCE OF THE TIMBER LAGGING.

DRAWINGS SHALL NOT BE SCALED.

BEVELED EXPOSED EDGES OF CONCRETE IS ¾-INCH, UNLESS OTHERWISE NOTED.

ALL DIMENSIONS ARE IN FEET AND INCHES, UNLESS OTHERWISE NOTED.

ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

ARCHITECTURAL SURFACE TREATMENT SHALL ACCURATELY DUPLICATE "RUSTIC ASHLAR" LIMESTONE. THE STONE SHALL BE 8-INCH TO 32-INCH WITH A MAXIMUM RELIEF OF 1 ½-INCH. SEE SPECIAL PROVISIONS.

ALL REINFORCEMENT SHALL HAVE A MINIMUM OF 2-INCHES CLEAR COVER UNLESS SHOWN OTHERWISE. REINFORCEMENT IN FACES CAST PERMANENTLY AGAINST EARTH SHALL HAVE A MINIMUM OF 3-INCHES CLEAR COVER.

IF THE UNDERGROUND UTILITY CONFLICTS WITH A PILE, THAT PILE MAY BE RELOCATED WITHIN 1'-0" FROM THE CALLED OUT LOCATION. DO NOT LOCATE A PILE LESS THAN 1'-0" FROM A CONTRACTION JOINT. PILES LOCATED AT CORNERS OF THE RETAINING WALL SHALL ONLY BE ADJUSTED WITH ENGINEER'S APPROVAL.

THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES RETAINING WALLS R-33-0006."

OFFSET IS BASED OFF OF BACK FACE OF WALL ALIGNMENT TO CENTER OF PILE.

CONTROLLED LOW STRENGTH MATERIAL AND FLOWABLE BACKFILL ARE INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS R-33-0006." SEE SPECIAL PROVISIONS FOR DESCRIPTION OF CONTROLLED LOW STRENGTH MATERIAL AND FLOWABLE BACKFILL.

6" DRAINAGE PIPE HAS A MINIMUM SLOPE OF 0.5%.

STAINING CONCRETE SHALL ACCURATELY DUPLICATE WEATHERED LIMESTONE COLORATION. COLOR IS MEDIUM TAN * 33446. SEE SPECIAL PROVISIONS.

BACK FACE OF WALL FOLLOWS STH 81 CURB ALIGNMENT, 14'-1½" TYPICAL OFFSET, OR EAST DIVISION ALIGNMENT, 8'-1½" TYPICAL OFFSET. OFFSET VARIES FROM STA 21+51.67 TO END OF WALL. SEE ROADWAY PLAN FOR CURB ALIGNMENT AND EAST DIVISION ALIGNMENT DETAILS.

BACKFILL THE FACES OF THE WALL EQUALLY.

SHAFT EXCAVATION FOR ALL PILES ARE 2'-0" DIAMETER.

WALL CURVE 1

PI STA = 503+50.61
Y = 166016.501
X = 484651.930
DELTA = 28°33'27"
D = 11°55'09"
T = 122.34'
L = 239.59'
R = 480.70'
PC STA = 502+28.27
PT STA = 504+67.86

NO.	DATE	REVISION	BY

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Suite 104
La Crosse, WI 54601
Phone: (608) 519-1455

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0006**

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GENERAL NOTES, PILE INFORMATION

SHEET 6 OF 28

8

8

STATE PROJECT NUMBER

5944-03-84

PILE/ REFERENCE INFORMATION

STATION	REFERENCE/ PILE NUMBER	OFFSET SEE NOTE 12	FINISHED GRADE AT WALL FACE	WALL HEIGHT (FT)	TOP OF WALL	BOTTOM OF WALL	TOP OF PILE	TOP OF FOOTING	BOTTOM OF FOOTING	FOOTING LENGTH	SOLDIER PILE SECTION	SOLDIER PILE LENGTH (FT)	NO. OF STUDS
502+87.06	REF. PT. K1	7'-3½"	836.09	2.00	841.91	839.91	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
502+87.06	REF. PT. K2	STAIRS	836.09	7.08	841.11	834.03	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
502+87.81	PK-1	6'-0½"	836.08	2.82	841.91	839.09	840.41	839.09	829.16	9.93	HP-12X63	11.25	4
502+87.81	PK-2	6"	836.08	7.08	841.10	834.01	839.60	834.01	827.85	6.17	HP-12X63	11.75	20
502+96.81	PK-3	6"	835.94	7.08	840.93	833.84	839.43	833.84	827.43	6.42	HP-12X63	12.00	10
503+00.81	REF. PT. L	E.J.	835.88	7.08	840.85	833.77	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
503+04.81	PL-1	6"	835.81	7.08	840.78	833.69	839.28	833.69	826.78	6.92	HP-12X63	12.50	10
503+13.81	PL-2	6"	835.67	7.08	840.61	833.53	839.11	833.53	826.86	6.67	HP-12X63	12.25	10
503+22.81	PL-3	6"	835.51	7.08	840.44	833.36	838.94	833.36	826.94	6.42	HP-12X63	12.00	10
503+26.81	REF. PT. M	E.J.	835.44	7.08	840.37	833.28	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
503+30.81	PM-1	6"	835.35	7.08	840.29	833.21	838.79	833.21	828.04	5.17	HP-12X63	10.75	10
503+37.46	PM-2	6"	835.21	7.08	840.17	833.08	838.67	833.08	827.92	5.17	HP-12X63	10.75	10
503+44.10	PM-3	6"	835.06	7.08	840.04	832.96	838.54	832.96	826.79	6.17	HP-12X63	11.75	20
503+44.10	PM-4	5'-1⅛"	835.06	2.92	840.15	837.23	838.65	837.23	827.65	9.58	HP-12X63	11.00	4
503+44.85	REF. PT. M1	STAIRS	835.05	7.08	840.03	832.95	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
503+44.85	REF. PT. M2	6'-4"	835.05	2.00	840.15	838.15	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
503+50.85	REF. PT. N1	6'-4"	834.90	2.00	840.15	838.15	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
503+50.85	REF. PT. N2	STAIRS	834.90	7.08	839.92	832.83	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
503+51.60	PN-1	5'-1⅛"	834.88	2.92	840.15	837.23	838.65	837.23	828.15	9.08	HP-12X63	10.50	4
503+51.60	PN-2	6"	834.88	7.09	839.90	832.81	838.40	832.81	826.65	6.16	HP-12X63	11.75	20
503+59.85	PN-3	6"	834.65	7.15	839.72	832.57	838.22	832.57	826.72	5.85	HP-12X63	11.50	10
503+68.10	PN-4	6"	834.41	7.22	839.54	832.32	838.04	832.32	826.79	5.53	HP-12X63	11.25	10
503+72.35	REF. PT. O	E.J.	834.27	7.25	839.45	832.20	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
503+76.35	PO-1	6"	834.15	7.33	839.36	832.03	837.86	832.03	826.36	5.67	HP-12X63	11.50	10
503+84.69	PO-2	6"	833.88	7.49	839.18	831.69	837.68	831.69	824.93	6.76	HP-12X63	12.75	20
503+84.69	PO-3	6'-9⅛"	833.88	2.80	840.07	837.27	838.57	837.27	827.57	9.70	HP-12X63	11.00	4
503+85.44	REF. PT. O1	STAIRS	833.85	7.50	839.16	831.66	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
503+85.44	REF. PT. O2	8'-0½"	833.85	2.00	840.07	838.07	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
503+91.44	REF. PT. P1	8'-1"	833.66	2.00	840.07	838.07	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
503+91.44	REF. PT. P2	STAIRS	833.66	7.50	839.16	831.66	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
503+92.19	PP-1	6'-9⅛"	833.63	2.80	840.07	837.27	838.57	837.27	828.32	8.95	HP-12X63	10.25	4
503+92.19	PP-2	6"	833.63	7.50	839.13	831.63	837.63	831.63	825.63	6.00	HP-12X63	12.00	20
504+00.19	PP-3	6"	833.38	7.50	838.85	831.35	837.35	831.35	825.85	5.50	HP-12X63	11.50	10
504+04.15	REF. PT. Q	E.J.	833.25	7.50	838.71	831.21	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
504+08.19	PQ-1	6"	833.12	7.52	838.57	831.05	837.07	831.05	825.57	5.48	HP-12X63	11.50	10
504+16.69	PQ-2	6"	832.81	7.56	838.27	830.71	836.77	830.71	824.27	6.44	HP-12X63	12.50	10
504+21.65	REF. PT. Q1	C.J.	832.58	7.58	838.09	830.51	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.
504+25.19	PQ-3	6"	832.40	7.55	837.83	830.29	836.33	830.29	824.33	5.95	HP-12X63	12.00	10
504+33.69	PQ-4	6"	831.90	7.46	837.22	829.76	835.72	829.76	824.22	5.54	HP-12X63	11.50	10
504+42.15	PQ-5	6"	831.41	7.37	836.60	829.23	835.10	829.23	823.85	5.38	HP-12X63	11.25	10
504+46.15	REF. PT. R	E.J.	831.18	7.33	836.31	828.98	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
504+50.15	PR-1	6"	830.95	7.31	836.02	828.71	834.52	828.71	823.27	5.44	HP-12X63	11.25	10
504+59.15	PR-2	6"	830.42	7.25	835.36	828.11	833.86	828.11	822.11	6.00	HP-12X63	11.75	20
504+59.15	PR-3	5'-1¼"	830.42	2.96	835.31	832.35	833.81	832.35	825.06	7.29	HP-12X63	8.75	4
504+59.90	REF. PT. R1	STAIRS	830.38	7.25	835.31	828.06	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
504+59.90	REF. PT. R2	6'-4"	830.38	2.00	835.31	833.31	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
504+65.90	REF. PT. S1	6'-3½"	830.03	2.00	835.31	833.31	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
504+65.90	REF. PT. S2	STAIRS	830.03	7.33	835.31	827.98	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
504+66.65	PS-1	5'-1¼"	829.99	2.96	835.31	832.35	833.81	832.35	825.31	7.04	HP-12X63	8.50	4
504+66.65	PS-2	6"	829.99	7.33	835.27	827.94	833.77	827.94	822.27	5.67	HP-12X63	11.50	20
504+75.65	PS-3	6"	829.48	7.33	834.78	827.44	833.28	827.44	821.03	6.42	HP-12X63	12.25	10
504+79.65	REF. PT. T	E.J.	829.25	7.33	834.56	827.22	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
504+83.65	PT-1	6"	829.03	7.13	834.11	826.98	832.61	826.98	820.61	6.37	HP-12X63	12.00	10
504+92.65	PT-2	6"	828.52	6.68	833.11	826.44	831.61	826.44	820.36	6.07	HP-12X63	11.25	10
505+01.65	PT-3	6"	828.01	6.23	832.12	825.89	830.62	825.89	820.37	5.52	HP-12X63	10.25	8
505+06.15	REF. PT. T1	C.J.	827.75	6.00	831.62	825.62	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.	C.J.
505+10.65	PT-4	6"	827.48	5.74	831.12	825.37	829.62	825.37	819.62	5.76	HP-12X63	10.00	8
505+19.65	PT-5	6"	826.95	5.23	830.12	824.89	828.62	824.89	819.12	5.77	HP-12X63	9.50	8
505+23.70	REF. PT. U	E.J.	826.71	5.00	829.67	824.67	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.	E.J.
505+27.70	PU-1	6"	826.46	4.87	829.29	824.42	827.79	824.42	818.29	6.13	HP-12X63	9.50	6
505+36.70	PU-2	6"	825.90	4.57	828.42	823.85	826.92	823.85	817.42	6.43	HP-12X63	9.50	6
505+45.70	PU-3	6"	825.33	4.27	827.55	823.27	826.05	823.27	816.80	6.48	HP-12X63	9.25	12
505+46.46	REF. PT. U1	STAIRS	825.29	4.25	827.48	823.23	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
505+46.46	REF. PT. U2	2'-2½"	825.29	2.00	827.29	825.29	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
505+52.46	REF. PT. V1	2'-2½"	824.90	2.00	827.29	825.29	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
505+52.46	REF. PT. V2	STAIRS	824.90	4.33	827.31	822.98	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS	STAIRS
505+53.21	PV-1	6"	824.85	4.29	827.21	822.92	825.71	822.92	816.21	6.71	HP-12X63	9.50	12
505+64.21	PV-2	6"	824.12	3.66	825.81	822.15	824.31	822.15	815.06	7.09	HP-12X63	9.25	6
505+75.21	PV-3	6"	823.40	3.03	824.41	821.37	822.91	821.37	813.66	7.72	HP-12X63	9.25	4
505+78.71	REF. PT. V3	END	823.18	2.83	823.96	821.13	END	END	END	END	END	END	END

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNITS	TOTAL QUANTITY
206.3000.04	EXCAVATION FOR STRUCTURES RETAINING WALL (R-33-0006)	LS	1
210.0100	BACKFILL STRUCTURAL	CY	15
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	190
505.0615	BAR STEEL REINFORCEMENT HS COATED RETAINING WALLS	LB	17567
506.0605	STRUCTURAL STEEL HS	LB	62370
506.3014	WELDED STUD SHEAR CONNECTORS 3/4x6-INCH	EACH	866
517.1010.S.03	CONCRETE STAINING R-33-0006	SF	1704
517.1050.S.03	ARCHITECTURAL SURFACE TREATMENT R-33-0006	SF	1704
612.0106	PIPE UNDERDRAIN 6-INCH	LF	698
612.0204	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	98
645.0111	GEOTEXTILE FABRIC TYPE DF SCHEDULE A	SY	562
SPV.0035.01	CONCRETE MASONRY SOLDIER PILE FOOTINGS	CY	67
SPV.0090.01	FOUNDATION DRILLING 24-INCH DIAMETER	LF	570
SPV.0090.02	RAILING PIPE GALVANIZED	LF	146
SPV.0105.03	RAILING STEEL TYPE C2 GALVANIZED PEDESTRIAN R-33-0006	LS	1
SPV.0110.01	TIMBER LAGGING	MBM	9.92
SPV.0165.01	GEOCOMPOSITE DRAIN BOARD	SF	3611

SOIL PARAMETERS

SOIL UNIT	TOTAL UNIT WEIGHT, PCF	UNDRAINED, DISTURBED			DRAINED	
		UNDRAINED SHEAR STRENGTH, SU, PSF	FRICTION ANGLE, Φ, DEG	COHESION, C' PSF	COHESION, C', PSF	FRICTION ANGLE, Φ, DEG
LEAN CLAY	130	3800	6	200	0	30
WEATHERED DOLOMITE BEDROCK	140				0	45

8

NO.	DATE	REVISION	BY

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0006**

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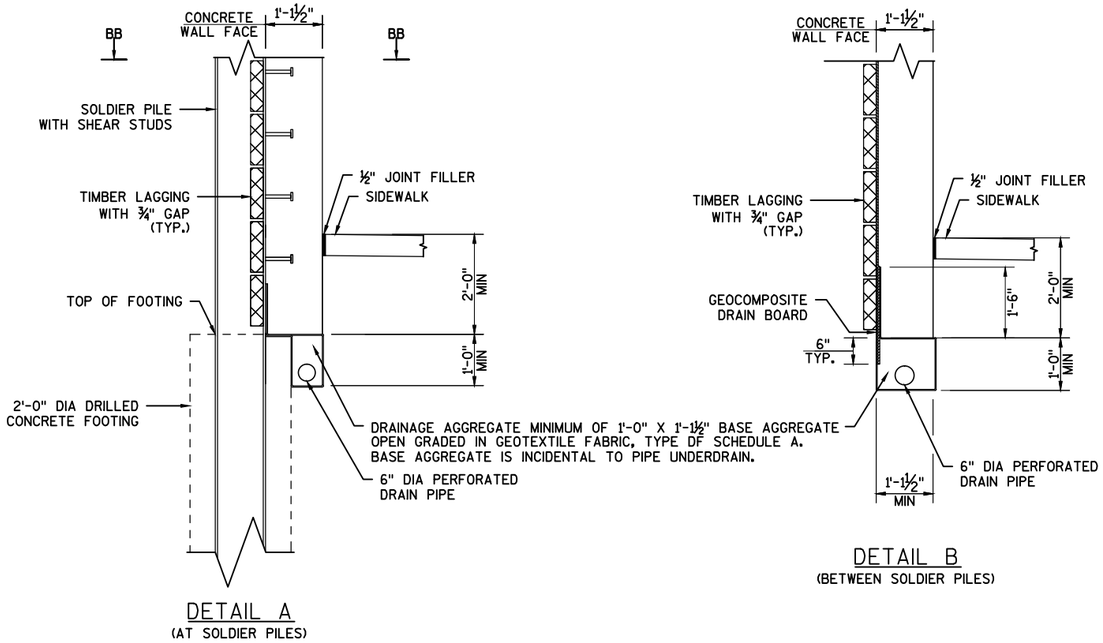
EST. QUANTITIES & PILE INFORMATION

SHEET 7 OF 28

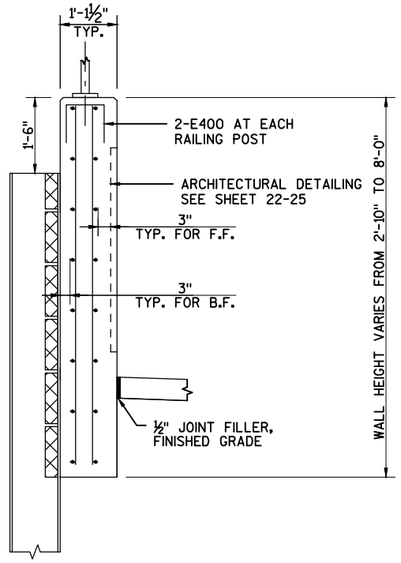
STATE PROJECT NUMBER

5944-03-84



DETAIL A
(AT SOLDIER PILES)

DETAIL B
(BETWEEN SOLDIER PILES)



TYP. REINFORCEMENT LAYOUT

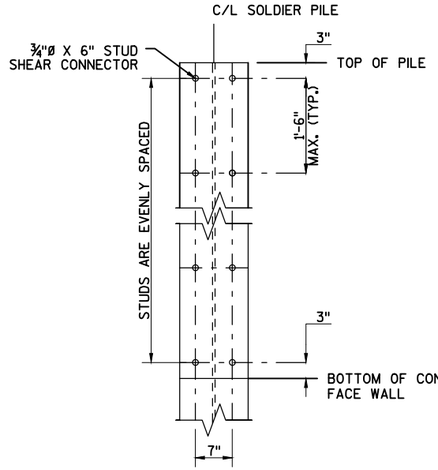
NOTES

PAINT PILE FROM TOP OF PILE TO 1'-0" BELOW TOP OF FOOTING WITH A PRIME COAT OF ORGANIC ZINC-RICH PAINT. PREPARE THE SURFACE AND APPLY THE PAINT AS SPECIFIED IN SECTION 517 OF THE STANDARD SPECIFICATIONS. PAINTING OF PILE IS INCIDENTAL TO THE BID ITEM "STRUCTURAL STEEL HS."

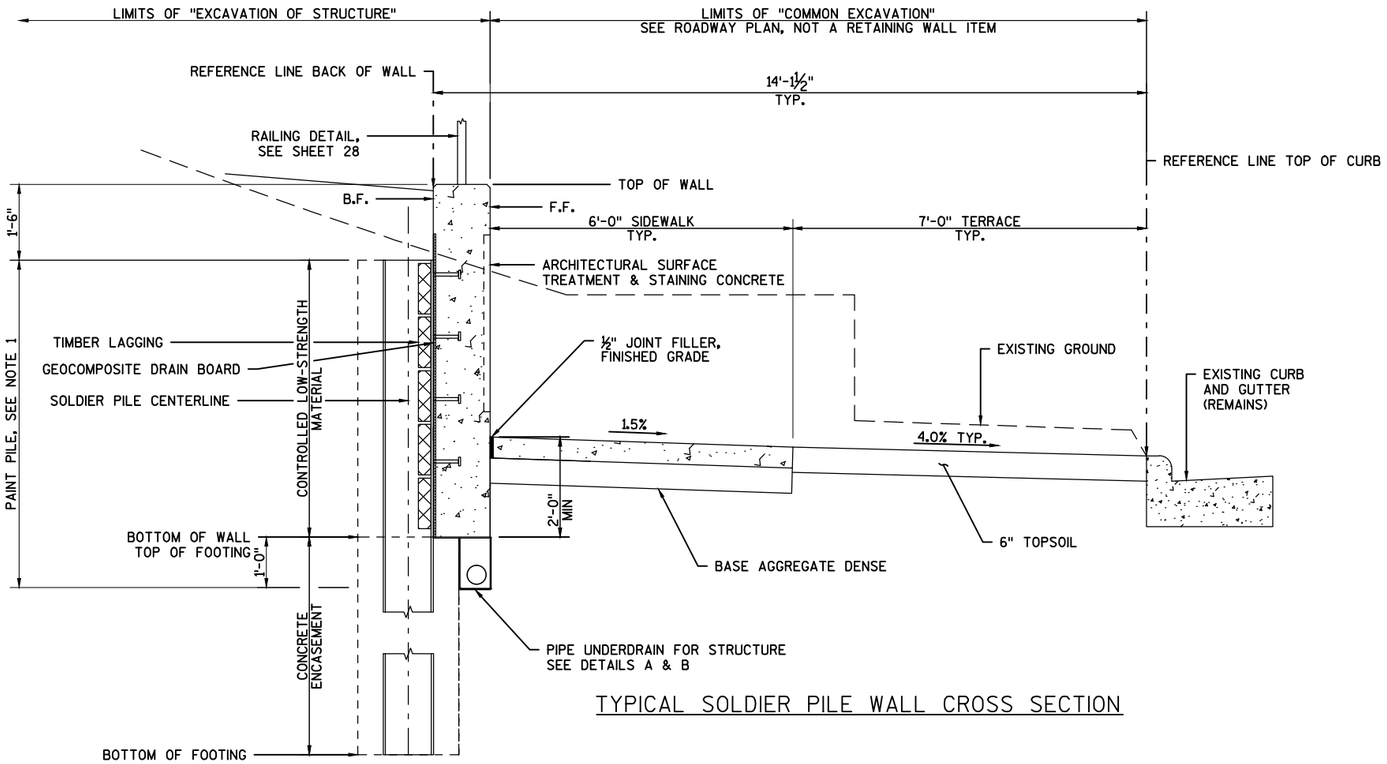
PILES SHOULD BE SET WITH A ¼"H:1'V BATTER.

LEGEND

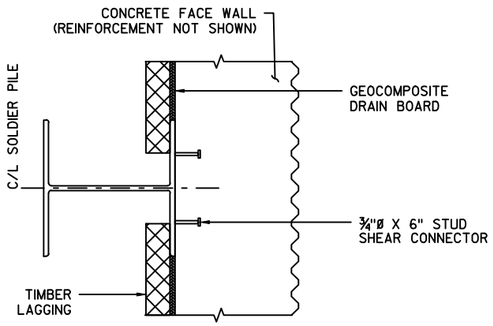
E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT



STUD SHEAR CONNECTION LAYOUT



TYPICAL SOLDIER PILE WALL CROSS SECTION



SECTION BB-BB

NO.	DATE	REVISION	BY

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Suite 104
La Crosse, WI 54601
Engineers & Architects Phone: (608) 519-1455

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0006**

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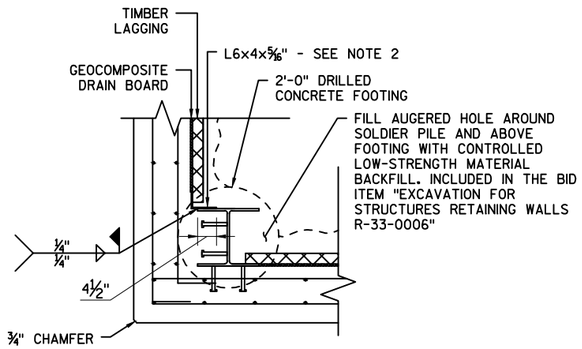
TYPICAL SECTIONS

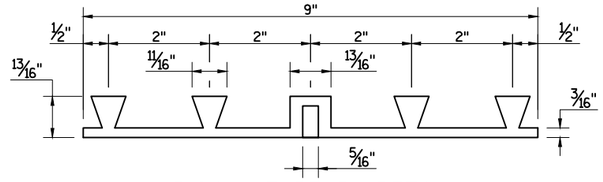
SHEET 8 OF 28

STATE PROJECT NUMBER

5944-03-84



CORNER PILE DETAIL



P.C.W. "TYPE B" DETAIL

(POLYVINYL CHLORIDE WATERSTOP)

(INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY RETAINING WALLS")
P.C.W. SHALL BE BUTT SPLICED AT ALL INTERSECTION BY USING A HEATED SPLICING IRON. HOLD P.C.W. FLUSH WITH CONCRETE. SEAL ALL VERTICAL ENDS OF P.C.W. WITH NON-STAINING BITUMINOUS JOINT SEALER.

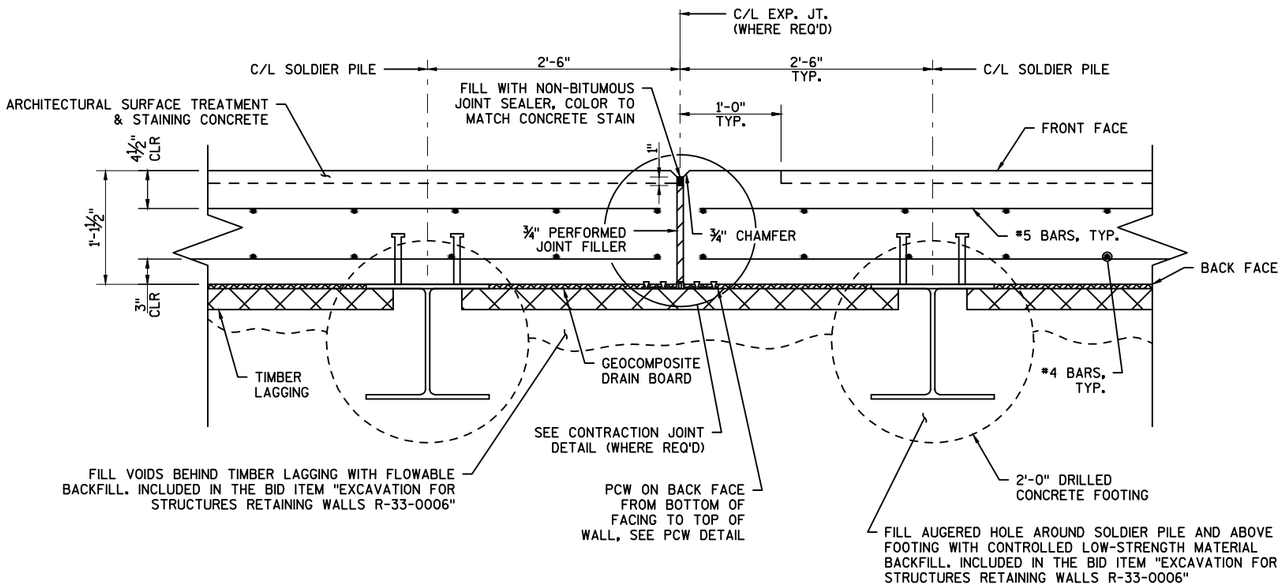
NOTES

PAINT PILE & ANGLED STEEL FROM TOP OF PILE TO 1'-0" BELOW TOP OF FOOTING WITH A PRIME COAT OF ORGANIC ZINC-RICH PAINT. PREPARE THE SURFACE AND APPLY THE PAINT AS SPECIFIED IN SECTION 517 OF THE STANDARD SPECIFICATIONS. PAINTING OF PILE IS INCIDENTAL TO THE BID ITEM "STRUCTURAL STEEL HS."

ANGLED STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M270M/ M270 GRADE 36. WHERE REQUIRED, THE ANGLED STEEL SPANS FROM THE TOP OF THE PILE TO THE BOTTOM OF THE WALL. ANGLED STEEL IS INCIDENTAL IN THE BID ITEM "STRUCTURAL STEEL HS."

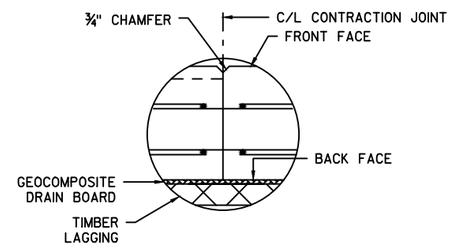
LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT



SOLDIER PILE JOINT DETAIL

(SEE PILE INFORMATION SHEETS FOR LOCATION OF CONTRACTION & EXPANSION JOINTS)



CONTRACTION JOINT DETAIL

NO.	DATE	REVISION	BY

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STATE OF WISCONSIN
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TYPICAL SECTIONS

SHEET 9 OF 28

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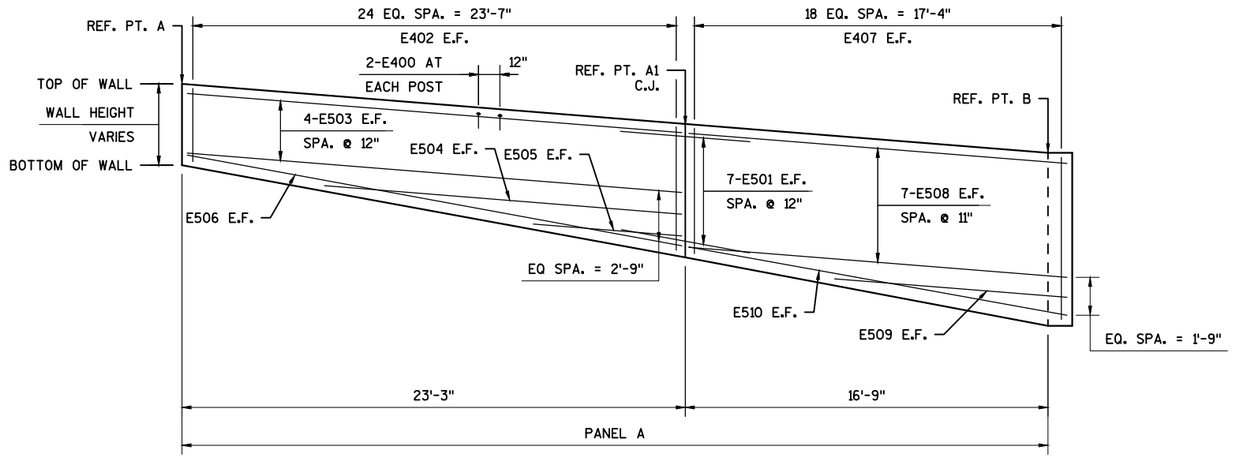
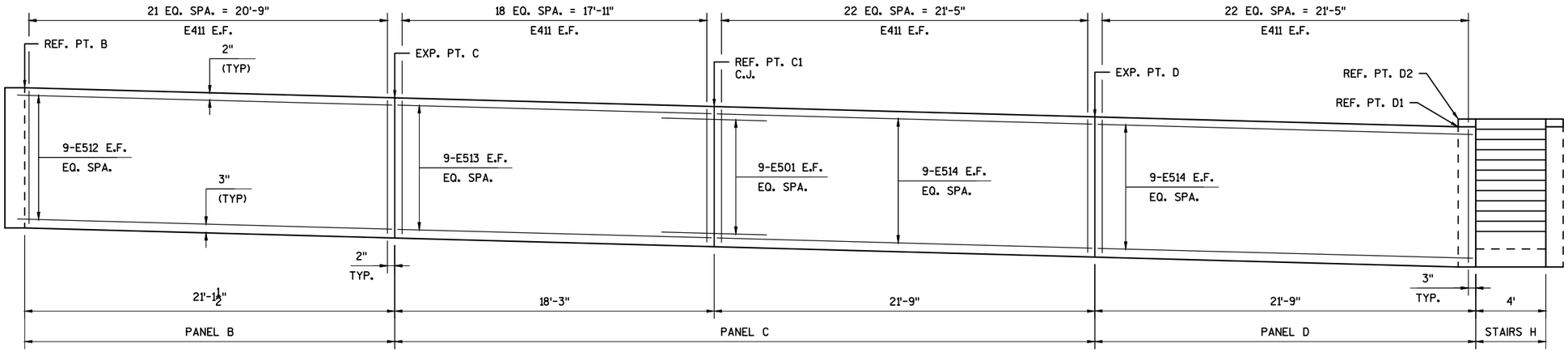


PARTIAL WALL FACING ELEVATION
(PANEL A)



PARTIAL WALL FACING ELEVATION
(PANELS B, C, & D)

LEGEND
E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT

NO.	DATE	REVISION	BY

KNIGHT
700 N Third Street
Suite 104
La Crosse, WI 54601
Engineers & Architects Phone: (608) 519-1455

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0006**

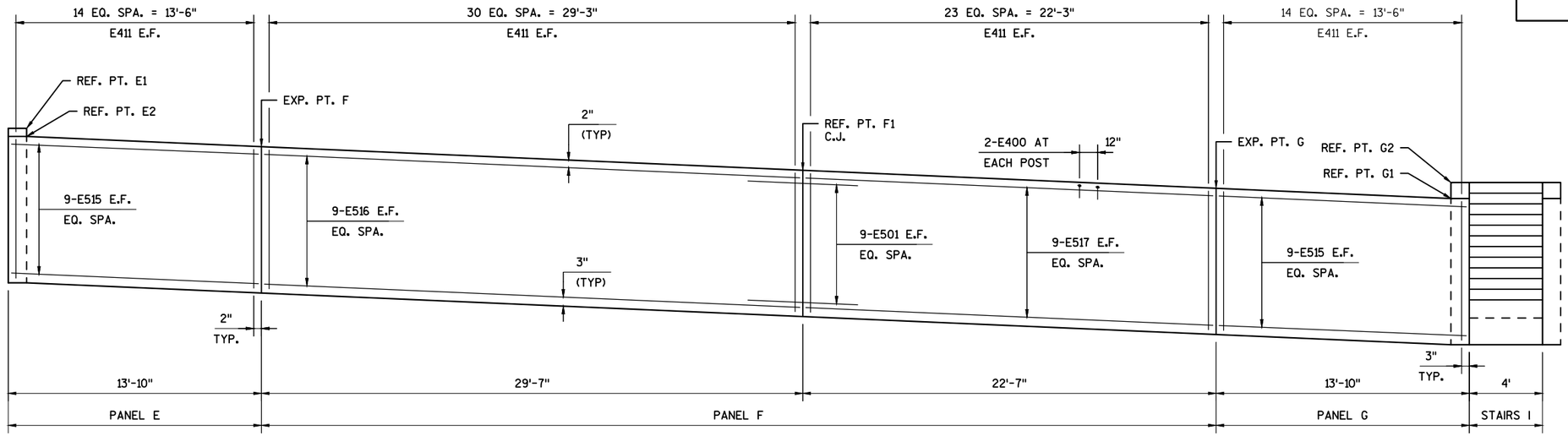
DRAWN BY AFD | PLANS CK'D. JDG

REINFORCEMENT LAYOUT

SHEET 10 OF 28

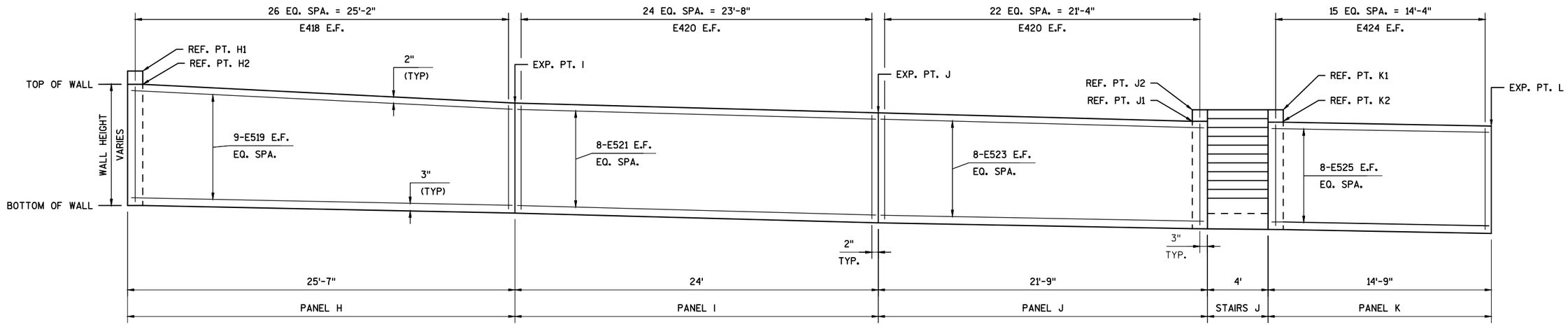
STATE PROJECT NUMBER

5944-03-84



PARTIAL WALL FACING ELEVATION

(PANELS E, F, & G)



PARTIAL WALL FACING ELEVATION

(PANELS H, I, J, & K)

LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT

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STATE OF WISCONSIN
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STRUCTURE **R-33-0006**

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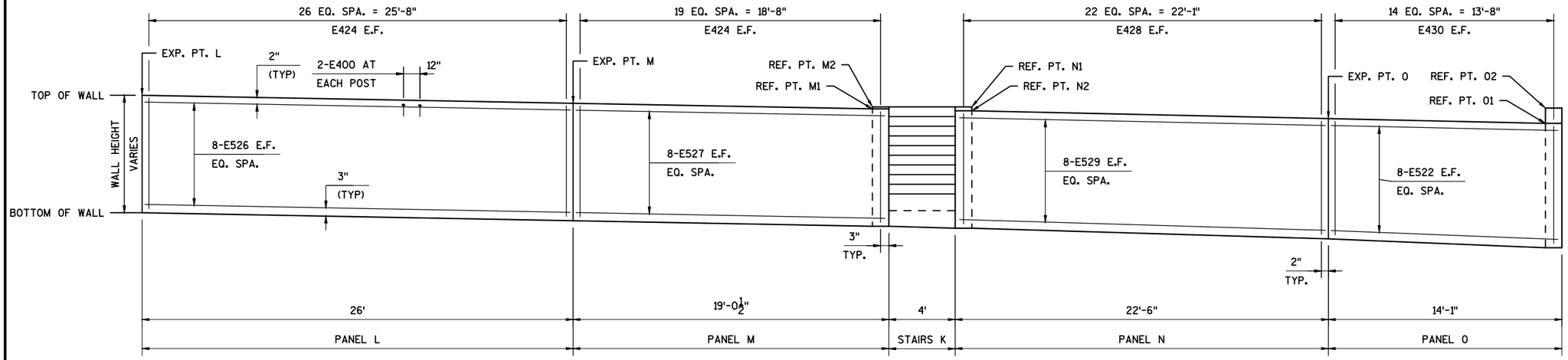
REINFORCEMENT LAYOUT

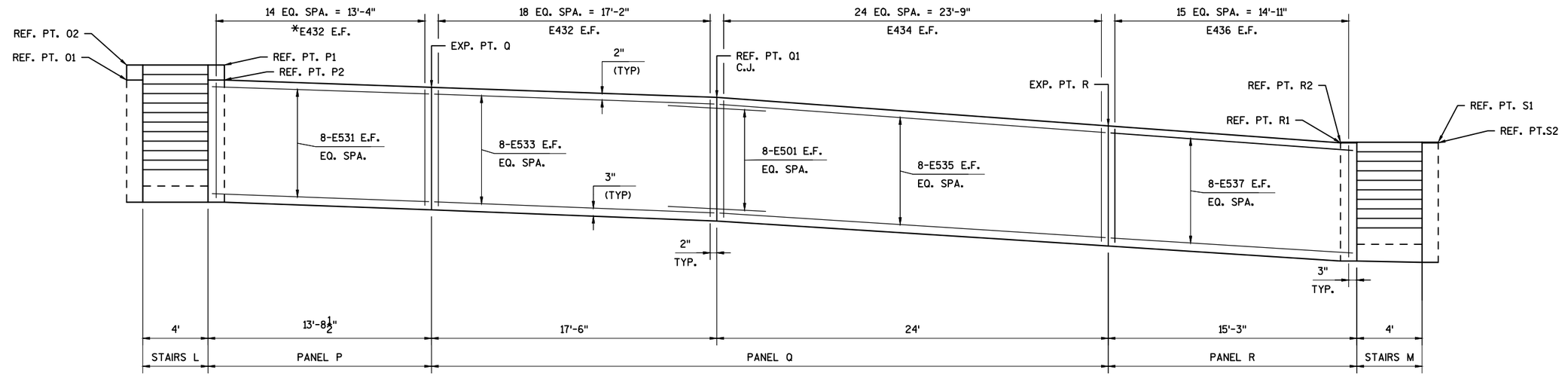
SHEET 11 OF 28

STATE PROJECT NUMBER

5944-03-84



PARTIAL WALL FACING ELEVATION
(PANELS L, M, N, & O)



PARTIAL WALL FACING ELEVATION
(PANELS P, Q, & R)

LEGEND
E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT

NO.	DATE	REVISION	BY

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STATE OF WISCONSIN
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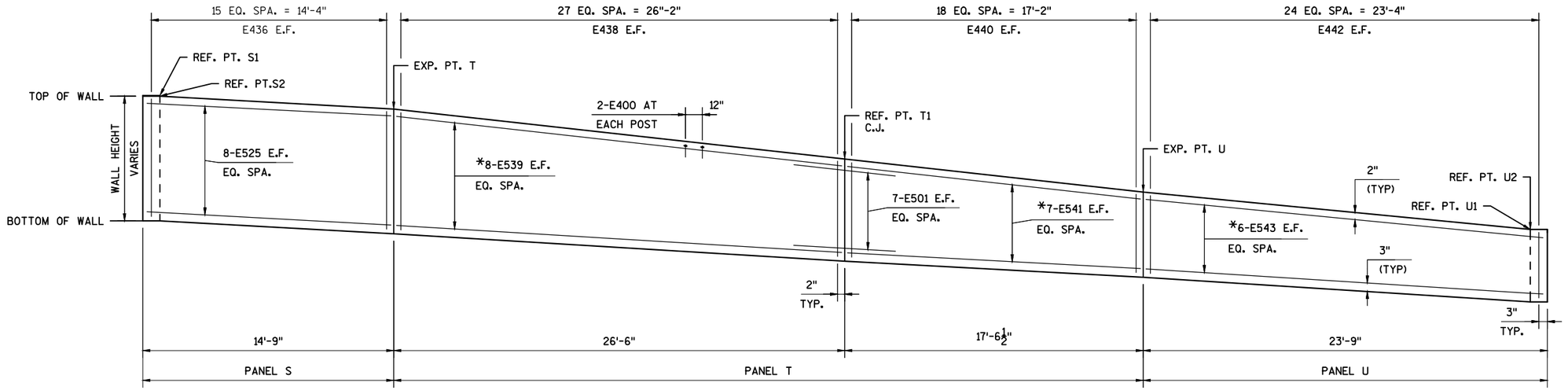
REINFORCEMENT LAYOUT

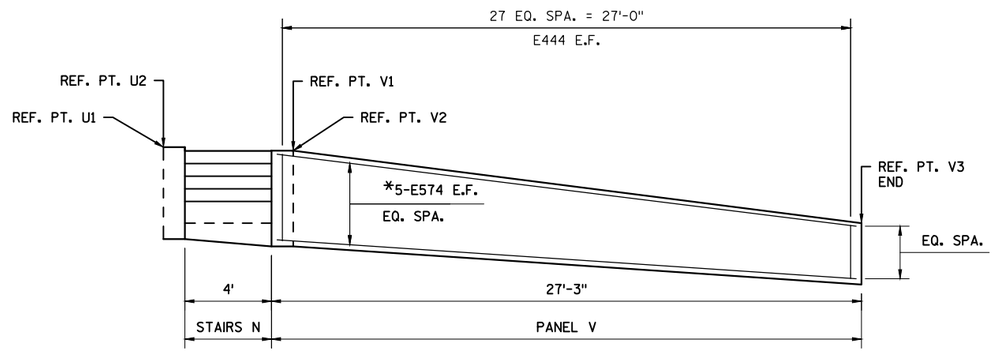
SHEET 12 OF 28

STATE PROJECT NUMBER

5944-03-84



PARTIAL WALL FACING ELEVATION
(PANELS S, T, & U)



PARTIAL WALL FACING ELEVATION
(PANEL V)

LEGEND
E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE
C.J. = CONTRACTION JOINT
EXP. JT. = EXPANSION JOINT

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STRUCTURE **R-33-0006**

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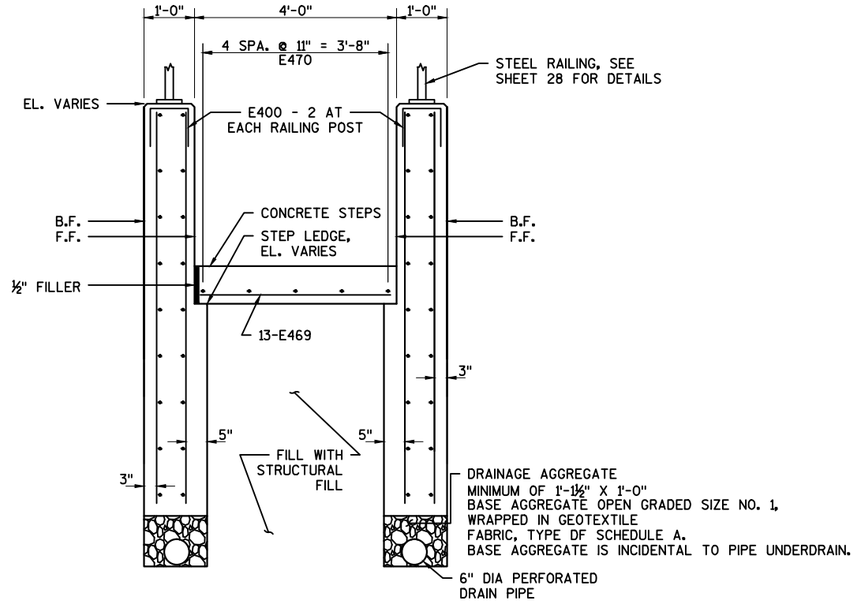
REINFORCEMENT LAYOUT

SHEET 13 OF 28

STATE PROJECT NUMBER

5944-03-84



NOTES

PLACE 2-FT STRUCTURAL BACKFILL BELOW BOTTOM OF STEPS.

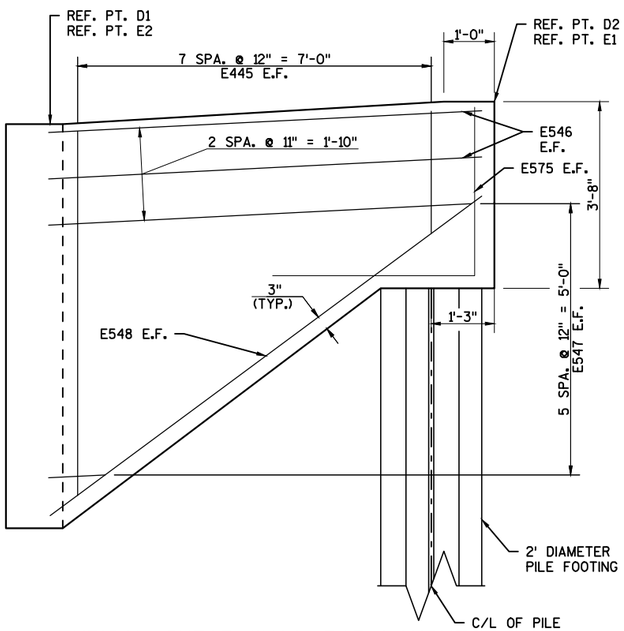
CONCRETE STEP IS MEASURED FROM THE FRONT FACE OF THE TOP RISER TO 10-INCH BACK FROM FRONT FACE OF THE TOP RISER. CONCRETE BEYOND THAT MARK IS PAID AS "CONCRETE SIDEWALK 4-INCH."

CONCRETE FOR STAIRS SHALL BE INCLUDED IN THE QUANTITY FOR "CONCRETE MASONRY, RETAINING WALL."

CONNECT THE UNDERDRAIN PIPE BENEATH THE STAIRCASE SHEAR WALLS TO THE UNDERDRAIN PIPE BENEATH THE WALL ALONG STH 81.

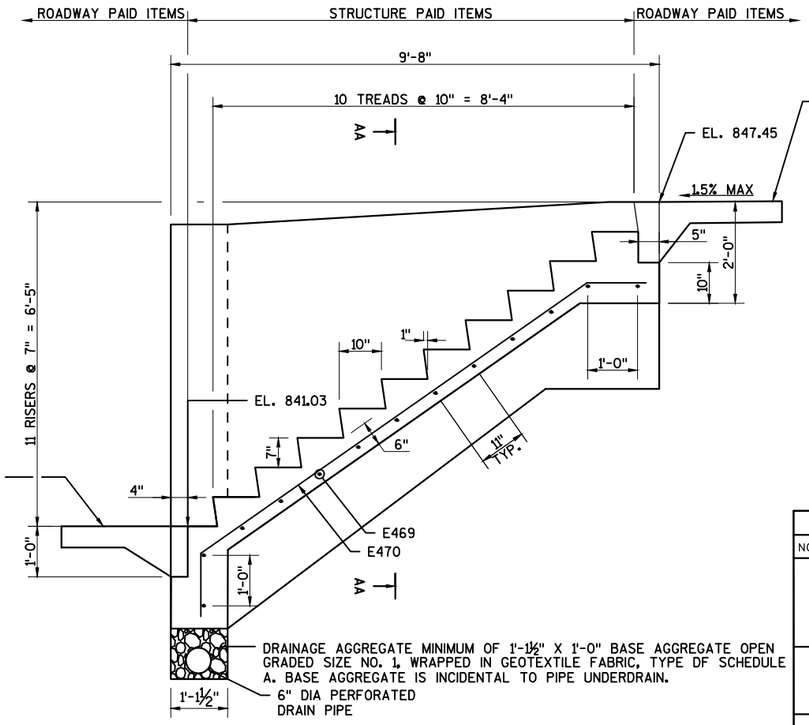
LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE



TYPICAL SHEAR WALL BAR LAYOUT
STAIRS H

SECTION AA-AA



STAIRS H CROSS SECTION
(STA 501+24.89'E')

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STATE OF WISCONSIN
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STRUCTURE **R-33-0006**

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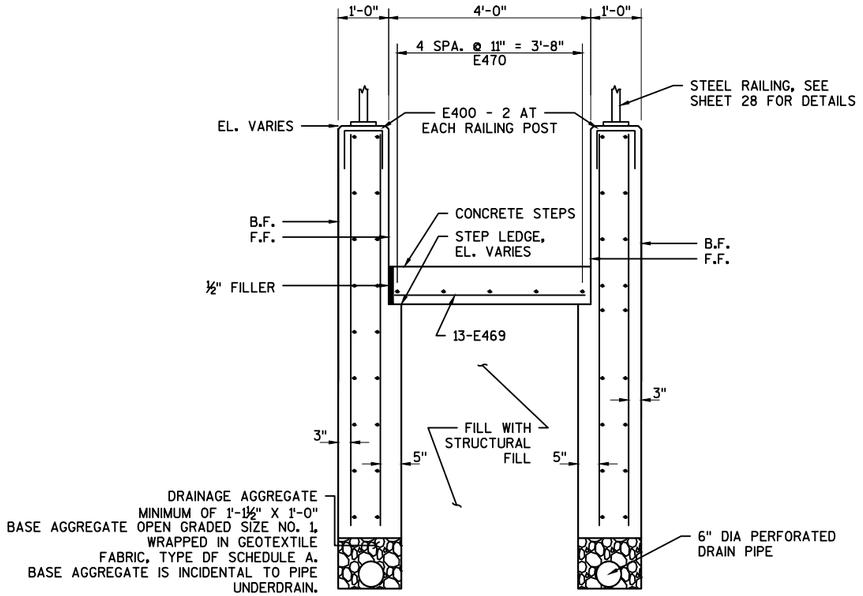
STAIRS H DETAILS

SHEET 14 OF 28

STATE PROJECT NUMBER
5944-03-84



NOTES

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CONCRETE STEP IS MEASURED FROM THE FRONT FACE OF THE TOP RISER TO 10-INCH BACK FROM FRONT FACE OF THE TOP RISER. CONCRETE BEYOND THAT MARK IS PAID AS "CONCRETE SIDEWALK 4-INCH."

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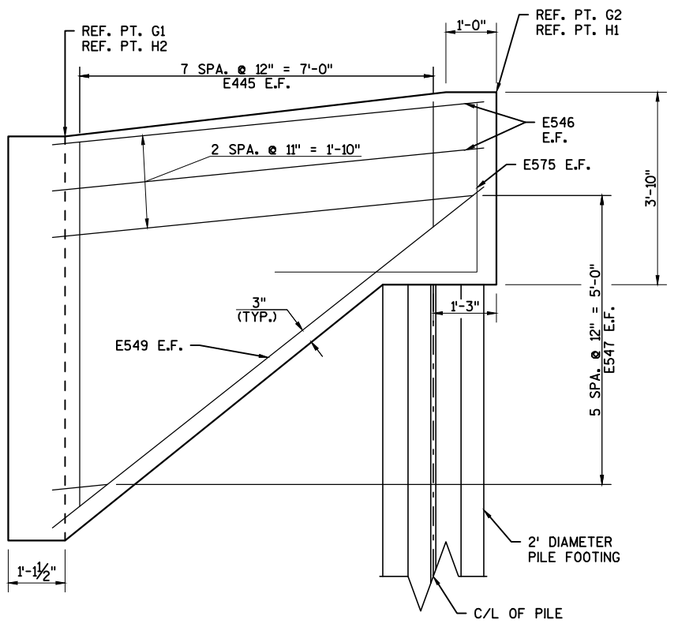
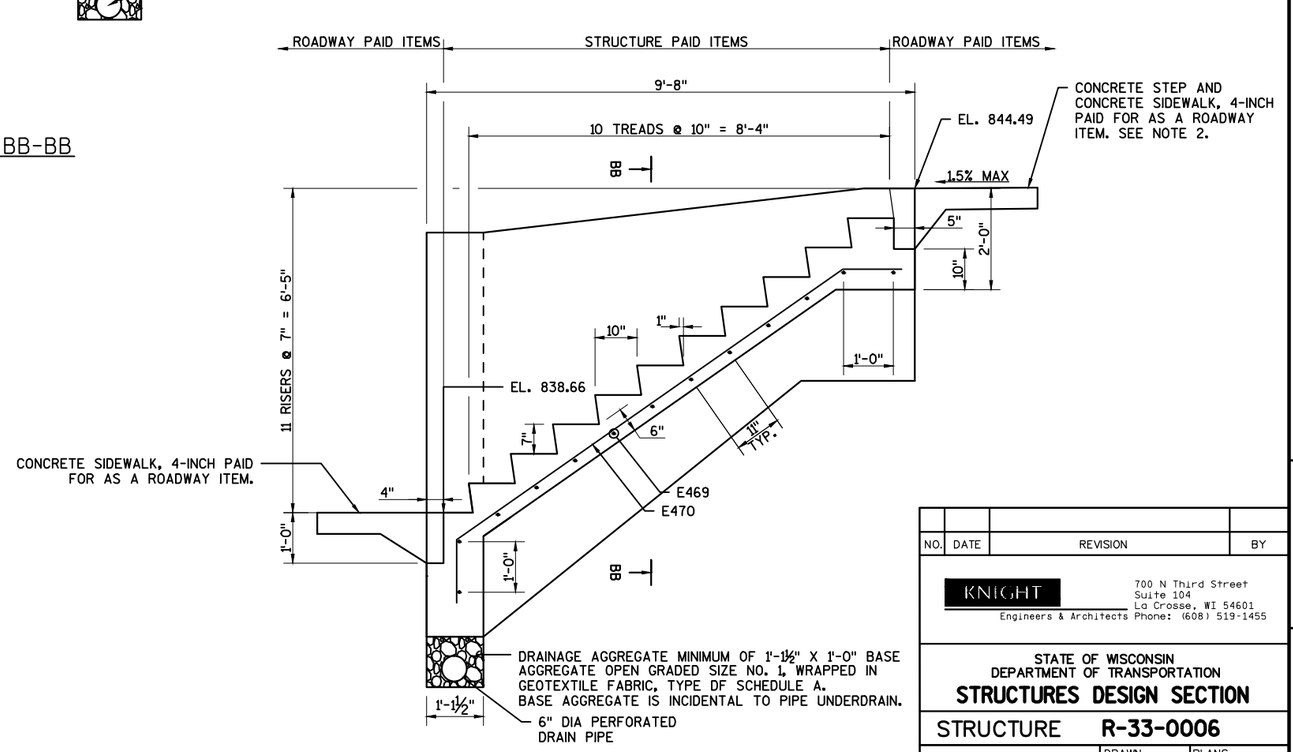
LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE



TYPICAL SHEAR WALL BAR LAYOUT
STAIRS I

SECTION BB-BB



STAIRS I CROSS SECTION
(STA 502+08.73'E')

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STATE OF WISCONSIN
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STRUCTURE **R-33-0006**

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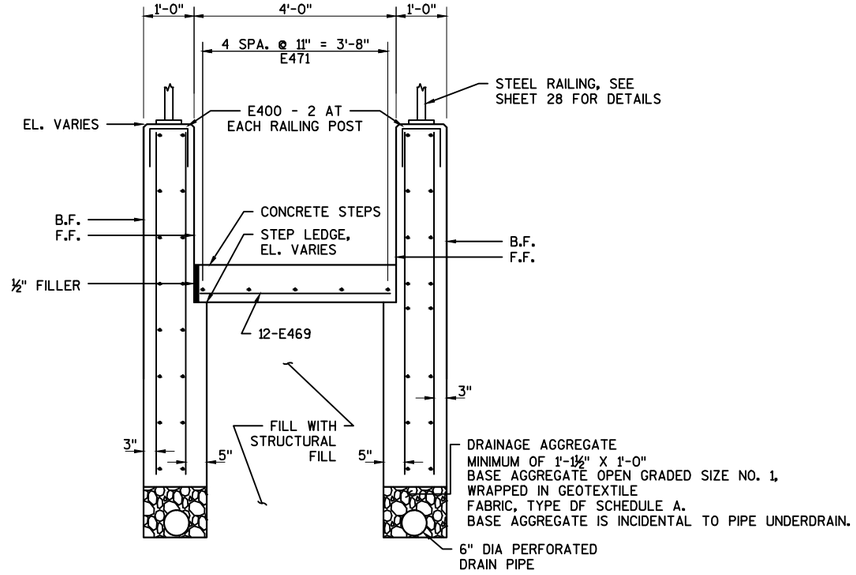
STAIRS I DETAILS

SHEET 15 OF 28

STATE PROJECT NUMBER
5944-03-84



SECTION CC-CC

NOTES

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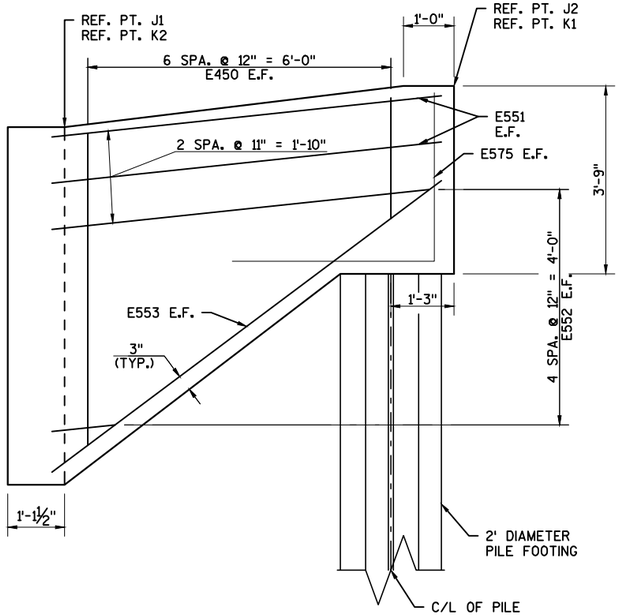
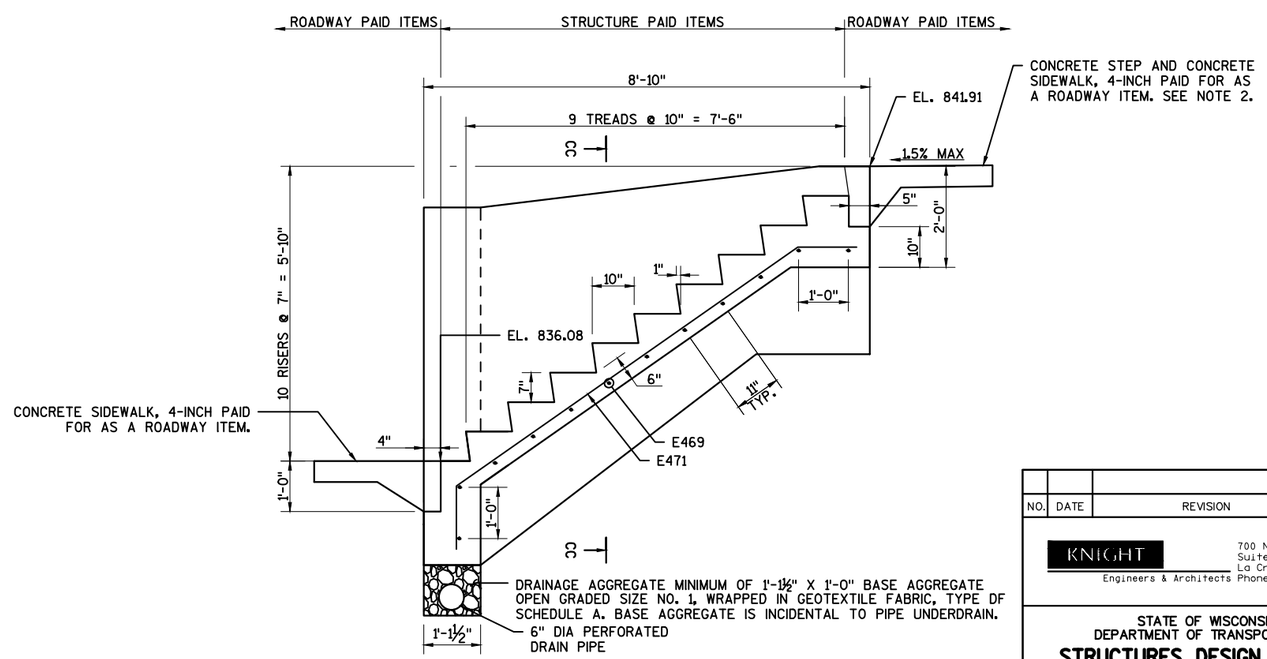
LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE



TYPICAL SHEAR WALL BAR LAYOUT
STAIRS J



STAIRS J CROSS SECTION
(STA 502+84.06'E')

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STATE OF WISCONSIN
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STRUCTURE **R-33-0006**

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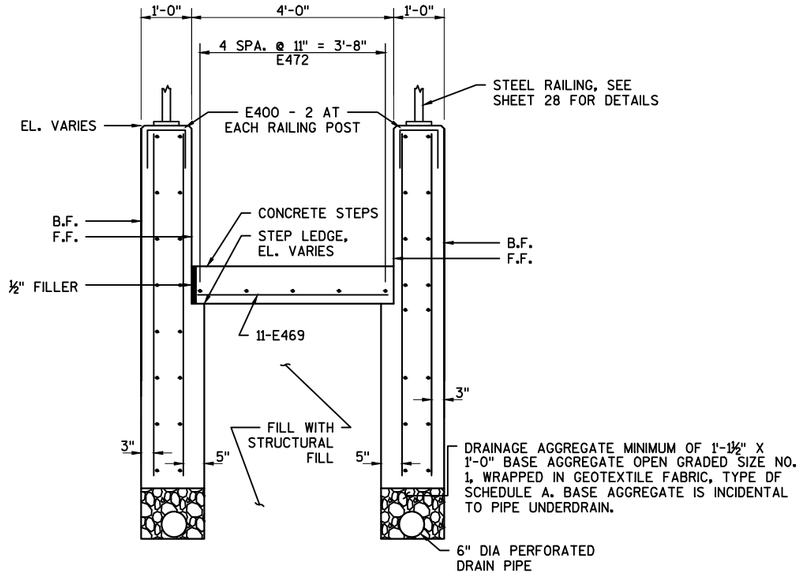
STAIRS J DETAILS

SHEET 16 OF 28

STATE PROJECT NUMBER
5944-03-84



SECTION DD-DD

NOTES

PLACE 2-FT STRUCTURAL BACKFILL BELOW BOTTOM OF STEPS.

CONCRETE STEP IS MEASURED FROM THE FRONT FACE OF THE TOP RISER TO 10-INCH BACK FROM FRONT FACE OF THE TOP RISER. CONCRETE BEYOND THAT MARK IS PAID AS "CONCRETE SIDEWALK 4-INCH."

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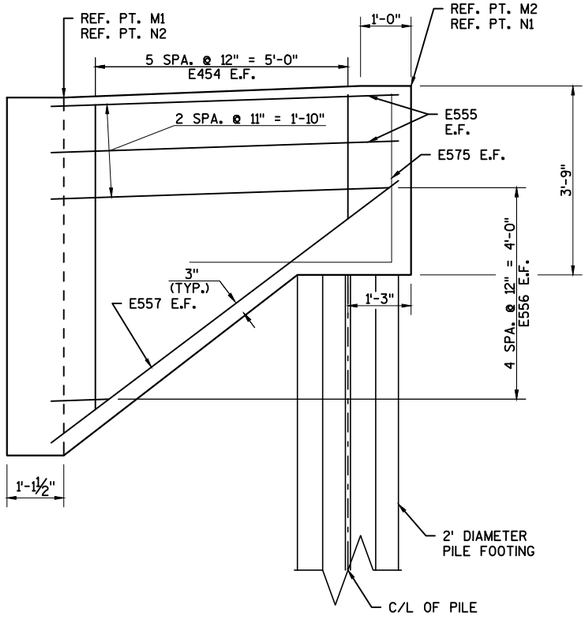
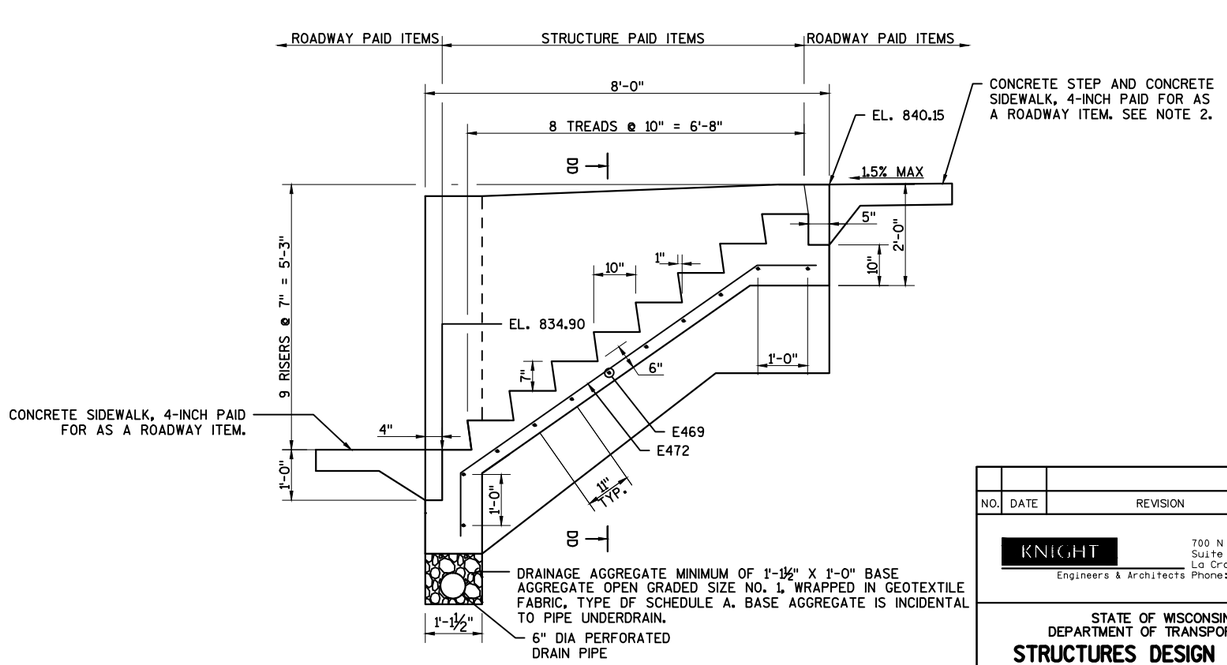
LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE



TYPICAL SHEAR WALL BAR LAYOUT
STAIRS K



STAIRS K CROSS SECTION
(STA 503+47.85'E')

NO.	DATE	REVISION	BY

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

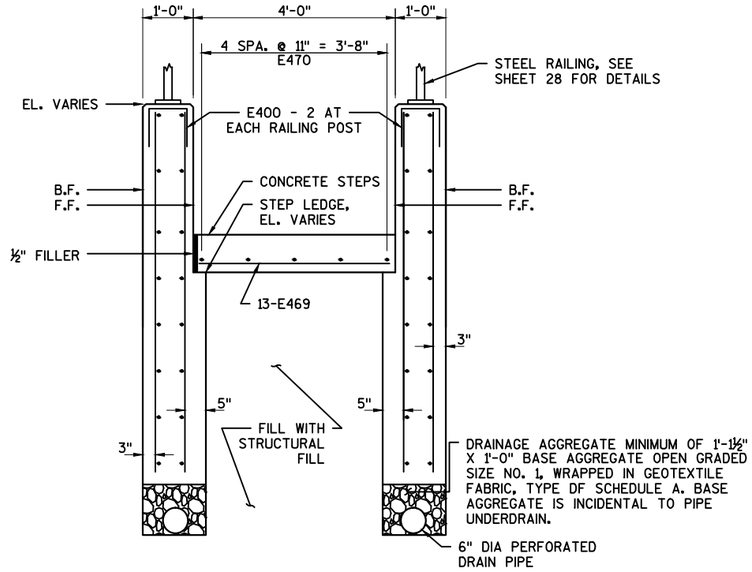
STRUCTURE **R-33-0006**

DRAWN BY	PLANS CK'D.
AFD	JDG

STAIRS K DETAILS

SHEET 17 OF 28

STATE PROJECT NUMBER
5944-03-84



NOTES

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LEGEND

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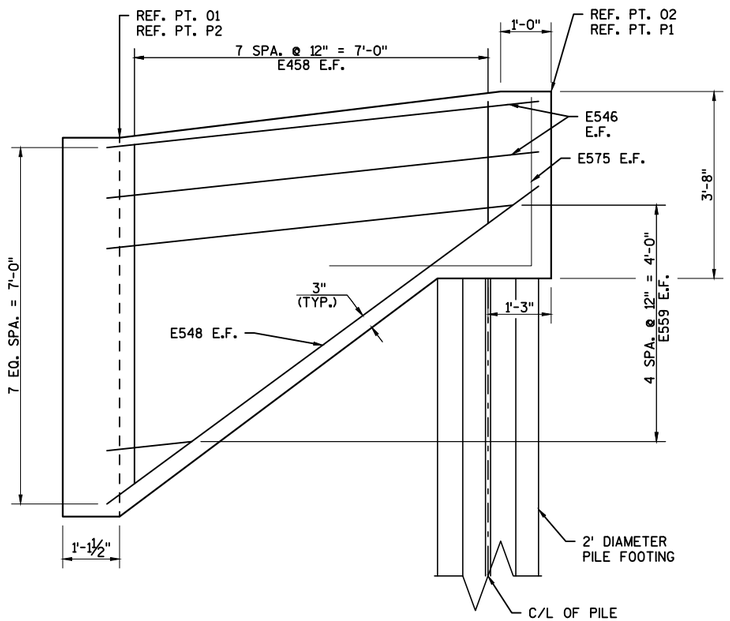
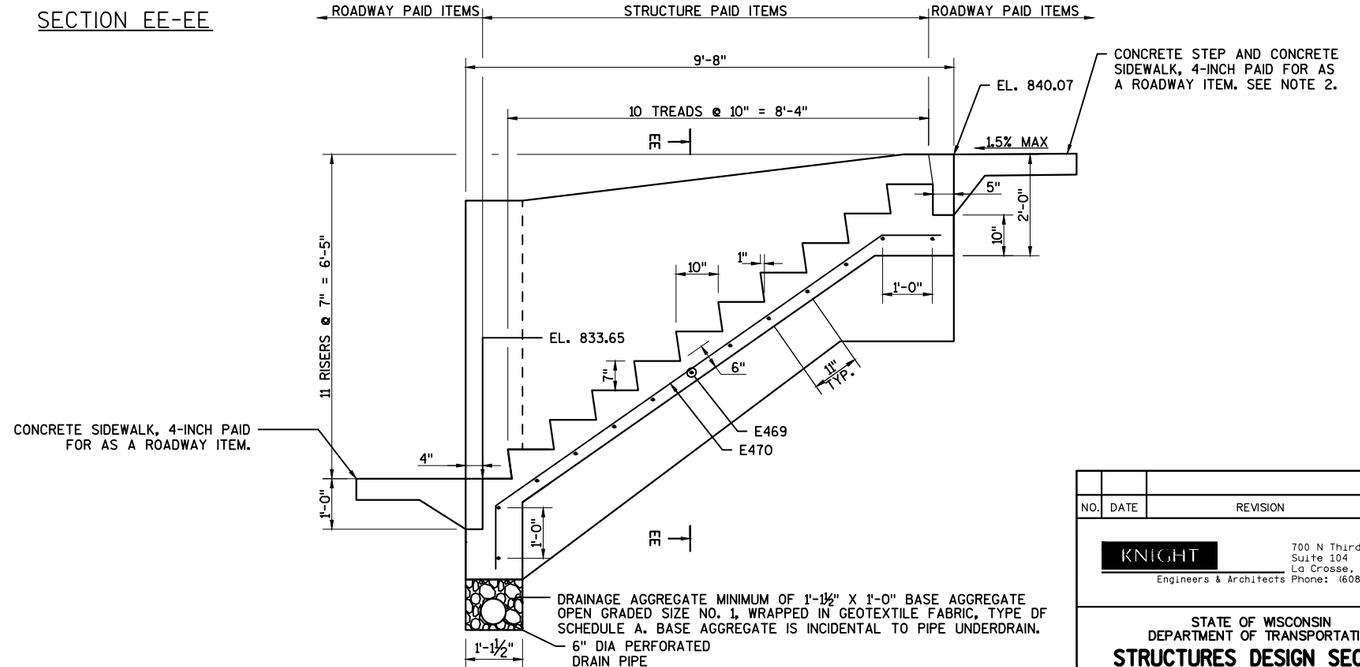
F.F. = FRONT FACE
B.F. = BACK FACE



TYPICAL SHEAR WALL BAR LAYOUT
STAIRS L

SECTION EE-EE



STAIRS L CROSS SECTION
(STA 503+88.44'E')

NO.	DATE	REVISION	BY

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STRUCTURE **R-33-0006**

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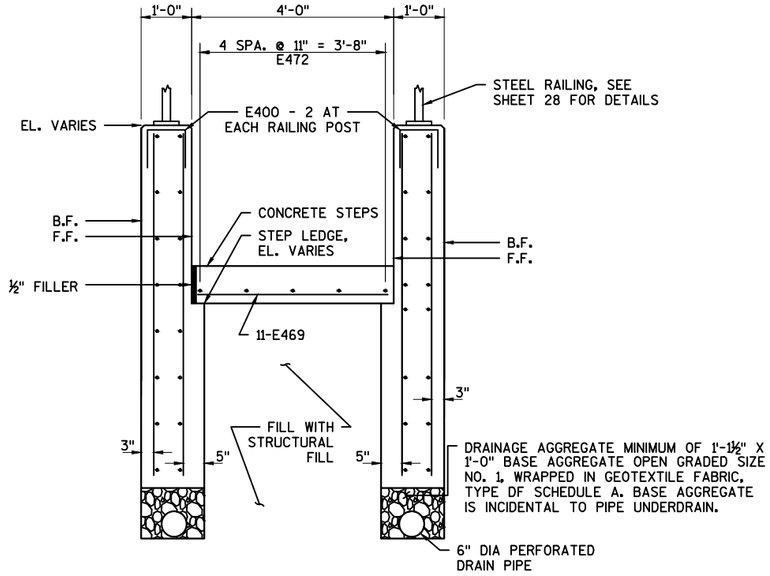
STAIRS L DETAILS

SHEET 18 OF 28

STATE PROJECT NUMBER
5944-03-84



SECTION FF-FF

NOTES

PLACE 2-FT STRUCTURAL BACKFILL BELOW BOTTOM OF STEPS.

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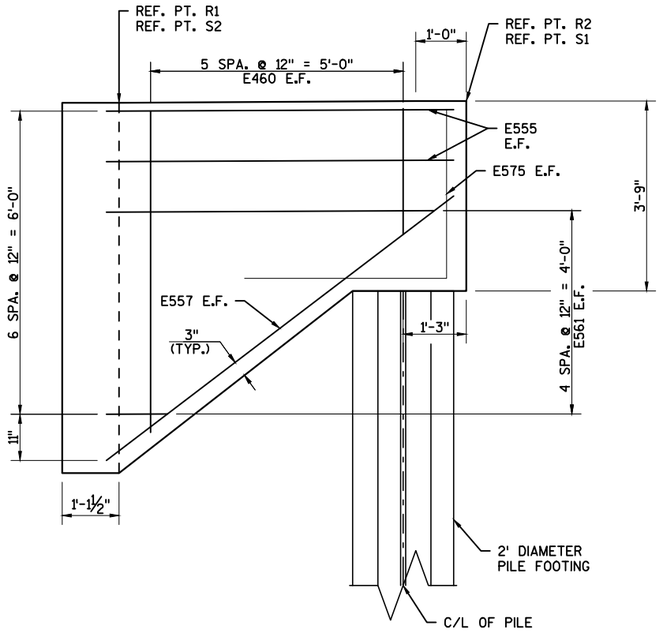
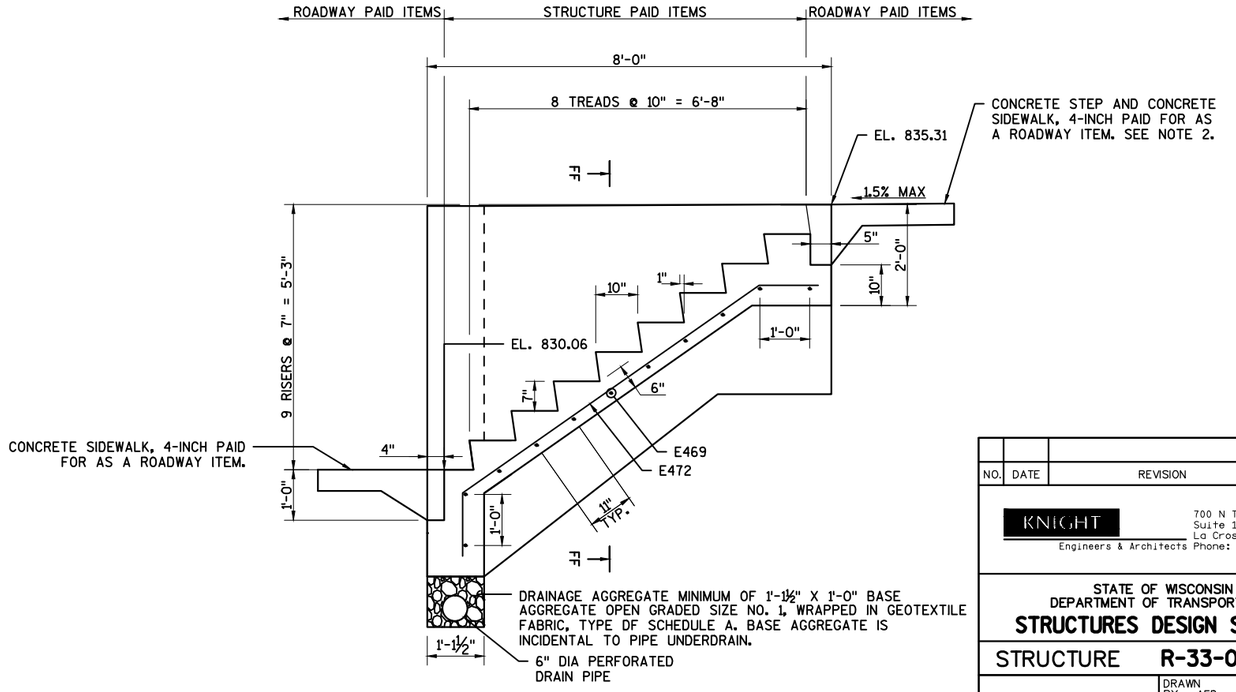
LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE



TYPICAL SHEAR WALL BAR LAYOUT
STAIRS M



STAIRS M CROSS SECTION
(STA 504+62.90'E')

NO.	DATE	REVISION	BY

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STRUCTURE **R-33-0006**

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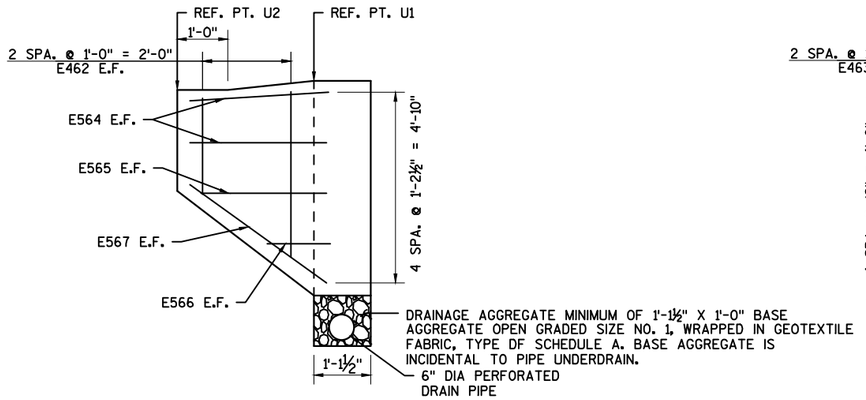
STAIRS M DETAILS

SHEET 19 OF 28

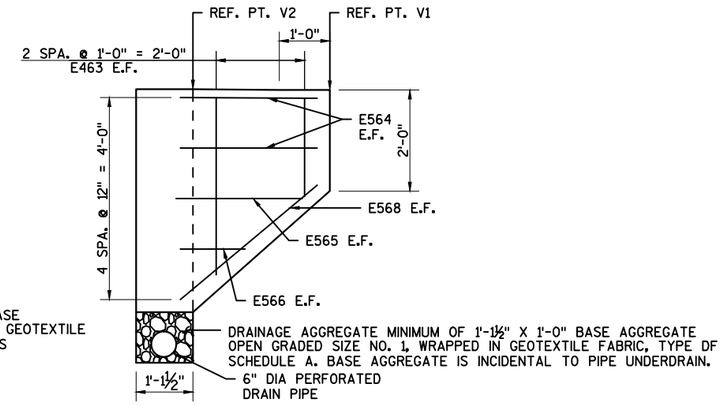
8

8

STATE PROJECT NUMBER
5944-03-84



SHEAR WALL BAR LAYOUT PANEL U
STAIRS N



SHEAR WALL BAR LAYOUT PANEL V
STAIRS N

NOTES

PLACE 2-FT STRUCTURAL BACKFILL BELOW BOTTOM OF STEPS.

CONCRETE STEP IS MEASURED FROM THE FRONT FACE OF THE TOP RISER TO 10-INCH BACK FROM FRONT FACE OF THE TOP RISER. CONCRETE BEYOND THAT MARK IS PAID AS "CONCRETE SIDEWALK 4-INCH."

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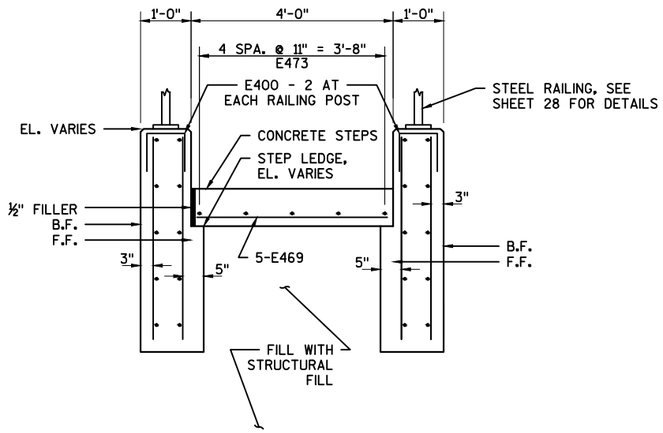
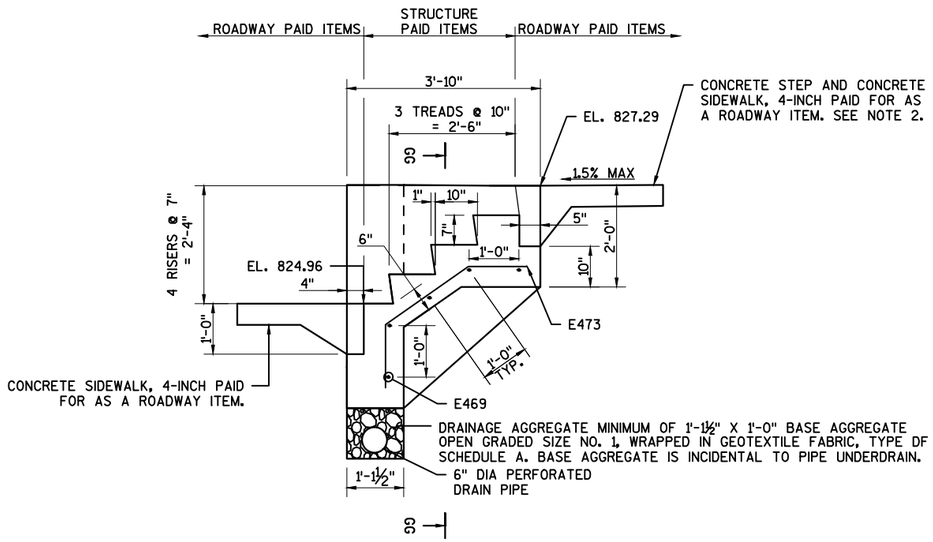
CONNECT THE UNDERDRAIN PIPE BENEATH THE STAIRCASE SHEAR WALLS TO THE UNDERDRAIN PIPE BENEATH THE WALL ALONG STH 81.

LEGEND

E.F. = EACH FACE
F.F. = FRONT FACE
B.F. = BACK FACE



SECTION GG-GG



STAIRS N CROSS SECTION
(STA 505+49.45'E')

NO.	DATE	REVISION	BY

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STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0006**

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STAIRS N DETAILS

SHEET 20 OF 28

STATE PROJECT NUMBER

5944-03-84

BILL OF BARS

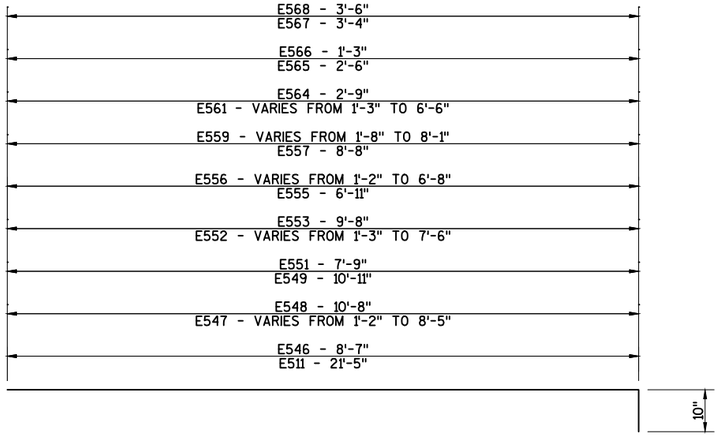
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
E400	X	212	2'-1"	X		AT TOP OF WALL NEAR FENCE POSTS
E501	X	80	6'-0"			AT CONTRACTION JOINTS
E402	X	50	4'-7"		▲	PANEL A VERTICAL
E503	X	8	22'-11"			PANEL A HORIZONTAL
E504	X	2	16'-7"			PANEL A HORIZONTAL
E505	X	2	6'-10"			PANEL A HORIZONTAL
E506	X	2	23'-3"			PANEL A HORIZONTAL
E407	X	38	6'-8"		▲	PANEL A VERTICAL
E508	X	14	17'-6"			PANEL A HORIZONTAL
E509	X	2	10'-9"			PANEL A HORIZONTAL
E510	X	2	17'-9"			PANEL A HORIZONTAL
E411	X	344	7'-7"			PANEL B, C, D, E, F, & G VERTICAL
E512	X	18	22'-2"	X		PANEL B HORIZONTAL
E513	X	18	17'-11"			PANEL C HORIZONTAL
E514	X	36	21'-5"			PANEL C & D HORIZONTAL
E515	X	36	13'-5"			PANEL E & G HORIZONTAL
E516	X	18	29'-3"			PANEL F HORIZONTAL
E517	X	18	22'-3"			PANEL F HORIZONTAL
E418	X	54	7'-3"		▲	PANEL H VERTICAL
E519	X	18	25'-2"			PANEL H HORIZONTAL
E420	X	96	6'-10"			PANEL I & J VERTICAL
E521	X	16	23'-8"			PANEL I HORIZONTAL
E522	X	16	13'-8"			PANEL O HORIZONTAL
E523	X	16	21'-4"			PANEL J HORIZONTAL
E424	X	126	6'-8"			PANEL K, L, & M VERTICAL
E525	X	32	14'-4"			PANEL L & S HORIZONTAL
E526	X	16	25'-8"			PANEL L HORIZONTAL
E527	X	16	18'-8"			PANEL M HORIZONTAL
E428	X	46	6'-9"		▲	PANEL N VERTICAL
E529	X	16	22'-9"			PANEL N HORIZONTAL
E430	X	30	7'-0"		▲	PANEL O VERTICAL
E531	X	16	13'-4"			PANEL P HORIZONTAL
E432	X	68	7'-2"			PANEL P & Q VERTICAL
E533	X	16	17'-2"			PANEL Q HORIZONTAL
E434	X	50	7'-1"		▲	PANEL Q VERTICAL
E535	X	16	23'-9"			PANEL Q HORIZONTAL
E436	X	64	6'-11"			PANEL R & S VERTICAL
E537	X	16	14'-11"			PANEL R HORIZONTAL
E438	X	56	6'-3"		▲	PANEL T VERTICAL
E539	X	16	26'-4"			PANEL T HORIZONTAL
E440	X	38	5'-1"		▲	PANEL T VERTICAL
E541	X	14	17'-4"			PANEL T HORIZONTAL
E442	X	50	4'-3"		▲	PANEL U VERTICAL
E543	X	12	23'-5"			PANEL U HORIZONTAL
E444	X	56	2'-9"		▲	PANEL V VERTICAL
E445	X	64	4'-11"		▲	STAIRS H & I SHEAR WALL VERTICAL
E546	X	24	9'-4"	X		STAIRS H, I, & L SHEAR WALL HORIZONTAL
E547	X	48	5'-7"	X	▲	STAIRS H & I SHEAR WALL HORIZONTAL
E548	X	8	11'-5"	X		STAIRS H & L SHEAR WALL HORIZONTAL
E549	X	4	11'-8"	X		STAIRS I SHEAR WALL HORIZONTAL
E450	X	28	4'-3"		▲	STAIRS J SHEAR WALL VERTICAL
E551	X	8	8'-6"	X		STAIRS J SHEAR WALL HORIZONTAL
E552	X	20	5'-2"	X	▲	STAIRS J SHEAR WALL HORIZONTAL
E553	X	4	10'-5"	X		STAIRS J SHEAR WALL HORIZONTAL
E454	X	24	4'-4"		▲	STAIRS K SHEAR WALL VERTICAL
E555	X	16	7'-8"	X		STAIRS K & M SHEAR WALL HORIZONTAL
E556	X	20	4'-8"	X	▲	STAIRS K SHEAR WALL HORIZONTAL
E557	X	8	9'-5"	X		STAIRS K & M SHEAR WALL HORIZONTAL
E458	X	32	4'-7"		▲	STAIRS L SHEAR WALL VERTICAL
E559	X	20	5'-8"	X	▲	STAIRS L SHEAR WALL HORIZONTAL
E460	X	24	4'-5"		▲	STAIRS M SHEAR WALL VERTICAL
E561	X	20	4'-8"	X	▲	STAIRS M SHEAR WALL HORIZONTAL
E462	X	6	2'-6"		▲	STAIRS N SHEAR WALL VERTICAL
E463	X	6	2'-8"		▲	STAIRS N SHEAR WALL VERTICAL
E564	X	8	3'-6"	X		STAIRS N SHEAR WALL HORIZONTAL
E565	X	4	3'-3"	X		STAIRS N SHEAR WALL HORIZONTAL
E566	X	4	2'-0"	X		STAIRS N SHEAR WALL HORIZONTAL
E567	X	2	4'-1"	X		STAIRS N SHEAR WALL HORIZONTAL
E568	X	2	4'-3"	X		STAIRS N SHEAR WALL HORIZONTAL
E469	X	78	3'-8"			STAIRS HORIZONTAL
E470	X	15	11'-9"	X		STAIRS H, I, & L VERTICAL
E471	X	5	10'-8"	X		STAIRS J VERTICAL
E472	X	10	9'-7"	X		STAIRS K & M VERTICAL
E473	X	5	4'-5"	X		STAIRS N VERTICAL
E574	X	10	27'-0"			PANEL V HORIZONTAL
E575	X	12	7'-3"	X		STAIRS H, I, J, K, L, & M SHEAR WALL

BAR SERIES TABLE

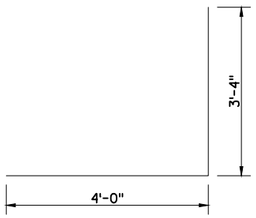
BAR MARK	NO. REQ'D	LENGTH
E402	2 SERIES OF 25	4'-11" TO 6'-3"
E407	2 SERIES OF 19	4'-8" TO 6'-4"
E418	2 SERIES OF 17	6'-10" TO 7'-7"
E428	2 SERIES OF 23	6'-8" TO 6'-10"
E430	2 SERIES OF 15	6'-10" TO 7'-1"
E434	2 SERIES OF 25	6'-11" TO 7'-2"
E438	2 SERIES OF 27	5'-7" TO 6'-11"
E440	2 SERIES OF 19	4'-7" TO 5'-7"
E442	2 SERIES OF 25	3'-11" TO 4'-7"
E445	2 SERIES OF 28	2'-6" TO 3'-0"
E546	8 SERIES OF 8	2'-6" TO 7'-3"
E548	8 SERIES OF 6	1'-11" TO 9'-2"
E551	4 SERIES OF 7	2'-4" TO 6'-2"
E553	4 SERIES OF 5	2'-0" TO 8'-3"
E555	4 SERIES OF 6	2'-6" TO 6'-1"
E557	4 SERIES OF 5	1'-11" TO 7'-5"
E559	4 SERIES OF 8	2'-5" TO 6'-9"
E460	4 SERIES OF 5	2'-5" TO 8'-10"
E561	4 SERIES OF 6	2'-6" TO 6'-4"
E462	4 SERIES OF 5	2'-0" TO 7'-3"
E463	2 SERIES OF 3	1'-9" TO 3'-3"
E564	2 SERIES OF 3	1'-9" TO 3'-6"

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

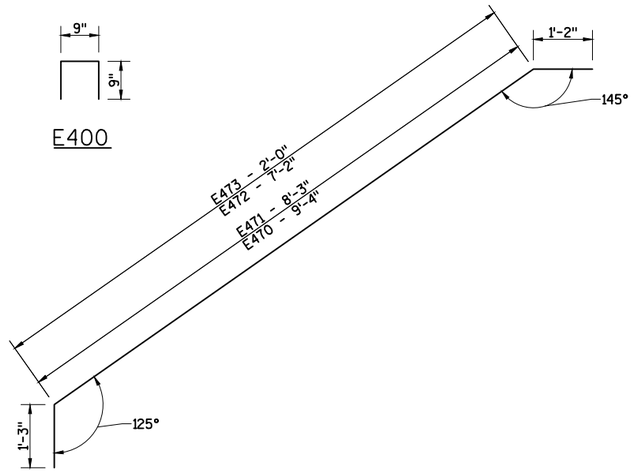
NOTE: THE FIRST DIGIT OF A BAR SIGNIFIES THE BAR SIZE. DIMENSIONS FOR BENDING ARE OUT TO OUT OF BAR.



E512, E546, E547, E548, E549, E551, E552, E553, E555, E556, E557, E559, E561, E564, E564, E565, E566, E567, & E568



E575



E470, E471, E472, & E473

NO.	DATE	REVISION	BY

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0006**

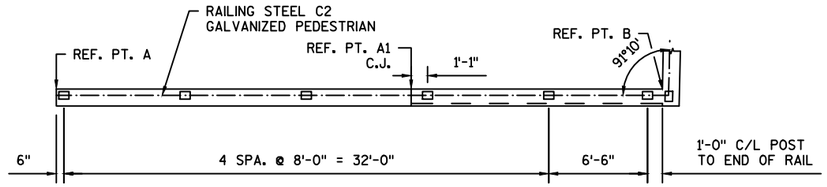
DRAWN BY AFD | PLANS CK'D. JDG

REINFORCEMENT SCHEDULE

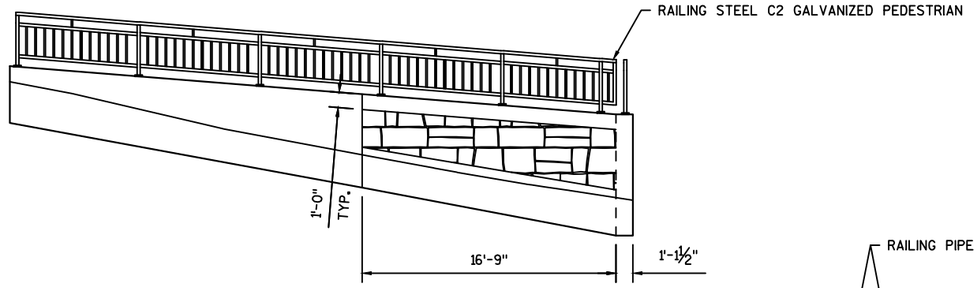
SHEET 21 OF 28

STATE PROJECT NUMBER

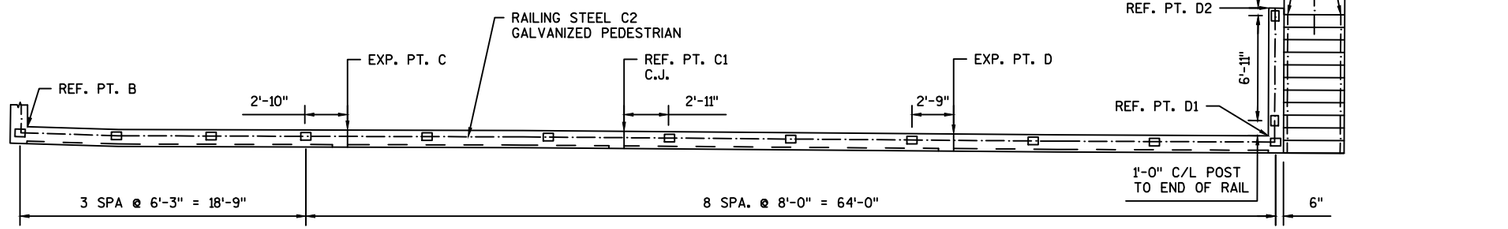
5944-03-84



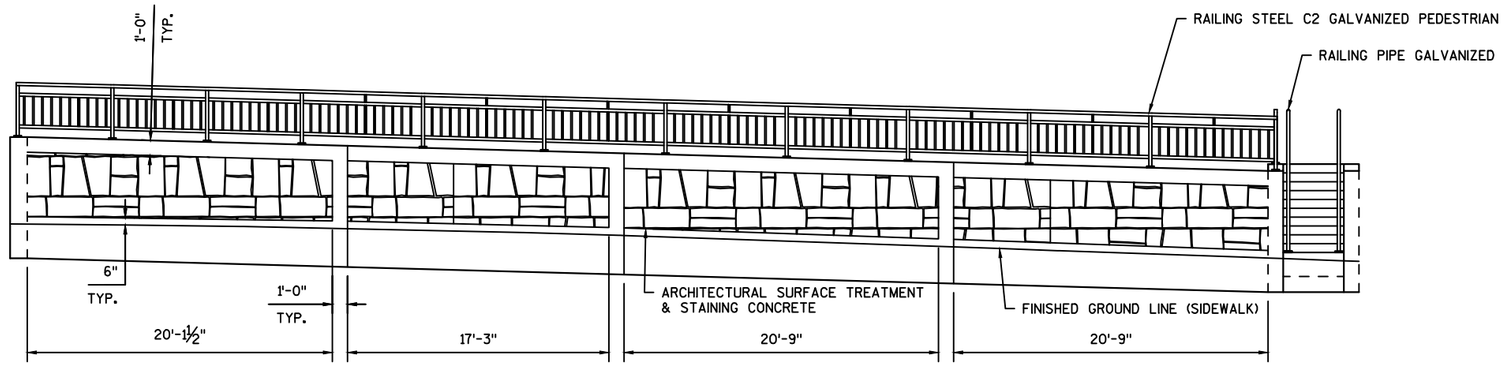
STEEL RAILING PLAN



ELEVATION



STEEL RAILING PLAN



ELEVATION

NOTES:

ALL POST SPACES ARE TAKEN HORIZONTALLY ALONG C/L RAILING.

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STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0006**

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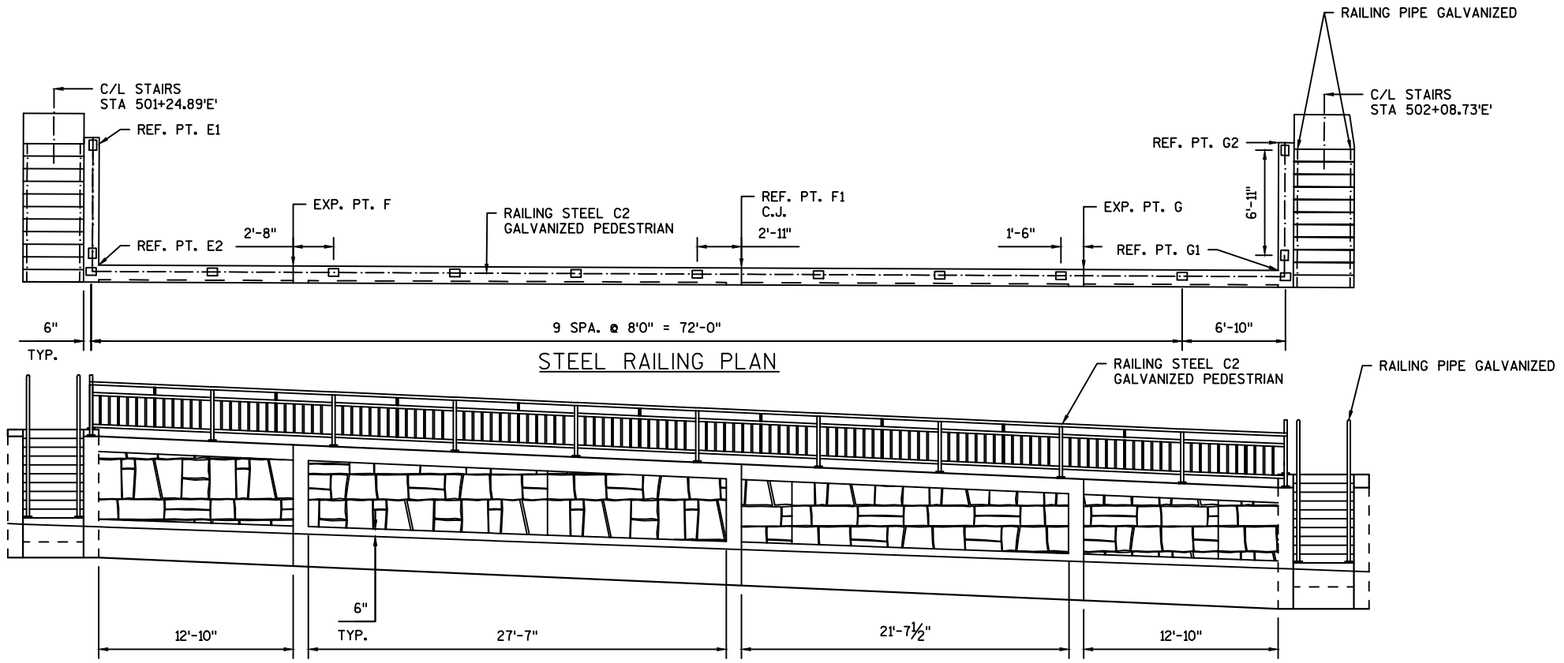
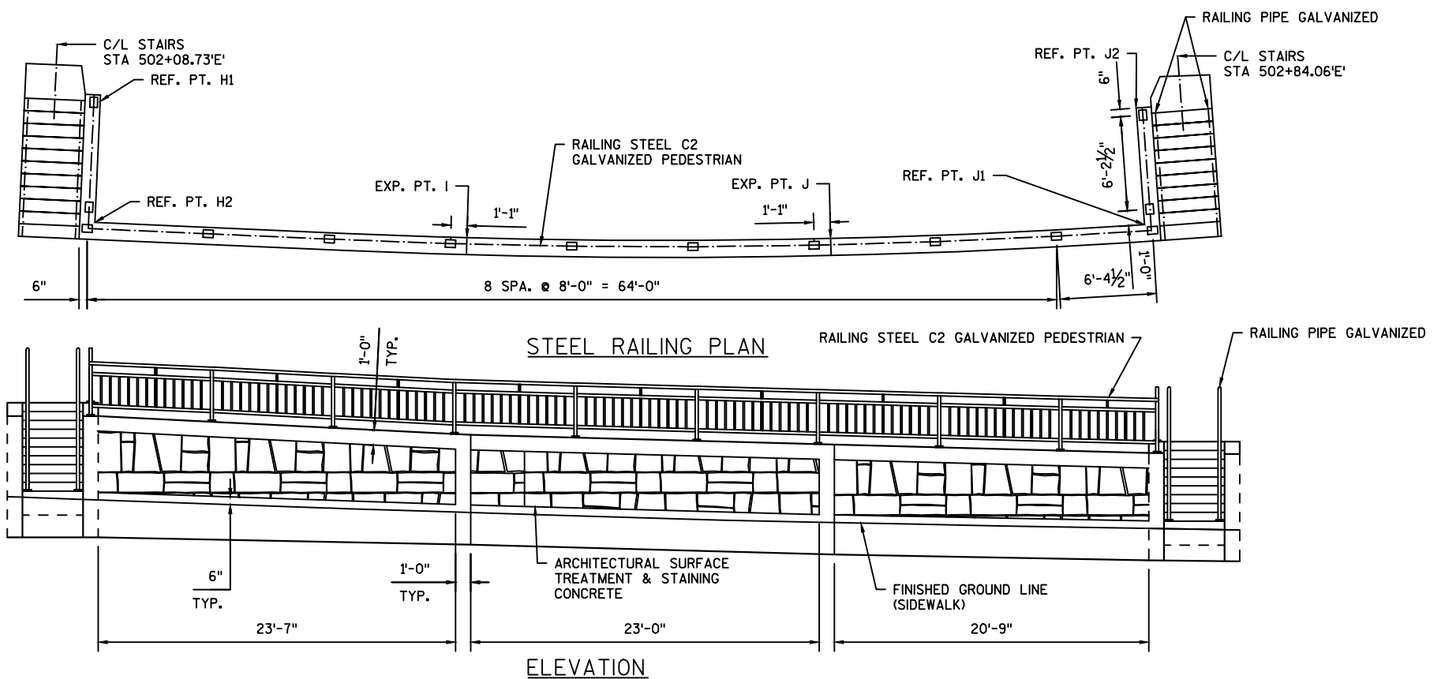
RAILING AND ARCHITECTURAL DETAILS

SHEET 22 OF 28

STATE PROJECT NUMBER

5944-03-84





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RAILING AND ARCHITECTURAL DETAILS

SHEET 23 OF 28

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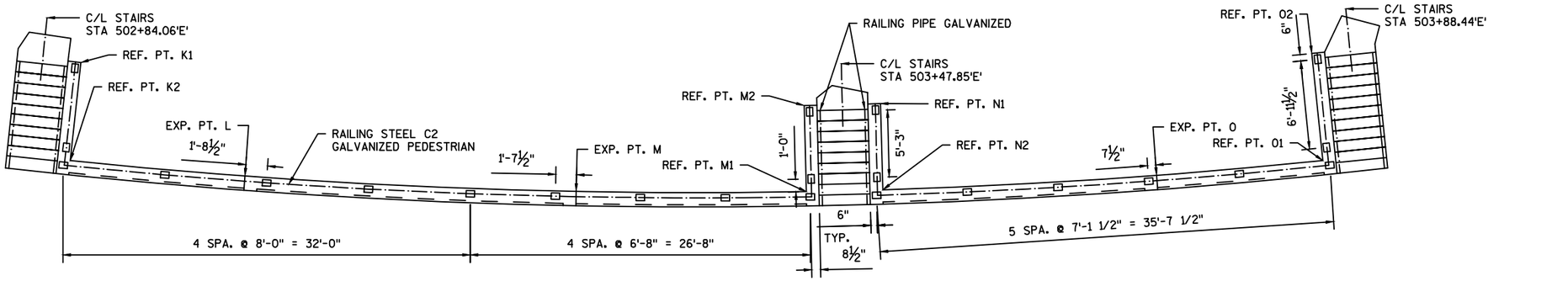
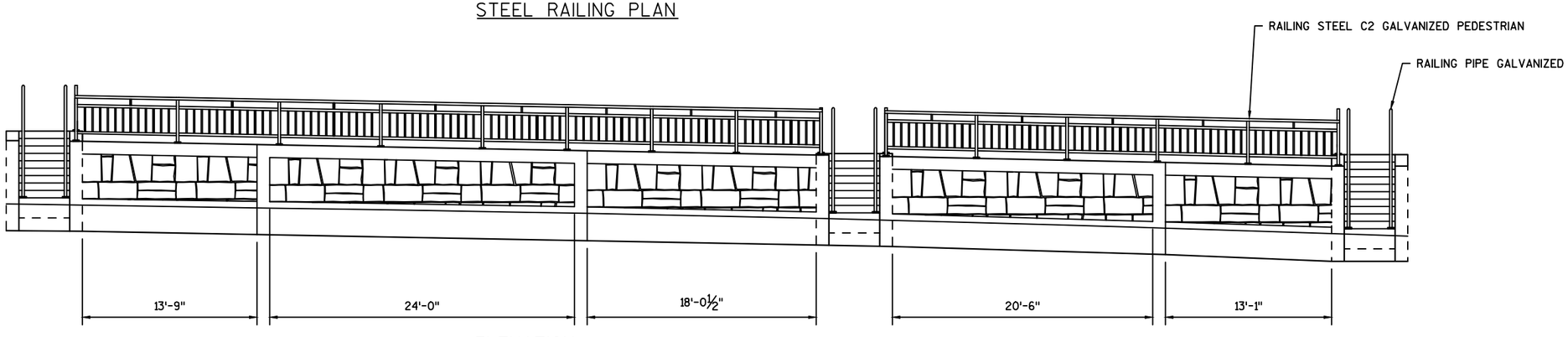
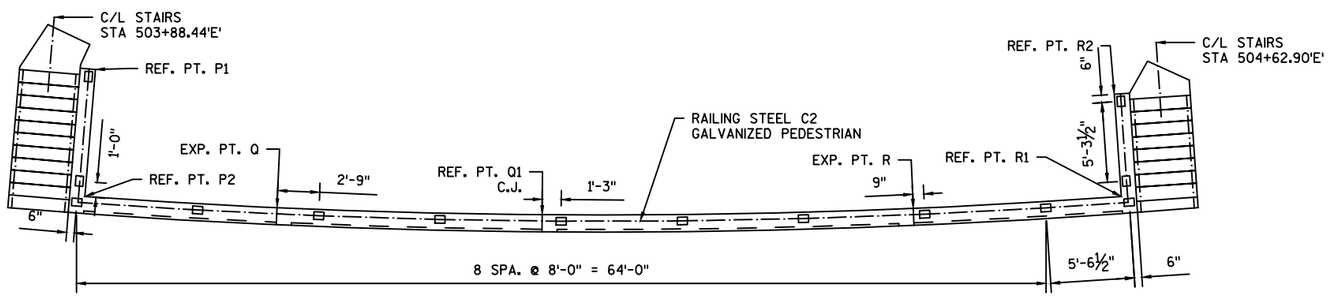


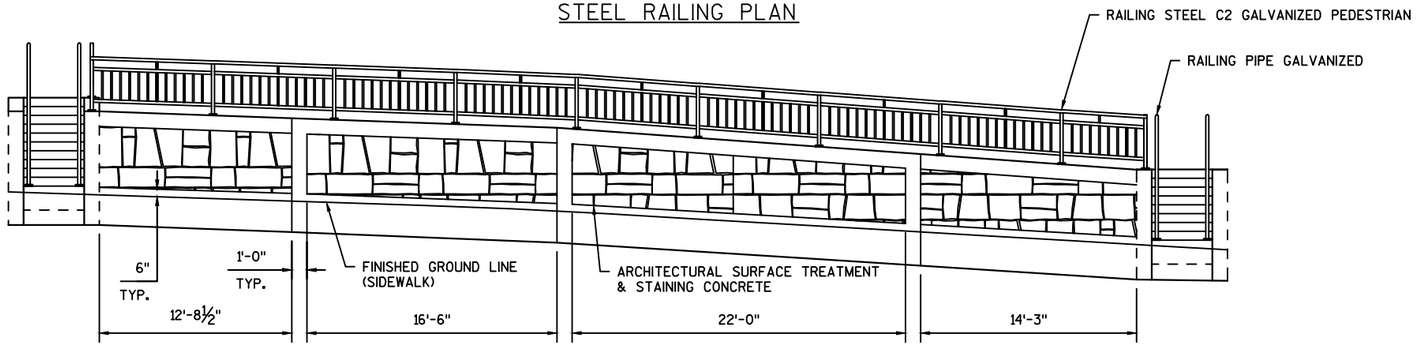
STEEL RAILING PLAN



ELEVATION



STEEL RAILING PLAN



ELEVATION

NOTES:

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STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE R-33-0006

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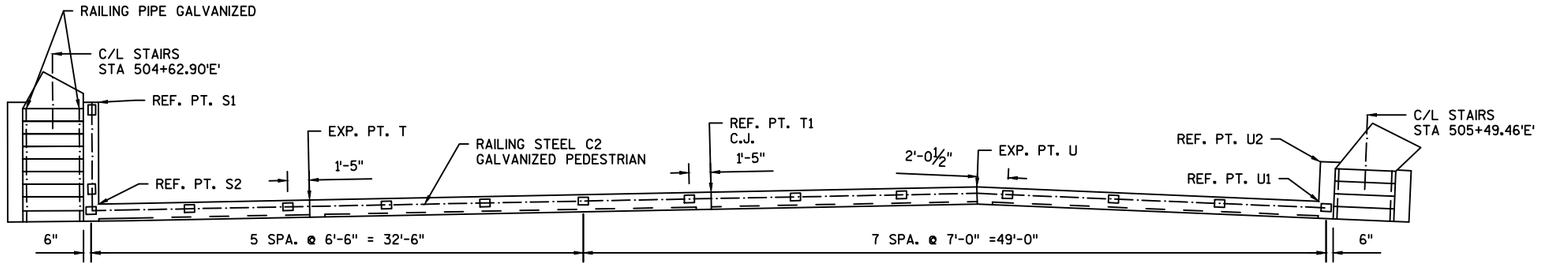
RAILING AND ARCHITECTURAL DETAILS

SHEET 24 OF 28

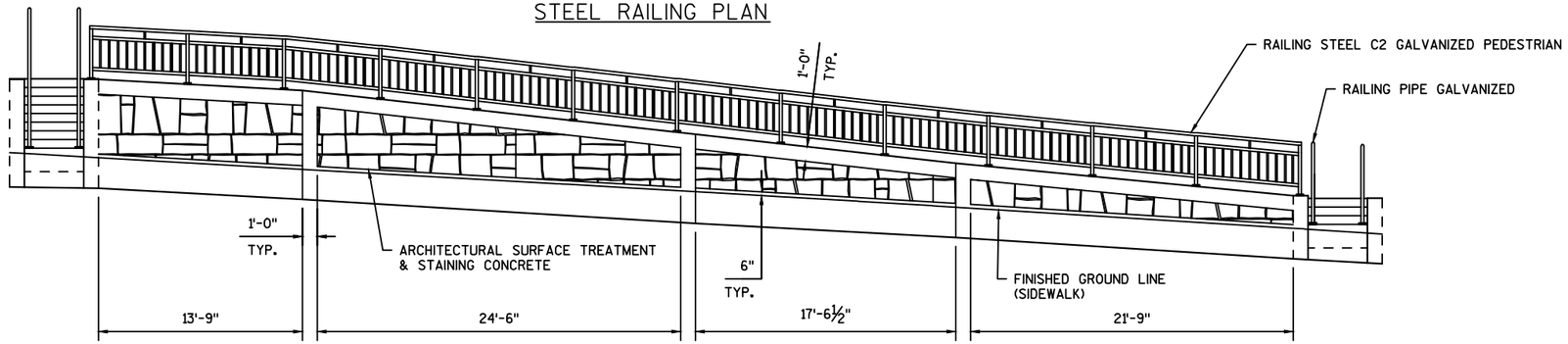
8

8

STATE PROJECT NUMBER
5944-03-84



STEEL RAILING PLAN



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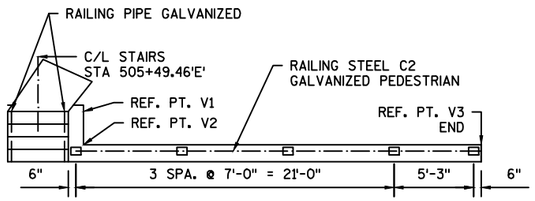
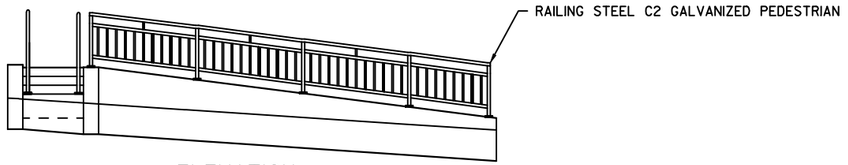


STEEL RAILING PLAN



ELEVATION

NOTES:

ALL POST SPACES ARE TAKEN HORIZONTALLY ALONG C/L RAILING.

NO.	DATE	REVISION	BY

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0006**

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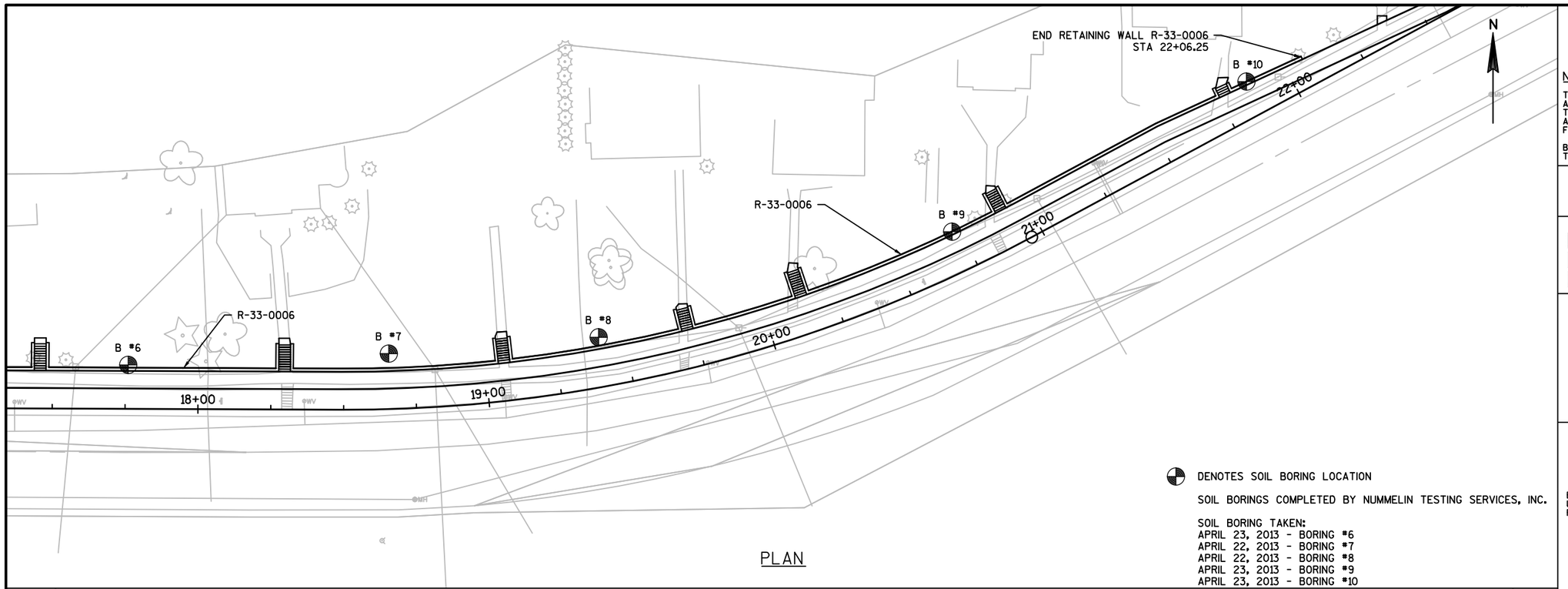
RAILING AND ARCHITECTURAL DETAILS

SHEET 25 OF 28

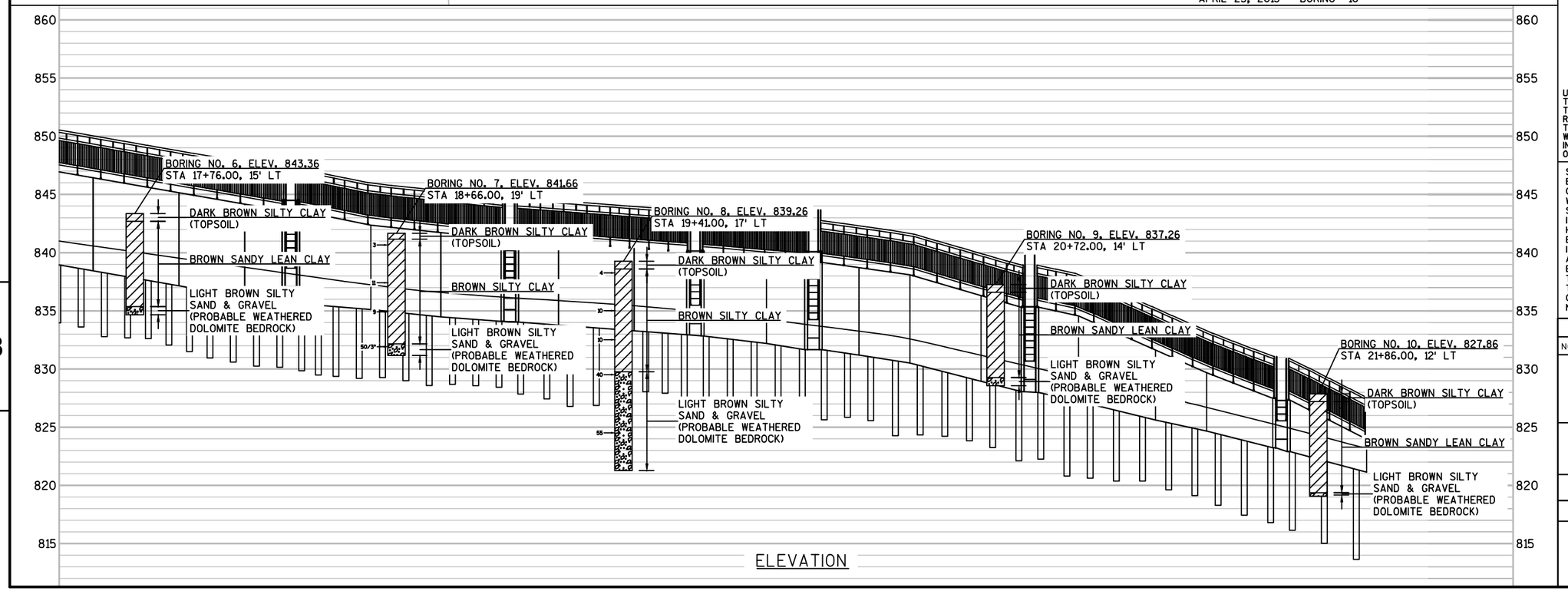


PLAN

DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY NUMMELIN TESTING SERVICES, INC.

SOIL BORING TAKEN:
APRIL 23, 2013 - BORING #6
APRIL 22, 2013 - BORING #7
APRIL 22, 2013 - BORING #8
APRIL 23, 2013 - BORING #9
APRIL 23, 2013 - BORING #10



ELEVATION

STATE PROJECT NUMBER

5944-03-84

NOTE:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITION SUBSURFACE INFORMATION.

BORING STATIONS AND OFFSETS ARE BASED ON STH 81 TOP OF CURB ℄.

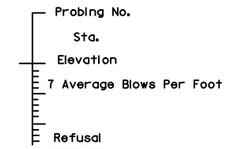
ABBREVIATIONS

F— Fine M—Medium C— Coarse
Ws— Weathered So— Sound

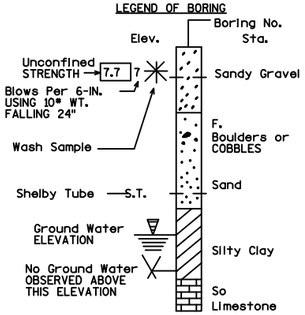
MATERIAL SYMBOLS

TOPSOIL/ FILL, Sand, Gravel, Silt, Peat, Clay, Sandstone, Limestone, Igneous Rock

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER 6-INCH AT THE LOCATIONS INDICATED ARE BASED ON DCP TESTING. THE DCP TESTS WERE PREFORMED USING A SOLID METAL ROD FITTED WITH A 1-3/8-INCH DIAMETER CONICAL POINT. THE POINT IS DRIVEN INTO THE SOIL WITH A 10-POUND WEIGHT FALLING 24-INCHES. THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE.

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.

NO.	DATE	REVISION	BY

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0006**

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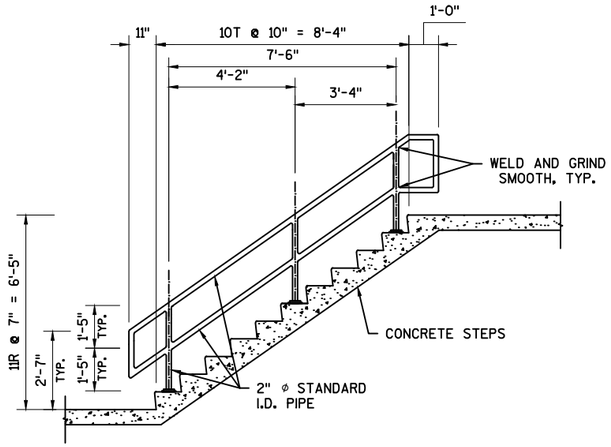
SUBSURFACE EXPLORATION

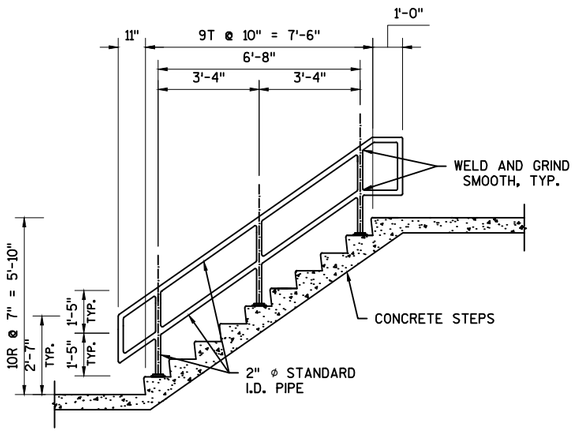
SHEET 26 OF 28

STATE PROJECT NUMBER

5944-03-84



STAIRS H AT STA 501+24.89'E',
STAIRS I AT STA 502+08.73'E' AND
STAIRS L AT STA 503+88.44'E'



STAIRS J STA 502+84.06'E'

NOTES

BID ITEM SHALL BE 'RAILING PIPE GALVANIZED' WHICH INCLUDES ALL ITEMS SHOWN AND PAINTING.

RAILING TO BE PLACED ON BOTH SIDES OF STEPS.

ALL SPACING ARE TAKEN HORIZONTALLY ALONG CENTER LINE OF RAILING.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

RAILS AND POSTS TO BE ASTM A500, GRADE B. ALL GALVANIZED AFTER FABRICATION.

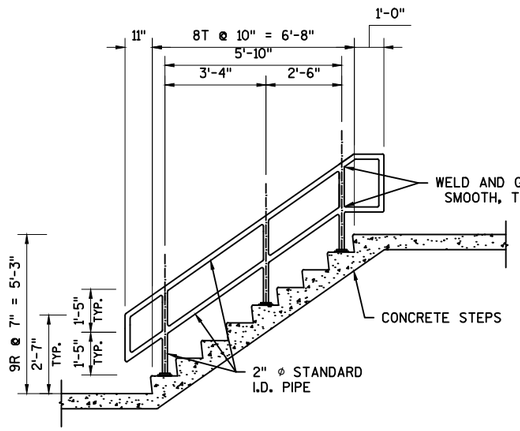
ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE A #6 BLAST CLEANING BY SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE SPECIAL PROVISIONS. THE FINISH COLOR SHALL BE BLACK, FED-STD. COLOR NO. 27038.

RAILING SHALL BE FABRICATED IN LENGTHS AS SHOWN.

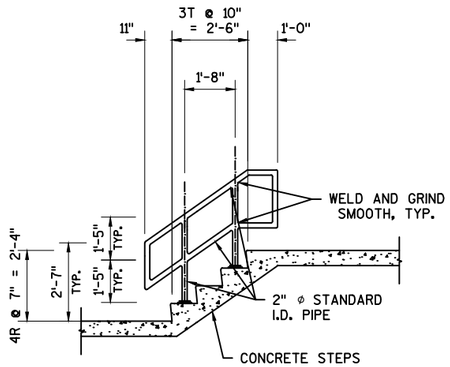
TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.

ALL POSTS AND RAILS SHALL BE WELDED TOGETHER WITH MIN. 3/16" FILLET WELDS ALL AROUND AND GROUND SMOOTH.

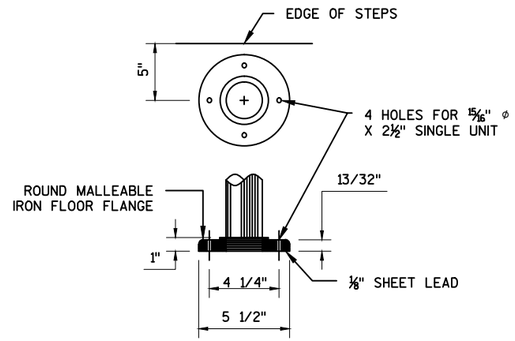
REFER TO R-33-0006 STRUCTURE DRAWINGS FOR CONCRETE STEP DETAILS.



STAIRS K AT STA 503+47.85'E' AND
STAIRS M AT STA 504+62.90'E'



STAIRS N AT STA 505+49.45'E'



FLANGE DETAIL

NO.	DATE	REVISION	BY

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0006**

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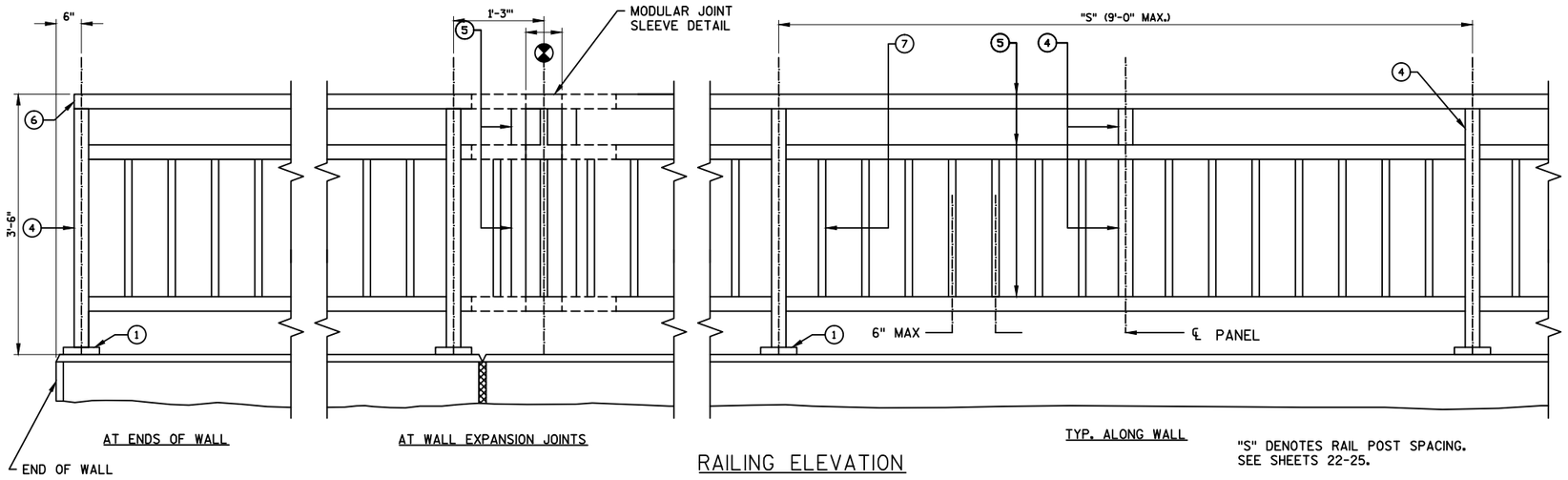
RAILING PIPE GALVANIZED DETAIL

SHEET 27 OF 28

STATE PROJECT NUMBER

5944-03-84



RAILING ELEVATION

"S" DENOTES RAIL POST SPACING. SEE SHEETS 22-25.

⊗ RAILING OPENING TO BE 6" AT 45°F. MOVEMENT ADJUSTMENT SHALL BE MADE AT A RATE OF 1" PER 20°F.

NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE C2 GALVANIZED PEDESTRIAN R-33-0006", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN AND PAINTING

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 CUTS.

NO. 1, 2, 6, 9, AND NO. 10 SHALL CONFORM TO A.S.T.M. A709 GRADE 36. STRUCTURAL TUBING SHALL CONFORM TO A.S.T.M. A500 GRADE B (NO. 4,5,7,8).

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT.

FILL BOLT SLOT OPENINGS IN SHIMS AND PLATE NO. 1 AND CAULK AROUND PERIMETER OF PLATE NO. 1 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL JOINTS IN C.I.P. CONCRETE RETAINING WALL ARE TO BE VERTICAL.

AFTER FABRICATION, ALL MATERIAL, EXCEPT ANCHORAGE (NO. 2 & 3) AND SHIMS SHALL BE PAINTED PER SPECIAL PROVISIONS. THE FINISH COLOR SHALL BE FEDERAL COLOR NO. 27038, BLACK.

¼"⌀ VENT HOLES LOCATED IN TOP RAIL OVER RAIL POSTS AND AT LOW END OF OTHER RAILS.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.

LEGEND

(1) PLATE ⅝" X 6" X 8" WITH ¾" X 1½" SLOTTED HOLES.

(2) ¼" X 5" X 7" ANCHOR PLATE WITH 11/16" ⌀ HOLES FOR ANCHOR BOLTS NO. 3.

(3) ⅝" DIA. X 7½" LONG ASTM F593 TYPE 316 STAINLESS STEEL ANCHOR BOLTS WITH NUT AND WASHERS OF SAME ALLOY GROUP. (ALTERNATE RAIL POST ANCHORAGE - 4 EQUIV. STAINLESS STEEL CONCRETE MASONRY ANCHORS, TYPE S (EPOXY) ⅜" ⌀, MINIMUM PULLOUT CAPACITY OF 15 KIPS. EMBED A MIN. OF 7" FOR RAIL POSTS)

(4) STRUCTURAL TUBING 3" X 1½" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.

(5) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 4.

(6) PLATE 3/16" X 3" X 1½" END CAP. WELD TO NO. 5 AND GRIND SMOOTH.

(7) STRUCTURAL TUBING 1" X 1" X ⅛" PICKETS. WELD TO NO. 5 SPACE AT 6" MAX. ℄ TO ℄ SPACING. PLACE VERTICAL.

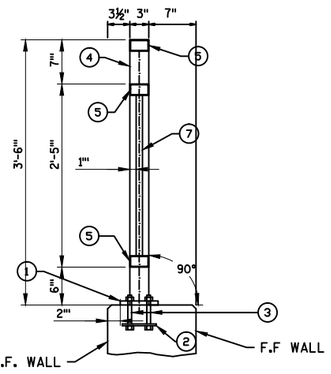
(8) STRUCTURAL TUBING 1" X 1½" X ⅛" PICKETS. WELD TO NO. 11. PLACE VERTICAL.

(9) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".

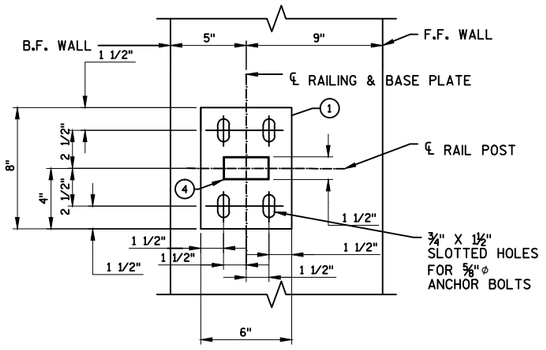
(10) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JOINTS).

(11) BAR 2½" X 1" X 2'-0"

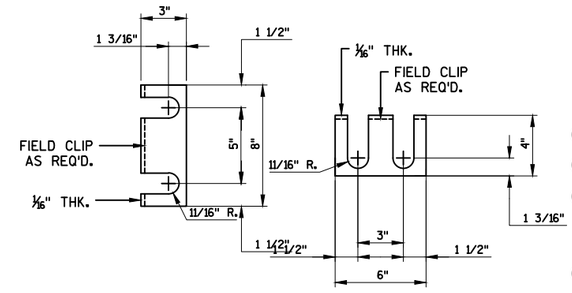
(12) ½" DIA. STAINLESS STEEL BOLT WITH NUT AND LOCKWASHER.



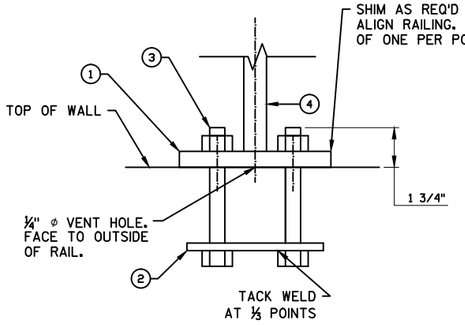
SECTION THRU RAILING



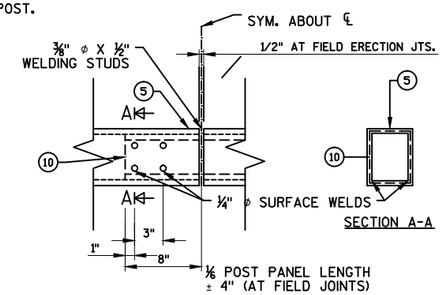
TYPICAL RAIL POST BASE PLATE



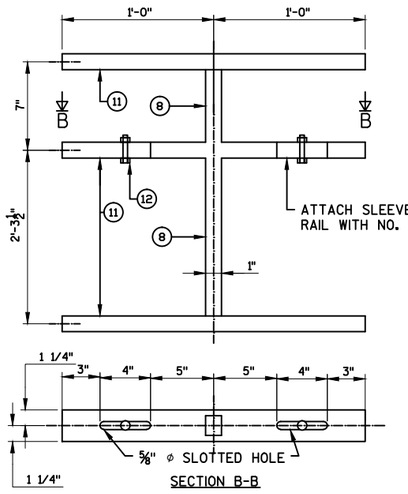
RAIL POST SHIM DETAIL
(2 SETS PER POST)



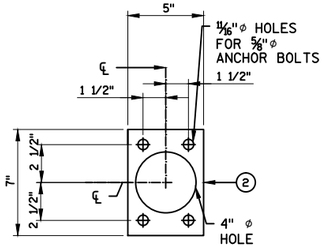
ANCHOR BOLTS FOR RAIL POSTS
NOTE: ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED



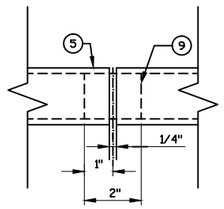
FIELD ERECTION JOINT DETAIL
*MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



MODULAR JOINT SLEEVE DETAIL



ANCHOR PLATE



SHOP RAIL SPLICE DETAIL
(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)

NO.	DATE	REVISION	BY

KNIGHT
Engineers & Architects
700 N Third Street
Suite 104
La Crosse, WI 54601
Phone: (608) 519-1455

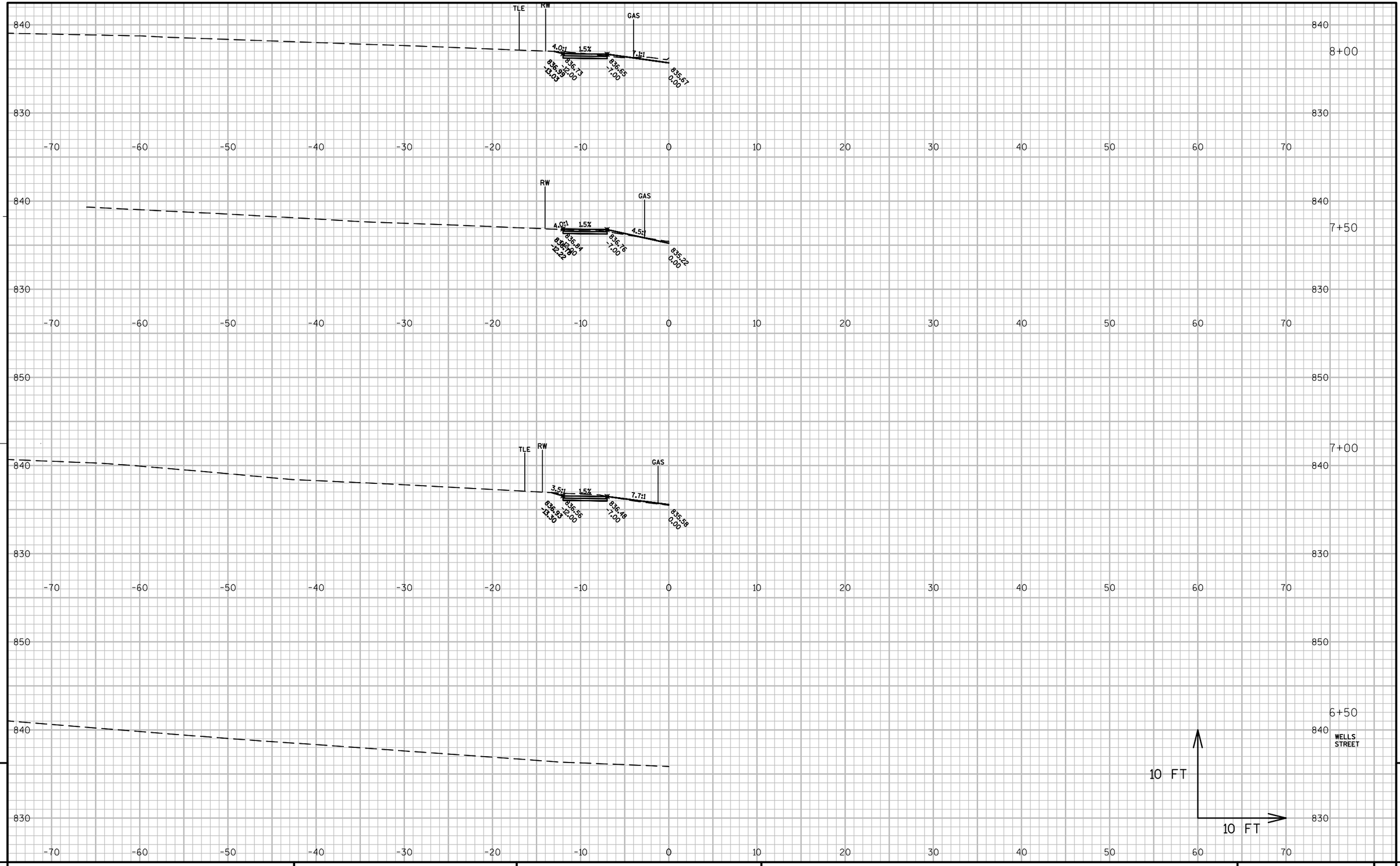
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE **R-33-0006**

DRAWN BY AFD | PLANS CK'D. JDG

STEEL RAILING DETAILS

SHEET 28 OF 28



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PROJECT NO:5944-03-84	HWY: STH 81	COUNTY:LAFAYETTE	CROSS SECTIONS: CROSS SECTION	SHEET	E

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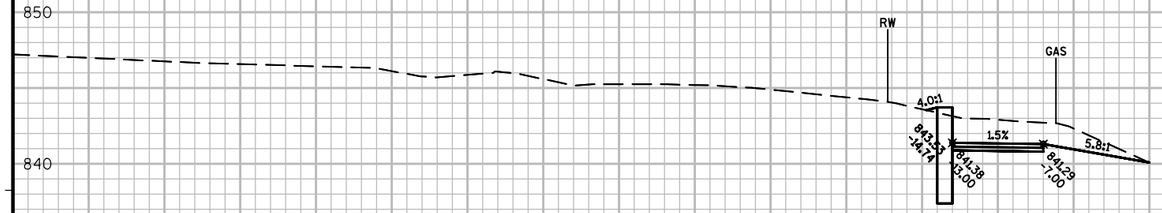

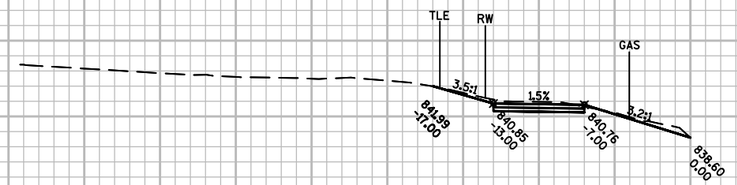

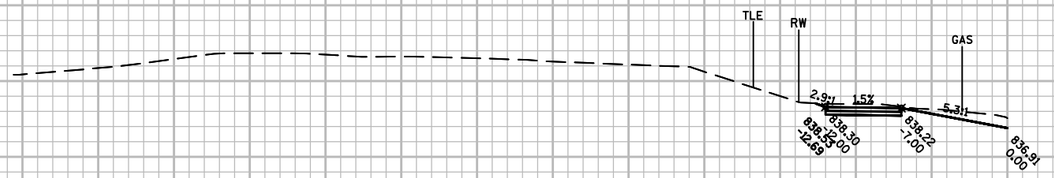

9+50

9+00

8+50

10 FT

10 FT

9

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PROJECT NO:5944-03-84	HWY: STH 81	COUNTY:LAFAYETTE	CROSS SECTIONS: CROSS SECTION	SHEET	E

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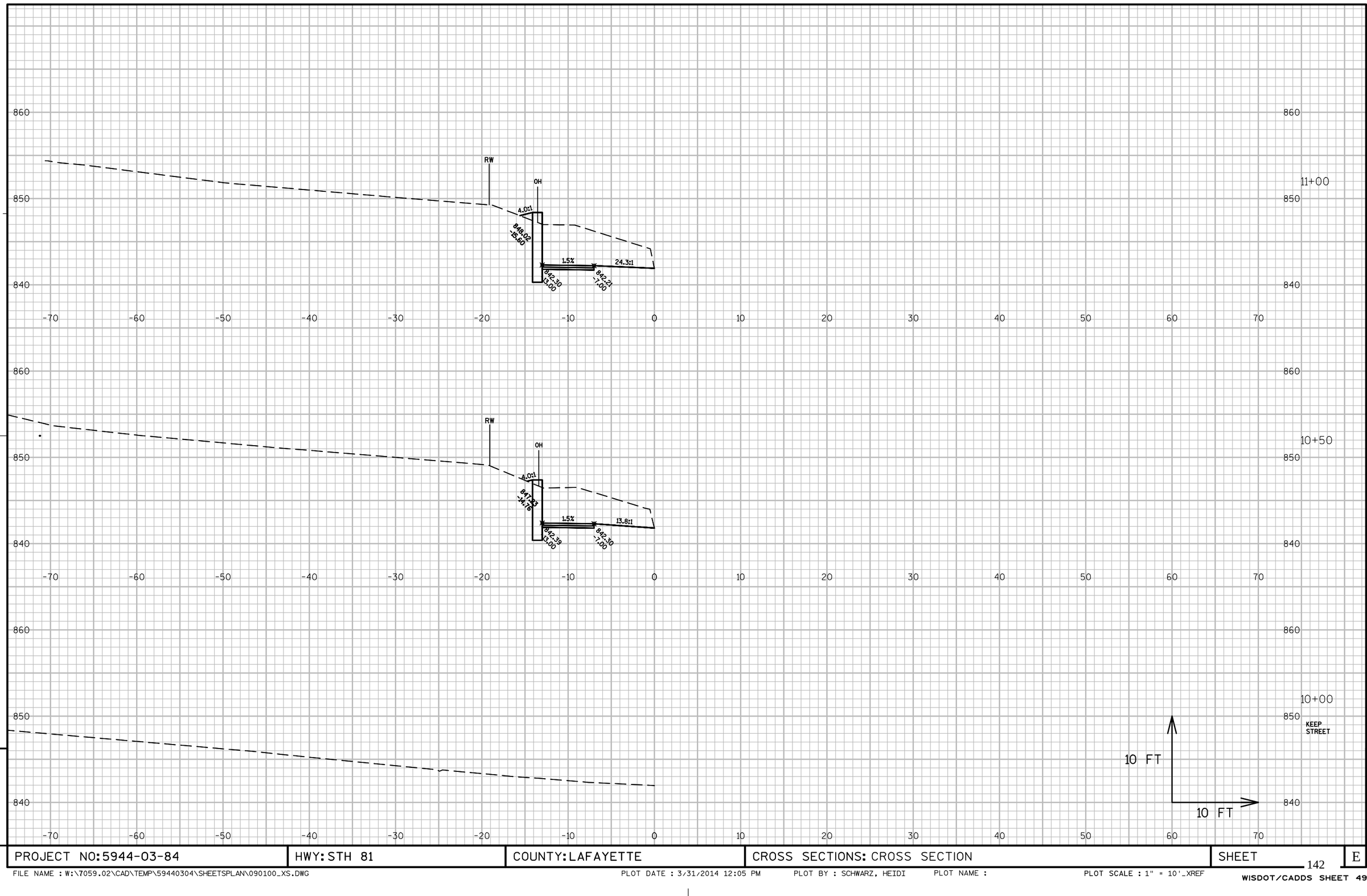
WISDOT/CADDS SHEET 49



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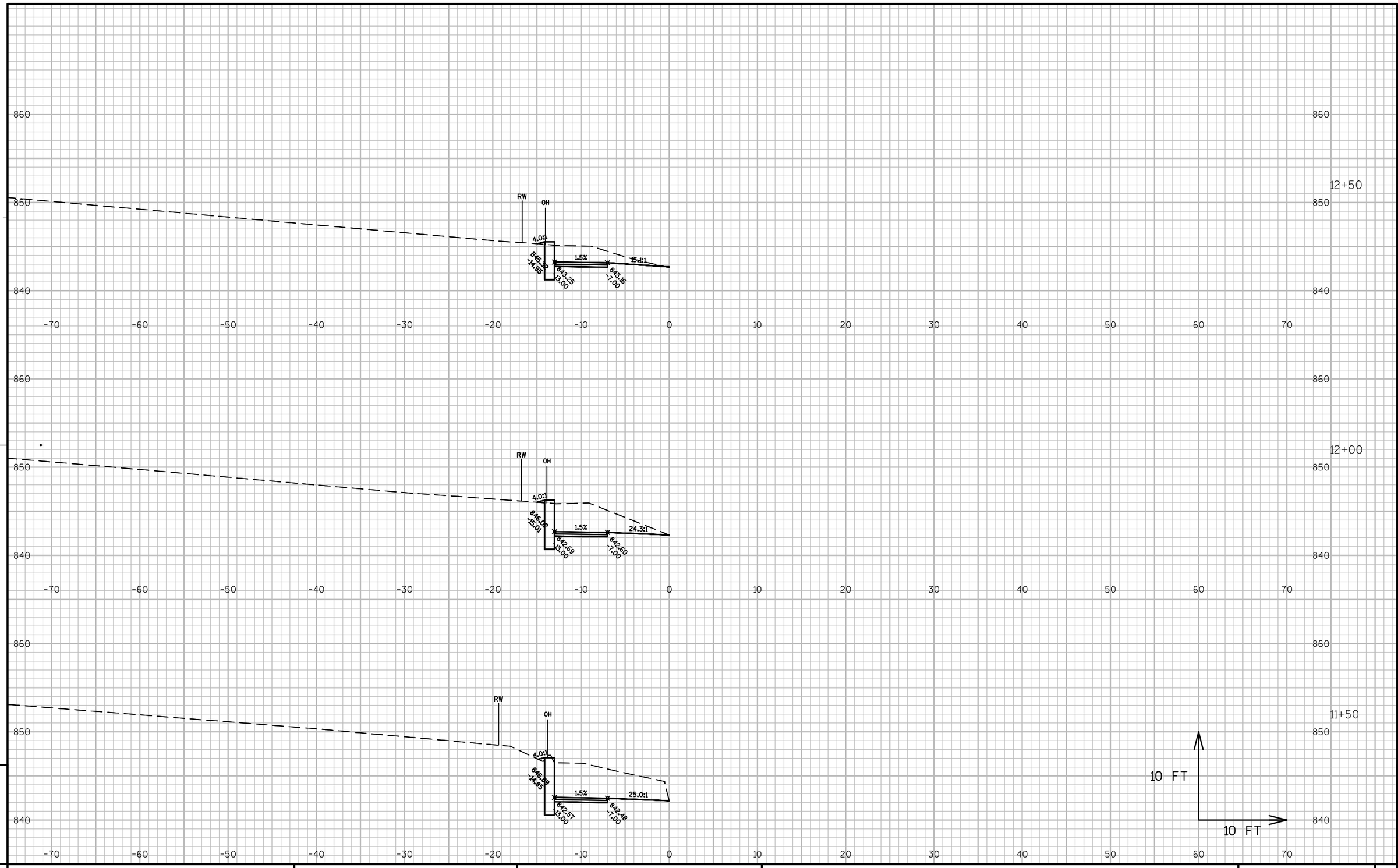

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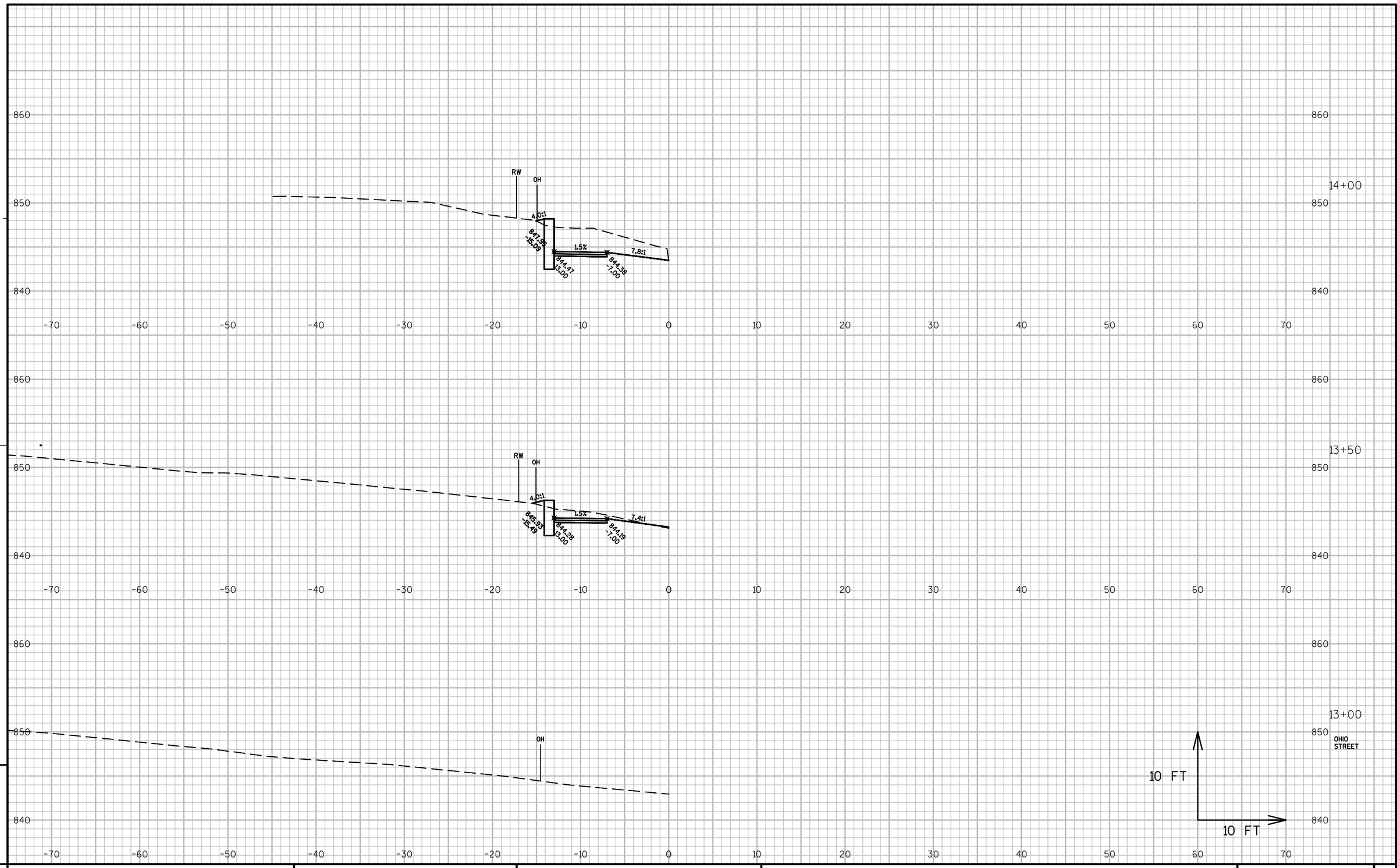

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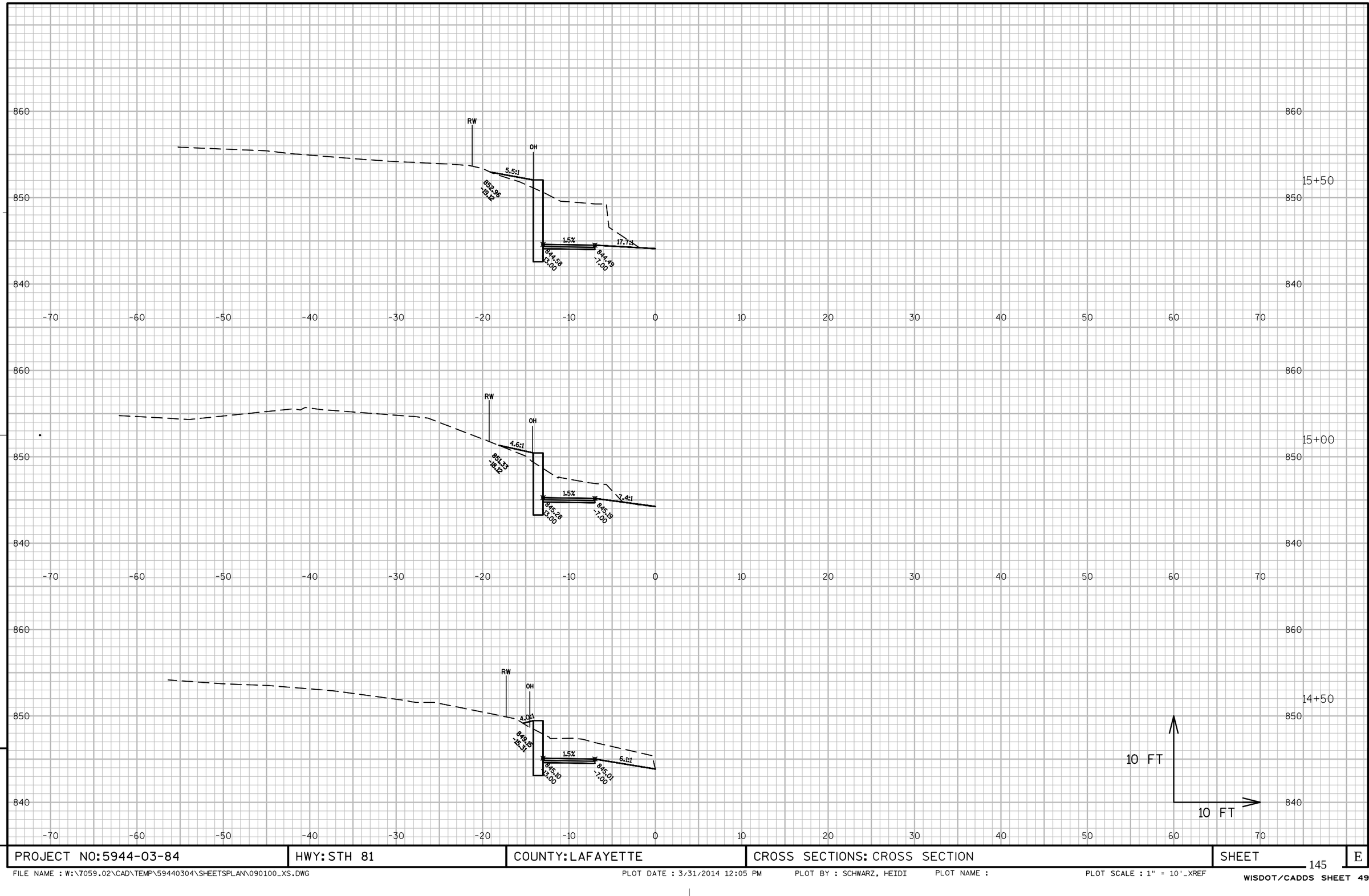

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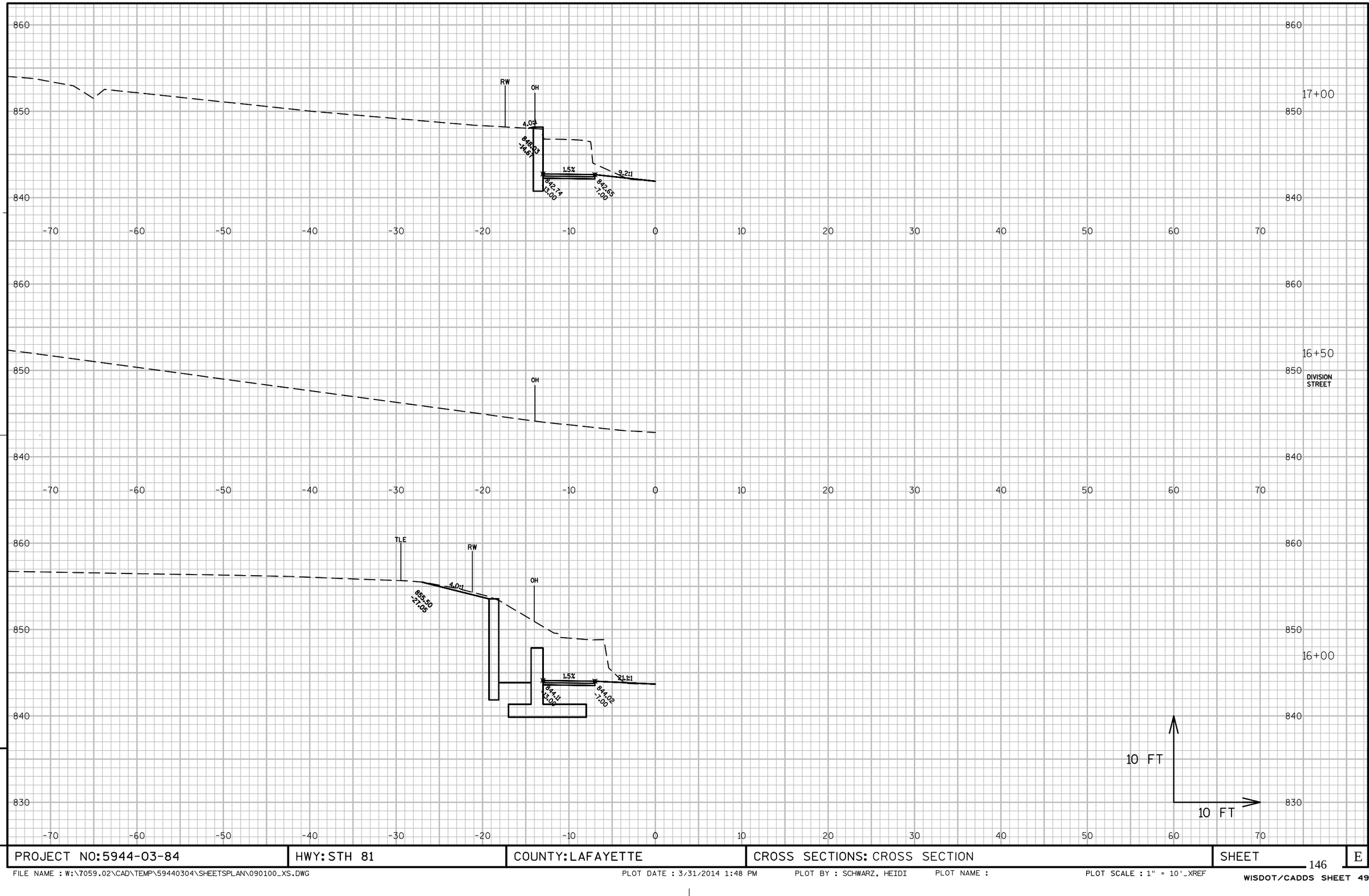

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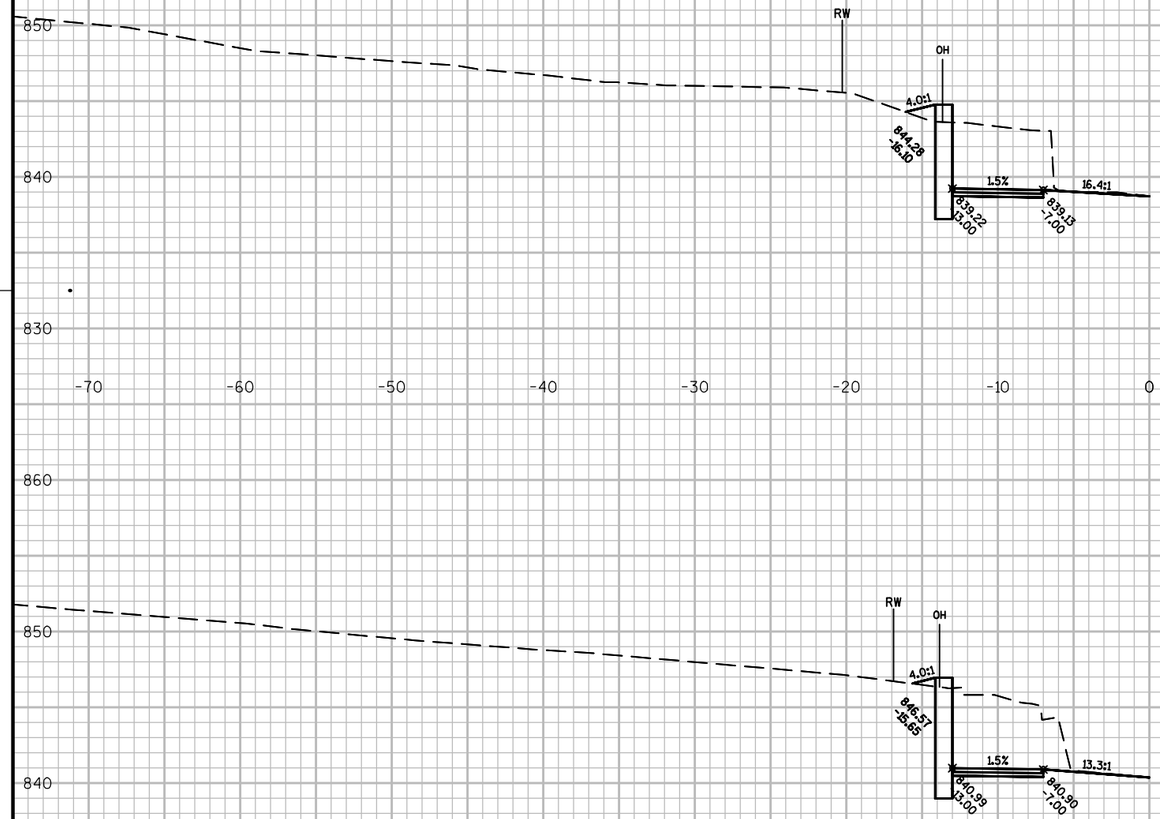

18+00

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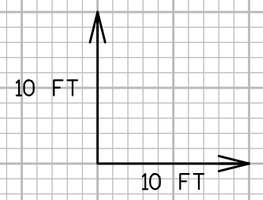

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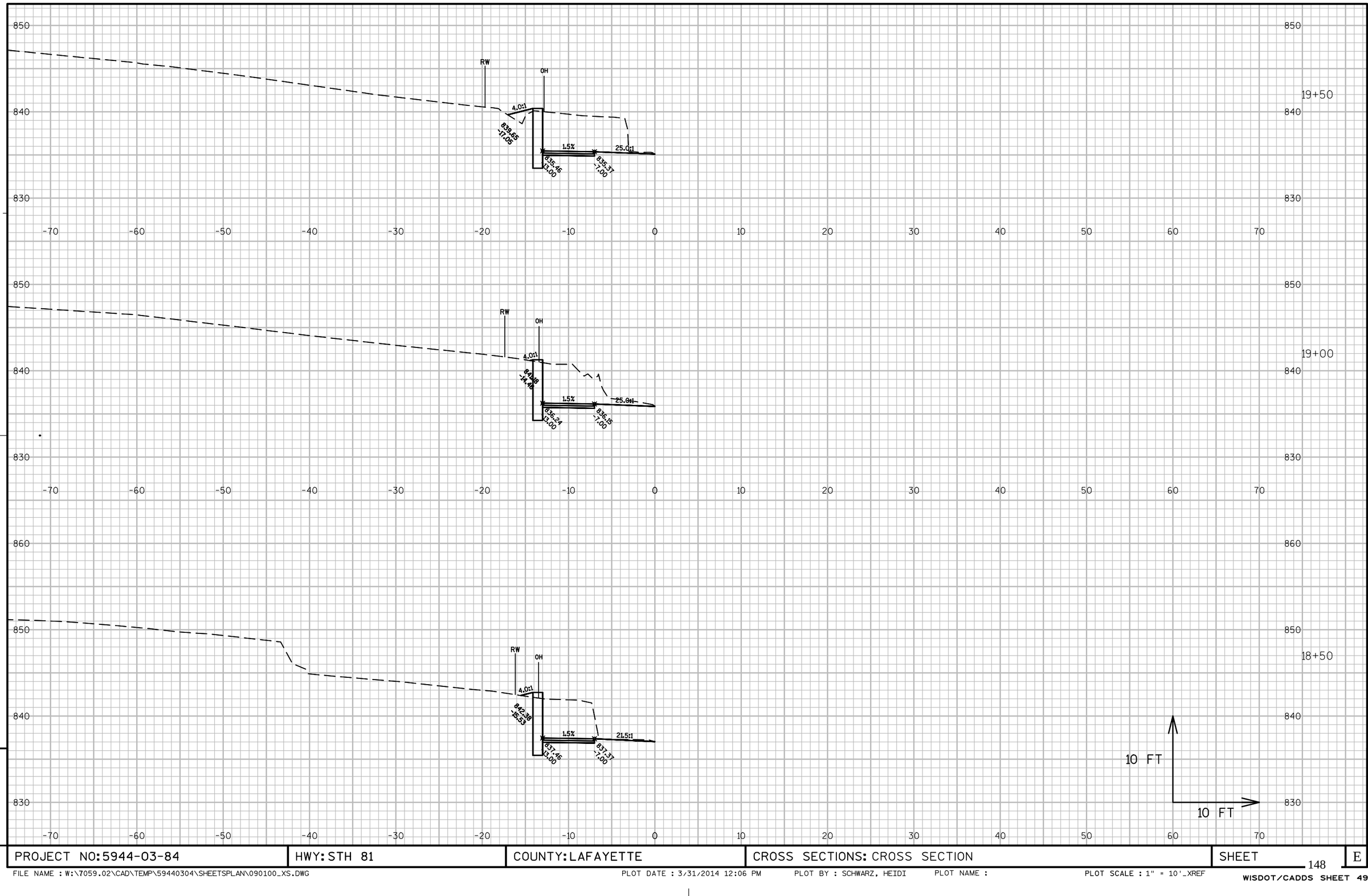

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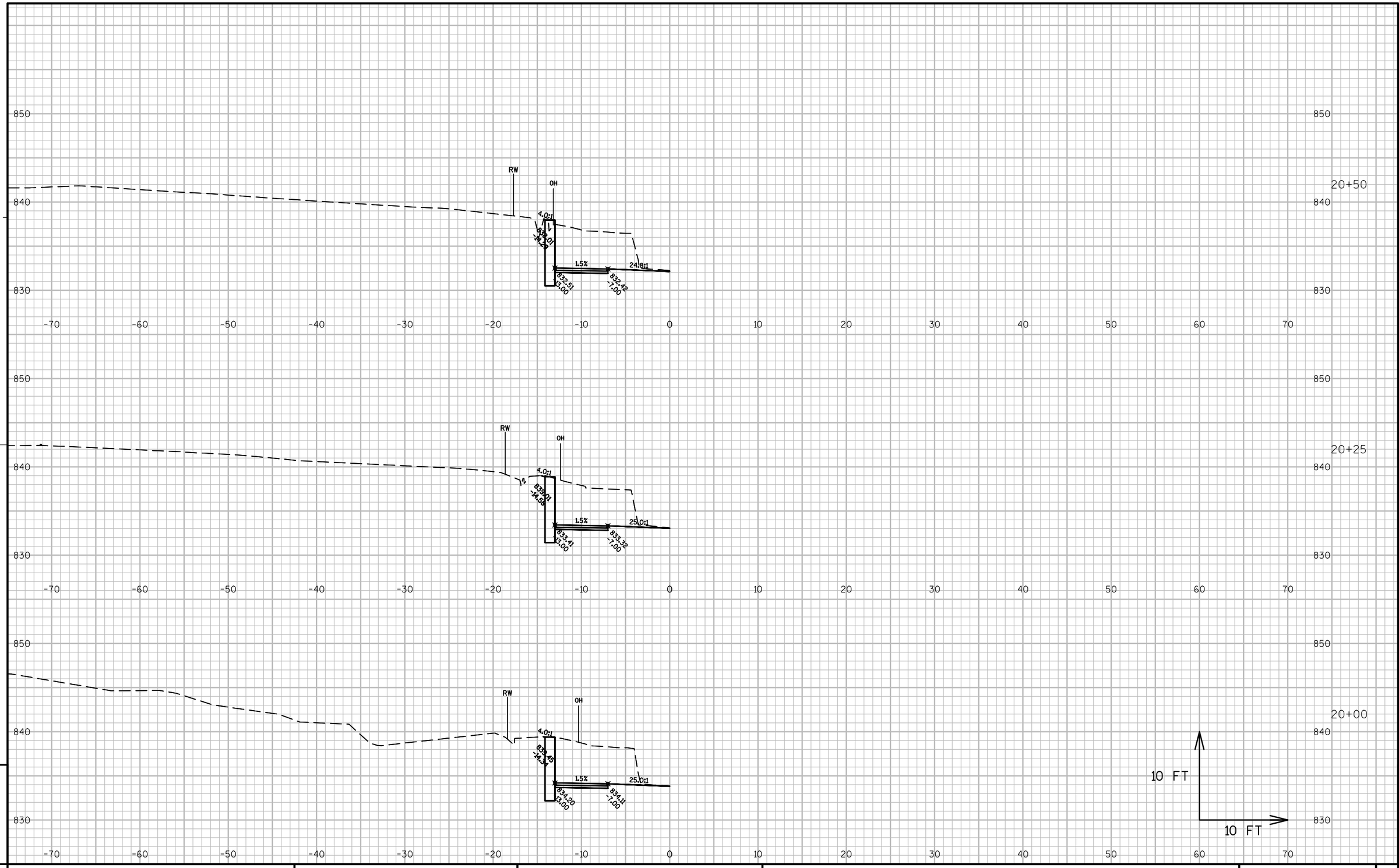

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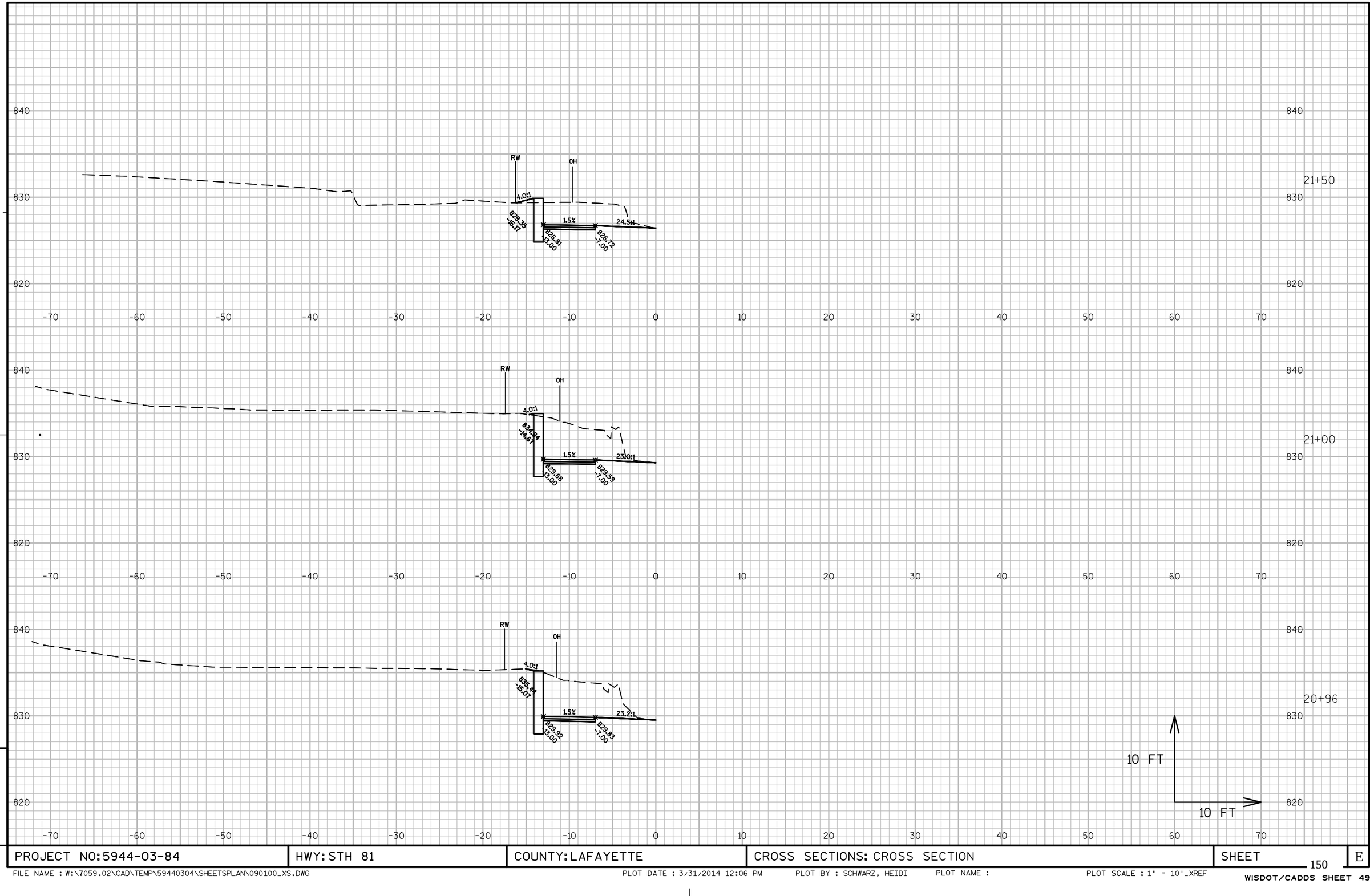

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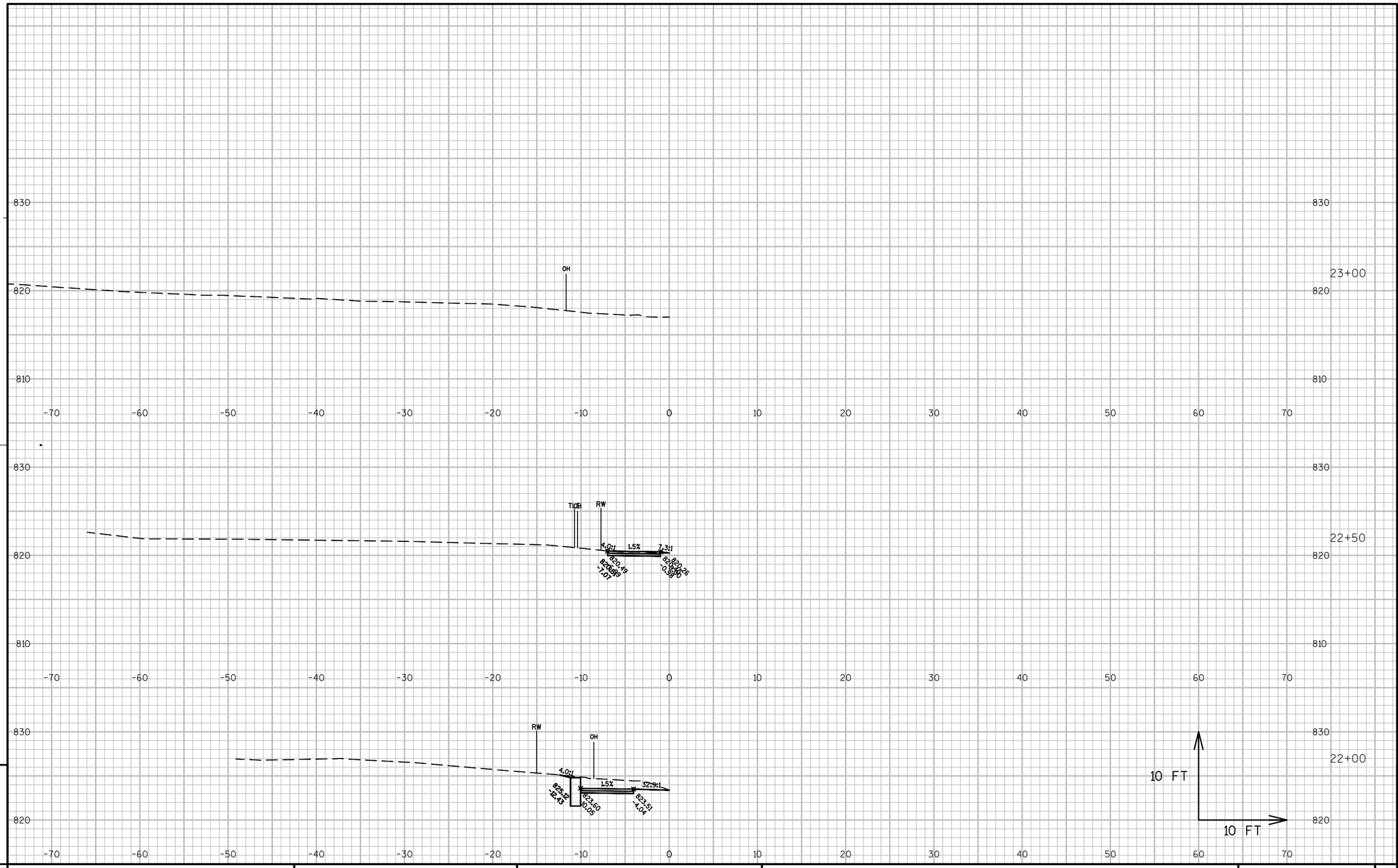

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WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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