GRE

PROJECT ID: 1581-14-70

COUNTY: PRICE

DECEMBER 2016

ORDER OF SHEETS

TOTAL SHEETS = 102

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

HAWKINS - PRENTICE

JUMP RIVER BRIDGE TO MILLER ROAD

USH 8

PRICE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1581-14-70	WISC 2016492	1

STATE PROJECT NUMBER
1581-14-70

DESIGN DESIGNATION

A.A.D.T.	2017	=	1100
A.A.D.T.	2037	=	1300
D.H.V.	2017	=	180
D.D.		=	61/39
T.		=	25.0%
DESIGN SPEED		=	60 MPH
ESALS		=	598,600

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

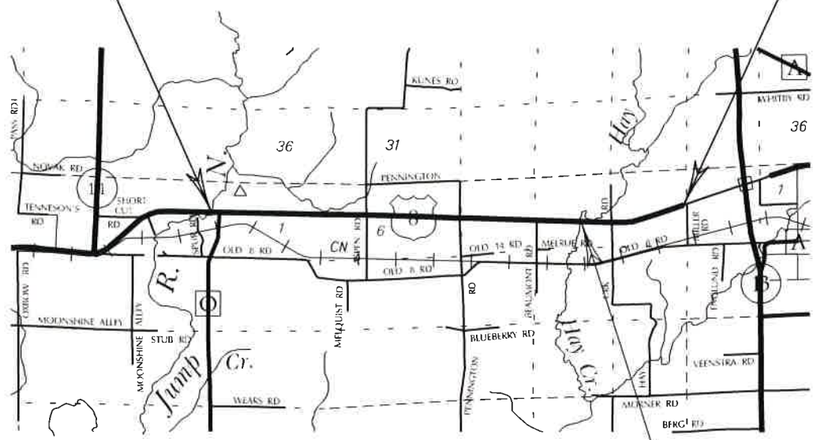
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

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

BEGIN PROJECT 1581-14-70
STA. 607+65
Y = 360,331.92
X = 755,133.68

END PROJECT 1581-14-70
STA. 940+60



R-1-W R-1-E

T-35-N

EXISTING STRUCTURE
B-50-275

LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 6.306 MI.

COORDINATES ON THIS PLAN ARE SCALED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), PRICE COUNTY, NAD 1983 (91)"

ELEVATIONS ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 NAVD 88 (91)

ORIGINAL PLANS PREPARED BY

DAAR ENGINEERING, INC.
414-225-9817
WISCONSIN
TAMMY S. TUCKER
E-40780
WAUKESHA, WI
PROFESSIONAL ENGINEER

7/14/2016 (Date) Tammy S. Tucker (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	DAAR ENGINEERING
Designer	DAAR ENGINEERING
Project Manager	MICHAEL GRACE
Regional Examiner	
Regional Supervisor	ROBIN STAFFORD
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 7/14/2016 (Signature)

E

GENERAL NOTES

UNLESS NOTED ON THE PLAN, ALL STATIONS AND OFFSETS ARE REFERENCED FROM USH 8 CL.

MAINTAIN THE EXISTING SUPERELEVATION RATES. EXISTING SUPERELEVATION TRANSITIONS WERE CONSTRUCTED WITH TWO THIRDS OF LENGTH OF RUNOFF ON THE TANGENT APPROACH AND ONE THIRD OF THE LENGTH ON THE CURVE.

WHEN THE PLAN QUANTITY OF THE ITEM ASPHALTIC PAVEMENT IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLAN IS APPROXIMATE & THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

THE LOCATIONS OF EXISTING OR PROPOSED UTILITIES, AS NOTED ON THE PLANS, ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

ALL FIELD, PRIVATE, AND COMMERICAL ENTRANCES SHALL BE RESTORED IN KIND. LIMITS TO BE DETERMINED BY THE ENGINEER.

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPALITY OR PUBLIC AGENCY WHICH IS NOT A MEMBER OF DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

THE CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY THEIR OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

PAVEMENT LOCATION	TOTAL PAVEMENT THICKNESS	LAYERS	PAVEMENT TYPE
USH 8	4”	1¾" UPPER	4 LT 58-28 S
		2¼" LOWER	3 LT 58-28 S

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

UTILITY CONTACTS

XCEL ENERGY - ELECTRIC TRANSMISSION
DAWN SCHULTZ
1414 W. HAMILTON AVE.
P.O. BOX 8
EAU CLAIRE, WI 54702-0008
DAWN.SCHULTZ@XCELENERGY.COM

PRICE ELECTRIC COOPERATIVE INC - ELECTRICITY
BEN ORYSEN
P.O. BOX 110
PHILLIPS, WI 54555
PHONE (800) 884-0881

PRICE COUNTY TELEPHONE COMPANY -
COMMUNICATION LINE
JOHN MESS
P.O. BOX 108
PHILLIPS, WI 54555
PHONE (715) 339-2151

WDNR CONTACT

WISCONSIN DNR
MR. SHAWN HASELEU
810 W. MAPLE STREET
SPOONER, WI 54801
OFFICE (715) 635-4228
Shawn.Haseleu@wisconsin.gov

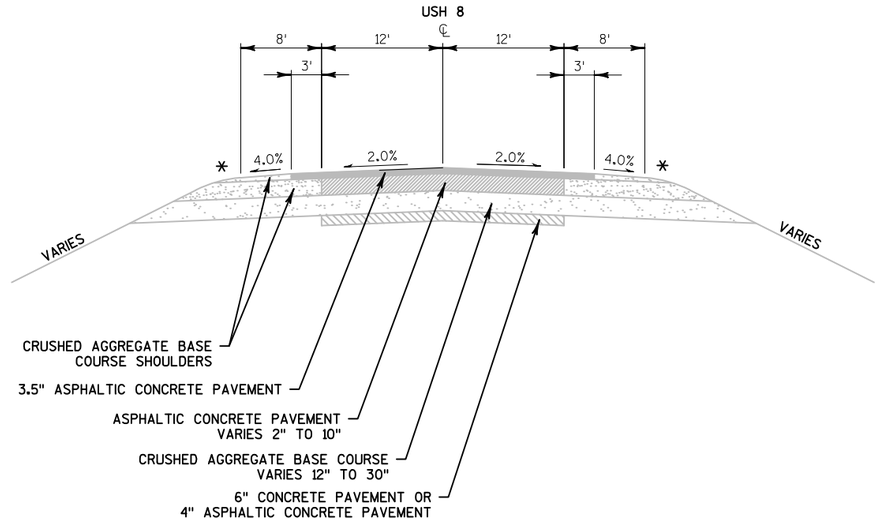
ORDER OF DETAIL SHEETS

PAVEMENT BORING LOG

NUMBER	STATION "APPROXIMATE"	OFFSET	PAVEMENT	UNDERLYING MATERIAL
1	STA. 612+60	10.0' RT	12.5" HMA	CABC
2	STA. 629+50	8.5' LT	6.5" HMA	CABC
3	STA. 645+80	5.5' RT	8.0" HMA	CABC
4	STA. 662+00	8.0' LT	7.0" HMA	CABC
5	STA. 678+10	5.0' RT	7.75" HMA	CABC
6	STA. 694+40	7.5' LT	13.25" HMA	CABC
7	STA. 711+20	6.0' RT	12.25" HMA	CABC
8	STA. 728+10	8.0' LT	10.0" HMA	CABC
9	STA. 744+50	6.0' RT	12.0" HMA	CABC
10	STA. 761+10	7.0' LT	11.0" HMA	CABC
11	STA. 777+80	5.0' RT	11.0" HMA	CABC
12	STA. 794+10	7.0' LT	9.5" HMA	CABC
13	STA. 809+40	5.0' RT	12.75" HMA	CABC
14	STA. 825+00	6.0' LT	9.5" HMA	CABC
15	STA. 840+30	5.5' RT	10.25" HMA	CABC
16	STA. 856+00	5.0' LT	5.75" HMA	CABC
17	STA. 872+00	5.0' RT	4.25" HMA	CABC
18	STA. 887+00	6.9' LT	5.5" HMA	CABC
19	STA. 902+40	5.0' RT	5.75" HMA	CABC
20	STA. 917+80	5.5' LT	5.0" HMA	CABC
21	STA. 933+30	7.0' RT	4.75" HMA	CABC

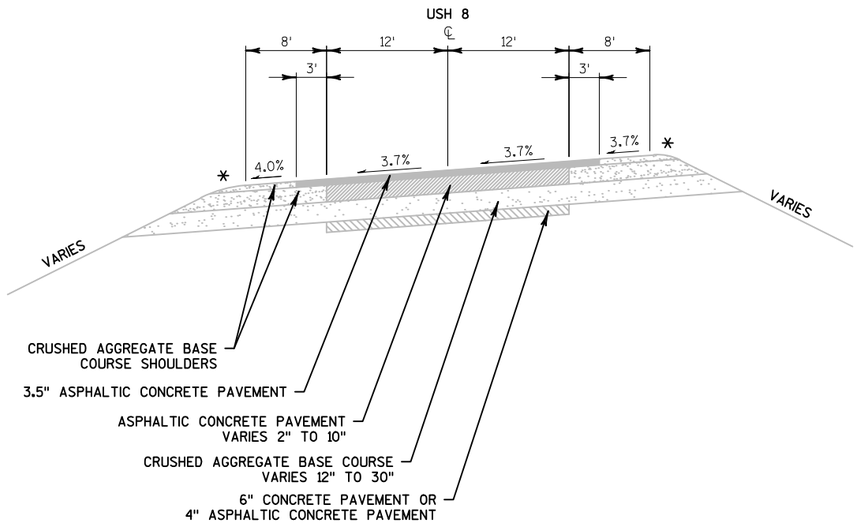
2

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	PROJECT OVERVIEW	SHEET 3	E



TYPICAL EXISTING SECTION USH 8

TANGENT SECTION



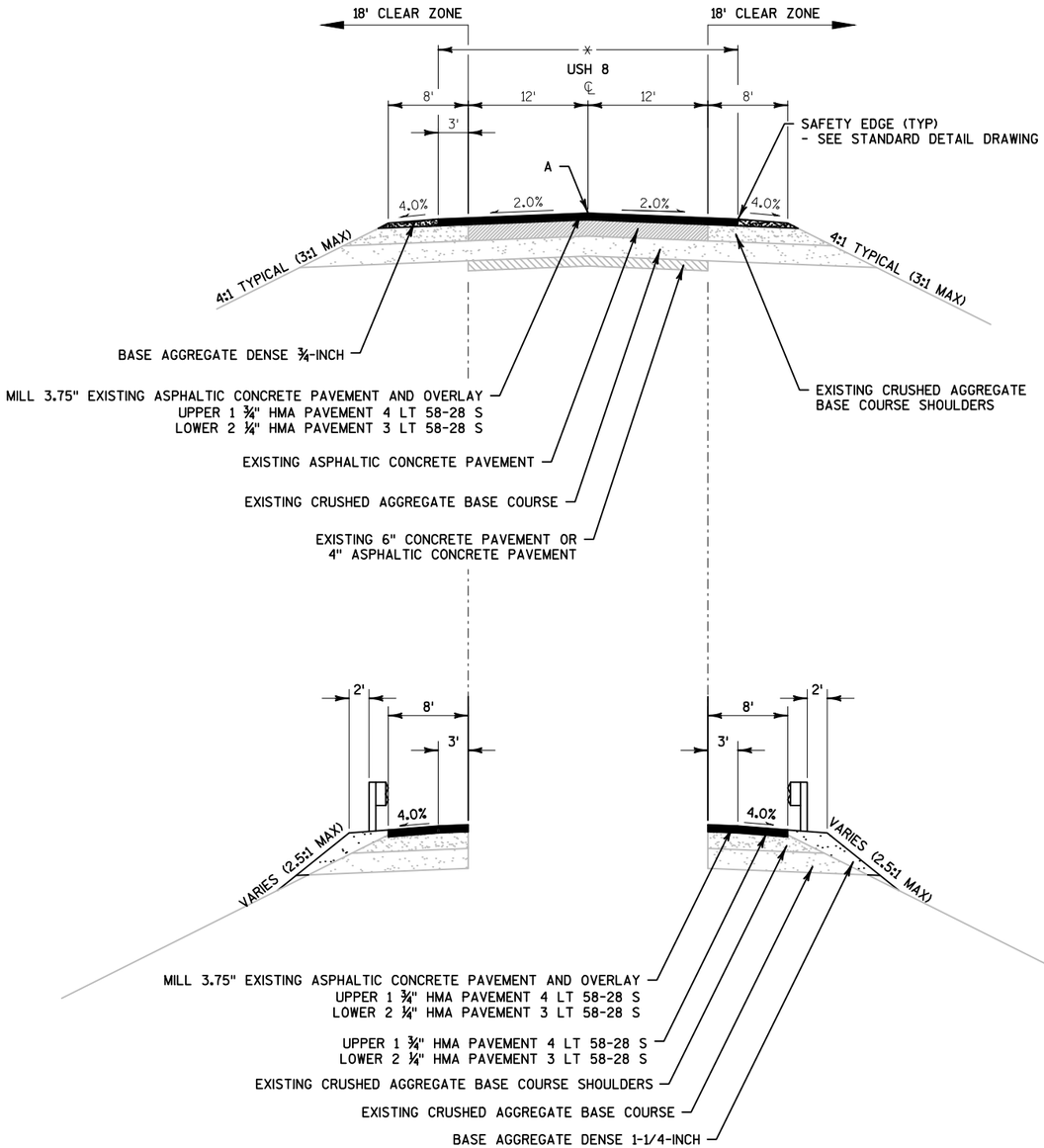
TYPICAL EXISTING SECTION USH 8

SUPER ELEVATED SECTION

*EXCESS SHOULDER WIDTH DUE TO MAINTENANCE OPERATIONS.

NOTE: UNDERDRAIN OUTFALLS DRAINING THE EXISTING PAVEMENT STRUCTURE ARE LOCATED THROUGHOUT THE PROJECT LIMITS AS STATED IN THE MISCELLANEOUS QUANTITIES.

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	EXISTING TYPICAL SECTIONS	SHEET 4	E



BEAM GUARD ON SHOULDERS
STA. 862+55 - 866+14

NOTE:
RECLAIM EXCESS GRAVEL MATERIAL OUTSIDE OF THE 8' EXISTING SHOULDER. TO BE PAID FOR UNDER SHAPING SHOULDERS.

A - CENTERLINE RUMBLE STRIPS STA. 608+10 TO STA. 940+60, REHEATING HMA PAVEMENT LONGITUDINAL JOINTS

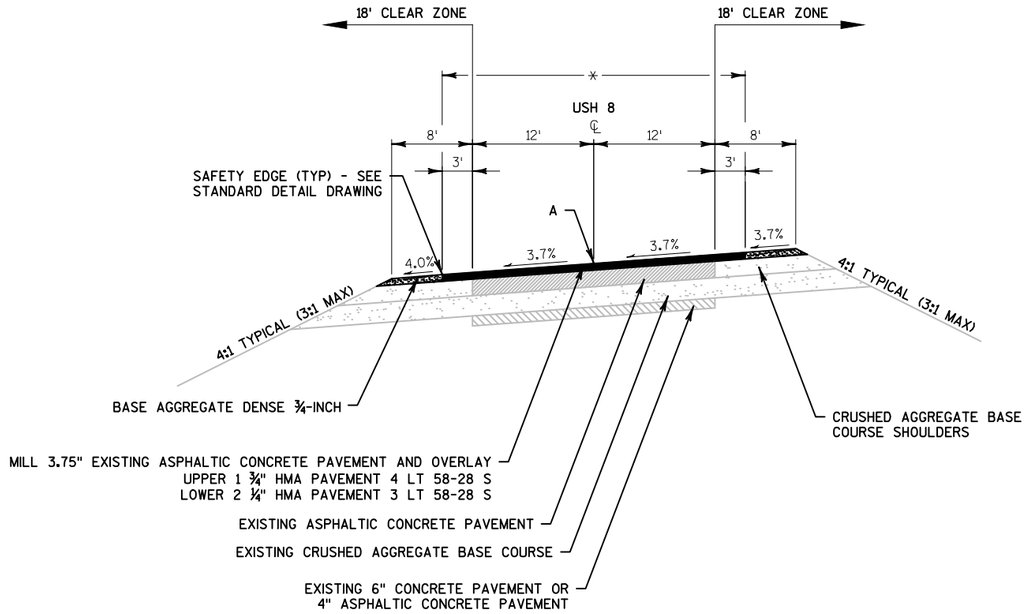
* - TRANSVERSE WIDTH FOR "PREPARE FOUNDATION FOR ASPHALTIC PAVING" ITEM IS 30 FEET.

TYPICAL PROPOSED SECTION USH 8

TANGENT SECTION
STA. 607+65 - 892+13
STA. 908+65 - 940+60

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	PROPOSED TYPICAL SECTIONS	SHEET 5	E

2



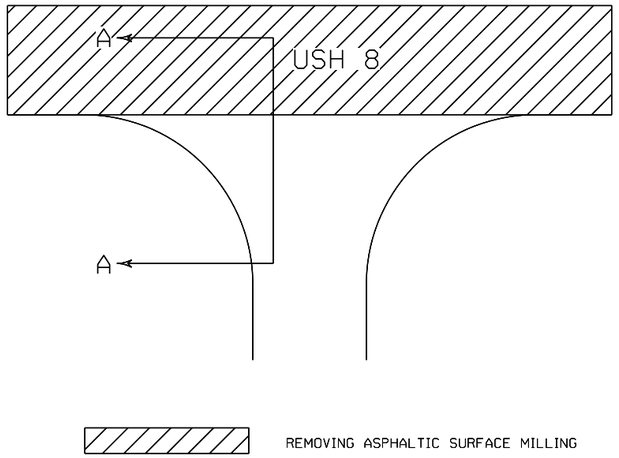
TYPICAL PROPOSED SECTION USH 8

SUPER ELEVATED SECTION
(EXISTING SUPERELEVATION TO REMAIN)
STA. 892+13 - 908+65

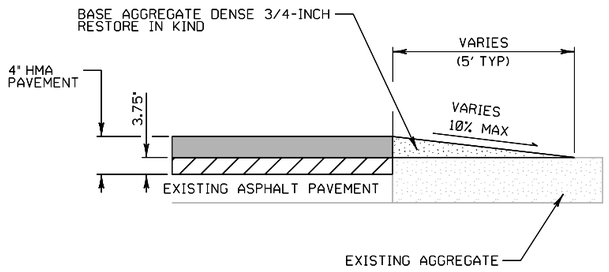
NOTE:
RECLAIM EXCESS GRAVEL MATERIAL OUTSIDE OF THE 8' EXISTING SHOULDER. TO BE PAID FOR UNDER SHAPING SHOULDERS.

A - CENTERLINE RUMBLE STRIPS STA. 608+10 TO STA. 940+60, REHEATING HMA PAVEMENT LONGITUDINAL JOINTS

* - TRANSVERSE WIDTH FOR "PREPARE FOUNDATION FOR ASPHALTIC PAVING" ITEM IS 30 FEET.

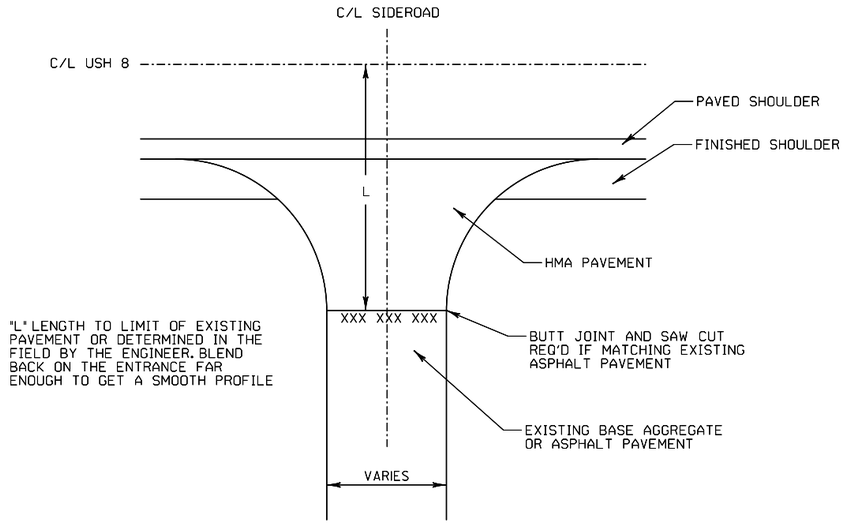


REMOVING ASPHALTIC SURFACE MILLING



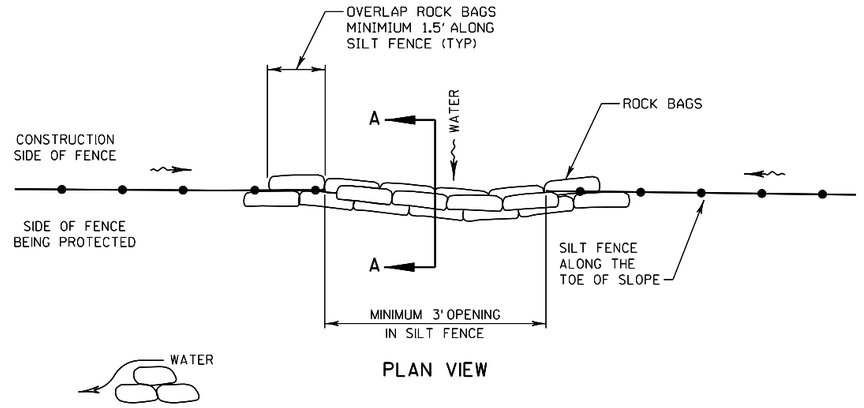
SECTION A-A

BASE AGGREGATE DENSE ENTRANCE DETAIL



INTERSECTION DETAIL

CTH O
ASPEN RD
PENNINGTON RD
BEAUMONT RD
HAY CREEK RD

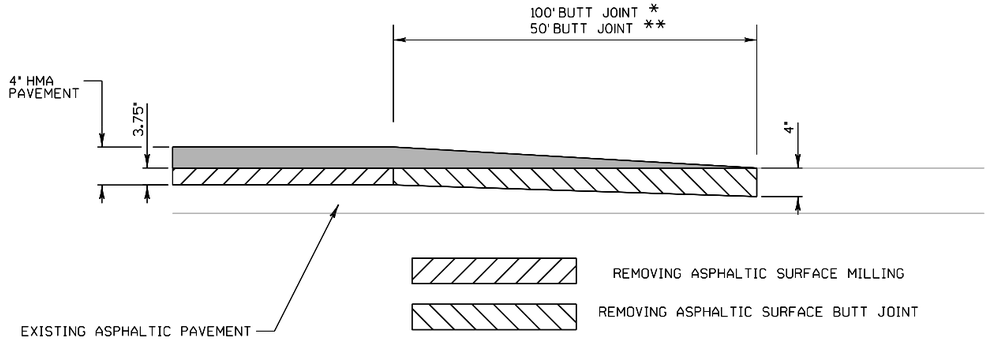


PLAN VIEW

SECTION A-A

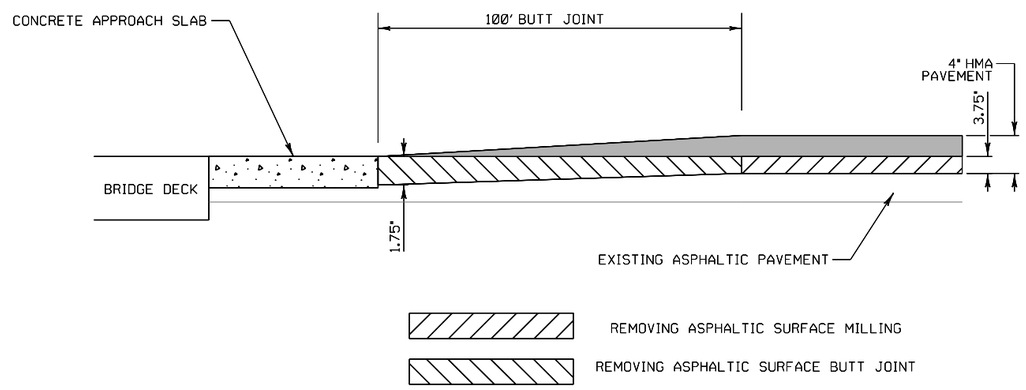
SILT FENCE DRAINAGE OUTLET, ROCK BAGS

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CONSTRUCTION DETAILS	SHEET 7	E



BUTT JOINT DETAIL

* MAINLINE
** SIDE ROADS



NOTE: MATCH APPROACH SLAB ELEVATION.

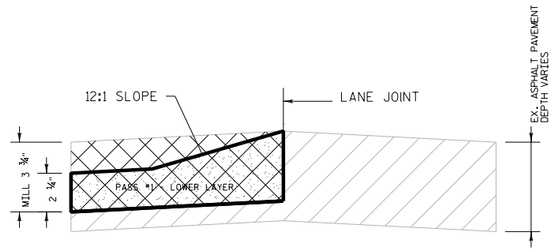
BUTT JOINT DETAIL

APPROACHES TO STRUCTURES

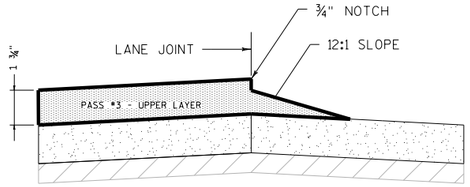
2

LEGEND:

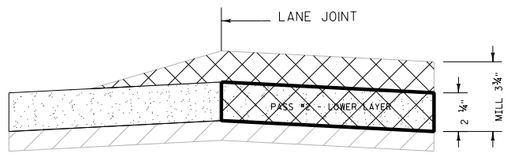
- -EXISTING ASPHALTIC CONCRETE PAVEMENT
- -1 ¾" HMA PAVEMENT 4 LT 58-28 S
- -2 ¼" HMA PAVEMENT 3 LT 58-28 S
- -REMOVING ASPHALTIC SURFACE MILLING



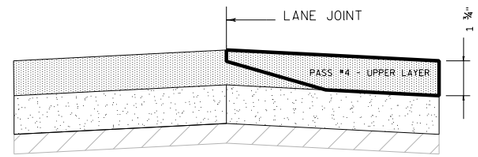
PASS 1



PASS 3



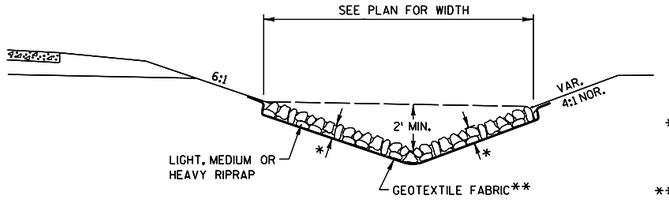
PASS 2



PASS 4

TYPICAL PAVEMENT CROSS SECTIONS OF LONGITUDINAL JOINTS

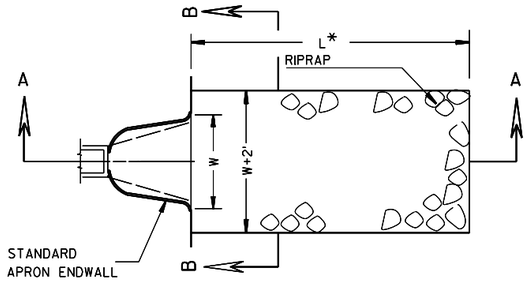
PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CONSTRUCTION DETAILS	SHEET 8	E



* 12" MIN. FOR LIGHT RIP RAP
18" MIN. FOR MEDIUM RIP RAP
24" MIN. FOR HEAVY RIP RAP

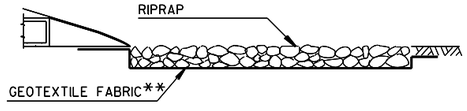
** GEOTEXTILE FABRIC
TYPE "R" FOR LIGHT
TYPE "HR" FOR MEDIUM AND HEAVY

DETAIL OF RIPRAP DITCH

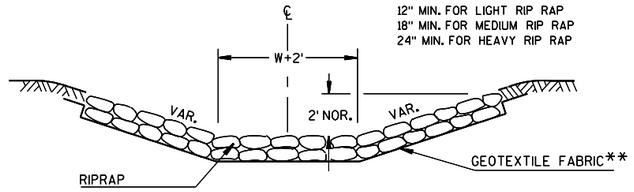


* L = 3 TIMES DIAMETER (NOR.) OR
10' MIN. OR AS DIRECTED BY THE
ENGINEER

** USE GEOTEXTILE FABRIC TYPE R
FOR LIGHT RIPRAP, USE GEOTEXTILE
FABRIC TYPE HR FOR MEDIUM RIPRAP



SECTION A-A

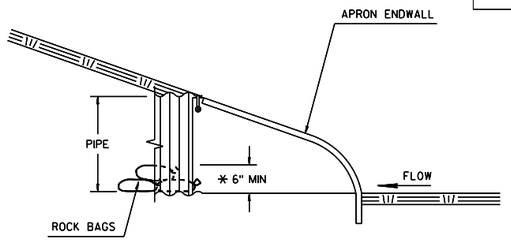


12" MIN. FOR LIGHT RIP RAP
18" MIN. FOR MEDIUM RIP RAP
24" MIN. FOR HEAVY RIP RAP

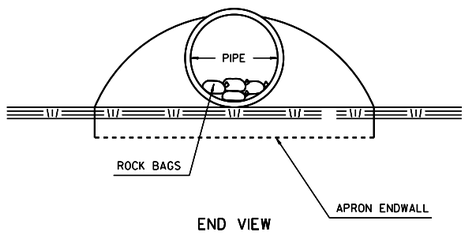
SECTION B-B

RIPRAP AND GEOTEXTILE FABRIC DETAIL AT APRON ENDWALLS

PIPE SIZE	ESTIMATED NO. OF BAGS
18"	2
24"	3
30"	5
48"	10
54"	10
60"	13
72"	16



SIDE VIEW



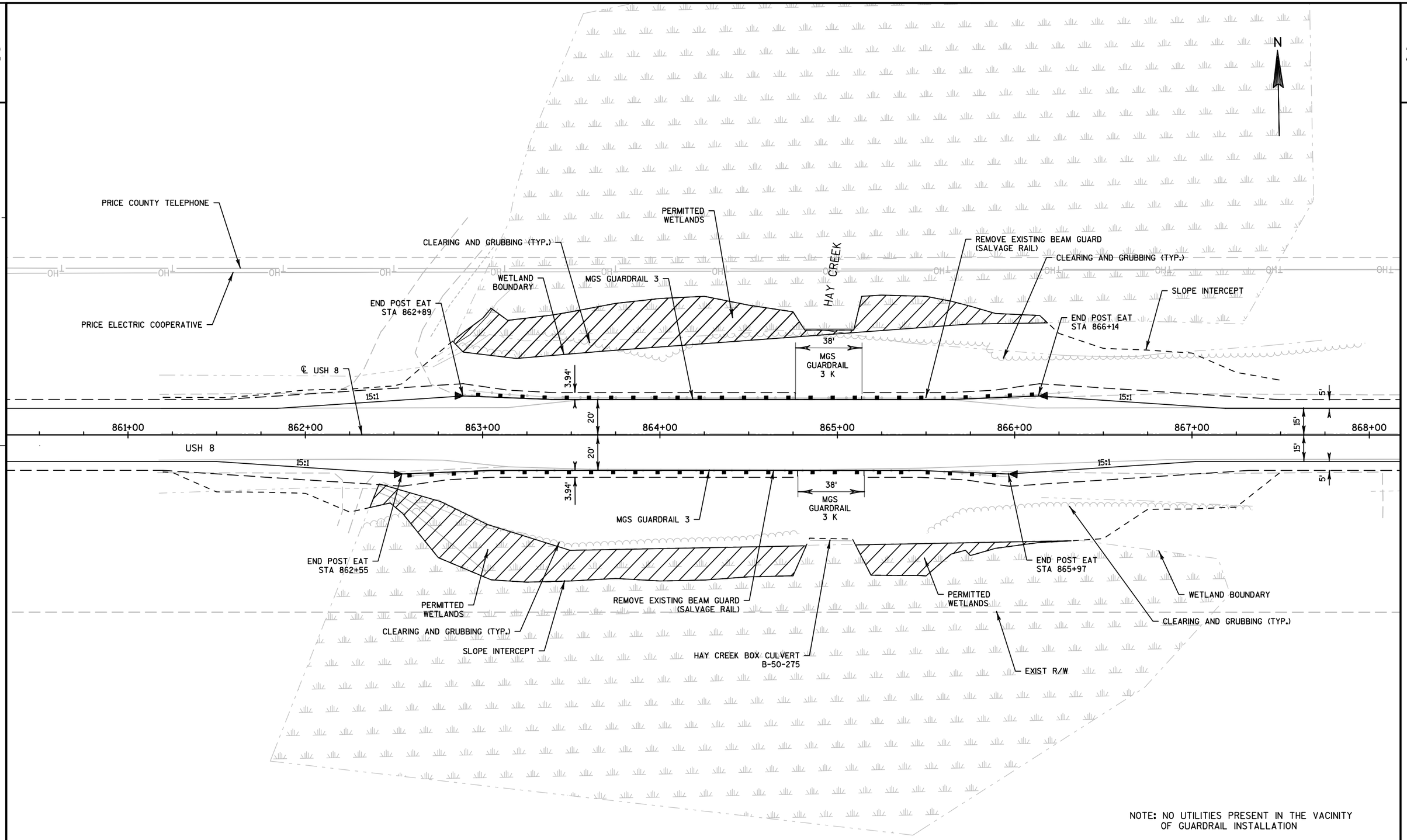
END VIEW

CULVERT PIPE CHECKS

SUPERELEVATION TABLE			
	STAITON	LEFT LANE	RIGHT LANE
END NORMAL CROWN	892+13	-2.00%	-2.00%
END RUNOUT	892+90	-2.00%	0.00%
REVERSE CROWN	893+67	-2.00%	2.00%
BEGIN FULL SUPER	984+32	-3.70%	3.70%
END FULL SUPER	906+46	-3.70%	3.70%
REVERSE CROWN	907+11	-2.00%	2.00%
BEGIN RUNOUT	907+88	-2.00%	0.00%
BEGIN NORMAL CROWN	908+65	-2.00%	-2.00%

FILE NAME : N:\CADD\Active\NC\1581-14-00 USH 8\C3D\15811400\SheetsPlan\021001_cd.dgn PLOT DATE : 7/28/2016 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 2.0000 ' / in.
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CONSTRUCTION DETAILS	SHEET	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\021002_CD.DWG PLOT DATE : 7/15/2016 2:33 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 50'_XREF
WISDOT/CADDS SHEET 42

2

N

EXISTING R/W

PRICE COUNTY TELEPHONE

PRICE ELECTRIC COOPERATIVE

PERMITTED WETLANDS

CLEAN DITCH LINE (PAID FOR UNDER EXCAVATION COMMON QUANTITY) STA 894+00 LT TO STA 898+00 LT

WETLAND BOUNDARY

STA. 893+98
41.8' LT
1503.63

PC: 893+85.33

STA. 894+14
39.9' LT
1503.59

STA. 895+12
38.9' LT
1503.41

STA. 869+15
39.0' LT
1503.21

STA. 897+21
38.7' LT
1503.01

STA. 897+89
41.1' LT
1502.87

892+00 893+00 USH 8 894+00 895+00 896+00 897+00 898+00 899+00

℄ USH 8

WETLAND BOUNDARY

EXISTING R/W

OH HO DH

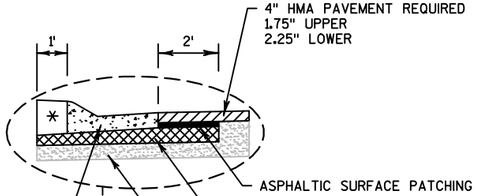
PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CONSTRUCTION DETAILS - REDITCHING AREA	SHEET 11	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\021002_CD.DWG PLOT DATE : 1/22/2015 12:52 PM PLOT BY : TAMMY.TUCKER PLOT NAME : PLOT SCALE : 1" = 50'_XREF

2

N

* TOPSOIL, SEED, FERTILIZER, EROSION MAT AS OUTLINED IN MISCELLANEOUS QUANTITIES.



PRICE ELECTRIC COOPERATIVE

SAWCUT REQUIRED
REMOVE ASPHALTIC SURFACE

℄ USH 8

SAWCUT REQUIRED
REMOVE ASPHALTIC SURFACE

612+00 613+00 USH 8 614+00

REMOVE EXISTING CURB & GUTTER AND INSTALL CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

+85.25 / 83.11' RT R=60'

SLOPE INTERCEPT

ASPHALTIC FLUME

RESTORE WITH EROSION MAT, TOPSOIL, SEED, FERTILIZER AS OUTLINED IN THE MISCELLANEOUS QUANTITIES

117'

CTH O

R=40'

+19.15 / 63.35' RT

REMOVE EXISTING CURB & GUTTER AND INSTALL CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

ASPHALTIC FLUME

RESTORE WITH EROSION MAT, TOPSOIL, SEED, FERTILIZER AS OUTLINED IN THE MISCELLANEOUS QUANTITIES

SAW CUT AND BUTT JOINT REQ'D

N

2

PRICE COUNTY TELEPHONE

PRICE ELECTRIC COOPERATIVE

MATCH AT EXISTING ASPHALT LIMIT

+99.35 / 56.49' LT R36'

R42' +96.19 / 63.50' LT

℄ USH 8

714+00 715+00 716+00 USH 8 71

+94.07 / 61.78' RT R43'

R34' +89.36 / 51.82' RT

ASPEN RD

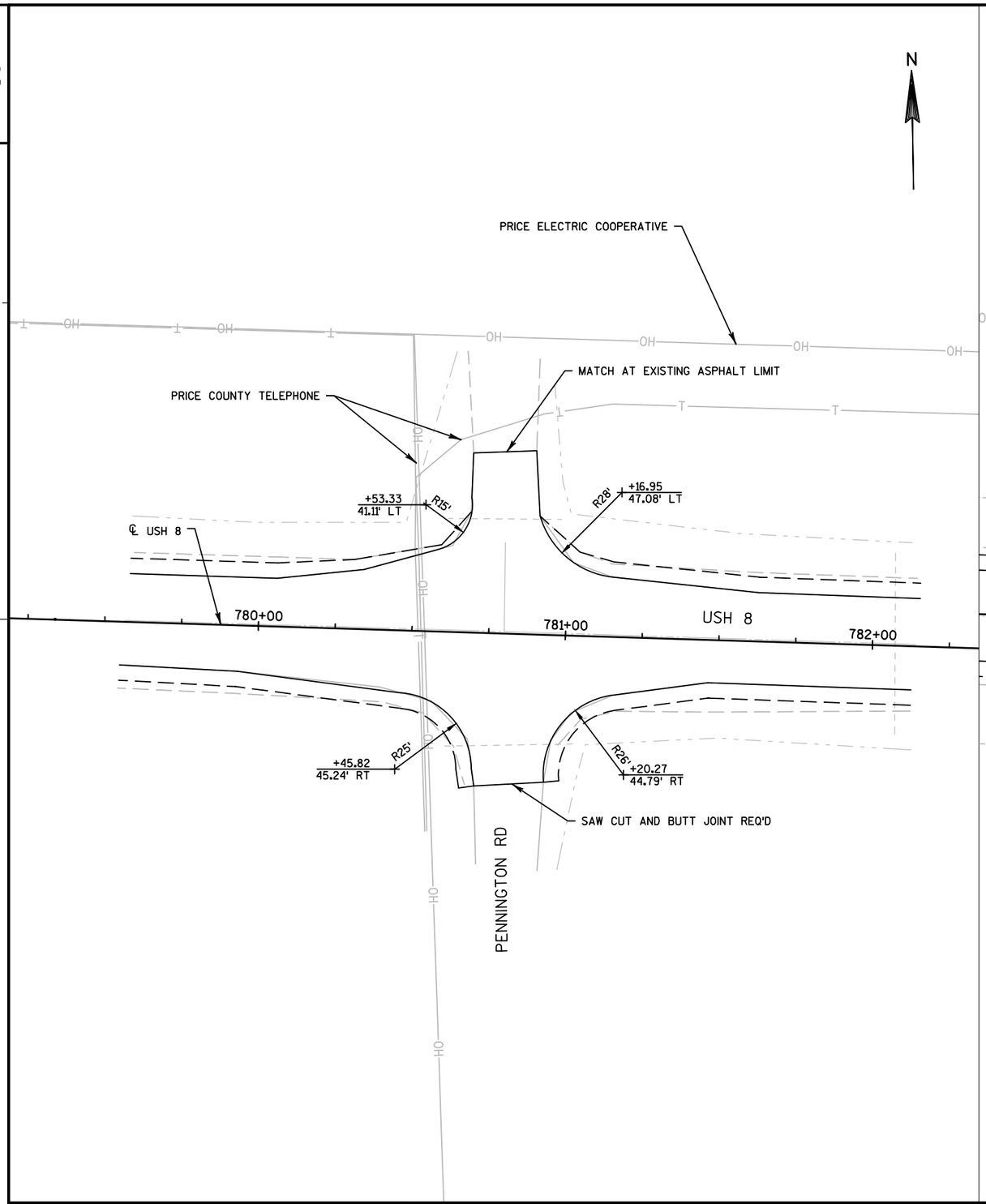
MATCH AT EXISTING ASPHALT LIMIT

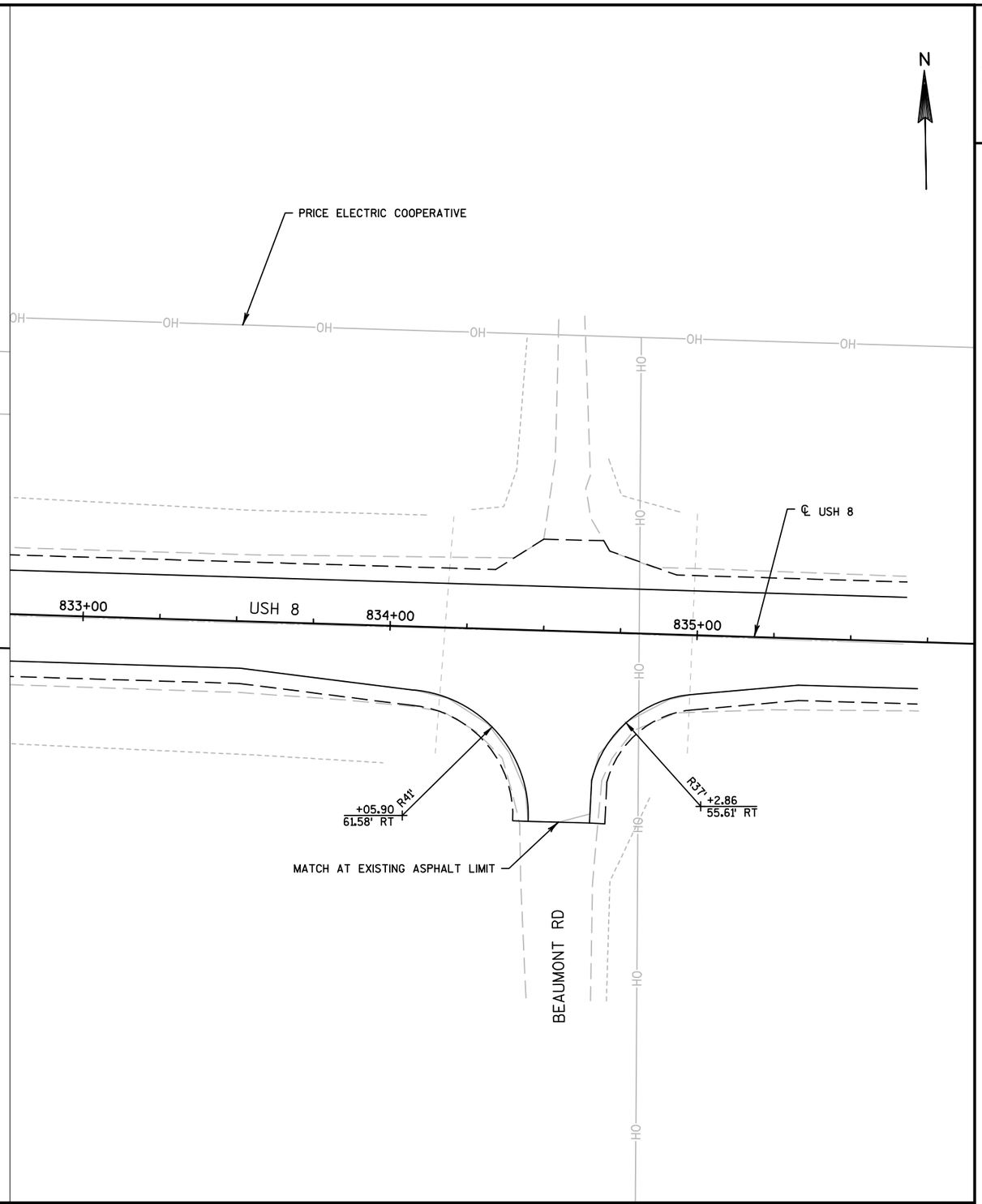
PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	INTERSECTION DETAILS	SHEET 12	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - 02111

PLOT DATE : 7/25/2016 4:01 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42





PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	INTERSECTION DETAILS	SHEET 13	E

2

N

PRICE ELECTRIC COOPERATIVE

PRICE COUNTY TELEPHONE

MATCH AT EXISTING ASPHALT LIMIT

R66' +75.88 / 79.59' LT

+49.22 / 56.86' LT R40'

℄ USH 8

884+00 885+00 886+00 887+00 USH 8 888+00 889+00 890+00

R48' +56.87 / 63.12' RT

MATCH AT EXISTING ASPHALT LIMIT

XCEL ENERGY TRANSMISSION

+02.13 / 104.67' RT R90'

PRICE COUNTY TELEPHONE

HAY CREEK RD

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	INTERSECTION DETAILS	SHEET 14	E

BEGIN PROJECT I.D. 1581-14-70
STA. 607+65
Y=360,331.92
X=755,133.68

LEGEND
EXISTING SIGN MOUNTED ON POST(S)
XXX DENOTES SIGN NUMBER

N

1R01 WEST REMOVE; 8 REMOVE
1R02 COUNTY O REMOVE; REMOVE
1R03 REMOVE
1R04 COUNTY O REMOVE; REMOVE
1R05 STOP REMOVE
1R06 8 REMOVE; REMOVE
1R07 EAST REMOVE; 8 REMOVE
1R08 NO PASSING ZONE REMOVE
1R09 JCT REMOVE; COUNTY O REMOVE
1R12 WAYSIDE 1/2 MILE REMOVE

610 615 620 625 630 635

CTH O

℄ USH 8

MATCHLINE - STA. 637+00

MATCHLINE - STA. 637+00

N

1R10 NO PASSING ZONE REMOVE
1R11 NO PASSING ZONE REMOVE

640 645 650 655 660 665

℄ USH 8

MATCHLINE - STA. 668+00

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	EXISTING SIGNING	SHEET	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\023201_ES.DWG PLOT DATE : 1/20/2015 3:51 PM PLOT BY : TAMMY.TUCKER PLOT NAME : PLOT SCALE : 1" = 200'_XREF

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

XXX DENOTES SIGN NUMBER

N

MATCHLINE - STA. 668+00

670 675 680 685 690 695

2R01 NO PASSING ZONE REMOVE

℄ USH 8

MATCHLINE - STA. 699+00

2

N

MATCHLINE - STA. 699+00

700 705 710 715 720 725

STOP REMOVE 2R03

2R05 ASPEN RD REMOVE

ASPEN RD REMOVE 2R02

STOP REMOVE 2R04

ASPEN RD TO REMAIN

ASPEN RD

℄ USH 8

MATCHLINE - STA. 730+00

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	EXISTING SIGNING	SHEET	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\023201_ES.DWG PLOT DATE : 1/20/2015 3:51 PM PLOT BY : TAMMY.TUCKER PLOT NAME : PLOT SCALE : 1" = 200'_XREF

WISDOT/CADDS SHEET 44

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

XXX DENOTES SIGN NUMBER

N

MATCHLINE - STA. 730+00

730 735 740 745 750 755 760

℄ USH 8

DIP REMOVE 3R01

DIP REMOVE 3R02

DIP REMOVE 3R03

DIP REMOVE 3R04

MATCHLINE - STA. 761+00

2

MATCHLINE - STA. 761+00

765 770 775 780 785 790

N

℄ USH 8

PENNINGTON RD REMOVE 3R05

STOP REMOVE 3R06

PENNINGTON RD

STOP REMOVE 3R07

PENNINGTON RD TO REMAIN

3R08 PENNINGTON RD REMOVE

MATCHLINE - STA. 792+00

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	EXISTING SIGNING	SHEET 17	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\023201_ES.DWG PLOT DATE : 1/20/2015 3:51 PM PLOT BY : TAMMY.TUCKER PLOT NAME : PLOT SCALE : 1" = 200'_XREF

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

XXX DENOTES SIGN NUMBER

N

MATCHLINE - STA. 792+00

795 800 805 810 815 820

℄ USH 8

MATCHLINE - STA. 823+00

N

825 830 835 840 845 850

℄ USH 8

BEAUMONT RD
REMOVE
4R01

BEAUMONT RD
REMOVE
4R03

NO PASSING ZONE
REMOVE
4R04

BEAUMONT RD
TO REMAIN

STOP
REMOVE
4R02

BEAUMONT RD

MATCHLINE - STA. 854+00

2

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	EXISTING SIGNING	SHEET	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\023201_ES.DWG PLOT DATE : 1/20/2015 3:51 PM PLOT BY : TAMMY.TUCKER PLOT NAME : PLOT SCALE : 1" = 200'_XREF

WISDOT/CADDS SHEET 44

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

(XXX) DENOTES SIGN NUMBER

N

MATCHLINE - STA. 854+00

855 860 865 870 ℄ USH 8 875 880 885

NO PASSING ZONE
REMOVE
5R01

NO PASSING ZONE
REMOVE
5R02

HAY CREEK RD
REMOVE
5R03

EXISTING SIGN TO REMAIN

MATCHLINE - STA. 885+00

MATCHLINE - STA. 885+00

885 890 895 900 905 910 915

STOP
REMOVE
5R05

HAY CREEK RD
REMOVE
5R07

SCHOOL BUS STOP AHEAD
REMOVE
5R08

℄ USH 8

NO PASSING ZONE
REMOVE
5R09

STOP
REMOVE
5R06

HAY CREEK RD
TO REMAIN

HAY CREEK RD

MATCHLINE - STA. 916+00

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	EXISTING SIGNING	SHEET	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\023201_ES.DWG PLOT DATE : 1/20/2015 3:51 PM PLOT BY : TAMMY.TUCKER PLOT NAME : PLOT SCALE : 1" = 200'_XREF

WISDOT/CADDS SHEET 44

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

(XXX) DENOTES SIGN NUMBER

N

END PROJECT I.D. 1581-14-70
STA. 940+60

MATCHLINE - STA. 916+00

920 925 930 935 940 945

℄ USH 8

MILLER RD
REMOVE
6R01

MILLER RD

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	EXISTING SIGNING	SHEET 20	E

BEGIN PROJECT I.D. 1581-14-70
STA. 607+65
Y=360,331.92
X=755,133.68

1P01 — W1-7, 48"_X_24"

1P02 — COUNTY O, M1-5A, 24"_X_24"

1P03 — M_6-1, 21"_X_21"

1P04 — NO PASSING ZONE, W14-3, 48"_X_36"

1P05 — JCT, M_2-1, 21"_X_15"

1P06 — COUNTY O, M1-5A, 24"_X_24"

1P18 — WAYSIDE 1/2 MILE, D5-61, 48"X24"

1P07 — WEST, M_3-4, 24"_X_12"

1P08 — 8, M1-4, 24"_X_24"

1P09 — COUNTY O, M1-5A, 24"_X_24"

1P10 — M_6-1, 21"_X_21"

CTH O

1P12 — 8, M1-4, 24"_X_24"

1P13 — M_6-4, 21"_X_21"

1P14 — EAST, M_3-2, 24"_X_12"

1P15 — 8, M1-4, 24"_X_24"

1P11 — STOP, R1-1, 30"_X_30"

℄ USH 8

610 615 620 625 630 635

MATCHLINE - STA. 637+00

MATCHLINE - STA. 637+00

640 645 650 655 660 665

1P16 — NO PASSING ZONE, W14-3, 48"_X_36"

1P17 — NO PASSING ZONE, W14-3, 48"_X_36"

℄ USH 8

MATCHLINE - STA. 668+00

LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- XXX — DENOTES SIGN NUMBER
- 1 — PAVEMENT MARKING EPOXY 4-INCH, WHITE
- 2 — PAVEMENT MARKING SAME DAY, EPOXY 4-INCH, YELLOW
- 3 — PAVEMENT MARKING SAME DAY, EPOXY 4-INCH, YELLOW SKIP, 12.5' SEG 37.5' GAP
- 4 — PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG 9' GAP
- 5 — PAVEMENT MARKING AERIAL ENFORCEMENT BARS EPOXY 24-INCH

PERMANENT SIGN LCOATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD. NO PASSING ZONE PENNANTS SHALL BE PLACED IN ACCORDANCE WITH THE RESULTS OF THE LOCATING NO PASSING ZONE ITEM.

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	PERMANENT SIGNING/PAVEMENT MARKING	SHEET 21	E

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

XXX DENOTES SIGN NUMBER

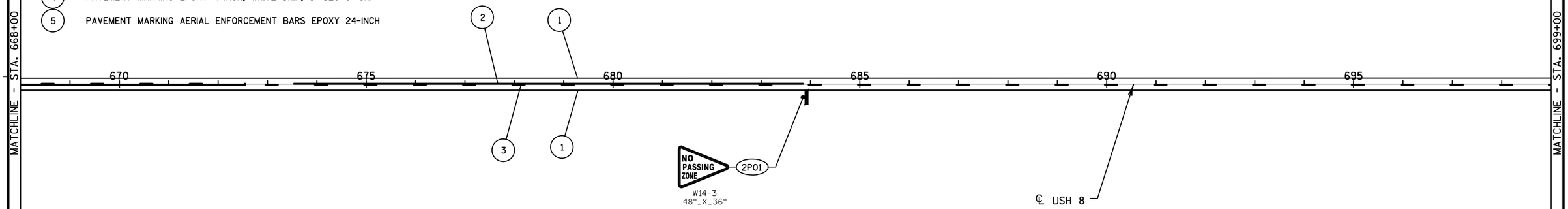
1 PAVEMENT MARKING EPOXY 4-INCH, WHITE

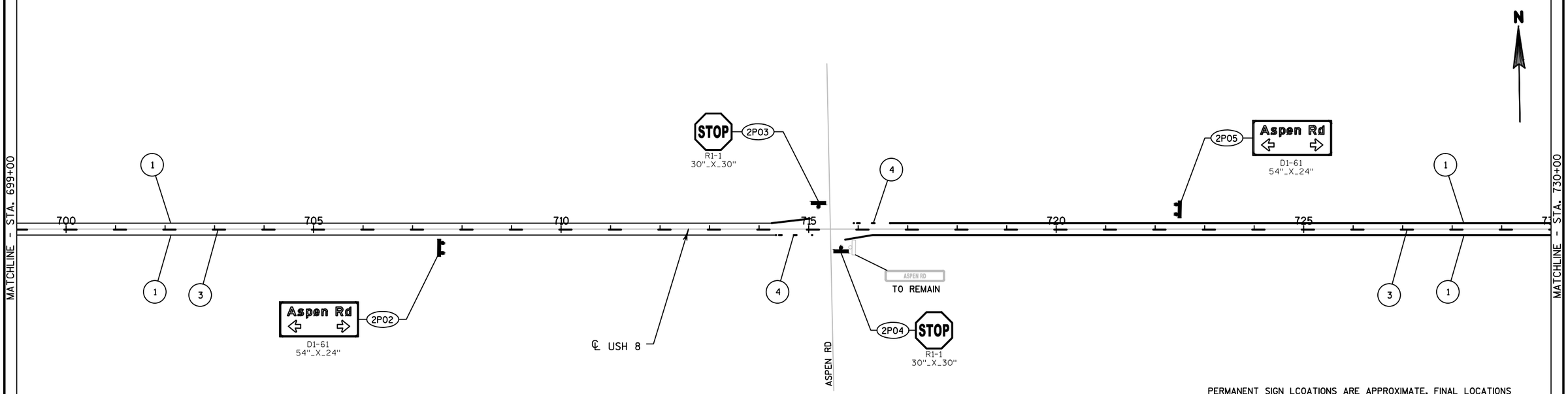
2 PAVEMENT MARKING SAME DAY, EPOXY 4-INCH, YELLOW

3 PAVEMENT MARKING SAME DAY, EPOXY 4-INCH, YELLOW SKIP, 12.5' SEG 37.5' GAP

4 PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG 9' GAP

5 PAVEMENT MARKING AERIAL ENFORCEMENT BARS EPOXY 24-INCH





PERMANENT SIGN LCOATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD. NO PASSING ZONE PENNANTS SHALL BE PLACED IN ACCORDANCE WITH THE RESULTS OF THE LOCATING NO PASSING ZONE ITEM.

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	PERMANENT SIGNING/PAVEMENT MARKING	SHEET 22	E

2

2

MATCHLINE - STA. 730+00

MATCHLINE - STA. 761+00

℄ USH 8

735 740 745 750 755 760

1 3 1

N

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

XXX DENOTES SIGN NUMBER

1 PAVEMENT MARKING EPOXY 4-INCH, WHITE

2 PAVEMENT MARKING SAME DAY, EPOXY 4-INCH, YELLOW

3 PAVEMENT MARKING SAME DAY, EPOXY 4-INCH, YELLOW SKIP, 12.5' SEG 37.5' GAP

4 PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG 9' GAP

5 PAVEMENT MARKING AERIAL ENFORCEMENT BARS EPOXY 24-INCH

MATCHLINE - STA. 761+00

MATCHLINE - STA. 792+00

765 770 775 780 785 790

1 3 1

℄ USH 8

3P01 Pennington Rd D1-61 78"_X_24"

STOP 3P02 R1-1 30"_X_30"

4 4

PENNINGTON RD

PENNINGTON RD TO REMAIN

3P03 STOP R1-1 30"_X_30"

3P04 Pennington Rd D1-61 78"_X_24"

1 3 1

N

PERMANENT SIGN LCOATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD. NO PASSING ZONE PENNANTS SHALL BE PLACED IN ACCORDANCE WITH THE RESULTS OF THE LOCATING NO PASSING ZONE ITEM.

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	PERMANENT SIGNING/PAVEMENT MARKING	SHEET 23	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\024501_PM.DWG PLOT DATE : 7/29/2016 11:17 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 200'_XREF

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

XXX DENOTES SIGN NUMBER

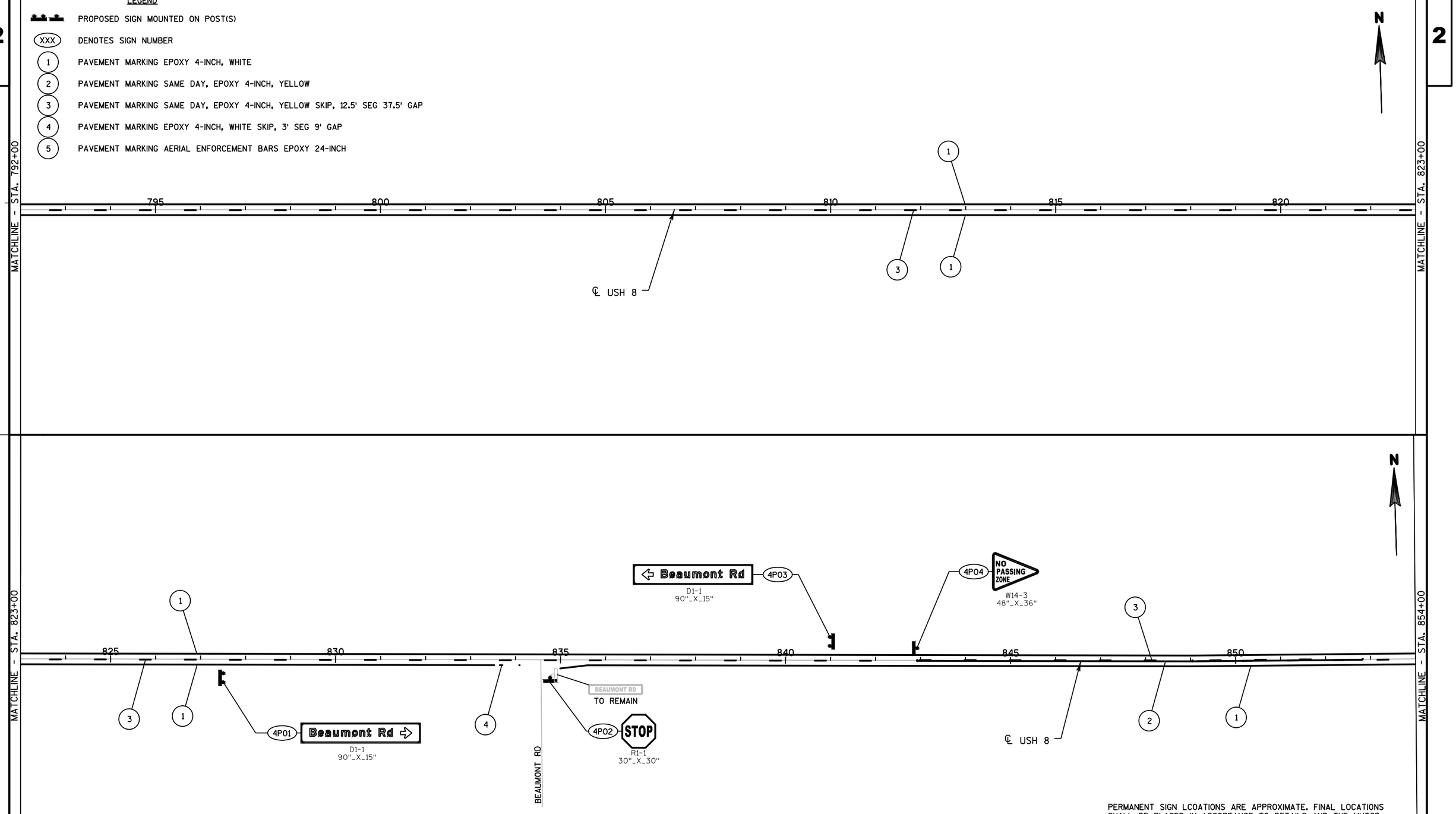
1 PAVEMENT MARKING EPOXY 4-INCH, WHITE

2 PAVEMENT MARKING SAME DAY, EPOXY 4-INCH, YELLOW

3 PAVEMENT MARKING SAME DAY, EPOXY 4-INCH, YELLOW SKIP, 12.5' SEG 37.5' GAP

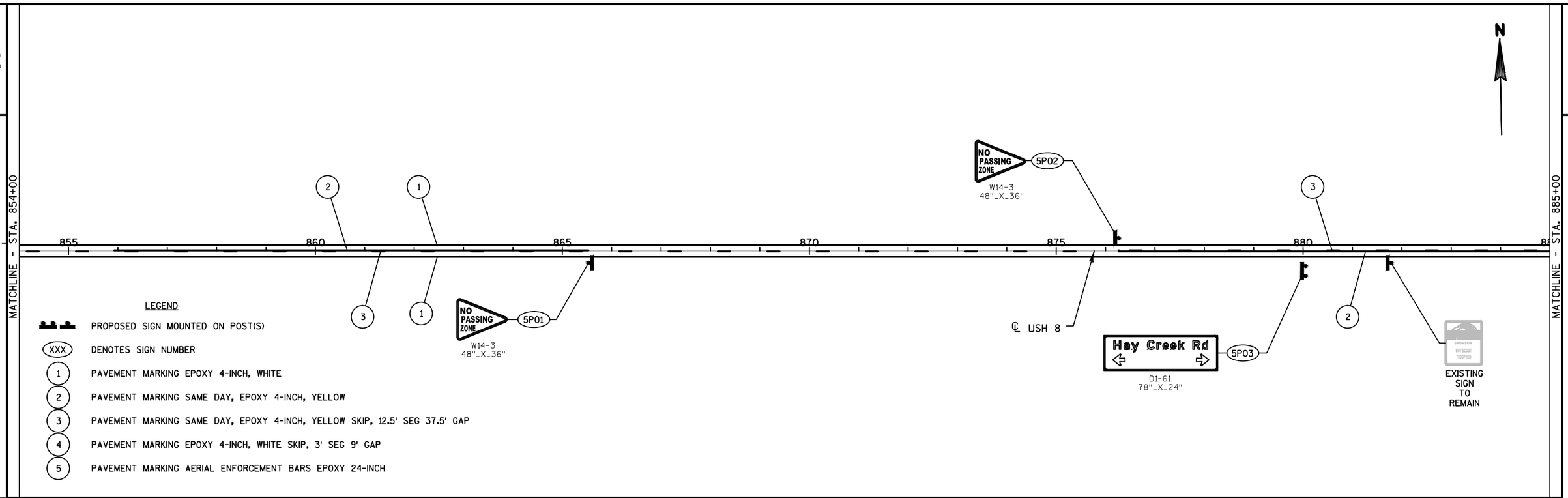
4 PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG 9' GAP

5 PAVEMENT MARKING AERIAL ENFORCEMENT BARS EPOXY 24-INCH



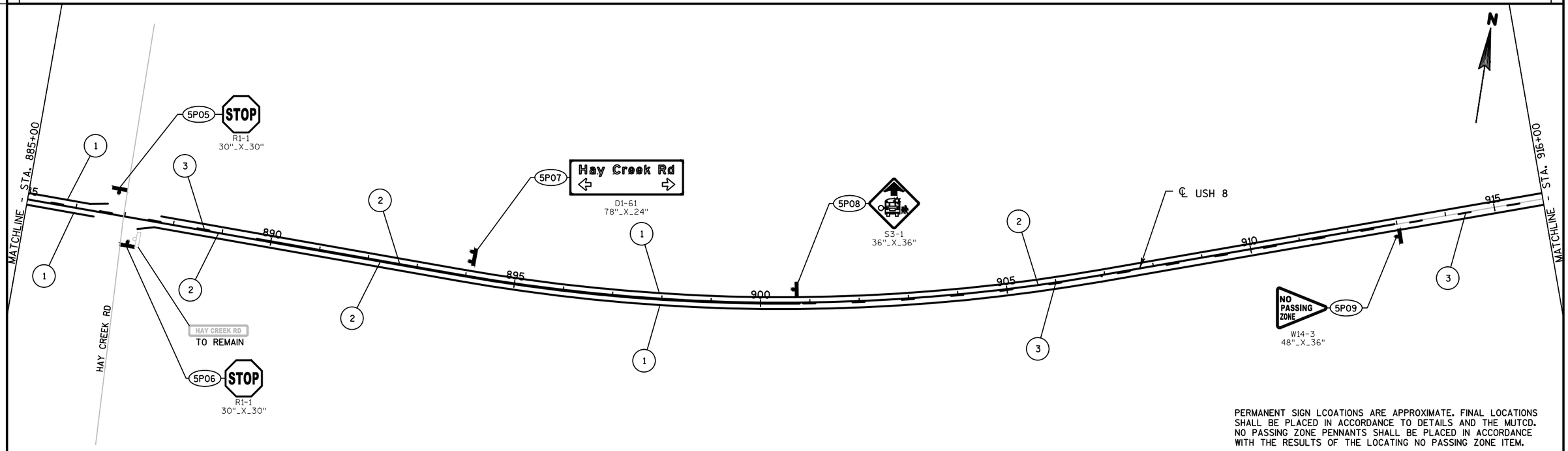
PERMANENT SIGN LCOATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD. NO PASSING ZONE PENNANTS SHALL BE PLACED IN ACCORDANCE WITH THE RESULTS OF THE LOCATING NO PASSING ZONE ITEM.

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	PERMANENT SIGNING/PAVEMENT MARKING	SHEET 24	E



LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- (XXX) DENOTES SIGN NUMBER
- (1) PAVEMENT MARKING EPOXY 4-INCH, WHITE
- (2) PAVEMENT MARKING SAME DAY, EPOXY 4-INCH, YELLOW
- (3) PAVEMENT MARKING SAME DAY, EPOXY 4-INCH, YELLOW SKIP, 12.5' SEG 37.5' GAP
- (4) PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG 9' GAP
- (5) PAVEMENT MARKING AERIAL ENFORCEMENT BARS EPOXY 24-INCH



PERMANENT SIGN LCOATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD. NO PASSING ZONE PENNANTS SHALL BE PLACED IN ACCORDANCE WITH THE RESULTS OF THE LOCATING NO PASSING ZONE ITEM.

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	PERMANENT SIGNING/PAVEMENT MARKING	SHEET 25	E

2

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

XXX DENOTES SIGN NUMBER

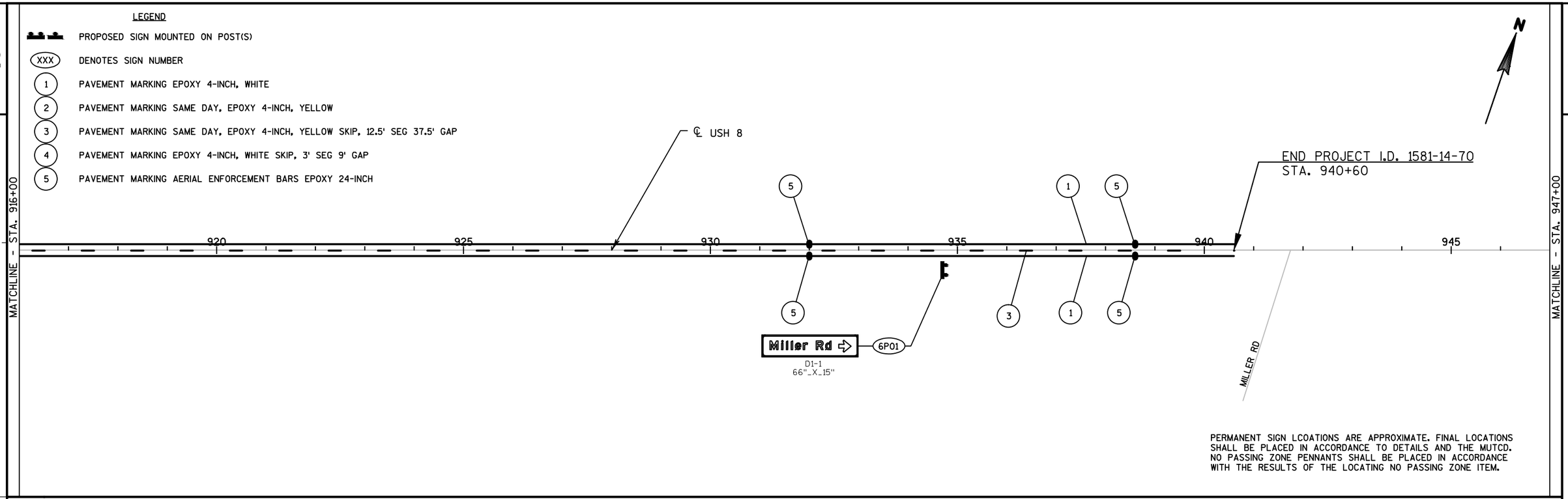
1 PAVEMENT MARKING EPOXY 4-INCH, WHITE

2 PAVEMENT MARKING SAME DAY, EPOXY 4-INCH, YELLOW

3 PAVEMENT MARKING SAME DAY, EPOXY 4-INCH, YELLOW SKIP, 12.5' SEG 37.5' GAP

4 PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG 9' GAP

5 PAVEMENT MARKING AERIAL ENFORCEMENT BARS EPOXY 24-INCH



PERMANENT SIGN LCOATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD. NO PASSING ZONE PENNANTS SHALL BE PLACED IN ACCORDANCE WITH THE RESULTS OF THE LOCATING NO PASSING ZONE ITEM.

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	PERMANENT SIGNING/PAVEMENT MARKING	SHEET 26	E

DATE 12OCT16 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	1581-14-70 QUANTITY
0010	201.0105	Clearing	STA	6.000	6.000
0020	201.0205	Grubbing	STA	6.000	6.000
0030	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0040	204.0110	Removing Asphaltic Surface	SY	40.000	40.000
0050	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,030.000	1,030.000
0060	204.0120	Removing Asphaltic Surface Milling	SY	119,050.000	119,050.000
0070	204.0150	Removing Curb & Gutter	LF	149.000	149.000
0080	204.0155	Removing Concrete Sidewalk	SY	45.000	45.000
0090	204.0180	Removing Delineators and Markers	EACH	56.000	56.000
0100	205.0100	Excavation Common **P**	CY	100.000	100.000
0110	208.0100	Borrow **P**	CY	2,900.000	2,900.000
0120	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 1581-14-70	LS	1.000	1.000
0130	213.0100	Finishing Roadway (project) 01. 1581-14-70	EACH	1.000	1.000
0140	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,100.000	2,100.000
0150	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	500.000	500.000
0160	305.0500	Shaping Shoulders	STA	656.000	656.000
0170	440.4410	Incentive IRI Ride	DOL	25,240.000	25,240.000
0180	455.0605	Tack Coat	GAL	13,650.000	13,650.000
0190	460.2000	Incentive Density HMA Pavement	DOL	16,200.000	16,200.000
0200	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	59,390.000	59,390.000
0210	460.5223	HMA Pavement 3 LT 58-28 S	TON	14,300.000	14,300.000
0220	460.5224	HMA Pavement 4 LT 58-28 S	TON	11,000.000	11,000.000
0230	465.0110	Asphaltic Surface Patching	TON	1.000	1.000
0240	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	30.000	30.000
0250	465.0315	Asphaltic Flumes	SY	40.000	40.000
0260	465.0475	Asphalt Center Line Rumble Strips 2-Lane Rural	LF	33,250.000	33,250.000
0270	520.8700	Cleaning Culvert Pipes	EACH	1.000	1.000
0280	520.9700.S	Culvert Pipe Liners (size) 01. 24-Inch	LF	177.000	177.000
0290	520.9700.S	Culvert Pipe Liners (size) 02. 36-Inch	LF	132.000	132.000
0300	520.9750.S	Cleaning Culvert Pipes for Liner Verification	EACH	3.000	3.000
0310	521.0124	Culvert Pipe Corrugated Steel 24-Inch	LF	34.000	34.000
0320	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	2.000	2.000
0330	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	149.000	149.000
0340	606.0200	Riprap Medium	CY	50.000	50.000
0350	614.0920	Salvaged Rail	LF	684.000	684.000
0360	614.2300	MGS Guardrail 3	LF	391.000	391.000
0370	614.2330	MGS Guardrail 3 K	LF	76.000	76.000
0380	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
0390	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1581-14-70	EACH	1.000	1.000
0400	619.1000	Mobilization	EACH	1.000	1.000
0410	624.0100	Water	MGAL	30.000	30.000
0420	625.0100	Topsoil	SY	52,850.000	52,850.000
0430	627.0200	Mulching	SY	50,875.000	50,875.000
0440	628.1104	Erosion Bales	EACH	30.000	30.000
0450	628.1504	Silt Fence	LF	1,775.000	1,775.000
0460	628.1520	Silt Fence Maintenance	LF	1,775.000	1,775.000

3

DATE 12OCT16 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	1581-14-70 QUANTITY
0470	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0480	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0490	628.2008	Erosion Mat Urban Class I Type B	SY	2,000.000	2,000.000
0500	628.7504	Temporary Ditch Checks	LF	25.000	25.000
0510	628.7555	Culvert Pipe Checks	EACH	3.000	3.000
0520	628.7570	Rock Bags	EACH	110.000	110.000
0530	629.0205	Fertilizer Type A	CWT	40.000	40.000
0540	630.0110	Seeding Mixture No. 10	LB	10.000	10.000
0550	630.0120	Seeding Mixture No. 20	LB	160.000	160.000
0560	630.0130	Seeding Mixture No. 30	LB	840.000	840.000
0570	630.0200	Seeding Temporary	LB	25.000	25.000
0580	631.0300	Sod Water	MGAL	220.000	220.000
0590	633.5200	Markers Culvert End	EACH	88.000	88.000
0600	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	25.000	25.000
0610	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	18.000	18.000
0620	637.2210	Signs Type II Reflective H	SF	176.440	176.440
0630	637.2230	Signs Type II Reflective F	SF	73.000	73.000
0640	638.2602	Removing Signs Type II	EACH	38.000	38.000
0650	638.3000	Removing Small Sign Supports	EACH	45.000	45.000
0660	642.5001	Field Office Type B	EACH	1.000	1.000
0670	643.0100	Traffic Control (project) 01. 1581-14-70	EACH	1.000	1.000
0680	643.0300	Traffic Control Drums	DAY	1,200.000	1,200.000
0690	643.0900	Traffic Control Signs	DAY	1,200.000	1,200.000
0700	645.0120	Geotextile Type HR	SY	110.000	110.000
0710	646.0106	Pavement Marking Epoxy 4-Inch	LF	65,600.000	65,600.000
0720	646.0406	Pavement Marking Same Day Epoxy 4-Inch	LF	20,800.000	20,800.000
0730	647.0803	Pavement Marking Aerial Enforcement Bars Epoxy 24-Inch	LF	24.000	24.000
0740	648.0100	Locating No-Passing Zones	MI	6.310	6.310
0750	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	20,800.000	20,800.000
0760	650.8000	Construction Staking Resurfacing Reference	LF	33,295.000	33,295.000
0770	650.9910	Construction Staking Supplemental Control (project) 01.1581-14-70	LS	1.000	1.000
0780	650.9920	Construction Staking Slope Stakes	LF	900.000	900.000
0790	690.0150	Sawing Asphalt	LF	248.000	248.000
0800	ASP.1T0A	On-the-Job Training Apprentice at $5. 00/HR	HRS	1,200.000	1,200.000
0810	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	600.000	600.000
0820	SPV.0060	Special 01. Reset Apron Endwall	EACH	5.000	5.000

3

3

CLEARING & GRUBBING

ROADWAY	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
USH 8	862+00 - 868+00	6	6
TOTAL		6	6

ALL ITEMS CATEGORY 0010

REMOVING ASPHALTIC SURFACE

ROADWAY	STATION	-	STATION	LOCATION	204.0110 SY
USH 8	611+85	-	913+15	RT	40
TOTAL					40

ALL ITEMS CATEGORY 0010

REMOVING DELINEATORS AND MARKERS

ROADWAY	LOCATION	204.0180 EACH	COMMENTS
USH 8	609+20	2	UNDERDRAIN OUTFALLS
USH 8	614+25	2	UNDERDRAIN OUTFALLS
USH 8	690+05	2	UNDERDRAIN OUTFALLS
USH 8	695+10	2	UNDERDRAIN OUTFALLS
USH 8	700+10	2	UNDERDRAIN OUTFALLS
USH 8	706+10	2	UNDERDRAIN OUTFALLS
USH 8	712+10	2	UNDERDRAIN OUTFALLS
USH 8	719+10	2	UNDERDRAIN OUTFALLS
USH 8	725+05	2	UNDERDRAIN OUTFALLS
USH 8	731+10	2	UNDERDRAIN OUTFALLS
USH 8	741+65	2	UNDERDRAIN OUTFALLS
USH 8	747+05	2	UNDERDRAIN OUTFALLS
USH 8	757+05	2	UNDERDRAIN OUTFALLS
USH 8	762+05	2	UNDERDRAIN OUTFALLS
USH 8	767+05	2	UNDERDRAIN OUTFALLS
USH 8	777+05	2	UNDERDRAIN OUTFALLS
USH 8	782+05	2	UNDERDRAIN OUTFALLS
USH 8	787+05	2	UNDERDRAIN OUTFALLS
USH 8	797+05	2	UNDERDRAIN OUTFALLS
USH 8	802+05	2	UNDERDRAIN OUTFALLS
USH 8	807+05	2	UNDERDRAIN OUTFALLS
USH 8	810+10	2	UNDERDRAIN OUTFALLS
USH 8	812+05	2	UNDERDRAIN OUTFALLS
USH 8	817+05	2	UNDERDRAIN OUTFALLS
USH 8	822+05	2	UNDERDRAIN OUTFALLS
USH 8	827+05	2	UNDERDRAIN OUTFALLS
USH 8	837+50	2	UNDERDRAIN OUTFALLS
USH 8	843+05	2	UNDERDRAIN OUTFALLS
TOTAL		56	

ALL ITEMS CATEGORY 0010

REMOVING SMALL PIPE CULVERTS

ROADWAY	LOCATION	203.0100 EACH	COMMENTS
USH 8	862+40 RT	1	18" CMCP
TOTAL		1	

ALL ITEMS CATEGORY 0010

REMOVING ASPHALTIC SURFACE BUTT JOINTS

ROADWAY	LOCATION	204.0115 SY
USH 8	BEGIN PROJECT	425
USH 8	CTH O	150
USH 8	PENNINGTON RD	115
USH 8	END PROJECT	340
TOTAL		1,030

ALL ITEMS CATEGORY 0010

REMOVING ASPHALTIC SURFACE MILLING

ROADWAY	STATION	-	STATION	204.0120 SY
USH 8	607+65	-	940+60	119,050
TOTAL				119,050

ALL ITEMS CATEGORY 0010

REMOVING CURB AND GUTTER

ROADWAY	STATION	-	STATION	LOCATION	204.0150 LF
USH 8	611+85	-	612+45	RT	91
USH 8	612+80	-	613+15	RT	58
TOTAL					149

ALL ITEMS CATEGORY 0010

REMOVING CONCRETE SIDEWALK

ROADWAY	STATION	-	STATION	LOCATION	204.0155 SY	COMMENTS
USH 8	862+40	-	863+00	RT	45	CONCRETE LINED DITCH
TOTAL					45	

ALL ITEMS CATEGORY 0010

3

EARTHWORK SUMMARY

Division	From / To Station	Location	Common Excavation (1)	Salvaged / Unusable Pavement Material (3)	Available Material (4)	Unexpanded Fill	Expanded Fill (5)	Mass Ordinate + / - (6)	Waste	Borrow (7)	Comment:
Division 1			Cut (2) (item #205.0100)*				Factor 1.25			(item #208.0100)*	
USH 8	861+20/867+49	LT/RT	0	0	0	2400	3000	-3000			BEAM GUARD AREA
	894+00/898+00	LT	100	0	100	0	0	100			REDITCHING AREA
Grand Total			100	0	100	2400	3000	-2900	0	2900	

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) Salvaged/Unusable Pavement Material
4) Available Material = Cut - Salvaged/Unusuable Pavement Material
5) Expanded Fill Factor = 1.25
6) 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.
7) Borrow Excavation item number 208.0100
* Pay Plan Quantity

3

PREPARE FOUNDATION FOR ASPHALTIC PAVING (1581-14-70)

ROADWAY	STATION	-	STATION	LOCATION	211.0100.01 LS
USH 8	611+85	-	613+15	RT	1
TOTAL					1

ALL ITEMS CATEGORY 0010

FINISHING ROADWAY (1581-14-70)

ROADWAY	213.0100.01 EACH
USH 8	1
TOTAL	1

ALL ITEMS CATEGORY 0010

SHAPING SHOULDERS

ROADWAY	STATION	-	STATION		305.0500 STA
USH 8	607+65	-	861+55	LT	254
USH 8	607+65	-	861+50	RT	254
USH 8	867+50	-	940+60	LT	74
USH 8	867+30	-	940+60	RT	74
TOTAL					656

ALL ITEMS CATEGORY 0010

3

BASE AGGREGATE ITEMS

ROADWAY	STATION	-	STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON
USH 8	607+65	-	940+60	2,100	500
TOTAL				2,100	500

ALL ITEMS CATEGORY 0010

ASPHALT ITEMS

ROADWAY	STATION	-	STATION	455.0605 TACK COAT GAL	460.5223 HMA PAVEMENT 3 LT 58-28 S TON	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	465.0110 ASPHALTIC SURFACE PATCHING TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0315 ASPHALTIC FLUMES SY
USH 8	607+65	-	940+60	13,650	14,300	11,000	---	30	---
USH 8	612+45, RT			---	---	---	---	---	20
USH 8	612+80, RT			---	---	---	---	---	20
USH 8	AT CTH O			---	---	---	1	---	---
TOTAL				13,650	14,300	11,000	1	30	40

ALL ITEMS CATEGORY 0010

REHEATING HMA PAVEMENT LONGITUDINAL JOINTS

ROADWAY	LOCATION	460.4110.S LF
USH 8	607+65 - 940+60	59,390
TOTAL		59,390

ALL ITEMS CATEGORY 0010

ASPHALT CENTER LINE RUMBLE STRIPS 2-LANE RURAL

ROADWAY	LOCATION	465.0475 LF
USH 8	608+10 - 940+60	33,250
TOTAL		33,250

ALL ITEMS CATEGORY 0010

CLEANING CULVERT PIPES

ROADWAY	LOCATION	520.8700 EACH
USH 8	893+81	1
TOTAL		1

ALL ITEMS CATEGORY 0010

PIPE LINERS

ROADWAY	LOCATION	520.9700.S.01 CULVERT PIPE LINERS 24-INCH LF	520.9700.S.02 CULVERT PIPE LINERS 36-INCH LF	520.9750.S CLEANING CULVERT PIPES FOR LINERS VERIFICATION EACH	EXISTING SLOPE (%)
USH 8	678+25	--	132	1	0.41%
USH 8	686+30	70	--	1	0.00%
USH 8	855+86	107	--	1	0.14%
TOTAL		177	132	3	

ALL ITEMS CATEGORY 0010

3

DRIVEWAY CULVERTS

ROADWAY	INLET END STA	INLET END OFFSET	INLET END ELEV	DISCHARGE END STA	DISCHARGE END OFFSET	DISCHARGE END ELEV	521.0124 CULVERT PIPE CORRUGATED STEEL 24-INCH LF	521.1024 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH EACH	MIN. THICKNESS
USH 8	862+07	34.2' RT	1503.00	862+46	40.0' RT	1501.30	34	2	0.064
TOTAL							34	2	

STATION AND OFFSETS ARE TO THE APRON END OF ENDWALLS
PIPE LENGTHS AND ELEVATIONS ARE FROM THE END OF PIPE TO END OF PIPE AND DO NOT INCLUDE LENGTH OF APRON ENDWALL

ALL ITEMS CATEGORY 0010

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

ROADWAY	STATION	-	STATION	LOCATION	601.0557 LF
USH 8	611+85	-	612+45	RT	91
USH 8	612+80	-	613+15	RT	58
TOTAL					149

ALL ITEMS CATEGORY 0010

3

RIPRAP LINED DITCH

ROADWAY	STATION	-	STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE FABRIC TYPE HR SY
USH 8	862+40	-	863+00	RT	50	110
TOTAL					50	110

ALL ITEMS CATEGORY 0010

SALVAGED RAIL

ROADWAY	STATION	-	STATION	LOCATION	614.0920 LF
USH 8	862+58	-	865+99	RT	342
USH 8	862+92	-	866+33	LT	342
TOTAL					684

ALL ITEMS CATEGORY 0010

MAINTENANCE AND REPAIR OF HAUL ROADS (1581-14-70)

ROADWAY	618.0100.01 EACH
USH 8	1
TOTAL	1

ALL ITEMS CATEGORY 0010

GUARDRAIL ITEMS

ROADWAY	STATION	-	STATION	LOCATION	614.2300 MGS GUARDRAIL 3 LF	614.2330 MGS GUARDRAIL 3 K LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH
USH 8	862+55	-	863+05	RT	--	--	1
USH 8	863+05	-	865+47	RT	204	38	--
USH 8	865+47	-	865+97	RT	--	--	1
USH 8	862+89	-	863+39	LT	--	--	1
USH 8	863+39	-	865+64	LT	187	38	--
USH 8	865+64	-	866+14	LT	--	--	1
TOTAL					391	76	4

ALL ITEMS CATEGORY 0010

MOBILIZATION

ROADWAY	619.1000 EACH
USH 8	1
TOTAL	1

ALL ITEMS CATEGORY 0010

WATER

ROADWAY	624.0100 MGAL
USH 8	30
TOTAL	30

ALL ITEMS CATEGORY 0010

3

RESTORATION ITEMS

ROADWAY	STATION	-	STATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	629.0205 FERTILIZER TYPE A CWT	630.0110 SEEDING MIXTURE NO. 10 LB	630.0120 SEEDING MIXTURE NO. 20 LB	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	631.0300 SOD WATER MGAL	COMMENTS
USH 8	611+75	-	613+25	90	--	1	--	--	2	--	1	CTH O INTERSECTION RADII
USH 8	607+65	-	940+60	37,000	37,000	25	--	--	670	--	150	DISTURBED SHOULDERS
USH 8	861+50		867+50	4,600	3,700	3	--	125	--	--	19	BEAM GUARD AREA
USH 8	894+00	-	898+00	575	--	1	8	--	--	--	3	REDITCHING AREA
UNDISTRIBUTED				10,585	10,175	10	2	35	168	25	47	
TOTAL				52,850	50,875	40	10	160	840	25	220	

ALL ITEMS CATEGORY 0010

EROSION CONTROL ITEMS

ROADWAY	STATION	-	STATION	628.1104 EROSION BALES EACH	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH	COMMENTS
USH 8	611+75	-	613+25	--	200	200	90	--	--	--	CTH O INTERSECTION RADII
USH 8	607+65	-	940+60	--	--	--	--	--	--	--	DISTURBED SHOULDERS
USH 8	861+50	-	867+50	--	1,200	1,200	900	--	3	65	BEAM GUARD AREA
USH 8	894+00	-	898+00	20	20	20	575	15	--	20	REDITCHING AREA
UNDISTRIBUTED				10	355	355	435	10	--	25	
TOTAL				30	1,775	1,775	2,000	25	3	110	

ALL ITEMS CATEGORY 0010

MOBILIZATION EROSION CONTROL

ROADWAY	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
USH 8	4	2
TOTAL	4	2

ALL ITEMS CATEGORY 0010

3

MARKERS CULVERT ENDS

ROADWAY	LOCATION	633.5200 EACH	COMMENTS
USH 8	609+20	2	UNDERDRAIN OUTFALLS
USH 8	614+25	2	UNDERDRAIN OUTFALLS
USH 8	631+43	2	CROSS CULVERT
USH 8	652+00	2	CROSS CULVERT
USH 8	665+48	2	CROSS CULVERT
USH 8	678+25	2	CROSS CULVERT
USH 8	690+05	2	UNDERDRAIN OUTFALLS
USH 8	695+10	2	UNDERDRAIN OUTFALLS
USH 8	700+10	2	UNDERDRAIN OUTFALLS
USH 8	706+10	2	UNDERDRAIN OUTFALLS
USH 8	712+10	2	UNDERDRAIN OUTFALLS
USH 8	717+10	2	CROSS CULVERT
USH 8	719+10	2	UNDERDRAIN OUTFALLS
USH 8	725+05	2	UNDERDRAIN OUTFALLS
USH 8	731+10	2	UNDERDRAIN OUTFALLS
USH 8	739+77	2	CROSS CULVERT
USH 8	741+65	2	UNDERDRAIN OUTFALLS
USH 8	747+05	2	UNDERDRAIN OUTFALLS
USH 8	757+05	2	UNDERDRAIN OUTFALLS
USH 8	762+05	2	UNDERDRAIN OUTFALLS
USH 8	767+05	2	UNDERDRAIN OUTFALLS
USH 8	777+05	2	UNDERDRAIN OUTFALLS
USH 8	782+05	2	UNDERDRAIN OUTFALLS
USH 8	787+05	2	UNDERDRAIN OUTFALLS
USH 8	797+05	2	UNDERDRAIN OUTFALLS
USH 8	801+92	2	CROSS CULVERT
USH 8	802+05	2	UNDERDRAIN OUTFALLS
USH 8	807+05	2	UNDERDRAIN OUTFALLS
USH 8	810+10	2	UNDERDRAIN OUTFALLS
USH 8	812+05	2	UNDERDRAIN OUTFALLS
USH 8	817+05	2	UNDERDRAIN OUTFALLS
USH 8	822+05	2	UNDERDRAIN OUTFALLS
USH 8	827+05	2	UNDERDRAIN OUTFALLS
USH 8	827+15	2	CROSS CULVERT
USH 8	834+15	2	CROSS CULVERT
USH 8	834+95	2	CROSS CULVERT
USH 8	837+50	2	UNDERDRAIN OUTFALLS
USH 8	843+05	2	UNDERDRAIN OUTFALLS
USH 8	855+86	2	CROSS CULVERT
USH 8	889+58	2	CROSS CULVERT
USH 8	893+85	2	CROSS CULVERT
USH 8	900+60	2	CROSS CULVERT
USH 8	910+58	2	CROSS CULVERT
USH 8	937+05	2	CROSS CULVERT
TOTAL		88	

ALL ITEMS CATEGORY 0010

PERMANENT SIGNING

ROADWAY	SIGN NO.	CODE NO.	SIGN MESSAGE	SIGN SIZE INCH X INCH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	SAME POST AS SIGN NO.	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X16-FT EACH
USH 8	1P01	W1-7	DOUBLE NIGHT ARROW	48 x 24	--	8.00	--	1	--
USH 8	1P02	M1-5A	COUNTY O	24 X 24	4.00	--	--	--	1
USH 8	1P03	M6-1	DIRECTIONAL ARROW LT	21 X 21	3.06	--	1P02	--	--
USH 8	1P04	W14-3	NO PASSING ZONE	48 X 36	--	6.00	--	1	--
USH 8	1P05	M2-1	JCT	21 X 15	2.19	--	--	--	1
USH 8	1P06	M1-5A	COUNTY O	24 X 24	4.00	--	1P05	--	--
USH 8	1P07	M3-4	WEST	24 X 12	2.00	--	--	--	1
USH 8	1P08	M1-4	USH 8	24 X 24	4.00	--	1P08	--	--
USH 8	1P09	M1-5A	COUNTY O	24 X 24	4.00	--	--	--	1
USH 8	1P10	M6-1	DIRECTIONAL ARROW RT	21 X 21	3.06	--	1P10	--	--
USH 8	1P11	R1-1	STOP	30 X 30	5.18	--	--	1	--
USH 8	1P12	M1-4	USH 8	24 X 24	4.00	--	--	--	1
USH 8	1P13	M6-4	DIRECTIONAL ARROW LT/RT	21 X 21	3.06	--	1P12	--	--
USH 8	1P14	M3-2	EAST	24 X 12	2.00	--	--	--	1
USH 8	1P15	M1-4	USH 8	24 X 24	4.00	--	1P14	--	--
USH 8	1P16	W14-3	NO PASSING ZONE	48 X 36	--	6.00	--	1	--
USH 8	1P17	W14-3	NO PASSING ZONE	48 X 36	--	6.00	--	1	--
USH 8	1P18	D5-61	WAYSIDE 1/2 MILE	48 X 24	--	8.00	--	1	--
USH 8	2P01	W14-3	NO PASSING ZONE	48 X 36	--	6.00	--	1	--
USH 8	2P02	D1-61	ASPEN RD ARROW LT/RT	54 X 24	9.00	--	--	--	2
USH 8	2P03	R1-1	STOP	30 X 30	5.18	--	--	1	--
USH 8	2P04	R1-1	STOP	30 X 30	5.18	--	--	1	--
USH 8	2P05	D1-61	ASPEN RD ARROW LT/RT	54 X 24	9.00	--	--	--	2
USH 8	3P01	D1-61	PENNINGTON RD ARROW LT/RT	78 X 24	13.00	--	--	--	2
USH 8	3P02	R1-1	STOP	30 X 30	5.18	--	--	1	--
USH 8	3P03	R1-1	STOP	30 X 30	5.18	--	--	1	--
USH 8	3P04	D1-61	PENNINGTON RD ARROW LT/RT	78 X 24	13.00	--	--	--	2
USH 8	4P01	D1-1	BEAUMONT RD ARROW RT	90 X 15	9.38	--	--	2	--
USH 8	4P02	R1-1	STOP	30 X 30	5.18	--	--	1	--
USH 8	4P03	D1-1	BEAUMONT RD ARROW LT	90 X 15	9.38	--	--	2	--
USH 8	4P04	W14-3	NO PASSING ZONE	48 X 36	--	6.00	--	1	--
USH 8	5P01	W14-3	NO PASSING ZONE	48 X 36	--	6.00	--	1	--
USH 8	5P02	W14-3	NO PASSING ZONE	48 X 36	--	6.00	--	1	--
USH 8	5P03	D1-61	HAY CREED RD ARROW LT/RT	78 X 24	13.00	--	--	--	2
USH 8	5P05	R1-1	STOP	30 X 30	5.18	--	--	1	--
USH 8	5P06	R1-1	STOP	30 X 30	5.18	--	--	1	--
USH 8	5P07	D1-61	HAY CREED RD ARROW LT/RT	78 X 24	13.00	--	--	--	2
USH 8	5P08	S3-1	SCHOOL BUS STOP AHEAD	36 X 36	--	9.00	--	1	--
USH 8	5P09	W14-3	NO PASSING ZONE	48 X 36	--	6.00	--	1	--
USH 8	6P01	D1-1	MILLER RD ARROW RT	66 X 15	6.88	--	--	2	--
TOTAL					176.44	73.00		25	18

ALL ITEMS CATEGORY 0010

SIGN REMOVALS

ROADWAY	SIGN NO.	STATION	LOCATION	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	SIGN MESSAGE
USH 8	1R01	610+40	LT	1	1	WEST, USH 8
USH 8	1R02	611+95	RT	1	1	COUNTY O, ARROW RT
USH 8	1R03	612+70	LT	1	1	DOUBLE NIGHT ARROW
USH 8	1R04	612+80	LT	1	1	COUNTY O, ARROW LT
USH 8	1R05	612+85	RT	1	1	STOP
USH 8	1R06	613+10	RT	1	1	USH 8, ARROW LT/RT
USH 8	1R07	614+45	RT	1	1	EAST, USH 8
USH 8	1R08	619+70	LT	1	1	NO PASSING ZONE
USH 8	1R09	622+95	LT	1	1	JCT, COUNTY O
USH 8	1R10	650+80	RT	1	1	NO PASSING ZONE
USH 8	1R11	660+25	LT	1	1	NO PASSING ZONE
USH 8	1R12	608+95	LT	1	1	WAYSIDE 1/2 MILE
USH 8	2R01	683+85	RT	1	1	NO PASSING ZONE
USH 8	2R02	707+60	RT	1	2	ASPEN RD
USH 8	2R03	715+20	LT	1	1	STOP
USH 8	2R04	715+65	RT	1	1	STOP
USH 8	2R05	722+45	LT	1	2	ASPEN RD
USH 8	3R01	734+65	RT	1	1	DIP
USH 8	3R02	739+40	RT	1	1	DIP
USH 8	3R03	740+20	LT	1	1	DIP
USH 8	3R04	744+90	LT	1	1	DIP
USH 8	3R05	773+80	RT	1	1	PENNINGTON RD
USH 8	3R06	780+60	LT	1	1	STOP
USH 8	3R07	780+95	RT	1	1	STOP
USH 8	3R08	787+80	LT	1	1	PENNINGTON RD
USH 8	4R01	827+50	RT	1	2	BEAUMONT RD
USH 8	4R02	834+75	RT	1	1	STOP
USH 8	4R03	841+00	LT	1	2	BEAUMONT RD
USH 8	4R04	842+90	LT	1	1	NO PASSING ZONE
USH 8	5R01	865+50	RT	1	1	NO PASSING ZONE
USH 8	5R02	876+25	LT	1	1	NO PASSING ZONE
USH 8	5R03	880+00	RT	1	2	HAY CREEK RD
USH 8	5R04	886+80	LT	1	1	STOP
USH 8	5R05	887+15	RT	1	1	STOP
USH 8	5R06	894+05	LT	1	2	HAY CREEK RD
USH 8	5R07	900+65	LT	1	1	SCHOOL BUS STOP AHEAD
USH 8	5R08	912+95	RT	1	1	NO PASSING ZONE
USH 8	6R01	934+80	RT	1	2	MILLER RD
TOTAL				38	45	

ALL ITEMS CATEGORY 0010

FIELD OFFICE TYPE B

ROADWAY	642.5001 EACH
USH 8	1
TOTAL	1

ALL ITEMS CATEGORY 0010

TRAFFIC CONTROL (1581-14-70)

ROADWAY	643.0100.01 EACH
USH 8	1
TOTAL	1

ALL ITEMS CATEGORY 0010

TRAFFIC CONTROL ITEMS

ROADWAY	STATION	-	STATION	643.0300 TRAFFIC CONTROL DRUMS NO.	643.0300 TRAFFIC CONTROL DRUMS DAYS	643.0900 TRAFFIC CONTROL SIGNS NO.	643.0900 TRAFFIC CONTROL SIGNS DAYS
USH 8	607+65	-	940+60	30	40	30	40
TOTAL				1,200		1,200	

ALL ITEMS CATEGORY 0010

3

PAVEMENT MARKING ITEMS

ROADWAY	STATION - STATION	646.0106 PAVEMENT MARKING EPOXY 4-INCH WHITE LF	646.0406 PAVEMENT MARKING SAME DAY EPOXY 4-INCH YELLOW LF	647.0803 PAVEMENT MARKING AERIAL ENFORCEMENT BARS EPOXY 24-INCH LF	648.0100 LOCATING NO PASSING ZONE MI	649.0402 TEMPORARY PAVEMENT MARKING PAINT 4-INCH YELLOW LF
USH 8	607+65 - 940+60	65,600	20,800	--	6.31	20,800
USH 8	932+00 LT & RT	--	--	12	--	--
USH 8	938+60 LT & RT	--	--	12	--	--
TOTAL		65,600	20,800	24	6.31	20,800

ALL ITEMS CATEGORY 0010

CONSTRUCTION STAKING

ROADWAY	STATION - STATION	RESURFACING REFERENCE 650.8000 LF	SUPPLEMENTAL CONTROL (1581-14-70) 650.9910.01 LS	SLOPE STAKES 650.9920 LF
USH 8	607+95 - 940+60	33,295	1	--
USH 8	862+50 - 897+50	--	--	500
USH 8	894+00 - 898+00	--	--	400
TOTAL		33,295	1	900

ALL ITEMS CATEGORY 0010

SAWING ASPHALT

ROADWAY	LOCATION	690.0150 LF
USH 8	611+85 - 613+15, RT	170
CTH 0	MATCHPOINT	28
PENNINGTON RD	MATCHPOINT	20
USH 8	940+60	30
TOTAL		248

ALL ITEMS CATEGORY 0010

RESET APRON ENDWALL

ROADWAY	LOCATION	SPV.0060.01 EACH	EXCAVATION COMMON* CY	SEEDING NO. 60* LB	SEEDING TEMPORARY* LB	FERTILIZER TYPE A* CWT	MULCHING* SY	SOD WATER* MGAL
USH 8	810+10, RT	1	25	1	1	1	25	1
USH 8	834+15, LT	1	25	1	1	1	25	1
USH 8	834+95, LT	1	25	1	1	1	25	1
USH 8	889+58, LT	1	25	1	1	1	25	1
USH 8	937+00, LT & RT	1	25	1	1	1	25	1
TOTAL		5	125	5	5	5	125	5

*FOR INFORMATION ONLY

ALL ITEMS CATEGORY 0010

BENCHMARKS				
POINT	STATION	OFFSET	ELEV	DESCRIPTION
BM1151	606+51.26	24.11' LT	1448.30	AL CAP
BM1252	621+25.37	60.48' LT	1461.13	DOT Y224 1985

BEGIN PROJECT I.D. 1581-14-70
STA. 607+65
Y=360,331.92
X=755,133.68

STA 608+10
BEGIN CENTERLINE
RUMBLE STRIP

BM1151

STA 620+89 LT
FE BAD RESTORE

BM1252

STA 627+00 LT
PE BAD RESTORE

STA 629+41 LT
FE BAD RESTORE

STA 631+43 50-008-024R
24" CPRC TO REMAIN
2 - MARKERS CULVERT ENDS REQ'D

STA 634+38 LT
FE BAD RESTORE

610 615 620 S88° 59' 34"E 625 630 635

SEE INTERSECTION DETAILS FOR WORK TO BE COMPLETED

CTH O STA 612+65 RT
RESTORE

STA 617+80 RT
PE BAD RESTORE

℄ USH 8

STA 627+68 RT
PE BAD RESTORE

STA 629+41 RT
PE BAD RESTORE

STA 635+83 RT
FE BAD RESTORE

MATCHLINE - STA. 637+00

TOWN OF CATAWBA

5

EROSION CONTROL LEGEND

- ### EROSION MAT CLASS I, TYPE B URBAN
- SILT FENCE
- ROCK BAGS – SILT FENCE RELIEF
- TEMPORARY DITCH CHECK

MATCHLINE - STA. 637+00

STA 645+94 LT
PE BAD RESTORE

STA 652+00 50-008-025
24" CPRC TO REMAIN
2 - MARKERS CULVERT ENDS REQ'D

STA 665+48 50-008-026
24" CPRC TO REMAIN
2 - MARKERS CULVERT ENDS REQ'D

STA 667+44 LT
PE BAD RESTORE

640 645 650 655 S88° 59' 34"E 660 665

STA 646+00 RT
PE BAD RESTORE

℄ USH 8

STA 667+28 RT
PE BAD RESTORE

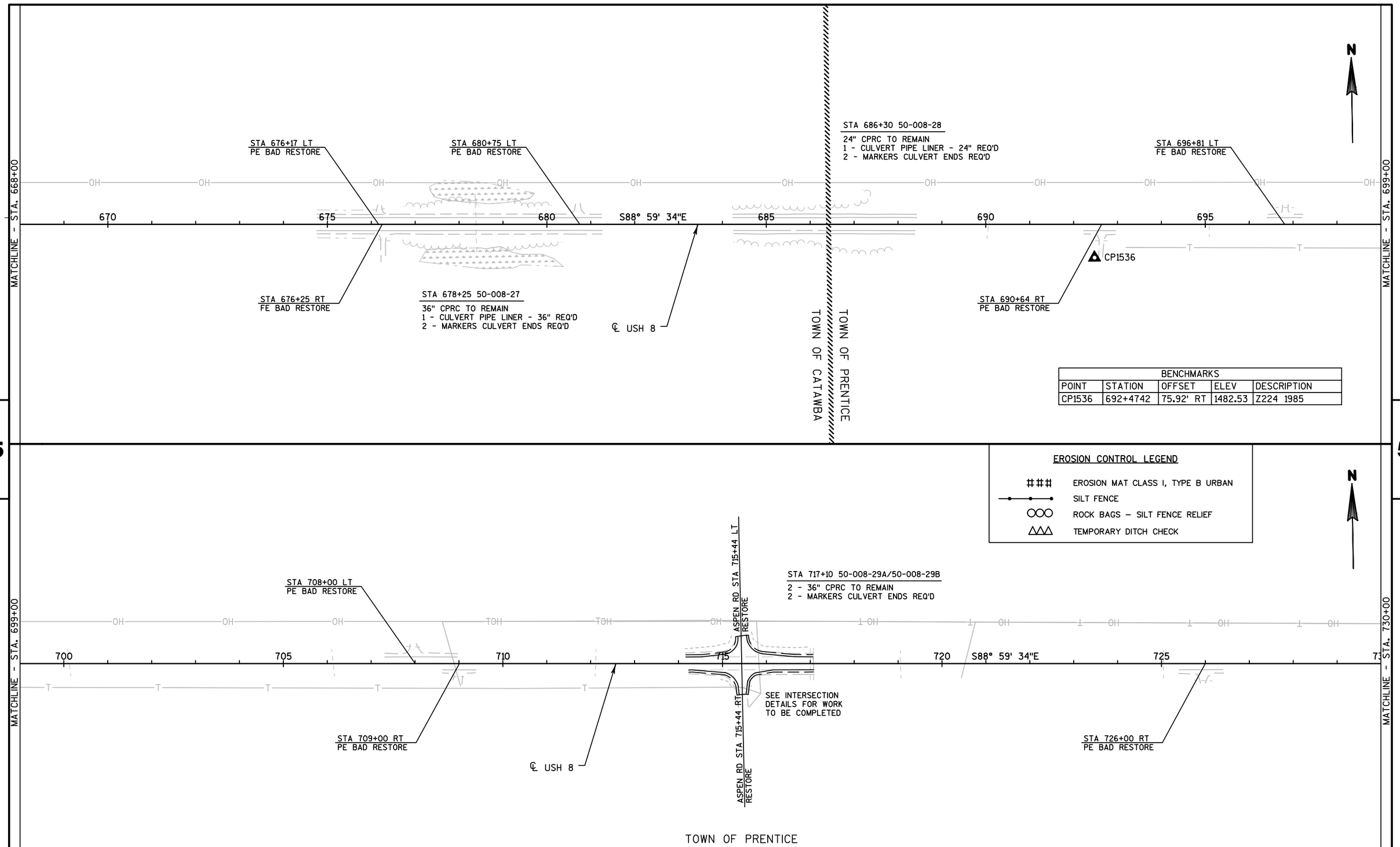
MATCHLINE - STA. 668+00

TOWN OF CATAWBA

5

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	PLAN	SHEET	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\050201_PN.DWG PLOT DATE : 7/25/2016 2:38 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 200'_XREF
WISDOT/CADDS SHEET 44



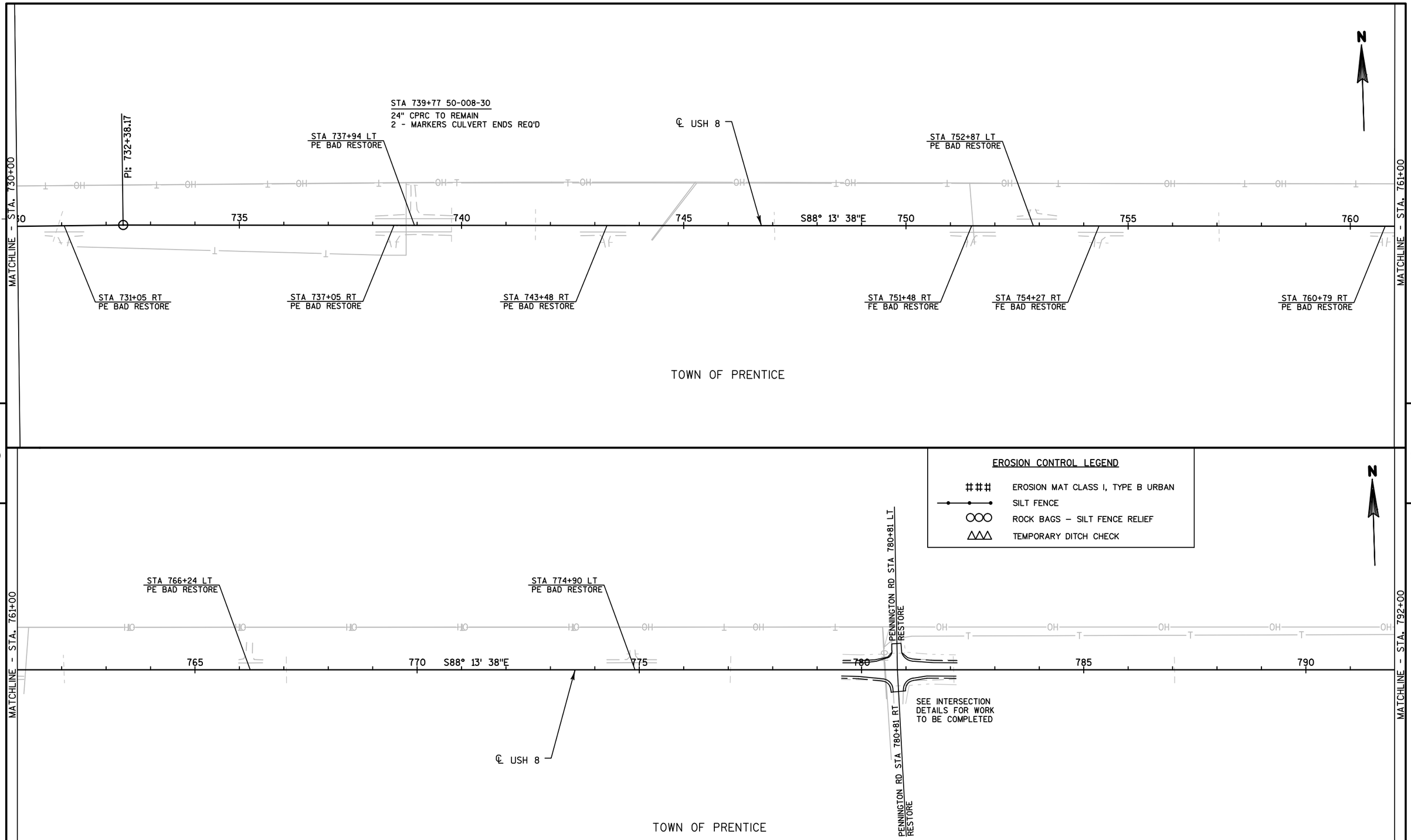
BENCHMARKS				
POINT	STATION	OFFSET	ELEV	DESCRIPTION
CP1536	692+4742	75.92' RT	1482.53	Z224 1985

EROSION CONTROL LEGEND

- ### EROSION MAT CLASS I, TYPE B URBAN
- SILT FENCE
- ROCK BAGS – SILT FENCE RELIEF
- TEMPORARY DITCH CHECK

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	PLAN	SHEET	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\050201_PN.DWG PLOT DATE : 7/25/2016 2:38 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1" = 200'_XREF
WISDOT/CADDS SHEET 44



PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	PLAN	SHEET 39	E

MATCHLINE - STA. 792+00

STA 801+92 50-008-031
36" CPRC TO REMAIN
2 - MARKERS CULVERT ENDS REQ'D

STA 810+98 LT
PE BAD RESTORE

795 800 805 810 S88° 13' 38"E 815 820

STA 810+10 50-008-032
24" CPRC TO REMAIN
RESET APRON ENDWALL RT
2 - MARKERS CULVERT ENDS REQ'D

℄ USH 8

MATCHLINE - STA. 823+00

TOWN OF PRENTICE

EROSION CONTROL LEGEND

- ### EROSION MAT CLASS I, TYPE B URBAN
- SILT FENCE
- ROCK BAGS – SILT FENCE RELIEF
- TEMPORARY DITCH CHECK

5

MATCHLINE - STA. 823+00

STA 827+15 50-008-033
24" CPRC TO REMAIN
2 - MARKERS CULVERT ENDS REQ'D

STA 834+56 LT
FE BAD RESTORE

STA 834+95 50-008-035
24" CPRC TO REMAIN
RESET APRON ENDWALL LT
2 - MARKERS CULVERT ENDS REQ'D

825 830 835 S88° 13' 38"E 840 845 850 S88° 50' 14"E

STA 834+15 50-008-034
24" CPRC TO REMAIN
RESET APRON ENDWALL LT
2 - MARKERS CULVERT ENDS REQ'D

SEE INTERSECTION DETAILS FOR WORK TO BE COMPLETED

BEAUMONT RD STA 834+56 RT
RESTORE

℄ USH 8

STA 849+00 LT
PE BAD RESTORE

PI: 849+03.38

STA 853+18 LT
PE BAD RESTORE

STA 850+00 RT
PE BAD RESTORE

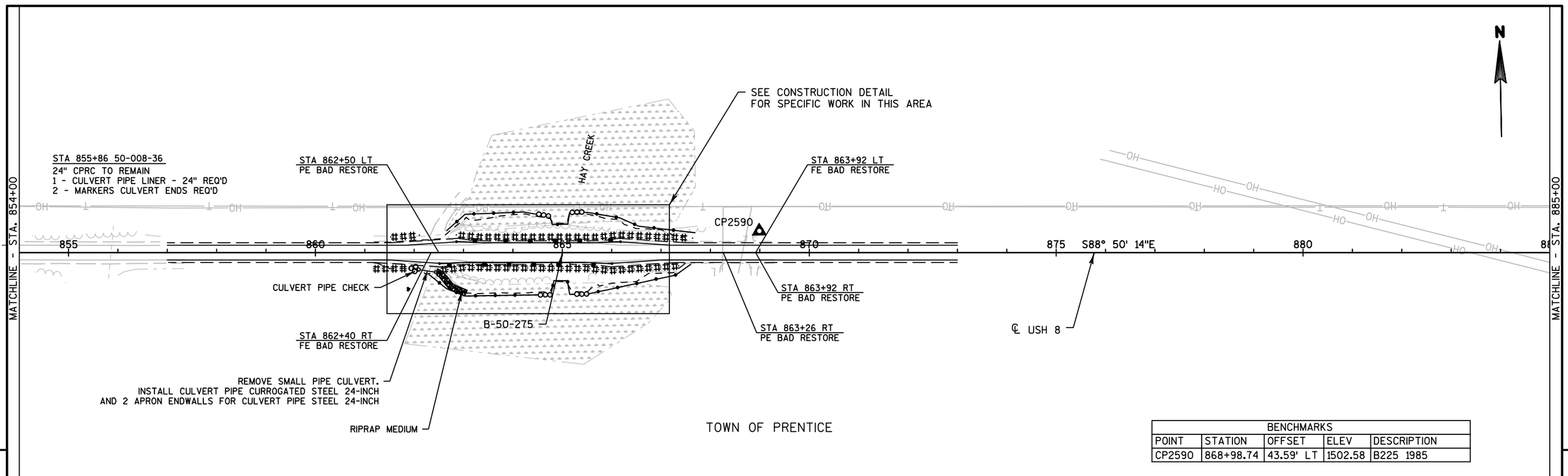
STA 851+31 RT
PE BAD RESTORE

MATCHLINE - STA. 854+00

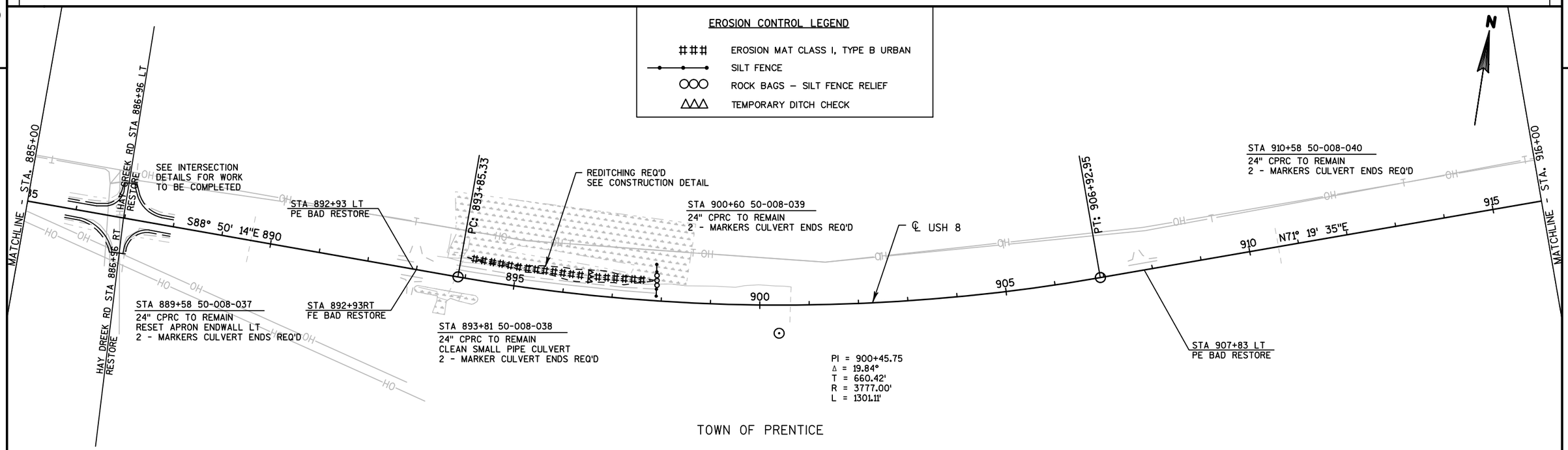
TOWN OF PRENTICE

5

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	PLAN	SHEET 40	E

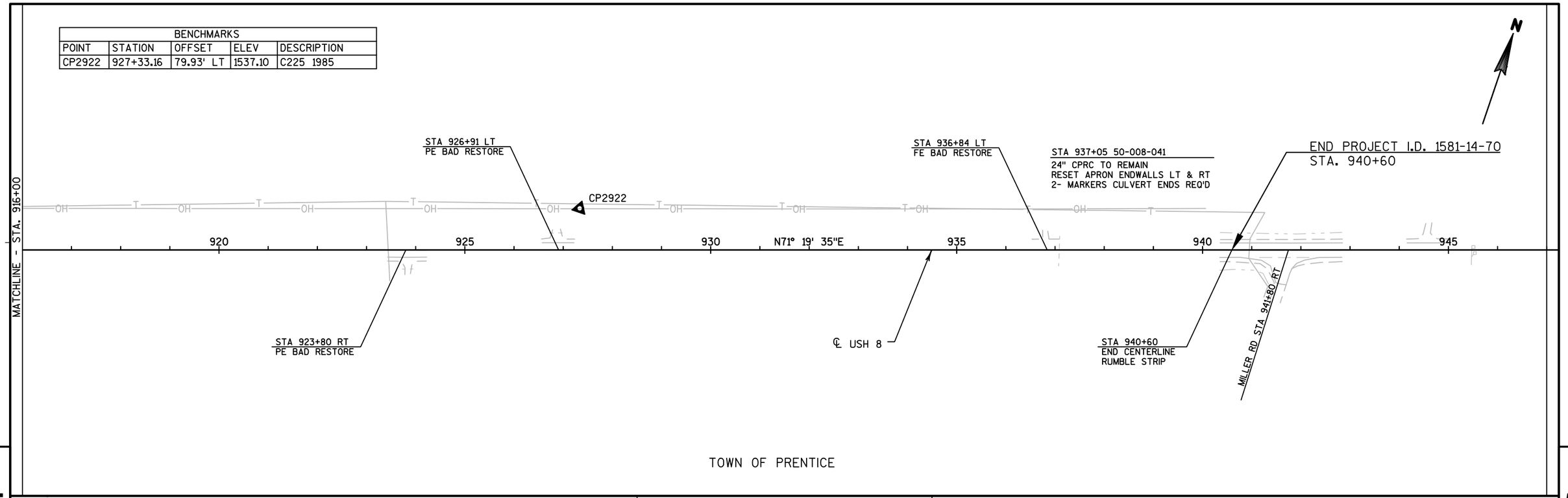


BENCHMARKS				
POINT	STATION	OFFSET	ELEV	DESCRIPTION
CP2590	868+98.74	43.59' LT	1502.58	B225 1985



PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	PLAN	SHEET 41	E

BENCHMARKS				
POINT	STATION	OFFSET	ELEV	DESCRIPTION
CP2922	927+33.16	79.93' LT	1537.10	C225 1985



TOWN OF PRENTICE

5

5

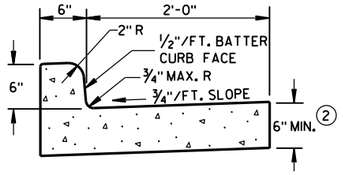
EROSION CONTROL LEGEND

###	EROSION MAT CLASS I, TYPE B URBAN
	SILT FENCE
OOO	ROCK BAGS – SILT FENCE RELIEF
△△△	TEMPORARY DITCH CHECK

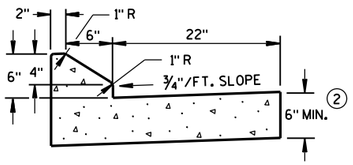
PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	PLAN	SHEET 42	E

Standard Detail Drawing List

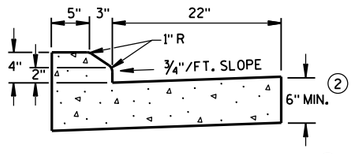
08D01-19	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B29-01	SAFETY EDGE
14B42-04A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-03	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)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C14-02	AERIAL ENFORCEMENT BARS PAVEMENT MARKING DETAILS
15C19-04A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY



TYPES A & D ①

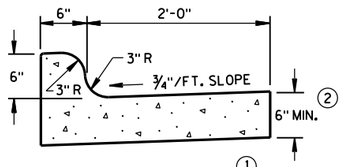


6" SLOPED CURB TYPES G & J ①

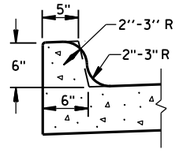


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

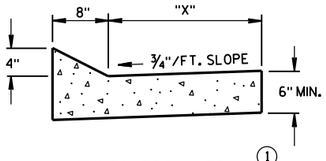


TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

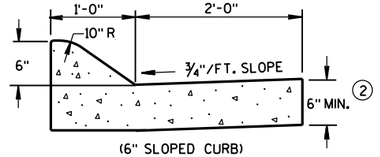
CONCRETE CURB & GUTTER 30"



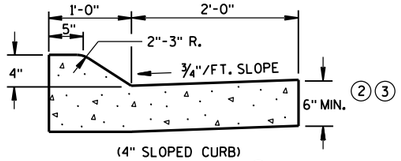
TYPES TBT & TBTT ①

CONCRETE CURB & GUTTER

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

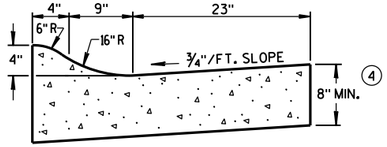


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D ①



4" SLOPED CURB TYPES R & T ①⑤

CONCRETE CURB & GUTTER 36"

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, R AND TBTT.

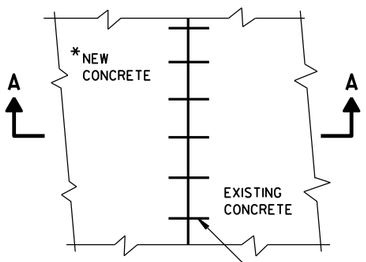
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

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

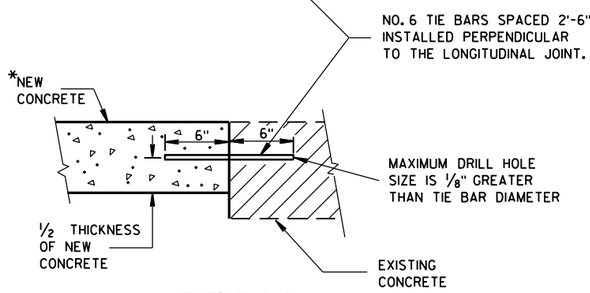
⑤ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

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



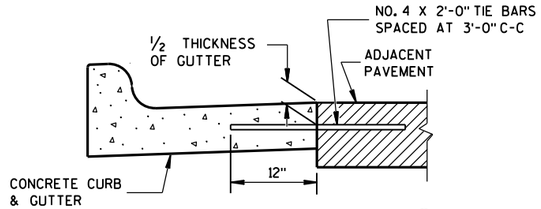
PLAN VIEW

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

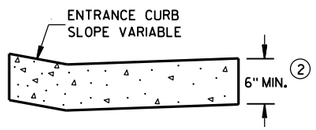


SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT

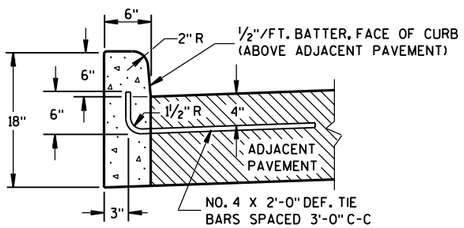


TYPICAL TIE BAR LOCATION ①

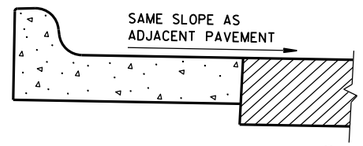


DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)

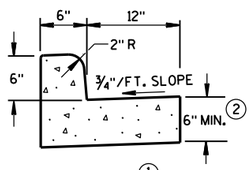


① TYPES A & D



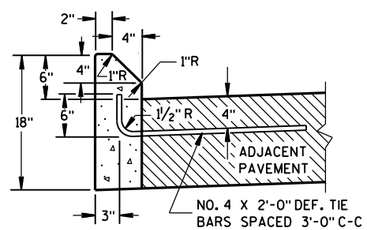
⑥ REVERSE SLOPE GUTTER

(TYPICAL FOR ALL CURB & GUTTER TYPES)



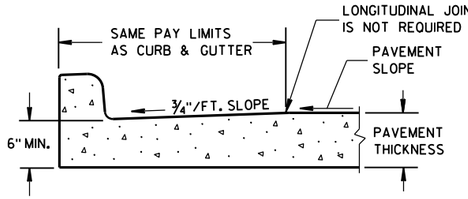
① TYPES A & D

CONCRETE CURB & GUTTER 18"

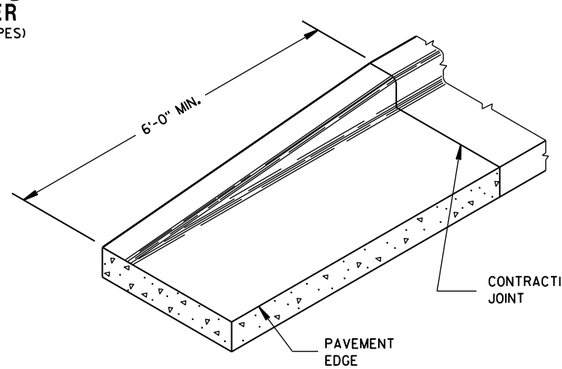


① TYPES G & J

CONCRETE CURB



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

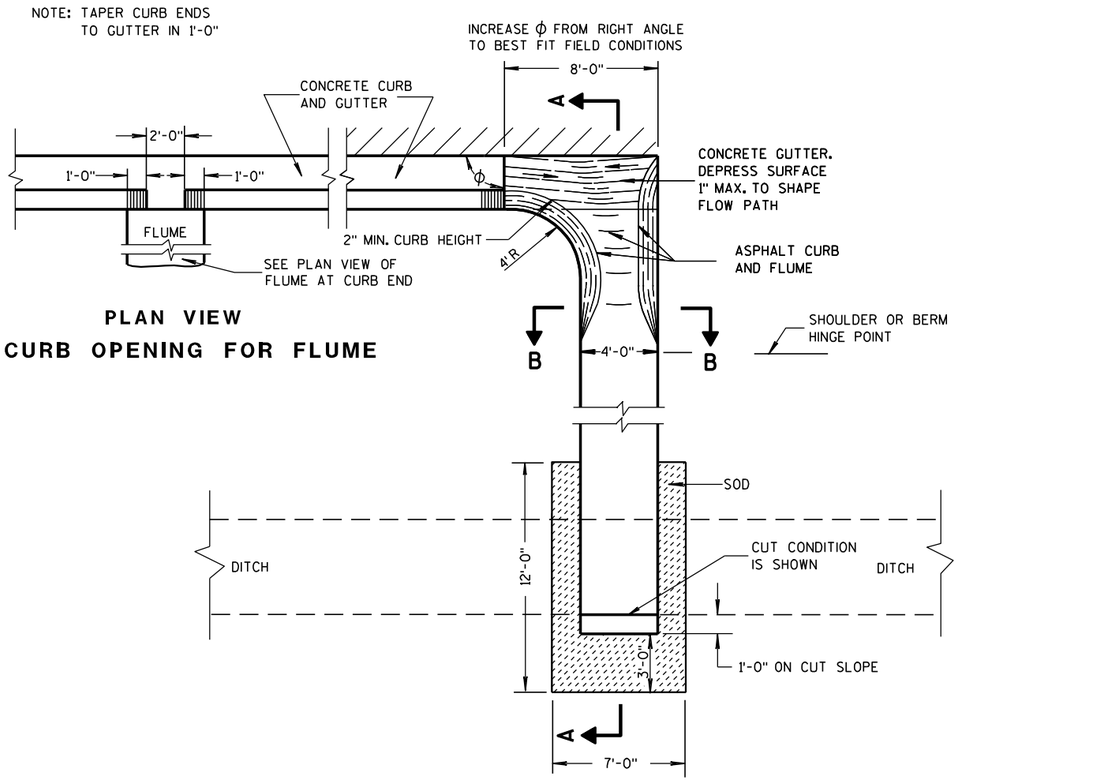
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

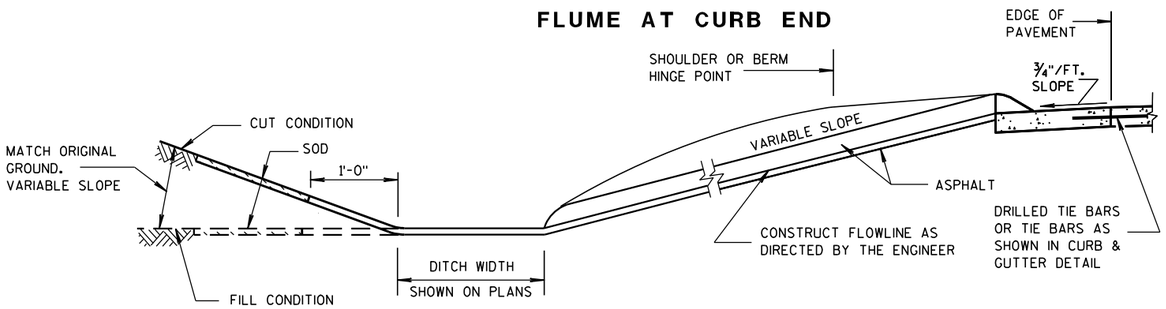
S.D.D. 8 D 1-19

ASPHALTIC FLUME

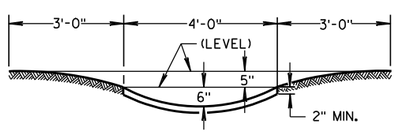


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

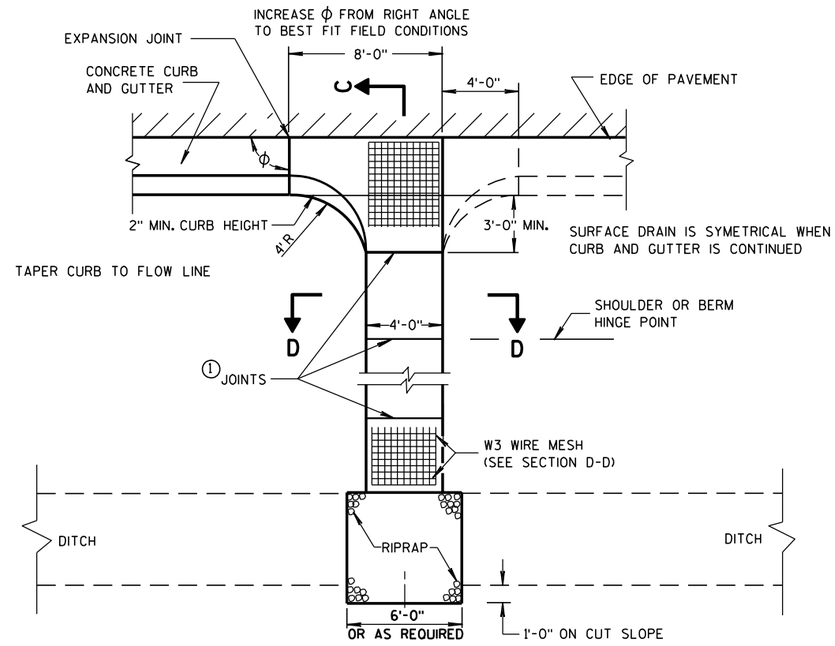
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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

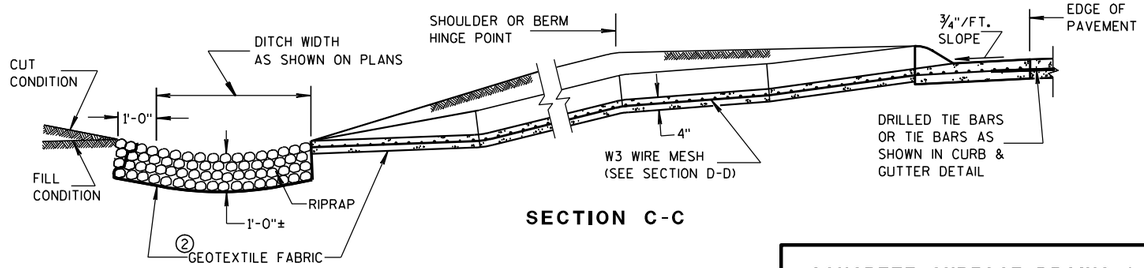
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

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

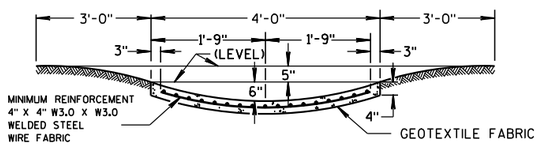
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
45
MENT
FHWA

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S.D.D. 8 D 4-5

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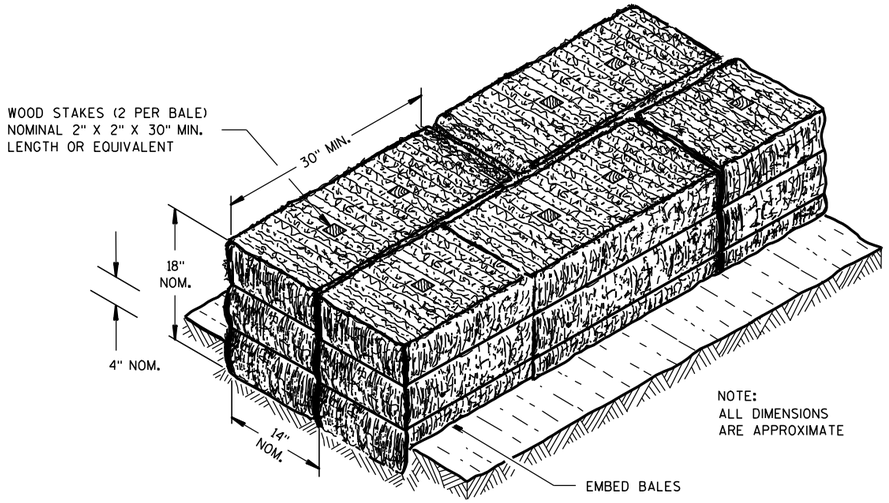
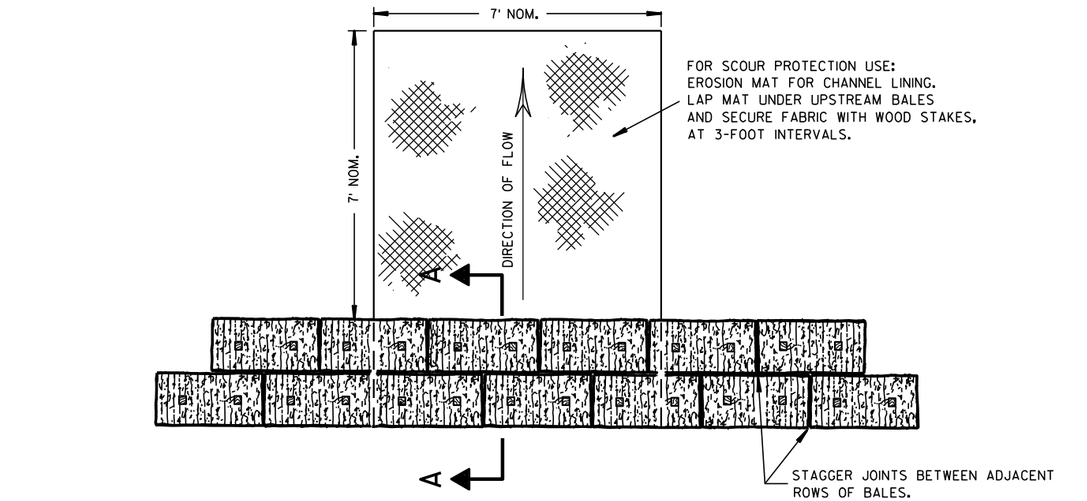
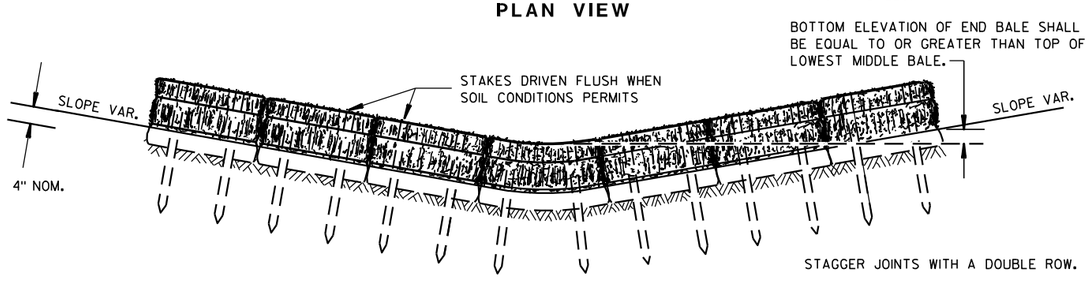
S.D.D. 8 D 4-5



SECTION A-A



PLAN VIEW



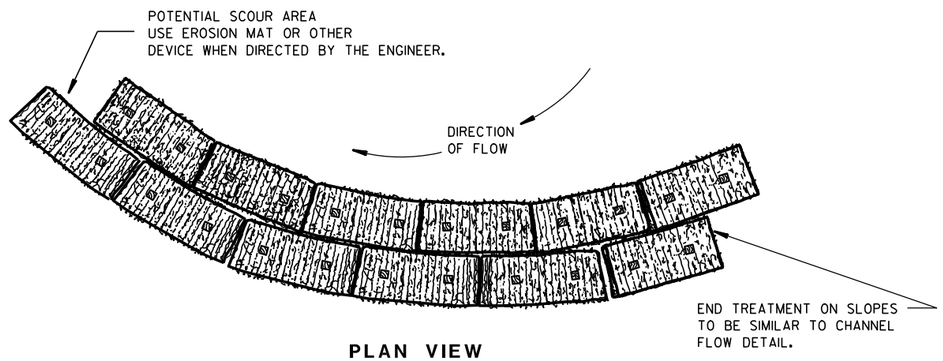
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

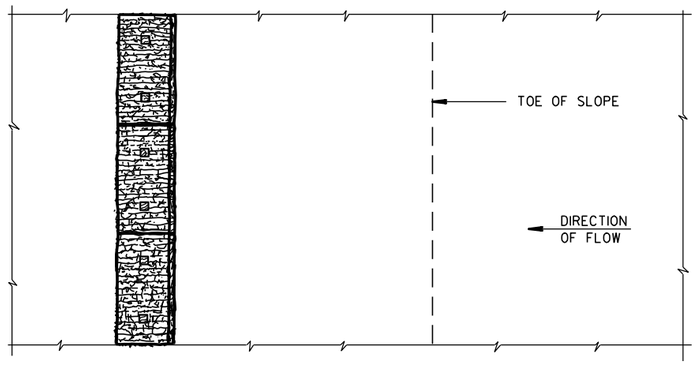
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

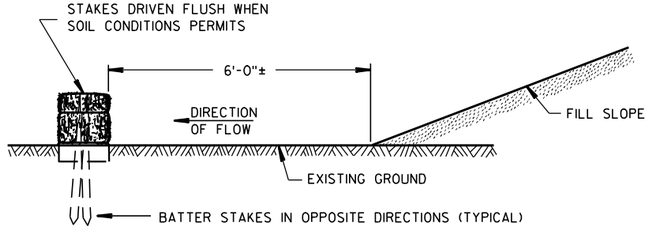


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

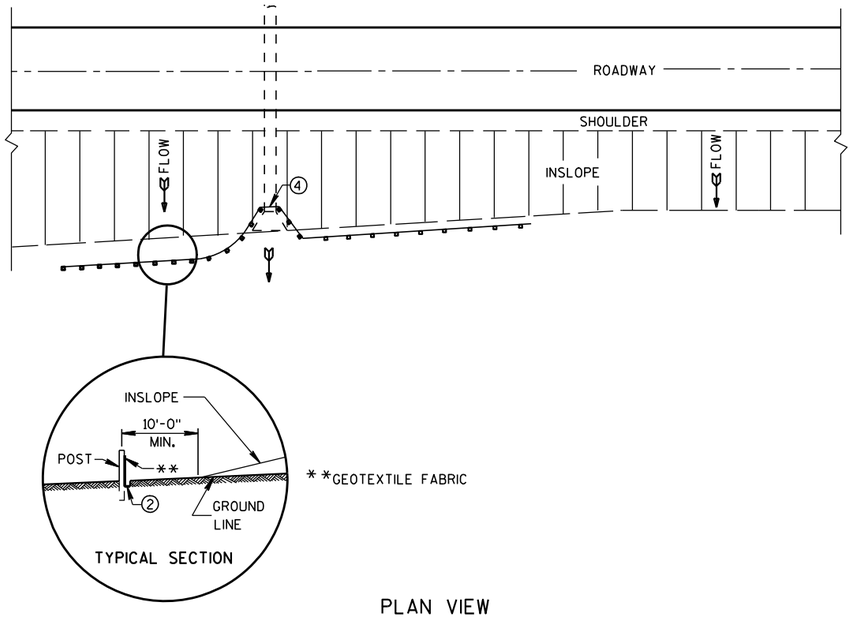
APPROVED
6/04/02 — DATE
/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

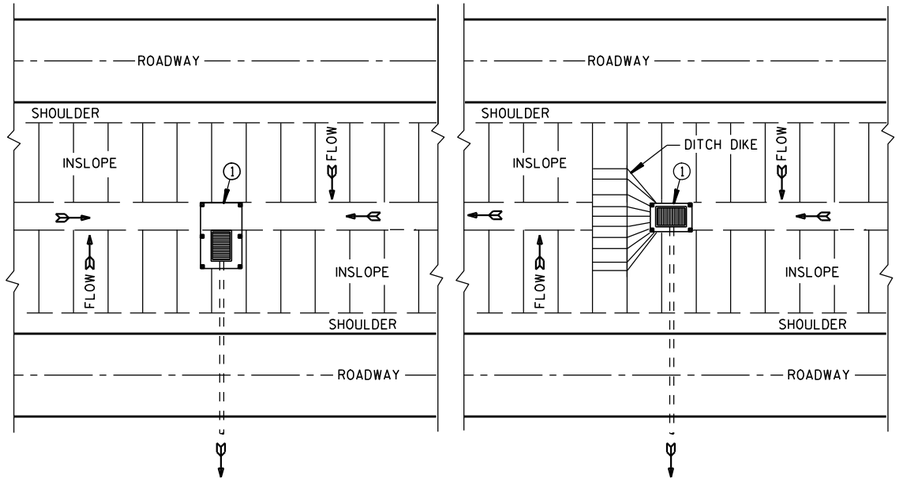
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

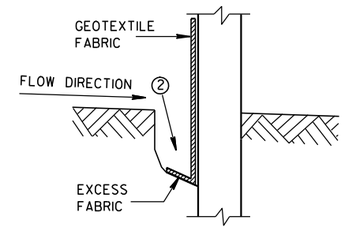
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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

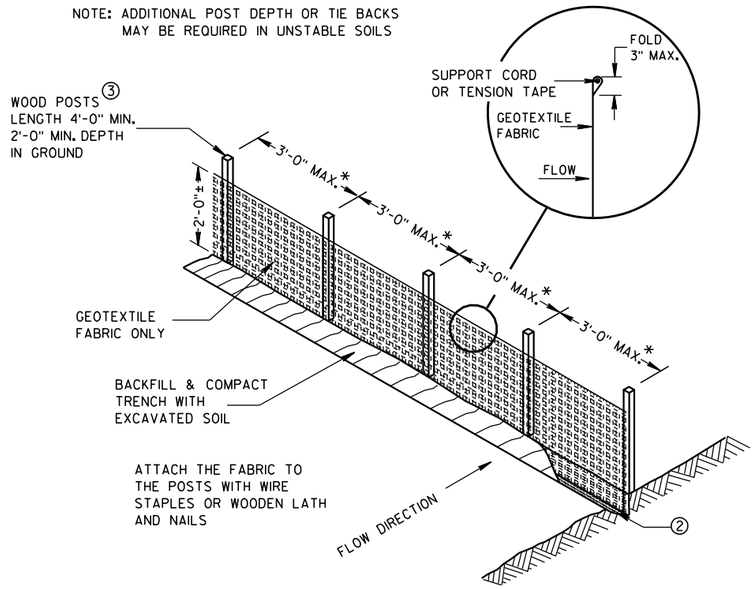
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

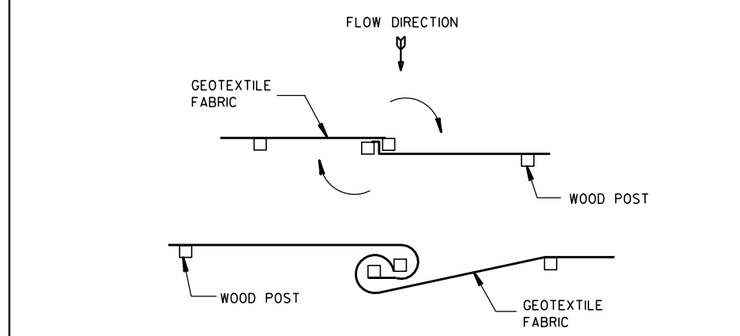
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



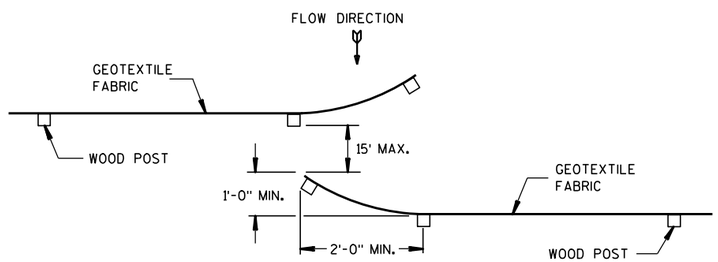
TRENCH DETAIL



SILT FENCE

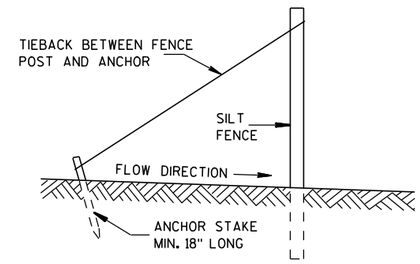


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6

METAL APRON ENDWALLS

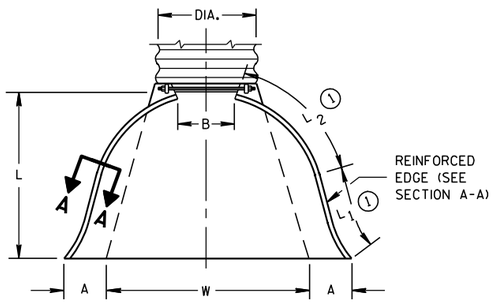
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

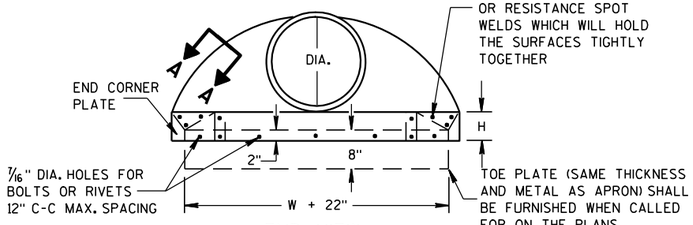
REINFORCED CONCRETE APRON ENDWALLS

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

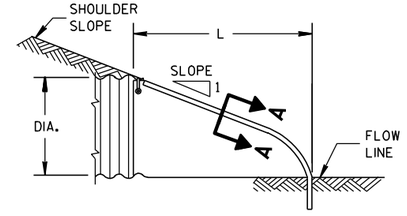
* MINIMUM
** MAXIMUM



PLAN VIEW

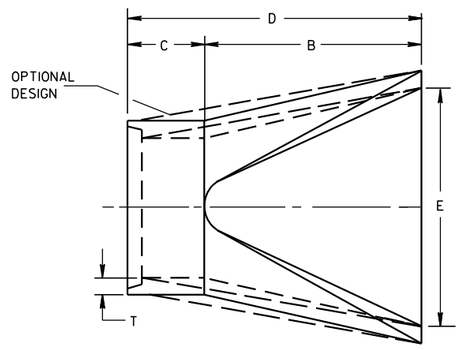


END VIEW

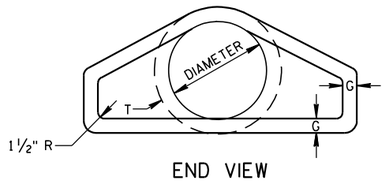


SIDE ELEVATION

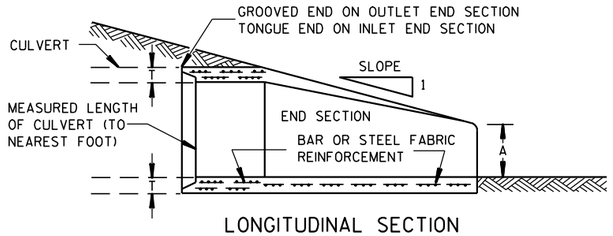
METAL ENDWALLS



PLAN

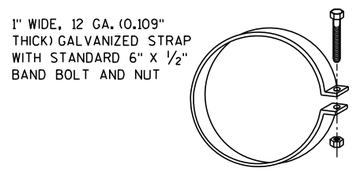


END VIEW



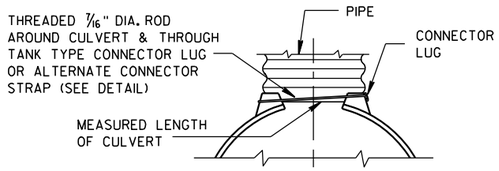
LONGITUDINAL SECTION

CONCRETE ENDWALLS

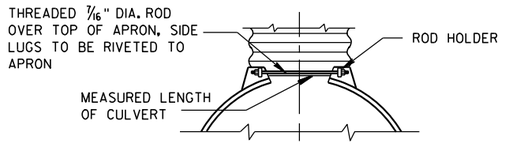


ALTERNATE FOR TYPE 1 CONNECTION

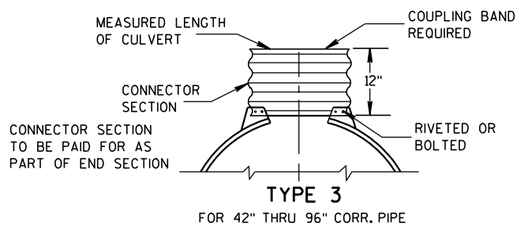
END SECTION CONNECTOR STRAP



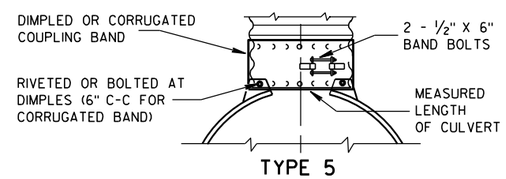
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

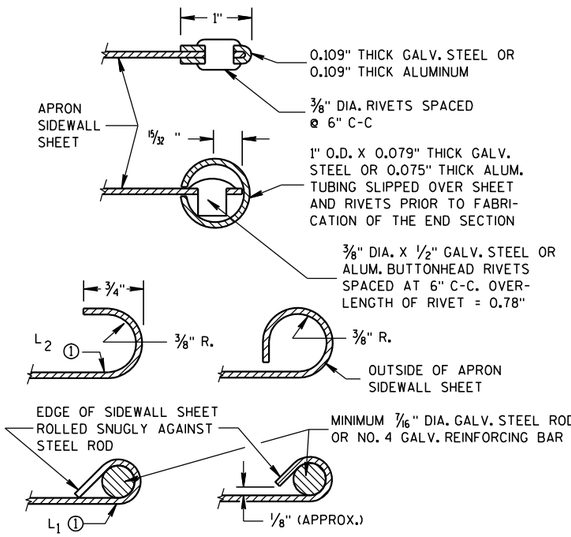
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

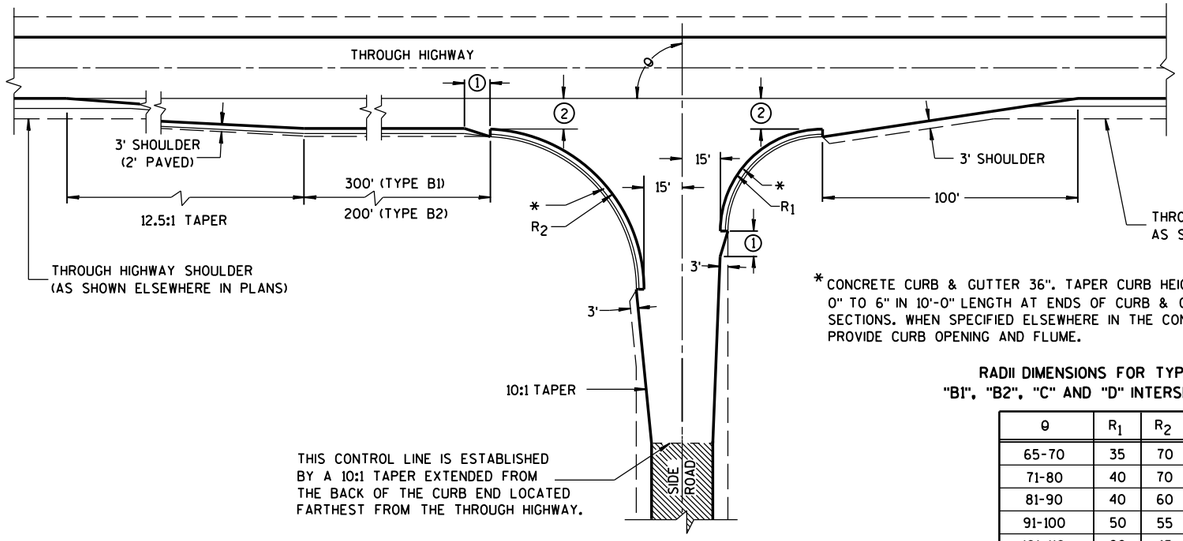
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

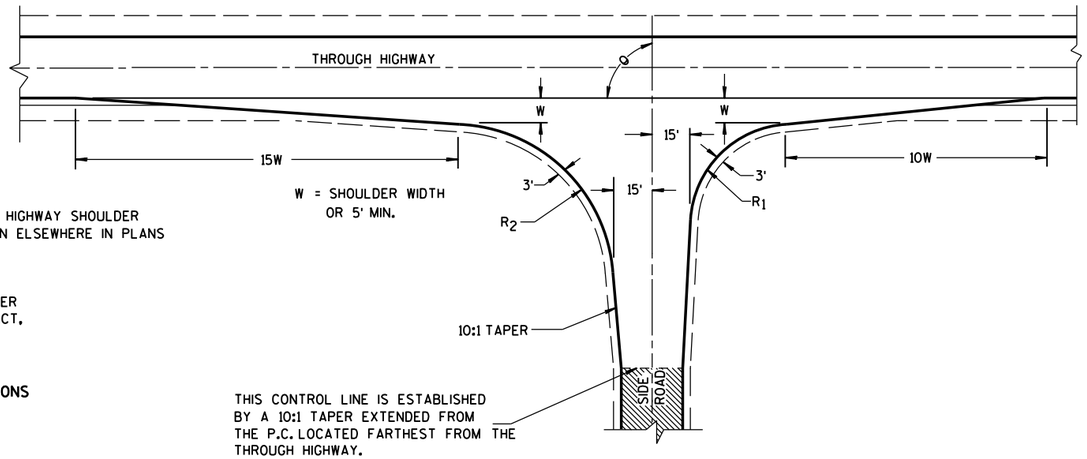


TYPE "B1" AND "B2"

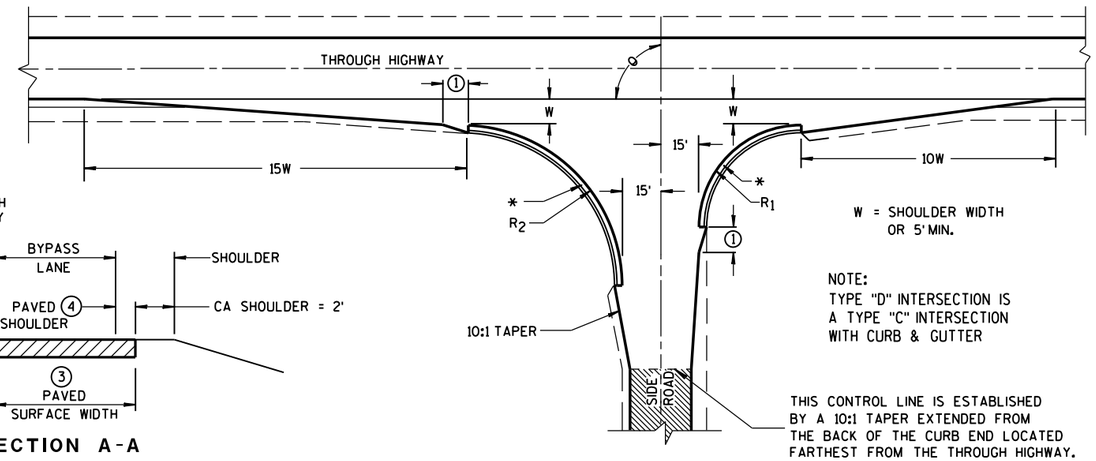
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

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

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



TYPE "C"



TYPE "D"

GENERAL NOTES

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

SIDE ROAD SURFACING NOTE

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

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

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

EXISTING PAVED SURFACE

BYPASS LANE

(1) 10-FT TYPICAL.

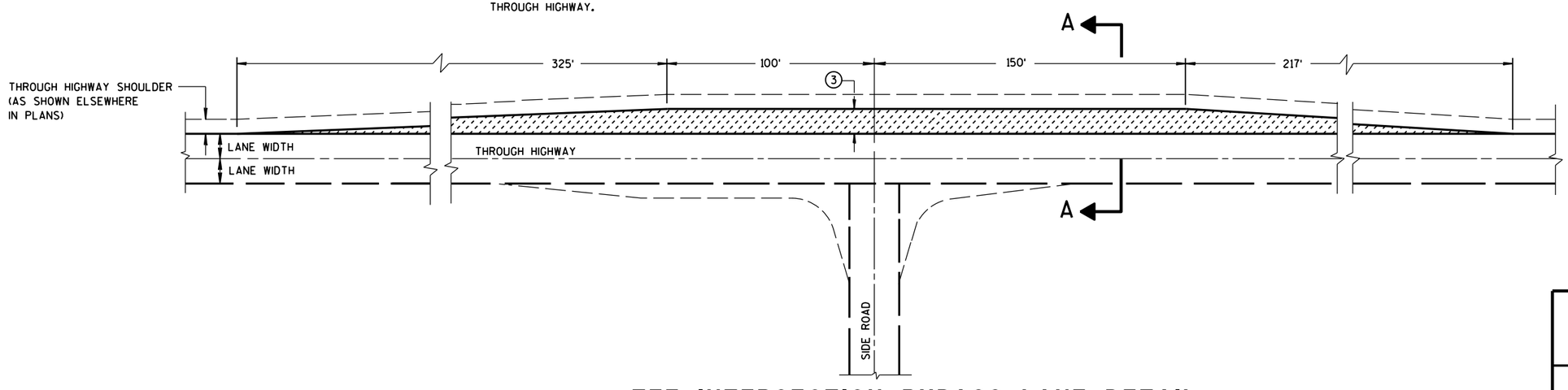
(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

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

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

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

SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)

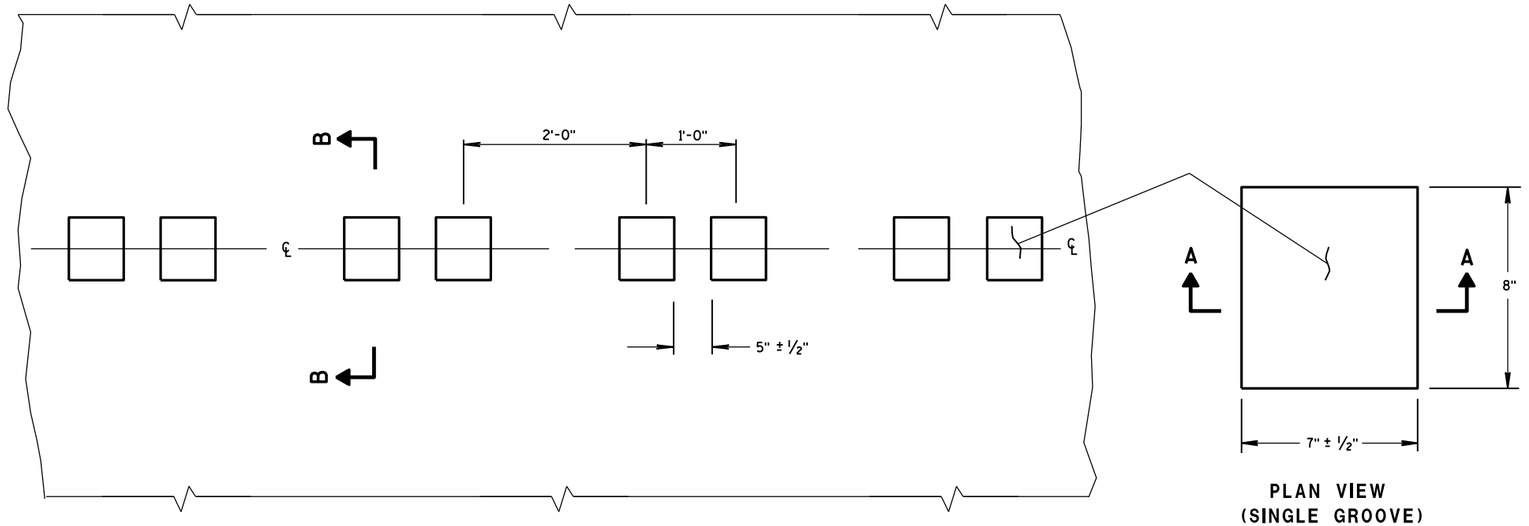


TEE INTERSECTION BYPASS LANE DETAIL

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 9 A 1-13a



PLAN VIEW
CENTER LINE WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

GENERAL NOTES

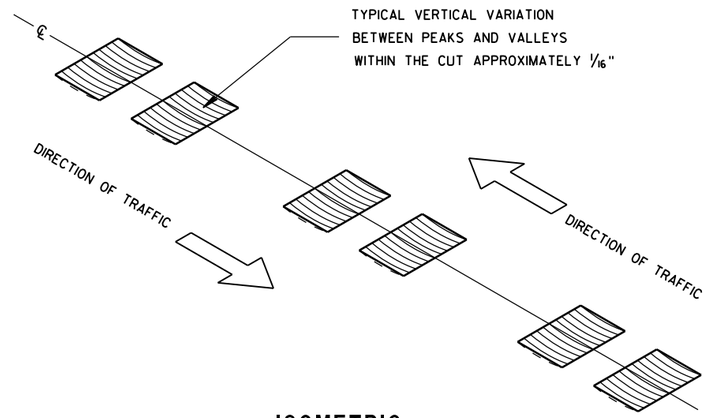
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTER LINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

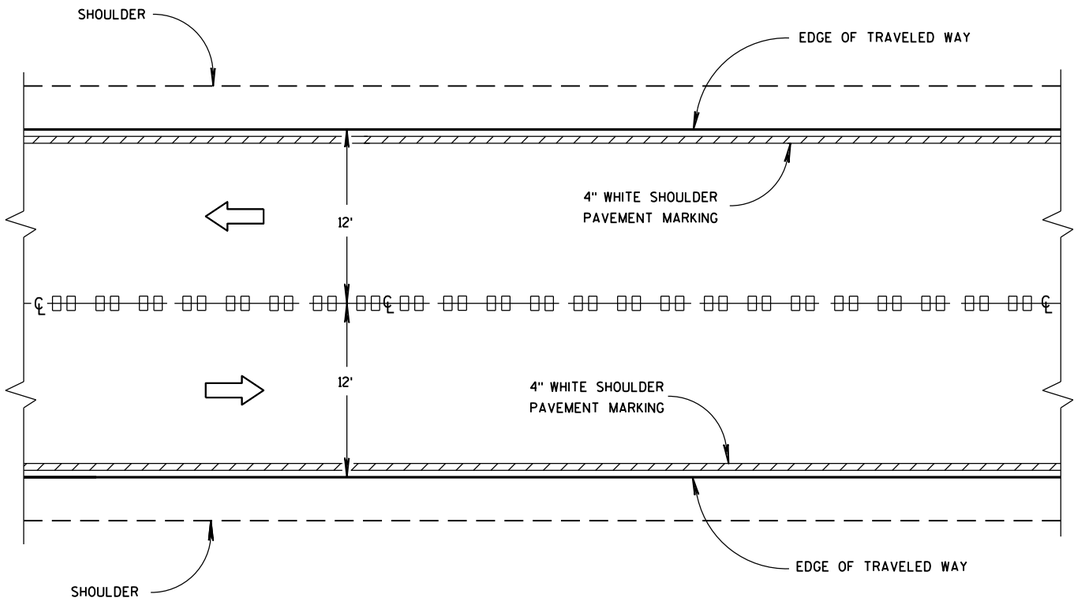
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

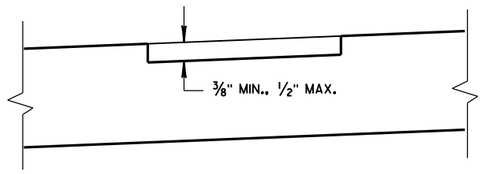
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



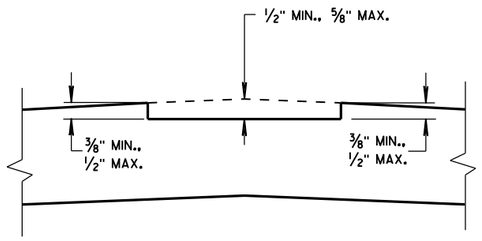
ISOMETRIC



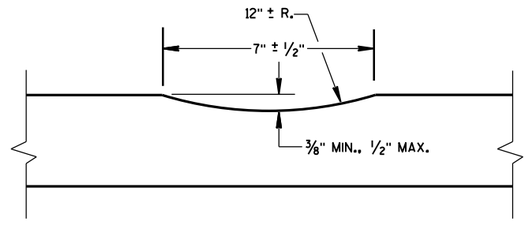
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



SECTION B-B
CROWNED ROADWAY

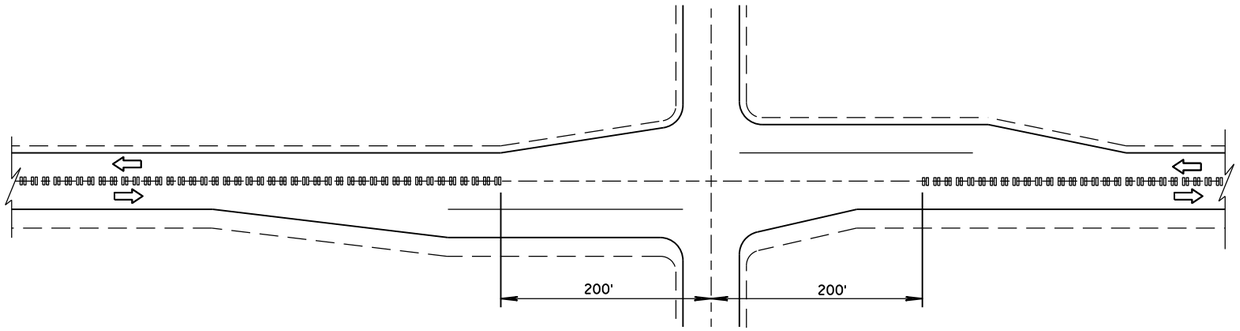


SECTION A-A

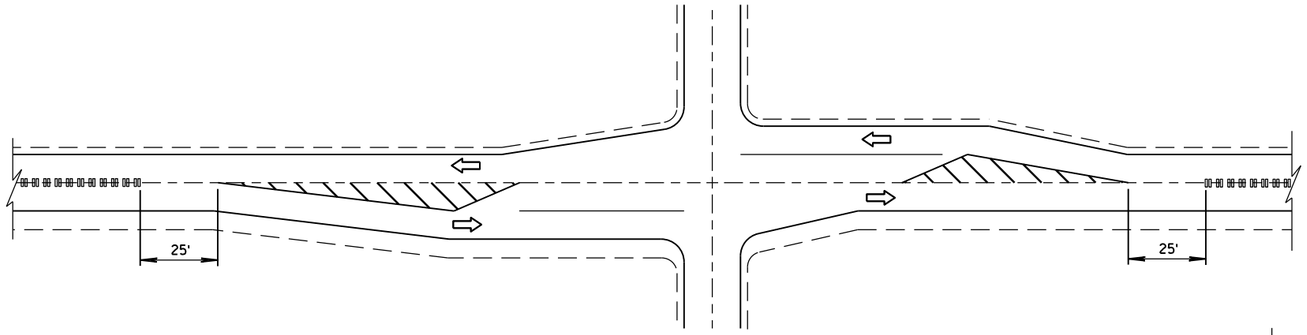
2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

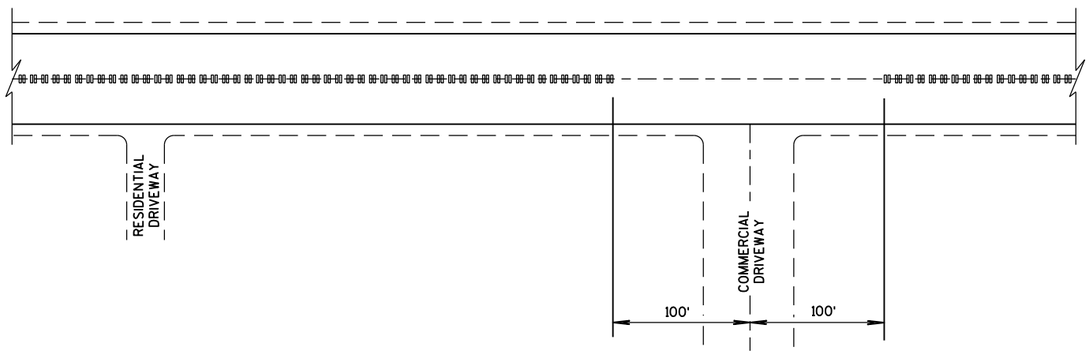
6
S.D.D. 13 A 11-2a



CENTER LINE GROOVES AT INTERSECTIONS

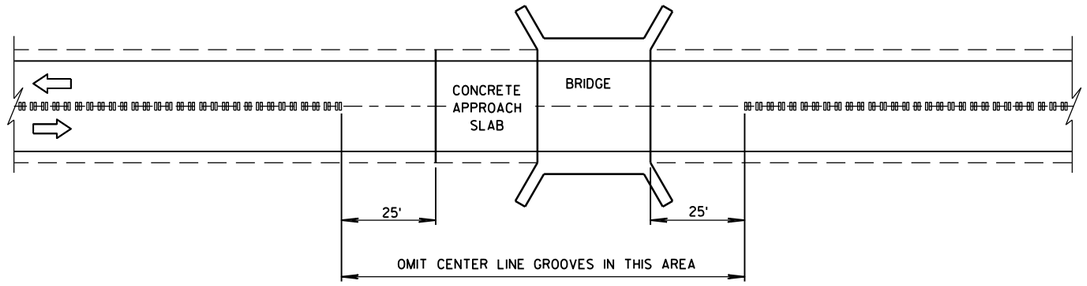


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

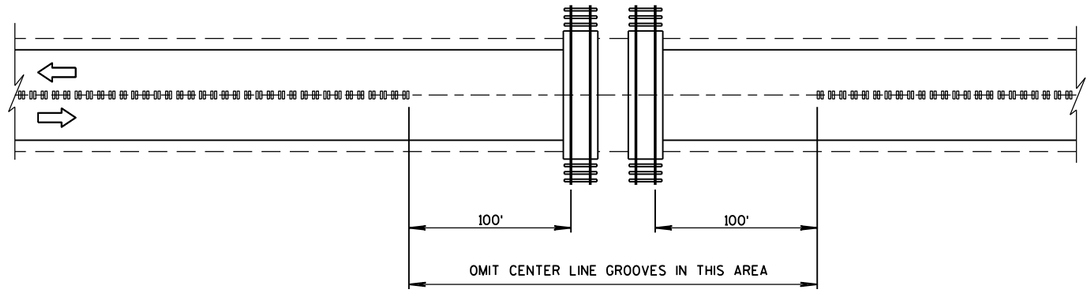


CENTER LINE GROOVES AT DRIVEWAYS (1)

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



CENTER LINE GROOVES AT BRIDGES



CENTER LINE GROOVES AT RAILROADS

6

S.D.D. 13 A 11-2b

6

S.D.D. 13 A 11-2b

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

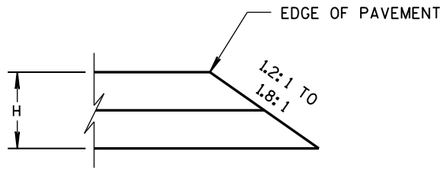
APPROVED

5/15/2013 DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

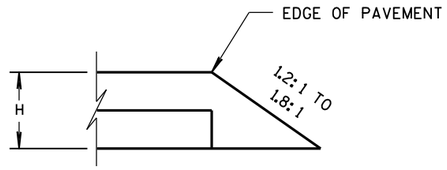
NT

FHWA



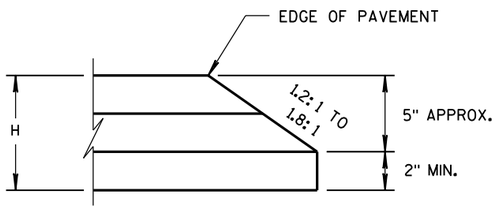
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



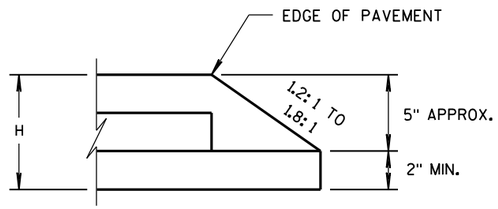
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

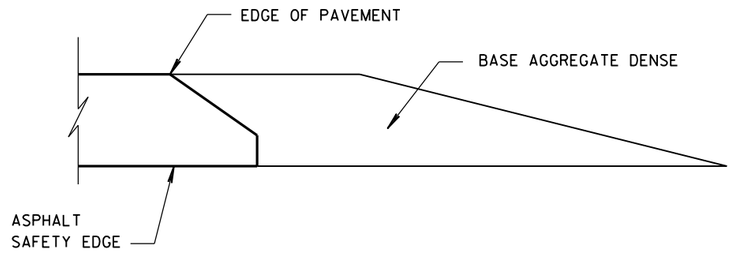
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

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

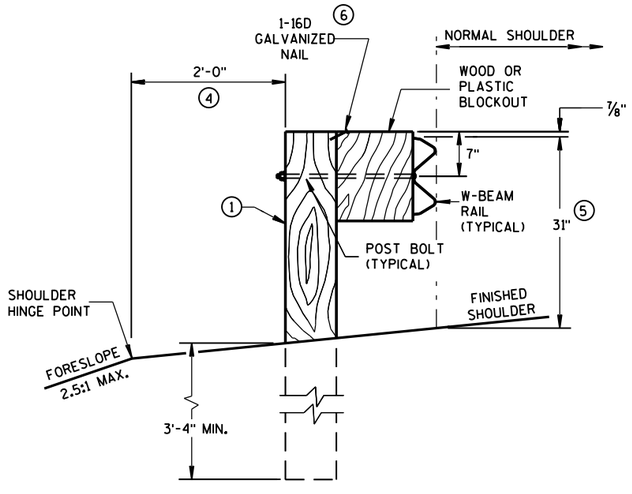
② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

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

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

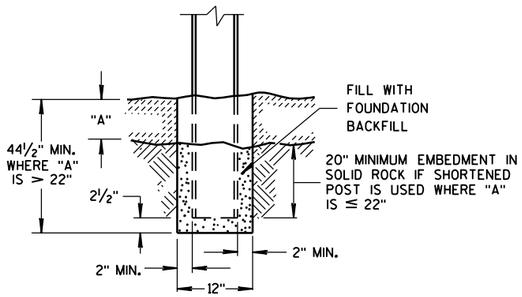
⑤ FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

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



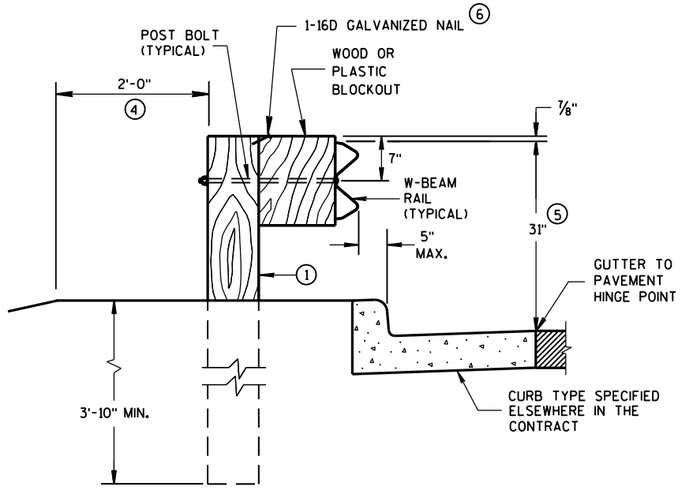
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



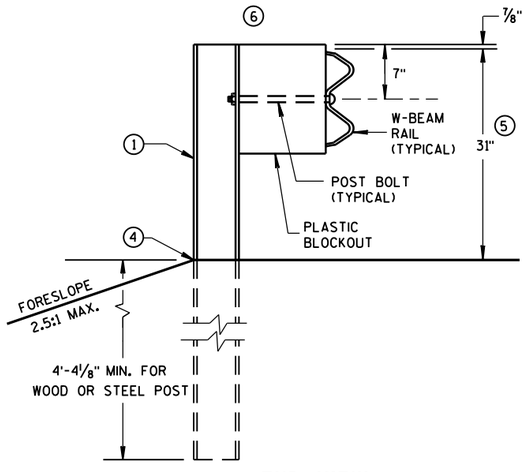
END VIEW

SETTING STEEL OR WOOD POST IN ROCK ③



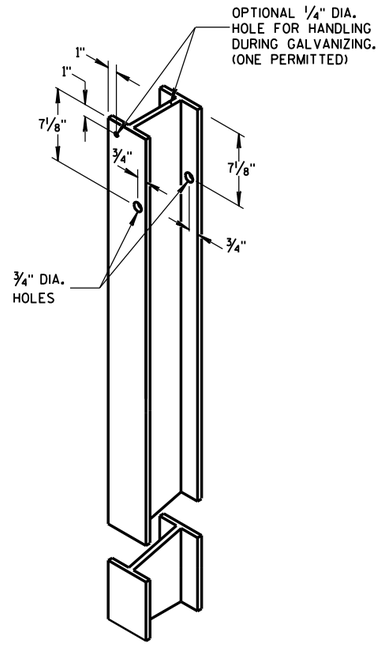
END VIEW

LOCATED ALONG A CURBED ROADWAY

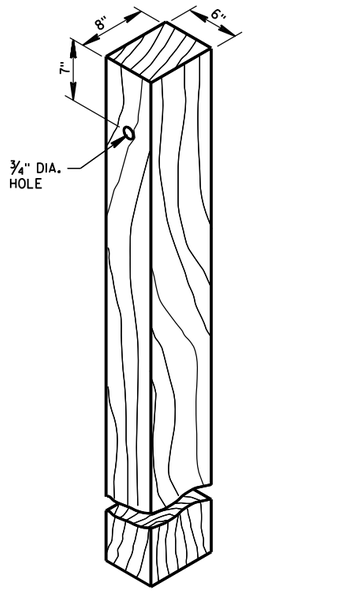


END VIEW

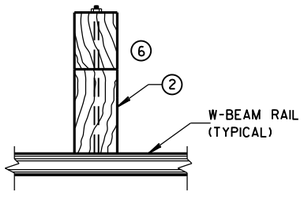
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



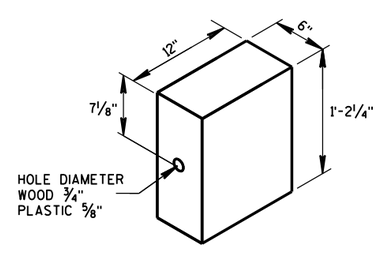
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①



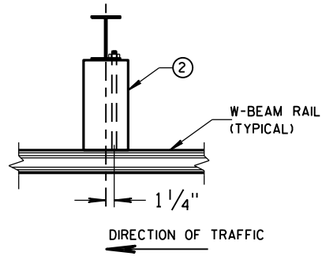
WOOD POST
(6" X 8") NOMINAL ①



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT ②



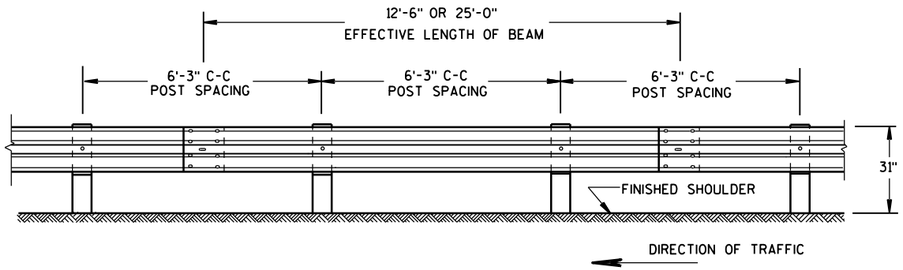
PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

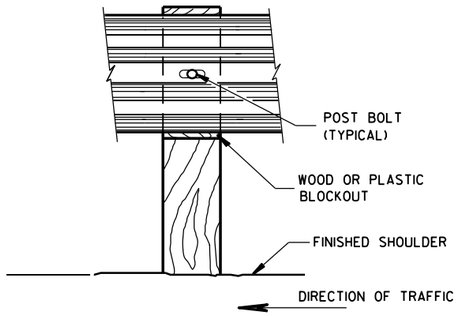
6

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



FRONT VIEW

POST SPACING STANDARD INSTALLATION



FRONT VIEW AT WOOD POST

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

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

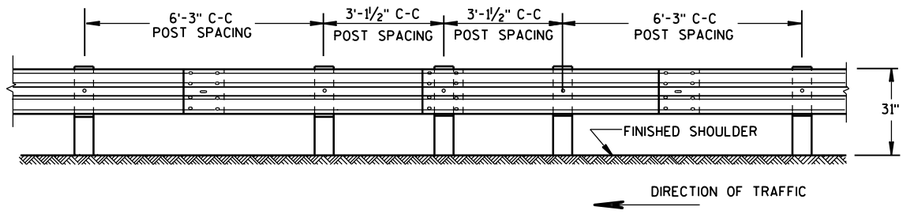
9. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

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

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

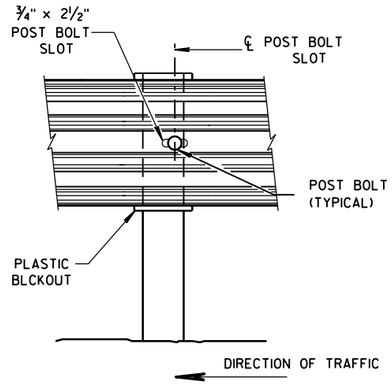
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

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

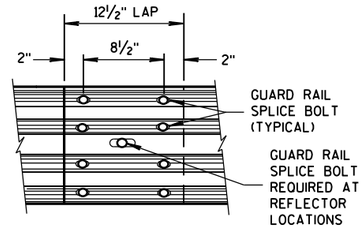


FRONT VIEW

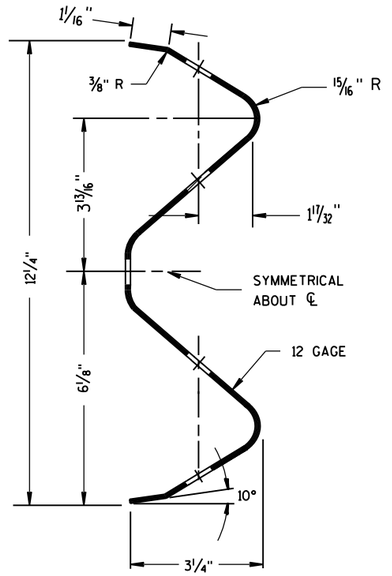
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



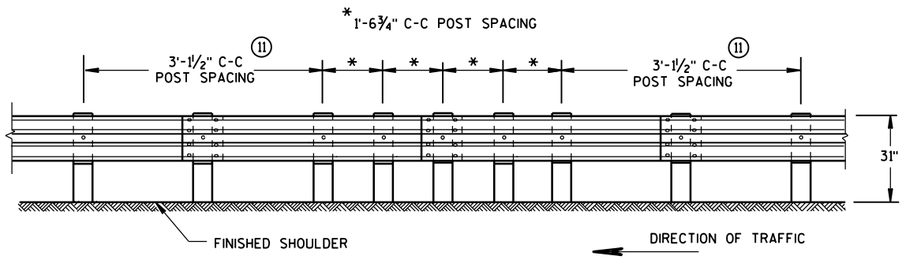
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE

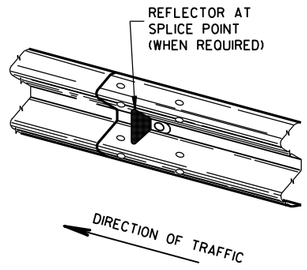


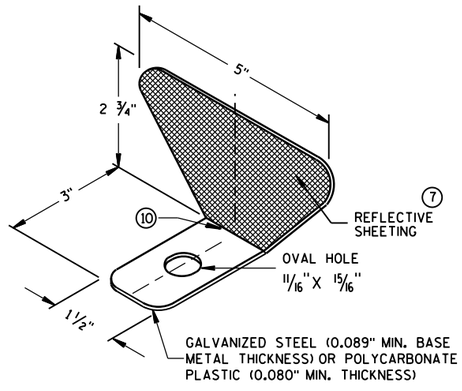
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (7)

REFLECTOR SPACING (8)

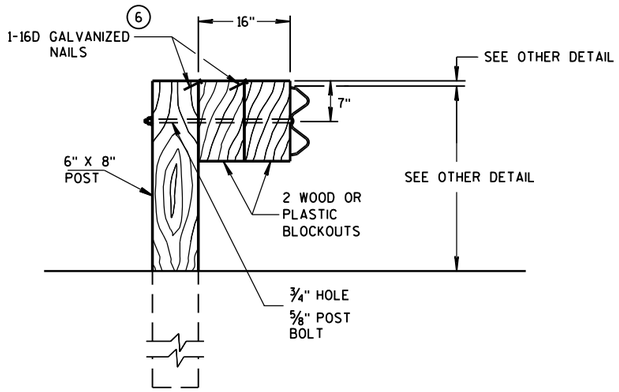
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 (9)	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2 (10)	

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

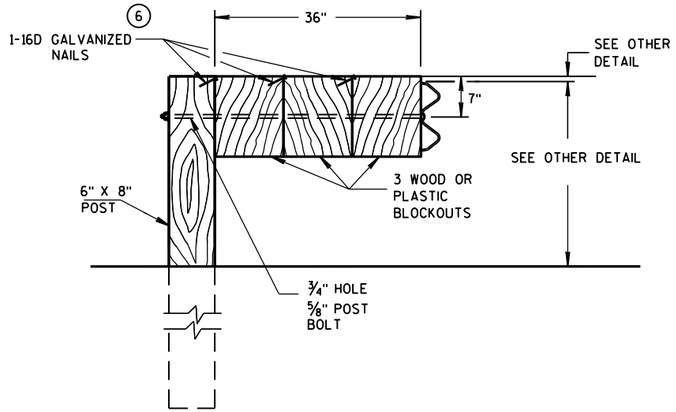
6

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



DETAIL FOR 16" BLOCKOUT DEPTH

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

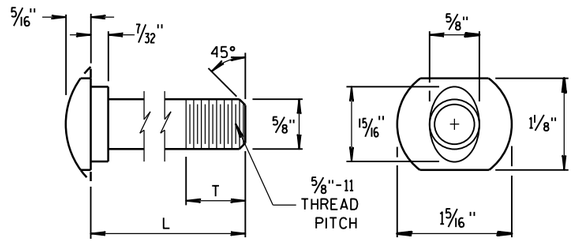


DETAIL FOR 36" BLOCKOUT DEPTH

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

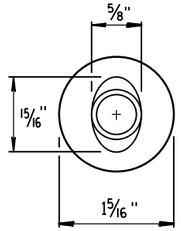
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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

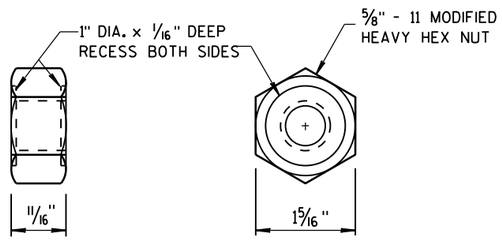


POST BOLT TABLE

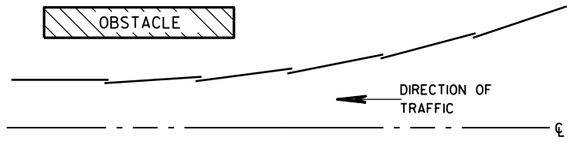
L	T (MIN.)
1¼"	1⅛"
2"	1¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

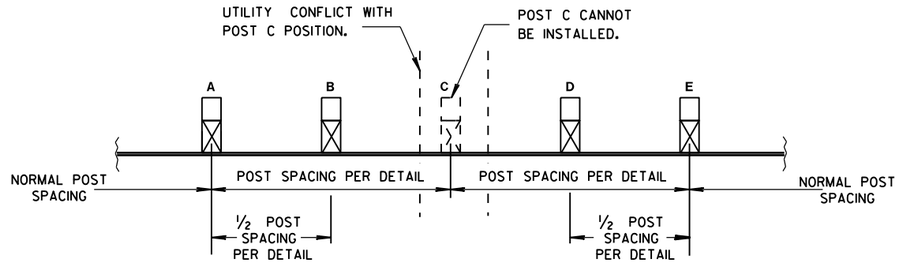


POST BOLT, SPLICE BOLT AND RECESS NUT

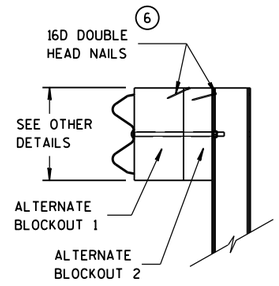


PLAN VIEW

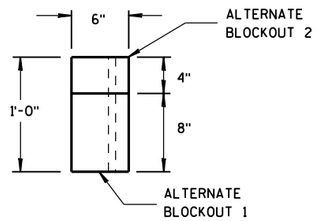
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

GENERAL NOTES

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

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

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

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

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

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

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

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

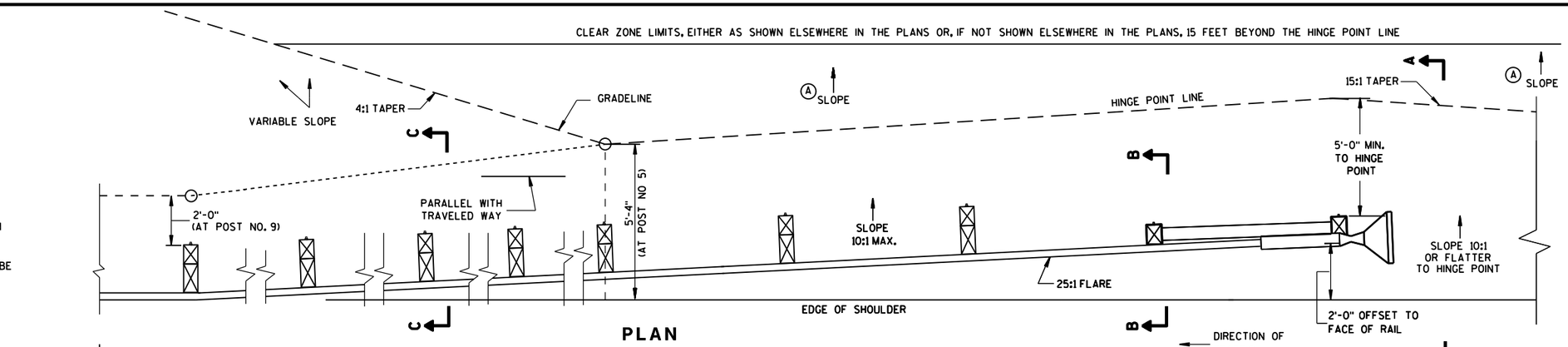
SEE SDD 14B42 FOR MORE INFORMATION.

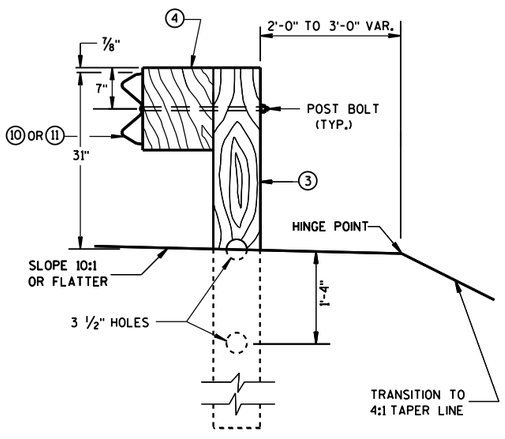
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

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

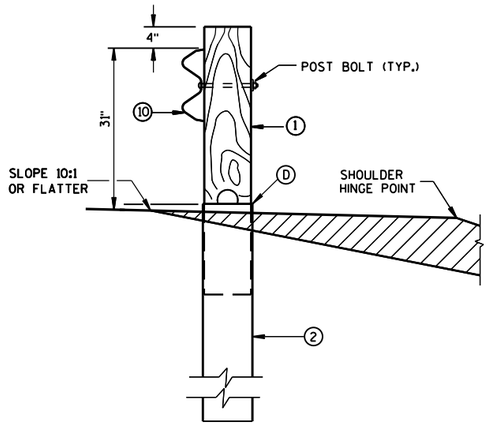
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

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

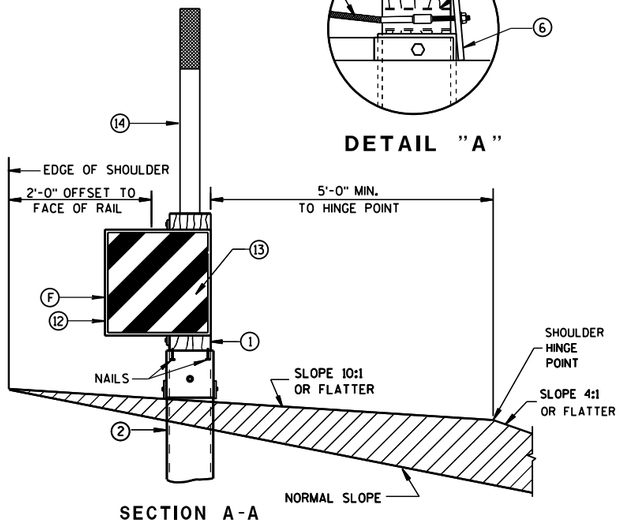




SECTION C-C
TYPICAL AT POST NOS. 3-9

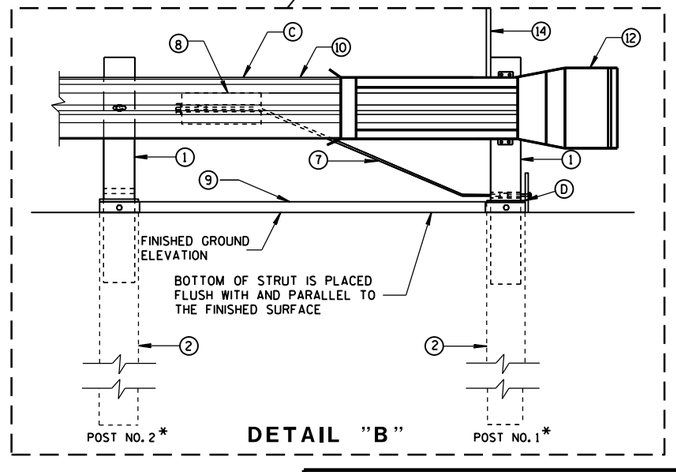


SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*

DETAIL "A"



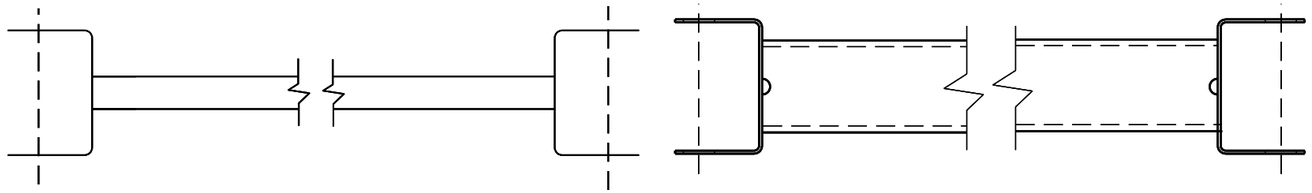
DETAIL "B"

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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

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

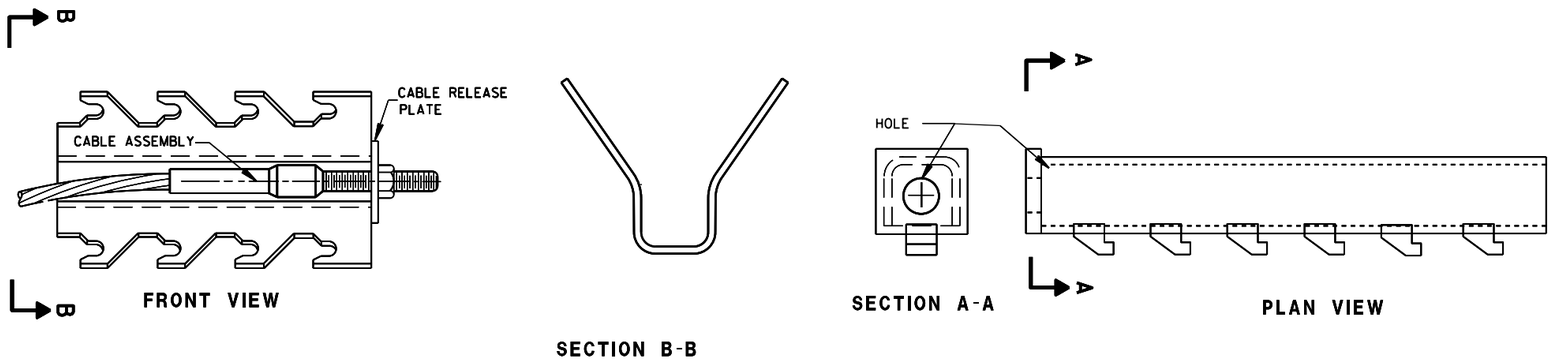


(9) (H)

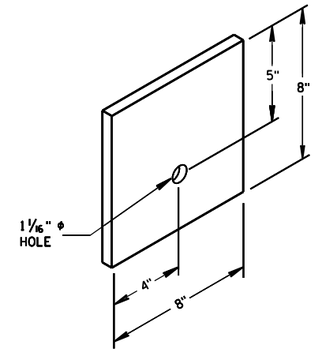
GENERIC GROUND STRUT

BILL OF MATERIALS

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



GENERIC ANCHOR CABLE BOX (8) (H)



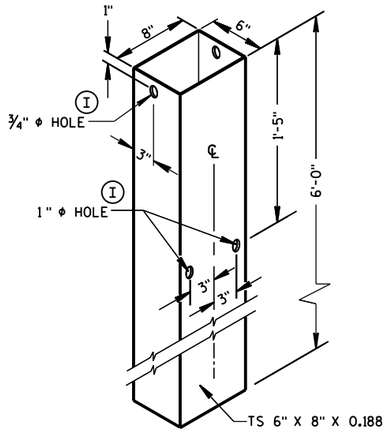
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

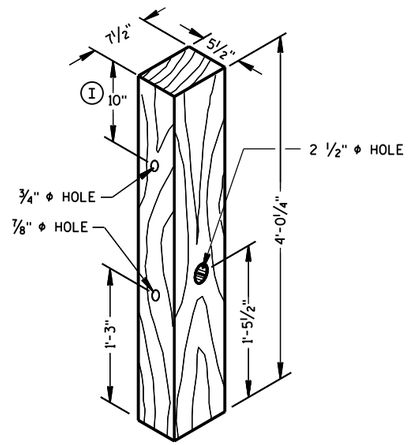
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

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

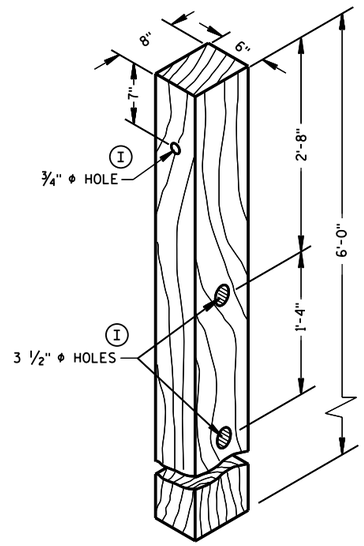


FOUNDATION TUBE (2)



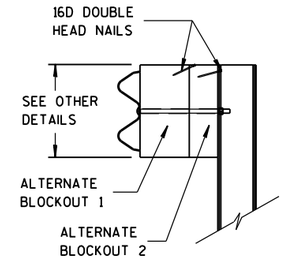
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

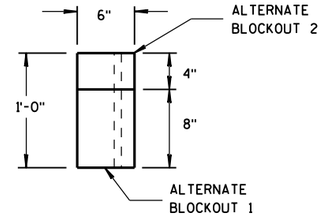


POSTS NUMBER 3-9

WOOD CRT POST (3)

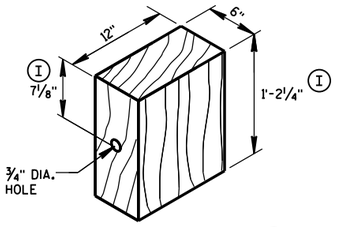


SIDE VIEW



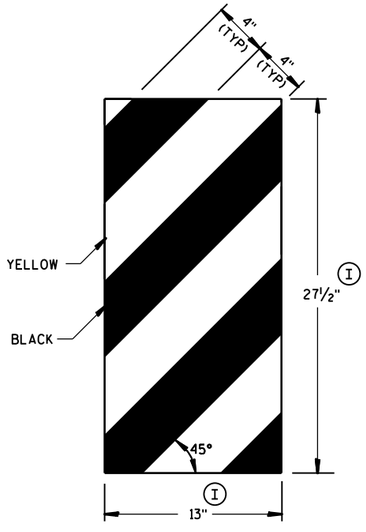
TOP VIEW

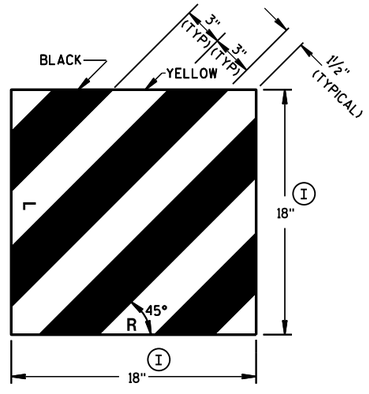
ALTERNATE WOOD BLOCKOUT DETAIL



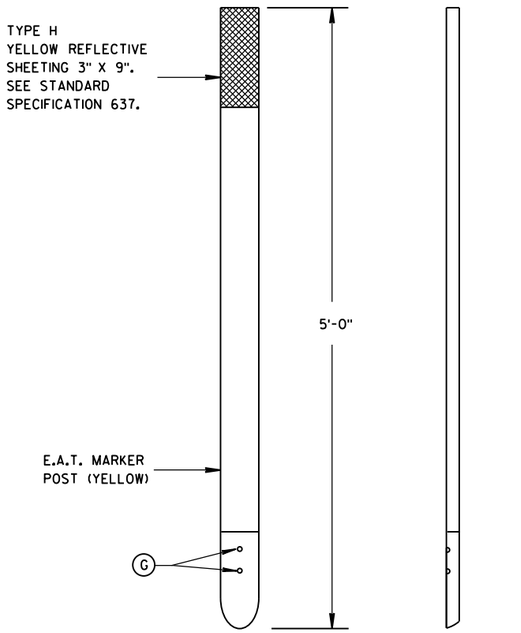
WOOD BLOCKOUT (4)

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





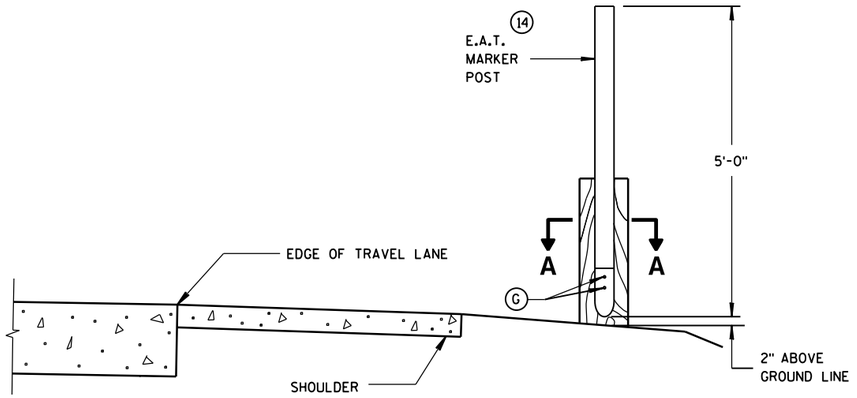
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

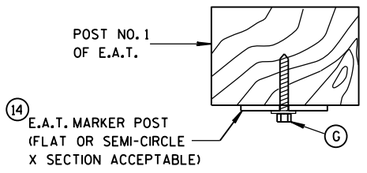
SIDE VIEW

E.A.T. MARKER POST (14)



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

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



SECTION A-A

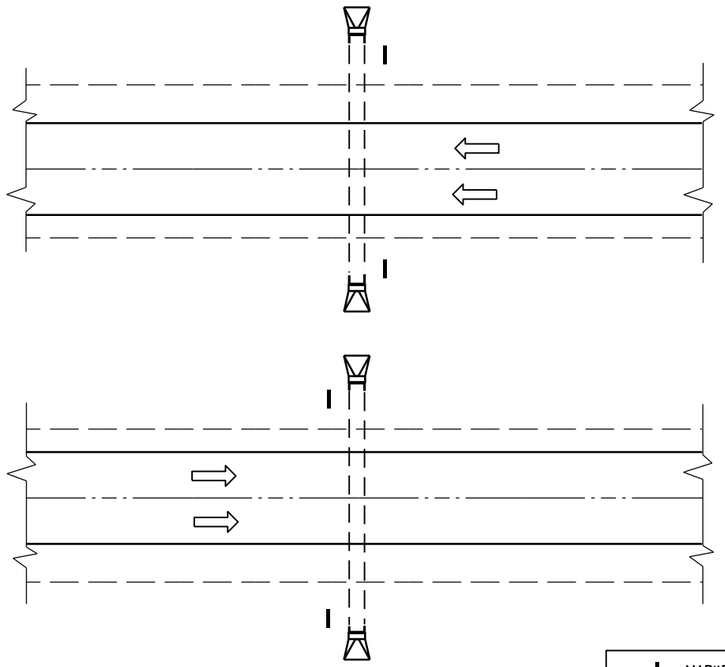
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

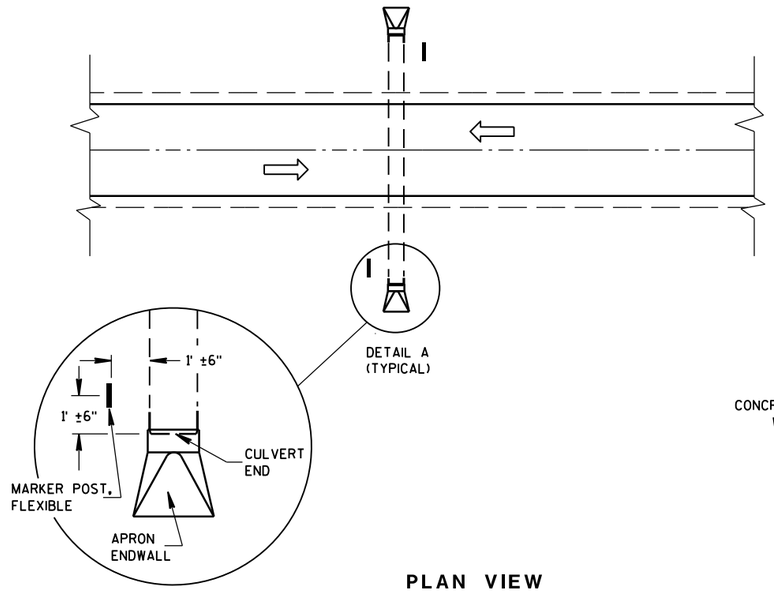
6

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



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

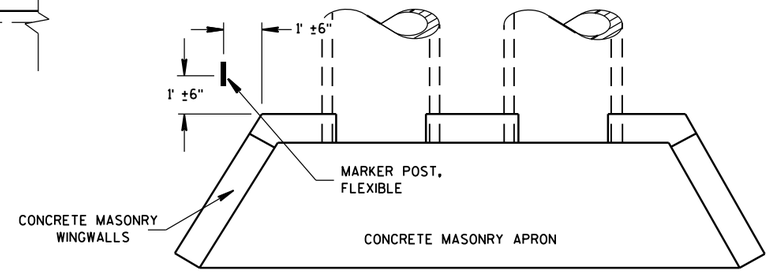
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

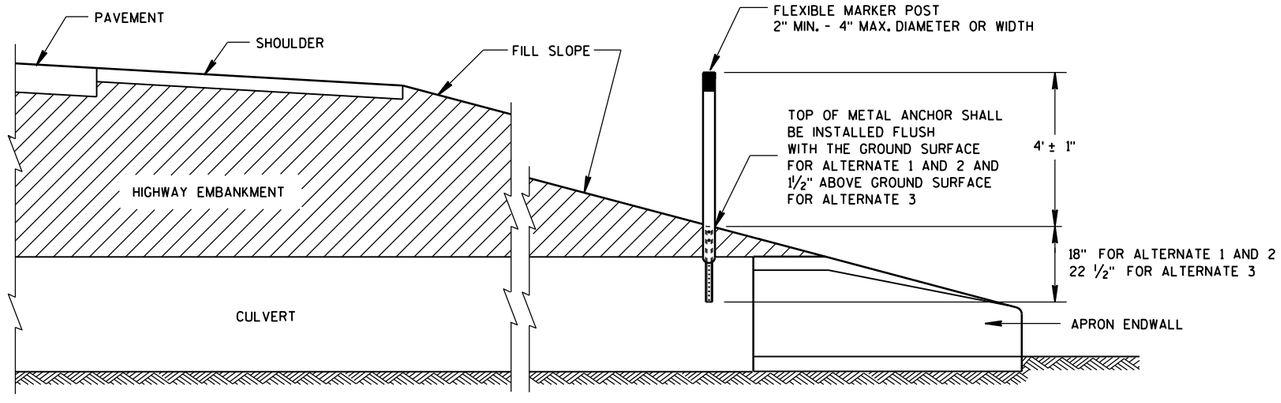
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

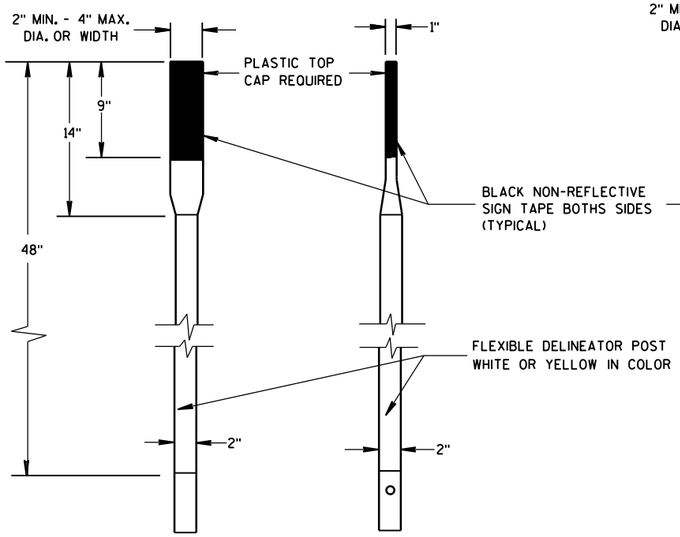
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

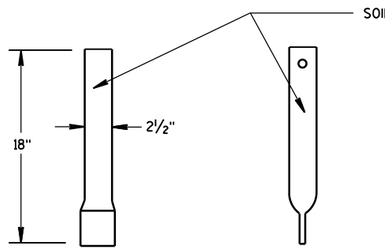
6

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

6

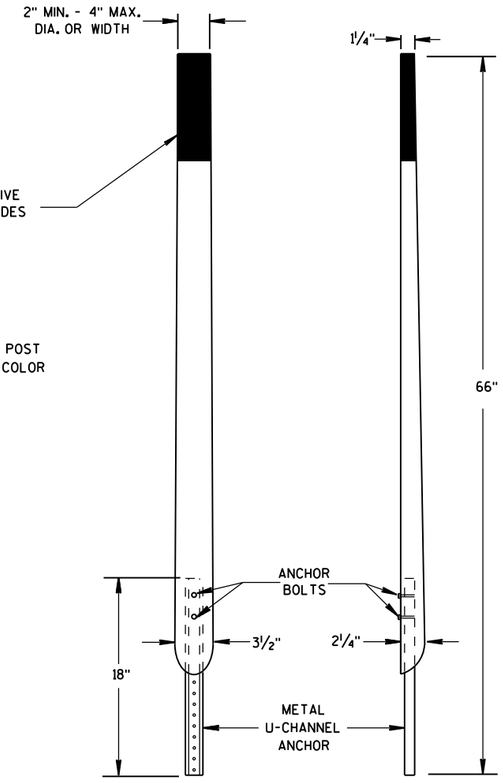
S.D.D. 15 A 3-2a





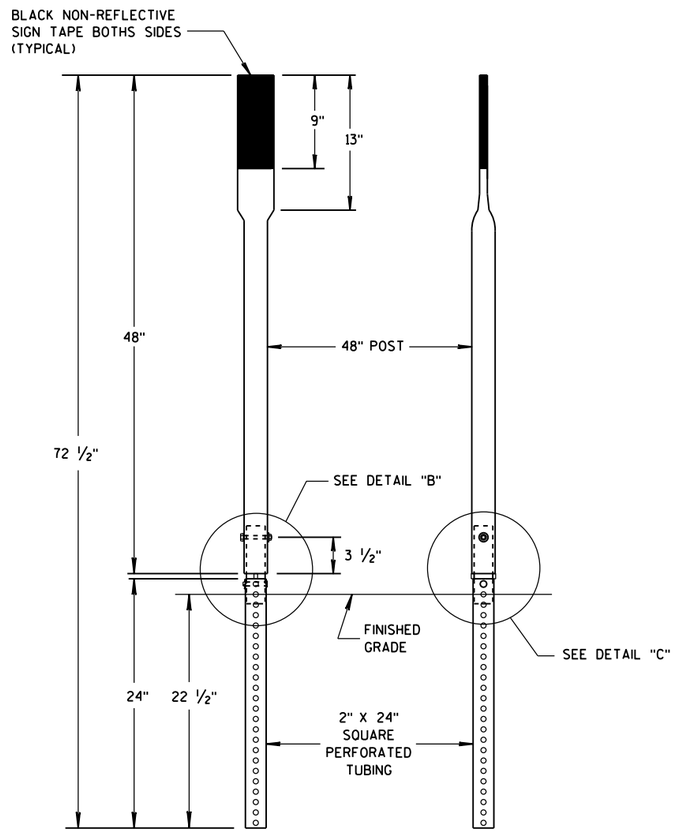
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

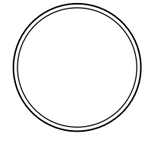
ALTERNATE 2



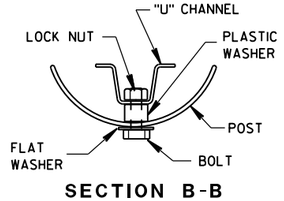
FRONT VIEW SIDE VIEW

ALTERNATE 3

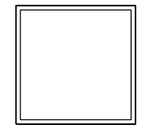
FLEXIBLE MARKER POSTS



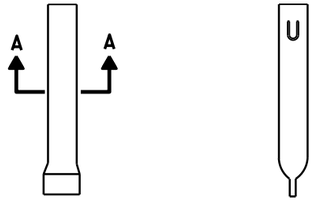
SECTION A-A



SECTION B-B

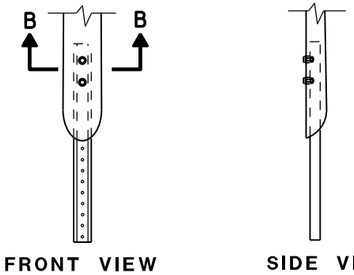


SECTION C-C



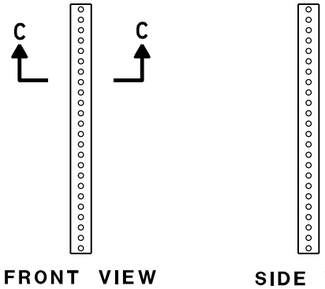
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

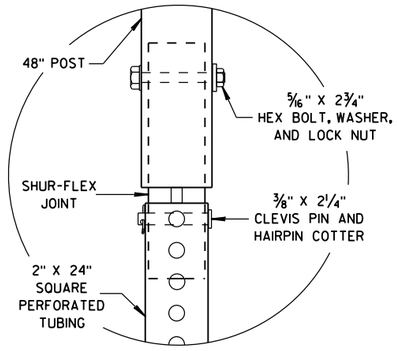
ALTERNATE 2



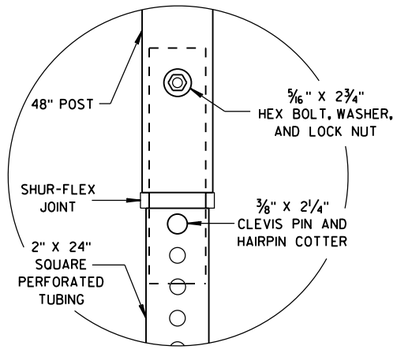
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

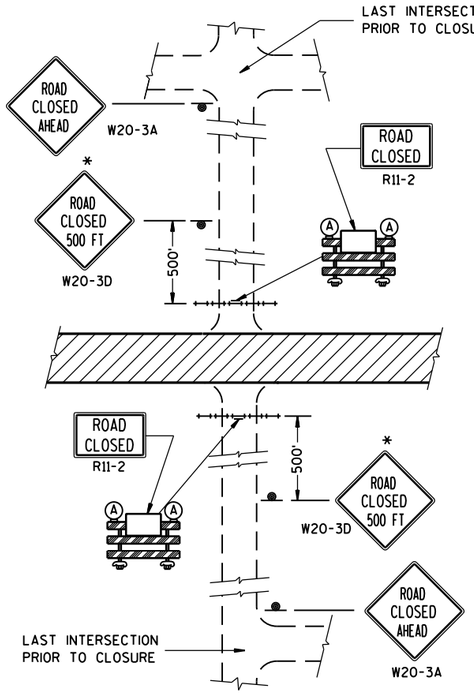
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

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

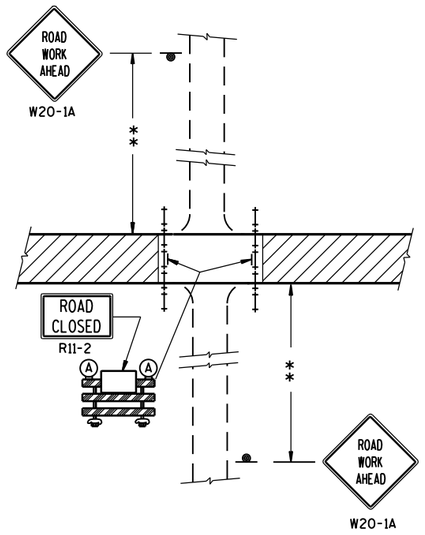
6

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



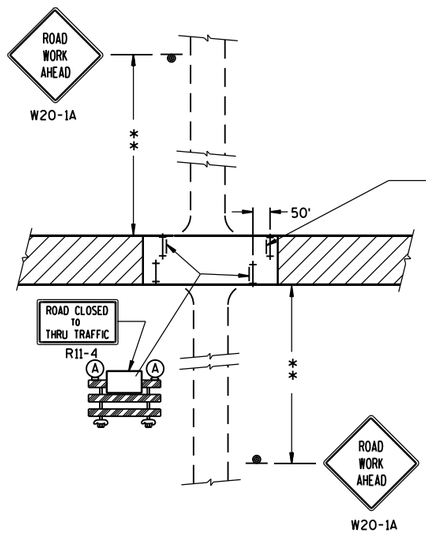
DETAIL 1

(NO ACCESS TO PROJECT)



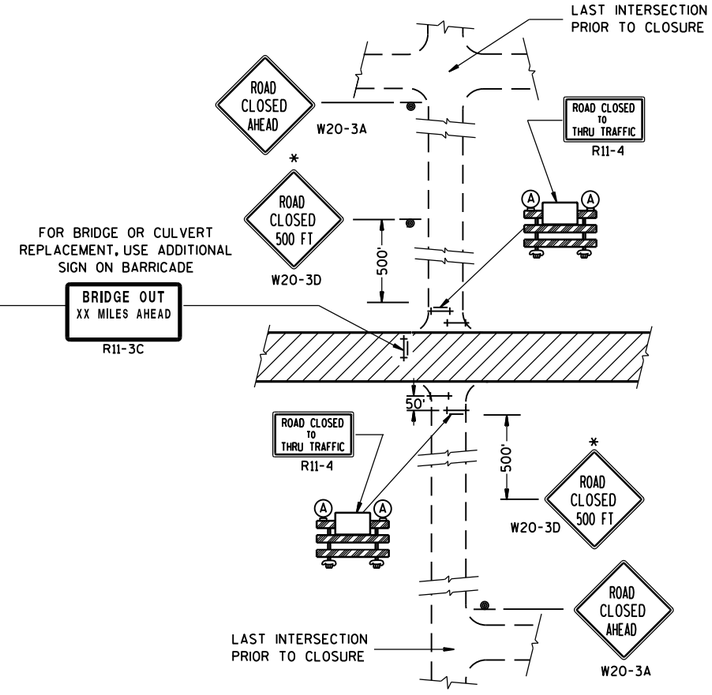
DETAIL 2

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



DETAIL 3

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



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

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

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 15 C 3-3

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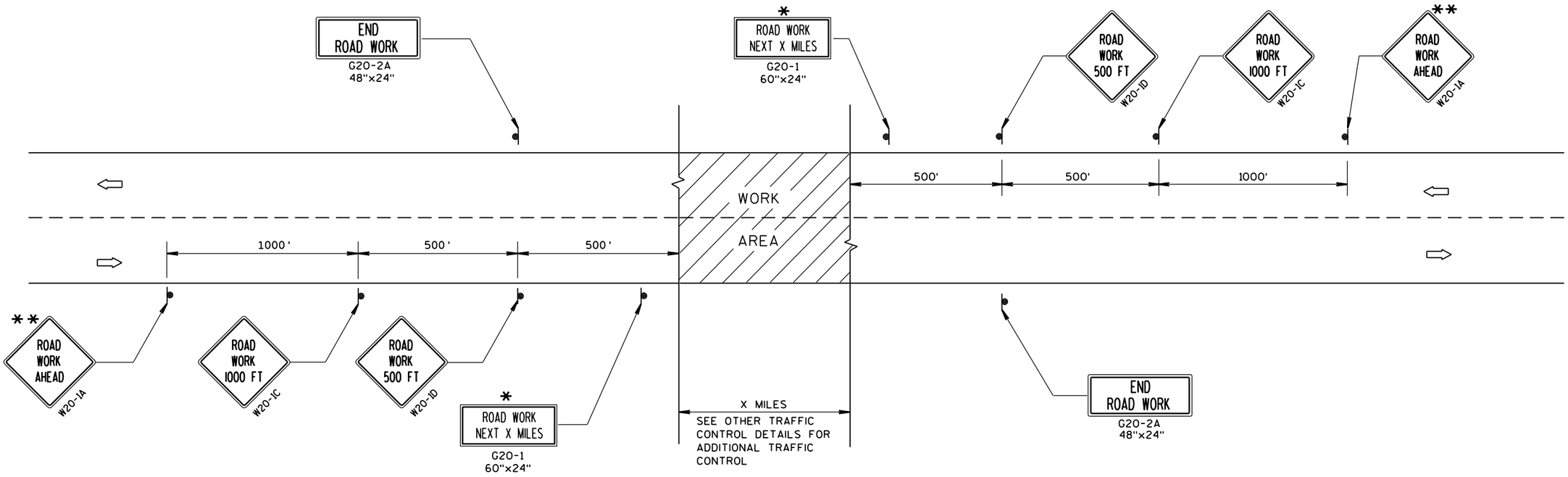
S.D.D. 15 C 3-3



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

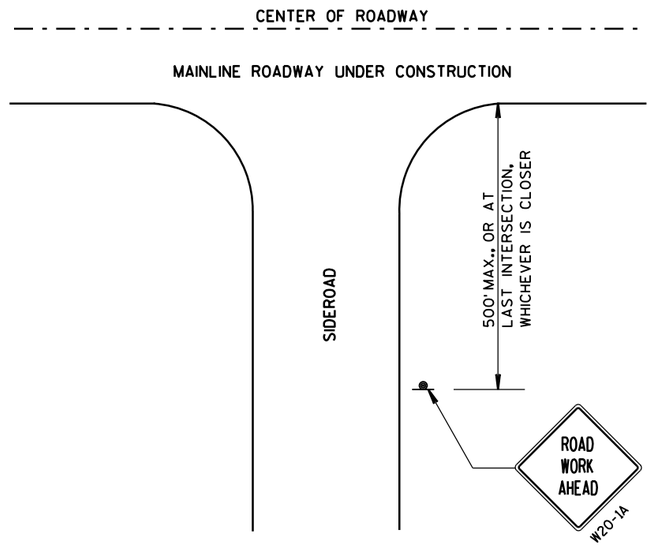
ALL SIGNS ARE 48"×48" UNLESS OTHERWISE NOTED.

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 W20-1A "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

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE SAFETY ENGINEER

FHWA

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S.D.D. 15 C 4-3

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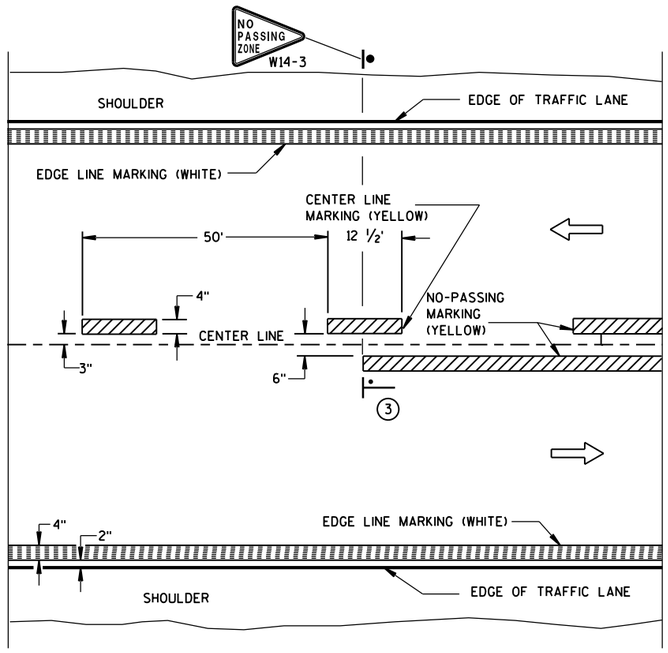
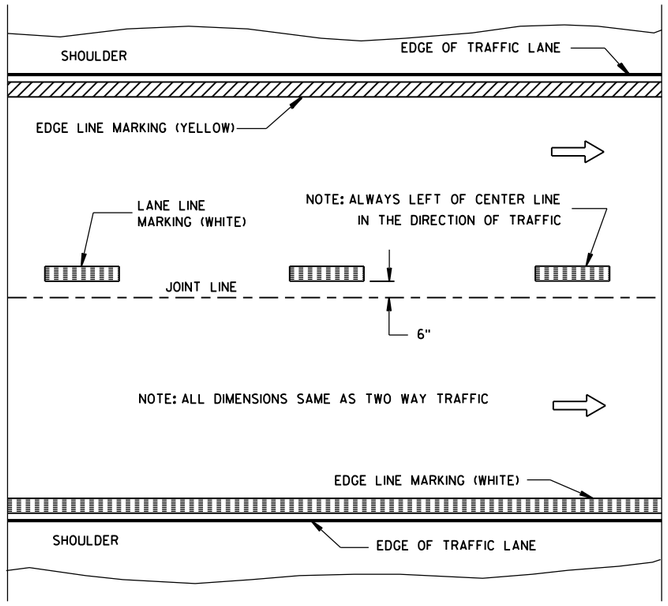
S.D.D. 15 C 4-3

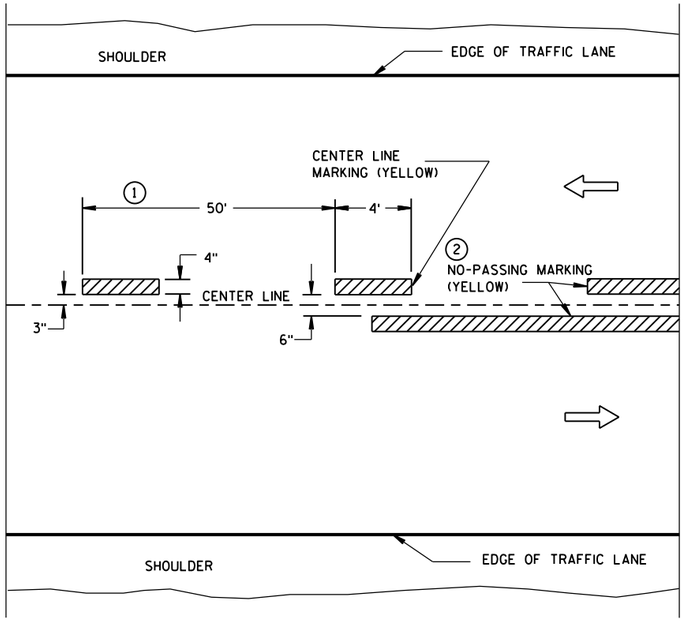


TWO WAY TRAFFIC

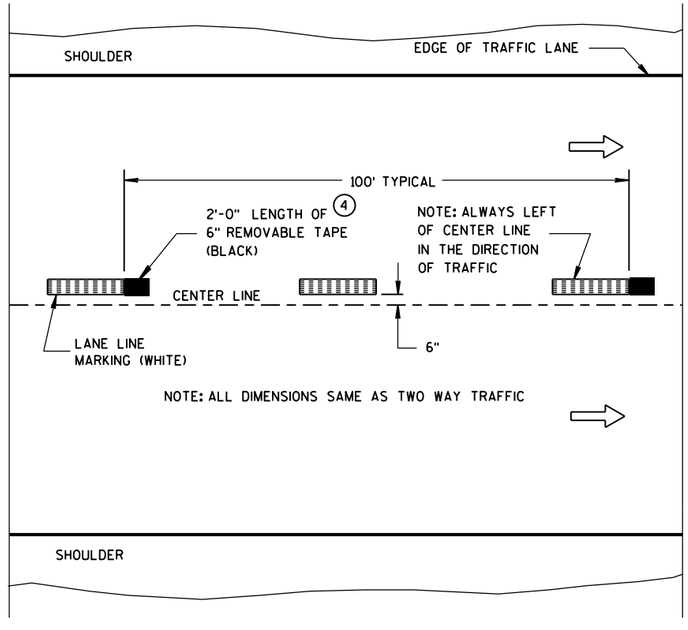


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

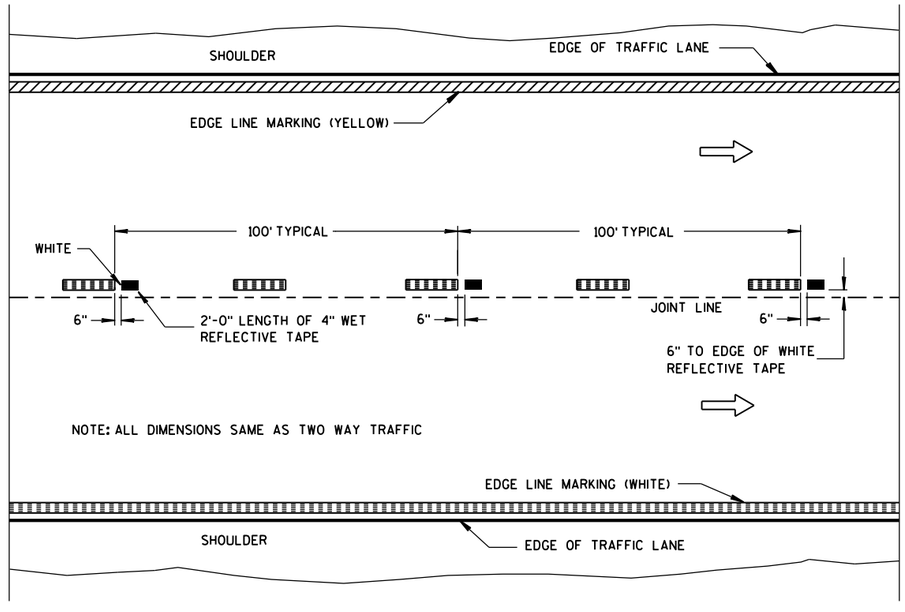
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



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

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013 DATE

/S/ Travis Feltes STATE TRAFFIC E

FHWA

6

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

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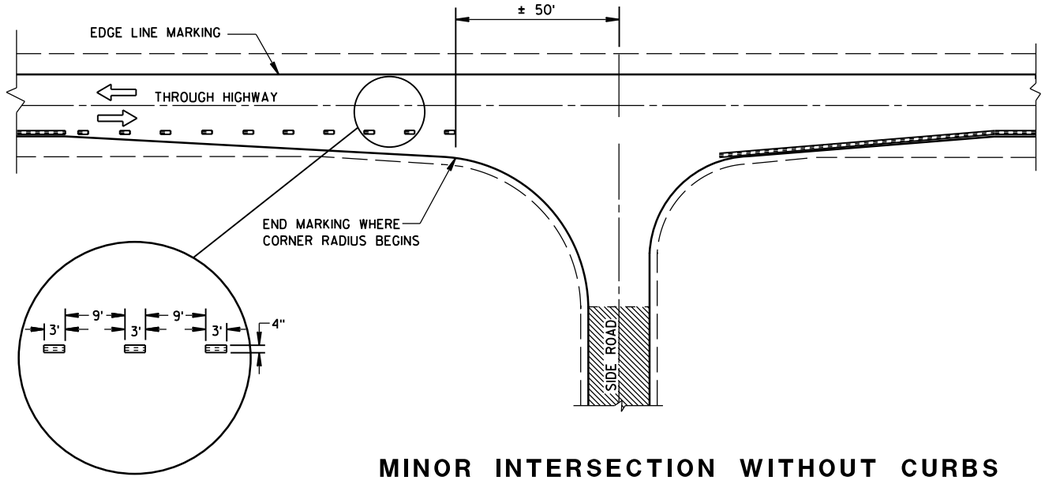
S.D.D. 15 C 8-16a



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.

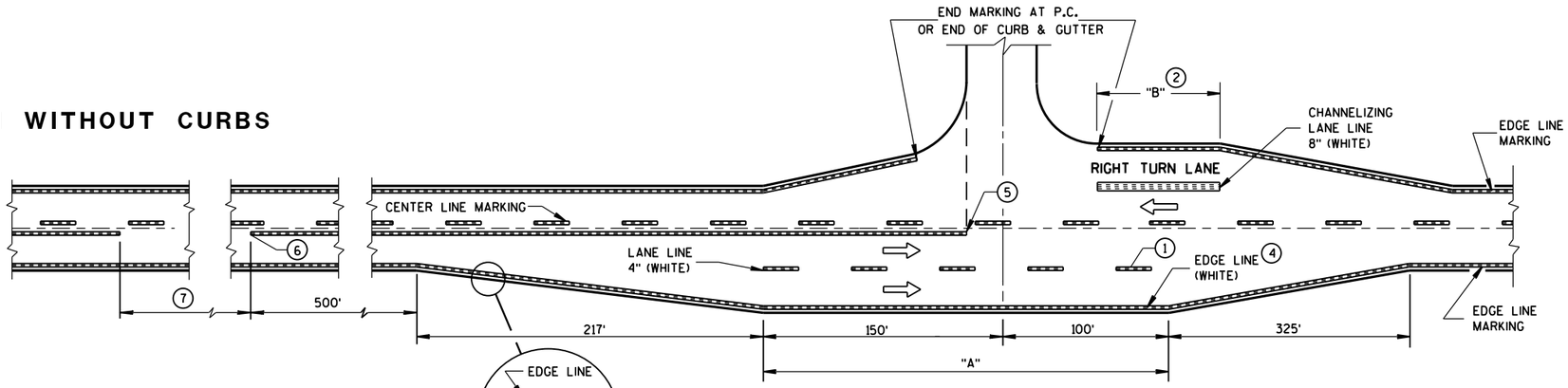
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

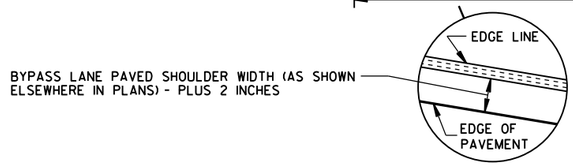
(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

(7)

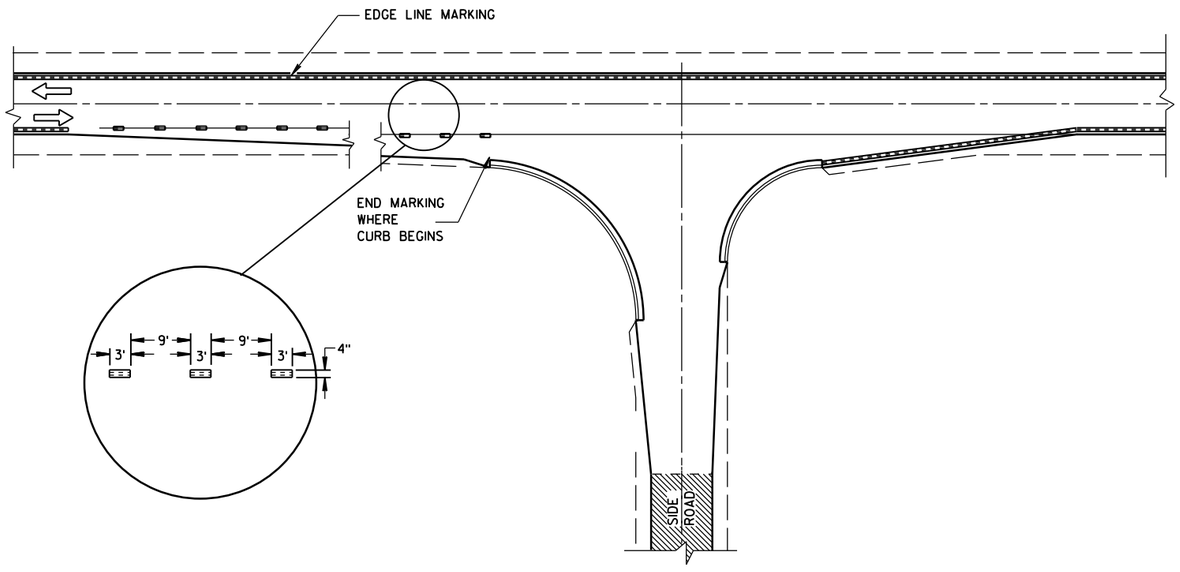
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792





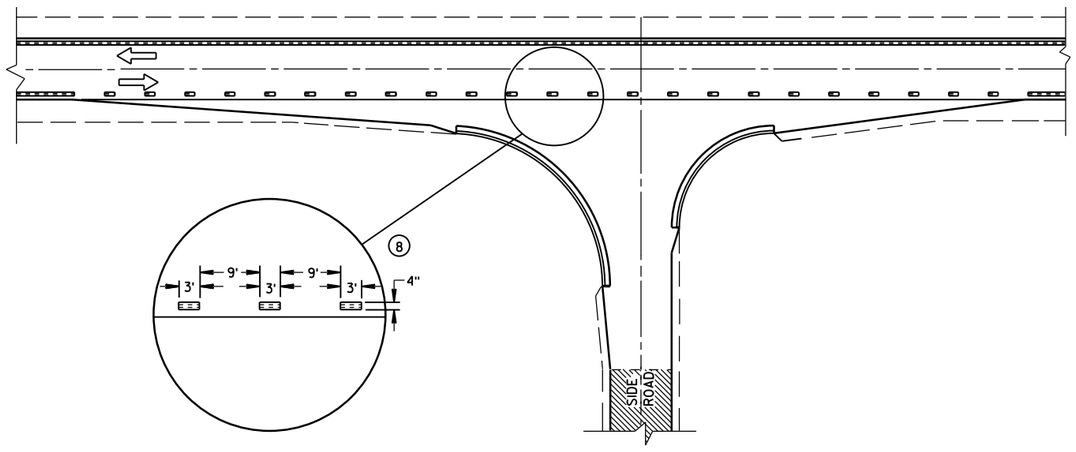
MAJOR INTERSECTIONS

(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

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

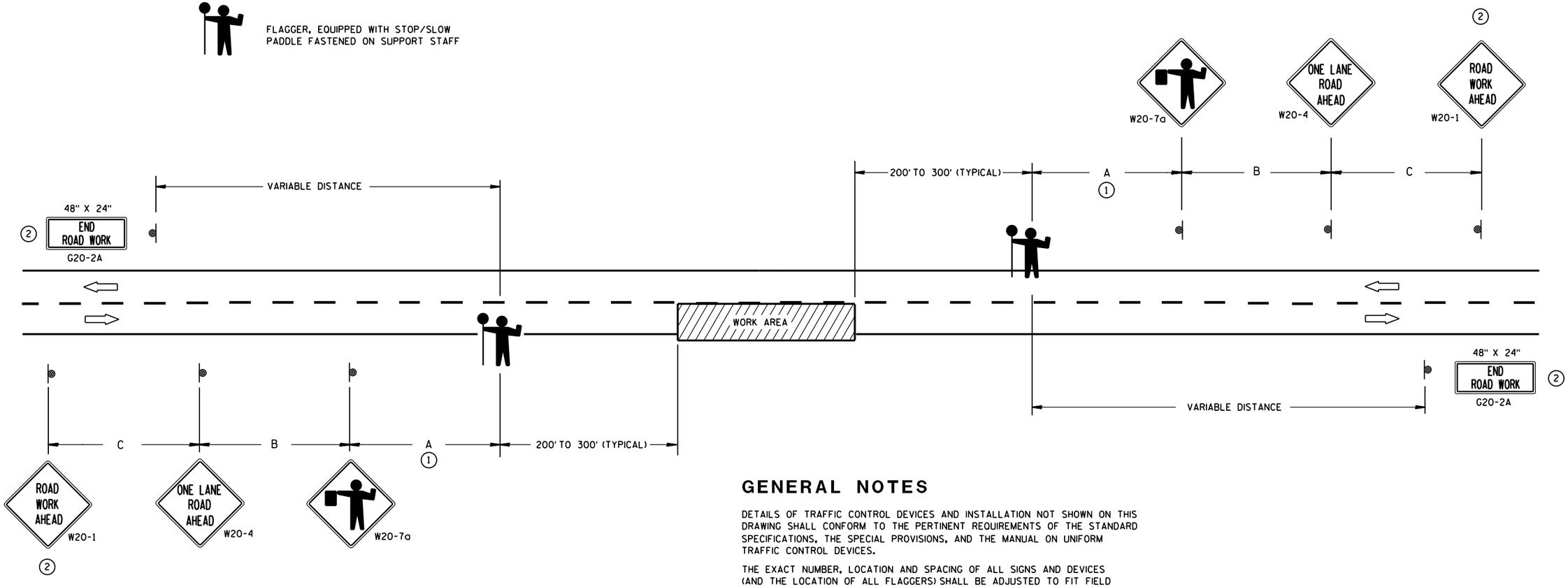
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
DESIGN
FHWA

6

S.D.D. 15 C 12-4

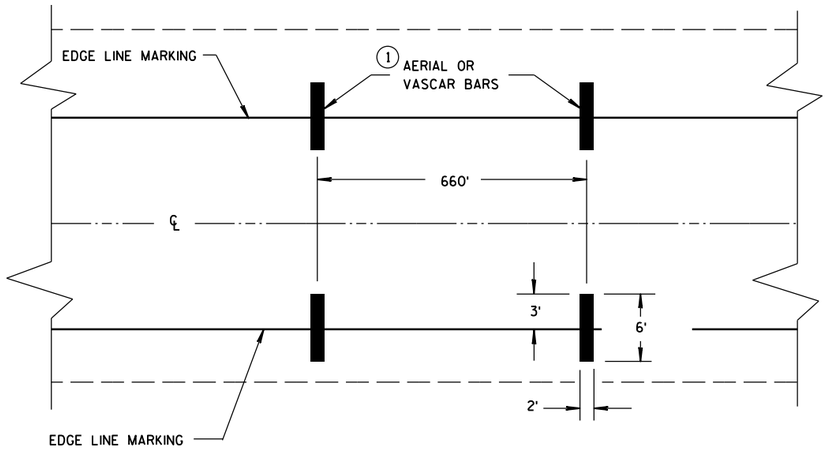
6

S.D.D. 15 C 12-4

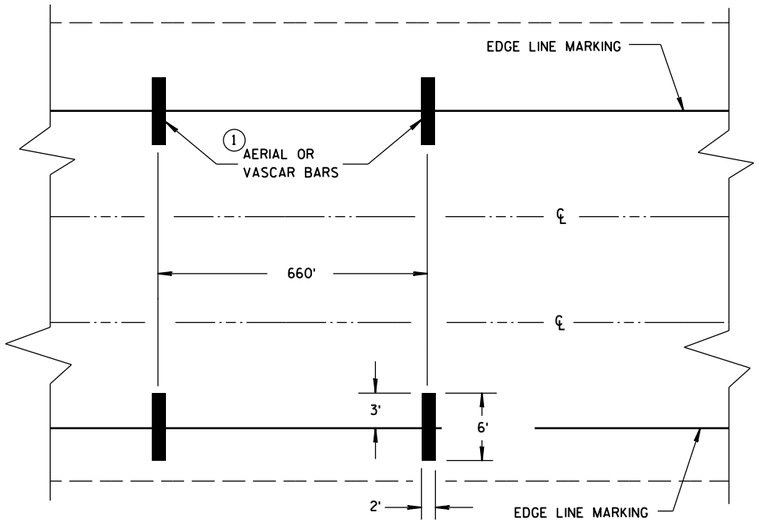
GENERAL NOTES

(1) NUMBER OF VASCAR OR AERIAL BARS SHALL BE A MINIMUM OF 2 OR A MAXIMUM OF 5 AT 660' SPACING.

A CAR CAN BE PROVIDED BY THE WISCONSIN STATE PATROL FOR TRAFFIC CONTROL.



TYPICAL FOR TWO WAY OR ONE WAY TRAFFIC



TYPICAL FOR MULTILANE TRAFFIC

SPEED ENFORCEMENT ZONE WITH AERIAL OR VASCAR BARS

6

S.D.D. 15 C 14-2

AERIAL ENFORCEMENT BARS
PAVEMENT MARKING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/18/2016 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MAR[illegible] GINEER
FHWA

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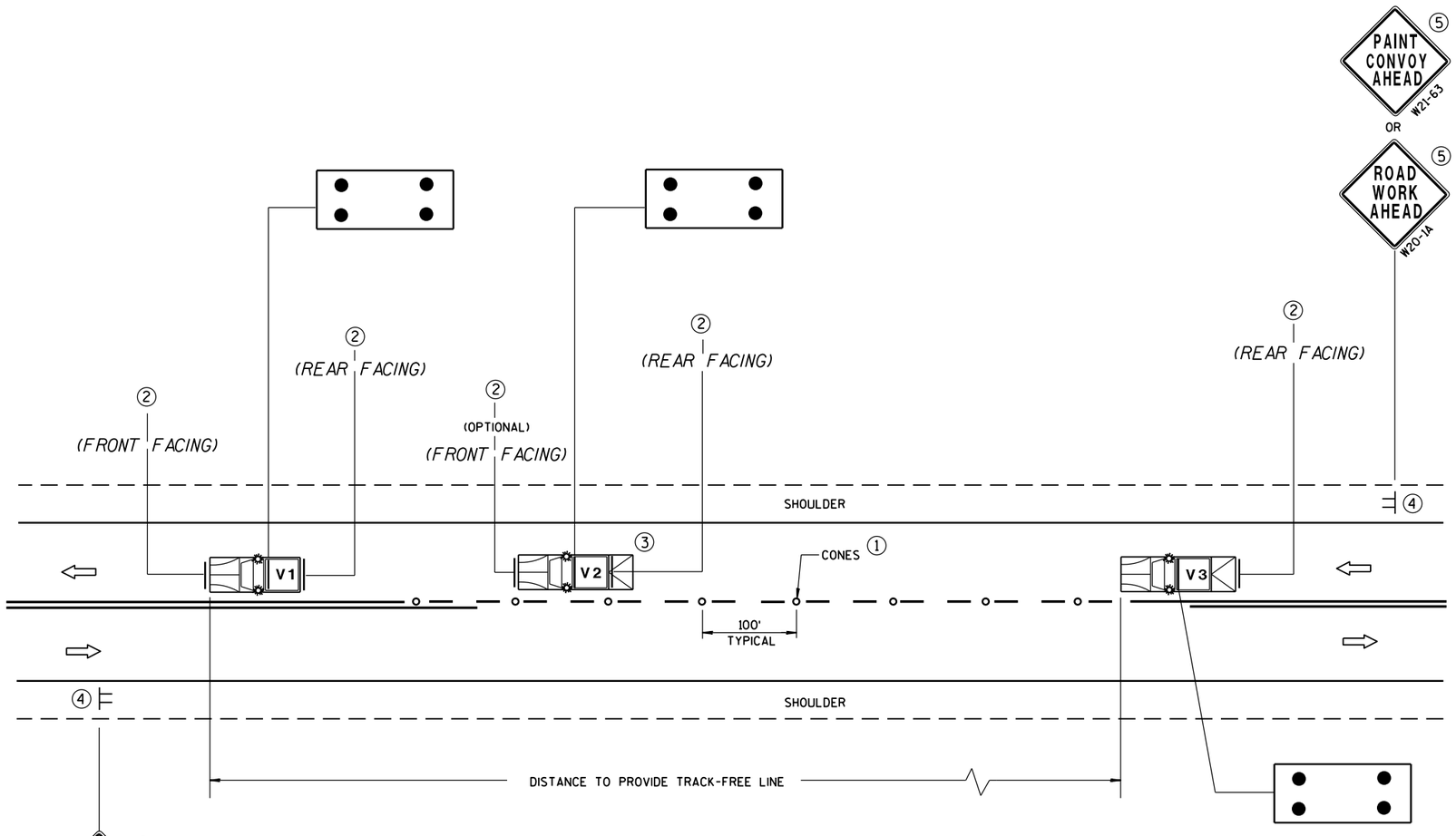
S.D.D. 15 C 14-2



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

(1) CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(5) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1	LEAD VEHICLE
V2	SHADOW VEHICLE
V3	TRAIL VEHICLE WITH TMA
TMA	TRUCK-MOUNTED ATTENUATOR
	SIGN ON TEMPORARY SUPPORT
	DIRECTION OF TRAFFIC
	CONES
	FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING OPERATION
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZON SAFETY ENGINE
FHWA

6

S.D.D. 15 C 19-4a

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.

W20-1A 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	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

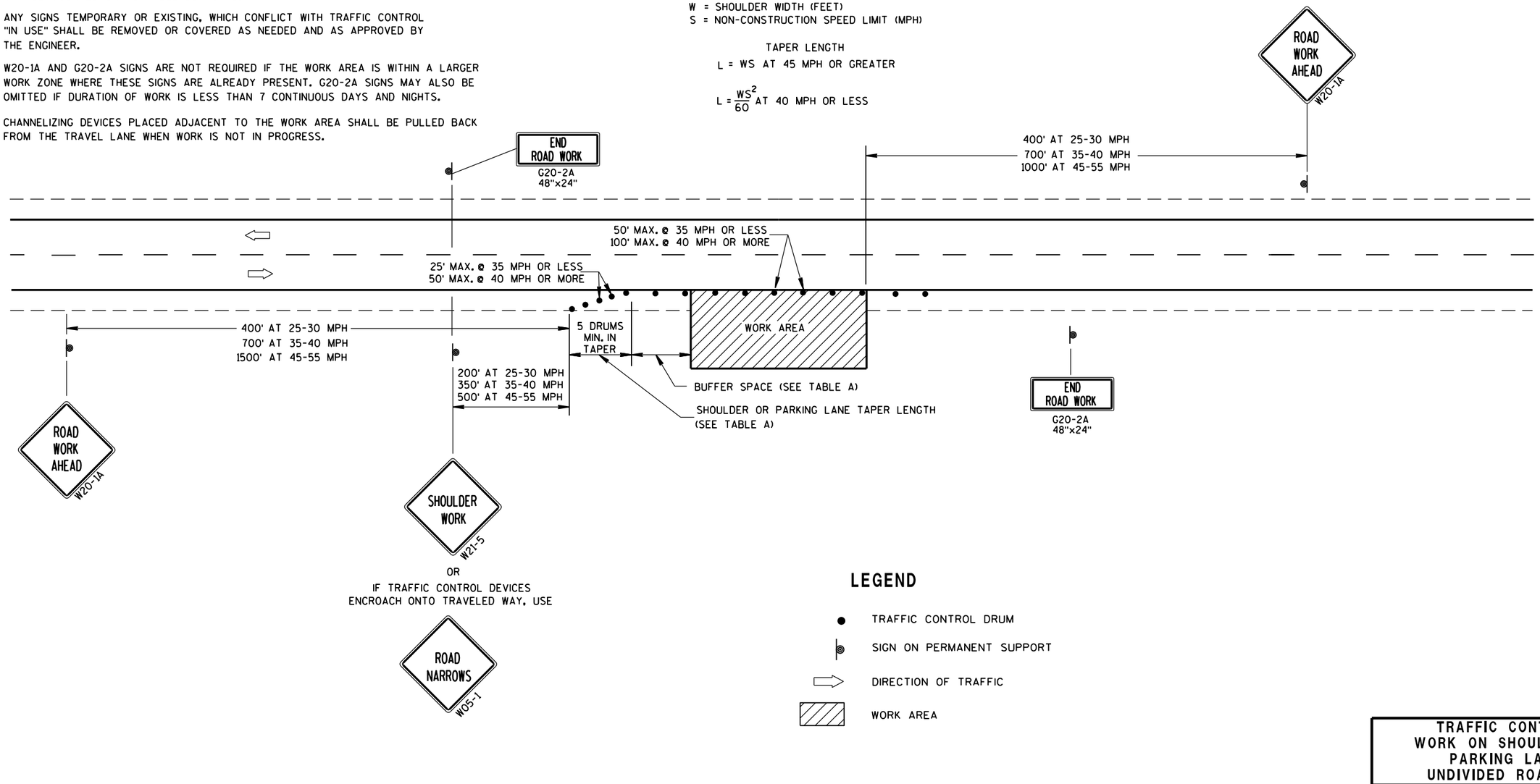
W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L = WS AT 45 MPH OR GREATER

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

SHOULDER TAPER LENGTH = $\frac{1}{3}L$



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

July 14, 2015 — DATE

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

FHWA

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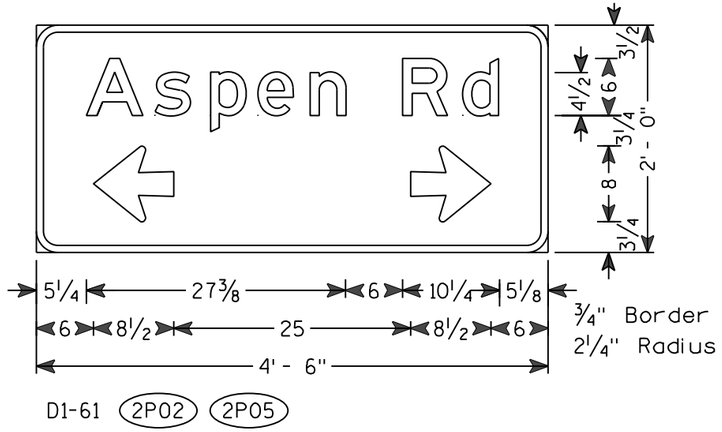
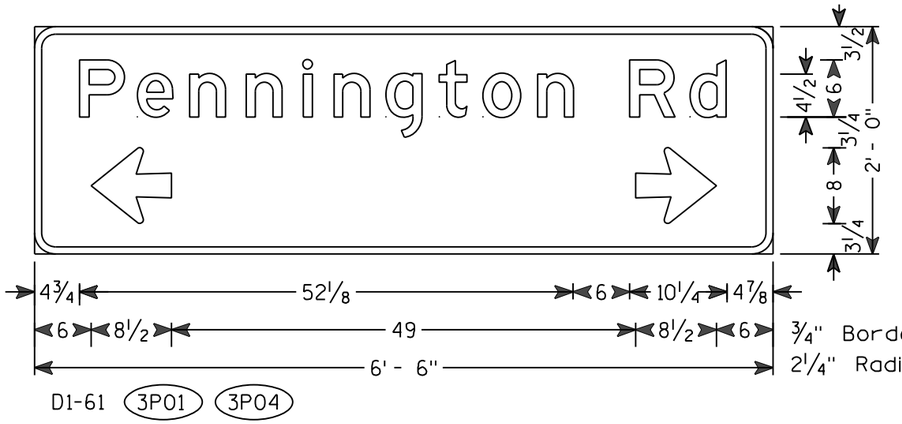
S.D.D. 15 D 28-3

NOTES

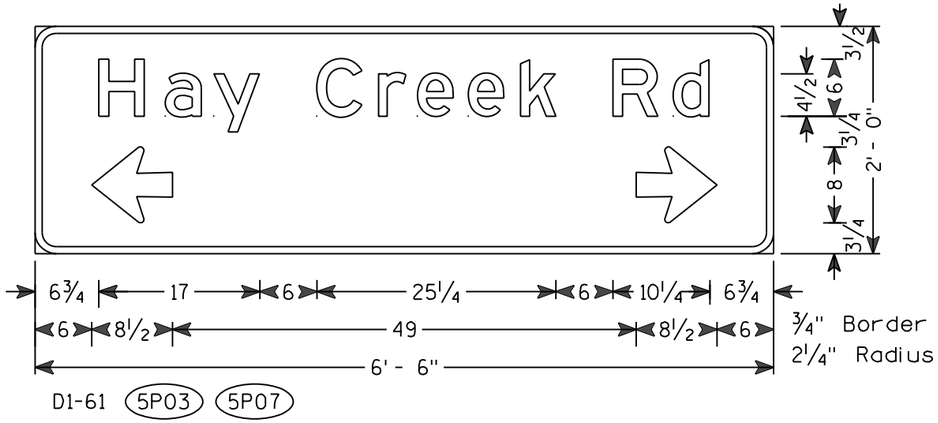
1. All Signs Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E



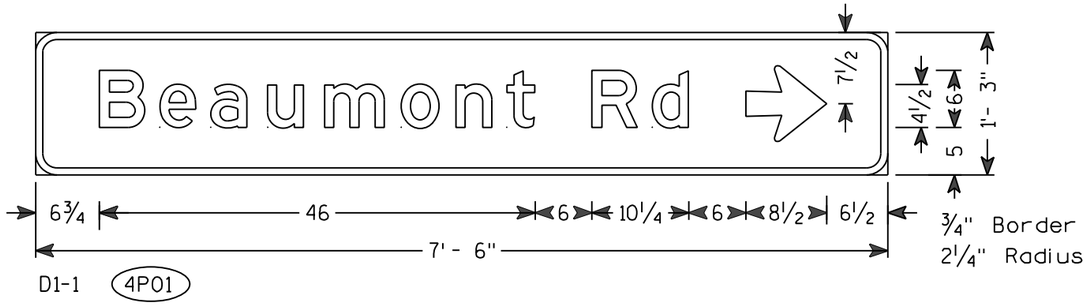
D1-61 (2P02) (2P05)



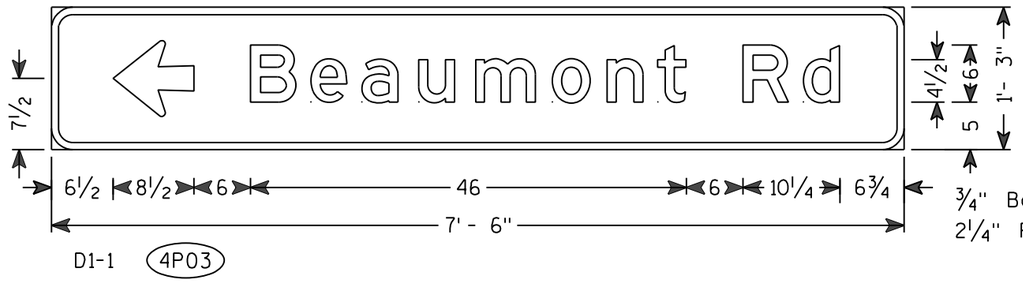
D1-61 (3P01) (3P04)



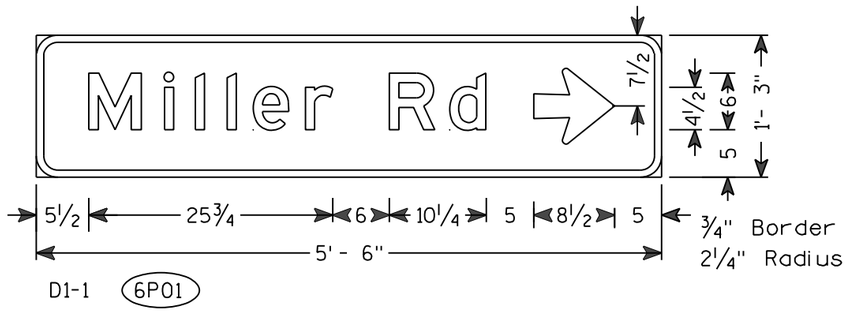
D1-61 (5P03) (5P07)



D1-1 (4P01)



D1-1 (4P03)



D1-1 (6P01)

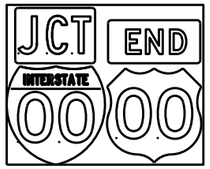
PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	PERMANENT SIGNING	SHEET NO: 69	E

7

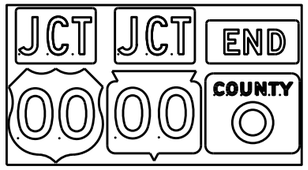
7

TYPICAL ASSEMBLIES

J1-1

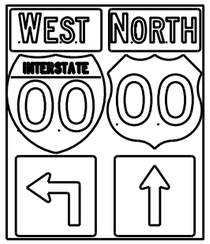


J1-2

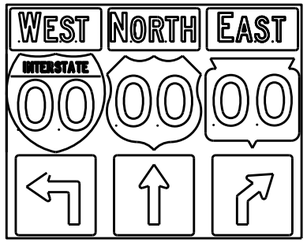


J1-3

J2-1



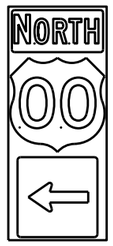
J2-2



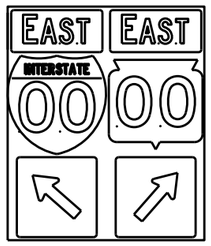
J2-3

JV

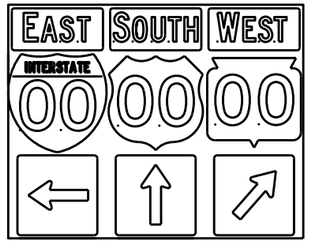
(Typical Vertical J-Assembly
See Note 10 and 11)



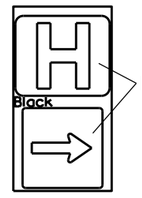
J3-1



J3-2

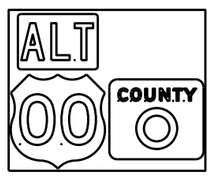


J3-3

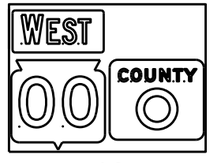


JH-1

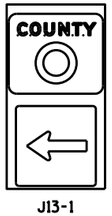
J4-1



J4-2



J4-2



J13-1

J12-1

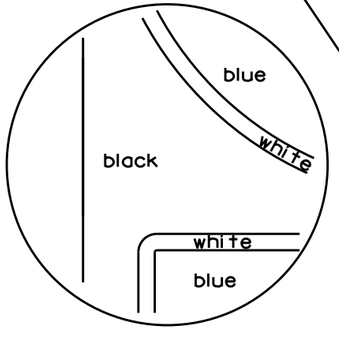
J32-1

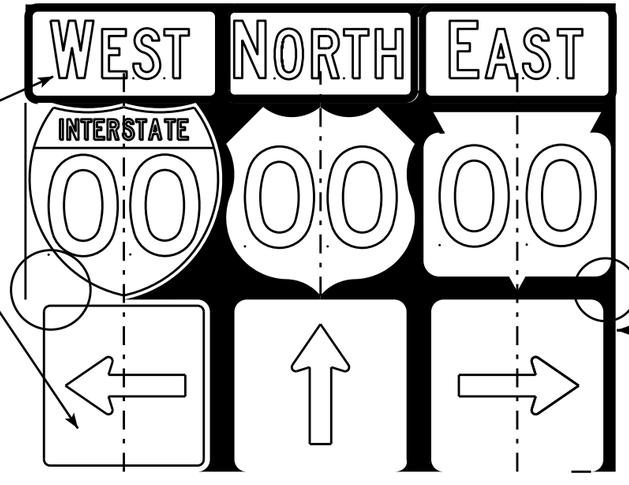
J33-1

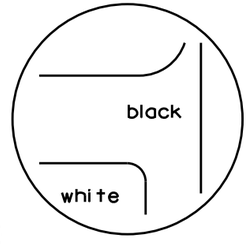
J23-1

J22-1

[blue background with interstate]







[black background]

NOTES

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

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

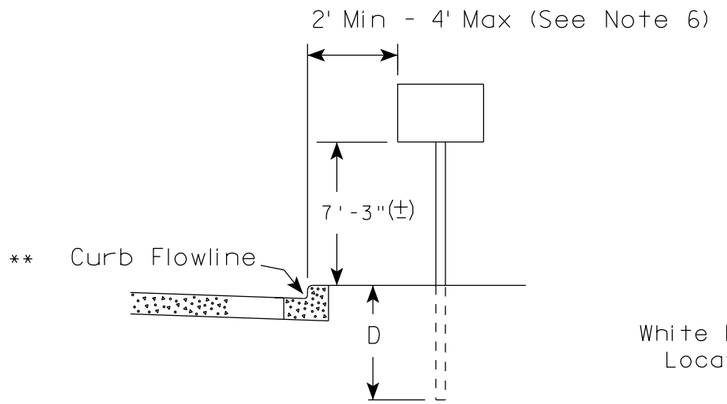
APPROVED Matthew R Rauch
for State Traffic Engineer

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

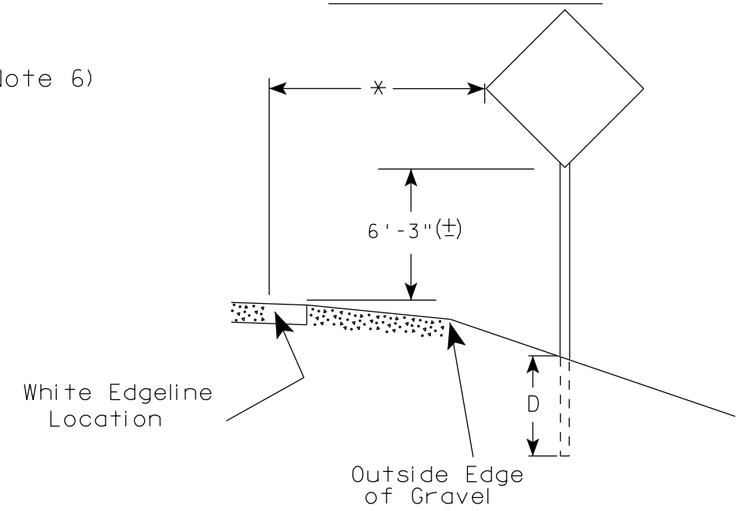
PROJECT NO: | SHEET NO: E

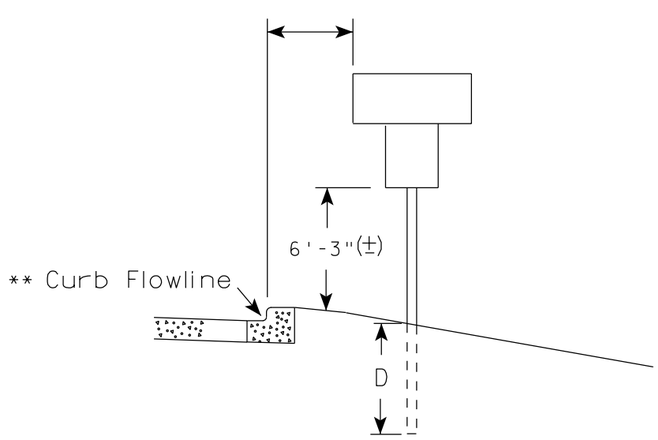
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :
WISDOT/CADDS SHEET 42

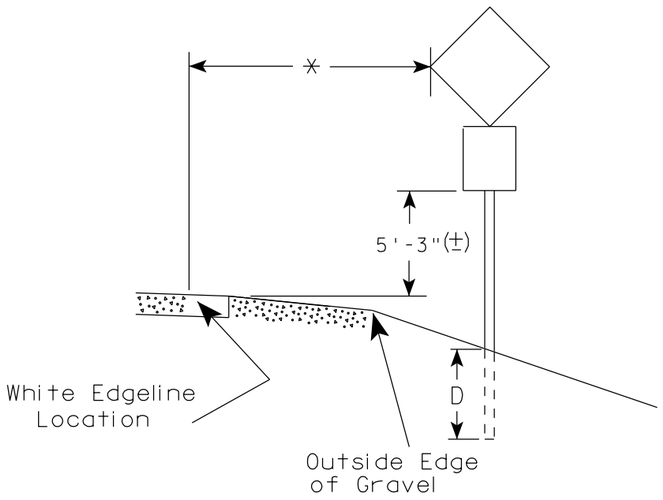
URBAN AREA



RURAL AREA (See Note 2)







GENERAL NOTES

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

POST EMBEDMENT DEPTH

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

** 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.

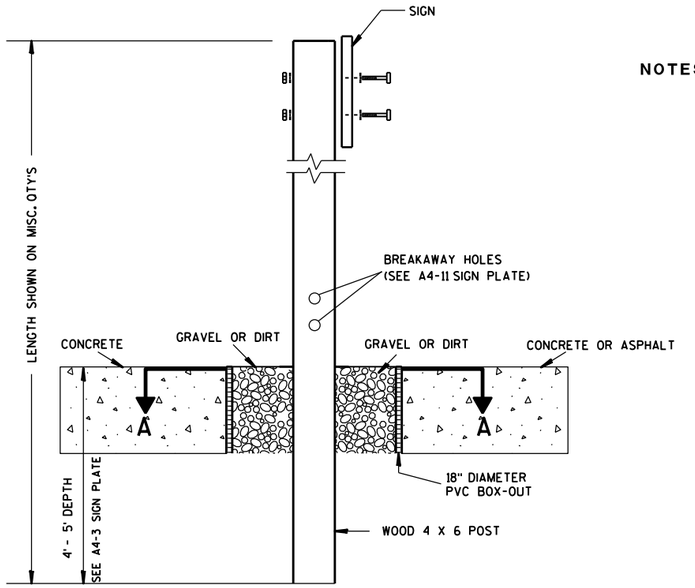
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

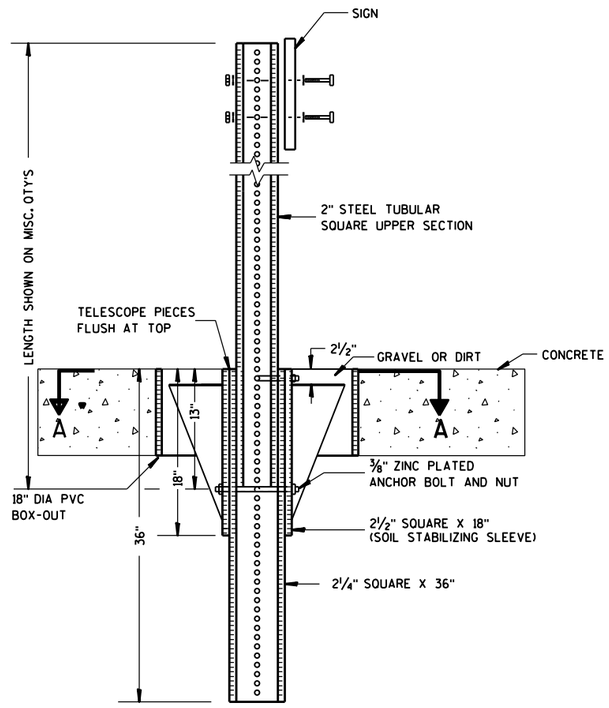
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

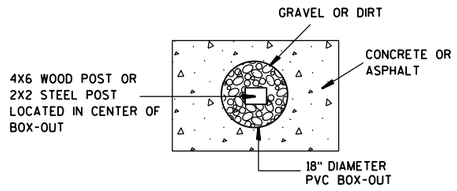
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

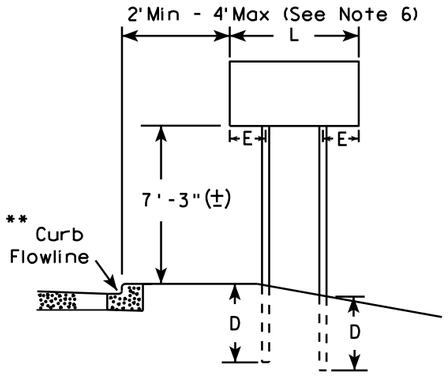
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

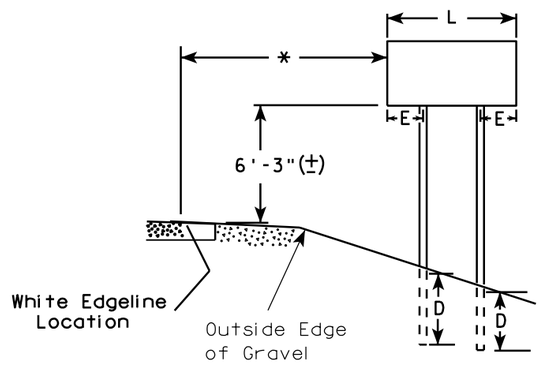
DATE 1/27/14 PLATE NO. A4-3B.1

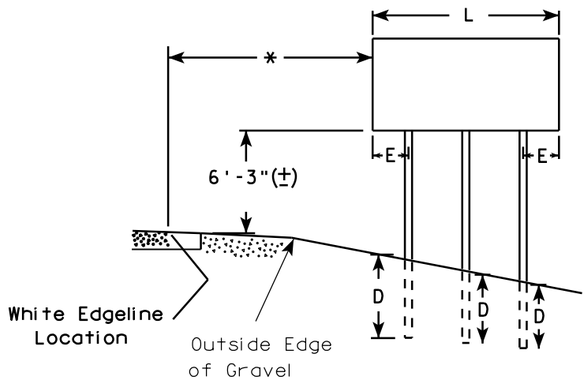
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

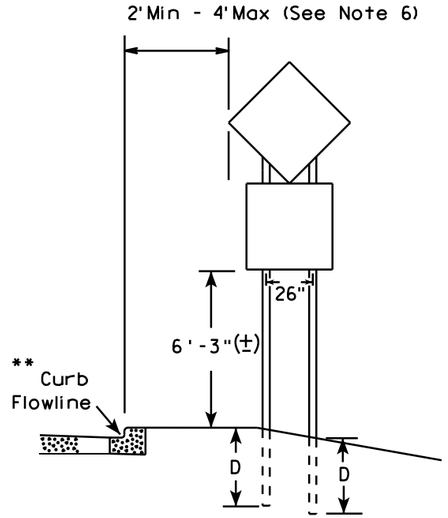
URBAN AREA



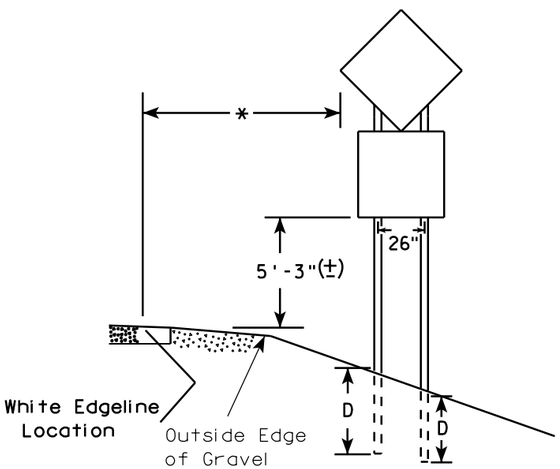
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



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 (A2-1S) 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 signs 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), In Road Object Markers (W5-54) & End of Road Markers (W5-56) 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 and less than 20 S.F. 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

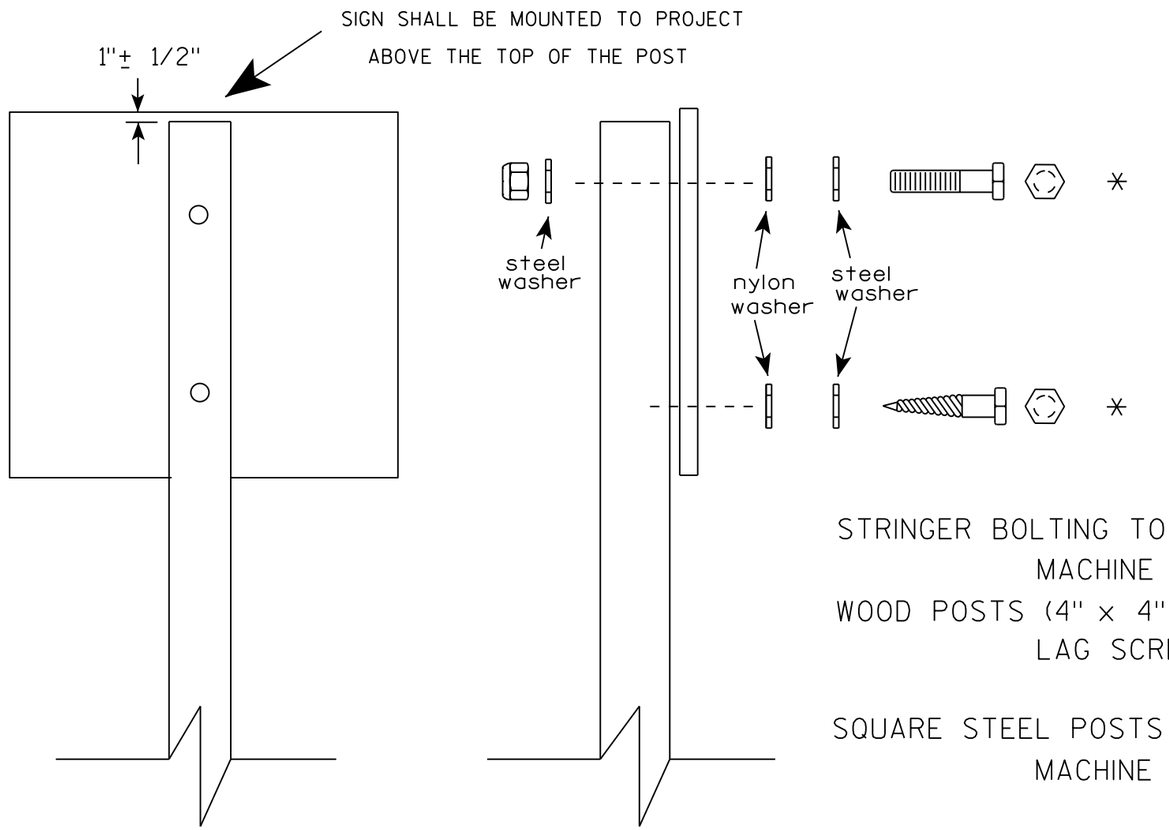
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4 14

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A44.DGN PLOT DATE : 23-JUL-2015 15:23 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 107.021305:1.000000 WISDOT/CADDS SHEET 42



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

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

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

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts
WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)
SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

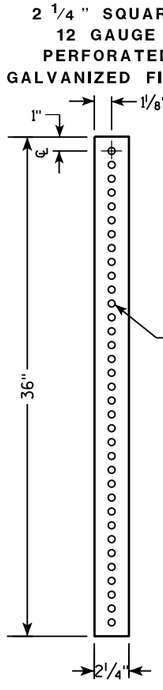
APPROVED Matthew R Rauch
For State Traffic Engineer

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

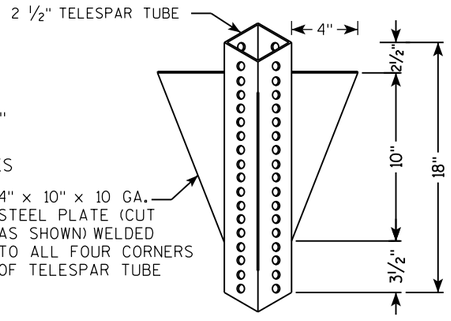
PROJECT NO: SHEET NO: E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

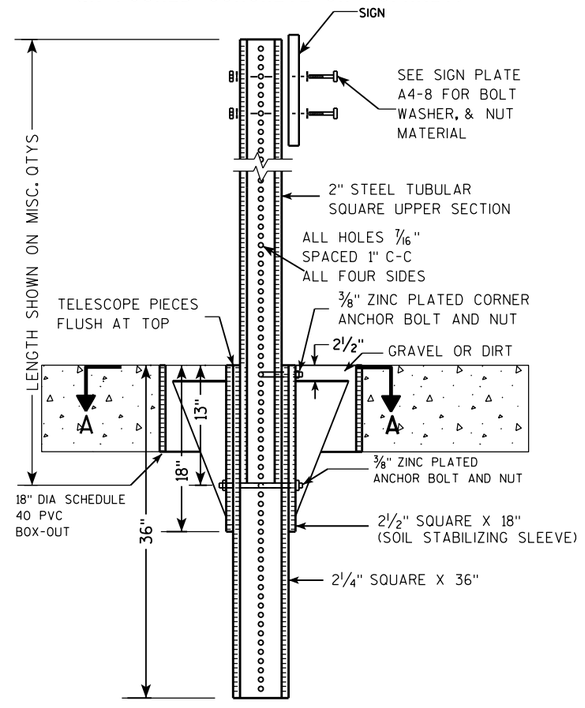
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



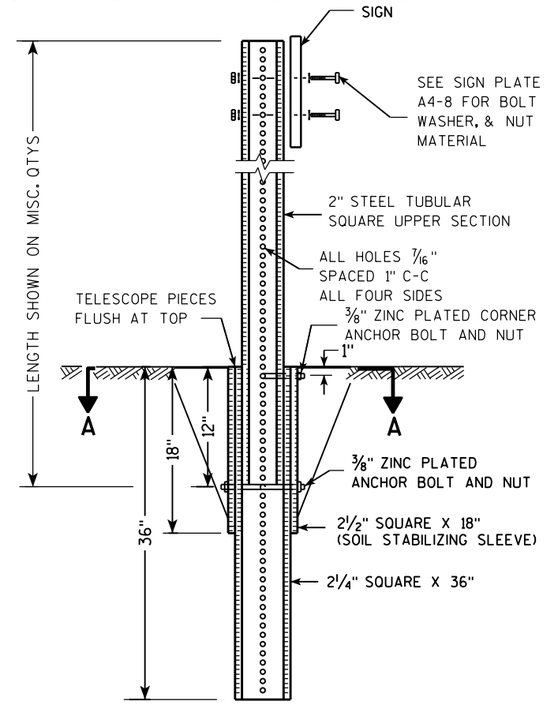
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

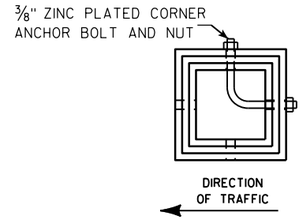


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

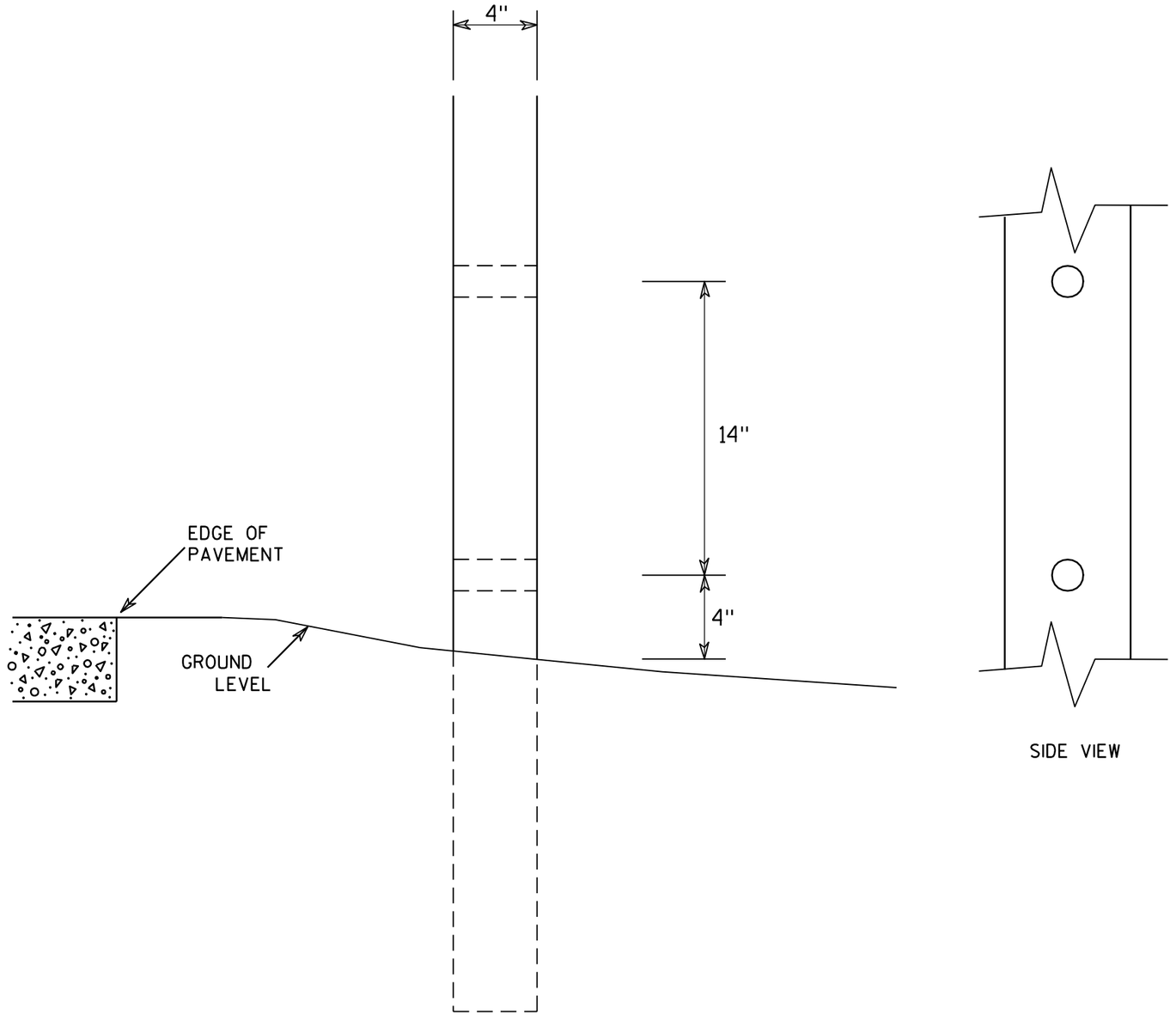
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 75 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

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.

7

7

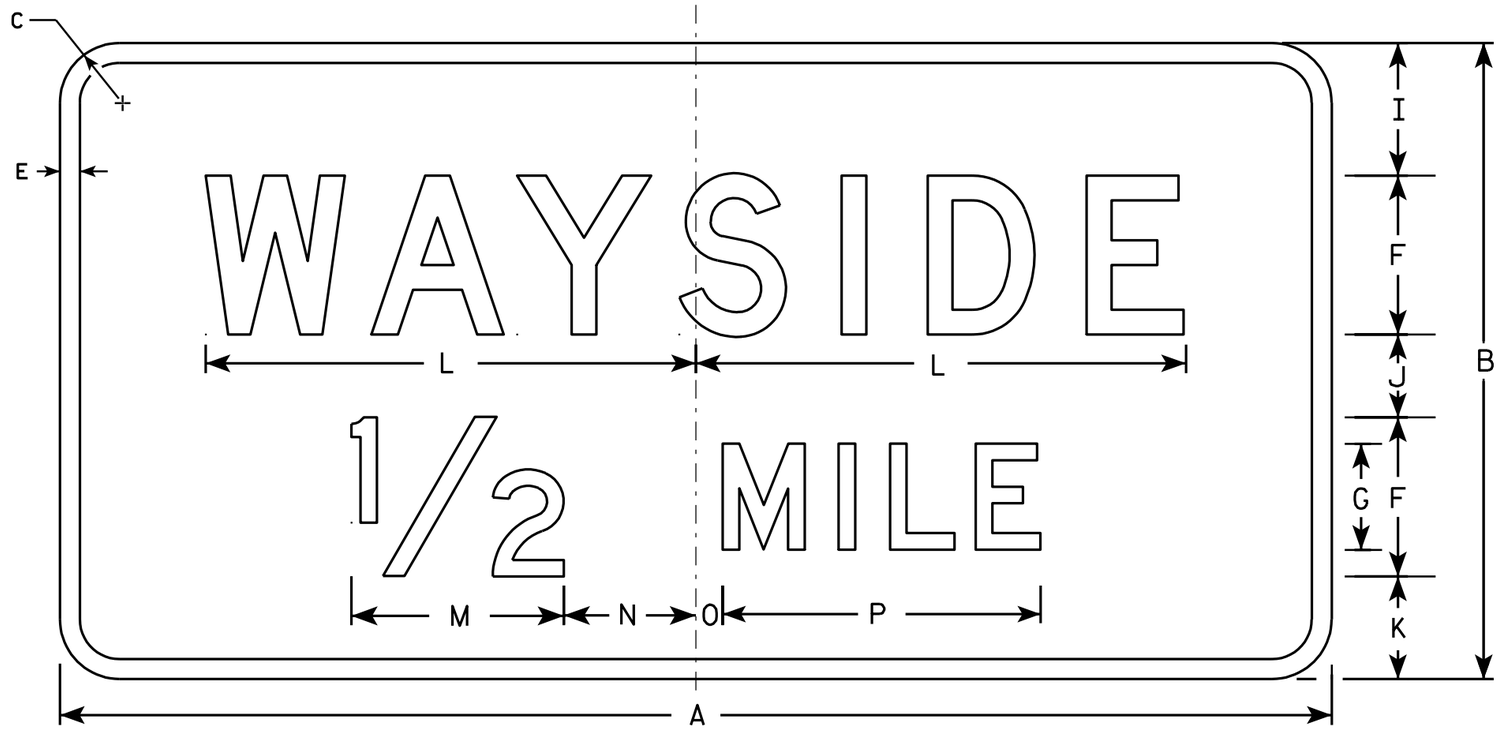
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 76	E



D5-61

NOTES

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

Metric equivalent for this sign is:

SIZE	
1	
2	1200 mm X 600 mm
3	
4	1950 mm X 1050 mm
5	

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		
1																												
2	48	24	2 1/4		3/4	6	4	6	5	3 1/8	3 7/8	18 1/2	8	5	1	12											8.0	0.72
3																												
4	78	42	3		1	10	7	10 1/2	8 3/4	5 3/4	7	30 1/8	14	8 3/4	1 3/4	21											22.8	2.05
5																												

STANDARD SIGN
D5-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

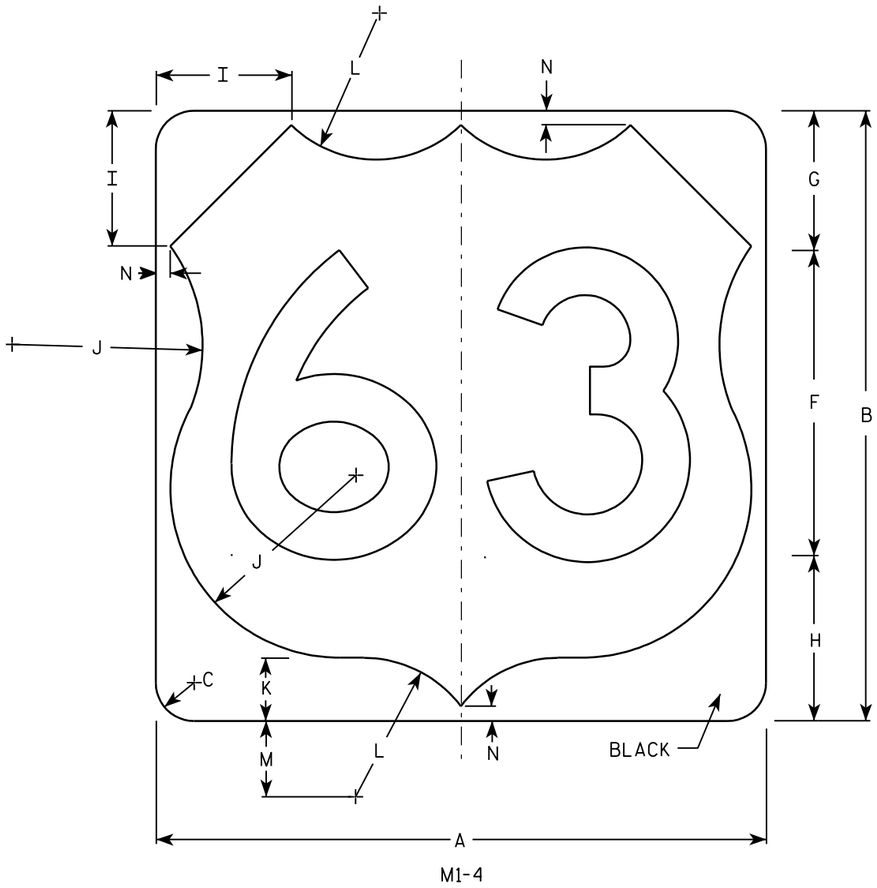
DATE 1/09/02 PLATE NO. D5-61.9

STATE PROJECT NUMBER:

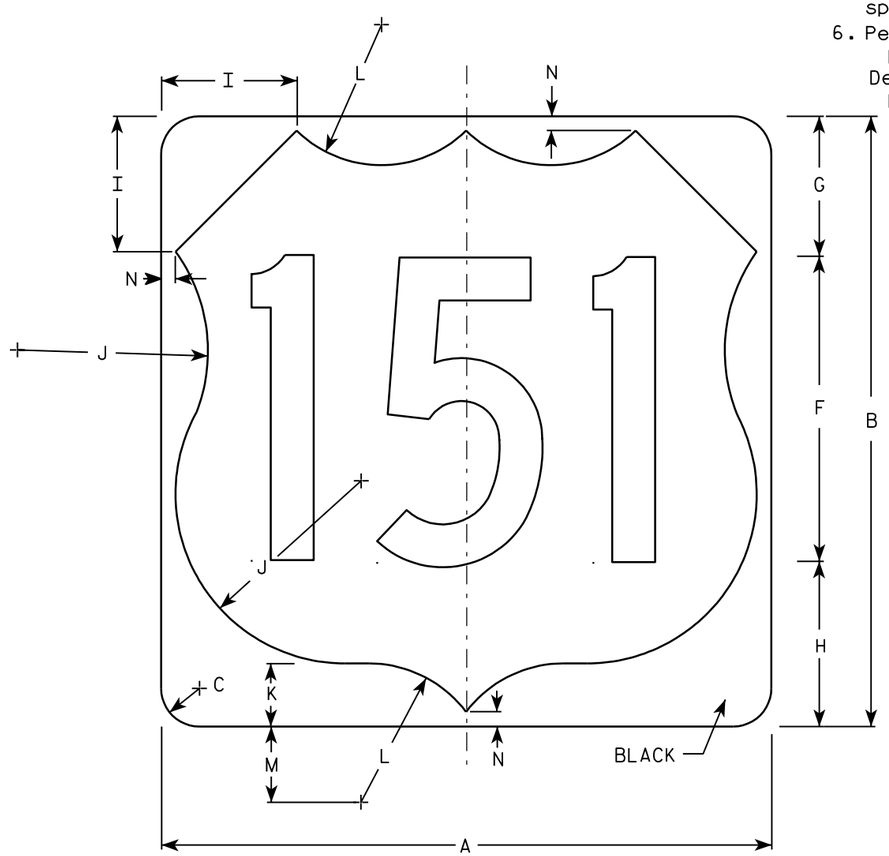
SHEET NO: 77 E

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and adjust spacing as per Plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary signs
   Background - Reflective



M1-4



M1-4

7

7

Metric equivalent for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

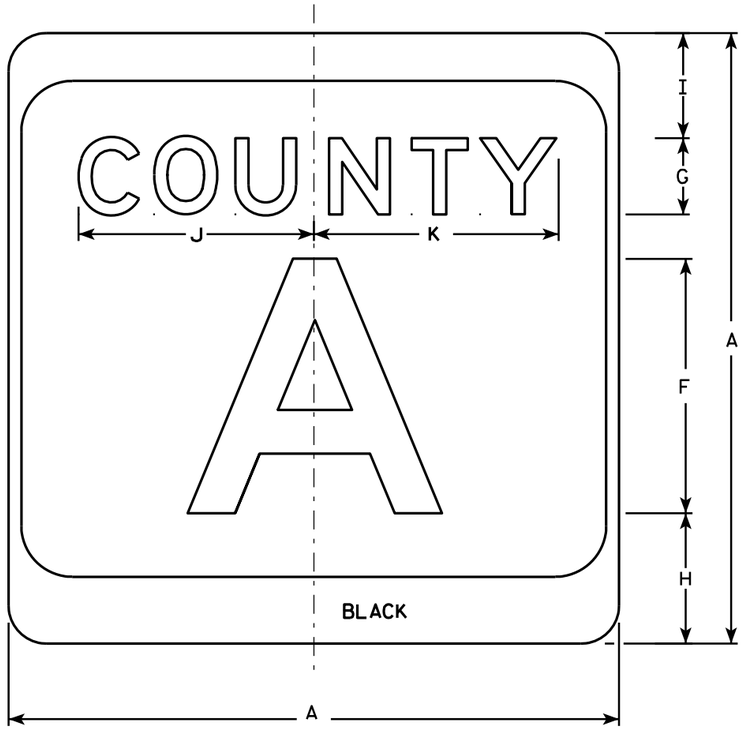
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

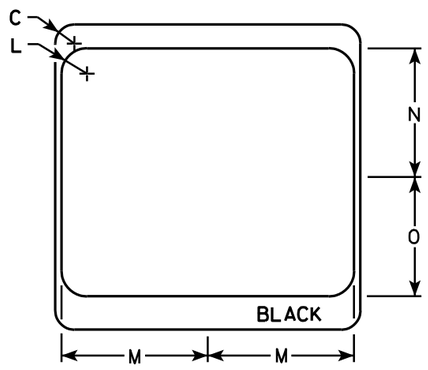
APPROVED Matthew R Rauch
for State Traffic Engineer

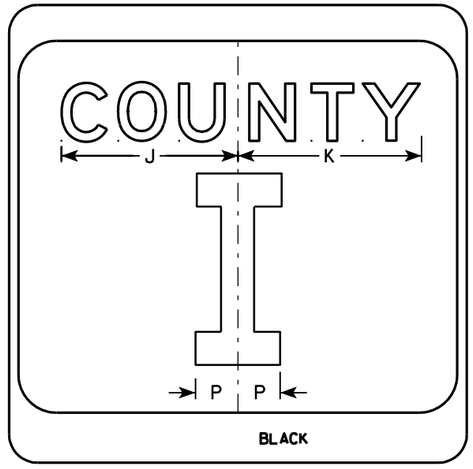
DATE 08/25/05 PLATE NO. M1-4.9

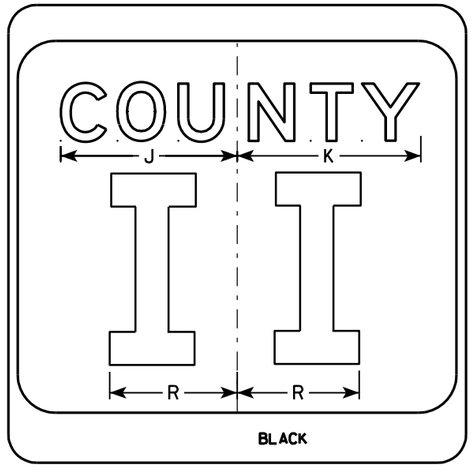
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 78	E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

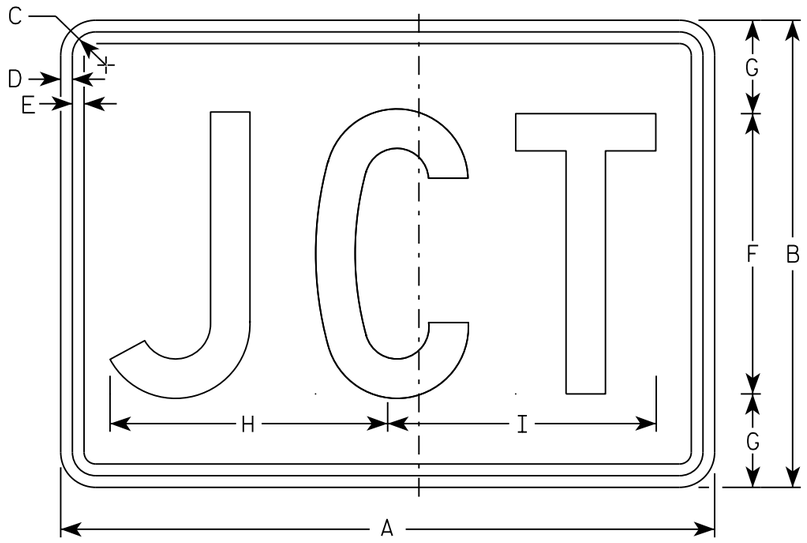
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

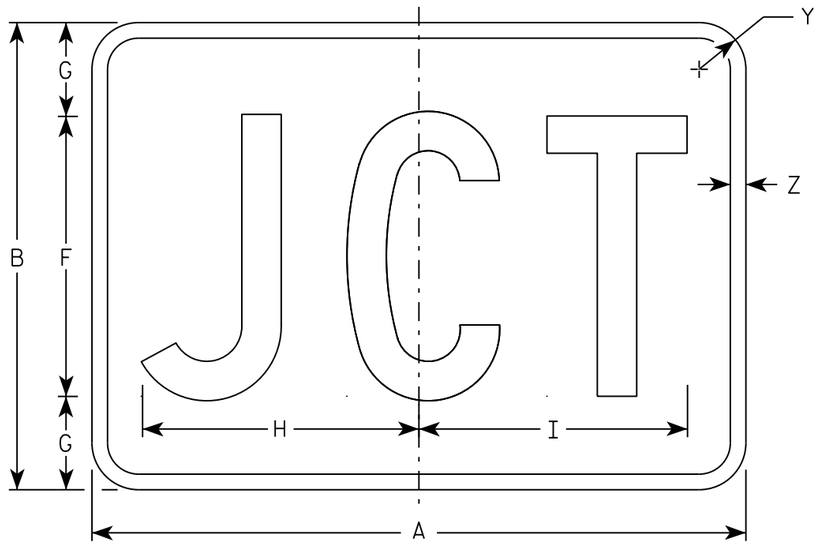
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 79 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\M15A.DGN PLOT DATE : 29-SEP-2011 11:25 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.959043:1.000000
WISDOT/CADDS SHEET 42



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

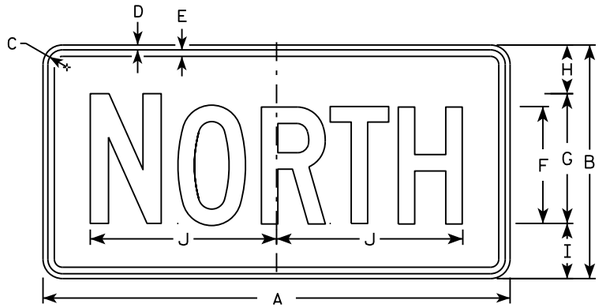
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

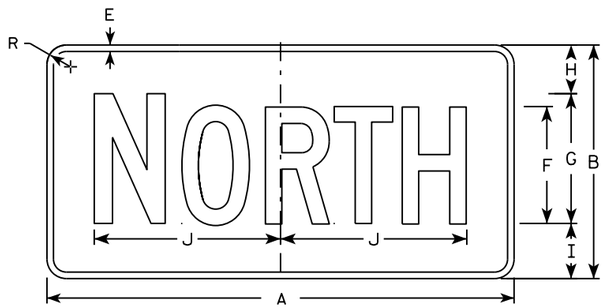
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 80 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



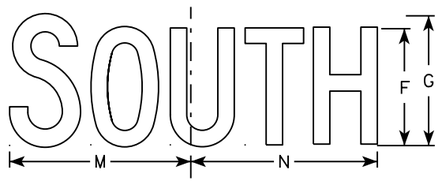
M3-1
MM3-1
MP3-1



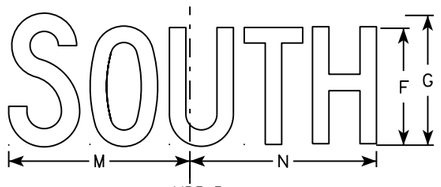
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

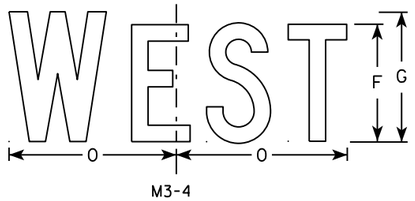
MB3-2
MK3-2
MN3-2



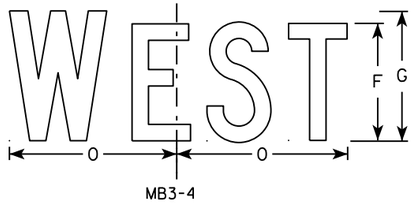
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

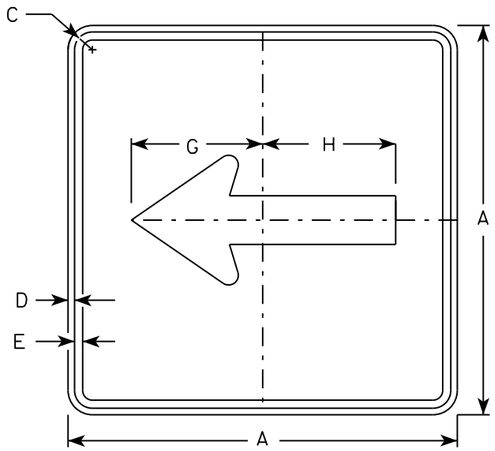
STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

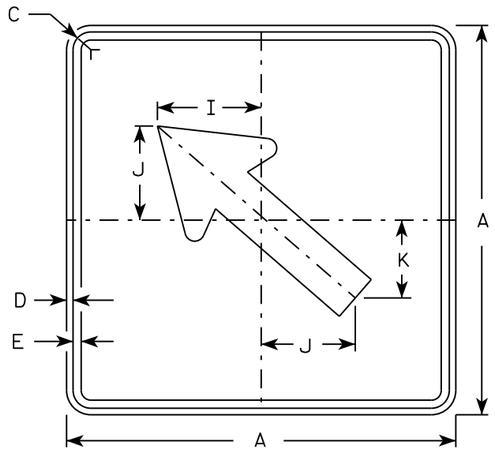
APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

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



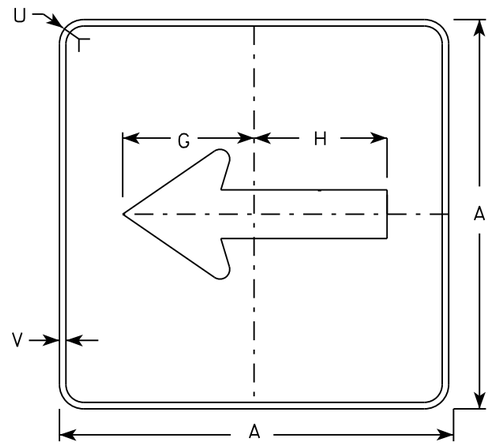
M6-1
MM6-1
MO6-1
MP6-1



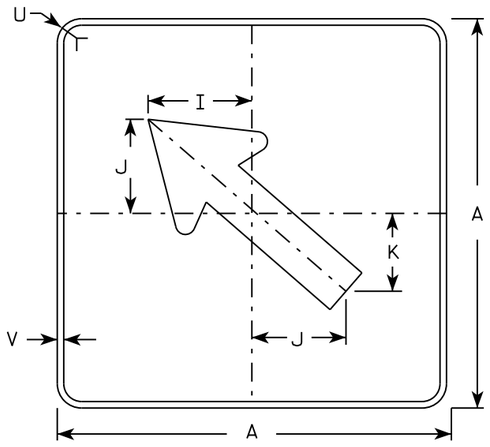
M6-2
MM6-2
MO6-2
MP6-2

NOTES

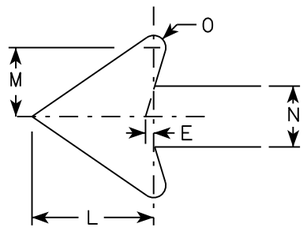
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

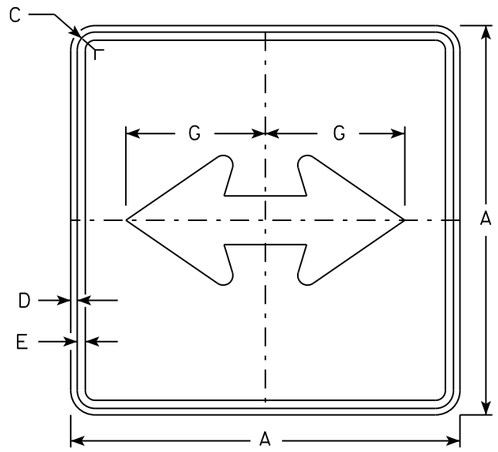
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

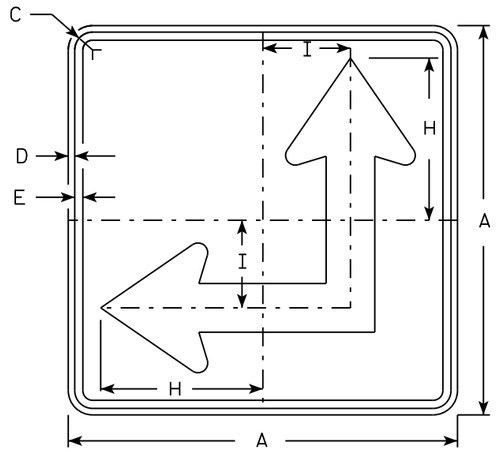
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 82 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



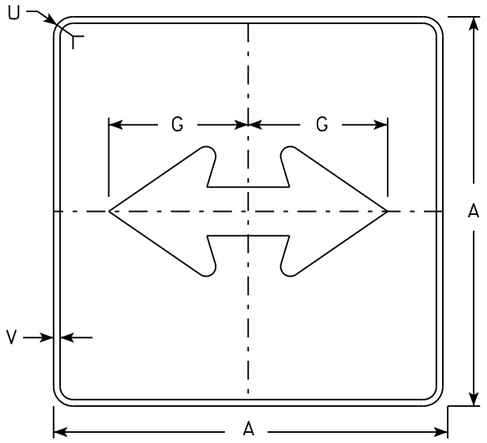
M6-4
MM6-4
MO6-4
MP6-4



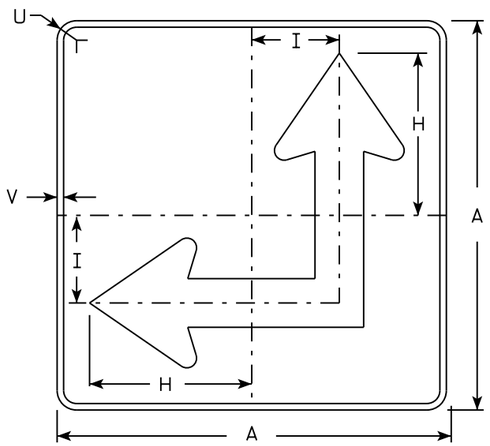
M6-6
MM6-6
MO6-6
MP6-6

NOTES

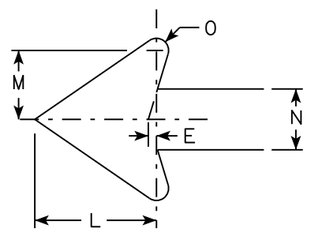
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

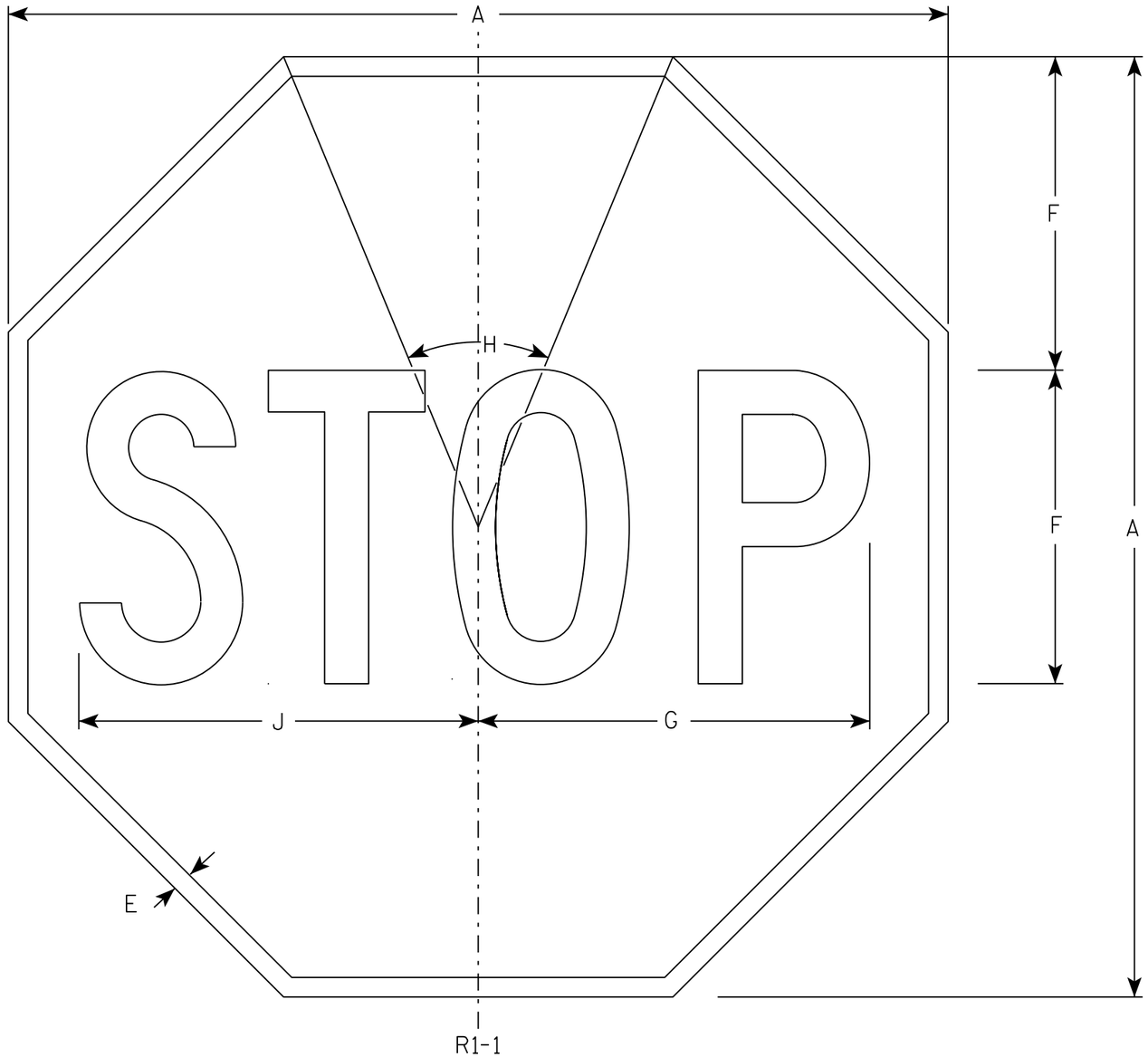
STANDARD SIGN
M6-4 & M6-6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 83 M6-4.10

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



R1-1

NOTES

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

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

STANDARD SIGN
R1-1

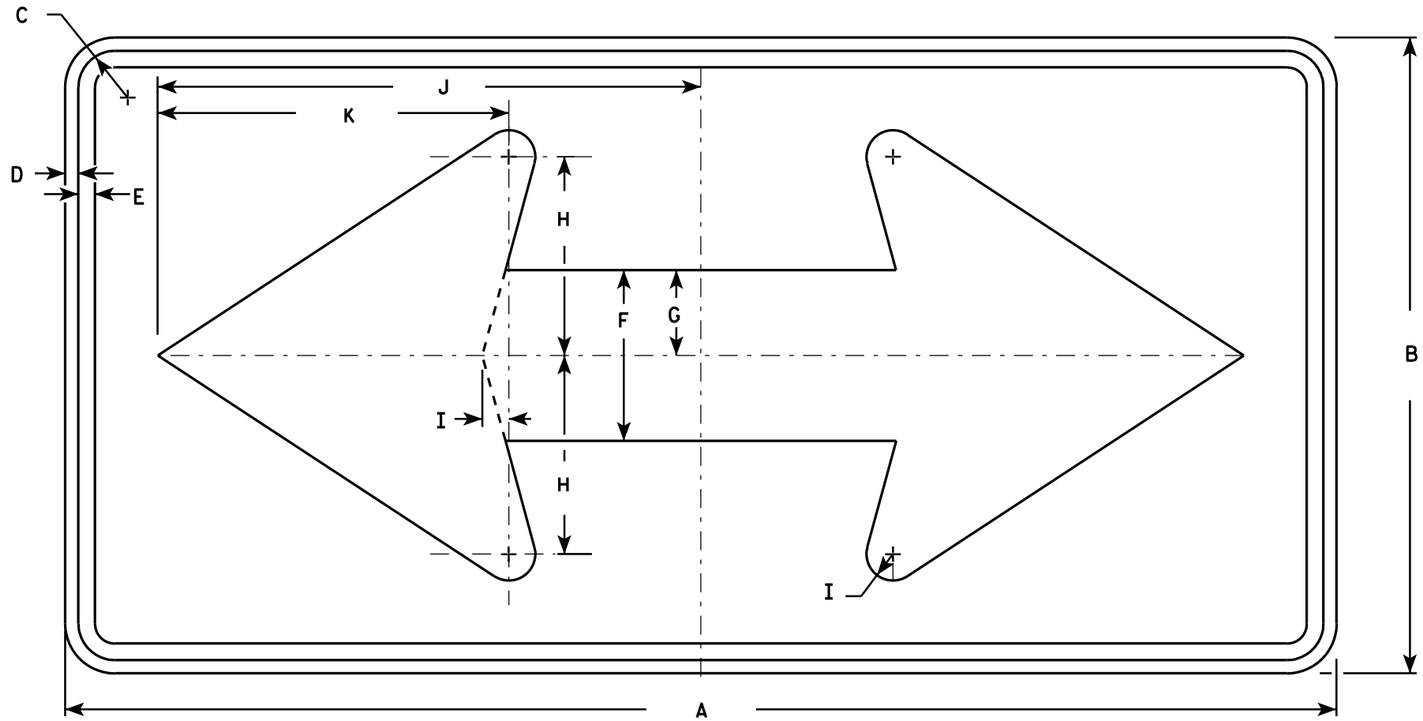
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE 84 R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R11.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.378143:1.000000



W1-7

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

STANDARD SIGN
W1-7

WISCONSIN DEPT OF TRANSPORTATION

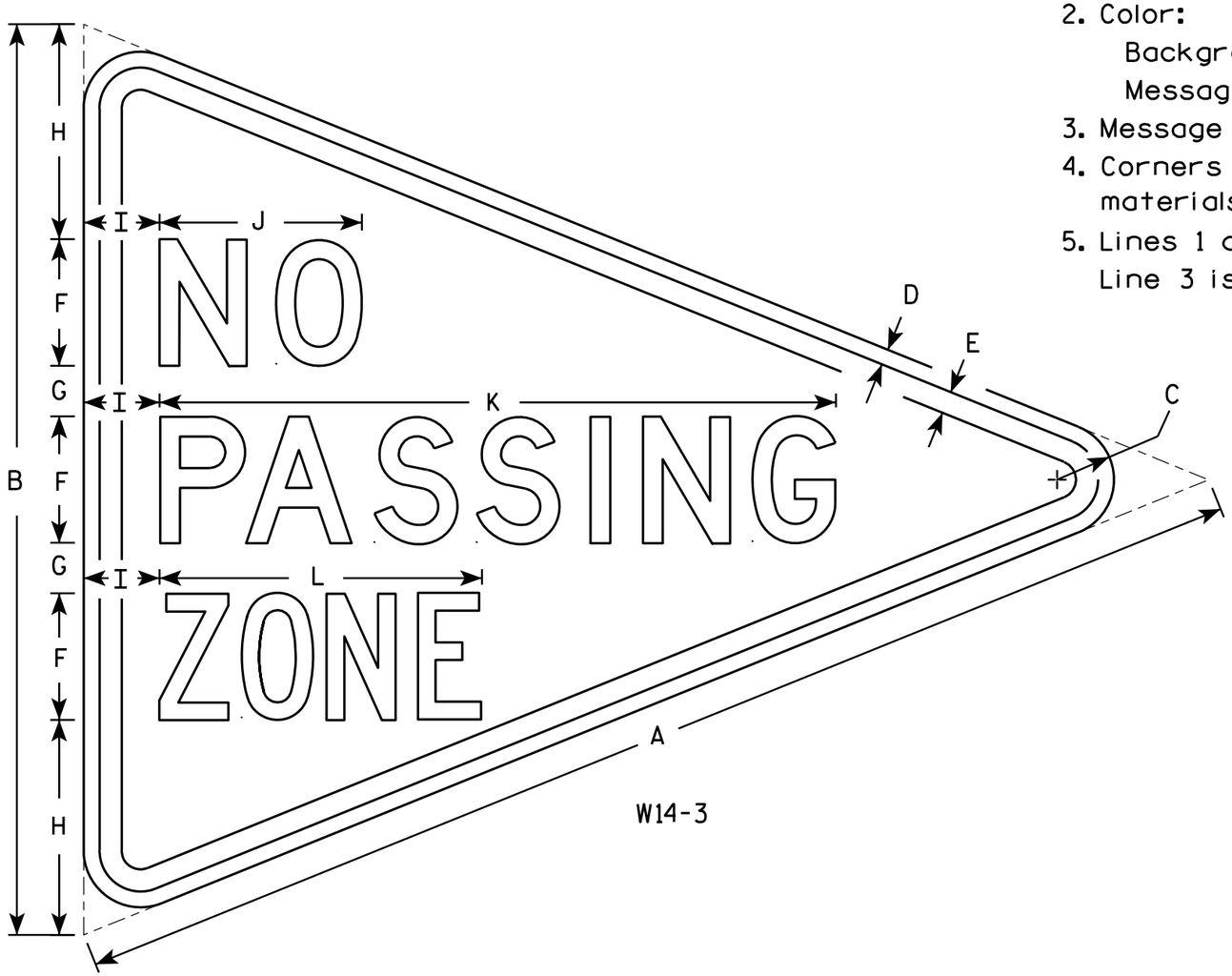
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 85 | 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. Message Series - See note 5
4. Corners and borders shall be rounded on all base materials for this sign.
5. Lines 1 and 2 are Series D.
   Line 3 is series C.



W14-3

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	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

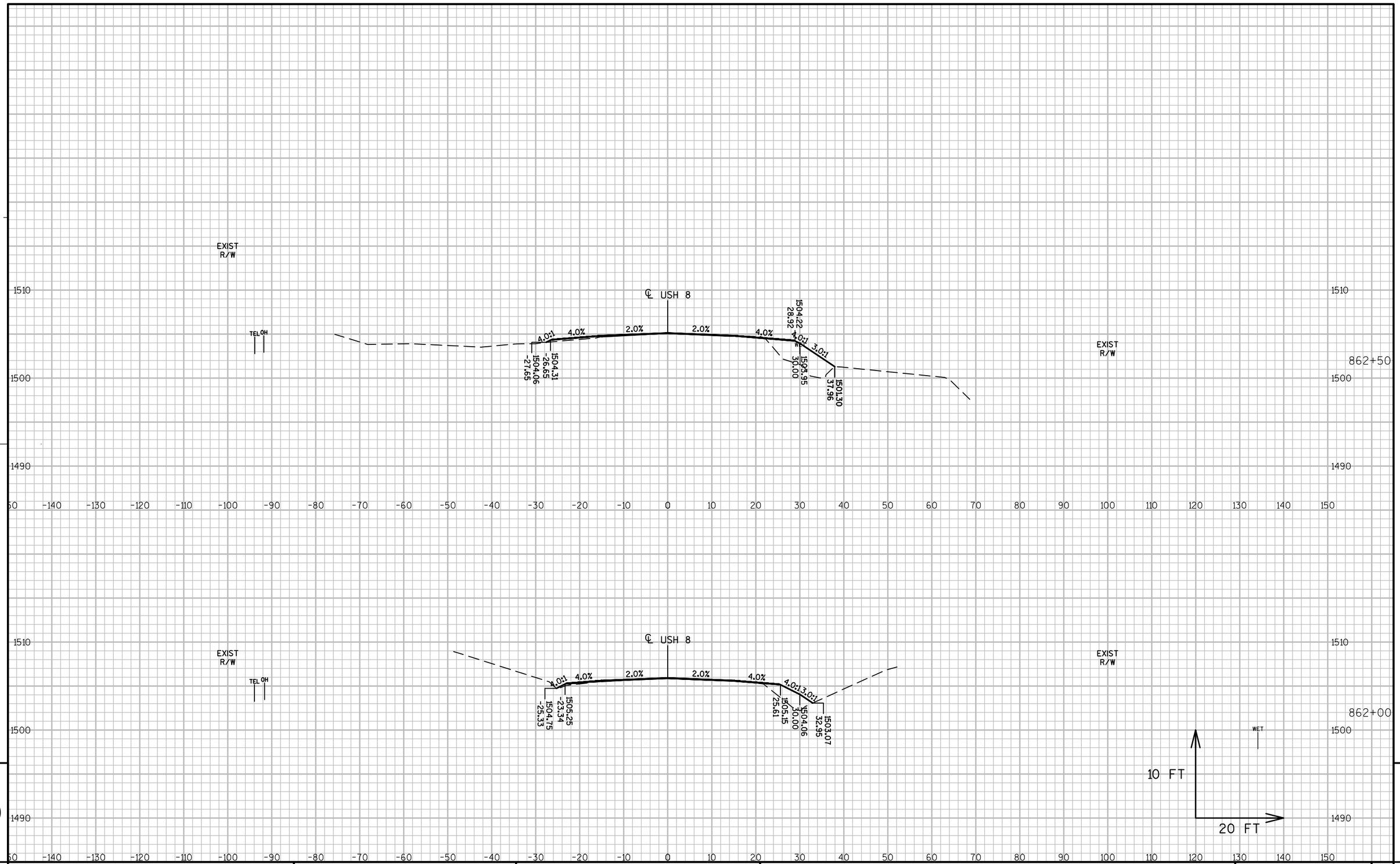
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9

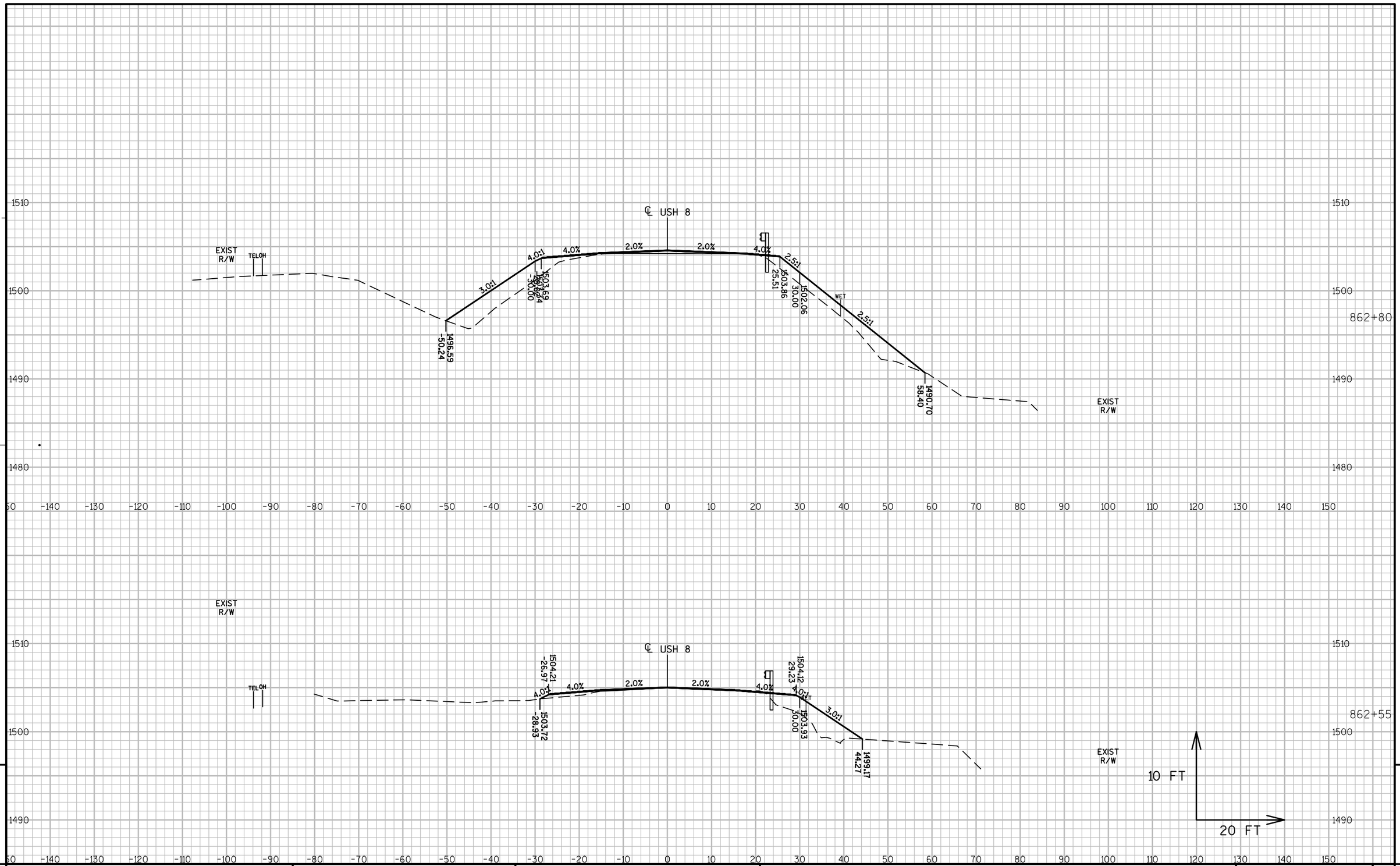
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 86	E



PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CROSS SECTIONS: USH 8 - BEAMGUARD AREA	SHEET 87	E

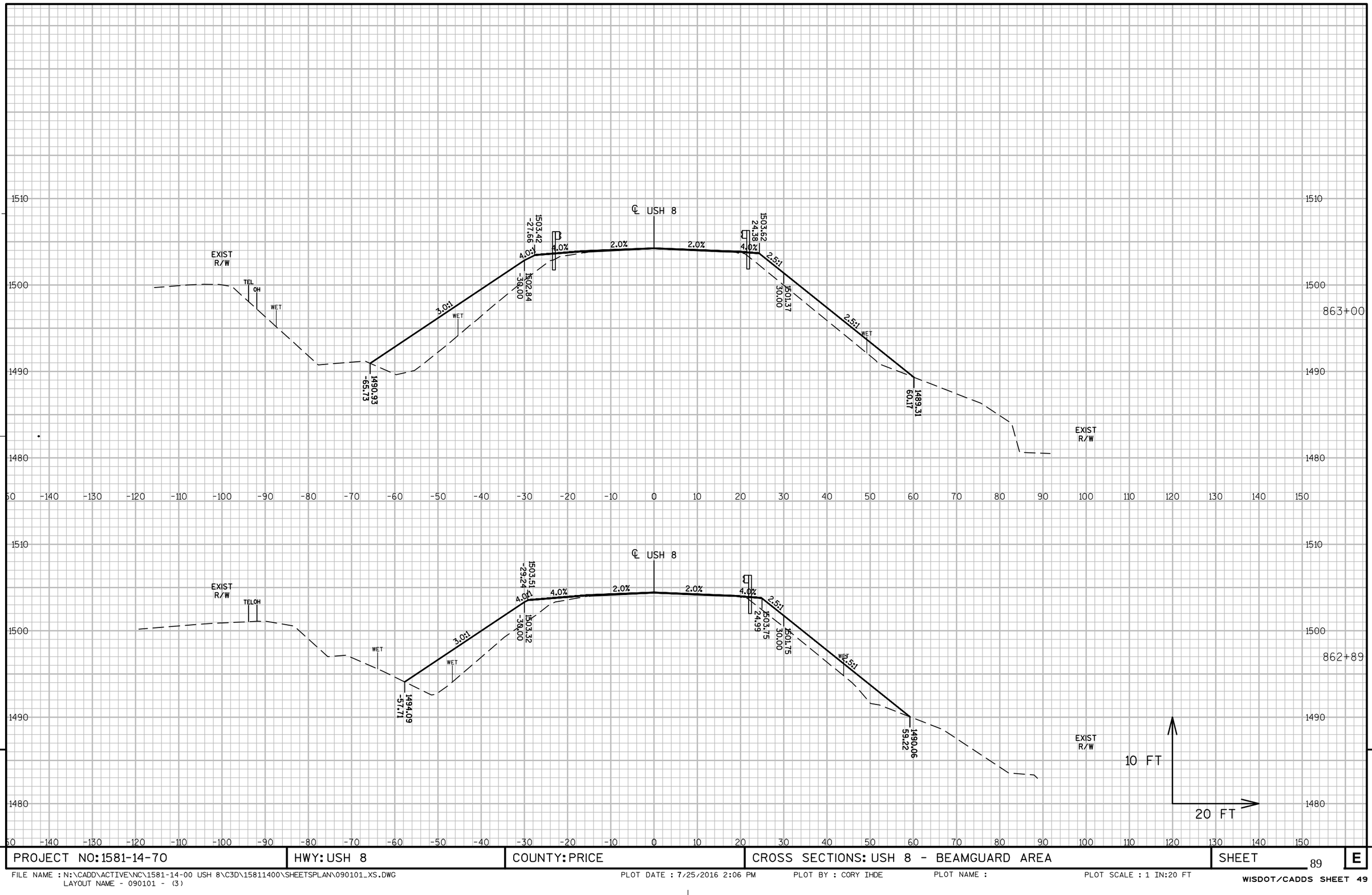
FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 090101 - (1)

PLOT DATE : 7/25/2016 2:05 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CROSS SECTIONS: USH 8 - BEAMGUARD AREA	SHEET 88	E

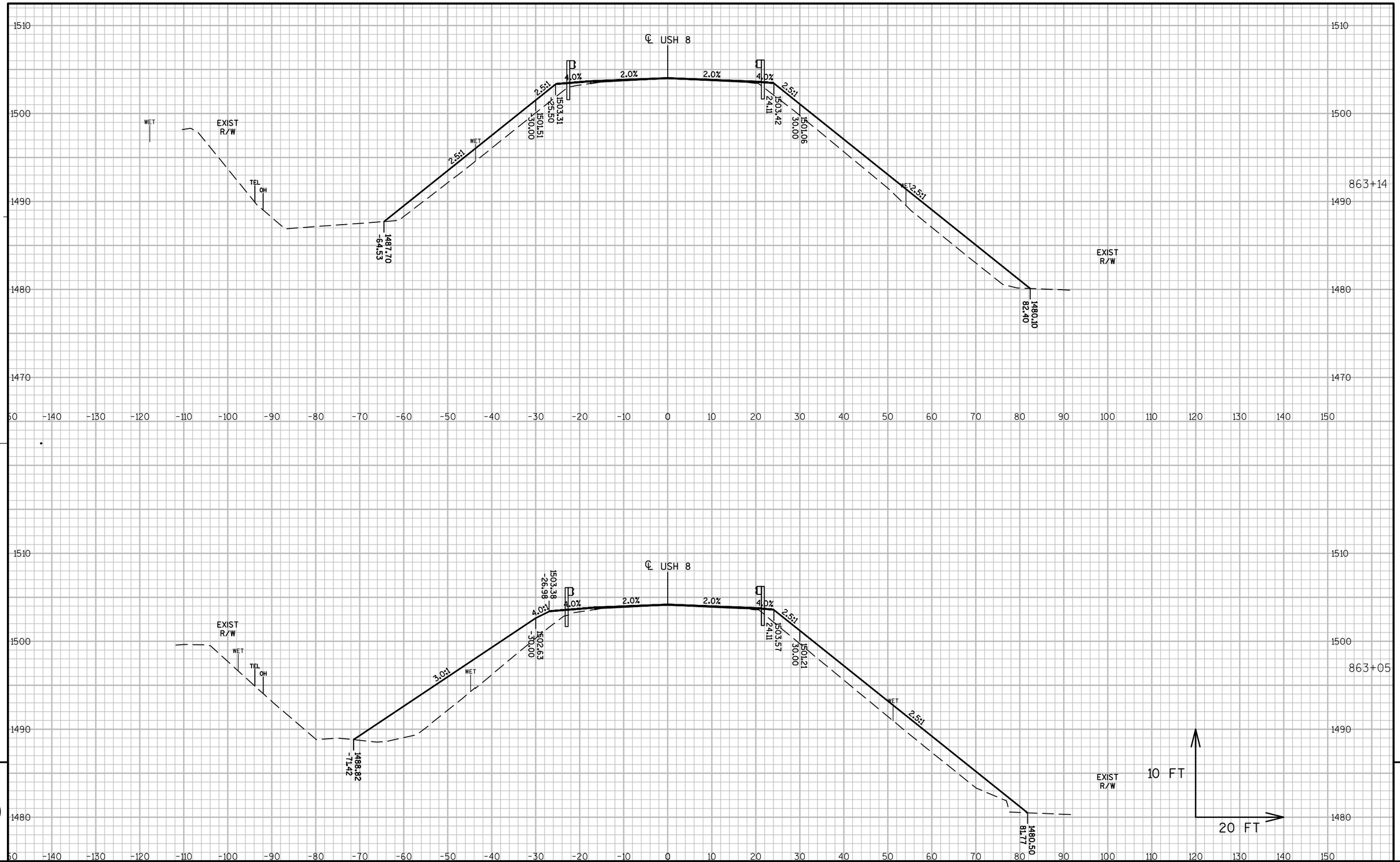
FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 090101 - (2)
PLOT DATE : 7/25/2016 2:05 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CROSS SECTIONS: USH 8 - BEAMGUARD AREA	SHEET 89	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 090101 - (3)

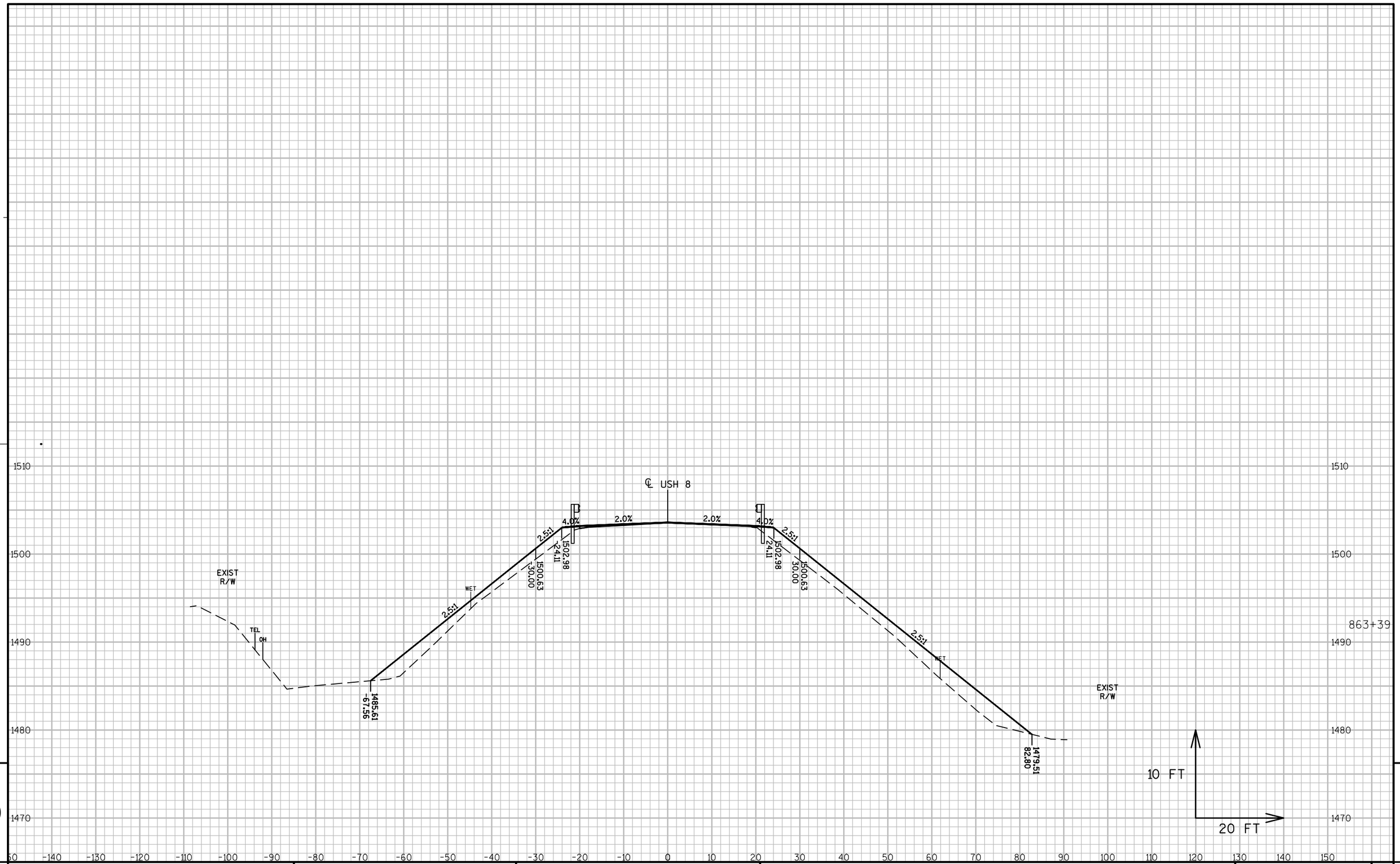
PLOT DATE : 7/25/2016 2:06 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CROSS SECTIONS: USH 8 - BEAMGUARD AREA	SHEET 90	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 090101 - (4)

PLOT DATE : 7/25/2016 2:06 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



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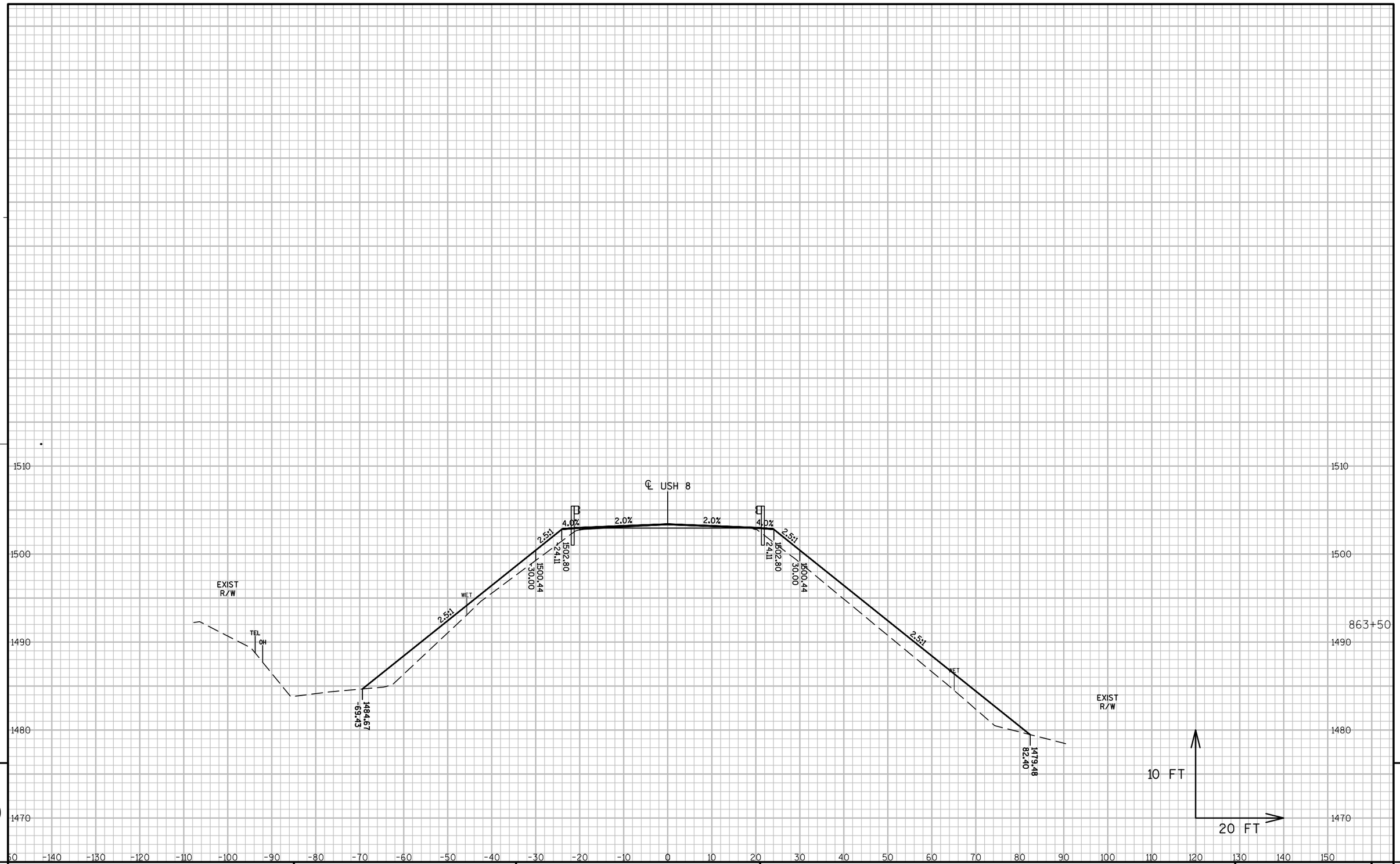
PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CROSS SECTIONS: USH 8 - BEAMGUARD AREA	SHEET 91	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 090101 - (5)

PLOT DATE : 7/25/2016 2:06 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



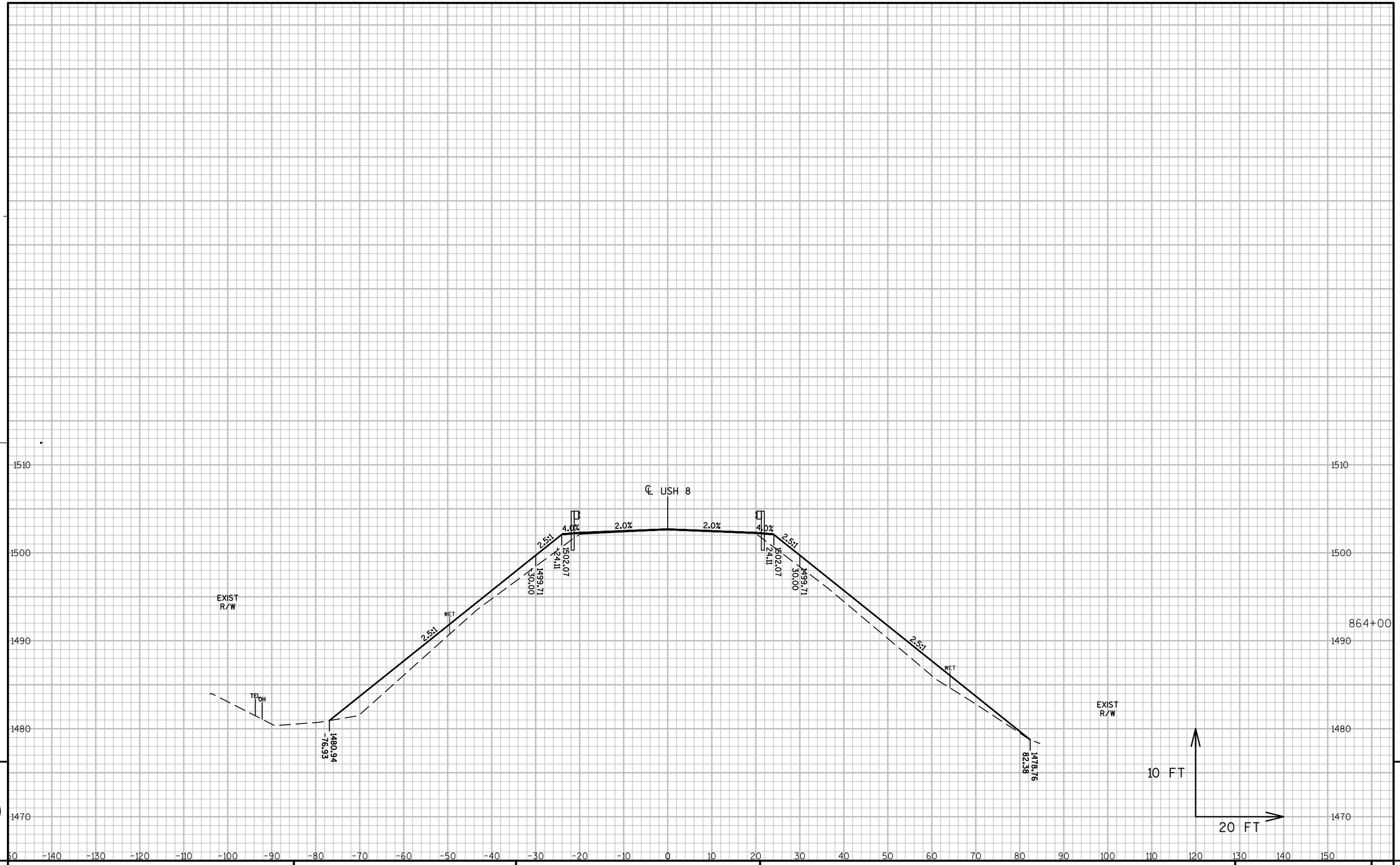
9

9

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CROSS SECTIONS: USH 8 - BEAMGUARD AREA	SHEET 92	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 090101 - (6)

PLOT DATE : 7/25/2016 2:06 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



9

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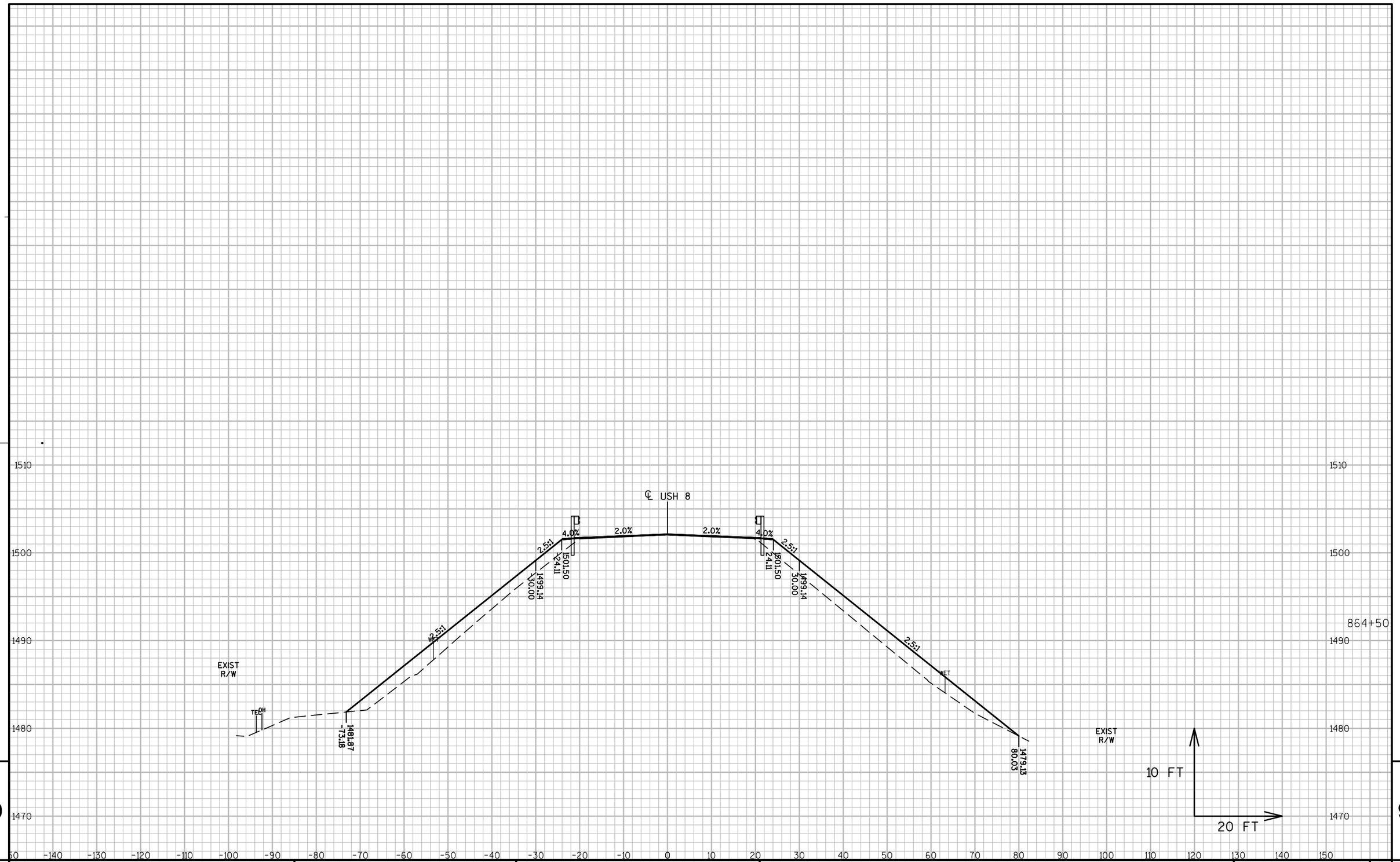
PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CROSS SECTIONS: USH 8 - BEAMGUARD AREA	SHEET 93	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 090101 - (7)

PLOT DATE : 7/25/2016 2:06 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



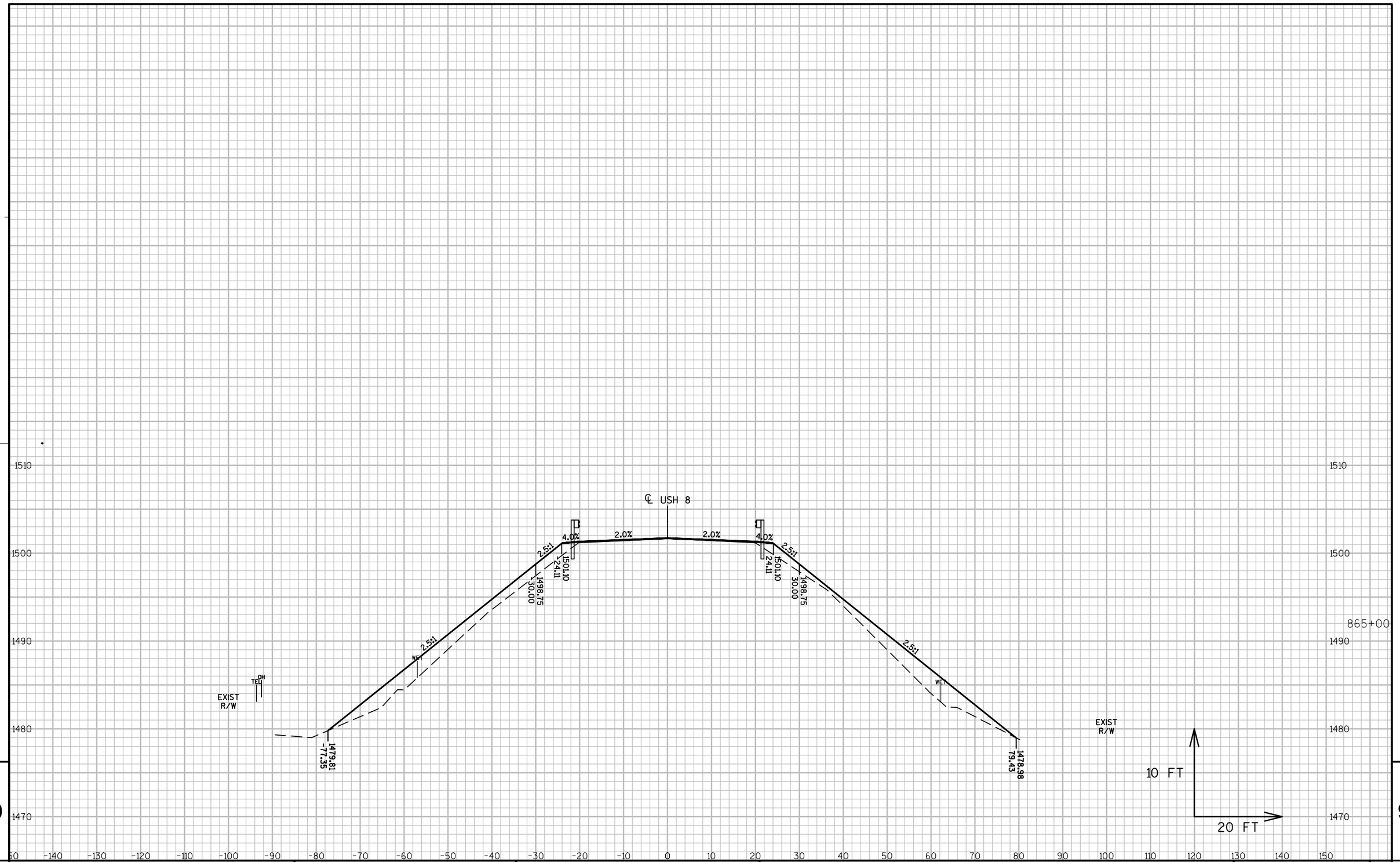
9

9

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CROSS SECTIONS: USH 8 - BEAMGUARD AREA	SHEET 94	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 090101 - (8)

PLOT DATE : 7/25/2016 2:06 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



9

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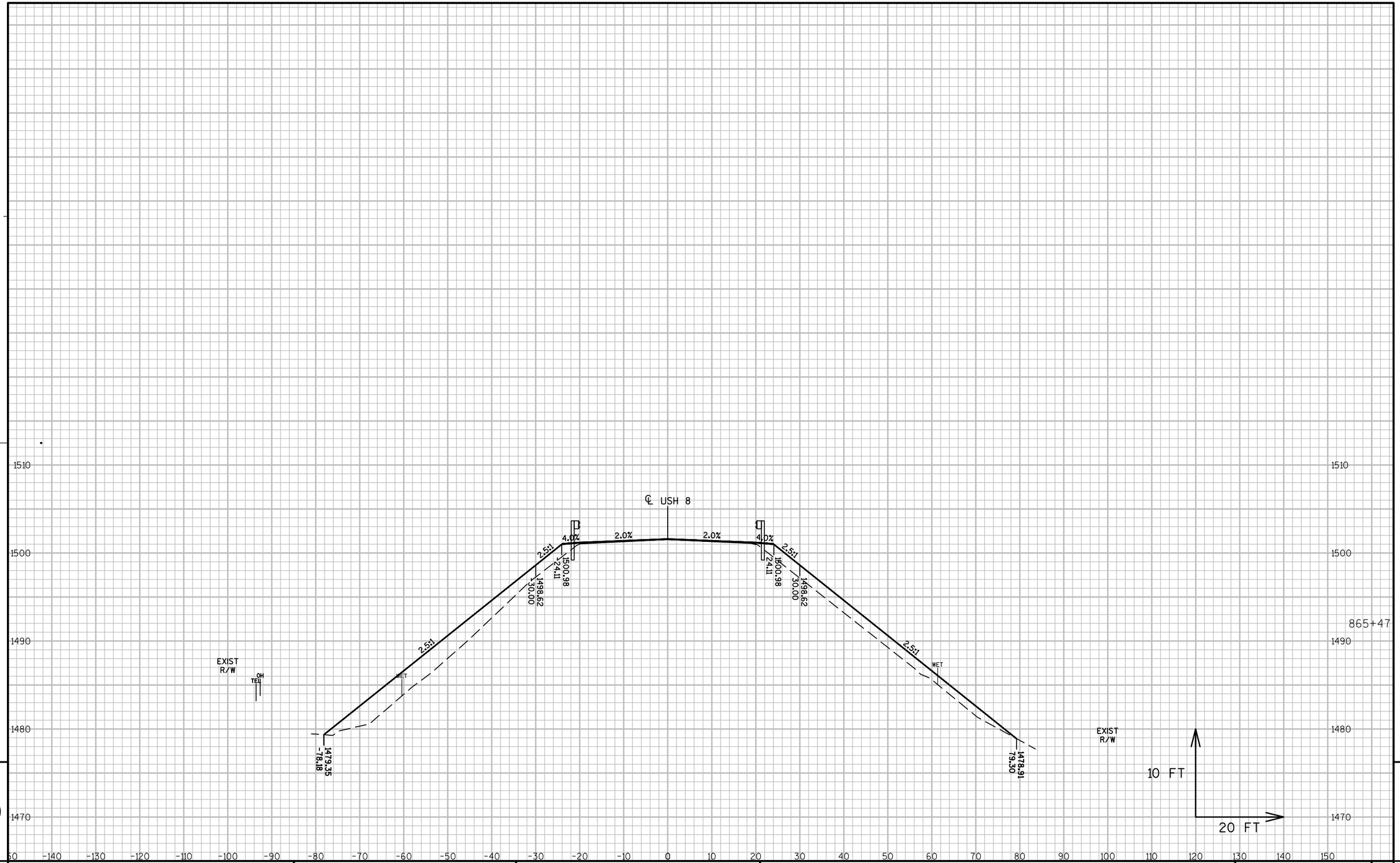
PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CROSS SECTIONS: USH 8 - BEAMGUARD AREA	SHEET 95	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 090101 - (9)

PLOT DATE : 7/25/2016 2:06 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



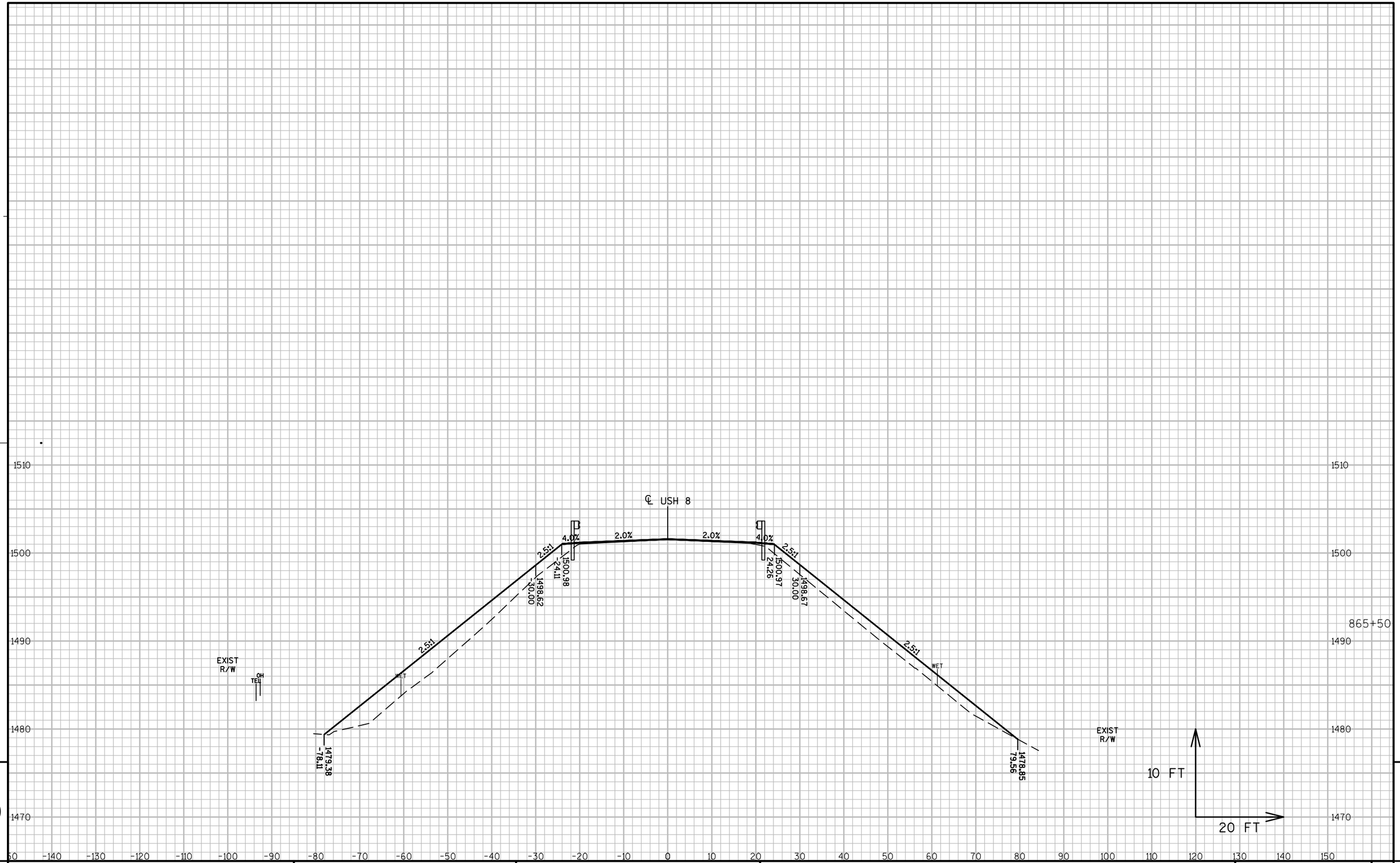
9

9

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CROSS SECTIONS: USH 8 - BEAMGUARD AREA	SHEET 96	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 090101 - (10)

PLOT DATE : 7/25/2016 2:06 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



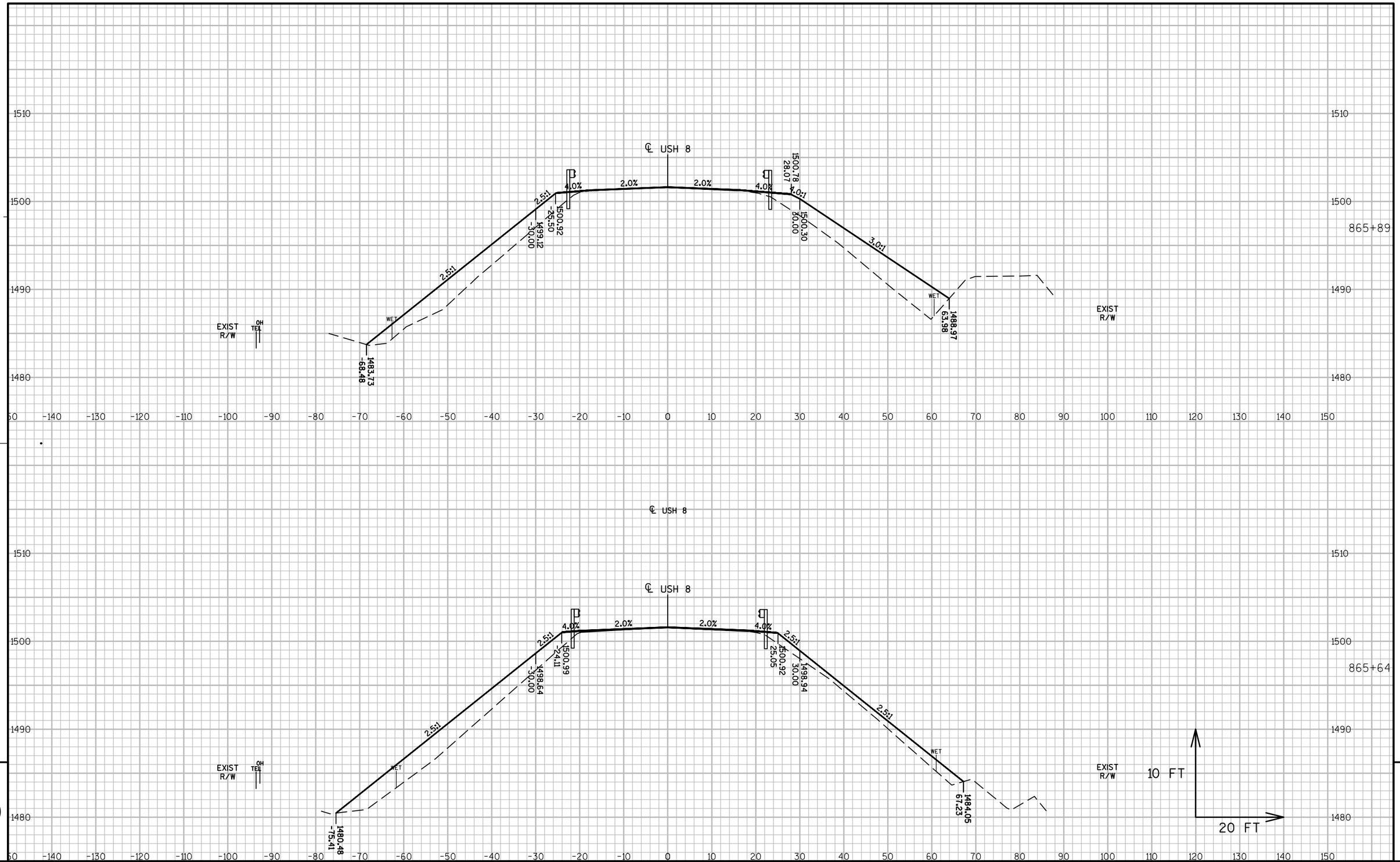
9

9

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CROSS SECTIONS: USH 8 - BEAMGUARD AREA	SHEET 97	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 090101 - (11)

PLOT DATE : 7/25/2016 2:06 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

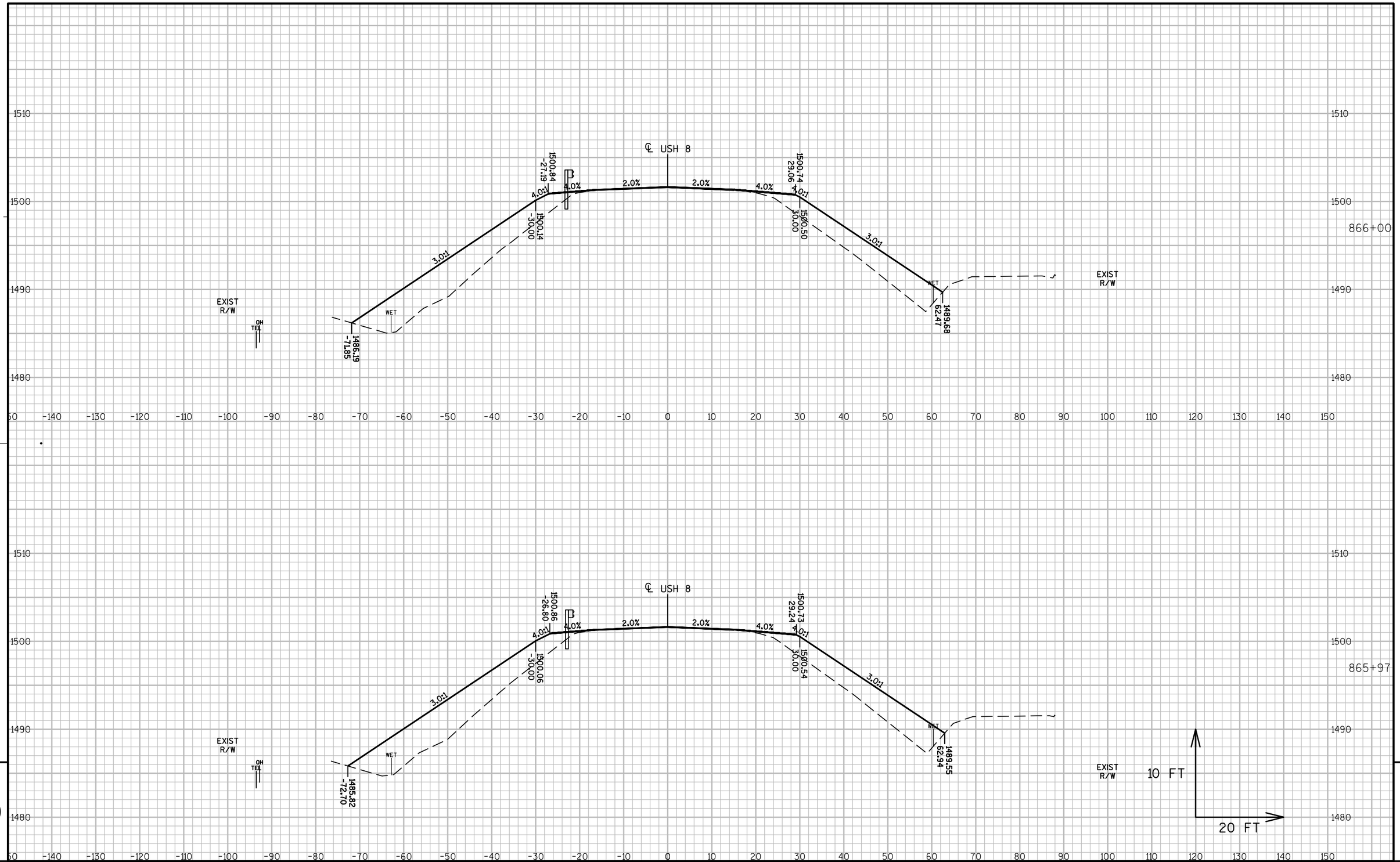


9

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CROSS SECTIONS: USH 8 - BEAMGUARD AREA	SHEET 98	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 090101 - (12)

PLOT DATE : 7/25/2016 2:06 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT

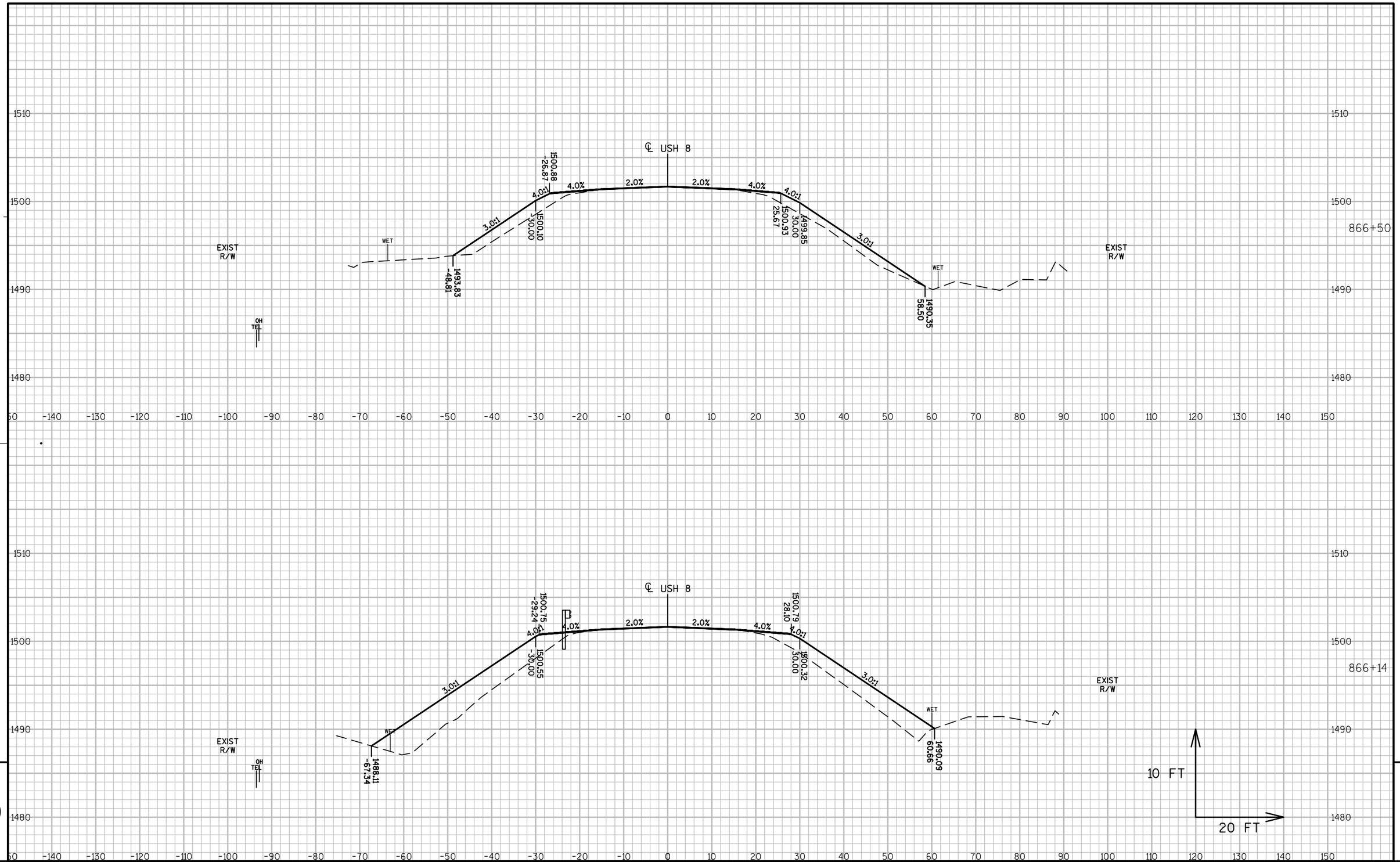


9 9

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CROSS SECTIONS: USH 8 - BEAMGUARD AREA	SHEET 99	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 090101 - (13)

PLOT DATE : 7/25/2016 2:06 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



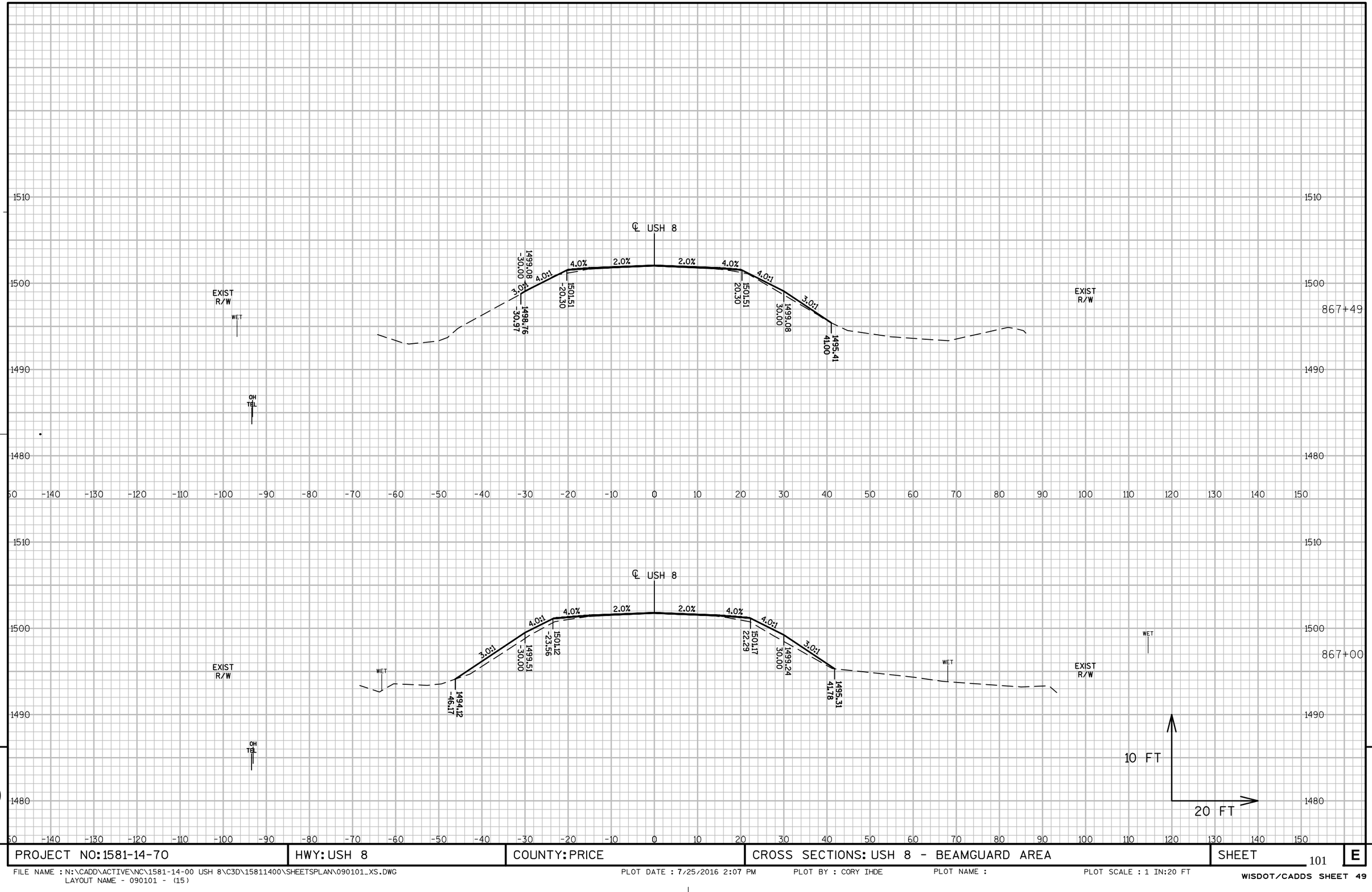
9

9

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CROSS SECTIONS: USH 8 - BEAMGUARD AREA	SHEET 100	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 090101 - (14)

PLOT DATE : 7/25/2016 2:06 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT



9

9

PROJECT NO: 1581-14-70	HWY: USH 8	COUNTY: PRICE	CROSS SECTIONS: USH 8 - BEAMGUARD AREA	SHEET 101	E

FILE NAME : N:\CADD\ACTIVE\NC\1581-14-00 USH 8\C3D\15811400\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 090101 - (15)
PLOT DATE : 7/25/2016 2:07 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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