SUP

APRIL 2014

PROJECT ID: 8530-14-71

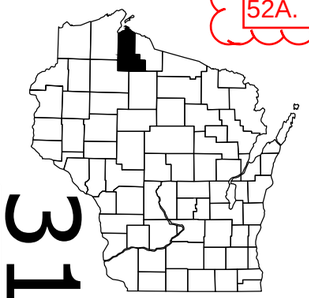
WITH: N/A

COUNTY: ASHLAND

ORDER OF SHEETS

TOTAL SHEETS = 112

Section 2 sheet 3 replaced with 3A. Section 3 sheets 36, 37, 42, 43 replaced with 36A, 37A, 42A, 43A. Section 5 sheets 45, 52 replaced with 45A, 52A.



31

N

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

CLAM LAKE - STH 13

CTH M - STH 13

STH 77

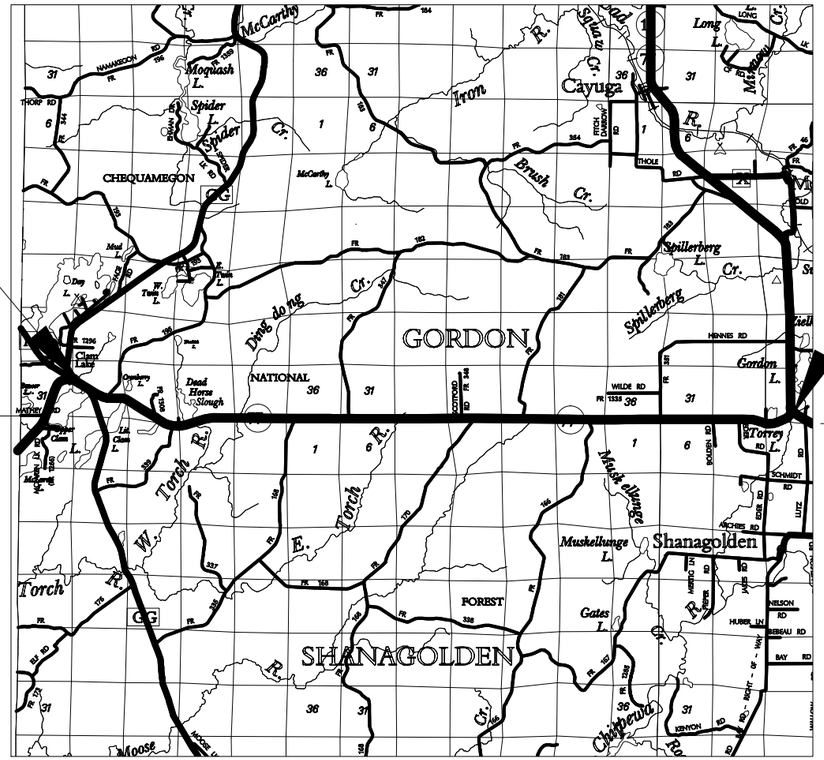
ASHLAND COUNTY

STATE PROJECT NUMBER
8530-14-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8530-14-71	WISC 2014116	1

AS-BUILT PLAN

SUPERVISOR: Dave Ostrowski
MANAGER: Matt Dickenson
PROJECT LEADER: Cheryl Lowney
CONTRACTOR: Northwood Paving
FINAL CONTRACT COST: $3,256,796.76
CONTRACT MODS: 1 & 2 - $750.00
WORK STARTED: 7/17/2014
WORK COMPLETED: 10/3/2014



LAYOUT

SCALE 0 1 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 13.69 MI.

BEGIN PROJECT 8530-14-71
STA. 1748+89.00
Y = 166897.669
X = 496181.225

END PROJECT 8530-14-71
STA. 2471+69.46
Y = 164597.772
X = 566852.865

-"COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), ASHLAND COUNTY."

DESIGN DESIGNATION

A.A.D.T.	2014	=	750
A.A.D.T.	2034	=	900
D.H.V.	2034	=	90
D.D.		=	50/50
T. -----		=	10.0 PERCENT
DESIGN SPEED		=	60 MPH
ESALS		=	189,800

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

Original Plans Prepared By

Chequamegon Bay Group, Inc.
ASHLAND, WI • MILWAUKEE, WI • MADISON, WI • DULUTH, MN
(715) 682-6004 (414) 258-6004 (608) 333-8740 (218) 726-4293
WWW.CHEQBAYGRP.COM

WISCONSIN
WILLIAM G. KURTZ
E-36390
ASHLAND, WI
PROFESSIONAL ENGINEER

10-23-13
DATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	Ben Flitcroft, RLS
Designer	William G. Kurtz, PE
Project Manager	Michael Pearson
Regional Examiner	Dan Ojibway
Regional Supervisor	Dave Ostrowski
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 10/31/13 (Signature)

E

2

LIST OF STANDARD ABBREVIATIONS

ABUT.	ABUTMENT
AGG.	AGGREGATE
AH.	AHEAD
APPROX.	APPROXIMATE
A.E.W.	APRON ENDWALL
ASPH.	ASPHALTIC
A.D.T.	AVERAGE DAILY TRAFFIC
AZ.	AZIMUTH
BK.	BEGIN
B.M.	BENCH MARKI
C/L	CENTER LINE
CONC.	CONCRETE
CONST.	CONSTRUCTION
CO.	COUNTY
C.T.H.	COUNTY TRUNK HIGHWAY
X-SEC.	CROSS SECTION
CR.	CRUSHED
CFS	CUBIC FEET/SECOND
C.Y., CU. YD.	CUBIC YARD
CULV.	CULVERT
C.P.	CULVERT PIPE
D.O.T.	DEPARTMENT OF TRANSPORTATION
D.H.V.	DESIGN HOUR VOLUME
DIA.	DIAMETER
D.	DIRECTIONAL DISTRIBUTION
DISCH. OR DIS.	DISCHARGE
EA.	EACH
ELECT.	ELECTRIC
EL. OR ELEV.	ELEVATION
EMB.	EMBANKMENT
E.B.S.	EXCAVATION BELOW SUBGRADE
EXIST.	EXISTING
FERT.	FERTILIZE
F.E.	FIELD ENTRANCE
FIN.	FINISHED
FT.	FOOT
F.L.	FLOW LINE
GA.	GAUGE
HORIZ.	HORIZONTAL
CWT.	HUNDREDWEIGHT
INL.	INLET
LT.	LEFT
L.H.F.	LEFT-HANDED FORWARD
LIN.	LINEAR
LIN. FT.	LINEAR FOOT
L.S.	LUMP SUM
MAX.	MAXIMUM
MI.	MILE
MISC.	MISCELLANEOUS
N.E.	NORTH EAST
N.W.	NORTH WEST
PAV'T	PAVEMENT
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.T.	POINT OF TANGENCY
P.O.T.	POINT OF TANGENT
LB.	POUND
P.E.	PRIVATE ENTRANCE
PROJ.	PROJECT
R.	RANGE
REQ'D	REQUIRED
RT.	RIGHT
R.H.F.	RIGHT-HAND FORWARD
R/W	RIGHT OF WAY
RD.	ROAD
SHR.	SHRINKAGE
SL.	SLOPE
S.D.D.	STANDARD
S.T.H.	STATE TRUNK HIGHWAY
STA.	STATION
S.P.P.A.	STRUCTURAL PLATE PIPE ARCH
STRUCT.	STRUCTURE
SURF.	SURFACE
TEL.	TELEPHONE
TN.	TOWN
T.	TRUCKS (PERCENT OF)
UNCL.	UNCLASSIFIED
U.G.	UNDERGROUND
V.	VELOCITY OR DESIGN SPEED
V.C.	VERTICAL CURVE

GENERAL NOTES

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

WHEN THE QUANTITY OF DENSE AGGREGATE BASE AND ASPHALTIC PAVEMENT ARE MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS AS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND UPON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

ALL RADII ARE MEASURED TO THE EDGE OF PAVEMENT UNLESS OTHERWISE SHOWN OR NOTED ON THE PLAN.

CURVE DATA SHOWN ON THE PLAN IS "ARC DEFINITION".

CONTROL POINTS ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM ASHLAND COUNTY. BENCHMARK ELEVATIONS ARE REFERENCED TO NGVD 29.

IN PORTIONS OF THIS ROADWAY, THE SURFACE MILL MAY BREAK THROUGH TO THE EXISTING BASE COURSE. MILLING DEPTHS MAY NEED TO BE ADJUSTED IN THE FIELD. IN THESE AREAS WHERE BREAK THROUGH OCCURS, A DECISION WILL BE MADE BY THE ENGINEER TO TAKE ALL OF THE EXISTING ASPHALT OR ATTEMPT TO LEAVE SOME ASPHALT IN PLACE.

LONGITUDINAL HMA WEDGE JOINTS SHALL NOT BE USED. MILL OUT ANY WEDGE USED FOR TRAFFIC STAGING PRIOR TO PLACEMENT OF THE ADJACENT LANE. THE NEW HMA LONGITUDINAL JOINT SHALL BE ON THE CENTERLINE AND SHALL NOT BE OFFSET.

SCENIC BYWAY AND GREAT DIVIDE SIGNS WILL BE PROVIDED BY USDA FOREST SERVICE. CONTACT JIM HONG
ASSISTANT DISTRICT RANGER – RECREATION
GREAT DIVIDE RANGER DISTRICT
CHEQUAMEGON-NICOLET NATIONAL FOREST
HAYWARD OFFICE
(715) 634-4821 EXTENSION 337

AREA CONTACTS

UTILITIES

NORVADO
COMMUNICATION LINE
43705 USH 63
PO BOX 67
CABLE, WI 54821
715-798-3303
FAX: 715-798-3044
info@cheqtel.com

BAYFIELD ELECTRIC COOPERATIVE INC.
ELECTRICITY
IRON RIVER OFFICE
7400 IRON RIVER DAM ROAD
PO BOX 68
IRON RIVER, WI 54847
715-372-4287

MELLEN SERVICE CENTER
38064 STH 13
HIGH BRIDGE, WI 54846
715-274-5281

PRICE ELECTRIC COOPERATIVE INC.
ELECTRICITY
PO BOX 110
PHILLIPS, WI 54555
800-884-0881

DESIGN CONTACT

CHEQUAMEGON BAY GROUP, INC.
211 6TH STREET WEST
ASHLAND, WI 54806
715-682-6004
ATTN: WILLIAM G. KURTZ, P.E.

DNR LIAISON

WDNR – NORTHWEST DISTRICT HEADQUARTERS
810 WEST MAPLE STREET
SPOONER, WI 54801
715-635-4228
ATTN: SHAWN HASELEU

DEPARTMENT OF TRANSPORTATION

MICHAEL PEARSON
WISDOT NWR SUPERIOR
1701 N. 4TH STREET
SUPERIOR, WI 548801
715-395-3024

TOWNS

TOWN OF SHANAGOLDEN
SHAWN BONNEY
CHAIRMAN
21708 LUTZ RD
GLIDDEN, WI 54527
715-264-2429

TOWN OF GORDON
DOUGLAS B. THORP
CHAIRMAN
77348 THUNDERSTICK ROAD
GLIDDEN, WI 54527
715-264-2474

COUNTY

ASHLAND COUNTY HIGHWAY COMMISSIONER
EMMER SHIELDS, JR.
PO BOX 25
HIGHBRIDGE WI 54846
715-274-3662

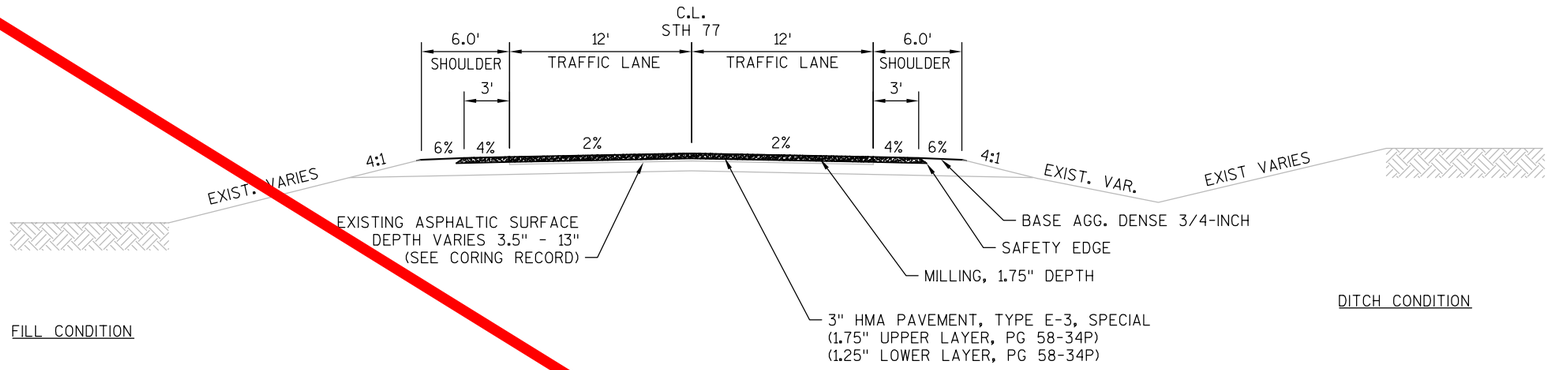
SHERIFF
MICHAEL BRENNAN
220 E 6TH STREET
ASHLAND WI 54806
715-685-7640

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

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	GENERAL NOTES	SHEET 2 2	E

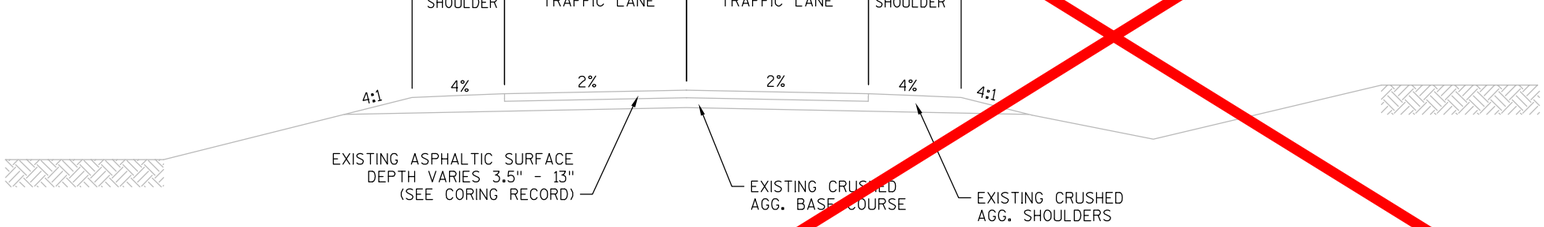
FILE NAME :N:\PDS\DESIGN\PROJECTS\85301400\FINAL ZIP FILE\2013.10.25 CD TO WISDOT\2013.10.25 CD TO WISDOT\DRAWINGS\STH 77 SECTION 2.DWG DATE : 9/25/2013 7:47 AM PLOT BY : PEARSON, MICHAEL R PLOT NAME : PLOT SCALE : 0.008943

WISDOT/CADDS SHEET 42

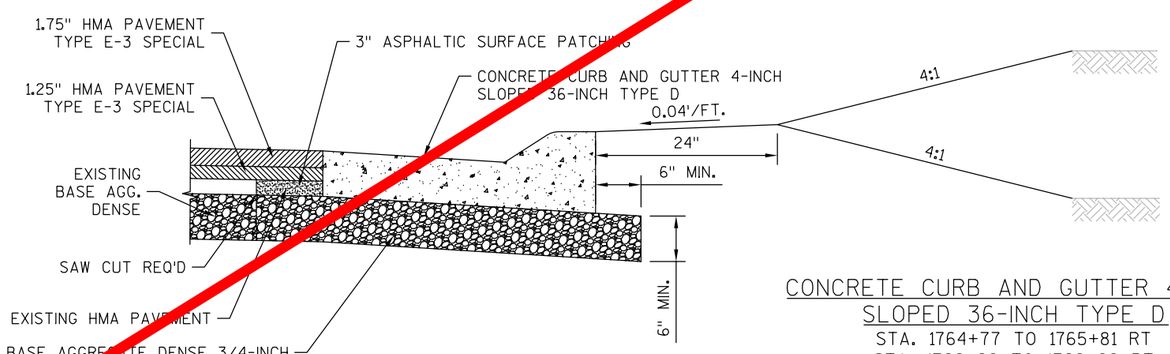


FINISHED TYPICAL SECTION

STA. 1748+89.00 - 2471+23.22



EXISTING TYPICAL SECTION



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

STA. 1764+77 TO 1765+81 RT
STA. 1766+26 TO 1766+66 RT
STA. 2468+33 TO 2468+73 LT
STA. 2471+27 TO 2471+69 RT

FIELD CORING RECORD

MAY 2008

LOCATION	OFFSET	BIT. DEPTH (INCHES)	NOTES
0'	6' LT OF CL	3.50	C-1
2500'	6' RT OF CL	5.00	C-2
5000'	6' LT OF CL	4.25	C-3
7500'	6' RT OF CL	5.00	C-4
10,000'	6' LT OF CL	5.25	C-5
12,500'	6' RT OF CL	4.50	C-6
15,000'	6' LT OF CL	4.75	C-7
17,500'	6' RT OF CL	4.50	C-8
20,000'	6' LT OF CL	3.75	C-9
22,500'	6' RT OF CL	7.50	C-10
25,000'	6' LT OF CL	6.00	C-11
27,500'	6' RT OF CL	6.25	C-12
30,000'	6' LT OF CL	7.75	C-13
32,500'	6' RT OF CL	5.75	C-14
35,000'	6' LT OF CL	6.00	C-15
37,500'	6' RT OF CL	5.75	C-16
40,000'	6' LT OF CL	6.50	C-17
42,500'	6' RT OF CL	6.25	C-18
45,000'	6' RT OF CL	6.25	C-19
47,500'	6' LT OF CL	5.75	C-20
50,000'	6' RT OF CL	6.50	C-21
52,500'	6' LT OF CL	5.50	C-22
55,000'	6' RT OF CL	5.25	C-23
57,500'	6' LT OF CL	5.25	C-24
60,000'	6' RT OF CL	6.00	C-25
62,500'	6' LT OF CL	7.00	C-26
65,000'	6' RT OF CL	13.00	C-27
67,500'	6' LT OF CL	10.50	C-28
70,000'	6' RT OF CL	13.00	C-29
72,500'	6' LT OF CL	5.00	C-30
	AVERAGE DEPTH	6.24	

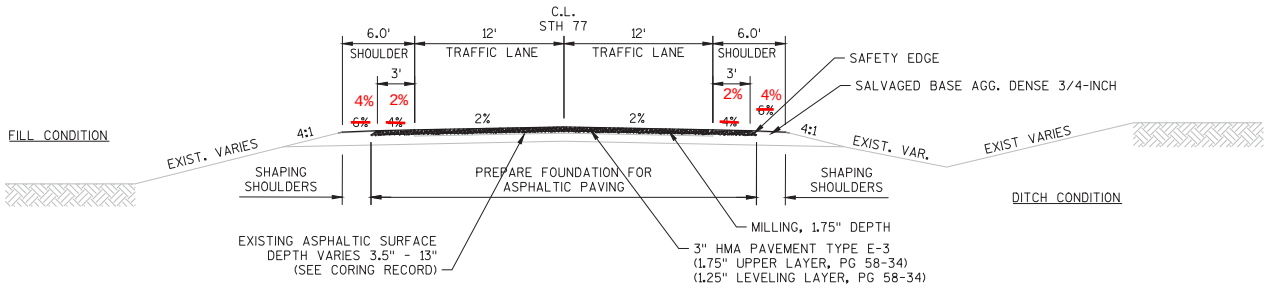
CONSTRUCTION NOTES:

DETAILS DEPICT TYPICAL CONDITIONS. ACTUAL FIELD CONDITIONS MAY VARY. ADJUSTMENTS REQUIRE ENGINEER APPROVAL.

DO NOT USE A LONGITUDINAL HMA WEDGE JOINT. MILL OUT AND REMOVE ANY WEDGE USED FOR TRAFFIC STAGING PRIOR TO PLACEMENT OF THE ADJACENT LANE. WEDGE MATERIAL FOR TRAFFIC STAGING AND REMOVAL IS CONSIDERED INCIDENTAL TO HMA PAVEMENT TYPE E-3 SPECIAL.

THE HMA LONGITUDINAL JOINT SHALL BE ON THE CENTERLINE AND SHALL NOT BE OFFSET.

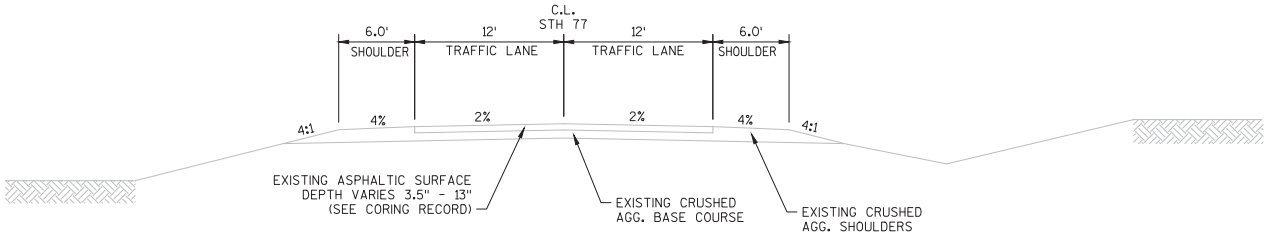
PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	TYPICAL SECTIONS	SHEET - 3	E



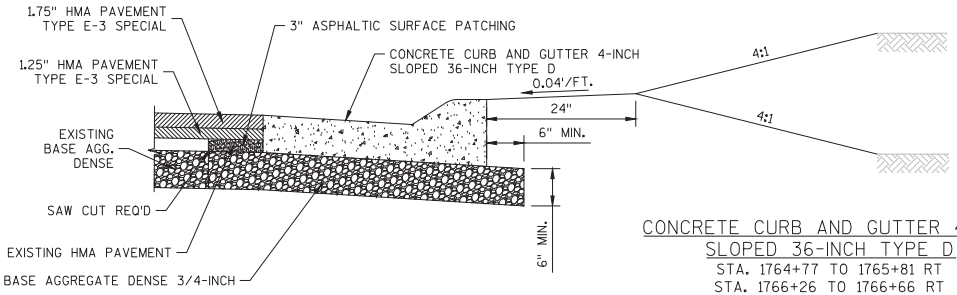
FINISHED TYPICAL SECTION

STA. ~~1964+58.0~~ - 2471+23.22

1964+00



EXISTING TYPICAL SECTION



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

STA. 1764+77 TO 1765+81 RT
STA. 1766+26 TO 1766+66 RT
STA. 2468+33 TO 2468+73 LT
STA. 2471+27 TO 2471+69 RT

FIELD CORING RECORD
MAY 2008

LOCATION	OFFSET	BIT. DEPTH (INCHES)	NOTES
0'	6' LT OF CL	3.50	C-1
2500'	6' RT OF CL	5.00	C-2
5000'	6' LT OF CL	4.25	C-3
7500'	6' RT OF CL	5.00	C-4
10,000'	6' LT OF CL	5.25	C-5
12,500'	6' RT OF CL	4.50	C-6
15,000'	6' LT OF CL	4.75	C-7
17,500'	6' RT OF CL	4.50	C-8
20,000'	6' LT OF CL	3.75	C-9
22,500'	6' RT OF CL	7.50	C-10
25,000'	6' LT OF CL	6.00	C-11
27,500'	6' RT OF CL	6.25	C-12
30,000'	6' LT OF CL	7.75	C-13
32,500'	6' RT OF CL	5.75	C-14
35,000'	6' LT OF CL	6.00	C-15
37,500'	6' RT OF CL	5.75	C-16
40,000'	6' LT OF CL	6.50	C-17
42,500'	6' RT OF CL	6.25	C-18
45,000'	6' RT OF CL	6.25	C-19
47,500'	6' LT OF CL	5.75	C-20
50,000'	6' RT OF CL	6.50	C-21
52,500'	6' LT OF CL	5.50	C-22
55,000'	6' RT OF CL	5.25	C-23
57,500'	6' LT OF CL	5.25	C-24
60,000'	6' RT OF CL	6.00	C-25
62,500'	6' LT OF CL	7.00	C-26
65,000'	6' RT OF CL	13.00	C-27
67,500'	6' LT OF CL	10.50	C-28
70,000'	6' RT OF CL	13.00	C-29
72,500'	6' LT OF CL	5.00	C-30
AVERAGE DEPTH		6.24	

CONSTRUCTION NOTES:

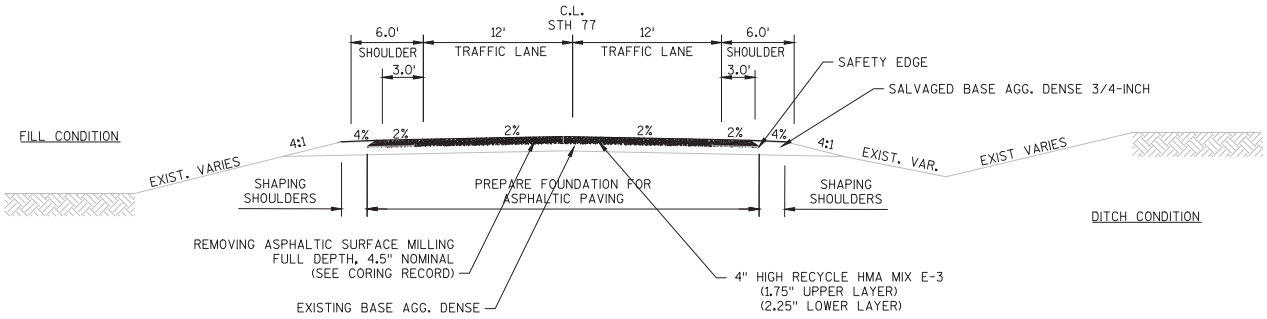
DETAILS DEPICT TYPICAL CONDITIONS. ACTUAL FIELD CONDITIONS MAY VARY. ADJUSTMENTS REQUIRE ENGINEER APPROVAL.

DO NOT USE A LONGITUDINAL HMA WEDGE JOINT. MILL OUT AND REMOVE ANY WEDGE USED FOR TRAFFIC STAGING PRIOR TO PLACEMENT OF THE ADJACENT LANE. WEDGE MATERIAL FOR TRAFFIC STAGING AND REMOVAL IS CONSIDERED INCIDENTAL TO HMA PAVEMENT TYPE E-3 SPECIAL AND SPV.0090.01 HMA PAVEMENT HIGH RECYCLE CONTENT SPECIAL.

THE HMA LONGITUDINAL JOINT SHALL BE ON THE CENTERLINE AND SHALL NOT BE OFFSET.

Addendum No. 1
ID 8530-14-71
Revised Sheet 3
April 4, 2014

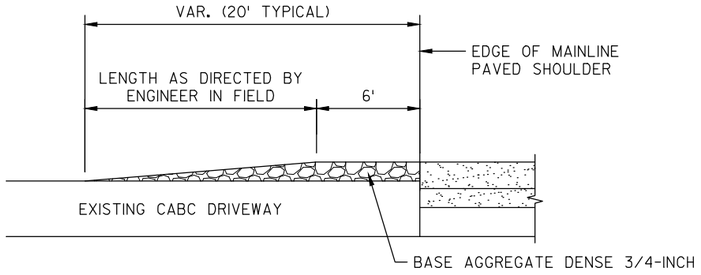
PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	TYPICAL SECTIONS	SHEET 3A_	E



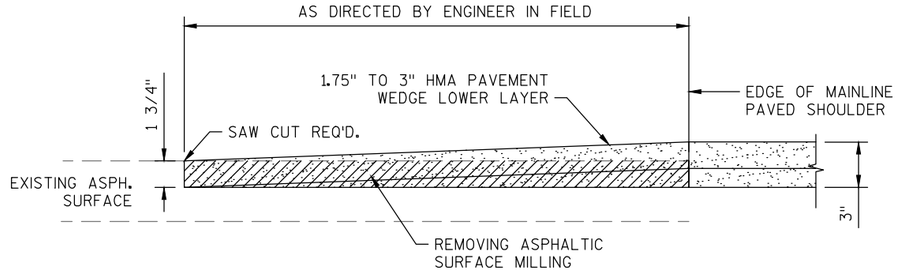
FINISHED TYPICAL SECTION
(HIGH RECYCLE HMA MIX E-3)
STA. 1748+89.00 - ~~1964+50~~
1964+00

Addendum No. 1
ID 8530-14-71
Added Sheet 3A
April 4, 2014

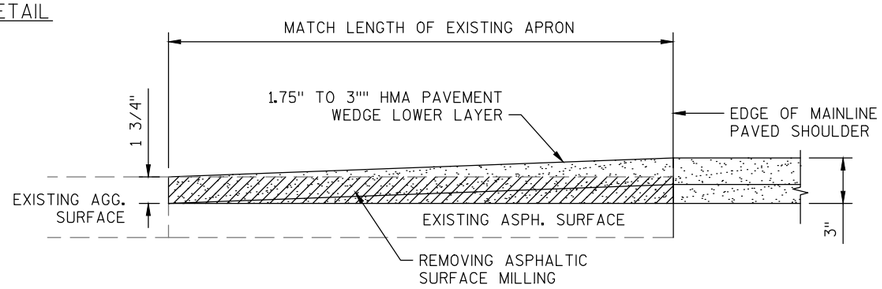
PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	TYPICAL SECTIONS	SHEET 3A_	E



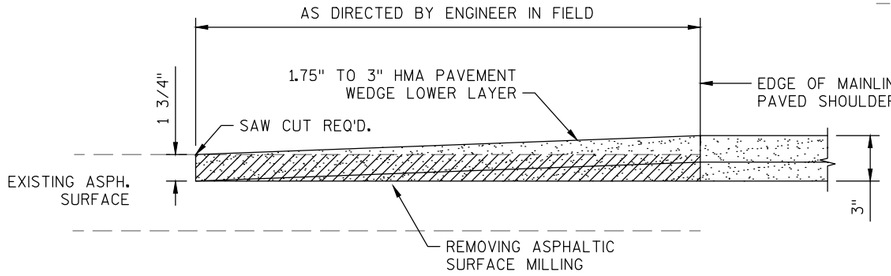
AGGREGATE PRIVATE ENTRANCE DETAIL
PROFILE VIEW



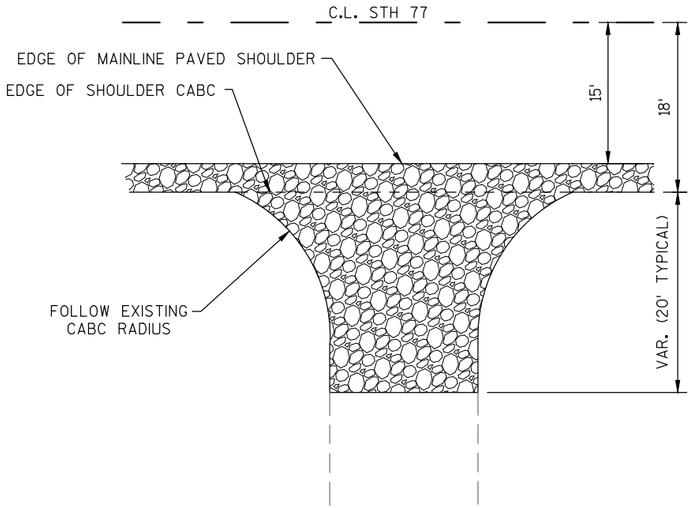
PAVED PRIVATE ENTRANCE DETAIL
PROFILE VIEW



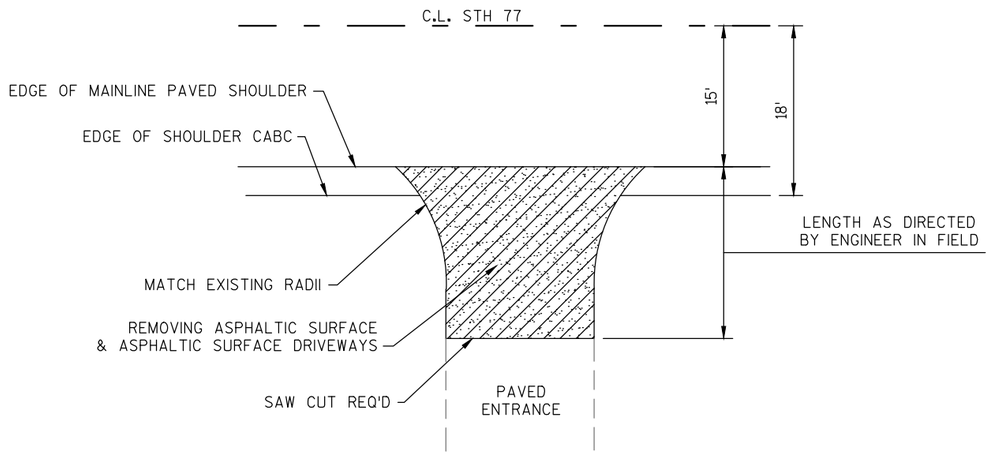
AGGREGATE SIDE ROAD WITH PAVED APRON DETAIL
PROFILE VIEW



PAVED SIDE ROAD DETAIL
PROFILE VIEW

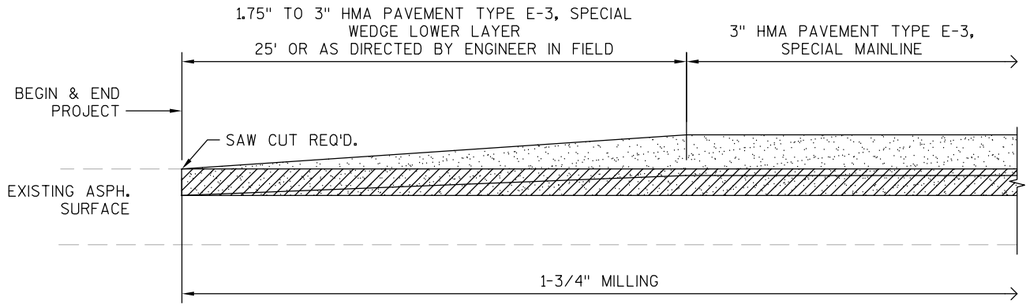


AGGREGATE PRIVATE ENTRANCE DETAIL
PLAN VIEW

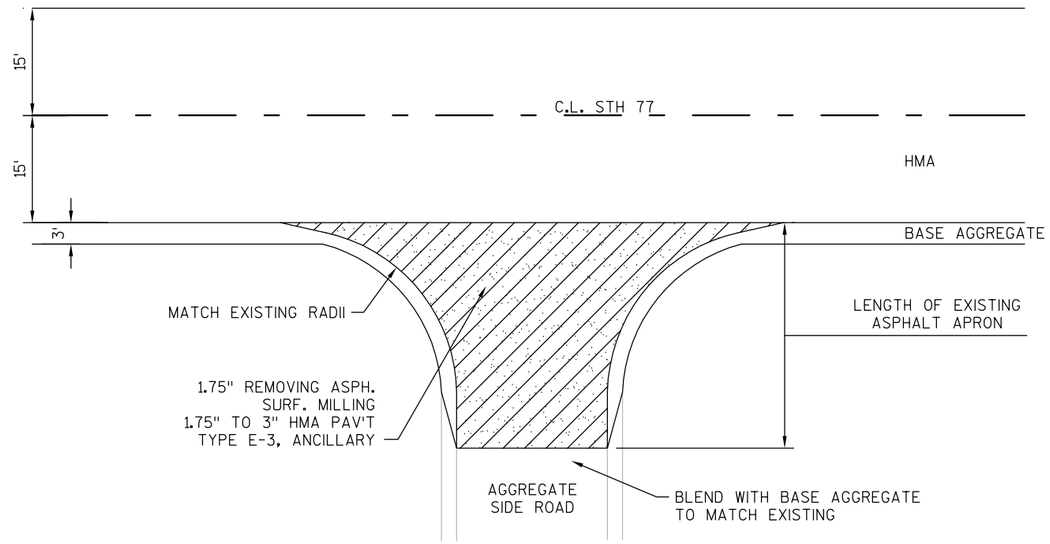


PAVED PRIVATE ENTRANCE DETAIL
PLAN VIEW

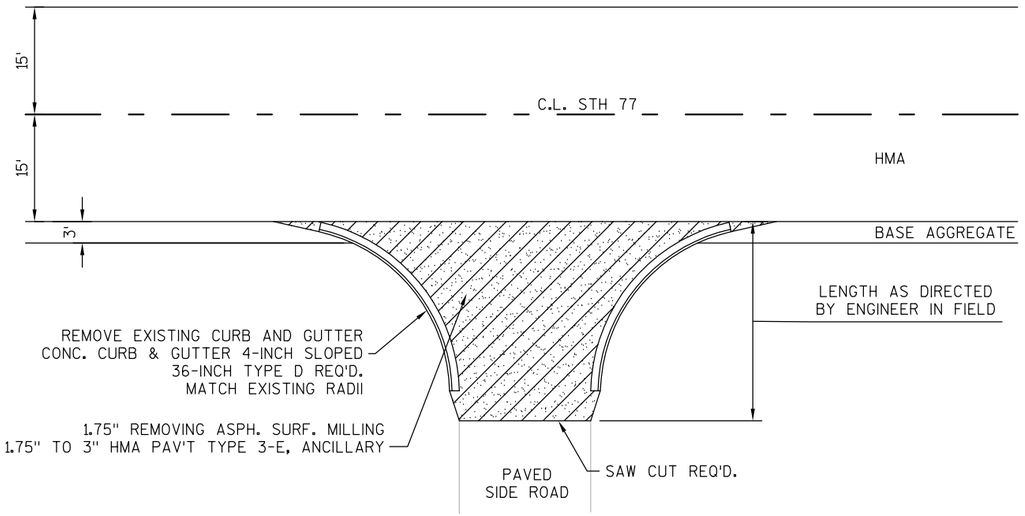
PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	CONSTRUCTION DETAILS	SHEET 4	E



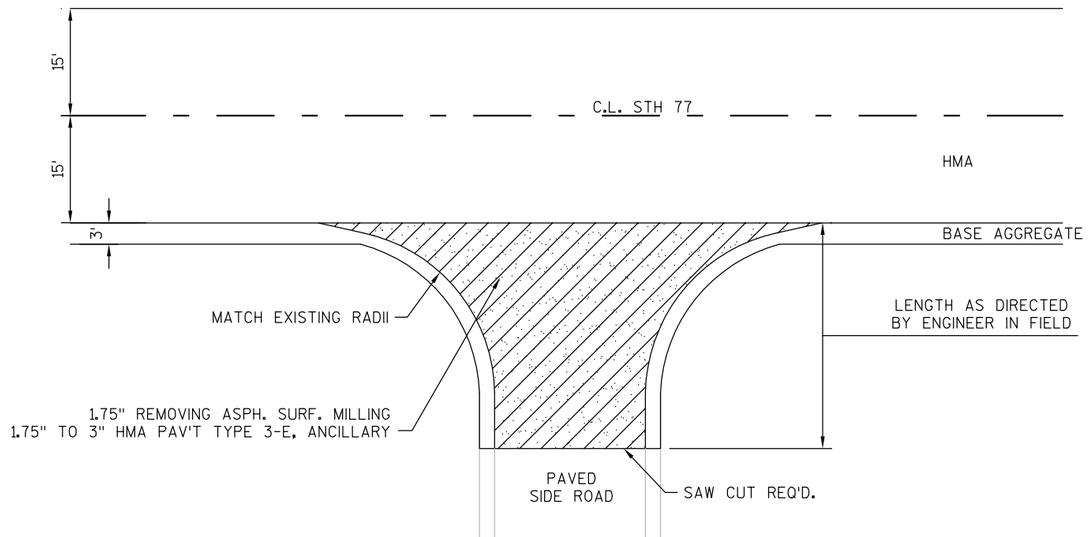
MAINLINE CONSTRUCTION JOINT
PROFILE VIEW



PAVING DETAIL
AGGREGATE SIDE ROADS WITH PAVED APRON



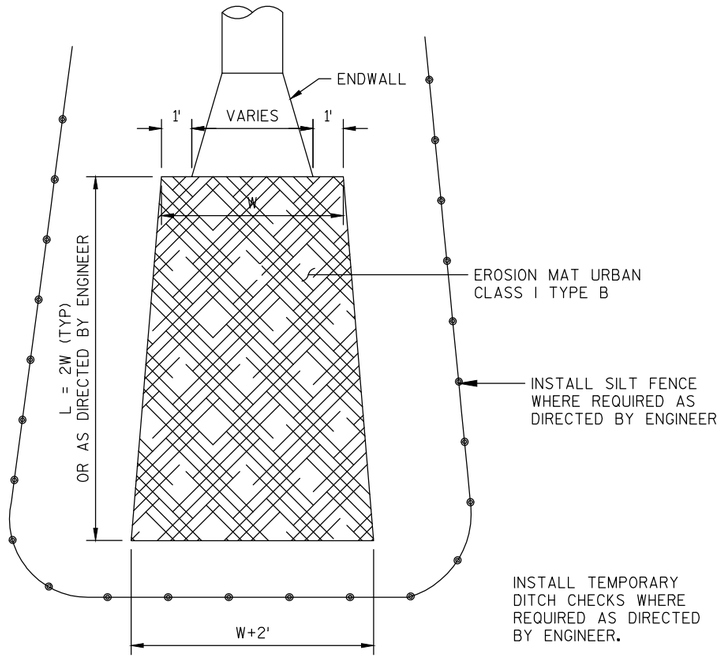
PAVING DETAIL
SIDEROADS WITH EXISTING CURB & GUTTER



PAVING DETAIL
SIDEROADS WITH PAVED SURFACE
WITHOUT CURB & GUTTER

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	CONSTRUCTION DETAILS	SHEET	E

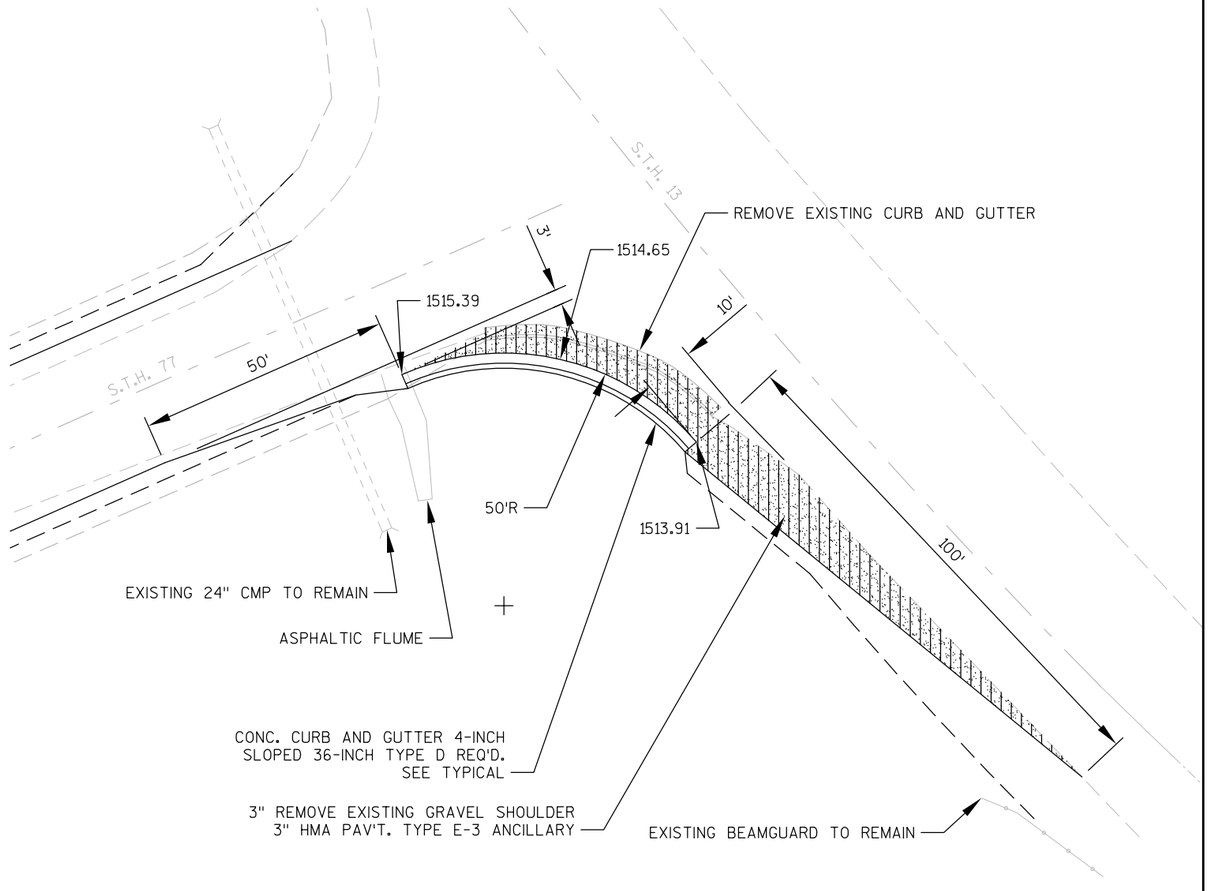
2



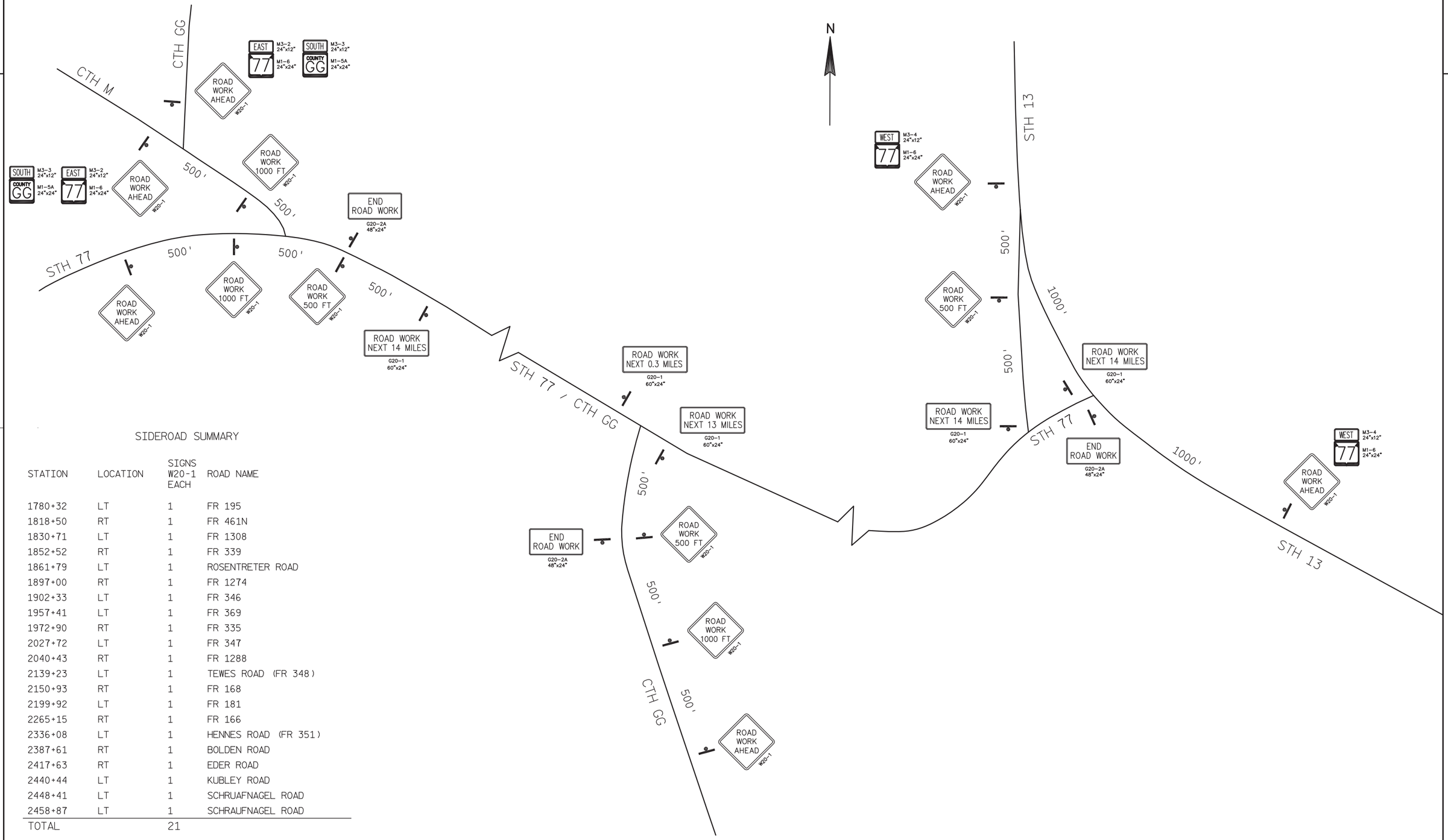
EROSION CONTROL TREATMENT AT APRON ENDWALLS

1794+27	1965+11	2140+88	2387+42
1800+50	1997+94	2156+52	2393+76
1820+50	2014+72	2178+79	2397+74
1839+19	2017+62	2212+78	2418+28
1865+88	2048+32	2270+80	2424+93
1879+12	2069+95	2287+30	2437+80
1917+51	2077+16	2301+30	2441+83
1917+62	2077+28	2322+72	
1917+74	2120+18	2332+15	
1935+26	2127+58	2354+67	
1947+50	2131+11	2357+91	

2



PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	INTERSECTION DETAILS	SHEET - E

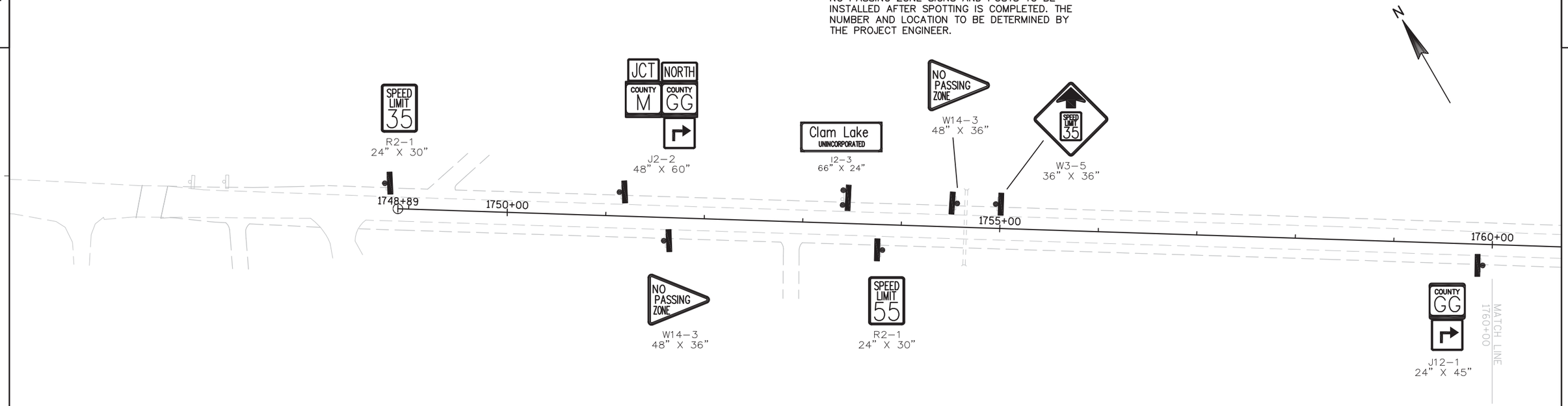


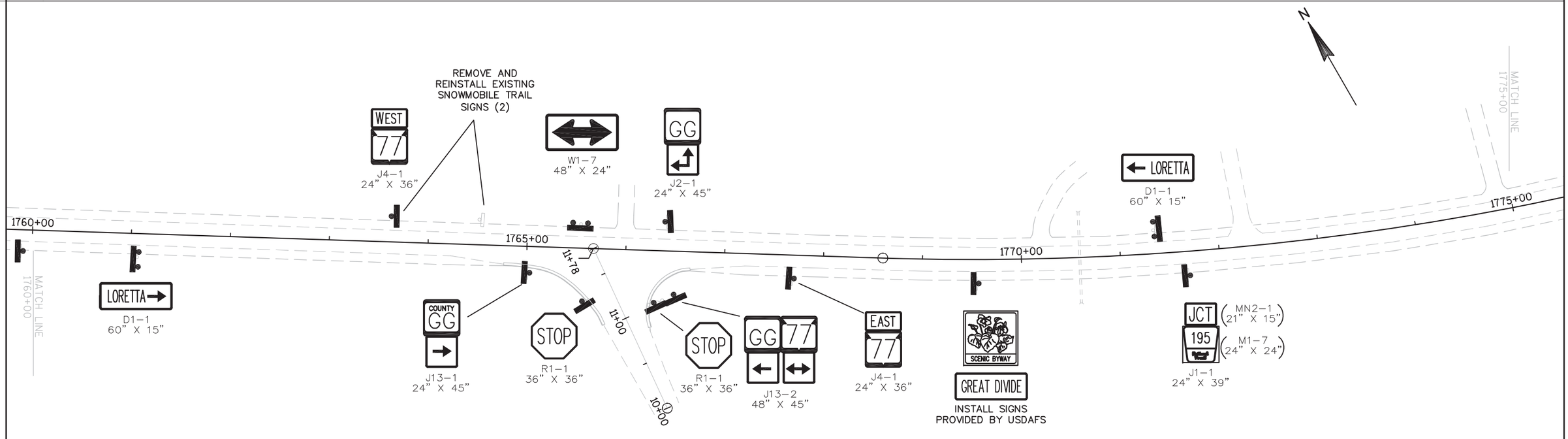
SIDEROAD SUMMARY

STATION	LOCATION	SIGNS W20-1 EACH	ROAD NAME
1780+32	LT	1	FR 195
1818+50	RT	1	FR 461N
1830+71	LT	1	FR 1308
1852+52	RT	1	FR 339
1861+79	LT	1	ROSENTRETER ROAD
1897+00	RT	1	FR 1274
1902+33	LT	1	FR 346
1957+41	LT	1	FR 369
1972+90	RT	1	FR 335
2027+72	LT	1	FR 347
2040+43	RT	1	FR 1288
2139+23	LT	1	TEWES ROAD (FR 348)
2150+93	RT	1	FR 168
2199+92	LT	1	FR 181
2265+15	RT	1	FR 166
2336+08	LT	1	HENNES ROAD (FR 351)
2387+61	RT	1	BOLDEN ROAD
2417+63	RT	1	EDER ROAD
2440+44	LT	1	KUBLEY ROAD
2448+41	LT	1	SCHRUAFNAGEL ROAD
2458+87	LT	1	SCHRAUFNAGEL ROAD
TOTAL		21	

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	TRAFFIC CONTROL	SHEET _ E

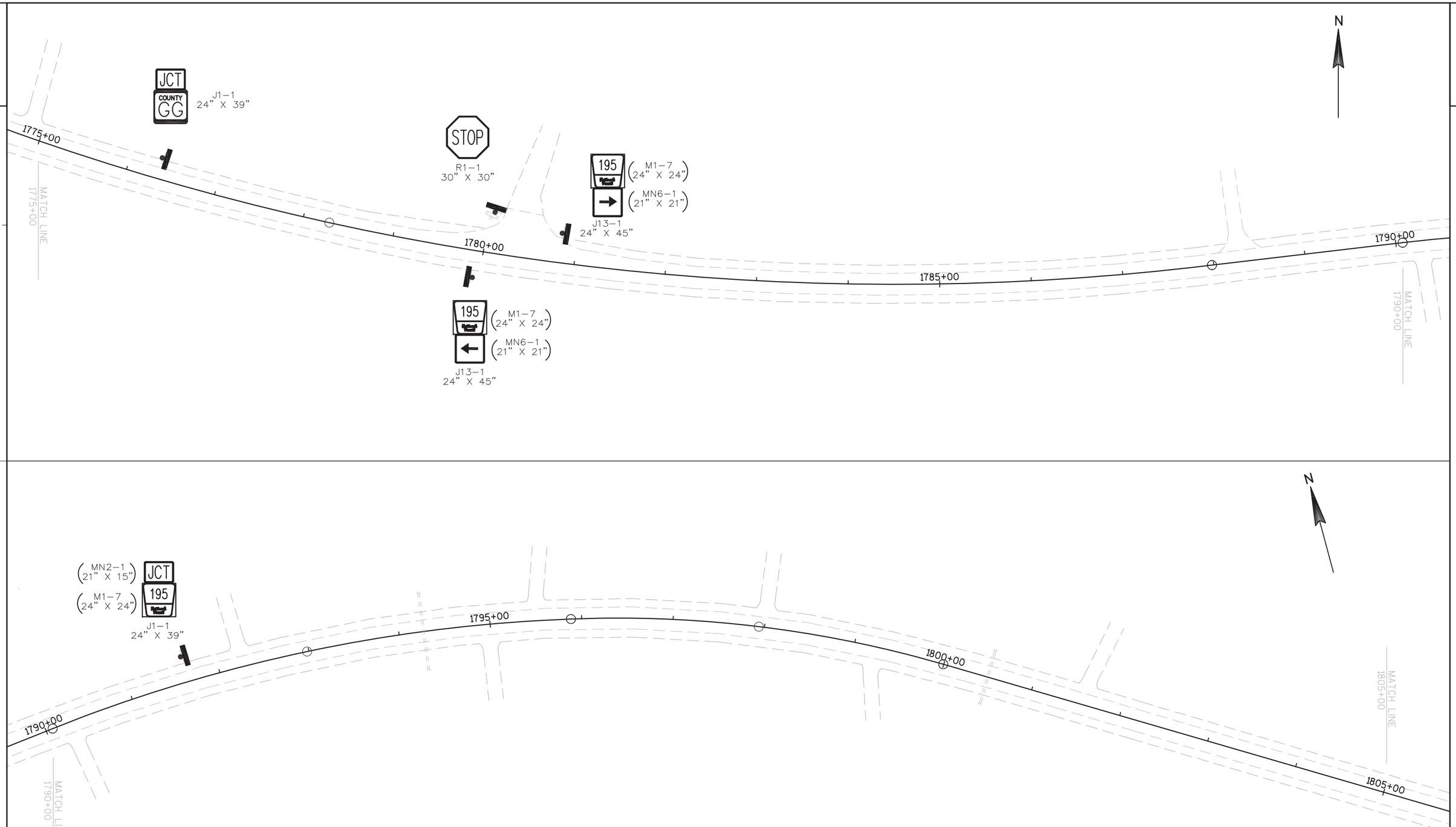
NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY THE PROJECT ENGINEER.





PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET - E

2



2

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET	E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 section2_signing.dwg PLOT DATE : 9/25/2013 10:18 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

2

2

N

1805+00

1810+00

1815+00

1820+00

MATCH LINE
1805+00

ELK
CROSSING
AREA

45
M.P.H.

TO REMAIN

MATCH LINE
1820+00

N

STOP

R1-1
30" X 30"

1820+00

1825+00

1830+00

1835+00

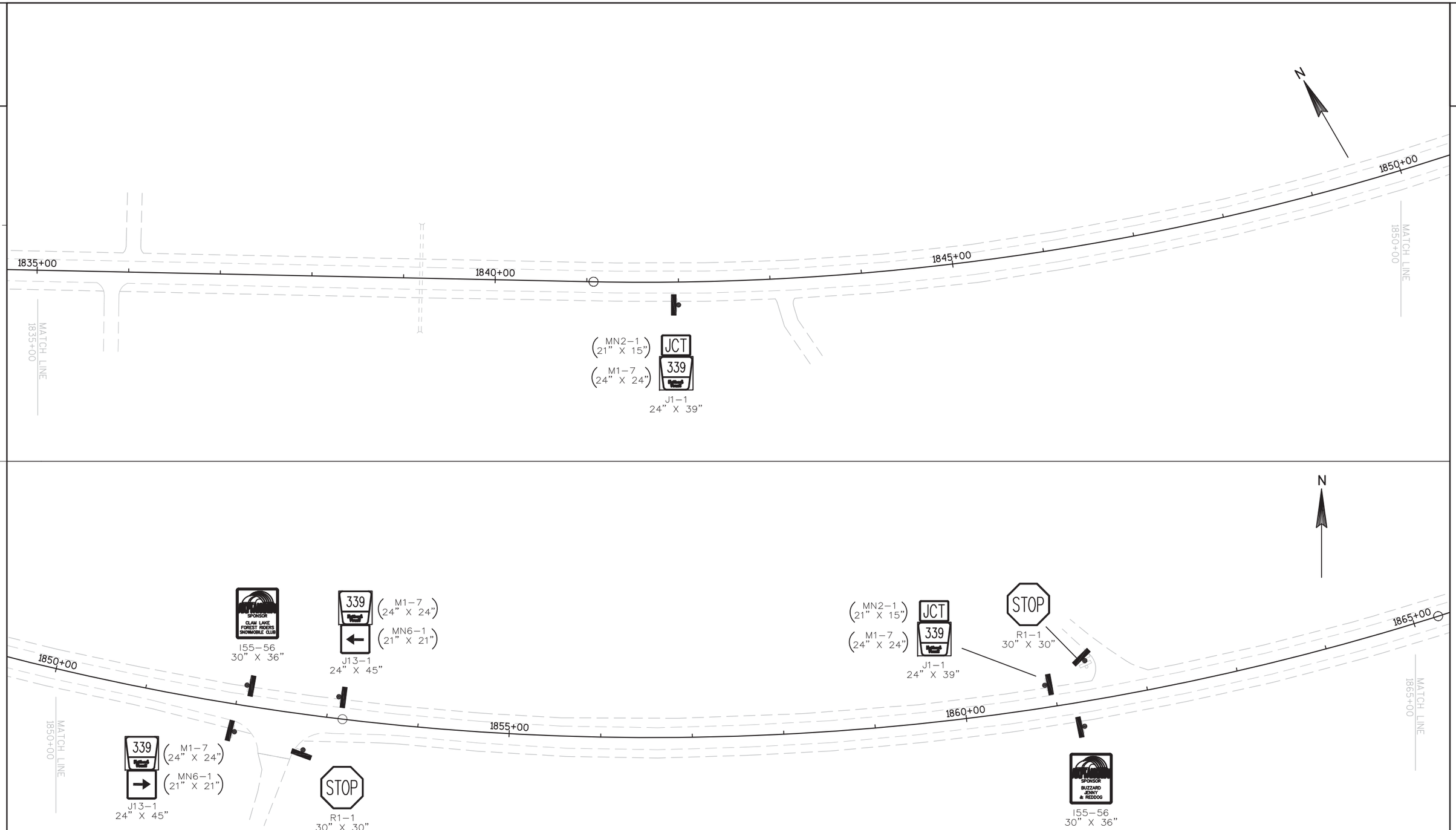
MATCH LINE
1820+00

MATCH LINE
1835+00

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET - E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 section2_signing.dwg PLOT DATE : 9/25/2013 10:18 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

2

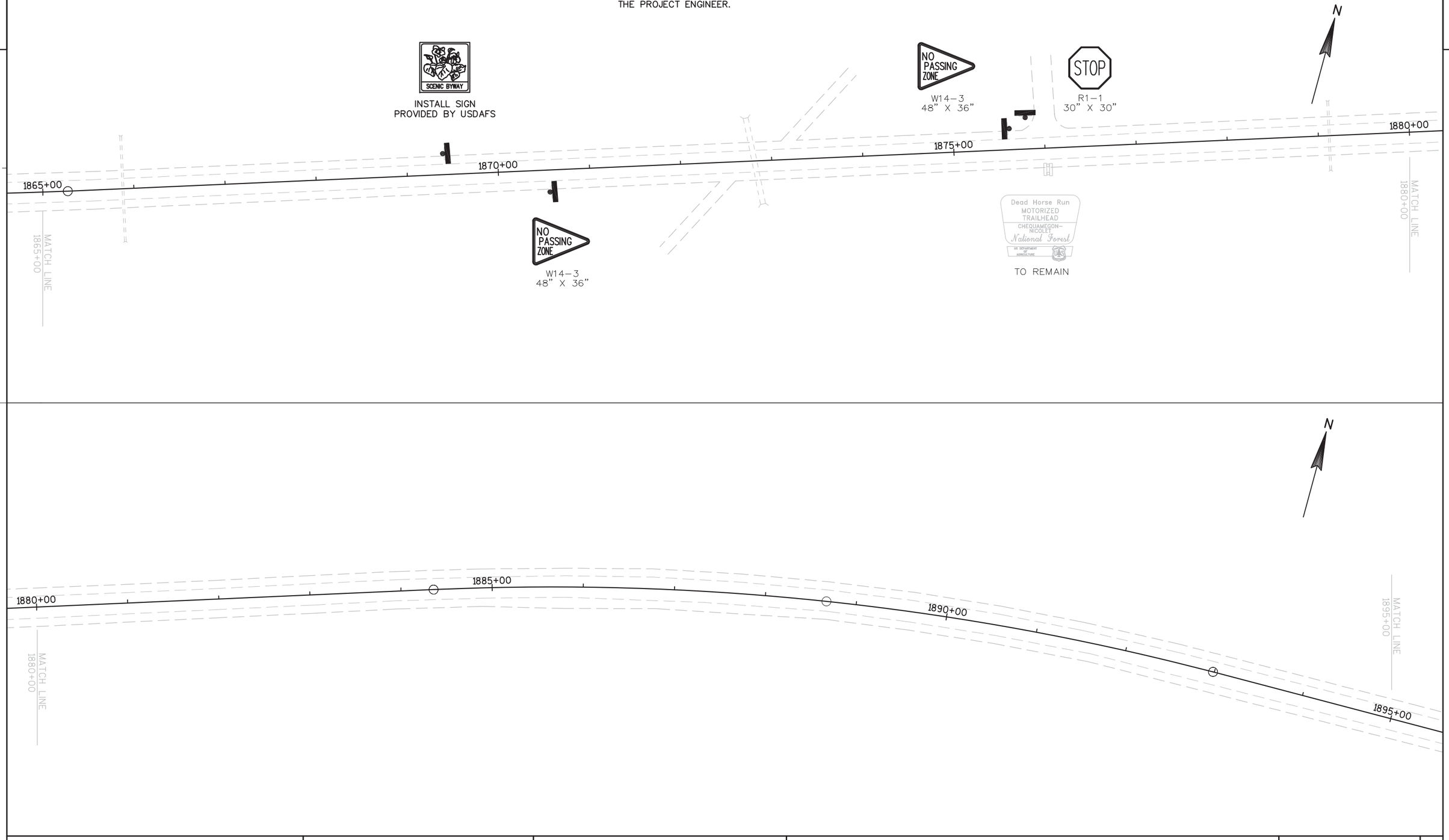


2

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET	E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 section2_signing.dwg PLOT DATE : 9/25/2013 10:19 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY THE PROJECT ENGINEER.



PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET	E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 section2_signing.dwg PLOT DATE : 9/25/2013 10:20 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

2

2

N

STOP
R1-1
30" X 30"

1895+00 1900+00 1905+00 1910+00

MATCH LINE
1895+00

MATCH LINE
1910+00

NO PASSING ZONE
W14-3
48" X 36"

NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY THE PROJECT ENGINEER.

N

ELK CROSSING AREA
45 M.P.H.
NEXT 16 MILES
TO REMAIN

1910+00 1915+00 1920+00 1925+00

MATCH LINE
1910+00

MATCH LINE
1925+00

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET - E

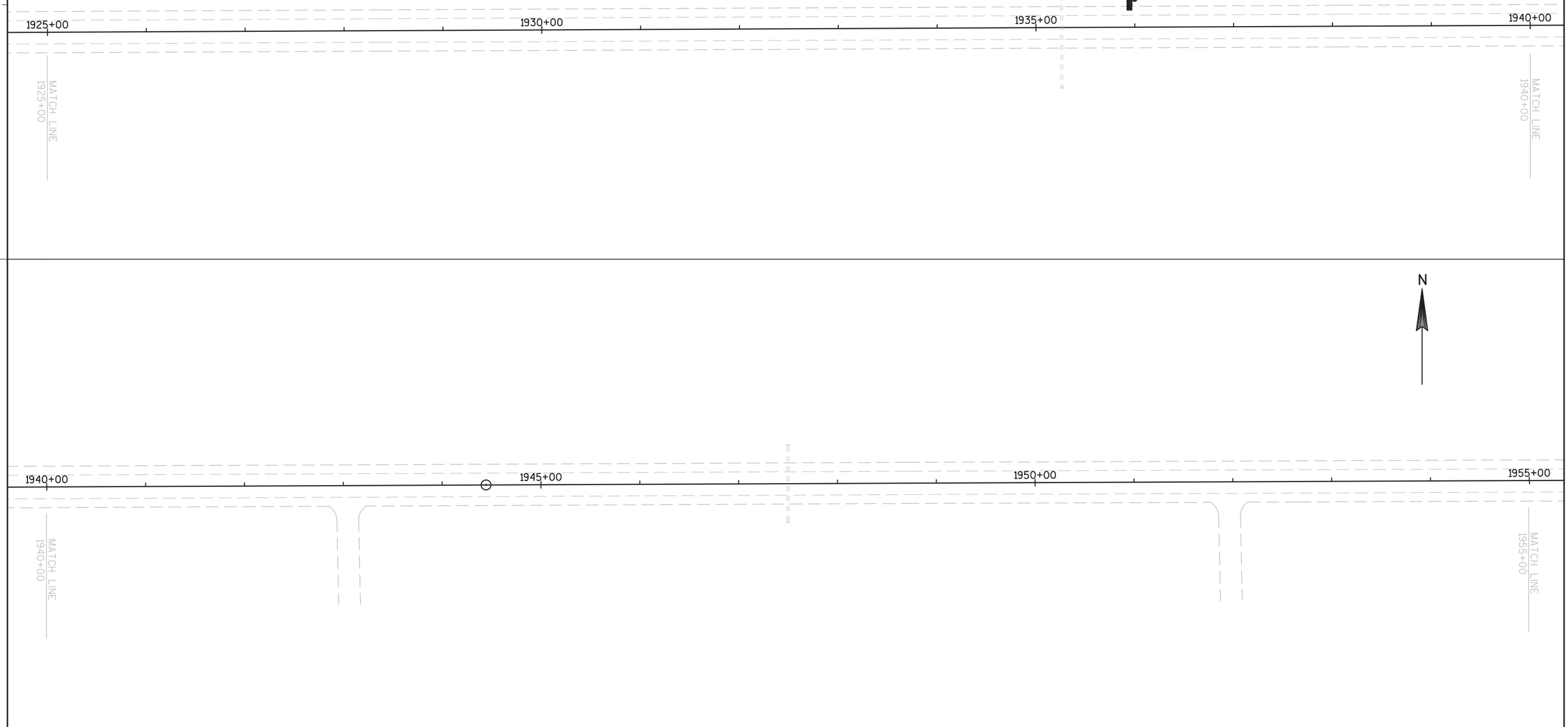
FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 section2_signing.dwg PLOT DATE : 9/25/2013 10:20 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

2

NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY THE PROJECT ENGINEER.

W14-3
48" X 36"

N

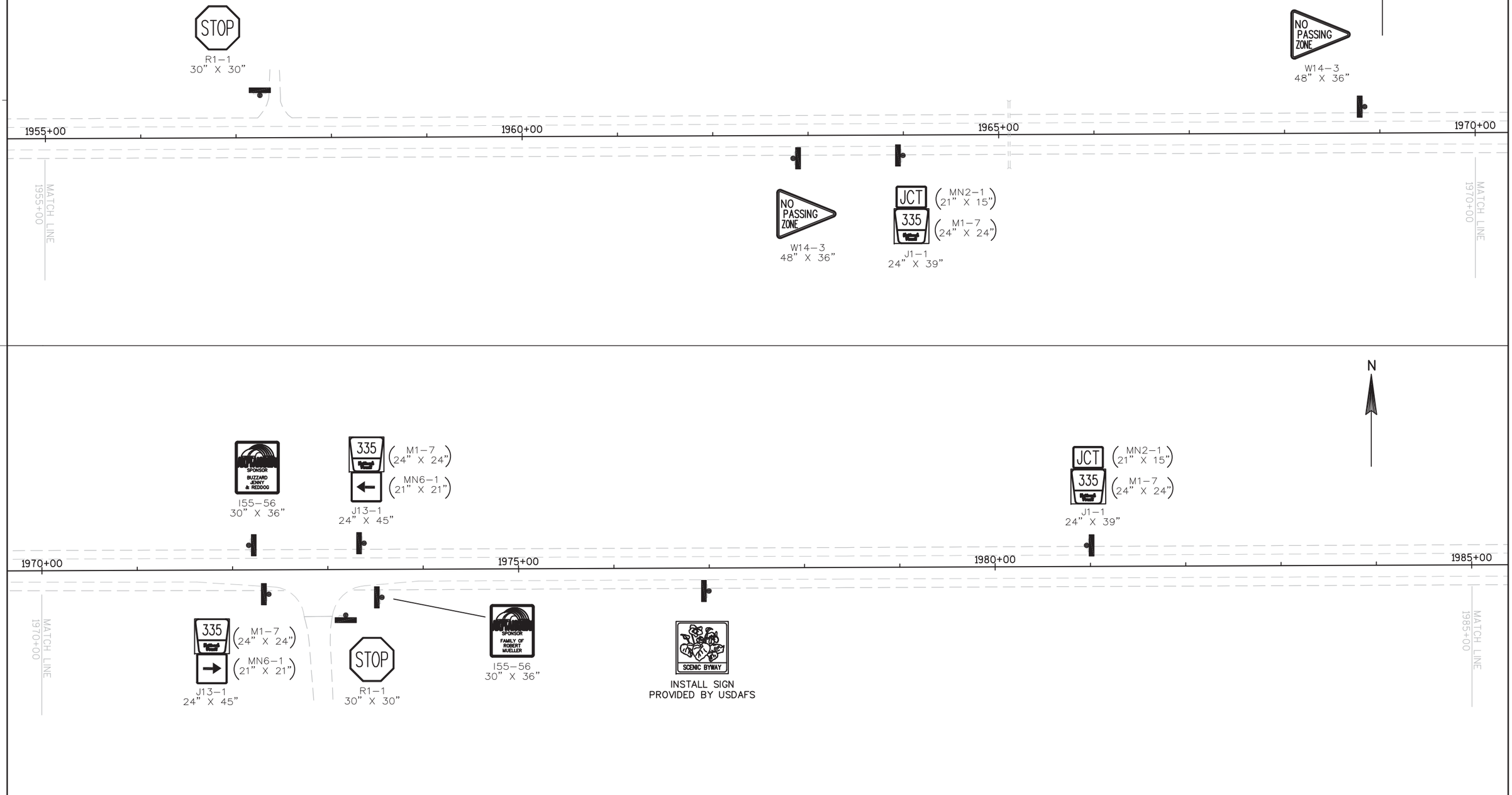


N

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET - 15	E

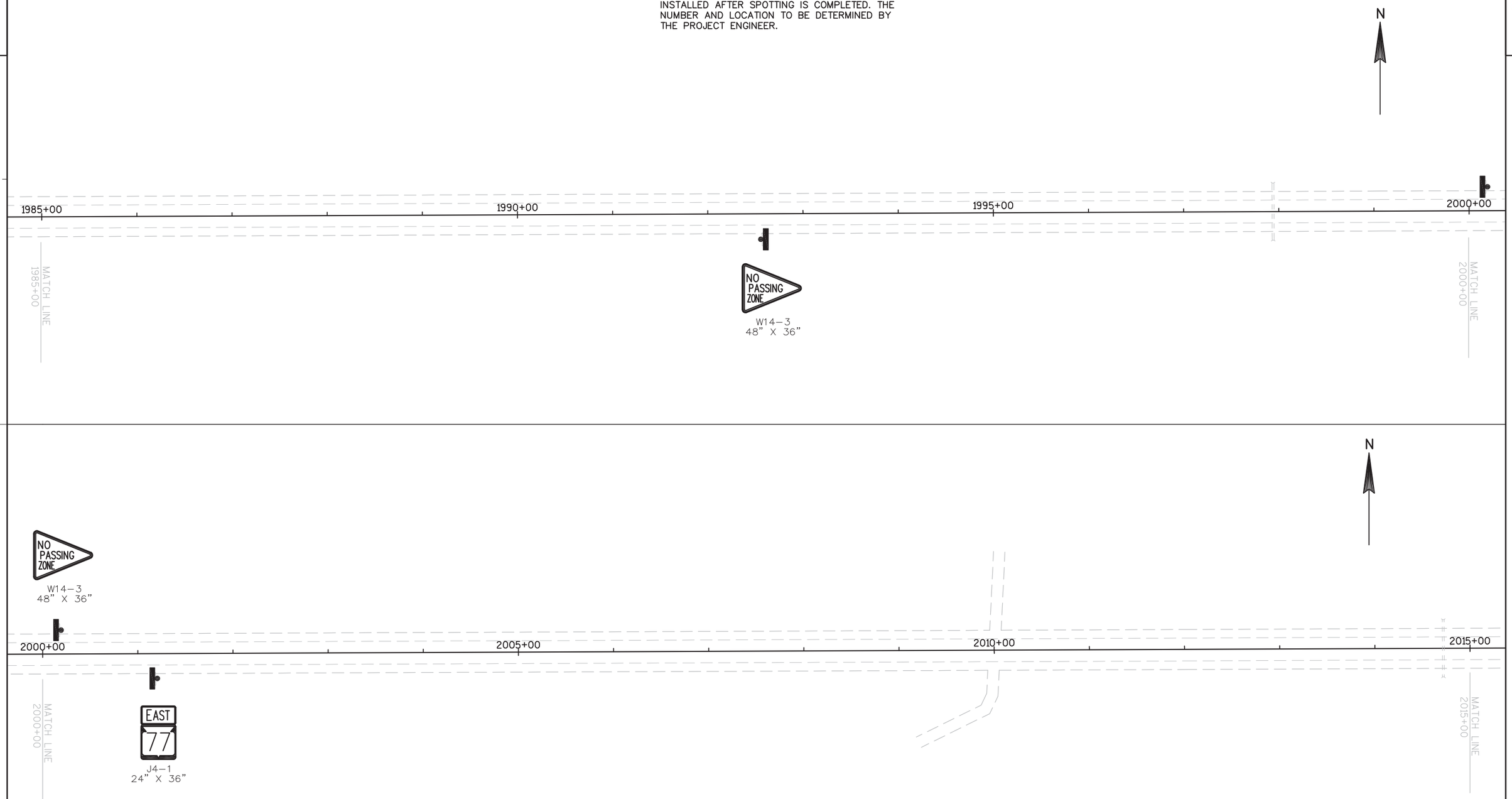
FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 section2_signing.dwg PLOT DATE : 9/25/2013 10:21 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY THE PROJECT ENGINEER.



PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET	E

NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY THE PROJECT ENGINEER.



PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET	E

2

NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY THE PROJECT ENGINEER.

N

NO PASSING ZONE
W14-3
48" X 36"

SCENIC BYWAY
INSTALL SIGN
PROVIDED BY USDAFS

STOP
R1-1
30" X 30"

347 (M1-7 24" X 24")
(MN6-1 21" X 21")
J13-1
24" X 45"

SPONSOR
FAMILY OF
ROBERT
MUELLER
I55-56MOD
30" X 36"

2015+00 2020+00 2025+00 2030+00

MATCH LINE
2015+00

NO PASSING ZONE
W14-3
48" X 36"

JCT (MN2-1 21" X 15")
347 (M1-7 24" X 24")
J1-1
24" X 39"

347 (M1-7 24" X 24")
(MN6-1 21" X 21")
J13-1
24" X 45"

SPONSOR
FAMILY OF
CECIL & ALICE
OEHLER
I55-56
30" X 36"

MATCH LINE
2030+00

N

JCT (MN2-1 21" X 15")
347 (M1-7 24" X 24")
J1-1
24" X 39"

2030+00 2035+00 2040+00 2045+00

MATCH LINE
2030+00

NO PASSING ZONE
W14-3
48" X 36"

MATCH LINE
2045+00

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET - E

2

2

N

2045+00

2050+00

2055+00

2060+00

MATCH LINE
2045+00

MATCH LINE
2060+00

N

2060+00

2065+00

2070+00

2075+00

MATCH LINE
2060+00

MATCH LINE
2075+00

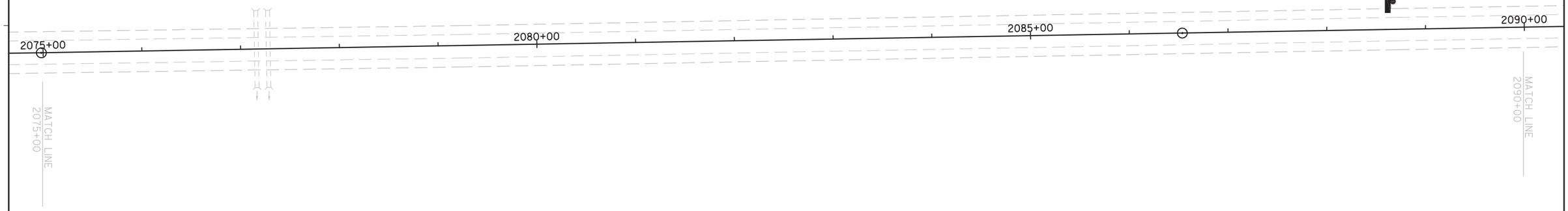
PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET	E

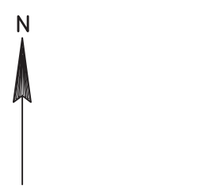
FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 section2_signing.dwg PLOT DATE : 9/25/2013 10:24 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

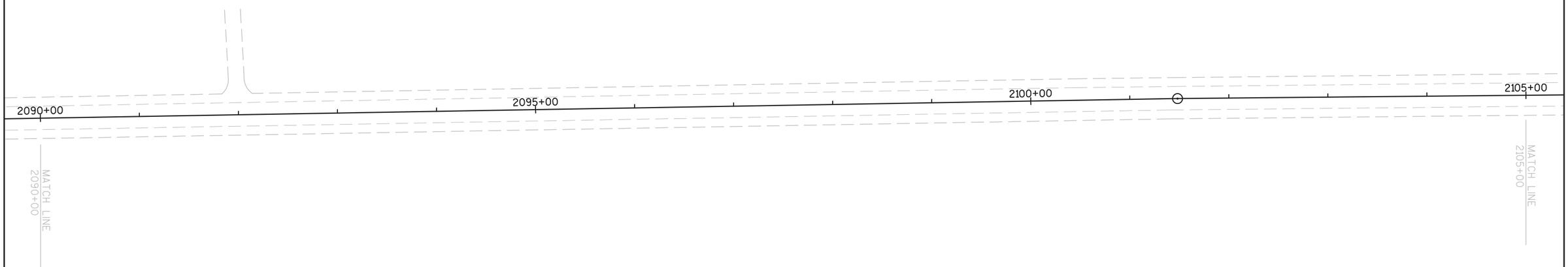
2

2

NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY THE PROJECT ENGINEER.







PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET	E

2

2

N

2105+00

2110+00

2115+00

2120+00

MATCH LINE
2105+00

MATCH LINE
2120+00

NO PASSING ZONE

W14-3
48" X 36"

NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY THE PROJECT ENGINEER.

N

WEST
77

J4-1
24" X 36"

2120+00

2125+00

2130+00

2135+00

MATCH LINE
2120+00

MATCH LINE
2135+00

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET E

2

2

N

STOP
R1-1
30" X 30"

2135+00 2140+00 2145+00 2150+00

MATCH LINE 2135+00

MATCH LINE 2150+00

JCT (MN2-1 21" X 15")
168 (M1-7 24" X 24")
J1-1
24" X 39"

N

NO PASSING ZONE
W14-3
48" X 36"

SPONSOR
FAMILY OF CECIL & ALICE DEHLER
I55-56
30" X 36"

168 (M1-7 24" X 24")
(MN6-1 21" X 21")
J13-1
24" X 45"

JCT (MN2-1 21" X 15")
168 (M1-7 24" X 24")
J1-1
24" X 39"

2150+00 2155+00 2160+00 2165+00

168 (M1-7 24" X 24")
(MN6-1 21" X 21")
J13-1
24" X 45"

STOP
R1-1
30" X 30"

MATCH LINE 2150+00

MATCH LINE 2165+00

NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY THE PROJECT ENGINEER.

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET - E

2

2

N

2165+00

2170+00

2175+00

2180+00

MATCH LINE
2165+00

MATCH LINE
2180+00

NO PASSING ZONE
W14-3
48" X 36"

NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY THE PROJECT ENGINEER.

N

NO PASSING ZONE
W14-3
48" X 36"

2180+00

2185+00

2190+00

2195+00

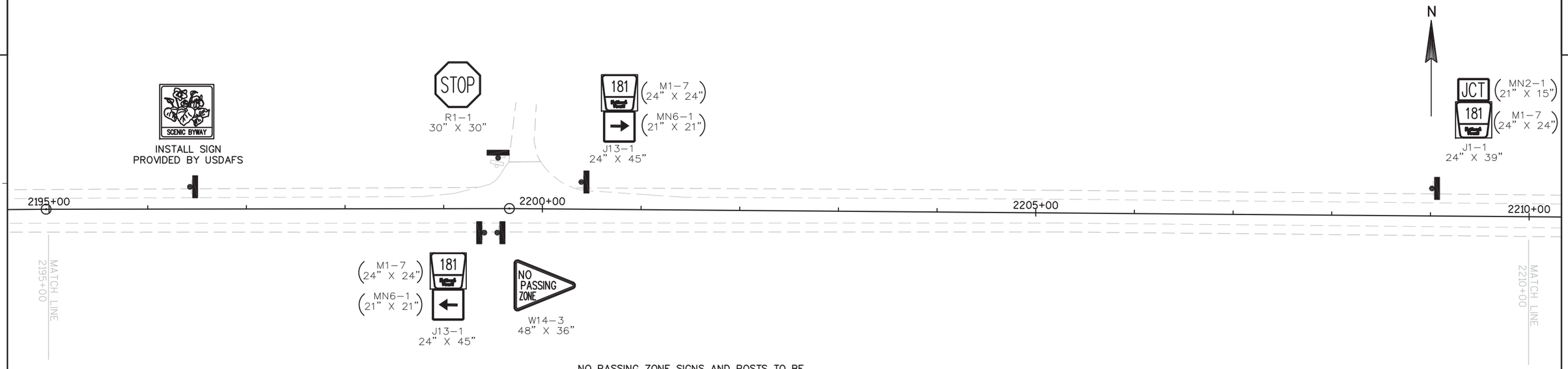
JCT (MN2-1 21" X 15")
181 (M1-7 24" X 24")
J1-1
24" X 39"

MATCH LINE
2180+00

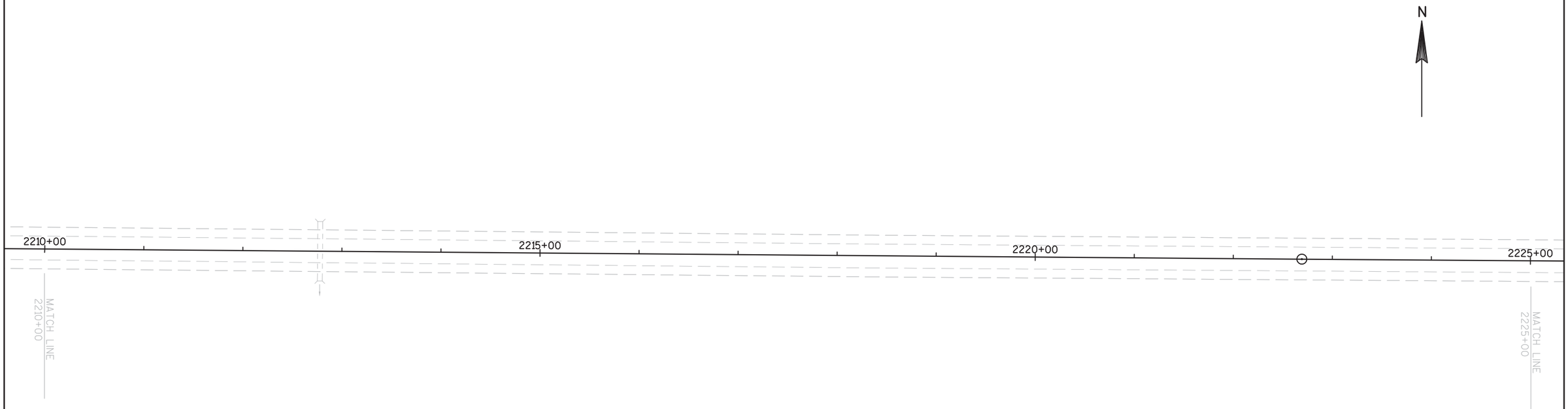
MATCH LINE
2195+00

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET - E

2



NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY THE PROJECT ENGINEER.



PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET	E

2

2

N

2225+00

2230+00

2235+00

2240+00

MATCH LINE
2225+00

MATCH LINE
2240+00

N

2240+00

2245+00

2250+00

2255+00

MATCH LINE
2240+00

JCT
166

(MN2-1
21" X 15")

(M1-7
24" X 24")

J1-1
24" X 39"

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET - 25	E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 section2_signing.dwg PLOT DATE : 9/25/2013 10:28 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

WISDOT/CAI EET 44

2

2

N

166 (M1-7 24" X 24")
(MN6-1 21" X 21")
J13-1
24" X 45"

2255+00 2260+00 2265+00 2270+00

MATCH LINE 2255+00

(M1-7 24" X 24")
166
(MN6-1 21" X 21")
J13-1
24" X 45"

STOP
R1-1
30" X 30"

MATCH LINE 2270+00

N

NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY THE PROJECT ENGINEER.

NO PASSING ZONE
W14-3
48" X 36"

JCT (MN2-1 21" X 15")
166 (M1-7 24" X 24")
J1-1
24" X 39"

2270+00 2275+00 2280+00 2285+00

MATCH LINE 2270+00

MATCH LINE 2285+00

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET E

2

2

N

2285+00

2290+00

2295+00

2300+00

MATCH LINE
2285+00

MATCH LINE
2300+00

NO PASSING ZONE

W14-3
48" X 36"

NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY THE PROJECT ENGINEER.

N

2300+00

2305+00

2310+00

2315+00

MATCH LINE
2300+00

MATCH LINE
2315+00

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET	E

2

N

NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY THE PROJECT ENGINEER.

W14–3
48" X 36"

2315+00 2320+00 2325+00 2330+00

MATCH LINE
2315+00

MATCH LINE
2330+00

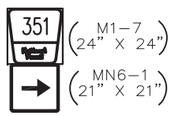
MN2–1
(21" X 15")

M1–7
(24" X 24")

J1–1
24" X 39"

N

R1–1
30" X 30"

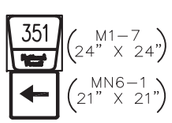


M1–7
(24" X 24")

MN6–1
(21" X 21")

J13–1
24" X 45"

2330+00 2335+00 2340+00 2345+00



M1–7
(24" X 24")

MN6–1
(21" X 21")

J13–1
24" X 45"

MATCH LINE
2330+00

MATCH LINE
2345+00

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET	E

2

NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY THE PROJECT ENGINEER.

N

JCT (MN2-1 21" X 15")
351 (M1-7 24" X 24")
J1-1
24" X 39"

NO PASSING ZONE
W14-3
48" X 36"

2345+00 2350+00 2355+00 2360+00

MATCH LINE 2345+00

MATCH LINE 2360+00

NO PASSING ZONE
W14-3
48" X 36"

SPONSOR
GLIDDEN HIGH SCHOOL STUDENT COUNCIL
I55-56
30" X 36"

N

2360+00 2365+00 2370+00 2375+00

MATCH LINE 2360+00

MATCH LINE 2375+00

NO PASSING ZONE
W14-3
48" X 36"

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET	E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 section2_signing.dwg PLOT DATE : 9/25/2013 10:43 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

2

2

N

2375+00

2380+00

2385+00

2390+00

MATCH LINE
2375+00

STOP
R1-1
30" X 30"

EAST
77
J4-1
24" X 36"

MATCH LINE
2390+00

N

NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY THE PROJECT ENGINEER.

NO PASSING ZONE
W14-3
48" X 36"

2390+00

2395+00

2400+00

2405+00

MATCH LINE
2390+00

MATCH LINE
2405+00

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET - E

2

2

N

SCENIC BYWAY

GREAT DIVIDE

INSTALL SIGNS
PROVIDED BY USDAFS

2405+00

2410+00

2415+00

2420+00

MATCH LINE
2405+00

W2-2
30" X 30"

45
M.P.H.

W13-1
18" X 18"

STOP

R1-1
30" X 30"

MATCH LINE
2420+00

N

2420+00

2425+00

2430+00

2435+00

MATCH LINE
2420+00

MATCH LINE
2435+00

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET	E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 section2_signing.dwg PLOT DATE : 9/25/2013 10:44 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

2

2

N

2435+00

MATCH LINE
2435+00

STOP
R1-1
30" X 30"

CONST. JOINT REQ'D
MATCH EXISTING

2440+00

2445+00

STOP
R1-1
30" X 30"

2450+00

MATCH LINE
2450+00

2450+00

MATCH LINE
2450+00

W1-2L
30" X 30"

45
M.P.H.
W13-1
18" X 18"

2455+00

W3-1
36" X 36"

STOP
R1-1
30" X 30"

W3-1
36" X 36"

2460+00

W1-2R
30" X 30"

W3-1
36" X 36"

2465+00

MATCH LINE
2465+00

JCT
13
J1-1
24"x36"

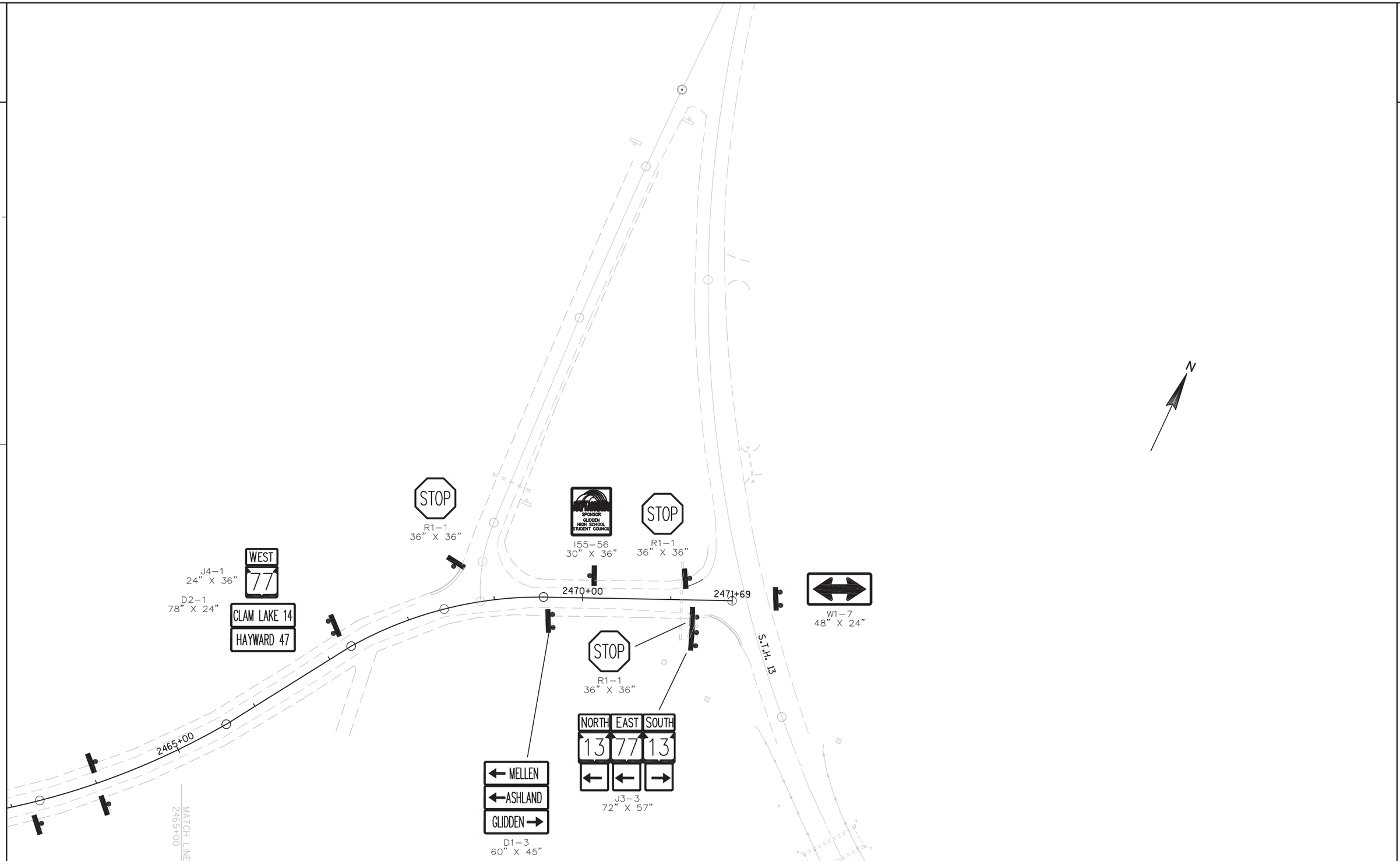
W3-1
36" X 36"

N

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET - E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 section2_signing.dwg PLOT DATE : 9/25/2013 10:45 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

2



PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET - E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 section2_signing.dwg PLOT DATE : 9/25/2013 10:45 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

DATE 10FEB14 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	8530-14-71 QUANTITY
0010	204.0120	REMOVING ASPHALTIC SURFACE MILLING	SY	197,433.000	197,433.000
0020	204.0150	REMOVING CURB & GUTTER	LF	313.000	313.000
0030	211.0100	PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) 01.8530-14-71	LS	1.000	1.000
0040	213.0100	FINISHING ROADWAY (PROJECT) 01. 8530-14-71	EACH	1.000	1.000
0050	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	12,296.000	12,296.000
0060	305.0500	SHAPING SHOULDERS	STA	1,450.000	1,450.000
0070	440.4410.S	INCENTIVE IRI RIDE	DOL	50,000.000	50,000.000
0080	455.0605	TACK COAT	GAL	6,091.000	6,091.000
0090	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	25,770.000	25,770.000
0100	465.0110	ASPHALTIC SURFACE PATCHING	TON	500.000	500.000
0110	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	55.000	55.000
0120	465.0315	ASPHALTIC FLUMES	SY	13.000	13.000
0130	465.0450	ASPHALTIC INTERSECTION RUMBLE STRIP	SY	79.000	79.000
0140	465.0475	ASPHALT CENTER LINE RUMBLE STRIP 2-LANE RURAL	LF	62,178.000	62,178.000
0150	525.0324	ALUMINUM APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 24-INCH	EACH	62.000	62.000
0160	525.0330	ALUMINUM APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 30-INCH	EACH	4.000	4.000
0170	525.0336	ALUMINUM APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 36-INCH	EACH	2.000	2.000
0180	525.0348	ALUMINUM APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 48-INCH	EACH	10.000	10.000
0190	525.0360	ALUMINUM APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 60-INCH	EACH	2.000	2.000
0200	601.0553	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D	LF	325.000	325.000
0210	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 8530-14-71	EACH	1.000	1.000
0220	619.1000	MOBILIZATION	EACH	1.000	1.000
0230	625.0100	TOPSOIL	SY	1,340.000	1,340.000
0240	627.0200	MULCHING	SY	1,340.000	1,340.000
0250	628.1504	SILT FENCE	LF	4,000.000	4,000.000
0260	628.1520	SILT FENCE MAINTENANCE	LF	8,000.000	8,000.000
0270	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	2.000	2.000
0280	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	2.000	2.000
0290	628.2008	EROSION MAT URBAN CLASS I TYPE B	SY	922.000	922.000
0300	628.7504	TEMPORARY DITCH CHECKS	LF	200.000	200.000
0310	629.0210	FERTILIZER TYPE B	CWT	1.000	1.000
0320	630.0120	SEEDING MIXTURE NO. 20	LB	36.000	36.000
0330	630.0200	SEEDING TEMPORARY	LB	36.000	36.000
0340	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	136.000	136.000
0350	637.2210	SIGNS TYPE II REFLECTIVE H	SF	628.040	628.040
0360	637.2230	SIGNS TYPE II REFLECTIVE F	SF	240.250	240.250
0370	638.2602	REMOVING SIGNS TYPE II	EACH	184.000	184.000
0380	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	131.000	131.000
0390	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000
0400	643.0100	TRAFFIC CONTROL (PROJECT) 01. 8530-14-71	EACH	1.000	1.000
0410	643.0900	TRAFFIC CONTROL SIGNS	DAY	3,300.000	3,300.000
0420	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	142,400.000	142,400.000
0430	646.0406	PAVEMENT MARKING SAME DAY EPOXY 4-INCH	LF	81,600.000	81,600.000
0440	648.0100	LOCATING NO-PASSING ZONES	MI	13.700	13.700

3

DATE 10FEB14 E S T I M A T E O F Q U A N T I T I E S

LINE 8530-14-71

NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0450	649.0200	TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH	LF	134,900.000	134,900.000
0460	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	325.000	325.000
0470	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	72,280.000	72,280.000
0480	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 8530-14-71	LS	1.000	1.000
0490	690.0150	SAWING ASPHALT	LF	530.000	530.000
0500	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5. 00/HR	HRS	2,000.000	2,000.000
0510	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	630.000	630.000
0520	SPV.0090	SPECIAL 01. CONCRETE CURB AND GUTTER CURE AND SEAL TREATMENT	LF	325.000	325.000
0530	SPV.0105	SPECIAL 01. MILLING AND REMOVING TEMPORARY JOINT	LS	1.000	1.000
0540	SPV.0105	SPECIAL 02. PREPARATION OF FOUNDATION FOR ASPHALTIC PAVING SPECIAL	LS	1.000	1.000
0550	SPV.0105	SPECIAL 03. MATERIAL TRANSFER VEHICLE	LS	1.000	1.000
0560	SPV.0170	SPECIAL 01. REHEATING HMA PAVEMENT LONGITUDINAL JOINTS SPECIAL	STA	1,446.000	1,446.000
0570	SPV.0195	SPECIAL 01.HMA PAVEMENT TYPE E-3 SPECIAL	TON	40,197.000	40,197.000

REMOVING ASPHALTIC SURFACE SUMMARY

STATION TO STATION	LOCATION	MILL DEPTH INCHES	REM ASPH. SURF. MILLING 204.0120 SY	SAWING ASPHALT 690.0150 LF	REMARKS
1748+89 - 1749+14	ML	1.75	85	30	CONST. JOINT
1749+14 - 1765+67	ML	1.75	4408		
1748+25	PE RT	1.75	81	25	
10+72 - 11+61	SR RT	1.75	649	37	C.T.H. GG
1765+67 - 1780+32	ML	1.75	3907		
1772+17	PE LT	1.75	37	16	
1780+32 - 1830+71	ML	1.75	13437		
1780+32	SR LT	1.75	282		F.R. 195
1788+25	PE LT	1.75	58	16	
1830+71 - 1852+52	ML	1.75	5816		
1830+71	SR LT	1.75	160	25	F.R. 1308
1835+90	PE RT	1.75	39	16	
1852+52 - 1902+33	ML	1.75	13283		
1852+52	SR RT	1.75	230		F.R. 339
1902+33 - 1972+90	ML	1.75	18819		
1902+33	SR LT	1.75	157		F.R. 346
1972+90 - 2027+72	ML	1.75	14619		
1972+90	SR RT	1.75	198		F.R. 335
2027+72 - 2150+93	ML	1.75	32856		
2027+75	SR LT	1.75	215		F.R. 347
2150+93 - 2199+92	ML	1.75	13064		
2150+93	SR RT	1.75	297		F.R. 168
2199+92 - 2265+15	ML	1.75	17395		
2199+92	SR LT	1.75	258		F.R. 181
2265+15 - 2336+08	ML	1.75	18915		
2265+15	SR RT	1.75	228		F.R. 166
2336+08 - 2417+63	ML	1.75	21747		
2336+08	SR LT	1.75	228		HENNES ROAD
2387+61	SR RT	1.75	35	33	BOLDEN ROAD
2417+63 - 2470+40	ML	1.75	14072		
2417+63	SR RT	1.75	334		EGER ROAD
2440+44	SR LT	1.75	135	18	KUBLEY ROAD
2448+41	SR LT	1.75	186	18	SCHRAUFNAGEL ROAD
2458+87	SR LT	1.75	142	18	SCHRAUFNAGEL ROAD
2459+00	PE RT	1.75	322	100	
2468+67	SR LT	1.75	228	42	
2470+40 - 2471+43	ML	1.75	514		
2471+43 - 2471+69	ML	1.75	199	136	CONST. JOINT
	TOTAL		197433	530	

LOCATING NO PASSING ZONES

STATION TO STATION	LOCATION	648.0100 MI
	PROJECT	13.70
	TOTAL	13.70

PAVEMENT MARKING SUMMARY

LOCATION	PAVEMENT MARKING EPOXY 4-INCH 646.0106 LF	PAVEMENT MARKING SAME DAY EPOXY 4-INCH 646.0406 LF	TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH 649.0200 LF
FIN. HMA SURF. (EDGELINE)	142400		
FIN. HMA SURF. (CENTERLINE)		81600	
MILLED SURFACE			67450
HMA BINDER			67450
TOTAL	142400	81600	134900

NOTE: TEMPORARY MARKING IS REQUIRED ON MILLED SURFACE AND LOWER HMA LIFT.

ASPHALTIC CENTERLINE RUMBLE STRIP

STATION TO STATION	ASPHALTIC CENTERLINE RUMBLE STRIP 2-LANE RURAL 465.0475 (LF)	REMARKS
1748+89 - 1763+67	1478	SEE SDD 13A11-1A, 1B
1767+67 - 1778+32	1065	
1782+32 - 1816+50	3418	
1820+50 - 1828+71	821	
1832+71 - 1842+05	934	
1844+05 - 1850+52	647	
1854+52 - 1859+79	527	
1863+79 - 1874+01	1022	
1878+01 - 1895+00	1699	
1899+00 - 1900+33	133	
1904+33 - 1955+41	5108	
1959+11 - 1970+90	1149	
1974+90 - 2025+72	5082	
2029+72 - 2038+43	871	
2042+43 - 2137+23	9480	
2141+23 - 2148+93	770	
2152+93 - 2197+92	4499	
2201+92 - 2263+15	6123	
2267+15 - 2334+08	6693	
2338+08 - 2385+61	4753	
2389+61 - 2415+63	2602	
2419+63 - 2438+44	1881	
2442+44 - 2446+41	397	
2450+41 - 2453+85	344	
2455+85 - 2456+87	102	
2460+87 - 2466+67	580	
TOTAL	62178	

REMOVING ASPHALTIC SURFACE SUMMARY

STATION TO STATION	LOCATION	MILL DEPTH INCHES	REM ASPH. SURF. MILLING 204.0120 SY	REM. ASPH SURF. FULL DEPTH SPV.0090.02 SY	SAWING ASPHALT 690.0150 LF	REMARKS
1748+89 - 1749+14	ML	4.5		85	30	CONST. JOINT
1749+14 - 1765+67	ML	4.5		4408		
1748+25	PE RT	1.75	81		25	
10+72 - 11+61	SR RT	1.75	649		37	C.T.H. GG
1765+67 - 1780+32	ML	4.5		3907		
1772+17	PE LT	1.75	37		16	
1780+32 - 1830+71	ML	4.5		13437		
1780+32	SR LT	1.75	282			F.R. 195
1788+25	PE LT	1.75	56		16	
1830+71 - 1852+52	ML	4.5		5816		
1830+71	SR LT	1.75	160		25	F.R. 1308
1835+90	PE RT	1.75	39		16	
1852+52 - 1902+33	ML	4.5		13283		
1852+52	SR RT	1.75	230			F.R. 339
1902+33 - 1964+50	ML	4.5		16579		
1902+33	SR LT	1.75	157			F.R. 346
1964+50 - 2027+72	ML	1.75	16859			
1972+90	SR RT	1.75	198			F.R. 335
2027+72 - 2150+93	ML	1.75	32856			
2027+75	SR LT	1.75	215			F.R. 347
2150+93 - 2199+92	ML	1.75	13064			
2150+93	SR RT	1.75	297			F.R. 168
2199+92 - 2265+15	ML	1.75	17395			
2199+92	SR LT	1.75	258			F.R. 181
2265+15 - 2336+08	ML	1.75	18915			
2265+15	SR RT	1.75	228			F.R. 166
2336+08 - 2417+63	ML	1.75	21747			
2336+08	SR LT	1.75	228			HENNES ROAD
2387+61	SR RT	1.75	35		33	BOLDEN ROAD
2417+63 - 2470+40	ML	1.75	14072			
2417+63	SR RT	1.75	334			EDER ROAD
2440+44	SR LT	1.75	135		18	KUBLEY ROAD
2448+41	SR LT	1.75	186		18	SCHRAUFNAGEL ROAD
2458+87	SR LT	1.75	142		18	SCHRAUFNAGEL ROAD
2459+00	PE RT	1.75	322		100	
2468+67	SR LT	1.75	228		42	
2470+40 - 2471+43	ML	1.75	314			
2471+43 - 2471+69	ML	1.75	199		136	CONST. JOINT
	TOTAL		139918	57515	530	

LOCATING NO PASSING ZONES

STATION TO STATION	LOCATION	648.0100 MI
1748+89 - 2471+69	PROJECT	13.70
	TOTAL	13.70

PAVEMENT MARKING SUMMARY

LOCATION	PAVEMENT MARKING EPOXY 4-INCH 646.0106 LF	TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH 649.0200 LF
FIN. HMA SURF. (EDGELINE)	224000	
FIN. HMA SURF. (CENTERLINE)		
MILLED SURFACE		108250
HMA BINDER		108250
TOTAL	224000	216500

NOTE: TEMPORARY MARKING IS REQUIRED ON MILLED SURFACE AND LOWER HMA LIFT.

ASPHALTIC CENTERLINE RUMBLE STRIP

STATION TO STATION	ASPHALTIC CENTERLINE RUMBLE STRIP 2-LANE RURAL 465.0475 (LF)	REMARKS
1748+89 - 1763+67	1478	SEE SDD 13A11-1A, 1B
1767+67 - 1778+32	1065	
1782+32 - 1816+50	3418	
1820+50 - 1828+71	821	
1832+71 - 1842+05	934	
1844+05 - 1850+52	647	
1854+52 - 1859+79	527	
1863+79 - 1874+01	1022	
1878+01 - 1895+00	1699	
1899+00 - 1900+33	133	
1904+33 - 1955+41	5108	
1959+41 - 1970+90	1149	
1974+90 - 2025+72	5082	
2029+72 - 2038+43	871	
2042+43 - 2137+23	9480	
2141+23 - 2148+93	770	
2152+93 - 2197+92	4499	
2201+92 - 2263+15	6123	
2267+15 - 2334+08	6693	
2338+08 - 2385+61	4753	
2389+61 - 2415+63	2602	
2419+63 - 2438+44	1881	
2442+44 - 2446+41	397	
2450+41 - 2453+85	344	
2455+85 - 2456+87	102	
2460+87 - 2466+67	580	
TOTAL	62178	

Addendum No. 1
ID 8530-14-71
Revised Sheet 36
April 4, 2014

HMA PAVEMENT SUMMARY

STATION TO STATION	LOCATION	DEPTH (IN)	AREA (SY)	HMA PAVEMENT TYPE E-3 SPECIAL SPV.0195.01 TON	REHEATING HMA LONGITUDINAL JOINTS SPV.0170.01 STA	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTR. 465.0120 TON	REMARKS
1748+89 - 1749+14	MAINLINE	1.75	83	8.0	1		CONST. JOINT
1749+14 - 2471+43	MAINLINE	3.00	240763	39725.9	1444		MAINLINE
2471+43 - 2471+69	MAINLINE	1.75	199	19.2	1		CONST. JOINT
1748+25	PE RT	1.75	81			7.8	
10+72 - 11+61	SR RT	3.00	649	107.1			C.T.H. GG
1772+17	PE LT	1.75	37			3.6	
1780+32	SR LT	1.75	282	27.1			F.R. 195
1788+25	PE LT	1.75	56			5.4	
1830+71	SR LT	1.75	160	15.4			F.R. 1308
1835+90	PE RT	1.75	39			3.8	
1852+52	SR RT	1.75	230	22.1			F.R. 339
1872+56	TRL RT	1.75	20			1.9	TRAIL 214
1873+15	TRL LT	1.75	20			1.9	TRAIL 214
1902+33	SR LT	1.75	157	15.1			F.R. 346
1972+90	SR RT	1.75	198	19.1			F.R. 335
2027+75	SR LT	1.75	215	20.7			F.R. 347
2150+93	SR RT	1.75	297	28.6			F.R. 168
2199+92	SR LT	1.75	258	24.8			F.R. 181
2265+15	SR RT	1.75	228	21.9			F.R. 166
2336+08	SR LT	1.75	228	21.9			HENNES ROAD
2387+61	SR RT	1.75	35	3.4			BOLDEN ROAD
2417+63	SR RT	1.75	334	32.1			EDER ROAD
2440+44	SR LT	1.75	135	13.0			KUBLEY ROAD
2448+41	SR LT	1.75	186	17.9			SCHRAUFNAGEL ROAD
2458+87	SR LT	1.75	142	13.7			SCHRAUFNAGEL ROAD
2459+00	PE RT	1.75	322			31.0	
2468+67	SR LT	1.75	228	21.9			
2471+27 - 2472+17	RT	3.00	107	17.7			WIDENING & TAPER HWY 13 INT.
TOTAL				40197	1446	55	

AGGREGATE SUMMARY

STATION TO STATION	LOCATION	LENGTH (FT)	E.A.	C.Y.	BASE AGGREGATE DENSE 3/4-INCH 305.0110 TON	SHAPING SHOULDERS 305.0500 STA	REMARKS
1748+89 - 2471+69	ML LT & RT	144560	1.125	6023.3	12047	1450	
2471+27 - 2471+74	RT	62	1.75	4.8	10		CURB & GUTTER
STH 13 INTERSECTION	RT			29.0	58		WIDENING & TAPER
ENTRANCES (32)				64.0	128		
SIDE ROADS (18)				27.0	54		
TOTAL				6148.1	12296	1450	

CONSTRUCTION STAKING

STATION TO STATION	LOCATION	RESURFACING REFERENCE 650.8000 LF	SUPPLEMENTAL CONTROL 650.9910 LS	CURB GUTTER AND CURB & GUTTER 650.5500 LF
1746+52 - 2471+69	ML	72280		
PROJECT			1	
1764+77 - 1765+81	RT			127
1766+26 - 1766+66	RT			86
2468+33 - 2468+73	LT			50
2471+27 - 2471+74	RT			62
TOTAL		72280	1	325

ASPHALTIC INTERSECTION RUMBLE STRIP

LOCATION	ASPHALTIC INTERSECTION RUMBLE STRIP 465.0450 SY	REMARKS
INT. STH 77 & STH 13	79	SEE SDD 13A8-1
TOTAL	79	

ASPHALTIC SURFACE PATCHING

STATION	LOCATION	465.0110 TON	REMARKS
PROJECT	UNDISTRIBUTED	500	
TOTAL		500	

CURB AND GUTTER SUMMARY

STATION TO STATION	LOCATION	REMOVING CURB AND GUTTER 204.0150 LF	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D 601.0553 LF	CONCRETE CURB AND GUTTER CURE AND SEAL TREATMENT SPV.0090.01 LF
1764+77 - 1765+81	RT	127	127	127
1766+26 - 1766+66	RT	86	86	86
2468+33 - 2468+73	LT	50	50	50
2471+27 - 2471+74	RT	50	62	62
TOTAL		313	325	325

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	MISCELLANEOUS QUANTITIES	SHEET	E

FILE NAME : R:\2010\10-042 (STH 77)\DRAWINGS\DWG\STH 77 SECTION 3.DWG PLOT DATE : 1/28/2014 1:35 PM PLOT BY : JAMES SOLBERG PLOT NAME : ----------

HMA PAVEMENT SUMMARY

STATION TO STATION	LOCATION	DEPTH (IN)	AREA (SY)	HMA PAVEMENT TYPE E-3 460.1103 TON	HIGH RECYCLE HOT MIX ASPHALT PAVEMENT SPV.0195.02 TON	ASPHALTIC MATERIAL PG58-34 455.0110 TON	REHEATING HMA LONGITUDINAL JOINTS SPV.0170.01 STA	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTR. 465.0120 TON	REMARKS
1748+89 - 1964+50	MAINLINE	4.00			16367		1		CONST. JOINT
1964+50 - 2471+43	MAINLINE	3.00		28756		1607	1444		MAINLINE
2471+43 - 2471+69	MAINLINE	1.75	199	19	ASPHALTIC		1		CONST. JOINT
1748+25	PE RT	1.75	81			TOTAL		7.8	
10+72 - 11+61	SR RT	3.00	649	107	MATERIAL				C.T.H. GG
1772+17	PE LT	1.75	37			ABOVE		3.6	
1780+32	SR LT	1.75	282	27	INCLUDED				F.R. 195
1788+25	PE LT	1.75	56			INCLUDES		5.4	
1830+71	SR LT	1.75	160	15	IN				F.R. 1308
1835+90	PE RT	1.75	39			THE		3.8	
1852+52	SR RT	1.75	230	22	MIX				F.R. 339
1872+56	TRL RT	1.75	20			ASPHALTIC		1.9	TRAIL 214
1873+15	TRL LT	1.75	20					1.9	TRAIL 214
1902+33	SR LT	1.75	157	15		MATERIAL			F.R. 346
1972+90	SR RT	1.75	198	19					F.R. 335
2027+75	SR LT	1.75	215	21		FOR			F.R. 347
2150+93	SR RT	1.75	297	29					F.R. 168
2199+92	SR LT	1.75	258	25		SIDE			F.R. 181
2265+15	SR RT	1.75	228	22					F.R. 166
2336+08	SR LT	1.75	228	22		ROADS			HENNES ROAD
2387+61	SR RT	1.75	35	3					BOLDEN ROAD
2417+63	SR RT	1.75	334	32					EDER ROAD
2440+44	SR LT	1.75	135	13					KUBLEY ROAD
2448+41	SR LT	1.75	186	18					SCHRAUFNAGEL ROAD
2458+87	SR LT	1.75	142	14					SCHRAUFNAGEL ROAD
2459+00	PE RT	1.75	322					31.0	
2468+67	SR LT	1.75	228	22					
2471+27 - 2472+17	RT	3.00	107	18					WIDENING & TAPER HWY 13 INT.
	TOTAL			29219	16367	1607	1446	55	

CONSTRUCTION STAKING

STATION TO STATION	LOCATION	RESURFACING REFERENCE 650.8000 LF	SUPPLEMENTAL CONTROL 650.9910 LS	CURB GUTTER AND CURB & GUTTER 650.5500 LF
1746+52 - 2471+69	ML	72280		
	PROJECT		1	
1764+77 - 1765+81	RT			127
1766+26 - 1766+66	RT			86
2468+33 - 2468+73	LT			50
2471+27 - 2471+74	RT			62
	TOTAL	72280	1	325

CURB AND GUTTER SUMMARY

STATION TO STATION	LOCATION	REMOVING CURB AND GUTTER 204.0150 LF	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D 601.0553 LF	CONCRETE CURB AND GUTTER CURE AND SEAL TREATMENT SPV.0090.01 LF
1764+77 - 1765+81	RT	127	127	127
1766+26 - 1766+66	RT	86	86	86
2468+33 - 2468+73	LT	50	50	50
2471+27 - 2471+74	RT	50	62	62
	TOTAL	313	325	325

ASPHALTIC INTERSECTION RUMBLE STRIP

LOCATION	ASPHALTIC INTERSECTION RUMBLE STRIP 465.0450 SY	REMARKS
INT. STH 77 & STH 13	79	SEE SDD 13A8-1
TOTAL	79	

Addendum No. 1
ID 8530-14-71
Revised Sheet 37
April 4, 2014

PERMANENT SIGNING SUMMARY

STATION	LOCATION	POSTS WOOD 4x6-INCH x 16-FT 634.0616 EACH	SIGNS TYPE II REFLECT. H 637.2210 SF	SIGNS TYPE II REFLECT. F 637.2230 SF	REM. SIGNS TYPE 2 638.2602 EACH	REM. SMALL SIGN SUPPORTS 638.3000 EACH	SIGN CODE	SIGN MESSAGE	SIZE	REMARKS
1748+75	LEFT	1	5.00		1	1	R2-1	SPEED LIMIT 35	24" X 30"	
1751+13	LEFT	1	20.00		3	1	J2-2	JCT CTH M NORTH CTH GG (ADV RT ARROW)	48" X 60"	
1751+59	RIGHT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
1753+40	LEFT	2	11.00		1	1	I2-3	CLAM LAKE UNINCORPORATED	66" X 24"	
1753+82	RIGHT	1	5.00		1	1	R2-1	SPEED LIMIT 55	24" X 30"	
1754+56	LEFT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
1754+95	LEFT	1		9.00	1	1	W3-5	RED. SPEED AHD. 35 MPH	36" X 36"	
1759+91	RIGHT	1	7.50		2	1	J12-1	CTH GG (ADV RT ARROW)	24" X 45"	
1761+06	RIGHT	2	6.25		1	1	D1-1	LORETTA (RIGHT ARROW)	60" X 15"	
1763+70	LEFT	1	6.00		2	1	J4-1	WEST STH 77	24" X 36"	REMOVE AND REINSTALL EXIST. SNOWMOBILE TRAIL SIGNS (2)
1765+03	RIGHT	1	7.50		2	1	J13-1	CTH GG (RIGHT ARROW)	24" X 45"	
1765+55	LEFT	2		8.00	2	2	W1-7	LARGE ARROW (TWO DIRECTIONS)	24" X 45"	
1765+58	RIGHT	1	7.46		1	1	R1-1	STOP	36" X 36"	CTH GG
1766+30	RIGHT	1	7.46		1	1	R1-1	STOP	36" X 36"	CTH GG
1766+38	RIGHT	1	15.00		3	1	J13-2	CTH GG (LEFT ARROW) STH 77 (LEFT & RIGHT ARROW)	48" X 45"	CTH GG
1766+39	LEFT	1	7.50		2	1	J2-1	CTH GG (ARROW LEFT & UP)	24" X 45"	
1767+70	RIGHT	1	6.00		2	1	J4-1	EAST STH 77	24" X 36"	
1769+57	RIGHT	2			2	2		SCENIC BYWAY GREAT DIVIDE	48" X 36" 51" X 12"	SIGNS PROVIDED BY USDAFS
1771+35	LEFT	2	6.25		1	1	D1-1	LORETTA (LEFT ARROW)	60" X 15"	
1771+69	RIGHT	1	6.50		2	1	J1-1	JCT FR 195	24" X 39"	
1776+34	LEFT	1	6.50		2	1	J1-1	JCT CTH GG	24" X 39"	
1779+92	RIGHT	1	7.50		2	1	J13-1	FR 195 (LEFT ARROW)	24" X 45"	
1780+05	LEFT	1	5.18		1	1	R1-1	STOP	30" X 30"	FR 195
1780+82	LEFT	1	7.50		2	1	J13-1	FR 195 (RIGHT ARROW)	24" X 45"	
1791+64	LEFT	1	6.50		2	1	J1-1	JCT FR 195	24" X 39"	
1815+30	RIGHT							ELK CROSSING AREA 45 MPH	30" X 30" 18" X 18"	TO REMAIN
1830+46	LEFT	1	6.25		1	1	R1-1	STOP	30" X 30"	FR 1308
1842+00	RIGHT	1	6.50		2	1	J1-1	JCT FR 339	24" X 39"	
1852+03	RIGHT	1	7.50		2	1	J13-1	FR 339 (RIGHT ARROW)	24" X 45"	
1852+09	LEFT	1	7.50		1	1	I55-56	ADOPT A HIGHWAY	30" X 36"	CLAM LAKE FOREST RIDERS SNOWMOBILE CLUB
1852+79	RIGHT	1	5.18		1	1	R1-1	STOP	30" X 30"	FR 339
1853+12	LEFT	1	7.50		2	1	J13-1	FR 339 (LEFT ARROW)	24" X 45"	

CONTINUED ON NEXT PAGE

NOTE: STATIONING SHOWN FOR ALL SIGNS IS APPROXIMATE. LAYOUT AND ACTUAL PLACEMENT SHALL BE DONE BY THE CONTRACTOR IN ACCORDANCE WITH THE MUTCD.

ELK CROSSING SIGNS SHALL NOT BE MOVED OR DISTURBED UNLESS PERMISSION IS OBTAINED FROM THE FIELD ENGINEER. IF DEEMED NECESSARY, MOVING THESE SIGNS SHALL BE INCIDENTAL TO THE CONTRACT COST.

PERMANENT SIGNING SUMMARY CONTINUED

STATION	LOCATION	POSTS WOOD 4x6-INCH x 16-FT 634.0616 EACH	SIGNS TYPE II REFLECT. H 637.2210 SF	SIGNS TYPE II REFLECT. F 637.2230 SF	REM. SIGNS TYPE 2 638.2602 EACH	REM. SMALL SIGN SUPPORTS 638.3000 EACH	SIGN CODE	SIGN MESSAGE	SIZE	REMARKS
1860+90	LEFT	1	6.50		2	1	J1-1	JCT FR 339	24" X 39"	
1861+26	RIGHT	1	7.50		1	1	I55-56	ADOPT A HIGHWAY	30" X 36"	BUZZARD JENNY & REDDOG
1861+39	LEFT	1	5.18		1	1	R1-1	STOP	30" X 30"	ROSENTRETER ROAD
1869+39	LEFT	1			1	1		SCENIC BYWAY	48" X 36"	SIGN PROVIDED BY USDAFS
1870+55	RIGHT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
1875+62	LEFT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
1875+80	LEFT	1	5.18		1	1	R1-1	STOP	30" X 30"	TRAILHEAD ACCESS ROAD
1902+05	LEFT	1	5.18		1	1	R1-1	STOP	30" X 30"	FR 346
1908+00	RIGHT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
1921+42	LEFT							ELK CROSSING AREA 45 MPH NEXT 16 MILES	30" X 30" 18" X 18" 30" X 15"	TO REMAIN
1936+00	LEFT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
1957+25	LEFT	1	5.18		1	1	R1-1	STOP	30" X 30"	FR 369
1962+85	RIGHT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
1964+00	RIGHT	1	6.50		2	1	J1-1	JCT FR 335	24' X 39"	
1968+84	LEFT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
1972+17	LEFT	1	7.50		1	1	I55-56	ADOPT A HIGHWAY	30" X 36"	BUZZARD JENNY & REDDOG
1972+39	RIGHT	1	7.50		2	1	J13-1	FR 335 (RIGHT ARROW)	24" X 45"	
1973+19	RIGHT	1	5.18		1	1	R1-1	STOP	30" X 30"	FR 335
1973+38	LEFT	1	7.50		2	1	J13-1	FR 335 (LEFT ARROW)	24" X 45"	
1973+56	RIGHT	1	7.50		1	1	I55-56	ADOPT A HIGHWAY	30" X 36"	FAMILY OF ROBERT MUELLER
1977+00	RIGHT	1			1	1		SCENIC BYWAY	48" X 36"	SIGN PROVIDED BY USDAFS
1981+00	LEFT	1	6.50		2	1	J1-1	JCT FR 335	24" X 39"	
1992+56	RIGHT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
2000+20	LEFT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
2001+20	RIGHT	1	6.00		2	1	J4-1	EAST STH 77	24" X 36"	
2017+45	RIGHT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
2018+19	RIGHT	1	6.50		2	1	J1-1	JCT FR 347	24" X 39"	
2020+53	LEFT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
2023+95	LEFT	1			1	1		SCENIC BYWAY	48" X 36"	SIGN PROVIDED BY USDAFS
2027+28	RIGHT	1	7.50		2	1	J13-1	FR 347 (LEFT ARROW)	24" X 45"	
2027+47	LEFT	1	5.18		1	1	R1-1	STOP	30" X 30"	
2028+18	LEFT	1	7.50		2	1	J13-1	FR 347 (RIGHT ARROW)	24" X 45"	
2029+36	RIGHT	1	7.50		1	1	I55-56	ADOPT A HIGHWAY	30" X 36"	FAMILY OF CECIL & ALICE OEHLER

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PERMANENT SIGNING SUMMARY CONTINUED

STATION	LOCATION	POSTS WOOD 4x6-INCH x 16-FT 634.0616 EACH	SIGNS TYPE II REFLECT. H 637.2210 SF	SIGNS TYPE II REFLECT. F 637.2230 SF	REM. SIGNS TYPE 2 638.2602 EACH	REM. SMALL SIGN SUPPORTS 638.3000 EACH	SIGN CODE	SIGN MESSAGE	SIZE	REMARKS
2029+38	LEFT	1	7.50		1	1	I55-56	ADOPT A HIGHWAY	30" X 36"	FAMILY OF ROBERT MUELLER
2037+22	LEFT	1	6.50		2	1	J1-1	JCT FR 347	24" X 39"	
2038+13	RIGHT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
2088+67	LEFT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
2117+25	RIGHT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
2130+45	LEFT	1	6.00		2	1	J4-1	WEST STH 77	24" X 36"	
2139+03	LEFT	1	5.18		1	1	R1-1	STOP	30" X 30"	FR 348
2140+90	RIGHT	1	6.50		2	1	J1-1	JCT FR 168	24" X 39"	
2150+10	LEFT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
2150+34	RIGHT	1	7.50		2	1	J13-1	FR 168 (RIGHT ARROW)	24" X 45"	
2151+18	RIGHT	1	5.18		1	1	R1-1	STOP	30" X 30"	FR 168
2151+36	LEFT	1	7.50		1	1	I55-56	ADOPT A HIGHWAY	30" X 36"	FAMILY OF CECIL & ALICE OEHLER
2151+40	LEFT	1	7.50		2	1	J13-1	FR 168 (LEFT ARROW)	24" X 45"	
2163+45	LEFT	1	6.50		2	1	J1-1	JCT FR 168	24" X 39"	
2179+08	RIGHT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
2181+80	LEFT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
2187+33	RIGHT	1	6.50		2	1	J1-1	JCT FR 181	24" X 39"	
2196+43	LEFT	1			1	1		SCENIC BYWAY	48" X 36"	SIGN PROVIDED BY USDAFS
2199+41	RIGHT	1	7.50		2	1	J13-1	FR 181 (LEFT ARROW)	24" X 45"	
2199+54	RIGHT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
2199+56	LEFT	1	5.18		1	1	R1-1	STOP	30" X 30"	FR 181
2200+40	LEFT	1	7.50		2	1	J13-1	FR 181 (RIGHT ARROW)	24" X 45"	
2209+00	LEFT	1	6.50		2	1	J1-1	JCT FR 181	24" X 39"	
2253+90	RIGHT	1	6.50		2	1	J1-1	JCT FR 166	24" X 39"	
2264+74	RIGHT	1	7.50		2	1	J13-1	FR 166 (RIGHT ARROW)	24" X 45"	
2265+50	RIGHT	1	5.18		1	1	R1-1	STOP	30" X 30"	FR 166
2265+66	LEFT	1	7.50		2	1	J13-1	FR 166 (LEFT ARROW)	24" X 45"	
2278+05	LEFT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
2279+63	LEFT	1	6.50		2	1	J1-1	JCT FR 166	24" X 39"	

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PERMANENT SIGNING SUMMARY CONTINUED

STATION	LOCATION	POSTS WOOD 4x6-INCH x 16-FT 634.0616 EACH	SIGNS TYPE II REFLECT. H 637.2210 SF	SIGNS TYPE II REFLECT. F 637.2230 SF	REM. SIGNS TYPE 2 638.2602 EACH	REM. SMALL SIGN SUPPORTS 638.3000 EACH	SIGN CODE	SIGN MESSAGE	SIZE	REMARKS
2294+66	RIGHT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
2324+40	RIGHT	1	6.50		2	1	J1-1	JCT FR 351	24" X 39"	
2329+06	LEFT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
2335+62	RIGHT	1	7.50		2	1	J13-1	FR 351 (LEFT ARROW)	24" X 45"	
2335+84	LEFT	1	5.18		1	1	R1-1	STOP	30" X 30"	FR 351
2336+65	LEFT	1	7.50		2	1	J13-1	FR 351 (RIGHT ARROW)	24" X 45"	
2346+56	LEFT	1	6.50		2	1	J1-1	JCT FR 351	24" X 39"	
2348+50	RIGHT	1	7.50	6.00	2	1	W14-3 I55-56	NO PASSING ZONE ADOPT A HIGHWAY	48" X 36" 30" X 36"	GLIDDEN HIGH SCHOOL STUDENT COUNCIL
2350+58	LEFT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
2369+00	RIGHT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
2387+81	RIGHT	1	5.18		1	1	R1-1	STOP	30" X 30"	BOLDEN ROAD
2388+55	RIGHT	1	6.00		2	1	J4-1	EAST STH 77	24" X 36"	
2393+98	LEFT	1		6.00	1	1	W14-3	NO PASSING ZONE	48" X 36"	
2410+12	RIGHT	1		6.25 2.25	2	1	W2-2 W13-1	TEE RIGHT 45 MPH	30" X 30" 18" X 18"	
2413+12	LEFT	2			1	2		SCENIC BYWAY GREAT DIVIDE	48" X 36"	SIGNS PROVIDED BY USDAFS
2417+88	RIGHT	1	5.18		1	1	R1-1	STOP	30" X 30"	EDER ROAD
2440+15	LEFT	1	5.18		1	1	R1-1	STOP	30" X 30"	KUBLEY ROAD
2448+25	LEFT	1	5.18		1	1	R1-1	STOP	30" X 30"	SCHRAUFNAGEL ROAD
2452+84	RIGHT	1		6.25 2.25	2	1	W1-2L W13-1	(LEFT CURVE ARROW) 45 MPH	30" X 30" 18" X 18"	
2458+00	LEFT	1		9.00	1	1	W3-1	STOP AHEAD	36" X 36"	
2458+00	RIGHT	1		9.00	1	1	W3-1	STOP AHEAD	36" X 36"	
2458+26	LEFT	1	5.18		1	1	R1-1	STOP	30" X 30"	WITH LOUVERED SHIELD
2459+82	LEFT	1		6.25	1	1	W1-2R	(RIGHT CURVE ARROW)	30" X 30"	
2463+28	RIGHT	1	6.00		2	1	J1-1	JCT STH 13	24" X 36"	
2464+05	LEFT	1		9.00	1	1	W3-1	(STOP AHEAD)	36" X 36"	
2464+05	RIGHT	1		9.00	1	1	W3-1	(STOP AHEAD)	36" X 36"	
2467+20	LEFT	2	6.00 13.00		3	2	J4-1 D2-2	WEST STH 77 CLAM LAKE 14 HAYWARD 47	24" X 36" 78" X 24"	

CONTINUED ON NEXT PAGE

PERMANENT SIGNING SUMMARY CONTINUED

STATION	LOCATION	POSTS WOOD 4x6-INCH x 16-FT 634.0616 EACH	SIGNS TYPE II REFLECT. H 637.2210 SF	SIGNS TYPE II REFLECT. F 637.2230 SF	REM. SIGNS TYPE 2 638.2602 EACH	REM. SMALL SIGN SUPPORTS 638.3000 EACH	SIGN CODE	SIGN MESSAGE	SIZE	REMARKS
2468+62	LEFT	1	7.46		1	1	R1-1	STOP	36" X 36"	SIDE ROAD
2469+67	RIGHT	2	18.75		1	2	D1-3	(LEFT ARROW) MELLEN (LEFT ARROW) ASHLAND (RIGHT ARROW) GLIDDEN	60" X 45"	
2470+07	LEFT	1	7.50		1	1	I55-56	ADOPT A HIGHWAY	30" X 36"	GLIDDEN HIGH SCHOOL STUDENT COUNCIL
2471+21	LEFT	1	7.46		1	1	R1-1	STOP	36" X 36"	
2471+23	RIGHT	1	7.46		1	1	R1-1	STOP	36" X 36"	
2471+23	RIGHT	2	28.50		7	2	J3-3	NORTH STH 13 (LEFT ARROW) EAST STH 77 (LEFT ARROW) SOUTH STH 13 (RIGHT ARROW)	72" X 57"	
2472+20	CL EXT.	2		8.00			W1-7	LARGE ARROW (TWO DIRECTIONS)	48" X 24"	
	TOTAL	136	628.04	240.25	184	131				

PERMANENT SIGNING SUMMARY CONTINUED

STATION	LOCATION	POSTS WOOD 4x6-INCH x 16-FT 634.0616 EACH	SIGNS TYPE II REFLECT. H 637.2210 SF	SIGNS TYPE II REFLECT. F 637.2230 SF	REM. SIGNS TYPE 2 638.2602 EACH	REM. SMALL SIGN SUPPORTS 638.3000 EACH	SIGN CODE	SIGN MESSAGE	SIZE	REMARKS
2468+62	LEFT	1	7.46		1	1	R1-1	STOP	36" X 36"	SIDE ROAD
2469+67	RIGHT	2	18.75		1	2	D1-3	(LEFT ARROW) MELLEN (LEFT ARROW) ASHLAND (RIGHT ARROW) GLIDDEN	60" X 45"	
2470+07	LEFT	1	7.50		1	1	I55-56	ADOPT A HIGHWAY	30" X 36"	GLIDDEN HIGH SCHOOL STUDENT COUNCIL
2471+21	LEFT	1	7.46		1	1	R1-1	STOP	36" X 36"	
2471+23	RIGHT	1	7.46		1	1	R1-1	STOP	36" X 36"	
2471+23	RIGHT	2	28.50		7	2	J3-3	NORTH STH 13 (LEFT ARROW) EAST STH 77 (LEFT ARROW) SOUTH STH 13 (RIGHT ARROW)	72" X 57"	
2472+20	CL EXT.	2		8.00			W1-7	LARGE ARROW (TWO DIRECTIONS)	48" X 24"	
	TOTAL	136	628.04	240.25	184	131				

AGGREGATE SUMMARY

STATION TO STATION	LOCATION	LENGTH (FT)	E.A.	C.Y.	BASE AGGREGATE DENSE 3/4-INCH 305.0110 TON	SHAPING SHOULDERS 305.0500 STA	REMARKS
1964+50 - 2471+69	ML LT & RT	101438	0.826	3100	6200	1450	SHOULDERS
2471+27 - 2471+74	RT	62	1.75	5.0	10		CURB & GUTTER
STH 13 INTERSECTION	RT			29.0	58		WIDENING & TAPER
ENTRANCES (32)				64.0	128		
SIDE ROADS (18)				27.0	54		
	TOTAL			3225.0	6450	1450	

Addendum No. 1
ID 8530-14-71
Revised Sheet 42
April 4, 2014

RESTORATION ITEMS SUMMARY

LOCATION	TOPSOIL 625.0105 SY	MULCHING 627.0200 SY	FERTILIZER TYPE B 629.0210 CWT	SEEDING MIXTURE NO. 20 630.0120 LB	SEEDING TEMPORARY 630.0200 LB
APRON ENDWALLS	922	922	.58	25	25
CTH GG INTERSECTION	250	250	.16	6.8	6.8
TRIANGLE ROAD INTERSECTION	78	78	.05	2.1	2.1
STH 13 INTERSECTION	90	90	.06	2.4	2.4
TOTAL	1340	1340	1	36	36

TACK COAT

LOCATION	TACK COAT 455.0605 GAL
MAINLINE	6023
SIDEROADS	68
TOTAL	6091

MOBILIZATIONS EROSION CONTROL

LOCATION	MOBILIZATIONS EROSION CONTROL 628.1905 EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL 628.1910 EACH
PROJECT	2	2
TOTAL	2	2

ASPHALTIC FLUMES

LOCATION	ASPHALTIC FLUMES 465.0315 SY
STA. 2471+26 RT	13
TOTAL	13

TRAFFIC CONTROL SUMMARY

STATION	LOCATION	SIGNS 643.0900 EACH	SIGNS 643.0900 DAYS	SIGN CODE	MESSAGE	SIZE	REMARKS
1747+75	RT	1	100	G20-1	ROAD WORK NEXT 14 MILES	60"X24"	
1765+00	LT	1	100	G20-1	ROAD WORK NEXT 0.3 MILES	60"X24"	
1767+00	RT	1	100	G20-1	ROAD WORK NEXT 13 MILES	60"X24"	
2471+00	RT	1	100	G20-A2	END ROAD WORK	48"X24"	
2471+00	LT	1	100	G20-1	ROAD WORK NEXT 14 MILES	60"X24"	
CTH M	EASTBOUND	1	100	M3-3	SOUTH	24"X12"	
CTH M	EASTBOUND	1	100	M1-5A	COUNTY GG	24"X24"	
CTH M	EASTBOUND	1	100	M3-2	EAST	24"X12"	
CTH M	EASTBOUND	1	100	M1-6	STH 77	24"X24"	
CTH M	EASTBOUND	1	100	W20-1	ROAD WORK AHEAD	48"X48"	
CTH GG	SOUTHBOUND	1	100	M3-2	EAST	24"X12"	
CTH GG	SOUTHBOUND	1	100	M1-6	STH 77	24"X24"	
CTH GG	SOUTHBOUND	1	100	M3-3	SOUTH	24"X12"	
CTH GG	SOUTHBOUND	1	100	M1-5A	COUNTY GG	24"X24"	
CTH GG	SOUTHBOUND	1	100	W20-1	ROAD WORK AHEAD	48"X48"	
CTH M	EASTBOUND	1	100	W20-1	ROAD WORK 1000 FT	48"X48"	
STH 77	EASTBOUND	1	100	W20-1	ROAD WORK AHEAD	48"X48"	
STH 77	EASTBOUND	1	100	W20-1	ROAD WORK 1000 FT	48"X48"	
STH 77	EASTBOUND	1	100	W20-1	ROAD WORK 500 FT	48"X48"	
STH 77	WESTBOUND	1	100	G20-2A	END ROAD WORK	48"X24"	
CTH GG	SOUTHBOUND	1	100	G20-2A	END ROAD WORK	48"X24"	
CTH GG	NORTHBOUND	1	100	W20-1	ROAD WORK 500 FT	48"X48"	
CTH GG	NORTHBOUND	1	100	W20-1	ROAD WORK 1000 FT	48"X48"	
CTH GG	NORTHBOUND	1	100	W20-1	ROAD WORK AHEAD	48"X48"	
STH 77	SOUTHBOUND	1	100	M3-4	WEST	24"X12"	
STH 77	SOUTHBOUND	1	100	M1-6	STH 77	24"X24"	
STH 77	SOUTHBOUND	1	100	W20-1	ROAD WORK AHEAD	48"X48"	
STH 77	SOUTHBOUND	1	100	W20-1	ROAD WORK 500 FT	48"X48"	
STH 77	SOUTHBOUND	1	100	G20-1	ROAD WORK NEXT 14 MILES	60"X24"	
STH 77	NORTHBOUND	1	100	W20-1	ROAD WORK AHEAD	48"X48"	
STH 77	NORTHBOUND	1	100	M3-4	WEST	24"X12"	
STH 77	NORTHBOUND	1	100	M1-6	STH 77	24"X24"	
	SIDEROADS	21	100	W20-1	ROAD WORK AHEAD	48"X48"	
	TOTAL	53	3300				

EROSION CONTROL RESTORATION ITEMS SUMMARY

LOCATION	TOPSOIL 625.0105 SY	MULCHING 627.0200 SY	FERTILIZER TYPE B 629.0210 CWT	SEEDING MIXTURE NO. 20 630.0120 LB	SEEDING TEMPORARY 630.0200 LB
APRON ENDWALLS	922	922	.58	25	25
CTH GG INTERSECTION	250	250	.16	6.8	6.8
TRIANGLE ROAD INTERSECTION	78	78	.05	2.1	2.1
STH 13 INTERSECTION	90	90	.06	2.4	2.4
TOTAL	1340	1340	1	36	36

ASPHALTIC PAVING MISCELLANEOUS ITEMS

LOCATION	TACK COAT 455.0605 GAL	HOT MIX ASPHALT TEST STRIP SPV.0105.01 LS	ASPHALTIC FLUMES 465.0315 SY	PREPARE FOUNDATION FOR ASPHALTIC PAVING 211.0100 LS
MAINLINE	6023			
SIDEROADS	68			
SELECTED		1		
STA. 2471+26 RT			13	
STA. 1748+89 - 2471+69				1
TOTAL	6091	1	13	1

MOBILIZATIONS EROSION CONTROL AND ASPHALTIC SURFACE

LOCATION	MOBILIZATIONS EROSION CONTROL 628.1905 EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL 628.1910 EACH	ASPHALTIC SURFACE PATCHING 465.0110 TON
PROJECT	2	2	
UNDISTRIBUTED			500
TOTAL	2	2	500

WATER AND DUST CONTROL SUMMARY

LOCATION	WATER 624.0100 MGAL	DUST CONTROL SURFACE TREATMENT 623.0200 SY
STA. 1748+89 - 1964+50	250	86244
TOTAL	250	86244

Addendum No. 1
ID 8530-14-71
Revised Sheet 43
April 4, 2014

TRAFFIC CONTROL SUMMARY

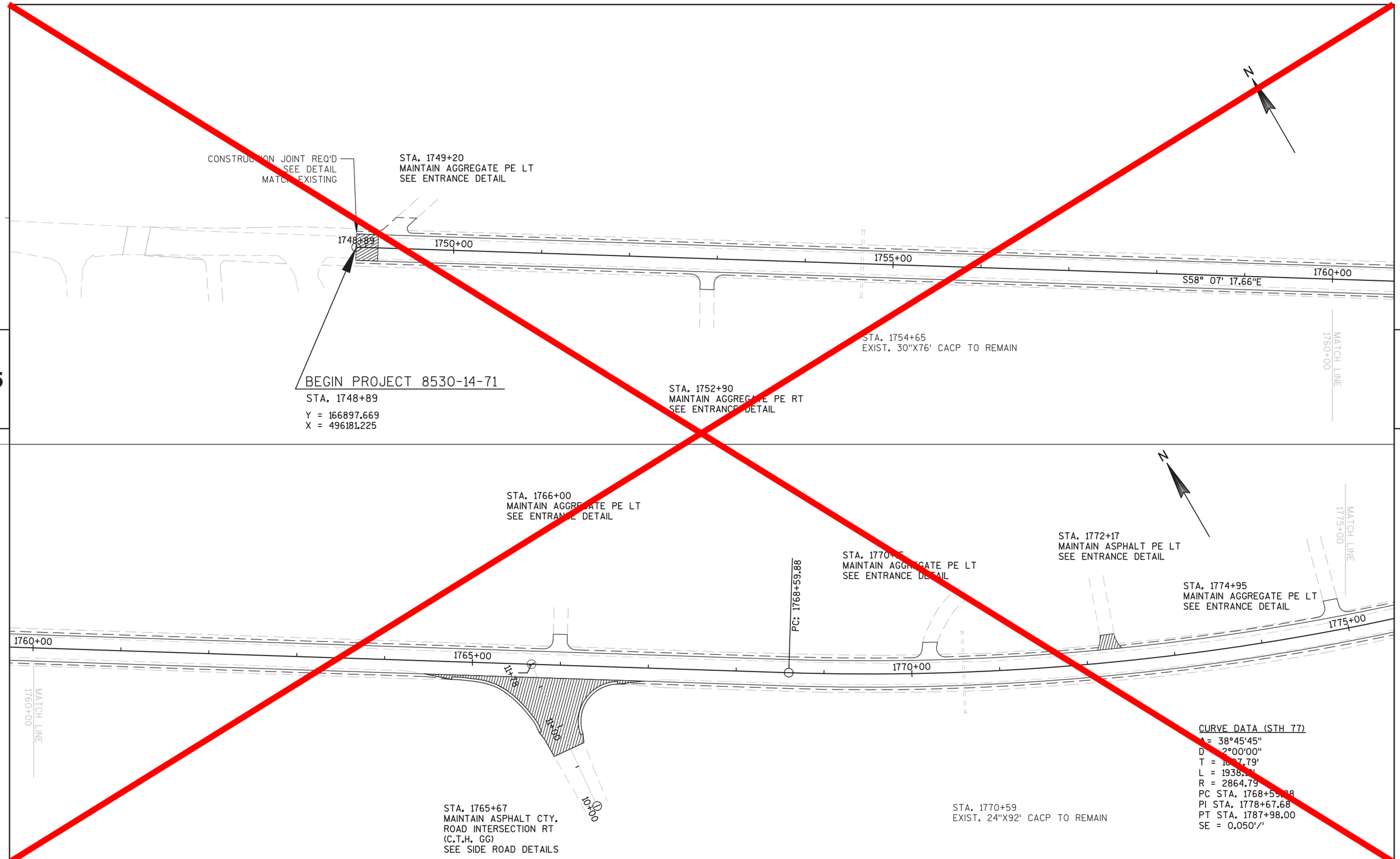
STATION	LOCATION	SIGNS 643.0900 EACH	SIGNS 643.0900 DAYS	SIGN CODE	MESSAGE	SIZE	REMARKS
1747+75	RT	1	100	G20-1	ROAD WORK NEXT 14 MILES	60"X24"	
1765+00	LT	1	100	G20-1	ROAD WORK NEXT 0.3 MILES	60"X24"	
1767+00	RT	1	100	G20-1	ROAD WORK NEXT 13 MILES	60"X24"	
2471+00	RT	1	100	G20-A2	END ROAD WORK	48"X24"	
2471+00	LT	1	100	G20-1	ROAD WORK NEXT 14 MILES	60"X24"	
CTH M	EASTBOUND	1	100	M3-3	SOUTH	24"X12"	
CTH M	EASTBOUND	1	100	M1-5A	COUNTY GG	24"X24"	
CTH M	EASTBOUND	1	100	M3-2	EAST	24"X12"	
CTH M	EASTBOUND	1	100	M1-6	STH 77	24"X24"	
CTH M	EASTBOUND	1	100	W20-1	ROAD WORK AHEAD	48"X48"	
CTH GG	SOUTHBOUND	1	100	M3-2	EAST	24"X12"	
CTH GG	SOUTHBOUND	1	100	M1-6	STH 77	24"X24"	
CTH GG	SOUTHBOUND	1	100	M3-3	SOUTH	24"X12"	
CTH GG	SOUTHBOUND	1	100	M1-5A	COUNTY GG	24"X24"	
CTH GG	SOUTHBOUND	1	100	W20-1	ROAD WORK AHEAD	48"X48"	
CTH M	EASTBOUND	1	100	W20-1	ROAD WORK 1000 FT	48"X48"	
STH 77	EASTBOUND	1	100	W20-1	ROAD WORK AHEAD	48"X48"	
STH 77	EASTBOUND	1	100	W20-1	ROAD WORK 1000 FT	48"X48"	
STH 77	EASTBOUND	1	100	W20-1	ROAD WORK 500 FT	48"X48"	
STH 77	WESTBOUND	1	100	G20-2A	END ROAD WORK	48"X24"	
CTH GG	SOUTHBOUND	1	100	G20-2A	END ROAD WORK	48"X24"	
CTH GG	NORTHBOUND	1	100	W20-1	ROAD WORK 500 FT	48"X48"	
CTH GG	NORTHBOUND	1	100	W20-1	ROAD WORK 1000 FT	48"X48"	
CTH GG	NORTHBOUND	1	100	W20-1	ROAD WORK AHEAD	48"X48"	
STH 77	SOUTHBOUND	1	100	M3-4	WEST	24"X12"	
STH 77	SOUTHBOUND	1	100	M1-6	STH 77	24"X24"	
STH 77	SOUTHBOUND	1	100	W20-1	ROAD WORK AHEAD	48"X48"	
STH 77	SOUTHBOUND	1	100	W20-1	ROAD WORK 500 FT	48"X48"	
STH 77	SOUTHBOUND	1	100	G20-1	ROAD WORK NEXT 14 MILES	60"X24"	
STH 77	NORTHBOUND	1	100	W20-1	ROAD WORK AHEAD	48"X48"	
STH 77	NORTHBOUND	1	100	M3-4	WEST	24"X12"	
STH 77	NORTHBOUND	1	100	M1-6	STH 77	24"X24"	
	SIDEROADS	21	100	W20-1	ROAD WORK AHEAD	48"X48"	
	TOTAL	53	3300				

CULVERT SUMMARY

C/L STATION	ALUMINUM APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 24-INCH 525.0324 EACH	ALUMINUM APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 30-INCH 525.0330 EACH	ALUMINUM APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 36-INCH 525.0336 EACH	ALUMINUM APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 48-INCH 525.0348 EACH	ALUMINUM APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 60-INCH 525.0360 EACH	REMARKS
1794+27	2					
1800+50	2					
1820+50	2					
1839+19			2			
1865+88	2					
1879+12	2					
1917+51				2		
1917+62				2		
1917+74				2		
1935+26	2					
1947+50	2					
1965+11	2					
1997+94	2					
2014+72	2					
2017+62	2					
2048+32	2					
2069+95	2					
2077+16				2		
2077+28				2		
2120+18	2					
2127+58	2					
2131+11	2					
2140+88	2					
2156+52	2					
2178+79	2					
2212+78					2	
2270+80	2					
2287+30	2					
2301+30		2				
2322+72	2					
2332+15	2					
2354+67	2					
2357+91	2					
2387+42	2					
2393+76	2					
2397+74	2					
2418+28		2				
2424+93	2					
2437+80	2					
2441+83	2					
TOTAL	62	4	2	10	2	

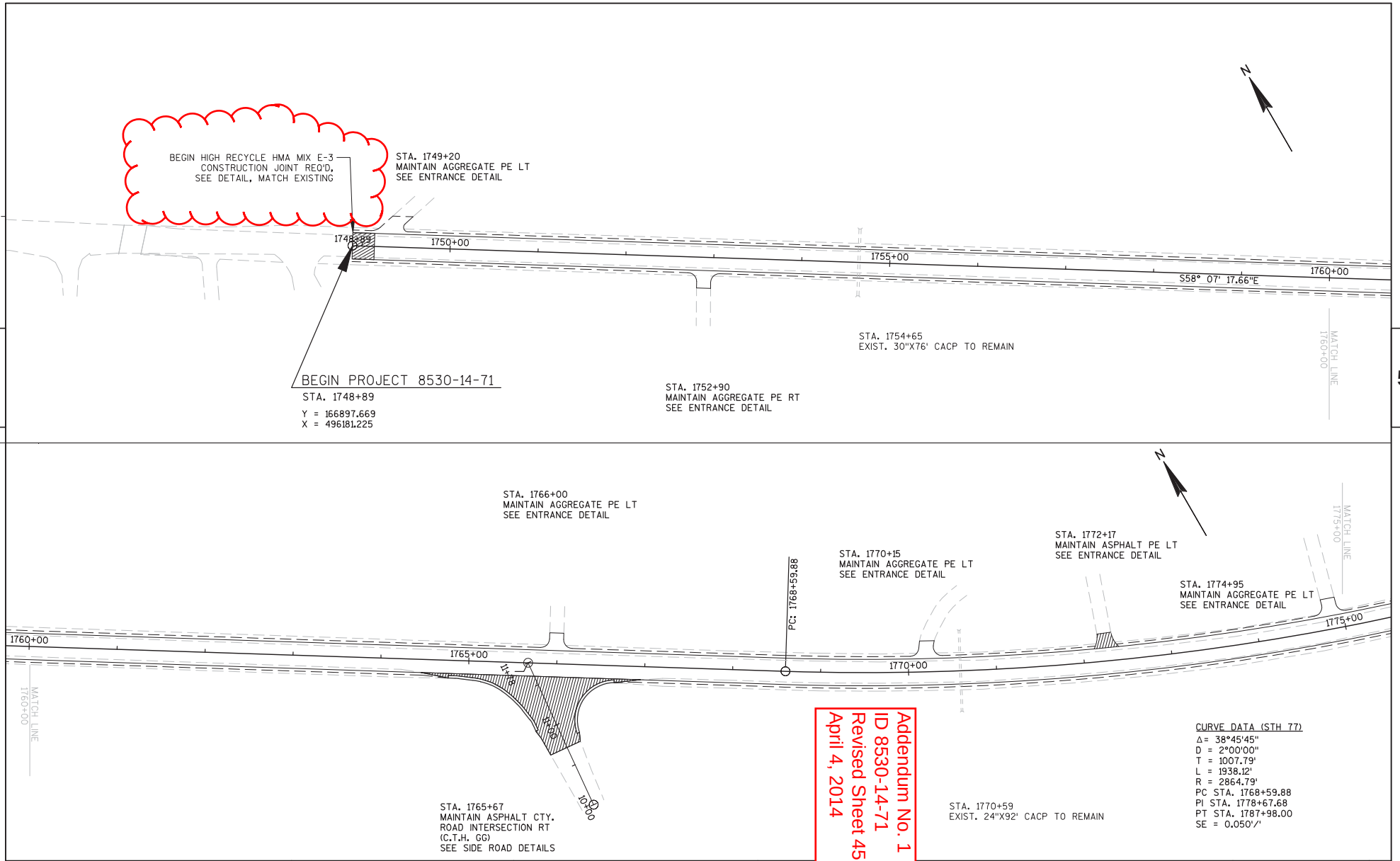
EROSION PROTECTION SUMMARY

C/L STATION	LEFT	RIGHT	EROSION MAT URBAN CLASS I TYPE B 628.2008 SY	SILT FENCE 628.1504 LF	TEMPORARY DITCH CHECKS 628.7504 LF	REMARKS
1794+27	X	X	18	100		
1800+50	X	X	18	100		
1820+50	X	X	18	100		
1839+19	X	X	32	100		
1865+88	X	X	18	100		
1879+12	X	X	18	100		
1917+51	X	X	44	100		
1917+62	X	X	44	100		
1917+74	X	X	44	100		
1935+26	X	X	18	100		
1947+50	X	X	18	100		
1965+11	X	X	18	100		
1997+94	X	X	18	100		
2014+72	X	X	18	100		
2017+62	X	X	18	100		
2048+32	X	X	18	100		
2069+95	X	X	18	100		
2077+16	X	X	44	100		
2077+28	X	X	44	100		
2120+18	X	X	18	100		
2127+58	X	X	18	100		
2131+11	X	X	18	100		
2140+88	X	X	18	100		
2156+52	X	X	18	100		
2178+79	X	X	18	100		
2212+78	X	X	64	100		
2270+80	X	X	18	100		
2287+30	X	X	18	100		
2301+30	X	X	24	100		
2322+72	X	X	18	100		
2332+15	X	X	18	100		
2354+67	X	X	18	100		
2357+91	X	X	18	100		
2387+42	X	X	18	100		
2393+76	X	X	18	100		
2397+74	X	X	18	100		
2418+28	X	X	24	100		
2424+93	X	X	18	100		
2437+80	X	X	18	100		
2441+83	X	X	18	100		
UNDIST.					200	
TOTAL			922	4000	200	

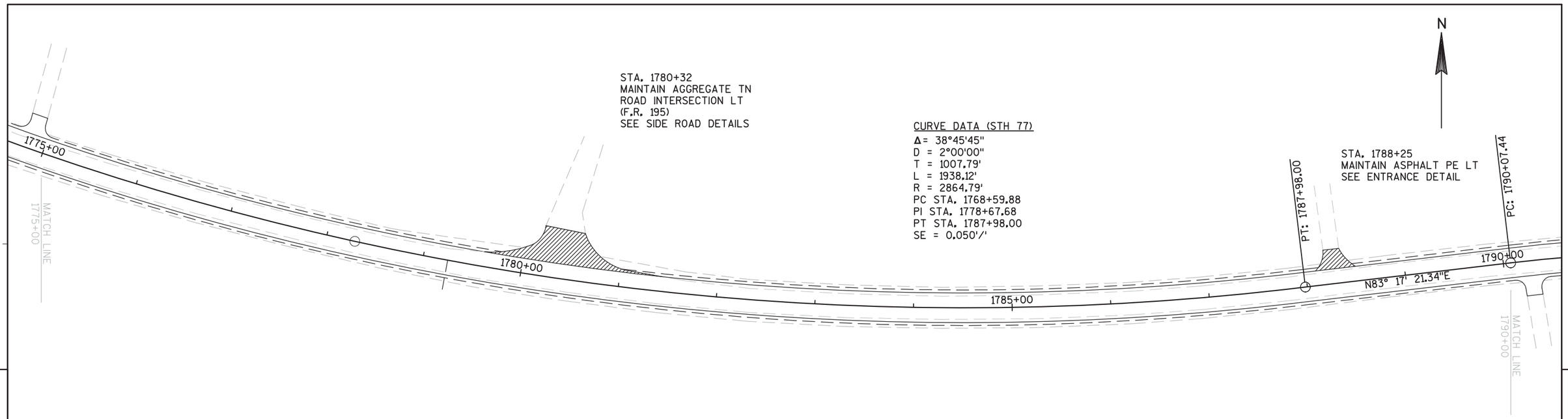


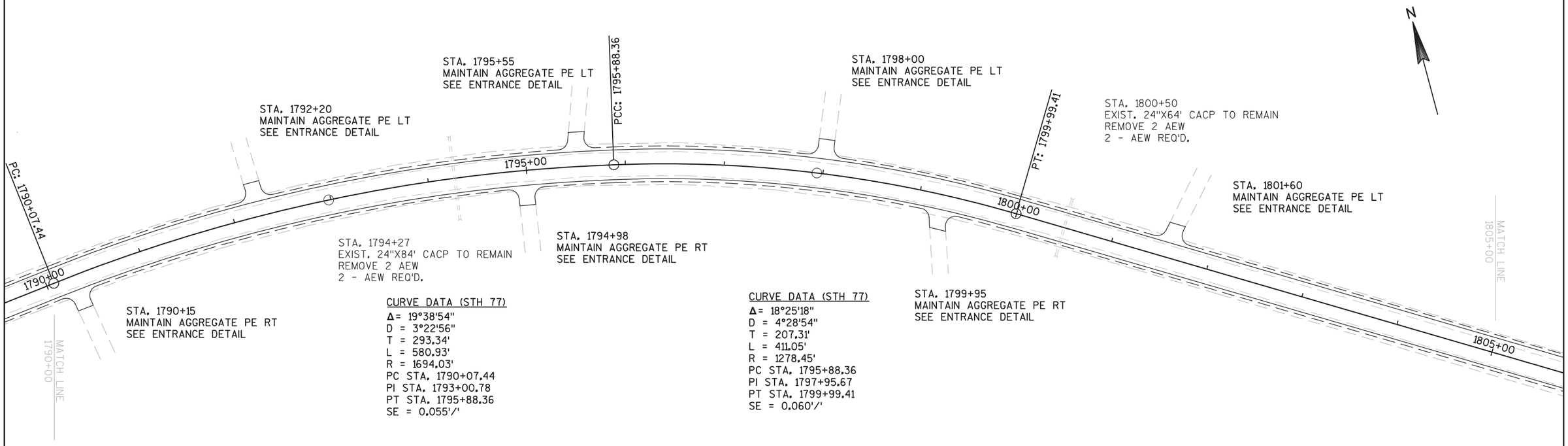
PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 LAYOUT.DWG PLOT DATE : 9/25/2013 8:28 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

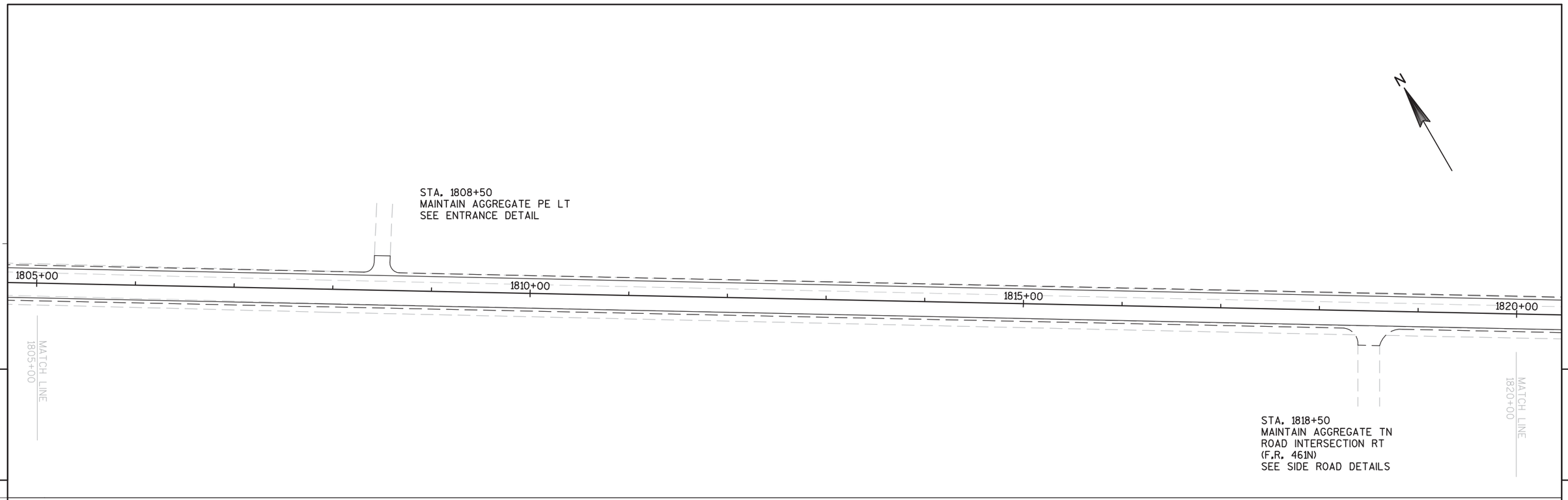


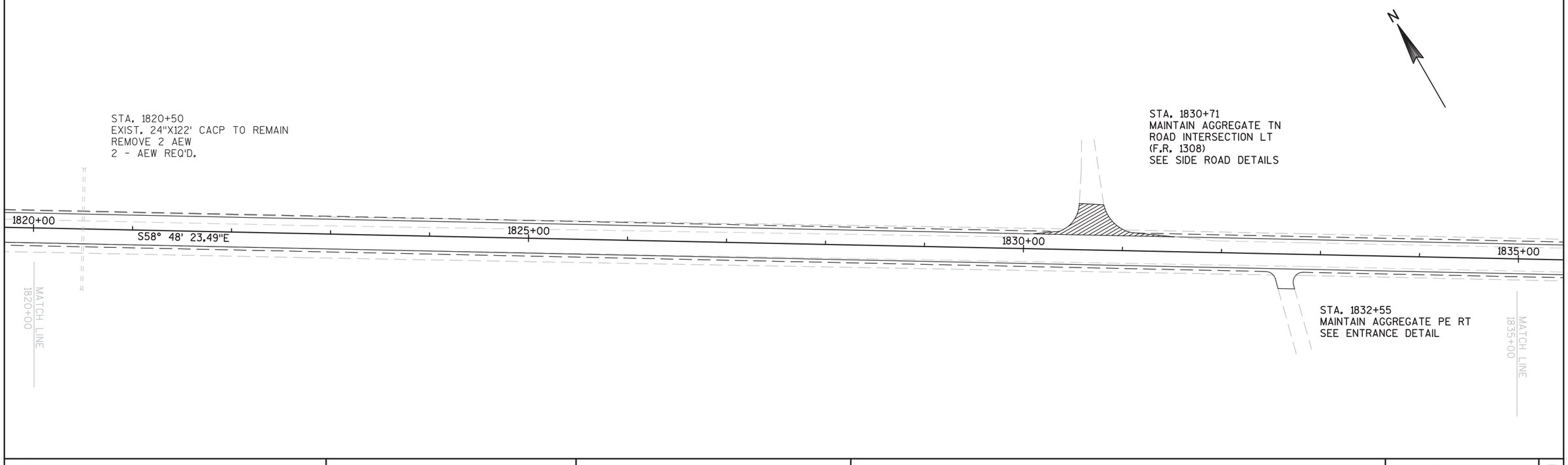
PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET 45A	E





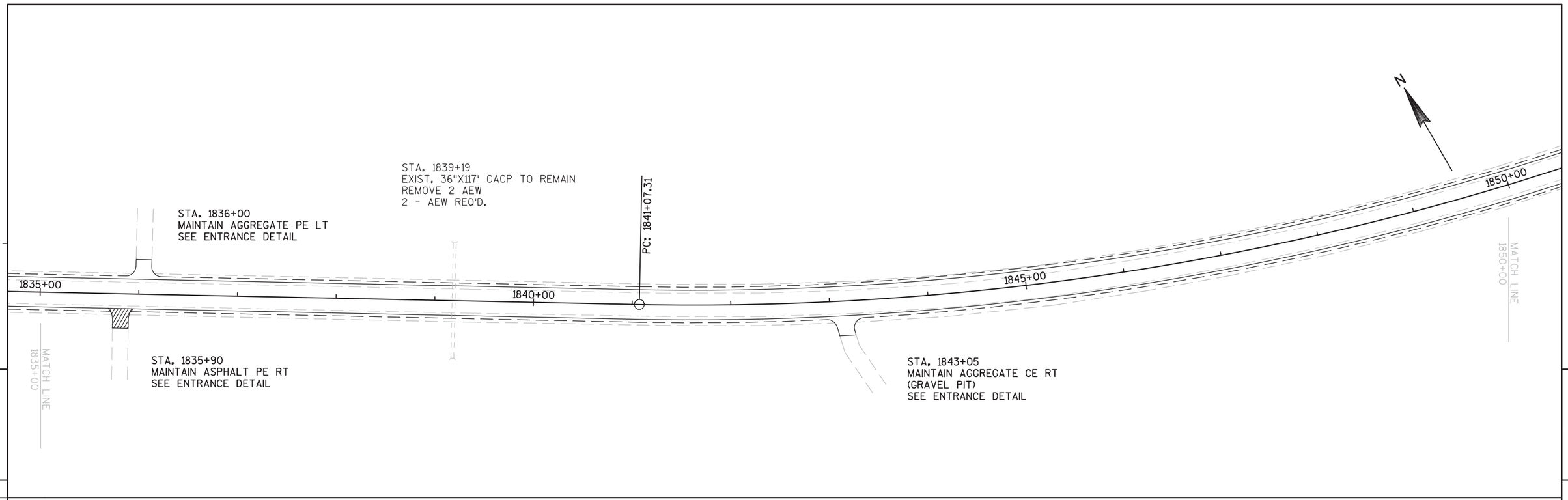
PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET – E

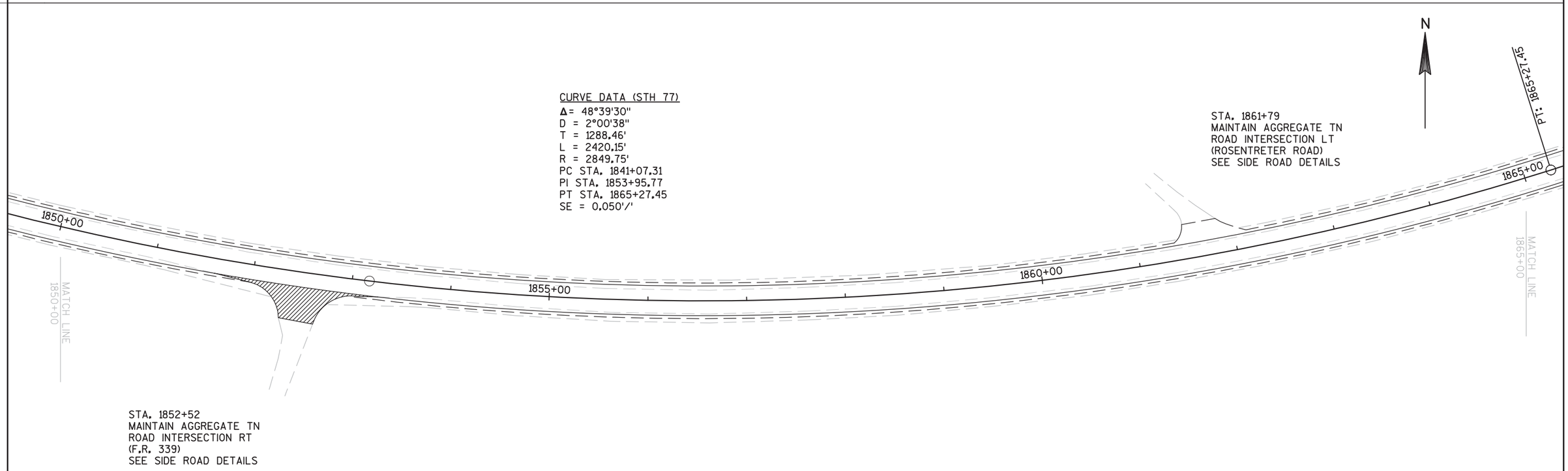




PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E

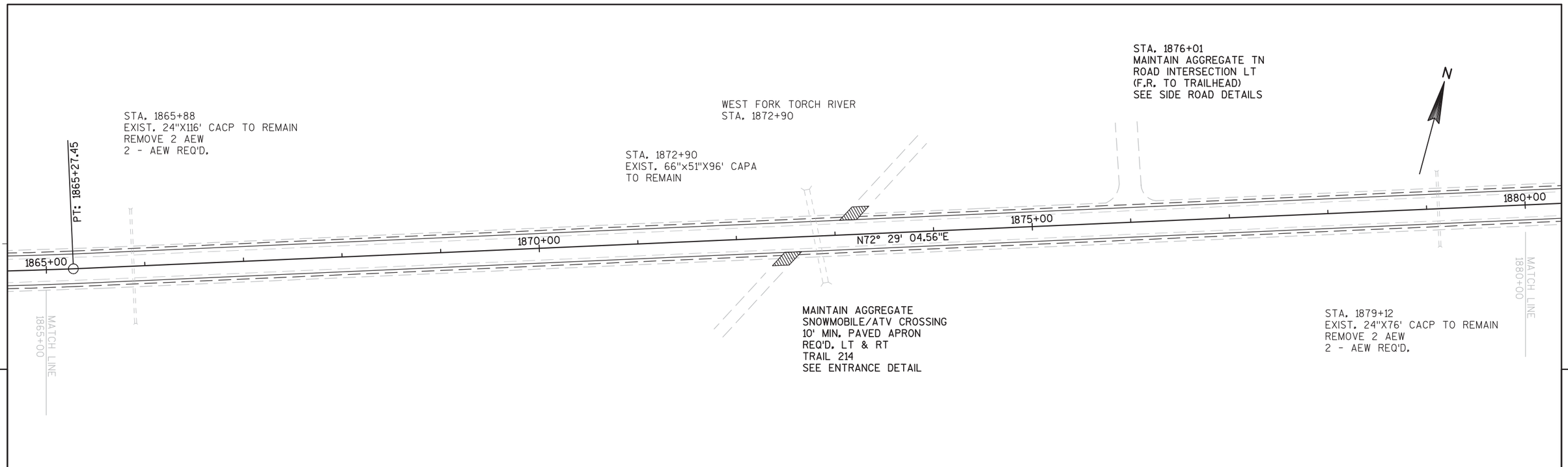
FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 LAYOUT.DWG PLOT DATE : 9/25/2013 8:37 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

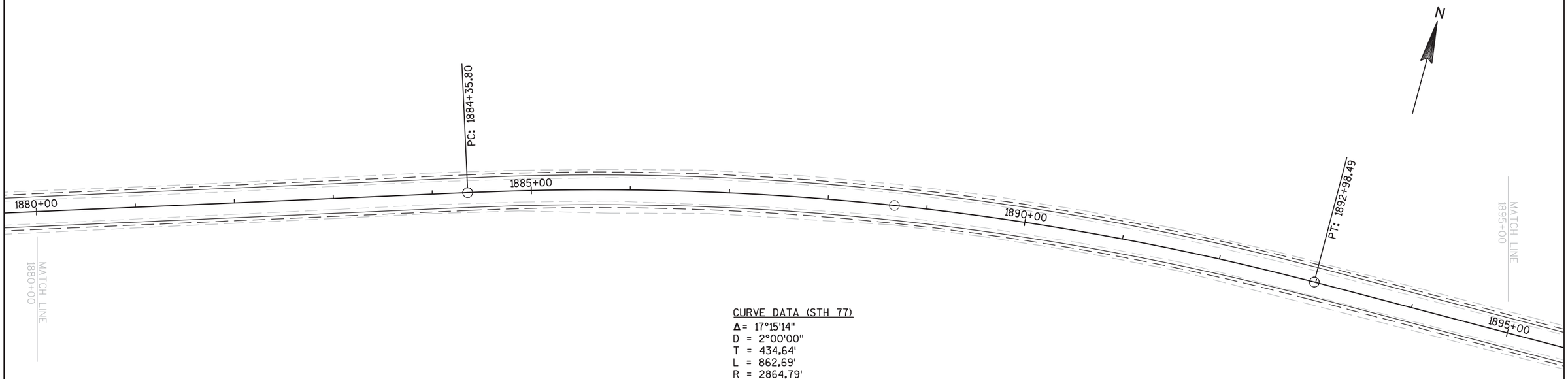




PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 LAYOUT.DWG PLOT DATE : 3/17/2011 2:44 PM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

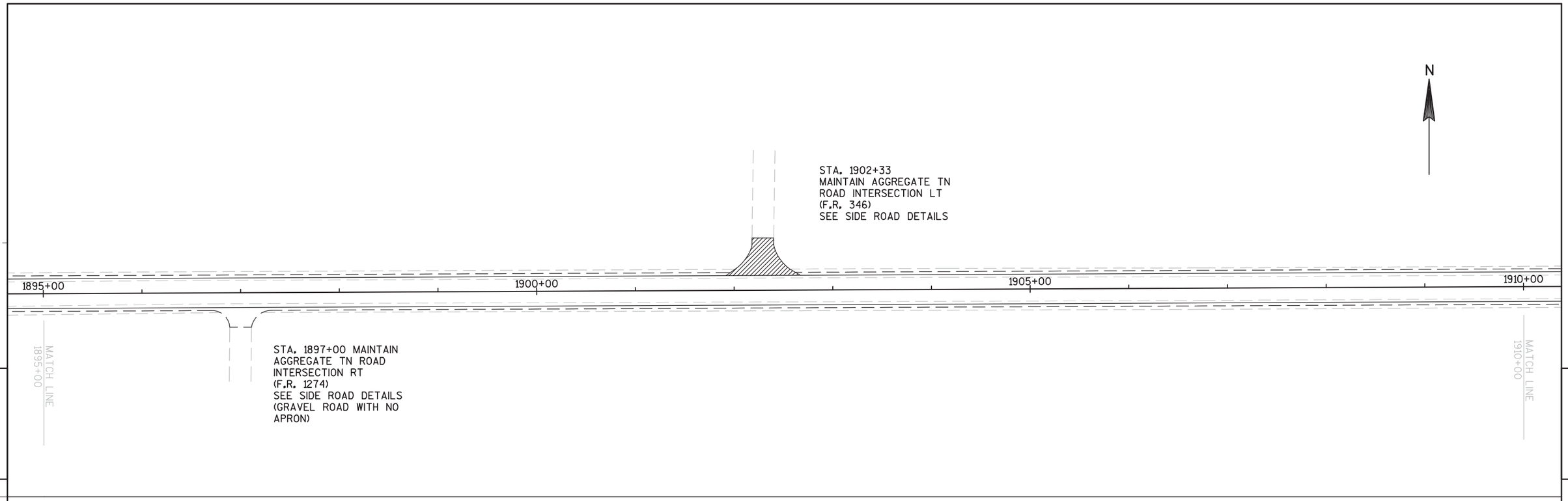


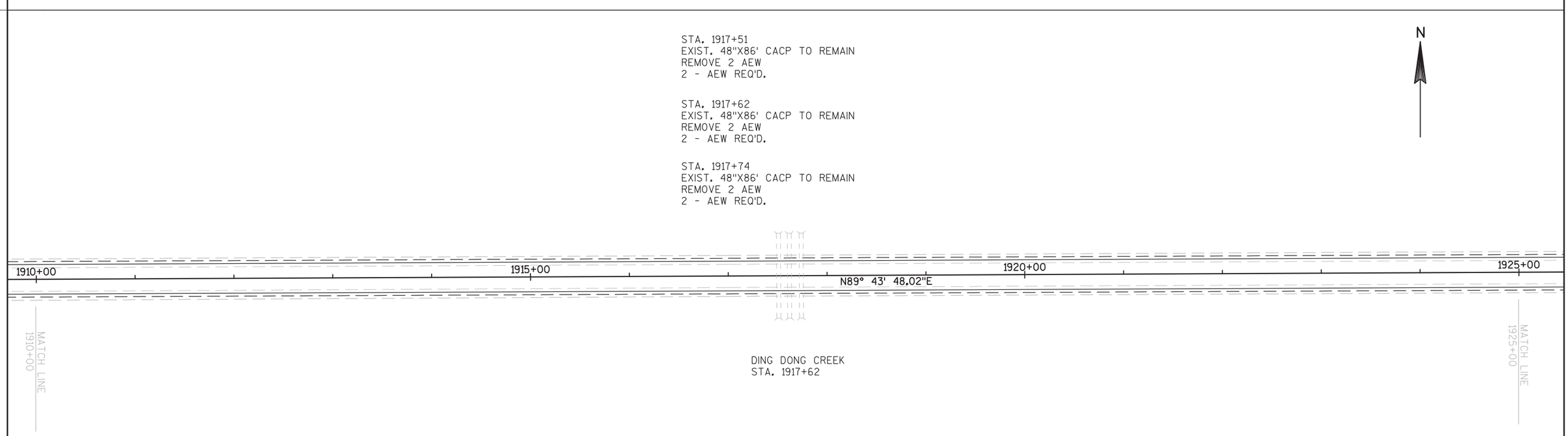


CURVE DATA (STH 77)
Δ= 17°15'14"
D = 2°00'00"
T = 434.64'
L = 862.69'
R = 2864.79'
PC STA. 1884+35.80
PI STA. 1888+70.43
PT STA. 1892+98.49
SE = 0.045'/'

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 LAYOUT.DWG PLOT DATE : 9/25/2013 8:38 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1





PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E

N

STA. 1935+26
EXIST. 24"X122' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.

1925+00 1930+00 1935+00 1940+00

MATCH LINE 1925+00

MATCH LINE 1940+00

5

5

N

PI: 1944+44.45

STA. 1947+50
EXIST. 24"X78' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.

1940+00 1945+00 1950+00 1955+00

MATCH LINE 1940+00

STA. 1943+00
MAINTAIN AGGREGATE PE RT
SEE ENTRANCE DETAIL

STA. 1952+00
MAINTAIN AGGREGATE PE RT
SEE ENTRANCE DETAIL

MATCH LINE 1955+00

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 LAYOUT.DWG PLOT DATE : 9/25/2013 9:06 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

N

STA. 1957+41
MAINTAIN AGGREGATE TN
ROAD INTERSECTION LT
(F.R. 335)
SEE SIDE ROAD DETAILS

STA. 1965+11
EXIST. 24"X70' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.

1955+00 1960+00 1965+00 1970+00

MATCH LINE 1955+00

MATCH LINE 1970+00

5

5

N

1970+00 1975+00 1980+00 1985+00

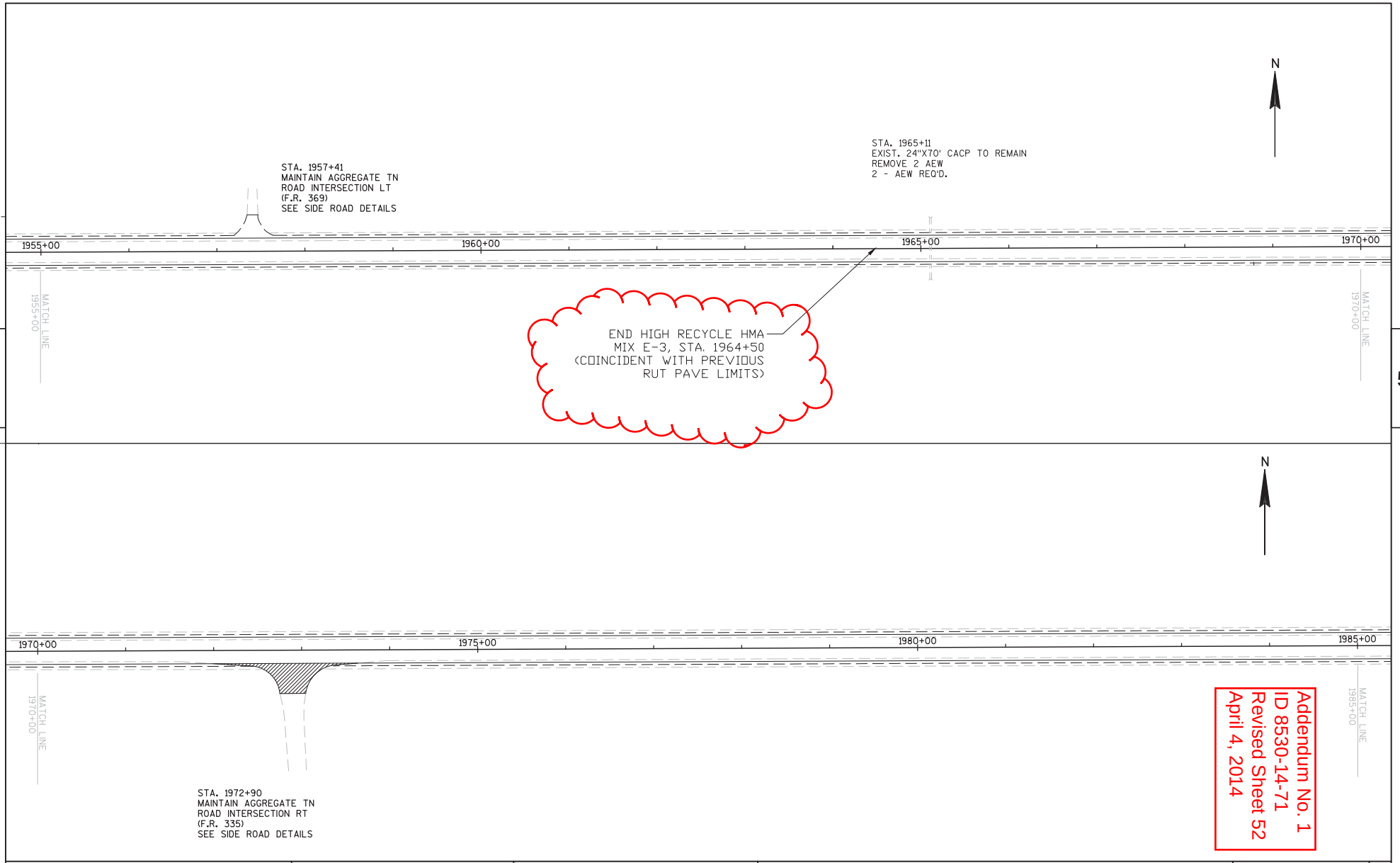
MATCH LINE 1970+00

MATCH LINE 1985+00

STA. 1972+90
MAINTAIN AGGREGATE TN
ROAD INTERSECTION RT
(F.R. 335)
SEE SIDE ROAD DETAILS

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 LAYOUT.DWG PLOT DATE : 9/25/2013 9:07 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1



Addendum No. 1
ID 8530-14-71
Revised Sheet 52
April 4, 2014

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET 52A	E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 LAYOUT.DWG PLOT DATE : 9/25/2013 9:07 AM PLOT BY : PEARSON, MICHAEL R PLOT NAME : PLOT SCALE : 100:1

N

STA. 1997+94
EXIST. 24"X61' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.

1985+00 1990+00 1995+00 2000+00

N89° 45' 36.47"E

MATCH LINE 1985+00

MATCH LINE 2000+00

5

5

N

STA. 2010+00
MAINTAIN AGGREGATE ATV
TRAIL LT & RT
(214) DEAD HORSE TRAIL
SEE ENTRANCE DETAIL

2000+00 2005+00 2010+00 2015+00

MATCH LINE 2000+00

STA. 2014+72
EXIST. 24"X67' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.

MATCH LINE 2015+00

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 LAYOUT.DWG PLOT DATE : 9/25/2013 9:08 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

N

STA. 2027+72
MAINTAIN AGGREGATE TN
ROAD INTERSECTION LT
(F.R. 347)
SEE SIDE ROAD DETAILS

STA. 2017+62
EXIST. 24"X54' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.

PI: 2027+72.81

2015+00 2020+00 2025+00 2030+00

MATCH LINE 2015+00

MATCH LINE 2030+00

5

5

N

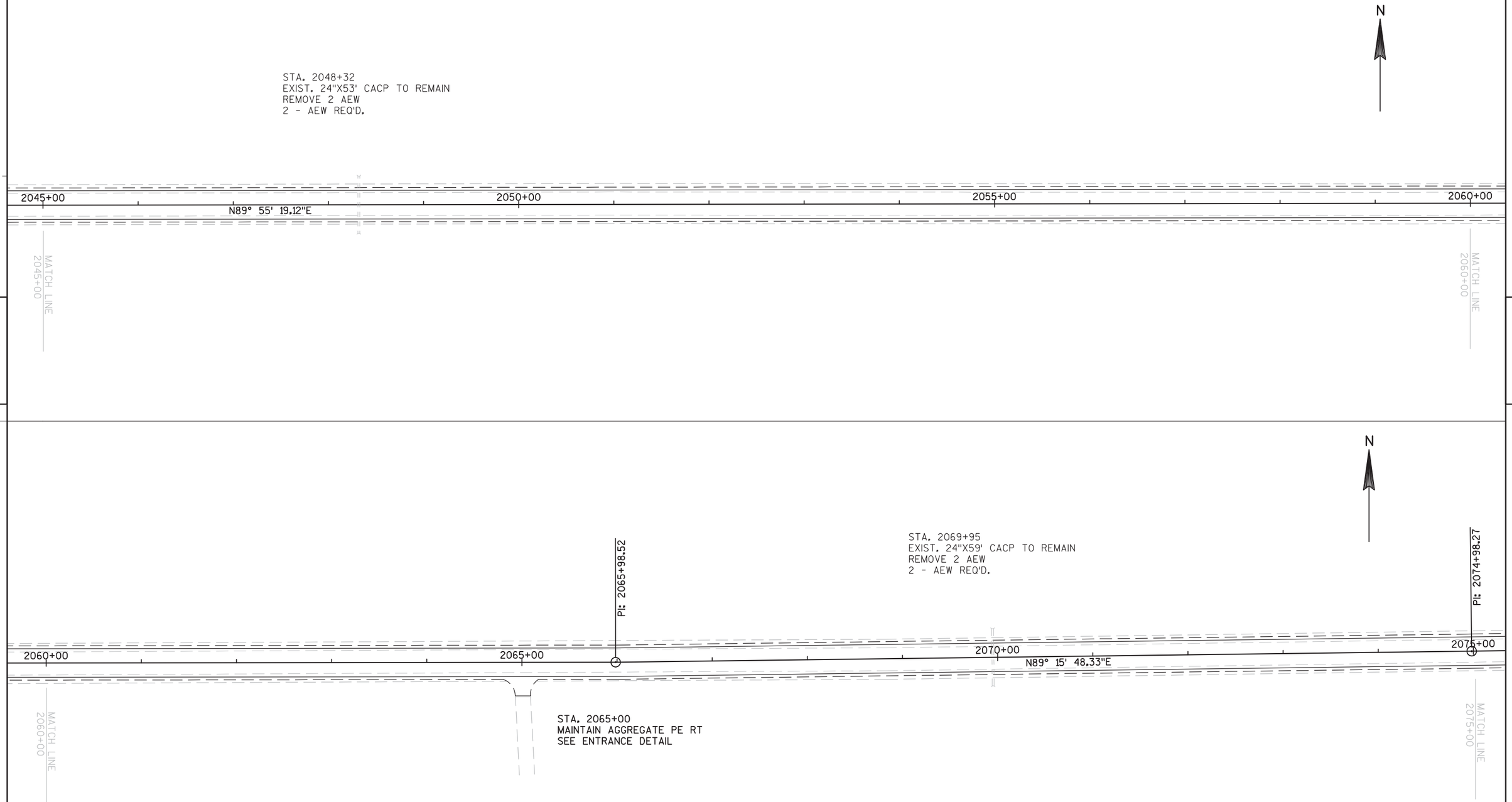
2030+00 2035+00 2040+00 2045+00

MATCH LINE 2030+00

MATCH LINE 2045+00

STA. 2040+43
MAINTAIN AGGREGATE TN
ROAD INTERSECTION RT
(F.R. 1288)
SEE SIDE ROAD DETAILS

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E



PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E

STA. 2077+16
EXIST. 48"X78' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.

STA. 2077+28
EXIST. 48"X78' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.

N

PI: 2074+98.27

PI: 2086+53.70

2075+00

2080+00

2085+00

2090+00

N89° 00' 25.15"E

MATCH LINE
2075+00

MATCH LINE
2090+00

EAST FORK
TORCH RIVER
STA. 2077+22

5

5

N

SENSITIVE AREA
CONTRACTOR IS NOT TO GO OFF OF ROADWAY. DO NOT
USE FOR BORROW OR WASTE DISPOSAL, OR FOR THE
STAGING OF PERSONNEL, EQUIPMENT OR SUPPLIES.

PI: 2101+48.20

STA. 2092+03
MAINTAIN AGGREGATE PE LT
SEE ENTRANCE DETAIL

2090+00

2095+00

2100+00

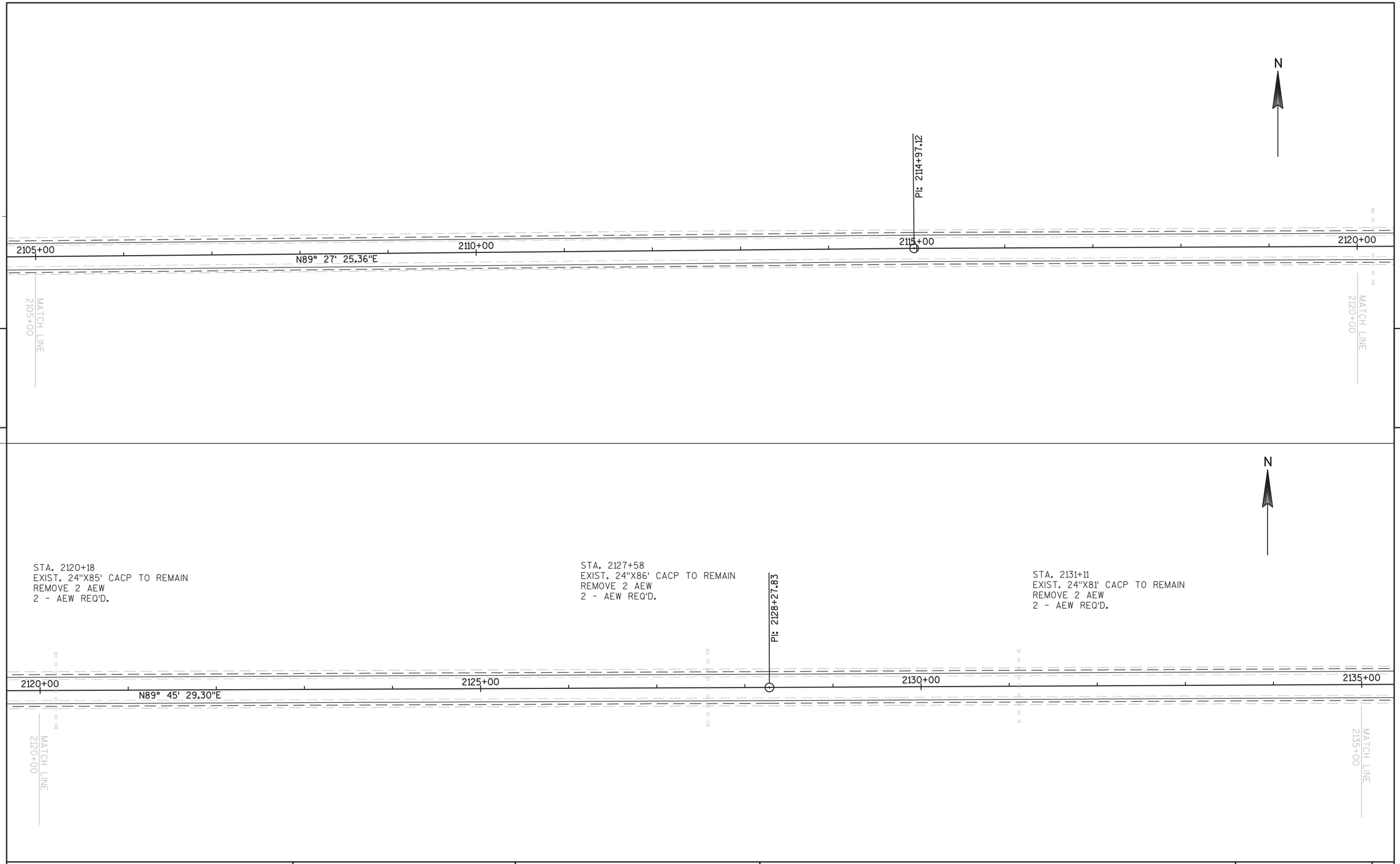
2105+00

N89° 00' 47.80"E

MATCH LINE
2090+00

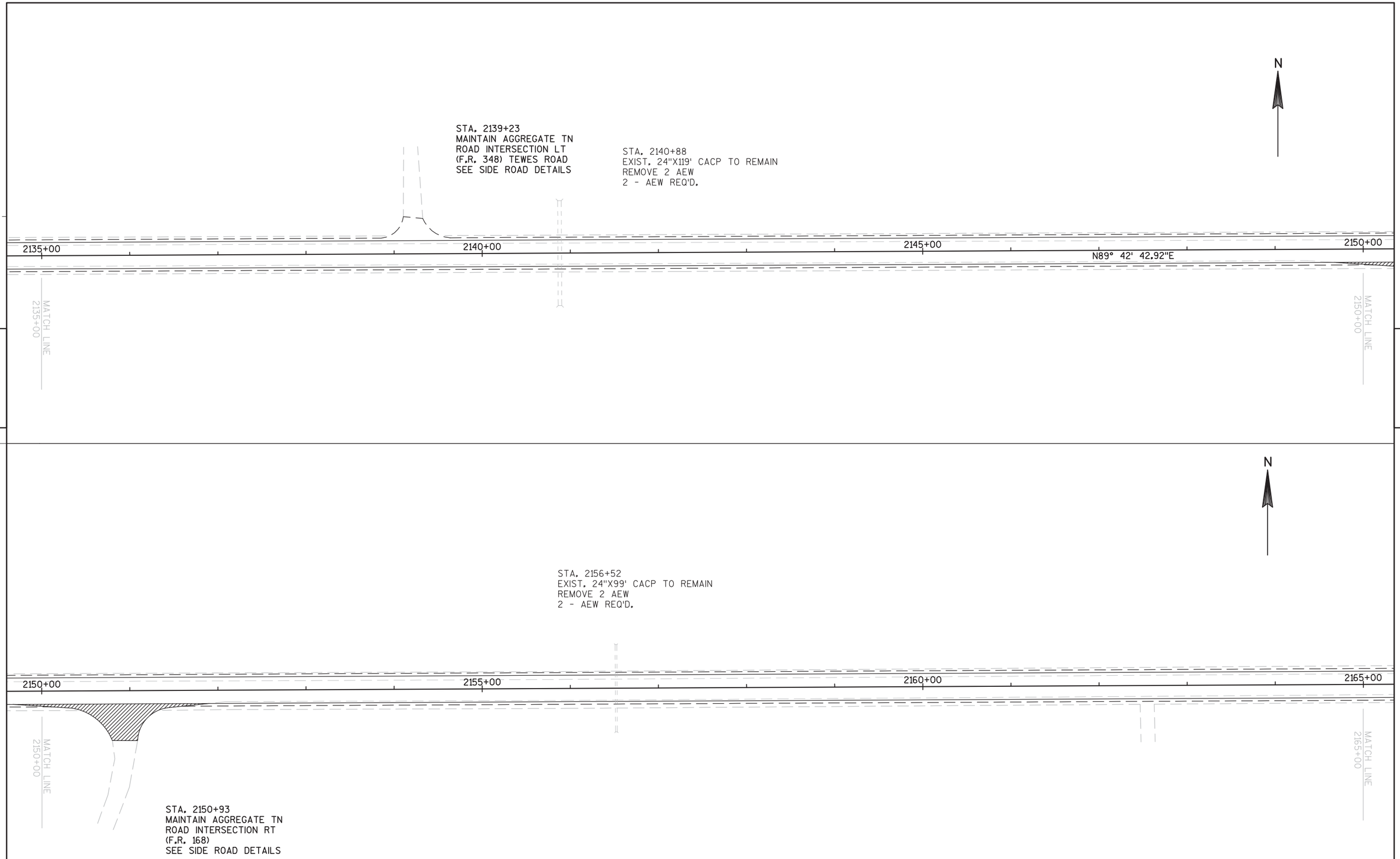
MATCH LINE
2105+00

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET 56	E

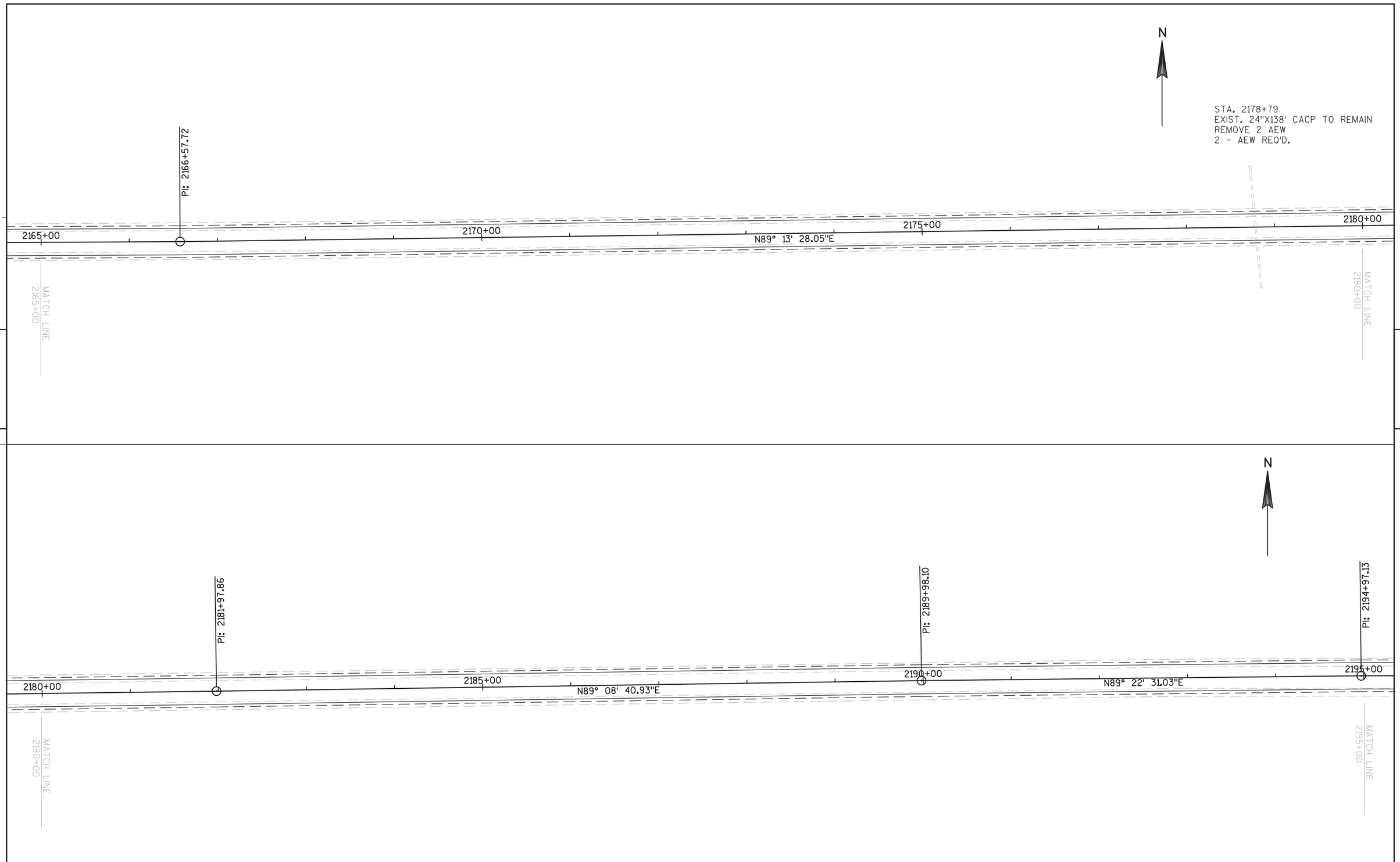


PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET - E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 LAYOUT.DWG PLOT DATE : 9/25/2013 9:23 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1



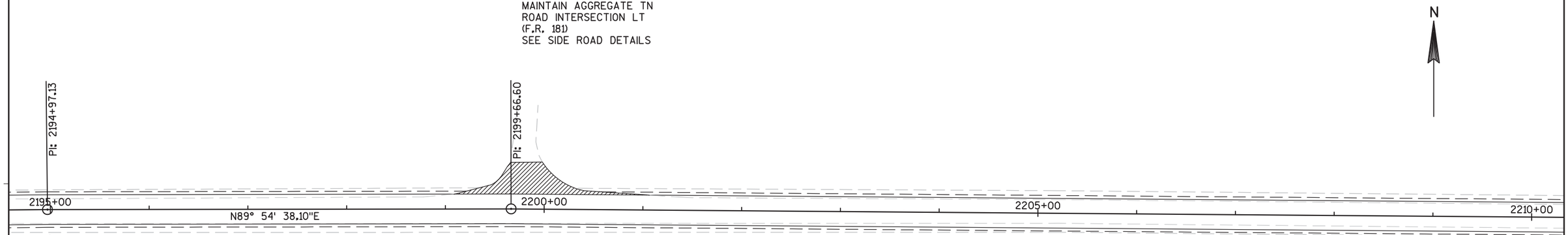
PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E



PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E

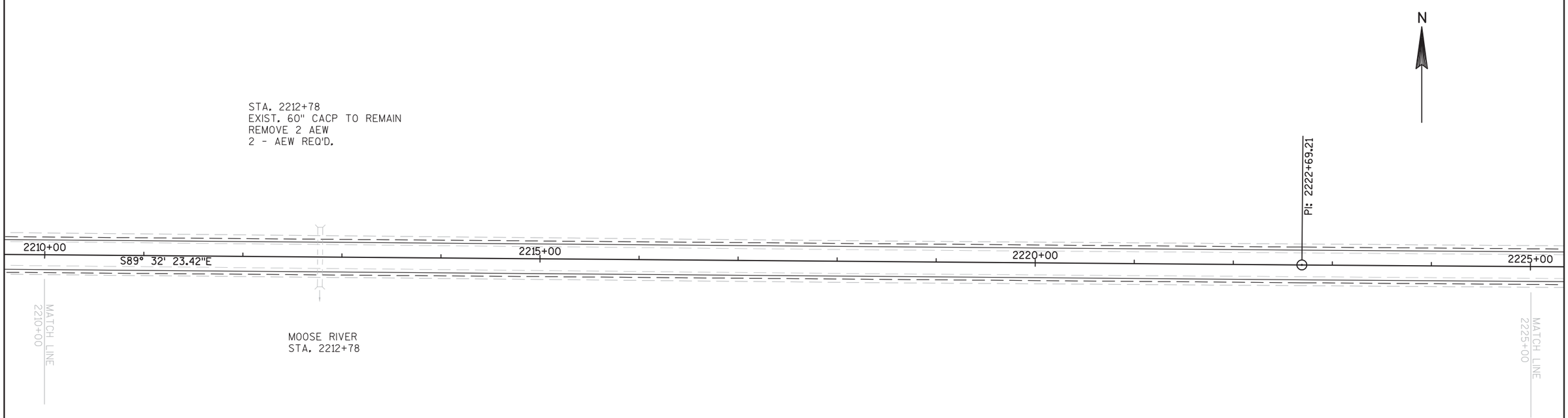
FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 LAYOUT.DWG PLOT DATE : 9/25/2013 9:25 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

STA. 2199+92
MAINTAIN AGGREGATE TN
ROAD INTERSECTION LT
(F.R. 181)
SEE SIDE ROAD DETAILS

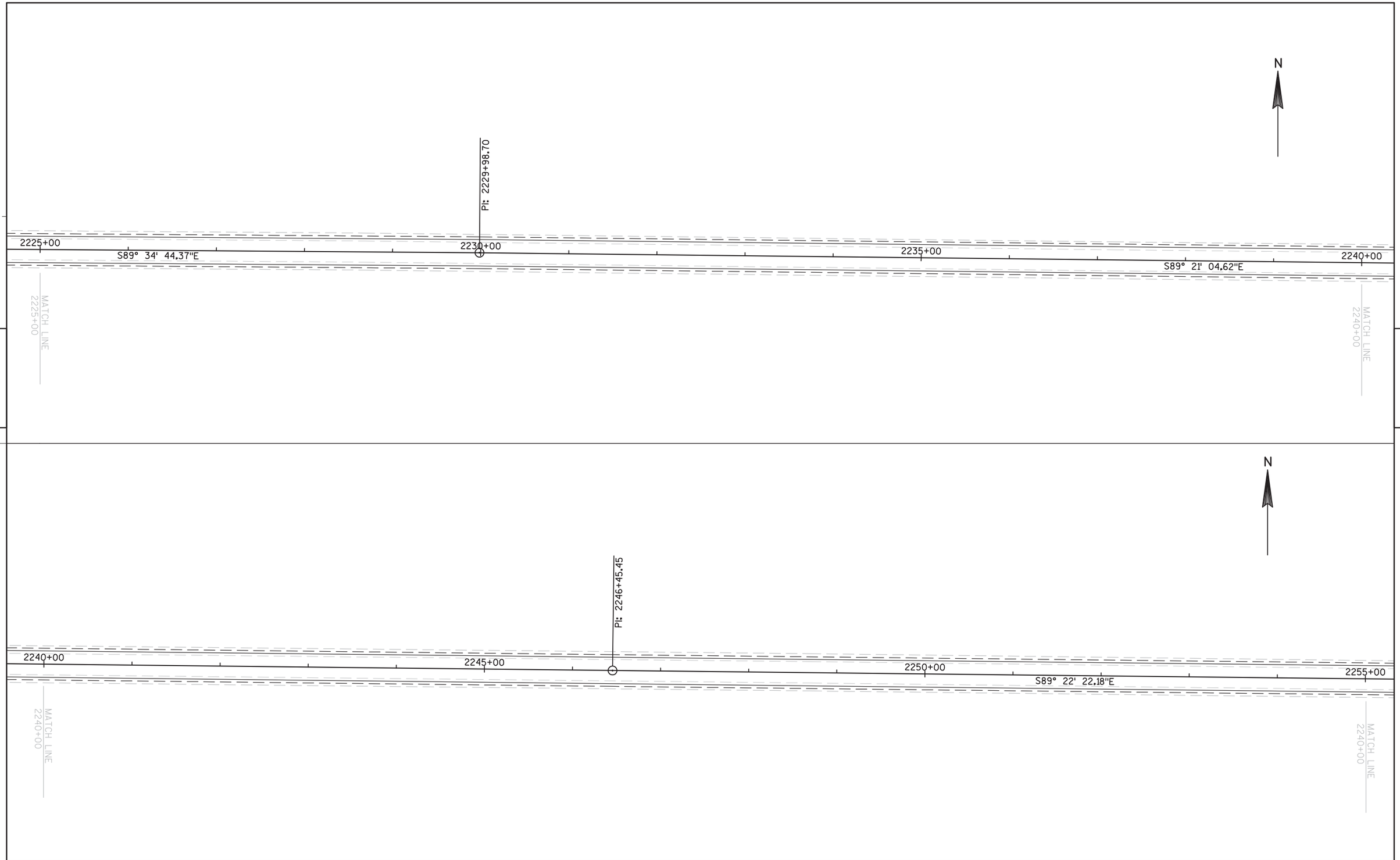


5

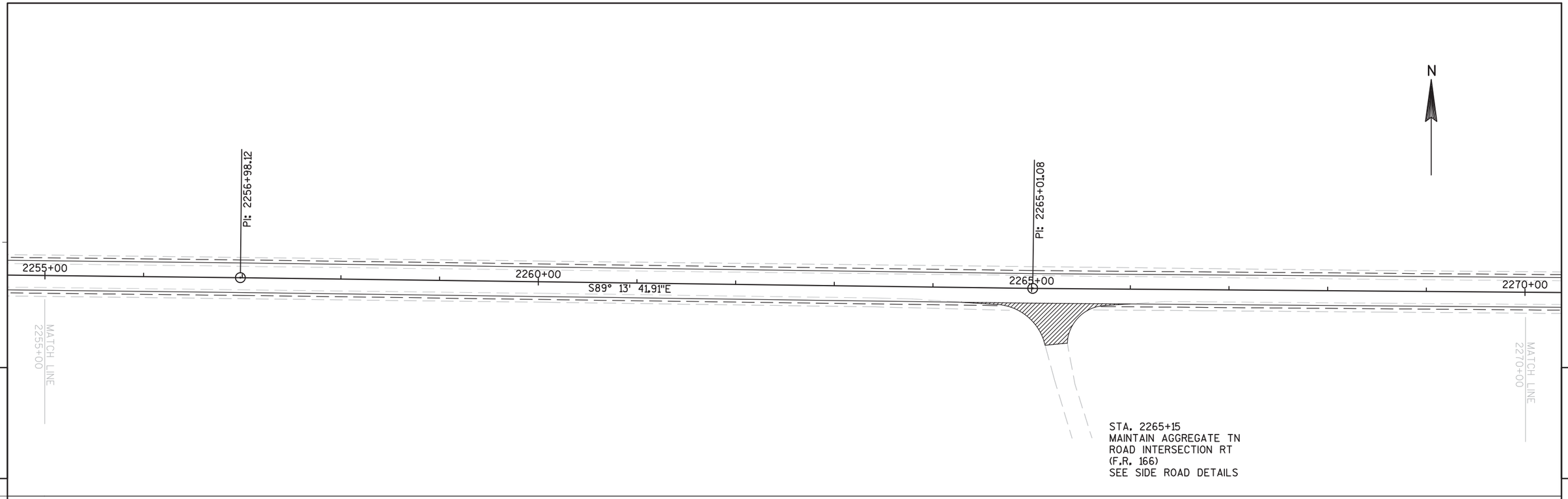
5

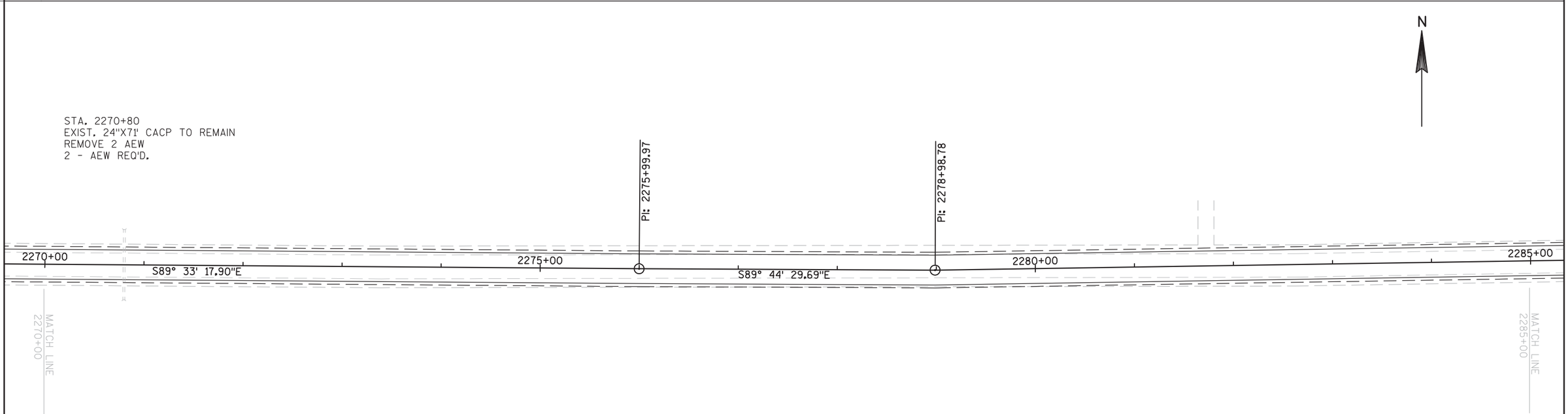


PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E



PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E





PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E

STA. 2287+30
EXIST. 24"X54' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.

PI: 2293+98.36

2285+00 2290+00 2295+00 2300+00

N89° 06' 23.72"E

MATCH LINE 2285+00

MATCH LINE 2300+00

5

STA. 2301+30
EXIST. 30"X52' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.

2300+00 2305+00 2310+00 2315+00

MATCH LINE 2300+00

MATCH LINE 2315+00

5

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E

N

STA. 2322+72
EXIST. 24"X62' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.

2315+00 2320+00 2325+00 2330+00

N89° 07' 31.30"E

MATCH LINE 2315+00

MATCH LINE 2330+00

5

5

N

SENSITIVE AREA
CONTRACTOR IS NOT TO GO OFF OF ROADWAY. DO NOT USE FOR BORROW OR WASTE DISPOSAL, OR FOR THE STAGING OF PERSONNEL, EQUIPMENT OR SUPPLIES.

STA. 2336+08
MAINTAIN AGGREGATE TN
ROAD INTERSECTION LT
(F.R. 351) HENNES ROAD
SEE SIDE ROAD DETAILS

PI: 2339+42.44

PI: 2344+97.79

2330+00 2335+00 2340+00 2345+00

N89° 31' 27.09"E

STA. 2332+15
EXIST. 24"X88' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.

STA. 2335+10
MAINTAIN AGGREGATE PE RT
SEE ENTRANCE DETAIL

MATCH LINE 2330+00

MATCH LINE 2345+00

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 LAYOUT.DWG PLOT DATE : 9/25/2013 9:30 AM PLOT BY : PEARSON, MICHAEL R PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 44

SENSITIVE AREA
CONTRACTOR IS NOT TO GO OFF OF ROADWAY. DO NOT USE FOR BORROW OR WASTE DISPOSAL, OR FOR THE STAGING OF PERSONNEL, EQUIPMENT OR SUPPLIES.

N

STA. 2354+67
EXIST. 24"X60' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.

STA. 2357+91
EXIST. 24"X60' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.

PI: 2344+97.79

PI: 2353+46.84

2345+00 2350+00 2355+00 2360+00

N89° 43' 21.49"E

MATCH LINE 2345+00

MATCH LINE 2360+00

5

5

N

STA. 2373+46
EXIST. 24"X60' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.

PI: 2370+68.24

2360+00 2365+00 2370+00 2375+00

N89° 44' 41.08"E

STA. 2365+00
MAINTAIN AGGREGATE PE RT
SEE ENTRANCE DETAIL

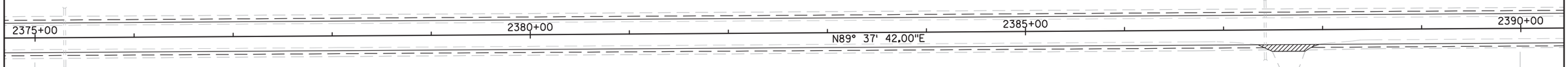
MATCH LINE 2360+00

MATCH LINE 2375+00

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET 65	E

STA. 2375+30
EXIST. 24"X61' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.

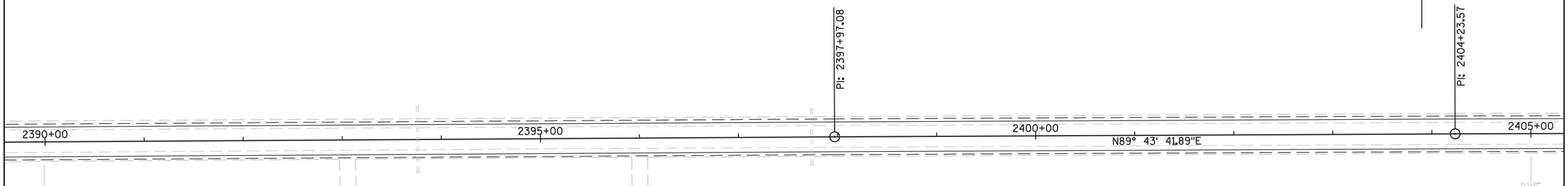
STA. 2387+42
EXIST. 24"X62' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.



5

STA. 2387+61
MAINTAIN ASPHALT TN
ROAD INTERSECTION RT
(BOLDEN ROAD)
SEE SIDE ROAD DETAILS

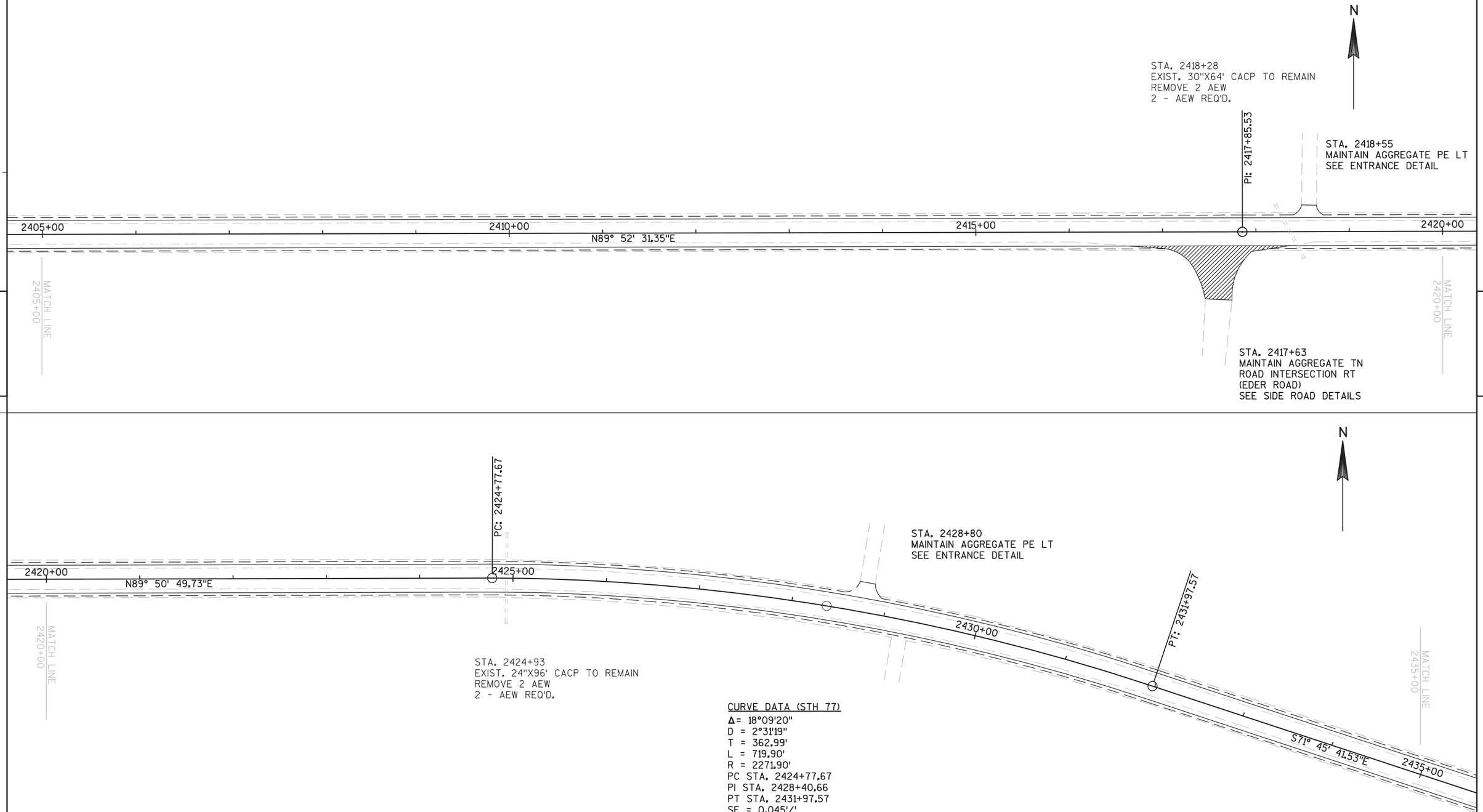
5



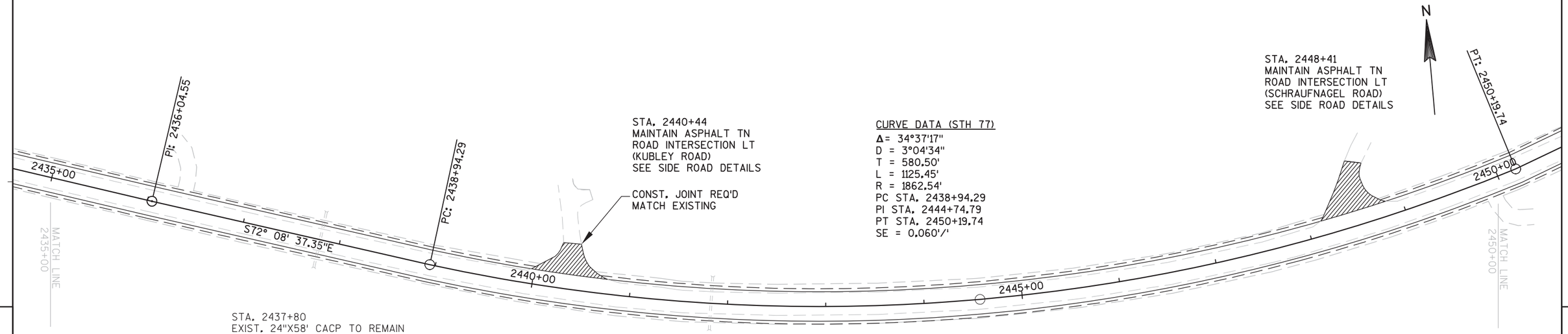
STA. 2393+76
EXIST. 24"X66' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.

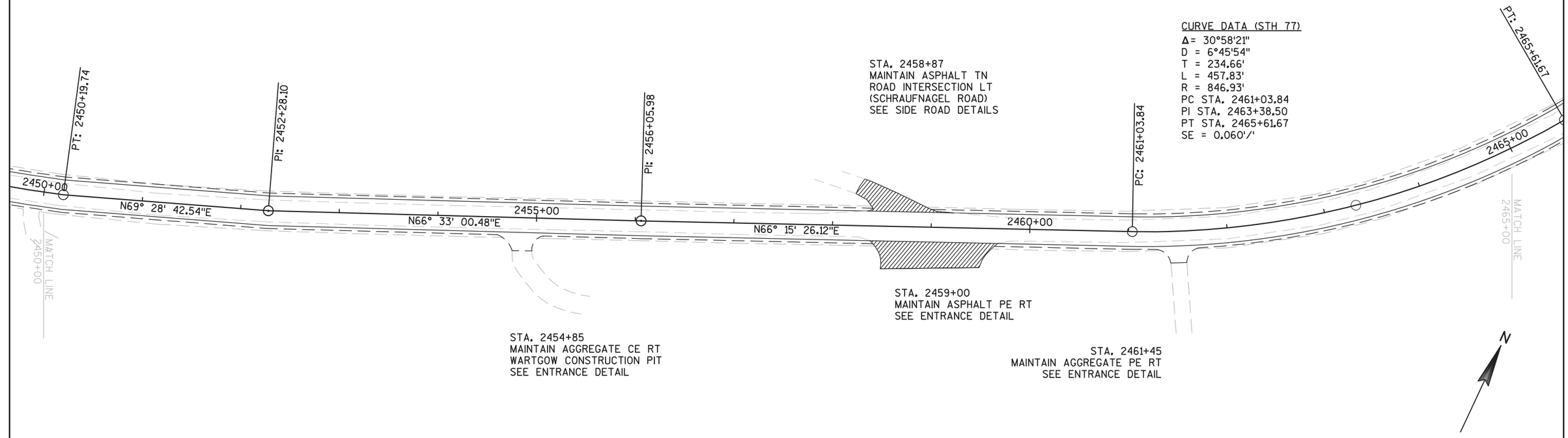
STA. 2397+74
EXIST. 24"X56' CACP TO REMAIN
REMOVE 2 AEW
2 - AEW REQ'D.

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E



PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E





PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET 68 E

FILE NAME : R:\2010\10-042 (STH 77)\Drawings\dwg\sth 77 LAYOUT.DWG PLOT DATE : 9/25/2013 9:41 AM PLOT BY : JAMES SOLBERG PLOT NAME : PLOT SCALE : 100:1

5

5

CURVE DATA (STH 77)
Δ= 29°29'26"
D = 12°58'28"
T = 116.23'
L = 227.30'
R = 441.60'
PC STA. 2467+28.52
PI STA. 2468+44.75
PT STA. 2469+55.82
SE = 0.050'/'

STA. 2468+67
MAINTAIN ASPHALT TN
ROAD INTERSECTION LT
SEE SIDE ROAD DETAILS

STA. 2471+12
EXIST. 24"X88'
CACP TO REMAIN

N

PT: 2469+55.82

CONSTRUCTION JOINT REQ'D
SEE DETAIL
MATCH EXISTING

PC: 2467+28.52

2470+00

2471+69

N66° 08' 50.88"E

PT: 2465+61.67

N33° 00' 41.77"E

S.T.H. 13

END PROJECT 8530-14-71
STA. 2471+69
Y = 164597.772
X = 566852.865

2465+00

STA. 2467+40
MAINTAIN AGGREGATE PE RT
SEE ENTRANCE DETAIL

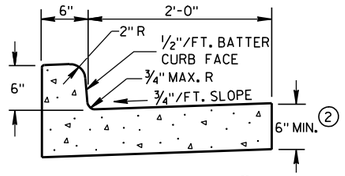
MATCH LINE
2465+00

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PLAN	SHEET	E

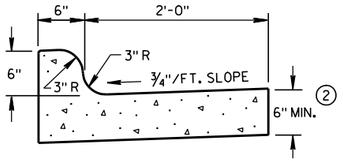
Standard Detail Drawing List

08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
13A08-01	ASPHALTIC RUMBLE STRIPS AT INTERSECTION
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B29-01	SAFETY EDGE
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

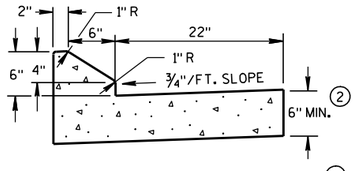
6



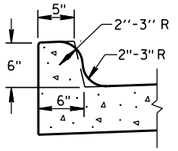
TYPES A & D (1)



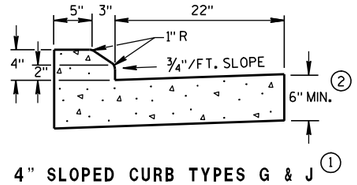
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

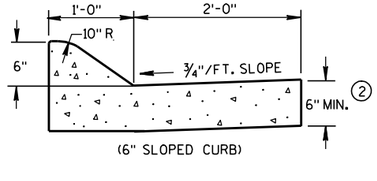


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

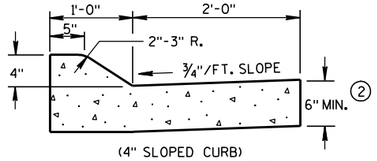


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

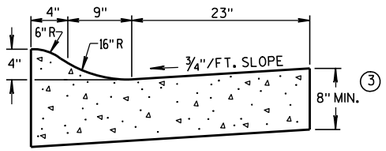


(6" SLOPED CURB)



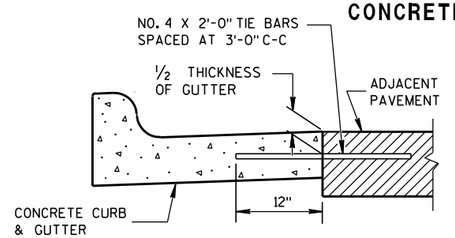
(4" SLOPED CURB)

TYPES A & D (1)

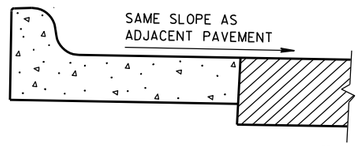


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION (1)



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

GENERAL NOTES

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

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

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

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

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

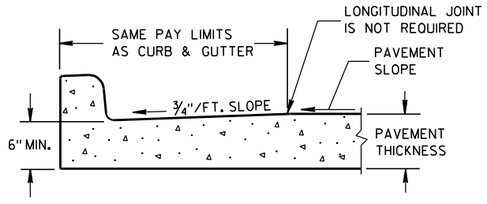
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

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

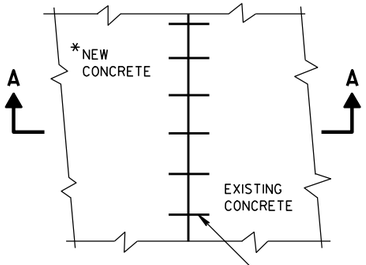
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

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

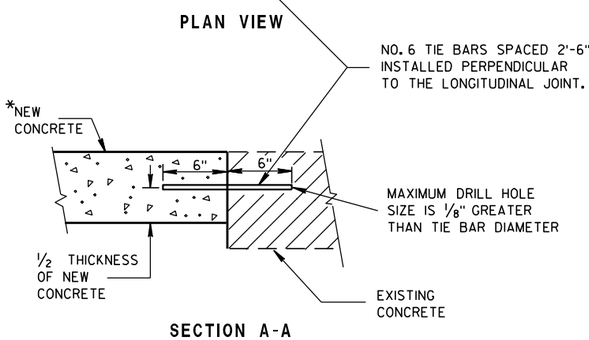


PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



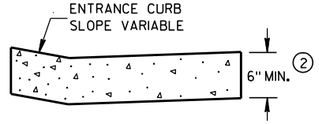
PLAN VIEW

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

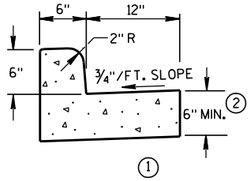


SECTION A-A

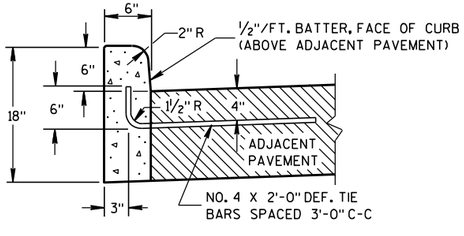
TIE BARS DRILLED INTO EXISTING PAVEMENT



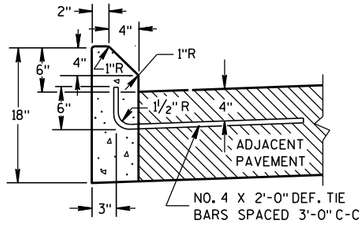
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



(1)
TYPES A & D
CONCRETE CURB & GUTTER 18"

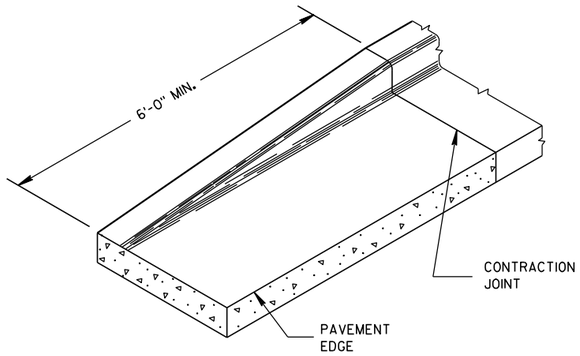


(1)
TYPES A & D



(1)
TYPES G & J

CONCRETE CURB



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

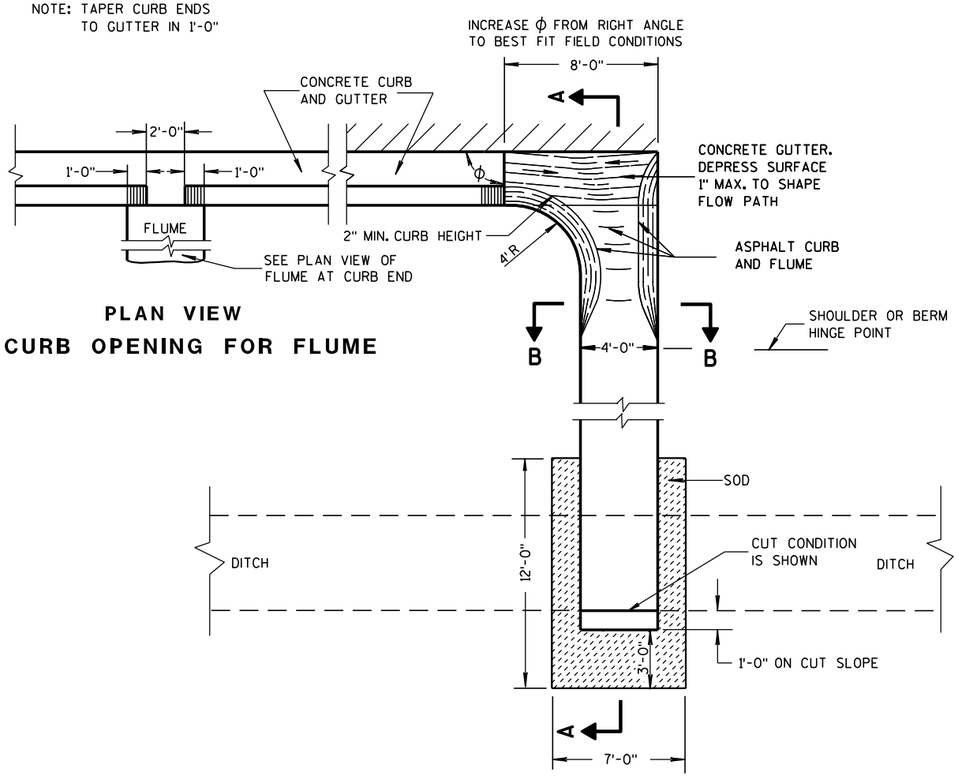
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 DATE
/S/ Jerry H. [illegible] ROADWAY STANDARDS ENGINEER
FHWA

6

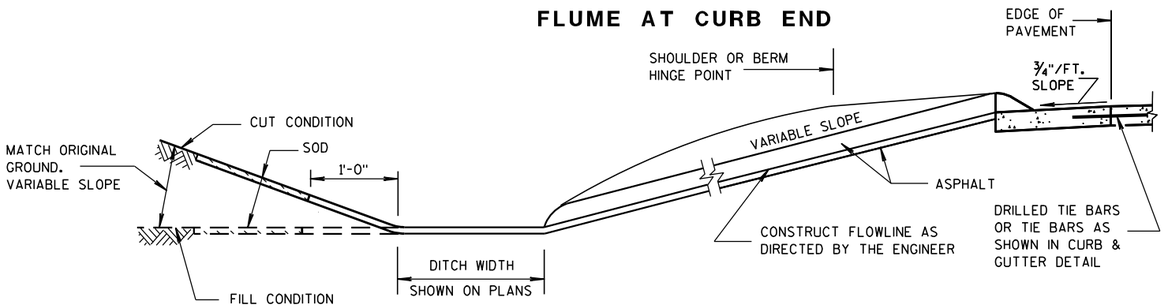
S.D.D. 8 D 1-17

ASPHALTIC FLUME

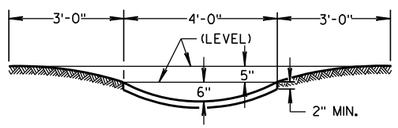


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

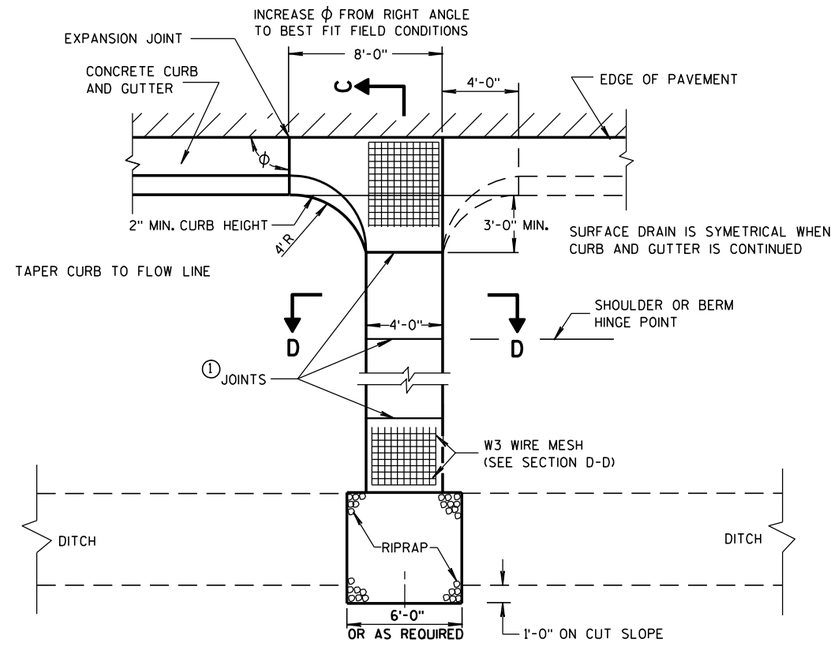
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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

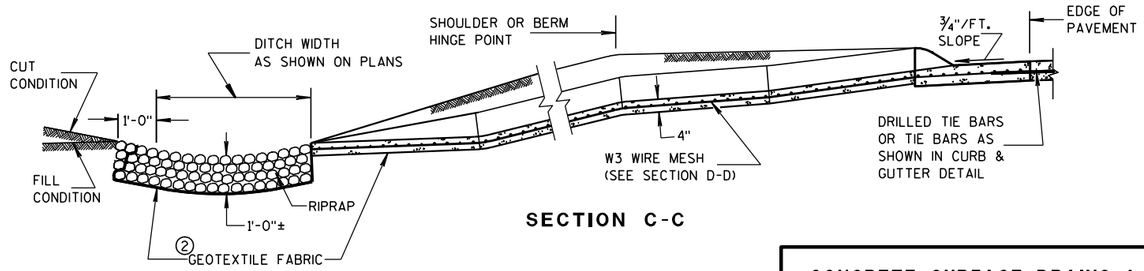
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

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

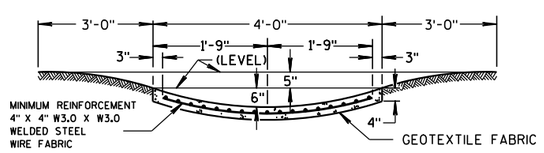
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

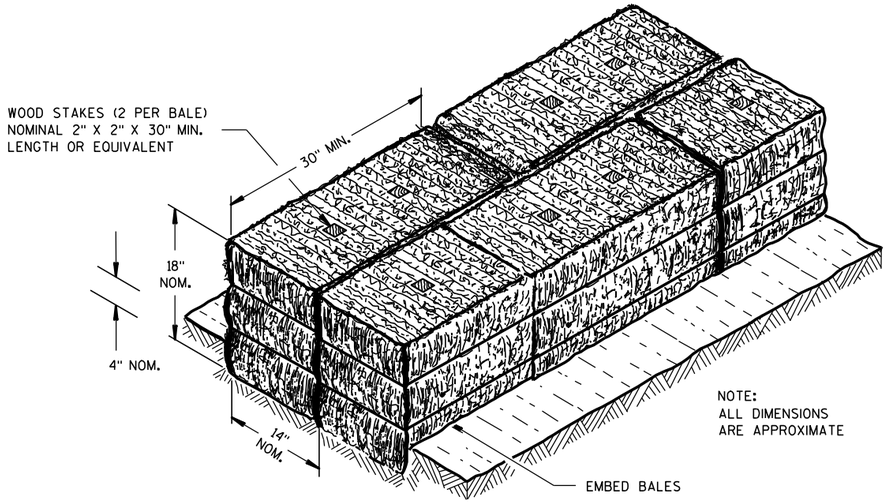
APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
MENT
FHWA

6

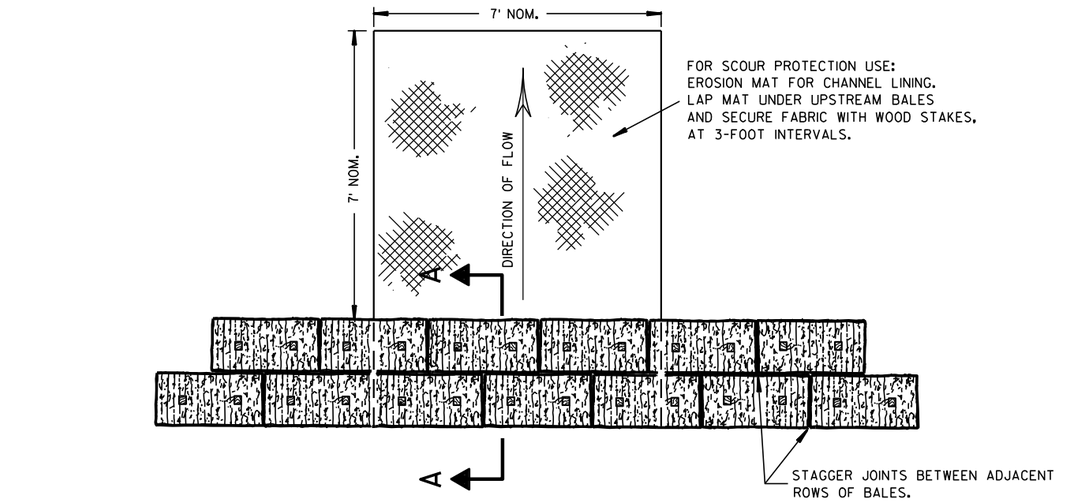
S.D.D. 8 D 4-5

6

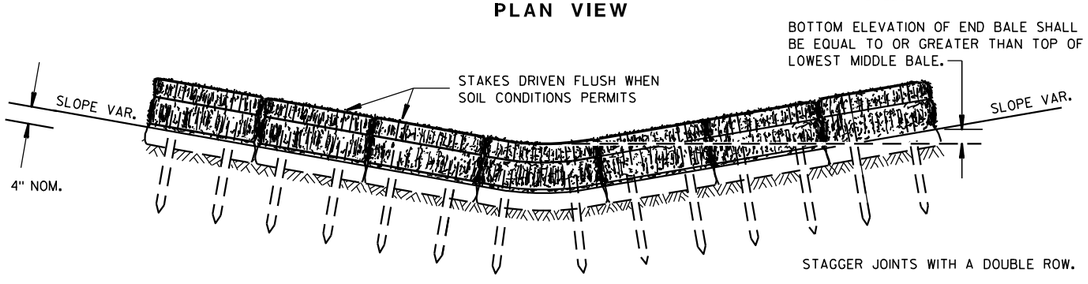
S.D.D. 8 D 4-5



SECTION A-A



PLAN VIEW



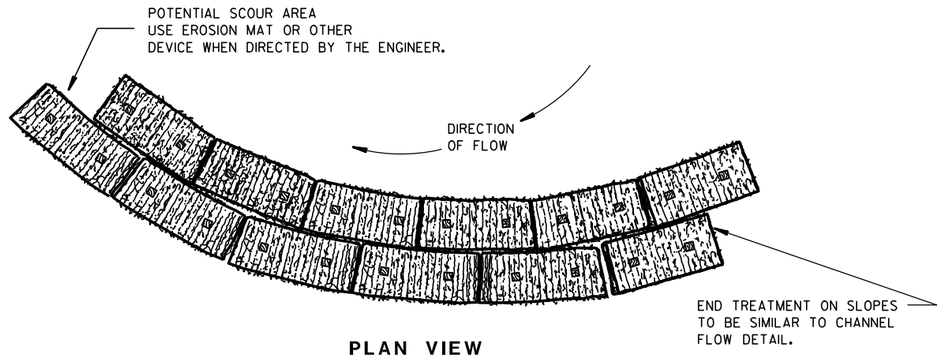
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

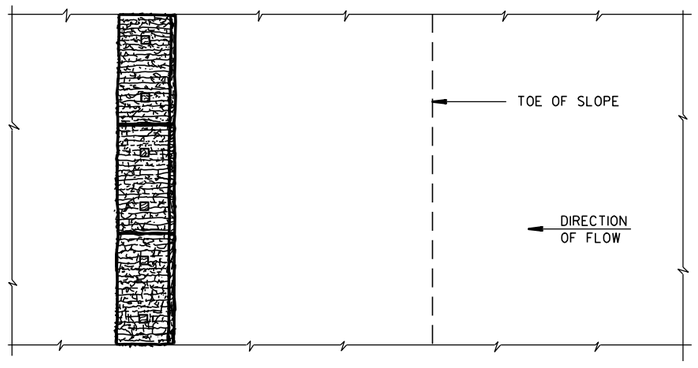
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

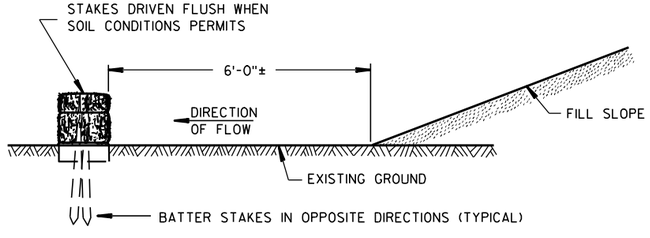


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

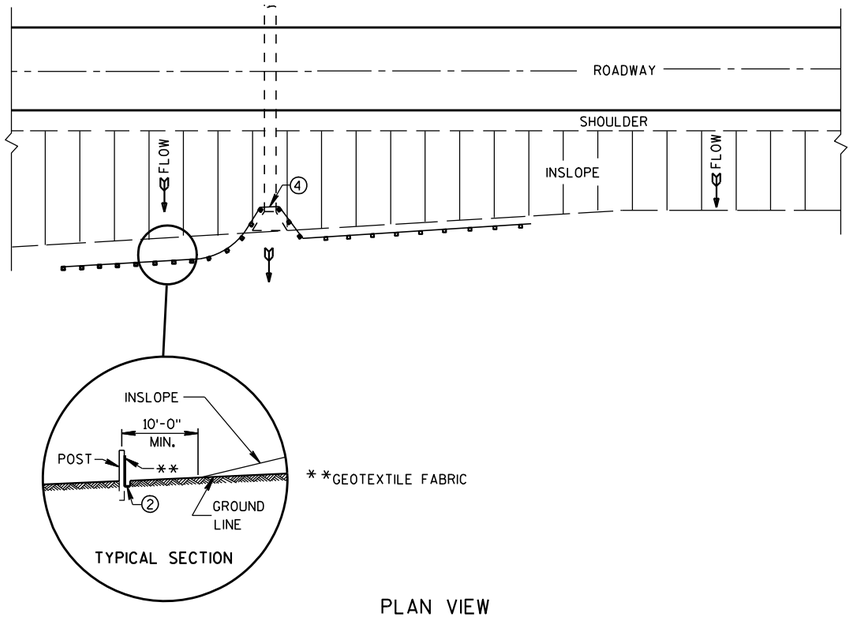
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

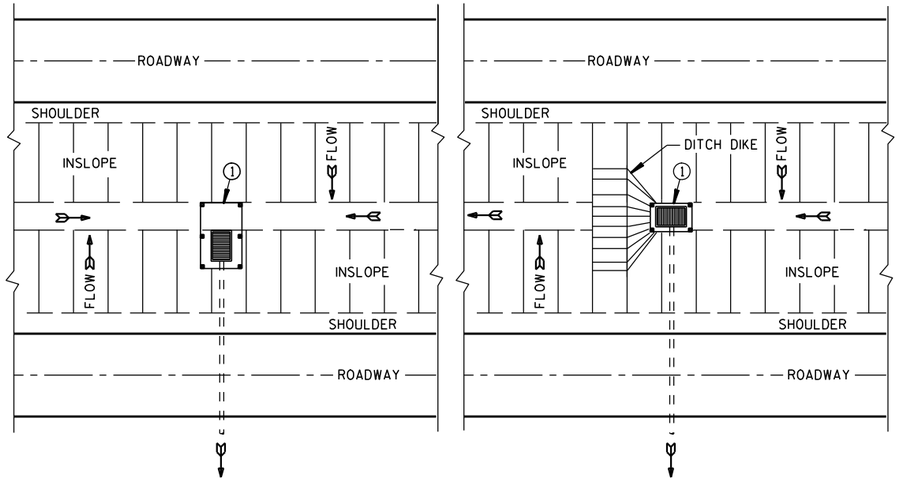
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



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.

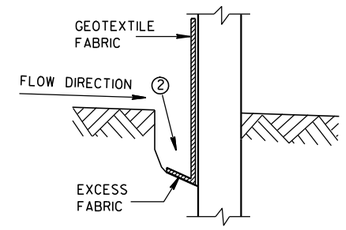
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

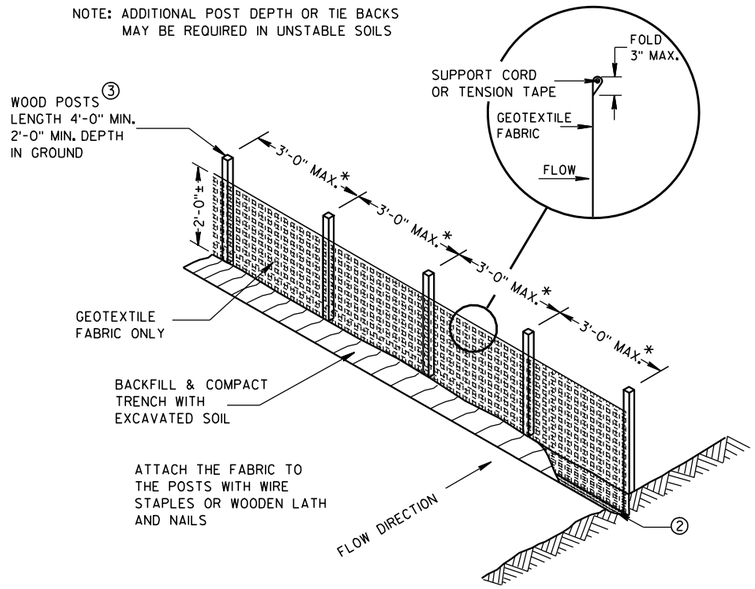
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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.

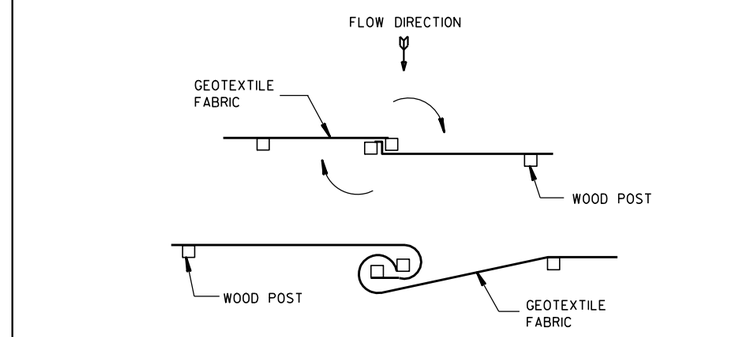


TRENCH DETAIL

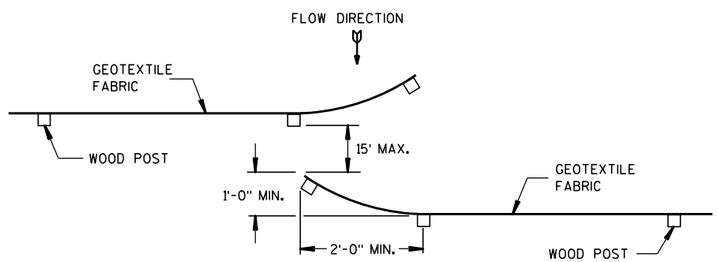


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

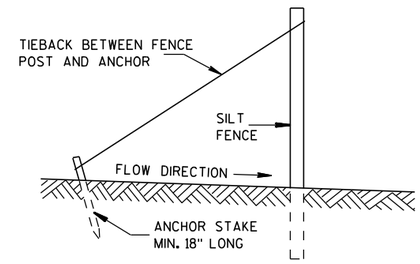


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



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

METAL APRON ENDWALLS

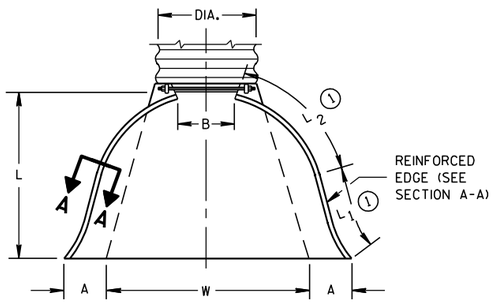
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

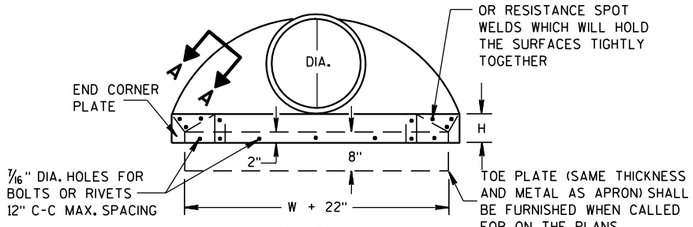
REINFORCED CONCRETE APRON ENDWALLS

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

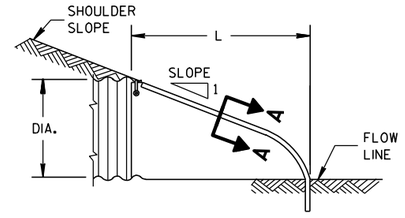
* MINIMUM
** MAXIMUM



PLAN VIEW

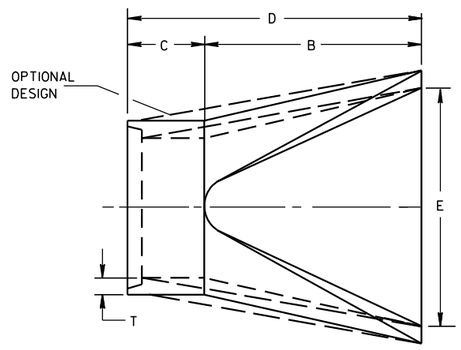


END VIEW

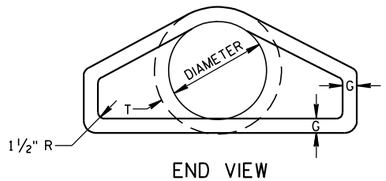


SIDE ELEVATION

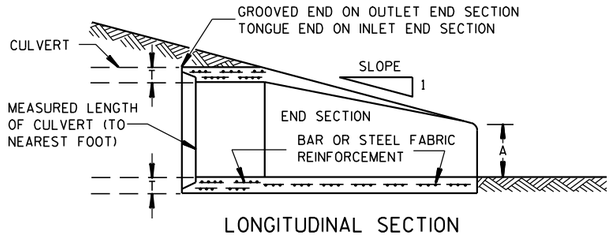
METAL ENDWALLS



PLAN

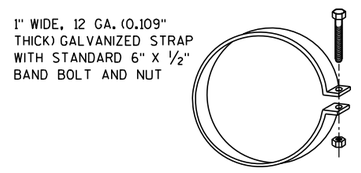


END VIEW



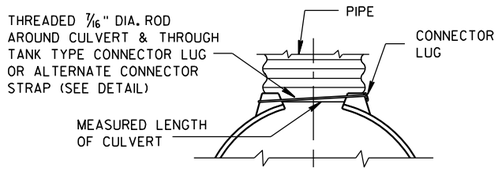
LONGITUDINAL SECTION

CONCRETE ENDWALLS

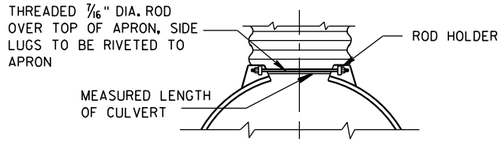


ALTERNATE FOR TYPE 1 CONNECTION

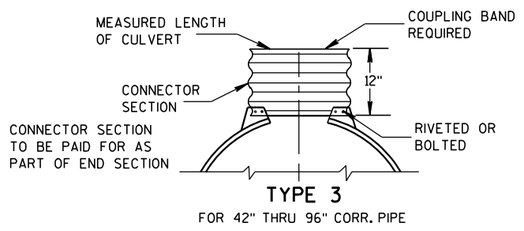
END SECTION CONNECTOR STRAP



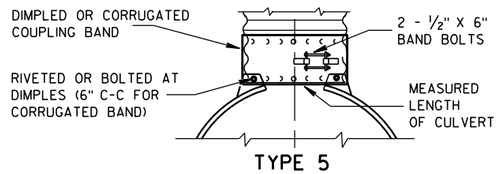
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

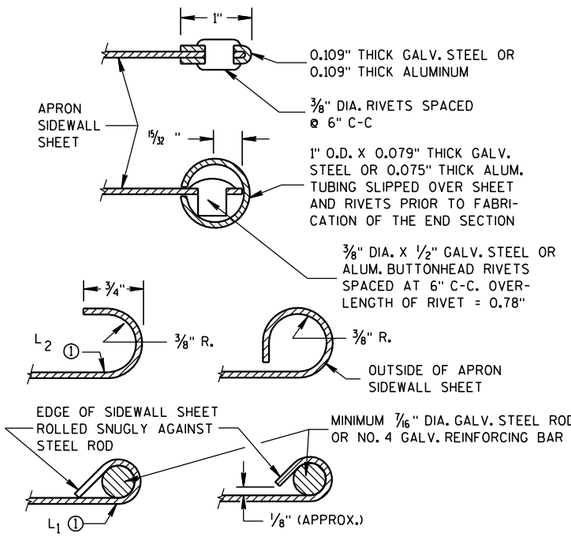
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

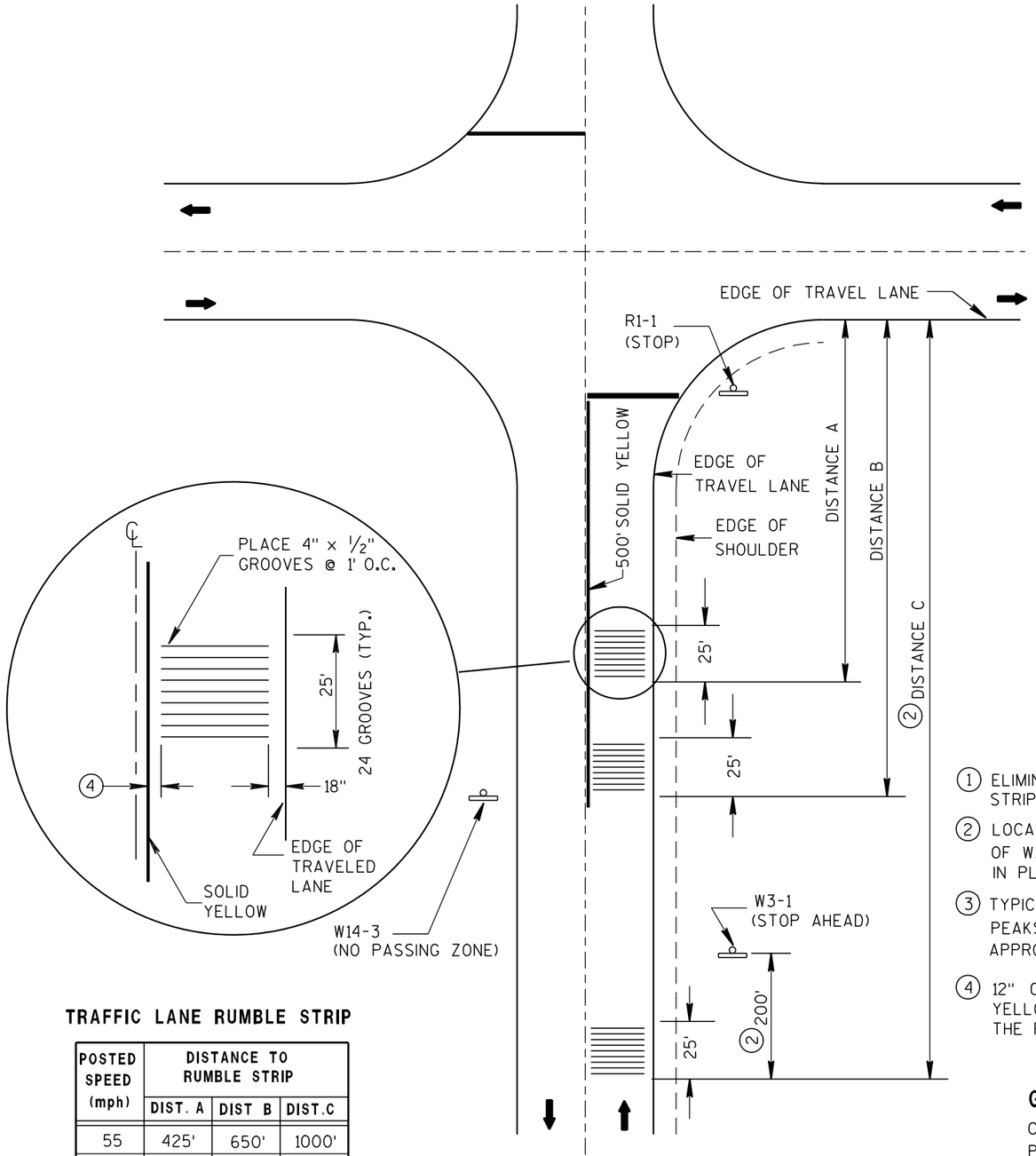
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

PLAN VIEW

RUMBLE STRIP LOCATION

TRAFFIC LANE RUMBLE STRIP

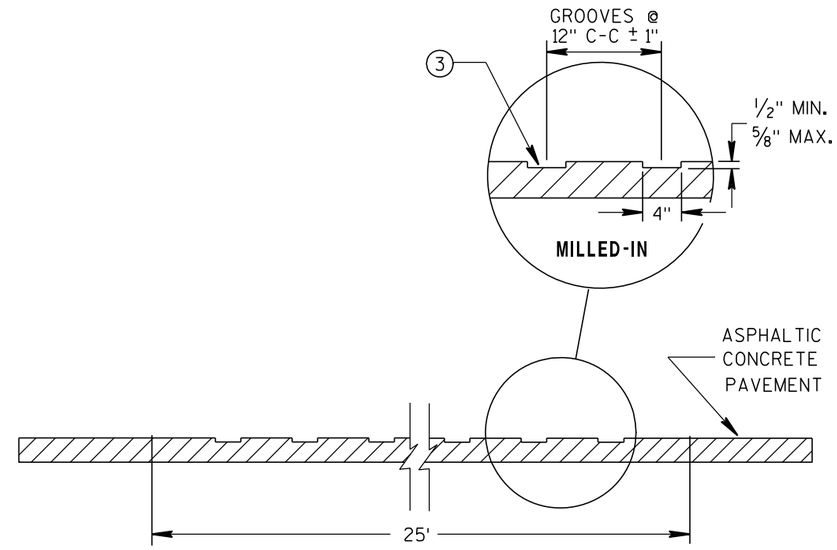
POSTED SPEED (mph)	DISTANCE TO RUMBLE STRIP		
	DIST. A	DIST B	DIST.C
55	425'	650'	1000'
50	325'	450'	800'
45	275'	400'	650'
40	225'	(1)	550'
35	175'	(1)	475'
≤ 30	125'	(1)	425'

(1) ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.

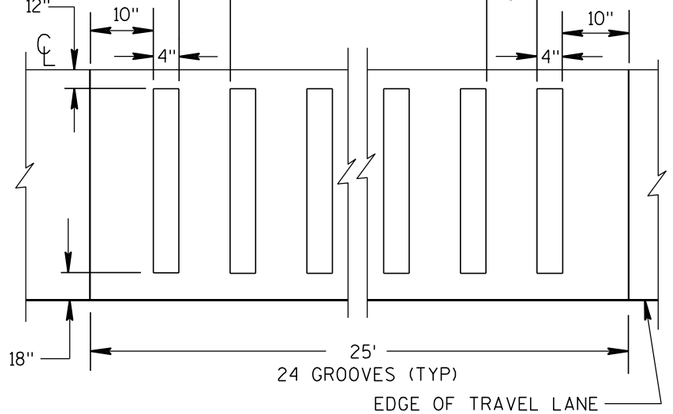
(2) LOCATE RUMBLE STRIP 200' IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE C.

(3) TYPICAL VERTICAL VARIATION BETWEEN PEAKS AND VALLEYS WITHIN THE CUT APPROXIMATELY 1/16"

(4) 12" CLEAR BETWEEN THE SOLID YELLOW LINE AND THE EDGE OF THE RUMBLE.



ELEVATION VIEW



PLAN VIEW

ASPHALTIC PAVEMENT MILLED-IN

GENERAL NOTES

CONTRACTOR SHALL CONFIRM RUMBLE STRIP LOCATION WITH THE ENGINEER PRIOR TO INSTALLATION. THE ENGINEER MAY MODIFY THE RUMBLE STRIP LOCATION AS FIELD CONDITIONS DICTATE.

WHEN ASPHALTIC PAVEMENT IS NEW IN THE RUMBLE AREA THE CONTRACTOR SHALL ALLOW THE PAVEMENT TO CURE A MINIMUM OF 7 DAYS PRIOR TO RUMBLE INSTALLATION.

PAVEMENT MARKING AND SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

ASPHALTIC RUMBLE STRIPS AT INTERSECTION

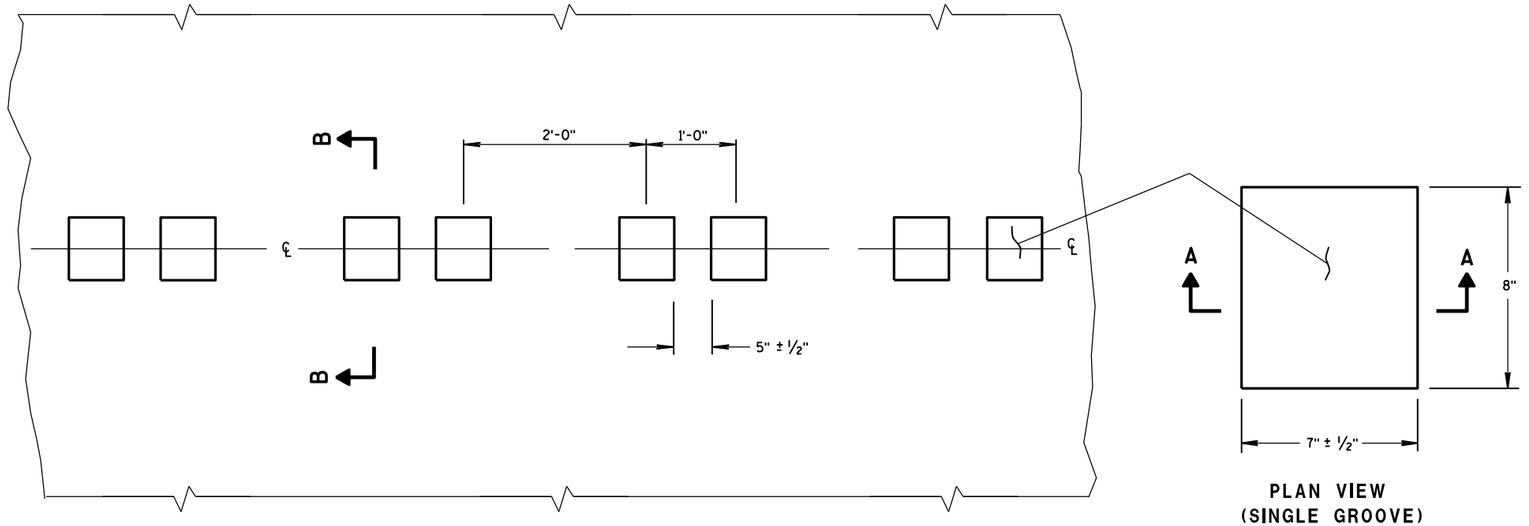
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/17/2011
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS
ENGINEER

FHWA



PLAN VIEW
CENTER LINE WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

GENERAL NOTES

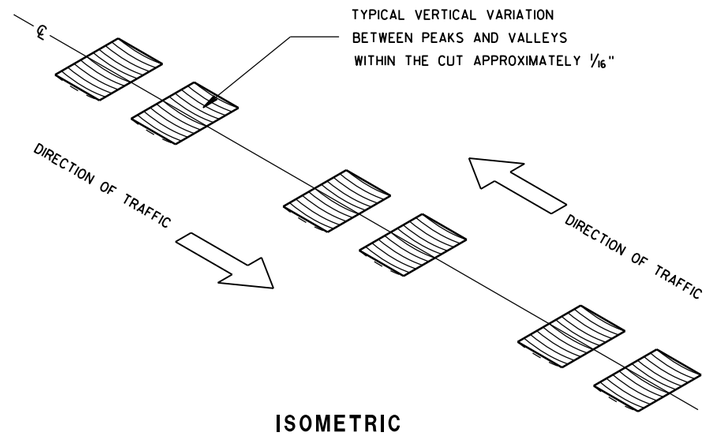
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

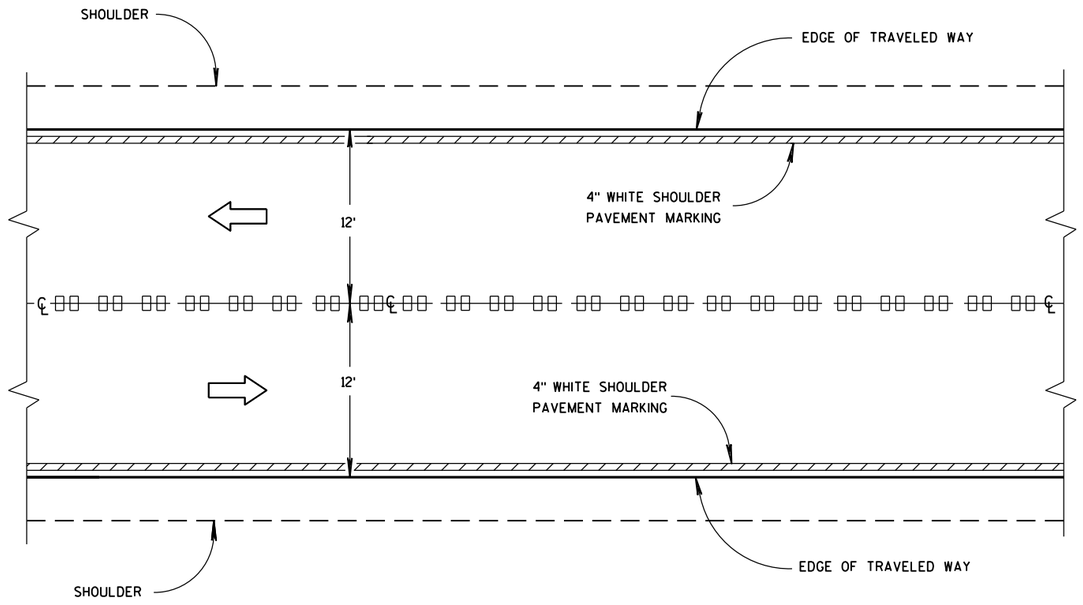
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

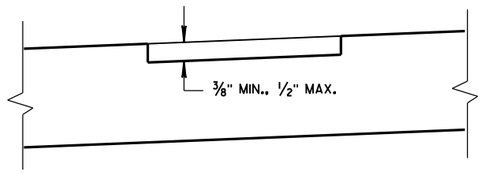
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



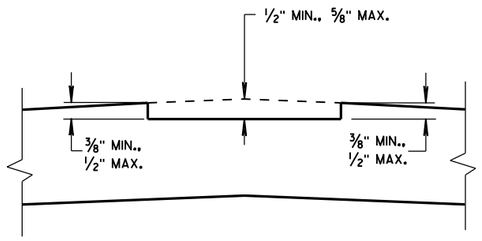
ISOMETRIC



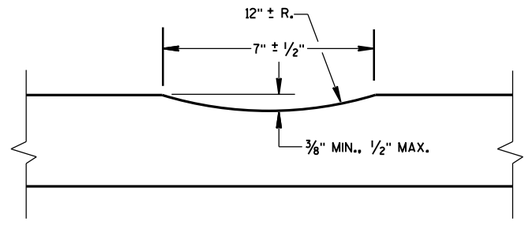
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



SECTION B-B
CROWNED ROADWAY



SECTION A-A

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

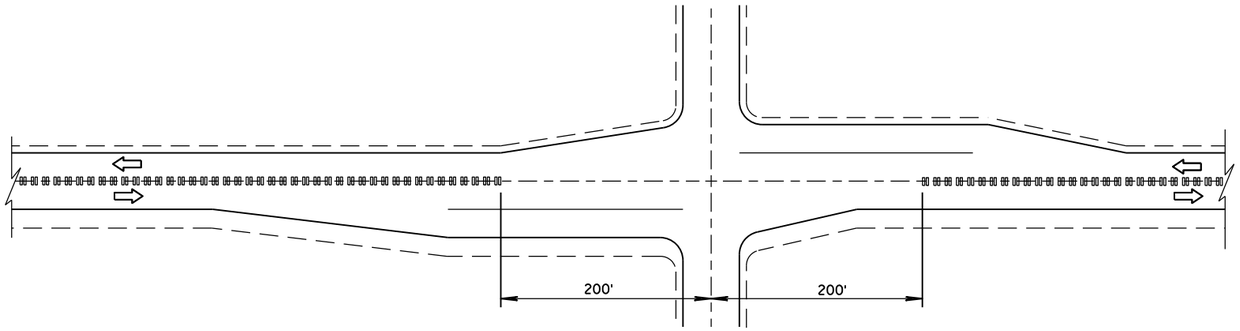
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI 77

6

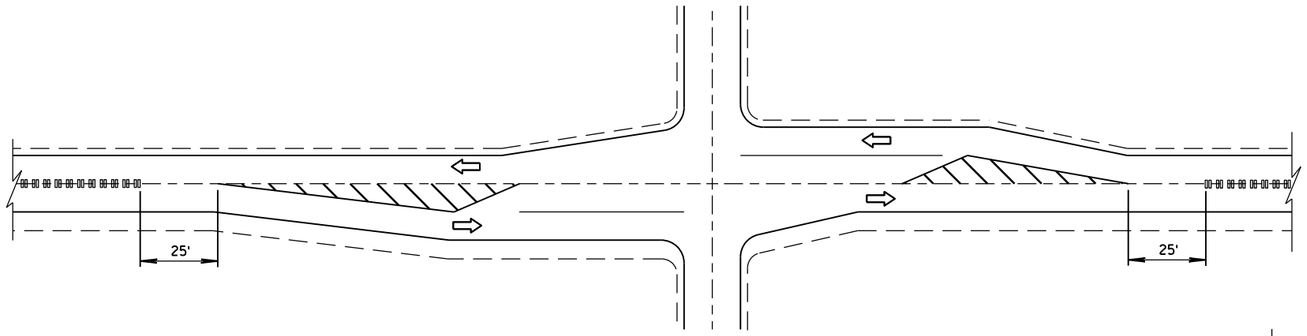
S.D.D. 13 A 11-2a

6

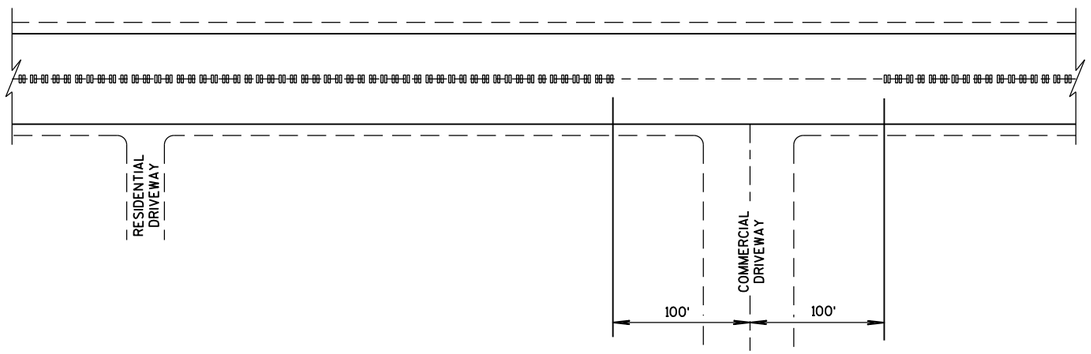
S.D.D. 13 A 11-2a



CENTER LINE GROOVES AT INTERSECTIONS

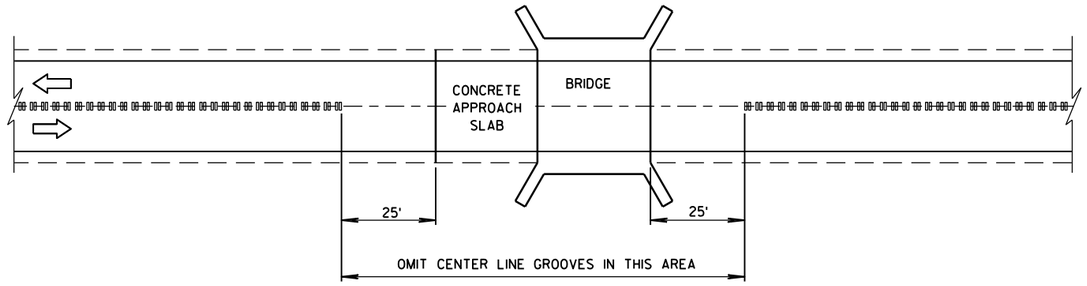


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

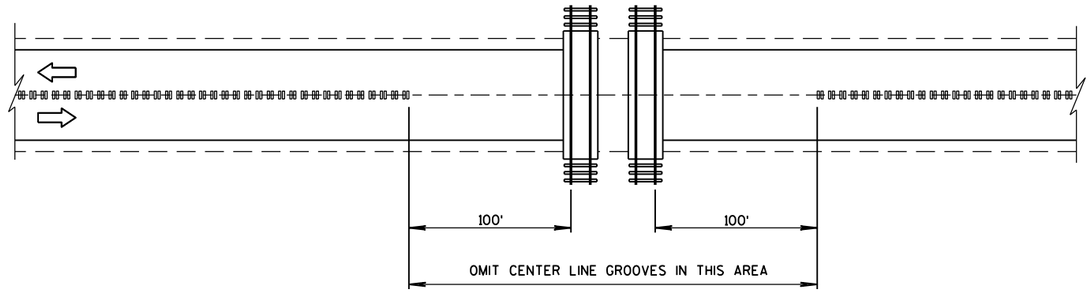


CENTER LINE GROOVES AT DRIVEWAYS (1)

(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

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/15/2013
DATE

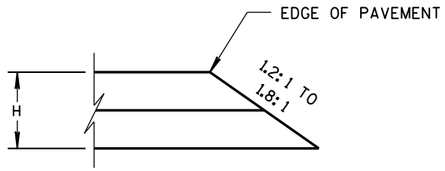
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

NT

FHWA

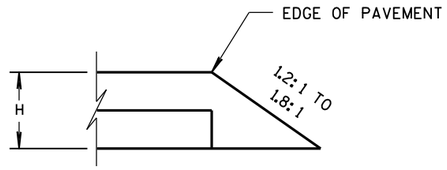
6

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



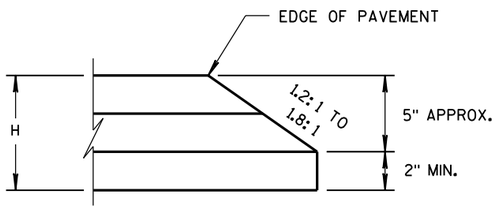
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



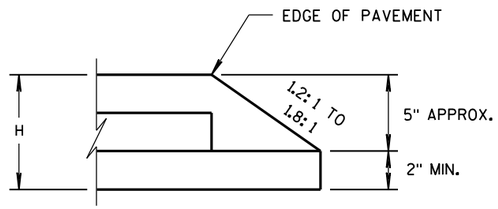
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

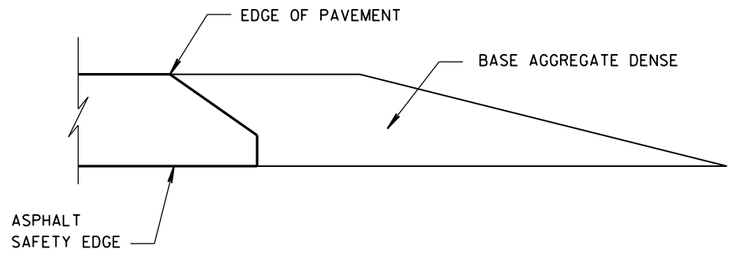
FOR H GREATER THAN 5"



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

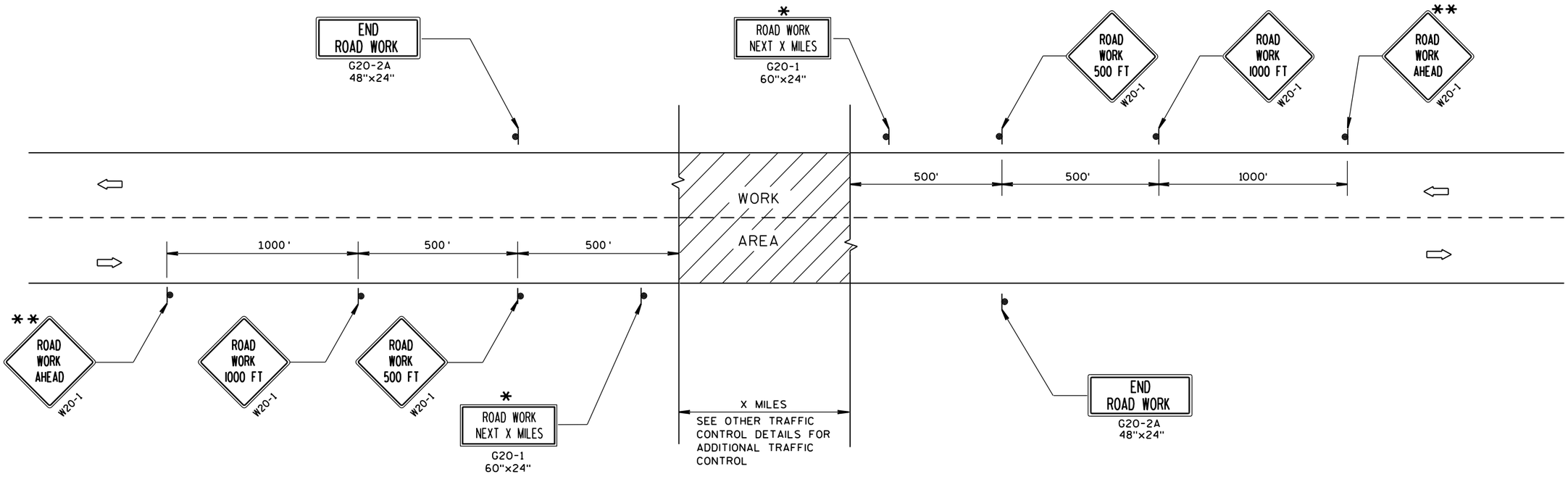
APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

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

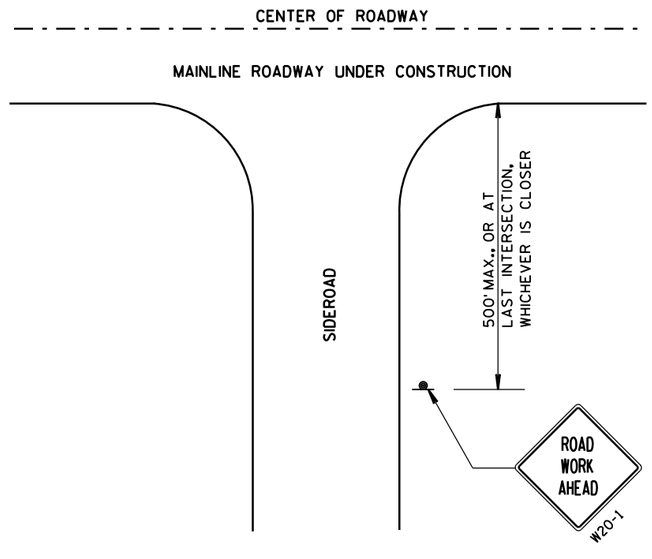
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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



LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

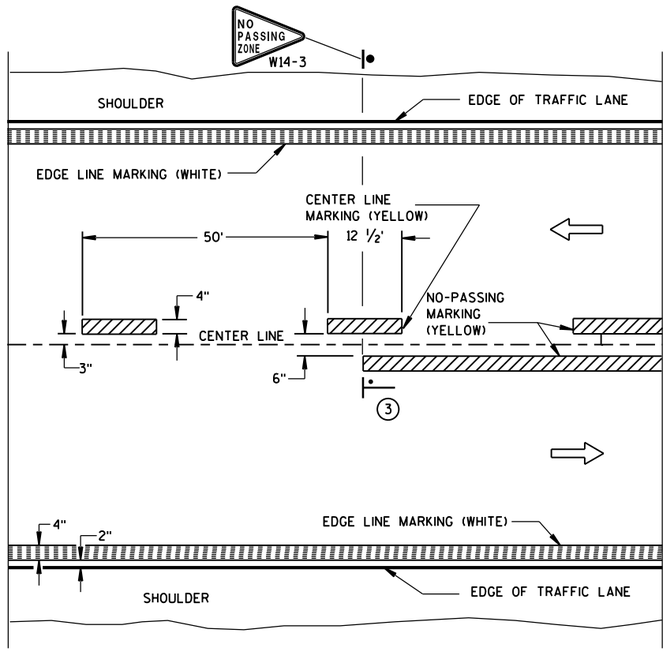
8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

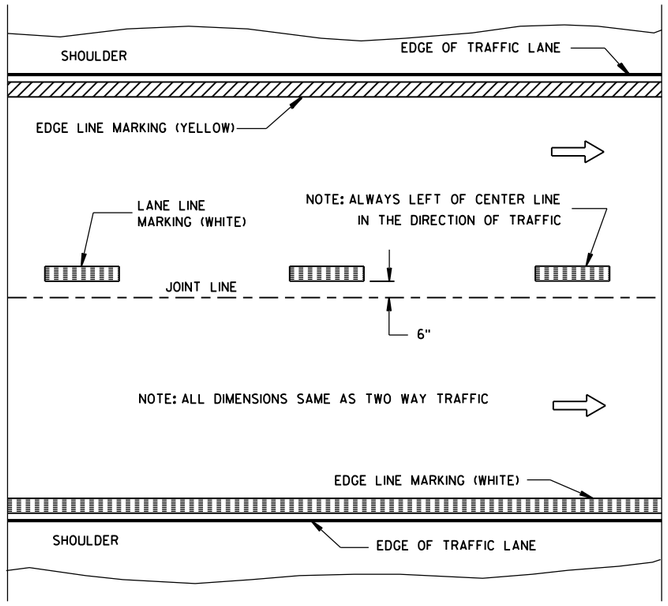
FHWA

6

S.D.D. 15 C 4-2

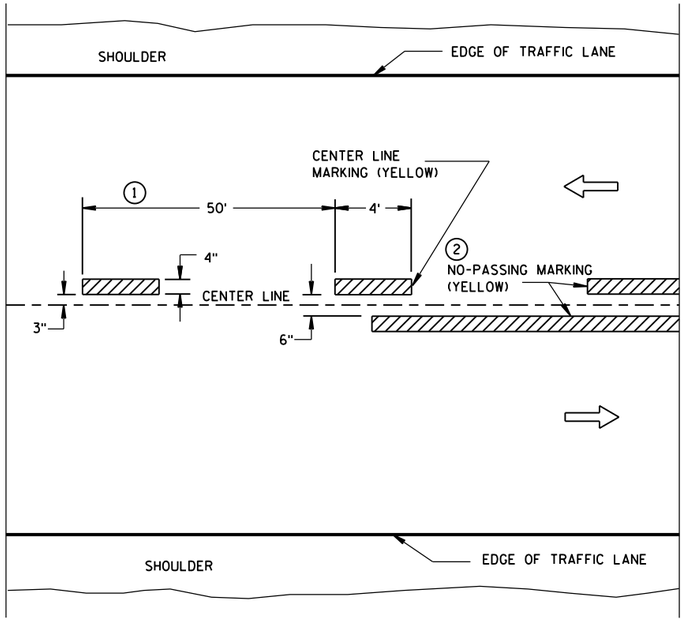


TWO WAY TRAFFIC

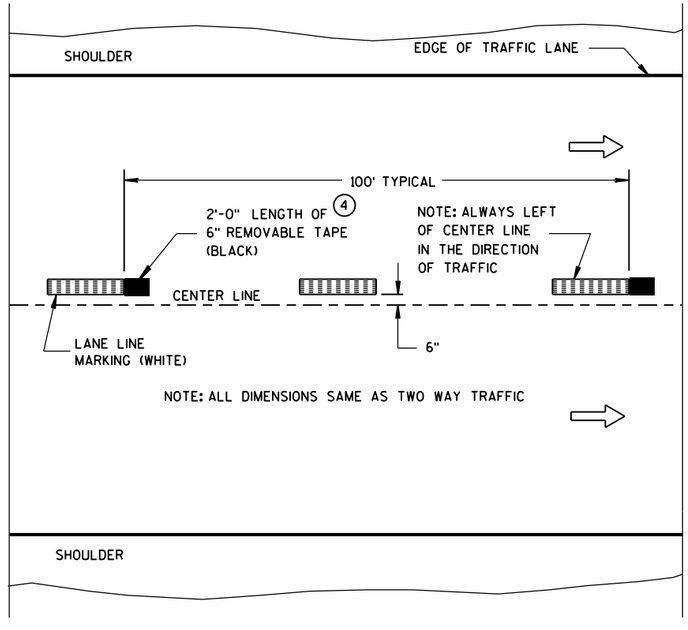


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

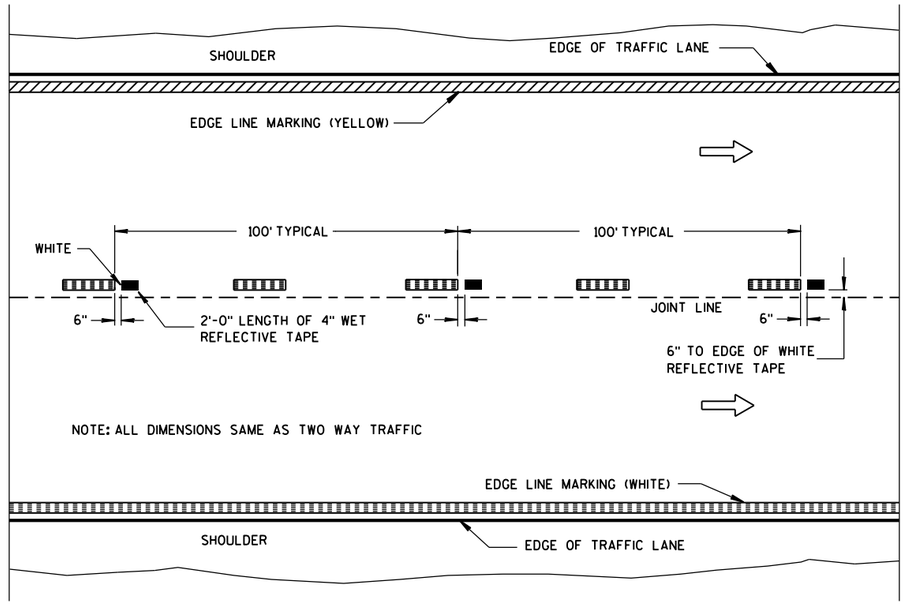
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



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

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

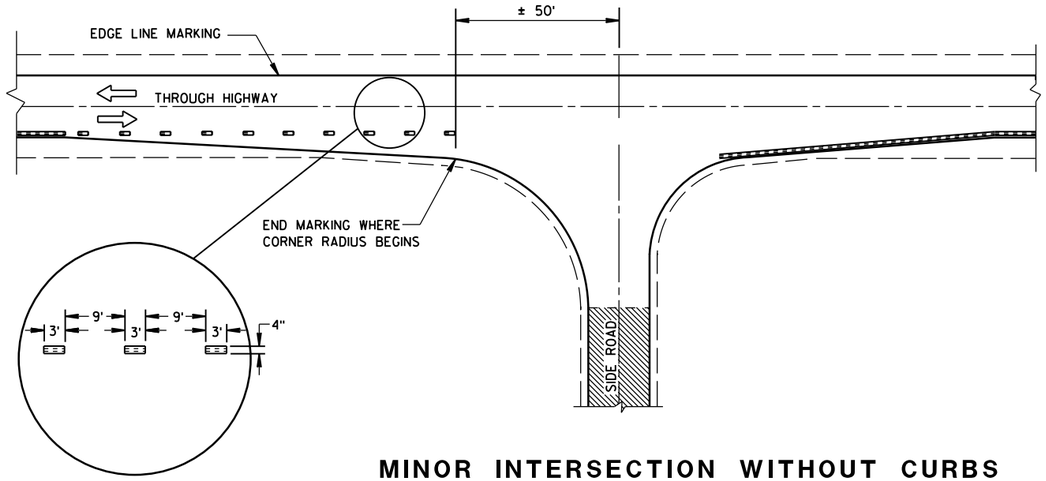
FHWA

6

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

6

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



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

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

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

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

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

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

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

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

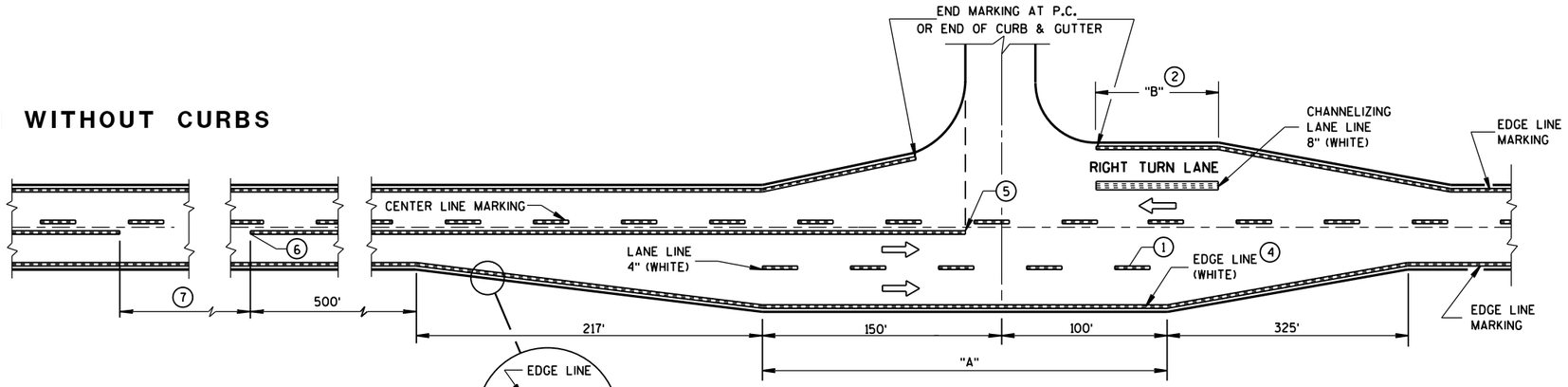
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

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

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

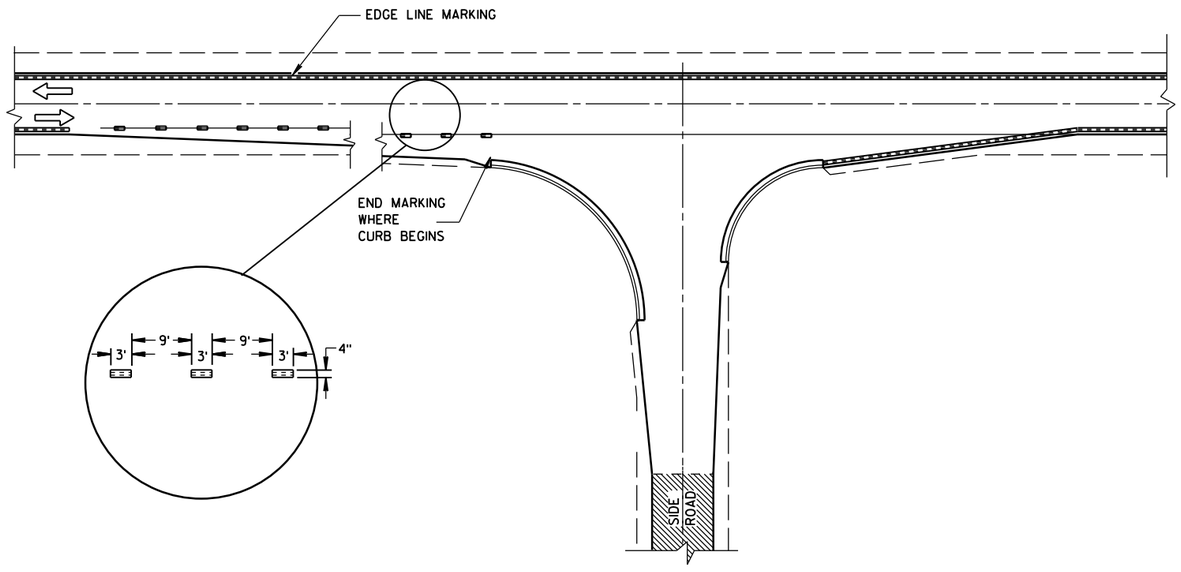
(7)

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



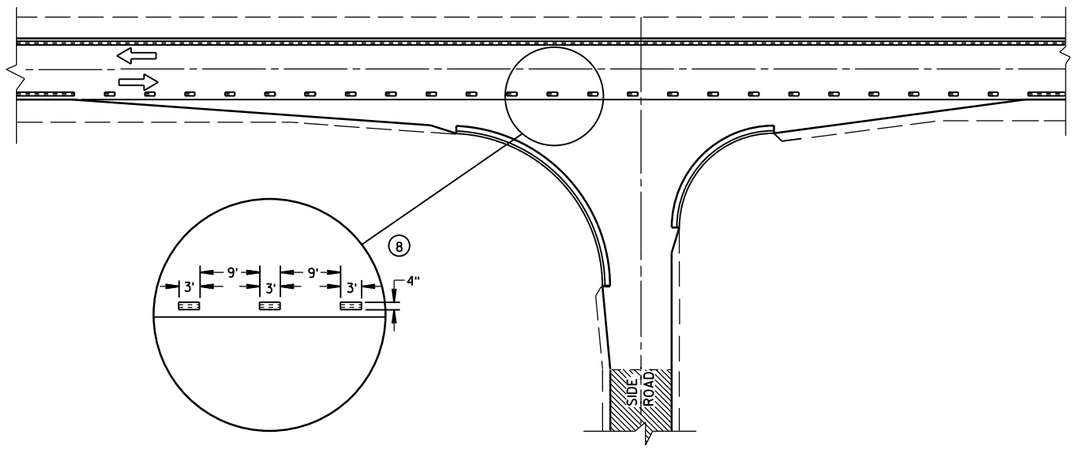
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

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

6

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

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

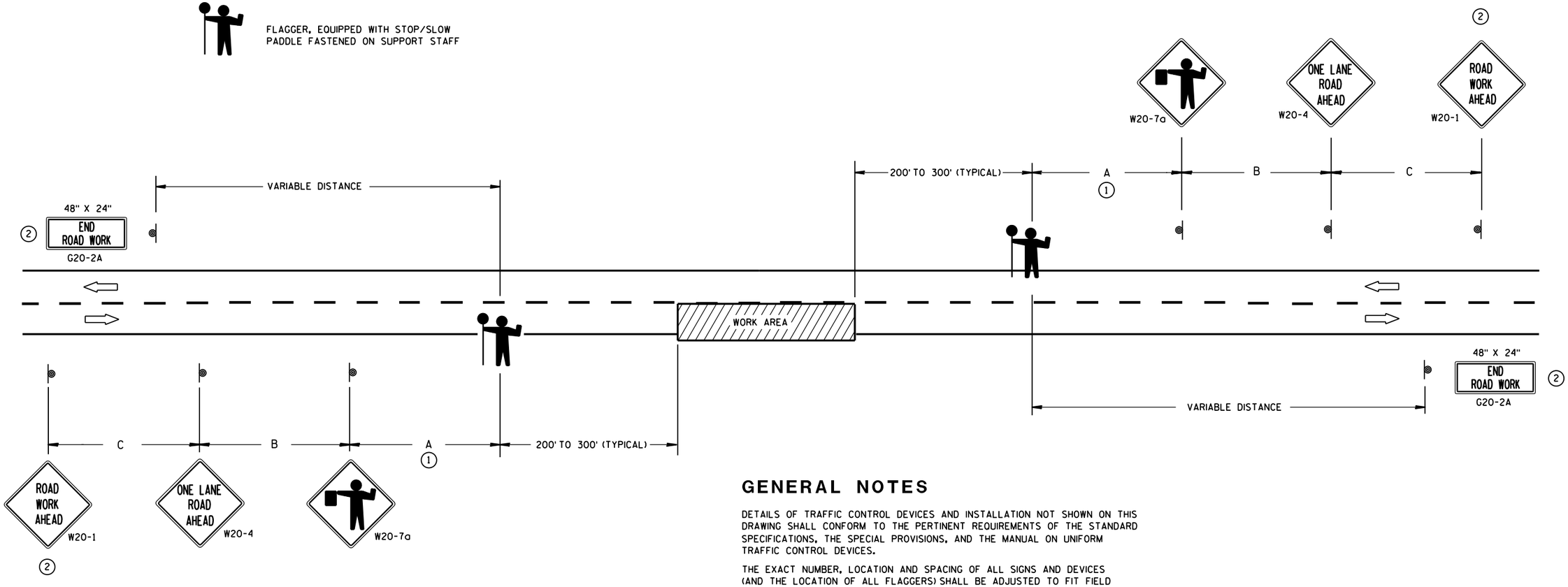
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

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

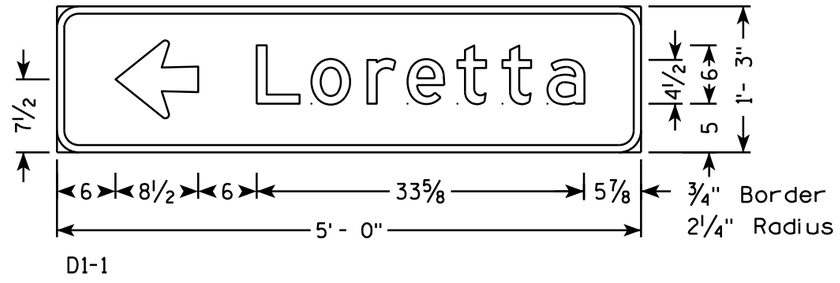
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
DESIGN
FHWA

6

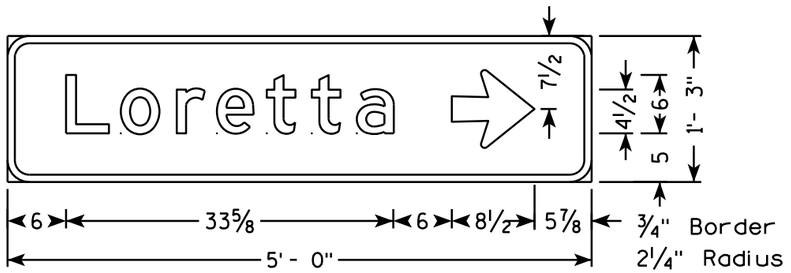
S.D.D. 15 C 12-4

6

S.D.D. 15 C 12-4



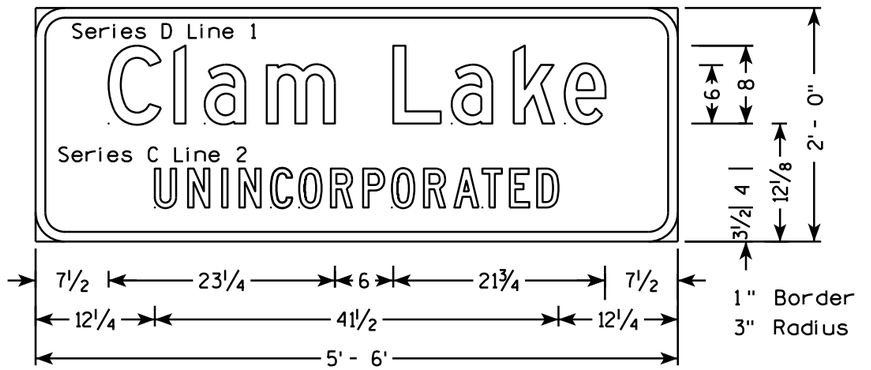
D1-1



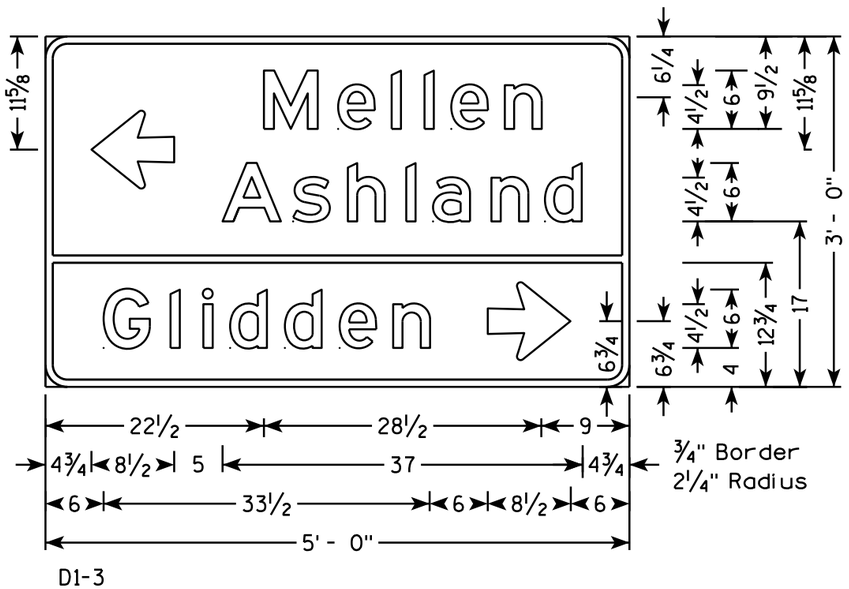
D1-1

NOTES

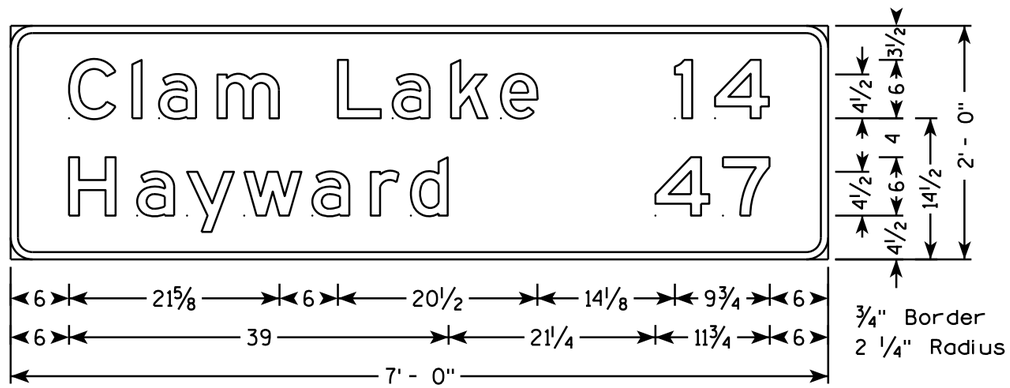
1. All Signs Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E except as Shown



I2-3



D1-3



D2-2

7

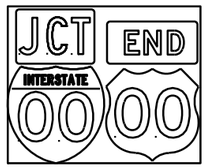
7

PROJECT NO: 8530-14-71	HWY: STH 77	COUNTY: ASHLAND	PERMANENT SIGNING	SHEET NO:	E

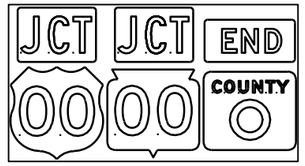
FILE NAME : C:\CAEFiles\Projects\tr_d8\8022A214.dgn PLOT DATE : 05-FEB-2014 12:14 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 15.566735:1.000000 WISDOT/CADDS SHEET 42

TYPICAL ASSEMBLIES

J1-1

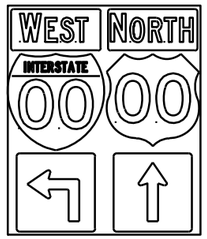


J1-2

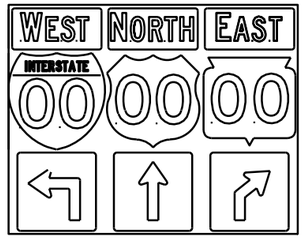


J1-3

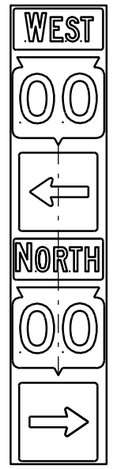
J2-1



J2-2

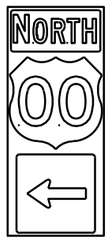


J2-3

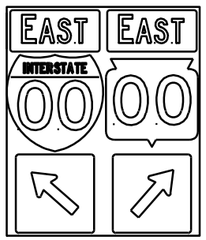


JV

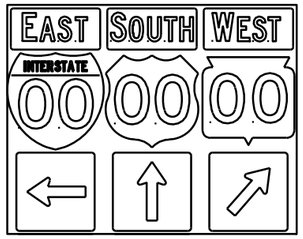
(Typical Vertical J-Assembly
See Note 10 and 11)



J3-1

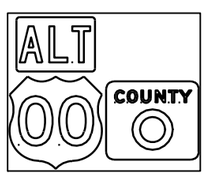


J3-2

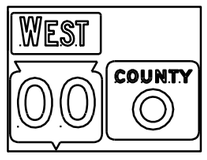


J3-3

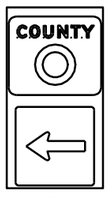
J4-1



J4-2



J4-2



J13-1

J12-1

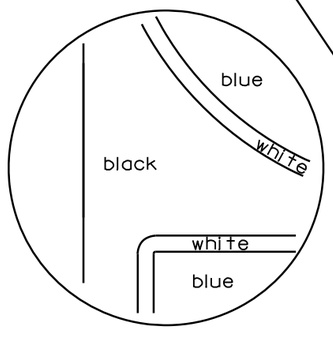
J32-1

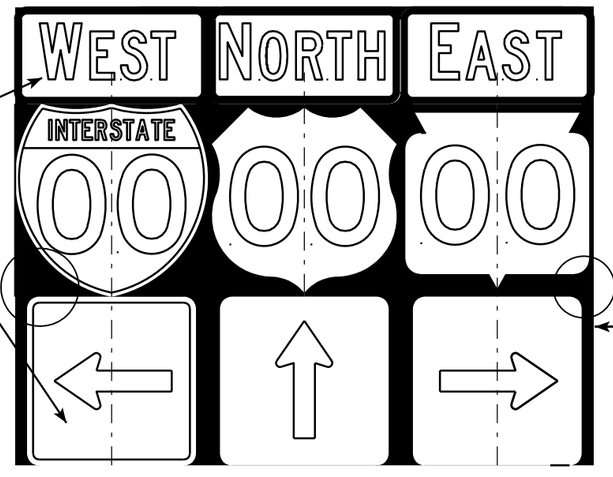
J33-1

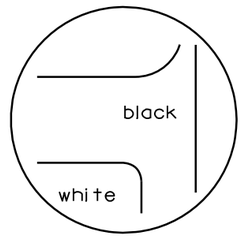
J23-1

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

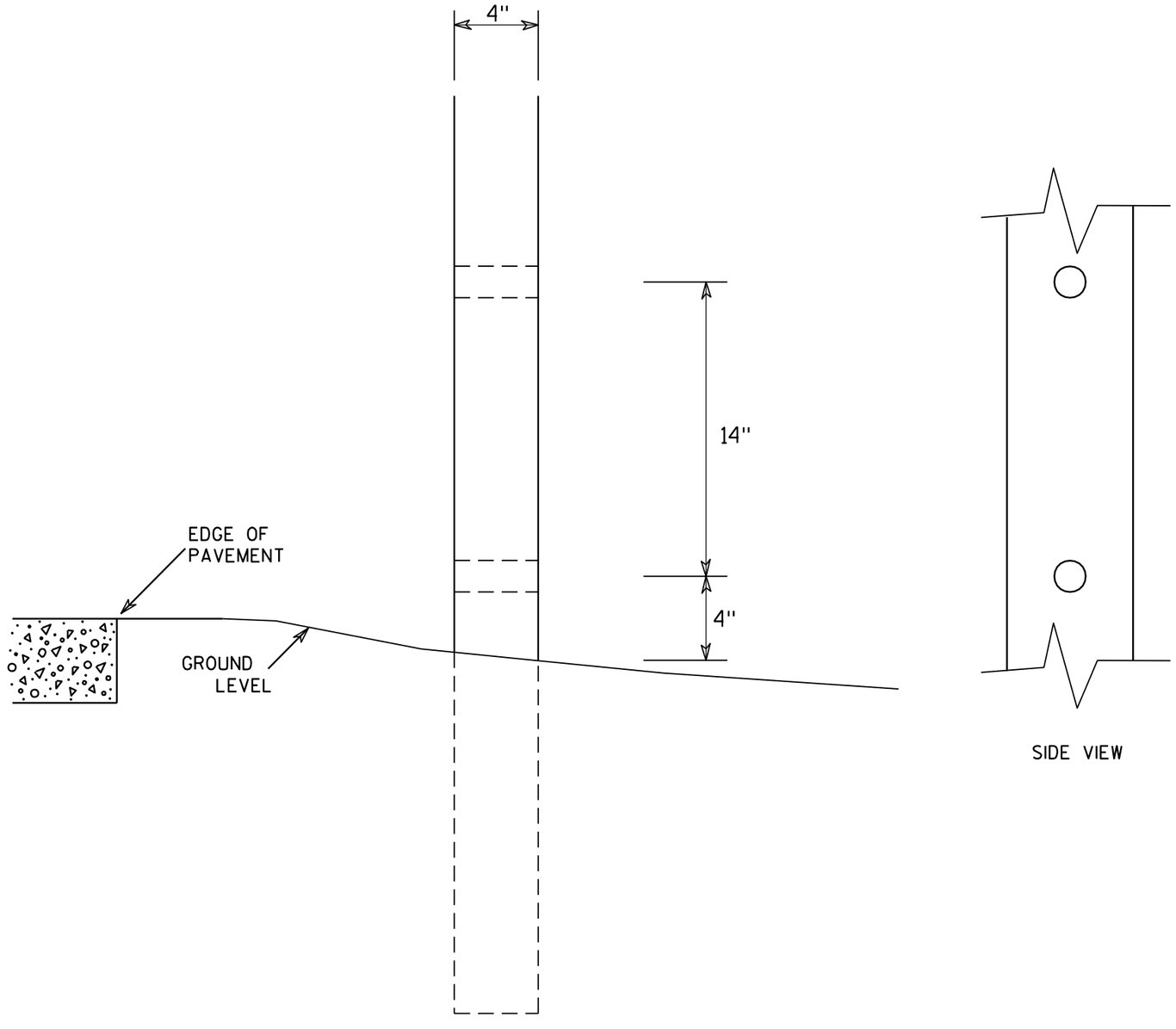
DATE 3/25/13 PLATE NO. A2-1S.7

7

7

PROJECT NO:

SHEET NO: 85 E



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

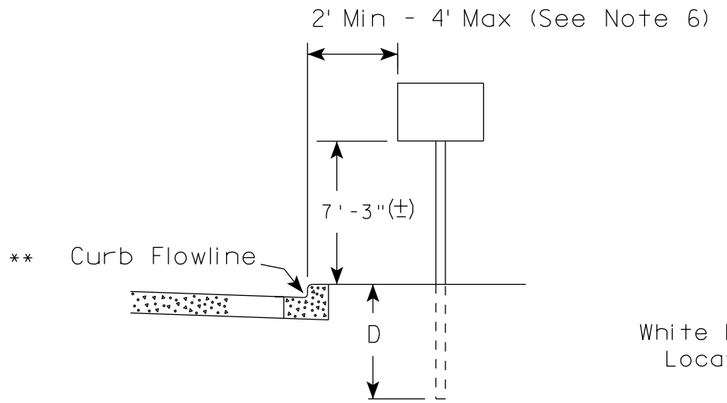
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

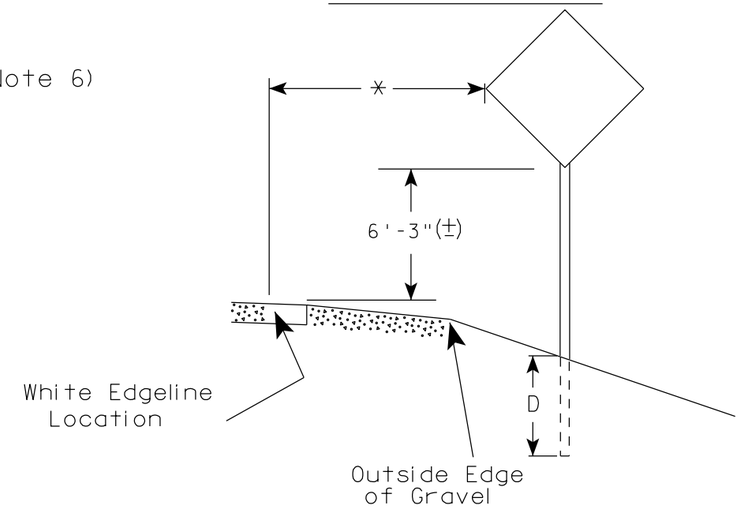
DATE 3/27/97 PLATE NO. A4-11.2

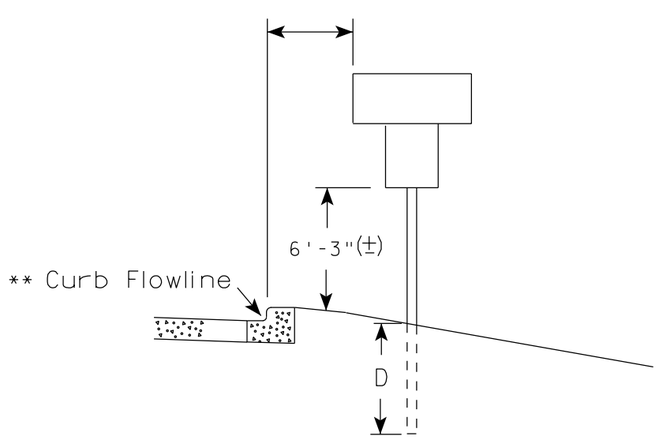
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 86	E

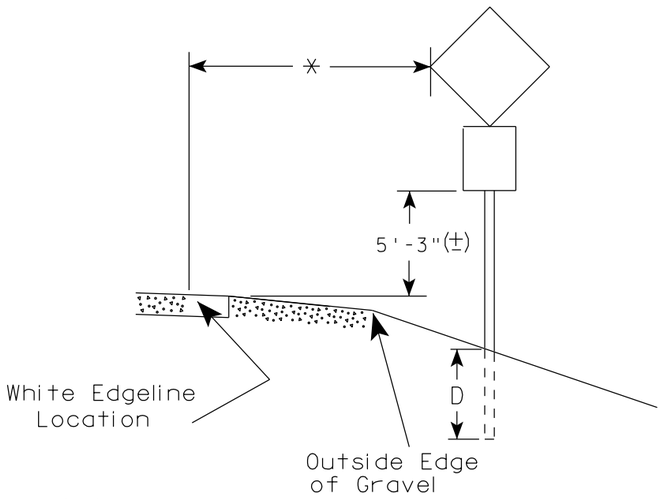
URBAN AREA



RURAL AREA (See Note 2)







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

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

GENERAL NOTES

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

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

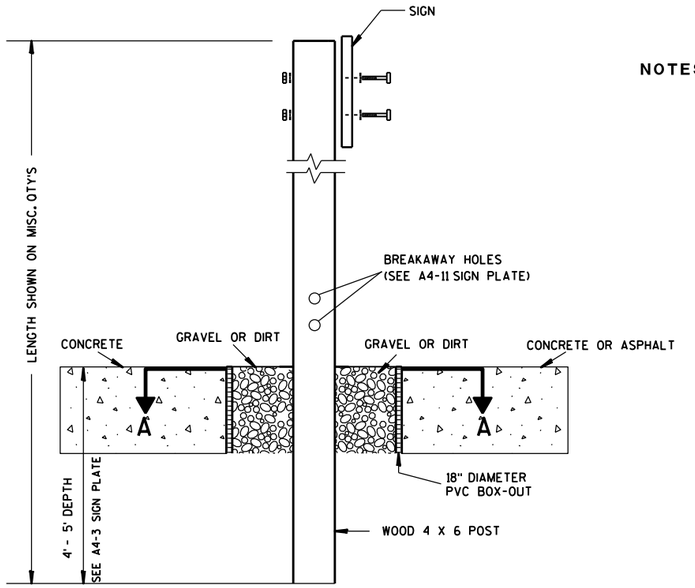
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

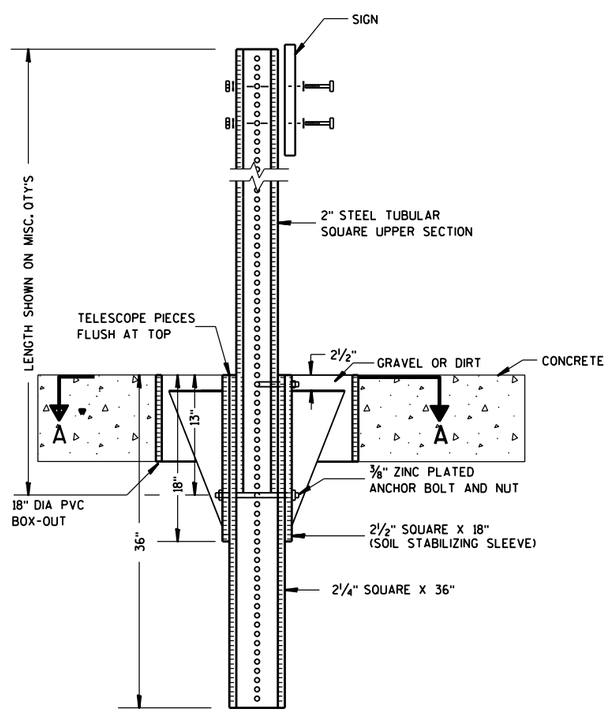
7



ELEVATION VIEW

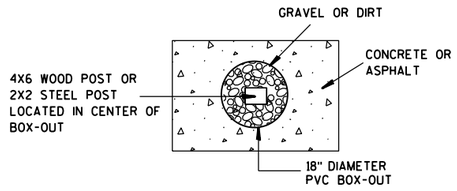
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

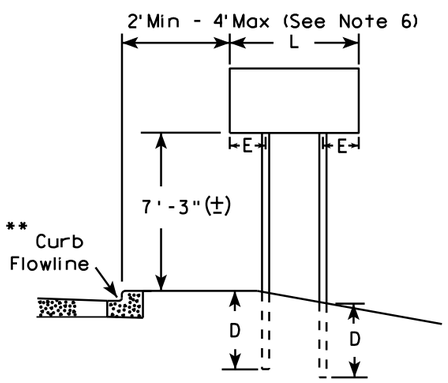
APPROVED Matthew R Rauch
for State Traffic Engineer

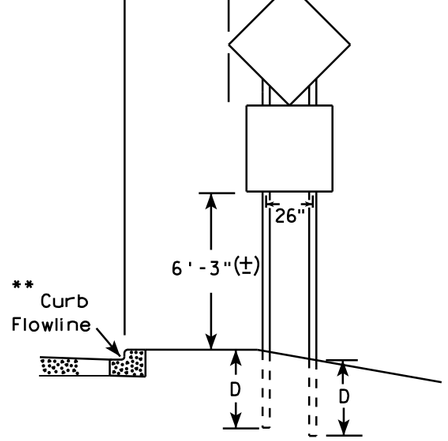
DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

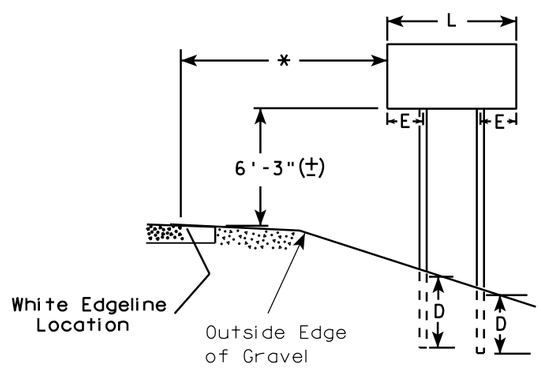
URBAN AREA

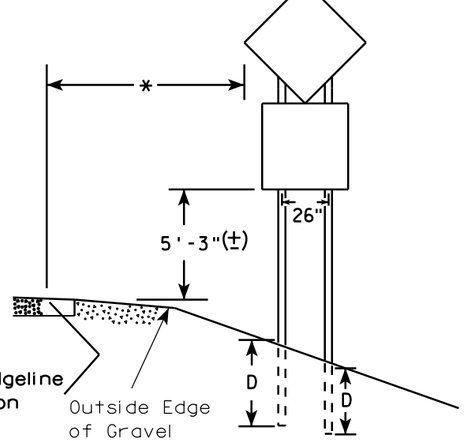




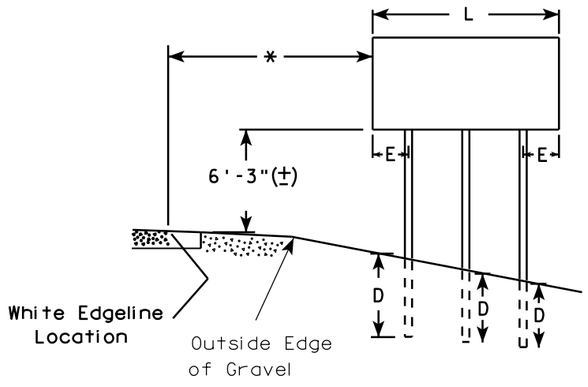
48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)





48" DIAMOND WARNING SIGN



GENERAL NOTES

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

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

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

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

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

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

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

POST EMBEDMENT DEPTH

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

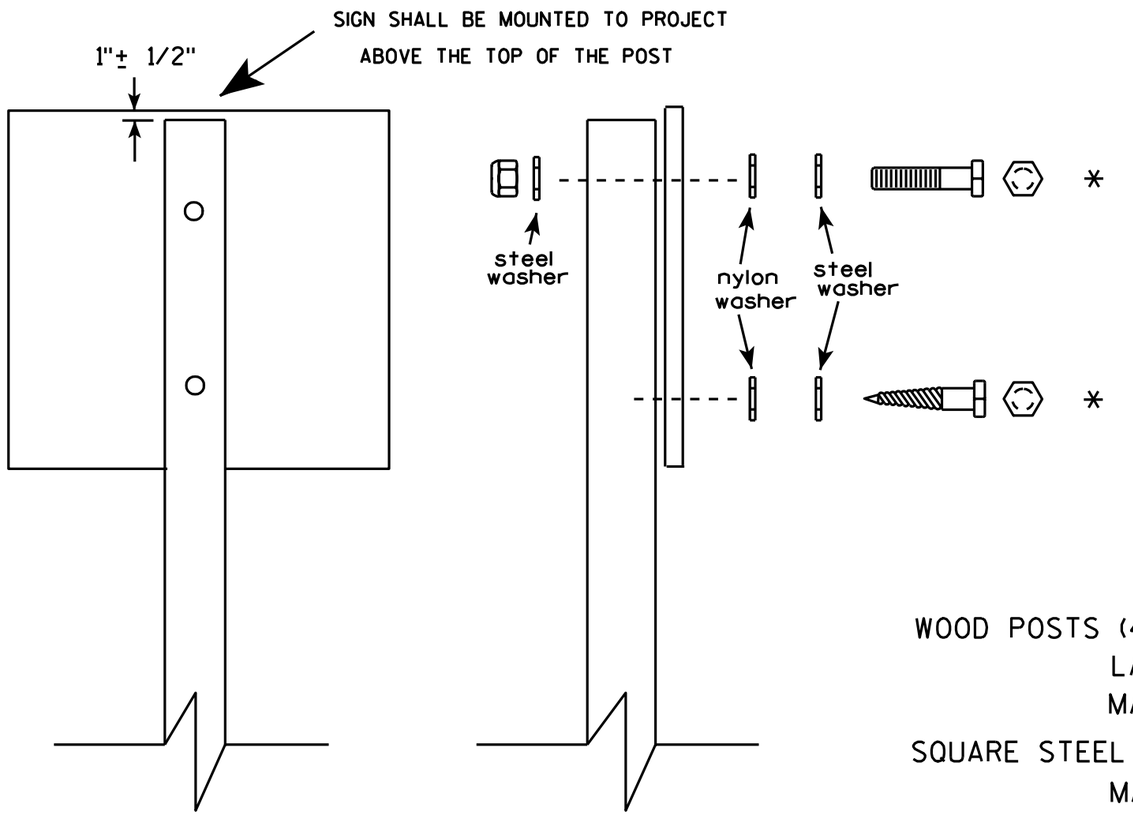
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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

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

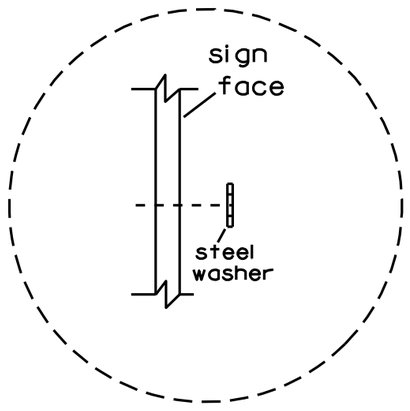
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

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

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

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



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

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

7

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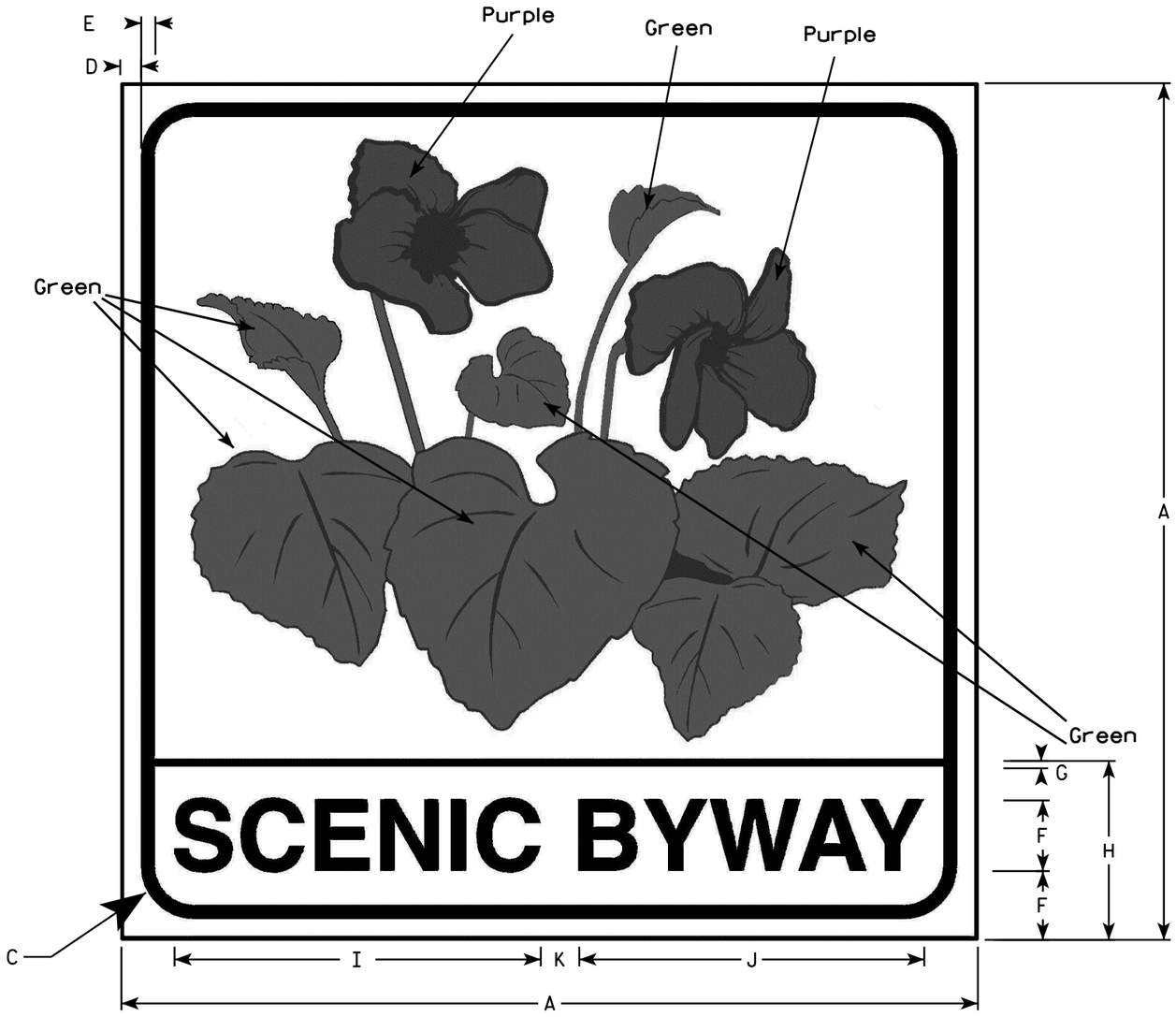
PROJECT NO:

SHEET NO: 90 E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black Except as noted
   Border of Leaves and Flowers is Black
3. Message Series - Special
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. Contact WisDOT with any questions.

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		1 1/2	5/8	3/8	2	1/4	5	10 1/4	9 5/8	1 1/8																4.0	.36
3																												
4	36		4	7/8	5/8	3	1/4	7 1/2	15 3/8	14 1/2	1 5/8																9.0	.81
5																												

STANDARD SIGN
D6-4S

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 10/05/09 PLATE NO. D6-4S.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 91	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\D64S.dgn PLOT DATE : 05-OCT-2009 13:37 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

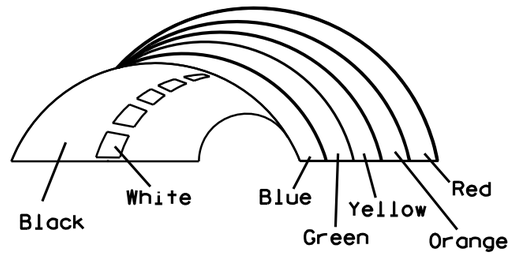
7

* VARIES

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - (See Note 5)
3. Message Series - (See Note 6)
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. Border - Blue
   Line 1 - Red
   Line 2 - Black
   Line 3-5 - Blue
6. Line 1 - Dutch 8011L
   Line 2 - Series E
   Line 3-5 - Series C
7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.

Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

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	30	36	1 1/2	1/2	5/8	3	2	3 1/2	2 7/8	1	8	2 1/8	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2							7.5
3																											
4																											
5																											

STANDARD SIGN
I55-56

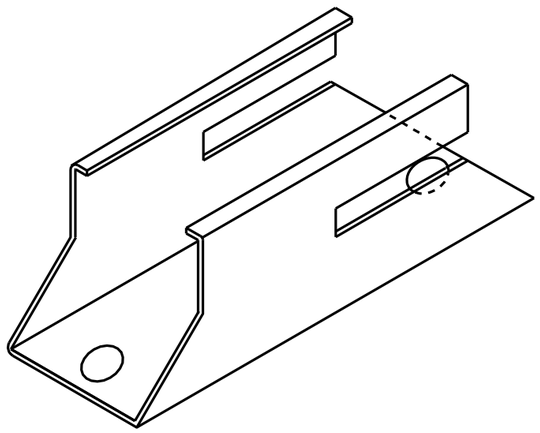
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/27/11 PLATE NO. 155-56.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 92

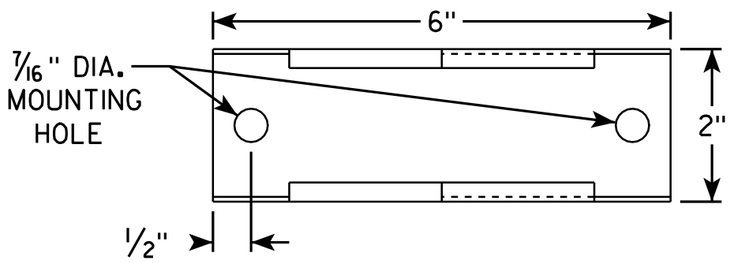
ISOMETRIC VIEW



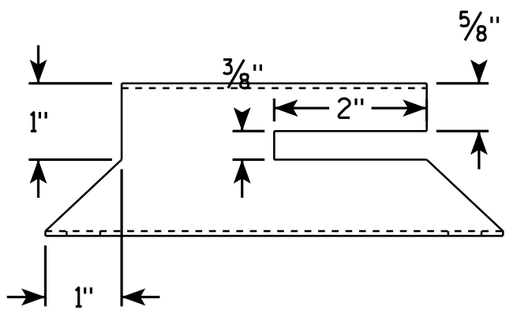
NOTES

1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

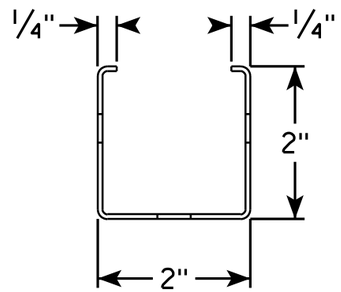
TOP VIEW



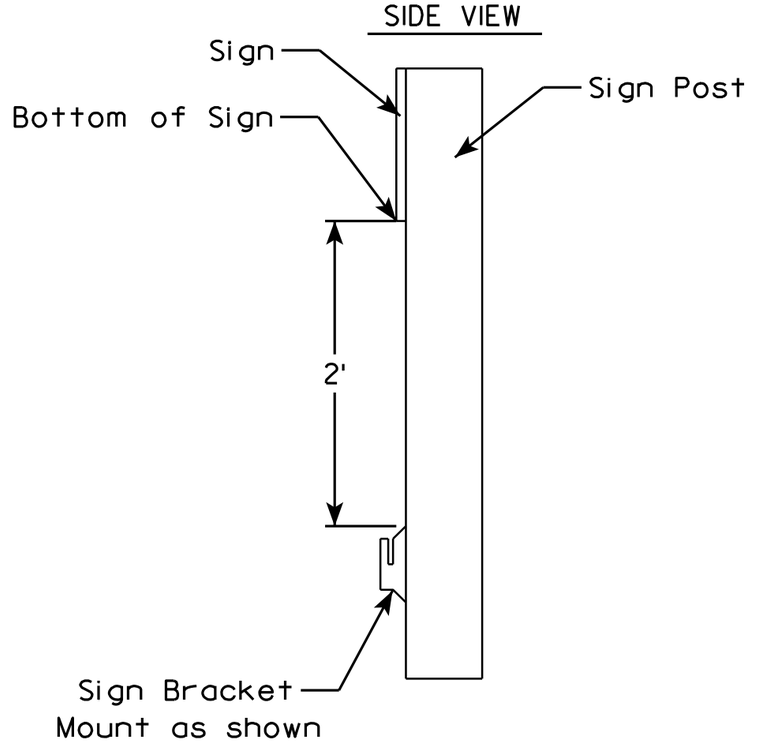
SIDE VIEW



END VIEW



SIDE VIEW



7

7

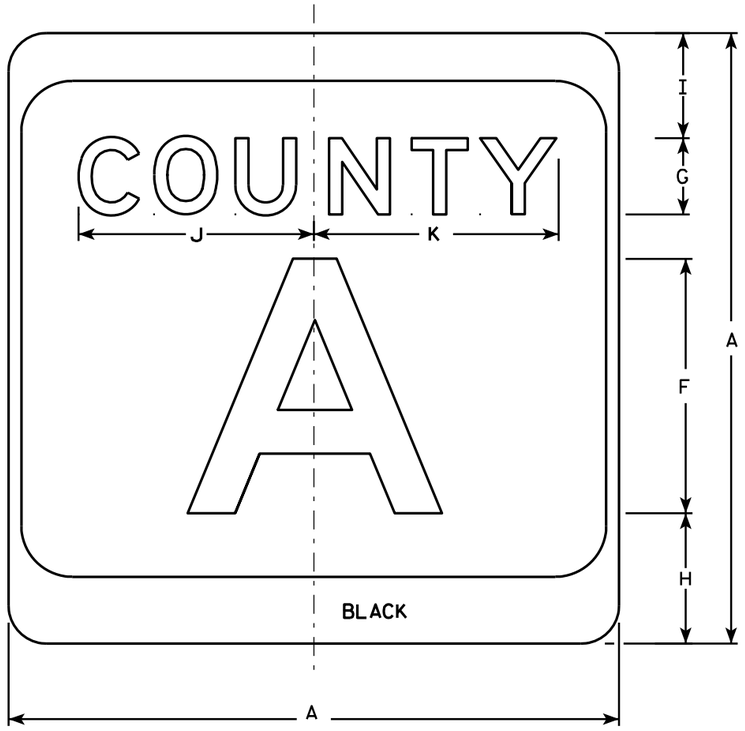
ROLLUP SIGN BRACKET I55-56B

WISCONSIN DEPT OF TRANSPORTATION

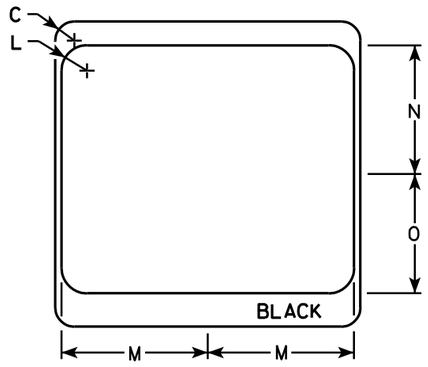
APPROVED Matthew R Rauch for State Traffic Engineer

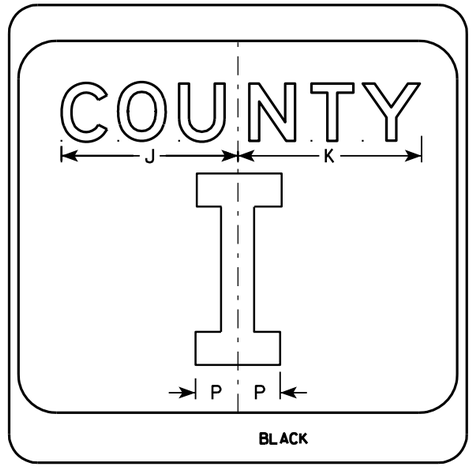
DATE 2/5/10 PLATE NO. I55-56B.1

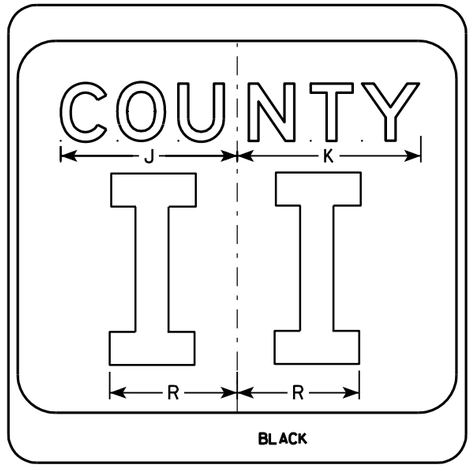
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 93	E



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

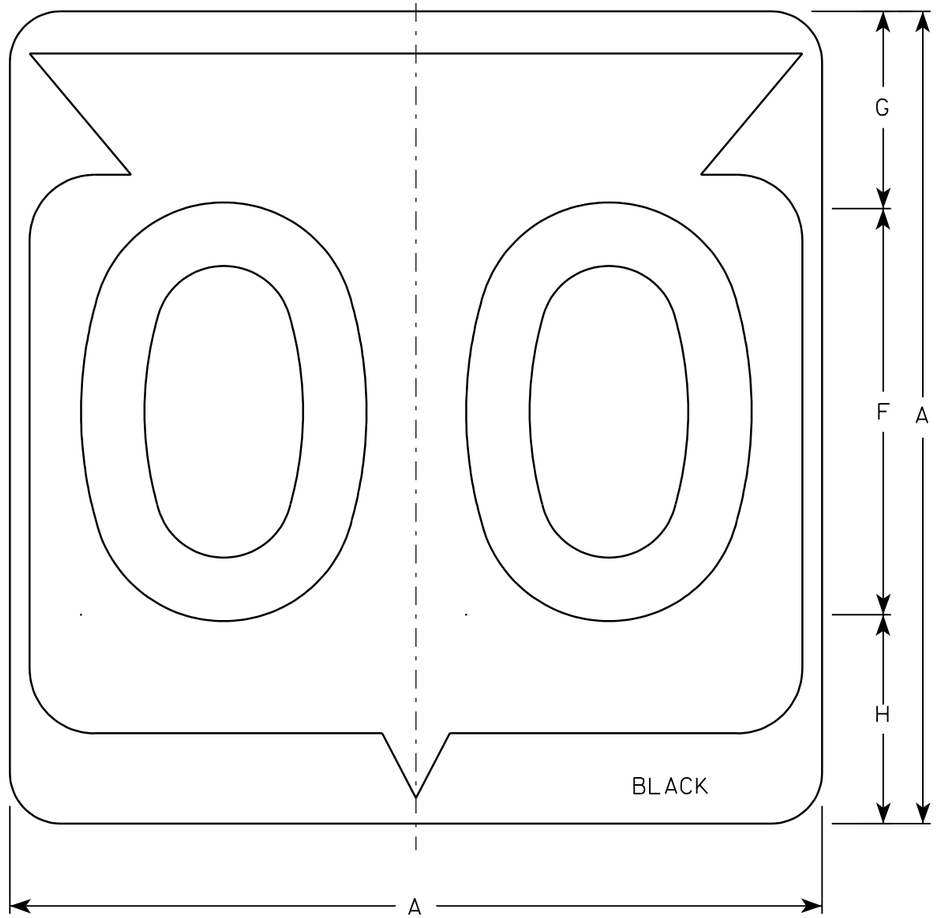
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

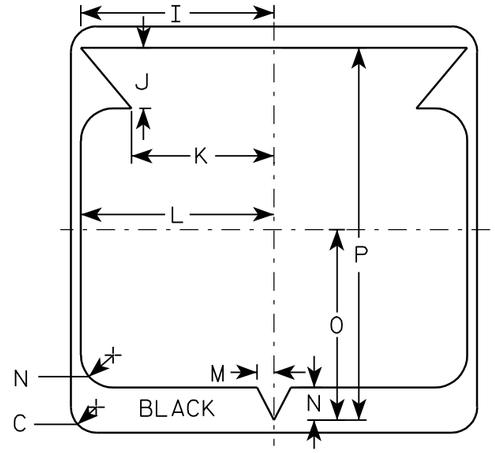
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 94	E



M1-6

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 Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective



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		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

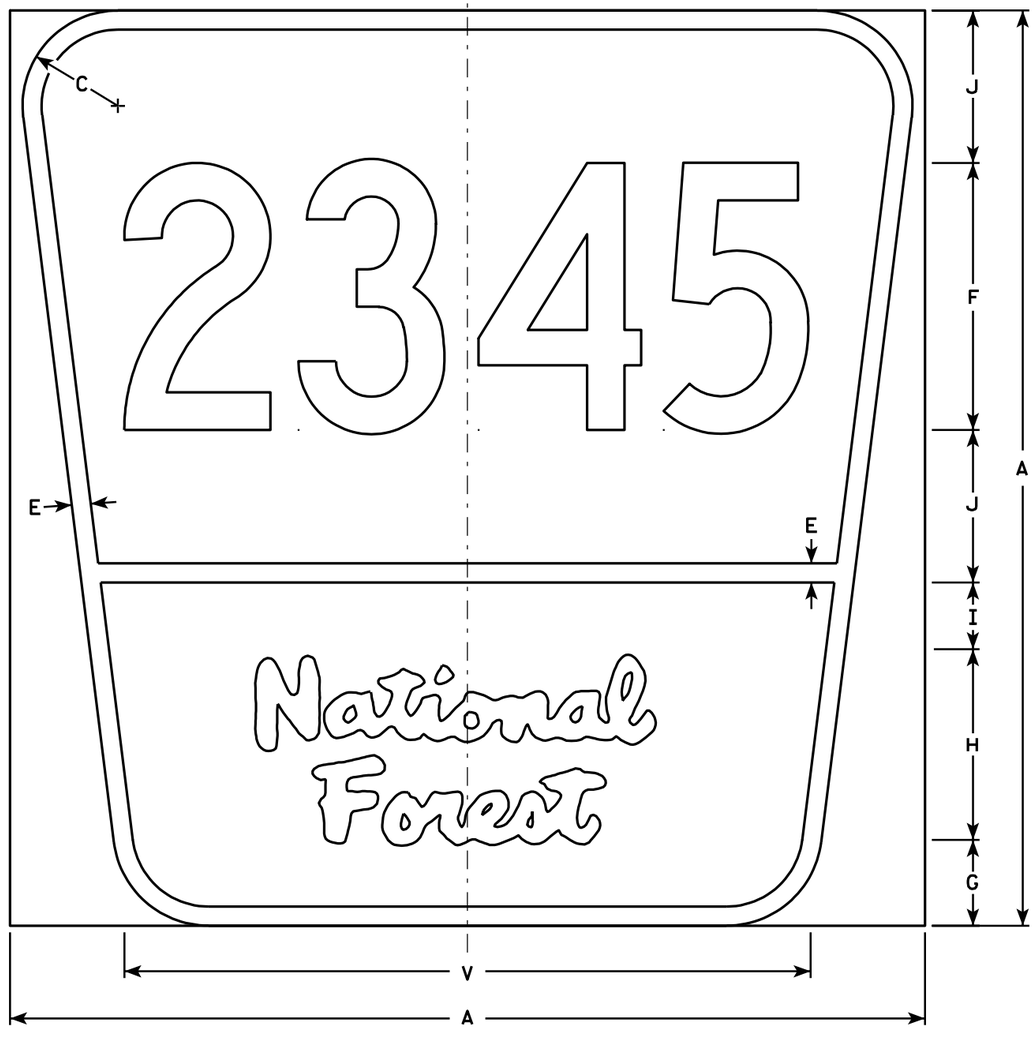
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 95	E



M1-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Brown
   Message - White - Type H Reflective
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. 4 digit numerals series C
   3 digit numerals series D
6. See National Forest Handbook for layout of "National Forest".

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	
4	
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	Area sq. ft.	Area sq. m.
1																												
2	24		2 ½		½	7	2 ¼	5	1 ¾	4												18					4.0	.37
3																												
4																												
5																												

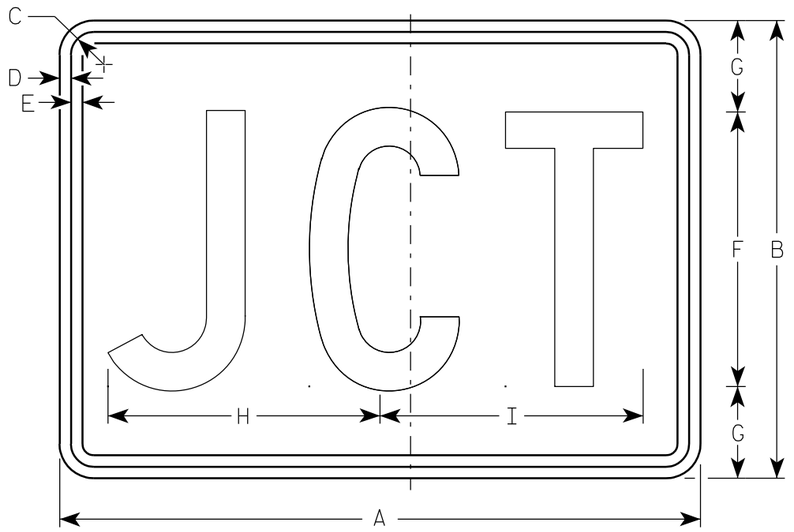
STANDARD SIGN
M1-7

WISCONSIN DEPT OF TRANSPORTATION

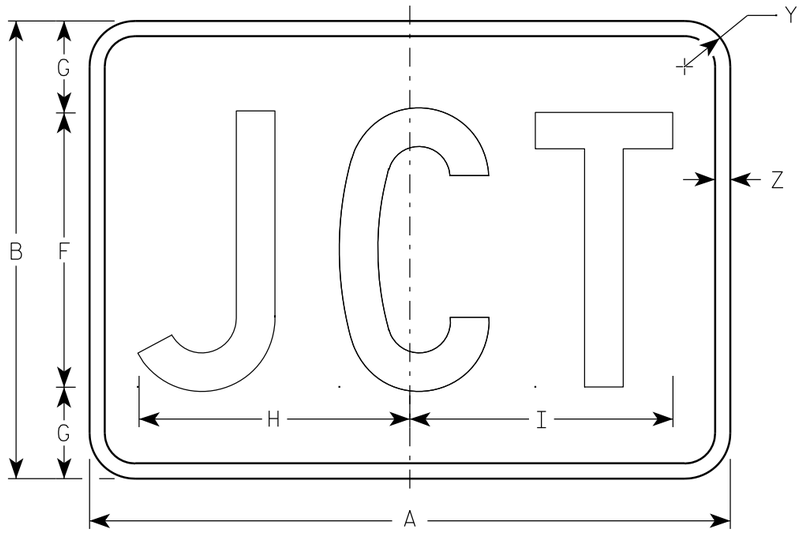
APPROVED Chester J Spagg for State Traffic Engineer

DATE 1/30/02 PLATE NO. M1-7.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 96 | E



M2-1
MK2-1
MM2-1
MR2-1



MB2-1
MG2-1
MN2-1

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 - Type H Reflective
   (Detour or temporary Signs - Reflective)
   Message - Black
   MB2-1 Background - Blue
   Message - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   MG2-1 Background - Green
   Message - White - Type H Reflective
   MK2-1 Background - Green
   Message - White - Type H Reflective
   MM2-1 Background - White - Type H Reflective
   Message - Green
   MN2-1 Background - Brown
   Message - White - Type H Reflective
   MR2-1 Background - Brown
   Message - Yellow - Type H Reflective

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 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	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20	0.20
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	0.20
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	0.20
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	0.20

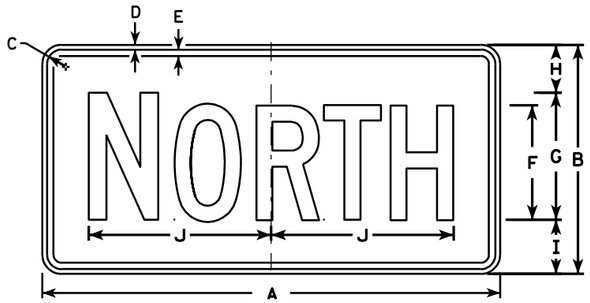
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

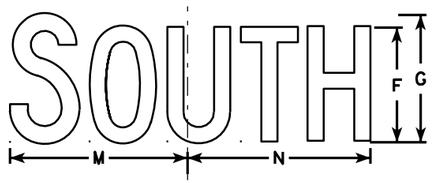
DATE 3/16/10 PLATE NO. M2-1.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 97	E

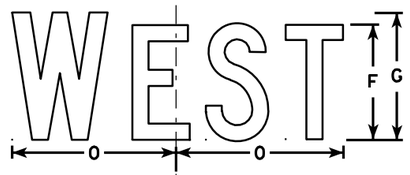


M3-1
MK3-1
MO3-1

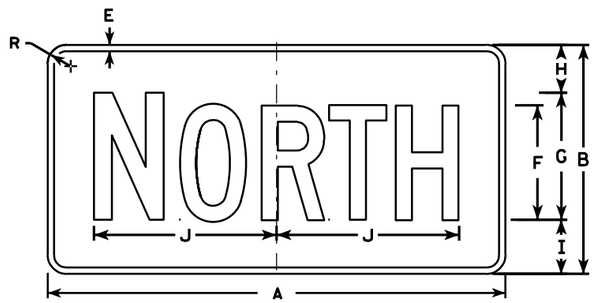
M3-2
MK3-2
MO3-2



M3-3
MK3-3
MO3-3

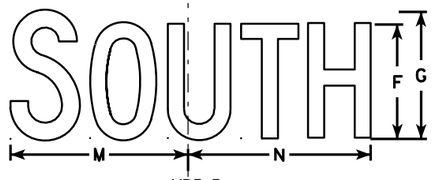


M3-4
MK3-4
MO3-4

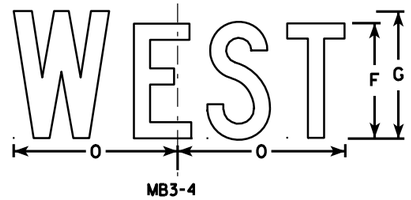


MB3-1
MG3-1
MM3-1
MN3-1

MB3-2
MG3-2
MM3-2
MN3-2



MB3-3
MG3-3
MM3-3
MN3-3



MB3-4
MG3-4
MM3-4
MN3-4

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 - Type H Reflective
   (Detour or temporary signs - Reflective)
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White - Type H Reflective
   (Detour or temporary signs - Reflective)
   MG3-1 thru MG3-4 Background - Green
   Message - White - Type H Reflective
   MK3-1 thru MK3-4 Background - Green
   Message - White - Type H Reflective
   MM3-1 thru MM3-4 Background - White - Type H Reflective
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White - Type H Reflective
   M03-1 thru M03-4 Background - Orange - Reflective
   Message - Black
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

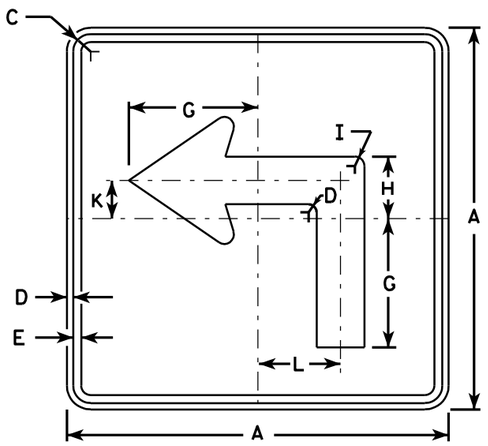
STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

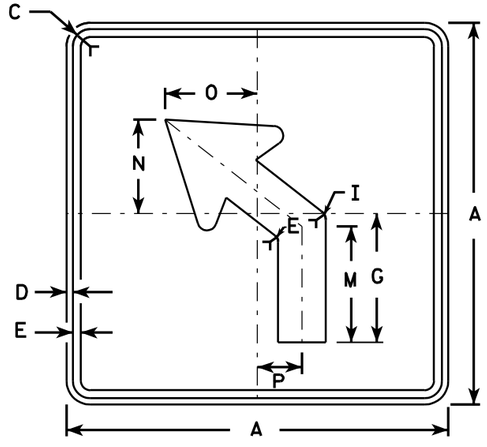
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 11/10/10 PLATE NO. M3-1.12

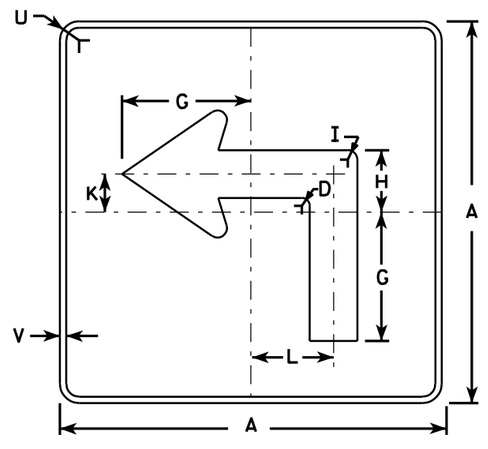
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 98	E



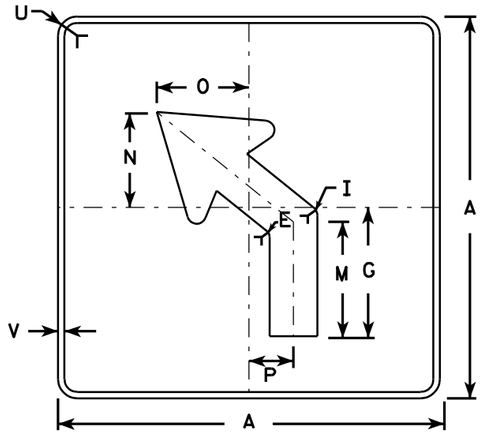
M5-1L
MK5-1L
MM5-1L
MO5-1L
MP5-1L
MR5-1L



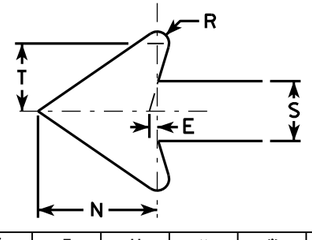
M5-2L
MK5-2L
MM5-2L
MO5-2L
MP5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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. M5-1 and M5-2 Background - White - Type H Reflective
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White - Type H Reflective
   MG5-1 and MG5-2 Background - Green
   Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green
   Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White - Type H Reflective
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow - Type H Reflective
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

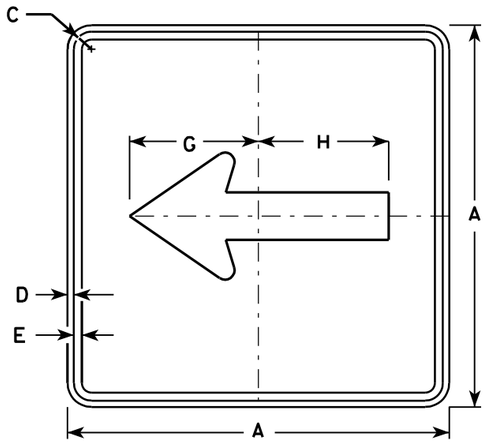
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

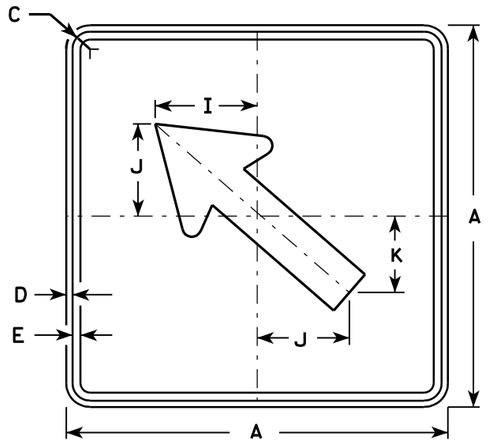
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M5-1.12

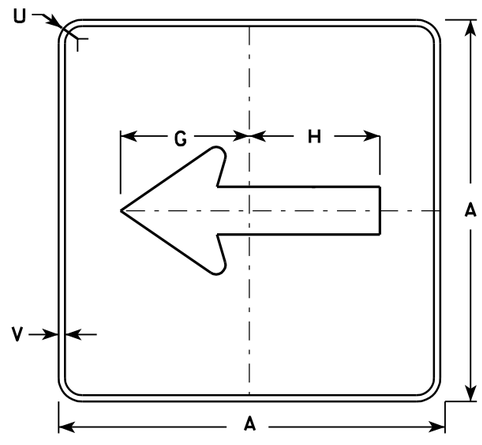
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 99 | E



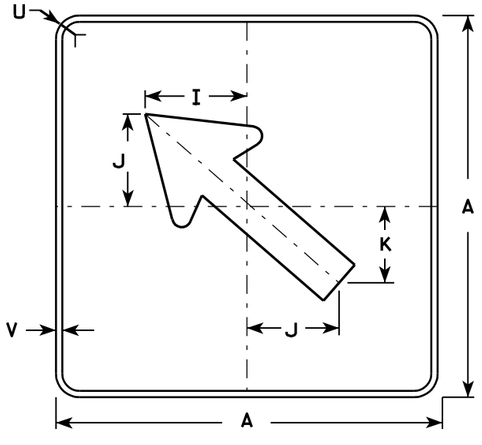
M6-1
MK6-1
MM6-1
MO6-1
MP6-1
MR6-1



M6-2
MK6-2
MM6-2
MO6-2
MP6-2
MR6-2



MB6-1
MG6-1
MN6-1



MB6-2
MG6-2
MN6-2

NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 - Type H Reflective
   Message - Black

   MB6-1 and MB6-2 Background - Blue
   Message - White - Type H Reflective

   MG6-1 and MG6-2 Background - Green
   Message - White - Type H Reflective

   MK6-1 and MK6-2 Background - Green
   Message - White - Type H Reflective

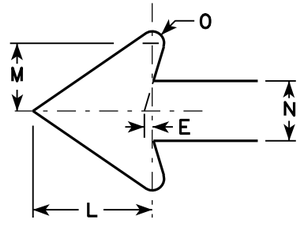
   MM6-1 and MM6-2 Background - White - Type H Reflective
   Message - Green

   MN6-1 and MN6-2 Background - Brown
   Message - White - Type H Reflective

   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black

   MP6-1 and MP6-2 Background - White - Type H Reflective
   Message - Blue

   MR6-1 and MR6-2 Background - Brown
   Message - Yellow - Type H 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	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

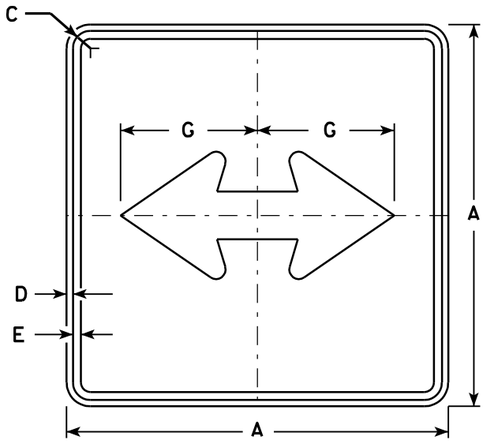
STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

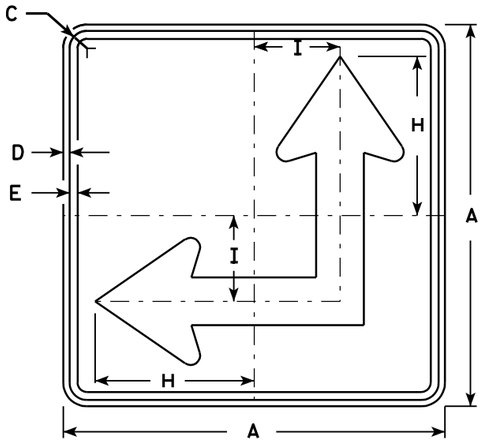
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M6-1.13

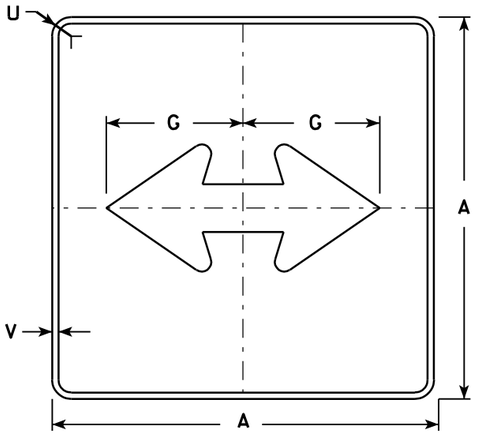
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 100	E



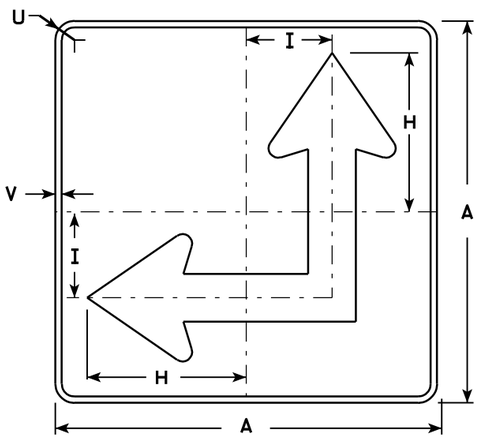
M6-4
MK6-4
MM6-4
MO6-4
MP6-4
MR6-4



M6-6
MK6-6
MM6-6
MO6-6
MP6-6
MR6-6



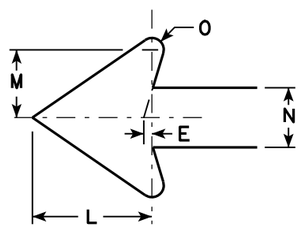
MB6-4
MG6-4
MN6-4



MB6-6
MG6-6
MN6-6

NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 - Type H Reflective
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White - Type H Reflective
   MG6-4 and MG6-6 Background - Green
   Message - White - Type H Reflective
   MK6-4 and MK6-6 Background - Green
   Message - White - Type H Reflective
   MM6-4 and MM6-6 Background - White - Type H Reflective
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White - Type H Reflective
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White - Type H Reflective
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - White - Type H Reflective
5. M6-6R same as M6-6L except arrow points ahead and right.



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

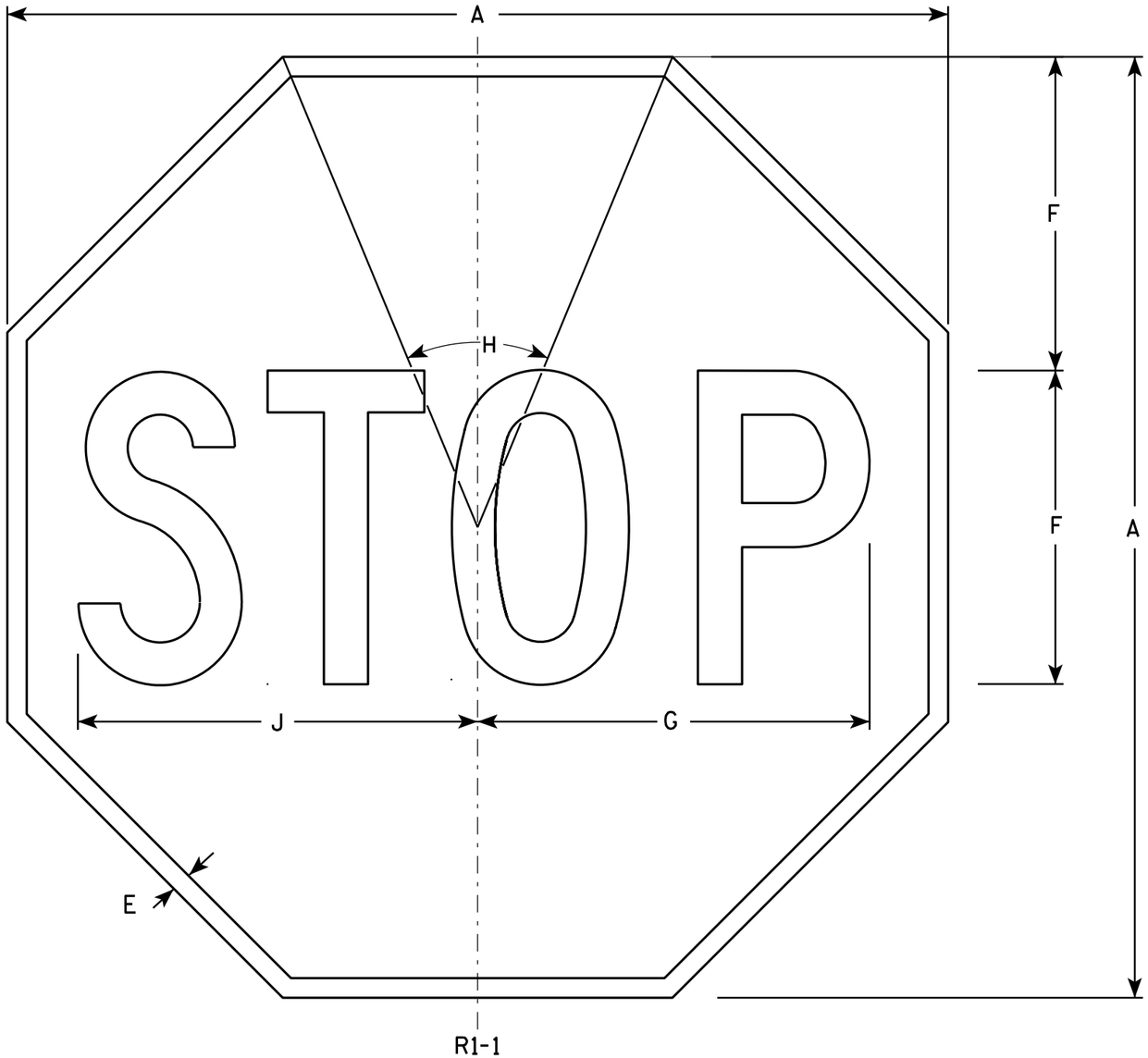
STANDARD SIGN M6-4 & M6-6 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 7/29/13 PLATE NO. M6-4.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 101 | E



NOTES

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

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

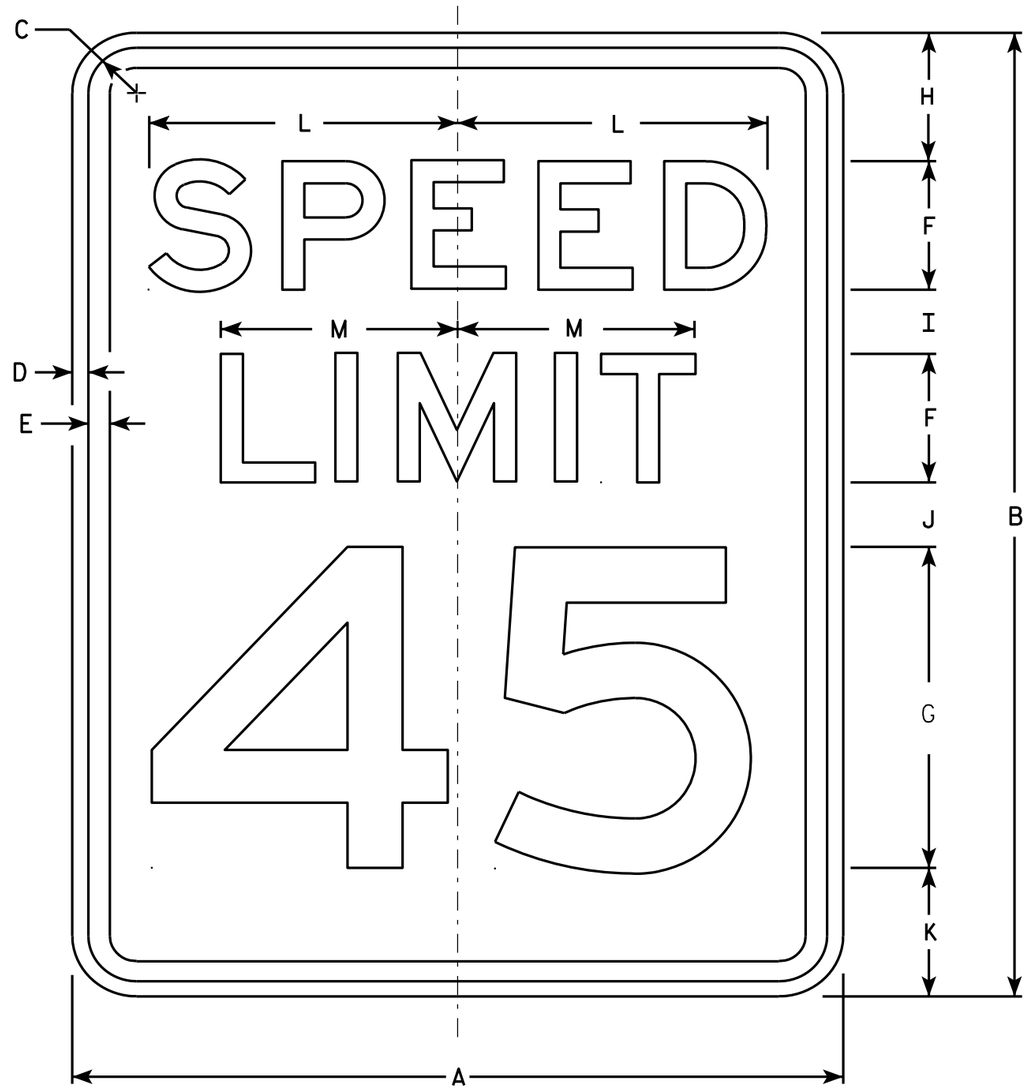
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 102	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

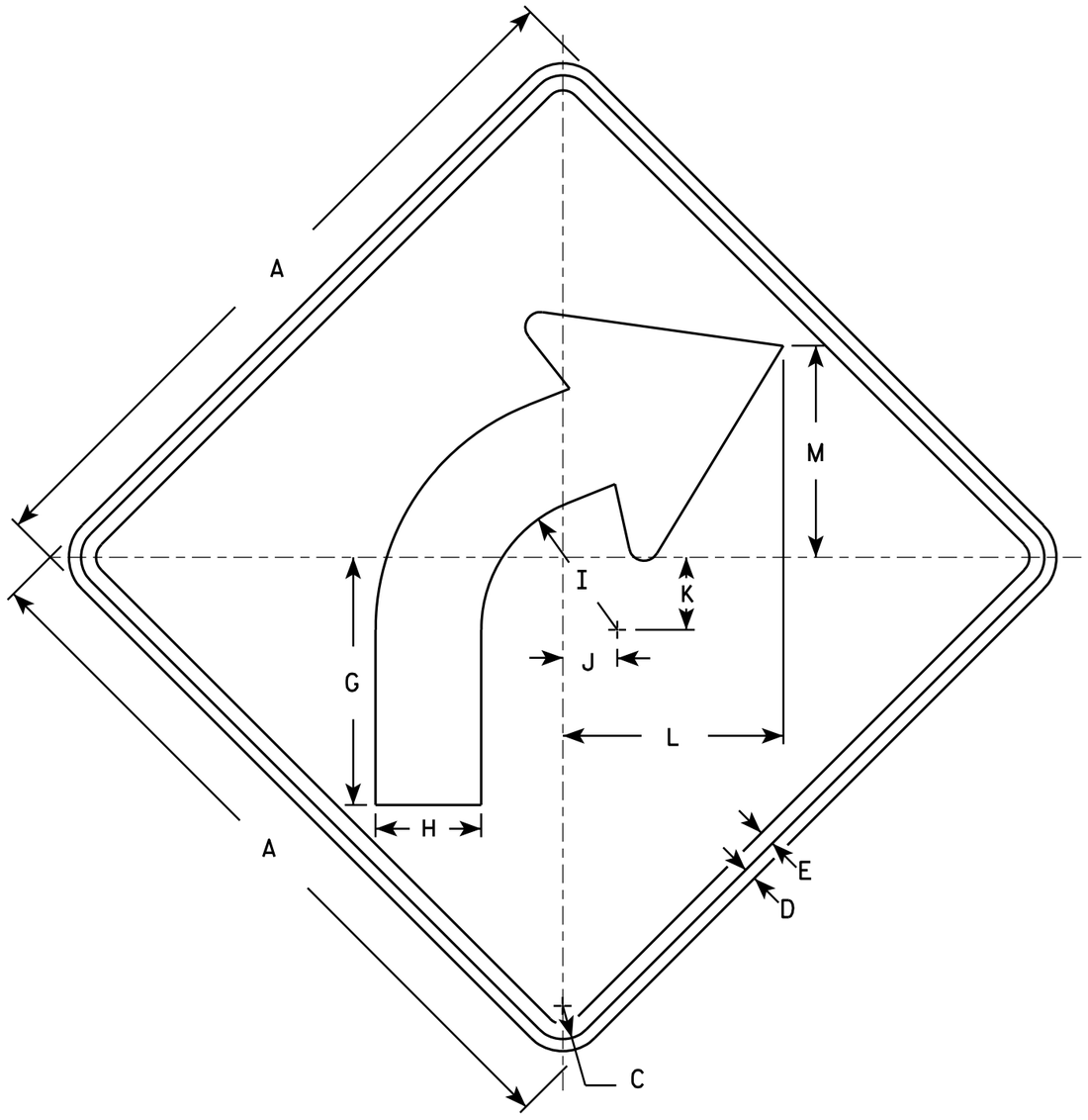
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

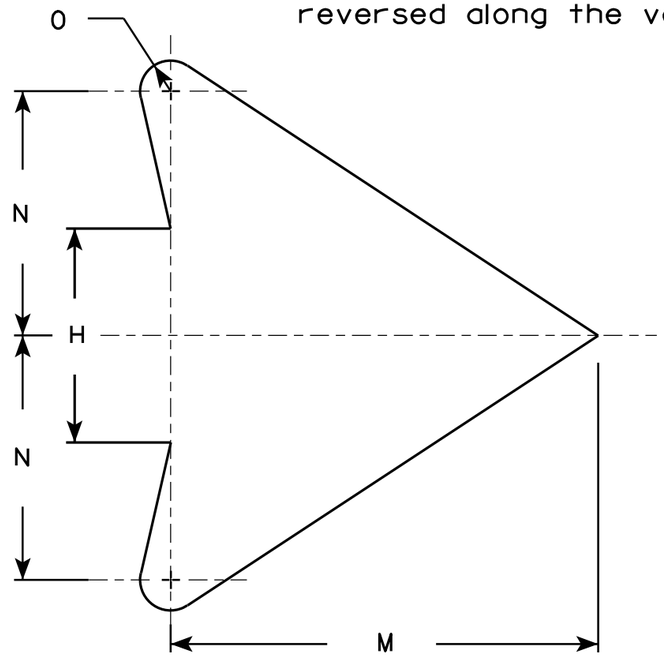
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 103 | E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

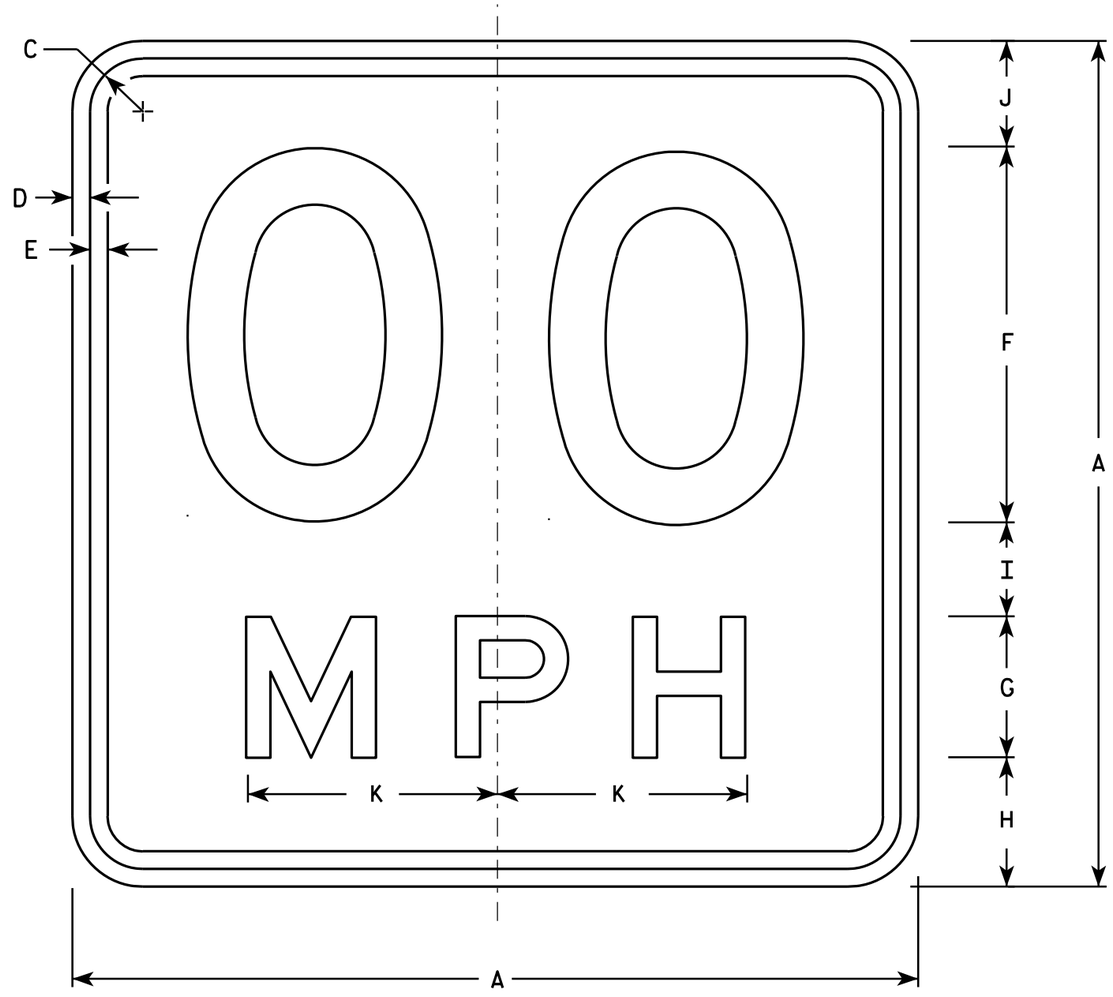
STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 104	E



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

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 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
	5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

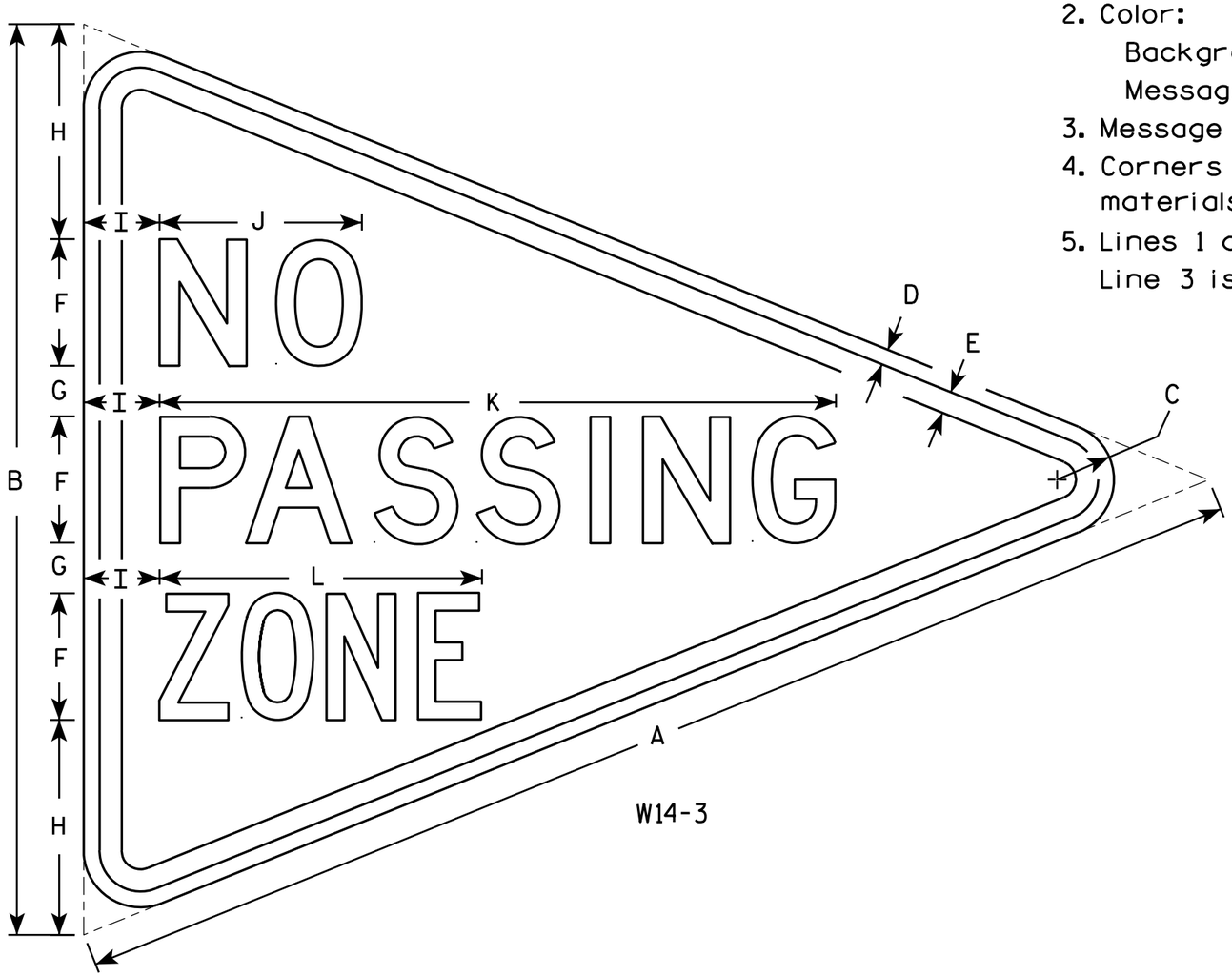
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 105 | 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																											

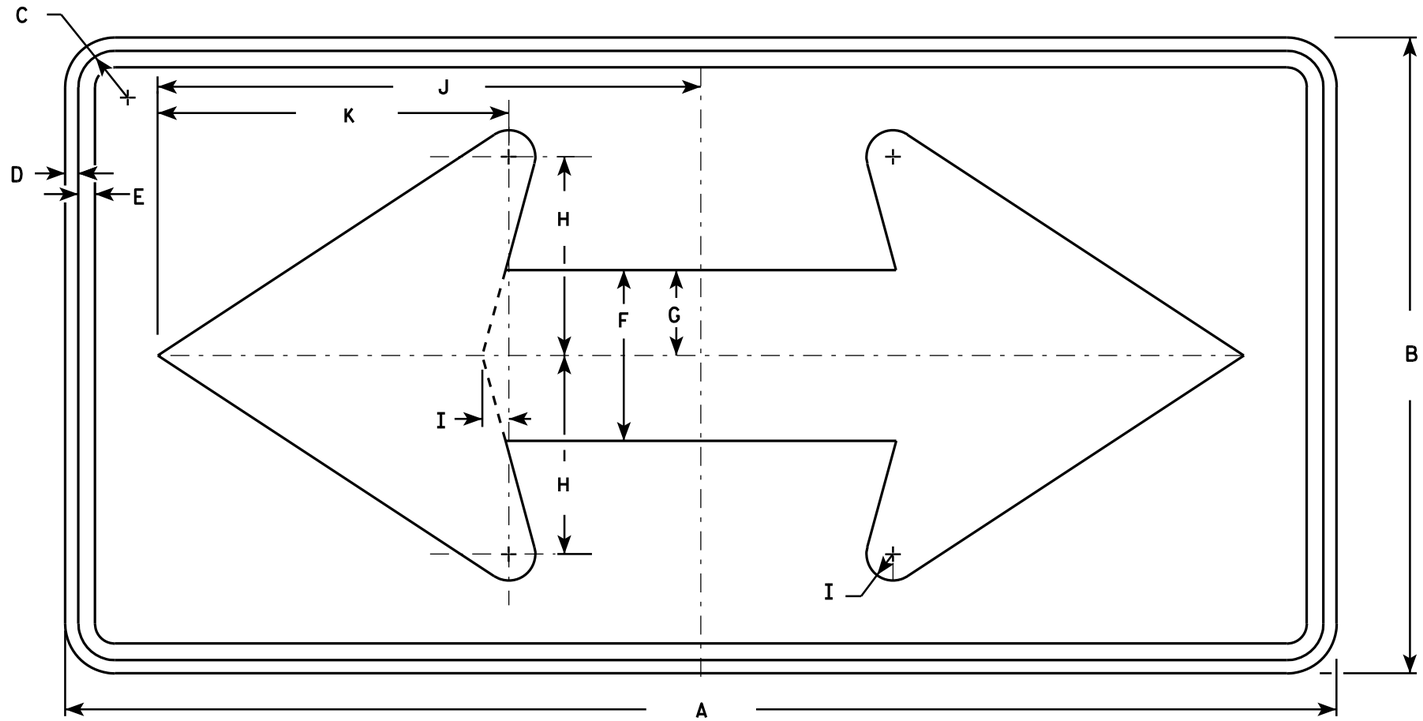
STANDARD SIGN
W14-3

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: 106	E



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

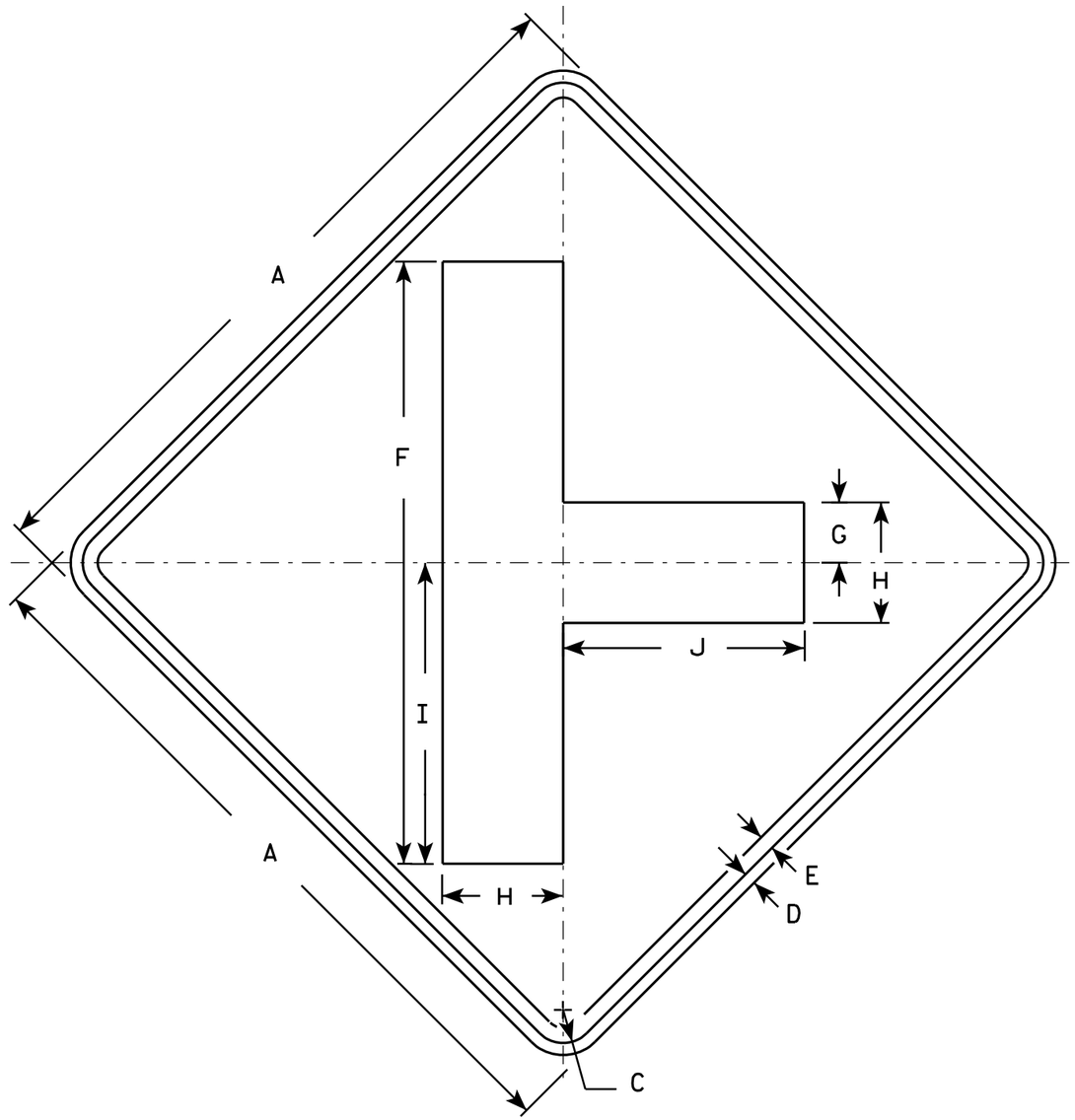
STANDARD SIGN
W1-7

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: 107 | E



W2-2

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	20	2	4	10	8																	4.0
2S	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
2M	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
3	36		1 5/8	5/8	3/4	30	3	6	15	12																	9.0
4	48		2 1/4	3/4	1	40	4	8	20	16																	16.0
5																											

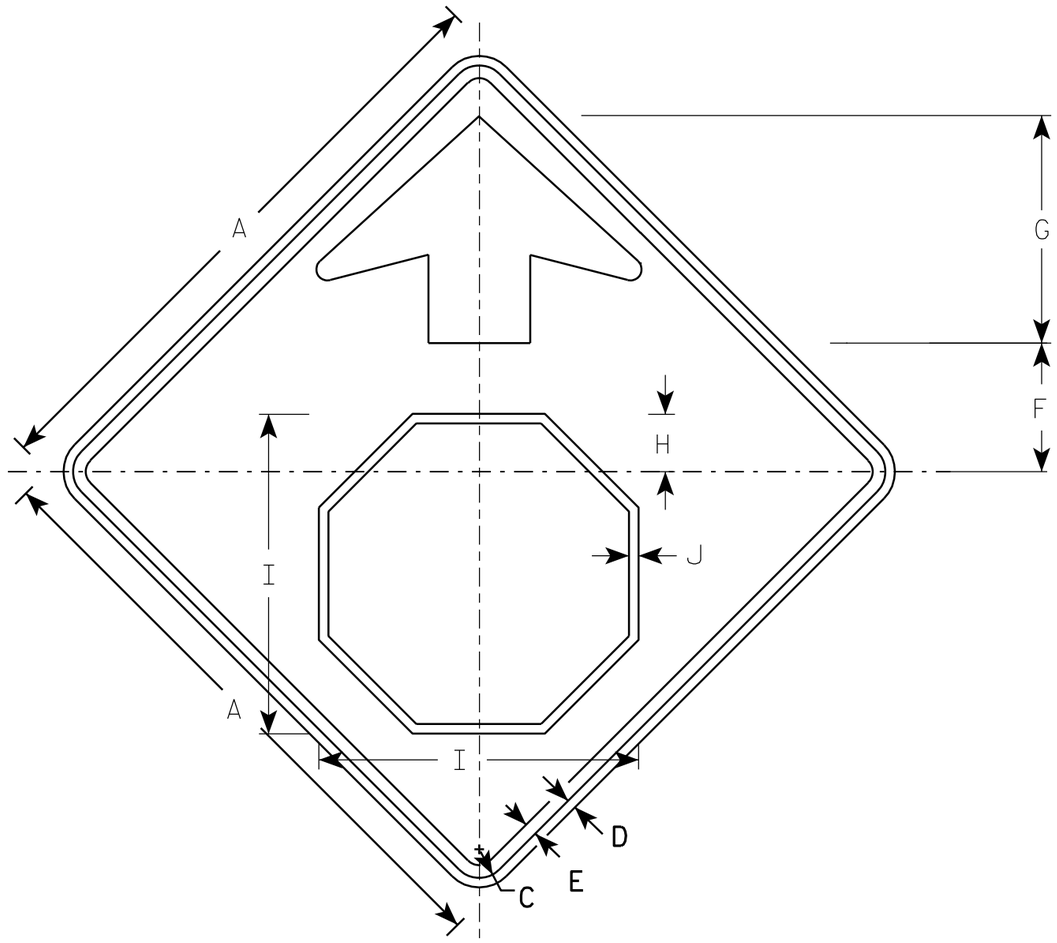
STANDARD SIGN
W2-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-2.6

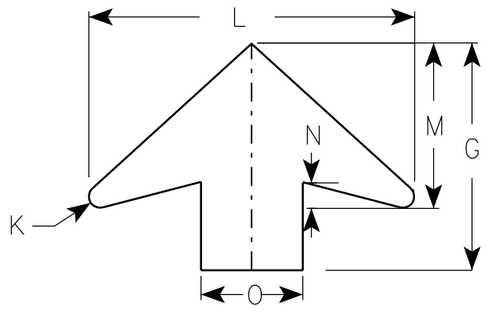
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 108	E



W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

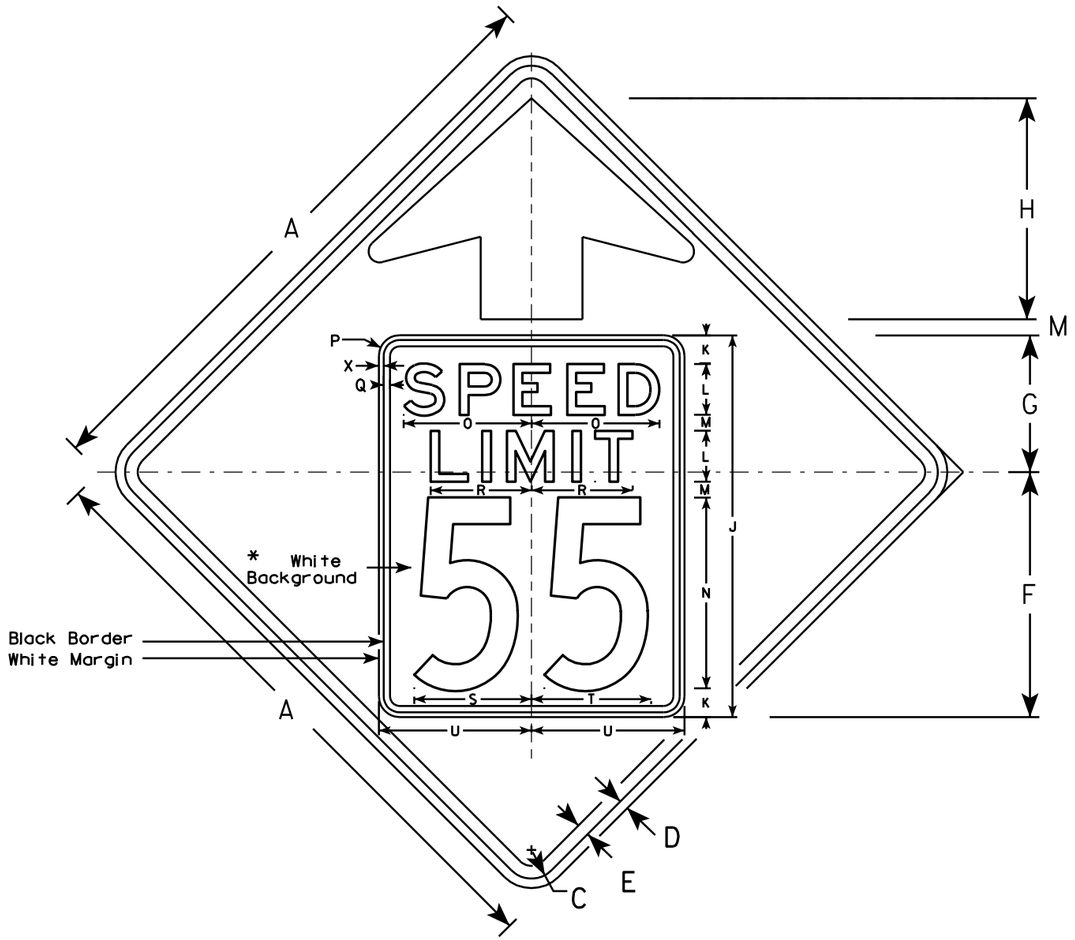
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

SHEET NO: 109 E

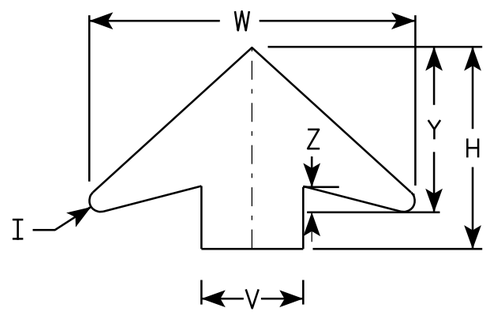


W3-5

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 - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2M	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
3	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W3-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

SHEET NO: 110 E

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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