MAD

MAY 2014

PROJECT ID: 5310-01-73

WITH:

COUNTY: DANE

ORDER OF SHEETS

TOTAL SHEETS = 150

N

DESIGN DESIGNATION

A.A.D.T.	(2012)	= 10400
A.A.D.T.	(2034)	= 13400
D.H.V.		= 970
D.D.		= 60/40
T.		= 8.5%
DESIGN SPEED		= 55 MPH
ESALS		= 2,613,400

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5310-01-73	———	—

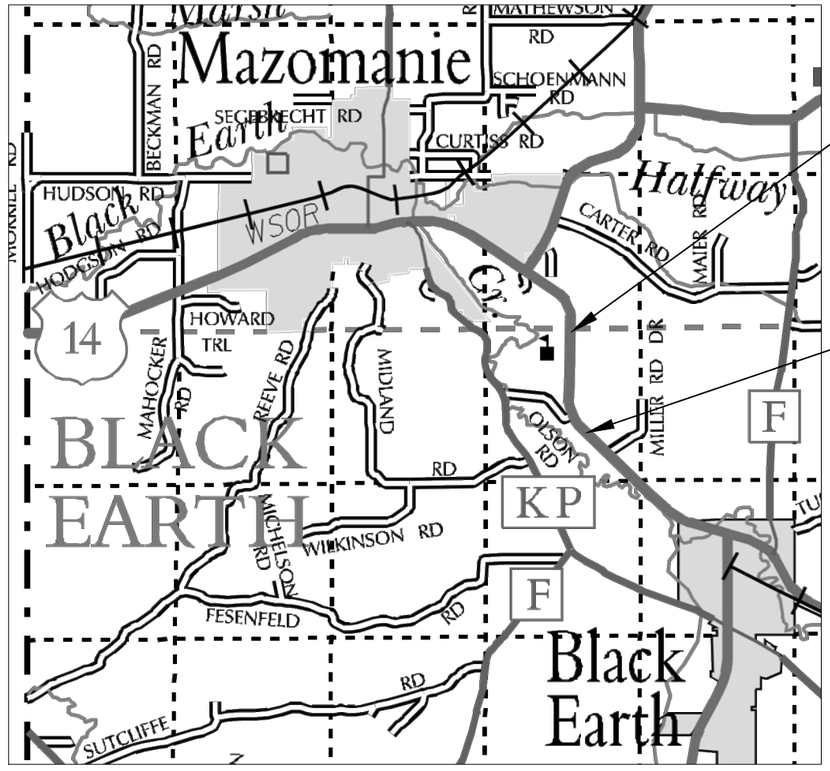
SPRING GREEN - MADISON

WISCONSIN HEIGHTS HS DRIVE TO OLSON ROAD

USH 14

DANE COUNTY

STATE PROJECT NUMBER
5310-01-73



BEGIN PROJECT
STA 124+00
X: 718698.48
Y: 514458.48

END PROJECT
STA 154+37.40
X: 719055.70
Y: 511537.47

LAYOUT
SCALE 0 0.5 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.575 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, DANE COUNTY, NAD83 (1991), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	JAY ADAMS, RLS.
Designer	JAY ADAMS, PE.
Project Manager	TODD WALDO, PE.
Regional Examiner	DAN KLEINERTZ PE.
Regional Supervisor	REINY YAHNKE PE.

APPROVED FOR THE DEPARTMENT

DATE: 1/29/2014 (Signature)

E

FILE NAME : N:\PDS\C3D\53100103\SHEETSOTHER\010101_TI.DWG

PLOT DATE : 1/23/2014 1:53 PM

PLOT BY : BALSIGER, LEE M

PLOT NAME :

WISDOT/CADDS SHEET 10

GENERAL NOTES

- CURVE DATA IS BASED ON ARC DEFINITION.
- COORDINATES SHOWN ON THE PLAN ARE REFERENCED TO THE DANE COUNTY COORDINATE SYSTEM; NAD 83 (1991).
- LOCATION OF UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGER'S HOTLINE AND/OR A DIRECT CALL TO THE INDIVIDUAL UTILITY COMPANIES, WHICH HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGER'S HOTLINE.
- ALL RADII ARE MEASURED TO EDGE OF PAVEMENT OR FLAG OF CURB UNLESS OTHERWISE SHOWN OR NOTED ON THE PLAN.
- NO TREES OR SHRUBS SHALL BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE BEEN DESIGNATED FOR REMOVAL BY THE ENGINEER.
- WHEN PORTIONS OF EXISTING ASPHALTIC SURFACES ARE TO BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION, THE LINE OF SUCH REMOVAL SHALL BE NEATLY DELINEATED WITH A SAW CUT JOINT THROUGH THE ASPHALTIC SURFACE SO THAT REMOVAL OF THE ASPHALT SHALL BE ACCOMPLISHED WITHOUT DAMAGE TO REMAINING PORTIONS. THE LOCATION OF SAW JOINTS AND THE AMOUNT REMOVED AT SIDE ROADS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- THE EXACT LOCATION OF PRIVATE AND FIELD ENTRANCES ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAY SHALL BE RE-ESTABLISHED IMMEDIATELY AFETR OPERATIONS ARE COMPLETE.
- WHEN THE QUANTITY OF HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OF THE THICKNESS OF THE MATERIAL THAT IS SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.
- HMA PAVEMENT QUANTITY IS BASED ON THE UNIT DENSITY OF 112LB/SY/IN.
- PLACE ASPHALTIC SURFACE AND HMA PAVEMENT IN THE FOLLOWING NUMBER OF LAYERS. THE 12.5mm GRADATION MAY BE USED FOR ALL LAYERS.
  - 3.5" ASPHALTIC SURFACE TEMPORARY IN ONE LAYER
  - 1.75" HMA PAVEMENT IN ONE LAYER
  - 3.5" HMA PAVEMENT IN 2 LAYERS
  - 5.25" HMA PAVEMENT IN 3 LAYERS
- STATION AND OFFSETS FOR CULVERT PIPES ARE COMPUTED TO THE ENDS OF THE PIPE, AT THE INVERT.
- THE CONTRACTOR'S PAVING OPERATION SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING, OR PARKING LANE.
- WATER FOR PROJECT MAY NOT BE WITHDRAWN FROM BLACK EARTH CREEK OR ITS TRIBUTARIES.
- SILT FENCE WILL BE PLACED AS DIRECTED BY THE ENGINEER.
- THE RATE OF APPLICATION FOR TACK COAT IS COMPUTED AT 0.05 GAL/SY.
- THE EROSION CONTROL ITEMS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE ENGINEER SHALL CONFIRM THE LOCATION OF EROSION CONTROL ITEMS. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY. AT THAT TIME, THE CONTRACTOR SHALL REMOVE THE TEMPORARY EROSION CONTROL ITEM INCIDENTAL TO THE COST OF THE RESPECTIVE BID ITEM.
- EXCAVATION OF EXISTING CRACKED AND SEATED PAVEMENT WILL BE PAID FOR UNDER 205.0100 COMMON EXCAVATION ONLY.
- EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS EXCAVATION COMMON. THE LOCATION OF EBS WILL BE DETERMINED BY THE ENGINEER.

UTILITY COMPANIES & PERSONNEL

Mike Olsen
ATC Management, Inc. - Electricity
801 O'keefe Rd
P.O. Box 6113
De Pere, WI 54115-6113
(920) 338-6582
molsen@atcllc.com

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ATC Management, Inc. - Electricity
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Waukesha, WI. 53188-1022
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(414) 651-1830 Mobile

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(Black Earth Telephone)
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Jerry.myers@tdstelecom.com

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(Black Earth Electric Utility – Electricity)
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La Crosse, WI 54601
Phone (608)498-0185
Jay.Adams@dot.wi.gov

DNR LIASON
Eric Hegglund
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Fitchburg, WI 53711
Phone (608)275-3301
Eric.Heggelund@wi.gov

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

STANDARD ABBREVIATIONS

AC.	ACRE	MAX.	MAXIMUM
AGG.	AGGREGATE	MGAL	1000 GALLONS
AH	AHEAD	MIN.	MINIMUM
<	ANGLE	N.C.	NORMAL CROWN OR NO CHANGE
AE, AEW	APRON ENDWALL	N	NORTH
ASPH.	ASPHALTIC	NO.	NUMBER
A.D.T.	AVERAGE DAILY TRAFFIC	PAV'T	PAVEMENT
B.F.	BACK FACE	P.L.E.	PERMANENT LIMITED EASEMENT
BK.	BACK	P.C.	POINT OF CURVATURE
BEG.	BEGIN	P.I.	POINT OF INTERSECTION
B.M.	BENCH MARK	P.T.	POINT OF TANGENCY
C/L	CENTER LINE	V.P.C.	VERTICAL POINT OF CURVATURE
D	CENTRAL ANGLE OR DELTA	V.P.I.	VERTICAL POINT OF INTERSECTION
C.M.C.P.	CORRUGATED METAL CULVERT PIPE	V.P.T.	VERTICAL POINT OF TANGENCY
C.M.P.	CORRUGATED METAL PIPE	PCC	PORTLAND CEMENT CONCRETE
CO.	COUNTY	P.E.	PRIVATE ENTRANCE
CTH	COUNTY TRUNK HIGHWAY	P.L.	PROPERTY LINE
CR.	CREEK	R	RADIUS OR RANGE
C.A.B.C.	CRUSHED AGGREGATE BASE COURSE	R/L	REFERENCE LINE
C.Y.	CUBIC YARD	R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE
C.P.	CULVERT PIPE	RT	RIGHT
C. & G.	CURB AND GUTTER	REQ'D	REQUIRED
D	DEGREE OF CURVE	R.H.F.	RIGHT HAND FORWARD
D.H.V.	DESIGN HOUR VOLUME	R/W	RIGHT OF WAY
DIA.	DIAMETER	R.	RIVER
DISCH.	DISCHARGE	RD.	ROAD
EA	EACH	SHLD.	SHOULDER(S)
E	EAST	SHR.	SHRINKAGE
ELEC.	ELECTRIC(AL), ELEC. CABLE	S	SOUTH
EL., ELEV.	ELEVATION	S.F.	SQUARE FOOT (FEET)
EXC.	EXCAVATION	SDD	STANDARD DETAIL DRAWING(S)
F.F.	FACE TO FACE	STH	STATE TRUNK HIGHWAY
FERT.	FERTILIZER	STA.	STATION
F.E.	FIELD ENTRANCE	S.E.	SUPERELEVATION
F/L, F.L.	FLOW LINE	S/L	SURVEY LINE
CWT.	HUNDRED WEIGHT	T	TANGENT
INL	INLET	TEL.	TELEPHONE
INTER.	INTERSECTION	TEMP.	TEMPORARY
JT.	JOINT	T.L.E.	TEMPORARY LIMITED EASEMENT
LT	LEFT	T.O.C.	TOP OF CURB
L.H.F.	LEFT HAND FORWARD	T.	(TRUCKS) PERCENT OF
L.	LENGTH OF CURVE	TYP.	TYPICAL
L.F.	LINEAR FOOT(FEET)	UNCL.	UNCLASSIFIED
LC.	LONG CHORD	U.G.	UNDERGROUND (CABLE)
LS	LUMP SUM	V.C.	VERTICAL CURVE
M.P.	MARKER POST	W	WEST

2

N

TO BLACK EARTH

TO MAZOMANIE

BP: 124+00.00

PC: 142+48.02

EP: PT: 154+37.40

USH 14

125

130

135

140

145

150

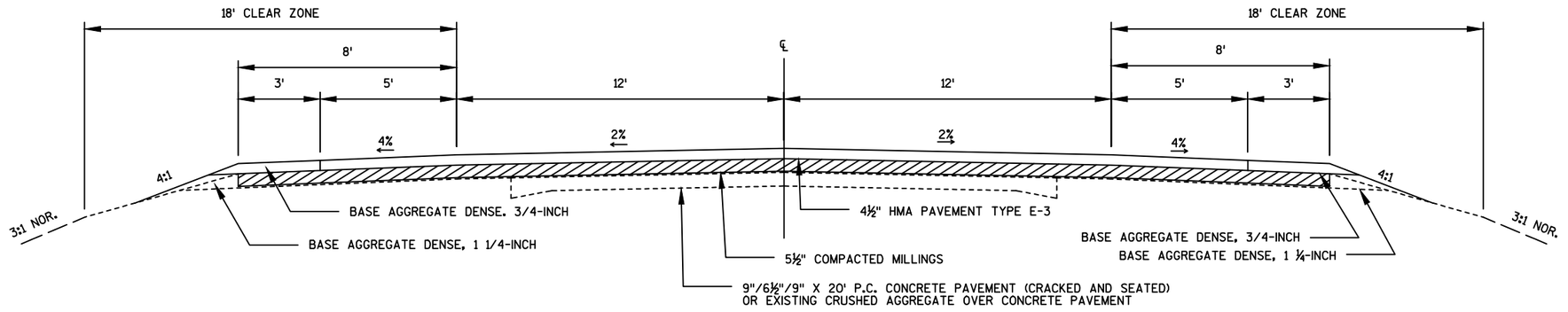
WISCONSIN HEIGHTS SCHOOL

OLSON ROAD

2

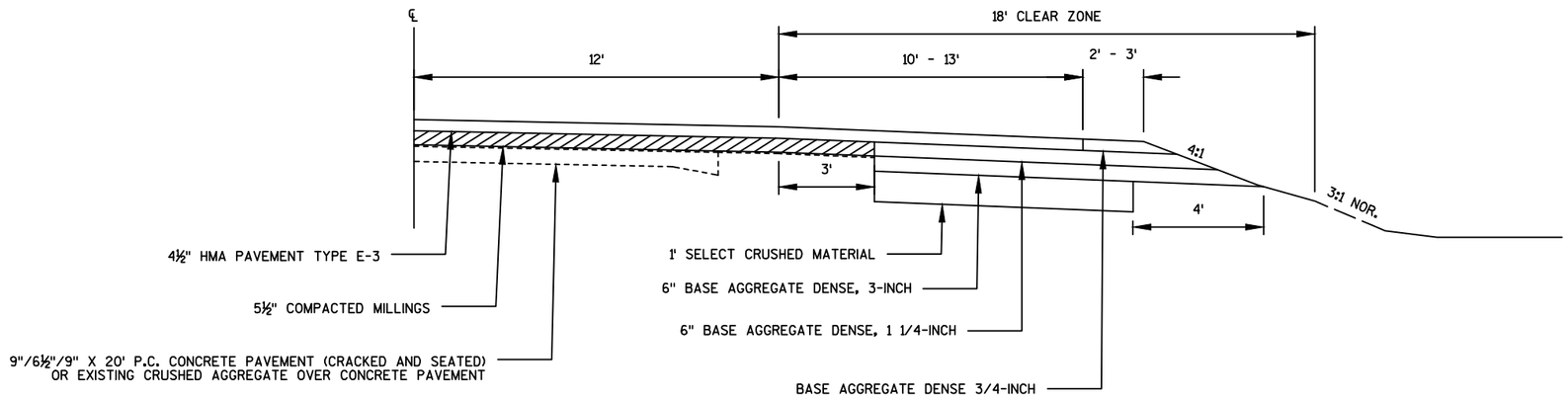
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PROJECT OVERVIEW	SHEET 4	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\OVERVIEW.DWG PLOT DATE : 1/23/2014 1:54 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1 IN:300 FT



TYPICAL EXISTING SECTION

STA 124+00 - 132+00
STA 142+00 - STA 154+37.40

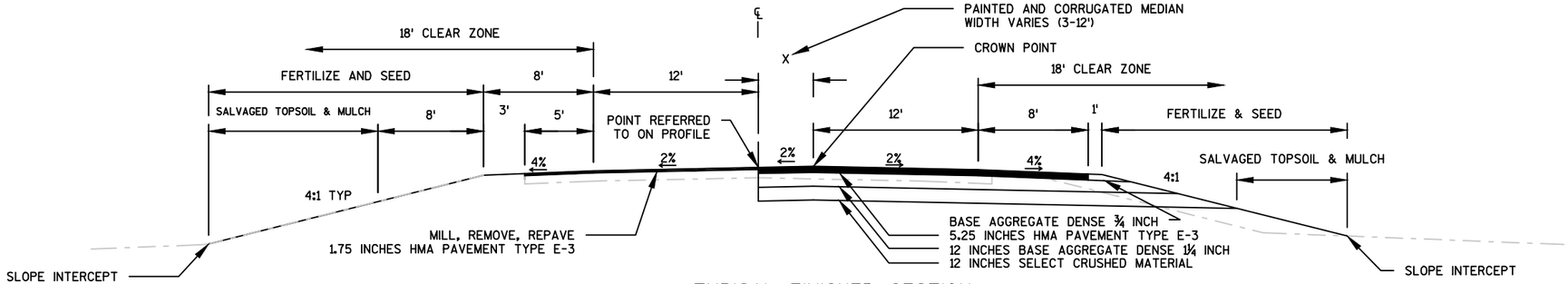


TYPICAL EXISTING SECTION

TURN LANE AND BYPASS LANE
STA 132+00 - 142+00

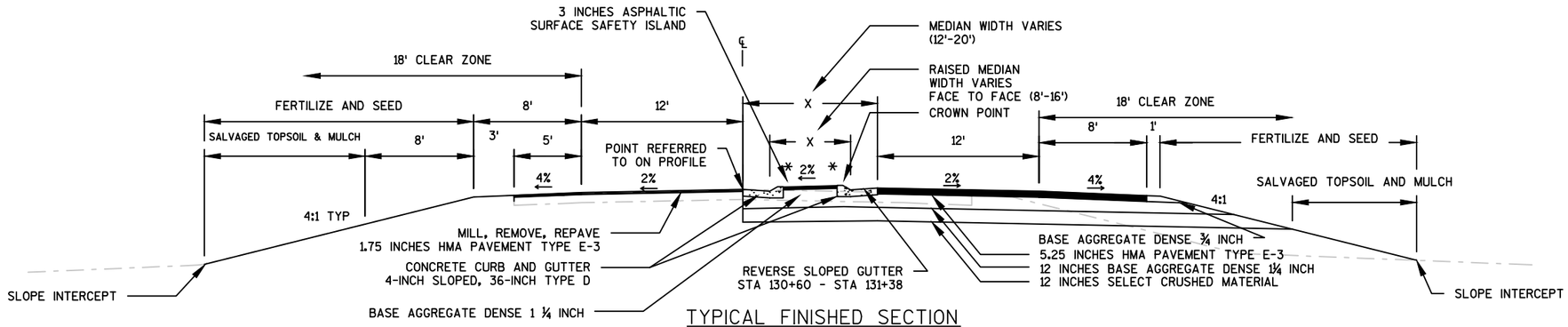
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	EXISTING TYPICALS SECTIONS	SHEET 5	E

2



TYPICAL FINISHED SECTION

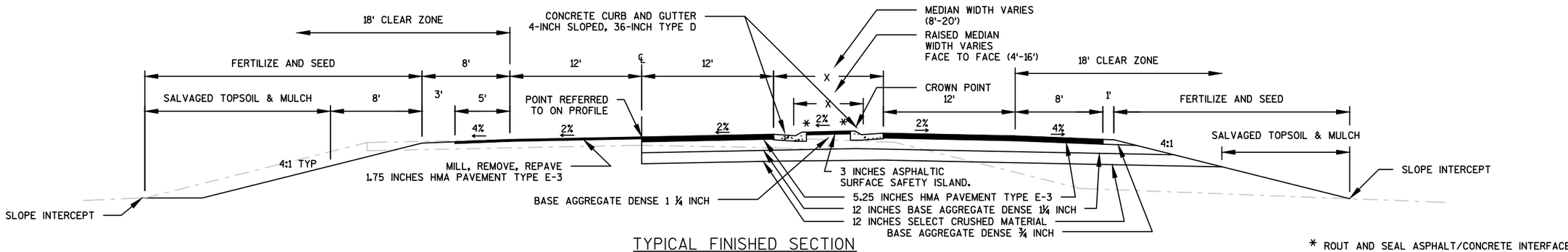
USH 14
STA 129+00 - STA 130+60
STA 145+09 - STA 149+50



TYPICAL FINISHED SECTION

RAISED CURBED MEDIAN
STA 130+60 - STA 131+38
STA 142+11 - STA 145+09

* ROUT AND SEAL ASPHALT/CONCRETE INTERFACE

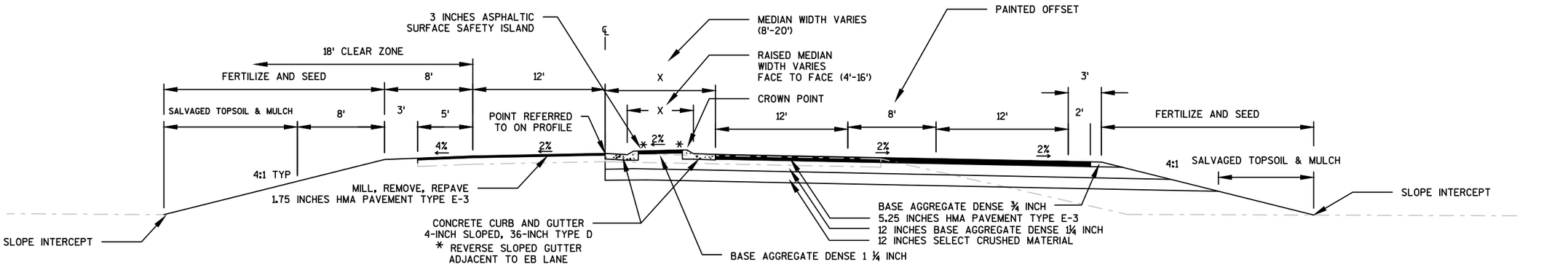


TYPICAL FINISHED SECTION

LEFT TURN LANE
STA 136+65 - STA 142+11

* ROUT AND SEAL ASPHALT/CONCRETE INTERFACE

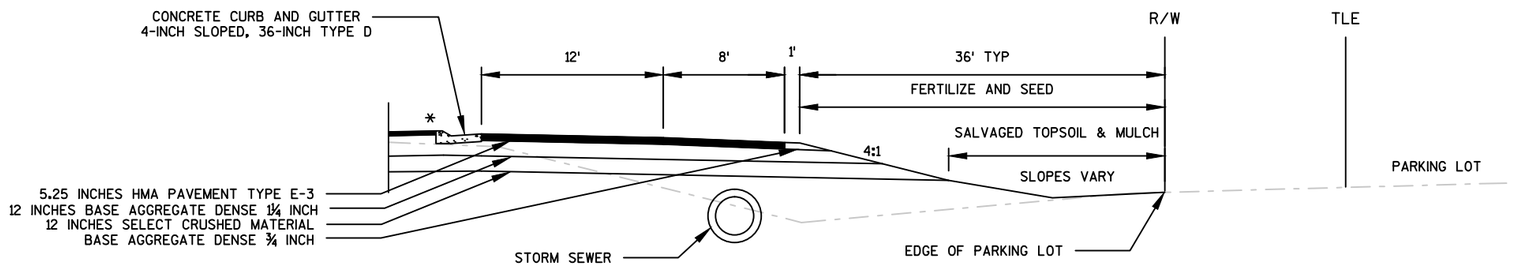
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PROPOSED TYPICAL SECTIONS	SHEET 6	E



* ROUT AND SEAL ASPHALT/CONCRETE INTERFACE

TYPICAL FINISHED SECTION

RIGHT TURN LANE
STA 131+38 - STA 135+13

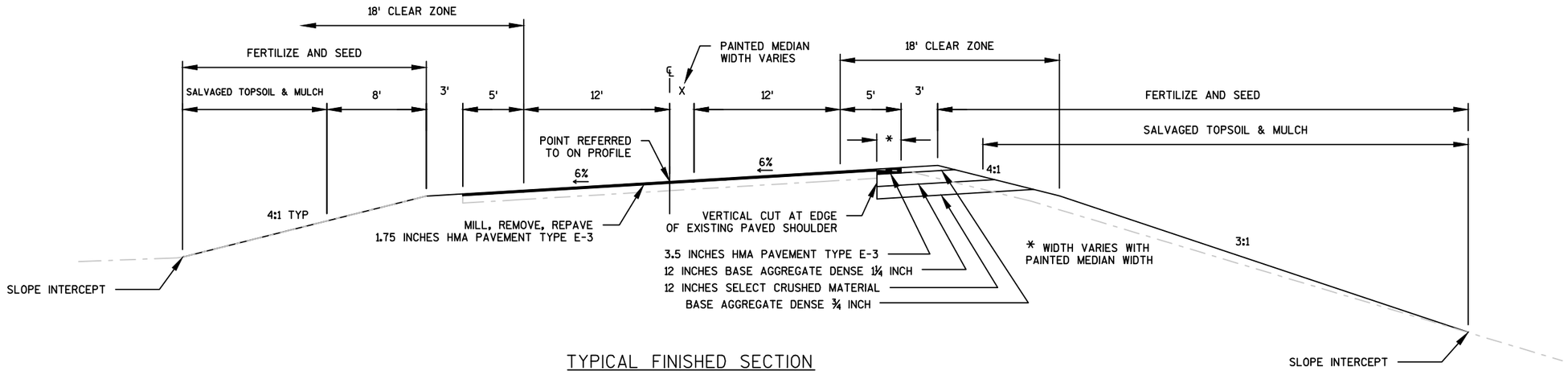


TYPICAL FINISHED HALF SECTION

DRAINAGE DITCH
STA 138+36 EB - STA 144+35 EB

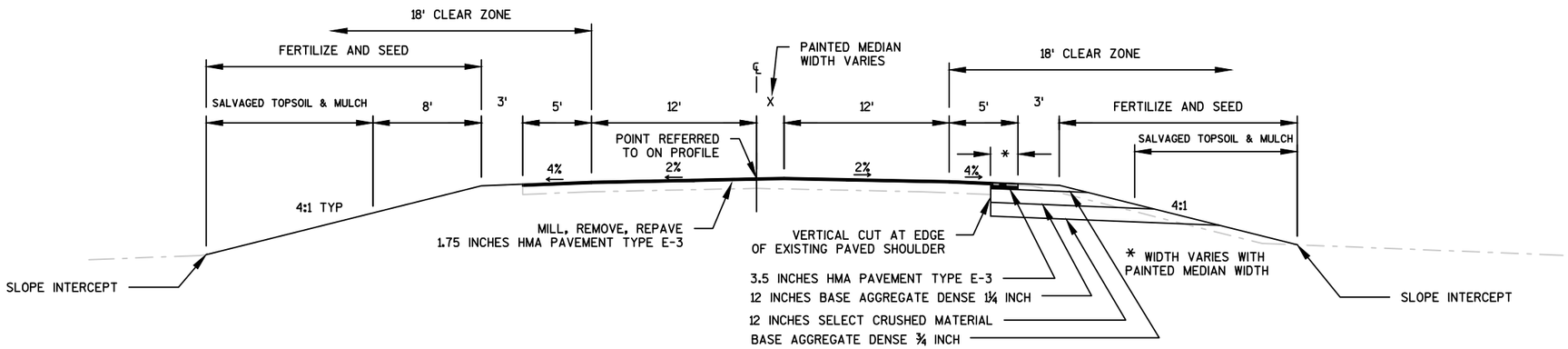
* ROUT AND SEAL ASPHALT/CONCRETE INTERFACE

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PROPOSED TYPICAL SECTIONS	SHEET 7	E



TYPICAL FINISHED SECTION

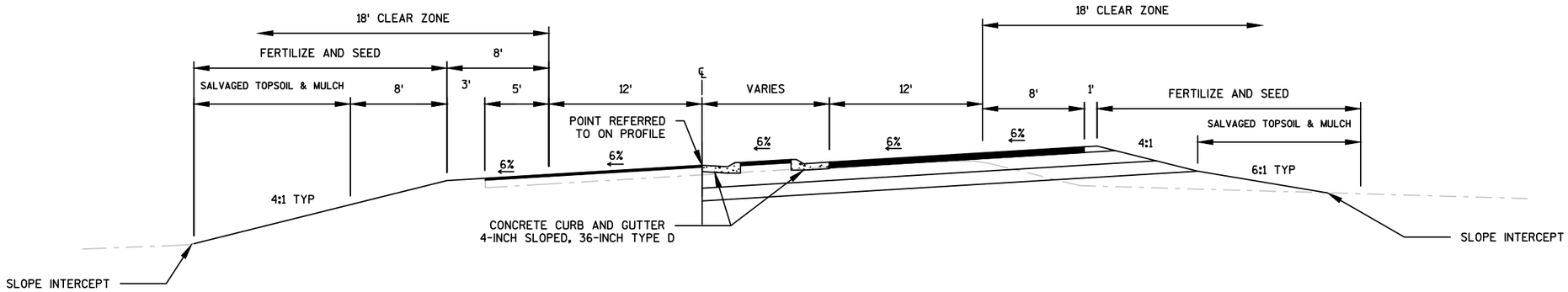
USH 14 - SOUTH OF OLSON RD
STA 149+50 - STA 154+37



TYPICAL FINISHED SECTION

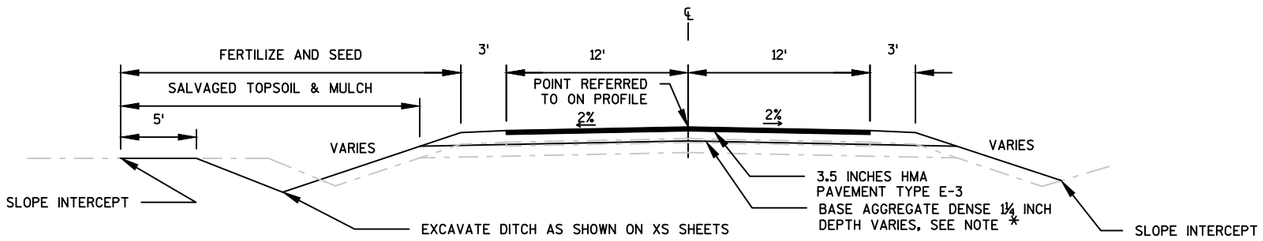
USH 14 - MILL AND REPAVE
STA 124+00 - STA 129+00

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PROPOSED TYPICAL SECTIONS	SHEET 8	E



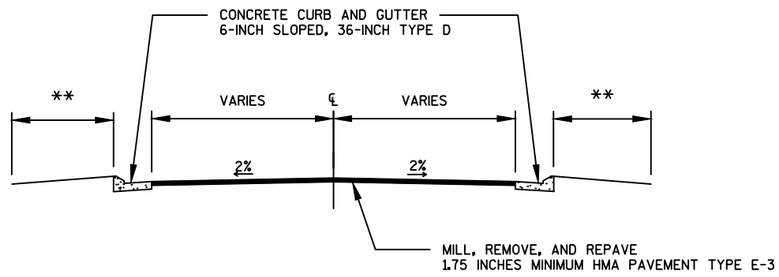
SUPERELEVATION SECTION

USH 14



TYPCAL FINISHED SECTION

SCHOOL ENTRANCE



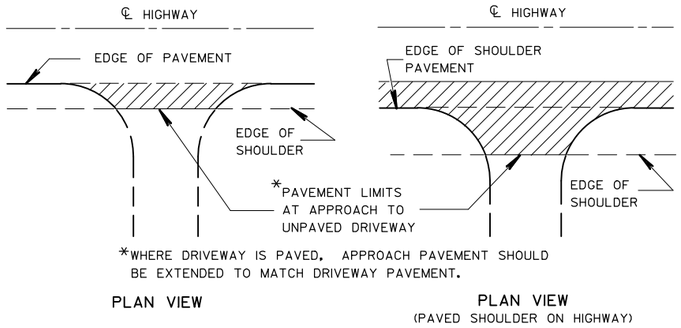
TYPCAL FINISHED SECTION

OLSON ROAD

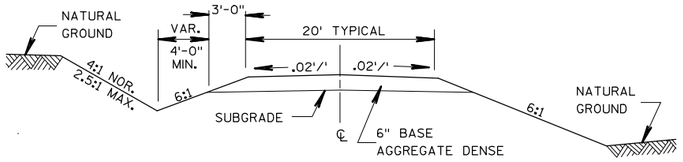
* REMOVE ASPHALTIC SURFACE AND ADD BASE AGGREGATE DENSE AS NEEDED TO RAISE PROFILE.

** SALVAGED TOPSOIL, FERTILIZE, SEED AND MULCH DISTURBED AREA BEHIND CURB

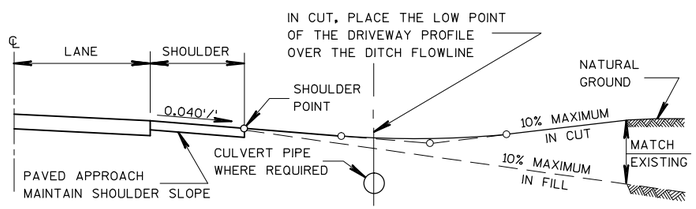
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PROPOSED TYPICAL SECTIONS	SHEET 9	E



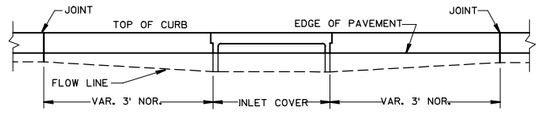
RURAL DRIVEWAY INTERSECTION DETAIL



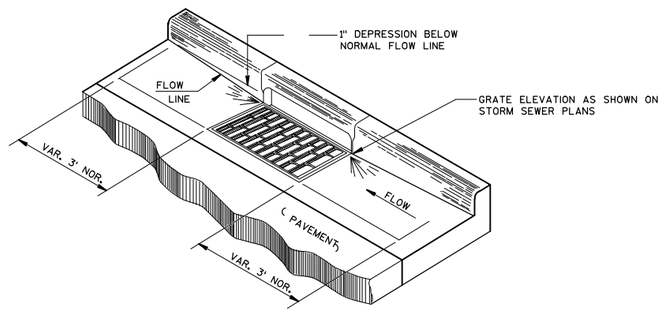
TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE



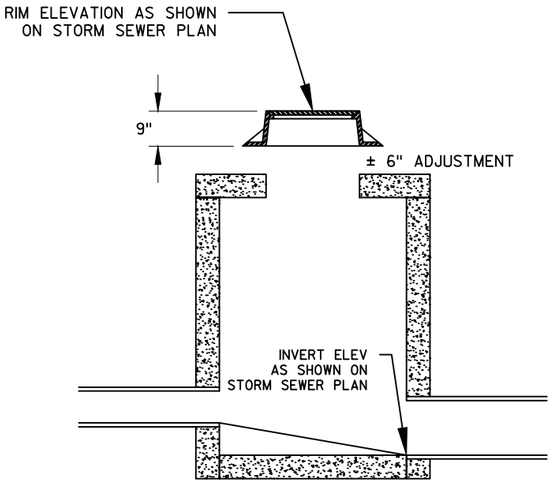
TYPICAL DRIVEWAY PROFILES



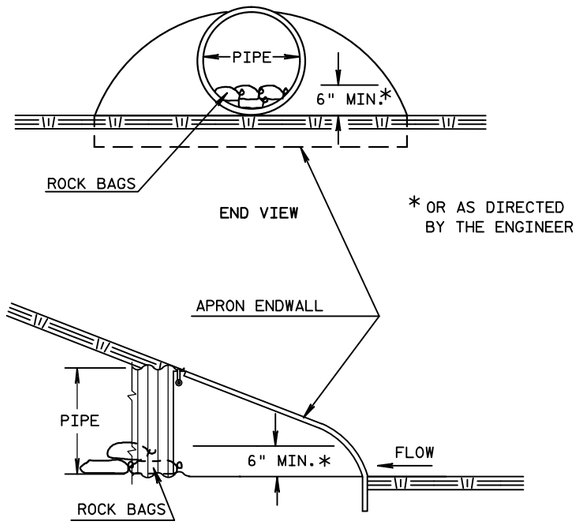
ELEVATION



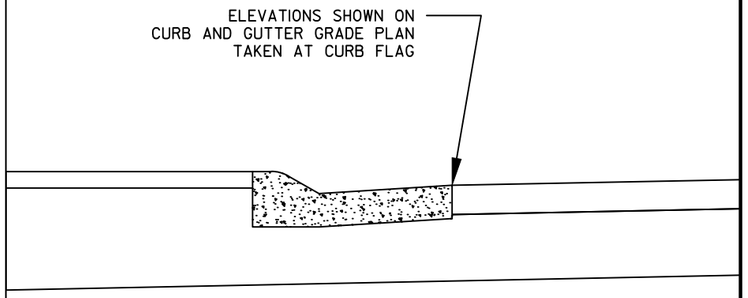
DETAIL FOR GUTTER CONSTRUCTION AT INLETS



DETAIL FOR COMPUTING MANHOLE ELEVATIONS



CULVERT PIPE DITCH CHECK



DETAIL FOR CURB & GUTTER ELEVATIONS

PT	STA	OFFSET	ELEV	RADIUS
1	134+99.5	1' RT	808.46	102.5'
2	135+16.8	6.2' RT	808.6	
3	135+31.1	11.3' RT	808.63	
4	135+33.9	16.49' RT	808.72	

PT	STA	OFFSET	ELEV	RADIUS
5	135+29.1	20' RT	808.81	
6	135+29.7	15.5' RT		4.5'
7	135+10.3	52' RT	808.25	
8	135+51.9	69.8' RT	806.99	

PT	STA	OFFSET	ELEV	RADIUS
9	135+69.3	11.6' RT	805.62	
10	135+09.3	112' RT		60.0'
11	135+86.4	41.5' RT		1.0'
12	135+86.4	57.5' RT		1.0'

PT	STA	OFFSET	ELEV	RADIUS
13	136+06.4	42.0' RT		4.5'
14	136+05.4	63.8' RT		3.5'
15	136+12.8	41.5' RT		4.5'
16	136+17.0	91.1' RT	806.07	

PT	STA	OFFSET	ELEV	RADIUS
17	136+22.5'	65.6' RT	806.85	
18	136+33.3	50.0' RT	807.79	
19	136+51.4	44' RT	807.8	
20	136+51.4	74' RT		30.0'

PT	STA	OFFSET	ELEV	RADIUS
21	137+03.6	89.5' RT		98.0'
22	136+38.2	20' RT	808.27	
23	136+34.2	16' RT	808.21	
24	136+38.2	12' RT	808.11	

PT	STA	OFFSET	ELEV	RADIUS
25	136+38	16' RT		4.0'

INLET 2X3-HM
STA: 134+80.6
OFF: 0' RT
GRATE: 808.65'
INV: 799.26'

EP: 135+88.00 S

135+00 136+00 137+00

135+00EB 136+00EB 137+00EB

USH 14

135 S

17.0' 29.0' 8.0' 2.0' 34.0' 20.0' 2.0' 18.0' 16.5' 14.0'

ASPHALTIC SURFACE
SAFETY ISLAND

CONCRETE CURB
AND GUTTER
4-INCH SLOPED
30-INCH TYPE J

ROUTE AND SEAL

CORRUGATED CONCRETE
CHANNELIZING ISLAND

36LF 36" RCCP EXTENSION
CONCRETE COLLAR REQ'D
ENDWALL REQ'D

STA: 137+13.9 "EB"
INV: 800.89'

SLOPE INTERCEPT

100LF 24" SSPRC
APRON END WALL REQ'D

R/W

STA: 135+15 "S"
OFF: 54' LT
INV: 798.25'

STA: 135+10.9 "S"
OFF: 51.8' LT
INV: 798.00'

120LF 42" CMCP
APRON END WALLS REQ'D

ASPHALTIC FLUME REQ'D

STA: 135+22.5 "S"
OFF: 68.8' RT
INV: 798.25'

ASPHALTIC FLUME REQ'D

SCHOOL ENTRANCE

TLE

N

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	INTERSECTION DETAIL	SHEET 11	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\050201_PN.DWG PLOT DATE : 2/26/2014 11:33 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 42

2

2

TEMPORARY DITCH CHECK

CULVERT PIPE CHECK

INLET PROTECTION TYPE "C"

N

SLOPE INTERCEPT

R/W

BP: 124+00.00

124

126

128

130

U.S.H. 14/S.T.H. 78

R/W

SILT FENCE

SLOPE INTERCEPT

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	EROSION CONTROL	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\022001_EC.DWG PLOT DATE : 1/23/2014 1:54 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:50_XREF

WISDOT/CADDS SHEET 42

2

2

TEMPORARY DITCH CHECK

CULVERT PIPE CHECK

INLET PROTECTION TYPE "C"

N

R/W

SLOPE INTERCEPT

132

134

136

138

SLOPE INTERCEPT

SILT FENCE

R/W

TLE

R/W

EROSION MAT
CLASS I, TYPE B

TLE

SLOPE INTERCEPT

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	EROSION CONTROL	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\022001_EC.DWG PLOT DATE : 1/23/2014 1:54 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:50_XREF

2

TEMPORARY DITCH CHECK

CULVERT PIPE CHECK

INLET PROTECTION TYPE "C"

N

SLOPE INTERCEPT

R/W

PC: 142+48.02

140

142

144

146

U.S.H. 14/S.T.H. 78

SIGN

SLOPE INTERCEPT

TLE

R/W

R/W

EROSION MAT
CLASS I, TYPE B

W

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	EROSION CONTROL	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\022001_EC.DWG PLOT DATE : 1/23/2014 1:54 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:50_XREF

WISDOT/CADDS SHEET 42

2

2

TEMPORARY DITCH CHECK

CULVERT PIPE CHECK

INLET PROTECTION TYPE "C"

N

R/W

SLOPE INTERCEPT

EXISTING TYPE 9 INLET

PT: 154+37.40

148

150

152

154

SLOPE INTERCEPT

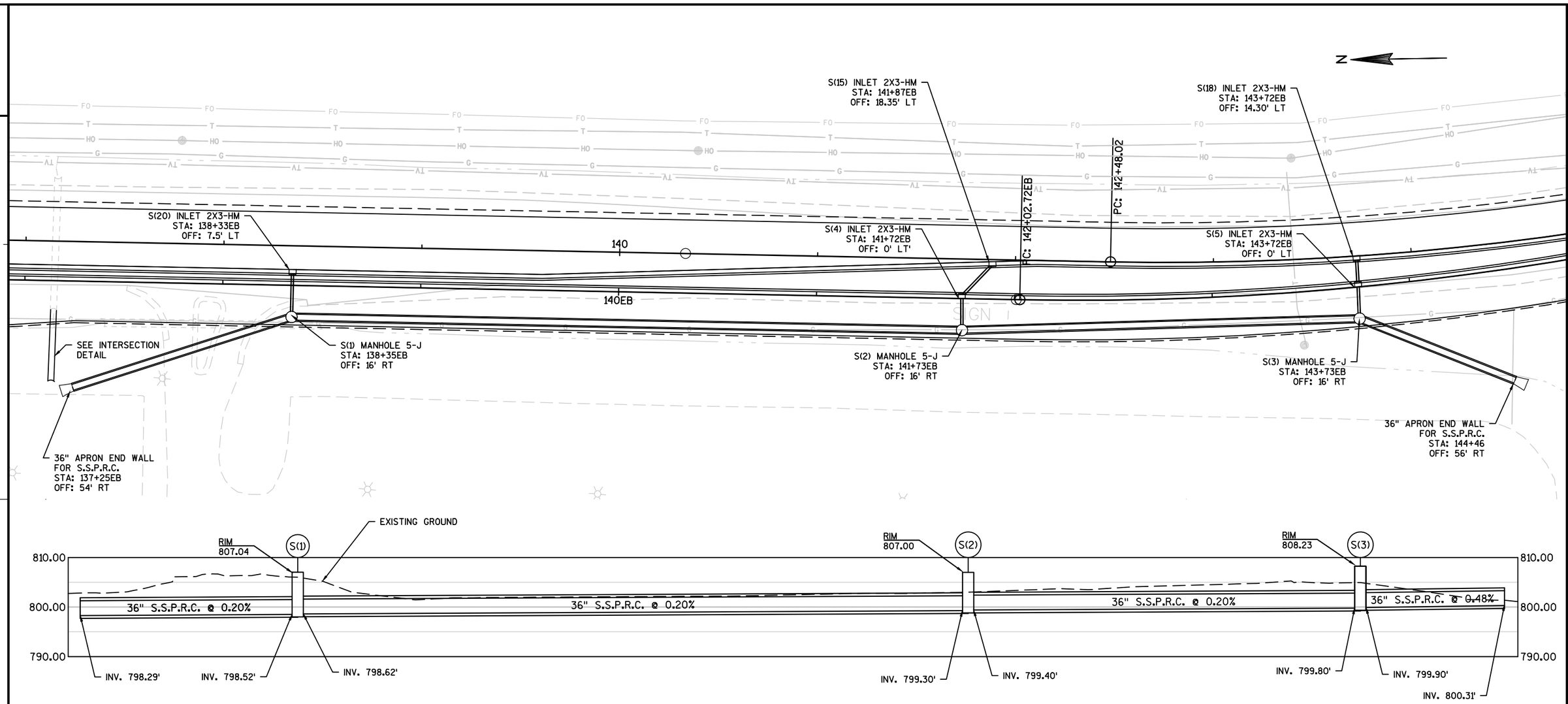
SILT FENCE

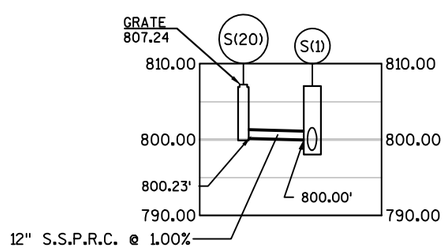
R/W

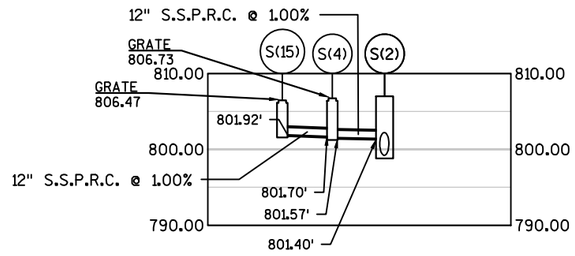
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	EROSION CONTROL	SHEET	E

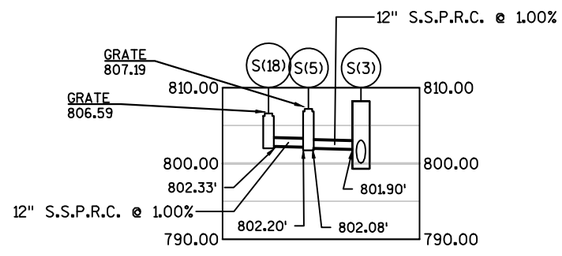
FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\022001_EC.DWG PLOT DATE : 1/23/2014 1:54 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:50_XREF

WISDOT/CADDS SHEET 42









PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	STORM SEWER PLAN	SHEET 16	E

2

N

101 W6-3 36"X36"

102 W1-2L 30"X30" MOVE SIGN (ONLY IF NEEDED)

105 END SCHOOL ZONE S5-2 24"X30" MOVE

STA: 122+00

BP: 124+00.00

124 125 126 127 128 129

USH 14/S.T.H. 78

STA: 119+00

100 W6-1 36"X36"

3

1

103 SCHOOL ENTRANCE W54-61 36" X 36"

104 45 M.P.H. W13-1 24" X 24" MOVE

(1) PAVEMENT MARKING EPOXY 4-INCH, WHITE

(1A) PAVEMENT MARKING EPOXY 4-INCH, WHITE; 3' LINE, 9' GAP

(2) PAVEMENT MARKING EPOXY 4-INCH YELLOW

(3) PAVEMENT MARKING EPOXY 4-INCH, DOUBLE YELLOW

(4) PAVEMENT MARKING EPOXY 8-INCH, WHITE

(5) PAVEMENT MARKING CURB EPOXY, YELLOW

(6) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, WHITE, SPACED 25' C-C

CONTINUE NO PASSING LANE FOR BOTH DIRECTIONS TO EXISTING. APPROXIMATELY 500'

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PERMANENT SIGNING AND MARKING	SHEET 17	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\023201_PS.DWG PLOT DATE : 1/29/2014 3:46 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:40_XREF

2

N

200 R4-7 36"X48"

201 W5-54S 18"X18" BOX OUT REQ'D

202 DO NOT ENTER R5-1 36"X36"

205R NO PASSING ZONE REMOVE

206 WRONG WAY R5-1A 42"X30"

207 W6-2 36"X36"

DOUBLE YELLOW LINES END HERE

130 131 132 133 134 135

203 BEGIN RIGHT TURN LANE R3-20R 24"X36"

204 WRONG WAY R5-1A 36"X24"

208 DO NOT ENTER R5-1 30"X30"

SEE CONCRETE CORRUGATED MEDIAN S.D.D.
FOR CORRUGATED MEDIAN PAVEMENT MARKING

(1) PAVEMENT MARKING EPOXY 4-INCH, WHITE

(1A) PAVEMENT MARKING EPOXY 4-INCH, WHITE; 3' LINE, 9' GAP

(2) PAVEMENT MARKING EPOXY 4-INCH YELLOW

(3) PAVEMENT MARKING EPOXY 4-INCH, DOUBLE YELLOW

(4) PAVEMENT MARKING EPOXY 8-INCH, WHITE

(5) PAVEMENT MARKING CURB EPOXY, YELLOW

(6) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, WHITE, SPACED 25' C-C

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PERMANENT SIGNING AND MARKING	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\023201_PS.DWG PLOT DATE : 1/29/2014 3:46 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

N

300 R4-7 24"X30" BOX OUT REQ'D

304 ONE WAY R6-2L 24"X30"

309 R4-7 24"X30" BOX OUT REQ'D

315R REMOVE

1

4

2

135 136 137 138 139 140 141

5

R1-1 30"X30"

305 STOP

306 DIVIDED HIGHWAY R6-3A 30"X24" BOX OUT REQ'D

301R ENTRANCE REMOVE

302R ONE WAY REMOVE

ONE WAY REMOVE

303R

EXISTING SIGN TO BE REMOVED BY SCHOOL

307R ENTER REMOVE

308 STOP R1-1 30"X30"

4

3

ONE WAY REMOVE

310R

DO NOT ENTER REMOVE

311R

ONE WAY REMOVE

ONE WAY REMOVE

314R 316R

319R DO NOT ENTER REMOVE

313R STOP REMOVE 317R

312R BUCKLE UP REMOVE 318R

1

320 W1-2L 30"X30" MOVE

(1) PAVEMENT MARKING EPOXY 4-INCH, WHITE

(1A) PAVEMENT MARKING EPOXY 4-INCH, WHITE; 3' LINE, 9' GAP

(2) PAVEMENT MARKING EPOXY 4-INCH YELLOW

(3) PAVEMENT MARKING EPOXY 4-INCH, DOUBLE YELLOW

(4) PAVEMENT MARKING EPOXY 8-INCH, WHITE

(5) PAVEMENT MARKING CURB EPOXY, YELLOW

(6) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, WHITE, SPACED 25' C-C

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PERMANENT SIGNING AND MARKING	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\023201_PS.DWG PLOT DATE : 1/29/2014 3:46 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

N

403 BEGIN LEFT TURN LANE
R3-20L
24"X36"
BOX OUT REQ'D

PC: 142+48.02

406 R4-7
36"X48"

407 W5-54S
18"X18"
BOX OUT REQ'D

BEGIN DOUBLE YELLOW LINES HERE

141 142 143 144 145 146

400R OLSON RD
REMOVE

401 W6-2
36"X36"

402 WRONG WAY
R5-1A
42"X30"

404 Olson Road
D1-1
66"X15"

405 MOVE SIGN TO NEW LOCATION

408 DO NOT ENTER
R5-1
36"X36"

409 END SCHOOL ZONE
S5-2
24"X30"
MOVE

SEE CONCRETE CORRUGATED MEDIAN S.D.D.
FOR CORRUGATED MEDIAN MARKING DETAILS

(1) PAVEMENT MARKING EPOXY 4-INCH, WHITE
(1A) PAVEMENT MARKING EPOXY 4-INCH, WHITE; 3' LINE, 9' GAP
(2) PAVEMENT MARKING EPOXY 4-INCH YELLOW
(3) PAVEMENT MARKING EPOXY 4-INCH, DOUBLE YELLOW
(4) PAVEMENT MARKING EPOXY 8-INCH, WHITE
(5) PAVEMENT MARKING CURB EPOXY, YELLOW
(6) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, WHITE, SPACED 25' C-C

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PERMANENT SIGNING AND MARKING	SHEET 20	E

2

N

W54-61
36" X 36"

500 SCHOOL ENTRANCE

501 45 M.P.H.

W13-1
24" X 24"
MOVE SIGN
(ONLY IF NEEDED)

14/S.T.H. 78

147 148 149 150 151 152

1 1A 1 3

502 STOP

R1-1
30"X30"
MOVE SIGN
(ONLY IF NEEDED)

(1) PAVEMENT MARKING EPOXY 4-INCH, WHITE
(1A) PAVEMENT MARKING EPOXY 4-INCH, WHITE; 3' LINE, 9' GAP
(2) PAVEMENT MARKING EPOXY 4-INCH YELLOW
(3) PAVEMENT MARKING EPOXY 4-INCH, DOUBLE YELLOW
(4) PAVEMENT MARKING EPOXY 8-INCH, WHITE
(5) PAVEMENT MARKING CURB EPOXY, YELLOW
(6) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, WHITE, SPACED 25' C-C

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PERMANENT SIGNING AND MARKING	SHEET 21	E

2

N

600R
OLSON RD
REMOVE

601
Olson Road
D1-1
66"X15"

603
W6-1
36"X36"
STA: 157+00

PT: 154+37.40

152
153
154

U.S.H. 14/S.T.H

1
1
3

602
W6-3
36"X36"

(1) PAVEMENT MARKING EPOXY 4-INCH, WHITE
(1A) PAVEMENT MARKING EPOXY 4-INCH, WHITE; 3' LINE, 9' GAP
(2) PAVEMENT MARKING EPOXY 4-INCH YELLOW
(3) PAVEMENT MARKING EPOXY 4-INCH, DOUBLE YELLOW
(4) PAVEMENT MARKING EPOXY 8-INCH, WHITE
(5) PAVEMENT MARKING CURB EPOXY, YELLOW
(6) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, WHITE, SPACED 25' C-C

CONTINUE NO PASSING LANE FOR BOTH
DIRECTIONS TO EXISTING. APPROXIMATELY 500'

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PERMANENT SIGNING AND MARKING	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\023201_PS.DWG PLOT DATE : 1/29/2014 3:46 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:40_XREF

2

N

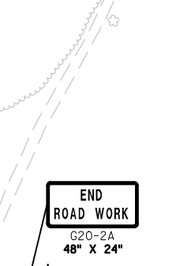
USE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR LAYOUT OF TRAFFIC CONTROL SIGNS OUTSIDE PROJECT LIMITS. USE 45 M.P.H. ADVISORY SPEED.

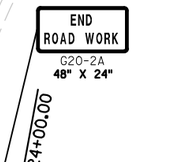
STAGE 1:

TRAFFIC CONTROL STAGE 1 WILL CONSIST OF DRUMMING OFF THE LEFT SHOULDER AND WIDENING THE SHOULDER. SHOULDER WORK WILL INCLUDE EARTHWORK, BASE COURSE, AND TEMPORARY ASPHALT PAVING.

SEE CONSTRUCTION STAGING TYPICAL SECTIONS AND TEMPORARY LANE CROSS SECTIONS.

USE SDD's "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" AND "TRAFFIC CONTROL ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC".





BP: 124+00.00

CONSTRUCT NEW FIELD ENTRANCE

INSTALL 6-FT TEMPORARY PIPE EXTENSION TO EXISTING 36" RCCP.

TEMPORARY ASPHALTIC SURFACE FOR TEMPORARY LANE

PC: 142+48.02

PT: 154+37.40

126 128 130 132 134 136 138 140 142 144 146 148 150 152 154

USE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR LAYOUT OF TRAFFIC CONTROL SIGNS OUTSIDE PROJECT LIMITS. USE 45 M.P.H. ADVISORY SPEED.

CLOSE SCHOOL ENTRANCE/EXITS

TEMPORARY ENTRANCE/EXIT AT OLSON RD

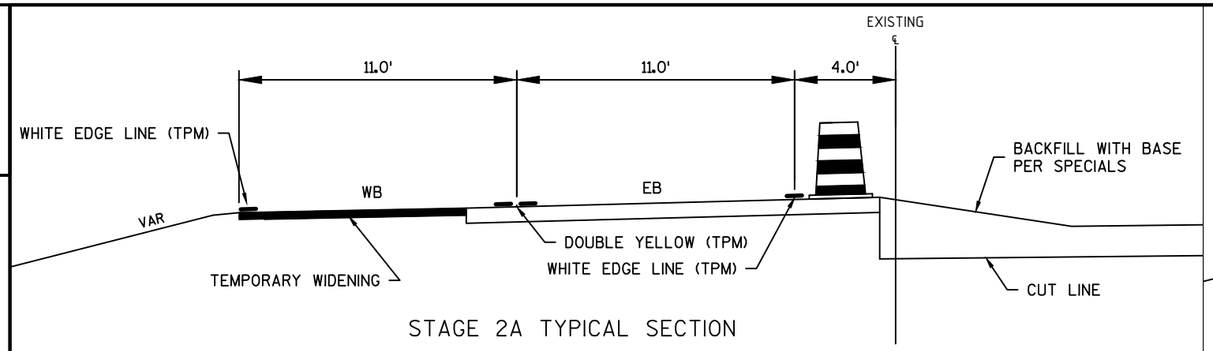
ATHLETIC FIELD

BLEACHERS

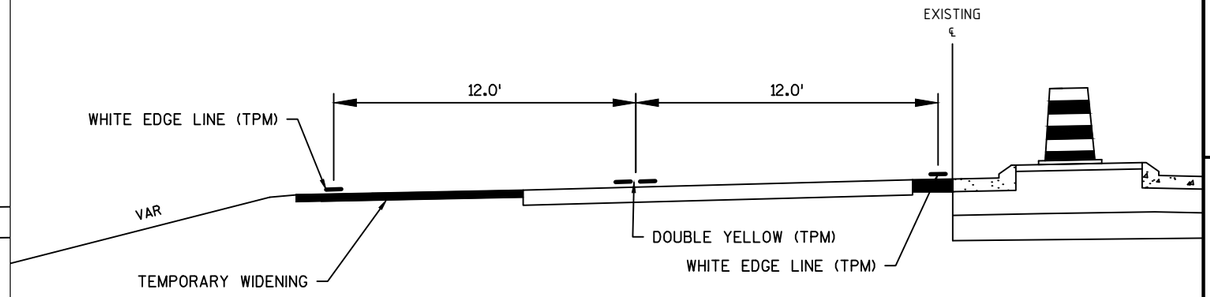
OLSON RD.

MILWAUKEE & SOUTHERN RAILROAD

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET 23	E



STAGE 2A TYPICAL SECTION



STAGE 2B TYPICAL SECTION

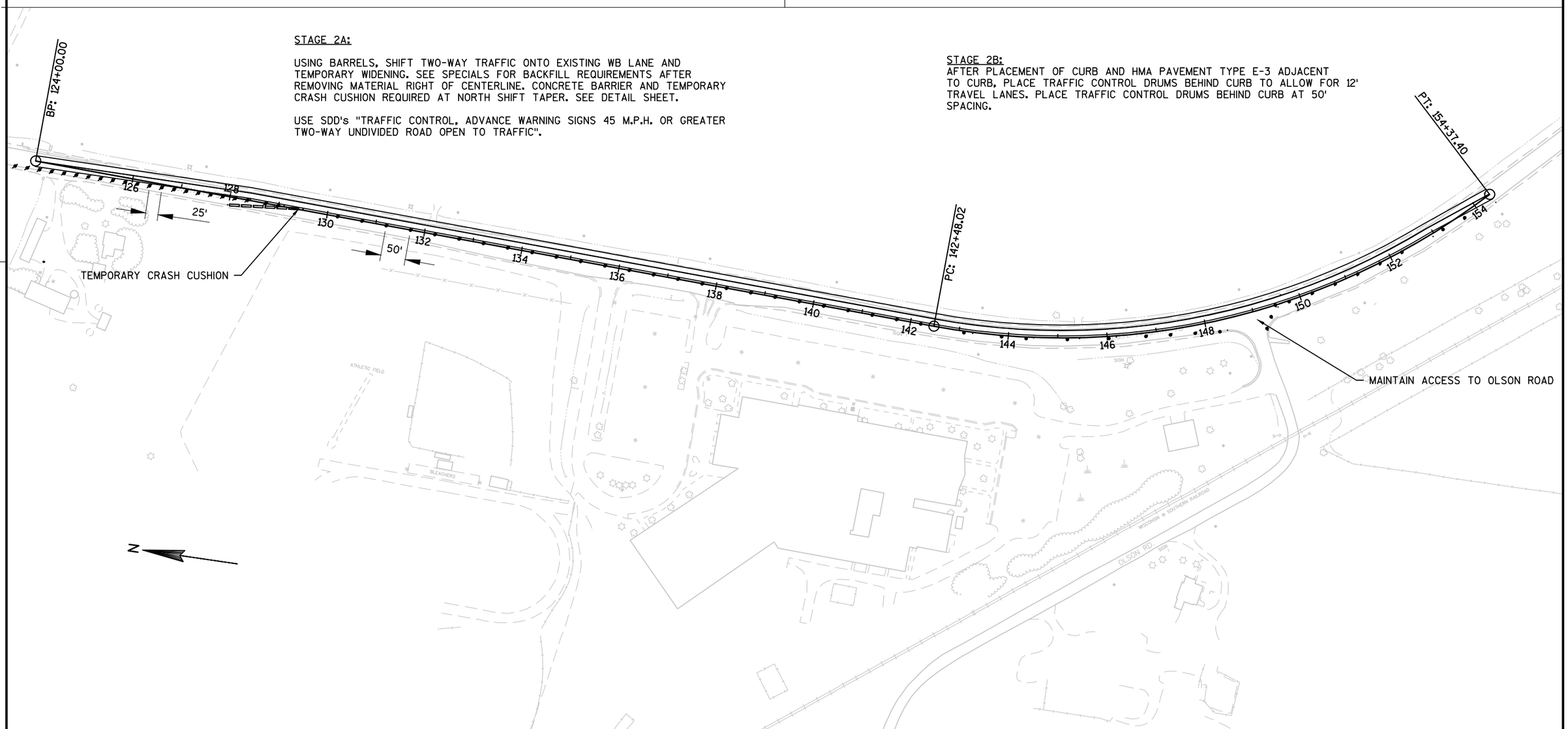
2

STAGE 2A:

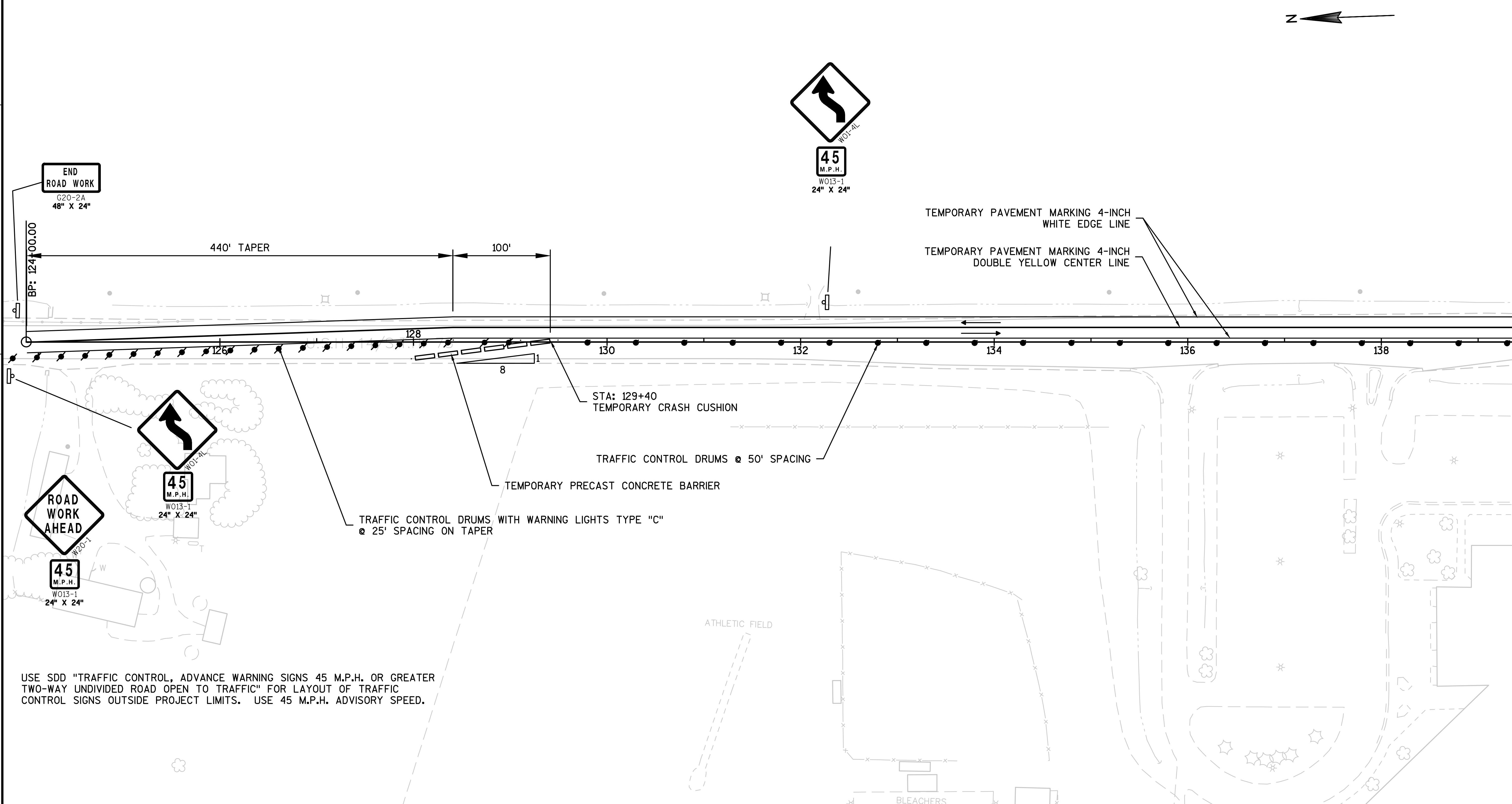
USING BARRELS, SHIFT TWO-WAY TRAFFIC ONTO EXISTING WB LANE AND TEMPORARY WIDENING. SEE SPECIALS FOR BACKFILL REQUIREMENTS AFTER REMOVING MATERIAL RIGHT OF CENTERLINE. CONCRETE BARRIER AND TEMPORARY CRASH CUSHION REQUIRED AT NORTH SHIFT TAPER. SEE DETAIL SHEET.

USE SDD's "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC".

STAGE 2B:
AFTER PLACEMENT OF CURB AND HMA PAVEMENT TYPE E-3 ADJACENT TO CURB, PLACE TRAFFIC CONTROL DRUMS BEHIND CURB TO ALLOW FOR 12' TRAVEL LANES. PLACE TRAFFIC CONTROL DRUMS BEHIND CURB AT 50' SPACING.



PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET 24	E



N
END ROAD WORK
G20-2A
48" X 24"
440' TAPER
100'
BP: 124+00.00
45 M.P.H.
W01-4L
W013-1
24" X 24"
TEMPORARY PAVEMENT MARKING 4-INCH WHITE EDGE LINE
TEMPORARY PAVEMENT MARKING 4-INCH DOUBLE YELLOW CENTER LINE
126
128
130
132
134
136
138
1
8
STA: 129+40 TEMPORARY CRASH CUSHION
TRAFFIC CONTROL DRUMS @ 50' SPACING
TEMPORARY PRECAST CONCRETE BARRIER
TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS TYPE "C" @ 25' SPACING ON TAPER
ROAD WORK AHEAD
W20-1
45 M.P.H.
W013-1
24" X 24"
ATHLETIC FIELD
BLEACHERS

USE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR LAYOUT OF TRAFFIC CONTROL SIGNS OUTSIDE PROJECT LIMITS. USE 45 M.P.H. ADVISORY SPEED.

PROJECT NO:5310-01-73	HWY:USH 14	COUNTY:DANE	TRAFFIC CONTROL - STAGE 2	SHEET 25	E

2

USE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR LAYOUT OF TRAFFIC CONTROL SIGNS OUTSIDE PROJECT LIMITS. USE 45 M.P.H. ADVISORY SPEED.

N

ROAD WORK AHEAD
W20-1
45 M.P.H.
W013-1
24" X 24"

W01-4R
45 M.P.H.
W013-1
24" X 24"

PT: 154+57.40

STA: 154+40
END TAPER

TRAFFIC CONTROL DRUMS WITH WARNING LIGHTS TYPE "C" @ 25' SPACING ON TAPER

STA: 151+00
BEGIN TAPER

PC: 142+48.02

TEMPORARY PAVEMENT MARKING 4-INCH WHITE EDGE LINE

TEMPORARY PAVEMENT MARKING 4-INCH DOUBLE YELLOW CENTER LINE

140 142 144 146 148 150 152 154

END ROAD WORK
G20-2A
48" X 24"

W01-4R
45 M.P.H.
W013-1
24" X 24"

TRAFFIC CONTROL DRUMS @ 50' SPACING

MAINTAIN ACCESS TO OLSON ROAD

TEMPORARY SCHOOL ENTRANCE/EXIT @ OLSON ROAD

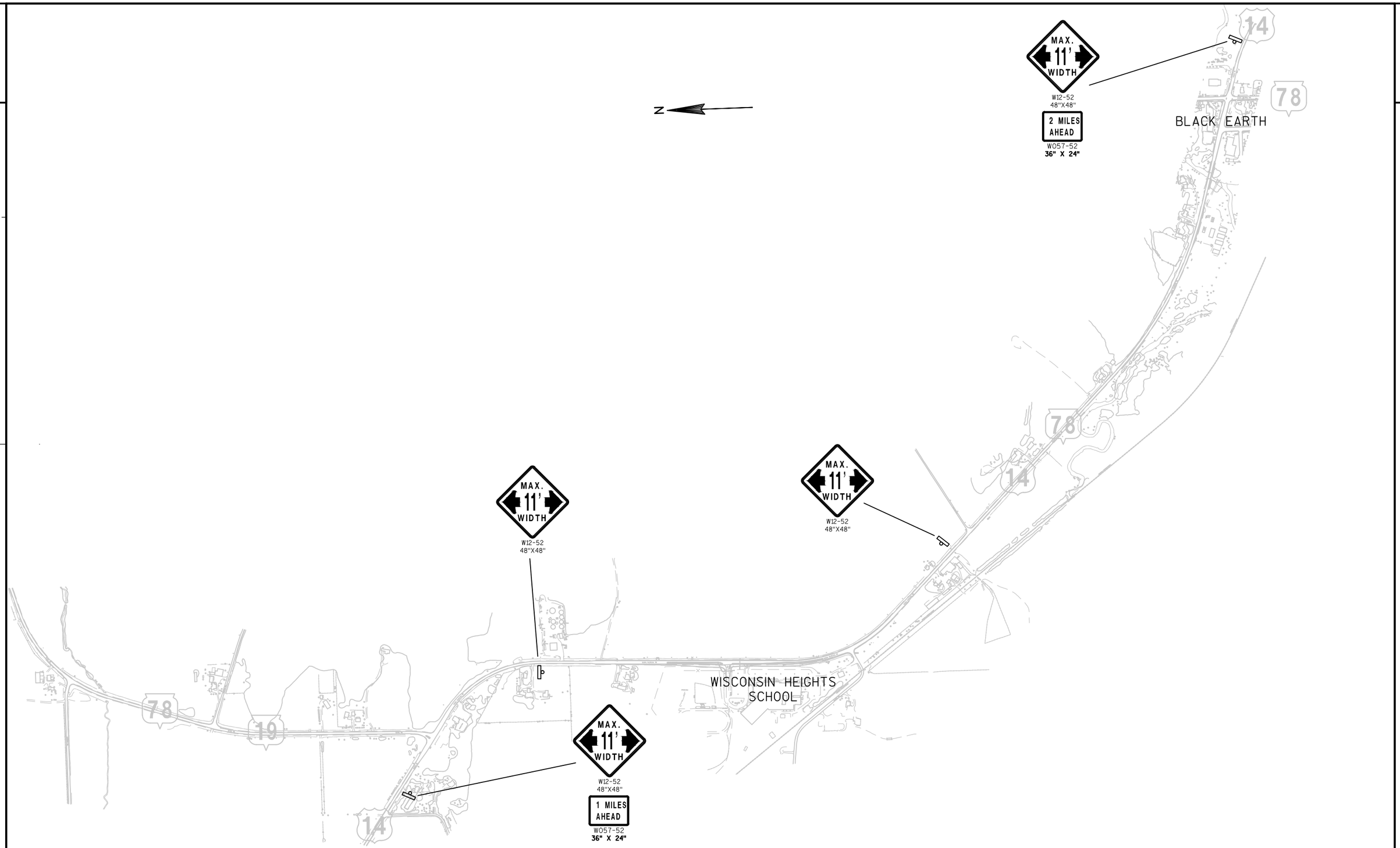
SIGN

WISCONSIN & SOUTHERN RAILROAD

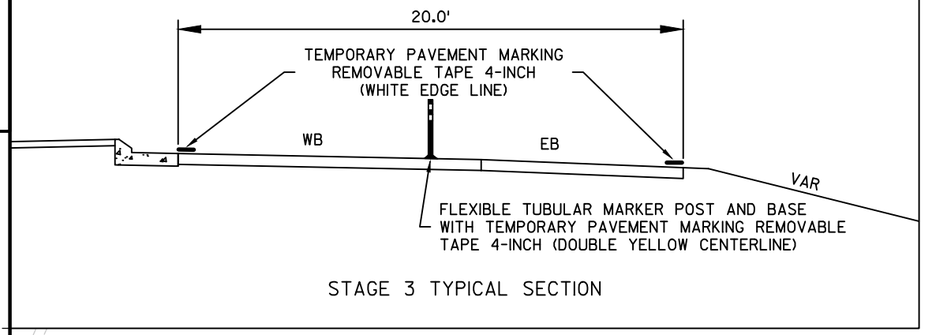
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSOTHER\025003_TC.DWG PLOT DATE : 1/28/2014 12:24 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:100_XREF

2



PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET 27	E

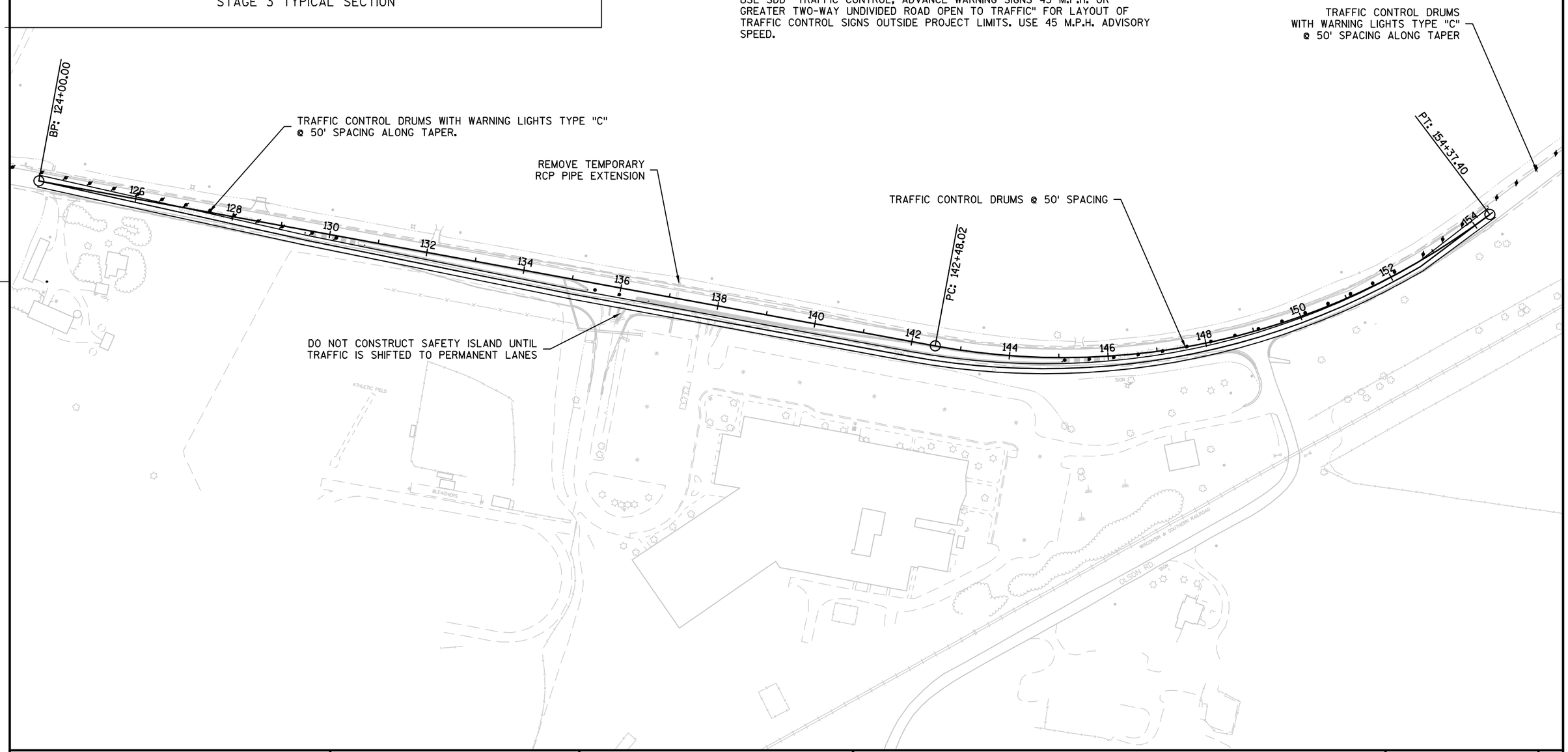


STAGE 3 TYPICAL SECTION

STAGE 3:
ROUTE TWO-WAY TRAFFIC ONTO NEW EB LANE AND 8' PAVED SHOULDER. INSTALL PERMANENT PAVEMENT MARKING IN THE COMPLETED WEST BOUND LANE DURING STAGE 3. INSTALL PERMANENT PAVEMENT MARKING IN THE COMPLETED EAST BOUND LANE UNDER TRAFFIC AFTER WEST BOUND TRAFFIC HAS BEEN SHIFTED TO ITS FINAL PROPOSED LANE.

SAFETY ISLAND WITHIN THE SCHOOL ENTRANCE MAY NOT BE CONSTRUCTED UNTIL TRAFFIC IS SHIFTED TO PERMANENT LANES.

USE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR LAYOUT OF TRAFFIC CONTROL SIGNS OUTSIDE PROJECT LIMITS. USE 45 M.P.H. ADVISORY SPEED.



PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSOTHER\025009_TC.DWG PLOT DATE : 1/28/2014 12:25 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

N

END ROAD WORK
G20-2A
48" X 24"

BP: 124+00.00

TYPE III BARRICADE

FLEXIBLE TUBULAR MARKER POST AND BASE
WITH TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE 4-INCH (DOUBLE YELLOW CENTERLINE)

W01-7
48" X 24"

TYPE III BARRICADE

126 128 130 132 134 136 138

20.0'

TEMPORARY PAVEMENT MARKING REMOVABLE
TAPE 4-INCH (WHITE EDGE LINE)

ROAD WORK AHEAD
W20-1

45
M.P.H.
W013-1
24" X 24"

U.S.H. 14/STH 69

ATHLETIC FIELD

BLEACHERS

USE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR LAYOUT OF TRAFFIC CONTROL SIGNS OUTSIDE PROJECT LIMITS. USE 45 M.P.H. ADVISORY SPEED.

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	TRAFFIC CONTROL STAGE 3	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSOTHER\025009_TC.DWG PLOT DATE : 1/28/2014 12:25 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:100_XREF

USE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR LAYOUT OF TRAFFIC CONTROL SIGNS OUTSIDE PROJECT LIMITS. USE 45 M.P.H. ADVISORY SPEED.

N

ROAD WORK AHEAD
W20-1

45 M.P.H.
W013-1
24" X 24"

W01-4L

45 M.P.H.
W013-1
24" X 24"

PT: 154+37.40

R11-2
48" X 30"
LANE CLOSED

TYPE III BARRICADE

W01-7
48" X 24"

TYPE III BARRICADE

TYPE III BARRICADE

FLEXIBLE TUBULAR MARKER POST AND BASE
WITH TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE 4-INCH (DOUBLE YELLOW CENTER LINE)

PC: 142+48.02

140 142 144 146 148 150 152 154

END ROAD WORK
G20-2A
48" X 24"

W01-4L

45 M.P.H.
W013-1
24" X 24"

20.0'

TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE 4-INCH
(WHITE EDGE LINE)

SIGN

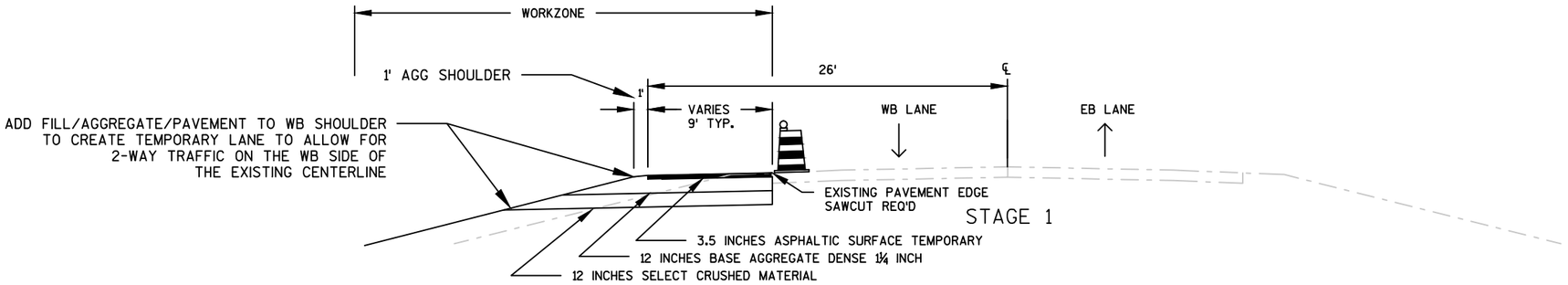
WISCONSIN & SOUTHERN RAILROAD

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	TRAFFIC CONTROL STAGE 3	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSOTHER\025009_TC.DWG PLOT DATE : 1/28/2014 12:25 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:100_XREF

WISDOT/CADDS SHEET 42

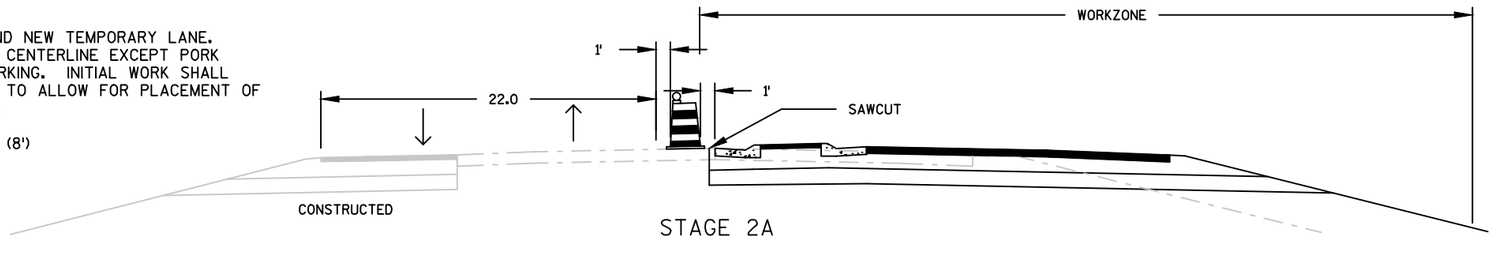
CONSTRUCTION STAGING



STAGE 1

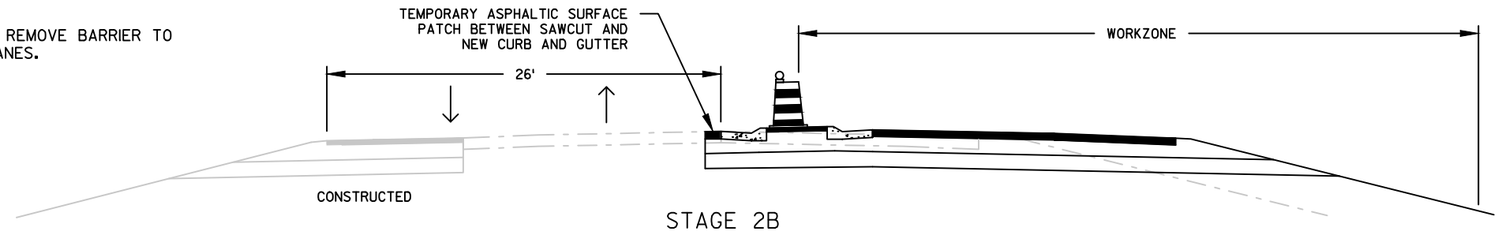
MOVE ALL TRAFFIC TO EXISTING WB LANE AND NEW TEMPORARY LANE. CONSTRUCT EVERYTHING ON THE EB SIDE OF CENTERLINE EXCEPT PORK CHOP ISLAND AND PERMANANT PAVEMENT MARKING. INITIAL WORK SHALL INCLUDE THE EASTERN CURB OF THE MEDIAN TO ALLOW FOR PLACEMENT OF BARRELS BEHIND CURB AND BEGIN STAGE 2B.

PAVE EB LANE WITH FULL WIDTH SHOULDERS (8')



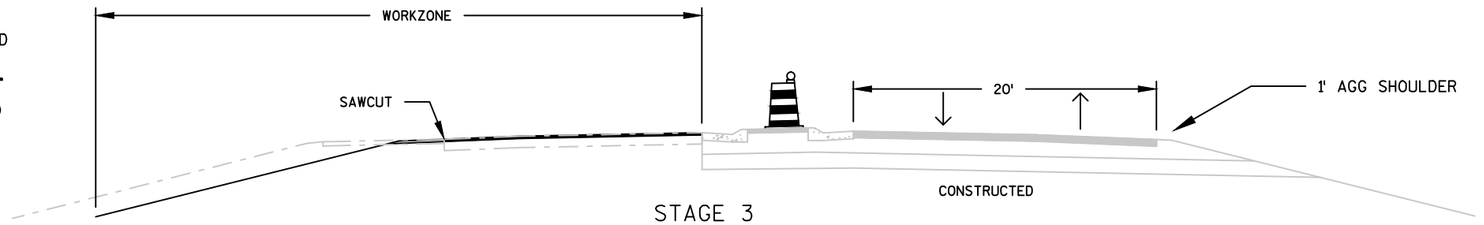
STAGE 2A

PATCH PAVEMENT NEXT TO NEW CURB AND REMOVE BARRIER TO INCREASE WIDTH OF TEMPORARY TRAFFIC LANES.



STAGE 2B

SWITCH ALL TRAFFIC TO NEWLY CONSTRUCTED EB LANE AND SHOULDER. CONSTRUCT EVERYTHING ON THE WB SIDE OF CENTERLINE. REMOVE TEMPORARY LANE AND MILL/REMOVE/REPAVE EXISTING WB LANE AND CONSTRUCT LEFT TURN LANE.



STAGE 3

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CONSTRUCTION STAGES	SHEET 31	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSOTHER\020301_TS.DWG PLOT DATE : 1/28/2014 11:44 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : NO SCALE
WISDOT/CADDS SHEET 42

2

2

139+25.00

N

BP: 124+00.00"EB"

BP: 124+00.00

125

125"EB"

130

130"EB"

S02°08'22"W 1848.02'

S03°10'48"W 1100.00'

PI: 135+00.00"EB"

135

135"EB"

S02°08'29"W 702.72'

BM 301

CP 900

EP: 135+88.00"S"

135"S"

BP: 132+70.65"S"

ATHLETIC FIELD

BLEACHERS

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	ALIGNMENT DIAGRAM	SHEET 32	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\027201_AD.DWG PLOT DATE : 1/23/2014 1:55 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:100_XREF

WISDOT/CADDS SHEET 42

2

N

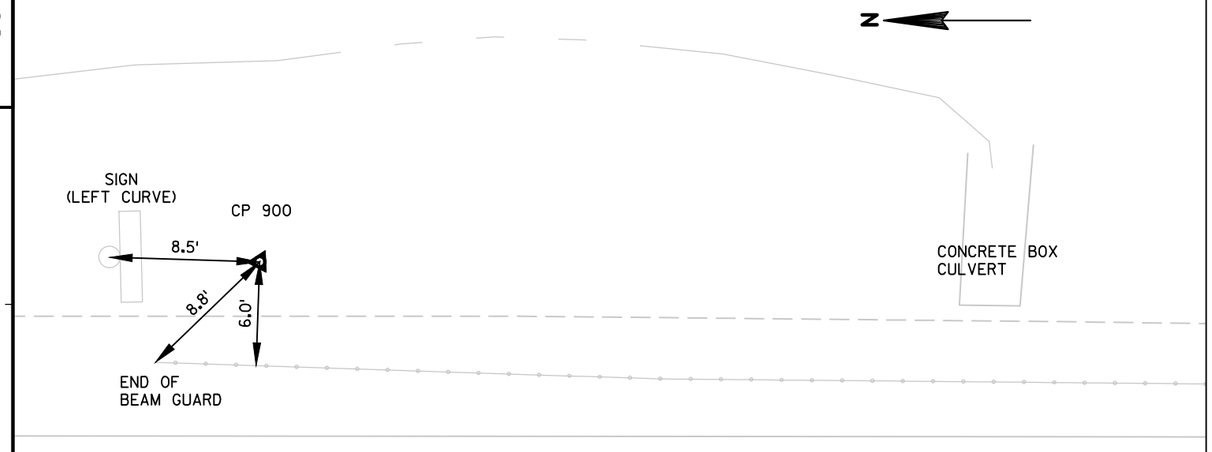
PI STA = 148+79.32
Y = 511980.892
X = 718606.352
DELTA = 47°31'13"
D = 3°59'43"
T = 631.30'
L = 1189.38'
R = 1434.06'
PC STA = 142+48.02
PT STA = 154+37.40

PI STA = 148+61.17"EB"
Y = 511999.960
X = 718587.029
DELTA = 47°31'19"
D = 3°49'51"
T = 658.45'
L = 1240.52'
R = 1495.66'
PC STA = 142+02.72"EB"
PT STA = 154+43.24"EB"

702.72'
140
140"EB"
PC: 142+02.72"EB"
PC: 142+48.02
145
145"EB"
PT: 154+37.40
PT: 154+43.24"EB"
150
150"EB"
EP: 149+01.00"0"
BP: 147+95.59"0"
CP 901
BM 300
CP 902
S45°22
USH 14/STH 78
SIGN
W
RAILROAD

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	ALIGNMENT DIAGRAM	SHEET	E

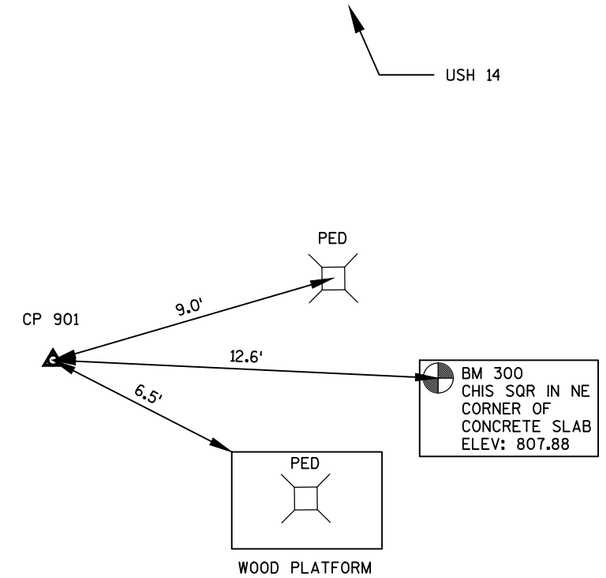
FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\027201_AD.DWG PLOT DATE : 1/23/2014 1:55 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:100_XREF



CONTROL POINT 900
X:718728.19 Y:514480.87 Z:812.85
REBAR WITH CAP LOCATED EAST OF MAZOMANIE

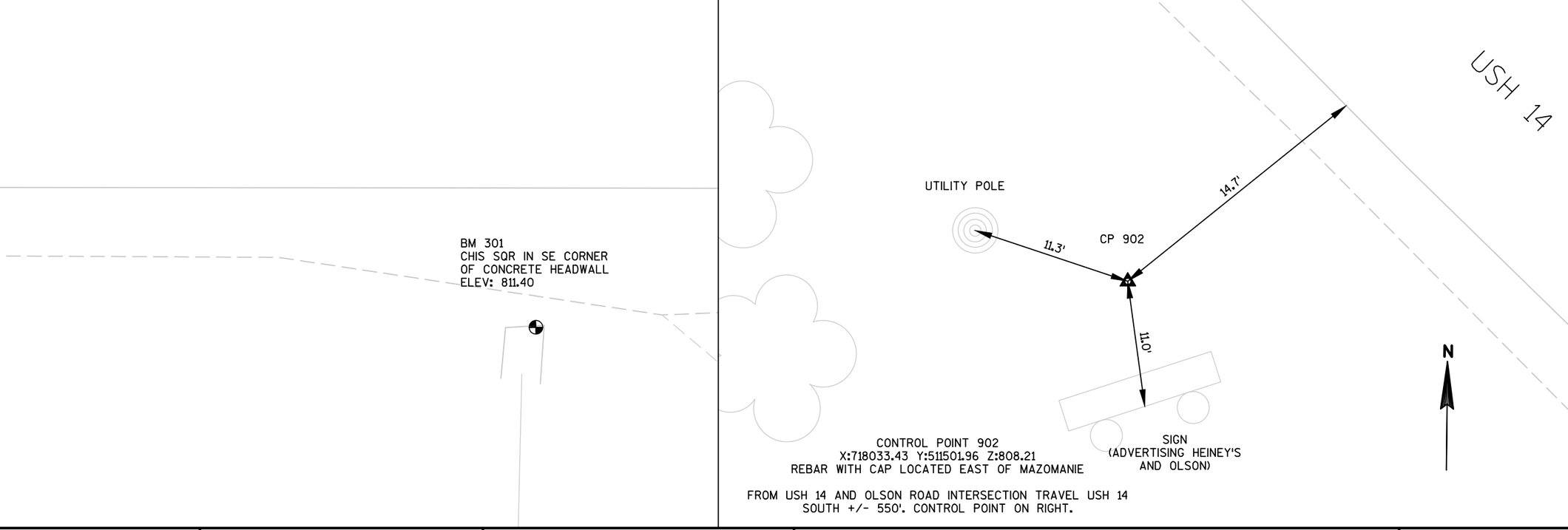
FROM USH 14 AND SCHOOL ENTRANCE INTERSECTION TRAVEL USH 14 NORTH +/- 1200'. CONTROL POINT ON RIGHT.

USH 14



CONTROL POINT 901
X:718608.86 Y:512230.41 Z:806.93
REBAR WITH CAP LOCATED EAST OF MAZOMANIE

FROM USH 14 AND OLSON ROAD INTERSECTION TRAVEL USH 14 NORTH +/- 270'. CONTROL POINT ON LEFT.



CONTROL POINT 902
X:718033.43 Y:511501.96 Z:808.21
REBAR WITH CAP LOCATED EAST OF MAZOMANIE

FROM USH 14 AND OLSON ROAD INTERSECTION TRAVEL USH 14 SOUTH +/- 550'. CONTROL POINT ON RIGHT.

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	ALIGNMENT TIES	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\027205_AT.DWG PLOT DATE : 1/23/2014 1:57 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 42

DATE 03MAR14 — E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	5310-01-73 QUANTITY
0010	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	3.000	3.000
0020	204.0110	REMOVING ASPHALTIC SURFACE	SY	5,975.000	5,975.000
0030	204.0120	REMOVING ASPHALTIC SURFACE MILLING	SY	10,300.000	10,300.000
0040	204.0150	REMOVING CURB & GUTTER	LF	399.000	399.000
0050	205.0100	EXCAVATION COMMON	CY	8,896.000	8,896.000
0060	208.0100	BORROW	CY	1,740.000	1,740.000
0070	213.0100	FINISHING ROADWAY (PROJECT) 01. 5310-01-73	EACH	1.000	1.000
0080	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	600.000	600.000
0090	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	8,090.000	8,090.000
0100	312.0110	SELECT CRUSHED MATERIAL	TON	8,420.000	8,420.000
0110	415.6000.S	ROUT AND SEAL	LF	3,230.000	3,230.000
0120	455.0105	ASPHALTIC MATERIAL PG58-28	TON	183.000	183.000
0130	455.0605	TACK COAT	GAL	540.000	540.000
0140	460.1103	HMA PAVEMENT TYPE E-3	TON	3,540.000	3,540.000
0150	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	1,990.000	1,990.000
0160	465.0125	ASPHALTIC SURFACE TEMPORARY	TON	410.000	410.000
0170	465.0305	ASPHALTIC SURFACE SAFETY ISLANDS	TON	175.000	175.000
0180	465.0315	ASPHALTIC FLUMES	SY	20.000	20.000
0190	520.8000	CONCRETE COLLARS FOR PIPE	EACH	2.000	2.000
0200	521.0118	CULVERT PIPE CORRUGATED STEEL 18-INCH	LF	32.000	32.000
0210	521.0142	CULVERT PIPE CORRUGATED STEEL 42-INCH	LF	120.000	120.000
0220	521.0342	APRON ENDWALLS FOR CULVERT PIPE SLOPED CROSS DRAINS STEEL 42-INCH 4 TO 1	EACH	2.000	2.000
0230	521.1518	APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 18-INCH 6 TO 1	EACH	2.000	2.000
0240	522.0136	CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH	LF	42.000	42.000
0250	522.1024	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	EACH	1.000	1.000
0260	522.1036	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH	EACH	2.000	2.000
0270	601.0553	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D	LF	2,700.000	2,700.000
0280	601.0557	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D	LF	285.000	285.000
0290	601.0576	CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE J	LF	65.000	65.000
0300	603.8000	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED	LF	128.000	128.000
0310	603.8125	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	LF	128.000	128.000
0320	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	97.000	97.000
0330	608.0324	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	100.000	100.000
0340	608.0336	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH	LF	740.000	740.000
0350	611.0530	MANHOLE COVERS TYPE J	EACH	3.000	3.000
0360	611.0627	INLET COVERS TYPE HM	EACH	6.000	6.000
0370	611.2005	MANHOLES 5-FT DIAMETER	EACH	3.000	3.000
0380	611.3230	INLETS 2X3-FT	EACH	6.000	6.000
0390	611.8120.S	COVER PLATES TEMPORARY	EACH	3.000	3.000
0400	614.0905	CRASH CUSHIONS TEMPORARY	EACH	1.000	1.000
0410	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 5310-01-73	EACH	1.000	1.000

3

DATE 03MAR14 E S T I M A T E O F Q U A N T I T I E S

LINE 5310-01-73

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0420	619.1000	MOBILIZATION	EACH	1.000	1.000
0430	620.0100	CONCRETE CORRUGATED MEDIAN	SF	2,161.000	2,161.000
0440	624.0100	WATER	MGAL	175.000	175.000
0450	625.0500	SALVAGED TOPSOIL	SY	17,804.000	17,804.000
0460	627.0200	MULCHING	SY	17,804.000	17,804.000
0470	628.1504	SILT FENCE	LF	2,800.000	2,800.000
0480	628.1520	SILT FENCE MAINTENANCE	LF	2,800.000	2,800.000
0490	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	9.000	9.000
0500	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	3.000	3.000
0510	628.2004	EROSION MAT CLASS I TYPE B	SY	2,000.000	2,000.000
0520	628.7015	INLET PROTECTION TYPE C	EACH	7.000	7.000
0530	628.7504	TEMPORARY DITCH CHECKS	LF	150.000	150.000
0540	628.7555	CULVERT PIPE CHECKS	EACH	12.000	12.000
0550	628.7560	TRACKING PADS	EACH	4.000	4.000
0560	629.0210	FERTILIZER TYPE B	CWT	11.000	11.000
0570	630.0120	SEEDING MIXTURE NO. 20	LB	299.000	299.000
0580	630.0140	SEEDING MIXTURE NO. 40	LB	103.000	103.000
0590	630.0200	SEEDING TEMPORARY	LB	454.000	454.000
0600	630.0300	SEEDING BORROW PIT	LB	60.000	60.000
0610	633.5100	MARKERS ROW	EACH	10.000	10.000
0620	633.5200	MARKERS CULVERT END	EACH	2.000	2.000
0630	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	9.000	9.000
0640	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	13.000	13.000
0650	637.2210	SIGNS TYPE II REFLECTIVE H	SF	128.000	128.000
0660	637.2230	SIGNS TYPE II REFLECTIVE F	SF	59.000	59.000
0670	638.2102	MOVING SIGNS TYPE II	EACH	10.000	10.000
0680	638.2602	REMOVING SIGNS TYPE II	EACH	17.000	17.000
0690	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	13.000	13.000
0700	642.5201	FIELD OFFICE TYPE C	EACH	1.000	1.000
0710	643.0100	TRAFFIC CONTROL (PROJECT) 01. 5310-01-73	EACH	1.000	1.000
0720	643.0300	TRAFFIC CONTROL DRUMS	DAY	5,900.000	5,900.000
0730	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	35.000	35.000
0740	643.0500	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS	EACH	60.000	60.000
0750	643.0600	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES	EACH	60.000	60.000
0760	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	1,920.000	1,920.000
0770	643.0900	TRAFFIC CONTROL SIGNS	DAY	1,634.000	1,634.000
0780	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	15,040.000	15,040.000
0790	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	1,070.000	1,070.000
0800	647.0456	PAVEMENT MARKING CURB EPOXY	LF	90.000	90.000
0810	647.0726	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	LF	110.000	110.000
0820	647.0856	PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY	SF	1,280.000	1,280.000
0830	649.0100	TEMPORARY PAVEMENT MARKING 4-INCH	LF	12,800.000	12,800.000
0840	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	12,800.000	12,800.000
0850	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	12.000	12.000
0860	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	6,000.000	6,000.000
0870	650.5000	CONSTRUCTION STAKING BASE	LF	6,250.000	6,250.000
0880	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	3,060.000	3,060.000
0890	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	3.000	3.000
0900	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	3,100.000	3,100.000

3

DATE 03MAR14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	5310-01-73 QUANTITY
0910	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 5310-01-73	LS	1.000	1.000
0920	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	6,000.000	6,000.000
0930	690.0150	SAWING ASPHALT	LF	4,755.000	4,755.000
0940	690.0250	SAWING CONCRETE	LF	6.000	6.000

3

3

REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	TO	STATION	LOCATION	203.0100 EACH	REMARKS
0010	132+00			LT	1	FIELD ENTRANCE 18" CMCP
0010	136+00			RT	1	EXISTING SCHOOL ENTRANCE 42" CMCP
0010	138+00			RT	1	EXISTING SCHOOL EXIT 24" RCCP
				TOTAL 0010	3	

REMOVING CURB & GUTTER

CATEGORY	STATION	TO	STATION	LOCATION	204.0150 LF	REMARKS
0010	135+41 EB	-	135+75 EB	RT	52	SCHOOL ENTRANCE
0010	136+01 EB	-	136+31 EB	RT	45	SCHOOL ENTRANCE
0010	137+51 EB	-	137+74 EB	RT	36	SCHOOL EXIT
0010	137+83 EB	-	138+01 EB	RT	84	SCHOOL EXIT ISLAND
0010	138+08 EB	-	138+43 EB	RT	50	SCHOOL EXIT
0010	148+42 EB	-	148+90 EB	RT	82	OLSON ROAD
0010	149+19 EB	-	149+50 EB	RT	50	OLSON ROAD
				TOTAL 0010	399	

ASPHALT REMOVALS

CATEGORY	STATION	TO	STATION	LOCATION	REMOVING ASPHALTIC SURFACE 204.0110 SY	REMOVING ASPHALTIC SURFACE MILLING 204.0120 SY	REMARKS
0010	129+00	-	149+50	RT	5,000	-	STAGE 2 - MAINLINE
0010	124+00	-	154+37	MAINLINE	-	10,100	STAGES 2 & 3 - MAINLINE
0010	134+00 "S"	-	135+80 "S"	SIDE ROAD	600	-	SCHOOL ENTRANCE
0010	138+00			RT	375	-	SCHOOL EXIT
0010	148+32.5 "O"	-	148+75 "O"	SIDE ROAD	-	200	OLSON ROAD
				TOTAL 0010	5,975	10,300	

EXCAVATION COMMON

CATEGORY	STATION	TO	STATION	LOCATION	205.0100 CY	REMARKS
0010	125+91	-	154+03	LT	1,466	STAGE 1 - TEMPORARY LANE
0010	124+00	-	154+37.40	RT	5,328	STAGE 2 - MAINLINE
0010	134+00"S"	-	135+80"S"	SIDE ROAD	201	SCHOOL ENTRANCE
0010	125+91	-	154+03	LT	1,901	STAGE 3 - TEMPORARY LANE REMOVAL
				TOTAL 0010	8,896	

3

BORROW

CATEGORY	STATION	TO	STATION	LOCATION	208.0100 CY	REMARKS
0010	127+00	-	154+38	RT	1,212	STAGE 2 - MAINLINE
0010	134+00 "S"	-	135+80 "S"	SIDE ROAD	528	SCHOOL ENTRANCE
				TOTAL 0010	1,740	

BASE AGGREGATE

CATEGORY	STATION	TO	STATION	LOCATION	BASE AGGREGATE DENSE 3/4 INCH 305.0110 TON	BASE AGGREGATE DENSE 1-1/4 INCH 305.0120 TON	SELECT CRUSHED MATERIAL 312.0110 TON	MAINTENANCE AND REPAIR OF HAUL ROADS 618.0100 EACH	WATER 624.0100 MGAL	REMARKS
0010	124+00	-	154+37	RT	220	6,300	6,200	-	100	STAGE 2 - MAINLINE
0010	125+91	-	154+03	LT	120	1,650	2,220	-	65	STAGE 1 - TEMPORARY LANE
0010	134+00 "S"	-	135+80 "S"	SIDE ROAD	40	140	-	-	10	SCHOOL ENTRANCE
0010	124+00	-	154+37	LT	220	-	-	-	-	STAGE 3
0010				PROJECT	-	-	-	1	-	
				TOTAL 0010	600	8,090	8,420	1	175	

ASPHALT PAVING

CATEGORY	STATION	TO	STATION	LOCATION	ASPHALTIC MATERIAL PG58-28 455.0105 TON	TACK COAT 455.0605 GAL	HMA PAVEMENT TYPE E-3 460.1103 TON	ASPHALTIC SURFACE TEMPORARY 465.0125 TON	ASPHALTIC SURFACE SAFETY ISLANDS 465.0305 TON	REMARKS
0010	124+00	-	154+37	RT	120	510	2,300	-	-	STAGE 2 - MAINLINE OVER NEW BAS
0010	124+00	-	154+37	MAINLINE	50	-	1,000	-	-	MAINLINE OVER MILLED
0010	134+00 "S"	-	135+80 "S"	SIDE ROAD	10	30	180	-	-	SCHOOL ENTRANCE
0010	148+32.5 "O	-	148+75 "O"	SIDE ROAD	3	-	60	-	-	OLSON ROAD
0010	125+91	-	154+03	LT	-	-	-	380	-	STAGE 1 - WB TEMPORARY LANE
0010	129+50	-	145+92	LT	-	-	-	30	-	STAGE 2 PATCHING
0010	130+60	-	135+30	RT	-	-	-	-	75	NORTH MEDIAN
0010	136+38	-	145+09	RT	-	-	-	-	100	SOUTH MEDIAN
				TOTAL 0010	183	540	3,540	410	175	

DRAINAGE

CATEGORY	STATION	LOCATION	CONCRETE COLLARS FOR PIPE 520.8000 EACH	CULVERT PIPE CORRUGATED STEEL 18-INCH 521.0118 LF	CULVERT PIPE CORRUGATED STEEL 42-INCH 521.0142 LF	APRON ENDWALLS FOR CULVERT PIPE SLOPED CROSS DRAINS STEEL 42-INCH 4 TO 1 521.0342 EACH	APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 18-INCH 6 TO 1 521.1518 EACH	CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH 522.0136 LF	MARKERS CULVERT END 633.5200 EACH	REMARKS
0010	137+14	RT	1	-	-	-	-	36	1	36" RCCP EXTENSION
0010	137+14	LT	1	-	-	-	-	6	1	36" TEMP EXTENSION
0010	128+50	LT	-	32	-	-	2	-	-	FIELD ENTRANCE
0010	135+15"S"	SIDE ROAD	-	-	120	2	-	-	-	SCHOOL ENTRANCE
		TOTAL 0010	2	32	120	2	2	42	2	

MINIMUM THICKNESS OF CORRUGATED STEEL CULVERT PIPES		
DIA (IN)	18	42
THICKNESS (IN)	0.064	0.109

ASPHALTIC FLUMES

CATEGORY	STATION	TO	STATION	LOCATION	465.0315 SY	REMARKS
0010	133+90 "S"			LT	10	
0010	134+20 "S"			RT	10	
				TOTAL 0010	20	

CURB AND GUTTER

CATEGORY	STATION	TO	STATION	LOCATION	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D 601.0553 LF	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D 601.0557 LF	CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE J 601.0576 LF	REMARKS
0010	130+60	-	135+35	RT	950	-	-	MEDIAN
0010	135+10	-	135+69	RT	-	90	-	SCHOOL ENTRANCE
0010	136+02	-	136+17	RT	-	-	65	SCHOOL ENTRANCE ISLAND
0010	136+17	-	136+51	RT	-	62	-	SCHOOL ENTRANCE
0010	136+34	-	145+09	RT	1,750	-	-	MEDIAN
0010	148+30	-	148+86	RT	-	79	-	OLSON ROAD
0010	149+14	-	149+52	RT	-	54	-	OLSON ROAD
				TOTAL 0010	2,700	285	65	

STORM SEWER

CATEGORY	STATION	TO	STATION	LOCATION	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH 522.1024 EACH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH 522.1036 EACH	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH 608.0312 LF	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH 608.0324 LF	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH 608.0336 LF	MANHOLE COVERS TYPE J 611.0530 EACH	INLET COVERS TYPE HM 611.0627 EACH	MANHOLES 5-FT DIAMETER 611.2005 EACH	INLETS 2X3 FT 611.3230 EACH	COVER PLATES TEMPORARY 611.8120.S EACH	REMARKS
0010	134+82			RT	1	-	-	100	-	-	1	-	1	-	
0010	137+25EB			RT	-	1	-	-	-	-	-	-	-	-	
0010	138+33EB			LT	-	-	23	-	-	-	1	-	1	-	
0010	138+35EB			RT	-	-	-	-	-	1	-	1	-	1	
0010	141+72EB			LT	-	-	18	-	-	-	1	-	1	-	
0010	141+73EB			RT	-	-	-	-	-	1	-	1	-	1	
0010	141+87EB			LT	-	-	24	-	-	-	1	-	1	-	
0010	143+72EB			LT	-	-	32	-	-	-	2	-	2	-	
0010	143+73EB			RT	-	-	-	-	-	1	-	1	-	1	
0010	137+25EB	-	144+46EB	RT	-	-	-	-	740	-	-	-	-	-	
0010	144+46EB			RT	-	1	-	-	-	-	-	-	-	-	
				TOTAL 0010	1	2	97	100	740	3	6	3	6	3	

SALVAGED TOPSOIL

CATEGORY	STATION	TO	STATION	LOCATION	625.0500 SY	REMARKS
0010	124+00	-	154+37	LT	7,578	
0010	124+00	-	129+26	RT	603	
0010	129+26	-	135+70	RT	1,845	
0010	136+00	-	148+80	RT	4,900	
0010	149+20	-	154+45	RT	2,878	
				TOTAL 0010	17,804	

EROSION CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	SILT FENCE 628.1504 LF	SILT FENCE MAINTENANCE 628.1520 LF	MOBILIZATIONS EROSION CONTROL 628.1905 EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL 628.1910 EACH	EROSION MAT CLASS I TYPE B 628.2004 SY	INLET PROTECTION TYPE C 628.7015 EACH	TEMPORARY DITCH CHECKS 628.7504 LF	CULVERT PIPE CHECKS 628.7555 EACH	REMARKS
0010	151+50	-	154+50	RT	300	300	-	-	-	-	-	-	
0010	124+50	-	135+00	LT	1,100	1,100	-	-	-	-	-	-	
0010				BORROW PIT	1,000	1,000	-	-	-	-	-	-	
0010	UNDISTRIBUTED			PROJECT	400	400	9	3	2,000	7	150	12	
				TOTAL 0010	2,800	2,800	9	3	2,000	7	150	12	

SIGNING

CATEGORY	NO.	STATION	DIR	LOCATION	SIGN CODE	SIZE	DESCRIPTION	POSTS WOOD 4X6-INCH X 14-FT 634.0614 EACH	POSTS WOOD 4X6-INCH X 16-FT 634.0616 EACH	SIGNS TYPE II REFLECTIVE H 637.2210 SF	SIGNS TYPE II REFLECTIVE F 637.2230 SF	MOVING SIGNS TYPE II 638.2102 EACH	REMOVING SIGNS TYPE II 638.2602 EACH	REMOVING SMALL SIGN SUPPORTS 638.3000 EACH	REMARKS
0010	100	119+00	EB	RT	W6-1	36" X 36"	DIVIDED HIGHWAY AHEAD SYMBOL	-	1	-	9.00	-	-	-	
0010	101	119+00	WB	LT	W6-3	36" X 36"	TWO-WAY TRAFFIC SYMBOL	-	1	-	9.00	-	-	-	
0010	102	124+00	WB	LT	W1-2-L	30" X 30"	LEFT CURVE	-	-	-	-	1	-	-	MOVE SIGN AND POSTS
0010	103	128+00	EB	RT	S54-61	36" X 36"	SCHOOL ENTRANCE	-	-	-	-	1	-	-	MOVE SIGN AND POSTS
0010	104	128+00	EB	RT	S13-1	24" X 24"	ADVISORY SPEED PLATE	-	-	-	-	1	-	-	MOUNTED WITH SIGN 103
0010	105	129+25	WB	LT	S5-2	24" X 30"	END SCHOOL ZONE	-	-	-	-	1	-	-	MOVE SIGN AND POSTS
0010	200	130+64	EB	RT	R4-7	36" X 48"	KEEP RIGHT	-	1	12.00	-	-	-	-	
0010	201	130+64	EB	RT	W5-54D	18" X 18"	CLEARANCE MARKER WITH YELLOW TYPE F SHEETING	-	-	-	2.25	-	-	-	MOUNTED WITH SIGN 200 (4' MOUNTING HEIGHT)
0010	202	130+64	EB	LT	R5-1	36" X 36"	DO NOT ENTER	-	1	9.00	-	-	-	-	
0010	203	131+06	EB	RT	R3-20R	24" X 36"	BEGIN RIGHT TURN LANE WITH DOWN LEFT ARROW	-	1	6.00	-	-	-	-	
0010	204	131+06	EB	RT	R5-1A	36' X 24"	WRONG WAY	-	-	6.00	-	-	-	-	MOUNT ON BACK OF SIGN 203
0010	205R	132+00	EB	LT	W14-3	48" X 36"	NO PASSING ZONE	-	-	-	-	-	1	1	REMOVE ONLY
0010	206	132+58	EB	LT	R5-1A	42" X 30"	WRONG WAY	-	-	8.75	-	-	-	-	MOUNT ON BACK OF SIGN 207
0010	207	132+58	WB	LT	W6-2	36" X 36"	DIVIDED HIGHWAY ENDS SYMBOL	-	1	-	9.00	-	-	-	
0010	208	134+60	EB	RT	R5-1A	30" X 30"	DO NOT ENTER	-	1	6.25	-	-	-	-	
0010	300	135+15	EB	RT	R4-7	24" X 30"	KEEP RIGHT	1	-	5.00	-	-	-	-	
0010	301R	135+43	EB	RT	-	-	ENTRANCE SIGN	-	-	-	-	-	1	1	REMOVE ONLY
0010	302R	135+55	EB	RT	R6-2-R	24" X 30"	ONE WAY RIGHT ARROW	-	-	-	-	-	1	1	REMOVE ONLY, TWO SIGNS MOUNTED ON ONE POST
0010	303R	135+55	WB	RT	R6-2-L	24" X 30"	ONE WAY LEFT ARROW	-	-	-	-	-	1	-	REMOVE ONLY, TWO SIGNS MOUNTED ON ONE POST
0010	304	135+90	WB	LT	R6-2-L	24" X 30"	ONE WAY LEFT ARROW	1	-	5.00	-	-	-	-	
0010	305	136+07	EB	RT	R1-1	30" X 30"	STOP	-	1	5.18	-	-	-	-	
0010	306	136+07	EB	RT	R6-3A	30" X 24"	DIVIDED HIGHWAY CROSSING T INTERSECTION	-	-	5.00	-	-	-	-	MOUNT BELOW SIGN 305
0010	307R	136+25	EB	RT	-	-	ENTRANCE SIGN	-	-	-	-	-	1	1	REMOVE ONLY
0010	308	136+39	EB	RT	R1-1	30" X 30"	STOP	1	-	5.18	-	-	-	-	
0010	309	136+40	EB	RT	R4-7	24" X 30"	KEEP RIGHT	1	-	5.00	-	-	-	-	
0010	310R	137+49	EB	RT	R6-2-R	24" X 30"	ONE WAY RIGHT ARROW	-	-	-	-	-	1	1	REMOVE ONLY
0010	311R	137+57	EB	RT	R5-1	30" X 30"	DO NOT ENTER	-	-	-	-	-	1	1	REMOVE ONLY, TWO SIGNS MOUNTED ON ONE POST
0010	312R	137+57	EB	RT	-	-	BUCKLE UP	-	-	-	-	-	1	-	REMOVE ONLY, TWO SIGNS MOUNTED ON ONE POST
0010	313R	137+62	EB	RT	R1-1	30" X 30"	STOP	-	-	-	-	-	1	1	REMOVE ONLY
0010	314R	137+95	EB	RT	R6-2-R	24" X 30"	ONE WAY RIGHT ARROW	-	-	-	-	-	1	1	REMOVE ONLY, TWO SIGNS MOUNTED ON ONE POST
0010	315R	137+95	WB	LT	R3-2	36" X 36"	NO LEFT TURN SYMBOL	-	-	-	-	-	1	1	REMOVE ONLY
0010	316R	137+95	EB	RT	R6-2-L	24" X 30"	ONE WAY LEFT ARROW	-	-	-	-	-	1	-	REMOVE ONLY, TWO SIGNS MOUNTED ON ONE POST
0010	317R	138+25	EB	RT	R1-1	30" X 30"	STOP	-	-	-	-	-	1	1	REMOVE ONLY
0010	318R	138+33	EB	RT	-	-	BUCKLE UP	-	-	-	-	-	1	-	REMOVE ONLY, TWO SIGNS MOUNTED ON ONE POST
0010	319R	138+33	EB	RT	R5-1	30" X 30"	DO NOT ENTER	-	-	-	-	-	1	1	REMOVE ONLY, TWO SIGNS MOUNTED ON ONE POST
0010	320	140+00	EB	RT	W1-2-L	30" X 30"	LEFT CURVE	-	-	-	-	1	-	-	MOVE SIGN AND POSTS
0010	400R	141+96	EB	RT	M1-94	54" X 15"	CROSSROAD NAME [OLSON ROAD]	-	-	-	-	-	1	1	REMOVE ONLY
0010	401	142+02	EB	RT	W6-2	36" X 36"	DIVIDED HIGHWAY ENDS SYMBOL	-	1	-	9.00	-	-	-	
0010	402	142+02	WB	RT	R5-1A	42" X 30"	WRONG WAY	-	-	8.75	-	-	-	-	MOUNT ON BACK OF SIGN 401
0010	403	142+06	WB	RT	R3-20L	24" X 36"	BEGIN LEFT TURN LANE WITH DOWN RIGHT ARROW	1	-	6.00	-	-	-	-	
0010	404	142+94	EB	RT	D1-1	66" X 15"	DESTINATION [OLSON ROAD] [RA]	2	-	6.88	-	-	-	-	
0010	405	144+35	EB	RT	-	-	MIDLAND UNITED METHODIST	-	-	-	-	1	-	-	MOVE SIGN AND POSTS
0010	406	145+05	WB	RT	R4-7	36" X 48"	KEEP RIGHT	-	1	12.00	-	-	-	-	
0010	407	145+05	WB	RT	W5-54D	18" X 18"	CLEARANCE MARKER WITH YELLOW TYPE F SHEETING	-	-	-	2.25	-	-	-	MOUNTED WITH SIGN 406 (4' MOUNTING HEIGHT)
0010	408	145+07	WB	RT	R5-1	36" X 36"	DO NOT ENTER	-	1	9.00	-	-	-	-	
0010	409	146+00	WB	RT	S5-2	24" X 30"	END SCHOOL ZONE	-	-	-	-	1	-	-	MOVE SIGN AND POSTS
0010	500	147+00	EB	LT	S54-61	36" X 36"	SCHOOL ENTRANCE	-	-	-	-	1	-	-	MOVE SIGN AND POSTS
0010	501	147+00	EB	LT	S13-1	24" X 24"	ADVISORY SPEED PLATE	-	-	-	-	1	-	-	MOUNTED WITH SIGN 500
0010	502	149+27	EB	RT	R1-1	-	STOP	-	-	-	-	1	-	-	MOVE SIGN AND POSTS
0010	600R	154+50	WB	LT	M1-94	54" X 15"	CROSSROAD NAME [OLSON ROAD]	-	-	-	-	-	1	1	
0010	601	154+65	WB	LT	D1-1	66" X 15"	DESTINATION [LA] [OLSON ROAD]	2	-	6.88	-	-	-	-	
0010	602	155+00	EB	RT	W6-3	36" X 36"	TWO-WAY TRAFFIC SYMBOL	-	1	-	9.00	-	-	-	
0010	603	157+00	WB	LT	W6-1	36" X 36"	DIVIDED HIGHWAY AHEAD SYMBOL	-	1	-	9.00	-	-	-	
TOTAL 0010								9	13	128	59	10	17	13	

TRACKING PADS

CATEGORY	STATION	TO	STATION	LOCATION	628.7560 EACH	REMARKS
0010	UNDISTRIBUTED			PROJECT	4	
				TOTAL 0010	4	

MARKERS ROW

CATEGORY	STATION	TO STATION	LOCATION	633.5100 EACH	REMARKS
0010	126+50		RT	1	PLAT PT NO. 114
0010	127+00		RT	1	PLAT PT NO. 113
0010	131+00		RT	1	PLAT PT NO. 112
0010	133+00		RT	1	PLAT PT NO. 111
0010	134+65		RT	1	PLAT PT NO. 110
0010	135+00		RT	1	PLAT PT NO. 109
0010	138+00		RT	1	PLAT PT NO. 108
0010	138+35		RT	1	PLAT PT NO. 107
0010	144+51.21		RT	1	PLAT PT NO. 105
0010	145+37.7		RT	1	PLAT PT NO. 103
			TOTAL 0010	10	

TRAFFIC CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	STAGE	TRAFFIC CONTROL DRUMS 643.0300 DAY	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 DAY	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS 643.0500 EACH	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES 643.0600 EACH	TRAFFIC CONTROL WARNING LIGHTS TYPE C 643.0715 DAY	TRAFFIC CONTROL SIGNS 643.0900 DAY	TEMPORARY PAVEMENT MARKING 4-INCH 649.0100 LF	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH 649.0400 LF	REMARKS
0010	124+00	-	154+37	MAINLINE	1	240	-	-	-	-	54	-	-	TEMPORARY SHOULDER WIDENING
0010	124+00	-	154+37	MAINLINE	2	5400	-	-	-	1920	1440	12800	-	EB LANE CLOSED
0010	124+00	-	154+37	MAINLINE	3	260	35	60	60	-	140	-	12800	WB LANE CLOSED
				TOTAL 0010		5900	35	60	60	1920	1634	12800	12800	

CONSTRUCTION STAKING

CATEGORY	STATION	TO	STATION	LOCATION	CONSTRUCTION STAKING STORM SEWER 650.4000 EACH	CONSTRUCTION STAKING SUBGRADE 650.4500 LF	CONSTRUCTION STAKING BASE 650.5000 LF	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER 650.5500 LF	CONSTRUCTION STAKING PIPE CULVERTS 650.6000 EACH	CONSTRUCTION STAKING RESURFACING REFERENCE 650.8000 LF	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 650.9910 LS	CONSTRUCTION STAKING SLOPE STAKES 650.9920 LF	REMARKS
0010	124+00	-	154+37	PROJECT	12	-	-	-	3	-	1	-	
0010	124+90	-	154+00	LT	-	2,900	2,900	-	-	-	-	2,900	STAGE 1 - TEMPORARY LANE
0010	124+00	-	154+37	MAINLINE	-	-	-	-	-	3,100	-	-	STAGE 2 & 3 - OVERLAY
0010	124+00 EB	-	154+43 EB	MAINLINE	-	3,100	3,100	2,700	-	-	-	3,100	STAGE 2 - MAINLINE
0010	134+00 "S"	-	135+83 "S"	SIDE ROAD	-	-	200	220	-	-	-	-	SCHOOL ENTRANCE
0010	148+33 "O"	-	148+78 "O"	SIDE ROAD	-	-	50	140	-	-	-	-	OLSON ROAD
				TOTAL 0010	12	6,000	6,250	3,060	3	3,100	1	6,000	

PAVEMENT MARKING

CATEGORY	STATION	TO	STATION	LOCATION	PAVEMENT MARKING EPOXY 4-INCH 646.0106 LF	PAVEMENT MARKING EPOXY 8-INCH 646.0126 LF	PAVEMENT MARKING CURB EPOXY 647.0456 LF	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH 647.0726 LF	PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY 647.0856 SF	REMARKS
0010	124+00	-	135+10	RT	1,200	-	-	-	-	WHITE EDGELINE
0010	124+00	-	129+50	LT & RT	2,200	-	-	-	-	DOUBLE YELLOW
0010	124+00	-	154+37	LT	3,100	-	-	-	-	WHITE EDGELINE
0010	129+50	-	130+60	CL	-	-	-	-	750	
0010	129+50	-	134+85	LT	550	-	-	-	-	YELLOW EDGELINE
0010	129+50	-	135+30	RT	580	-	-	-	-	YELLOW EDGELINE
0010	132+14	-	135+45	RT	-	680	-	110	-	RIGHT TURN LANE
0010	134+77	-	135+32	RT	-	-	70	-	-	
0010	136+36	-	136+43	RT	-	-	20	-	-	
0010	136+38	-	139+61	CL	-	330	-	-	-	LEFT TURN LANE
0010	136+38	-	145+92	RT	960	-	-	-	-	YELLOW EDGELINE
0010	136+38	-	145+92	LT	960	-	-	-	-	YELLOW EDGELINE
0010	136+51	-	147+72	RT	1,200	-	-	-	-	WHITE EDGELINE
0010	145+09	-	145+92	CL	-	-	-	-	500	
0010	145+92	-	154+37	LT & RT	3,100	-	-	-	-	DOUBLE YELLOW
0010	147+72	-	149+89	RT	150	-	-	-	-	WHITE 3' SKIPS
0010	149+89	-	154+37	RT	460	-	-	-	-	WHITE EDGELINE
0010	132+71 "S"	-	135+50 "S"	SCHOOL ENTRANCE	560	-	-	-	-	DOUBLE YELLOW
0010	135+50 "S"	-	135+68 "S"	SCHOOL ENTRANCE	20	-	-	-	-	YELLOW EDGELINE
0010	135+21 "S"	-	135+50 "S"	SCHOOL ENTRANCE	-	60	-	-	-	
0010	135+50 "S"	-	135+68 "S"	SCHOOL ENTRANCE	-	-	-	-	30	
				TOTAL 0010	15,040	1,070	90	110	1,280	

ROUTE AND SEAL

CATEGORY	STATION	TO	STATION	LOCATION	415.6000.S LF	REMARKS
0010	129+50	-	130+60	RT	242	CORRUGATED MEDIAN AND HMA PAVEMENT INTERFACE
0010	130+60	-	135+35	RT	950	BACK OF CURB AND ASPHALTIC MEDIAN INTERFACE
0010	135+80			RT	40	SCHOOL ENTRANCE CORRUGATED ISLAND
0010	136+05			RT	60	SCHOOL ENTRANCE SAFETY ISLAND
0010	136+34	-	145+09	RT	1750	BACK OF CURB AND ASPHALTIC MEDIAN INTERFACE
0010	145+09	-	145+92	RT	188	CORRUGATED MEDIAN AND HMA PAVEMENT INTERFACE
				TOTAL 0010	3230	

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CONCRETE BARRIER

CATEGORY	STATION	TO	STATION	LOCATION	TEMPORARY PRECAST DELIVERED 603.8000 LF	TEMPORARY PRECAST INSTALLED 603.8125 LF	CRASH CUSHION TEMPORARY 614.0905 EACH	REMARKS
0010	128+12	-	129+40	RT	128	128	-	STAGE 2
0010	129+40			RT	-	-	1	
				TOTAL 0010	128	128	1	

CONCRETE CORRUGATED MEDIAN

CATEGORY	STATION	TO	STATION	LOCATION	620.0100 SF	REMARKS
0010	129+50	-	130+60	RT	1,210	NORTH MEDIAN
0010	135+86			RT	38	SCHOOL ENTERANCE/EXIT
0010	145+09	-	145+92	RT	913	SOUTH MEDIAN
				TOTAL 0010	2,161	

SEEDING

CATEGORY	STATION	TO	STATION	LOCATION	MULCHING 627.0200 SY	FERTILIZER TYPE B 629.0210 CWT	SEEDING MIXTURE NO. 20 630.0120 LB	SEEDING MIXTURE NO. 40 630.0140 LB	SEEDING TEMPORARY 630.0200 LB	SEEDING BORROW PIT 630.0300 LB	REMARKS
0010	124+00	-	154+37	LT	7,578	4.8	205	-	205	-	
0010	124+00	-	129+26	RT	603	0.4	16	-	16	-	
0010	129+26	-	148+80	RT	6,745	4.0	-	103	155	-	
0010	149+20	-	154+45	RT	2,878	1.8	78	-	78	-	
0010				BORROW PIT	-	-	-	-	-	60	
				TOTAL 0010	17,804	11	299	103	454	60	

SAWING

CATEGORY	STATION	TO	STATION	LOCATION	SAWING ASPHALT 690.0150 LF	SAWING CONCRETE 690.0250 LF	REMARKS
0010	124+90	-	154+00	LT	2900	-	STAGE 1 - TEMPORARY LANE
0010	145+92	-	129+50	CENTERLINE	1700	-	STAGE 2
0010	124+00			MAINLINE	40	-	PROJECT START
0010	154+37			MAINLINE	40	-	PROJECT END
0010	134+00 "S"			SIDE ROAD	25	-	SCHOOL ENTRANCE
0010	148+33 "O"			SIDE ROAD	50	-	OLSON ROAD
0010	148+33 "O"			LT	-	3	LT CURB & GUTTER
0010	148+45 "O"			RT	-	3	RT CURB & GUTTER
				TOTAL 0010	4755	6	

EARTHWORK SUMMARY

Division	From / To Station	Location	Common Excavation (1)	(item # 205.0100)	Salvaged / Unusable Pavement Material (4)	Available Material (5)	Marsh Excavation (6)	Rock Excavation (7)	Reduced Marsh in Fill (8)	Reduced EBS in Fill (9)	Expanded Marsh Backfill (10)	Expanded EBS Backfill (11)	Expanded Rock (12)	Unexpanded Fill	Expanded Fill (13)	Mass Ordinate + / - (14)	Waste	Borrow	Comment:
			Cut (2)	EBS Excavation (3)			(item #205.0500)	(item #205.0200)	Factor	Factor 0.80	Factor	Factor 1.30	Factor		Factor 1.25			(item #208.0100)	
Division 1																			
Stage 1 - Temp Lane	125+91 to 154+03		1,466			1,466									689	777	777		
Division 1 Subtotal			1,466	0	0	1,466	0	0	0	0	0	0	0	0	689	777	777	0	
Division 2																			
Stage 2 - Mainline	124+00 to 154+37.4		5,196	132		5,196				106		172			6,408	-1,212		1,212	
School Entrance	134+00 "S" to 135+75.42 "S"		201			201									729	-528		528	
Division 2 Subtotal			5,397	132	0	5,397	0	0	0	106	0	172	0	0	7,137	-1,740	0	1,740	
Division 3																			
Stage 3 - Remove Temp Lane	125+91 to 154+03		1,901			1,901									113	1,788	1,788		
Division 3 Subtotal			1,901	0	0	1,901	0	0	0	0	0	0	0	0	113	1,788	1,788	0	
Grand Total			8,764.00	132.00	0.00	8,764.00	0.00	0.00	0.00	105.60	0.00	171.60	0.00	0.00	7,939.00	825.00	2,565.00	1,740.00	0.00
		Total Common Exc		8,896.00															

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) EBS Excavation to be backfilled with Select Borrow material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well.
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
6) Marsh Excavation - to be backfilled with Select Borrow Material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well. Item number 20505
7) Rock Excavation item number 205.0200
8) Reduced Marsh in Fill - Excavated Marsh material is usuable in Fills outside the 1:1 slope. Marsh in Fill Reduction factor = 0.6
9) Reduced EBS in Fill - Excavated EBS material is usuable in Fills outside the 1:1 slope. EBS in Fill Reduction factor = 0.8
10) Expanded Marsh Backfill - This is to be filled with Select Borrow material. Marsh Backfill Factor = 1.5. Item number 208.1100
11) Expanded EBS Backfill - This is to be filled with Select Borrow material. EBS Backfill Factor = 1.3. Item number 208.1100
12) Expanded Rock - Factor = 1.1
13) Expanded Fill. Factor = 1.25
Depending on selections: **Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor**
Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced EBS) * Fill Factor
Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh) * Fill Factor
Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor) * Fill Factor
14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
PROJECT 5310-01-20
SPRING GREEN - MADISON
(WIS. HEIGHTS HS DRIVE - OLSON ROAD)
USH 14
DANE COUNTY

CONVENTIONAL SIGNS AND ABBREVIATIONS

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

SECTION CORNER
NOTATION FOR COMBUSTABLE FLUIDS (CAUTION)
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES (CAUTION)
BRIDGE

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

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	■	⊠
TELEPHONE POLE	■	⊠
PEDESTAL (LABEL TYPE - (COMMUNICATIONS, ELECTRIC)	■	⊠

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

PARCEL NUMBER (102)
UTILITY NUMBER (92)

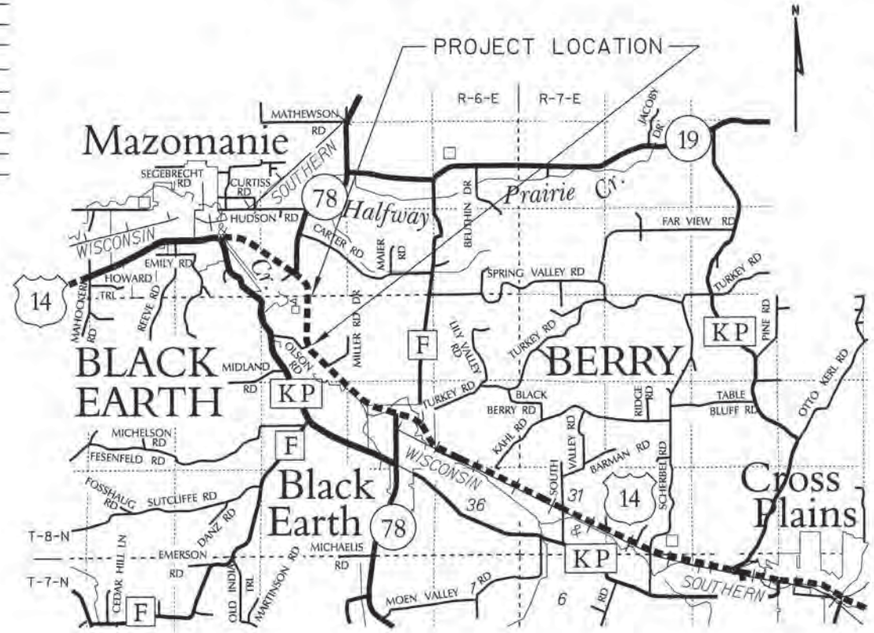
CONVENTIONAL UTILITY SYMBOLS

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

ACCESS POINT	AP
ACCESS RIGHTS	AR
ACRES	AC.
AGRICULTURAL P.D.	AGRI. P.D.
AHEAD	AH
ALUMINUM	ALUM.
AND OTHERS	ET.AL.
BACK	BK
BLOCK	BLK
CENTERLINE	C/L
CERTIFIED SURVEY MAP	C.S.M.
CONCRETE	CONC.
CORNER	COR.
COUNTY	CO.
COUNTY TRUNK HIGHWAY	CTH
DISTANCE	DIST.
DOCUMENT NUMBER	DOC.
EASEMENT	EASE
EXISTING	EX.
GAS VALVE	G.V.
GRID NORTH	GN
HIGHWAY EASEMENT	H.E.
IDENTIFICATION	ID.
LAND CONTRACT	LC
LEFT	LT.
MONUMENT	MON.
NUMBER	NO.
OUTLOT	O.L.
PAGE	P.
PERMANENT LIMITED EASEMENT	P.L.E.
POINT OF BEGINNING	P.O.B.
POINT OF COMPOUND CURVE	PCC
POINT OF CURVATURE	PC
POINT OF INTERSECTION	PI
POINT OF REVERSE CURVATURE	PRC
PRIVATE DRIVEWAY	P.D.
POINT ON TANGENT	POT
PROPERTY LINE	P.L.
RECORDED AS	(100')
REFERENCE LINE	R/L
REMAINING	REM.
RIGHT	RT.
RIGHT OF WAY	R/W
SECTION	SEC.
SEPTIC VENT	SEPV.
SQUARE FEET	S.F.
STATE TRUNK HIGHWAY	STH
STATION	STA.
SUBDIVISION	SUBD
TANGENT	TAN.
TELEPHONE PEDESTAL	T.P.
TEMPORARY LIMITED EASEMENT	T.L.E.
TRANSPORTATION PROJECT PLAT	TPP
UNITED STATES HIGHWAY	USH
VOLUME	V.

CURVE DATA

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



LAYOUT SCALE

0 1 2 4

MILES

THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 5310-01-20.

NOTES:

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

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

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR U.S.H. 14 ESTABLISHED FROM PREVIOUS PROJECT DJ 1435 AND CSM 9400.

EXISTING ACCESS CONTROL ALONG U.S.H. 14 ESTABLISHED FROM PREVIOUS PROJECT 5310-01-29 AND CSM 9400.

DIMENSIONING FOR THE NEW R/W IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

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

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

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

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

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, ROCK COUNTY, NAD83(91), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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

TPP NUMBER 5310-01-20 - 4.01
SHEET 2

FILE NAME : \\Mad31zp1\w3dtdd1\PDS\Support\CADDS\Projects\d1_53100120\040400.DGN
PLOT DATE : 09-JUL-2013 08:27
PLOT BY : dotc4c
PLOT NAME :
PLOT SCALE : 100.000000:1.000000
WISDOT/CADDS SHEET 70

ALUM. MON.
Y 514,938.435
X 715,850.058

2" IRON PIPE
Y 514,938.256
X 718,475.495

S 89°59'46" E
2625.44'

TOWN OF BLACK EARTH

N 89°38'25" E
50.01' R/W TO R/L

N 89°38'25" E
50.08' R/L TO R/W

S 89°38'25" W
2370.43' SEC. COR. TO R/W

ALUM. MON.
Y 514,954.972
X 721,137.356

MAZOMANIE

P.L. STA. 119+18.38

N 89°38'25" E
191.39' SEC. CORNER TO R/W

KRISTI CHLEBOWSKI
DANE COUNTY
REGISTER OF DEEDS
DOCUMENT #5009838
07/24/2013 4:16 PM
TRANS. FEE:
EXEMPT #:
REC. FEE: 25.00
PAGES: 2
THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE COUNTY REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 5310-01-20 - 4.01
SHEET 1 OF 2
AMENDMENT NO:

TRANSPORTATION PROJECT PLAT NO: 5310-01-20 - 4.01

THAT PART OF LOT 2 OF CSM 9400 LOCATED IN THE NW¼ OF THE NE¼, ALSO THAT PART OF THE NW¼ OF THE NE¼, THE SW¼ OF THE NE¼, AND THE SE¼ OF THE NW¼. ALL IN SECTION 22, TOWN OF BLACK EARTH. T 8 N, R 6 E, DANE COUNTY, WISCONSIN.

RELOCATION ORDER USH 14 SPRING GREEN - MADISON ROAD (WIS. HEIGHTS HS DRIVE - OLSON ROAD)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION 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 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

LOT 1
C.S.M. 8660
VOL. 47, P.290-291
DOC. 2876928

LOT 1
C.S.M. 8333
VOL. 45, P.118-119
DOC. 2793388

LOT 1
C.S.M. 9400
VOL. 53, P.214-216
DOC. 3143317

LOT 2
C.S.M. 9400
VOL. 53, P.214-216
DOC. 3143317

TOWN

NE-NW

NW-NE

SE-NW

SW-NE

GN

USH 14/STH 78

S 2°08'22" W

Station & Offset Table

Point Number	Station	Offset
100	119+16.20	50.04'
101	142+49.63	51.12'
102	145+60.20	50.93'
103	145+37.70	79.52'
105	144+51.21	92.30'
106	142+48.02	77.00'
107	138+35.00	77.00'
108	138+00.00	115.00'
109	135+00.00	115.00'
110	134+65.00	80.00'
111	133+00.00	80.00'
112	131+00.00	65.00'
113	127+00.00	60.00'
114	126+50.00	49.63'
115	119+20.56	49.96'
T1	135+00.00	240.00'
T2	136+60.00	240.00'
T3	136+60.00	115.00'
T4	138+23.95	89.00'
T5	144+49.63	104.18'

R/W Course Table

100-101	S 2°06'47" W	2333.38'
103-109	N 15°38'17" W	92.54'
105-106	N 2°08'22" E	215.54'
106-107	N 2°08'22" E	413.02'
107-108	N 45°12'50" W	51.66'
108-109	N 2°08'22" E	300.00'
109-110	N 41°08'22" E	49.50'
110-111	N 2°08'22" E	165.00'
111-112	N 6°25'43" E	200.56'
112-113	N 2°51'20" E	400.03'
113-114	N 13°51'43" E	51.07'
114-115	N 2°06'47" E	729.44'

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, ROCK COUNTY, NAD83(91), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES. GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR U.S.H. 14 ESTABLISHED FROM PREVIOUS PROJECT DJ 1435 & CSM 9400.

EXISTING ACCESS CONTROL ALONG U.S.H. 14 ESTABLISHED FROM PREVIOUS PROJECT 5310-01-29 & CSM 9400.

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

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES OR S.F. REQUIRED NEW	EXISTING	TOTAL	T.L.E. & (P.L.E.) ACRES OR S.F.
1	LOIS R BALLWEG	FEE	0.065	1.082	1.147	
2	WISCONSIN HEIGHTS SCHOOL DISTRICT	FEE	0.102	0.321	0.423	
3	JOINT SCHOOL DISTRICT NO. 1	FEE & TLE	1.144	1.531	2.675	0.634

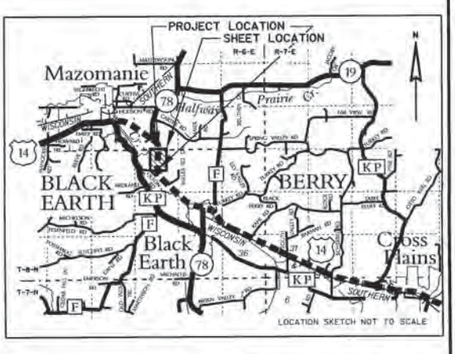
ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED.

P.I. = 148+79.32
Y 511,980.892
X 718,606.352
Δ. = 47°31'13" LT
D. = 3°59'43"
T. = 631.30'
L. = 1189.39'
R. = 1434.06'
DA. = S 45°22'50" E
PT. = 154+37.41

TLE-GRADING
0.459 AC.

TLE-GRADING
0.175 AC.

PROJECT LOCATION
SHEET LOCATION



American Transmission Company
Vol. 243, P. 81-82, Doc. 825499
Vol. 243, P. 91-92 ,Doc. 825504
Vol. 6696, P. 43-44, Doc. 1875984
Vol. 6661, P. 3-4, Doc. 1874503

Black Earth Telephone Company
Vol. 26935 ,P. 65, Doc. 2585001
Vol. 26935, P.63, Doc. 2585999

Wisconsin Power and Light
Vol. 243, P. 95, Doc. 825506
Vol. 243, P. 81, Doc. 825499

Ingress - Egress
Doc. 2895251

STATE OF WISCONSIN

99'

S 0°04'56" W 2628.14'
SEC. CORNER TO SEC. CORNER

301.84'

PC 142+48.02

101-102
L. = 299.52'
L.C. = 298.93'
L.C.B. = S 4°05'34" E
R. = 1382.70'

ALUM. MON.
Y 512,310.115
X 718,471.725

BLACK EARTH

STA. 145+50.92

NOT RECOVERED

N 89°59'52" E
98.15' SEC. CORNER TO R/W

S 89°59'52" W
2419.79' SEC. CORNER TO R/W

ALUM. MON.
Y 512,310.221
X 721,122.071

S 89°59'52" W
48.78' TAN. TO R/W

S 89°59'52" W
83.63' R/W TO TAN.

329.46'

PI 148+79.32

SCALE. FEET
0 100 200

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

KEIF S. CALLAWAY — 07/18/2013
PRINTED NAME — SIGNATURE — DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

JAMES R. KUEHN — 07/22/2013
PRINTED NAME — SIGNATURE — DATE

PLOT SCALE : 100.000000:1.000000
PLOT NAME :
PLOT BY : dotc4c
PLOT DATE : 25-JUL-2013 09:45
FILE NAME : \\Mod31zp1\w3dfrd1\PDS\Support\CADDS\Projects\01-53100103\040401.dgn
APPRAISAL PLAT DATE : JULY 18, 2013

4.01
48

DATE: JULY 9, 2013

REVISION DATE

TRANSPORTATION PROJECT PLAT 5310-01-20 - 4.02

RELOCATION ORDER USH 14, SPRING GREEN - MADISON
(WIS. HEIGHTS HS DRIVE - OLSON ROAD)

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
100	514940.086	718766.974
101	512608.295	718680.942
102	512310.124	718702.278
103	512310.119	718569.873
105	512399.236	718544.927
106	512614.630	718552.974
107	513027.362	718568.393
108	513063.757	718531.726
109	513363.548	718542.926
110	513397.217	718579.208
111	513562.102	718585.368
112	513761.402	718607.824
113	514160.937	718627.754
114	514210.515	718639.988
115	514939.458	718666.883

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X

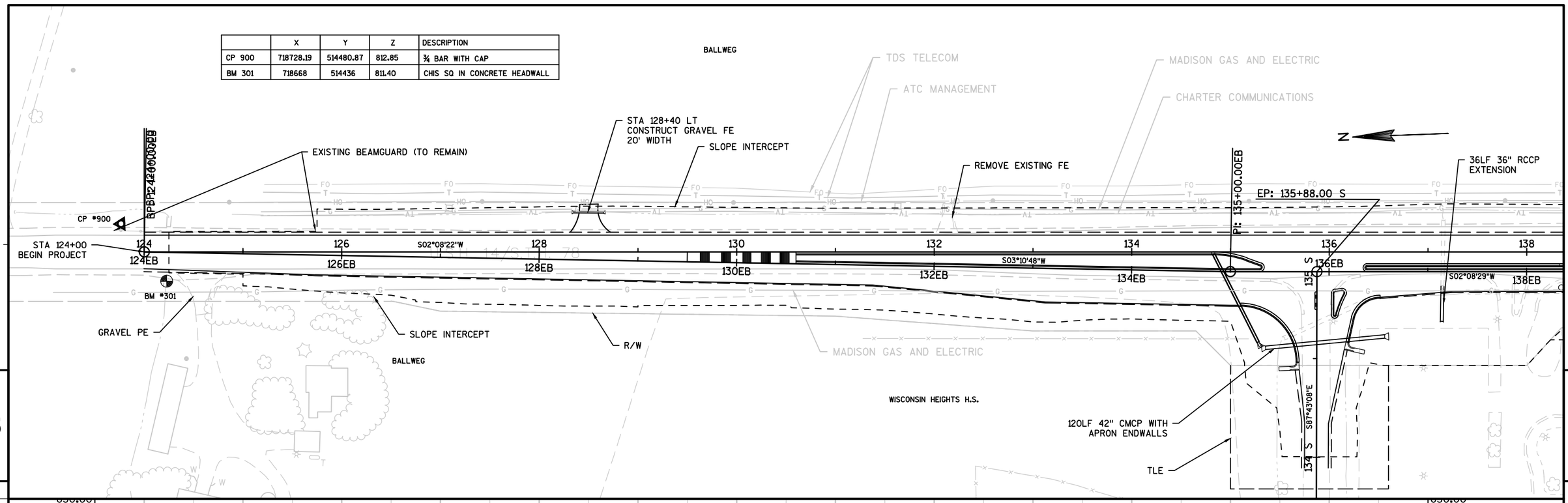
R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X

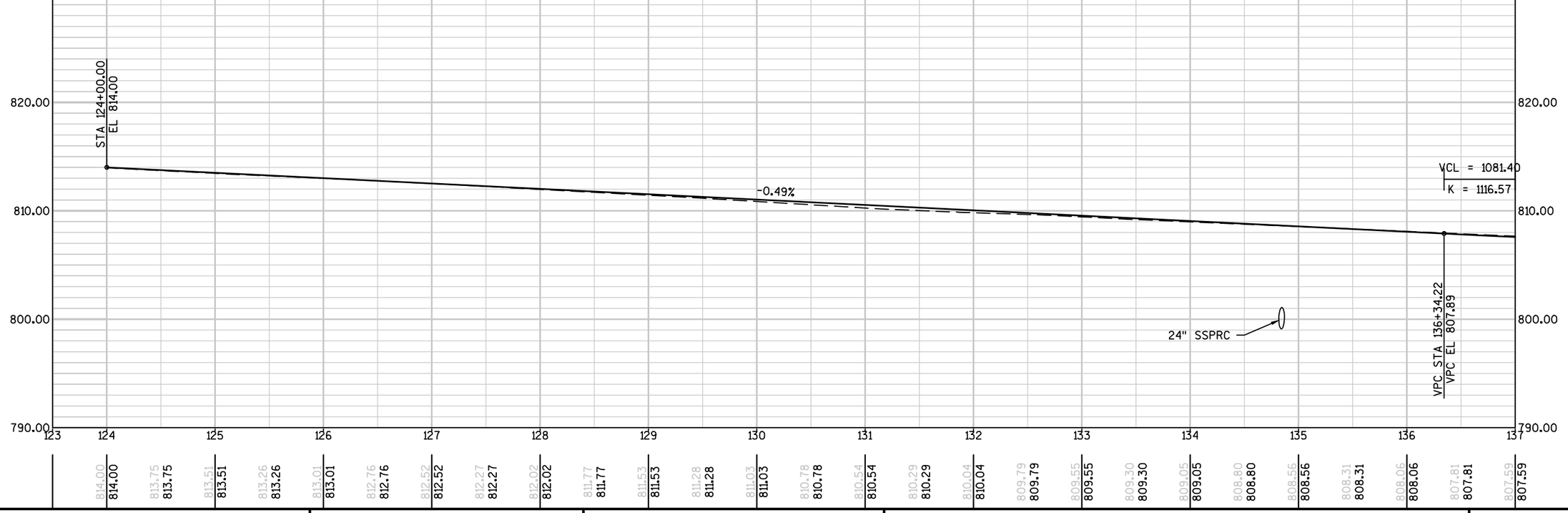
FILE NAME : R:\Projects\D1_53100103\040402.DGN PLOT DATE : 18-JUL-2013 11:11 PLOT BY : dotj3j PLOT NAME : PLOT SCALE : 100.000000:1.000000 WISDOT/CADDS SHEET 72

4

4

	X	Y	Z	DESCRIPTION
CP 900	718728.19	514480.87	812.85	¾ BAR WITH CAP
BM 301	718668	514436	811.40	CHIS SQ IN CONCRETE HEADWALL





PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PLAN AND PROFILE: MAINLINE	SHEET	E

	X	Y	Z	DESCRIPTION
CP 901	718608.86	512230.41	806.93	¾ BAR WITH CAP
BM 300	718608	512218	807.88	CHIS SQ IN CONCRETE SLAB

PI STA = 148+79.32
Y = 511980.892
X = 718606.352
DELTA = 47°31'13"
D = 3°59'43"
T = 631.30'
L = 1189.38'
R = 1434.06'
PC STA = 142+48.02
PT STA = 154+37.40
SE = 6%

PI STA = 148+61.17
Y = 511999.960
X = 718587.029
DELTA = 47°31'19"
D = 3°49'51"
T = 658.45'
L = 1240.52'
R = 1495.66'
PC STA = 142+02.72
PT STA = 154+43.24
SE = 6%

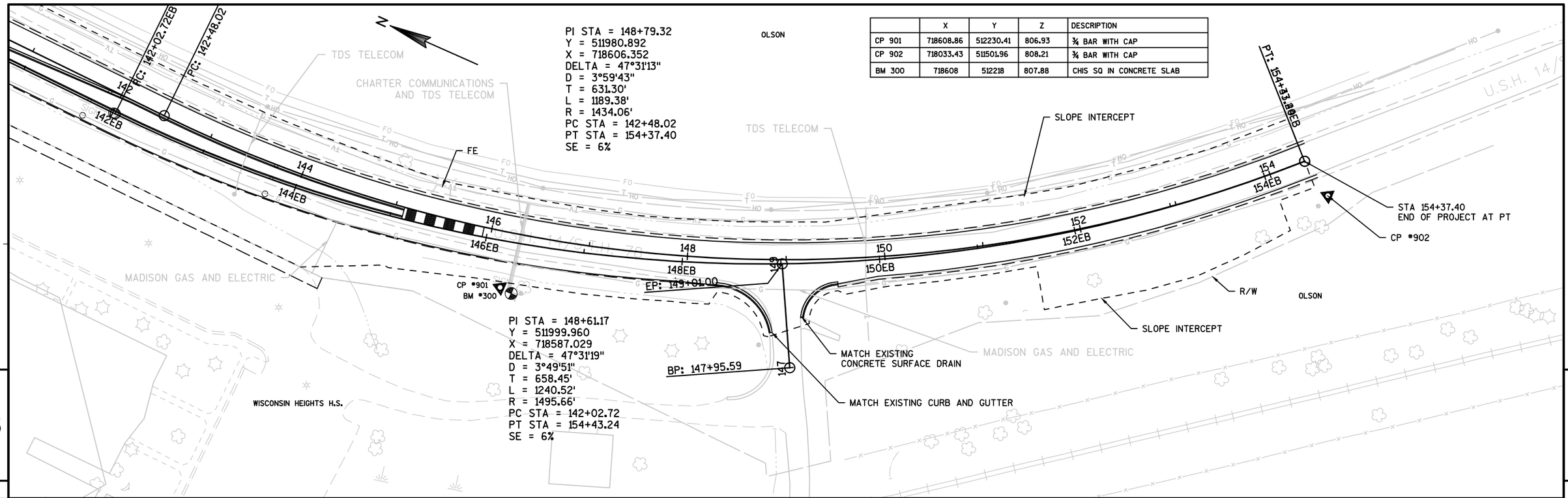
PROJECT NO:5310-01-73 | HWY:USH 14 | COUNTY:DANE | PLAN AND PROFILE: MAINLINE | SHEET 51 | E

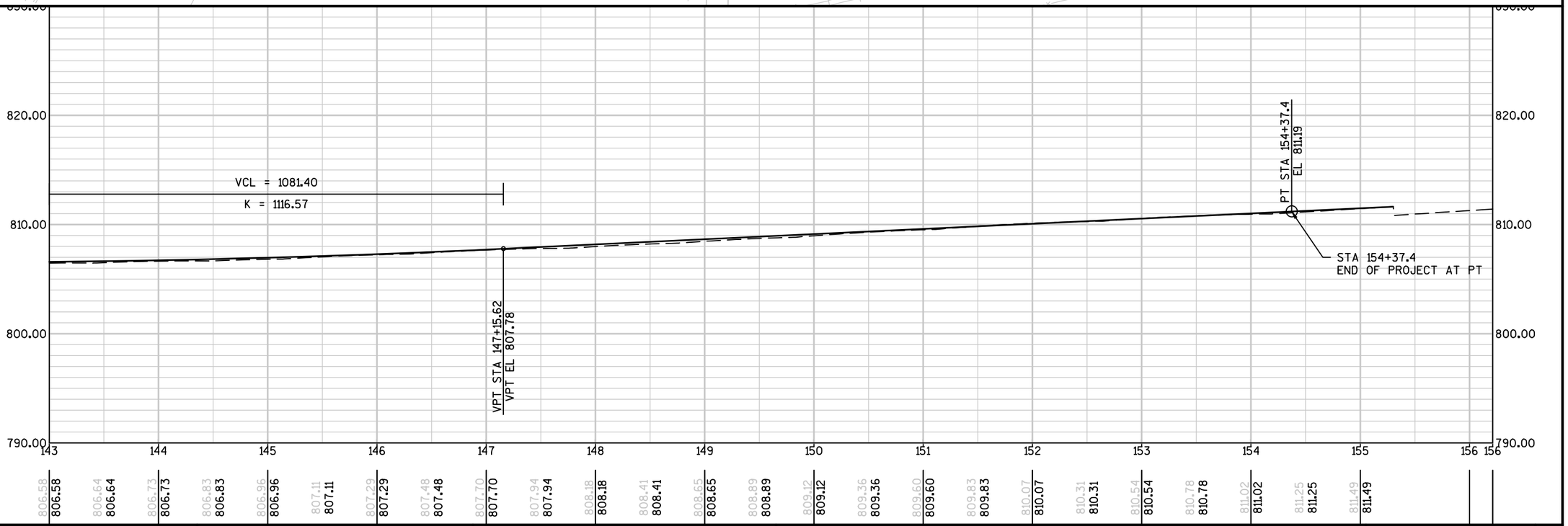
FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\050101_PP.DWG
PLOT DATE : 1/29/2014 11:42 AM
PLOT BY : BALSIGER, LEE M
PLOT NAME :
PLOT SCALE : 1:100_XREF

	X	Y	Z	DESCRIPTION
CP 901	718608.86	512230.41	806.93	¾ BAR WITH CAP
CP 902	718033.43	511501.96	808.21	¾ BAR WITH CAP
BM 300	718608	512218	807.88	CHIS SQ IN CONCRETE SLAB

PI STA = 148+79.32
Y = 511980.892
X = 718606.352
DELTA = 47°31'13"
D = 3°59'43"
T = 631.30'
L = 1189.38'
R = 1434.06'
PC STA = 142+48.02
PT STA = 154+37.40
SE = 6%

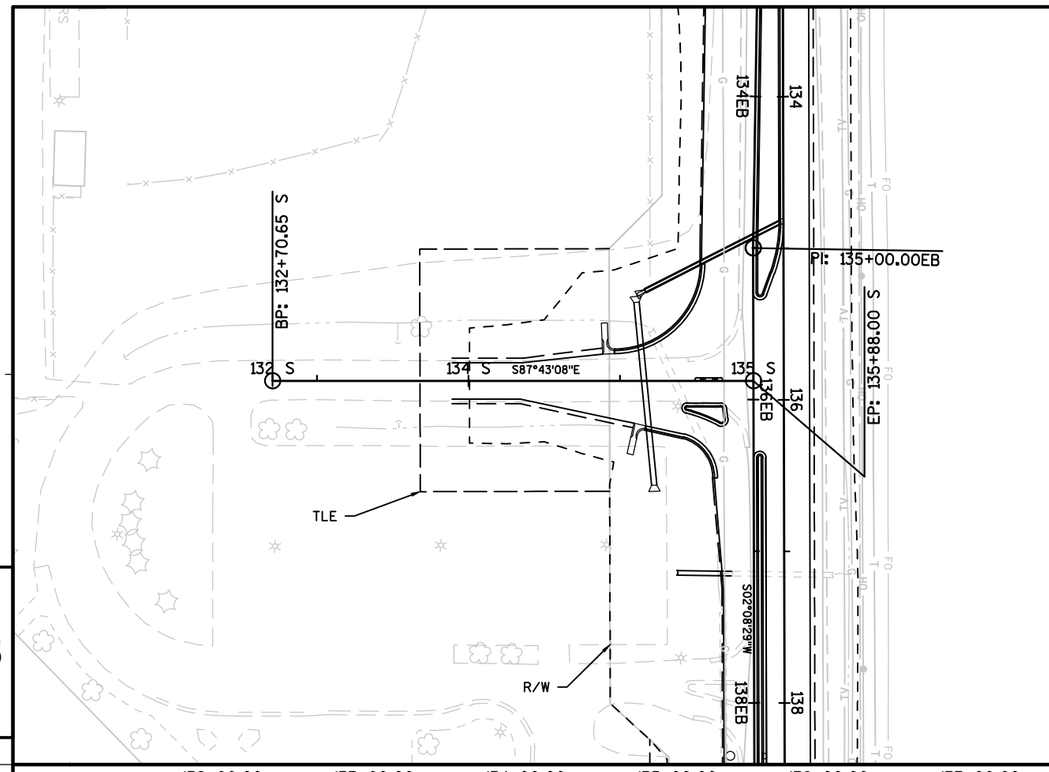
PI STA = 148+61.17
Y = 511999.960
X = 718587.029
DELTA = 47°31'19"
D = 3°49'51"
T = 658.45'
L = 1240.52'
R = 1495.66'
PC STA = 142+02.72
PT STA = 154+43.24
SE = 6%

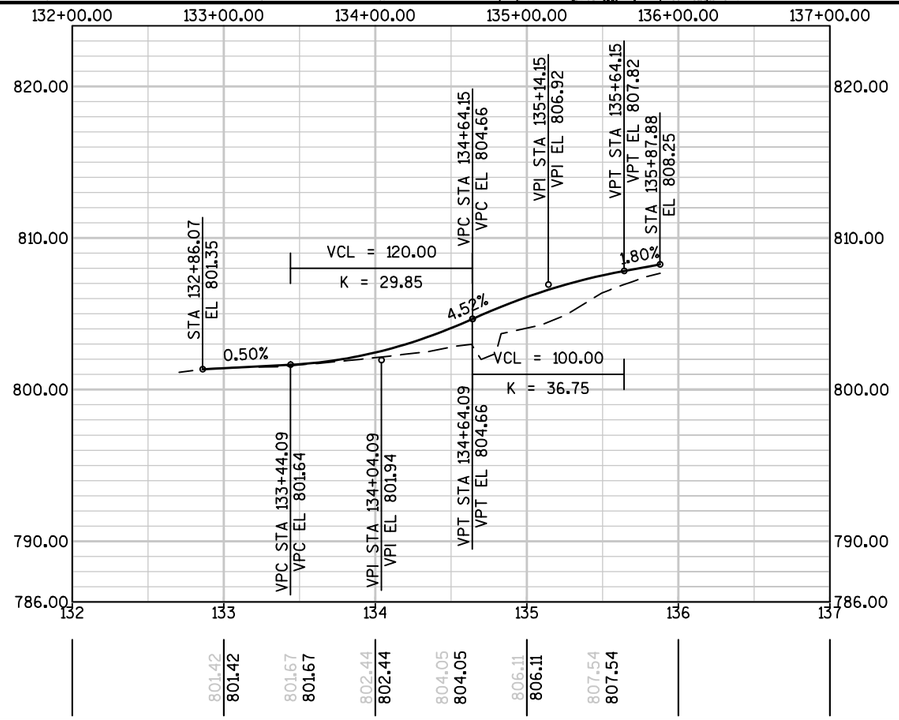




PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PLAN AND PROFILE: MAINLINE	SHEET E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\050101_PP.DWG PLOT DATE : 1/29/2014 11:43 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:100_XREF
WISDOT/CADDS SHEET 44





PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PLAN AND PROFILE: SCHOOL ENTRANCE	SHEET 53	E

BALLWEG

N

SLOPE INTERCEPT

R/W

STA 128+50 LT
CONSTRUCT NEW FE
WITH 32LF 18" CMCP
2 APRON END WALLS REQ'D

BEGIN CORRUGATED MEDIAN
STA 129+50 (10' WIDTH)

5

5

BP: 124+00.00

SAWCUT REQ'D

XXXX

XXXX

17.0

17.0'

20.0'

125+00

125+00EB

126+00

126+00EB

USH 14

127+00

127+00EB

128+00

128+00EB

129+00

129+00EB

USH 14/STH 78

STA 124+00 EB
OFF: 17' RT
BEGIN TAPER

STA 125+70 EB
OFF: 20' RT
END TAPER

SLOPE INTERCEPT

R/W

BALLWEG

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PLAN SHEETS	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\050201_PN.DWG PLOT DATE : 2/26/2014 11:33 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44

BALLWEG

N

BEGIN CORRUGATED MEDIAN
STA 129+50 (10' WIDTH)

BEGIN CURB & GUTTER
STA 130+60
(12" WIDTH FLAG TO FLAG)

R/W

SLOPE INTERCEPT

REMOVE FE
AND PIPE
18" CMCP

ROUTE AND SEAL
BEHIND CURB HEAD

4" SLOPED TYPE "D" CURB WITH
ASPHALTIC SURFACE SAFETY ISLAND

128+00 129+00 130+00 131+00 132+00 133+00 134+00

128+00EB 129+00EB 130+00EB 131+00EB 132+00EB 133+00EB 134+00EB

17.0'

20.0'

34.0'

ROUTE AND SEAL
CORRUGATED MEDIAN

STA: 130+60 TO STA: 135+60
REVERSE SLOPED GUTTER ALONG EB ALIGNMENT

R/W

STA 131+38.4 EB
OFF: 20' RT
BEGIN TAPER

SLOPE INTERCEPT

STA 133+13EB
OFF: 34' RT
END TAPER

BALLWEG

WISCONSIN HEIGHT H.S.

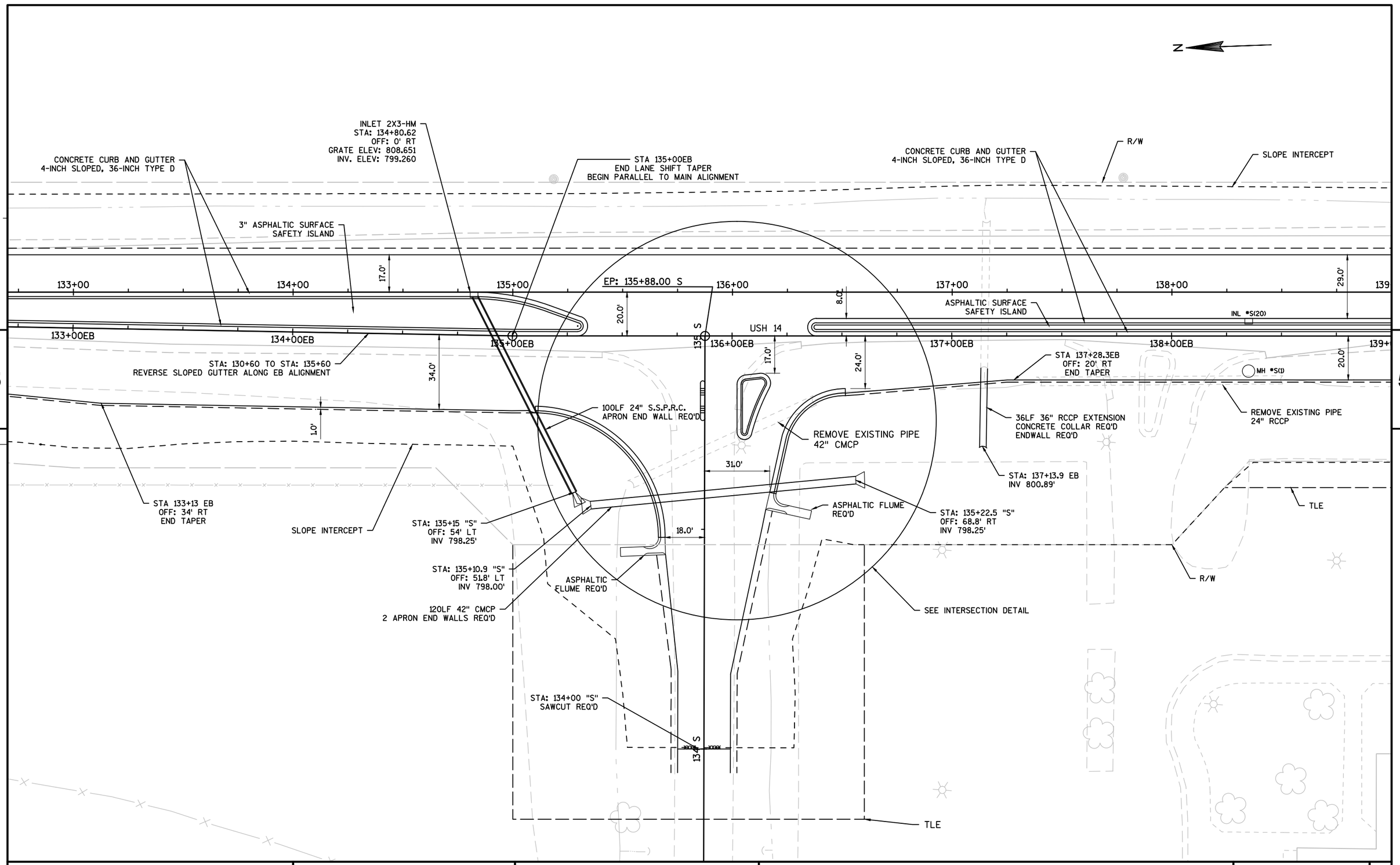
5

5

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PLAN SHEETS	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\050201_PN.DWG PLOT DATE : 2/26/2014 11:33 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44



5

5

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PLAN SHEETS	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\050201_PN.DWG PLOT DATE : 2/26/2014 11:33 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44

OLSON

N

SLOPE INTERCEPT

R/W

CONCRETE CURB AND GUTTER
4-INCH SLOPED, 36-INCH TYPE D

STA 142+11
OFF: 0' RT
END TAPER

PC: 142+48.02

5

5

137+00

138+00

USH 14

29.0'

139+00

STA 139+61
OFF: 12' RT
BEGIN TAPER

140+00

ASPHALTIC SURFACE
SAFETY ISLAND

141+00

142+00

17.0'

INL *S(20)

INL *S(15)

20.0'

137+00EB

138+00EB

139+00EB

140+00EB

141+00EB

INL *S(4)

142+00EB

SIGN 7

24.0'

STA 137+25.2EB
OFF: 20' RT
END TAPER

MH *S(1)

8.0'

MH *S(2)

20.0'

REMOVE EXISTING PIPE

TLE

R/W

WISCONSIN HEIGHTS SCHOOL

W

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PLAN SHEETS	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\050201_PN.DWG PLOT DATE : 2/26/2014 11:33 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:40_XREF

OLSON

N

SLOPE INTERCEPT

CONCRETE CURB AND GUTTER
4-INCH SLOPED, 36-INCH TYPE D

R/W

FE

END CONCRETE
CORRUGATED MEDIAN
STA 145+92
(10' WIDTH)

ROUTE AND SEAL
BEHIND CURB HEAD

PC: 142+48.02

17.0'

ASPHALTIC SURFACE
SAFETY ISLAND

141+00

142+00

143+00

144+00

145+00

146+00

147+00

147+00EB

INL *S(15)

INL *S(18)

141+00EB

INL *S(4)

142+00EB

143+00EB

144+00EB

145+00EB

146+00EB

MH *S(2)

INL *S(5)

MH *S(3)

20.0'

ROUTE AND SEAL
CORRUGATED MEDIAN

END CURB AND GUTTER
STA 145+09
(12' WIDTH FLAG TO FLAG)

SLOPE INTERCEPT

R/W

TLE

WISCONSIN HEIGHTS SCHOOL

U.S.H. 14/S.H.

SIGN

W

5

5

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PLAN SHEETS	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\050201_PN.DWG PLOT DATE : 2/26/2014 11:33 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44

OLSON

R/W

VARIABLE WIDTH PAINTED MEDIAN

5

5

146+00

146+00EB

147+00

147+00EB

148+00

148+00EB

149+00

149+00EB

EP: 149+01.00"0"

150+00

150+00EB

151+00

151+00EB

152+00

152+00EB

17.0'

17.0'

U.S.H. 14/S.H. 78

SIGN

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE D

STA 147+94EB
OFF: 20' RT
BEGIN TAPER

STA 148+35.0EB
OFF: 20.0' RT
ELEV: 809.82

R60.0'

STA 148+34.4EB
OFF: 80.0' RT
RAD: 60'

STA 148+32.5 "0"
MATCH EXISTING
CURB AND GUTTER
SAW CUT REQ'D

BP: 147+95.59"0"

148+50"0"

R40.0'

STA 149+56.8EB
OFF: 60.0' RT
RAD: 40'

STA 149+98EB
OFF: 17' RT
END TAPER

STA: 149+56.7EB
OFF: 20.0' RT
ELEV: 810.30'

MATCH EXISTING FLUME
SAW CUT REQ'D

SAW CUT REQ'D

R/W

WISCONSIN HEIGHTS SCHOOL

OLSON

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PLAN SHEETS	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\050201_PN.DWG PLOT DATE : 2/26/2014 11:34 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44

OLSON

N

R/W

PT: 154+37.40

151+00

151+00EB

17.0'

17.0'

152+00

152+00EB

153+00

153+00EB

154+00

154+00EB

XXXX

XXXX

5

5

U.S.H.

END PROJECT
STA 154+37.40
SAW CUT REQ'D
MATCH EXISTING

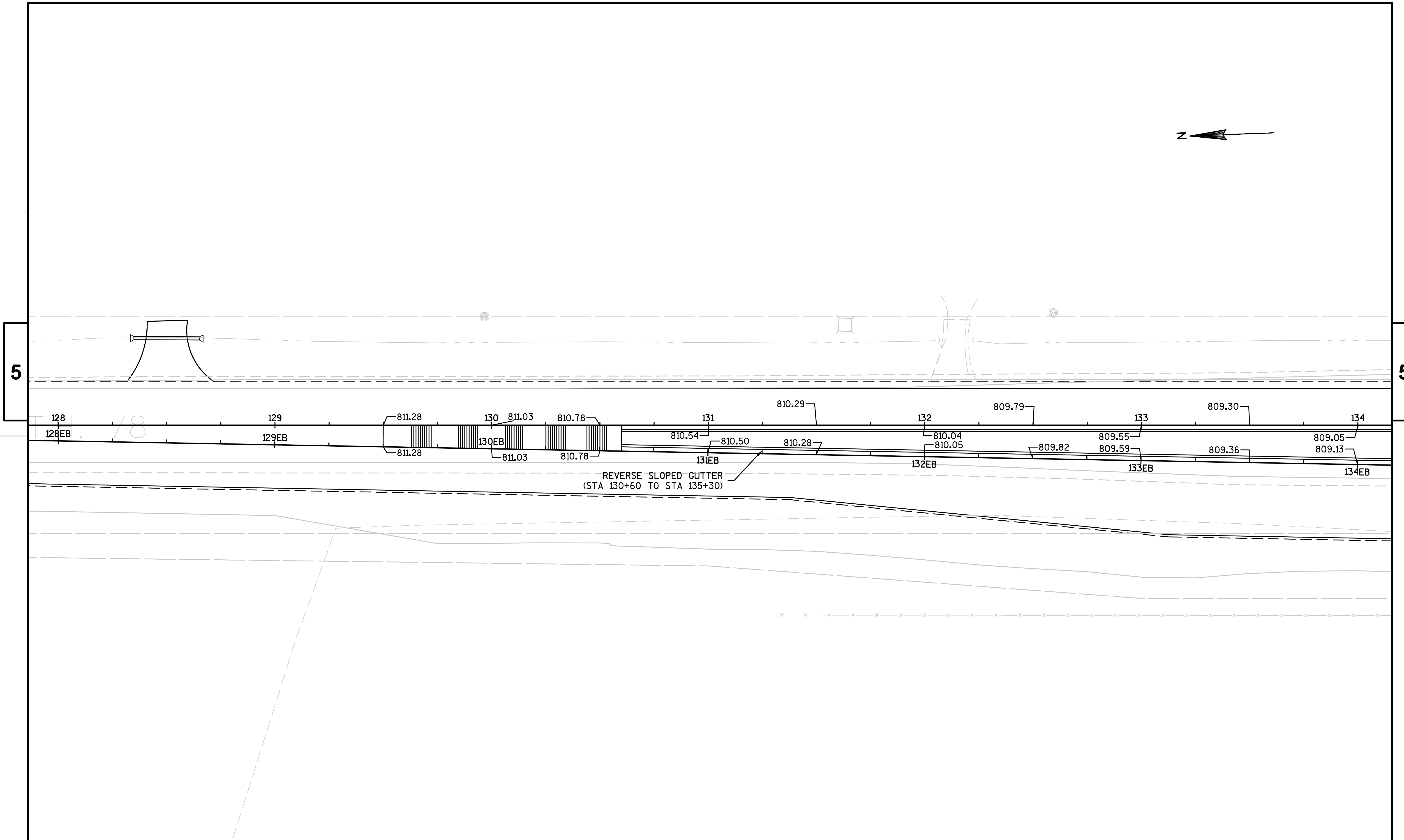
R/W

OLSON

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PLAN SHEETS	SHEET 60	E

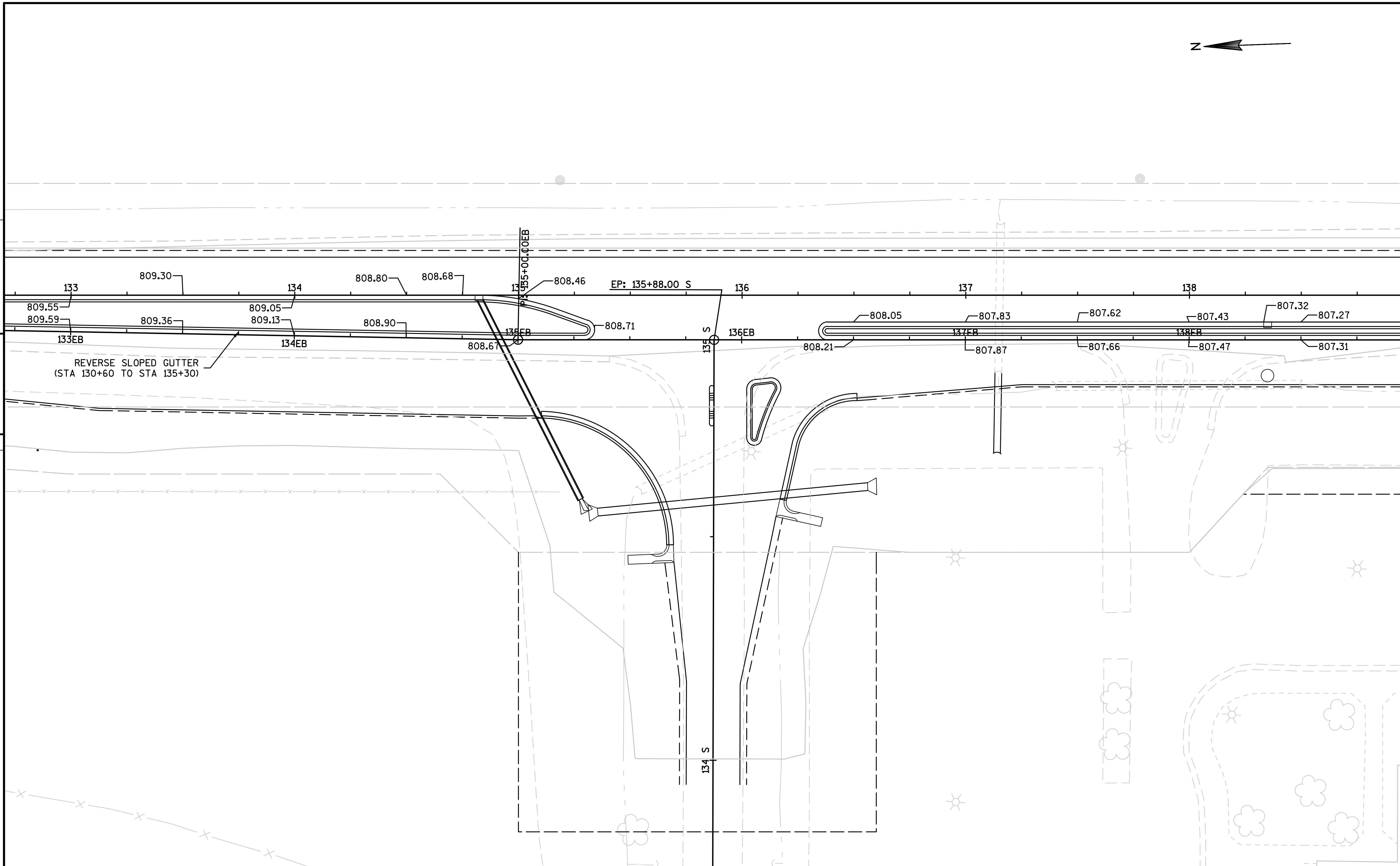
FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\050201_PN.DWG PLOT DATE : 2/26/2014 11:34 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44



PROJECT NO:5310-01-73	HWY:USH 14	COUNTY:DANE	CURB AND GUTTER GRADES	SHEET 61	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\050202_PN.DWG PLOT DATE : 1/23/2014 2:43 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:40_XREF



PROJECT NO:5310-01-73	HWY:USH 14	COUNTY:DANE	CURB AND GUTTER GRADES	SHEET 62	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\050202_PN.DWG PLOT DATE : 1/23/2014 2:43 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:40_XREF WISDOT/CADDS SHEET 44

N

137 138 139 140 141 142

PC: 142+48.02

142+02.72EB

806.59 806.520

808.05 807.83 807.62 807.43 807.32 807.27 807.13 807.02 806.88 806.76 806.66 806.80 806.83

137EB 138EB 139EB 140EB 141EB 142EB

808.21 807.87 807.66 807.47 807.31 807.17 807.05 806.96 806.89 806.84 806.81

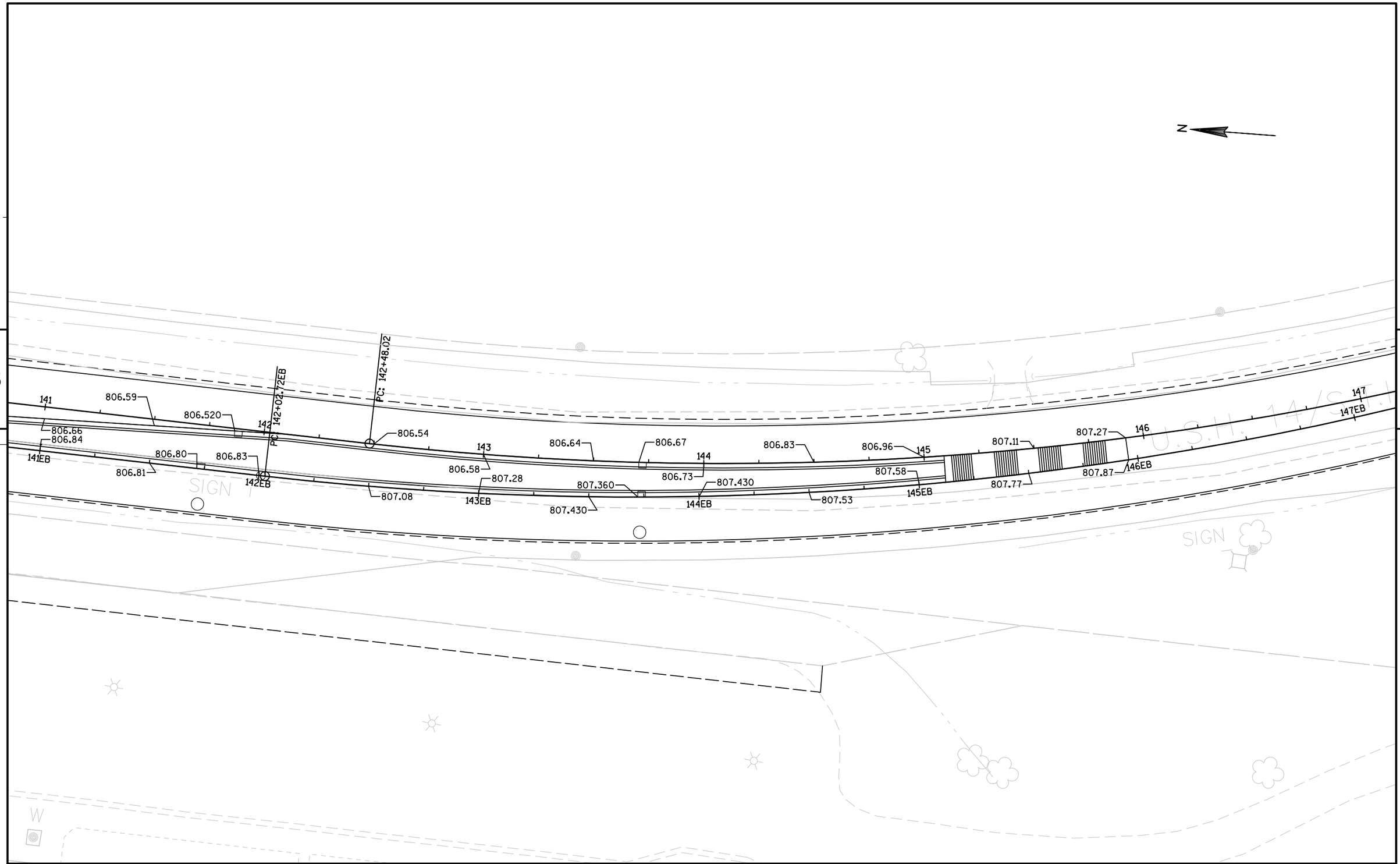
SIGN

W

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CURB AND GUTTER GRADES	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\050202_PN.DWG PLOT DATE : 1/23/2014 2:43 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44



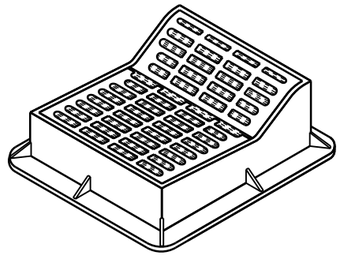
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CURB AND GUTTER GRADES	SHEET 64	E

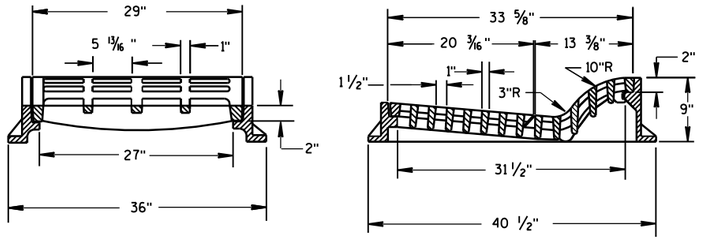
FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\050202_PN.DWG PLOT DATE : 1/23/2014 2:43 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44

Standard Detail Drawing List

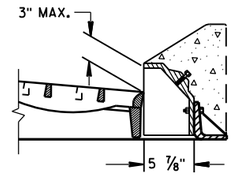
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F08-02	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED CROSS DRAINS
11B01-05	CONCRETE CORRUGATED MEDIAN
14B07-13A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-01A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
15A01-11	MARKER POST FOR RIGHT-OF-WAY
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C11-05	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15C18-03	MEDIAN ISLAND MARKING
15D28-02	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

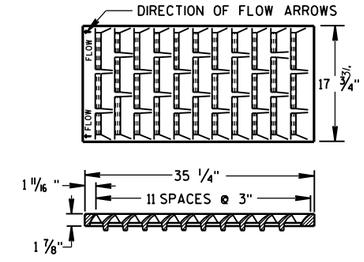
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

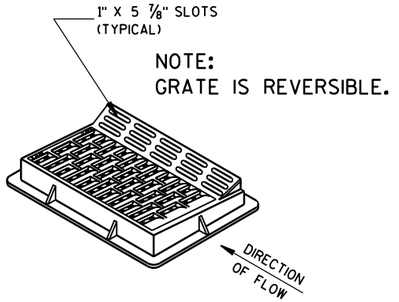
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

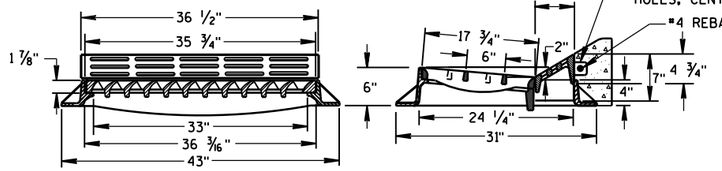
GENERAL NOTES

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

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



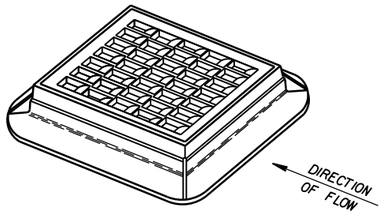


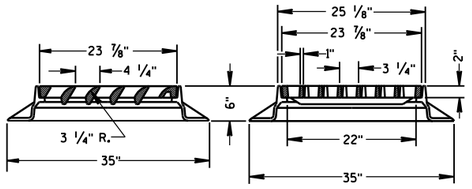


TYPE "HM"

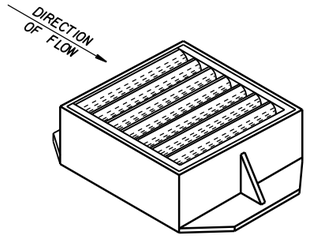
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

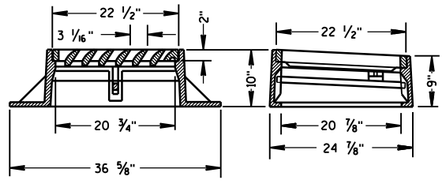
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



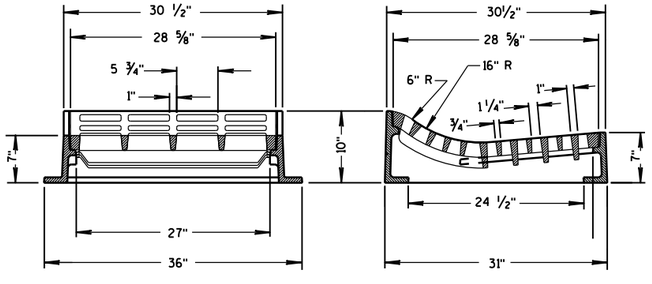


TYPE "S"



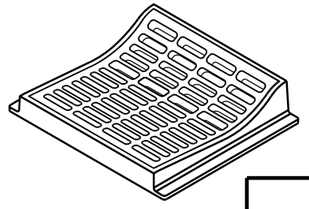


TYPE "V"



TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

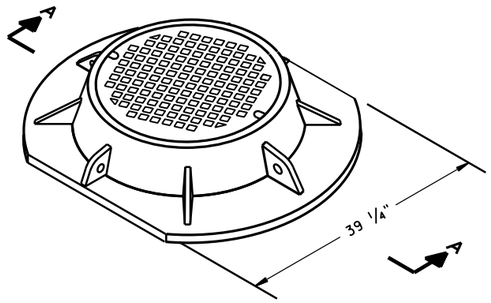
FHWA

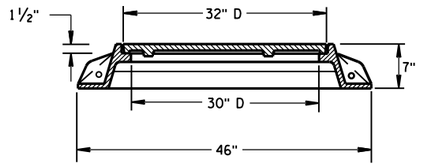
6

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

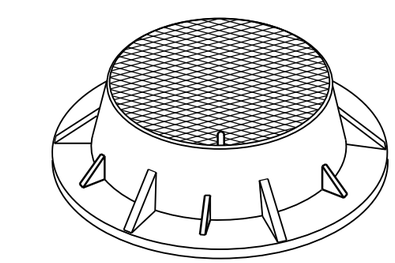
6

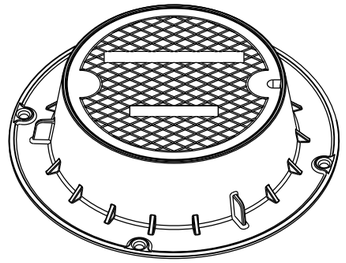
S.D.D. 8 A 5-19c

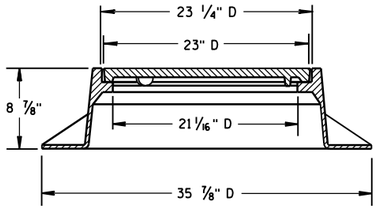


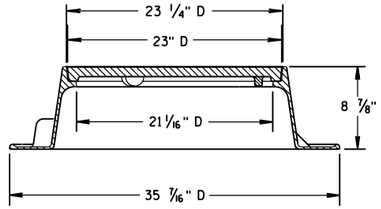


SECTION A-A
TYPE "K"









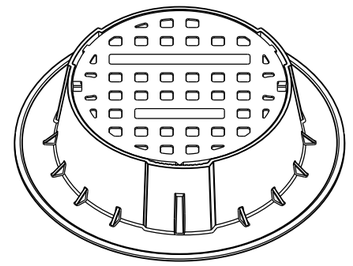
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

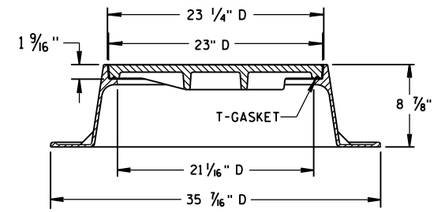
GENERAL NOTES

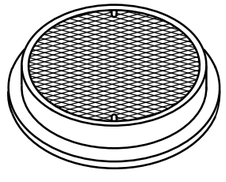
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

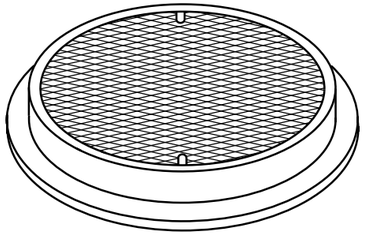
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

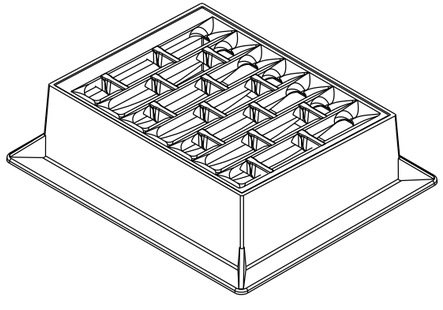
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

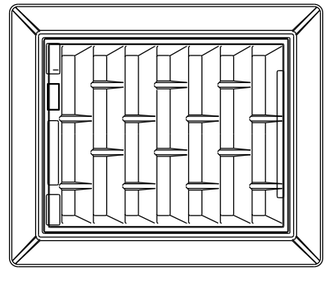


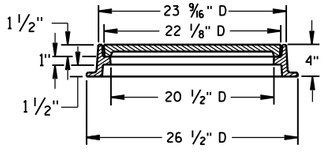












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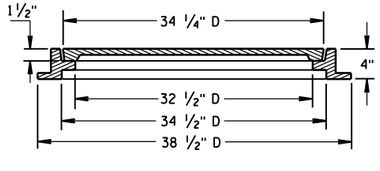

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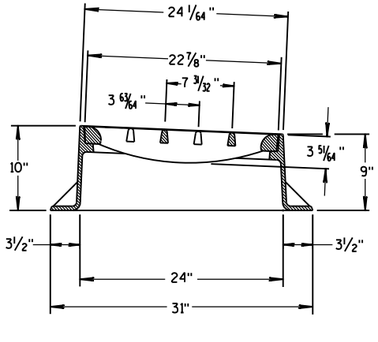
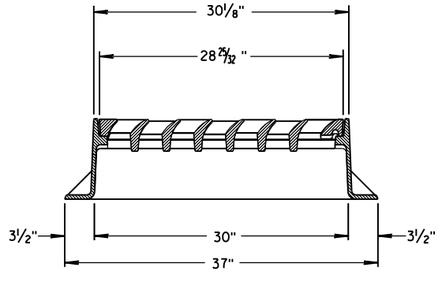
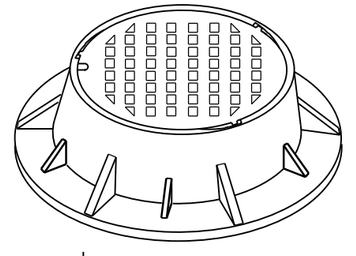
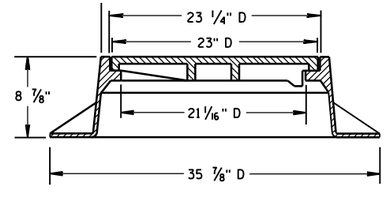




INLET COVER TYPE "BW"





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

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

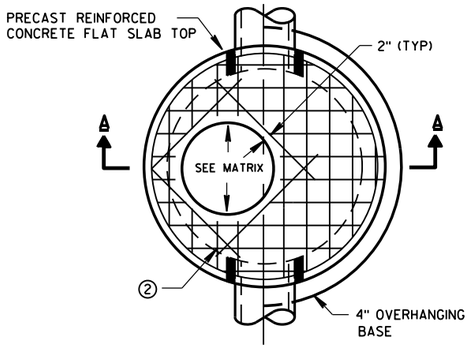
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

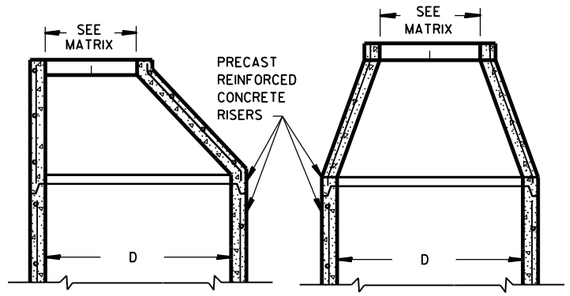
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

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

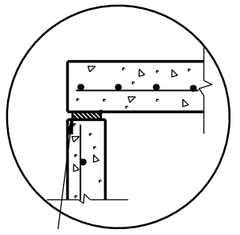


PLAN VIEW CIRCULAR OPENING

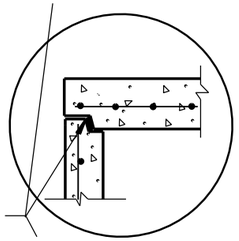


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

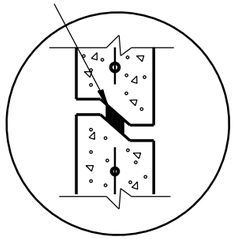


TOP WITH PLAIN END JOINT



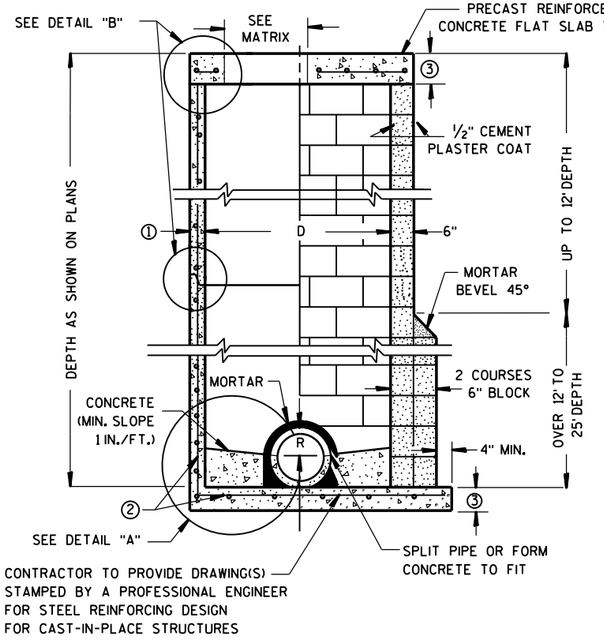
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



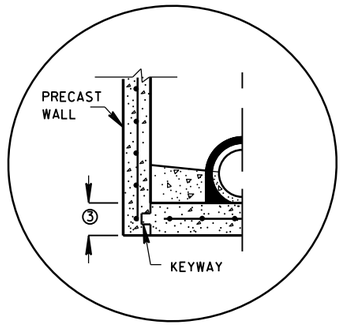
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

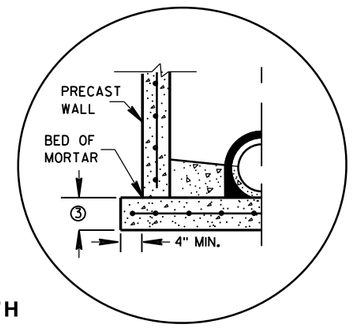


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

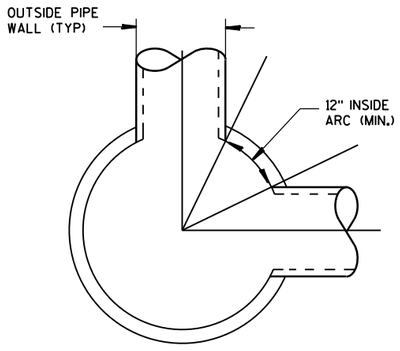


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

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

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

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

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF 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

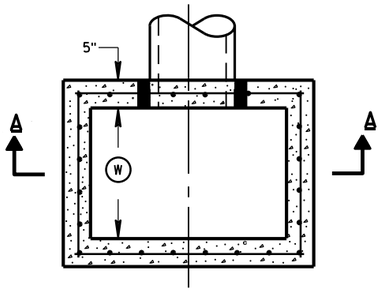
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

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

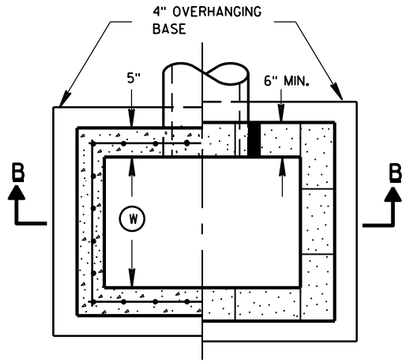
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

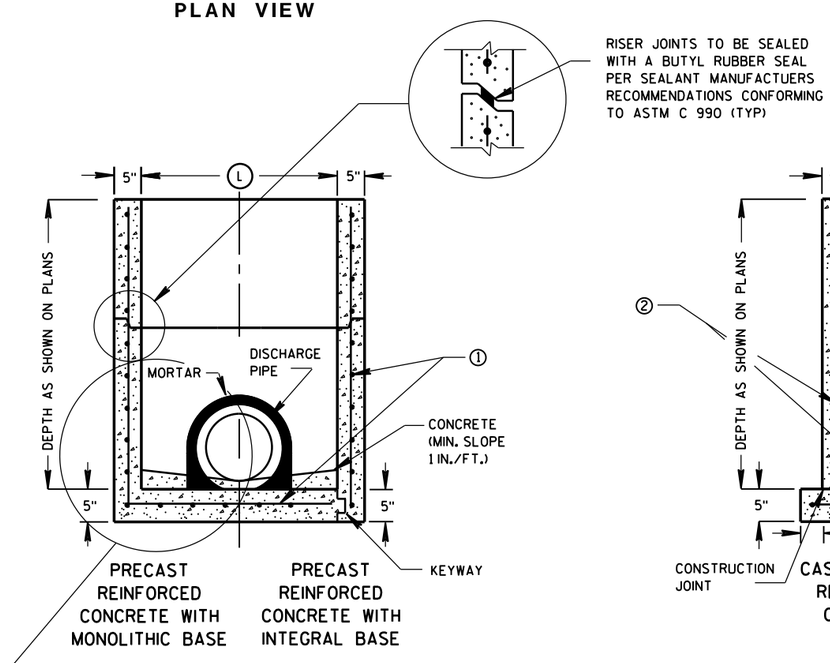
S.D.D. 8 B 9-1



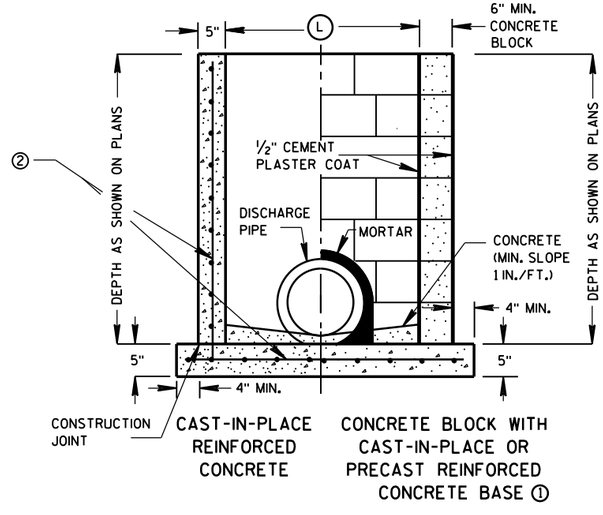
PLAN VIEW



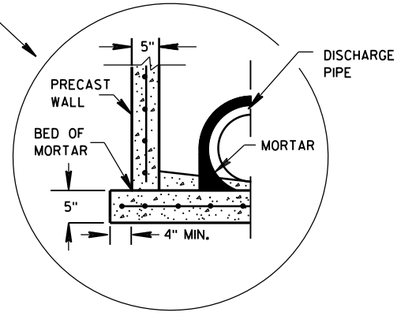
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

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 INLET 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 PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES 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.

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

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

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND 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.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

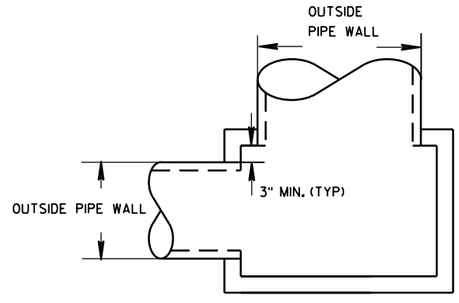
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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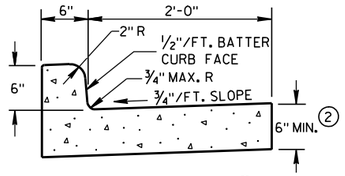
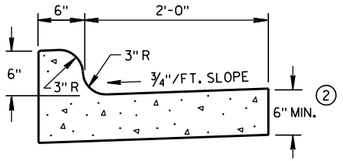
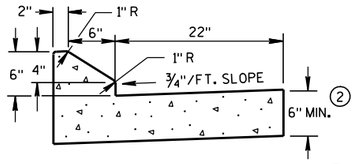
S.D.D. 8 C 7-1



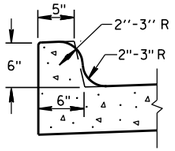
TYPES A & D (1)



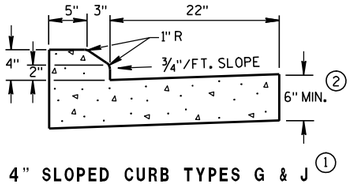
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

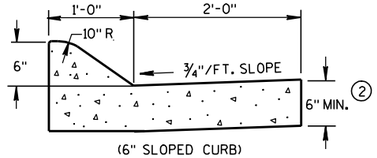


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

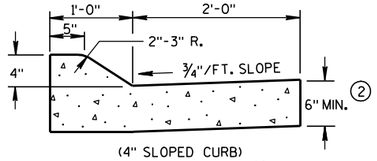


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

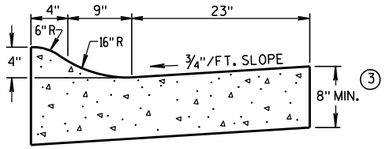


(6" SLOPED CURB)



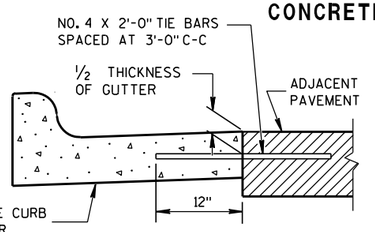
(4" SLOPED CURB)

TYPES A & D (1)

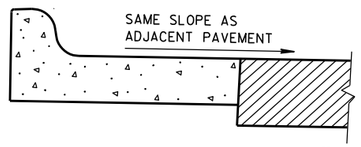


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION (1)



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

GENERAL NOTES

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

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

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

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

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

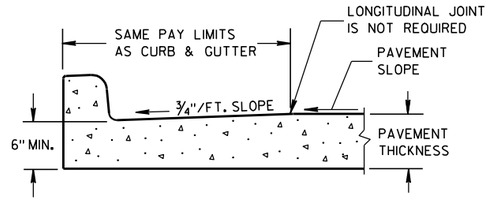
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

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

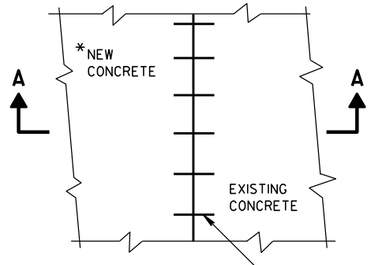
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

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

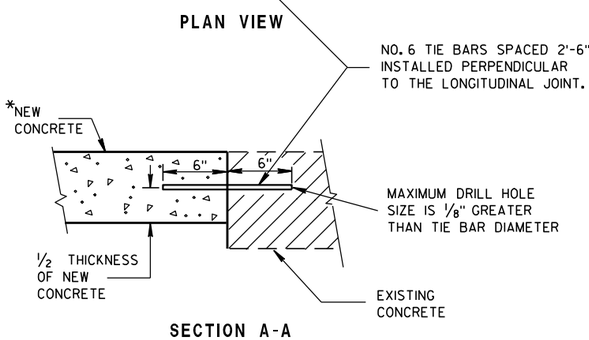


PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



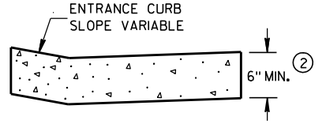
PLAN VIEW

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

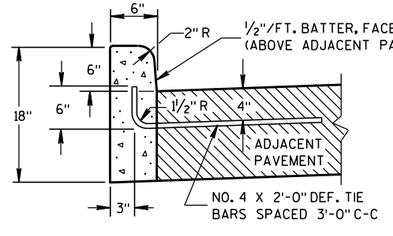


SECTION A-A

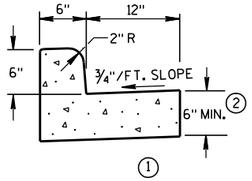
TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

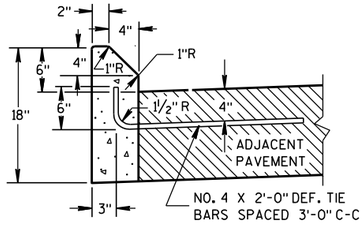


(1) TYPES A & D

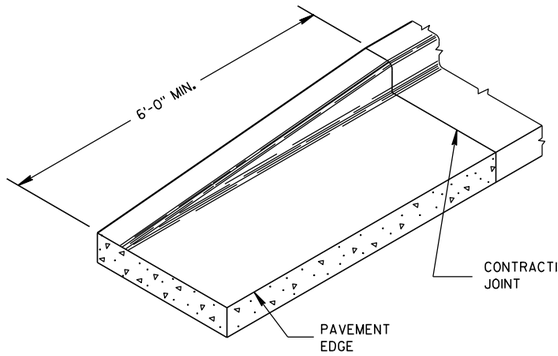


(1) TYPES A & D

CONCRETE CURB & GUTTER 18"



(1) TYPES G & J



END SECTION CURB & GUTTER

CONCRETE CURB

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
9/4/08 DATE	/S/ Jerry H. [illegible] ROADWAY STANDARDS ENGINEER
FHWA	70 ENT

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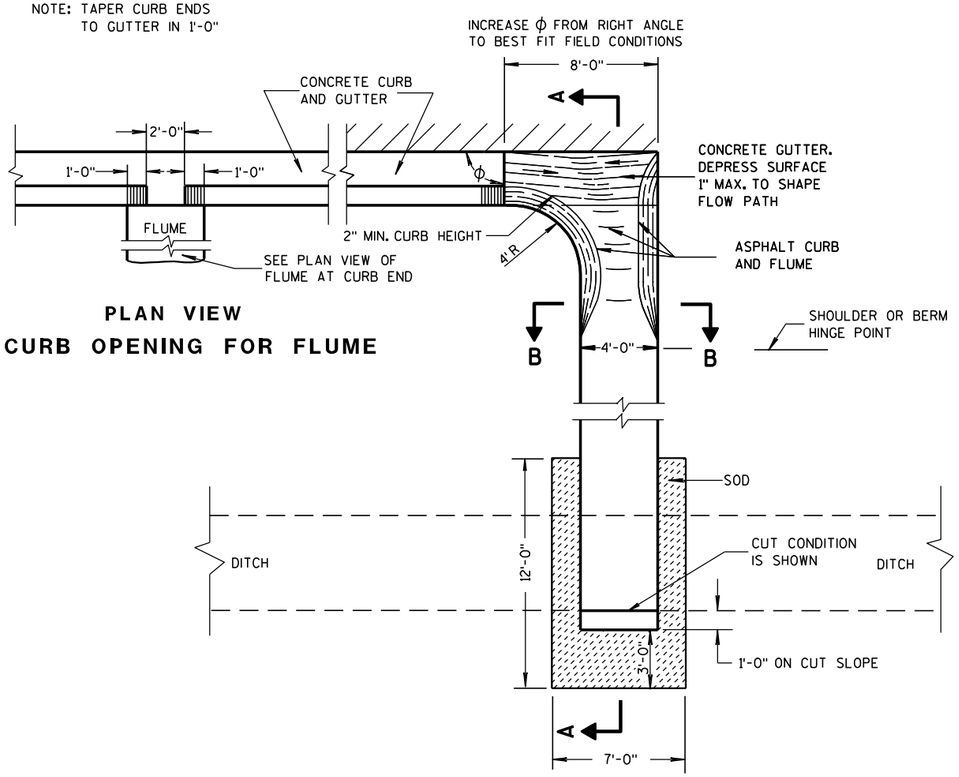
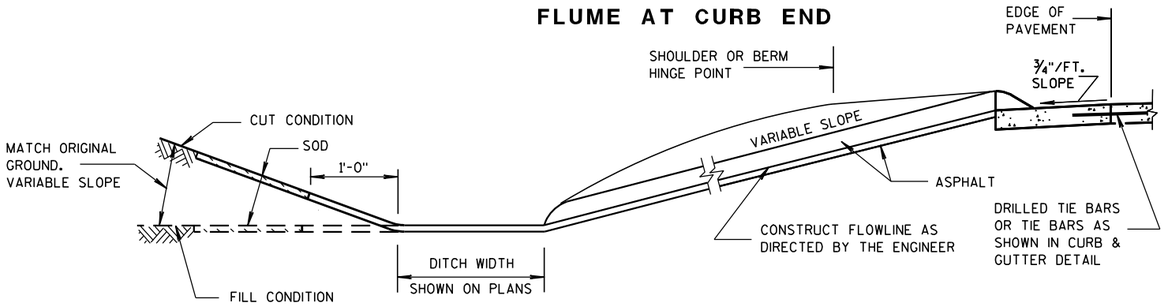
ASPHALTIC FLUME

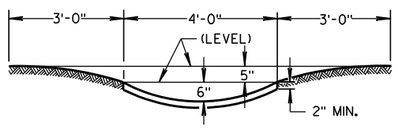


PLAN VIEW
CURB OPENING FOR FLUME

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.

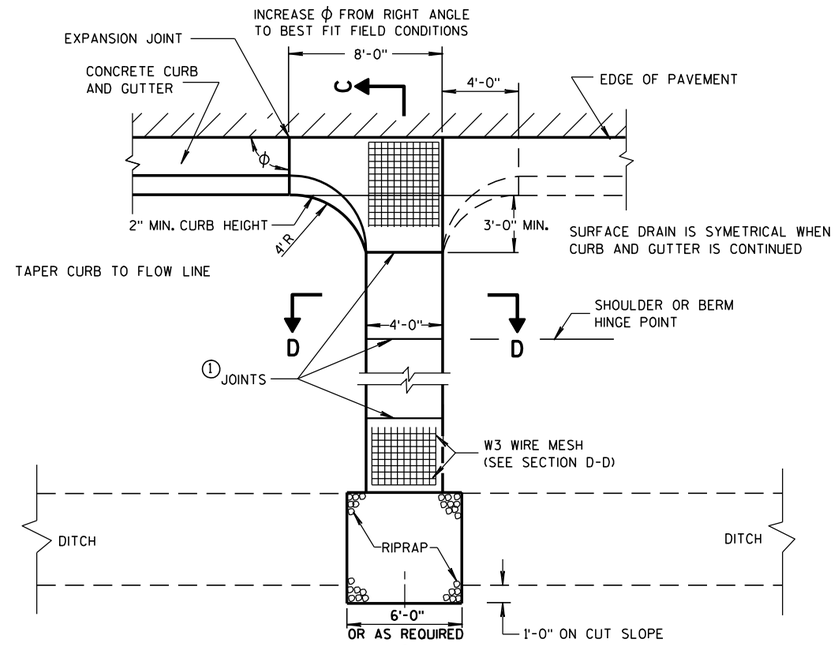
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE ⅛ TO ¼ INCH WIDE BY 1½ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

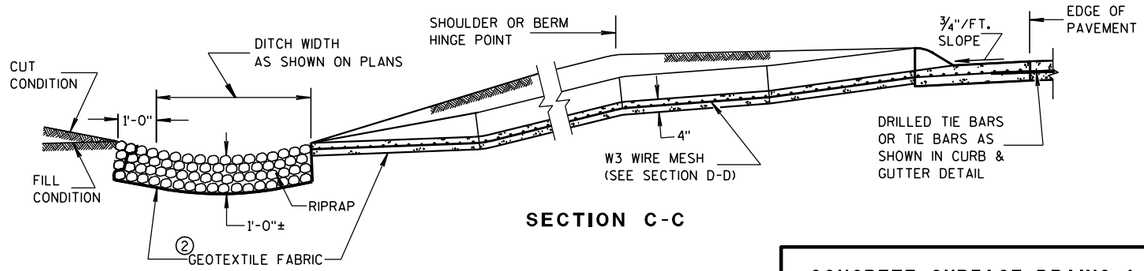
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

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

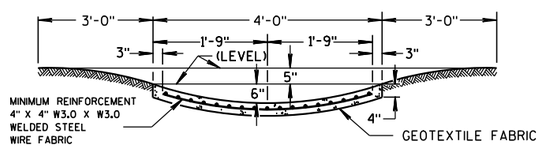
③ CONCRETE SURFACE DRAIN



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. ... ROADWAY STANDARDS ENGINEER
MENT
FHWA

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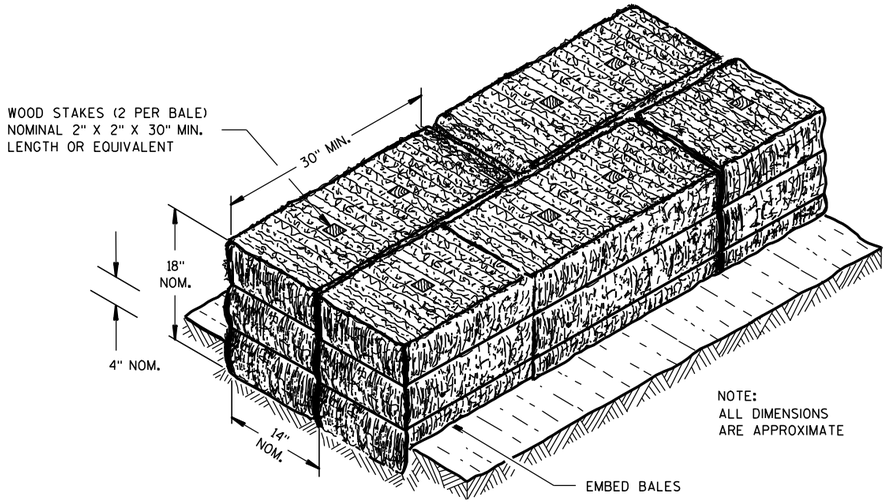
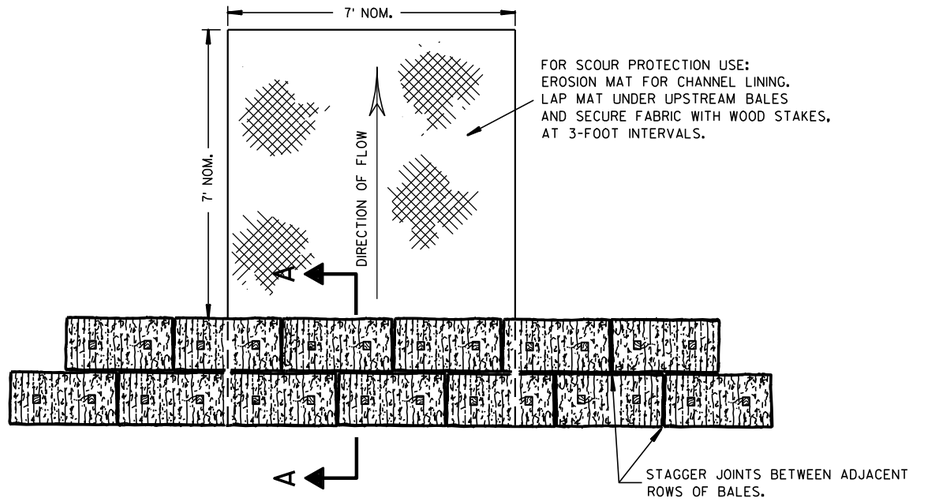
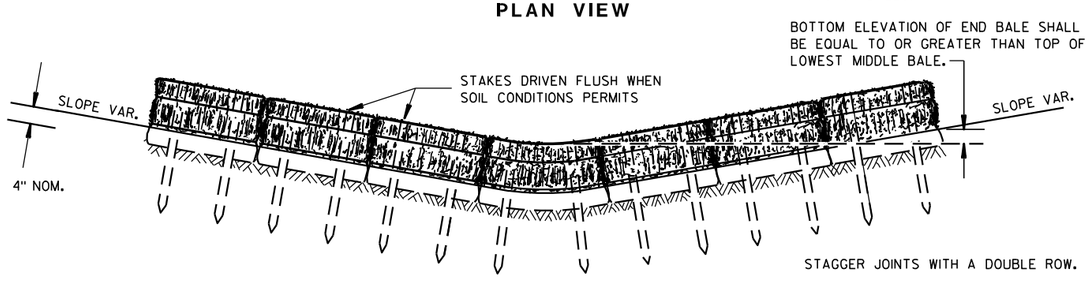


SECTION A-A



PLAN VIEW



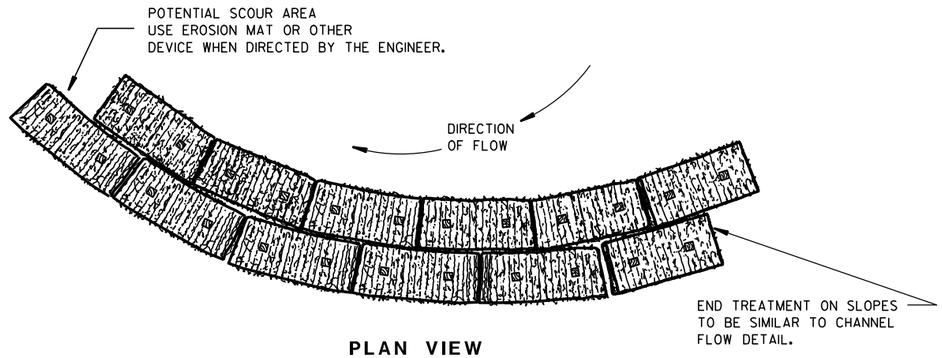
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

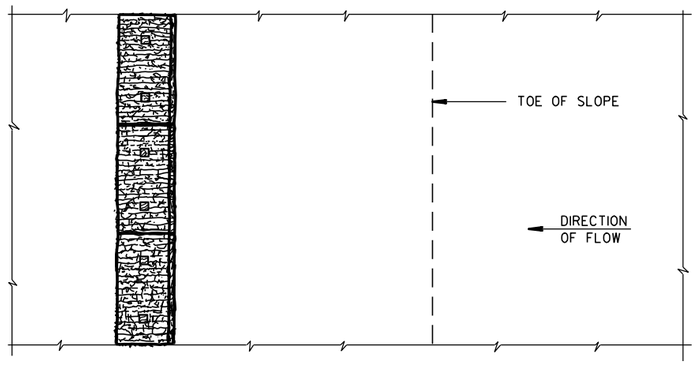
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

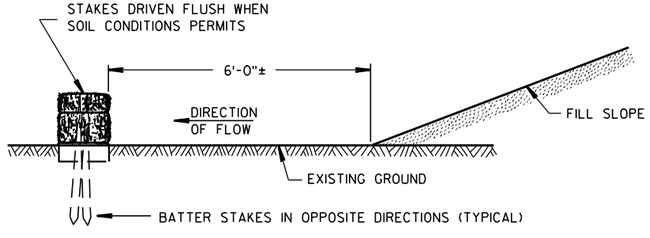


PLAN VIEW

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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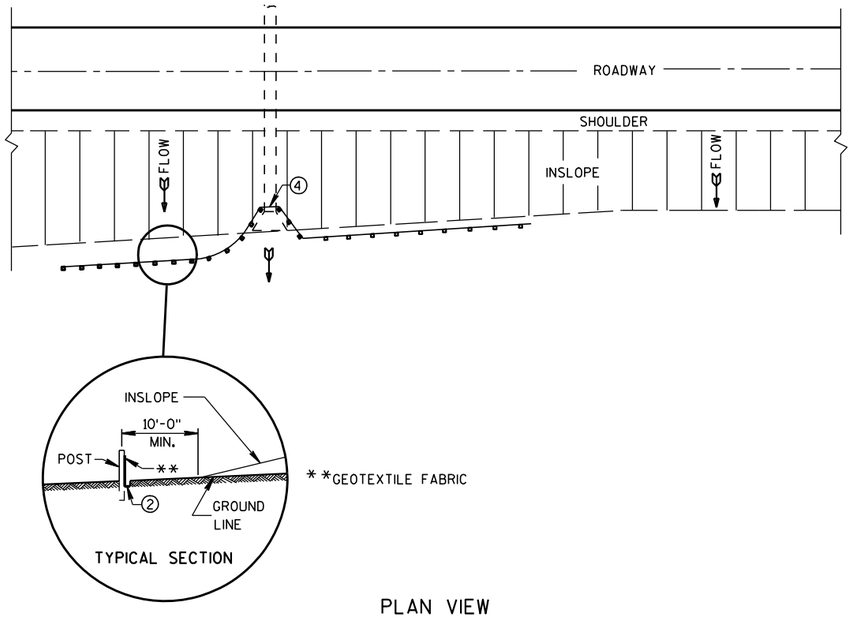
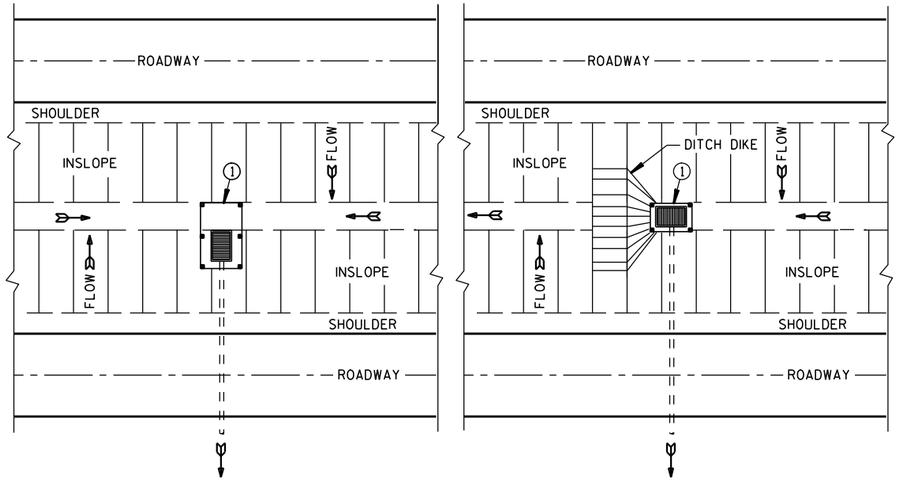


PLAN VIEW

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.

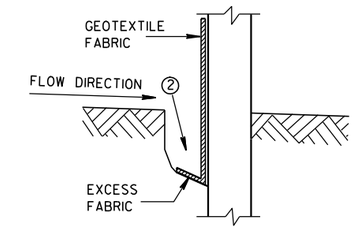
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

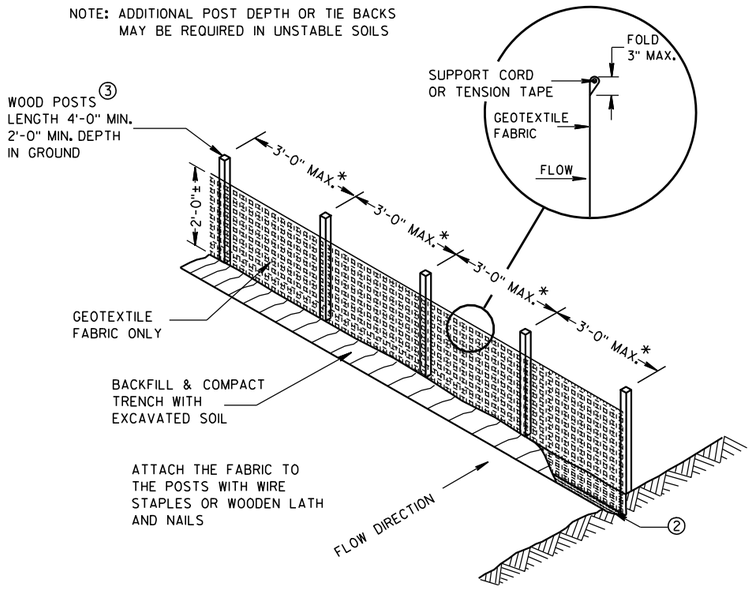
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

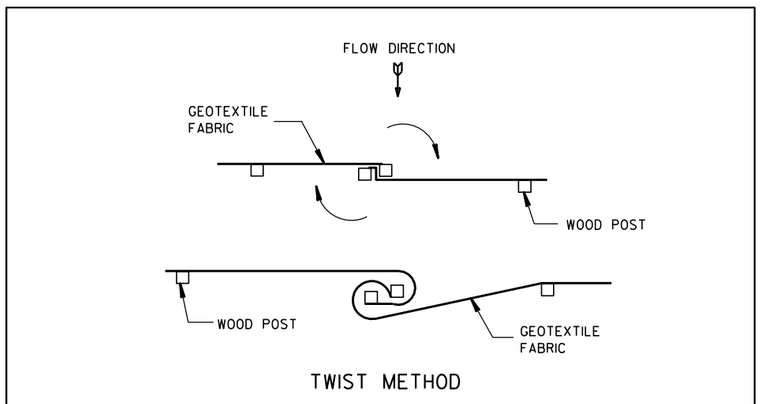
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



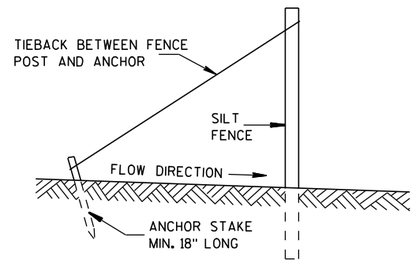
TRENCH DETAIL



SILT FENCE



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

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S.D.D. 8 E 9-6

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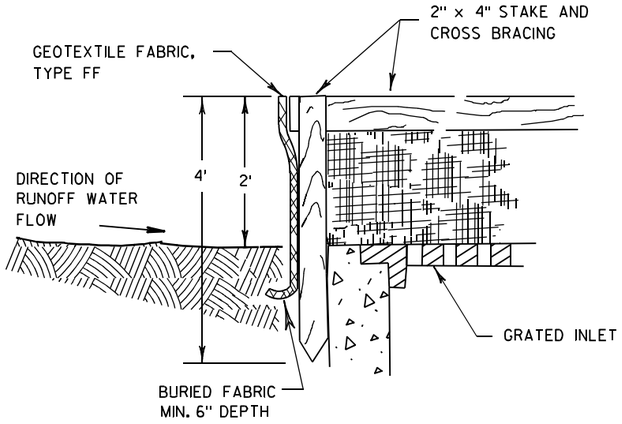
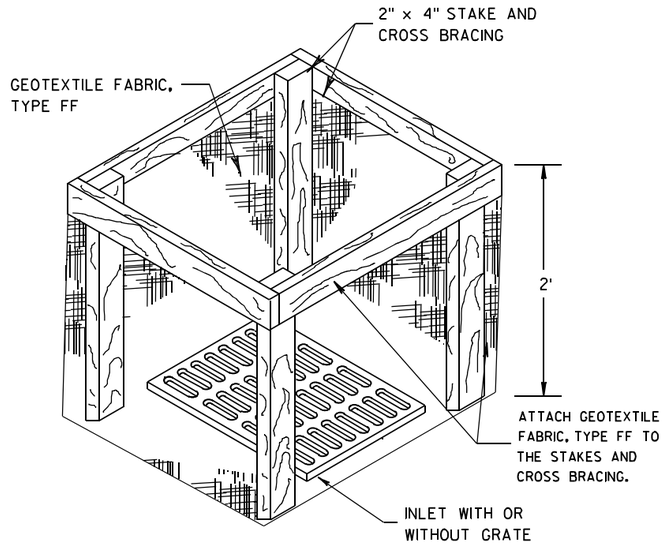
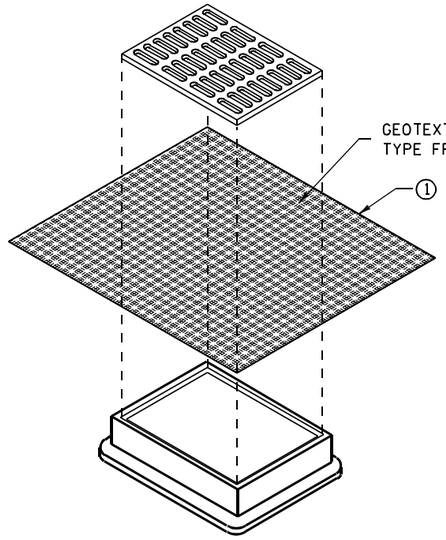


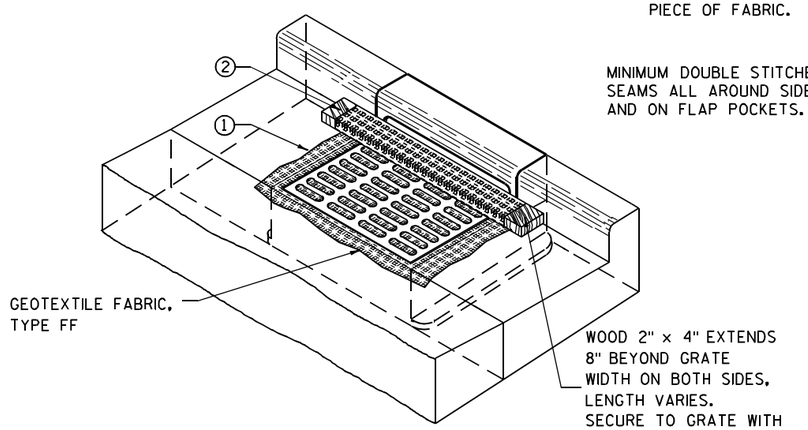


INLET PROTECTION, TYPE A

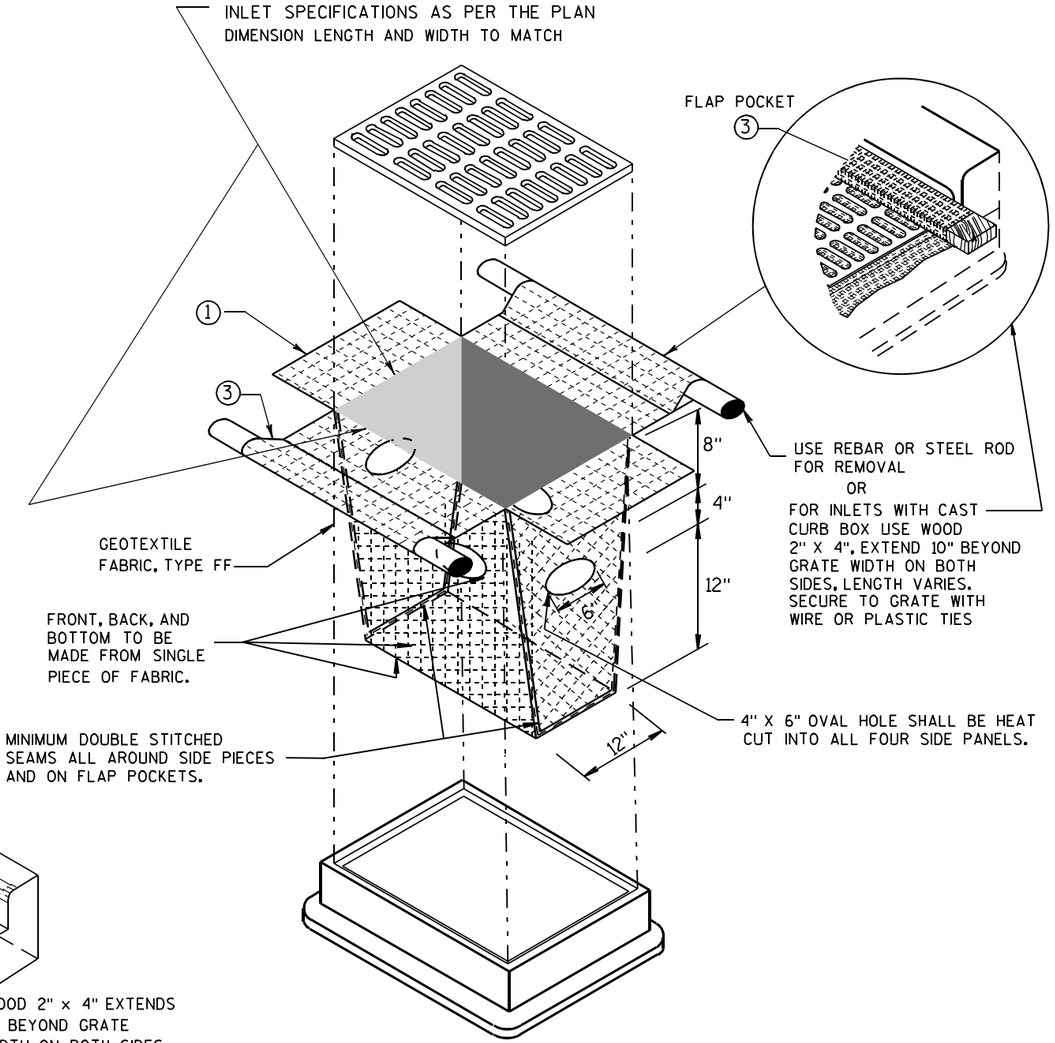


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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S.D.D. 8 E 10-2

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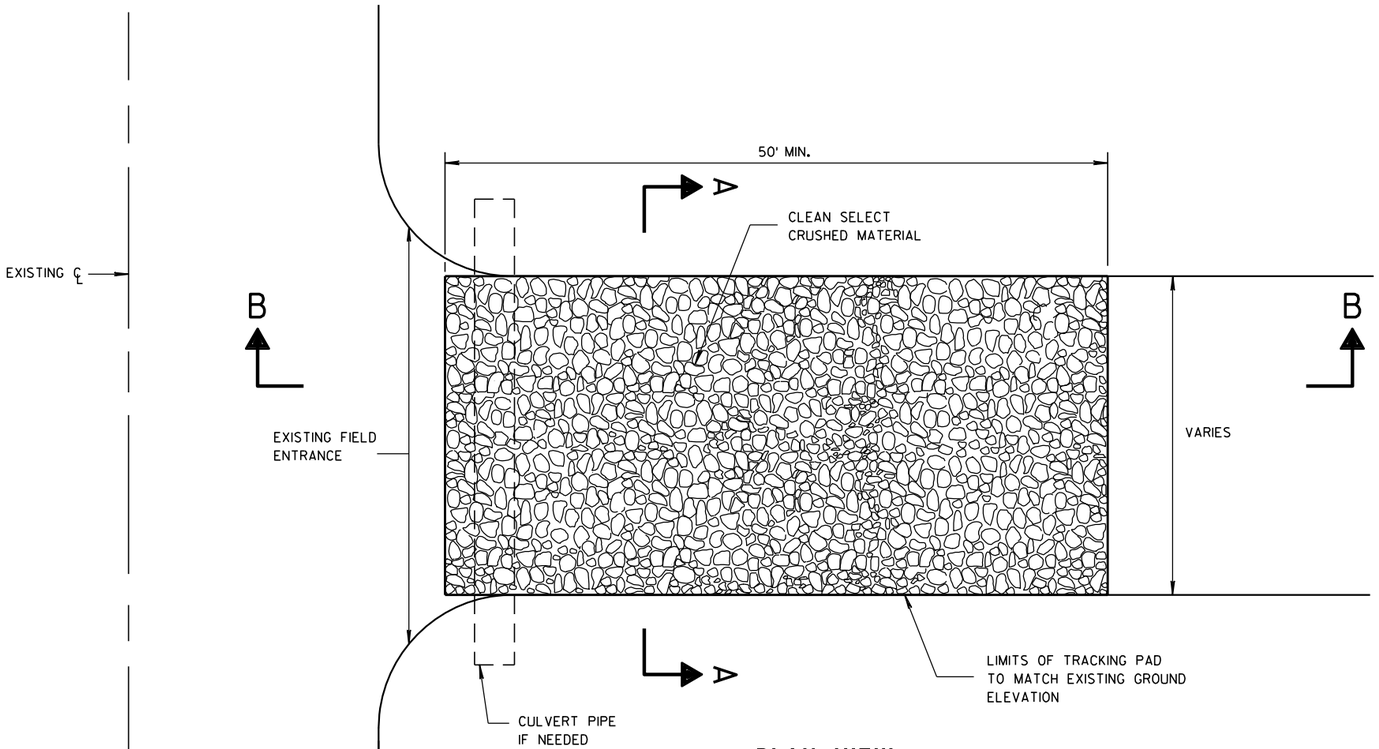
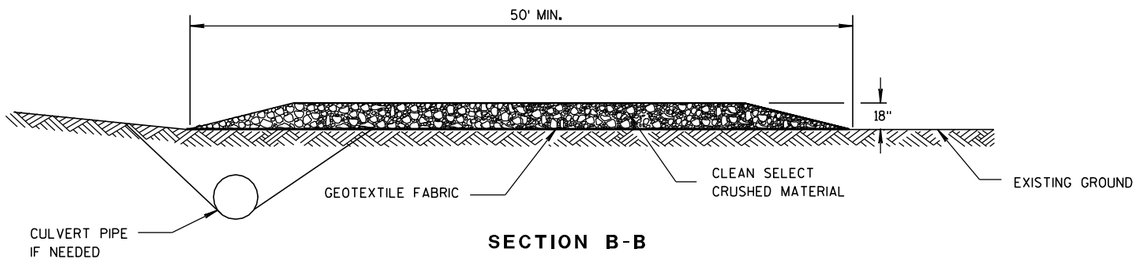
S.D.D. 8 E 10-2



PLAN VIEW



SECTION B-B

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.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

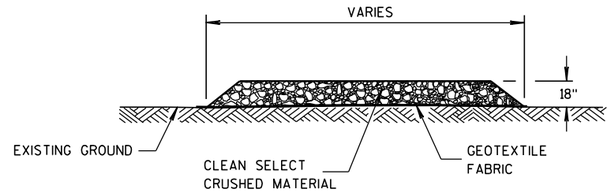
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2011 — DATE
/S/ Jerry H. Zona — ROADWAY STANDARDS ENGINEER
75
ENT
FHWA

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S.D.D. 8 E 14-1

METAL APRON ENDWALLS

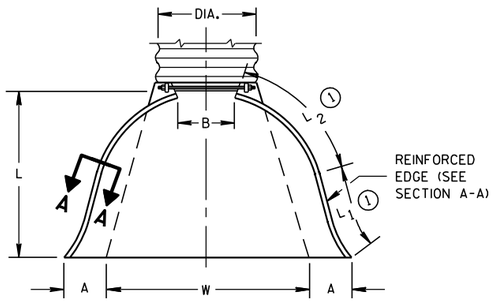
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

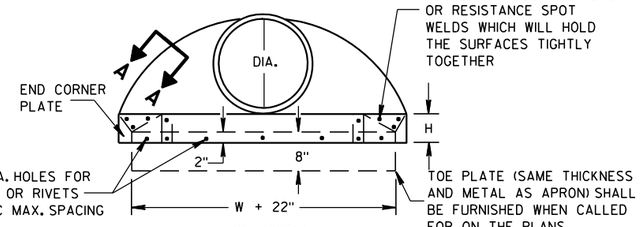
REINFORCED CONCRETE APRON ENDWALLS

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

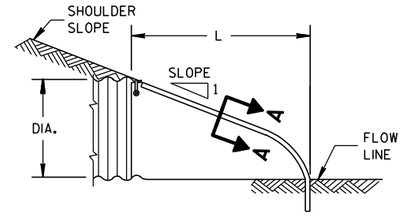
*MINIMUM
**MAXIMUM



PLAN VIEW

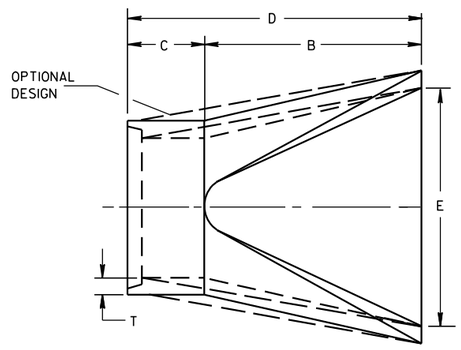


END VIEW

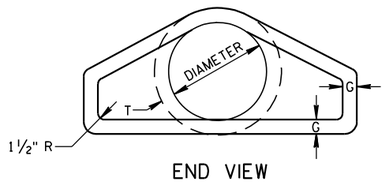


SIDE ELEVATION

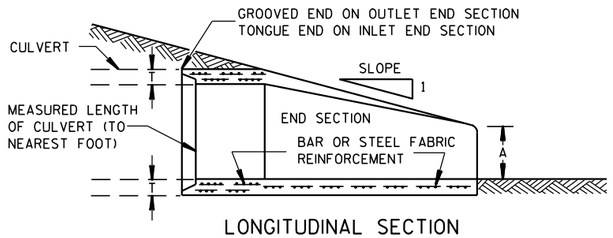
METAL ENDWALLS



PLAN

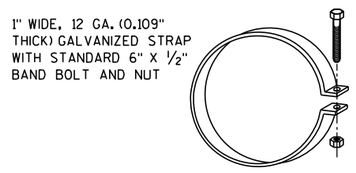


END VIEW



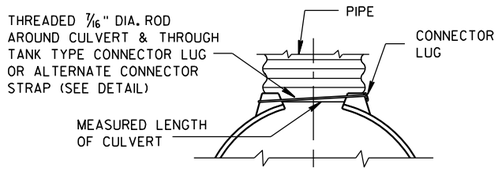
LONGITUDINAL SECTION

CONCRETE ENDWALLS

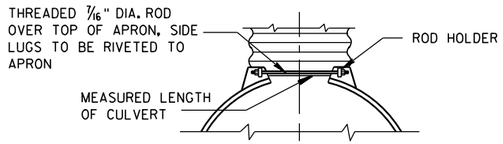


ALTERNATE FOR TYPE 1 CONNECTION

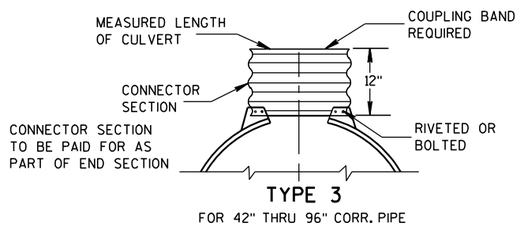
END SECTION CONNECTOR STRAP



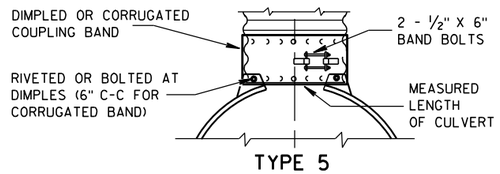
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

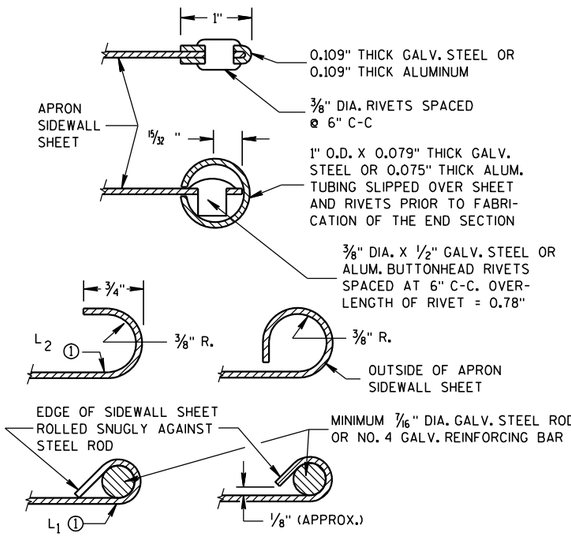
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

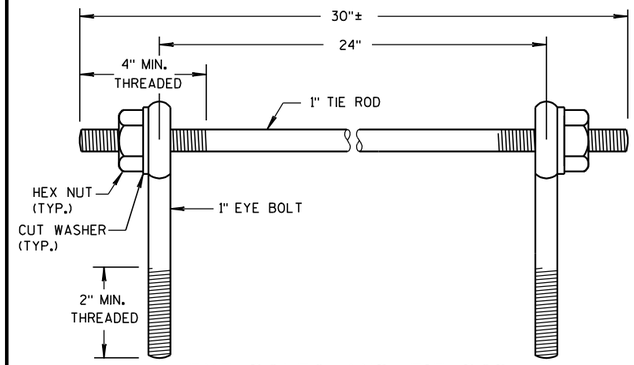
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

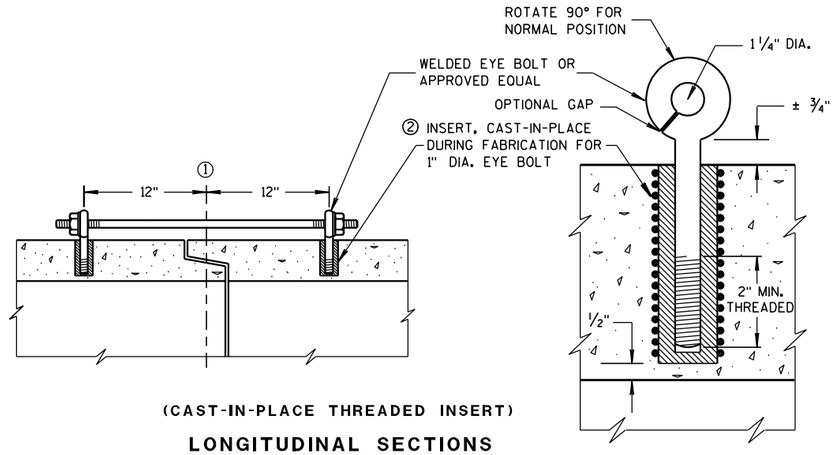
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

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

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

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

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

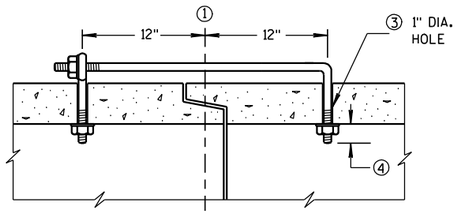
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

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

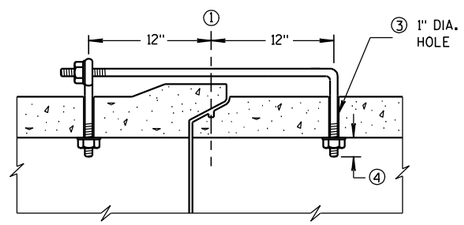
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

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



(TONGUE & GROOVE PIPE)

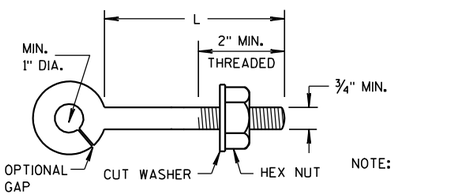


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

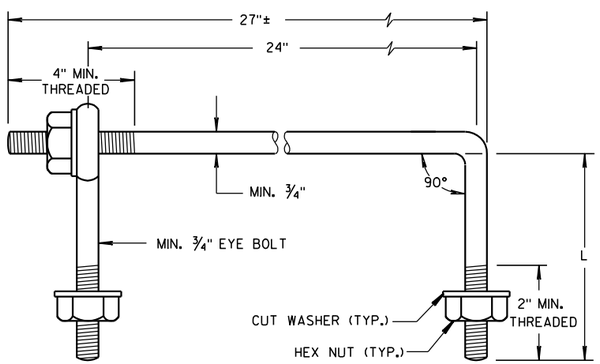
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

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



EYE BOLT AND TIE ROD

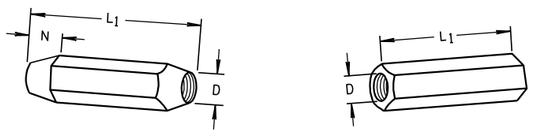
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

ADJUSTABLE TIE ROD TABLE

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

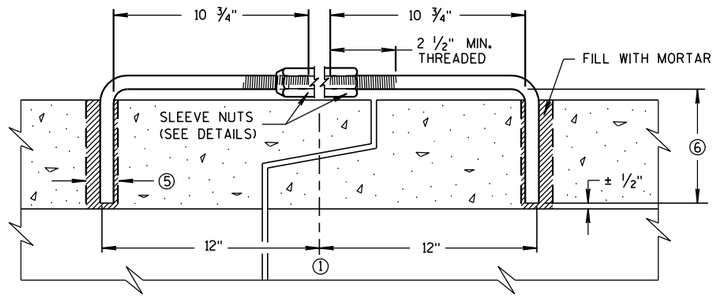
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

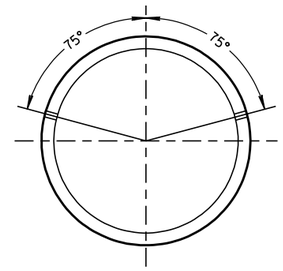
SLEEVE NUTS



LONGITUDINAL SECTION

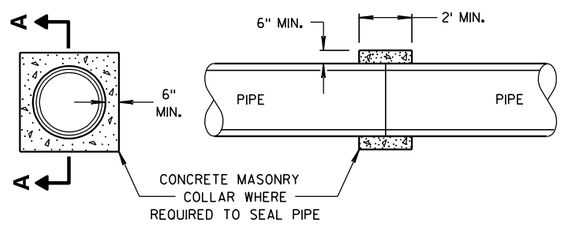
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

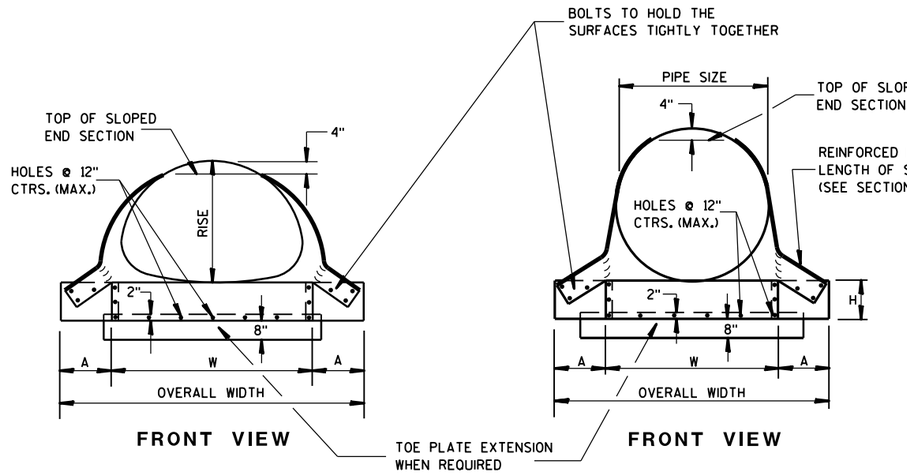
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
77 — 'MENT
FHWA

6

S.D.D. 8 F 4-7

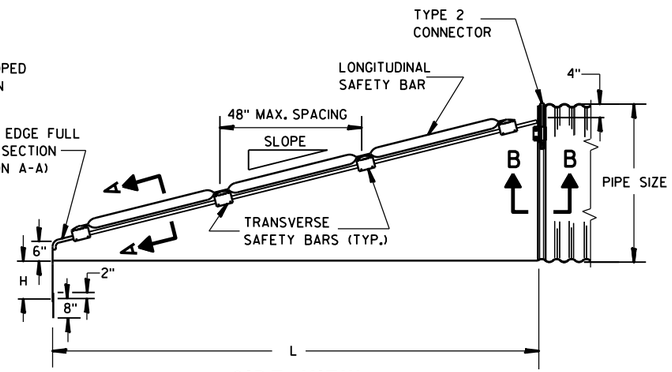
6

S.D.D. 8 F 4-7



FRONT VIEW

FRONT VIEW



SIDE VIEW
(48" SIZE ILLUSTRATED)

GENERAL NOTES

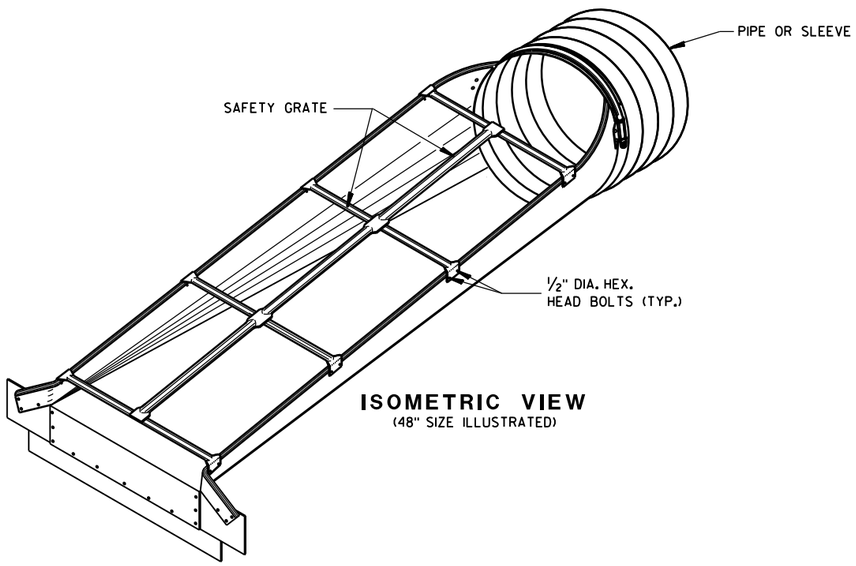
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

SAFETY GRATES SHALL BE FABRICATED FROM 3-INCH DIAMETER GALVANIZED PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL. THE LONGITUDINAL BAR SHALL BE WELDED TO THE TRANSVERSE BARS WHERE THE BARS CROSS. THE NUMBER OF TRANSVERSE BARS REQUIRED WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

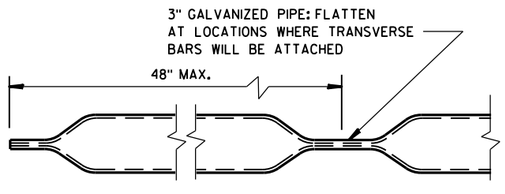
SLOPED STEEL ENDWALLS LOCATED AT THE ENDS OF CONCRETE CULVERT PIPE SHALL BE FURNISHED WITH STEEL ADAPTER SLEEVES.

STEEL APRON ENDWALLS FOR CULVERT PIPE CROSS DRAINS

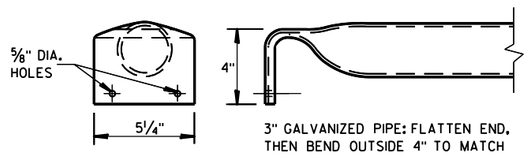
PIPE DIA. (IN.)	MIN. THICK.		DIMENSIONS (Inches)				L DIMENSIONS			
	IN.	GAGE	A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
36	.109	12	12	9	42	66	4:1	104	6:1	156
42	.109	12	16	12	48	80	4:1	128	6:1	192
48	.109	12	16	12	54	86	4:1	152	6:1	228
54	.109	12	16	12	60	92	4:1	176	6:1	264
60	.109	12	16	12	66	98	4:1	200	6:1	300



ISOMETRIC VIEW
(48" SIZE ILLUSTRATED)



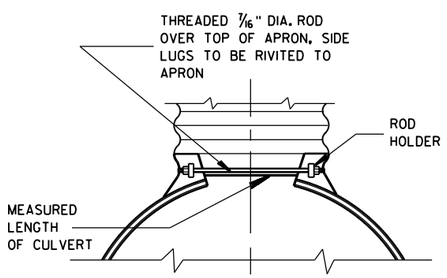
LONGITUDINAL SAFETY BAR



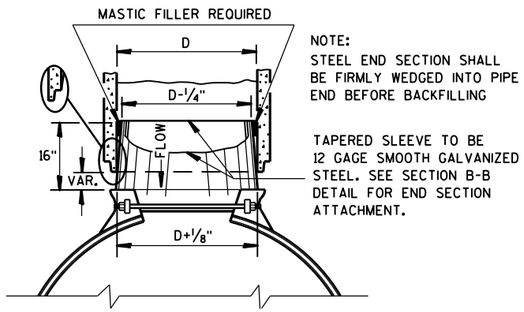
TRANSVERSE SAFETY BAR

STEEL APRON ENDWALLS FOR PIPE ARCH SLOPED CROSS DRAINS

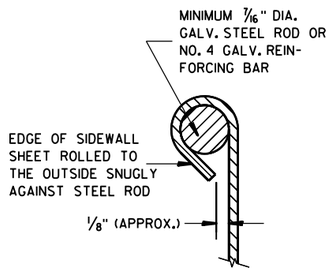
EQUIV. DIA. (IN.)	INCHES		MIN. THICK.		DIMENSIONS (Inches)				L DIMENSIONS			
	SPAN	RISE	IN.	GAGE	A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
30	35	24	.079	14	12	9	41	65	4:1	56	6:1	84
36	42	29	.109	12	12	9	48	72	4:1	76	6:1	114
42	49	33	.109	12	16	12	55	87	4:1	92	6:1	138
48	57	38	.109	12	16	12	63	95	4:1	112	6:1	168
54	64	43	.109	12	16	12	70	102	4:1	132	6:1	198
60	71	47	.109	12	16	12	77	109	4:1	148	6:1	222



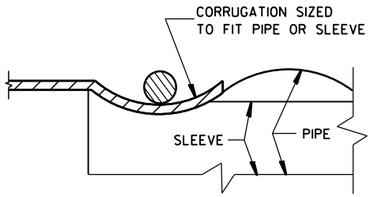
TYPE 2 CONNECTOR DETAIL



STEEL ADAPTER SLEEVE FOR CONCRETE PIPE



SECTION A-A



SECTION B-B

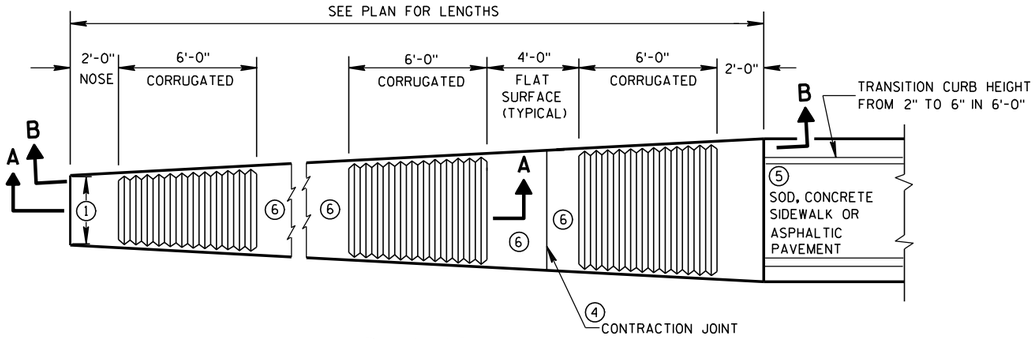
STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED CROSS DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

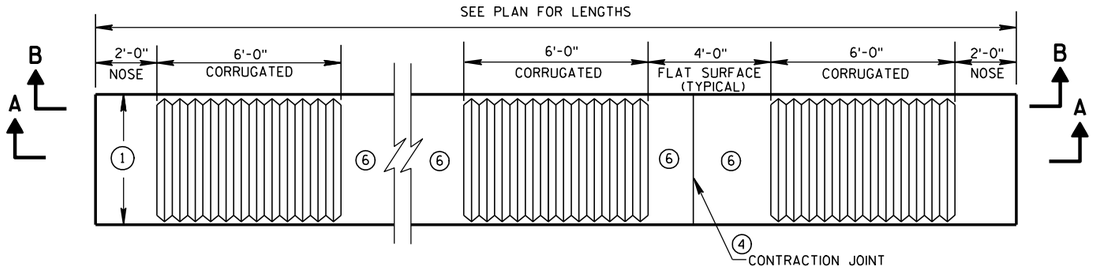
6

S.D.D. 8 F 8-2



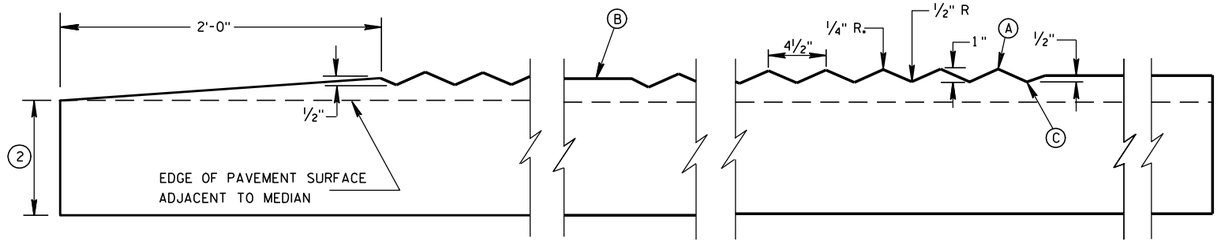
PLAN VIEW

VARIABLE WIDTH CONCRETE CORRUGATED MEDIAN



PLAN VIEW

UNIFORM WIDTH CONCRETE CORRUGATED MEDIAN



SECTION A-A

LONGITUDINAL SECTION

GENERAL NOTES

(1) SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.

(2) THE DEPTH OF THE CONCRETE CORRUGATED MEDIAN SHALL BE 9-INCHES UNLESS SHOWN OTHERWISE IN THE PLAN.

ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

(2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE, OR PAVEMENT.

(3) ASPHALTIC PAVEMENT OVER BASE AGGREGATE DENSE.

(3) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

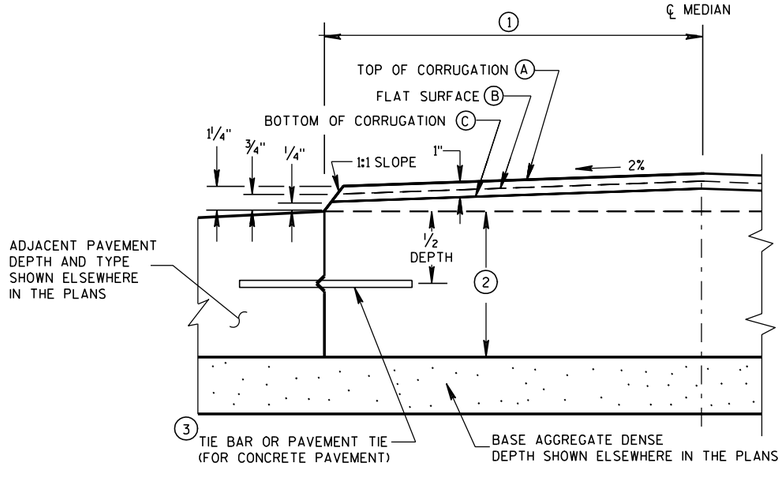
INSTALL TIE BARS TO MAINTAIN A MINIMUM OF 3-INCHES OF COVER BETWEEN THE TIE BAR AND THE CONCRETE SURFACE (BOTTOM AND TOP).

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR CONCRETE BASE COURSE, PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(4) CONCRETE CORRUGATED MEDIAN CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT. WHERE ADJACENT PAVEMENT IS ASPHALT WITH BASE AGGREGATE DENSE. TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS.

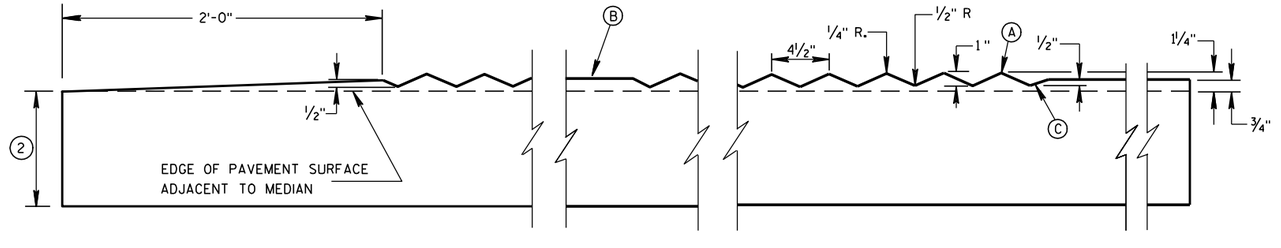
(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.

(6) YELLOW MARKING ON FLAT SURFACE WHEN MEDIAN SEPARATES OPPOSING TRAFFIC.



HALF CROSS SECTION

(2) CONCRETE CORRUGATED MEDIAN AND ADJACENT PAVEMENT



SECTION B-B

LONGITUDINAL SECTION

CONCRETE CORRUGATED MEDIAN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/07 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER

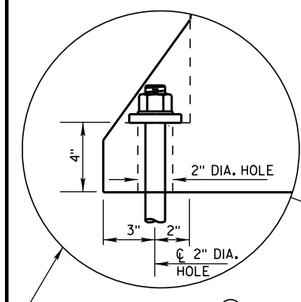
FHWA

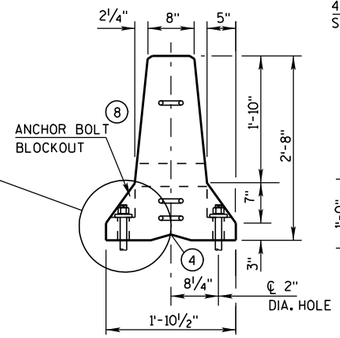
6

S.D.D. 11 B 1-5

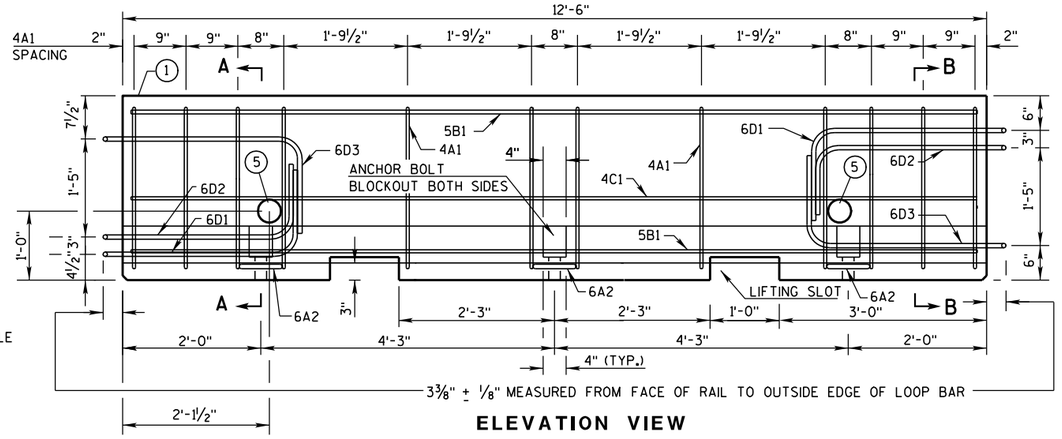
6

S.D.D. 11 B 1-5

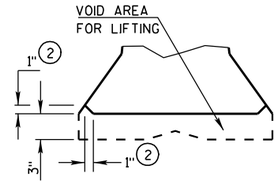




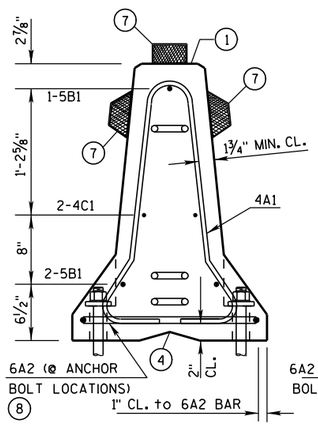
END VIEW



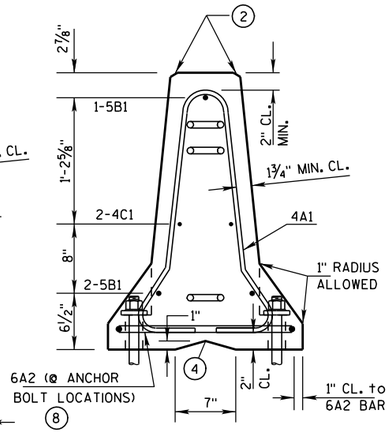
ELEVATION VIEW



DETAIL "B"
LIFTING SLOT DETAIL



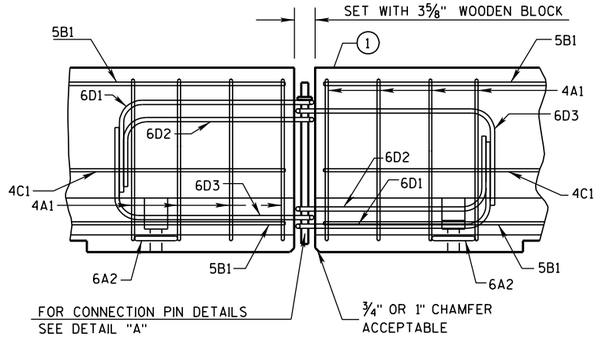
SECTION A-A
(STIRRUP PLACEMENT)



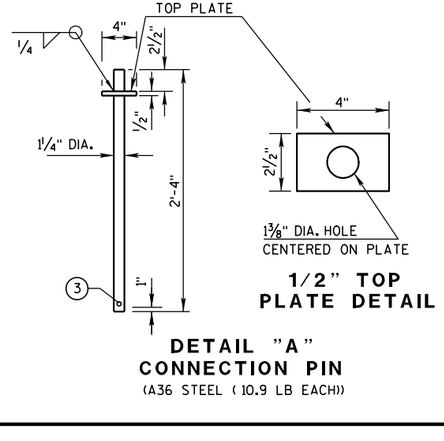
SECTION B-B
(STIRRUP PLACEMENT)

PLAN VIEW

DETAILS OF BARRIER SECTION

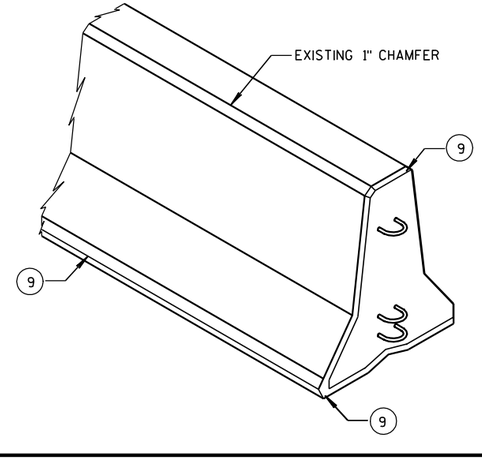


DETAILS OF BARRIER CONNECTION



1/2" TOP PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-13(a) THRU 14B7-13(h).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE ¾" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR EPOXY ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE: WICBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..

(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

(8) SEE SHEET D FOR ANCHORING CRITERIA.

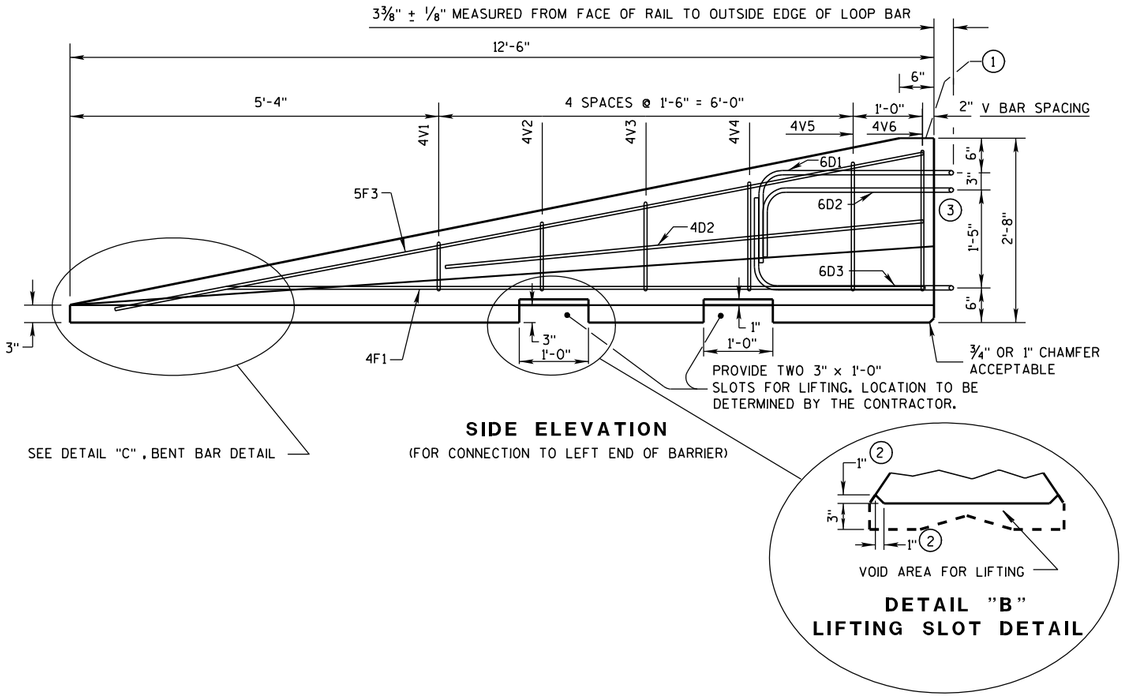
(9) 1" CHAMFER OPTIONAL.

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO.....

6

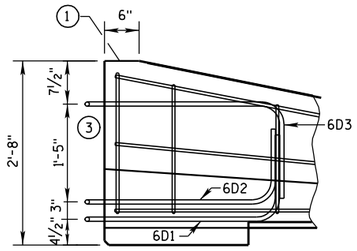
S.D.D. 14 B 7-13a



SIDE ELEVATION

(FOR CONNECTION TO LEFT END OF BARRIER)

DETAIL "B"
LIFTING SLOT DETAIL

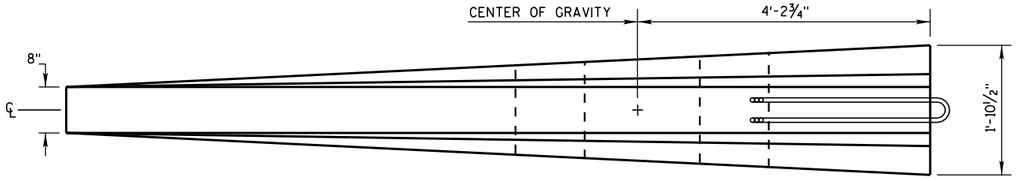


SIDE ELEVATION

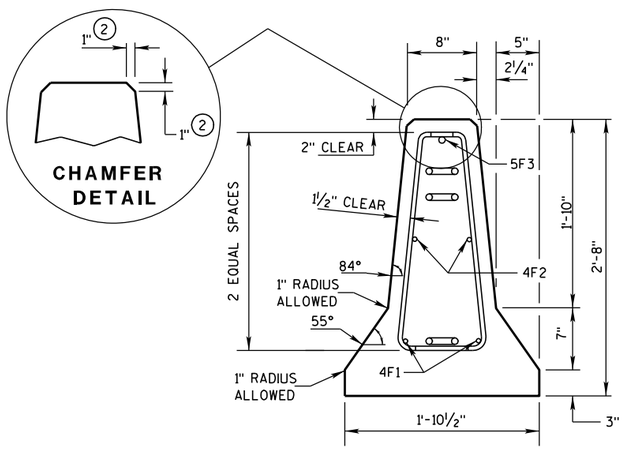
LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

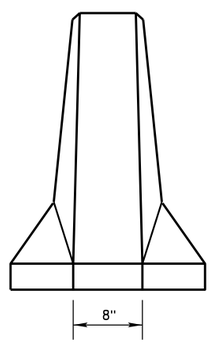
1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



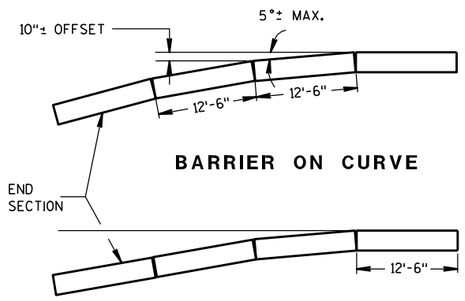
PLAN VIEW



END SECTION



FRONT ELEVATION



BARRIER ON CURVE

FLARE AT BARRIER END

POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 7-13b

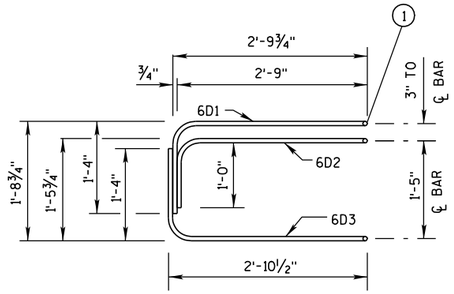
6

S.D.D. 14 B 7-13b

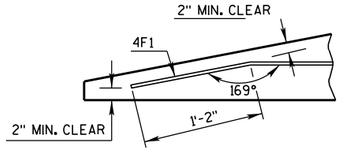
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

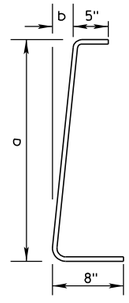
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY



DETAIL "C"
BENT BAR DETAIL



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

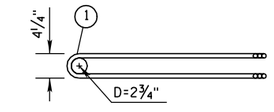
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

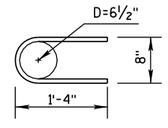
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

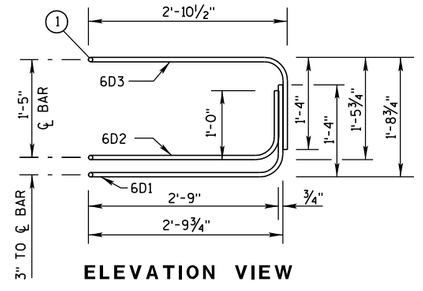
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



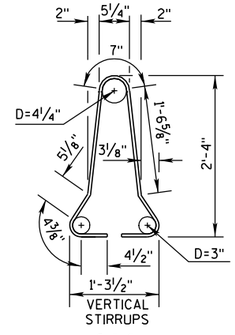
PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



6A2



ELEVATION VIEW



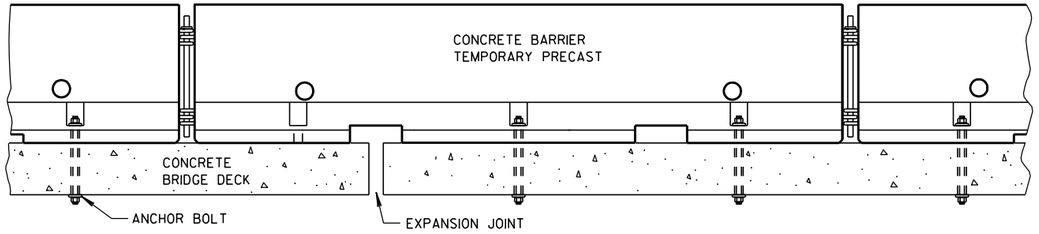
4A1

BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

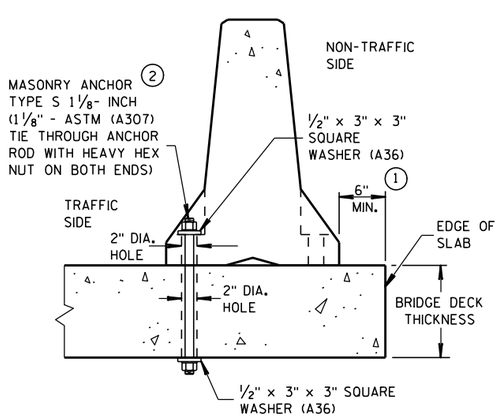
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

6
S.D.D. 14 B 7-13c



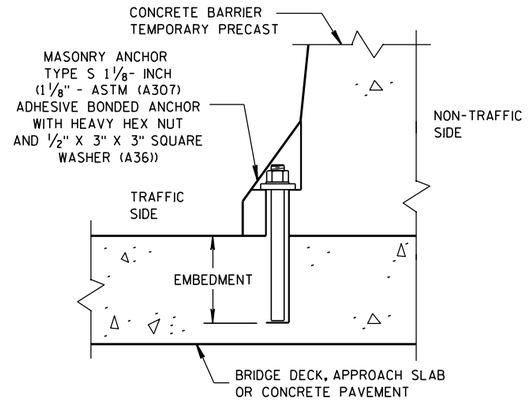
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



REMOVABLE ADHESIVE BONDED ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT ②

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

GENERAL NOTES

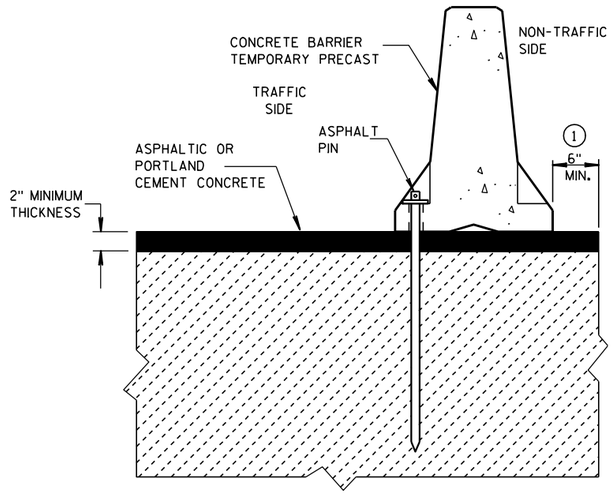
① CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT. IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 40 MPH OR LESS.

② ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

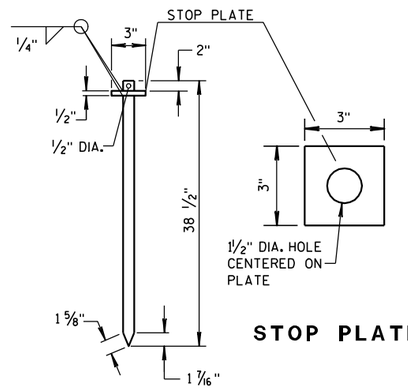
WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED (EPOXY) ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1⅛-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALLANCHOR BOLTS AND COMPLETELY FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CONCRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERICAL GROUT OR EPOXY MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.



STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

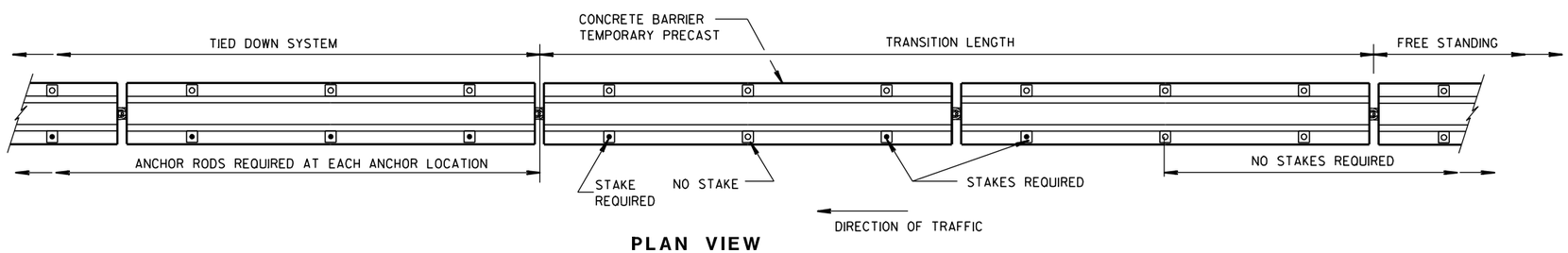
(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



STOP PLATE

ASPHALT PIN

(ASTM A36 STEEL)



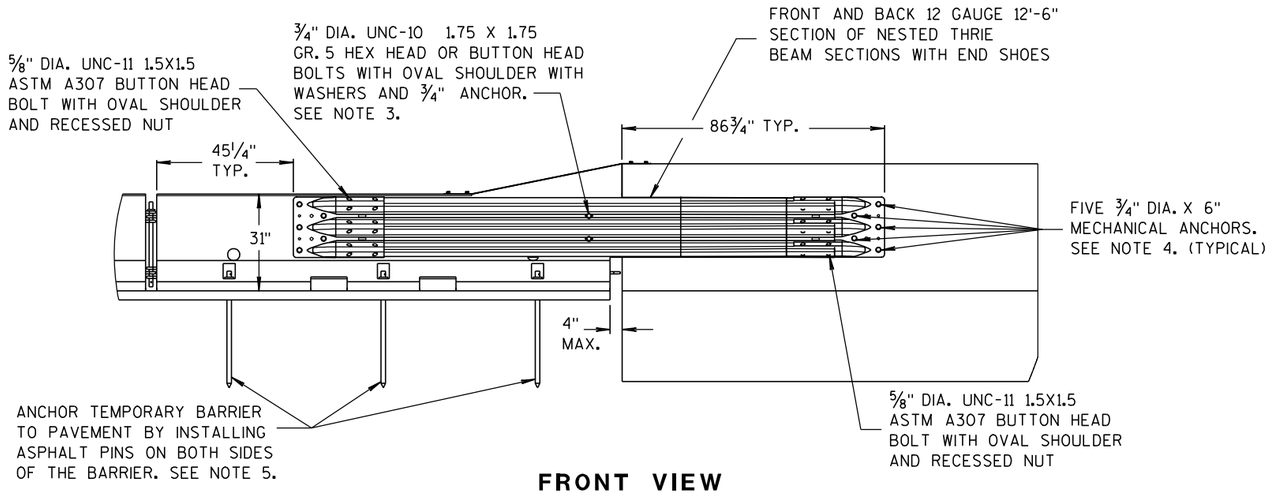
PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

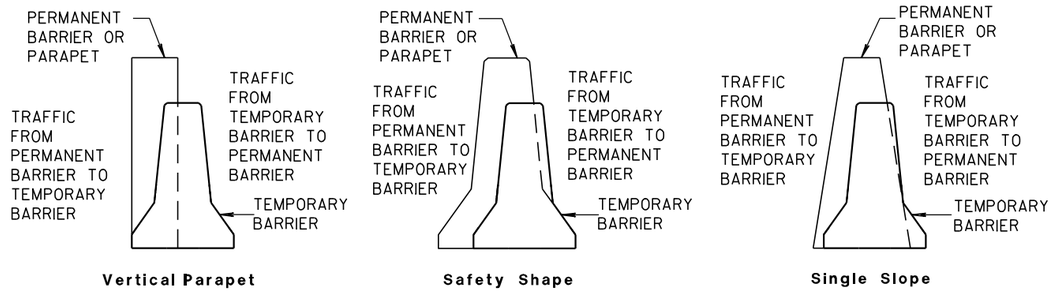
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...



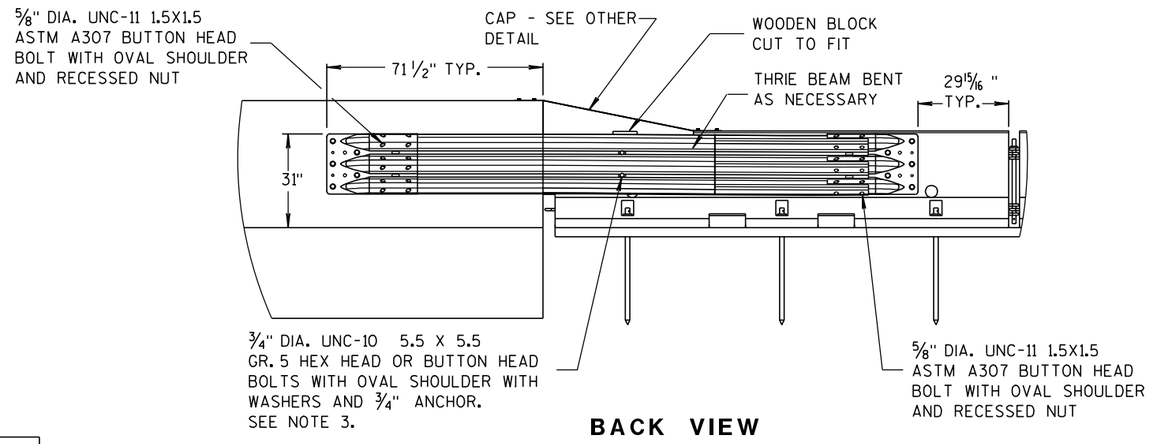
FRONT VIEW

NOTES

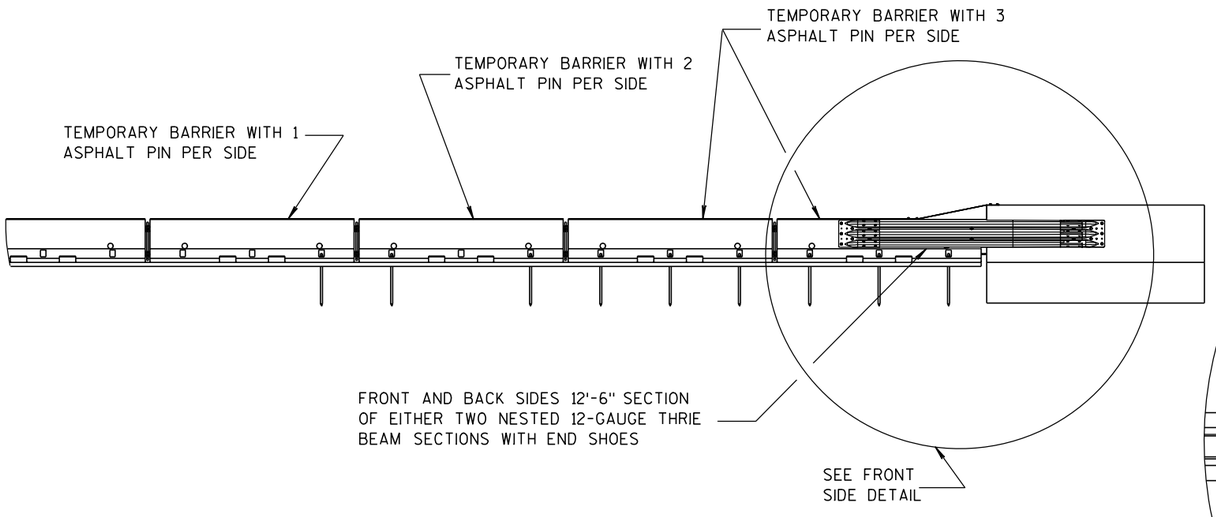
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.



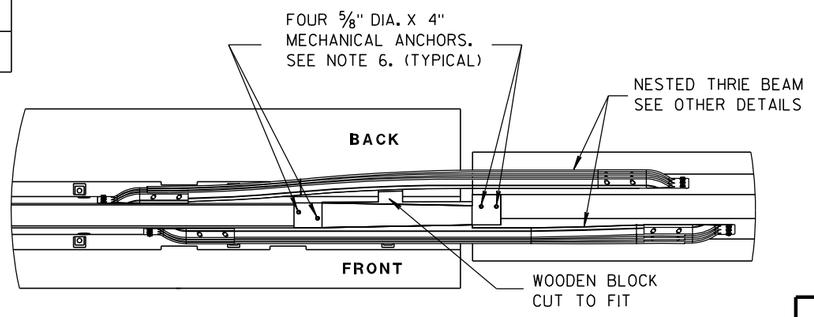
TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM



BACK VIEW



FRONT VIEW



PLAN VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO.....T

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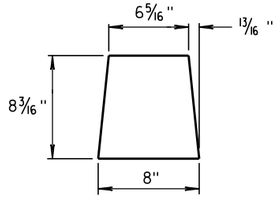
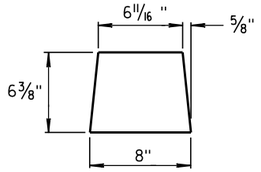


GUSSET 1



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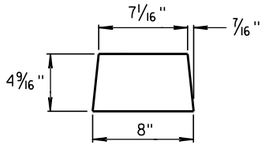
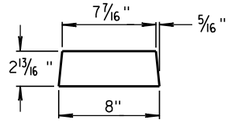
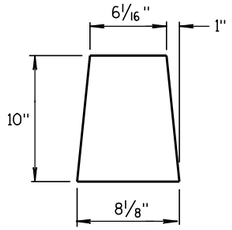


GUSSET 3

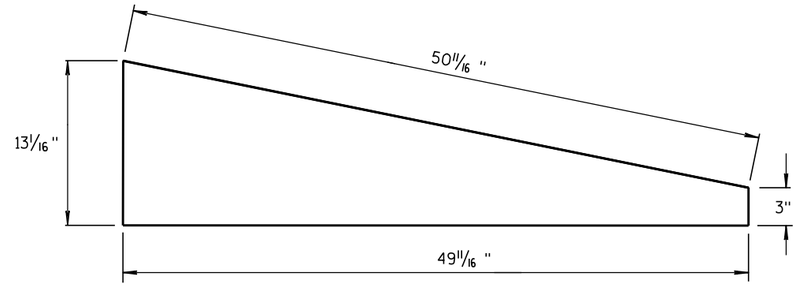


GUSSET 4

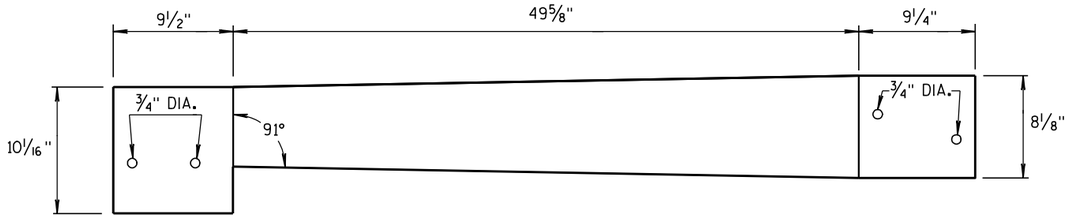
GUSSETS

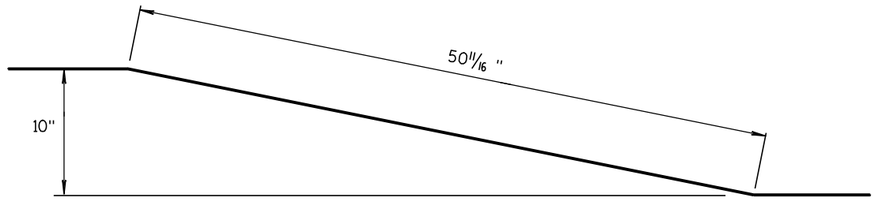


END PLATE

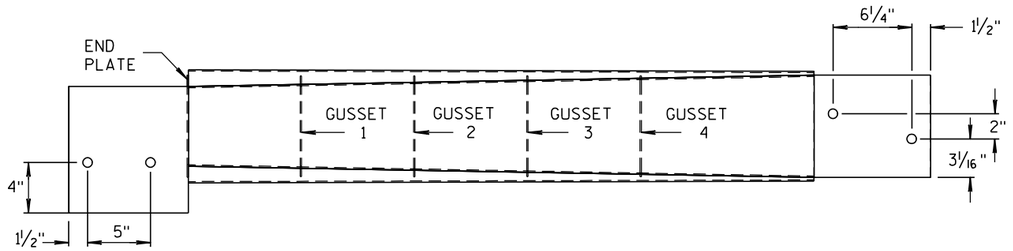


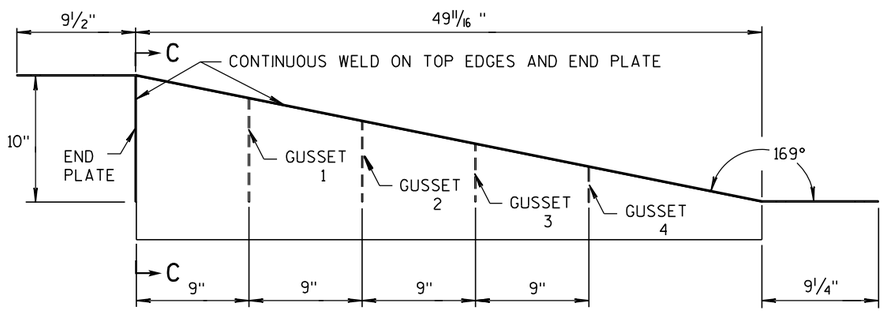
SIDE PLATE

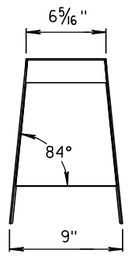




TOP PLATE







SECTION C-C

NOTES

1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

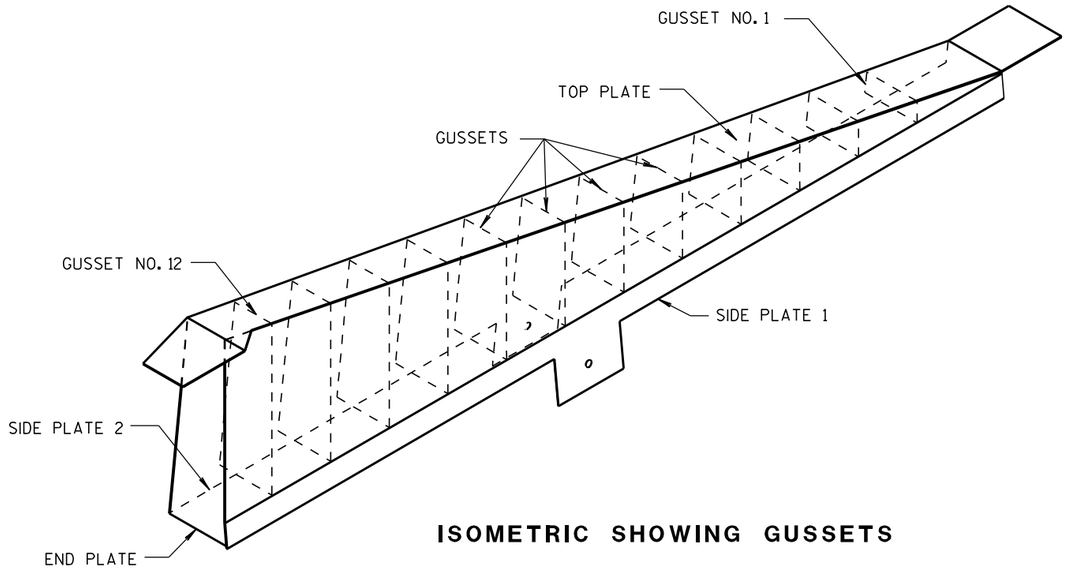
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

SIDE, TOP AND END PLATES FOR CAP FROM TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

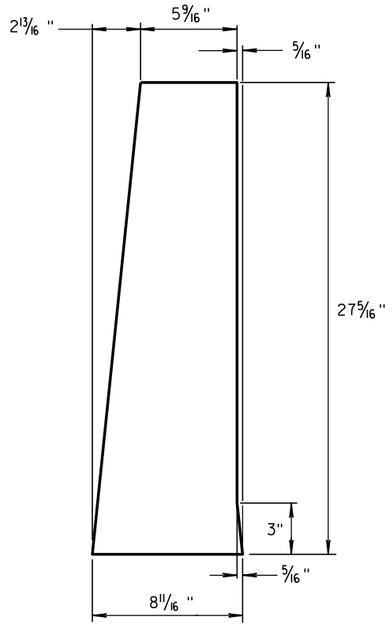
SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

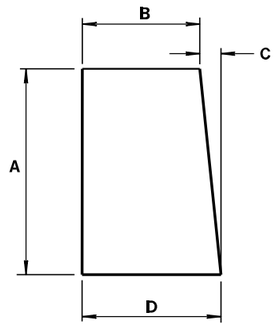


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



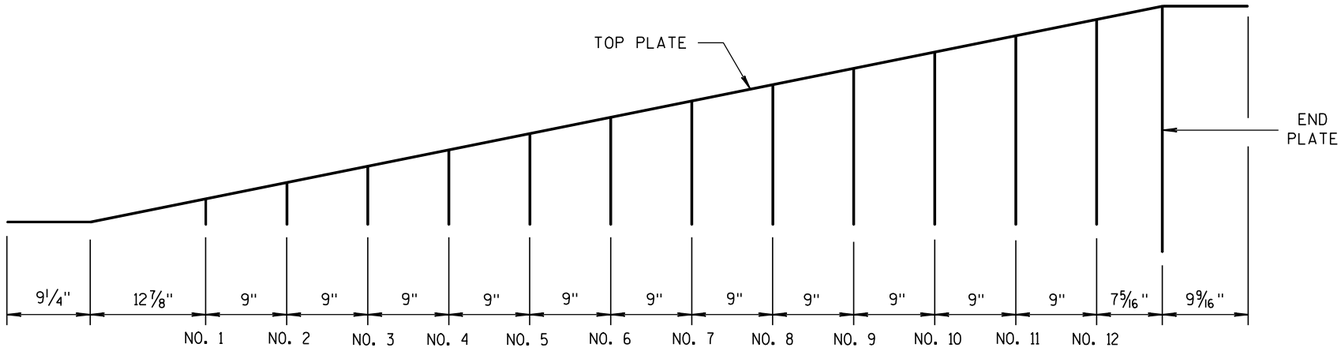
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 15/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



GUSSET LOCATION

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO.....T

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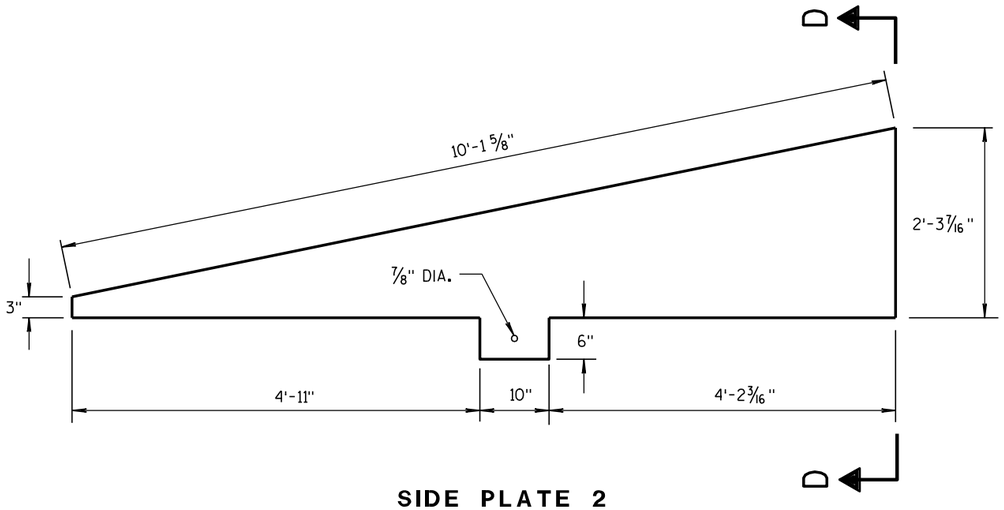
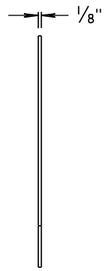
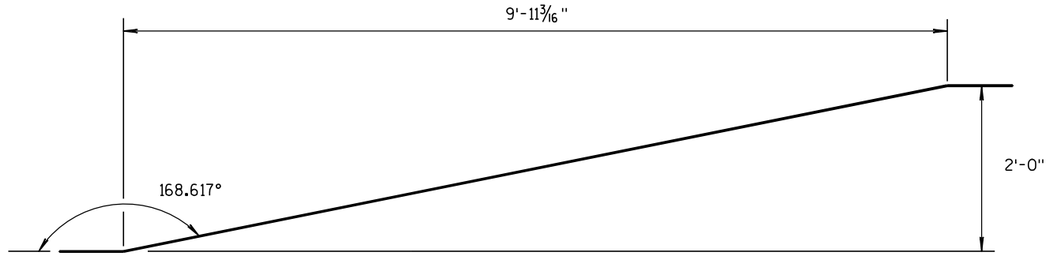


SIDE PLATE 2

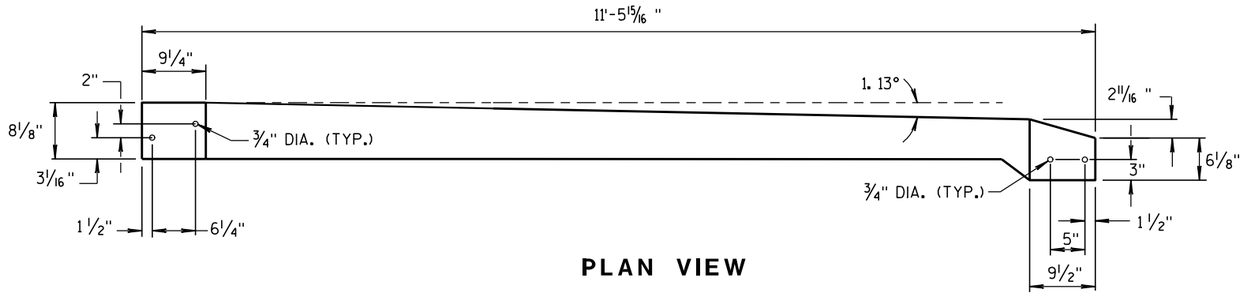


END VIEW



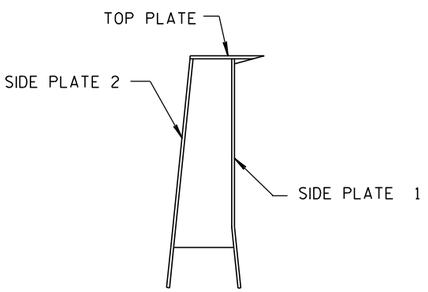
SIDE VIEW

TOP PLATE

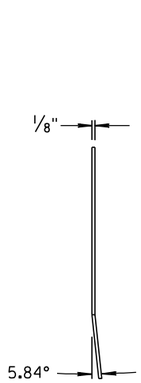


PLAN VIEW

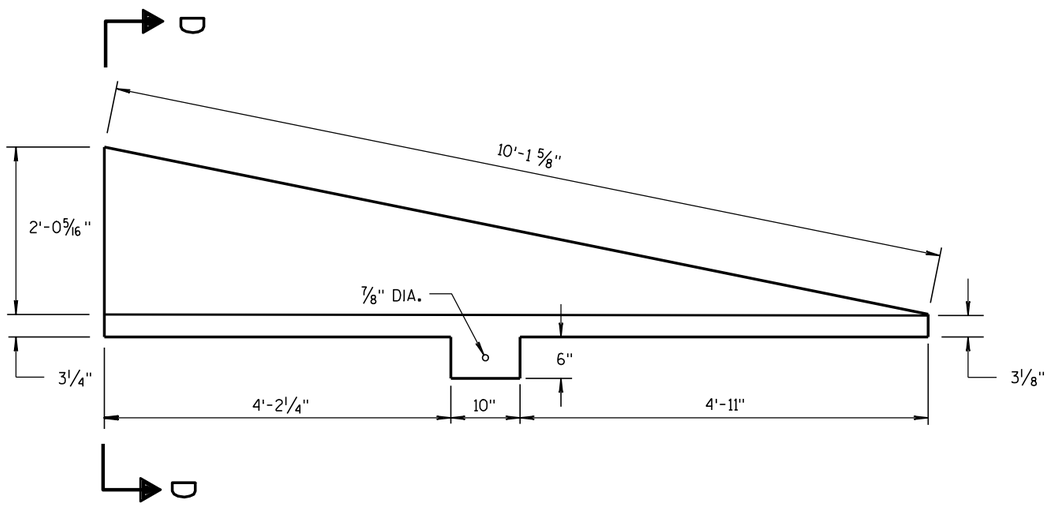
TOP PLATE



SECTION D-D



END VIEW



SIDE PLATE 1

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 8/31/2012 DATE /S/ Jerry H. ROADWAY STANDARDS ENGINEER 87 ENT FHWA

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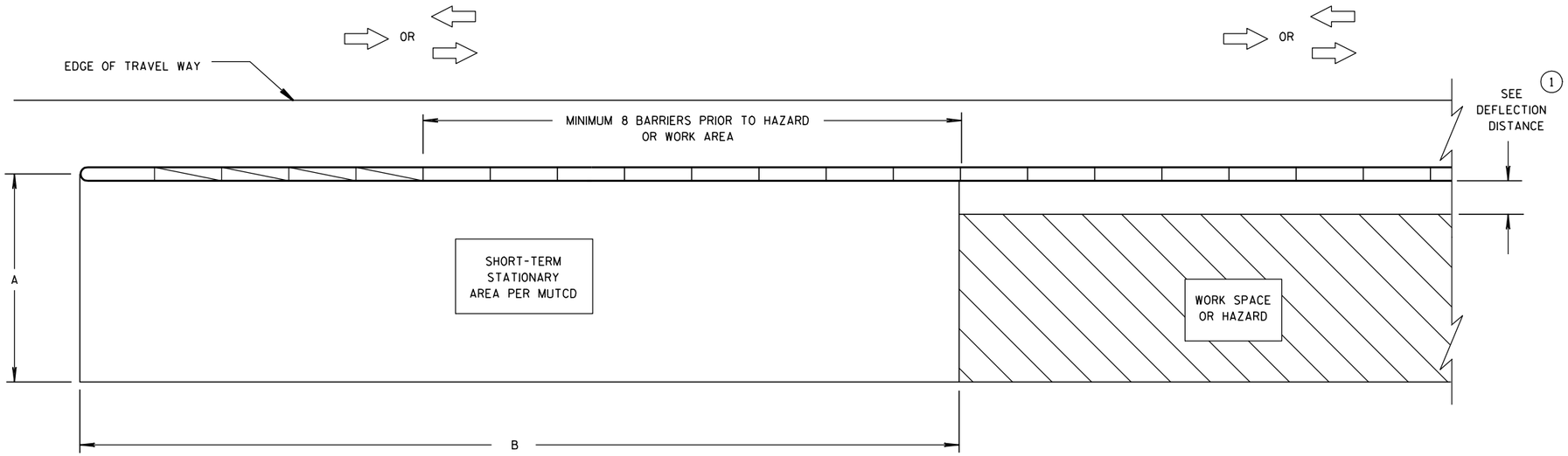
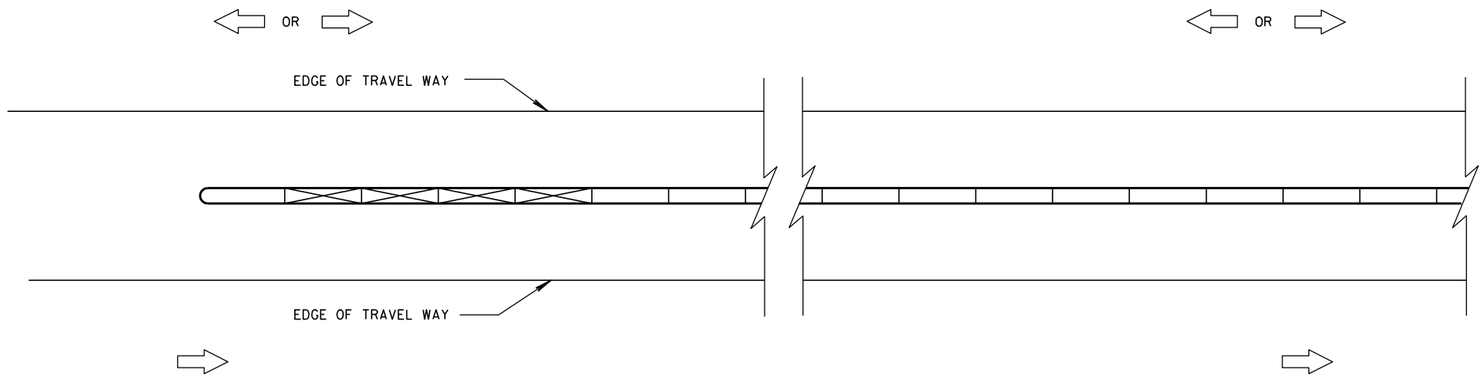


CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

DIMENSION A TABLE (2)

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE (2)

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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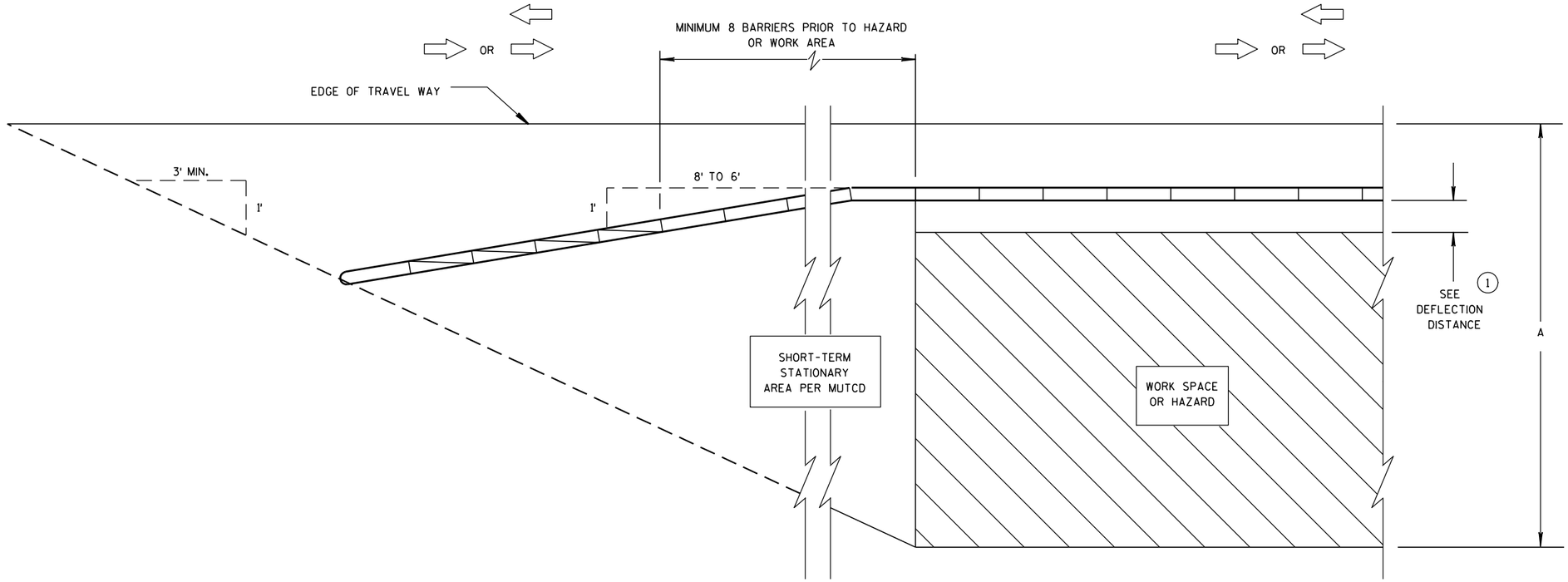
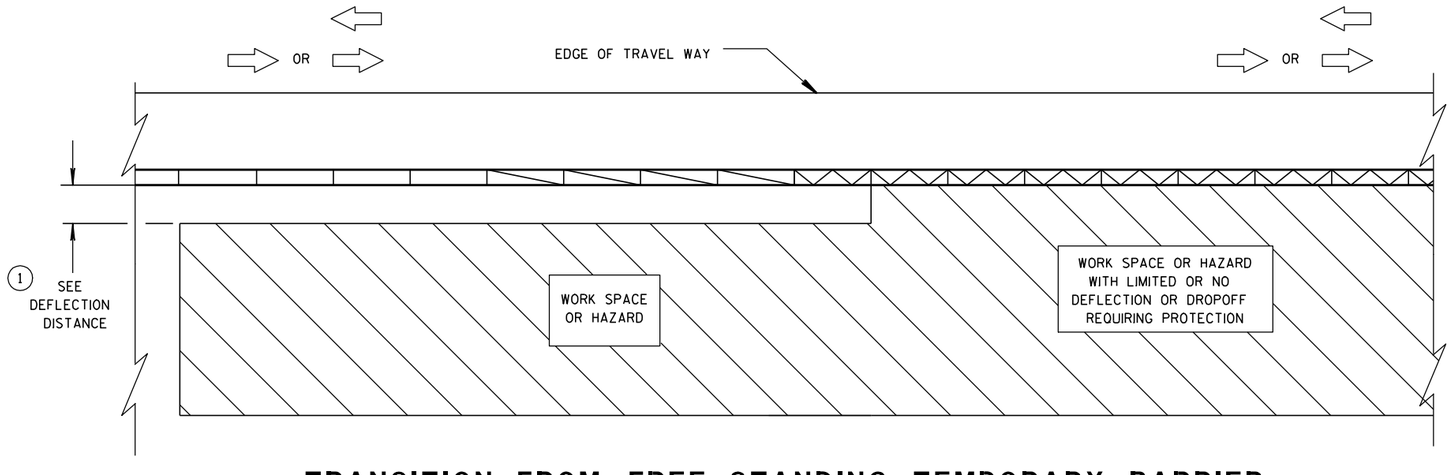
S.D.D. 14 B 8-1a



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION



TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO.....T

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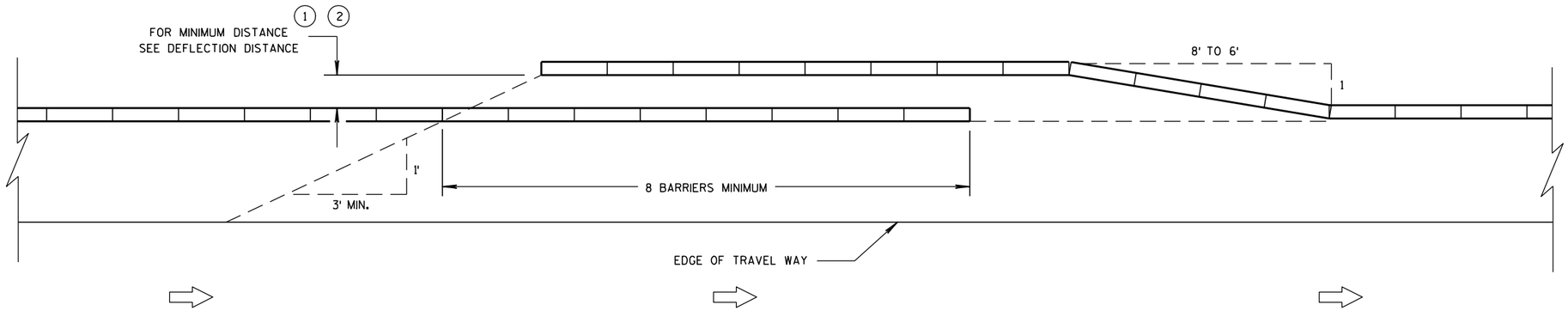
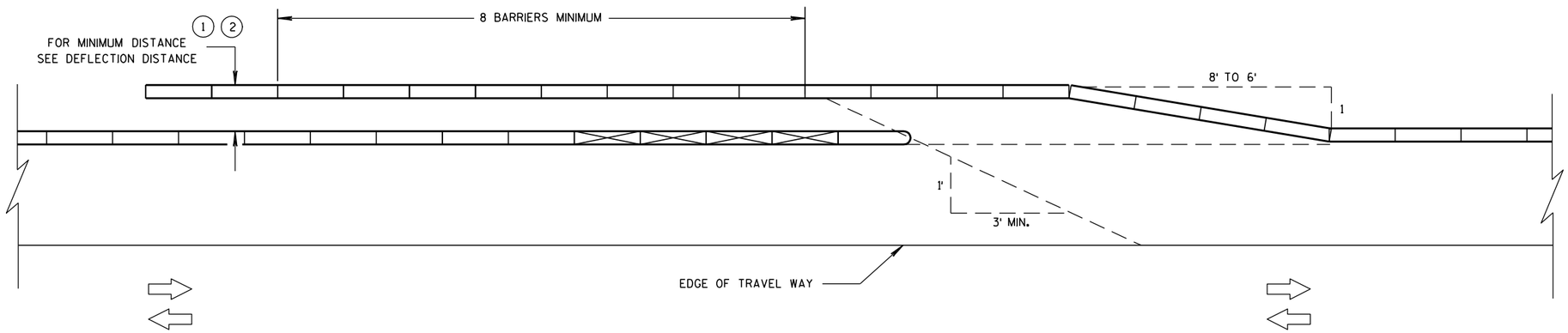
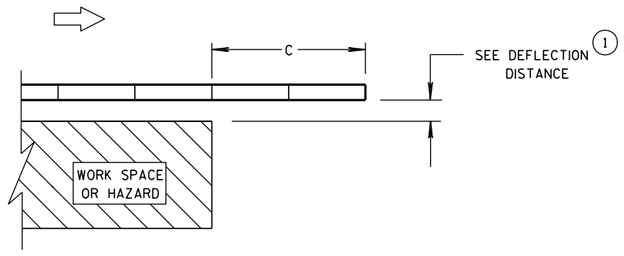


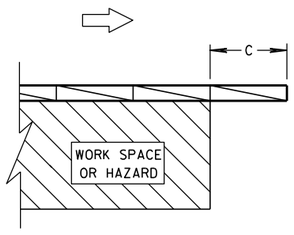
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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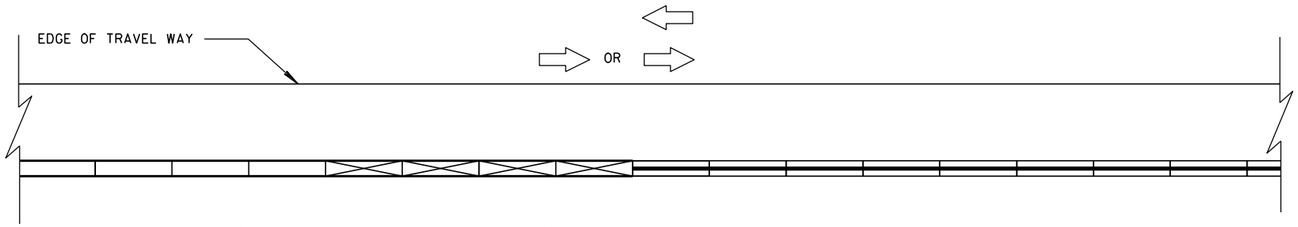
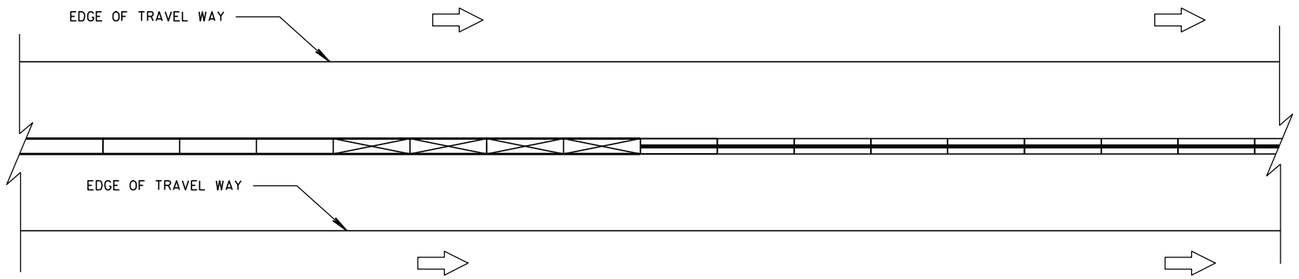
S.D.D. 14 B 8-1c



CONNECTING TEMPORARY BARRIER TO PERMANENT CONCRETE BARRIER-TRAFFIC ON ONE SIDE



CONNECTING TEMPORARY BARRIER TO PERMANENT CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

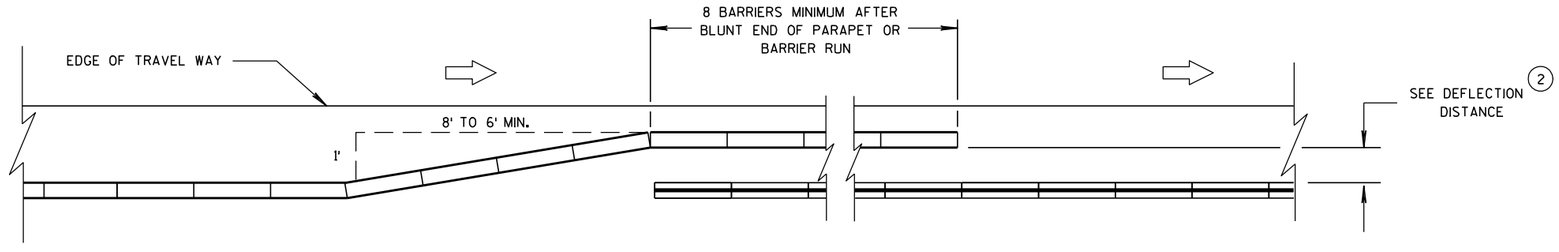
SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

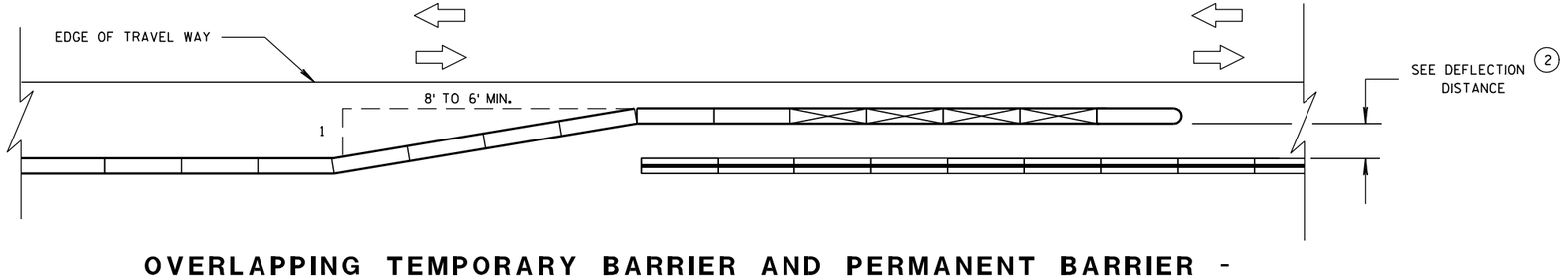
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER - ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER - TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 14 B 8-1d

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

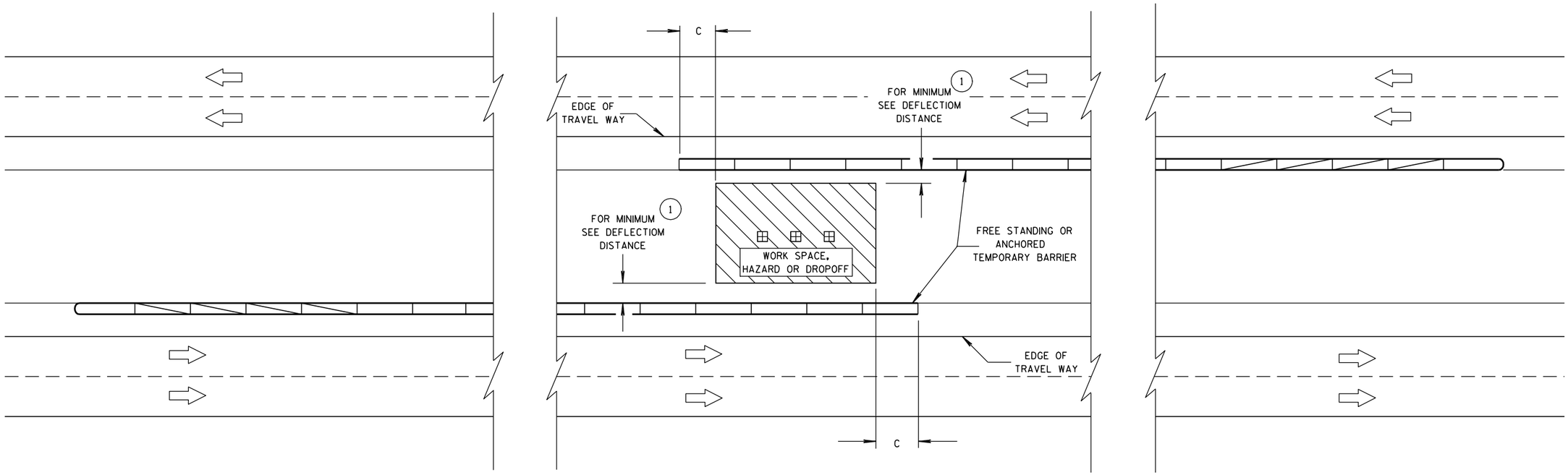
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINNER

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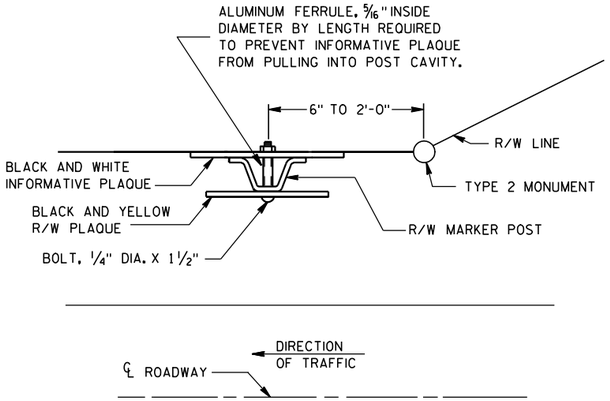
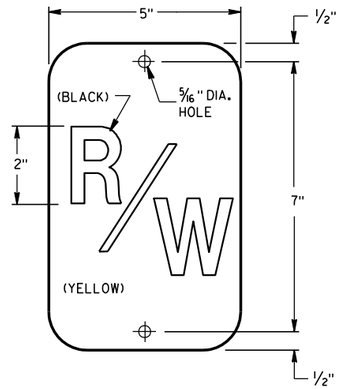
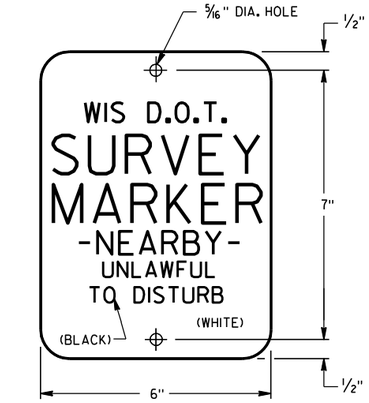


PLAN VIEW



R/W PLAQUE

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



INFORMATIVE PLAQUE

GENERAL NOTES

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

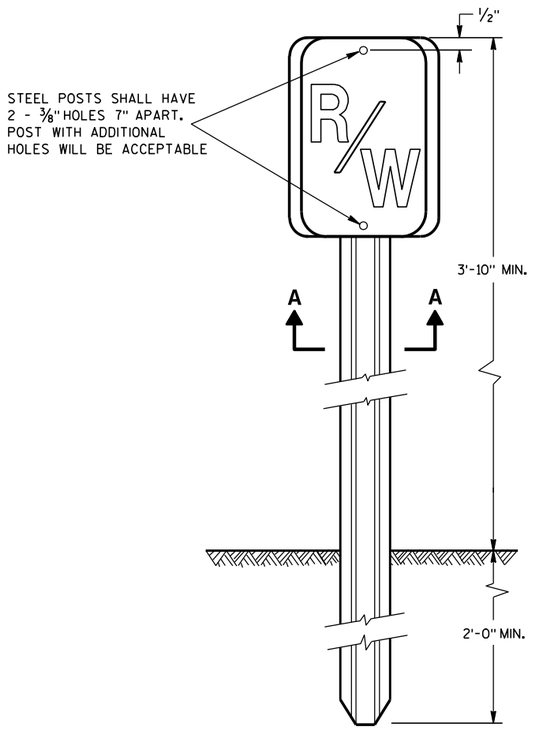
A STEEL MARKER POST FOR RIGHT-OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY, WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

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

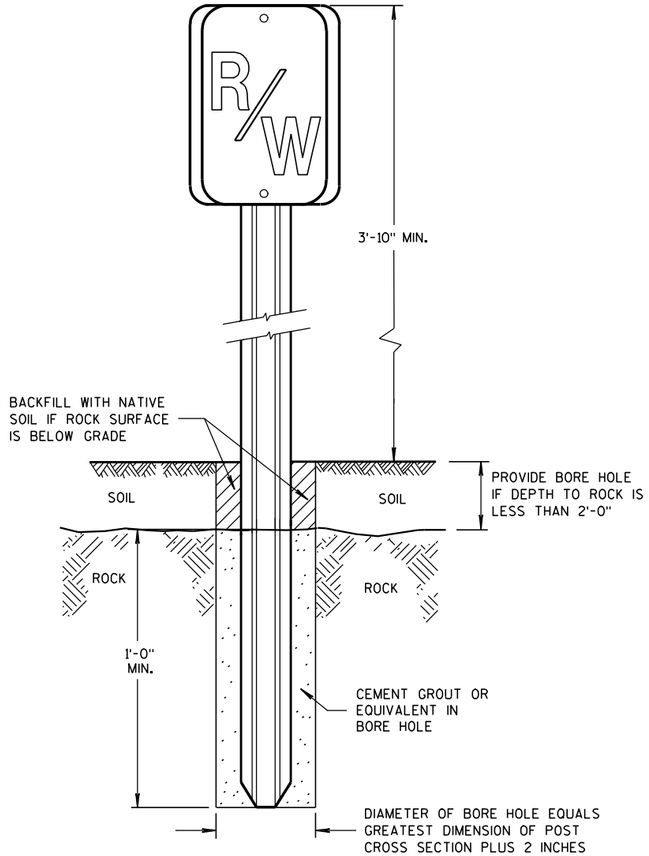
STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

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

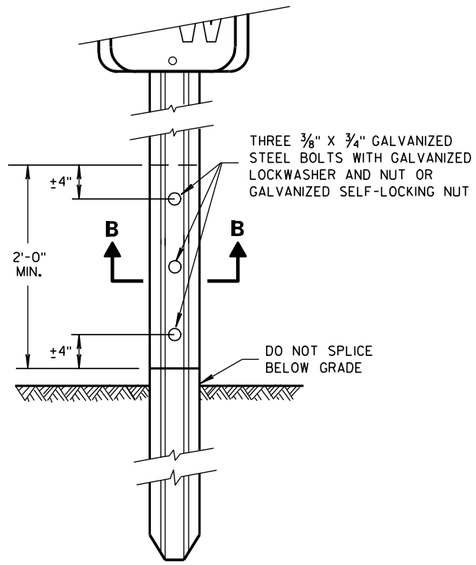
FILL THE BORE HOLE WITH CEMENT GROUT, OR EQUIVALENT, DEPENDING ON THE STABILITY OF THE ROCK.



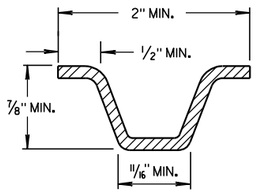
FRONT VIEW
STEEL MARKER POST



FRONT VIEW
ROCK INSTALLATION (1)

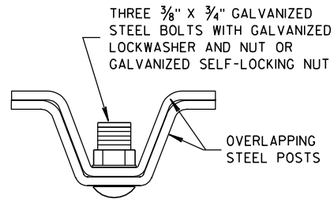


FRONT VIEW
SPLICE DETAIL



MIN. WEIGHT 1.12 LB./FT.

SECTION A-A



SECTION B-B

MARKER POST FOR RIGHT-OF-WAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

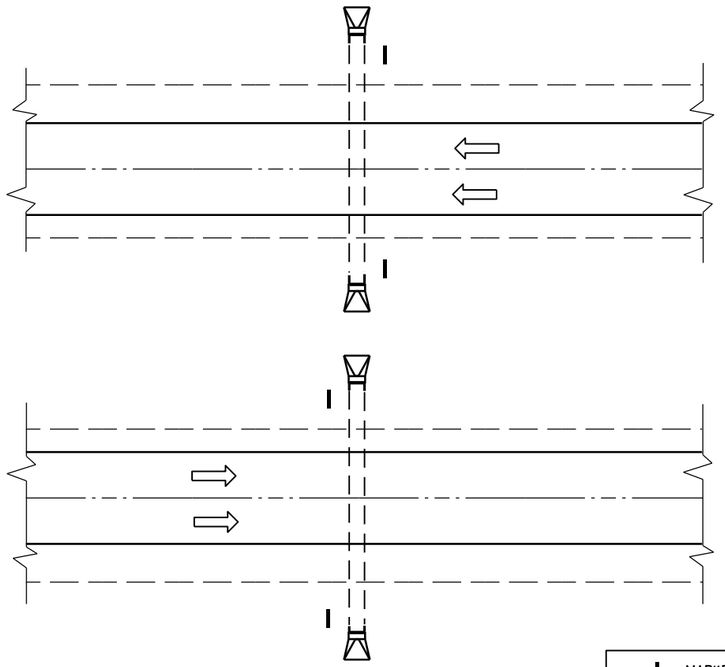
APPROVED
4/27/09 — DATE
/S/ Ray Kumapayi — CHIEF SURVEYING AND MAPPING ENGINEER
FHWA

6

S.D.D. 15 A 1-11

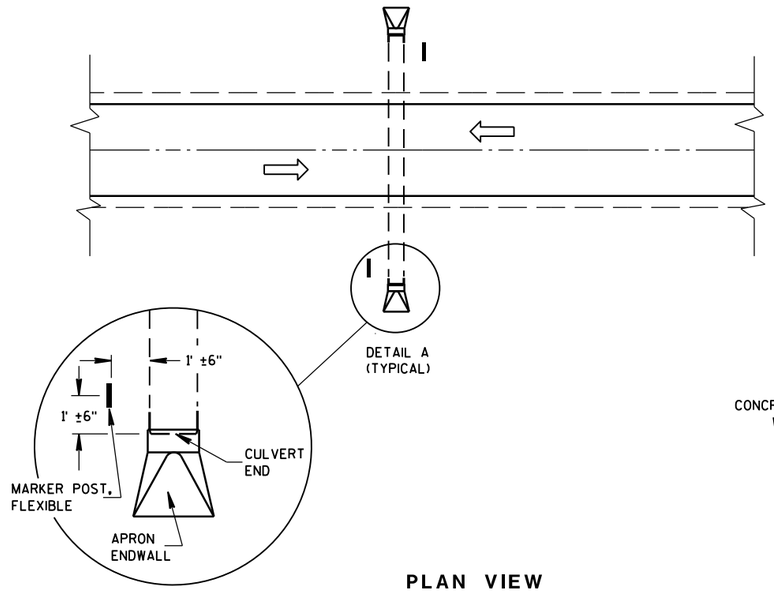
6

S.D.D. 15 A 1-11



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

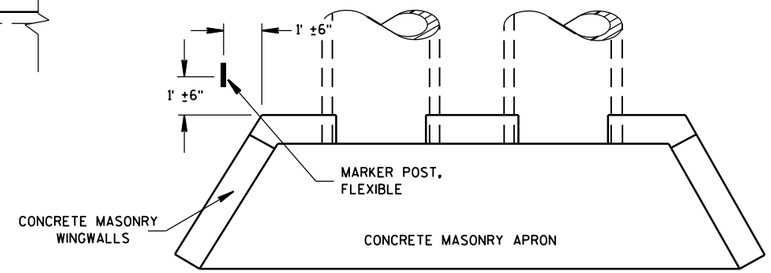
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

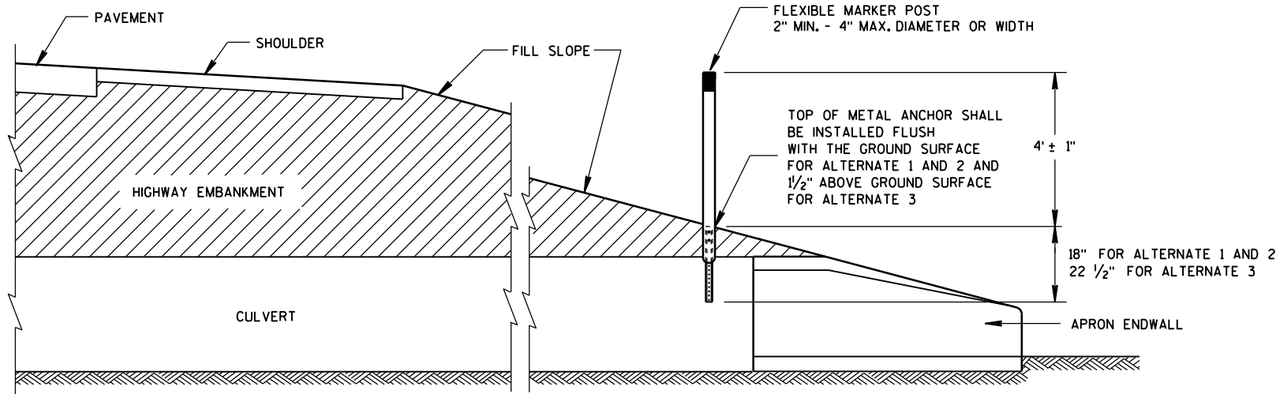
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

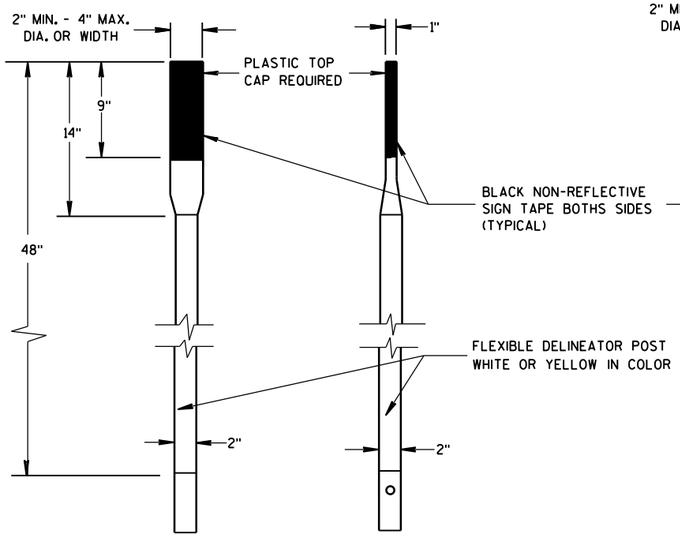
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

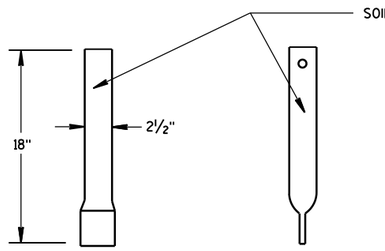
6

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

6

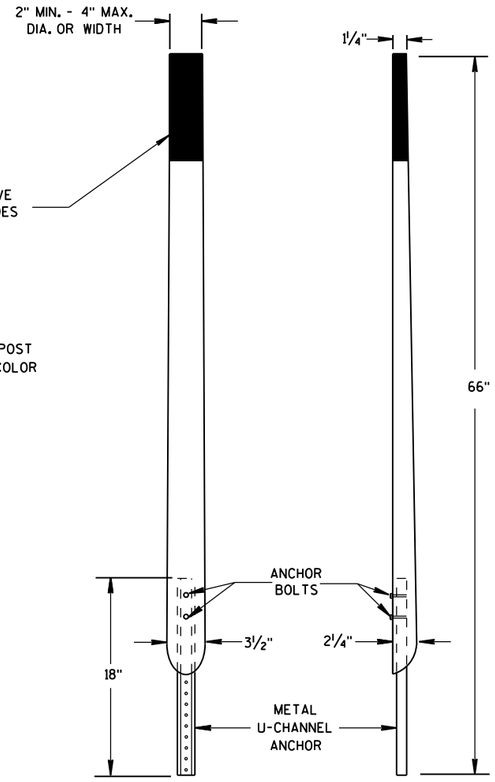
S.D.D. 15 A 3-2a





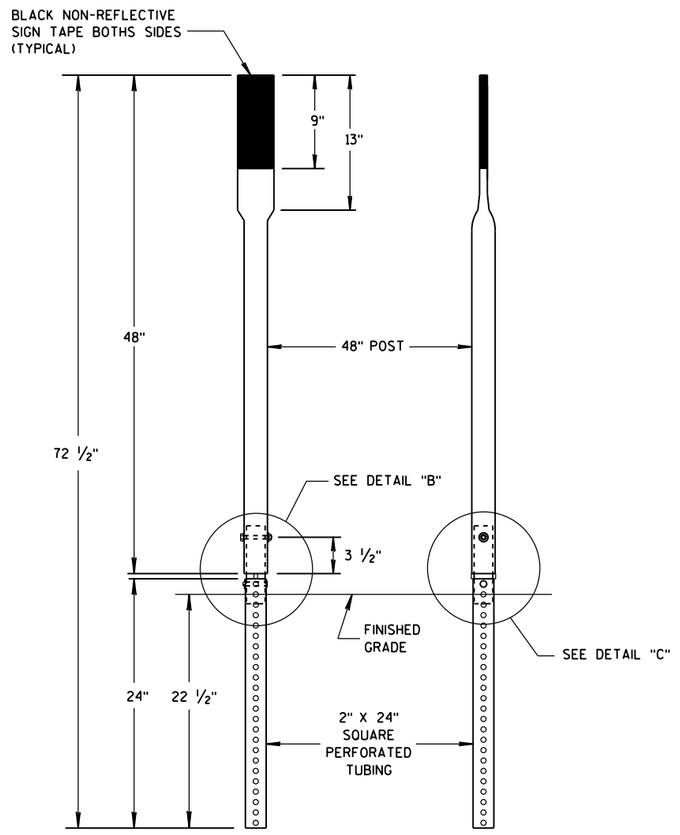
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

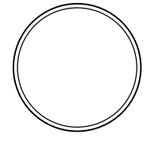
ALTERNATE 2



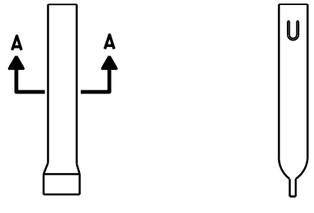
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

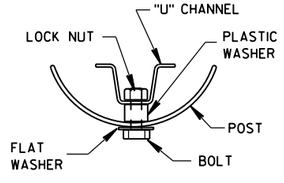


SECTION A-A

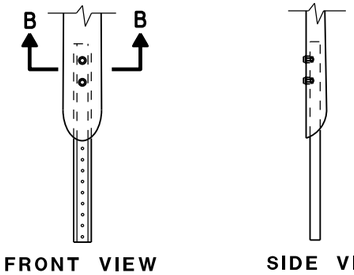


FRONT VIEW SIDE VIEW

ALTERNATE 1

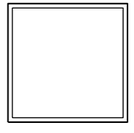


SECTION B-B

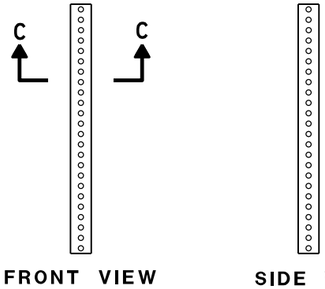


FRONT VIEW SIDE VIEW

ALTERNATE 2



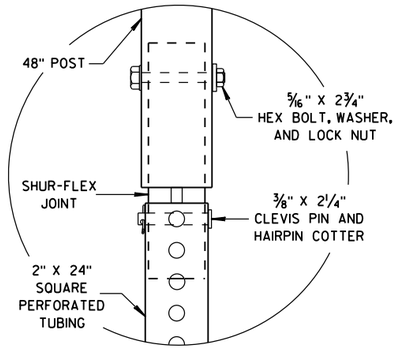
SECTION C-C



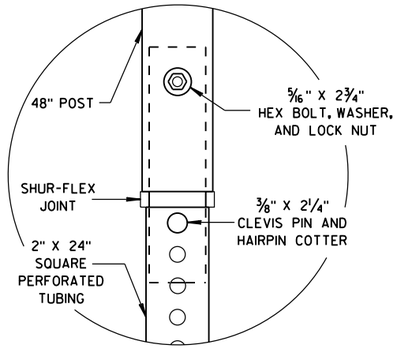
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

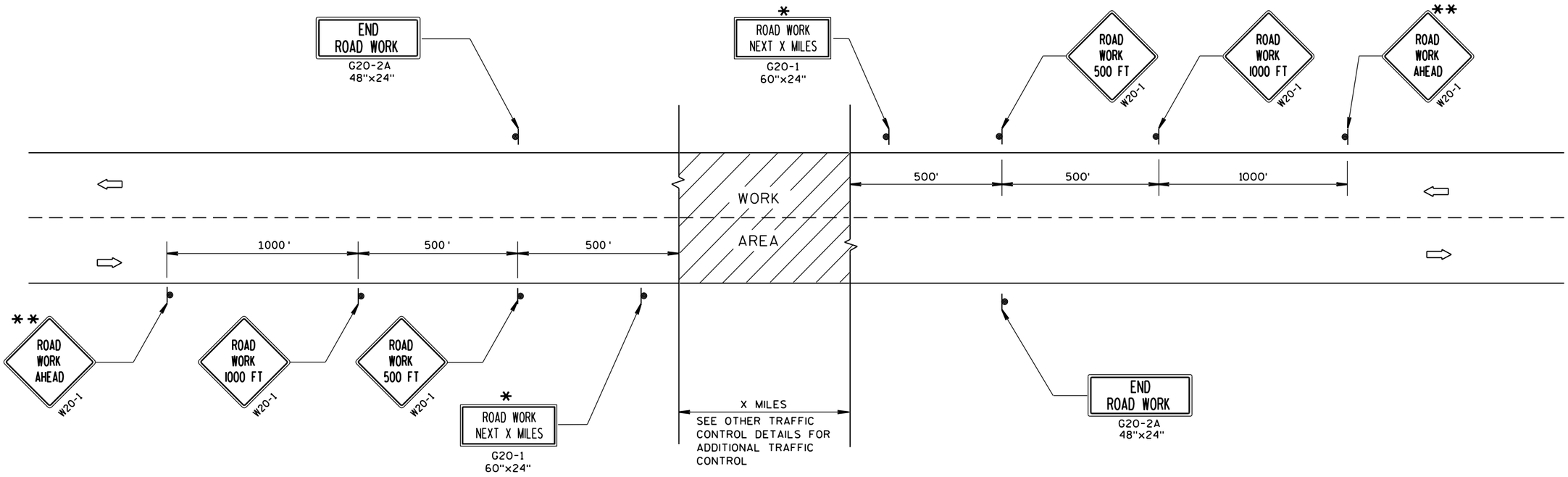
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

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

6

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



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 MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

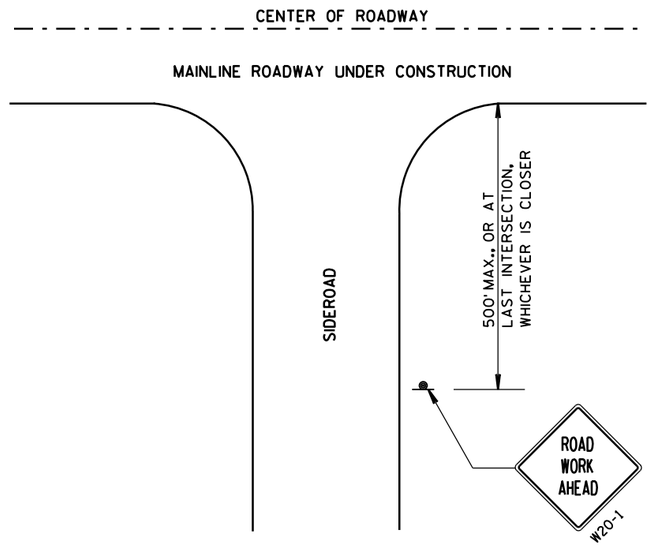
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



LEGEND

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

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

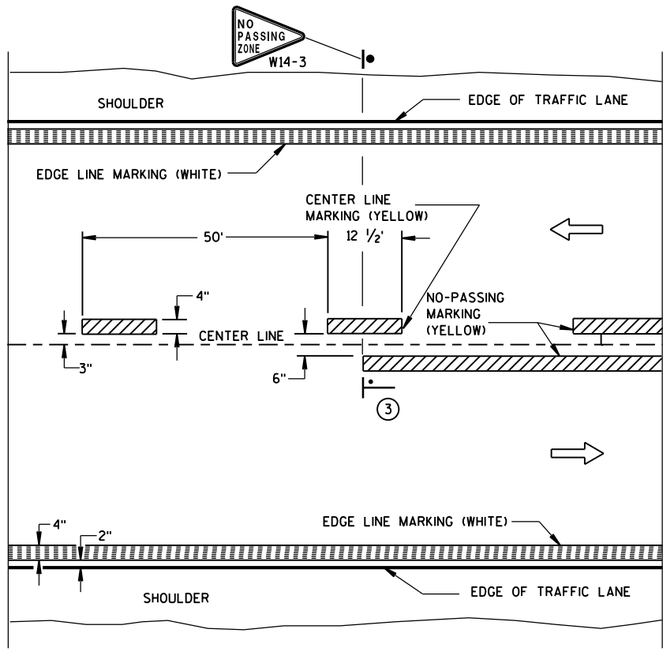
/S/ Travis Feltes — STATE TRAFFIC ENGINEER

SIGN

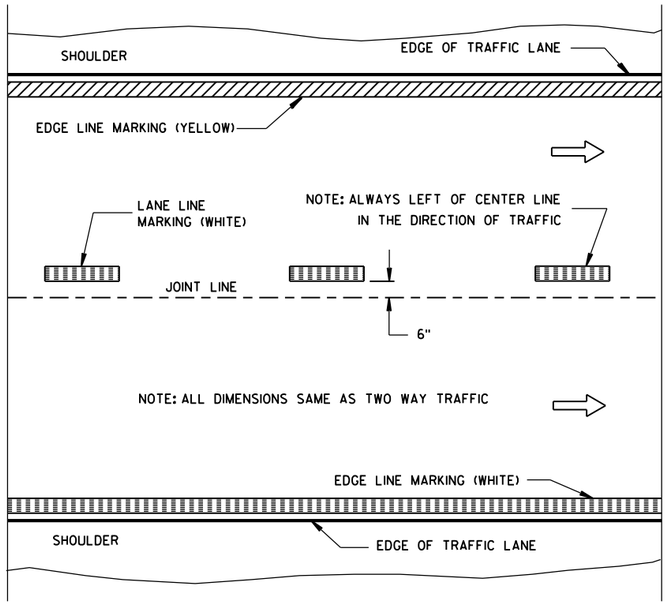
FHWA

6

S.D.D. 15 C 4-2

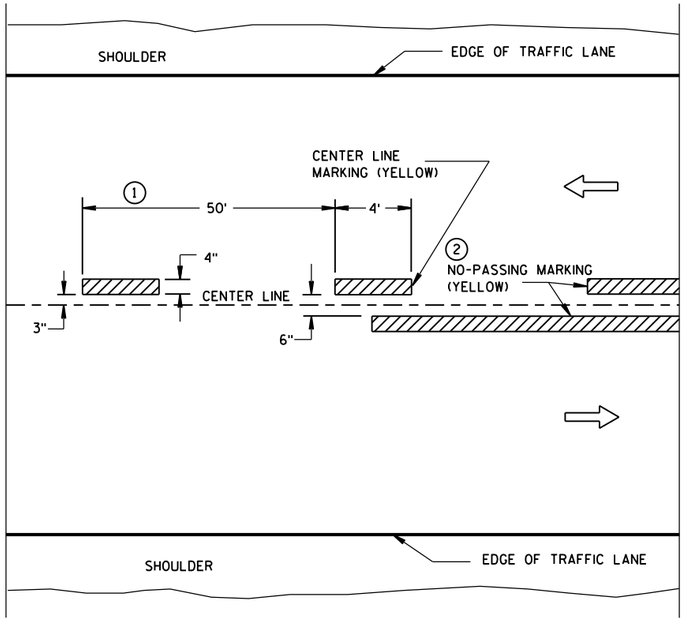


TWO WAY TRAFFIC

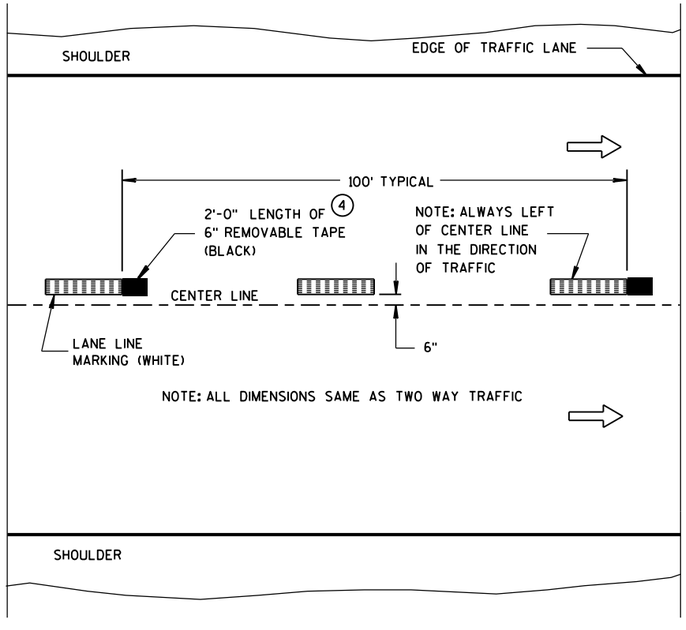


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

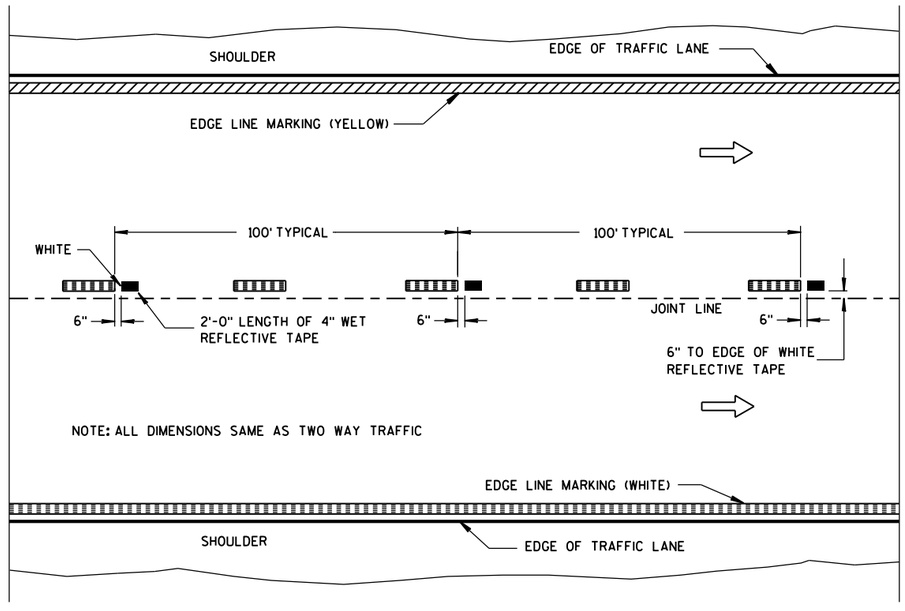
GENERAL NOTES

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

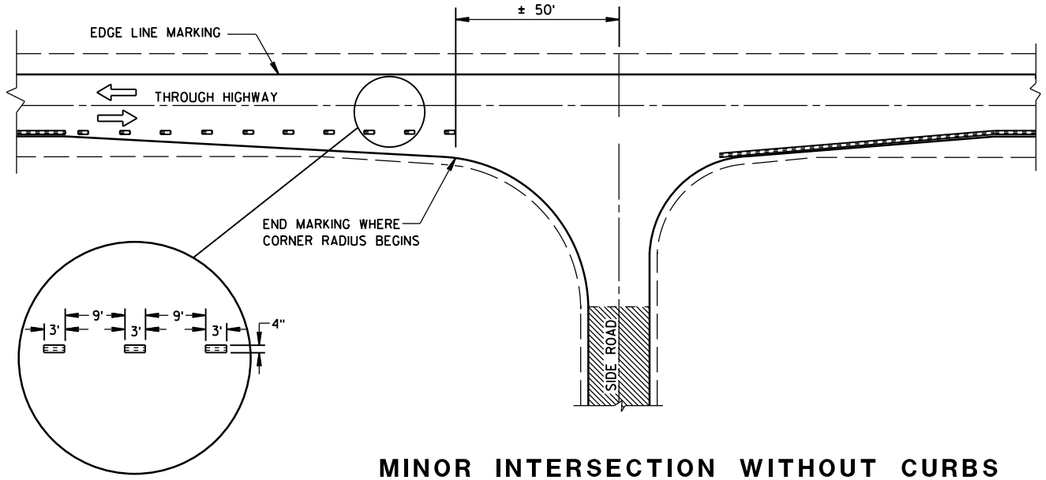
APPROVED
5-13-2013 DATE
/S/ Travis Feltes STATE TRAFFIC E 97
FHWA

6

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

6

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



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

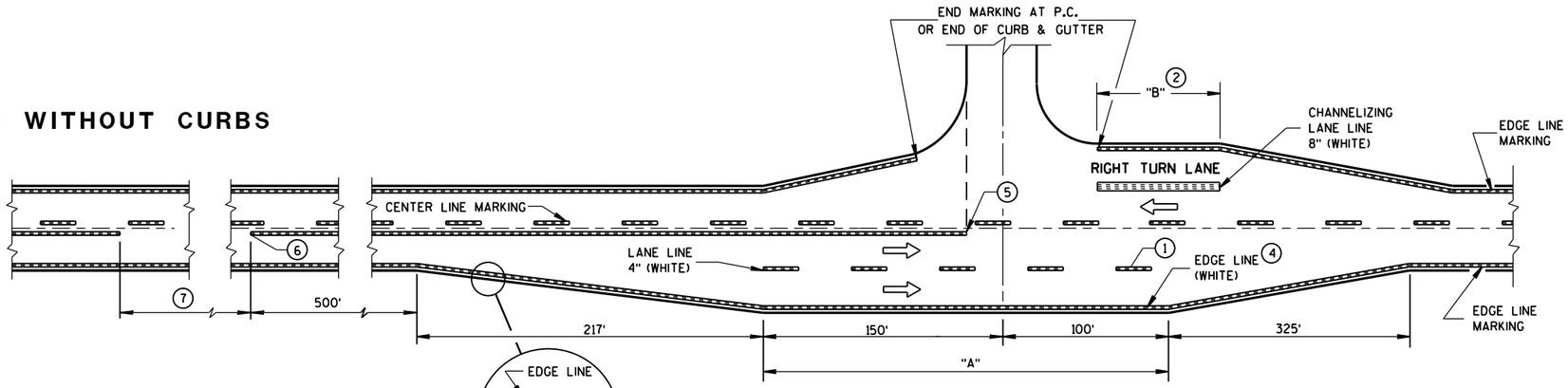
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

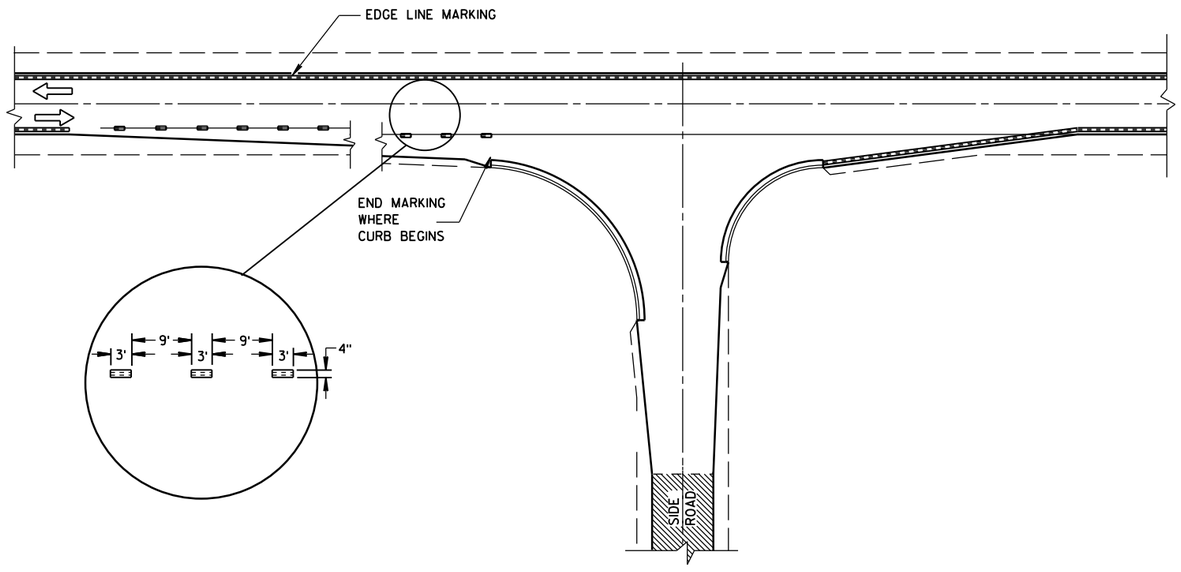
(7)

POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



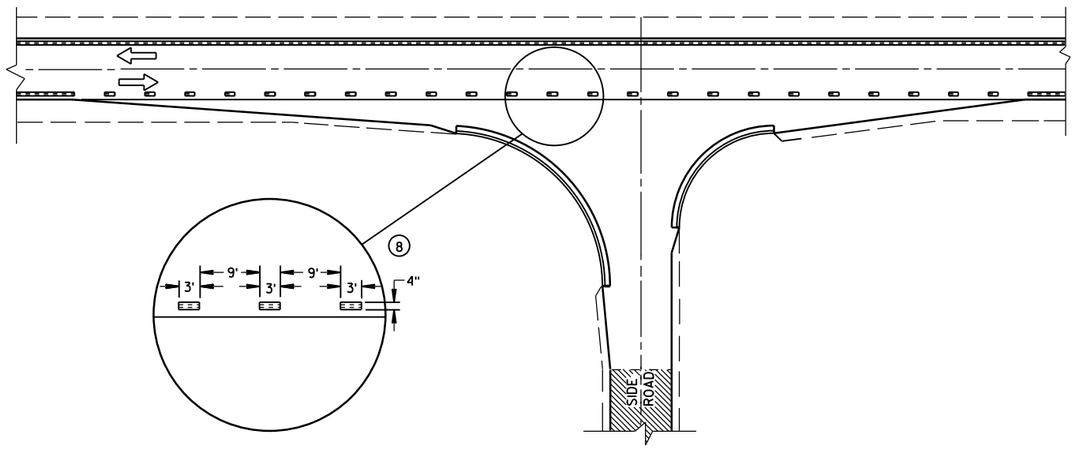
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

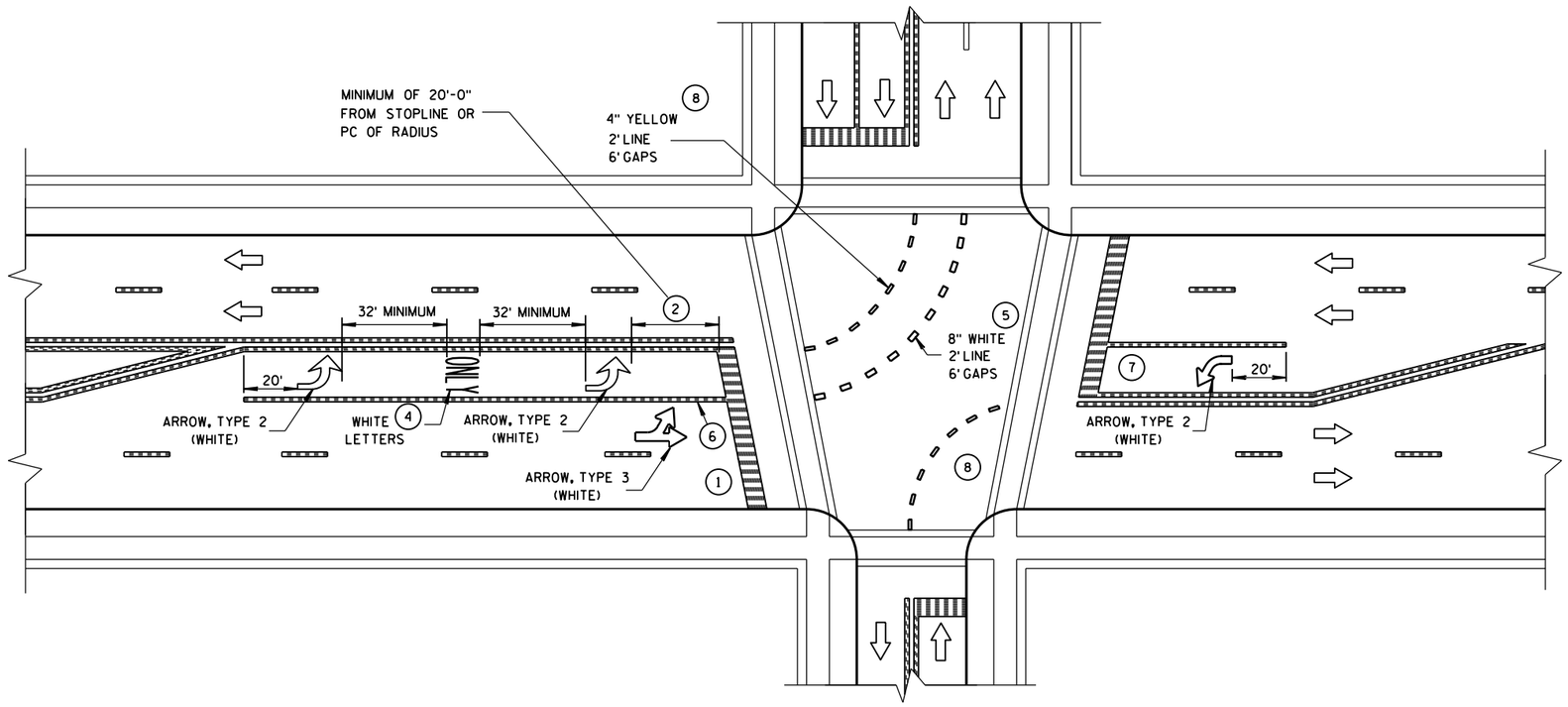
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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

6

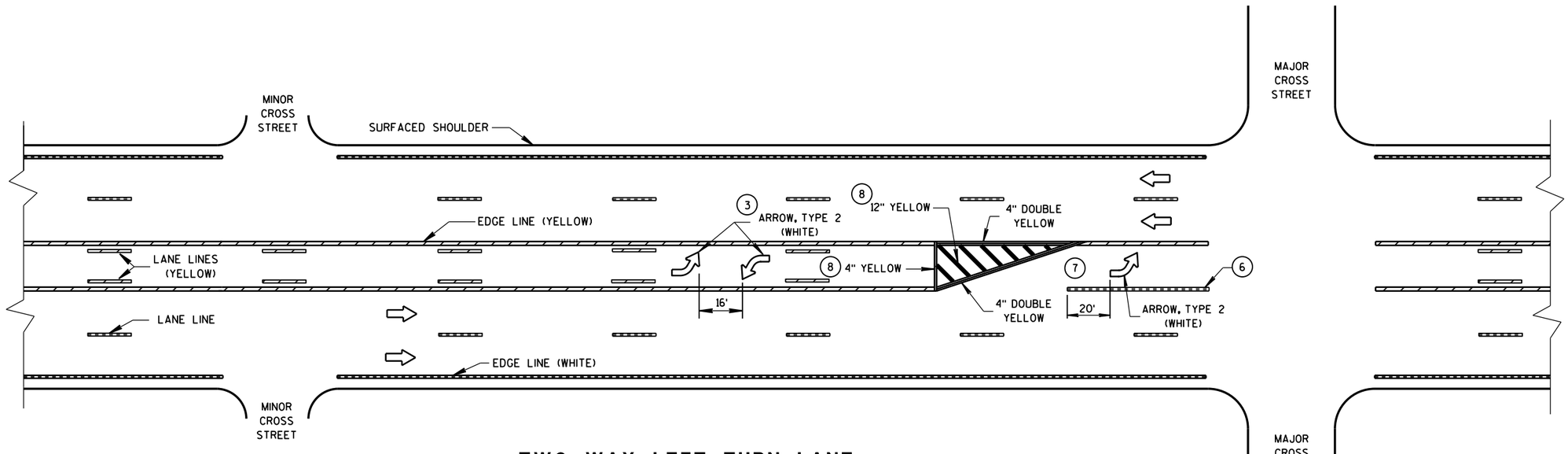
S.D.D. 15 C 8-16b



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

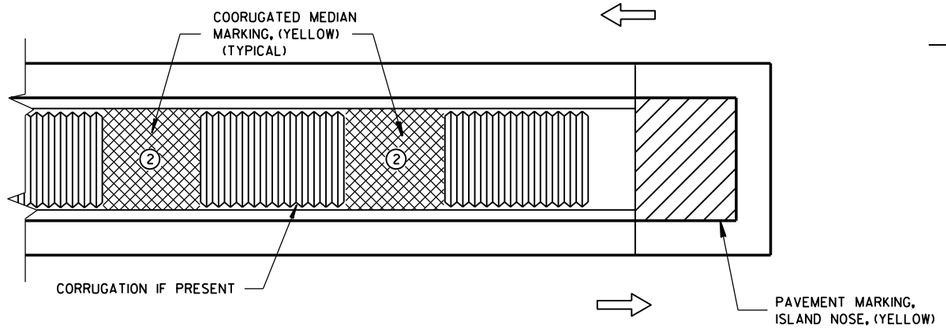
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

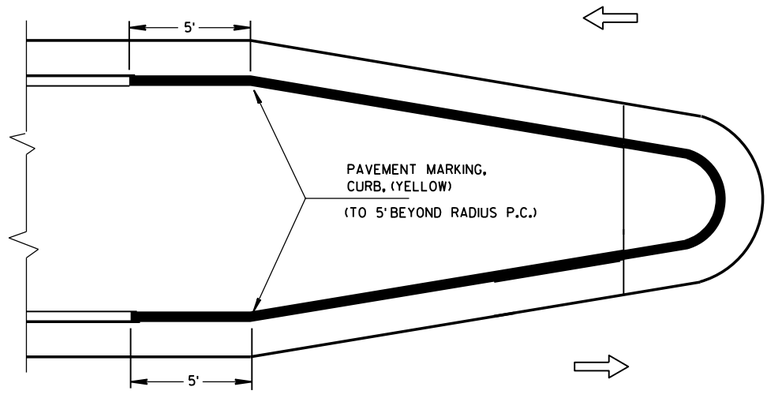
S.D.D. 15 C 8-16e

6

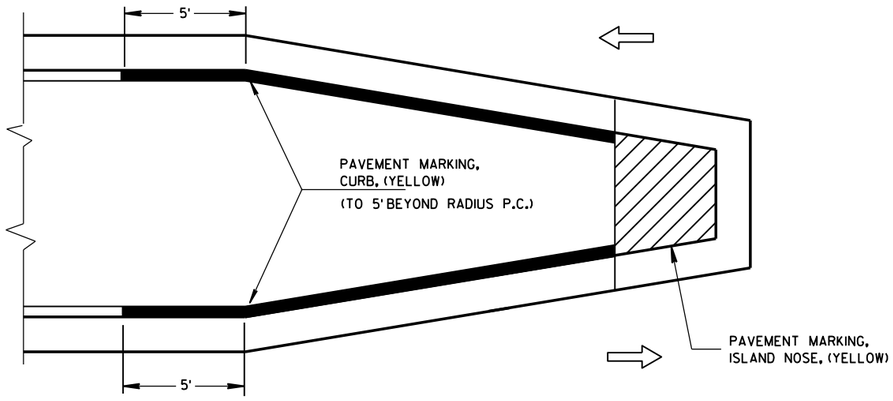
S.D.D. 15 C 8-16e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

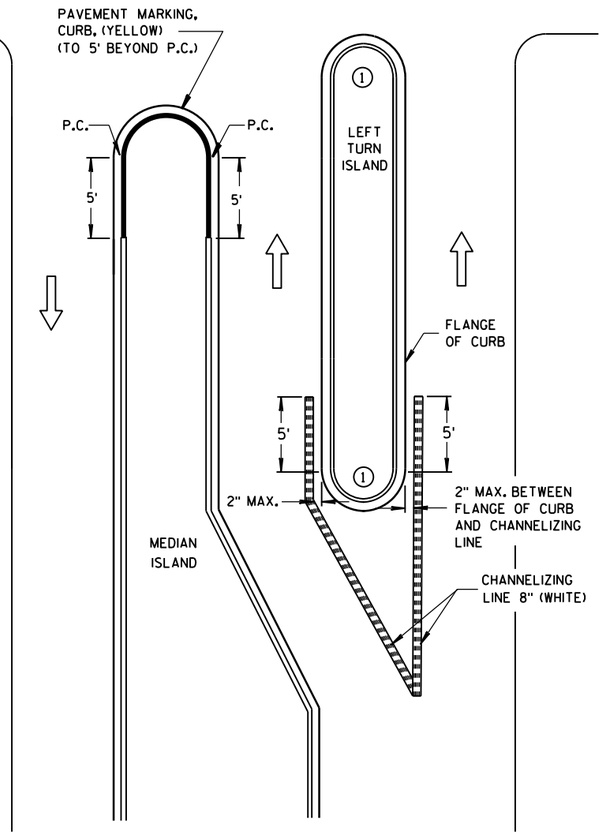


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

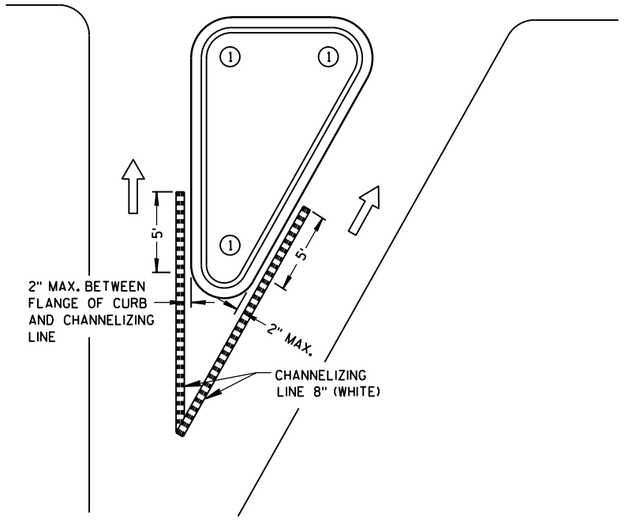


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.

2. WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS)

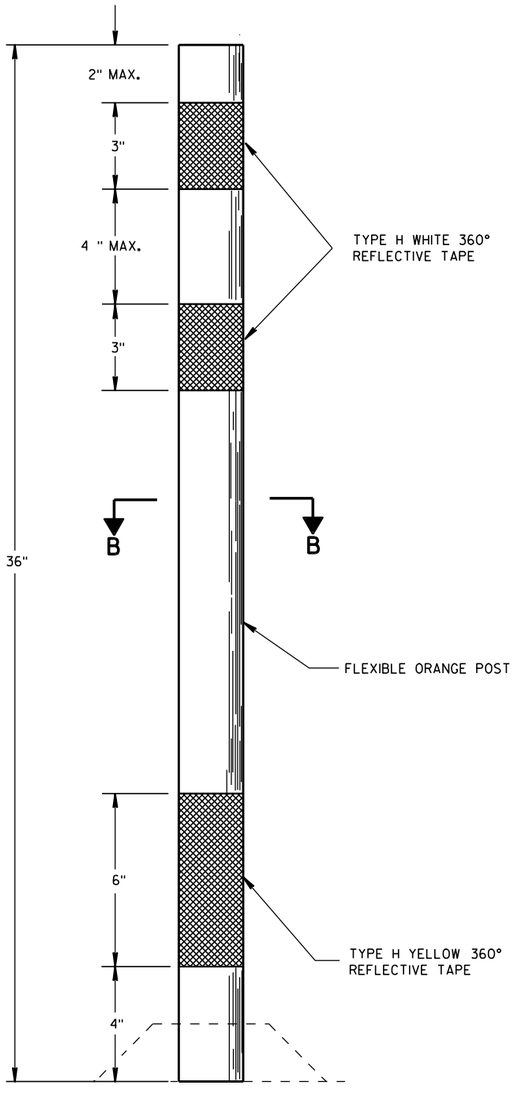
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

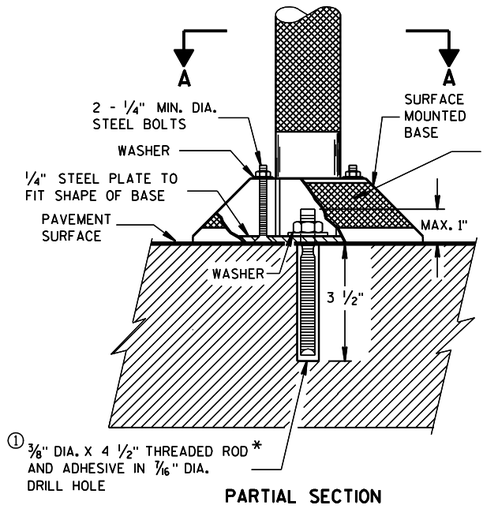
S.D.D. 15 C 8-16f

6

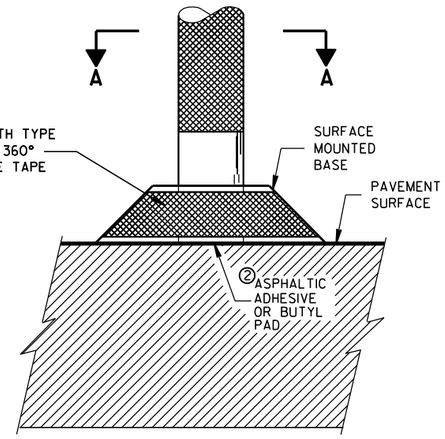
S.D.D. 15 C 8-16f



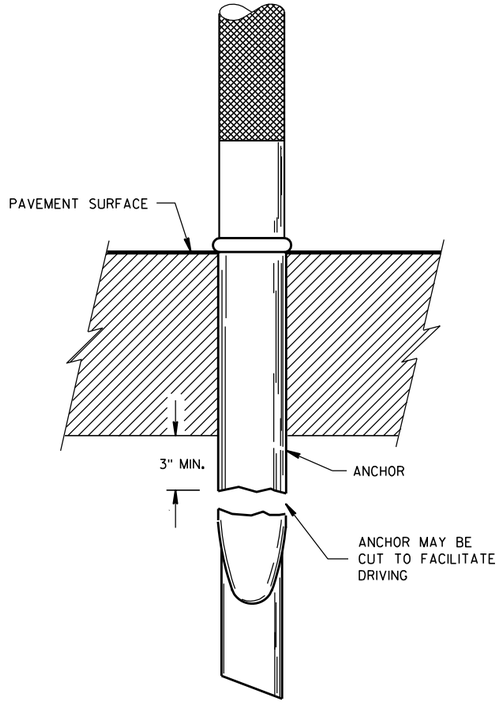
FLEXIBLE TUBULAR MARKER POST

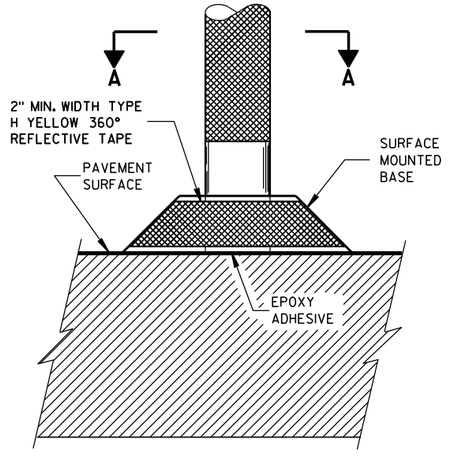


PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT





POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED

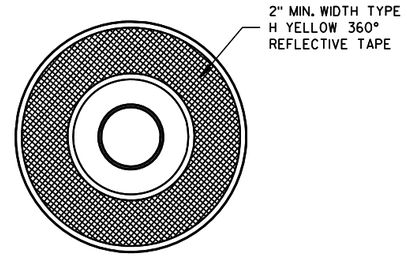
GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

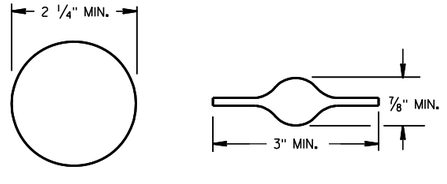
① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1 1/4 INCHES FROM THE TOP.

② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



SECTION A-A

SURFACE MOUNTED BASE



SECTION B-B

ALTERNATIVE SHAPES

FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2/17/94 DATE

/S/ Chester J. [illegible] DIRECTOR, OFFICE O

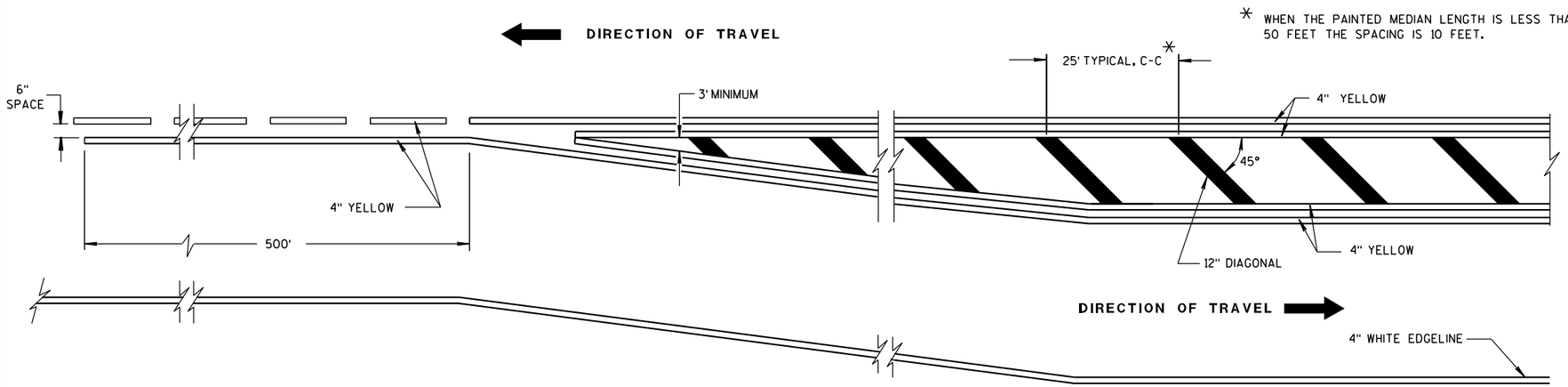
FHWA

6

S.D.D. 15 C 11-5

6

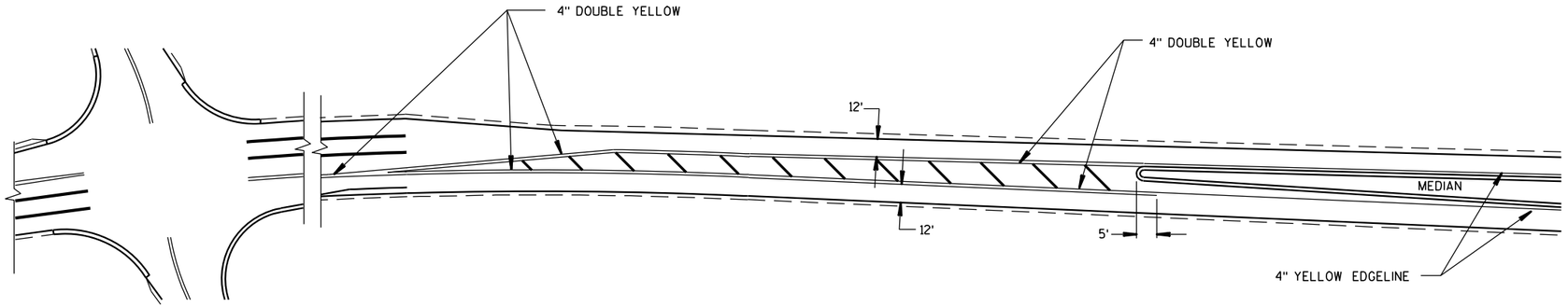
S.D.D. 15 C 11-5



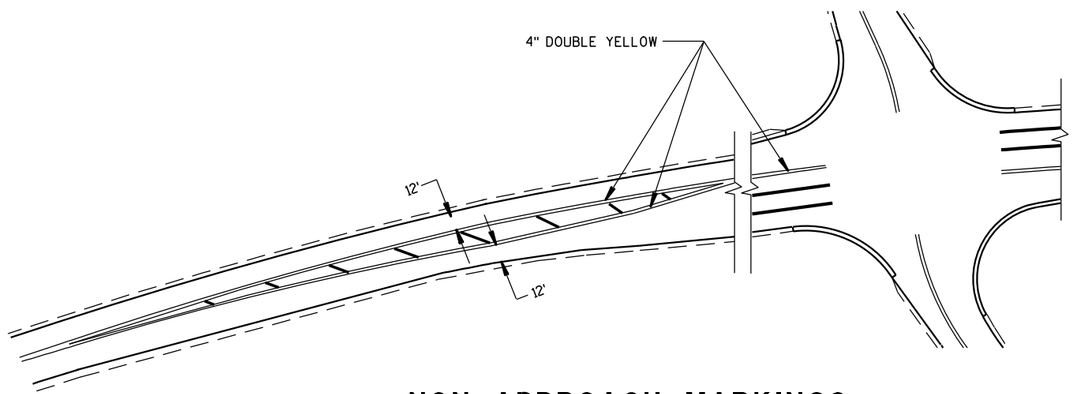
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-5-09 DATE	/S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER
FHWA	102 IGN

6

S.D.D. 15 C 18-3

6

S.D.D. 15 C 18-3

GENERAL NOTES

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

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

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

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

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

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

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

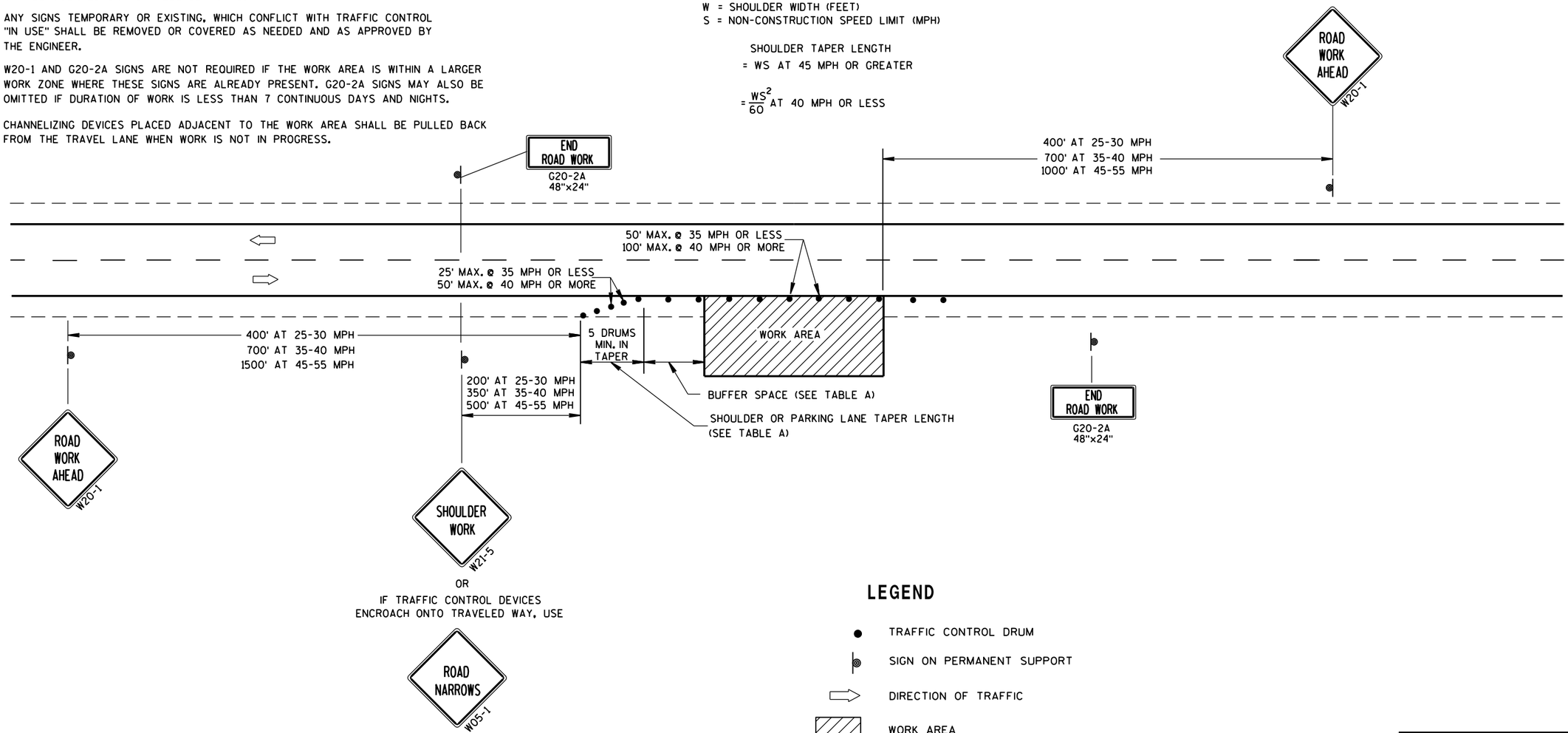
TABLE A

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

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

SHOULDER TAPER LENGTH
= WS AT 45 MPH OR GREATER

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



LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

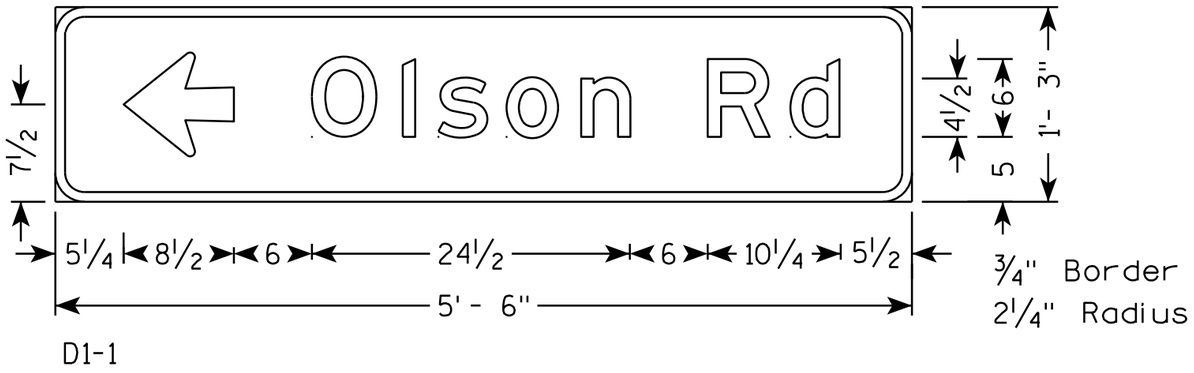
8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

6

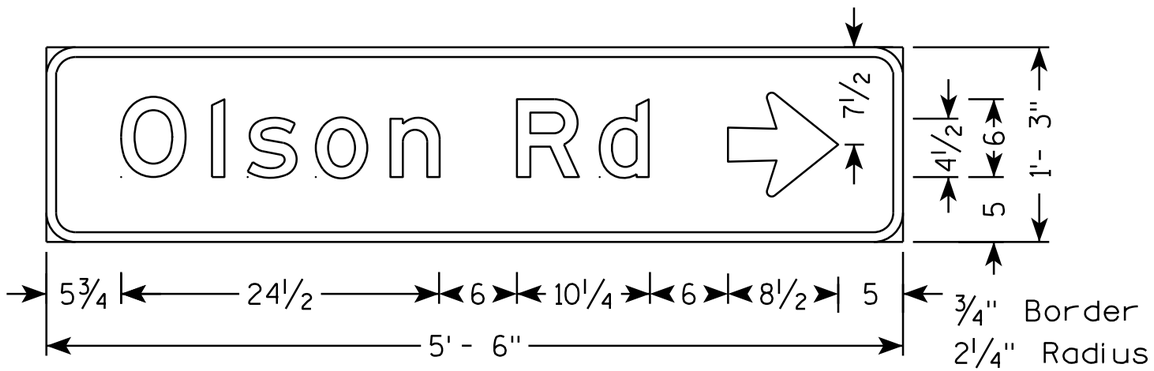
S.D.D. 15 D 28-2



D1-1

NOTES

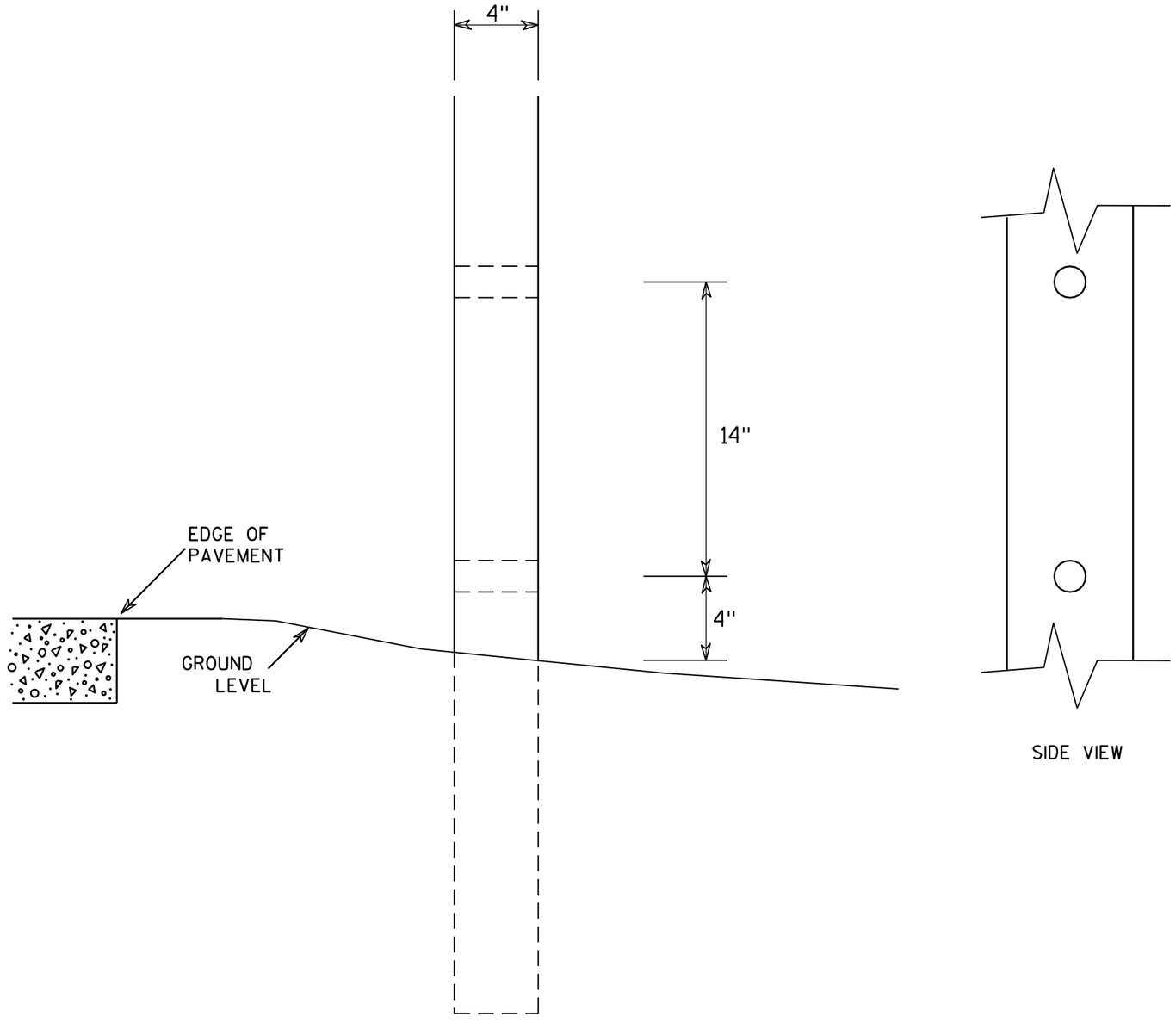
1. All Signs Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E



D1-1

PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	PERMANENT SIGNING	SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_d1\1131A114.dgn PLOT DATE : 22-JAN-2014 11:31 PLOT BY : mscsjq PLOT NAME : PLOT SCALE : 11.675051:1.000000 WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

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

4 X 6 WOOD POST MODIFICATIONS

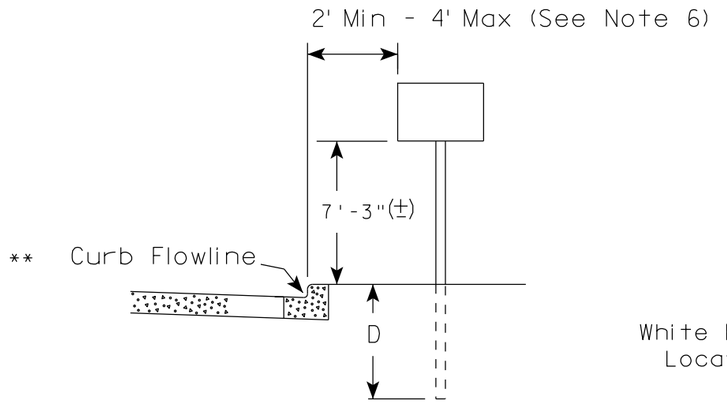
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

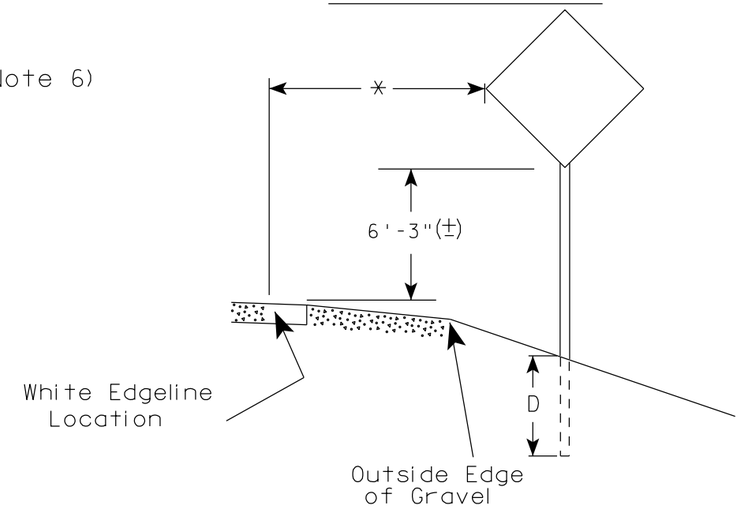
DATE 3/27/97 PLATE NO. A4-11.2

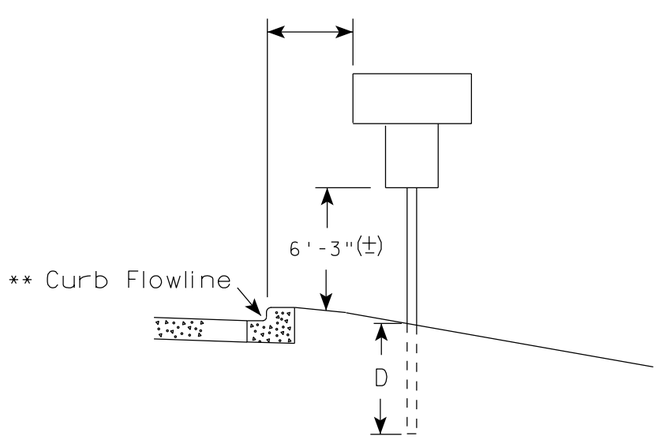
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 105	E

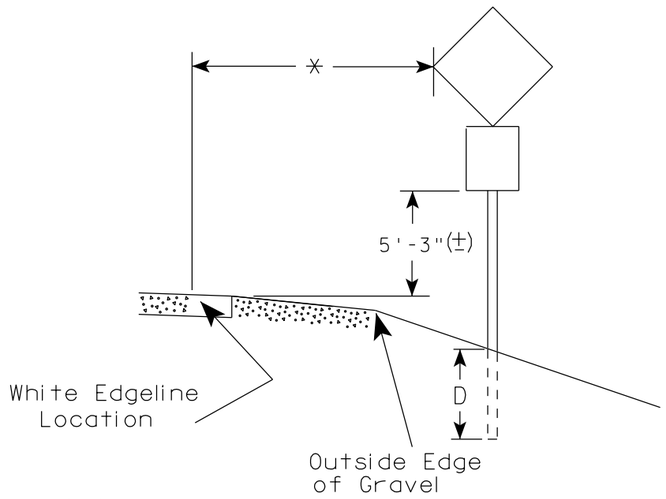
URBAN AREA



RURAL AREA (See Note 2)







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

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

GENERAL NOTES

1. Signs wider than 4 feet, 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series) & End of Rod Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (+).

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

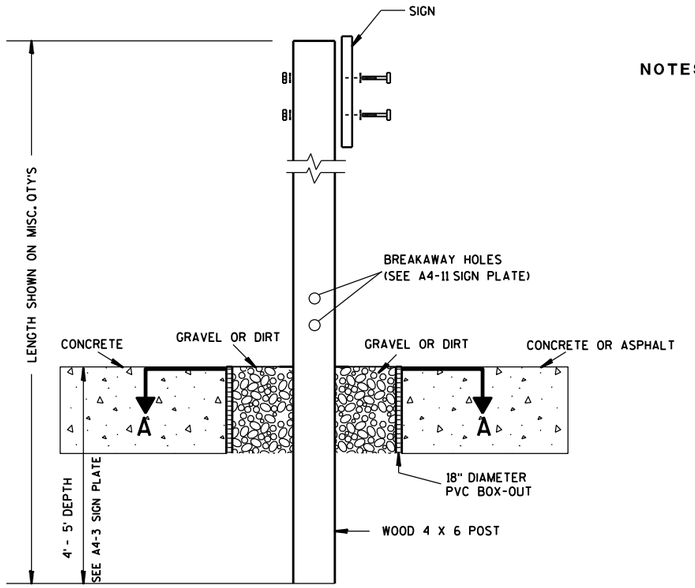
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

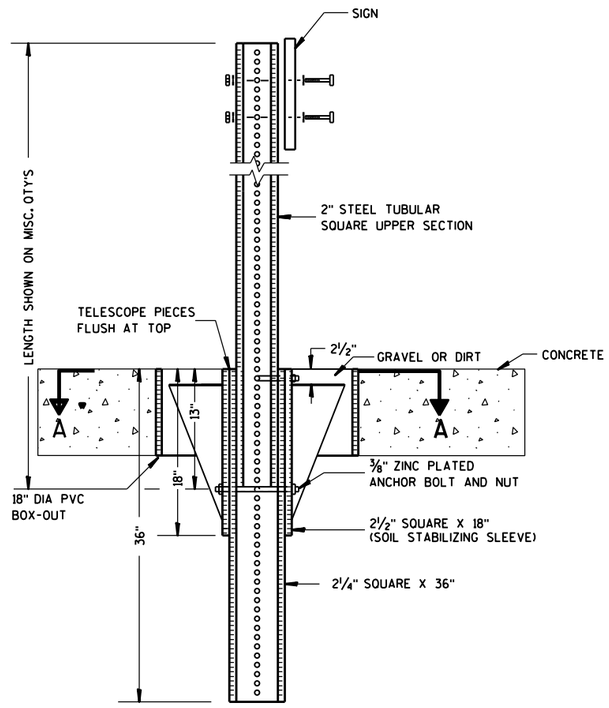
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A43.DGN PLOT DATE : 30-SEP-2013 13:25 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 99.237937:1.000000 WISDOT/CADDS SHEET 42



ELEVATION VIEW

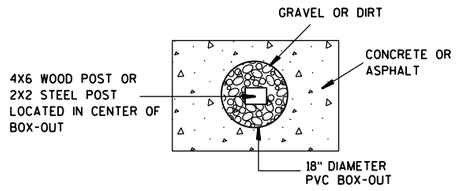
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

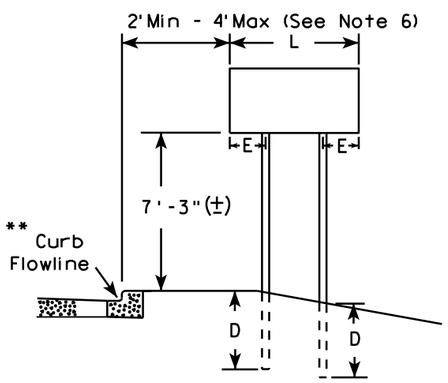
WISCONSIN DEPT OF TRANSPORTATION

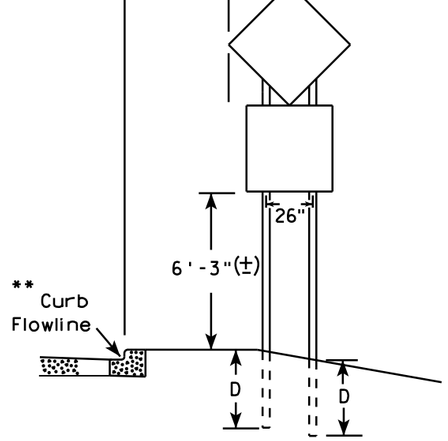
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

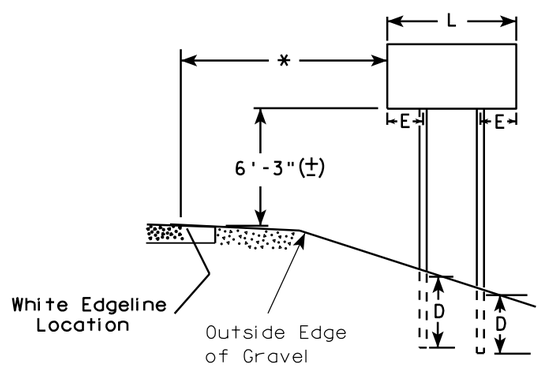
URBAN AREA

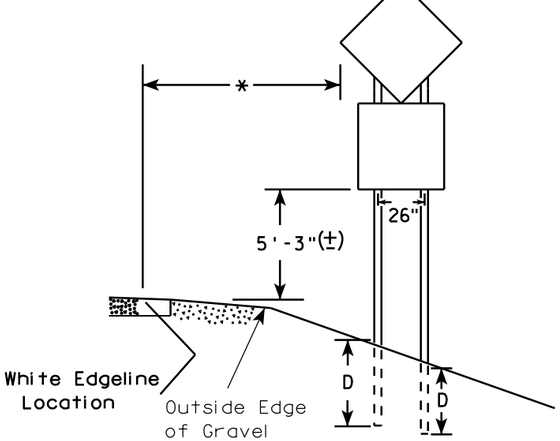




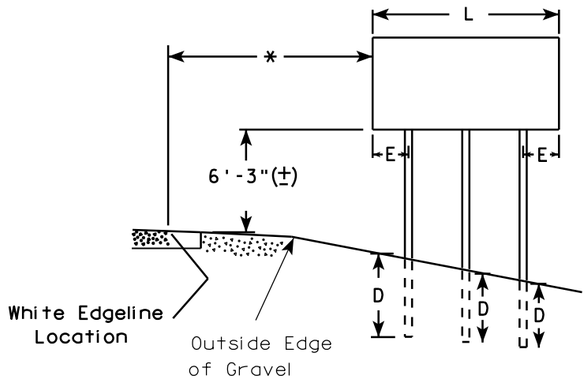
48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)





48" DIAMOND WARNING SIGN



GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4"-3" (±).

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

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

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

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

***

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

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

POST EMBEDMENT DEPTH

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

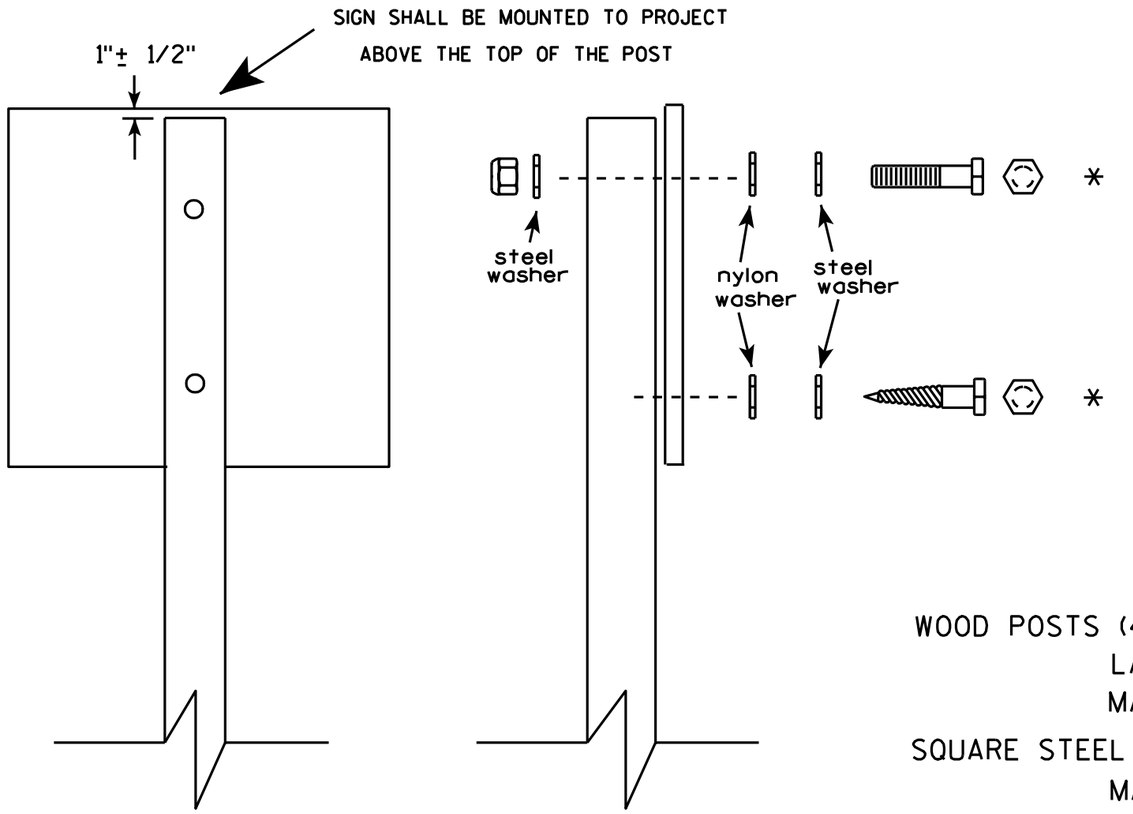
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

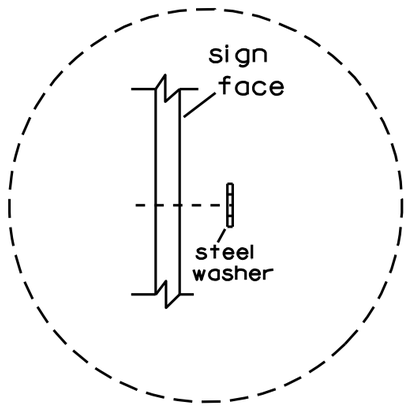
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

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

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

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



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

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

7

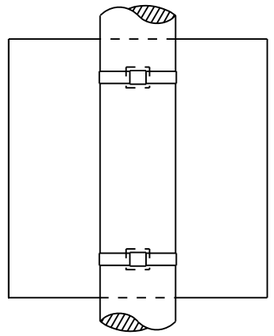
7

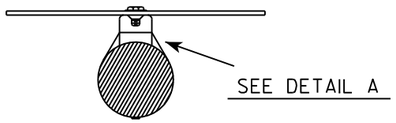
PROJECT NO:

SHEET NO: 109 E

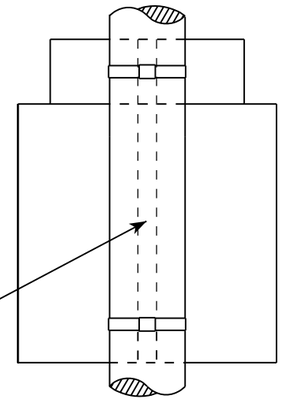
BANDING

SINGLE SIGN

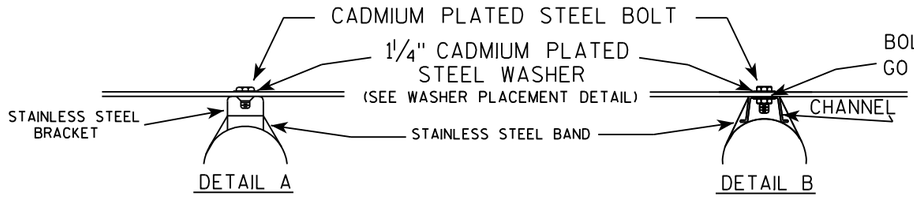




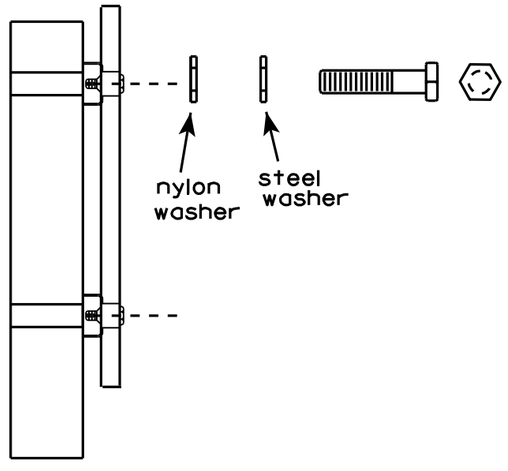
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL INSTALLATION SHEET



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

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

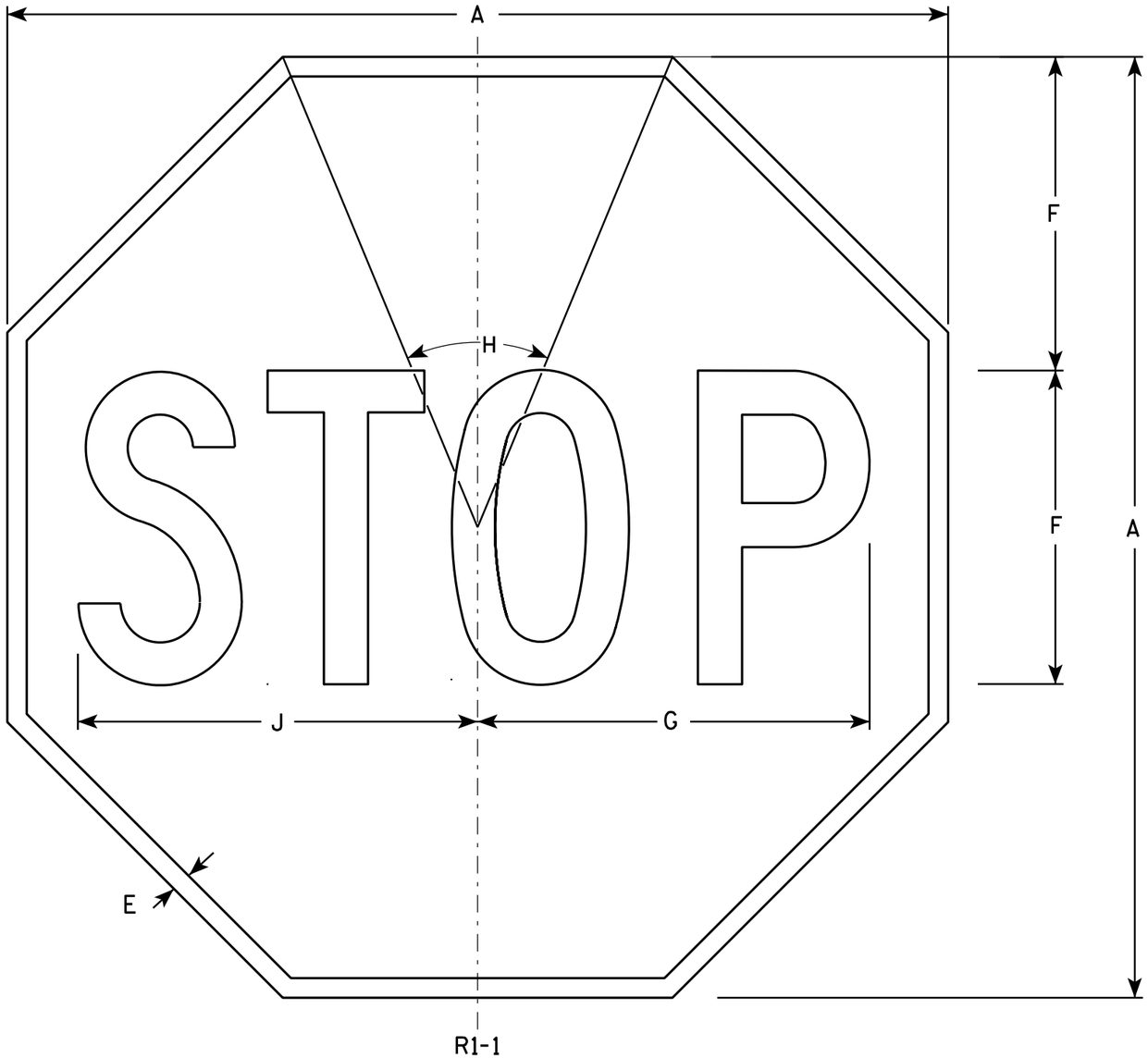
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 110	E



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

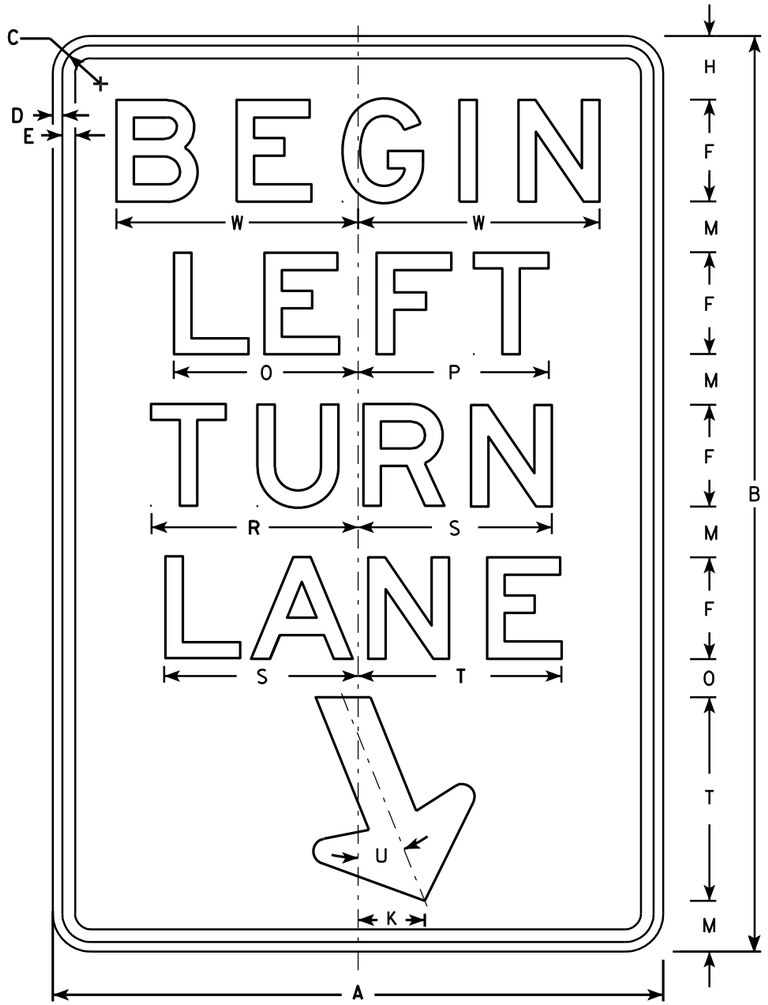
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

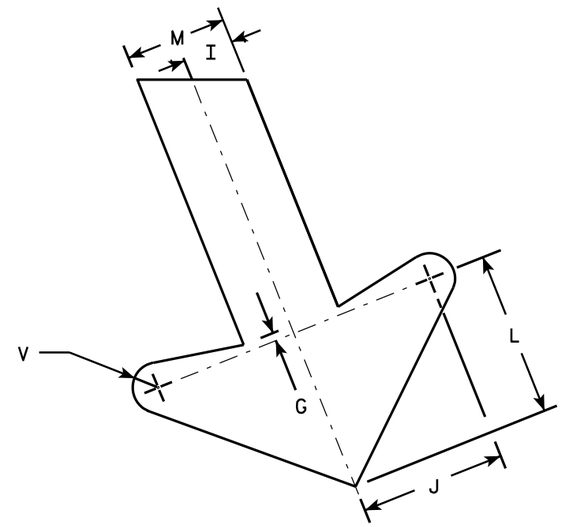
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 111	E



R3-20L

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.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

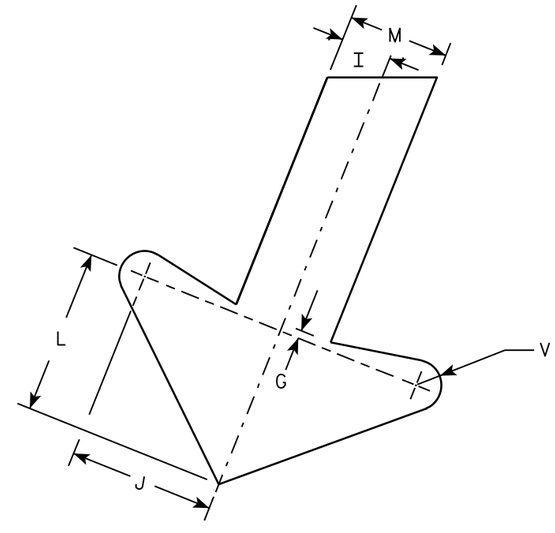
DATE 10/18/10 PLATE NO. R3-20L.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 112 | E

R3-20R

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.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

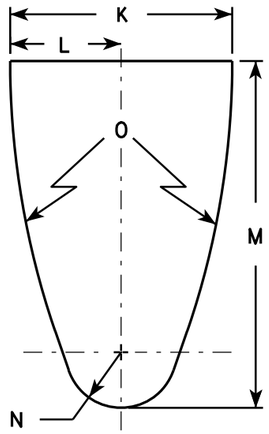
STANDARD SIGN
R3-20R

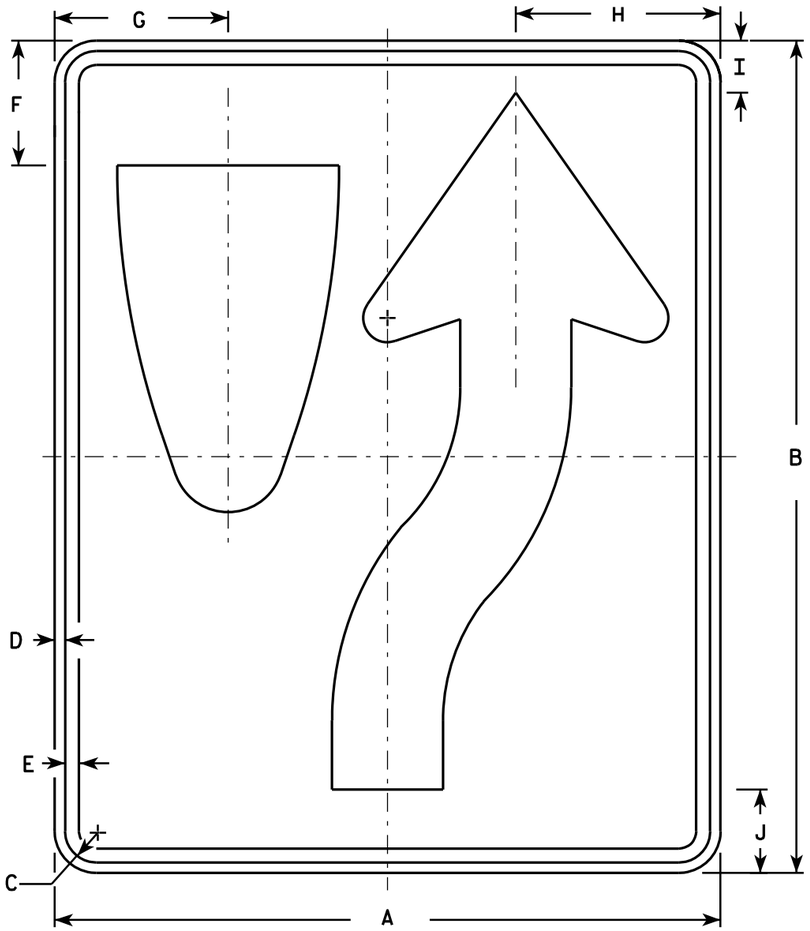
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 113 | E

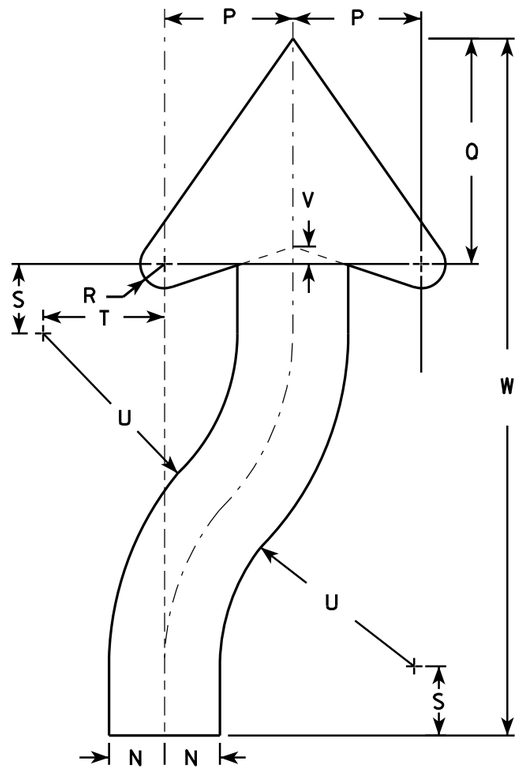




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

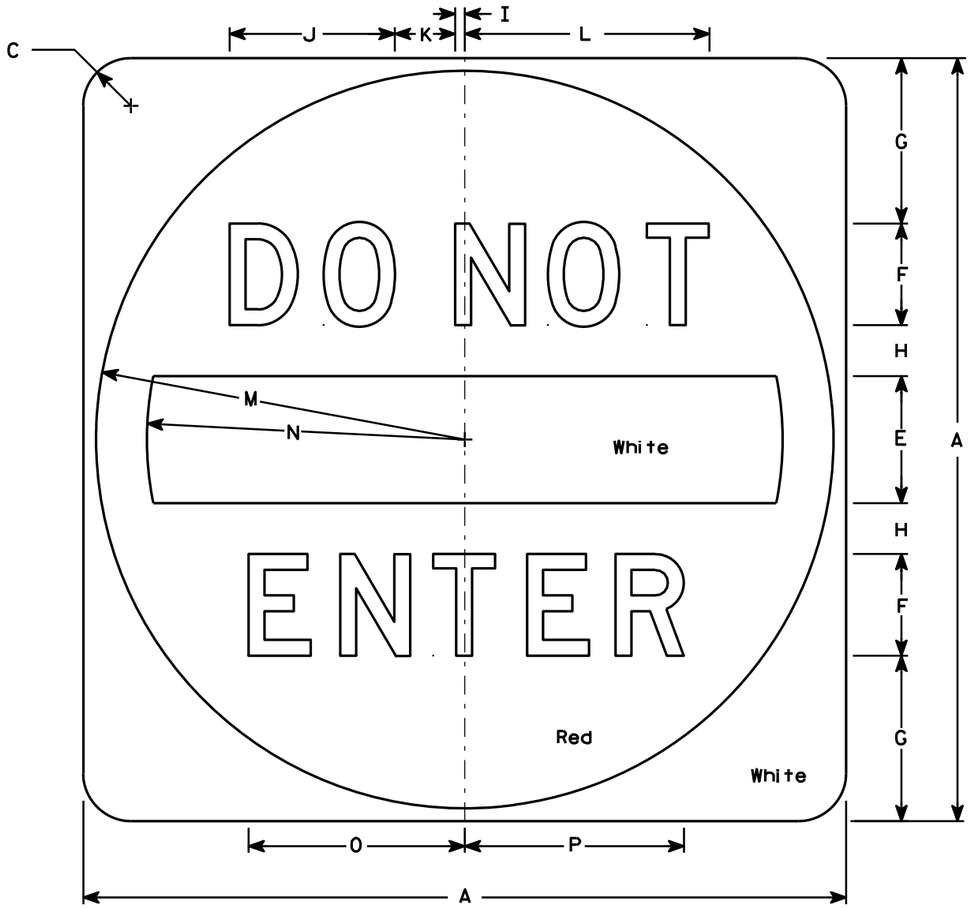
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 114	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

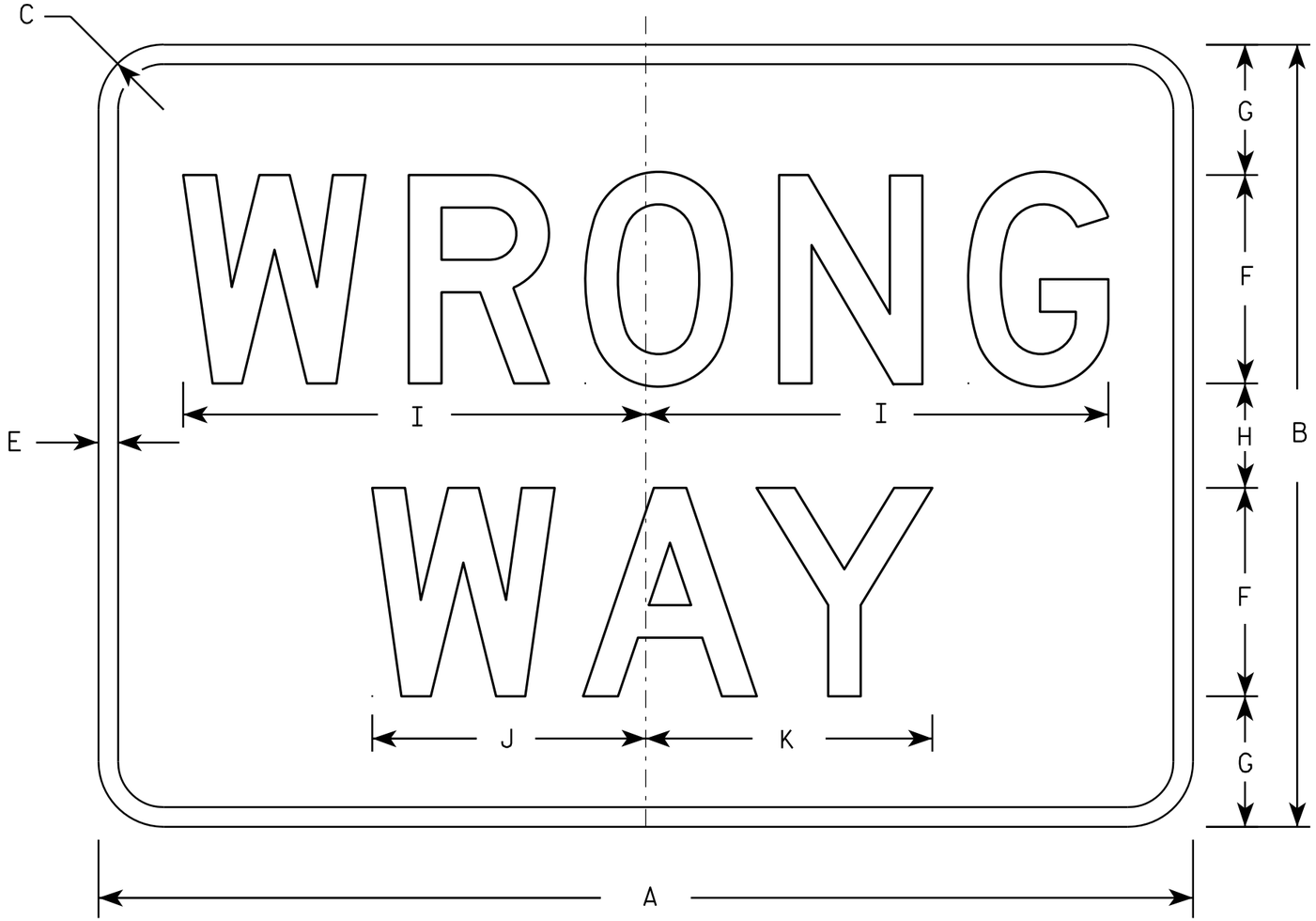
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 115 | E



R5-1A

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 - D
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.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

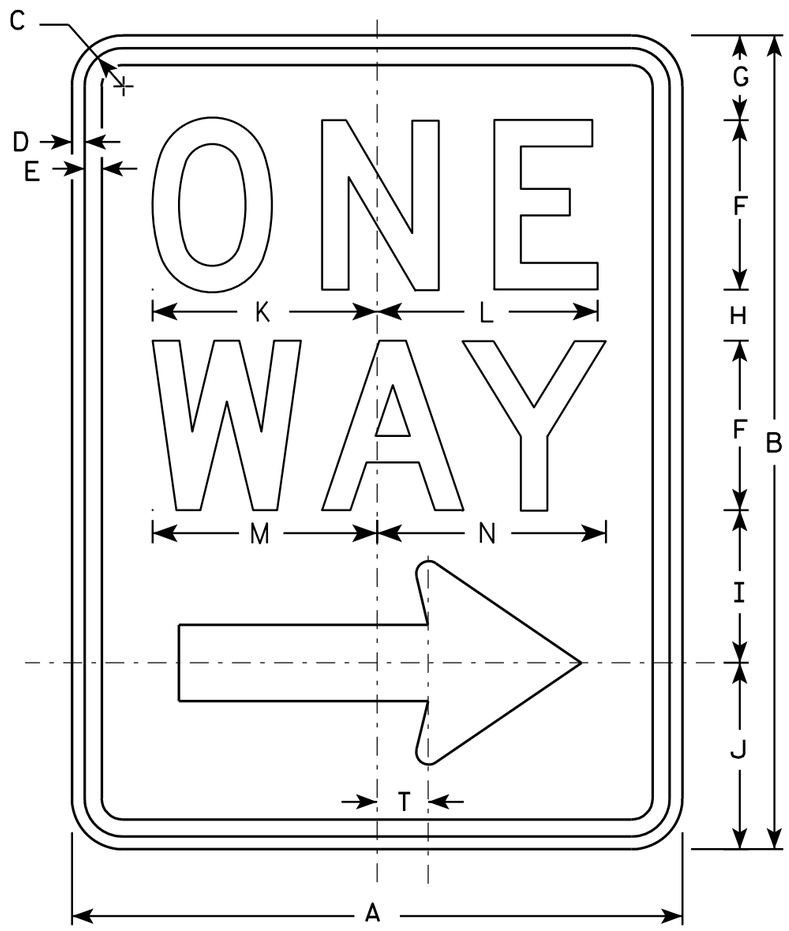
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

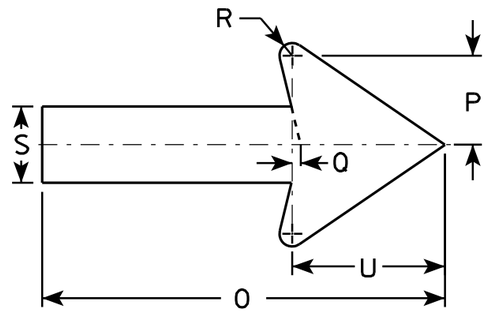
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 116	E



R6-2R

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 - D
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. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

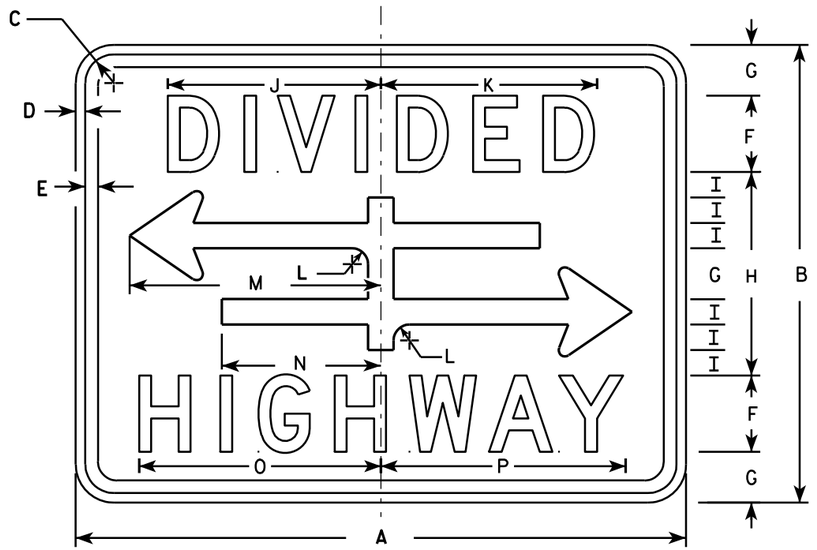
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

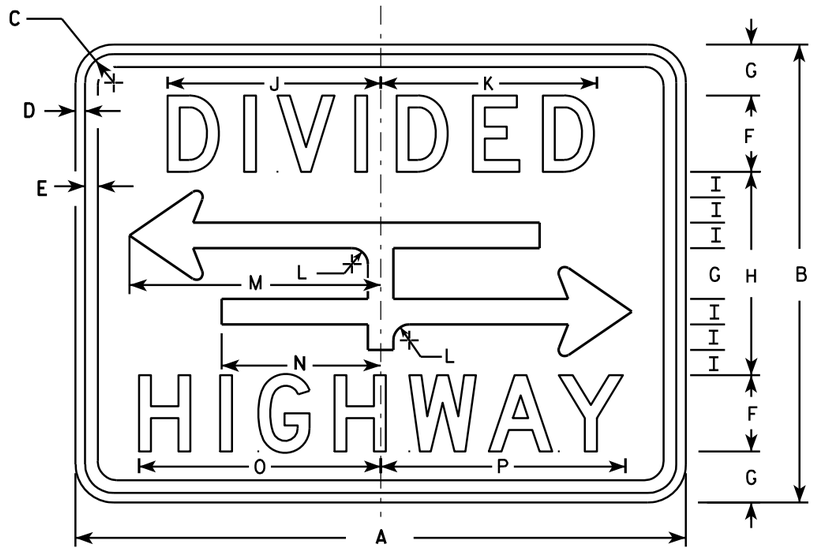
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 117	E



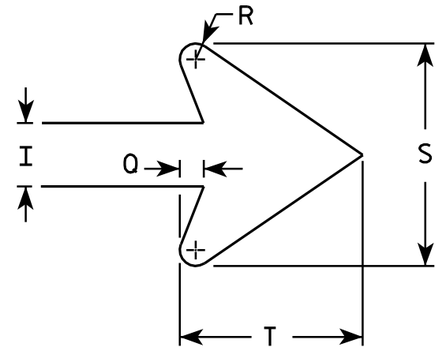
R6-3

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 - D
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.



R6-3A



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	18	1 1/8	3/8	3/8	3	2	8	1	8 3/8	8 1/2	5/8	9 7/8	6 1/4	9 1/2	9 5/8	3/8	1/4	3 1/2	2 3/4							3.0
2S	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
2M	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
3																											
4																											
5																											

STANDARD SIGN
R6-3 & R6-3A

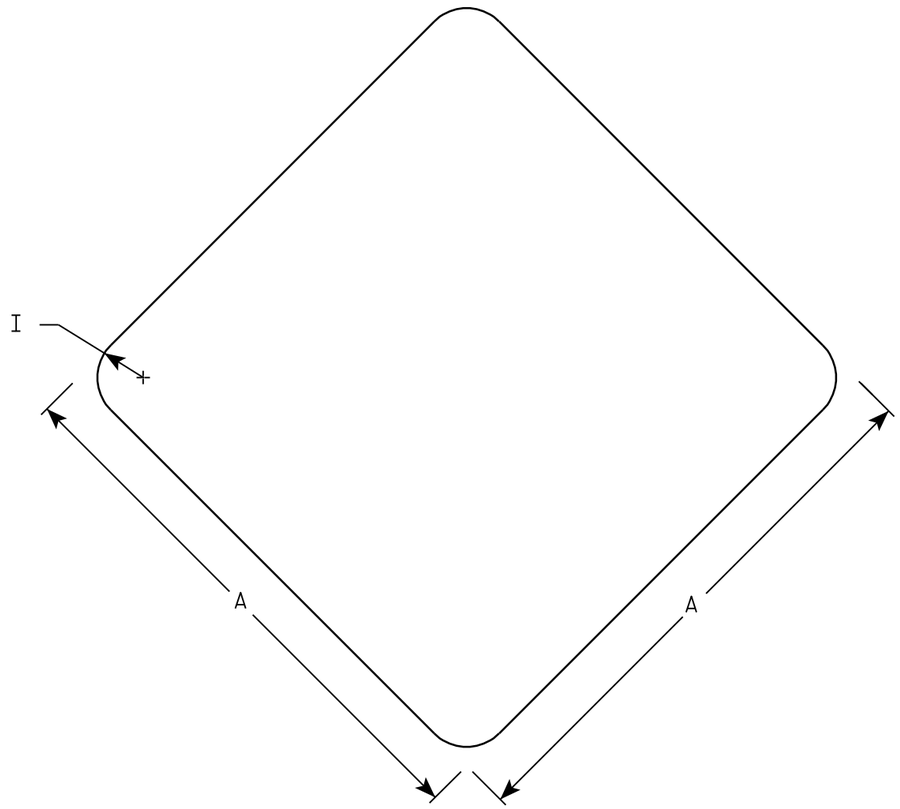
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R6-3.5

PROJECT NO:

SHEET NO: 118 E



W5-54

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

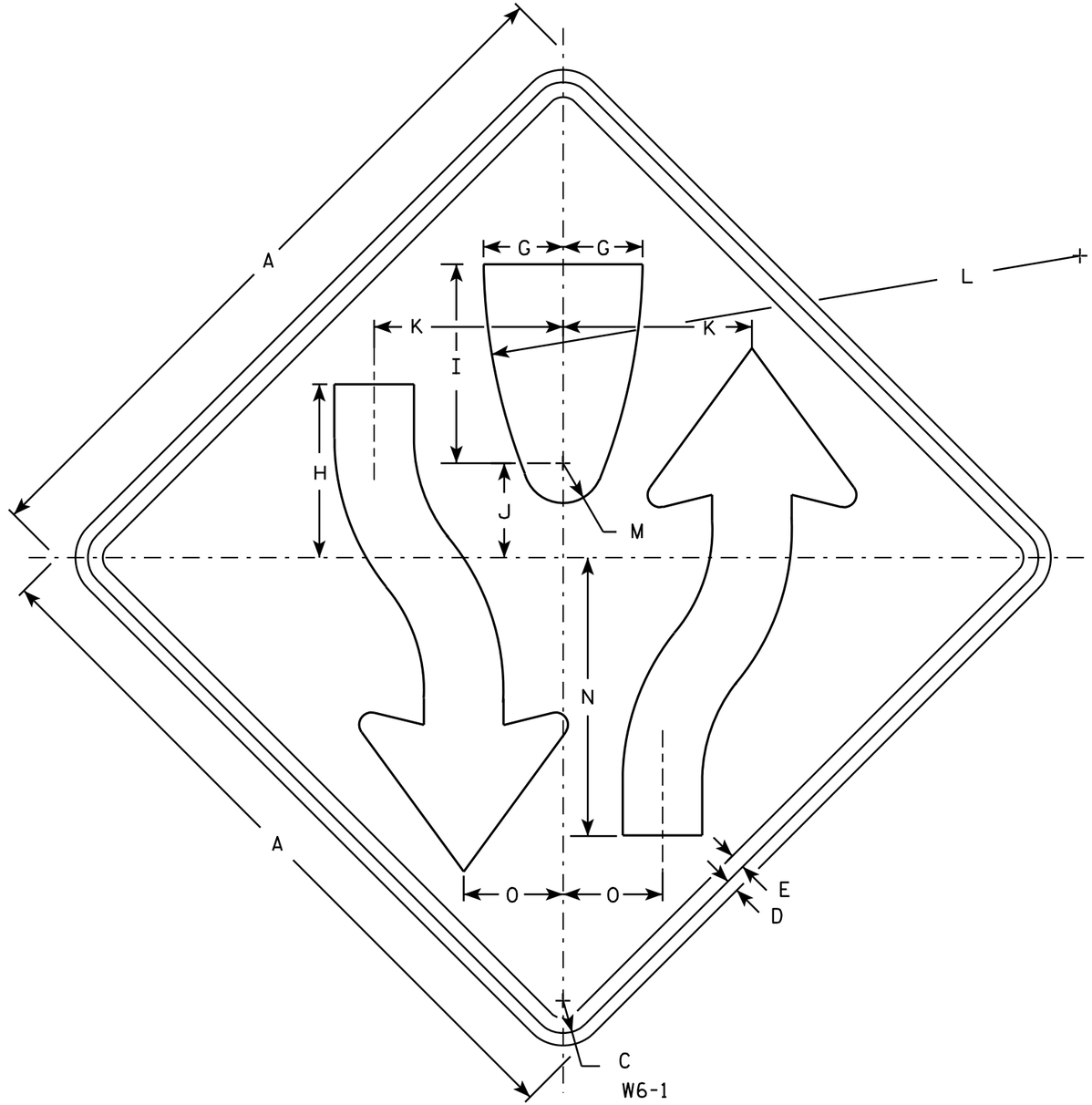
STANDARD SIGN
W5-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

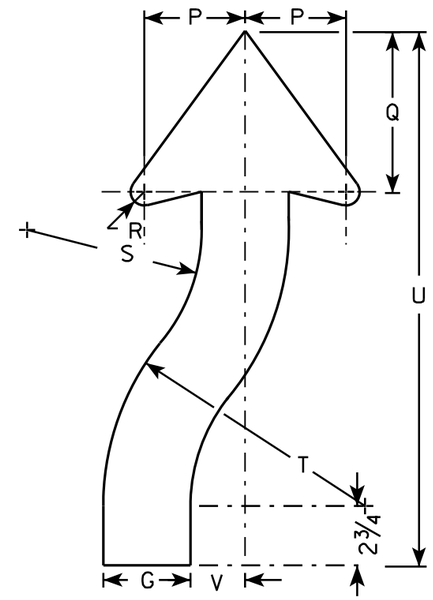
DATE 11/3/10 PLATE NO. W5-54.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 119	E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25
2S	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2M	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
3																											
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

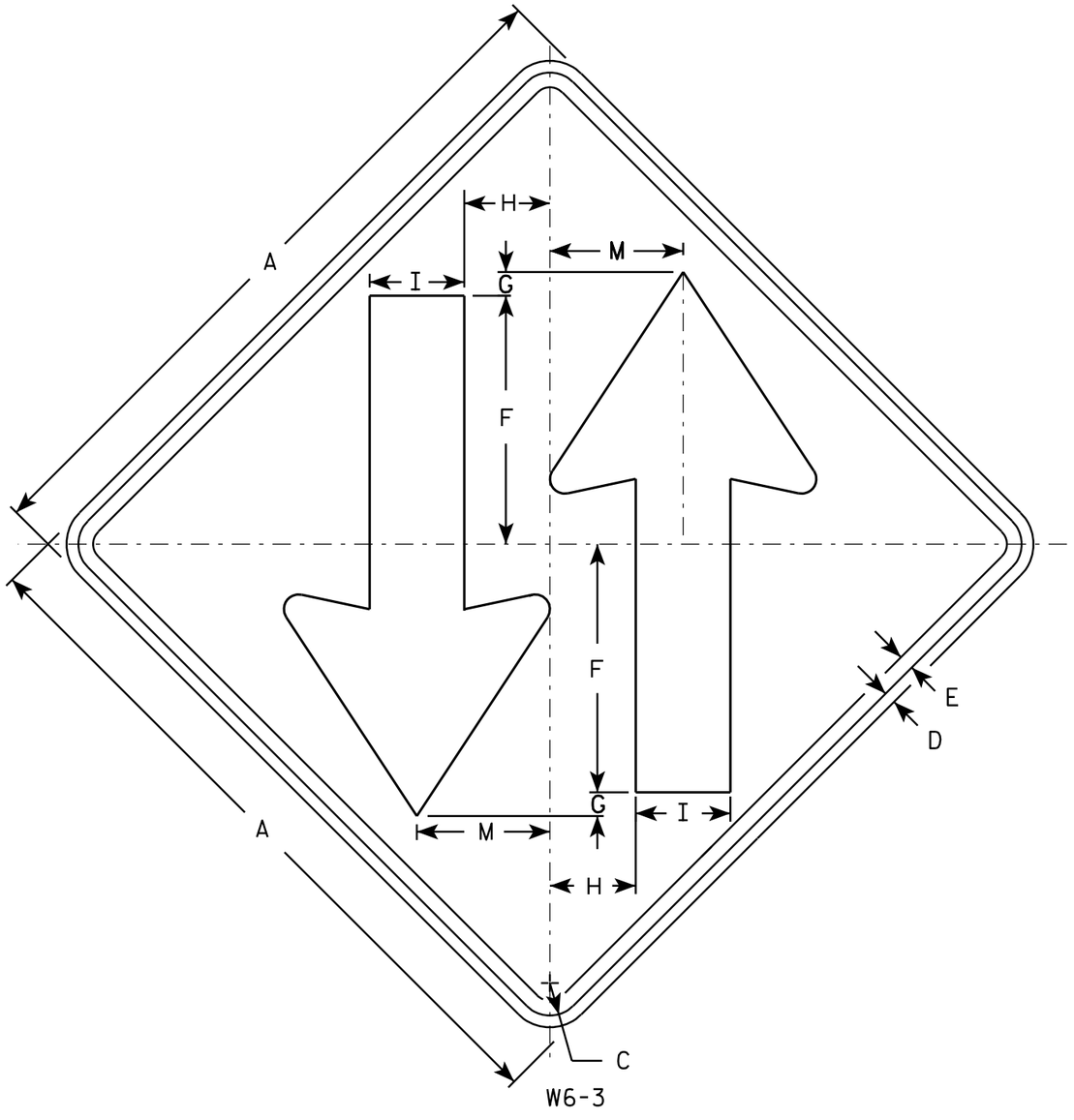
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 120	E

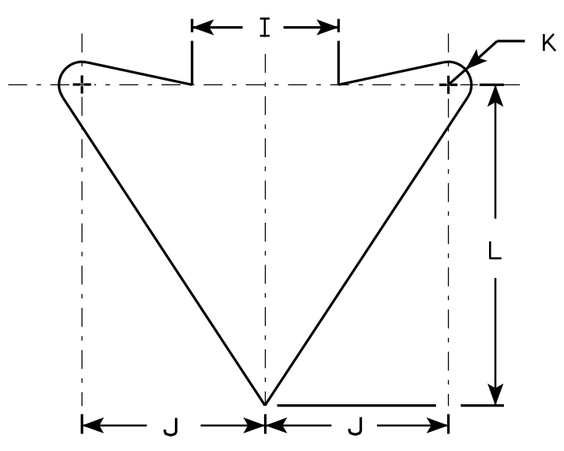
7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W61.DGN PLOT DATE : 12-MAR-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000
WISDOT/CADDS SHEET 42



NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10 1/2	1	3 5/8	4	5	5/8	8 3/4	5 5/8														6.25
2S	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2M	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
3																											
4	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0

STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-3.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 121	E

STAGE 1 - TEMP LANE

STATION	Real Station	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)							Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Expanded Fill	Expanded Marsh Backfill	Expanded Rock	Expanded EBS Backfill	Reduced Marsh in Fill	Reduced EBS In Fill	
									Note 1	Note 2	Note 3				1.00 Note 1	1.25	1.50 Note 4	1.10	1.30 Note 5	0.60 Note 6	0.80 Note 7	Note 8
125+91.5	12591.50	0.00	17.49	0.00	0.09	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00
126+00	12600.00	8.50	17.28	0.00	0.12	0.00	0.00	0.00	5	0	0	0	0	0	5	0	0	0	0	0.00	0.00	5.43
126+50	12650.00	50.00	15.20	0.00	1.22	0.00	0.00	0.00	30	0	1	0	0	0	36	2	0	0	0	0.00	0.00	33.96
127+00	12700.00	50.00	15.01	0.00	3.25	0.00	0.00	0.00	28	0	4	0	0	0	64	7	0	0	0	0.00	0.00	56.76
127+50	12750.00	50.00	14.16	0.00	3.50	0.00	0.00	0.00	27	0	6	0	0	0	91	15	0	0	0	0.00	0.00	75.96
128+00	12800.00	50.00	14.82	0.00	6.37	0.00	0.00	0.00	27	0	9	0	0	0	117	26	0	0	0	0.00	0.00	91.37
128+50	12850.00	50.00	16.84	0.00	2.38	0.00	0.00	0.00	29	0	8	0	0	0	147	36	0	0	0	0.00	0.00	110.56
129+00	12900.00	50.00	14.26	0.00	13.38	0.00	0.00	0.00	29	0	15	0	0	0	175	54	0	0	0	0.00	0.00	121.11
129+50	12950.00	50.00	13.06	0.00	13.57	0.00	0.00	0.00	25	0	25	0	0	0	201	86	0	0	0	0.00	0.00	115.21
130+00	13000.00	50.00	13.56	0.00	11.83	0.00	0.00	0.00	25	0	24	0	0	0	225	115	0	0	0	0.00	0.00	110.46
130+50	13050.00	50.00	13.89	0.00	9.89	0.00	0.00	0.00	25	0	20	0	0	0	251	140	0	0	0	0.00	0.00	110.74
131+00	13100.00	50.00	14.58	0.00	8.51	0.00	0.00	0.00	26	0	17	0	0	0	277	161	0	0	0	0.00	0.00	115.81
131+50	13150.00	50.00	15.23	0.00	8.47	0.00	0.00	0.00	28	0	16	0	0	0	305	181	0	0	0	0.00	0.00	123.76
132+00	13200.00	50.00	15.11	0.00	6.34	0.00	0.00	0.00	28	0	14	0	0	0	333	198	0	0	0	0.00	0.00	134.71
132+50	13250.00	50.00	12.53	0.00	10.79	0.00	0.00	0.00	26	0	16	0	0	0	359	218	0	0	0	0.00	0.00	140.46
133+00	13300.00	50.00	10.33	0.00	11.41	0.00	0.00	0.00	21	0	21	0	0	0	380	244	0	0	0	0.00	0.00	135.92
133+50	13350.00	50.00	7.42	0.00	10.42	0.00	0.00	0.00	16	0	20	0	0	0	396	269	0	0	0	0.00	0.00	127.08
134+00	13400.00	50.00	6.81	0.00	10.62	0.00	0.00	0.00	13	0	19	0	0	0	409	293	0	0	0	0.00	0.00	115.91
134+50	13450.00	50.00	6.86	0.00	9.13	0.00	0.00	0.00	13	0	18	0	0	0	422	316	0	0	0	0.00	0.00	105.71
135+00	13500.00	50.00	6.99	0.00	6.82	0.00	0.00	0.00	13	0	15	0	0	0	435	335	0	0	0	0.00	0.00	100.07
135+50	13550.00	50.00	6.79	0.00	5.73	0.00	0.00	0.00	13	0	12	0	0	0	448	349	0	0	0	0.00	0.00	98.31
136+00	13600.00	50.00	6.52	0.00	5.58	0.00	0.00	0.00	12	0	10	0	0	0	460	362	0	0	0	0.00	0.00	97.55
136+50	13650.00	50.00	6.78	0.00	5.60	0.00	0.00	0.00	12	0	10	0	0	0	472	375	0	0	0	0.00	0.00	96.92
137+00	13700.00	50.00	6.20	0.00	9.76	0.00	0.00	0.00	12	0	14	0	0	0	484	393	0	0	0	0.00	0.00	91.16
137+50	13750.00	50.00	7.15	0.00	3.80	0.00	0.00	0.00	12	0	13	0	0	0	497	409	0	0	0	0.00	0.00	87.82
138+00	13800.00	50.00	8.73	0.00	3.58	0.00	0.00	0.00	15	0	7	0	0	0	511	417	0	0	0	0.00	0.00	93.97
138+50	13850.00	50.00	9.83	0.00	2.34	0.00	0.00	0.00	17	0	5	0	0	0	528	424	0	0	0	0.00	0.00	104.31
139+00	13900.00	50.00	11.15	0.00	1.36	0.00	0.00	0.00	19	0	3	0	0	0	548	428	0	0	0	0.00	0.00	119.46
139+50	13950.00	50.00	10.98	0.00	2.01	0.00	0.00	0.00	20	0	3	0	0	0	568	432	0	0	0	0.00	0.00	136.05
140+00	14000.00	50.00	12.11	0.00	2.35	0.00	0.00	0.00	21	0	4	0	0	0	590	437	0	0	0	0.00	0.00	152.38
140+50	14050.00	50.00	14.35	0.00	1.53	0.00	0.00	0.00	25	0	4	0	0	0	614	442	0	0	0	0.00	0.00	172.39
141+00	14100.00	50.00	16.89	0.00	1.30	0.00	0.00	0.00	29	0	3	0	0	0	643	445	0	0	0	0.00	0.00	198.04
141+50	14150.00	50.00	15.85	0.00	2.13	0.00	0.00	0.00	30	0	3	0	0	0	673	449	0	0	0	0.00	0.00	224.38
142+00	14200.00	50.00	15.24	0.00	2.02	0.00	0.00	0.00	29	0	4	0	0	0	702	454	0	0	0	0.00	0.00	248.36
142+50	14250.00	50.00	17.06	0.00	0.51	0.00	0.00	0.00	30	0	2	0	0	0	732	457	0	0	0	0.00	0.00	275.33
143+00	14300.00	50.00	19.71	0.00	0.00	0.00	0.00	0.00	34	0	0	0	0	0	766	457	0	0	0	0.00	0.00	308.78
143+50	14350.00	50.00	19.57	0.00	0.00	0.00	0.00	0.00	36	0	0	0	0	0	803	457	0	0	0	0.00	0.00	345.15
144+00	14400.00	50.00	17.35	0.00	0.27	0.00	0.00	0.00	34	0	0	0	0	0	837	458	0	0	0	0.00	0.00	379.02
144+50	14450.00	50.00	18.00	0.00	0.48	0.00	0.00	0.00	33	0	1	0	0	0	869	459	0	0	0	0.00	0.00	410.88
145+00	14500.00	50.00	18.12	0.00	0.59	0.00	0.00	0.00	33	0	1	0	0	0	903	460	0	0	0	0.00	0.00	443.08
145+50	14550.00	50.00	17.94	0.00	0.00	0.00	0.00	0.00	33	0	1	0	0	0	936	461	0	0	0	0.00	0.00	475.78
146+00	14600.00	50.00	15.28	0.00	2.12	0.00	0.00	0.00	31	0	2	0	0	0	967	463	0	0	0	0.00	0.00	504.09
146+50	14650.00	50.00	15.30	0.00	1.90	0.00	0.00	0.00	28	0	4	0	0	0	995	468	0	0	0	0.00	0.00	527.75
147+00	14700.00	50.00	14.44	0.00	1.82	0.00	0.00	0.00	28	0	3	0	0	0	1,023	472	0	0	0	0.00	0.00	550.98
147+50	14750.00	50.00	15.69	0.00	1.89	0.00	0.00	0.00	28	0	3	0	0	0	1,051	476	0	0	0	0.00	0.00	574.58
148+00	14800.00	50.00	16.74	0.00	0.91	0.00	0.00	0.00	30	0	3	0	0	0	1,081	479	0	0	0	0.00	0.00	601.36
148+50	14850.00	50.00	19.13	0.00	0.76	0.00	0.00	0.00	33	0	2	0	0	0	1,114	481	0	0	0	0.00	0.00	632.63
149+00	14900.00	50.00	20.15	0.00	0.70	0.00	0.00	0.00	36	0	1	0	0	0	1,150	483	0	0	0	0.00	0.00	667.32
149+50	14950.00	50.00	19.28	0.00	1.77	0.00	0.00	0.00	37	0	2	0	0	0	1,187	486	0	0	0	0.00	0.00	700.97
150+00	15000.00	50.00	22.22	0.00	1.29	0.00	0.00	0.00	38	0	3	0	0	0	1,225	489	0	0	0	0.00	0.00	735.84
150+50	15050.00	50.00	19.46	0.00	7.71	0.00	0.00	0.00	39	0	8	0	0	0	1,264	500	0	0	0	0.00	0.00	764.02
151+00	15100.00	50.00	20.11	0.00	8.08	0.00	0.00	0.00	37	0	15	0	0	0	1,301	518	0	0	0	0.00	0.00	782.39
151+50	15150.00	50.00	16.46	0.00	12.89	0.00	0.00	0.00	34	0	19	0	0	0	1,334	542	0	0	0	0.00	0.00	791.98
152+00	15200.00	50.00	14.45	0.00	17.98	0.00	0.00	0.00	29	0	29	0	0	0	1,363	578	0	0	0	0.00	0.00	784.88
152+50	15250.00	50.00	11.90	0.00	17.63	0.00	0.00	0.00	24	0	33	0	0	0	1,387	619	0	0	0	0.00	0.00	768.08
153+00	15300.00	50.00	13.55	0.00	14.04	0.00	0.00	0.00	24	0	29	0	0	0	1,411	656	0	0	0	0.00	0.00	755.00
153+50	15350.00	50.00	14.45	0.00	4.76	0.00	0.00	0.00	26	0	17	0	0	0	1,437	678	0	0	0	0.00	0.00	759.17
154+00	15400.00	50.00	14.80	0.00	4.61	0.00	0.00	0.00	27	0	9	0	0	0	1,464	689	0	0	0	0.00	0.00	775.40
154+03.03	15403.03	3.03	14.79	0.00	4.62	0.00	0.00	0.00	2	0	1	0	0	0	1,466	689	0	0	0	0.00	0.00	776.41

EARTHWORK TABLE - MAINLINE STAGE 2

STATION	Real Station	Distance	AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Marsh Exc	Rock Exc	EBS	Cumulative Vol (CY) Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Expanded Rock 1.10	Expanded EBS Backfill 1.30 Note 5	Reduced Marsh in Fill 0.60 Note 6	Reduced EBS In Fill 0.80 Note 7	Mass Ordinate Note 8
124+00	12400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00
124+50	12450.00	50.00	60.76	0.00	0.00	0.00	0.00	0.00	56	0	0	0	0	0	56	0	0	0	0	0.00	0.00	56.26
125+00	12500.00	50.00	23.04	0.00	0.12	0.00	0.00	0.00	78	0	0	0	0	0	134	0	0	0	0	0.00	0.00	133.73
125+50	12550.00	50.00	16.55	0.00	2.65	0.00	0.00	0.00	37	0	3	0	0	0	171	3	0	0	0	0.00	0.00	167.19
126+00	12600.00	50.00	13.62	0.00	9.97	0.00	0.00	0.00	28	0	12	0	0	0	198	18	0	0	0	0.00	0.00	180.51
126+50	12650.00	50.00	12.13	0.00	13.99	0.00	0.00	0.00	24	0	22	0	0	0	222	46	0	0	0	0.00	0.00	176.63
127+00	12700.00	50.00	11.18	0.00	28.14	0.00	0.00	0.00	22	0	39	0	0	0	244	94	0	0	0	0.00	0.00	149.46
127+50	12750.00	50.00	11.78	0.00	36.59	0.00	0.00	0.00	21	0	60	0	0	0	265	169	0	0	0	0.00	0.00	95.80
128+00	12800.00	50.00	11.22	0.00	40.90	0.00	0.00	0.00	21	0	72	0	0	0	286	259	0	0	0	0.00	0.00	27.39
128+50	12850.00	50.00	10.97	0.00	46.04	0.00	0.00	0.00	21	0	81	0	0	0	307	360	0	0	0	0.00	0.00	-52.70
129+00	12900.00	50.00	18.28	0.00	45.37	0.00	0.00	0.00	27	0	85	0	0	0	334	465	0	0	0	0.00	0.00	-131.42
129+50	12950.00	50.00	25.59	0.00	42.51	0.00	0.00	0.00	41	0	81	0	0	0	375	567	0	0	0	0.00	0.00	-192.52
130+00	13000.00	50.00	23.50	0.00	39.68	0.00	0.00	0.00	45	0	76	0	0	0	420	662	0	0	0	0.00	0.00	-242.20
130+50	13050.00	50.00	21.08	0.00	38.57	0.00	0.00	0.00	41	0	72	0	0	0	461	753	0	0	0	0.00	0.00	-291.50
131+00	13100.00	50.00	22.89	0.00	48.57	0.00	0.00	0.00	41	0	81	0	0	0	502	854	0	0	0	0.00	0.00	-351.65
131+50	13150.00	50.00	26.68	0.00	48.30	0.00	0.00	0.00	46	0	90	0	0	0	548	966	0	0	0	0.00	0.00	-417.87
132+00	13200.00	50.00	28.60	0.00	46.07	0.00	0.00	0.00	51	0	87	0	0	0	599	1,075	0	0	0	0.00	0.00	-475.93
132+50	13250.00	50.00	34.49	0.00	64.68	0.00	0.00	0.00	58	0	103	0	0	0	658	1,203	0	0	0	0.00	0.00	-545.70
133+00	13300.00	50.00	39.66	0.00	64.81	0.00	0.00	0.00	69	0	120	0	0	0	726	1,353	0	0	0	0.00	0.00	-626.92
133+50	13350.00	50.00	44.89	0.00	54.36	0.00	0.00	0.00	78	0	110	0	0	0	805	1,491	0	0	0	0.00	0.00	-686.57
134+00	13400.00	50.00	48.79	0.00	35.87	0.00	0.00	0.00	87	0	84	0	0	0	891	1,596	0	0	0	0.00	0.00	-704.26
134+50	13450.00	50.00	53.73	0.00	42.92	0.00	0.00	0.00	95	0	73	0	0	0	986	1,687	0	0	0	0.00	0.00	-700.52
135+00	13500.00	50.00	58.66	0.00	42.61	0.00	0.00	0.00	104	0	79	0	0	0	1,090	1,786	0	0	0	0.00	0.00	-695.46
135+09.25	13509.25	9.25	62.99	0.00	107.21	0.00	0.00	0.00	21	0	26	0	0	0	1,111	1,818	0	0	0	0.00	0.00	-706.70
135+25	13525.00	15.75	77.52	0.00	108.64	0.00	0.00	0.00	41	0	63	0	0	0	1,152	1,897	0	0	0	0.00	0.00	-744.41
135+50	13550.00	25.00	49.49	0.00	70.31	0.00	0.00	0.00	59	0	83	0	0	0	1,211	2,000	0	0	0	0.00	0.00	-789.18
135+75	13575.00	25.00	50.00	0.00	6.16	0.00	0.00	0.00	46	0	35	0	0	0	1,257	2,044	0	0	0	0.00	0.00	-787.37
136+00	13600.00	25.00	49.48	0.00	6.53	0.00	0.00	0.00	46	0	6	0	0	0	1,303	2,052	0	0	0	0.00	0.00	-748.66
136+25	13625.00	25.00	50.13	0.00	62.02	0.00	0.00	0.00	46	0	32	0	0	0	1,349	2,091	0	0	0	0.00	0.00	-742.22
136+50	13650.00	25.00	55.29	0.00	145.29	0.00	0.00	0.00	49	0	96	0	0	0	1,398	2,211	0	0	0	0.00	0.00	-813.38
136+51.35	13651.35	1.35	131.50	0.00	139.77	0.00	0.00	0.00	5	0	7	0	0	0	1,403	2,220	0	0	0	0.00	0.00	-817.61
137+00	13700.00	48.65	165.43	0.00	113.13	0.00	0.00	0.00	268	0	228	0	0	0	1,670	2,505	0	0	0	0.00	0.00	-834.92
137+50	13750.00	50.00	141.79	0.00	20.84	0.00	0.00	0.00	284	0	124	0	0	0	1,955	2,660	0	0	0	0.00	0.00	-705.52
138+00	13800.00	50.00	298.90	0.00	0.00	0.00	0.00	0.00	408	0	19	0	0	0	2,363	2,684	0	0	0	0.00	0.00	-321.58
138+50	13850.00	50.00	73.39	0.00	22.35	0.00	0.00	0.00	345	0	21	0	0	0	2,707	2,710	0	0	0	0.00	0.00	-2.74
139+00	13900.00	50.00	55.22	0.00	92.05	0.00	0.00	0.00	119	0	106	0	0	0	2,826	2,843	0	0	0	0.00	0.00	-16.08
139+50	13950.00	50.00	47.71	0.00	84.47	0.00	0.00	0.00	95	0	163	0	0	0	2,922	3,047	0	0	0	0.00	0.00	-125.07
140+00	14000.00	50.00	45.57	0.00	78.15	0.00	0.00	0.00	86	0	151	0	0	0	3,008	3,235	0	0	0	0.00	0.00	-226.93
140+50	14050.00	50.00	47.01	0.00	76.16	0.00	0.00	0.00	86	0	143	0	0	0	3,094	3,414	0	0	0	0.00	0.00	-319.82
141+00	14100.00	50.00	48.87	0.00	74.95	0.00	0.00	0.00	89	0	140	0	0	0	3,183	3,589	0	0	0	0.00	0.00	-405.93
141+50	14150.00	50.00	51.45	0.00	87.53	0.00	0.00	0.00	93	0	150	0	0	0	3,275	3,777	0	0	0	0.00	0.00	-501.09
142+00	14200.00	50.00	55.45	0.00	104.18	0.00	0.00	0.00	99	0	178	0	0	0	3,374	3,998	0	0	0	0.00	0.00	-623.99
142+50	14250.00	50.00	55.59	0.00	117.84	0.00	0.00	0.00	103	0	206	0	0	0	3,477	4,255	0	0	0	0.00	0.00	-778.15
143+00	14300.00	50.00	56.82	0.00	120.51	0.00	0.00	0.00	104	0	221	0	0	0	3,581	4,531	0	0	0	0.00	0.00	-949.93
143+50	14350.00	50.00	68.53	0.00	93.28	0.00	0.00	0.00	116	0	198	0	0	0	3,697	4,779	0	0	0	0.00	0.00	-1,081.31
144+00	14400.00	50.00	65.92	0.00	78.81	0.00	0.00	0.00	124	0	159	0	0	0	3,822	4,978	0	0	0	0.00	0.00	-1,156.01
144+50	14450.00	50.00	54.88	0.00	90.36	0.00	0.00	0.00	112	0	157	0	0	0	3,934	5,174	0	0	0	0.00	0.00	-1,239.95
145+00	14500.00	50.00	56.83	0.00	41.52	0.00	0.00	0.00	103	0	122	0	0	0	4,037	5,326	0	0	0	0.00	0.00	-1,289.14
145+50	14550.00	50.00	51.57	0.00	58.80	0.00	0.00	0.00	100	0	93	0	0	0	4,138	5,442	0	0	0	0.00	0.00	-1,304.88
146+00	14600.00	50.00	54.75	0.00	45.44	0.00	0.00	0.00	98	0	97	0	0	0	4,236	5,563	0	0	0	0.00	0.00	-1,327.08
146+50	14650.00	50.00	56.86	0.00	34.29	0.00	0.00	0.00	103	0	74	0	0	0	4,339	5,655	0	0	0	0.00	0.00	-1,316.02
147+00	14700.00	50.00	56.87	0.00	25.98	0.00	0.00	0.00	105	0	56	0	0	0	4,445	5,725	0	0	0	0.00	0.00	-1,280.48
147+50	14750.00	50.00	54.33	0.00	21.97	0.00	0.00	0.00	103	0	44	0	0	0	4,548	5,781	0	0	0	0.00	0.00	-1,233.02
148+00	14800.00	50.00	56.79	0.00	15.14	0.00	0.00	0.00	103	0	34	0	0	0	4,651	5,824	0	0	0	0.00	0.00	-1,173.09
148+30.61	14830.61	30.61	41.82	0.00	4.17	0.00	0.00	0.00	56	0	11	0	0	0	4,706	5,837	0	0	0	0.00	0.00	-1,130.88
148+50	14850.00	19.39	41.58	0.00	0.11	0.00	0.00	0.00	30	0	2	0	0	0	4,736	5,839	0	0	0	0.00	0.00	-1,102.86
148+75	14875.00	25.00	41.38	0.00	0.00	0.00	0.00	0.00	38	0	0	0	0	0	4,775	5,839	0	0	0	0.00	0.00	-1,064.51
149+00	14900.00	25.00	28.74	0.00	0.05	0.00	0.00	0.00	32	0	0	0	0	0	4,807	5,839	0	0	0	0.00	0.00	-1,032.08
149+25	14925.00	25.00	34.11	0.00	0.95	0.00	0.00	0.00	29	0	0	0	0	0	4,836	5,840	0	0	0	0.00	0.00	-1,003.56
149+50	14950.00	25.00	30.50	0.00	0.72	0.00	0.00	0.00	30	0	1	0	0	0	4,866	5,841	0	0	0	0.00	0.00	-974.61
149+52.03	14952.03	2.03	26.08	0.00	0.97	0.00	0.00	0.00	2	0	0	0	0	0	4,868	5,841	0	0	0	0.00	0.00	-972.57
150+00	15000.00	47.97	21.14	0.00	0.53	0.00	0.00	0.00	42	0	1	0	0	0	4,910	5,843	0	0	0	0.00	0.00	-932.27
150+50	15050.00	50.00	21.02	0.00	3.47	0.00	0.00	0.00	39	0	4	0	0	0	4,949	5,847	0	0	0	0.00	0.00	-897.87
151+00	15100.00	50.00	25.65	0.00	4.77	0.00	0.00	0.00	43	0	8	0	0	0	4,993	5,857	0	0	0	0.00	0.00	-864.20
151+50	15150.00	50.00	22.68	0.00	18.70	0.00	0.00	0.00	45	0	22	0	0	0	5,037	5,884	0	0	0	0.00	0.00	-846.61
152+00	15200.00	50.00	18.86	0.00	43.87	0.00	0.00	0.00	38	0	58	0	0	0	5,076	5,956	0	0	0	0.00	0.00	-880.56
152+50	15250.00	50.00	16.72	0.00	45.72	0.00	0.00	0.00	33	0	83	0	0	0	5,109	6,060	0	0	0	0.00	0.00	-951.32
153+00	15300.00	50.00	14.06	0.00	56.47	0.00	0.00	0.00	28	0	95	0	0	0	5,137	6,178	0	0	0	0.00	0.00	-1,041.11
153+50	15350.00	50.00	12.40	0.00	53.11	0.00	0.00	0.00	25	0	101	0	0	0	5,162	6,305	0	0	0	0.00	0.00	-1,143.43
154+00	15400.00	50.00	14.34	0.00	20.32	0.00	0.00	0.00	25	0	68	0	0	0	5,186	6,390	0	0	0	0.00	0.00	-1,203.65
154+37.4	15437.40	37.40	0.00	0.00	0.00	0.00	0.00	0.00	10	0	14	0	0	0	5,196	6,408	0	0	0	0.00	0.00	-1,211.31

STAGE 3 - TEMP LANE REMOVAL

STATION	Real Station	Distance	AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)							
			Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Marsh Exc	Rock Exc	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Expanded Rock 1.10	Expanded EBS Backfill 1.30 Note 5	Reduced Marsh in Fill 0.60 Note 6	Reduced EBS In Fill 0.80 Note 7	Mass Ordinate Note 8
125+91.5	12591.50	0.00	0.06	0.00	8.23	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00
126+00	12600.00	8.50	0.01	0.00	7.09	0.00	0.00	0.00	0	0	2	0	0	0	0	3	0	0	0	0.00	0.00	-3.00
126+50	12650.00	50.00	1.29	0.00	0.18	0.00	0.00	0.00	1	0	7	0	0	0	1	11	0	0	0	0.00	0.00	-10.22
127+00	12700.00	50.00	6.28	0.00	0.41	0.00	0.00	0.00	7	0	1	0	0	0	8	12	0	0	0	0.00	0.00	-3.90
127+50	12750.00	50.00	9.69	0.00	0.28	0.00	0.00	0.00	15	0	1	0	0	0	23	13	0	0	0	0.00	0.00	10.08
128+00	12800.00	50.00	21.95	0.00	0.22	0.00	0.00	0.00	29	0	0	0	0	0	52	13	0	0	0	0.00	0.00	38.80
128+50	12850.00	50.00	15.02	0.00	0.39	0.00	0.00	0.00	34	0	1	0	0	0	87	14	0	0	0	0.00	0.00	72.31
129+00	12900.00	50.00	37.53	0.00	0.42	0.00	0.00	0.00	49	0	1	0	0	0	135	15	0	0	0	0.00	0.00	120.03
129+50	12950.00	50.00	34.06	0.00	0.55	0.00	0.00	0.00	66	0	1	0	0	0	201	16	0	0	0	0.00	0.00	185.19
130+00	13000.00	50.00	31.16	0.00	0.77	0.00	0.00	0.00	60	0	1	0	0	0	262	18	0	0	0	0.00	0.00	244.05
130+50	13050.00	50.00	29.07	0.00	1.01	0.00	0.00	0.00	56	0	2	0	0	0	318	20	0	0	0	0.00	0.00	297.75
131+00	13100.00	50.00	29.54	0.00	1.25	0.00	0.00	0.00	54	0	2	0	0	0	372	22	0	0	0	0.00	0.00	349.41
131+50	13150.00	50.00	23.59	0.00	1.15	0.00	0.00	0.00	49	0	2	0	0	0	421	25	0	0	0	0.00	0.00	395.82
132+00	13200.00	50.00	30.72	0.00	0.90	0.00	0.00	0.00	50	0	2	0	0	0	471	28	0	0	0	0.00	0.00	443.74
132+50	13250.00	50.00	28.65	0.00	0.74	0.00	0.00	0.00	55	0	2	0	0	0	526	30	0	0	0	0.00	0.00	496.82
133+00	13300.00	50.00	29.51	0.00	0.66	0.00	0.00	0.00	54	0	1	0	0	0	580	31	0	0	0	0.00	0.00	549.06
133+50	13350.00	50.00	30.55	0.00	0.62	0.00	0.00	0.00	56	0	1	0	0	0	636	33	0	0	0	0.00	0.00	603.20
134+00	13400.00	50.00	31.10	0.00	0.54	0.00	0.00	0.00	57	0	1	0	0	0	693	34	0	0	0	0.00	0.00	658.94
134+50	13450.00	50.00	28.95	0.00	0.41	0.00	0.00	0.00	56	0	1	0	0	0	748	35	0	0	0	0.00	0.00	713.43
135+00	13500.00	50.00	26.96	0.00	0.25	0.00	0.00	0.00	52	0	1	0	0	0	800	36	0	0	0	0.00	0.00	764.43
135+50	13550.00	50.00	23.75	0.00	0.12	0.00	0.00	0.00	47	0	0	0	0	0	847	36	0	0	0	0.00	0.00	810.96
136+00	13600.00	50.00	21.79	0.00	0.05	0.00	0.00	0.00	42	0	0	0	0	0	889	36	0	0	0	0.00	0.00	852.92
136+50	13650.00	50.00	25.97	0.00	0.16	0.00	0.00	0.00	44	0	0	0	0	0	934	37	0	0	0	0.00	0.00	896.90
137+00	13700.00	50.00	26.12	0.00	0.08	0.00	0.00	0.00	48	0	0	0	0	0	982	37	0	0	0	0.00	0.00	944.86
137+50	13750.00	50.00	26.94	0.00	0.00	0.00	0.00	0.00	49	0	0	0	0	0	1,031	37	0	0	0	0.00	0.00	993.90
138+00	13800.00	50.00	28.39	0.00	0.00	0.00	0.00	0.00	51	0	0	0	0	0	1,082	37	0	0	0	0.00	0.00	1,045.13
138+50	13850.00	50.00	21.90	0.00	0.02	0.00	0.00	0.00	47	0	0	0	0	0	1,129	37	0	0	0	0.00	0.00	1,091.67
139+00	13900.00	50.00	17.05	0.00	0.01	0.00	0.00	0.00	36	0	0	0	0	0	1,165	37	0	0	0	0.00	0.00	1,127.70
139+50	13950.00	50.00	19.88	0.00	0.11	0.00	0.00	0.00	34	0	0	0	0	0	1,199	37	0	0	0	0.00	0.00	1,161.76
140+00	14000.00	50.00	21.62	0.00	0.23	0.00	0.00	0.00	38	0	0	0	0	0	1,237	38	0	0	0	0.00	0.00	1,199.80
140+50	14050.00	50.00	15.00	0.00	0.39	0.00	0.00	0.00	34	0	1	0	0	0	1,271	38	0	0	0	0.00	0.00	1,233.00
141+00	14100.00	50.00	11.31	0.00	0.67	0.00	0.00	0.00	24	0	1	0	0	0	1,296	40	0	0	0	0.00	0.00	1,256.13
141+50	14150.00	50.00	12.80	0.00	1.25	0.00	0.00	0.00	22	0	2	0	0	0	1,318	42	0	0	0	0.00	0.00	1,276.23
142+00	14200.00	50.00	8.46	0.00	2.27	0.00	0.00	0.00	20	0	3	0	0	0	1,338	46	0	0	0	0.00	0.00	1,291.84
142+50	14250.00	50.00	6.43	0.00	1.70	0.00	0.00	0.00	14	0	4	0	0	0	1,351	50	0	0	0	0.00	0.00	1,301.03
143+00	14300.00	50.00	5.57	0.00	1.47	0.00	0.00	0.00	11	0	3	0	0	0	1,363	54	0	0	0	0.00	0.00	1,308.48
143+50	14350.00	50.00	5.68	0.00	0.96	0.00	0.00	0.00	10	0	2	0	0	0	1,373	57	0	0	0	0.00	0.00	1,316.09
144+00	14400.00	50.00	4.52	0.00	1.28	0.00	0.00	0.00	9	0	2	0	0	0	1,382	60	0	0	0	0.00	0.00	1,322.94
144+50	14450.00	50.00	4.97	0.00	1.73	0.00	0.00	0.00	9	0	3	0	0	0	1,391	63	0	0	0	0.00	0.00	1,328.25
145+00	14500.00	50.00	8.33	0.00	1.95	0.00	0.00	0.00	12	0	3	0	0	0	1,404	67	0	0	0	0.00	0.00	1,336.30
145+50	14550.00	50.00	1.19	0.00	1.68	0.00	0.00	0.00	9	0	3	0	0	0	1,412	71	0	0	0	0.00	0.00	1,340.90
146+00	14600.00	50.00	10.88	0.00	1.00	0.00	0.00	0.00	11	0	2	0	0	0	1,424	75	0	0	0	0.00	0.00	1,348.96
146+50	14650.00	50.00	10.97	0.00	1.14	0.00	0.00	0.00	20	0	2	0	0	0	1,444	77	0	0	0	0.00	0.00	1,366.70
147+00	14700.00	50.00	11.21	0.00	1.31	0.00	0.00	0.00	21	0	2	0	0	0	1,464	80	0	0	0	0.00	0.00	1,384.40
147+50	14750.00	50.00	11.30	0.00	1.49	0.00	0.00	0.00	21	0	3	0	0	0	1,485	83	0	0	0	0.00	0.00	1,402.00
148+00	14800.00	50.00	8.87	0.00	1.72	0.00	0.00	0.00	19	0	3	0	0	0	1,504	87	0	0	0	0.00	0.00	1,416.97
148+50	14850.00	50.00	8.66	0.00	1.52	0.00	0.00	0.00	16	0	3	0	0	0	1,520	91	0	0	0	0.00	0.00	1,429.45
149+00	14900.00	50.00	8.71	0.00	1.27	0.00	0.00	0.00	16	0	3	0	0	0	1,536	94	0	0	0	0.00	0.00	1,442.31
149+50	14950.00	50.00	11.56	0.00	1.11	0.00	0.00	0.00	19	0	2	0	0	0	1,555	97	0	0	0	0.00	0.00	1,458.32
150+00	15000.00	50.00	12.72	0.00	1.13	0.00	0.00	0.00	22	0	2	0	0	0	1,577	99	0	0	0	0.00	0.00	1,478.21
150+50	15050.00	50.00	20.11	0.00	0.75	0.00	0.00	0.00	30	0	2	0	0	0	1,608	101	0	0	0	0.00	0.00	1,506.43
151+00	15100.00	50.00	22.53	0.00	0.51	0.00	0.00	0.00	39	0	1	0	0	0	1,647	103	0	0	0	0.00	0.00	1,544.45
151+50	15150.00	50.00	22.90	0.00	0.16	0.00	0.00	0.00	42	0	1	0	0	0	1,689	104	0	0	0	0.00	0.00	1,585.74
152+00	15200.00	50.00	29.38	0.00	0.17	0.00	0.00	0.00	48	0	0	0	0	0	1,738	104	0	0	0	0.00	0.00	1,633.78
152+50	15250.00	50.00	26.18	0.00	0.67	0.00	0.00	0.00	51	0	1	0	0	0	1,789	105	0	0	0	0.00	0.00	1,684.25
153+00	15300.00	50.00	24.44	0.00	0.46	0.00	0.00	0.00	47	0	1	0	0	0	1,836	106	0	0	0	0.00	0.00	1,729.81
153+50	15350.00	50.00	13.95	0.00	0.97	0.00	0.00	0.00	36	0	1	0	0	0	1,872	108	0	0	0	0.00	0.00	1,763.71
154+00	15400.00	50.00	10.08	0.00	1.86	0.00	0.00	0.00	22	0	3	0	0	0	1,894	111	0	0	0	0.00	0.00	1,782.68
154+37.4	15437.40	37.40	0.00	0.00	0.00	0.00	0.00	0.00	7	0	1	0	0	0	1,901	113	0	0	0	0.00	0.00	1,788.06

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PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\DESIGN\QUANTITIES\EARTHWORK-USH14-STAGE3.DWG PLOT DATE : 1/23/2014 2:00 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 49

SCHOOL ENTRANCE

STATION	Real Station	Distance	AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Marsh Exc	Rock Exc	EBS	Cumulative Vol (CY) Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.50 Note 4	Expanded Rock 1.10	Expanded EBS Backfill 1.30 Note 5	Reduced Marsh in Fill 0.60 Note 6	Reduced EBS In Fill 0.80 Note 7	Mass Ordinate Note 8
134+00.62	13400.62	0.00	48.94	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00
134+20	13420.00	19.38	26.32	0.00	0.47	0.00	0.00	0.00	27	0	0	0	0	0	27	0	0	0	0	0.00	0.00	26.80
134+40	13440.00	20.00	7.92	0.00	18.51	0.00	0.00	0.00	13	0	7	0	0	0	40	9	0	0	0	0.00	0.00	30.69
134+60	13460.00	20.00	15.80	0.00	68.09	0.00	0.00	0.00	9	0	32	0	0	0	48	49	0	0	0	0.00	0.00	-0.61
134+80	13480.00	20.00	64.10	0.00	128.27	0.00	0.00	0.00	30	0	73	0	0	0	78	140	0	0	0	0.00	0.00	-61.93
135+00	13500.00	20.00	84.19	0.00	128.12	0.00	0.00	0.00	55	0	95	0	0	0	133	259	0	0	0	0.00	0.00	-125.71
135+20	13520.00	20.00	50.25	0.00	271.56	0.00	0.00	0.00	50	0	148	0	0	0	183	444	0	0	0	0.00	0.00	-260.95
135+40	13540.00	20.00	0.00	0.00	148.56	0.00	0.00	0.00	19	0	156	0	0	0	201	638	0	0	0	0.00	0.00	-436.84
135+60	13560.00	20.00	0.00	0.00	26.39	0.00	0.00	0.00	0	0	65	0	0	0	201	719	0	0	0	0.00	0.00	-517.83
135+75.42	13575.42	15.42	0.00	0.00	0.56	0.00	0.00	0.00	0	0	8	0	0	0	201	729	0	0	0	0.00	0.00	-527.45

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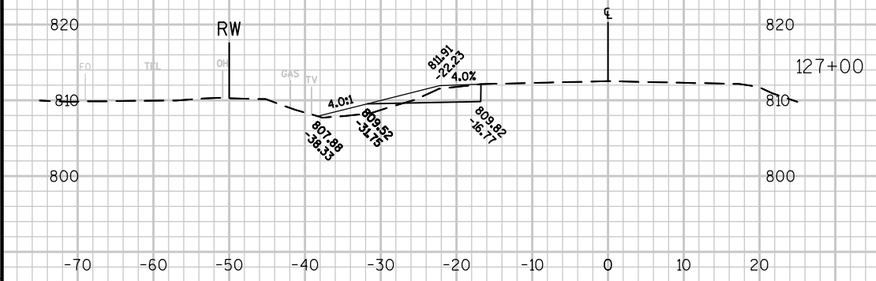
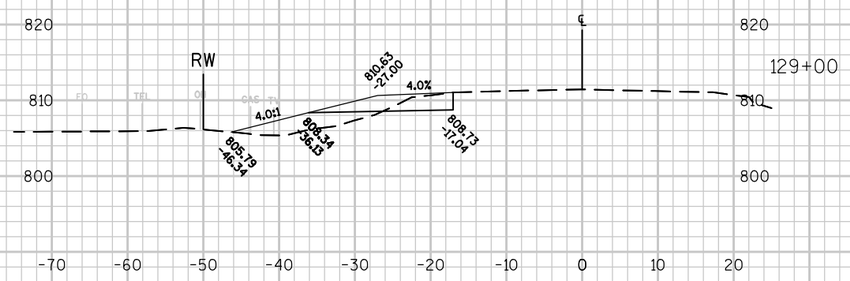
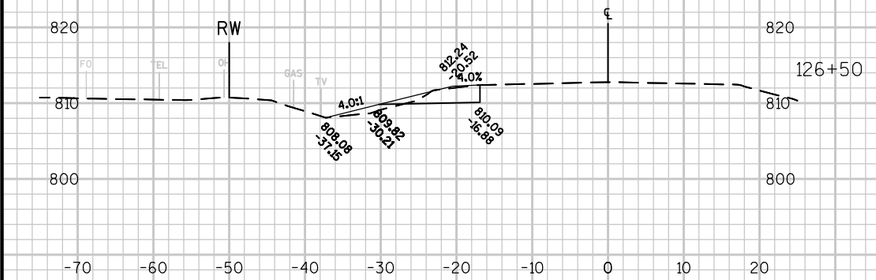
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: COMPUTER EARTHWORK DATA	SHEET	E

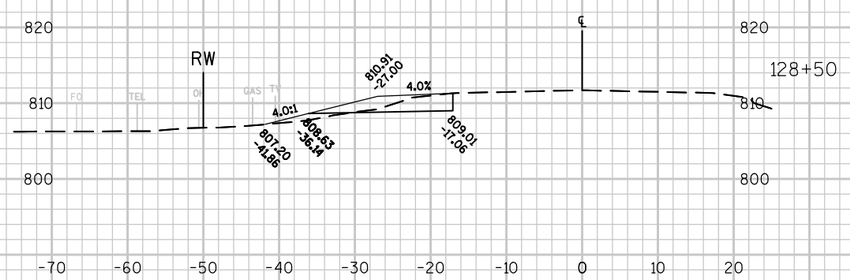
FILE NAME : N:\PDS\C3D\53100103\DESIGN\QUANTITIES\EARTHWORK-USH14-BESTFIT.DWG PLOT DATE : 1/23/2014 2:00 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : **********

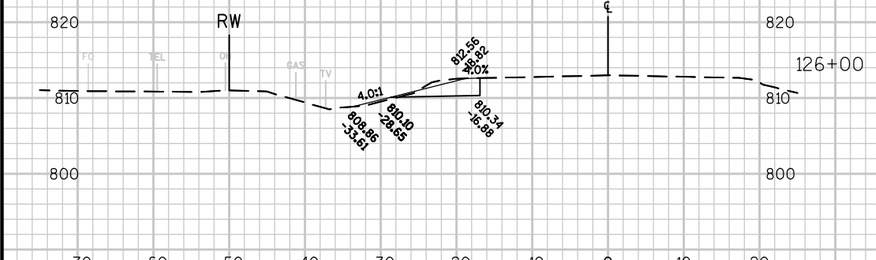
WISDOT/CADDS SHEET 49

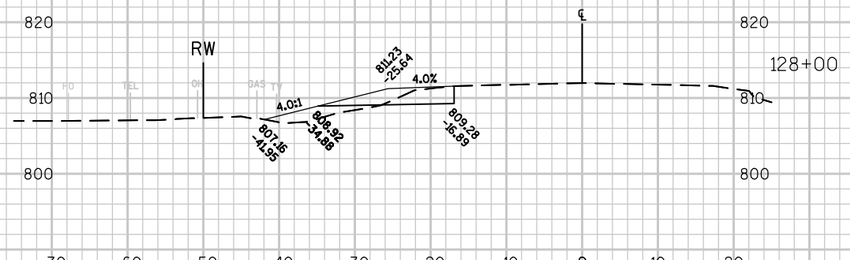


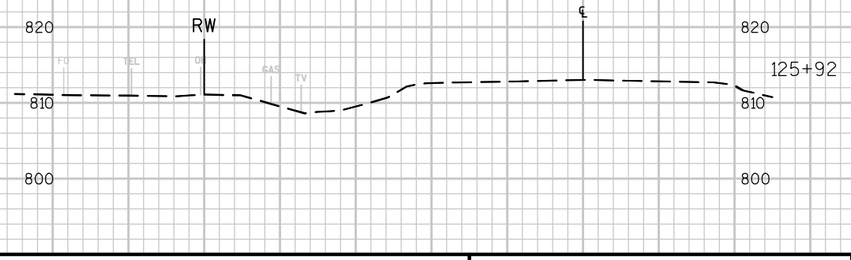


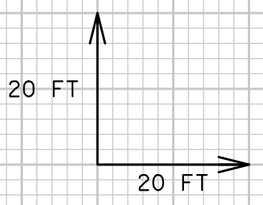












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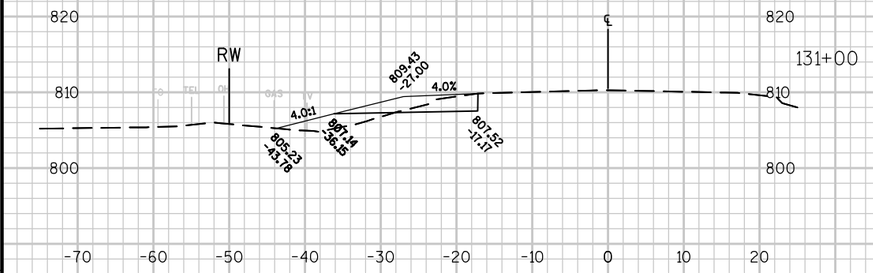
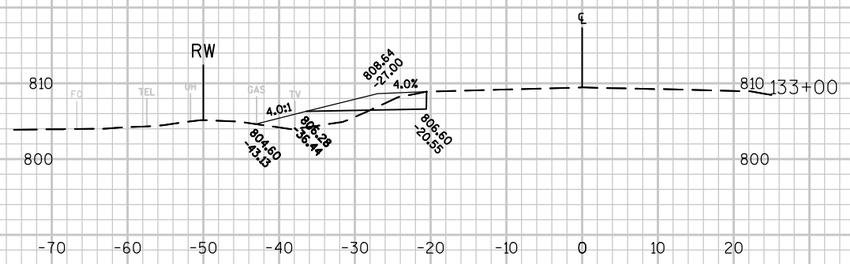
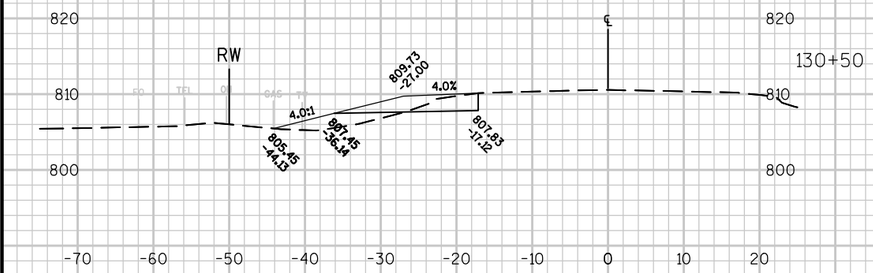
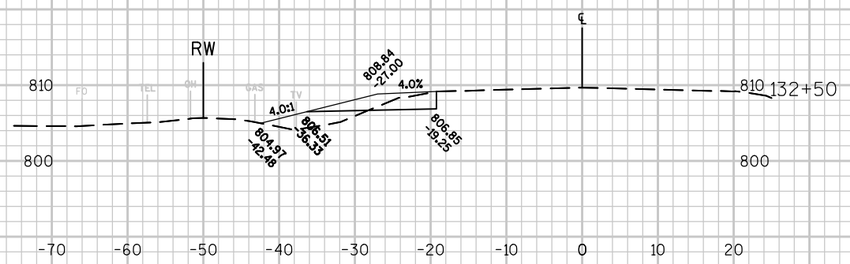
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: TEMP LANE	SHEET	E

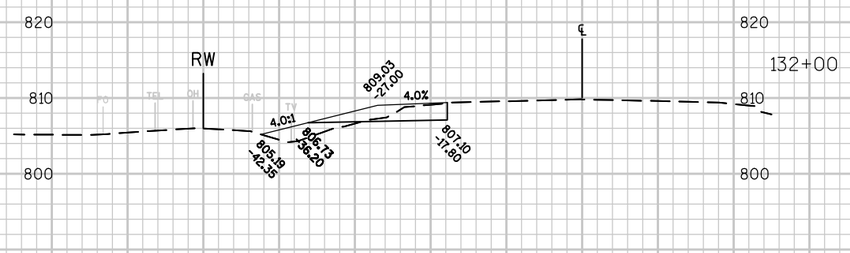
FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090202_XS.DWG PLOT DATE : 1/23/2014 2:01 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF

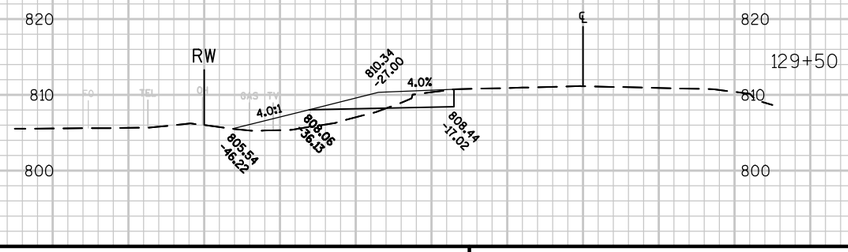


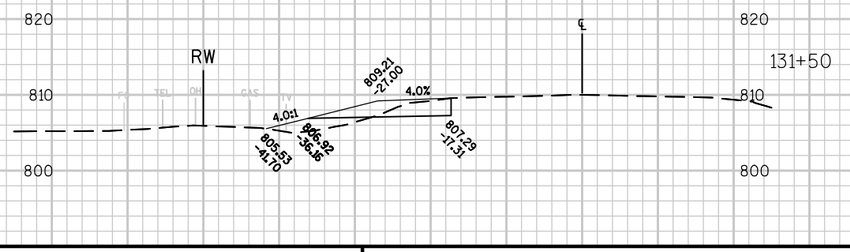


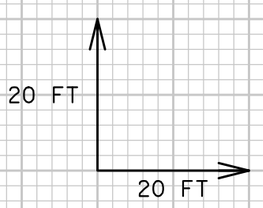












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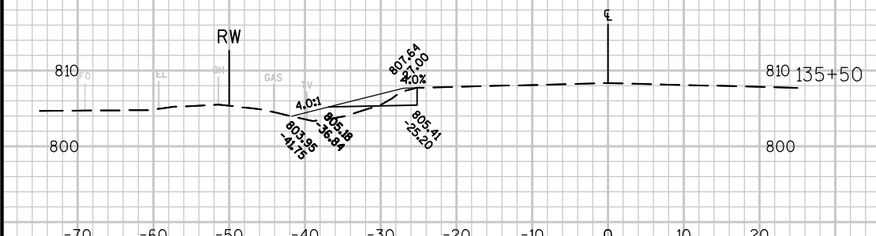
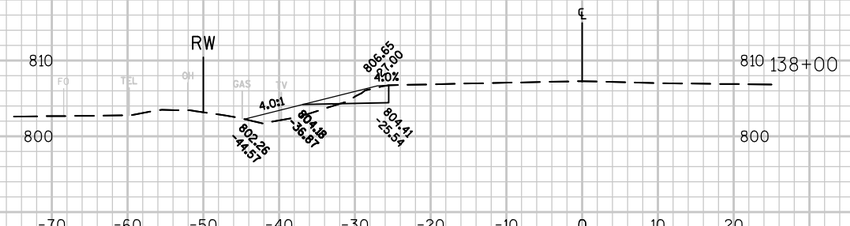
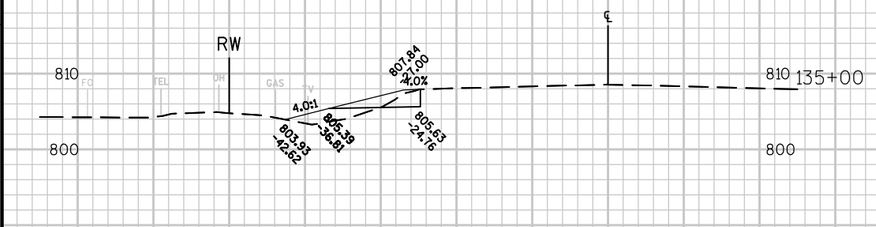
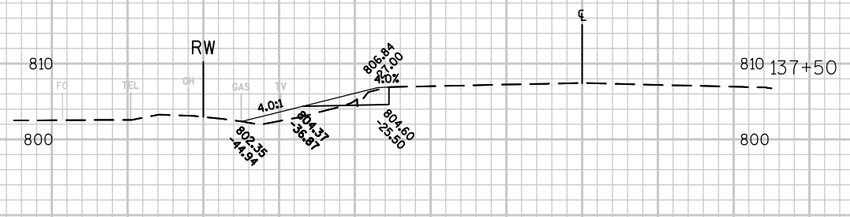
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: TEMP LANE	SHEET	E

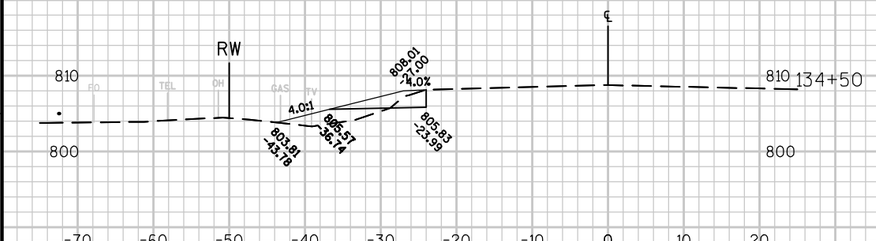
FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090202_XS.DWG PLOT DATE : 1/23/2014 2:01 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF

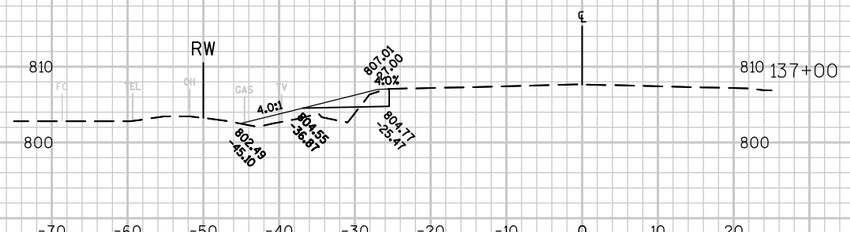


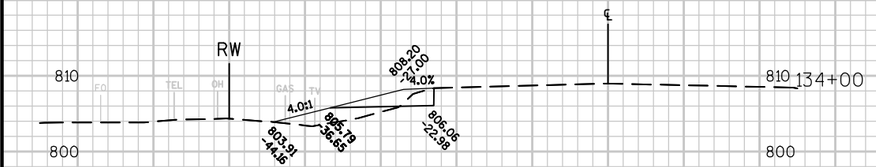


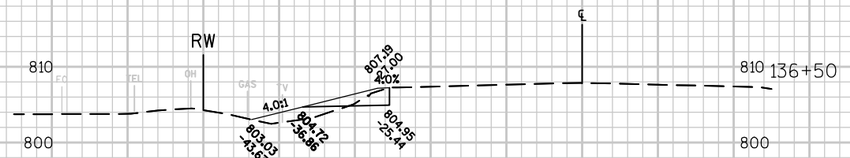


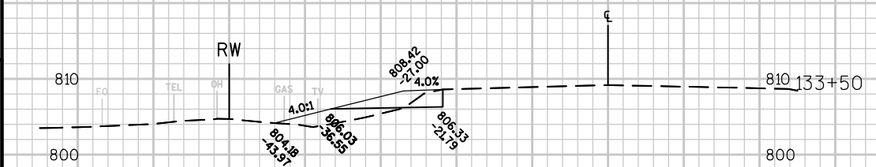


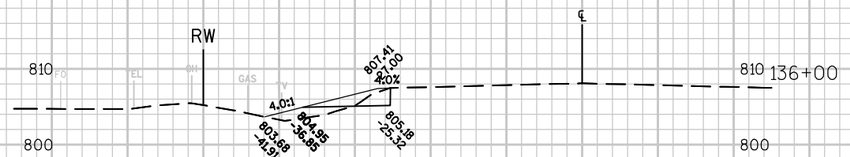


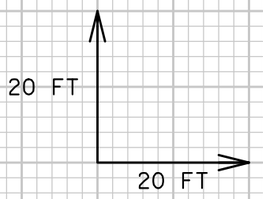












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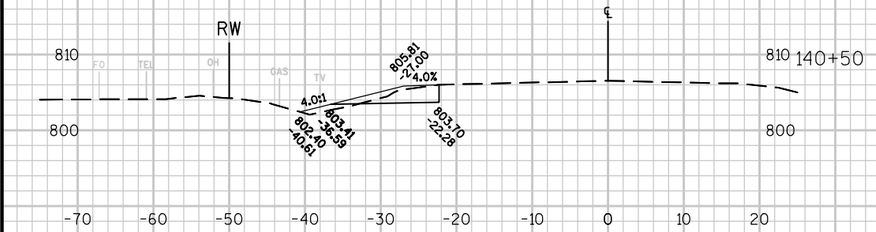
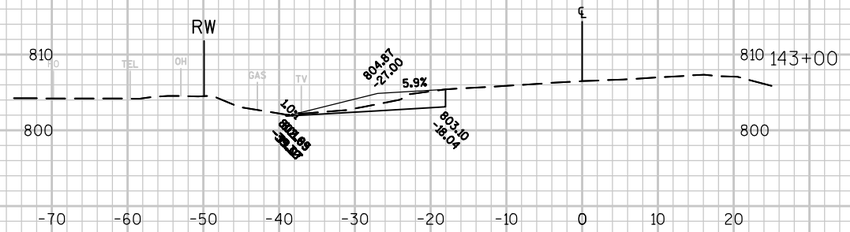
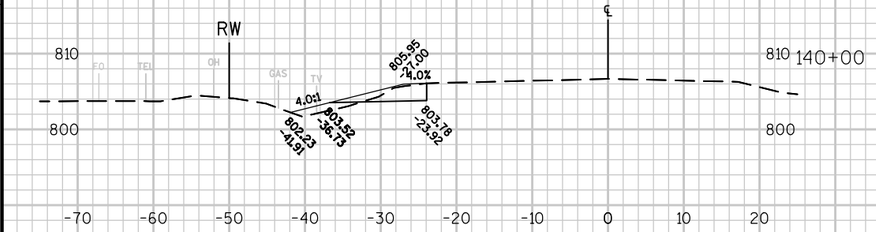
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: TEMP LANE	SHEET	E

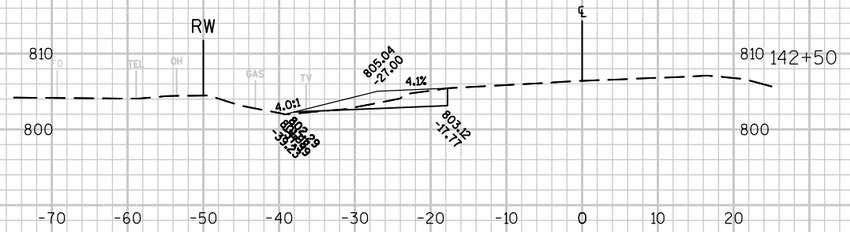
FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090202_XS.DWG PLOT DATE : 1/23/2014 2:01 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF

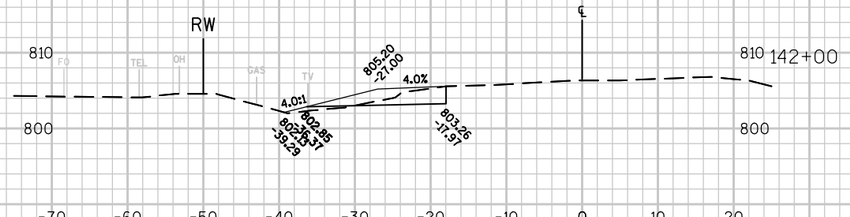
WISDOT/CADDS SHEET 49

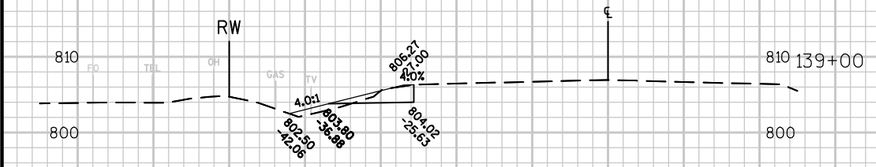


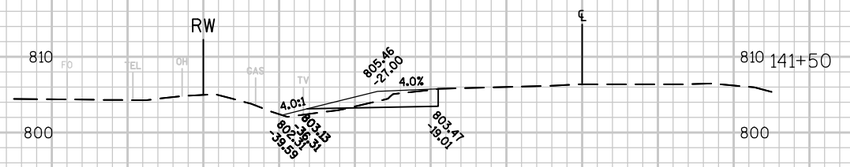


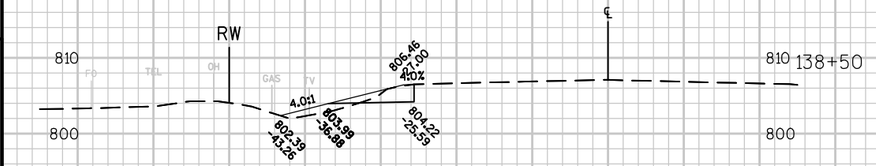


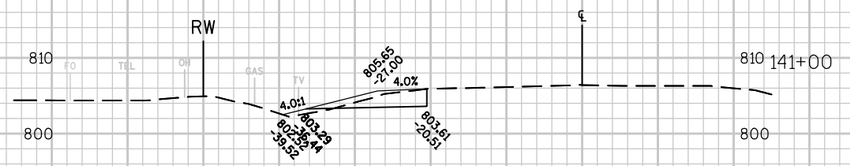


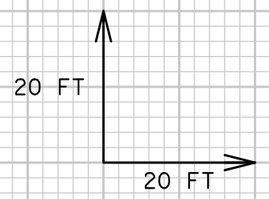












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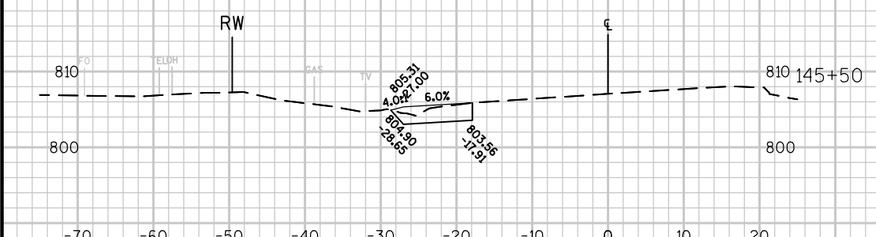
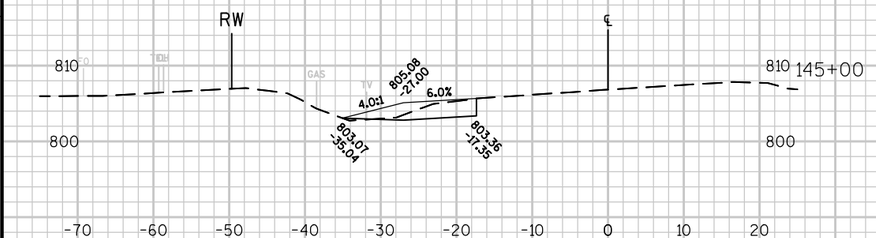
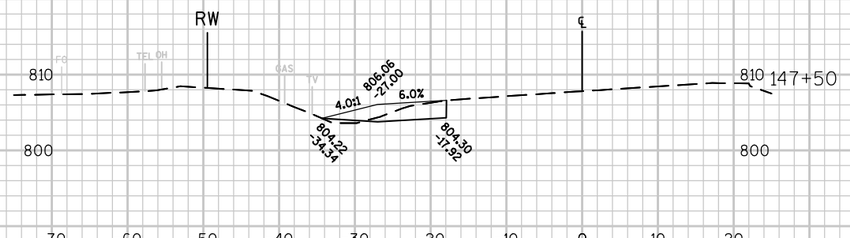
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: TEMP LANE	SHEET	E

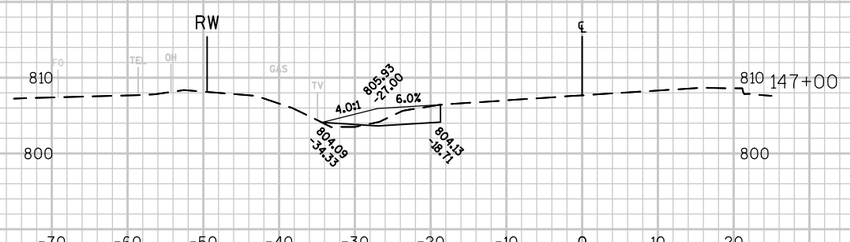
FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090202_XS.DWG PLOT DATE : 1/23/2014 2:01 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF

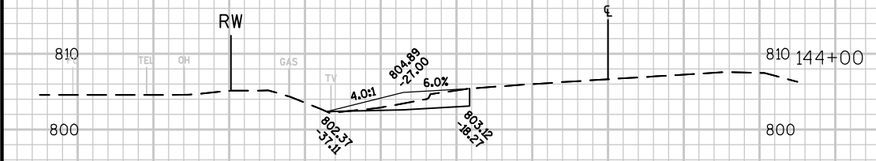
WISDOT/CADDS SHEET 49

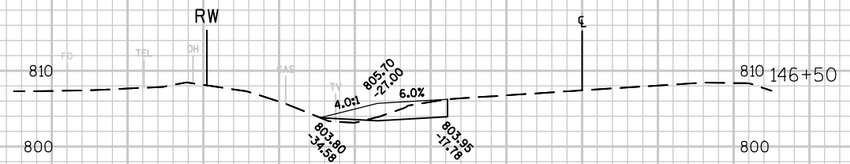


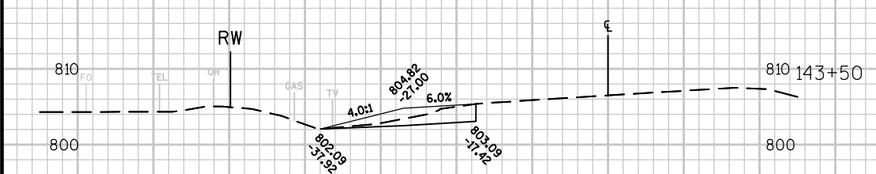


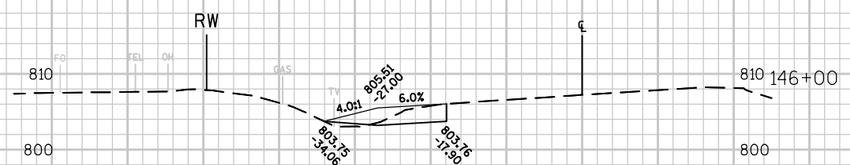


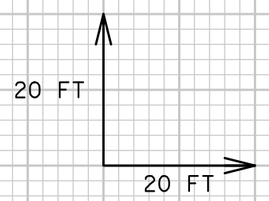












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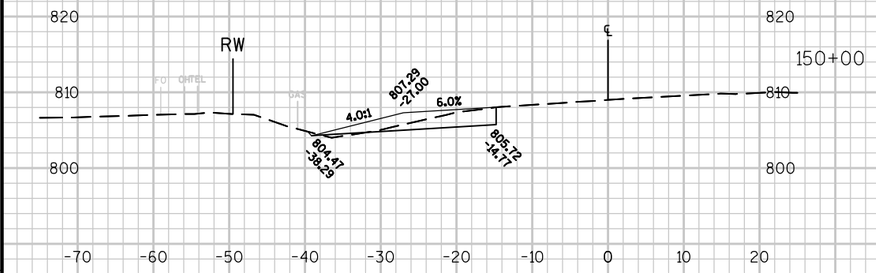
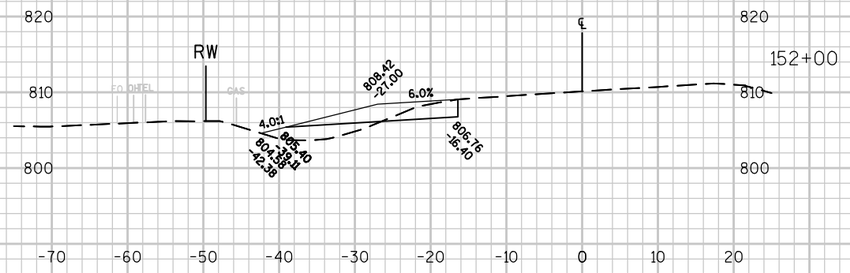
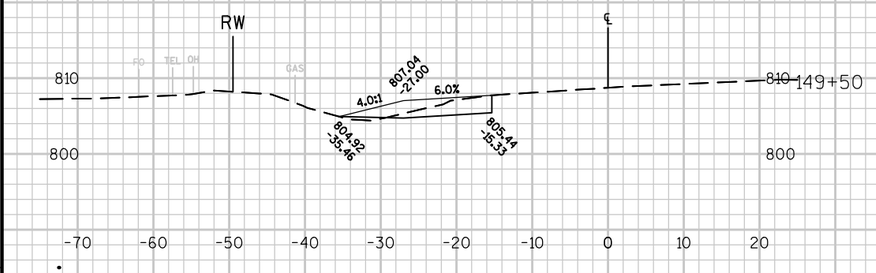
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: TEMP LANE	SHEET	E

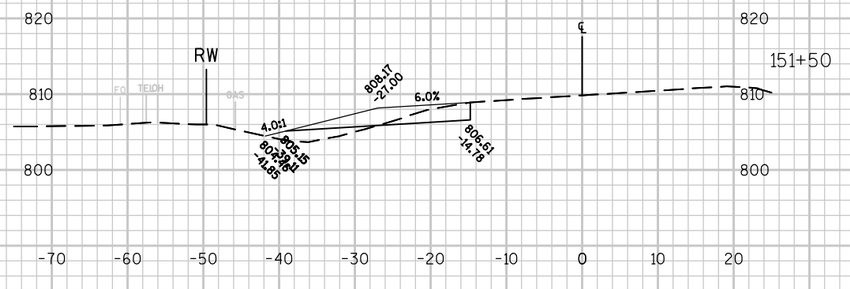
FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090202_XS.DWG PLOT DATE : 1/23/2014 2:01 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF

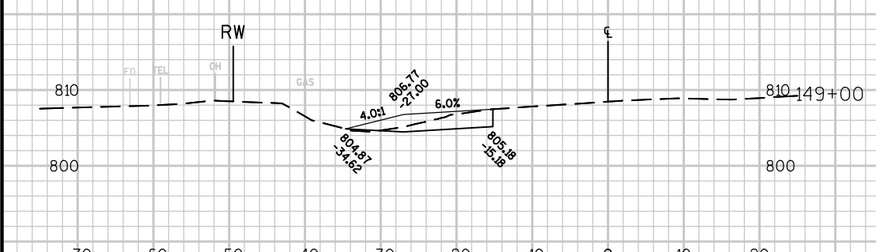
WISDOT/CADDS SHEET 49

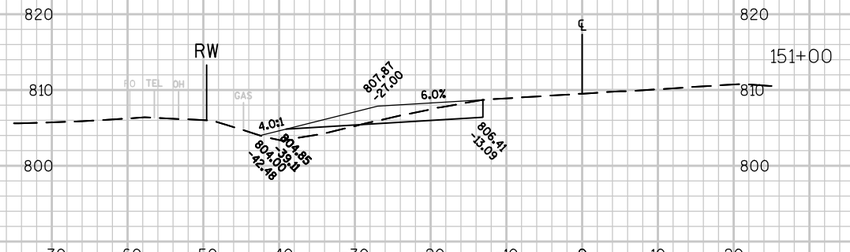


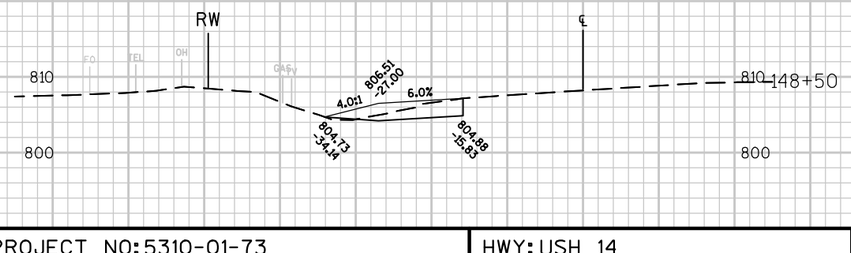


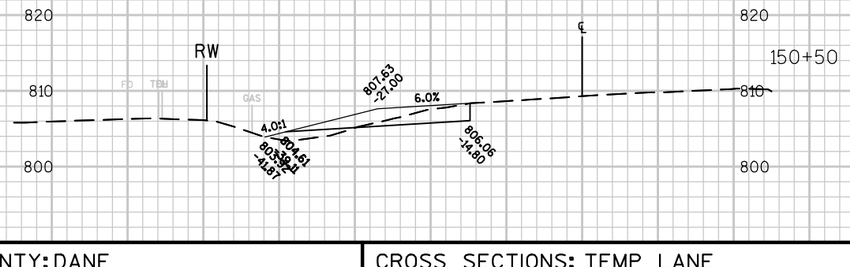












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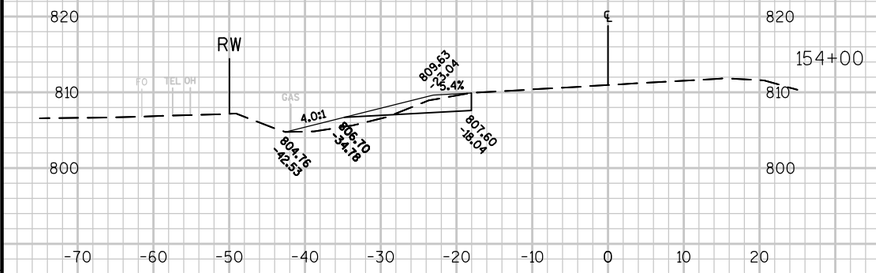
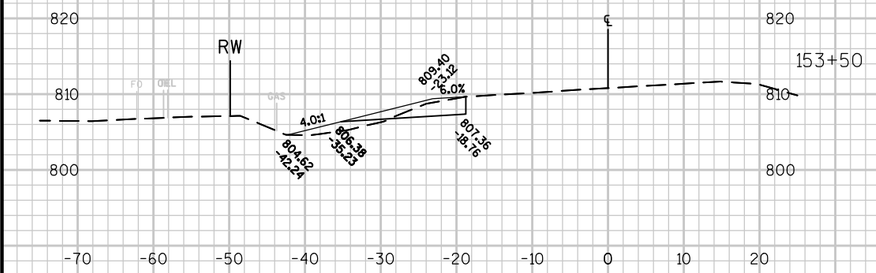
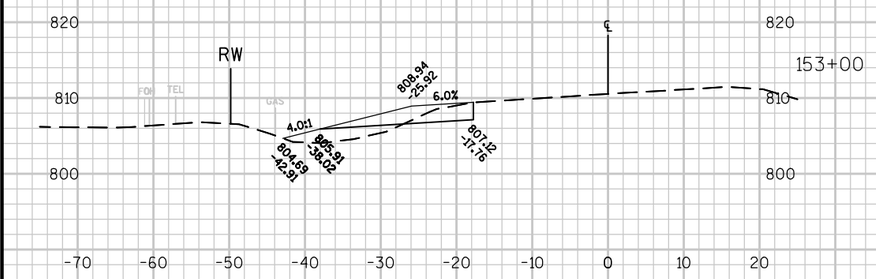
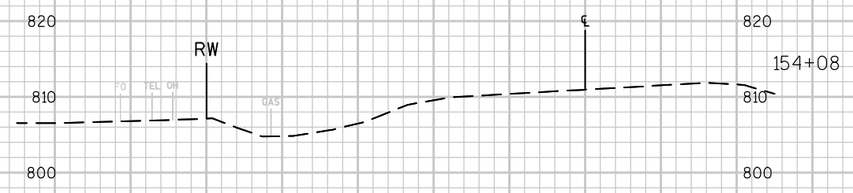
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: TEMP LANE	SHEET	E

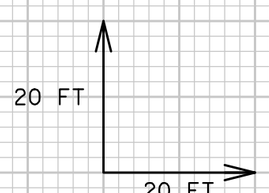
FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090202_XS.DWG PLOT DATE : 1/23/2014 2:02 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF











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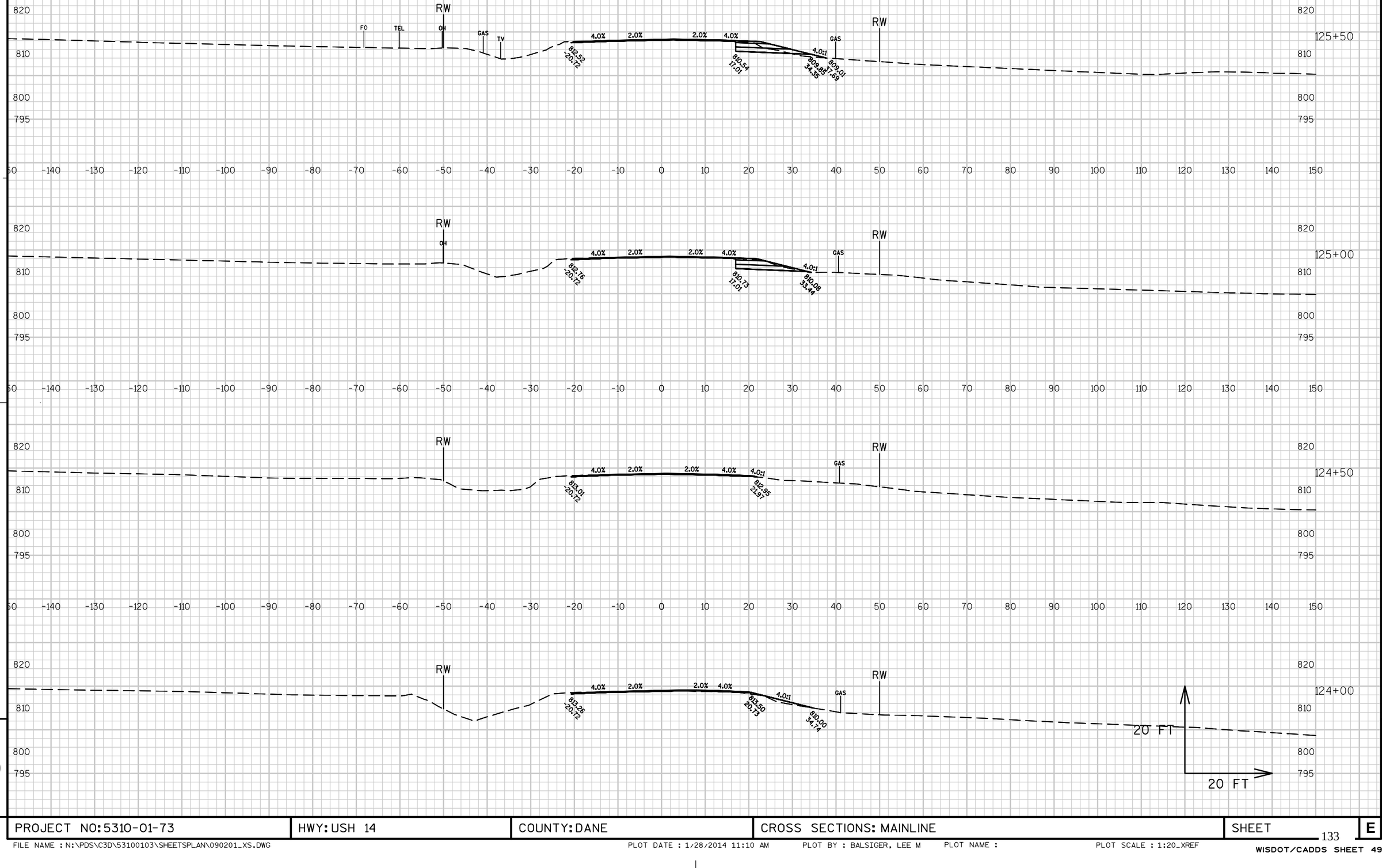
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: TEMP LANE	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090202_XS.DWG PLOT DATE : 1/23/2014 2:02 PM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF



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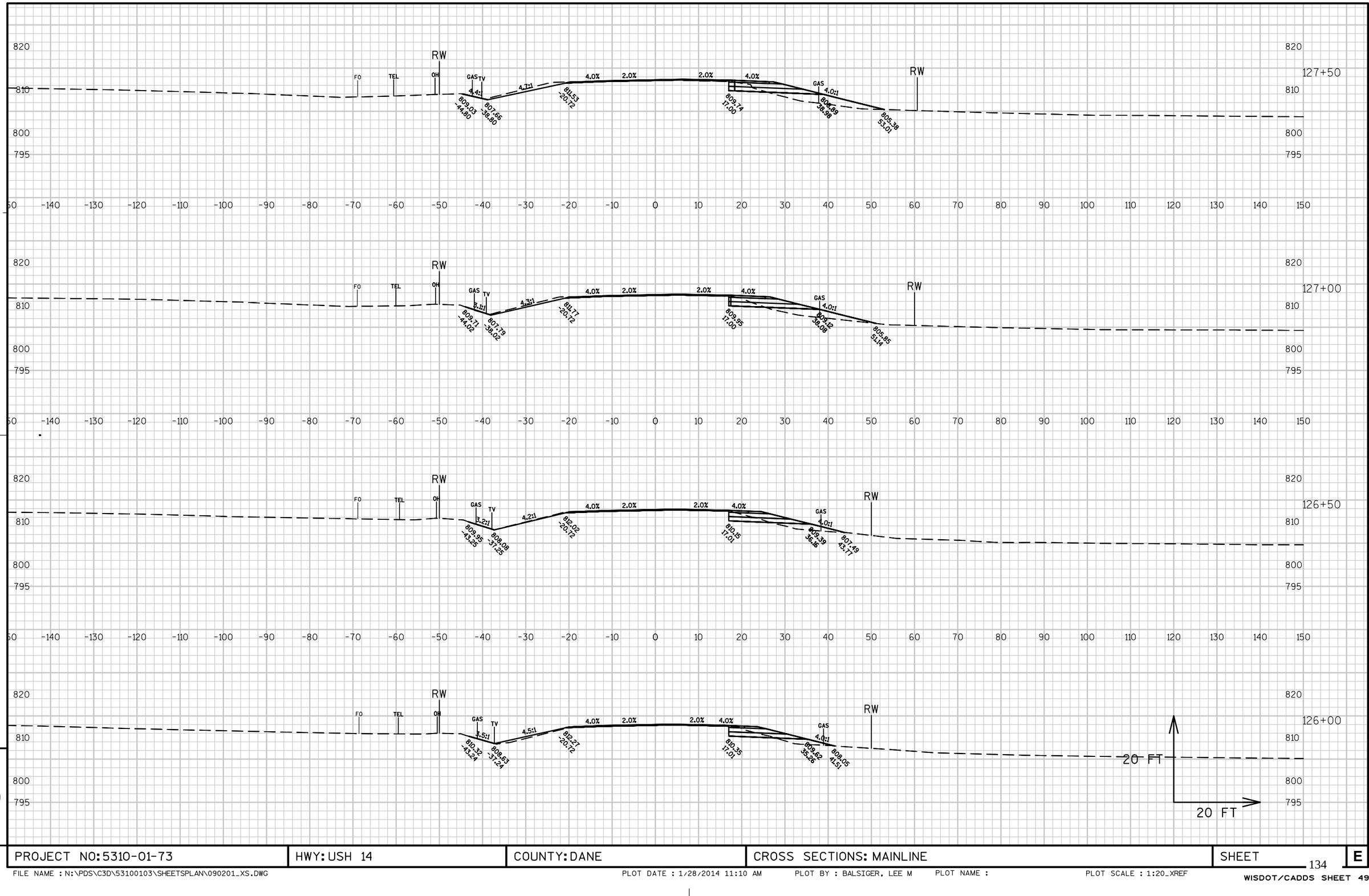
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090201_XS.DWG PLOT DATE : 1/28/2014 11:10 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF



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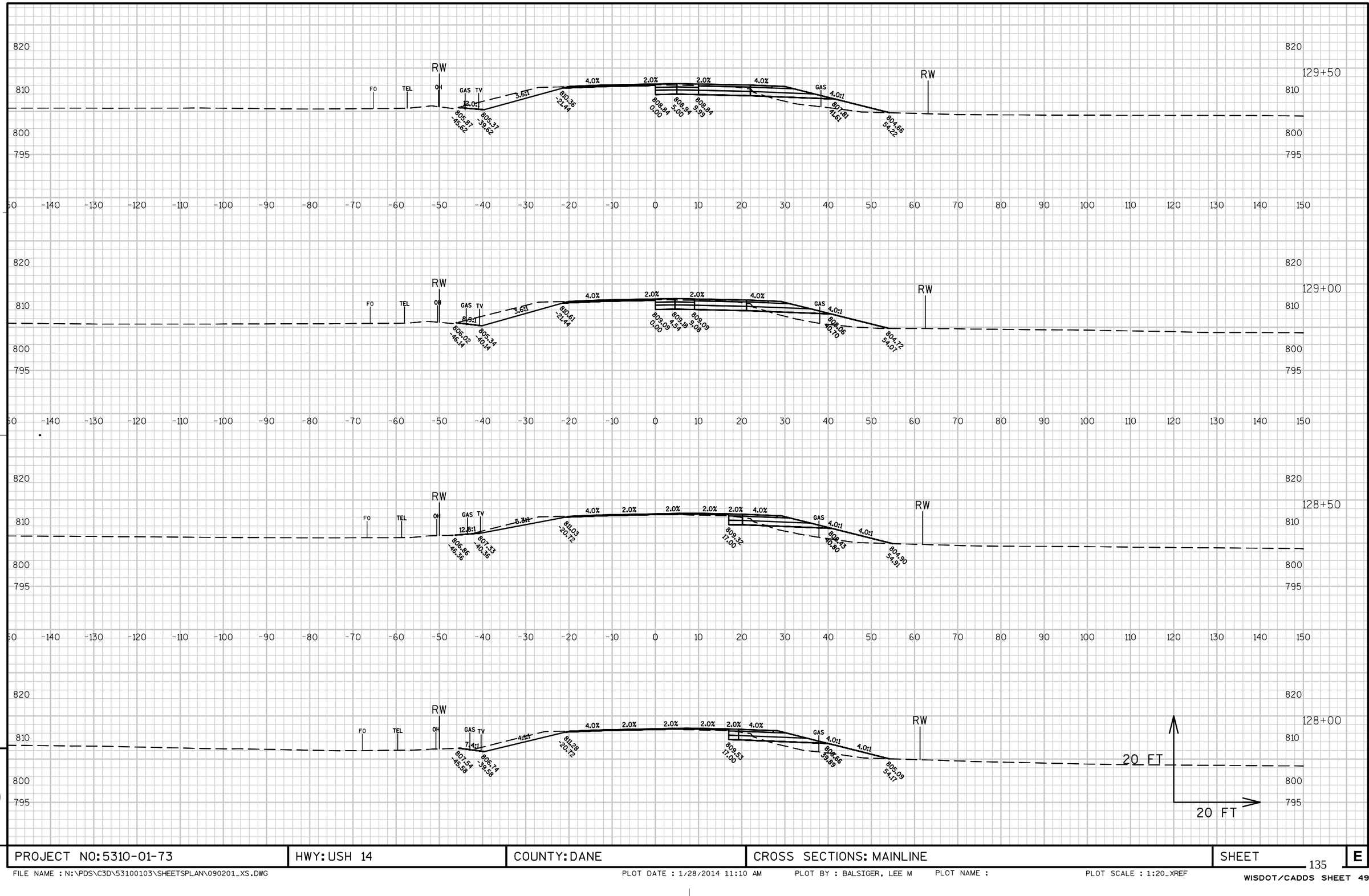
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090201_XS.DWG PLOT DATE : 1/28/2014 11:10 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF



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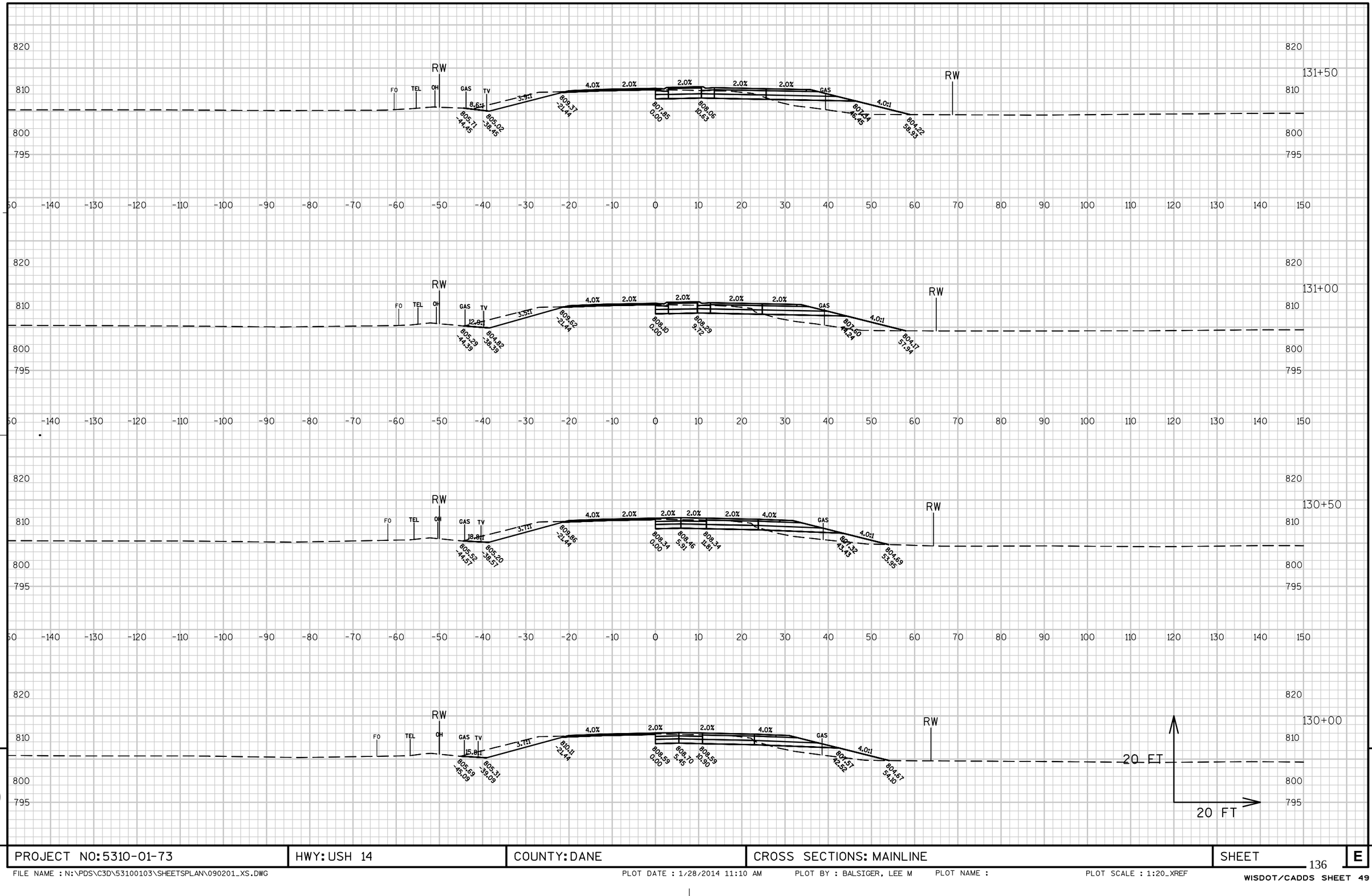
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090201_XS.DWG PLOT DATE : 1/28/2014 11:10 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



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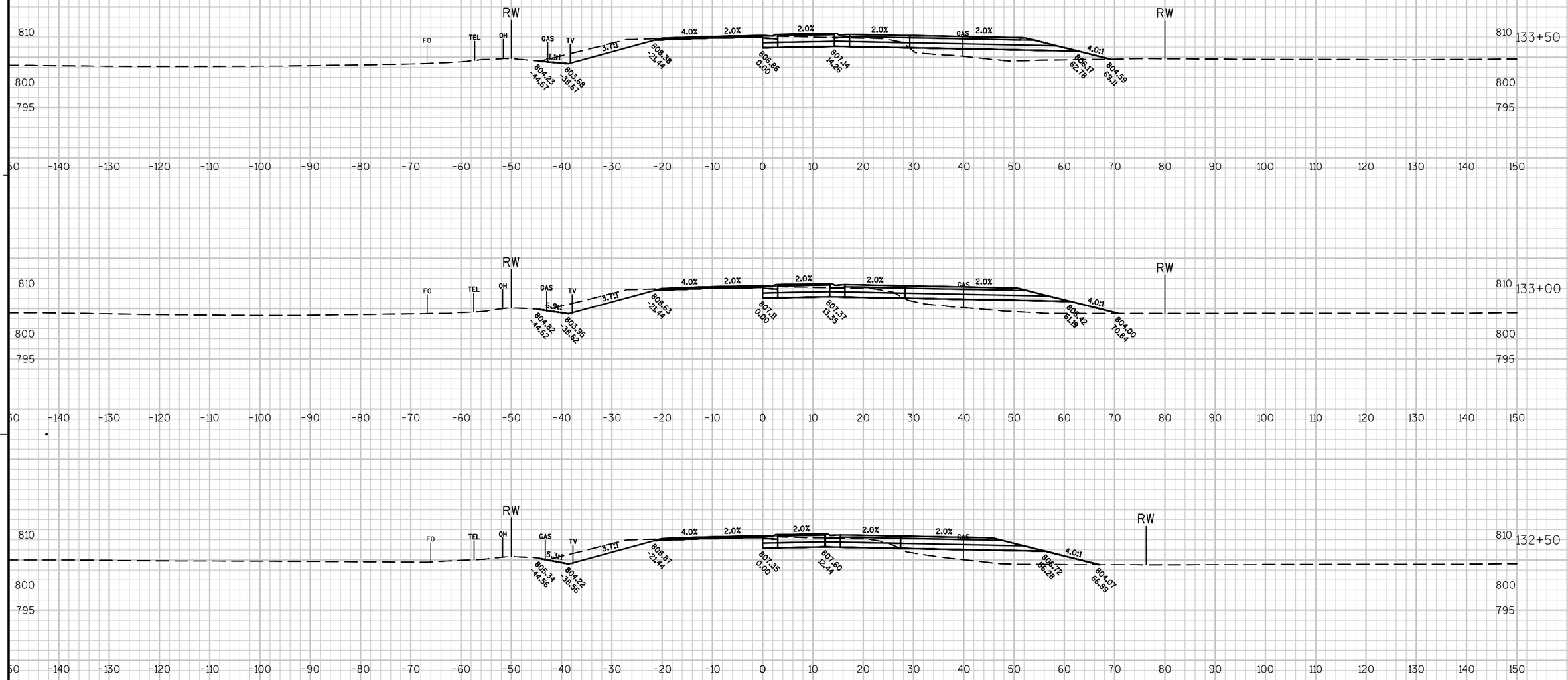
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

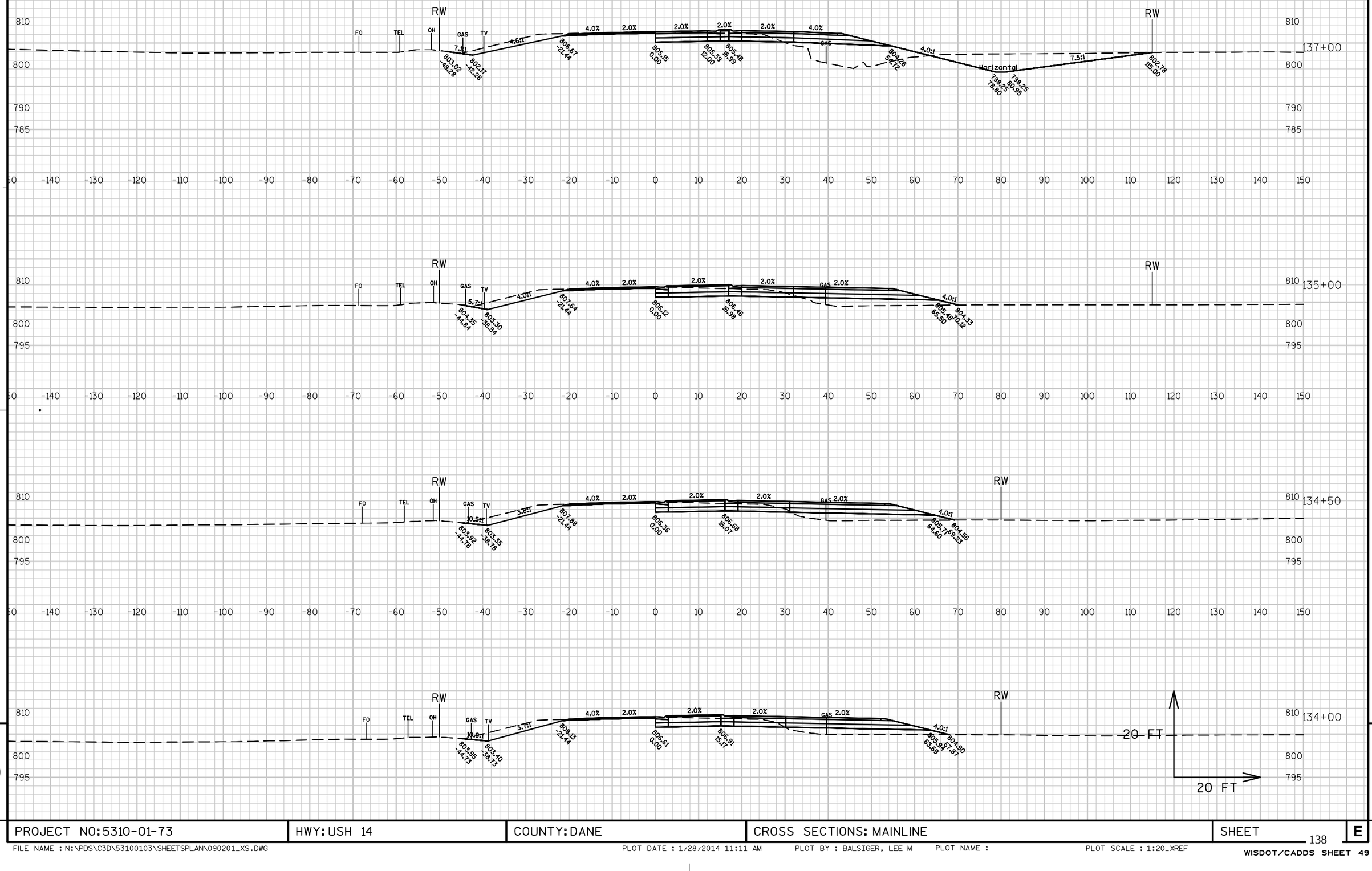
FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090201_XS.DWG PLOT DATE : 1/28/2014 11:10 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090201_XS.DWG PLOT DATE : 1/28/2014 11:10 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



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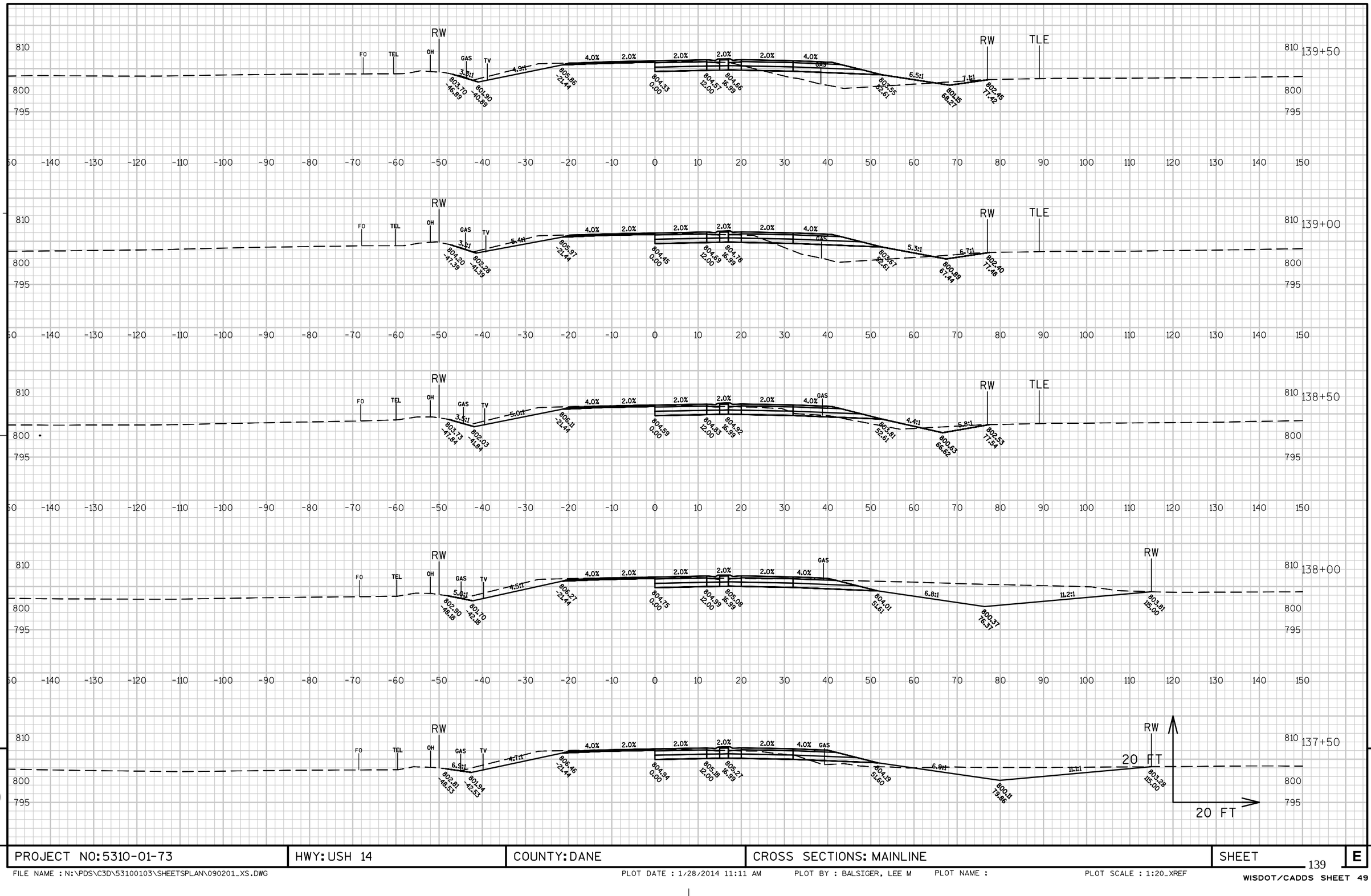
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090201_XS.DWG PLOT DATE : 1/28/2014 11:11 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



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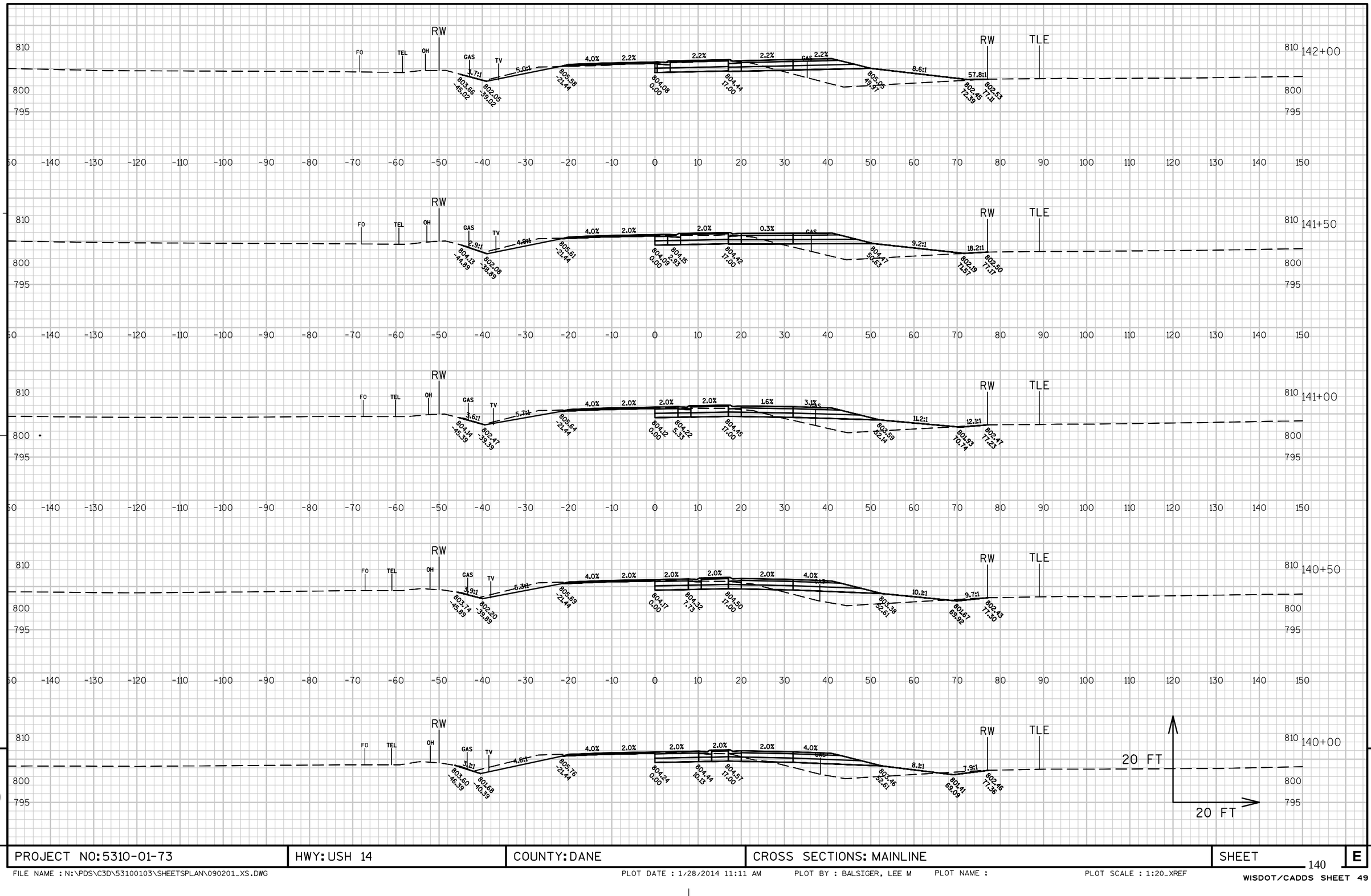
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090201_XS.DWG PLOT DATE : 1/28/2014 11:11 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



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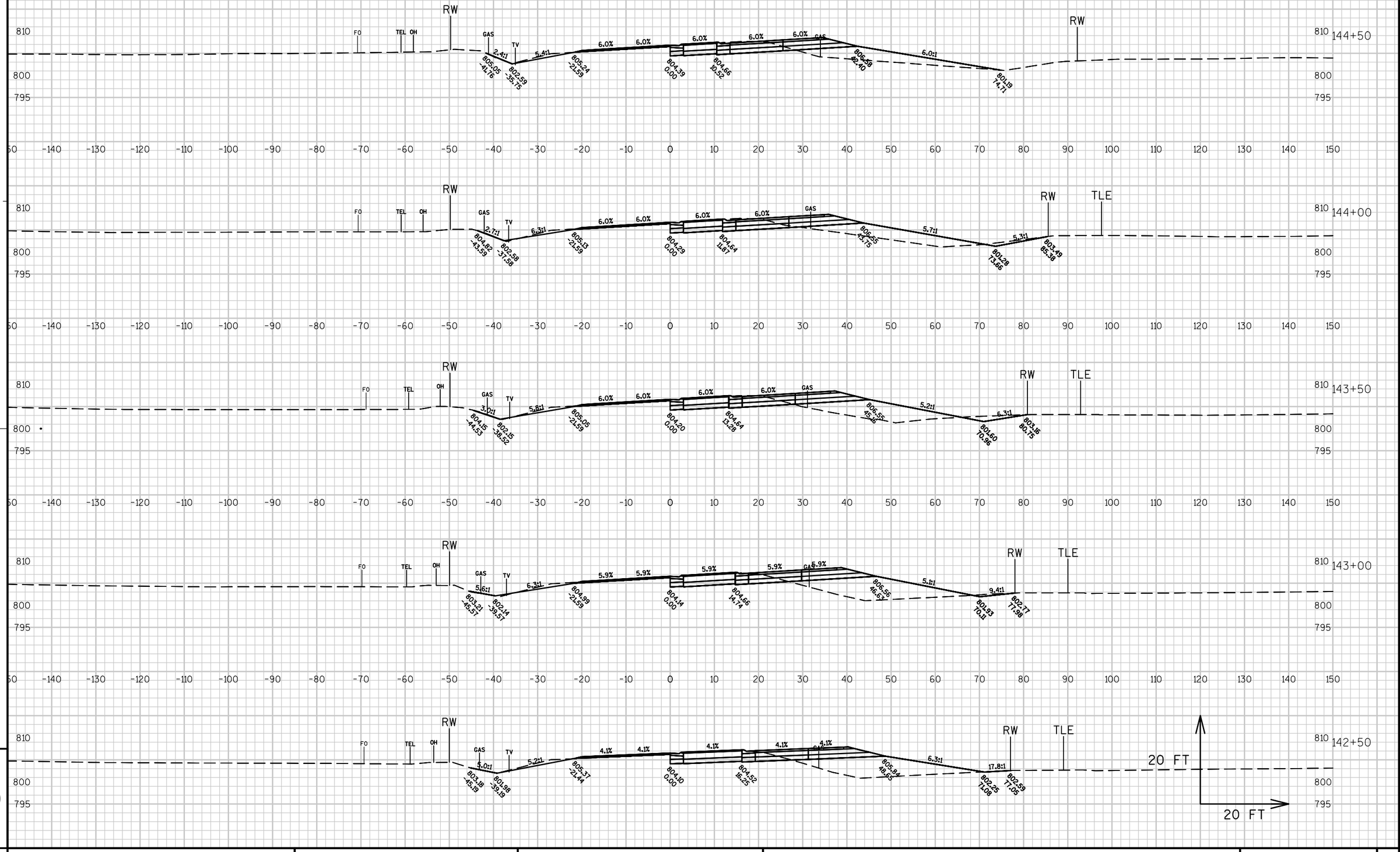
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET 140	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090201_XS.DWG PLOT DATE : 1/28/2014 11:11 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF

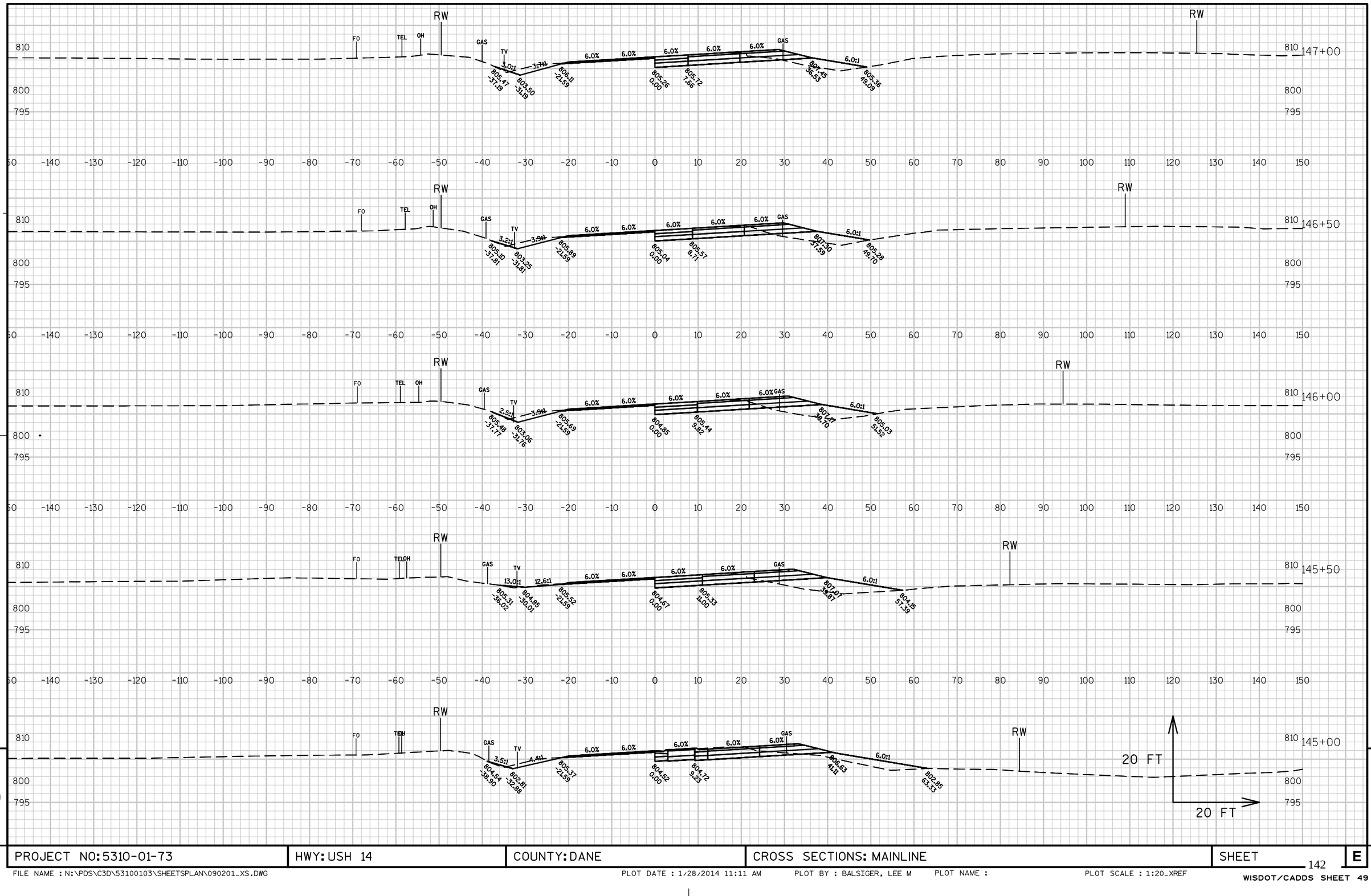
WISDOT/CADDS SHEET 49



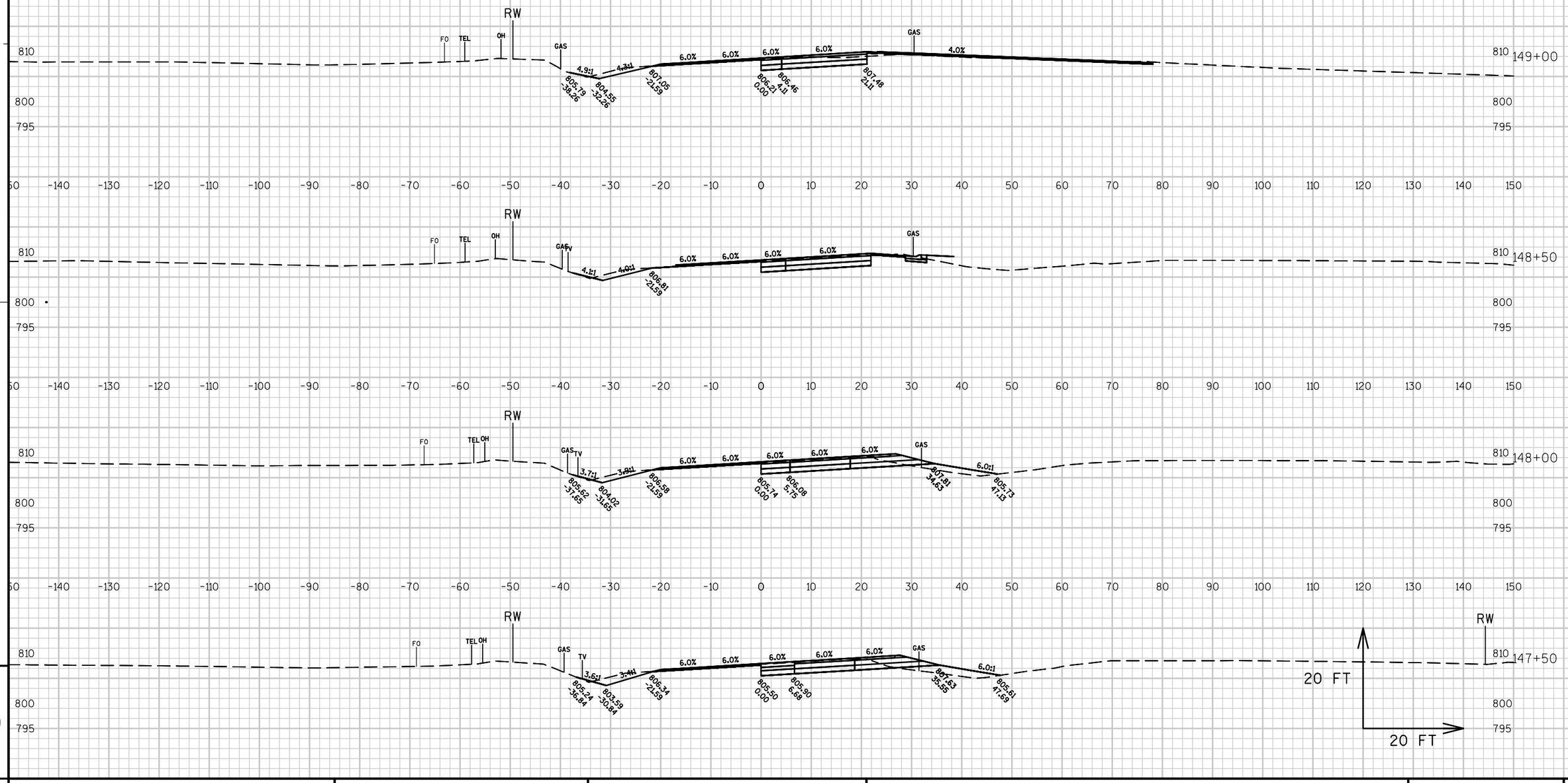
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090201_XS.DWG PLOT DATE : 1/28/2014 11:11 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF

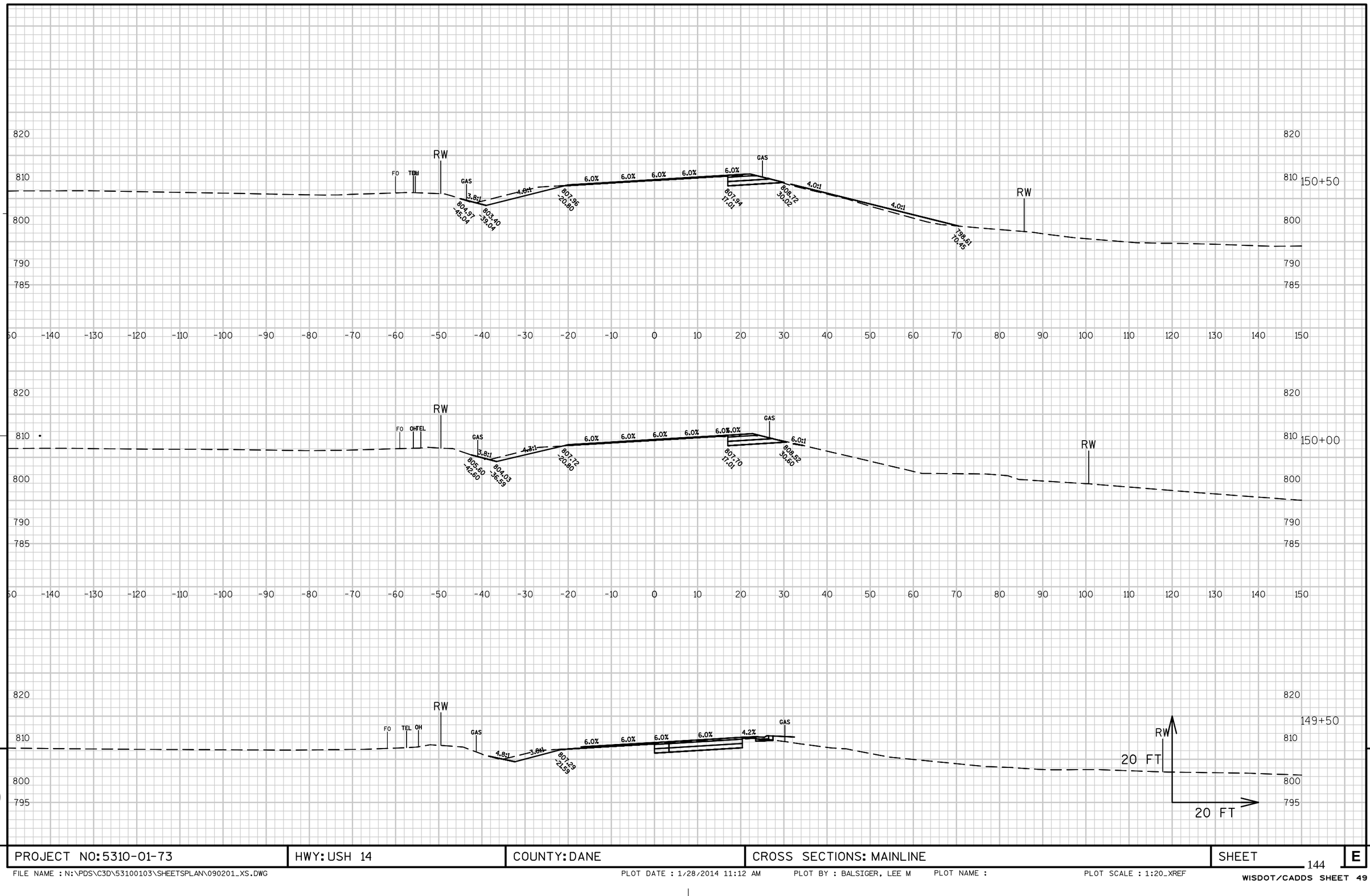
WISDOT/CADDS SHEET 49



PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E



PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E



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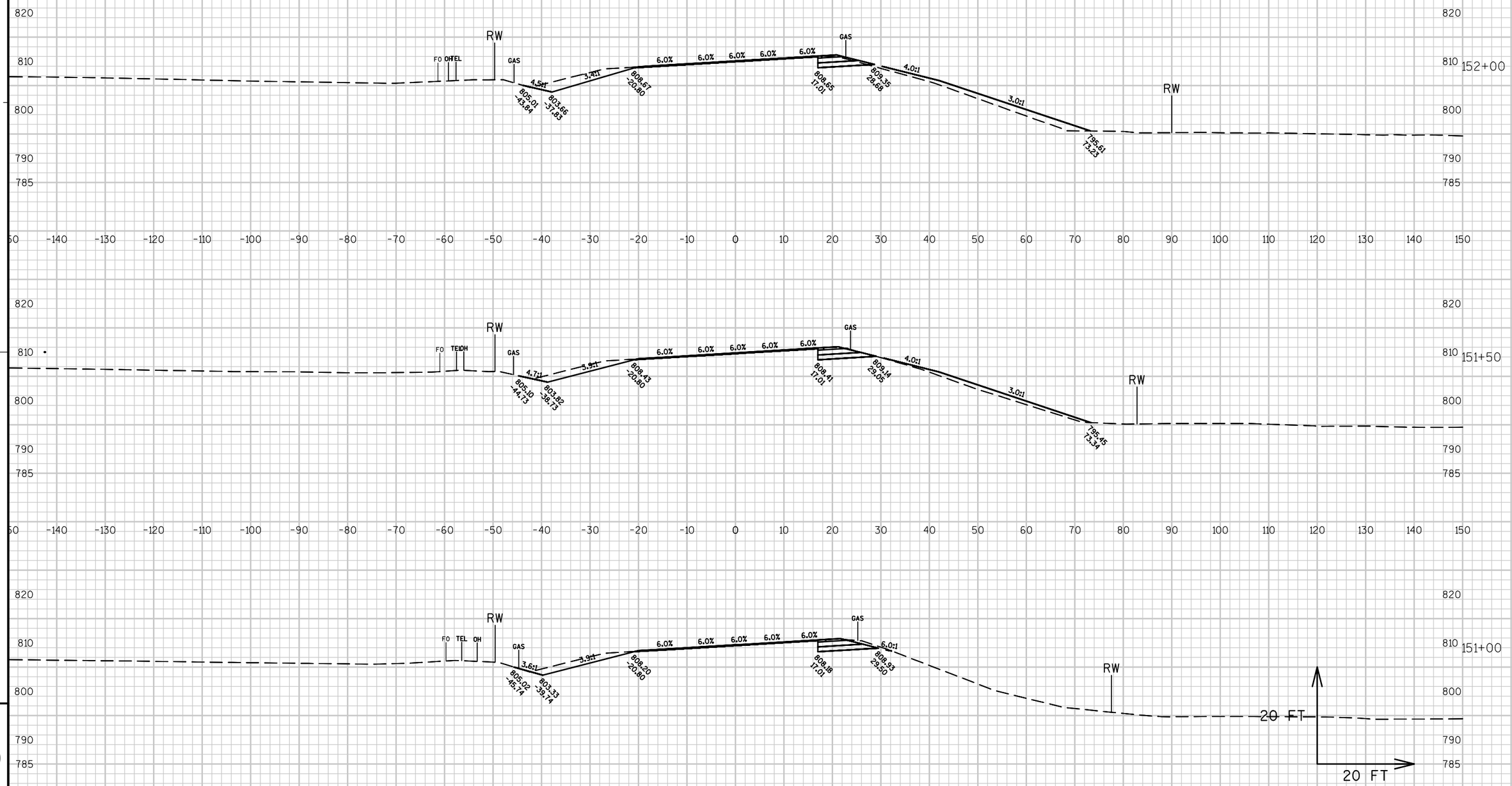

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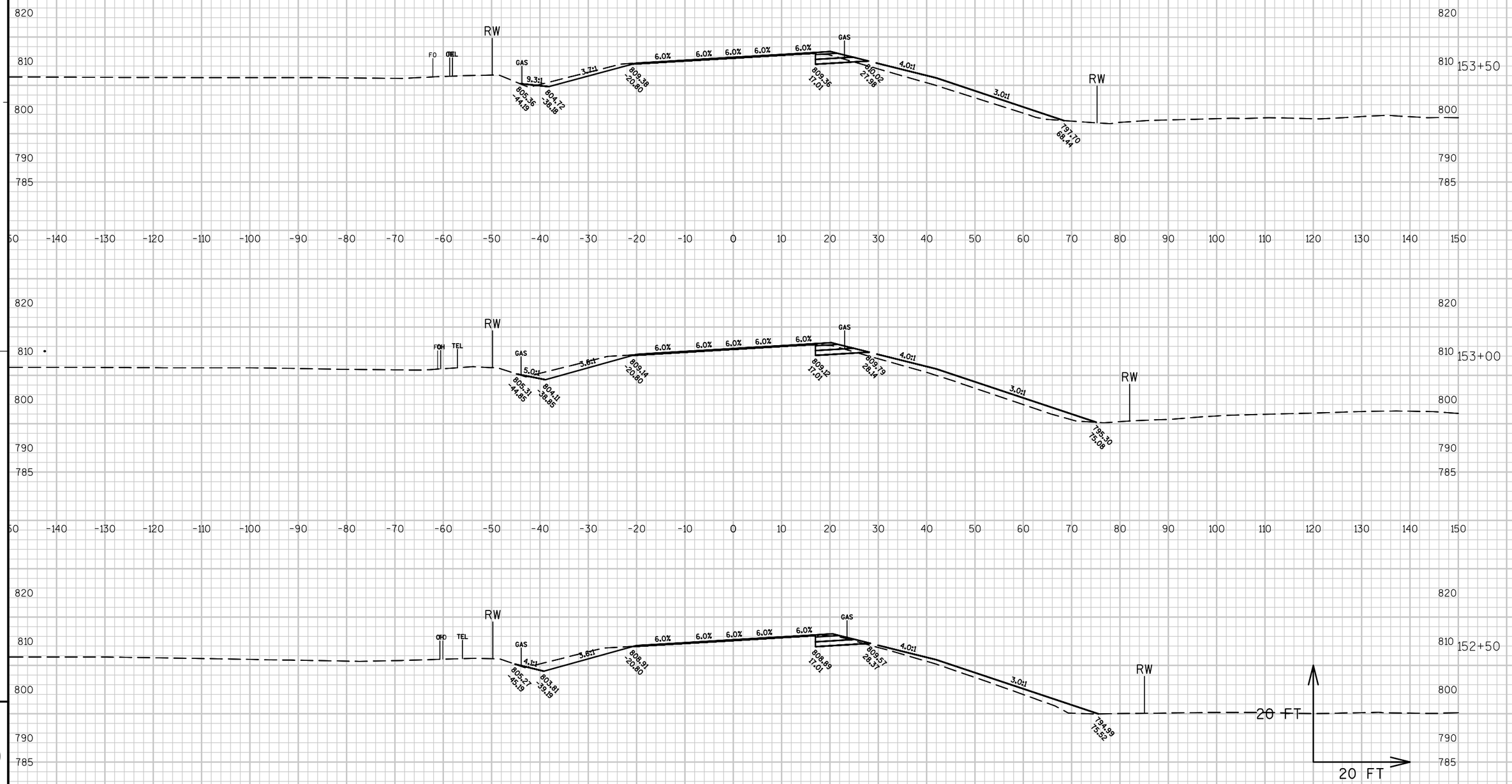
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090201_XS.DWG PLOT DATE : 1/28/2014 11:12 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF



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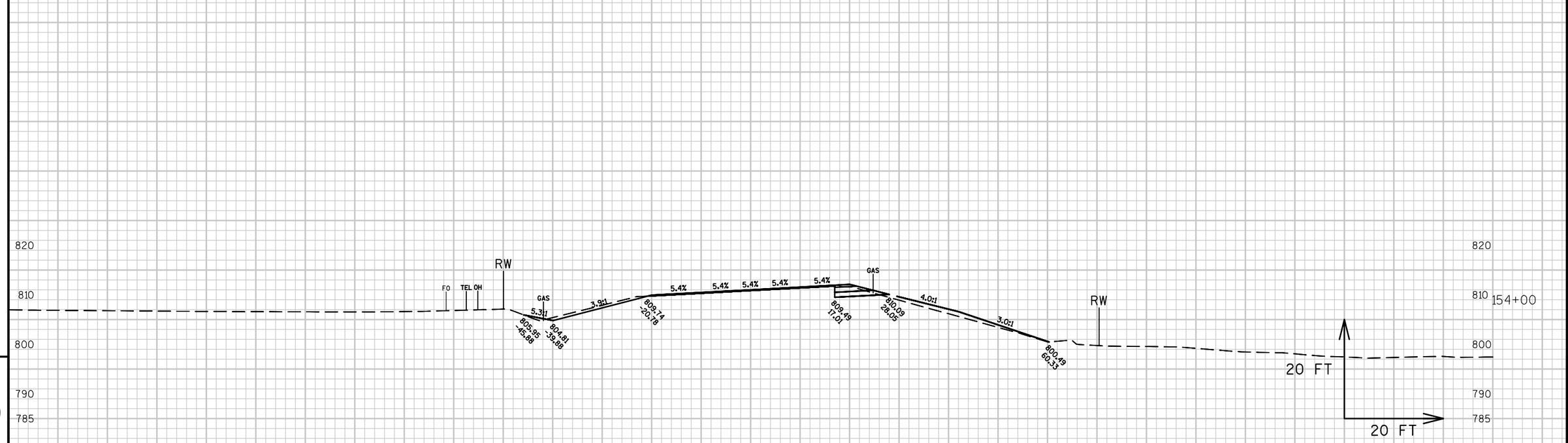
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090201_XS.DWG PLOT DATE : 1/28/2014 11:12 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF



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PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: MAINLINE	SHEET	E

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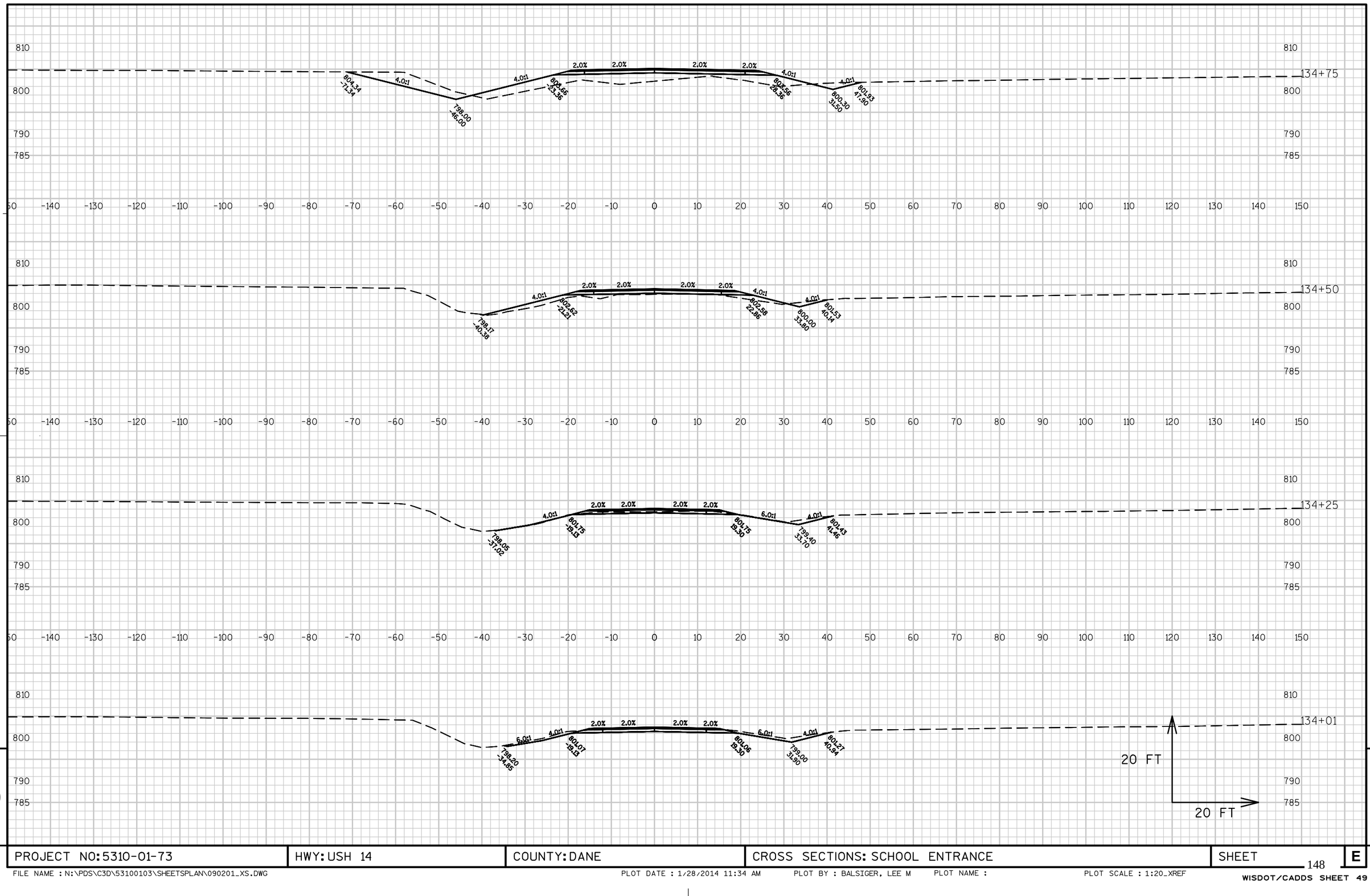
FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090201_XS.DWG PLOT DATE : 1/28/2014 11:12 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF



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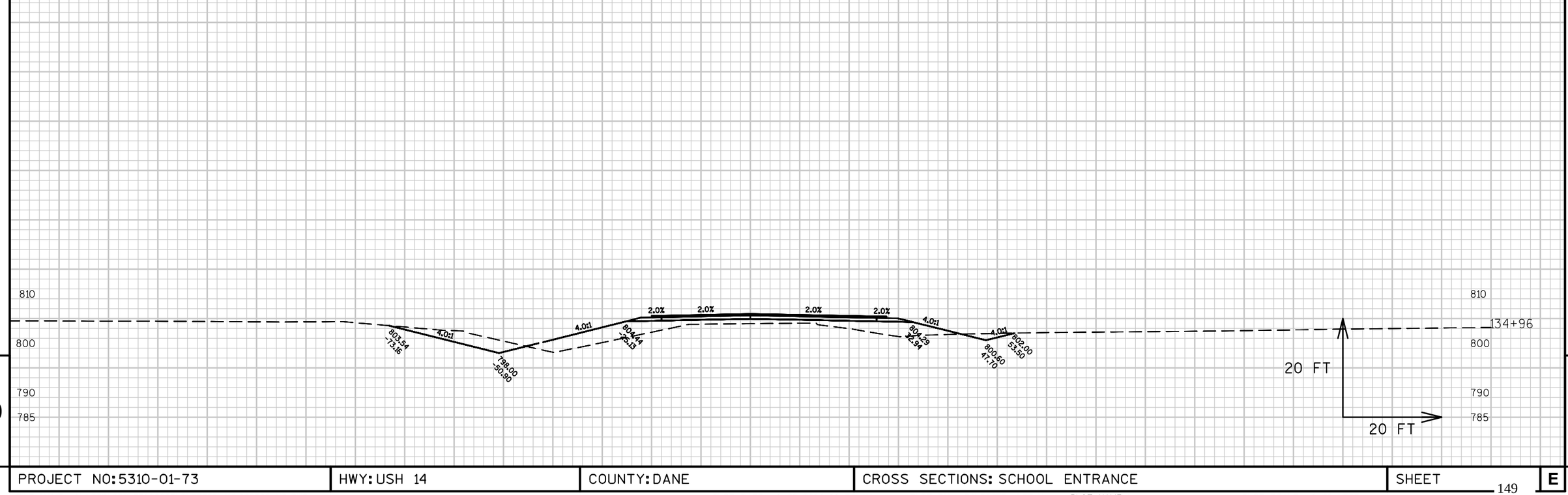
PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: SCHOOL ENTRANCE	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090201_XS.DWG PLOT DATE : 1/28/2014 11:34 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



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PROJECT NO: 5310-01-73	HWY: USH 14	COUNTY: DANE	CROSS SECTIONS: SCHOOL ENTRANCE	SHEET	E

FILE NAME : N:\PDS\C3D\53100103\SHEETSPLAN\090201_XS.DWG PLOT DATE : 1/28/2014 11:34 AM PLOT BY : BALSIGER, LEE M PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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