WKE

APRIL 2020

PROJECT ID: 3733-00-71

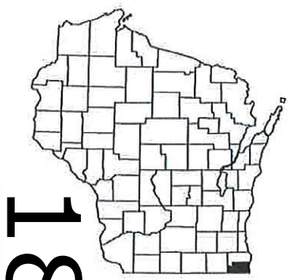
WITH: NA

COUNTY: KENOSHA

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
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 = 200



18

N

DESIGN DESIGNATION

		WEST LIMIT-CTH EM	CTH EM-EAST LIMIT
A.A.D.T. (2018)	=	2300	4100
A.A.D.T. (2038)	=	2430	4800
D.H.V.	=	276	492
D.D.	=	59/41	59/41
T.	=	11.2%	11.2%
DESIGN SPEED	=	60 MPH	40 MPH
ESALS	=	---	---

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			
SLOPE INTERCEPT		CULVERT (Profile View)	
REFERENCE LINE	300'CL	UTILITIES	
EXISTING CULVERT		ELECTRIC	E
PROPOSED CULVERT (Box or Pipe)		FIBER OPTIC	FO
COMBUSTIBLE FLUIDS	CAUTION	GAS	G
		SANITARY SEWER	SAN
		STORM SEWER	SS
		TELEPHONE	T
MARSH AREA		WATER	W
		UTILITY PEDESTAL	
		POWER POLE	
WOODED OR SHRUB AREA		TELEPHONE POLE	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

CTH F

CTH O - 352ND AVENUE

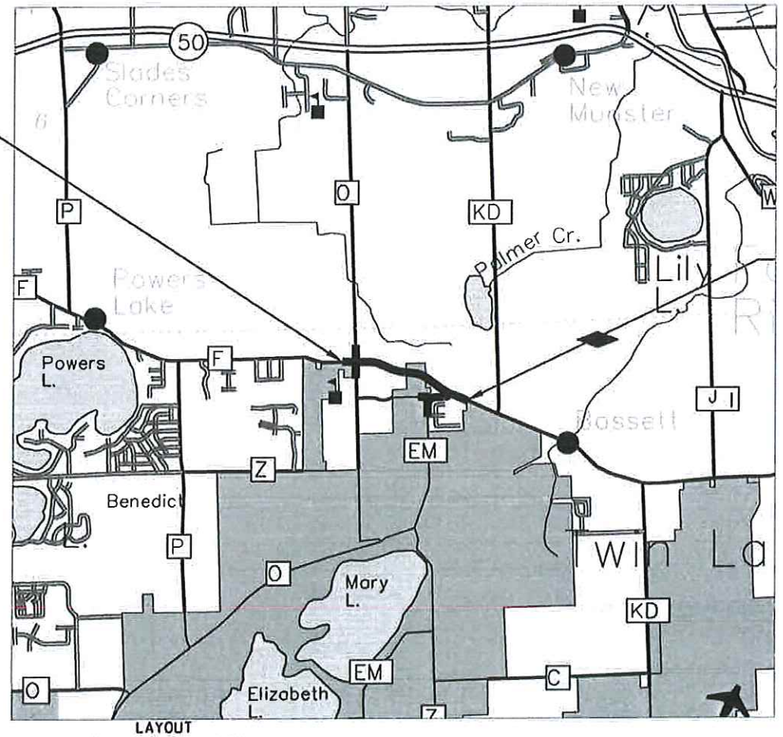
LOCAL ROAD

KENOSHA COUNTY

STATE PROJECT NUMBER
3733-00-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
PROJECT ID		
3733-00-71	WISC 2020142	1

BEGIN PROJECT
STA. 10+00.00
N = 121,439.14
E = 511,962.67



END PROJECT
STA. 59+00.00
N = 119,970.10
E = 516,384.49

LAYOUT
SCALE 0 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.928 MI.

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, KENOSHA 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
KENOSHA COUNTY
Date 10/31/19 Clement Abongavera
(Signature and Title of Official)

ORIGINAL PLANS PREPARED BY
WISCONSIN
ANNE M. HOLZEM
E-43226
SHEBOYGAN, WI
PROFESSIONAL ENGINEER
DATE 10-29-19 Anne M. Holzem
(Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	TERRATEC ENGINEERING
Designer	DONOHUE & ASSOCIATES, INC.
Project Manager	KATHY KRAMER, P.E.
Regional Examiner	SE REGION
Regional Supervisor	JEFF BOHEN, P.E.

APPROVED FOR THE DEPARTMENT
DATE: 10/31/19 K Kramer
(Signature)

E

UTILITY CONTACTS

ALLIANT ENERGY
CURT EILERTSON
400B KOOPMAN LANE
ELKHORN, WI 53121
(262) 379-4543
CURTEILERTSON@ALLIANTENERGY.COM

AMERICAN TRANSMISSION COMPANY
TJ LAUX
P.O. BOX 47
WAUKESHA, WI 53187-0047
(262) 720-1541
TLAUX@ATCLLC.COM

FRONTIER COMMUNICATIONS
CALVIN KLADE
1851 N 14TH AVENUE
WAUSAU, WI 54401
(715) 573-2110
CALVIN.KLADE@FTR.COM

LEGACY CHARTER
TOM PHILLIPS
1348 PLAINFIELD AVE
JANESVILLE, WI 53547
(608) 209-4821
THOMAS.PHILLIPS@CHARTER.COM

LEGACY TIME WARNER CABLE/CHARTER
NEAL LONG
1320 N. DR. MARTIN LUTHER KING JR. DRIVE
MILWAUKEE, WI 53202
(414) 277-4271
NEAL.LONG@CHARTER.COM

MIDWEST FIBER NETWORKS, LLC
NATHAN WRIGHT
6070 N. FLINT ROAD
GLENDALE, WI 53209
(414) 349-3656
NWRIGHT@MIDWESTFIBERNETWORKS.COM

TDS TELECOM
ERIK BORGEN
525 JUNCTION RD
MADISON, WI 53717
(608) 556-7110
ERIK.BORGEN@TDSTELECOM.COM

WE ENERGIES - GAS
JOE BONGRATZ
700 S. KANE STREET
BURLINGTON, WI 53105
(414) 587-7105
JOSEPH.BONGRATZ@WE-ENERGIES.COM

GENERAL NOTES:

PIPE ELEVATIONS, LENGTHS AND LOCATIONS AS SHOWN ON THE PLANS MAY BE ADJUSTED TO FIT EXISTING FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ALL DISTURBED AREAS WITHIN THE RIGHT OF WAY AND TLE SHALL BE RESTORED WITH TOPSOIL, SEED, FERTILIZER AND EROSION MAT AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. ANY OTHER DISTURBED AREAS ARE TO BE SEEDED, FERTILIZED AND EMAT AS DIRECTED BY THE ENGINEER AT THE CONTRACTORS EXPENSE.

THE EXACT LOCATION AND WIDTHS OF PRIVATE AND COMMERCIAL DRIVEWAYS ARE TO BE DETERMINED BY THE ENGINEER IN THE FIELD AND SHALL BE REPLACED IN KIND.

ALL DISTANCES ARE GROUND DISTANCES. TIES ARE HORIZONTAL UNLESS SHOWN OTHERWISE.

THE LOCATIONS OF EXISTING UTILITY FACILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

TREES DESIGNATED FOR REMOVAL ARE SHOWN ON THE PLANS. NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

NO ADDITIONAL PAYMENT WILL BE MADE FOR PAVEMENT REMOVAL SHOULD THE EXISTING PAVEMENT BE FOUND TO CONTAIN STEEL MESH.

THE CONTROL SURVEY CONDUCTED FOR THIS PROJECT MET THIRD ORDER CONTROL SURVEY SPECIFICATIONS.

EXCAVATION BELOW SUBGRADE (EBS) LOCATIONS ARE NOT SHOWN ON THE CROSS SECTIONS. IF EBS IS DETERMINED NECESSARY BY THE ENGINEER IN THE FIELD IT SHALL BE MEASURED AND PAID FOR AS EXCAVATION COMMON, PROVIDED THE ENGINEER DID NOT APPROVE THE SUBGRADE FOR SUBSEQUENT OPERATIONS (SEE STANDARD SPEC. SECTION 205.5.2(2)). LATERAL TRANSITIONS OUT OF EBS AREAS SHALL BE AT A 5:1 SLOPE.

EROSION CONTROL DEVICES ARE SHOWN ON THE EROSION CONTROL SHEETS AND IN THE SUMMARY OF MISCELLANEOUS QUANTITIES. EROSION CONTROL DEVICES ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTORS ECIP AND BY THE ENGINEER IN THE FIELD. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER REQUIRED.

ALL CURB AND GUTTER RADII SHOWN ON THE PLANS ARE MEASURED TO THE FLANGE UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ANY AND ALL DISTURBED AREAS THAT WILL NOT BE PERMANENTLY RESTORED WITHIN 14 DAYS OF INITIAL DISTURBANCE SHALL BE TEMPORARILY SEEDED AND MULCHED WITHIN 4 DAYS OF ANY DISTURBANCE.

ORDER OF DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
EROSION CONTROL DETAILS
STORM SEWER DETAILS
PERMANENT SIGNING AND PAVEMENT MARKING
TRAFFIC CONTROL
DETOUR PLAN
ALIGNMENT DIAGRAM

DNR CONTACT

CRAIG WEBSTER
WISCONSIN DNR SE REGION
141 NW BARSTOW ROOM 180
WAUKESHA, WI 53188
(262) 574-2141
CRAIG.WEBSTER@WISCONSIN.GOV

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

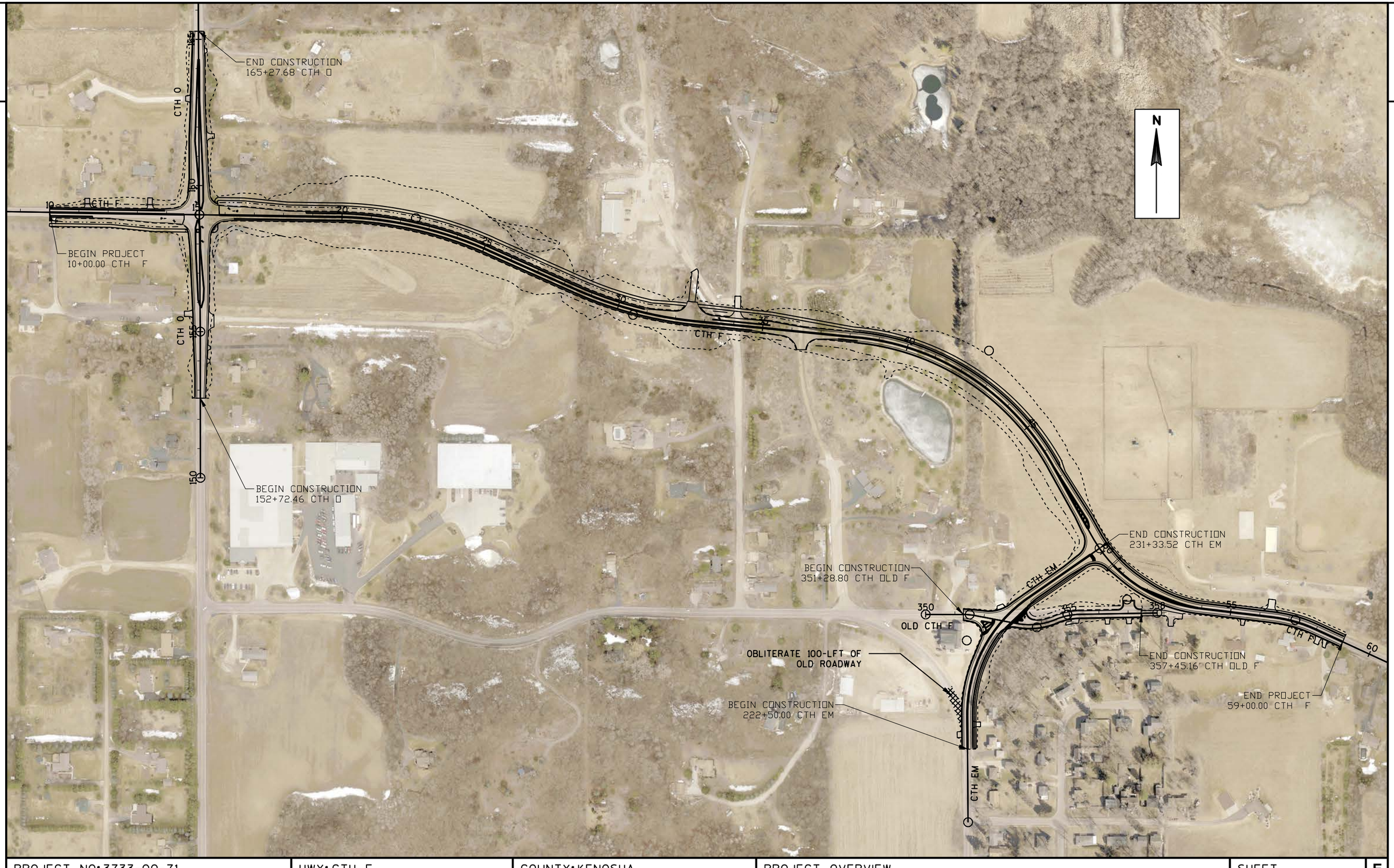
2

RUNOFF COEFFICIENT TABLE

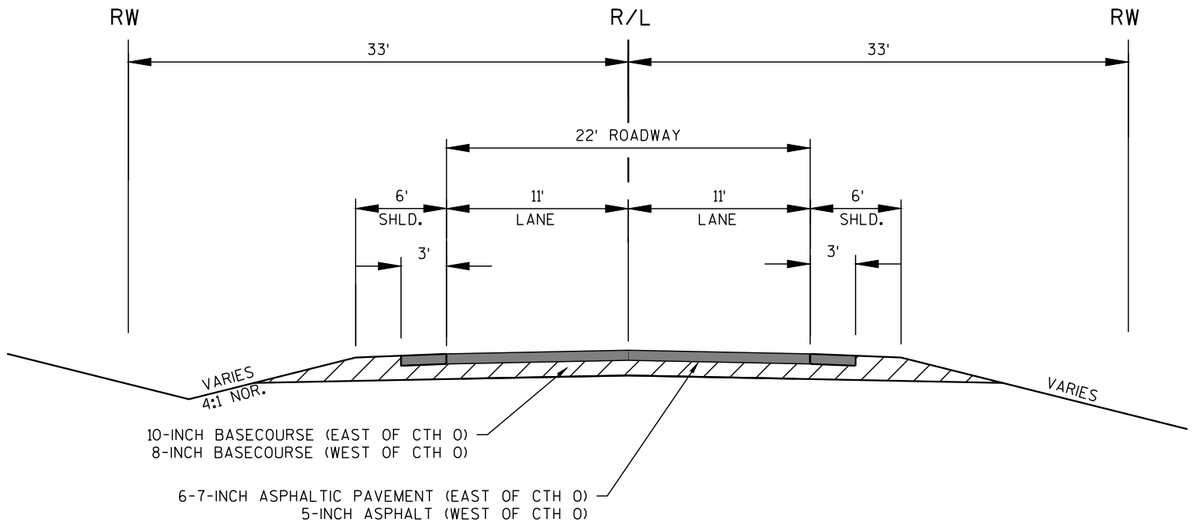
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33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

TOTAL PROJECT AREA = 19.353 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 19.353 ACRES

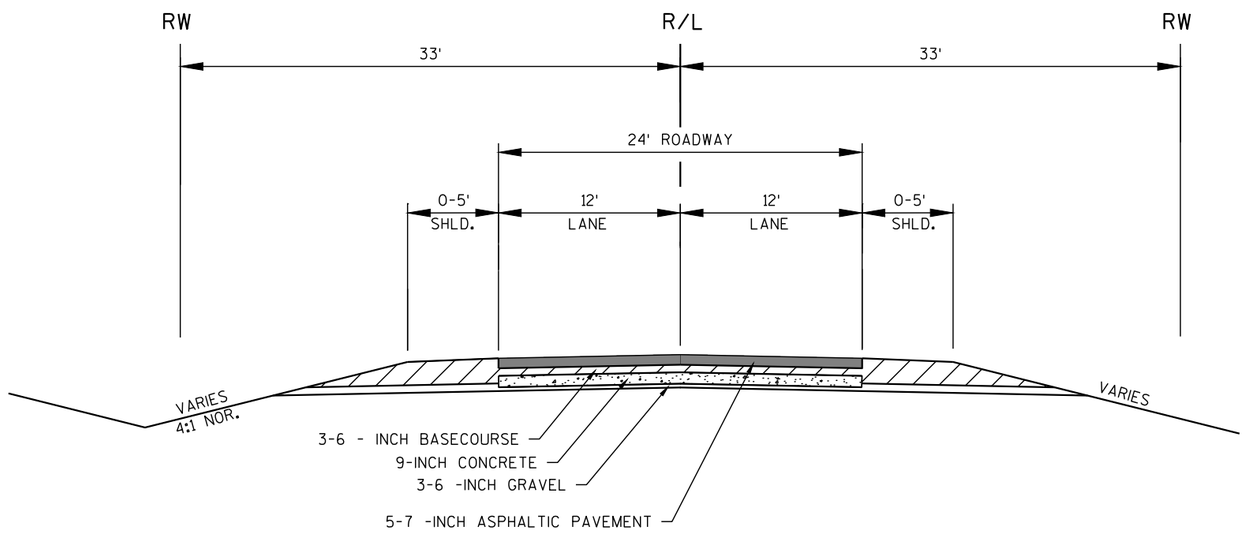
2



PROJECT NO:3733-00-71	HWY:CTH F	COUNTY:KENOSHA	PROJECT OVERVIEW	SHEET 3	E



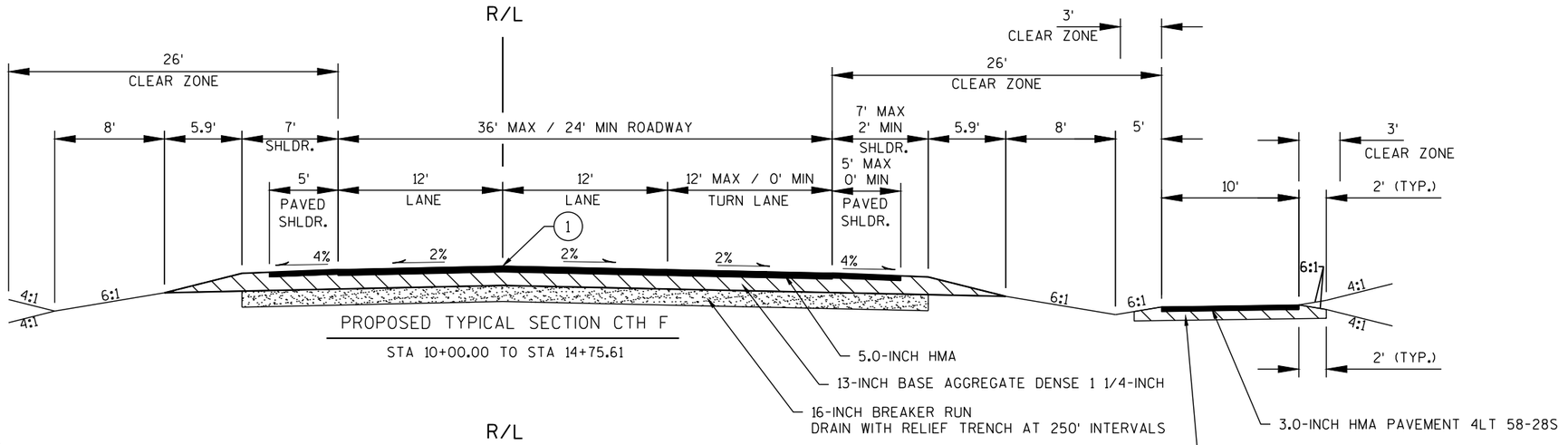
EXISTING TYPICAL SECTION CTH F

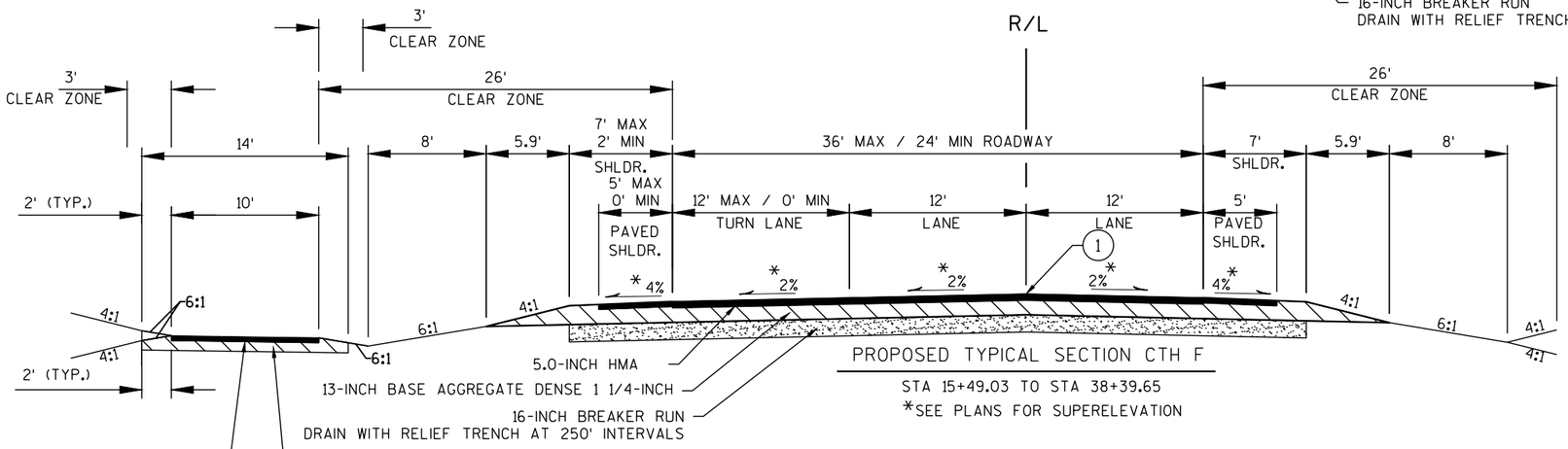


EXISTING TYPICAL SECTION CTH O AND CTH EM

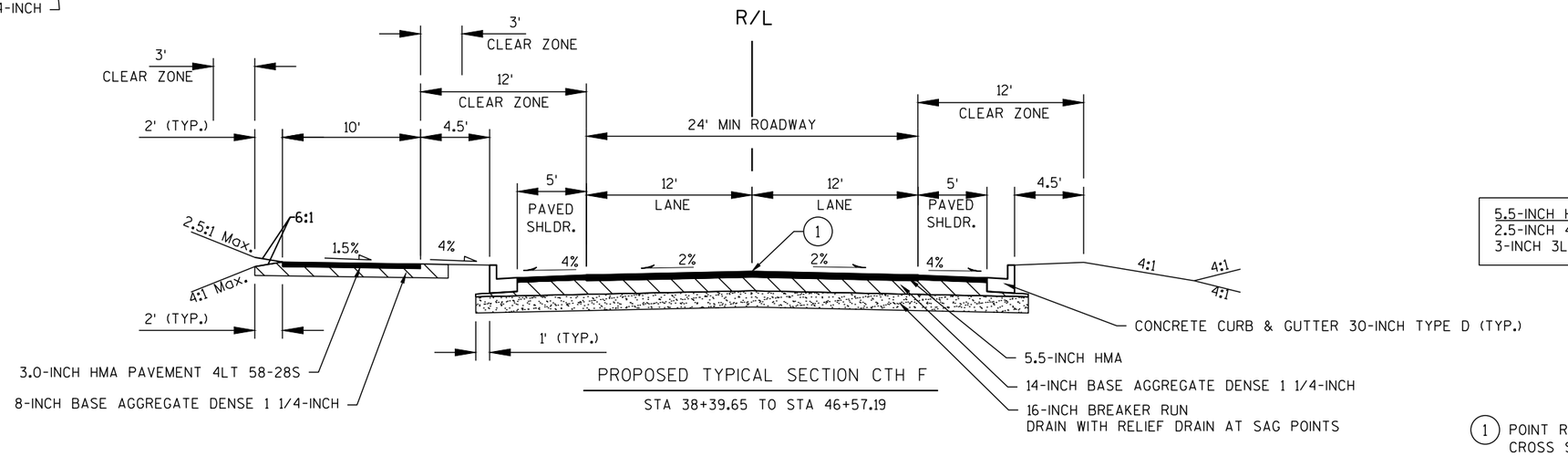
CTH O - STA 152+72.58 - STA 165+27.68
CTH EM - STA 222+50.00 TO STA 231+85.69

PROJECT NO:3733-00-71	HWY:CTH F	COUNTY:KENOSHA	TYPICAL SECTIONS - EXISTING	SHEET 4	E





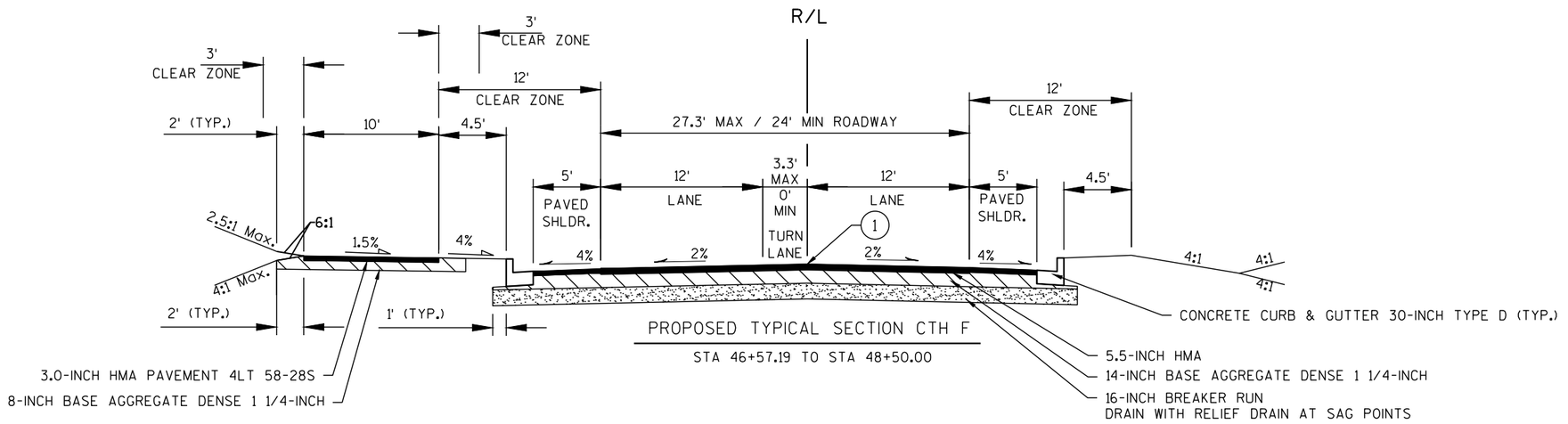
5.0-INCH HMA
2.5-INCH 4LT 58-28S UPPER LAYER
2.5-INCH 3LT 58-28S LOWER LAYER

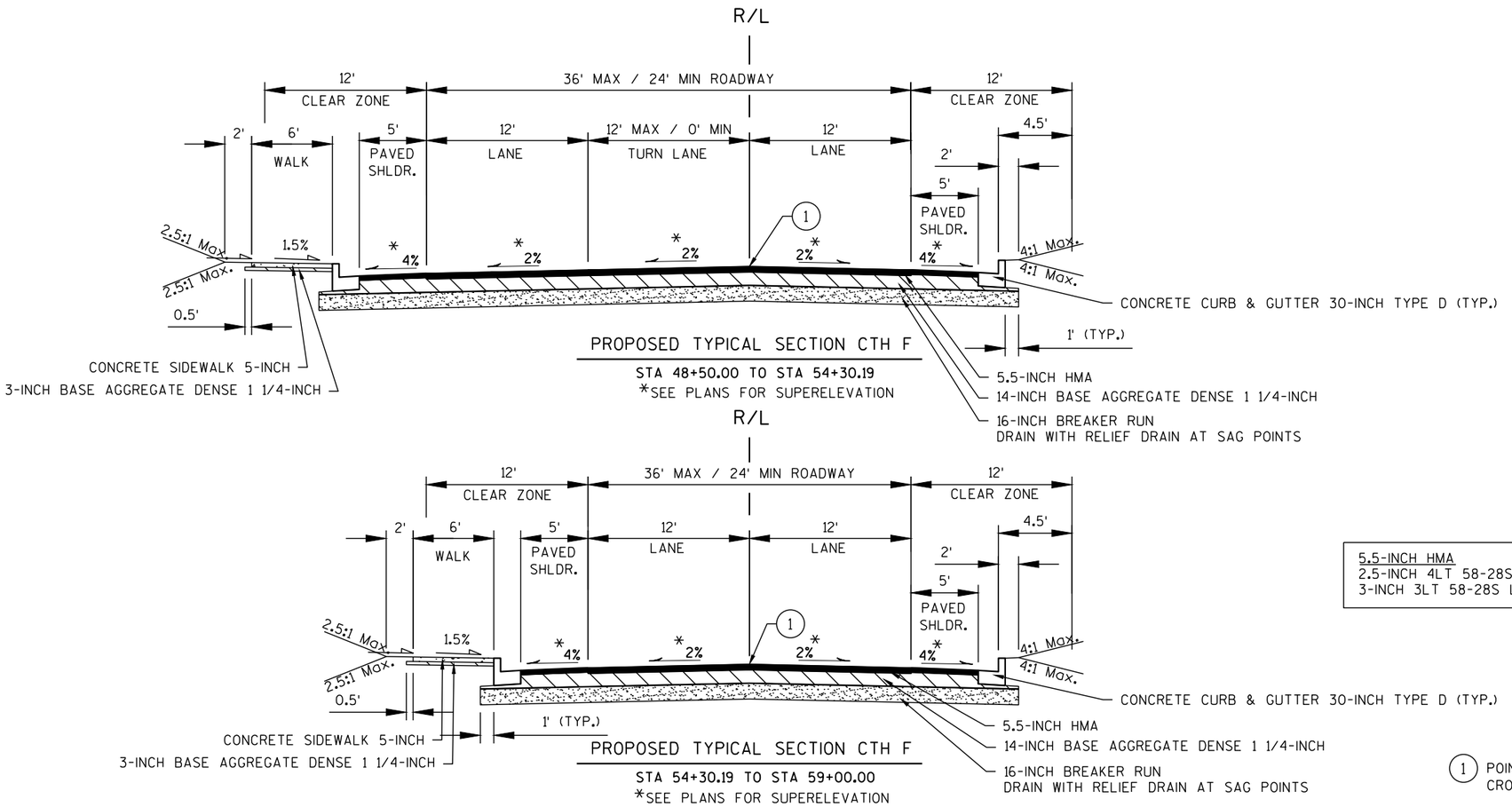


5.5-INCH HMA
2.5-INCH 4LT 58-28S UPPER LAYER
3-INCH 3LT 58-28S LOWER LAYER

(1) POINT REFERRED TO ON PROFILE AND CROSS SECTIONS.

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	TYPICAL SECTIONS - PROPOSED	SHEET 5	E

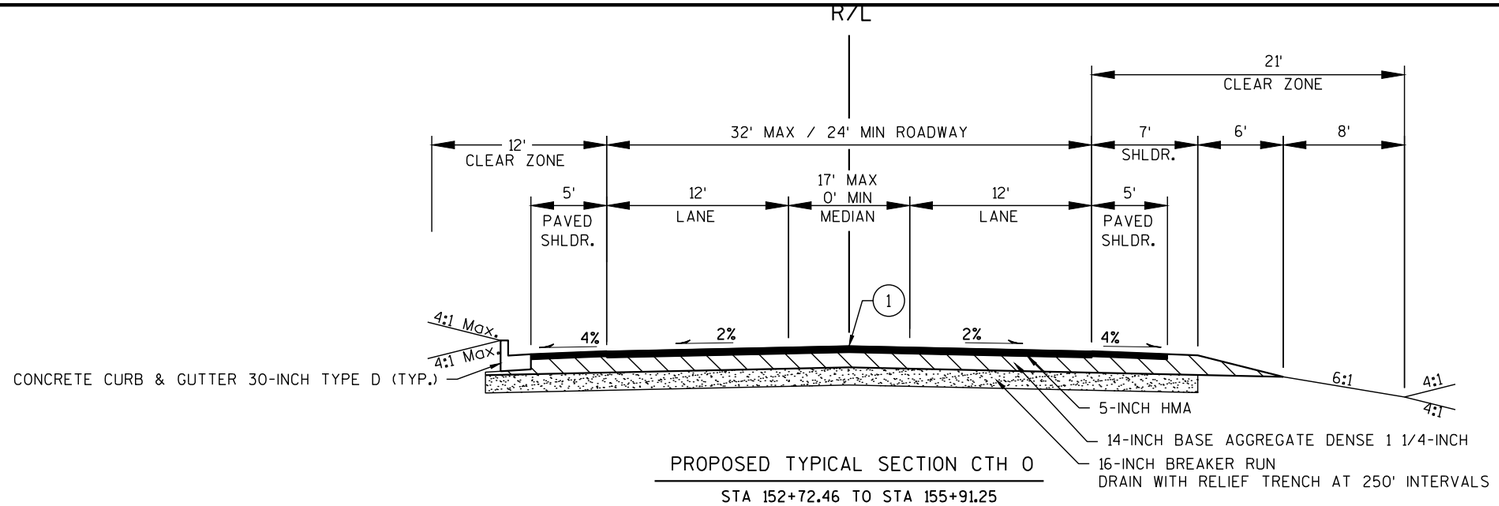




5.5-INCH HMA
2.5-INCH 4LT 58-28S UPPER LAYER
3-INCH 3LT 58-28S LOWER LAYER

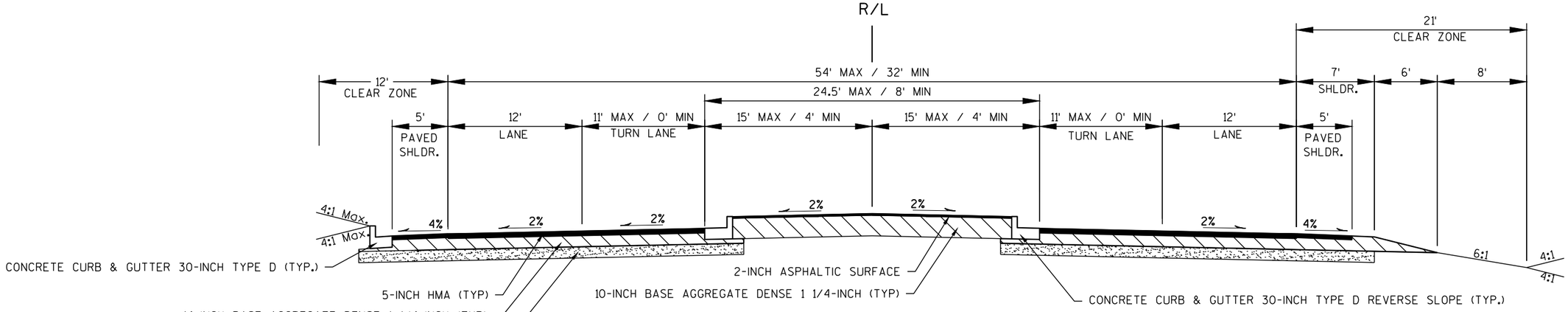
(1) POINT REFERRED TO ON PROFILE AND CROSS SECTIONS.

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	TYPICAL SECTIONS - PROPOSED	SHEET 6	E



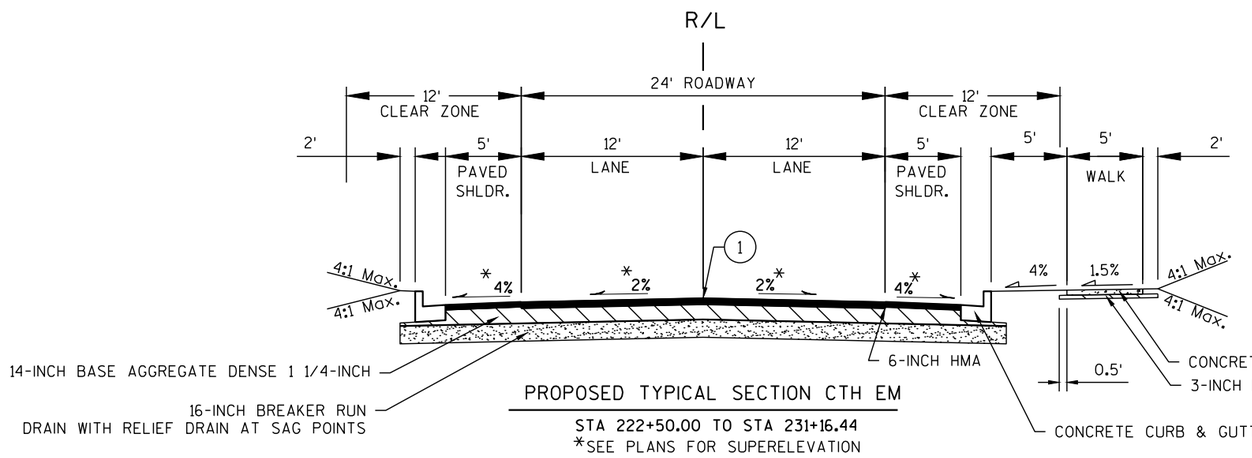
PROPOSED TYPICAL SECTION CTH O

STA 152+72.46 TO STA 155+91.25
STA 164+27.44 TO STA 165+27.68



PROPOSED TYPICAL SECTION CTH O

STA 155+91.25 TO STA 164+27.44



PROPOSED TYPICAL SECTION CTH EM

STA 222+50.00 TO STA 231+16.44
*SEE PLANS FOR SUPERELEVATION

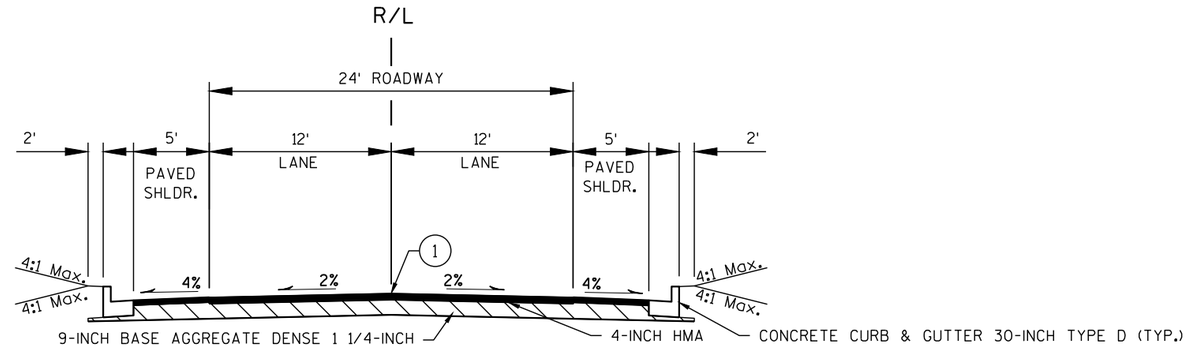
5-INCH HMA
2.5-INCH 4LT 58-28S UPPER LAYER
2.5-INCH 3LT 58-28S LOWER LAYER

6-INCH HMA
2.5-INCH 4LT 58-28S UPPER LAYER
3.5-INCH 3LT 58-28S LOWER LAYER

(1) POINT REFERRED TO ON PROFILE AND CROSS SECTIONS.

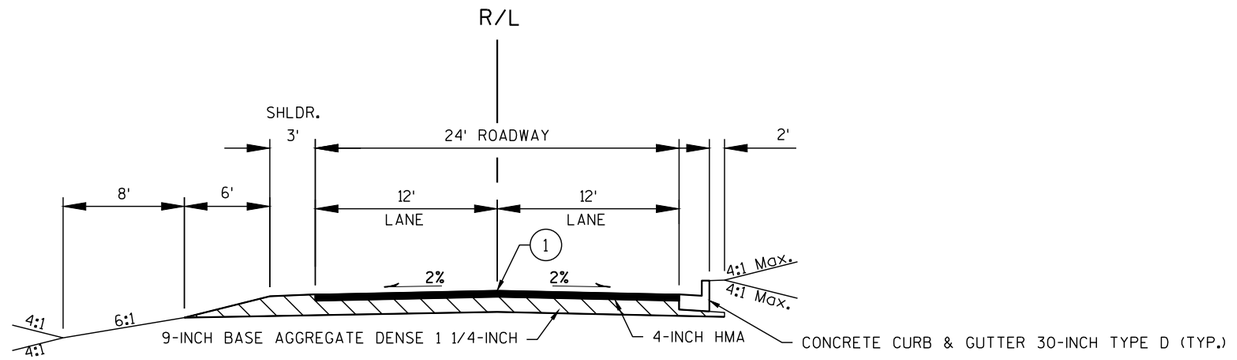
PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	TYPICAL SECTIONS - PROPOSED	SHEET 7	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSOTHER\020301_TS ALT5.DWG
LAYOUT NAME - 020301_TS ALT5 - 020304
PLOT DATE : 11/1/2019 12:08 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



PROPOSED TYPICAL SECTION CTH OLD F

STA 351+28.80 TO STA 352+45.01



PROPOSED TYPICAL SECTION CTH OLD F

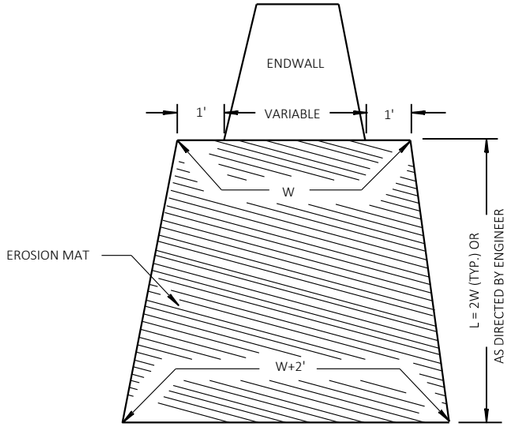
STA 352+84.47 TO STA 357+45.16

4-INCH HMA
1.75-INCH 4LT 58-28S UPPER LAYER
2.25-INCH 3LT 58-28S LOWER LAYER

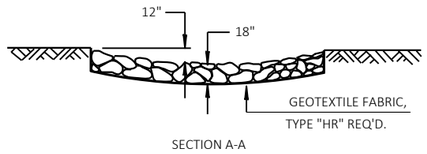
(1) POINT REFERRED TO ON PROFILE AND CROSS SECTIONS.

PROJECT NO:3733-00-71	HWY:CTH F	COUNTY:KENOSHA	TYPICAL SECTIONS - PROPOSED	SHEET 8	E

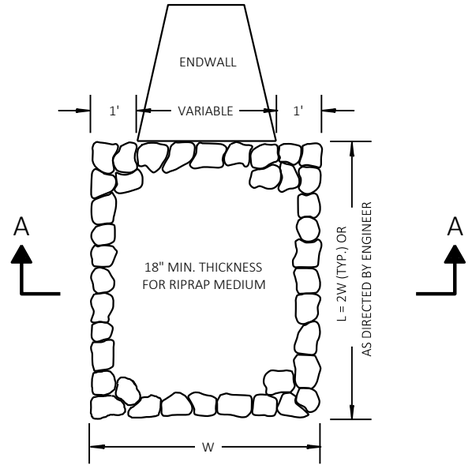
FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSOTHER\020301_TS ALT5.DWG
LAYOUT NAME - 020301_TS ALT5 - 020305
PLOT DATE : 11/1/2019 12:08 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



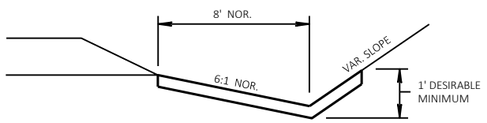
EROSION MAT TREATMENT AT CULVERT/STORM SEWER ENDWALLS



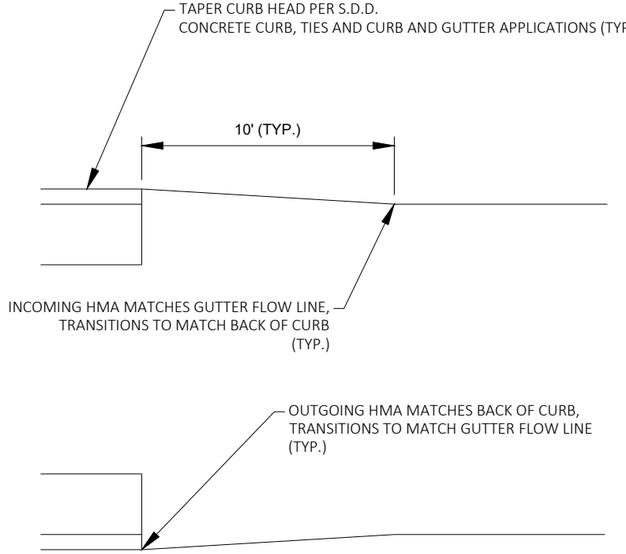
SECTION A-A



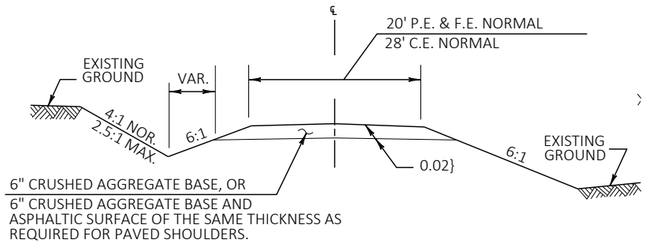
RIPRAP MEDIUM TREATMENT AT CULVERT/STORM SEWER ENDWALLS



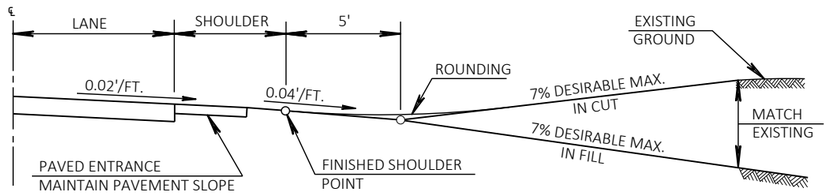
EROSION MAT DETAIL FOR DITCHES



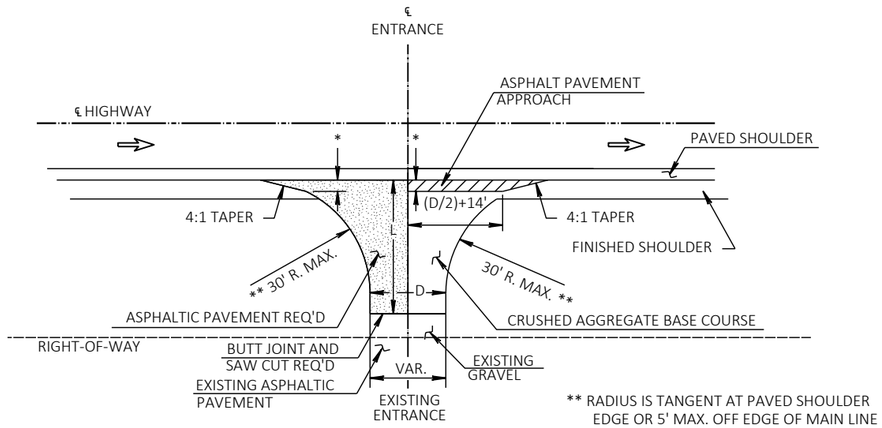
BEGIN CONCRETE CURB & GUTTER TRANSITION DETAIL



TYPICAL CROSS SECTION



PROFILE VIEW



L=VARIABLE, EXACT LENGTH TO BE DETERMINED IN THE FIELD BY THE ENGINEER. BLEND BACK ON THE ENTRANCE FAR ENOUGH TO GET A SMOOTH PROFILE.

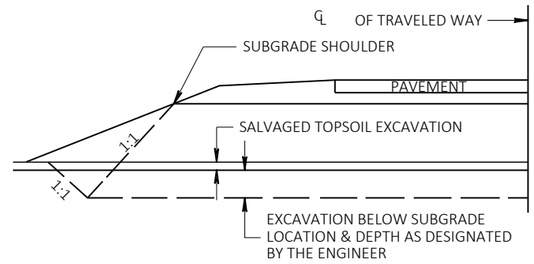
D=DRIVEWAY WIDTH
D=20'TYP.(PE's & FE's) (16'MIN.-24'MAX.)
D=28'TYP.(CE's & FARM ENT.) (24'MIN.-35'MAX.)

** RADIUS IS TANGENT AT PAVED SHOULDER EDGE OR 5' MAX. OFF EDGE OF MAIN LINE PAVEMENT WHICH EVER IS LESS.

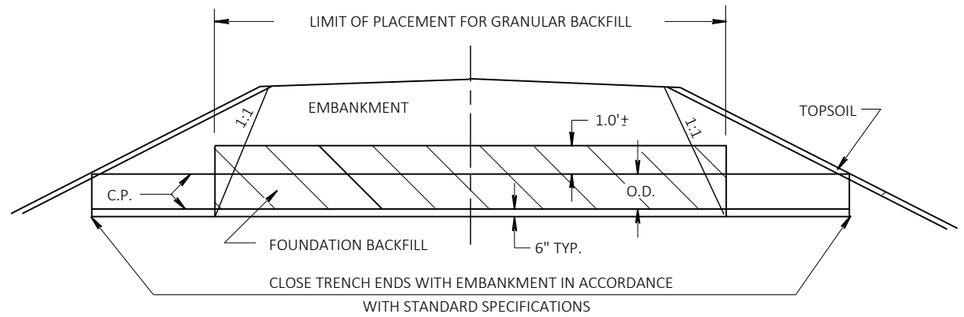
* 3' MAX. OR TO FINISHED SHOULDER WHICH EVER IS LESS.

PLAN VIEW

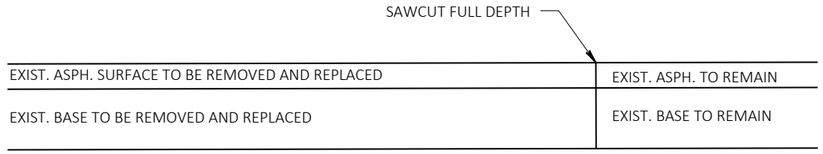
RURAL DRIVEWAY INTERSECTION DETAIL - TYPE "A"
(PE's, FE's & CE'S)



DETAIL FOR EXCAVATION BELOW SUBGRADE

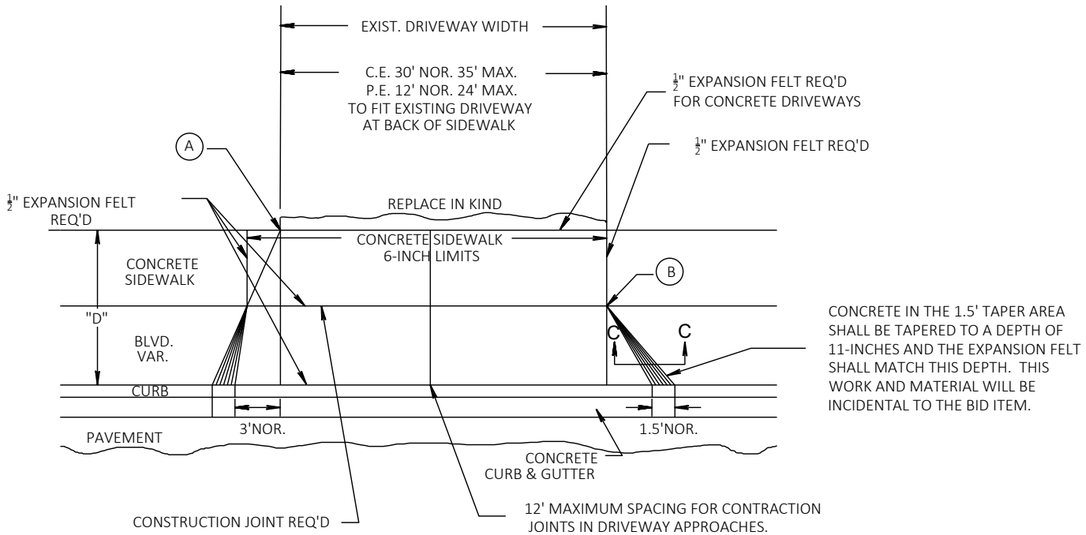


CULVERT BACKFILL DETAIL



ASPHALT BUTT JOINT

DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER - TYPE "B"

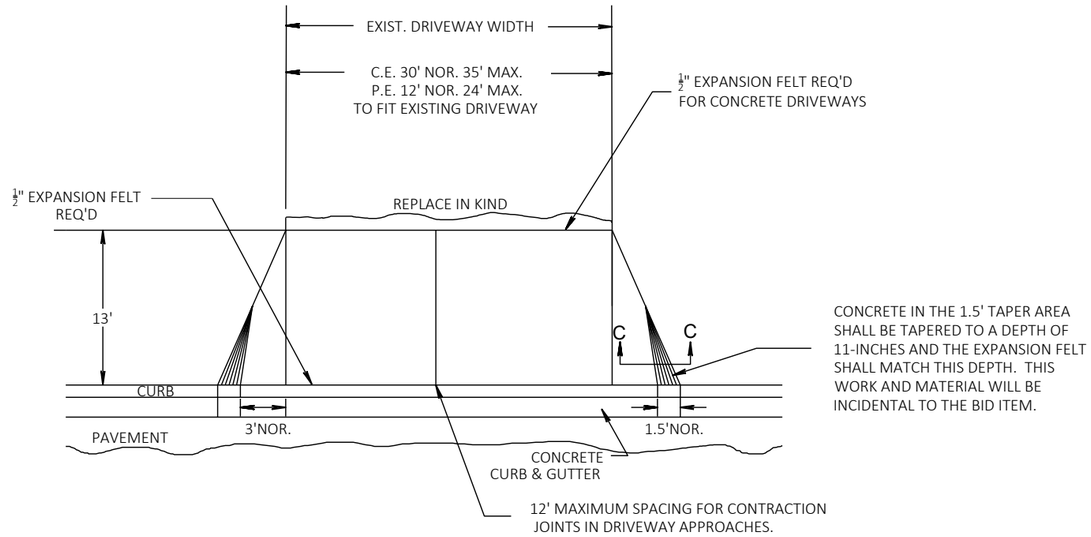


PLAN VIEW

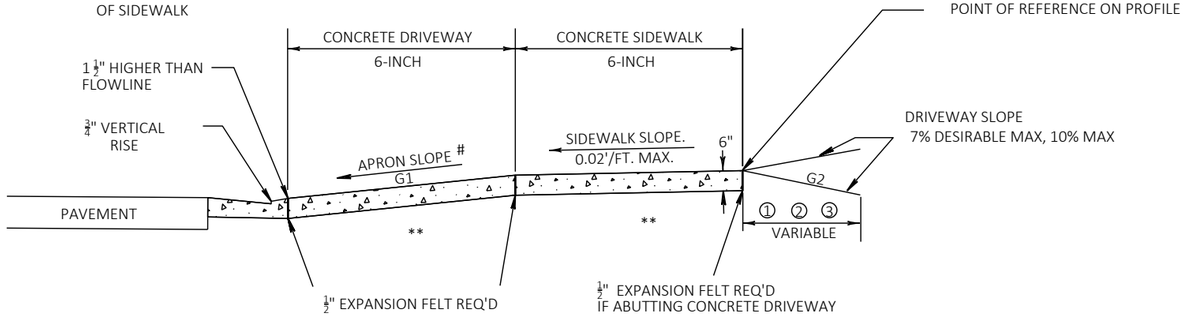
(A) WHEN "D" IS 13' OR LESS, ALIGN TAPER WITH BACK OF SIDEWALK

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

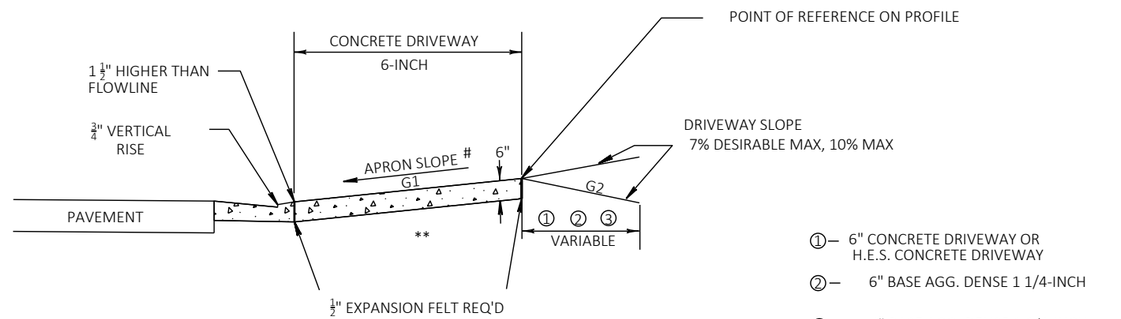
DRIVEWAY ENTRANCE DETAIL WITHOUT SIDEWALK, CURB & GUTTER - TYPE "C"



PLAN VIEW



TYPICAL SIDEWALK SECTION



TYPICAL SECTION

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

② — 6" BASE AGG. DENSE 1 1/4-INCH

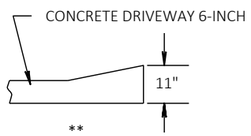
③ — 4" BASE AGG. DENSE 1 1/4-INCH BASE WITH 2" ASPHALTIC SURFACE

** = 6" BASE AGG. DENSE 1 1/4-INCH REQ'D UNDER CONCRETE DRWY

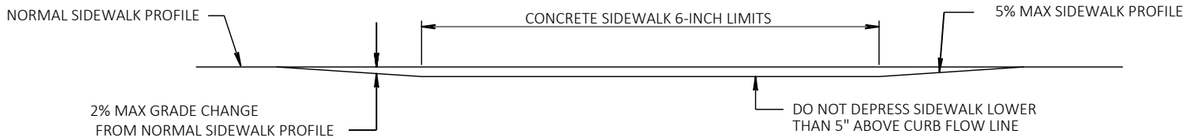
TERRACE WIDTH	APRON SLOPE (G1)		
	MIN %	DESIRABLE %	MAX %
3 FT	7.0	8.5	9.0
4 FT	5.0	7.0	9.0
5 FT	4.0	7.0	9.0
6 FT	4.0	7.0	9.0
7 FT	3.5	7.0	9.0
8 FT	3.0	7.0	9.0

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

DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE

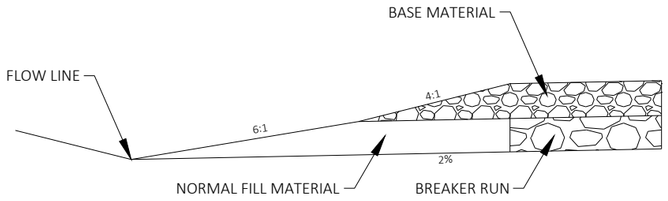


SECTION C-C

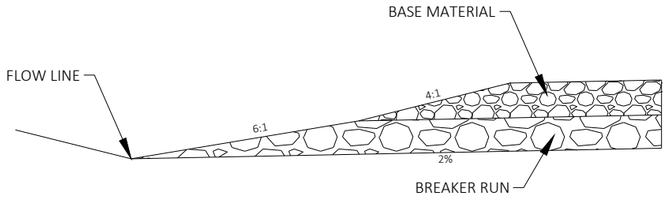


DEPRESSED SIDEWALK PROFILE DETAIL

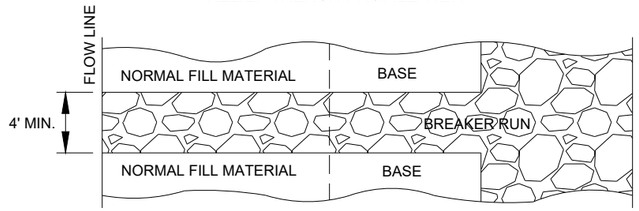
PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	PLAN: CONSTRUCTION DETAILS	SHEET 11	E



STANDARD PROFILE VIEW

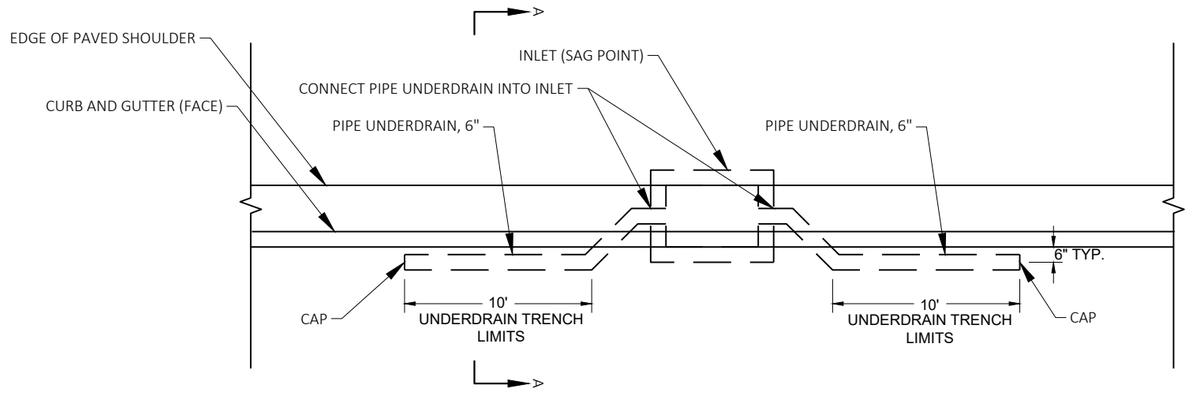


RELIEF TRENCH PROFILE VIEW

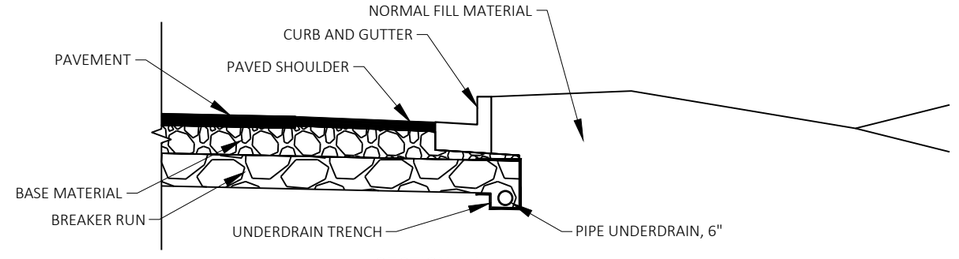


RELIEF TRENCH PLAN VIEW THROUGH SELECT MATERIAL

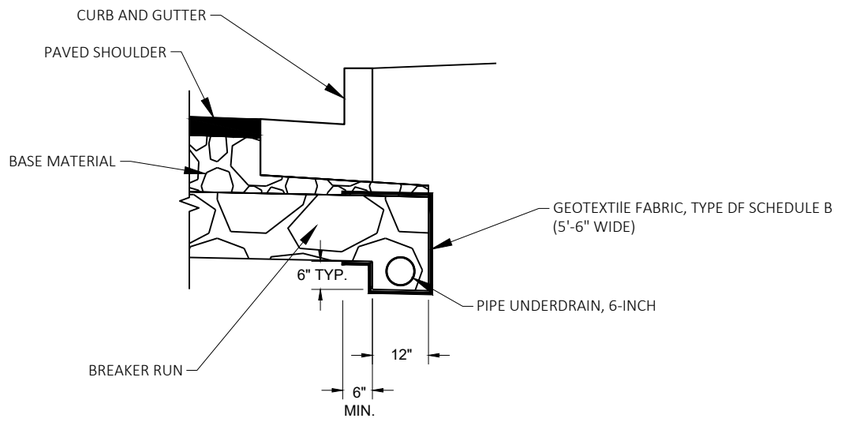
RELIEF TRENCH DETAIL



PLAN VIEW OF ROADWAY WITH CURB AND GUTTER

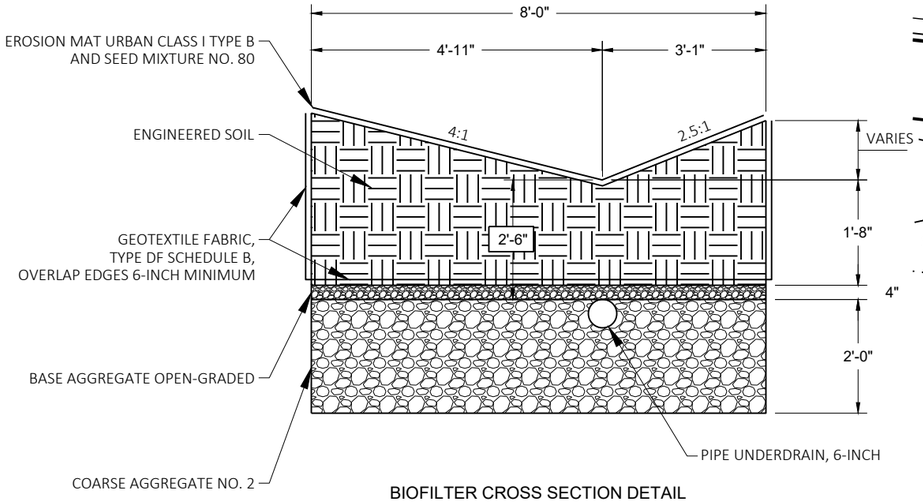


SECTION A-A

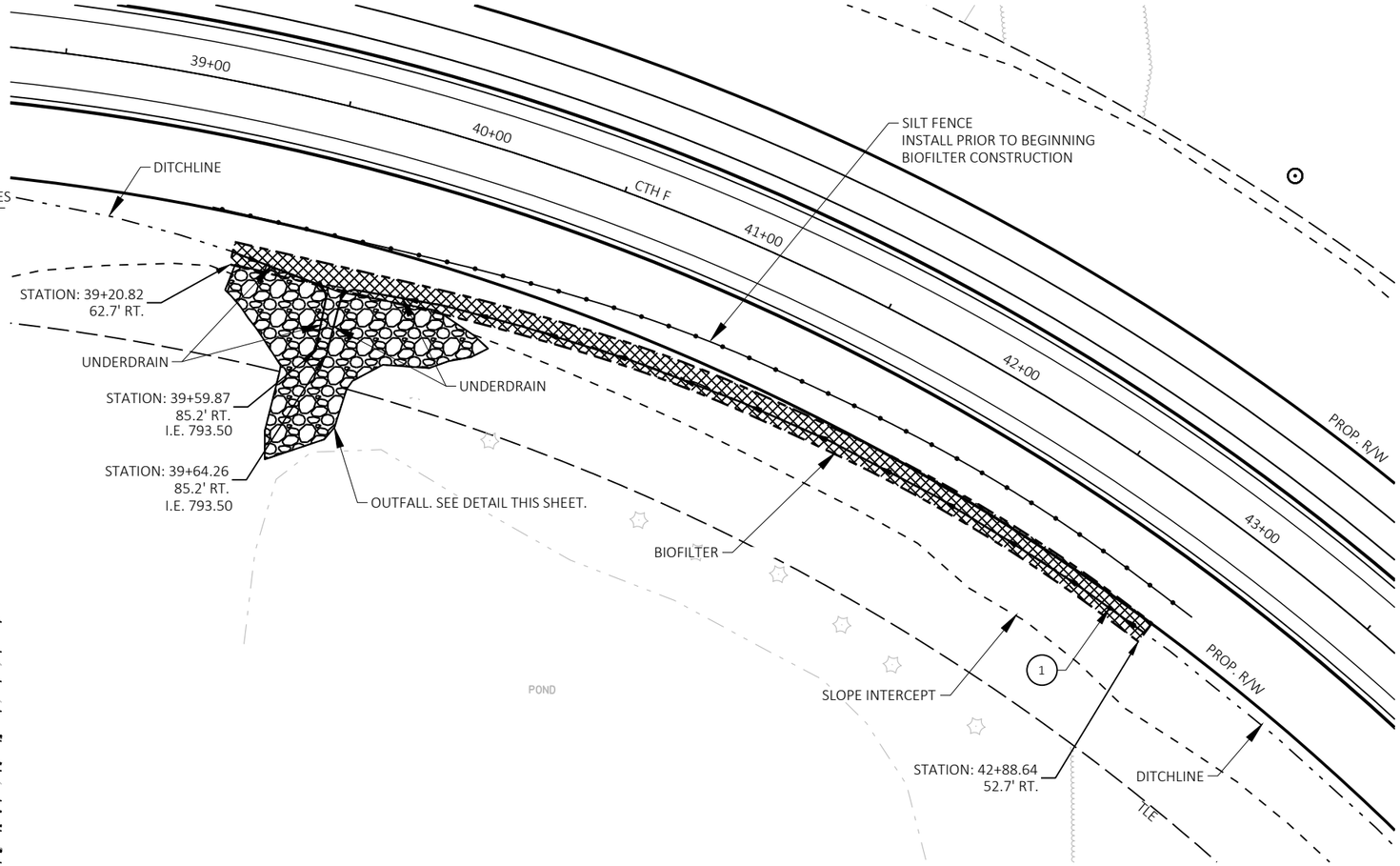


UNDERDRAIN TRENCH DETAIL

RELIEF DRAIN DETAIL



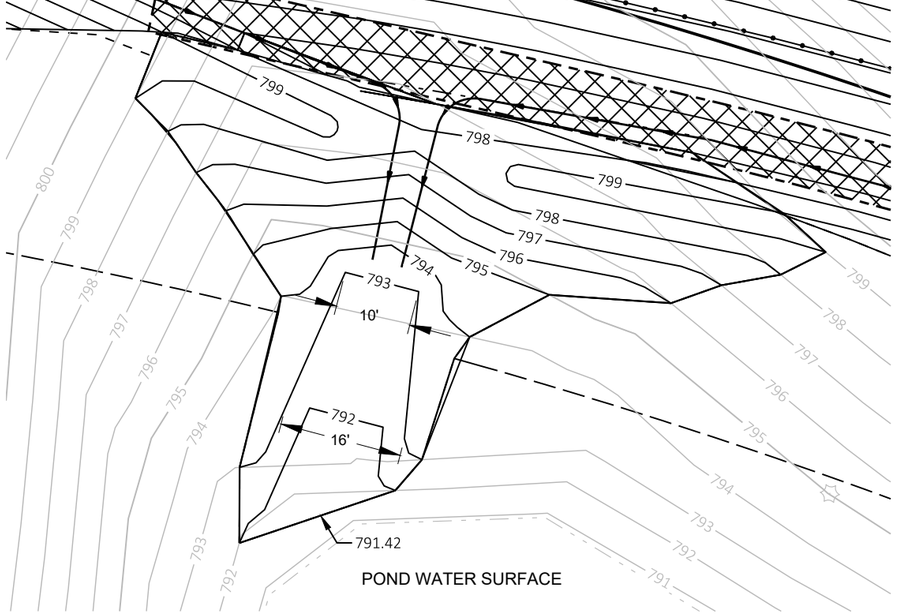
BIOFILTER CROSS SECTION DETAIL



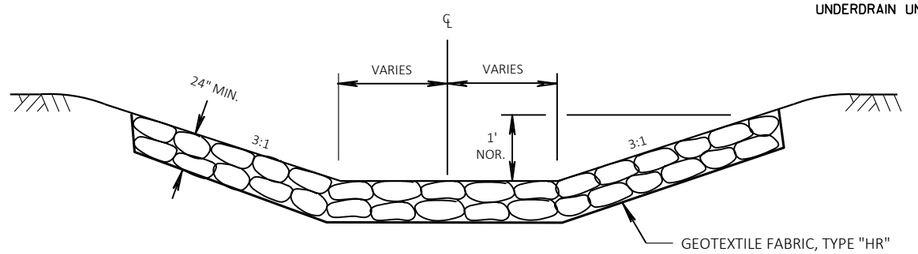
BIOFILTER PLAN DETAIL
1" = 50'

NOTES:

1. CLEAN-OUT PORT. 2-0" PIPE UNDERDRAIN UNPERFORATED, 6-INCH. INSTALL VERTICALLY, CONNECT TO THE PERFORATED UNDERDRAIN AND COVER WITH A WATER TIGHT CAP THAT IS FLUSH WITH THE GROUND ELEVATION. FURNISHING AND INSTALLING THE CAP IS INCIDENTAL TO PIPE UNDERDRAIN UNPERFORATED, 6-INCH.

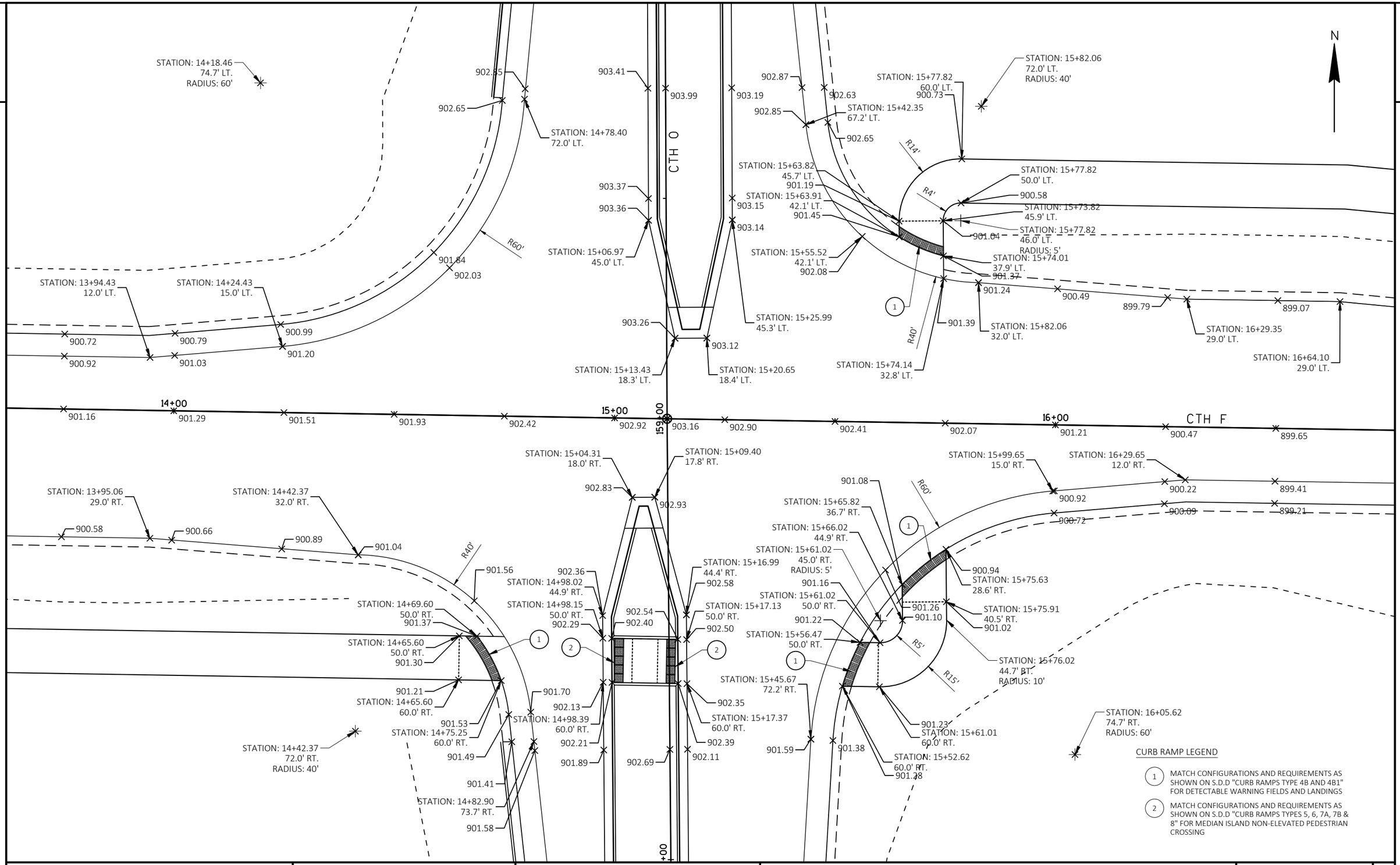


OUTFALL DETAIL
1" = 20'



DETAIL FOR SPECIAL DITCH WITH RIPRAP MEDIUM AND GEOTEXTILE FABRIC

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	PLAN: CONSTRUCTION DETAILS	SHEET 13	E



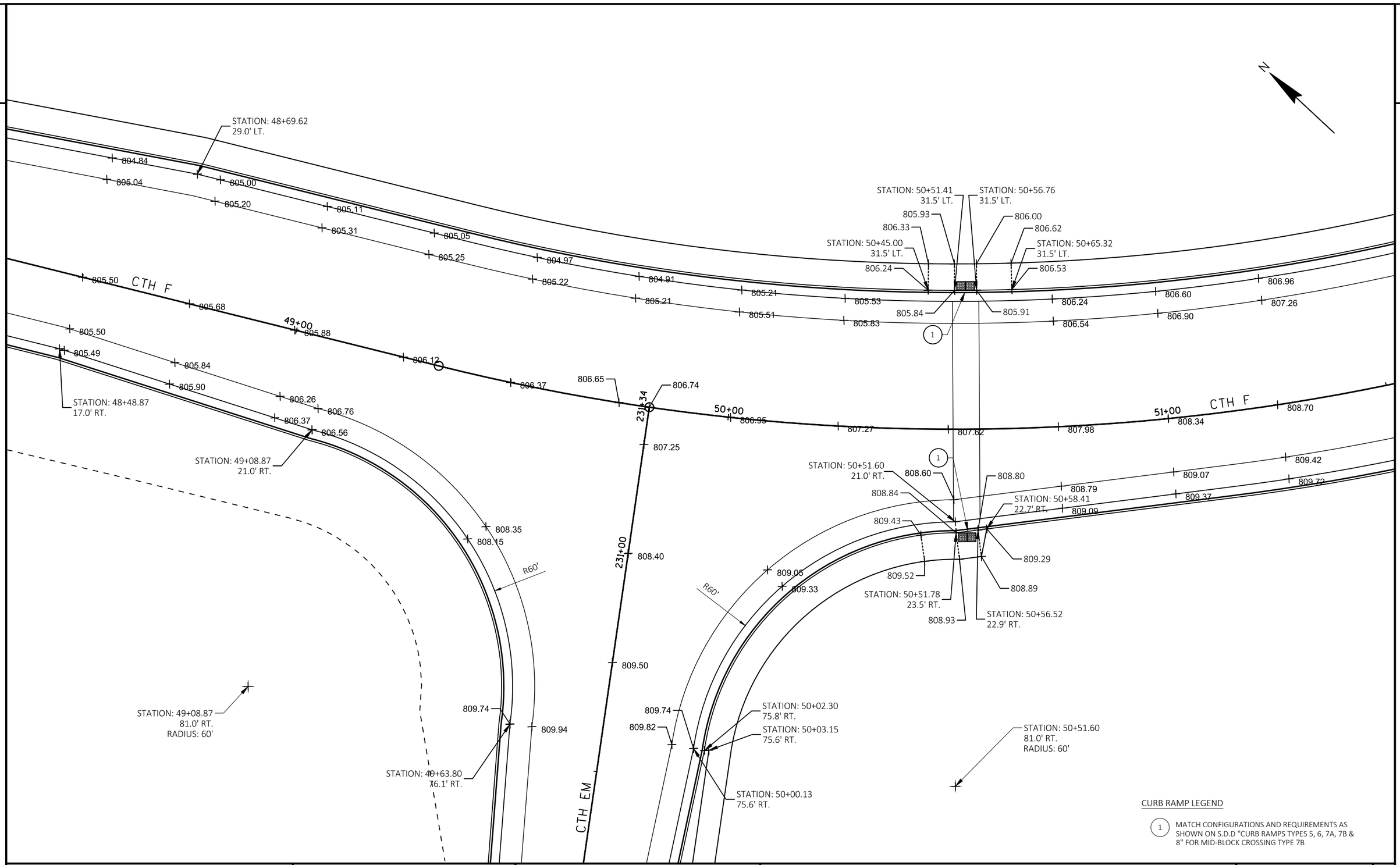
PROJECT NO: 3733-00-01	HWY: CTH F	COUNTY: KENOSHA	CURB RAMP AND PAVING DETAILS	SHEET 14	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\021201_PD ALT5.DWG
LAYOUT NAME - 021201_pd

PLOT DATE : 11/1/2019 12:09 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2



CURB RAMP LEGEND

(1) MATCH CONFIGURATIONS AND REQUIREMENTS AS SHOWN ON S.D.D "CURB RAMPS TYPES 5, 6, 7A, 7B & 8" FOR MID-BLOCK CROSSING TYPE 7B

PROJECT NO: 3733-00-01	HWY: CTH F	COUNTY: KENOSHA	CURB RAMP AND PAVING DETAILS	SHEET 15	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\021201_PD ALT5.DWG
LAYOUT NAME - 021202_pd
PLOT DATE : 11/1/2019 12:09 PM
PLOT BY : BREMER, SAM
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

2

STATION: 227+83.44
140.0' LT.
RADIUS: 120'

STATION: 227+83.44
20.0' LT.

STATION: 227+01.15
73.9' LT.

CTH OLD F

CTH EM

CTH EM

CTH OLD F

N

STATION: 228+57.29
17.0' RT.

STATION: 228+26.95
20.0' RT.

STATION: 228+27.31
24.5' RT.

STATION: 228+22.01
24.5' RT.

STATION: 228+15.80
24.5' RT.

STATION: 228+06.98
29.5' RT.

STATION: 228+26.95
50.0' RT.
RADIUS: 30'

STATION: 228+02.57
33.9' RT.

STATION: 228+08.81
75.5' RT.

STATION: 226+57.07
84.8' LT.

STATION: 226+21.68
66.0' LT.
RADIUS: 45'

STATION: 226+21.68
21.0' LT.

STATION: 226+93.59
22.2' RT.

STATION: 226+74.28
17.0' RT.

STATION: 226+62.35
24.5' RT.

STATION: 227+34.67
48.0' RT.

STATION: 227+15.15
32.3' RT.

STATION: 227+10.74
29.5' RT.

STATION: 227+00.52
24.5' RT.

STATION: 226+94.31
24.5' RT.

STATION: 226+74.28
77.0' RT.
RADIUS: 60'

R120'

R45'

R60'

R30'

352+00

353+00

354+00

227+00

228+00

CURB RAMP LEGEND

(1) MATCH CONFIGURATIONS AND REQUIREMENTS AS SHOWN ON S.D.D "CURB RAMPS TYPE 4B AND 4B1" FOR CURB RAMP TYPE 4B1.

PROJECT NO: 3733-00-01	HWY: CTH F	COUNTY: KENOSHA	CURB RAMP AND PAVING DETAILS	SHEET 16	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\021201_PD ALT5.DWG
LAYOUT NAME - 021203_pd

PLOT DATE : 11/1/2019 12:09 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

EROSION CONTROL LEGEND

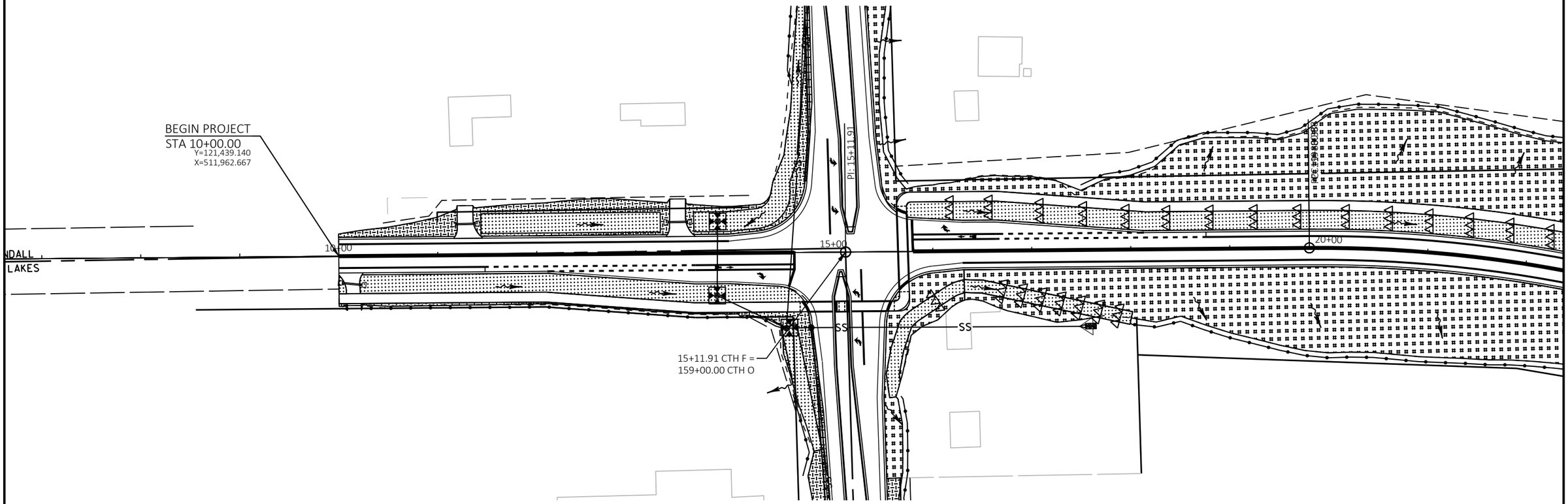
- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT CLASS I TYPE A
- EROSION MAT CLASS I TYPE B
- RIPRAP MEDIUM (UNLESS NOTED OTHERWISE)
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- INLET PROTECTION
- SURFACE WATER FLOW

GENERAL NOTES

1. RESTORE ALL DISTURBED AREAS WITH TOPSOIL, SEED, AND E-MAT AT DIRECTION OF ENGINEER IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. SEE STORM SEWER DETAIL SHEETS FOR STORM SEWER LAYOUT INFORMATION.
3. SEE PLAN AND PROFILE SHEETS FOR CULVERT INFORMATION.

N

2



PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	EROSION CONTROL PLAN - CTH F	SHEET 17	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\022001_EC ALT5.DWG
LAYOUT NAME - 022001
PLOT DATE : 11/1/2019 12:10 PM
PLOT BY : BREMER, SAM
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

EROSION CONTROL LEGEND

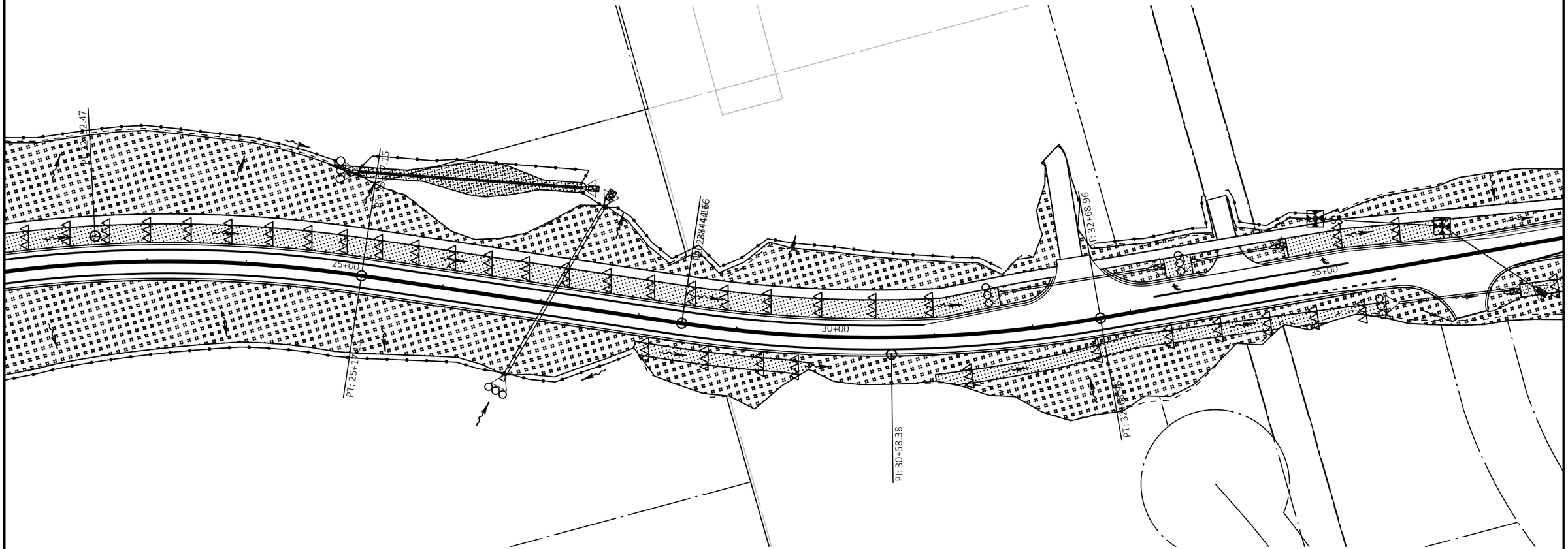
- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT CLASS I TYPE A
- EROSION MAT CLASS I TYPE B
- RIPRAP MEDIUM (UNLESS NOTED OTHERWISE)
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- ASPHALTIC FLUME (ASPH)
- INLET PROTECTION
- SURFACE WATER FLOW

GENERAL NOTES

1. RESTORE ALL DISTURBED AREAS WITH TOPSOIL, SEED, AND E-MAT AT DIRECTION OF ENGINEER IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. SEE STORM SEWER DETAIL SHEETS FOR STORM SEWER LAYOUT INFORMATION.
3. SEE PLAN AND PROFILE SHEETS FOR CULVERT INFORMATION.

N

2



PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	EROSION CONTROL PLAN - CTH F	SHEET 18	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\022001_EC ALT5.DWG
LAYOUT NAME - 022002

PLOT DATE : 11/1/2019 2:18 PM PLOT BY : GRUNWALD, BEN PLOT NAME : PLOT SCALE : 1 IN:100 FT

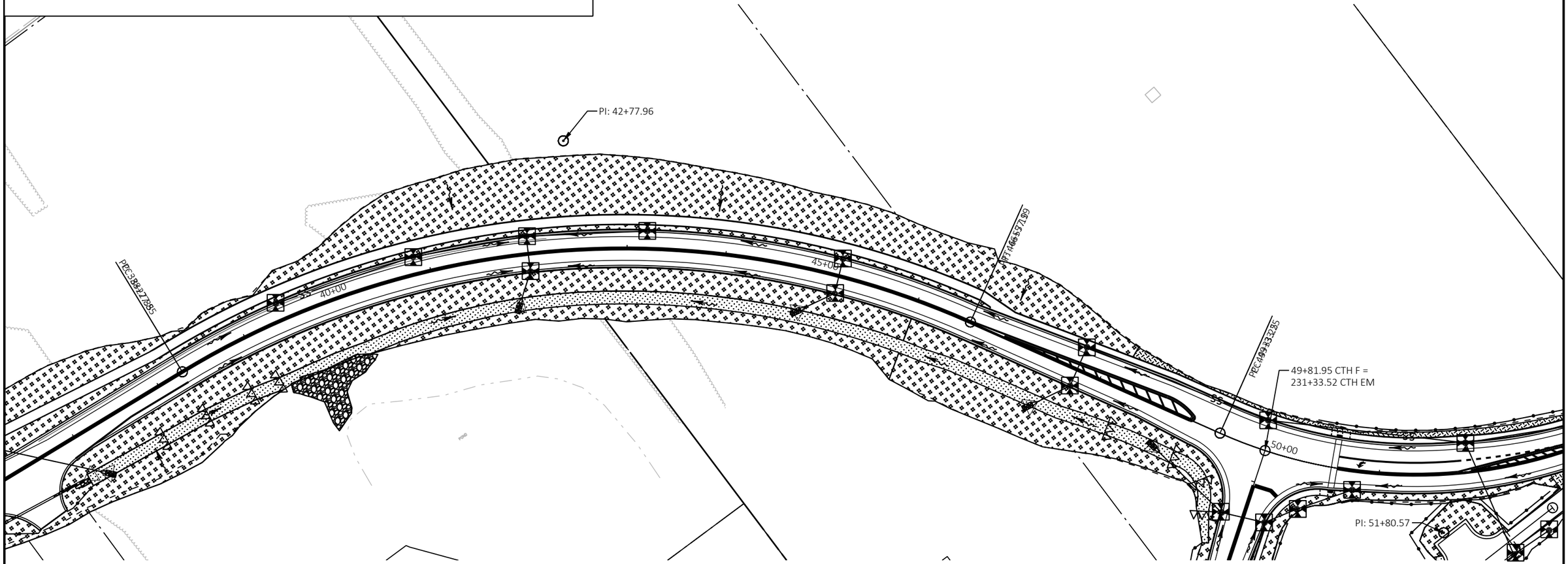
WISDOT/CADDS SHEET 42

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT CLASS I TYPE A
- EROSION MAT CLASS I TYPE B
- RIPRAP MEDIUM (UNLESS NOTED OTHERWISE)
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- INLET PROTECTION
- SURFACE WATER FLOW

GENERAL NOTES

1. RESTORE ALL DISTURBED AREAS WITH TOPSOIL, SEED, AND E-MAT AT DIRECTION OF ENGINEER IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. SEE STORM SEWER DETAIL SHEETS FOR STORM SEWER LAYOUT INFORMATION.
3. SEE PLAN AND PROFILE SHEETS FOR CULVERT INFORMATION.



PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	EROSION CONTROL PLAN - CTH F	SHEET 19	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\022001_EC ALT5.DWG
LAYOUT NAME - 022003

PLOT DATE : 11/1/2019 2:18 PM PLOT BY : GRUNWALD, BEN PLOT NAME : PLOT SCALE : 1 IN:100 FT

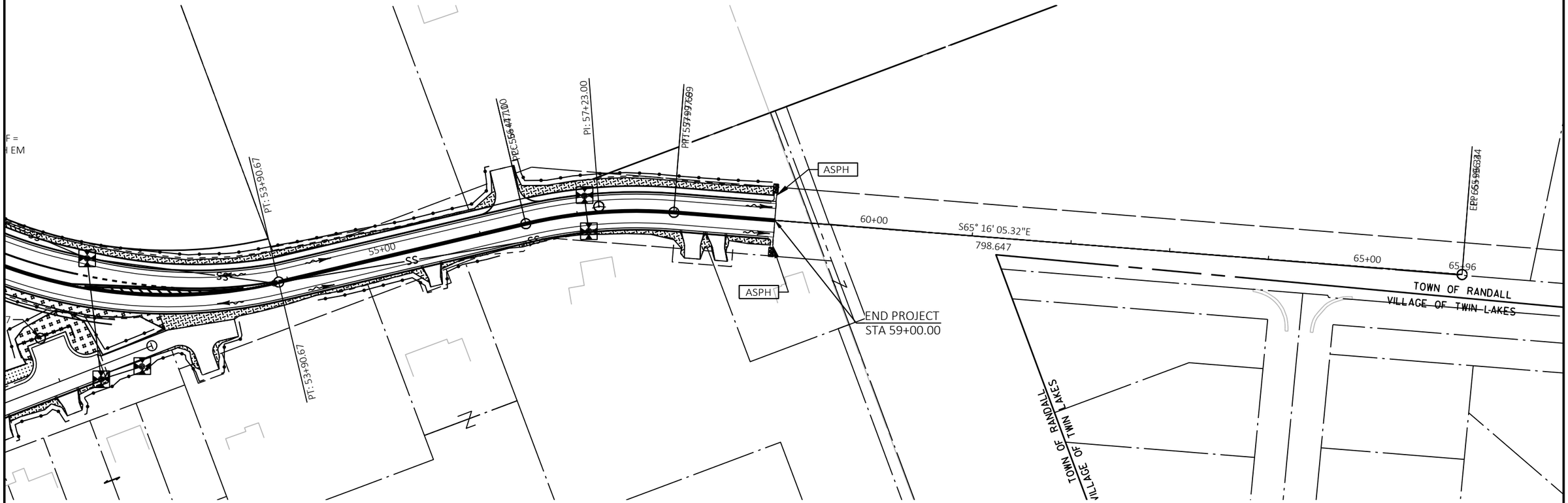
WISDOT/CADDS SHEET 42

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT CLASS I TYPE A
- EROSION MAT CLASS I TYPE B
- RIPRAP MEDIUM (UNLESS NOTED OTHERWISE)
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- ASPHALTIC FLUME
- INLET PROTECTION
- SURFACE WATER FLOW

GENERAL NOTES

1. RESTORE ALL DISTURBED AREAS WITH TOPSOIL, SEED, AND E-MAT AT DIRECTION OF ENGINEER IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. SEE STORM SEWER DETAIL SHEETS FOR STORM SEWER LAYOUT INFORMATION.
3. SEE PLAN AND PROFILE SHEETS FOR CULVERT INFORMATION.



PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	EROSION CONTROL PLAN - CTH F	SHEET 20	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\022001_EC ALT5.DWG
LAYOUT NAME - 022004
PLOT DATE : 11/1/2019 12:11 PM
PLOT BY : BREMER, SAM
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

EROSION CONTROL LEGEND

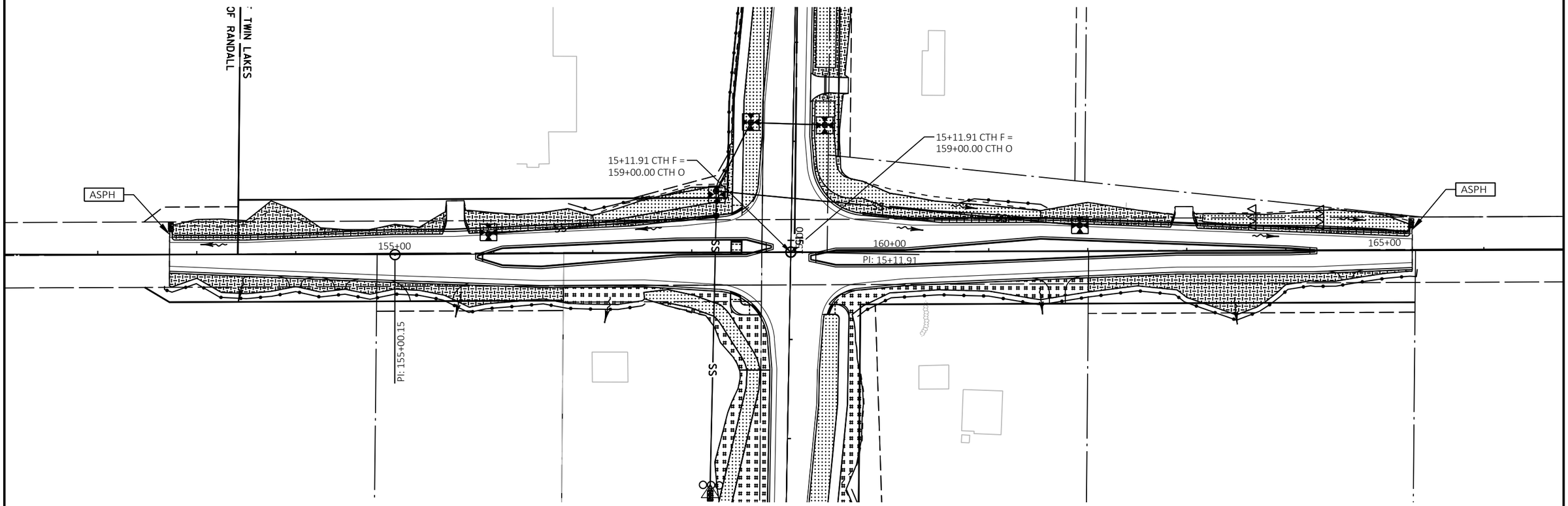
EROSION MAT URBAN CLASS I TYPE A	SLOPE INTERCEPT
EROSION MAT CLASS I TYPE A	ASPHALTIC FLUME
EROSION MAT CLASS I TYPE B	INLET PROTECTION
RIPRAP MEDIUM (UNLESS NOTED OTHERWISE)	SURFACE WATER FLOW
SILT FENCE	
TEMPORARY DITCH CHECK	
CULVERT PIPE CHECK	

GENERAL NOTES

1. RESTORE ALL DISTURBED AREAS WITH TOPSOIL, SEED, AND E-MAT AT DIRECTION OF ENGINEER IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. SEE STORM SEWER DETAIL SHEETS FOR STORM SEWER LAYOUT INFORMATION.
3. SEE PLAN AND PROFILE SHEETS FOR CULVERT INFORMATION.

N

2



PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	EROSION CONTROL PLAN - CTH O	SHEET 21	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\022005_EC ALT5.DWG
LAYOUT NAME - 022005
PLOT DATE : 11/1/2019 12:12 PM
PLOT BY : BREMER, SAM
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

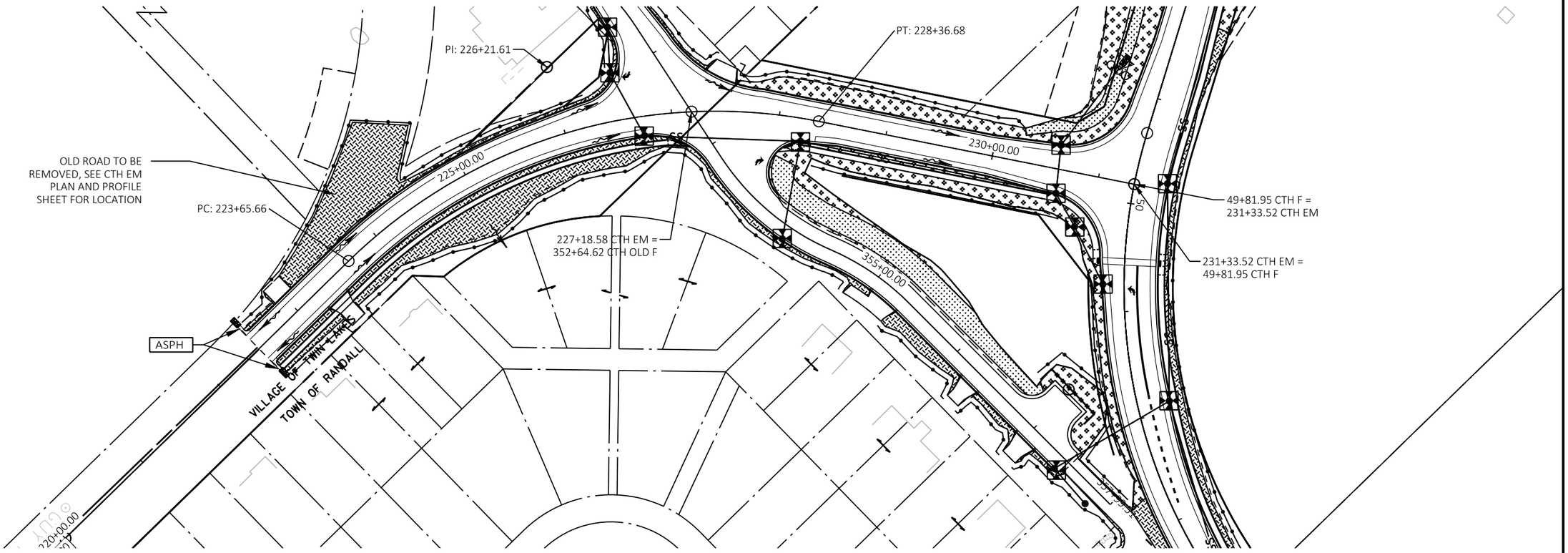
2

EROSION CONTROL LEGEND

EROSION MAT URBAN CLASS I TYPE A	SLOPE INTERCEPT
EROSION MAT CLASS I TYPE A	ASPHALTIC FLUME
EROSION MAT CLASS I TYPE B	INLET PROTECTION
RIPRAP MEDIUM (UNLESS NOTED OTHERWISE)	SURFACE WATER FLOW
SILT FENCE	
TEMPORARY DITCH CHECK	
CULVERT PIPE CHECK	

GENERAL NOTES

1. RESTORE ALL DISTURBED AREAS WITH TOPSOIL, SEED, AND E-MAT AT DIRECTION OF ENGINEER IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. SEE STORM SEWER DETAIL SHEETS FOR STORM SEWER LAYOUT INFORMATION.
3. SEE PLAN AND PROFILE SHEETS FOR CULVERT INFORMATION.



PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	EROSION CONTROL PLAN - CTH EM	SHEET 22	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\022006_EC ALT5.DWG
LAYOUT NAME - 022006
PLOT DATE : 2/6/2020 5:24 PM PLOT BY : HOLZEM, ANNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

EROSION CONTROL LEGEND

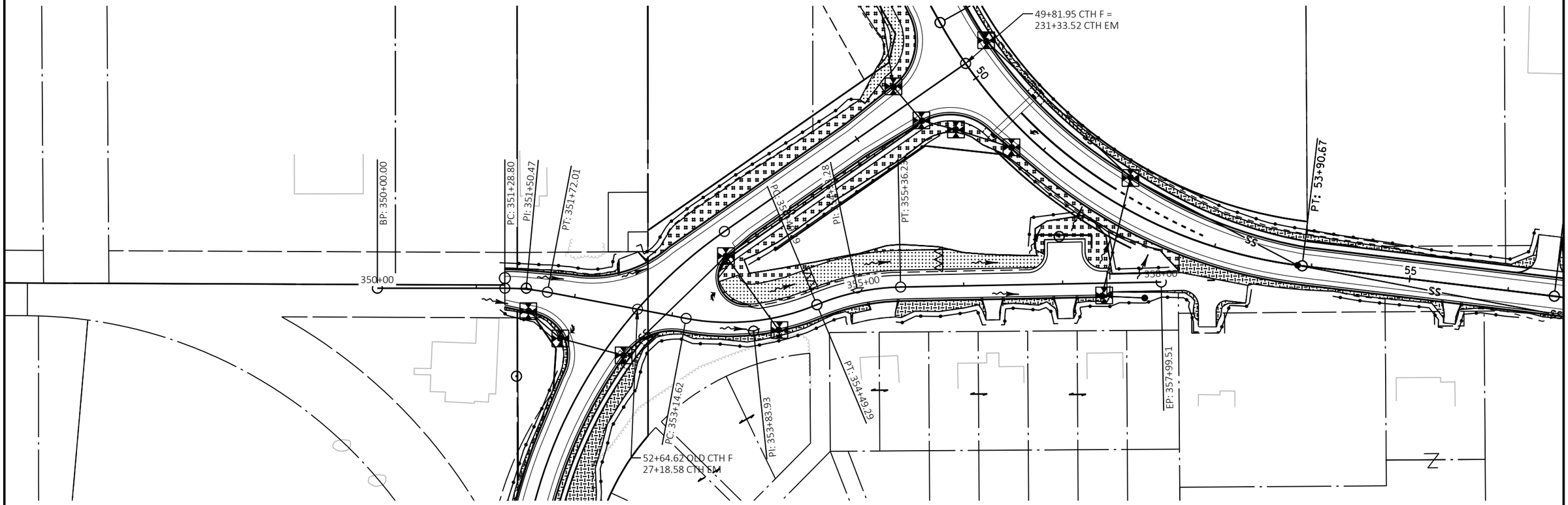
EROSION MAT URBAN CLASS I TYPE A	SLOPE INTERCEPT
EROSION MAT CLASS I TYPE A	ASPHALTIC FLUME (ASPH)
EROSION MAT CLASS I TYPE B	INLET PROTECTION
RIPRAP MEDIUM (UNLESS NOTED OTHERWISE)	SURFACE WATER FLOW
SILT FENCE	
TEMPORARY DITCH CHECK	
CULVERT PIPE CHECK	

GENERAL NOTES

1. RESTORE ALL DISTURBED AREAS WITH TOPSOIL, SEED, AND E-MAT AT DIRECTION OF ENGINEER IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. SEE STORM SEWER DETAIL SHEETS FOR STORM SEWER LAYOUT INFORMATION.
3. SEE PLAN AND PROFILE SHEETS FOR CULVERT INFORMATION.

N

2

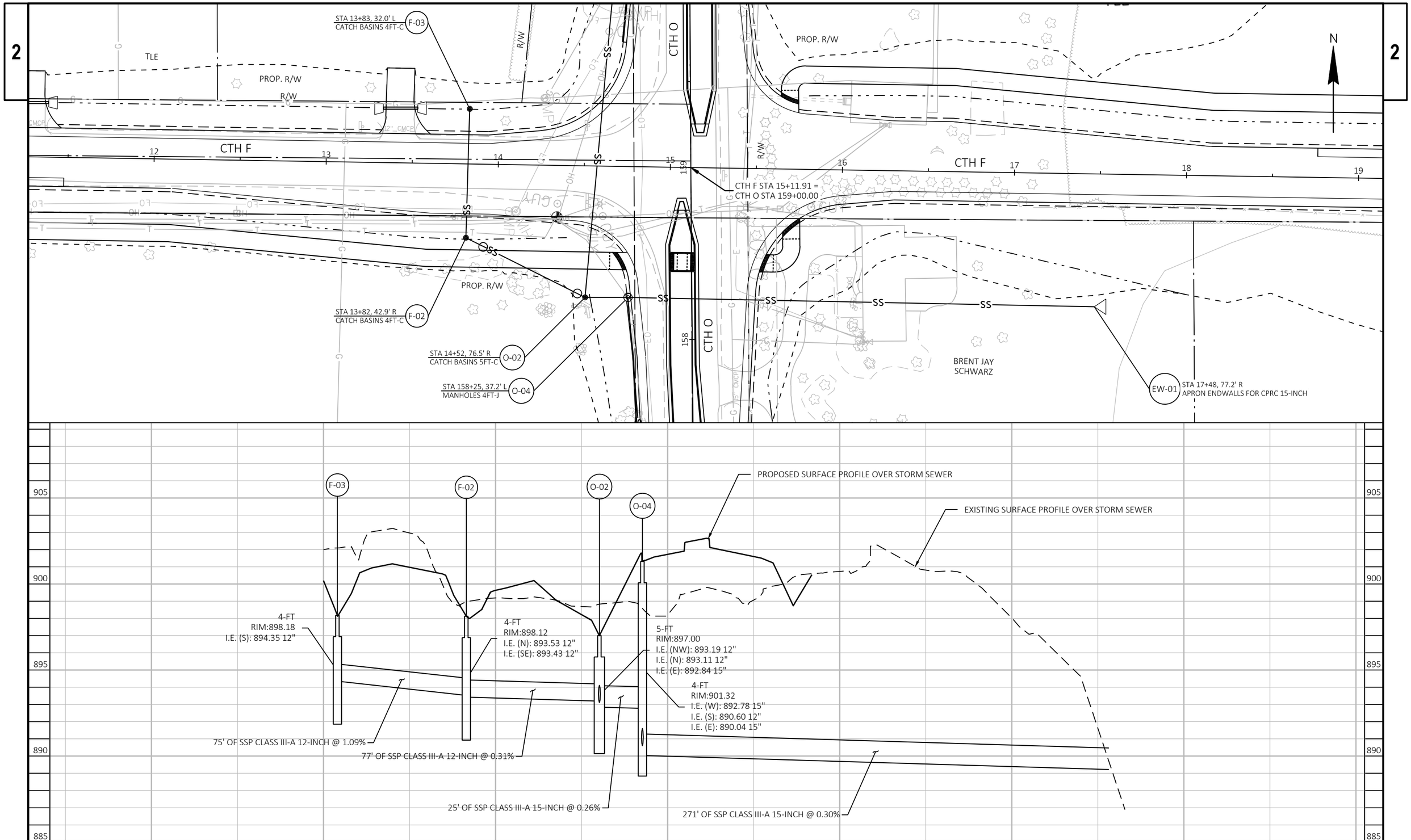


PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	EROSION CONTROL PLAN - OLD CTH F	SHEET 23	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\022007_EC ALT5.DWG
LAYOUT NAME - 022007

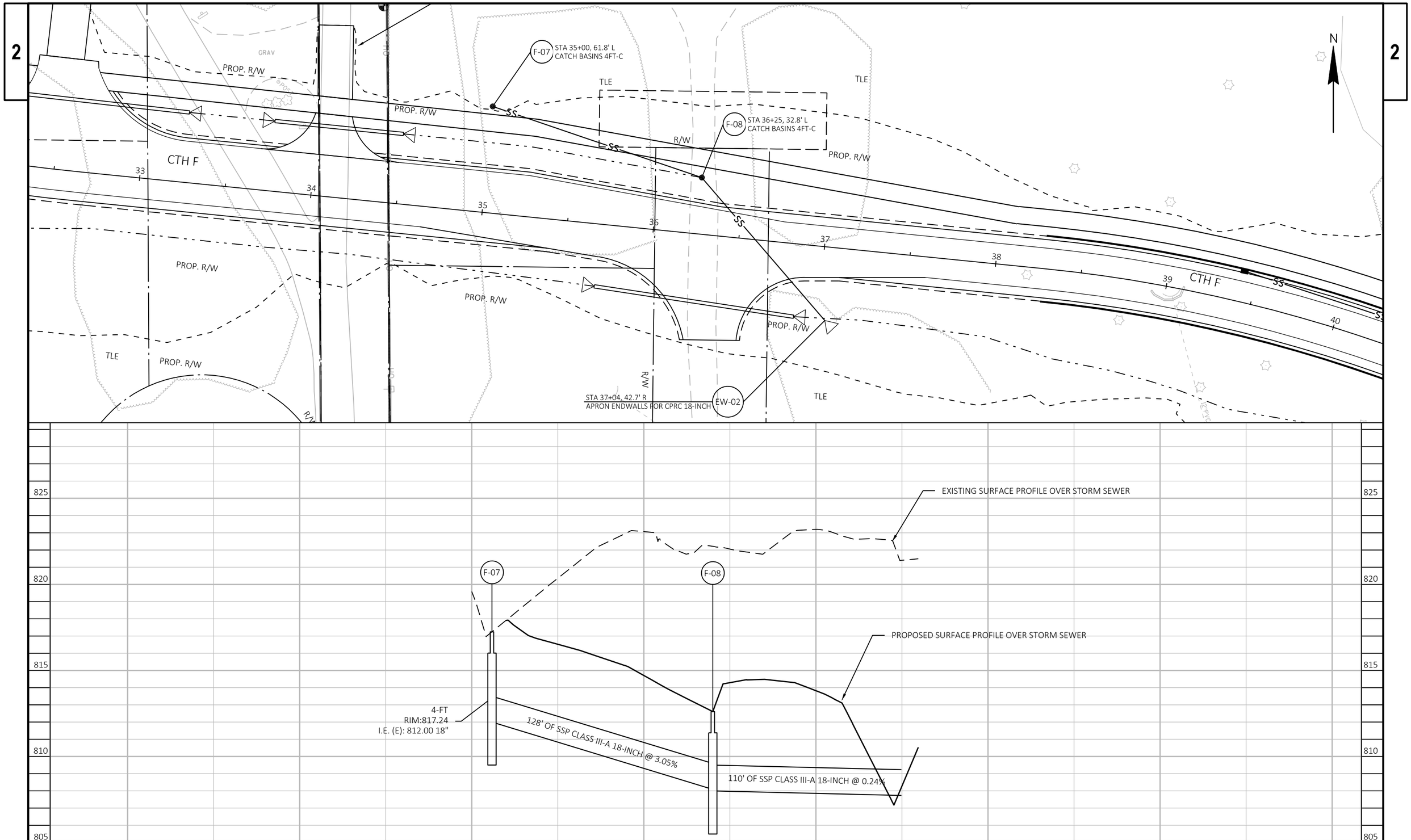
PLOT DATE : 11/1/2019 12:15 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42



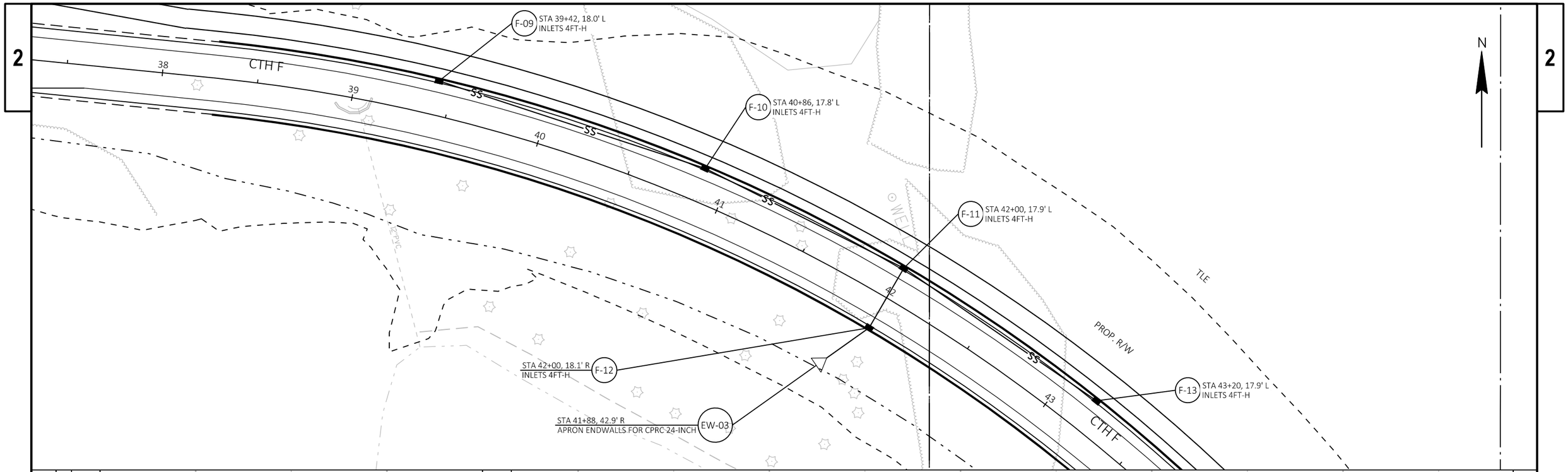
PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	STORM SEWER: CTH F	SHEET 24	E

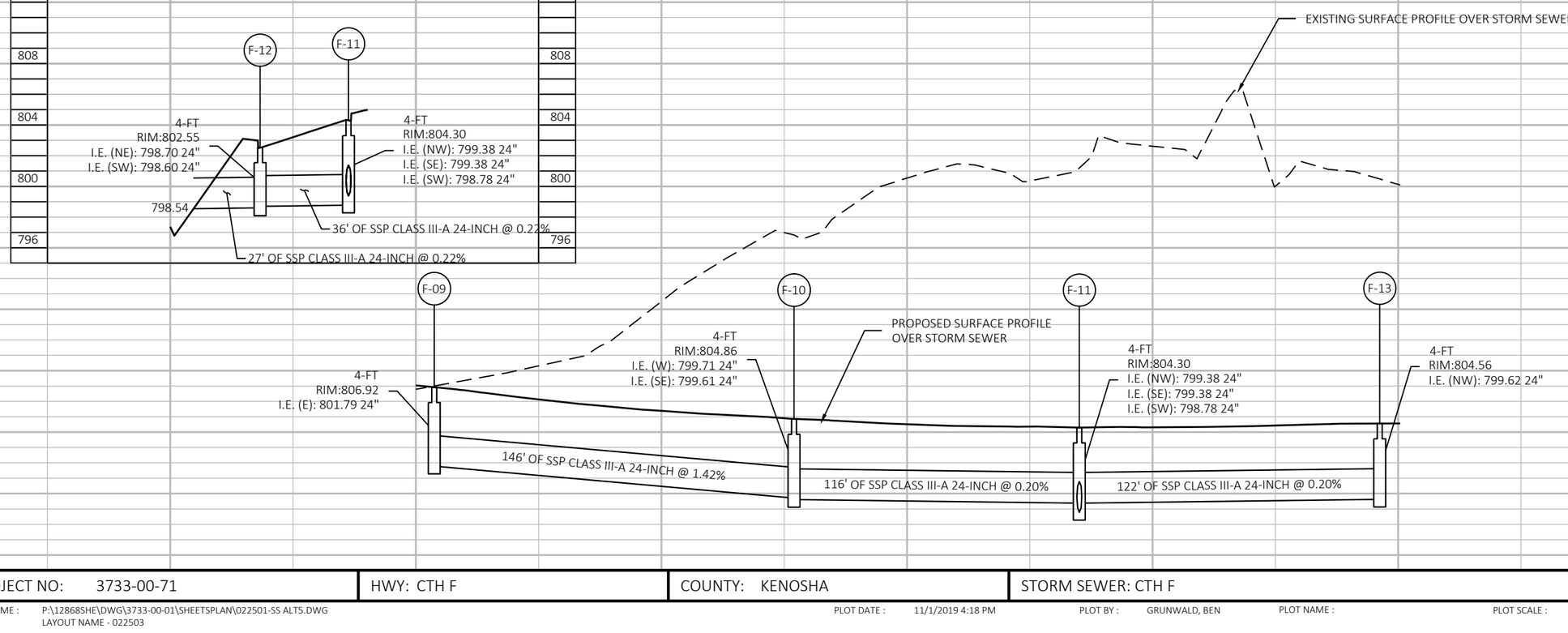
FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\022501-SS ALT5.DWG
LAYOUT NAME - 022501
PLOT DATE : 11/1/2019 4:18 PM
PLOT BY : GRUNWALD, BEN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 41



PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	STORM SEWER: CTH F	SHEET 25	E

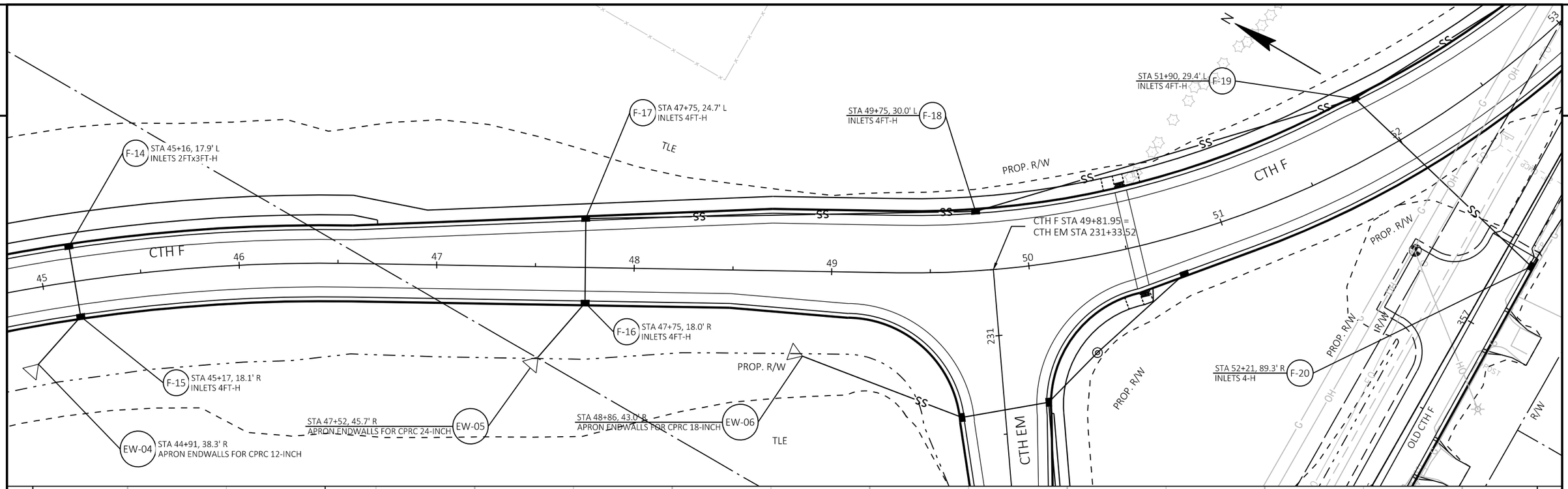
FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\022501-SS ALT5.DWG
LAYOUT NAME - 022502
PLOT DATE : 11/1/2019 4:18 PM
PLOT BY : GRUNWALD, BEN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 41

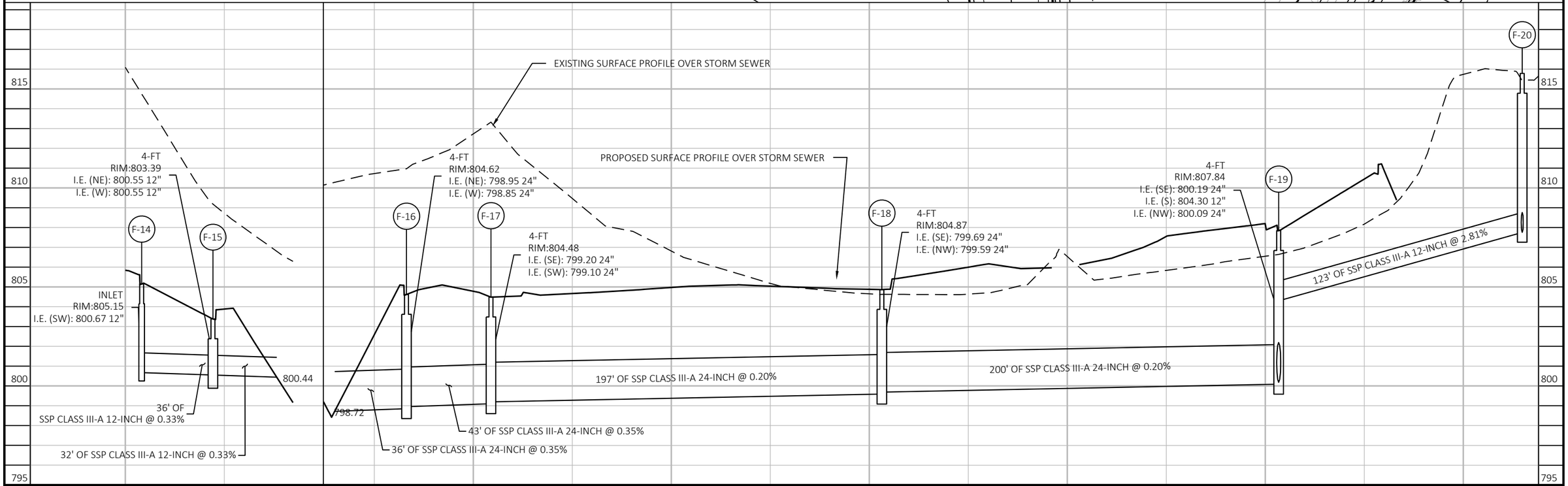




PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	STORM SEWER: CTH F	SHEET 26	E

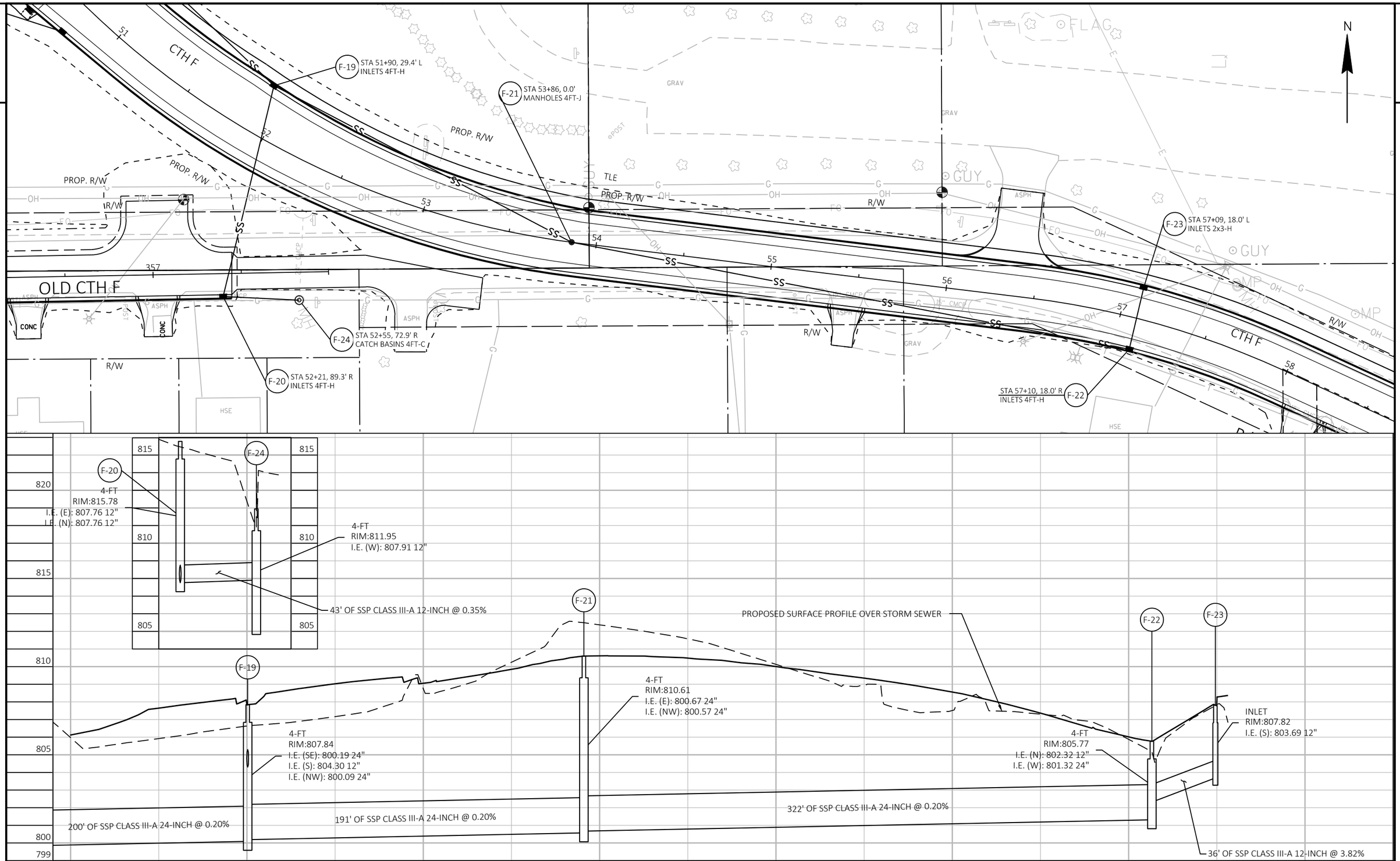
FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\022501-SS ALT5.DWG
LAYOUT NAME - 022503
PLOT DATE : 11/1/2019 4:18 PM
PLOT BY : GRUNWALD, BEN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 41





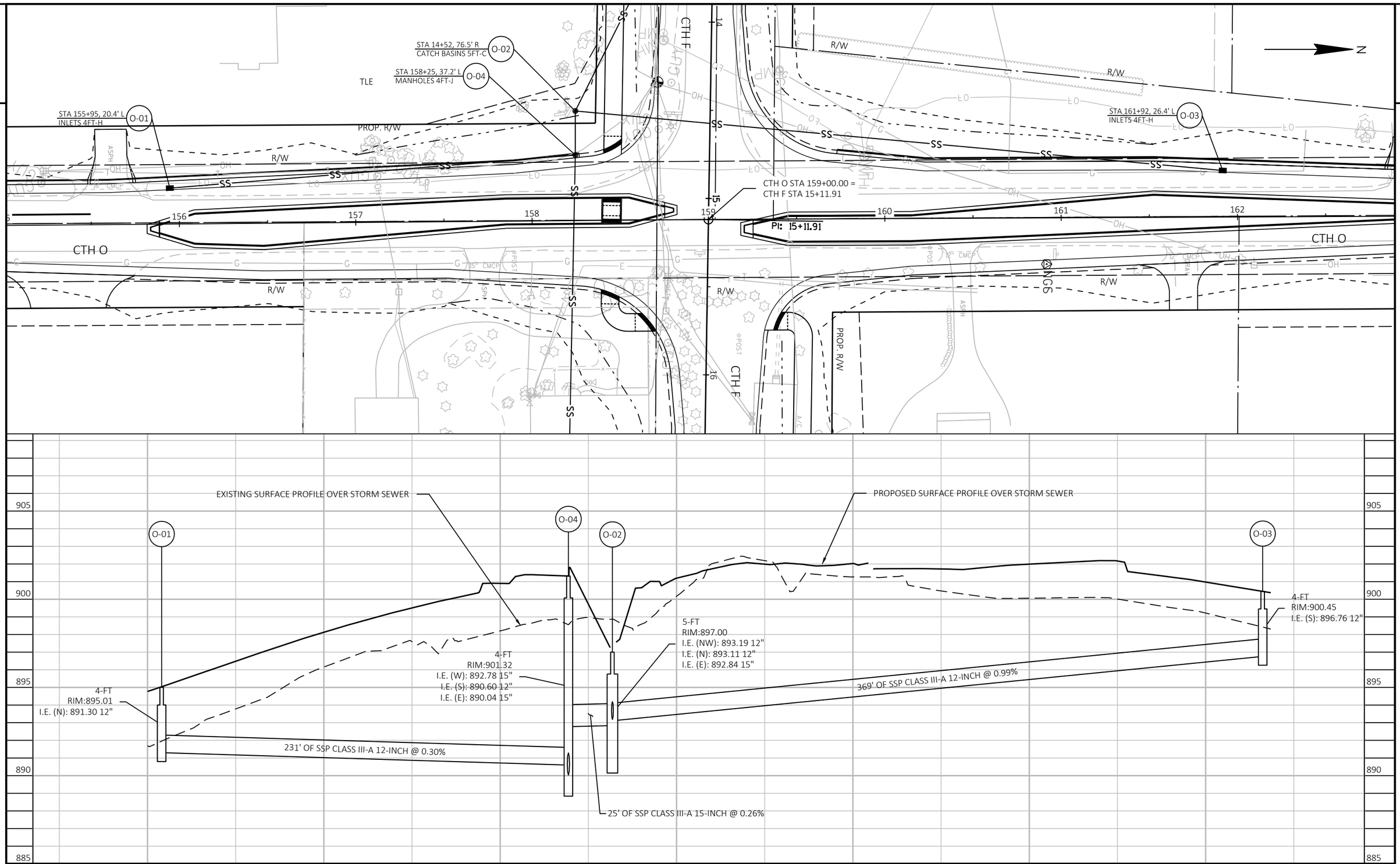
PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	STORM SEWER: CTH F	SHEET 27	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\022501-SS ALT5.DWG
LAYOUT NAME - 022504
PLOT DATE : 11/1/2019 4:18 PM
PLOT BY : GRUNWALD, BEN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 41



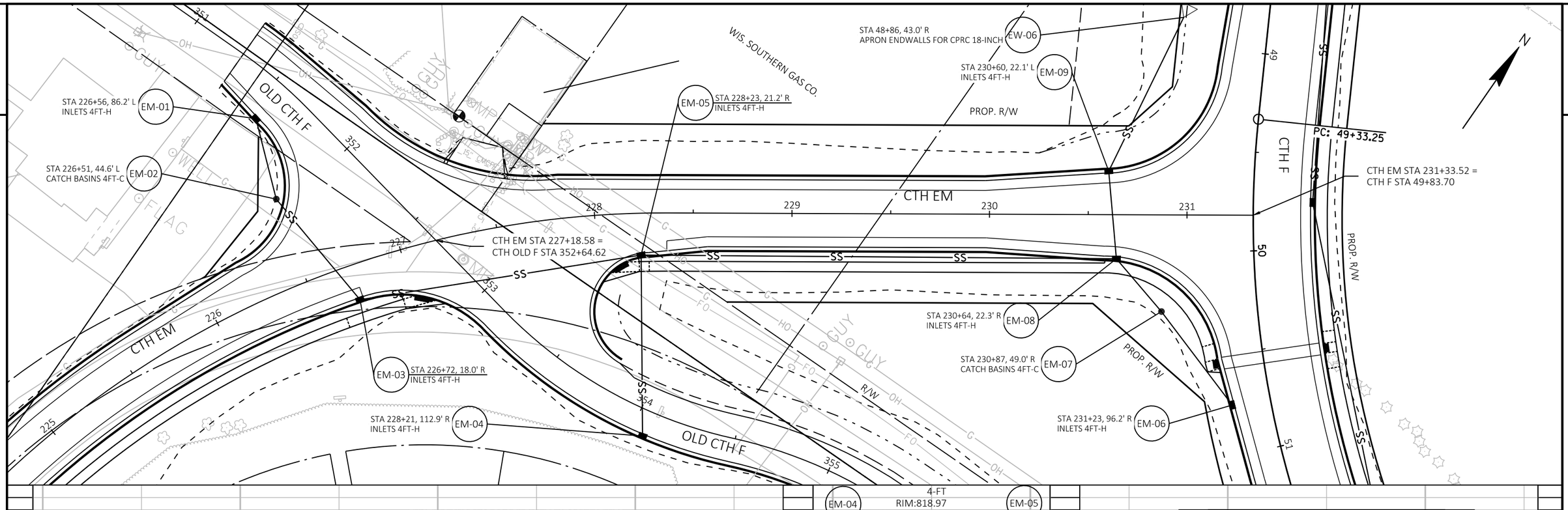
PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	STORM SEWER: CTH F	SHEET 28	E

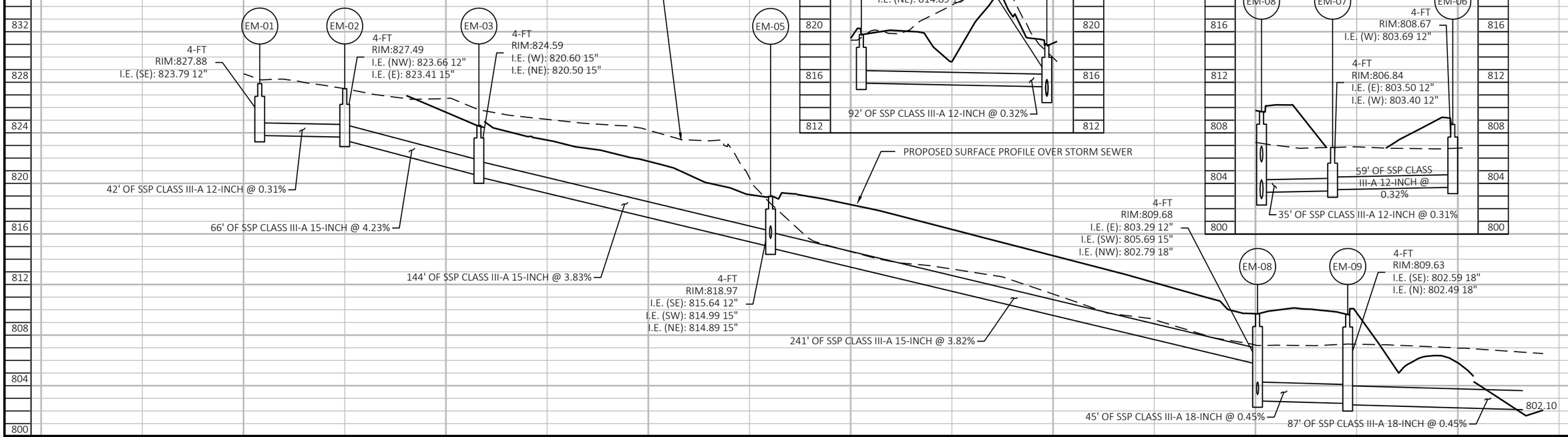
FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\022501-SS ALT5.DWG
LAYOUT NAME - 022505
PLOT DATE : 11/1/2019 4:18 PM
PLOT BY : GRUNWALD, BEN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 41



PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	STORM SEWER: CTH O	SHEET 29	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\022506-SS ALT5.DWG
LAYOUT NAME - 022506
PLOT DATE : 11/1/2019 12:18 PM
PLOT BY : BREMER, SAM
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 41





PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	STORM SEWER: CTH EM	SHEET 30	E

2

N

15+11.91 CTH F PI
159+00.00 CTH O PI

PAUL F. & JENNIFER L. MAKI

BRENT JAY SCHWARZ

MESSIAH LUTHERN CHURCH

PAUL JU

REMOVE SIGN/SUPPORT

REMOVE SIGN/SUPPORT

REMOVE SIGN/SUPPORT

REMOVE SIGN/SUPPORT

REMOVE SIGN/SUPPORT

S1-1 36"X36"
S16-9P AHEAD 24"X12"

SPEED LIMIT 35
R2-1 24"X30"

STOP
R1-1 30"X30"

R4-7 24"X30"

R3-4 24"X24"

COUNTY O
J13-1 24"X45"

W11-15 30"X30"
W16-9P AHEAD 24"X12"

JCT COUNTY O
J1-1 24"X39"

W3-1 36"X36"

PI: 15+11.91

PC: 19+80.38

PAVEMENT MARKING LEGEND

1. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING STOP LINE EPOXY 18-INCH
4. MARKING LINE EPOXY 8-INCH (WHITE)
5. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
6. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
7. MARKING SYMBOL EPOXY
8. MARKING CHEVRON EPOXY 24-INCH (WHITE)
9. MARKING ARROW EPOXY
10. MARKING LINE EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
11. MARKING LINE EPOXY 8-INCH (WHITE 3' LINE, 9' GAP)
12. MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	PAVEMENT MARKING AND SIGNING: CTH F	SHEET 31	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\024501-PM ALT5.DWG
LAYOUT NAME - 024501
PLOT DATE : 11/1/2019 12:19 PM
PLOT BY : BREMER, SAM
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

KENOSHA COUNTY

PAUL JUST & JULIE JUST

PT: 25+17.15

PC: 28+44.16

PT: 32+68.96

SPEED LIMIT 35 R2-1 24"X30"

SPEED LIMIT 35 R2-1 24"X30"

25

30

35

PAVEMENT MARKING LEGEND

1. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING STOP LINE EPOXY 18-INCH
4. MARKING LINE EPOXY 8-INCH (WHITE)
5. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
6. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
7. MARKING SYMBOL EPOXY
8. MARKING CHEVRON EPOXY 24-INCH (WHITE)
9. MARKING ARROW EPOXY
10. MARKING LINE EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
11. MARKING LINE EPOXY 8-INCH (WHITE 3' LINE, 9' GAP)
12. MARKING DIAGONAL EPOXY 12-INCH (WHITE)

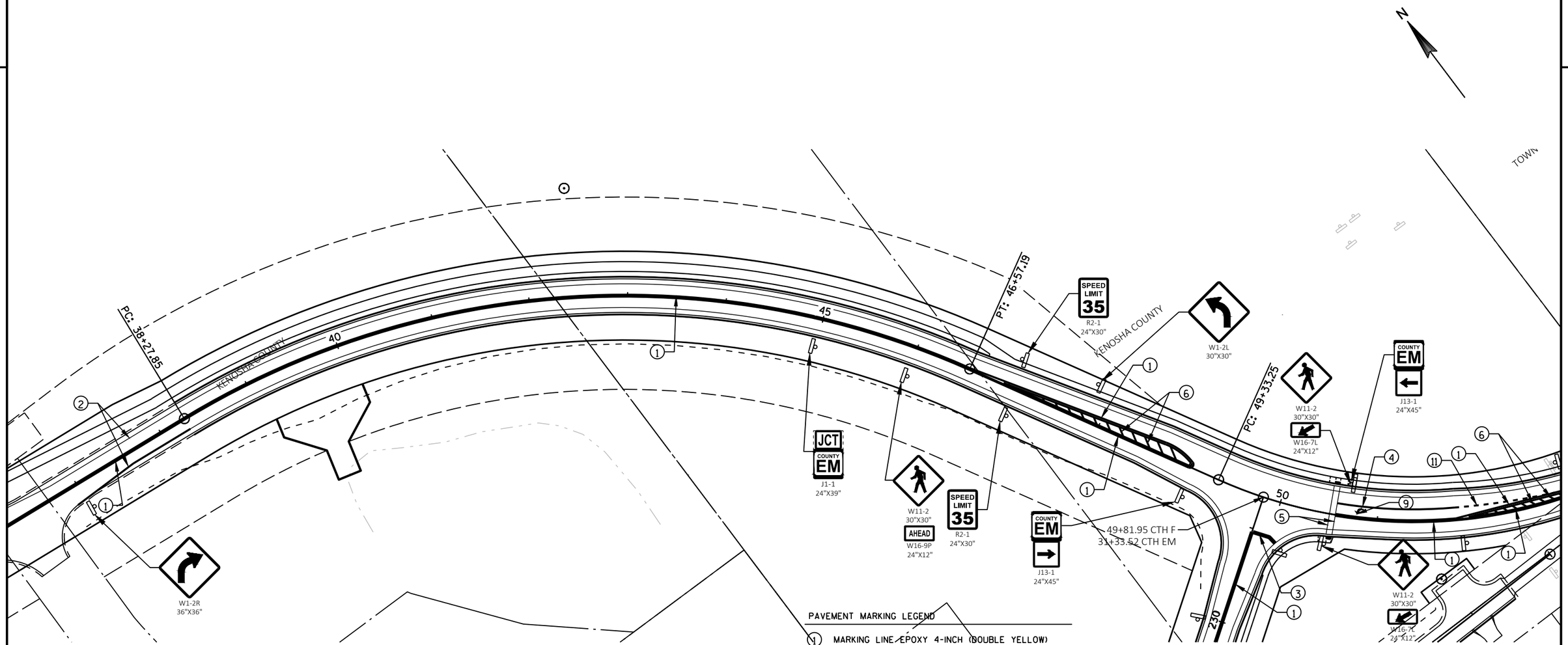
PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	PAVEMENT MARKING AND SIGNING: CTH F	SHEET 32	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\024501-PM ALT5.DWG
LAYOUT NAME - 024502

PLOT DATE : 11/1/2019 12:20 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



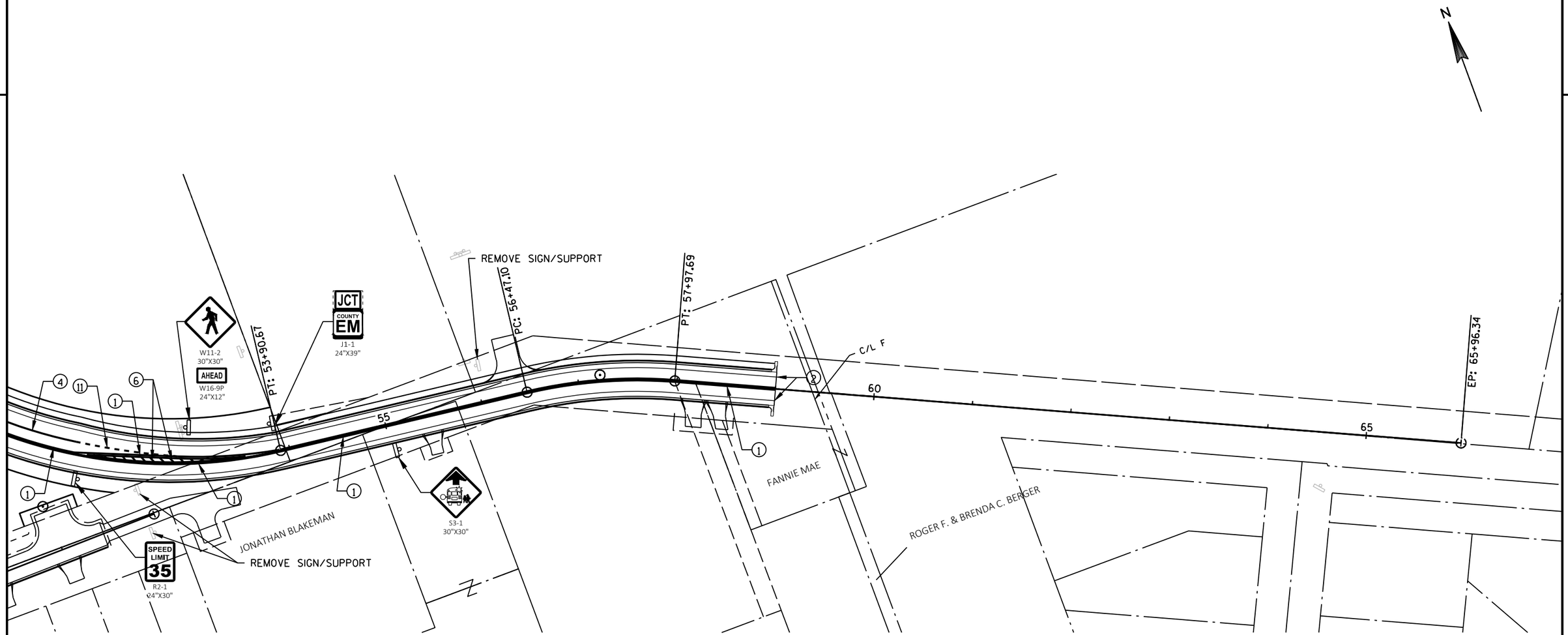
PAVEMENT MARKING LEGEND

1. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING STOP LINE EPOXY 18-INCH
4. MARKING LINE EPOXY 8-INCH (WHITE)
5. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
6. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
7. MARKING SYMBOL EPOXY
8. MARKING CHEVRON EPOXY 24-INCH (WHITE)
9. MARKING ARROW EPOXY
10. MARKING LINE EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
11. MARKING LINE EPOXY 8-INCH (WHITE 3' LINE, 9' GAP)
12. MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	PAVEMENT MARKING AND SIGNING: CTH F	SHEET 33	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\024501-PM ALT5.DWG
LAYOUT NAME - 024503
PLOT DATE : 11/1/2019 12:20 PM
PLOT BY : BREMER, SAM
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



PAVEMENT MARKING LEGEND

1. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING STOP LINE EPOXY 18-INCH
4. MARKING LINE EPOXY 8-INCH (WHITE)
5. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
6. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
7. MARKING SYMBOL EPOXY
8. MARKING CHEVRON EPOXY 24-INCH (WHITE)
9. MARKING ARROW EPOXY
10. MARKING LINE EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
11. MARKING LINE EPOXY 8-INCH (WHITE 3' LINE, 9' GAP)
12. MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	PAVEMENT MARKING AND SIGNING: CTH F	SHEET 34	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\024501-PM ALT5.DWG
LAYOUT NAME - 024504
PLOT DATE : 11/1/2019 12:20 PM
PLOT BY : BREMER, SAM
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

15+11.91 CTH F PI
159+00.00 CTH O PI

PI: 155+00.15

PI: 15+11.91

REMOVE SIGN/SUPPORT

REMOVE 6 CTH F ROUTE SIGNS AT THE INTERSECTION OF CTH O AND CTH OLD F

REMOVE SIGN/SUPPORT

REMOVE SIGN/SUPPORT

250'

250'

155

160

165

W6-1 36"X36"

W6-2 36"X36"

R4-7 24"X30"

R2-1 24"X30"

W11-15 30"X30"

W16-7L 24"X12"

R5-1 30"X30"

J13-1 24"X45"

W16-9P 24"X12"

J1-1 24"X39"

W6-2 36"X36"

PAVEMENT MARKING LEGEND

1. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING STOP LINE EPOXY 18-INCH
4. MARKING LINE EPOXY 8-INCH (WHITE)
5. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
6. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
7. MARKING SYMBOL EPOXY
8. MARKING CHEVRON EPOXY 24-INCH (WHITE)
9. MARKING ARROW EPOXY
10. MARKING LINE EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
11. MARKING LINE EPOXY 8-INCH (WHITE 3' LINE, 9' GAP)
12. MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	PAVEMENT MARKING AND SIGNING: CTH O	SHEET 35	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\024505-PM ALT5.DWG
LAYOUT NAME - 024505
PLOT DATE : 11/1/2019 12:20 PM
PLOT BY : BREMER, SAM
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

SPEED LIMIT 25
R2-1
24"X30"

COUNTY F
J13-1
24"X45"

STOP
R1-1
30"X30"

REMOVE SIGN/SUPPORT

RELOCATE SIGN

PT: 53+90.67

RELOCATE SIGN

NO OUTLET
W14-2
30"X30"

END-OF-ROADWAY SIGNING
SEE S.O.D. 15C26

W5-56
18"X18"

REMOVE SIGN/SUPPORT

REMOVE SIGN/SUPPORT

JCT
COUNTY F
J1-1
24"X39"

RELOCATE SIGN

REMOVE 6 OLD CTH F ROUTE SIGNS
~~AND 1 SIGN SUPPORT~~ AT THE INTERSECTION
OF CTH EM AND 90TH ST

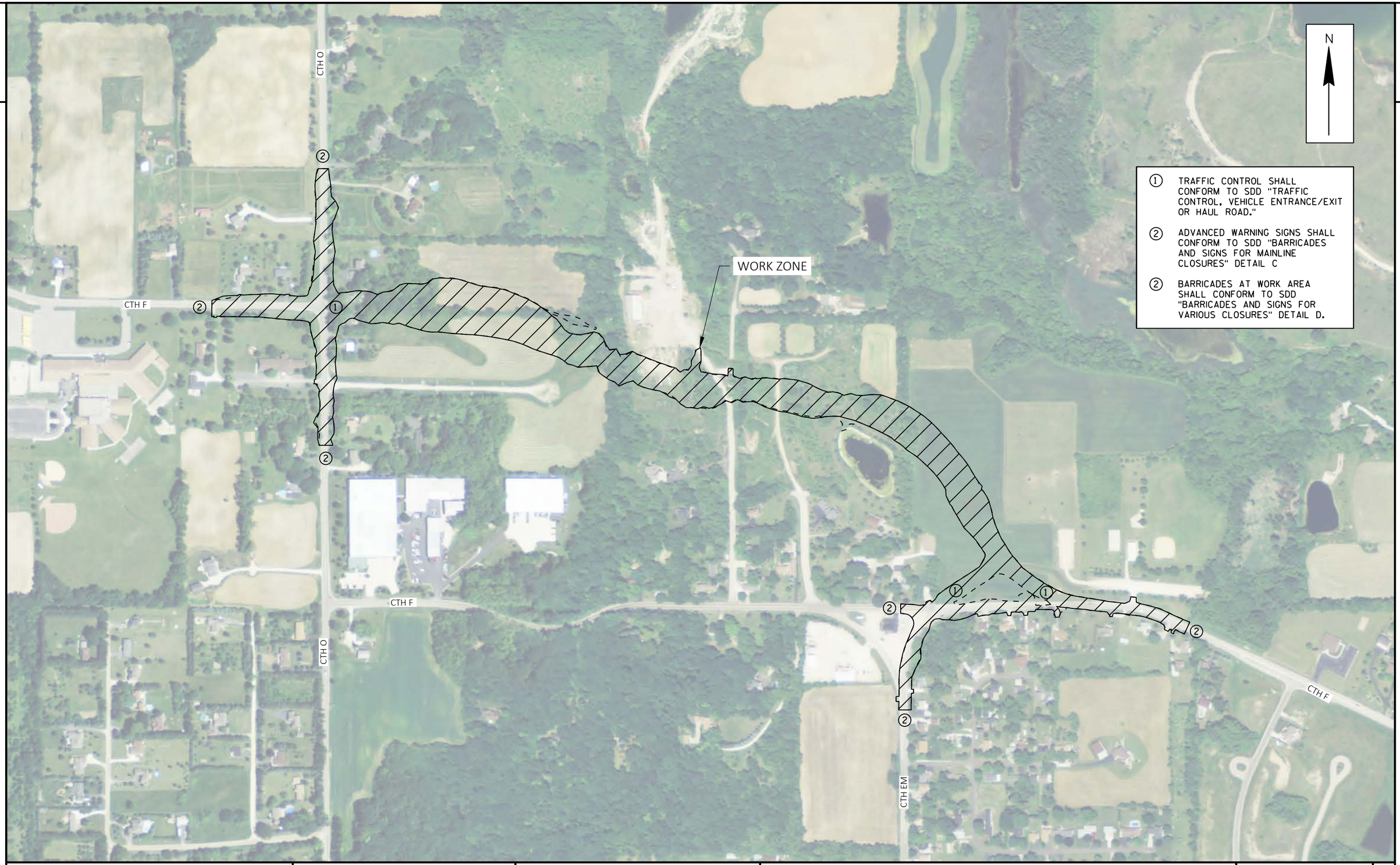
REMOVE W2-3R SIGN AND SUPPORT SOUTH OF
THE INTERSECTION OF CTH EM AND 90TH ST

PAVEMENT MARKING LEGEND

1. MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING STOP LINE EPOXY 18-INCH
4. MARKING LINE EPOXY 8-INCH (WHITE)
5. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
6. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
7. MARKING SYMBOL EPOXY
8. MARKING CHEVRON EPOXY 24-INCH (WHITE)
9. MARKING ARROW EPOXY
10. MARKING LINE EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
11. MARKING LINE EPOXY 8-INCH (WHITE 3' LINE, 9' GAP)
12. MARKING DIAGONAL EPOXY 12-INCH (WHITE)

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	PAVEMENT MARKING AND SIGNING: OLD CTH F AND CTH EM	SHEET 36	E

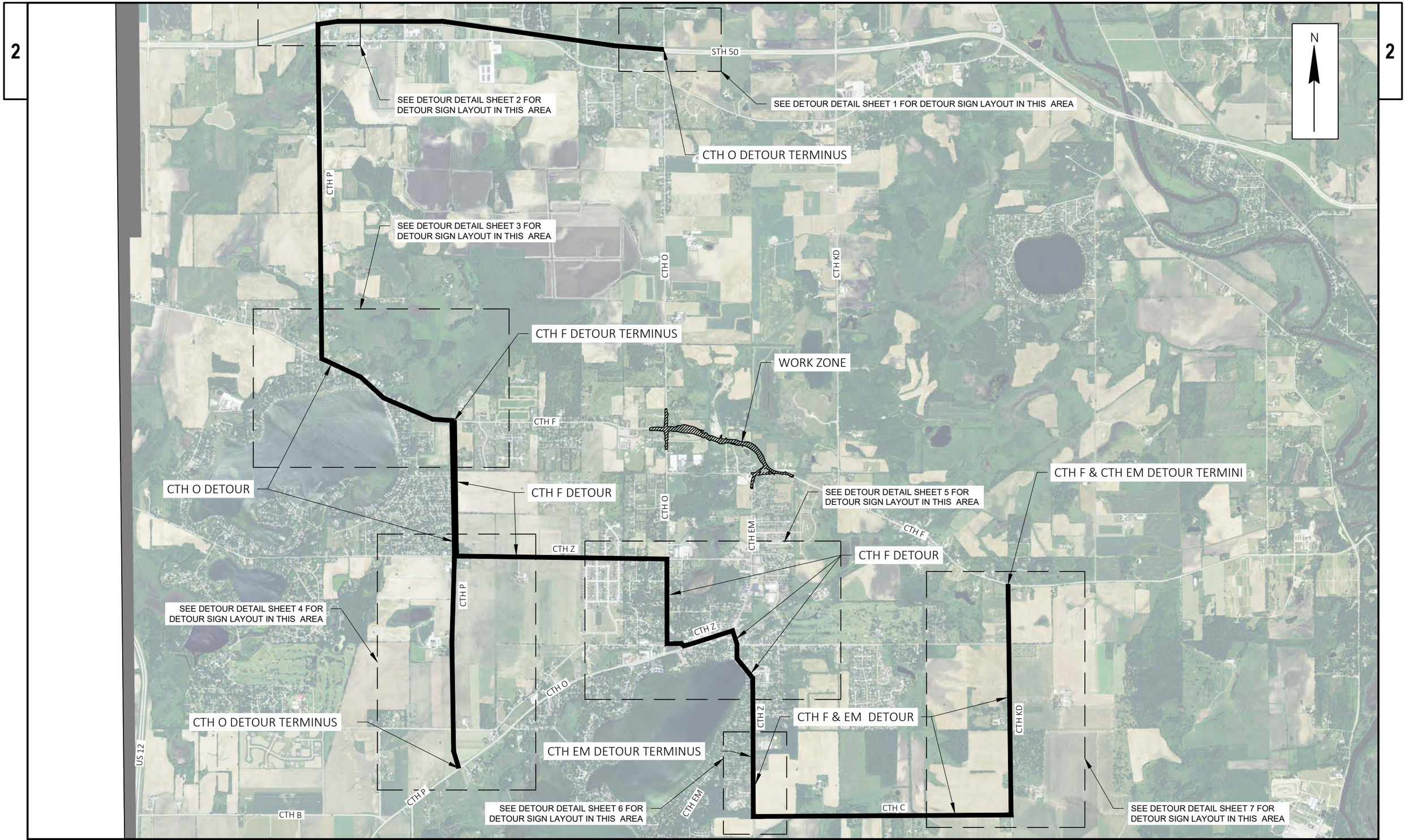
FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\024507-PM ALT5.DWG
LAYOUT NAME - 024506
PLOT DATE : 11/1/2019 12:21 PM
PLOT BY : BREMER, SAM
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	TRAFFIC CONTROL PLAN	SHEET 37	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\025001-TC ALT 5.DWG
LAYOUT NAME - 027001_dt

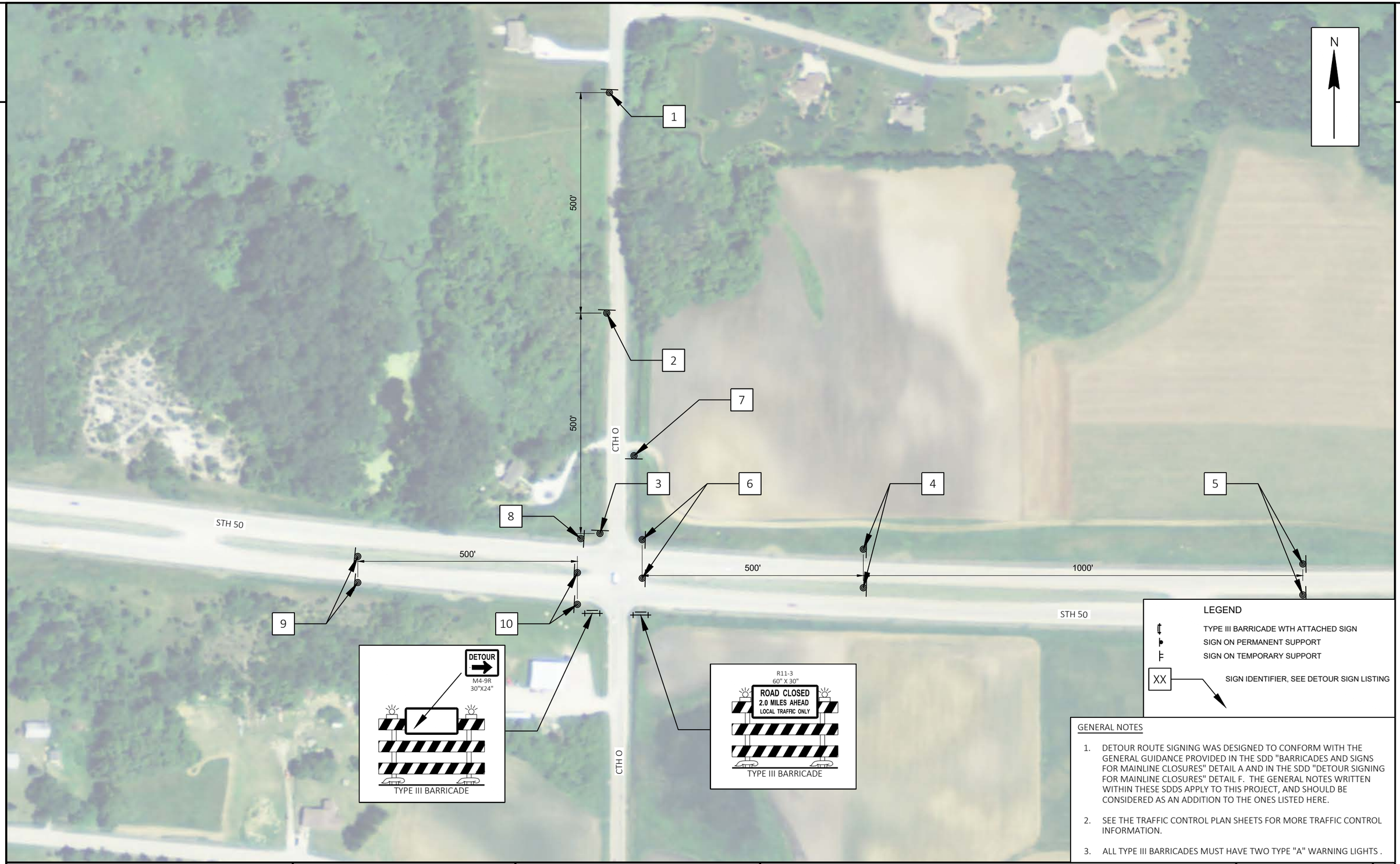
PLOT DATE : 11/1/2019 12:22 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:400 FT



PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	DETOUR OVERVIEW	SHEET 38	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\027001-DT ALT 5.DWG
LAYOUT NAME - 027001_dt

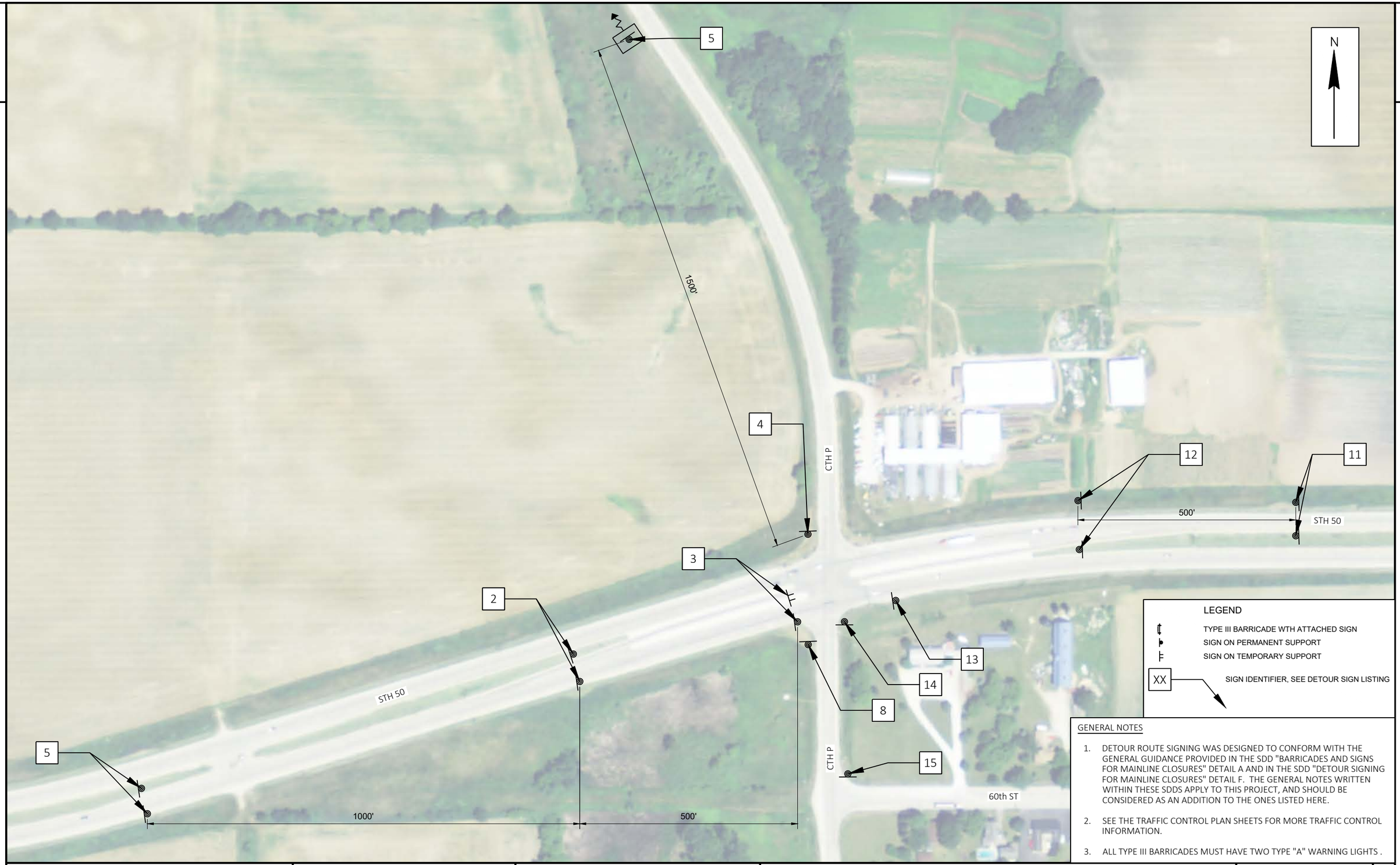
PLOT DATE : 11/1/2019 12:23 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:0.5 MI



GENERAL NOTES

1. DETOUR ROUTE SIGNING WAS DESIGNED TO CONFORM WITH THE GENERAL GUIDANCE PROVIDED IN THE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL A AND IN THE SDD "DETOUR SIGNING FOR MAINLINE CLOSURES" DETAIL F. THE GENERAL NOTES WRITTEN WITHIN THESE SDDS APPLY TO THIS PROJECT, AND SHOULD BE CONSIDERED AS AN ADDITION TO THE ONES LISTED HERE.
2. SEE THE TRAFFIC CONTROL PLAN SHEETS FOR MORE TRAFFIC CONTROL INFORMATION.
3. ALL TYPE III BARRICADES MUST HAVE TWO TYPE "A" WARNING LIGHTS .

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	DETOUR DETAIL SHEET 1	SHEET 39	E



GENERAL NOTES

1. DETOUR ROUTE SIGNING WAS DESIGNED TO CONFORM WITH THE GENERAL GUIDANCE PROVIDED IN THE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL A AND IN THE SDD "DETOUR SIGNING FOR MAINLINE CLOSURES" DETAIL F. THE GENERAL NOTES WRITTEN WITHIN THESE SDDS APPLY TO THIS PROJECT, AND SHOULD BE CONSIDERED AS AN ADDITION TO THE ONES LISTED HERE.
2. SEE THE TRAFFIC CONTROL PLAN SHEETS FOR MORE TRAFFIC CONTROL INFORMATION.
3. ALL TYPE III BARRICADES MUST HAVE TWO TYPE "A" WARNING LIGHTS .

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	DETOUR DETAIL SHEET 2	SHEET 40	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\027001-DT ALT 5.DWG
LAYOUT NAME - 027003_dt
PLOT DATE : 11/1/2019 12:23 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

2

N

5

11

CTH P

12

13

CTH F

500'

4

1500'

500'

15

CTH F

8

14

CTH P

R11-3
60" X 30"
ROAD CLOSED
1.0 MILES AHEAD
LOCAL TRAFFIC ONLY
TYPE III BARRICADE

23

16

18

20

500'

CTH F

17

500'

19

CTH P

21

DETOUR
M4-9R
30"X24"
TYPE III BARRICADE

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- XX — SIGN IDENTIFIER, SEE DETOUR SIGN LISTING

GENERAL NOTES

1. DETOUR ROUTE SIGNING WAS DESIGNED TO CONFORM WITH THE GENERAL GUIDANCE PROVIDED IN THE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL A AND IN THE SDD "DETOUR SIGNING FOR MAINLINE CLOSURES" DETAIL F. THE GENERAL NOTES WRITTEN WITHIN THESE SDDS APPLY TO THIS PROJECT, AND SHOULD BE CONSIDERED AS AN ADDITION TO THE ONES LISTED HERE.
2. SEE THE TRAFFIC CONTROL PLAN SHEETS FOR MORE TRAFFIC CONTROL INFORMATION.
3. ALL TYPE III BARRICADES MUST HAVE TWO TYPE "A" WARNING LIGHTS .

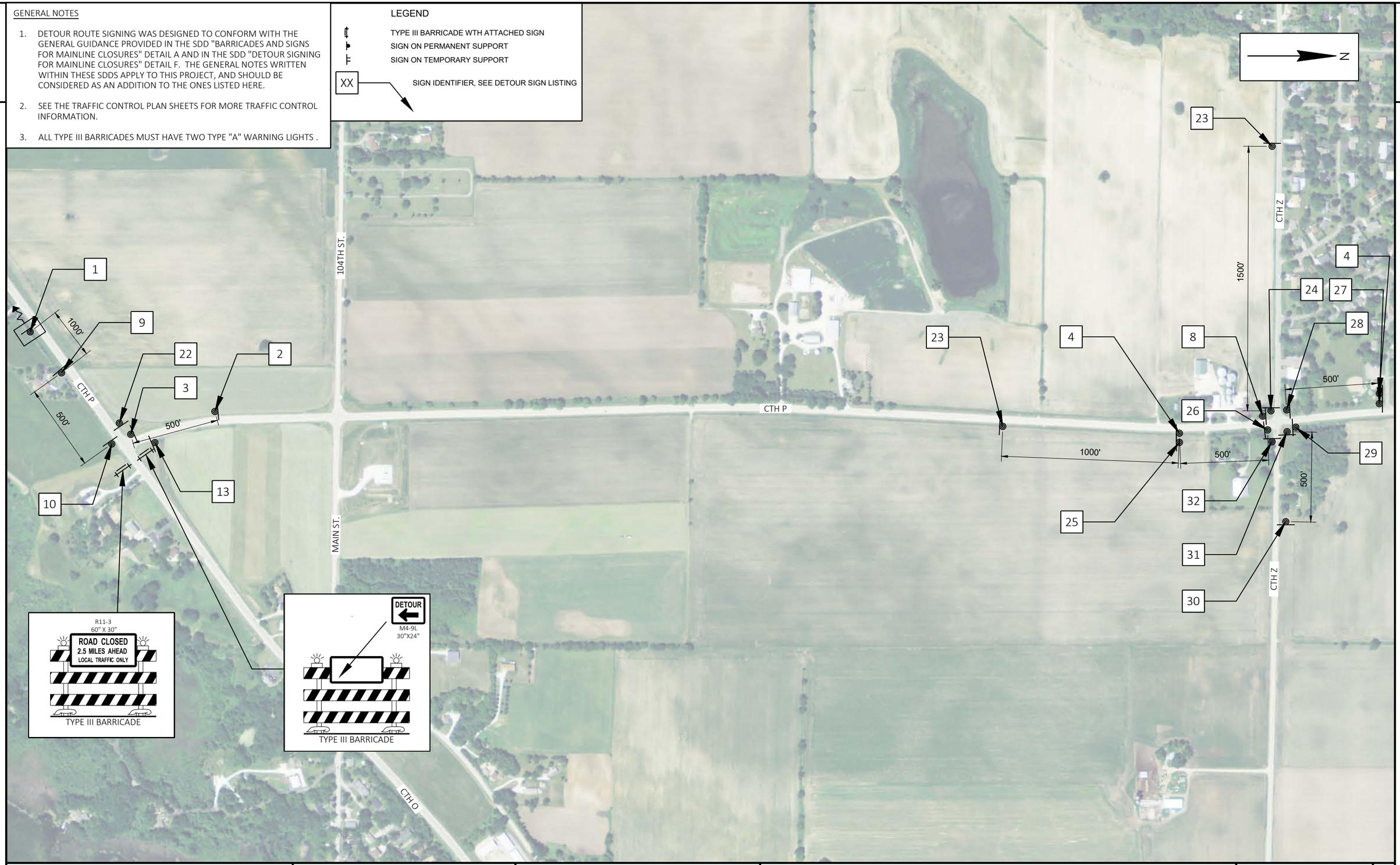
PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	DETOUR DETAIL SHEET 3	SHEET 41	E

GENERAL NOTES

1. DETOUR ROUTE SIGNING WAS DESIGNED TO CONFORM WITH THE GENERAL GUIDANCE PROVIDED IN THE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL A AND IN THE SDD "DETOUR SIGNING FOR MAINLINE CLOSURES" DETAIL F. THE GENERAL NOTES WRITTEN WITHIN THESE SDDS APPLY TO THIS PROJECT, AND SHOULD BE CONSIDERED AS AN ADDITION TO THE ONES LISTED HERE.
2. SEE THE TRAFFIC CONTROL PLAN SHEETS FOR MORE TRAFFIC CONTROL INFORMATION.
3. ALL TYPE III BARRICADES MUST HAVE TWO TYPE "A" WARNING LIGHTS .

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- XX — SIGN IDENTIFIER, SEE DETOUR SIGN LISTING



PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	DETOUR DETAIL SHEET 4	SHEET 42	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\027001-DT ALT 5.DWG
LAYOUT NAME - 027005_dt

PLOT DATE : 11/1/2019 12:23 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:500 FT

WISDOT/CADDS SHEET 42

2

2

N

CTH O

CTH Z

24

25

33

34

500'

500'

26

32

35

36

CTH O

CTH Z

CTH EM

27

28

33

37

500'

MAIN ST.

CTH Z

CTH O

28

37

30

CTH Z

58

35

38

LEGION DRIVE

24

CTH O

24

25

26

32

CTH Z

WILMOT AVE.

CTH EM

39

32

LEGEND

TYPE III BARRICADE WTH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

XX — SIGN IDENTIFIER, SEE DETOUR SIGN LISTING

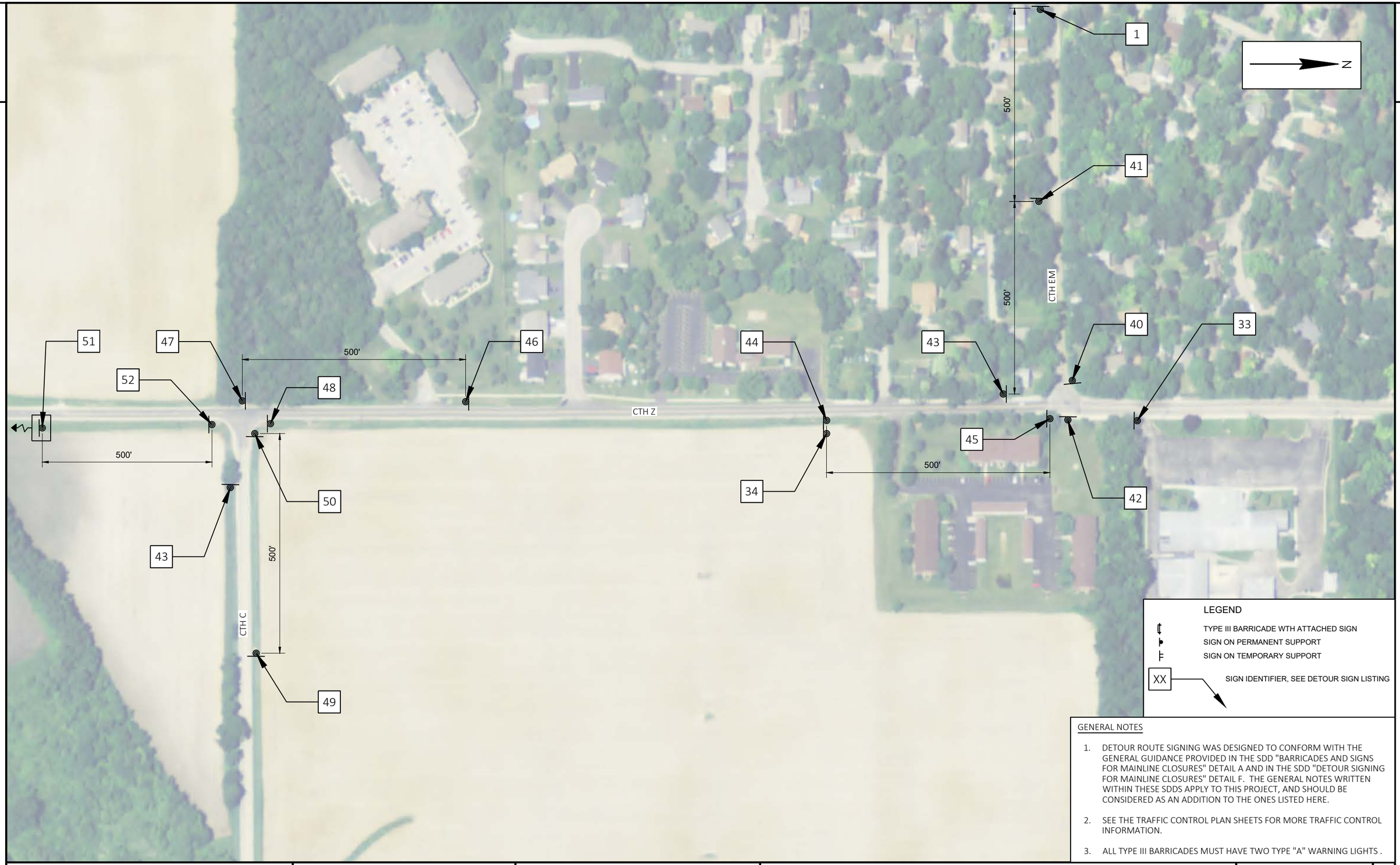
GENERAL NOTES

1. DETOUR ROUTE SIGNING WAS DESIGNED TO CONFORM WITH THE GENERAL GUIDANCE PROVIDED IN THE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL A AND IN THE SDD "DETOUR SIGNING FOR MAINLINE CLOSURES" DETAIL F. THE GENERAL NOTES WRITTEN WITHIN THESE SDDS APPLY TO THIS PROJECT, AND SHOULD BE CONSIDERED AS AN ADDITION TO THE ONES LISTED HERE.
2. SEE THE TRAFFIC CONTROL PLAN SHEETS FOR MORE TRAFFIC CONTROL INFORMATION.
3. ALL TYPE III BARRICADES MUST HAVE TWO TYPE "A" WARNING LIGHTS .

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	DETOUR DETAIL SHEET 5	SHEET 43	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\027001-DT ALT 5.DWG
LAYOUT NAME - 027006_dt

PLOT DATE : 11/1/2019 12:23 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:500 FT



GENERAL NOTES

1. DETOUR ROUTE SIGNING WAS DESIGNED TO CONFORM WITH THE GENERAL GUIDANCE PROVIDED IN THE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL A AND IN THE SDD "DETOUR SIGNING FOR MAINLINE CLOSURES" DETAIL F. THE GENERAL NOTES WRITTEN WITHIN THESE SDDS APPLY TO THIS PROJECT, AND SHOULD BE CONSIDERED AS AN ADDITION TO THE ONES LISTED HERE.
2. SEE THE TRAFFIC CONTROL PLAN SHEETS FOR MORE TRAFFIC CONTROL INFORMATION.
3. ALL TYPE III BARRICADES MUST HAVE TWO TYPE "A" WARNING LIGHTS .

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	DETOUR DETAIL SHEET 6	SHEET 44	E

2

GENERAL NOTES

1. DETOUR ROUTE SIGNING WAS DESIGNED TO CONFORM WITH THE GENERAL GUIDANCE PROVIDED IN THE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL A AND IN THE SDD "DETOUR SIGNING FOR MAINLINE CLOSURES" DETAIL F. THE GENERAL NOTES WRITTEN WITHIN THESE SDDS APPLY TO THIS PROJECT, AND SHOULD BE CONSIDERED AS AN ADDITION TO THE ONES LISTED HERE.
2. SEE THE TRAFFIC CONTROL PLAN SHEETS FOR MORE TRAFFIC CONTROL INFORMATION.
3. ALL TYPE III BARRICADES MUST HAVE TWO TYPE "A" WARNING LIGHTS .

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- XX — SIGN IDENTIFIER, SEE DETOUR SIGN LISTING

N

R11-3
60" X 30"
ROAD CLOSED
1.0 MILES AHEAD
LOCAL TRAFFIC ONLY
TYPE III BARRICADE

DETOUR
M4-9L
30"X24"
TYPE III BARRICADE

CTH C
98TH ST
CTH F
CTH KD
CTH F

46
47
48
50
49
43
59
54
48
52
55
57
53
56
1

500'
500'
500'
500'
500'
1000'

2

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	DETOUR DETAIL SHEET 7	SHEET 45	E

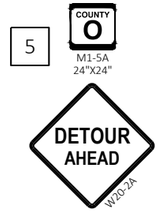
FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\027001-DT ALT 5.DWG
LAYOUT NAME - 027008_dt
PLOT DATE : 11/1/2019 12:23 PM
PLOT BY : BREMER, SAM
PLOT NAME :
PLOT SCALE : 1 IN:500 FT

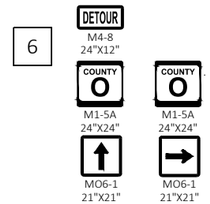
1


2

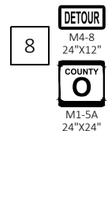

3

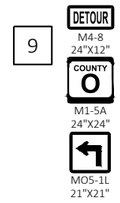

4

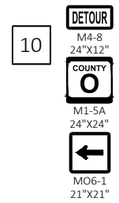

5


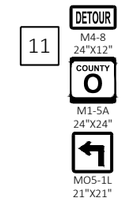
6


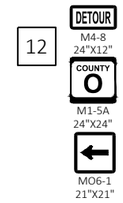
7

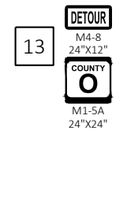

8


9


10


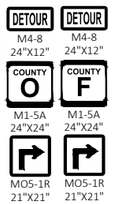
11


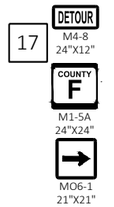
12


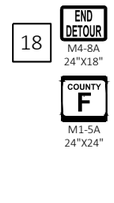
13


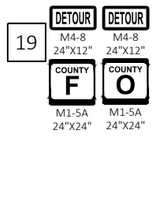
14

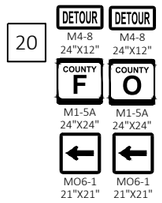

15

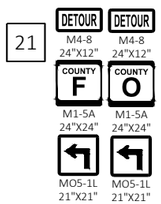

16


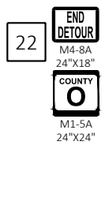
17


18


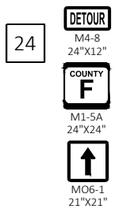
19


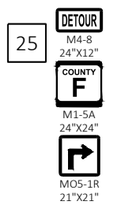
20


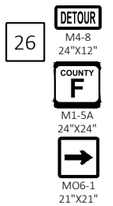
21


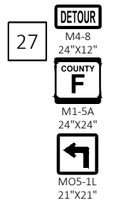
22


23

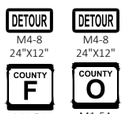

24


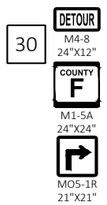
25


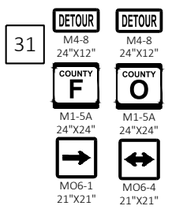
26


27


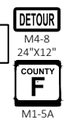
28


29


30


31


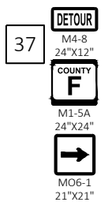
32

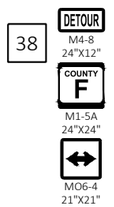

33


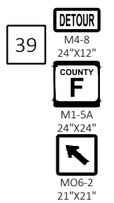
34

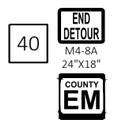

35

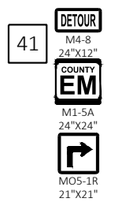

36

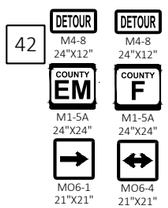

37


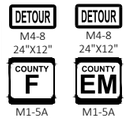
38


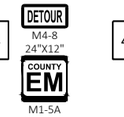
39


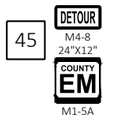
40


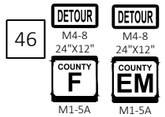
41


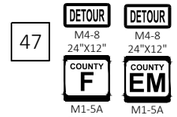
42


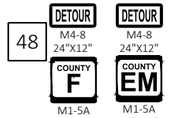
43


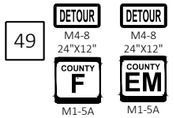
44


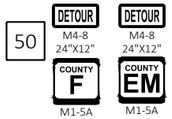
45


46


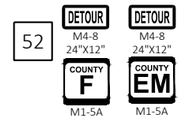
47


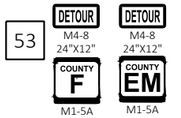
48


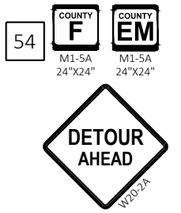
49


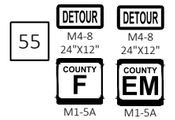
50


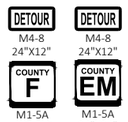
51

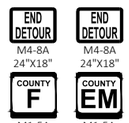

52


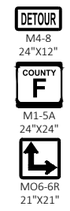
53


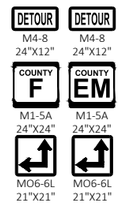
54


55


56


57


58


59


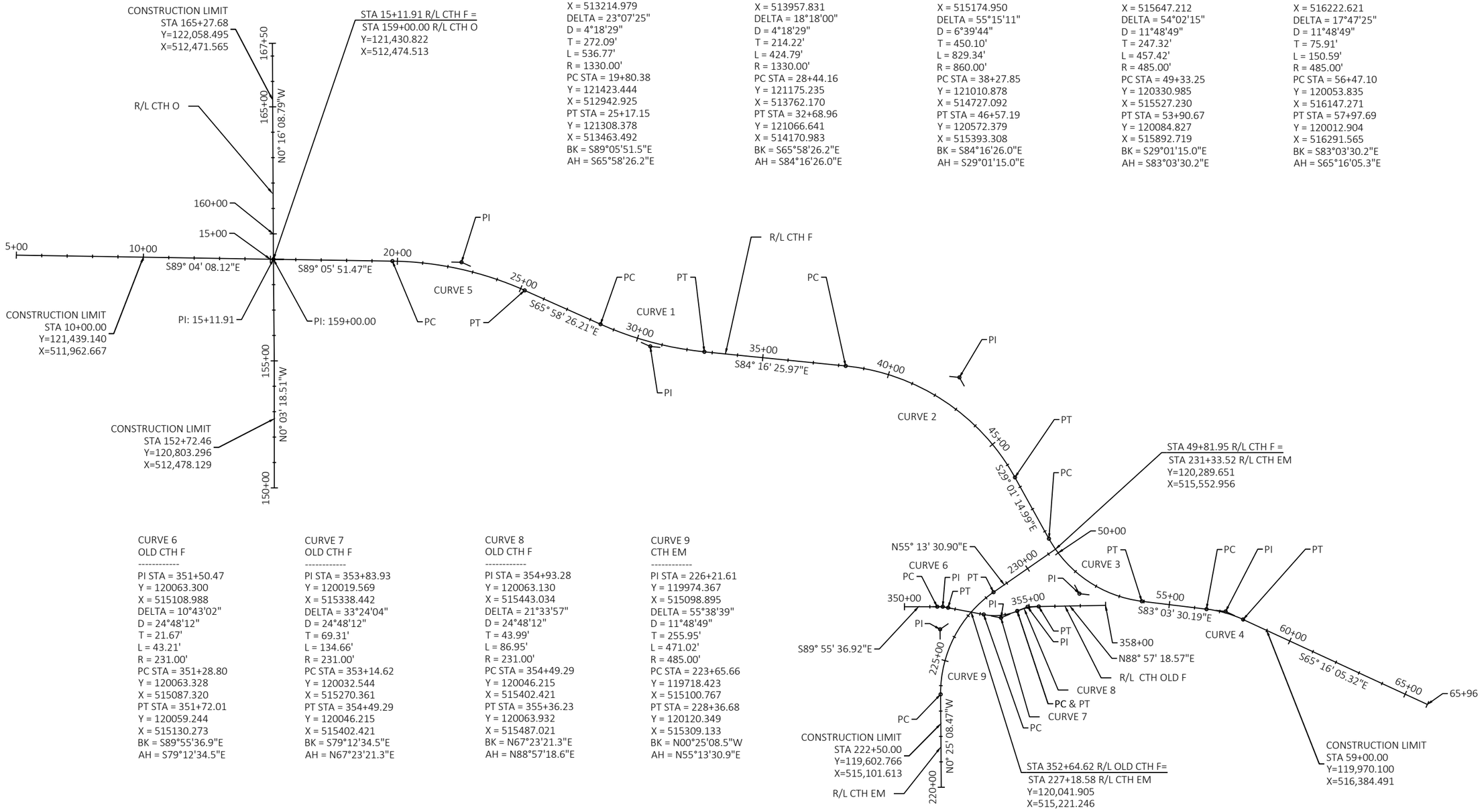
PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	DETOUR ROUTE SIGN LISTING	SHEET 46 E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\027001-DT ALT 5.DWG
LAYOUT NAME - 027009_dt

PLOT DATE : 11/1/2019 12:23 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : ##########

2

N



CURVE 5
CTH F

PI STA = 22+52.47
Y = 121419.159
X = 513214.979
DELTA = 23°07'25"
D = 4°18'29"
T = 272.09'
L = 536.77'
R = 1330.00'
PC STA = 19+80.38
Y = 121423.444
X = 512942.925
PT STA = 25+17.15
Y = 121308.378
X = 513463.492
BK = S89°05'51.5"E
AH = S65°58'26.2"E

CURVE 1
CTH F

PI STA = 30+58.38
Y = 121088.015
X = 513957.831
DELTA = 18°18'00"
D = 4°18'29"
T = 214.22'
L = 424.79'
R = 1330.00'
PC STA = 28+44.16
Y = 121175.235
X = 513762.170
PT STA = 32+68.96
Y = 121066.641
X = 514170.983
BK = S65°58'26.2"E
AH = S84°16'26.0"E

CURVE 2
CTH F

PI STA = 42+77.96
Y = 120965.970
X = 515174.950
DELTA = 55°15'11"
D = 6°39'44"
T = 450.10'
L = 829.34'
R = 860.00'
PC STA = 38+27.85
Y = 121010.878
X = 514727.092
PT STA = 46+57.19
Y = 120572.379
X = 515393.308
BK = S84°16'26.0"E
AH = S29°01'15.0"E

CURVE 3
CTH F

PI STA = 51+80.57
Y = 120114.717
X = 515647.212
DELTA = 54°02'15"
D = 11°48'49"
T = 247.32'
L = 457.42'
R = 485.00'
PC STA = 49+33.25
Y = 120330.985
X = 515527.230
PT STA = 53+90.67
Y = 120084.827
X = 515892.719
BK = S29°01'15.0"E
AH = S83°03'30.2"E

CURVE 4
CTH F

PI STA = 57+23.00
Y = 120044.661
X = 516222.621
DELTA = 17°47'25"
D = 11°48'49"
T = 75.91'
L = 150.59'
R = 485.00'
PC STA = 56+47.10
Y = 120053.835
X = 516147.271
PT STA = 57+97.69
Y = 120012.904
X = 516291.565
BK = S83°03'30.2"E
AH = S65°16'05.3"E

CURVE 6
OLD CTH F

PI STA = 351+50.47
Y = 120063.300
X = 515108.988
DELTA = 10°43'02"
D = 24°48'12"
T = 21.67'
L = 43.21'
R = 231.00'
PC STA = 351+28.80
Y = 120063.328
X = 515087.320
PT STA = 351+72.01
Y = 120059.244
X = 515130.273
BK = S89°55'36.9"E
AH = S79°12'34.5"E

CURVE 7
OLD CTH F

PI STA = 353+83.93
Y = 120019.569
X = 515338.442
DELTA = 33°24'04"
D = 24°48'12"
T = 69.31'
L = 134.66'
R = 231.00'
PC STA = 353+14.62
Y = 120032.544
X = 515270.361
PT STA = 354+49.29
Y = 120046.215
X = 515402.421
BK = S79°12'34.5"E
AH = N67°23'21.3"E

CURVE 8
OLD CTH F

PI STA = 354+93.28
Y = 120063.130
X = 515443.034
DELTA = 21°33'57"
D = 24°48'12"
T = 43.99'
L = 86.95'
R = 231.00'
PC STA = 354+49.29
Y = 120046.215
X = 515402.421
PT STA = 355+36.23
Y = 120063.932
X = 515487.021
BK = N67°23'21.3"E
AH = N88°57'18.6"E

CURVE 9
CTH EM

PI STA = 226+21.61
Y = 119974.367
X = 515098.895
DELTA = 55°38'39"
D = 11°48'49"
T = 255.95'
L = 471.02'
R = 485.00'
PC STA = 223+65.66
Y = 119718.423
X = 515100.767
PT STA = 228+36.68
Y = 120120.349
X = 515309.133
BK = N00°25'08.5"W
AH = N55°13'30.9"E

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	ALIGNMENT OVERVIEW	SHEET 47	E

CTH F-Curve 5

SUPERELEVATION TRANSITION EVENT POINTS		RATE			
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
EndNormalCrown	18+20.38'	-4.00%	-2.00%	-2.00%	-4.00%
LevelCrown	18+73.71'	.00%	.00%	-2.00%	-4.00%
ReverseCrown	19+27.05'	2.00%	2.00%	-2.00%	-4.00%
BeginShoulderRollover	19+80.38'	4.00%	4.00%	-4.00%	-4.00%
BeginFullSuper	20+33.71'	6.00%	6.00%	-6.00%	-6.00%
EndFullSuper	24+63.82'	6.00%	6.00%	-6.00%	-6.00%
EndShoulderRollover	25+17.16'	4.00%	4.00%	-4.00%	-4.00%
ReverseCrown	25+70.49'	2.00%	2.00%	-2.00%	-4.00%
LevelCrown	26+23.82'	.00%	.00%	-2.00%	-4.00%
BeginNormalCrown	26+77.16'	-4.00%	-2.00%	-2.00%	-4.00%

CTH F-Curve 3

SUPERELEVATION TRANSITION EVENT POINTS		RATE			
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
EndNormalCrown	48+09.24'	-4.00%	-2.00%	-2.00%	-4.00%
LevelCrown	48+50.58'	-4.00%	-2.00%	.00%	.00%
ReverseCrown	48+91.91'	-4.00%	-2.00%	2.00%	2.00%
BeginShoulderRollover	49+33.24'	-4.00%	-4.00%	4.00%	4.00%
BeginFullSuper	49+74.58'	-6.00%	-6.00%	6.00%	6.00%
EndFullSuper	53+49.34'	-6.00%	-6.00%	6.00%	6.00%
EndShoulderRollover	53+90.67'	-4.00%	-4.00%	4.00%	4.00%
ReverseCrown	54+32.00'	-4.00%	-2.00%	2.00%	2.00%
LevelCrown	54+73.34'	-4.00%	-2.00%	.00%	.00%
BeginNormalShoulder	55+14.67'	-4.00%	-2.00%	-2.00%	-4.00%

CTH F-Curve 1

SUPERELEVATION TRANSITION EVENT POINTS		RATE			
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
EndNormalShoulder	26+84.16'	-4.00%	-2.00%	-2.00%	-4.00%
LevelCrown	27+37.49'	-4.00%	-2.00%	.00%	.00%
ReverseCrown	27+90.82'	-4.00%	-2.00%	2.00%	2.00%
BeginShoulderRollover	28+44.16'	-4.00%	-4.00%	4.00%	4.00%
BeginFullSuper	28+97.49'	-6.00%	-6.00%	6.00%	6.00%
EndFullSuper	32+15.63'	-6.00%	-6.00%	6.00%	6.00%
EndShoulderRollover	32+68.96'	-4.00%	-4.00%	4.00%	4.00%
ReverseCrown	33+22.29'	-4.00%	-2.00%	2.00%	2.00%
LevelCrown	33+75.63'	-4.00%	-2.00%	.00%	.00%
BeginNormalCrown	34+28.96'	-4.00%	-2.00%	-2.00%	-4.00%

CTH F-Curve 4

SUPERELEVATION TRANSITION EVENT POINTS		RATE			
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
EndNormalCrown	55+23.09'	-4.00%	-2.00%	-2.00%	-4.00%
LevelCrown	55+64.43'	.00%	.00%	-2.00%	-4.00%
ReverseCrown	56+05.76'	2.00%	2.00%	-2.00%	-4.00%
BeginShoulderRollover	56+47.09'	4.00%	4.00%	-4.00%	-4.00%
BeginFullSuper	56+88.43'	6.00%	6.00%	-6.00%	-6.00%
EndFullSuper	57+56.36'	6.00%	6.00%	-6.00%	-6.00%
EndShoulderRollover	57+97.69'	4.00%	4.00%	-4.00%	-4.00%
ReverseCrown	58+39.03'	2.00%	2.00%	-2.00%	-4.00%
LevelCrown	58+80.36'	.00%	.00%	-2.00%	-4.00%
BeginNormalCrown	59+21.69'	-4.00%	-2.00%	-2.00%	-4.00%

CTH F-Curve 2

SUPERELEVATION TRANSITION EVENT POINTS		RATE			
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
EndNormalCrown	37+14.31'	-4.00%	-2.00%	-2.00%	-4.00%
LevelCrown	37+55.85'	.00%	.00%	-2.00%	-4.00%
ReverseCrown	37+97.39'	2.00%	2.00%	-2.00%	-4.00%
BeginShoulderRollover	38+38.93'	4.00%	4.00%	-4.00%	-4.00%
BeginFullSuper	38+63.85'	5.20%	5.20%	-5.20%	-5.20%
EndFullSuper	46+21.20'	5.20%	5.20%	-5.20%	-5.20%
EndShoulderRollover	46+46.12'	4.00%	4.00%	-4.00%	-4.00%
ReverseCrown	46+87.66'	2.00%	2.00%	-2.00%	-4.00%
LevelCrown	47+29.20'	.00%	.00%	-2.00%	-4.00%
BeginNormalShoulder	47+70.73'	-4.00%	-2.00%	-2.00%	-4.00%

CTH EM-Curve 9

SUPERELEVATION TRANSITION EVENT POINTS		RATE			
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
EndNormalCrown	222+41.66'	-4.00%	-2.00%	-2.00%	-4.00%
LevelCrown	222+82.99'	.00%	.00%	-2.00%	-4.00%
ReverseCrown	223+24.32'	2.00%	2.00%	-2.00%	-4.00%
BeginShoulderRollover	223+65.66'	4.00%	4.00%	-4.00%	-4.00%
BeginFullSuper	224+06.99'	6.00%	6.00%	-6.00%	-6.00%
EndFullSuper	227+95.35'	6.00%	6.00%	-6.00%	-6.00%
EndShoulderRollover	228+36.68'	4.00%	4.00%	-4.00%	-4.00%
ReverseCrown	228+78.02'	2.00%	2.00%	-2.00%	-4.00%
LevelCrown	229+19.35'	.00%	.00%	-2.00%	-4.00%
BeginNormalCrown	229+60.68'	-4.00%	-2.00%	-2.00%	-4.00%

2

2

N

SECTION CORNER
CONCRETE MONUMENT
WITH BRASS CAP
N=122722.111
E=512466.600

SECTION CORNER
CONCRETE MONUMENT
WITH BRASS CAP
N=122703.033
E=515101.625

CTH-O

NGS MONUMENT

NGS

1/4

HMOD

BM-1

CTH-F

BM-2

NE 1/4

CTH-F

BM-3

CTH-F

QUARTER SECTION CORNER
CONCRETE MONUMENT
WITH BRASS CAP
N=120081.249
E=517734.123

CTH-O

CTH-OLD F

BM-4

BM-6

CTH-EM

BM-7

BM-8

BM-9

BM-10

CTH-OLD F

BM-11

CTH-F

QUARTER SECTION CORNER
CONCRETE MONUMENT
WITH BRASS CAP
N=120081.000
E=512482.785

QUARTER SECTION CORNER
CONCRETE MONUMENT
WITH BRASS CAP
N=120066.355
E=515099.890

BM-5

CTH-EM

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	SURVEY CONTROL OVERVIEW	SHEET 49	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\027204-AD_CP ALT5.DWG
LAYOUT NAME - 027204

PLOT DATE : 11/1/2019 12:25 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:400 FT

WISDOT/CADDS SHEET 42

2

BM-1
HMOD STA
N=121461
E=511504
ELEV=904.62

BM-2
RAILROAD SPIKE IN POWER POLE
NO. 1-19-16 25/39
N=121402
E=512396
ELEV=901.68

NGS MONUMENT
29ES 1957
N=121622
E=512499
ELEV=900.81

BM-3
RAILROAD SPIKE IN POWER POLE
NO. 1-19-16 45/37
N=121163
E=514343
ELEV=819.07

BM-4
RAILROAD SPIKE IN POWER POLE
NO. 108-4
N=120039
E=514849
ELEV=822.61

BM-5
RAILROAD SPIKE IN POWER POLE
NO. 1-19-15.3 0/43
N=119569
E=515124
ELEV=833.64

QUARTER SECTION CORNER
CONCRETE MONUMENT
WITH BRASS CAP
N=120066.355
E=515099.890

BM-6
BRASS CAP IN CONCRETE POST
N=121163
E=514343
ELEV=819.07

BM-7
PK NAIL IN POWER POLE
NO. 1-6-15 5/26
N=120109
E=515668
ELEV=813.69

BM-8
BRASS CAP IN CONRETE POST
N=120105
E=515897
ELEV=810.66

BM-9
RAILROAD SPIKE IN POWER POLE
NO. 1-19-15 9/27
N=120113
E=516098
ELEV=807.99

BM-10
RAILROAD SPIKE IN POWER POLE
NO. 1-19-15.3 25/51
N=120008
E=516400
ELEV=801.98

BM-11
RAILROAD SPIKE IN POWER POLE
NO. 1-19-15.8
N=119840
E=516762
ELEV=800.02

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	SURVEY CONTROL	SHEET 50	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\027204-AD_CP ALT5.DWG
LAYOUT NAME - 027205

PLOT DATE : 11/1/2019 12:25 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:100 FT

3733-00-71

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	27.000	27.000
0004	201.0110	Clearing	SY	147.000	147.000
0006	201.0205	Grubbing	STA	27.000	27.000
0008	201.0210	Grubbing	SY	147.000	147.000
0010	203.0100	Removing Small Pipe Culverts	EACH	22.000	22.000
0012	204.0115	Removing Asphaltic Surface Butt Joints	SY	49.000	49.000
0014	204.0280	Sealing Pipes	EACH	1.000	1.000
0016	205.0100	Excavation Common	CY	80,970.000	80,970.000
0018	205.9015.S	Grading Shaping and Finishing Intersection (location) 01. CTH F and CTH O	LS	1.000	1.000
0020	205.9015.S	Grading Shaping and Finishing Intersection (location) 02. CTH F and CTH EM	LS	1.000	1.000
0022	205.9015.S	Grading Shaping and Finishing Intersection (location) 03. CTH EM and Old CTH F	LS	1.000	1.000
0024	208.0100	Borrow	CY	66,603.000	66,603.000
0026	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 3733-00-71	LS	1.000	1.000
0028	213.0100	Finishing Roadway (project) 01. 3733-00-71	EACH	1.000	1.000
0030	214.0100	Obliterating Old Road	STA	4.000	4.000
0032	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	35,290.000	35,290.000
0034	310.0115	Base Aggregate Open-Graded	CY	218.000	218.000
0036	311.0110	Breaker Run	TON	28,740.000	28,740.000
0038	371.2000.S	QMP Base Aggregate Dense 1 1/4-Inch Compaction	EACH	38.000	38.000
0040	416.0160	Concrete Driveway 6-Inch	SY	325.000	325.000
0042	455.0605	Tack Coat	GAL	1,225.000	1,225.000
0044	460.2000	Incentive Density HMA Pavement	DOL	9,800.000	9,800.000
0046	460.5223	HMA Pavement 3 LT 58-28 S	TON	4,704.000	4,704.000
0048	460.5224	HMA Pavement 4 LT 58-28 S	TON	6,191.000	6,191.000
0050	465.0105	Asphaltic Surface	TON	128.000	128.000
0052	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	386.000	386.000
0054	465.0315	Asphaltic Flumes	SY	26.000	26.000
0056	520.1012	Apron Endwalls for Culvert Pipe 12-Inch	EACH	1.000	1.000
0058	520.1015	Apron Endwalls for Culvert Pipe 15-Inch	EACH	1.000	1.000
0060	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	10.000	10.000
0062	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	2.000	2.000
0064	520.1030	Apron Endwalls for Culvert Pipe 30-Inch	EACH	2.000	2.000
0066	520.3318	Culvert Pipe Class III-A 18-Inch	LF	566.000	566.000
0068	520.3330	Culvert Pipe Class III-A 30-Inch	LF	199.000	199.000
0070	521.1012	Apron Endwalls for Culvert Pipe Steel 12-Inch	EACH	2.000	2.000
0072	521.1015	Apron Endwalls for Culvert Pipe Steel 15-Inch	EACH	4.000	4.000
0074	521.3112	Culvert Pipe Corrugated Steel 12-Inch	LF	20.000	20.000

Line	Item	Item Description	Unit	Total	Qty
0076	521.3115	Culvert Pipe Corrugated Steel 15-Inch	LF	40.000	40.000
0078	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	8,915.000	8,915.000
0080	602.0410	Concrete Sidewalk 5-Inch	SF	12,130.000	12,130.000
0082	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	180.000	180.000
0084	606.0200	Riprap Medium	CY	195.000	195.000
0086	608.3012	Storm Sewer Pipe Class III-A 12-Inch	LF	1,250.000	1,250.000
0088	608.3015	Storm Sewer Pipe Class III-A 15-Inch	LF	747.000	747.000
0090	608.3018	Storm Sewer Pipe Class III-A 18-Inch	LF	370.000	370.000
0092	608.3024	Storm Sewer Pipe Class III-A 24-Inch	LF	1,436.000	1,436.000
0094	611.0530	Manhole Covers Type J	EACH	2.000	2.000
0096	611.0612	Inlet Covers Type C	EACH	8.000	8.000
0098	611.0624	Inlet Covers Type H	EACH	23.000	23.000
0100	611.1004	Catch Basins 4-FT Diameter	EACH	7.000	7.000
0102	611.1005	Catch Basins 5-FT Diameter	EACH	1.000	1.000
0104	611.2004	Manholes 4-FT Diameter	EACH	2.000	2.000
0106	611.3004	Inlets 4-FT Diameter	EACH	20.000	20.000
0108	611.3230	Inlets 2x3-FT	EACH	3.000	3.000
0110	612.0106	Pipe Underdrain 6-Inch	LF	434.000	434.000
0112	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	2.000	2.000
0114	618.0100	Maintenance And Repair of Haul Roads (project) 01. 3733-00-71	EACH	1.000	1.000
0116	619.1000	Mobilization	EACH	1.000	1.000
0118	620.0300	Concrete Median Sloped Nose	SF	204.000	204.000
0120	624.0100	Water	MGAL	539.000	539.000
0122	625.0100	Topsoil	SY	50,930.000	50,930.000
0124	628.1504	Silt Fence	LF	10,860.000	10,860.000
0126	628.1520	Silt Fence Maintenance	LF	10,860.000	10,860.000
0128	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0130	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0132	628.2002	Erosion Mat Class I Type A	SY	41,830.000	41,830.000
0134	628.2004	Erosion Mat Class I Type B	SY	12,690.000	12,690.000
0136	628.2006	Erosion Mat Urban Class I Type A	SY	9,150.000	9,150.000
0138	628.2008	Erosion Mat Urban Class I Type B	SY	440.000	440.000
0140	628.7005	Inlet Protection Type A	EACH	30.000	30.000
0142	628.7015	Inlet Protection Type C	EACH	30.000	30.000
0144	628.7504	Temporary Ditch Checks	LF	785.000	785.000
0146	628.7555	Culvert Pipe Checks	EACH	6.000	6.000
0148	629.0210	Fertilizer Type B	CWT	32.000	32.000
0150	630.0120	Seeding Mixture No. 20	LB	1,720.000	1,720.000
0152	630.0180	Seeding Mixture No. 80	LB	7.000	7.000

3733-00-71

Line	Item	Item Description	Unit	Total	Qty
0154	630.0500	Seed Water	MGAL	1,151.000	1,151.000
0156	633.5200	Markers Culvert End	EACH	2.000	2.000
0158	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	3.000	3.000
0160	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	20.000	20.000
0162	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	47.000	47.000
0164	637.2210	Signs Type II Reflective H	SF	247.260	247.260
0166	637.2220	Signs Type II Reflective SH	SF	6.750	6.750
0168	637.2230	Signs Type II Reflective F	SF	179.250	179.250
0170	638.2602	Removing Signs Type II	EACH	38.000	38.000
0172	638.3000	Removing Small Sign Supports	EACH	21.000	21.000
0174	642.5401	Field Office Type D	EACH	1.000	1.000
0176	643.0420	Traffic Control Barricades Type III	DAY	2,442.000	2,442.000
0178	643.0705	Traffic Control Warning Lights Type A	DAY	1,776.000	1,776.000
0180	643.0900	Traffic Control Signs	DAY	16,465.000	16,465.000
0182	643.0920	Traffic Control Covering Signs Type II	EACH	12.000	12.000
0184	643.5000	Traffic Control	EACH	1.000	1.000
0186	645.0112	Geotextile Type DF Schedule B	SY	750.000	750.000
0188	645.0120	Geotextile Type HR	SY	383.000	383.000
0190	646.1020	Marking Line Epoxy 4-Inch	LF	27,459.000	27,459.000
0192	646.3020	Marking Line Epoxy 8-Inch	LF	406.000	406.000
0194	646.5020	Marking Arrow Epoxy	EACH	13.000	13.000
0196	646.5220	Marking Symbol Epoxy	EACH	2.000	2.000
0198	646.6120	Marking Stop Line Epoxy 18-Inch	LF	161.000	161.000
0200	646.7120	Marking Diagonal Epoxy 12-Inch	LF	338.000	338.000
0202	646.7220	Marking Chevron Epoxy 24-Inch	LF	38.000	38.000
0204	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	558.000	558.000
0206	650.4000	Construction Staking Storm Sewer	EACH	39.000	39.000
0208	650.4500	Construction Staking Subgrade	LF	7,039.000	7,039.000
0210	650.5000	Construction Staking Base	LF	7,655.000	7,655.000
0212	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	8,915.000	8,915.000
0214	650.6000	Construction Staking Pipe Culverts	EACH	5.000	5.000
0216	650.9910	Construction Staking Supplemental Control (project) 01. 3373-00-71	LS	1.000	1.000
0218	650.9920	Construction Staking Slope Stakes	LF	7,655.000	7,655.000
0220	690.0150	Sawing Asphalt	LF	513.000	513.000
0222	740.0440	Incentive IRI Ride	DOL	3,713.000	3,713.000
0224	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,400.000	1,400.000
0226	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,800.000	1,800.000
0228	SPV.0035	Special 01. Engineered Soil	CY	249.000	249.000
0230	SPV.0035	Special 02. Coarse Aggregate No. 2	CY	36.000	36.000

Line	Item	Item Description	Unit	Total	Qty
0232	SPV.0060	Special 01. Section Corner Monuments	EACH	46.000	46.000
0234	SPV.0060	Special 02. Salvage and Re-Install Park Sign	EACH	1.000	1.000

CLEARING & GRUBBING

STATION			LOCATION	201.0105 CLEARING STA	201.0110 CLEARING SY	201.0205 GRUBBING STA	201.0210 GRUBBING SY
11+00	- 11+00	LT	CTH F	---	16	---	16
12+00	- 14+00	LT	CTH F	---	1	---	1
10+72	- 12+34	RT	CTH F	---	2	---	2
13+45	- 14+25	RT	CTH F	---	23	---	23
15+00	- 22+00	LT & RT	CTH F	7	---	7	---
22+00	- 28+00	LT	CTH F	6	---	6	---
28+00	- 30+00	LT & RT	CTH F	2	---	2	---
32+00	- 38+00	LT & RT	CTH F	6	---	6	---
40+00	- 44+00	LT & RT	CTH F	4	---	4	---
50+60	- 50+76	LT	CTH F	---	1	---	1
156+71	- 158+21	RT	CTH O	---	3	---	3
157+05	- 157+99	LT	CTH O	---	77	---	77
159+75	- 163+32	RT	CTH O	---	4	---	4
162+67	- 163+26	LT	CTH O	---	20	---	20
224+00	- 226+00	RT	CTH EM	2	---	2	---
TOTALS				**27**	**147**	**27**	**147**

REMOVING CULVERT SUMMARY

STATION		LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0280 SEALING PIPES EACH	REMARKS
10+13	RT	CTH F	1	---	DRIVEWAY - 15" CMP
11+27	LT	CTH F	1	---	DRIVEWAY - 15" CMP
13+43	LT	CTH F	1	---	DRIVEWAY - 12" CMP
39+05	RT	CTH F	1	---	CULVERT - 12" PVC
55+47	RT	CTH F	1	---	DRIVEWAY - 15" CMP
56+04	RT	CTH F	1	---	DRIVEWAY - 15" CMP
58+19	RT	CTH F	1	---	DRIVEWAY - 18" CMP
58+46	RT	CTH F	1	---	DRIVEWAY - 18" CMP
58+79	RT	CTH F	1	1	24" CMCP
154+00	RT	CTH O	1	---	DRIVEWAY
154+45	RT	CTH O	1	---	DRIVEWAY
155+61	LT	CTH O	1	---	DRIVEWAY - 18" CMP
157+73	RT	CTH O	1	---	DRIVEWAY - 15" CMP
160+43	RT	CTH O	1	---	DRIVEWAY - 12" CMP
161+70	RT	CTH O	1	---	DRIVEWAY - 12" CMP
162+98	LT	CTH O	1	---	DRIVEWAY - 15" CMP
164+62	RT	CTH O	1	---	DRIVEWAY
227+39		CTH EM	1	---	12" CMCP
227+47	LT	CTH EM	1	---	DRIVEWAY - 15" CMP
355+18	RT	CTH OLD F	1	---	DRIVEWAY - 15" CMP
356+60	RT	CTH OLD F	1	---	CULVERT - 15" CMCP
357+84		CTH OLD F	1	---	24" CMCP
TOTAL			**22**	**1**	

REMOVING ASPHALTIC SURFACE SUMMARY

STATION	TO STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY
10+00		CTH F	8
10+00	- 15+00	CTH F	---
52+98	- 59+00	CTH F	---
59+00		CTH F	8
152+72		CTH O	6
152+72	- 165+28	CTH O	---
165+28		CTH O	6
222+50		CTH EM	8
222+50	- 228+10	CTH EM	---
351+29		CTH OLD F	8
351+29	- 357+45	CTH OLD F	---
357+45		CTH OLD F	5
DRIVEWAYS			---
TOTALS			**49**

OBLITERATING OLD ROADWAY

LOCATION	STA	REMARKS
	ITEM NO. 214.0100 OBLITERATING OLD ROADWAY	
OLD CTH F	3	EAST OF CTH EM TO NEW ALIGNMENT OF CTH F
CTH EM	1	WEST CONNECTION WITH CTH OLD F
TOTALS	**4**	

3

EARTHWORK SUMMARY TABLE

Division	From/To Station	Location	205.0100 Common Excavation (1)		Salvaged/Unusable Pavement Material (4)	Available Material (5)	Unexpanded Fill	Expanded Fill (13)	Mass Ordinate +/- (14)	Waste	208.0100 Borrow	Comment:
			Cut (2)	EBS Excavation (3)				Factor 1.30				
Division 1												
CTH F	09+50/59+00		76,880	0	752	76,128	105,882	137,646	-61,518	0	61,518	
CTH F	39+21/42+89	BIOFILTER	467	0	0	467	0	0	467	467	0	
CTH O	152+72.46/165+27		1,276	0	645	631	2,713	3,527	-2,896	0	2,896	
CTH EM	222+50/230+50		1,000	0	304	696	2,219	2,885	-2,188	0	2,188	
CTH OLD F	351+50/357+44.67		1,347	0	302	1,045	226	294	751	751	0	
Division 1 Subtotal			80,970	0	2,003	78,967	111,040	144,352	-65,385	1,218	66,603	
Grand Total			80,970	0	2,003	78,967	111,040	144,352	-65,385	1,218	66,603	
Total Common Exc			80,970									

Notes:

(1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100

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

(3) EBS Excavation to be backfilled with Select Borrow material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well.

(4) Salvaged/Unusable Pavement Material

(5) Available Material = Cut - Salvaged/Unusuable Pavement Material

(13) Expanded Fill Factor = 1.3

Depending on selections: **Expanded Fill = (Unexpanded Fill) * Fill Factor**

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

BASE AGGREGATE AND HMA ITEMS

FROM		TO	LOCATION	ITEM NO. 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	ITEM NO. 311.0110 BREAKER RUN TON	ITEM NO. 455.0605 TACK COAT GAL	ITEM NO. 460.5223 HMA PAVEMENT 3 LT 58-28 S TON	ITEM NO. 460.5224 HMA PAVEMENT 4 LT 58-28 S TON	ITEM NO. 465.0105 ASPHALTIC SURFACE TON	ITEM NO. 465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	ITEM NO. 465.0315 ASPHALTIC FLUMES SY	ITEM NO. 624.0100 WATER MGAL
10+00	-	14+76	CTH F	1,840	1,797	70	303	370	---	---	---	28
15+49	-	38+40	CTH F	9,400	9,094	345	1,530	1,838	---	---	---	141
38+40	-	46+57	CTH F	2,830	2,980	105	456	660	---	---	---	43
46+57	-	49+82	CTH F	1,320	1,430	55	226	253	---	---	---	20
49+82	-	53+91	CTH F	1,690	1,810	65	287	321	---	---	---	26
53+91	-	59+00	CTH F	1,770	1,860	65	284	318	---	---	9	27
152+72	-	155+91	CTH O	1,290	1,244	50	200	186	---	---	4	20
155+91	-	164+27	CTH O	3,510	3,461	110	486	453	---	---	---	53
164+27	-	165+28	CTH O	420	414	15	54	51	---	---	4	7
222+50	-	231+16	CTH EM	2,870	3,160	110	483	631	---	---	9	44
351+29	-	352+35	CTH OLD F	230	---	15	43	50	---	---	---	4
353+00	-	357+45	CTH OLD F	1,090	---	45	141	164	---	---	---	17
ADDITIONAL AT CTH F AND CTH O INTERSECTION				650	550	25	94	87	---	---	---	10
ADDITIONAL AT CTH F AND CTH EM INTERSECTION				350	360	10	42	55	---	---	---	6
ADDITIONAL AT CTH EM AND CTH OLD F INTERSECTI				560	580	20	75	97	---	---	---	9
155+89	-	158+75	CTH O MEDIAN	260	---	10	---	---	52	---	---	4
159+25	-	164+24	CTH O MEDIAN	380	---	15	---	---	76	---	---	6
UNDISTRIBUTED				1,570	---	---	---	---	---	---	---	24
DRIVEWAYS				550	---	25	---	---	---	386	---	9
SIDEWALK / TRAIL				2,710	---	70	---	657	---	---	---	41
TOTALS				**35,290**	**28,740**	**1,225**	**4,704**	**6,191**	**128**	**386**	**26**	**539**

3

CONCRETE CURB AND GUTTER ITEMS

STATION	TO	STATION		LOCATION	416.0160 CONCRETE DRIVEWAY 6-INCH SY	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF
38+40	-	46+57	RT	CTH F	---	817	---
46+57	-	49+09	RT	CTH F	---	252	---
49+09	-	49+63	RT	CTH F - WEST CORNER WITH CTH EM	---	119	---
50+01	-	50+52	RT	CTH F - EAST CORNER WITH CTH EM	---	118	---
50+52	-	59+00	RT	CTH F	---	848	---
38+40	-	59+00	LT	CTH F	---	2,060	---
152+72	-	158+27	LT	CTH O	---	555	---
159+73	-	165+28	LT	CTH O	---	555	---
155+89	-	158+75		CTH O MEDIAN	---	577	99
159+25	-	164+24		CTH O MEDIAN	---	1,000	105
222+50	-	224+50	LT	CTH EM	---	200	---
224+50	-	225+80	LT	CTH EM	325	---	---
225+80	-	226+22	LT	CTH EM	---	42	---
227+84	-	230+58	LT	CTH EM	---	274	---
222+50	-	226+74	RT	CTH EM	---	424	---
228+27	-	230+58	RT	CTH EM	---	231	---
351+29	-	351+91	LT	CTH OLD F	---	62	---
351+91	-	352+84	LT	CTH OLD F - NW CORNER WITH CTH EM	---	103	---
353+58	-	353+80	LT	CTH OLD F - NE CORNER WITH CTH EM	---	80	---
351+29	-	351+57	RT	CTH OLD F	---	28	---
351+57	-	352+03	RT	CTH OLD F - SW CORNER WITH CTH EM	---	104	---
352+61	-	353+14	RT	CTH OLD F - SE CORNER WITH CTH EM	---	36	---
353+14	-	357+44	RT	CTH OLD F	---	430	---
TOTALS					**325**	**8,915**	**204**

CULVERT ITEMS

STATION		LOCATION	520.3318 CULVERT PIPE CLASS III-A 18-INCH LF	520.3330 CULVERT PIPE CLASS III-A 30-INCH LF	521.3112 CULVERT PIPE CORRUGATED STEEL 12-INCH LF	521.3115 CULVERT PIPE CORRUGATED STEEL 15-INCH LF	520.1018* APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH	520.1030 APRON ENDWALLS FOR CULVERT PIPE 30-INCH EACH	521.1012* APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH EACH	521.1015* APRON ENDWALLS FOR CULVERT PIPE STEEL 15-INCH EACH	633.5200 MARKERS CULVERT EACH
10+13	RT	CTH F	---	---	---	20	---	---	---	2	---
11+27	LT	CTH F	---	---	---	20	---	---	---	2	---
13+43	LT	CTH F	---	---	20	---	---	---	2	---	---
25+00	LT	CTH F	---	---	---	---	1	---	---	---	---
26+12	LT	CTH F	227	---	---	---	---	---	---	---	---
26+75	RT	CTH F	---	---	---	---	---	1	---	---	1
27+25	LT	CTH F	---	---	---	---	1	---	---	---	---
27+07		CTH F	---	199	---	---	---	---	---	---	---
27+50	LT	CTH F	---	---	---	---	---	1	---	---	1
31+75	LT	CTH F	---	---	---	---	1	---	---	---	---
32+51	LT	CTH F	147	---	---	---	---	---	---	---	---
33+25	LT	CTH F	---	---	---	---	1	---	---	---	---
33+75	LT	CTH F	---	---	---	---	1	---	---	---	---
34+13	LT	CTH F	75	---	---	---	---	---	---	---	---
34+50	LT	CTH F	---	---	---	---	1	---	---	---	---
35+69	RT	CTH F	---	---	---	---	1	---	---	---	---
36+75	RT	CTH F	117	---	---	---	---	---	---	---	---
36+86	RT	CTH F	---	---	---	---	1	---	---	---	---
TOTALS			**566**	**199**	**20**	**40**	**8**	**2**	**2**	**4**	**2**

*QUANTITY SHOWN ELSEWHERE ON PLAN

SIDEWALK ITEMS

STATION	TO	STATION	LOCATION	ITEM NO. 602.0410 CONCRETE SIDEWALK 5-INCH SF	ITEM NO. 602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF
46+57	-	59+00	CTH F	7,460	---
15+70			CTH F	---	48
50+54			CTH F	---	16
158+45			CTH O	---	84
222+50	-	230+58	CTH EM	4,270	---
227+00	-	228+16	CTH EM	---	32
230+58	-	231+17	CTH EM SW CORNER WITH CTH F	400	---
TOTAL				**12,130**	**180**

RELIEF DRAIN ITEMS

STATION	TO	TATION		LOCATION	ITEM NO. 612.0106 PIPE UNDERDRAIN 6-INCH* LF	ITEM NO. 645.0112 GEOTEXTILE TYPE DF SCHEDULE B* SY
41+90	-	42+10	LT	CTH F	25	15
41+90	-	42+10	RT	CTH F	25	15
UNDISTRIBUTED					---	5
TOTAL					**50**	**35**

*ITEM LISTED ELSEWHERE ON THE PLANS

SPV ITEMS

LOCATION	ITEM NO. SPV.0060.01 LANDMARK REFERENCE MONUMENTS EACH	ITEM NO. SPV.0060.02 SALVAGE AND RE-INSTALL PARK SIGN EACH
PROJECT	46	1
TOTALS	**46**	**1**

MAINTENANCE AND REPAIR OF HAUL ROADS

LOCATION	ITEM NO. 618.0100 MAINTENANCE AND REPAIR OF HAUL ROADS EACH
PROJECT	1
TOTAL	1

3

STORM SEWER PIPES

FROM	-	TO	608.3012 STORM SEWER PIPE CLASS III-A 12-INCH LF	608.3015 STORM SEWER PIPE CLASS III-A 15-INCH LF	608.3018 STORM SEWER PIPE CLASS III-A 18-INCH LF	608.3024 STORM SEWER PIPE CLASS III-A 24-INCH LF	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT
O-01	-	O-04	231				891.30	890.60	0.0030
O-02	-	O-04		25			892.84	892.78	0.0024
O-03	-	O-02	369				896.76	893.11	0.0099
O-04	-	EW-01		271			890.04	889.22	0.0030
F-02	-	F-03	75				894.35	893.53	0.0109
F-02	-	O-02	77				893.43	893.19	0.0031
F-07	-	F-08			128		812.00	808.09	0.0305
F-08	-	EW-02			110		808.00	807.73	0.0025
F-09	-	F-10				146	801.79	799.71	0.0142
F-10	-	F-11				116	799.61	799.38	0.0020
F-12	-	F-11				36	798.78	798.70	0.0022
F-12	-	EW-03				27	798.60	798.54	0.0022
F-13	-	F-11				122	799.62	799.38	0.0020
F-14	-	F-15	36				800.67	800.55	0.0033
F-15	-	EW-04	32				800.55	800.44	0.0034
F-16	-	EW-05				36	798.85	798.72	0.0036
F-17	-	F-16				43	799.10	798.95	0.0035
F-18	-	F-17				197	799.59	799.20	0.0020
F-19	-	F-18				200	800.09	799.69	0.0020
F-20	-	F-19	123				807.76	804.30	0.0281
F-21	-	F-19				191	800.57	800.19	0.0020
F-22	-	F-21				322	801.32	800.67	0.0020
F-23	-	F-22	36				803.69	802.32	0.0381
F-24	-	F-20	43				807.91	807.76	0.0035
EM-01	-	EM-02	42				823.79	823.66	0.0031
EM-02	-	EM-03		66			823.41	820.60	0.0426
EM-03	-	EM-05		144			820.50	814.99	0.0383
EM-04	-	EM-05	92				815.93	815.64	0.0032
EM-05	-	EM-08		241			814.89	805.69	0.0382
EM-06	-	EM-07	59				803.69	803.50	0.0032
EM-07	-	EM-08	35				803.40	803.29	0.0031
EM-08	-	EM-09			45		802.79	802.59	0.0044
EM-09	-	EW-06			87		802.49	802.10	0.0045
TOTALS			**1,250**	**747**	**370**	**1,436**			

STORM SEWER STRUCTURES

STRUCTURE	STATION	OFFSET*	520.1012* APRON ENDWALLS FOR CULVERT PIPE 12-INCH EACH	520.1015* APRON ENDWALLS FOR CULVERT PIPE 15-INCH EACH	520.1018* APRON ENDWALLS FOR CULVERT PIPE 18-INCH**** EACH	520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0612 INLET COVERS TYPE C EACH	611.0624 INLET COVERS TYPE H EACH	611.1004 CATCH BASINS 4-FT DIAMETER EACH	611.1005 CATCH BASINS 5-FT DIAMETER EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3230 INLETS 2X3-FT EACH	RIM ELEVATION	INVERT** ELEVATION	DEPTH***
O-01	155+95	20.4' LT							1				1		895.01	891.30	2.87
O-02	14+52	76.5' RT						1			1				897.00	890.81	4.95
O-03	161+92	26.4' LT							1				1		900.45	896.76	2.86
O-04	158+25	37.2' LT					1					1			901.32	890.04	10.23
F-02	13+82	42.9' RT						1		1					898.12	891.43	5.45
F-03	13+83	32.0' LT						1		1					898.18	892.35	4.59
F-07	35+00	61.8' LT						1		1					817.24	810.00	6.00
F-08	36+25	32.8' LT						1		1					812.61	806.00	5.38
F-09	39+42	18.0' LT							1				1		806.93	801.79	4.39
F-10	40+86	17.8' LT							1				1		804.86	799.61	4.50
F-11	42+00	17.9' LT							1				1		804.30	798.78	4.77
F-12	42+00	18.1' RT							1				1		802.55	798.60	3.20
F-13	43+20	17.9' LT							1				1		804.56	799.62	4.19
F-14	45+16	17.9' LT							1					1	805.15	800.67	3.65
F-15	45+17	18.1' RT							1					1	803.39	800.55	2.00
F-16	47+75	18.0' RT							1				1		804.62	798.85	5.02
F-17	47+75	24.7' LT							1				1		804.48	799.10	4.63
F-18	49+75	30.0' LT							1				1		804.87	799.59	4.53
F-19	51+90	29.4' LT							1				1		808.15	800.09	7.31
F-20	52+21	89.3' RT							1				1		815.78	807.76	7.19
F-21	53+86	0.0'					1					1			810.61	800.57	9.04
F-22	57+10	18.0' RT							1				1		805.77	801.32	3.70
F-23	57+09	18.0' LT							1					1	807.81	803.69	3.29
F-24	52+55	72.9' RT						1		1					811.95	805.33	5.38
EW-01	17+48	77.2' RT		1												890.66	
EW-02	37+04	42.7' RT			1											809.44	
EW-03	41+88	42.9' RT				1										800.79	
EW-04	44+91	38.3' RT	1													801.61	
EW-05	47+52	45.7' RT				1										800.97	
EW-06	48+86	43.0' RT			1											803.81	
EM-01	226+56	86.2' LT							1				1		827.88	823.79	3.26
EM-02	226+51	44.6' LT						1		1					827.49	823.41	2.85
EM-03	226+72	18.0' RT							1				1		824.59	820.50	3.27
EM-04	228+21	112.9' RT							1				1		819.77	815.93	3.00
EM-05	228+23	21.2' RT							1				1		818.97	814.89	3.28
EM-06	231+23	96.2' RT							1				1		808.67	803.69	4.15
EM-07	230+87	49.0' RT						1		1					806.84	803.40	2.20
EM-08	230+64	22.3' RT							1				1		809.68	802.79	6.10
EM-09	230+60	22.1' LT							1				1		809.63	802.49	6.35
TOTALS			**1**	**1**	**2**	**2**	**2**	**8**	**23**	**7**	**1**	**2**	**20**	**3**			

REMARKS

* STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

** FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP.
FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE

*** DEPTH = RIM ELEV - TOP OF STRUCTURE BASE ELEV - COVER HEIGHT - 6 -INCH ADJUSTMENT RING HEIGHT

**** QUANTITY SHOWN ELSEWHERE ON PLAN

BIOINFILTRATION

STATION	TO	STATION	LOCATION	ITEM NO. 310.0115 BASE AGGREGATE OPEN-GRADED CY	ITEM NO. 612.0106 PIPE UNDERDRAIN 6-INCH* LF	ITEM NO. 612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH* LF	ITEM NO. 630.0500 SEED WATER* MGAL	ITEM NO. 628.1504 SILT FENCE* LF	ITEM NO. 628.1520 SILT FENCE MAINTENANCE* LF	ITEM NO. 628.2008 EROSION MAT URBAN CLASS I TYPE B SY	ITEM NO. 630.0180 SEEDING MIXTURE NO. 80 LB	ITEM NO. 645.0112 GEOTEXTILE TYPE DF SCHEDULE B* SY	ITEM NO. SPV.0035.01 ENGINEERED SOIL CY	ITEM NO. SPV.0035.02 COARSE AGGREGATE NO. 2 CY
39+21	-	42+89	RT CTH F	218	384	2	7	380	380	350	2	570	249	36
UNDISTRIBUTED				---	---	---	---	95	95	90	---	145	---	---
TOTALS				**218**	**384**	**2**	**7**	**475**	**475**	**440**	**2**	**715**	**249**	**36**

*ITEM LISTED ELSEWHERE ON THE PLANS

TEMPORARY EROSION CONTROL

STATION	TO	STATION	LOCATION	ITEM NO. 628.1504 SILT FENCE* LF	ITEM NO. 628.1520 SILT FENCE MAINTENANCE* LF	ITEM NO. 628.7005 INLET PROTECTION TYPE A EACH	ITEM NO. 628.7015 INLET PROTECTION TYPE C EACH	ITEM NO. 628.7504 TEMPORARY DITCH CHECKS LF	ITEM NO. 628.7555 CULVERT PIPE CHECKS EACH
10+00	-	14+50	CTH F	435	435	2	2	---	---
16+00	-	50+00	CTH F	2,835	2,835	3	3	614	5
50+00	-	59+00	CTH F	1,245	1,245	13	13	---	---
152+00	-	165+00	CTH O	1,300	1,300	3	3	4	---
222+50	-	231+00	CTH EM	1,700	1,700	6	6	---	---
351+50	-	358+00	CTH OLD F	790	790	3	3	10	---
UNDISTRIBUTED				2,080	2,080	---	---	157	1
TOTALS				**10,385**	**10,385**	**30**	**30**	**785**	**6**

*ITEM LISTED ELSEWHERE ON THE PLANS

TOPSOIL, EROSION MAT, AND SEED

STATION	TO	STATION	LOCATION	ITEM NO. 625.0100 TOPSOIL SY	ITEM NO. 629.0210 FERTILIZER TYPE B CWT	ITEM NO. 630.0120 SEEDING MIXTURE NO. 20 LB	ITEM NO. 630.0500 SEED WATER* MGAL	ITEM NO. 628.2006 EROSION MAT URBAN CLASS I TYPE A SY	ITEM NO. 628.2002 EROSION MAT CLASS I TYPE A SY	ITEM NO. 628.2004 EROSION MAT CLASS I TYPE B SY
10+00	-	15+00	CTH F	2,460	1.55	66	55	740	---	1,720
15+00	-	40+00	CTH F	28,780	18.13	777	646	480	22,900	5,400
40+00	-	59+00	CTH F	10,840	6.83	293	243	1,000	8,480	1,360
155+00	-	163+00	CTH O	5,160	3.25	139	116	3,420	750	990
225+00	-	231+00	CTH EM	2,260	1.42	61	51	1,380	880	---
351+50	-	358+00	CTH OLD F	1,430	0.90	39	32	300	450	680
UNDISTRIBUTED				---	---	345	---	1,830	8,370	2,540
TOTALS				**50,930**	**32**	**1,720**	**1,144**	**9,150**	**41,830**	**12,690**

*ITEM LISTED ELSEWHERE ON THE PLANS

EROSION CONTROL MOBILIZATIONS

CONSTRUCTION STAGE	LOCATION	ITEM NO. 628.1905 MOBILIZATIONS EROSION CONTROL EA	ITEM NO. 628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EA
STAGE 1	PROJECT	3	2
STAGE 2	PROJECT	3	2
TOTALS		**6**	**4**

SIGNS AND POSTS

STATION	CODE	SIZE IN. X IN.	ITEM NO. 634.0612 POSTS WOOD 4X6-INCH X 12 FEET EACH	ITEM NO. 634.0614 POSTS WOOD 4X6-INCH X 14 FEET EACH	ITEM NO. 634.0616 POSTS WOOD 4X6-INCH X 16 FEET EACH	ITEM NO. 637.2210 SIGNS TYPE II REFLECTIVE H S.F.	ITEM NO. 637.2220 SIGNS TYPE II REFLECTIVE SH S.F.	ITEM NO. 637.2230 SIGNS TYPE II REFLECTIVE F S.F.	ITEM NO. 638.2602 REMOVING SIGNS TYPE II EACH	ITEM NO. 638.3000 REMOVING SMALL SIGN SUPPORTS EACH
9+29, RT	W3-1	36X36	---	---	1	---	---	9.00	---	---
10+89, LT	S1-1	36X36	---	---	1	---	---	6.75	1	---
	S16-9P	24X12	---	---	---	---	---	2.00	---	---
10+60, RT	J1-1	24X39	---	---	1	6.20	---	---	1	1
	M1-5A	24X24	---	---	---	---	---	---	---	---
	M2-1	21X15	---	---	---	---	---	---	---	---
13+16, LT	R2-1	24X30	---	1	---	5.00	---	---	1	1
13+00, RT	W11-15	30X30	---	---	1	---	---	6.25	---	---
	W16-9P	24X12	---	---	---	---	---	2.00	---	---
14+52, LT	R1-1	30X30	---	1	---	5.18	---	---	1	1
14+56, RT	R1-1	30X30	---	1	---	5.18	---	---	1	1
14+56, RT	J13-1	24X45	---	---	1	7.06	---	---	4	1
	M1-5A	24X24	---	---	---	---	---	---	---	---
	M6-4	21X21	---	---	---	---	---	---	---	---
15+17, RT	R4-7	24X30	---	---	1	5.00	---	---	---	---
	R3-4	24X24	---	---	---	4.00	---	---	---	---
15+16, LT	R4-7	24X30	---	---	1	5.00	---	---	---	---
	R3-4	24X24	---	---	---	4.00	---	---	---	---
15+32, RT	---	---	---	---	---	---	---	---	1	1
15+79, LT	R1-1	30X30	---	1	---	5.18	---	---	---	---
15+79, RT	J13-1	24X45	---	---	1	7.06	---	---	---	---
	M1-5A	24X24	---	---	---	---	---	---	---	---
	M6-4	21X21	---	---	---	---	---	---	---	---
17+65, RT	R2-1	24X30	---	---	1	5.00	---	---	---	---
18+30, LT	W11-15	30X30	---	1	---	---	---	6.25	---	---
	W16-9P	24X12	---	---	---	---	---	2.00	---	---
19+83, LT	J1-1	24X39	---	---	1	6.20	---	---	---	---
	M1-5A	24X24	---	---	---	---	---	---	---	---
	M2-1	21X15	---	---	---	---	---	---	---	---
22+23, LT	W3-1	36X36	---	1	---	---	---	9.00	---	---
30+91, LT	R2-1	24X30	---	---	1	5.00	---	---	---	---
30+91, RT	R2-1	24X30	---	---	1	5.00	---	---	---	---
37+04, RT	W1-2R	36X36	---	---	1	---	---	9.00	---	---
44+99, RT	J1-1	24X39	---	---	1	6.20	---	---	---	---
	M1-5A	24X24	---	---	---	---	---	---	---	---
	M2-1	21X15	---	---	---	---	---	---	---	---
46+00, RT	W11-2	30X30	---	---	1	---	---	6.25	---	---
	W16-9P	24X12	---	---	---	---	---	2.00	---	---
47+00, LT	R2-1	24X30	---	---	1	5.00	---	---	---	---
47+00, RT	R2-1	24X30	---	---	1	5.00	---	---	---	---
47+83, LT	W1-2L	30X30	---	---	1	---	---	6.25	---	---
49+07, RT	J13-1	24X45	---	---	1	7.06	---	---	---	---
	M1-5A	24X24	---	---	---	---	---	---	---	---
	M6-1	21X21	---	---	---	---	---	---	---	---
50+51, RT	W11-2	30X30	---	---	1	---	---	6.25	---	---
	W16-7L	24X12	---	---	---	---	---	2.00	---	---
50+68, LT	W11-2	30X30	---	---	1	---	---	6.25	---	---
	W16-7L	24X12	---	---	---	---	---	2.00	---	---
50+68, LT	J13-1	24X45	---	---	1	7.06	---	---	---	---
	M1-5A	24X24	---	---	---	---	---	---	---	---
	M6-1	21X21	---	---	---	---	---	---	---	---
51+88, RT	R2-1	24X30	---	1	---	5.00	---	---	---	---
52+44, RT	---	---	---	---	---	---	---	---	1	1
52+94, LT	W11-2	30X30	---	---	1	---	---	6.25	---	---
	W16-9P	24X12	---	---	---	---	---	2.00	---	---

SIGNS AND POSTS

STATION	CODE	SIZE IN. X IN.	ITEM NO. 634.0612 POSTS WOOD 4X6-INCH X 12 FEET EACH	ITEM NO. 634.0614 POSTS WOOD 4X6-INCH X 14 FEET EACH	ITEM NO. 634.0616 POSTS WOOD 4X6-INCH X 16 FEET EACH	ITEM NO. 637.2210 SIGNS TYPE II REFLECTIVE H S.F.	ITEM NO. 637.2220 SIGNS TYPE II REFLECTIVE SH S.F.	ITEM NO. 637.2230 SIGNS TYPE II REFLECTIVE F S.F.	ITEM NO. 638.2602 REMOVING SIGNS TYPE II EACH	ITEM NO. 638.3000 REMOVING SMALL SIGN SUPPORTS EACH
53+85, LT	J1-1	24X39	---	---	1	6.20	---	---	---	---
	M1-5A	24X24	---	---	---	---	---	---	---	---
	M2-1	21X15	---	---	---	---	---	---	---	---
55+08, RT	S3-1	30X30	---	1	---	---	---	6.25	---	---
55+98, LT	---	---	---	---	---	---	---	---	1	1
SOUTH INTERSECTION OF CTH O AND CTH OLD F			---	---	---	---	---	---	6	---
150+20, RT	J1-1	24X39	---	---	1	6.20	---	---	1	1
	M1-5A	24X24	---	---	---	---	---	---	---	---
	M2-1	21X15	---	---	---	---	---	---	---	---
152+79, RT	W6-1	36X36	---	---	1	---	---	9.00	---	---
153+88, RT	W11-15	30X30	---	---	1	---	---	6.25	---	---
	W16-9P	24X12	---	---	---	---	---	2.00	---	---
155+94, LT	R5-1	30X30	---	---	1	6.25	---	---	---	---
155+95, RT	R4-7	24X30	---	1	---	5.00	---	---	---	---
156+37, LT	W6-2	36X36	---	---	1	---	---	9.00	---	---
157+35, LT	R2-1	24X30	---	1	---	5.00	---	---	1	1
158+26, RT	J13-1	24X45	---	---	1	7.06	---	---	---	---
	M1-5A	24X24	---	---	---	---	---	---	---	---
	M6-4	21X21	---	---	---	---	---	---	---	---
158+26, RT	W11-15	30X30	---	---	1	---	---	6.25	---	---
	W16-7L	24X12	---	---	---	---	---	2.00	---	---
158+26, RT	R5-1	30X30	---	---	1	6.25	---	---	---	---
158+33, LT	W11-15	30X30	---	---	1	---	---	6.25	---	---
	W16-7L	24X12	---	---	---	---	---	2.00	---	---
158+69, LT	R4-7	24X30	---	1	---	5.00	---	---	---	---
159+31, RT	R4-7	24X30	---	1	---	5.00	---	---	---	---
159+87, LT	R5-1	30X30	---	---	1	6.25	---	---	---	---
159+87, LT	J13-1	24X45	---	---	1	7.06	---	---	---	---
	M1-5A	24X24	---	---	---	---	---	---	---	---
	M6-4	21X21	---	---	---	---	---	---	---	---
160+99, RT	R2-1	24X30	---	1	---	5.00	---	---	1	1
162+55, LT	W11-15	30X30	---	---	1	---	---	6.25	---	---
	W16-9P	24X12	---	---	---	---	---	2.00	---	---
163+12, RT	W6-2	36X36	---	---	1	---	---	9.00	---	---
164+19, RT	R4-7	24X30	---	1	---	5.00	---	---	---	---
164+19, RT	R5-1	30X30	---	---	1	6.25	---	---	---	---
165+99, LT	J1-1	24X39	---	---	1	6.20	---	---	1	1
	M1-5A	24X24	---	---	---	---	---	---	---	---
	M2-1	21X15	---	---	---	---	---	---	---	---
166+81, LT	W6-1	36X36	---	---	1	---	---	9.00	---	---
INTERSECTION OF CTH EM AND 90TH ST			---	---	---	---	---	---	7	2
223+98, LT	---	---	---	---	---	---	---	---	3	2
224+60, LT	W5-56	18X18	1	---	1	---	2.25	---	---	---
224+68, LT	W5-56	18X18	1	---	1	---	2.25	---	---	---
224+76, LT	W5-56	18X18	1	---	1	---	2.25	---	---	---
225+34, LT	W14-2	30X30	---	---	1	---	---	6.25	---	---
225+42, RT	J1-1	24X39	---	---	1	6.20	---	---	---	---
	M1-5A	24X24	---	---	---	---	---	---	---	---
	M2-1	21X15	---	---	---	---	---	---	---	---
226+38, LT	R1-1	30X30	---	1	---	5.18	---	---	---	---
226+85, LT	R1-1	30X30	---	1	---	5.18	---	---	---	---
226+93, LT	---	---	---	---	---	---	---	---	1	1
227+16, LT	---	---	---	---	---	---	---	---	1	1
227+45, RT	W14-2	30X30	---	---	1	---	---	6.25	---	---
227+62, RT	R1-1	30X30	---	1	---	5.18	---	---	---	---
227+77, RT	---	---	---	---	---	---	---	---	2	1
228+07, RT	R1-1	30X30	---	1	---	5.18	---	---	---	---
229+95, LT	R2-1	24X30	---	1	---	5.00	---	---	---	---
230+88, RT	R1-1	30X30	---	1	---	5.18	---	---	---	---
230+88, RT	J13-1	24X45	---	---	1	7.06	---	---	---	---
	M1-5A	24X24	---	---	---	---	---	---	---	---
	M6-4	21X21	---	---	---	---	---	---	---	---
354+11, LT	---	---	---	---	---	---	---	---	1	1
357+94, RT	---	---	---	---	---	---	---	---	1	1
TOTALS			**3**	**20**	**47**	**247.26**	**6.75**	**179.25**	**38**	**21**

TRAFFIC CONTROL ITEMS

LOCATION	DAYS IN SERVICE	ITEM NO. 643.5000 TRAFFIC CONTROL EA	ITEM NO. 643.042 TRAFFIC CONTROL BARRICADES TYPE III NO.	DAYS	ITEM NO. 643.0900 TRAFFIC CONTROL SIGNS NO.	DAYS	ITEM NO. 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A NO.	DAYS
STAGE 1 + STAGE 2								
CTH F	74	---	4	296	6	444	4	296
CTH O	74	---	---	---	4	296	---	---
CTH EM	74	---	2	148	3	222	2	148
CTH Old F	74	---	---	---	2	148	---	---
STAGE 2								
CTH F	37	---	18	666	12	444	12	444
CTH O	37	---	18	666	12	444	12	444
CTH EM	37	---	9	333	6	222	6	222
CTH OLD F	37	---	9	333	6	222	6	222
DETOUR	37	---	---	---	379	14,023	---	---
PROJECT TOTALS		**1**		**2,442**		**16,465**		**1,776**

SAWING

STATION	TO STATION	LOCATION	ITEM NO. 690.0150 SAWING ASPHALT LF	REMARKS
10+00		CTH F	28	BEGIN OF PROJECT
10+00	- 15+00	CTH F	46	DRIVEWAYS
15+00	- 50+00	CTH F	42	DRIVEWAYS
50+00	- 59+00	CTH F	64	DRIVEWAYS
59+00		CTH F	28	END OF PROJECT
152+72		CTH O	28	BEGIN CONSTRUCTION
152+72	- 165+28	CTH O	36	DRIVEWAYS
165+28		CTH O	28	END CONSTRUCTION
222+50		CTH EM	28	BEGIN CONSTRUCTION
222+50	- 228+10	CTH EM	37	DRIVEWAYS
351+29		CTH OLD F	28	BEGIN CONSTRUCTION
351+29	- 357+45	CTH OLD F	92	DRIVEWAYS
357+45		CTH OLD F	28	END CONSTRUCTION
TOTALS			**513**	

TRAFFIC CONTROL DETOUR ITEMS

LOCATION	DAYS IN SERVICE	ITEM NO 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	NUMBER OF CYCLES	NUMBER OF SIGNS
DETOUR ROUTE	37	12	1	12
PROJECT TOTALS		**12**		

RIPRAP MEDIUM AND GEOTEXTILE FABRIC TYPE HR

STATION		LOCATION	ITEM NO. 606.0200 RIPRAP MEDIUM CY	ITEM NO. 645.0120 GEOTEXTILE TYPE HR SY	REMARKS
17+48	RT	CTH F	2	4	ENDWALL
27+30	LT	CTH F	3	6	ENDWALL
27+52	LT	CTH F	6	11	ENDWALL
33+31	LT	CTH F	3	6	ENDWALL
34+56	LT	CTH F	3	6	ENDWALL
36+86	RT	CTH F	3	6	ENDWALL
39+63	RT	CTH F	146	292	OUTFALL AT POND
41+86	RT	CTH F	3	6	ENDWALL
44+86	RT	CTH F	2	4	ENDWALL
47+48	RT	CTH F	3	6	ENDWALL
48+86	RT	CTH F	3	6	ENDWALL
59+00		CTH F	6	10	ASPHALTIC FLUME
152+73	LT	CTH O	3	5	ASPHALTIC FLUME
165+28	LT	CTH O	3	5	ASPHALTIC FLUME
222+50		CTH EM	6	10	ASPHALTIC FLUME
TOTALS			**195**	**383**	

CONSTRUCTION STAKING

LOCATION	650.4000 STORM SEWER EACH	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.6000 PIPE CULVERTS EACH	650.9910 SUPPLEMENTAL CONTROL PROJECT 3733-00-71 LS	650.9920 SLOPE STAKES LF
PROJECT	**39**	**7,039**	**7,655**	**8,915**	**5**	**1**	**7,655**

PAVEMENT MARKING

STATION	-	STATION	LOCATION	ITEM NO. 646.1020 MARKING LINE EPOXY 4-INCH WHITE LF	ITEM NO. 646.1020 MARKING LINE EPOXY 4-INCH YELLOW LF	ITEM NO. 646.3020 MARKING LINE EPOXY 8-INCH WHITE LF	ITEM NO. 646.5020 MARKING ARROW EPOXY EACH	ITEM NO. 646.5220 MARKING SYMBOL EPOXY EACH	ITEM NO. 646.6120 MARKING STOP LINE EPOXY 18-INCH LF	ITEM NO. 646.7120 MARKING DIAGONAL EPOXY 12-INCH WHITE LF	ITEM NO. 646.7120 MARKING DIAGONAL EPOXY 12-INCH YELLOW LF	ITEM NO. 646.7220 MARKING CHEVRON EPOXY 24-INCH WHITE LF	ITEM NO. 646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH LF
10+00	-	14+76	CTH F	1,069	921	138	2	1	37	---	---	---	---
15+49	-	38+40	CTH F	4,682	4,521	123	4	1	32	---	---	---	146
38+40	-	46+57	CTH F	1,635	1,635	---	---	---	---	---	---	---	---
46+57	-	49+82	CTH F	622	918	---	---	---	---	---	105	---	---
49+82	-	53+91	CTH F	784	989	146	1	---	---	---	64	---	100
53+91	-	59+00	CTH F	1,019	1,019	---	---	---	---	---	---	---	---
152+72	-	155+91	CTH O	820	1,012	---	---	---	---	---	31	38	---
155+91	-	164+27	CTH O	1,650	---	---	4	---	---	---	---	---	127
164+27	-	165+28	CTH O	202	402	---	---	---	---	---	30	---	---
222+50	-	231+16	CTH EM	1,521	1,694	---	---	---	26	---	---	---	---
351+29	-	352+35	CTH OLD F	300	---	---	1	---	30	74	---	---	---
353+00	-	357+45	CTH OLD F	44	---	---	1	---	36	34	---	---	185
SUB-TOTALS				**14,348**	**13,111**					**108**	**230**		
			TOTALS	**27,459**		**406**	**13**	**2**	**161**	**338**		**38**	**558**

FIELD OFFICE

LOCATION	ITEM NO. 642.5401 FIELD OFFICE TYPE D EACH
CTH F	1
PROJECT TOTALS	**1**

QMP Base Aggregate

FROM		TO	LOCATION	ITEM NO. 371.2000.S QMP BASE AGGREGATE DENSE 1 1/4-INCH COMPACTION EACH
10+00	-	38+40	CTH F	12
38+40	-	46+57	CTH F	4
46+57	-	54+30	CTH F	4
54+30	-	59+00	CTH F	4
152+72	-	165+28	CTH O	6
222+50	-	231+16	CTH EM	4
351+29	-	357+45	CTH OLD F	4
TOTALS				**38**

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
3733-00-01	4.01	

PLAT OF RIGHT OF WAY REQUIRED FOR

CTH F 87TH STREET TO CTH F 89TH STREET

TOWN OF RANDALL/VILLAGE OF TWIN LAKES KENOSHA COUNTY

3733-00-71	

CONVENTIONAL SYMBOLS

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

SECTION CORNER SYMBOL (18, 23, 24, 16, 15, 9)
SECTION CORNER MONUMENT
SIGN — SIGN
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
OFF-PREMISE SIGN — I-25 — SIGN

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

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

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER (25) UTILITY NUMBER (40)
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

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

CURVE DATA

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

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WCCS), KENOSHA 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 1" X 24" IRON PIPE) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

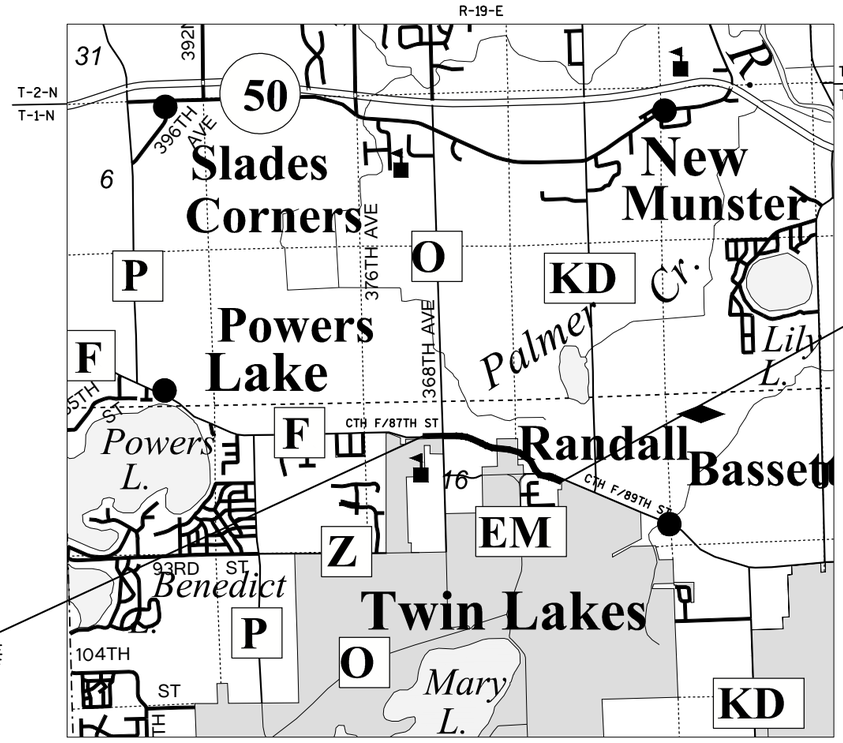
RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

CONVENTIONAL UTILITY SYMBOLS

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

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

N



END RELOCATION ORDER
STA. 61+00

179.930' SOUTH OF AND 1466.256' EAST OF THE NORTHWEST CORNER OF THE SOUTHWEST 1/4 OF SECTION 15, T.1N., R.19E.

Y=119886.425
X=516566.146

BEGIN RELOCATION ORDER
STA. 8+00

1279.721' SOUTH OF AND 703.907' WEST OF THE NORTHEAST CORNER OF THE NORTHWEST 1/4 OF SECTION 16, T.1N., R.19E.

Y=121442.390
X=511762.693

LAYOUT
SCALE 0 SCALE
1" = 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 1.004 MI

WISCONSIN ROBERT F. SCHMALZER 1760 COLGATE, WI LAND SURVEYOR

ROBERT F. SCHMALZER, PLS 1760
DATE: 9-17-2017

TERRATEC ENGINEERING, LLC.
#67 N222 EVERGREEN BLVD. STE. 205
CEDARBURG, WI 53012
Tel: 262.377.0905 - Fax: 262.375.1958

© 2019 TERRATEC ENGINEERING, LLC.

REVISION DATE:
4/2/2019 (2)
5/31/2019 NC
7/29/2019 NC
9/23/2019 NC
9/29/2019 NC

APPROVED FOR KENOSHA COUNTY.

DATE:_____ _____
(Signature)

FILE NAME : C:\CIVIL 3D PROJECTS\3733-00-01 CTH F\RW\RW\RWSHEET 4.01.DWG
LAYOUT NAME -
PLOT DATE : 2/22/2019 2:00 PM PLOT BY : terratec PLOT NAME :

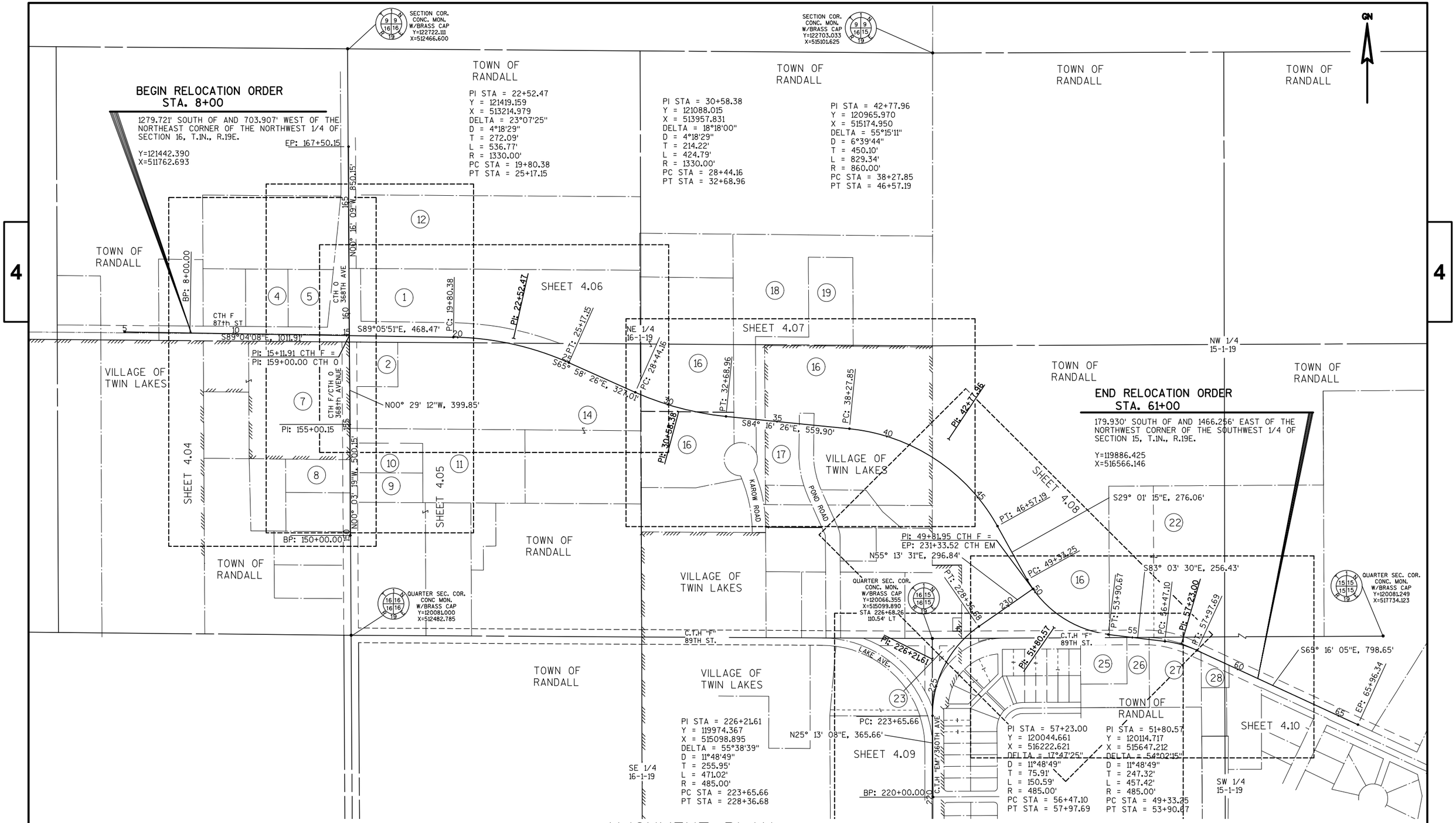
SCHEDULE OF LANDS AND INTEREST

"OWNERS" NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO WISCONSIN DEPARTMENT OF TRANSPORTATION. AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL ACRES EXISTING PARCEL	AREA ACRES REQUIRED			TOTAL ACRES REMAINING	PLE ACRES REQUIRED	TLE ACRES REQUIRED
					NEW	EXISTING	TOTAL			
1 (4)(5)	4.06	PAUL F. MAKI JR. & JENNIFER L. MAKI	TLE	8.041 * (6)	-	-	-	8.041	-	1.172
2	4.06	THE JANET M. ORENIC REVOCABLE LIVING TRUST UAD DECEMBER 20, 1996 JANET M. ORENIC GRANTOR AND/OR TRUSTEE	FEE	1.0	0.85	0.15	1.0	0	-	-
(3)				-	-	-	-	-	-	-
4 (2)(3)	4.04	RUSSELL J. WOLTER & SHIRLEY A. WOLTER	FEE & TLE	1.140	0.031	-	0.031	1.109	-	0.043
5 (2)	4.04	JOSEPH B. TERRAULT	FEE & TLE	1.130	0.040	-	0.040	1.090	-	0.049
7 (2)	4.04	MESSIAH LUTHERAN CHURCH OF TWIN LAKES, WISCONSIN	FEE & TLE	6.580	0.605	0.401	1.006	5.574	-	0.031
8 (2)	4.04	DAVID C. HEISELMANN	FEE	1.000	0.030	0.114	0.144	0.856	-	-
9 (2)	4.05	DONALD F. & KAREN R. DITTHARDT	FEE	1.000	0.008	0.101	0.109	0.891	-	-
10 (2)	4.05	THOMAS G. KUEBRITZ II & ANGELA M. KUERBITZ	FEE	1.000	0.046	0.101	0.147	0.853	-	-
11 (2)	4.05	THE RICHARD C. KARRASCH TRUST AS DATED JULY 5, 2017, AS AMENDED AND RESTATED, RICHARD C. KARRASCH, TRUSTEE	FEE	4.050	0.023	0.050	0.073	3.977	- -	-
12 (2)	4.05	MARK D. & JOYCE B. WINKELS	FEE & TLE	10.000	0.152	0.251	0.403	9.597		0.114
									-	
14 (2)	4.06	PAUL & JULIE JUST	FEE & TLE	11.000	3.814	0.143	3.957	7.043		0.043
									-	
16 (2)(3)	4.07 & 4.08	KENOSHA COUNTY, A WISCONSIN MUICIPAL CORPORATION	FEE & TLE	142.280	5.892	0.505	6.397	135.883	0.102	3.753
17 (2)	4.07	CARL F. KAROW JR.	FEE & TLE	0.920	0.056	-	0.056	0.864	-	0.053
18 (2)	4.07	SCOTT R. & MEGAN M. SWEDERSKI, SWEDERSKI LIVING TRUST, DATED DECEMBER 11, 2015	FEE & TLE	4.710	0.422	-	0.422	4.288	-	0.081
19 (2)	4.07	NOEL & DONNA KAROW	FEE & TLE	7.390	0.362	-	0.362	7.028	-	0.032
22 (2)	4.08	TOWN OF RANDALL, A MUNICIPAL CORPORATION	FEE & TLE	15.130	0.019	0.211	0.230	14.900	-	0.038
23 (2)(3)	4.09	DANIEL PATTON	FEE	1.070	0.422	-	0.422	0.648	-	-
25 (2)	4.09	JOHNATHON BLAKEMAN	TLE	1.000	-	-	-	1.000	-	0.015
26 (2)	4.10	WESLEY S. & TEAGAN M. MROWKA	TLE	0.420	-	-	-	0.420	-	0.010
27 (2)	4.10	DARLENE F. JAHNUS TRUST	TLE	2.600	-	-	-	2.600	-	0.015
28 (2)	4.10	RACHEL KRAMER	TLE	0.374	-	-	-	0.374	-	0.009

UTILITY NUMBER	SHEET NUMBER	OWNER	
90 (2)	4.04, 4.05, 4.06, 4.08	TDS TELECOM INC.	RELEASE OF RIGHTS
91 (2)	4.08	WE ENERGIES	RELEASE OF RIGHTS
92 (2)	4.04	AMERICAN TRANSMISSION COMPANY, LLC	RELEASE OF RIGHTS

* PREVIOUSLY DEDICATED FOR PUBLIC ROAD PURPOSES (1.937 ACRES) PER CSM 2911



ALIGNMENT PLAN

REVISION DATE: 4/2/2019 5/31/2019 (3) 7/29/2019 (NC) 9/23/2019 (5) 9/29/2019 (6)	DATE: 10/9/2018 GRID FACTOR: N/A	SCALE, FEET 0 200' 400'	HWY: CTH F COUNTY: KENOSHA	STATE R/W PROJECT NUMBER 3733-00-01 CONSTRUCTION PROJECT NUMBER 3733-00-71	PLAT SHEET 4.03 PS&E SHEET 68 E

FILE NAME : RWSHEET 4.03.DWG PLOT DATE : 2-22-2019 2:00 PM PLOT BY : terratec PLOT NAME :

CONST. 3733-00-71 CTH F R/W 3733-00-01-4.03

ROAD NAME	BASIS OF EXISTING R/W	WIDTH	YEAR
CTH O-368th AVE	DOC #569810	VARIES	1974
CTH F/O 368th AVE	TWN RD REC VOL. 1 P. 198-199	66'	1851
CTH F-87th AVE	CSM 1749 DOC.# 1152018	66'	1989
CTH F-87th AVE	TWN RD REC VOL.2 P. 60-61 STATUTE 82.31	66'	1891

UTILITY #	OWNER	PARCEL OCCUPIED	DOCUMENT
90	TDS TELECOM INC.	7	#1087822 #580277
92	AMERICAN TRANSMISSION COMPANY, LLC	7 & 8	#1818710 #1830005

VILLAGE OF TWIN LAKES

TOWN OF RANDALL

BEGIN RELOCATION ORDER
STA. 8+00

1279.721' SOUTH OF AND 703.907' WEST OF THE NORTHEAST CORNER OF THE NORTHWEST 1/4 OF SECTION 16, T.1N., R.19E.

Y=121442.390
X=511762.693

BP: 8+00.00

N00°17'41"W 20.00'

VILLAGE OF TWIN LAKES
TOWN OF RANDALL

FEE-221 8+55.24 54.35'
FEE-220 8+54.81 34.35'

1/16 LINE= S89°30'44"E

RL=S89°04'08"E 711.91'

UNPLATTED LAND
DOC. NO. 477502

CSM 791 LOT 1

CSM 1749 LOT 1

65.81'

TOWN OF RANDALL

LINE COURSE		BEARING	DISTANCE
FEE-213	FEE-212	N00°17'18"W	10.00'
FEE-210	FEE-211	S00°17'18"E	10.00'
FEE-214	FEE-215	S05°50'27"W	10.04'
FEE-212	TLE-204	N00°17'18"W	12.00'
TLE-205	FEE-214	S05°50'27"W	12.05'
FEE-211	FEE-210	N00°29'14"W	10.00'
FEE-212	FEE-213	S00°17'18"E	10.00'
TLE-201	TLE-202	N82°45'57"E	46.94'
TLE-202	TLE-203	N40°38'49"E	20.53'
TLE-204	FEE-212	S00°17'18"E	12.00'
FEE-226	FEE-231	N89°29'33"W	22.00'
FEE-227	FEE-224	S32°02'15"W	41.07'
FEE-224	TLE-237	S00°21'04"E	96.67'
TLE-229	FEE-224	S89°30'44"E	44.35'
FEE-225	FEE-226	S89°29'33"E	15.00'

10+44.95 33.12' TLE-201
10+91.41 39.79' TLE-202
10+99.82 33.55' FEE-211
10+99.74 43.55' FEE-210
11+04.53 55.59' TLE-203

6' UTILITY EASEMENT PER CSM 1749

CSM 1749 LOT 2

76.52'

12'

10'

TLE SLOPES & GRADING

12+35.88 56.60' TLE-204

4
WOLTER
CSM 1749 LOT 2
DOC. NO. 962571

UNPLATTED LAND

NE-NW
16-1-19

CSM 1749 LOT 3

12+36.13 44.60'
12+36.35 34.61'
14+13.09 35.97'
14+13.95 45.38'
14+14.98 57.99'

FEE-215 FEE-214 TLE-205 FEE-213 FEE-212

5
TERRAULT
CSM 1749 LOT 3
DOC. NO. 962571

QUARTER SEC. COR.
CONC. MON.
W/BRASS CAP
Y=122722.111
X=512466.600

EASEMENT
AMERICAN TRANSMISSION COMPANY, LLC
PER DOC. NO. 1821954

ACCESS RESTRICTION PER CSM 1749

SLOPE INTERCEPT

CTH O
368TH AVE

N89°30'44"W 98.00'

VARIES

RL=N00°16'09"W 325.00'

EAST LINE NW/NE N00°21'04"W 2641.16' COR. TO COR.

S00°21'04"E 1320.58'

S00°21'04"E 1254.57'

EP: 165+00
Y = 122030.815
X = 512471.695

INGRESS/EGRESS EASEMENT
DOC. NO. 477502

16.5' EASEMENT
TDS TELECOM INC.
DOC. NO. 1087822
BURIED LINES

7
MESSIAH LUTHERAN CHURCH OF TWIN LAKES, WISCONSIN
UNPLATTED LAND
DOC. NO. 486938

FEE-222 12+00 51.68'

UTILITY EASEMENT
TDS TELECOM INC.
DOC. NO. 580277
BURIED LINES

CTH F
87th ST
CL=S89°30'44"E

SLOPE INTERCEPT
FEE-223 13+60 65.44'

N89°30'44"W 98.35'
TLE-229 14+14 65.02'
N60°30'17"W 25.05'
TLE
SLOPES & GRADING
TLE-230 14+36 77.00'
N15°16'36"W 87.81'
FEE-224 14+58.35 64.68'
TLE-237 157+40 55.38'

N84°09'10"W 160.59'

179°34'06"

N89°30'44"W 33.00'

179°58'17"

PI: 15+11.91 = PI:159+00
Y = 121430.822
X = 512474.514

SIGN SCHEDULE

SIGN NO.	STATION	OFFSET	SIGN OWNER
S-1	156+39.5	46.5' LT	MESSIAH LUTHERAN CHURCH

92
EASEMENT
AMERICAN TRANSMISSION COMPANY, LLC
DOC. NO. 1830005

QUARTER SEC. COR.
CONC MON.
W/BRASS CAP
Y=120081.000
X=512482.785

BP: 150+00
Y = 120530.836
X = 512478.391

8
HEISELMANN
UNPLATTED LAND
DOC. NO. 1410868

N89°29'33"W
STA 153+41.37

92
25' EASEMENT
AMERICAN TRANSMISSION COMPANY, LLC
DOC. NO. 1818710

PI: 155+00.15
Y = 121030.988
X = 512477.910

153+41.91 55.13' FEE-231
153+41.84 48.13' FEE-225
153+41.69 33.13' FEE-226
152+66 47.74' FEE-236
152+46 32.63' FEE-235

N37°06'52"W 25.06'

494.34'
529.35'
529.36'

179071

CTH F/CTH O
368TH AVE

RL=N00°03'19"W

RL=N00°29'12"W

SW-NE
16-1-19

SE-NW
16-1-19

CSM 191

TOWN OF RANDALL

TOWN OF RANDALL

REVISION DATE:	DATE: 10/9/2018	SCALE, FEET 0 50' 100'	HWY: CTH F	STATE R/W PROJECT NUMBER 3733-00-01	PLAT SHEET 4.04	
4/2/2019 (2) 5/31/2019 (3) 7/29/2019 (NC) 9/23/2019 (NC) 9/29/2019 (NC)	GRID FACTOR: N/A		COUNTY: KENOSHA	CONSTRUCTION PROJECT NUMBER 3733-00-71	PS&E SHEET 69	E

FILE NAME : RWSHEET 4.04.DWG PLOT DATE : X-X-X 10:45AM PLOT BY : terratec PLOT NAME :

CONST. 3733-00-71 CTH F R/W 3733-00-01-4.04

ROAD NAME	BASIS OF EXISTING R/W	WIDTH	YEAR
CTH O-368th AVE	DOC #569810	VARIES	1974
CTH F/O 368th AVE	TWN RD REC VOL. 1 P. 198-199	66'	1851
CTH F-87th AVE	CSM 1749 DOC.# 1152018	66'	1989
CTH F-87th AVE	TWN RD REC VOL.2 P. 60-61 STATUTE 82.31	66'	1891

TOWN OF RANDALL

VILLAGE OF TWIN LAKES

TOWN OF RANDALL

UNPLATTED LAND

UNPLATTED LAND

QUARTER SEC. COR.
CONC MON.
W/BRASS CAP
Y=120081.000
X=512482.785

VILLAGE OF TWIN LAKES

P/L TOWN OF RANDALL

BP: 150+00
Y = 120530.836
X = 512478.391

PI: 155+00.15
Y = 121030.988
X = 512477.910

1/16 LINE=
S89°30'44"E

CSM 1749
LOT 2

CSM 1749
LOT 3

NE-NW
16-1-19

SE-NW
16-1-19

SW-NE
16-1-19

NW-NE
16-1-19

CTH F
87th ST

CTH O
368TH AVE

CTH F/CTH O 368TH AVE

RL=N00°03'19"W

N00°21'04"W
732.50'

179°34'06"

RL=N00°29'12"W

179°58'17"

PI:159+00
Y = 121430.822
X = 512474.514

RL=N00°16'09"W
325.00'

EAST LINE NW/NE N00°21'04"W
2641.16' CORR. TO COR.

S00°21'04"E
989.01'

S89°38'00"E
33.00'

S89°40'46"E
33.00'

N29°42'15"E, 29.95'

S00°21'04"E, 9.88'

SLOPE
INTERCEPT

MATCH LINE
154+82.19
SHEET 4.06

MATCH LINE
161+20.96
SHEET 4.06

EASEMENT
TDS TELECOM INC.
DOC. NO. 1087820

TLE
SLOPES &
GRADING

15' SNOWMOBILE TRAIL
EASEMENT
TWIN RUNNERS
SNOWMOBILE CLUB, INC.
DOC. NO. 996490

QUARTER SEC. COR.
CONC. MON.
W/BRASS CAP
Y=122722.111
X=512466.600

EP: 165+00
Y = 122030.815
X = 512471.695

LINE COURSE	BEARING	DISTANCE
FEE-243 FEE-242	S89°40'46"E	15.00'
FEE-240 FEE-243	N00°21'04"W	35.98'
FEE-245 FEE-244	S89°40'46"E	15.00'
FEE-247 FEE-246	S89°31'04"E	15.00'
FEE-251 FEE-252	S89°38'03"E	20.00'
FEE-253 FEE-250	N89°38'00"W	15.00'
FEE-252 TLE-256	S89°38'03"E	15.00'
TLE-255 FEE-253	N89°38'00"W	15.00'

UTILITY #	OWNER	PARCEL OCCUPIED	DOCUMENT
90	TDS TELECOM INC.	12	#1087820

9 DITTHARDT
DOC. NO. 1206647
UNPLATTED LAND

10 KUERBITZ
DOC. NO. 1773558
UNPLATTED LAND

11 KARRASCH
CSM 191
DOC. NO. 1799646

12 WINKELS
DOC. NO. 996490
UNPLATTED LAND

90 TDS TELECOM INC.

CSM 763

CSM 191

N89°37'56"W

1/16 LINE

REVISION DATE: 4/2/2019 (2) 5/31/2019 (3) 7/29/2019 (NC) 9/23/2019 (5) 9/29/2019 (NC)	DATE: 10/9/2018 GRID FACTOR: N/A	SCALE. FEET 0 50' 100'	HWY: CTH F COUNTY: KENOSHA	STATE R/W PROJECT NUMBER 3733-00-01 CONSTRUCTION PROJECT NUMBER 3733-00-71	PLAT SHEET 4.05 PS&E SHEET 70	E

FILE NAME : RWSHEET 4.05.DWG PLOT DATE : 7-16-2018 10:45AM PLOT BY : terratec PLOT NAME :

CONST. 3733-00-71 CTH F R/W 3733-00-01-4.05

ROAD NAME	BASIS OF EXISTING R/W	WIDTH	YEAR
CTH O-368th AVE	DOC #569810	VARIES	1974
CTH F/O 368th AVE	TWN RD REC VOL. 1 P. 198-199	66'	1851
CTH F-87th AVE	CSM 1749 DOC.# 1152018	66'	1989
CTH F-87th AVE	TWN RD REC VOL.2 P. 60-61 STATUTE 82.31	66'	1891

TOWN OF RANDALL

VILLAGE OF TWIN LAKES

QUARTER SEC.COR. CONC. MON. W/BRASS CAP Y=122722.111 X=512466.600

MATCH LINE 161+20.96 SHEET 4.05

MATCH LINE 154+82.19 SHEET 4.05

QUARTER SEC. COR. CONC MON. W/BRASS CAP Y=120081.000 X=512482.785

NE-NW 16-1-19 | NW-NE 16-1-19 | SW-NE 16-1-19 | SE-NW 16-1-19 | NE-NE 16-1-19 | SE-NE 16-1-19

CTH O 368TH AVE | CTH F/CTH O 368th AVENUE | CTH F (87th ST)

S00°21'04"E 988.95' | EAST LINE NW/NE N00°21'04"W 2641.16' COR. TO COR.

162+01.77 52.57' (420) | 1 ACCESS 40' WIDE PER CSM 2911

RIGHT-OF-WAY AUTHORIZATION - TDS TELECOM INC. DOC. NO. 581034

R=N00°16'09"W 325.00' | 331.63' | 1320.58' | 222.84' | VARIES

159+78.94 52.89' (TLE-422) | 33'X33' VISION TRIANGLE PER CSM 2911 | N47°41'53"E 37.47'

159+63.93 52.91' (TLE-421) | 18+19.67 80' (TLE-423) | 18+46.98 105.65' (TLE-424)

S89°05'51"E 256.49' | 416.88' | P/L

158+70.24 32.93' (FEE-106) | RL=S89°05'51"E 468.47'

RL=S89°04'08"E | 217.90' | IP | R/L

PI: 15+11.91= PI:159+00 Y = 121430.822 X = 512474.514

RL=N00°29'12"W 399.85' | 179°58'17" | 292.09' | 66.5' | 200.00'

17+30.44 27.23' (FEE-268) | N89°05'51"W 73.83' | N00°21'04"W 78.79' | 121.21

18+06 106' (FEE-266) | 17+32.17 106' (FEE-267) | 17+34.82 227.18' (FEE-104)

S89°37'56"E 169.90' | 156+69.87 57.46' (TLE-274) | 156+70.02 47.46' (FEE-271) | 156+70.24 32.46' (FEE-270)

S89°37'56"E 33.00' | 10' | 48' | TLE SLOPES & GRADING

154+81.89 32.15' (FEE-273) | 154+81.75 47.15' (FEE-272) | 154+81.65 57.15' (TLE275)

179°34'06" | PI: 155+00.15 Y = 121030.988 X = 512477.910

33' | 33' | (119071) | RL=N00°03'19"W

PI STA = 22+52.47 Y = 121419.159 X = 513214.979 DELTA = 23°07'25" D = 4°18'29" T = 272.09' L = 536.77' R = 1330.00' PC STA = 19+80.38 PT STA = 25+17.15

PI STA = 30+58.38 Y = 121088.015 X = 513957.831 DELTA = 18°18'00" D = 4°18'29" T = 214.22' L = 424.79' R = 1330.00' PC STA = 28+44.16 PT STA = 32+68.96

(1) MAKI — LOT 1 CSM 2911 DOC. NO. 1849016

(2) ORENIC

(14) JUST — DOC. NO. 1654032 UNPLATTED LAND

LOT 2 CSM 2911 DOC. NO. 1849016

671.26' | N89°37'56"W | 587.50' | P/L | 2.43'

273.08' | S00°22'00"W

TLE SLOPES & GRADING

N72°47'46"E 28.08' | 18+73.67 114.38' (TLE-425) | 19+56.47 116.20' (TLE-426) | 20+03.50 145.81' (TLE-427) | 20+99.27 147.57' (TLE-428) | 22+12.48 130.34' (TLE-429)

N60°14'22"E 57.62' | S86°59'10"E 106.33' | N89°38'31"E 82.82' | S73°41'56"E 126.16' | S83°42'21"E 94.83' | S67°33'46"E 110.71'

SLOPE INTERCEPT

19+80.38 65' (TLE-435) | 22+98 141' (TLE-430) | 23+98 130' (TLE431) | 24+48.20 65' (TLE-277) | 24+85 115' (TLE432) | 25+36 117' (TLE433) | 25+83.11 123.69' (TLE434)

S60°15'53"E 96.17' | S68°33'10"E 53.83' | S74°03'27"E 47.59' | S89°37'56"E 3.40' | 27+75.68 208.05' (FEE-261)

PC: 19+80.38 | L=490.68' R=1395.00' CRD BRG=N79°01'15"W CRD LGT=488.16'

NO ACCESS PER CSM 2911

PI: 22+52.47 | PT: 25+17.15 | 150.93'

1/16 LINE STA 22+25.92 | S89°37'56"E 1091.75' (1092.80')

WEST LINE OF CSM 2126 OVERLAPS 1/16 LINE | N00°09'25"W 331.59'

N86°25'25"W 383.26' | SLOPE INTERCEPT | 22+08 106' (FEE-265)

N78°54'27"W 206.94' | 24+31 90' (FEE-264)

RL=S65°58'26"E 327.01' | PC: 28+44.16 | S00°17'00"E 323.24' | CSM 2126 LOT 2

N68°02'52"W 265.29' | 27+02 83' (FEE-263)

N64°59'45"W 206.76' | 2.70' | 29+04.74 88' (FEE-262)

STA 28+69.53 1/16 LINE STA 28+72.69 | WEST LINE OF CSM 2126 OVERLAPS | CSM 191

UTILITY #	OWNER	PARCEL OCCUPIED	DOCUMENT
(90)	TDS TELECOM INC.	1 & 2	#581034 #1087821

TOWN OF RANDALL

REVISION DATE: 4/2/2019 (2) 5/31/2019 (3) 7/29/2019 (4) 9/23/2019 (5) 9/29/2019 (NC)

DATE: 10/9/2018 | GRID FACTOR: N/A | SCALE, FEET 0 50' 100'

HWY: CTH F | COUNTY: KENOSHA

STATE R/W PROJECT NUMBER 3733-00-01 | CONSTRUCTION PROJECT NUMBER 3733-00-71

PLAT SHEET 4.06 | PS&E SHEET 71 | E

FILE NAME : RWSHEET 4.06.DWG | PLOT DATE : X-X-2018 10:45AM | PLOT BY : terratec | PLOT NAME :

CONST. 3733-00-71 CTH F R/W 3733-00-01-4.06

ROAD NAME	BASIS OF EXISTING R/W	WIDTH	YEAR
POND ROAD	CSM 1805 DOC. #985912	66'	1995
POND ROAD	CSM 2499 DOC. #1485462	66'	2006
KAROW ROAD	CSM 2126 DOC. #1152018	VARIES	1999
KAROW ROAD	CSM 2126 DOC. #1152018	VARIES	1999

LINE COURSE	BEARING	DISTANCE
FEE-302 FEE-297	N00°42'38"E	98.68'
FEE-302 TLE-327	S00°42'38"W	50.19'
FEE-297 FEE-296	N89°17'22"W	66.00'
FEE-296 FEE-306	S00°42'38"W	70.29'
FEE-306 FEE-305	N89°17'22"W	154.03'
FEE-305 FEE-294	N00°18'31"W	101.52'
FEE-306 FEE-307	S00°42'38"W	22.59'
FEE-308 FEE-305	N00°18'42"W	9.09'
FEE-305 FEE-306	S89°17'22"E	154.03'
FEE-308 TLE-325	S00°18'42"E	5.03'
TLE-326 FEE-307	N00°42'38"E	25.10'
FEE-294 TLE-321	N00°18'42"W	35.20'
FEE-292 TLE-291	N00°18'42"W	35.20'
FEE-293 TLE-320	N00°18'42"W	35.20'
FEE-318 TLE-310	N00°18'42"W	19.78'

CURVE No.	RADIUS	ARC LENGTH	CHORD BRG.	CHORD LENGTH
FEE-300 FEE-301	815.00'	406.24'	N69°59'39"W	402.05'
FEE-300 PLE-406	815.00'	232.28'	N63°52'45"W	231.50'
PLE-406 PLE-405	815.00'	94.05'	N75°21'01"W	94.00'
PLE-405 FEE-301	815.00'	79.91'	N81°27'54"W	79.88'
FEE-298 FEE-299	905.00'	391.14'	S71°53'32"E	388.10'
FEE-299 FEE-298	905.00'	391.14'	N71°53'32"W	388.10'
TLE-322 TLE-323	960.00'	382.88'	S72°50'53"E	380.35'
FEE-315 FEE-316	649.76'	260.73'	N11°48'26"W	258.99'
FEE-316 FEE-317	75.00'	78.43'	N08°36'41"E	74.90'
FEE-317 FEE-318	75.00'	121.15'	N67°37'12"W	108.40'
FEE-303 FEE-280	1375.00'	393.69'	N76°04'17"W	392.35'
FEE-304 FEE-282	1265.00'	404.03'	S75°07'26"E	402.32'
TLE-330 TLE-287	1235.00'	330.42'	S73°38'19"E	329.44'
PRW-400 PRW-401	860.00'	398.39'	N71°00'10"W	394.84'
PLE-408 TLE-329	765.00'	284.76'	S63°47'16"E	283.12'
TLE-328 PLE-411	765.00'	107.15'	S80°15'41"E	107.06'

LINE COURSE	BEARING	DISTANCE
PLE-406 PLE-407	S14°38'59"W	20.03'
PLE-407 PLE-408	S65°17'40"W	45.27'
PLE-408 PLE-409	S14°38'59"W	32.00'
PLE-409 PLE-410	N75°21'01"W	24.00'
PLE-410 PLE-411	N14°38'59"E	32.00'
PLE-411 PLE-412	N35°59'42"W	45.27'
PLE-412 PLE-405	N14°38'59"E	20.03'
PRW-401 PRW-402	N84°16'26"W	523.05'

PI STA = 30+58.38
Y = 121088.015
X = 513957.831
DELTA = 18°18'00"
D = 4°18'29"
T = 214.22'
L = 424.79'
R = 1330.00'
PC STA = 28+44.16
PT STA = 32+68.96

PI STA = 42+77.96
Y = 120965.970
X = 515174.950
DELTA = 55°15'11"
D = 6°39'44"
T = 450.10'
L = 829.34'
R = 860.00'
PC STA = 38+27.85
PT STA = 46+57.19

SECTION COR. CONC. MON. W/BRASS CAP Y=122703.033 X=515101.625

QUARTER SEC. COR. CONC. MON. W/BRASS CAP Y=120066.355 X=515099.890

REVISION DATE: 4/2/2019 (2) 5/31/2019 (3) 7/29/2019 (NC) 9/23/2019 (NC) 9/29/2019 (NC)	DATE: 10/9/2018 GRID FACTOR: N/A	SCALE. FEET 0 50' 100'	HWY: CTH F COUNTY: KENOSHA	STATE R/W PROJECT NUMBER 3733-00-01 CONSTRUCTION PROJECT NUMBER 3733-00-71	PLAT SHEET 4.07 PS&E SHEET 72 E

FILE NAME : RWSHEET 4.07.DWG PLOT DATE : X-X-2018 10:45AM PLOT BY : terratec PLOT NAME :

CONST. 3733-00-71 CTH F R/W 3733-00-01-4.07

TOWN OF RANDALL

PI STA = 42+77.96
Y = 120965.970
X = 515174.950
DELTA = 55°15'11"
D = 6°39'44"
T = 450.10'
L = 829.34'
R = 860.00'
PC STA = 38+27.85
PT STA = 46+57.19

PI STA = 51+80.57
Y = 120114.717
X = 515647.212
DELTA = 54°02'15"
D = 11°48'49"
T = 247.32'
L = 457.42'
R = 485.00'
PC STA = 49+33.25
PT STA = 53+90.67

PI STA = 57+23.00
Y = 120044.661
X = 516222.621
DELTA = 17°47'25"
D = 11°48'49"
T = 75.91'
L = 150.59'
R = 485.00'
PC STA = 56+47.10
PT STA = 57+97.69

PI STA = 226+21.61
Y = 119974.367
X = 515098.895
DELTA = 55°38'39"
D = 11°48'49"
T = 255.95'
L = 471.02'
R = 485.00'
PC STA = 223+65.66
PT STA = 228+36.68

SECTION COR.
CONC. MON.
W/BRASS CAP
Y=122703.033
X=515101.625

119059

PI: 42+77.96

41+70.85 TLE-323 100'

41+99.54 FEE-299 45'

SLOPE INTERCEPT

TLE SLOPES & GRADING

46+57.19 TLE-349 100'

46+57.19 FEE-340 45'

PT: 46+57.19

16
COUNTY OF KENOSHA
DOC. NO. 1320662
UNPLATTED LAND

91
20' EASEMENT
WE ENERGIES
DOC. NO. 612611

90
EASEMENT
TDS TELECOM
DOC. NO. 580261
UG CABLES

49+33.25 FEE-341 45'

PC: 49+33.25

N17°45'11"W 281.48'

276.06'

RL=S29°01'15"E 276.06'

264.23'

S29°01'15"E 289.27'

63.18'

106.48'

61.43'

FEE-300 42+56.53 45'

42+95.41 TLE-329 95'

FEE-348 46+57.19 45'

TLE-350 46+57.19 95'

SLOPE INTERCEPT

TLE SLOPES & GRADING

FEE-347 49+24.42 45'

FEE-346 49+42.23 64.99'

TLE-351 49+44.30 95.15'

49+81.95
Y = 120289.651
X = 515552.956

231+33.52

N55°13'31"E 296.44'

RL=N55°13'31"E 296.84'

665.97'

666.14'

PI: 51+80.57

S-2

22
TOWN OF RANDALL
A MUNICIPAL
CORPORATION
DOC. NO. 960766
UNPLATTED LAND

S00°14'49"E 29.67'

TLE-364 56+57.89 70.71'

56+61.92 TLE-365 41.39'

PI: 57+91.69

N89°40'34"E 70.00'

PC: 56+47.10

PI: 57+23.00

TLE SLOPES & GRADING

TLE-363 55+90.03 61.72'

TLE-362 55+92.40 42.92'

RW-400 55+47 39.10'

FEE-361 54+91.33 32.00'

53+90.23 FEE-342 45.00'

53+91.41 FEE-360 35.97'

53+93.48 FEE-343 19.52'

CUIV

31.05'

57+28.51 37.05' RW-401

119073

S89°40'34"W 139.16' EXISTING CL C-1

S80°47'02"E 100.00'

98.64'

200.28' P/L

RL=S83°03'30"E 256.43'

QUARTER SEC. COR.
CONC. MON.
W/BRASS CAP
Y=120081.249
X=517734.123

T 15N R 19E

SIGN SCHEDULE

SIGN NO.	STATION	OFFSET	SIGN OWNER
S-2	52+91	34.0' LT	TOWN OF RANADLL

CSM 2499
LOT 1

POND

WEST LINE NW 1/4
N00°02'16"E 2636.68'
COR. TO COR.
STA 42+26.25

TOWN OF RANDALL
VILLAGE OF TWIN LAKES

P/L

CSM 1805
LOT 2

VILLAGE OF TWIN LAKES

UNPLATTED LAND

UNPLATTED LAND

PT: 228+36.68

FEE-345 227+79.52 48.70'

FEE-344 227+66.21 32.87'

SW-NW 15-1-19

SE-NE 16-1-19

NW-SW 15-1-19

33.00' P/L

132.00'

QUARTER SEC. COR.
CONC. MON.
W/BRASS CAP
Y=120066.355
X=515099.890

119072

T 16N R 19E

C.T.H "F" / 89TH ST.

SOUTH LINE NW 1/4
N89°40'34"E 2634.28'
COR. TO COR.

BEL-AIR SUBDIVISION

1 2 3 4 5 6 7 8 9 10 25 26 27 28 29 30 31 32

UTILITY #	OWNER	PARCEL OCCUPIED	DOCUMENT
90	TDS TELECOM INC.	16 & 22	#580261
91	WE ENERGIES	16 & 22	#612611

CURVE No.	RADIUS	ARC LENGTH	CHORD BRG.	CHORD LENGTH
FEE348 FEE-300	815.00'	379.70'	N42°22'03"W	376.28'
FEE-299 FEE-340	905.00'	481.60'	S44°15'57"E	475.93'
FEE-341 FEE-342	440.00'	414.58'	S56°00'50"E	399.42'
TLE-329 TLE-350	765.00'	321.82'	S41°04'21"E	319.45'
TLE-365 TLE-362	533.00'	70.85'	N81°37'00"W	70.80'
TLE-349 TLE-323	960.00	542.89'	N45°13'18"W	535.69'
EXIST C/L C-1	500.00'	219.34	S77°45'23"E	217.59'
RW-400 RW-401	533.00'	188.54'	S80°11'25"E	187.56'

LINE COURSE	BEARING	DISTANCE
FEE-344 FEE-345	N00°02'16"E	21.42'
FEE-342 FEE-343	S00°14'49"E	25.68'
FEE-346 FEE-347	N13°06'08"E	29.67'
TLE-351 FEE-346	N55°13'31"E	30.25'
FEE-343 FEE-360	N00°14'49"W	16.57'
TLE-362 TLE-363	N00°14'49"W	18.95'

ROAD NAME	BASIS OF EXISTING R/W	WIDTH	YEAR
CTH F	Twn Road Rec. Vol 1 Pge 10	66	1842
CTH F/ CTH EM	Hwy Comm. Project No. APP 161(25) Doc. No. 158086	VARIES	1925
CTH F/ CTH EM	Survey RA-15-2 Recorded December 1940	66	1940
CTH F/ CTH EM	BEL-AIR Subdivision	VARIES	1946
CTH F	Surveys	66	

REVISION DATE: 4/2/2019 (2)
5/31/2019 NC
7/29/2019 NC
9/23/2019 NC
9/29/2019 NC

DATE: 10/9/2018

GRID FACTOR: N/A

SCALE, FEET
0 50' 100'

HWY: CTH F

COUNTY: KENOSHA

STATE R/W PROJECT NUMBER 3733-00-01

CONSTRUCTION PROJECT NUMBER 3733-00-71

PLAT SHEET 4.08

PS&E SHEET 73

E

FILE NAME : RWSHEET 4.08.DWG

PLOT DATE : X-X-2018 10:45AM

PLOT BY : terratec

PLOT NAME :

CONST. 3733-00-71 CTH F R/W 3733-00-01-4.08

TOWN OF RANDALL

POND ROAD

QUARTER SEC. COR.
CONC. MON.
W/BRASS CAP
Y=120066.355
X=515099.890
STA 226+68.26
110.54' LT

T 1 N
R 19 E
16 15
16 15

119072

UNPLATTED LANDS

SE-NE
16-1-19

SW-NW
15-1-19

UNPLATTED LAND

IP

PT: 228+36.68

R/L=N55°13'31"E
296.84'

EXISTING C/L CTH F
NORTH LINE SW 1/4 15-1-19
N89°40'34"E 2634.28'
COR. TO COR.

C.T.H "F" / 89th ST.

PI: 51+80.57

681.00'

52

54

UNPLATTED LANDS

PT: 53+90.67

RL=S83°03'30"E
109.33'

MATCH LINE
55+00
SHEET 4.10

GN

SLOPE
INTERCEPT

S00°19'26"E
33.00'

TLE-374 52+98.42
70.79'

N89°40'34"E
33.12"

53+26.37
61.37'
TLE-375

S00°19'26"E
20.18"

53+30.80
80.90'
TLE-376

N00°19'26"W
20.18'

TLE-377 53+03.72
90'

S89°40'34"W
33.12"

TLE
SLOPES & GRADING

BEL-AIR SUBDIVISION

7 6 5 4 3 2 1
27 28 29 30 31 32

25
BLAKEMAN
DOC.NO. 1657562
UNPLATTED LAND

QUARTER SEC. COR.
CONC. MON.
W/BRASS CAP
Y=120081.249
X=517734.123

T 1 N
R 19 E
15 15
15 15

119073

UNPLATTED LANDS

UNPLATTED LANDS

TOWN OF RANDALL

LAKE AVE.

EXISTING C/L CTH F
NORTH LINE NE 1/4 16-1-19
S89°40'46"W 2617.15'
COR. TO COR.

23
PATTON
DOC.NO. 1784156
UNPLATTED LANDS

PI: 226+21.61

SEE DETAIL

NE-SE
16-1-19

NW-SW 11
15-1-19

8 9 10 11 12 13 14 15 16 17 18 19
26 25 24 23 22 21 20

PI STA = 51+80.57	PI STA = 57+23.00
Y = 120114.717	Y = 120044.661
X = 515647.212	X = 516222.621
DELTA = 54°02'15"	DELTA = 17°47'25"
D = 11°48'49"	D = 11°48'49"
T = 247.32'	T = 75.91'
L = 457.42'	L = 150.59'
R = 485.00'	R = 485.00'
PC STA = 49+33.25	PC STA = 56+47.10
PT STA = 53+90.67	PT STA = 57+97.69

UNPLATTED LAND

CSM 2619
LOT 2

PC: 223+65.66

CURVE No.	RADIUS	ARC LENGTH	CHORD BRG.	CHORD LENGTH
C-1	301.56'	471.92'	N44°50'38"E	425.22'
C-2	315.32'	494.98'	N44°42'19"E	445.70'
C-3	301.56'	92.63'	N80°52'35"E	92.26'
C-4	301.56'	92.63'	N08°48'40"E	92.26'
FEE-371 FEE-372	301.56'	286.67'	S44°50'38"E	275.99'

VILLAGE OF TWIN LAKES

EXISTING C/L CTH EM PER
HIGHWAY COMMISSION PROJECT
APP. 161(25)
WEST LINE SW 1/4 15-1-19
S00°00'41"W 2646.32'
COR. TO COR.

EXISTING C/L CTH EM PER
BEL-AIR SUBDIVISION
S00°15'56"E

R/L=N00°25'08"W
365.66'

C.T.H "EM" / 360TH AVE

VILLAGE OF TWIN LAKES

TOWN OF RANDALL

Y = 119352.773
X = 515103.441

BP: 220+00.00

90TH ST.

ROAD NAME	BASIS OF EXISTING R/W	WIDTH	YEAR
CTH F	Twn Road Rec. Vol 1 Pge 10	66	1842
CTH EM	Twn Road Rec. Vol 1 Pge 32-33	66	1843
CTH F/ CTH EM	Hwy Comm. Project No. APP 161(25) Doc. No. 158086	VARIES	1925
CTH F/ CTH EM	Survey RA-15-2 Recorded December 1940	66	1940
CTH EM	Doc. No. 278529	66	1945
CTH F/ CTH EM	BEL-AIR Subdivision	VARIES	1946
CTH EM	CSM 2619 Doc. No. 1551093	VARIES	2008
CTH F	Surveys	66	

DETAIL

EXISTING C/L CTH F
NORTH LINE NE 1/4 16-1-19
S89°40'46"W 2617.15'
COR. TO COR.

NORTH LINE SW 1/4 15-1-19
N89°40'34"E 2634.28'
COR. TO COR.

NW COR. SW 1/4 15-1-19
STA 226+68.26
110.54'

PT: 228+36.68

228+03.19
42.02'
FEE-370

91.10'

C-3

227+93.27
52.93'
FEE-371

208.70'

PI: 226+21.61

PI STA = 226+21.61	
Y = 119974.367	
X = 515098.895	
DELTA = 55°38'39"	
D = 11°48'49"	
T = 255.95'	
L = 471.02'	
R = 485.00'	
PC STA = 223+65.66	
PT STA = 228+36.68	

C-5
C/L PER DOC. 278529

208.70'

C-1
C/L PER HIGHWAY COMMISSION
PROJECT APP 161(25)
DOC. 158086

C-2
C/L PER BEL-AIR SUBDIVISION

LINE COURSE	BEARING	DISTANCE
FEE-370 FEE-371	S00°00'41"W	14.11'
FEE-372 FEE-373	S89°40'34"W	14.11'

FEE-373 225+01.27
19.49'

225+05.10
5.94'
FEE-372

C-4

91.10'

EXISTING C/L CTH EM PER
HIGHWAY COMMISSION PROJECT
APP. 161(25)
WEST LINE SW 1/4 15-1-19
S00°00'41"W 2646.32'
COR. TO COR.

PC: 223+65.66

REVISION DATE: 4/2/2019 (2) 5/31/2019 (NC) 7/29/2019 (NC) 9/23/2019 (NC) 9/29/2019 (NC)	DATE: 10/9/2018 GRID FACTOR: N/A	SCALE. FEET 0 50' 100'	HWY: CTH F COUNTY: KENOSHA	STATE R/W PROJECT NUMBER 3733-00-01 CONSTRUCTION PROJECT NUMBER 3733-00-71	PLAT SHEET 4.09 PS&E SHEET 74 E

TOWN OF RANDALL

LINE COURSE	BEARING	DISTANCE
TLE380-TLE381	N89°40'34"E	26.77'
TLE382-TLE383	S00°19'26"E	14.79'
TLE383-TLE384	S89°40'34"W	29.76'
TLE384-TLE380	N00°19'26"W	14.79'
TLE385-TLE386	S00°25'56"E	19.36'
TLE386-TLE387	N65°16'05"W	42.13'
TLE387-TLE388	N24°48'40"E	17.57'
TLE388-TLE385	S65°11'20"E	33.87'
TLE385-TLE390	S65°11'20"E	26.13'
TLE390-TLE391	S24°48'40"W	17.48'
TLE391-TLE386	N65°16'05"W	17.87'
TLE386-TLE385	N00°25'56"W	19.36'

CURVE No.	RADIUS	ARC LENGTH	CHORD BRG.	CHORD LENGTH
TLE381 TLE382 C-1	467.00' 500.00'	2.99' 219.34'	N89°51'34"E S77°45'23"E	2.99' 217.59'

PI STA = 57+23.00
Y = 120044.661
X = 516222.621
DELTA = 17°47'25"
D = 11°48'49"
T = 75.91'
L = 150.59'
R = 485.00'
PC STA = 56+47.10
PT STA = 57+97.69

QUARTER SEC. COR.
CONC. MON.
W/BRASS CAP
Y=120066.355
X=515099.890

QUARTER SEC. COR.
CONC. MON.
W/BRASS CAP
Y=120081.249
X=517734.123

UNPLATTED LAND

C.T.H "F" / 89th ST.

926.18'

C/L CTH F
NORTH LINE SW 1/4
N89°40'34"E 2634.28'
COR. TO COR.

MATCH LINE 55+00 SHEET 4.09

RL=S83°03'30"E 147.10'

EXISTING CTH F C-1

PC: 56+47.10

PI: 57+23.00

PT: 57+97.69

S00°25'56"E 104.95'

284.02'

S00°19'26"E 33.00'

SLOPE INTERCEPT

55+55.35 26.37' TLE381

55+28.79 29.76' TLE380

55+30.67 44.43' TLE384

55+58.32 26.00' TLE382

55+60.19 40.67' TLE383

58+00 32.43' TLE388

58+00 50' TLE387

58+33.90 32.48' TLE385

58+42.13 50' TLE386

58+60 32.52' TLE390

58+60 50' TLE391

TLE SLOPES & GRADING

SW-NW 15-1-19

SE-NW 15-1-19

NW-SW 15-1-19

NE-SW 15-1-19

1/16 LINE

BEGIN RELOCATION ORDER
STA. 61+00
179.930' SOUTH OF AND 1466.256' EAST OF THE NORTHWEST CORNER OF THE SOUTHWEST 1/4 OF SECTION 15, T.1N., R.19E.
Y=119886.425
X=516566.146

EP: 61+00.00

CSM 699 PARCEL 2

EXISTING CL= S65°11'20"E 60

RL=S65°16'05"E 302.31'

MROWKA
26
DOC.NO. 1719855
UNPLATTED LAND

JAHNUS TRUST
DOC. NO. 1639954
UNPLATTED LAND
27

28
KREMER
DOC. NO. 1751377
UNPLATTED LAND

12' ACCESS EASEMET
DOC.NO. 310239

CSM 652 PARCEL 1

OUTLOT 1

LOT 1

LOT 2

FAIRWAY WOODS

FAIRWAY DR.

WELL

TOWN OF RANDALL

ROAD NAME	BASIS OF EXISTING R/W	WIDTH	YEAR
CTH F	Twn Road Rec. Vol 1 Pge 10	66	1842
CTH F	CSM 652	66	1994
CTH F	FAIRWAY WOODS	VARIES	2007
CTH F	CSM 699	VARIES	1998
CTH F	Surveys	66	
CTH F/ CTH EM	BEL-AIR Subdivision	VARIES	1946

REVISION DATE: 4/2/2019 (2)
5/31/2019 (3)
7/29/2019 (NC)
9/23/2019 (NC)
9/29/2019 (NC)

DATE: 10/9/2018

GRID FACTOR: N/A

SCALE. FEET
0 50' 100'

HWY: CTH F

COUNTY: KENOSHA

STATE R/W PROJECT NUMBER 3733-00-01

CONSTRUCTION PROJECT NUMBER 3733-00-71

PLAT SHEET 4.10

PS&E SHEET

E

FILE NAME : RWSHEET 4.10.DWG

PLOT DATE : X-X-2018 10:45AM

PLOT BY : terratec

PLOT NAME :

CONST. 3733-00-71 CTH F R/W 3733-00-01-4.10

BEGIN PROJECT
STA 10+00.00
Y=121,439.140
X=511,962.667

SEPTIC SYSTEM
STA 10+49.80, 40.2' LT
TO STA 10+89.81, 40.5' LT

CULVERT PIPE
CORRUGATED STEEL, 15-INCH
WITH ENDWALLS

P.E.

TLE

SLOPE INTERCEPT

CULVERT PIPE
CORRUGATED STEEL, 12-INCH
WITH ENDWALLS

P.E.

STATION: 16+64.94
50.0' LT.

SLOPE INTERCEPT

STATION: 18+14.92
38.0' LT.

STATION: 18+13.60
17.0' LT.

PAUL F. & JENNIFER L. MAKI

PC: 19+80.38

CULVERT PIPE CORRUGATED
STEEL, 15-INCH
WITH ENDWALLS

P.E.

STATION: 12+10.79
17.0' RT.

STATION: 12+09.12
38.0' RT.

SLOPE INTERCEPT

STATION: 13+60.79
29.0' RT.

STATION: 13+59.12
50.0' RT.

15+11.91 CTH F =
159+00.00 CTH O

BRENT JAY
SCHWARZ

SLOPE INTERCEPT

CTH F

CTH O

PROP. R/W

R/W

TLE

10+00

15+00

20+00

160+00

N

5

5

VCL = 100.00

K = 38.06

VCL = 200.00

K = 67.09

EXISTING PROFILE

PROPOSED PROFILE

PROPOSED LT DITCH PROFILE

PROPOSED RT DITCH PROFILE

PROPOSED RT DITCH PROFILE

-0.63%

2.00%

-2.00%

STA 10+00.00
EL 903.43

STA 15+11.91
EL 903.16

VPC STA 13+50.00
VPC EL 901.24

VPI STA 14+00.00
VPI EL 900.92

VPT STA 14+50.00
VPT EL 901.92

VPC STA 15+50.00
VPC EL 902.40

VPI STA 16+50.00
VPI EL 900.40

VPT STA 17+50.00
VPT EL 895.42

897.46

880.00

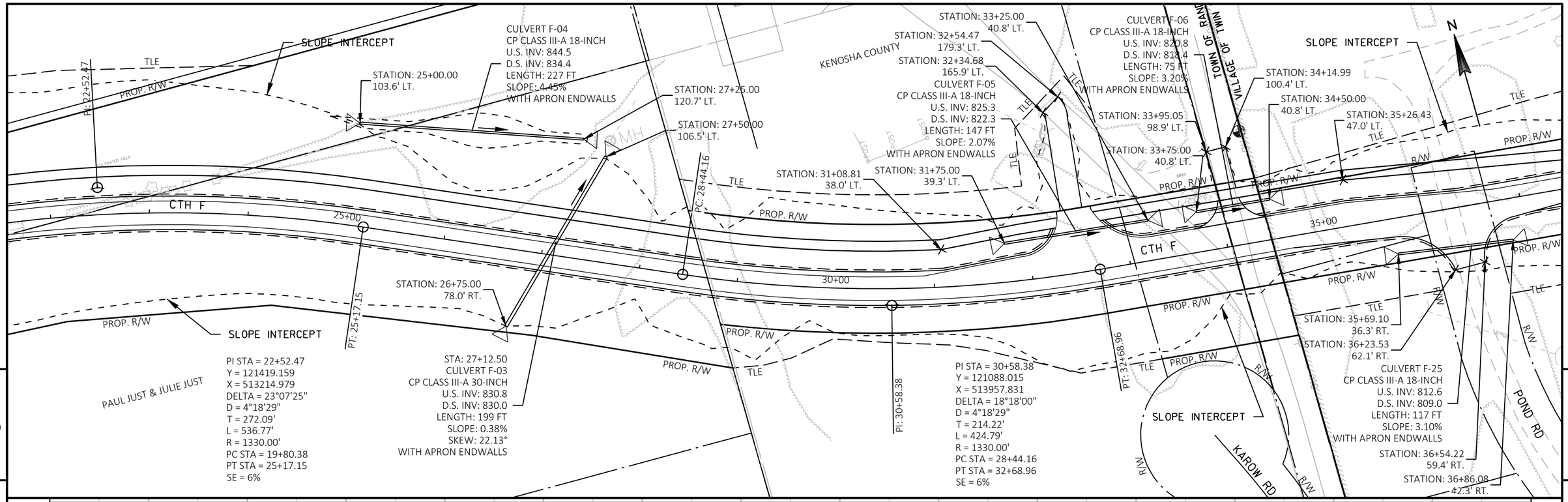
940 930 920 910 900 890 880 870 860 850 840

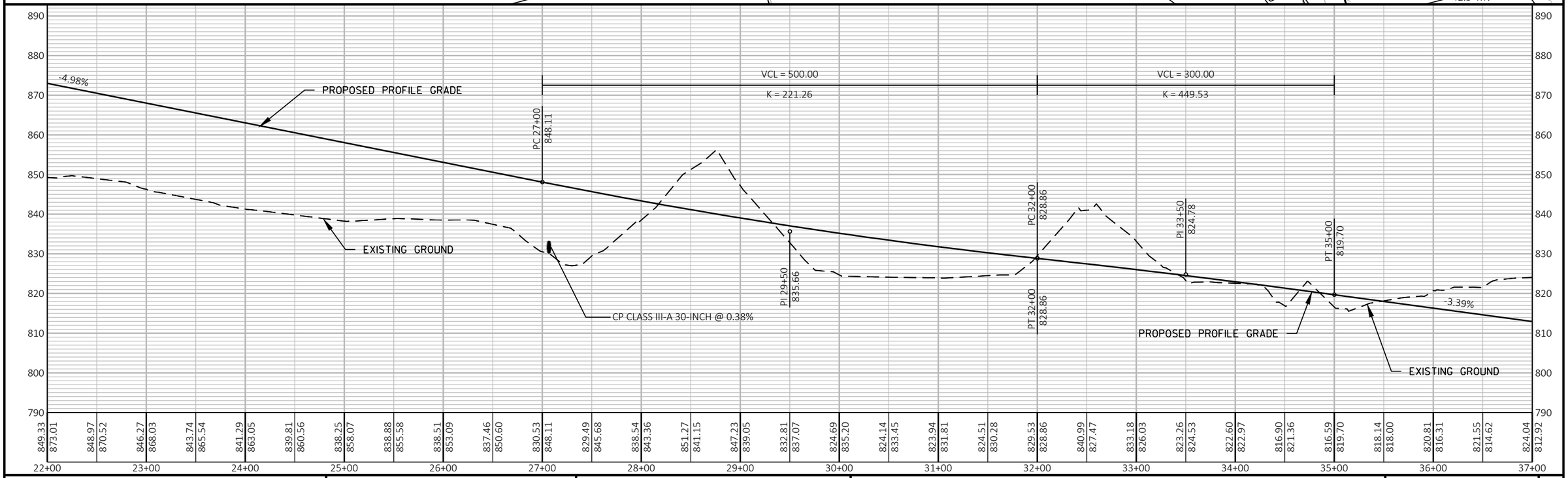
904.07 904.05 904.02 903.63 903.00 903.50 903.43 903.43 903.47 903.12 903.53 902.80 903.78 902.49 904.02 902.18 904.03 901.86 903.79 901.55 903.47 901.24 903.09 901.25 902.56 901.92 901.83 902.92 901.09 902.40 901.40 901.21 901.98 899.65 900.96 897.72 895.97 895.42 887.85 892.93 878.52 890.44 874.34 887.95 865.79 885.46 855.92 882.97 852.85 880.48 850.42 877.99 849.40 875.50 849.33 873.01

7+00 8+00 9+00 10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00

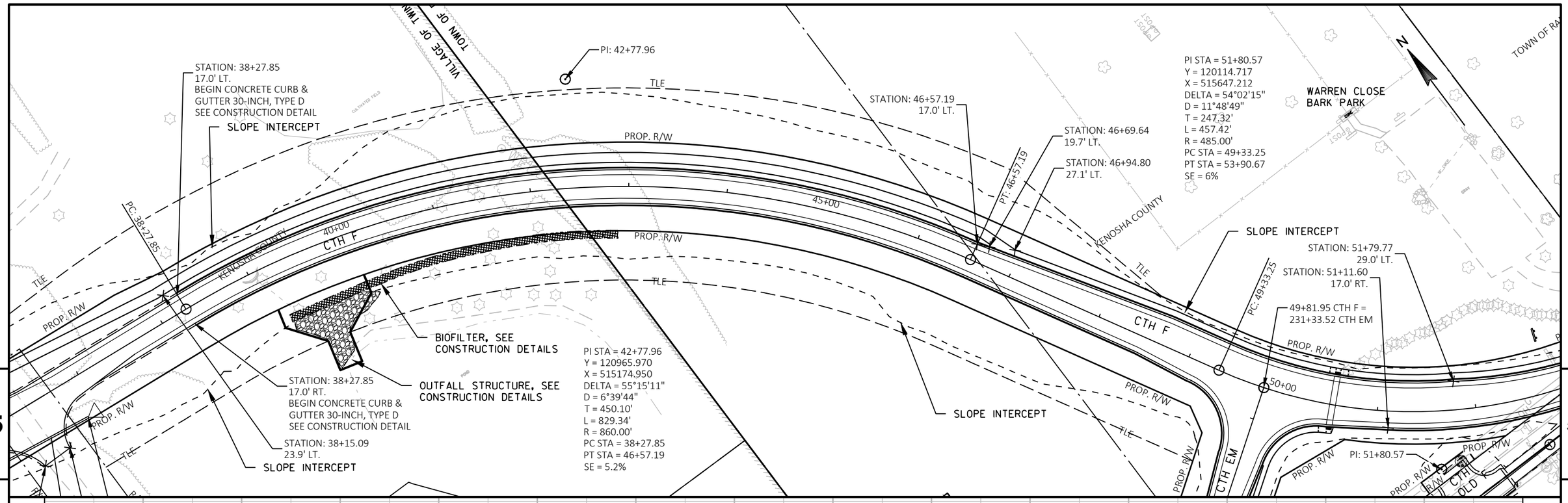
PROJECT NO:3733-00-71	HWY: CTH F	COUNTY:KENOSHA	PLAN AND PROFILE: CTH F	SHEET E

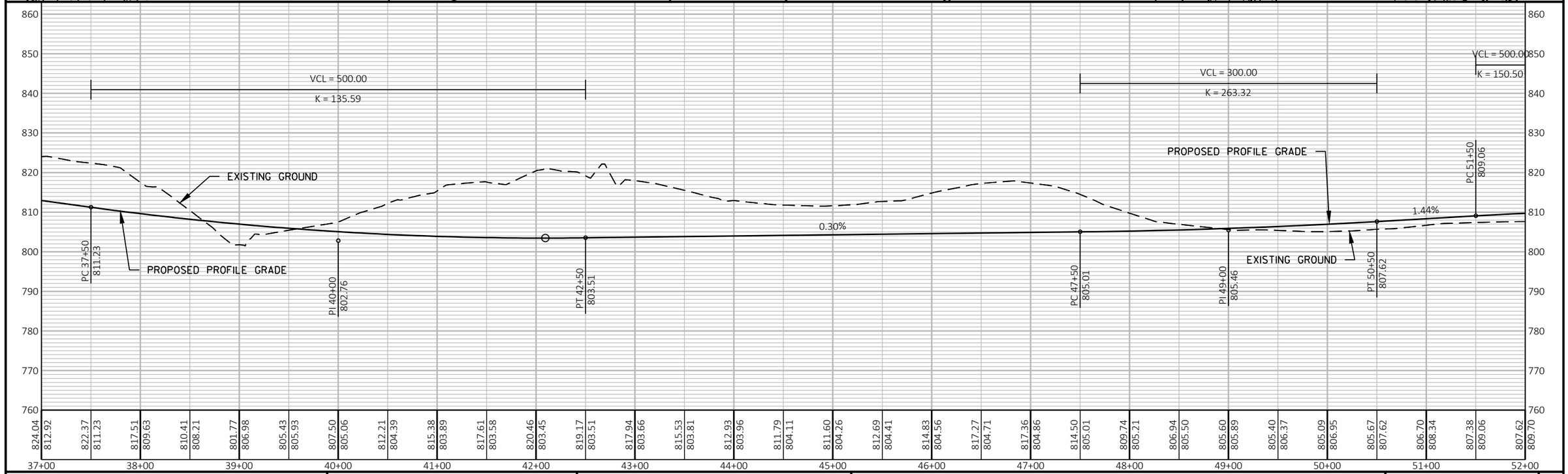
FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\050101_PP ALT5.DWG
LAYOUT NAME - 050101 ALT5
PLOT DATE : 11/1/2019 4:25 PM PLOT BY : GRUNWALD, BEN PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44





PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	PLAN AND PROFILE: CTH F	SHEET 77 E





PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	PLAN AND PROFILE: CTH F	SHEET 78	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\050101_PP ALT5.DWG
LAYOUT NAME - 050103 ALT5

PLOT DATE : 11/1/2019 4:25 PM PLOT BY : GRUNWALD, BEN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

REMOVE SIGN AT STA 52+91, 40' LT.
RELOCATE SIGN TO STA 52+78, 60' LT
VERIFY PLACEMENT WITH KENOSHA COUNTY PARKS DIRECTOR,
CONTACT MATT COLLINS (262) 857-1850

N: 51+79.77
29.0' LT
STATION 51+11.60
F = 17.0' RT.
EM

KASKIN PARK

C.E.

PC: 56+47.10

PI: 57+23.00

PT: 57+97.69

SLOPE INTERCEPT

STATION: 59+00.00
17.0' LT.
BEGIN CONCRETE CURB &
GUTTER 30-INCH, TYPE D
SEE CONSTRUCTION DETAIL

SLOPE INTERCEPT

R/W

PROP. R/W

TLE

55+00

60+00

CTH F

65+00

EP: 65+96

TOWN OF RANDALL
VILLAGE OF TWIN LAKES

P.E.

PT: 53+90.67

SLOPE INTERCEPT

PI STA = 57+23.00
Y = 120044.661
X = 516222.621
DELTA = 17°47'25"
D = 11°48'49"
T = 75.91'
L = 150.59'
R = 485.00'
PC STA = 56+47.10
PT STA = 57+97.69
SE = 6%

END PROJECT
STA 59+00.00

STATION: 59+00.00
17.0' RT.
BEGIN CONCRETE CURB &
GUTTER 30-INCH, TYPE D
SEE CONSTRUCTION DETAIL

REMOVE 24" CULVERT PIPE
FROM DRIVEWAY TO PROJECT
LIMITS. SEAL CULVERT PIPE
END AT PROJECT LIMITS.
LEAVE CULVERT PIPE END IN
DOWNSTREAM MANHOLE OPEN.

CTH OLD F

5

5

VCL = 500.00
K = 150.50

PC 51+50
809.06

PI 54+00
812.66

PT 56+50
807.95

STA 59+00.00
EL 803.24

EXISTING GROUND

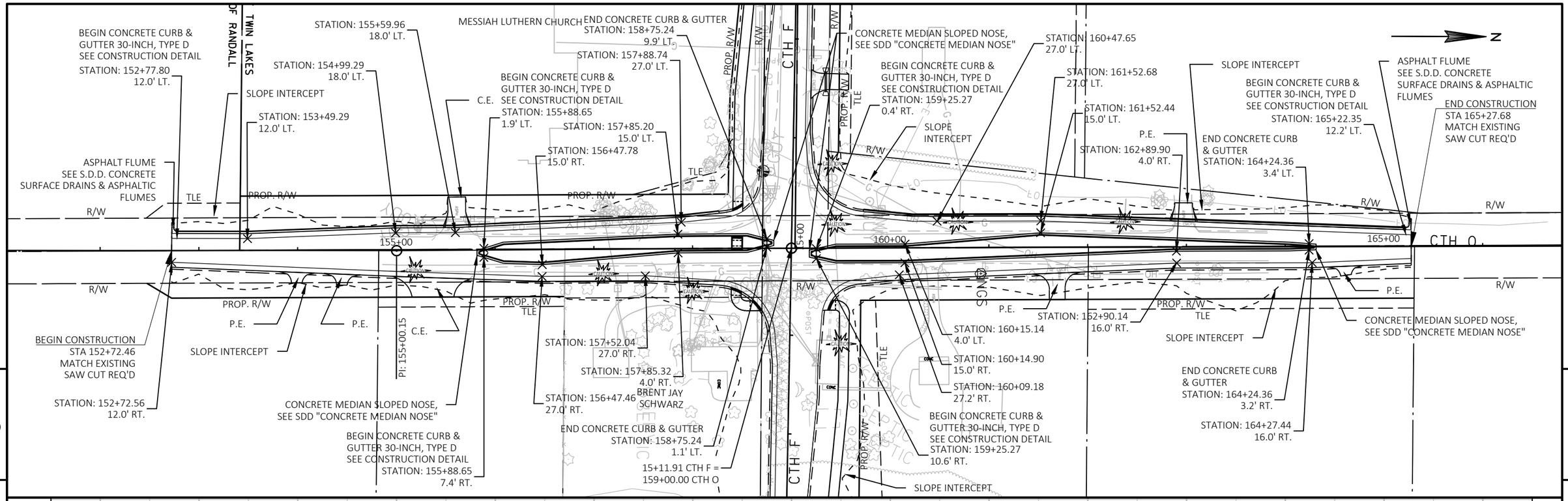
PROPOSED PROFILE GRADE

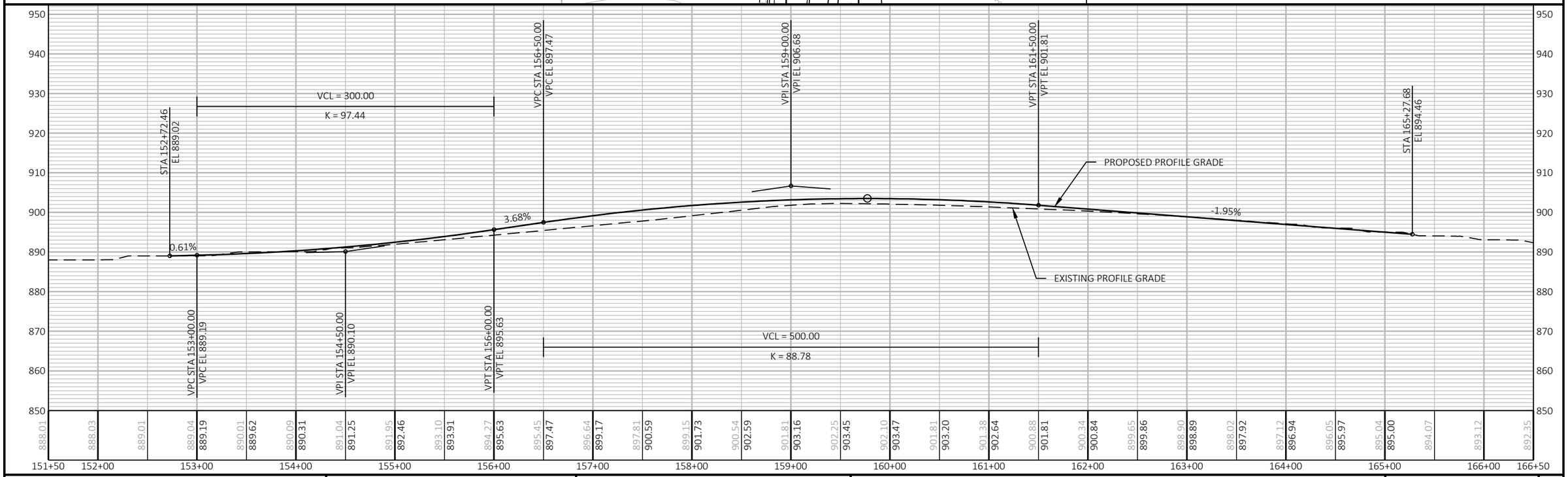
-1.88%

EXISTING PROFILE GRADE

51+25	52+00	53+00	54+00	55+00	56+00	57+00	58+00	59+00	60+00	61+00	62+00	63+00	64+00	65+00	66+00	66+50
807.20	807.62	808.31	810.39	812.72	812.29	811.46	810.40	809.24	808.13	807.35	806.81	806.09	805.12	804.30	803.43	802.65	801.87	801.20	800.57	800.30	800.07	799.86	799.74	799.66	799.58	799.64	799.67	799.71
808.70	809.70	810.17	810.47	810.61	810.58	810.39	810.03	809.50	808.81	807.95	807.01	806.07	805.12	804.18	803.24													
809.06																												

PROJECT NO: 3733-00-71 | HWY: CTH F | COUNTY: KENOSHA | PLAN AND PROFILE: CTH F | SHEET 79 E





PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	PLAN AND PROFILE: CTH O	SHEET 80	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\050201_PP ALT5.DWG
LAYOUT NAME - 050201 ALT5

PLOT DATE : 11/1/2019 4:26 PM PLOT BY : GRUNWALD, BEN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

STATION: 224+57.82
61.0' LT.

STATION: 224+41.02
83.7' LT.

OBLITERATE OLD ROADWAY AND RESTORE
DISTURBED AREA WITH TOPSOIL, SEED AND E-MAT

SLOPE INTERCEPT

BEGIN CONCRETE CURB &
GUTTER 30-INCH, TYPE D

PC: 223+65.66

BEGIN CONSTRUCTION
STA 222+50.00
MATCH EXISTING
SAW CUT REQ'D

F.E.

CTH EM

VILLAGE OF TWIN LAKES

TOWN OF RANDALL

P.E.

SLOPE INTERCEPT

BEGIN CONCRETE CURB &
GUTTER 30-INCH, TYPE D

PI: 226+21.61

PI STA = 226+21.61
Y = 119974.367
X = 515098.895
DELTA = 55°38'39"
D = 11°48'49"
T = 255.95'
L = 471.02'
R = 485.00'
PC STA = 223+65.66
PT STA = 228+36.68
SE = 6%

225+80.00 CTH EM
END DRIVEWAY ENTRANCE CURB
BEGIN CONCRETE CURB & GUTTER
30-INCH, TYPE D

224+50.00 CTH EM
END CONCRETE CURB & GUTTER
30-INCH, TYPE D
BEGIN DRIVEWAY ENTRANCE CURB

227+18.58 CTH EM =
352+64.62 CTH OLD F

OLD CTH F

WIS. SOUTHERN GAS CO.

PT: 228+36.68

SLOPE INTERCEPT

STATION: 229+97.81
17.0' LT.

230+00.00

CTH EM

231+33.52 CTH EM =
49+81.95 CTH F

CTH F

PC: 49+33.25

STATION: 229+98.84
17.0' RT.

SLOPE INTERCEPT

355+00.00

OLD CTH F

357+99.51

TOWN OF

KENOSHA COUNTY

N

5

5

VPC STA 222+75.00
VPC EL 834.30

VPI STA 223+75.00
VPI EL 835.27

VPT STA 224+75.00
VPT EL 832.02

VPC STA 226+50.00
VPC EL 826.33

VPI STA 227+50.00
VPI EL 823.08

VPT STA 228+50.00
VPT EL 818.92

STA 222+50.00
EL 834.05

0.98%

-3.25%

PROPOSED PROFILE GRADE

STA 231+12.52
EL 807.99

STA 231+33.52
EL 806.73

-4.16%

6.00%

VCL = 200.00
K = 47.28

VCL = 200.00
K = 219.93

EXISTING PROFILE GRADE

880 870 860 850 840 830 820 810 800 790 780

831.52 831.73 832.21 832.67 833.25 834.05 834.05 834.66 834.47 834.75 834.44 834.14 833.87 832.93 832.77 831.23 831.21 829.60 829.58 828.38 827.96 827.26 826.33 825.32 824.65 824.55 822.85 818.62 820.94 814.10 818.92 812.55 816.83 810.54 814.75 808.72 812.67 807.50 810.59 805.96 808.51

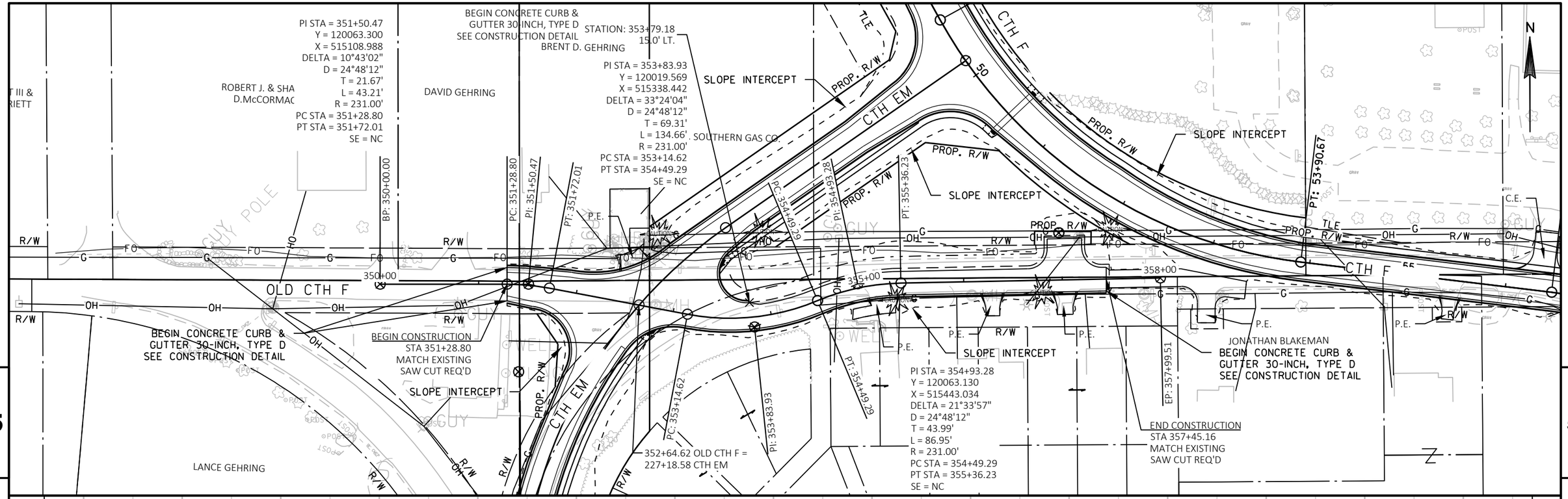
220+00 221+00 222+00 223+00 224+00 225+00 226+00 227+00 228+00 229+00 230+00 231+00 232+00 233+00 234+00 235+00

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	PLAN AND PROFILE: CTH EM	SHEET 81	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\050301_PP ALT5.DWG
LAYOUT NAME - 050301 ALT5

PLOT DATE : 11/1/2019 4:27 PM PLOT BY : GRUNWALD, BEN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

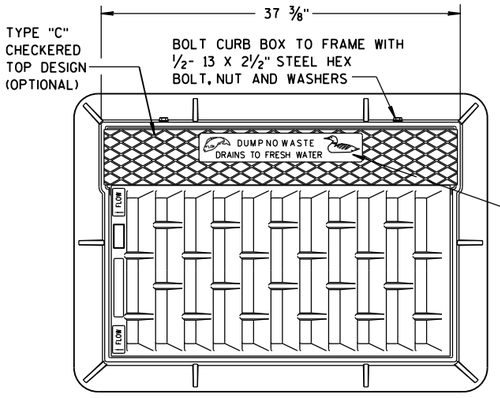


PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	PLAN AND PROFILE: OLD CTH F	SHEET 82	E

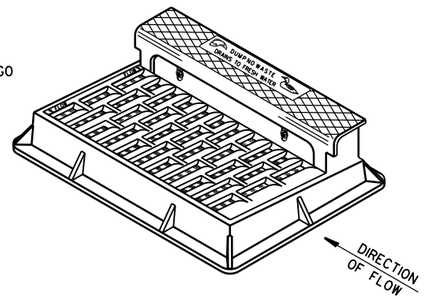
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-02	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D02-06	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D18-02	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
08D19-02	DRIVEWAY AND SIDEWALK RAMPS TYPE Z
08D20-01	DRIVEWAYS WITH CURB & GUTTER RETURNS
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F06-04	REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-13B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
11B02-02	CONCRETE MEDIAN NOSE
15A01-13A	MARKER POST FOR RIGHT-OF-WAY
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-07A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-07B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-07C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-14B	PAVEMENT MARKING WORDS
15C07-14C	PAVEMENT MARKING ARROWS
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C08-19B	PAVEMENT MARKING (TURN LANES)
15C08-19C	PAVEMENT MARKING (TURN LANES)
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-04	MEDIAN ISLAND MARKING
15C26-04	END-OF-ROADWAY SIGNING
15C33-03	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-03B	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15C35-03C	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D29-05	TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

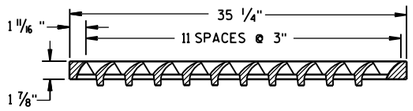
6

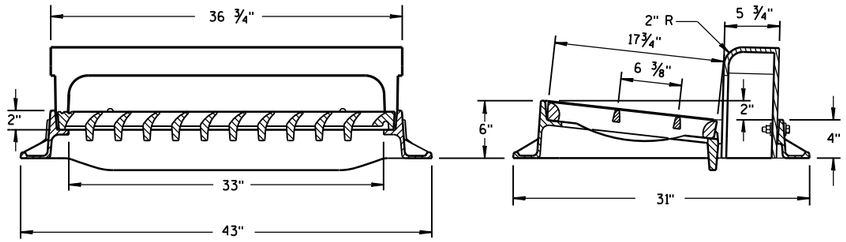


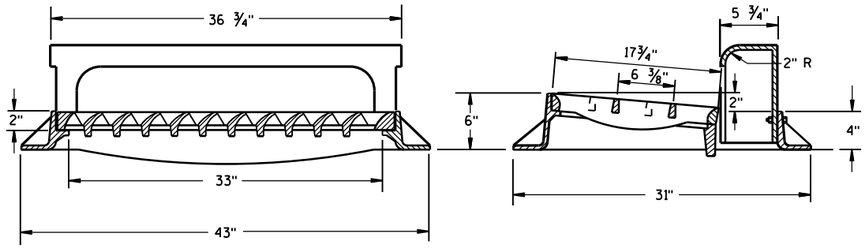
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

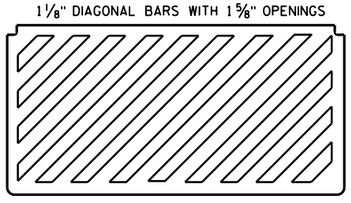






TYPE "H"

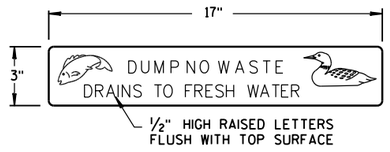
NOTE: EITHER CASTING IS ACCEPTABLE



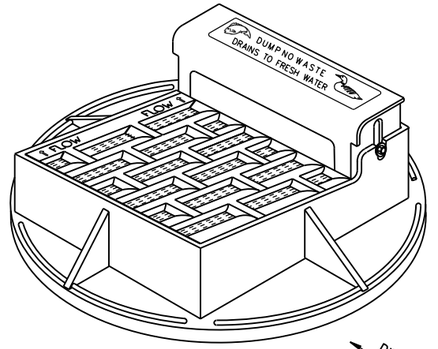
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

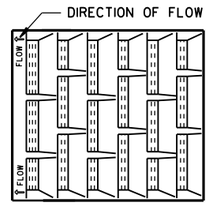
NOTE:
GRATE IS REVERSIBLE.

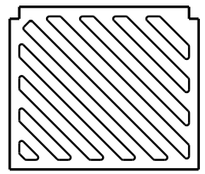
GENERAL NOTES

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.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

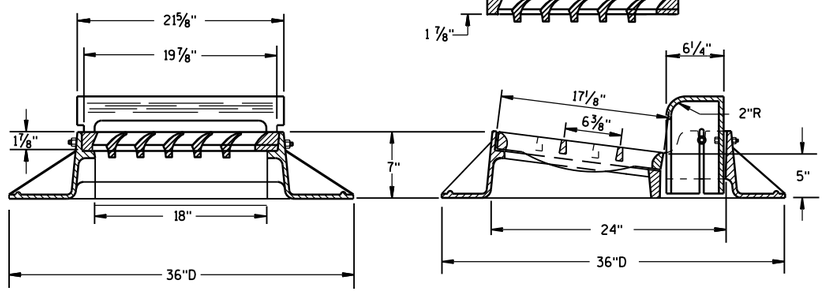




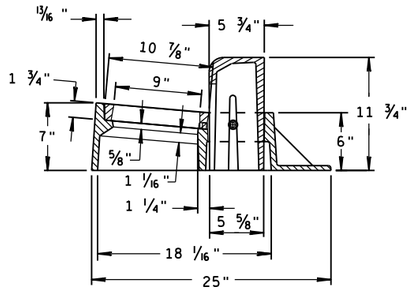
SPECIAL GRATE FOR TYPE "A" COVER

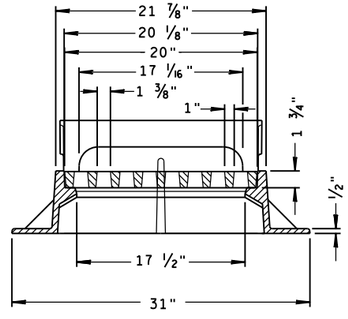
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)

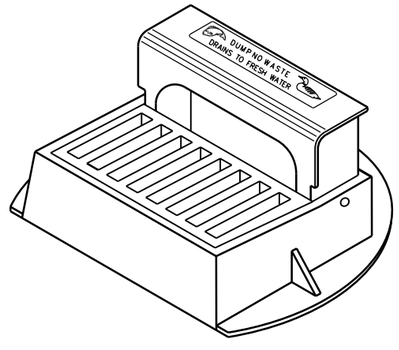


TYPE "A"





TYPE "Z"



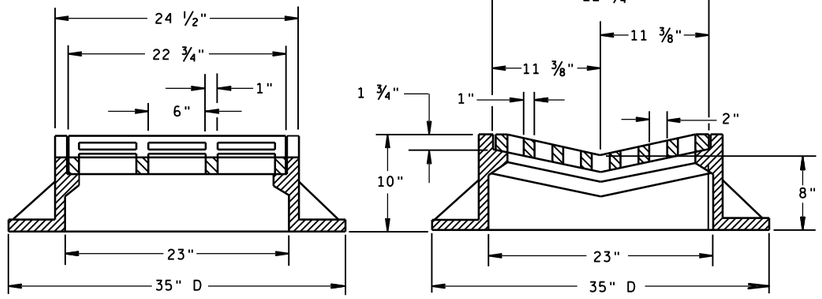
INLET COVERS
TYPE A, H, A-S, H-S & Z

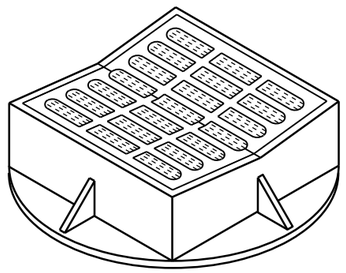
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

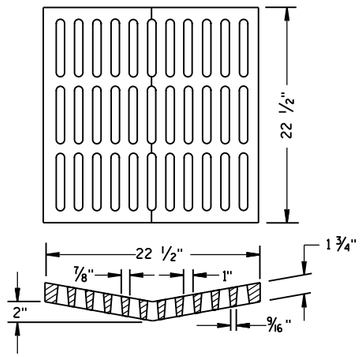
6

S.D.D. 8 A 5-19a



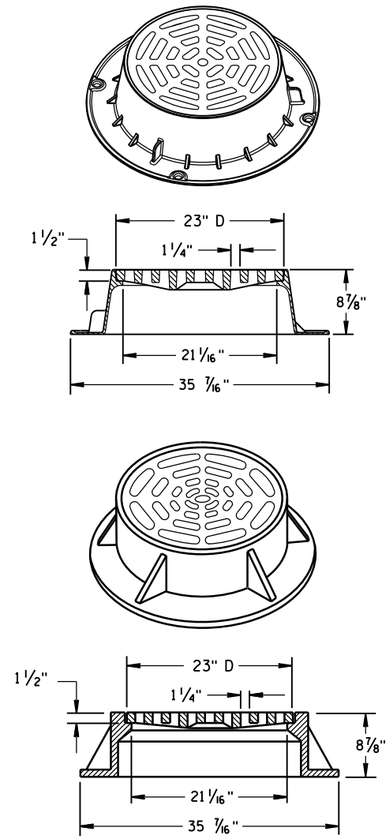


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

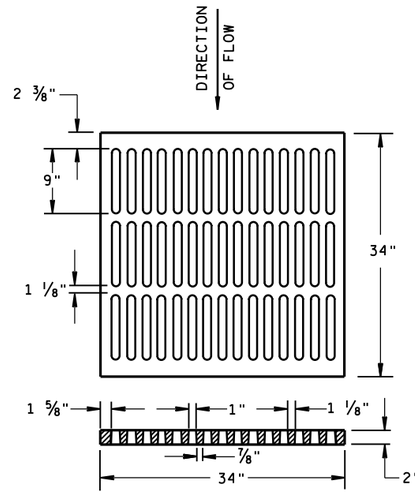
NOTE: EITHER CASTING IS ACCEPTABLE

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.

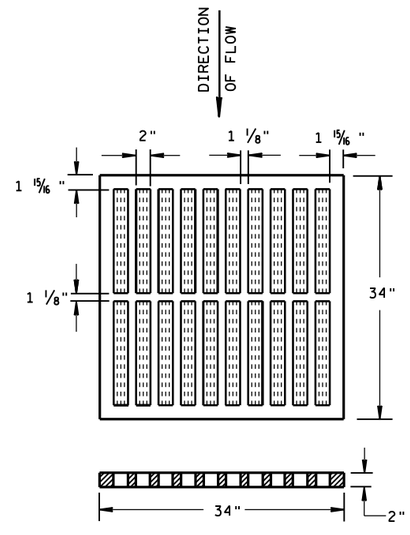
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



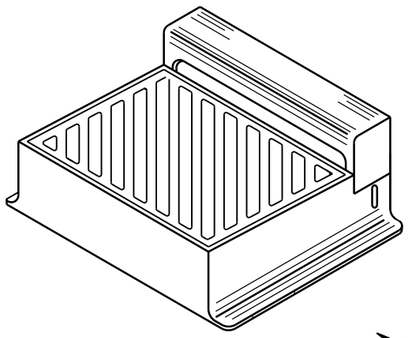
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

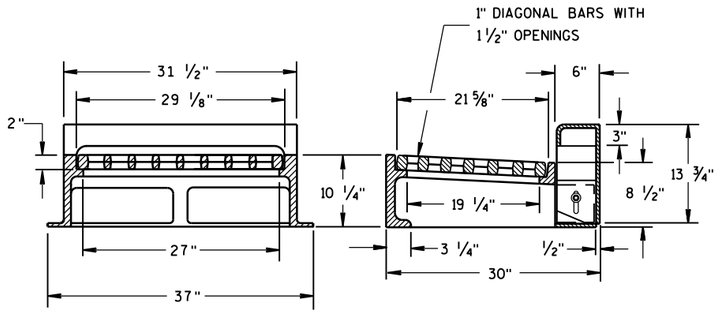


TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

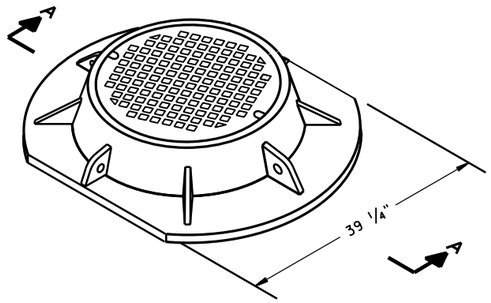
INLET COVERS
TYPE B, B-A, C,
MS, MS-A, & WM

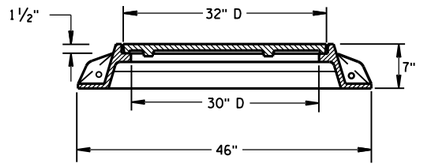
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

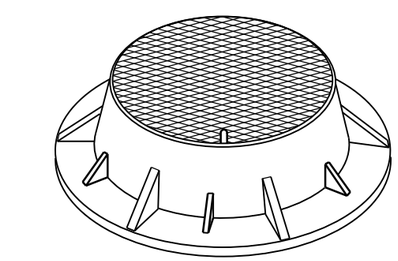
6

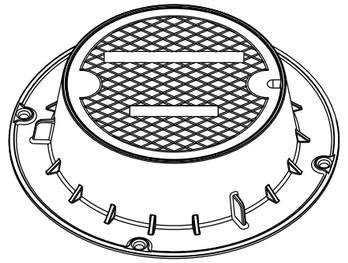
S.D.D. 8 A 5-19b

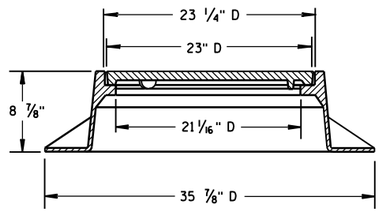


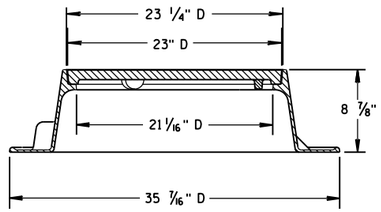


SECTION A-A
TYPE "K"









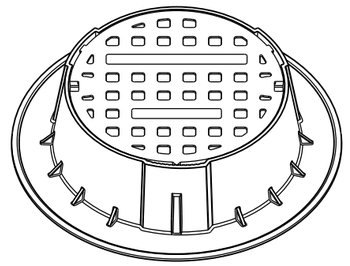
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

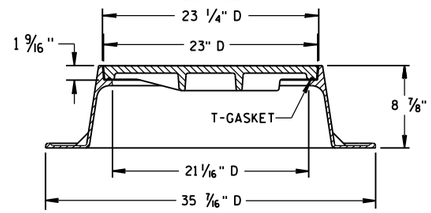
GENERAL NOTES

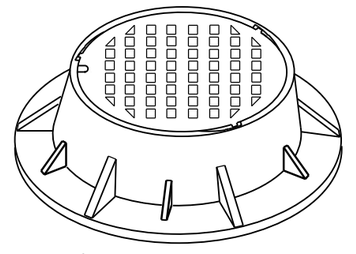
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

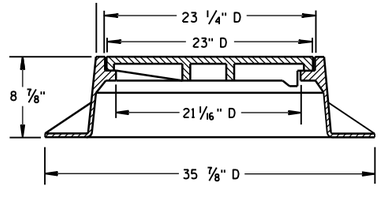
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

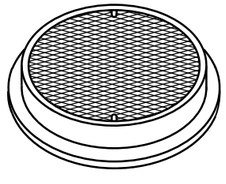


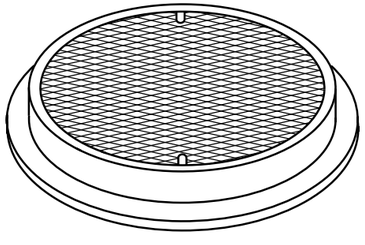


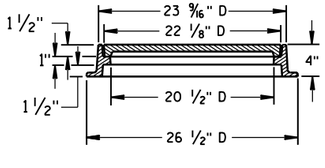




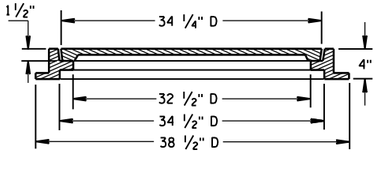
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



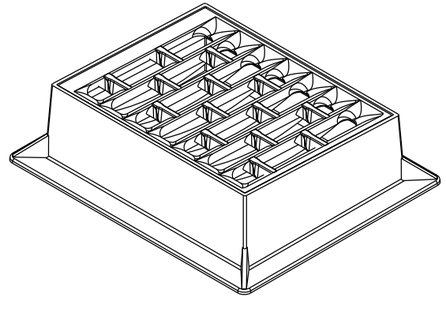


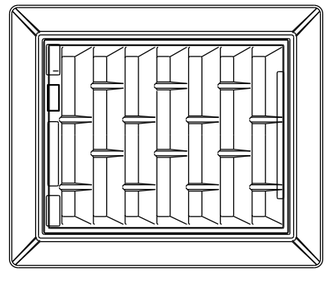


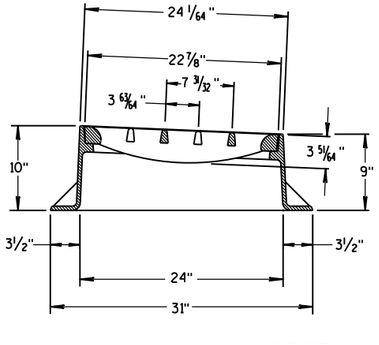
TYPE "L"

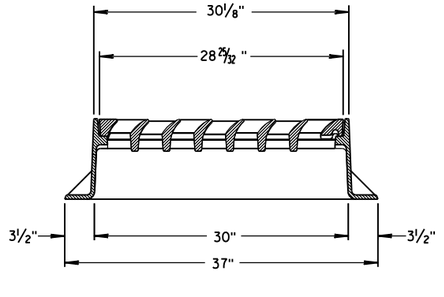


TYPE "M"









INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

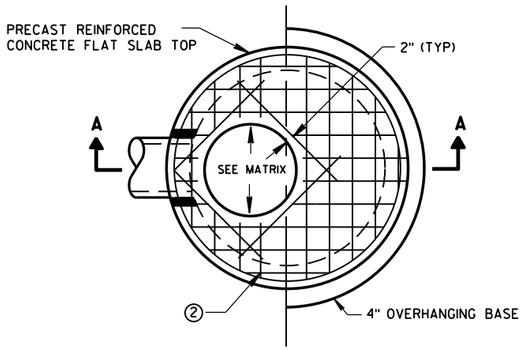
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

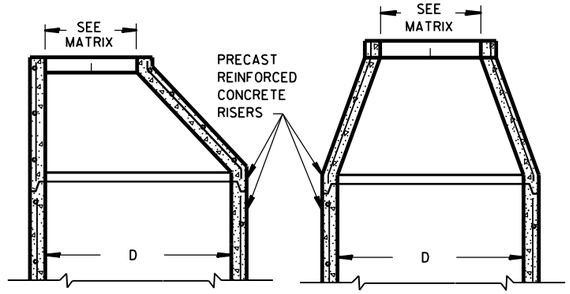
S.D.D. 8 A 5-19d

6

S.D.D. 8 A 5-19d

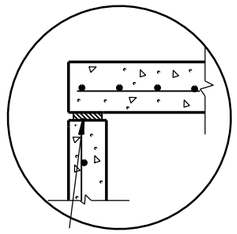


PLAN VIEW CIRCULAR OPENING

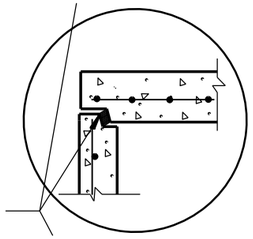


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

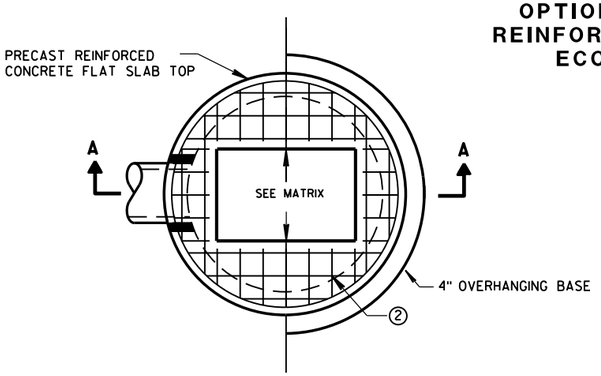
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



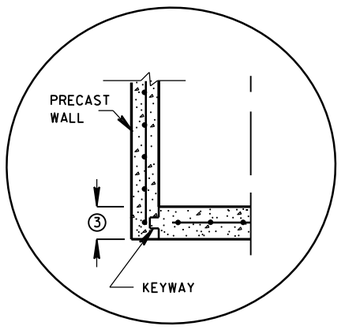
TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT

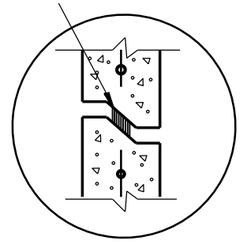


PLAN VIEW RECTANGULAR OPENING



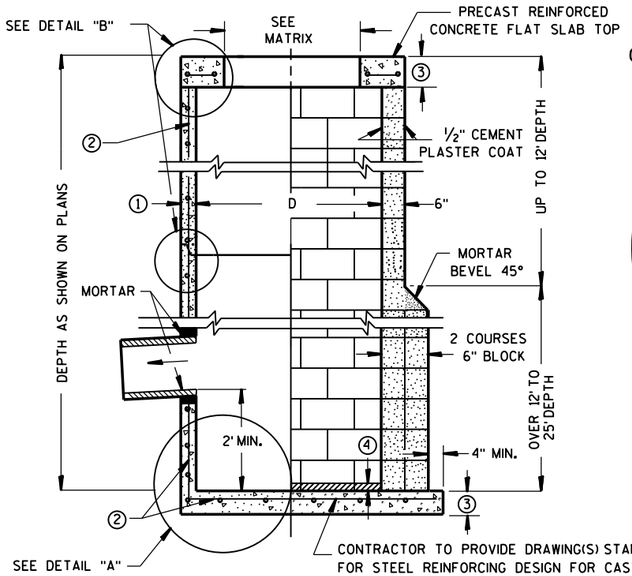
PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



RISER WITH TONGUE AND GROOVE JOINT

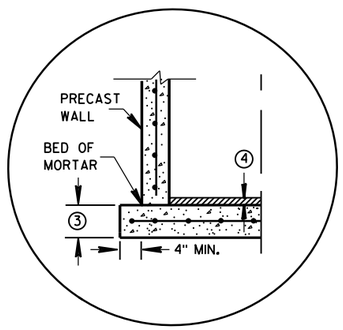
DETAIL "B"



SECTION A-A

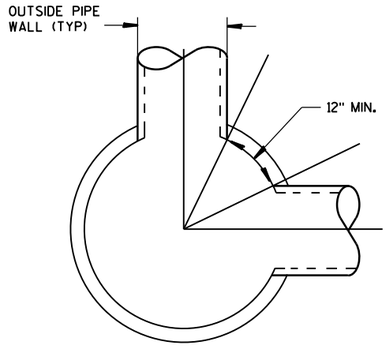
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

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.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

④ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT)											
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT-6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

PIPE MATRIX

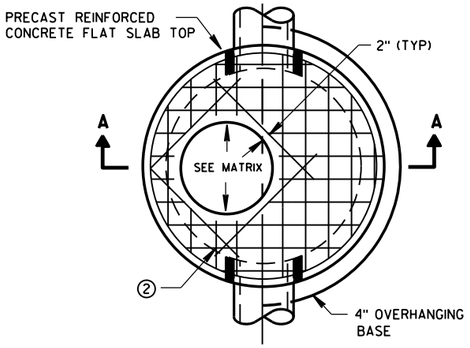
CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

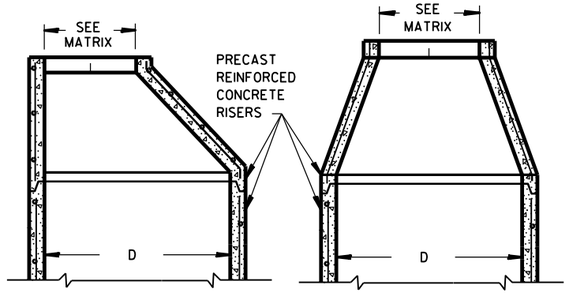
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

S.D.D. 8 A 8-2

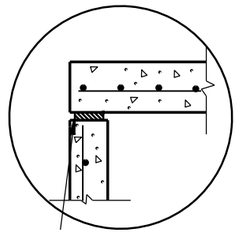


PLAN VIEW CIRCULAR OPENING

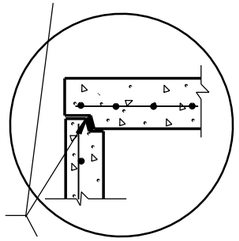


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

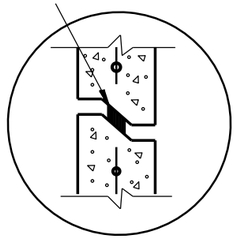


TOP WITH PLAIN END JOINT



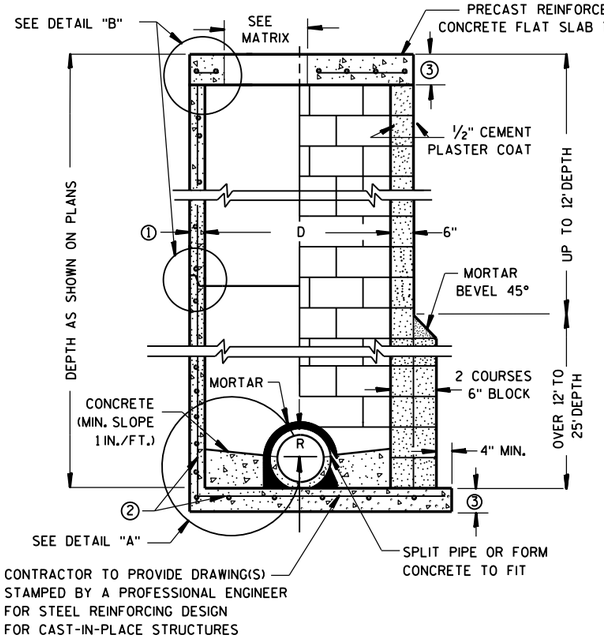
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



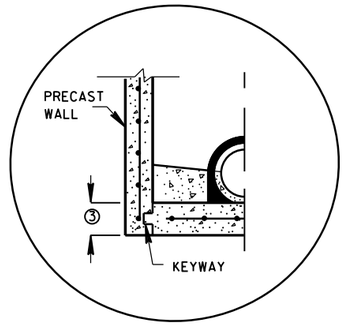
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

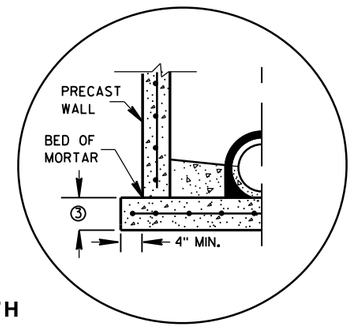


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

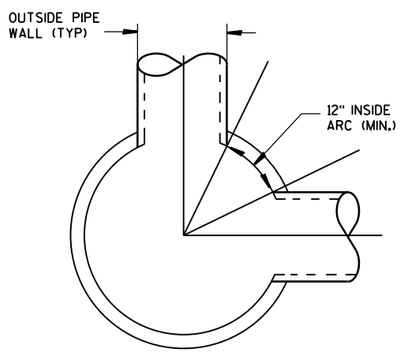


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

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.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

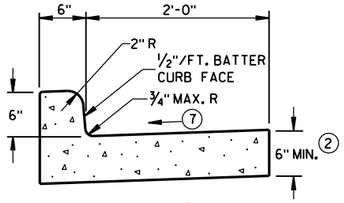
APPROVED

Sept., 2016
DATE

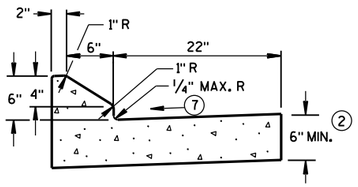
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

FHWA

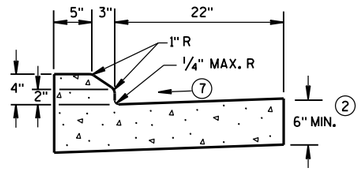
6
S.D.D. 8 B 9-2



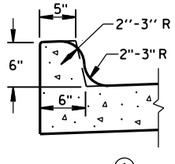
TYPES A (1) & D



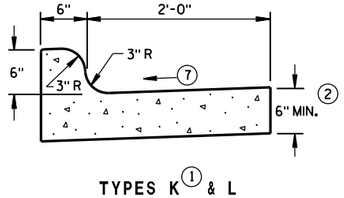
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

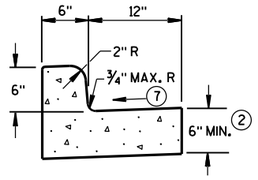


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



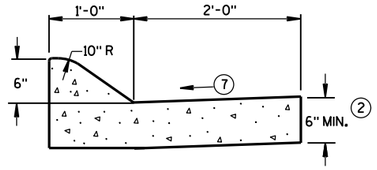
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

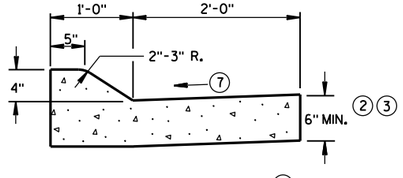


TYPES A (1) & D

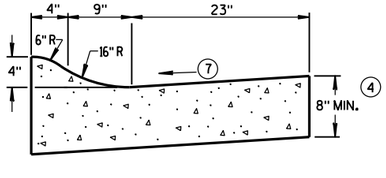
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

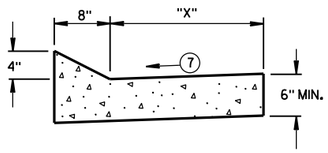


4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

CONCRETE CURB & GUTTER 36"



TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"

GENERAL NOTES

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

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

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

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

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

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

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

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

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

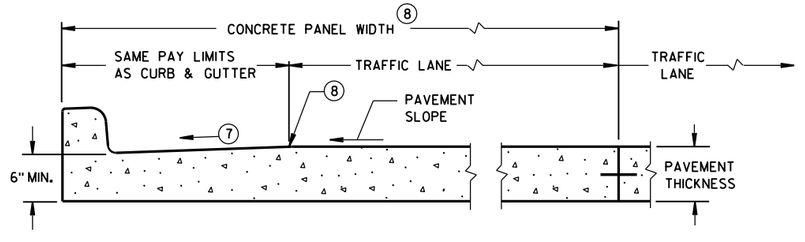
(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

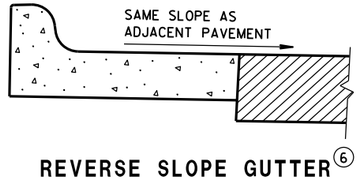
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB & GUTTER

* BIKE LANE IS NOT SHOWN.

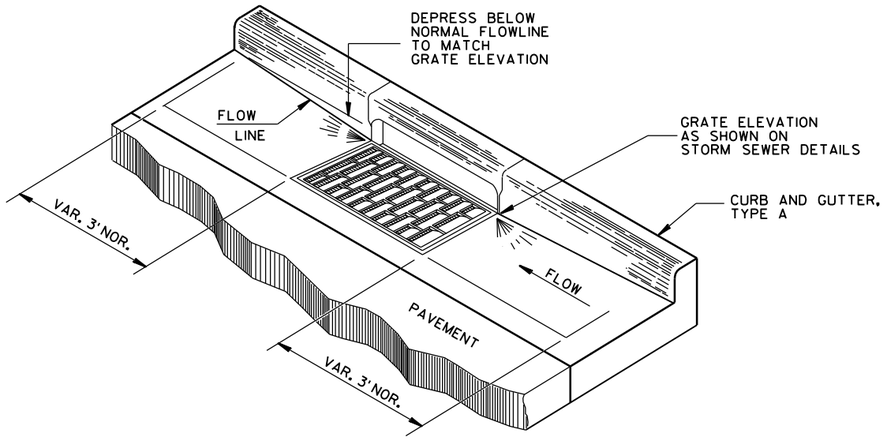


REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

CONCRETE CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 8 D 1-20a



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

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

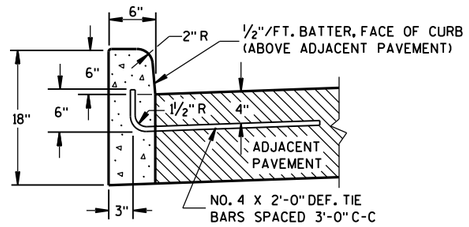
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

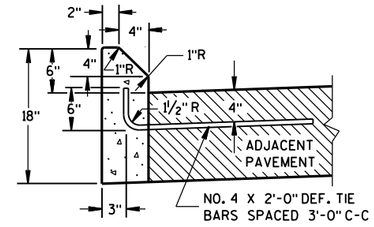
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

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

(9) REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

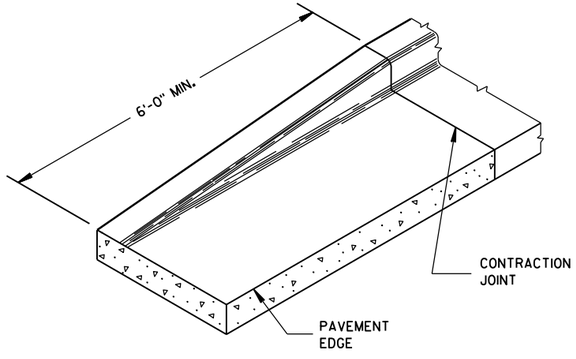


TYPES A(1) & D

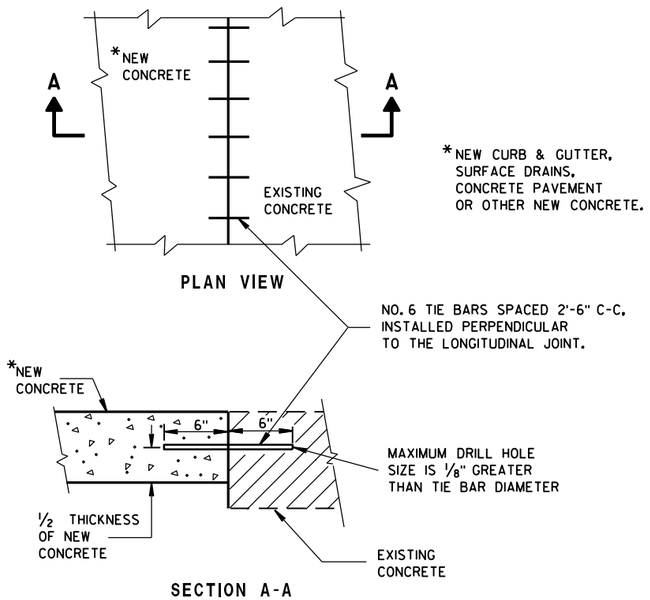


TYPES G(1) & J

CONCRETE CURB



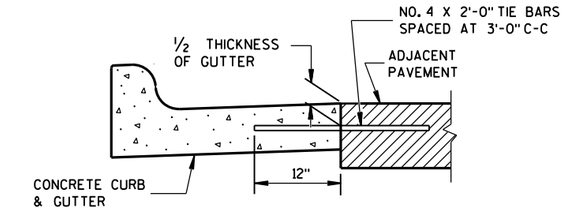
END SECTION CURB & GUTTER



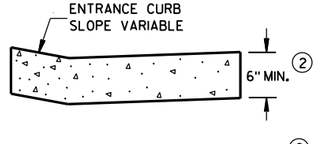
PLAN VIEW

SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

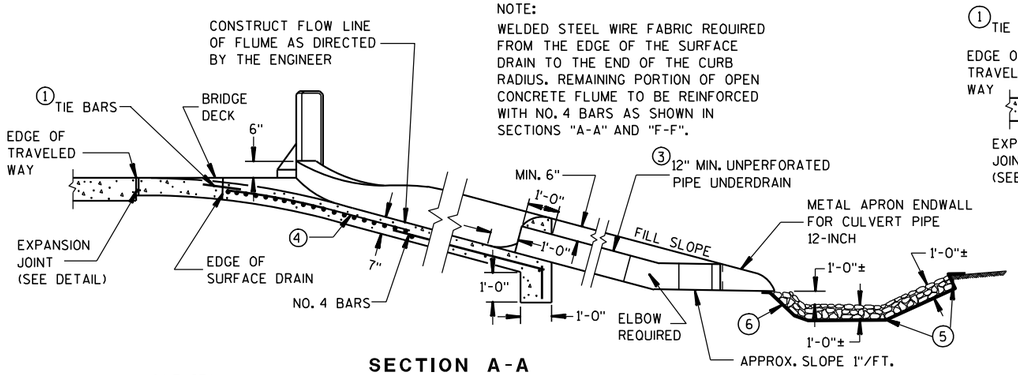
APPROVED
June, 2017 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS 90 ENT
UNIT SUPERVISOR
FHWA

6

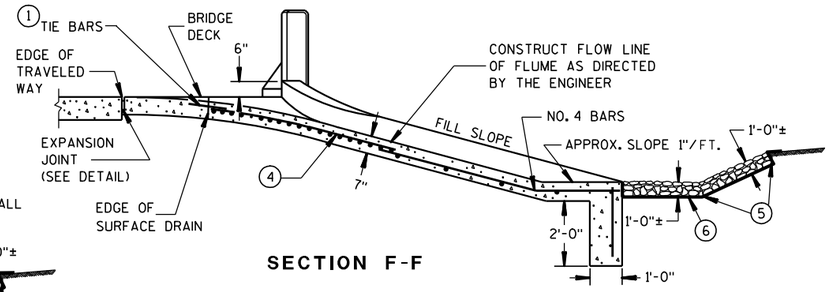
S.D.D. 8 D 1-20b

6

S.D.D. 8 D 1-20b



SECTION A-A



SECTION F-F

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.

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

(1) NO. 4 X 2'-0" TIE BARS SPACED AT 3'-0" CENTERS TO BE USED ONLY WHEN ADJACENT TO P.C. CONCRETE.

(2) NO. 4 X 2'-0" TIE BARS SPACED AT 12" CENTERS TO BE PLACED BY BRIDGE CONTRACTOR, OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PIPE UNDERDRAIN MAY BE ANY OF THE MATERIALS LISTED IN SECTION 612.2 OF THE STANDARD SPECIFICATIONS EXCEPT DRAIN TILE.

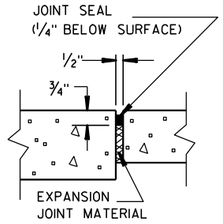
(4) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C-C.

(5) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

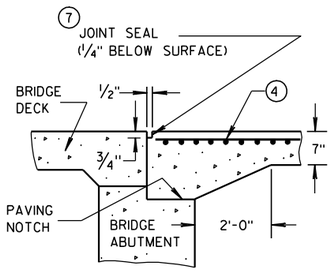
(6) GEOTEXTILE FABRIC, TYPE 'R"

(7) HOT POURED SEALANT UNLESS OTHERWISE SPECIFIED.

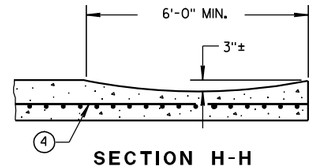
(8) THIS DIMENSION MAY VARY DEPENDING ON THE SPACING OF POSTS FOR THE STEEL PLATE BEAM GUARD. THE TYPICAL LOCATION FOR THE SURFACE DRAIN IS WHERE THE POST SPACING WIDENS TO 3'-1½".



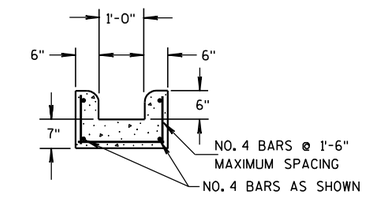
EXPANSION JOINT DETAIL



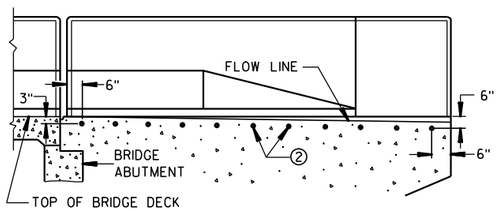
SECTION D-D



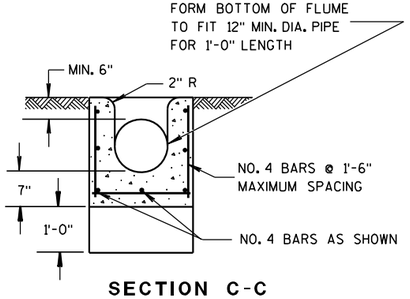
SECTION H-H



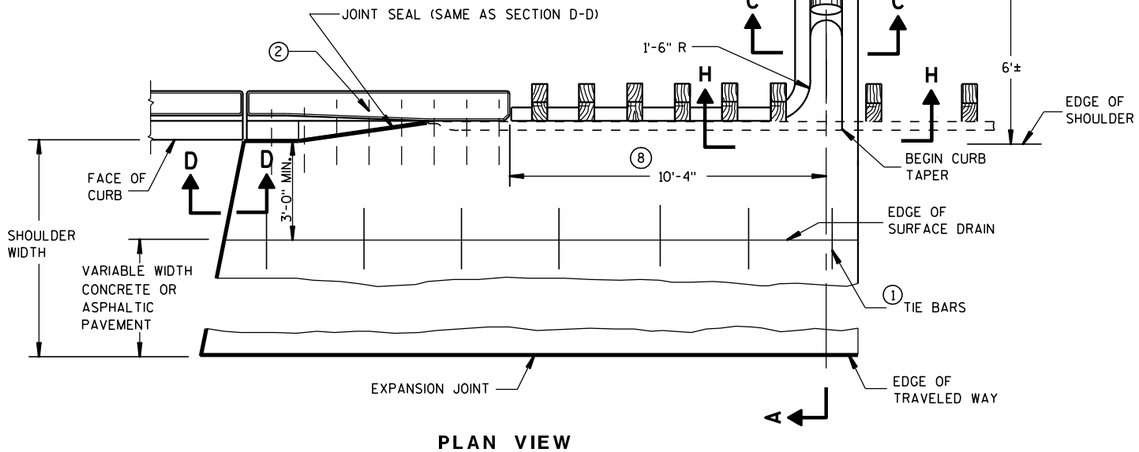
SECTION E-E



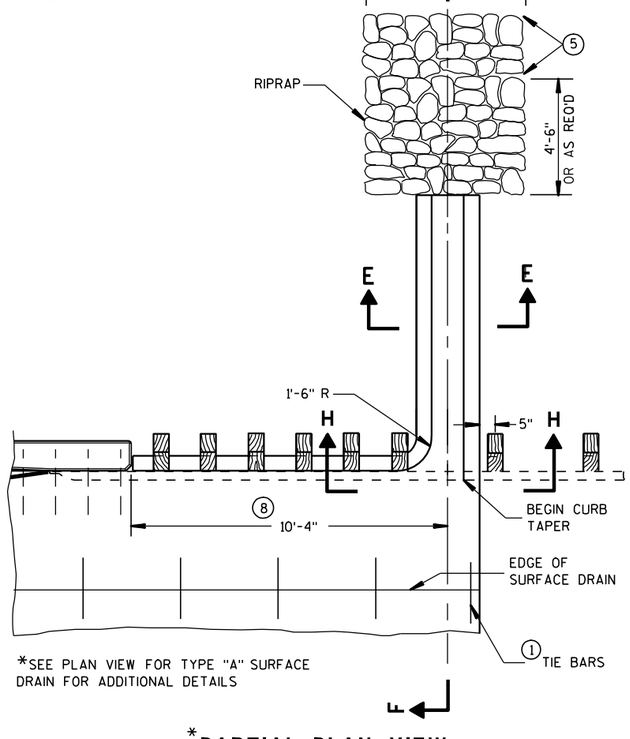
LOCATION OF TIE BARS IN WINGWALL



SECTION C-C



PLAN VIEW
SURFACE DRAIN WITH PIPE
TYPE "A"



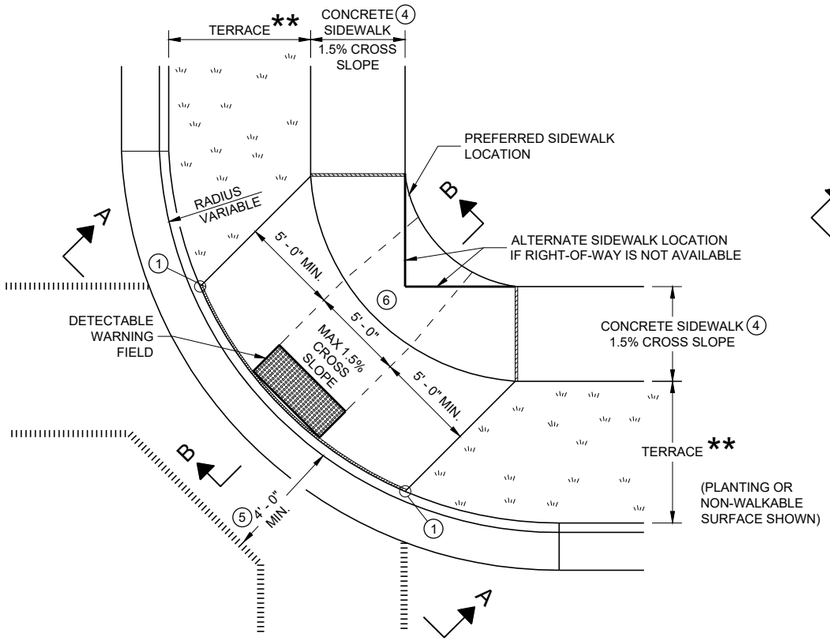
*SEE PLAN VIEW FOR TYPE "A" SURFACE DRAIN FOR ADDITIONAL DETAILS

*PARTIAL PLAN VIEW
SURFACE DRAIN WITHOUT PIPE
TYPE "B"

CONCRETE SURFACE DRAINS
FLUME TYPE
AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

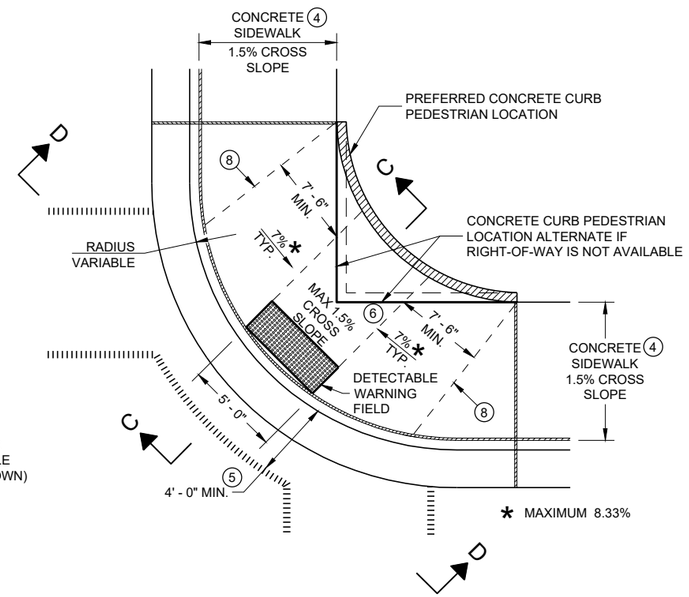
APPROVED
9/4/08
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA



PLAN VIEW

CURB RAMP TYPE 1

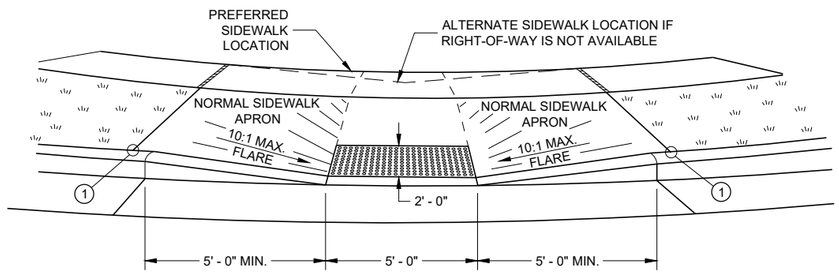
(CENTER OF CORNER RADIUS)



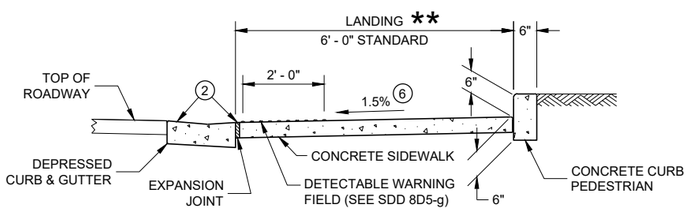
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

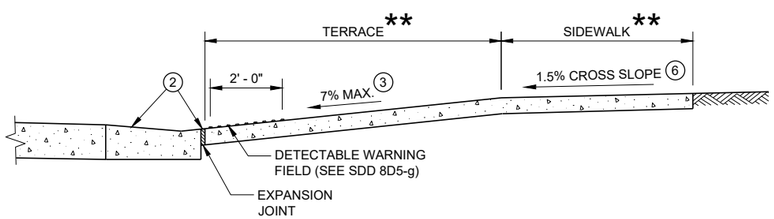


VIEW A - A FOR TYPE 1

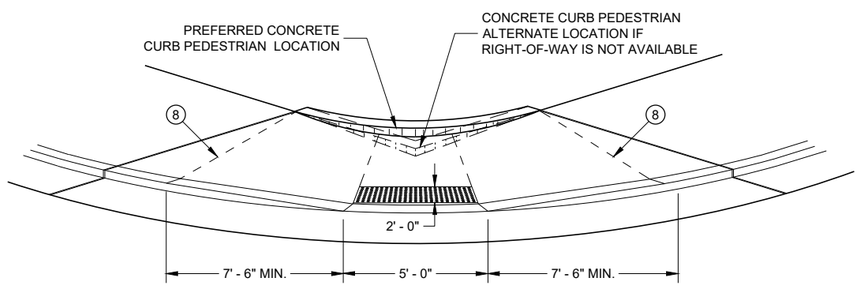


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

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

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.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

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

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

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

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

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

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

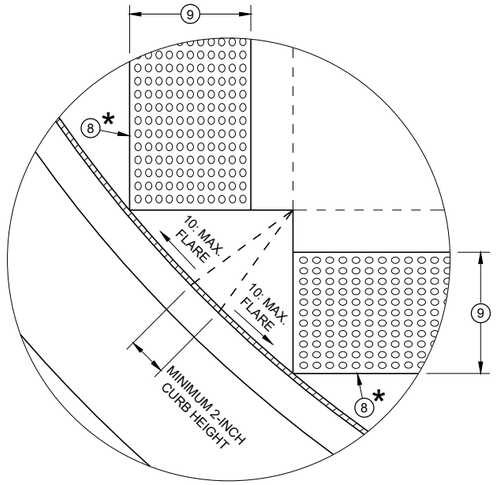
LEGEND

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

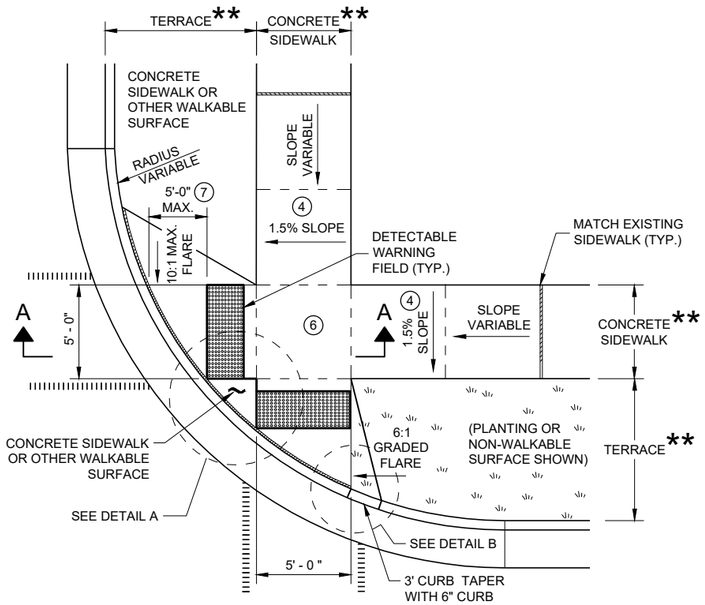
CURB RAMPS
TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D05 - 20a



DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)

GENERAL NOTES

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

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.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

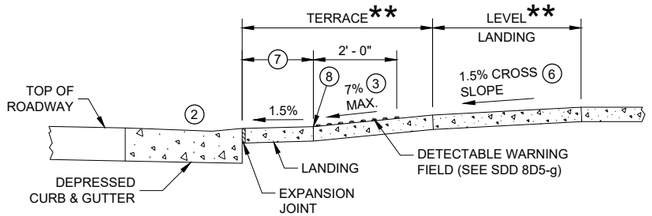
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

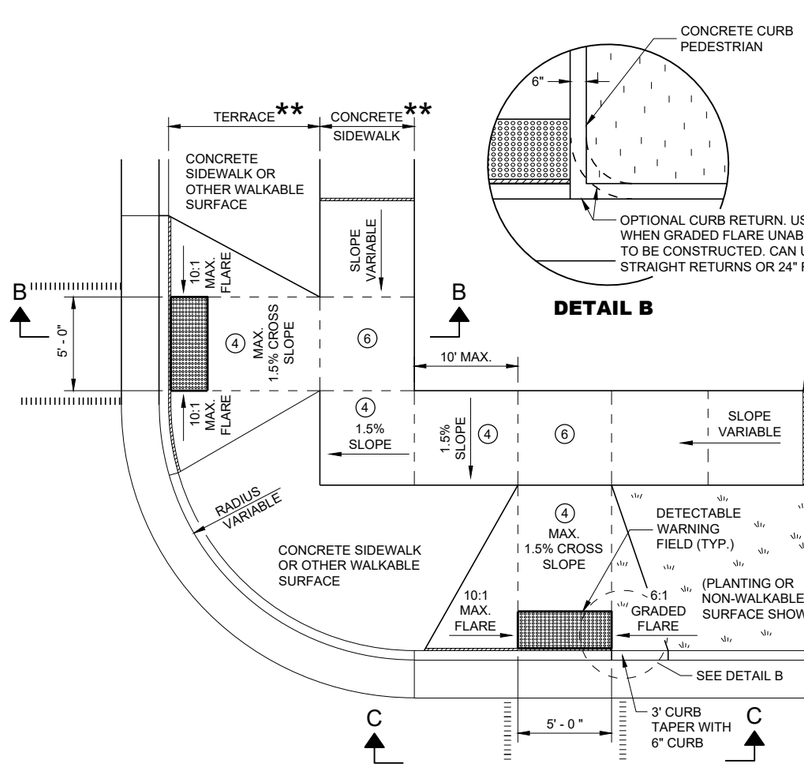
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

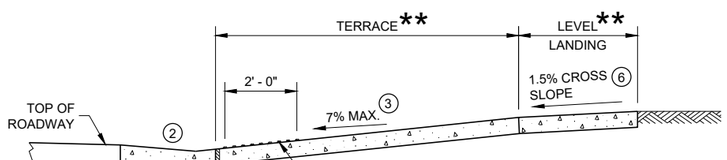
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS



DETAIL B

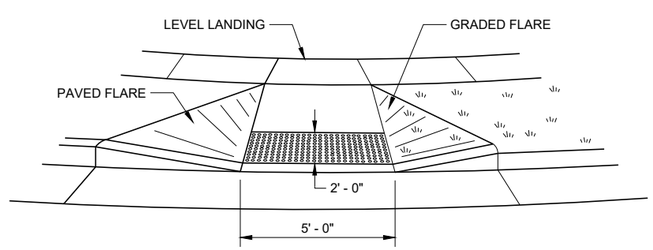
PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION B - B FOR TYPE 3

LEGEND

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



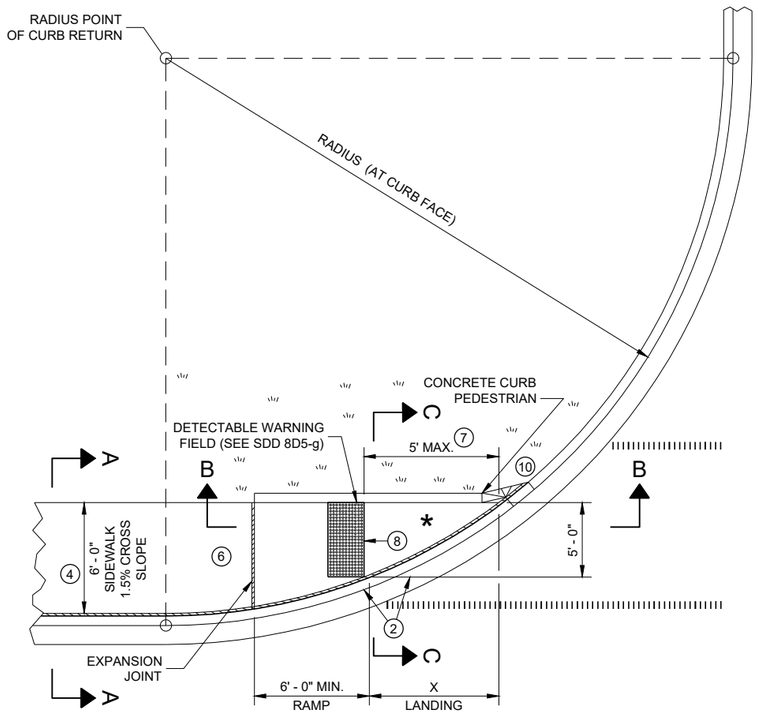
VIEW C - C FOR TYPE 3

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20b

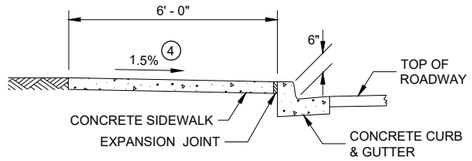


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

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

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.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

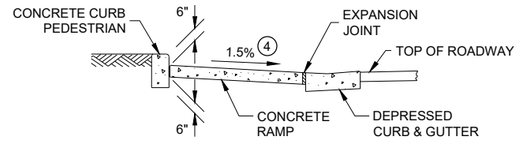
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

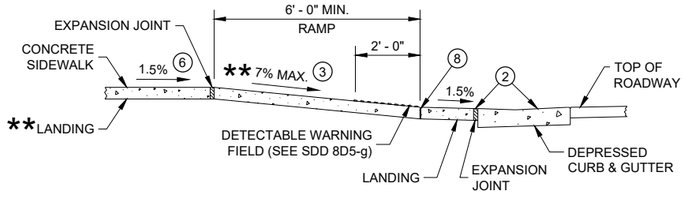
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



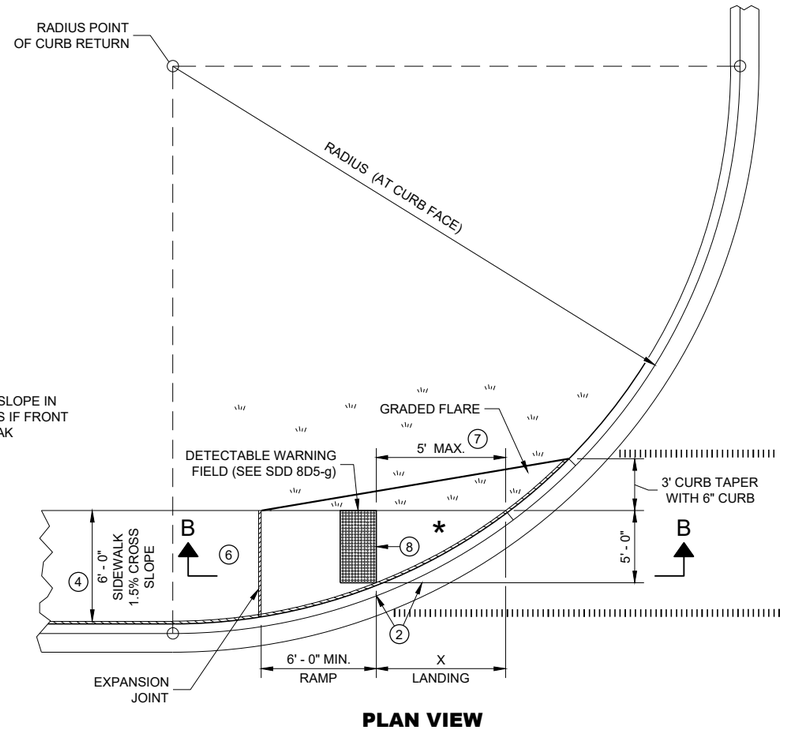
SECTION C - C FOR TYPE 4A



SECTION B - B FOR TYPE 4A AND TYPE 4A1

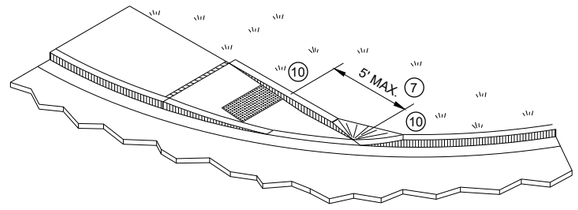
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

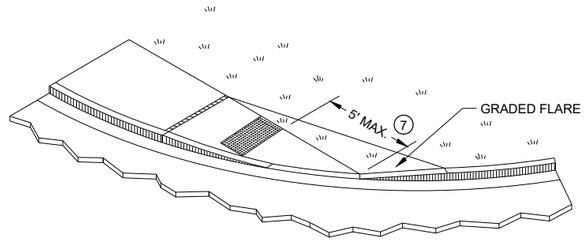


PLAN VIEW

CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A



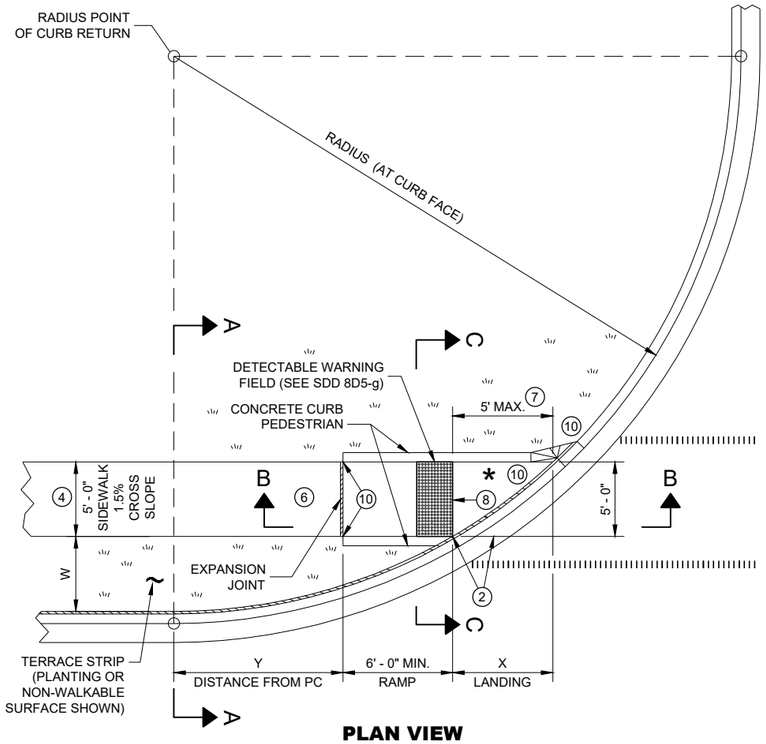
ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20c

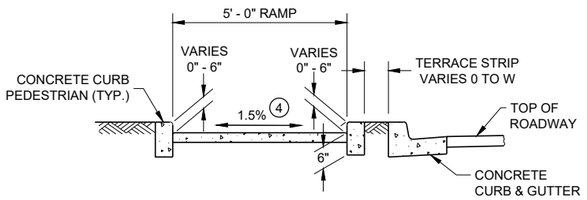


PLAN VIEW

CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 ¼"	0' - 5"	2' - 1"	1' - 4 ½"	1' - 5"	2' - 1"	0' - 10"	2' - 7 ½"	0' - 3 ¼"	3' - 0 ¼"						
15 FEET	4' - 6 ¾"	2' - 1 ¾"	3' - 9"	3' - 5 ¾"	3' - 1 ¼"	4' - 6"	2' - 6 ¾"	5' - 4 ½"	2' - 1"	6' - 1"	1' - 8"	6' - 8 ½"	1' - 3 ¼"	7' - 2 ½"	0' - 10 ¾"	7' - 7 ¼"
20 FEET	5' - 9 ¾"	3' - 6 ½"	4' - 11 ½"	5' - 1 ¾"	4' - 3 ¼"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¼"	2' - 1 ¼"	10' - 9"
30 FEET			6' - 9 ¼"	7' - 11 ¼"	6' - 0 ¼"	9' - 8"	5' - 5"	11' - 1 ¾"	4' - 10 ¾"	12' - 5 ¾"	4' - 5 ½"	13' - 7 ¾"	4' - 0 ¾"	14' - 8 ½"	3' - 8 ½"	15' - 8 ¼"
40 FEET									6' - 1 ¾"	15' - 8 ½"	5' - 8"	17' - 2"	5' - 3"	18' - 5 ¾"	4' - 10 ¾"	19' - 8 ¼"
50 FEET															5' - 10 ¼"	23' - 2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



SECTION C - C FOR TYPE 4B

LEGEND

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

GENERAL NOTES

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

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.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

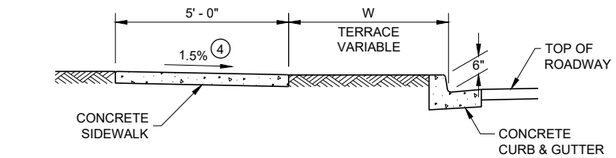
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

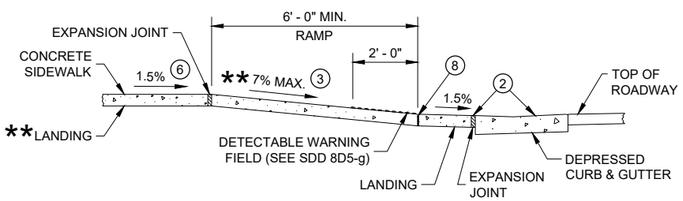
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

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



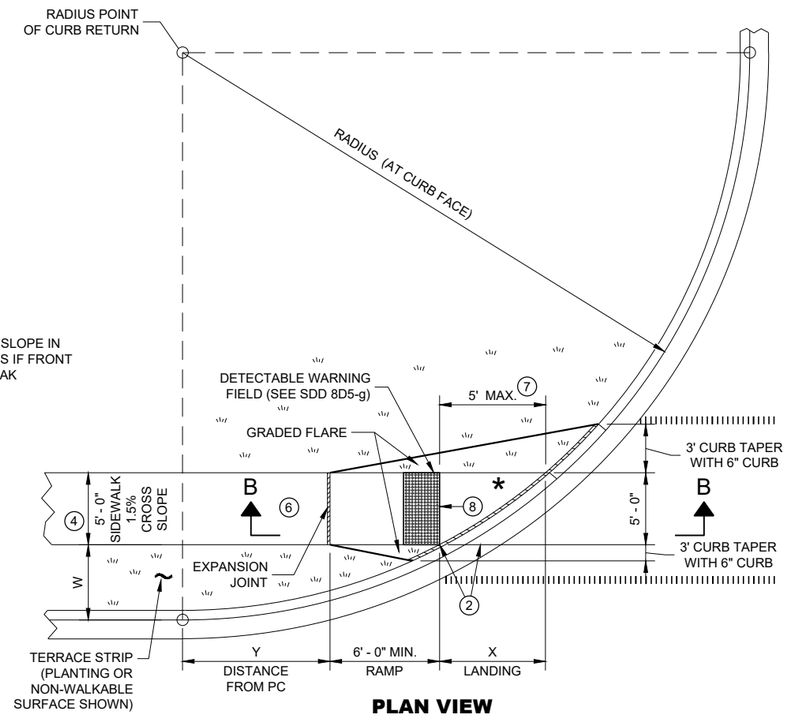
SECTION A - A FOR TYPE 4B



** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

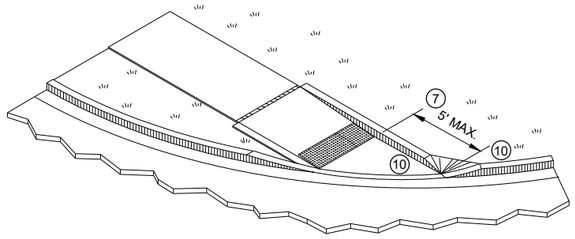
SECTION B - B FOR TYPE 4B AND TYPE 4B1

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

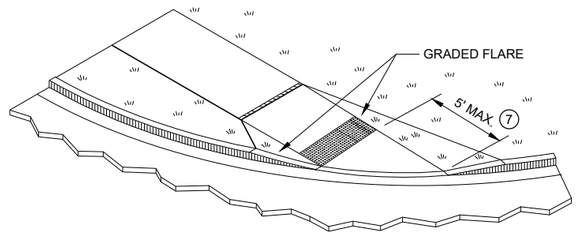


PLAN VIEW

CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B



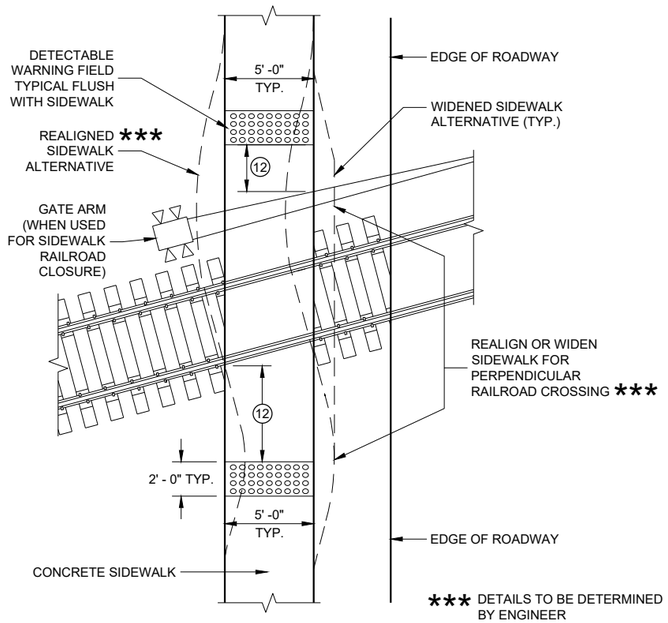
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

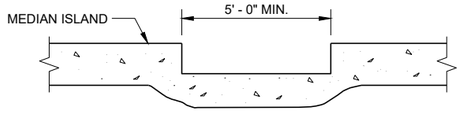
6

SDD 08D05 - 20d

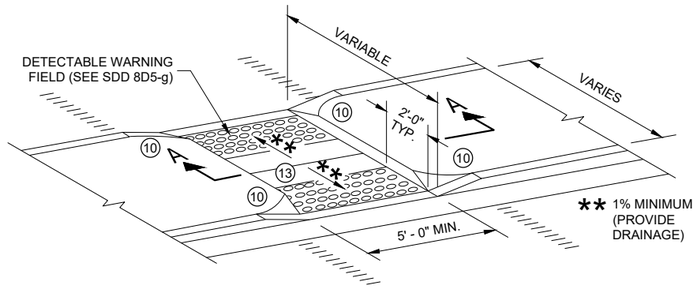


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

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

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.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

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

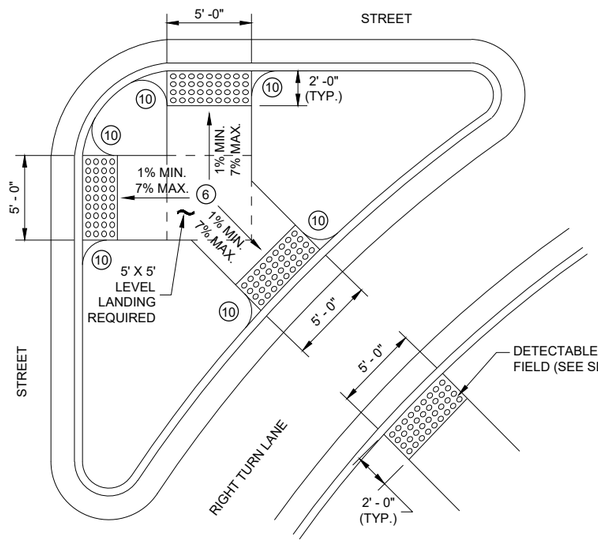
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

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

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

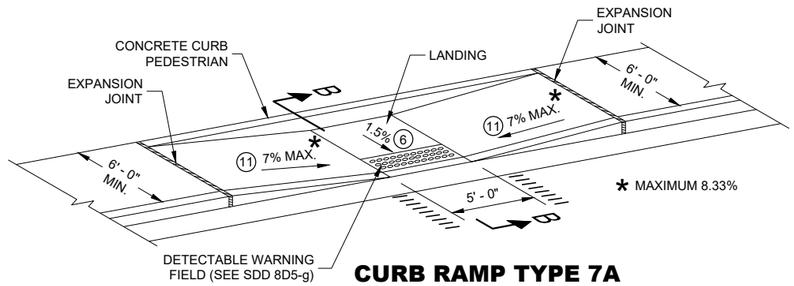
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

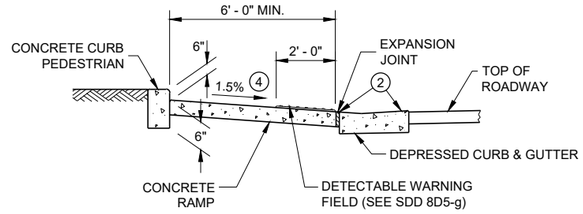
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS

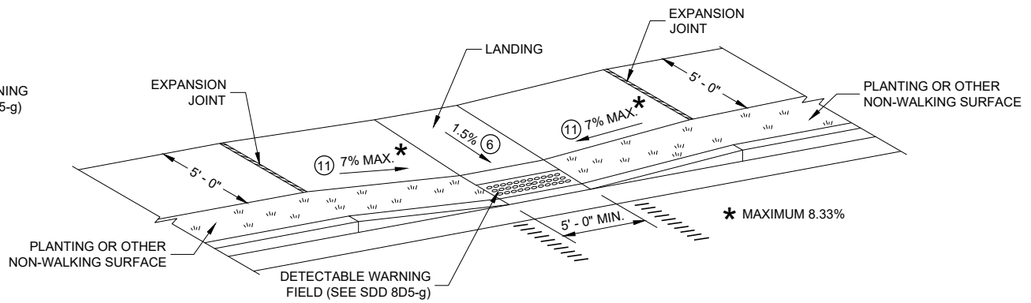


CURB RAMP TYPE 7A

MID BLOCK CROSSING



SECTION B - B FOR TYPE 7A



CURB RAMP TYPE 7B

MID BLOCK CROSSING

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

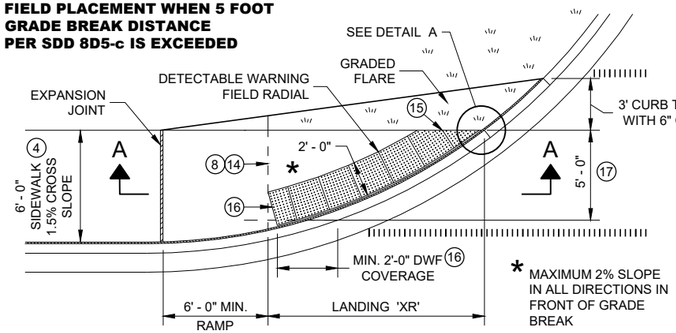
CURB RAMPS TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20e

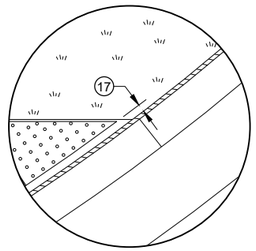
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



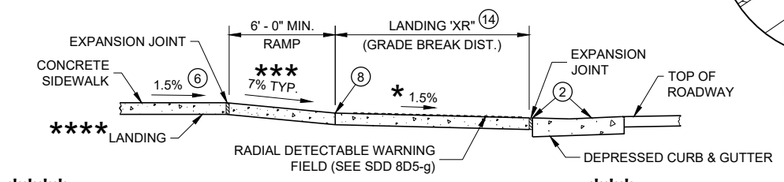
PLAN VIEW

CURB RAMP TYPE 4A1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL A

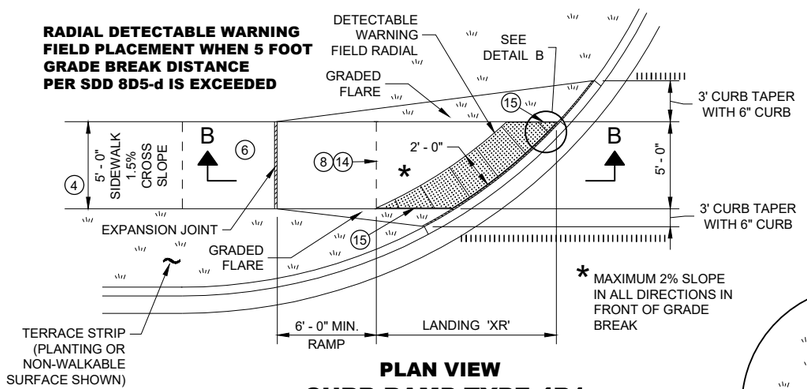


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1

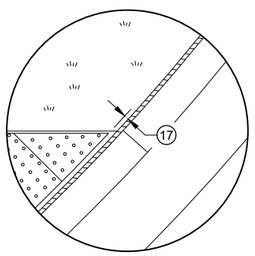
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



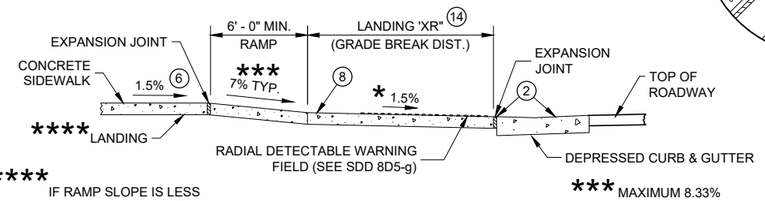
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

LEGEND

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

GENERAL NOTES

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

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.

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

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

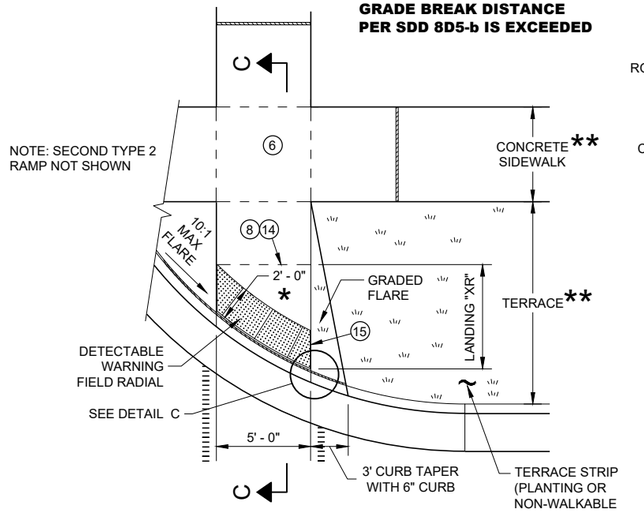
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

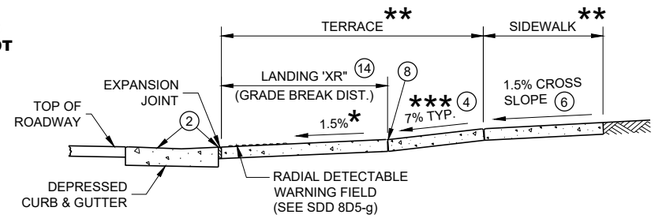


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

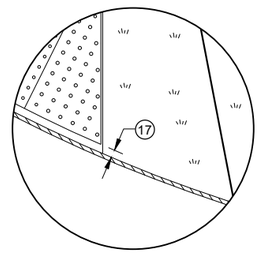


SECTION C - C FOR TYPE 2

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



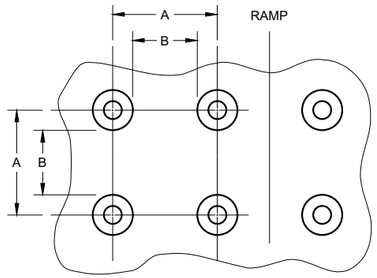
DETAIL C

CURB RAMPS
RADIAL DETECTABLE WARNING FIELD APPLICATIONS

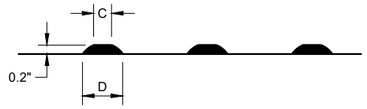
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

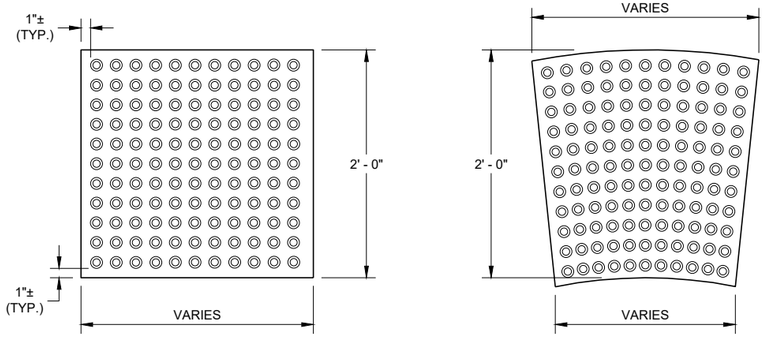


PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

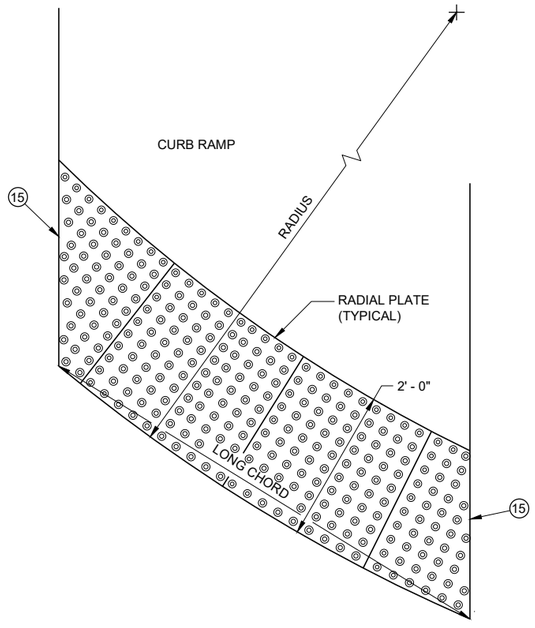
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

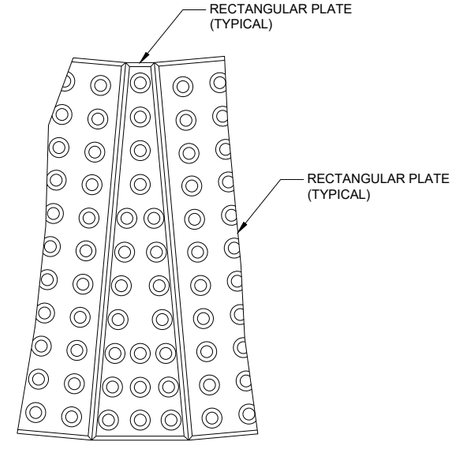
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

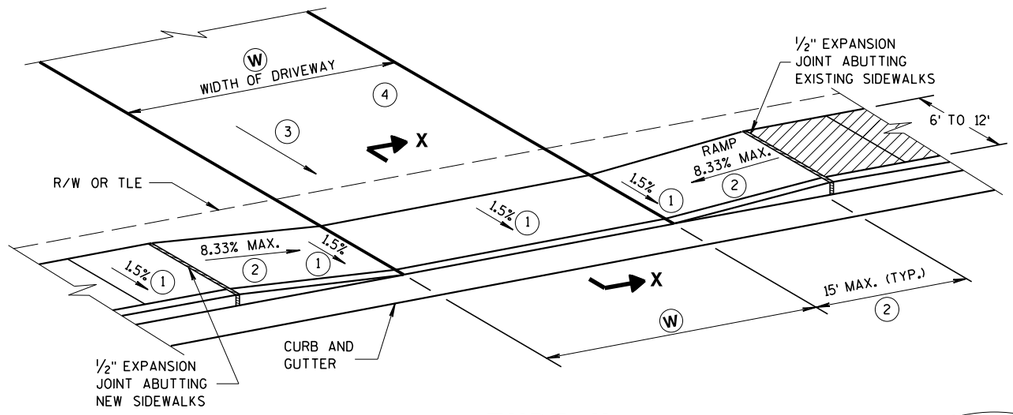
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

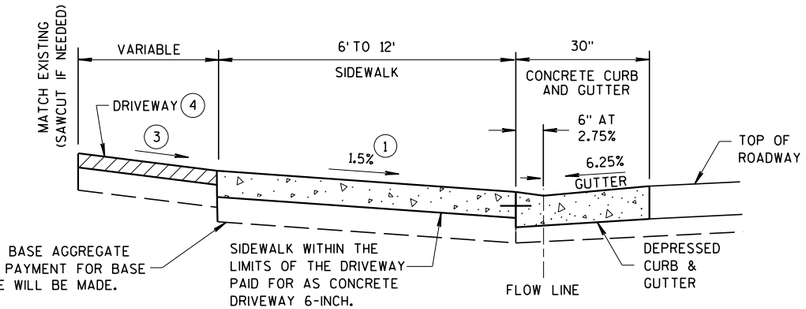
FHWA

6

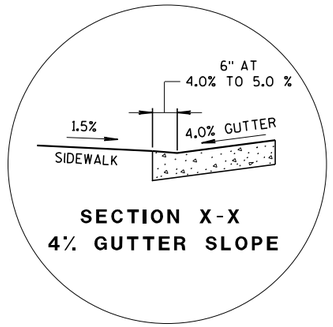
SDD 08D05 - 20g



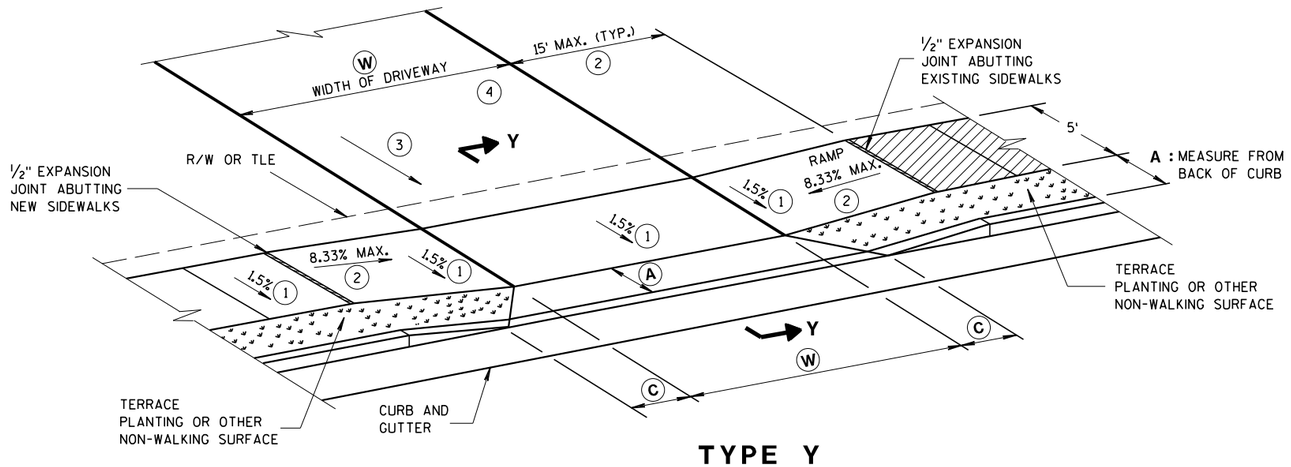
TYPE X
SIDEWALK ABUTS CURB & GUTTER
TERRACE VARIES 0 TO 3 FEET



SECTION X-X



SECTION X-X
4% GUTTER SLOPE



TYPE Y
SIDEWALK WITH NARROWER TERRACE
TERRACE VARIES 4 TO 6 FEET

W: 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)
16' MIN. - 35' MAX. COMMERCIAL (CE)

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

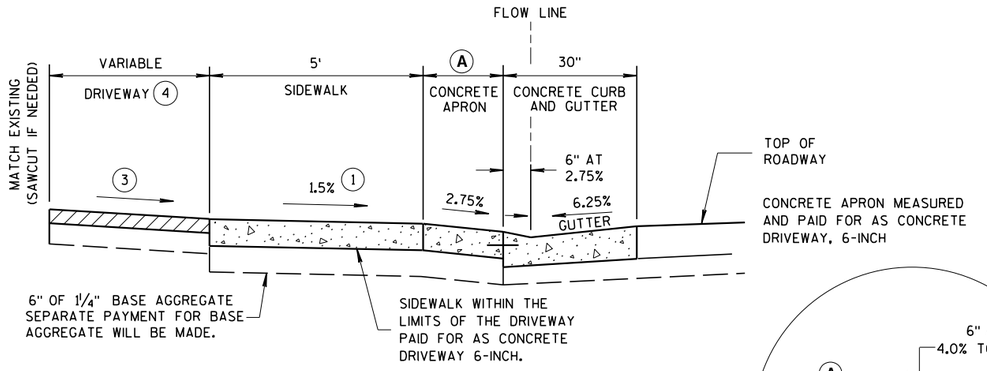
OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

(1) CONSTRUCTION TOLERANCE OF 0.5% ± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

(2) THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(3) DRIVEWAY SLOPES: DESIRABLE MAXIMUM
- 10.5% UP AWAY FROM SIDEWALK (SAG)
- 8.5% DOWN AWAY FROM SIDEWALK (CREST)
- ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

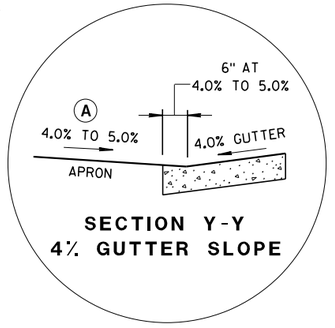
(4) DRIVEWAY TYPES
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES)



NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS

SECTION Y-Y

DRIVEWAY DETAIL
WITH CONCRETE CURB & GUTTER
(URBAN AND SUBURBAN)



SECTION Y-Y
4% GUTTER SLOPE

TABLE Y

(A) FEET	(C) FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'

NOT TO SCALE

DRIVEWAY AND SIDEWALK RAMPS
TYPES X & Y

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

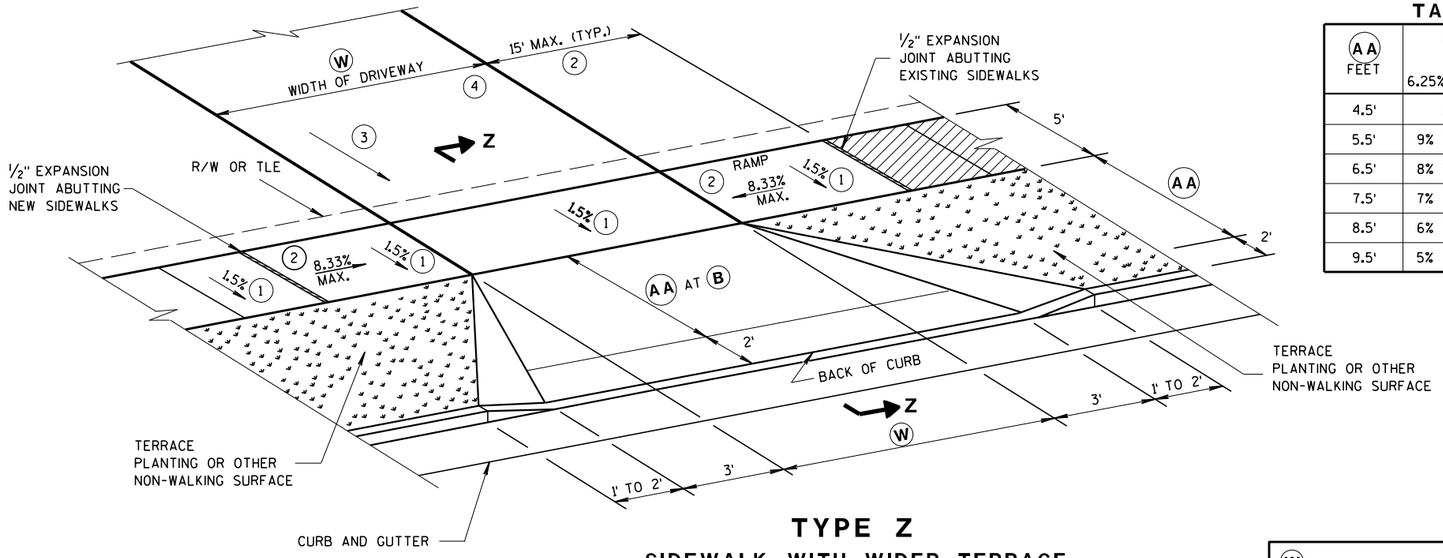
APPROVED
March 2018 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS 99 MENT
UNIT SUPERVISOR
FHWA

6

S.D.D. 8 D 18-2

6

S.D.D. 8 D 18-2



TYPE Z

SIDEWALK WITH WIDER TERRACE
TERRACE VARIES 7 TO 12 FEET

TABLE Z

(AA) FEET	(B) % 6.25% GUTTER	(B) % 4% GUTTER
4.5'	11.5%	9% TO 11.5%
5.5'	9% TO 11.5%	8% TO 11.5%
6.5'	8% TO 11.5%	6% TO 11.5%
7.5'	7% TO 11.5%	6% TO 11.5%
8.5'	6% TO 11.5%	5% TO 11.5%
9.5'	5% TO 11.5%	4% TO 11.5%

(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)
16' MIN. - 35' MAX. COMMERCIAL (CE)

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

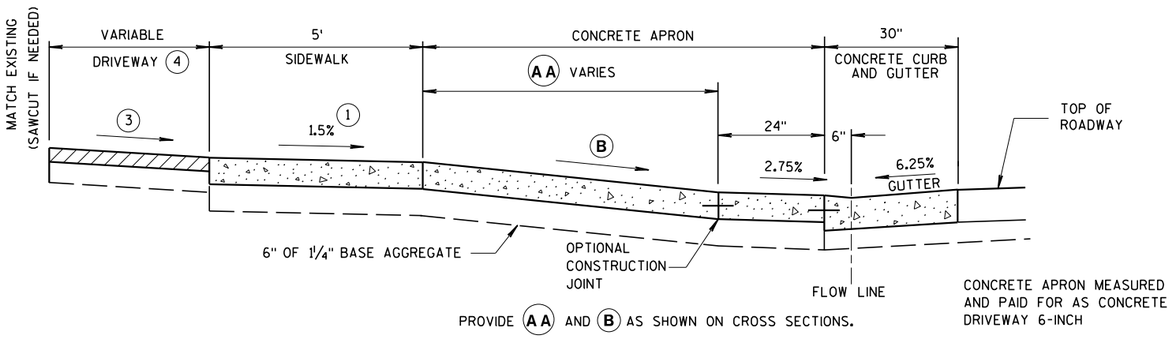
OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

(1) CONSTRUCTION TOLERANCE OF 0.5% ± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

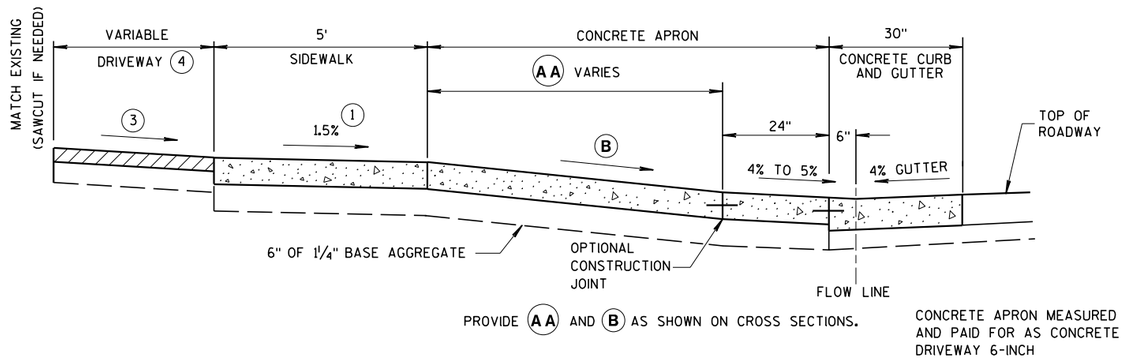
(2) THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.

(3) DRIVEWAY SLOPES: DESIRABLE MAXIMUM
10.5% UP AWAY FROM SIDEWALK (SAG)
8.5% DOWN AWAY FROM SIDEWALK (CREST)
ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

(4) DRIVEWAY TYPES
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES)



6.25% GUTTER SLOPE



4% GUTTER SLOPE

NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS FOR **B** VALUES NOT SHOWN IN TABLE Z.

SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY 6-INCH.

SEPARATE PAYMENT FOR BASE AGGREGATE WILL BE MADE.

SECTION Z-Z

DRIVEWAY DETAIL WITH CONCRETE CURB & GUTTER

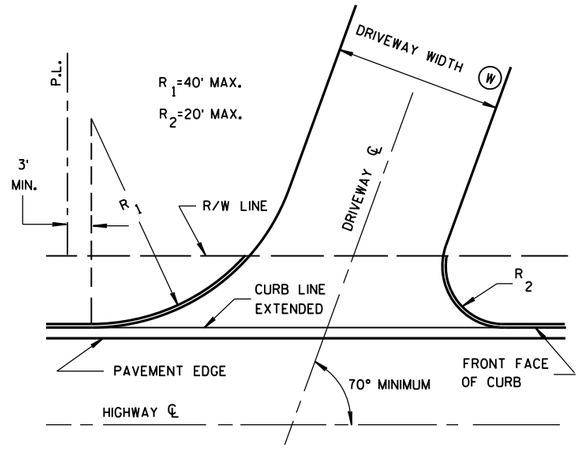
(URBAN AND SUBURBAN)

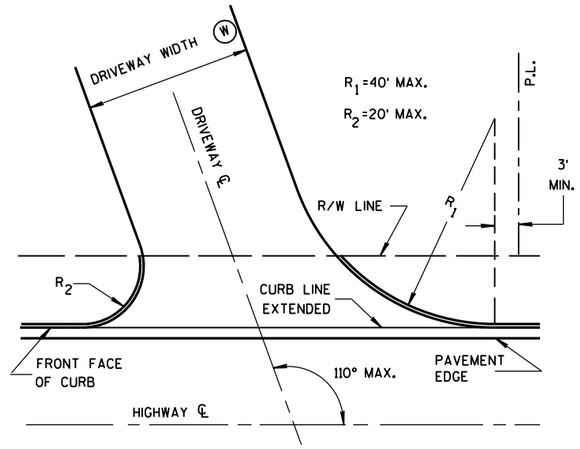
NOT TO SCALE

DRIVEWAY AND SIDEWALK RAMPS TYPE Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

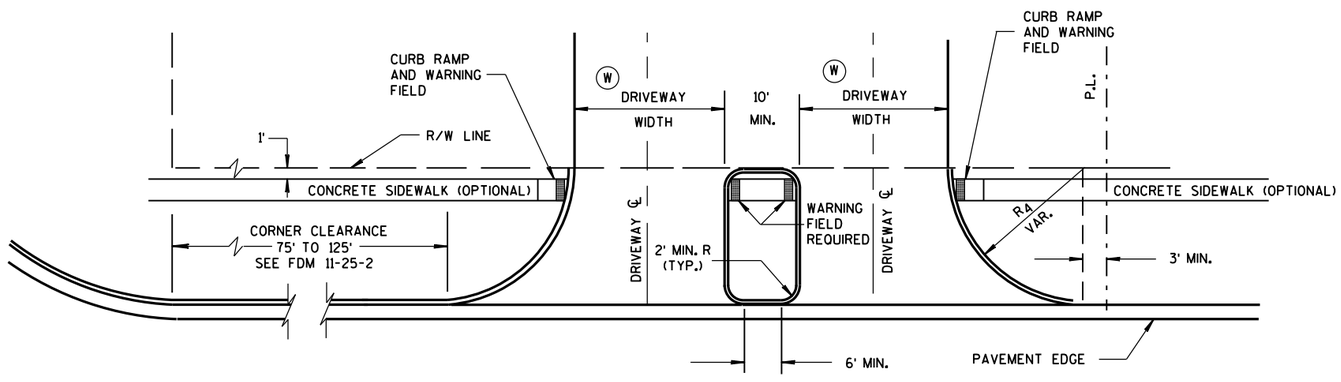
APPROVED
March 2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA





SKEWED DRIVEWAY DETAILS
(COMMERCIAL AND NON-COMMERCIAL)

SIDEWALK NOT SHOWN



DRIVEWAY LOCATION AND SPACING DETAILS

SIDEWALK SHOWN

NOTES

A MAXIMUM RADIUS OF 10 FEET SHALL BE USED FOR NON-COMMERCIAL PRIVATE ENTRANCES. RADII FOR COMMERCIAL DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER BASED ON TRAFFIC AND DRIVEWAY PERMIT RESTRICTIONS.

THE MINIMUM ANGLE OF INTERSECTION BETWEEN THE DRIVEWAY AND HIGHWAY CENTERLINES SHALL BE 70°.

ALL CURVILINEAR PRIVATE ENTRANCE OUTLINES SHALL BE CONTAINED WITHIN THE HIGHWAY R/W.

NO DRIVEWAY SHALL BE BUILT WITHIN 3 FEET OF THE PROPERTY LINE EXCEPT FOR EXISTING JOINT DRIVEWAY SHARED BY TWO OWNERS.

Ⓦ DRIVEWAY WIDTHS:

COMMERCIAL - 35' MAX., 16' MIN.

RESIDENTIAL AND NON-COMMERCIAL - 24' MAX., 12' MIN.

DRIVEWAYS WITH CURB & GUTTER RETURNS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS UNIT SUPERV
FHWA

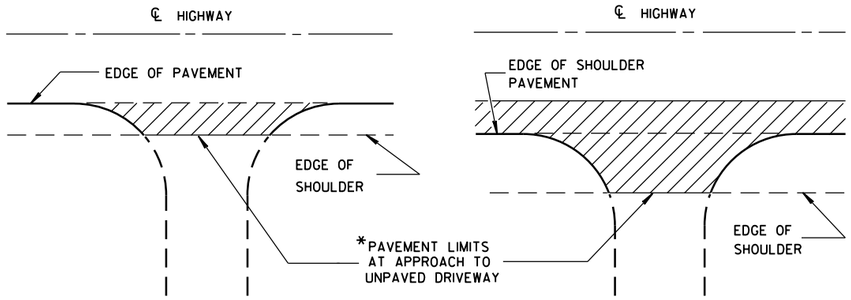
ENT

6

S.D.D. 8 D 20-1

6

S.D.D. 8 D 20-1

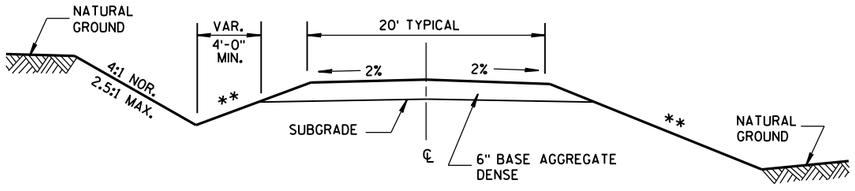


*WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT.

PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB & GUTTER OR SIDEWALK)

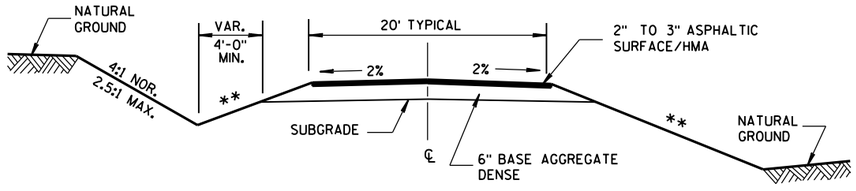


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

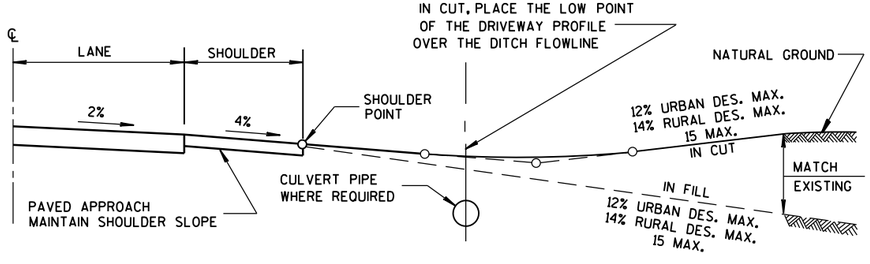
** SLOPE CAN VARY WITH SPEED. SEE 11-45-2.6.2.

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥35 TO <60	6:1
≥60	10:1



IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE



TYPICAL DRIVEWAY PROFILES

DRIVEWAYS WITHOUT CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

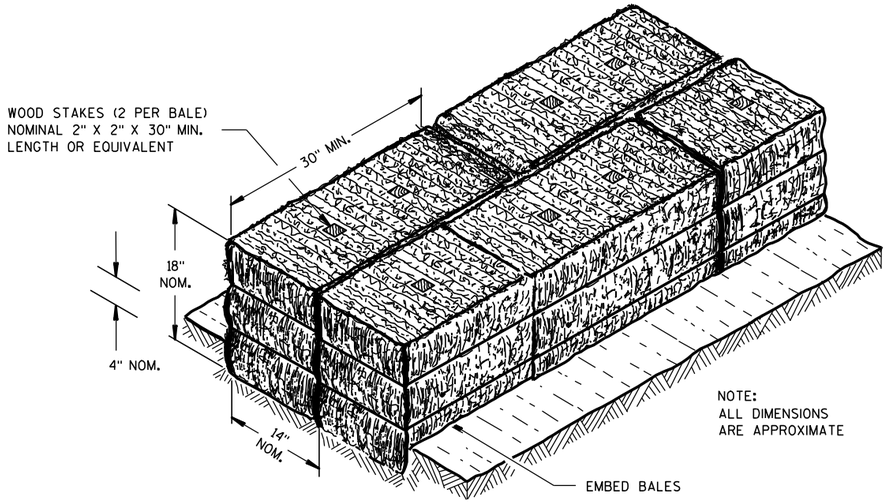
APPROVED
December, 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS UNIT SUPERV
FHWA

6

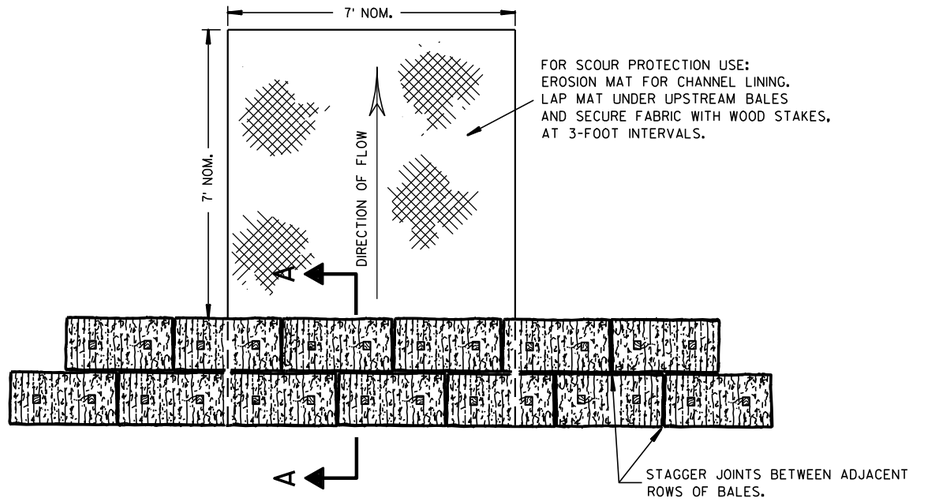
S.D.D. 8 D 21-1

6

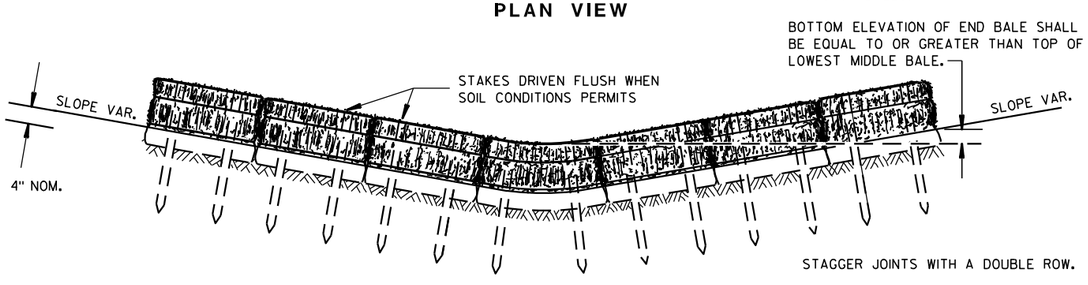
S.D.D. 8 D 21-1



SECTION A-A



PLAN VIEW



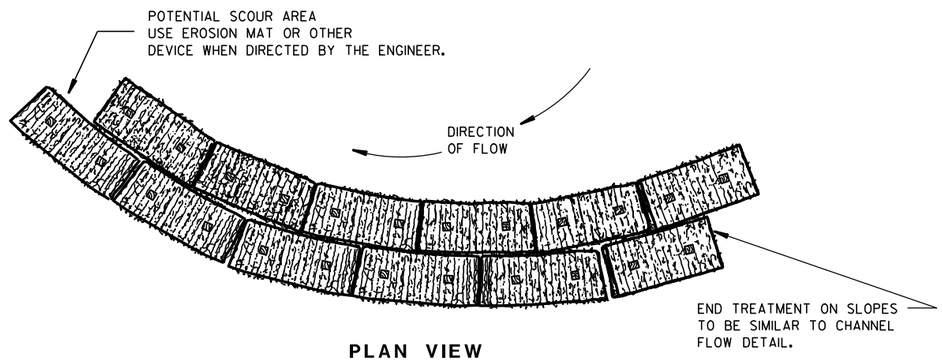
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

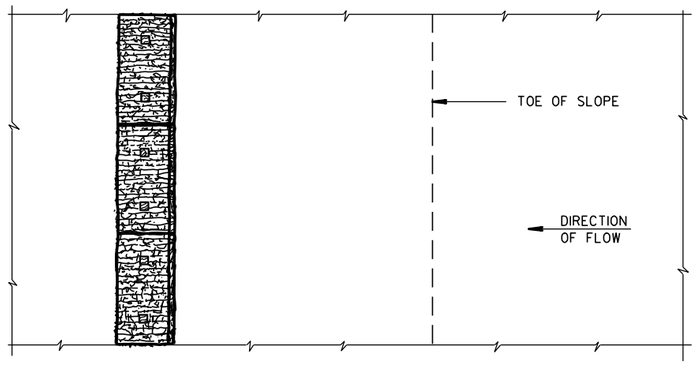
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

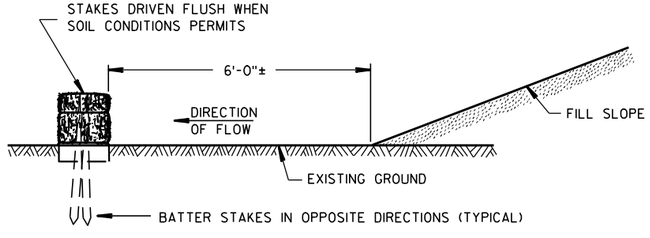


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

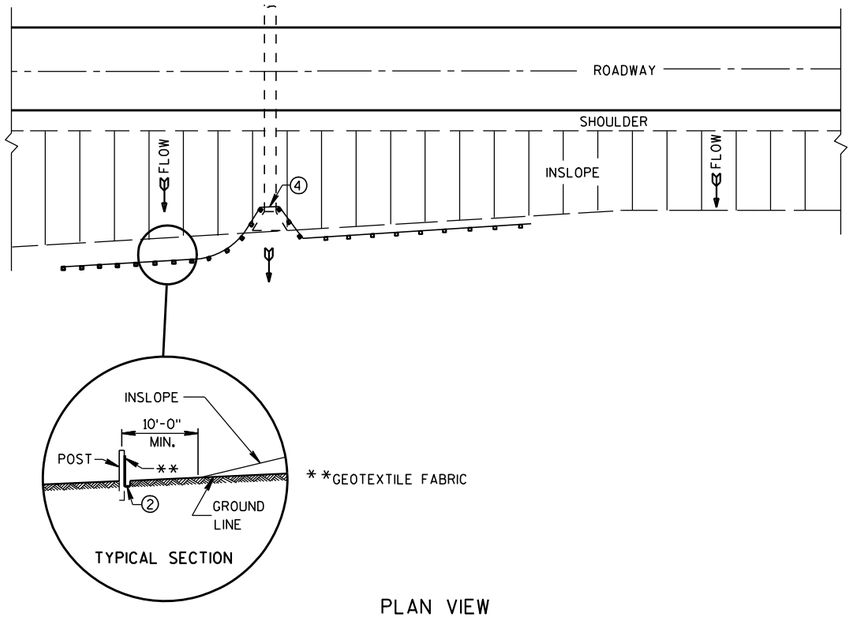
EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

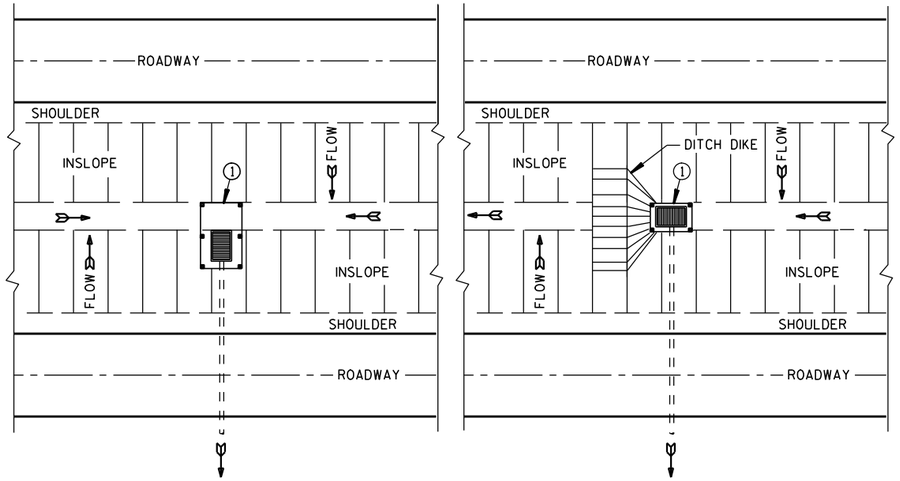
APPROVED
6/04/02 DATE
/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

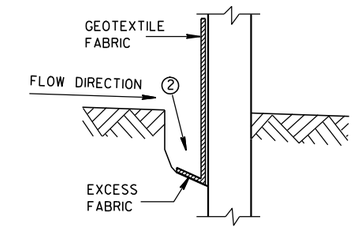
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

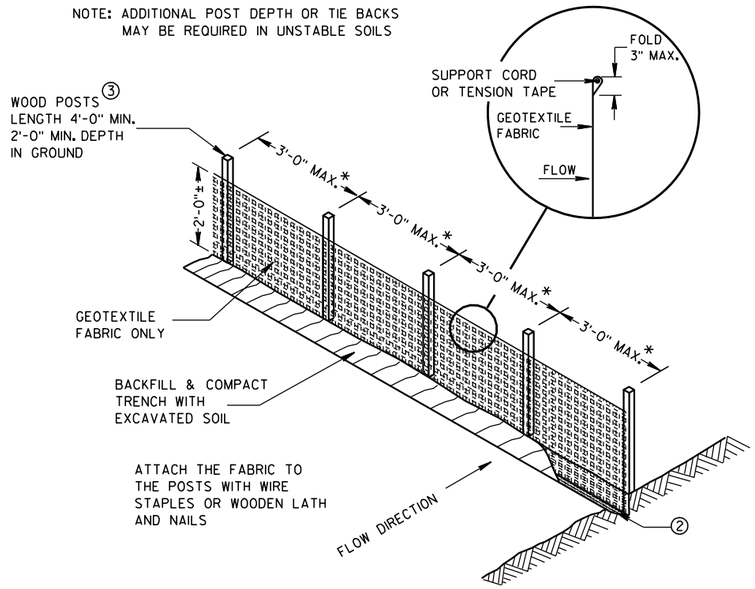
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

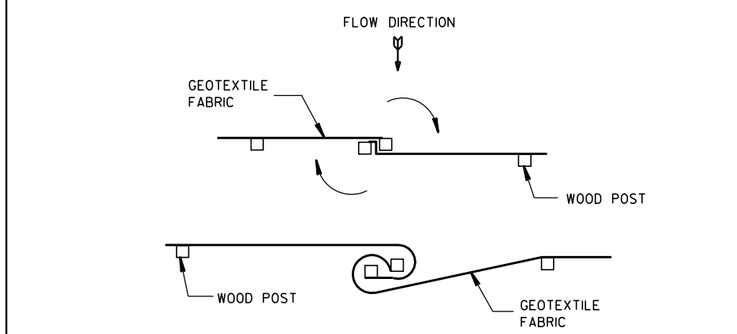
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



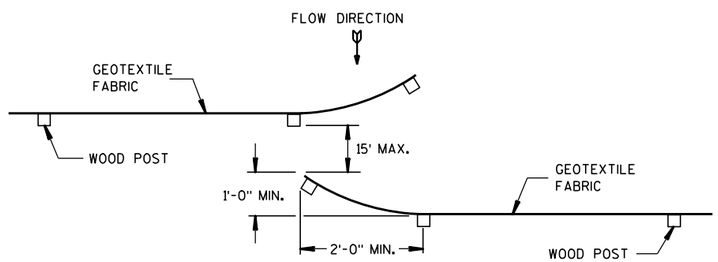
TRENCH DETAIL



SILT FENCE

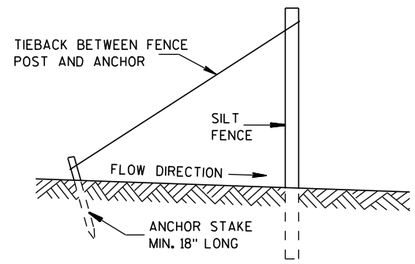


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

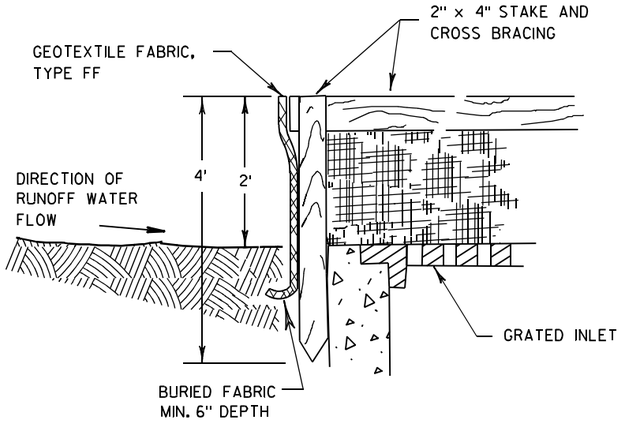
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

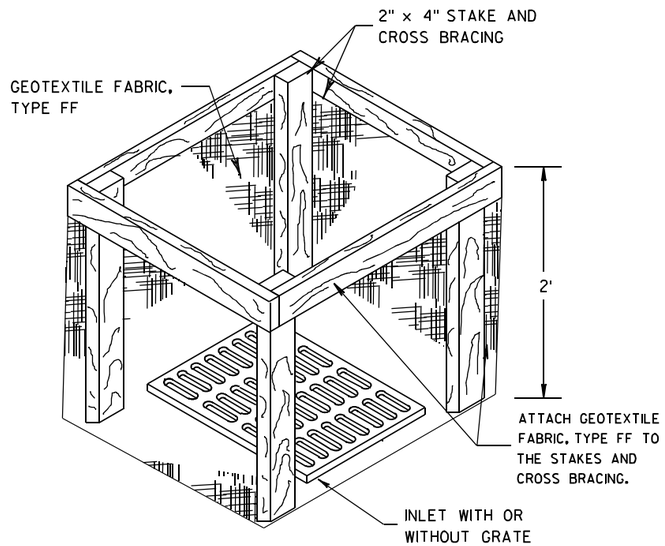
6

S.D.D. 8 E 9-6

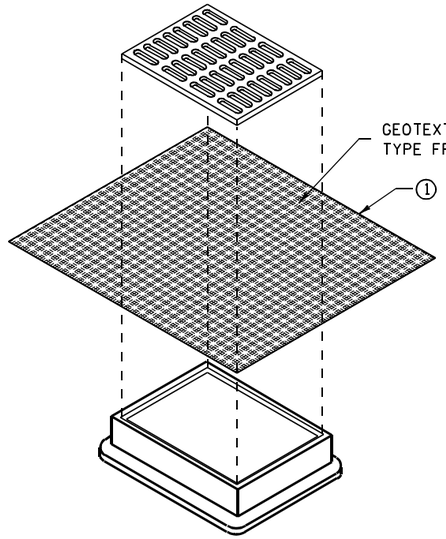
6

S.D.D. 8 E 9-6



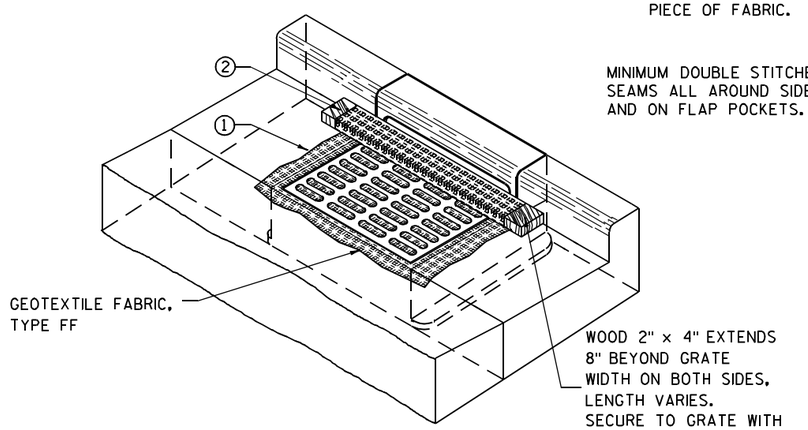


INLET PROTECTION, TYPE A

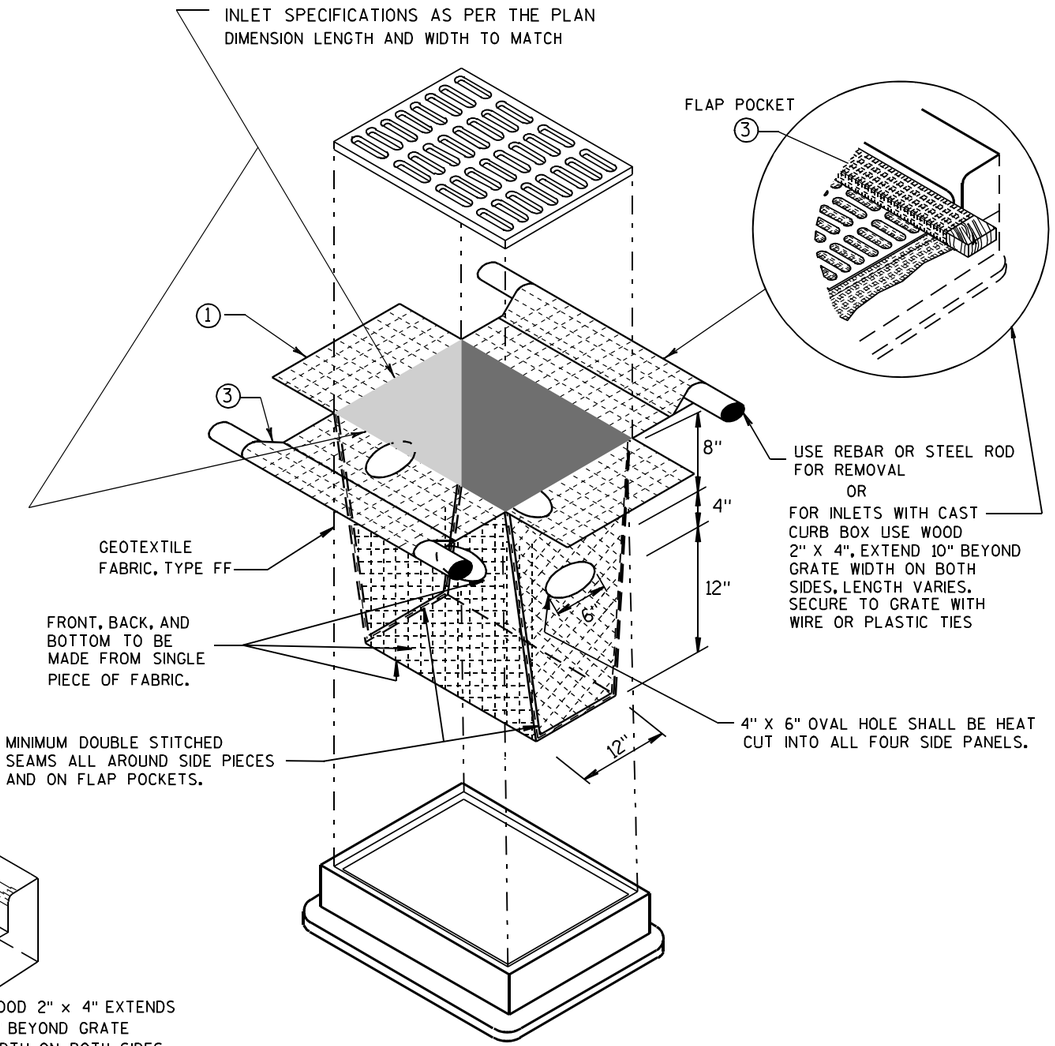


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

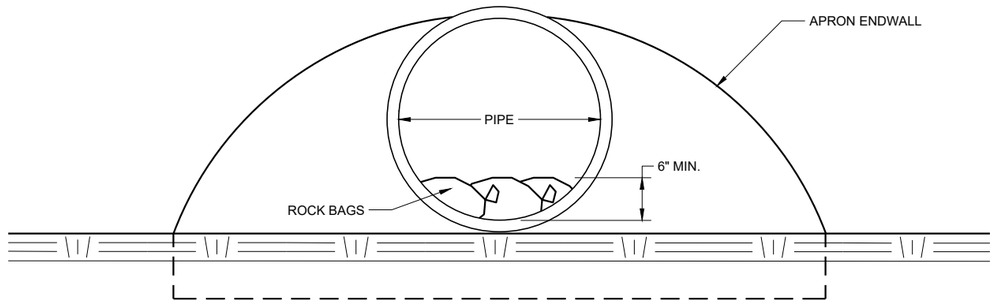
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

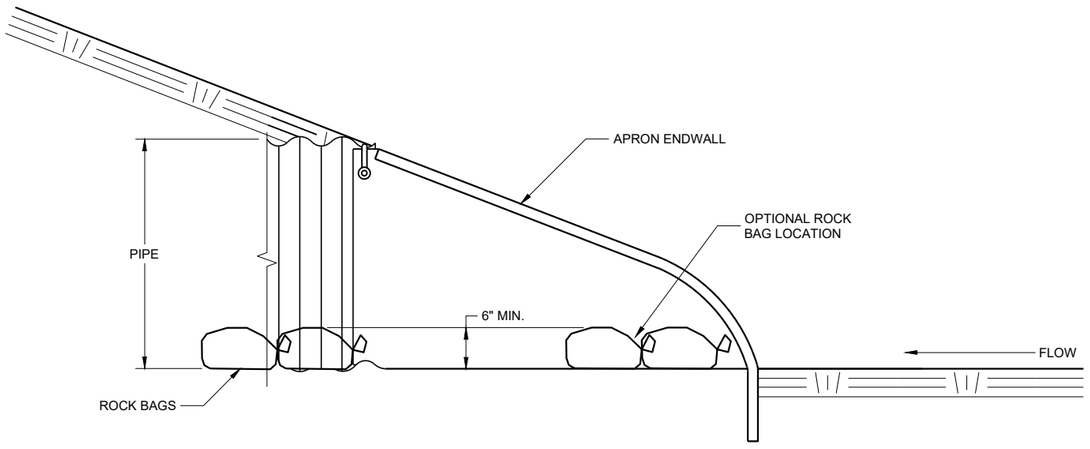
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

6

SDD 08E15 - 01

6

SDD 08E15 - 01

METAL APRON ENDWALLS

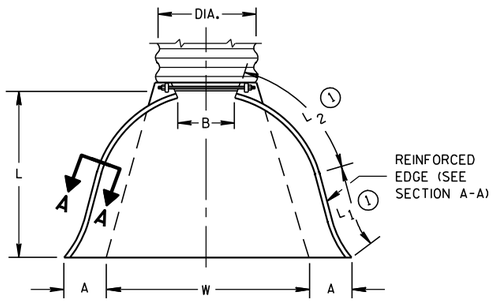
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

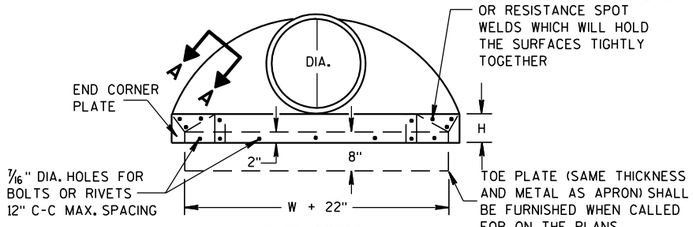
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
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

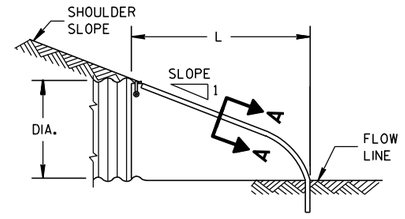
*MINIMUM
**MAXIMUM



PLAN VIEW

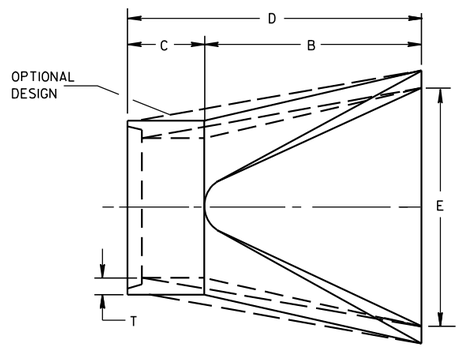


END VIEW

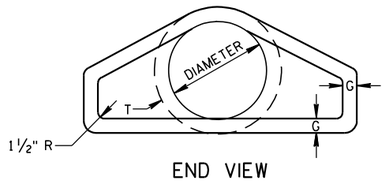


SIDE ELEVATION

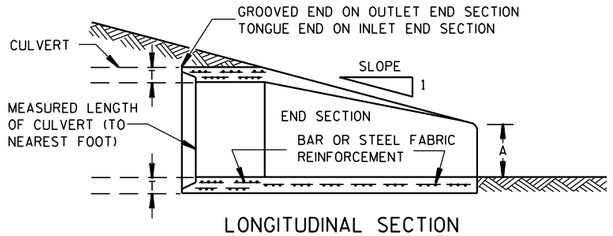
METAL ENDWALLS



PLAN

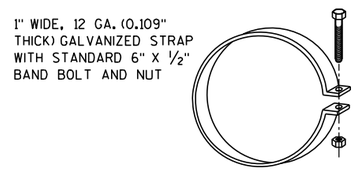


END VIEW



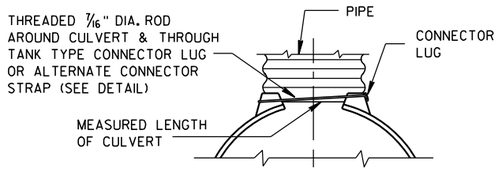
LONGITUDINAL SECTION

CONCRETE ENDWALLS

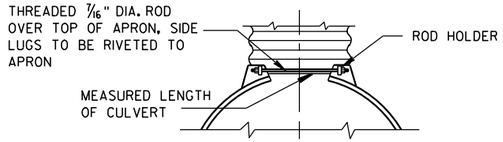


ALTERNATE FOR TYPE 1 CONNECTION

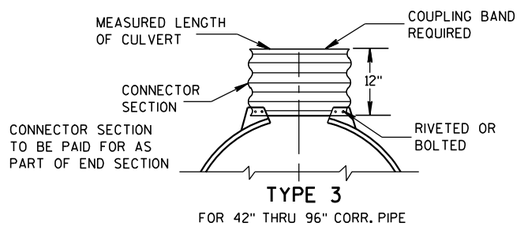
END SECTION CONNECTOR STRAP



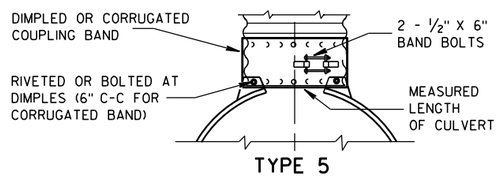
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

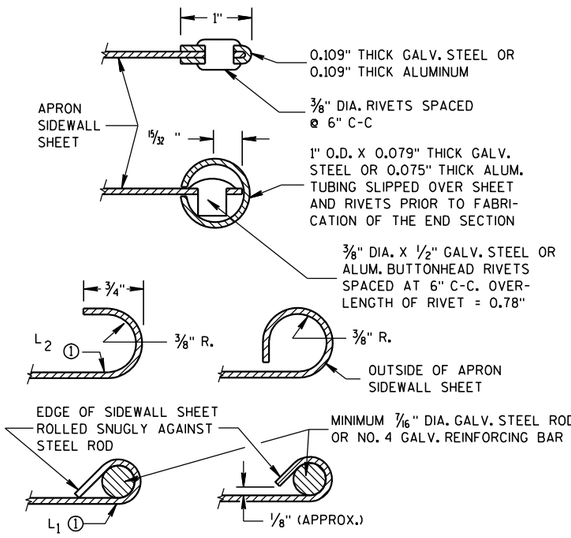
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

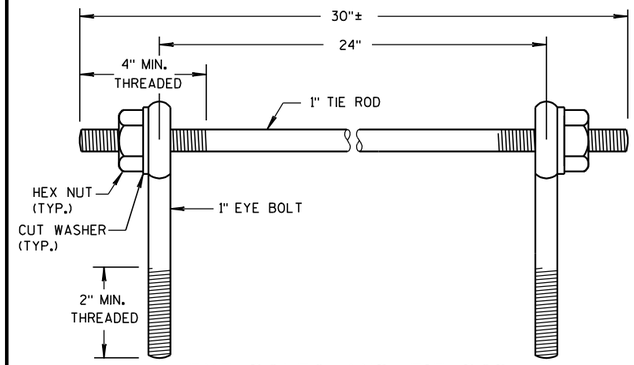
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

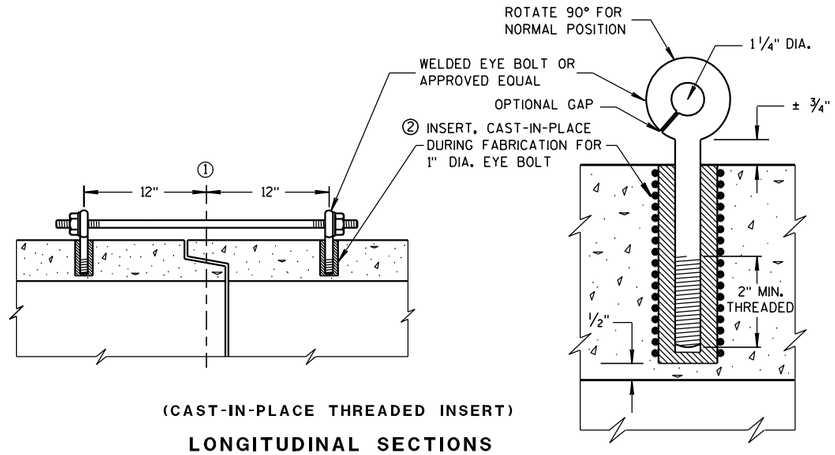
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6
S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 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 APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

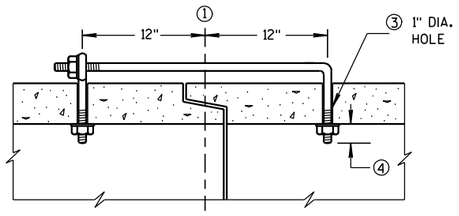
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

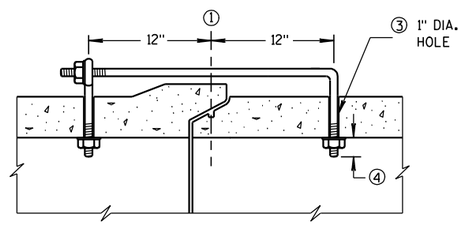
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

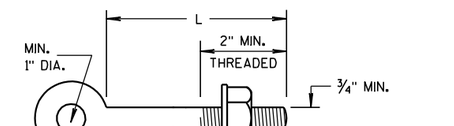


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

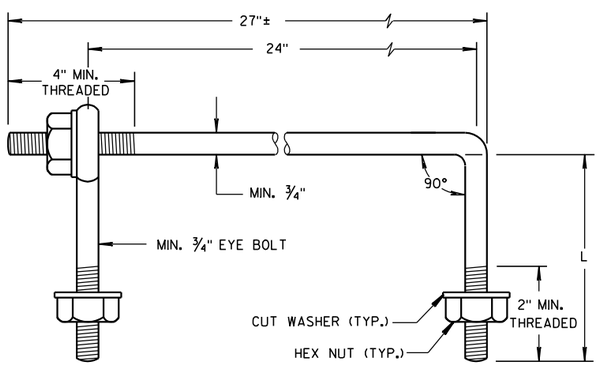
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

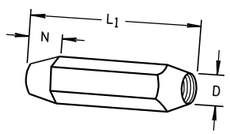
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

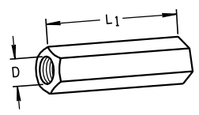
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES



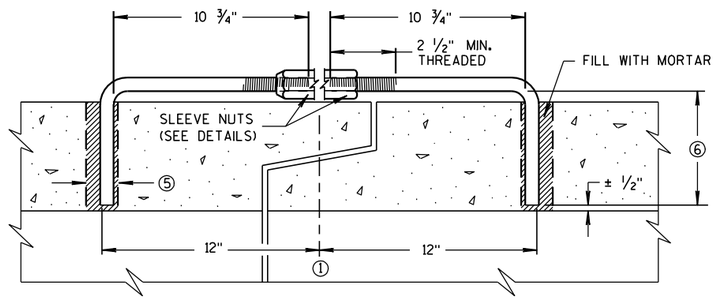
TAPERED



PLAIN

RIGHT AND LEFT THREADS

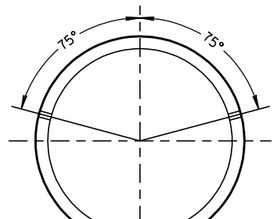
SLEEVE NUTS



LONGITUDINAL SECTION

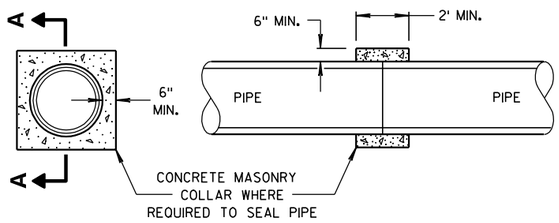
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
108

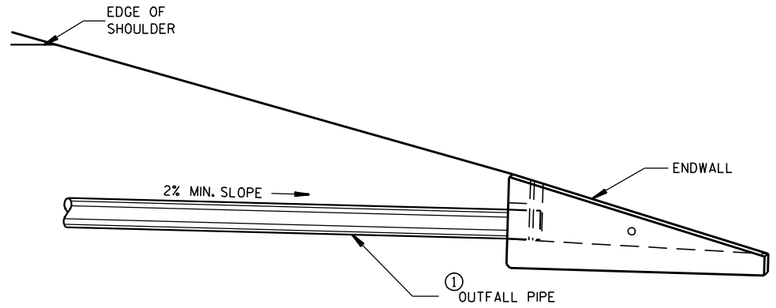
FHWA

6

S.D.D. 8 F 4-7

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	Z
**4	6	12	5 1/4	9	8	32	36	11	2 3/8	6 1/2	4
6	8	14	7 1/4	11	10	42	44	13	3 5/8	8 1/2	6

**APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION DETAIL

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.

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

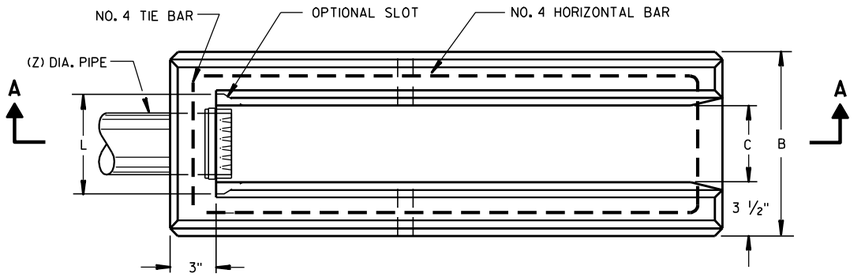
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

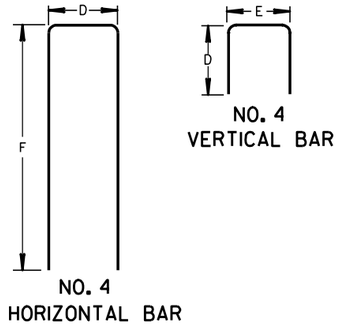
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

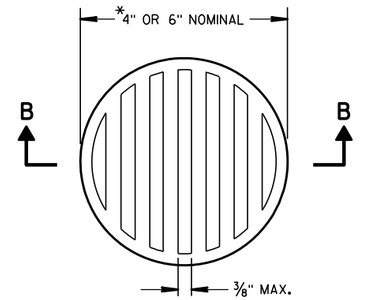
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

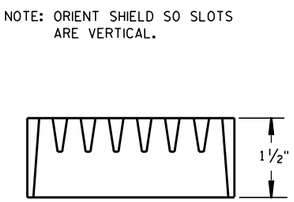


PLAN VIEW



BAR STEEL REINFORCEMENT DETAILS

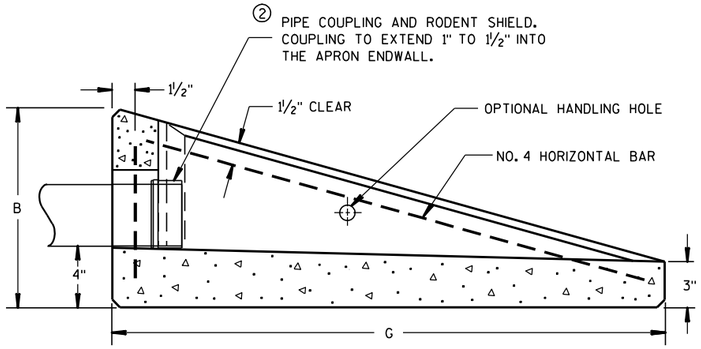




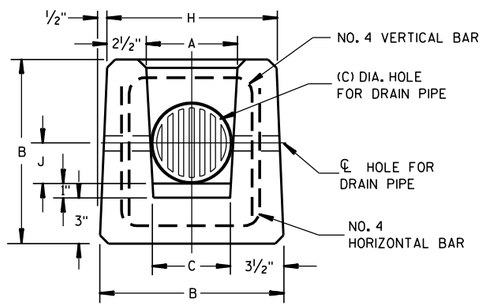
SECTION B-B

② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.



SECTION A-A



END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN

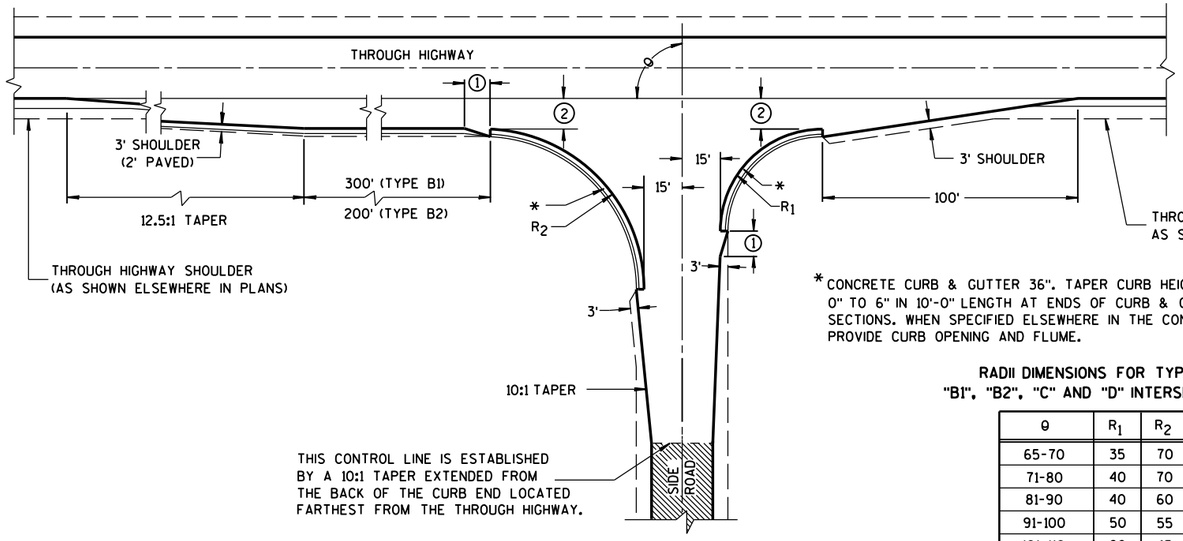
REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/10/98 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 F 6-4

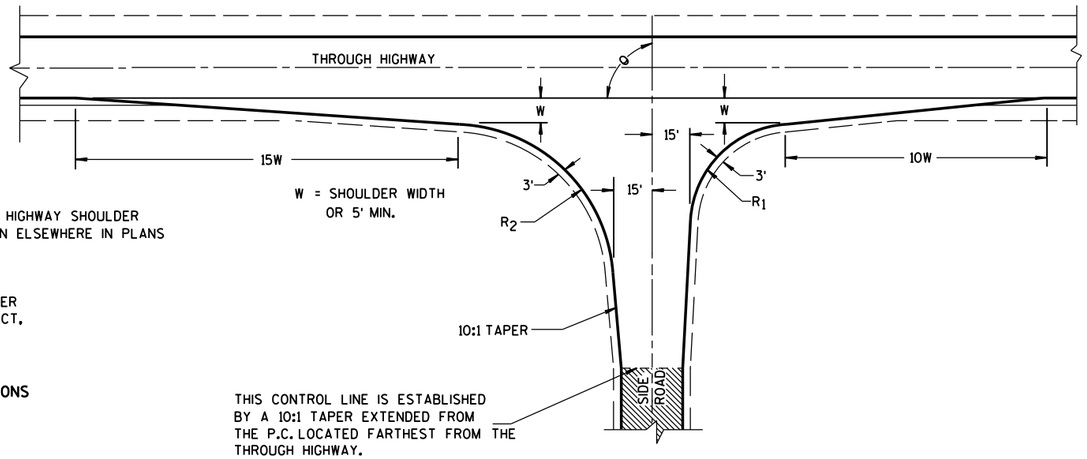


TYPE "B1" AND "B2"

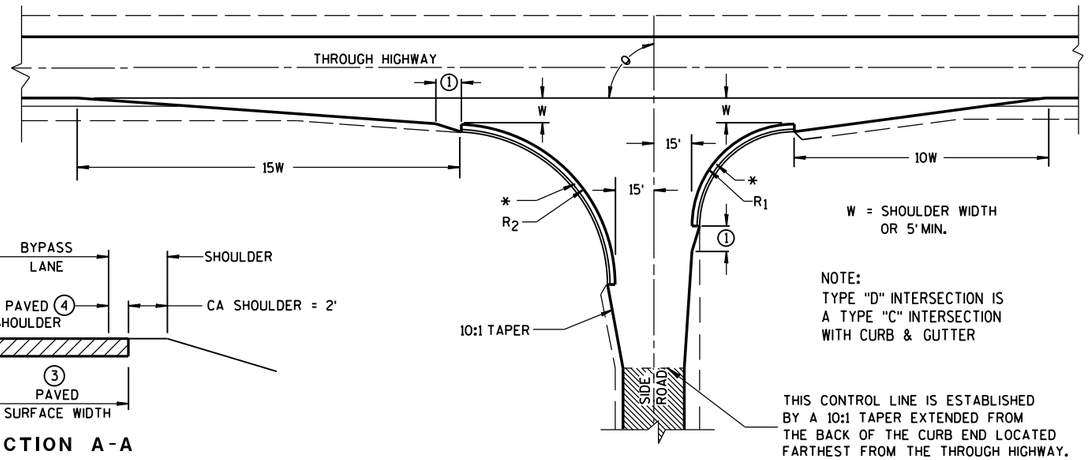
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45



TYPE "C"



TYPE "D"

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING PAVED SURFACE

BYPASS LANE

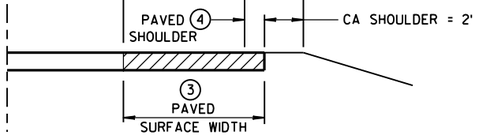
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

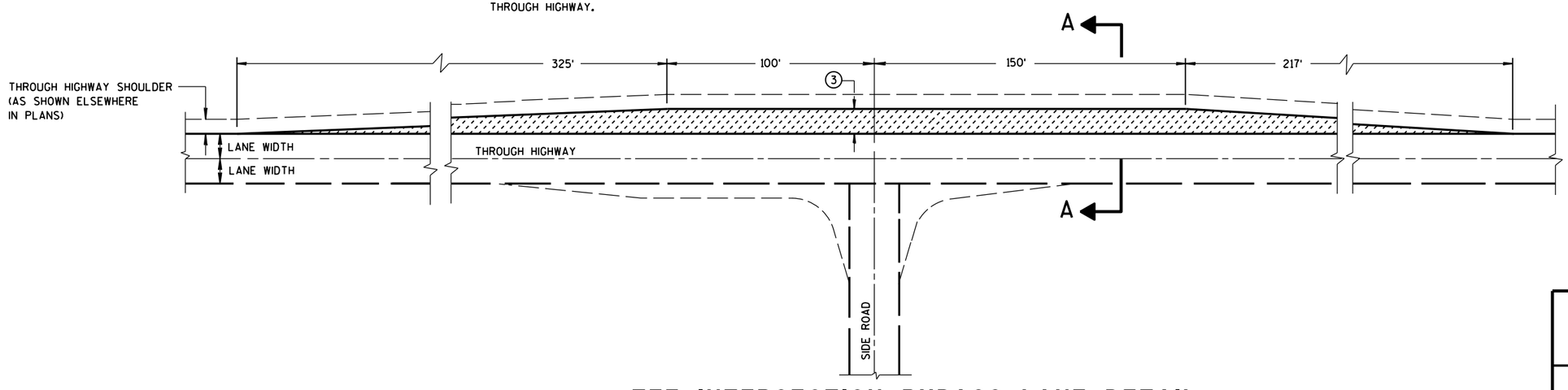
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.

(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



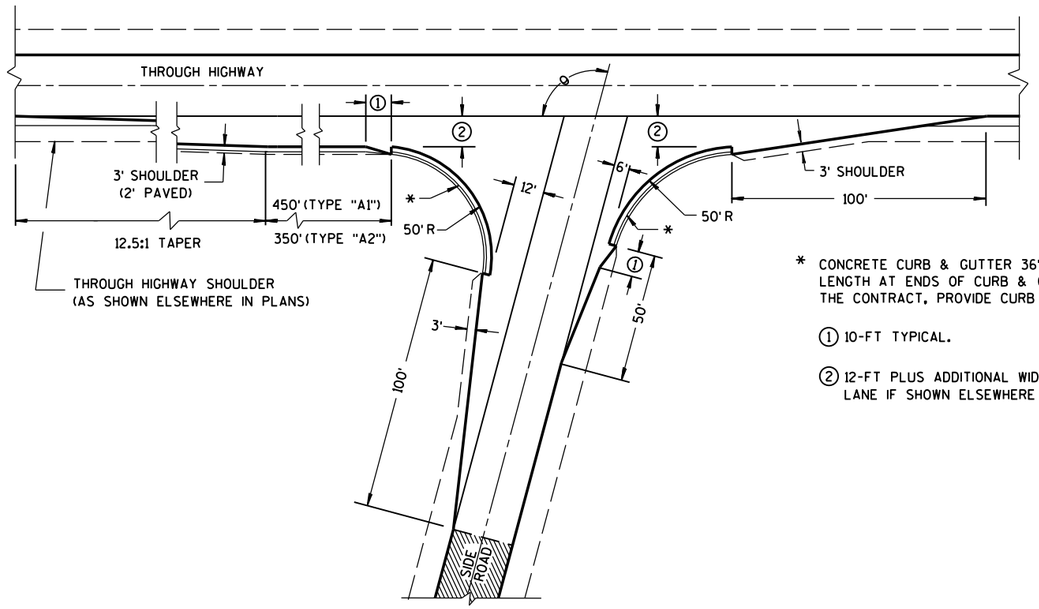
TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 9 A 1-13a



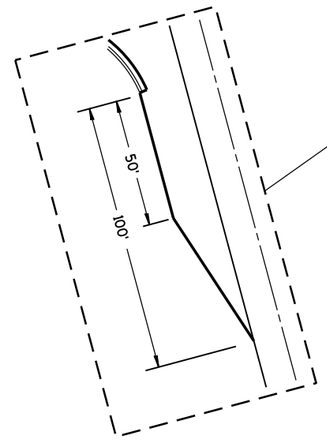
θ = MORE THAN 80°

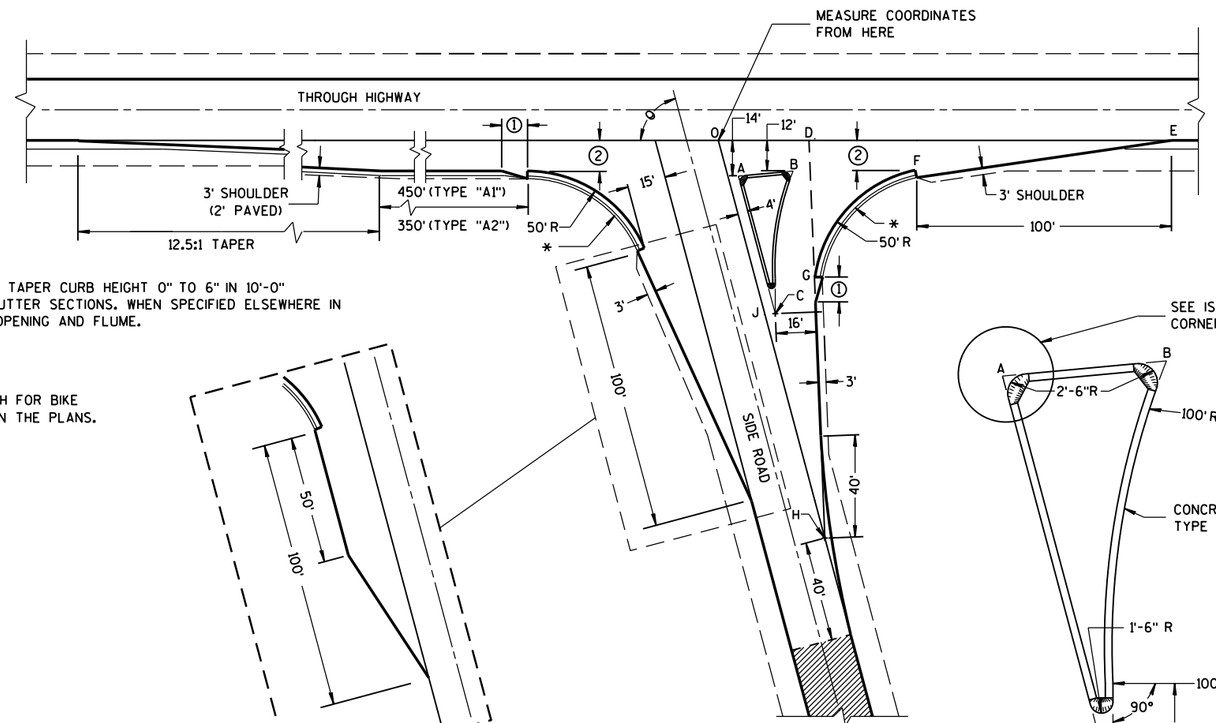
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10-FT TYPICAL.

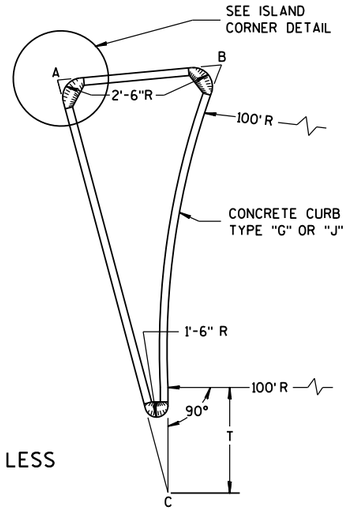
② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.

EXISTING PAVED SURFACE

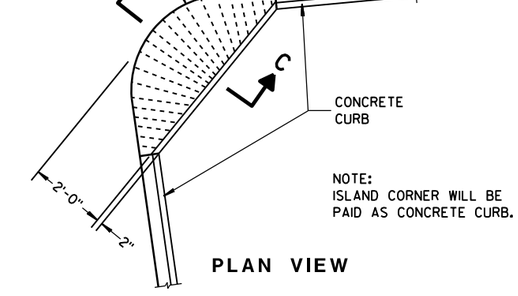




θ = ACUTE ANGLES 80° OR LESS

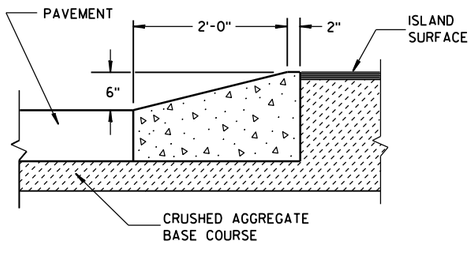


SIDE ROAD WIDENING AND TAPER REQUIRED WHERE
THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS



NOTE:
ISLAND CORNER WILL BE
PAID AS CONCRETE CURB.

PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)

TABLE OF DIMENSIONS FOR
VARIABLE SIDE ROAD INTERSECTION ANGLES
(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O") X / Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4 / 0.0	196.1 / 0.0	95.7 / -12.0	54.1 / -71.5	70.5 / -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.9 / -12.0	29.8 / -70.1	37.4 / 0.0	188.3 / 0.0	87.8 / -12.0	45.6 / -67.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.3 / -12.0	22.3 / -67.9	35.7 / 0.0	181.2 / 0.0	80.7 / -12.0	38.2 / -63.4	41.8 / -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.4 / -12.0	15.6 / -65.2	34.4 / 0.0	174.8 / 0.0	74.4 / -12.0	31.8 / -59.3	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

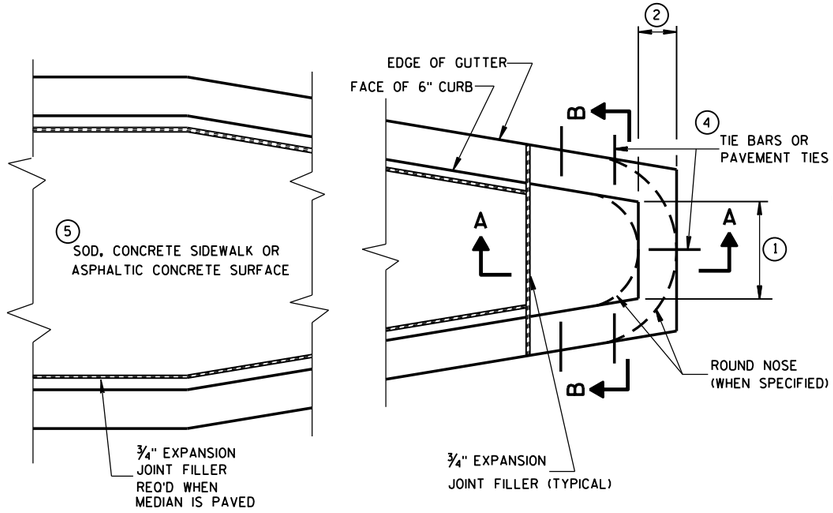
AT-GRADE SIDE ROAD
INTERSECTION, TYPE "A1" & "A2"

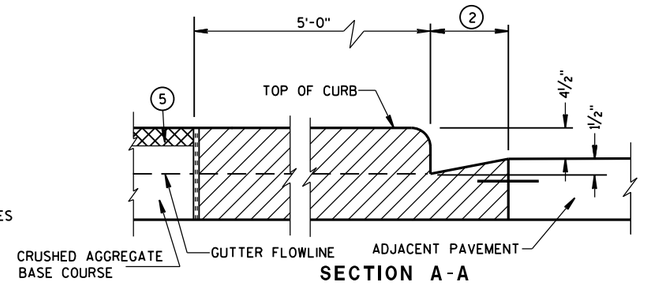
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/18/12 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

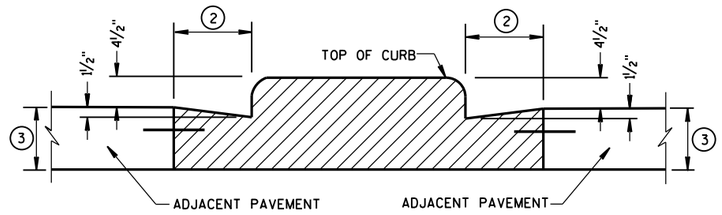
S.D.D. 9 A 1-13b

6





SECTION A-A



SECTION B-B

CONCRETE MEDIAN BLUNT NOSE DETAIL

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) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

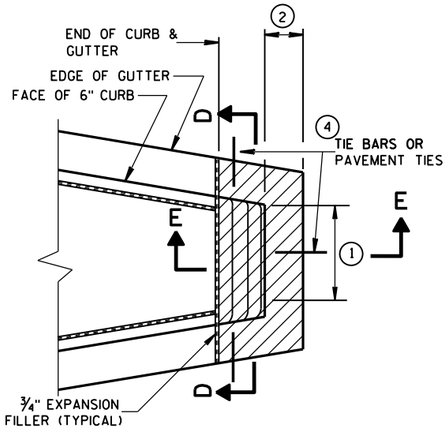
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

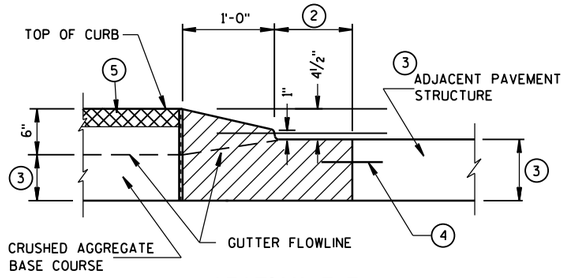
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

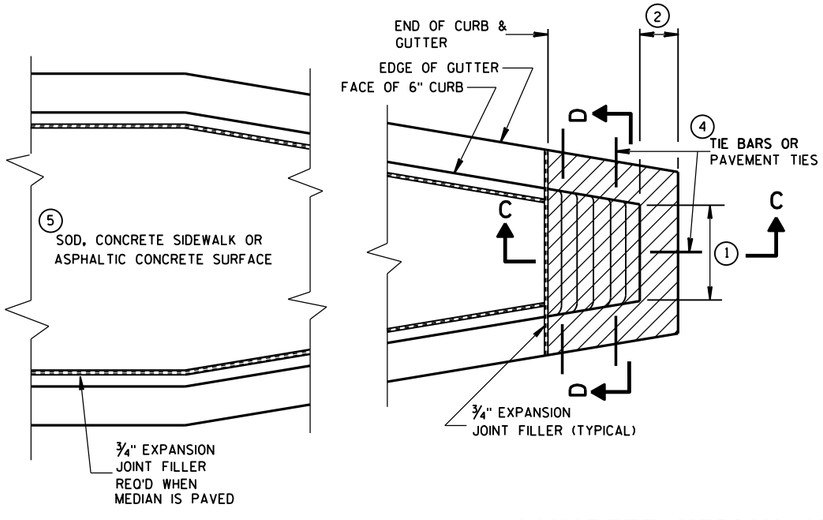
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

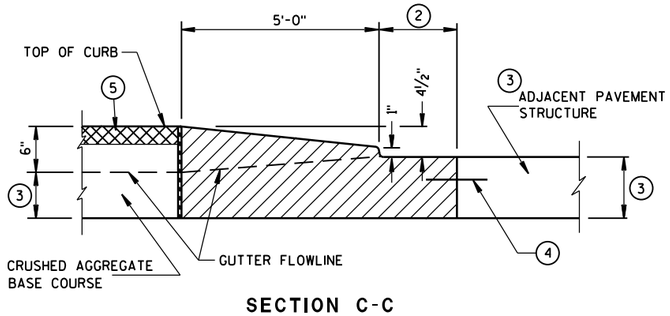




SECTION E-E

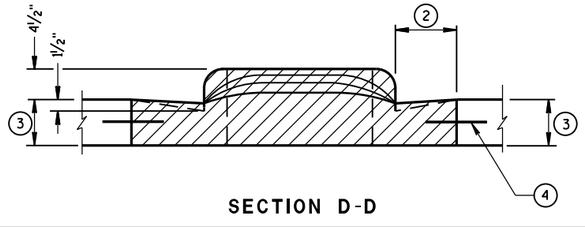
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

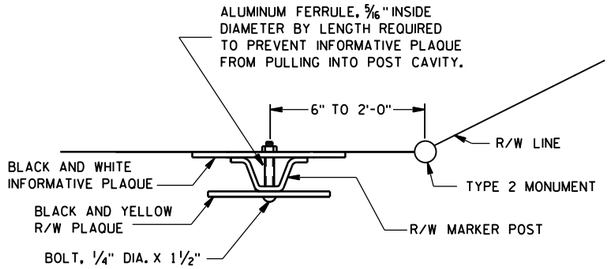
APPROVED
6/8/2006 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

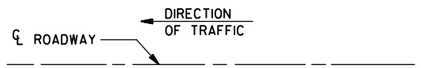
6

S.D.D. 11 B 2-2

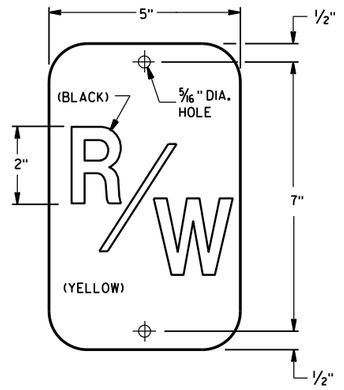
6

S.D.D. 11 B 2-2



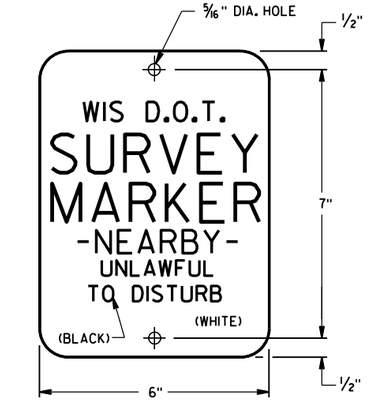


PLAN VIEW



R/W PLAQUE

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



INFORMATIVE PLAQUE

GENERAL NOTES

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

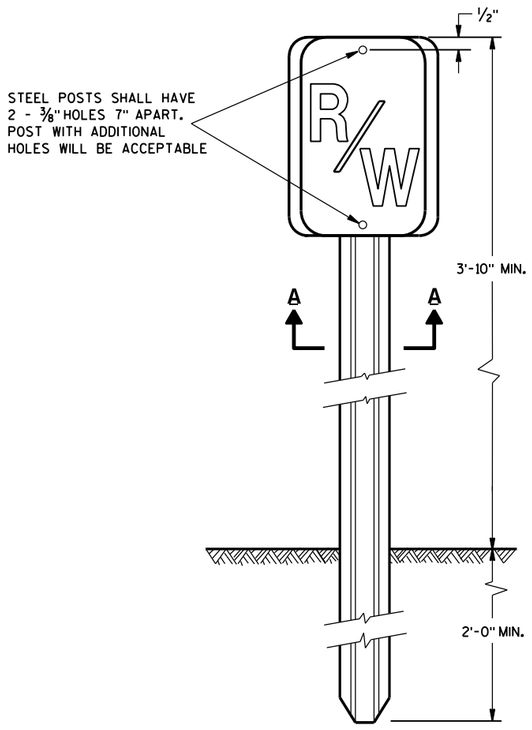
A STEEL MARKER POST FOR RIGHT-OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY, WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

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

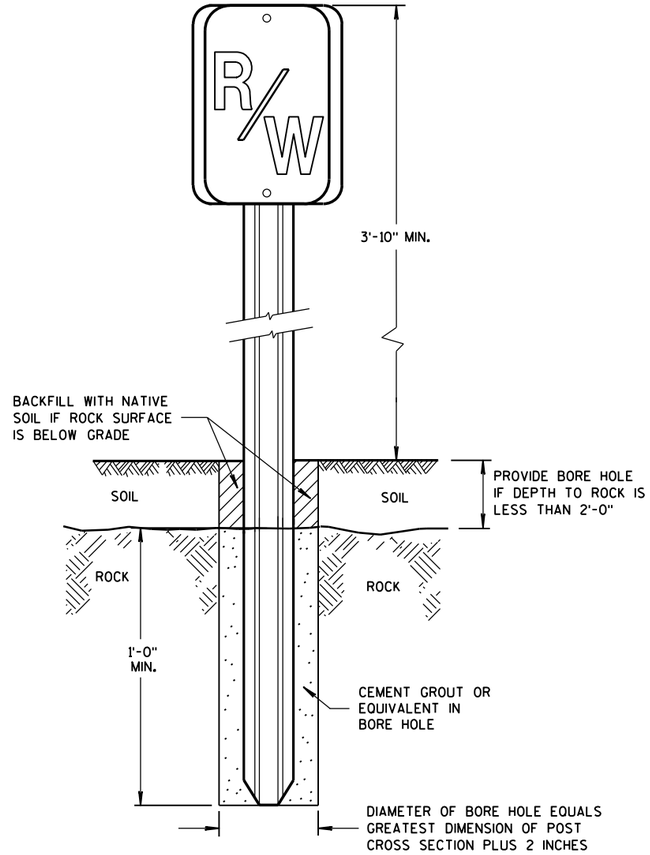
STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

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

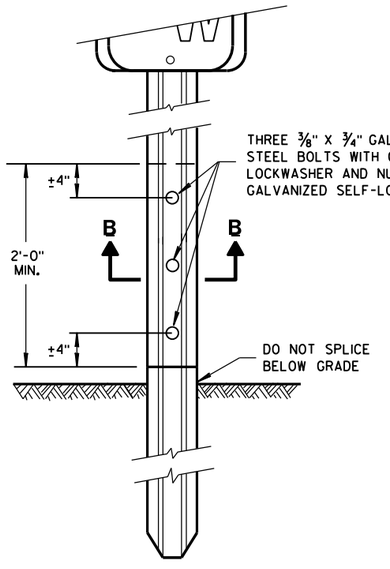
FILL THE BORE HOLE WITH CEMENT GROUT, OR EQUIVALENT. DEPENDING ON THE STABILITY OF THE ROCK.



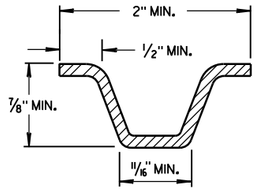
FRONT VIEW
STEEL MARKER POST



FRONT VIEW
ROCK INSTALLATION (1)

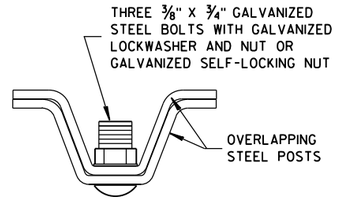


FRONT VIEW
SPLICE DETAIL



MIN. WEIGHT 1.12 LB./FT.

SECTION A-A



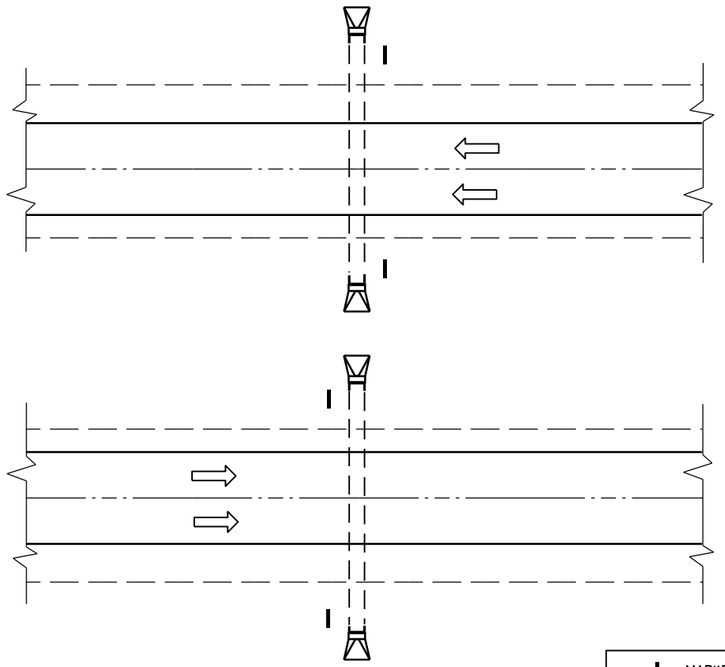
SECTION B-B

MARKER POST FOR RIGHT-OF-WAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

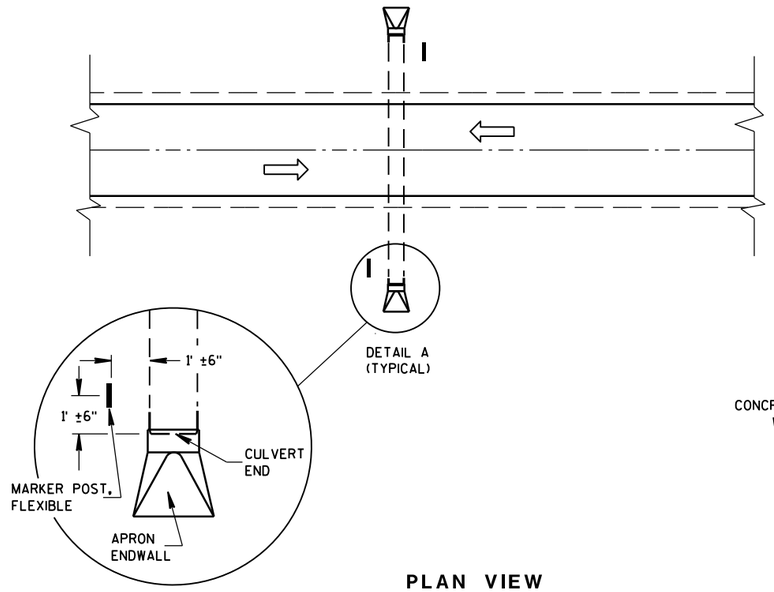
APPROVED
2/18/2016 — DATE
/S/ Ray Kumapayi — CHIEF SURVEYING AND MAPPING ENGINEER
FHWA

6
S.D.D. 15 A 1-13a



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

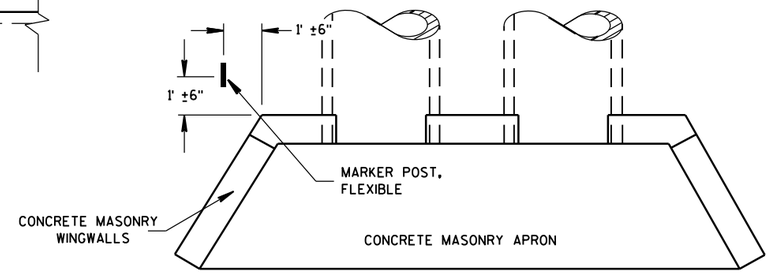
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

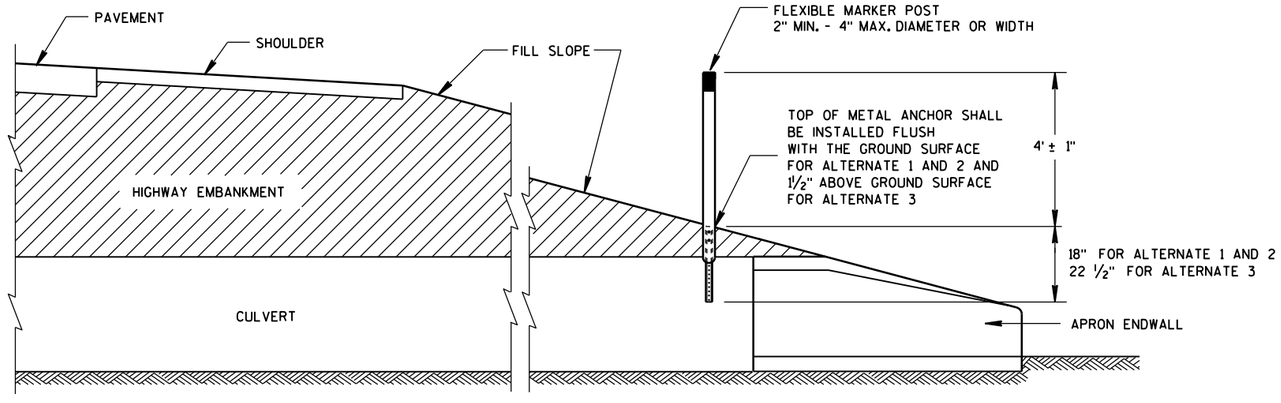
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

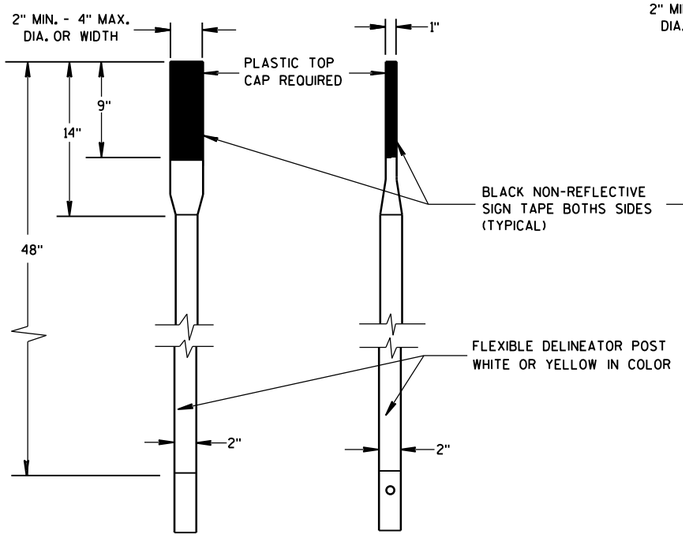
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

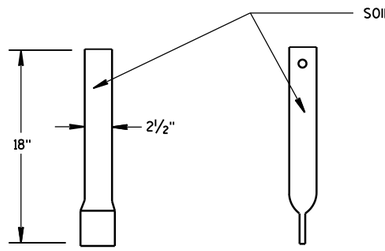
6

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

6

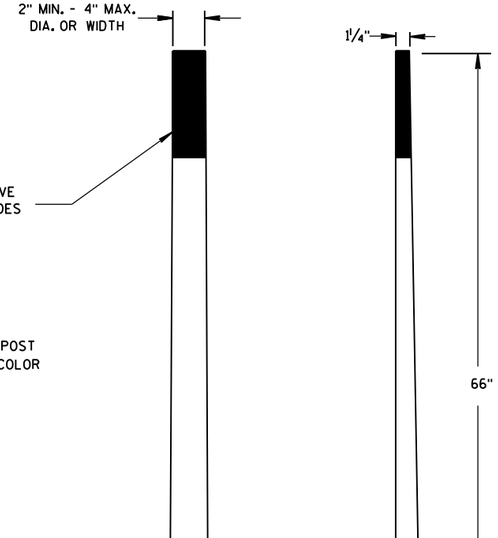
S.D.D. 15 A 3-2a





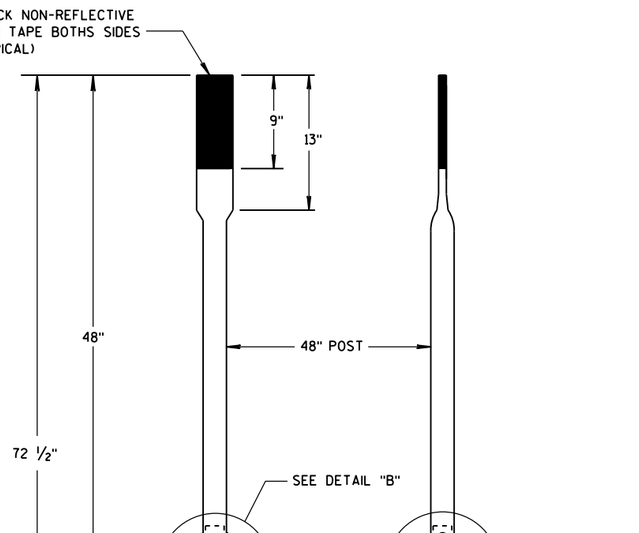
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

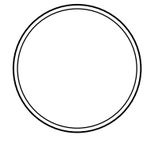
ALTERNATE 2



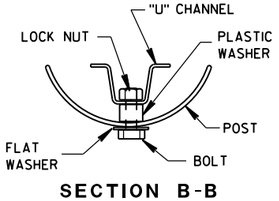
FRONT VIEW SIDE VIEW

ALTERNATE 3

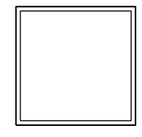
FLEXIBLE MARKER POSTS



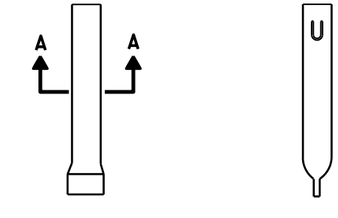
SECTION A-A



SECTION B-B

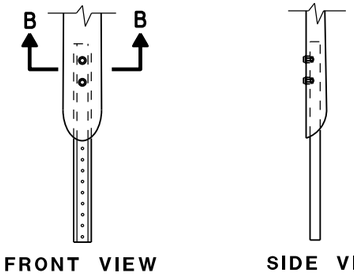


SECTION C-C



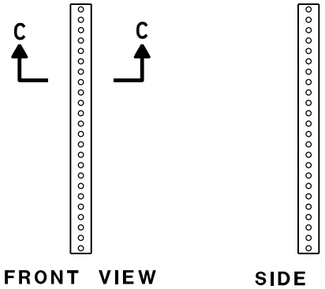
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

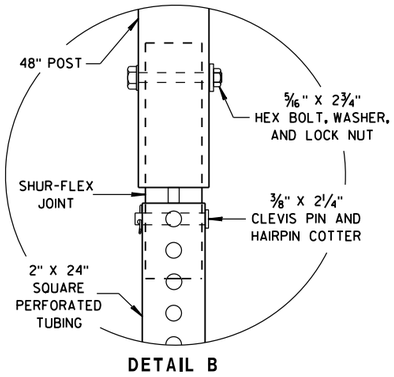
ALTERNATE 2



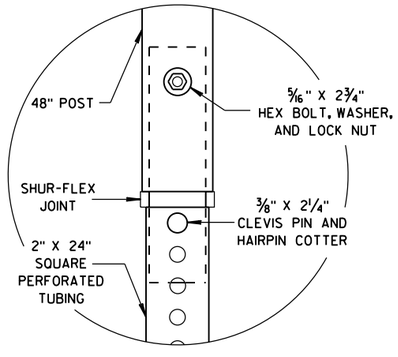
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

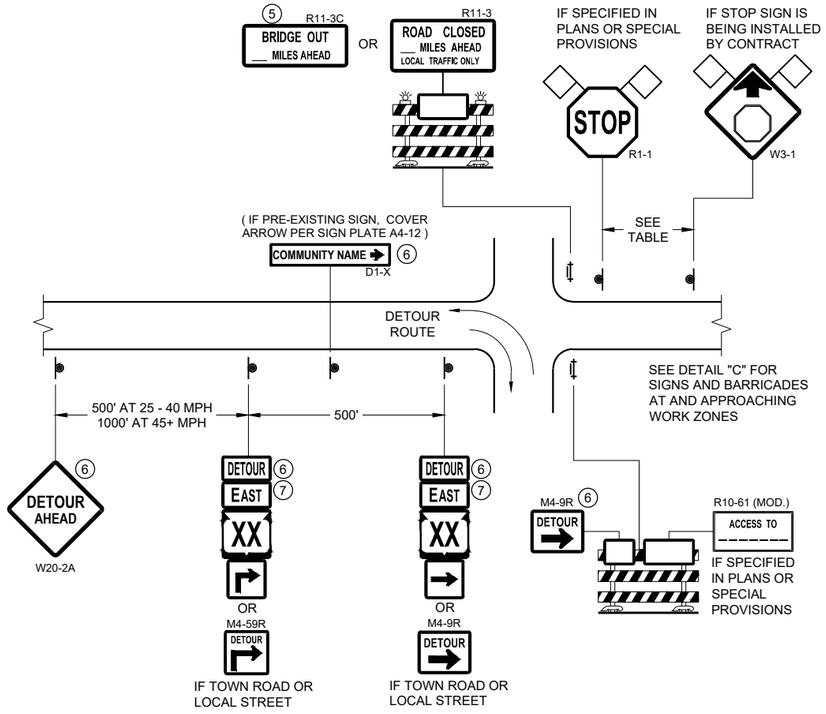
APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

6

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

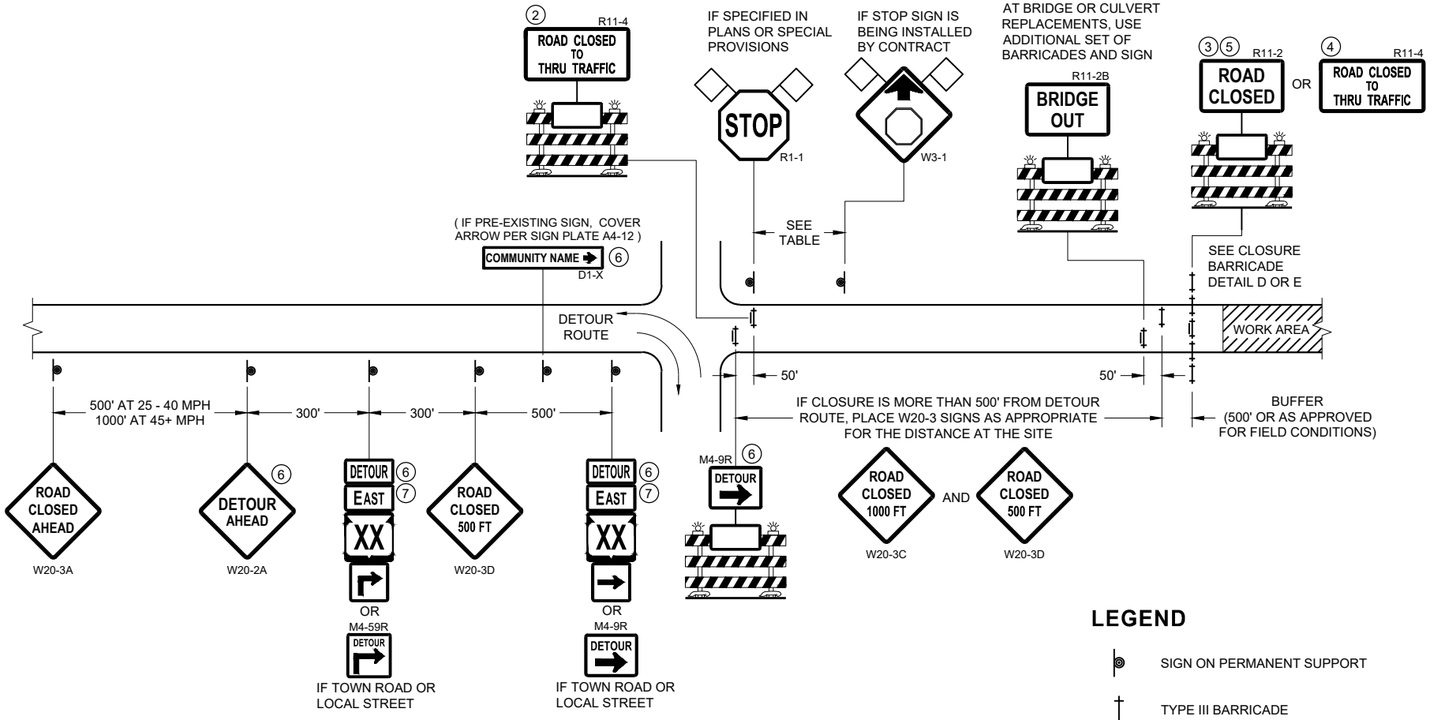
6

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



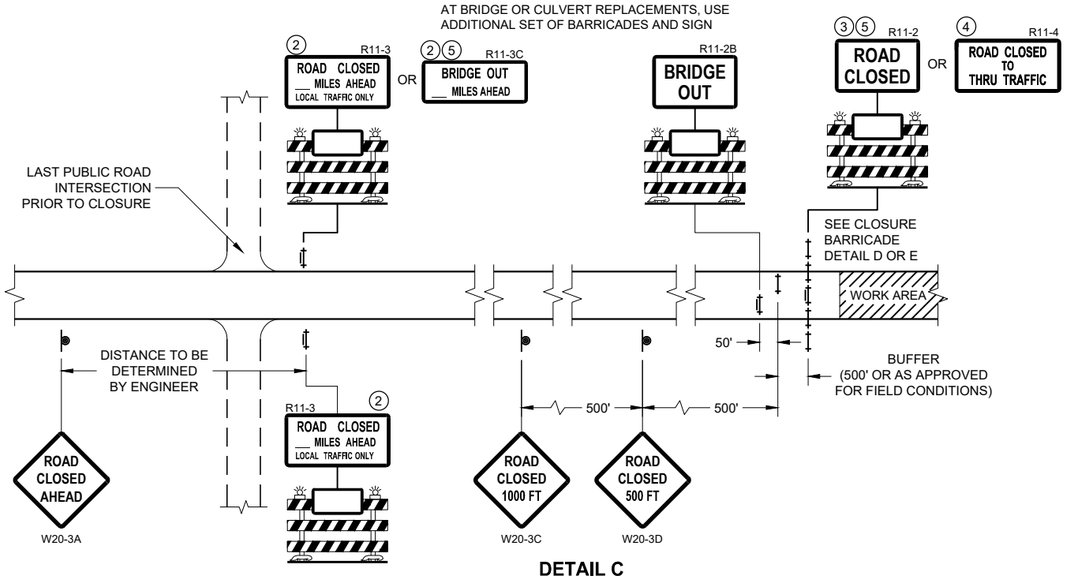
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8
EAST M3 - X
XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

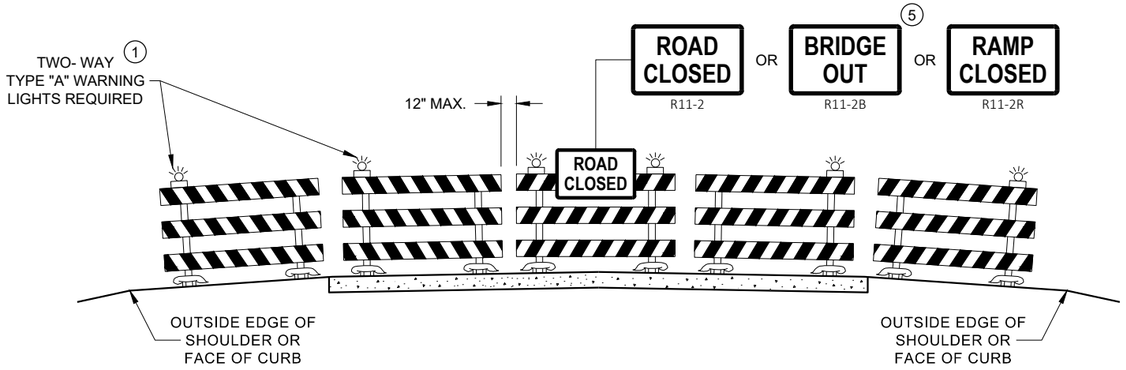
APPROVED
November 2018
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

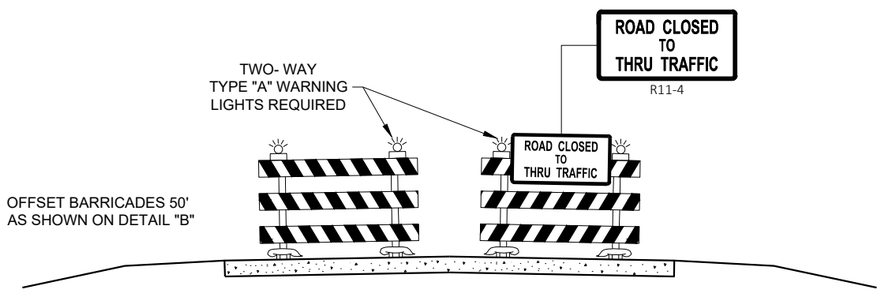
6

SDD 15C02 - 07a

SDD 15C02 - 07a



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 THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL 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 SHALL, 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" (36" X 18" 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)
- MO5 - 1 AND MO6 - 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 AN 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 ROAD 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 VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C02 - 07b

6

SDD 15C02 - 07b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

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. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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.

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

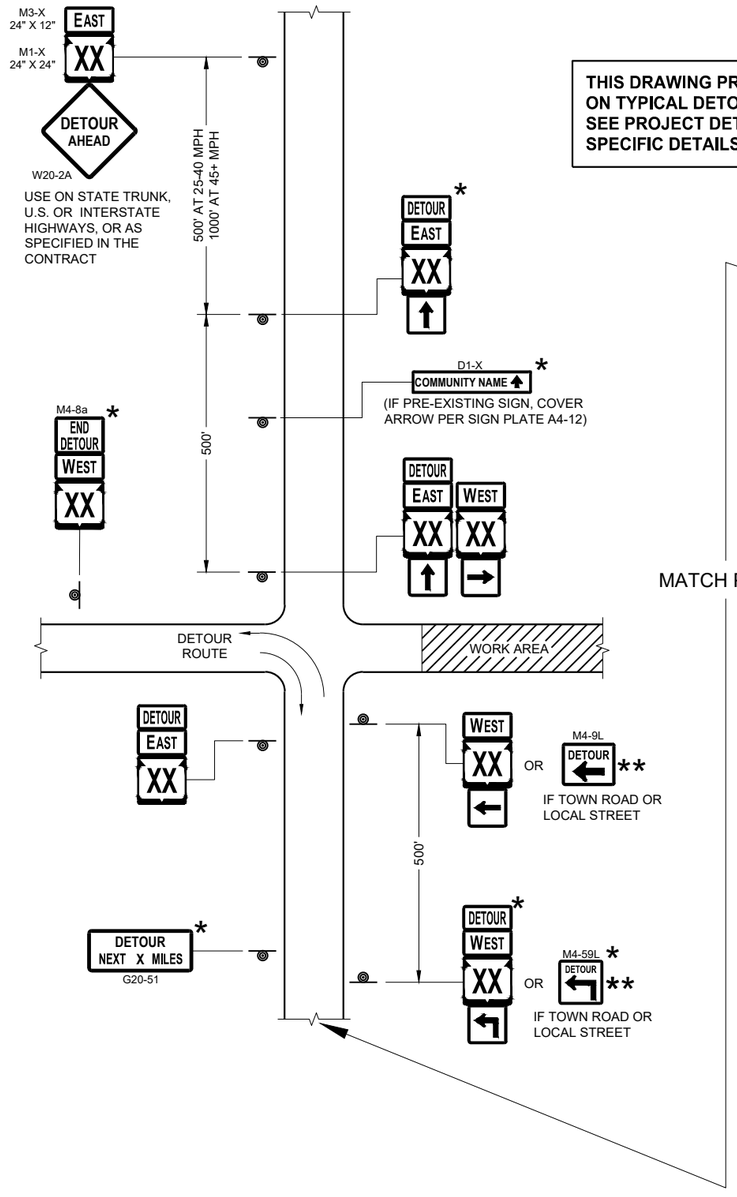
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

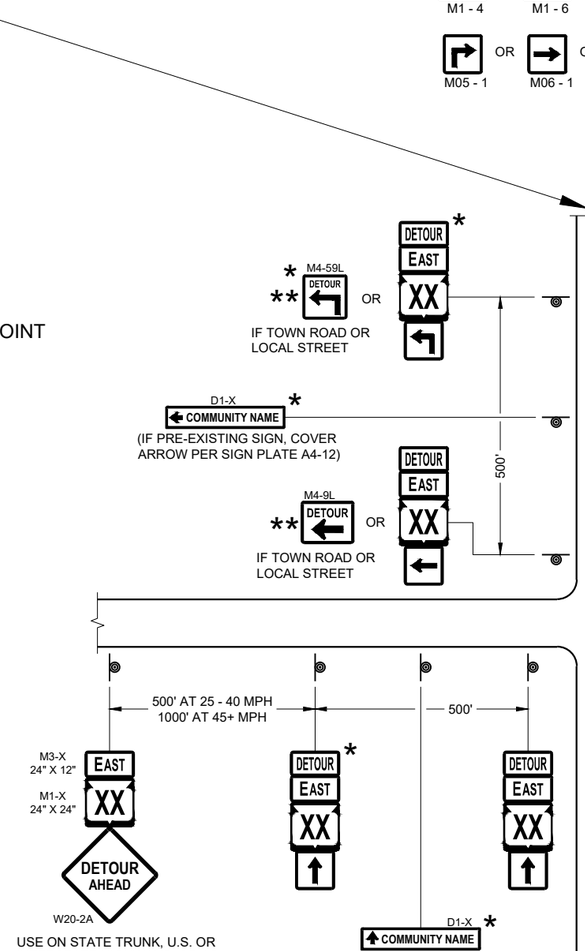
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

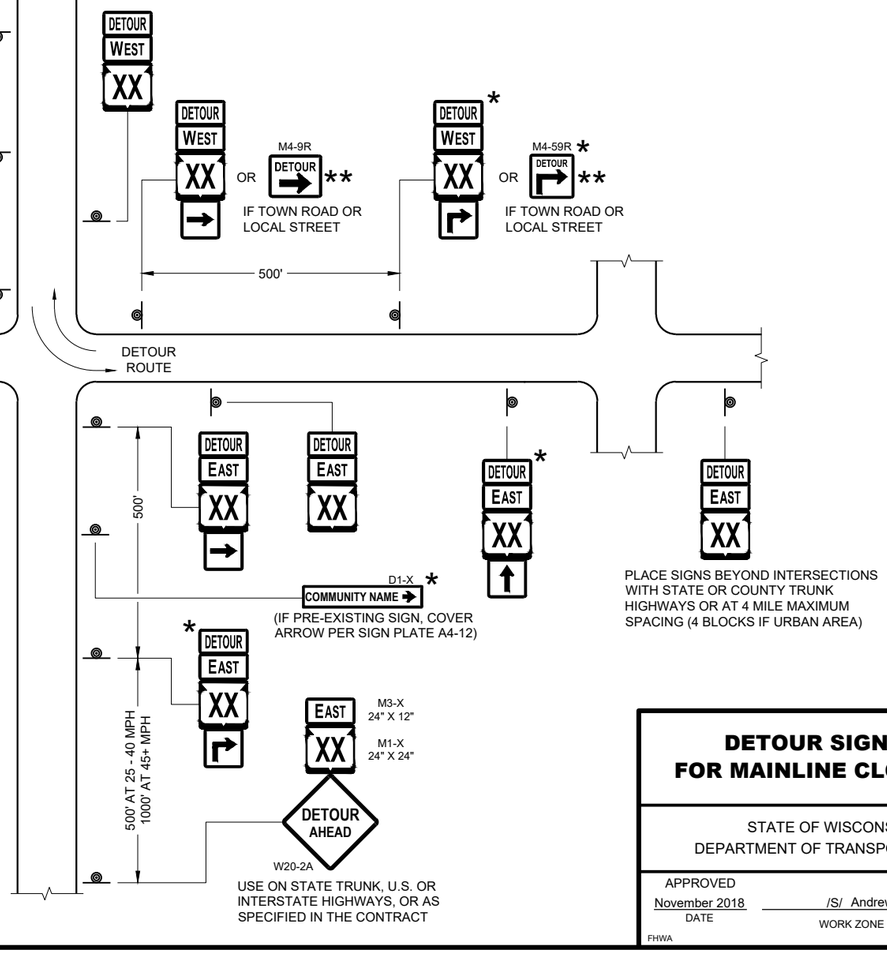
* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



MATCH POINT





SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

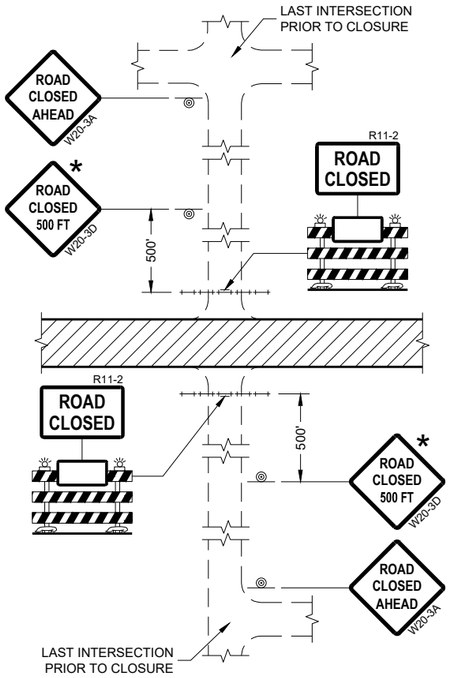
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

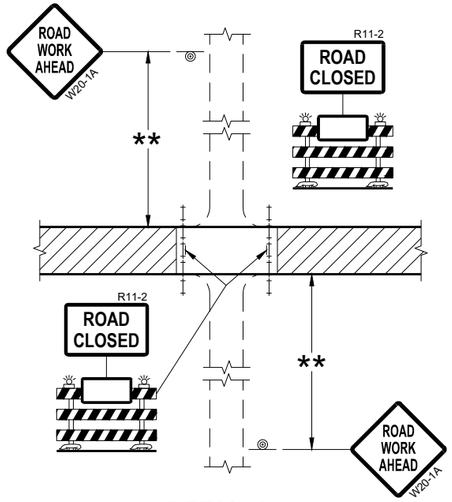
SDD 15C02 - 07c

SDD 15C02 - 07c

6



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)

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 (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN 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, AND R11-4 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.

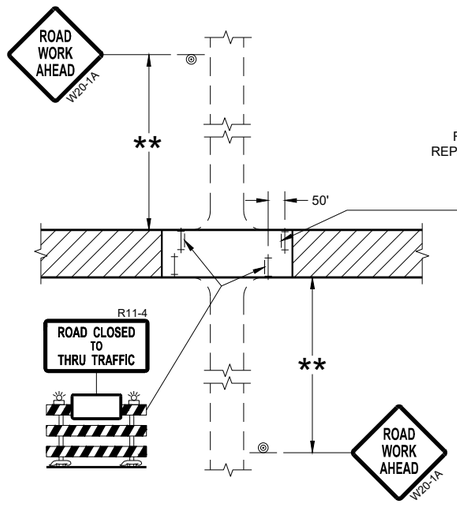
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

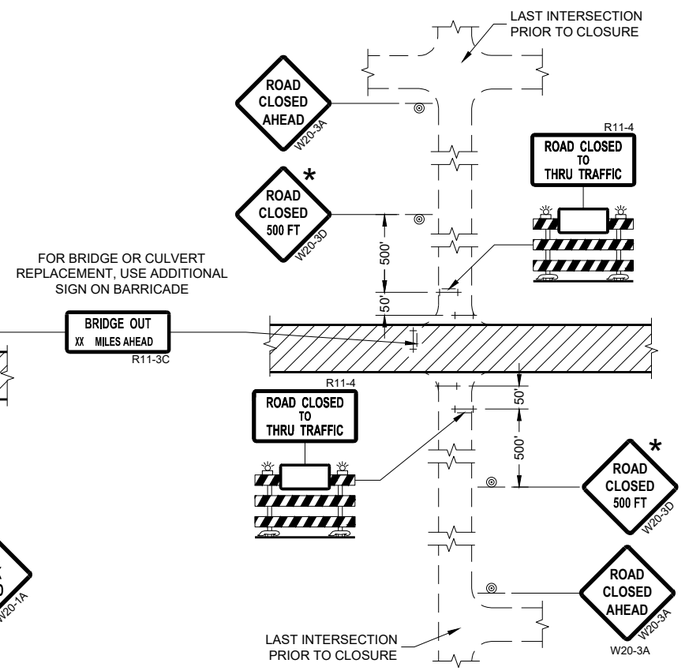
** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C03 - 05

GENERAL NOTES

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

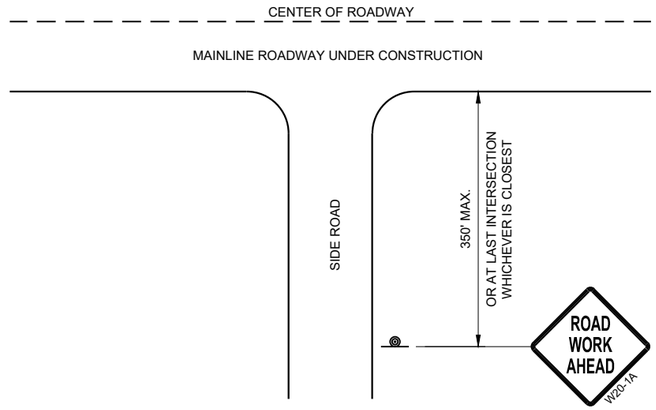
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

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

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

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



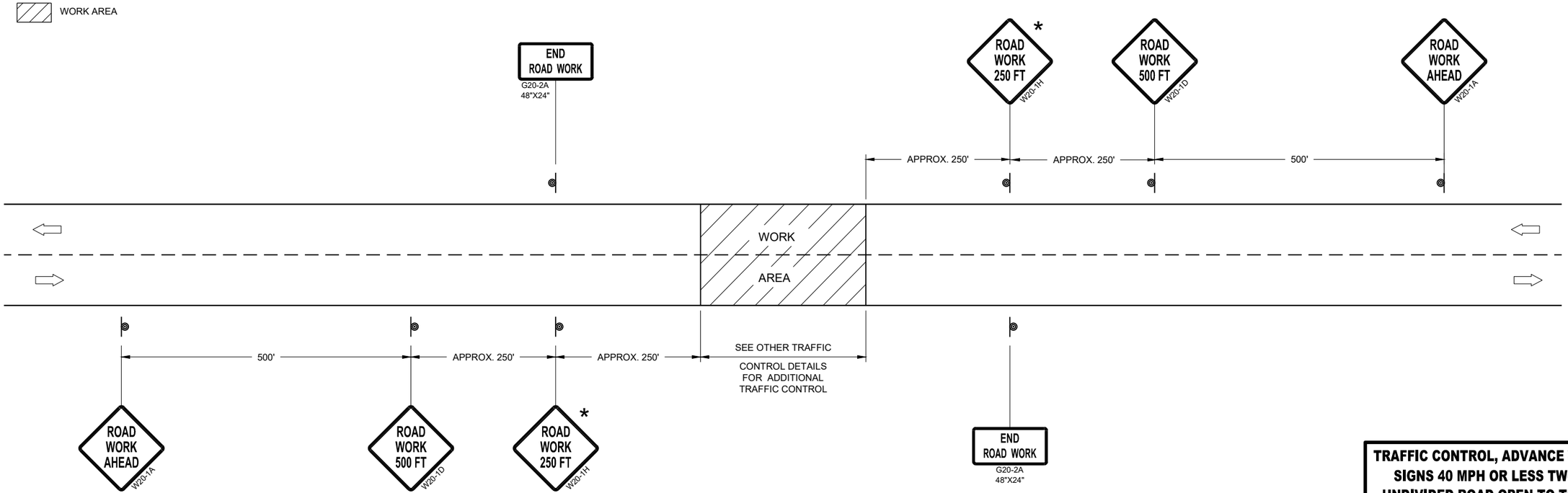
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

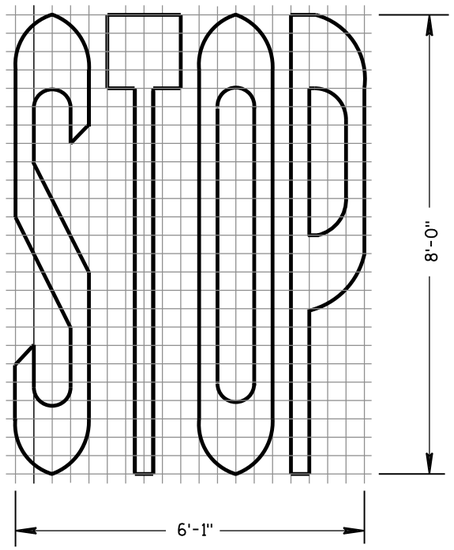
FHWA

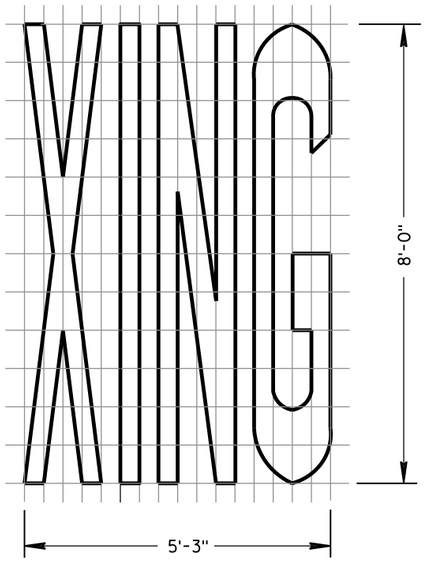
6

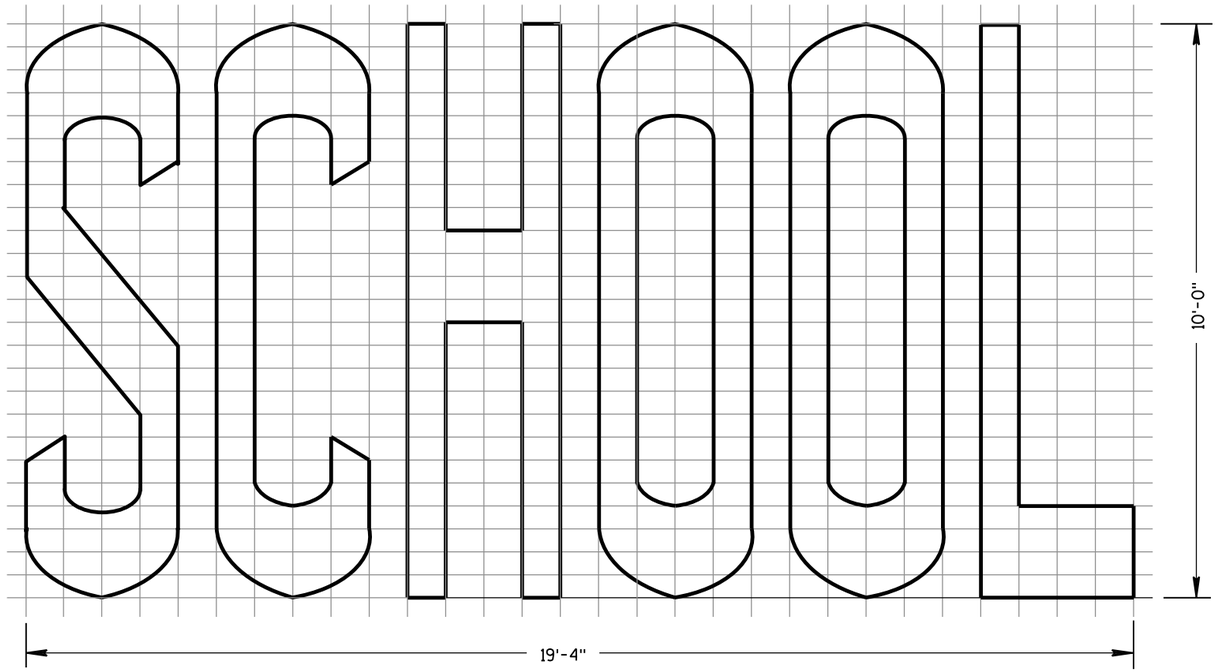
SDD 15C05 - 05

GENERAL NOTES

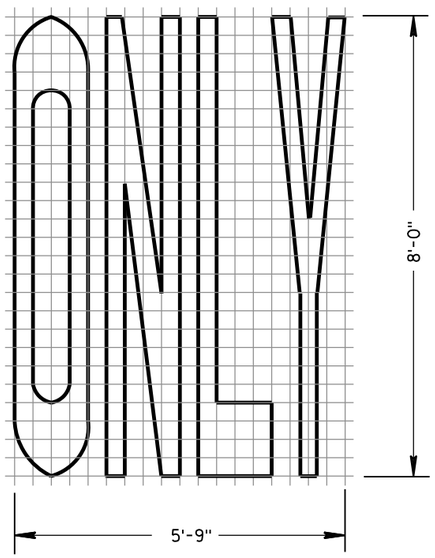
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

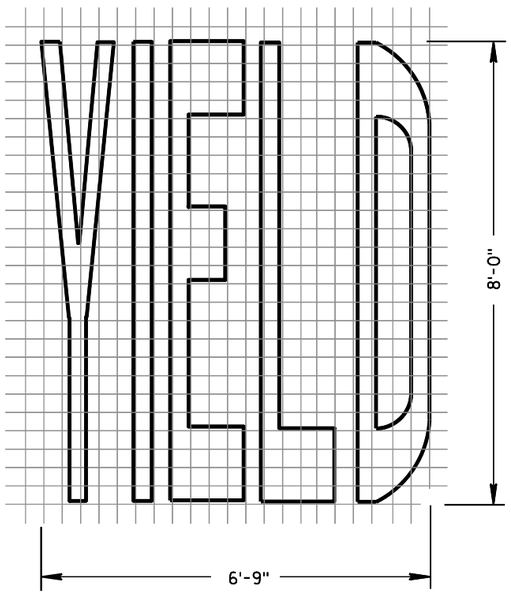


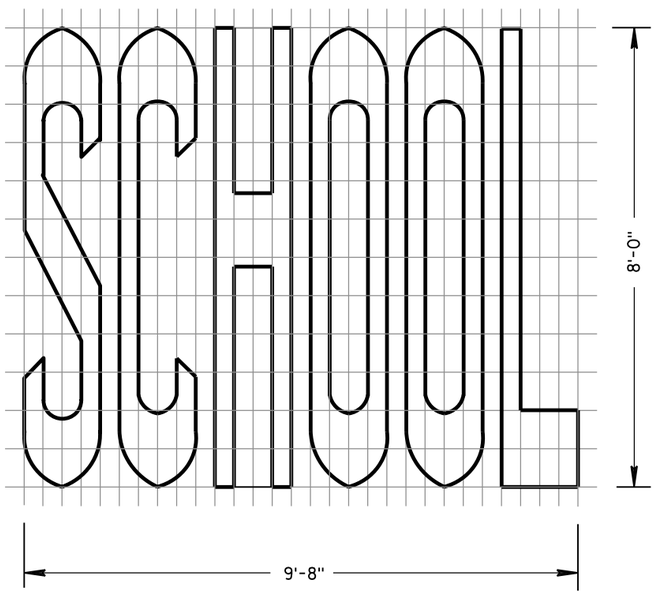




TWO-LANE







SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MARK ENGR

FHWA

6

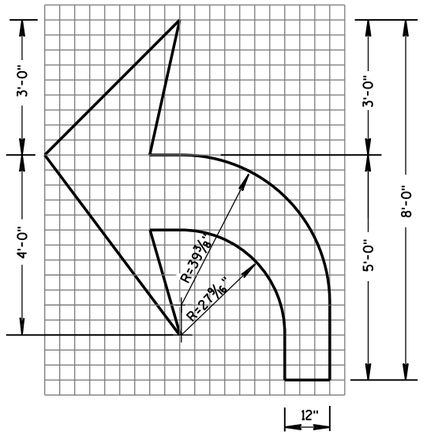
S.D.D. 15 C 7-14b

6

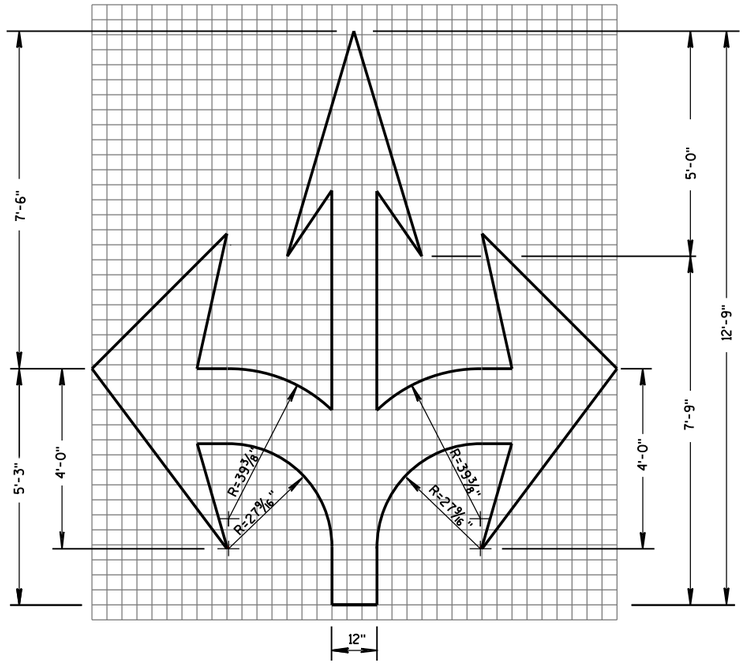
S.D.D. 15 C 7-14b

GENERAL NOTES

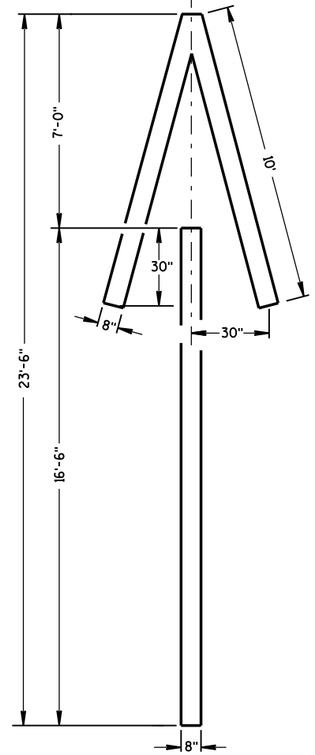
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



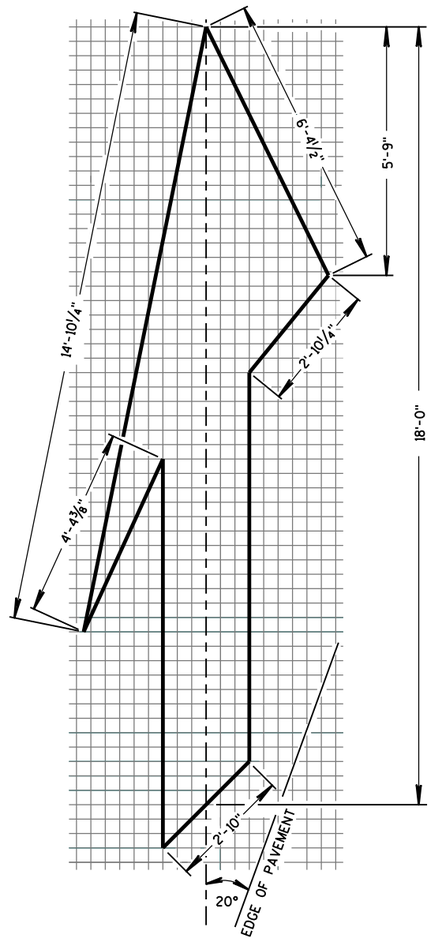
TYPE 2



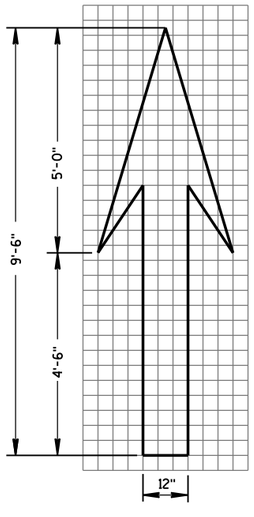
TYPE 6



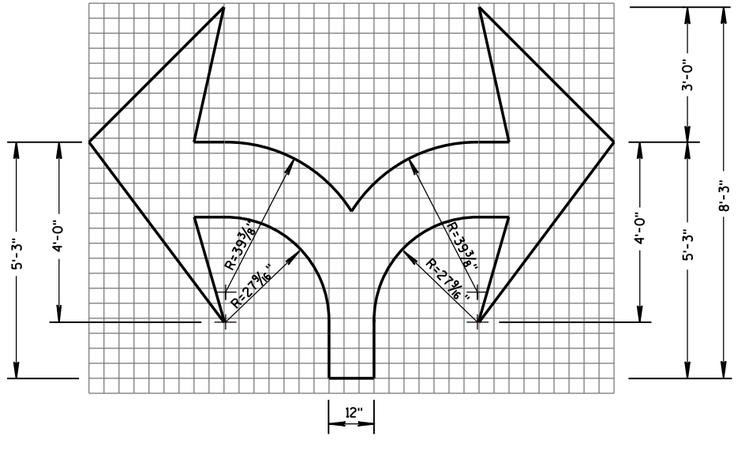
TYPE 4



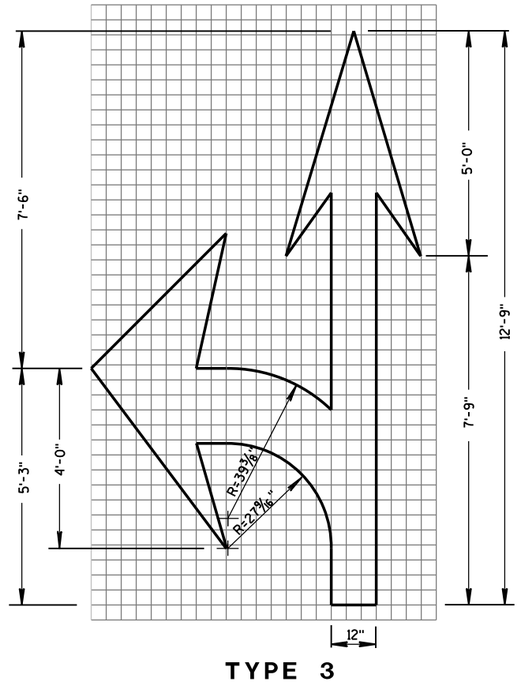
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

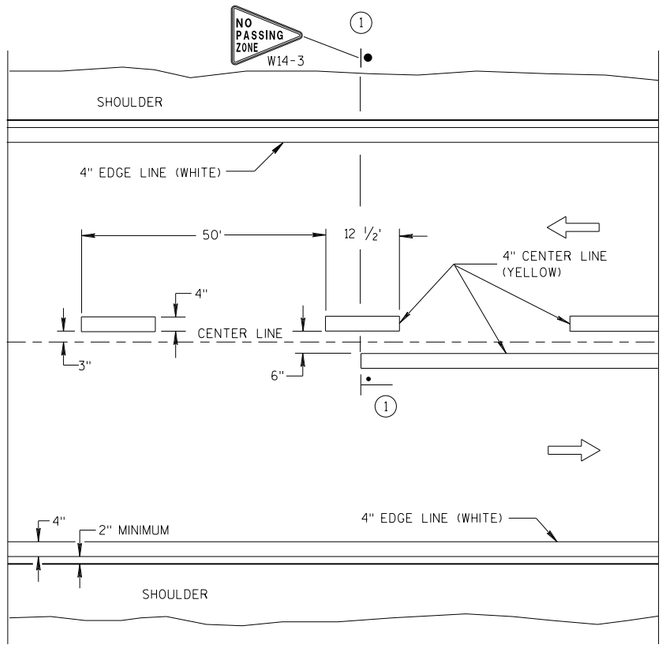
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

6

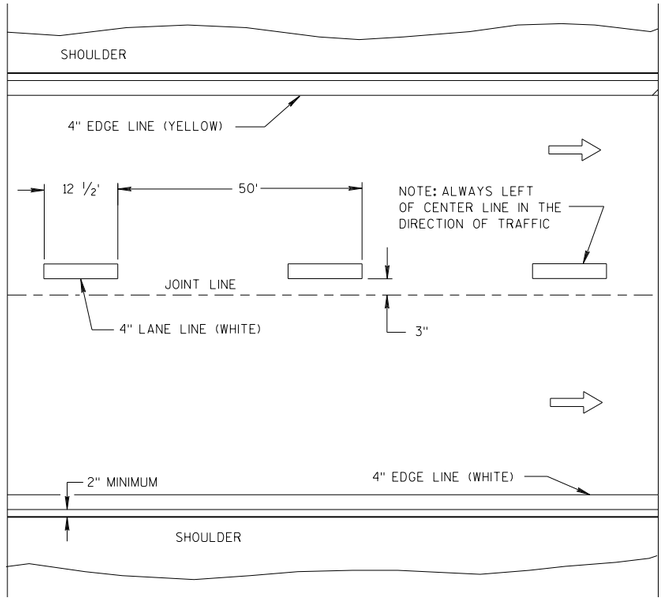
S.D.D. 15 C 7-14c

6

S.D.D. 15 C 7-14c



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.

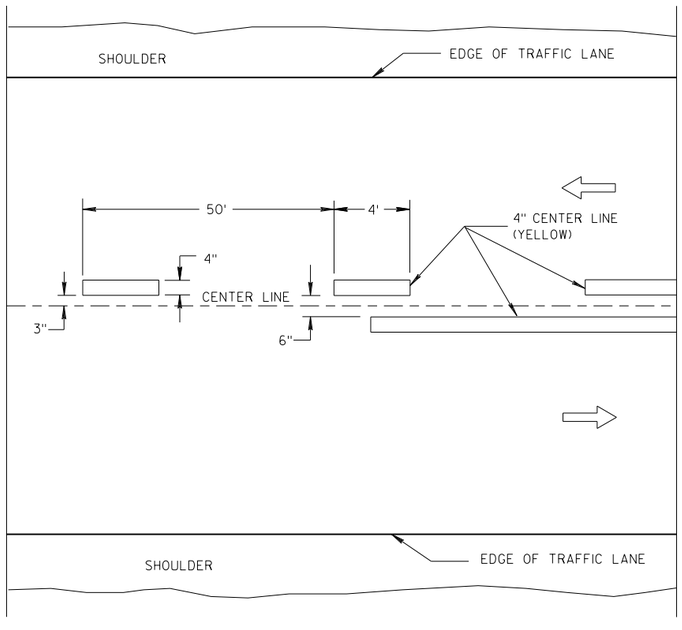
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

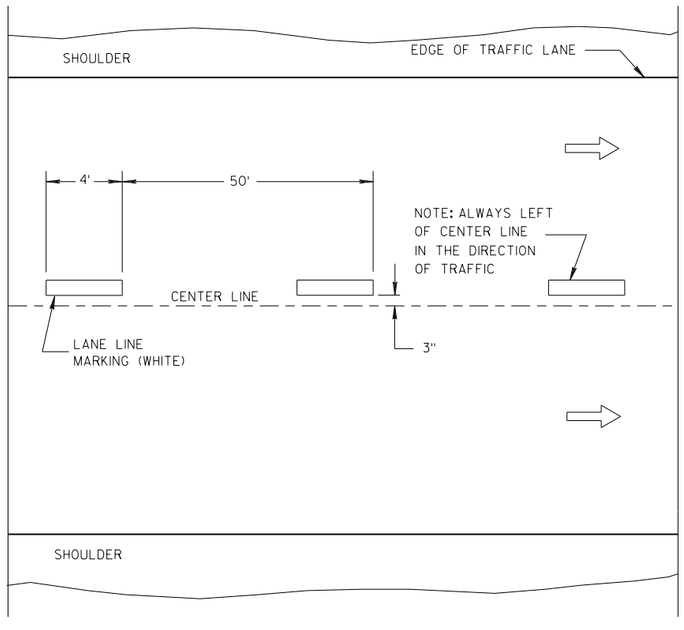
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

6

S.D.D. 15 C 8-19a

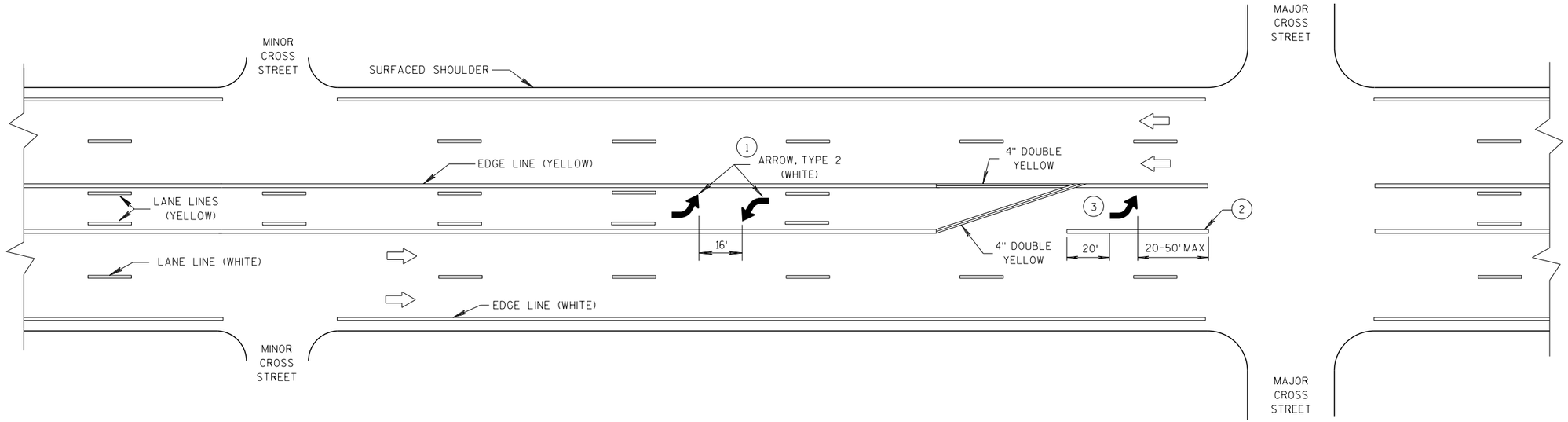
GENERAL NOTES

(1) A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

(2) 8" WHITE

(3) TURN BAY LENGTH OF LESS THAN 48'DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT

DIRECTION OF TRAFFIC



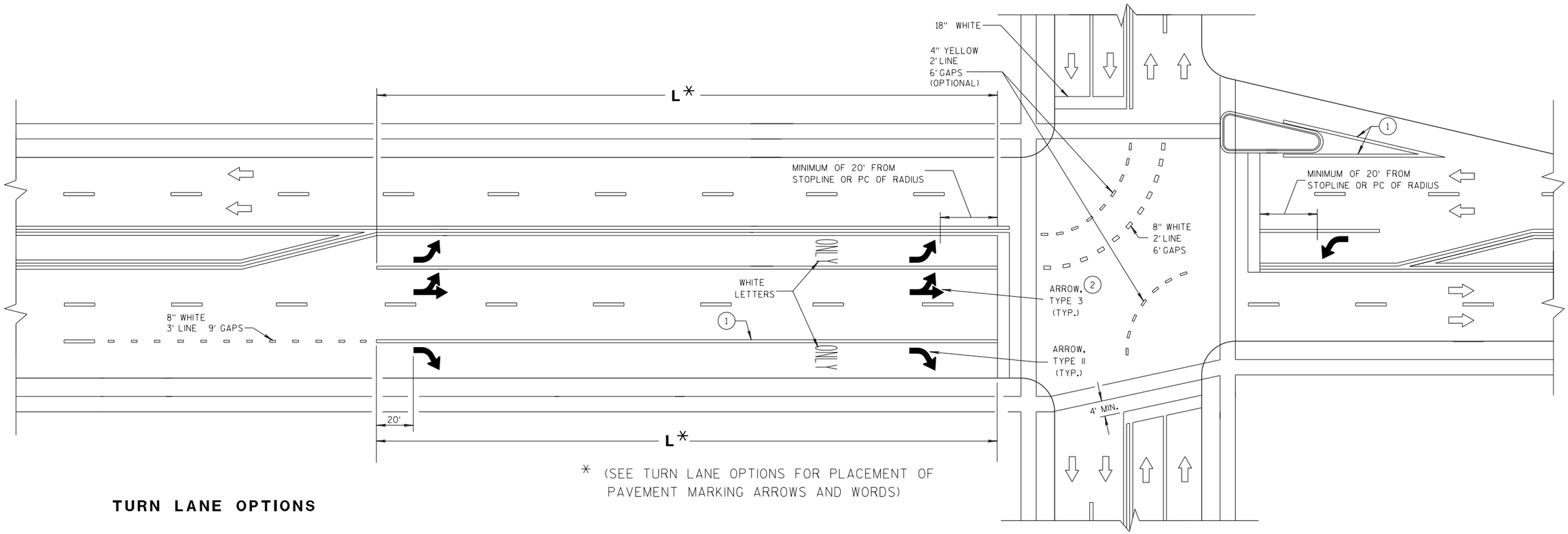
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

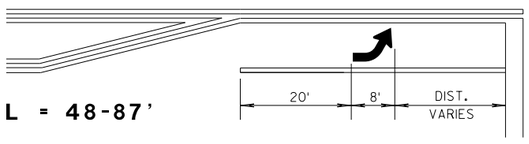
S.D.D. 15 C 8-19b



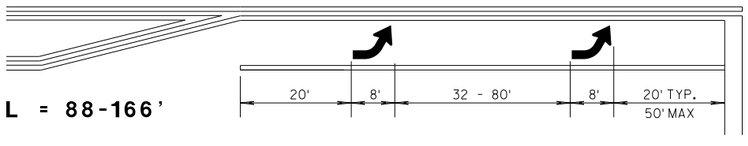
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

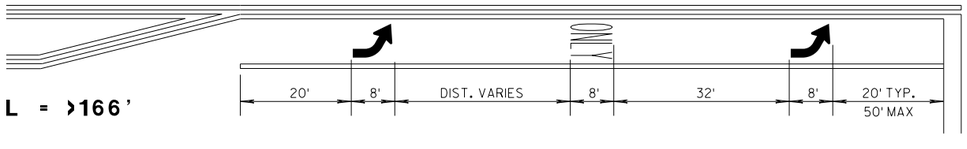
LENGTH OF TURN BAY (**L**) OF 0-47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48-87'



L = 88-166'



L = >166'

GENERAL NOTES

1. 8" WHITE
2. QUANTITY AND LOCATION OF TYPE 3 ARROW ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION, THE ARROWS AND ONLY MARKING ARE ELIMINATED.

⇨ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORT

6

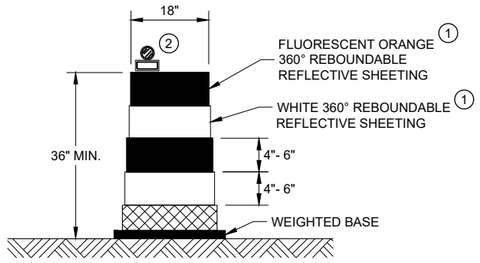
S.D.D. 15 C 8-19c

6

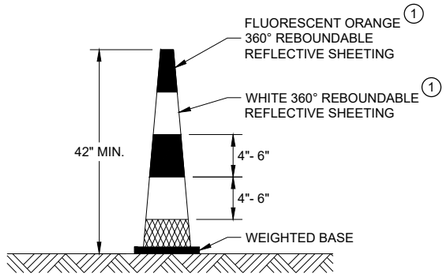
S.D.D. 15 C 8-19c

GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

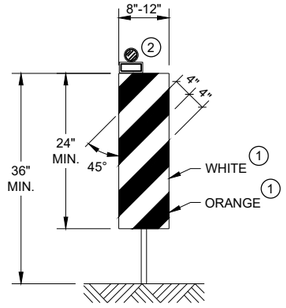


DRUM



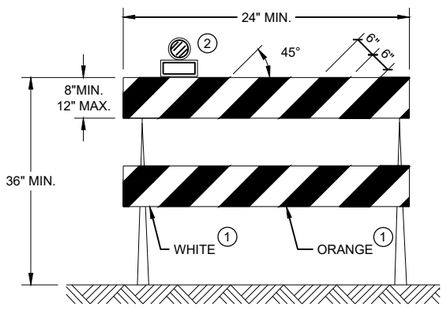
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



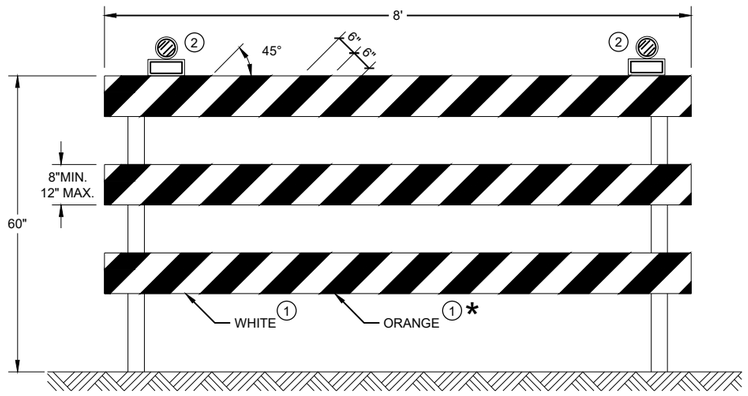
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

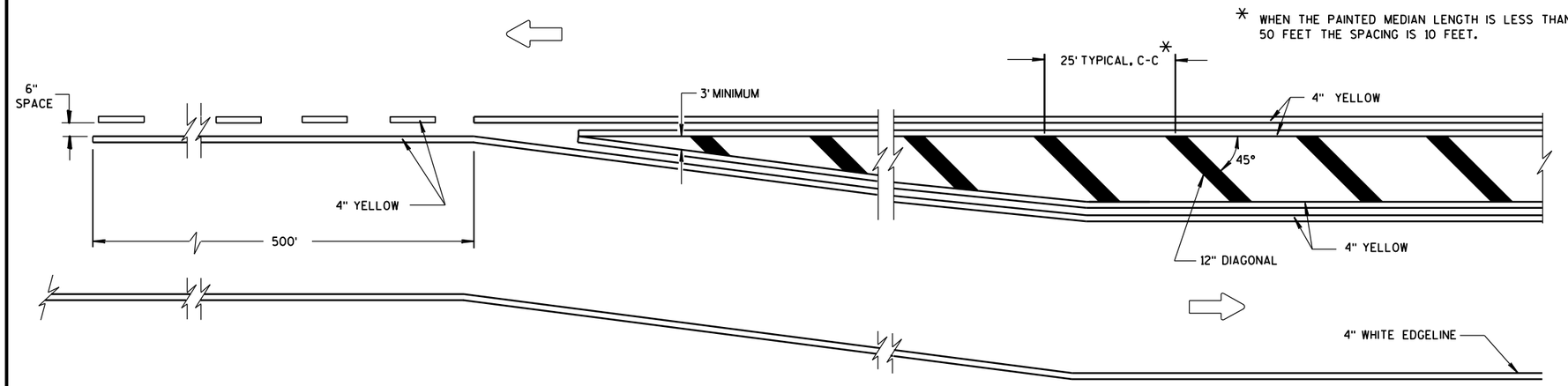
FHWA

6

SDD 15C11 - 07b

6

SDD 15C11 - 07b



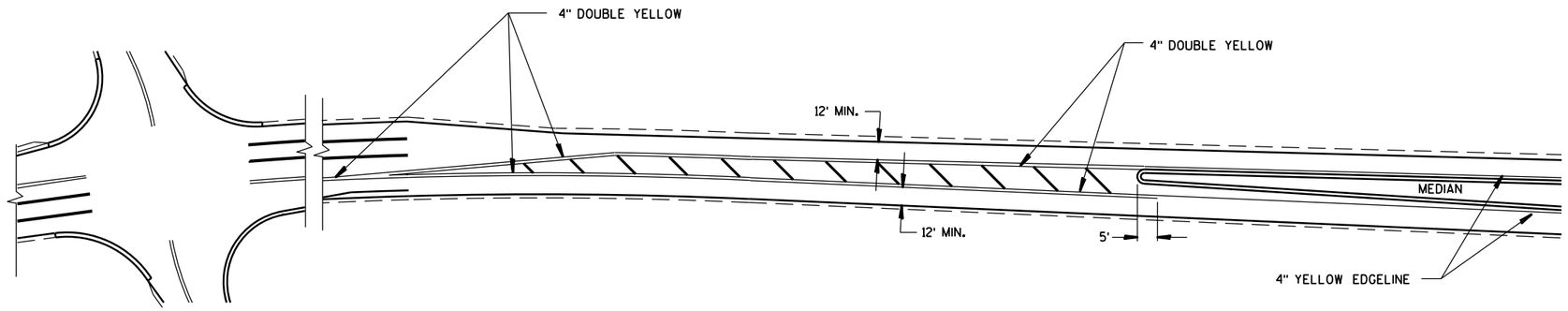
* WHEN THE PAINTED MEDIAN LENGTH IS LESS THAN 50 FEET THE SPACING IS 10 FEET.

MEDIAN ISLAND DETAIL

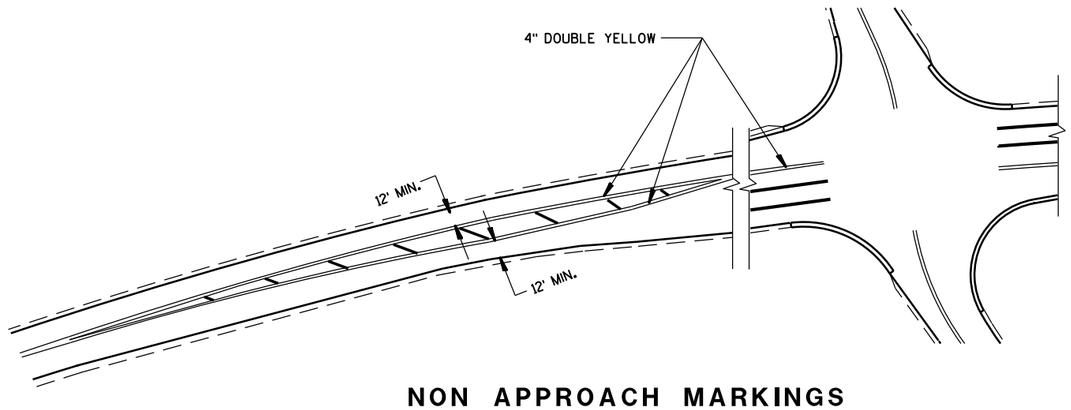
GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

DIRECTION OF TRAVEL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE FHWA	/S/ Matthew Rauch STATE SIGNING AND MARK[illegible]ER

6

S.D.D. 15 C 18-4

6

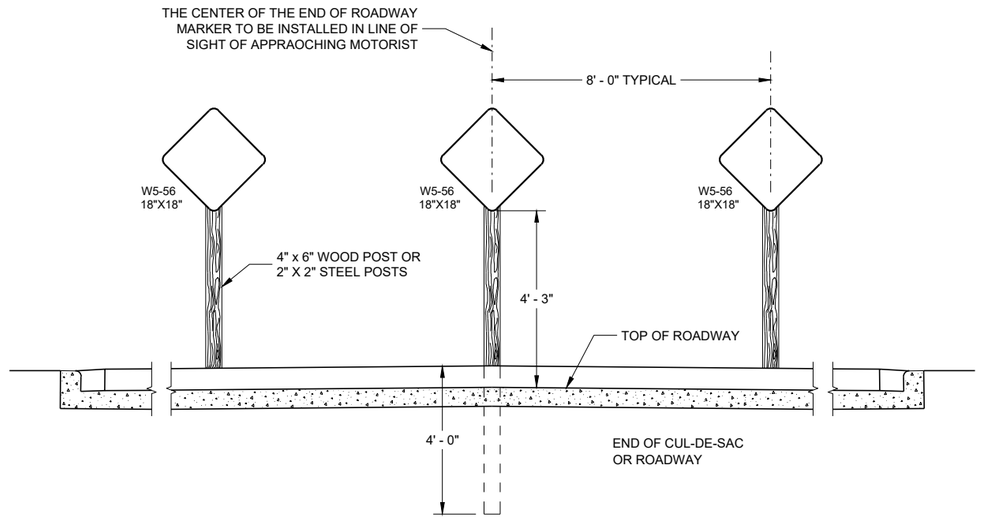
S.D.D. 15 C 18-4

GENERAL NOTES

SIGN LOCATIONS SHOWN ARE TYPICAL PLACEMENT AND MAY BE ADJUSTED BY THE ENGINEER AS FIELD CONDITIONS DICTATE.

THE MINIMUM NUMBER OF END-OF-ROADWAY SIGNS ARE THREE (AS SHOWN). ADDITIONAL END-OF-ROADWAY SIGNS MAY BE INSTALLED AS FIELD CONDITIONS DICTATE. (SEE SIGNING PLAN).

WHEN BEAMGUARD IS REQUIRED, PLACE END-OF-ROADWAY SIGNING BEHIND BEAMGUARD.



TYPICAL SIGN INSTALLATION

END-OF-ROADWAY SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

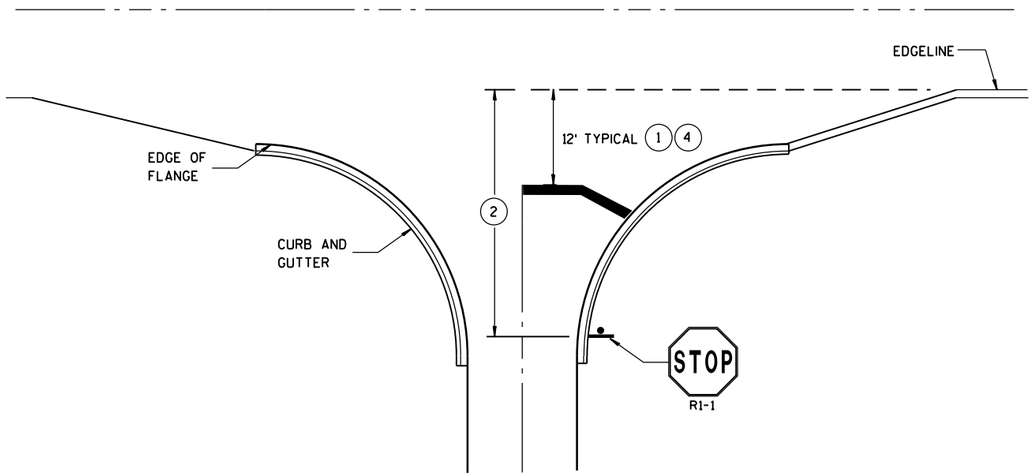
May 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

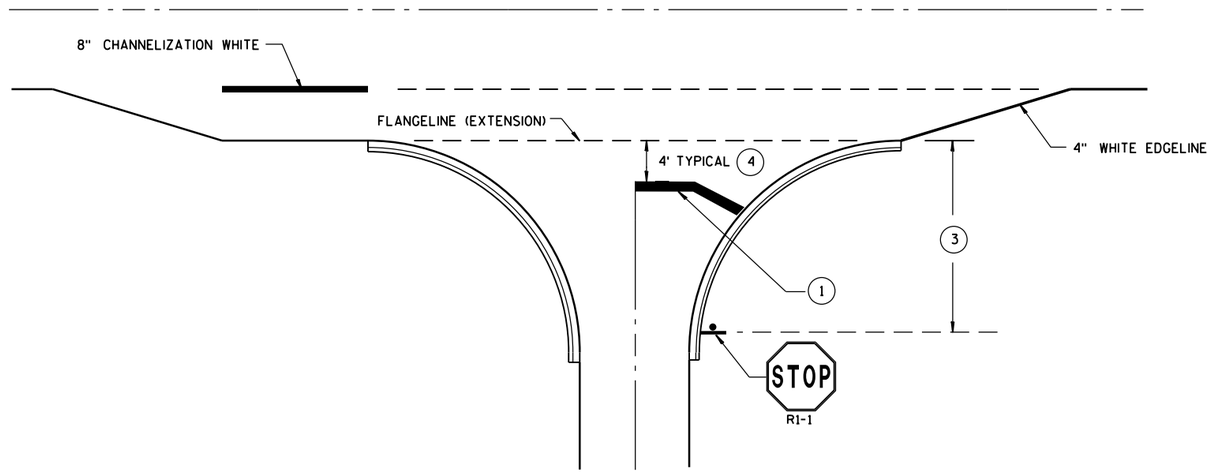
FHWA

6

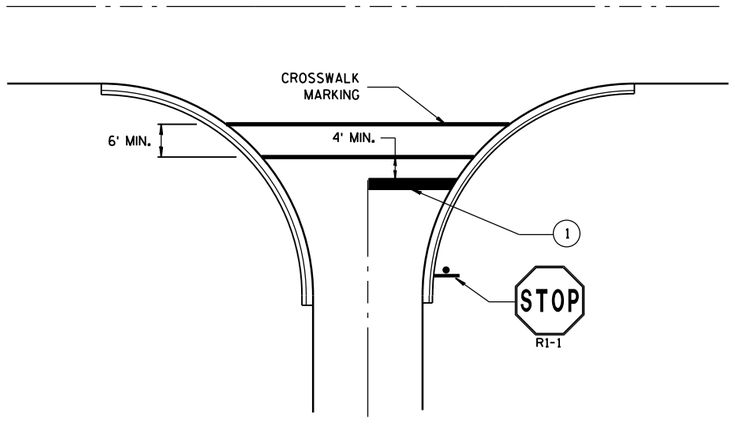
SDD 15C26 - 04



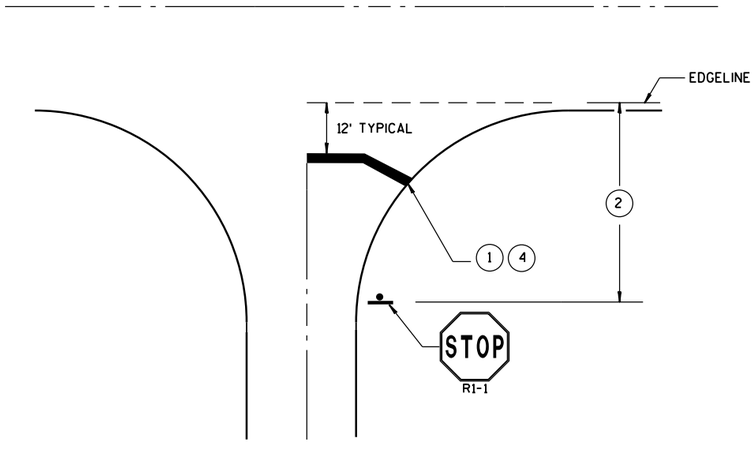
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

(1) 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.

(2) IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.

(3) IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.

(4) MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

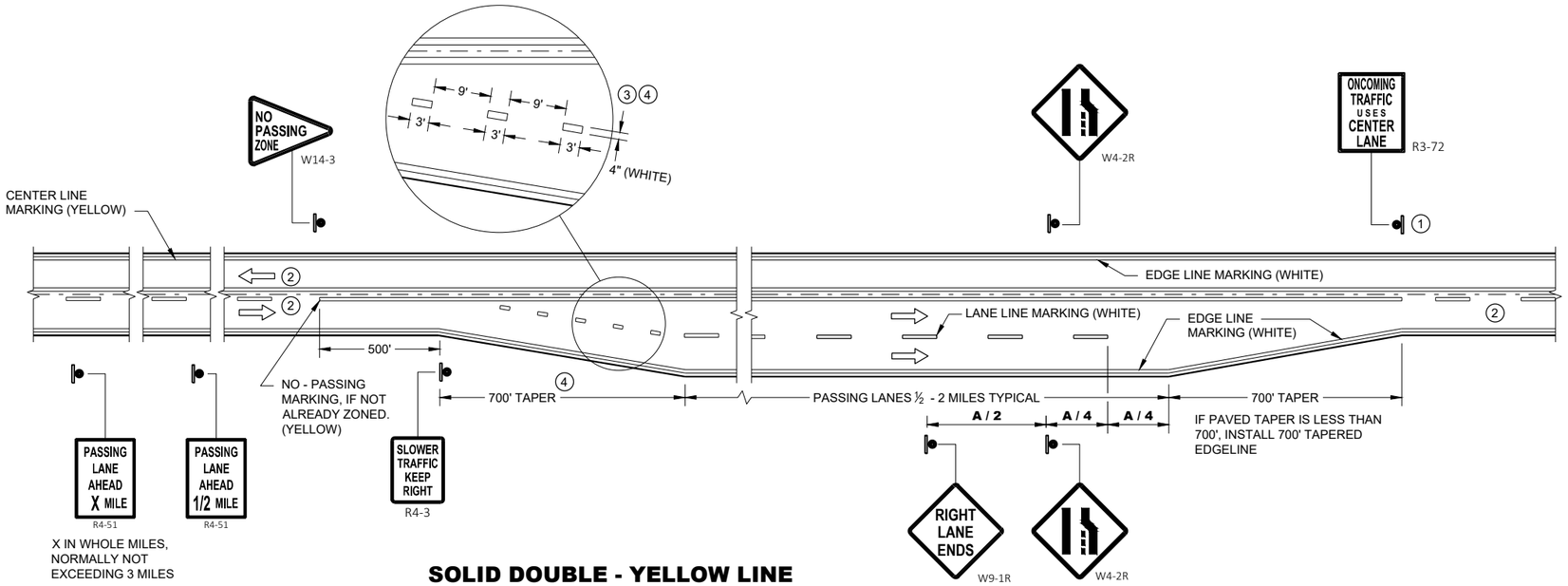
Sept., 2017 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]NEER

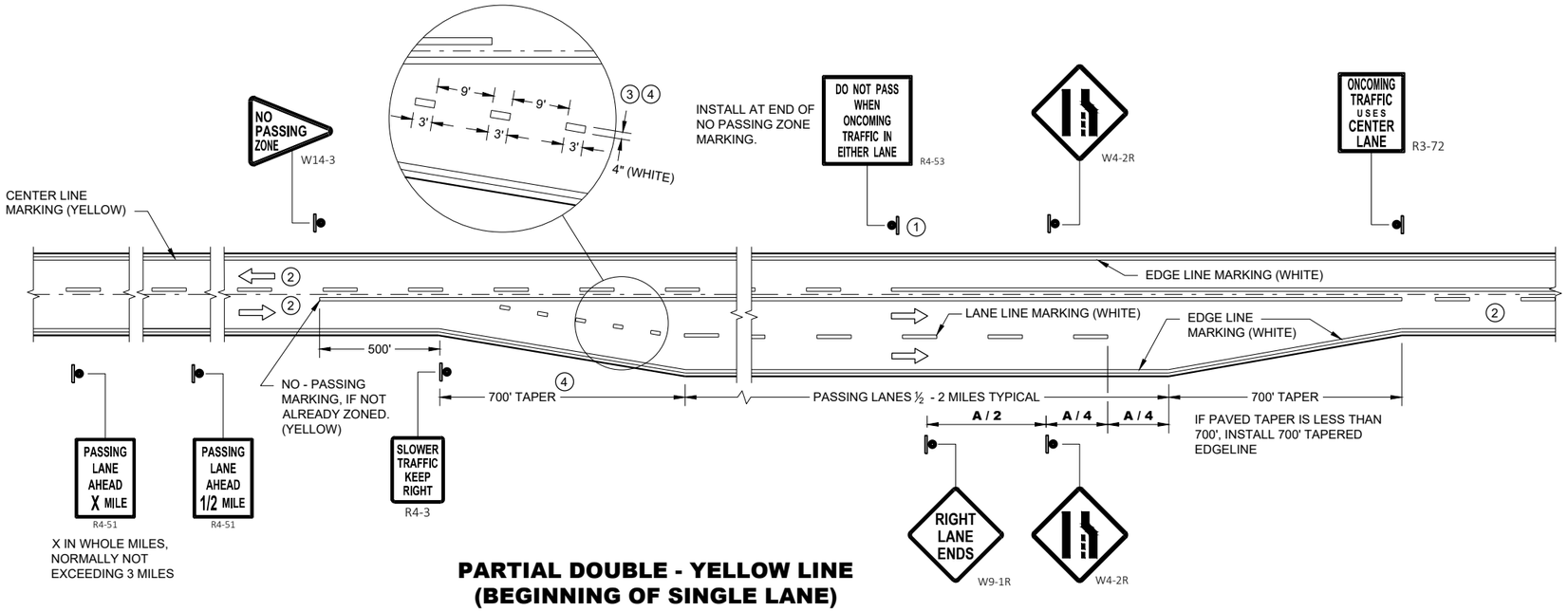
FHWA

6

S.D.D. 15 C 33-3



SOLID DOUBLE - YELLOW LINE
(THROUGHOUT ENTIRE PASSING / CLIMBING LANE)



PARTIAL DOUBLE - YELLOW LINE
(BEGINNING OF SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBLING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

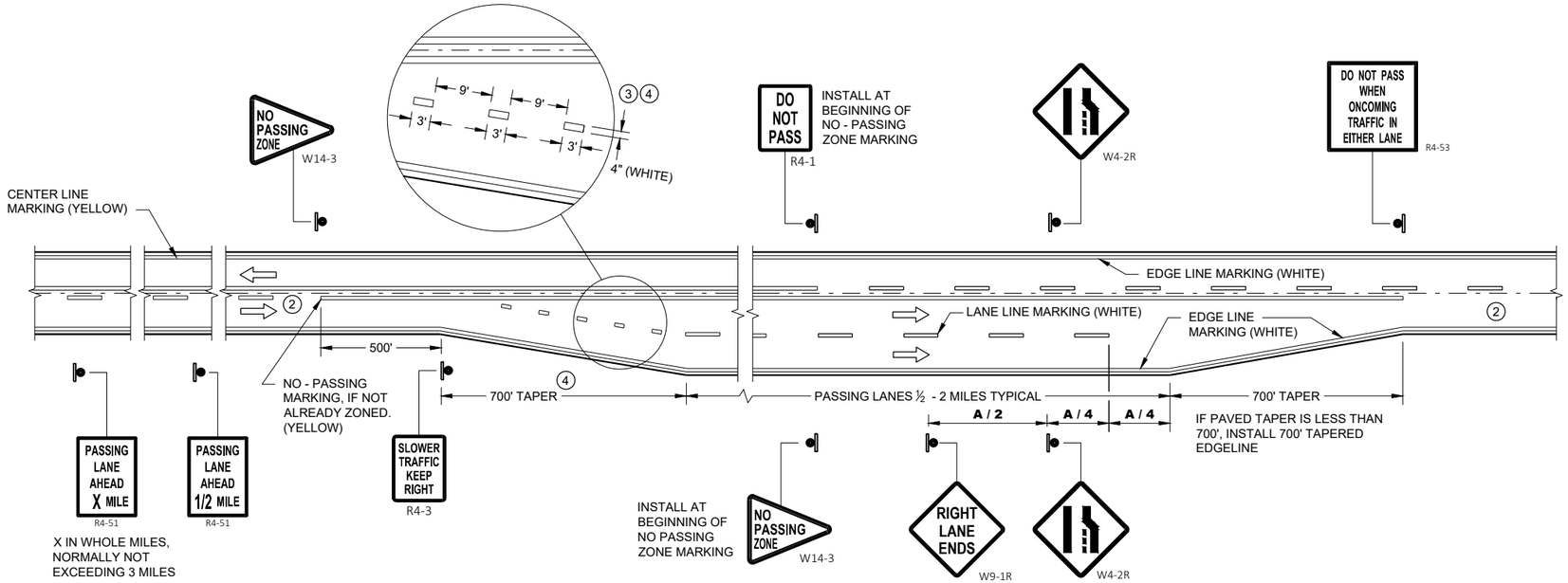
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	850
55	950

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35 - 03b



SOLID DOUBLE - YELLOW LINE
(END OF SINGLE LANE)

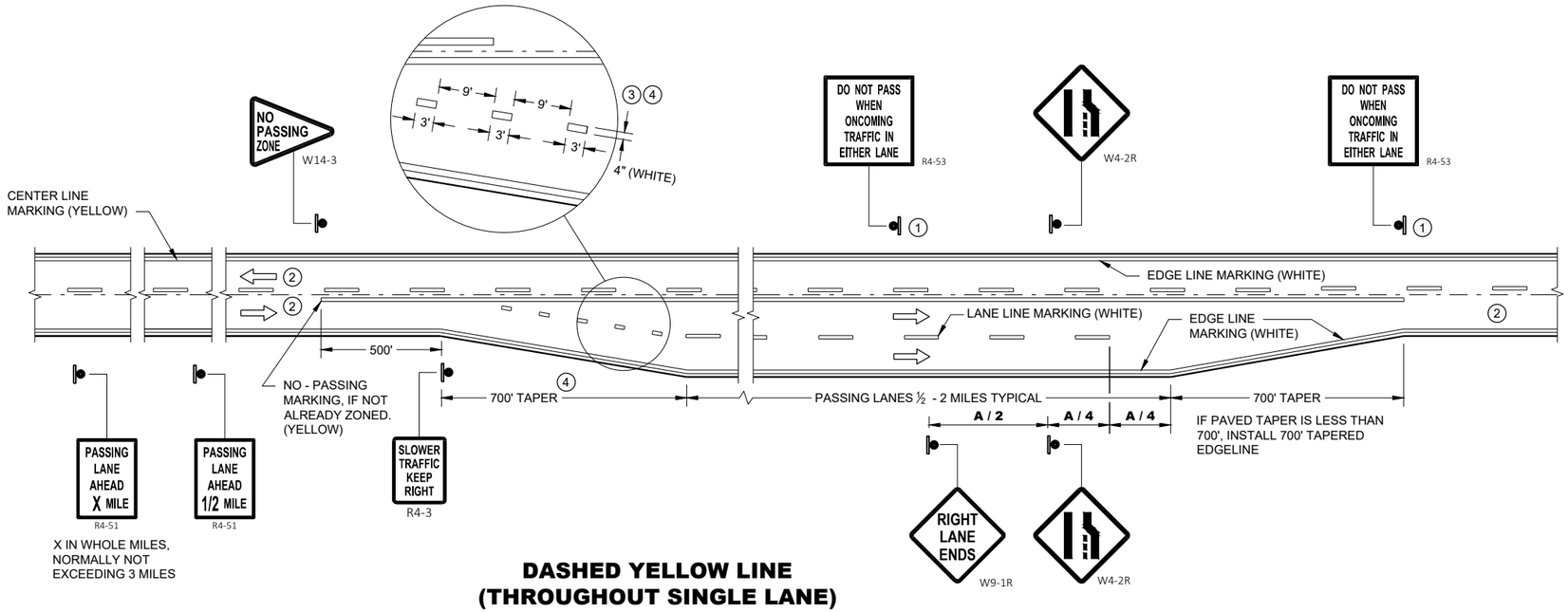
GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBLING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	850
55	950



DASHED YELLOW LINE
(THROUGHOUT SINGLE LANE)

PAVEMNET MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAF ENGINEER
FHWA

6

SDD 15C35 - 03c

6

SDD 15C35 - 03c

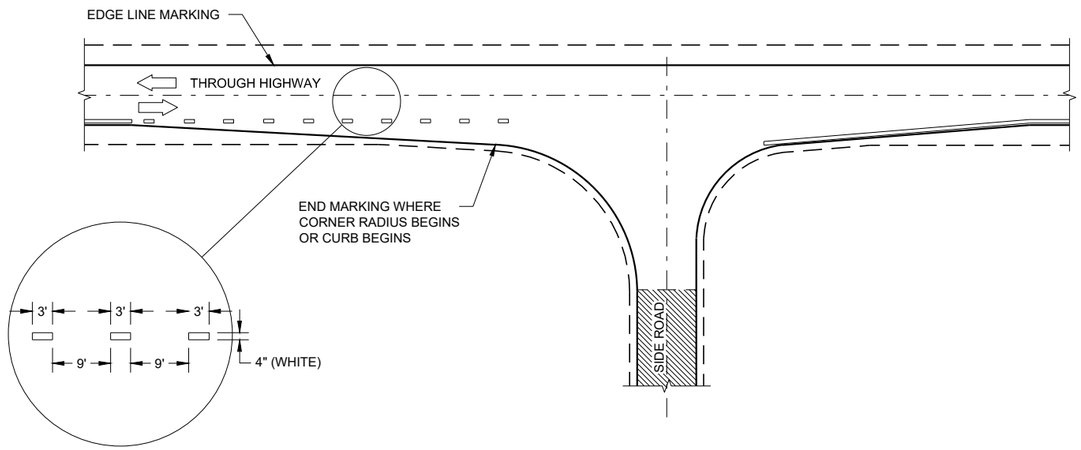
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

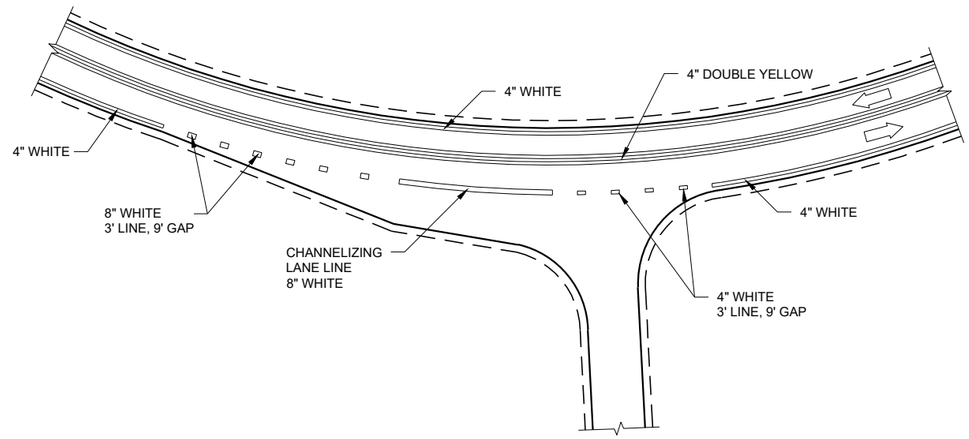
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

LEGEND

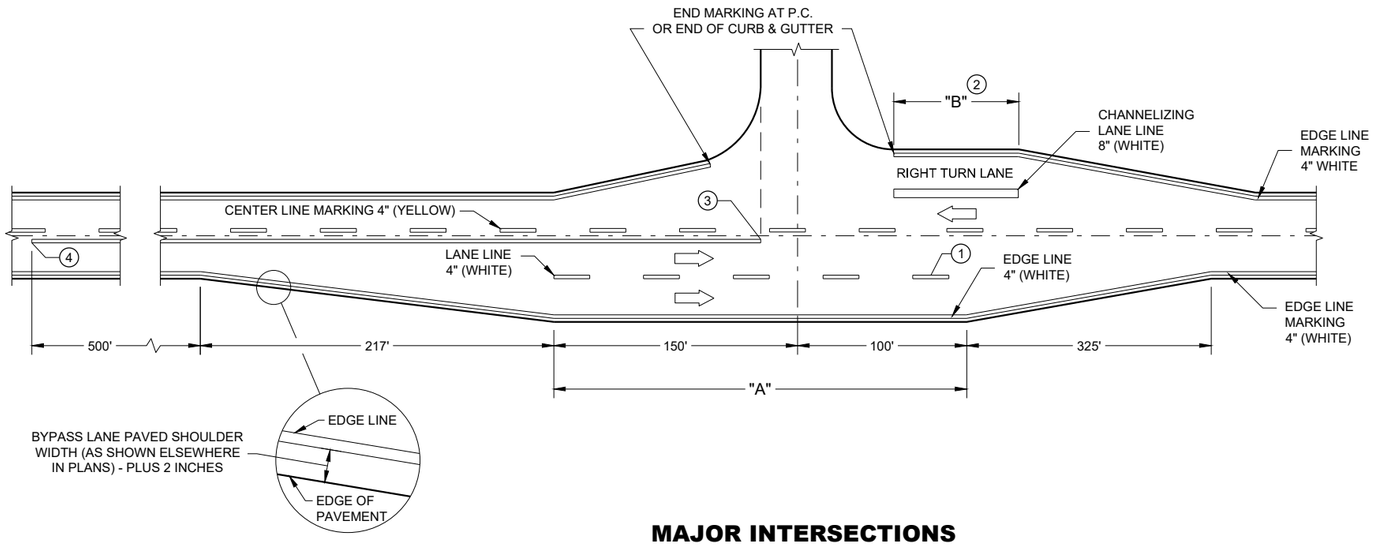
DIRECTION OF TRAVEL



MINOR INTERSECTION



INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35 - 04a

6

SDD 15C35 - 04a

LEGEND

SIGN ON TEMPORARY SUPPORT

SIGN ON PERMANENT SUPPORT

TYPE III BARRICADE

TYPE III BARRICADE WITH ATTACHED SIGN

TYPE "A" WARNING LIGHT (FLASHING)

DIRECTION OF TRAFFIC

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

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

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

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

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

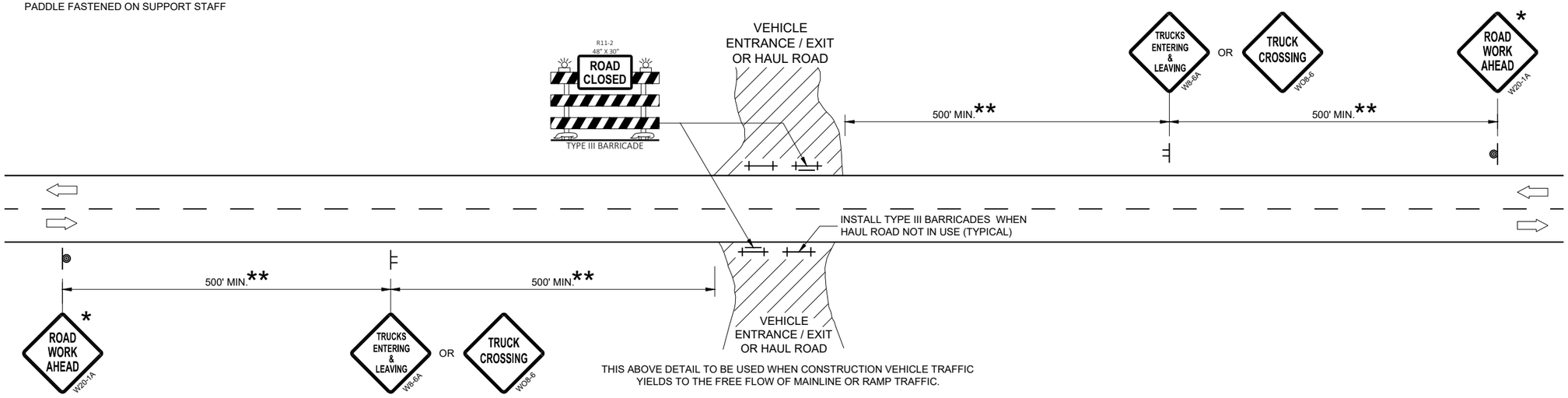
WHEN ACTIVITY REFLECTED BY THE SIGN IS NOT CURRENTLY TAKING PLACE, THE HIGHWAY SHALL BE RESTORED TO NORMAL CONDITION AND THE SIGNS SHALL BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC.

WHEN A SIDE ROAD OR RAMP INTERSECTS WITHIN THE ADVANCE SIGNING AREA, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND / OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

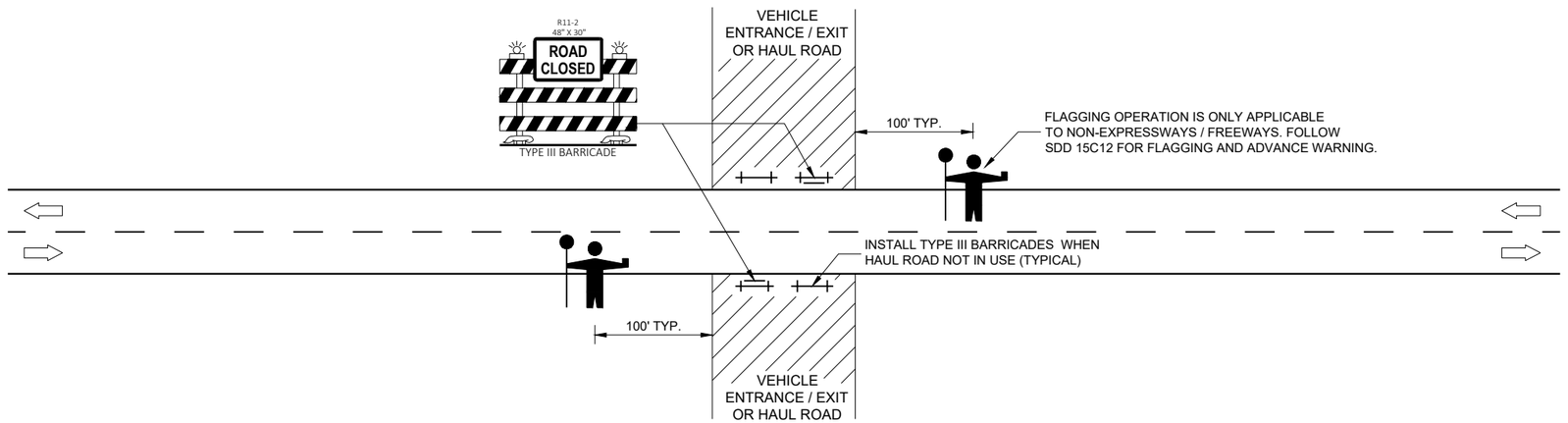
PLACE SIGNS ON BOTH SIDES IF USED ON DIVIDED HIGHWAY.

* THESE SIGNS ARE TO BE USED ONLY WHEN VEHICLE ENTRANCE / EXIT CONDITIONS ARE SEPARATED BY MORE THAN TWO MILES FROM PREVIOUS WORK AREA OR SIGNING OR AS DIRECTED BY THE ENGINEER.

** 500 FEET SHOWN IS FOR ROADWAYS WITH A NON-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35 -40 MPH, USE 350 FEET. FOR 25-30 MPH, USE 200 FEET. USE 1000-1500 FEET FOR EXPRESSWAY / FREEWAY.



THIS ABOVE DETAIL TO BE USED WHEN CONSTRUCTION VEHICLE TRAFFIC YIELDS TO THE FREE FLOW OF MAINLINE OR RAMP TRAFFIC.



THIS DETAIL TO BE USED WHEN CONSTRUCTION WORK INCLUDING TRUCKING ACTIVITY REQUIRES MAINLINE TRAFFIC TO BE TEMPORARILY STOPPED IN ONE OR BOTH DIRECTIONS. DELAY TO HIGHWAY TRAFFIC SHALL BE MINIMIZED.

TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD

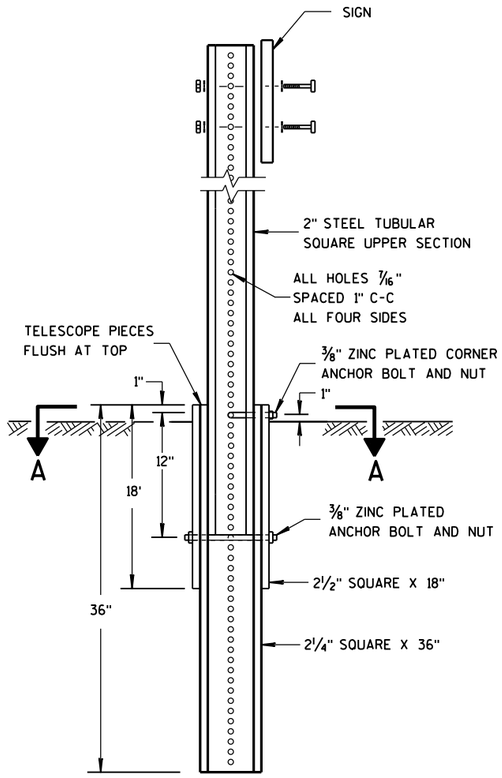
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE

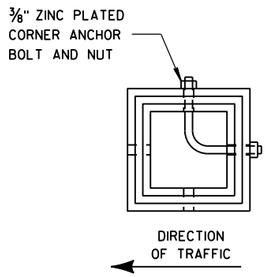
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

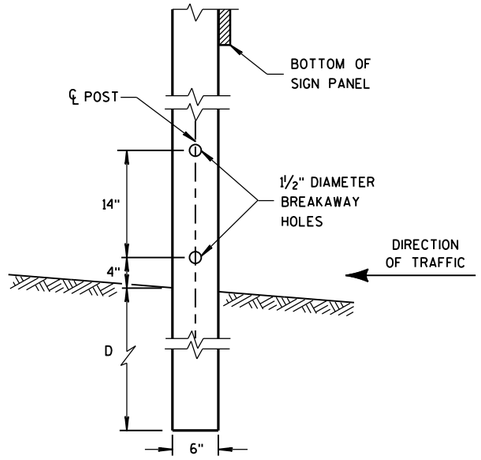
6
SDD 15D29 - 05



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



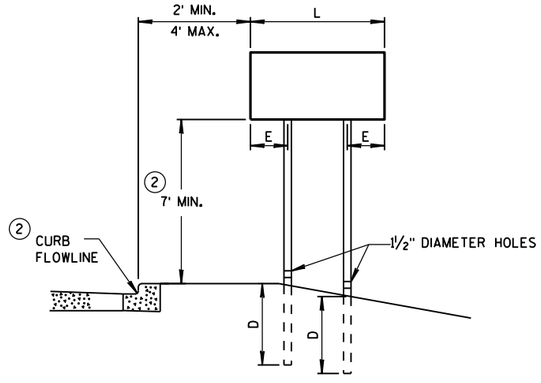
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

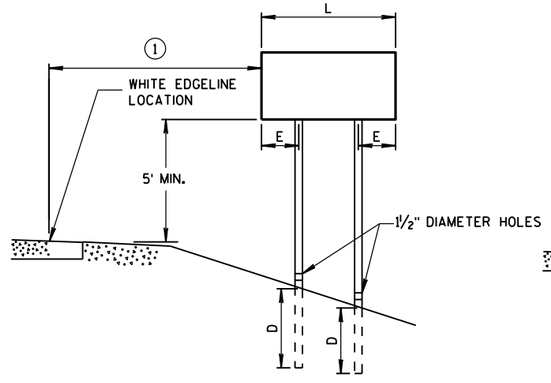
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

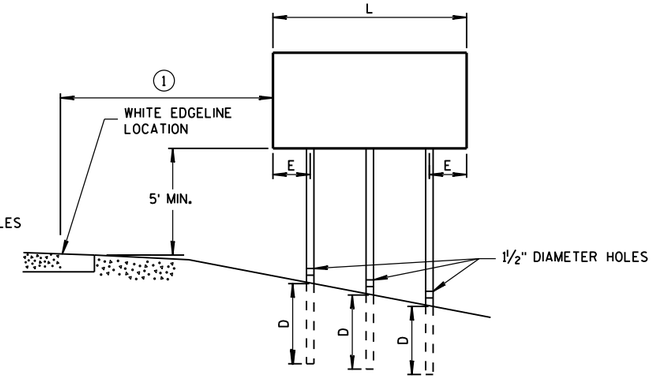
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK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

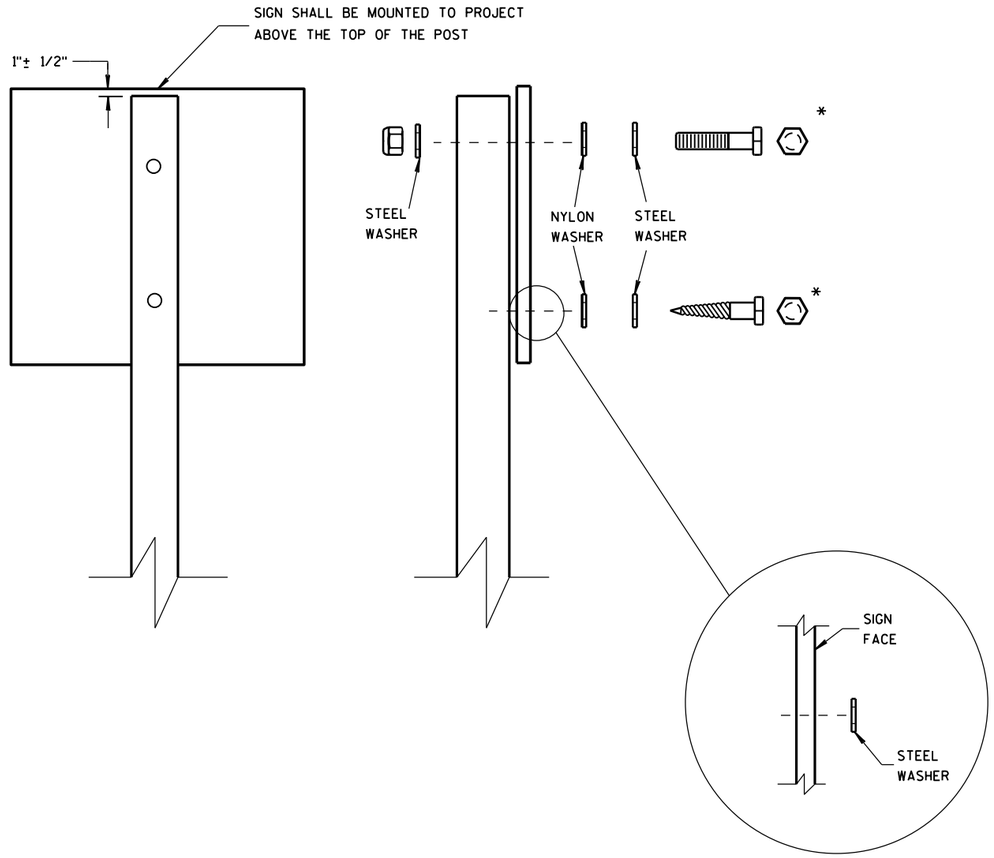
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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

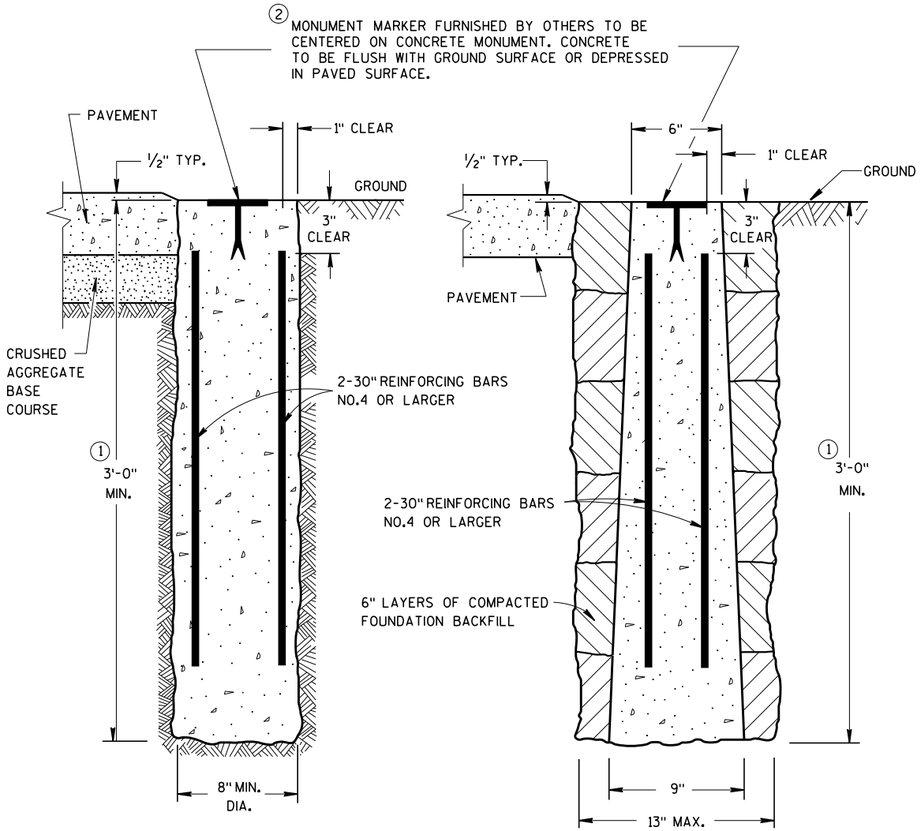
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

FHWA

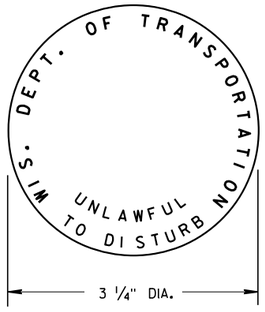


CAST-IN-PLACE

PRECAST

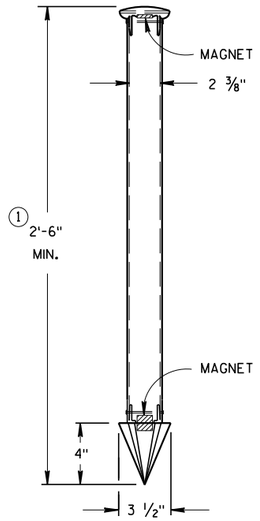
CONCRETE MONUMENTS

TYPE A



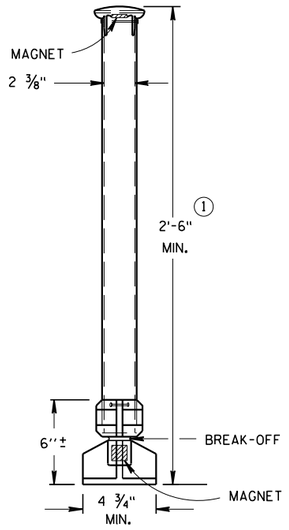
② **WIS DOT MONUMENT MARKER LOGO**

FOR TYPES "A", "C", & "D"



TYPE C

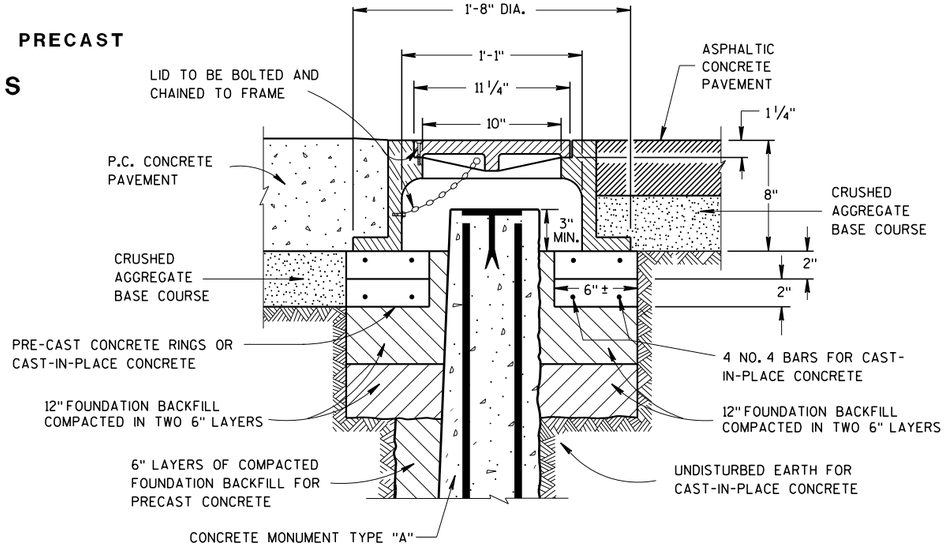
DRIVE-IN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT 95 LBS)

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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

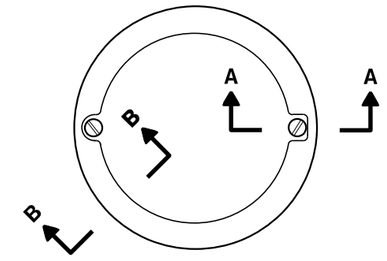
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

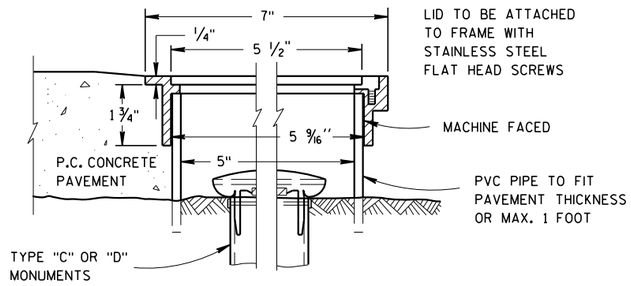
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



TOP VIEW



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Raymond A. Kumagai — CHIEF SURVEYING AND MAPPING ENGINEER
FHWA

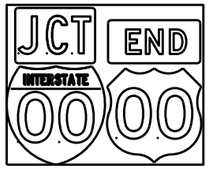
6

S.D.D. 16 A 1-7

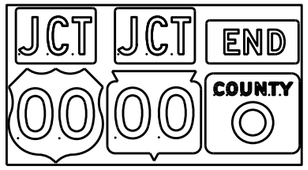
TYPICAL ASSEMBLIES



J1-1



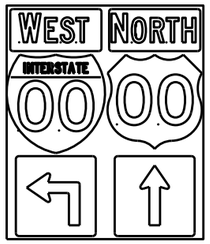
J1-2



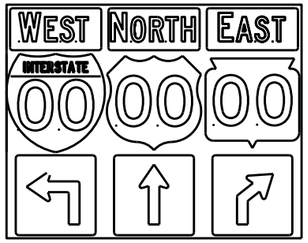
J1-3



J2-1



J2-2

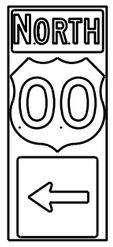


J2-3

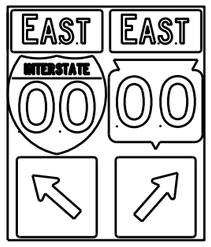


JV

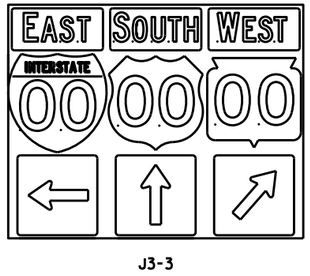
(Typical Vertical J-Assembly
See Note 10 and 11)



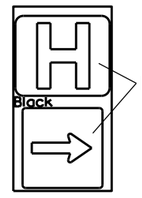
J3-1



J3-2



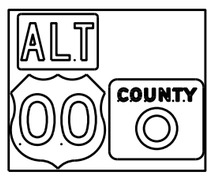
J3-3



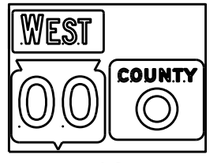
JH-1



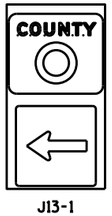
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

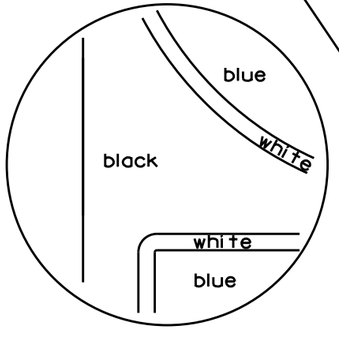


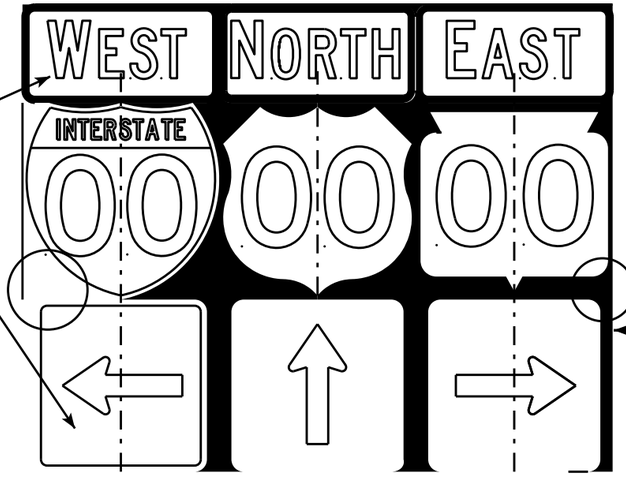
J23-1

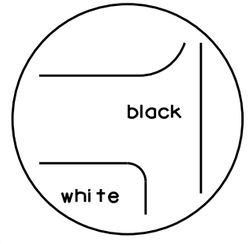


J22-1

blue background
with interstate







black background

NOTES

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

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

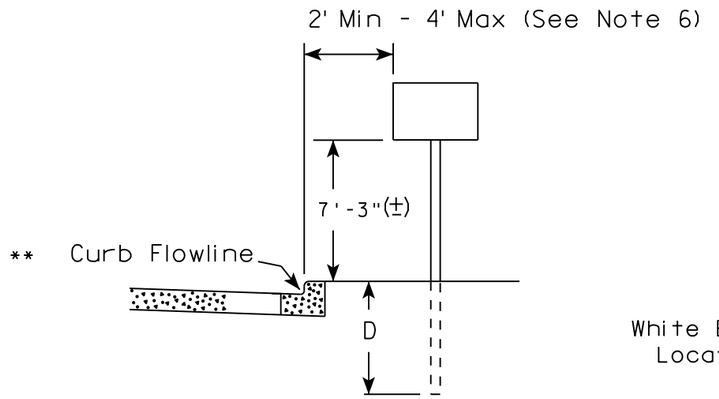
DATE 2/06/14 PL... A2-1S.8

PROJECT NO: | SHEET NO: E

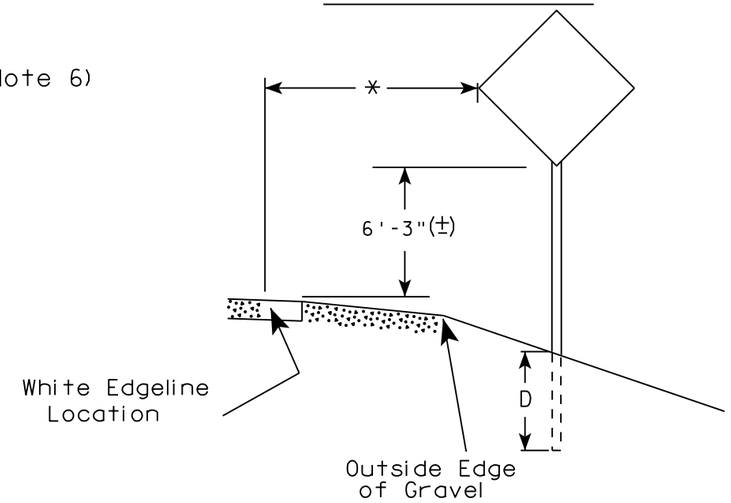
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

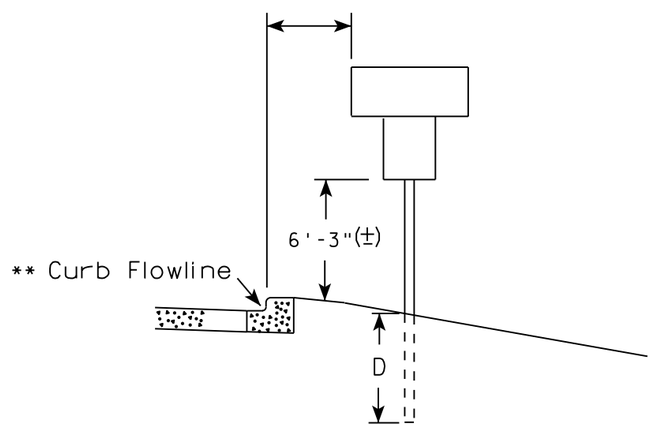
WISDOT/CADDS SHEET 42

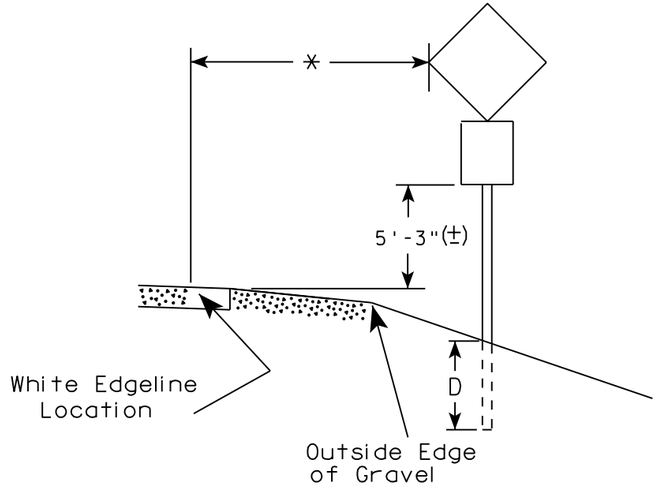
URBAN AREA



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. J-Assemblies are considered to be one sign for mounting height.
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" (±).

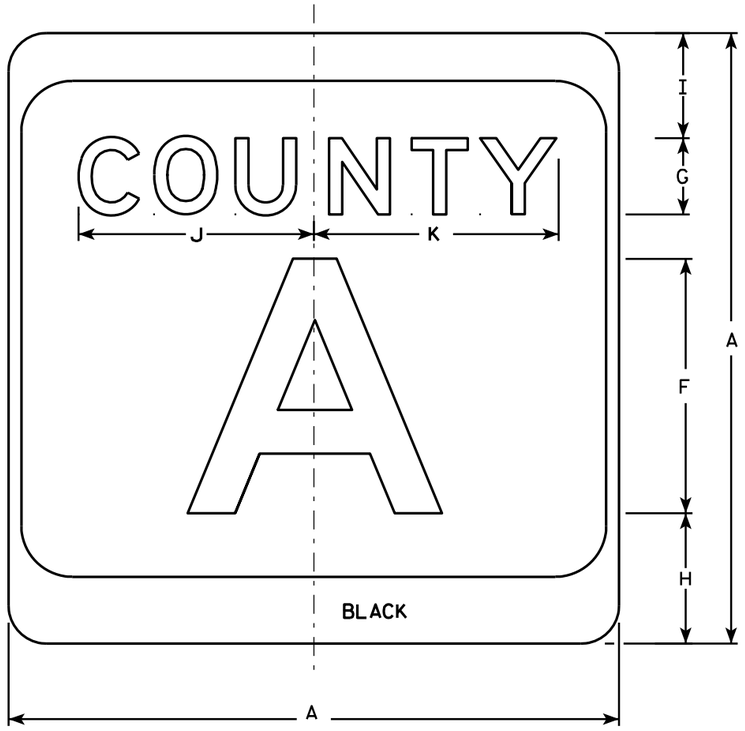
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

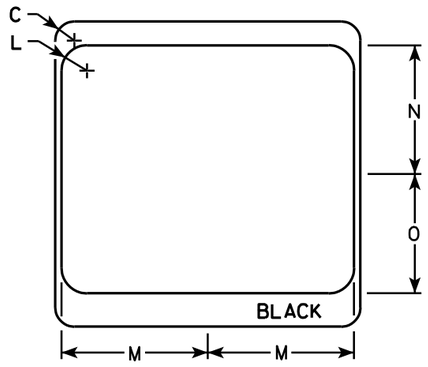
APPROVED Matthew R Rauch
for State Traffic Engineer

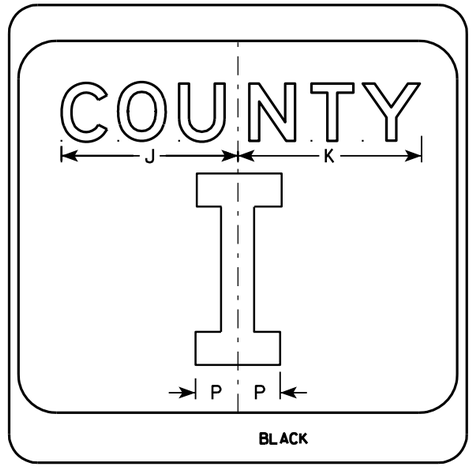
DATE 8/21/17 PLATE NO. A4-3.21

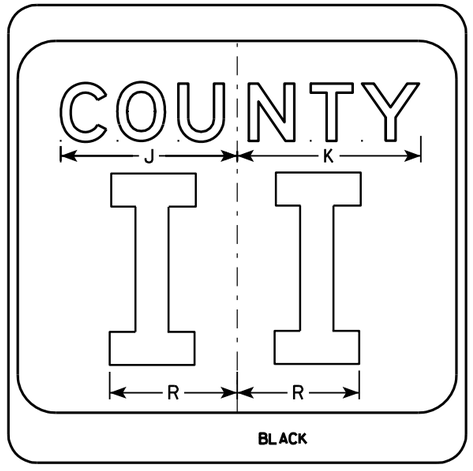
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 138	E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

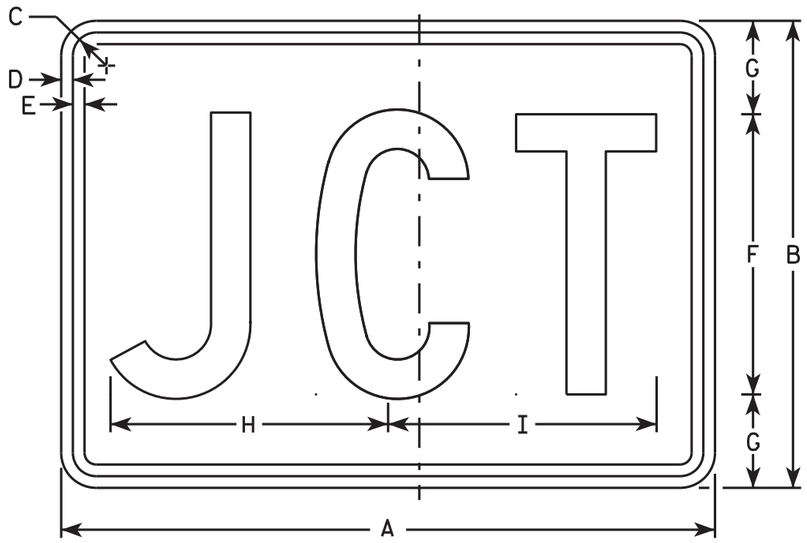
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

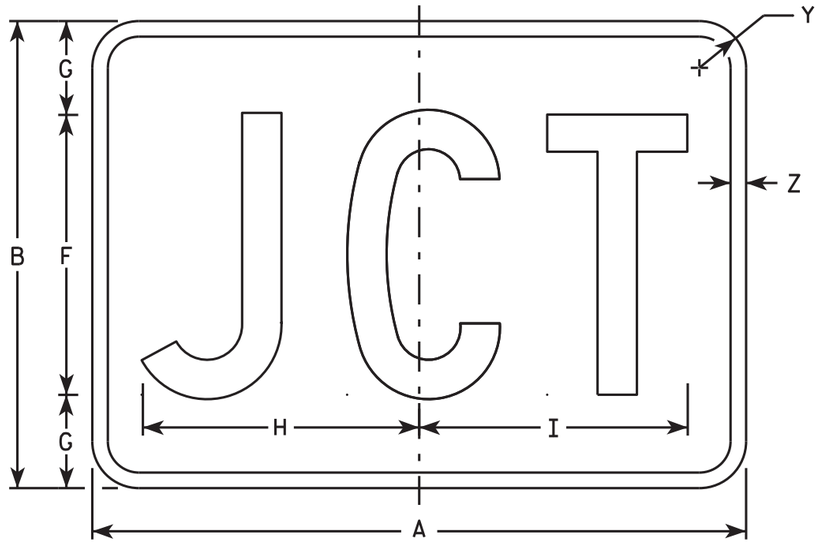
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 139 | E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

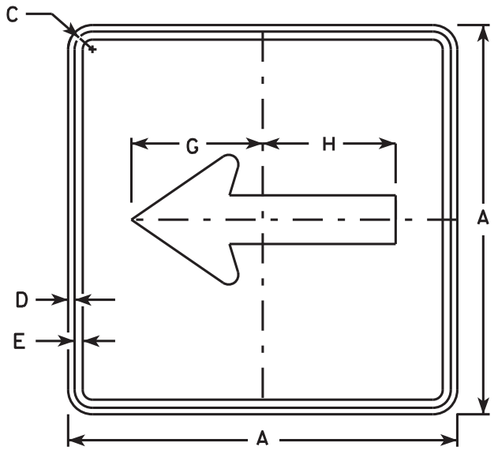
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

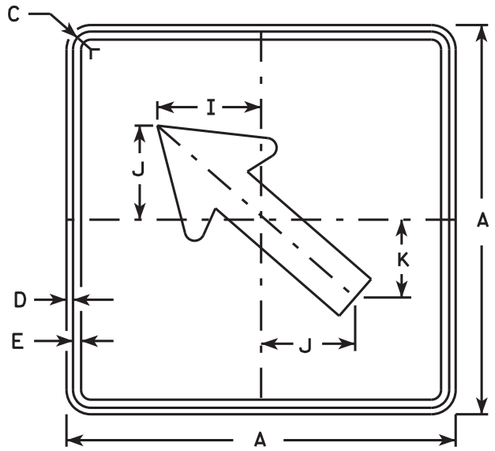
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M2-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



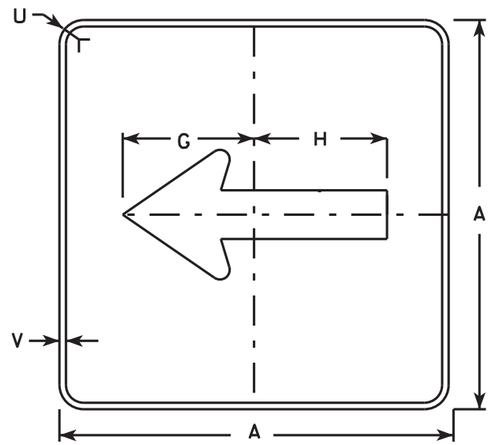
M6-1
MM6-1
MO6-1
MP6-1



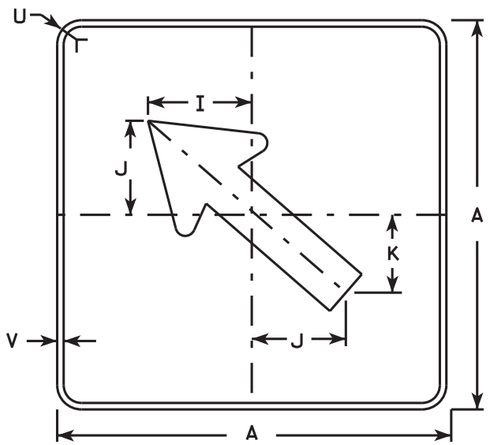
M6-2
MM6-2
MO6-2
MP6-2

NOTES

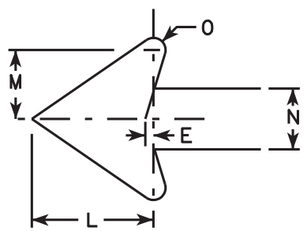
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

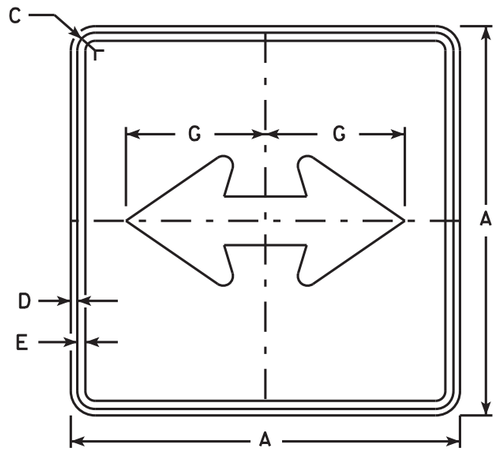
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-1.15

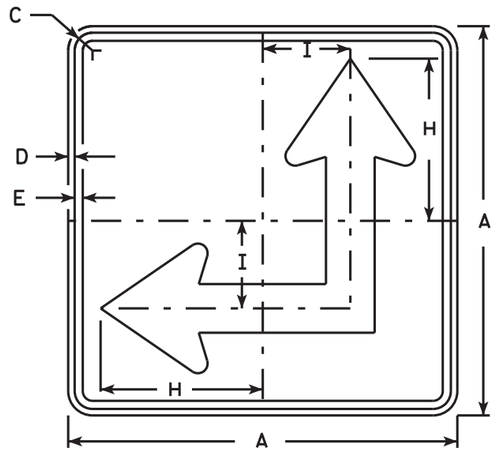
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

7

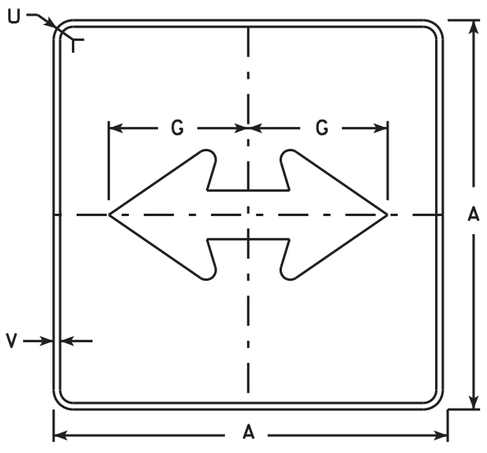
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 15-OCT-2015 13:17 PLOT BY : ss...plotuser...ss PLOT NAME : PLOT SCALE : 18.607113:1.000000
WISDOT/CADDS SHEET 42



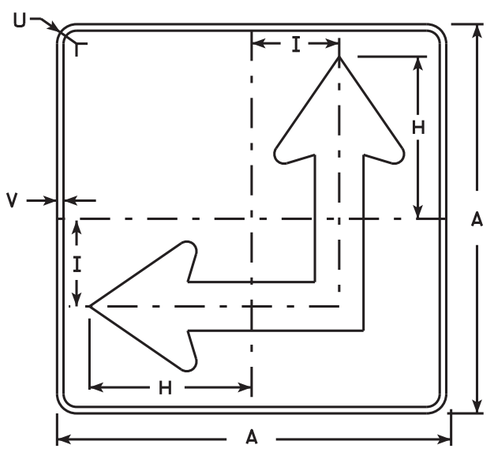
M6-4
MM6-4
MO6-4
MP6-4



M6-6
MM6-6
MO6-6
MP6-6



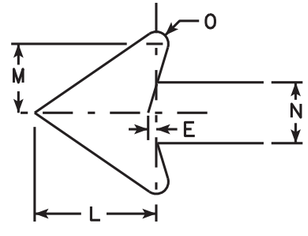
MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6

NOTES

1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

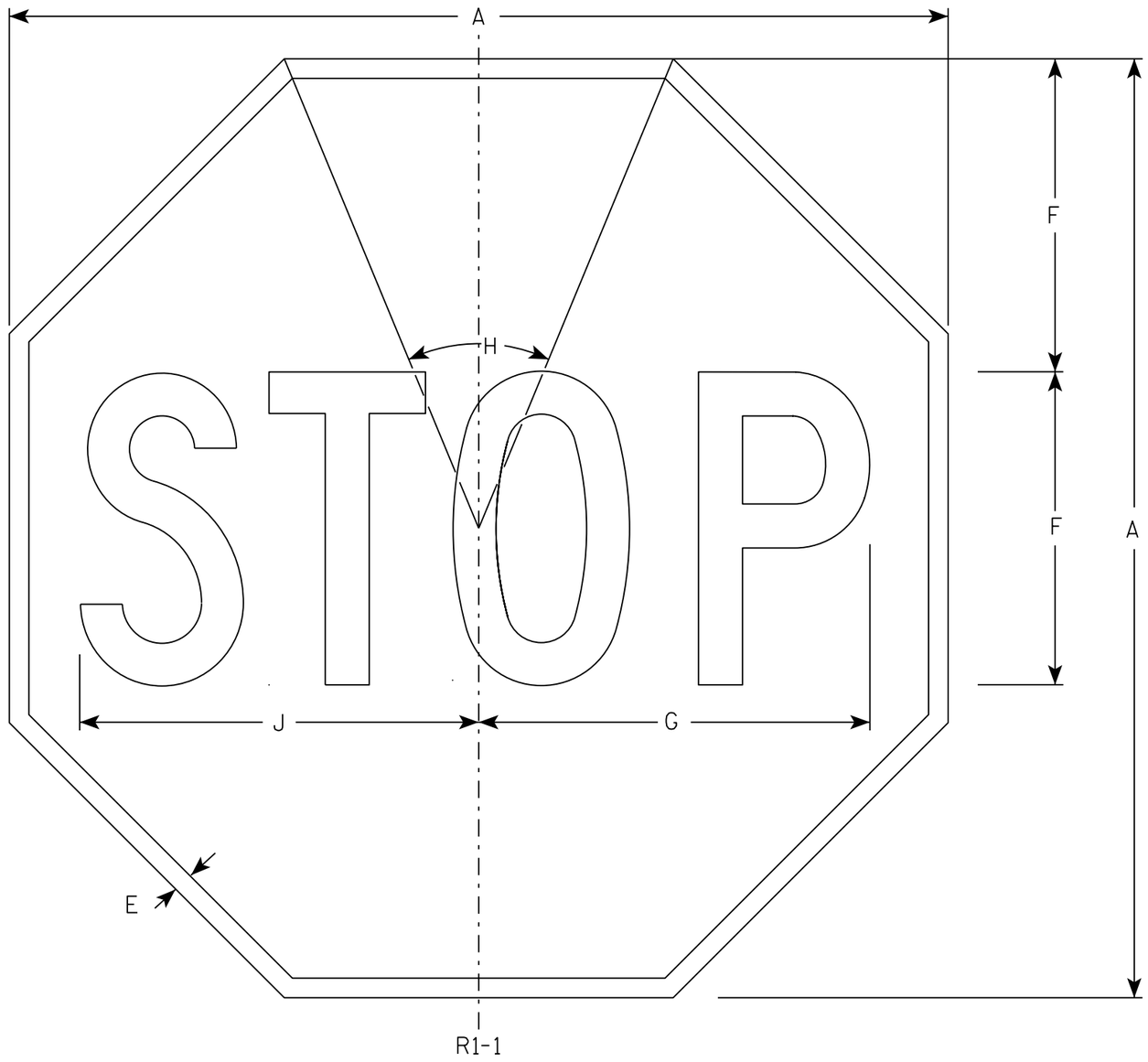
STANDARD SIGN
M6-4 & M6-6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-4.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN

R1-1

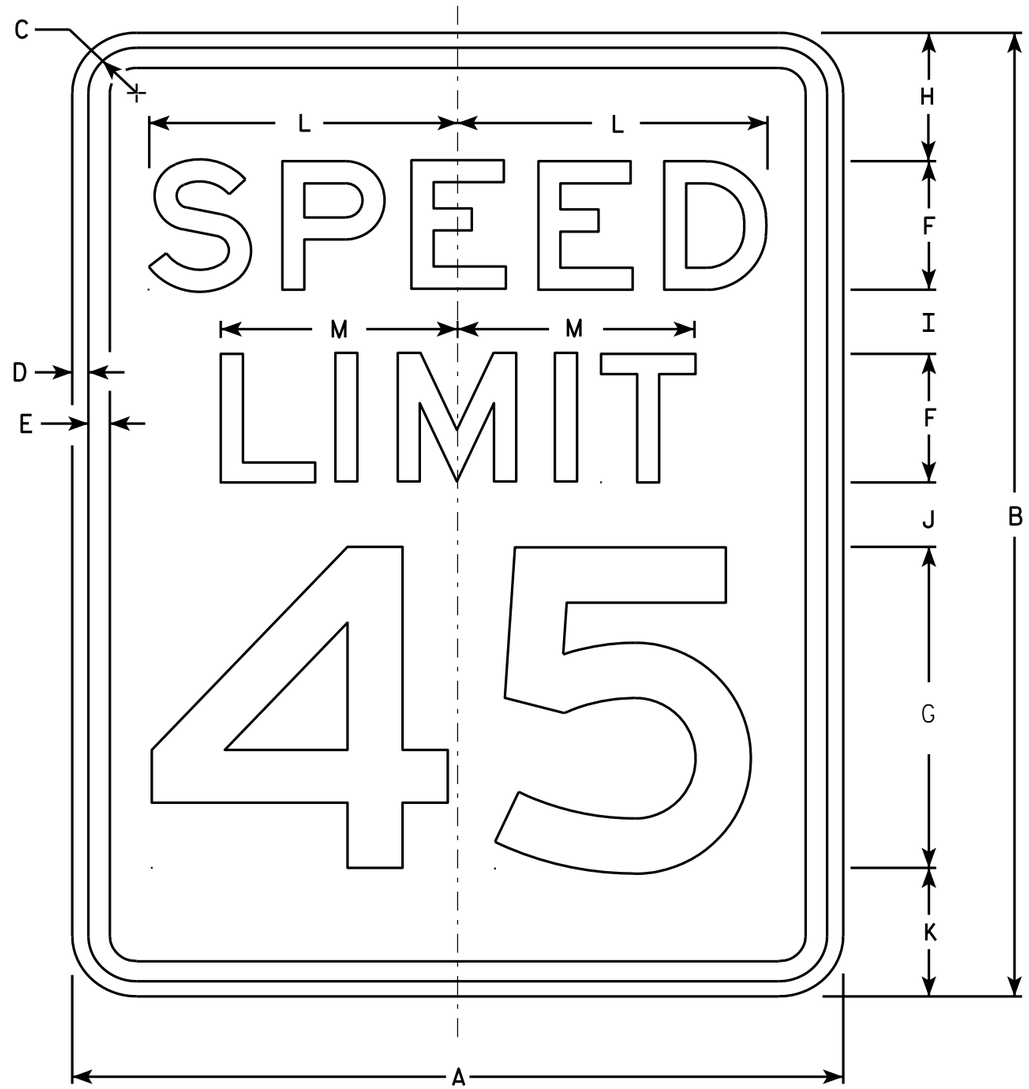
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 143	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

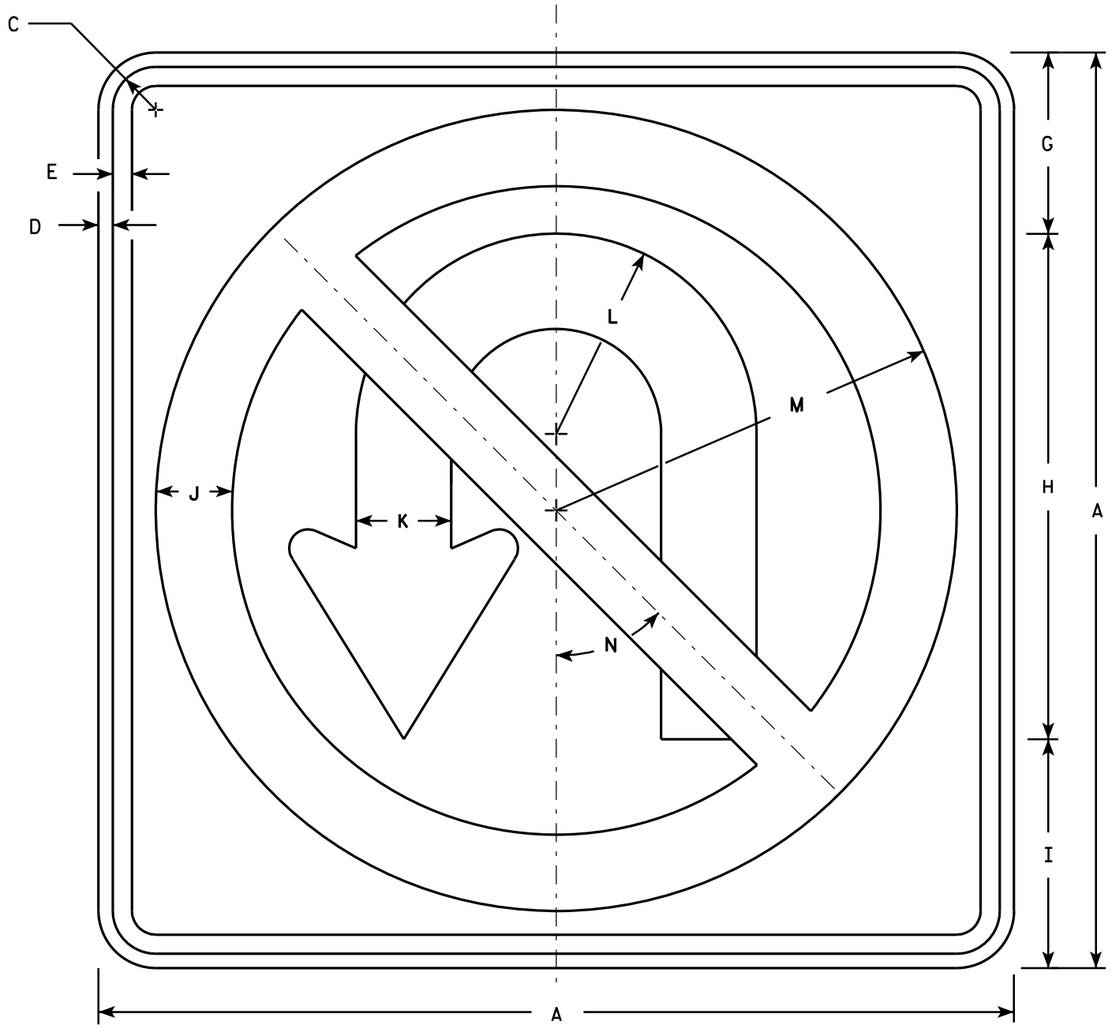
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

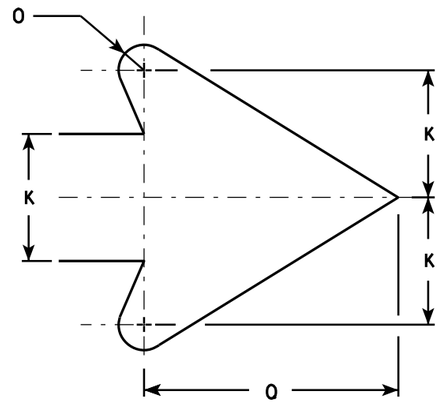
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 144	E



R3-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		4 3/4	13 1/4	6	2	2 1/2	5 1/4	10 1/2	45°	1/2		5										4.0
2M	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
3	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
4	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
5	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0

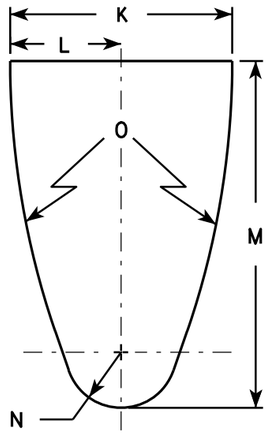
STANDARD SIGN
R3-4

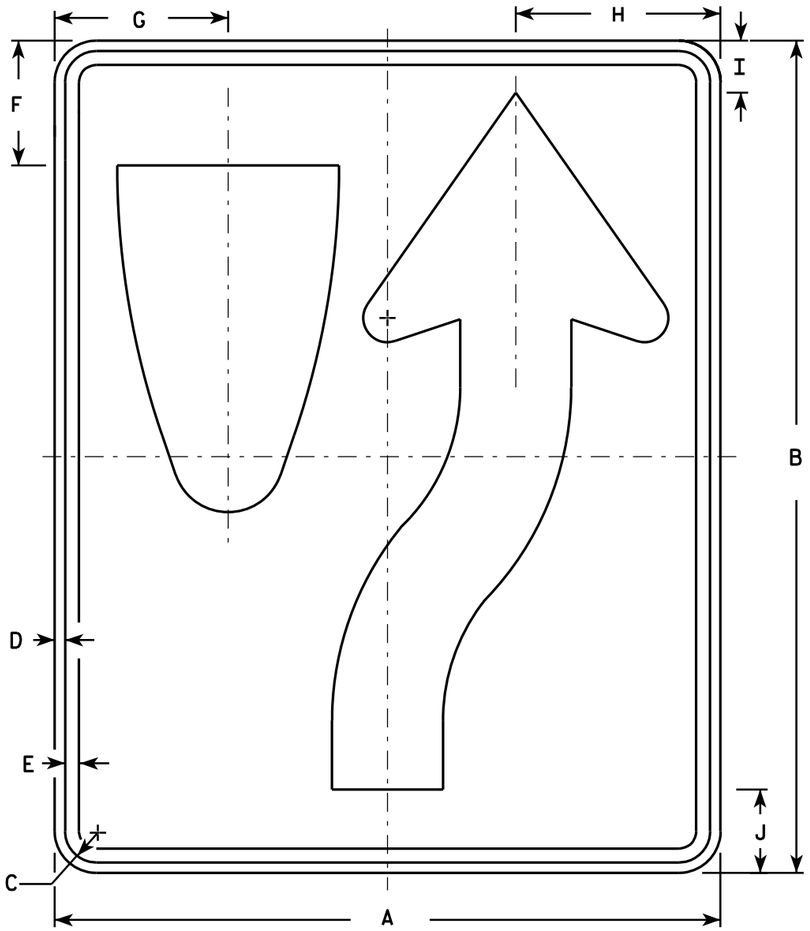
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-4.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 145	E

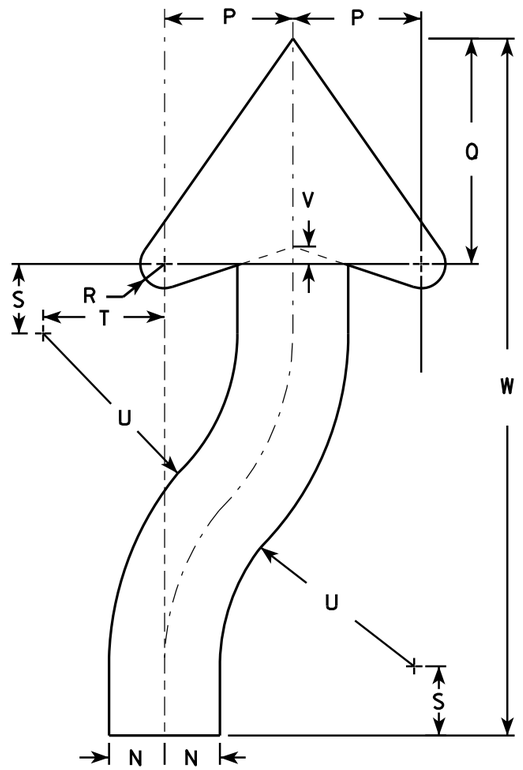




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

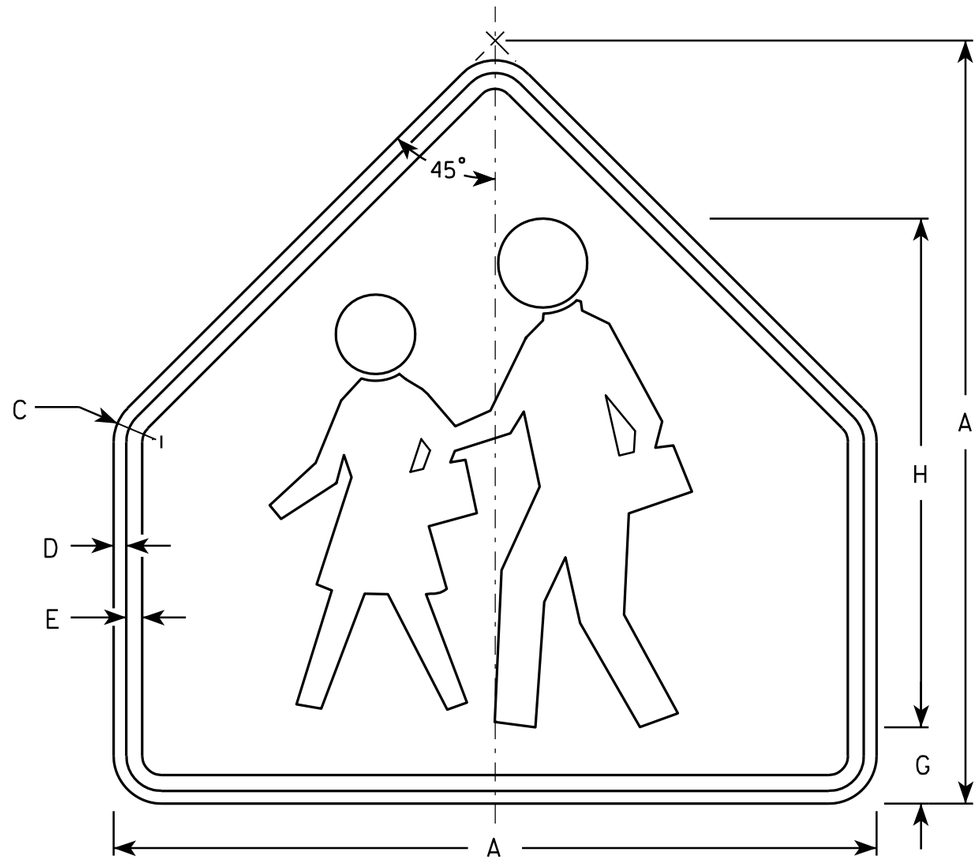
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 146	E



S1-1

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-Green
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

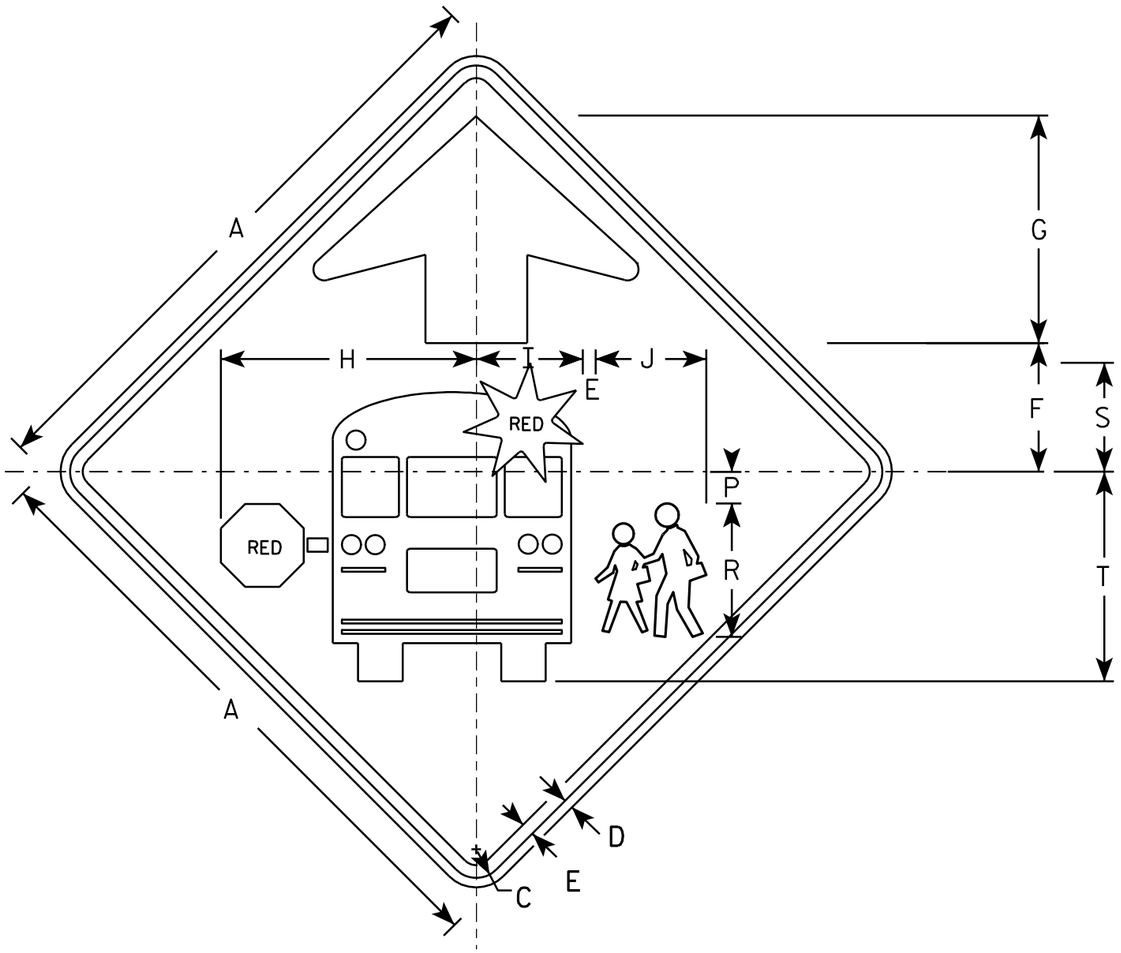
STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/05 PLATE NO. S1-1.8

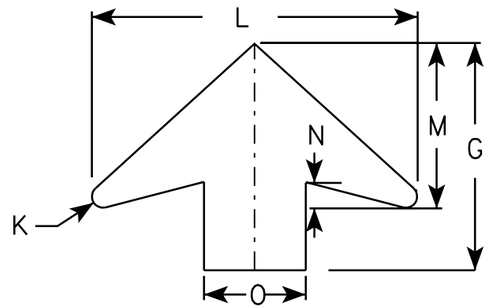
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 147	E



S3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW-GREEN
   Message - BLACK except as noted
   Circles except PEDS- RED BACKGROUND
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.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	12 1/2	5 1/4	5 1/2	1/2	16	8	1 1/4	5	1 1/2		6 5/8	5 3/8	10 3/8							6.25
2	36		1 5/8	5/8	3/4	7 1/2	13 1/2	15 1/8	6 1/4	6 1/2	5/8	19 1/4	9 3/4	1 5/8	6	1 7/8		7 7/8	6 3/8	12 3/8							9.0
3	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
4	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
5																											

STANDARD SIGN
S3-1

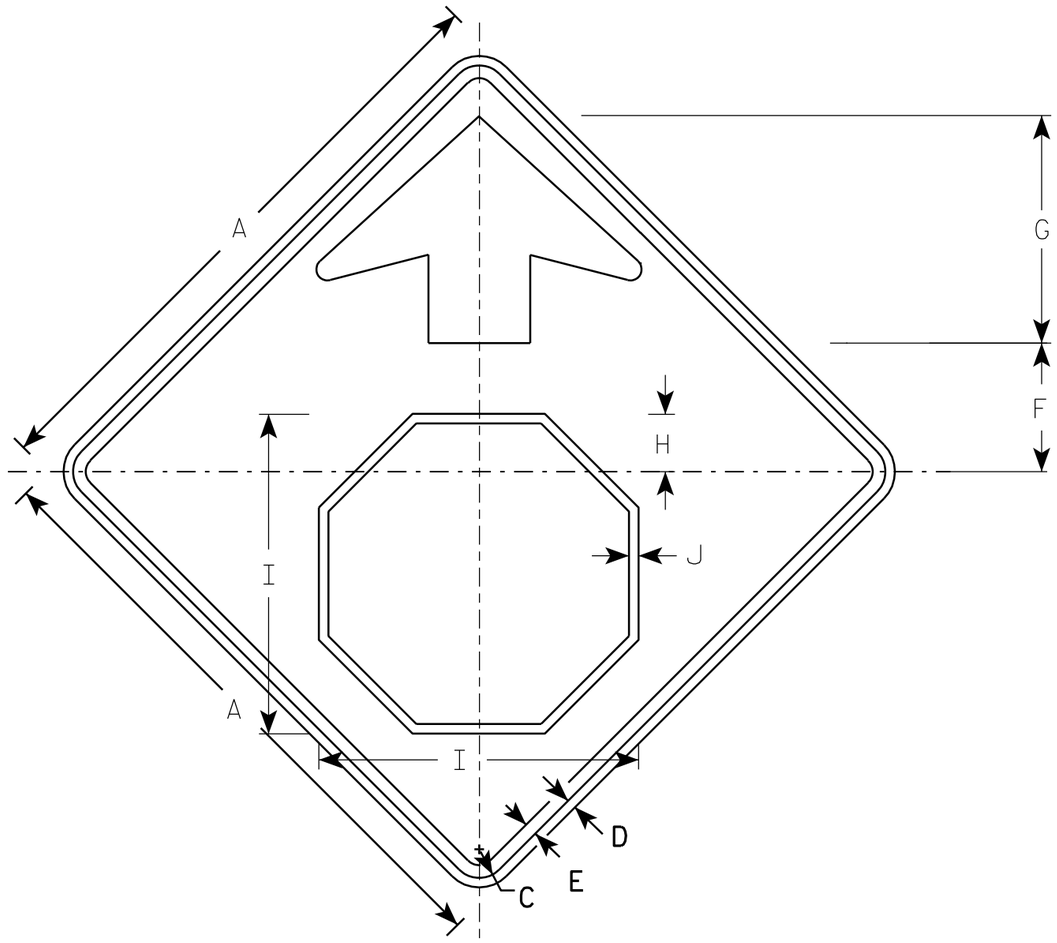
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/8/10 PLATE NO. S3-1.6

PROJECT NO:

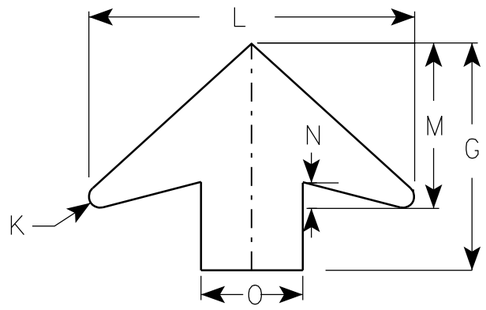
SHEET NO: 148 E



W3-1

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

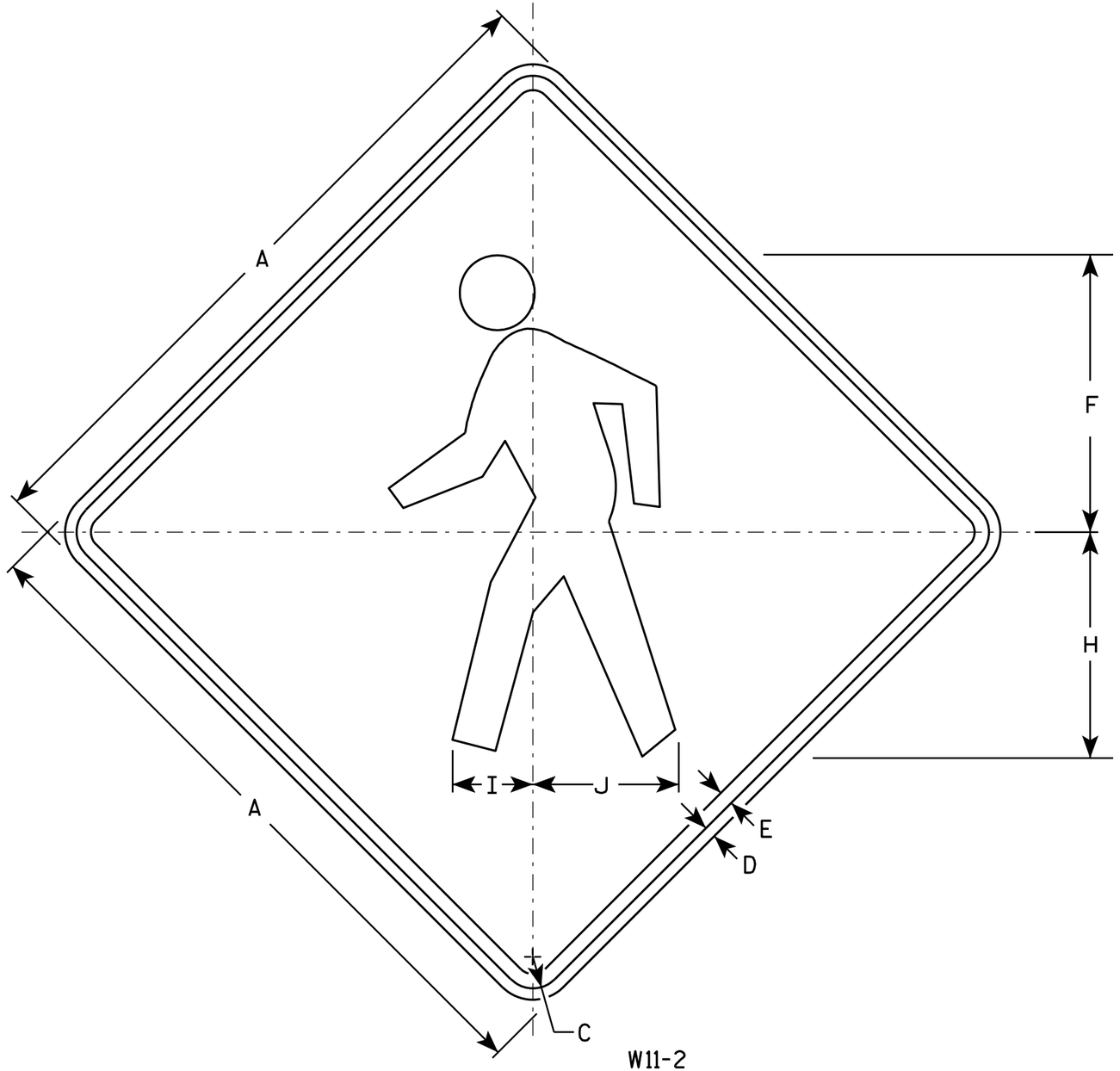
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 149 E



W11-2

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

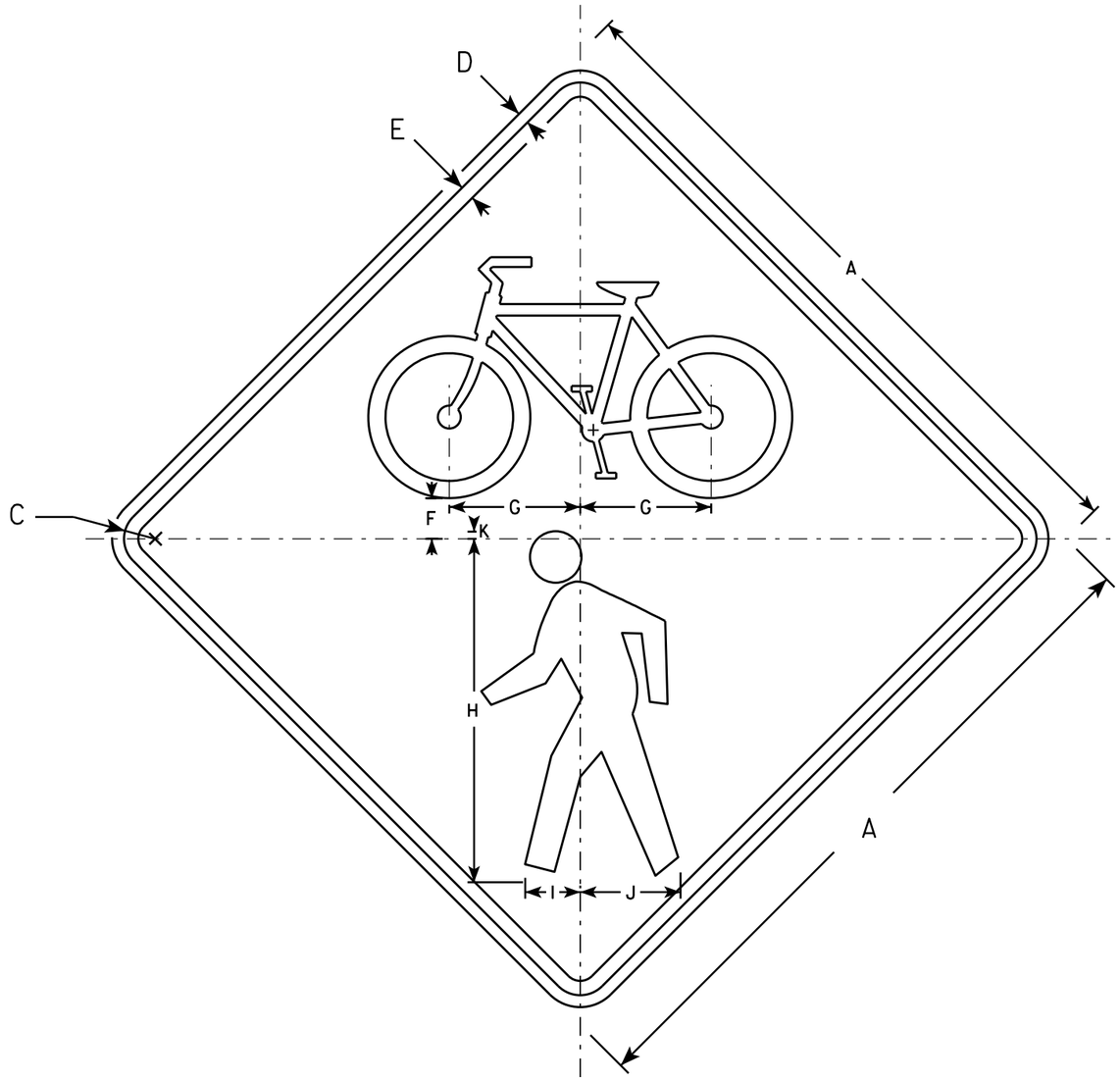
STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 150	E



W11-15

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	1 3/8	4 5/8	12	1 7/8	3 1/2	1/4																4.0
2S	30		1 3/8	1/2	5/8	1 3/4	5 3/4	15	2 3/8	4 3/8	3/8																6.25
2M	36		1 5/8	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																9.0
3	36		1 5/8	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																16.0
4	48		2 1/4	3/4	1	2 7/8	9 1/8	24	3 7/8	7	1/2																16.0
5																											

STANDARD SIGN
W11-15

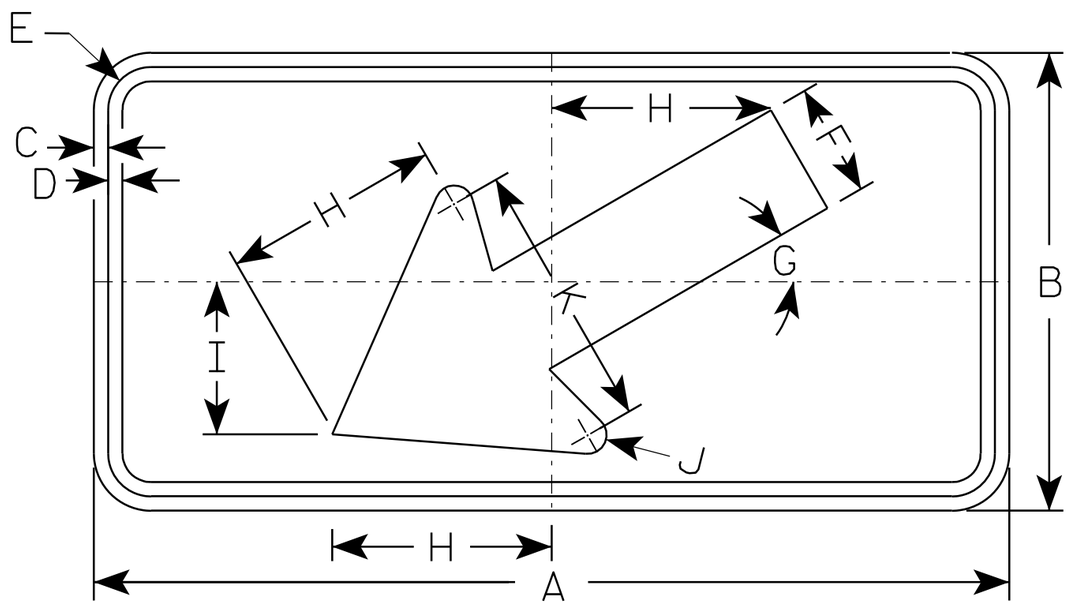
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 2/13/14 PLATE NO. W11-15.4

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W1115.DGN PLOT DATE : 13-FEB-2014 10:54 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 7.783368:1.000000
WISDOT/CADDS SHEET 42



W16-7L

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. W16-7R is the same as W16-L except the arrow is reversed along the vertical centerline.

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	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4																											8
5																											8

STANDARD SIGN
W16-7

WISCONSIN DEPT OF TRANSPORTATION

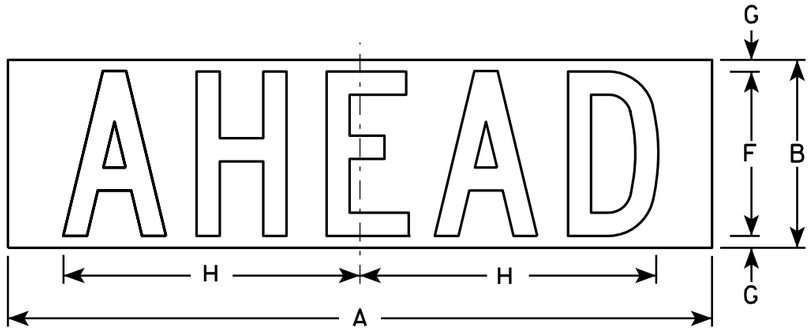
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/02/10 PLATE NO. W16-7.5

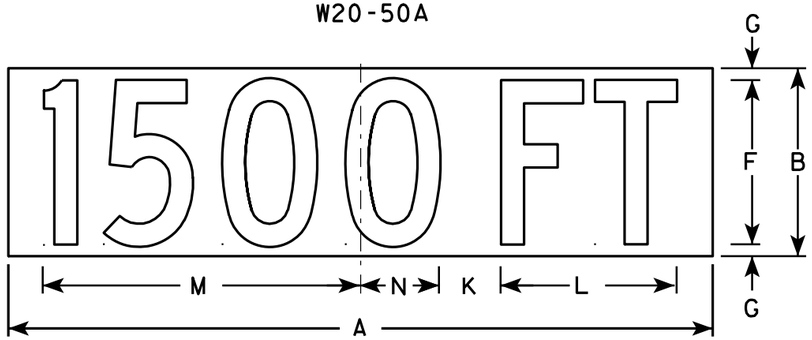
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 152	E

NOTES

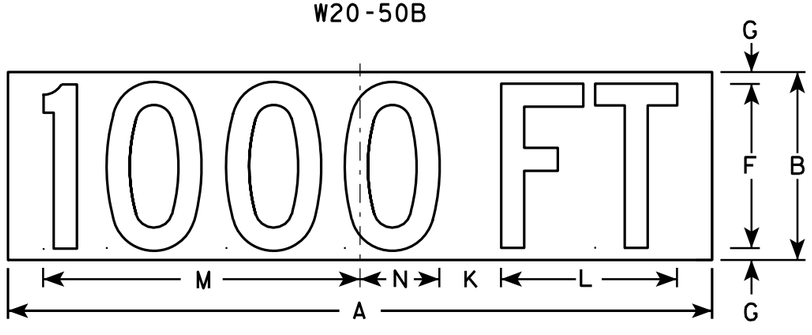
1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. These plaques are for changing the distance shown on signs W20 series of signs.



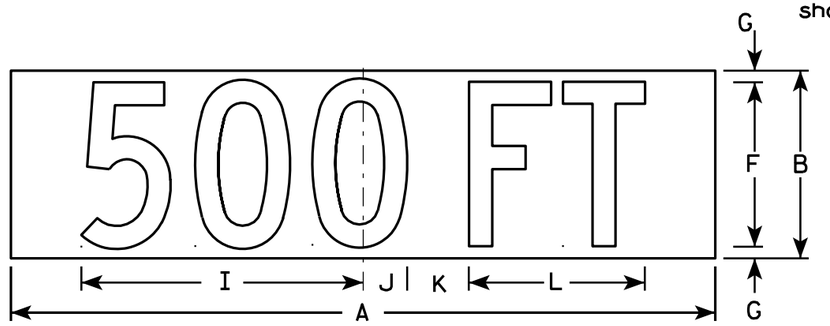
W20-50A



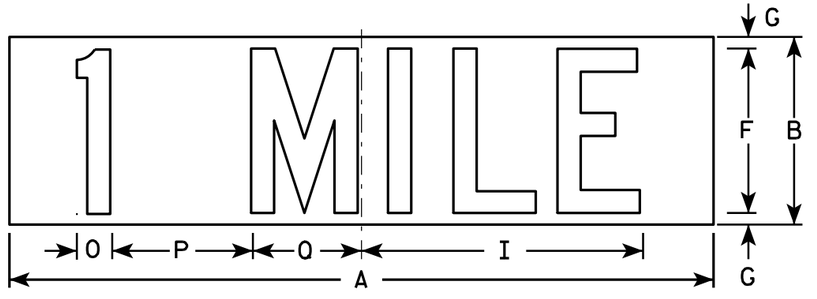
W20-50B



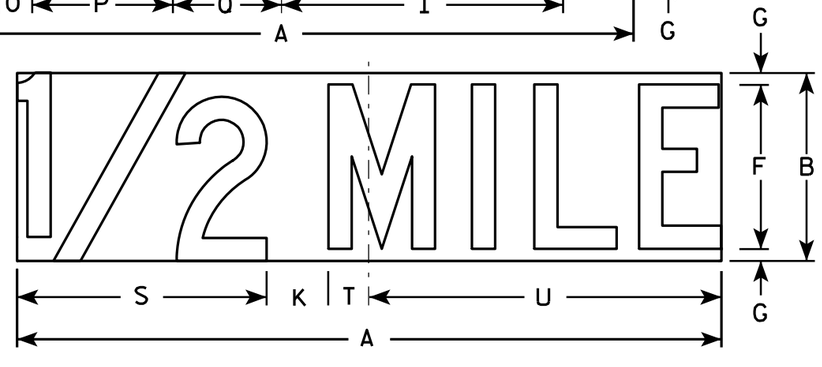
W20-50C



W20-50D



W20-50F



W20-50G

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	22	6				5	½	9 ½	9	1 ⅜	1 ⅞	5 ⅝	10 ⅛	2 ½	1 ⅛	4 ½	3 ½		8	1 ¾	10 ¾						0.92
2S	30	8				7	½	12 ⅝	12	1 ⅞	2 ⅝	7 ½	13 ½	3 ⅜	1 ½	6	4 ⅝		10 ⅝	2 ⅜	14 ⅜						1.67
2M	30	8				7	½	12 ⅝	12	1 ⅞	2 ⅝	7 ½	13 ½	3 ⅜	1 ½	6	4 ⅝		10 ⅝	2 ⅜	14 ⅜						1.67
3	30	8				7	½	12 ⅝	12	1 ⅞	2 ⅝	7 ½	13 ½	3 ⅜	1 ½	6	4 ⅝		10 ⅝	2 ⅜	14 ⅜						1.67
4	30	8				7	½	12 ⅝	12	1 ⅞	2 ⅝	7 ½	13 ½	3 ⅜	1 ½	6	4 ⅝		10 ⅝	2 ⅜	14 ⅜						1.67
5	30	8				7	½	12 ⅝	12	1 ⅞	2 ⅝	7 ½	13 ½	3 ⅜	1 ½	6	4 ⅝		10 ⅝	2 ⅜	14 ⅜						1.67

SUPPLEMENTARY MESSAGES
W20-50A, B, C, D, F, & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-50.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 153	E

CTH F
STA 9+50 - 59+00

Station	Cut Area (Sq.ft.)	Cut Volume (Cu.yd.)	Reusable Volume (Cu.yd.)	Fill Area (Sq.ft.)	Fill Volume (Cu.yd.)	Cum. Cut Vol. (Cu.yd.)	Cum. Reusable Vol. (Cu.yd.)	Cum. Fill Vol. (Cu.yd.)	Cum. Net Vol. (Cu.yd.)
9+50.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10+00.000	35.70	33.05	33.05	6.15	5.69	33.05	33.05	5.69	27.36
10+15.545	67.48	29.70	29.70	0.00	1.77	62.75	62.75	7.46	55.29
10+25.000	52.24	20.96	20.96	2.10	0.37	83.72	83.72	7.83	75.89
10+50.000	55.32	49.80	49.80	9.08	5.18	133.52	133.52	13.01	120.51
10+75.000	70.72	58.35	58.35	4.91	6.48	191.87	191.87	19.49	172.38
11+00.000	88.21	73.58	73.58	4.33	4.28	265.44	265.44	23.76	241.68
11+27.864	141.43	118.49	118.49	1.81	3.17	383.94	383.94	26.93	357.01
12+00.000	219.79	482.53	482.53	0.00	2.42	866.47	866.47	29.35	837.12
13+00.000	246.07	862.69	862.69	2.92	5.41	1729.16	1729.16	34.76	1694.40
13+42.695	239.06	383.57	383.57	4.16	5.60	2112.73	2112.73	40.36	2072.37
13+86.212	204.49	357.45	357.45	1.89	4.88	2470.18	2470.18	45.23	2424.95
14+00.000	0.00	52.21	52.21	0.00	0.48	2522.40	2522.40	45.72	2476.68
14+26.581	0.00	0.00	0.00	0.00	0.00	2522.40	2522.40	45.72	2476.68
14+50.000	0.00	0.00	0.00	0.00	0.00	2522.40	2522.40	45.72	2476.68
16+30.642	385.59	1289.89	1289.89	0.00	0.00	3812.29	3812.29	45.73	3766.57
17+00.000	681.52	1370.60	1370.60	0.00	0.00	5182.89	5182.89	45.73	5137.17
18+00.000	31.91	1321.17	1321.17	522.58	967.75	6504.06	6504.06	1013.48	5490.58
19+00.000	0.00	59.08	59.08	1756.18	4219.94	6563.14	6563.14	5233.42	1329.73
20+00.000	0.00	0.00	0.00	4077.15	10802.46	6563.14	6563.14	16035.88	-9472.74
21+00.000	0.00	0.00	0.00	4363.83	15817.15	6563.14	6563.14	31853.03	-25289.89
22+00.000	0.00	0.00	0.00	3546.25	14818.43	6563.14	6563.14	46671.46	-40108.32
23+00.000	0.00	0.00	0.00	3143.04	12544.64	6563.14	6563.14	59216.11	-52652.96
24+00.000	6.42	11.13	11.13	2781.09	11133.65	6574.28	6574.28	70349.76	-63775.48
25+00.000	0.00	11.13	11.13	2391.14	9695.40	6585.41	6585.41	80045.16	-73459.75
26+00.000	258.50	478.70	478.70	1150.12	6557.88	7064.11	7064.11	86603.04	-79538.93
26+75.000	180.57	609.81	609.81	1396.38	3536.80	7673.92	7673.92	90139.84	-82465.92
27+00.000	47.11	105.41	105.41	1786.85	1473.72	7779.33	7779.33	91613.55	-83834.23
27+50.000	3.47	46.83	46.83	1904.25	3417.69	7826.16	7826.16	95031.24	-87205.08
28+00.000	105.03	100.46	100.46	350.28	2087.53	7926.62	7926.62	97118.77	-89192.15
29+00.000	877.49	1826.17	1826.17	64.33	759.85	9752.79	9752.79	97878.62	-88125.83
30+00.000	0.00	1645.24	1645.24	908.09	1780.27	11398.03	11398.03	99658.89	-88260.86
31+00.000	0.00	0.00	0.00	660.28	2884.36	11398.03	11398.03	102543.25	-91145.22
32+00.000	624.93	1165.98	1165.98	0.00	1217.08	12564.01	12564.01	103760.33	-91196.32
32+50.000	1911.17	2361.54	2361.54	0.00	0.00	14925.55	14925.55	103760.33	-88834.78
33+00.000	912.99	2614.97	2614.97	14.86	13.76	17540.51	17540.51	103774.08	-86233.57
34+00.000	118.08	1909.40	1909.40	46.85	114.27	19449.91	19449.91	103888.36	-84438.45
34+14.000	155.07	70.82	70.82	8.95	14.47	19520.73	19520.73	103902.83	-84382.10
34+28.000	148.11	78.60	78.60	32.27	10.69	19599.33	19599.33	103913.51	-84314.18
35+00.000	13.55	215.55	215.55	123.50	207.69	19814.88	19814.88	104121.20	-84306.32
36+00.000	808.68	1522.64	1522.64	0.00	228.70	21337.52	21337.52	104349.90	-83012.39
37+00.000	1511.81	4297.20	4297.20	0.00	0.00	25634.71	25634.71	104349.90	-78715.19
38+00.000	1139.26	4909.39	4909.39	1.84	3.40	30544.11	30544.11	104353.31	-73809.20
39+00.000	44.84	2153.11	2153.11	304.99	563.62	32697.22	32697.22	104916.93	-72219.71
39+62.000	101.39	166.76	166.76	155.45	513.90	32863.97	32863.97	105430.83	-72566.85
40+00.000	283.23	273.83	273.83	37.65	127.50	33137.81	33137.81	105558.32	-72420.52
41+00.000	1503.84	3349.19	3349.19	0.00	64.88	36487.00	36487.00	105623.20	-69136.20
42+00.000	1975.93	6541.73	6541.73	4.50	7.65	43028.73	43028.73	105630.85	-62602.12
43+00.000	1898.12	7280.95	7280.95	0.00	7.65	50309.69	50309.69	105638.51	-55328.82
44+00.000	1232.84	5866.05	5866.05	0.00	0.00	56175.73	56175.73	105638.51	-49462.78
45+00.000	980.50	4137.53	4137.53	18.07	30.47	60313.26	60313.26	105668.98	-45355.72
46+00.000	1314.93	4254.66	4254.66	0.00	30.47	64567.92	64567.92	105699.44	-41131.53
47+00.000	1591.20	5364.77	5364.77	0.00	0.00	69932.68	69932.68	105699.44	-35766.76
48+00.000	679.79	4205.55	4205.55	3.65	6.76	74138.23	74138.23	105706.20	-31567.97
49+00.000	149.89	1536.45	1536.45	2.73	11.81	75674.68	75674.68	105718.01	-30043.33
49+74.976	9.38	226.24	226.24	44.10	66.18	75900.92	75900.92	105784.19	-29883.27
50+00.000	2.96	5.41	5.41	60.04	49.65	75906.33	75906.33	105833.84	-29927.51
51+00.000	0.33	5.76	5.76	49.77	205.90	75912.09	75912.09	106039.74	-30127.65
51+99.272	0.00	0.56	0.56	59.62	202.31	75912.64	75912.64	106242.05	-30329.40
52+00.000	0.00	0.00	0.00	73.79	1.80	75912.64	75912.64	106243.84	-30331.20
52+21.000	0.00	0.00	0.00	72.05	56.25	75912.64	75912.64	106300.10	-30387.45
52+50.000	4.40	2.50	2.50	49.29	64.18	75915.14	75915.14	106364.28	-30449.13
53+00.000	75.43	75.67	75.67	5.11	48.93	75990.81	75990.81	106413.20	-30422.39
53+25.000	95.10	80.37	80.37	8.89	6.07	76071.18	76071.18	106419.27	-30348.09
54+00.000	90.19	259.50	259.50	7.31	21.33	76330.68	76330.68	106440.60	-30109.92
55+00.000	65.25	287.84	287.84	2.22	17.64	76618.52	76618.52	106458.24	-29839.72
55+45.074	57.75	102.67	102.67	0.00	1.85	76721.19	76721.19	106460.09	-29738.90
56+00.000	30.44	89.70	89.70	0.52	0.53	76810.89	76810.89	106460.62	-29649.73
56+36.250	24.04	36.57	36.57	4.41	3.31	76847.46	76847.46	106463.93	-29616.47
57+00.000	41.28	76.83	76.83	10.86	18.47	76924.29	76924.29	106482.40	-29558.11
58+00.000	39.54	147.50	147.50	20.46	59.75	77071.79	77071.79	106542.15	-29470.37
58+19.885	39.43	29.08	29.08	11.11	11.63	77100.87	77100.87	106553.78	-29452.91
58+49.068	46.46	46.42	46.42	11.25	12.08	77147.28	77147.28	106565.86	-29418.58
59+00.000	46.97	88.13	88.13	8.88	18.99	77235.41	77235.41	106584.85	-29349.43

9

9

PROJECT NO: 3733-00-71 | HWY: CTH F | COUNTY: KENOSHA | EARTHWORK QUANTITIES | SHEET 154 | E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_EW.DWG
LAYOUT NAME - 090101_ew

PLOT DATE : 11/1/2019 12:35 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

CTH O
STA 152+72 - 165+00

Station	Cut Area (Sq.ft.)	Cut Volume (Cu.yd.)	Reusable Volume (Cu.yd.)	Fill Area (Sq.ft.)	Fill Volume (Cu.yd.)	Cum. Cut Vol. (Cu.yd.)	Cum. Reusable Vol. (Cu.yd.)	Cum. Fill Vol. (Cu.yd.)	Cum. Net Vol. (Cu.yd.)
152+72.463	39.71	0.00	0.00	1.59	0.00	0.00	0.00	0.00	0.00
153+00.000	47.26	44.35	44.35	0.19	0.91	44.35	44.35	0.91	43.44
154+00.000	43.72	168.49	168.49	2.33	4.67	212.85	212.85	5.58	207.27
155+00.000	18.59	115.39	115.39	7.87	18.88	328.24	328.24	24.46	303.78
155+61.000	8.76	30.90	30.90	18.44	29.72	359.13	359.13	54.18	304.95
156+00.000	2.75	8.32	8.32	95.95	82.62	367.45	367.45	136.80	230.65
157+00.000	0.44	5.92	5.92	160.52	474.94	373.37	373.37	611.74	-238.37
158+00.000	49.02	91.60	91.60	154.23	582.86	464.96	464.96	1194.60	-729.63
158+27.000	33.16	41.09	41.09	144.37	149.30	506.05	506.05	1343.90	-837.84
159+40.000	45.72	165.07	165.07	39.24	384.24	671.12	671.12	1728.13	-1057.01
159+57.000	34.69	25.31	25.31	57.40	30.43	696.44	696.44	1758.56	-1062.12
159+73.000	23.95	17.37	17.37	71.79	38.28	713.81	713.81	1796.84	-1083.03
160+00.000	11.33	17.64	17.64	85.40	78.60	731.45	731.45	1875.44	-1143.99
161+00.000	0.41	21.75	21.75	82.98	311.82	753.19	753.19	2187.26	-1434.06
162+00.000	13.35	25.48	25.48	47.74	242.08	778.68	778.68	2429.34	-1650.66
162+97.000	47.28	108.91	108.91	34.44	147.63	887.58	887.58	2576.97	-1689.38
163+00.000	46.81	5.23	5.23	40.79	4.18	892.81	892.81	2581.15	-1688.34
164+00.000	40.99	162.60	162.60	13.73	100.97	1055.41	1055.41	2682.12	-1626.71
165+00.000	53.69	175.33	175.33	1.28	27.81	1230.74	1230.74	2709.93	-1479.18
165+27.000	37.17	45.43	45.43	5.67	3.48	1276.17	1276.17	2713.40	-1437.23

CTH EM
STA 222+50 - 230+50

Station	Cut Area (Sq.ft.)	Cut Volume (Cu.yd.)	Reusable Volume (Cu.yd.)	Fill Area (Sq.ft.)	Fill Volume (Cu.yd.)	Cum. Cut Vol. (Cu.yd.)	Cum. Reusable Vol. (Cu.yd.)	Cum. Fill Vol. (Cu.yd.)	Cum. Net Vol. (Cu.yd.)
222+50.000	41.41	0.00	0.00	5.97	0.00	0.00	0.00	0.00	0.00
223+00.000	47.95	82.74	82.74	7.74	12.69	82.74	82.74	12.69	70.04
223+34.655	54.78	65.93	65.93	3.46	7.18	148.66	148.66	19.88	128.78
223+50.000	53.68	30.82	30.82	8.85	3.50	179.48	179.48	23.38	156.11
224+00.000	49.25	95.22	95.22	8.78	15.72	274.70	274.70	39.09	235.61
224+50.000	44.13	86.43	86.43	36.56	39.29	361.13	361.13	78.38	282.75
225+00.000	36.16	74.59	74.59	62.31	84.89	435.72	435.72	163.27	272.45
225+50.000	37.49	68.52	68.52	30.46	79.82	504.24	504.24	243.09	261.15
226+00.000	51.90	82.85	82.85	25.51	48.67	587.09	587.09	291.76	295.33
226+50.000	61.44	104.38	104.38	7.33	28.48	691.47	691.47	320.24	371.23
226+75.000	71.54	60.85	60.85	1.12	3.64	752.33	752.33	323.88	428.44
227+00.000	46.59	54.18	54.18	0.00	0.48	806.51	806.51	324.37	482.14
227+50.000	73.85	111.33	111.33	0.00	0.00	917.84	917.84	324.37	593.47
228+00.000	6.03	73.77	73.77	122.90	117.85	991.61	991.61	442.22	549.39
228+22.250	0.00	2.43	2.43	180.98	128.91	994.04	994.04	571.12	422.92
228+50.000	0.00	0.00	0.00	245.05	220.49	994.04	994.04	791.61	202.43
229+00.000	0.00	0.00	0.00	219.78	430.40	994.04	994.04	1222.01	-227.97
229+50.000	0.00	0.00	0.00	181.16	371.24	994.04	994.04	1593.25	-599.21
230+00.000	0.00	0.00	0.00	174.62	329.42	994.04	994.04	1922.68	-928.64
230+50.000	4.94	4.57	4.57	132.27	284.15	998.61	998.61	2206.82	-1208.22

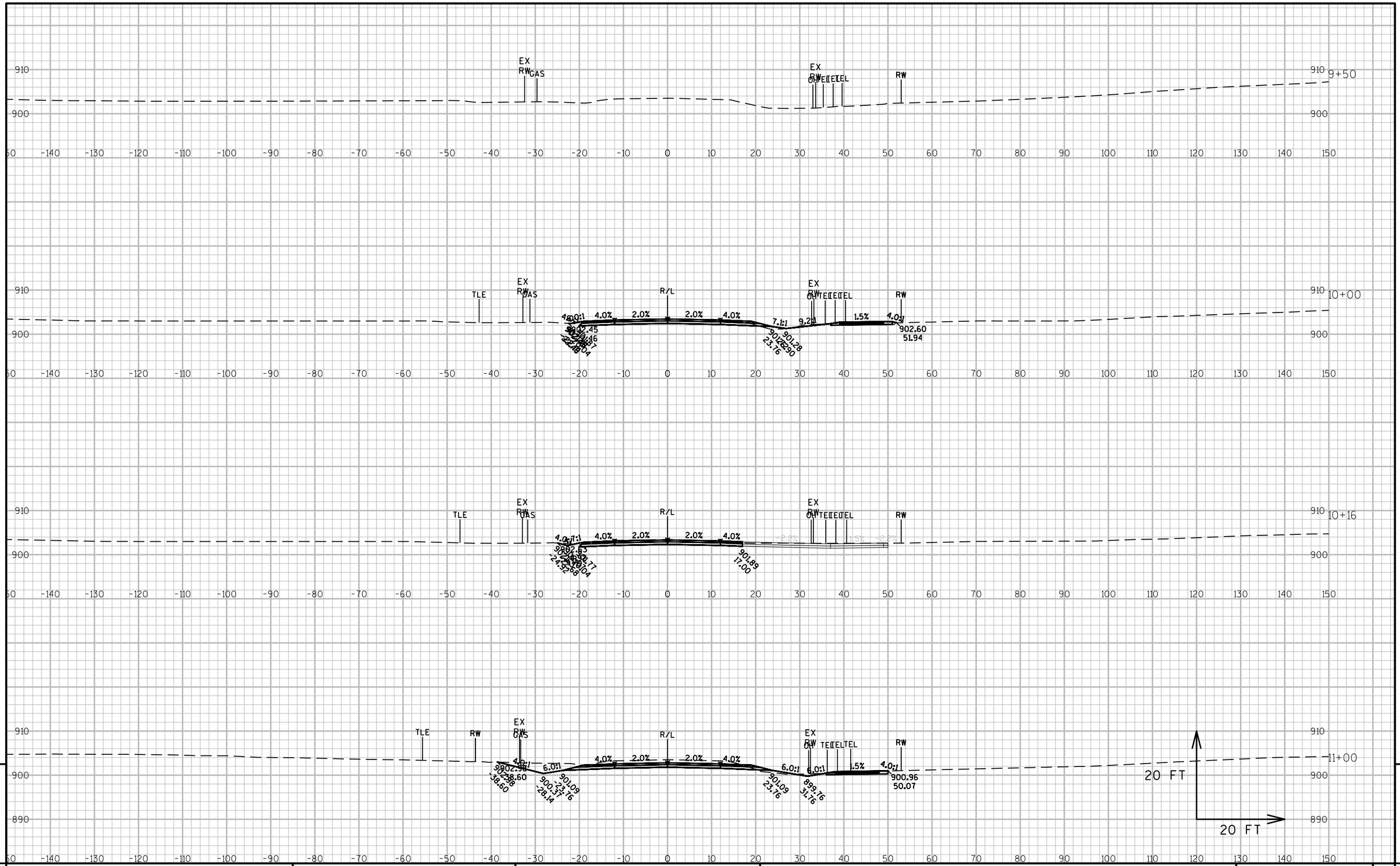
CTH OLD F
STA 351+50 - 357+45

Station	Cut Area (Sq.ft.)	Cut Volume (Cu.yd.)	Reusable Volume (Cu.yd.)	Fill Area (Sq.ft.)	Fill Volume (Cu.yd.)	Cum. Cut Vol. (Cu.yd.)	Cum. Reusable Vol. (Cu.yd.)	Cum. Fill Vol. (Cu.yd.)	Cum. Net Vol. (Cu.yd.)
351+50.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
351+90.740	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
352+00.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
353+00.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
353+13.660	31.29	7.91	7.91	0.00	0.00	7.91	7.91	0.00	7.91
353+50.000	43.37	49.53	49.53	1.35	0.96	57.44	57.44	0.96	56.48
353+86.340	116.97	98.87	98.87	3.69	3.62	156.32	156.32	4.58	151.74
354+00.000	122.56	54.74	54.74	0.66	1.17	211.06	211.06	5.75	205.31
354+50.000	137.81	219.74	219.74	1.29	1.94	430.80	430.80	7.70	423.11
355+00.000	117.82	254.53	254.53	2.91	3.62	685.33	685.33	11.32	674.01
355+15.990	95.59	66.36	66.36	2.17	1.37	751.69	751.69	12.70	738.99
355+50.000	102.05	128.04	128.04	4.39	3.93	879.73	879.73	16.62	863.11
356+00.000	78.08	166.79	166.79	1.20	5.18	1046.52	1046.52	21.80	1024.73
356+28.840	62.27	74.96	74.96	11.14	6.59	1121.48	1121.48	28.38	1093.10
356+50.000	55.01	45.96	45.96	13.62	9.70	1167.44	1167.44	38.09	1129.35
357+00.000	43.54	91.26	91.26	98.19	103.53	1258.70	1258.70	141.61	1117.08
357+44.667	47.96	75.69	75.69	3.84	84.39	1334.39	1334.39	226.00	1108.38

9

9

PROJECT NO: 3733-00-71 | HWY: CTH F | COUNTY: KENOSHA | EARTHWORK QUANTITIES | SHEET 155 | E



9

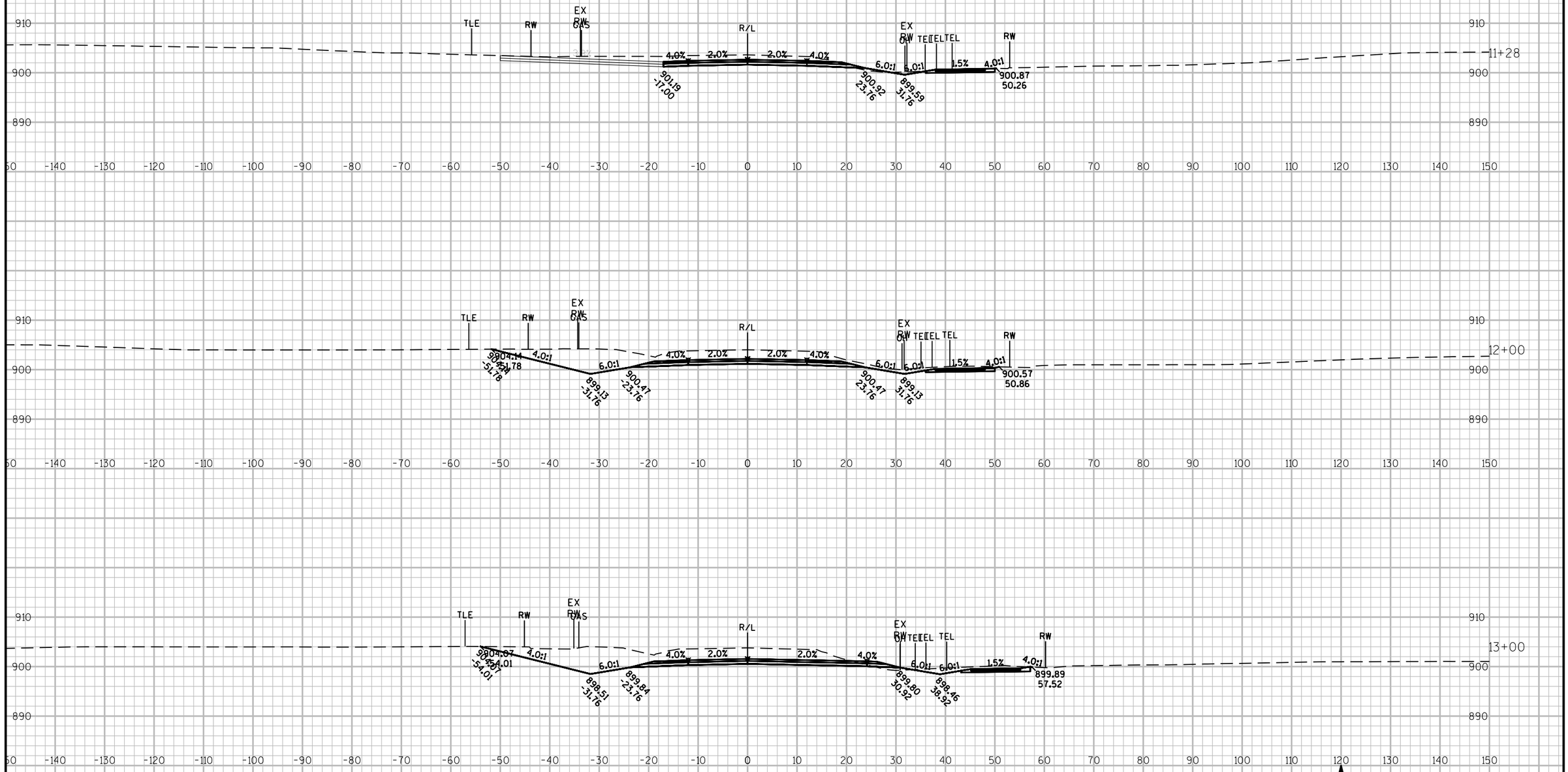
9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 156	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090101 ALT5

PLOT DATE : 11/1/2019 12:37 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

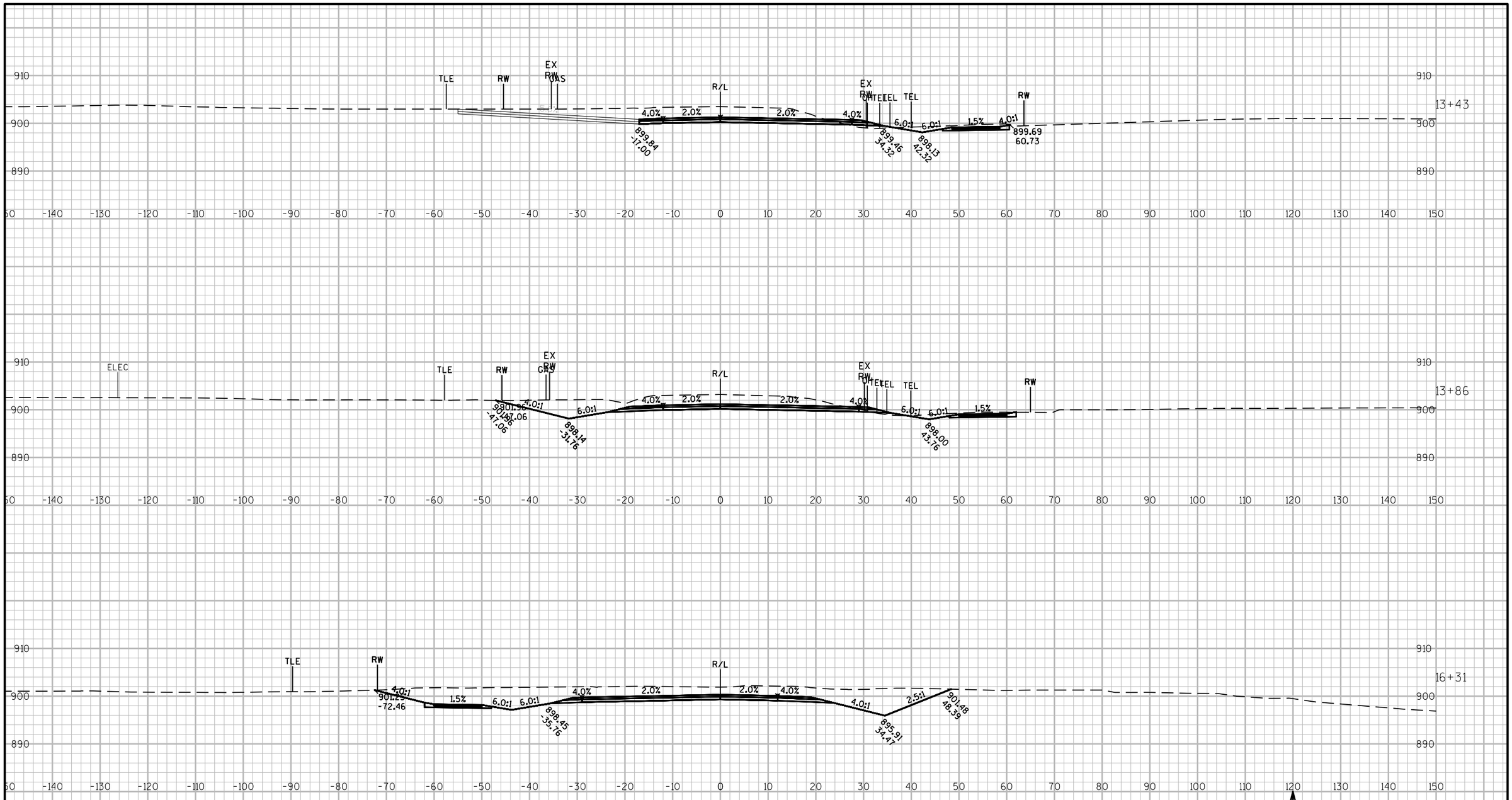
WISDOT/CADDS SHEET 49



PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 157	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090102 ALT5

PLOT DATE : 11/1/2019 12:37 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT



9

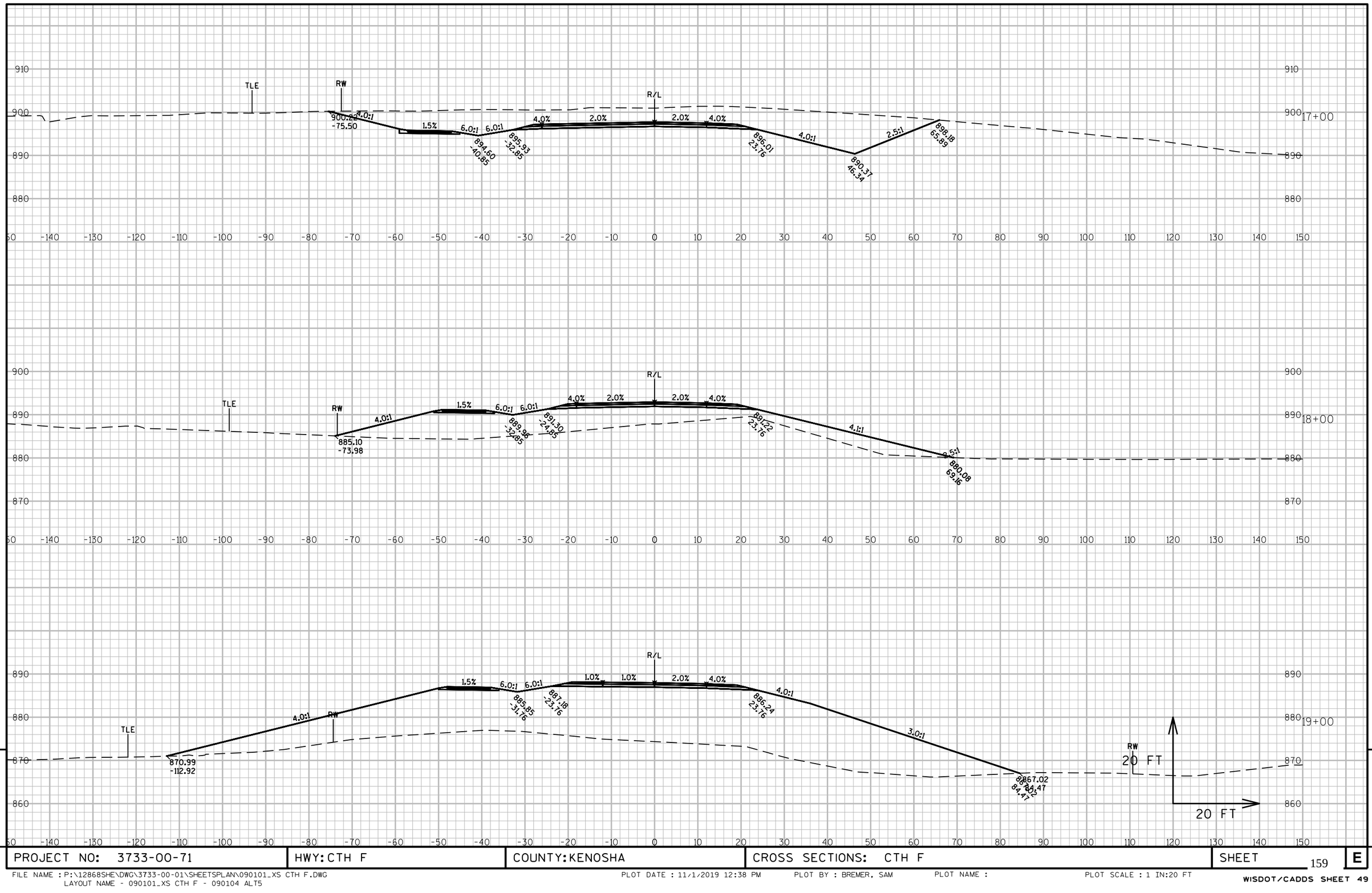
9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 158	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090103 ALT5

PLOT DATE : 11/1/2019 12:38 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



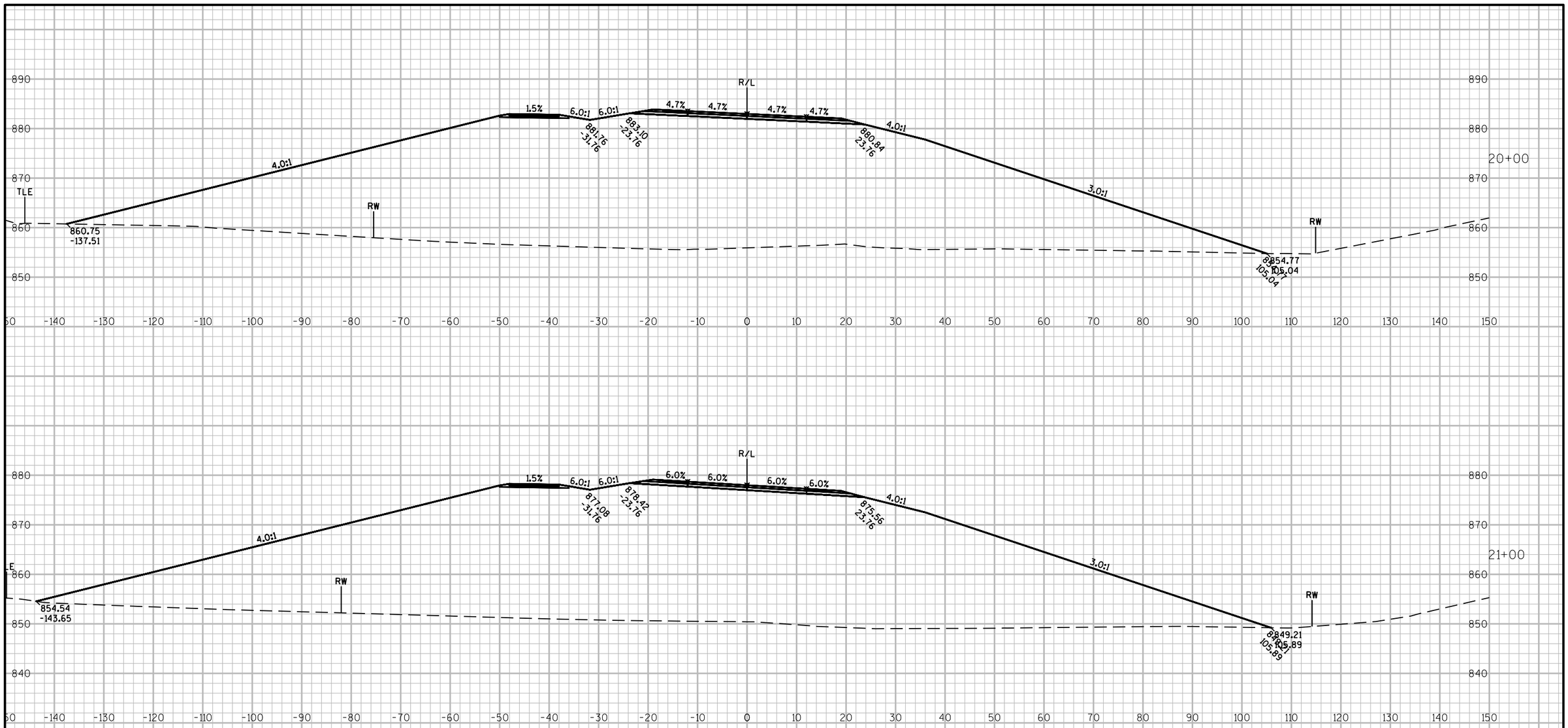
9 9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 159 E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090104 ALT5

PLOT DATE : 11/1/2019 12:38 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

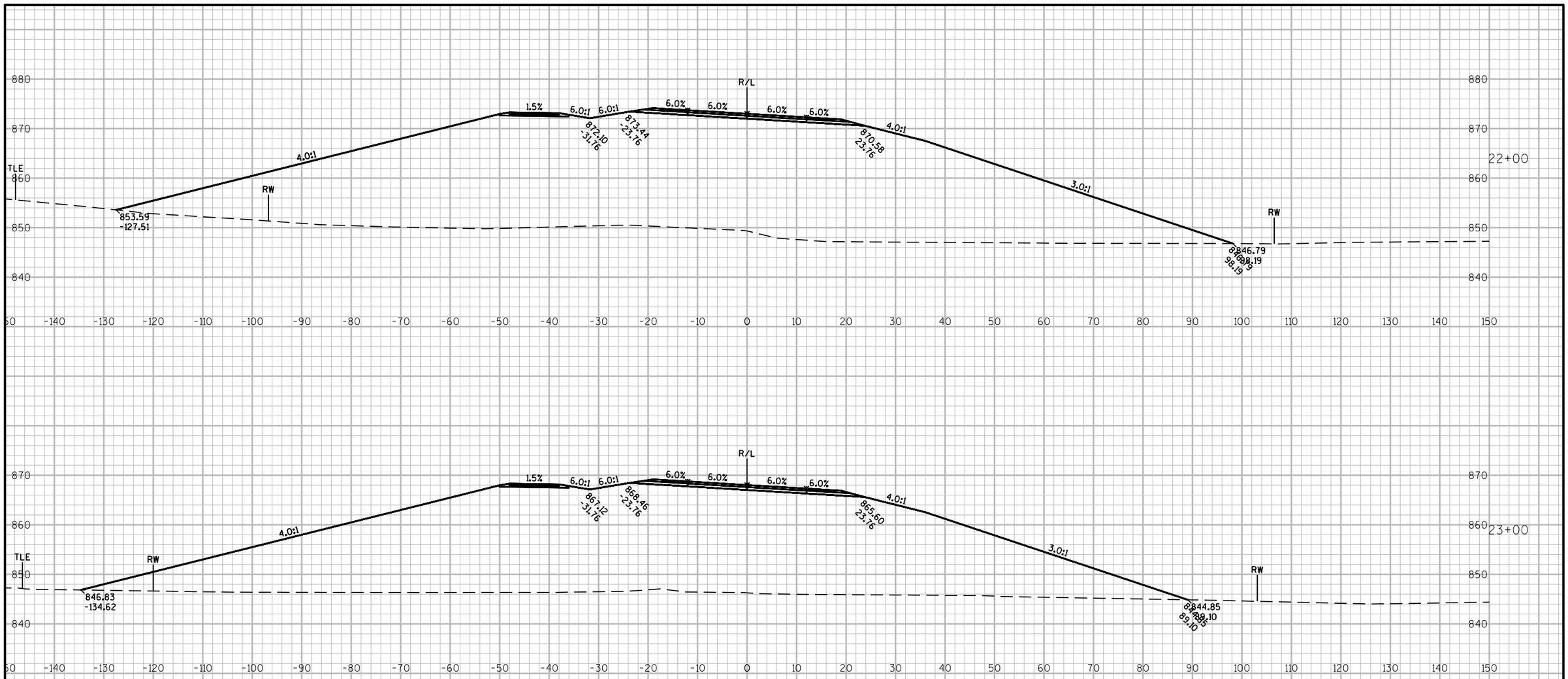
WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 160	E



20 FT

20 FT

9

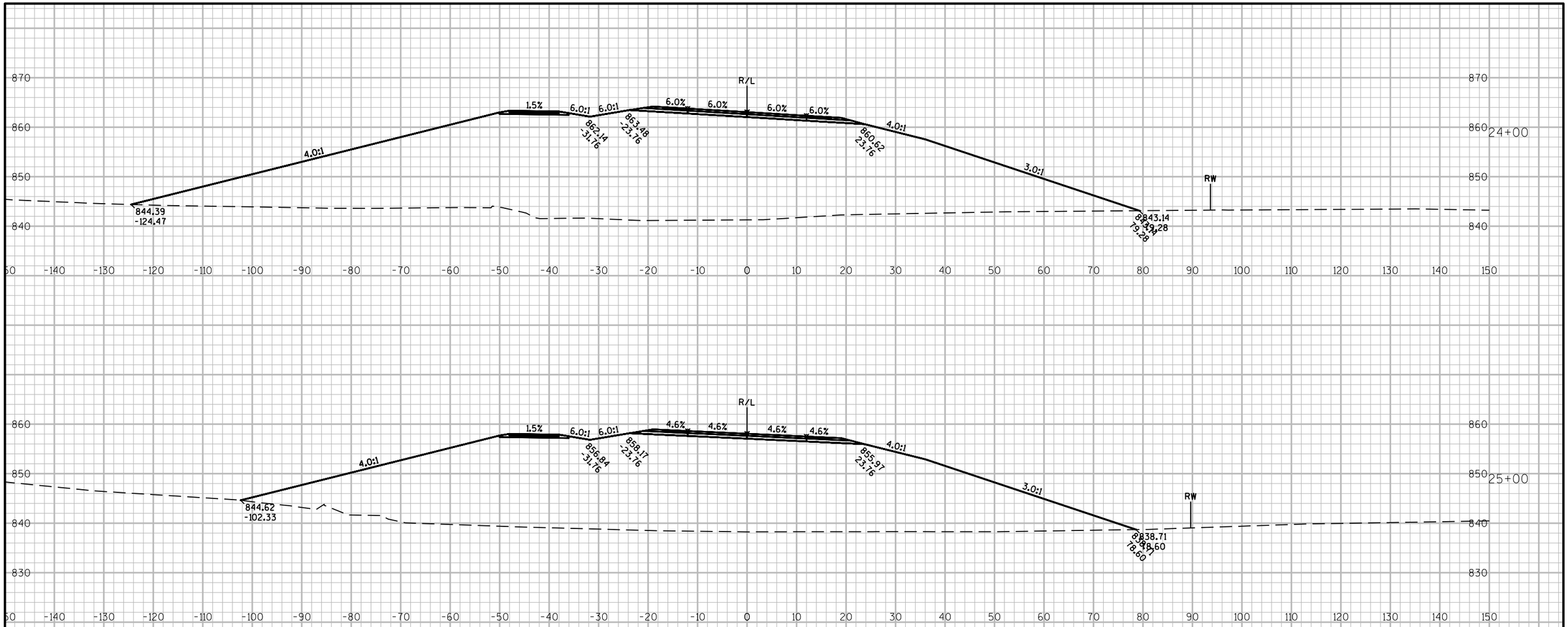
9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 161	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090106 ALT5

PLOT DATE : 11/1/2019 12:38 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

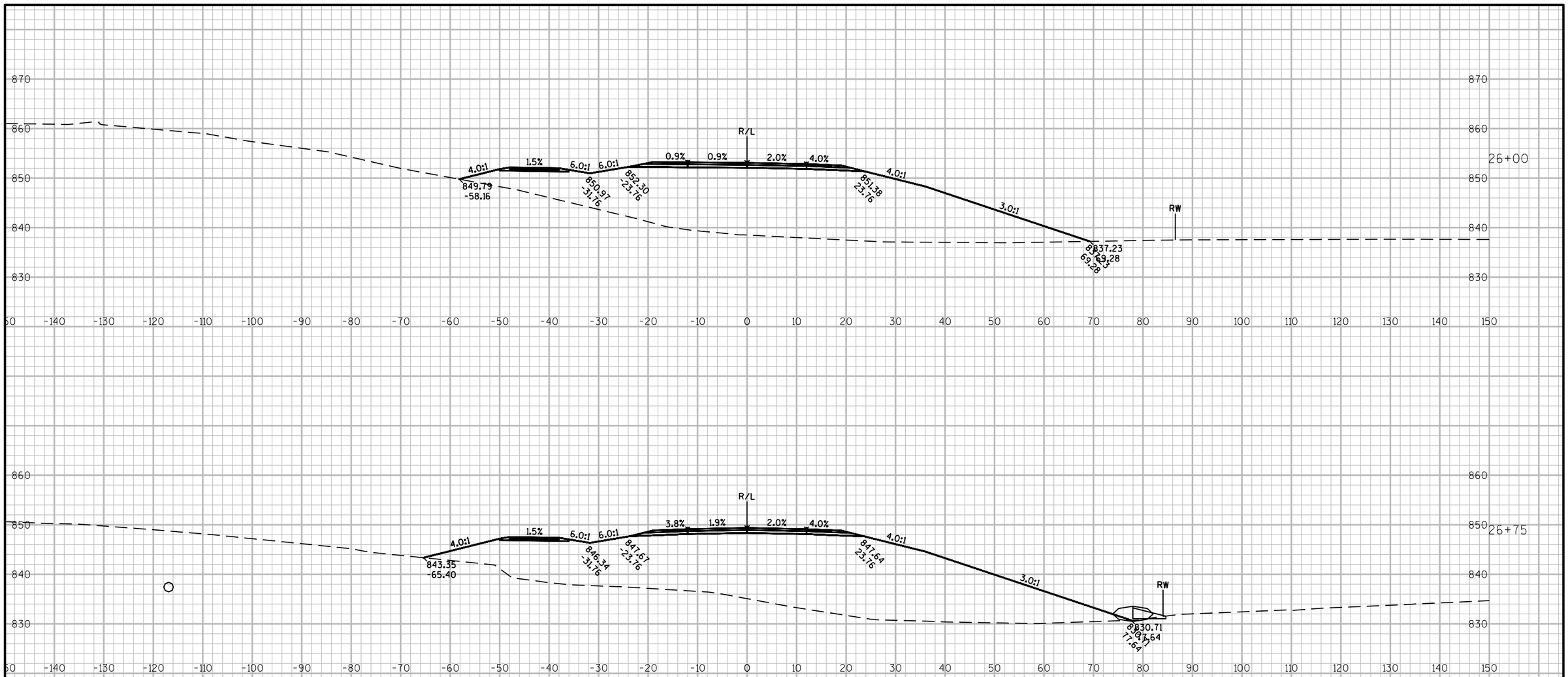
WISDOT/CADDS SHEET 49

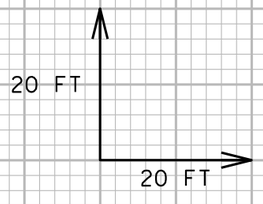


9

9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 162	E





9

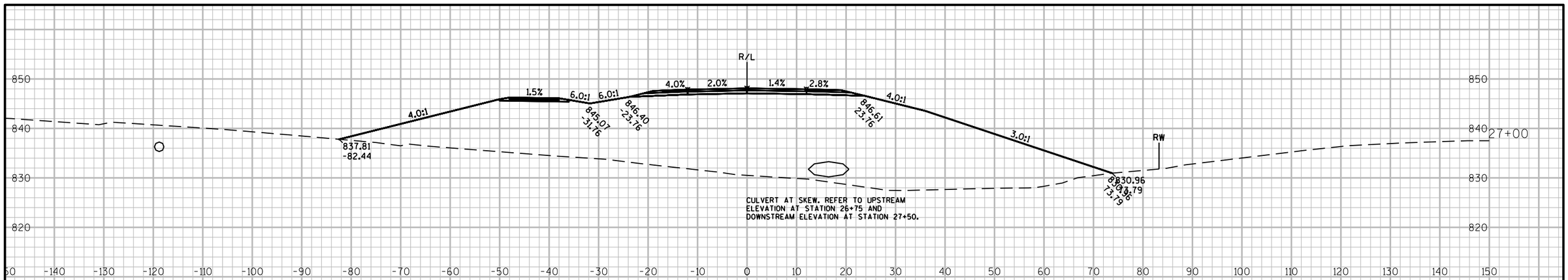
9

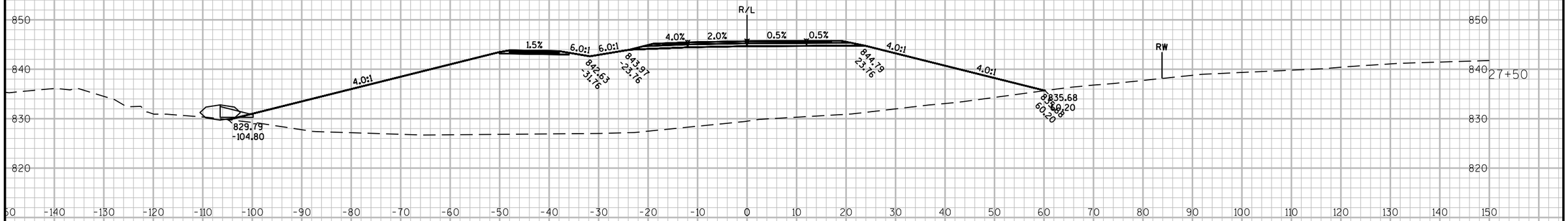
PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 163	E

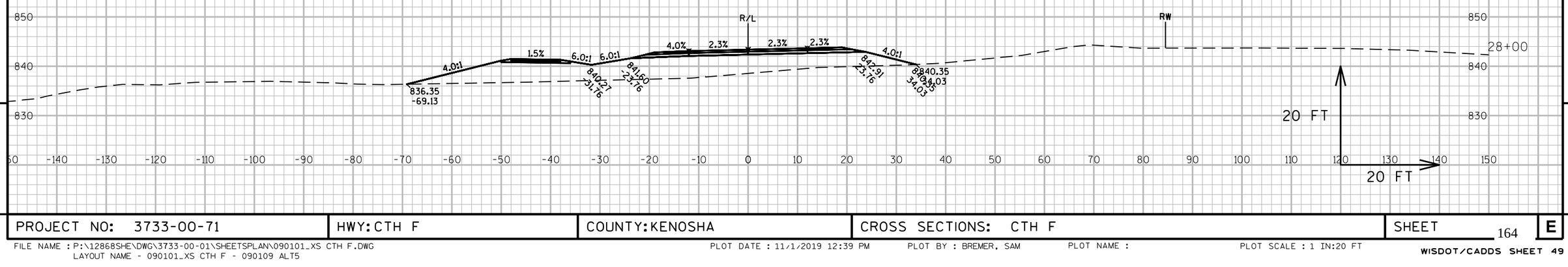
FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090108 ALT5

PLOT DATE : 11/1/2019 12:39 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49





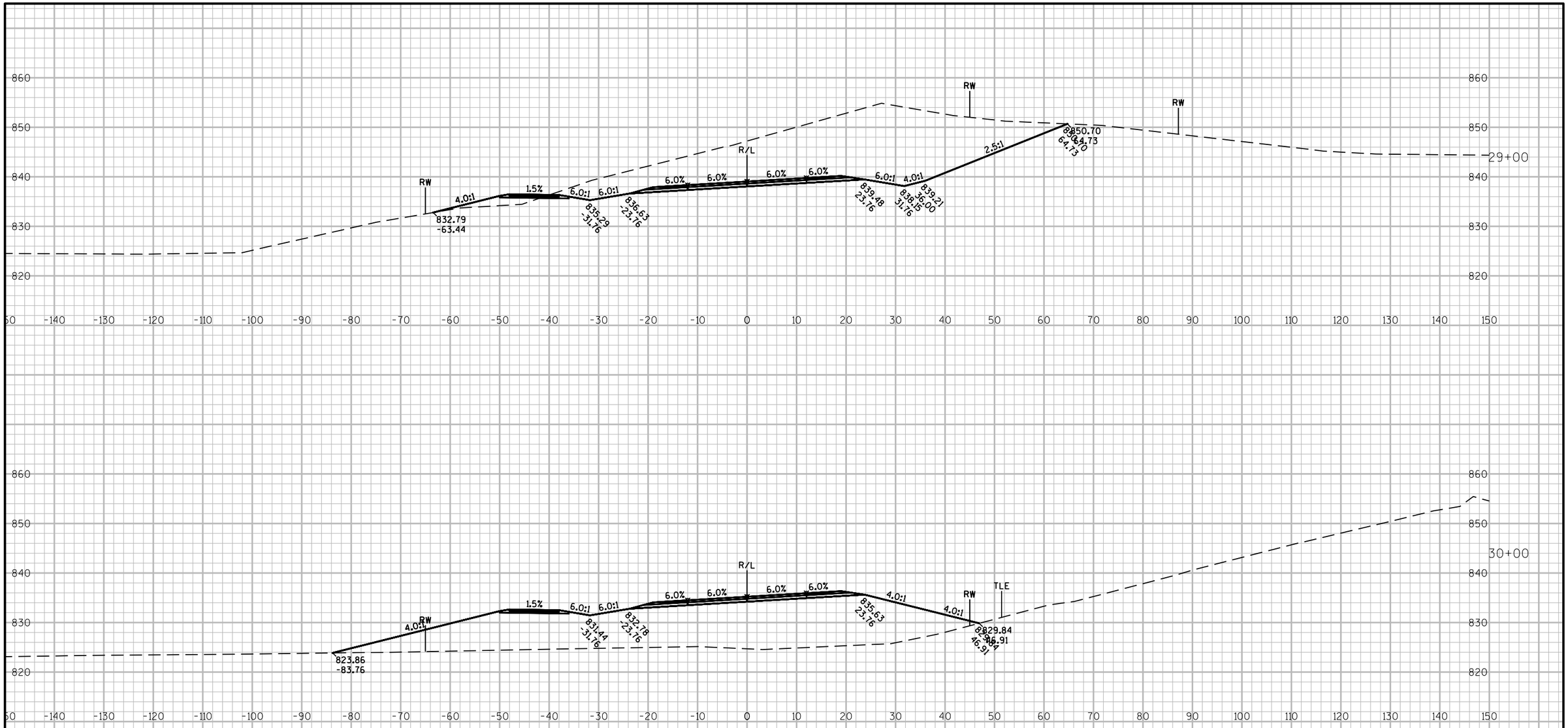


9 9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 164	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090109 ALT5

PLOT DATE : 11/1/2019 12:39 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

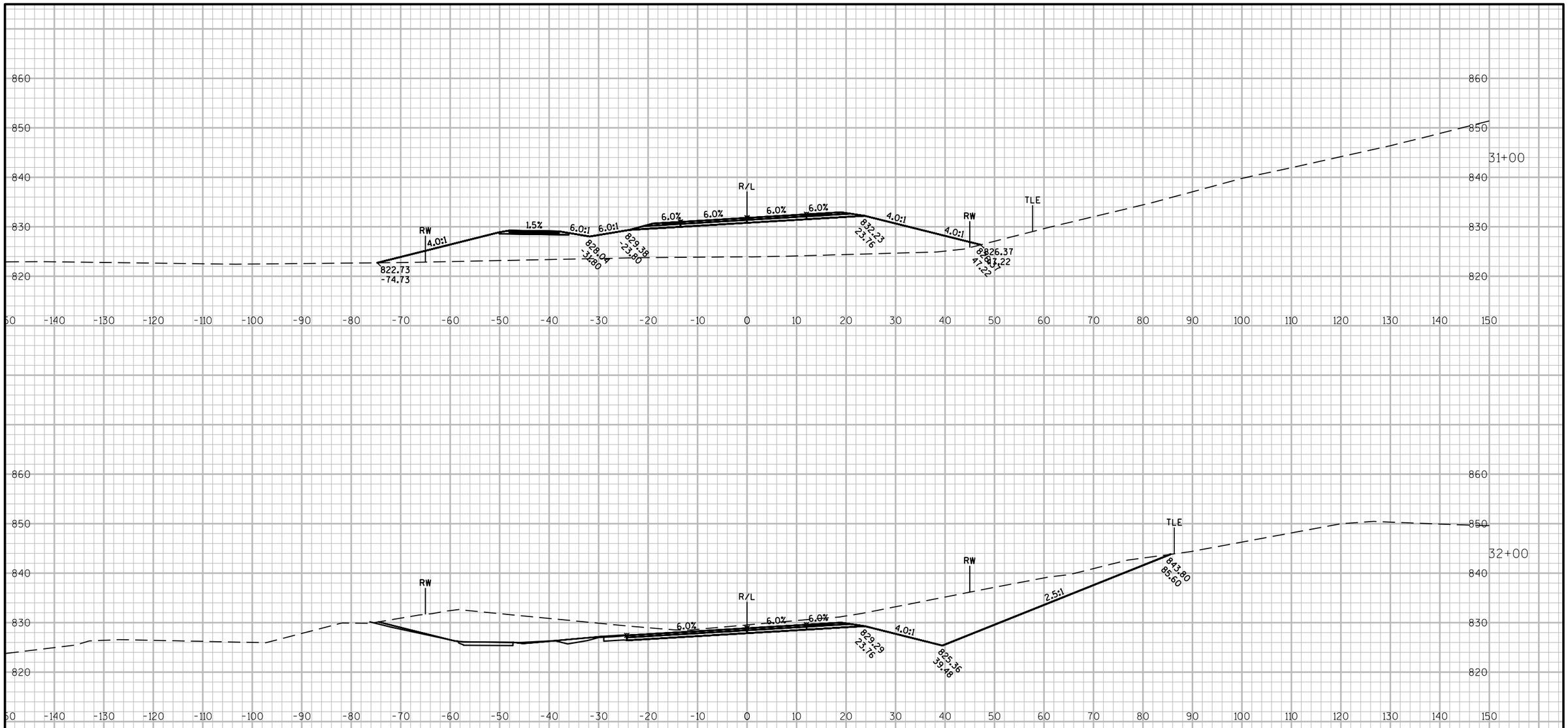


PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 165 E

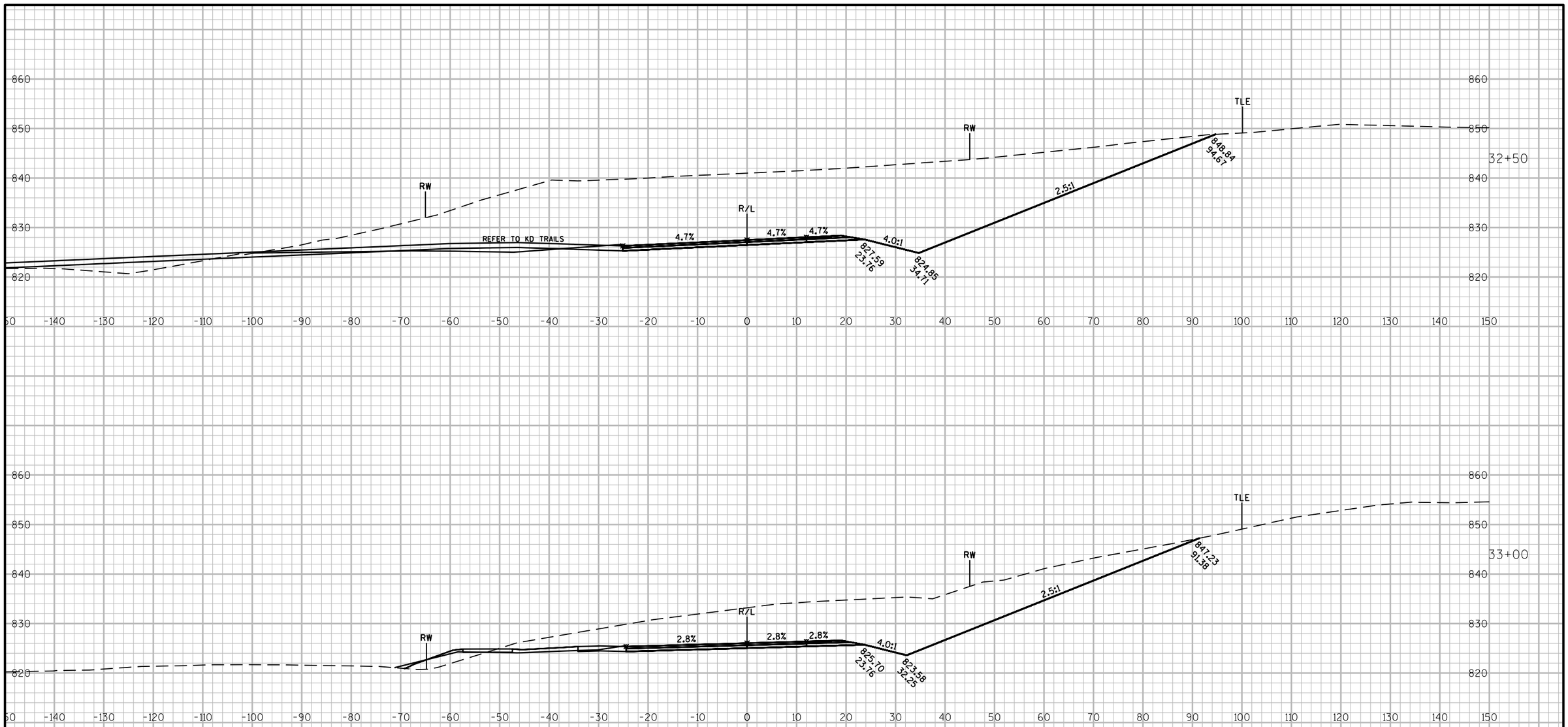
FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090110 ALT5

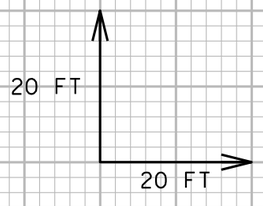
PLOT DATE : 11/1/2019 12:39 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 166	E





9

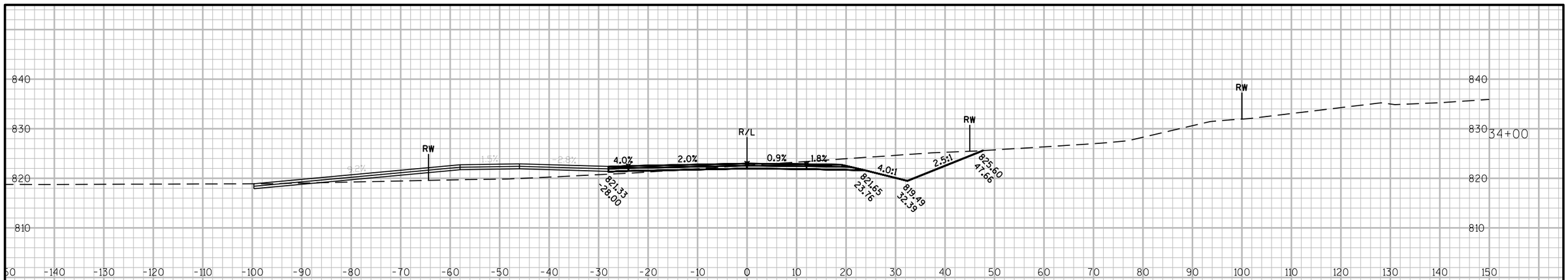
9

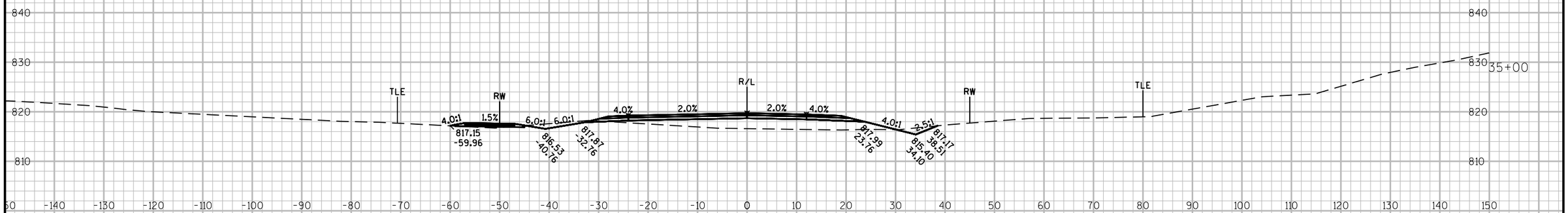
PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 167	E

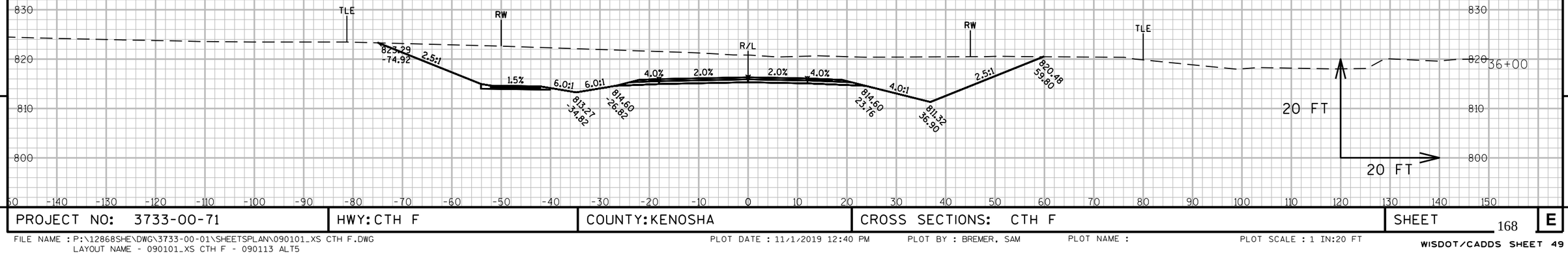
FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090112 ALT5

PLOT DATE : 11/1/2019 12:40 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49







9

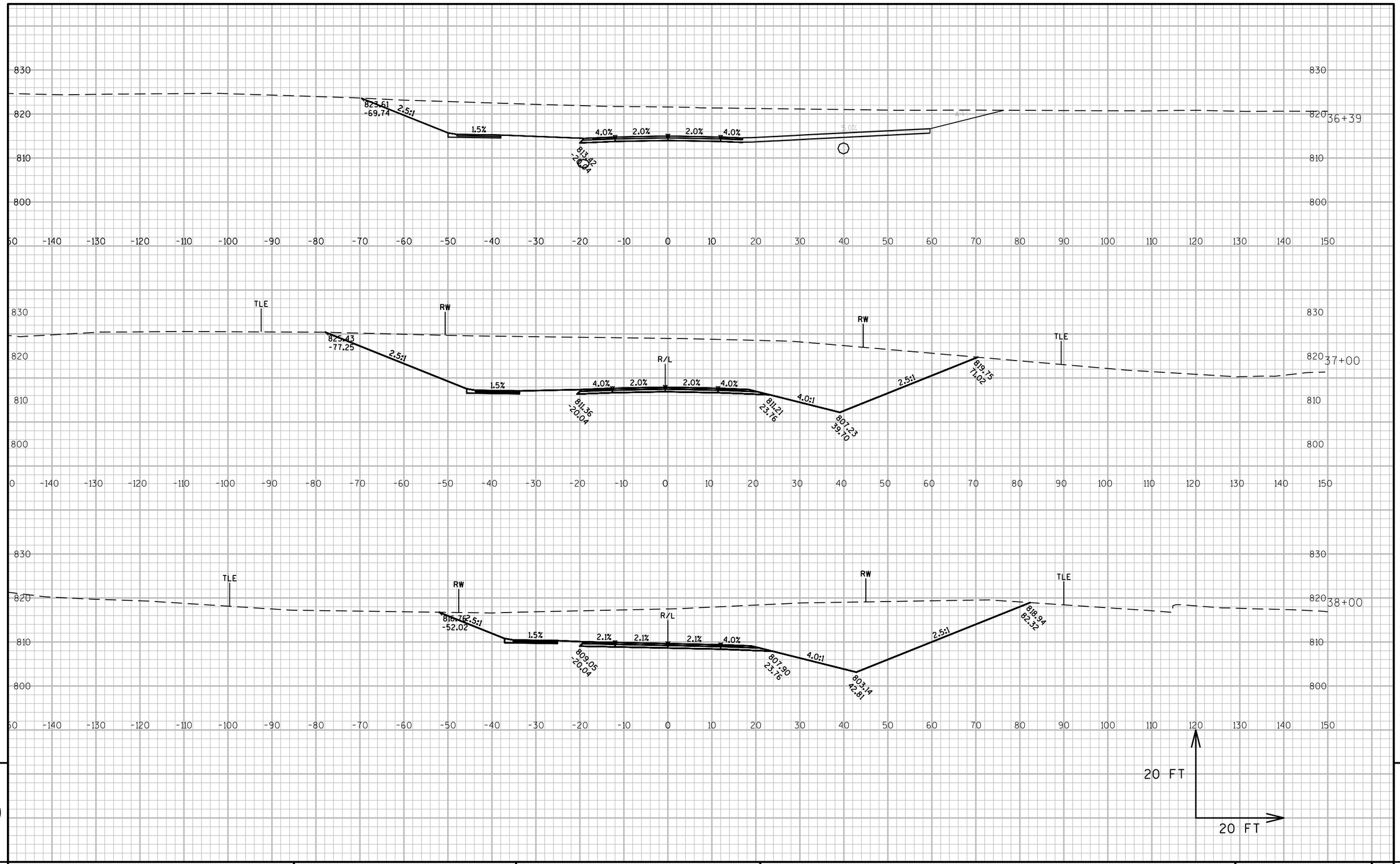
9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090113 ALT5

PLOT DATE : 11/1/2019 12:40 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

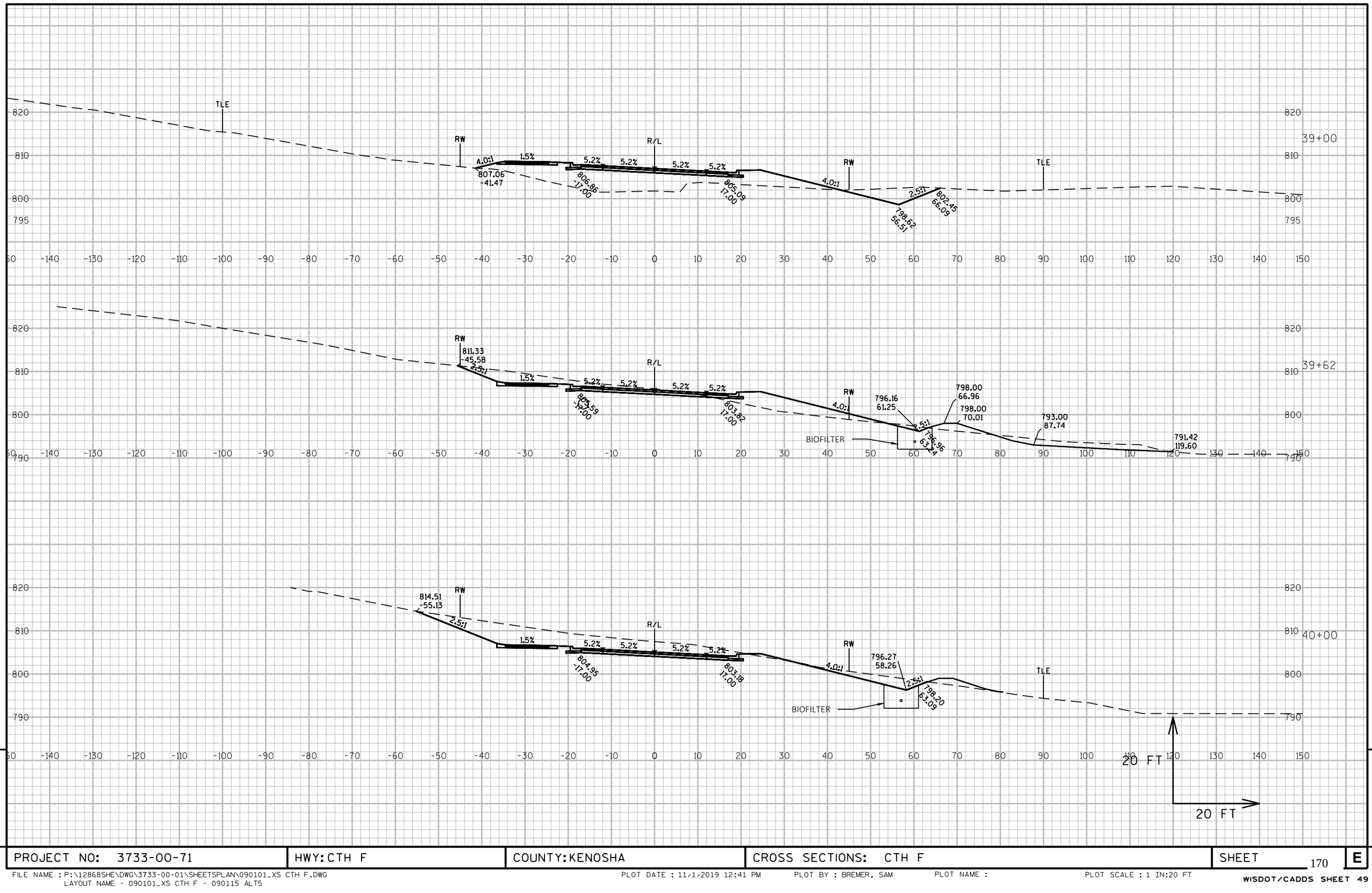
9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 169	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090114 ALT5

PLOT DATE : 11/1/2019 12:40 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

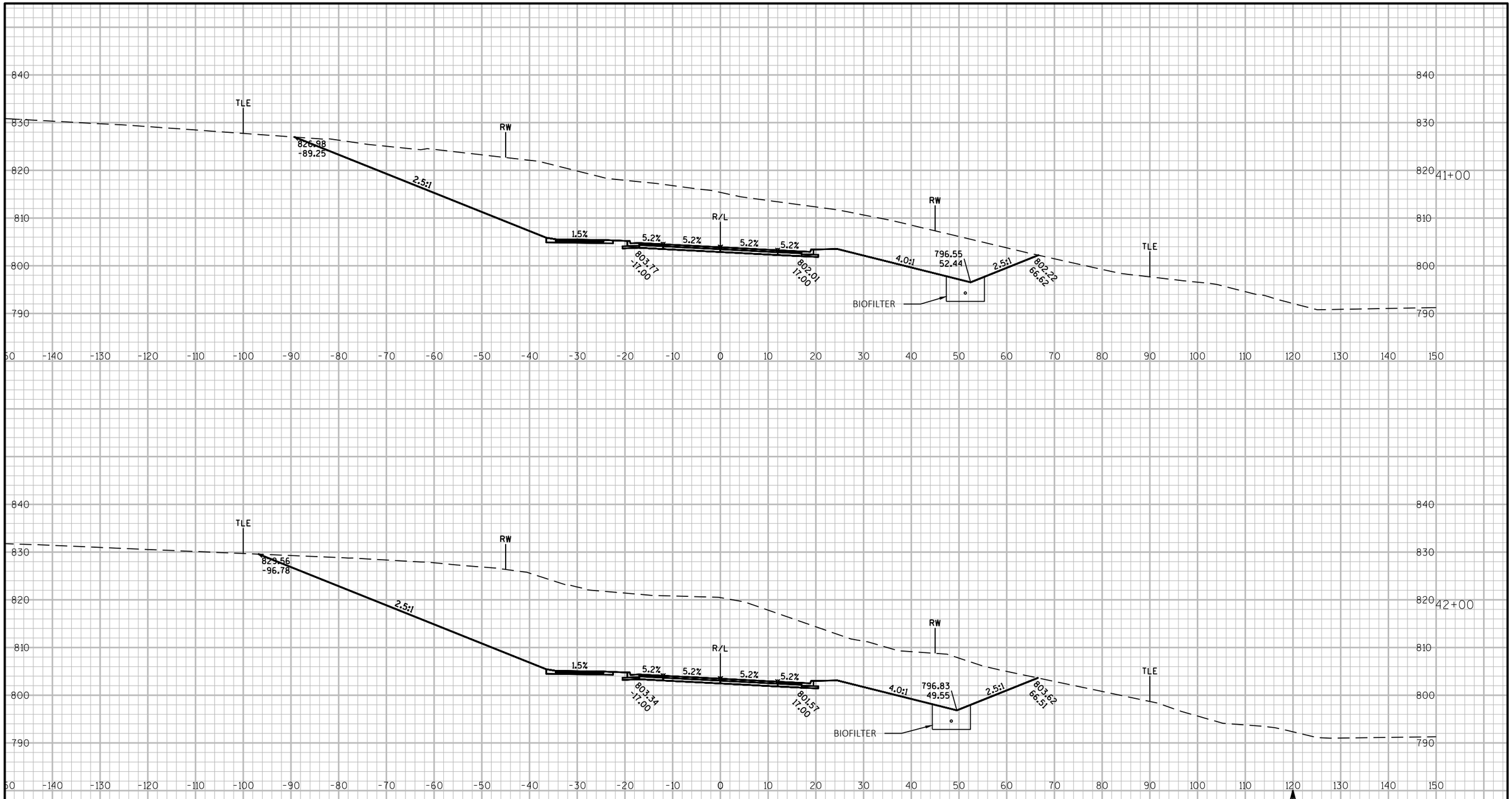


PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 170	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090115 ALT5

PLOT DATE : 11/1/2019 12:41 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

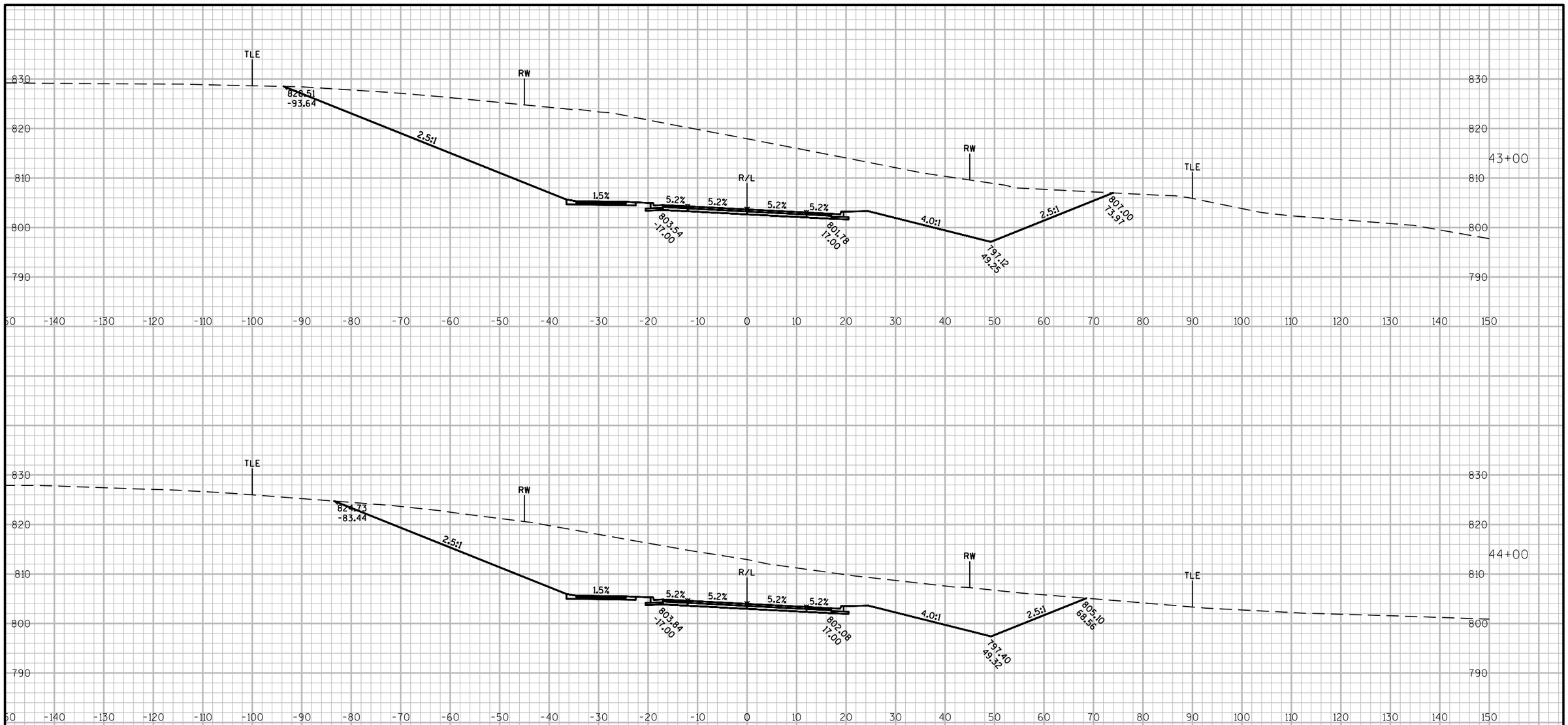


PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 171 E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090116 ALT5

PLOT DATE : 11/1/2019 12:41 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

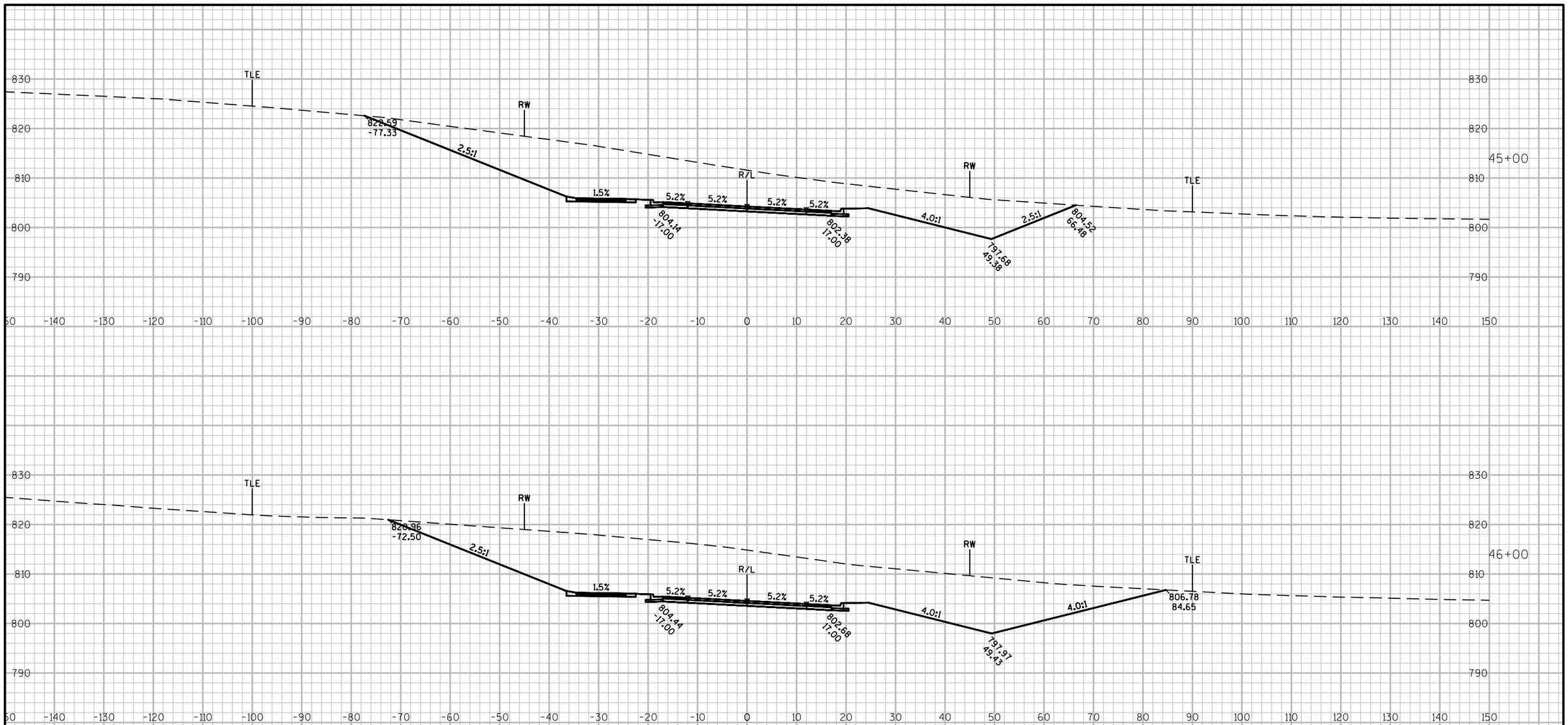
9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 172	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090117 ALT5

PLOT DATE : 11/1/2019 12:41 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

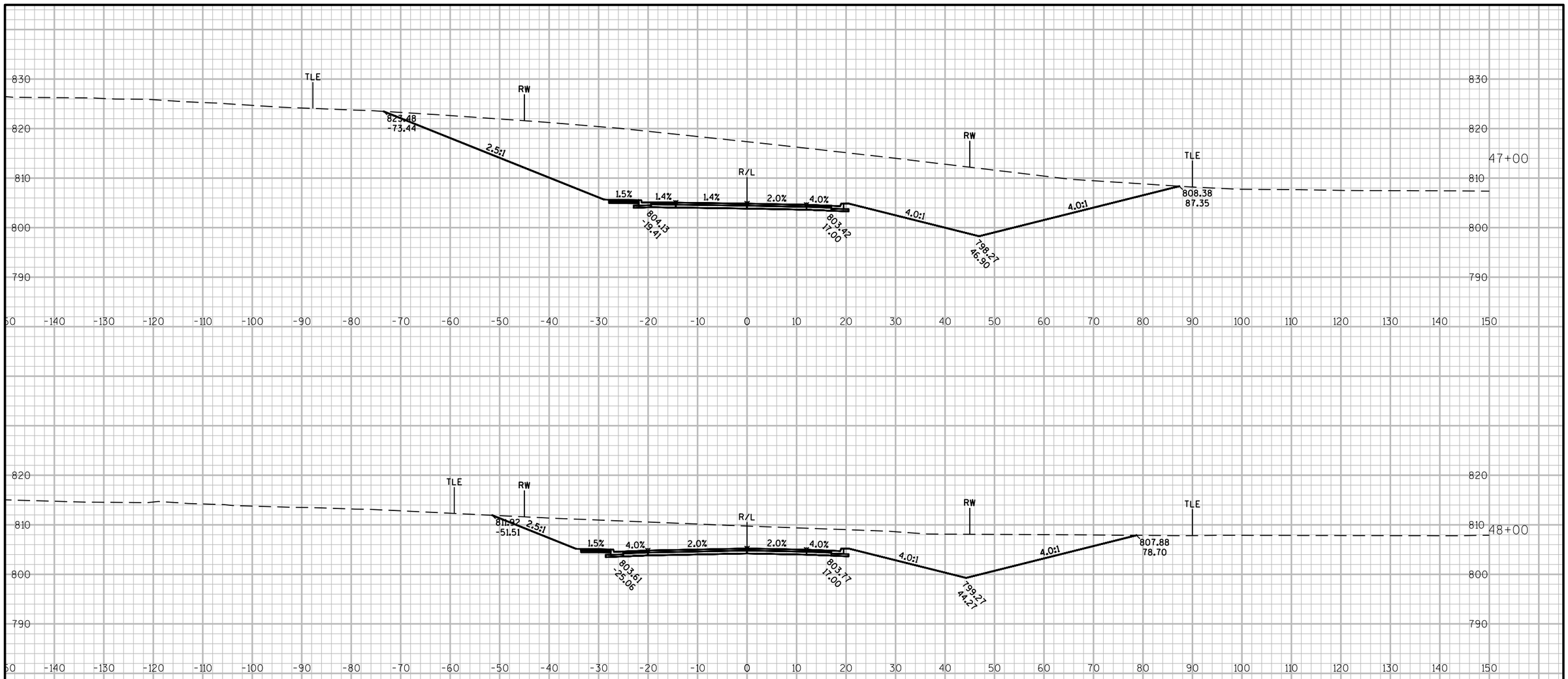
9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 173	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090118 ALT5

PLOT DATE : 11/1/2019 12:41 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

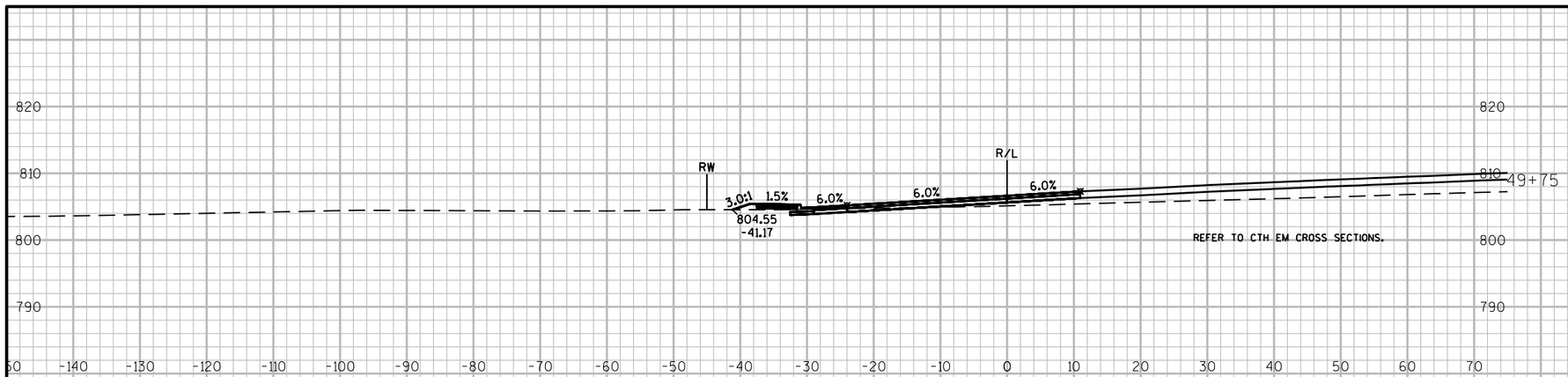
9

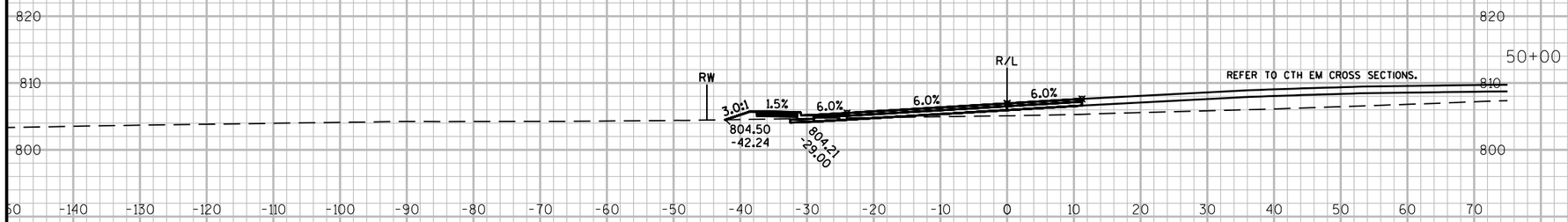
PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 174	E

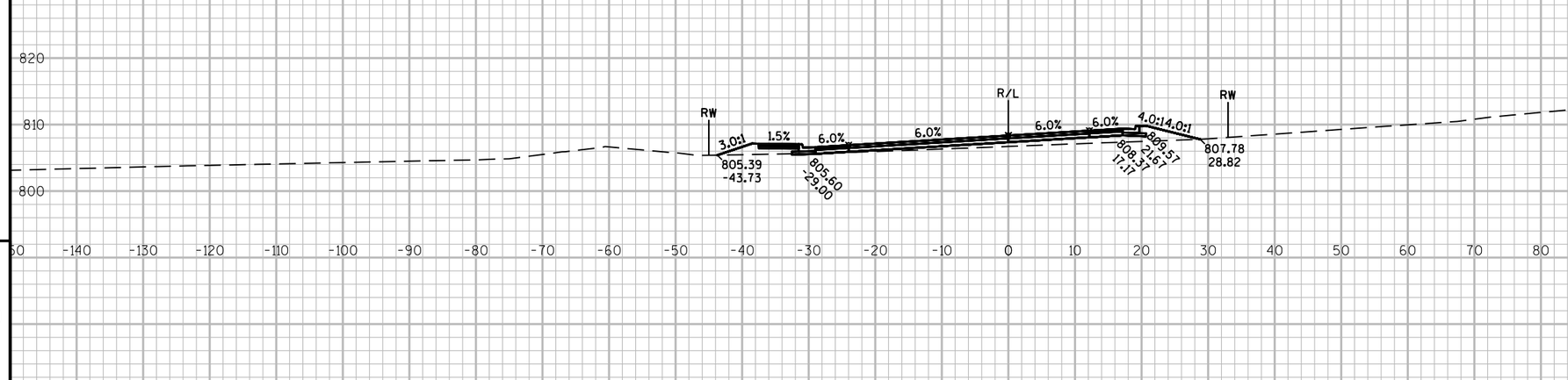
FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090119 ALT5

PLOT DATE : 11/1/2019 12:42 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49





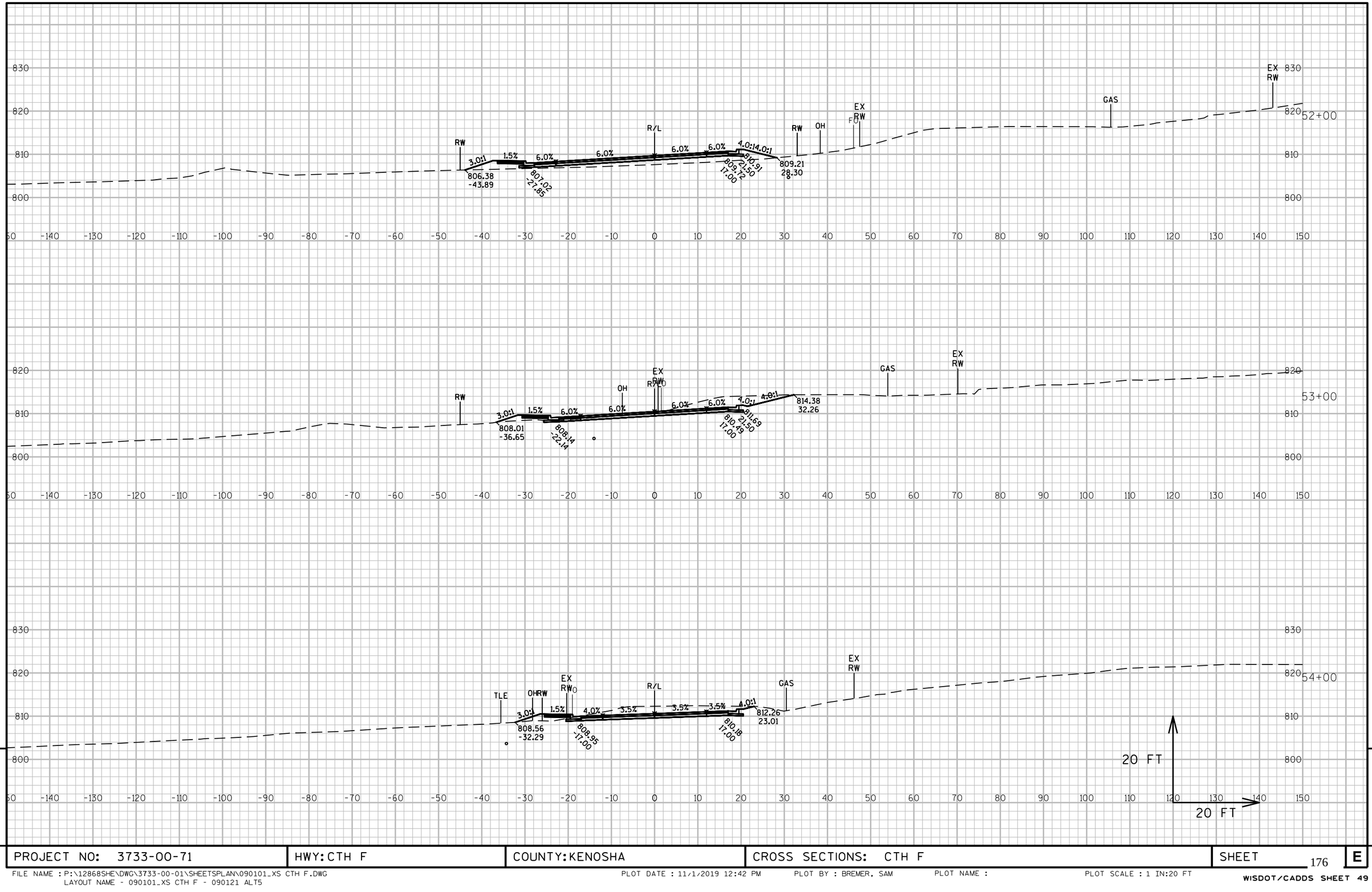


PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 175	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090120 ALT5

PLOT DATE : 11/1/2019 12:42 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

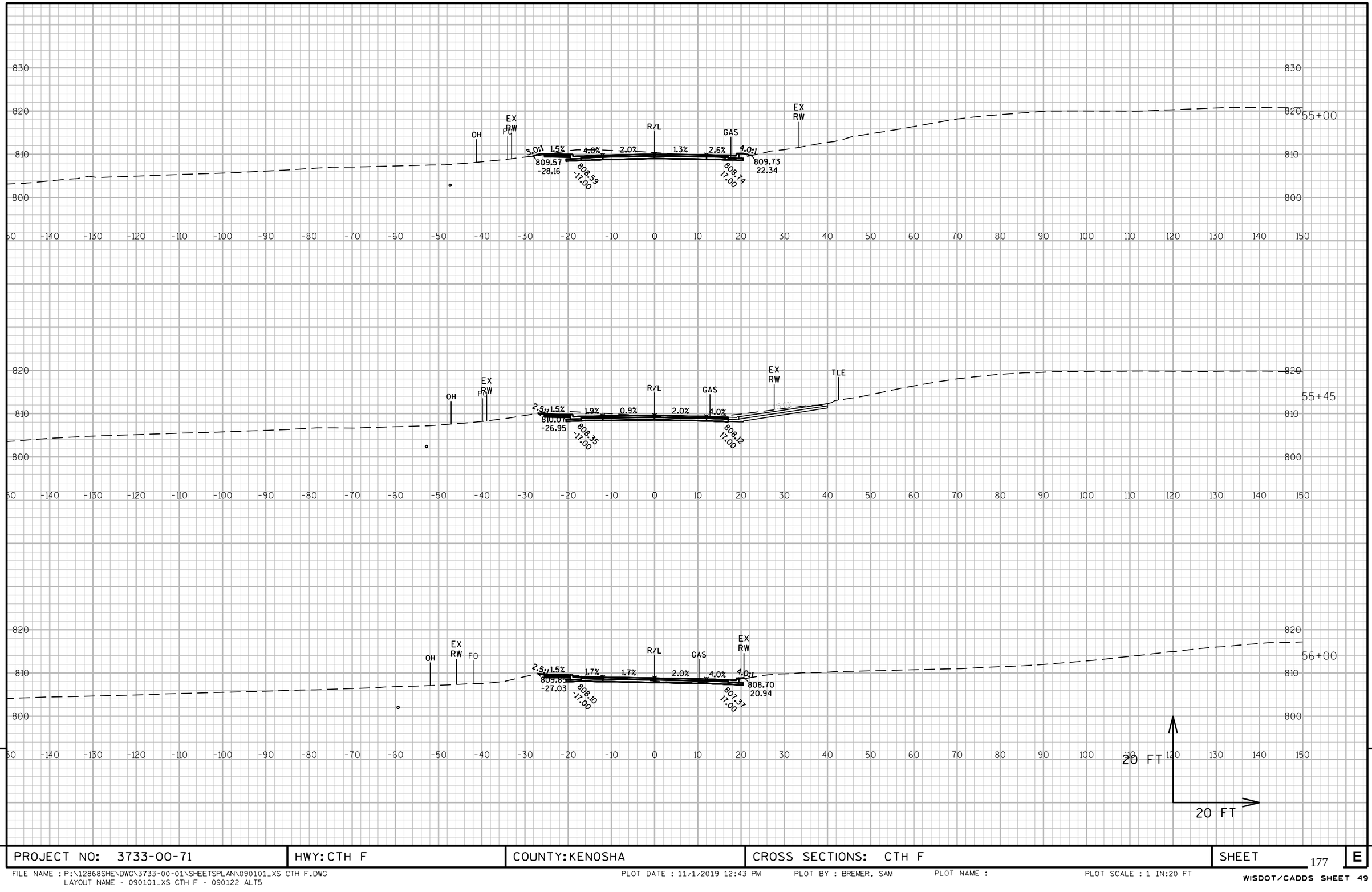


9 9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 176	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090121 ALT5

PLOT DATE : 11/1/2019 12:42 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT



9

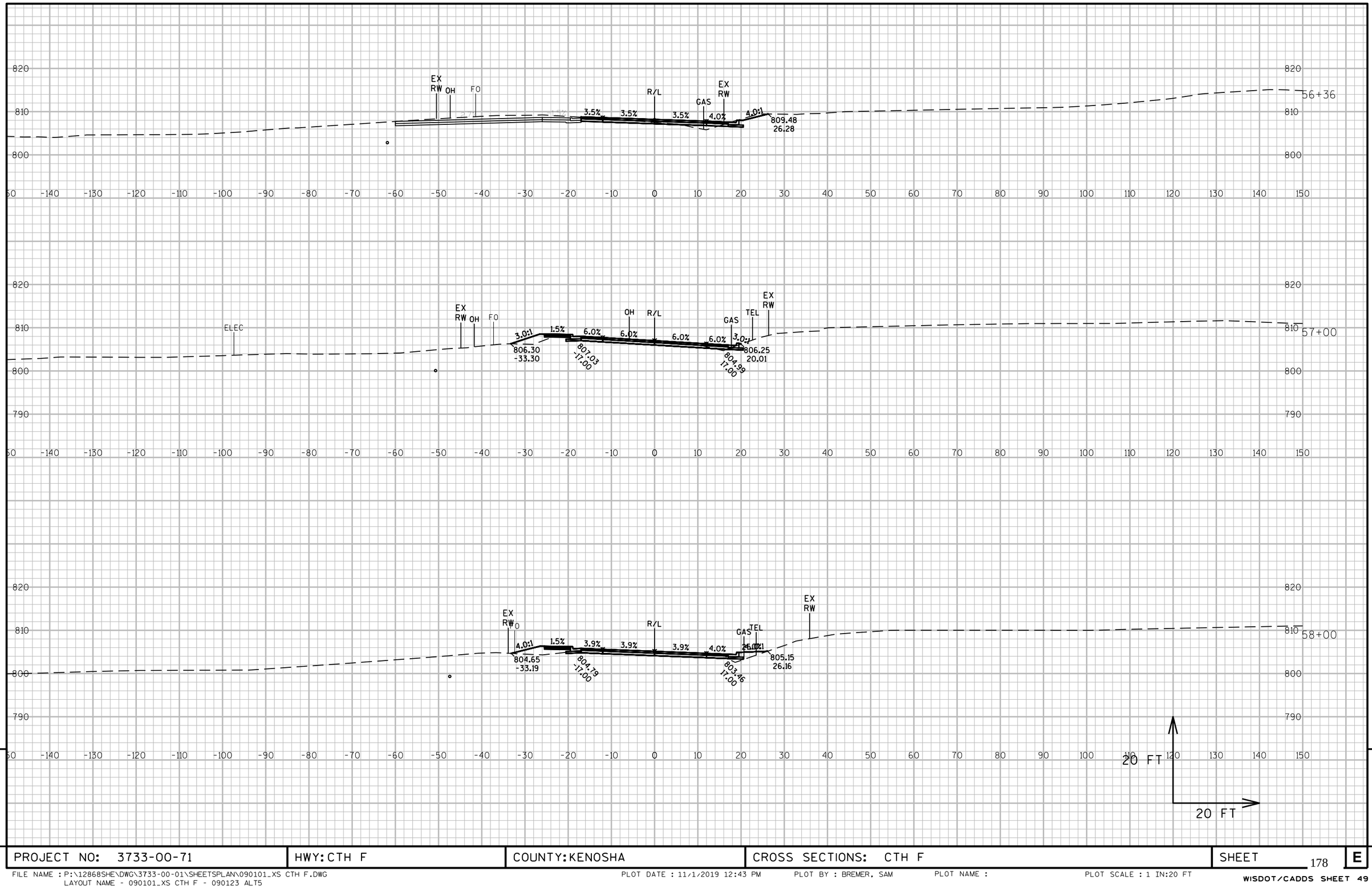
9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 177	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090122 ALT5

PLOT DATE : 11/1/2019 12:43 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



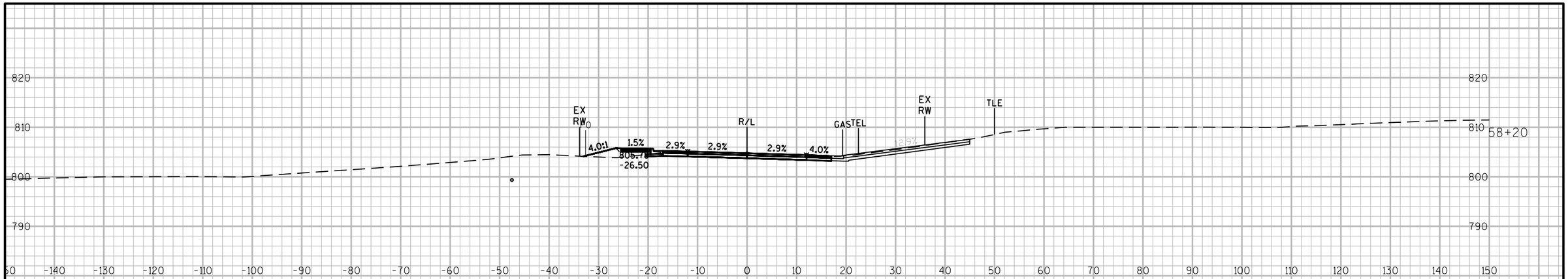
9

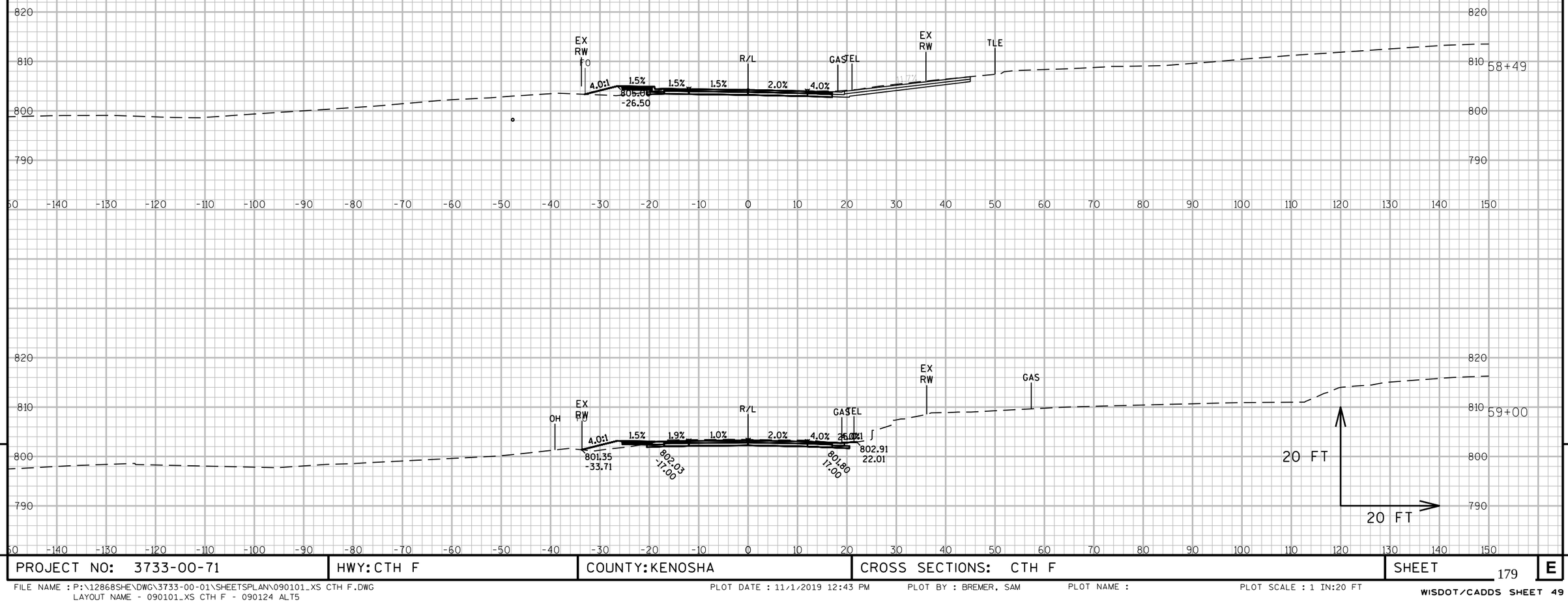
9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 178	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090123 ALT5

PLOT DATE : 11/1/2019 12:43 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT





9

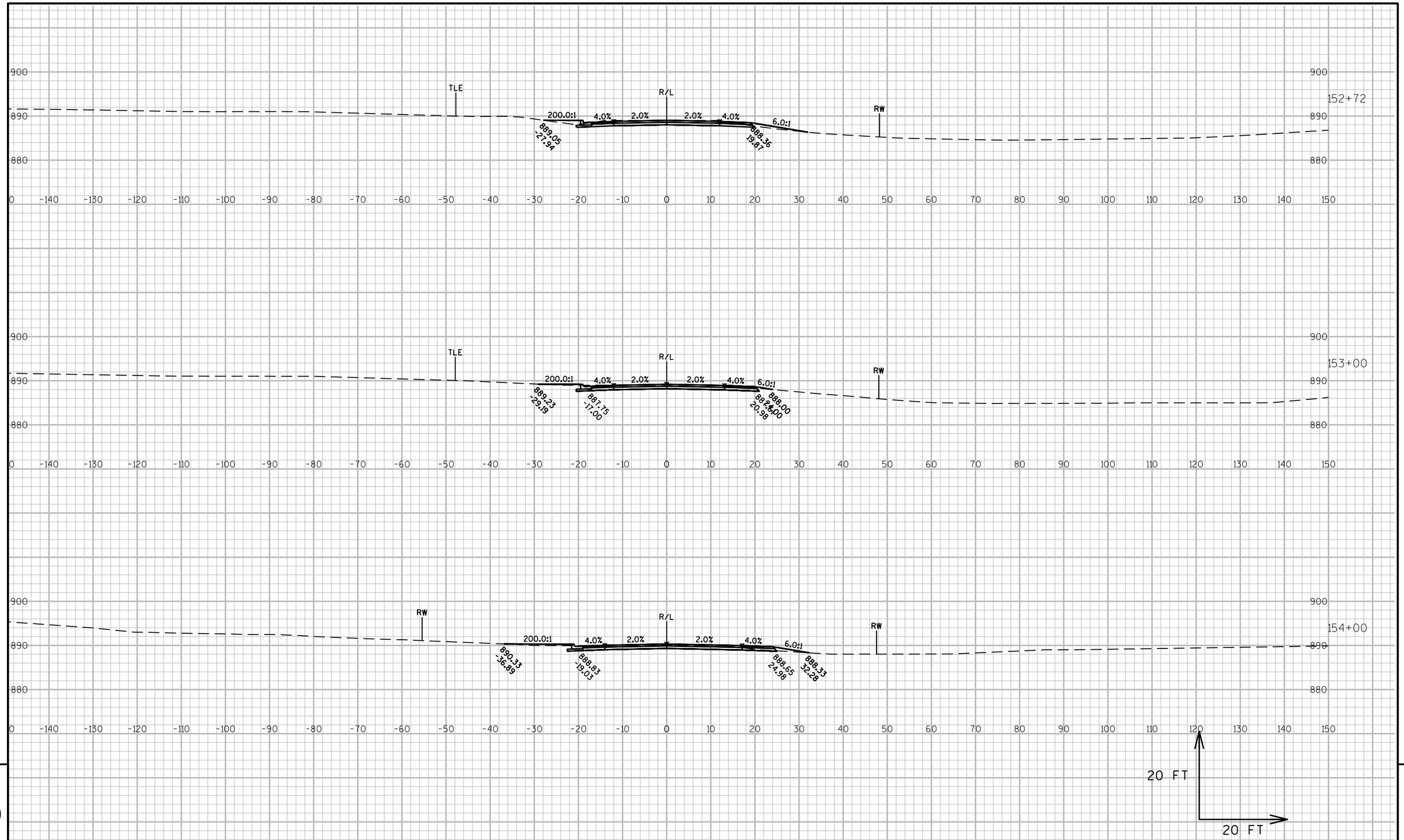
9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH F	SHEET 179	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090101_XS CTH F.DWG
LAYOUT NAME - 090101_XS CTH F - 090124 ALT5

PLOT DATE : 11/1/2019 12:43 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



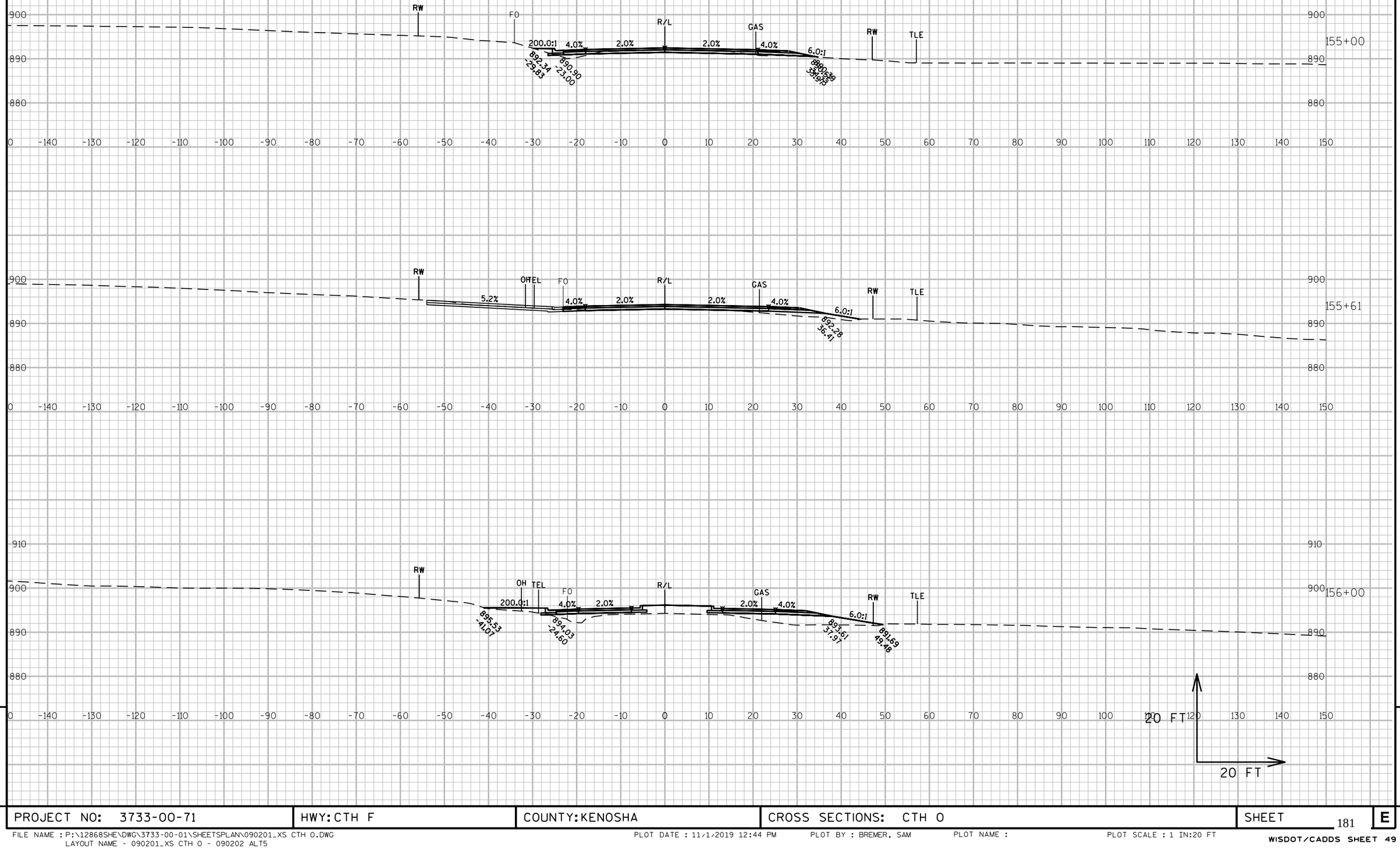
9

9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH O	SHEET 180	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090201_XS CTH O.DWG
LAYOUT NAME - 090201_XS CTH O - 090201 ALT5

PLOT DATE : 11/1/2019 12:44 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

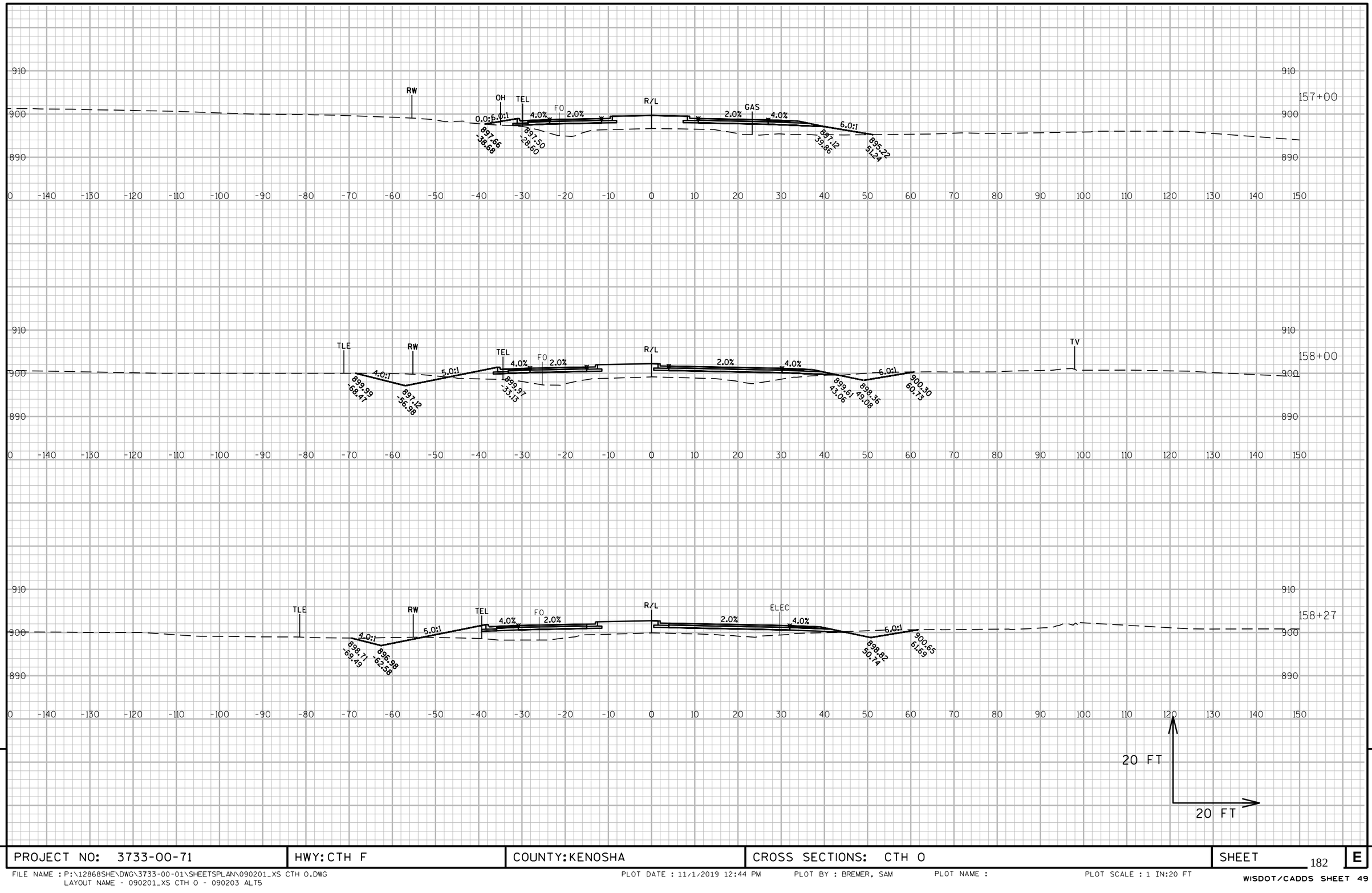


PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH O	SHEET 181	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090201_XS CTH O.DWG
LAYOUT NAME - 090201_XS CTH O - 090202 ALT5

PLOT DATE : 11/1/2019 12:44 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

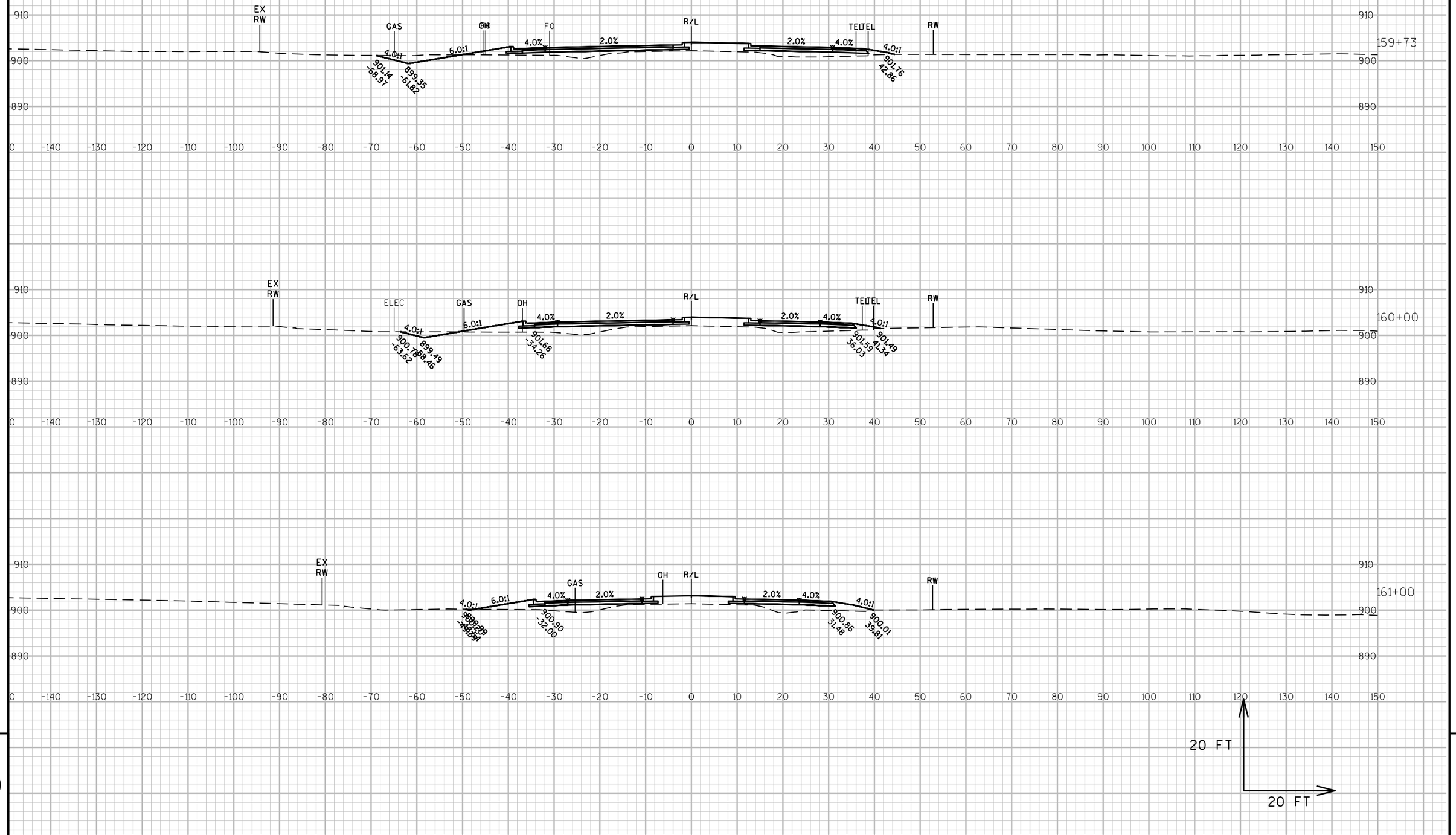


PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH O	SHEET 182	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090201_XS CTH O.DWG
LAYOUT NAME - 090201_XS CTH O - 090203 ALT5

PLOT DATE : 11/1/2019 12:44 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



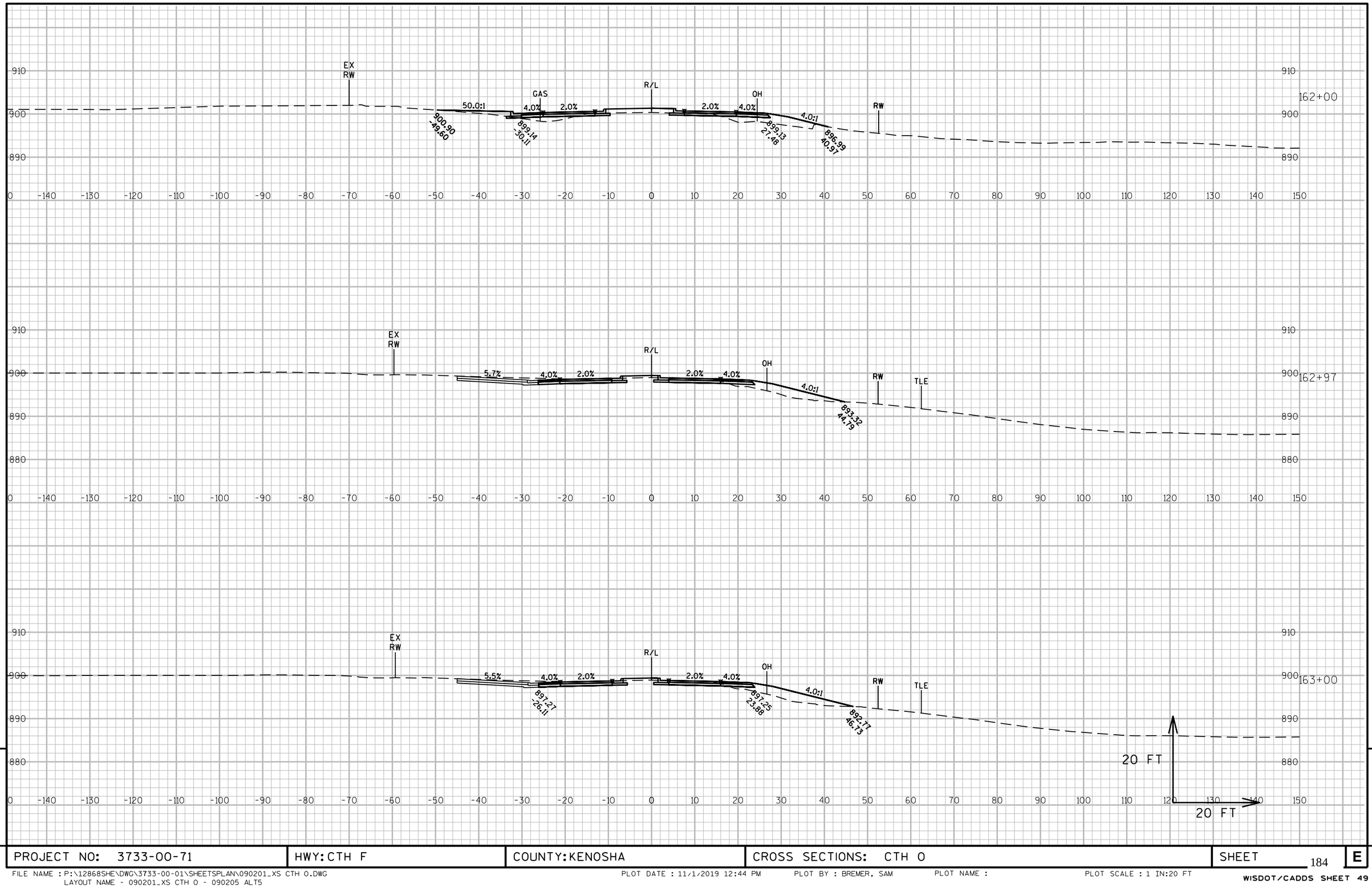
9 9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH O	SHEET 183	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090201_XS CTH O.DWG
LAYOUT NAME - 090201_XS CTH O - 090204 ALT5

PLOT DATE : 11/1/2019 12:44 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

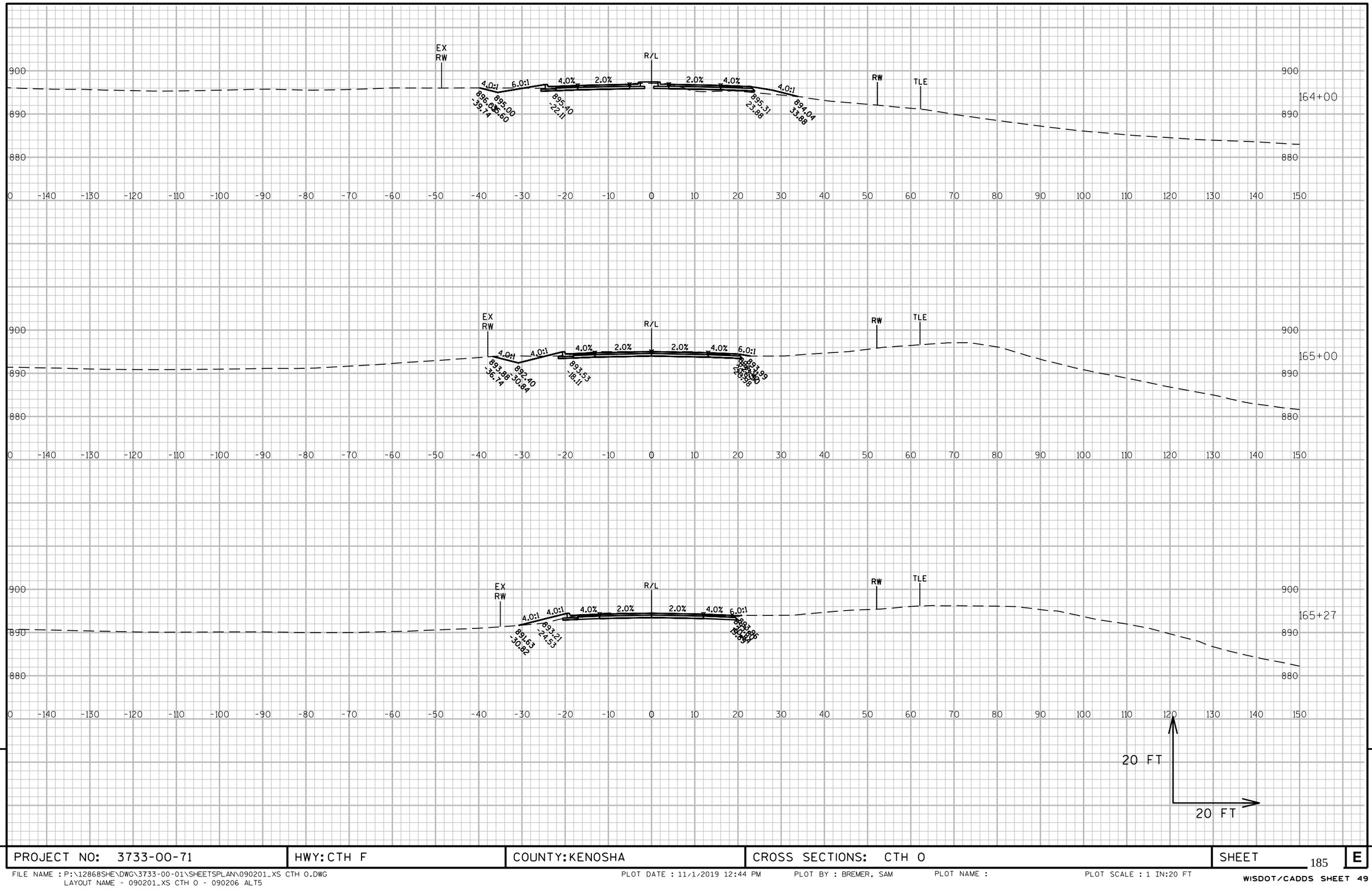
9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH O	SHEET 184	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090201_XS CTH O.DWG
LAYOUT NAME - 090201_XS CTH O - 090205 ALT5

PLOT DATE : 11/1/2019 12:44 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

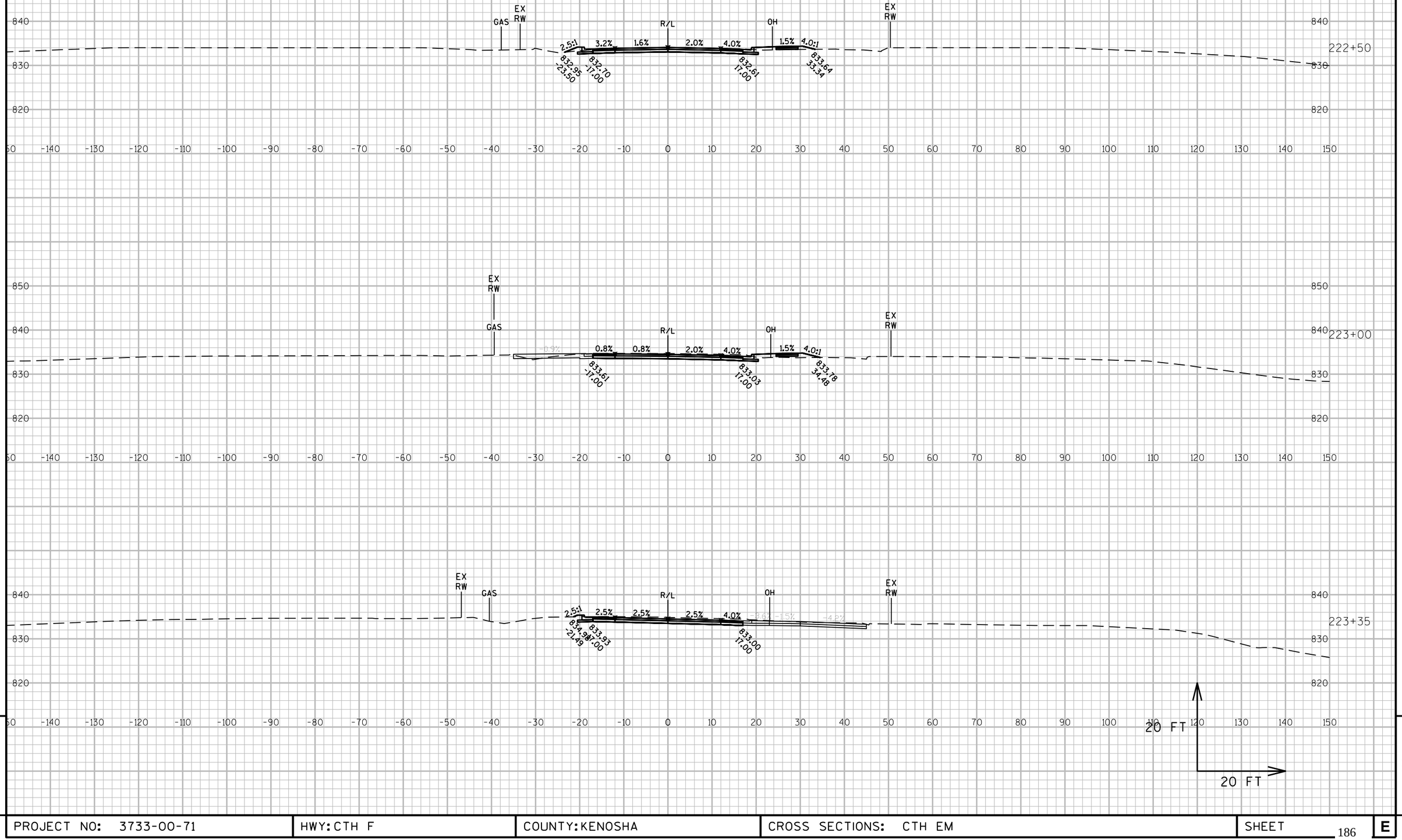
9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH O	SHEET 185	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090201_XS CTH O.DWG
LAYOUT NAME - 090201_XS CTH O - 090206 ALT5

PLOT DATE : 11/1/2019 12:44 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

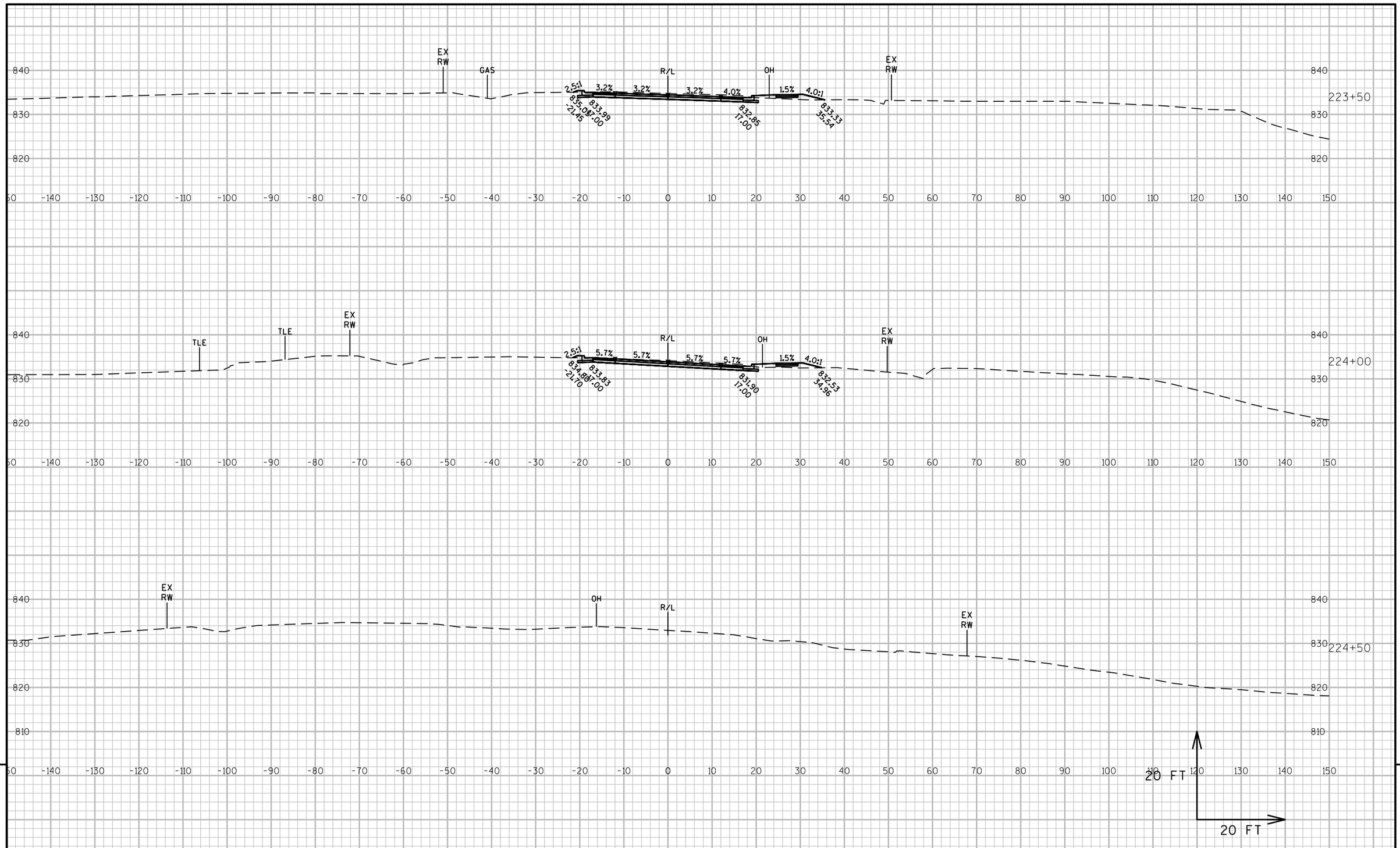
9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH EM	SHEET 186	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090301_XS CTH EM.DWG
LAYOUT NAME - 090301_XS CTH EM - 090301 ALT5

PLOT DATE : 11/1/2019 12:45 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

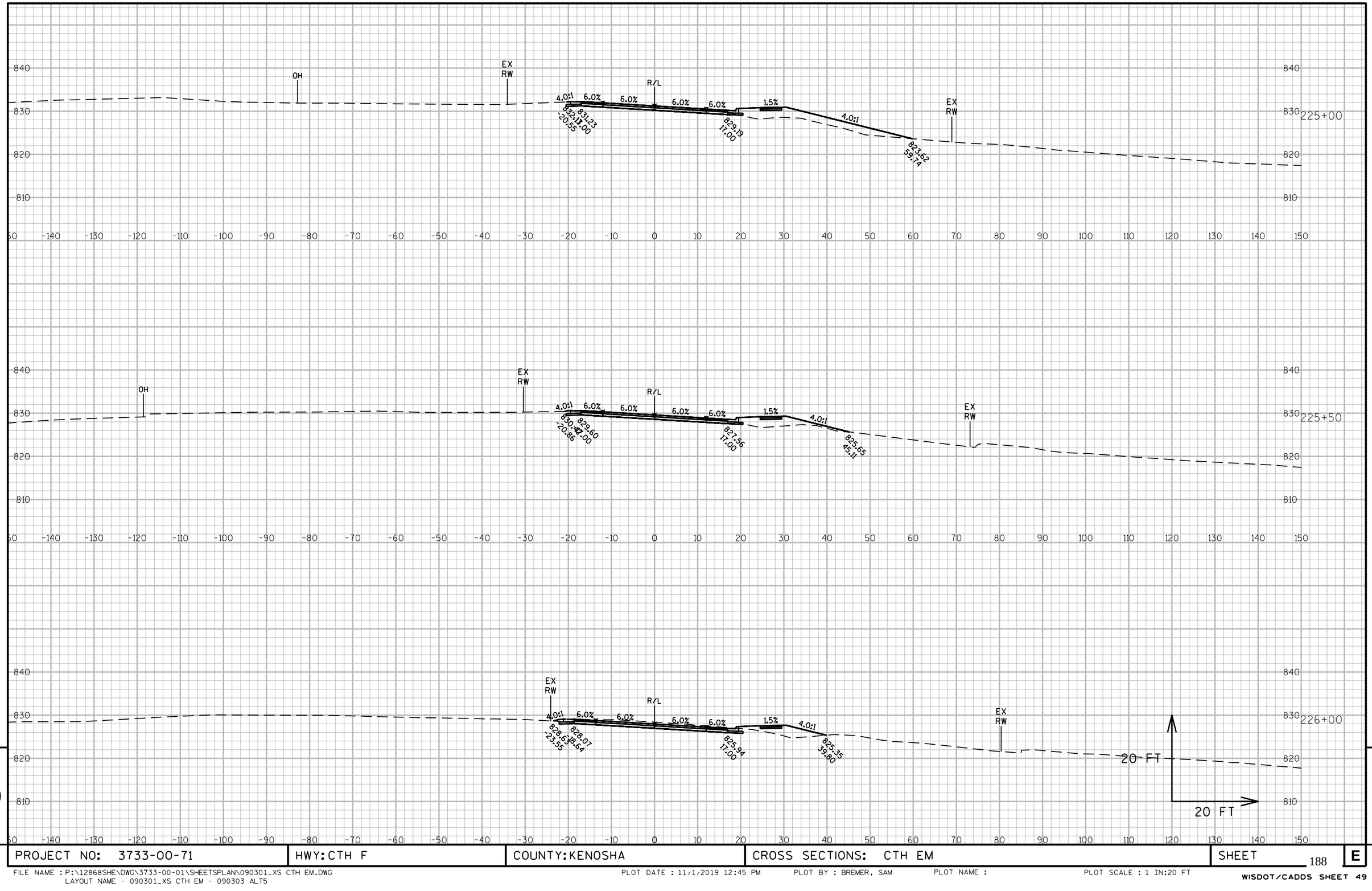
9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH EM	SHEET 187	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090301_XS CTH EM.DWG
LAYOUT NAME - 090301_XS CTH EM - 090302 ALT5

PLOT DATE : 11/1/2019 12:45 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



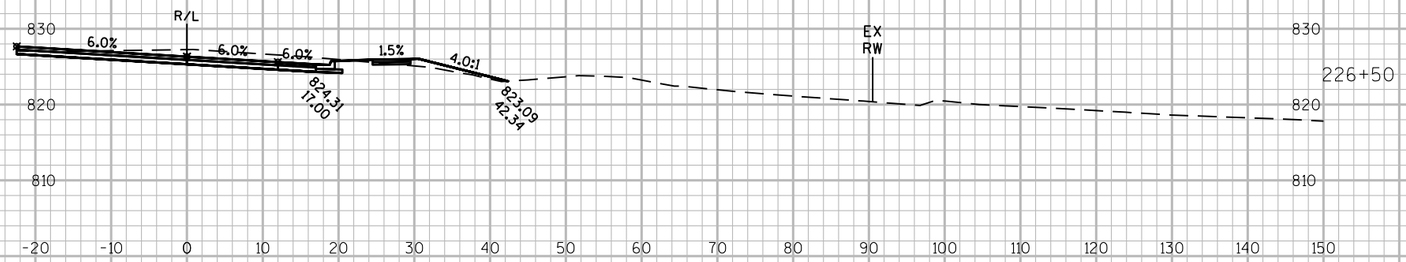
PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH EM	SHEET 188	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090301_XS CTH EM.DWG
LAYOUT NAME - 090301_XS CTH EM - 090303 ALT5

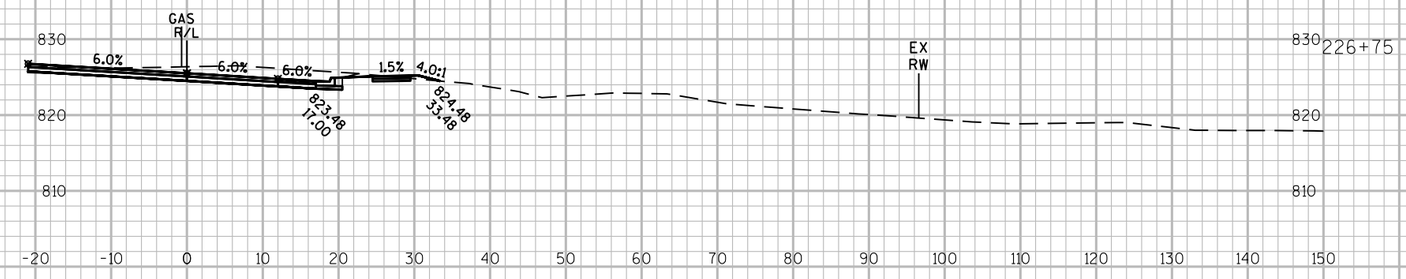
PLOT DATE : 11/1/2019 12:45 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

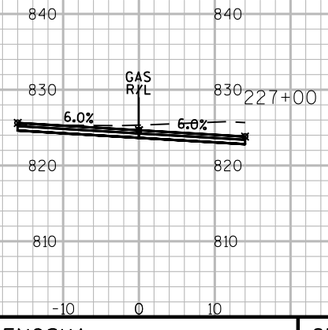
REFER TO OLD CTH F CROSS SECTIONS.

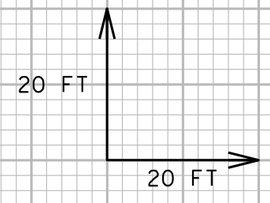


REFER TO OLD CTH F CROSS SECTIONS.



REFER TO OLD CTH F CROSS SECTIONS.





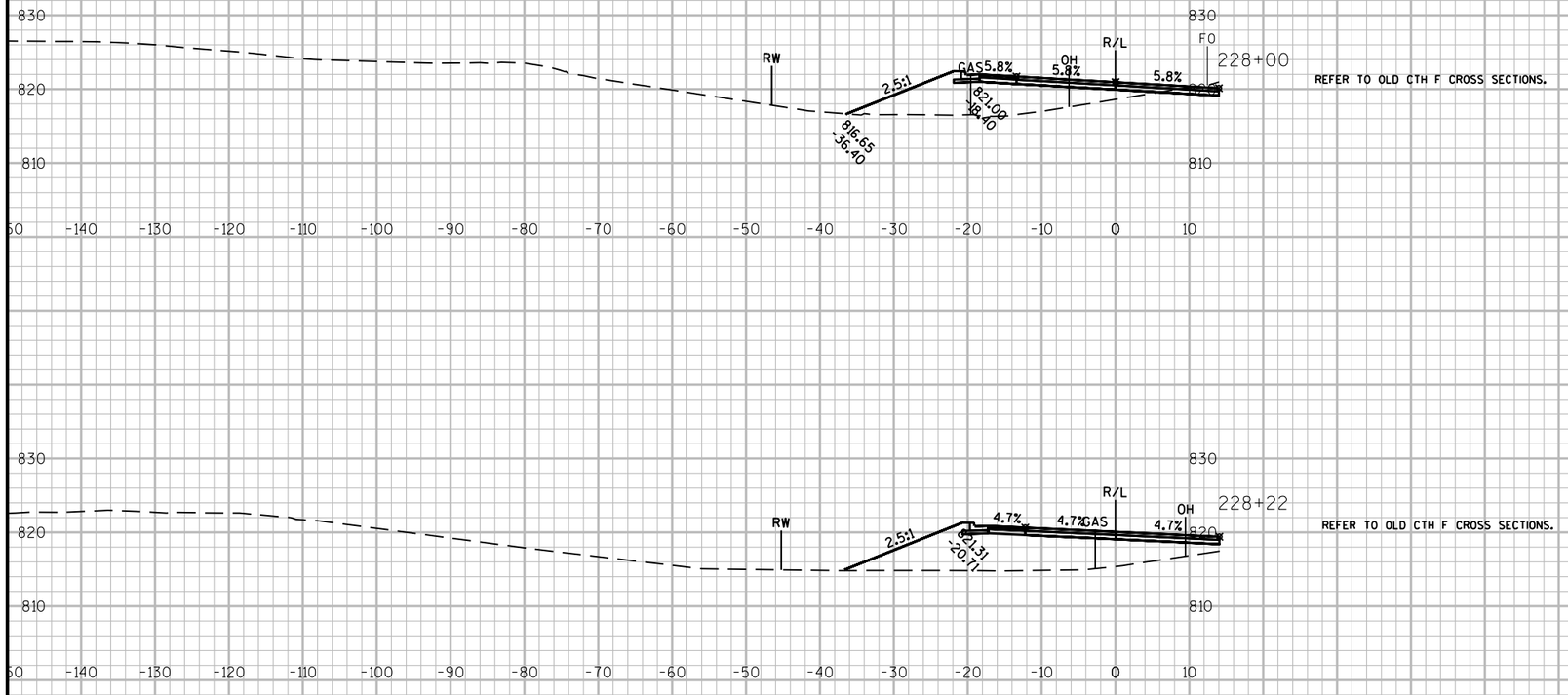
9

9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH EM	SHEET 189	E

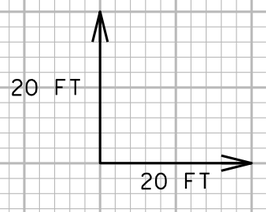


REFER TO OLD CTH F CROSS SECTIONS.



REFER TO OLD CTH F CROSS SECTIONS.

REFER TO OLD CTH F CROSS SECTIONS.



9

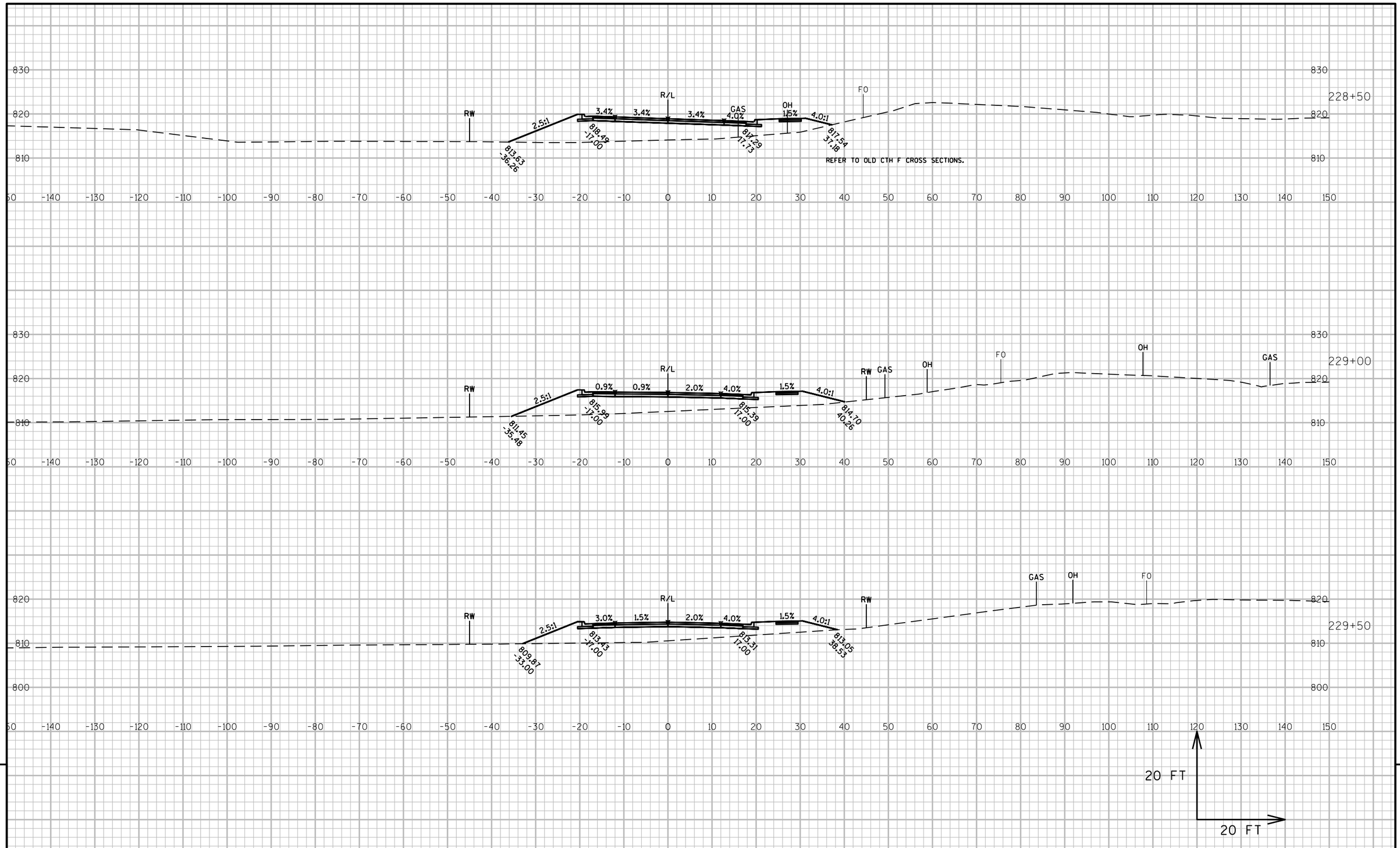
9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH EM	SHEET 190	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090301_XS CTH EM.DWG
LAYOUT NAME - 090301_XS CTH EM - 090305 ALT5

PLOT DATE : 11/1/2019 12:45 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

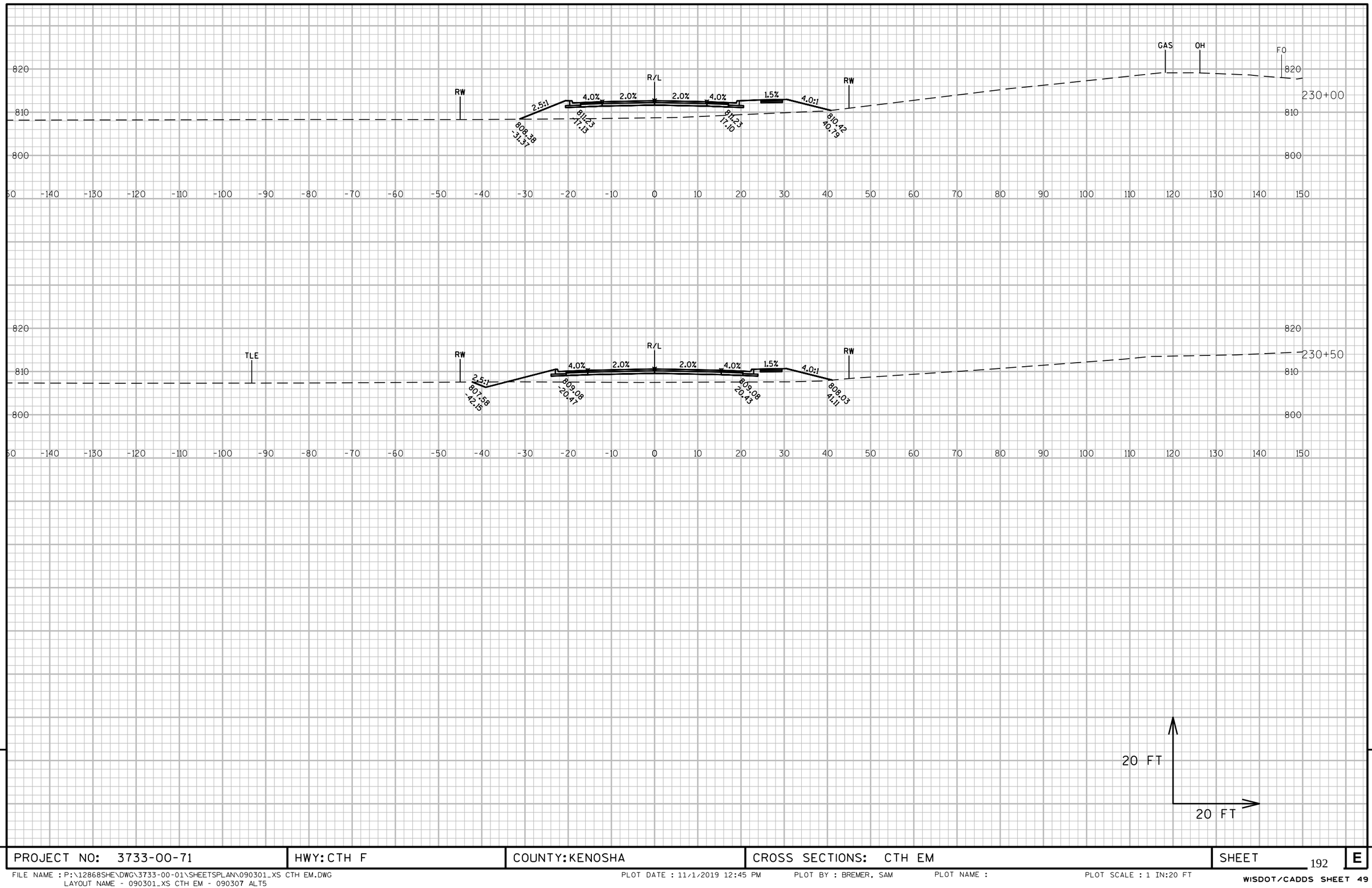
9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH EM	SHEET 191	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090301_XS CTH EM.DWG
LAYOUT NAME - 090301_XS CTH EM - 090306 ALT5

PLOT DATE : 11/1/2019 12:45 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

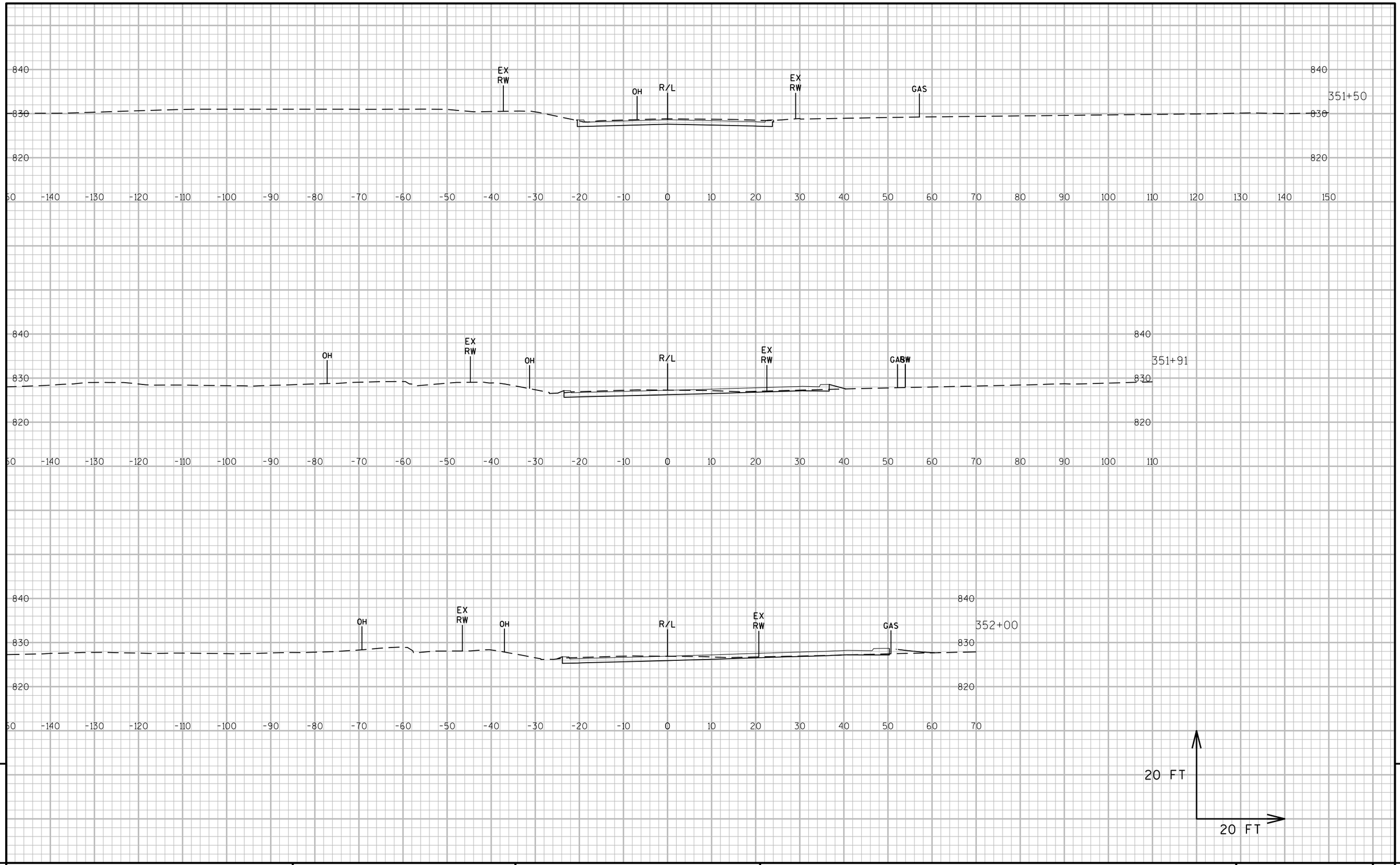
9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: CTH EM	SHEET	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090301_XS CTH EM.DWG
LAYOUT NAME - 090301_XS CTH EM - 090307 ALT5

PLOT DATE : 11/1/2019 12:45 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



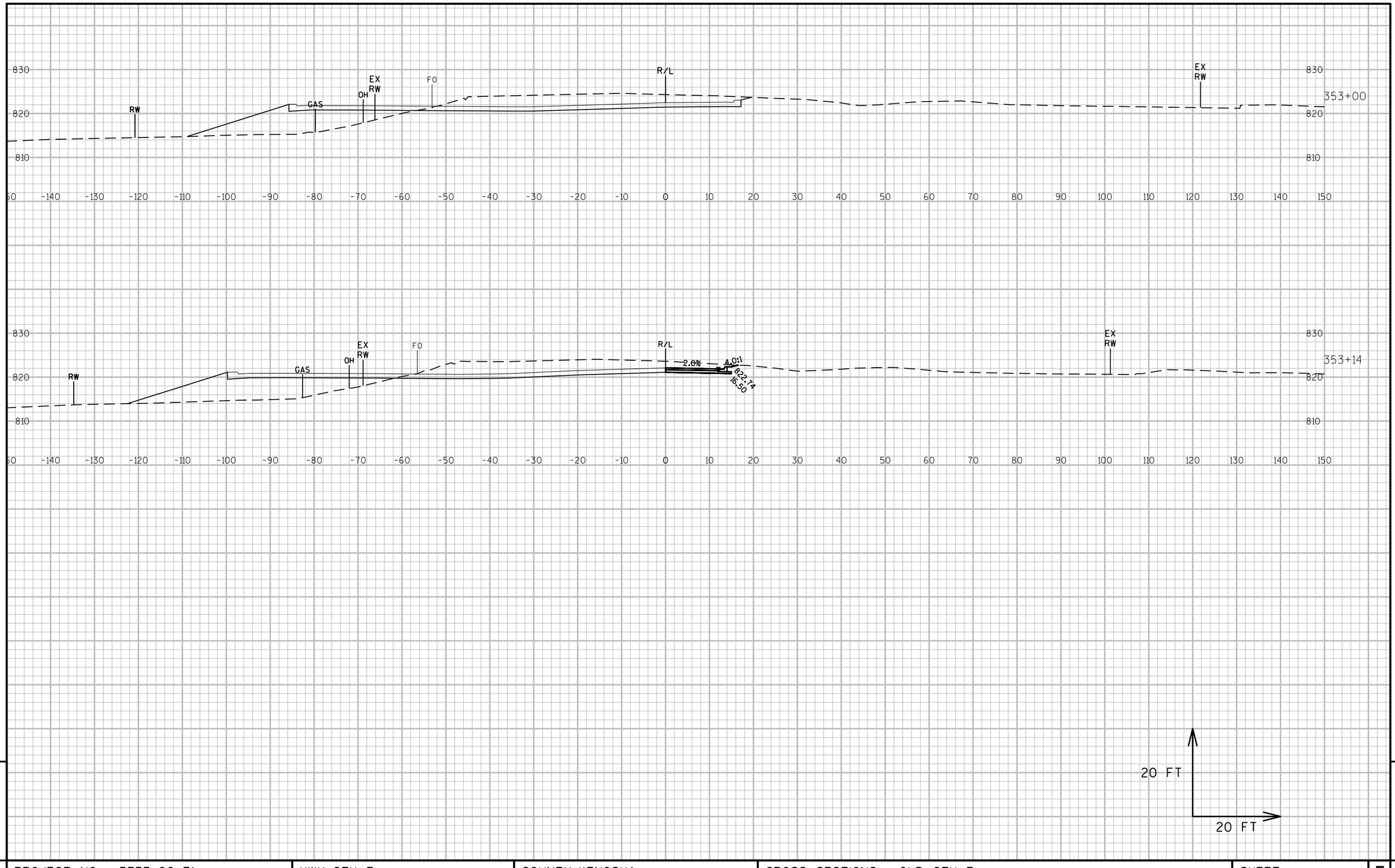
9

9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: OLD CTH F	SHEET 193	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090401_XS CTH OLD F.DWG
LAYOUT NAME - 090401_XS CTH OLD F - 090401 ALT5

PLOT DATE : 11/1/2019 12:46 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT



9

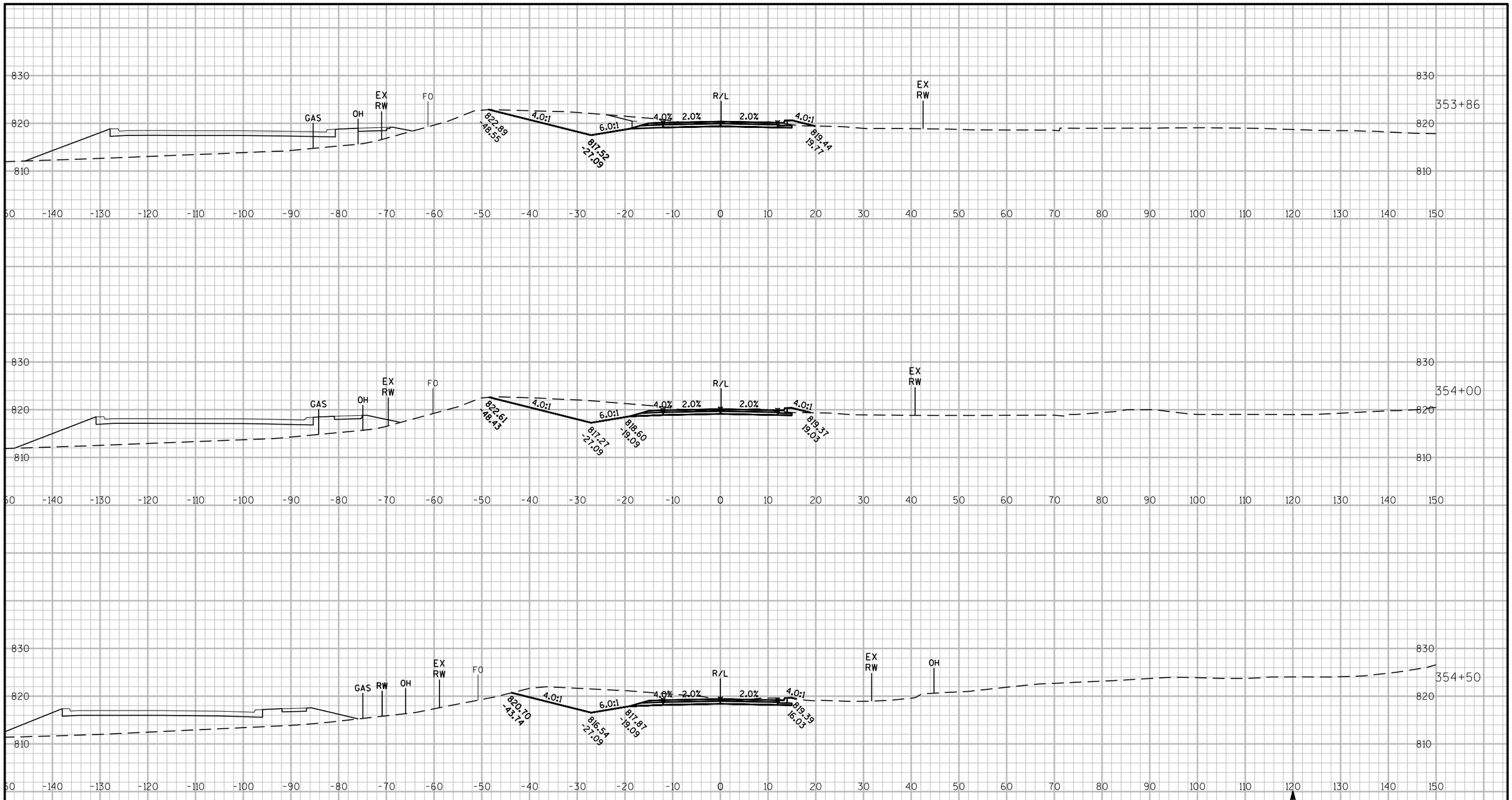
9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: OLD CTH F	SHEET 194	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090401_XS CTH OLD F.DWG
LAYOUT NAME - 090401_XS CTH OLD F - 090402 ALT5

PLOT DATE : 11/1/2019 12:46 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

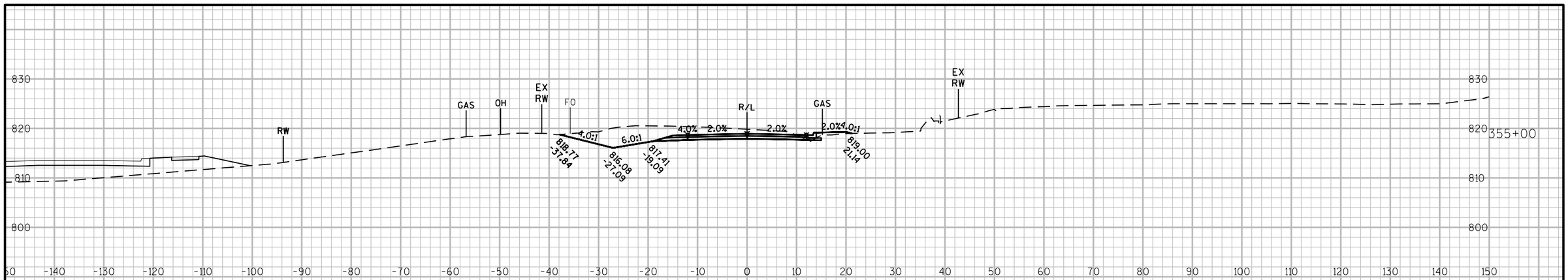


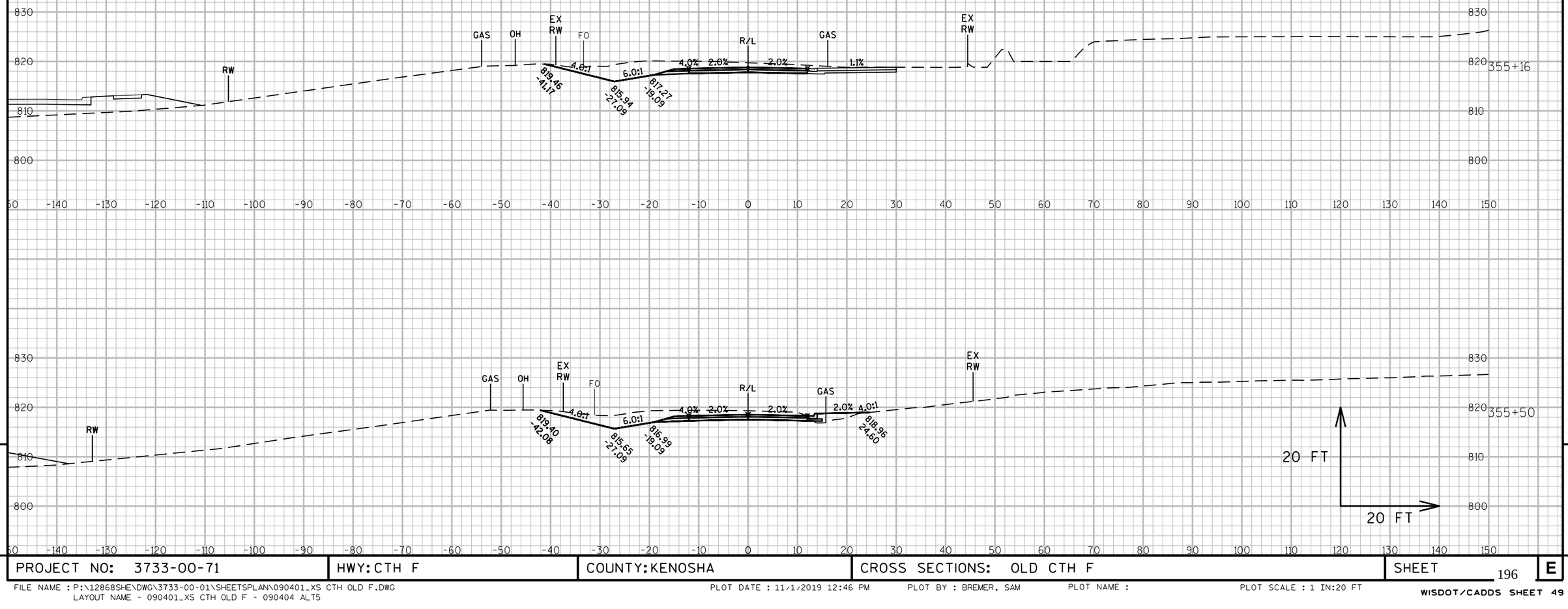
9

9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: OLD CTH F	SHEET 195	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090401_XS CTH OLD F.DWG
LAYOUT NAME - 090401_XS CTH OLD F - 090403 ALT5
PLOT DATE : 11/1/2019 12:46 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49





9

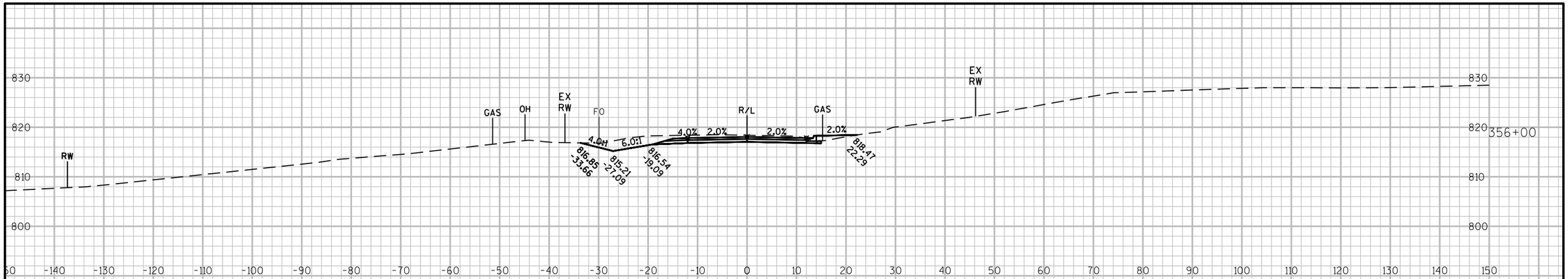
9

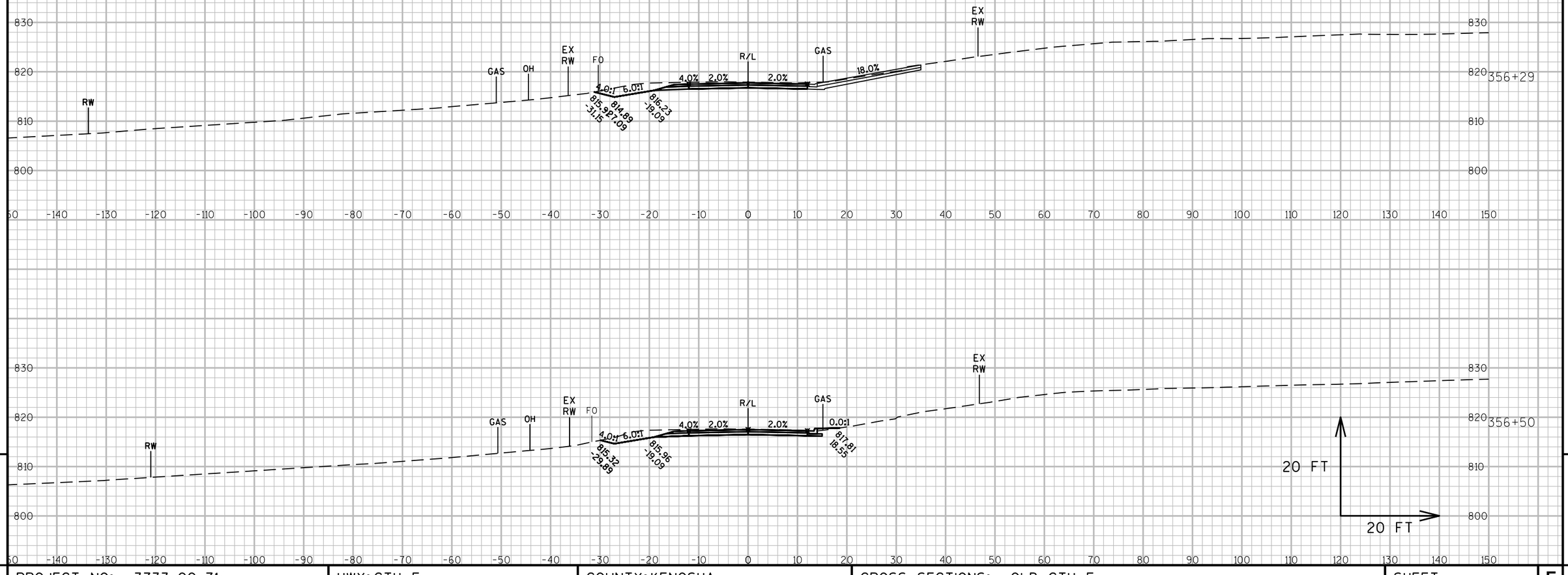
PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: OLD CTH F	SHEET 196	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090401_XS CTH OLD F.DWG
LAYOUT NAME - 090401_XS CTH OLD F - 090404 ALT5

PLOT DATE : 11/1/2019 12:46 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

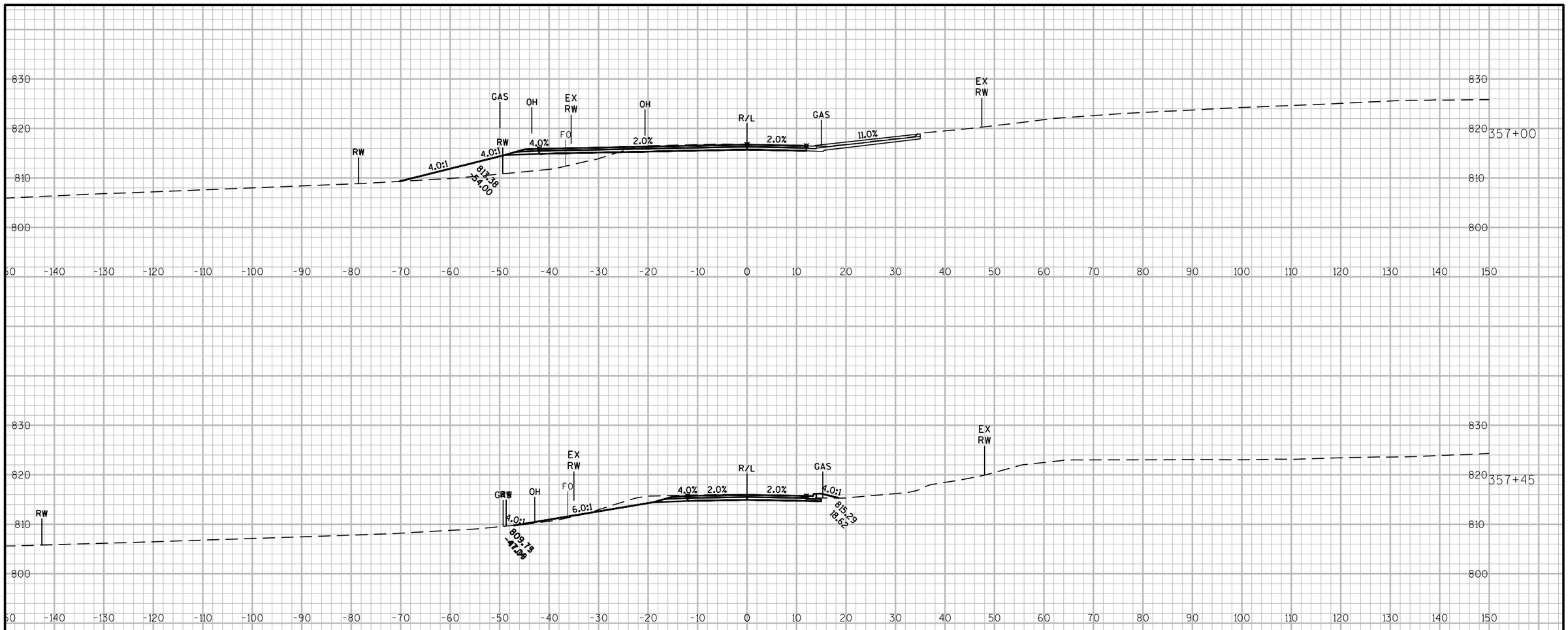


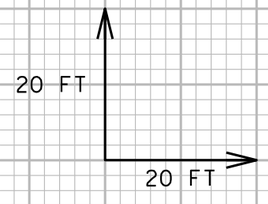


9

9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: OLD CTH F	SHEET 197	E





9

9

PROJECT NO: 3733-00-71	HWY: CTH F	COUNTY: KENOSHA	CROSS SECTIONS: OLD CTH F	SHEET 198	E

FILE NAME : P:\12868SHE\DWG\3733-00-01\SHEETSPLAN\090401_XS CTH OLD F.DWG
LAYOUT NAME - 090401_XS CTH OLD F - 090406 ALT5

PLOT DATE : 11/1/2019 12:46 PM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov