SEL APR 2017

PROJECT ID: 3751-00-70

WITH: N/A

COUNTY: KENOSHA

ORDER OF SHEETS

TOTAL SHEETS = 106

22

N

DESIGN DESIGNATION

A.A.D.T.	(2016) =	1600
A.A.D.T.	(2036) =	2200
D.H.V.	=	350
D.D.	=	59/41
T.	=	7.3
DESIGN SPEED	=	40 MPH
ESALS	=	482,000

CONVENTIONAL SYMBOLS

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
3751-00-70	WISC 2017168	1

CTH W

2300 FEET SOUTH OF 82ND STREET TO 82ND STREET

CTH W

KENOSHA

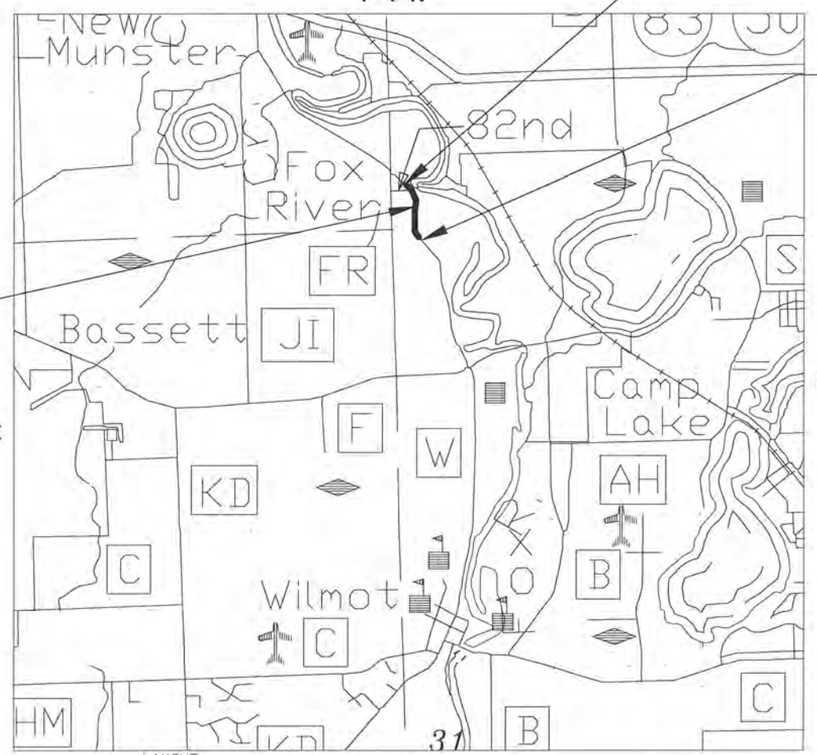
STATE PROJECT NUMBER
3751-00-70

END PROJECT
STA 44+00.00

BEGIN PROJECT
STA 19+75.00
Y = 206,627.75
X =2,489,346.90

PROJECT LOCATION

T-1-N



R-20-E

R-20-E

LAYOUT

SCALE 0 1 MILE

T-1-N

TOTAL NET LENGTH OF CENTERLINE = 0.459 mi

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, KENOSHA COUNTY, NAD27, IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

KENOSHA COUNTY
ACCEPTED FOR
Clement Abongwa
10/26/16 (Date) for HWY COMMISSIONER (Signature & Title of Official)

ORIGINAL PLANS PREPARED BY

WISCONSIN
KEVIN K. RISCH
E-36446
KENOSHA
WIS.
PROFESSIONAL ENGINEER

10/26/2016 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor CLARK DIETZ, INC.
Designer CLARK DIETZ, INC.
Management Consultant DAAR Engineering

APPROVED FOR THE DEPARTMENT
DATE: 10/28/16
MANAGEMENT CONSULTANT SIGNATURE

E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0101_TITLE.DWG
CTH W RECONSTRUCTION - TITLE SHEET

PLOT DATE : 10/26/2016 9:03 AM PLOT BY : KEVIN K. RISCH PLOT NAME :

WISDOT/CADDS SHEET 10

2

UTILITIES

ELECTRIC

WE ENERGIES
333 W. EVERETT ST.-A279
MILWAUKEE, WI. 53203
ATTN: MR. LATROY BRUMFIELD
PH: (414) 221-5617 A299
EMAIL:

PAVING COORDINATOR
WE ENERGIES
500 S. 116TH STREET - WAOC
WEST ALLIS, WI 53214
EMAIL:
we-utility-relocations@we-energies.com

GAS

WE ENERGIES
333 W. EVERETT ST.-A279
MILWAUKEE, WI. 53203
ATTN: MR. LATROY BRUMFIELD
PH: (414) 221-5617 A299
EMAIL:

PAVING COORDINATOR
WE ENERGIES
500 S. 116TH STREET - WAOC
WEST ALLIS, WI 53214
EMAIL:
we-utility-relocations@we-energies.com

TDS TELECOM

16924 WEST VICTOR ROAD
NEW BERLIN, WI 53151
ATTN: MATTHEW SCHULTE
PH. (262) 409-1177 (CELL)
EMAIL: MATT.SCHULTE@tdstelecom.com

CHARTER COMMUNICATIONS (FORMERLY TWC)

1320 N. MARTIN LUTHER KING JR. DRIVE
MILWAUKEE, WI 53212
ATTN: STEVE CRAMER
PH. (414) 688-2385 (CELL)
EMAIL: steven.cramer@charter.com

CONTACTS

DESIGN CONSULTANT:

CLARK DIETZ, INC.
5017 GREEN BAY ROAD
SUITE 126
KENOSHA, WI 53144
ATTN: KEVIN RISCH, P.E.
PH. (262) 657-1550
FAX: (262) 657-1594
EMAIL: kevin.risch@clarkdietz.com

KENOSHA COUNTY

KENOSHA COUNTY PUBLIC WORKS
19600 75TH STREET
KENOSHA, WI 53104
ATTN: CLEMENT ABONGWA
PH. (262) 857-1870
EMAIL:clement.abongwa@kenoshacounty.org

WDNR LIAISON

STATE OF WISCONSIN
DEPT. OF NATURAL RESOURSES
2300 N. DR. MARTIN LUTHER KING JR. DR.
MILWAUKEE, WI 53212
ATTN: CRAIG WEBSTER
PH. (262) 574-2141
EMAIL: craig.webster@wisconsin.gov

SEWRPC

CHIEF TRANSPORTATION ENGINEER
S.E. WI. REGIONAL PLANNING COMMISSION
W239 N1812 ROCKWOOD DRIVE
P.O. BOX 1607
WAUKESHA, WI. 53187-1607
ATTN: CHRISTOPHER T. HIEBERT
PH. (262) 547-6722 EXT. 227
EMAIL: CHIEBERT@SEWRPC.ORG

LIST OF STANDARD ABBREVIATIONS

ABUT	Abutment
AC	Acre
AGG	Aggregate
AH	Ahead
ASPH	Asphaltic
AVG	Average
ADT	Average Daily Traffic
BK	Back
BM	Bench Mark
BR	Bridge
CE	COMMERCIAL ENTRANCE
CL or C/L	Center Line
CC	Center to Center
CTH	County Trunk Highway
CY or CU YD	Cubic Yard
C & G	Curb and Gutter
DIA	Diameter
E	East
EB	Eastbound
ELEC	Electric (al)
EL or ELEV	Elevation
EBS	Excavation Below Subgrade
FE	Field Entrance
FG	Finished Grade
FL or F/L	Flow Line
HYD	Hydrant
INL	Inlet
ID	Inside Diameter
IND	Inch-Diameter
INV	Invert
IP	Iron Pipe or Pin
JT	Joint
LHF	Left-Hand Forward
LIN FT or LF	Linear Foot
MH	Manhole
MB	Message Board
MLB	Mailbox
ML or M/L	Match Line
NC	Normal Crown
NB	Northbound
OD	Outside Diameter
PGL	Profile Grade Line
PLE	Permanent Limited Easement
PT	Point
PC	Point of Curvature
PI	Point of Intersection
PRC	Point of Reverse Curvature
PT	Point of Tangency
POC	Point On Curve
POT	Point on Tangent
PVC	Polyvinyl Chloride
PCC	Portland Cement Concrete
PE	Private Entrance
R	Radius
RL or R/L	Reference Line
RCCP	Reinforced Concrete Culvert Pipe
REQD	Required
RW	Retaining Wall
RT	Right
RHF	Right-Hand Forward
R/W	Right-of-Way
RDWY	Roadway
SALV	Salvaged
SEC	Section
SHLDR	Shoulder
SW	Sidewalk
SB	Southbound
SQ	Square
SF or SQ FT	Square Feet
SY or SQ YD	Square Yard
STD	Standard
SDD	Standard Detail Drawings
STH	State Trunk Highways
STA	Station
SG	Subgrade
T	Tangent
TEL	Telephone
TEMP	Temporary
TLE	Temporary Limited Easement
TC	Top Of Curb
TYP	Typical
UG	Underground Cable
VAR	Variable
VERT	Vertical
VC	Vertical Curve
WM	Water Main
WV	Water Valve
WB	Westbound

GENERAL NOTES

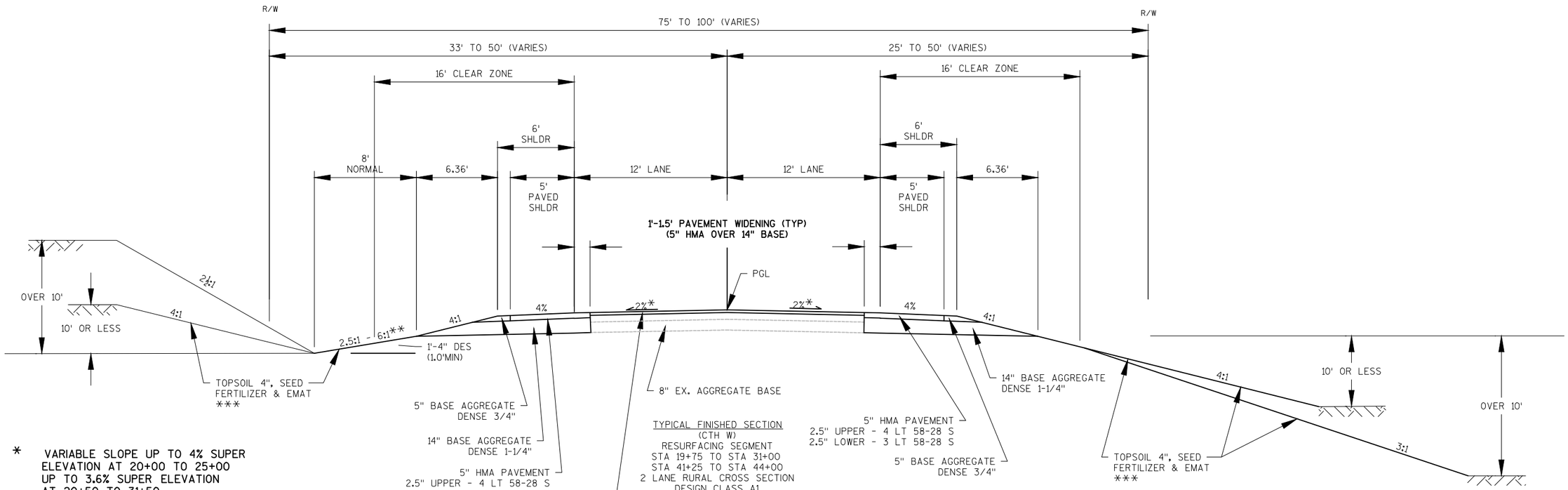
1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
2. ELEVATIONS ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. COORDINATES AND BEARINGS ARE ORIENTED TO THE WISCONSIN COUNTY COORDINATE SYSTEM KENOSHA COUNTY (ENGLISH) NAD 27, ALL PLAN DISTANCES ARE GROUND LENGTH.
4. BENCH MARKS ARE REFERENCED TO NAVD 88 ON THE SW ¼ CORNER OF SECTION 18 T3N, R22/23E. LOCATED NORTH OF VICTORY AVENUE IN THE CITY OF RACINE, RACINE COUNTY, WISCONSIN. HAVING A KNOWN ELEVATION OF 697.915 (1929 ADJ.).
5. THE EXACT LOCATION AND WIDTH OF PRIVATE, COMMERCIAL AND FIELD ENTRANCES TO BE DETERMINED BY THE ENGINEER IN THE FIELD. EXISTING DRIVEWAYS WILL BE RESTORED WITH CONCRETE AND ASHPHALT.
6. CULVERT PIPE INVERT ELEVATIONS, LENGTHS AND LOCATIONS AS SHOWN ON THE PLANS AND CROSS SECTIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. ANY DAMAGE TO THE REMAINING DRIVEWAY PORTIONS WILL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTORS EXPENSE.
8. NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE FIRST BEEN INDICATED FOR REMOVAL BY THE ENGINEER IN THE FIELD.
9. MISCELLANEOUS REMOVAL ITEMS REQUIRING RESTORATION OF CONCRETE DRIVEWAYS OR SIDE STREETS SHALL BE REMOVED TO AN EXISTING JOINT OR SAWED AS DETERMINED BY THE ENGINEER IN THE FIELD, OR AS SHOWN ON THE PLANS.
10. TRAFFIC CONTROL LOCATIONS AS SHOWN ON THE PLAN ARE SUGGESTED LOCATIONS. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
11. EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO CONSTRUCTION OPERATIONS. EROSION CONTROL ITEMS ON THE PLAN ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS AND DIMENSIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD. ALL EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER IN THE FIELD DEEMS THE DEVICES NO LONGER NECESSARY.
12. ALL DISTURBED AREAS SHOWN WITHIN THE RIGHT-OF-WAY, SHALL RECEIVE TOPSOIL FERTILIZER TYPE A AND SEED OR LAWN SOD AS DIRECTED BY THE ENGINEER IN THE FIELD. NO DISTURBED LAND IS TO BE LEFT UNSEEDED OR UNSODDED FOR MORE THAN 3 DAYS FOLLOWING THE DISTURBING ACTIVITY.
13. SILT FENCE SHALL BE PLACED AS SHOWN ON THE EROSION CONTROL PLAN AND MISCELLANEOUS QUANTITY SHEET OR AS DIRECTED BY THE ENGINEER IN THE FIELD. SILT FENCE SHALL BE PLACED PRIOR TO CONSTRUCTION.
14. TEMPORARY SEEDING, SEEDING, MULCHING AND FERTILIZING HAVE BEEN COMPUTED BY A DIRECT MEASUREMENT ON THE PLAN PLUS 25% FOR UNDISTURBED AMOUNT.
15. FILL EXPANSION OF EARTHWORK IS ESTIMATED AT 15%.
16. 5 INCHES OF HMA PAVEMENT SHALL BE PLACED @ 2.5 INCH THICKNESS OF 4LT 58-28S UPPER LAYER AND A 2.5 INCH THICKNESS OF 3LT 58-28S LOWER LAYER MATERIAL.

ORDER OF SECTION 2 SHEETS

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

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	PLAN: GENERAL NOTES	SHEET 2	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0201_NOTES.DWG
LAYOUT NAME - GENERAL NOTES
PLOT DATE : 2/9/2017 3:28 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1 IN:80 FT

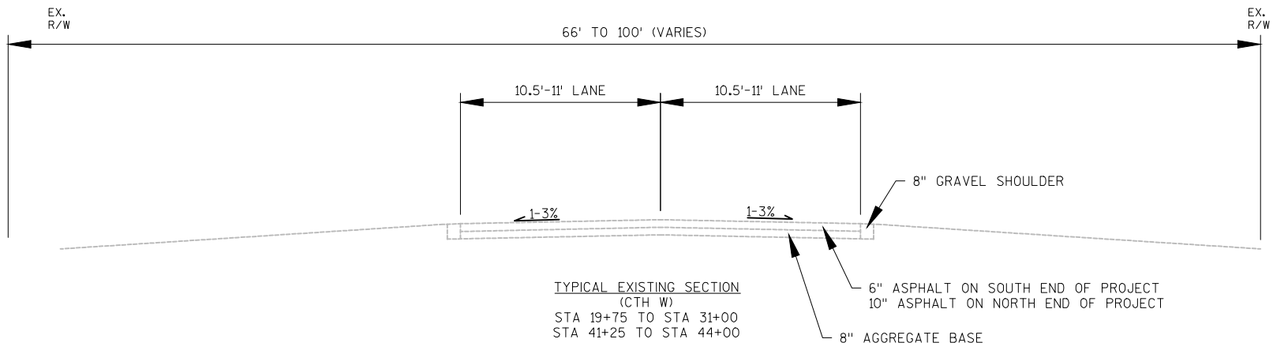


* VARIABLE SLOPE UP TO 4% SUPER ELEVATION AT 20+00 TO 25+00 UP TO 3.6% SUPER ELEVATION AT 20+50 TO 31+50

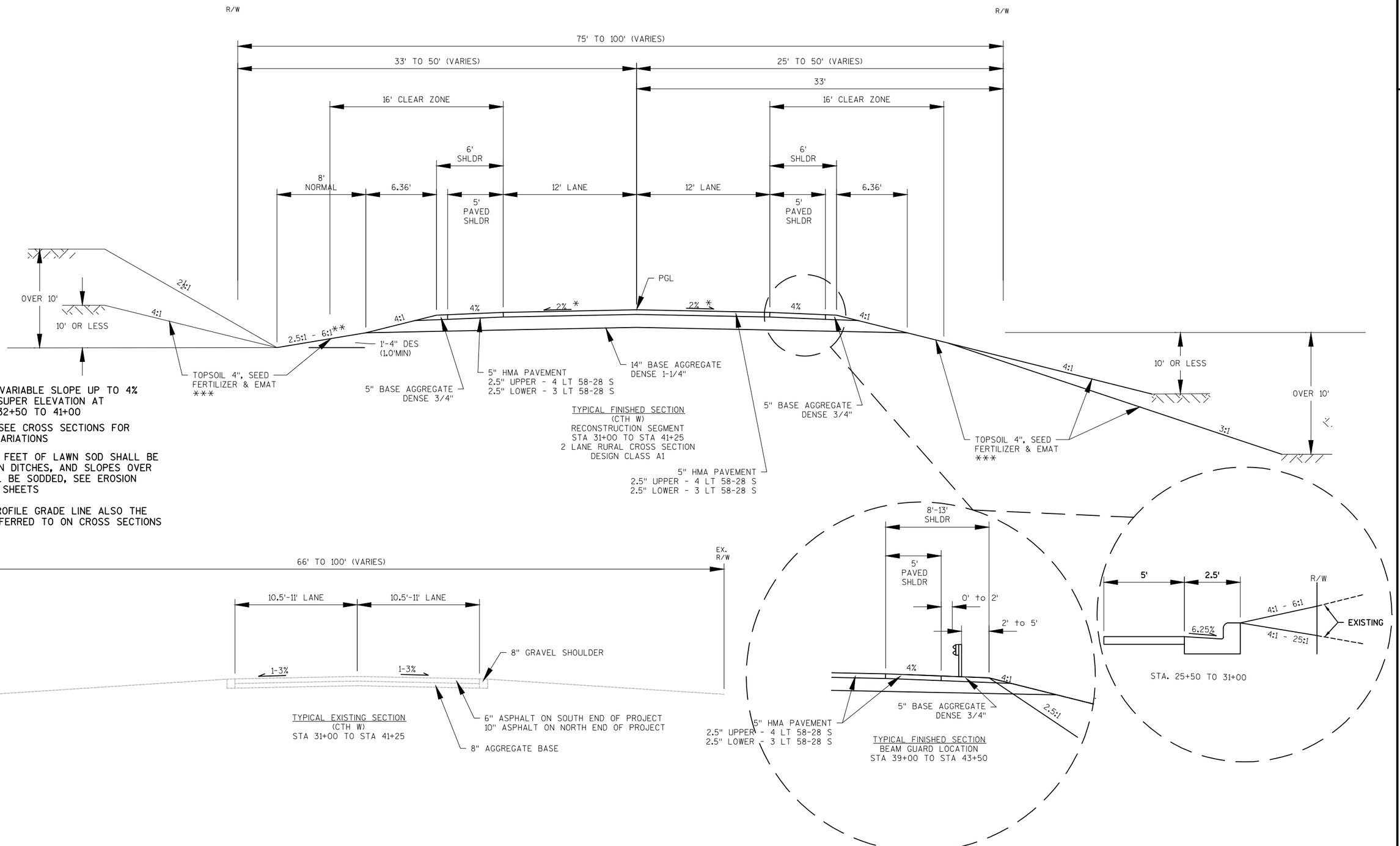
** SEE CROSS SECTIONS FOR VARIATIONS

*** 8 FEET OF LAWN SOD SHALL BE PLACED IN DITCHES, AND SLOPES OVER 3:1 SHALL BE SODDED, SEE EROSION CONTROL SHEETS

PGL = PROFILE GRADE LINE ALSO THE POINT REFERRED TO ON CROSS SECTIONS



PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	PLAN: TYPICAL SECTIONS (CTH W RESURFACING)	SHEET 3	E



TYPICAL FINISHED SECTION
(CTH W)
RECONSTRUCTION SEGMENT
STA 31+00 TO STA 41+25
2 LANE RURAL CROSS SECTION
DESIGN CLASS A1

5" HMA PAVEMENT
2.5" UPPER - 4 LT 58-28 S
2.5" LOWER - 3 LT 58-28 S

* VARIABLE SLOPE UP TO 4% SUPER ELEVATION AT 32+50 TO 41+00

** SEE CROSS SECTIONS FOR VARIATIONS

*** 8 FEET OF LAWN SOD SHALL BE PLACED IN DITCHES, AND SLOPES OVER 3:1 SHALL BE SODDED, SEE EROSION CONTROL SHEETS

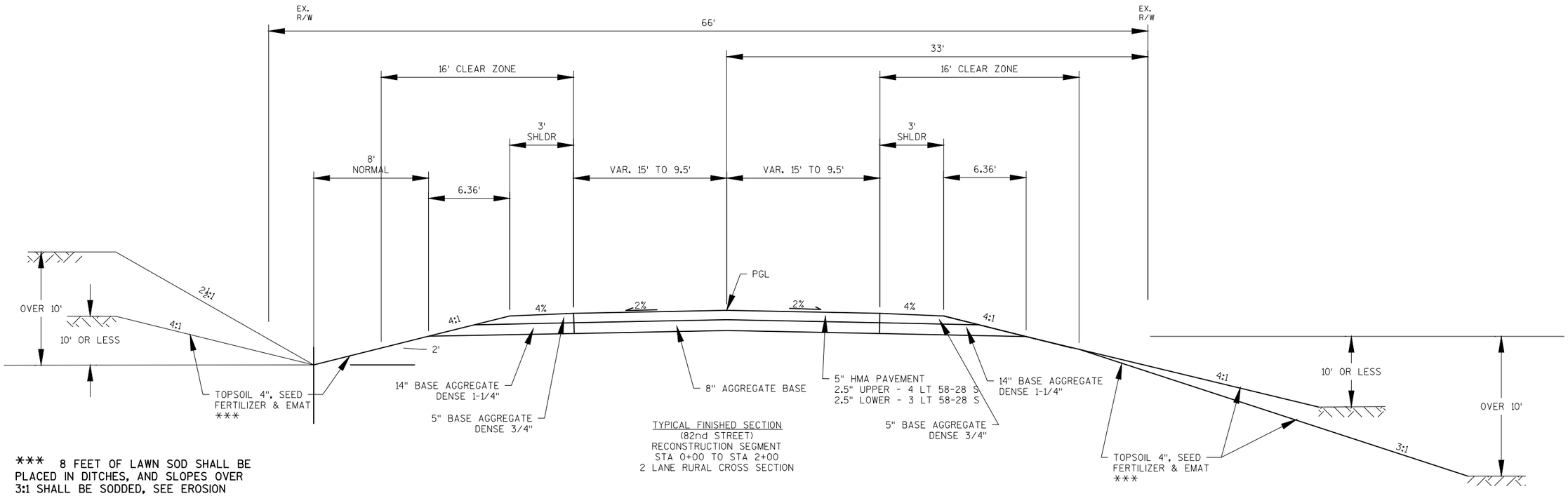
PGL = PROFILE GRADE LINE ALSO THE POINT REFERRED TO ON CROSS SECTIONS

TYPICAL EXISTING SECTION
(CTH W)
STA 31+00 TO STA 41+25

TYPICAL FINISHED SECTION
BEAM GUARD LOCATION
STA 39+00 TO STA 43+50

STA. 25+50 TO 31+00

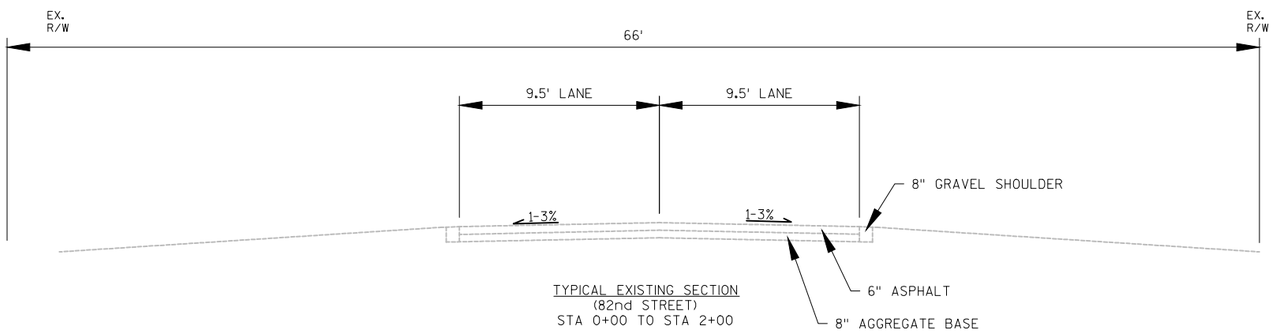
PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	PLAN: TYPICAL SECTIONS (CTH W - RECONSTRUCTION)	SHEET 4	E



TYPICAL FINISHED SECTION
(82nd STREET)
RECONSTRUCTION SEGMENT
STA 0+00 TO STA 2+00
2 LANE RURAL CROSS SECTION

*** 8 FEET OF LAWN SOD SHALL BE PLACED IN DITCHES, AND SLOPES OVER 3:1 SHALL BE SODDED, SEE EROSION CONTROL SHEETS

PGL = PROFILE GRADE LINE ALSO THE POINT REFERRED TO ON CROSS SECTIONS



TYPICAL EXISTING SECTION
(82nd STREET)
STA 0+00 TO STA 2+00

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	PLAN: TYPICAL SECTIONS (82nd STREET RECONSTRUCTION)	SHEET 5	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0202_TYP.DWG
LAYOUT NAME - 5 - TYPICALS - 82ND STREET
PLOT DATE : 1/23/2017 10:55 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : **********

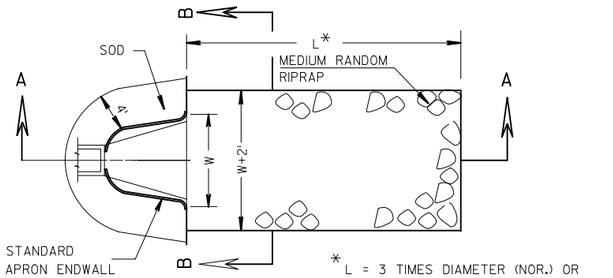
WISDOT/CADDS SHEET 42

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	PROJECT OVERVIEW	SHEET 6	E

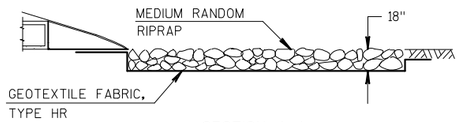
FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0203_OV.DWG
LAYOUT NAME - PROJECT OVERVIEW

PLOT DATE : 1/23/2017 10:55 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : ********

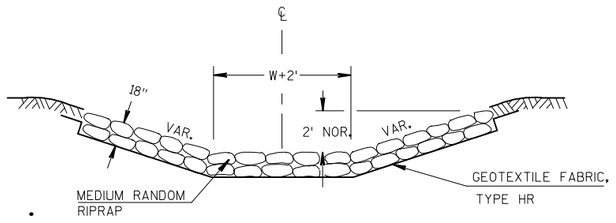
WISDOT/CADDS SHEET 42



* L = 3 TIMES DIAMETER (NOR.) OR 10' MIN. OR AS DIRECTED BY THE ENGINEER

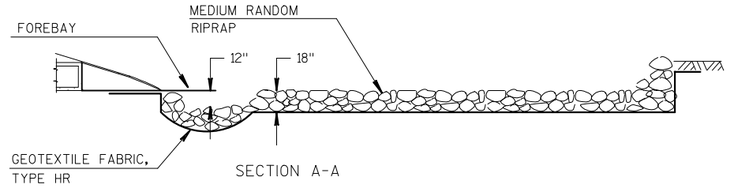


SECTION A-A

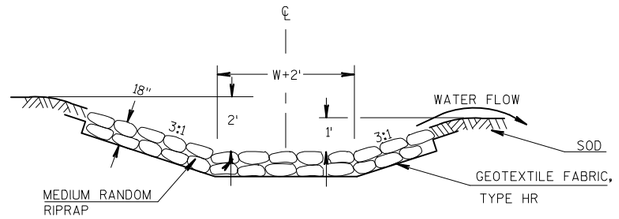


SECTION B-B

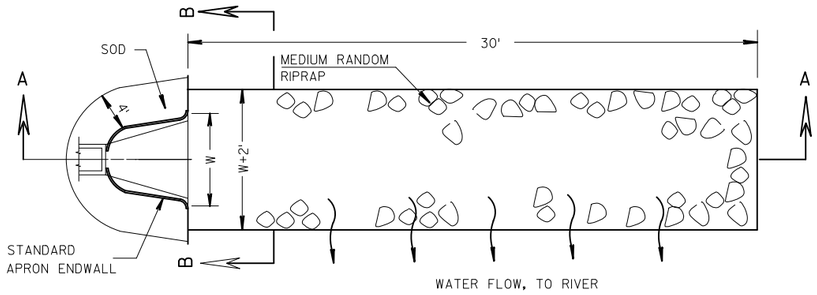
SOD, MEDIUM RANDOM RIPRAP AND GEOTEXTILE FABRIC TYPE HR
DETAIL AT APRON ENDWALLS



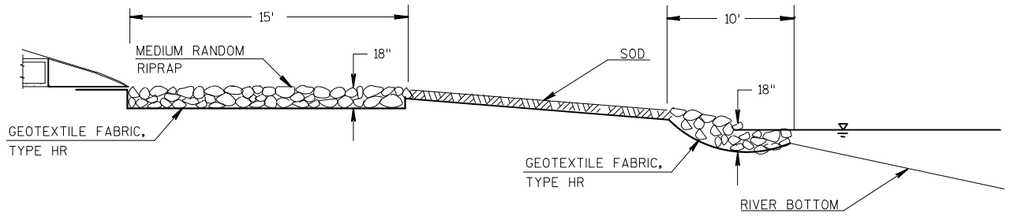
SECTION A-A



SECTION B-B

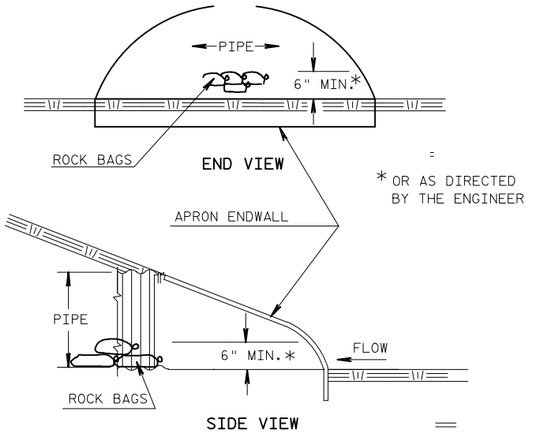


SOD, MEDIUM RANDOM RIPRAP AND GEOTEXTILE FABRIC TYPE HR
LEVEL SPREADER DETAIL AT APRON ENDWALL



SOD, MEDIUM RANDOM RIPRAP AND GEOTEXTILE FABRIC TYPE HR
DETAIL AT APRON ENDWALL
AT RIVER OUTFALL

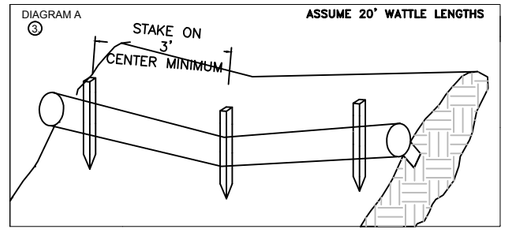
* NOTE: WIDTH OF RIPRAP TO FOLLOW APRON ENDWALL DETAIL

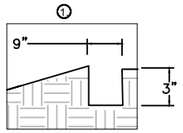


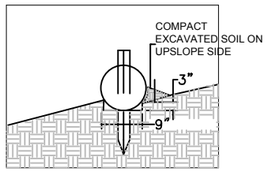
CULVERT PIPE CHECK

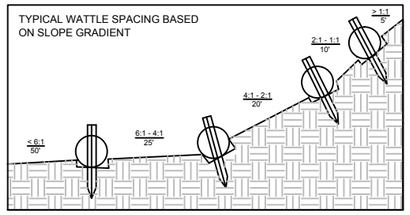
NORTH AMERICAN GREEN

STRAW WATTLE INSTALLATION GUIDE

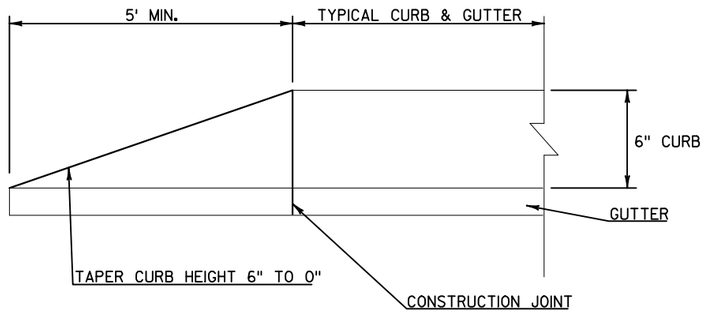




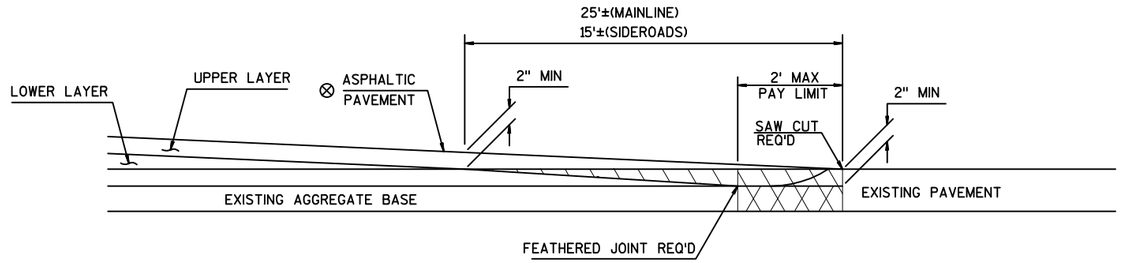




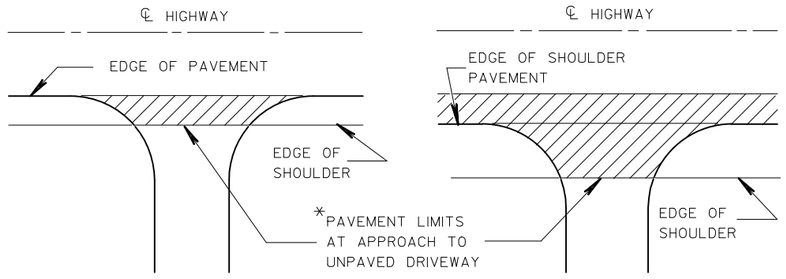
1. BEGIN AT THE LOCATION WHERE THE WATTLE IS TO BE INSTALLED BY EXCAVATING A 2-3" DEEP X 9" WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UPSLOPE FROM THE ANCHOR TRENCH.
2. PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. ADJACENT WATTLES SHOULD TIGHTLY ABUT.
3. SECURE THE WATTLE WITH 18-24" STAKES EVERY 3' AND WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE WATTLE LEAVING AT LEAST 2-3" OF STAKE EXTENDING ABOVE THE WATTLE. STAKES SHOULD BE DRIVEN PERPENDICULAR TO THE SLOPE FACE.



CURB & GUTTER TERMINI DETAIL

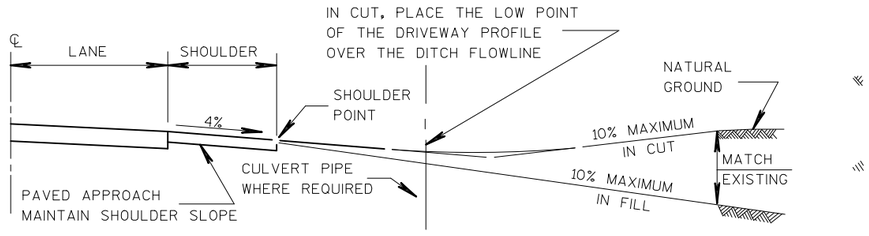


BUTT JOINT DETAIL FOR MILLED ASPHALTIC PAVEMENTS



RURAL DRIVEWAY INTERSECTION DETAIL

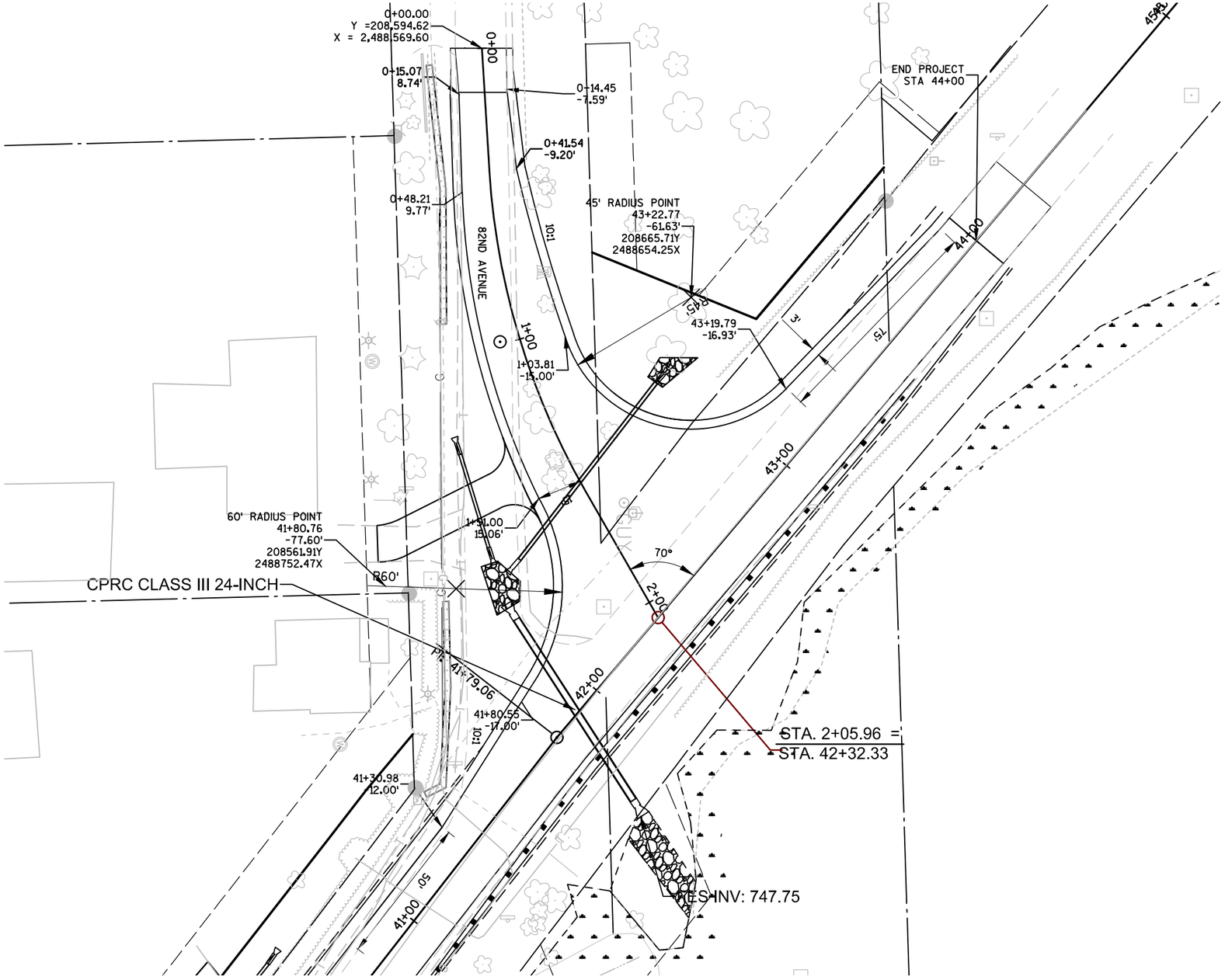
TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE



TYPICAL DRIVEWAY PROFILES

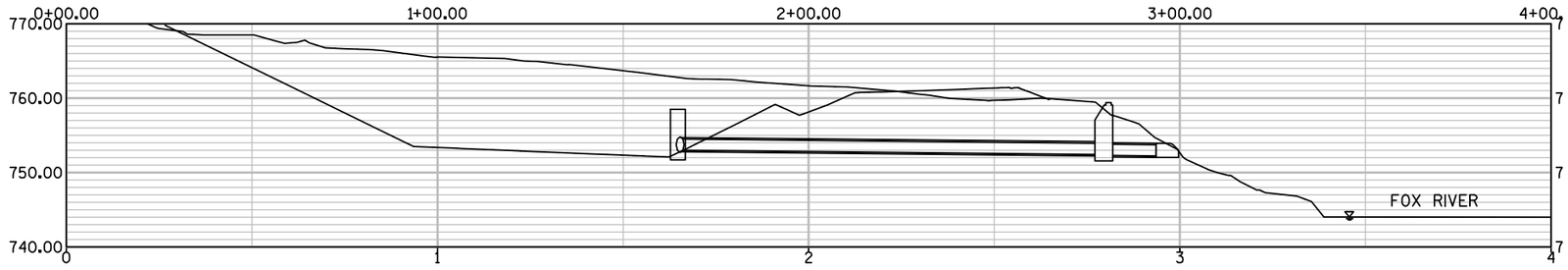
PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CONSTRUCTION DETAILS	SHEET 8	E

2



PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	82ND STREET INTERSECTION DETAIL	SHEET 9	E

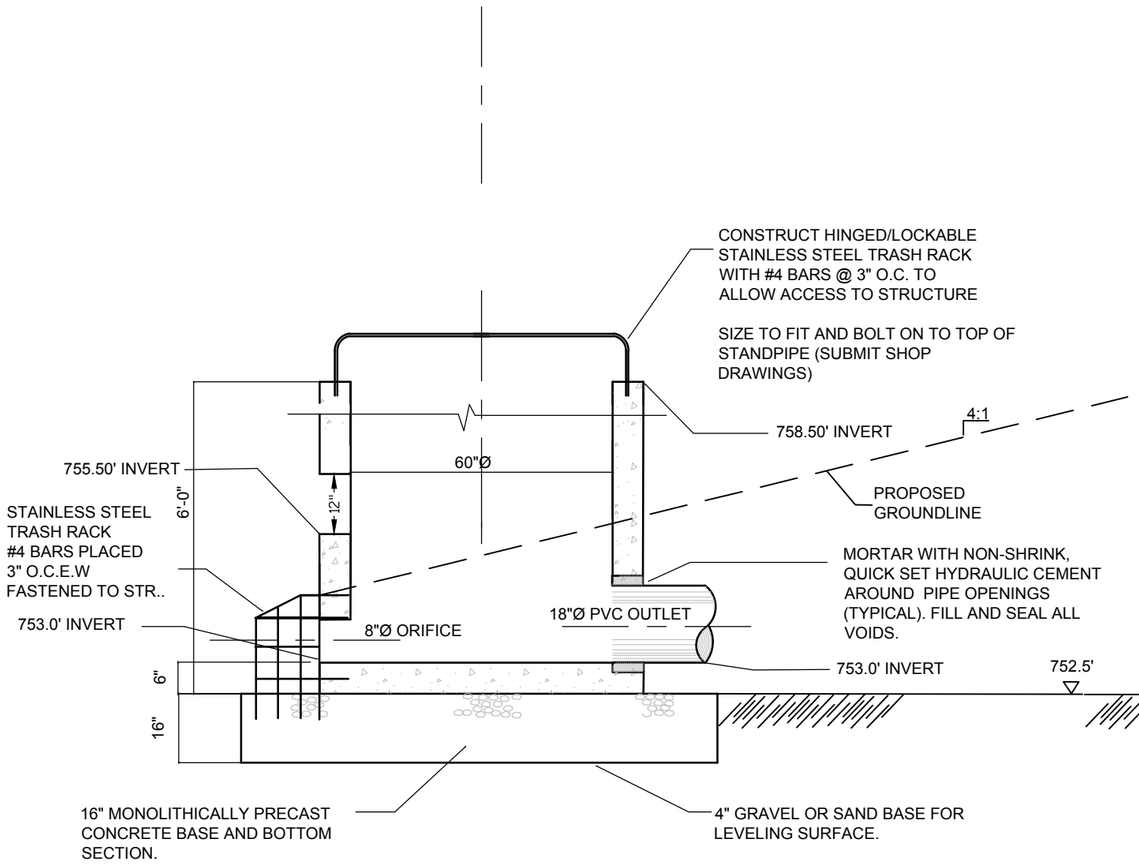
FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - INTERSECTION DETAIL
PLOT DATE : 1/23/2017 10:56 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 42



Pond Layout Table				
Point #	Y	X	Elevation	Description
1	208312.5582	2488945.0192	0.0	3' Radius
2	208235.0358	2489058.1001	753.5	PI
3	208208.2575	2489084.7828	753.6	PI
4	208317.2064	2489040.2656	0.0	8' Radius
5	208315.5166	2488944.7179	753.3	PI
6	208310.0582	2488943.4091	753.5	PI
7	208325.1452	2489039.2695	752.1	PI
8	208320.4390	2489047.5845	752.1	PI
9	208176.0353	2488807.2223	770.0	PI
10	208208.7941	2488814.8898	768.0	PI
11	208275.1862	2488913.3700	765.0	PI

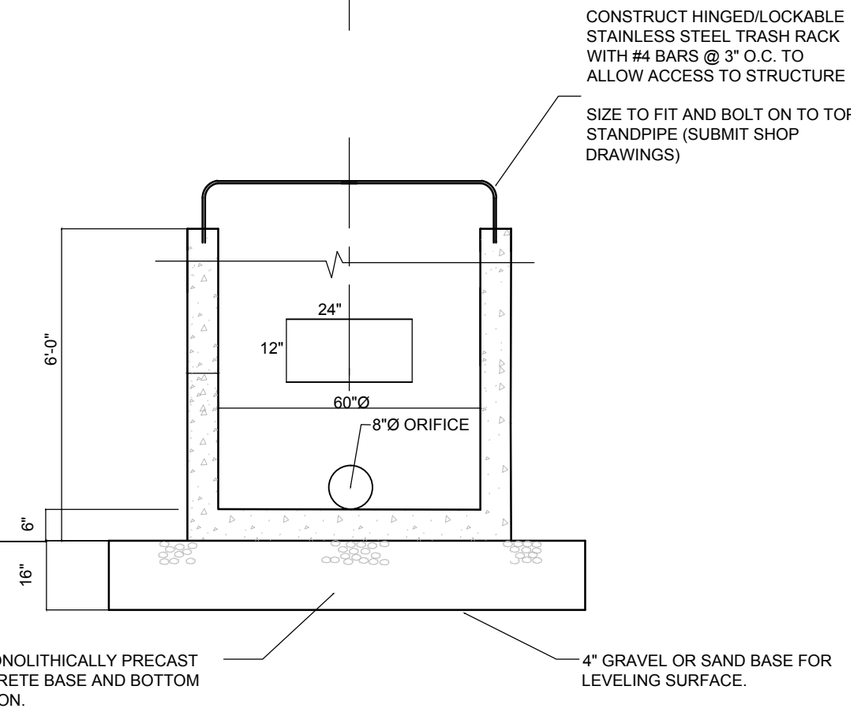
PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	DETENTION POND DETAIL	SHEET 10	E

2



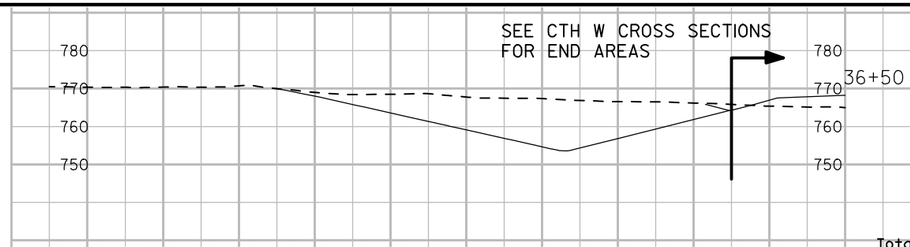
C/3 DETENTION OUTFALL STRUCTURE

NOT TO SCALE

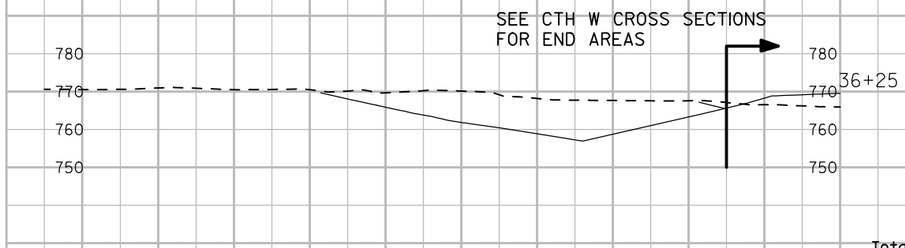


C/3 DETENTION OUTFALL STRUCTURE

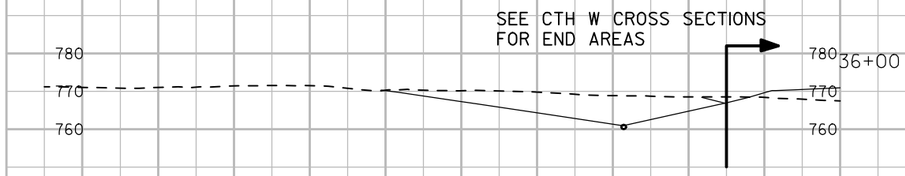
NOT TO SCALE



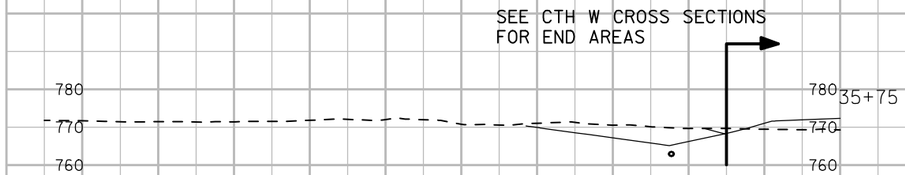
Total Volume at Station 36+50.00	
Cut Area	827.55
Fill Area	0.04
Cum Cut Vol	1263.06
Cum Fill Vol	0.09
Net Vol	1262.96



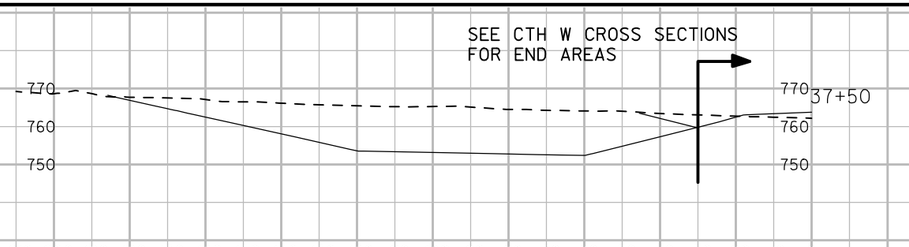
Total Volume at Station 36+25.00	
Cut Area	700.26
Fill Area	0.00
Cum Cut Vol	659.85
Cum Fill Vol	0.08
Net Vol	659.77



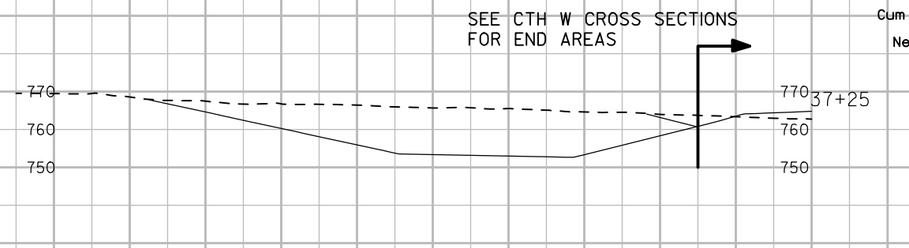
Total Volume at Station 36+00.00	
Cut Area	391.66
Fill Area	0.09
Cum Cut Vol	224.28
Cum Fill Vol	0.04
Net Vol	224.24



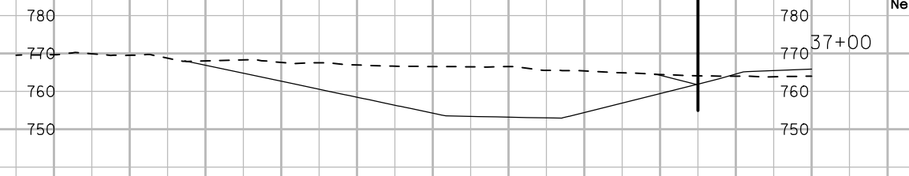
Total Volume at Station 35+75.00	
Cut Area	157.28
Fill Area	0.00



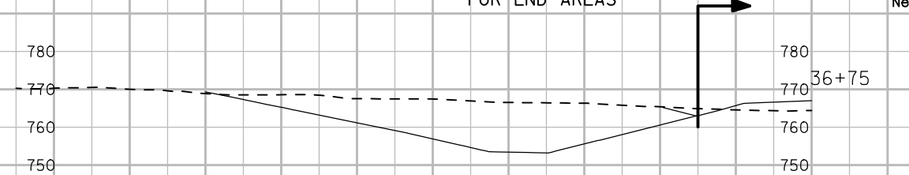
Total Volume at Station 37+50.00	
Cut Area	1325.69
Fill Area	0.31
Cum Cut Vol	4666.01
Cum Fill Vol	0.88
Net Vol	4665.13



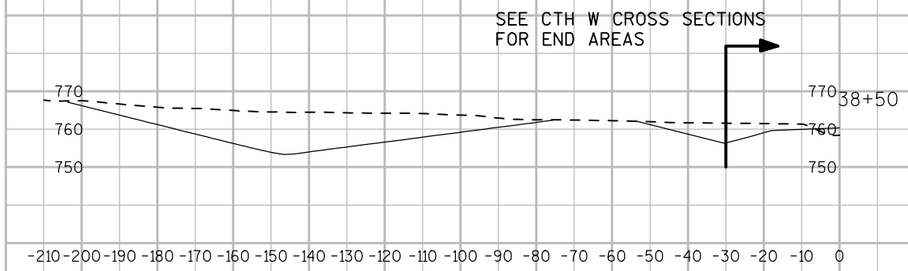
Total Volume at Station 37+25.00	
Cut Area	1224.69
Fill Area	0.00
Cum Cut Vol	3690.86
Cum Fill Vol	0.77
Net Vol	3690.09



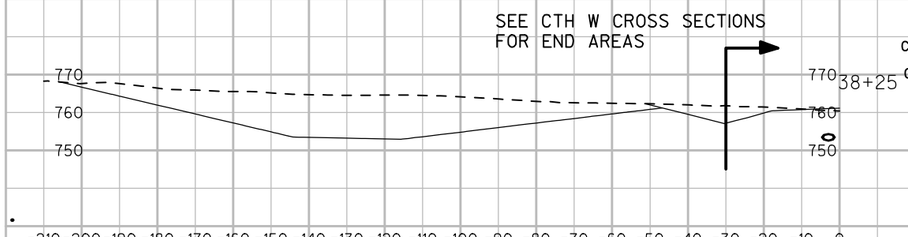
Total Volume at Station 37+00.00	
Cut Area	1119.34
Fill Area	0.05
Cum Cut Vol	2787.22
Cum Fill Vol	0.75
Net Vol	2786.46



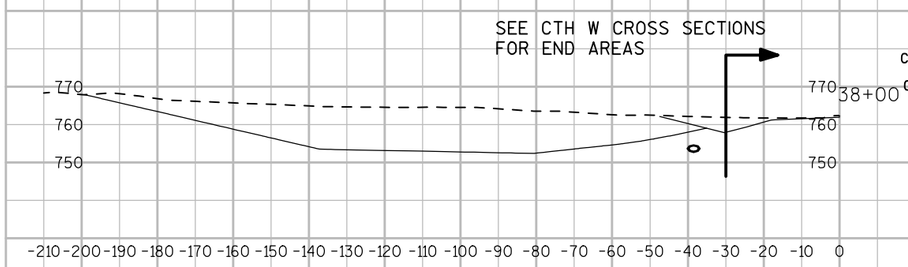
Total Volume at Station 36+75.00	
Cut Area	978.50
Fill Area	0.83
Cum Cut Vol	1971.71



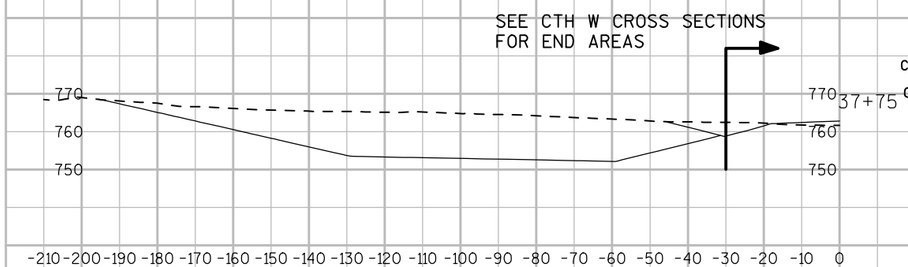
Total Volume at Station 38+50.00	
Cut Area	757.80
Fill Area	0.00
Cum Cut Vol	8249.49
Cum Fill Vol	1.07
Net Vol	8248.42



Total Volume at Station 38+25.00	
Cut Area	1097.24
Fill Area	0.04
Cum Cut Vol	7597.30
Cum Fill Vol	1.06
Net Vol	7596.24



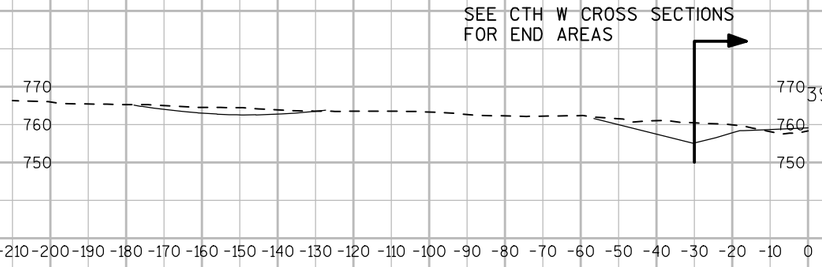
Total Volume at Station 38+00.00	
Cut Area	1344.24
Fill Area	0.00
Cum Cut Vol	6707.60
Cum Fill Vol	1.05
Net Vol	6706.55



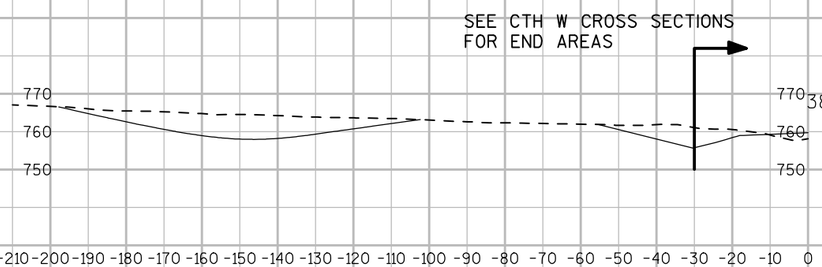
Total Volume at Station 37+75.00	
Cut Area	1377.85
Fill Area	0.08

Total Detention Pond Volume

Station	Cut Area	Fill Area	Cut Vol	Fill Vol	Cum Cut Vol	Cum Fill Vol	Net Vol
35+75.00	157.28	0.00	0.00	0.00	0.00	0.00	0.00
36+00.00	391.66	0.09	224.28	0.04	224.28	0.04	224.24
36+25.00	700.26	0.00	435.58	0.04	659.85	0.08	659.77
36+50.00	827.55	0.04	603.20	0.01	1263.06	0.09	1262.96
36+75.00	978.50	0.83	708.65	0.33	1971.71	0.42	1971.29
37+00.00	1119.34	0.05	815.51	0.33	2787.22	0.75	2786.46
37+25.00	1224.69	0.00	903.64	0.02	3690.86	0.77	3690.09
37+50.00	1325.69	0.31	975.15	0.11	4666.01	0.88	4665.13
37+75.00	1377.85	0.08	1024.05	0.14	5690.06	1.02	5689.04
38+00.00	1344.24	0.00	1017.54	0.03	6707.60	1.05	6706.55
38+25.00	1097.24	0.04	889.70	0.01	7597.30	1.06	7596.24
38+50.00	757.80	0.00	652.19	0.01	8249.49	1.07	8248.42
38+75.00	357.59	0.01	381.03	0.00	8630.52	1.07	8629.44
39+00.00	56.76	0.33	139.34	0.14	8769.85	1.21	8768.64



Total Volume at Station 39+00.00	
Cut Area	56.76
Fill Area	0.33
Cum Cut Vol	8769.85
Cum Fill Vol	1.21
Net Vol	8768.64



Total Volume at Station 38+75.00	
Cut Area	357.59
Fill Area	0.01

PROJECT NO:3751-00-70	HWY: CTH W	COUNTY: KENOSHA	DETENTION POND OUTLET DETAIL - STA 38+25 TO STA 39+00	SHEET 13	E

2

TEMPORARY DITCH CHECKS (WATTLES)

SOD, LAWN

RIP RAP MED or HEAVY

SILT FENCE

SLOPE INTERCEPT

R/W

ROADWAY CENTERLINE

30+00

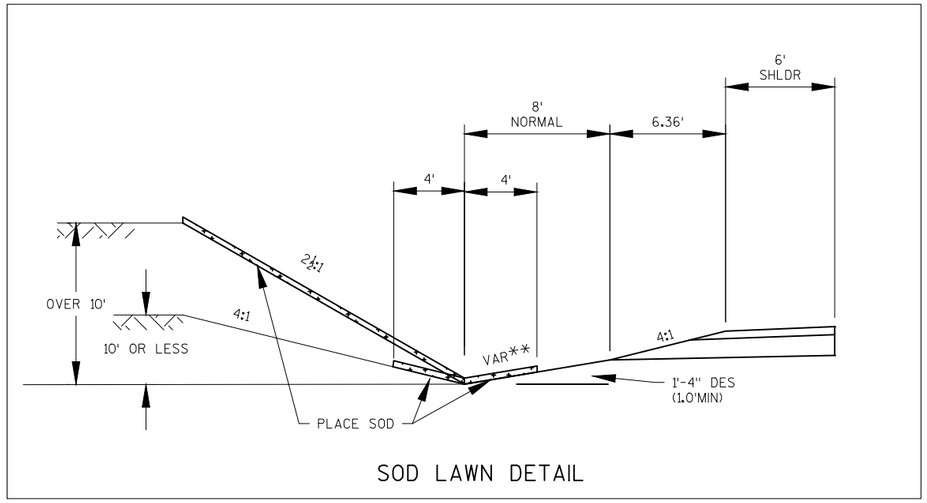
PROPERTY LINE TYP.

DITCHLINE WITH FLOW ARROWS TYP.

25+00

20+00

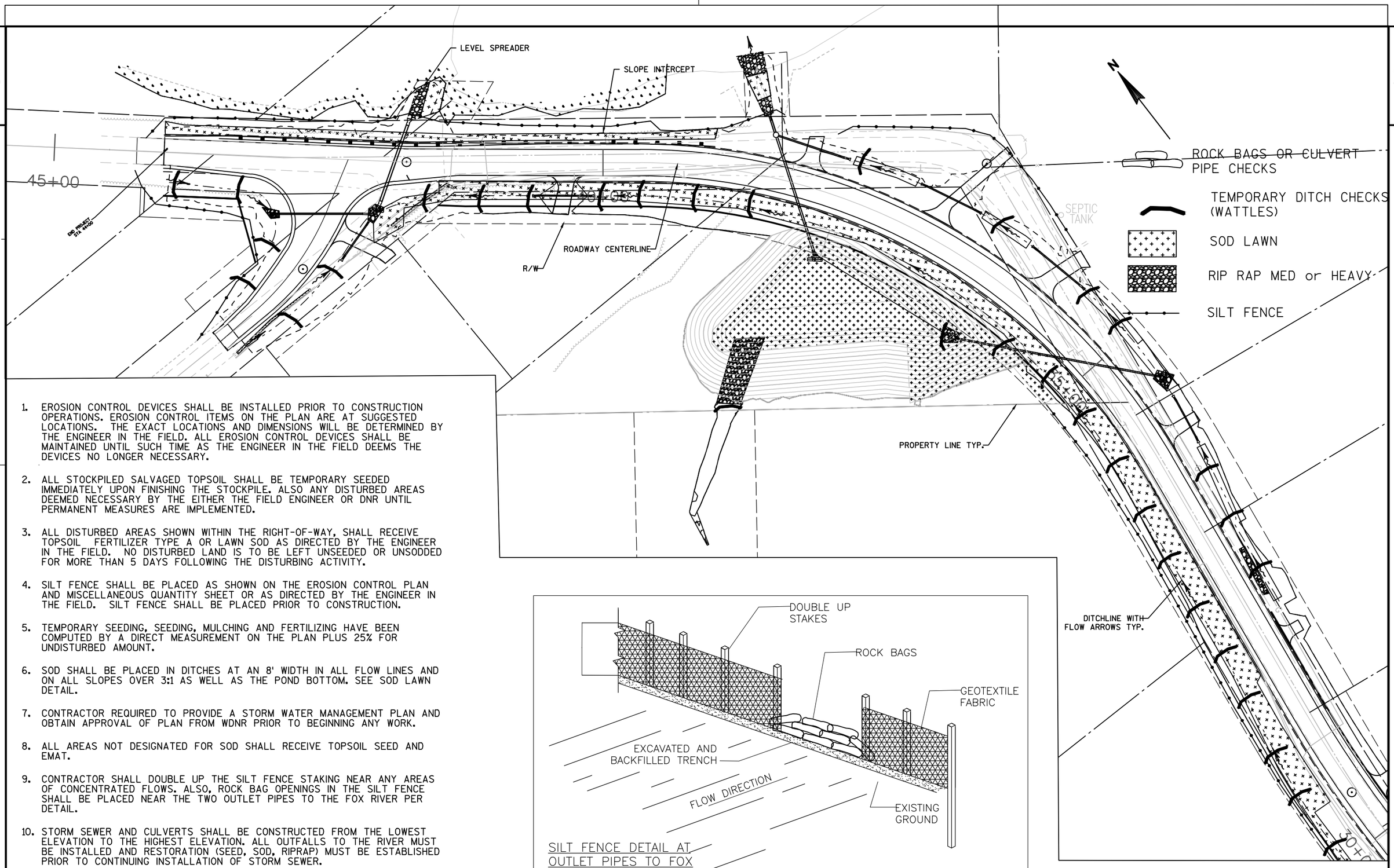
BEGIN PROJECT STA 19+75



SOD LAWN DETAIL

2

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	EROSION CONTROL (1 OF 2)	SHEET 14	E



1. EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO CONSTRUCTION OPERATIONS. EROSION CONTROL ITEMS ON THE PLAN ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS AND DIMENSIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD. ALL EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER IN THE FIELD DEEMS THE DEVICES NO LONGER NECESSARY.

2. ALL STOCKPILED SALVAGED TOPSOIL SHALL BE TEMPORARY SEEDED IMMEDIATELY UPON FINISHING THE STOCKPILE. ALSO ANY DISTURBED AREAS DEEMED NECESSARY BY THE EITHER THE FIELD ENGINEER OR DNR UNTIL PERMANENT MEASURES ARE IMPLEMENTED.

3. ALL DISTURBED AREAS SHOWN WITHIN THE RIGHT-OF-WAY, SHALL RECEIVE TOPSOIL FERTILIZER TYPE A OR LAWN SOD AS DIRECTED BY THE ENGINEER IN THE FIELD. NO DISTURBED LAND IS TO BE LEFT UNSEEDED OR UNSODDED FOR MORE THAN 5 DAYS FOLLOWING THE DISTURBING ACTIVITY.

4. SILT FENCE SHALL BE PLACED AS SHOWN ON THE EROSION CONTROL PLAN AND MISCELLANEOUS QUANTITY SHEET OR AS DIRECTED BY THE ENGINEER IN THE FIELD. SILT FENCE SHALL BE PLACED PRIOR TO CONSTRUCTION.

5. TEMPORARY SEEDING, SEEDING, MULCHING AND FERTILIZING HAVE BEEN COMPUTED BY A DIRECT MEASUREMENT ON THE PLAN PLUS 25% FOR UNDISTURBED AMOUNT.

6. SOD SHALL BE PLACED IN DITCHES AT AN 8' WIDTH IN ALL FLOW LINES AND ON ALL SLOPES OVER 3:1 AS WELL AS THE POND BOTTOM. SEE SOD LAWN DETAIL.

7. CONTRACTOR REQUIRED TO PROVIDE A STORM WATER MANAGEMENT PLAN AND OBTAIN APPROVAL OF PLAN FROM WDNR PRIOR TO BEGINNING ANY WORK.

8. ALL AREAS NOT DESIGNATED FOR SOD SHALL RECEIVE TOPSOIL SEED AND EMAT.

9. CONTRACTOR SHALL DOUBLE UP THE SILT FENCE STAKING NEAR ANY AREAS OF CONCENTRATED FLOWS. ALSO, ROCK BAG OPENINGS IN THE SILT FENCE SHALL BE PLACED NEAR THE TWO OUTLET PIPES TO THE FOX RIVER PER DETAIL.

10. STORM SEWER AND CULVERTS SHALL BE CONSTRUCTED FROM THE LOWEST ELEVATION TO THE HIGHEST ELEVATION. ALL OUTFALLS TO THE RIVER MUST BE INSTALLED AND RESTORATION (SEED, SOD, RIPRAP) MUST BE ESTABLISHED PRIOR TO CONTINUING INSTALLATION OF STORM SEWER.

SILT FENCE DETAIL AT OUTLET PIPES TO FOX RIVER

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	EROSION CONTROL (2 OF 2)	SHEET 15	E

2

CTH W (FOX RIVER RD)

SPEED LIMIT 35
R2-1
24"X30"
EXISTING SIGN TO REMAIN

25 M.P.H.
W013-1
36"X36"
EXISTING SIGN TO REMAIN

BEGIN PROJECT 3751-00-70
BEGIN RESURFACING STA 19+75.00

PI: 19+00.00

PAVEMENT MARKING EPOXY 4-INCH (DOUBLE YELLOW)

PC: 21+21.16

12'(TYP)
12'(TYP)

HILL BLOCKS VIEW

8555
EXISTING SIGN TO REMAIN

25 M.P.H.
W013-1
36"X36"
MOVING SIGN TYPE II
STA. 21+00 RT.

MATCH LINE 22+00

PAVEMENT MARKING EPOXY 4-INCH (EDGELINE WHITE)

N

PT: 23+58.80

PAVEMENT MARKING EPOXY 4-INCH (DOUBLE YELLOW)

PI: 26+80.16

12'(TYP)
12'(TYP)

CTH W (FOX RIVER RD)

MATCH LINE 29+50

8421
EXISTING SIGN TO REMAIN

PRIVATE PROPERTY NO TRESPASSING
EXISTING SIGN TO REMAIN

PAVEMENT MARKING EPOXY 4-INCH (EDGELINE WHITE)

8421
MOVING SIGN TYPE II
STA. 29+50 RT.

ALL REMOVED SIGNS TO BE SALVAGED FOR COUNTY PICK UP

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CTH W PAVEMENT MARKING AND SIGNING PLAN	SHEET	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - PAVEMENT MARKING PLAN

PLOT DATE : 1/23/2017 10:58 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1:50_XREF

MATCH LINE 29+50

PC: 2

30

12'(TYP)

12'(TYP)

31

PT: 31+30.5

SIGNS ON SAME POST

15 M.P.H. W013-1 36"X36" — REMOVING SIGNS TYPE II

25 M.P.H. W013-1 36"X36" — MOVING SIGN TYPE II STA. 31+30 LT.

PAVEMENT MARKING EPOXY 4-INCH (DOUBLE YELLOW)

32

33

CTH W (FOX RIVER RD)

PC: 33+92.91

34

15 M.P.H. W013-1 36"X36" — REMOVING SIGNS TYPE II

35

36

15 M.P.H. W013-1 36"X36" — REMOVING SIGNS TYPE II

MATCH LINE 37+00

PT:

8347 — MOVING SIGN TYPE II STA. 30+25 RT.

15 M.P.H. W013-1 36"X36" — REMOVING SIGNS TYPE II

8331 — MOVING SIGN TYPE II STA. 32+10 RT.

SPEED LIMIT 35 R2-1 24"X30" SIGNS TYPE II REFLECTIVE H

8315 — MOVING SIGN TYPE II STA. 33+95 RT.

PAVEMENT MARKING EPOXY 4-INCH (EDGELINE WHITE)

8230 — REMOVING SIGNS TYPE II

8239 — MOVING SIGN TYPE II STA. 37+00 RT.

8221 — MOVING SIGN TYPE II STA. 36+00 RT.

W1-8 REMOVING SIGNS TYPE II

W1-8 48"X24" — REMOVING SIGNS TYPE II

W1-8 REMOVING SIGNS TYPE II

ALL REMOVED SIGNS TO BE SALVAGED FOR COUNTY PICK UP

PAVEMENT MARKING EPOXY 4-INCH (DOUBLE YELLOW)

MATCH LINE 37+00

SPEED LIMIT 35 R2-1 24"X30" SIGNS TYPE II REFLECTIVE H

PT: 39+66.19

15 M.P.H. W013-1 36"X36" — REMOVING SIGNS TYPE II

8331 — EXISTING SIGN TO REMAIN

STOP R1-1 30"X30" — REMOVING SIGNS TYPE II

PI: 41+79.06

STOP R1-1 30"X30" SIGNS TYPE II REFLECTIVE H

82ND STREET

15 M.P.H. W013-1 36"X36" — REMOVING SIGNS TYPE III

38

39

12'(TYP)

12'(TYP)

40

CTH W (FOX RIVER RD)

41

42

43

44

W1-8 48"X24" — REMOVING SIGNS TYPE II

REMOVING SIGNS TYPE II

8221 — EXISTING SIGN TO REMAIN

REMOVING SIGNS TYPE II

REMOVING SIGNS TYPE II

15 M.P.H. W013-1 36"X36" — REMOVING SIGNS TYPE II

PAVEMENT MARKING EPOXY 4-INCH (EDGELINE WHITE)

JCT COUNTY FR — MOVING SIGN TYPE II STA. 42+95 RT.

END PROJECT 3751-00-70 STA 44+00.00

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CTH W PAVEMENT MARKING AND SIGNING PLAN	SHEET 17	E

2

BEGIN PROJECT
3751-00-70
BEGIN RESURFACING
STA 19+75.00

CTH W (FOX RIVER RD)

15 16 17 18 19 20 21

810.29 810.50 810.29
811.57 811.78 811.57
814.04 814.02 813.79
816.20 815.85 815.30
818.24 817.59 816.93
820.34 819.62 818.90

12'(TYP)
12'(TYP)

MATCH LINE 22+00

65-4-120-182-1110
RONALD J & DIANE E
8555 FOX RIVER RD

RAY E & JANICE LANE
8433 312TH AVE

N

2

CTH W (FOX RIVER RD)

22 23 24 25 26 27 28 29

822.80 822.08 821.36
825.69 824.97 824.25
828.60 828.07 827.53
831.40 831.17 830.93
833.71 833.80 833.66
834.54 834.78 834.54
833.83 834.07 833.83
831.60 831.84 831.60
829.11 829.35 829.11
826.62 826.86 826.62
824.13 824.37 824.13
821.83 822.07 821.83
819.72 819.96 819.72
817.78 817.85 817.61
815.67 815.45 815.21

12'(TYP)
12'(TYP)

MATCH LINE 29+50

MATCH LINE 22+00

65-4-120-073-1109
RICK M & KYLI F BLATTNER
53 FOX RIVER RD

65-4-120-073-1071
PAUL L & SHERRY A UDVARE
8421 FOX RIVER RD

65-4-120-073-1108
RICK M & KYLI F BLATTNER
8353 FOX RIVER RD

N

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	PAVING PLAN	SHEET	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0203_PAV.DWG
LAYOUT NAME - PAVING PLAN

PLOT DATE : 1/23/2017 10:58 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 50'_XREF

MATCH LINE 29+50

812.97 812.54 812.11 30 12'(TYP) 12'(TYP) 809.56 809.13 809.70 805.66 805.23 804.80 31 801.65 801.48 801.24 797.86 797.98 797.74 32 794.24 794.48 794.24 790.74 790.98 790.76 33 787.21 787.48 787.53 783.62 783.98 784.34 34 780.00 780.48 780.96 776.55 777.03 777.51 35 773.35 773.83 774.31 770.42 770.90 774.38 36 767.77 768.25 768.73 765.39 765.87 766.35

CTH W (FOX RIVER RD)

END RESURFACING
STA 31+00
BEGIN FULL DEPTH
ASPHALT PAVEMENT

65-4-120-073-1060
DONALD C GAUL
8347 FOX RIVER RD

65-4-120-073-1050
JOSEPH T STEPHENS
8331 FOX RIVER RD

65-4-120-073-1040
CALLIE SCHULZ (1/2 INT) & HARLEY RUPPERT (1/2 INT)
8315 FOX RIVER RD

65-4-120-073-1030
ARNE & DEBRA JENSEN
8245 FOX RIVER RD

65-4-120-073-1020
STEPHEN P JELINEK
8239 FOX RIVER RD

MATCH LINE 37+00

MATCH LINE 37+00

763.29 763.77 764.25 761.46 761.94 762.42 38 759.90 760.38 760.86 758.62 759.10 759.58 39 757.07 757.55 758.03 12'(TYP) 12'(TYP) 756.50 757.31 757.43 40 756.31 756.55 756.38 755.73 755.97 755.73 41 755.37 755.39 755.25 754.29 754.82 754.58 42 754.24 754.00 753.77 753.67 753.34 753.43 43 752.91 753.09 752.85 752.28 752.52 752.28 44

CTH W (FOX RIVER RD)

754.71 754.95 754.56 753.57 753.95 82ND STREET

65-4-120-073-0750
WILLIAM E BYCHOWSKI & JAMES J BYCHOWSKITRUSTEES
OF BYCHOWSKI TRUST EACH 1/2 INT
FOX RIVER RD

65-4-120-073-0715
WILLIAM E BYCHOWSKI & JAMES J BYCHO
OF BYCHOWSKI TRUST EACH 1/2 INT
FOX RIVER RD

65-4-120-073-0[illegible]
JAMES A CAYWOOD
CORINNE A CAYWOOD
31110 82ND ST

END FULL DEPTH
ASPHALT PAVEMENT
STA 41+25
BEGIN ASPHALT RESURFACING

END ASPHALT RESURFACING
STA 44+00

END PROJECT
3751-00-70
STA 44+50.00

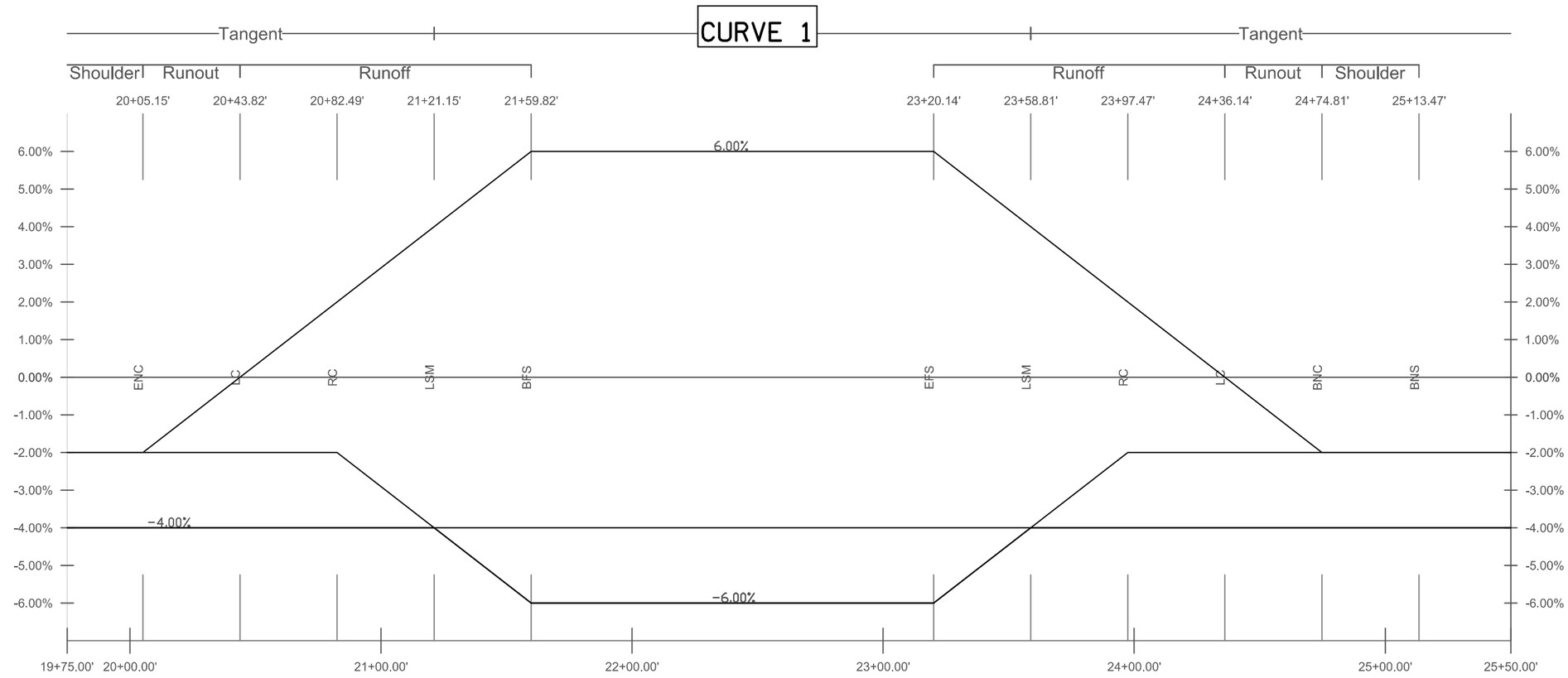
PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	PAVING PLAN	SHEET 19	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0203_PAV.DWG
LAYOUT NAME - PAVING PLAN

PLOT DATE : 1/23/2017 10:58 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : *********

2

Superelevation

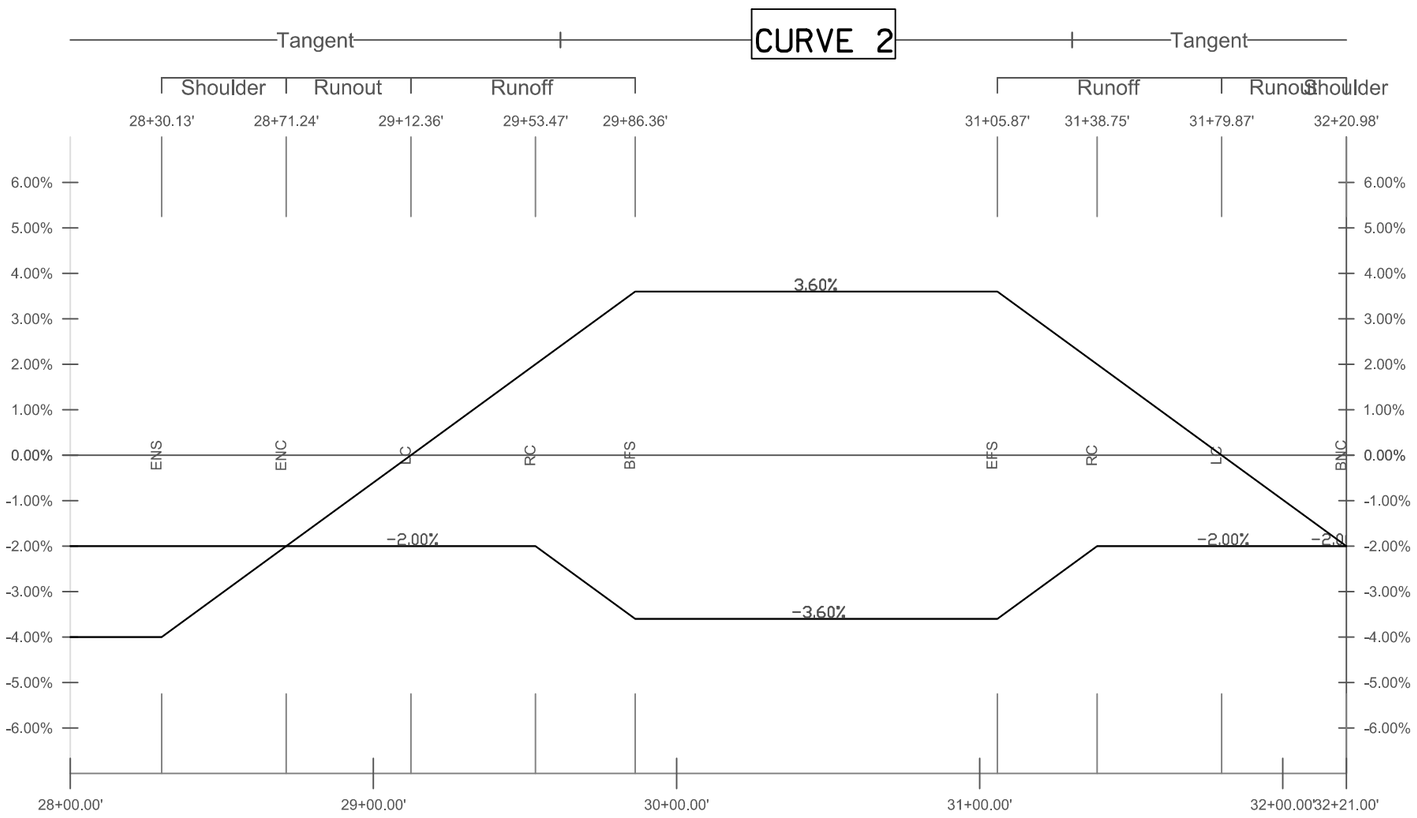


PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	SUPERELEVATION DIAGRAM (CURVE 1)	SHEET 20	E

2

2

Superelevation



PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	SUPERELEVATION DIAGRAM (CURVE 2)	SHEET 21	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0203_CD.DWG
LAYOUT NAME - SUPERELEVATION CURVE 2

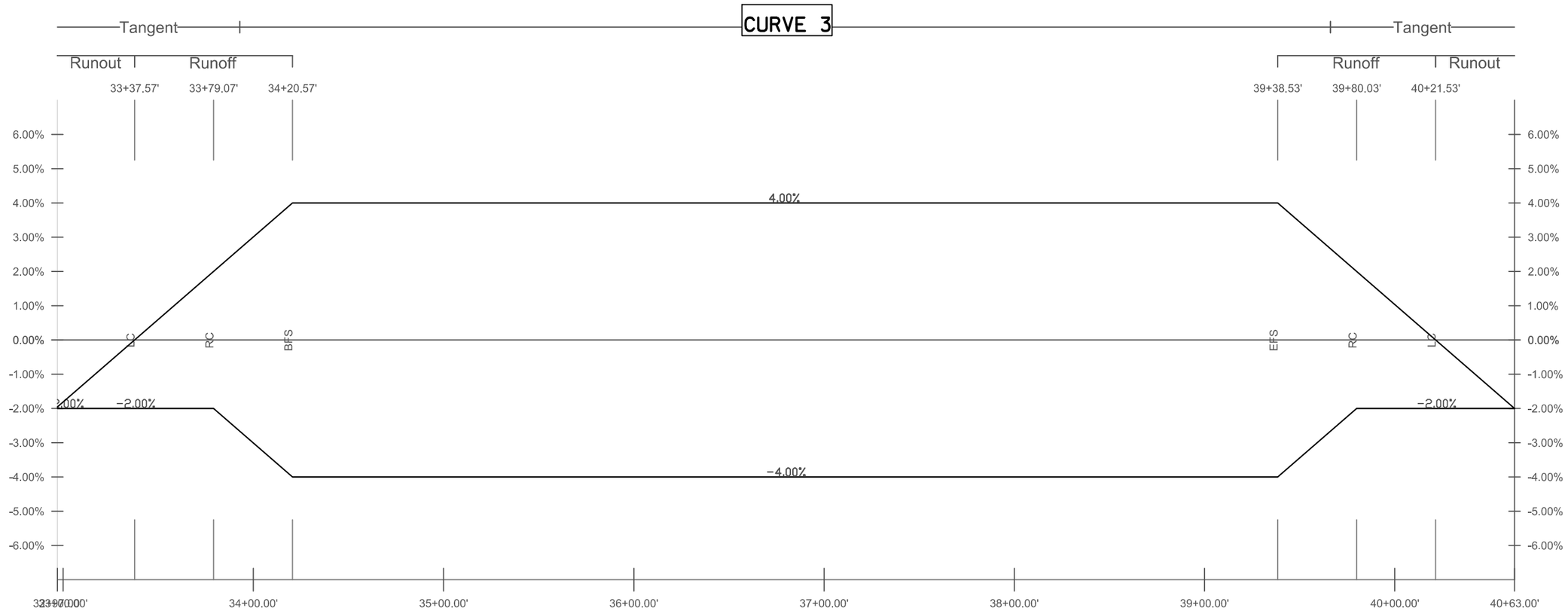
PLOT DATE : 1/23/2017 10:59 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : ********

WISDOT/CADDS SHEET 42

2

2

Superelevation

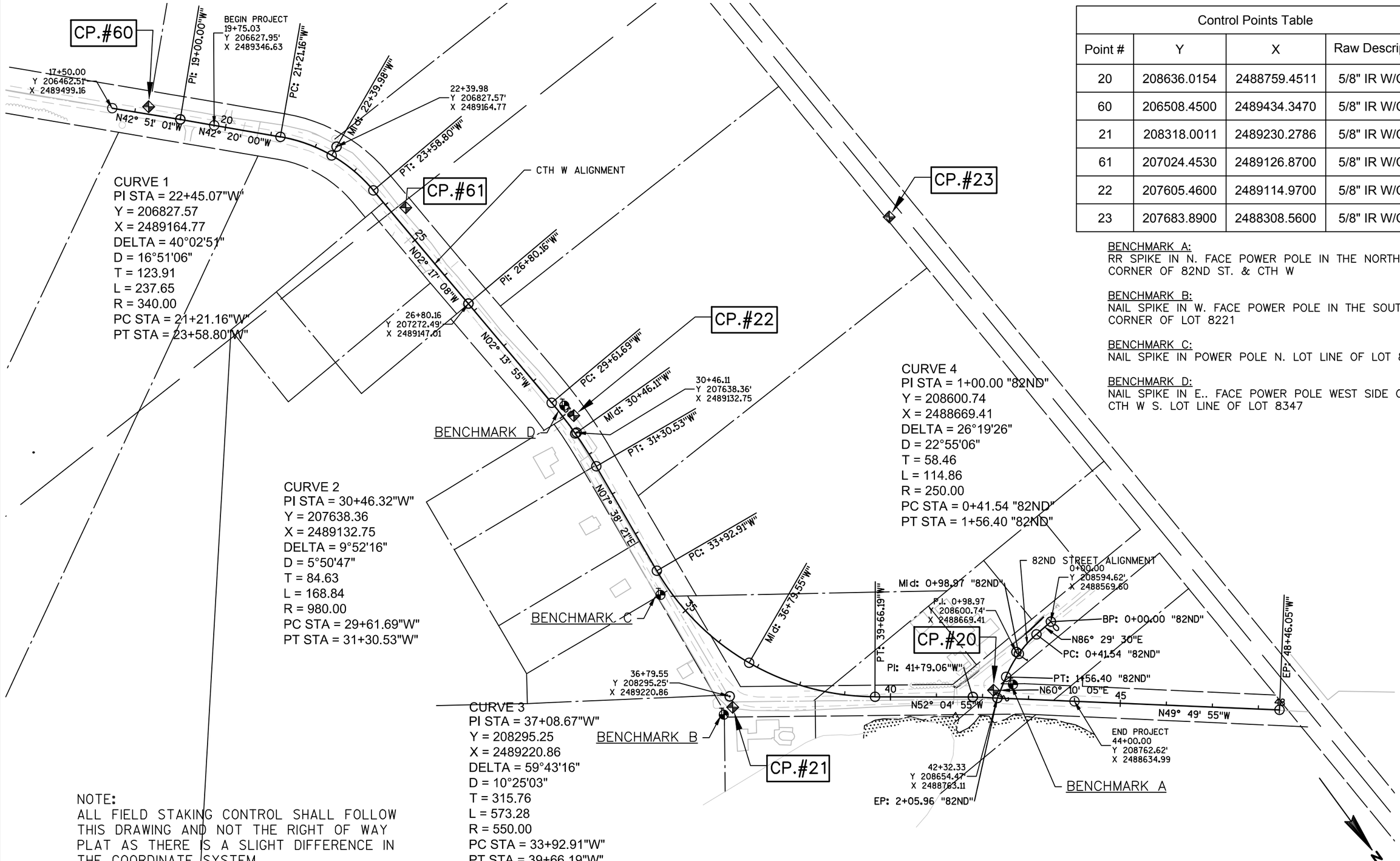


PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	SUPERELEVATION DIAGRAM (CURVE 3)	SHEET 22	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0203_CD.DWG
LAYOUT NAME - SUPERELEVATION CURVE 3

PLOT DATE : 1/23/2017 10:59 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : ********

WISDOT/CADDS SHEET 42



Control Points Table			
Point #	Y	X	Raw Description
20	208636.0154	2488759.4511	5/8" IR W/CAP
60	206508.4500	2489434.3470	5/8" IR W/CAP
21	208318.0011	2489230.2786	5/8" IR W/CAP
61	207024.4530	2489126.8700	5/8" IR W/CAP
22	207605.4600	2489114.9700	5/8" IR W/CAP
23	207683.8900	2488308.5600	5/8" IR W/CAP

BENCHMARK A:
RR SPIKE IN N. FACE POWER POLE IN THE NORTHWEST CORNER OF 82ND ST. & CTH W

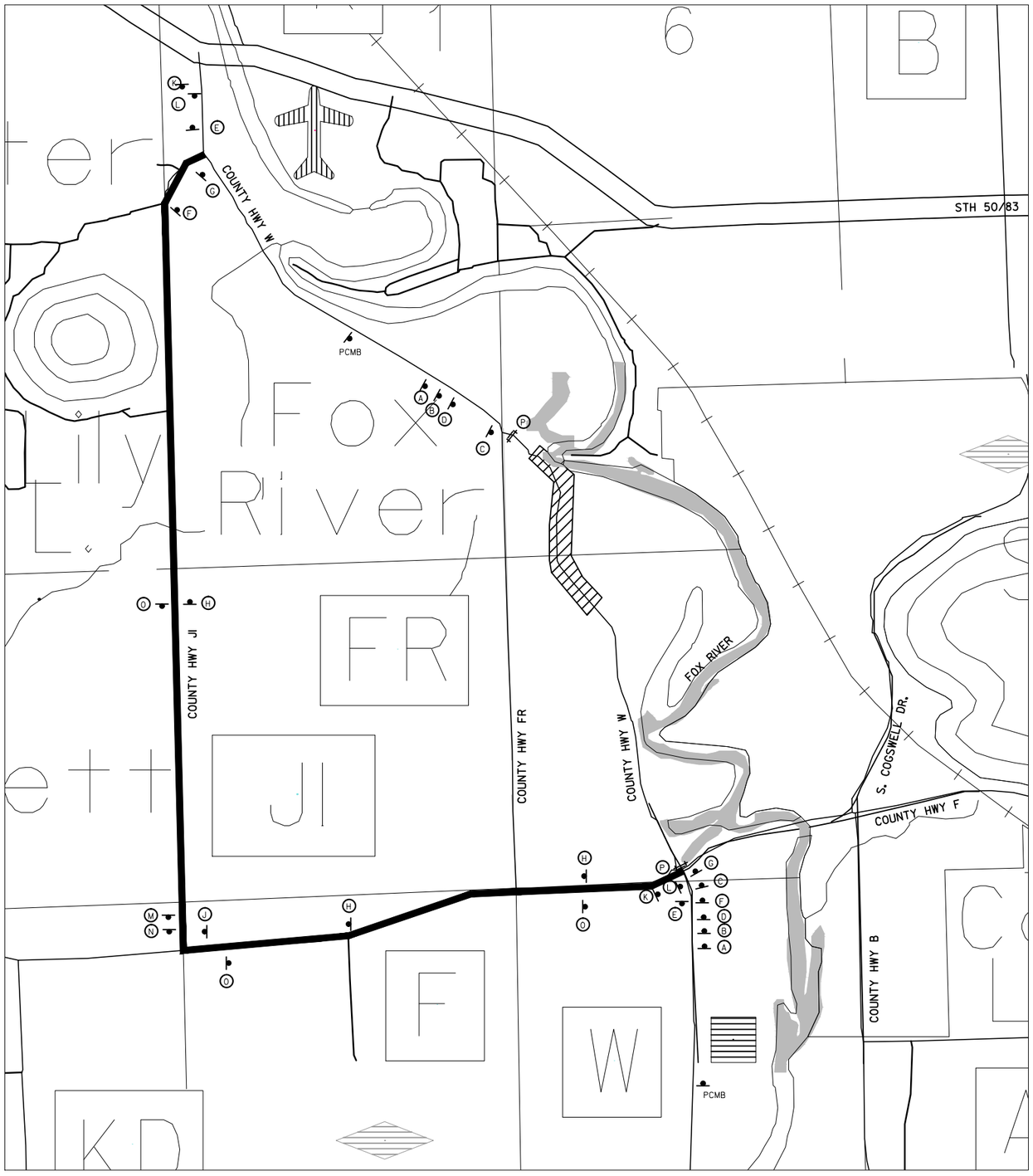
BENCHMARK B:
NAIL SPIKE IN W. FACE POWER POLE IN THE SOUTHEAST CORNER OF LOT 8221

BENCHMARK C:
NAIL SPIKE IN POWER POLE N. LOT LINE OF LOT 8315

BENCHMARK D:
NAIL SPIKE IN E.. FACE POWER POLE WEST SIDE OF CTH W S. LOT LINE OF LOT 8347

NOTE:
ALL FIELD STAKING CONTROL SHALL FOLLOW THIS DRAWING AND NOT THE RIGHT OF WAY PLAT AS THERE IS A SLIGHT DIFFERENCE IN THE COORDINATE SYSTEM.

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	ALIGNMENT DETAIL	SHEET 23	E



(A) 2
ROAD WORK AHEAD
W20-1

(B) 2
ROAD CLOSED AHEAD
W20-3

(C) 2
ROAD CLOSED 500 FT
W20-3

(D) 2
DETOUR AHEAD
W20-2

(E) 2
END DETOUR
M4-8A
24"x18"

(F) 2
M4-8 24"x12" DETOUR
M3-1 24"x12" NORTH
M1-5A 21"x21" COUNTY W
M5-1L 21"x21"

(G) 2
M3-1 24"x12" NORTH
M1-5A 21"x21" COUNTY W
M4-9L 30"x24" DETOUR

(H) 3
M4-8 24"x12" DETOUR
M3-1 24"x12" NORTH
M1-5A 21"x21" COUNTY W
M6-1 21"x21"

(I) DELETED

(J) 1
M3-1 24"x12" NORTH
M1-5A 21"x21" COUNTY W
M4-9R 30"x24" DETOUR

(K) 2
M4-8 24"x12" DETOUR
M3-3 24"x12" SOUTH
M1-5A 21"x21" COUNTY W
M5-1R 21"x21"

(L) 2
M3-3 24"x12" SOUTH
M1-5A 21"x21" COUNTY W
M4-9R 30"x24" DETOUR

(M) 1
M4-8 24"x12" DETOUR
M3-3 24"x12" SOUTH
M1-5A 21"x21" COUNTY W
M5-1L 21"x21"

(N) 1
M3-3 24"x12" SOUTH
M1-5A 21"x21" COUNTY W
M4-9L 30"x24" DETOUR

(O) 4
M4-8 24"x12" DETOUR
M3-3 24"x12" SOUTH
M1-5A 21"x21" COUNTY W
M6-1 21"x21"

(P) 2
ROAD CLOSED
R11-2
48"x30"

WORK ZONE

- SIGN ASSEMBLY
- CLASS III BARRICADES WITH FLASHING LIGHTS

SB CTH W	NB CTH W
CLOSURE	CLOSURE
6/5-9/15	6/5-9/15

FOLLOW DETOUR ROUTE

PCMS 2

PROVIDE AND DISPLAY CHANGEABLE MESSAGE SIGN AT BOTH ENDS OF THE PROJECT FOR A PERIOD OF NO LESS THAN 14 CALENDAR DAYS PRIOR TO START OF ROAD WORK

2

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	PLAN: PROPOSED DETOUR	SHEET 24	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0203_DET.DWG
LAYOUT NAME - DETOUR PLAN
PLOT DATE : 1/23/2017 11:00 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 42

3751-00-70

Line	Item	Item Description	Unit	Total	Qty
0010	201.0110	Clearing	SY	540.000	540.000
0020	201.0120	Clearing	ID	570.000	570.000
0030	201.0210	Grubbing	SY	555.000	555.000
0040	201.0220	Grubbing	ID	905.000	905.000
0050	203.0100	Removing Small Pipe Culverts	EACH	15.000	15.000
0060	204.0100	Removing Pavement	SY	2,845.000	2,845.000
0070	204.0115	Removing Asphaltic Surface Butt Joints	SY	160.000	160.000
0080	204.0120	Removing Asphaltic Surface Milling	SY	3,350.000	3,350.000
0090	204.0165	Removing Guardrail	LF	90.000	90.000
0100	205.0100	Excavation Common	CY	17,300.000	17,300.000
0110	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 3751-00-70	LS	1.000	1.000
0120	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	15.000	15.000
0130	213.0100	Finishing Roadway (project) 01. 3751-00-70	EACH	1.000	1.000
0140	214.0100	Obliterating Old Road	STA	3.000	3.000
0150	305.0110	Base Aggregate Dense 3/4-Inch	TON	200.000	200.000
0160	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	7,200.000	7,200.000
0170	311.0110	Breaker Run	TON	2,450.000	2,450.000
0180	416.0160	Concrete Driveway 6-Inch	SY	20.000	20.000
0190	440.4410	Incentive IRI Ride	DOL	4,850.000	4,850.000
0200	455.0605	Tack Coat	GAL	205.000	205.000
0210	460.5223	HMA Pavement 3 LT 58-28 S	TON	1,385.000	1,385.000
0220	460.5224	HMA Pavement 4 LT 58-28 S	TON	1,015.000	1,015.000
0230	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	129.000	129.000
0240	465.0315	Asphaltic Flumes	SY	9.000	9.000
0250	520.1012	Apron Endwalls for Culvert Pipe 12-Inch	EACH	13.000	13.000
0260	521.0112	Culvert Pipe Corrugated Steel 12-Inch	LF	295.000	295.000
0270	522.0112	Culvert Pipe Reinforced Concrete Class III 12-Inch	LF	255.000	255.000
0280	522.0118	Culvert Pipe Reinforced Concrete Class III 18-Inch	LF	130.000	130.000
0290	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	75.000	75.000
0300	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	4.000	4.000
0310	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	1.000	1.000
0320	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	2.000	2.000
0330	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	675.000	675.000
0340	602.0405	Concrete Sidewalk 4-Inch	SF	50.000	50.000
0350	606.0200	Riprap Medium	CY	186.000	186.000
0360	606.0300	Riprap Heavy	CY	70.000	70.000
0370	611.0530	Manhole Covers Type J	EACH	1.000	1.000

3751-00-70

Line	Item	Item Description	Unit	Total	Qty
0380	611.2004	Manholes 4-FT Diameter	EACH	1.000	1.000
0390	614.2300	MGS Guardrail 3	LF	452.000	452.000
0400	614.2610	MGS Guardrail Terminal EAT	EACH	2.000	2.000
0410	616.0600.S	Fence Temporary	LF	500.000	500.000
0420	619.1000	Mobilization	EACH	1.000	1.000
0430	623.0200	Dust Control Surface Treatment	SY	4,650.000	4,650.000
0440	624.0100	Water	MGAL	200.000	200.000
0450	625.0100	Topsoil	SY	2,810.000	2,810.000
0460	625.0500	Salvaged Topsoil	SY	14,030.000	14,030.000
0470	627.0200	Mulching	SY	10,290.000	10,290.000
0480	628.1504	Silt Fence	LF	3,120.000	3,120.000
0490	628.1520	Silt Fence Maintenance	LF	3,120.000	3,120.000
0500	628.1905	Mobilizations Erosion Control	EACH	1.000	1.000
0510	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0520	628.2002	Erosion Mat Class I Type A	SY	9,170.000	9,170.000
0530	628.7504	Temporary Ditch Checks 01. EROSION CONTROL DITCH WATTLES	LF	1,480.000	1,480.000
0540	628.7555	Culvert Pipe Checks	EACH	40.000	40.000
0550	628.7570	Rock Bags	EACH	50.000	50.000
0560	629.0205	Fertilizer Type A	CWT	9.700	9.700
0570	630.0130	Seeding Mixture No. 30	LB	105.000	105.000
0580	630.0200	Seeding Temporary	LB	70.000	70.000
0590	631.0300	Sod Water	MGAL	60.000	60.000
0600	631.1000	Sod Lawn	SY	7,650.000	7,650.000
0610	633.5200	Markers Culvert End	EACH	7.000	7.000
0620	634.0416	Posts Wood 4x4-Inch X 16-FT	EACH	7.000	7.000
0630	637.2210	Signs Type II Reflective H	SF	16.500	16.500
0640	638.2102	Moving Signs Type II	EACH	10.000	10.000
0650	638.2602	Removing Signs Type II	EACH	23.000	23.000
0660	638.3000	Removing Small Sign Supports	EACH	16.000	16.000
0670	642.5001	Field Office Type B	EACH	1.000	1.000
0680	643.0100	Traffic Control (project) 01. 3751-00-70	EACH	1.000	1.000
0690	643.0420	Traffic Control Barricades Type III	DAY	186.000	186.000
0700	643.0705	Traffic Control Warning Lights Type A	DAY	186.000	186.000
0710	643.1000	Traffic Control Signs Fixed Message	SF	64.000	64.000
0720	643.1050	Traffic Control Signs PCMS	DAY	28.000	28.000
0730	643.2000	Traffic Control Detour (project) 01. 3751-00-70	EACH	1.000	1.000
0740	643.3000	Traffic Control Detour Signs	DAY	6,890.000	6,890.000
0750	645.0120	Geotextile Type HR	SY	365.000	365.000
0760	646.0106	Pavement Marking Epoxy 4-Inch	LF	9,950.000	9,950.000

3751-00-70

Line	Item	Item Description	Unit	Total	Qty
0770	647.0576	Pavement Marking Stop Line Epoxy 24-Inch	LF	15.000	15.000
0780	650.5000	Construction Staking Base	LF	2,625.000	2,625.000
0790	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	675.000	675.000
0800	650.6000	Construction Staking Pipe Culverts	EACH	7.000	7.000
0810	650.8000	Construction Staking Resurfacing Reference	LF	1,400.000	1,400.000
0820	650.9910	Construction Staking Supplemental Control (project) 01. 3751-00-70	LS	1.000	1.000
0830	650.9920	Construction Staking Slope Stakes	LF	5,250.000	5,250.000
0840	690.0150	Sawing Asphalt	LF	215.000	215.000
0850	690.0250	Sawing Concrete	LF	20.000	20.000
0860	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	500.000	500.000
0870	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	600.000	600.000
0880	SPV.0060	Special 01. TREE PROTECTION	EACH	16.000	16.000
0890	SPV.0105	Special 01. DETENTION POND OUTLET STRUCTURE	LS	1.000	1.000
0900	SPV.0105	Special 02. CONSTRUCTION STAKING DETENTION POND	LS	1.000	1.000

ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE NOTED

TREE REMOVAL

STATION	LOCATION	201.0110 CLEARING SY	201.0120 CLEARING ID	201.0210 GRUBBING SY	201.0220 GRUBBING ID
21+00	Fox River Rd	68	-	68	-
24+85	Fox River Rd, 34' RT	56	-	56	-
30+85	Fox River Rd, 28' RT	-	18	-	18
32+20	Fox River Rd, 30' RT	-	-	-	10
32+35 - 33+55	Fox River Rd, 30' RT	165	-	165	-
32+55	Fox River Rd, 43' RT	-	-	-	32
34+20	Fox River Rd, 35' RT	-	10	-	10
34+80	Fox River Rd, 37' RT	-	-	-	16
35+65	Fox River Rd, 50' LT	-	48	-	48
36+05	Fox River Rd, 14' RT	-	-	-	12
36+25	Fox River Rd, 10' RT	-	-	-	12
36+35	Fox River Rd, 20' LT	-	-	-	14
36+65	Fox River Rd, 118' LT	-	-	-	30
36+80	Fox River Rd, 38' LT	-	-	-	8
37+30	Fox River Rd, 43' RT	-	-	-	12
37+30	Fox River Rd, 0'	-	-	-	24
37+30	Fox River Rd, 50' LT	-	-	-	60
37+85	Fox River Rd, 102' LT	-	-	-	24
37+95	Fox River Rd, 80' LT	-	-	-	14
38+00	Fox River Rd, 0'	-	24	-	24
38+10	Fox River Rd, 68' LT	-	-	-	14
38+30	Fox River Rd, 75' LT	-	-	-	14
38+40	Fox River Rd, 34' LT	-	-	-	20
38+50	Fox River Rd, 60' LT	-	-	-	18
38+55	Fox River Rd, 16' LT	-	48	-	48
38+70	Fox River Rd, 30' LT	-	42	-	42
38+85	Fox River Rd, 43' LT	-	12	-	12
39+00	Fox River Rd, 50' LT	-	24	-	24
39+05	Fox River Rd, 54' LT	-	18	-	18
39+30	Fox River Rd, 20'-53' LT	44	-	44	-
39+65	Fox River Rd, 40' LT	-	4	-	4
39+70	Fox River Rd, 31' LT	-	6	-	6
39+75	Fox River Rd, 42' LT	-	4	-	4
40+15	Fox River Rd, 27' LT	-	16	-	16
40+50 - 41+75	Fox River Rd, 25' LT	153	-	153	-
40+85	Fox River Rd, 40' LT	-	8	-	8
41+55	Fox River Rd, 25' RT	-	20	-	20
43+00	Fox River Rd, 55' LT	-	28	-	28
0+35	27 82nd St, 27' RT		26		26
0+50	82nd St, 15' LT	26	-	26	-
0+69	29 82nd St, 29' RT		24		24
0+80	82nd St, 14' LT	-	-	16	-
0+90	82nd St, 12' LT	-	8	-	8
0+95	37 82nd St, 37' RT		28		28
1+10	82nd St, 50' RT	-	28	-	28
1+13	50 82nd St, 50' RT		24		24
1+15	82nd St, 2' RT	-	10	-	10
1+25	82nd St, 3' RT	-	30	-	30
1+26	49 82nd St, 49' RT		26		26
1+30	82nd St, 50' RT	-	24	-	24
1+40	82nd St, 20' LT	-	12	-	12
1+45	82nd St, 4' RT	23	-	23	-
	PROJECT TOTAL	540	570	555	905

REMOVING PAVEMENT

STATION - STATION	LOCATION	204.0100 SY
31+00 - 41+25	Fox River Rd	2450
0+15 - 2+00	82nd St	395
	PROJECT TOTAL	2845

REMOVING ASPHALT

STATION - STATION	LOCATION	204.0115 REMOVING ASPHALT SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALT SURFACE MILLING SY
19+75 - 31+00	Fox River Rd	-	2690
41+25 - 44+00	Fox River Rd	-	660
0+00- 0+15	82nd St	40	-
19+50 - 19+75	Fox River Rd	60	-
44+00 - 44+25	Fox River Rd	60	-
	PROJECT TOTAL	160	3350

REMOVING GUARD RAIL

STATION-STATION	LOCATION	204.0165 LF
36+72 - 37+37	Fox River Road, RT	90
	PROJECT TOTAL	90

REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	COMMENTS
20+00 LT	Fox River Road	1	EXISTING DRIVEWAY (12" PIPE)
21+60 LT	Fox River Road	1	EXISTING DRIVEWAY (10" PIPE)
21+90 LT	Fox River Road	1	EXISTING DRIVEWAY (12" PIPE)
30+35 RT	Fox River Road	1	EXISTING DRIVEWAY (15" PIPE)
33+70 RT	Fox River Road	1	EXISTING DRIVEWAY (15" PIPE)
34+10 RT	Fox River Road	1	EXISTING DRIVEWAY (20" PIPE)
35+00 LT	Fox River Road	1	EXISTING DRIVEWAY (15" PIPE)
35+80 RT	Fox River Road	1	EXISTING DRIVEWAY (20" PIPE)
36+85 RT	Fox River Road	1	EXISTING DRIVEWAY (12" PIPE)
38+10 RT	Fox River Road	1	EXISTING DRIVEWAY (15" PIPE)
40+30 LT	Fox River Road	1	EXISTING DRIVEWAY (15" PIPE)
41+45	Fox River Road	1	EXISTING DRIVEWAY (15" PIPE)
41+75 LT	82nd St	1	UNDER ROADWAY (12" PIPE)
44+25	Fox River Road	1	UNDER ROADWAY (24" PIPE)
1+05 RT	82nd St	1	EXISTING DRIVEWAY (12" PIPE)
	PROJECT TOTAL	15	

ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE NOTED

EARTHWORK SUMMARY

STATION -STATION	LOCATION	1 205.0100 EXCAVATION COMMON CY	EXISTING TOPSOIL CY	(EX. PAV'T) UNUSABLE MATERIAL CY	EXCAVATION BELOW SUBGRADE CY	2 USABLE MATERIAL AVAILABLE CY	FILL VOLUME CY	3 EXPANDED FILL VOLUME CY	4 WASTE MATERIAL CY
STA 19+75 to STA 31+00	CTH W	3600	580	120		2900	270	300	2720
STA 31+00 to STA 41+00	CTH W	2350	860	350	1100	1140	1700	1950	640
STA 41+00 to STA 44+50	CTH W	1050	80	30		940	130	150	820
STA 38+55 to STA 39+00 LT.	CTH W	8800				8800			8800
STA 0+00TO STA 1+87	82nd STREET	400	50	20		330			350
	PROJECT TOTAL	16200	1570	520	1100	14110	2100	2400	13330
		1100							
		17300							

*NOTES: (1) CUT DOES NOT INCLUDE EBS
(2) USABLE MATERIAL AVAILABLE = EXCAVATION COMMON - EXCESS TOPSOIL - UNUSABLE MATERIAL
NOTE: THIS IS A WASTE PROJECT. THEREFORE, ALL USABLE MATERIAL WILL BE HAULED OFF JOB.
(3) FILL EXPANSION FACTOR = 1.15
(4) WASTE MATERIAL = UNSABLE MATERIAL + EBS + USABLE MATERIAL - EXPANDED FILL {(+) INDICATES WASTE (-) INDICATES BORROW}

PREPARING FOUNDATIONS FOR ASPHALT

LOCATION	211.0100 ASPH. PAVING (ID 3751-00-70) LS	211.0400 ASPH. SHOULDERS (ID 3751-00-70) STA
Fox River Rd & 82nd St	1	15
PROJECT TOTAL	1	15

FINISHING ROADWAY

STATION - STATION	LOCATION	213.0100 FINISHING ROADWAY (ID 3751-00-70) EACH
19+75 - 44+50 & 0+00 - 2+05	Fox River Rd. & 82nd St.	1
	PROJECT TOTAL	1

OBLITERATING OLD ROAD

STATION - STATION	LOCATION	214.0100 OBLITERATE OLD ROAD STA
35+00 - 38+00 RT	Fox River Rd	3
	PROJECT TOTAL	3

BREAKER RUN

STATION - STATION	LOCATION	311.0110 TON
31+00 - 41+25	Fox River Rd	2450
	PROJECT TOTAL	2450

TEMPORARY FENCING

STATION	OFFSET	LOCATION	616.0600.S FENCE TEMPORARY LF
37+94 TO 39+71 LT UNDISTRUBUTED	225'	Fox River Rd	410
			90
		PROJECT TOTAL	500

FILE NAME : _____ PLOT DATE : 07-24-2016 PLOT BY : KEVIN RISCH PLOT NAME : _____ PLOT SCALE : 1:1

ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE NOTED

CULVERT PIPES

STATION	LOCATION	520.1012 APRON ENDWALLS FOR CULVERT PIPE 12-INCH EA	521.0112 CULVERT PIPE CORRUGATED STEEL 12-INCH LF	522.0112 CULVERT PIPE REINF. CONCRETE CLASS III 12-INCH LF	522.0118 CULVERT PIPE REINF. CONCRETE CLASS III 18-INCH LF	522.0124 CULVERT PIPE REINF. CONCRETE CLASS III 24-INCH LF	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONC. 12-INCH EA	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONC. 18-INCH EA	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONC. 24-INCH EA
20+00 LT	Fox River Rd	2	25	-	-	-	-	-	-
34+10 RT	Fox River Rd	2	25	-	-	-	-	-	-
35+05 RT & LT	Under Fox River Rd	-	-	180	-	-	2	-	-
35+80 RT	Fox River Rd	2	50	-	-	-	-	-	-
36+85 RT	Fox River Rd	2	50	-	-	-	-	-	-
38+10 RT	Fox River Rd	1	65	-	-	-	-	-	-
38+25 RT & LT	Under Fox River Rd	-	-	-	130	-	-	1	-
40+30 LT	Fox River Rd	2	45	-	-	-	-	-	-
41+90 RT & LT	Under Fox River Rd	-	-	-	-	75	-	-	2
1+43 RT	82nd Street	2	35	-	-	-	-	-	-
1+49 RT & LT	Under 82nd St	-	-	75	-	-	2	-	-
	PROJECT TOTAL	13	295	255	130	75	4	1	2

CONCRETE DRIVEWAY

STATION - STATION	LOCATION	416.0160 6-INCH SY
25+43 - 25+75	Fox River Road, RT	20
	PROJECT TOTAL	20

BASE AGGREGATE

STATION - STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4" TON	305.0120 BASE AGGREGATE DENSE 1 1/4" TON	COMMENTS
19+75 - 31+00	Fox River Rd	69	2028	
31+00 - 41+25	Fox River Rd	63	3752	
41+25 - 44+00	Fox River Rd	17	496	
0+00 - 2+00	82nd St	37	637	
20+00 LT	Fox River Road	-	17	DRIVEWAY
25+60 RT	Fox River Road	-	10	DRIVEWAY
29+25 RT	Fox River Road	-	14	DRIVEWAY
30+35 RT	Fox River Road	-	9	DRIVEWAY
32+00 RT	Fox River Road	-	9	DRIVEWAY
34+10 RT	Fox River Road	-	14	DRIVEWAY
35+80 RT	Fox River Road	-	30	DRIVEWAY
36+85 RT	Fox River Road	-	35	DRIVEWAY
38+10 RT	Fox River Road	-	55	DRIVEWAY
40+30 LT	Fox River Road	-	20	DRIVEWAY
1+43 RT	82nd St	-	34	DRIVEWAY
	PROJECT TOTAL	200	7200	

MISCELLANEOUS ASPHALT PAVEMENT

STATION	LOCATION	465.0120 ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES TON	465.0315 ASPHALTIC FLUMES SY	COMMENTS
20+00 LT	Fox River Road	9	-	DRIVEWAY
25+60 RT	Fox River Road	6	-	DRIVEWAY
29+25 RT	Fox River Road	7	-	DRIVEWAY
30+35 RT	Fox River Road	5	-	DRIVEWAY
32+00 RT	Fox River Road	5	-	DRIVEWAY
34+10 RT	Fox River Road	8	-	DRIVEWAY
35+80 RT	Fox River Road	15	-	DRIVEWAY
36+85 RT	Fox River Road	18	-	DRIVEWAY
38+10 RT	Fox River Road	28	-	DRIVEWAY
40+30 LT	Fox River Road	10	-	DRIVEWAY
1+43 RT	82nd St	18	-	DRIVEWAY
32+25 RT	Fox River Rd	-	9	END of C&G
	PROJECT TOTAL	129	9	

NOTE: ASPHALT SURFACE TONNAGE IS BASED ON 4 INCHES THICK

INCENTIVE IRI RIDE

STATION - STATION	LOCATION	440.4410 INCENTIVE IRI RIDE DOL
19+75 - 44+00 EAST SIDE	Fox River Rd, RT	2425
19+75 - 44+00 WEST SIDE	Fox River Rd, LT	2425
	PROJECT TOTAL	4850

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WATER

STATION - STATION	LOCATION	624.0100 MGAL
UNDISTRIBUTED	UNDISTRIBUTED	200
	PROJECT TOTAL	200

CONCRETE CURB & GUTTER

STATION - STATION	LOCATION	601.0411 CONCRETE CURB &GUTTER 30-INCH TYPE D LF
25+50 - 32+25	Fox River Rd, RT	675
	PROJECT TOTAL	675

ASPHALT

STATION - STATION	LOCATION	455.0605 TACK COAT GAL	460.5223 HMA PAVEMENT 3 LT 58-28 S TON	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	ASPHALT THICKNESS (LOWER--UPPER)
19+75 - 31+00	Fox River Rd	135	375	-	2.5"
19+75 - 31+00	Fox River Rd	-	45	45	2.5"---2.5"
19+75 - 31+00	Fox River Rd	-	175	175	2.5"---2.5"
31+00 - 41+25	Fox River Rd	-	380	380	2.5"---2.5"
31+00 - 41+25	Fox River Rd	-	160	160	2.5"---2.5"
41+25 - 44+00	Fox River Rd	35	95	-	2.5"
41+25 - 44+00	Fox River Rd	-	15	15	2.5"---2.5"
41+25 - 44+00	Fox River Rd	-	45	45	2.5"---2.5"
0+00 - 2+00	82nd St	35	95	95	2.5"---2.5"
Super Elev. Wedge (undist.)	Sta 19+00 to 31+00			100	
	PROJECT TOTAL	205	1385	1015	

tack coat application: ## gal/SY used for calcualtions

SAWING

STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	COMMENTS
19+50	Fox River Road	25	-	TERMINI
19+75	Fox River Road	25	-	TERMINI
20+00 LT	Fox River Road	10	-	DRIVEWAY
25+60 RT	Fox River Road	-	20	DRIVEWAY
29+25 RT	Fox River Road	20	-	DRIVEWAY
30+35 RT	Fox River Road	15	-	DRIVEWAY
32+00 RT	Fox River Road	-	-	DRIVEWAY
34+10 RT	Fox River Road	-	-	DRIVEWAY
35+80 RT	Fox River Road	20	-	DRIVEWAY
36+85 RT	Fox River Road	10	-	DRIVEWAY
38+10 RT	Fox River Road	20	-	DRIVEWAY
40+30 LT	Fox River Road	15	-	DRIVEWAY
44+00	Fox River Road	25	-	TERMINI
44+25	Fox River Road	25	-	TERMINI
0+00	82nd St	20	-	TERMINI
0+25	83rd St	20	-	TERMINI
1+43 RT	82nd St	15	-	DRIVEWAY
	PROJECT TOTAL	215	20	

MOBILIZATION

STATION - STATION	LOCATION	619.1000 MOBILIZATION EACH
19+75 - 44.00 & 0+00 - 2+00	Fix River Rd & 82nd St	1
	PROJECT TOTAL	1

DUST CONTROL SURFACE TREATMENT

STATION - STATION	LOCATION	623.0200 SY
31+00 - 41+25	Fox River Rd	4100
0+00 - 2+00	82nd St	550
	PROJECT TOTAL	4650

CONRETE SIDEWALK 4 INCH

STATION - STATION	LOCATION	602.0405 CONRETE SIDEWALK 4 INCH SF
33+75 RT.	Fox River Rd	50
	PROJECT TOTAL	50

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MANHOLES

STATION	LOCATION	611.0530 MANHOLE COVER TYPE J EACH	611.2004 MANHOLES 4-FT DIAMETER EACH
38+50	Fox River Rd, 38.8' RT	1	1
	PROJECT TOTAL	1	1

MARKERS

STATION - STATION	LOCATION	633.5200 CULVERT END EA
34+55 RT	Fox River Rd	1
36+05 LT	Fox River Rd	1
38+50 RT	Fox River Rd	1
42+00 LT	Fox River Rd	1
41+75 RT	Fox River Rd	1
1+50 RT/LT	82nd St	2
	PROJECT TOTAL	7

FIELD OFFICE

LOCATION	642.5001 FIELD OFFICE TYPE B EACH
Fox River Rd	1
PROJECT TOTAL	1

SEMI-RIGID BARRIER SYSTEMS AND END TREATMENTS

STATION	LOCATION	614.2300 MIDWEST GUARDRAIL SYSTEM (MGS) 3 LF	614.2610 MIDWEST GUARDRAIL SYSTEM (MGS) ENERGY ABSORBING TERMINAL EA
39+00 - 43+50 RT	Fox River Rd	452	2
	PROJECT TOTAL	452	2

RIPRAP

STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	606.0300 RIPRAP HEAVY CY
32+75 RT	Fox River Rd	15	-
34+55 RT	Fox River Rd	11	-
36+05 LT	Fox River Rd	11	-
38+00 LT	Fox River Rd	135	-
38+75 RT	Fox River Rd	-	35
41+75 RT	Fox River Rd	-	35
42+00 LT	Fox River Rd	9	-
43+00 LT	Fox River Rd	5	-
	PROJECT TOTAL	186	70

FINISHING ITEMS

STATION - STATION	LOCATION	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	627.0200 MUCLHING SY	629.0205 FERTILIZER TYPE A CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY	
34+55 RT	Fox River Rd	-	-	-	-	-	-	1	5	sod around apron endwall
36+05 LT	Fox River Rd	-	-	-	-	-	-	1	5	sod around apron endwall
38+75 RT	Fox River Rd	-	-	-	-	-	-	1	5	sod around apron endwall
38+75 RT	Fox River Rd	-	-	-	-	-	-	1	30	sod after riprap
42+00 LT	Fox River Rd	-	-	-	-	-	-	1	10	sod around apron endwall
41+75 RT	Fox River Rd	-	-	-	-	-	-	1	55	sod beyond level spreader
19+75 - 31+00	Fox River Rd	760	5140	2400	1.5	45	-	16	2740	4" topsoil, sod through ditches
31+00 - 41+25	Fox River Rd	1160	3940	5600	3.5	15	-	12	2140	4" topsoil, sod through ditches
41+25 - 44+00	Fox River Rd	100	700	220	0.1	5	-	3	480	4" topsoil, sod through ditches
0+00 - 2+00	82nd St	70	450	450	0.3	10	-	-	-	4" topsoil, seed through ditches
35+50 - 38+25 LT	Fox River Rd (Pond)		3800	1620	1.0	30	-	13	2180	4" topsoil (Sod for pond)
35+00 - 38+00 RT	Old Fox River Road	720	-	-	3	-	-	-	-	Obliterated Road Area
	Salvaged Topsoil Pile						70			
	Undistributed Water for Seeded Areas							10		
	PROJECT TOTAL	2810	14030	10290	9.7	105	70	60	7650	

Total Disturbed Area (includes Obliterated Rd and new Alignment) = 20,900 SY

Quantity of water is 1 inch rain per week for 4 weeks

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EROSION CONTROL

STATION - STATION	LOCATION	628.7570 ROCK BAGS EA	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATION EROSION CONTROL EA	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL EA	628.2002 EROSION MAT CLASS 1 TYPE A SY	628.7504 TEMPORARY DITCH CHECK WATTLES (74 @ 20' EA) LF	628.7555 CULVERT PIPE CHECKS EA
19+75 - 31+00	Fox River Rd	-	1790	1790	1	3	2400	680	-
31+00 - 41+25	Fox River Rd	20	1130	1130	-	-	5600	520	30
41+25 - 44+00	Fox River Rd	20	-	-	-	-	220	100	-
0+00 - 2+00	82nd St	-	-	-	-	-	450	80	-
	UNDISTRIBUTED	10	200	200			500	100	10
	PROJECT TOTAL	50	3120	3120	1	3	9170	1480	40

TRAFFIC CONTROL ITEMS

LOCATION	643.0100 TRAFFIC CONTROL (ID 3751-00-70) EACH	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAYS	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS	643.1000 TRAFFIC CONTROL SIGN FIXED MESSAGE SF	643.1050 TRAFFIC CONTROL SIGNS PCMS DAYS	643.2000 TRAFFIC CONTROL DETOUR (ID 3751-00-70) EACH	643.3000 TRAFFIC CONTROL DETOUR SIGNS DAYS	TOTAL SIGNS
Fox River Rd.	1	-	-	64		1	-	
Fox River Rd. north of project	-	-	-	-	14	-	1210	13
Fox River Rd project area	-	186	186	-	-	-	-	
CTH JI	-	-	-	-	-	-	2050	22
CTH F	-	-	-	-	-	-	2420	26
Fox River Rd south of project	-	-	-	-	14	-	1210	13
				-				
PROJECT TOTAL	1	186	186	64	28	1	6890	

GEOTEXTILE FABRIC

STATION - STATION	LOCATION	645.0120 TYPE HR SY
32+75 RT	Fox River Rd	30
34+55 RT	Fox River Rd	21
36+05 LT	Fox River Rd	21
38+00 LT	Fox River Rd	162
38+75 RT	Fox River Rd	67
41+75 RT	Fox River Rd	37
42+00 LT	Fox River Rd	17
43+00 LT	Fox River Rd	10
	PROJECT TOTALS	365

PAVEMENT MARKING

STATION	LOCATION	647.0106 PAVEMENT MARKING EPOXY 4-INCH LF	647.0576 PAVEMENT MARKING STOP LINE EPOXY 24-INCH LF	COMMENT
19+75 - 42+00	Fox River Rd	4450	-	double yellow
43+00 - 44+50	Fox River Rd	300	-	double yellow
20+25-44+50 RT	Fox River Rd	2425	-	edgeline white (N)
19+75 - 42+00 LT	Fox River Rd	2225	-	edgeline white (S)
43+00 - 44+50 LT	Fox River Rd	150	-	edgeline white (S)
0+00 - 2+05 LT	82nd St	200	-	edgeline white (W)
0+00 - 2+05 RT	82nd St	200	-	edgeline white (E)
1+50	82nd St	-	15	
	PROJECT TOTALS	9950	15	

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PERMANENT SIGNING

STATION	LOCATION	TYPE	634.0416 POSTS WOOD 4X4-INCH 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	COMMENT
21+00 RT	Fox River Rd	W013-1 36"x36"	1	-	1	-	-	
29+50 RT	Fox River Rd	EXIST. ADDRESS	-	-	1	-	-	#8421 - Reuse Sign Support
30+25 RT	Fox River Rd	EXIST. ADDRESS	-	-	1	-	-	#8347 - Reuse Sign Support
31+30 RT&LT	Fox River Rd	W01-1L	1	-	1	2	2	on same post as signs W013-1 36"x36"
31+30 RT&LT	Fox River Rd	W013-1 36"x36"	1	-	1	2	-	on same post as signs W01-1L
32+10 RT	Fox River Rd	EXIST. ADDRESS	-		1	-	-	#8231 - Reuse Sign Support
33+50 RT	Fox River Rd	R2-1 24"x30"	1	5.0	-	-	-	
33+95 RT	Fox River Rd	EXIST. ADDRESS	-		1	-	-	#8315 - Reuse Sign Support
34+40 RT	Fox River Rd	W01-1L	-	-	-	1	1	on same post as sign W013-1 36"x36"
34+40 RT	Fox River Rd	W013-1 36"x36"	-	-	-	1	-	on same post as sign W01-1L
36+00 RT	Fox River Rd	EXIST. ADDRESS	-		-	1	-	
36+20 RT	Fox River Rd	W01-1L	-	-	-	1	1	on same post as sign W5-52L 12"x36"
36+20 RT	Fox River Rd	W5-52L 12"x36"	-	-	-	1	1	on same post as sign W01-1L
36+51 RT	Fox River Rd	W1-8	-	-	-	1	1	CHEVRON LT
36+61 RT	Fox River Rd	W1-6 48"x24"	-		-	1	1	ARROW LT
36+62 RT	Fox River Rd	EXIST. ADDRESS	-	-	-	1	1	#8230
36+78 RT	Fox River Rd	W1-8	-	-	-	1	1	CHEVRON RT
37+00 RT	Fox River Rd	EXIST. ADDRESS	-	-	1	-	-	#8239 - Reuse Sign Support
37+05 RT	Fox River Rd	W1-6 48"x24"	-	-	-	1	1	ARROW RT
37+20 RT	Fox River Rd	W1-8	-	-	-	1	1	CHEVRON LT
37+40 RT	Fox River Rd	W1-8	-	-	-	1	1	CHEVRON LT
37+65 RT	Fox River Rd	EXIST. ADDRESS	-	-	1	-	-	#8221 - Reuse Sign Support
39+00 LT	Fox River Rd	R2-1 24"x30"	1	5.0	-	-	-	
40+10 RT&LT	Fox River Rd	W01-1R	-	-	-	2	2	on same post as signs W013-1 36"x36"
40+10 RT&LT	Fox River Rd	W013-1 36"x36"	-	-	-	2	-	on same post as signs W01-1L
42+95 RT	Fox River Rd	JCT CTH FR	1	-	1	-	-	
44+30 LT	Fox River Rd	W01-1R	-	-	-	1	1	on same post as signs W013-1 36"x36"
44+30 LT	Fox River Rd	W013-1 36"x36"	-	-	-	1	-	on same post as signs W01-1R
2+00 RT	82nd St	R1-1 30"x30"	-	-	-	1	1	
1+60 RT	82nd St	R1-1 30"x30"	1	6.5	-	-	-	
		PROJECT TOTALS	7	16.5	10	23	16	

DETENTION POND OUTLET STRUCTURE

STATION	LOCATION	SPV.0105.01 DETENTION POND OUTLET STRUCTURE LS
38+50	Fox River Rd, 38.8' RT	1
	PROJECT TOTAL	1

TREE PROTECTION

STATION	LOCATION	SPV.0060.01 TREE PROTECTION EACH
19+45 RT	Fox River Rd	1
19+60 LT	Fox River Rd	1
19+85 LT	Fox River Rd	1
20+75 LT	Fox River Rd	1
21+25 LT	Fox River Rd	1
24+85 RT	Fox River Rd	1
25+35 RT	Fox River Rd	1
25+85 RT	Fox River Rd	1
27+45 RT	Fox River Rd	1
27+65 RT	Fox River Rd	1
30+65 RT	Fox River Rd	1
31+05 RT	Fox River Rd	1
41+70 LT	Fox River Rd	1
1+10 LT	82nd Street	1
1+10 LT	82nd Street	2
	PROJECT TOTAL	16

CONSTRUCTION STAKING

STATION - STATION	LOCATION	650.5000 CONSTRUCTION STAKING BASE LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EA	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (ID 3750-00-70) LS	SPV.0105.02 CONSTRUCTION STAKING DETENTION POND LS
19+75 - 44+00 & 0+00 - 2+00	Fox River Rd & 82nd St	2625	-	-	-	-	1	1
25+50 - 32+25	Fox River Rd, RT	-	675	-	-	-	-	-
34+55 RT	Fox River Rd	-	-	1	-	-	-	-
36+05 LT	Fox River Rd	-	-	1	-	-	-	-
38+50 RT	Fox River Rd	-	-	1	-	-	-	-
42+00 LT	Fox River Rd	-	-	1	-	-	-	-
41+75 RT	Fox River Rd	-	-	1	-	-	-	-
19+75 - 31+00 & 41+25 - 44+00	Fox River Rd	-	-	-	1400	-	-	-
19+75 - 44+00 & 0+00-2+00	Fox River Rd & 82nd St	-	-	2	-	5250.0	-	-
							-	-
	PROJECT TOTAL	2625	675	7	1400	5250	1	1

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

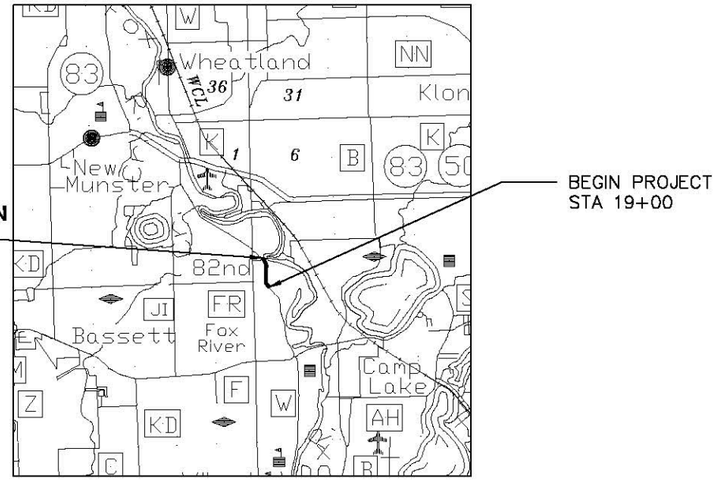
TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJECT NO. 3751-00-00

CTH W
2300 FEET SOUTH OF 82ND
STREET TO 82ND STREET
CTH W
KENOSHA COUNTY

DOCUMENT
1779296
RECORDED
At Kenosha County, Kenosha WI 53140
JoAllyn N. Storz, Register of Deeds
August 30, 2016 12:20 PM
$25.00
Pages 2
20145

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3751-00-00-4.00
SHEET 2 OF 2



LAYOUT
0 1 MILE 2 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.49 mi

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTHERN ZONE, NAD27. SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION CONTROL SURVEY SUMMARY DIAGRAM, DATED AUGUST 2011. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: PLAN OF ERICKSON, FOX RIVER COUNTRY ESTATES, CERTIFIED SURVEY MAP 604, CERTIFIED SURVEY MAP 712, CERTIFIED SURVEY MAP 2676.

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

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

A HIGHWAY EASEMENT (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE.

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

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	RELEASE OF RIGHTS	ROR
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET.AL.	SECTION	SEC.
CENTERLINE	C/L	STATION	STA.
CERTIFIED SURVEY MAP	CSM	TEMPORARY LIMITED EASEMENT	TLE
CORNER	COR.	VOLUME	V.
DOCUMENT	DOC.		
EASEMENT	EASE.		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	PL		
RECORDED AS	(100')		
REFERENCE LINE	R/L		

CURVE DATA

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

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LP (1" UNLESS NOTED)	PROPOSED R/W LINE	
R/W MONUMENT	•	EXISTING H.E. LINE	
SIGN	SIGN	PROPERTY LINE	
SECTION CORNER MONUMENT		LOT & TIE LINES	
		SLOPE INTERCEPTS	
FEE (HATCH VARIES)		ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)	
TEMPORARY LIMITED EASEMENT		ACCESS RESTRICTED (BY ACQUISITION)	
PERMANENT LIMITED EASEMENT		ACCESS RESTRICTED (BY STATUTORY AUTHORITY)	
R/W BOUNDARY POINT	200		
PARCEL NUMBER	102	SECTION LINE	
UTILITY INTEREST	45	QUARTER LINE	
SIGN NUMBER (OFF PREMISE)	21	SIXTEENTH LINE	
		EXISTING CENTERLINE	
BUILDING		PROPOSED REFERENCE LINE	
		PARALLEL OFFSET	

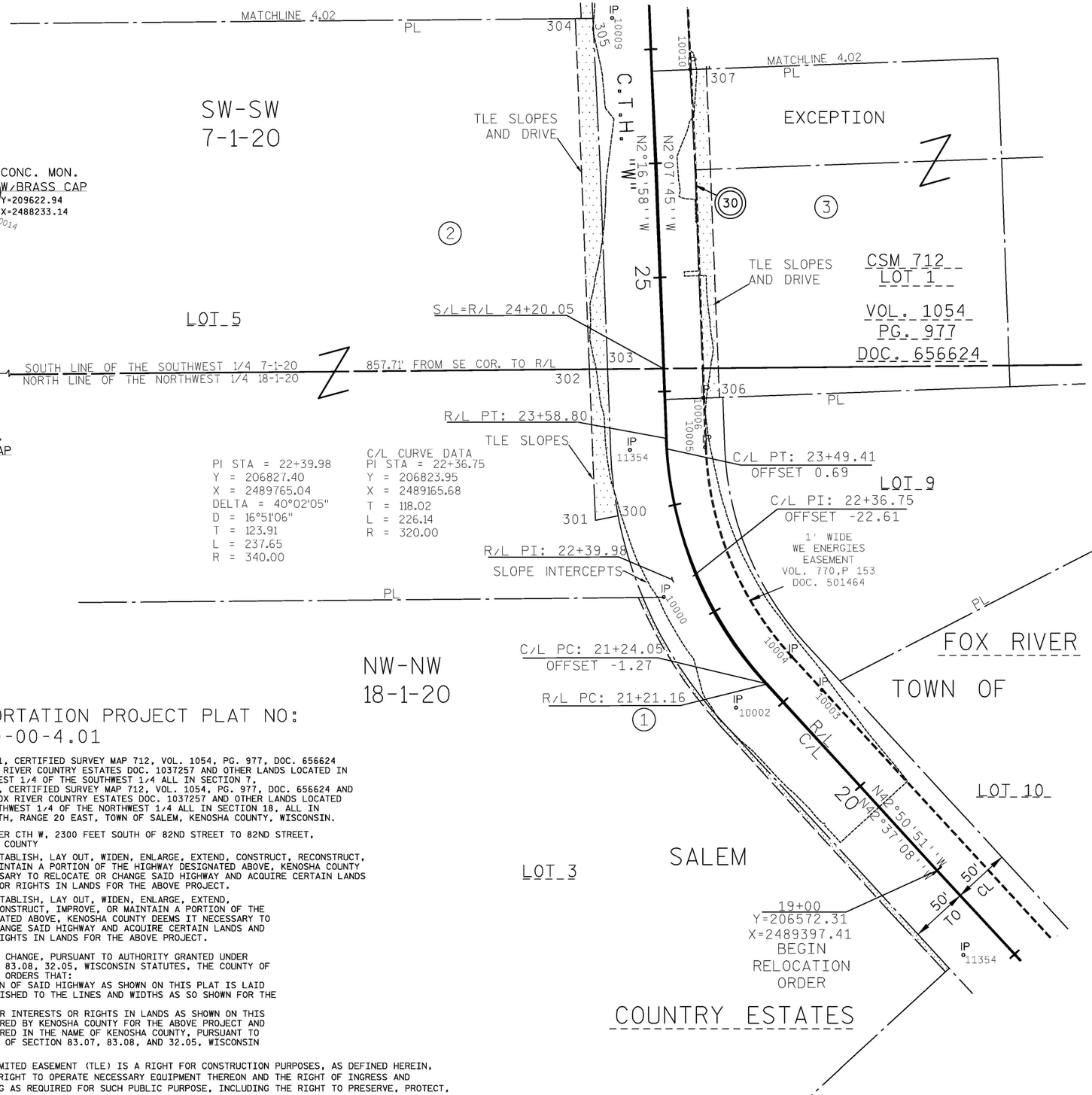
CONVENTIONAL UTILITY SYMBOLS

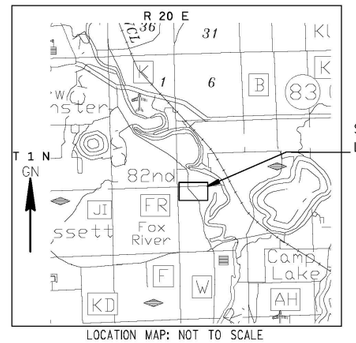
	NON COMPENSABLE	COMPENSABLE
WATER —W—		
GAS —G—		
TELEPHONE —T—		
OVERHEAD —OH—		
TRANSMISSION LINES		
ELECTRIC —E—		
CABLE TELEVISION —TV—		
FIBER OPTIC —FO—		
SANITARY SEWER —SAN—		
STORM SEWER —SS—		
POWER POLE	○	●
TELEPHONE POLE	⌀	⌀
TELEPHONE PEDESTAL	⌑	⌑
ELECTRIC TOWER	⊠	■

FILE NAME : F:\PROJECTS\14-059-028 CTH W PLAT\SURVEY\CAD\TITLE.DWG
APPRAISAL PLAT DATE : 8/19/16

PLOT DATE : 10/3/2016 7:08 AM PLOT BY : ANTHONY GROMACKI PLOT NAME : _____PLOT SCALE : C

3751-00-00 4.00





LOCATION MAP: NOT TO SCALE

GN

0 50 100
SCALE, FEET

DOCUMENT
1779296
RECORDED
At Kenosha County, Kenosha WI 53140
Jo&Ilya M. Storz, Register of Deeds
August 30, 2016 12:20 PM
$25.00
Pages 2
20145

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3751-00-00-4.01
SHEET 1 OF 2

SCHEDULE OF LAND AND INTEREST REQUIRED		OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT				
PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED ACRES NEW	R/W REQUIRED ACRES EXISTING	R/W REQUIRED ACRES TOTAL	T.L.E. TEMP ACRES
1	CHRIS L. AND PATRICIA L. RAINEY	TLE				0.040
2	RAY E. AND JANICE LANE	TLE				0.160
3	PAUL L. AND SHERRY A. UDVARE	TLE				0.049

ROAD NAME	BASIS OF EXISTING R/W	WIDTH	YEAR
CTH W	FOX RIVER COUNTRY ESTATES	100'	1996
CTH W	CSM 712	50'	1979

EASEMENT TABLE		
OWNER	RECORDING INFORMATION	LOCATED IN R/W PARCEL
WE ENERGIES ELECTRIC	1' WIDE EASEMENT VOL. 770, P 153 DOC. 501464	3

UTILITY INTEREST REQUIRED		
UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
30	WE ENERGIES ELECTRIC	RELEASE OF RIGHTS

RECOVERED MONUMENTS			
POINT	DESCRIPTION	Y	X
10000	1.5" IRON PIPE	206940.98	2489128.29
10001	0.75" IRON PIPE	206812.02	2489157.89
10002	1.5" IRON PIPE	206715.10	2489221.33
10003	0.75" BENT S	206730.58	2489296.55
10004	1.5" IRON PIPE	206759.71	2489269.86
10005	1.5" IRON PIPE	206943.38	2489194.20
10006	1.5" IRON PIPE	206986.78	2489192.60
10009	0.75" IRON PIPE	207319.50	2489112.68
10010	1.5" IRON PIPE	207274.51	2489181.10
11354	0.75" IRON PIPE	206498.28	2489420.61

STATION OFFSET TABLE		
Point	Station	Offset
294	18+29.85	50.41' LT
295	18+29.87	55.00' LT
296	21+21.16	55.00' LT
297	21+23.46	51.27' LT
298	22+37.00	55.00' LT
299	22+35.77	51.55' LT
304	27+29.50	65.05' LT
305	27+29.04	49.73' LT
306	23+92.81	48.00' RT
300	23+00.93	50.57' LT
301	23+01.24	70.87' LT
302	24+22.06	65.00' LT
303	24+21.56	48.99' LT
307	26+80.85	48.00' RT

TRANSPORTATION PROJECT PLAT NO: 3751-00-00-4.01

THAT PART LOT 1, CERTIFIED SURVEY MAP 712, VOL. 1054, PG. 977, DOC. 656624 AND LOT 5, FOX RIVER COUNTRY ESTATES DOC. 1037257 AND OTHER LANDS LOCATED IN THE THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 ALL IN SECTION 7, AND PART LOT 1, CERTIFIED SURVEY MAP 712, VOL. 1054, PG. 977, DOC. 656624 AND LOT 3, LOT 5 FOX RIVER COUNTRY ESTATES DOC. 1037257 AND OTHER LANDS LOCATED IN THE THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 ALL IN SECTION 18, ALL IN TOWNSHIP 1 NORTH, RANGE 20 EAST, TOWN OF SALEM, KENOSHA COUNTY, WISCONSIN.

RELOCATION ORDER CTH W, 2300 FEET SOUTH OF 82ND STREET TO 82ND STREET, CTH W, KENOSHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, KENOSHA COUNTY DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, KENOSHA COUNTY DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 83.07, 83.08, 32.05, WISCONSIN STATUTES, THE COUNTY OF KENOSHA HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY KENOSHA COUNTY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF KENOSHA COUNTY, PURSUANT TO THE PROVISIONS OF SECTION 83.07, 83.08, AND 32.05, WISCONSIN STATUTES.

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

M SQUARED ENGINEERING
W62 N215 WASHINGTON AVE.
CEDARBURG WI. 53012

I ANTHONY J. GROMACKI, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF KENOSHA COUNTY, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 3751-00-00 4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

ANTHONY J. GROMACKI
P.L.S. NUMBER S-2090

8/29/16
DATE

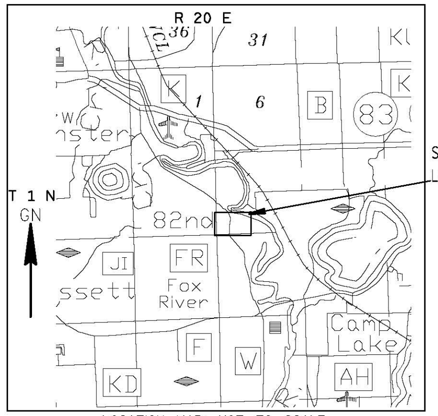
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR KENOSHA COUNTY, WISCONSIN

GARY SIPERNA

9/36
DATE

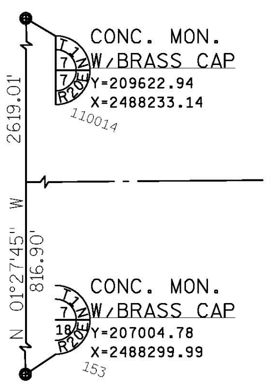
REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2. OF DOCUMENT NO. 1779296 FOR ADDITIONAL INFORMATION.

4



LOCATION MAP: NOT TO SCALE

SCHEDULE OF LAND AND INTEREST REQUIRED		OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT				
PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED ACRES NEW	EXISTING	TOTAL	T.L.E. TEMP ACRES
4	JOHN W. AND JANET M. ENDICOTT	TLE				0.130
5	DONALD C. GAUL	TLE				0.042
6	JOESPH T. STEPHENS	TLE				0.095



C/L CURVE DATA
PI STA = 30+09.77
Y = 207601.74
X = 2489132.11
T = 89.64
L = 178.80
R = 1000.00

PI STA = 30+46.11
Y = 207638.20
X = 2489133.06
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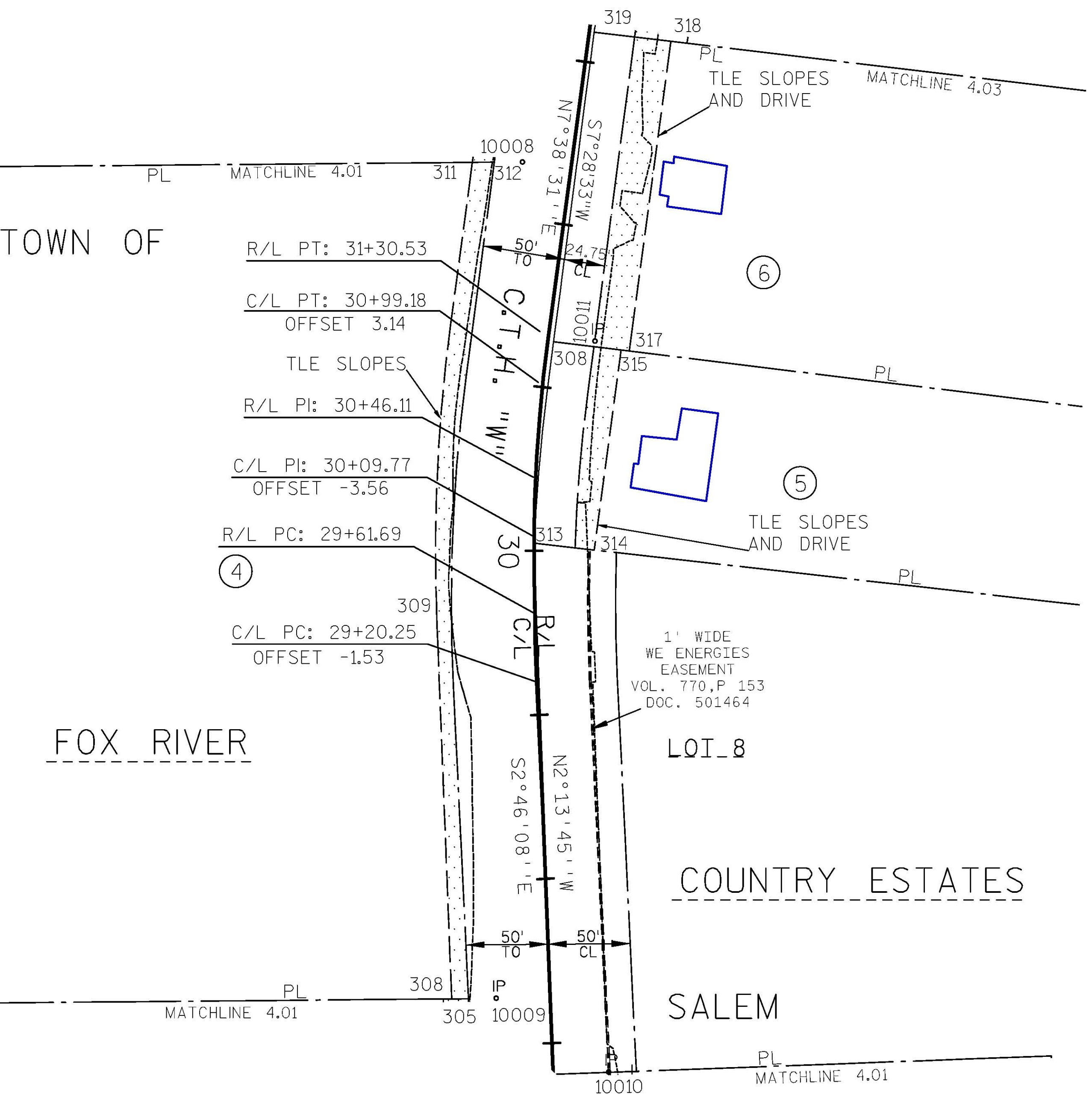
D = 5°50'47"
T = 84.63
L = 168.84
R = 980.00



ROAD NAME	BASIS OF EXISTING R/W	WIDTH	YEAR
CTH W	FOX RIVER COUNTRY ESTATES	100'	1996

RECOVERED MONUMENTS

POINT	DESCRIPTION	Y	X
10008	0.75" IRON PIPE	207828.84	2489128.68
10009	0.75" IRON PIPE	207319.50	2489112.68
10010	1.5" IRON PIPE	207274.51	2489181.10
10011	1" IRON PIPE	207719.79	2489172.91

STATION OFFSET TABLE

Point	Station	Offset
308	27+29.35	60.00' LT
309	29+57.31	60.00' LT
310	31+30.53	60.00' LT
311	32+30.01	60.00' LT
312	32+31.96	46.74' LT
313	30+01.86	24.97' RT
314	30+00.51	36.72' RT
315	31+28.68	45.00' RT
316	31+28.52	28.31' RT
317	31+28.73	50.00' RT
318	33+19.27	50.00' RT
319	33+18.94	27.76' RT

GN

0 50 100
SCALE, FEET

TRANSPORTATION PROJECT PLAT NO: 3751-00-00-4.02

THAT PART OF LOT 6 FOX RIVER COUNTRY ESTATES DOC. 1037257 AND OTHER LANDS LOCATED IN THE NORTHWEST 1/4 AND THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 ALL IN SECTION 7, TOWNSHIP 1 NORTH, RANGE 20 EAST, TOWN OF SALEM, KENOSHA COUNTY, WISCONSIN.

RELOCATION ORDER CTH W, 2300 FEET SOUTH OF 82ND STREET TO 82ND STREET, CTH W, KENOSHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, KENOSHA COUNTY DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, KENOSHA COUNTY DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 83.07, 83.08, 32.05, WISCONSIN STATUTES, THE COUNTY OF KENOSHA HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY KENOSHA COUNTY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF KENOSHA COUNTY, PURSUANT TO THE PROVISIONS OF SECTION 83.07, 83.08, AND 32.05, WISCONSIN STATUTES.

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

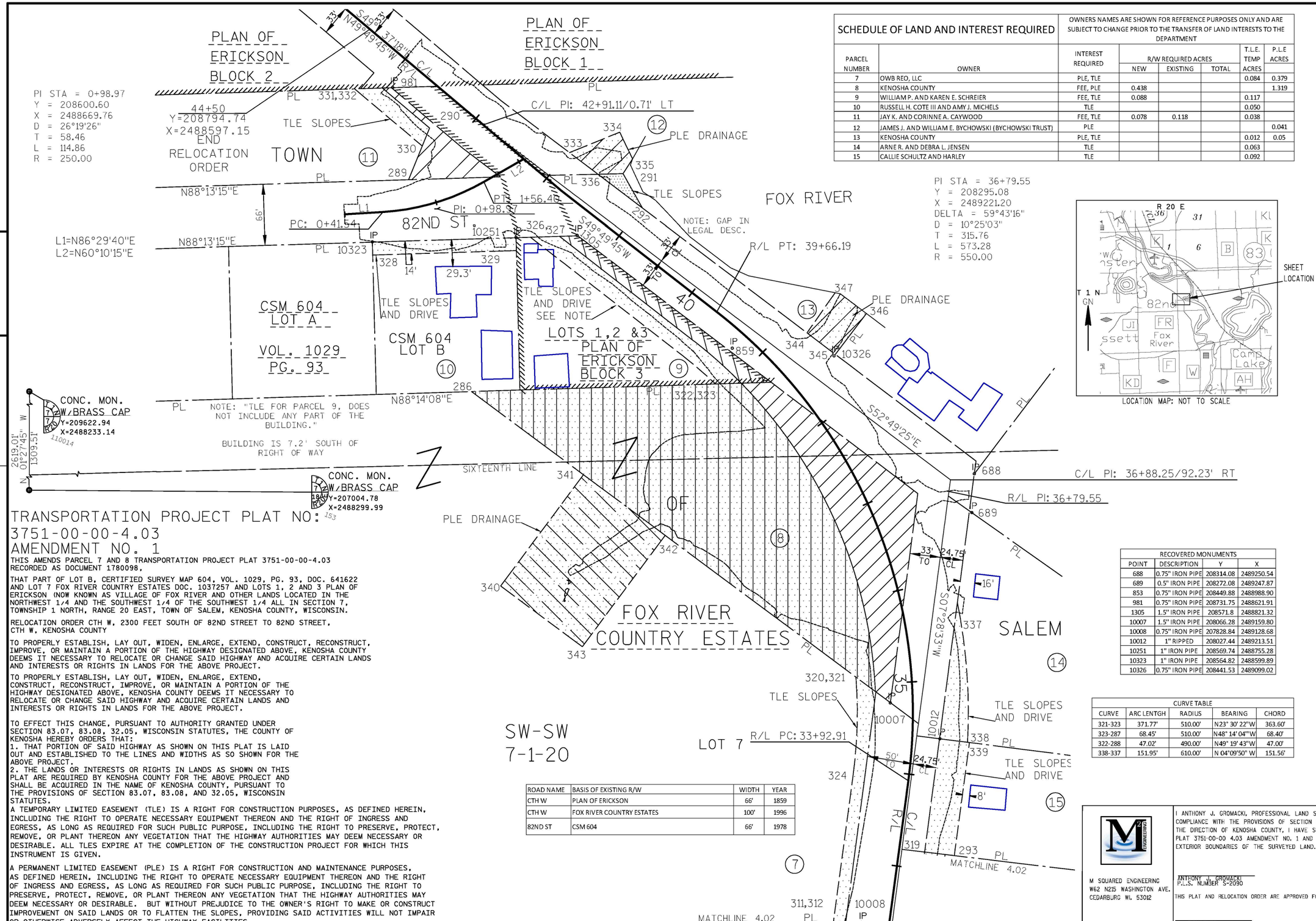
M SQUARED ENGINEERING
W62 N215 WASHINGTON AVE.
CEDARBURG WI. 53012

I ANTHONY J. GROMACKI, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF KENOSHA COUNTY, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 3751-00-00 4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

ANTHONY J. GROMACKI — DATE
P.L.S. NUMBER S-2090

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR KENOSHA COUNTY, WISCONSIN

SIGNATURE — DATE



SCHEDULE OF LAND AND INTEREST REQUIRED		OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT					
PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED ACRES			T.L.E. TEMP ACRES	P.L.E ACRES
			NEW	EXISTING	TOTAL		
7	OWB REO, LLC	PLE, TLE				0.084	0.379
8	KENOSHA COUNTY	FEE, PLE	0.438				1.319
9	WILLIAM P. AND KAREN E. SCHREIER	FEE, TLE	0.088			0.117	
10	RUSSELL H. COTE III AND AMY J. MICHELS	TLE				0.050	
11	JAY K. AND CORINNE A. CAYWOOD	FEE, TLE	0.078	0.118		0.038	
12	JAMES J. AND WILLIAM E. BYCHOWSKI (BYCHOWSKI TRUST)	PLE					0.041
13	KENOSHA COUNTY	PLE, TLE				0.012	0.05
14	ARNE R. AND DEBRA L. JENSEN	TLE				0.063	
15	CALLIE SCHULTZ AND HARLEY	TLE				0.092	

DOCUMENT
1780098
RECORDED
At Kenosha County, Kenosha WI 53140
JoEllyn M. Storz, Register of Deeds
September 09, 2016 11:24 AM
$25.00
Pages 1
20147

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3751-00-00-4.03
AMENDMENT NO. 1

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2. OF DOCUMENT NO. 1779296 FOR ADDITIONAL INFORMATION.

LOCATION MAP: NOT TO SCALE

GN
0 50 100
SCALE, FEET

STATION OFFSET TABLE		
Point	Station	Offset
286	41+22.46	230.88' LT
287	39+66.19	40.00' LT
288	39+66.19	60.00' LT
289	0+75.45	31.15' LT
290	43+31.75	40.00' LT
291	41+37.87	55.58' RT
292	40+98.65	39.20' RT
293	33+19.41	60.00' RT
321	34+91.44	40.00' LT
322	39+13.41	60.00' LT
323	38+92.37	40.00' LT
324	33+92.91	60.00' LT
326	41+74.76	60.00' LT
327	41+50.67	40.00' LT
328	0+27.44	45.56' RT
329	1+51.52	81.85' RT
330	43+25.23	60.00' LT
331	44+20.98	60.01' LT
332	43+98.72	40.00' LT
333	41+91.69	37.54' RT
334	41+69.18	74.41' RT
335	41+39.18	73.96' RT
336	41+59.61	38.60' RT
337	35+74.74	60.00' RT
338	34+37.73	60.00' RT
339	34+37.60	62.02' RT
340	39+68.31	377.44' LT
341	39+71.64	227.47' LT
342	37+95.03	208.63' LT
343	36+62.41	344.43' LT
344	38+82.39	48.85' RT
345	38+48.00	56.55' RT
346	38+58.44	110.78' RT
347	38+91.46	101.06' RT

RECOVERED MONUMENTS			
POINT	DESCRIPTION	Y	X
688	0.75" IRON PIPE	208314.08	2489250.54
689	0.5" IRON PIPE	208272.08	2489247.87
853	0.75" IRON PIPE	208449.88	2488988.90
981	0.75" IRON PIPE	208731.75	2488621.91
1305	1.5" IRON PIPE	208571.8	2488821.32
10007	1.5" IRON PIPE	208066.28	2489159.80
10008	0.75" IRON PIPE	207828.84	2489128.68
10012	1" RIPPED	208027.44	2489213.51
10251	1" IRON PIPE	208569.74	2488755.28
10323	1" IRON PIPE	208564.82	2488599.89
10326	0.75" IRON PIPE	208441.53	2489099.02

CURVE TABLE				
CURVE	ARC LENTGH	RADIUS	BEARING	CHORD
321-323	371.77'	510.00'	N23° 30' 22"W	363.60'
323-287	68.45'	510.00'	N48° 14' 04"W	68.40'
322-288	47.02'	490.00'	N49° 19' 43"W	47.00'
338-337	151.95'	610.00'	N 04°09'50" W	151.56'

ROAD NAME	BASIS OF EXISTING R/W	WIDTH	YEAR
CTH W	PLAN OF ERICKSON	66'	1859
CTH W	FOX RIVER COUNTRY ESTATES	100'	1996
82ND ST	CSM 604	66'	1978

TRANSPORTATION PROJECT PLAT NO: 3751-00-00-4.03 AMENDMENT NO. 1

THIS AMENDS PARCEL 7 AND 8 TRANSPORTATION PROJECT PLAT 3751-00-00-4.03 RECORDED AS DOCUMENT 1780098,

THAT PART OF LOT B, CERTIFIED SURVEY MAP 604, VOL. 1029, PG. 93, DOC. 641622 AND LOT 7 FOX RIVER COUNTRY ESTATES DOC. 1037257 AND LOTS 1, 2 AND 3 PLAN OF ERICKSON (NOW KNOWN AS VILLAGE OF FOX RIVER AND OTHER LANDS LOCATED IN THE NORTHWEST 1/4 AND THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 ALL IN SECTION 7, TOWNSHIP 1 NORTH, RANGE 20 EAST, TOWN OF SALEM, KENOSHA COUNTY, WISCONSIN.

RELOCATION ORDER CTH W, 2300 FEET SOUTH OF 82ND STREET TO 82ND STREET, CTH W, KENOSHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, KENOSHA COUNTY DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, KENOSHA COUNTY DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 83.07, 83.08, 32.05, WISCONSIN STATUTES, THE COUNTY OF KENOSHA HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY KENOSHA COUNTY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF KENOSHA COUNTY, PURSUANT TO THE PROVISIONS OF SECTION 83.07, 83.08, AND 32.05, WISCONSIN STATUTES.
A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

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

M SQUARED ENGINEERING
W62 N215 WASHINGTON AVE.
CEDARBURG WI. 53012

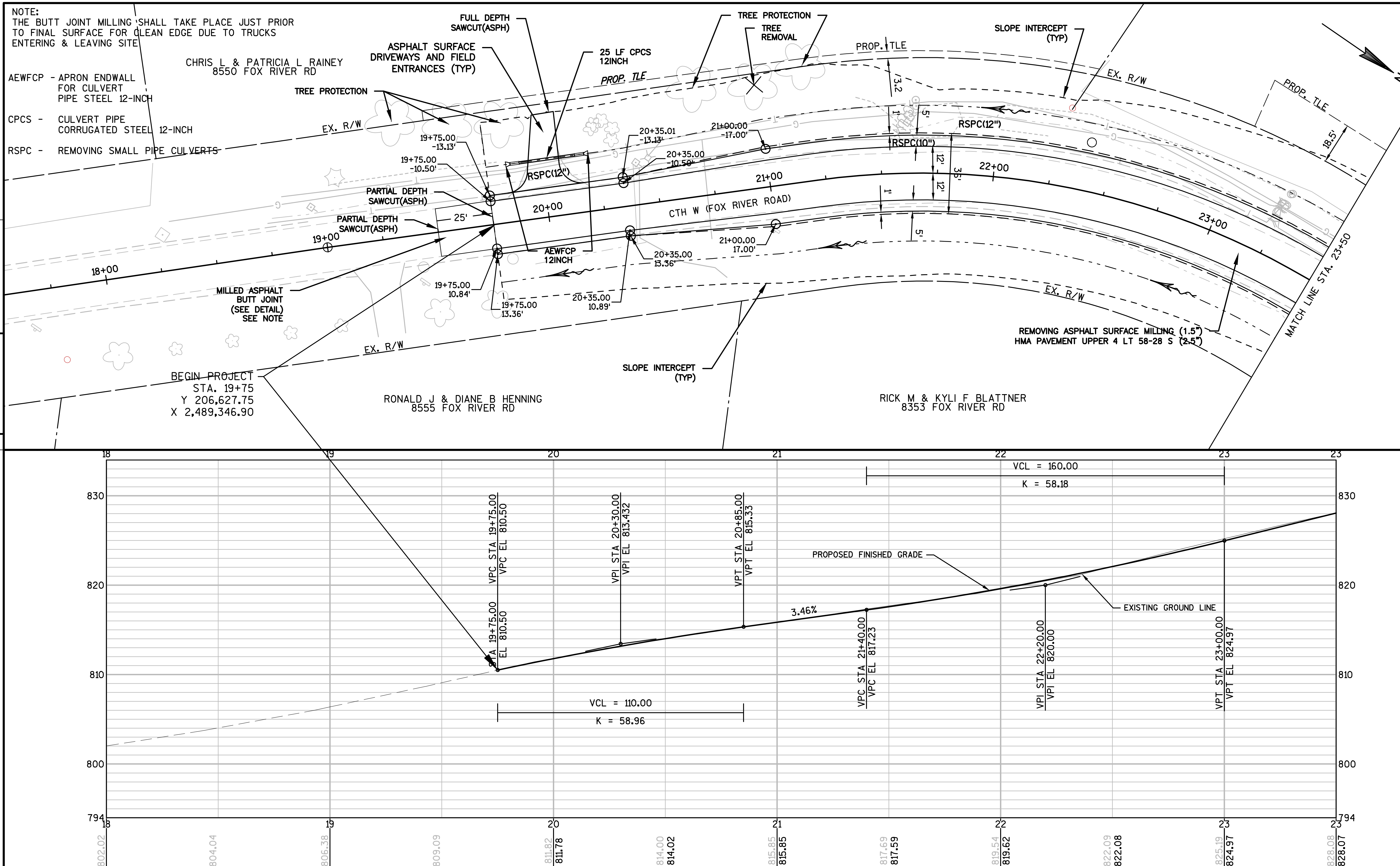
I ANTHONY J. GROMACKI, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF KENOSHA COUNTY, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 3751-00-00 4.03 AMENDMENT NO. 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

ANTHONY J. GROMACKI
P.L.S. NUMBER S-2090 — DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR KENOSHA COUNTY, WISCONSIN

38

SIGNATURE — DATE



NOTE:
THE BUTT JOINT MILLING SHALL TAKE PLACE JUST PRIOR TO FINAL SURFACE FOR CLEAN EDGE DUE TO TRUCKS ENTERING & LEAVING SITE
AEWFCP - APRON ENDWALL FOR CULVERT PIPE STEEL 12-INCH
CPCS - CULVERT PIPE CORRUGATED STEEL 12-INCH
RSPC - REMOVING SMALL PIPE CULVERTS
CHRIS L & PATRICIA L RAINEY
8550 FOX RIVER RD
FULL DEPTH SAWCUT(ASPH)
ASPHALT SURFACE DRIVEWAYS AND FIELD ENTRANCES (TYP)
25 LF CPCS 12INCH
TREE PROTECTION
TREE REMOVAL
PROP. TLE
SLOPE INTERCEPT (TYP)
EX. R/W
RSPC(12")
RSPC(10")
PARTIAL DEPTH SAWCUT(ASPH)
MILLED ASPHALT BUTT JOINT (SEE DETAIL) SEE NOTE
AEWFCP 12INCH
CTH W (FOX RIVER ROAD)
19+75.00 -13.13'
19+75.00 -10.50'
19+75.00 10.84'
19+75.00 13.36'
20+35.01 -13.13'
20+35.00 -10.50'
20+35.00 13.36'
20+35.00 10.89'
21+00.00 -17.00'
21+00.00 17.00'
18+00
19+00
20+00
21+00
22+00
23+00
MATCH LINE STA. 23+50
REMOVING ASPHALT SURFACE MILLING (1.5")
HMA PAVEMENT UPPER 4 LT 58-28 S (2.5")
BEGIN PROJECT
STA. 19+75
Y 206,627.75
X 2,489,346.90
RONALD J & DIANE B HENNING
8555 FOX RIVER RD
RICK M & KYLI F BLATTNER
8353 FOX RIVER RD
5
VCL = 160.00
K = 58.18
VPC STA 19+75.00
VPC EL 810.50
VPI STA 20+30.00
VPI EL 813.432
VPT STA 20+85.00
VPT EL 815.33
PROPOSED FINISHED GRADE
3.46%
EXISTING GROUND LINE
VPC STA 21+40.00
VPC EL 817.23
VPI STA 22+20.00
VPI EL 820.00
VPT STA 23+00.00
VPT EL 824.97
VCL = 110.00
K = 58.96
830
820
810
800
794
802.02
804.04
806.38
809.09
811.82
811.78
814.00
814.02
815.85
815.85
817.69
817.59
819.54
819.62
822.09
822.08
825.19
824.97
828.08
828.07

PROJECT NO:3751-00-70	HWY:CTH W	COUNTY:KENOSHA	PLAN AND PROFILE: CTH W (FOX RIVER ROAD)	SHEET 39	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0501_PP.DWG
LAYOUT NAME - PLAN & PROFILE_0501
PLOT DATE : 1/23/2017 11:00 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1 IN:40 FT

AEWFCP - APRON ENDWALL
FOR CULVERT
PIPE STEEL 12-INCH

CPCS - CULVERT PIPE
CORRUGATED STEEL 12-INCH

RAY E & JANICE LANE
8433 312TH AVE

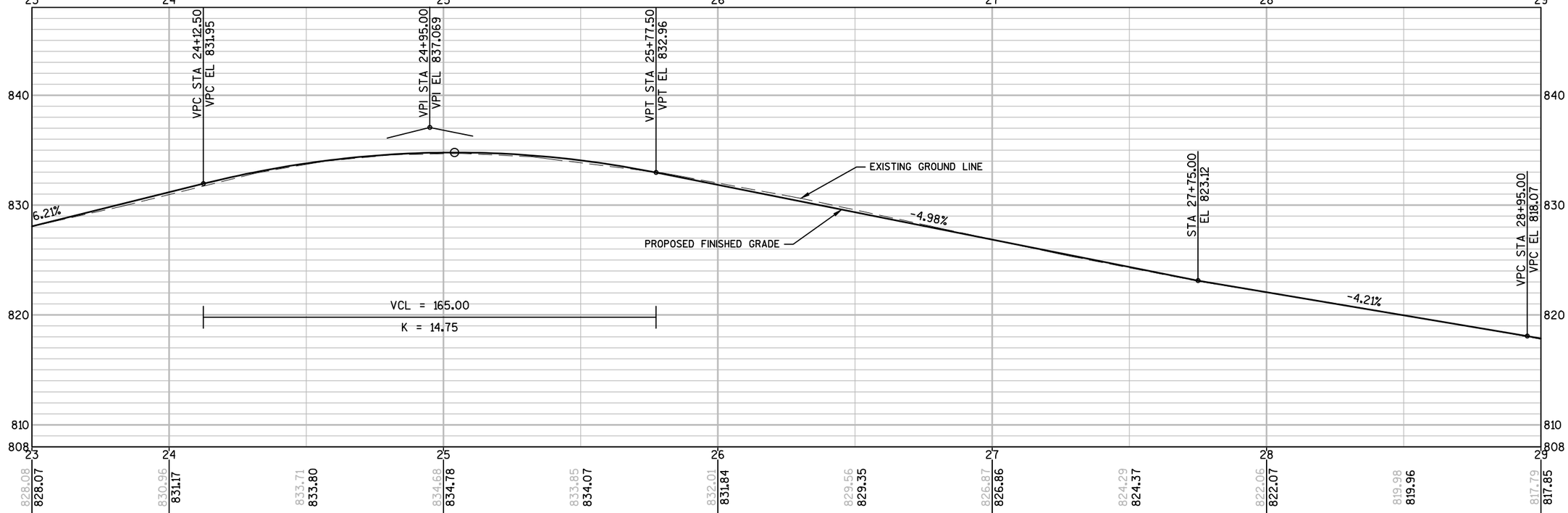
N

PROP. TLE
EX. R/W
18.0'
REMOVING ASPHALT SURFACE MILLING (1.5")
HMA PAVEMENT UPPER 4 LT 58-28 S (2.5")
SLOPE INTERCEPT (TYP)
6.0'
17.5'
MATCH LINE STA. 23+50
MATCH LINE STA. 23+00
24+00
25+00
26+00
27+00
28+00
CTH W (FOX RIVER ROAD)
1'
5'
12'
35'
100'
37'
25+00.00
19.00'
12.0'
2.5'
5.0'
TREE REMOVAL
TREE PROTECTION
FULL DEPTH SAWCUT(CONC)
CONCRETE DRIVEWAY 6-INCH
CONCRETE CURB & GUTTER 30-INCH TYPE D
30" CURB AND GUTTER

PAUL L & SHERRY A UDVARE
8421 FOX RIVER RD

RICK M & KYLI F BLATTNER
8353 FOX RIVER RD

5



PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	PLAN AND PROFILE: CTH W (FOX RIVER ROAD)	SHEET 40	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0501_PP.DWG
LAYOUT NAME - PLAN & PROFILE_0502

PLOT DATE : 1/23/2017 11:00 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

AEWFCP - APRON ENDWALL FOR CULVERT PIPE STEEL 12-INCH

CPCS - CULVERT PIPE CORRUGATED STEEL 12-INCH

RSPC - REMOVING SMALL PIPE CULVERTS

JOHN W & JANET M ENDICOTT
8359 312TH AVE

END RESURFACING

31+00

BEGIN RECONSTRUCTION

5" HMA PAVEMENT
2.5" UPPER - 4 LT 58-28 S
2.5" LOWER - 3 LT 58-28 S

65-4-120-073-1107
THORNE, TODD A &
WAKEFIELD THORNE, HEIDE
8317 312TH AVE

N

PROP. TLE

EX. R/W

CAUTION

TREE REMOVAL

SLOPE INTERCEPT (TYP)

ASPHALT SURFACE DRIVEWAYS AND FIELD ENTRANCES (TYP)

37 LF CPCS 12-INCH

TREE PROTECTION

MATCH LINE STA. 29+00

MATCH LINE STA. 34+50

30+00

31+00

31+23.38
19.00'

32+00

33+00

34+00

74.75'

7.0'

SB-1

RSPC(15")

RSPC(20")

R10'

ASPHALT SURFACE DRIVEWAYS AND FIELD ENTRANCES (TYP)

FULL DEPTH SAWCUT(ASPH)

REMOVING ASPHALT SURFACE MILLING (1.5")
HMA PAVEMENT UPPER 4 LT 58-28 S (2.5")

DONALD C GAUL
8347 FOX RIVER RD

JOSEPH T STEPHENS
8331 FOX RIVER RD

CALLIE SCHULZ (1/2 INT) &
HARLEY RUPPERT (1/2 INT)
8315 FOX RIVER RD

CONCRETE SIDEWALK 4 INCH

AEWFCP 12INCH

VPI STA 29+95.00
VPI EL 813.853

VPT STA 30+95.00
VPT EL 805.64

STA 31+20.33
EL 803.56

PROPOSED FINISHED GRADE

EXISTING GROUND LINE

-8.22%

-7.00%

VCL = 200.00

K = 49.99

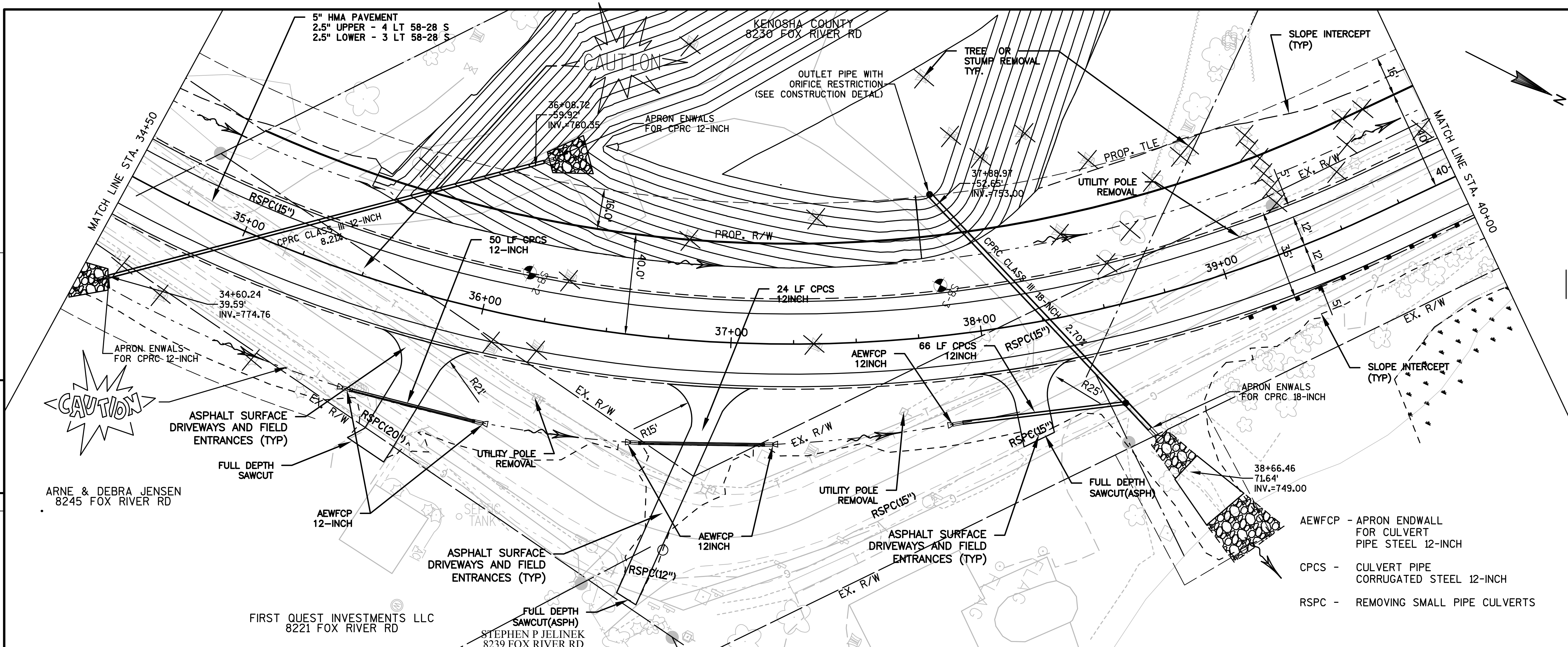
817.79 817.85
815.37 815.45
812.45 812.54
808.95 809.13
805.13 805.23
801.31 801.48
797.39 797.98
793.26 794.48
789.09 790.98
785.20 787.48
781.47 783.98
777.76 780.48

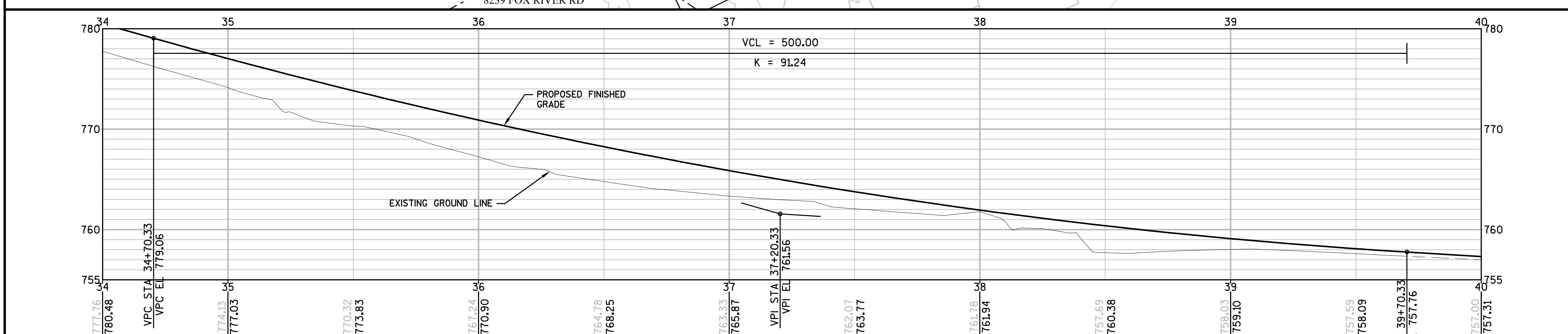
PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	PLAN AND PROFILE: CTH W (FOX RIVER ROAD)	SHEET 41	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0501_PP.DWG
LAYOUT NAME - PLAN & PROFILE_0503

PLOT DATE : 1/23/2017 11:01 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1 IN:40 FT

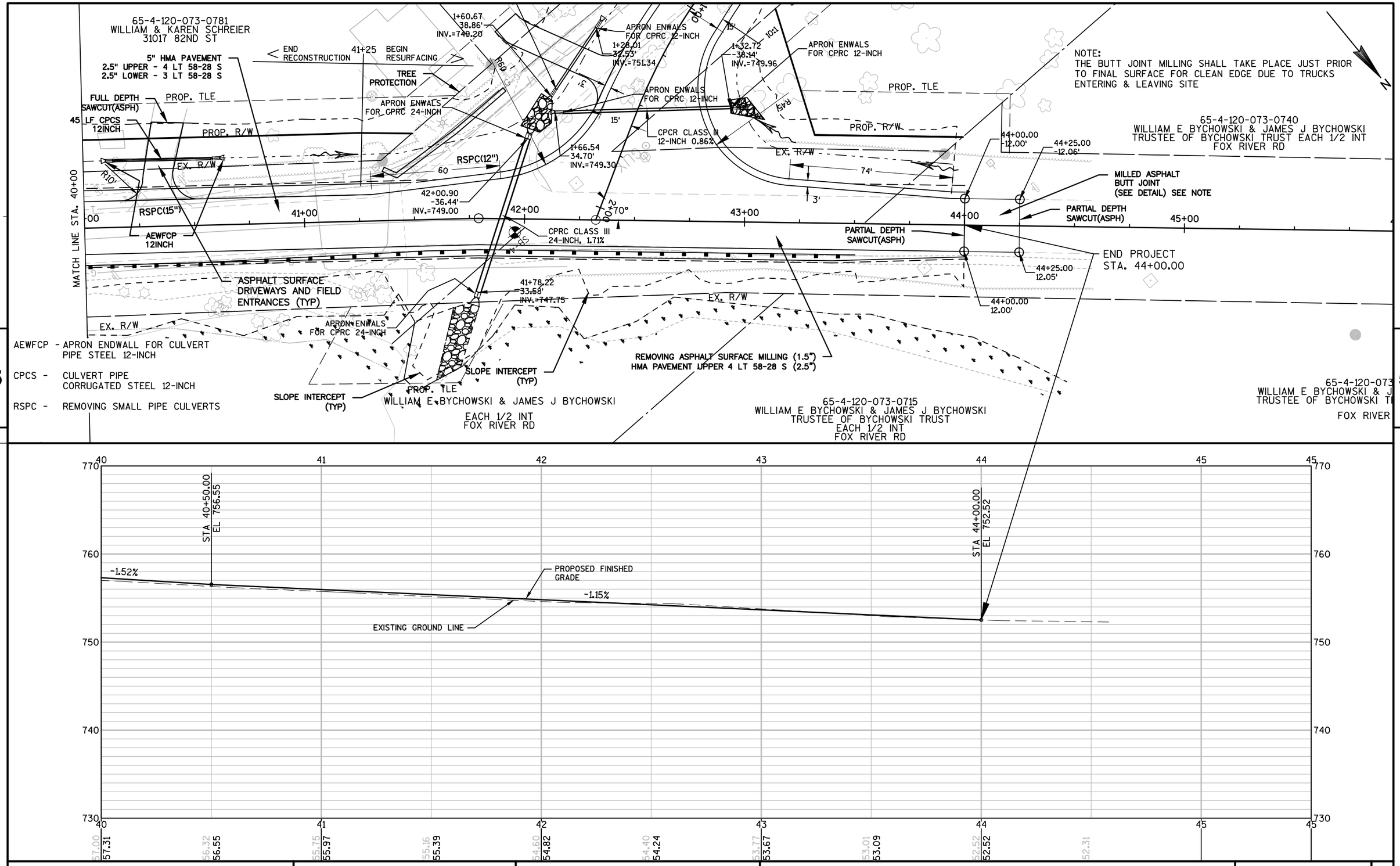
WISDOT/CADDS SHEET 44


5" HMA PAVEMENT
2.5" UPPER - 4 LT 58-28 S
2.5" LOWER - 3 LT 58-28 S
KENOSHA COUNTY
8230 FOX RIVER RD
CAUTION
TREE OR STUMP REMOVAL TYP.
OUTLET PIPE WITH ORIFICE RESTRICTION (SEE CONSTRUCTION DETAL)
SLOPE INTERCEPT (TYP)
36+08.72
-59.92'
INV.=760.35
APRON ENWALS FOR CPRC 12-INCH
37+88.97
-52.65'
INV.=753.00
PROP. TLE
UTILITY POLE REMOVAL
EX. R/W
MATCH LINE STA. 34+50
MATCH LINE STA. 40+00
RSPC(15")
35+00
CPRC CLASS III 12-INCH 8.21%
PROP. R/W
50 LF CPCS 12-INCH
34+60.24
-39.59'
INV.=774.76
36+00
37+00
24 LF CPCS 12INCH
38+00
39+00
CPRC CLASS III 18-INCH 2.70%
APRON ENWALS FOR CPRC 12-INCH
AEWFCP 12INCH
66 LF CPCS 12INCH
RSPC(15")
SLOPE INTERCEPT (TYP)
CAUTION
ASPHALT SURFACE DRIVEWAYS AND FIELD ENTRANCES (TYP)
R21'
R15'
R25'
APRON ENWALS FOR CPRC 18-INCH
RSPC(20")
UTILITY POLE REMOVAL
FULL DEPTH SAWCUT
38+66.46
-71.64'
INV.=749.00
ARNE & DEBRA JENSEN
8245 FOX RIVER RD
AEWFCP 12-INCH
SEPTIC TANK
UTILITY POLE REMOVAL
RSPC(15")
FULL DEPTH SAWCUT(ASPH)
AEWFCP 12INCH
ASPHALT SURFACE DRIVEWAYS AND FIELD ENTRANCES (TYP)
RSPC(12")
FULL DEPTH SAWCUT(ASPH)
FIRST QUEST INVESTMENTS LLC
8221 FOX RIVER RD
STEPHEN P JELINEK
8239 FOX RIVER RD
AEWFCP - APRON ENDWALL FOR CULVERT PIPE STEEL 12-INCH
CPCS - CULVERT PIPE CORRUGATED STEEL 12-INCH
RSPC - REMOVING SMALL PIPE CULVERTS
5
5


34
35
36
37
38
39
40
780
770
760
755
VCL = 500.00
K = 91.24
PROPOSED FINISHED GRADE
EXISTING GROUND LINE
VPC STA 34+70.33
VPC EL 779.06
VPI STA 37+20.33
VPI EL 761.56
VPT STA 39+70.33
VPT EL 757.76
777.76
780.48
774.13
777.03
770.32
773.83
767.24
770.90
764.78
768.25
763.33
765.87
762.07
763.77
761.78
761.94
757.69
760.38
758.03
759.10
757.59
758.09
757.00
757.31

PROJECT NO:3751-00-70	HWY:CTH W	COUNTY:KENOSHA	PLAN AND PROFILE: CTH W (FOX RIVER ROAD)	SHEET 42	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0501_PP.DWG
LAYOUT NAME - PLAN & PROFILE_0504
PLOT DATE : 1/23/2017 11:01 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

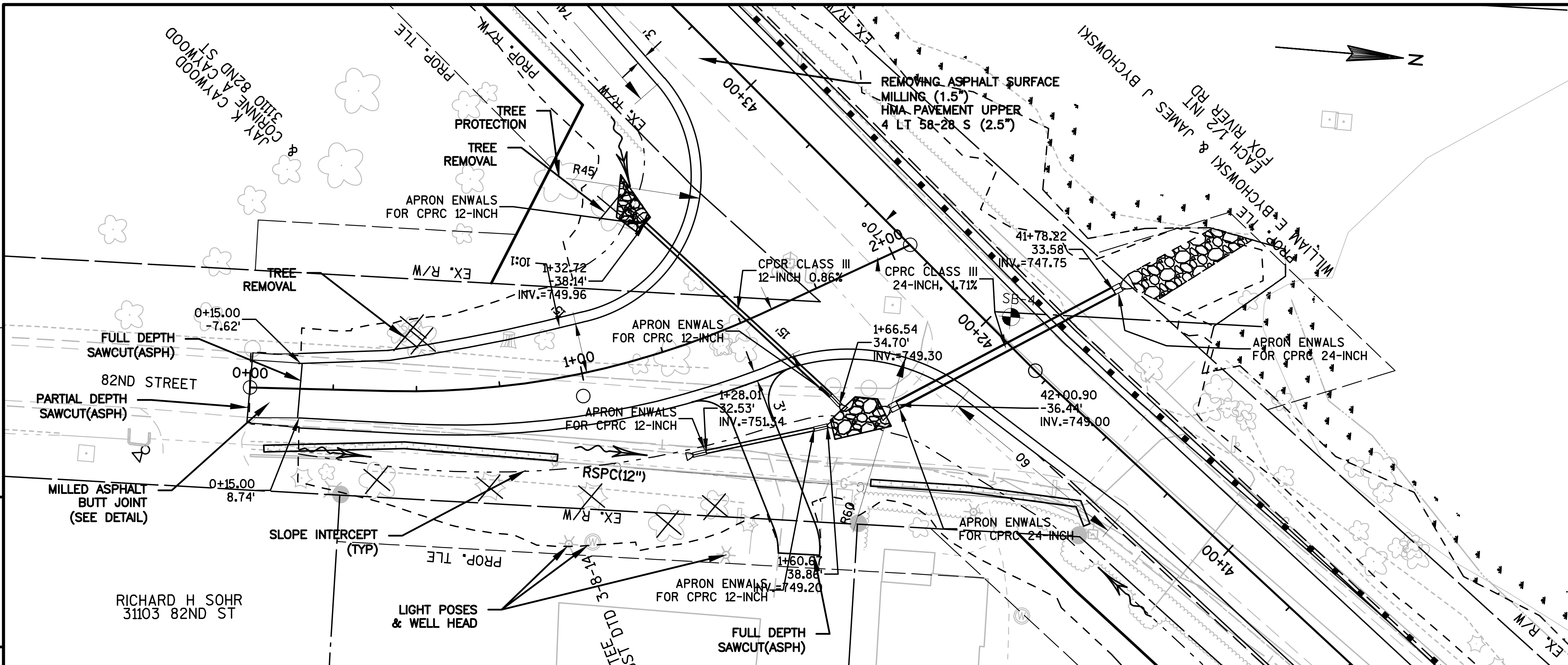


PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	PLAN AND PROFILE: CTH W (FOX RIVER ROAD)	SHEET 43	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0501_PP.DWG
LAYOUT NAME - PLAN & PROFILE_0505

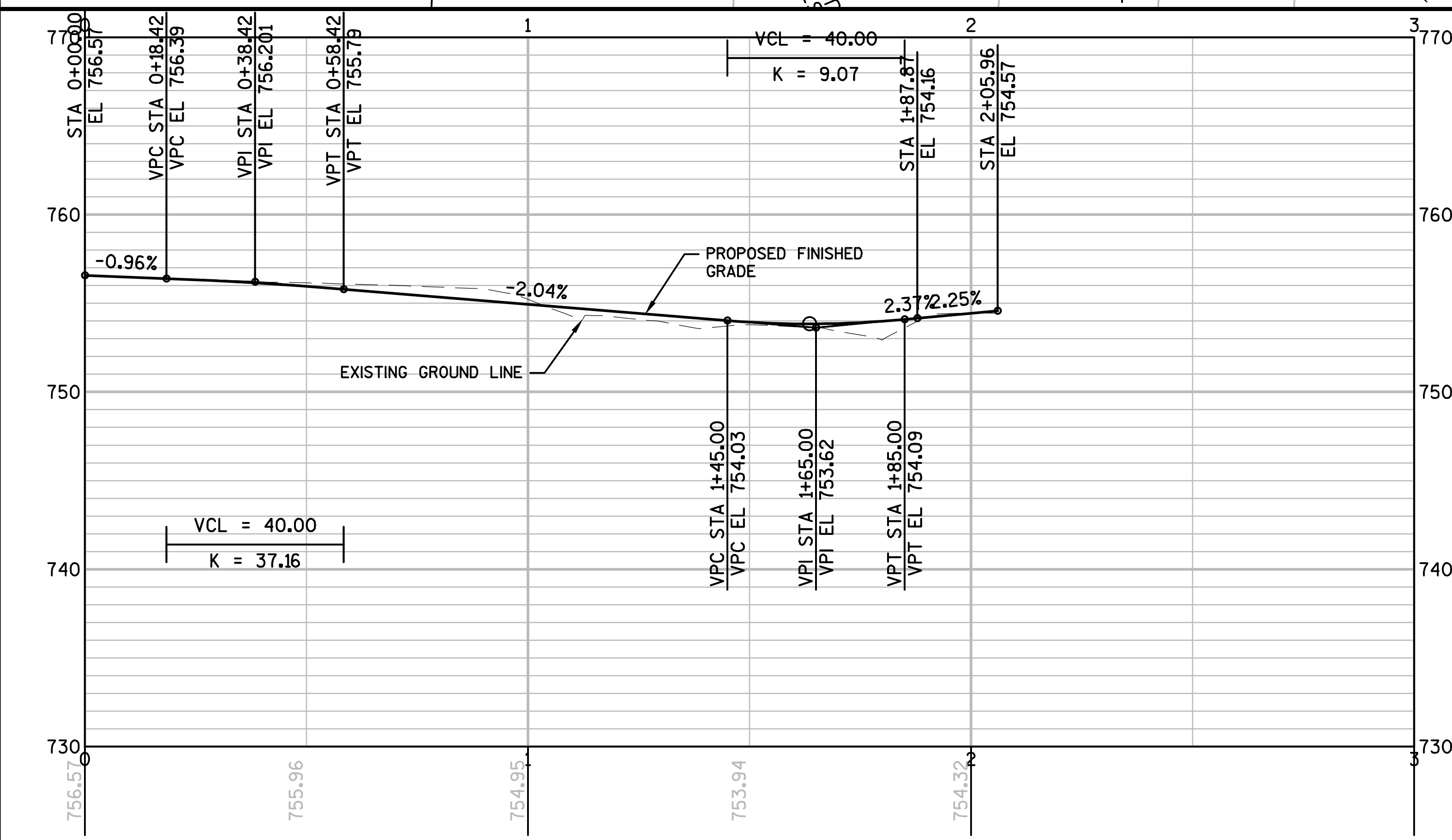
PLOT DATE : 1/23/2017 11:01 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44


REMOVING ASPHALT SURFACE MILLING (1.5")
HMA PAVEMENT UPPER 4 LT 58-28 S (2.5")
TREE PROTECTION
TREE REMOVAL
APRON ENWALS FOR CPRC 12-INCH
JAY K CAYWOOD & CORINNE A CAYWOOD 31110 82ND ST
EACH 1/2 INT JAMES J BYCHOWSKI & WILLIAM E BYCHOWSKI FOX RIVER RD
PROP. TLE
PROP. R/W
EX. R/W
43+00
42+00
41+00
2+00
1+00
0+00
1+32.72
-38.14'
INV.=749.96
CPCS CLASS III 12-INCH 0.86%
CPRC CLASS III 24-INCH, 1.71%
41+78.22
33.58'
INV.=747.75
APRON ENWALS FOR CPRC 24-INCH
0+15.00
-7.62'
FULL DEPTH SAWCUT(ASPH)
82ND STREET
PARTIAL DEPTH SAWCUT(ASPH)
1+66.54
34.70'
INV.=749.30
1+28.01
32.53'
INV.=751.34
42+00.90
-36.44'
INV.=749.00
RSPC(12")
MILLED ASPHALT BUTT JOINT (SEE DETAIL)
0+15.00
8.74'
SLOPE INTERCEPT (TYP)
1+60.67
38.88'
INV.=749.20
RICHARD H SOHR 31103 82ND ST
LIGHT POSES & WELL HEAD
FULL DEPTH SAWCUT(ASPH)
SB-4
R45'
R60'
N

AEWFCP -	APRON ENDWALL FOR CULVERT PIPE STEEL 12-INCH
CPCS -	CULVERT PIPE CORRUGATED STEEL 12-INCH
RSPC -	REMOVING SMALL PIPE CULVERTS

5

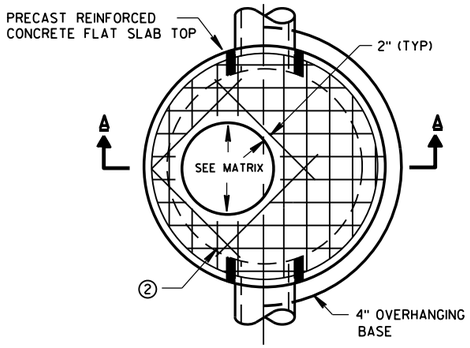

770
760
750
740
730
STA 0+00.00 EL 756.57
VPC STA 0+18.42 VPC EL 756.39
VPI STA 0+38.42 VPI EL 756.201
VPT STA 0+58.42 VPT EL 755.79
VCL = 40.00
K = 9.07
STA 1+87.87 EL 754.16
STA 2+05.96 EL 754.57
-0.96%
-2.04%
2.37%
2.25%
PROPOSED FINISHED GRADE
EXISTING GROUND LINE
VPC STA 1+45.00 VPC EL 754.03
VPI STA 1+65.00 VPI EL 753.62
VPT STA 1+85.00 VPT EL 754.09
VCL = 40.00
K = 37.16
756.57
755.96
754.95
753.94
754.32

PROJECT NO:3751-00-70	HWY:CTH W	COUNTY:KENOSHA	PLAN AND PROFILE: 82ND STREET	SHEET 44	E

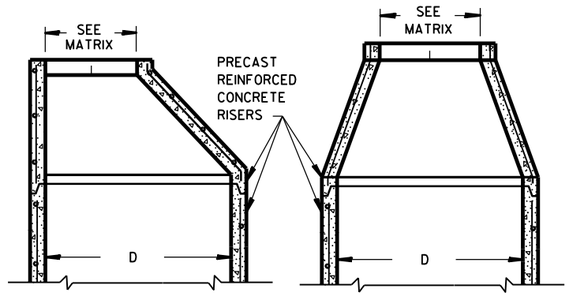
FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0501_PP.DWG
LAYOUT NAME - PLAN & PROFILE_0506
PLOT DATE : 1/23/2017 11:01 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1 IN:40 FT

Standard Detail Drawing List

08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D16-10	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08E05-02	SODDED BACKSLOPE FLUME AND INTERCEPTING EMBANKMENT
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
14A01-03	TREE PRESERVATION DETAILS
14B42-04A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D38-01A	TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS
15D38-01B	ATTACHMENT OF SIGNS TO POSTS

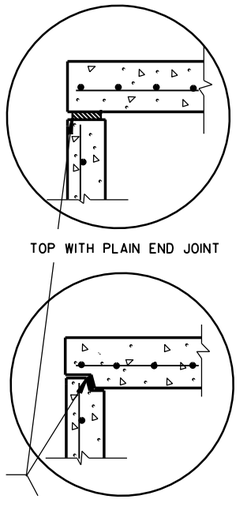


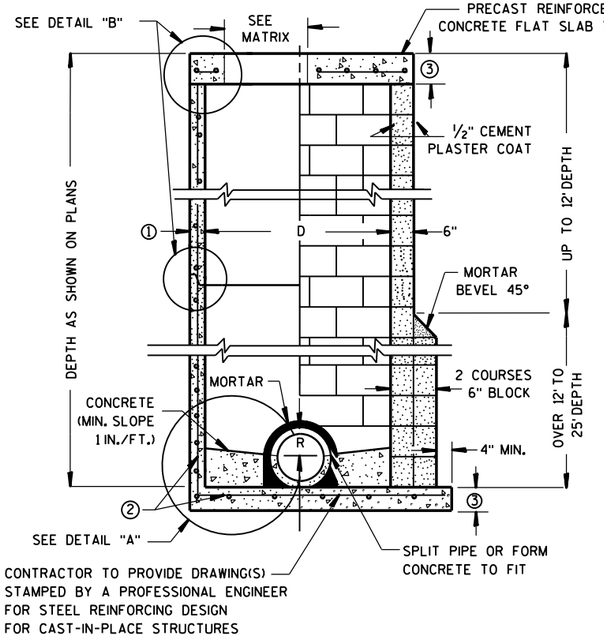
PLAN VIEW CIRCULAR OPENING



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

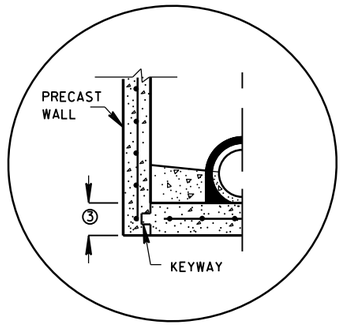
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



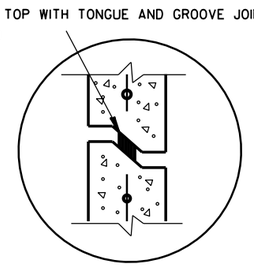


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

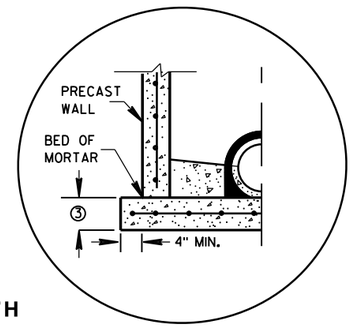
CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②



PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

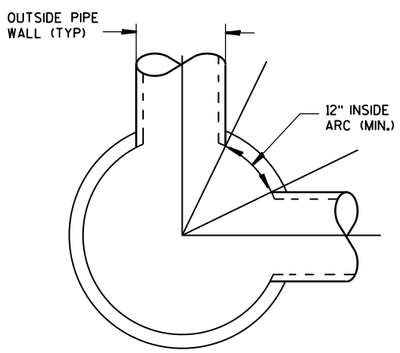


DETAIL "B"



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 GRANULAR 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. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

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

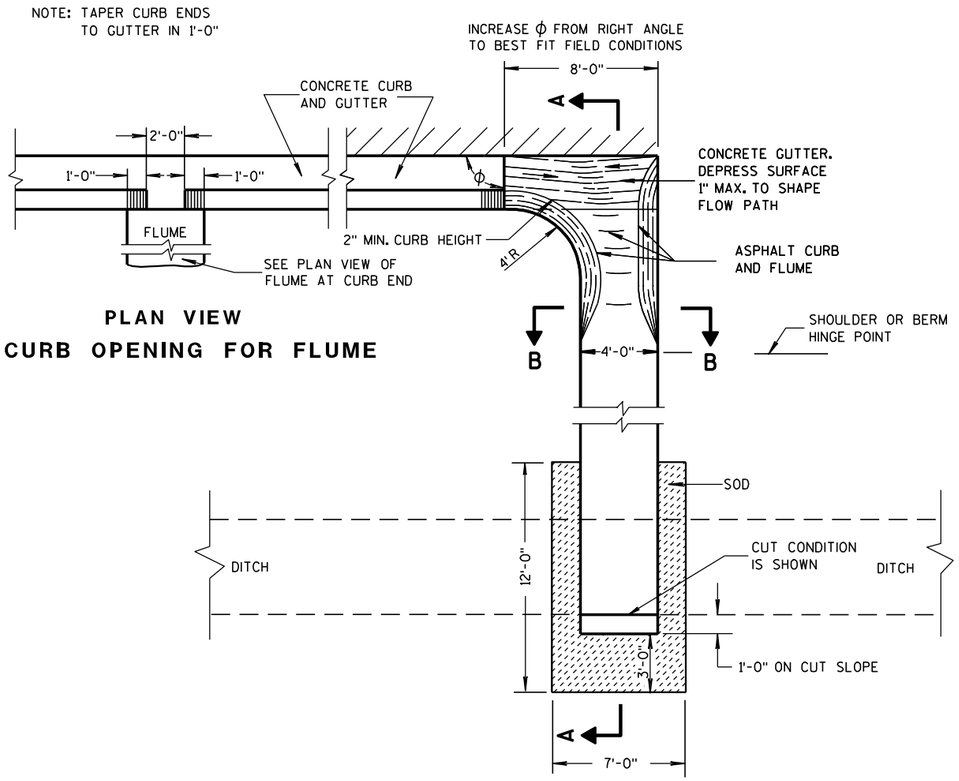
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

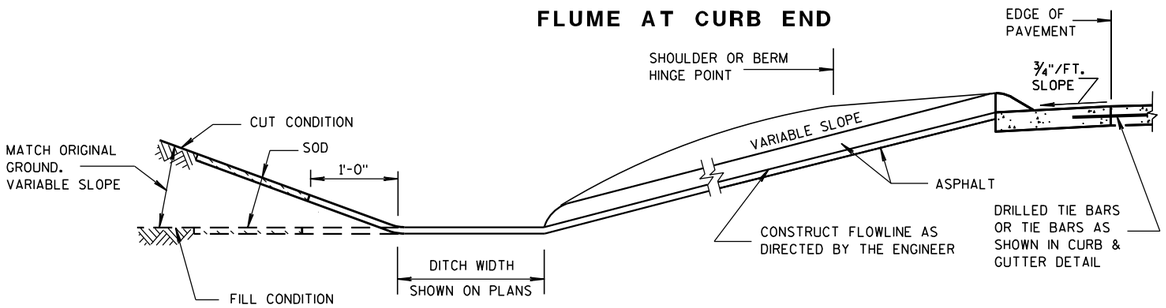
6
S.D.D. 8 B 9-1

ASPHALTIC FLUME

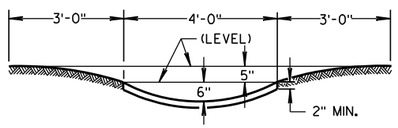


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

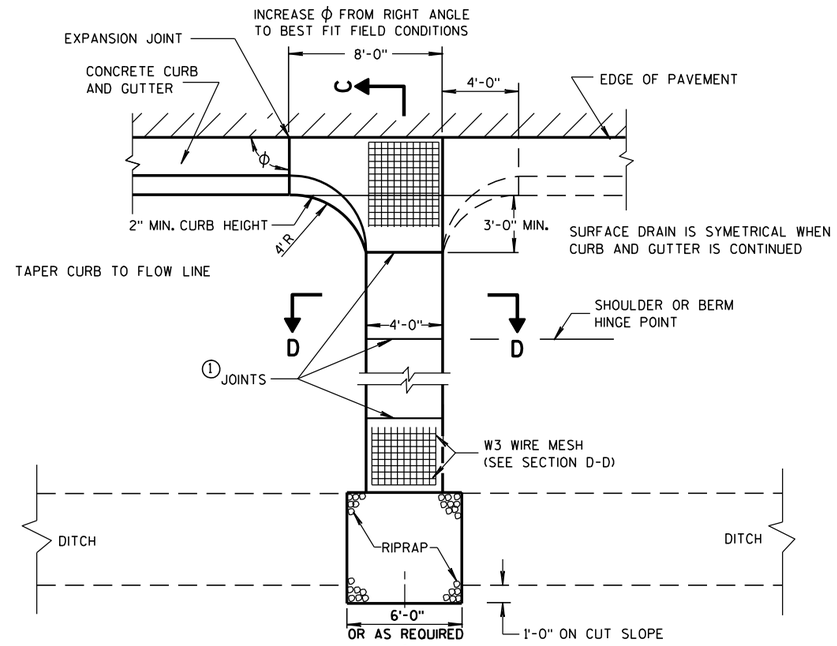
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

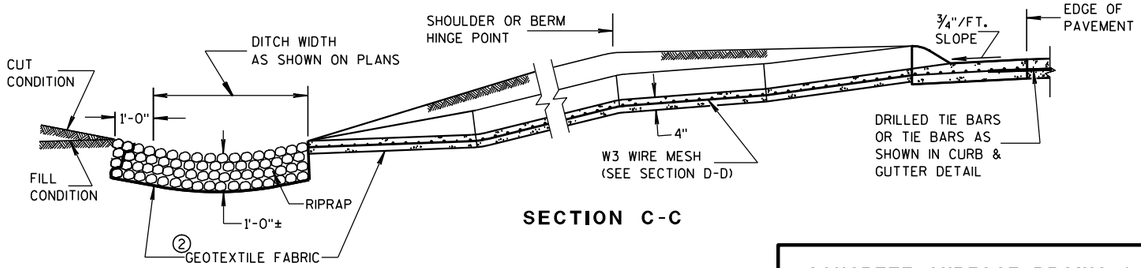
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

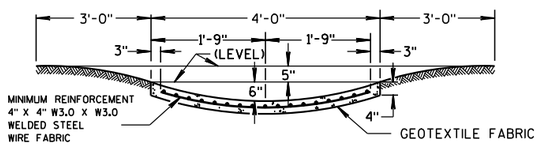
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
47
MENT

FHWA

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S.D.D. 8 D 4-5

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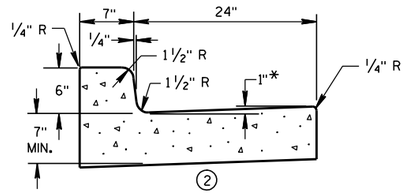
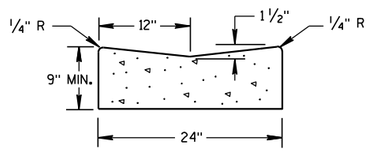
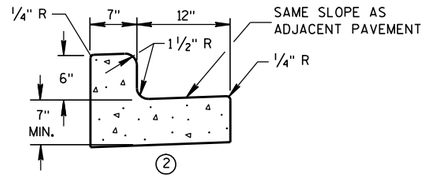
S.D.D. 8 D 4-5



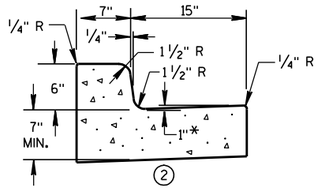
① CONCRETE CURB & GUTTER 31"



① CONCRETE GUTTER 24"

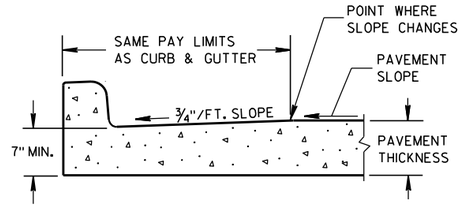


① CONCRETE CURB & GUTTER 19"



① CONCRETE CURB & GUTTER 22"

* TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER

GENERAL NOTES

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

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

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

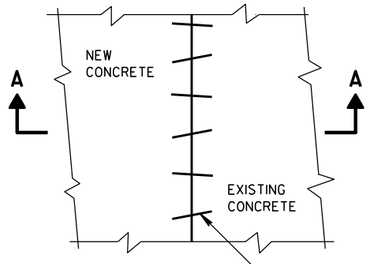
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURB.

① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUIRED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".

② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MIMIMUM GUTTER THICKNESS IS MAINTAINED.

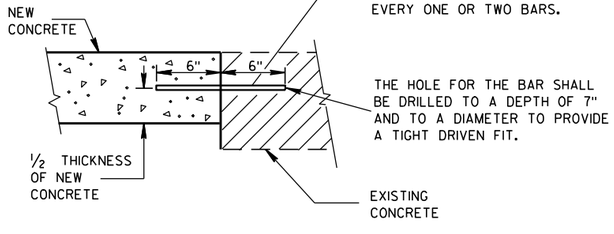
③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLAN.



PLAN VIEW

EXISTING AND NEW CONCRETE MAY BE CURB & GUTTER, SURFACE DRAIN, PAVEMENT OR OTHER CONCRETE STRUCTURE.

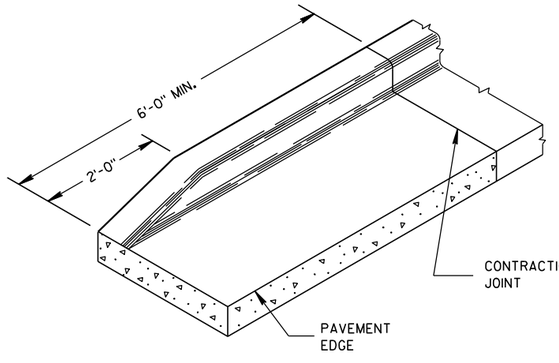
NO. 6 X 12" DEF. BARS SPACED 3'-0" C-C, INSTALLED ON 6:1 SKEW HORIZONTALLY. DIRECTION OF SKEW ALTERNATING AFTER EVERY ONE OR TWO BARS.



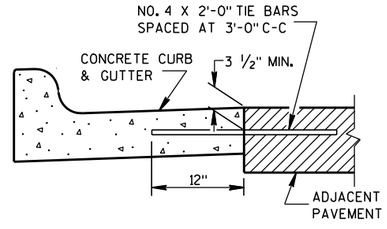
THE HOLE FOR THE BAR SHALL BE DRILLED TO A DEPTH OF 7" AND TO A DIAMETER TO PROVIDE A TIGHT DRIVEN FIT.

SECTION A-A

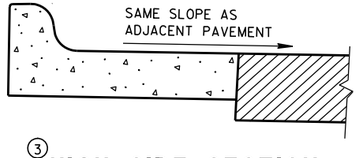
PAVEMENT TIES



END SECTION CURB & GUTTER



① TYPICAL TIE BAR LOCATION



③ HIGH SIDE SECTION

(TYPICAL FOR ALL CURB & GUTTER)

CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES

(For Optional Use in Milwaukee Co. Only)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/2/2010 — DATE

/S/ Jerry Zogg — ROADWAY STANDARDS ENGINEER

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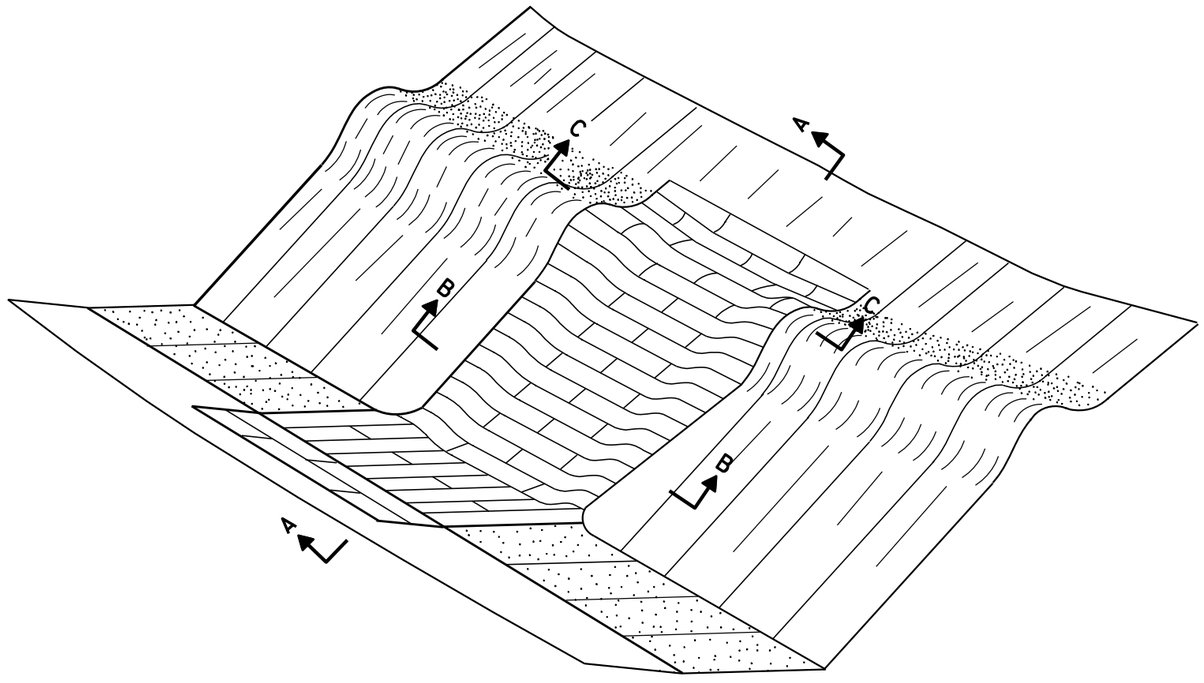


PERSPECTIVE

BACKSLOPE WITH FLUME AND INTERCEPTING EMBANKMENT

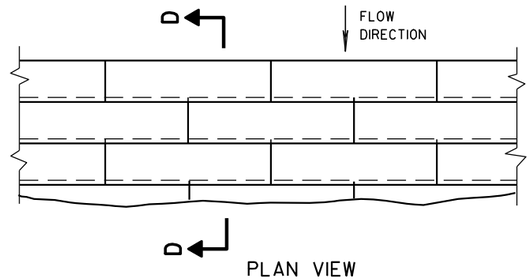
GENERAL NOTES

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

GRADING AND SHAPING INTERCEPTING EMBANKMENT WILL BE MEASURED AND PAID FOR IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTION 205, "ROADWAY AND DRAINAGE EXCAVATION".

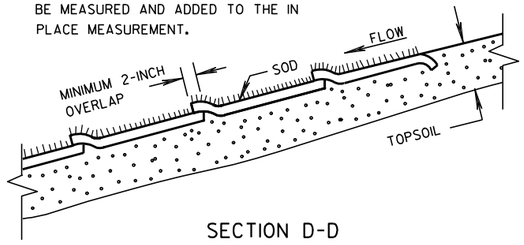
SOD STRIPS SHALL BE LAID TRANSVERSELY TO THE DIRECTION OF THE WATER FLOW.

DIMENSIONS SHALL BE ADJUSTED TO FIT SITE CONDITIONS AS DIRECTED BY THE ENGINEER.



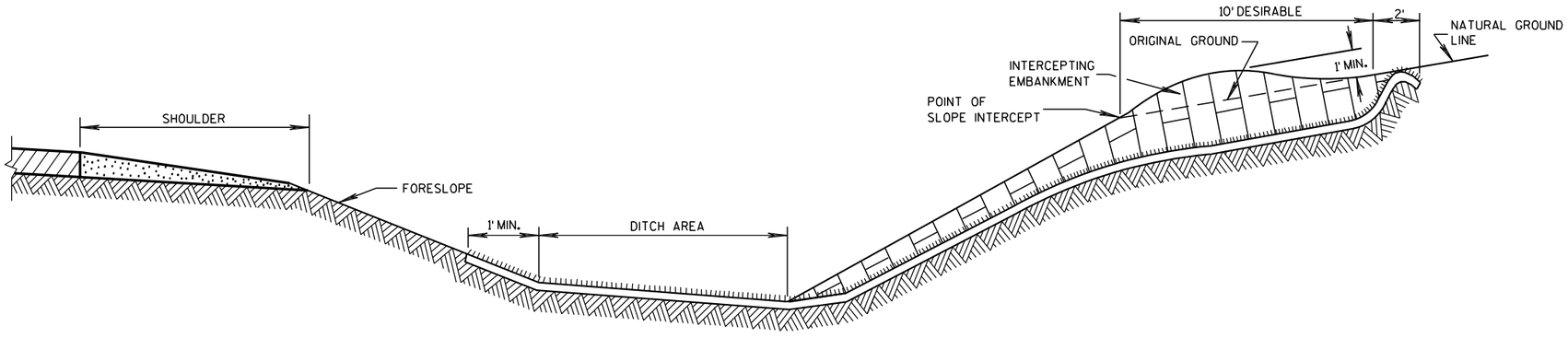
PLAN VIEW

NOTE:
SOD SHALL BE LAID AS SHOWN ON THE PLAN VIEW, AND AS DIRECTED BY THE ENGINEER. THE SOD OVERLAP WILL BE MEASURED AND ADDED TO THE IN PLACE MEASUREMENT.

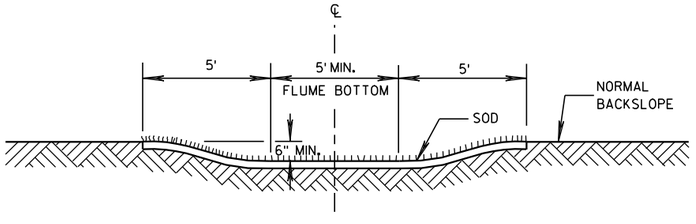


SECTION D-D

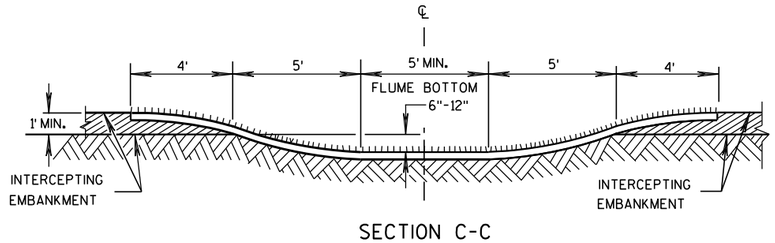
DETAIL FOR OVERLAP OF SOD STRIPS



SECTION A-A



SECTION B-B



SECTION C-C

SODDED BACKSLOPE FLUME AND INTERCEPTING EMBANKMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/24/95 — DATE
/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 E 5-2

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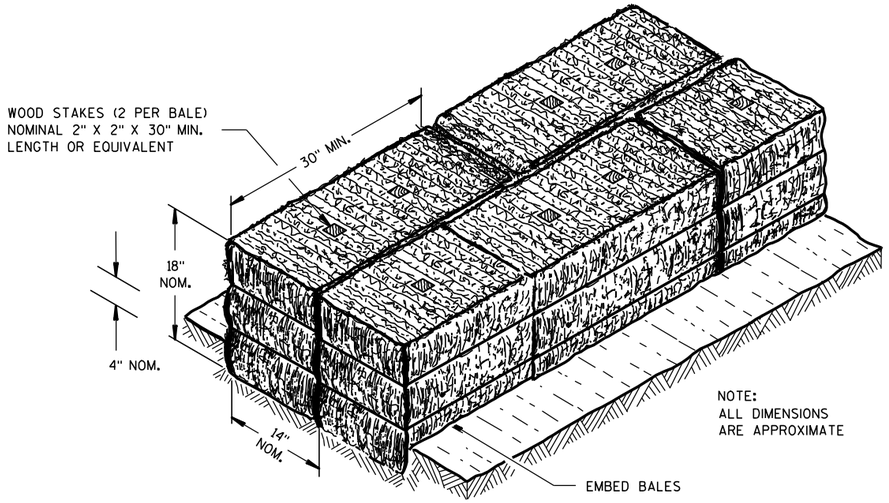
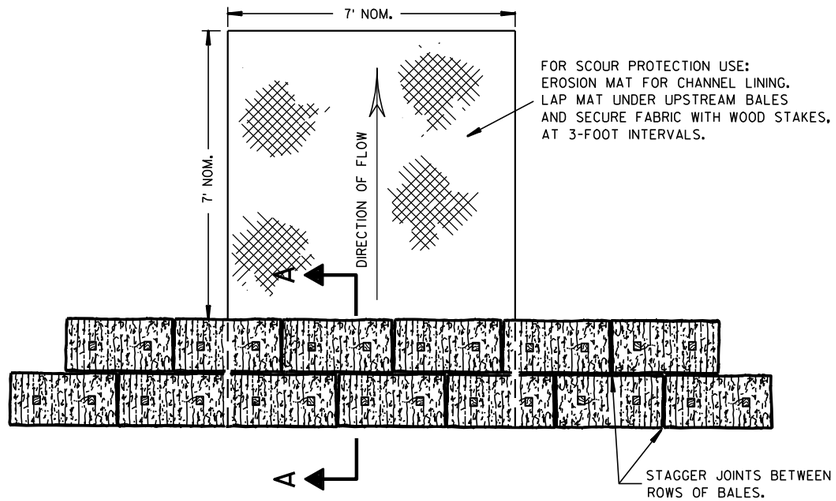
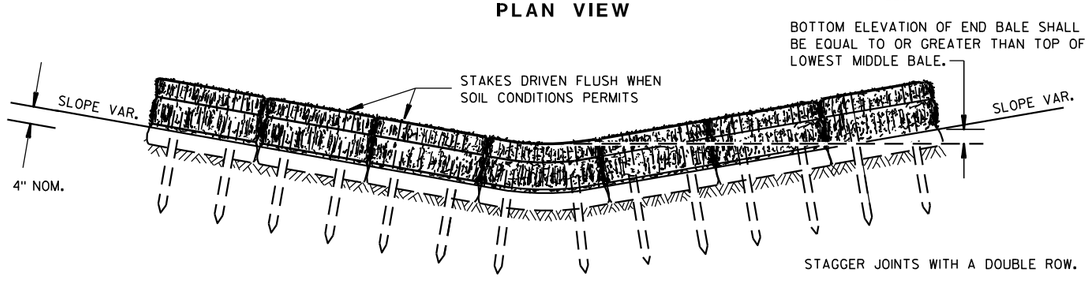
S.D.D. 8 E 5-2



SECTION A-A



PLAN VIEW



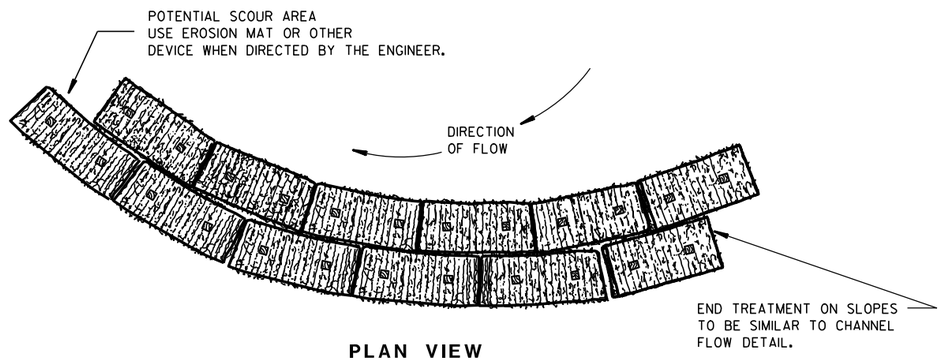
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

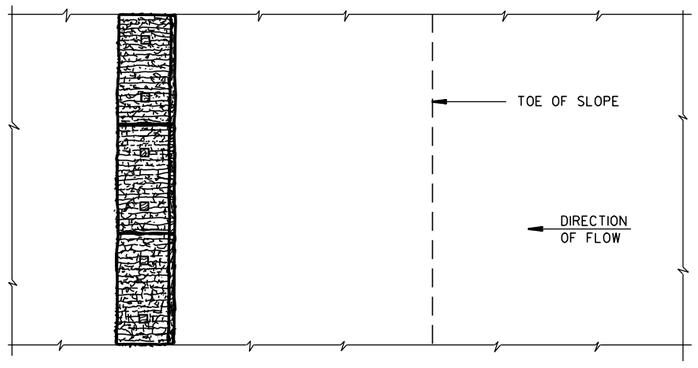
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

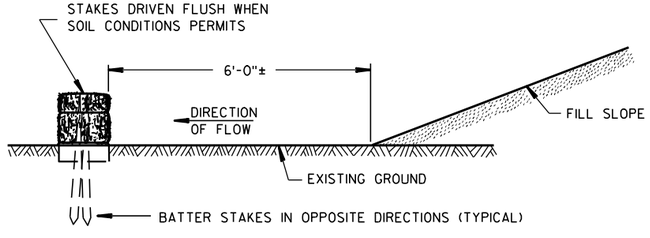


PLAN VIEW

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

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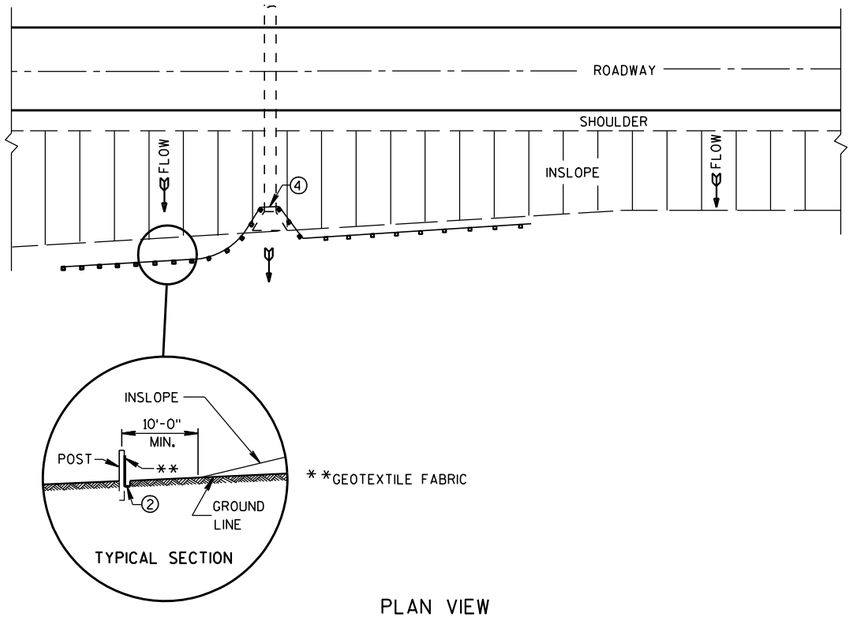
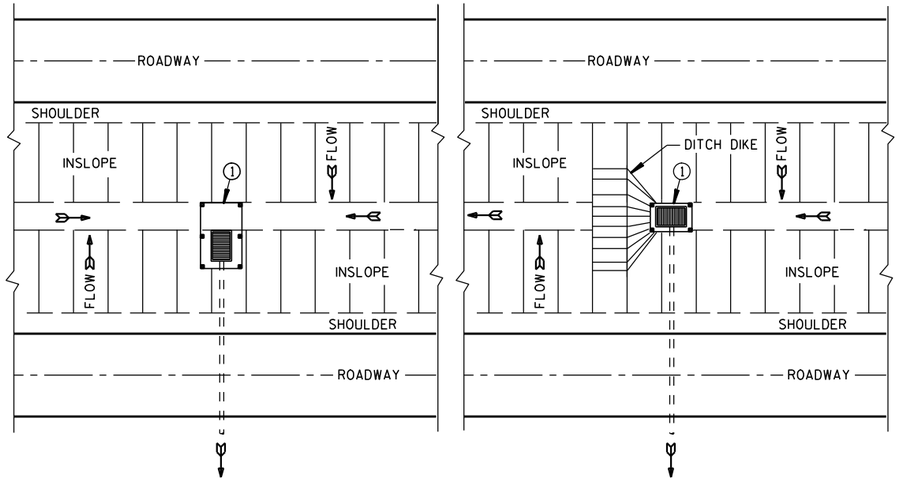


PLAN VIEW

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.

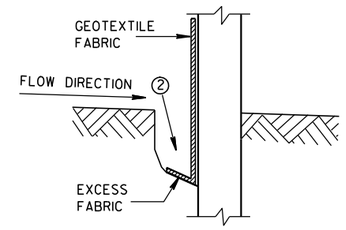
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

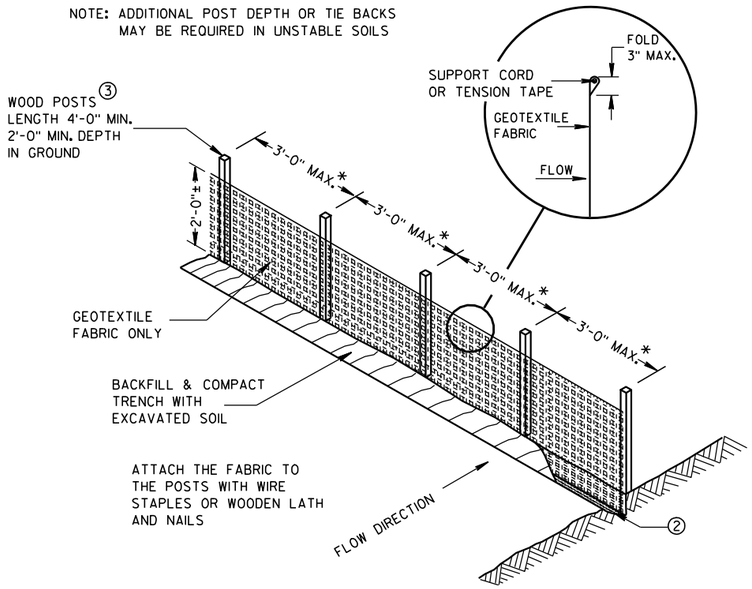
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

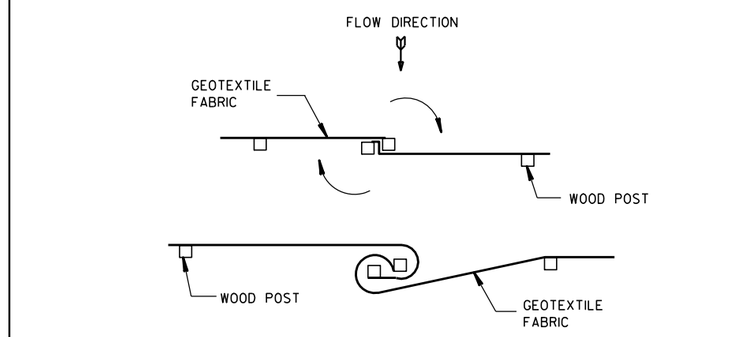
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



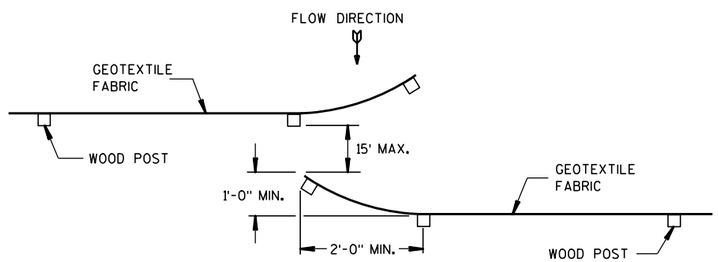
TRENCH DETAIL



SILT FENCE

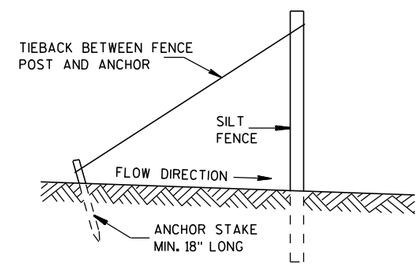


TWIST METHOD



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

METAL APRON ENDWALLS

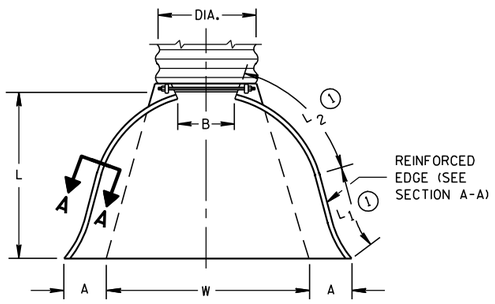
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

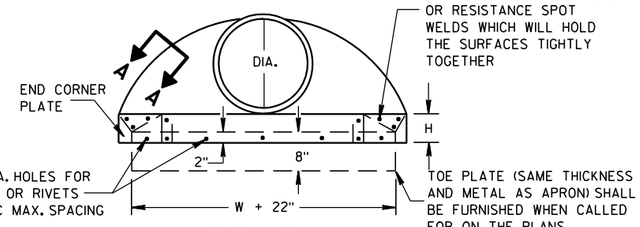
REINFORCED CONCRETE APRON ENDWALLS

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

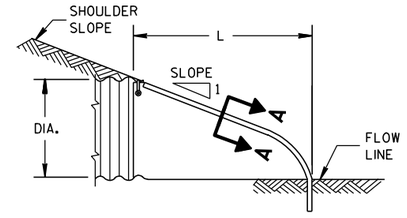
*MINIMUM
**MAXIMUM



PLAN VIEW

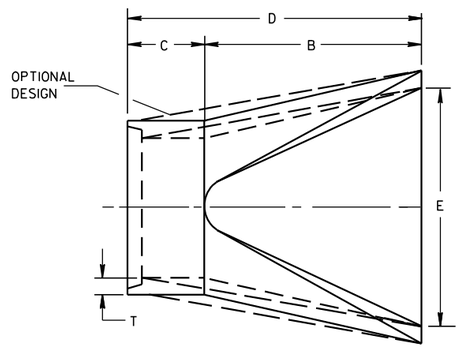


END VIEW

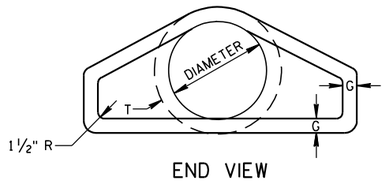


SIDE ELEVATION

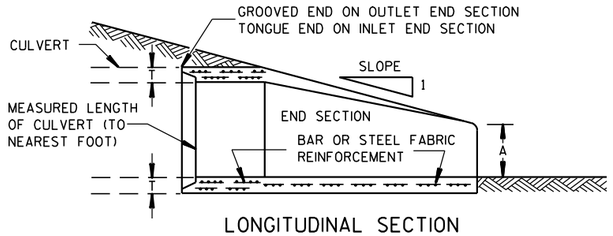
METAL ENDWALLS



PLAN

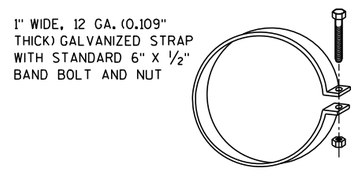


END VIEW



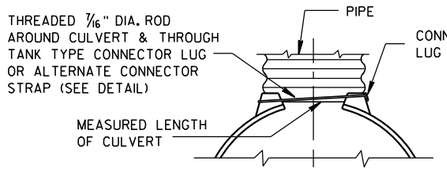
LONGITUDINAL SECTION

CONCRETE ENDWALLS

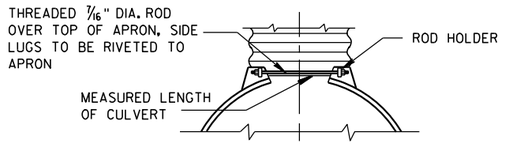


ALTERNATE FOR TYPE 1 CONNECTION

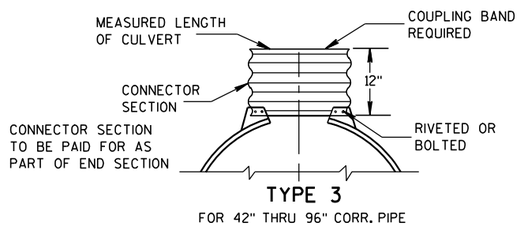
END SECTION CONNECTOR STRAP



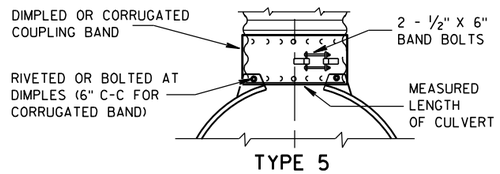
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

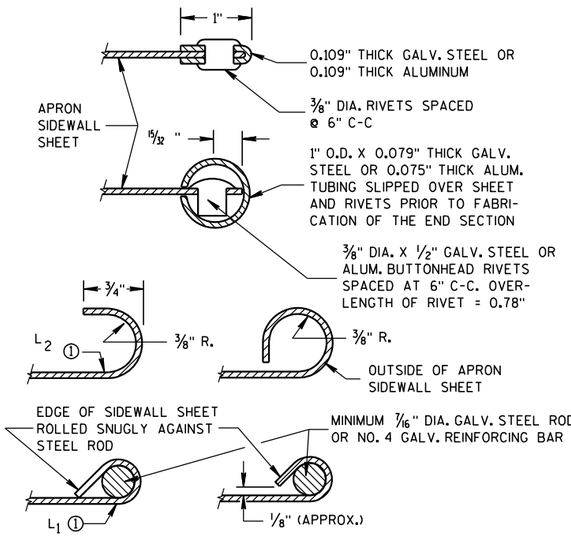
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

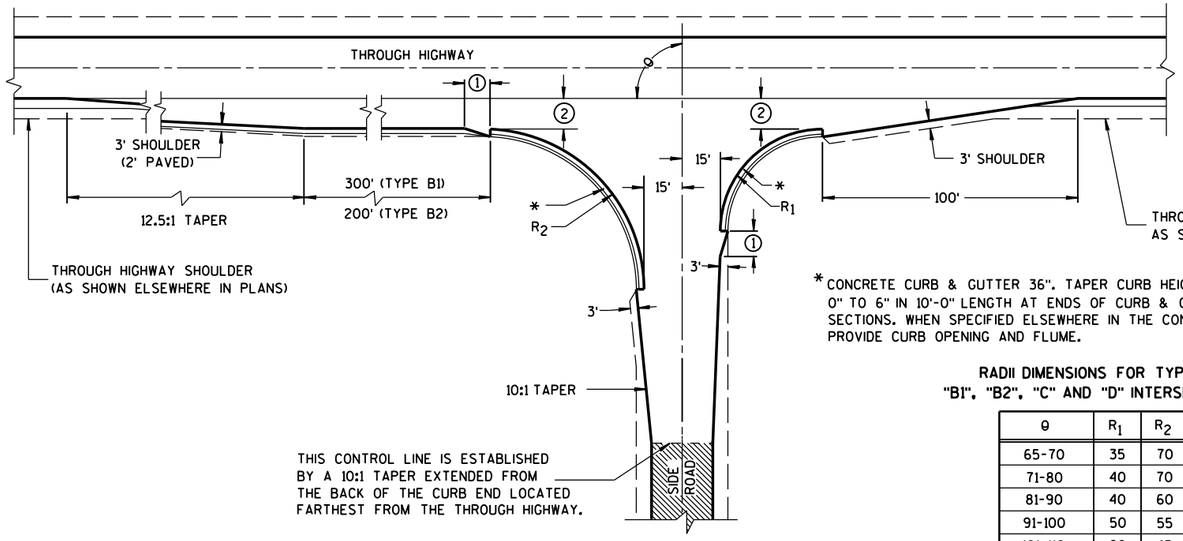
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

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

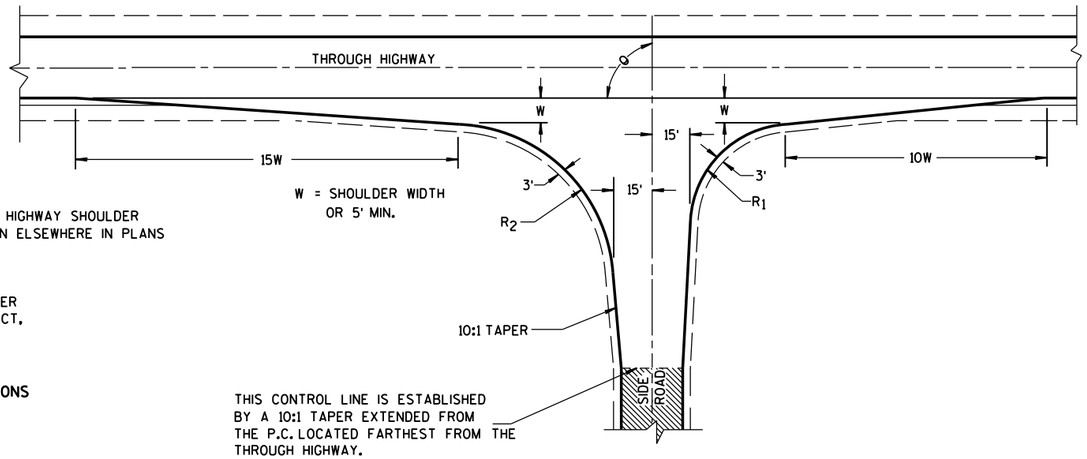


TYPE "B1" AND "B2"

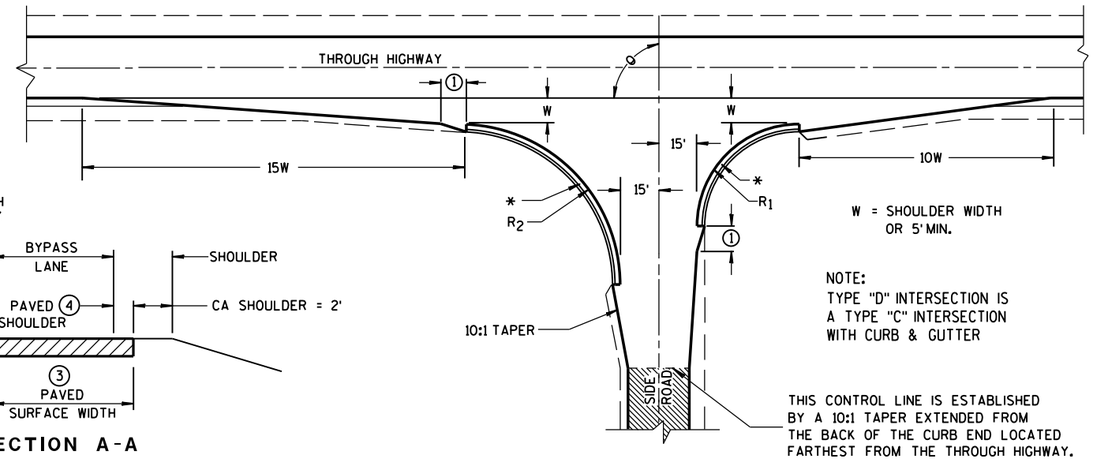
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

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

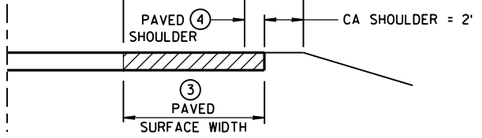
(1) 10-FT TYPICAL.

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

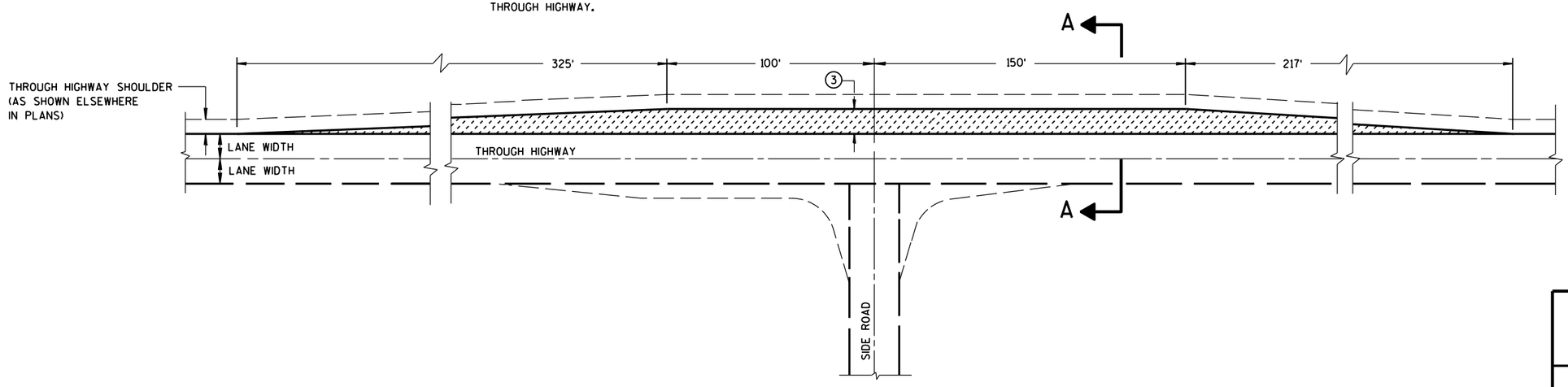
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(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)



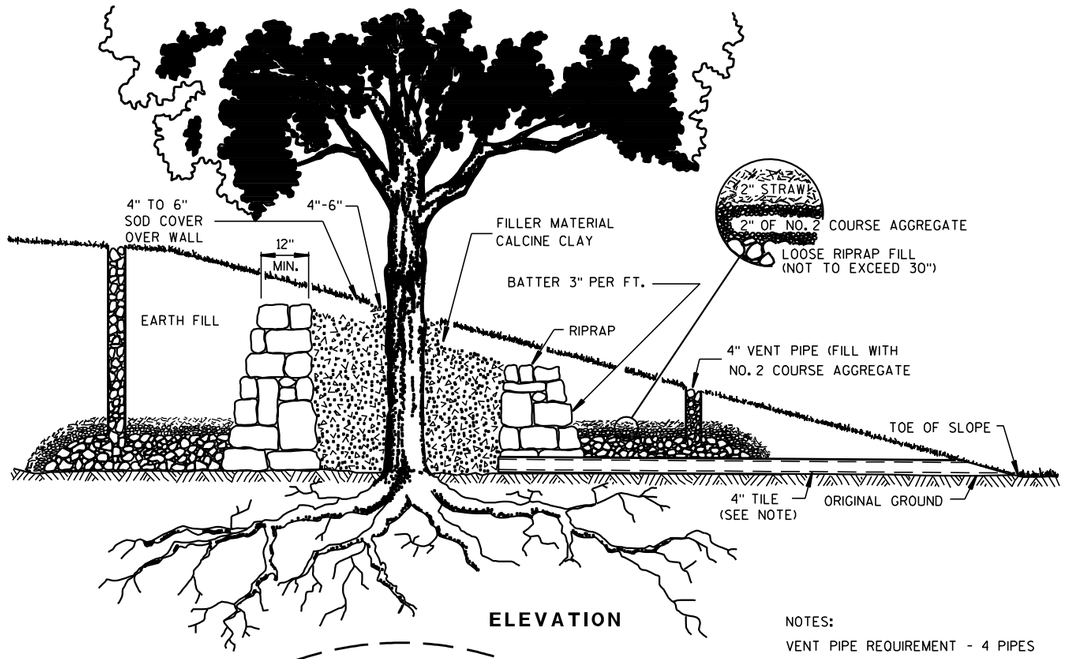
TEE INTERSECTION BYPASS LANE DETAIL

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

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



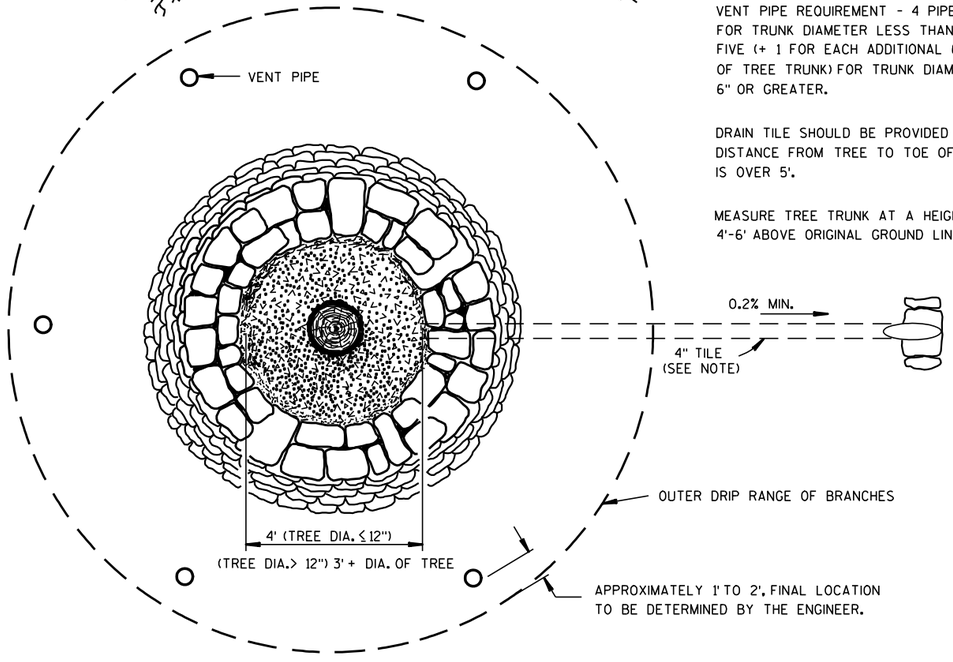
ELEVATION

NOTES:

VENT PIPE REQUIREMENT - 4 PIPES FOR TRUNK DIAMETER LESS THAN 6". FIVE (+ 1 FOR EACH ADDITIONAL 6" OF TREE TRUNK) FOR TRUNK DIAMETER 6" OR GREATER.

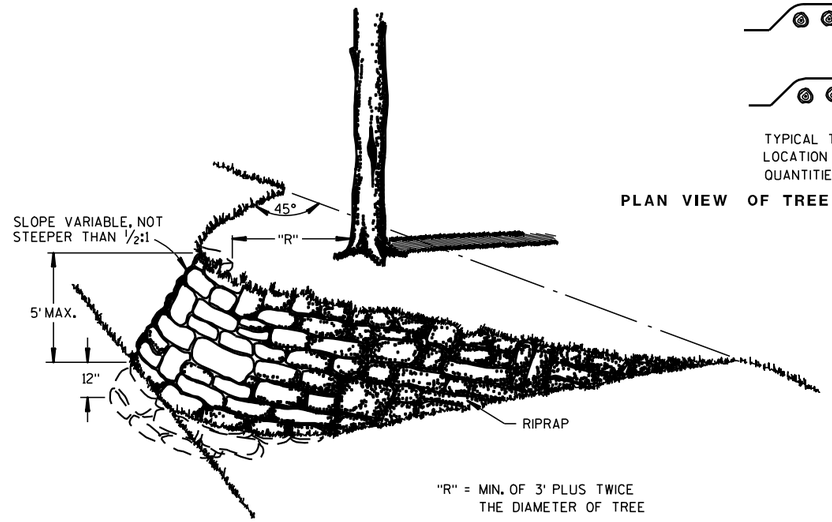
DRAIN TILE SHOULD BE PROVIDED IF DISTANCE FROM TREE TO TOE OF SLOPE IS OVER 5'.

MEASURE TREE TRUNK AT A HEIGHT 4'-6' ABOVE ORIGINAL GROUND LINE.



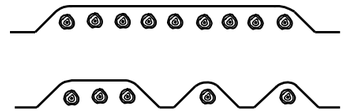
PLAN

FULL TREE WELL WITH RIPRAP WALL



"R" = MIN. OF 3' PLUS TWICE THE DIAMETER OF TREE

DETAILS OF TREE ISLAND AND ROOT PROTECTION



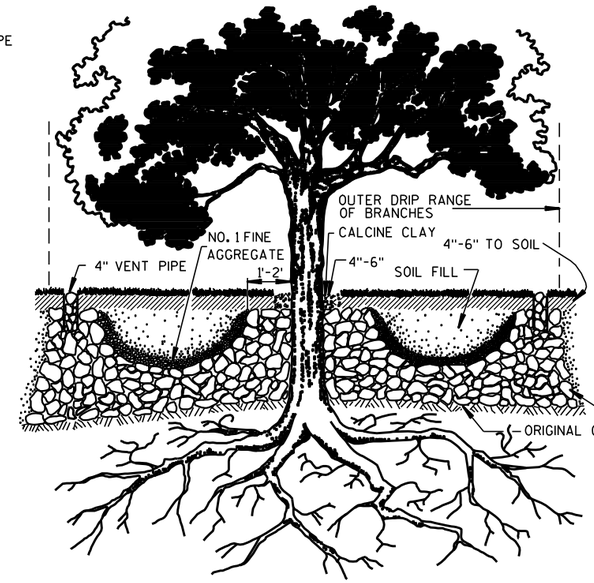
TYPICAL TREATMENTS OF ROOT PROTECTION. LOCATION SHOWN ON MISCELLANEOUS QUANTITIES SHEET.

PLAN VIEW OF TREE ISLANDS FOR ONE OR MORE TREES

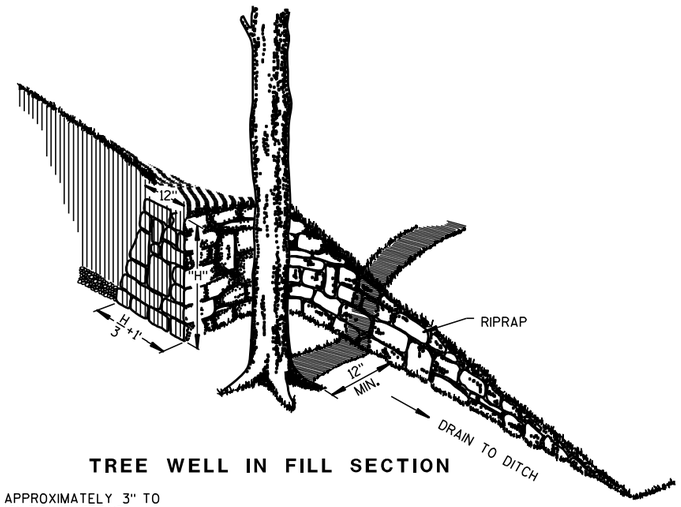
GENERAL NOTES

WALLS TO BE BUILT TO APPROXIMATE SHAPE AND DIMENSIONS SHOWN. STONE TO CONFORM TO SPECIFICATIONS FOR RIPRAP.

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



TREE WELL WITHOUT WALL



TREE WELL IN FILL SECTION

DETAILS FOR TREE WELLS

TREE PRESERVATION DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/25/76 DATE
/S/ D. L. Str---
STATE DESIGN ENGINEER
FHWA

6

S.D.D. 14 A 1-3

6

S.D.D. 14 A 1-3

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

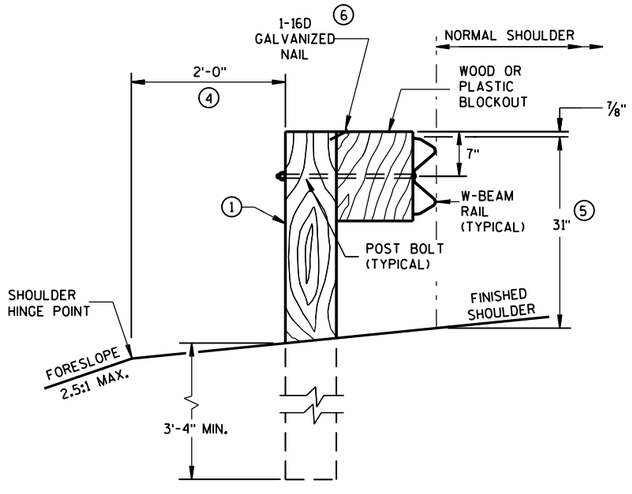
(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½ INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

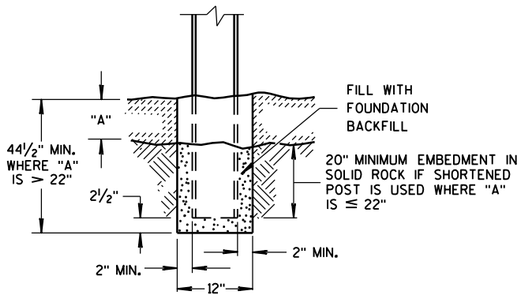
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

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



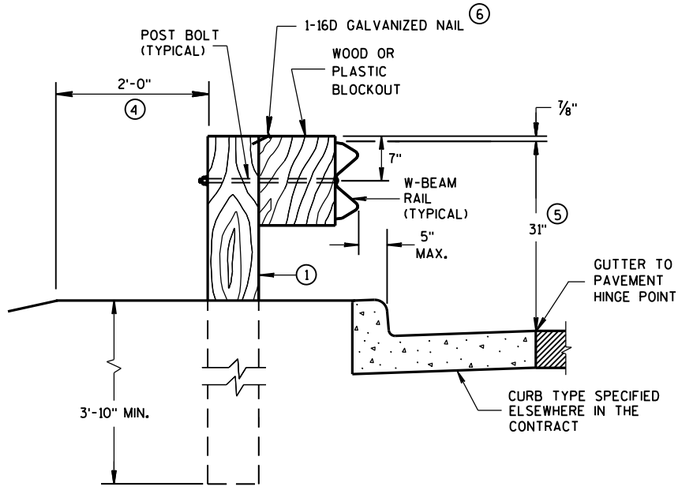
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



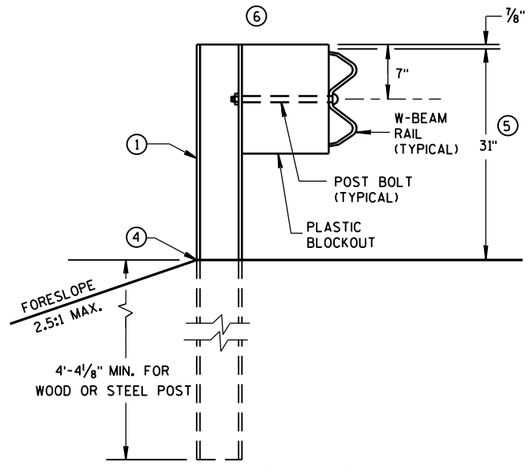
END VIEW

SETTING STEEL OR WOOD POST IN ROCK (3)



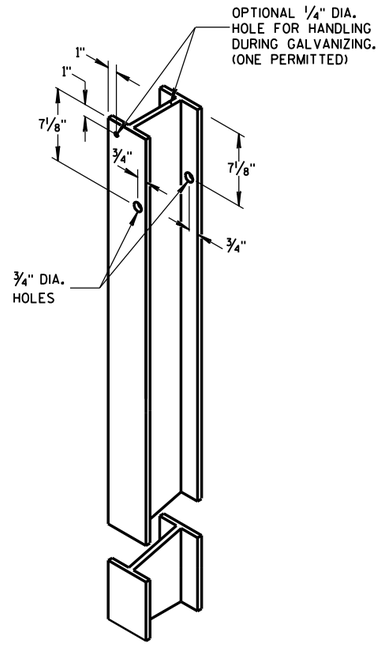
END VIEW

LOCATED ALONG A CURBED ROADWAY

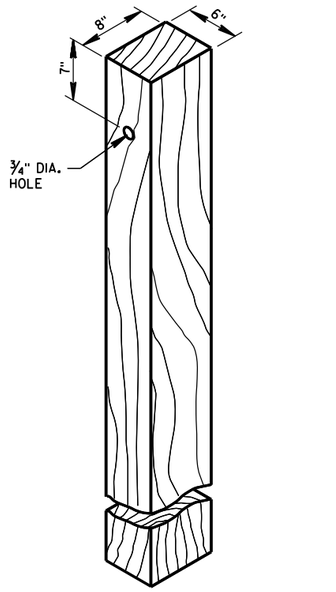


END VIEW

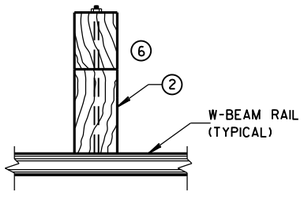
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



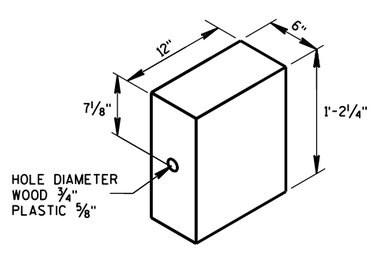
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) (1)



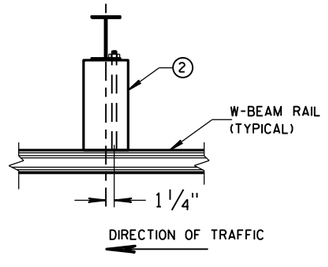
WOOD POST
(6" X 8") NOMINAL (1)



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT (2)

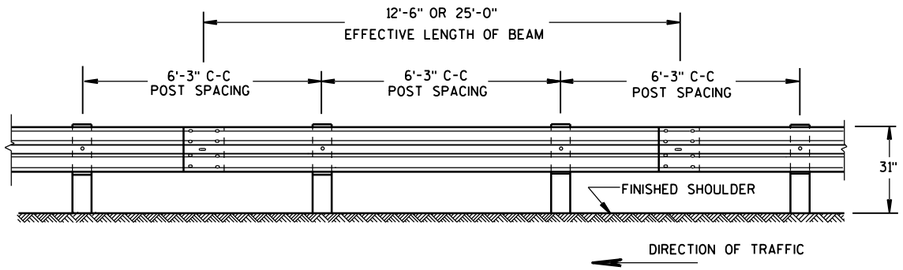


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

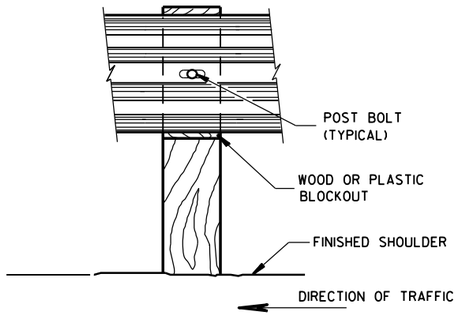
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 14 B 42-4a



FRONT VIEW

POST SPACING STANDARD INSTALLATION



FRONT VIEW AT WOOD POST

7. PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.

8. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.

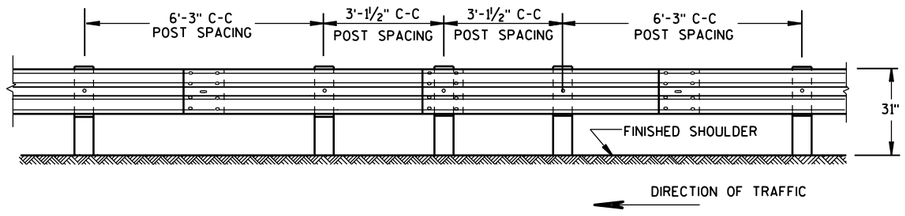
9. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

10. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.

11. 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

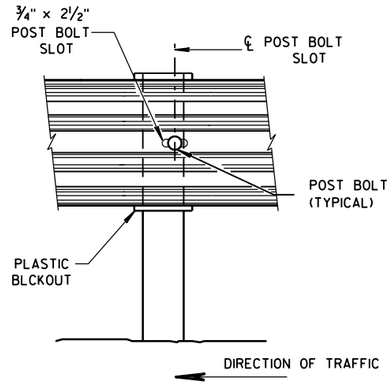
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

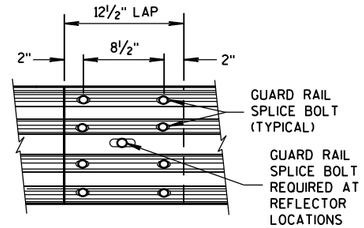


FRONT VIEW

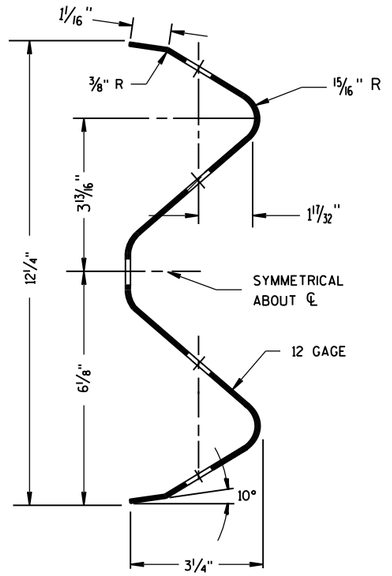
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



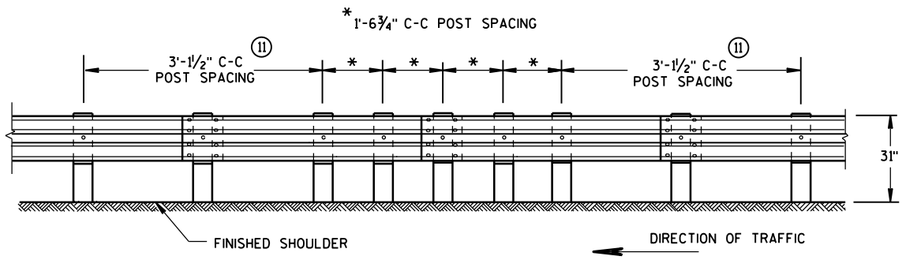
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE

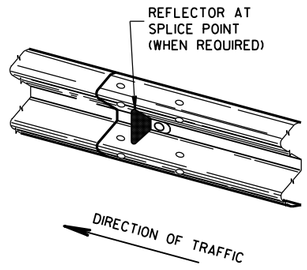


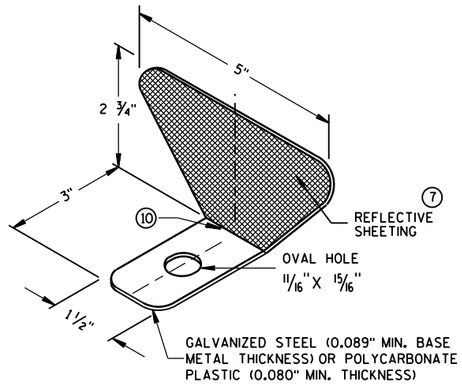
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (7)

REFLECTOR SPACING (8)

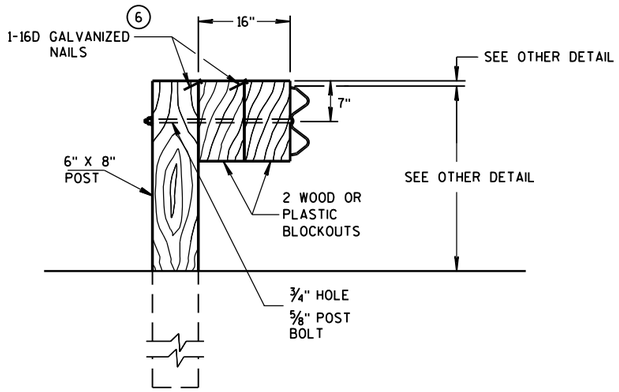
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 (9)	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2 (10)	

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

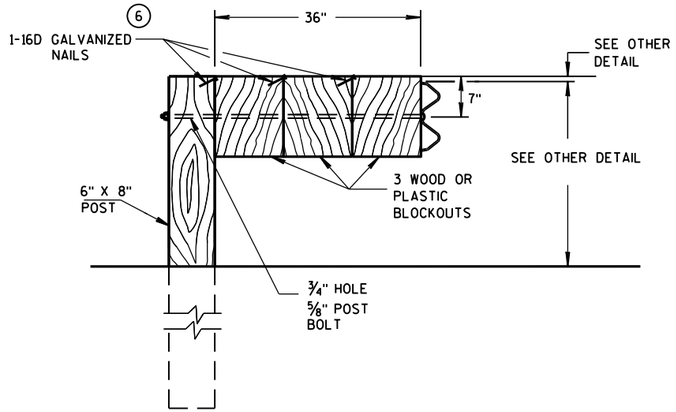
6

S.D.D. 14 B 42-4b



DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

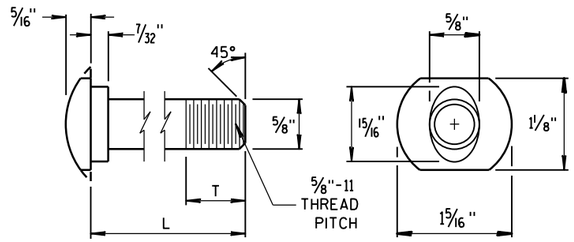


DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

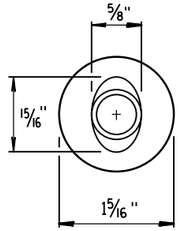
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

NOTE: 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 1/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

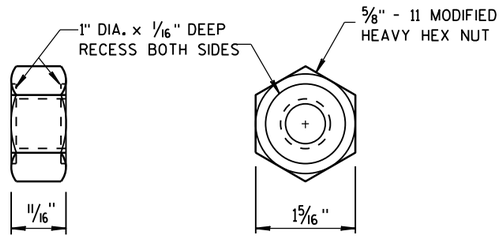


POST BOLT TABLE

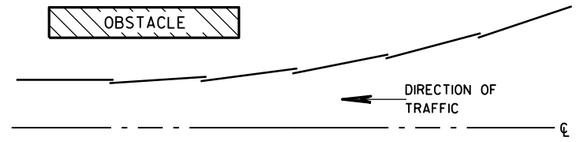
L	T (MIN.)
1¼"	1⅛"
2"	1¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

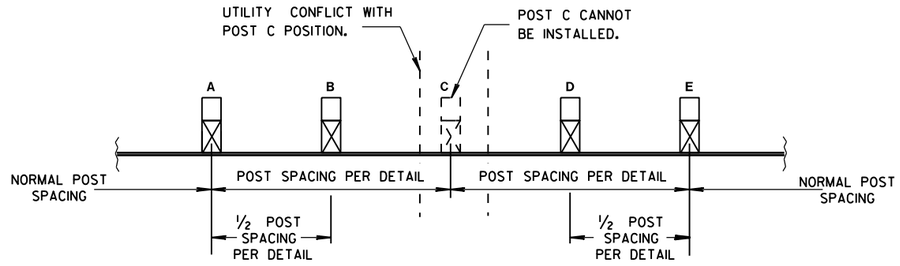


POST BOLT, SPLICE BOLT AND RECESS NUT

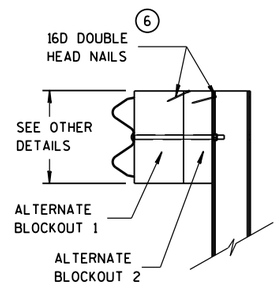


PLAN VIEW

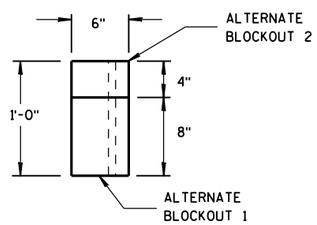
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6
S.D.D. 14 B 42-4c

GENERAL NOTES

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

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

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

(D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

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

(G) ½" DIAMETER X 3" LONG LAG BOLT AND WASHER.

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

(I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

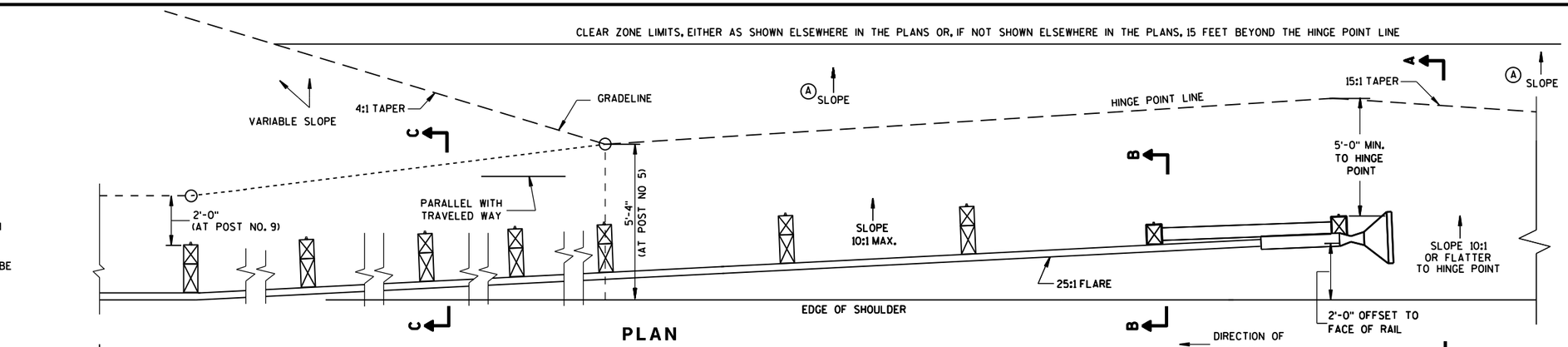
SEE SDD 14B42 FOR MORE INFORMATION.

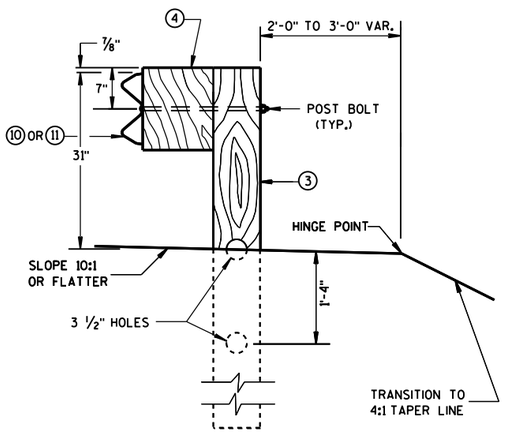
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

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

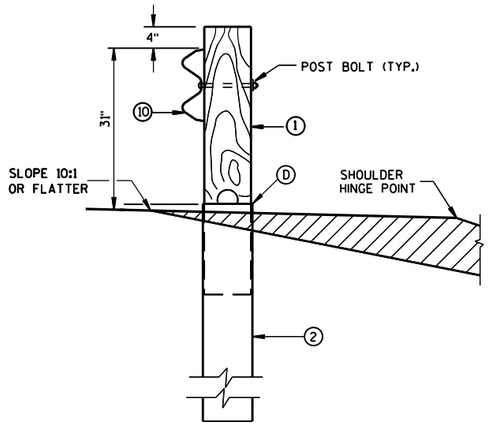
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

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

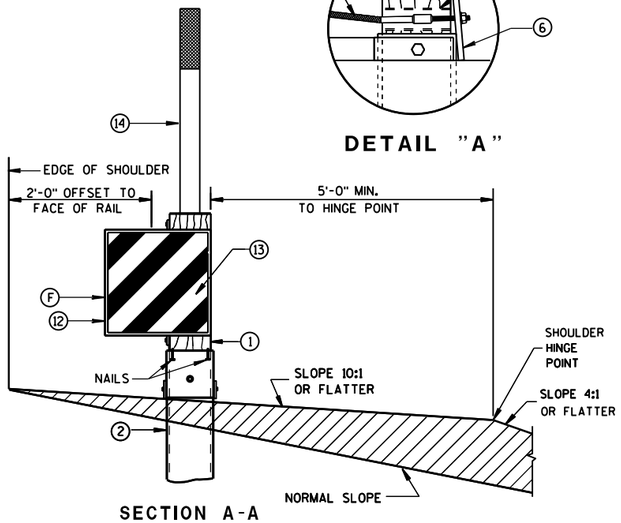




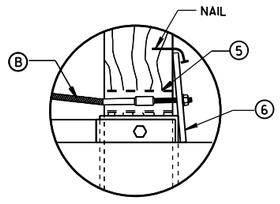
SECTION C-C
TYPICAL AT POST NOS. 3-9



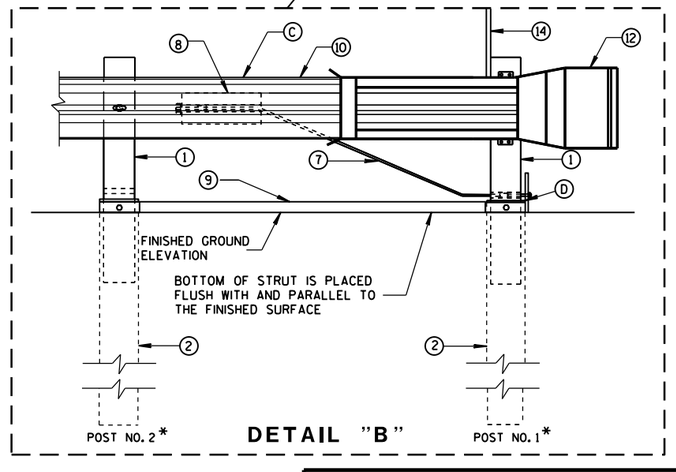
SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



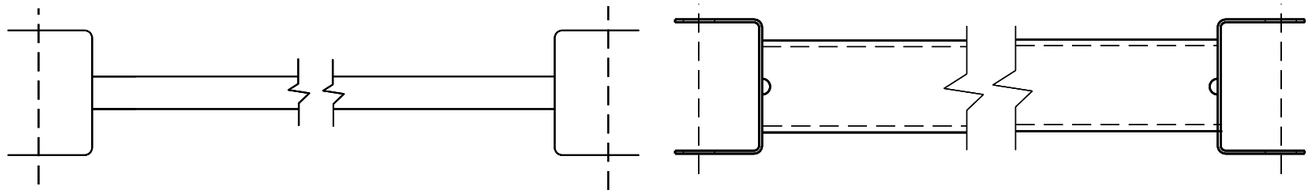
DETAIL "B"

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

S.D.D. 14 B 44-2a

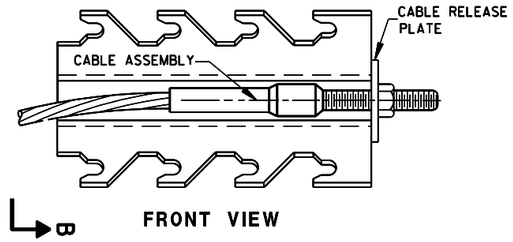
S.D.D. 14 B 44-2a



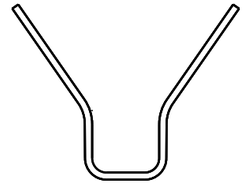
GENERIC GROUND STRUT (9) (H)

BILL OF MATERIALS

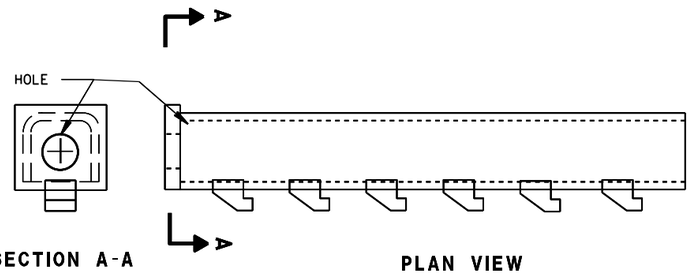
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	END SECTION EAT
(13)	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
(14)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



FRONT VIEW



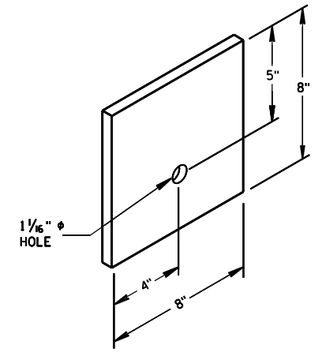
SECTION B-B



SECTION A-A

PLAN VIEW

GENERIC ANCHOR CABLE BOX (8) (H)



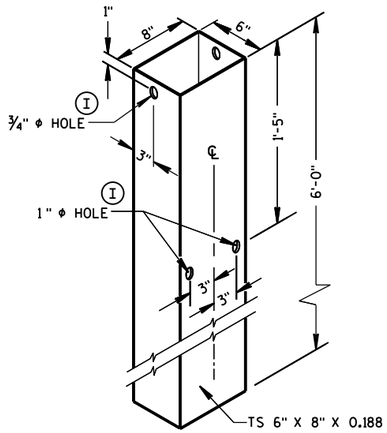
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

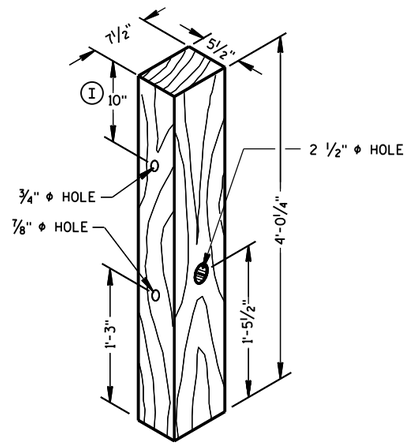
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 44-2b

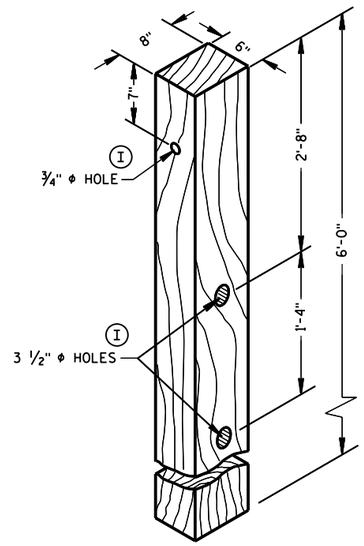


FOUNDATION TUBE (2)



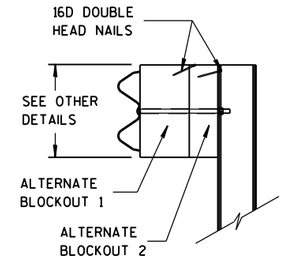
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

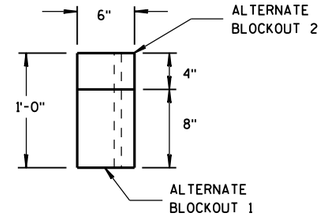


POSTS NUMBER 3-9

WOOD CRT POST (3)

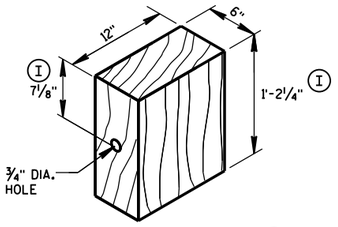


SIDE VIEW



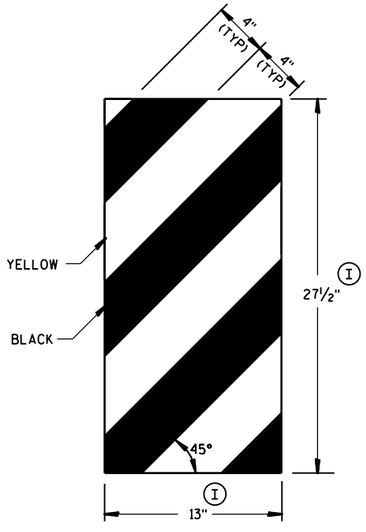
TOP VIEW

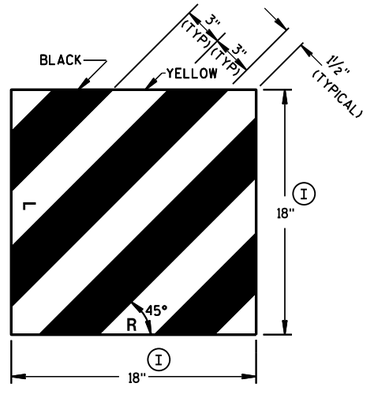
ALTERNATE WOOD BLOCKOUT DETAIL



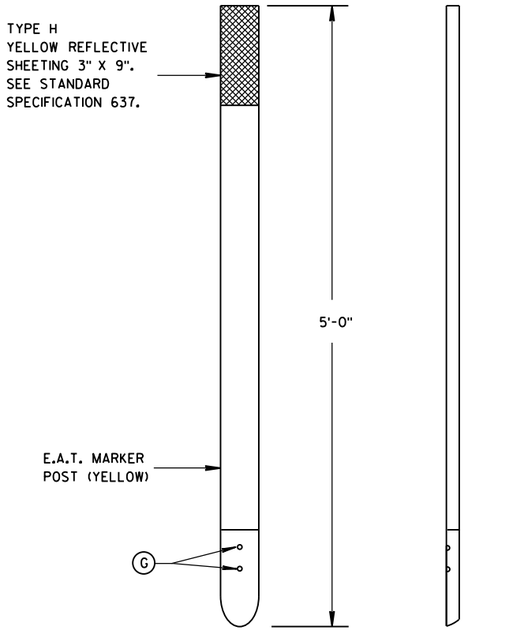
WOOD BLOCKOUT (4)

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





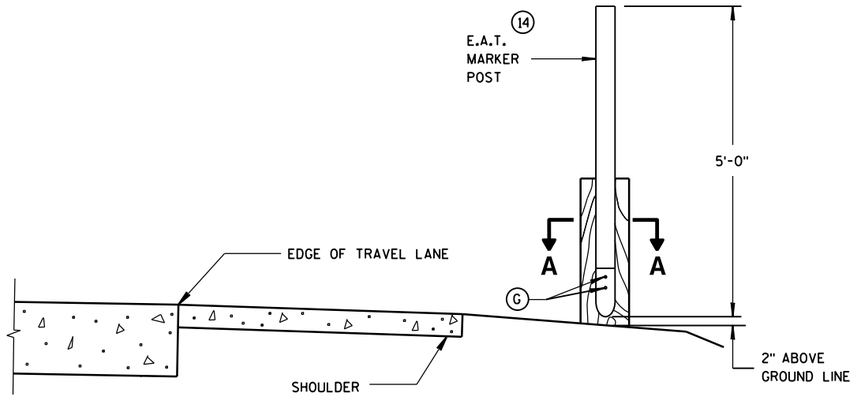
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

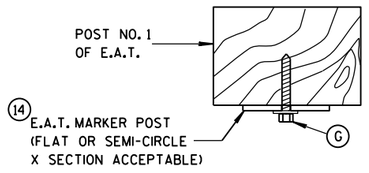
SIDE VIEW

E.A.T. MARKER POST (14)



TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1

(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

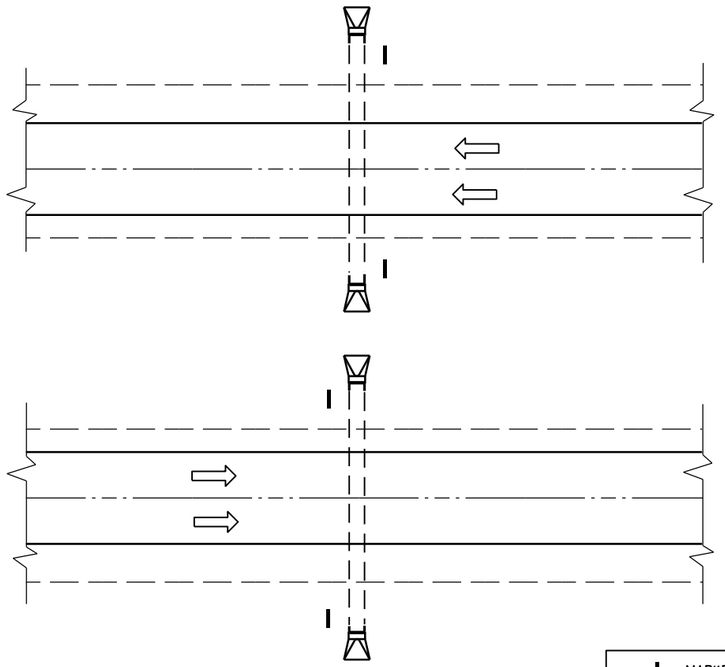
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

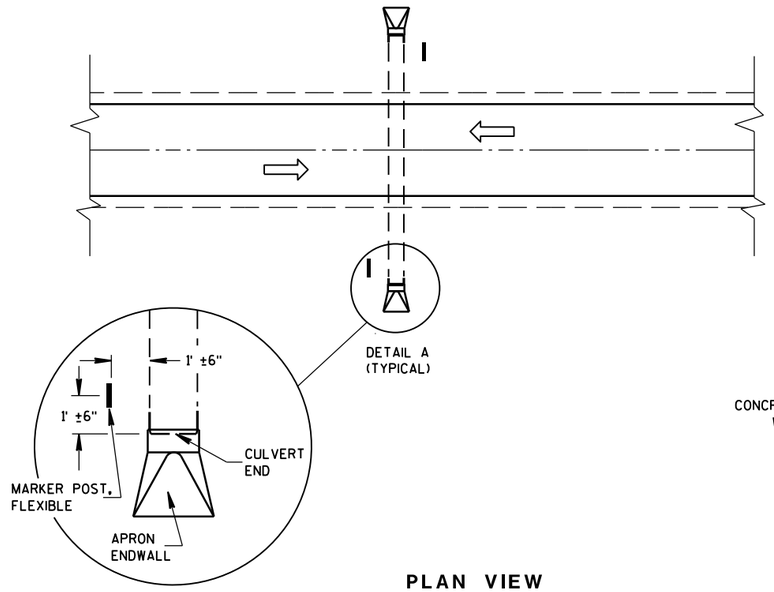
6

S.D.D. 14 B 44-2c



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

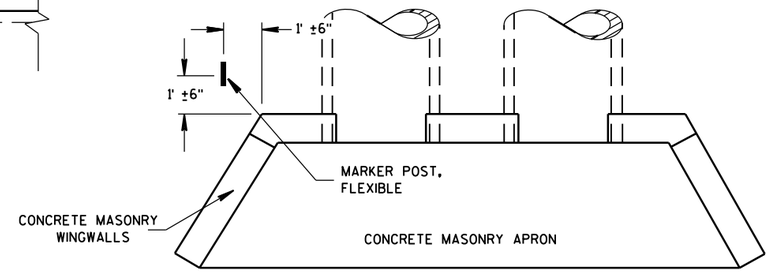
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

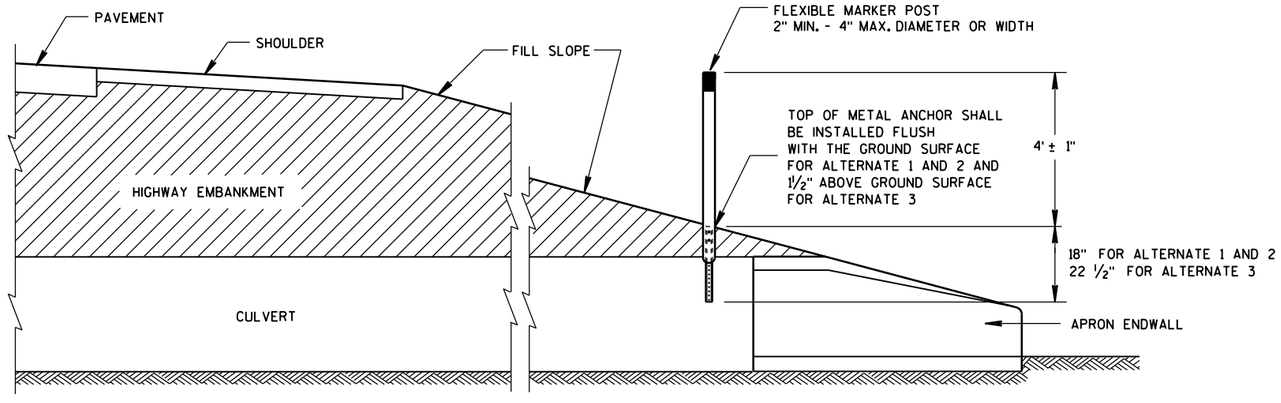
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

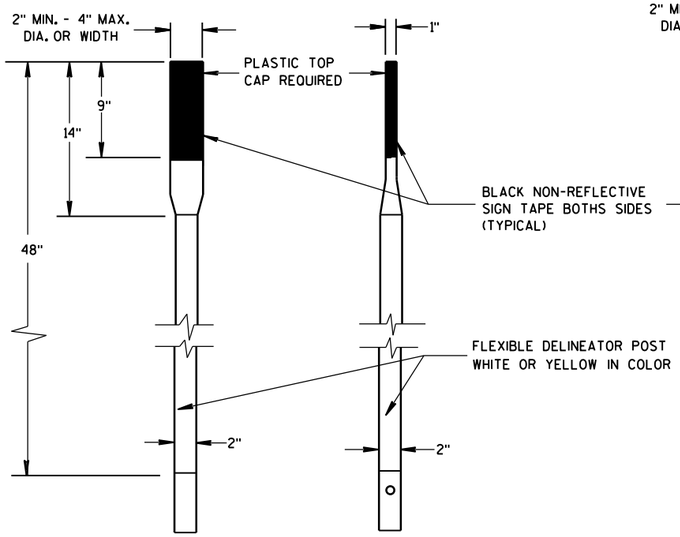
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

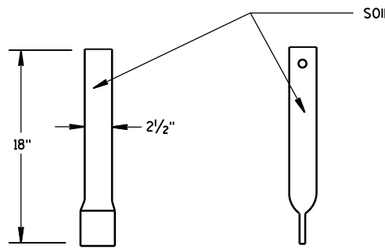
6

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

6

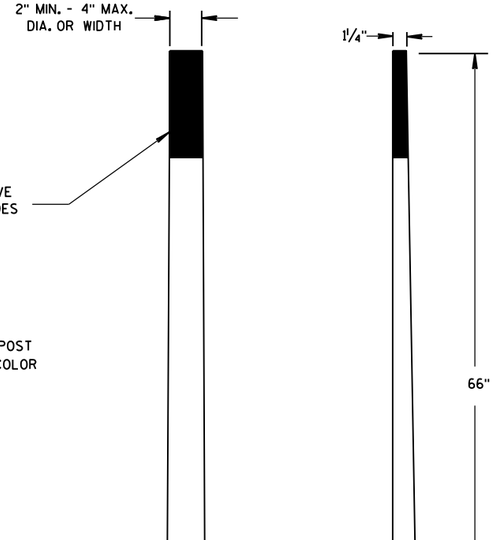
S.D.D. 15 A 3-2a





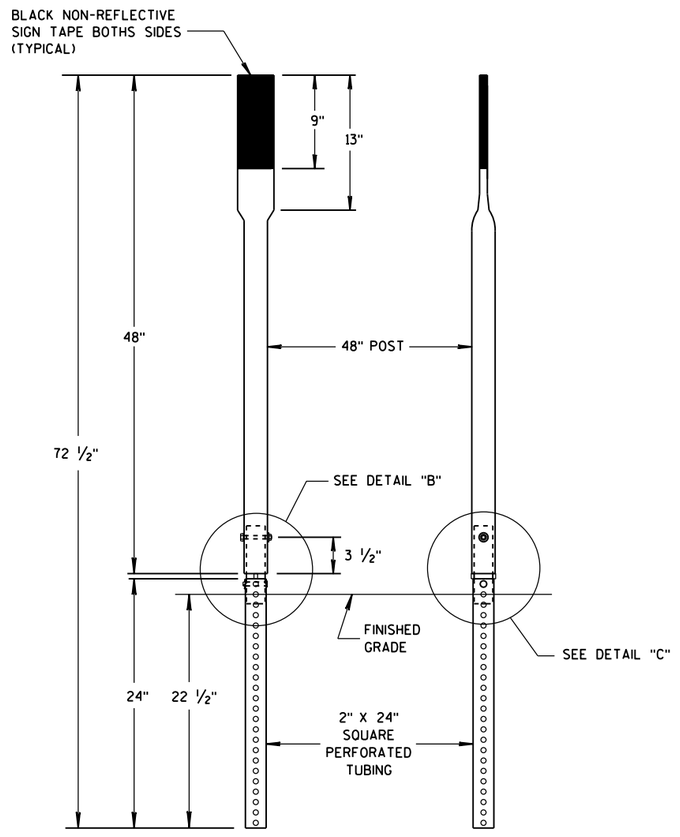
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

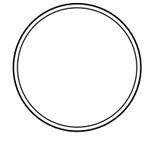
ALTERNATE 2



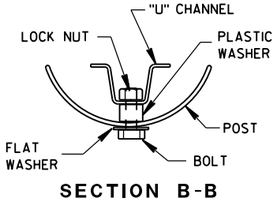
FRONT VIEW SIDE VIEW

ALTERNATE 3

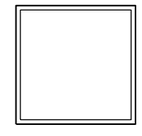
FLEXIBLE MARKER POSTS



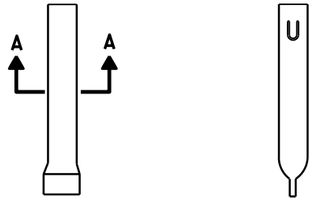
SECTION A-A



SECTION B-B

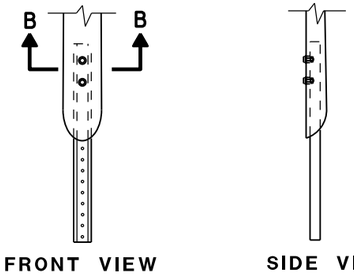


SECTION C-C



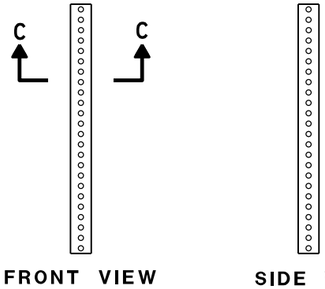
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

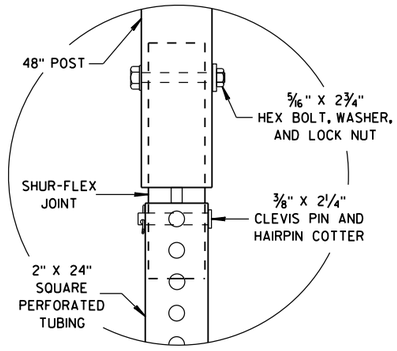
ALTERNATE 2



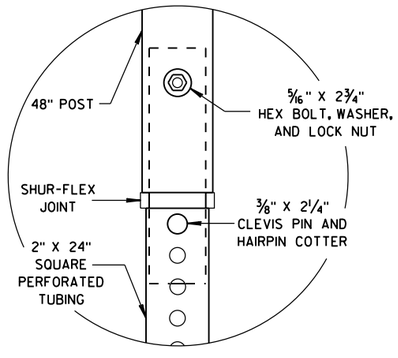
FRONT VIEW SIDE VIEW

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
IGN
FHWA

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

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

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.

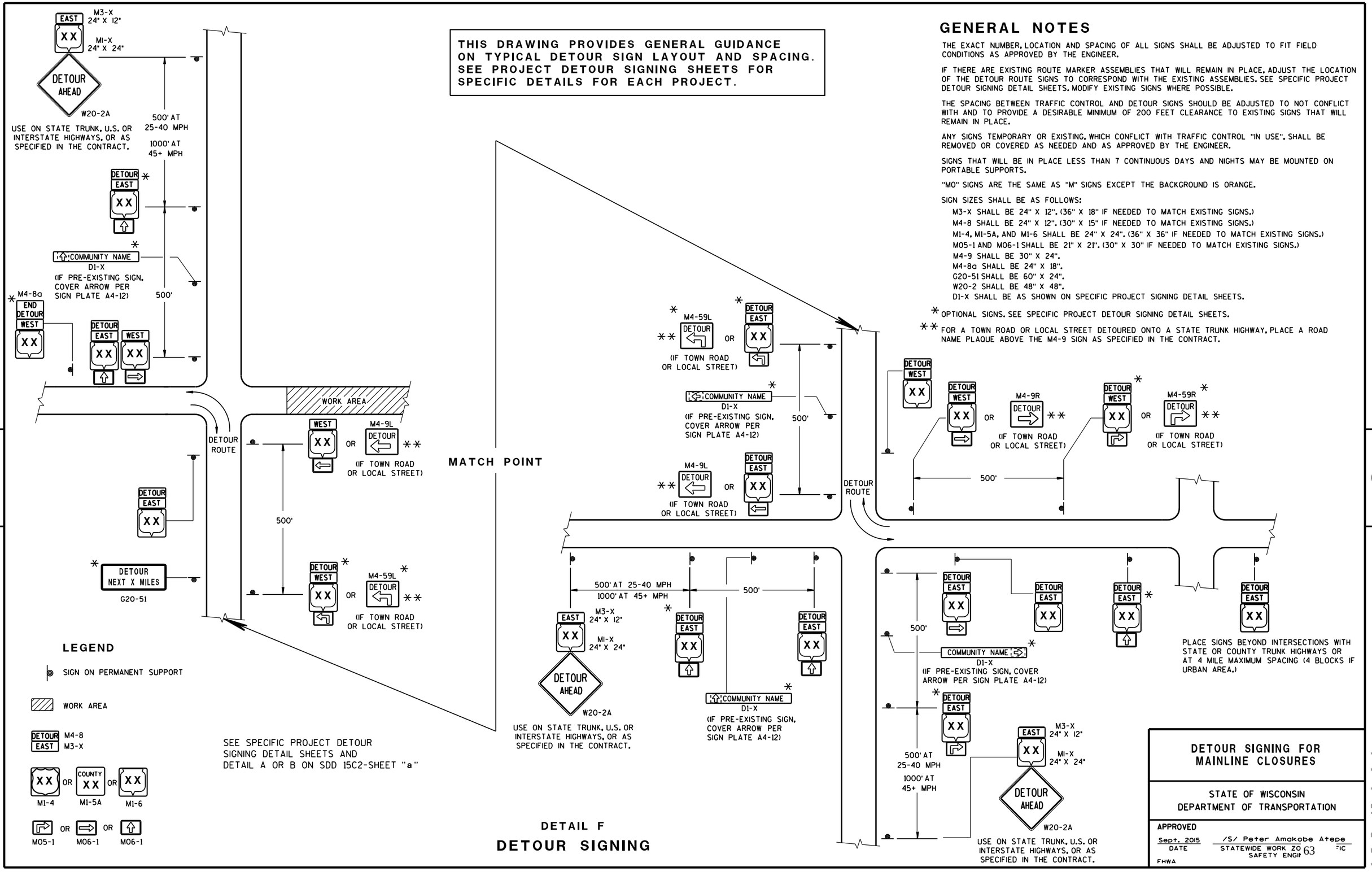
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- MO5-1 AND MO6-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 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.



DETAIL F

DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible] FIC

FHWA

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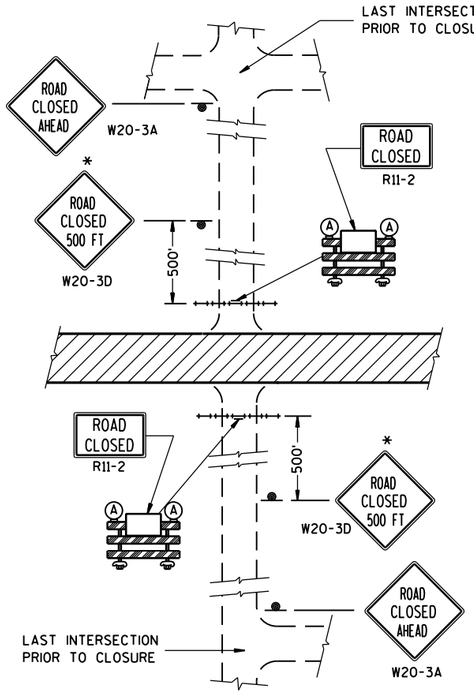
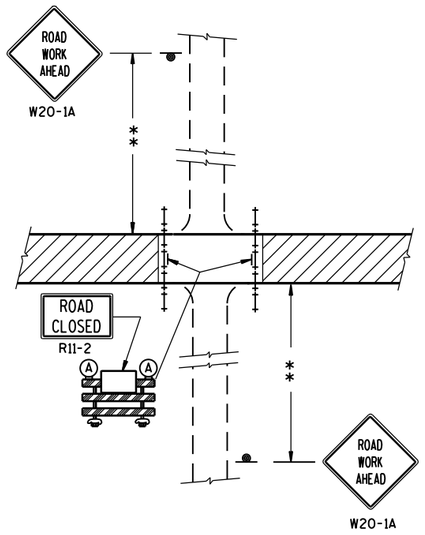


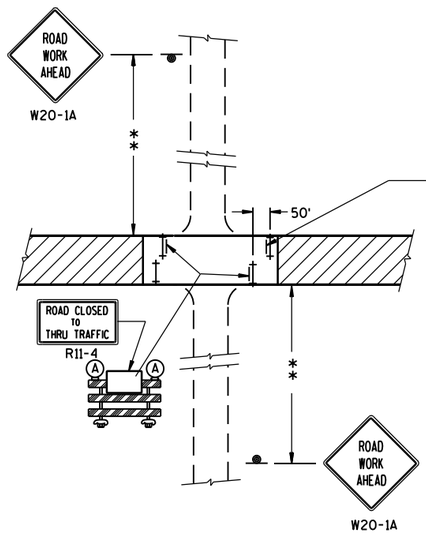
DETAIL 1

(NO ACCESS TO PROJECT)



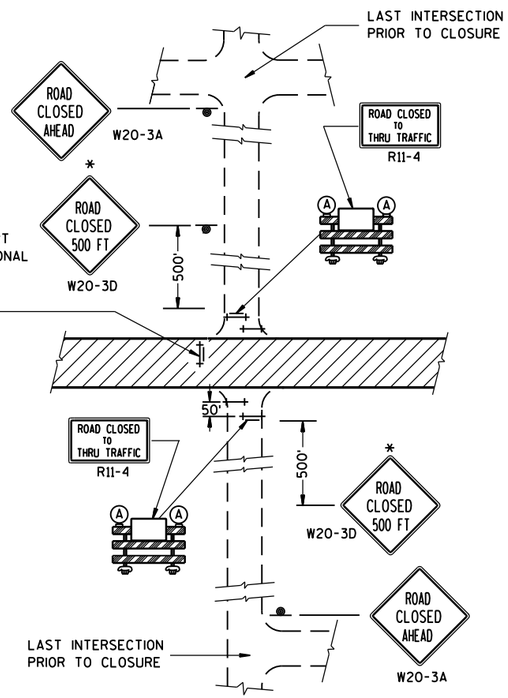
DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).



DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT 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 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 RE-ESTABLISHED.

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 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 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 15 C 3-3

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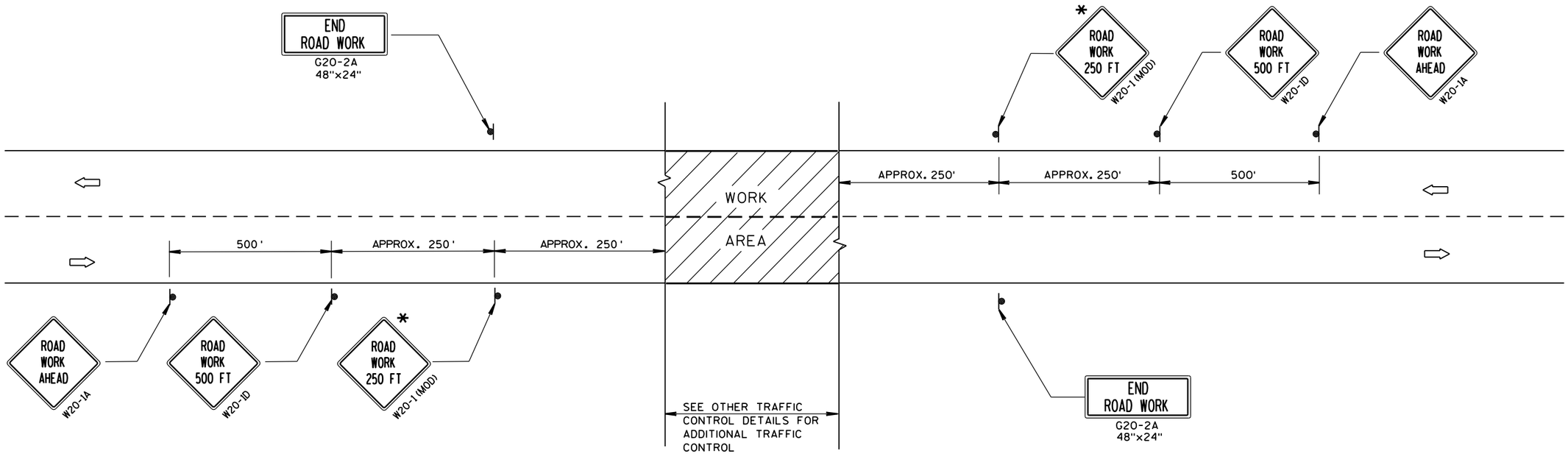
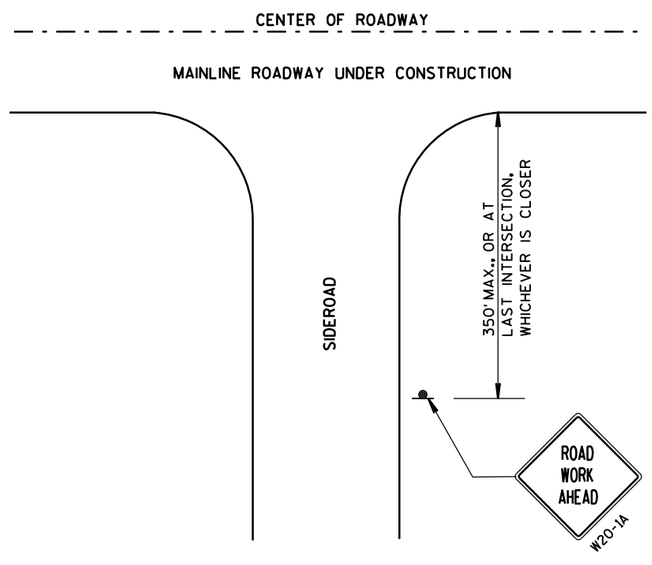
S.D.D. 15 C 3-3



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

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

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

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

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

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

LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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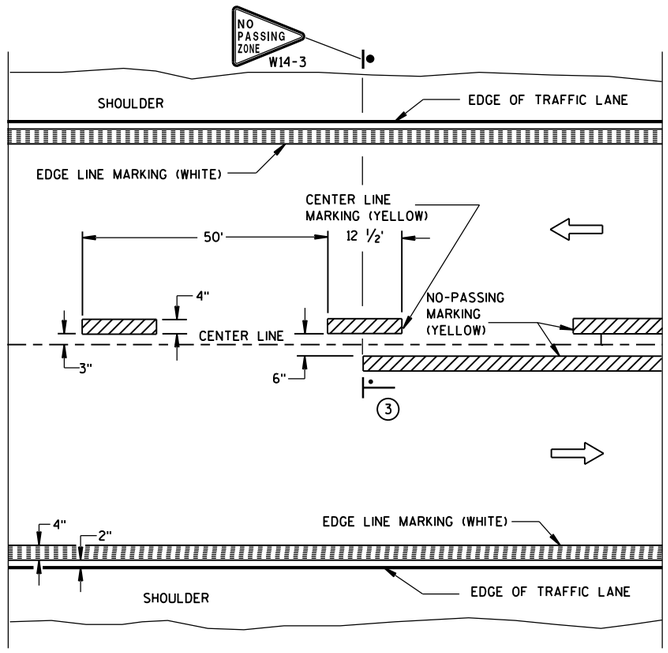
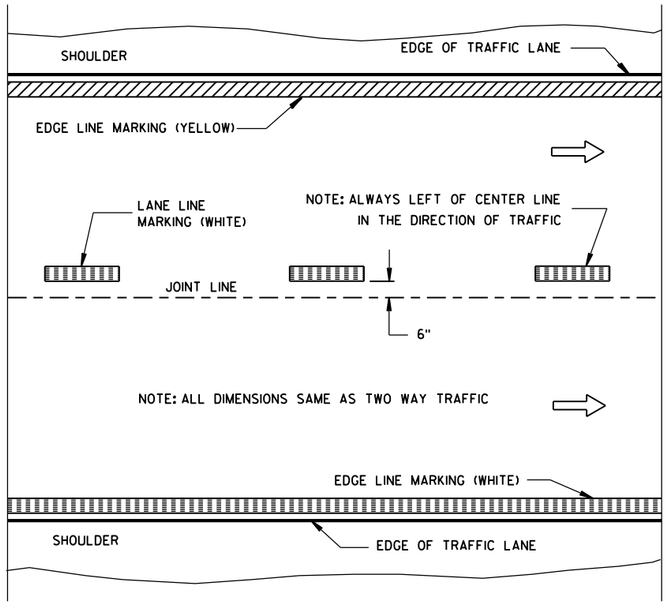
S.D.D. 15 C 5-3

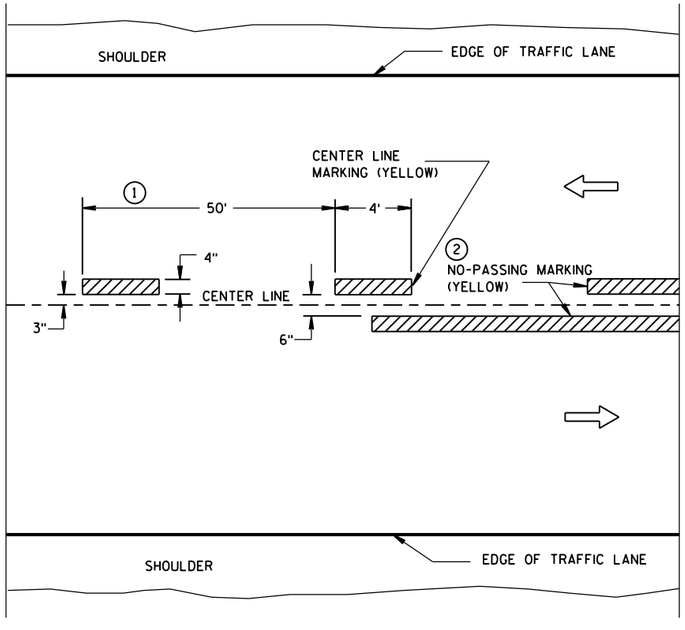


TWO WAY TRAFFIC

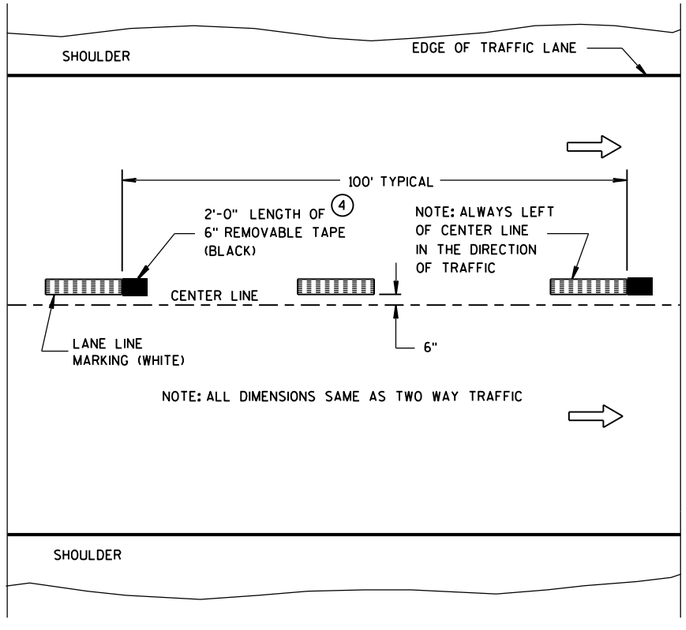


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

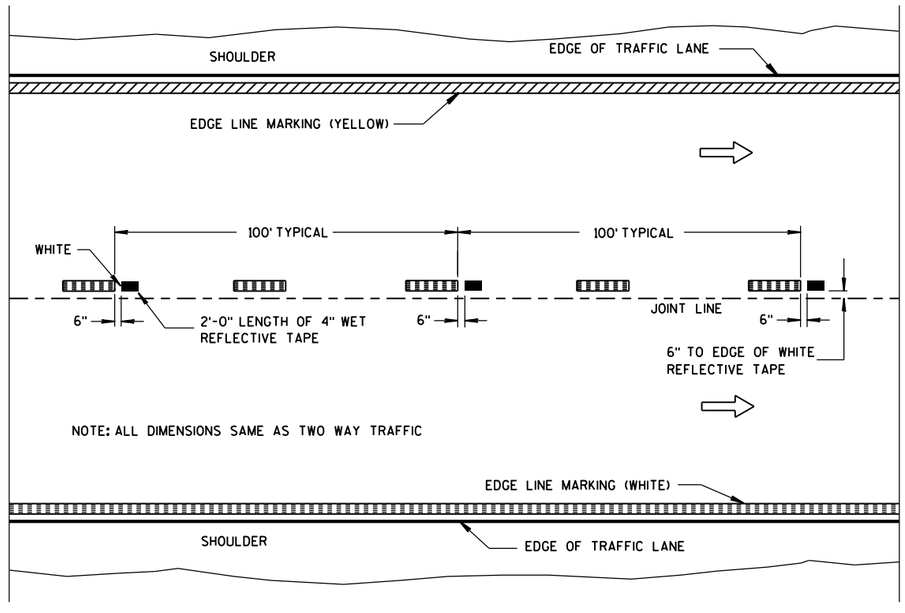
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



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

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013 DATE
/S/ Travis Feltes STATE TRAFFIC E
FHWA

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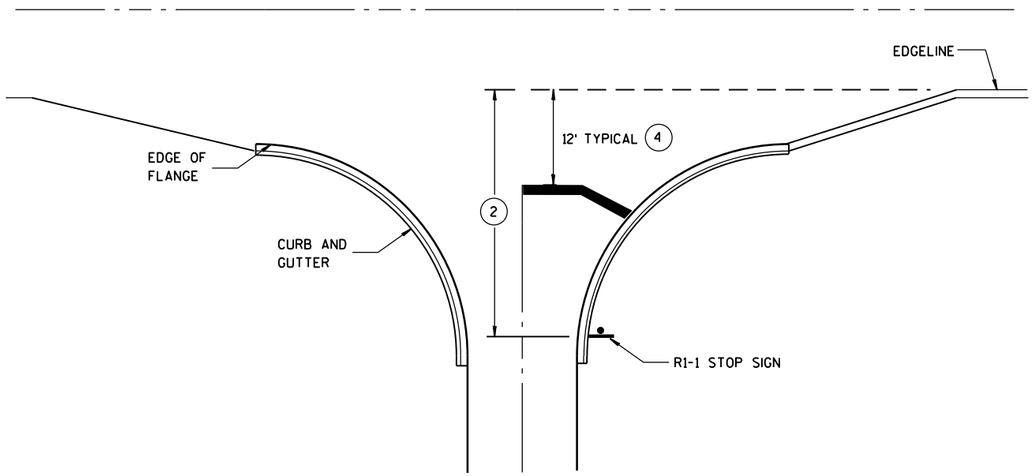
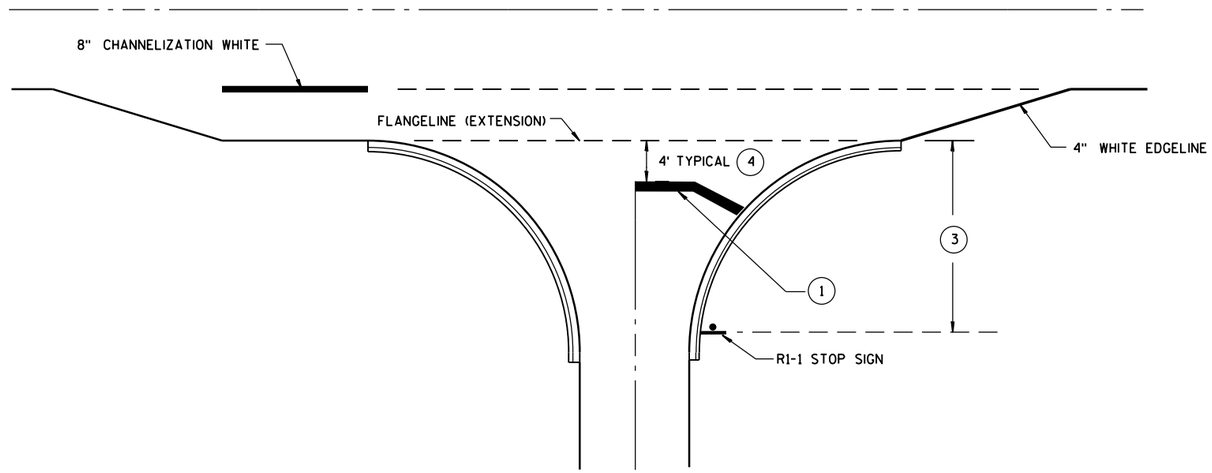
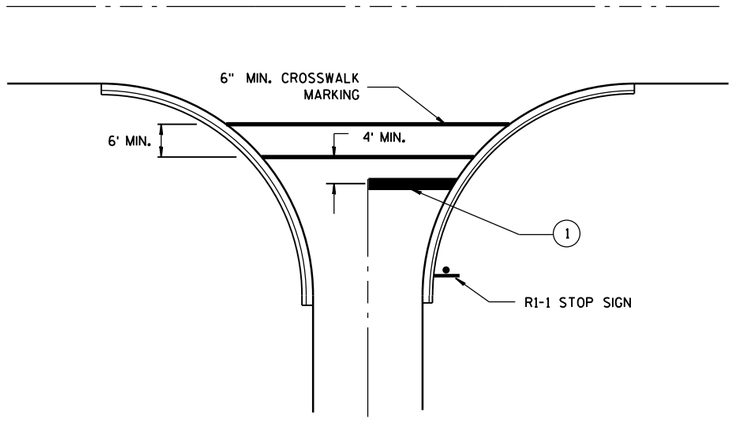


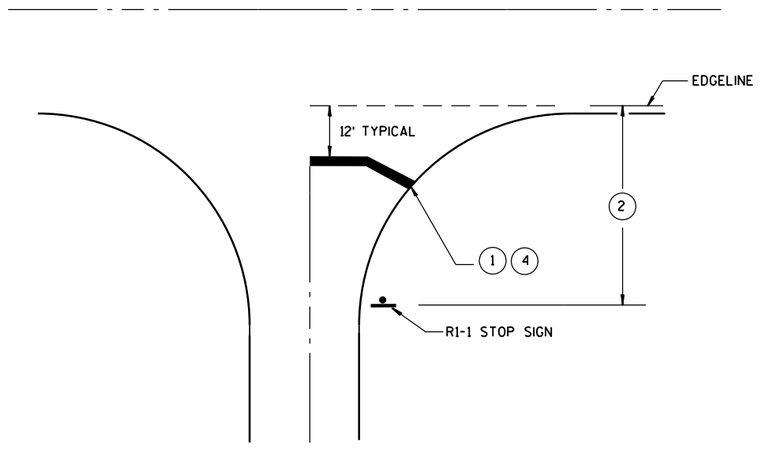
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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

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

4-18-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR

NEER

FHWA

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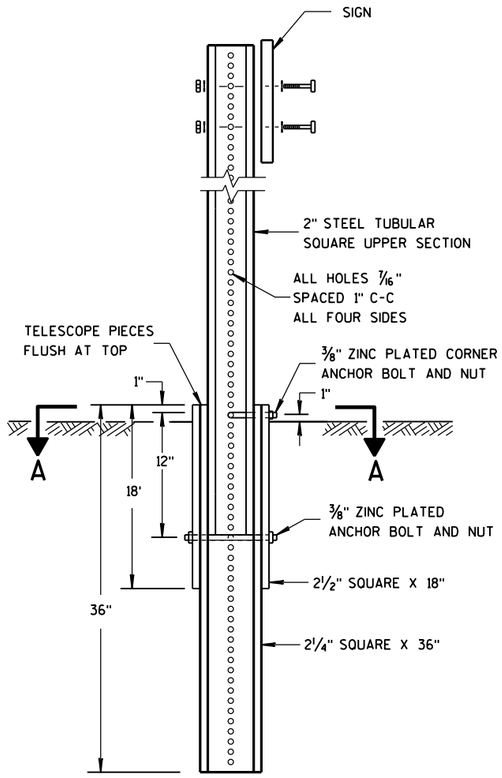
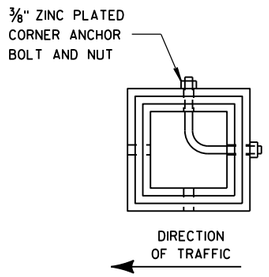
S.D.D. 15 C 33-2

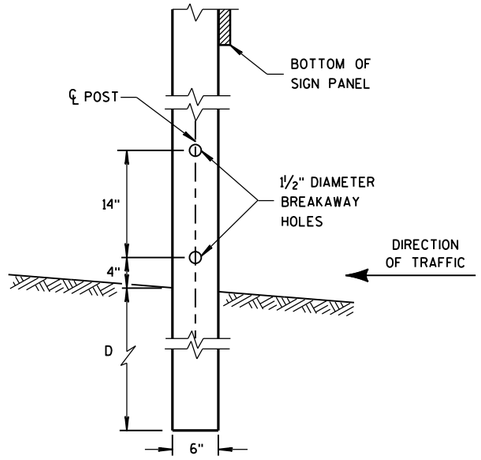
S.D.D. 15 C 33-2



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



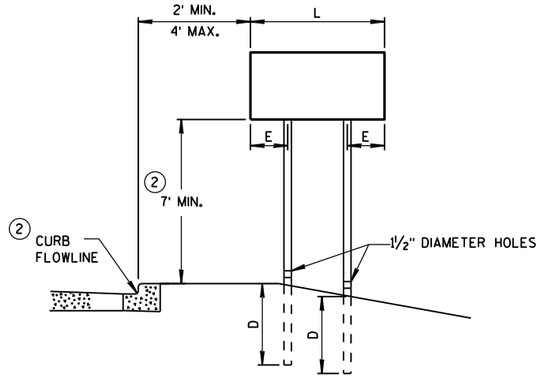
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

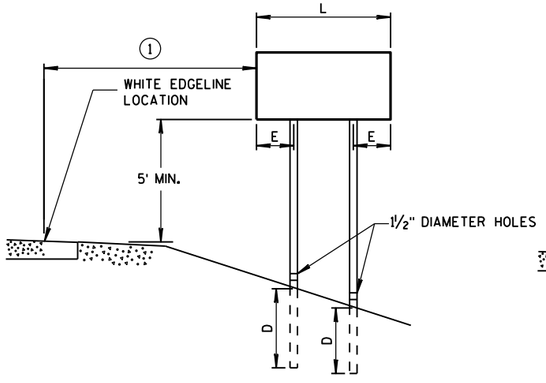
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

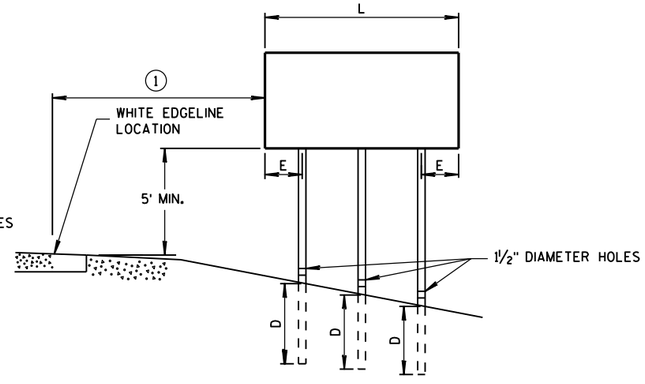
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK 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 FIXED MESSAGE SIGNS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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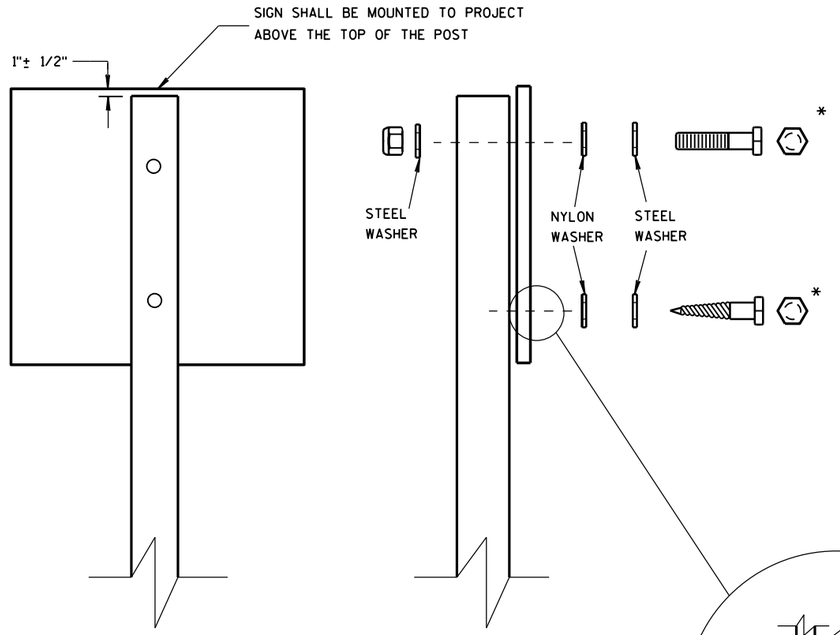
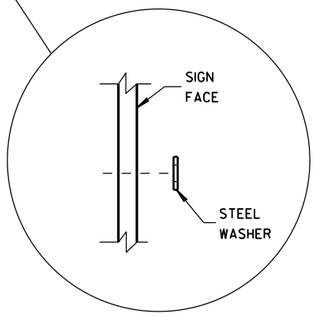




WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

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 38-1b

S.D.D. 15 D 38-1b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

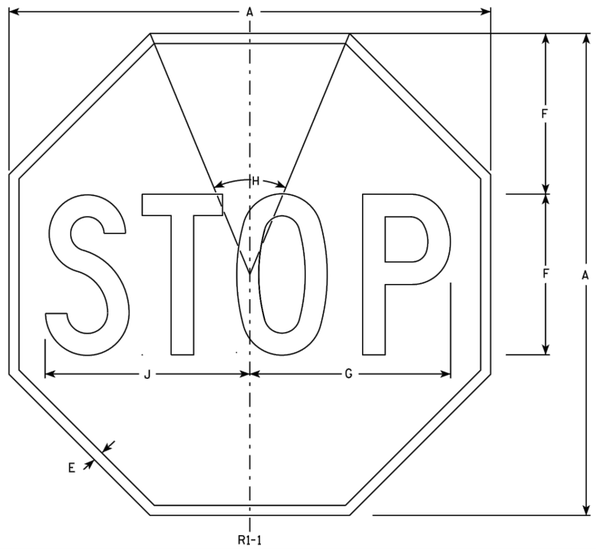
APPROVED

Feb. 2015 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

SIGN



NOTES

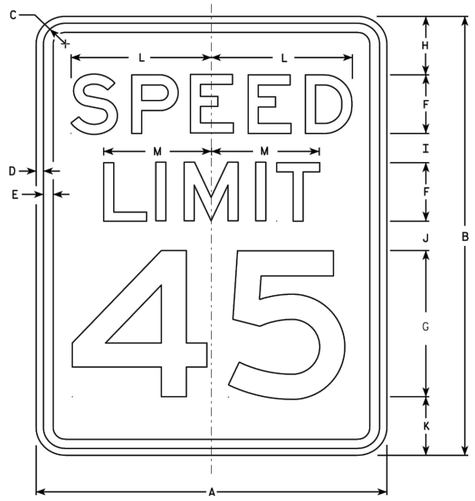
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

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	APX. WT.
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. R1-1.12

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

FILE NAME : C:\CAEfiles\Projects\hr_stdplate\R11.DGN PLOT DATE : 12-NOV-2015 10:32 PLOT BY : ##...plotuser...## PLOT NAME : PLOT SCALE : 6.977666:1.000000 WISDOT/CADDS SHEET 42



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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	APX. WT.
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: E

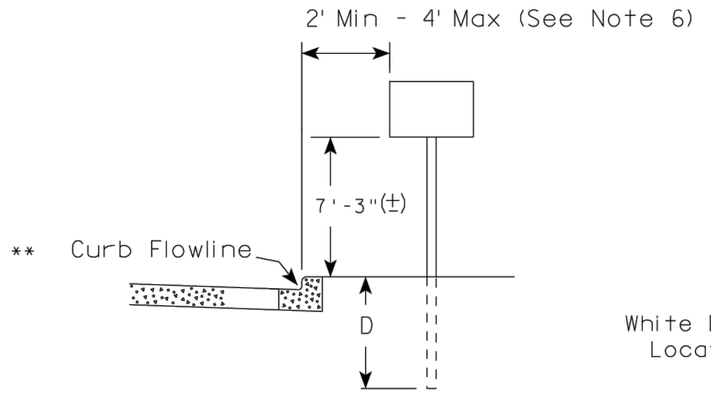
FILE NAME : C:\Users\PROJECTS\hr_stdplate\R21.DGN PLOT DATE : 28-MAY-2010 08:32 PLOT BY : dirpph PLOT NAME : PLOT SCALE : 4.717577:1.000000 WISDOT/CADDS SHEET 42

PROJECT NO: 3751-00-70 | HWY: CTH W | COUNTY: KENOSHA | CTH W SIGN PLATES | SHEET 70 E

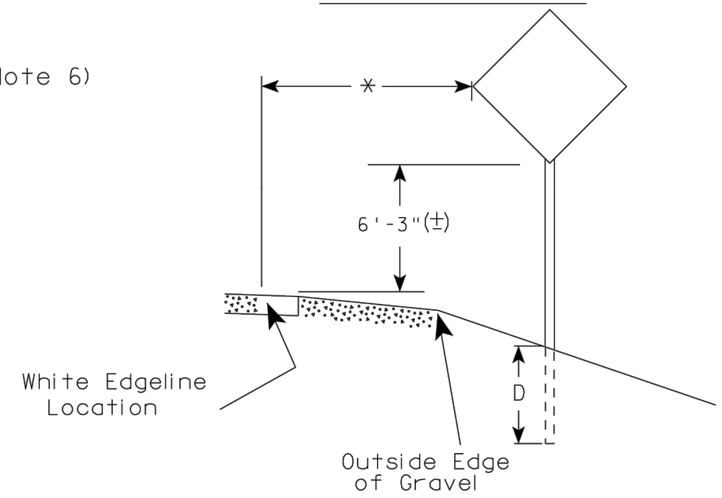
FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - SIGN PLATES
PLOT DATE : 1/23/2017 11:01 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : *********

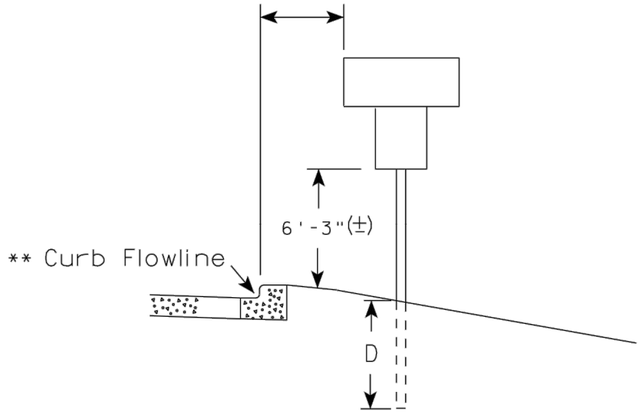
WISDOT/CADDS SHEET

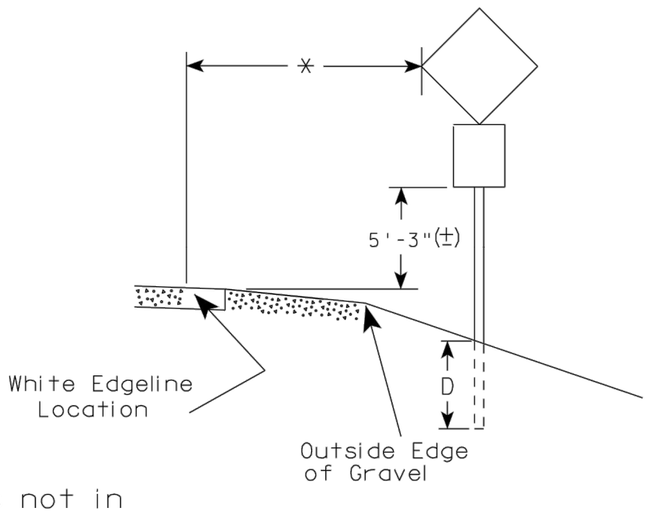
URBAN AREA



RURAL AREA (See Note 2)







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

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

GENERAL NOTES

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

POST EMBEDMENT DEPTH

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

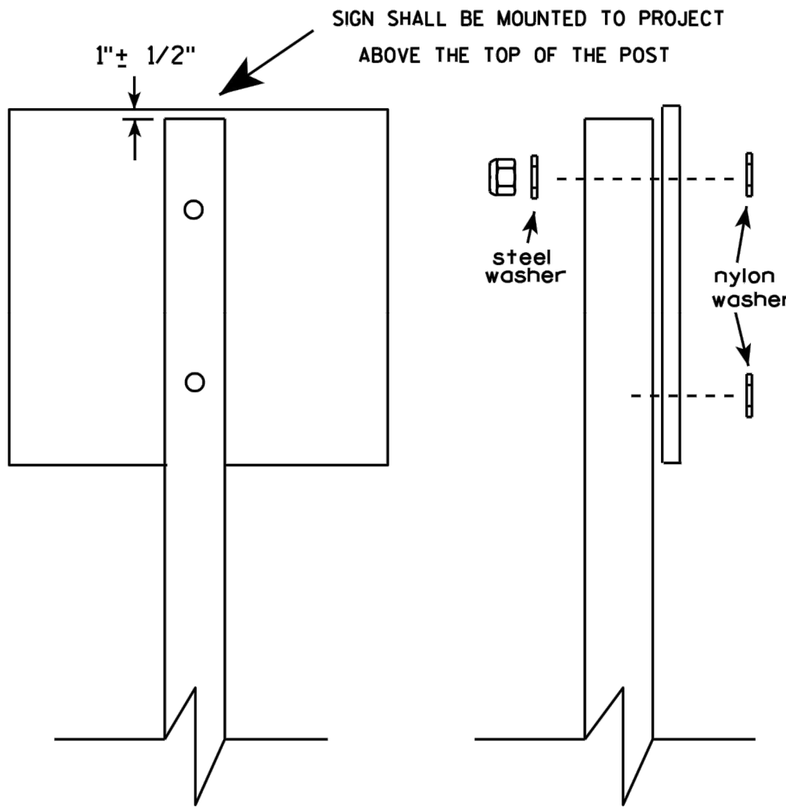
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

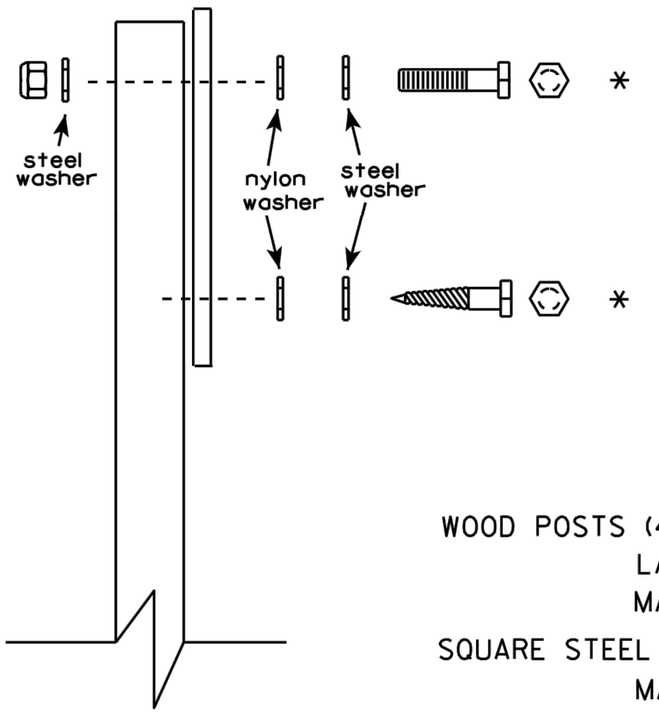
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

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

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CTH W SIGN PLATES	SHEET NO: 71	E





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

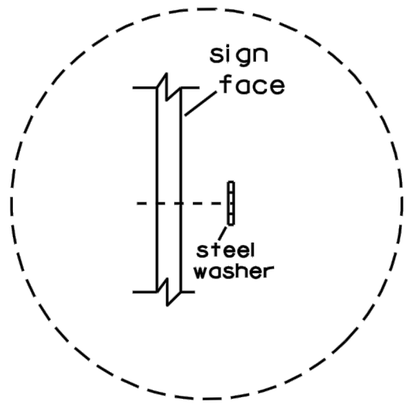
a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



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

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

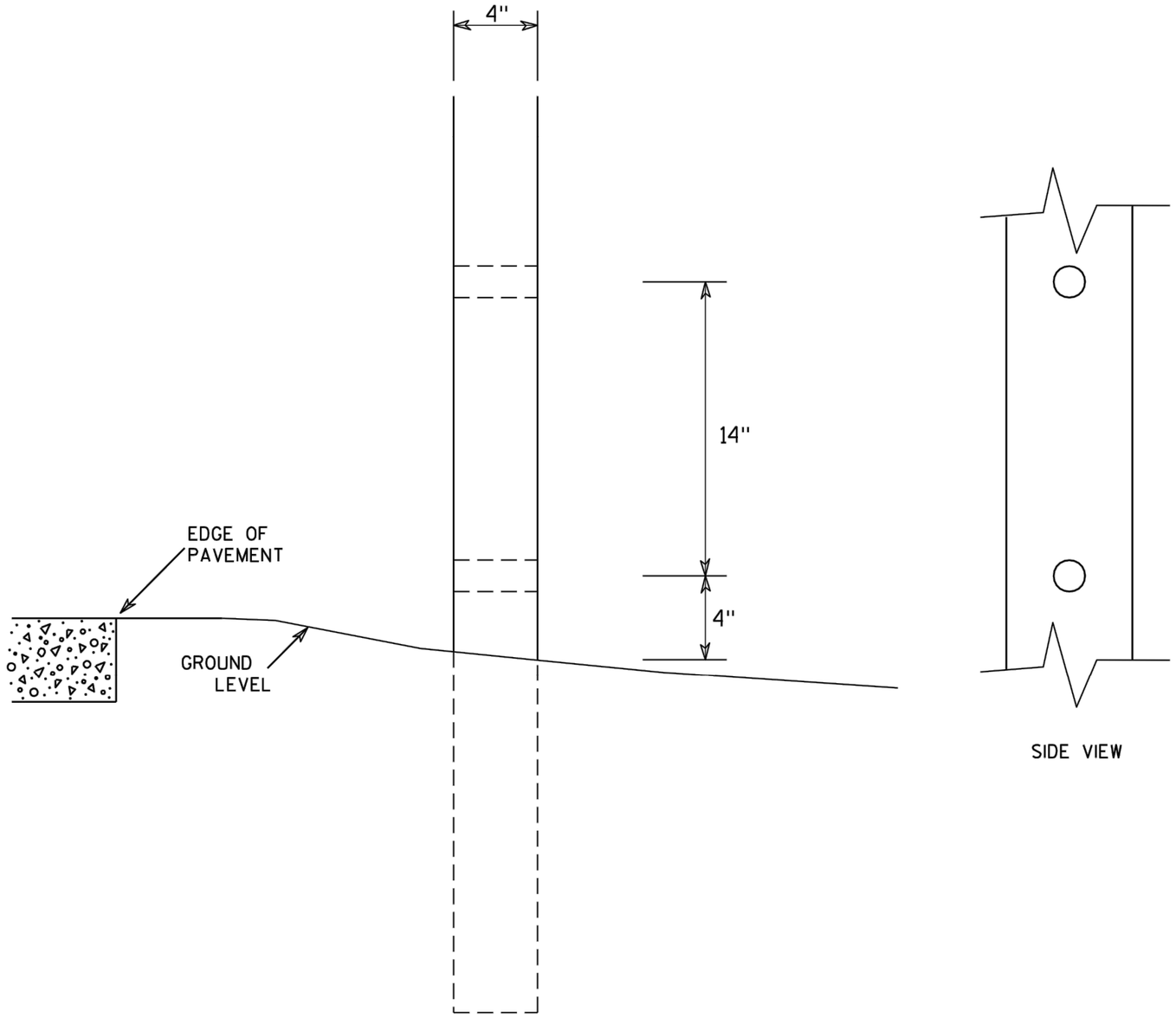
ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: 3751-00-70	CTH W	KENOSHA	CTH W SIGN PLATES	SHEET NO: 72	E



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CTH W SIGN PLATES	SHEET NO: 73	E

Total CTH W Earthwork Volume							
Station	Cut Area	Fill Area	Cut Vol	Fill Vol	Cum Cut Vol	Cum Fill Vol	Net Vol
19+50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20+00.00	125.14	0.00	115.87	0.00	115.87	0.00	115.87
20+50.00	124.56	0.31	231.21	0.33	347.08	0.33	346.74
21+00.00	129.53	0.02	235.27	0.36	582.35	0.69	581.66
21+50.00	122.40	0.22	233.83	0.27	816.19	0.96	815.23
22+00.00	86.71	0.00	188.70	0.25	1004.88	1.21	1003.68
22+50.00	87.12	0.38	155.93	0.44	1160.81	1.65	1159.16
23+00.00	119.45	0.00	191.17	0.44	1351.98	2.08	1349.90
23+50.00	128.00	0.48	237.23	0.53	1589.21	2.61	1586.59
24+00.00	128.04	2.19	239.56	2.86	1828.76	5.47	1823.30
24+50.00	211.19	0.18	314.10	2.52	2142.87	7.99	2134.88
25+00.00	171.90	0.00	354.72	0.19	2497.58	8.18	2489.40
25+50.00	73.34	1.12	227.08	1.20	2724.66	9.38	2715.28
25+57.61	71.11	0.31	20.35	0.23	2745.01	9.61	2735.40
26+00.00	75.62	0.00	115.19	0.29	2860.20	9.90	2850.30
26+50.00	53.21	1.95	119.28	2.08	2979.48	11.98	2967.50
27+00.00	32.63	19.11	79.48	22.43	3058.96	34.41	3024.55
27+50.00	25.48	19.71	53.81	41.34	3112.78	75.75	3037.03
28+00.00	30.53	11.81	51.86	33.56	3164.64	109.31	3055.32
28+50.00	38.95	6.14	64.33	19.11	3228.97	128.43	3100.54
29+00.00	34.88	4.33	68.36	11.15	3297.33	139.58	3157.75
29+28.00	55.97	0.23	47.11	2.72	3344.43	142.30	3202.14
29+50.00	43.09	10.39	40.36	4.98	3384.79	147.28	3237.51
30+00.00	29.21	27.58	67.84	41.05	3452.62	188.33	3264.30
30+37.00	29.21	17.72	40.19	36.59	3492.81	224.92	3267.90
30+50.00	38.36	17.82	16.27	9.84	3509.08	234.76	3274.32
31+00.00	37.58	15.28	70.82	35.93	3579.91	270.69	3309.22
31+50.00	68.79	11.30	99.35	28.32	3679.26	299.01	3380.25
32+00.00	73.86	4.88	132.09	17.23	3811.34	316.23	3495.11
32+50.00	96.81	4.85	158.02	10.36	3969.37	326.59	3642.78

Total CTH W Earthwork Volume							
Station	Cut Area	Fill Area	Cut Vol	Fill Vol	Cum Cut Vol	Cum Fill Vol	Net Vol
33+00.00	16.18	35.21	104.61	42.66	4073.98	369.25	3704.73
33+50.00	21.47	68.20	34.86	110.11	4108.84	479.36	3629.49
34+00.00	19.36	91.43	37.81	169.97	4146.65	649.33	3497.32
34+11.00	22.64	82.48	8.97	41.01	4155.62	690.34	3465.29
34+50.00	23.56	100.48	34.67	153.44	4190.29	843.78	3346.52
35+00.00	32.21	90.26	52.66	206.23	4242.95	1050.01	3192.94
35+50.00	0.00	0.00	30.20	97.84	4273.15	1147.85	3125.30
35+77.00	33.01	93.55	17.38	54.66	4290.53	1202.51	3088.03
36+00.00	39.95	110.83	32.66	101.81	4323.20	1304.32	3018.88
36+50.00	9.18	113.35	47.02	243.24	4370.22	1547.55	2822.66
36+75.00	24.21	84.27	15.29	107.33	4385.50	1654.88	2730.63
37+00.00	38.78	58.79	28.91	77.86	4414.42	1732.74	2681.68
37+50.00	52.33	24.47	82.10	91.11	4496.51	1823.85	2672.67
38+00.00	107.30	29.29	143.68	59.13	4640.19	1882.97	2757.21
38+50.00	126.85	9.98	209.14	42.95	4849.33	1925.92	2923.41
39+00.00	147.34	7.23	241.43	18.83	5090.76	1944.75	3146.01
39+50.00	130.88	1.44	245.34	9.70	5336.10	1954.45	3381.65
40+00.00	101.84	1.93	212.78	3.63	5548.88	1958.08	3590.80
40+33.00	117.02	0.95	133.75	2.02	5682.63	1960.10	3722.53
40+50.00	102.71	0.56	69.17	0.55	5751.80	1960.65	3791.16
41+00.00	90.95	3.50	179.31	4.32	5931.12	1964.97	3966.15
41+50.00	64.03	37.61	143.50	43.77	6074.62	2008.73	4065.89
42+00.00	213.81	10.41	265.02	50.05	6339.64	2058.79	4280.86
42+50.00	21.91	0.00	218.26	11.08	6557.91	2069.87	4488.04
43+00.00	138.36	1.89	148.39	2.02	6706.30	2071.89	4634.41
43+50.00	62.71	0.39	186.17	2.43	6892.47	2074.32	4818.15
44+00.00	17.79	0.00	74.54	0.41	6967.01	2074.73	4892.28
44+50.00	0.00	0.00	16.48	0.00	6983.49	2074.73	4908.75

9

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PROJECT NO: 3751-00-70 | HWY: CTH W | COUNTY: KENOSHA | CROSS SECTIONS: CTH W (FOX RIVER ROAD) | SHEET 74 | E

Total Excavation Below Subgrade (EBS) Volume							
Station	Cut Area	Fill Area	Cut Vol	Fill Vol	Cum Cut Vol	Cum Fill Vol	Net Vol
33+00.00	0.08	0.00	0.07	0.00	0.07	0.00	0.07
33+50.00	7.98	0.00	7.46	0.00	7.54	0.00	7.54
34+00.00	16.15	0.00	22.35	0.00	29.88	0.00	29.88
34+11.00	18.32	0.00	6.82	0.00	36.71	0.00	36.71
34+50.00	29.90	0.00	33.96	0.00	70.67	0.00	70.67
35+00.00	45.69	0.00	68.66	0.00	139.32	0.00	139.32
35+50.00	0.00	0.00	41.61	0.00	180.93	0.00	180.93
35+77.00	79.92	0.00	39.96	0.00	220.88	0.00	220.88
36+00.00	80.00	0.00	68.11	0.00	288.99	0.00	288.99
36+50.00	80.12	0.00	148.25	0.00	437.25	0.00	437.25
36+75.00	80.02	0.00	74.13	0.00	511.38	0.00	511.38
37+00.00	78.99	0.00	73.62	0.00	585.00	0.00	585.00
37+50.00	71.62	0.00	139.66	0.00	724.67	0.00	724.67
38+00.00	39.38	0.00	103.54	0.00	828.20	0.00	828.20
38+50.00	40.48	0.00	74.76	0.00	902.96	0.00	902.96
39+00.00	26.57	0.00	62.10	0.00	965.06	0.00	965.06
39+50.00	17.09	0.00	39.93	0.00	1004.99	0.00	1004.99
40+00.00	18.78	0.00	32.99	0.00	1037.98	0.00	1037.98
40+33.00	3.84	0.00	13.83	0.00	1051.81	0.00	1051.81
40+50.00	11.12	0.00	4.71	0.00	1056.52	0.00	1056.52
41+00.00	12.56	0.00	21.93	0.00	1078.45	0.00	1078.45
41+50.00	1.02	0.00	12.58	0.00	1091.04	0.00	1091.04
42+00.00	0.00	0.00	0.96	0.00	1092.00	0.00	1092.00
42+50.00	0.00	0.00	0.00	0.00	1092.00	0.00	1092.00
43+00.00	0.00	0.00	0.00	0.00	1092.00	0.00	1092.00
43+50.00	0.00	0.00	0.00	0.00	1092.00	0.00	1092.00
44+00.00	0.00	0.00	0.00	0.00	1092.00	0.00	1092.00
44+50.00	0.00	0.00	0.00	0.00	1092.00	0.00	1092.00

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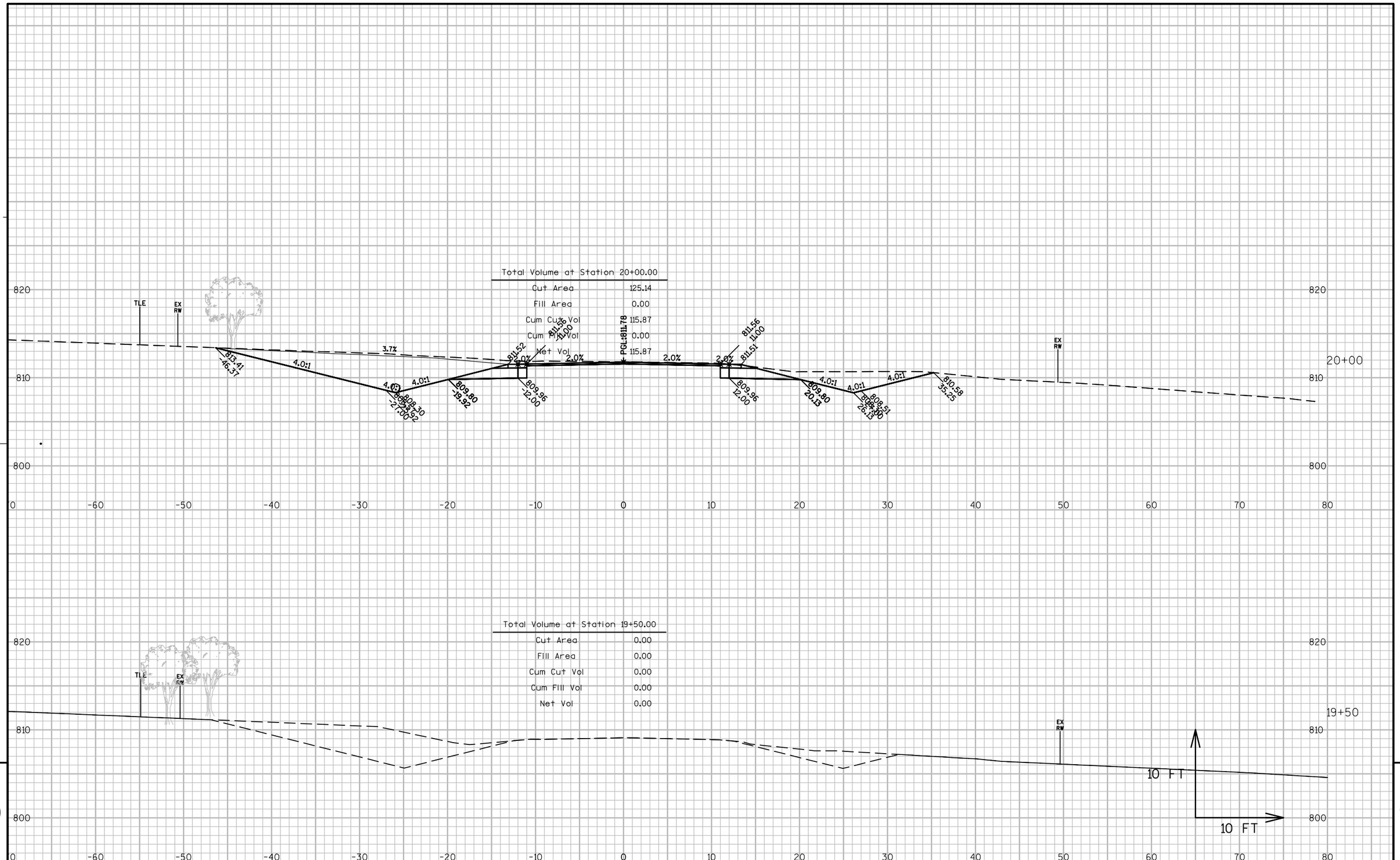
PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 75	E

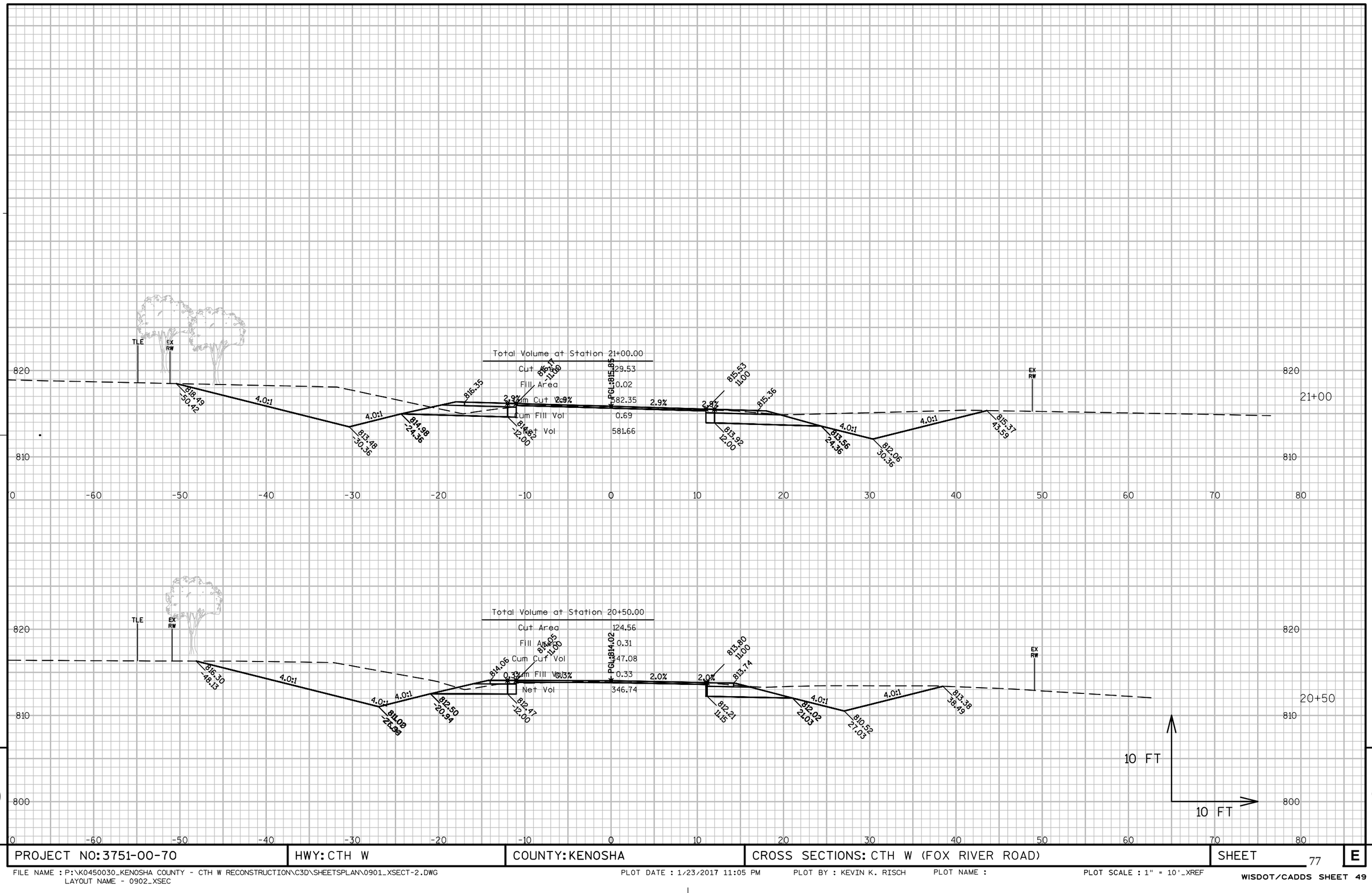


PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 76	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0901_XSEC

PLOT DATE : 1/23/2017 11:04 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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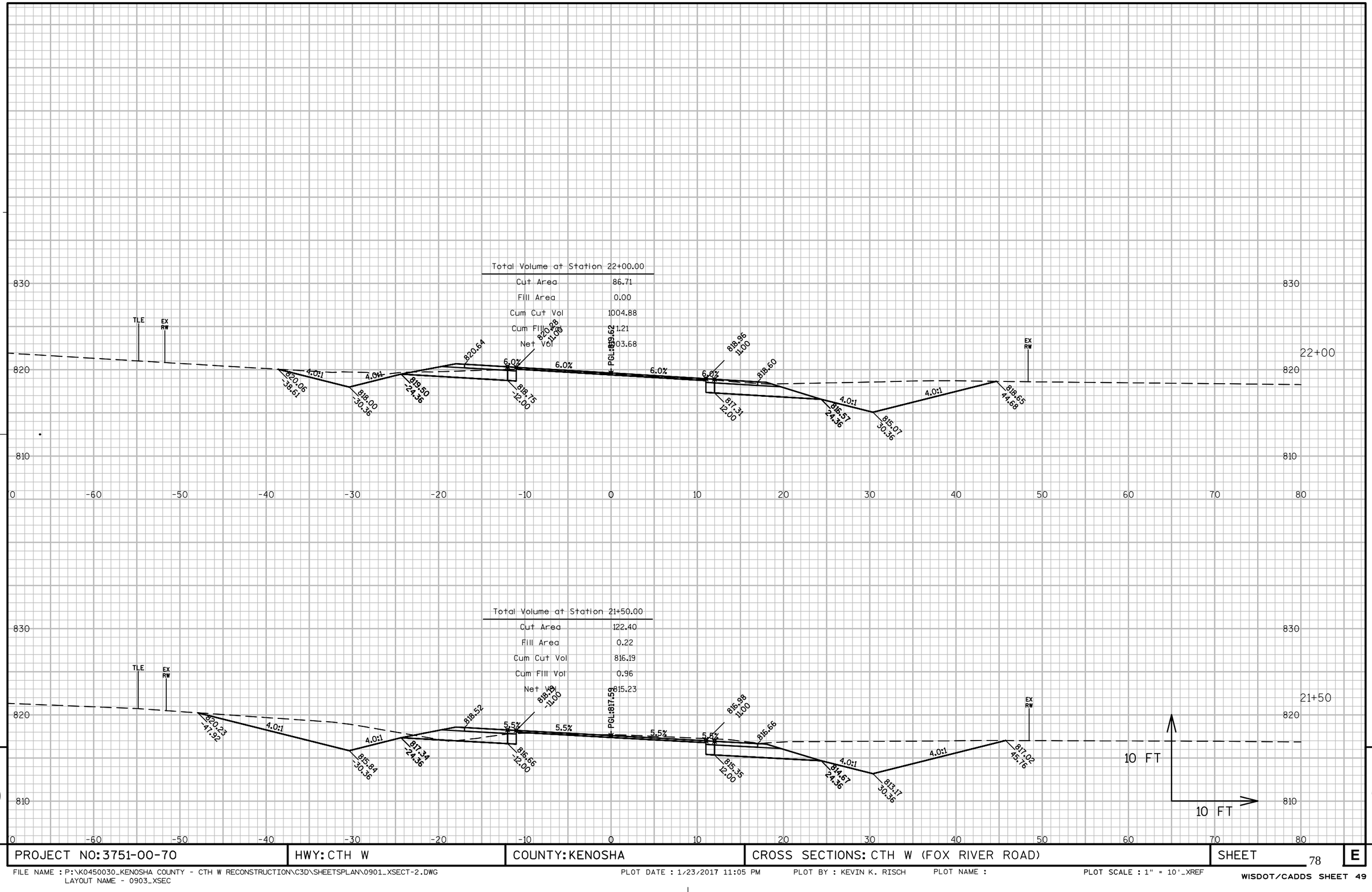
9

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 77	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0902_XSEC

PLOT DATE : 1/23/2017 11:05 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

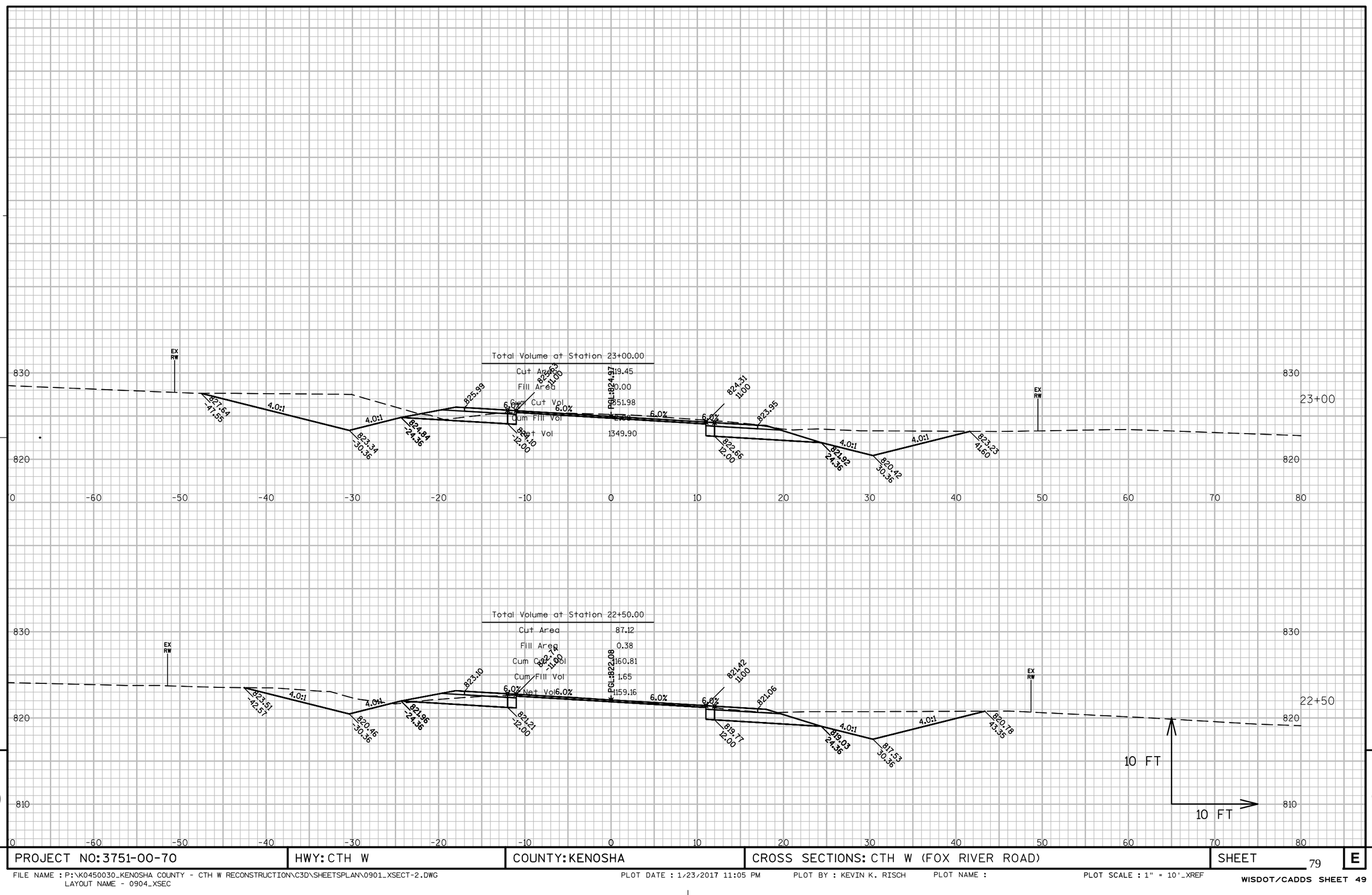


PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 78	E

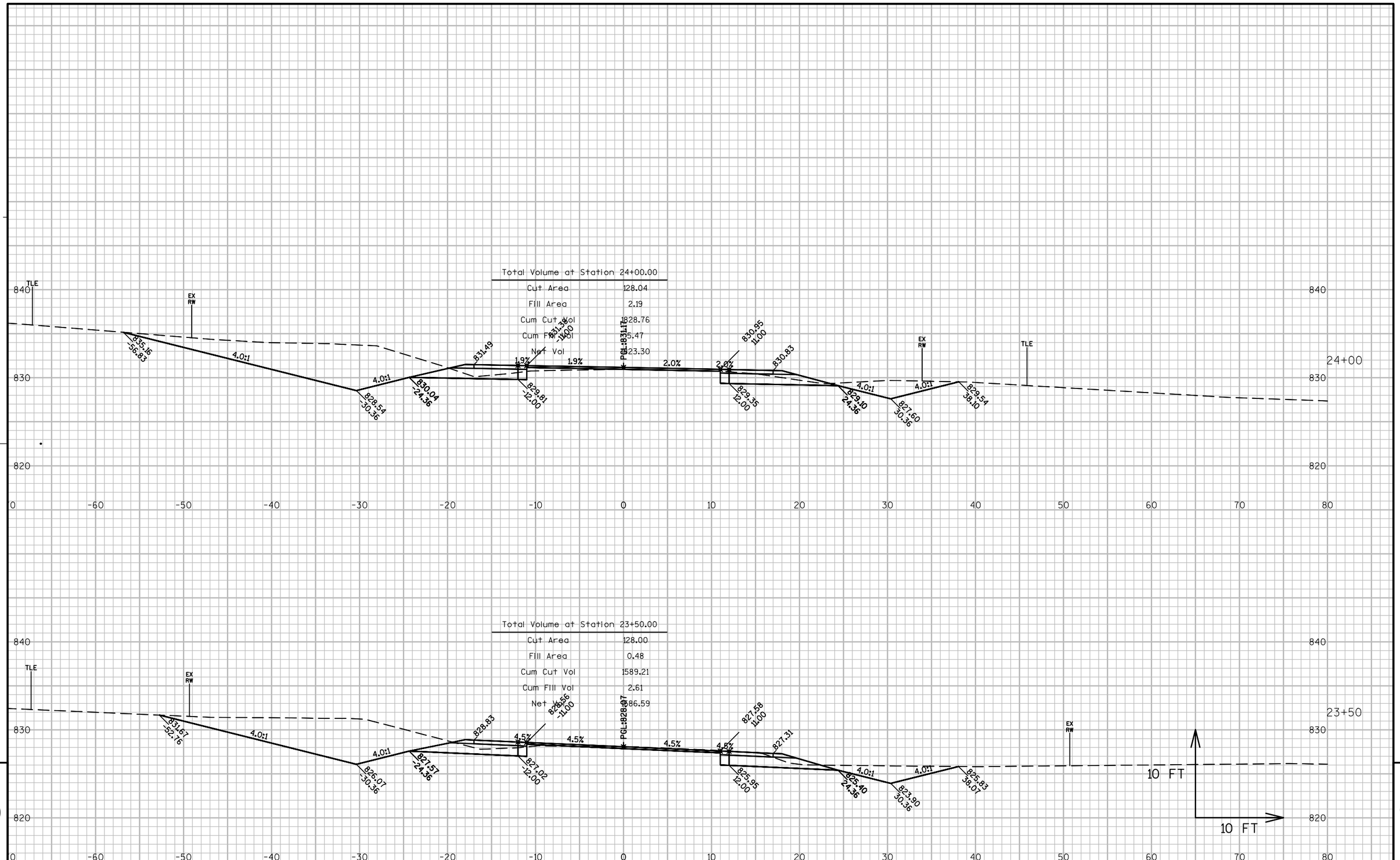
FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0903_XSEC

PLOT DATE : 1/23/2017 11:05 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 79	E

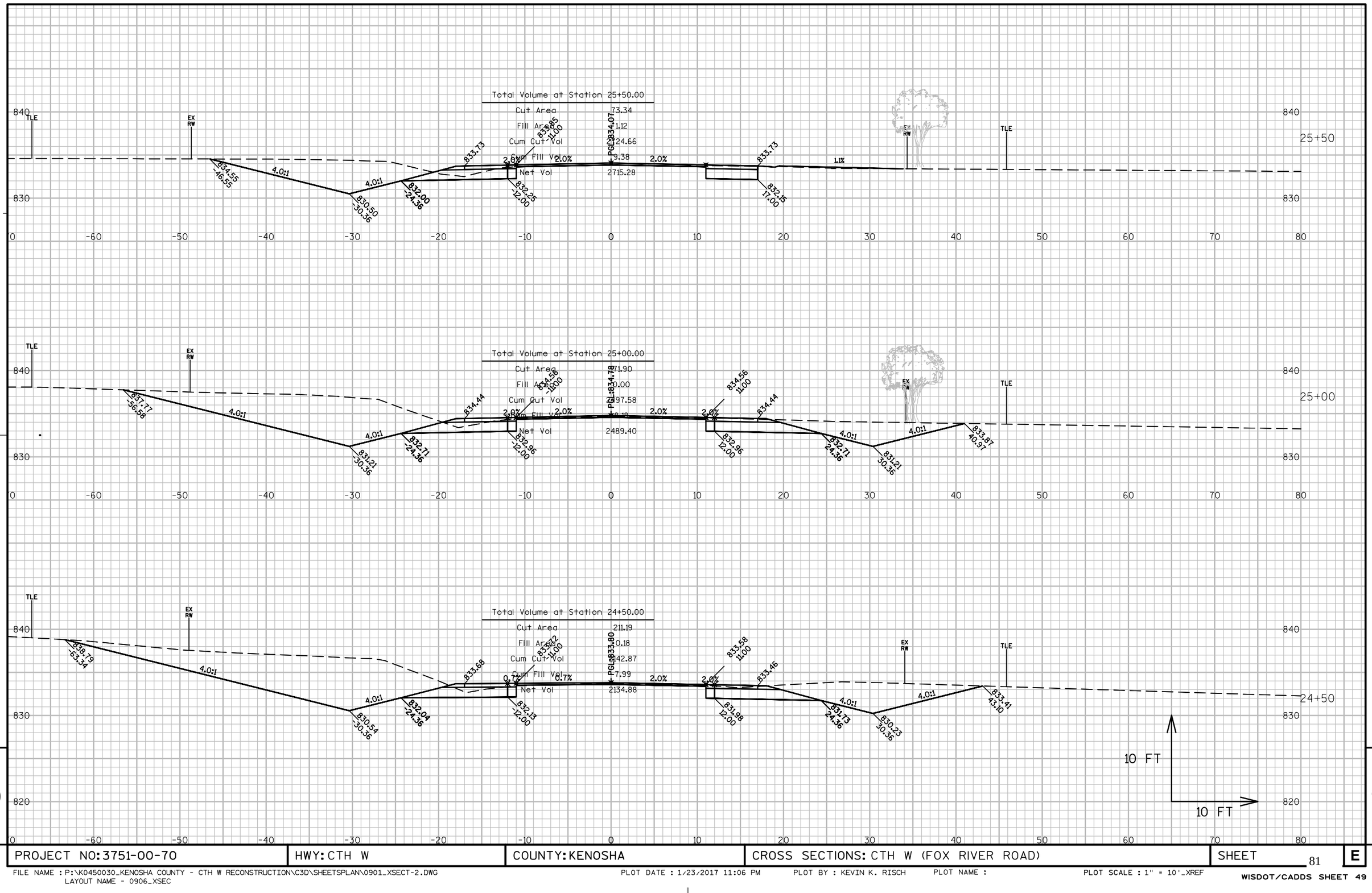


PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 80	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0905_XSEC

PLOT DATE : 1/23/2017 11:06 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

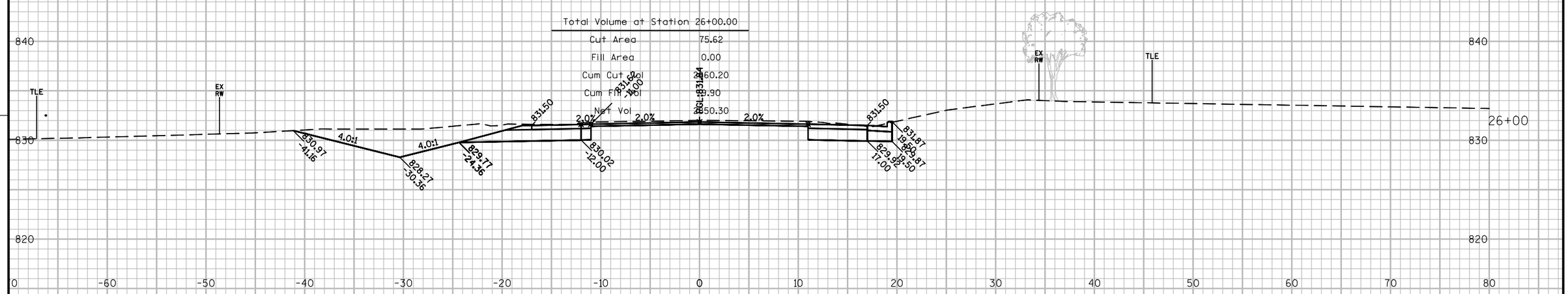
9

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET	E

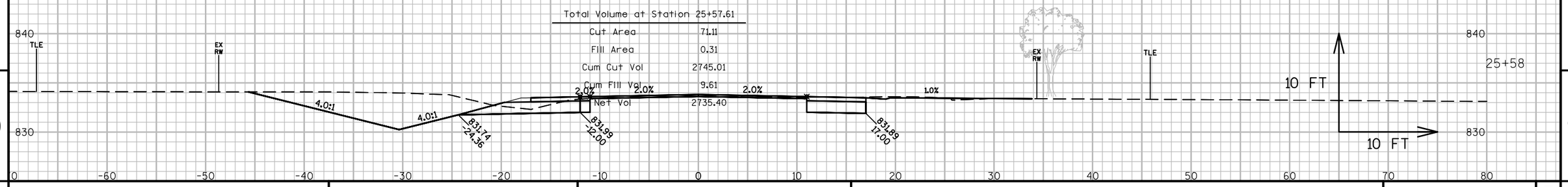
FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0906_XSEC

PLOT DATE : 1/23/2017 11:06 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

Total Volume at Station 26+00.00	
Cut Area	75.62
Fill Area	0.00
Cum Cut Vol	860.20
Cum Fill Vol	9.90
Net Vol	850.30



Total Volume at Station 25+57.61	
Cut Area	71.11
Fill Area	0.31
Cum Cut Vol	2745.01
Cum Fill Vol	9.61
Net Vol	2735.40



9

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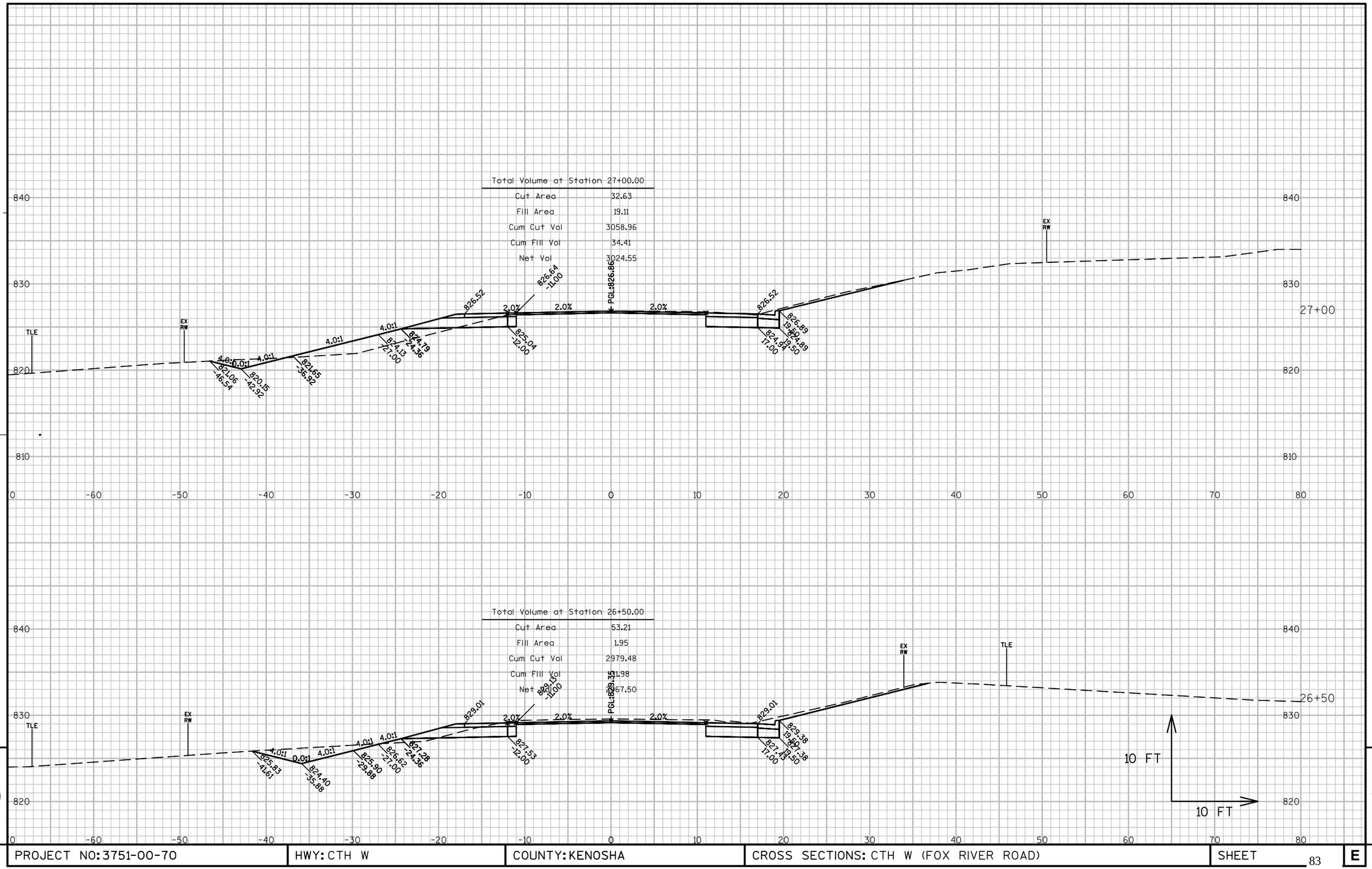
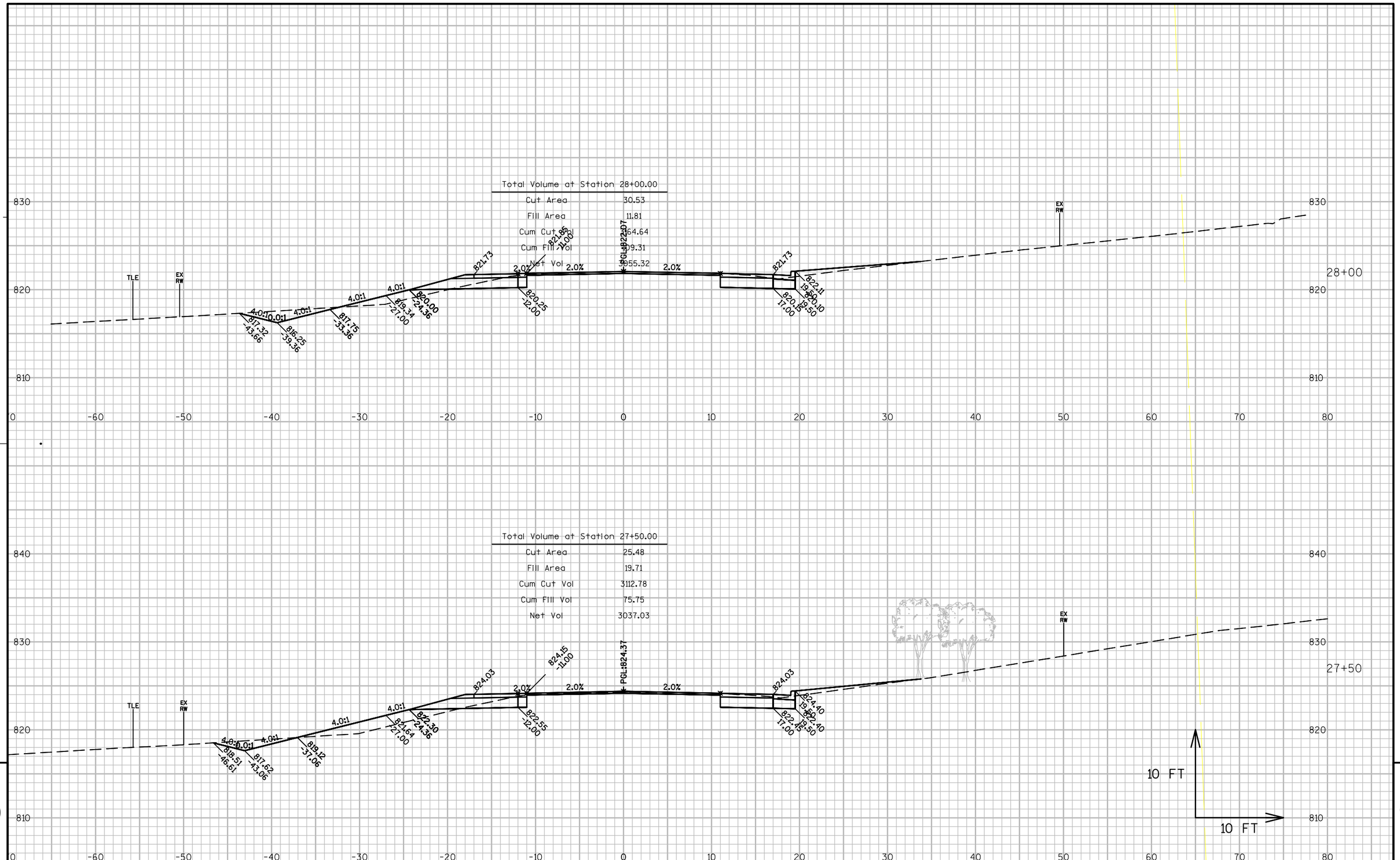
PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 82	E



PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 83	E

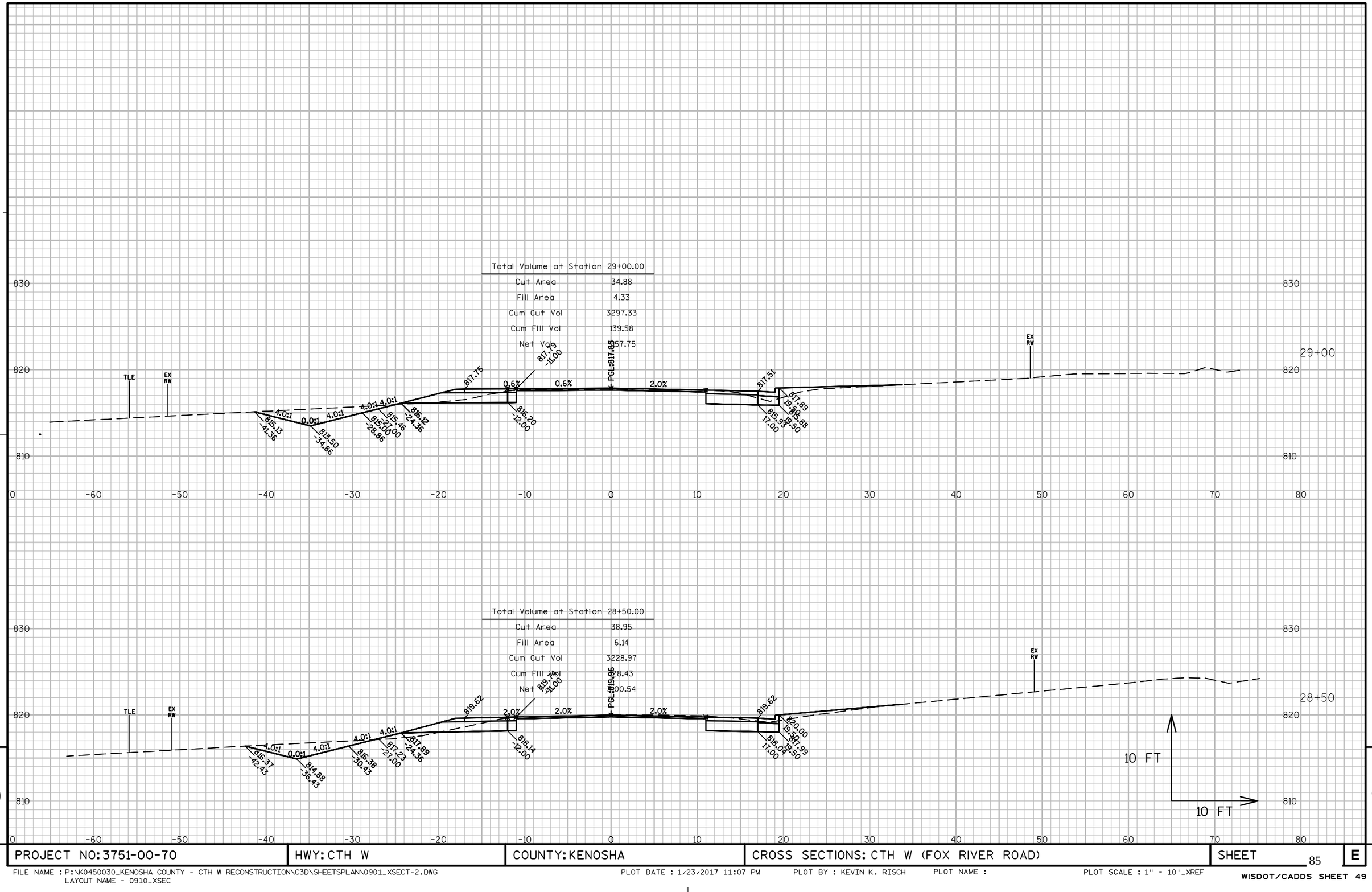


PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 84	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0909_XSEC

PLOT DATE : 1/23/2017 11:07 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

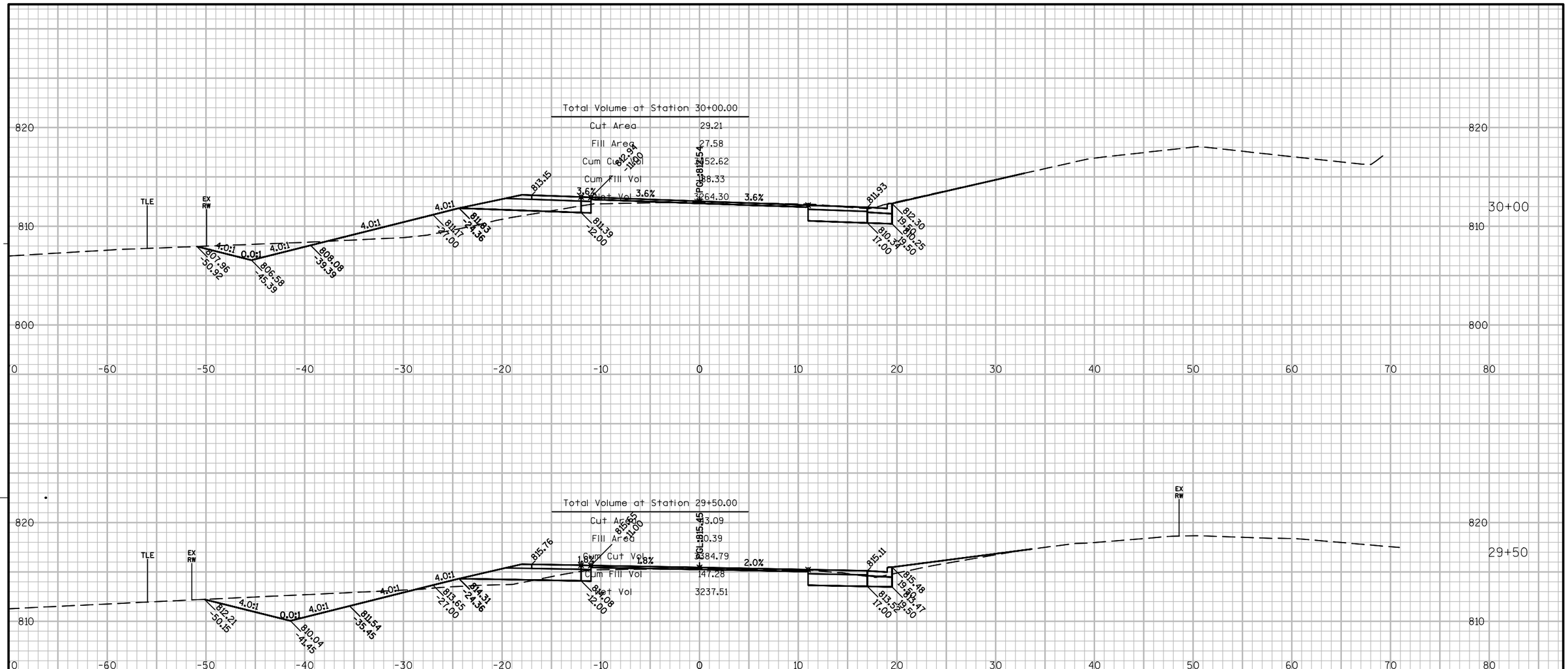


PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 85 E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0910_XSEC

PLOT DATE : 1/23/2017 11:07 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

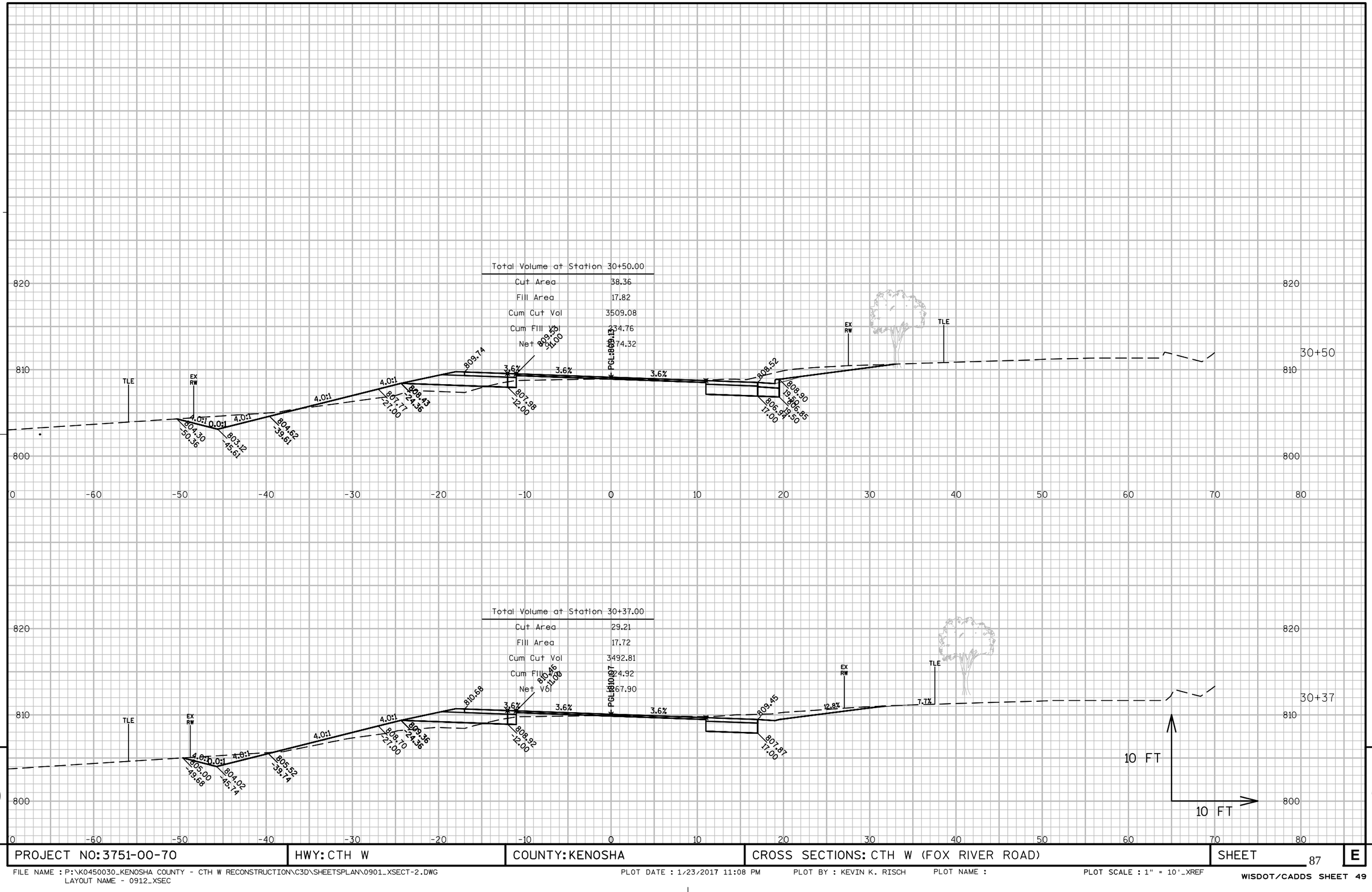


PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 86	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0911_XSEC

PLOT DATE : 1/23/2017 11:07 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

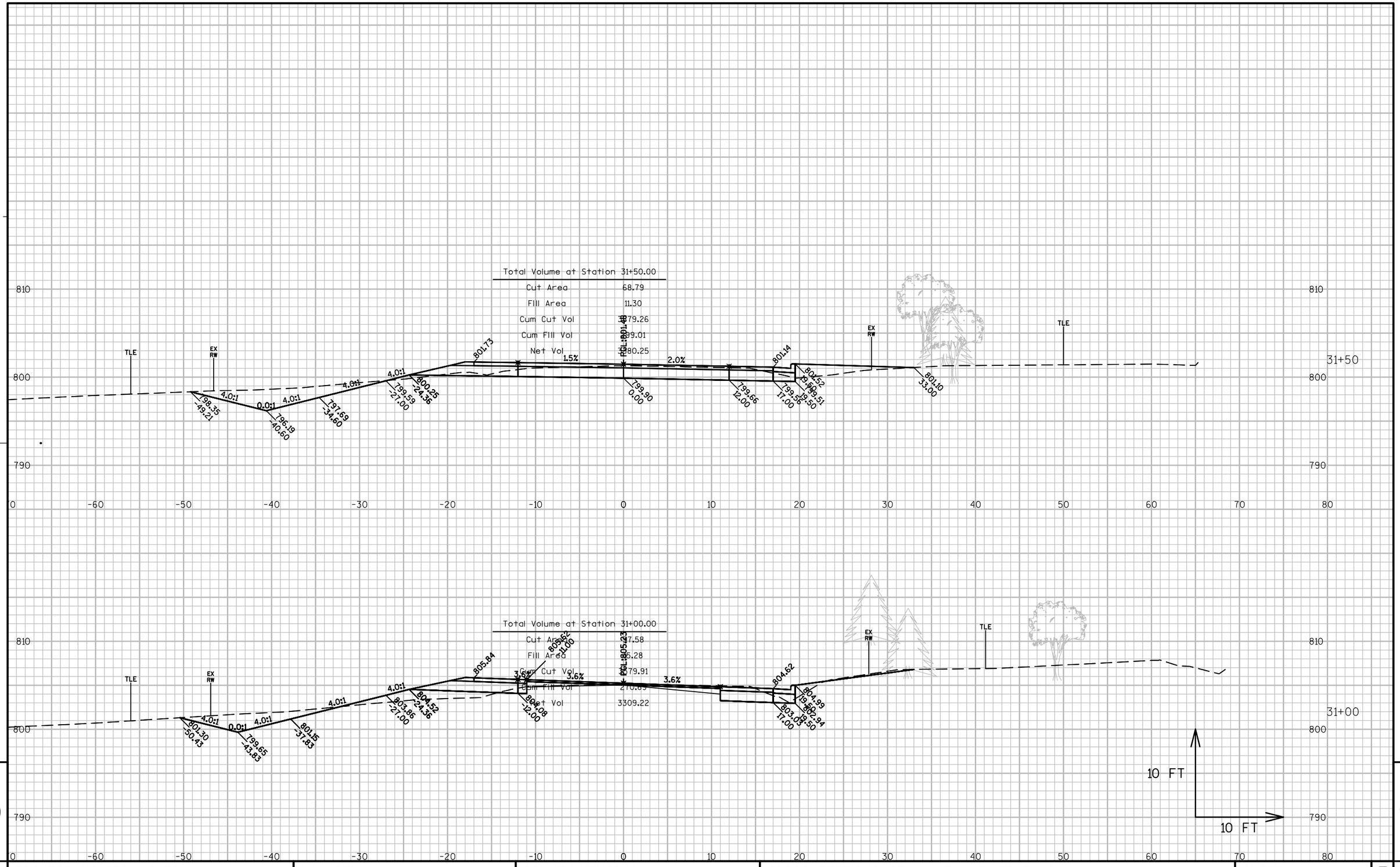


PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 87	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0912_XSEC

PLOT DATE : 1/23/2017 11:08 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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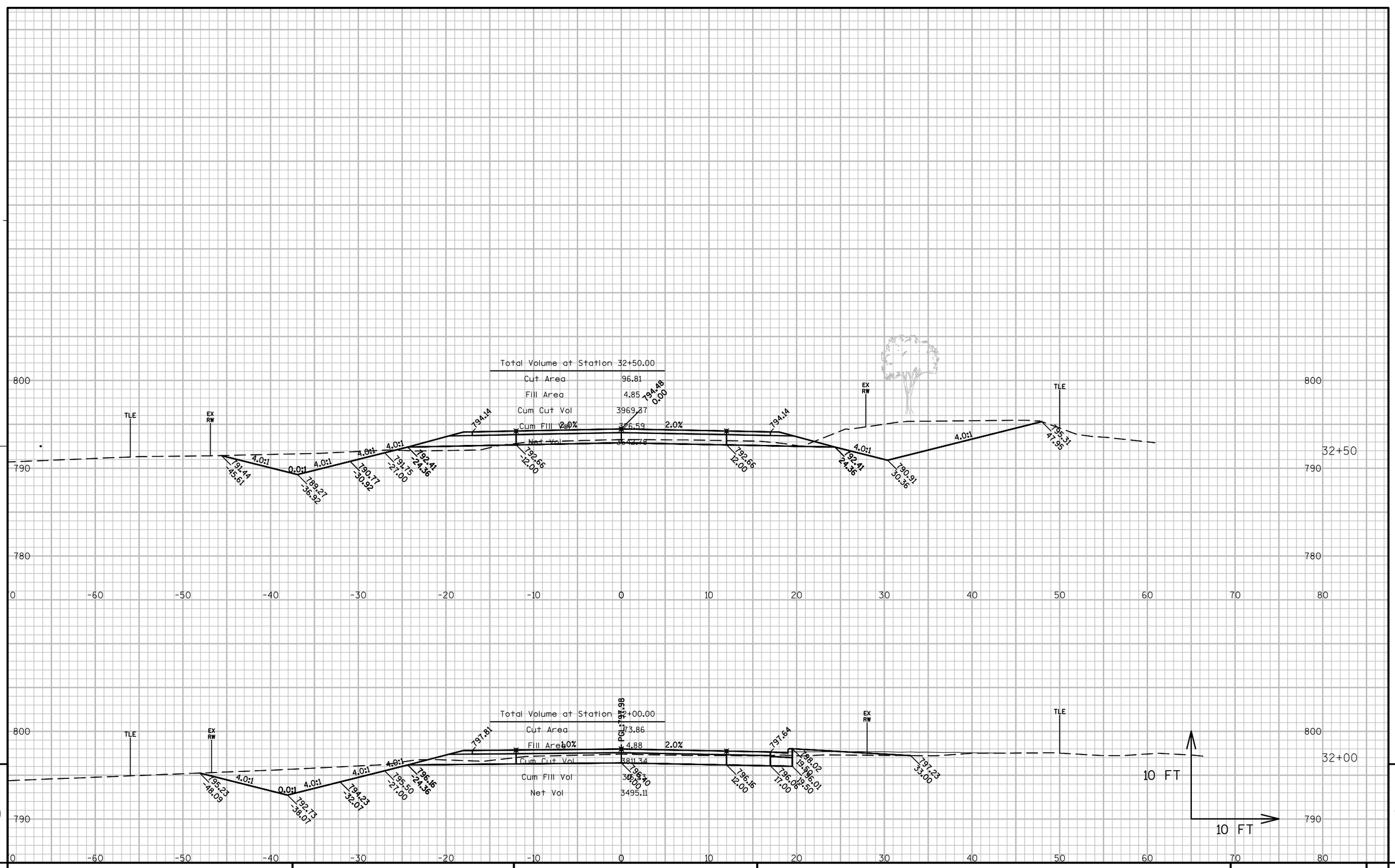
PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 88	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0913_XSEC

PLOT DATE : 1/23/2017 11:08 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

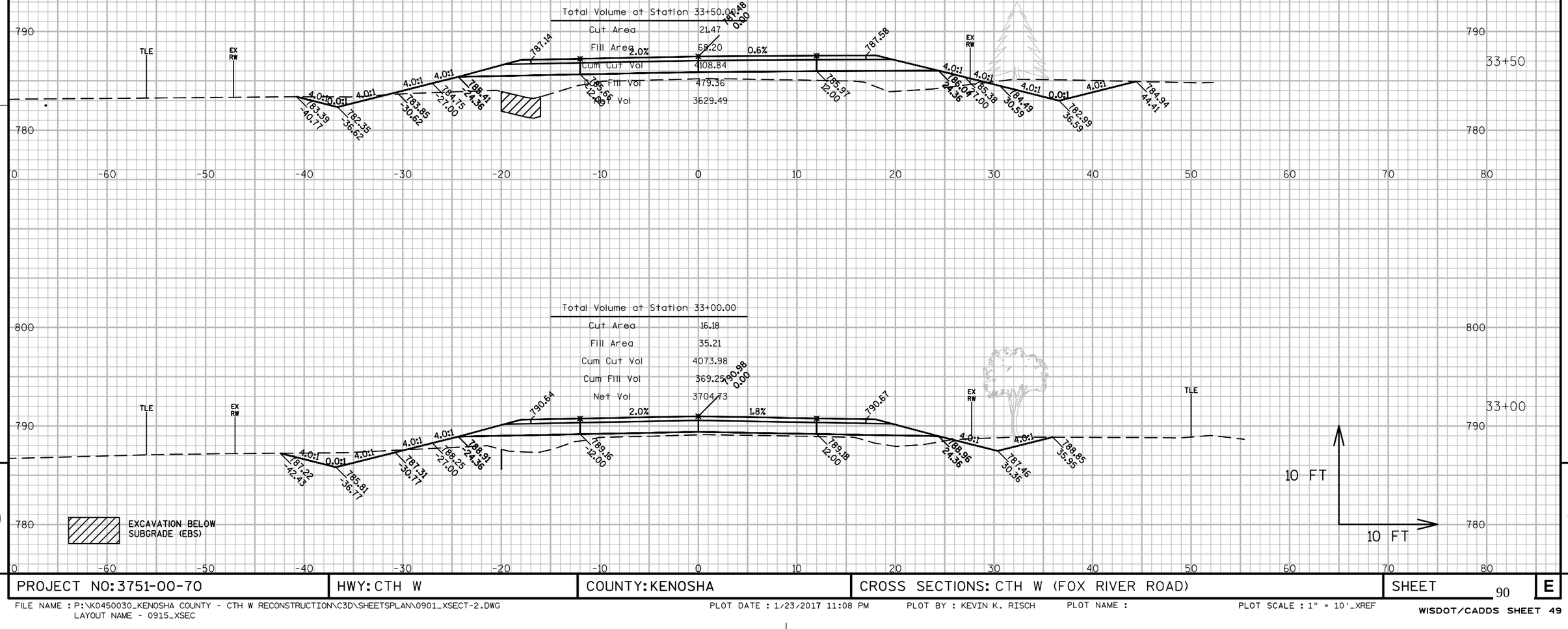
9

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 89	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0914_XSEC

PLOT DATE : 1/23/2017 11:08 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

EBS



9

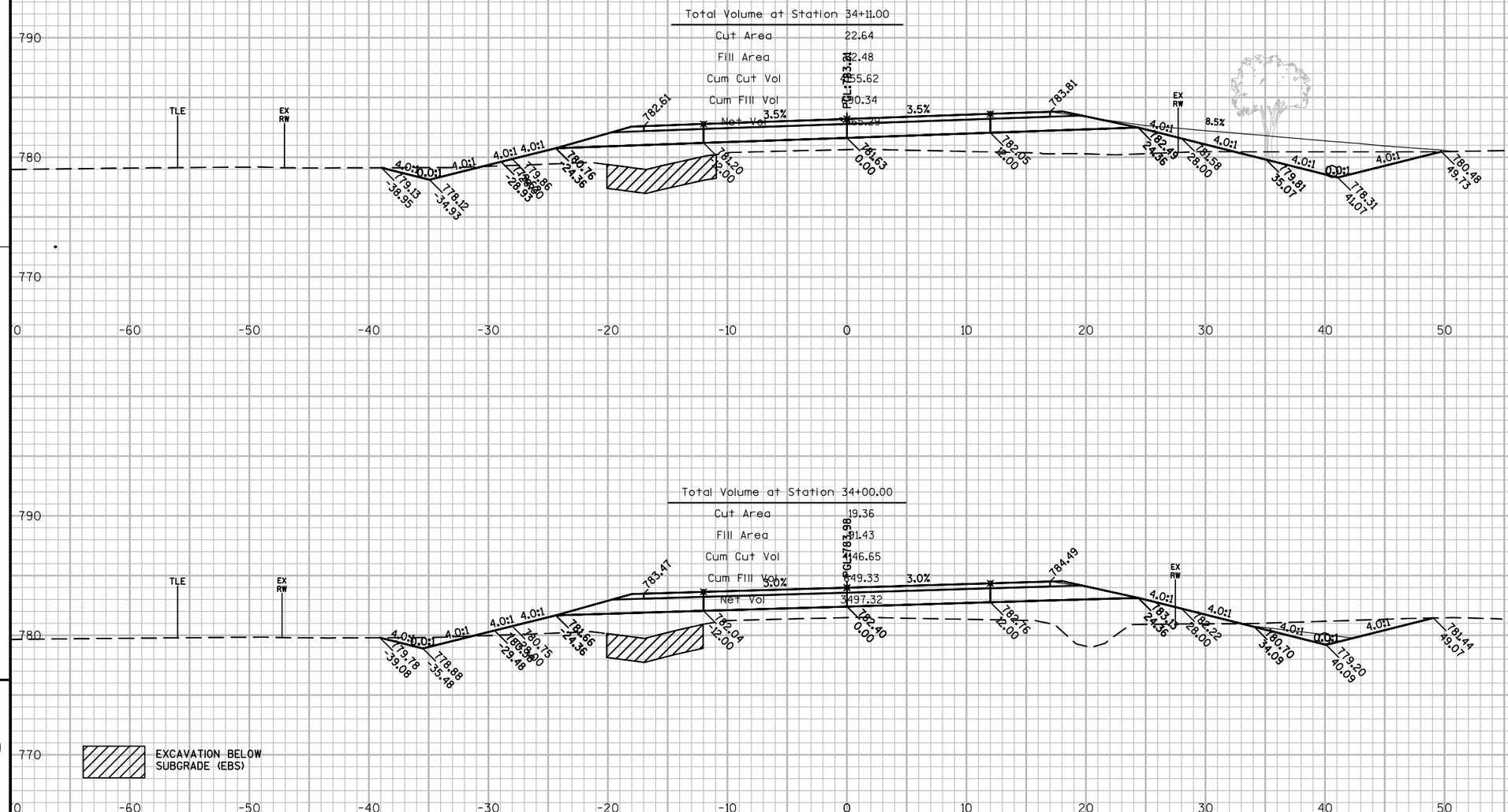
9

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 90	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0915_XSEC

PLOT DATE : 1/23/2017 11:08 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

EBS



PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 91	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0916_XSEC

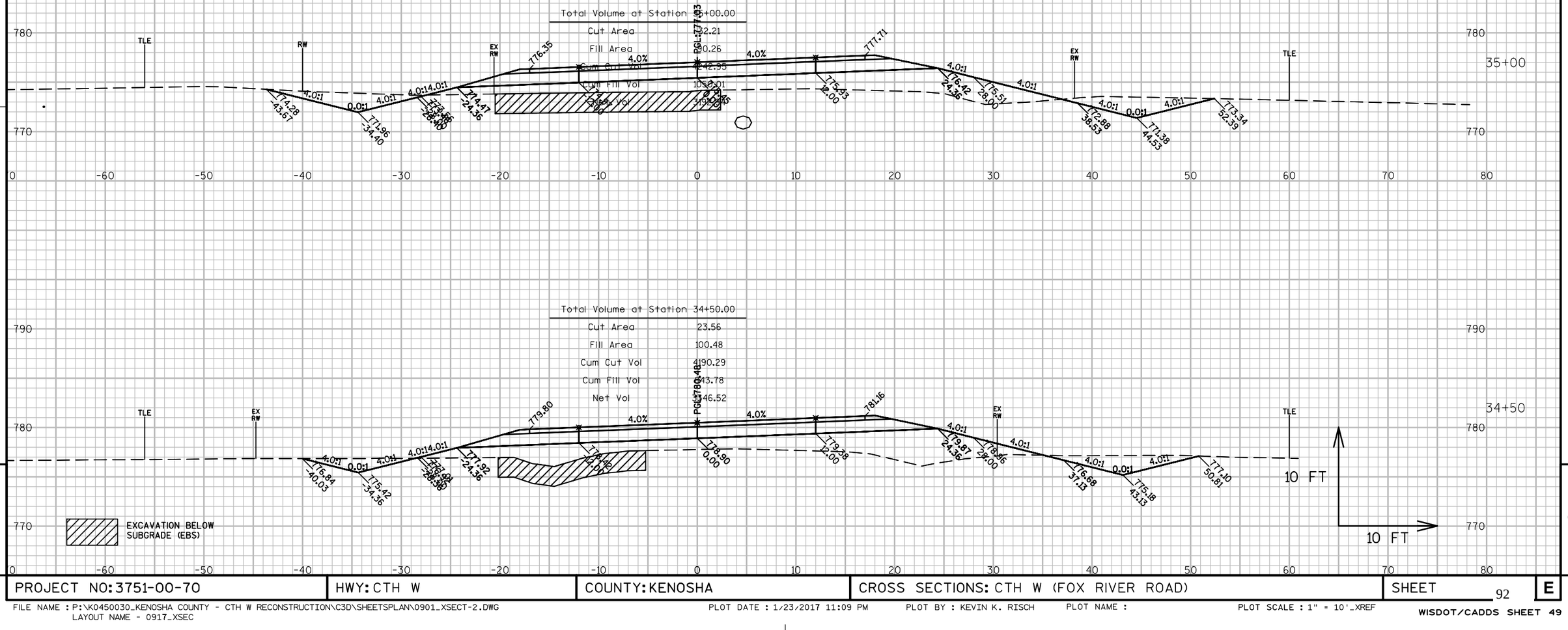
PLOT DATE : 1/23/2017 11:09 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

EBS

Total Volume at Station 35+00.00

Cut Area	32.21
Fill Area	90.26
Cum Cut Vol	1242.95
Cum Fill Vol	1050.01
Net Vol	192.94



Total Volume at Station 34+50.00

Cut Area	23.56
Fill Area	100.48
Cum Cut Vol	4190.29
Cum Fill Vol	4343.78
Net Vol	-153.49

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PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 92	E

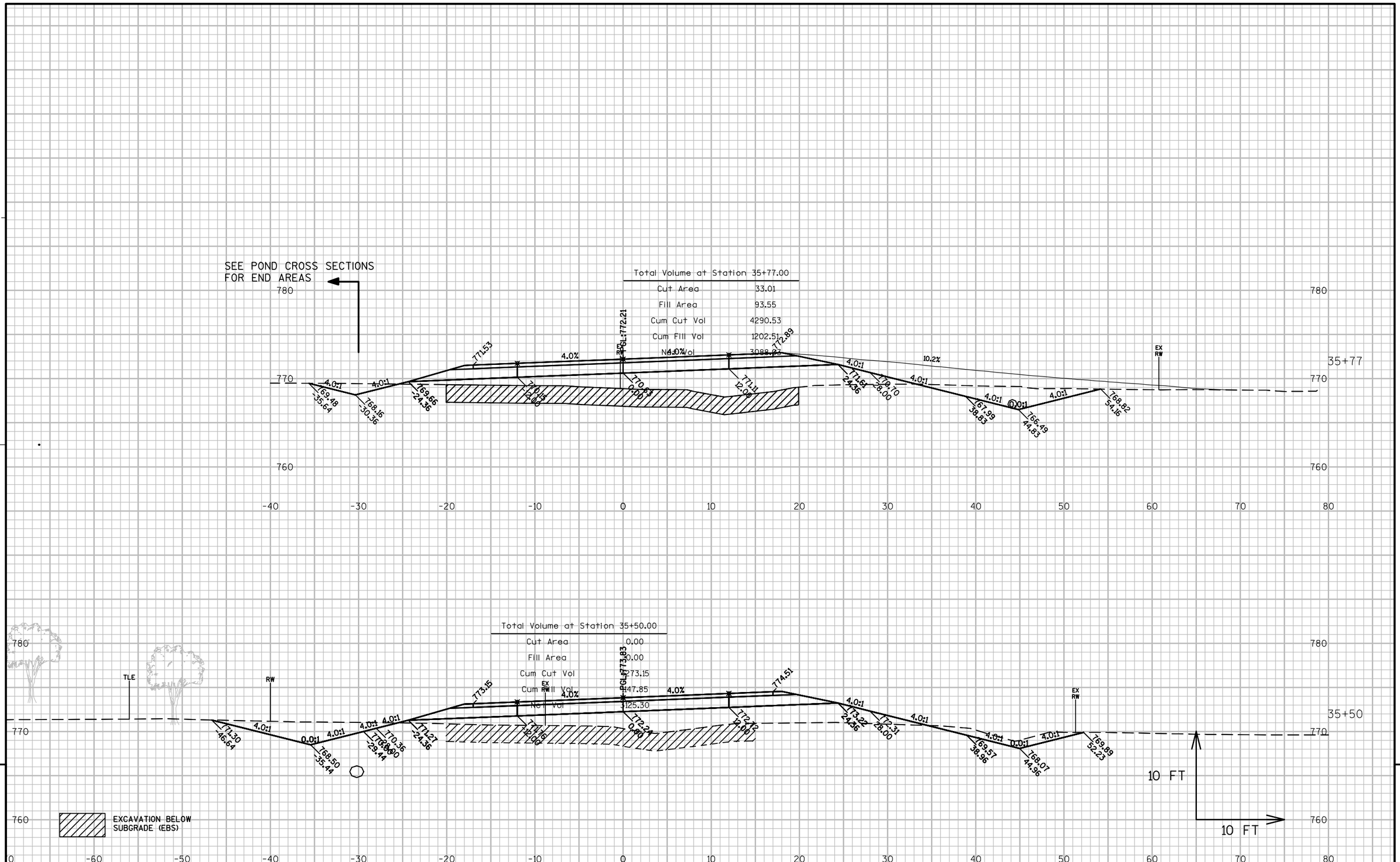
FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0917_XSEC

PLOT DATE : 1/23/2017 11:09 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

SEE POND CROSS SECTIONS
FOR END AREAS

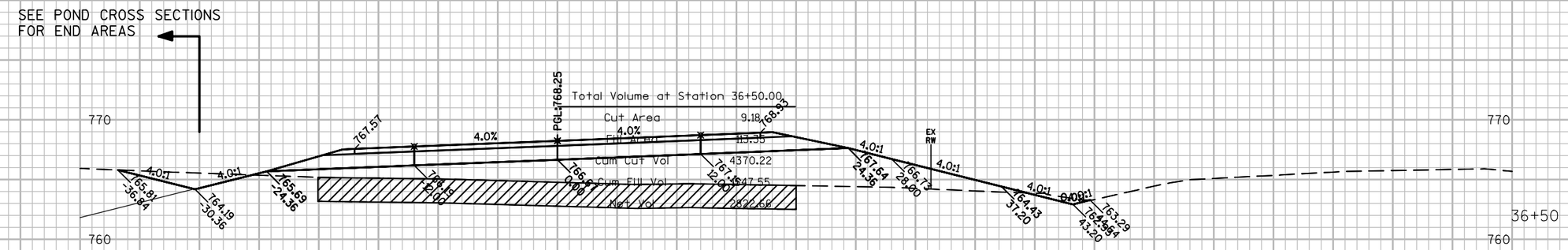
Total Volume at Station 35+77.00	
Cut Area	33.01
Fill Area	93.55
Cum Cut Vol	4290.53
Cum Fill Vol	1202.51
Net Vol	3088.03

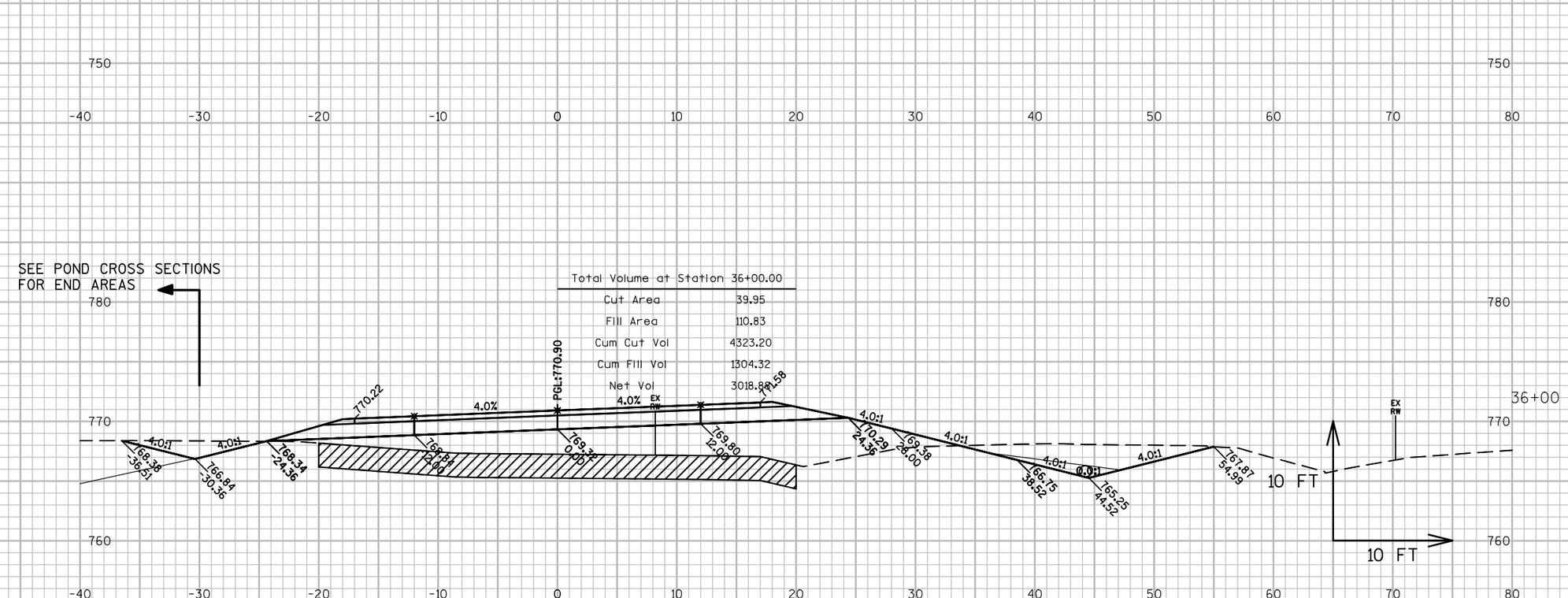


Total Volume at Station 35+50.00	
Cut Area	0.00
Fill Area	0.00
Cum Cut Vol	273.15
Cum Fill Vol	147.85
Net Vol	125.30

9 9

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 93	E

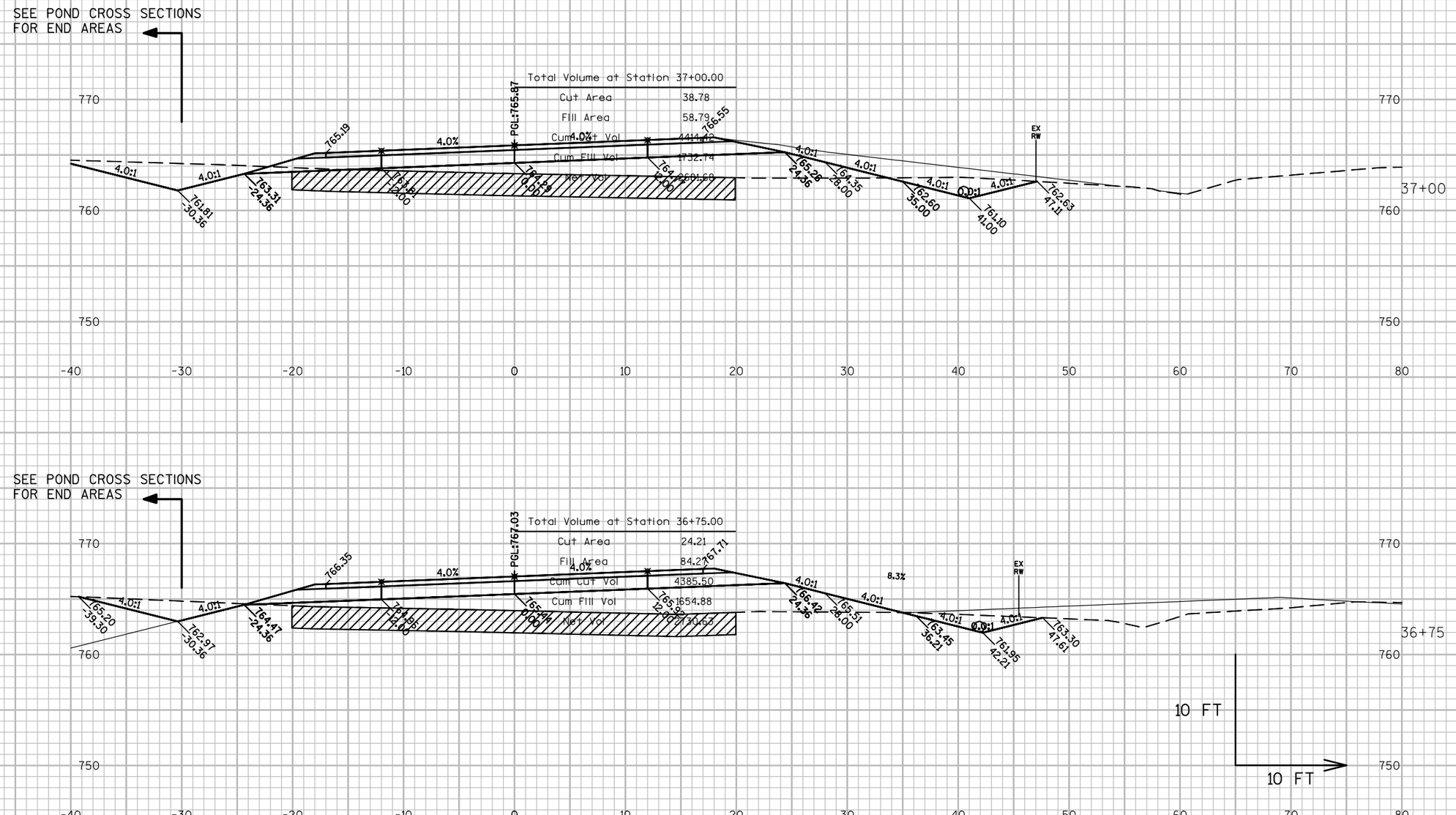




EXCAVATION BELOW SUBGRADE (EBS)

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 94	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0919_XSEC
PLOT DATE : 1/23/2017 11:10 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF



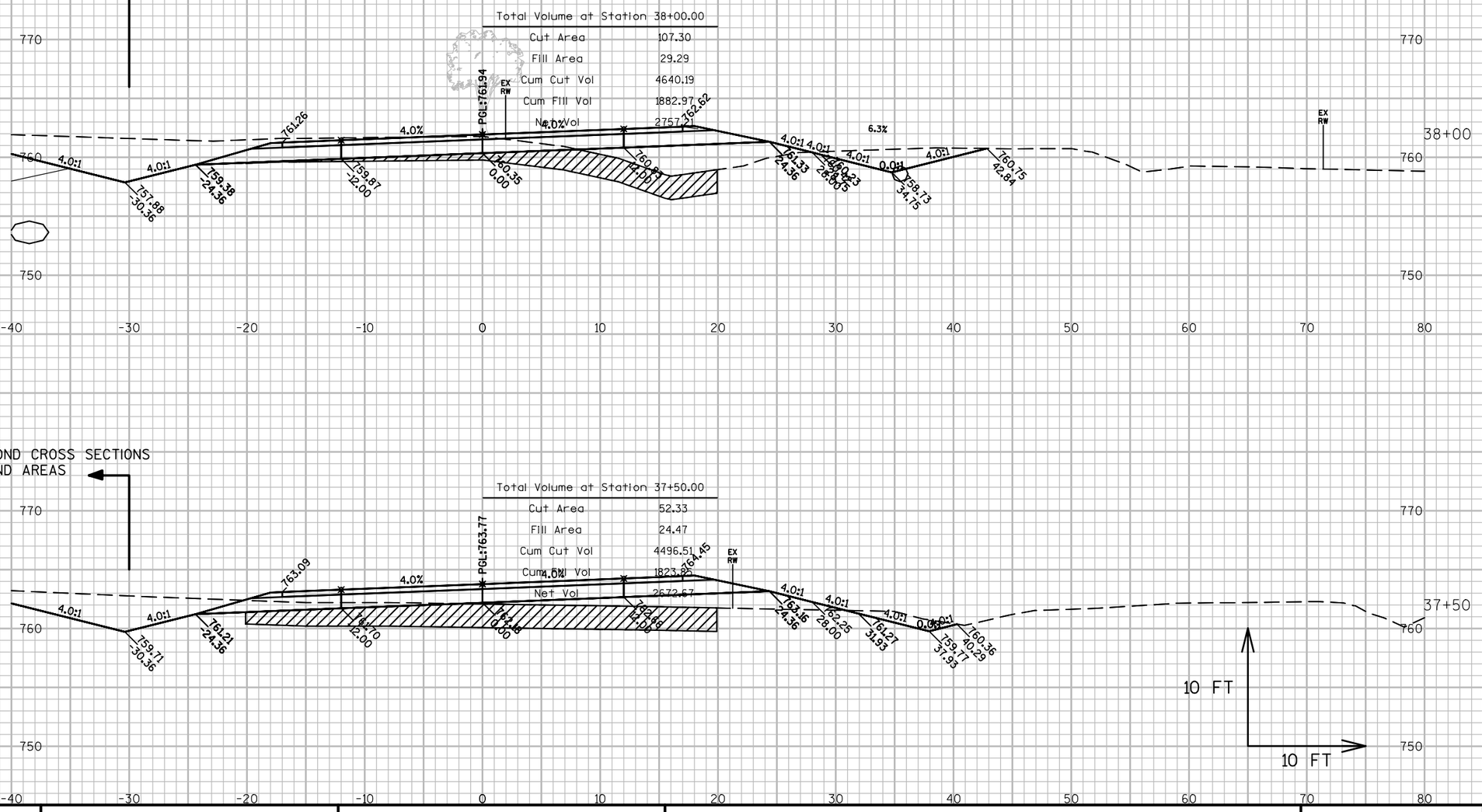
PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 95	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0920_XSEC

PLOT DATE : 1/23/2017 11:10 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

SEE POND CROSS SECTIONS
FOR END AREAS



SEE POND CROSS SECTIONS
FOR END AREAS

EXCAVATION BELOW SUBGRADE (EBS)

9 9

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 96	E

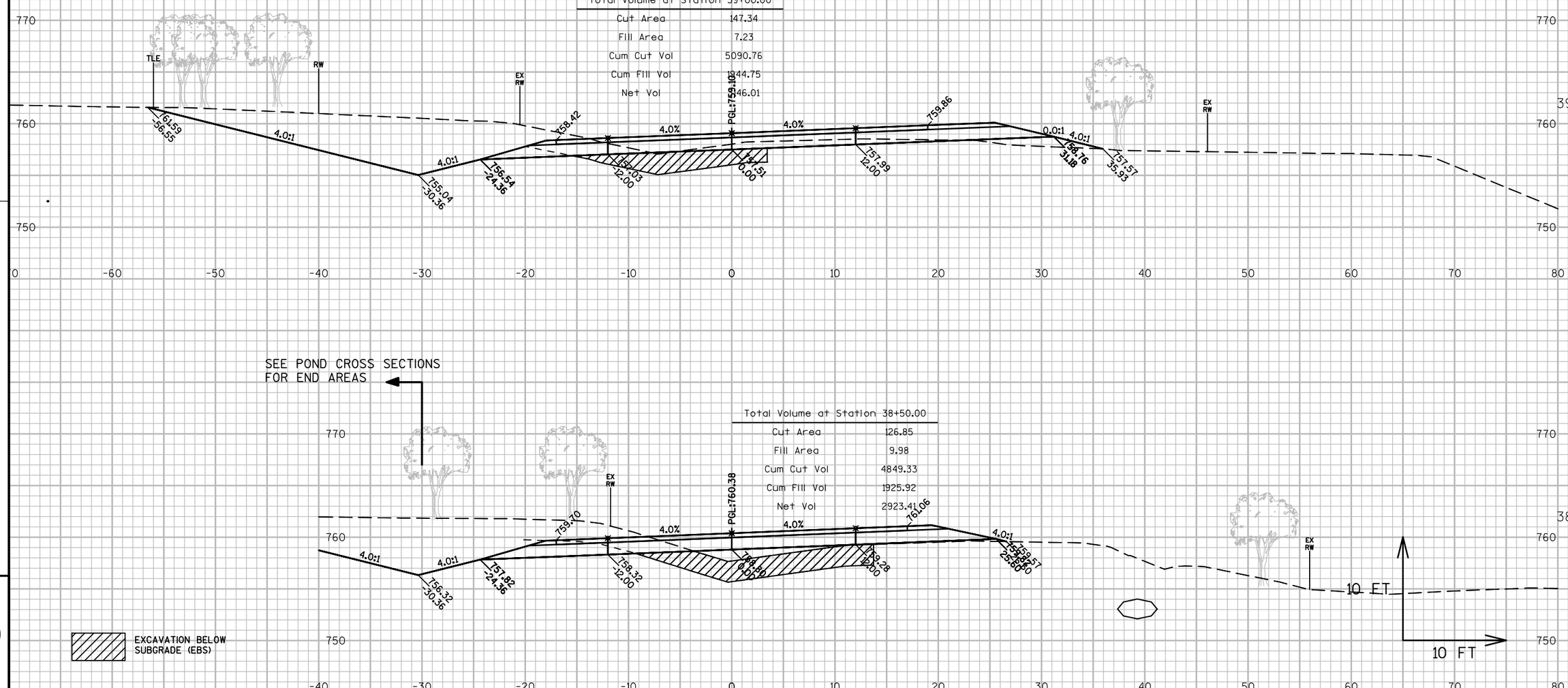
FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0921_XSEC

PLOT DATE : 1/23/2017 11:10 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

EBS

Total Volume at Station 39+00.00	
Cut Area	147.34
Fill Area	7.23
Cum Cut Vol	5090.76
Cum Fill Vol	344.75
Net Vol	4746.01



SEE POND CROSS SECTIONS
FOR END AREAS

Total Volume at Station 38+50.00	
Cut Area	126.85
Fill Area	9.98
Cum Cut Vol	4849.33
Cum Fill Vol	1925.92
Net Vol	2923.41

EXCAVATION BELOW SUBGRADE (EBS)

9 9

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 97	E

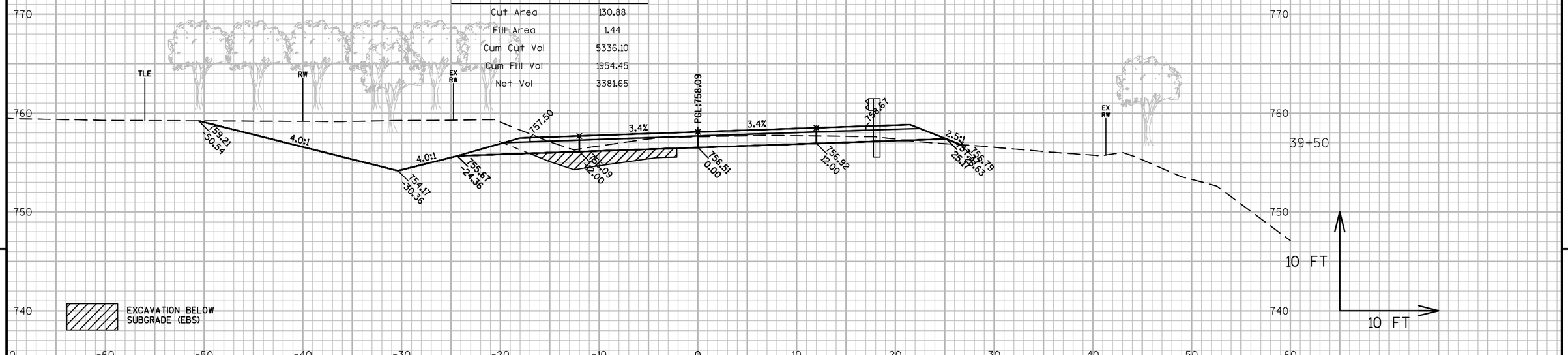
FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0922_XSEC

PLOT DATE : 1/23/2017 11:10 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

EBS

Total Volume at Station 39+50.00	
Cut Area	130.88
Fill Area	1.44
Cum Cut Vol	5336.10
Cum Fill Vol	1954.45
Net Vol	3381.65

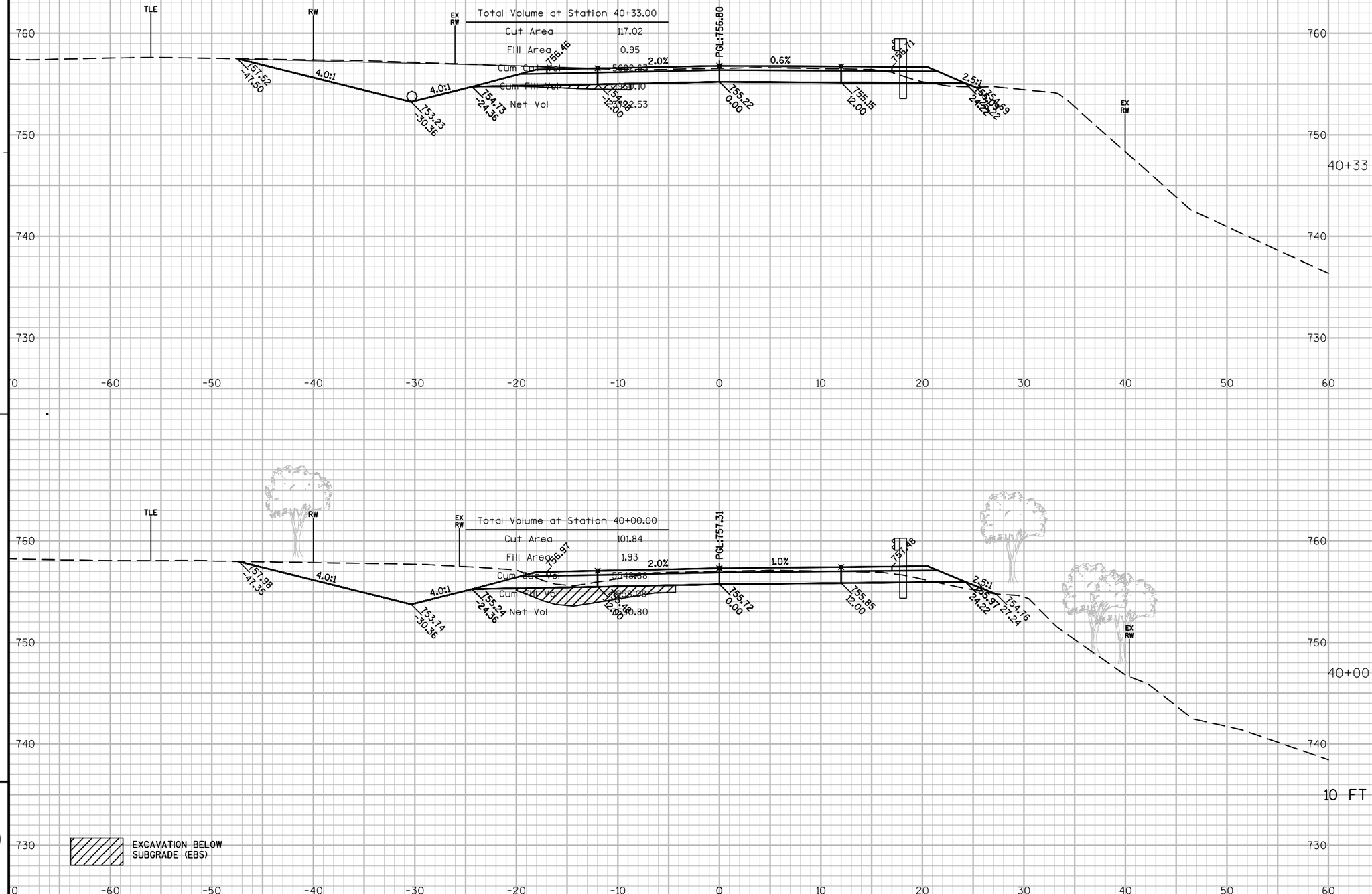


PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 98	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0923_XSEC

PLOT DATE : 1/23/2017 11:11 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

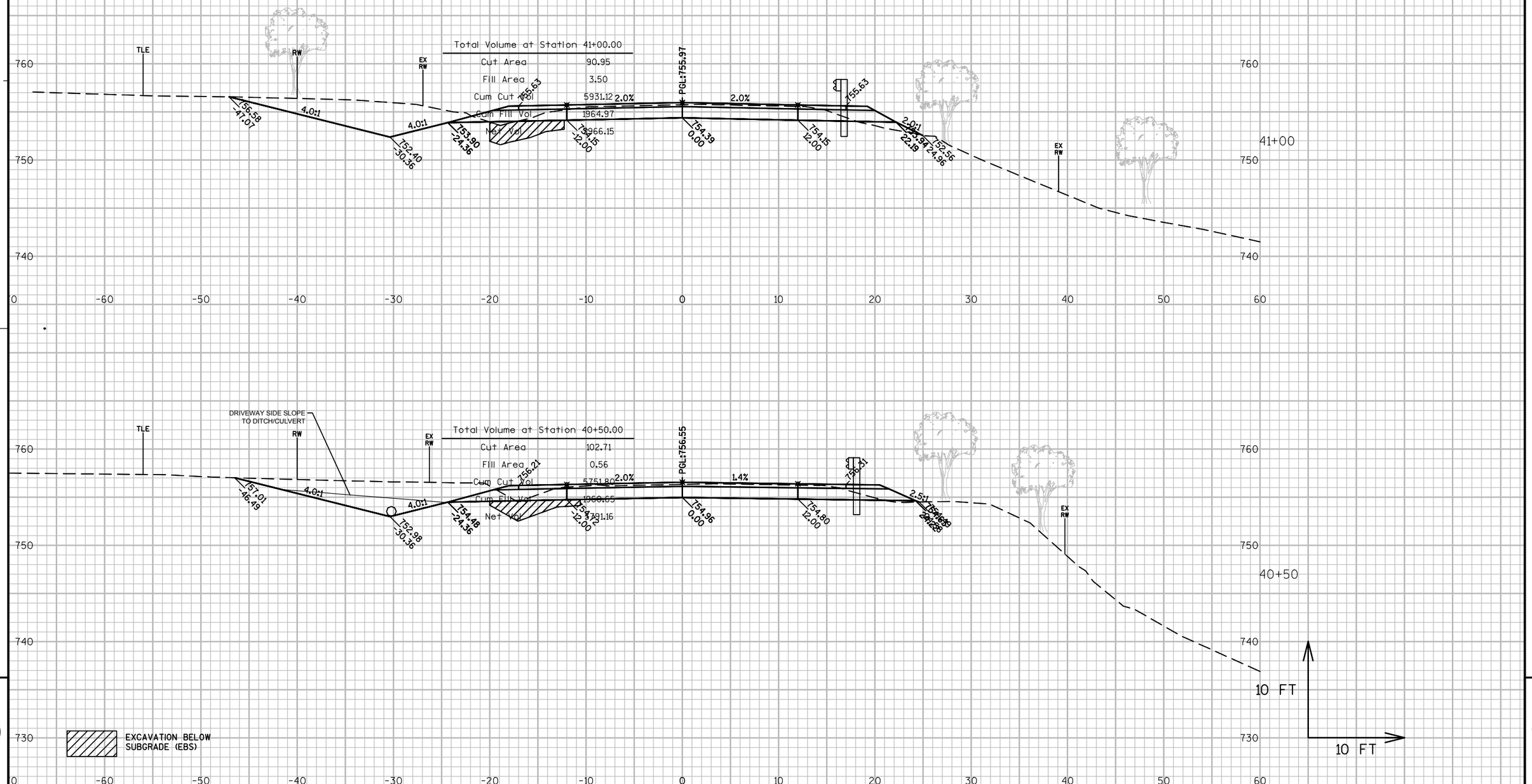
EBS



PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 99	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0924_XSEC
PLOT DATE : 1/23/2017 11:11 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

EBS



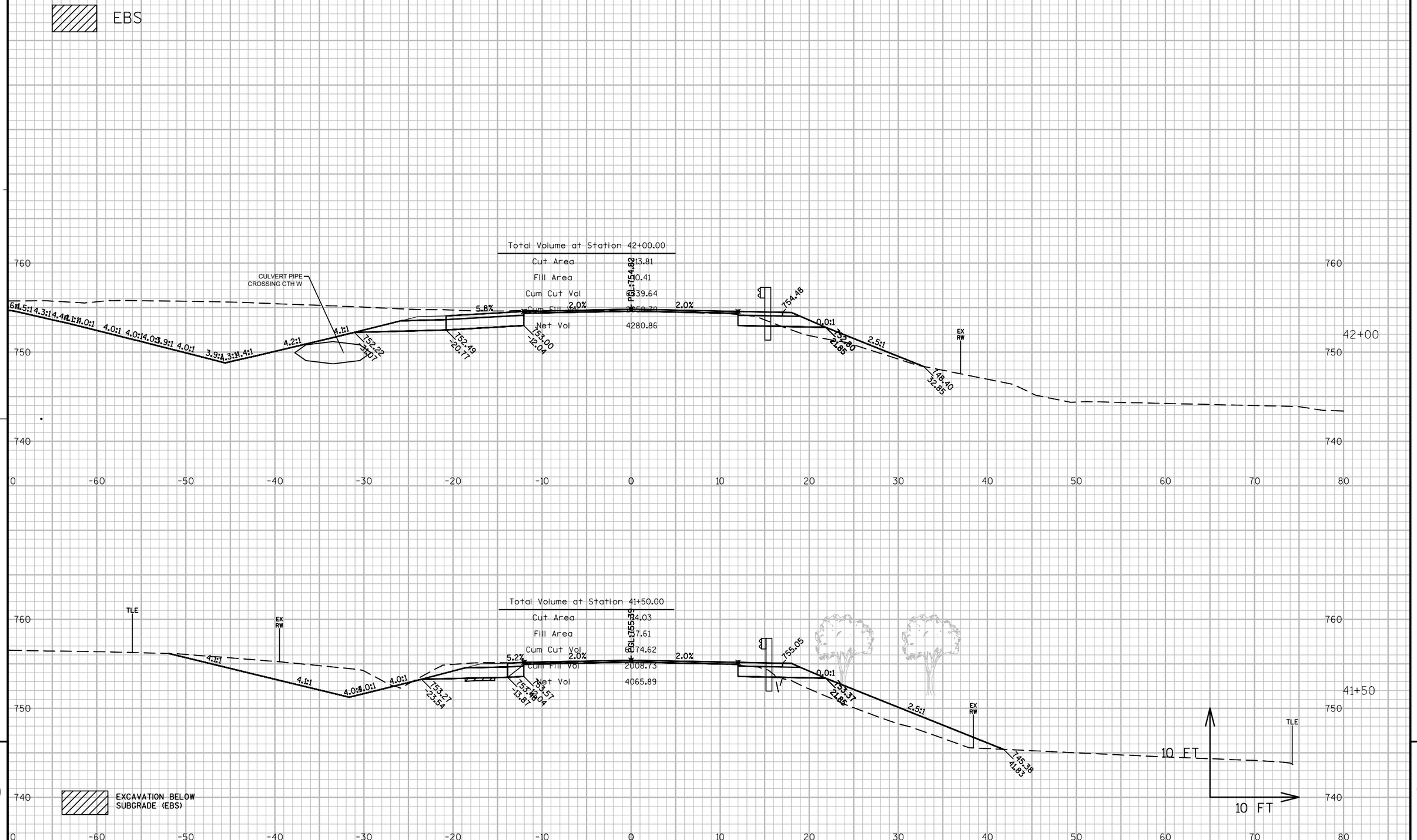
PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 100	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0925_XSEC

PLOT DATE : 1/23/2017 11:11 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

EBS

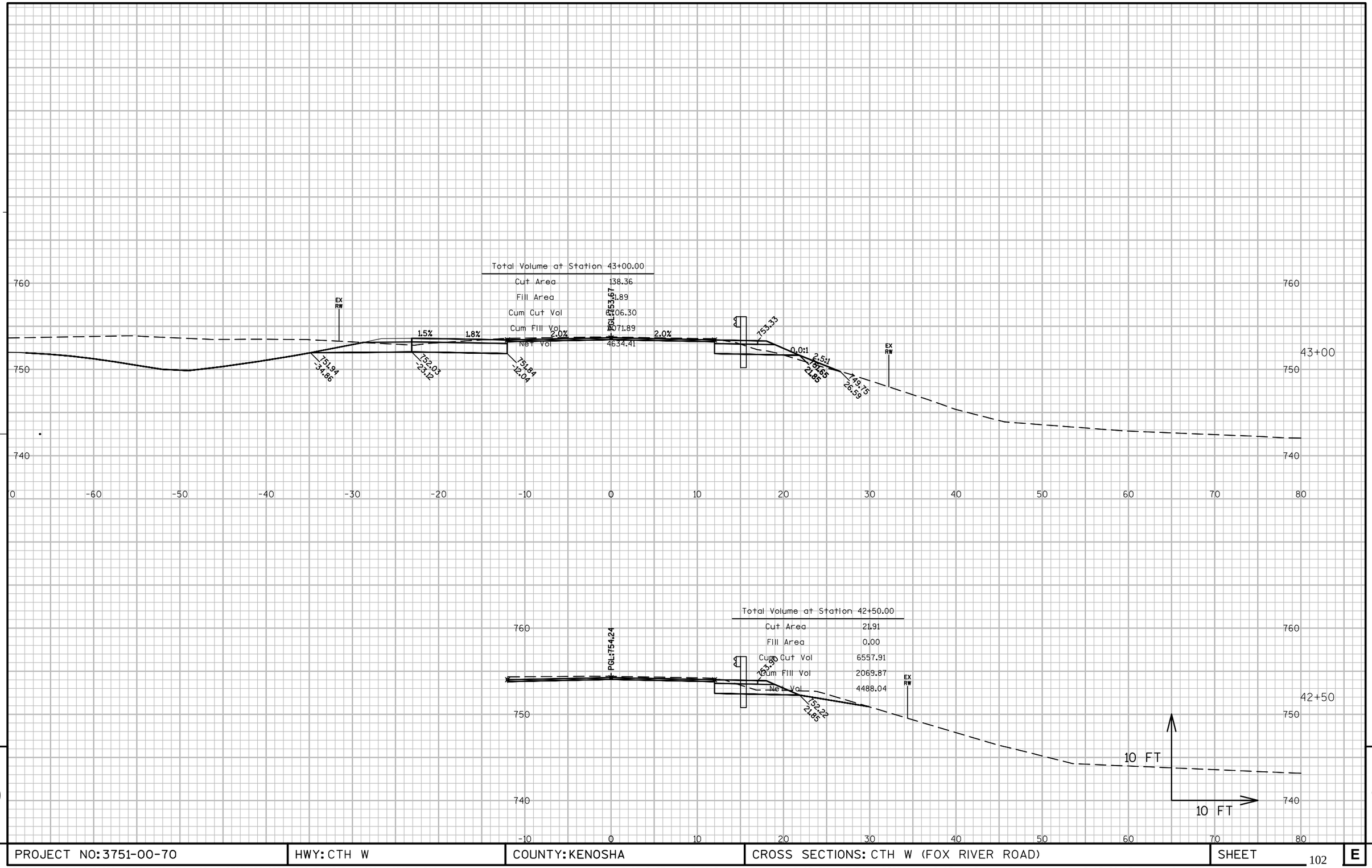


PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 101	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0926_XSEC

PLOT DATE : 1/23/2017 11:11 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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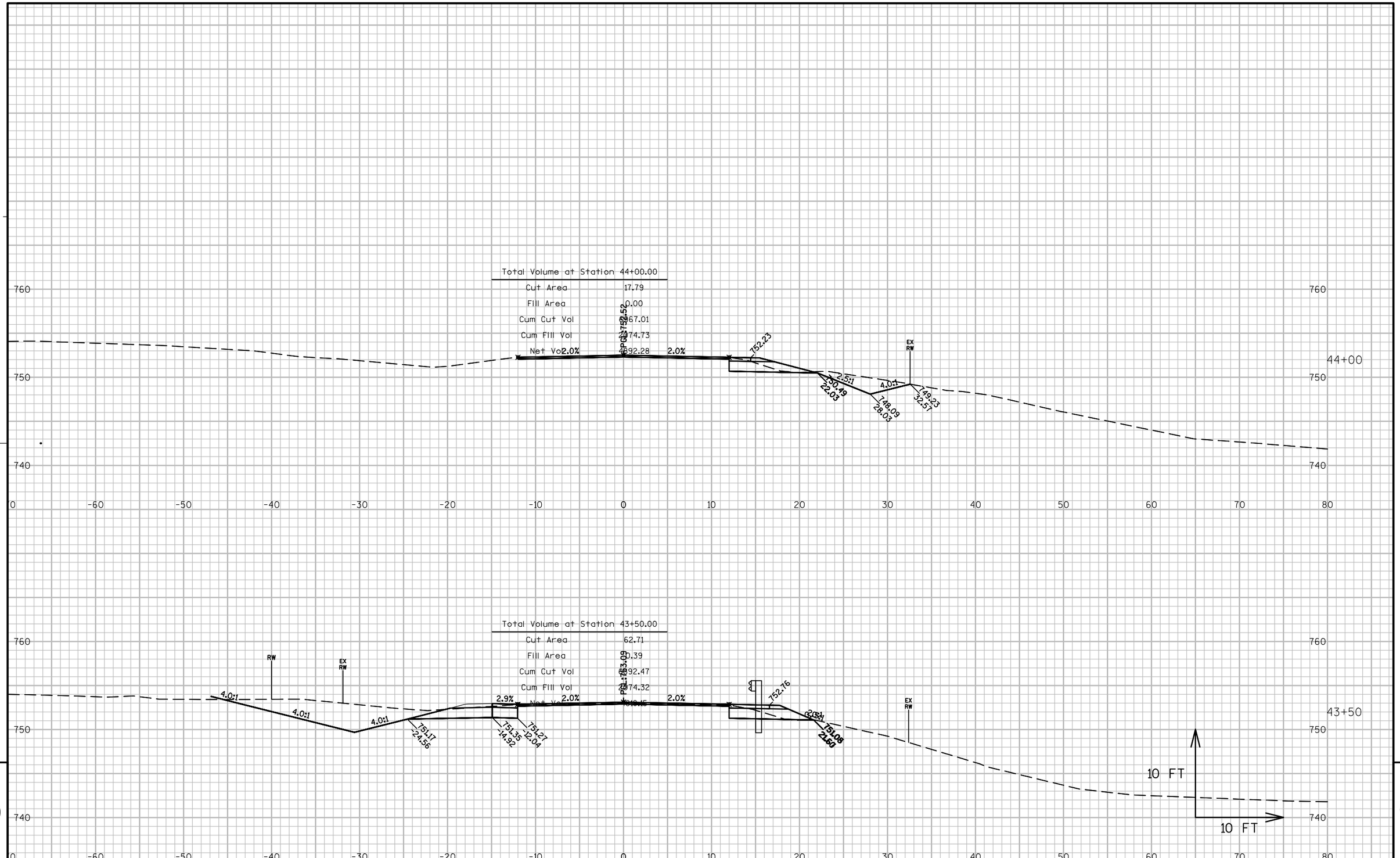
PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 102	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0901_XSECT-2.DWG
LAYOUT NAME - 0927_XSEC

PLOT DATE : 1/23/2017 11:12 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

Total Volume at Station 44+00.00	
Cut Area	17.79
Fill Area	0.00
Cum Cut Vol	967.01
Cum Fill Vol	74.73
Net Vol	892.28



Total Volume at Station 43+50.00	
Cut Area	62.71
Fill Area	0.39
Cum Cut Vol	892.47
Cum Fill Vol	74.32
Net Vol	818.15

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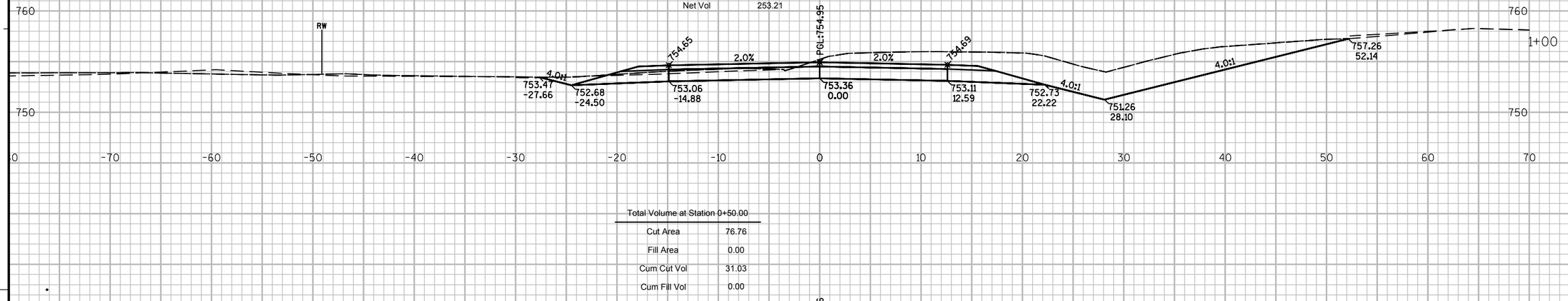
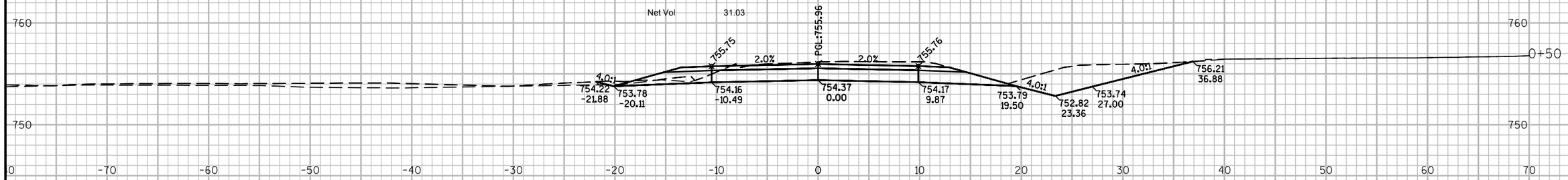
PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: CTH W (FOX RIVER ROAD)	SHEET 103	E

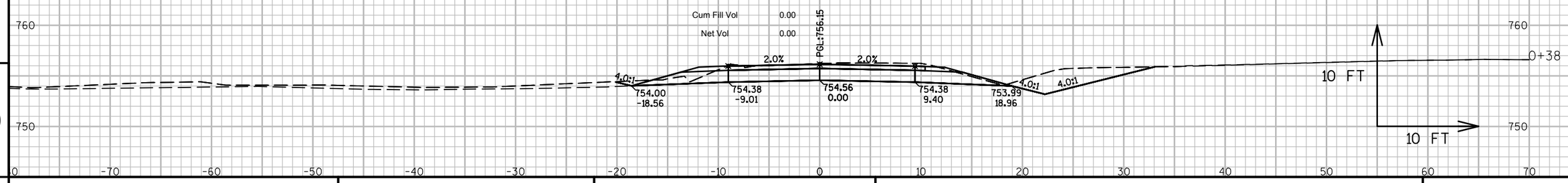
Total Volume at Station 1+00.00	
Cut Area	150.21
Fill Area	0.00
Cum Cut Vol	253.21
Cum Fill Vol	0.00
Net Vol	253.21



Total Volume at Station 0+50.00	
Cut Area	76.76
Fill Area	0.00
Cum Cut Vol	31.03
Cum Fill Vol	0.00
Net Vol	31.03



Total Volume at Station 0+38.42	
Cut Area	64.43
Fill Area	0.00
Cum Cut Vol	0.00
Cum Fill Vol	0.00
Net Vol	0.00



9

9

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: 82nd Street	SHEET 104	E

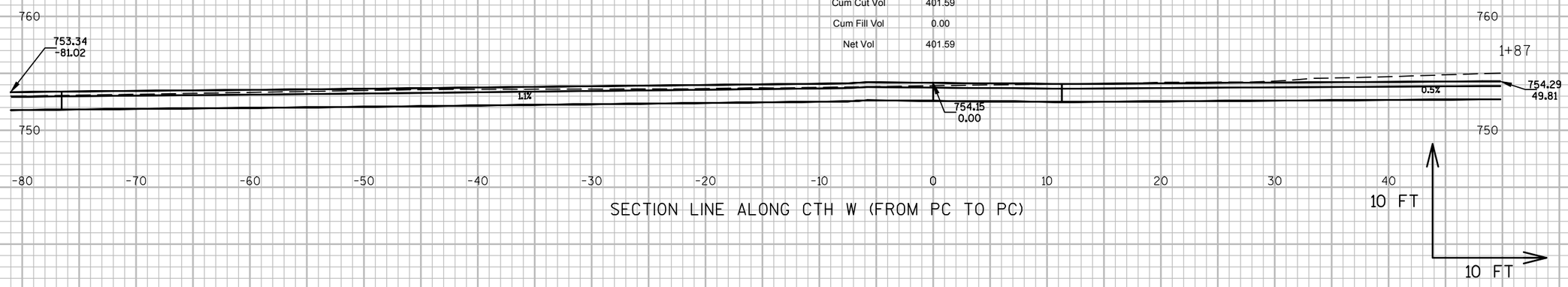
FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0902_XSECT-2.DWG
LAYOUT NAME - 0931_XSECT-2

PLOT DATE : 1/23/2017 11:14 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

Total 82nd Street Earthwork Volume							
Station	Cut Area	Fill Area	Cut Vol	Fill Vol	Cum Cut Vol	Cum Fill Vol	Net Vol
0+38.42	64.43	0.00	0.00	0.00	0.00	0.00	0.00
0+50.00	76.76	0.00	31.03	0.00	31.03	0.00	31.03
1+00.00	150.21	0.00	222.18	0.00	253.21	0.00	253.21
1+50.00	0.00	0.00	148.38	0.00	401.59	0.00	401.59
1+78.62	0.00	0.00	0.00	0.00	401.59	0.00	401.59
1+87.13	0.00	0.00	0.00	0.00	401.59	0.00	401.59

Total Volume at Station 1+50.00	
Cut Area	0.00
Fill Area	0.00
Cum Cut Vol	401.59
Cum Fill Vol	0.00
Net Vol	401.59



SECTION LINE ALONG CTH W (FROM PC TO PC)

PROJECT NO: 3751-00-70	HWY: CTH W	COUNTY: KENOSHA	CROSS SECTIONS: 82nd Street	SHEET 105	E

FILE NAME : P:\K0450030_KENOSHA COUNTY - CTH W RECONSTRUCTION\C3D\SHEETSPLAN\0902_XSECT-2.DWG
LAYOUT NAME - 0932_XSECT-2

PLOT DATE : 1/23/2017 11:14 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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