MAD

DECEMBER 2018

PROJECT ID: 5958-00-70

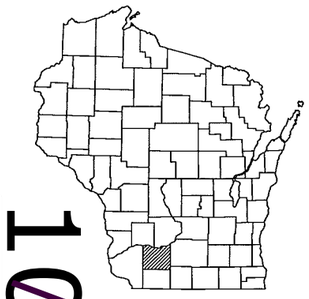
WITH: N/A

COUNTY: IOWA

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile (Includes Erosion Control Plan)
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 88



N

DESIGN DESIGNATION

A.A.D.T.	2019	=	220
A.A.D.T.	2039	=	240
D.H.V.	2039	=	48
D.D.		=	60/40
T.		=	7.8%
DESIGN SPEED		=	40
ESALS		=	37,000

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.36
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE		ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
MARSH AREA		TELEPHONE	T
		WATER	W
		UTILITY PEDESTAL	
WOODED OR SHRUB AREA		POWER POLE	
		TELEPHONE POLE	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

REWEY - COBB

(PECATONICA RIVER BRIDGE B-25-0180)

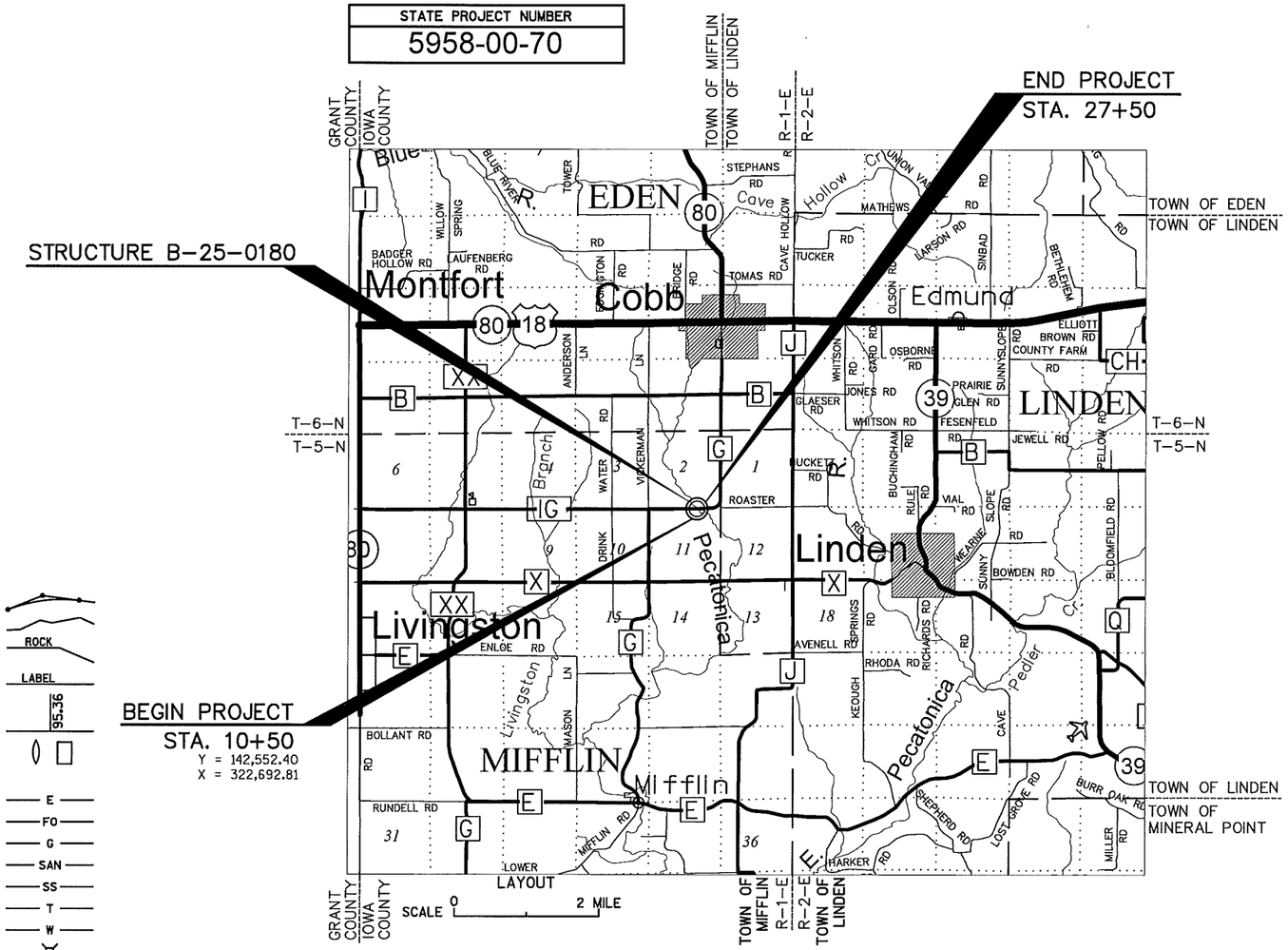
CTH G

IOWA COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5958-00-70	———	—

STATE PROJECT NUMBER

5958-00-70



TOTAL NET LENGTH OF CENTERLINE = 0.322

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

ACCEPTED FOR

COUNTY of IOWA

4/12/2018 (Date) Cody E. Hall (Highway Commissioner)

ORIGINAL PLANS PREPARED BY

JEWELL associates engineers, inc.

Engineers - Architects - Surveyors

WISCONSIN ELLERY A. SCHAFFER E-41742-6 SPRING GREEN, WI PROFESSIONAL ENGINEER

4/11/2018 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor JEWELL ASSOCIATES ENGINEERS, INC.

Designer JEWELL ASSOCIATES ENGINEERS, INC.

Management Consultant KL ENGINEERING, INC.

APPROVED FOR THE DEPARTMENT

DATE: 7/31/18

Mark Westerveld

~~Management Consultant~~ Signature

E

2

LIST OF STANDARD ABBREVIATIONS

ABUT	Abutment	INV	Invert	SALV	Salvaged
AC	Acre	IP	Iron Pipe or Pin	SAN S	Sanitary Sewer
AGG	Aggregate	IRS	Iron Rod Set	SEC	Section
AH	Ahead	JT	Joint	SHLDR	Shoulder
<	Angle	JCT	Junction	SHR	Shrinkage
ASPH	Asphaltic	LHF	Left–Hand Forward	SW	Sidewalk
AVG	Average	L	Length of Curve	S	South
ADT	Average Daily Traffic	LIN FT or LF	Linear Foot	SQ	Square
BAD	Base Aggregate Dense	LC	Long Chord of Curve	SF or SQ FT	Square Feet
BK	Back	MH	Manhole	SY or SQ YD	Square Yard
BF	Back Face	MB	Mailbox	STD	Standard
BM	Bench Mark	ML or M/L	Match Line	SDD	Standard Detail Drawings
BR	Bridge	N	North	STH	State Trunk Highways
C or C/L	Center Line	Y	North Grid Coordinate	STA	Station
CC	Center to Center	OD	Outside Diameter	SS	Storm Sewer
CTH	County Trunk Highway	PLE	Permanent Limited Easement	SG	Subgrade
CR	Creek			SE	Superelevation
CR	Crushed	PT	Point	SL or S/L	Survey Line
CY or CU YD	Cubic Yard	PC	Point of Curvature	SV	Septic Vent
CP	Culvert Pipe	PI	Point of Intersection	T	Tangent
C & G	Curb and Gutter	PRC	Point of Reverse Curvature	TEL	Telephone
D	Degree of Curve	PT	Point of Tangency	TEMP	Temporary
DHV	Design Hour Volume	POC	Point On Curve	TI	Temporary Interest
DIA	Diameter	POT	Point on Tangent	TLE	Temporary Limited Easement
E	East	PVC	Polyvinyl Chloride		
X	East Grid Coordinate	PCC	Portland Cement Concrete	t	Ton
ELEC	Electric (al)	LB	Pound	T or TN	Town
EL or ELEV	Elevation	PSI	Pounds Per Square Inch	TRANS	Transition
ESALS	Equivalent Single Axle Loads	PE	Private Entrance	TL or T/L	Transit Line
		R	Radius	T	Trucks (percent of)
EBS	Excavation Below Subgrade	RR	Railroad	TYP	Typical
FF	Face to Face	R	Range	UNCL	Unclassified
FE	Field Entrance	RL or R/L	Reference Line	UG	Underground Cable
F	Fill	RP	Reference Point	USH	United States Highway
FG	Finished Grade	RCCP	Reinforced Concrete Culvert Pipe	VAR	Variable
FL or F/L	Flow Line			V	Velocity or Design Speed
FT	Foot	REQ'D	Required	VERT	Vertical
FTG	Footing	RES	Residence or Residential	VC	Vertical Curve
GN	Grid North	RW	Retaining Wall	VOL	Volume
HT	Height	RT	Right	WM	Water Main
CWT	Hundredweight	RHF	Right–Hand Forward	WV	Water Valve
HYD	Hydrant	R/W	Right–of–Way	W	West
INL	Inlet	R	River	WB	Westbound
ID	Inside Diameter	RD	Road	YD	Yard
		RDWY	Roadway		

FOR INFORMATION ONLY

BORING LOG

NO.	STATION/OFFSET	EXISTING ASPHALTIC SURFACE THICKNESS (IN.)	EXISTING B.A.D. THICKNESS (IN.)	WEATHERED DOLOMITE BEDROCK ENCOUNTERED (DEPTH BELOW EXIST. SURFACE (FT.))
1	24+15, 9' RT.	8	6	12.5
2	24+40, 1' RT.	–	–	12.5
3	24+90, 9' LT.	8	6	13.5
4	18+85, 7' RT.	7.5	4.5	2.5

NOTE: BORING 2 TAKEN AT EXISTING STRUCTURE P–25–38

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

TOTAL PROJECT AREA= 5.91 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 4.43 ACRES

GENERAL NOTES

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

COORDINATES AND BEARINGS ON THIS PLAN ARE REFERENCES TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), IOWA COUNTY.

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE FIRST BEEN INDICATED FOR REMOVAL BY THE ENGINEER IN THE FIELD.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE, AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS COMMON EXCAVATION. EXACT LOCATIONS OF EBS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

DISTURBED AREAS SHOWN WITHIN THE RIGHT–OF–WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS ARE TO BE FERTILIZED (TYPE B), SEEDED (USE SEED MIX NO. 20), AND MULCHED/COVERED WITH EROSION MAT AS DIRECTED BY THE ENGINEER IN THE FIELD. ALL POST CONSTRUCTION WET AREAS SHALL BE SEEDED WITH SEEDING MIXTURE NO. 60.

WHEN THE QUANITY OF THE ITEM OF BASE AGGREGATE DENSE, BREAKER RUN, OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

SILT FENCE, TEMPORARY DITCH CHECKS, TURBIDITY BARRIER, AND CULVERT PIPE CHECKS SHALL BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER IN THE FIELD. SILT FENCE AND TURBIDITY BARRIER SHALL BE PLACED PRIOR TO CONSTRUCTION AND SHALL BE IN PLACE PRIOR TO STRUCTURE REMOVAL.

COVER ALL MAINLINE SLOPES WITH MULCH/EROSION MAT URBAN CLASS I TYPE B AS DIRECTED BY THE ENGINEER IN THE FIELD.

FILL EXPANSION IS VARIABLE AND IS ESTIMATED AT 25%.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

REMOVAL OF ASPHALTIC SURFACES WHERE AN ABUTTING ASPHALTIC SURFACE IS TO REMAIN IN PLACE SHALL REQUIRE A SAWCUT MEETING THE APPROVAL OF THE ENGINEER IN THE FIELD.

THE LOCATION OF ALL PERMANENT SIGNING SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD PRIOR TO PLACEMENT.

WETLANDS ARE PRESENT IN THE PROJECT LIMITS. THE CONTRACTOR SHALL NOT OPERATE EQUIPMENT OR STOCKPILE MATERIALS BEYOND THE EXISTING TOE OF SLOPE FROM STA. 23+95 – STA. 24+06, LT., STA. 24+35, LT. – STA. 24+67, RT., STA. 24+78 – STA. 24+85, RT.

4–INCHES OF HMA PAVEMENT SHALL BE CONSTRUCTED WITH A 2¼–INCH LOWER LAYER AND A 1¾–INCH UPPER LAYER.

ADJUST DITCH GRADING AS NECESSARY TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER IN THE FIELD.

HMA PAVEMENT QUANTITIES WERE CALCULATED USING 115 LB/SY/IN.

INLET & OUTLET ELEVATIONS FOR CULVERT PIPES AS SHOWN ON THE PLAN MAY BE ADJUSTED TO FIT EXISTING FIELD CONDITIONS.

EXISTING DRIVEWAYS SHALL BE RESTORED IN KIND AND THEIR LOCATION VERIFIED BY THE ENGINEER IN THE FIELD.

CURVE DATA IS BASED ON THE ARC DEFINITION.

CONTACTS

DESIGN CONSULTANT

JEWELL ASSOCIATES ENGINEERS, INC.
560 SUNRISE DRIVE
SPRING GREEN, WI 53588
ATTN: ELLERY SCHAFFER, P.E.
PH: (608) 588–7484
CELL: (608) 341–8159
EMAIL: ellery.schaffer@jewellassoc.com

IOWA COUNTY HIGHWAY DEPARTMENT

CRAIG HARDY, COMMISSIONER
1215 NORTH BEQUETTE STREET
DODGEVILLE, WI 53533
PH: (608) 935–3381
CELL: (608) 574–2935
EMAIL: craig.hardy@iowacounty.org

DNR LIAISON

STATE OF WISCONSIN
DNR SOUTH CENTRAL REGION HQ
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
ATTN: ANDY BARTA
PHONE: (608) 275–3308
EMAIL: Andrew.Barta@wisconsin.gov

UTILITIES

ELECTRIC

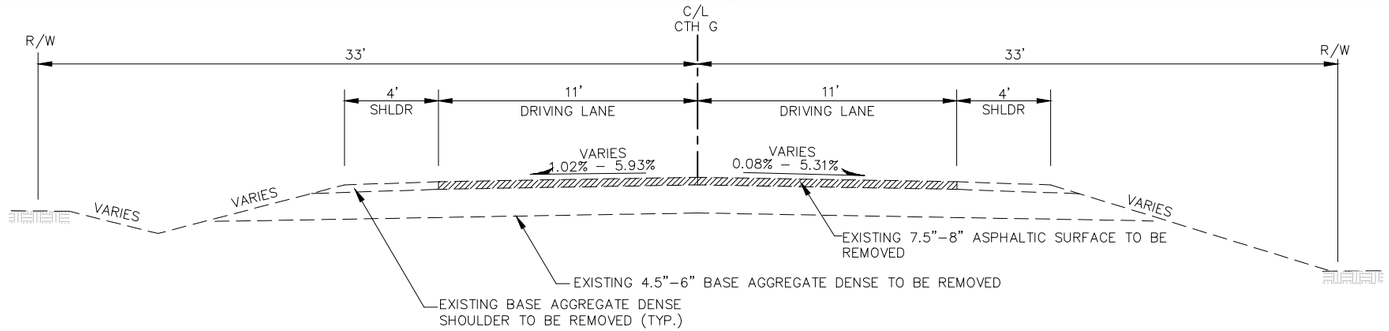
ALLIANT ENERGY CORPORATION
ATTN: MICHAEL BROLIN
4902 NORTH BILTMORE LANE
MADISON, WI 53713
OFFICE: (608) 458–4871
EMAIL: MichaelBrolin@alliantenergy.com

TELEPHONE

FRONTIER COMMUNICATIONS OF WI, LLC
ATTN: RUSS RYAN
100 COMMUNICATIONS DRIVE
SUN PRAIRIE, WI 53590
PH: (920) 583–3275
CELL: (920) 737–9662
EMAIL: russell.w.ryan@ftr.com

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

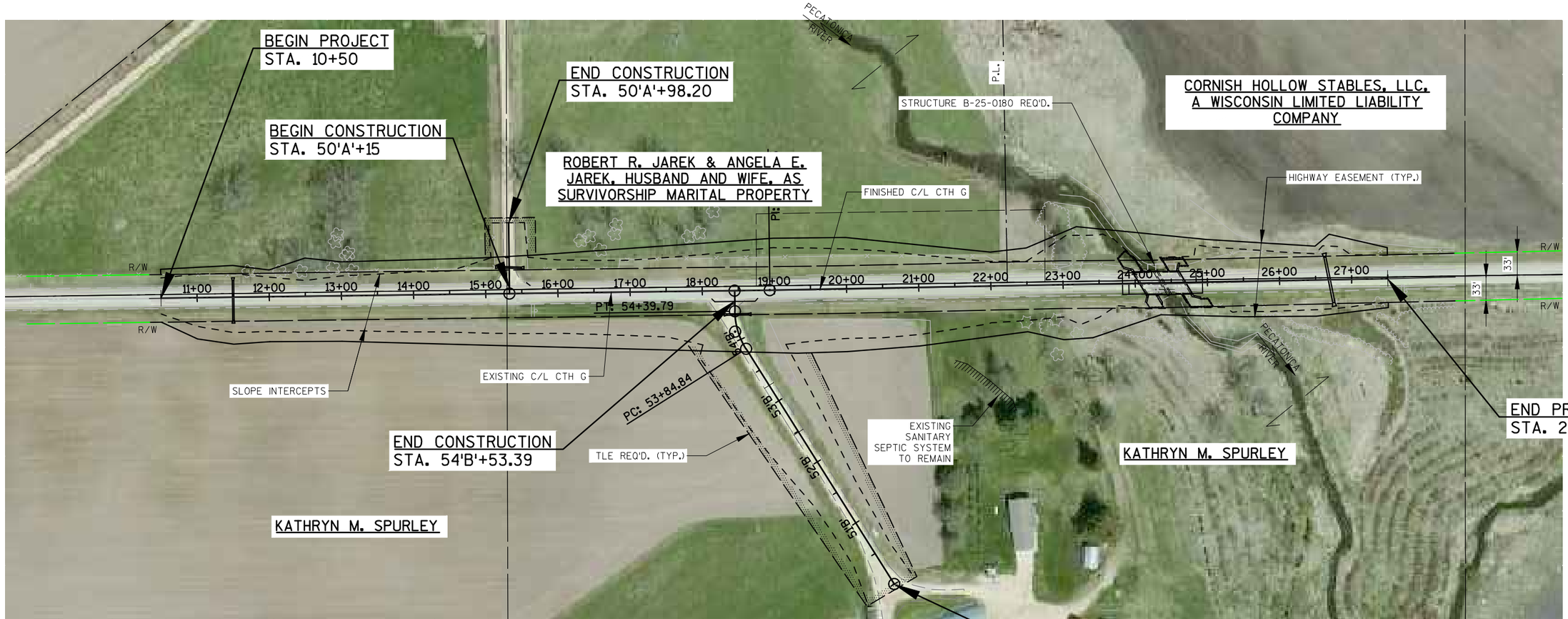
* DENOTES UTILITY IS NOT A MEMBER OF DIGGERS HOTLINE



TYPICAL EXISTING SECTION

PROJECT NO:5958-00-70	HWY: CTH G	COUNTY:IOWA	GENERAL NOTES, CONTACTS, UTILITIES, EXISTING TYPICAL SECTION, & HSG CHART	SHEET 2	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY – CTH G\SHEETSPLAN\DETAILS\GEN NOTES AND UTILITIES.DWG
LAYOUT : LAYOUT1
PLOT DATE : 4/20/2018
PLOT TIME : 2:51:28 PM
PLOT BY : STEPHANIE POTTER
PLOT SCALE : 1" = 1'



PROJECT NO: 5958-00-70	HWY: CTH G	COUNTY: IOWA	PROJECT OVERVIEW	SHEET 3	E

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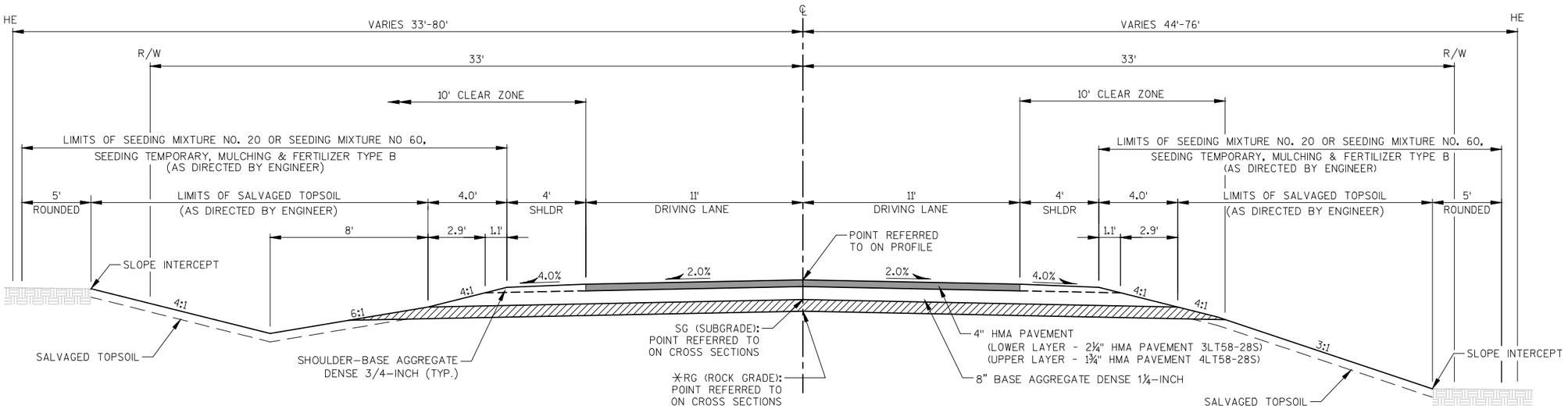
WISDOT/CADDS SHEET 42

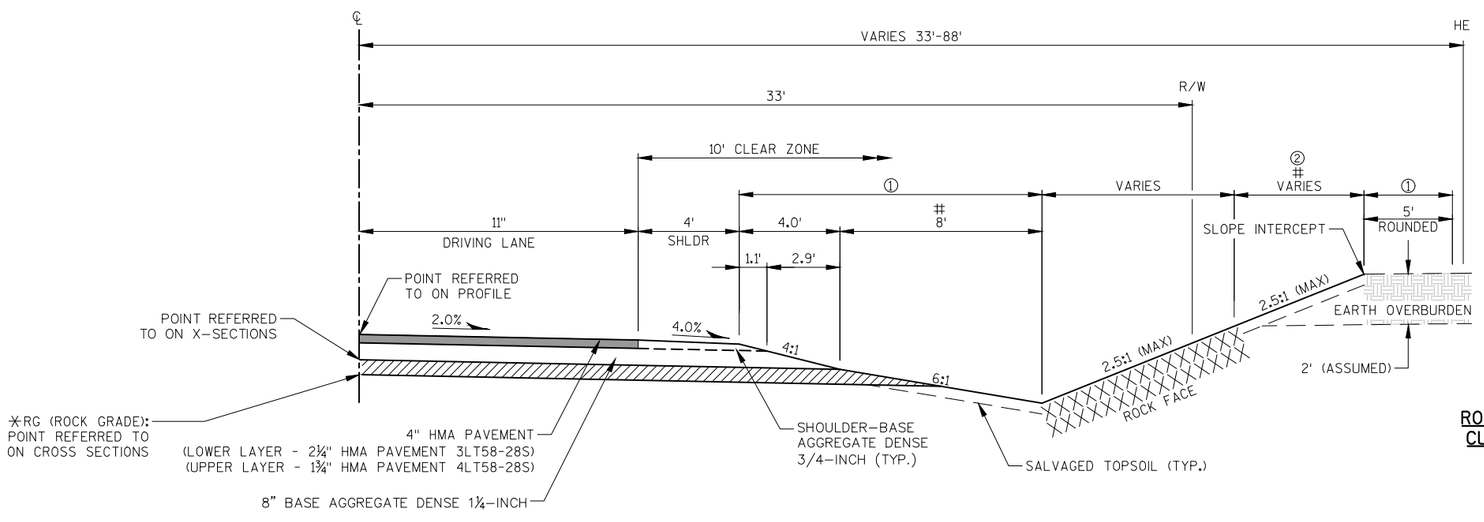


TYPICAL FINISHED SECTION

(STA. 10+50 - STA. 24+38, LT.)
(STA. 23+25 - STA. 24+38, RT.)

*STA. 12+25 - STA. 20+75

REMOVE ROCK, IF ENCOUNTERED IN EXCAVATION, TO A DEPTH APPROXIMATELY 6 INCHES BELOW THE EARTH SUBGRADE BETWEEN LIMITS OF THE SHOULDER SLOPES



TYPICAL FINISHED HALF SECTION AT ROCK CUT

(STA. 10+50 - STA. 23+25, RT.)

ROCK CUT

*STA. 12+25 - STA. 20+75

REMOVE ROCK, IF ENCOUNTERED IN EXCAVATION, TO A DEPTH APPROXIMATELY 6 INCHES BELOW THE EARTH SUBGRADE BETWEEN LIMITS OF THE SHOULDER SLOPES

LIMITS OF SALVAGED TOPSOIL (AS DIRECTED BY ENGINEER)

① LIMITS OF FERTILIZER TYPE B, SEEDING MIXTURE NO. 20, SEEDING TEMPORARY, AND MULCHING (AS DIRECTED BY ENGINEER)

② LIMITS OF FERTILIZER TYPE B, SEEDING MIXTURE NO. 20, SEEDING TEMPORARY, AND EROSION MAT URBAN CLASS I TYPE B (AS DIRECTED BY ENGINEER)

PROJECT NO: 5958-00-70	HWY: CTH G	COUNTY: IOWA	TYPICAL FINISHED SECTIONS	SHEET 4	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\SHEETSPLAN\TYPICALS\PROPOSED AND EXISTING TYPICAL.DWG
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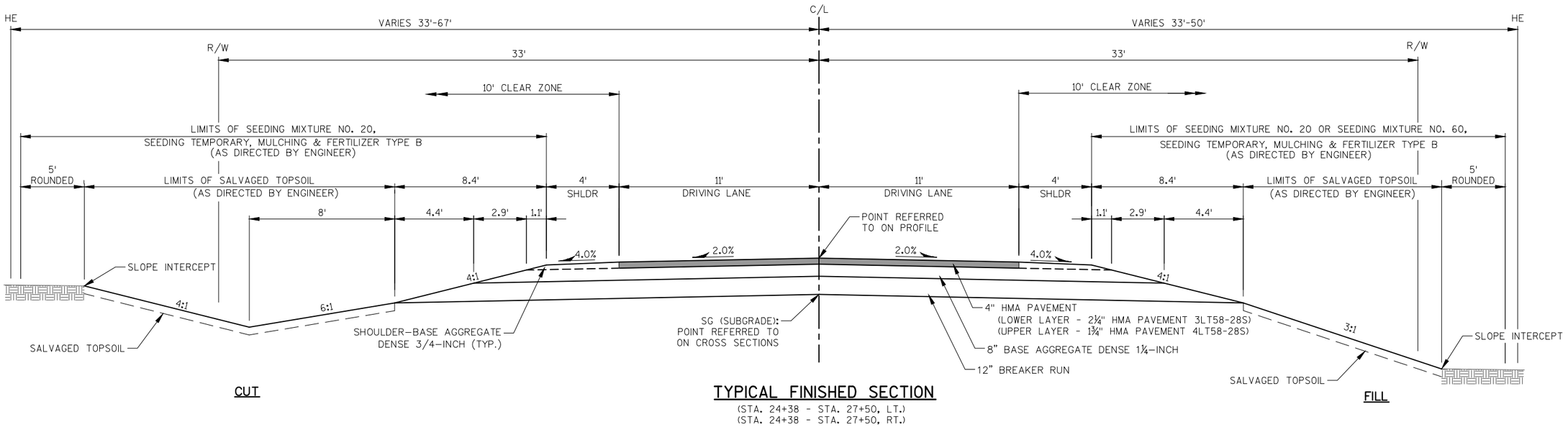
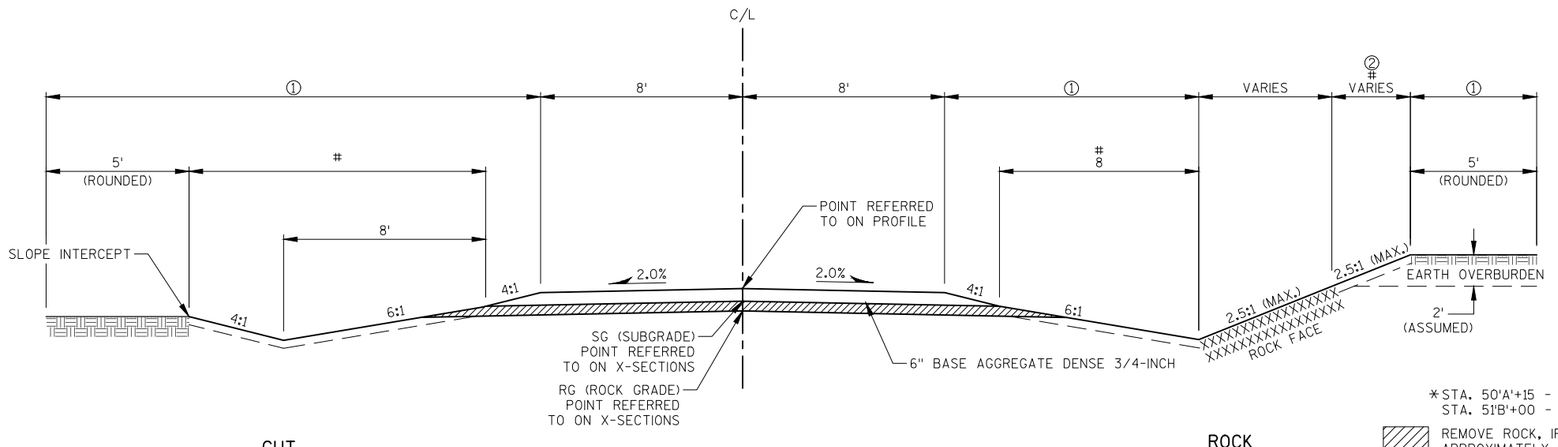
PLOT BY : STEPHANIE POTTER
PLOT SCALE : 1" = 1'



TYPICAL FINISHED SECTION

(STA. 24+38 - STA. 27+50, LT.)
(STA. 24+38 - STA. 27+50, RT.)



TYPICAL FINISHED SECTION

'A'-LINE
'B'-LINE

* STA. 50'A'+15 - STA. 50'A'+98.20
STA. 51'B'+00 - STA. 54'B'+53.40

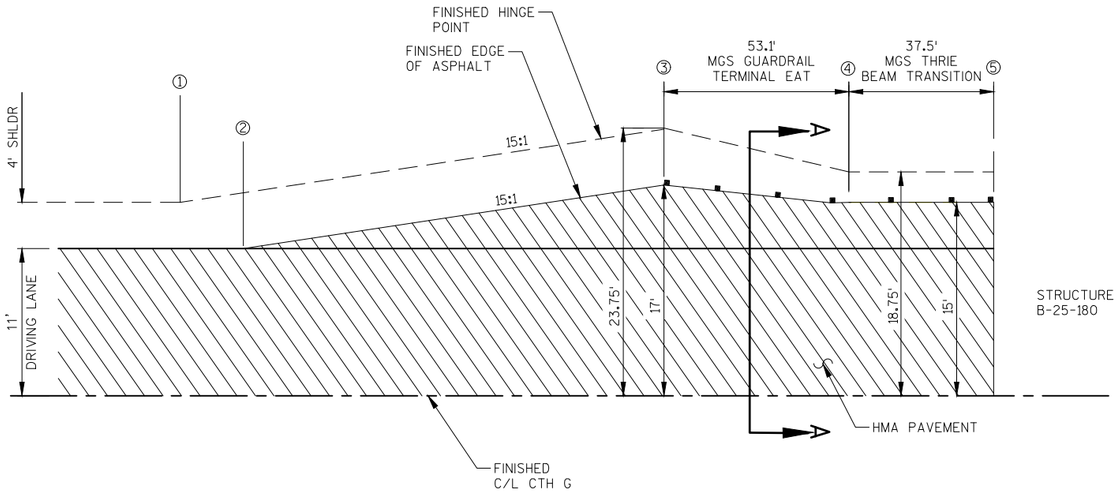
REMOVE ROCK, IF ENCOUNTERED IN EXCAVATION, TO A DEPTH APPROXIMATELY 6 INCHES BELOW THE EARTH SUBGRADE BETWEEN LIMITS OF THE SHOULDER SLOPES

\# LIMITS OF SALVAGED TOPSOIL, (AS DIRECTED BY ENGINEER)

① LIMITS OF FERTILIZER TYPE B, SEEDING MIXTURE NO. 20, SEEDING TEMPORARY, AND MULCHING (AS DIRECTED BY ENGINEER)

② LIMITS OF FERTILIZER TYPE B, SEEDING MIXTURE NO. 20, SEEDING TEMPORARY AND EROSION MAT URBAN CLASS I TYPE B (AS DIRECTED BY ENGINEER)

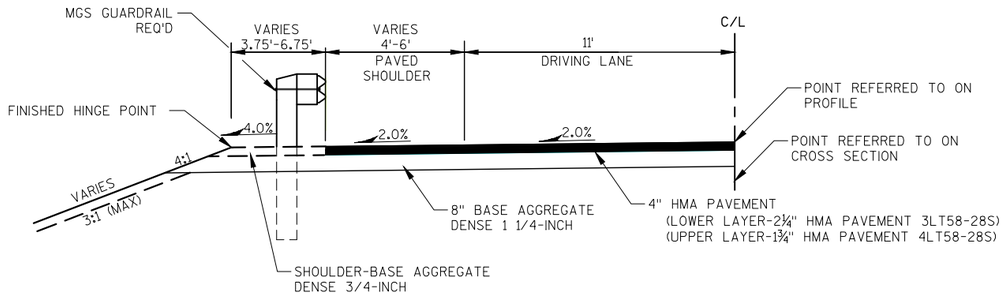
PROJECT NO: 5958-00-70	HWY: CTH G	COUNTY: IOWA	TYPICAL FINISHED SECTIONS	SHEET 5	E



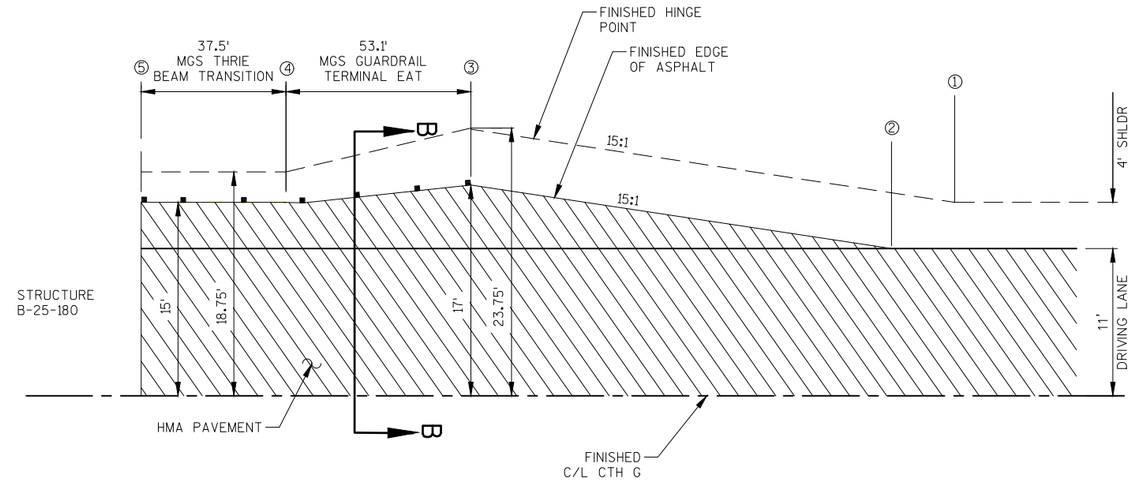
BEAMGUARD LAYOUT TABLE

QUADRANT	LOCATION	STATION ①	②	③	④	⑤
SOUTHWEST	MAINLINE, RT.	21+92	22+33	23+23	23+76	24+14
NORTHWEST	MAINLINE, LT.	21+75	22+16	23+06	23+59	23+97

BEAMGUARD LAYOUT DETAIL



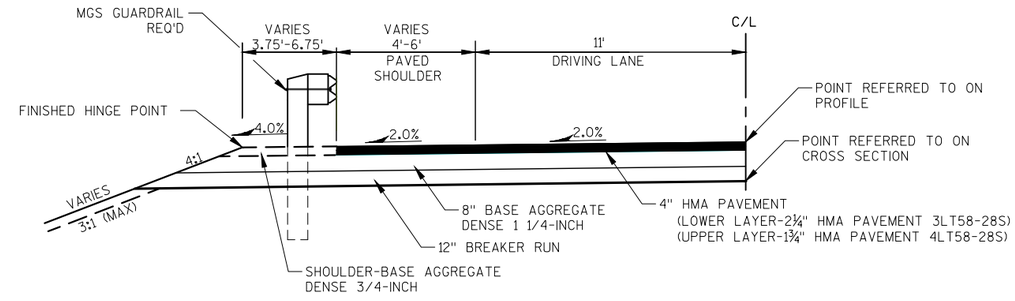
SECTION A–A



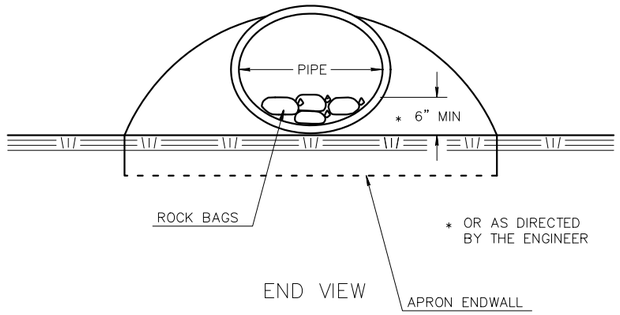
BEAMGUARD LAYOUT TABLE

QUADRANT	LOCATION	STATION ①	②	③	④	⑤
NORTHEAST	MAINLINE, LT.	26+84	26+42	25+52	24+99	24+62
SOUTHEAST	MAINLINE, RT.	27+01	26+60	25+70	25+17	24+79

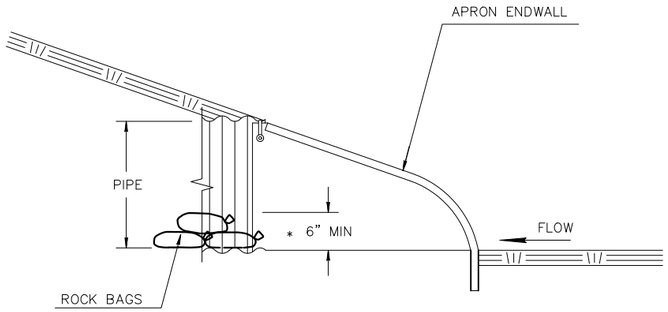
BEAMGUARD LAYOUT DETAIL



SECTION B–B

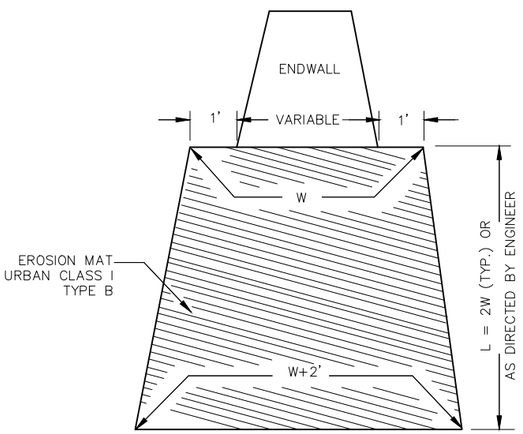


END VIEW



SIDE VIEW

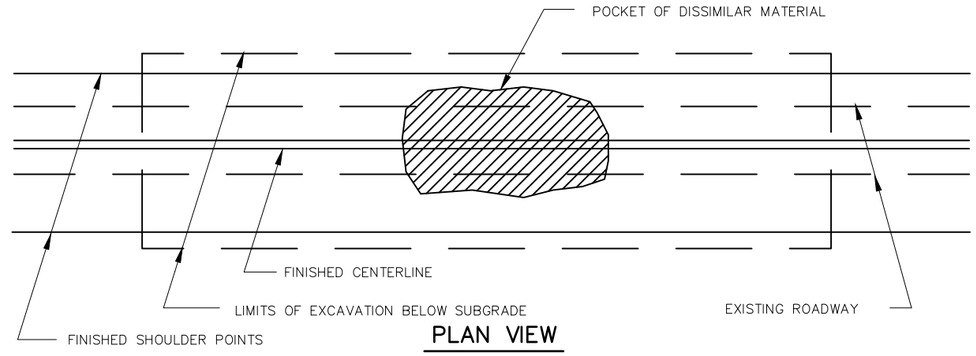
CULVERT PIPE CHECKS



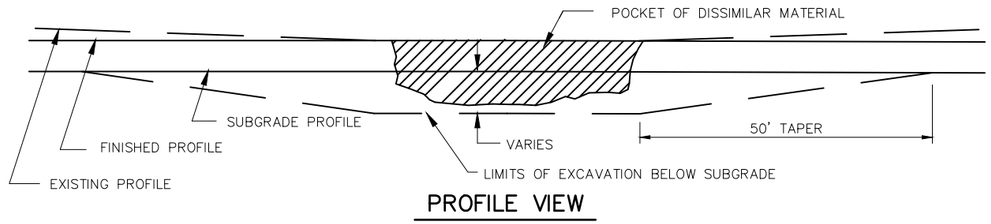
EROSION MAT URBAN CLASS I TYPE B TREATMENT AT CULVERTS

SEE MISCELLANEOUS QUANTITIES
SHEET FOR LOCATION AND DIMENSIONS

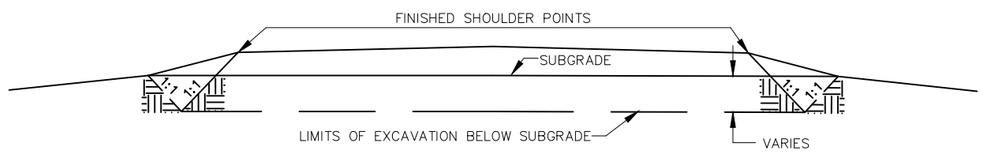
2



PLAN VIEW



PROFILE VIEW



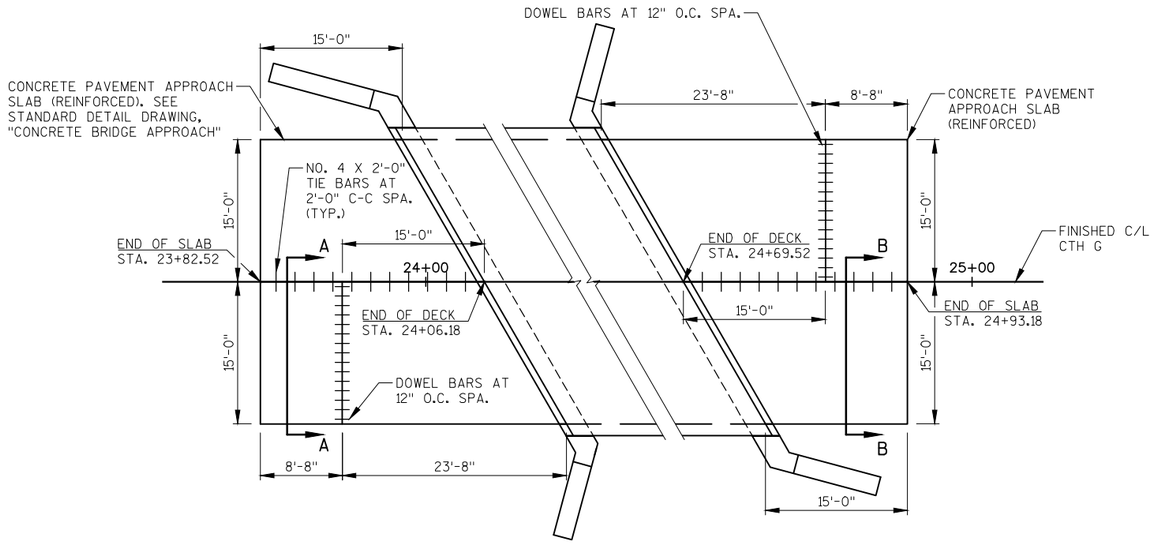
CROSS SECTION VIEW

1. EXACT LOCATION OF E.B.S. (EXCAVATION BELOW SUBGRADE) SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

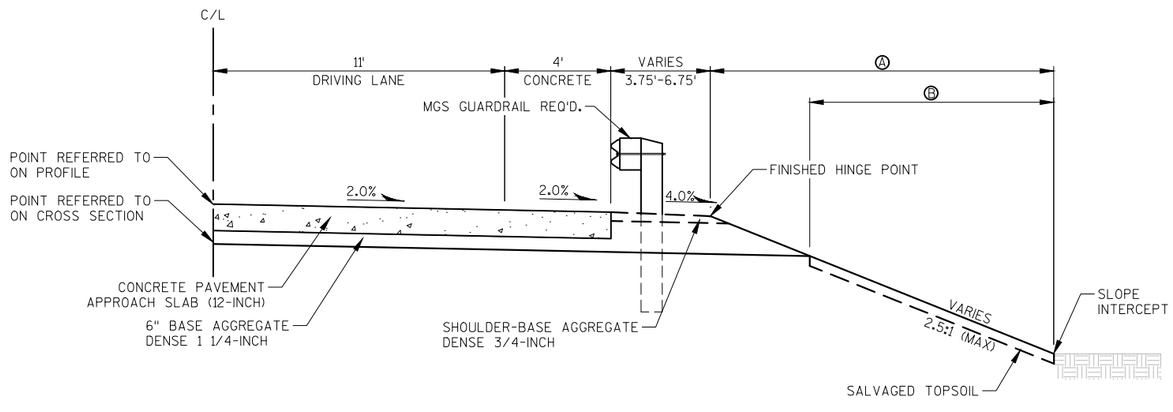
2. E.B.S. AREA TO BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE ENGINEER. BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.

3. THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTIL E.B.S. IS COMPLETED. LATERAL LIMITS OF EXCAVATION SHALL BE THE SUBGRADE SHOULDER POINTS.

EXCAVATION BELOW SUBGRADE (E.B.S.)



STRUCTURE APPROACH DETAILS

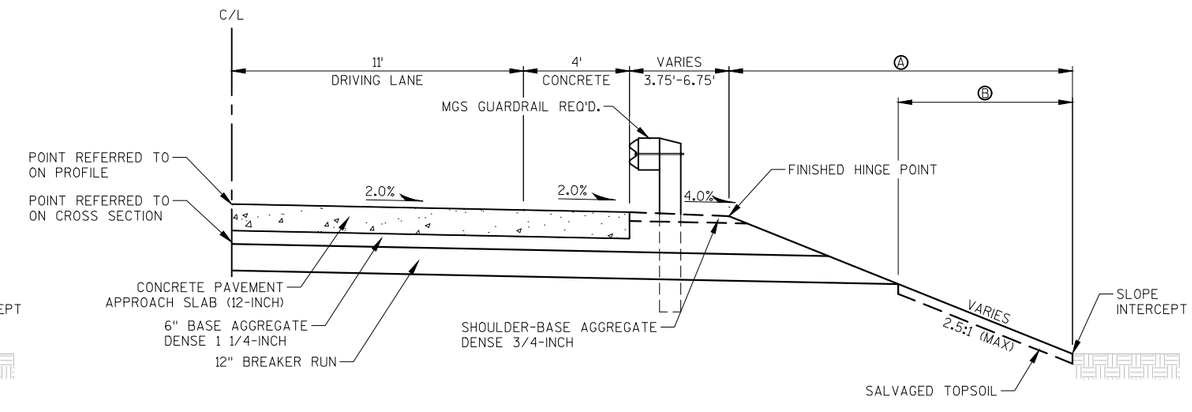


SECTION A-A

FILL

Ⓐ LIMITS OF SEEDING MIXTURE NO. 20, OR NO. 60, SEEDING TEMPORARY, MULCHING & FERTILIZER TYPE B (AS DIRECTED BY ENGINEER)

Ⓑ LIMITS OF SALVAGED TOPSOIL (AS DIRECTED BY ENGINEER)

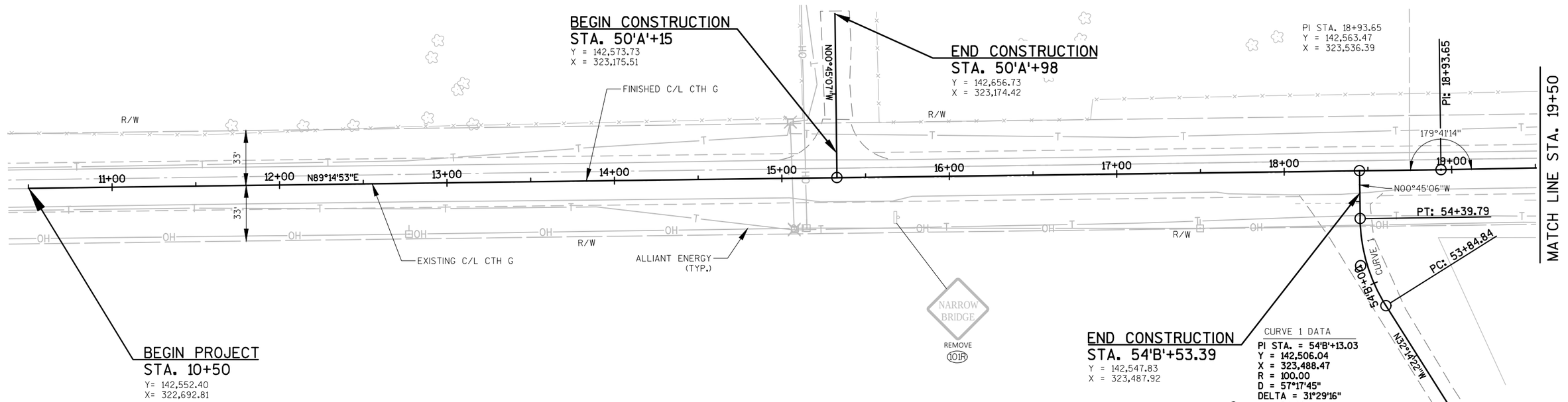


SECTION B-B

FILL

Ⓐ LIMITS OF SEEDING MIXTURE NO. 20, OR NO. 60, SEEDING TEMPORARY, MULCHING & FERTILIZER TYPE B (AS DIRECTED BY ENGINEER)

Ⓑ LIMITS OF SALVAGED TOPSOIL (AS DIRECTED BY ENGINEER)



CTH G STATION LAYOUT

STATION	Y	X	COMMENTS
10+50.00	142,552.40	322,692.81	BEGIN PROJECT
11+00.00	142,553.05	322,742.81	-
11+50.00	142,553.71	322,792.80	-
12+00.00	142,554.36	322,842.80	-
12+50.00	142,555.02	322,892.80	-
13+00.00	142,555.68	322,942.79	-
13+50.00	142,556.33	322,992.79	-
14+00.00	142,556.99	323,042.78	-
14+50.00	142,557.65	323,092.78	-
15+00.00	142,558.30	323,142.77	-
15+50.00	142,558.96	323,192.77	-
16+00.00	142,559.61	323,242.77	-
16+50.00	142,560.27	323,292.76	-
17+00.00	142,560.93	323,342.76	-
17+50.00	142,561.58	323,392.75	-
18+00.00	142,562.24	323,442.75	-
18+50.00	142,562.90	323,492.74	-
19+00.00	142,563.59	323,542.74	-
19+50.00	142,564.52	323,592.73	-
20+00.00	142,565.45	323,642.72	-
20+50.00	142,566.37	323,692.71	-
21+00.00	142,567.30	323,742.70	-
21+50.00	142,568.23	323,792.70	-
22+00.00	142,569.16	323,842.69	-
22+50.00	142,570.09	323,892.68	-
23+00.00	142,571.02	323,942.67	-

CTH G STATION LAYOUT

23+50.00	142,571.95	323,992.66	-
24+00.00	142,572.88	324,042.65	-
24+05.41	142,572.98	324,048.06	END OF DECK
24+50.00	142,573.81	324,092.64	-
24+70.29	142,574.18	324,112.93	END OF DECK
25+00.00	142,574.74	324,142.64	-
25+50.00	142,575.67	324,192.63	-
26+00.00	142,576.59	324,242.62	-
26+50.00	142,577.52	324,292.61	-
27+00.00	142,578.45	324,342.60	-
27+50.00	142,579.38	324,392.59	END PROJECT

'A'-LINE STATION LAYOUT

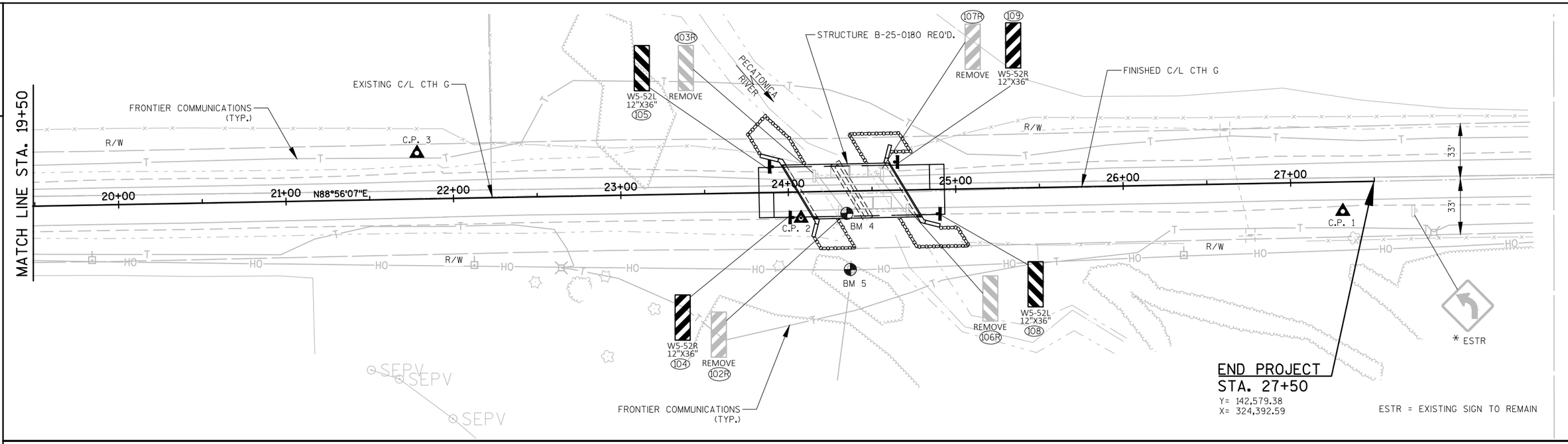
STATION	Y	X	COMMENTS
50'A'+15.00	142,573.73	323,175.51	BEGIN CONSTRUCTION
50'A'+50.00	142,608.73	323,175.05	-
50'A'+98.00	142,656.73	323,174.42	END CONSTRUCTION

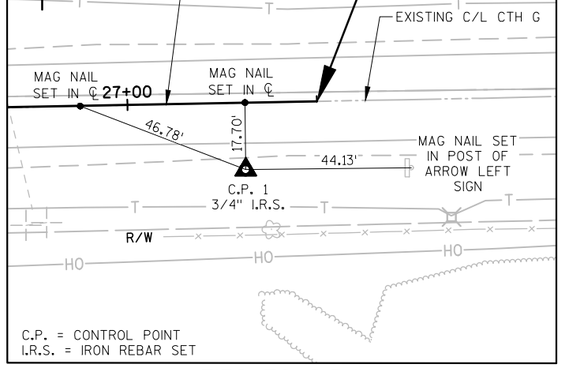
'B'-LINE STATION LAYOUT

STATION	Y	X	COMMENTS
50'B'+00.00	142,156.69	323,708.80	BEGIN CONSTRUCTION
50'B'+50.00	142,198.98	323,682.13	
51'B'+00.00	142,241.27	323,655.46	
51'B'+50.00	142,283.57	323,628.78	
52'B'+00.00	142,325.86	323,602.11	
52'B'+50.00	142,368.15	323,575.44	
53'B'+00.00	142,410.44	323,548.77	
53'B'+50.00	142,452.73	323,522.09	
54'B'+00.00	142,495.59	323,496.42	
54'B'+50.00	142,544.44	323,487.97	
54'B'+53.39	142,547.83'	323,487.92	END CONSTRUCTION

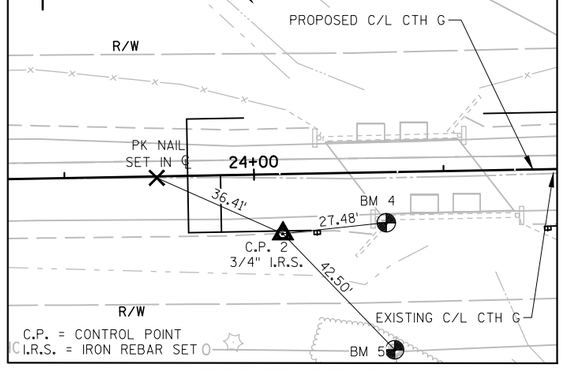
PROJECT NO: 5958-00-70	HWY: CTH G	COUNTY: IOWA	ALIGNMENT AND TIES/PERMANENT SIGNING	SHEET 9	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY – CTH G\SHEETSPLAN\DETAILS\ALIGNMENT AND TIES.DWG
LAYOUT : ALIGNMENT
PLOT DATE : 4/16/2018
PLOT TIME : 8:04:19 AM
PLOT BY : STEPHANIE POTTER
PLOT SCALE : 1" = 1'

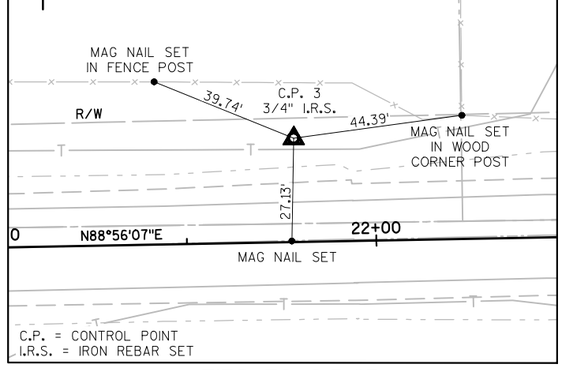




TIES TO C.P.#1
STA. 27+30.89; 17.7' RT.
Y = 142,561.34
X = 324,373.82



TIES TO C.P.#2
STA. 24+07.35; 15.8' RT.
Y = 142,557.25
X = 324,050.29



TIES TO C.P.#3
STA. 21+78.69; 27.4' LT.
Y = 142,596.12
X = 323,820.87

CONTROL POINTS

No.	STATION	DESCRIPTION	Y	X
1	27+30.89	3/4" IRON REBAR SET 17.7' RT.	142,561.34	324,373.82
2	24+07.35	3/4" IRON REBAR SET 15.8' RT.	142,557.25	324,050.29
3	21+78.69	3/4" IRON REBAR SET 27.4' LT.	142,596.12	323,820.87

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY – CTH G\SHEETSPLAN\DETAILS\ALIGNMENT AND TIES.DWG
LAYOUT : TIES
PLOT DATE : 4/18/2018
PLOT TIME : 8:44:38 AM
PLOT BY : STEPHANIE POTTER
PLOT SCALE : 1" = 1'

5958-00-70

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	5.000	5.000
0004	201.0205	Grubbing	STA	2.000	2.000
0006	201.0210	Grubbing	SY	3.000	3.000
0008	203.0100	Removing Small Pipe Culverts	EACH	2.000	2.000
0010	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. 24+43	LS	1.000	1.000
0012	205.0100	Excavation Common	CY	15,582.000	15,582.000
0014	205.0200	Excavation Rock	CY	16,742.000	16,742.000
0016	206.1000	Excavation for Structures Bridges (structure) 01. B-25-0180	LS	1.000	1.000
0018	206.5000	Cofferdams (structure) 01. B-25-0180	LS	1.000	1.000
0020	210.1500	Backfill Structure Type A	TON	570.000	570.000
0022	213.0100	Finishing Roadway (project) 01. 5958-00-70	EACH	1.000	1.000
0024	305.0110	Base Aggregate Dense 3/4-Inch	TON	850.000	850.000
0026	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	3,420.000	3,420.000
0028	311.0110	Breaker Run	TON	980.000	980.000
0030	415.0410	Concrete Pavement Approach Slab	SY	160.000	160.000
0032	455.0605	Tack Coat	GAL	250.000	250.000
0034	460.2000	Incentive Density HMA Pavement	DOL	710.000	710.000
0036	460.5223	HMA Pavement 3 LT 58-28 S	TON	615.000	615.000
0038	460.5224	HMA Pavement 4 LT 58-28 S	TON	480.000	480.000
0040	502.0100	Concrete Masonry Bridges	CY	291.000	291.000
0042	502.3200	Protective Surface Treatment	SY	270.000	270.000
0044	505.0400	Bar Steel Reinforcement HS Structures	LB	10,110.000	10,110.000
0046	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	26,730.000	26,730.000
0048	513.4061	Railing Tubular Type M	LF	131.000	131.000
0050	516.0500	Rubberized Membrane Waterproofing	SY	14.000	14.000
0052	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	6.000	6.000
0054	520.1036	Apron Endwalls for Culvert Pipe 36-Inch	EACH	2.000	2.000
0056	520.3324	Culvert Pipe Class III-A 24-Inch	LF	106.000	106.000
0058	520.3336	Culvert Pipe Class III-A 36-Inch	LF	64.000	64.000
0060	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	320.000	320.000
0062	606.0300	Riprap Heavy	CY	265.000	265.000
0064	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	170.000	170.000
0066	614.2500	MGS Thrie Beam Transition	LF	160.000	160.000
0068	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
0070	618.0100	Maintenance And Repair of Haul Roads (project) 01. 5958-00-70	EACH	1.000	1.000
0072	619.1000	Mobilization	EACH	1.000	1.000
0074	624.0100	Water	MGAL	40.000	40.000

5958-00-70

Line	Item	Item Description	Unit	Total	Qty
0076	625.0500	Salvaged Topsoil	SY	9,300.000	9,300.000
0078	627.0200	Mulching	SY	13,100.000	13,100.000
0080	628.1504	Silt Fence	LF	1,400.000	1,400.000
0082	628.1520	Silt Fence Maintenance	LF	4,200.000	4,200.000
0084	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0086	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0088	628.2008	Erosion Mat Urban Class I Type B	SY	1,300.000	1,300.000
0090	628.6005	Turbidity Barriers	SY	320.000	320.000
0092	628.7504	Temporary Ditch Checks	LF	260.000	260.000
0094	628.7555	Culvert Pipe Checks	EACH	20.000	20.000
0096	629.0210	Fertilizer Type B	CWT	9.000	9.000
0098	630.0120	Seeding Mixture No. 20	LB	390.000	390.000
0100	630.0160	Seeding Mixture No. 60	LB	1.000	1.000
0102	630.0200	Seeding Temporary	LB	200.000	200.000
0104	633.5100	Markers Row	EACH	39.000	39.000
0106	633.5200	Markers Culvert End	EACH	4.000	4.000
0108	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0110	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0112	638.2602	Removing Signs Type II	EACH	5.000	5.000
0114	638.3000	Removing Small Sign Supports	EACH	5.000	5.000
0116	642.5001	Field Office Type B	EACH	1.000	1.000
0118	643.0420	Traffic Control Barricades Type III	DAY	1,620.000	1,620.000
0120	643.0705	Traffic Control Warning Lights Type A	DAY	2,520.000	2,520.000
0122	643.0900	Traffic Control Signs	DAY	1,440.000	1,440.000
0124	643.5000	Traffic Control	EACH	1.000	1.000
0126	645.0111	Geotextile Type DF Schedule A	SY	120.000	120.000
0128	645.0120	Geotextile Type HR	SY	440.000	440.000
0130	646.1020	Marking Line Epoxy 4-Inch	LF	6,800.000	6,800.000
0132	650.4500	Construction Staking Subgrade	LF	2,170.000	2,170.000
0134	650.5000	Construction Staking Base	LF	2,170.000	2,170.000
0136	650.6000	Construction Staking Pipe Culverts	EACH	4.000	4.000
0138	650.6500	Construction Staking Structure Layout (structure) 01. B-25-0180	LS	1.000	1.000
0140	650.9910	Construction Staking Supplemental Control (project) 01. 5958-00-70	LS	1.000	1.000
0142	650.9920	Construction Staking Slope Stakes	LF	2,170.000	2,170.000
0144	690.0150	Sawing Asphalt	LF	44.000	44.000
0146	715.0415	Incentive Strength Concrete Pavement	DOL	500.000	500.000
0148	715.0502	Incentive Strength Concrete Structures	DOL	1,758.000	1,758.000

3

CLEARING & GRUBBING

STATION	LOCATION	201.0105 CLEARING (STA) CATEGORY 010	201.0105 CLEARING (STA) CATEGORY 030	201.0205 GRUBBING (STA) CATEGORY 010	201.0205 GRUBBING (STA) CATEGORY 030
12+00 - 14+00	MAINLINE, LT.	-	2	-	2
22+00- 25+00	MAINLINE	3	-	3	-
	SUBTOTALS =	3	2	3	2
	TOTAL =	5		5	

REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	203.0100 (EACH) CATEGORY 030	REMARKS
26+69	MAINLINE	1	36" CMP / L=57'
54'B'+49	B'-LINE	1	24"CMP / L=51'
	TOTAL =	2	

ALL BID ITEMS ARE CATEGORY 010 OR 030 UNLESS OTHERWISE NOTED

MGS GUARDRAIL

STATION - STATION	LOCATION	614.2500 MGS THRIE BEAM TRANSITION (LF) CATEGORY 010	614.2610 MGS GUARDRAIL TERMINAL EAT (EACH) CATEGORY 010
23+06 - 23+97	MAINLINE, LT.	40	1
23+23 - 24+14	MAINLINE, RT.	40	1
24+62 - 25+52	MAINLINE, LT.	40	1
24+79 - 25+70	MAINLINE, RT.	40	1
	TOTALS =	160	4

3

EARTHWORK SUMMARY

FROM/TO STA	LOCATION	CATEGORY 010 205.0100 EXCAVATION COMMON CUT (CY)	CATEGORY 030 205.0100 EXCAVATION COMMON CUT (CY)	AVAILABLE MATERIAL (CY) (1)	CATEGORY 010 205.0200 EXCAVATION ROCK (CY)	CATEGORY 030 205.0200 EXCAVATION ROCK (CY)	EXPANDED ROCK (CY) FACTOR 1.1 (2)	UNEXPANDED FILL (CY)	FILL (25%) (3)	MASS ORDINATE +/- (CY) (4)	WASTE (CY)
STA. 10+50 - STA. 20+80	MAINLINE	--	9624	9624	--	9947	10942	640	-12879	22503	22503
STA. 20+80 - STA. 26+50	MAINLINE	2090	--	2090	103	--	112	2243	2665	-575	-575
STA. 26+50 - STA. 27+50	MAINLINE	--	354	354	--	0	0	219	274	80	80
STA. 50+15 - STA. 50+98	'A'-LINE	--	354	354	--	57	63	0	-78	432	432
STA. 50+00 - STA. 54+53.39	'B'-LINE	--	3160	3160	--	6635	7299	176	-8904	12064	12064
SUBTOTALS =		2,090	13,492	15,582	103	16,639	18,416	3,278	-18,922		34,504
TOTALS =		15,582		15,582	16,742		18,416	3,278	-18,922		34,504

NOTES:
1.) AVAILABLE MATERIAL = CUT
2.) EXPANDED ROCK FACTOR = 1.1
3.) FILL 25%: [UNEXPANDED FILL-(ROCK*ROCK FACTOR)]*1.25
4.) THE MASS ORDINATE+ OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE CATEGORY. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE CATEGORY.

WATER

PROJECT	624.0100 (MGAL) CATEGORY 010	624.0100 (MGAL) CATEGORY 030
5958-00-70	11	29
SUBTOTALS =	11	29
TOTAL =	40	

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON) CATEGORY 010	305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON) CATEGORY 030	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON) CATEGORY 010	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON) CATEGORY 030	311.0110 BREAKER RUN (TON) CATEGORY 010	311.0110 BREAKER RUN (TON) CATEGORY 030
10+50 - 22+00	MAINLINE	-	269	-	2121	-	-
22+00 - 26+00	MAINLINE	104	-	800	-	* 465	-
26+00 - 27+50	MAINLINE	-	46	-	306	-	463
50'A'+15 - 50'A'+98	'A'-LINE	-	59	-	-	-	-
50'B'+00 - 54'B'+53.40	'B'-LINE	-	322	-	-	-	-
-	UNDISTRIBUTED	6	44	50	143	25	27
	SUBTOTALS =	110	740	850	2570	490	490
	TOTALS =	850		3420		980	

*STA. 24+69 - STA. 26+00

CONCRETE PAVEMENT APPROACH SLAB

STATION - STATION	LOCATION	415.0410 (SY) CATEGORY 010
23+82.52 - 24+06.18	MAINLINE	80
24+69.52 - 24+93.18	MAINLINE	80
TOTAL =		160

HMA PAVEMENT

STATION - STATION	LOCATION	455.0605 TACK COAT (GAL) CATEGORY 010	455.0605 TACK COAT (GAL) CATEGORY 030	460.5223 HMA PAVEMENT 3LT 58-28S (TON) CATEGORY 010	460.5223 HMA PAVEMENT 3LT 58-28S (TON) CATEGORY 030	460.5224 HMA PAVEMENT 4LT 58-28S (TON) CATEGORY 010	460.5224 HMA PAVEMENT 4LT 58-28S (TON) CATEGORY 030
10+50 - 22+00	MAINLINE	-	156	-	402	-	313
22+00 - 26+00	MAINLINE	56	-	143	-	111	-
26+00 - 27+50	MAINLINE	-	20	-	50	-	39
-	UNDISTRIBUTED	4	14	7	13	4	13
	SUBTOTALS =	60	190	150	465	115	365
	TOTALS =	250		615		480	

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY – CTH G\SHEETSPLAN\DETAILS\MISCEL QUANTS.DWG
LAYOUT : LAYOUT1
PLOT DATE : 4/18/2018
PLOT TIME : 1:32:10 PM
PLOT BY : STEPHANIE POTTER
PLOT SCALE : 1" = 1'

ALL BID ITEMS ARE CATEGORY 010 OR 030 UNLESS OTHERWISE NOTED

3

CULVERT PIPES

STATION - STATION	LOCATION	520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH (EACH) CATEGORY 030	520.1036 APRON ENDWALLS FOR CULVERT PIPE 36-INCH (EACH) CATEGORY 030	520.3324 CULVERT PIPE CLASS III-A 24-INCH (LF) CATEGORY 030	520.3336 CULVERT PIPE CLASS III-A 36-INCH (LF) CATEGORY 030	633.5200 MARKERS CULVERT END (EACH) CATEGORY 030	650.6000 CONSTRUCTION STAKING PIPE CULVERTS (EACH) CATEGORY 030
11+50	MAINLINE	2	-	44	-	2	1
26+69	MAINLINE	-	2	-	64	2	1
50'A'+27	MAINLINE, LT.	2	-	32	-	-	1
54'B'+41	MAINLINE, RT.	2	-	30	-	-	1
	TOTALS =	6	2	106	64	4	4

PIPE SIZE	MINIMUM THICKNESS (IN) STEEL	ALUMINUM
24-INCH	0.064	0.075
36-INCH	0.079	0.105

FINISHING ITEMS

STATION - STATION	LOCATION	625.0500 SALVAGED TOPSOIL (SY) CATEGORY 010	625.0500 SALVAGED TOPSOIL (SY) CATEGORY 030	627.02000 MULCHING (SY) CATEGORY 010	627.02000 MULCHING (SY) CATEGORY 030	629.0210 FERTILIZER TYPE B (CWT) CATEGORY 010	629.0210 FERTILIZER TYPE B (CWT) CATEGORY 030	630.0120 SEEDING MIXTURE NO. 20 (LB) CATEGORY 010	630.0120 SEEDING MIXTURE NO. 20 (LB) CATEGORY 030	630.0160 SEEDING MIXTURE NO. 60 (LB) CATEGORY 010	630.0200 SEEDING TEMPORARY (LB) CATEGORY 010	630.0200 SEEDING TEMPORARY (LB) CATEGORY 030
10+50 - 22+00	MAINLINE	-	4,520	-	6,160	-	4.3	-	184	-	-	92
22+00 - 26+00	MAINLINE	1,400	-	1,940	-	1.3	-	54	-	*0.5	28	-
26+00 - 27+50	MAINLINE	-	228	-	728	-	0.5	-	20	-	-	10
50'A'+15 - 50'A'+98	'A'-LINE	-	112	-	189	-	0.1	-	5	-	-	3
50'B'+00 - 54'B'+53.40	'B'-LINE	-	1,212	-	1,500	-	1.1	-	49	-	-	25
-	UNDISTRIBUTED	350	1,478	460	2,123	0.3	1.4	13	65	0.5	8	34
	SUBTOTALS =	1,750	7,550	2,400	10,700	1.6	7.4	67	323	1.0	36	164
	TOTAL =	9,300		13,100		9.0		390		1.0	200	

*STA. 23+95 - STA. 24+06, LT.
STA. 24+35, LT. - STA. 24+67, RT.
STA. 24+78 - STA. 24+85, RT.

SILT FENCE

STATION - STATION	LOCATION	628.1504 SILT FENCE (LF) CATEGORY 010	628.1504 SILT FENCE (LF) CATEGORY 030	628.1520 SILT FENCE MAINTENANCE (LF) CATEGORY 010	628.1520 SILT FENCE MAINTENANCE (LF) CATEGORY 030
10+50 - 14+25	MAINLINE, LT.	-	375	-	1125
22+25 - 23+50	MAINLINE, LT.	135	-	405	-
24+07 - 24+49	MAINLINE, RT.	43	-	129	
24+46 - 26+00	MAINLINE, LT.	165	-	495	-
24+99 - 26+00	MAINLINE, RT.	105	-	315	-
26+00 - 27+50	MAINLINE, LT.	-	160	-	480
26+00 - 27+50	MAINLINE, RT.	-	145	-	435
-	UNDISTRIBUTED	102	170	306	510
	SUBTOTALS =	550	850	1,650	2,550
	TOTAL =	1,400		4,200	

MOBILIZATION EROSION CONTROL

PROJECT	628.1905 MOBILIZATION EROSION CONTROL (EACH) CATEGORY 010	628.1905 MOBILIZATION EROSION CONTROL (EACH) CATEGORY 030	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL (EACH) CATEGORY 010	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL (EACH) CATEGORY 030
5958-00-70	4	2	2	1
SUBTOTALS =	4	2	2	1
TOTAL =	6		3	

TEMPORARY DITCH CHECKS

STATION	LOCATION	628.7504 (LF) CATEGORY 010	628.7504 (LF) CATEGORY 030
15+00	MAINLINE, RT.	-	8
15+00	MAINLINE, LT.	-	8
16+50	MAINLINE, RT.	-	8
17+50	MAINLINE, RT.	-	8
17+50	MAINLINE, LT.	-	8
18+50	MAINLINE, LT.	-	8
19+00	MAINLINE, RT.	-	8
19+50	MAINLINE, LT.	-	8
20+00	MAINLINE, RT.	-	8
20+50	MAINLINE, LT.	-	8
21+00	MAINLINE, RT.	-	8
21+50	MAINLINE, LT.	-	8
22+00	MAINLINE, LT.	8	-
22+00	MAINLINE, RT.	8	-
23+00	MAINLINE, RT.	8	-
24+00	MAINLINE, RT.	8	-
50'A'+75	A'-LINE, LT.	-	8
50'A'+75	A'-LINE, RT.	-	8
51'B'+00	B'-LINE, LT.	-	8
51'B'+00	B-LINE, RT.	-	8
52'B'+00	B'-LINE, LT.	-	8
52'B'+00	B-LINE, RT.	-	8
53'B'+00	B'-LINE, LT.	-	8
53'B'+00	B-LINE, RT.	-	8
54'B'+00	B'-LINE, LT.	-	8
54'B'+00	B-LINE, RT.	-	8
-	UNDISTRIBUTED	8	44
	SUBTOTALS =	40	220
	TOTALS =	260	

EROSION MAT URBAN CLASS I TYPE B

STATION - STATION	LOCATION	628.2008 (SY) CATEGORY 010	628.2008 (SY) CATEGORY 030
10+50 - 22+00	MAINLINE	-	640
22+00 - 23+25	MAINLINE	83	-
50'B'+00 - 54'B'+53.40	'B'-LINE	-	278
-	CULVERT TREATMENT	-	50
-	UNDISTRIBUTED	17	232
	SUBTOTALS =	100	1,200
	TOTAL =	1,300	

TURBIDITY BARRIERS

STATION-STATION	LOCATION	628.6005 (SY) CATEGORY 010
23+54 - 24+65	MAINLINE	178
24+30 - 24+98	MAINLINE	125
-	UNDISTRIBUTED	17
	TOTAL =	320

CULVERT PIPE CHECKS

STATION	LOCATION	628.7555 (EACH) CATEGORY 030
11+50	MAINLINE, RT.	3
26+69	MAINLINE, LT.	7
50'A'+27	'A'-LINE, LT	3
54'B'+41	'B'-LINE, LT.	3
-	UNDISTRIBUTED	4
	TOTAL =	20

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\SHEETSPLAN\DETAILS\MISCEL QUANTS.DWG
LAYOUT : LAYOUT1 (2)
PLOT DATE : 3/27/2018
PLOT TIME : 2:30:55 PM
PLOT BY : BOLAND, PATRICK
PLOT SCALE : 1" = 1'

ALL BID ITEMS ARE CATEGORY 010 OR 030 UNLESS OTHERWISE NOTED

3

MARKERS ROW

STATION	LOCATION	633.5100 (EACH) CATEGORY 010	633.5100 (EACH) CATEGORY 030
10+50.00	MAINLINE, 32.79 LT.	-	1
10+50.00	MAINLINE, 40.00 LT.	-	1
11+50.00	MAINLINE, 44.00 LT.	-	1
12+00.00	MAINLINE, 37.00 LT.	-	1
12+50.00	MAINLINE, 53.00 LT.	-	1
13+00.00	MAINLINE, 47.00 LT.	-	1
14+95.00	MAINLINE, 50.00 LT.	-	1
15+70.00	MAINLINE, 53.00 LT.	-	1
16+00.00	MAINLINE, 54.73 LT.	-	1
16+00.00	MAINLINE, 74.96 RT.	-	1
15+50.00	MAINLINE, 73.00 RT.	-	1
13+00.00	MAINLINE, 63.00 RT.	-	1
12+00.00	MAINLINE, 62.00 RT.	-	1
11+50.00	MAINLINE, 65.00 RT.	-	1
11+00.00	MAINLINE, 57.00 RT.	-	1
10+50.00	MAINLINE, 33.22 RT.	-	1
19+00.00	MAINLINE, 72.00 LT.	-	1
20+00.00	MAINLINE, 71.00 LT.	-	1
22+00.00	MAINLINE, 47.00 LT.	1	-
22+00.00	MAINLINE, 69.67 RT.	1	-
21+00.00	MAINLINE, 81.00 RT.	-	1
20+00.00	MAINLINE, 87.00 RT.	-	1
19+30.00	MAINLINE, 88.00 RT.	-	1
17+80.00	MAINLINE, 82.00 RT.	-	1
22+50.00	MAINLINE, 52.00 LT.	1	-
23+20.00	MAINLINE, 80.00 LT.	1	-
25+00.00	MAINLINE, 59.00 LT.	1	-
26+50.00	MAINLINE, 47.00 LT.	-	1
26+70.00	MAINLINE, 63.00 LT.	-	1
27+50.00	MAINLINE, 43.00 LT.	-	1
27+50.00	MAINLINE, 33.18 LT.	-	1
27+50.00	MAINLINE, 32.82 RT.	-	1
27+50.00	MAINLINE, 40.00 RT.	-	1
26+50.00	MAINLINE, 50.00 RT.	-	1
25+50.00	MAINLINE, 49.00 RT.	1	-
24+35.00	MAINLINE, 44.00 RT.	1	-
23+40.00	MAINLINE, 74.00 RT.	1	-
23+00.00	MAINLINE, 76.00 RT.	1	-
22+50.00	MAINLINE, 64.00 RT.	1	-
	SUBTOTALS =	10	29
	TOTALS =	39	

PERMANENT SIGNING

SIGN NUMBER	APPROX. STATION	POSITIIO	SITE ID	SIGN CODE	SIGN DESCRIPTION	SIZE (INCH X INCH)	634.0612 POSTS WOOD 4X6-INCH X 12-FT (EACH) CATEGORY 010	637.2230 SIGNS TYPE II REFLECTIVE F (SF) CATEGORY 010	638.2602 REMOVING SIGNS TYPE II (EACH) CATEGORY 010	638.3000 REMOVING SMALL SIGN SUPPORTS (EACH) CATEGORY 010
1-01R	15+69	RIGHT	MAINLINE	W5-2	NARROW BRIDGE	30X30	---	---	1	1
1-02R	24+32	RIGHT	MAINLINE	W5-52	BRIDGE HASH MARKS	12X36	---	---	1	1
1-03R	24+17	LEFT	MAINLINE	W5-52L	BRIDGE HASH MARKS	12X36	---	---	1	1
1-04	24+15	RIGHT	MAINLINE	W5-52L	BRIDGE HASH MARKS	12X36	1	3.0	---	---
1-05	23+96	LEFT	MAINLINE	W5-	BRIDGE HASH MARKS	12X36	1	3.0	---	---
1-06R	24+69	RIGHT	MAINLINE	W5-52R	BRIDGE HASH MARKS	12X36	---	---	1	1
1-07R	24+54	LEFT	MAINLINE	W5-52L	BRIDGE HASH MARKS	12X36	---	---	1	1
1-08	24+80	RIGHT	MAINLINE	W5-52R	BRIDGE HASH MARKS	12X36	1	3.0	---	---
1-09	24+60	LEFT	MAINLINE	W5-52L	BRIDGE HASH MARKS	12X36	1	3.0	---	---
						TOTALS =	4	12.00	5	5

TRAFFIC CONTROL

LOCATION	643.0420 BARRICADES TYPE III (DAYS) CATEGORY 010	643.0705 WARNING LIGHTS TYPE A (DAYS) CATEGORY 010	643.0900 SIGNS (DAYS) CATEGORY 010	643.5000 TRAFFIC CONTROL (EACH) CATEGORY 010
PROJECT	1620	2520	1440	1
TOTALS =	1620	2520	1440	1

MARKING LINE EPOXY 4-INCH

STATION - STATION	LOCATION	646.1020 (LF) CATEGORY 010	646.1020 (LF) CATEGORY 030	DESCRIPTION
10+50 - 22+00	MAINLINE	-	2300	DOUBLE YELLOW
10+50 - 22+00	MAINLINE	-	2300	WHITE EDGELINES
22+00 - 26+00	MAINLINE	800	-	DOUBLE YELLOW
22+00 - 26+00	MAINLINE	800	-	WHITE EDGELINES
26+00 - 27+50	MAINLINE	-	300	DOUBLE YELLOW
26+00 - 27+50	MAINLINE	-	300	WHITE EDGELINES
	SUBTOTALS =	1,600	5,200	
	TOTAL =	6,800		

CONSTRUCTION STAKING

STA. - STA.	LOCATION	650.4500 SUBGRADE (L.F.) CATEOGRY 010	650.4500 SUBGRADE (L.F.) CATEGORY 030	650.5000 BASE (L.F.) CATEOGRY 010	650.5000 BASE (L.F.) CATEGORY 030	650.6500 STRUCTURE LAYOUT (B-25-0180) CATEGORY 020	650.9910 SUPPLEMENTAL CONTROL (L.S.) CATEGORY 010	650.9920 SLOPE STAKES (L.F.) CATEOGRY 010	650.9920 SLOPE STAKES (L.F.) CATEGORY 030
10+50 - 22+00	MAINLINE	-	1150	-	1150	-	-	-	1150
22+00 - 26+00	MAINLINE	335	-	335	-	-	-	335	-
26+00 - 27+50	MAINLINE	-	150	-	150	-	-	-	150
50+15 - 50+98	'A'-LINE	-	83	-	83	-	-	-	83
50+00 - 54+53.40	'B'-LINE	-	452	-	452	-	-	-	452
-	PROJECT	-	-	-	-	1	1	-	-
	SUBTOTALS =	335	1835	335	1835	1	1	335	1835
	TOTALS =	2170		2170		1	1	2170	

SEE "CULVERT PIPES" FOR BID ITEM 650.6000 CONSTRUCTION STAKING CULVERT PIPE QUANTITIES

SAWING ASPHALT

STATION	LOCATION	690.0150 (L.F.) CATEGORY 030
10+50	MAINLINE	22
27+50	MAINLINE	22
	TOTAL =	44

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
5958-00-00		
FEDERAL PROJECT NUMBER	4.01	5

PLAT OF RIGHT-OF-WAY REQUIRED FOR

REWEY-COBB

(PECATONICA RIVER BRIDGE B-25-0180)

CTH G — IOWA COUNTY

CONSTRUCTION PROJECT NUMBER

5958-00-70

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP
ACCESS RIGHTS	AR
ACRES	AC.
AND OTHERS	ET.AL.
BARN	B.
CENTERLINE	C/L
CERTIFIED SURVEY MAP	CSM
CORNER	COR.
CONVEYANCE OF RIGHTS	CR
DOCUMENT	DOC.
EASEMENT	EASE.
GARAGE	G.
HIGHWAY EASEMENT	H.E.
HOUSE	H.
HOUSE TRAILER	H.T.
LAND CONTRACT	LC
MONUMENT	MON.
PAGE	P.
PERMANENT LIMITED EASEMENT	PLE
PROPERTY LINE	PL
RECORDED AS	(100')
REFERENCE LINE	R/L
RELEASE OF RIGHTS	ROR
REMAINING	REM.
RIGHT-OF-WAY	R/W
SECTION	SEC.
SHED	S.
STATION	STA.
TEMPORARY LIMITED EASEMENT	TLE
VOLUME	V.

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	DELTA
LENGTH OF CURVE	L
TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND SURVEY MONUMENT (WITH POINT NUMBER) o 1040

R/W MONUMENT o ● (SET)

R/W STANDARD △ ▲ (SET)

SIGN |SIGN

SECTION CORNER MONUMENT

SECTION CORNER SYMBOL

FEE (HATCH VARIES)

TEMPORARY LIMITED EASEMENT

PERMANENT LIMITED EASEMENT

R/W BOUNDARY POINT RWB20

PARCEL NUMBER (8)

UTILITY PARCEL NUMBER (57)

SIGN NUMBER (OFF PREMISE) 21-1

BUILDING

PROPOSED R/W LINE

EXISTING H.E. LINE

PROPERTY LINE

LOT & TIE LINES

SLOPE INTERCEPTS

CORPORATE LIMITS

NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)

NO ACCESS (BY ACQUISTION)

NO ACCESS (BY STATUTORY AUTHORITY)

SECTION LINE

QUARTER LINE

SIXTEENTH LINE

EXISTING CENTERLINE

PROPOSED REFERENCE LINE

PARALLEL OFFSET

ENCROACHMENT E-1/TYPE

HIGHWAY EASEMENT

CONVENTIONAL UTILITY SYMBOLS

WATER	W	SANITARY SEWER	SAN
GAS	G	STORM SEWER	SS
TELEPHONE	T		
OVERHEAD TRANSMISSION LINES	OH		
ELECTRIC	E	POWER POLE	NON COMPENSABLE / COMPENSABLE
CABLE TELEVISION	TV	TELEPHONE POLE	
FIBER OPTIC	FO	TELEPHONE PEDESTAL	
		ELECTRIC TOWER	

NOTES

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

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 3/4" X 24" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD."

STRUCTURE B-25-0180

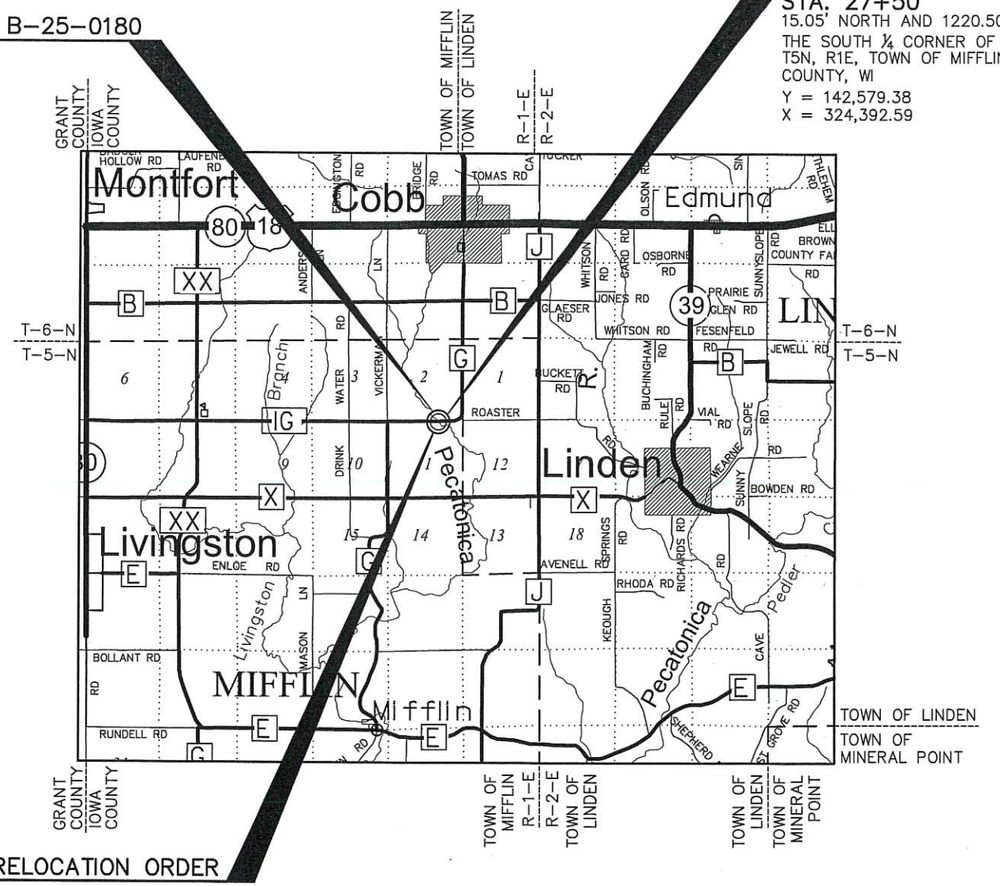
END RELOCATION ORDER

STA. 27+50

15.05' NORTH AND 1220.50' EAST OF THE SOUTH ¼ CORNER OF SECTION 2, T5N, R1E, TOWN OF MIFFLIN, IOWA COUNTY, WI

Y = 142,579.38

X = 324,392.59



BEGIN RELOCATION ORDER

STA. 10+50

11.93' SOUTH AND 479.28' WEST OF THE SOUTH ¼ CORNER OF SECTION 2, T5N, R1E, TOWN OF MIFFLIN, IOWA COUNTY, WI

Y = 142,552.40

X = 322,692.81

N

LAYOUT

SCALE 0 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.322 MI.

JEWELL associates engineers, inc.

Engineers - Architects - Surveyors

560 SUNRISE DRIVE
SPRING GREEN, WI 53588
PHONE : 608.588.7484
FAX : 608.588.9322

I HEREBY CERTIFY THAT THIS PLAT WAS MADE FOR IOWA COUNTY, WISCONSIN AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

WISCONSIN
SCOTT D. WARNER
S-2524
RICHLAND CENTER, WI
12-28-2018
LAND SURVEYOR

REVISION DATE

APPROVED FOR IOWA COUNTY

DATE: 3/8/18 NAME/TITLE

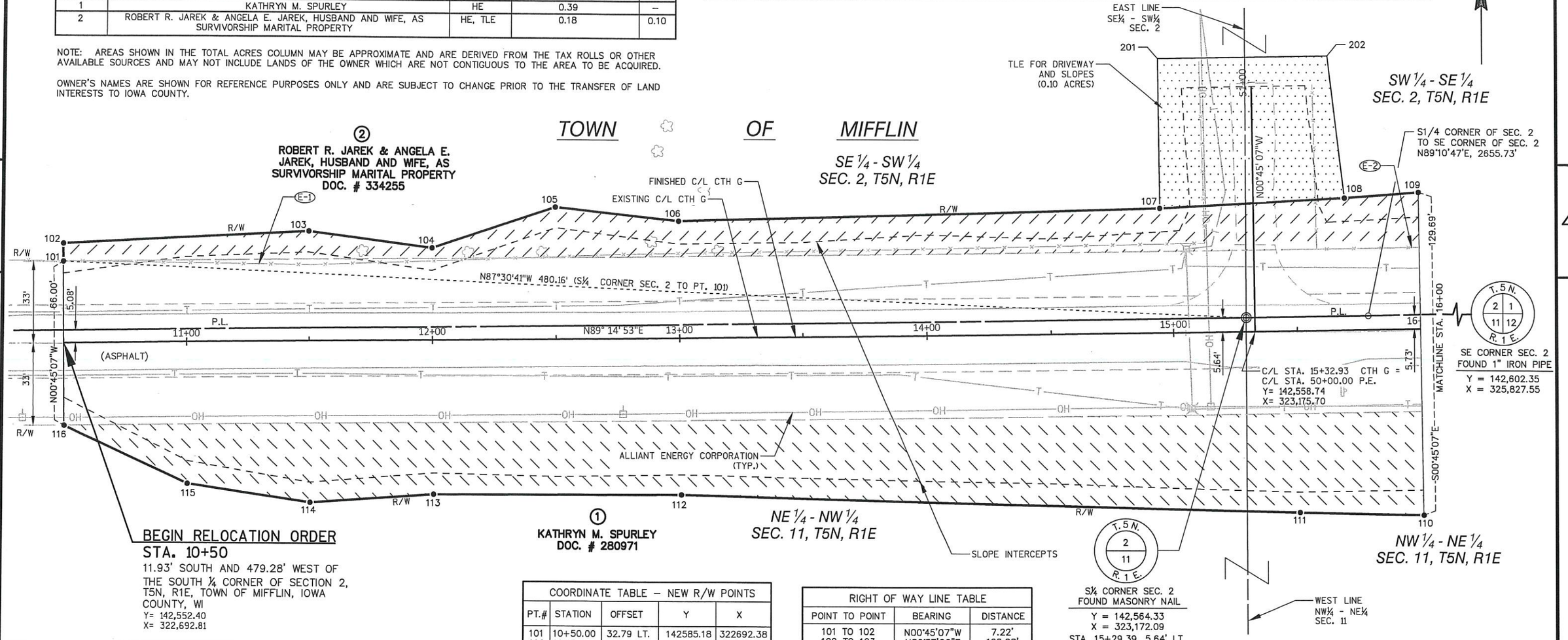
SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	HE ACRES REQUIRED	TLE ACRES REQ.
			NEW	
1	KATHRYN M. SPURLEY	HE	0.39	–
2	ROBERT R. JAREK & ANGELA E. JAREK, HUSBAND AND WIFE, AS SURVIVORSHIP MARITAL PROPERTY	HE, TLE	0.18	0.10

NOTE: AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM THE TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

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

EASEMENT TABLE			
OWNER	RECORDING INFORMATION	LOCATED IN R/W PARCEL #	REMARKS
FRONTIER COMMUNICATIONS OF WISCONSIN, LLC	DOC. #144143, VOL. 347, PG. 37	2	16' WIDE ON C/L FIRST CABLE BURIED IN E. ½ SW¼ SEC. 2. NO LINES PRESENT



TLE LINE TABLE		
POINT TO POINT	BEARING	DISTANCE
107 TO 201	N00°48'57"W	60.00'
201 TO 202	N89°14'53"E	69.00'
202 TO 108	S06°49'38"E	57.32'

NOTE: EXISTING C/L OF CTH G WAS BASED ON CENTERLINE OF EXISTING PAVEMENT.

BASIS OF EXISTING RIGHT-OF-WAY FOR CTH G WAS BASED ON COUNTY RECORDS, THE CENTERLINE OF EXISTING PAVEMENT, AND WIS. STATUTE 82.31(2).

COORDINATE TABLE – TEMPORARY LIMITED EASEMENT (TLE) POINTS				
PT.#	STATION	OFFSET	Y	X
201	14+94.93	110.00 LT.	142668.23	323136.26
202	15+63.93	110.00 LT.	142669.13	323205.26

COORDINATE TABLE – NEW R/W POINTS				
PT.#	STATION	OFFSET	Y	X
101	10+50.00	32.79 LT.	142585.18	322692.38
102	10+50.00	40.00 LT.	142592.39	322692.29
103	11+50.00	44.00 LT.	142597.70	322792.23
104	12+00.00	37.00 LT.	142591.36	322842.31
105	12+50.00	53.00 LT.	142608.02	322892.10
106	13+00.00	47.00 LT.	142602.67	322942.17
107	14+95.00	50.00 LT.	142608.23	323137.12
108	15+70.00	53.00 LT.	142612.22	323212.07
109	16+00.00	54.73 LT.	142614.34	323242.05
110	16+00.00	74.96 RT.	142484.66	323243.75
111	15+50.00	73.00 RT.	142485.96	323193.73
112	13+00.00	63.00 RT.	142492.68	322943.62
113	12+00.00	62.00 RT.	142492.37	322843.61
114	11+50.00	65.00 RT.	142488.71	322793.66
115	11+00.00	57.00 RT.	142496.06	322743.56
116	10+50.00	33.22 RT.	142519.18	322693.25

RIGHT OF WAY LINE TABLE		
POINT TO POINT	BEARING	DISTANCE
101 TO 102	N00°45'07"W	7.22'
102 TO 103	N86°57'26"E	100.08'
103 TO 104	S82°46'57"E	50.49'
104 TO 105	N71°30'12"E	52.50'
105 TO 106	S83°54'33"E	50.36'
106 TO 107	N88°22'00"E	195.02'
107 TO 108	N86°57'26"E	75.06'
108 TO 109	N85°56'35"E	30.05'
109 TO 110	S00°45'07"E	129.69'
110 TO 111	N88°30'40"W	50.04'
111 TO 112	N88°27'41"W	250.20'
112 TO 113	S89°49'15"W	100.00'
113 TO 114	S85°48'52"W	50.09'
114 TO 115	N81°39'42"W	50.64'
115 TO 116	N65°18'42"W	55.37'
116 TO 101	N00°45'07"W	66.00'

ENCROACHMENT TABLE

NUMBER	OWNER	LOCATION	ENCROACHMENT TYPE
E-1	ROBERT R. JAREK & ANGELA E. JAREK, HUSBAND AND WIFE, AS SURVIVORSHIP MARITAL PROPERTY	STA. 10+53 – STA. 12+37, 30.4' – 32.9' LT.	FENCE
E-2	ROBERT R. JAREK & ANGELA E. JAREK, HUSBAND AND WIFE, AS SURVIVORSHIP MARITAL PROPERTY	STA. 15+58 – STA. 15+95, 32.9' LT.	FENCE

REVISION DATE	DATE 3/6/2018	SCALE, FEET 0 20 40	HWY: CTH G	R/W PROJECT NUMBER: 5958-00-00	PLAT SHEET 4.02
	GRID FACTOR N/A		COUNTY: IOWA	CONSTRUCTION PROJECT NUMBER: 5958-00-70	PS&E SHEET E

FILE NAME : S:\Projects\K51030 Iowa County – CTH G\RW\59580070_Plat Sheets.dwg PLOT DATE : 1/10/2018 8:06 AM PLOT BY : Scott Warner PLOT NAME : PLOT SCALE : 1:1

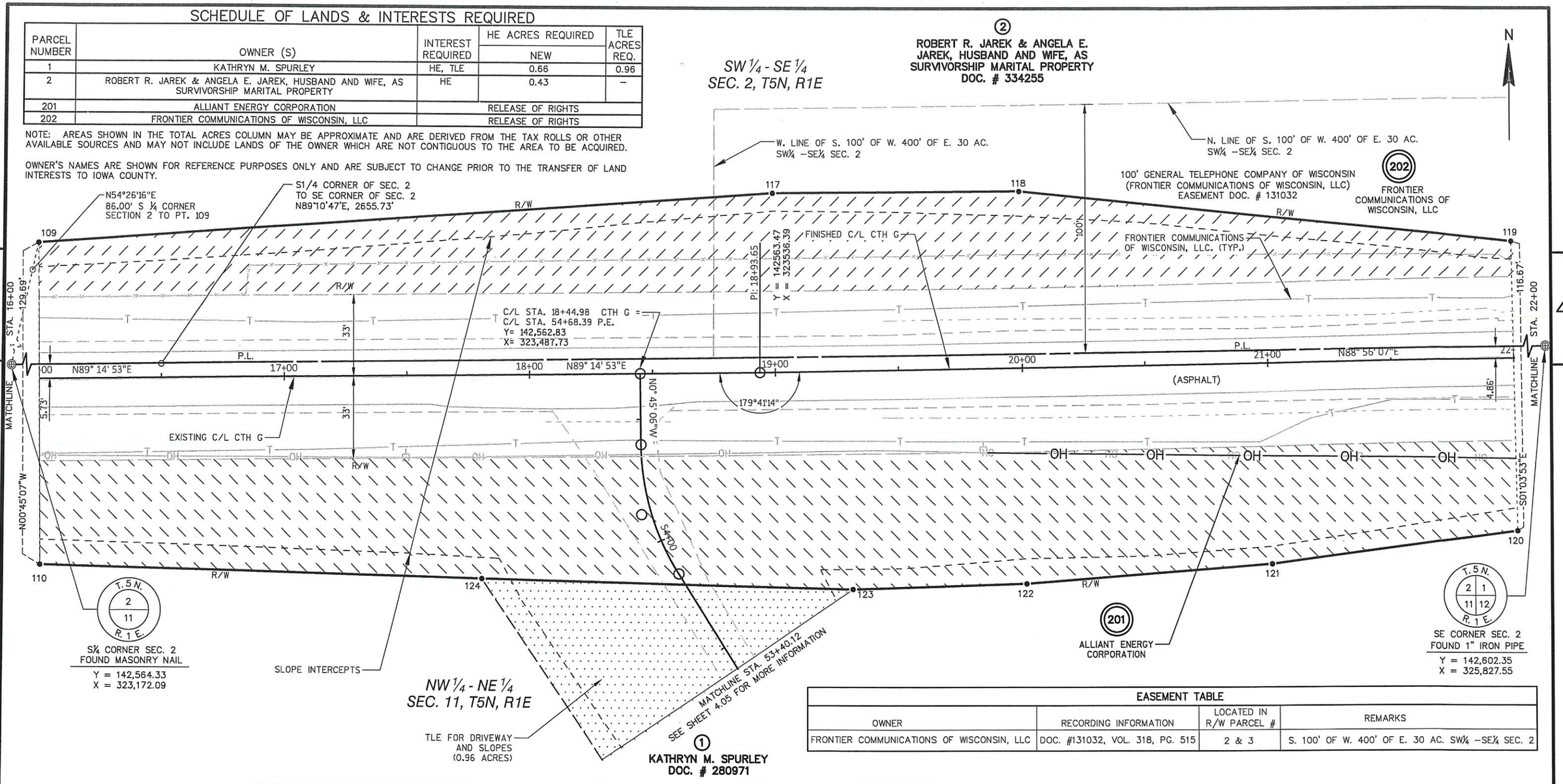
WISDOT/CADDS SHEET 75

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	HE ACRES REQUIRED	TLE ACRES REQ.
			NEW	
1	KATHRYN M. SPURLEY	HE, TLE	0.66	0.96
2	ROBERT R. JAREK & ANGELA E. JAREK, HUSBAND AND WIFE, AS SURVIVORSHIP MARITAL PROPERTY	HE	0.43	–
201	ALLIANT ENERGY CORPORATION	RELEASE OF RIGHTS		
202	FRONTIER COMMUNICATIONS OF WISCONSIN, LLC	RELEASE OF RIGHTS		

NOTE: AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM THE TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

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



EASEMENT TABLE			
OWNER	RECORDING INFORMATION	LOCATED IN R/W PARCEL #	REMARKS
FRONTIER COMMUNICATIONS OF WISCONSIN, LLC	DOC. #131032, VOL. 318, PG. 515	2 & 3	S. 100' OF W. 400' OF E. 30 AC. SW¼ –SE¼ SEC. 2

COORDINATE TABLE – NEW R/W POINTS				
PT.#	STATION	OFFSET	Y	X
109	16+00.00	54.73 LT.	142614.34	323242.05
110	16+00.00	74.96 RT.	142484.66	323243.75
117	19+00.00	72.00 LT.	142635.57	323541.40
118	20+00.00	71.00 LT.	142636.43	323641.40
119	22+00.00	47.00 LT.	142616.15	323841.81
120	22+00.00	69.67 RT.	142499.51	323843.98
121	21+00.00	81.00 RT.	142486.32	323744.21
122	20+00.00	87.00 RT.	142478.46	323644.34
123	19+30.00	88.00 RT.	142476.16	323574.37
124	17+80.00	82.00 RT.	142479.98	323423.83

RIGHT OF WAY LINE TABLE		
POINT TO POINT	BEARING	DISTANCE
109 TO 117	N85°56'35"E	300.11'
117 TO 118	N89°30'30"E	100.00'
118 TO 119	S84°13'19"E	201.43'
119 TO 120	S01°03'53"E	116.67'
120 TO 121	S82°28'10"W	100.64'
121 TO 122	S85°30'06"W	100.18'
122 TO 123	S88°07'01"W	70.01'
123 TO 124	N88°32'41"W	150.59'
124 TO 110	N88°30'40"W	180.14'
110 TO 109	N00°45'07"W	129.69'

NOTE: EXISTING C/L OF CTH G WAS BASED ON CENTERLINE OF EXISTING PAVEMENT.

BASIS OF EXISTING RIGHT–OF–WAY FOR CTH G WAS BASED ON COUNTY RECORDS, THE CENTERLINE OF EXISTING PAVEMENT, AND WIS. STATUTE 82.31(2).

REVISION DATE	DATE 3/9/2018	SCALE, FEET 0 20 40	HWY: CTH G	R/W PROJECT NUMBER: 5958–00–00	PLAT SHEET 4.03
	GRID FACTOR N/A		COUNTY: IOWA	CONSTRUCTION PROJECT NUMBER: 5958–00–70	PS&E SHEET E

FILE NAME : S:\Projects\K51030 Iowa County – CTH G\RW\59580070_Plat Sheets.dwg PLOT DATE : 1/10/2018 8:08 AM PLOT BY : Scott Warner PLOT NAME : PLOT SCALE : 1:1

WISDOT/CADDS SHEET 75

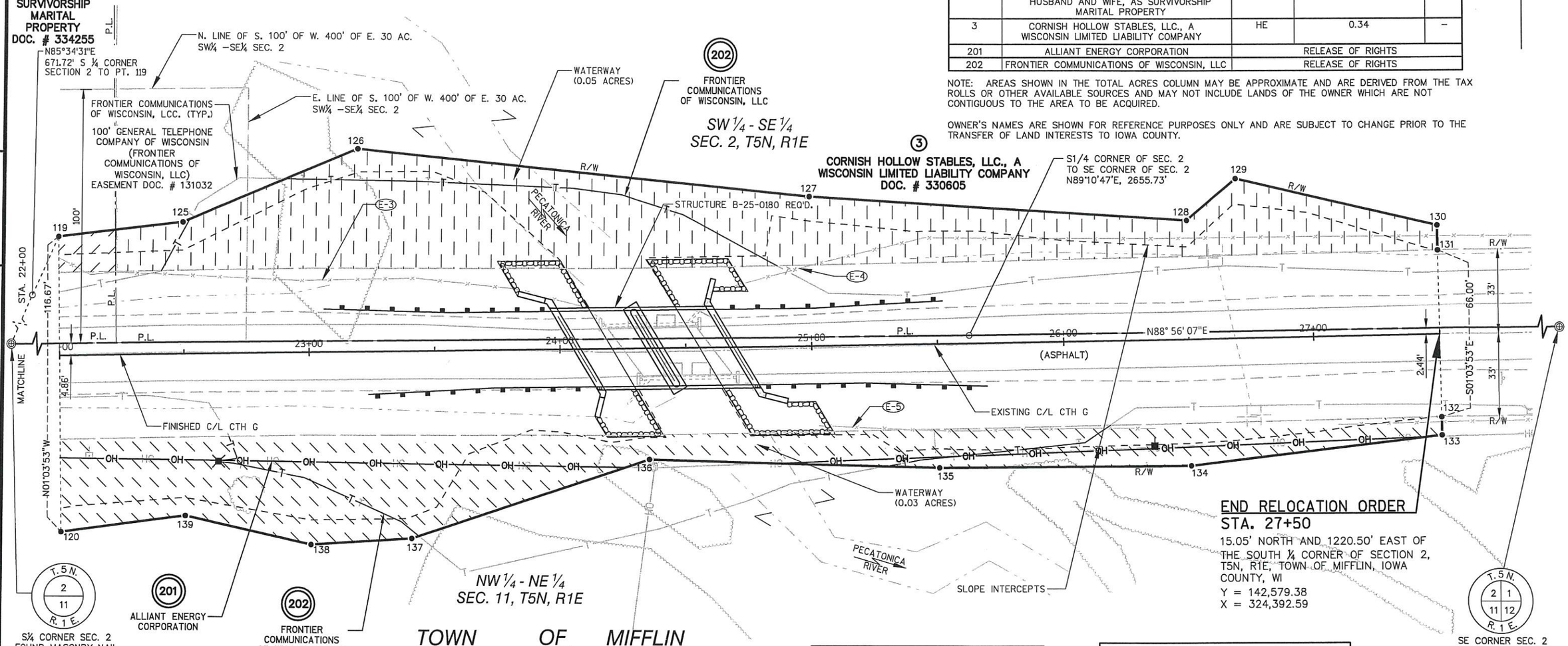
EASEMENT TABLE			
OWNER	RECORDING INFORMATION	LOCATED IN R/W PARCEL #	REMARKS
FRONTIER COMMUNICATIONS OF WISCONSIN, LLC	DOC. #131032, VOL. 318, PG. 515	2 & 3	S. 100' OF W. 400' OF E. 30 AC. SW¼ –SE¼ SEC. 2

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	HE ACRES REQUIRED NEW	TLE ACRES REQ.
1	KATHRYN M. SPURLEY	HE	0.27	–
2	ROBERT R. JAREK & ANGELA E. JAREK, HUSBAND AND WIFE, AS SURVIVORSHIP MARITAL PROPERTY	HE	0.01	–
3	CORNISH HOLLOW STABLES, LLC., A WISCONSIN LIMITED LIABILITY COMPANY	HE	0.34	–
201	ALLIANT ENERGY CORPORATION	RELEASE OF RIGHTS		
202	FRONTIER COMMUNICATIONS OF WISCONSIN, LLC	RELEASE OF RIGHTS		

NOTE: AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM THE TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

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



ENCROACHMENT TABLE			
NUMBER	OWNER	LOCATION	ENCROACHMENT TYPE
E-3	ROBERT R. JAREK & ANGELA E. JAREK, HUSBAND AND WIFE, AS SURVIVORSHIP MARITAL PROPERTY	STA. 22+11– STA. 24+05, 17.7' – 32.6' LT.	FENCE
E-4	CORNISH HOLLOW STABLES, LLC., A WISCONSIN LIMITED LIABILITY COMPANY	STA. 24+60 – STA. 25+01, 21.7' – 31.9' LT.	FENCE
E-5	KATHRYN M. SPURLEY	STA. 25+02 – STA. 25+40, 31.6' – 33.8' RT.	FENCE

NOTE: EXISTING C/L OF CTH G WAS BASED ON CENTERLINE OF EXISTING PAVEMENT.

BASIS OF EXISTING RIGHT-OF-WAY FOR CTH G WAS BASED ON COUNTY RECORDS, THE CENTERLINE OF EXISTING PAVEMENT, AND WIS. STATUTE 82.31(2).

RIGHT OF WAY LINE TABLE		
POINT TO POINT	BEARING	DISTANCE
119 TO 125	N83°13'29"E	50.25'
125 TO 126	N67°08'02"E	75.39'
126 TO 127	S84°24'37"E	181.22'
127 TO 128	S86°29'27"E	150.48'
128 TO 129	N50°16'35"E	25.61'
129 TO 130	S77°01'42"E	82.46'
130 TO 131	S01°03'53"E	9.82'
131 TO 132	S01°03'53"E	66.00'
132 TO 133	S01°03'53"E	7.18'
133 TO 134	S83°13'29"W	100.50'
134 TO 135	S89°30'30"W	100.00'
135 TO 136	N88°34'31"W	115.11'
136 TO 137	S71°24'35"W	99.62'
137 TO 138	S86°04'22"W	40.05'
138 TO 139	N77°34'08"W	51.42'
139 TO 120	S82°28'10"W	50.32'
120 TO 119	N01°03'53"W	116.67'

COORDINATE TABLE – NEW R/W POINTS				
PT.#	STATION	OFFSET	Y	X
119	22+00.00	47.00 LT.	142616.15	323841.81
120	22+00.00	69.67 RT.	142499.51	323843.98
125	22+50.00	52.00 LT.	142622.08	323891.71
126	23+20.00	80.00 LT.	142651.38	323961.18
127	25+00.00	59.00 LT.	142633.73	324141.54
128	26+50.00	47.00 LT.	142624.52	324291.74
129	26+70.00	63.00 LT.	142640.88	324311.44
130	27+50.00	43.00 LT.	142622.37	324391.79
131	27+50.00	33.18 LT.	142612.56	324391.98
132	27+50.00	32.82 RT.	142546.57	324393.20
133	27+50.00	40.00 RT.	142539.39	324393.34
134	26+50.00	50.00 RT.	142527.53	324293.54
135	25+50.00	49.00 RT.	142526.67	324193.54
136	24+35.00	44.00 RT.	142529.54	324078.46
137	23+40.00	74.00 RT.	142497.78	323984.04
138	23+00.00	76.00 RT.	142495.03	323944.08
139	22+50.00	64.00 RT.	142506.10	323893.87

REVISION DATE	DATE 3/5/2018	SCALE, FEET 0 20 40	HWY: CTH G	R/W PROJECT NUMBER: 5958-00-00	PLAT SHEET 4.04
	GRID FACTOR N/A		COUNTY: IOWA	CONSTRUCTION PROJECT NUMBER: 5958-00-70	PS&E SHEET E

FILE NAME : S:\Projects\K51030 Iowa County – CTH G\RW\59580070_Plat Sheets.dwg PLOT DATE : 1/10/2018 8:02 AM PLOT BY : Scott Warner PLOT NAME : PLOT SCALE : 1:1

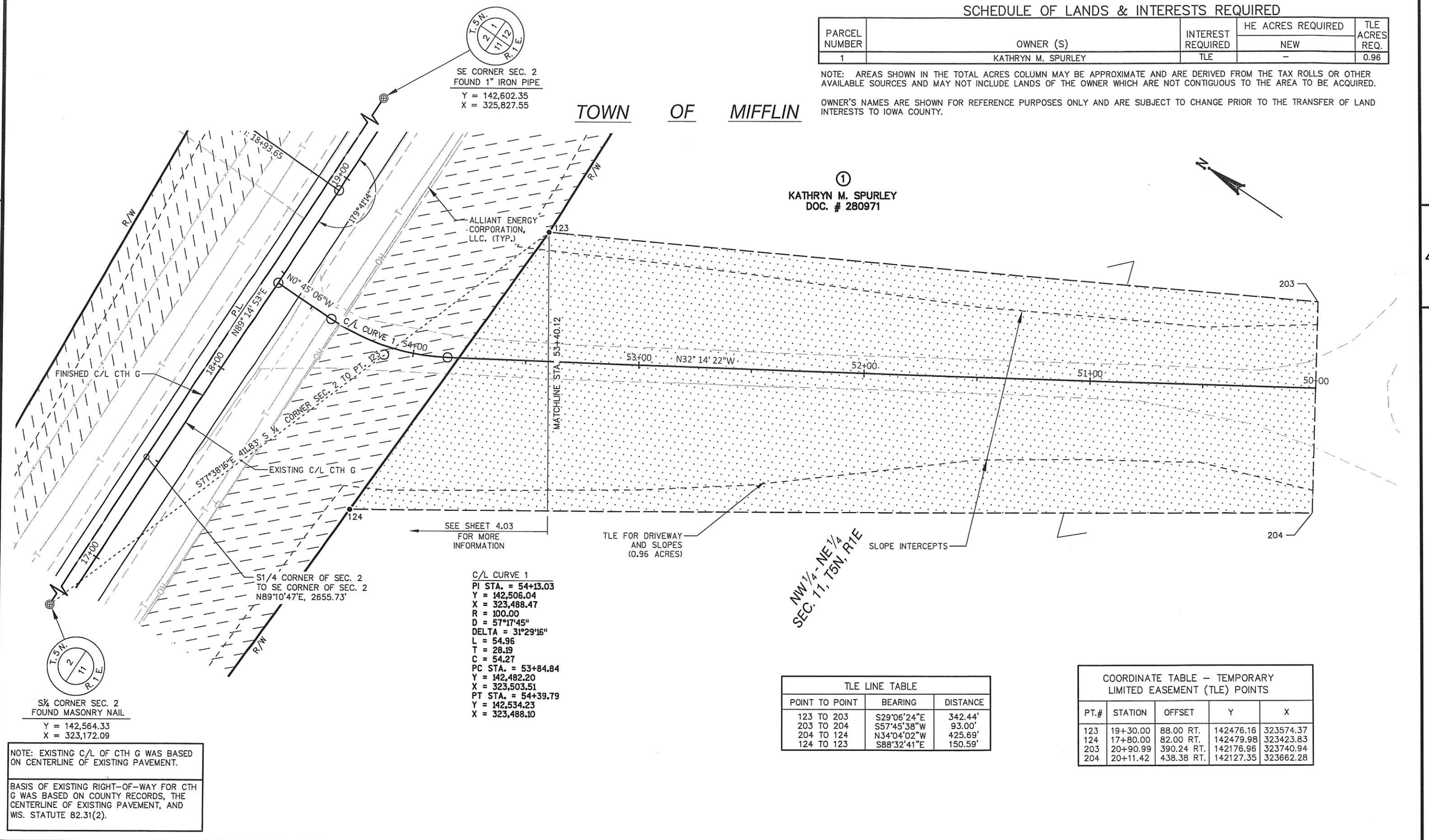
WISDOT/CADDS SHEET 75

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	HE ACRES REQUIRED	TLE ACRES REQ.
			NEW	
1	KATHRYN M. SPURLEY	TLE	–	0.96

NOTE: AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM THE TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

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



C/L CURVE 1
PI STA. = 54+13.03
Y = 142,506.04
X = 323,488.47
R = 100.00
D = 57°17'45"
DELTA = 31°29'16"
L = 54.96
T = 28.19
C = 54.27
PC STA. = 53+84.84
Y = 142,482.20
X = 323,503.51
PT STA. = 54+39.79
Y = 142,534.23
X = 323,488.10

TLE LINE TABLE		
POINT TO POINT	BEARING	DISTANCE
123 TO 203	S29°06'24"E	342.44'
203 TO 204	S57°45'38"W	93.00'
204 TO 124	N34°04'02"W	425.69'
124 TO 123	S88°32'41"E	150.59'

COORDINATE TABLE – TEMPORARY LIMITED EASEMENT (TLE) POINTS				
PT.#	STATION	OFFSET	Y	X
123	19+30.00	88.00 RT.	142476.16	323574.37
124	17+80.00	82.00 RT.	142479.98	323423.83
203	20+90.99	390.24 RT.	142176.96	323740.94
204	20+11.42	438.38 RT.	142127.35	323662.28

NOTE: EXISTING C/L OF CTH G WAS BASED ON CENTERLINE OF EXISTING PAVEMENT.

BASIS OF EXISTING RIGHT-OF-WAY FOR CTH G WAS BASED ON COUNTY RECORDS, THE CENTERLINE OF EXISTING PAVEMENT, AND WIS. STATUTE 82.31(2).

REVISION DATE	DATE 3/5/2018	SCALE, FEET 0 20 40	HWY: CTH G	R/W PROJECT NUMBER: 5958-00-00	PLAT SHEET 4.05
	GRID FACTOR N/A		COUNTY: IOWA	CONSTRUCTION PROJECT NUMBER: 5958-00-70	PS&E SHEET 20 E

ROBERT R. JAREK & ANGELA E. JAREK, HUSBAND AND WIFE, AS SURVIVORSHIP MARITAL PROPERTY

STA. 12+00 - STA. 14+00, LT.
CLEARING AND GRUBBNG REQ'D

FRONTIER COMMUNICATIONS (TYP.)

STA. 10+50 - STA. 15+13, LT.
STA. 15+58 - STA. 24+10, LT.
REMOVING FENCE BY OTHERS

STA. 15+33, LT.
P.E. REQ'D (B.A.D.)

N

H.E.

R/W

EXISTING C/L CTH G

33'

11+00 12+00 N89°14'53"E 13+00 14+00 15+00 16+00

50.00

90°0'0"

(ASPHALT)

FINISHED C/L CTH G

ALLIANT ENERGY (TYP.)

MATCH LINE STA. 16+30

STA. 11+50
(1) CULVERT PIPE CLASS III-A 24-INCH
(2) APRON ENDWALLS REQ'D
SKEW = 0°

SLOPE INTERCEPTS

KATHRYN M. SPURLEY

5

5

BEGIN PROJECT
STA. 10+50
Y= 142,552.40
X= 322,692.81

EARTHWORK SUMMARY

	MAINLINE	'A'-LINE	'B'-LINE	TOTAL
EXCAVATION COMMON =	12068 C.Y.	354 C.Y.	3160 C.Y.	15582 C.Y.
FILL =	3102 C.Y.	0 C.Y.	176 C.Y.	3278 C.Y.
EXCAVATION ROCK =	10050 C.Y.	57 C.Y.	6635 C.Y.	16742 C.Y.
EXPANDED ROCK (10%) =	11055 C.Y.	63 C.Y.	7299 C.Y.	18416 C.Y.
FILL EXPANSION (25%) =	-9940 C.Y.	-78 C.Y.	-8904 C.Y.	-18922 C.Y.
WASTE =	22008 C.Y.	432 C.Y.	12064 C.Y.	34504 C.Y.

LEGEND
- DIRECTION OF FLOW
- XXXXXXXXX SAWING ASPHALT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECKS

EXISTING C/L PROFILE CTH G

PC STA 10+52.50
EL 1116.60

1.18%

MATCH EXISTING
STA. 10+50
EL. = 1116.57

FINISHED C/L PROFILE CTH G

TOP OF WEATHERED DOLOMITE BEDROCK (ASSUMED 2.5'±)

EXISTING C/L ELEVATION
FINISHED C/L ELEVATION

1126 1124 1122 1120 1118 1116 1114 1112 1110

10+40	10+60	10+80	11+00	11+20	11+40	11+60	11+80	12+00	12+20	12+40	12+60	12+80	13+00	13+20	13+40	13+60	13+80	14+00	14+20	14+40	14+60	14+80	15+00	15+20	15+40	15+60	15+80	16+00	16+20
1116.57	1116.57	1116.68	1116.69	1116.92	1116.90	1117.16	1117.10	1117.38	1117.28	1117.58	1117.43	1117.78	1117.57	1118.04	1117.68	1118.30	1117.78	1118.56	1117.85	1118.75	1117.90	1118.94	1117.94	1119.13	1117.95	1119.36	1117.94	1119.58	1117.91	1119.75	1117.86	1119.88	1117.79	1120.01	1117.70	1120.08	1117.59	1120.15	1117.45	1120.21	1117.30	1120.26	1117.13	1120.31	1116.93	1120.37	1116.72	1120.44	1116.48	1120.51	1116.23	1120.54	1115.95	1120.58	1115.65	1120.54	1115.33	1120.47	1115.00

PROJECT NO: 5958-00-70	HWY: CTH G	COUNTY: IOWA	PLAN AND PROFILE: MAINLINE	PLOT SCALE : 1 IN:40 FT	SHEET 21	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\SHEETSPLAN\PLAN & PROFILE SHEETS\CTH G P&P- (1).DWG
LAYOUT : CTH G - (2)

PLOT DATE : 3/26/2018
PLOT TIME : 1:33:00 PM

PLOT BY : BOLAND, PATRICK

PLOT SCALE : 0.215269

ROBERT R. JAREK & ANGELA E. JAREK, HUSBAND AND WIFE, AS SURVIVORSHIP MARITAL PROPERTY

STA. 15+58 - STA. 24+10, LT.
REMOVING FENCE BY OTHERS

PI STA. 18+93.65
Y = 142,563.47
X = 323,536.39

N

SLOPE INTERCEPTS

H.E.

MATCH LINE STA. 16+30

MATCH LINE STA. 22+00

R/W

33'

33'

R/W

17+00

18+00

19+00

20+00

21+00

22-

PI: 18+93.65

90°0'2"

179°41'14"

N89°14'53"E

N88°56'07"E

N0°45'06"W 54.68

FRONTIER COMMUNICATIONS (TYP.)

BM 3

SB-4

EXISTING C/L CTH G

FINISHED C/L CTH G

PT: 54+39.79

OH

HO

ALLIANT ENERGY (TYP.)

STA. 18+45, RT.
CONSTRUCT P.E. (B.A.D.)

KATHRYN M. SPURLEY

LIMITS OF AGRICULTURAL FIELD

54+00

84.84

NOTE: STA. 21+49 - STA. 22+33, 102' - 173' RT, EXISTING SANITARY SEPTIC SYSTEM TO REMAIN

5

5

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
3	21+79	3/4" IRON REBAR SET, 27.4' LT	1097.53

EXISTING C/L PROFILE CTH G

L=1200.00'
K=194.20

SB-4

TOP OF WEATHERED DOLOMITE BEDROCK

(BEDROCK DEPTH = 2.5')

FINISHED C/L PROFILE CTH G

PI STA 16+52.50
EL 1123.67

FINISHED C/L ELEVATION

EXISTING C/L ELEVATION

EARTHWORK SUMMARY

	MAINLINE	'A'-LINE	'B'-LINE	TOTAL
EXCAVATION COMMON =	12068 C.Y.	354 C.Y.	3160 C.Y.	15582 C.Y.
FILL =	3102 C.Y.	0 C.Y.	176 C.Y.	3278 C.Y.
EXCAVATION ROCK =	10050 C.Y.	57 C.Y.	6635 C.Y.	16742 C.Y.
EXPANDED ROCK (10%) =	11055 C.Y.	63 C.Y.	7299 C.Y.	18416 C.Y.
FILL EXPANSION (25%) =	-9940 C.Y.	-78 C.Y.	-8904 C.Y.	-18922 C.Y.
WASTE =	22008 C.Y.	432 C.Y.	12064 C.Y.	34504 C.Y.

1120 1118 1116 1114 1112 1110 1108 1106 1104

1120.44 1114.82 | 1120.41 1114.64 | 1120.31 1114.26 | 1120.20 1113.86 | 1120.07 1113.44 | 1119.91 1112.99 | 1119.74 1112.53 | 1119.44 1112.05 | 1119.18 1111.55 | 1118.88 1111.02 | 1118.48 1110.48 | 1118.09 1109.91 | 1117.54 1109.33 | 1116.93 1108.72 | 1116.27 1108.09 | 1115.48 1107.45 | 1114.69 1106.78 | 1113.73 1106.09 | 1112.74 1105.38

16+30 16+40 16+60 16+80 17+00 17+20 17+40 17+60 17+80 18+00 18+20 18+40 18+60 18+80 19+00 19+20 19+40 19+60 19+80

LEGEND

DIRECTION OF FLOW

SILT FENCE

TEMPORARY DITCH CHECK

CULVERT PIPE CHECKS

EXISTING C/L PROFILE CTH G

FINISHED C/L PROFILE CTH G

TOP OF WEATHERED DOLOMITE BEDROCK

EXISTING C/L ELEVATION

FINISHED C/L ELEVATION

1112 1110 1108 1106 1104 1102 1100 1098 1096

1111.67 1104.65 | 1110.41 1103.90 | 1109.16 1103.13 | 1107.76 1102.34 | 1106.32 1101.53 | 1104.82 1100.69 | 1103.21 1099.84 | 1101.59 1098.97 | 1099.95 1098.07 | 1098.29 1097.16

20+00 20+20 20+40 20+60 20+80 21+00 21+20 21+40 21+60 21+80

PROJECT NO: 5958-00-70	HWY: CTH G	COUNTY: IOWA	PLAN AND PROFILE: MAINLINE	PLOT SCALE : 1 IN:40 FT	SHEET 22	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\SHEETSPLAN\PLAN & PROFILE SHEETS\CTH G P&P- (2).DWG
LAYOUT : CTH G - (3)

PLOT DATE : 3/26/2018
PLOT TIME : 1:33:03 PM

PLOT BY : BOLAND, PATRICK

PLOT SCALE : 0.215269

N

CORNISH HOLLOW STABLES, LLC,
A WISCONSIN LIMITED LIABILITY
COMPANY

KATHRYN M. SPURLEY

SLOPE INTERCEPTS

STA. 15+58 - STA. 24+10, LT.
STA. 24+60 - STA. 27+50, LT.
REMOVING FENCE BY OTHERS

LIMITS OF AGRICULTURAL FIELD

STA. 22+00 - STA. 25+00
CLEARING AND GRUBBING REQ'D.

REMOVING SMALL PIPE CULVERTS
STA. 26+69
REMOVE 36" CMCP

STA. 26+69
(1) CULVERT PIPE CLASS III-A 36-INCH
(2) APRON ENDWALLS REQ'D
SKEW = 10° RHF

STRUCTURE B-25-0180 REQ'D.

PECATONICA RIVER

MATCH LINE STA. 22+00

R/W
33'
33'
R/W

22+00 23+00 24+00 25+00 N88°56'07"E 26+00 27+00

EXISTING C/L CTH G

FINISHED C/L CTH G

(ASPHALT)

SB 1
SB 2
SB 3

BM 1
BM 2
BM 5

ALLIANT ENERGY (TYP.)

REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS
STA. 24+43 (P-25-0038)
SINGLE SPAN CONCRETE DECK GIRDER STRUCTURE
19.2' CLEAR ROADWAY WIDTH
35.3' OVERALL LENGTH

FRONTIER COMMUNICATIONS (TYP.)

STA. 25+02 - STA. 27+50, RT.
REMOVING FENCE BY OTHERS

STA. 25+00 - STA. 26+00, RT.
BRUSH TO BE REMOVED
(PAID FOR AS EXCAVATION COMMON)

DELINEATED WETLANDS (TYP.)

5

5

LEGEND

- DIRECTION OF FLOW
- XXXXXXXXX SAWING ASPHALT
- SILT FENCE
- TURBIDITY BARRIER
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECKS

EARTHWORK SUMMARY

	MAINLINE	'A'-LINE	'B'-LINE	TOTAL
EXCAVATION COMMON =	12068 C.Y.	354 C.Y.	3160 C.Y.	15582 C.Y.
FILL =	3102 C.Y.	0 C.Y.	176 C.Y.	3278 C.Y.
EXCAVATION ROCK =	10050 C.Y.	57 C.Y.	6635 C.Y.	16742 C.Y.
EXPANDED ROCK (10%) =	11055 C.Y.	63 C.Y.	7299 C.Y.	18416 C.Y.
FILL EXPANSION (25%) =	-9940 C.Y.	-78 C.Y.	-8904 C.Y.	-18922 C.Y.
WASTE =	22008 C.Y.	432 C.Y.	12064 C.Y.	34504 C.Y.

END PROJECT
STA. 27+50
Y= 142,579.38
X= 324,392.59

PT STA 22+52.50
EL 1093.67

-5.00%

FINISHED C/L PROFILE CTH G

TOP OF WEATHERED DOLOMITE BEDROCK

EXISTING C/L PROFILE CTH G

STA. 24+38
STRUCTURE B-25-0180 REQ'D.
TWO SPAN REINFORCED CONCRETE FLAT SLAB
CLEAR ROADWAY WIDTH = 30.0'
O.A.L. = 64.88'
SKEW = 30° RHF
STREAMBED EL. 1067.91

EXISTING C/L ELEVATION
FINISHED C/L ELEVATION

1094.89 1095.26 | 1093.16 1094.29 | 1091.57 1093.29 | 1089.99 1092.29 | 1088.43 1091.29 | 1086.94 1090.29 | 1085.45 1089.29 | 1084.04 1088.29
22+20 22+40 22+60 22+80 23+00 23+20 23+40 23+60

PC STA 23+93.79
EL 1086.60

HIGH WATER100
EL = 1079.63

HIGH WATER2
EL = 1074.88

OBSERVED WATER
EL. 1070.79
(5-10-2016)

FINISHED C/L PROFILE CTH G

L=325.00'
K=65.58

PI STA 25+56.29
EL 1078.47

-0.05%

EXISTING C/L PROFILE CTH G

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
1	27+31	3/4" IRON REBAR SET, 17.7' RT	1076.24
2	24+07	3/4" IRON REBAR SET, 15.8' RT	1080.45
5	24+36	COTTON GIN SPINDLE IN PPOL, 46.9' RT	1079.92

PT STA 27+18.79
EL 1078.39

MATCH EXISTING
STA. 27+50
EL. = 1078.38

EXISTING C/L ELEVATION
FINISHED C/L ELEVATION

1081.44 1086.29 | 1080.64 1085.34 | 1080.18 1084.45 | 1080.01 1083.62 | 1079.84 1082.85 | 1079.76 1082.15 | 1079.65 1081.50 | 1079.54 1080.91 | 1079.42 1080.39 | 1079.31 1079.93 | 1079.19 1079.53 | 1079.07 1079.18 | 1078.95 1078.90 | 1078.79 1078.69 | 1078.61 1078.53 | 1078.48 1078.43 | 1078.43 1078.39 | 1078.38 1078.38 | 1078.38 1078.38 | 1078.39
24+00 24+20 24+40 24+60 24+80 25+00 25+20 25+40 25+60 25+80 26+00 26+20 26+40 26+60 26+80 27+00 27+20 27+50

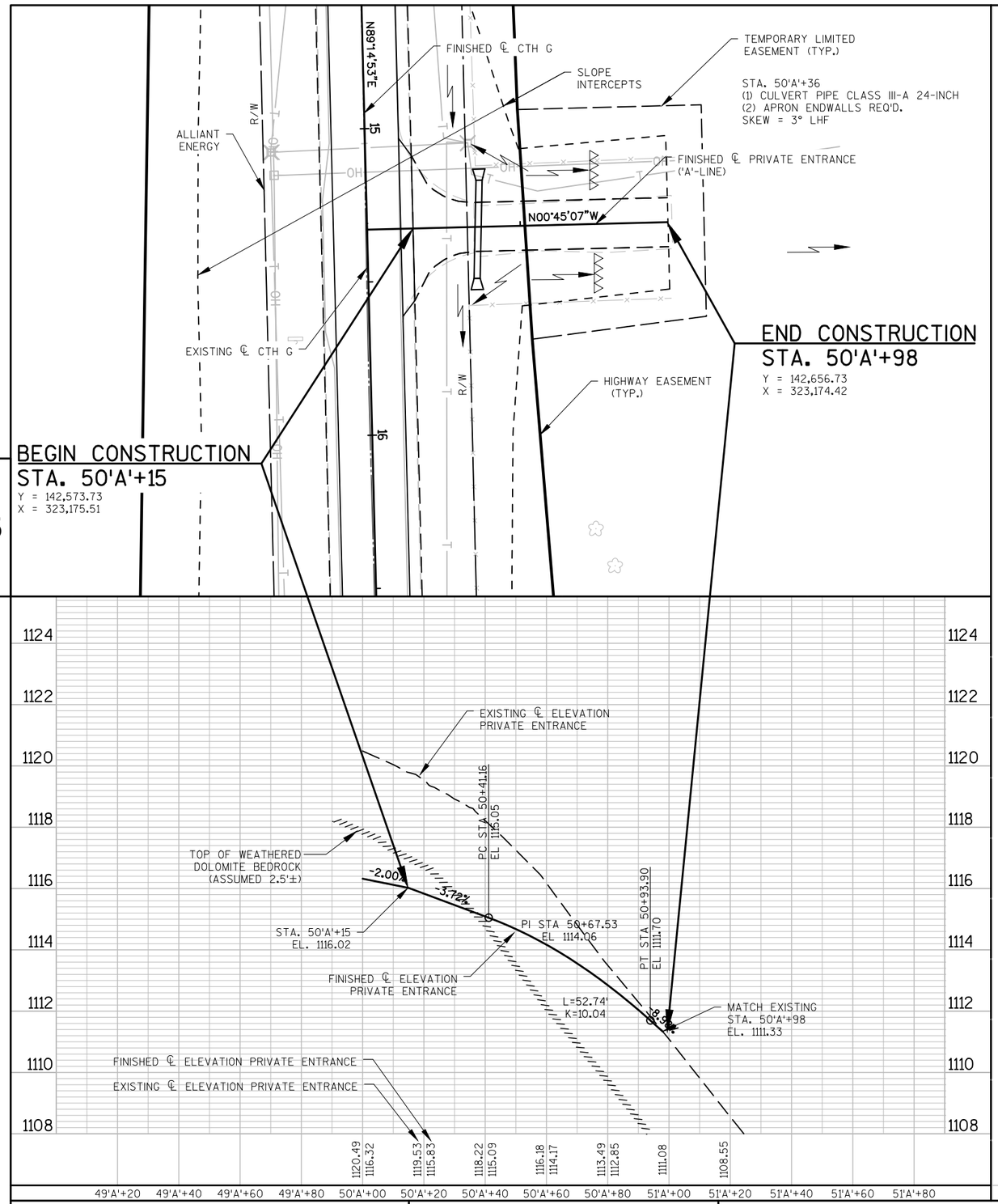
PROJECT NO: 5958-00-70	HWY: CTH G	COUNTY: IOWA	PLAN AND PROFILE: MAINLINE	PLOT SCALE : 1 IN:40 FT	SHEET 23	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\SHEETSPLAN\PLAN & PROFILE SHEETS\CTH G P&P- (3).DWG
LAYOUT : CTH G - (4)

PLOT DATE : 4/18/2018
PLOT TIME : 8:51:17 AM

PLOT BY : STEPHANIE POTTER

PLOT SCALE : 0.215269



EARTHWORK SUMMARY					
		MAINLINE	'A'-LINE	'B'-LINE	TOTAL
EXCAVATION COMMON	=	12068 C.Y.	354 C.Y.	3160 C.Y.	15582 C.Y.
FILL	=	3102 C.Y.	0 C.Y.	176 C.Y.	3278 C.Y.
EXCAVATION ROCK	=	10050 C.Y.	57 C.Y.	6635 C.Y.	16742 C.Y.
EXPANDED ROCK (10%)	=	11055 C.Y.	63 C.Y.	7299 C.Y.	18416 C.Y.
FILL EXPANSION (25%)	=	-9940 C.Y.	-78 C.Y.	-8904 C.Y.	-18922 C.Y.
WASTE	=	22008 C.Y.	432 C.Y.	12064 C.Y.	34504 C.Y.

PROJECT NO: 5958-00-70	HWY: CTH G	COUNTY: IOWA	PLAN AND PROFILE: 'A'-LINE	PLOT SCALE : **********	SHEET 24	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY – CTH G\SHEETSPLAN\PLAN & PROFILE SHEETS\SIDE ROADS P&P.DWG
LAYOUT : 'A'-LINE P&P
PLOT DATE : 3/26/2018
PLOT TIME : 1:33:13 PM
PLOT BY : BOLAND, PATRICK
PLOT SCALE : 1" = 1'

EXISTING P.E. (B.A.D.) TO REMAIN

TEMPORARY LIMITED EASEMENT (TYP.)

SLOPE INTERCEPTS

FINISHED ℄ PRIVATE ENTRANCE ('B'-LINE)

50'B'

51'B'

52'B' N32°14'22"W

53'B'

54'B'

CURVE 1

N00°45'06"W

PC: 53+84.84

PT: 54+39.79

FINISHED ℄ CTH G

18'

19'

PI: 18+93.65

ALLIANT ENERGY

R/W

N88°56'07"E

STA. 54'B'+35
(1) CULVERT PIPE CLASS III-A 24-INCH
(2) APRON ENDWALLS REQ'D.
SKEW = 2° RHF

HIGHWAY EASEMENT (TYP.)

REMOVING SMALL PIPE CULVERTS
STA. 54'B'+49
REMOVE 24" CMP

BEGIN CONSTRUCTION
STA. 50'B'+00
Y = 142,156.69
X = 323,708.80

CURVE 1 DATA
PI STA. = 54'B'+13.03
Y = 142,506.04
X = 323,488.47
R = 100.00
D = 57°17'45"
DELTA = 31°29'16"
L = 54.96
T = 28.19
C = 54.27
PC STA. = 53'B'+84.84
Y = 142,482.20
X = 323,503.51
PT STA. = 54'B'+39.79
Y = 142,534.23
X = 323,488.10

PC STA 50+20.26
EL 1127.61

PI STA 50+75.26
EL 1129.23

PT STA 51+30.26
EL 1125.93

EXISTING ℄ ELEVATION PRIVATE ENTRANCE

2.95%

L=110.00'
K=12.29

MATCH EXISTING
STA. 50'B'+00
EL. 1127.01

FINISHED ℄ ELEVATION PRIVATE ENTRANCE

TOP OF WEATHERED DOLOMITE BEDROCK (ASSUMED 2.5'±)

-6.00%

EXISTING ℄ ELEVATION PRIVATE ENTRANCE

FINISHED ℄ ELEVATION PRIVATE ENTRANCE

EARTHWORK SUMMARY

	MAINLINE	'A'-LINE	'B'-LINE	TOTAL
EXCAVATION COMMON =	12068 C.Y.	354 C.Y.	3160 C.Y.	15582 C.Y.
FILL =	3102 C.Y.	0 C.Y.	176 C.Y.	3278 C.Y.
EXCAVATION ROCK =	10050 C.Y.	57 C.Y.	6635 C.Y.	16742 C.Y.
EXPANDED ROCK (10%) =	11055 C.Y.	63 C.Y.	7299 C.Y.	18416 C.Y.
FILL EXPANSION (25%) =	-9940 C.Y.	-78 C.Y.	-8904 C.Y.	-18922 C.Y.
WASTE =	22008 C.Y.	432 C.Y.	12064 C.Y.	34504 C.Y.

TOP OF WEATHERED DOLOMITE BEDROCK (ASSUMED 2.5'±)

PC STA 53+74.97
EL 1111.25

L=75.00'
K=12.45

PT STA 54+49.97
EL 1109.01

0.09%

2.00%

STA. 18+44.98
EL. 1109.77

PI STA 54+12.47
EL 1109.00

STA. 54'B'+53.39
EL. 1109.47

END CONSTRUCTION
STA. 54'B'+53.39
Y = 142,547.83
X = 323,487.92

1126.55 | 1127.01 1127.01 | 1127.74 1127.60 | 1128.22 1128.03 | 1128.59 1128.14 | 1128.78 1127.92 | 1128.88 1127.38 | 1129.04 1126.51 | 1129.13 1125.35 | 1129.15 1124.15 | 1129.17 1122.95 | 1129.02 1121.75 | 1128.67 1120.55 | 1128.26 1119.35 | 1127.79 1118.15

49'B'+80 | 50'B'+00 | 50'B'+20 | 50'B'+40 | 50'B'+60 | 50'B'+80 | 51'B'+00 | 51'B'+20 | 51'B'+40 | 51'B'+60 | 51'B'+80 | 52'B'+00 | 52'B'+20 | 52'B'+40 | 52'B'+60

1125.88 1114.55 | 1124.97 1113.35 | 1123.89 1112.15 | 1122.73 1110.96 | 1121.13 1110.00 | 1119.57 1109.36 | 1117.99 1109.05 | 1117.66 1109.22

53'B'+20 | 53'B'+40 | 53'B'+60 | 53'B'+80 | 54'B'+00 | 54'B'+20 | 54'B'+40 | 54'B'+60 | 54'B'+80 | 55'B'+00 | 55'B'+20 | 55'B'+40

PROJECT NO: 5958-00-70 | HWY: CTH G | COUNTY: IOWA | PLAN AND PROFILE: 'B'-LINE | PLOT SCALE : ********** | SHEET 25 | E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\SHEETSPLAN\PLAN & PROFILE SHEETS\SIDE ROADS P&P.DWG
LAYOUT : 'B'-LINE P&P

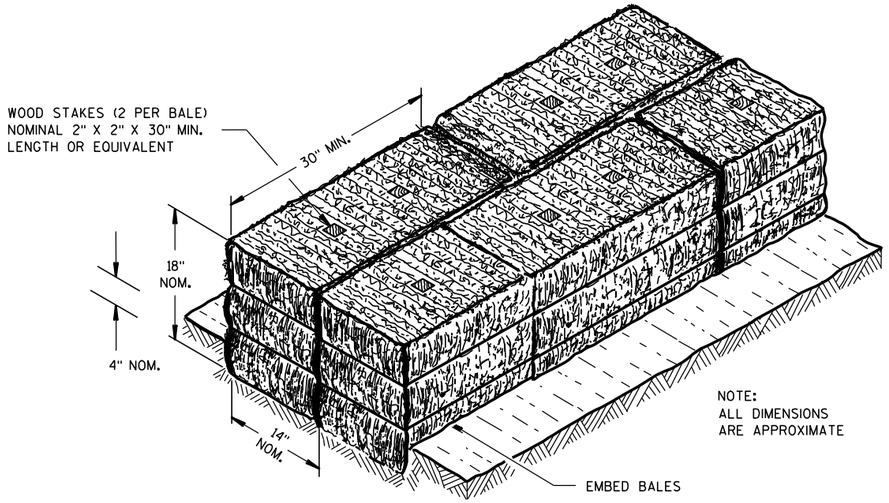
PLOT DATE : 3/26/2018
PLOT TIME : 1:33:18 PM

PLOT BY : BOLAND, PATRICK

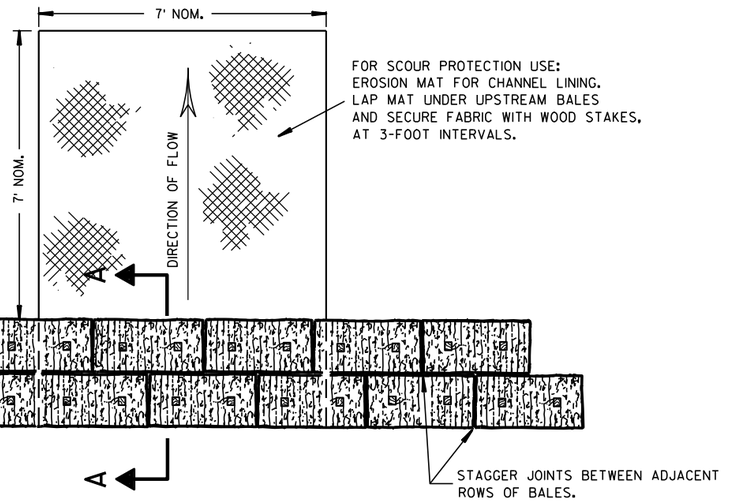
PLOT SCALE : 0.215269

Standard Detail Drawing List

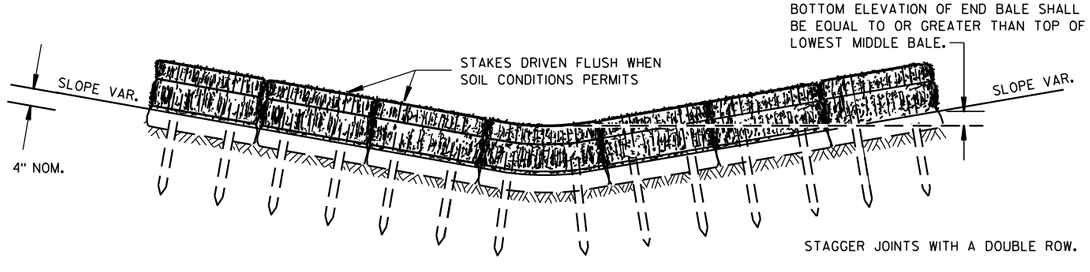
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
12A03-10	NAME PLATE (STRUCTURES)
14B44-03A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-03B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-03C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-04A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A01-13A	MARKER POST FOR RIGHT-OF-WAY
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-18A	LONGITUDINAL MARKING (MAINLINE)
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS



SECTION A-A



PLAN VIEW



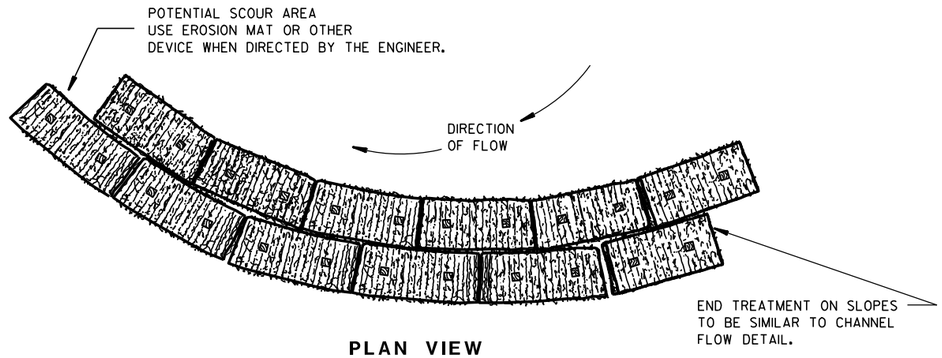
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

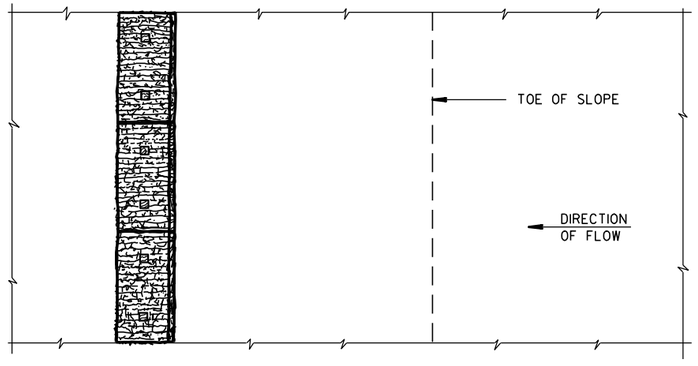
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

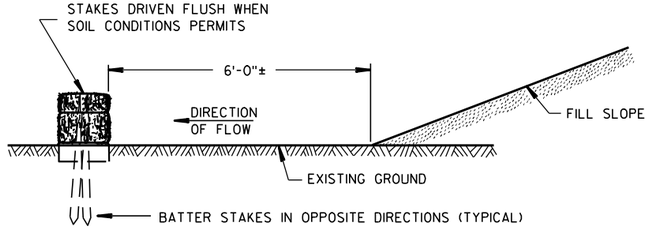


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

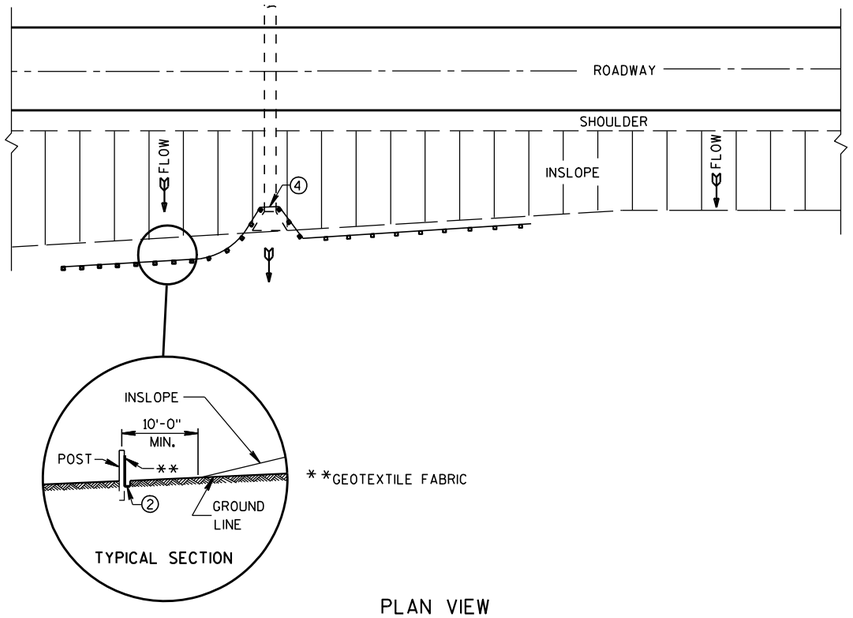
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

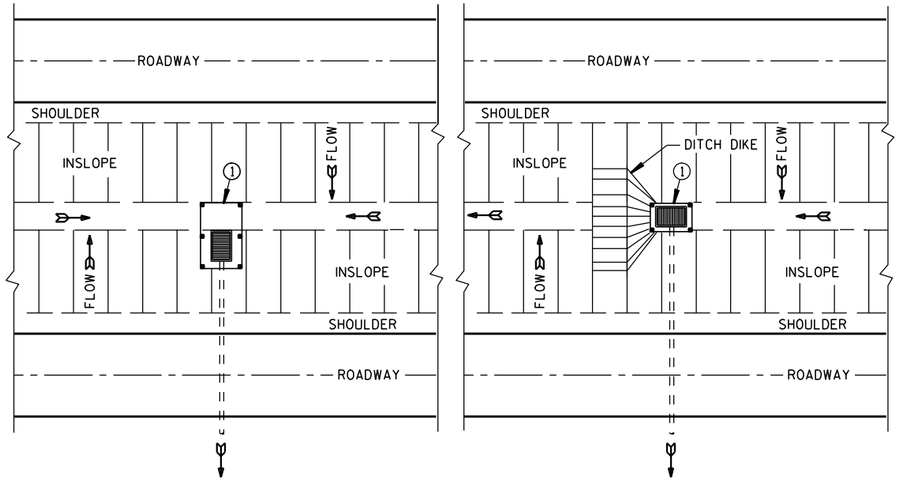
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/04/02 DATE
/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



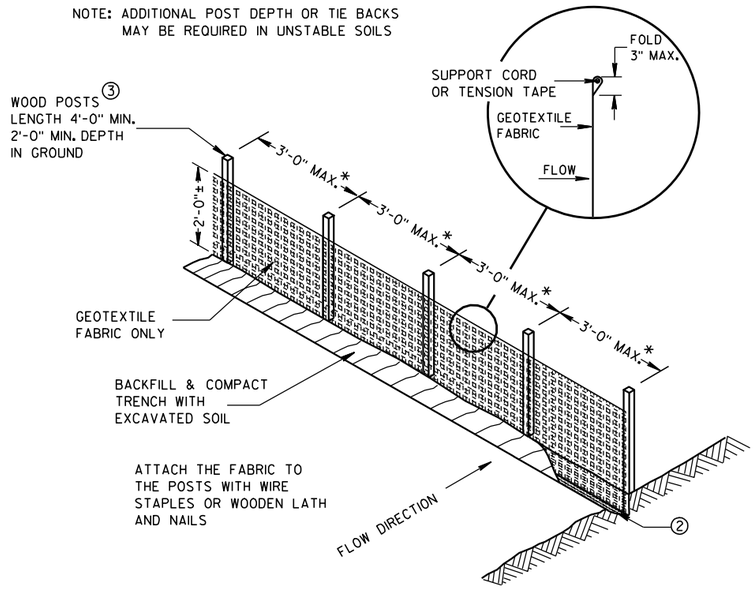
PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



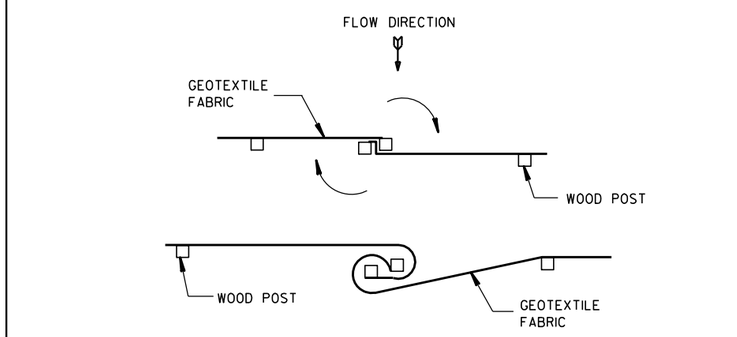
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

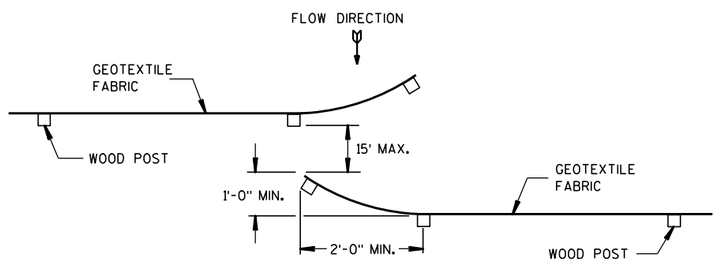


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE



TWIST METHOD



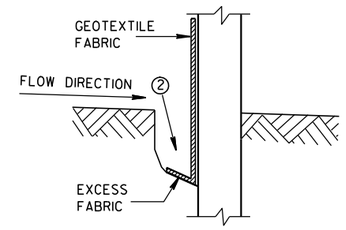
HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5

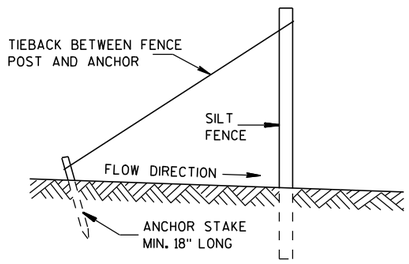
GENERAL NOTES

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

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 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 TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

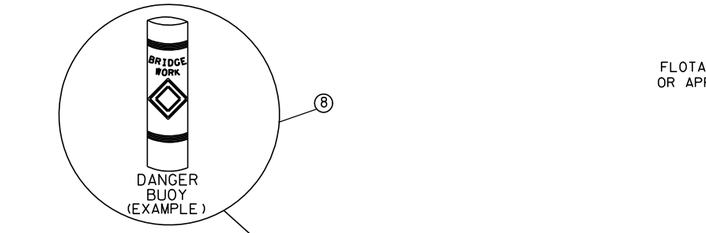
SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

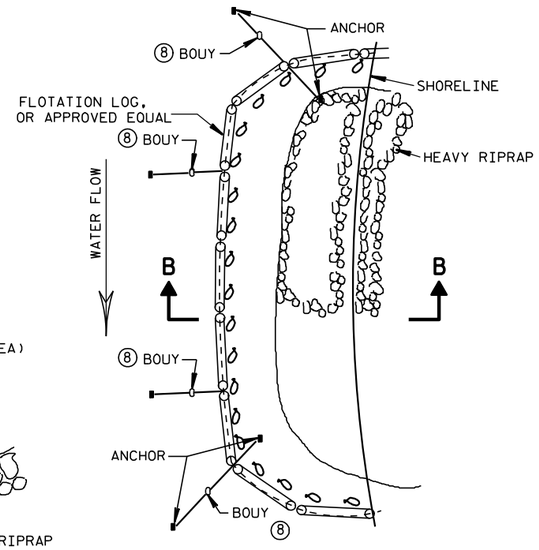
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

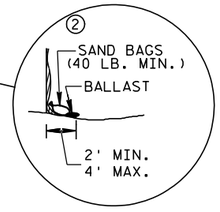
S.D.D. 8 E 9-6

6

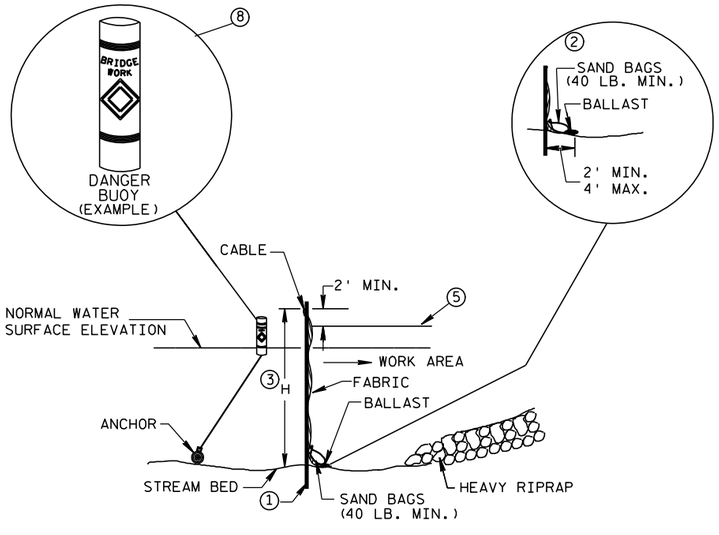


SECTION B-B

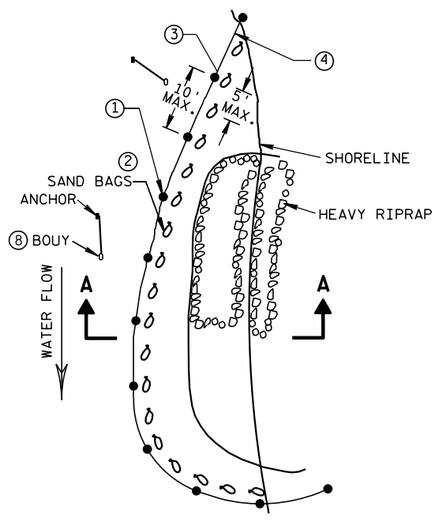




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A-A



PLAN VIEW

TURBIDITY BARRIER STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

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

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

① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.

② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.

③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.

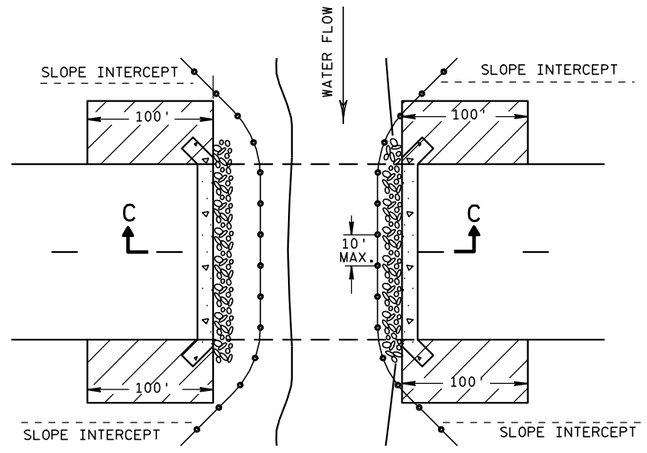
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MIMIMUM BARRIER HEIGHT SHALL BE 2'GREATER THAN EITHER THE O2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WICHEVER IS GREATER.

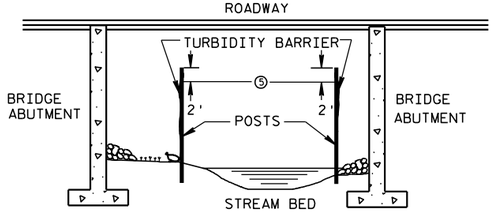
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.

⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
6/04/02 DATE	/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

6

S.D.D. 8 E 11-2

METAL APRON ENDWALLS

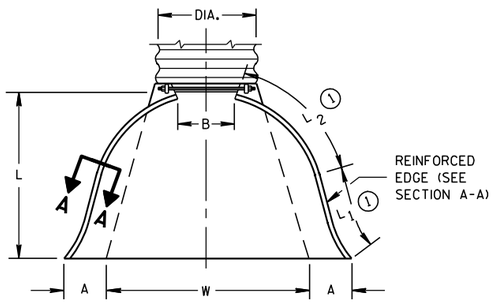
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

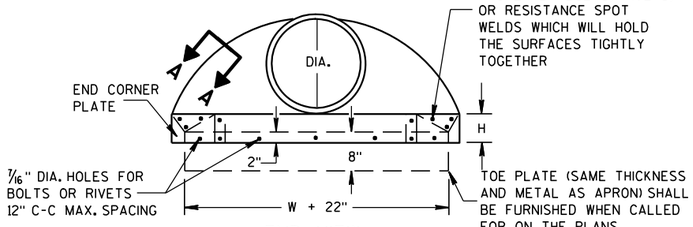
REINFORCED CONCRETE APRON ENDWALLS

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

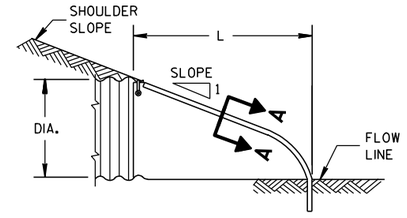
*MINIMUM
**MAXIMUM



PLAN VIEW

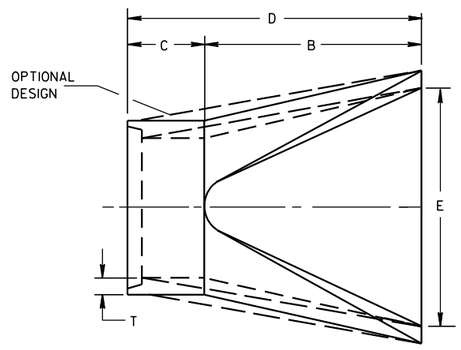


END VIEW

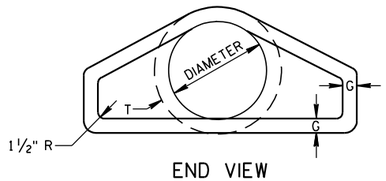


SIDE ELEVATION

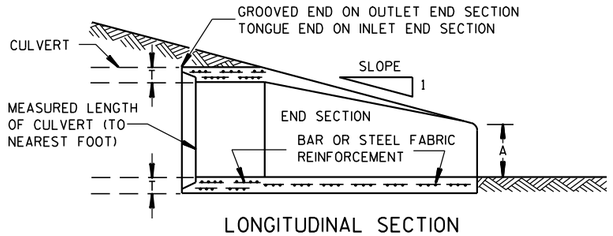
METAL ENDWALLS



PLAN

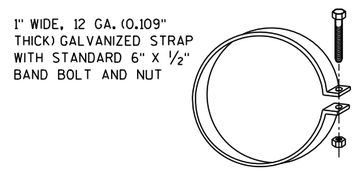


END VIEW



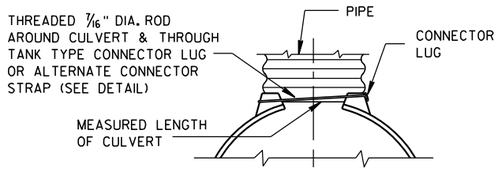
LONGITUDINAL SECTION

CONCRETE ENDWALLS

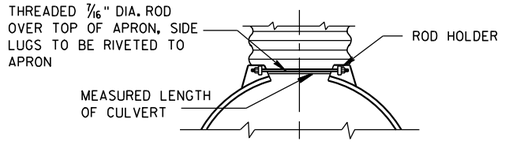


ALTERNATE FOR TYPE 1 CONNECTION

END SECTION CONNECTOR STRAP

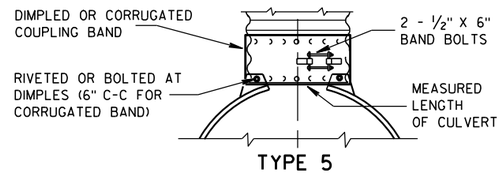


TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE

TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

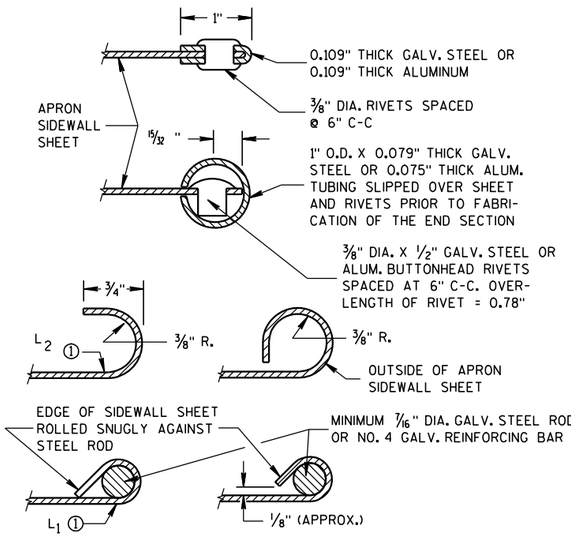
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

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

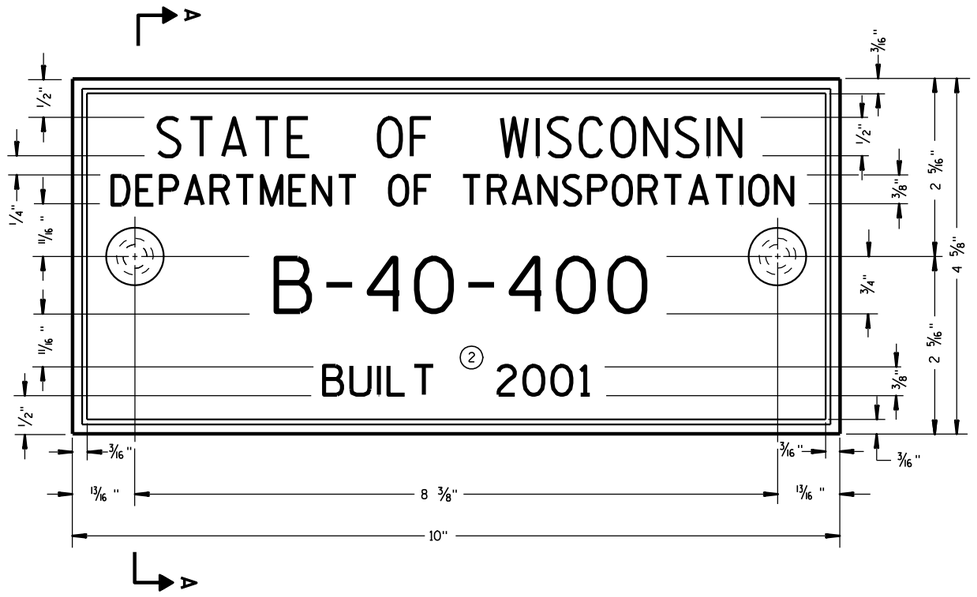
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

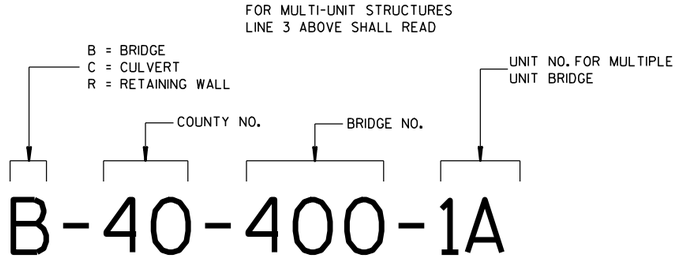
APPROVED
11/30/94 — DATE
/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 F 1-11



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



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

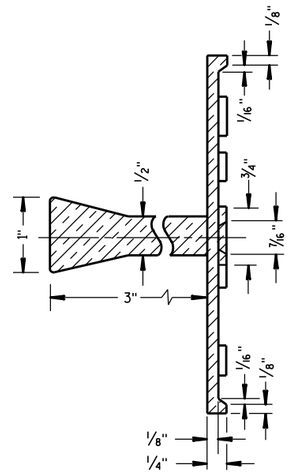
GENERAL NOTES

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.

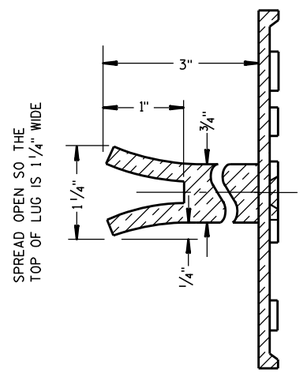
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

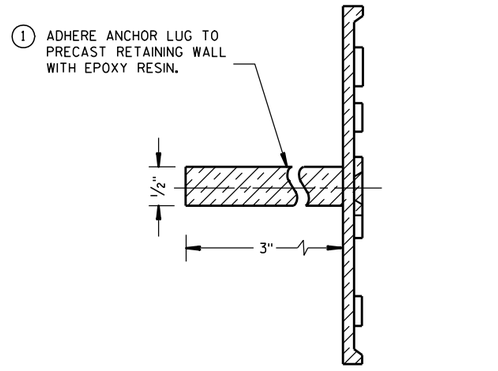
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



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 DEVELOPMENT ENGINEER

FHWA

6

S.D.D. 12 A 3-10

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.

(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

(H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.

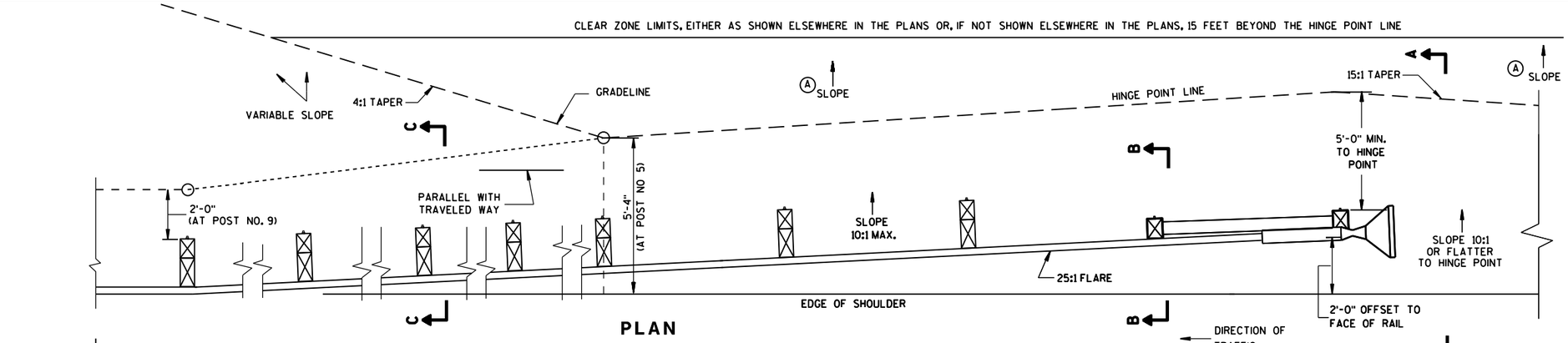
SEE SDD 14B42 FOR MORE INFORMATION.

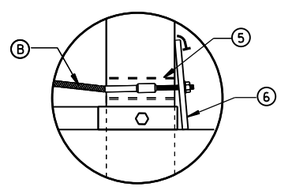
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

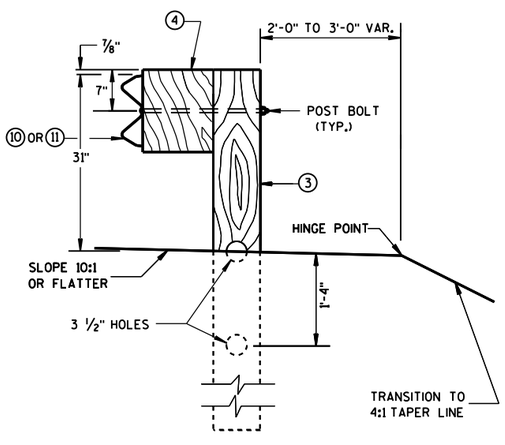
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

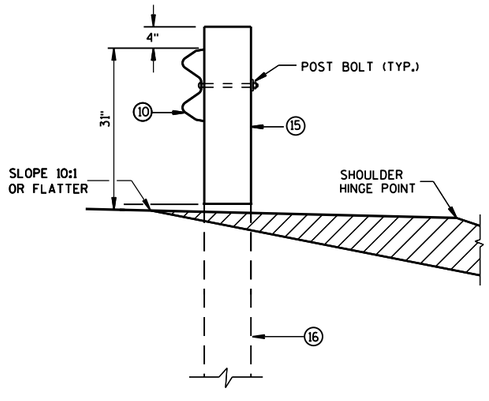
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

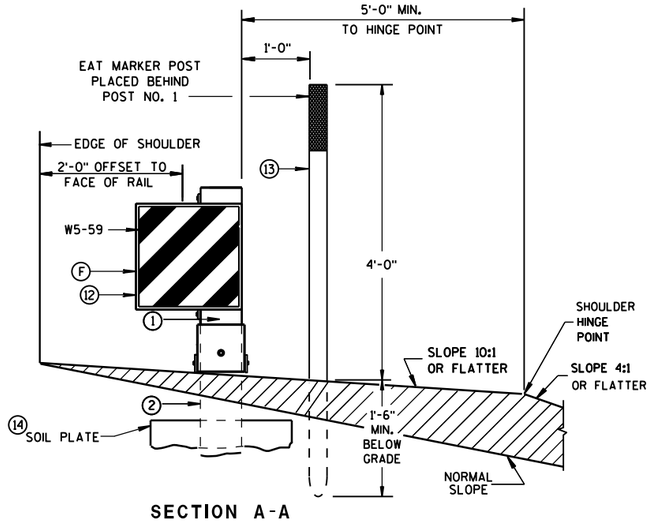
THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.

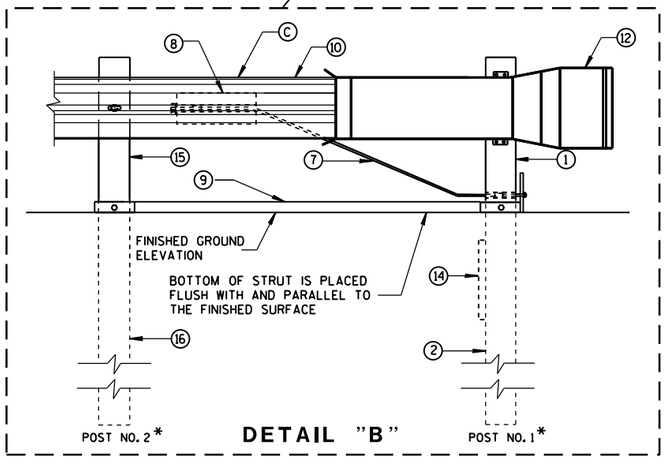












MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

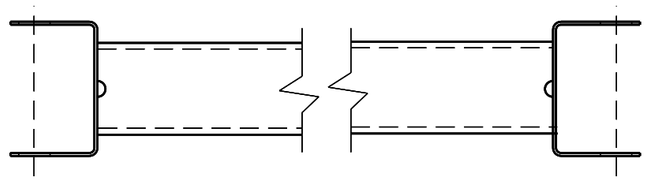
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

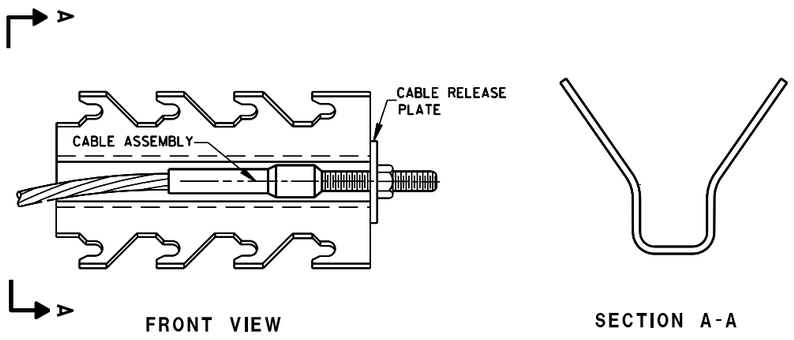
S.D.D. 14 B 44-3a

6

S.D.D. 14 B 44-3a



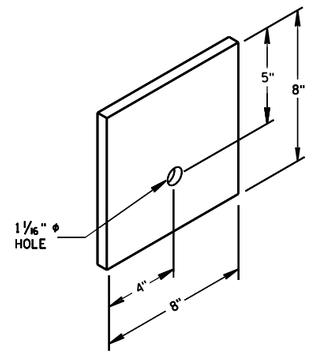
GENERIC GROUND STRUT (9) (H)



GENERIC ANCHOR CABLE BOX (8) (H)

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	UPPER POST NO. 1 6" X 6" TUBE
(2)	LOWER POST NO. 1
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	IMPACT HEAD
(13)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
(14)	SOIL PLATE
(15)	UPPER POST NO. 2
(16)	LOWER POST NO. 2



BEARING PLATE (6)

6

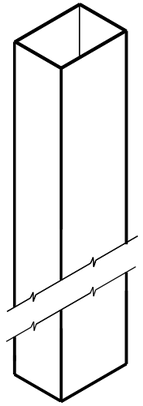
6

S.D.D. 14 B 44-3b

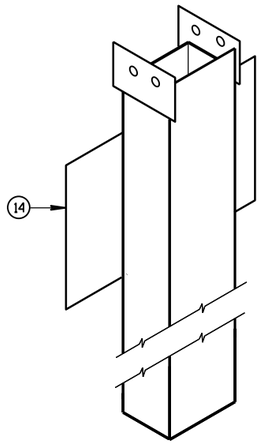
S.D.D. 14 B 44-3b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

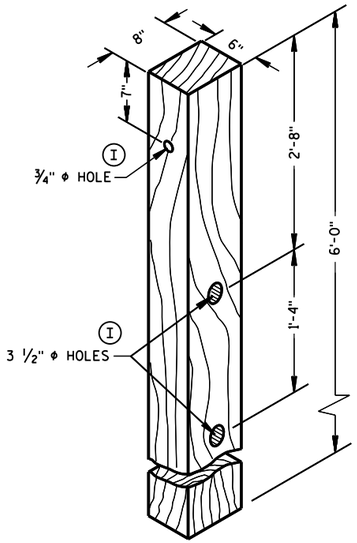
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR



UPPER POST NO. 1 (1)

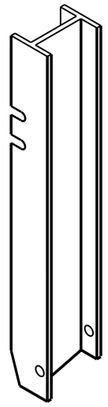


LOWER POST NO. 1 (2)

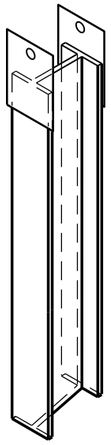


POSTS NUMBER 3-9

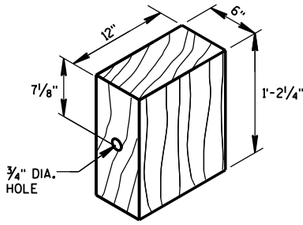
WOOD CRT POST (3)



UPPER POST NO. 2 (15)

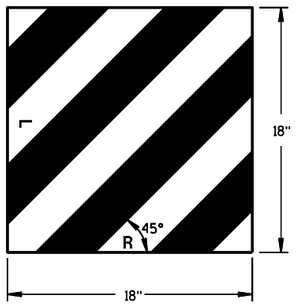


LOWER POST NO. 2 (16)



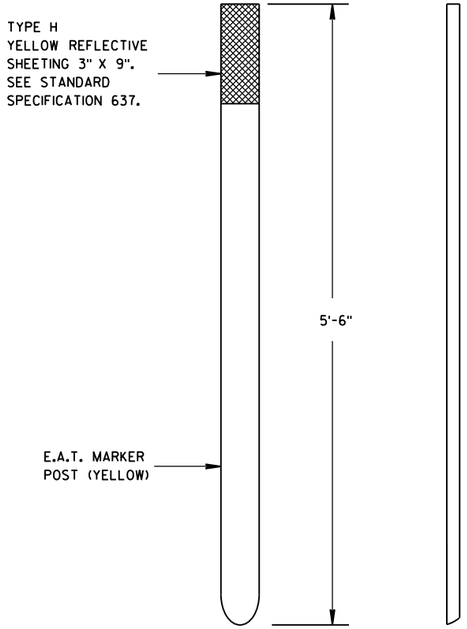
WOOD BLOCKOUT (4)

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



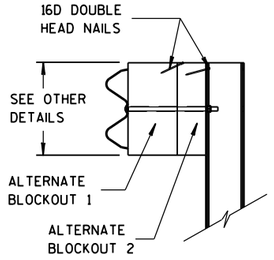
W5-59

REFLECTIVE SHEETING DETAIL (H)

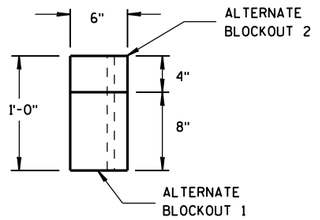


FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

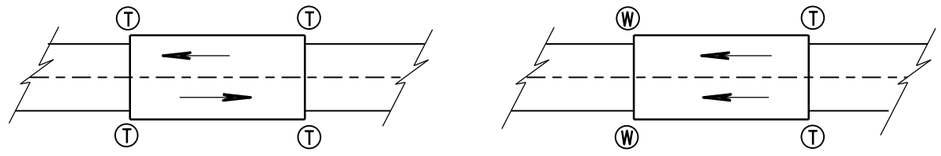
APPROVED

June 2017
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS
UNIT SUPERVISOR

FHWA

6
S.D.D. 14 B 44-3c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

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

GENERAL NOTES

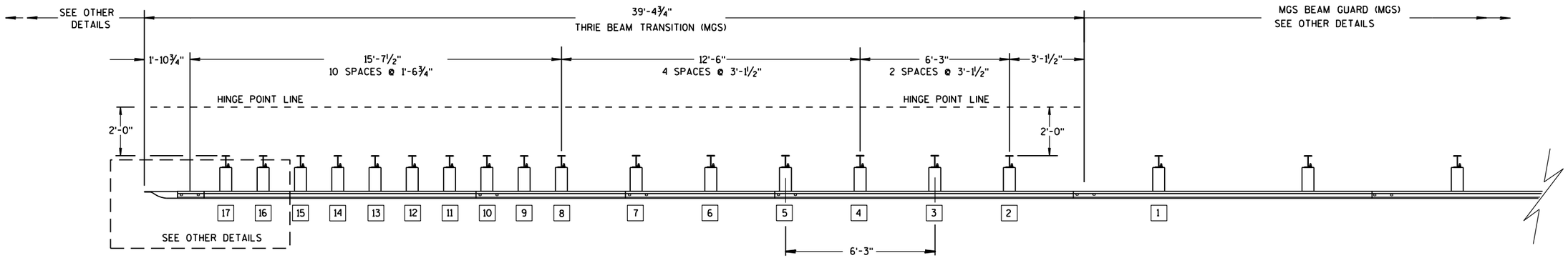
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

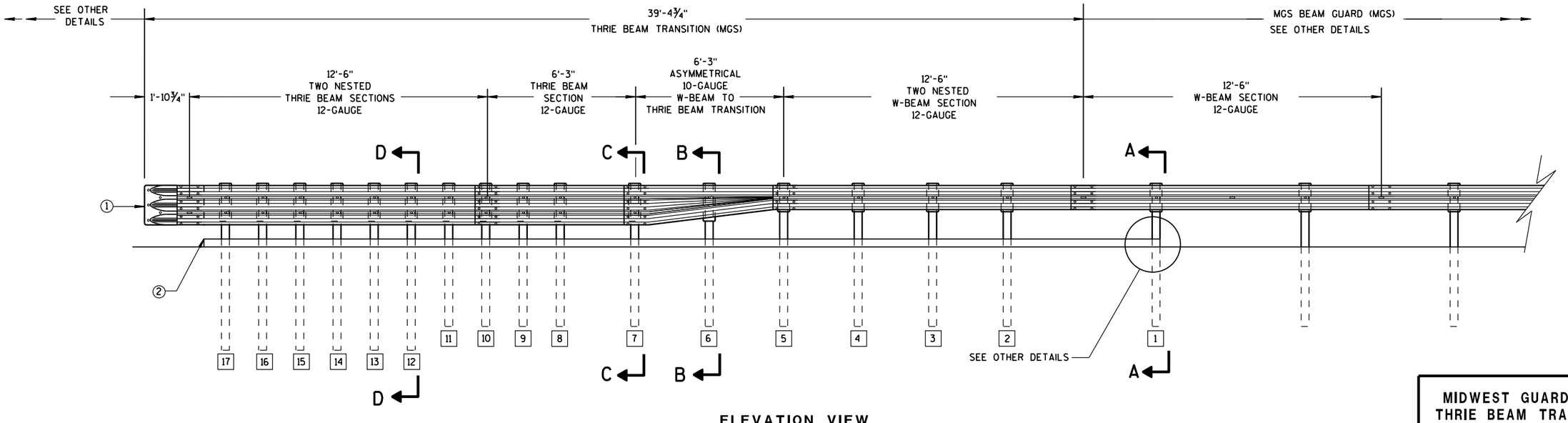
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

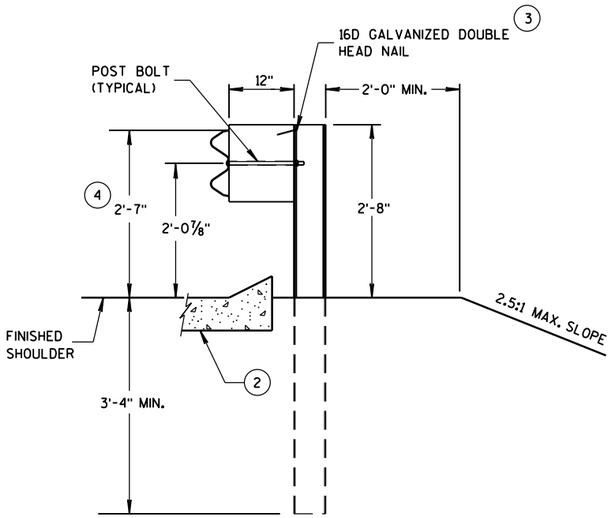
S.D.D. 14 B 45-4a

GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE_FEATURE SEE PLAN FOR INFORMATION.

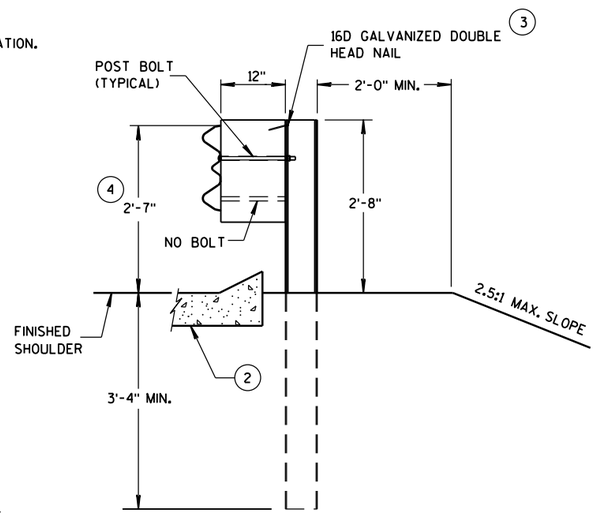
(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



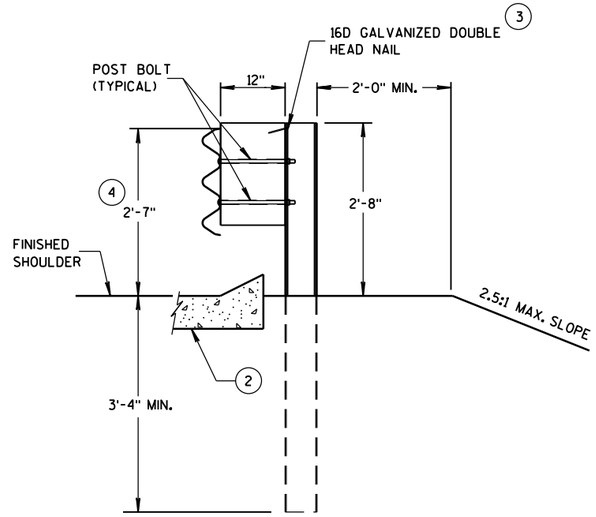
SECTION A-A

POSTS 1-5



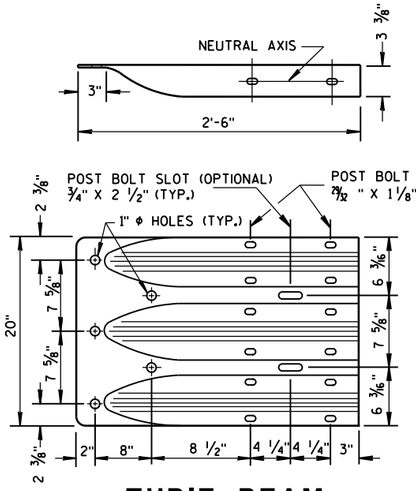
SECTION B-B

POST 6



SECTION C-C

POSTS 7-11



THRIE BEAM TERMINAL CONNECTOR

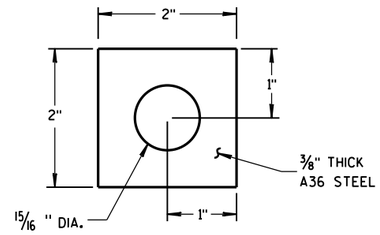
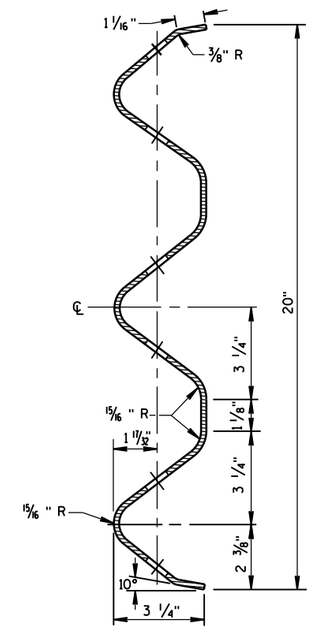
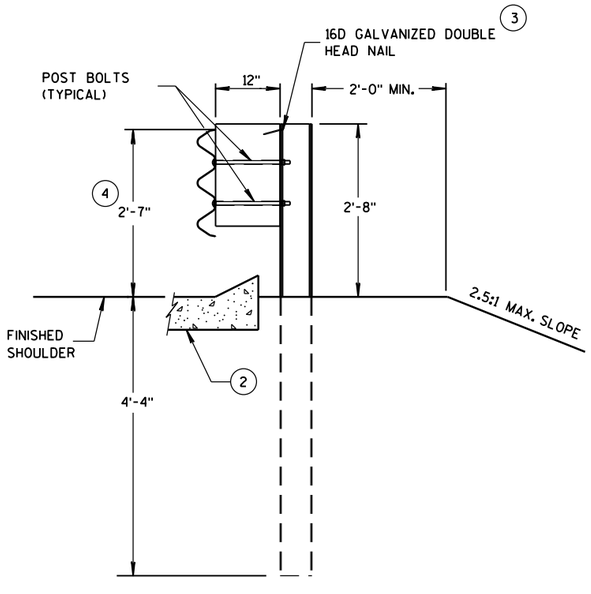


PLATE WASHER DETAIL

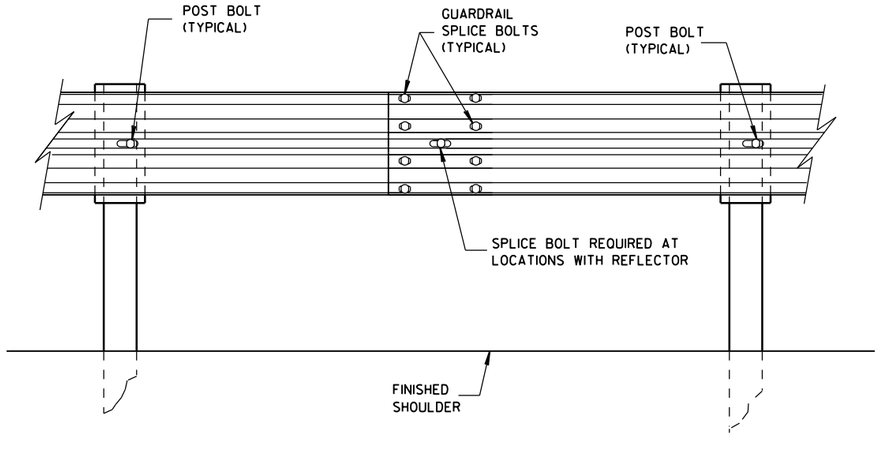


SECTION THRU THRIE BEAM RAIL ELEMENT



SECTION D-D

POSTS 12-17



SPLICE DETAIL

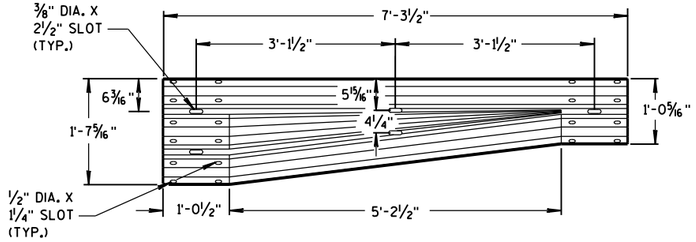
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

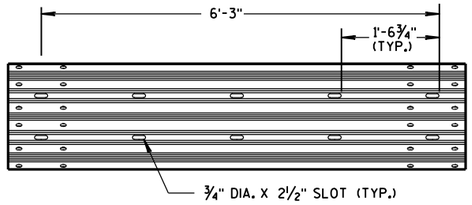
6

S.D.D. 14 B 45-4b

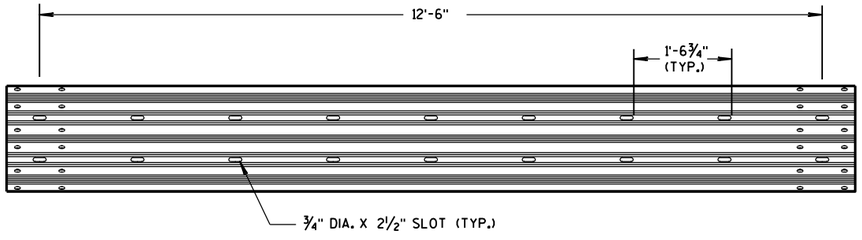
S.D.D. 14 B 45-4b



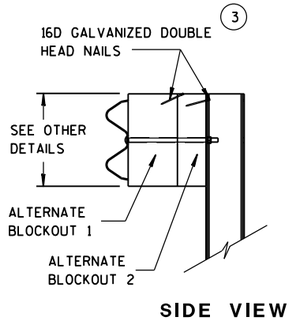
W-BEAM TO THRIE BEAM TRANSITION SECTION



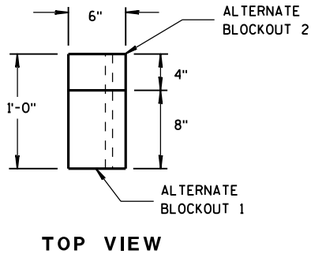
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

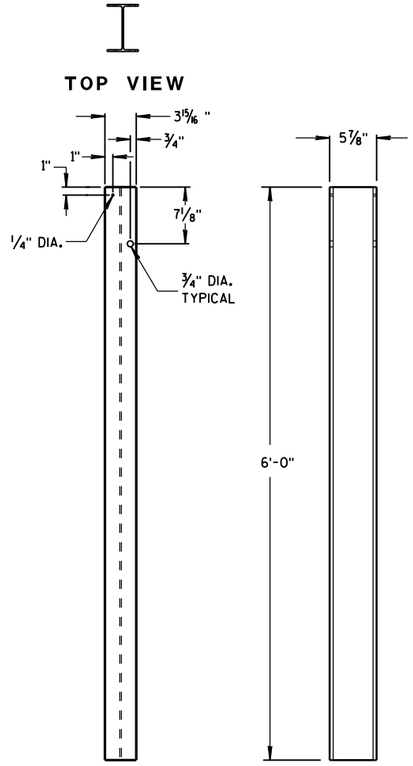


SIDE VIEW

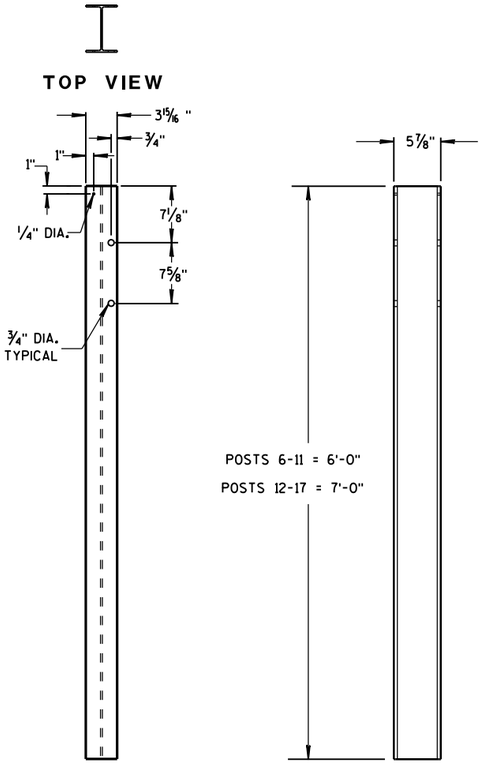


TOP VIEW

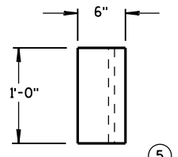
ALTERNATE WOOD BLOCKOUT DETAIL



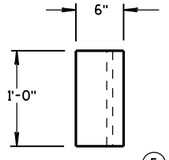
STEEL POSTS 1-5



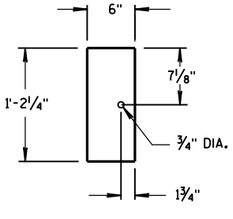
STEEL POSTS 6-17



TOP VIEW (5)

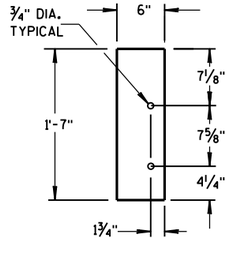


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

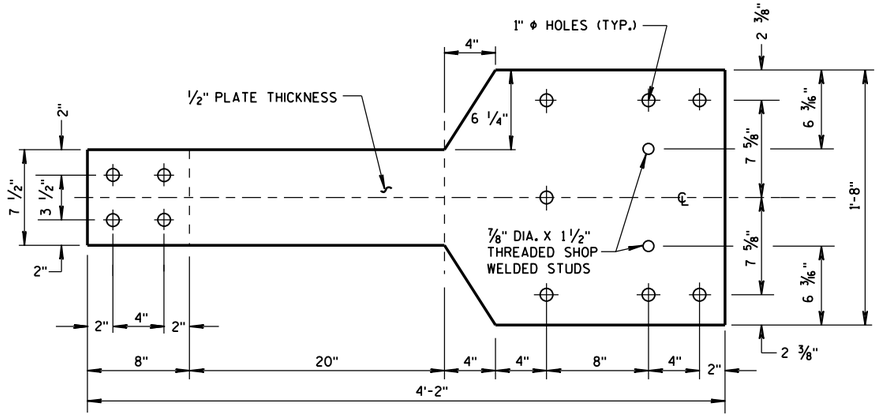
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

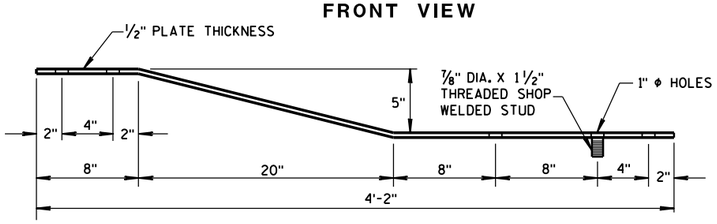
S.D.D. 14 B 45-4c

GENERAL NOTES

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

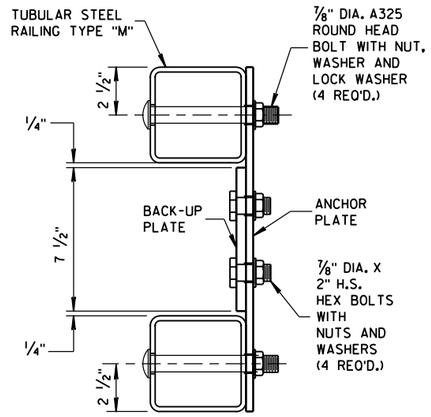


FRONT VIEW

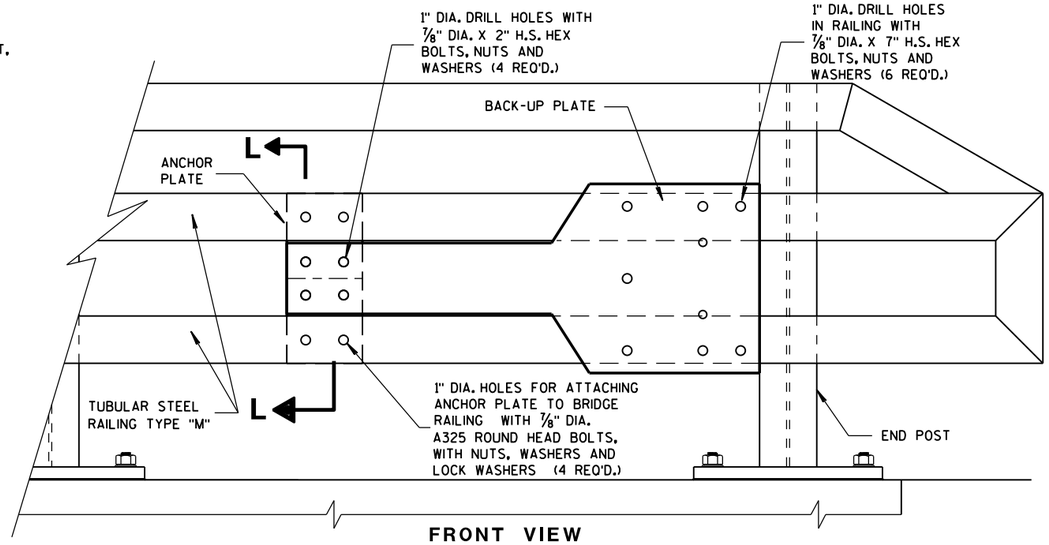


PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

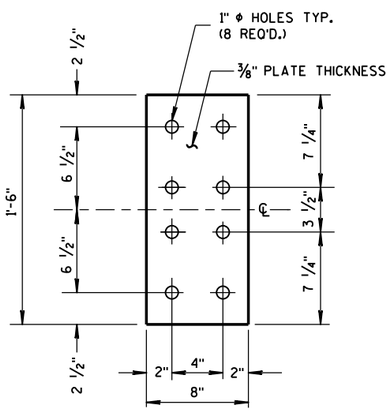


SECTION L-L



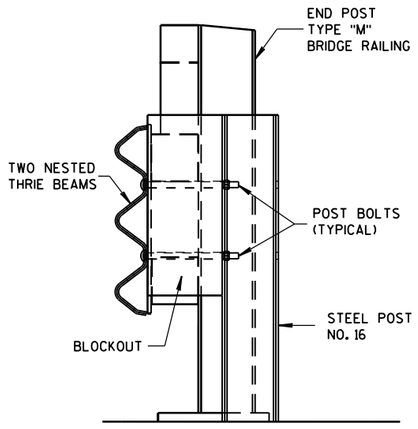
FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"

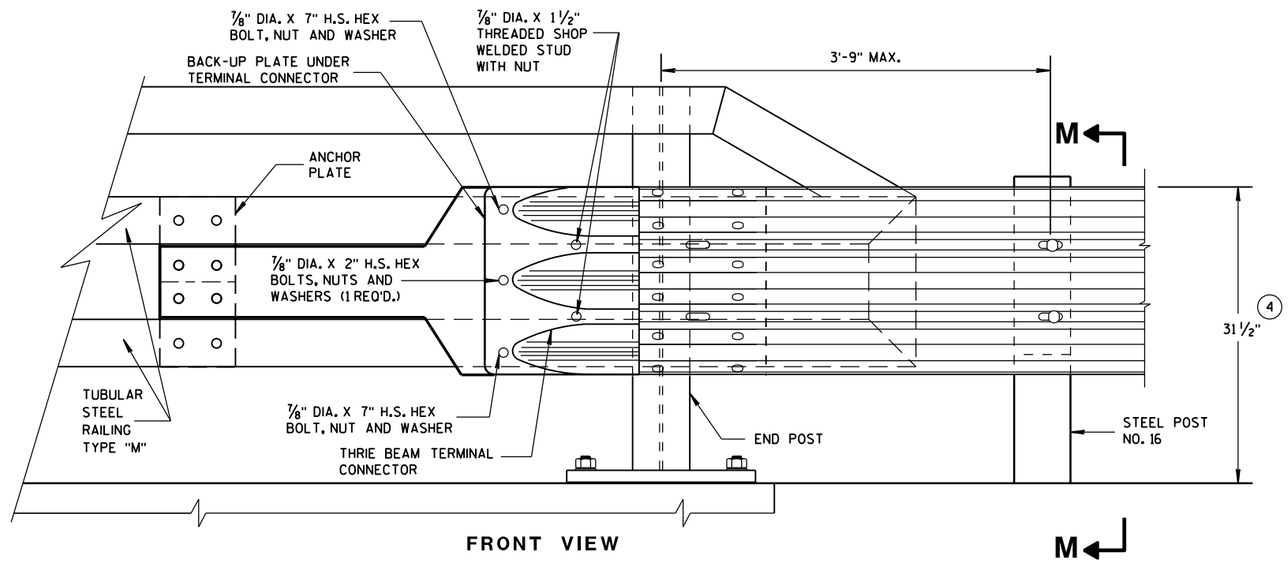


FRONT VIEW

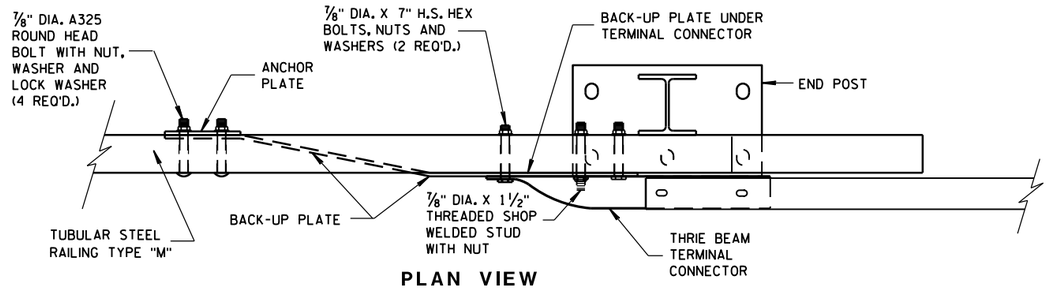
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

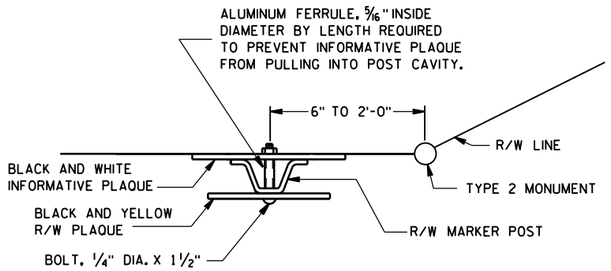
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

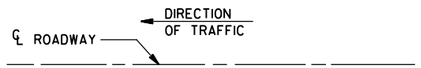
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

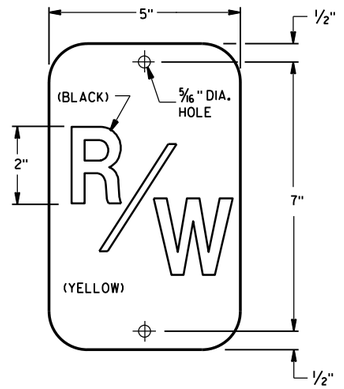
6

S.D.D. 14 B 45-4h



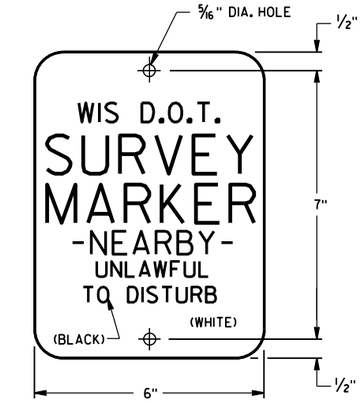


PLAN VIEW



R/W PLAQUE

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



INFORMATIVE PLAQUE

GENERAL NOTES

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

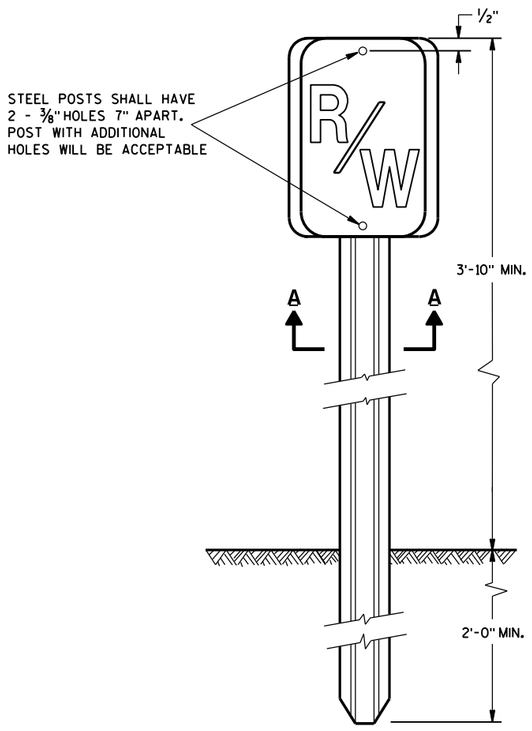
A STEEL MARKER POST FOR RIGHT-OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY, WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

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

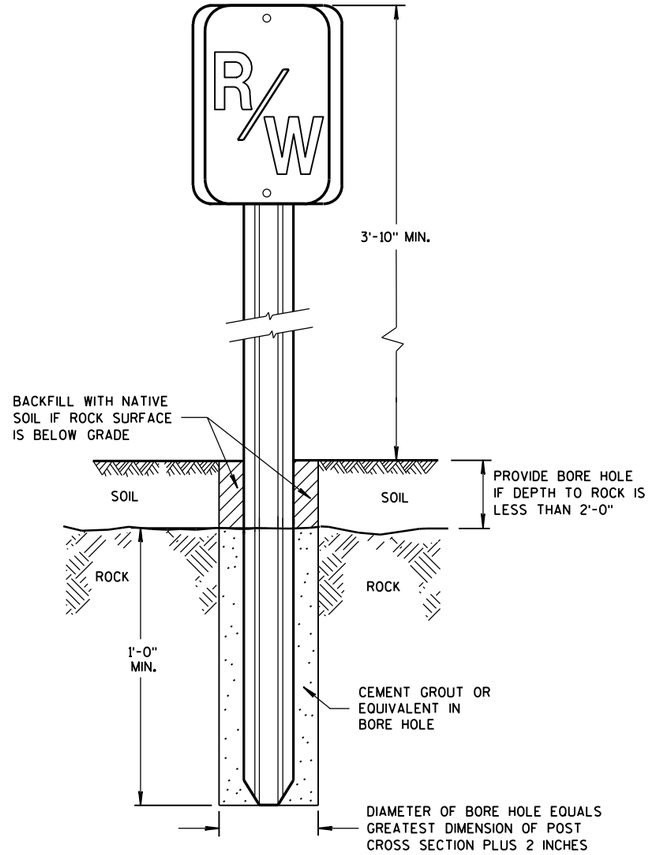
STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

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

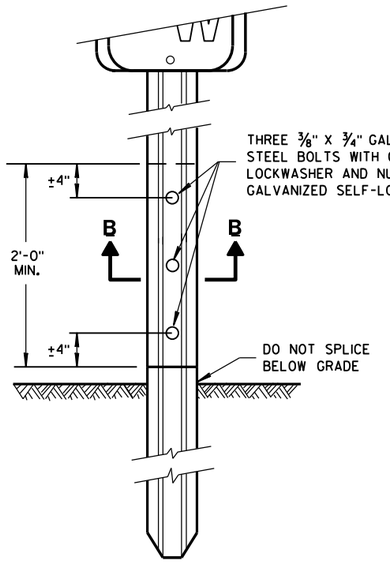
FILL THE BORE HOLE WITH CEMENT GROUT, OR EQUIVALENT. DEPENDING ON THE STABILITY OF THE ROCK.



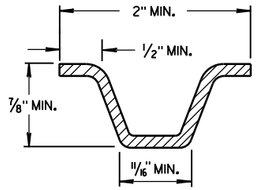
FRONT VIEW
STEEL MARKER POST



FRONT VIEW
ROCK INSTALLATION (1)

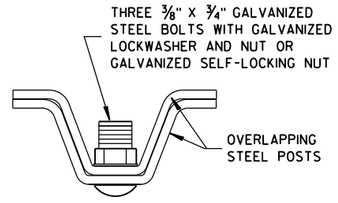


FRONT VIEW
SPLICE DETAIL



MIN. WEIGHT 1.12 LB./FT.

SECTION A-A



SECTION B-B

MARKER POST FOR RIGHT-OF-WAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/18/2016 — DATE
/S/ Ray Kumapayi — CHIEF SURVEYING AND MA[illegible]INEER
FHWA

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

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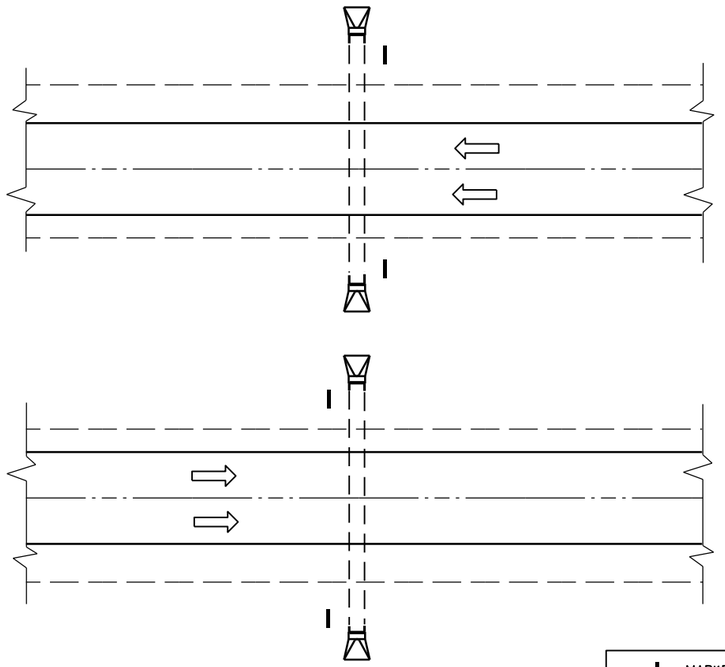
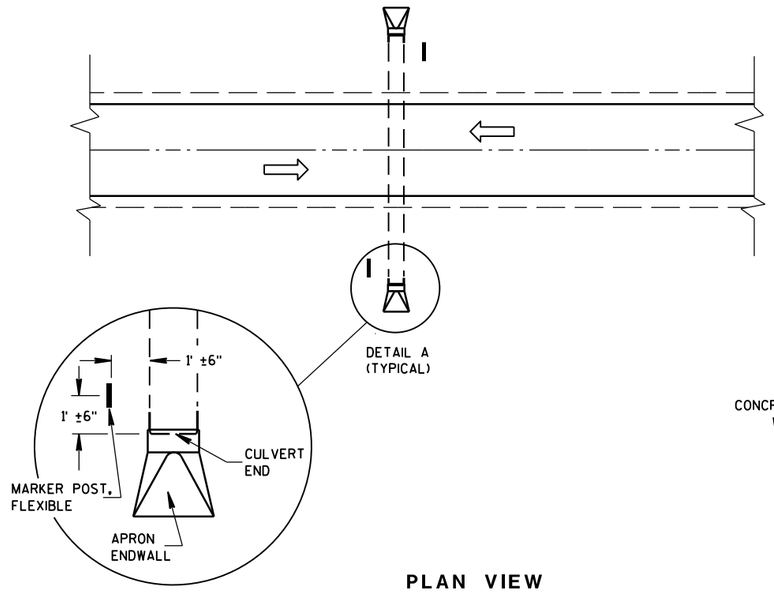
S.D.D. 15 A 1-13a



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

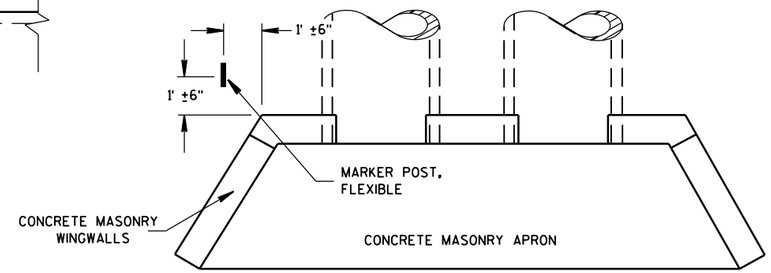
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

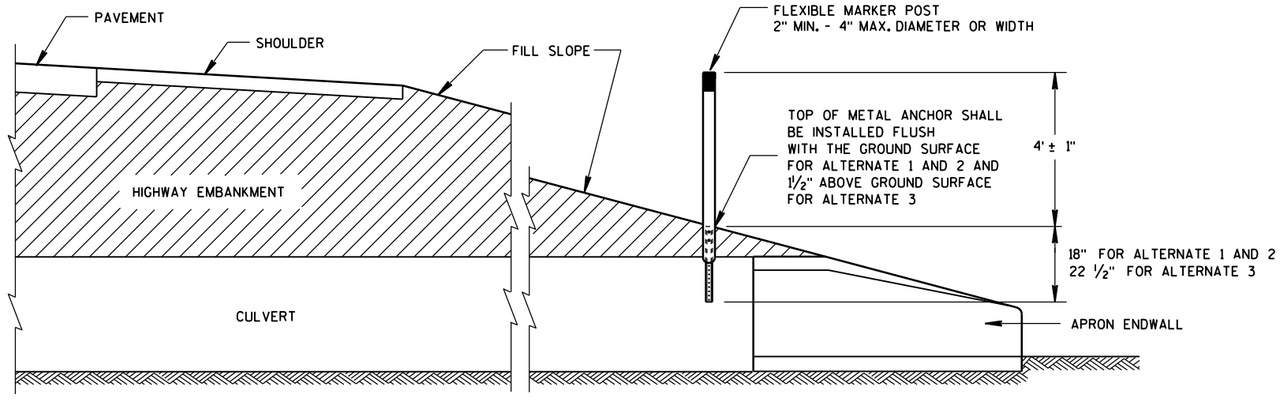
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

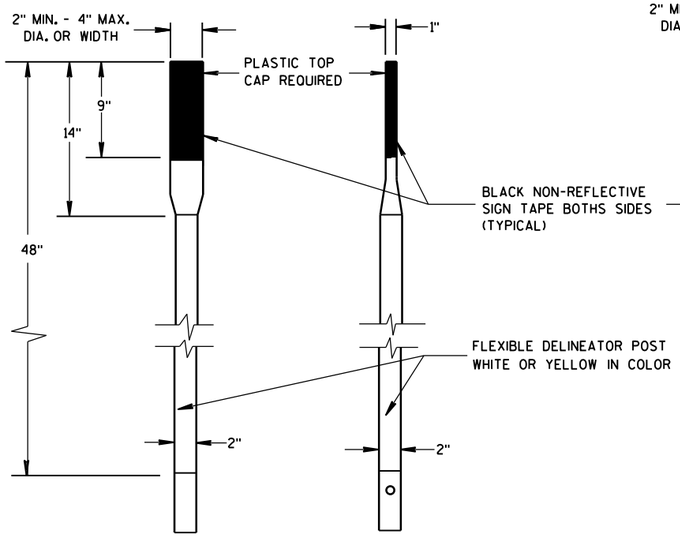
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

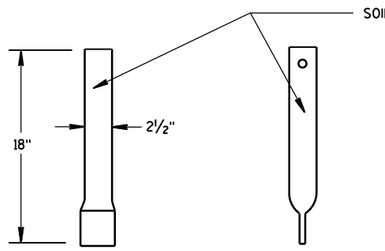
6

S.D.D. 15 A 3-2a

6

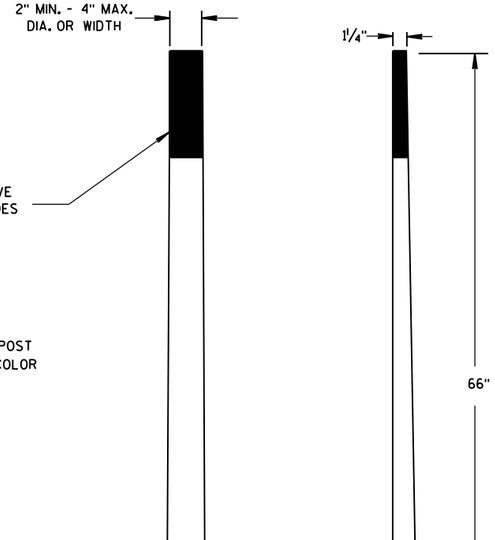
S.D.D. 15 A 3-2a





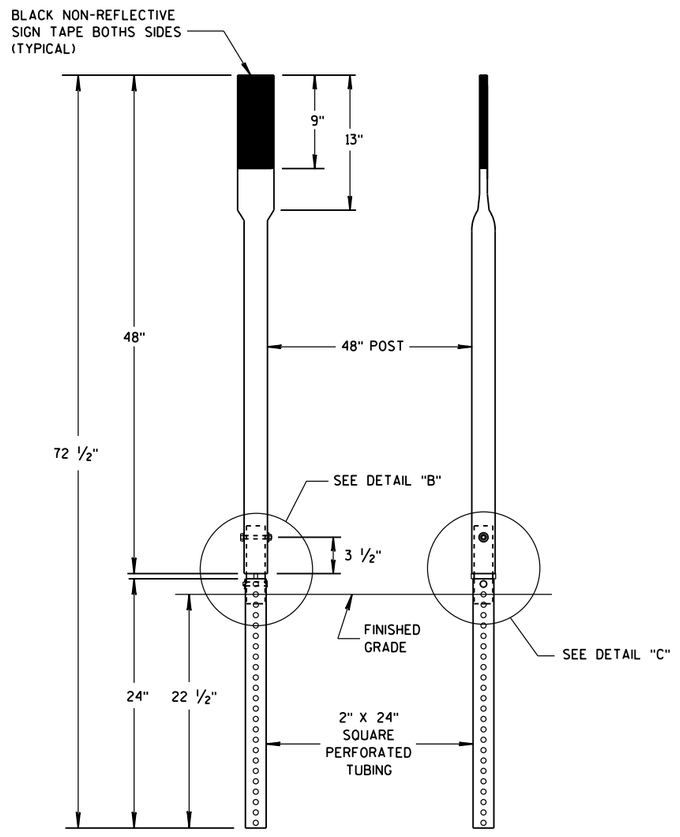
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

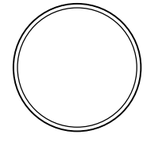
ALTERNATE 2



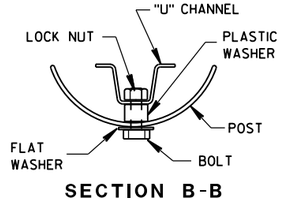
FRONT VIEW SIDE VIEW

ALTERNATE 3

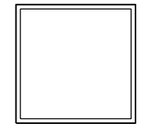
FLEXIBLE MARKER POSTS



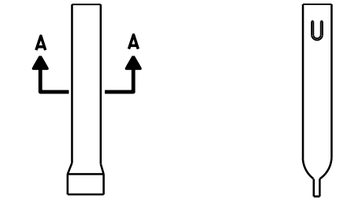
SECTION A-A



SECTION B-B

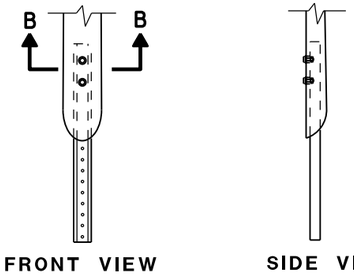


SECTION C-C



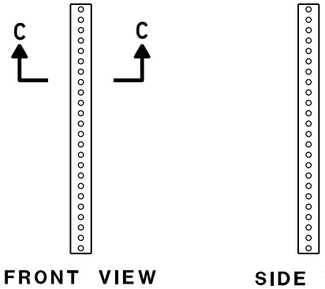
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

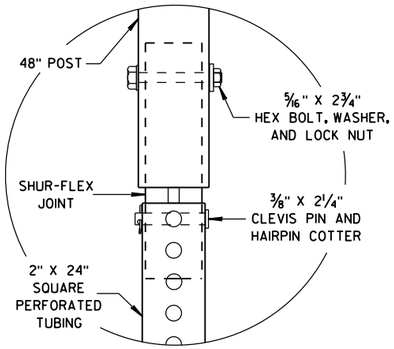
ALTERNATE 2



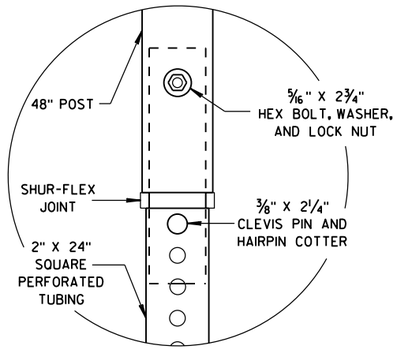
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

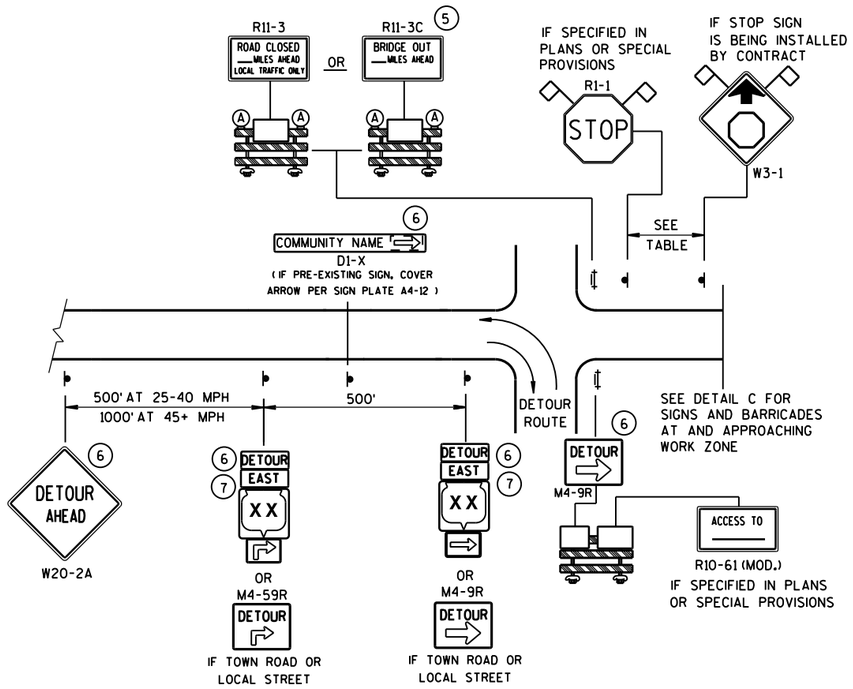
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 A 3-2b

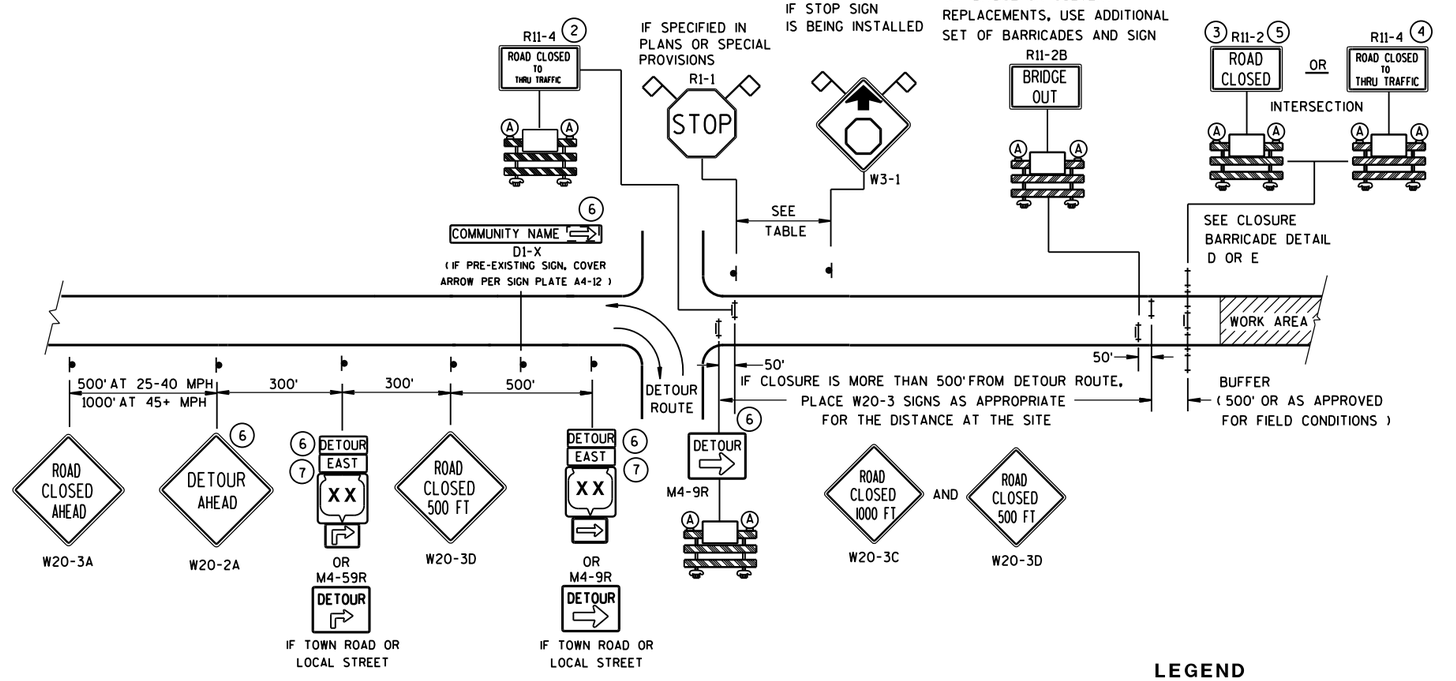
6

S.D.D. 15 A 3-2b



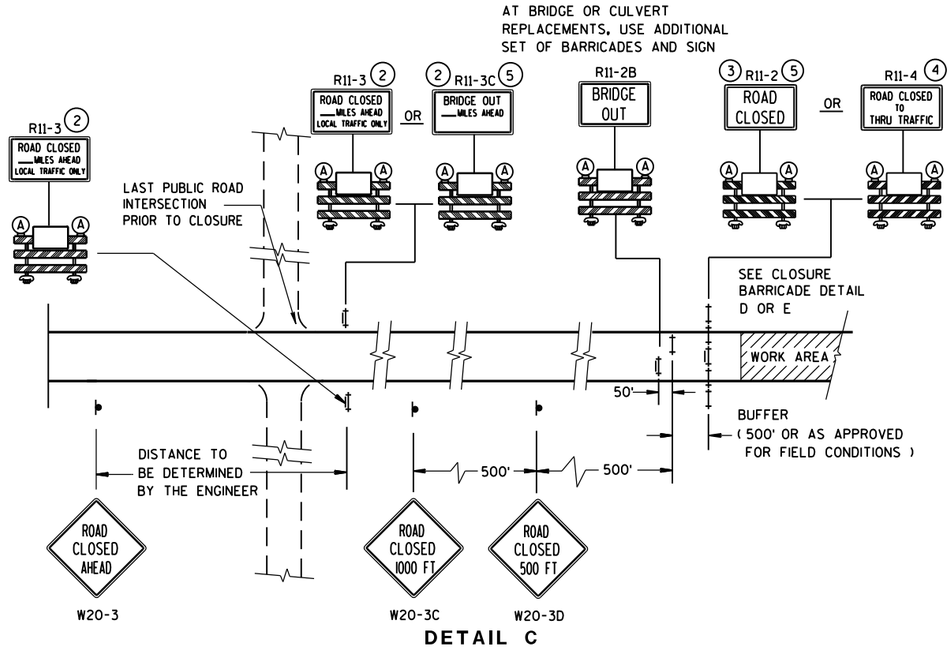
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

LEGEND

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

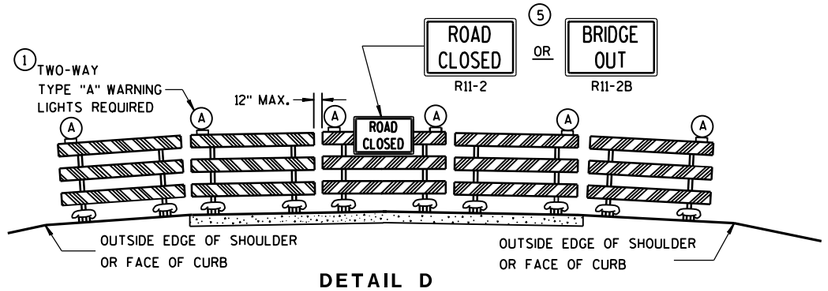
SEE SDD 15C2-SHEET "**b**" FOR GENERAL NOTES AND FOOTNOTES (1) THROUGH (7)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

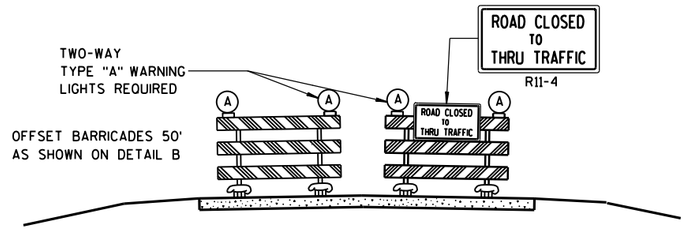
S.D.D. 15 C 2-6a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

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

GENERAL NOTES

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

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

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

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

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

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

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

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

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

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

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

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

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

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

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

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

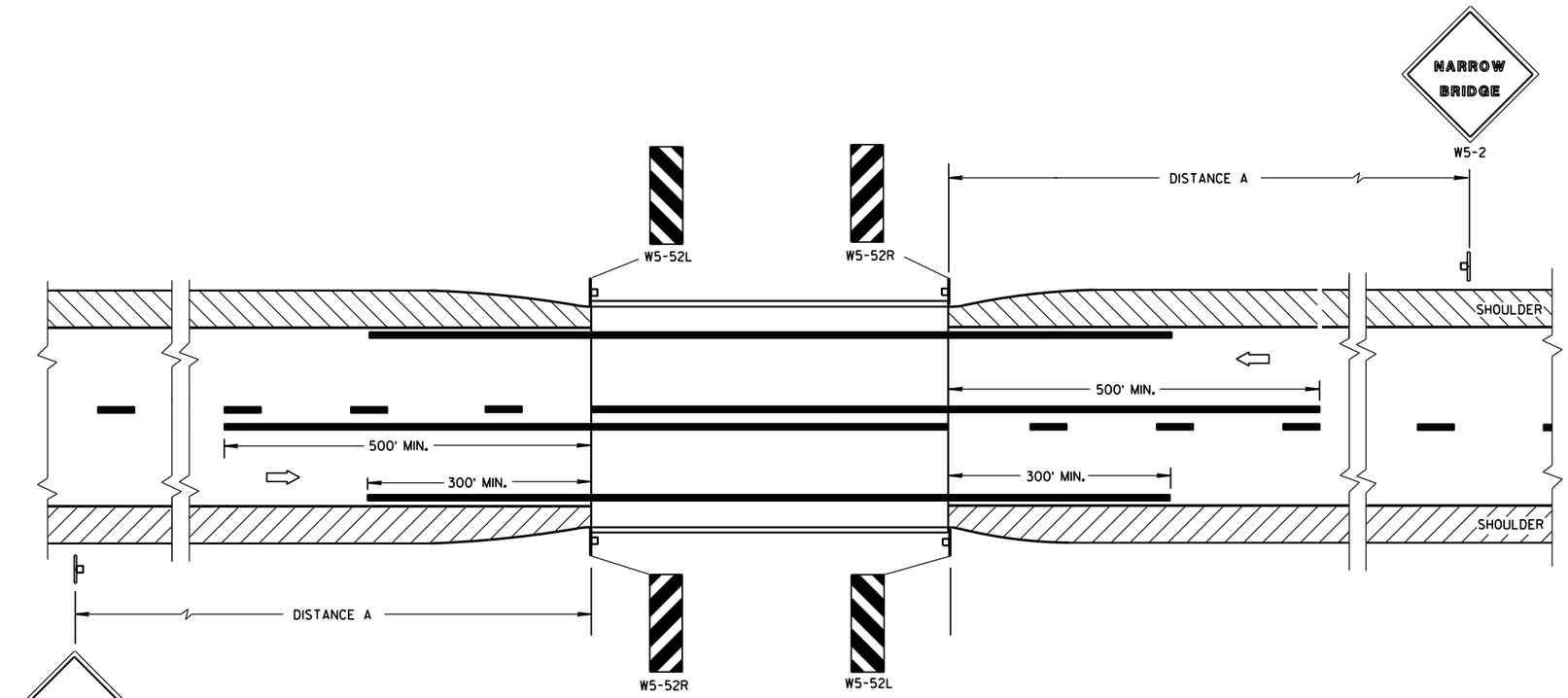
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI — FHWA — FIC

6

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



SITUATION 1

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

DISTANCE TABLE

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

GENERAL NOTES

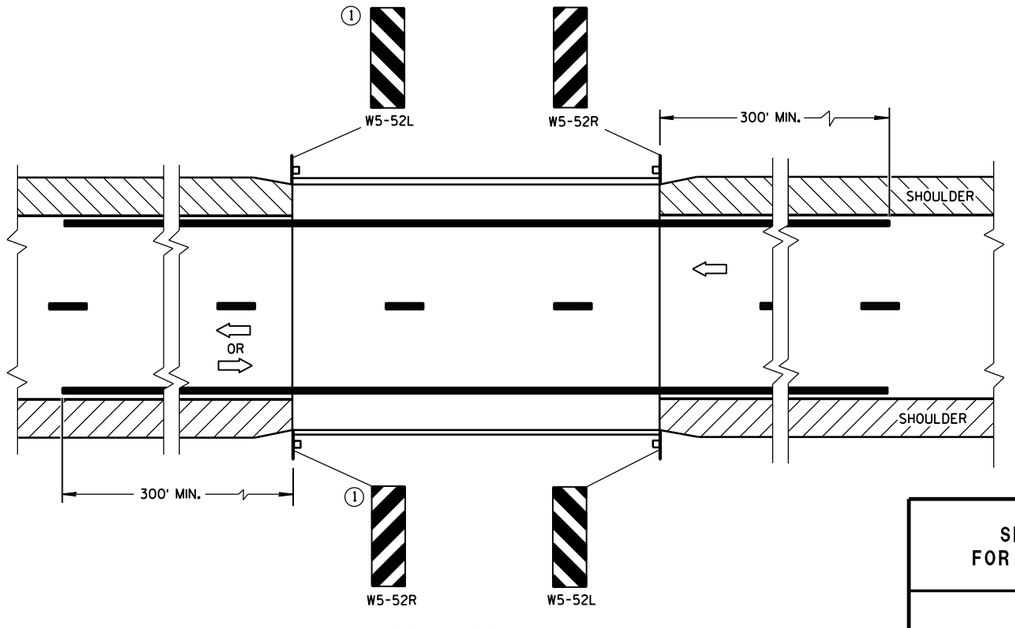
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

(1) OMIT ON ONE-WAY TRAVELLED WAYS.

⇨ DIRECTION OF TRAFFIC



SITUATION 2

WARRANTING CRITERIA:

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

SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

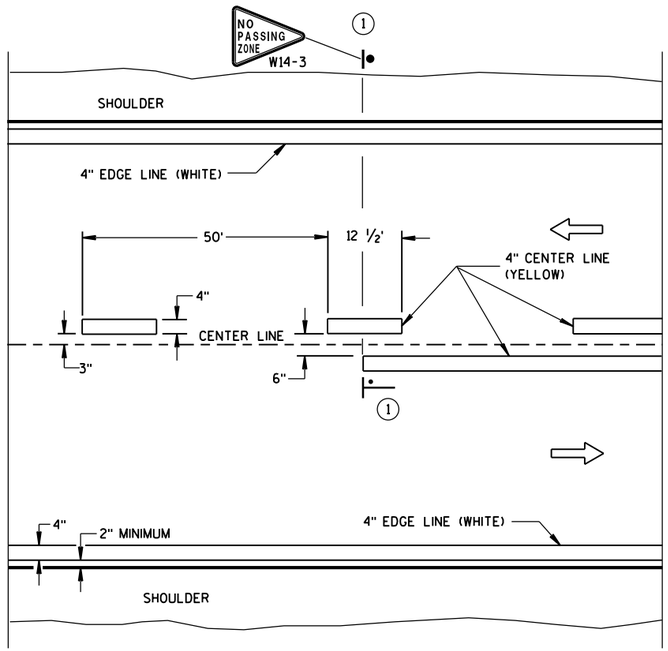
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

6

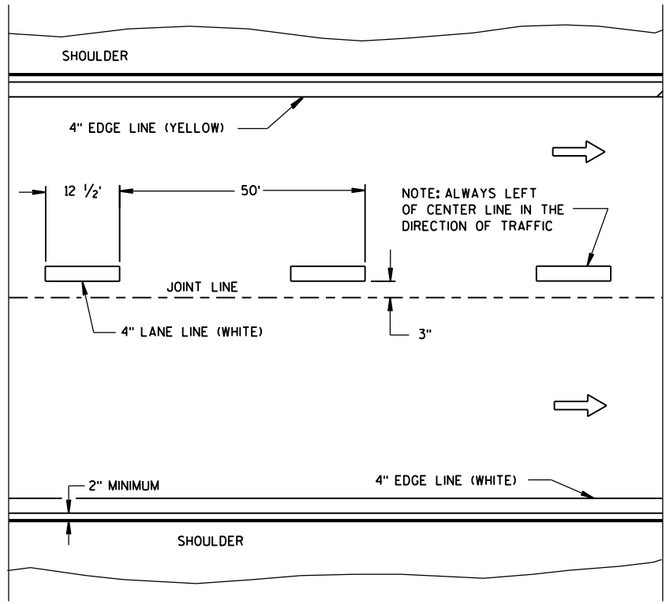
S.D.D. 15 C 6-9

6

S.D.D. 15 C 6-9



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

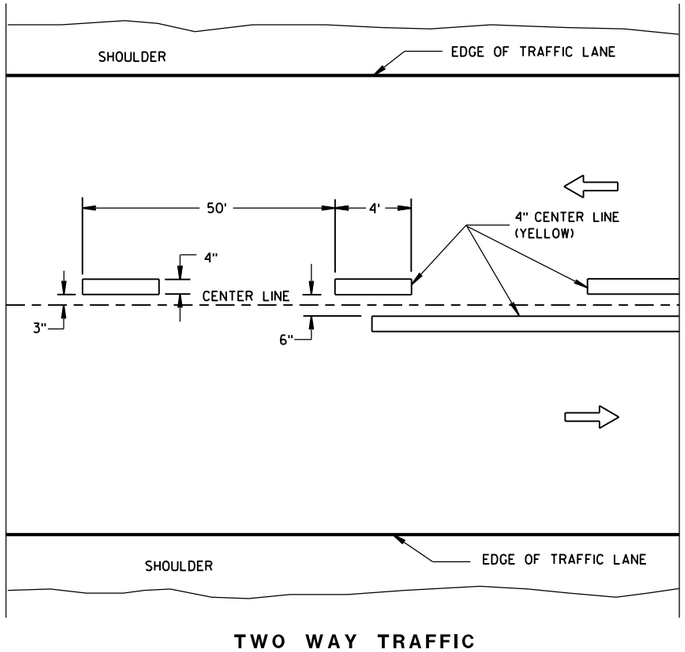
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

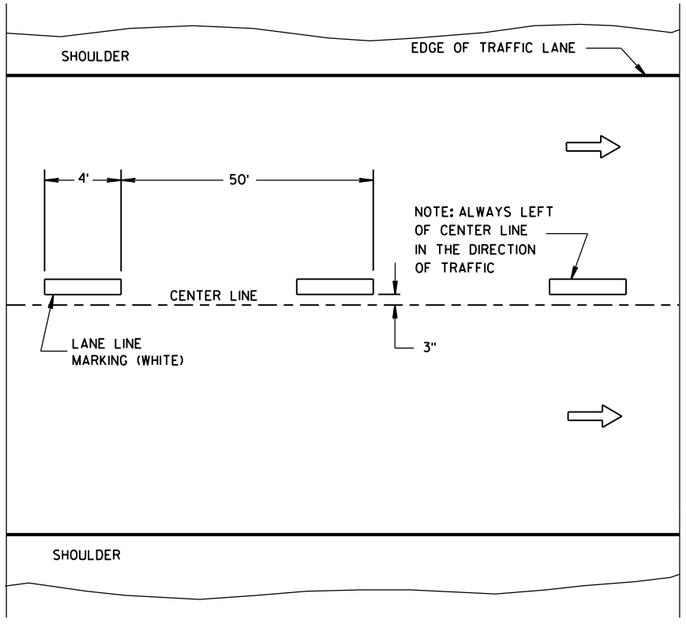
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



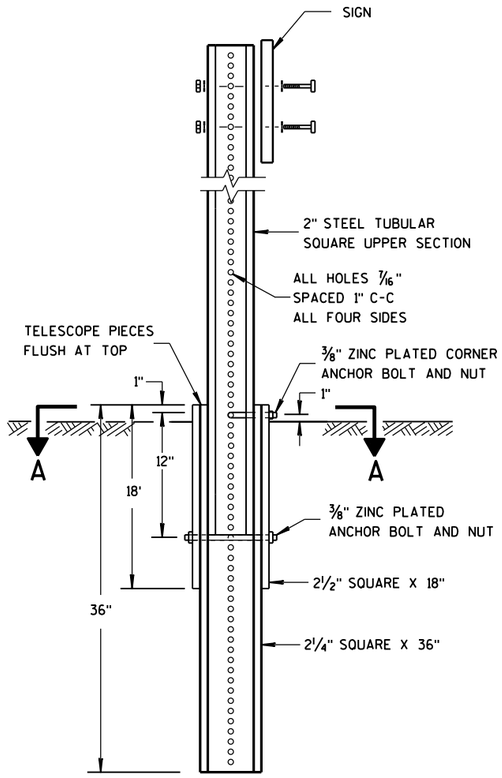
ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

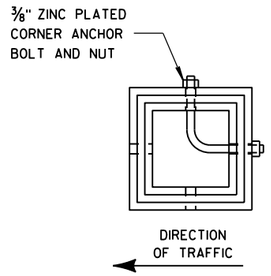
LONGITUDINAL MARKING (MAINLINE)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Matthew R. Rauch STATE SIGNING AND MAR ENGINEER
FHWA	

6

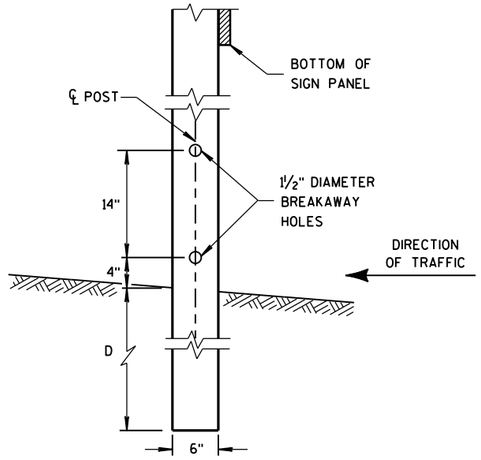
S.D.D. 15 C 8-18a



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



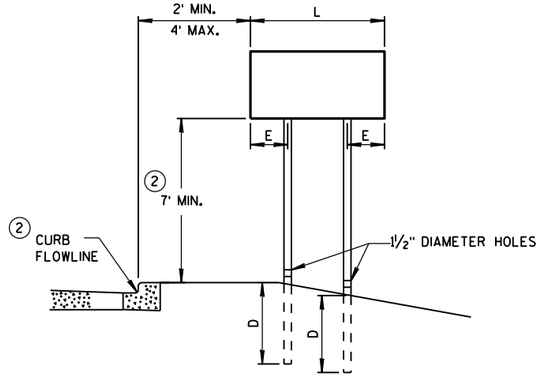
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

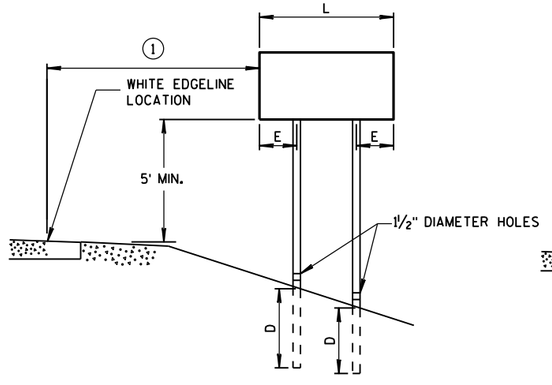
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

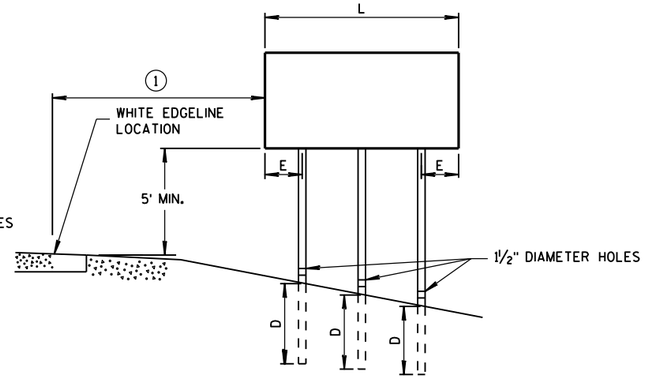
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

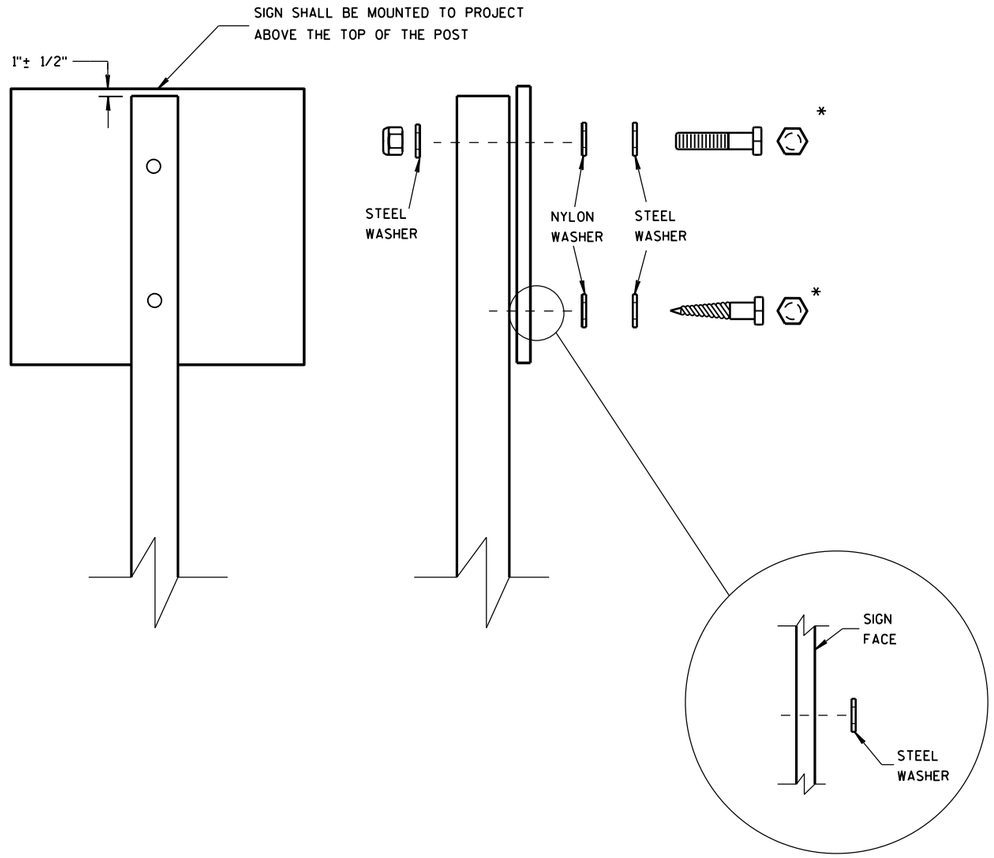
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 D 38-2a



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

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

* 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

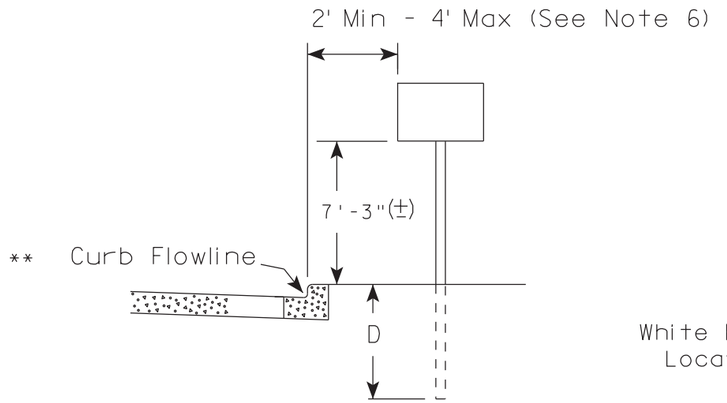
APPROVED

June 2017
DATE

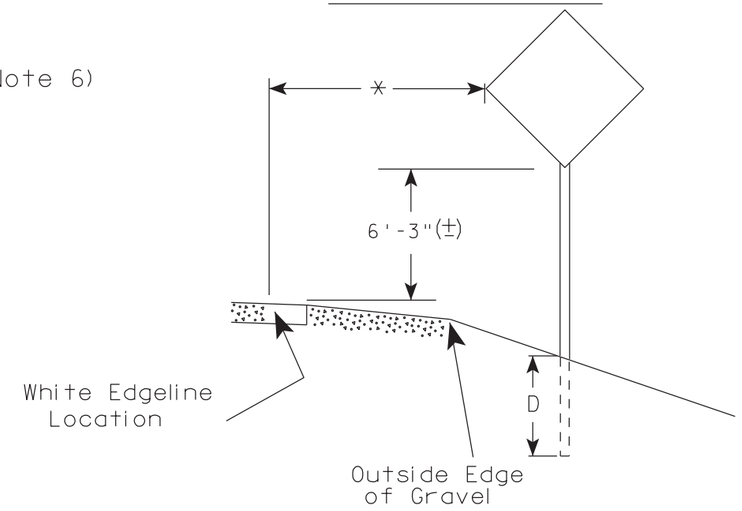
/S/ Andrew Heldtke
WORK ZONE ENG

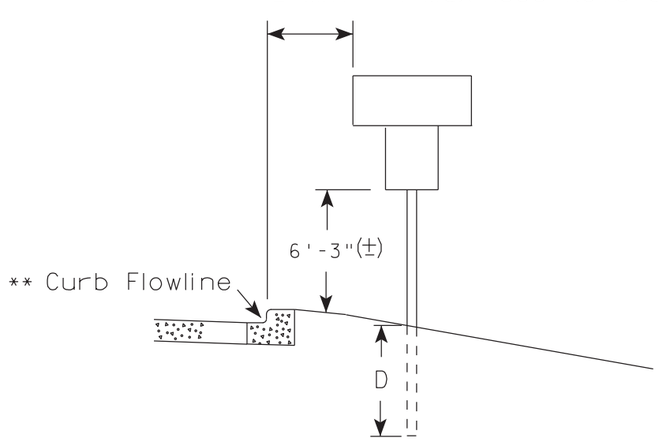
FHWA

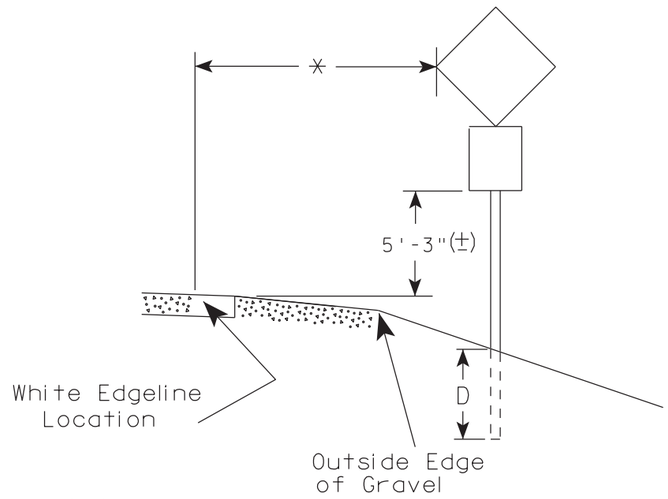
URBAN AREA



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.

POST EMBEDMENT DEPTH

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

GENERAL NOTES

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

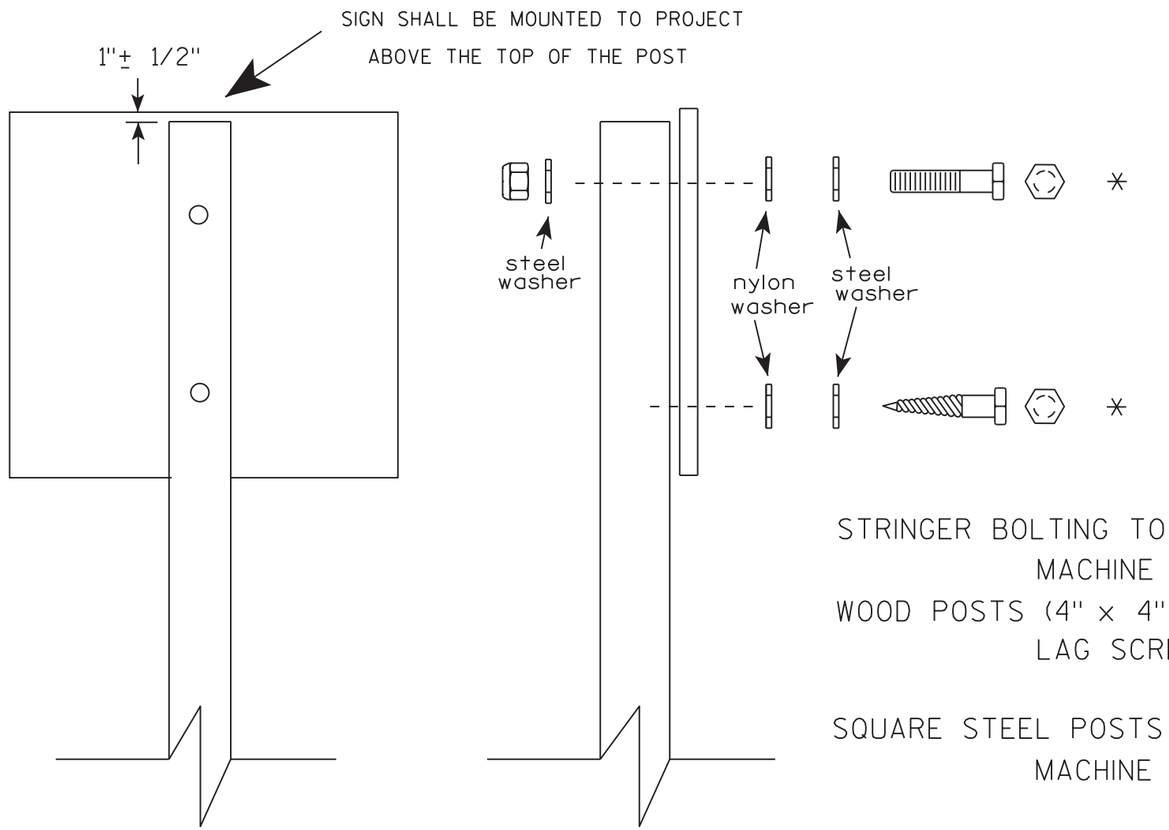
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

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

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

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

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

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

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

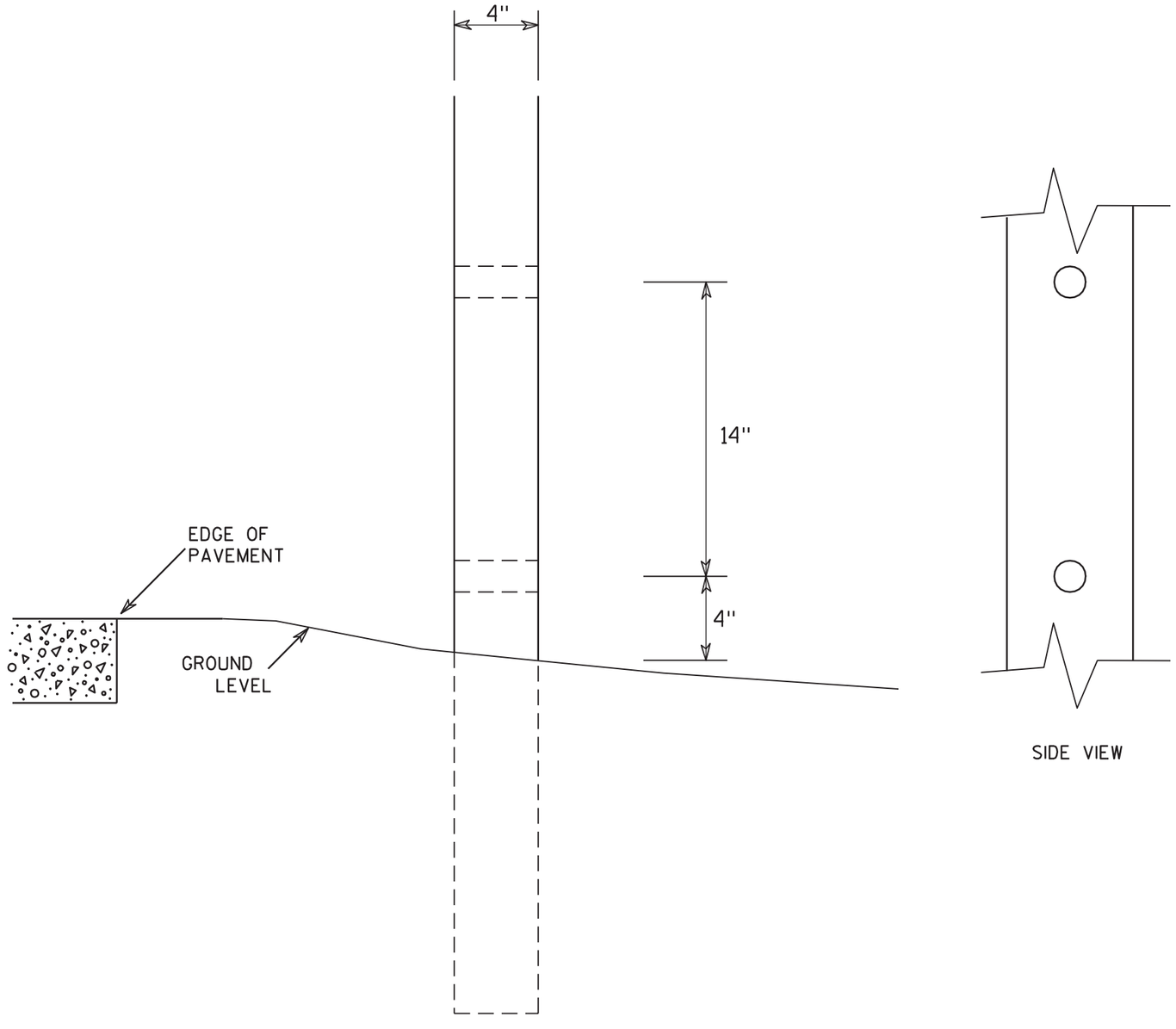
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: E



SIDE VIEW

GENERAL NOTES

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

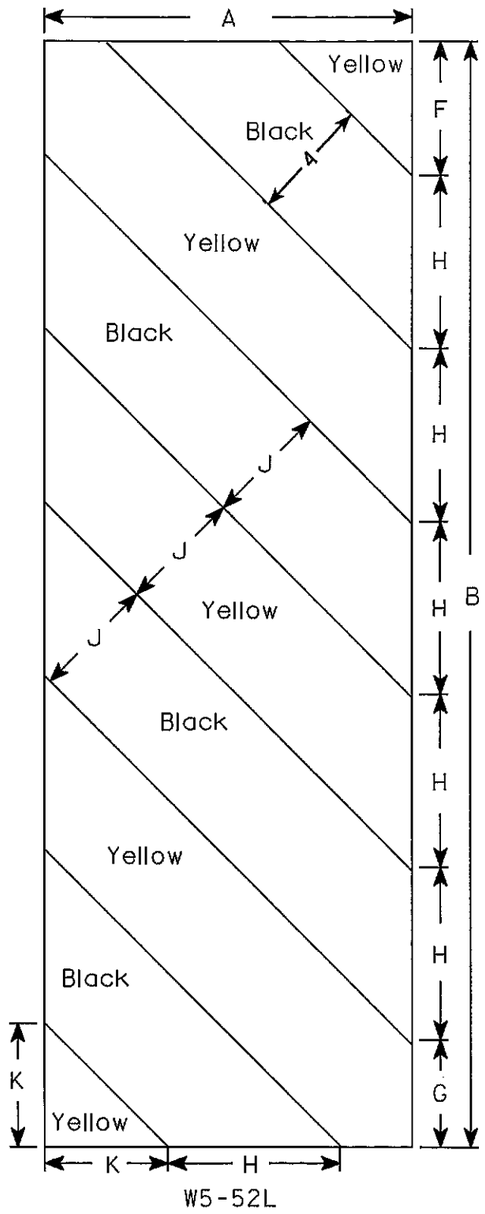
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

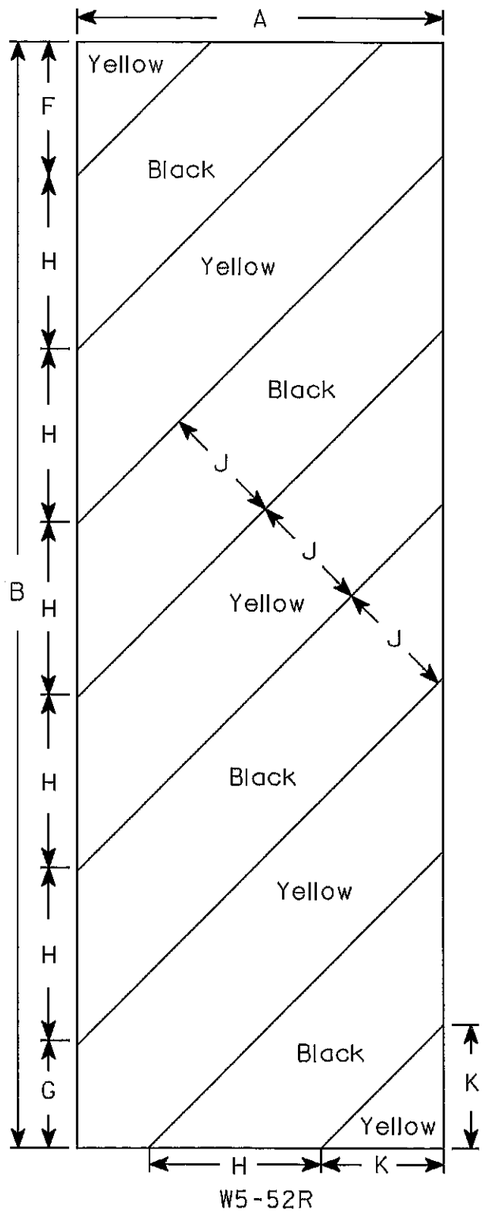
APPROVED Chester J Spang for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 50	E



W5-52L



W5-52R

NOTES

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

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

STANDARD SIGN

W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

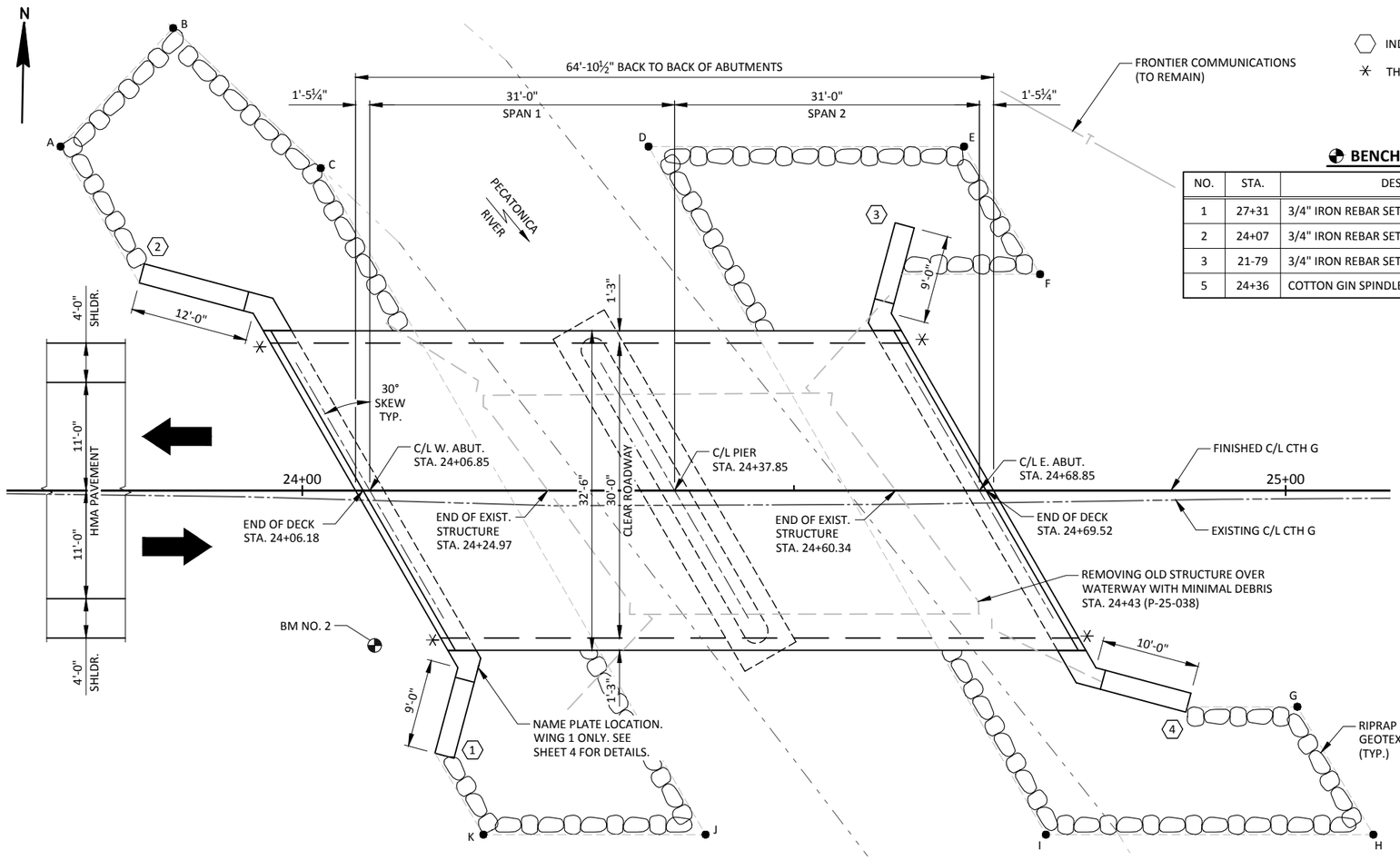
DATE 5/29/12 PLATE NO. W5-52.9

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W552.DGN PLOT DATE : 29-MAY-2012 13:03 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 4.961899:1.000000 WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER

5958-00-70



INDICATES WING NUMBER

THRIE BEAM RAIL ATTACHMENT

BENCH MARKS

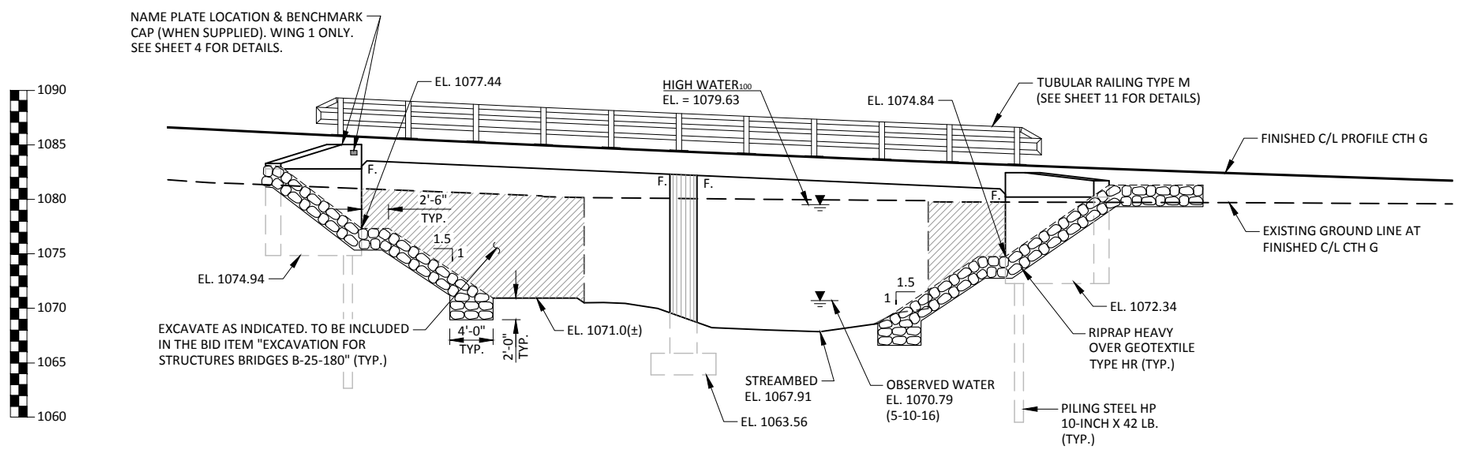
NO.	STA.	DESCRIPTION	ELEV.
1	27+31	3/4" IRON REBAR SET, 17.7' RT.	1076.24
2	24+07	3/4" IRON REBAR SET, 15.8', RT.	1080.45
3	21-79	3/4" IRON REBAR SET, 27.4', LT.	1097.53
5	24+36	COTTON GIN SPINDLE IN PPOL, 46.9' RT.	1079.92

RIPRAP HEAVY LAYOUT

POINT	STATION	OFFSET
A	23+75	35' LT.
B	23+87	47' LT.
C	24+02	33' LT.
D	24+35	35' LT.
E	24+67	35' LT.
F	24+75	22' LT.
G	25+01	22' RT.
H	25+09	35' RT.
I	24+76	35' RT.
J	24+41	35' RT.
K	24+18	35' RT.

PLAN B-25-180

(TWO-SPAN REINFORCED CONCRETE FLAT SLAB)



ELEVATION

(NORMAL TO PECATONICA RIVER

DESIGN DATA

LIVE LOAD:

DESIGN LOADING — HL-93
INVENTORY RATING FACTOR — RF=1.19
OPERATING RATING FACTOR — RF=1.55
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) — 250 KIPS

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

MATERIAL PROPERTIES:

CONCRETE MASONRY, SLAB — $f'c$ = 4,000 P.S.I.
ALL OTHER — $f'c$ = 3,500 P.S.I.
HIGH-STRENGTH BAR STEEL
REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON PILING STEEL HP 10-INCH X 42 LB DRIVEN TO A REQ'D. DRIVING RESISTANCE OF 100 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATE 20 FT PILE LENGTHS AT BOTH ABUTMENTS.

PIER TO BE SUPPORTED BY SPREAD FOOTING ON SOUND ROCK WITH A REQ'D. FACTORED BEARING RESISTANCE OF 18 KSF.*** A GEOTECHNICAL ENGINEER, WITH THREE DAYS NOTICE, WILL DETERMINE THE FACTORED BEARING RESISTANCE BY VISUAL INSPECTION PRIOR TO CONSTRUCTION OF THE PIER FOOTING.

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

***THE FACTORED BEARING RESISTANCE IS THE VALUE USED FOR DESIGN.

TRAFFIC DATA

A.D.T. (2018) — 220
A.D.T. (2038) — 240
DESIGN SPEED — 40 M.P.H.

HYDRAULIC DATA

100-YEAR FREQUENCY
DRAINAGE AREA — 7.7 SQ. MI.
Q_{100} TOTAL — 3,010 C.F.S.
THROUGH STRUCTURE — 2,035 C.F.S.
OVERTOPPING ROADWAY — 975 C.F.S.
VELOCITY - THROUGH STRUCTURE — 9.8 F.P.S.
WATERWAY AREA - THROUGH STRUCTURE — 209 SQ. FT.
HIGH WATER$_{100}$ ELEVATION — 1079.63
SCOUR CRITICAL CODE — 5

DESIGN ROADWAY OVERFLOW FREQUENCY
ROADWAY OVERTOPPING FREQUENCY — 38 YRS.
Q_{38} — 2,170 C.F.S.
HIGH WATER$_{38}$ ELEVATION — 1078.51

EROSION CONTROL
Q_2 — 690 C.F.S.
HIGH WATER$_2$ ELEVATION — 1074.88
VELOCITY$_2$ — 4.3 F.P.S.

WISCONSIN
PATRICK T. BOLAND
E-36303
SPRING GREEN
WI
PROFESSIONAL ENGINEER
4-10-18

LIST OF DRAWINGS

GENERAL PLAN — 1.
CROSS SECTION AND QUANTITIES — 2.
SUBSURFACE EXPLORATION — 3.
WEST ABUTMENT — 4.
WEST ABUTMENT DETAILS — 5.
EAST ABUTMENT — 6.
EAST ABUTMENT DETAILS — 7.
PIER — 8.
SUPERSTRUCTURE — 9.
SUPERSTRUCTURE DETAILS — 10.
TUBULAR RAILING TYPE M — 11.

DESIGN CONSULTANT
PATRICK BOLAND, PE
(608) 588-7484

BRIDGE OFFICE CONTACT
WILLIAM DREHER, PE
(608) 266-8489

NO.	DATE	REVISION	BY

JEWELL associates engineers, inc.
Engineers - Architects - Surveyors
560 SUNRISE DRIVE
SPRING GREEN, WI 53588
OFFICE: (608) 588-7484
www.jewellassoc.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR — 05/08/18
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-25-180

CTH G OVER PECATONICA RIVER

COUNTY: IOWA | TOWN/~~CITY/VILLAGE~~: MIFFLIN

DESIGN SPEC.: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
JZ	PTB	JZ	PTB

GENERAL PLAN

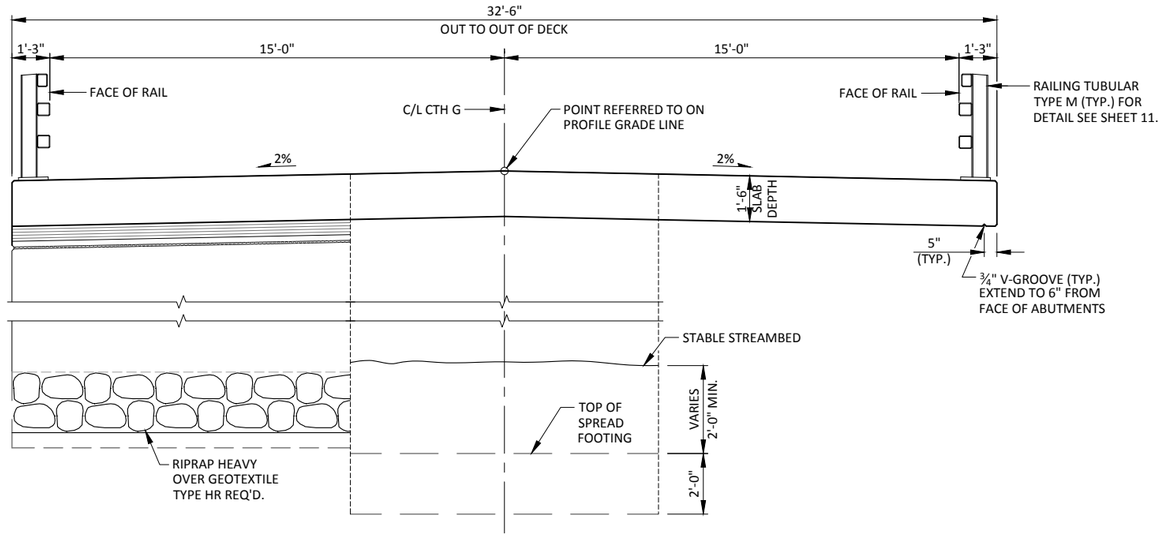
SHEET 1 OF 11

52

8

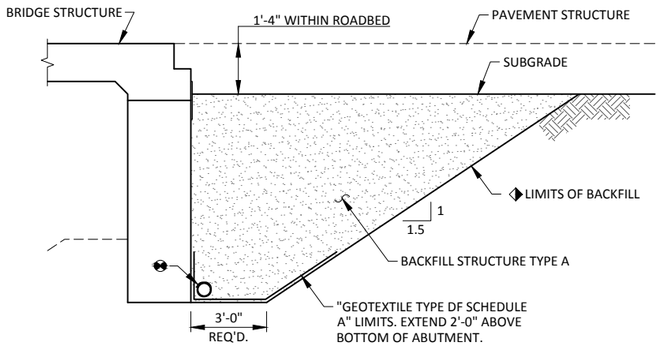
8

STATE PROJECT NUMBER
5958-00-70



PROPOSED CROSS-SECTION THROUGH ROADWAY

(LOOKING EAST)

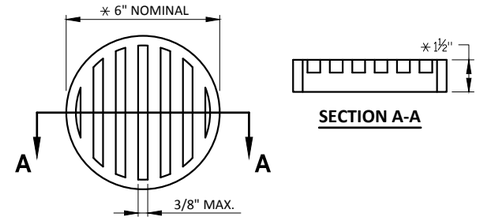


◆ BACKFILL STRUCTURE TYPE A PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO THE BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES B-25-180". LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

◆ PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPED 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON THIS SHEET. RODENT SCREEN TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH."

BACKFILL STRUCTURE DETAIL

ABUTMENT BODY SHOWN - WING WALLS SIMILAR
(TYPICAL AT BOTH ABUTMENTS)



RODENT SCREEN

SECTION A-A

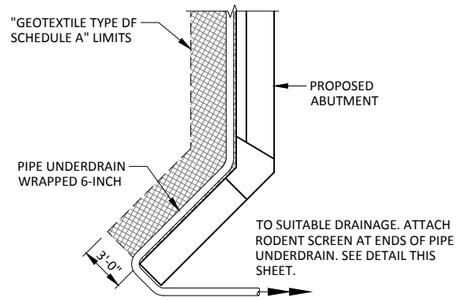
NOTES:

⁎ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

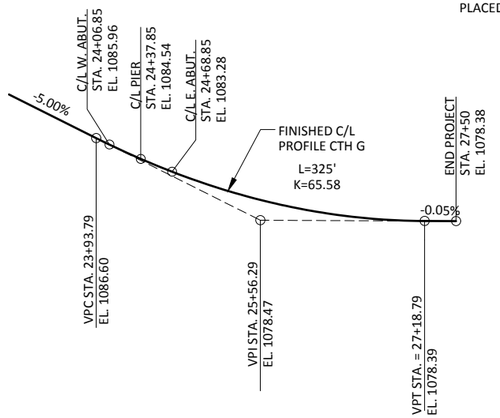
ORIENT SCREEN SO SLOTS ARE VERTICAL.

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

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

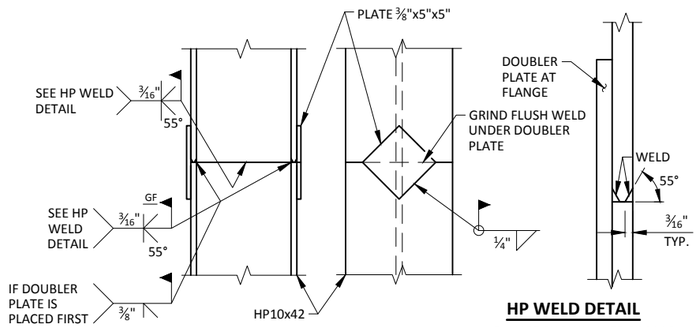


PIPE UNDERDRAIN DETAIL



PROFILE GRADE LINE

CTH G



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE SPLICE DETAIL

STEEL "HP" PILE MATERIAL SHALL BE ASTM A572 GRADE 50.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICA VERTICAL DATUM OF 1988 (NAVD 88).

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

JOINT FILLER SHALL CONFORM TO A.A.S.H.T.O. DESIGNATION MI53, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M213.

THE SLOPE OF FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE TYPE HR TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS, OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

AT THE BACK FACE OF ABUTMENTS, ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE TYPE A. SEE THIS SHEET FOR DETAIL.

SPREAD FOOTING AT PIER SHALL BE KEYED A MINIMUM OF 6" INTO SOUND ROCK TO PROVIDE LATERAL STABILITY.

ANY EXCAVATION BELOW THE ABUTMENT AND ASSOCIATED ABUTMENT BEDDING MATERIALS REQUIRE THE APPROVAL OF THE ENGINEER IN THE FIELD.

APPLY PROTECTIVE SURFACE TREATMENT TO THE TOP OF THE DECK, THE SIDES OF THE DECK AND EXTERIOR 12" OF THE UNDERSIDE OF THE DECK (CONCRETE MATERIAL ONLY).

THE EXISTING STRUCTURE (P-25-038) IS A SINGLE SPAN CONCRETE DECK GIRDER STRUCTURE SUPPORTED ON FULL RETAINING CONCRETE ABUTMENTS. THE STRUCTURE HAS A 19.1' CLEAR ROADWAY WIDTH AND IS 31.5' LONG AND SHALL BE REMOVED.

ALL STATIONS AND ELEVATIONS SHOWN ARE IN FEET.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-25-180" SHALL BE THE EXISTING GROUNDLINE.

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

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	W. ABUT.	PIER	E. ABUT.	SUPER	TOTALS
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 24+43	LS	--	--	--	--	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-25-180	LS	--	--	--	--	1
206.5000	COFFERDAMS B-25-180	LS	--	--	--	--	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	285	--	285	--	570
502.0100	CONCRETE MASONRY BRIDGES	CY	51	70	49	121	291
502.3200	PROTECTIVE SURFACE TREATMENT	SY	--	--	--	270	270
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	2,980	4,180	2,950	--	10,110
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,710	70	1,570	23,380	26,730
513.4061	RAILING TUBULAR TYPE M B-25-180	LF	--	--	--	131	131
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	7	--	--	7	14
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	160	--	160	--	320
606.0300	RIPRAP HEAVY	CY	130	--	135	--	265
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	85	--	85	--	170
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	60	--	60	--	120
645.0120	GEOTEXTILE TYPE HR	SY	210	--	230	--	440
	NON-BID ITEMS						
	FILLER	SIZE					½" & ¾"
	NAME PLATE						

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-25-180

DRAWN BY: JZ | PLANS CK'D.: PTB

CROSS SECTIONS & QUANTITIES

SHEET 2 OF 11

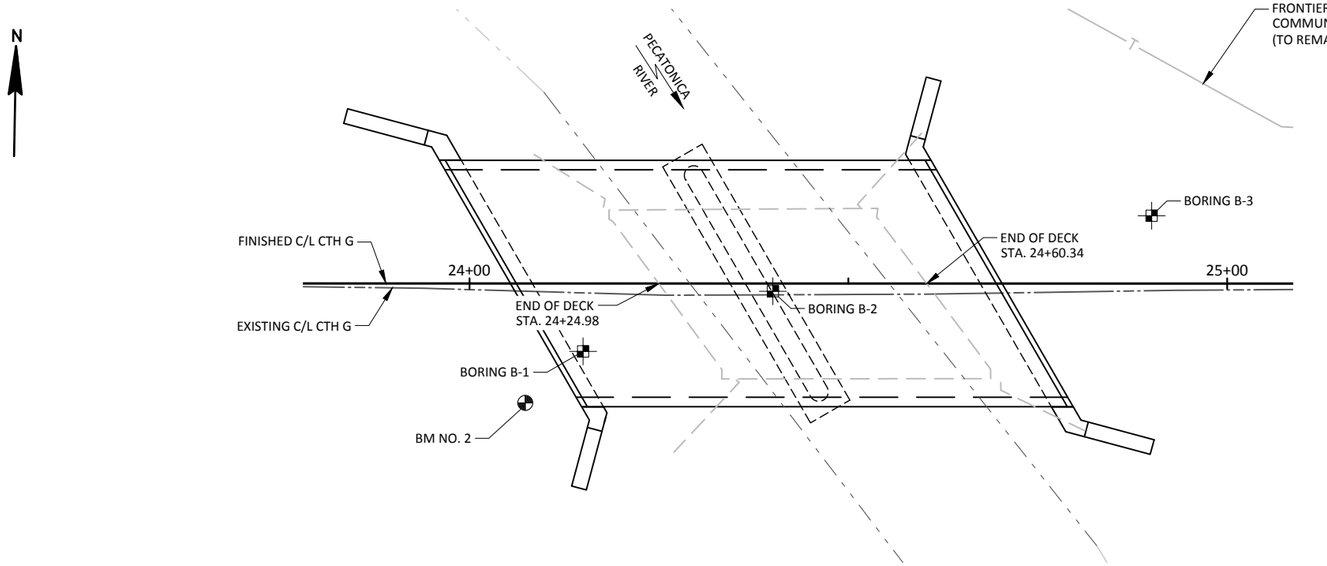
53

8

8

STATE PROJECT NUMBER

5958-00-70



PLAN B-25-180

SOIL BORINGS

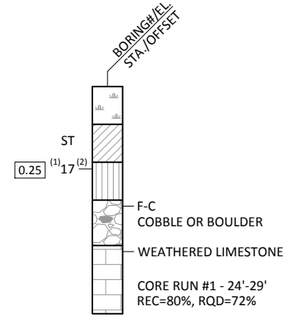
BORING NUMBER	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	10/12/16	142,564.2	324,057.8
2	10/13/16	142,572.6	324,082.7
3	10/12/16	142,583.5	324,132.5

BORINGS & REPORT COMPLETED BY: NUMMELIN TESTING SERVICES, INC. (NTS)
5620 WOODLAND DRIVE
WAUNAKEE, WI 53597

MATERIAL SYMBOLS

Asphalt, Topsoil, Peat, Concrete, Fill, Gravel, Sand, Clay, Silt, Boulders or Cobbles, Limestone, Bedrock (unknown), Shale, Sandstone, Igneous/ meta

LEGEND OF BORING



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

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

GROUND WATER ELEVATIONS

AT TIME OF DRILLING
END OF DRILLING
AFTER DRILLING

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-25-180

DRAWN BY . PLANS CK'D. .

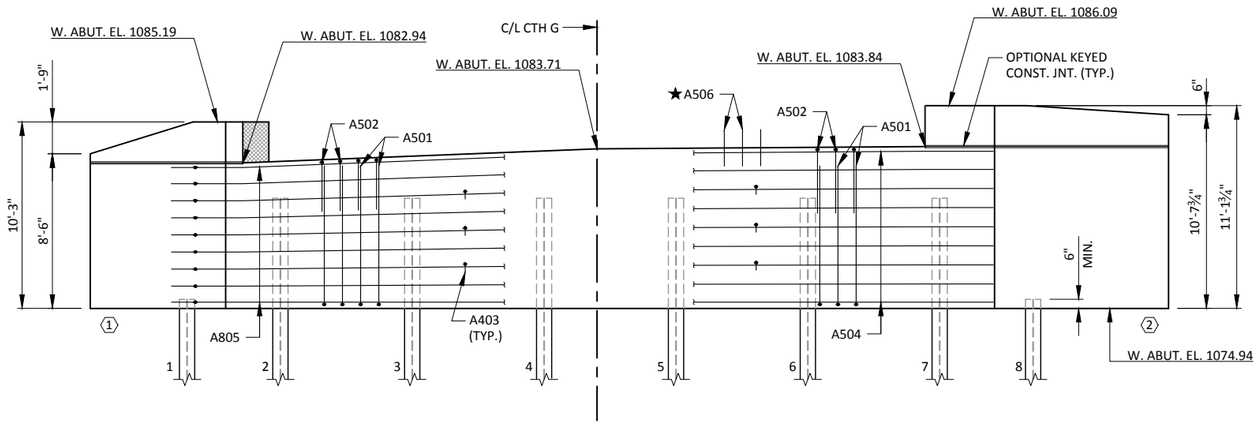
SUBSURFACE EXPLORATION

SHEET 3 OF 11

54

STATE PROJECT NUMBER

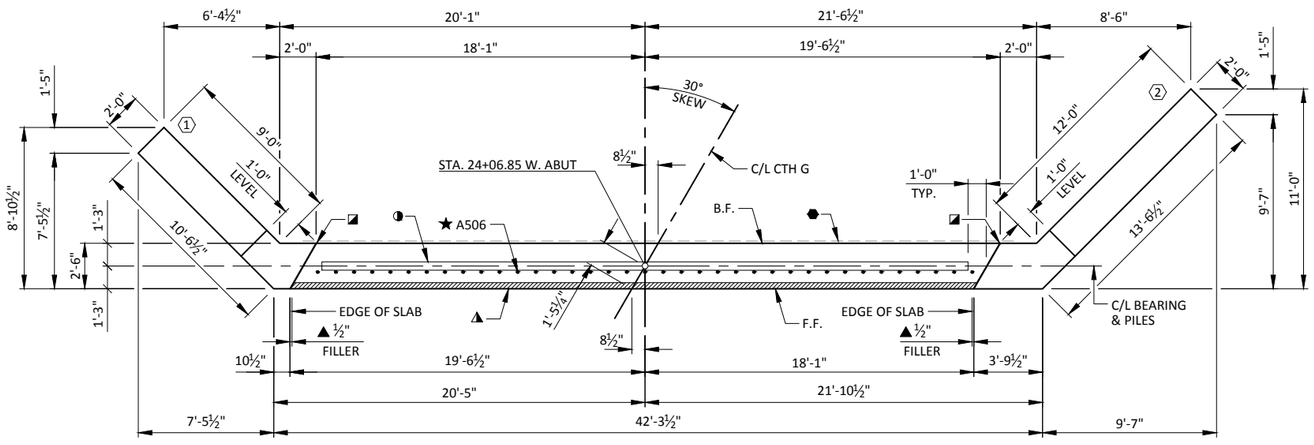
5958-00-70



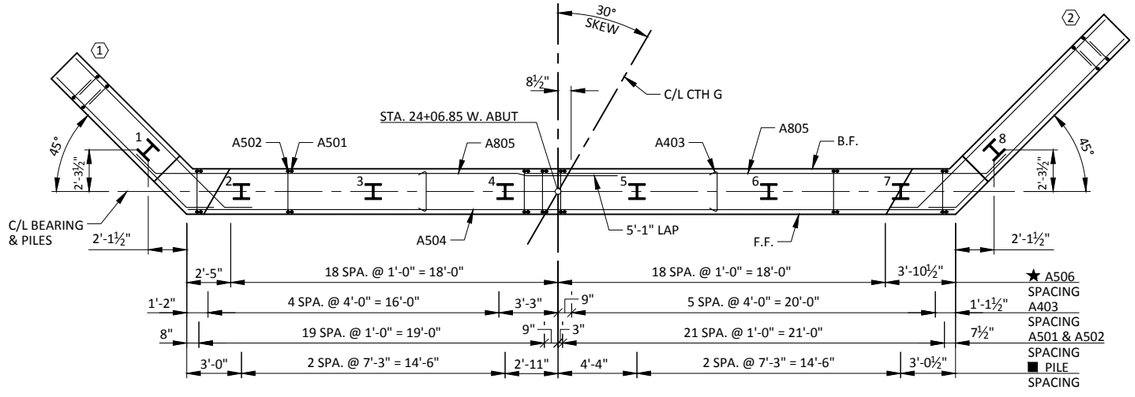
BACK FACE BAR STEEL REINF. **FRONT FACE BAR STEEL REINF.**

ELEVATION

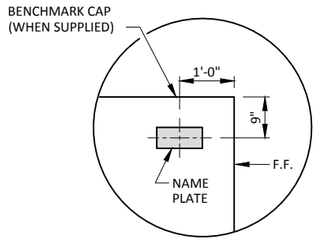
(WEST ABUTMENT LOOKING WEST)



PLAN

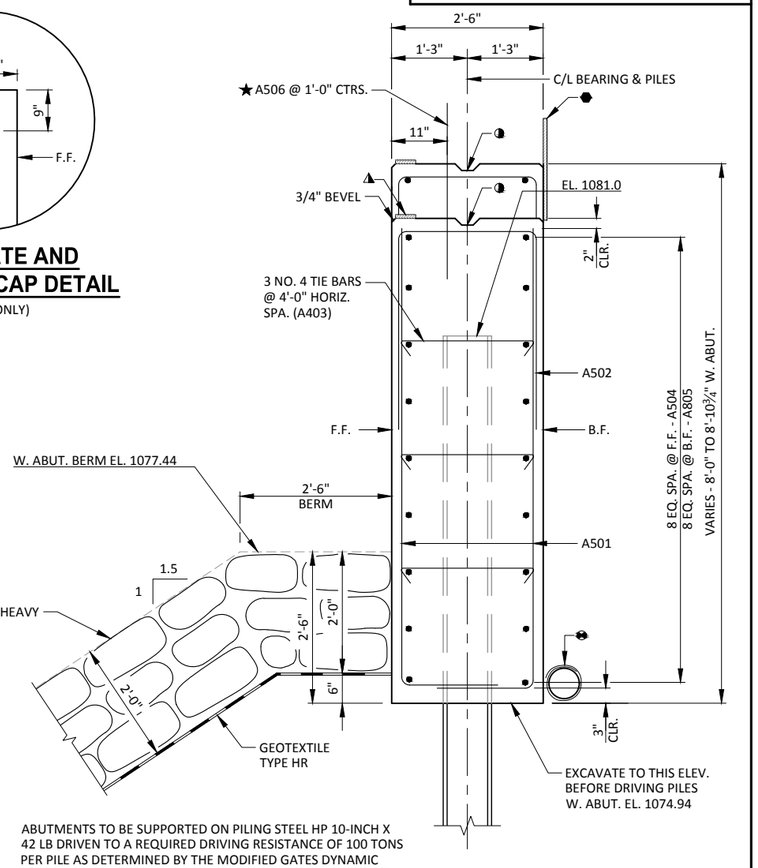


LAYOUT



NAME PLATE AND BENCHMARK CAP DETAIL

(WING 1 ONLY)



ABUTMENTS TO BE SUPPORTED ON PILING STEEL HP 10-INCH X 42 LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 100 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATE 20 FT PILE LENGTHS AT WEST ABUTMENT.

TYPICAL SECTION THROUGH ABUTMENT BODY

LEGEND

- ◐ KEYED CONSTRUCTION JOINT FORMED BY SURFACED & BEVELED 2x6.
- ◪ VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING EXTEND FROM 9" BELOW BRIDGE SEAT TO 1" BELOW TOP OF WINGS.
- ⬣ 18" RUBBERIZED MEMBRANE WATERPROOFING. (HORIZONTAL)
- ▲ ½" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINUOS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE)
- ◭ ¾" x 4" PREFORMED FILLER, EXTEND FULL LENGTH OF ABUTMENTS BETWEEN EDGES OF SLAB.
- ★ A506 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE IT HAS TAKEN ITS INITIAL SET. EMBED BAR 1'-0".
- ■ PILE SPACING MEASURED AT BASE OF ABUTMENT BODY.
- ⬬ PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPED 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 2. RODENT SCREEN TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH."

NOTES

SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE SHEET 5 FOR BILL OF BARS.

SEAT ELEVATIONS SHOWN IN THE ELEVATION VIEW ARE TAKEN AT THE C/L OF BEARING, NEGLECTING THE CONST. JOINT.

DO NOT PLACE FILL HIGHER THAN 3 FEET FROM BOTTOM OF ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

SPACE REINFORCEMENT TO MISS PILING

F.F. - FRONT FACE

B.F. - BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-25-180

DRAWN BY JZ | PLANS CK'D. PTB

WEST ABUTMENT

SHEET 4 OF 11

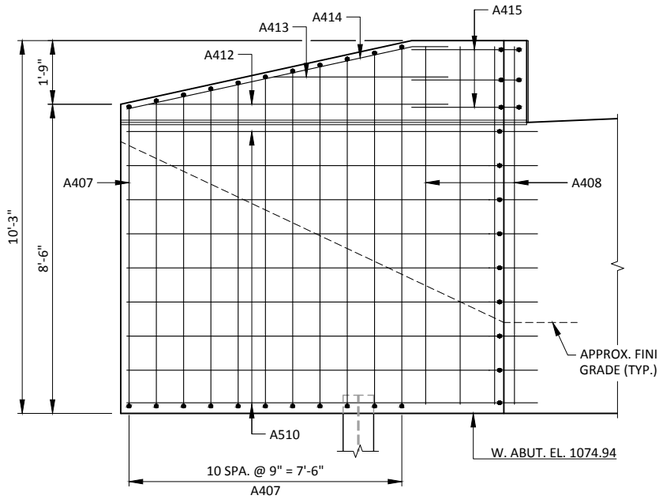
55

8

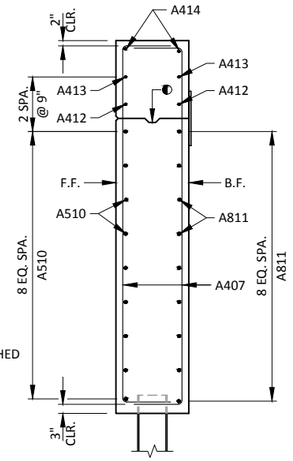
8

STATE PROJECT NUMBER

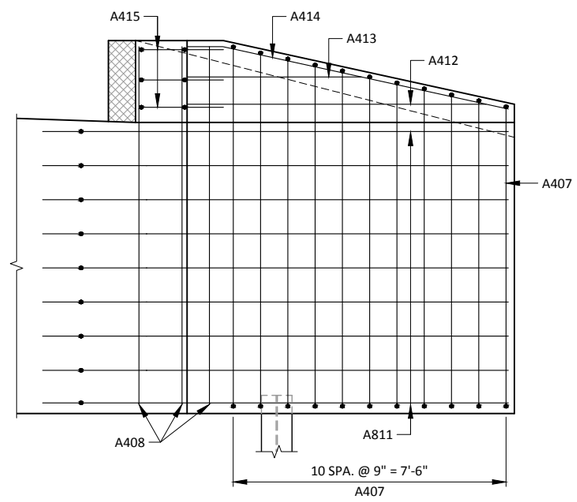
5958-00-70



F.F. ELEVATION - WING 1



SECTION A-A



B.F. ELEVATION - WING 1

BILL OF BARS
WEST ABUTMENT

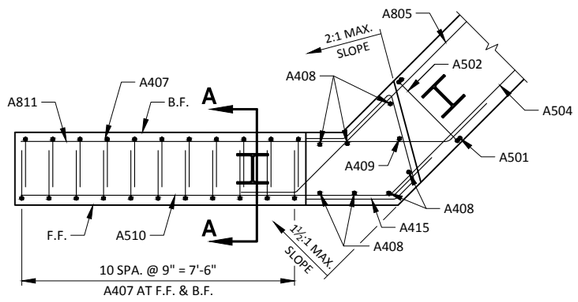
1,710 LB (COATED)
2,980 LB (UNCOATED)

BAR MARK	NO. REQ'D.	LENGTH	BENT	COAT	BAR SERIES	LOCATION
A501	84	9-1	X			BODY - VERT. - F.F & B.F.
A502	42	9-5	X			BODY - VERT. - TOP
A403	33	2-8	X			TIE BARS
A504	9	42-1				BODY - HORIZ. - F.F.
A805	18	27-4	X			BODY - HORIZ. - B.F.
A506	37	2-0		X		BODY - VERT. - DOWELS
A407	22	11-5	X	X	⚹	WING 1 - VERT. - F.F. & B.F.
A408	7	9-10		X		WING 1 - VERT.
A409	1	2-10		X		WING 1 - VERT. - TOP
A510	9	11-9	X	X		WING 1 - HORIZ. - F.F.
A811	9	13-5	X	X		WING 1 - HORIZ. - B.F.
A412	2	8-3		X		WING 1 -HORIZ. - F.F. & B.F.
A413	2	4-10		X		WING 1 -HORIZ. - F.F. & B.F.
A414	2	9-0	X	X		WING 1 - HORIZ. - F.F. & B.F. - TOP
A415	3	8-4	X	X		WING 1 - HORIZ. - TOP
A416	30	13-0	X	X	⚹	WING 2 - VERT. - F.F. & B.F.
A417	10	10-9		X		WING 2 - VERT.
A418	1	2-10		X		WING 2 - VERT. - TOP
A519	9	14-9	X	X		WING 2 - HORIZ. - F.F.
A820	9	16-5	X	X		WING 2 - HORIZ. - B.F.
A421	4	11-10		X		WING 2 -HORIZ. - F.F. & B.F.
A422	2	11-10	X	X		WING 2 - HORIZ. - F.F. & B.F. - TOP
A423	3	11-1	X	X		WING 2 - HORIZ. - TOP

⚹ NOTES: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

LENGTH SHOWN IS AN AVERAGE LENGTH ONLY. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



PLAN VIEW - WING 1

LEGEND

◐ OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY SURFACED & BEVELED 2x6. ¾" "V" GROOVE AT FRONT FACE OF WING WALL AND HORIZONTAL 18" RUBBERIZED MEMBRANE WATERPROOFING AT BACK FACE IF CONSTRUCTION JOINT IS USED. COST IS INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY BRIDGES".

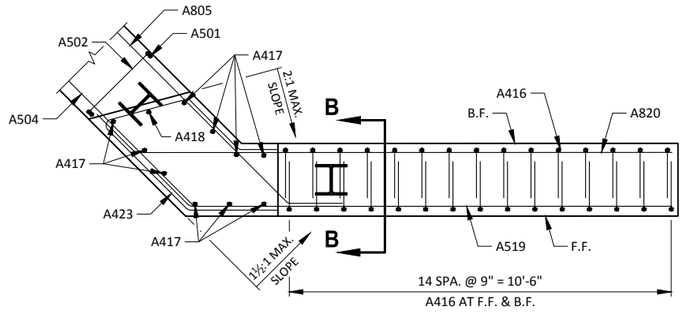
NOTES

SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE THIS SHEET FOR BILL OF BARS.

SPACE REINFORCEMENT TO MISS PILING

F.F. - FRONT FACE

B.F. - BACK FACE

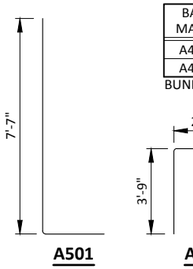


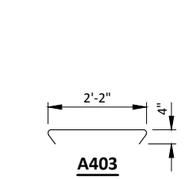
PLAN VIEW - WING 2

BAR SERIES TABLE

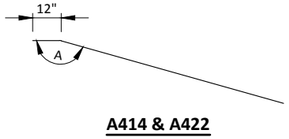
BAR MARK	NO. REQ'D.	LENGTH
A407	2 SERIES OF 11	12-3 TO 10-7
A416	2 SERIES OF 15	13-3 TO 12-9

BUNDLE AND TAG EACH SERIES SEPARATELY.

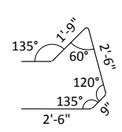


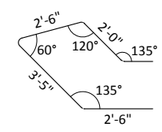


A805, A510, A811, A519 & A820

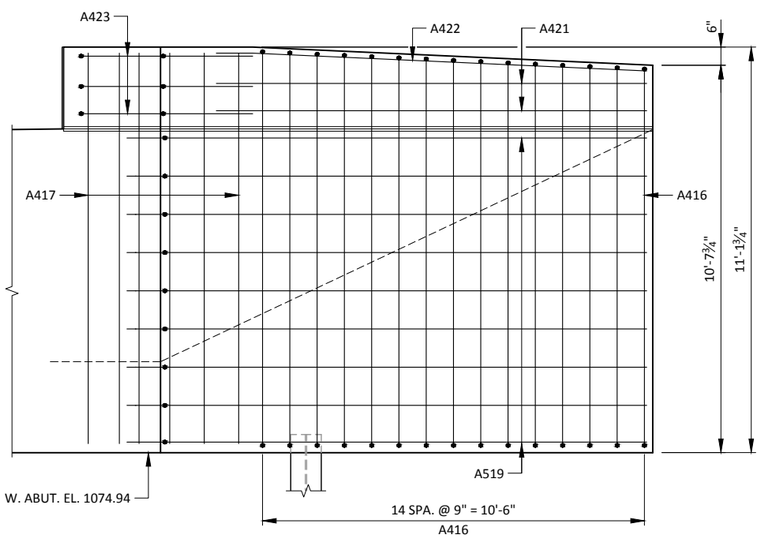


A414 & A422

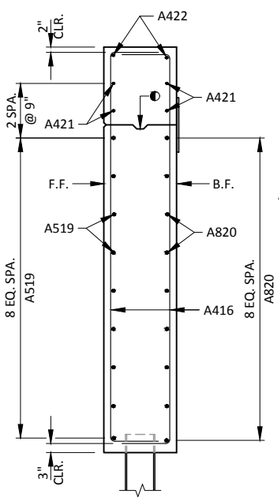




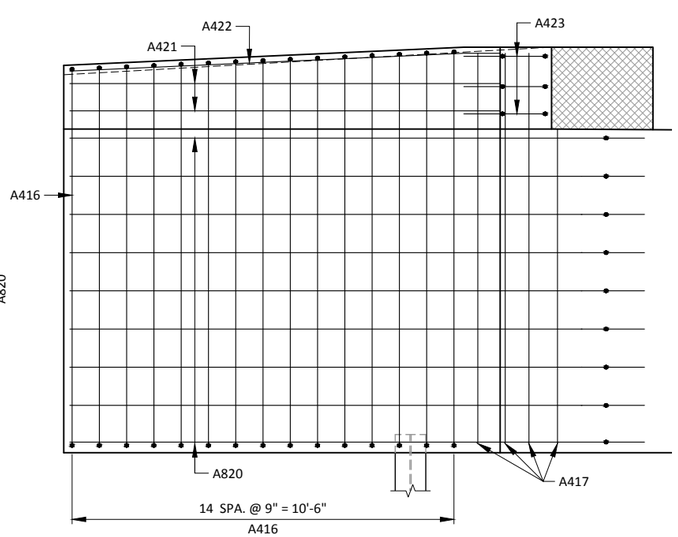
MARK	'A'
A414	167°40'
A422	177°24'



F.F. ELEVATION - WING 2



SECTION B-B



B.F. ELEVATION - WING 2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-25-180

DRAWN BY JZ | PLANS CK'D. PTB

WEST ABUTMENT DETAILS

SHEET 5 OF 11

56

8

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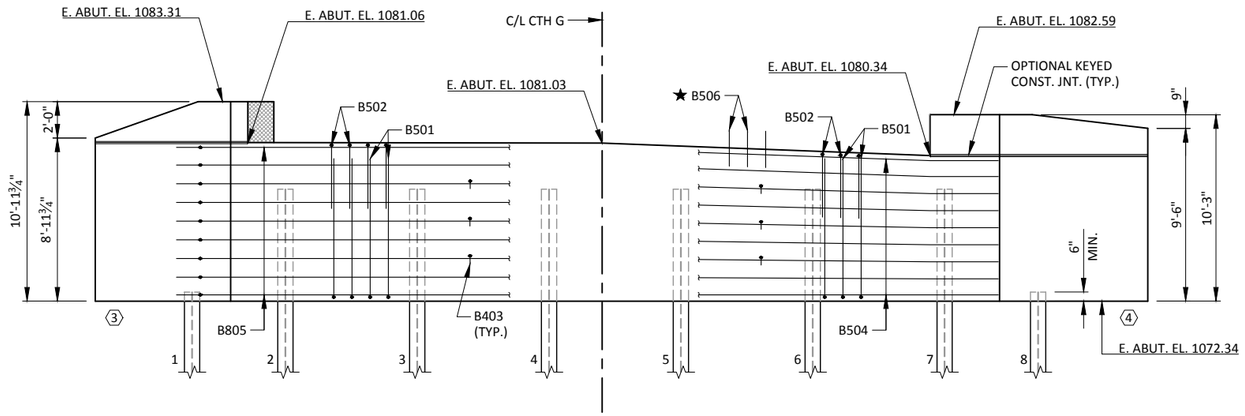
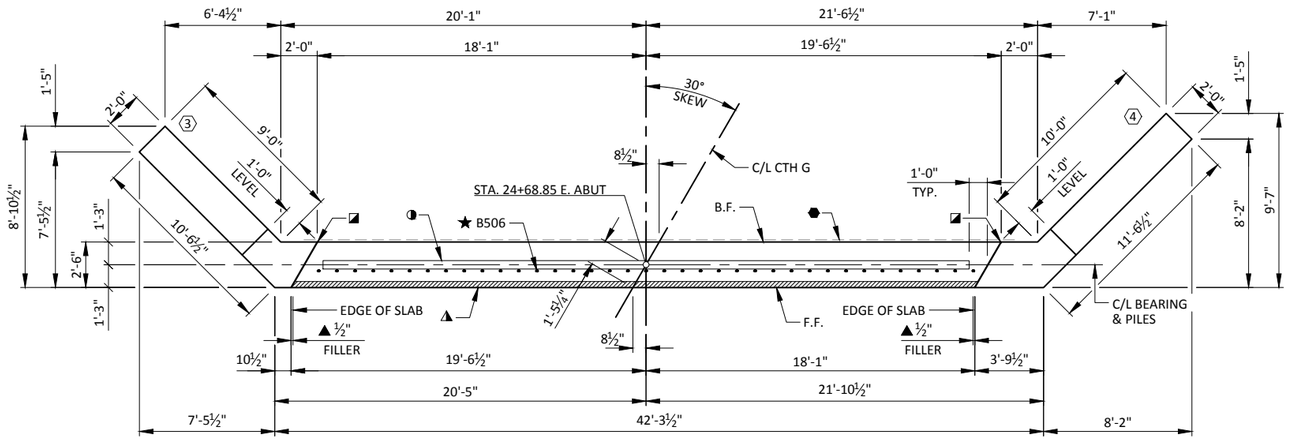


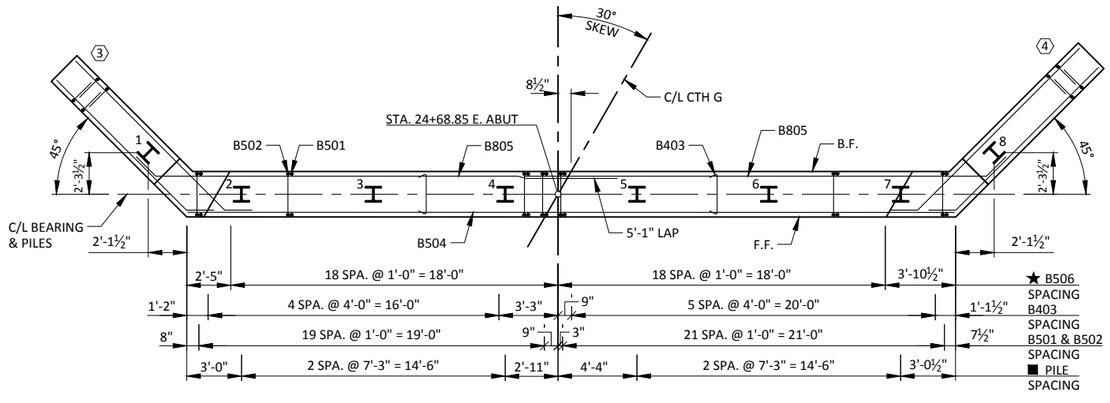
BACK FACE BAR STEEL REINF. **FRONT FACE BAR STEEL REINF.**

ELEVATION

(EAST ABUTMENT LOOKING EAST)



PLAN



LAYOUT

NOTES

SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE SHEET 7 FOR BILL OF BARS.

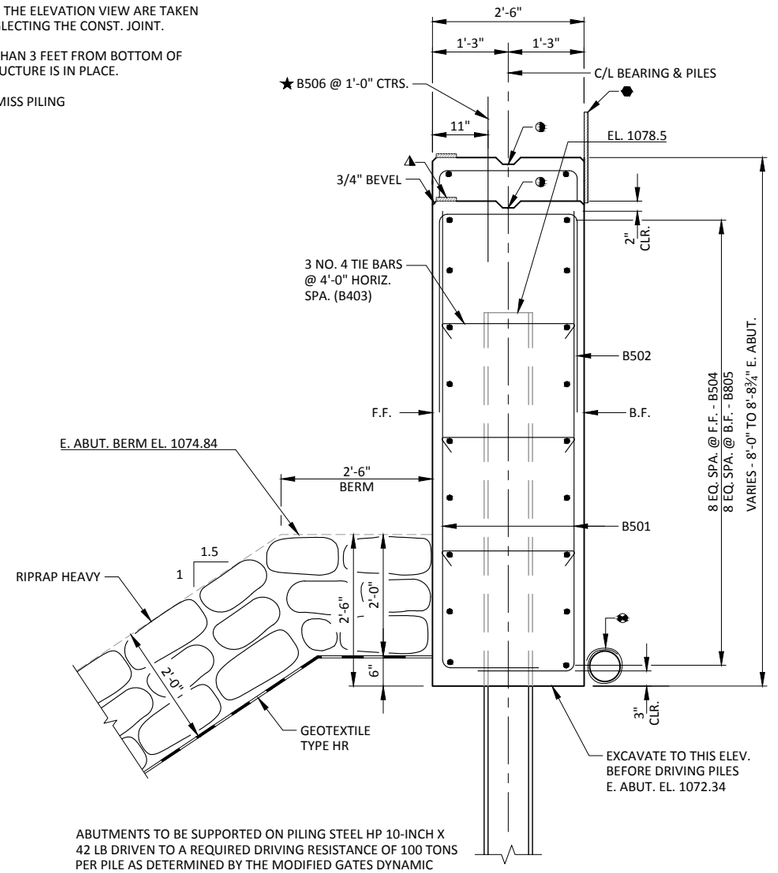
SEAT ELEVATIONS SHOWN IN THE ELEVATION VIEW ARE TAKEN AT THE C/L OF BEARING, NEGLECTING THE CONST. JOINT.

DO NOT PLACE FILL HIGHER THAN 3 FEET FROM BOTTOM OF ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

SPACE REINFORCEMENT TO MISS PILING

F.F. - FRONT FACE

B.F. - BACK FACE



ABUTMENTS TO BE SUPPORTED ON PILING STEEL HP 10-INCH X 42 LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 100 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATE 20 FT PILE LENGTHS AT EAST ABUTMENT.

TYPICAL SECTION THROUGH ABUTMENT BODY

LEGEND

- ◐ KEYED CONSTRUCTION JOINT FORMED BY SURFACED & BEVELED 2x6.
- ◪ VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING EXTEND FROM 9" BELOW BRIDGE SEAT TO 1" BELOW TOP OF WINGS.
- ⬣ 18" RUBBERIZED MEMBRANE WATERPROOFING. (HORIZONTAL)
- ▲ ½" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINUOS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE)
- ◭ ¾" x 4" PREFORMED FILLER, EXTEND FULL LENGTH OF ABUTMENTS BETWEEN EDGES OF SLAB.
- ★ B506 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE IT HAS TAKEN ITS INITIAL SET. EMBED BAR 1'-0".
- ■ PILE SPACING MEASURED AT BASE OF ABUTMENT BODY.
- ⬲ PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPED 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SCREEN AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 2. RODENT SCREEN TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH."

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-25-180

DRAWN BY JZ | PLANS CK'D. PTB

EAST ABUTMENT

SHEET 6 OF 11

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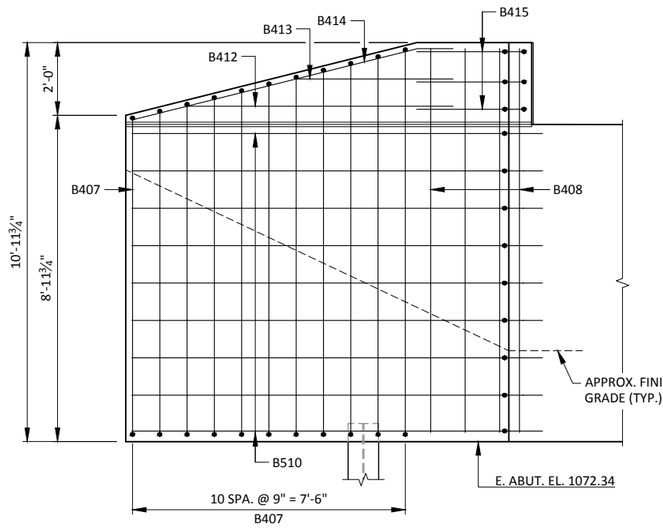
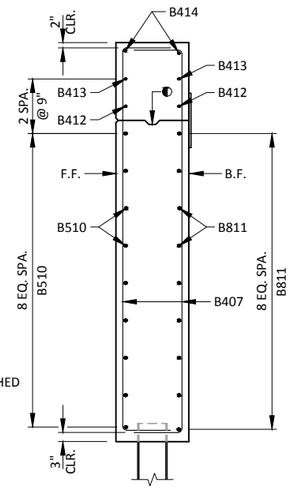
STATE PROJECT NUMBER

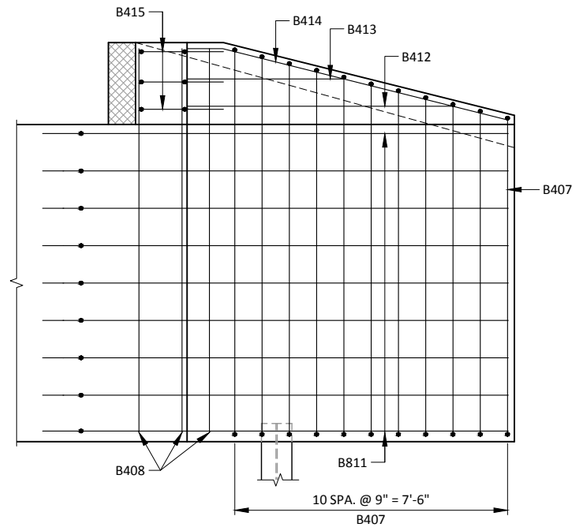
5958-00-70



F.F. ELEVATION - WING 3



SECTION A-A



B.F. ELEVATION - WING 3

BILL OF BARS
EAST ABUTMENT

1,570 LB (COATED)
2,950 LB (UNCOATED)

BAR MARK	NO. REQ'D.	LENGTH	BENT	COAT	BAR SERIES	LOCATION
B501	84	9-1	X			BODY - VERT. - F.F & B.F.
B502	42	8-9	X			BODY - VERT. - TOP
B403	33	2-8	X			TIE BARS
B504	9	42-1				BODY - HORIZ. - F.F.
B805	18	27-4	X			BODY - HORIZ. - B.F.
B506	37	2-0		X		BODY - VERT. - DOWELS
B407	22	12-0	X	X	⚹	WING 3 - VERT. - F.F. & B.F.
B408	7	10-7		X		WING 3 - VERT.
B409	1	2-10		X		WING 3 - VERT. - TOP
B510	9	11-9	X	X		WING 3 - HORIZ. - F.F.
B811	9	13-5	X	X		WING 3 - HORIZ. - B.F.
B412	2	7-4		X		WING 3 -HORIZ. - F.F. & B.F.
B413	2	4-4		X		WING 3 -HORIZ. - F.F. & B.F.
B414	2	9-1	X	X		WING 3 - HORIZ. - F.F. & B.F. - TOP
B415	3	8-4	X	X		WING 3 - HORIZ. - TOP
B416	24	11-11	X	X	⚹	WING 4 - VERT. - F.F. & B.F.
B417	10	9-10		X		WING 4 - VERT.
B418	1	2-10		X		WING 4 - VERT. - TOP
B519	9	12-9	X	X		WING 4 - HORIZ. - F.F.
B820	9	14-5	X	X		WING 4 - HORIZ. - B.F.
B421	4	9-10		X		WING 4 -HORIZ. - F.F. & B.F.
B422	2	9-10	X	X		WING 4 - HORIZ. - F.F. & B.F. - TOP
B423	3	11-1	X	X		WING 4 - HORIZ. - TOP

⚹ NOTES: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

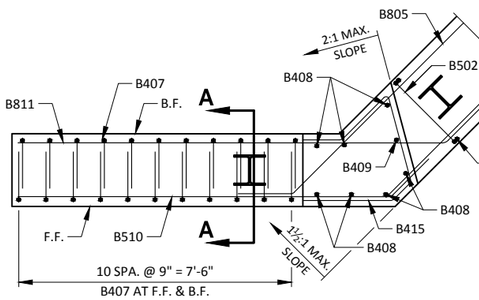
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

LENGTH SHOWN IS AN AVERAGE LENGTH ONLY. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
B407	2 SERIES OF 11	12-11 TO 11-1
B416	2 SERIES OF 12	12-3 TO 11-7

BUNDLE AND TAG EACH SERIES SEPARATELY.



PLAN VIEW - WING 3

LEGEND

◐ OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY SURFACED & BEVELED 2x6. ¾" "V" GROOVE AT FRONT FACE OF WING WALL AND HORIZONTAL 18" RUBBERIZED MEMBRANE WATERPROOFING AT BACK FACE IF CONSTRUCTION JOINT IS USED. COST IS INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY BRIDGES".

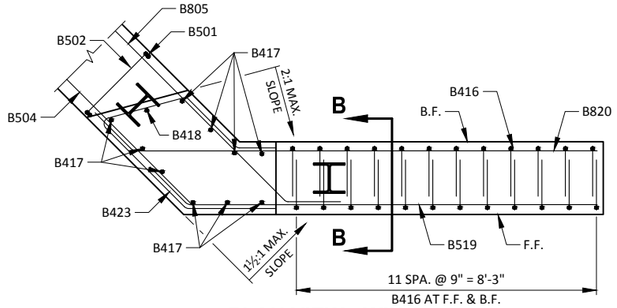
NOTES

SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE THIS SHEET FOR BILL OF BARS.

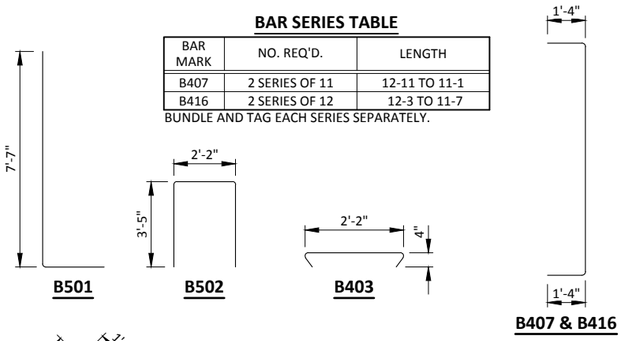
SPACE REINFORCEMENT TO MISS PILING

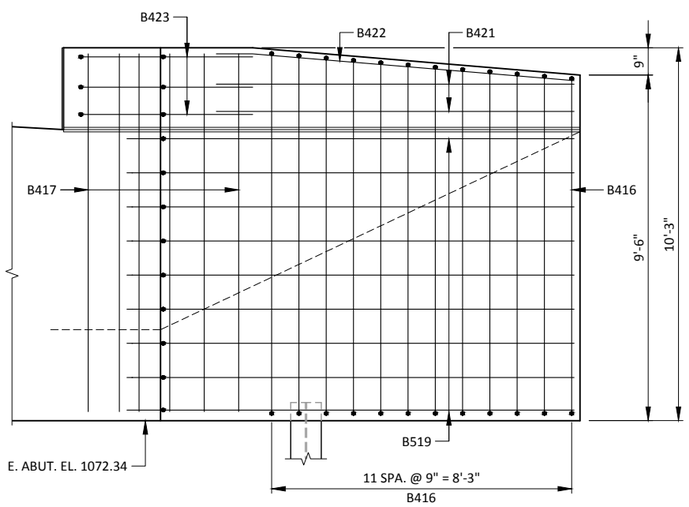
F.F. - FRONT FACE

B.F. - BACK FACE

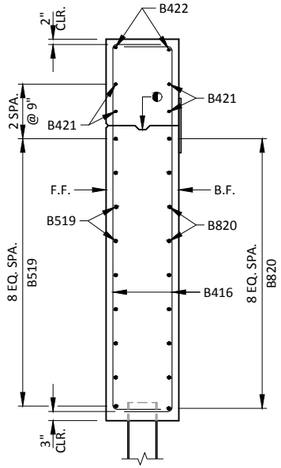


PLAN VIEW - WING 4

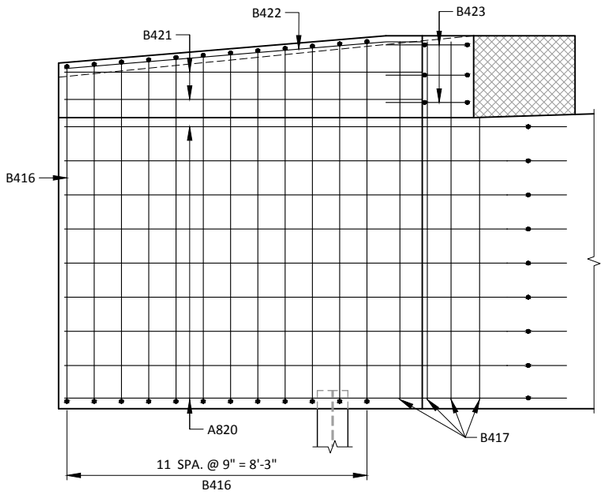




F.F. ELEVATION - WING 4



SECTION B-B



B.F. ELEVATION - WING 4

MARK	'A'
B414	167°40'
B422	177°24'

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-25-180

DRAWN BY JZ | PLANS CK'D. PTB

EAST ABUTMENT DETAILS

SHEET 7 OF 11

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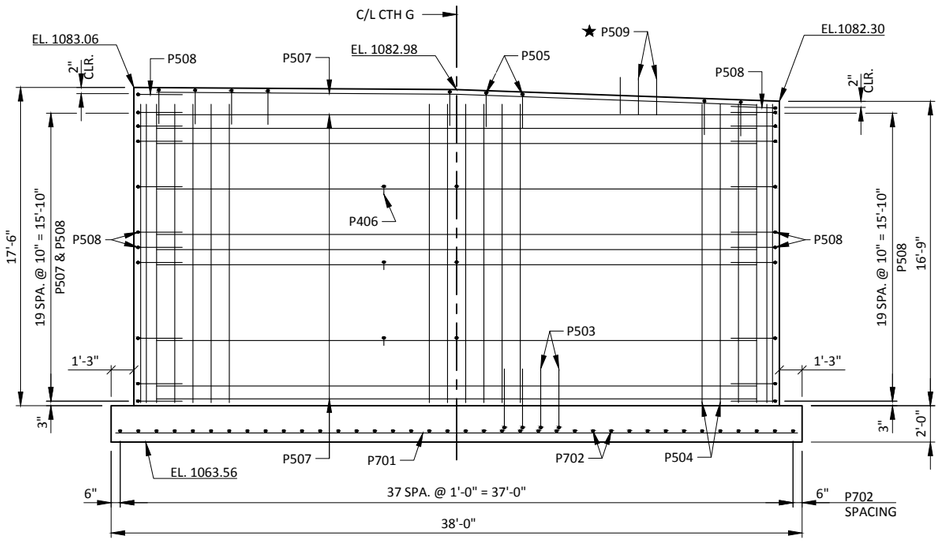
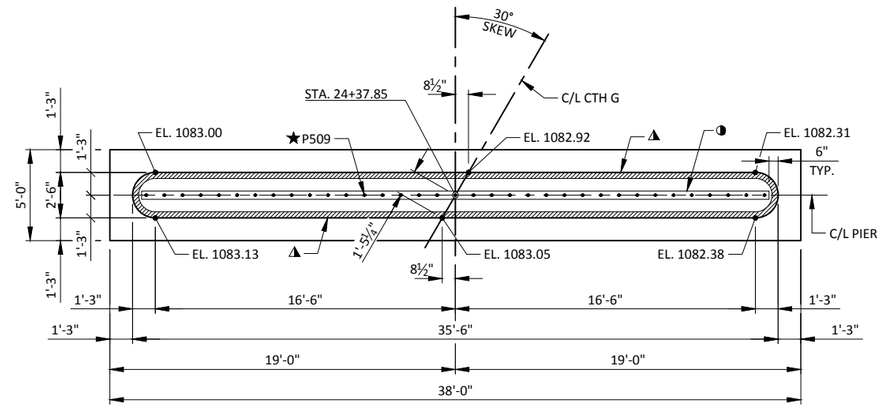
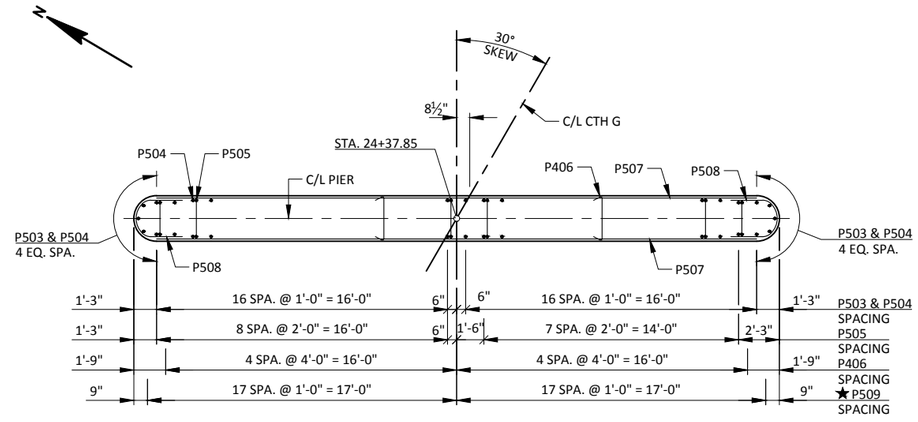


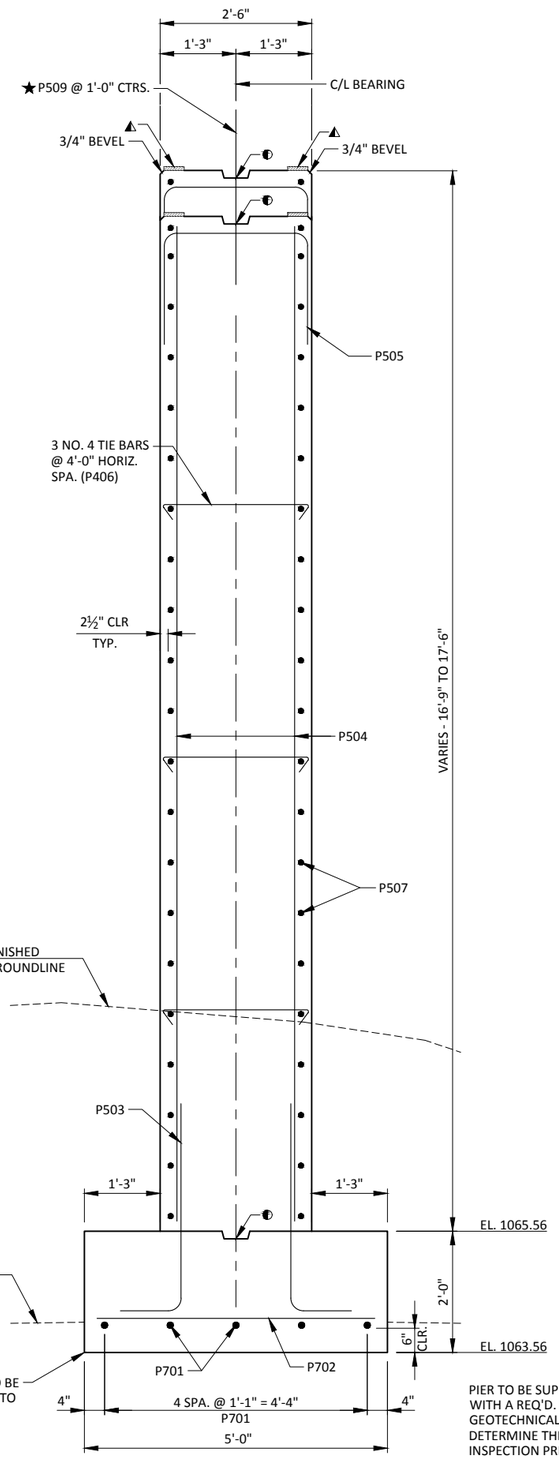
ELEVATION
(PIER LOOKING EAST)



PLAN



LAYOUT



TYPICAL SECTION THROUGH PIER

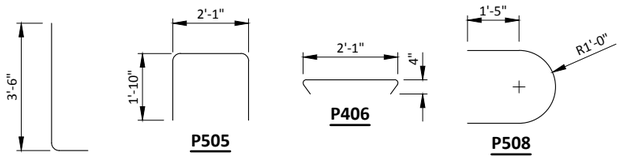
BILL OF BARS
PIER

70 LB (COATED)
4,180 LB (UNCOATED)

	BAR MARK	NO. REQ'D.	LENGTH	BENT	COAT	LOCATION
	P701	5	37-6			FOOTING - BOTTOM - LONGIT.
	P702	38	4-6			FOOTING - BOTTOM - TRANS.
	P503	74	4-4	X		FOOTING - DOWELS
	P504	74	16-4			BODY - VERT. - E.F.
	P505	17	5-6	X		BODY - VERT. - TOP
	P406	27	2-8	X		TIE BARS
	P507	42	33-0			BODY - HORIZ. - E.F.
	P508	42	6-0	X		BODY - HORIZ. - ENDS
★	P509	35	2-0		X	BODY - VERT. - DOWELS

NOTES: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.



LEGEND

◑ KEYED CONSTRUCTION JOINT FORMED BY SURFACED & BEVELED 2x6.

◭ ¾"x4" PREFORMED FILLER, EXTEND FULL LENGTH OF PIER AS SHOWN.

★ P509 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE IT HAS TAKEN ITS INITIAL SET. EMBED BAR 1'-0".

NOTES

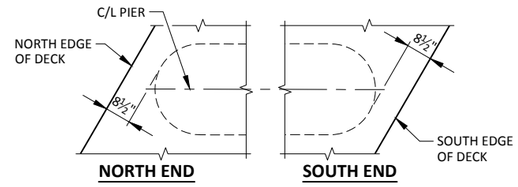
PIER SPREAD FOOTING SHALL BE KEYED A MINIMUM OF 6" INTO SOUND ROCK TO PROVIDE LATERAL STABILITY.

SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE THIS SHEET FOR BILL OF BARS.

SEAT ELEVATIONS SHOWN IN THE ELEVATION VIEW ARE TAKEN AT THE C/L OF BEARING, NEGLECTING THE KEYED CONSTRUCTION JOINT.

TOP OF PIER ELEVATIONS ARE ¾" BELOW BOTTOM OF DECK TO ALLOW FOR FILLER.

E.F. - EACH FACE



PLAN AT END OF PIER

PIER TO BE SUPPORTED BY SPREAD FOOTING ON SOUND ROCK WITH A REQ'D. FACTORED BEARING RESISTANCE OF 18 KSF. A GEOTECHNICAL ENGINEER, WITH THREE DAYS NOTICE, WILL DETERMINE THE FACTORED BEARING RESISTANCE BY VISUAL INSPECTION PRIOR TO CONSTRUCTION OF THE PIER FOOTING.

STATE PROJECT NUMBER

5958-00-70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-25-180

DRAWN BY JZ | PLANS CK'D. PTB

PIER

SHEET 8 OF 11

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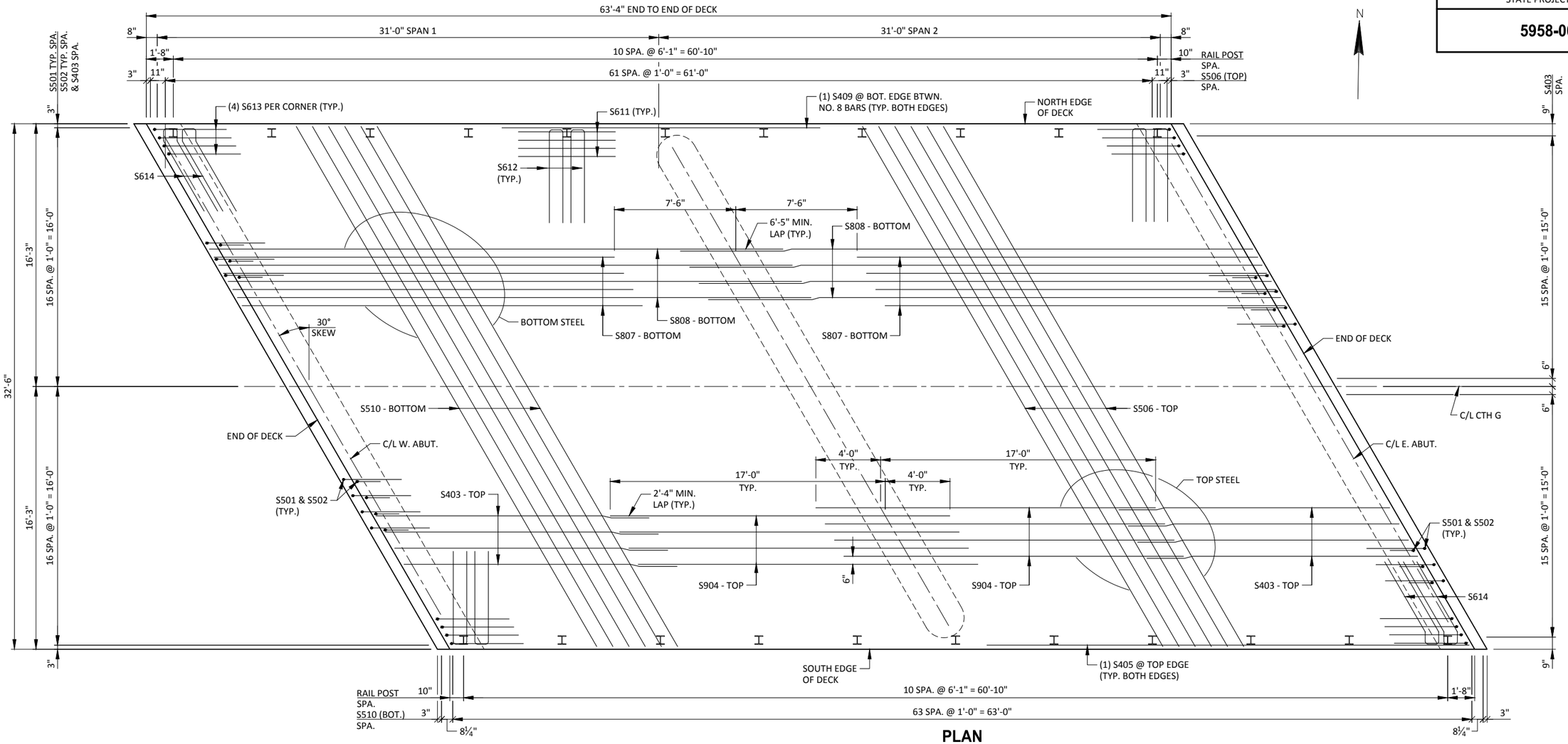
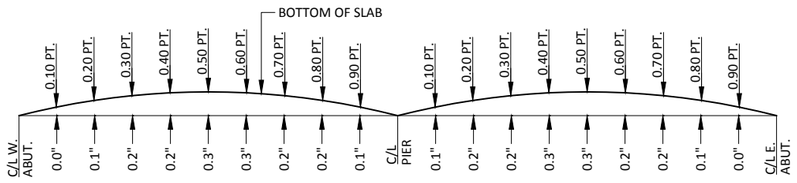
STATE PROJECT NUMBER
5958-00-70



PLAN



CAMBER DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPAN AS SHOWN TO PROVIDE FOR THEORETICAL DEADLOAD DEFLECTION AND FUTURE PLASTIC FLOW. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB OR CENTER LINE FOLLOW THIS PROCEDURE:

TOP OF SLAB ELEVATION AT FINAL GRADE
-SLAB THICKNESS
+CAMBER
+FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (COMPUTED BY CONTRACTOR)
=TOP OF SLAB FALSEWORK ELEVATION.

SURVEY TOP OF DECK ELEVATIONS

	W. ABUT.	0.50 PT. SPAN 1	PIER	0.50 PT. SPAN 2	E. ABUT.
NORTH EDGE OF DECK					
CENTER LINE					
SOUTH EDGE OF DECK					

PRIOR TO RELEASING SLAB FASLEWORK, TAKE TOP OF DECK ELEVATIONS AT THE C/L OF THE ABUTMENTS, C/L OF PIER, AND AT 0.50 PTS. OF BOTH SPANS TO VERIFY CAMBER. TAKE ELEVATIONS ALONG THE EDGE OF DECK AND CENTER LINE. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

NOTES

SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE SHEET 10 FOR BILL OF BARS.

SEE SUPERSTRUCTURE DETAILS SHEET (SHEET 10) FOR BAR SPACINGS NOT SHOWN ON THIS SHEET (MAIN LONGITUDINAL BARS).

SUPPORT ALTERNATE TOP TRANSVERSE BARS IN SLAB BY INDIVIDUAL BAR CHAIRS AT APPROX. 3'-0" CENTERS. SUPPORT BOTTOM LONGITUDINAL BARS BY CONTINUOUS BAR CHAIRS AT APPROX. 4'-0" CENTERS.

PLACE TRANSVERSE BARS PARALLEL TO THE CENTERLINE OF SUBSTRUCTURE UNITS.

THE SLAB THICKNESS DIMENSION IS MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

TOP OF DECK ELEVATIONS

	C/L W. ABUT.	0.10 PNT.	0.20 PNT.	0.30 PNT.	0.40 PNT.	0.50 PNT.	0.60 PNT.	0.70 PNT.	0.80 PNT.	0.90 PNT.	C/L PIER	0.10 PNT.	0.20 PNT.	0.30 PNT.	0.40 PNT.	0.50 PNT.	0.60 PNT.	0.70 PNT.	0.80 PNT.	0.90 PNT.	C/L E. ABUT.
N. EDGE	1086.09	1085.93	1085.78	1085.63	1085.49	1085.34	1085.19	1085.05	1084.91	1084.77	1084.63	1084.49	1084.35	1084.22	1084.08	1083.95	1083.82	1083.69	1083.56	1083.44	1083.31
C/L	1085.96	1085.81	1085.67	1085.52	1085.38	1085.23	1085.09	1084.95	1084.82	1084.68	1084.54	1084.41	1084.28	1084.15	1084.02	1083.89	1083.77	1083.64	1083.52	1083.40	1083.28
S. EDGE	1085.19	1085.04	1084.90	1084.76	1084.62	1084.48	1084.35	1084.21	1084.08	1083.95	1083.82	1083.69	1083.56	1083.43	1083.31	1083.18	1083.06	1082.94	1082.82	1082.71	1082.59

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-25-180

DRAWN BY JZ | PLANS CK'D. PTB

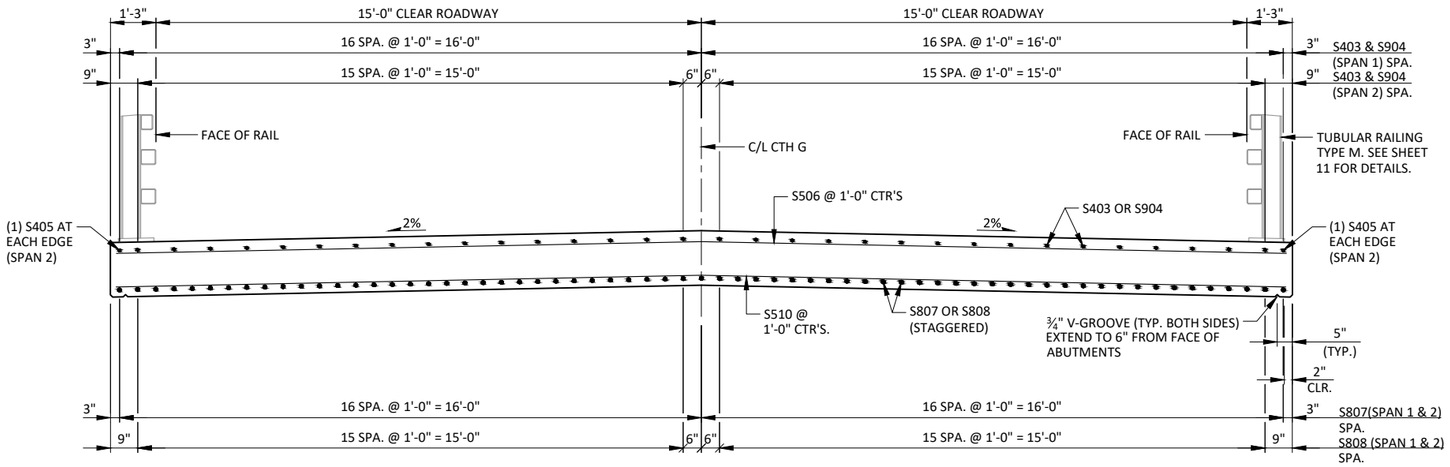
SUPERSTRUCTURE

SHEET 9 OF 11

60

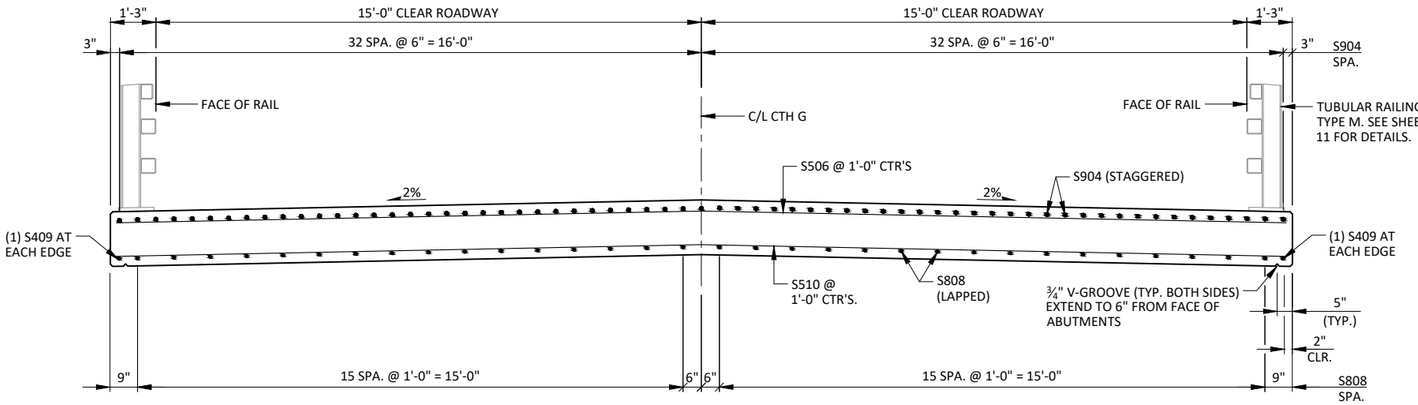
8

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\STRUCTURE\CAD FILES\FINALS\09 SUPERSTRUCTURE.DWG
PLOT DATE : 4/9/2018 8:32:43 AM
PLOT BY : BOLAND, PATRICK
PLOT SCALE : 1 IN:1 FT
LAYOUT : SUPER



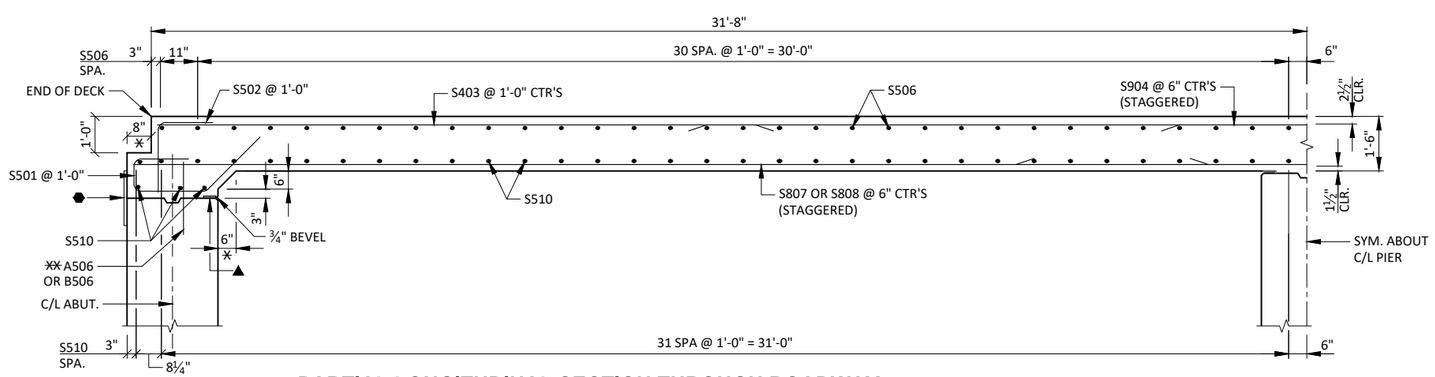
CROSS SECTION THROUGH ROADWAY

IN SPAN LOOKING EAST



CROSS SECTION THROUGH ROADWAY

AT PIER LOOKING EAST



PARTIAL LONGITUDINAL SECTION THROUGH ROADWAY

STATE PROJECT NUMBER

5958-00-70

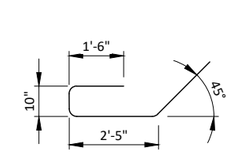
BILL OF BARS
SUPERSTRUCTURE — 23,380 LB (COATED)

BAR MARK	NO. REQ'D.	LENGTH	BENT	COAT	LOCATION
S501	66	6-6	X	X	END OF DECK
S502	66	3-2	X	X	END OF DECK - TOP
S403	65	16-10		X	SLAB - TOP - LONGIT. @ ENDS
S904	65	21-0		X	SLAB - TOP - LONGIT.
S405	2	29-10		X	SLAB - TOP - LONGIT. - EDGES
S506	64	37-1		X	SLAB - TOP - TRANS.
S807	66	24-9		X	SLAB - BOTTOM - LONGIT.
S808	64	35-6		X	SLAB - BOTTOM - LONGIT.
S409	2	19-8		X	SLAB - BOTTOM - LONGIT. - EDGES
S510	72	37-1		X	SLAB - BOTTOM - TRANS.
S611	72	6-0		X	RAIL POSTS - INTERIOR
S612	40	12-0	X	X	RAIL POSTS - INTERIOR
S613	16	6-0	X	X	RAIL POSTS - CORNERS
S614	4	12-0	X	X	RAIL POSTS - CORNERS

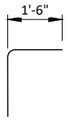
NOTES: THE FIRST DIGIT OF A THREE DIGIT BAR MARK AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

SOME BARS HAVE BEEN OMITTED FOR CLARITY.



S501



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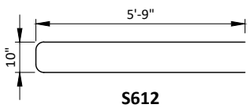
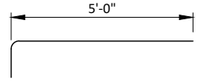


S612



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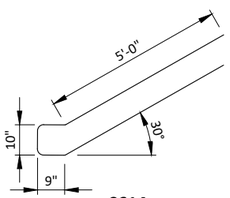

S614

LEGEND

- ⬣ 18" RUBBERIZED MEMBRANE WATERPROOFING. (HORIZONTAL)
- ▲ ¾" x 4" PREFORMED FILLER, EXTEND FULL LENGTH OF ABUTMENTS BETWEEN EDGES OF SLAB.
- ✳ DIMENSION IS NORMAL TO THE C/L OF SUBSTRUCTURE UNITS.
- XX SEE SHEET 4 FOR PLACEMENT OF A506 BARS AND SHEET 6 FOR PLACEMENT OF B506 BARS.

NOTES

SUPPORT ALTERNATE TOP TRANSVERSE BARS IN SLAB BY INDIVIDUAL BAR CHAIRS AT APPROX. 3'-0" CENTERS. SUPPORT BOTTOM LONGITUDINAL BARS BY CONTINUOUS BAR CHAIRS AT APPROX. 4'-0" CENTERS.

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-25-180

DRAWN BY JZ | PLANS CK'D. PTB

SUPERSTRUCTURE DETAILS

SHEET 10 OF 11

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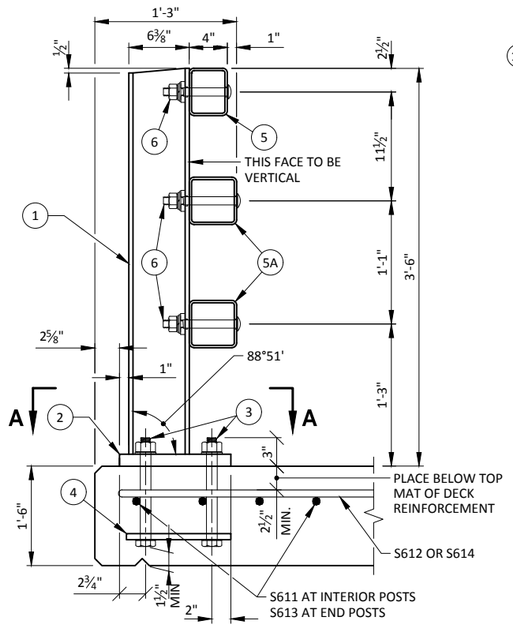
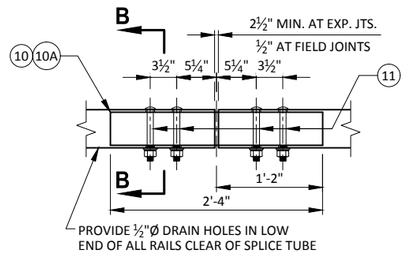
8

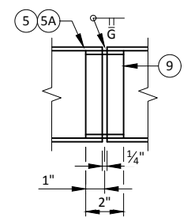
8



SECTION THROUGH RAILING ON DECK

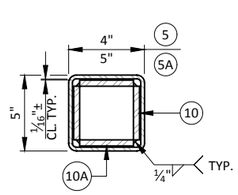


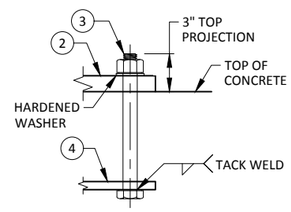
FIELD ERECTION JOINT DETAIL



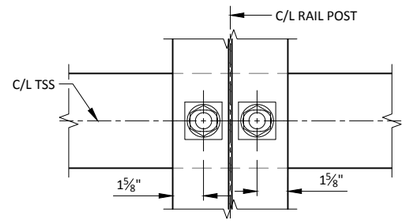
SHOP RAIL SPLICE DETAIL

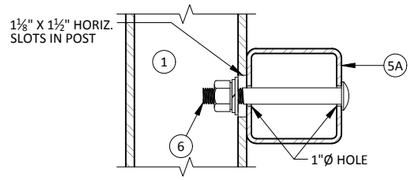
(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)





ANCHOR BOLTS

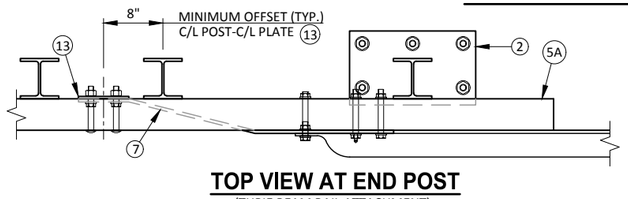




SECTION THROUGH RAIL

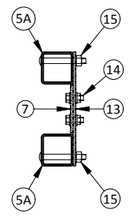
NOTE: CONNECTIONS AT LOWER RAILS SHOWN. CONNECTIONS AT TOP RAIL SIMILAR.

TYPICAL RAIL TO POST CONNECTIONS

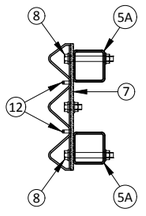


TOP VIEW AT END POST

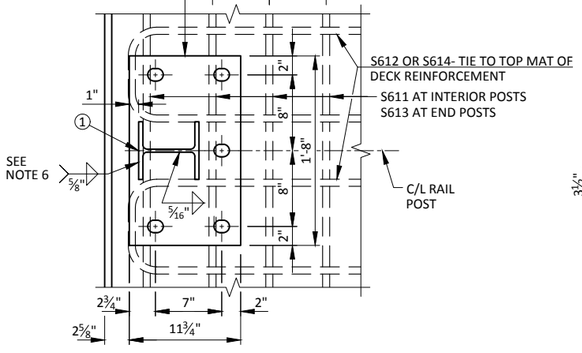
(THRIE BEAM RAIL ATTACHMENT)



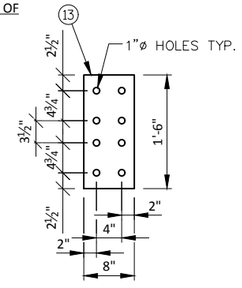
SECTION C-C



SECTION D-D

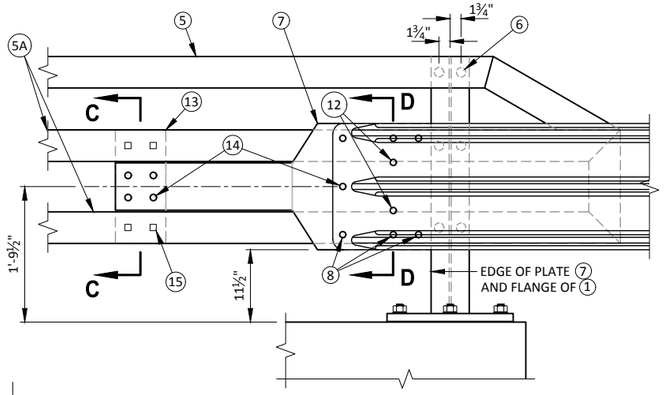


SECTION A-A



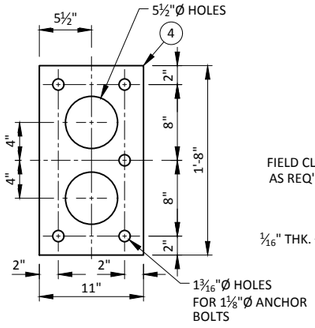
ANCHOR PLATE

AT BEAM GUARD ATTACHMENT



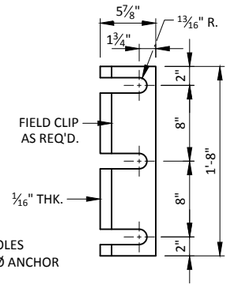
DETAIL AT END POST

(THRIE BEAM RAIL ATTACHMENT)

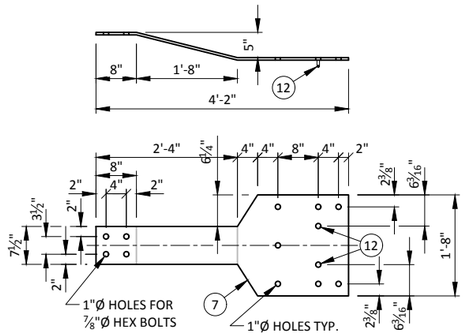


ANCHOR PLATE

AT RAIL TO DECK CONNECTION

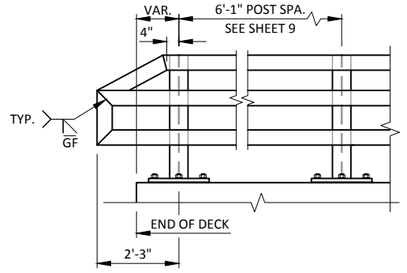


POST SHIM DETAIL



BACK-UP PLATE DETAIL

AT BEAM GUARD ATTACHMENT



PART ELEVATION OF RAILING

LEGEND

1. W6x25 WITH 1⅛" x 1½" HORIZ. SLOTS ON EACH SIDE OF POST FOR BOLT NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.
2. PLATE 1¼ "x11¾"x1'-8" WITH 1⁵⁄₁₆"x1⅝" SLOTTED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN. SLOTS PARALLEL TO SHORT SIDE OF PLATE.
3. ASTM A449 - 1½" DIA. ANCHOR BOLTS WITH NUT AND HARDENED WASHER (ALL GALVANIZED). FIVE REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 2. CHAMFER TOP OF BOLTS BEFORE THREADING. AT POSTS ON CONCRETE SLAB SUPERSTRUCTURES WHERE THE SLAB THICKNESS IS > 1'-4" USE 1'-3" LONG. USE 10¾" LONG AT ALL OTHER LOCATIONS.
4. ⅝"x11"x1'-8" ANCHOR PLATE (GALVANIZED) WITH 1³⁄₁₆" DIA. HOLES FOR ANCHOR BOLTS NO. 3
5. TSS 5x4x¼ STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
5A. TSS 5x5x¼ STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
6. ⅞" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, ³⁄₁₆"x1⅝"x1⅝" WASHER, AND LOCK WASHER (TWO REQ'D. AT EACH RAIL TO POST LOCATION).
7. ½" THK. BACK-UP PLATE WITH (2) ⅞"x1½" THREADED SHOP WELDED STUDS (NO. 12). BOLT TO RAIL AS SHOWN IN DETAIL. REQUIRED AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYMMETRICALLY ABOUT TUBES NO. 5A.
8. 1" DIA. HOLES IN PLATE NO. 7 & TUBES NO. 5A FOR ⅞" DIA. A325 BOLTS WITH HEX NUTS AND WASHERS. SIX HOLES IN TUBES AND PLATE NO. 7.
9. SPLICE SLEEVE FABRICATED FROM ¼" PLATE. PROVIDE "SLIDING FIT".
10. ⅜"x3⅝"x2'-4" PLATE. TWO PER RAIL. USED IN NO. 5 & 5A.
10A. ⅜"x2⅝"x2'-4" PLATE USED IN NO. 5, ⅜"x3⅝"x2'-4" PLATE USED IN NO. 5A. TWO PER RAIL.
11. ⅞" DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER, AND LOCK WASHER. USE ¹⁵⁄₁₆"x1¼" LONGIT. SLOTTED HOLES AT FIELD JOINTS AND ¹⁵⁄₁₆"x2¼" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS IN PLATE NO. 10A.
12. ⅞" DIA. BY 1½" LONG THREADED SHOP WELDED STUDS (TWO REQ'D).
13. ⅜"x8"x1'-6" PLATE. BOLT TO RAIL AS SHOWN IN DETAIL. REQ'D. AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYM. ABOUT TUBES NO. 5A.
14. ⅞" DIA. x 2" LONG A325 HEX BOLT WITH NUT AND WASHER (FIVE REQ'D.).
15. 1" DIA. HOLES IN TUBES NO. 5A FOR ⅞" A325 ROUND HEAD BOLT WITH NUT, WASHER AND LOCK WASHER (FOUR REQ'D.). FOUR HOLES IN TUBES.

GENERAL NOTES

1. BID ITEM SHALL BE "RAILING TUBULAR TYPE M B-25-180" WHICH INCLUDES ALL ITEMS SHOWN.
2. RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. HOLLOW RAILING STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED FY=50 KSI. ANCHOR PLATES AND SPLICE TUBE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 36.
3. THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN.
4. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF THREE (3) POSTS WITHOUT SPLICES WHERE POSSIBLE.
5. ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
6. WELD IS THE SAME ON BOTH FLANGES. FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING.
7. FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 2 AND CAULK AROUND PERIMETER OF PLATE NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.
8. POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.
9. ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS & STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY S.S.P.C. SPECIFICATIONS.
10. THIS RAILING MEETS MASH EVALUATION CRITERIA FOR TEST LEVEL 2 (TL-2).

STATE PROJECT NUMBER

5958-00-70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-25-180

DRAWN BY JZ | PLANS CK'D. PTB

TUBULAR RAILING TYPE M

SHEET 11 OF 11

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EARTHWORK-MAINLINE

	AREA (SF)			INCREMENTAL VOL (CY)					CUMMULATIVE VOLUME (CY)					
STATION	CUT	FILL	ROCK EXC	CUT NOTE 1	FILL NOTE 2	ROCK EXC	EXPANDED ROCK (1.1) NOTE 3	FILL (25%) NOTE 4	CUT 1.00 NOTE 1	FILL	ROCK EXC	EXPANDED ROCK (1.1) NOTE 3	FILL (25%) NOTE 4	MASS ORDINATE NOTE 5
10+50	38	0	0	0	0	0	0	0	0	0	0	0	0	0
11+00	63	18	0	94	17	0	0	21	94	17	0	0	21	73
11+50	107	9	5	157	25	5	6	24	251	42	5	6	45	206
12+00	101	3	19	193	11	22	24	-16	444	53	27	30	29	415
12+50	146	21	30	229	22	45	50	-35	673	75	72	80	-6	679
13+00	158	21	38	281	39	63	69	-38	954	114	135	149	-44	998
13+50	173	22	56	306	40	96	106	-83	1260	154	231	255	-127	1387
14+00	184	24	97	331	43	151	166	-154	1591	197	382	421	-281	1872
14+50	195	21	130	351	42	210	231	-236	1942	239	592	652	-517	2459
15+00	237	20	197	400	38	303	333	-369	2342	277	895	985	-886	3228
15+50	252	20	278	453	37	440	484	-559	2795	314	1335	1469	-1445	4240
16+00	240	20	277	456	37	514	565	-660	3251	351	1849	2034	-2105	5356
16+50	240	20	332	444	37	564	620	-729	3695	388	2413	2654	-2834	6529
17+00	248	21	387	452	38	666	733	-869	4147	426	3079	3387	-3703	7850
17+50	258	21	457	469	39	781	859	-1025	4616	465	3860	4246	-4728	9344
18+00	300	21	613	517	39	991	1090	-1314	5133	504	4851	5336	-6042	11175
18+50	305	21	671	560	39	1189	1308	-1586	5693	543	6040	6644	-7628	13321
19+00	361	21	716	617	39	1284	1412	-1716	6310	582	7324	8056	-9344	15654
19+50	443	21	541	744	39	1164	1280	-1551	7054	621	8488	9336	-10895	17949
20+00	530	0	363	901	19	837	921	-1128	7955	640	9325	10257	-12023	19978
20+50	596	0	183	1043	0	506	557	-696	8998	640	9831	10814	-12719	21717
21+00	531	0	27	1044	0	194	213	-266	10042	640	10025	11027	-12985	23027
21+50	344	0	0	810	0	25	28	-35	10852	640	10050	11055	-13020	23872
22+00	147	0	0	455	0	0	0	0	11307	640	10050	11055	-13020	24327
22+50	57	30	0	189	28	0	0	35	11496	668	10050	11055	-12985	24481
23+00	31	158	0	81	174	0	0	218	11577	842	10050	11055	-12767	24344
23+50	13	410	0	41	526	0	0	658	11618	1368	10050	11055	-12109	23727
24+00	0	275	0	12	634	0	0	793	11630	2002	10050	11055	-11316	22946
24+05	0	232	0	0	47	0	0	59	11630	2049	10050	11055	-11257	22887
24+05	0	0	0	0	0	0	0	0	11630	2049	10050	11055	-11257	22887
24+70	0	0	0	0	0	0	0	0	11630	2049	10050	11055	-11257	22887
24+70	0	319	0	0	0	0	0	0	11630	2049	10050	11055	-11257	22887
25+00	0	255	0	0	319	0	0	399	11630	2368	10050	11055	-10858	22488
25+50	22	114	0	20	342	0	0	428	11650	2710	10050	11055	-10430	22080
26+00	47	73	0	64	173	0	0	216	11714	2883	10050	11055	-10214	21928
26+50	66	56	0	105	119	0	0	149	11819	3002	10050	11055	-10065	21884
27+00	68	26	0	124	76	0	0	95	11943	3078	10050	11055	-9970	21913
27+50	67	0	0	125	24	0	0	30	12068	3102	10050	11055	-9940	22008
			COLUMN SUBTOTALS =	12068	3102	10050	11055	-9940						

EARTHWORK- 'A'-LINE

	AREA (SF)			INCREMENTAL VOL (CY)					CUMMULATIVE VOLUME (CY)					
STATION	CUT	FILL	ROCK EXC	CUT NOTE 1	FILL NOTE 2	ROCK EXC	EXPANDED ROCK (1.1) NOTE 3	FILL (25%) NOTE 4	CUT 1.00 NOTE 1	FILL	ROCK EXC	EXPANDED ROCK (1.1) NOTE 3	FILL (25%) NOTE 4	MASS ORDINATE NOTE 5
50'A'+15	226	0	0	0	0	0	0	0	0	0	0	0	0	0
50'A'+50	116	0	37	222	0	24	26	-33	222	0	24	26	-33	255
50'A'+98	32	0	0	132	0	33	36	-45	354	0	57	62	-78	432
			COLUMN SUBTOTALS =	354	0	57	62	-78						

EARTHWORK- 'B'-LINE

	AREA (SF)			INCREMENTAL VOL (CY)					CUMMULATIVE VOLUME (CY)					
STATION	CUT	FILL	ROCK EXC	CUT NOTE 1	FILL NOTE 2	ROCK EXC	EXPANDED ROCK (1.1) NOTE 3	FILL (25%) NOTE 4	CUT 1.00 NOTE 1	FILL	ROCK EXC	EXPANDED ROCK (1.1) NOTE 3	FILL (25%) NOTE 4	MASS ORDINATE NOTE 5
50'B'+00	66	0	0	0	0	0	0	0	0	0	0	0	0	0
50'B'+50	64	0	0	120	0	0	0	0	120	0	0	0	0	120
51'B'+00	135	12	13	184	11	12	13	-3	304	11	12	13	-3	307
51'B'+50	157	12	147	270	22	148	163	-176	574	33	160	176	-179	753
52'B'+00	187	12	324	319	22	436	480	-572	893	55	596	656	-751	1644
52'B'+50	217	12	490	374	22	754	829	-1009	1267	77	1350	1485	-1760	3027
53'B'+00	239	12	625	422	22	1032	1135	-1392	1689	99	2382	2620	-3152	4841
53'B'+50	254	12	730	456	22	1255	1381	-1698	2145	121	3637	4001	-4850	6995
54'B'+00	278	12	911	493	22	1519	1671	-2061	2638	143	5156	5672	-6911	9549
54'B'+50	255	19	610	494	29	1408	1549	-1900	3132	172	6564	7220	-8811	11943
54'B'+53	249	50	664	28	4	71	78	-93	3160	176	6635	7299	-8904	12064
			COLUMN SUBTOTALS =	3160	176	6635	7299	-8904						
			MAINLINE	12068	3102	10050	11055	-9940	12068	3102	10050	11055	-9940	22008
			'A'-LINE	354	0	57	62	-78	12422	3102	10107	11117	-10018	22440
			'B'-LINE	3160	176	6635	7299	-8904	15582	3278	16742	18416	-18922	34504

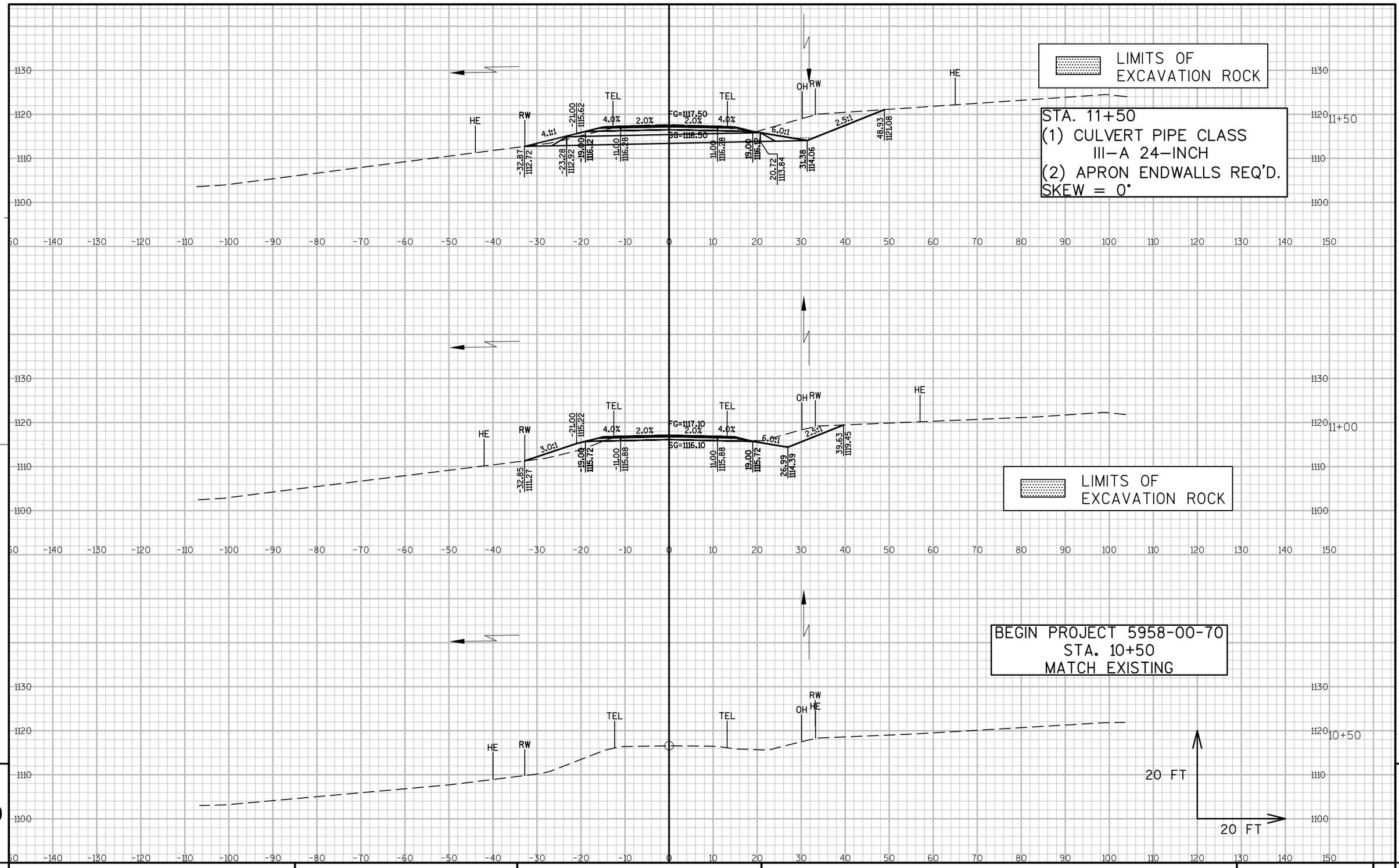
NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
3 - EXPANDED ROCK FACTOR	EXPANDED ROCK FACTOR = 1.1
4 - FILL (25%)	FILL 25%: (UNEXPANDED FILL - (ROCK * ROCK FACTOR))*1.25
5 - MASS ORDINATE	(CUT - FILL (25%))

9

9

PROJECT NO:5958-00-70	HWY: CTH G	COUNTY:IOWA	EARTHWORK	SHEET 64	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\SHEETSPLAN\DETAILS\EARTHWORK.DWG
LAYOUT : LAYOUT1



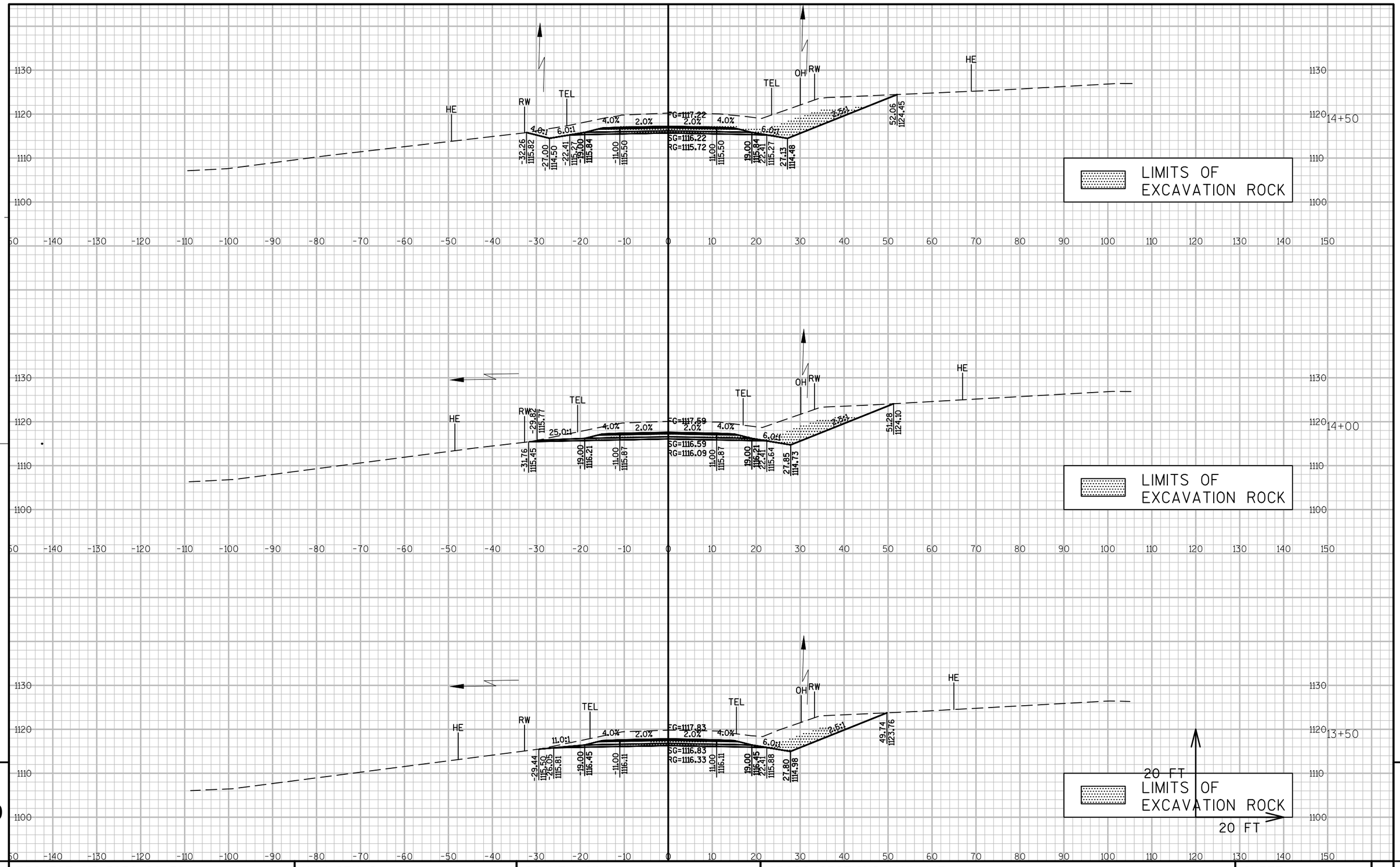
PROJECT NO: 5958-00-70	HWY: CTH G	COUNTY: IOWA	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\DESIGN\CORRIDORS\CRDR-CTH G.DWG PLOT DATE : 3/22/2018 3:50 PM PLOT BY : JULIA ZEHNER PLOT NAME : PLOT SCALE : 1 IN:20 FT

PROJECT NO: 5958-00-70	HWY: CTH G	COUNTY: IOWA	CROSS SECTIONS: MAINLINE	SHEET	E

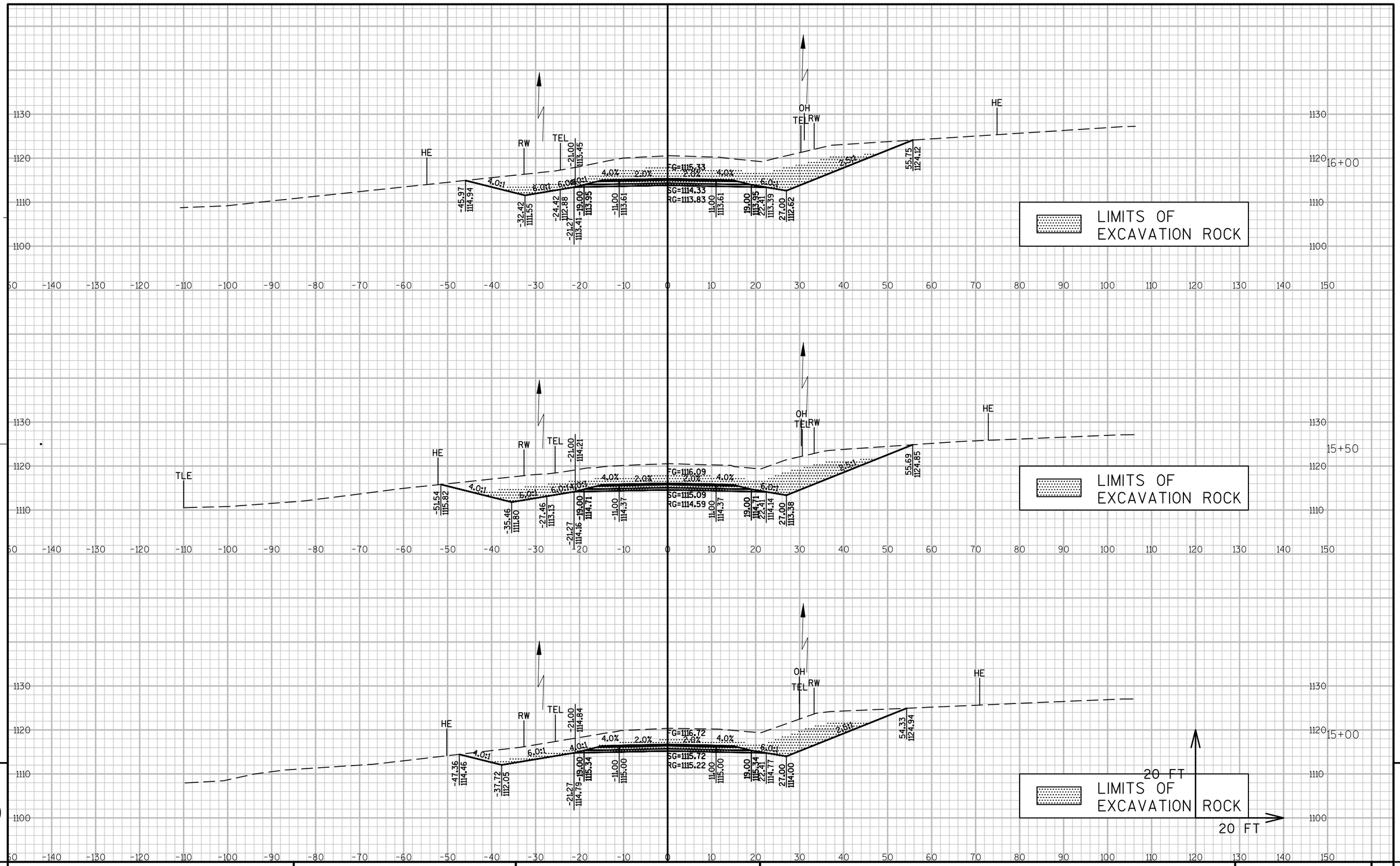
FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\DESIGN\CORRIDORS\CRDR-CTH G.DWG PLOT DATE : 3/22/2018 3:50 PM PLOT BY : JULIA ZEHNER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



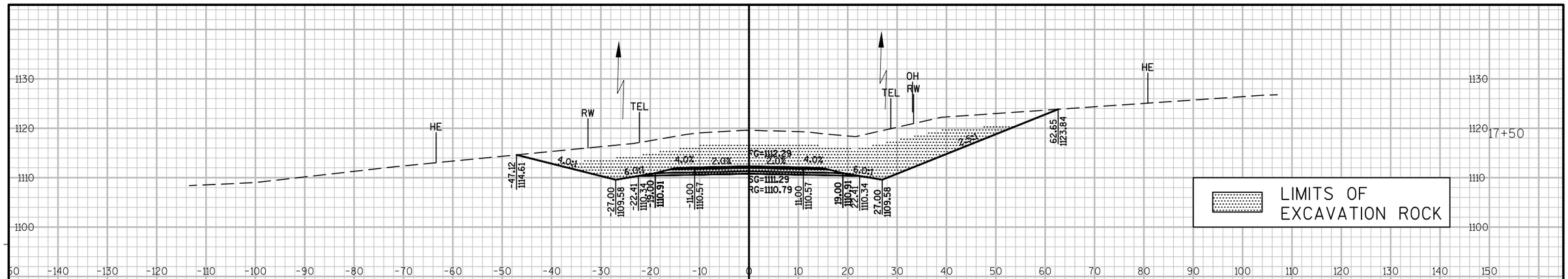
PROJECT NO:5958-00-70	HWY: CTH G	COUNTY: IOWA	CROSS SECTIONS: MAINLINE	SHEET	E

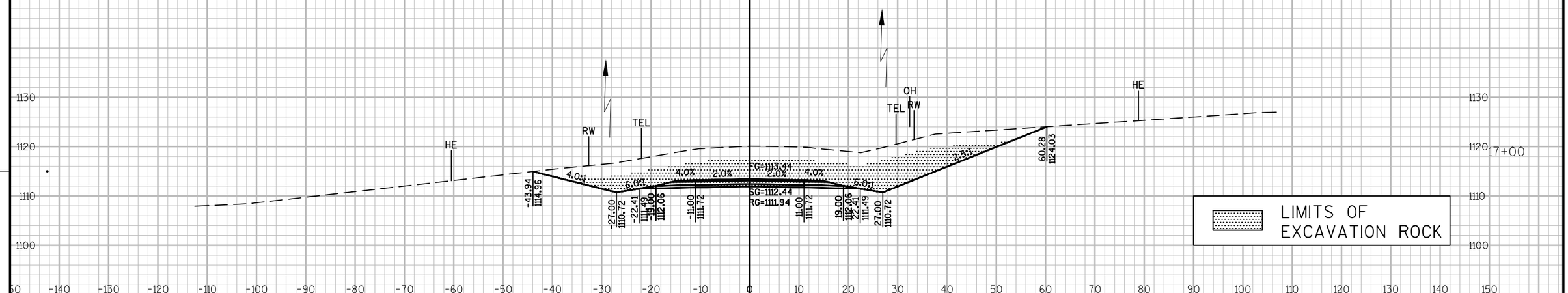
FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\DESIGN\CORRIDORS\CRDR-CTH G.DWG PLOT DATE : 3/22/2018 3:50 PM PLOT BY : JULIA ZEHNER PLOT NAME : PLOT SCALE : 1 IN:20 FT

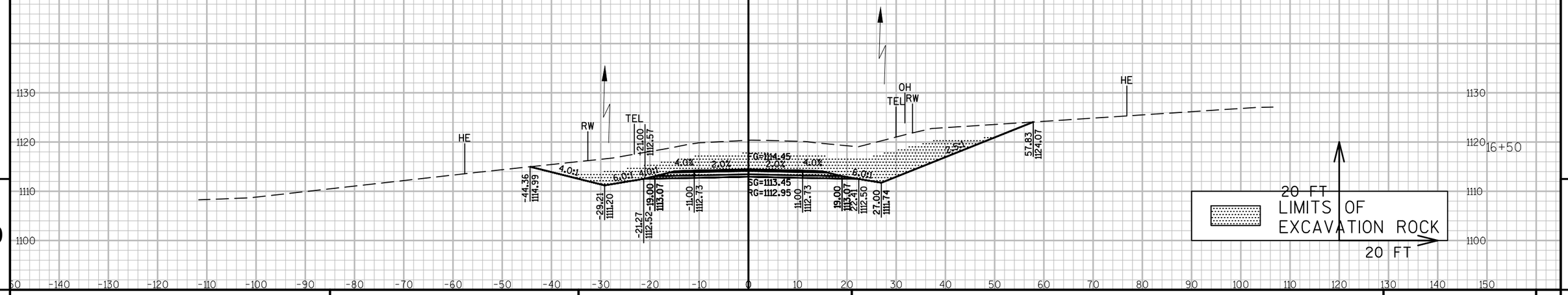


PROJECT NO:5958-00-70	HWY: CTH G	COUNTY:IOWA	CROSS SECTIONS: MAINLINE	SHEET 68	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\DESIGN\CORRIDORS\CRDR-CTH G.DWG PLOT DATE : 3/22/2018 3:50 PM PLOT BY : JULIA ZEHNER PLOT NAME : PLOT SCALE : 1 IN:20 FT







9

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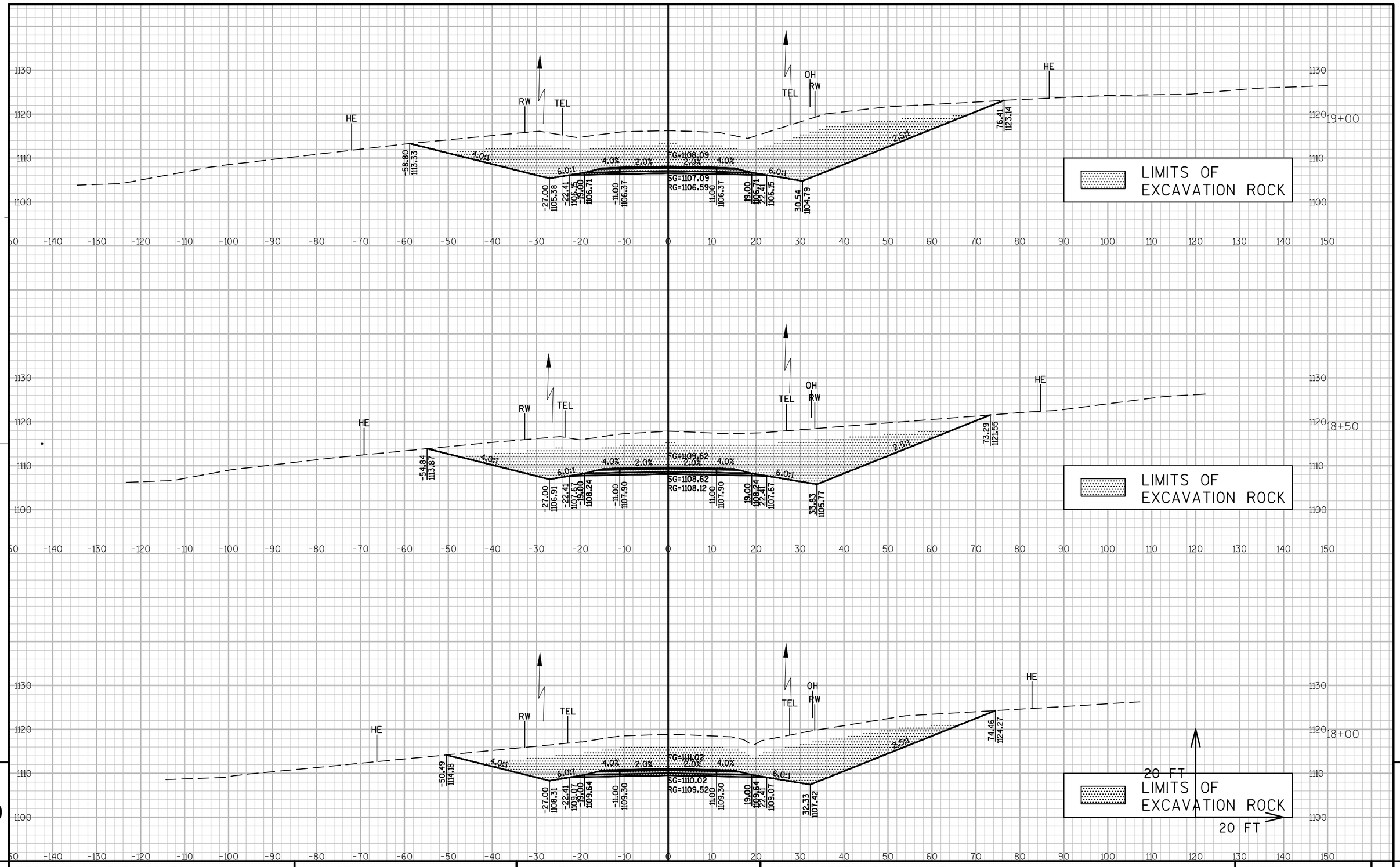
PROJECT NO:5958-00-70	HWY: CTH G	COUNTY: IOWA	CROSS SECTIONS: MAINLINE	SHEET 69	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\DESIGN\CORRIDORS\CRDR-CTH G.DWG PLOT DATE : 3/22/2018 3:50 PM PLOT BY : JULIA ZEHNER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

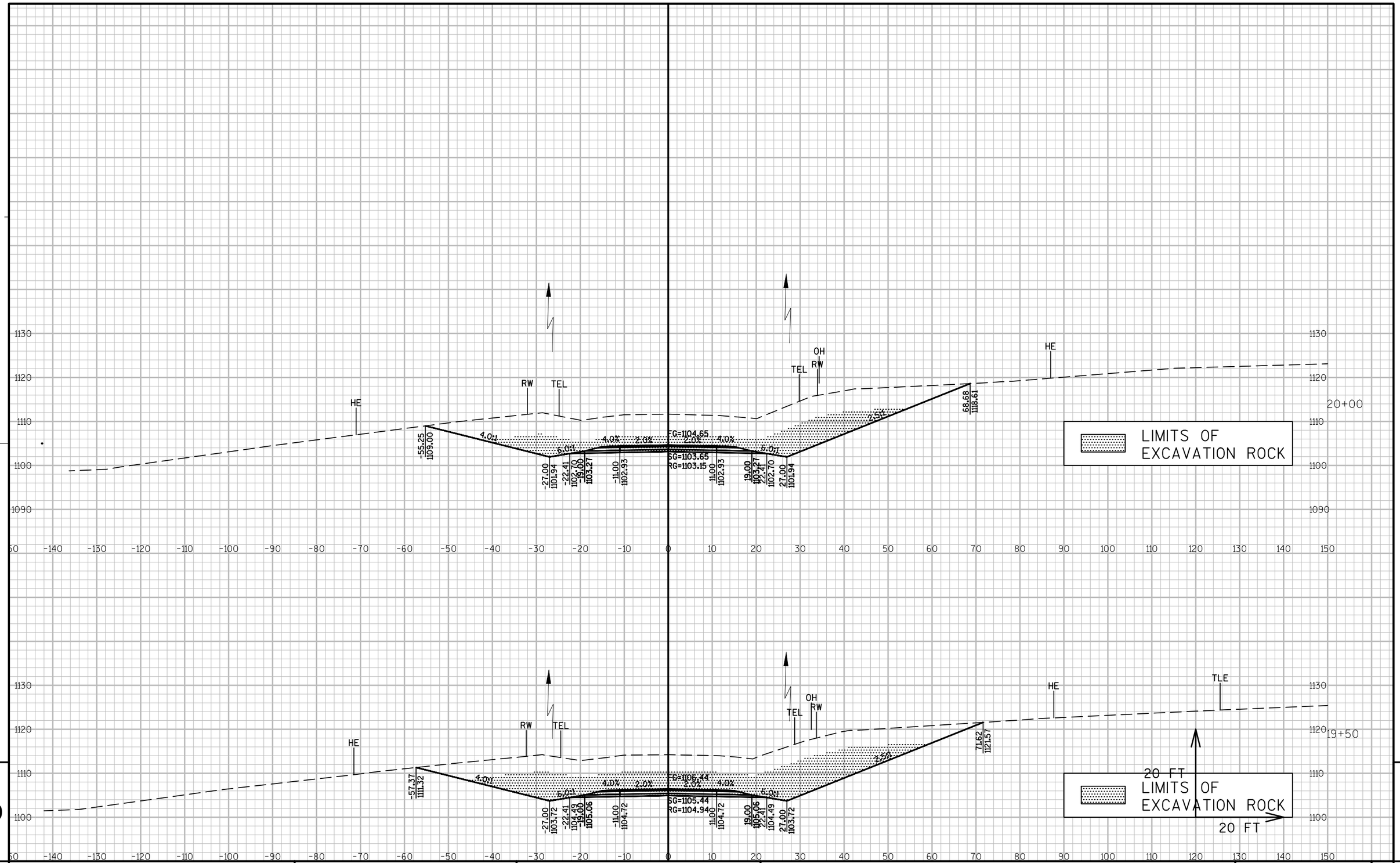


9

9

PROJECT NO: 5958-00-70	HWY: CTH G	COUNTY: IOWA	CROSS SECTIONS: MAINLINE	SHEET 70	E

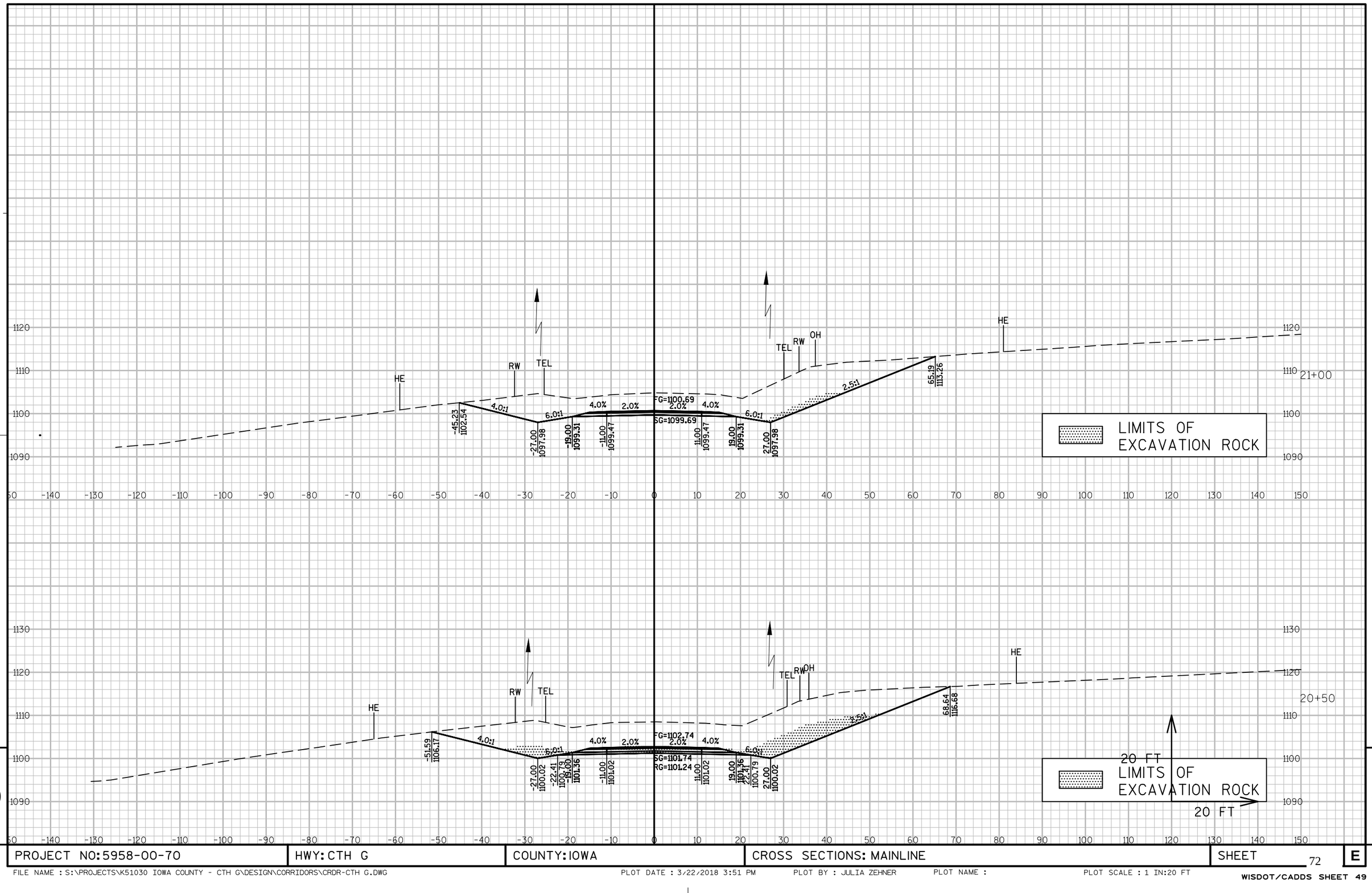
FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\DESIGN\CORRIDORS\CRDR-CTH G.DWG PLOT DATE : 3/22/2018 3:50 PM PLOT BY : JULIA ZEHNER PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO:5958-00-70	HWY: CTH G	COUNTY:IOWA	CROSS SECTIONS: MAINLINE	SHEET 71	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\DESIGN\CORRIDORS\CRDR-CTH G.DWG PLOT DATE : 3/22/2018 3:50 PM PLOT BY : JULIA ZEHNER PLOT NAME : PLOT SCALE : 1 IN:20 FT

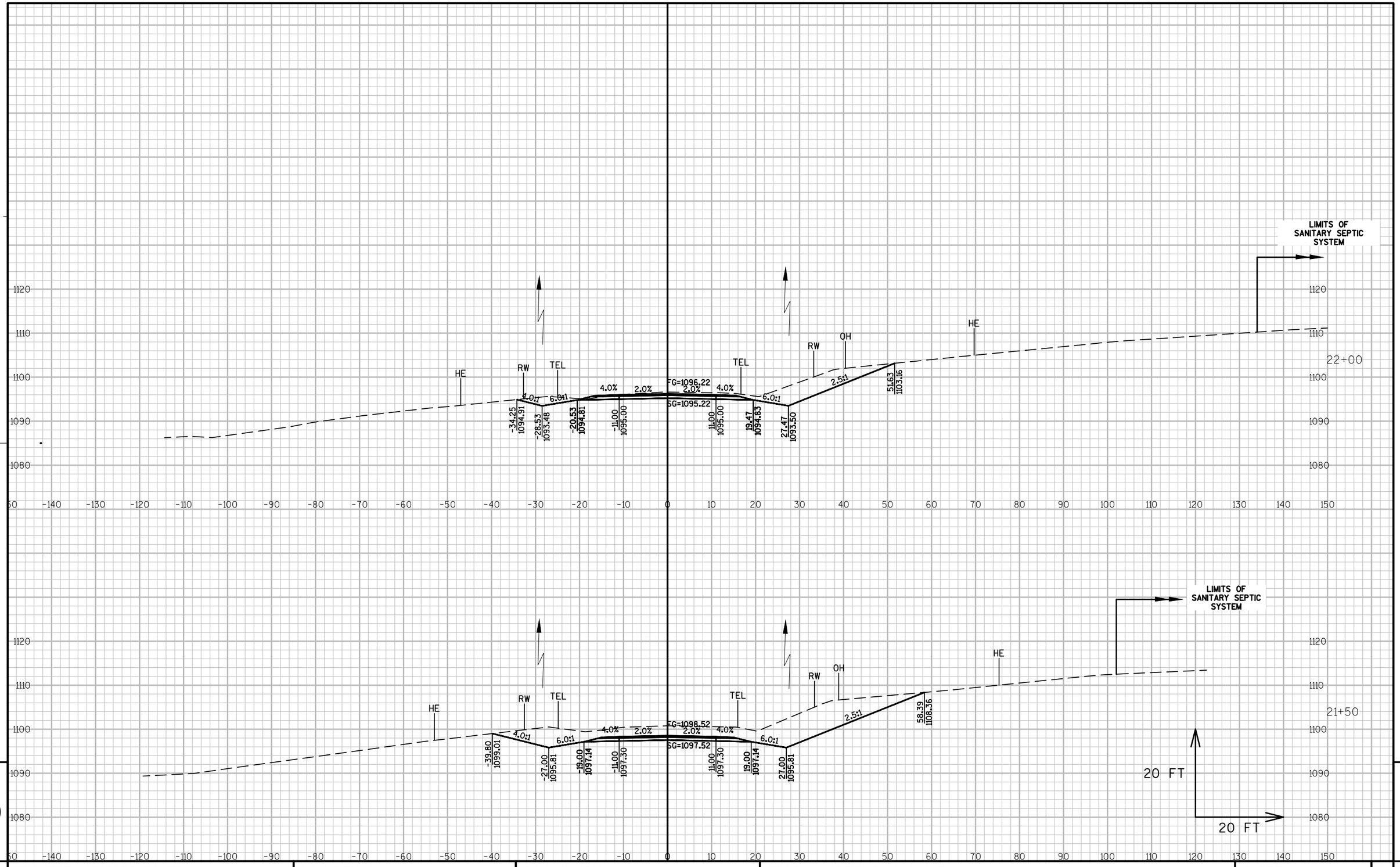
WISDOT/CADDS SHEET 49



PROJECT NO: 5958-00-70	HWY: CTH G	COUNTY: IOWA	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\DESIGN\CORRIDORS\CRDR-CTH G.DWG PLOT DATE : 3/22/2018 3:51 PM PLOT BY : JULIA ZEHNER PLOT NAME : PLOT SCALE : 1 IN:20 FT

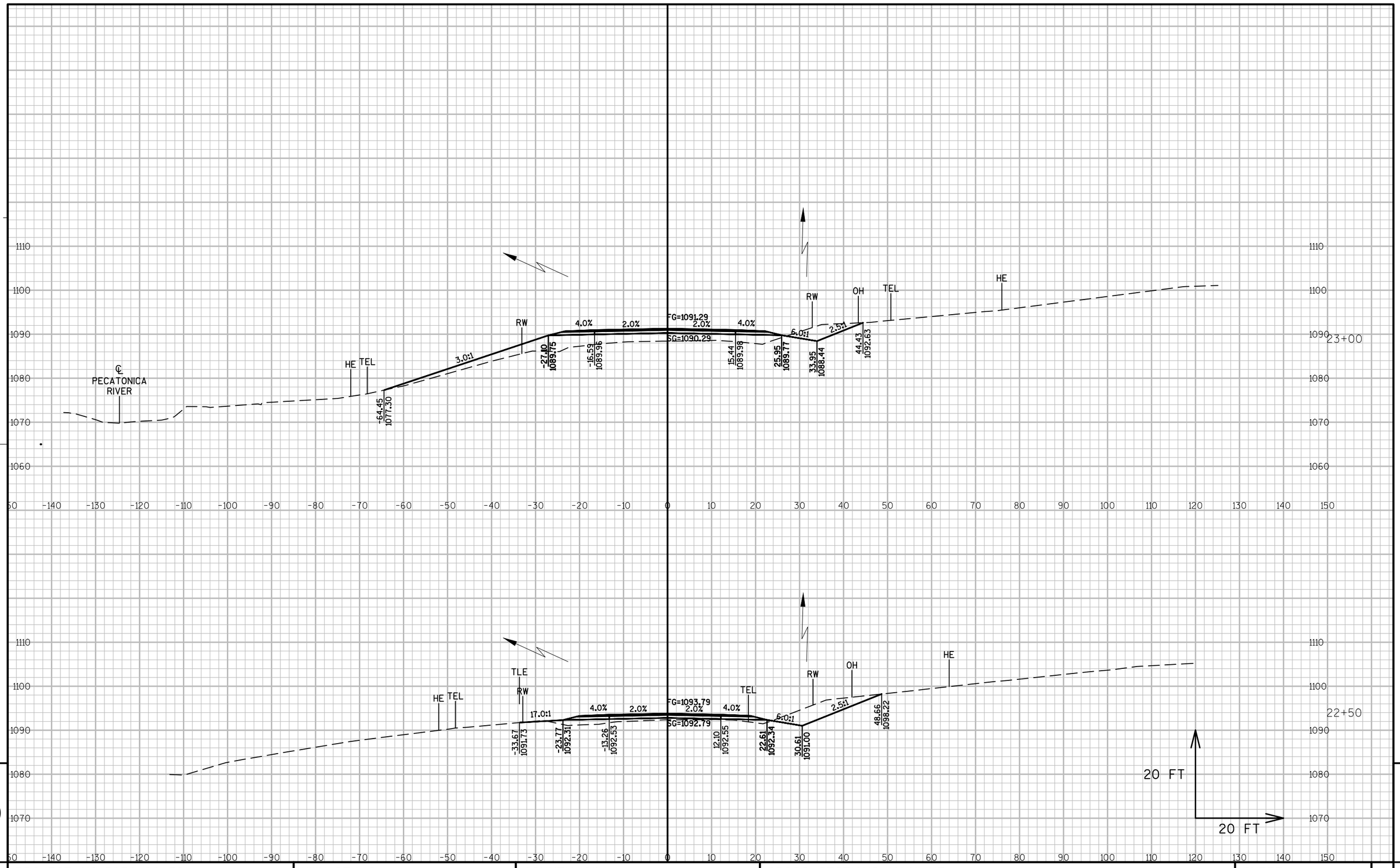
WISDOT/CADDS SHEET 49



PROJECT NO:5958-00-70	HWY: CTH G	COUNTY:IOWA	CROSS SECTIONS: MAINLINE	SHEET 73	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\DESIGN\CORRIDORS\CRDR-CTH G.DWG PLOT DATE : 3/22/2018 3:51 PM PLOT BY : JULIA ZEHNER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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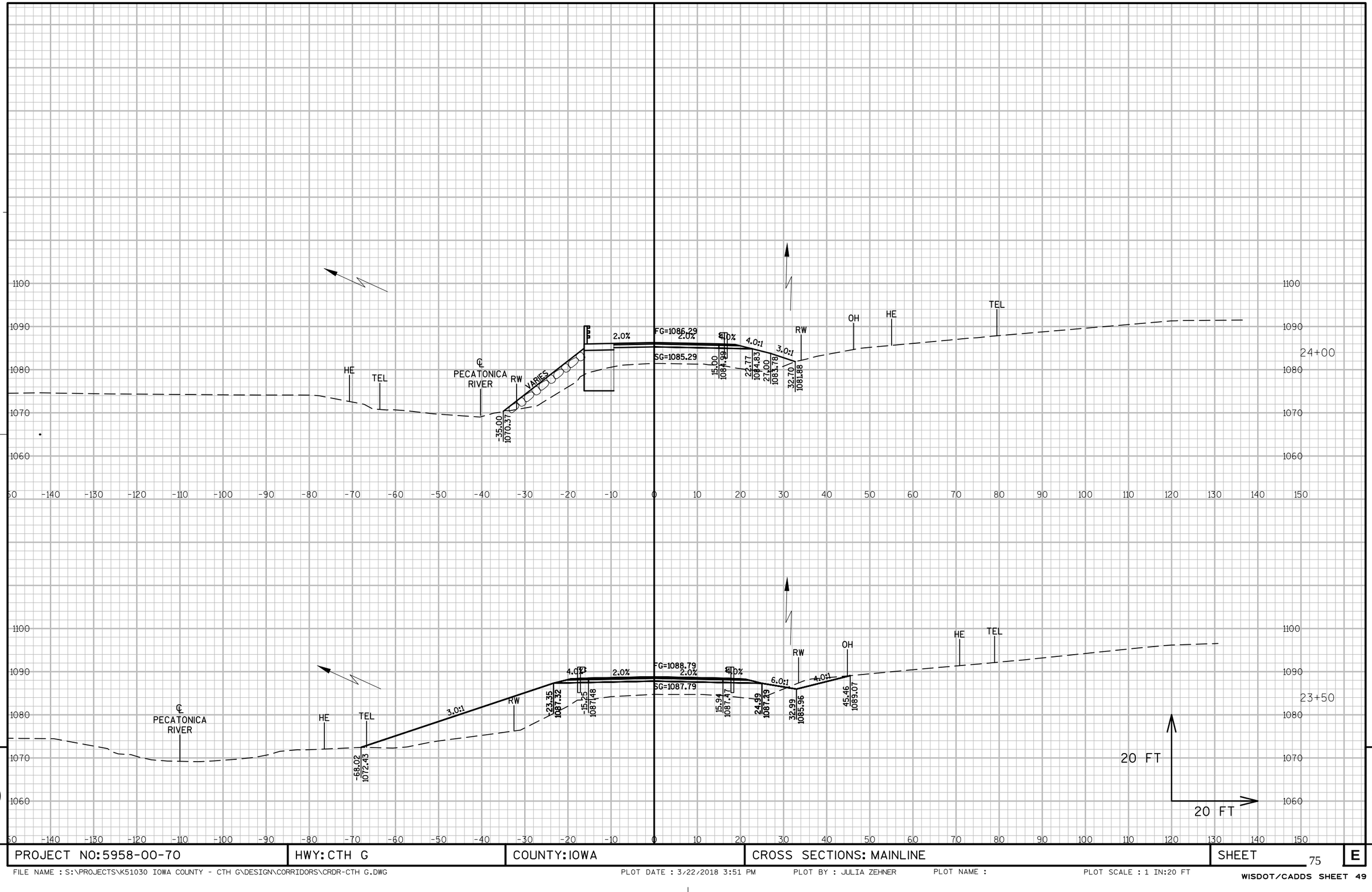
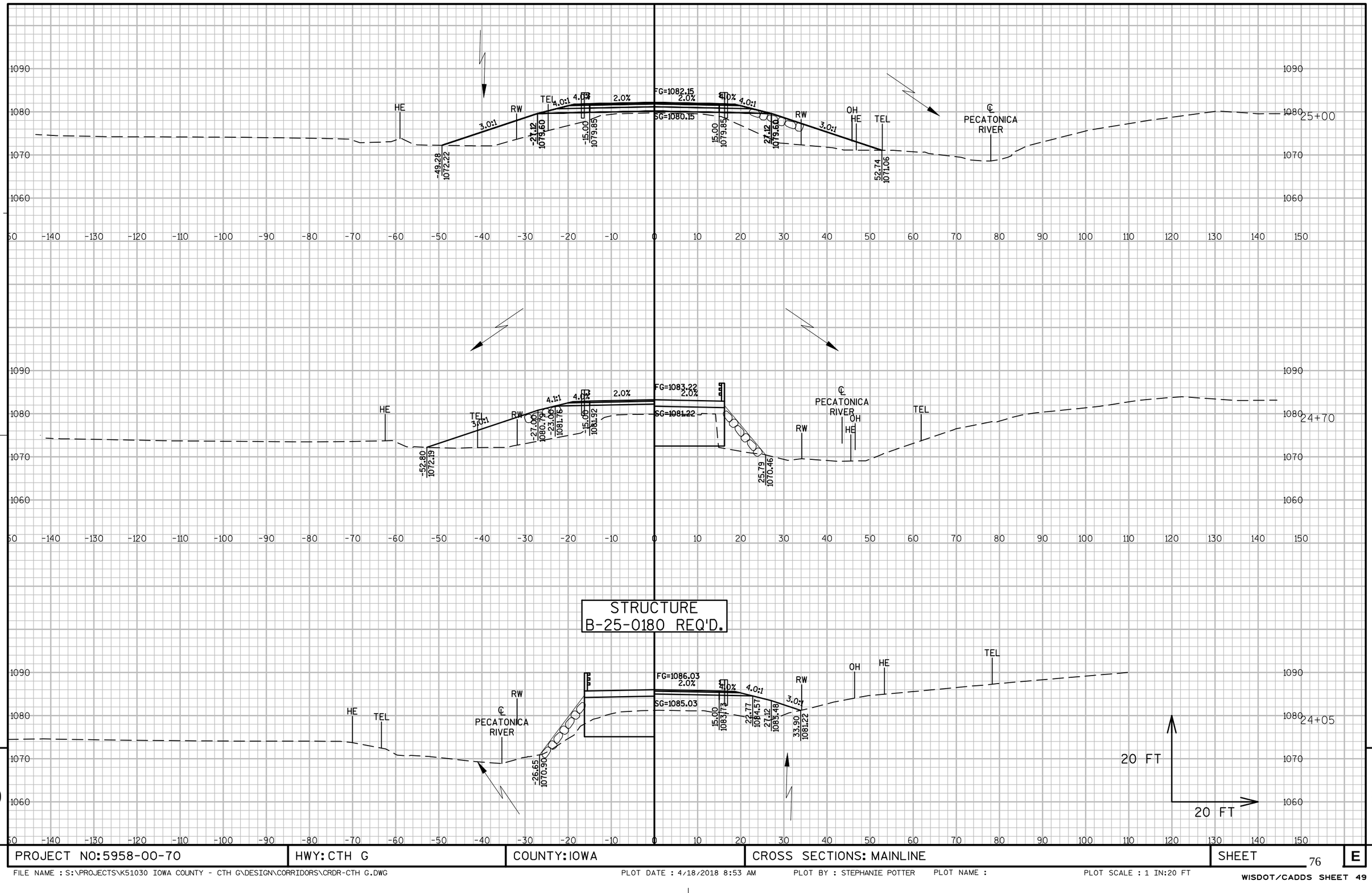
PROJECT NO:5958-00-70	HWY: CTH G	COUNTY:IOWA	CROSS SECTIONS: MAINLINE	SHEET 74	E



PROJECT NO:5958-00-70	HWY: CTH G	COUNTY: IOWA	CROSS SECTIONS: MAINLINE	SHEET 75	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\DESIGN\CORRIDORS\CRDR-CTH G.DWG PLOT DATE : 3/22/2018 3:51 PM PLOT BY : JULIA ZEHNER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



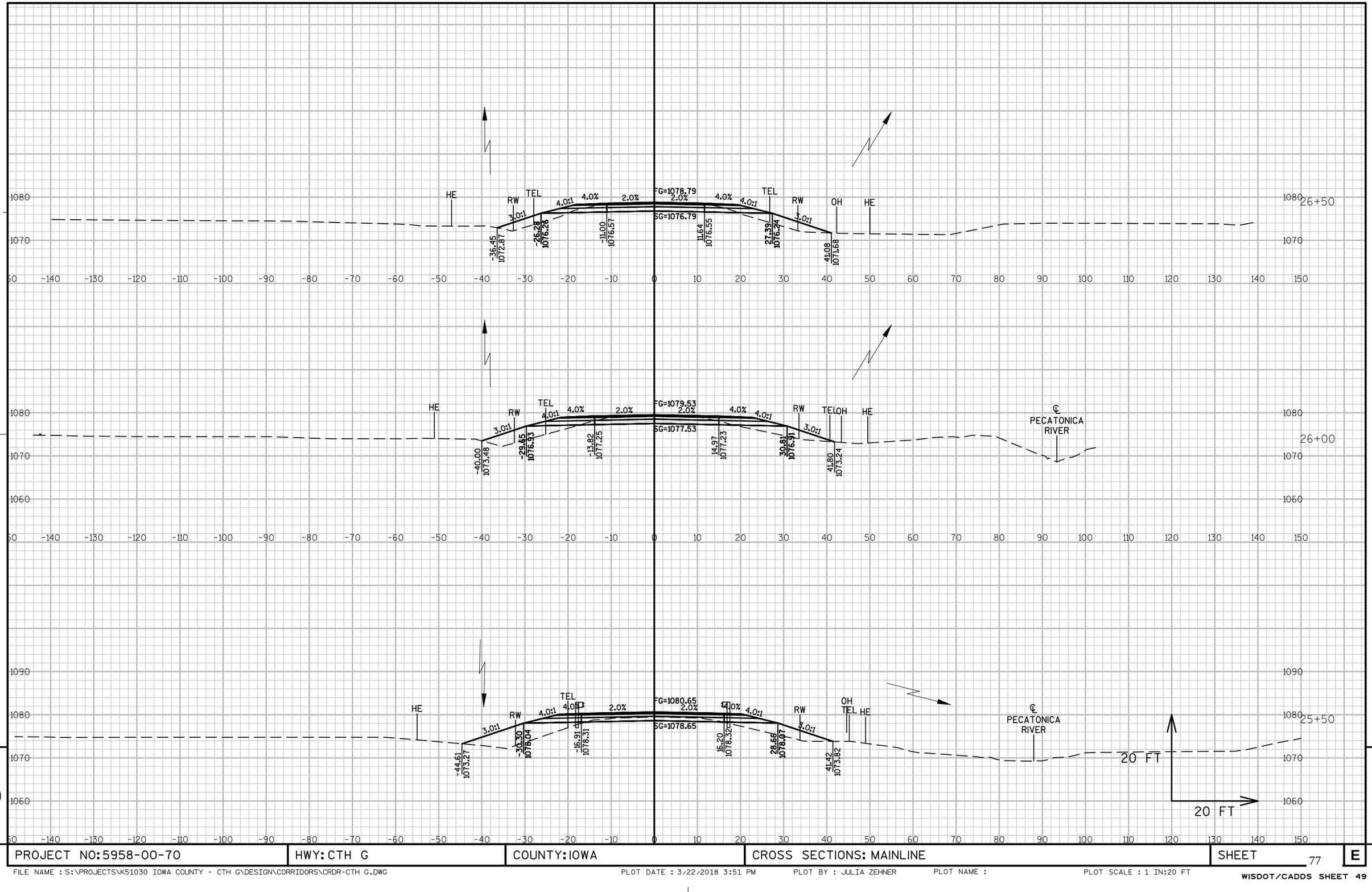
9

9

PROJECT NO:5958-00-70	HWY: CTH G	COUNTY: IOWA	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\DESIGN\CORRIDORS\CRDR-CTH G.DWG PLOT DATE : 4/18/2018 8:53 AM PLOT BY : STEPHANIE POTTER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

9

PROJECT NO:5958-00-70	HWY: CTH G	COUNTY: IOWA	CROSS SECTIONS: MAINLINE	SHEET 77	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\DESIGN\CORRIDORS\CRDR-CTH G.DWG PLOT DATE : 3/22/2018 3:51 PM PLOT BY : JULIA ZEHNER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

END PROJECT 5958-00-70
STA. 27+50
MATCH EXISTING

27+50

HE RW TEL TEL RW OH HE

1090 1080 1070

-140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

27+00

HE RW TEL 4.0:1 4.0% 2.0% FG=1078.43 2.0% 4.0% 4.0:1 TEL RW OH HE 3.0:1 3.0:1 SG=1076.43

-34.11 1072.38 -23.35 1075.96 -11.00 1076.21 11.00 1076.21 24.29 1075.94 37.74 1071.46

STA. 26+69
(1) CULVERT PIPE CLASS III-A 36-INCH
(2) APRON ENDWALLS REQ'D.
SKEW = 10° RHF

26+69

HE RW TEL TEL RW 6.0:1 4.0:1 4.0:1 4.0% 1.8% FG=1078.61 2.1% 4.0% 4.0:1 OH HE 3.0:1 SG=1076.61

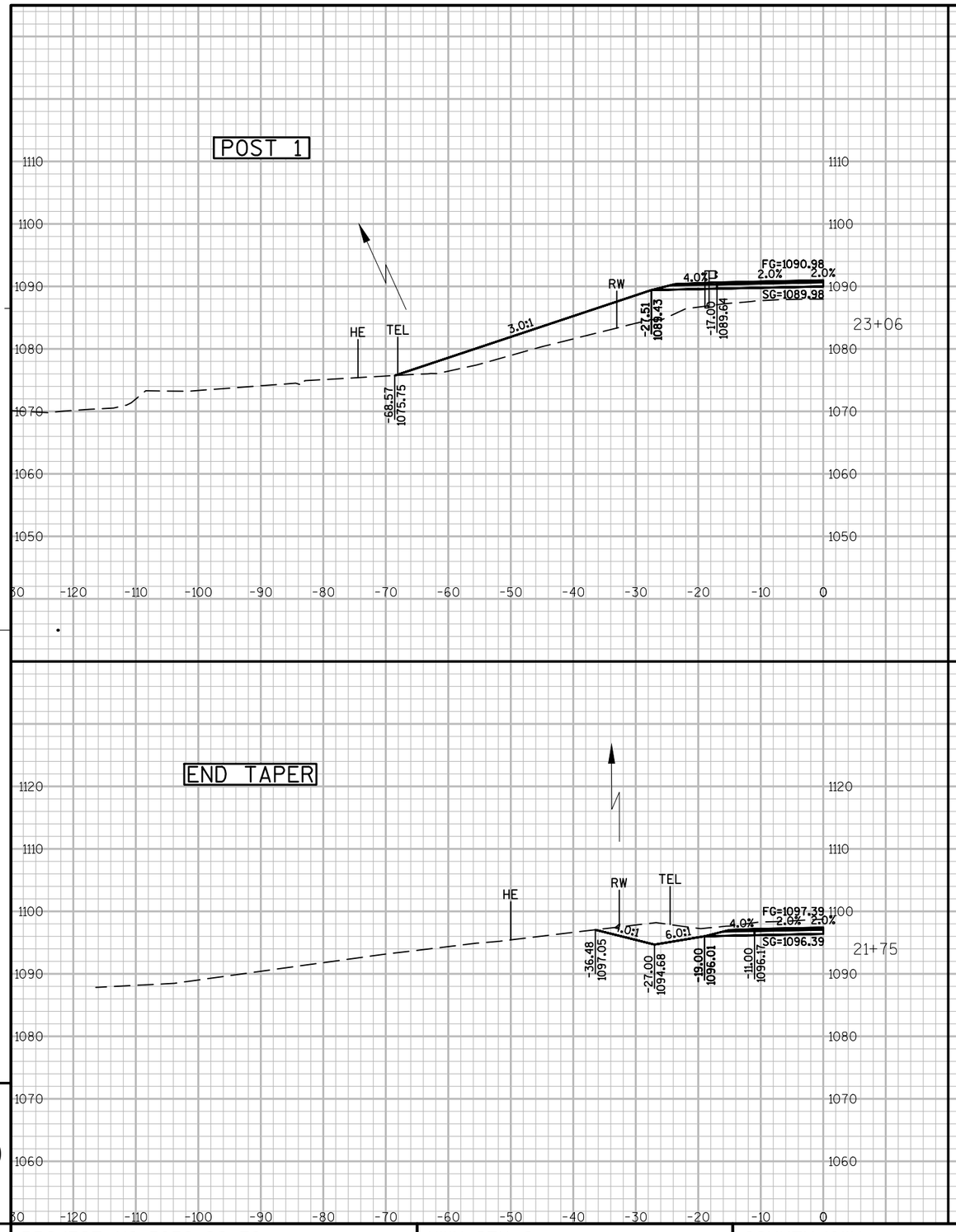
-48.00 1073.20 -41.59 1072.13 -32.60 1072.04 -25.54 1076.14 -11.17 1076.40 11.17 1076.37 26.30 1076.05 31.40 1071.43 40.47 1071.34

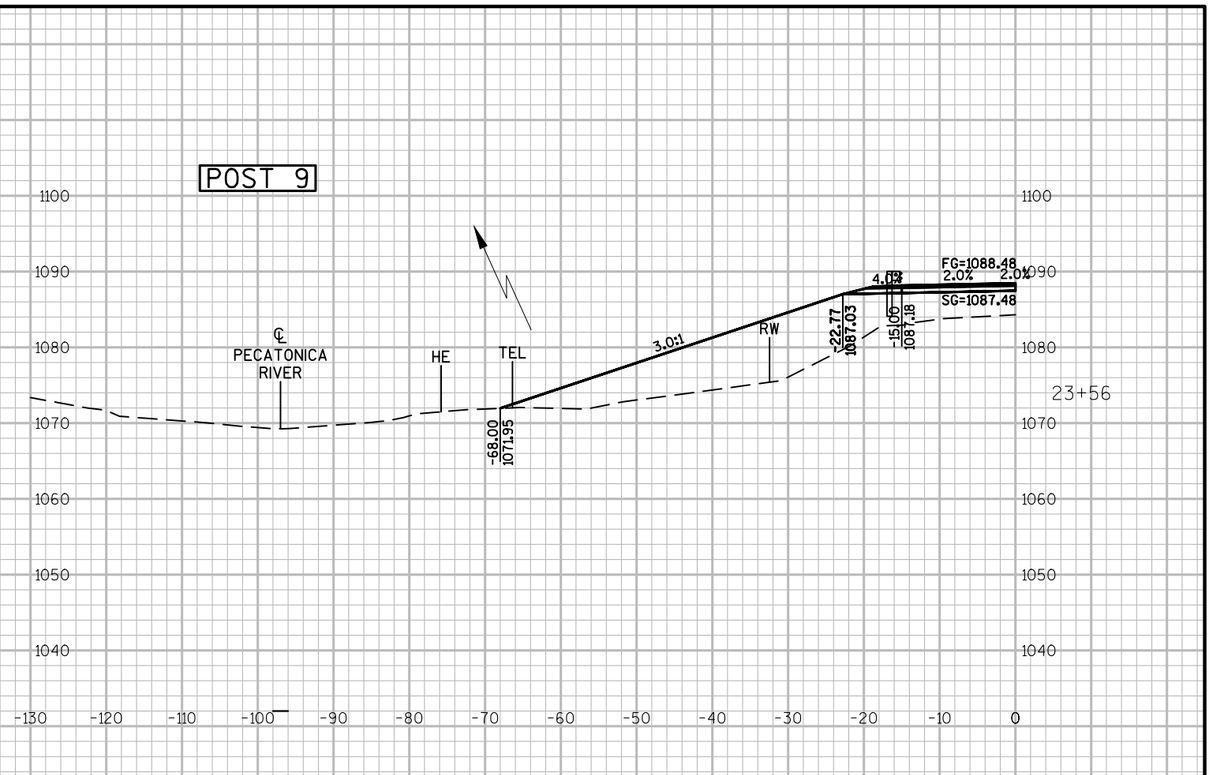
20 FT 20 FT

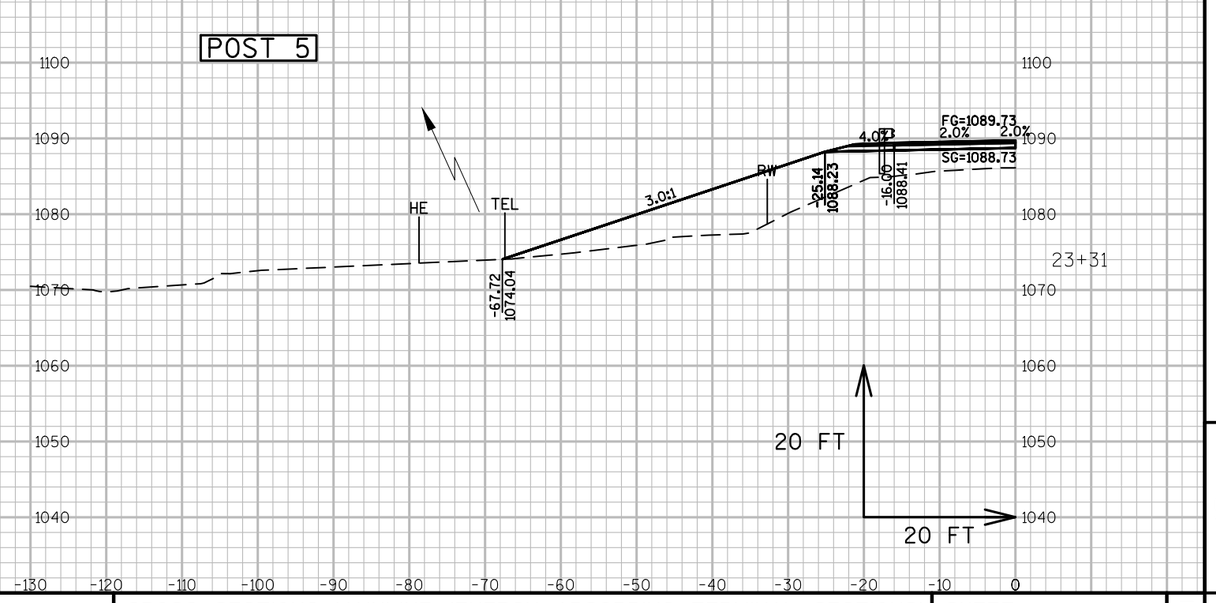
9 9

PROJECT NO: 5958-00-70	HWY: CTH G	COUNTY: IOWA	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\DESIGN\CORRIDORS\CRDR-CTH G.DWG PLOT DATE : 3/22/2018 3:51 PM PLOT BY : JULIA ZEHNER PLOT NAME : PLOT SCALE : 1 IN:20 FT



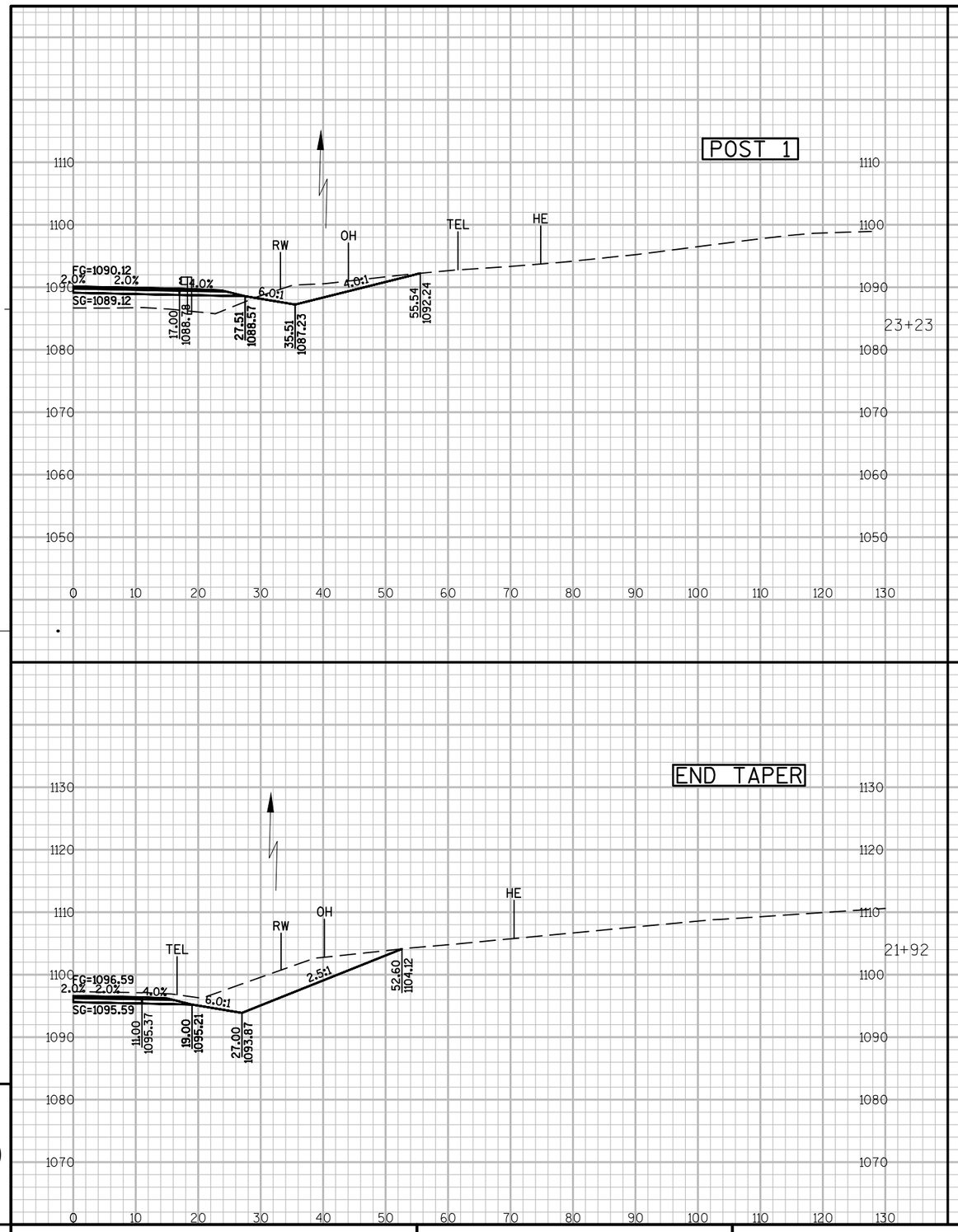


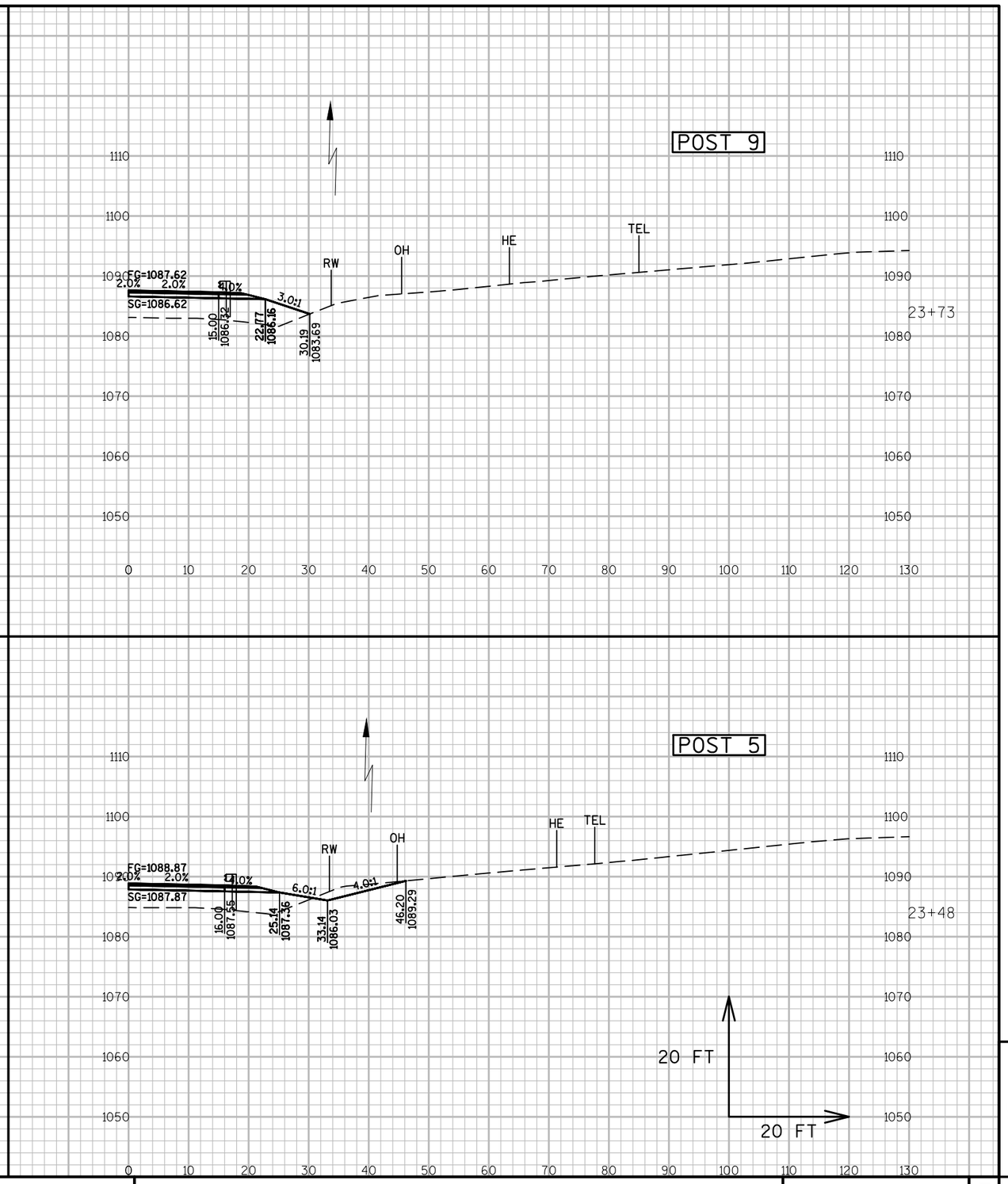


9

9

PROJECT NO:5958-00-70	HWY: CTH G	COUNTY:IOWA	CROSS SECTIONS: MAINLINE (ENERGY ABSORBING TERMINAL SECTIONS)	SHEET 79	E

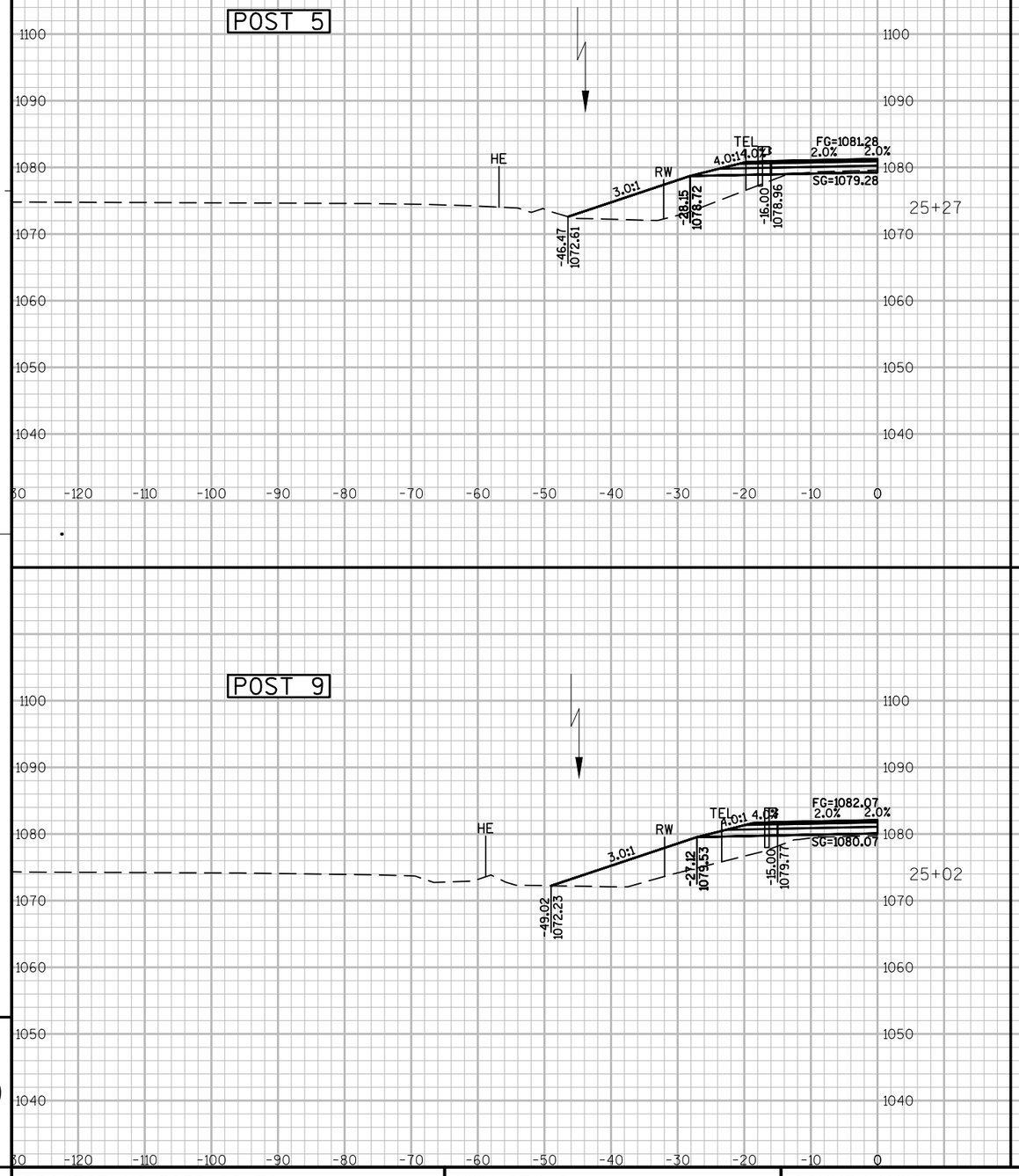


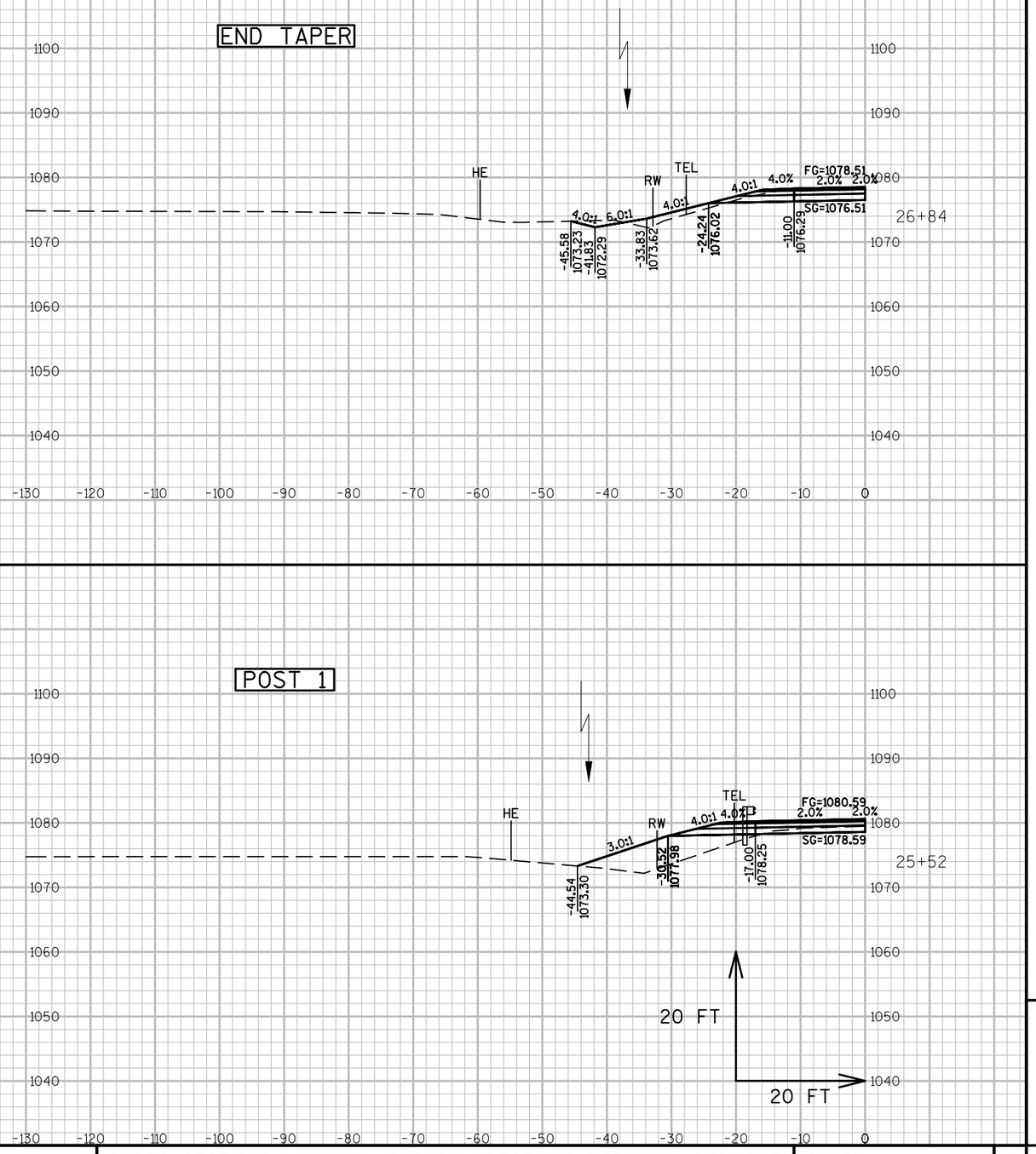


9

9

PROJECT NO:5958-00-70	HWY: CTH G	COUNTY:IOWA	CROSS SECTIONS: MAINLINE (ENERGY ABSORBING TERMINAL SECTIONS)	SHEET 80	E

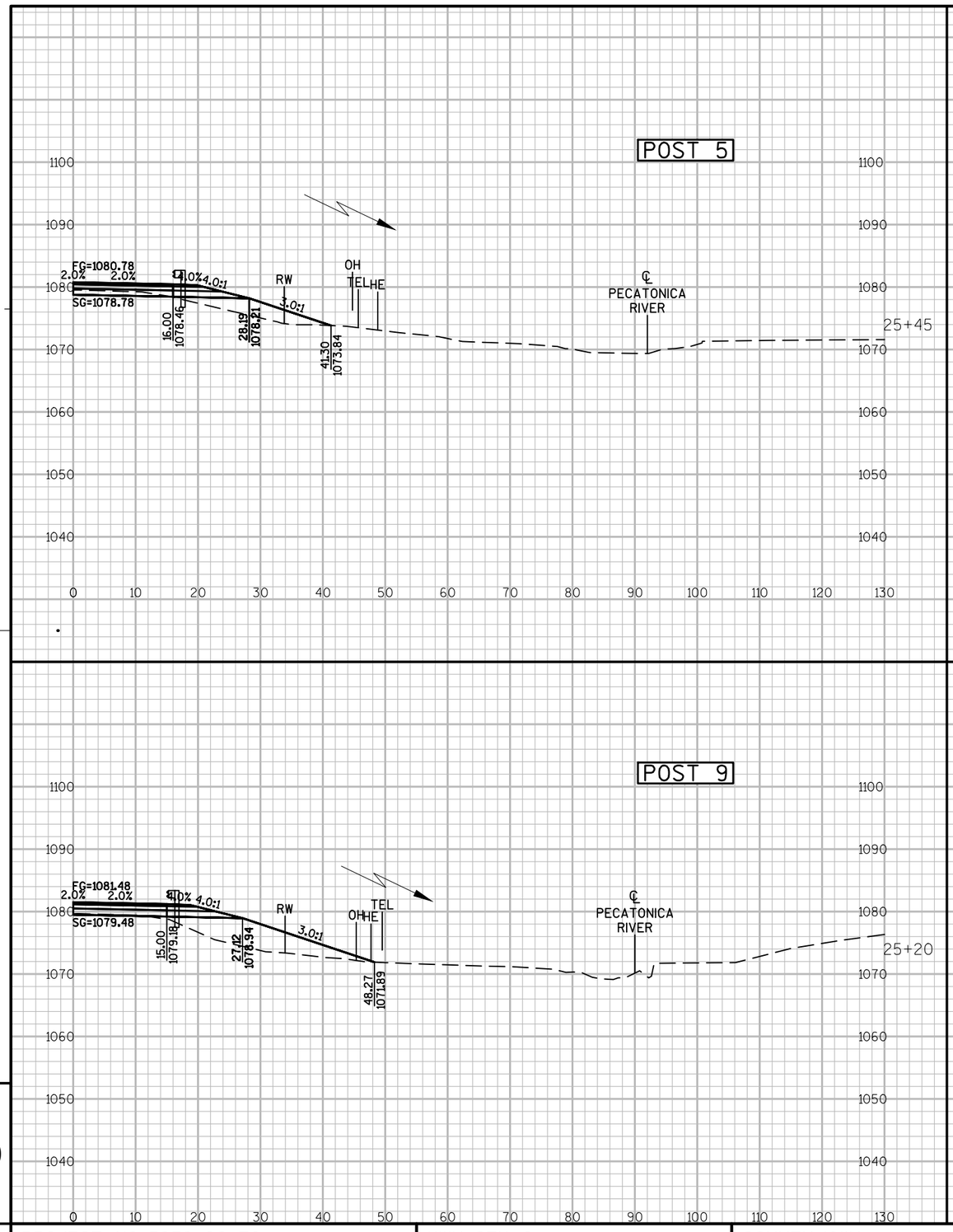


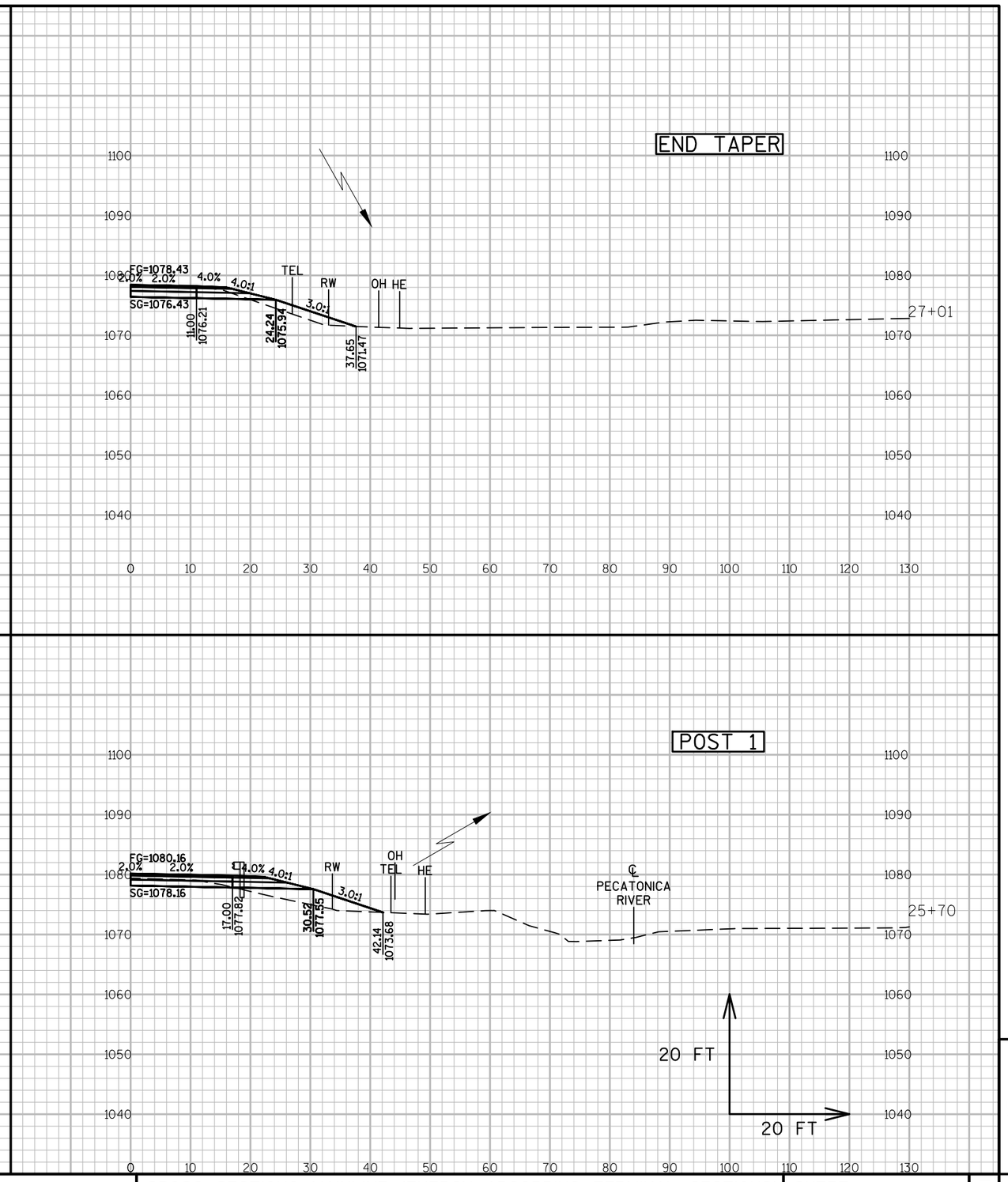


9

9

PROJECT NO:5958-00-70	HWY: CTH G	COUNTY:IOWA	CROSS SECTIONS: MAINLINE (ENERGY ABSORBING TERMINAL SECTIONS)	SHEET 81	E





9

9

PROJECT NO:5958-00-70	HWY: CTH G	COUNTY:IOWA	CROSS SECTIONS: MAINLINE (ENERGY ABSORBING TERMINAL SECTIONS)	SHEET 82	E

END CONSTRUCTION
STA. 50'A'+98
MATCH EXISTING

LIMITS OF
EXCAVATION ROCK

STA. 50'A'+36
(1) CULVERT PIPE CLASS
III–A 24–INCH
(2) APRON ENDWALLS REQ'D.
SKEW = 3° LHF

LIMITS OF
EXCAVATION ROCK

BEGIN CONSTRUCTION
STA. 50'A'+15

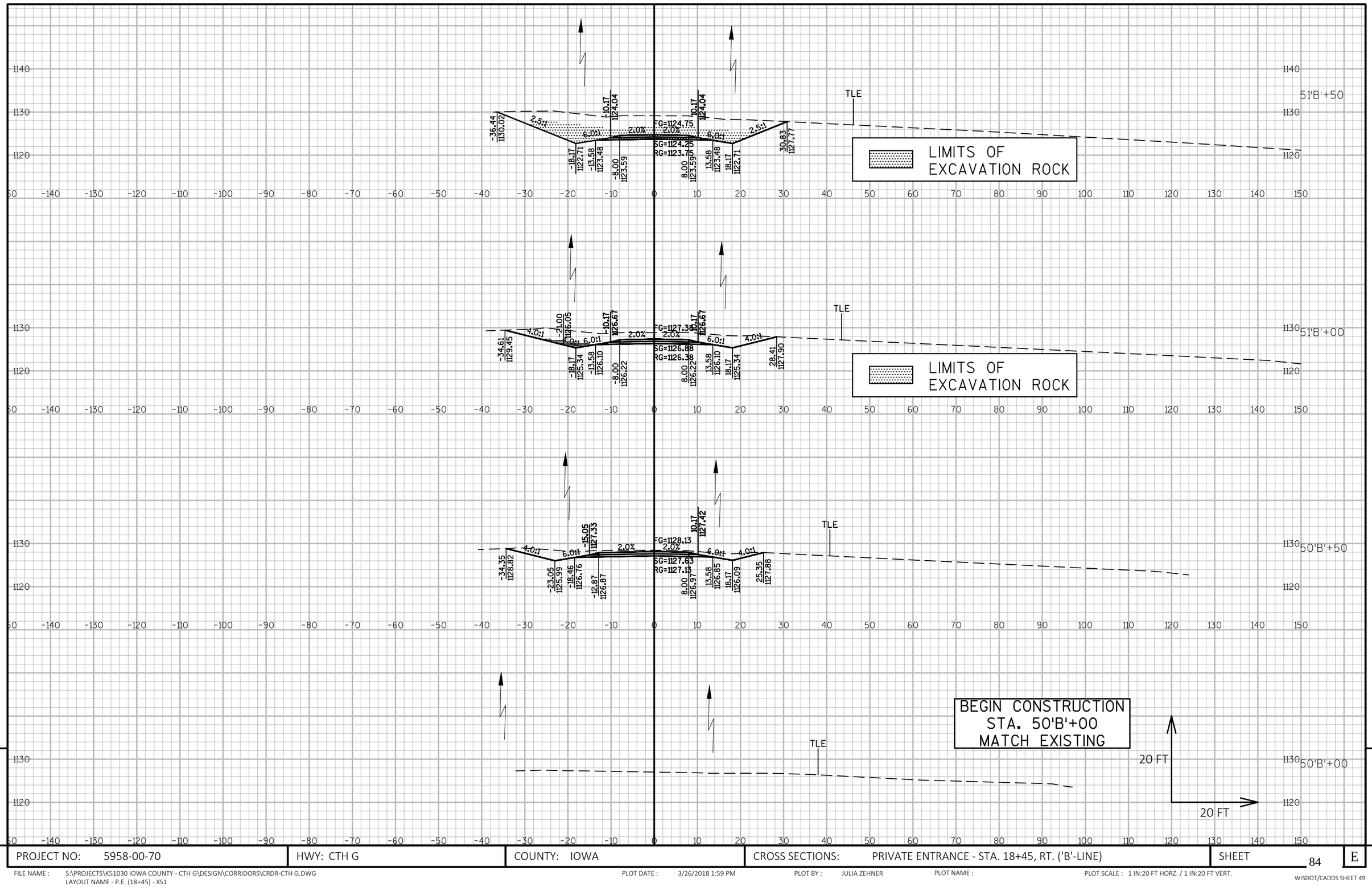
20 FT
20 FT

PROJECT NO: 5958-00-70	HWY: CTH G	COUNTY: IOWA	CROSS SECTIONS: PRIVATE ENTRANCE -STA. 15+33, LT. ('A'-LINE)	SHEET 83	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\DESIGN\CORRIDORS\CRDR-CTH G.DWG
LAYOUT NAME - P.E. (15+33) - XS1

PLOT DATE : 3/22/2018 3:51 PM PLOT BY : JULIA ZEHNER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



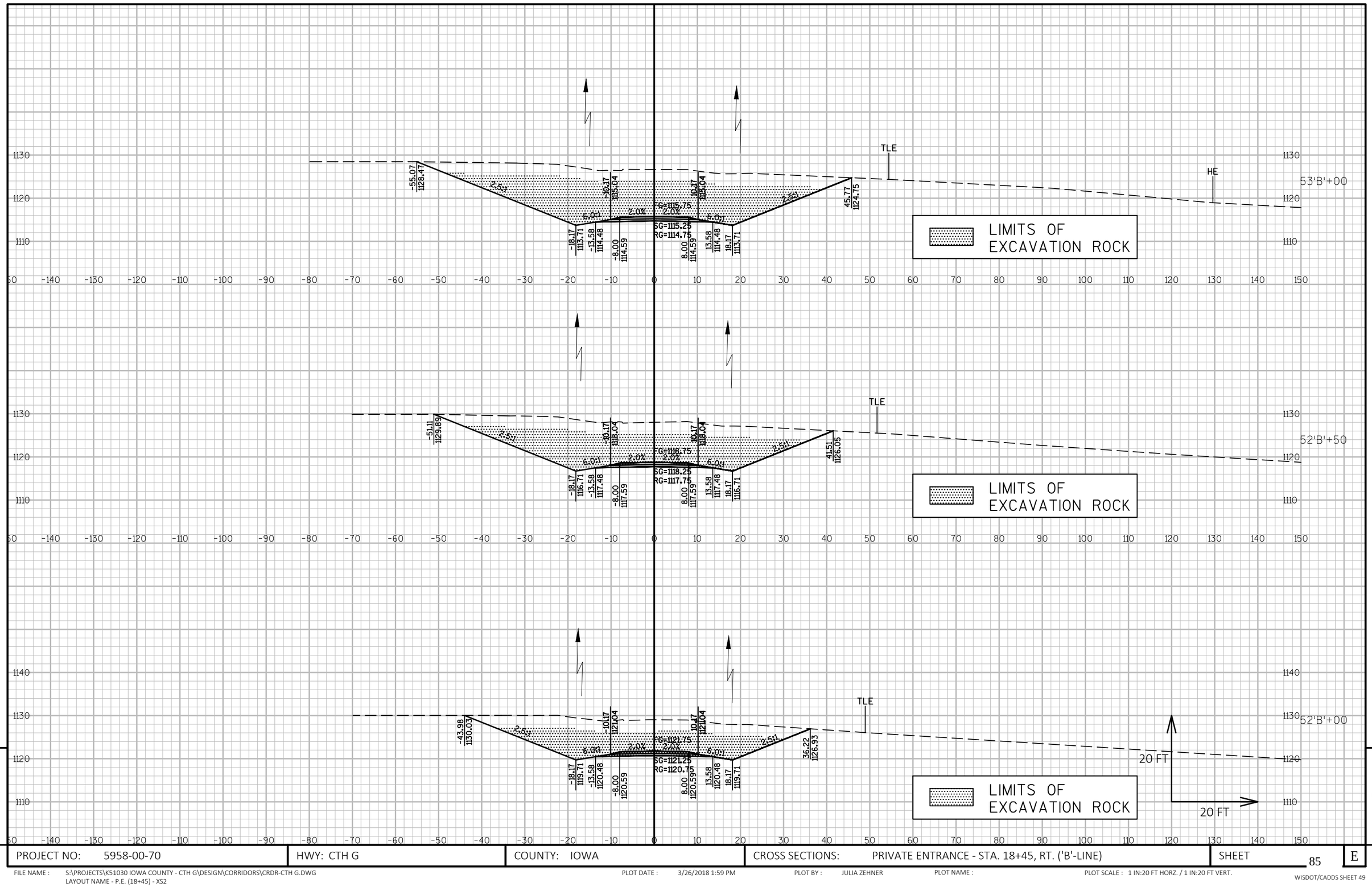
9

9

PROJECT NO: 5958-00-70	HWY: CTH G	COUNTY: IOWA	CROSS SECTIONS: PRIVATE ENTRANCE - STA. 18+45, RT. ('B'-LINE)	SHEET 84	E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\DESIGN\CORRIDORS\CRDR-CTH G.DWG
LAYOUT NAME - P.E. (18+45) - XS1

PLOT DATE : 3/26/2018 1:59 PM PLOT BY : JULIA ZEHNER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

9

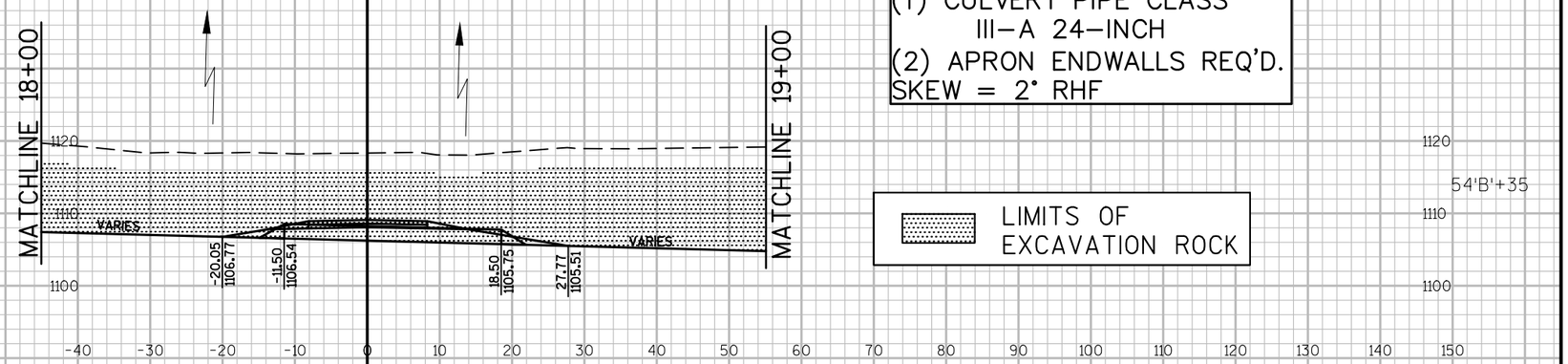
PROJECT NO: 5958-00-70	HWY: CTH G	COUNTY: IOWA	CROSS SECTIONS: PRIVATE ENTRANCE - STA. 18+45, RT. ('B'-LINE)	SHEET 85	E

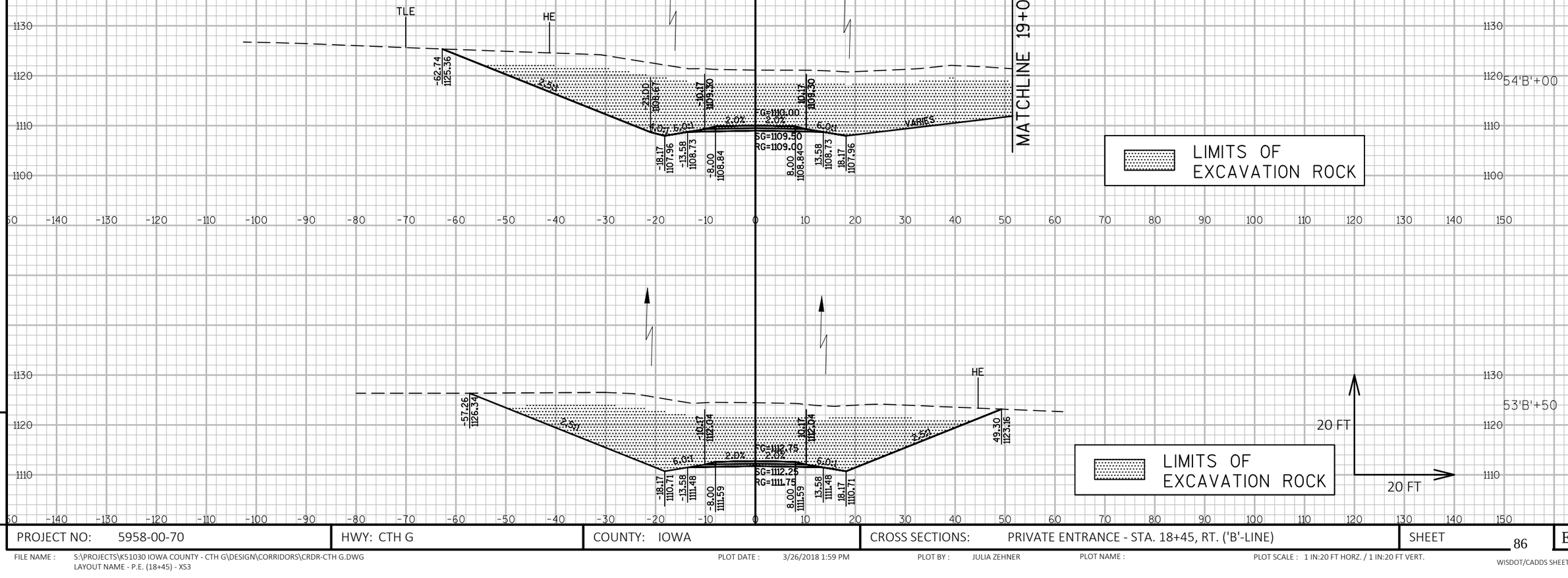
FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\DESIGN\CORRIDORS\CRDR-CTH G.DWG
LAYOUT NAME - P.E. (18+45) - XS2

PLOT DATE : 3/26/2018 1:59 PM PLOT BY : JULIA ZEHNER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

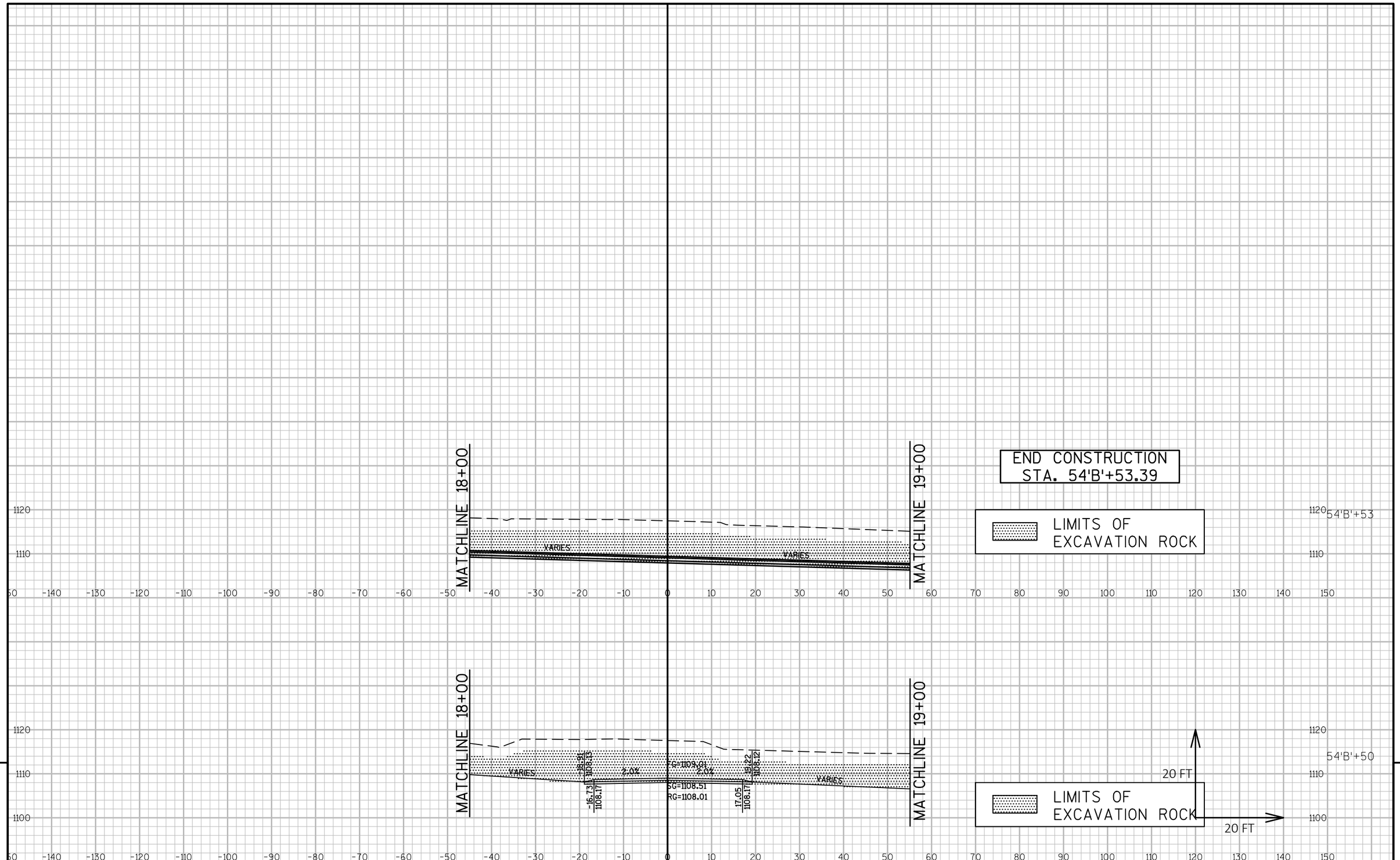
WISDOT/CADDS SHEET 49

STA. 54'B'+35
(1) CULVERT PIPE CLASS III–A 24–INCH
(2) APRON ENDWALLS REQ'D.
SKEW = 2° RHF





PROJECT NO: 5958-00-70	HWY: CTH G	COUNTY: IOWA	CROSS SECTIONS: PRIVATE ENTRANCE - STA. 18+45, RT. ('B'-LINE)	SHEET 86	E



PROJECT NO: 5958-00-70	HWY: CTH G	COUNTY: IOWA	CROSS SECTIONS: PRIVATE ENTRANCE - STA. 18+45, RT. ('B'-LINE)	SHEET 87 E

FILE NAME : S:\PROJECTS\K51030 IOWA COUNTY - CTH G\DESIGN\CORRIDORS\CRDR-CTH G.DWG
LAYOUT NAME - P.E. (18+45) - XS4

PLOT DATE : 3/26/2018 1:59 PM PLOT BY : JULIA ZEHNER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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