

WKE

PROJECT ID: 1330-01-72

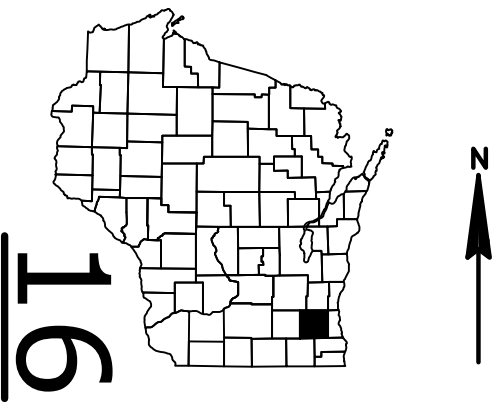
COUNTY: WAUKESHA

MAY 2016

ORDER OF SHEETS

Section No. 1	Title
Section No. 2	Typical Sections and Details
Section No. 3	Estimate of Quantities
Section No. 3	Miscellaneous Quantities
Section No. 4	Right of Way Plat
Section No. 5	Plan and Profile
Section No. 6	Standard Detail Drawings
Section No. 7	Sign Plates
Section No. 8	Structure Plans
Section No. 9	Computer Earthwork Data
Section No. 9	Cross Sections

TOTAL SHEETS = 116



DESIGN DESIGNATION

A.A.D.T. (2016)	=	5,600
A.A.D.T. (2036)	=	6,700
D.H.V.	=	777
D.D.	=	59/41
T.	=	6.0%
DESIGN SPEED	=	40 MPH
ESALS	=	15,276

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

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

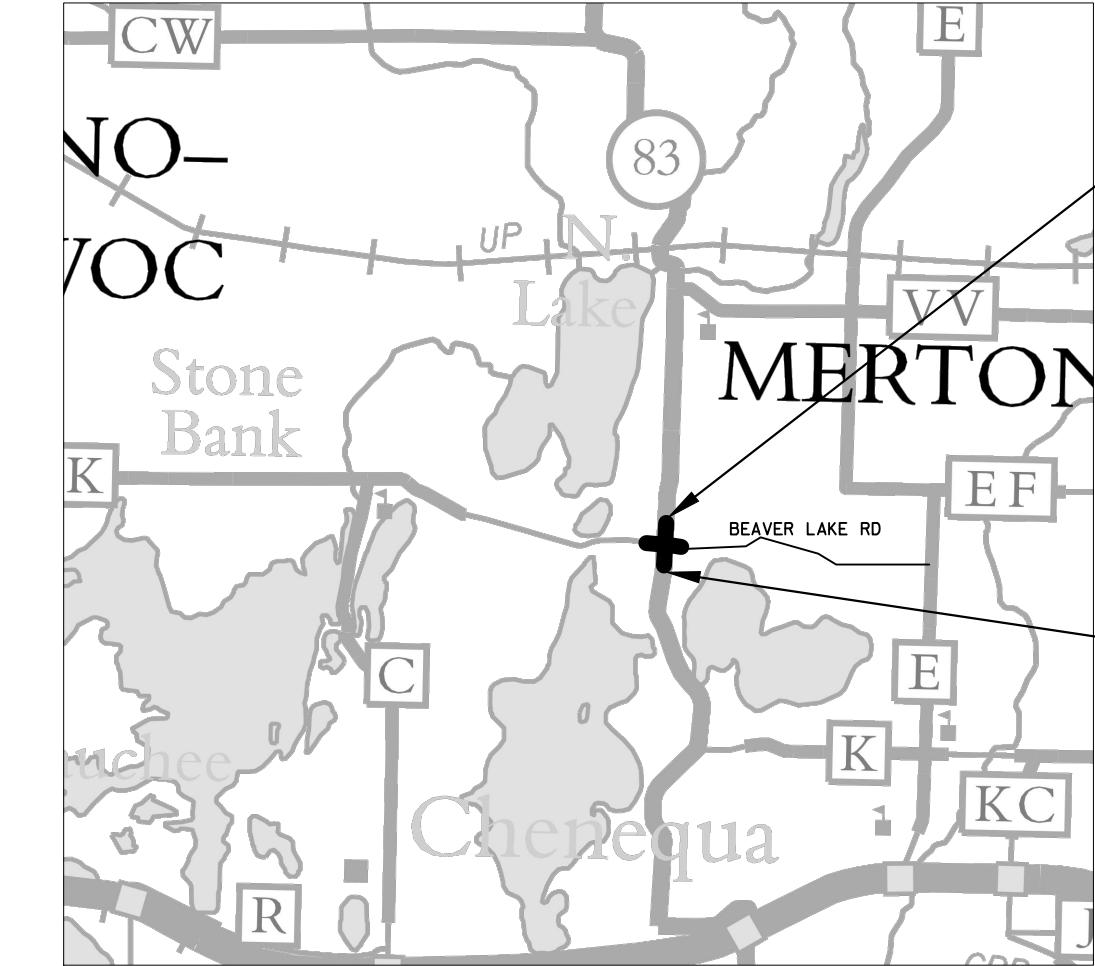
HARTLAND ROAD, VILLAGE OF CHENEQUA

CTH K, BEAVER LAKE RD INTERSECTION

STH 83

WAUKESHA COUNTY

STATE PROJECT NUMBER
1330-01-72



LAYOUT

SCALE 0 1 Mi.

TOTAL NET LENGTH OF CENTERLINE = 0.087 MI.

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, WAUKESHA COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM, NAVD88 (2012)

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1330-01-72		

END PROJECT
STA. 140+05

BEGIN PROJECT
STA. 135+45
X=645,754.70
Y=206,635.45

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT
Designer	DANIEL STRAYER
Project Manager	NGUYEN LY
Regional Examiner	STEVE CHOJNACKI
Regional Supervisor	BENEDICT ERUCHALU

APPROVED FOR THE DEPARTMENT

DATE: 02/29/16

Signature: [Handwritten Signature]

E

GENERAL NOTES

NO ADDITIONAL TREES SHALL BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

OAK TREES SHALL NOT BE PRUNED OR CUT BETWEEN MARCH AND JULY TO PREVENT SPREAD OF OAK WILT.

EROSION CONTROL DEVICES AS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIOSN AND SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL CURB AND GUTTER RADII ARE MEASURED TO THE FLANGE OF CURB.

PIPE AND INLET ELEVATIONS AS SHOWN ON THE PLANS MAY BE ADJUSTED BY THE ENGINEER.

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK.

ALL SIGN LOCATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION.

THE LOCATIONS OF EROSION CONTROL DEVICES SHALL BE DETERMINED BY THE ENGINEER. ALL EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

RE-TOPSOIL OF GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING IS COMPLETED WITHIN THOSE AREAS. EROSION MAT TOP-SOILED AREAS, AS DESIGNATED BY THE ENGINEER, WITHIN FIVE (5) CALENDAR DAYS AFTER PLACEMENT OF TOPSOIL. IF GRADED AREAS ARE LEFT EXPOSED FOR MORE THAN FOURTEEN (14) CALENDAR DAYS, SEED THOSE AREAS WITH SEEDING MIXTURE NO. 20.

EROSION CONTROL BMP'S ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTORS ECIP AND BY THE ENGINEER. EROSION CONTROL BMP'S SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE BMP IS NO LONGER REQUIRED.

HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYERS & GRADATIONS:

THICKNESS	LAYERS	HMA
4-INCHES (FOR EXISITING PAVEMENT AND EXISTING SHOULDER	1¾" UPPER LAYER 2¼" LOWER LAYER	4 LT 58-28 S 3 LT 58-28 S
6½-INCHES (FOR PAVEMENT WIDENING AND NEW SHOULDER)	1¾" UPPER LAYER 2¼" UPPER-LOWER LAYER 2½" LOWER-LOWER LAYER	4 LT 58-28 S 3 LT 58-28 S 3 LT 58-28 S

UTILITIES CONTACTS

WE ENERGIES (ELECTRIC)
LATROY BRUMFIELD
333 W. EVERETT STREET, A299
MILWAUKEE, WI 53203
(414) 221-5617
LATROY.BRUMFIELD@WE-ENERGIES.COM

WE ENERGIES (GAS)
LATROY BRUMFIELD
333 W. EVERETT STREET, A299
MILWAUKEE, WI 53203
(414) 221-5617
LATROY.BRUMFIELD@WE-ENERGIES.COM

AT&T WISCONSIN
ALPER KOLCU
2005 PEWAUKEE RD
WAUKESHA, WI 53188
(262) 970-8494
AK308X@ATT.COM

WE ENERGIES (ELECTRIC) FIELD CONTACT
BRYAN STOEHR
500 S. 116TH ST.
WEST ALLIS, WI 53214
(414) 944-5516
BRYAN.STOEHR@WE-ENERGIES.COM

WE ENERGIES (GAS) FIELD CONTACT
TYLER ROEBKE
1830 S. WEST AVE.
WAUKESHA, WI 53189
(262) 574-3163
TYLER.ROEBKE@WE-ENERGIES.COM

TIME WARNER CABLE
1320 N. DR. MARTIN LUTHER KING DRIVE
MILWAUKEE, WI 53212
(414) 277-4045
WIS.ENGINEERING@TWCABLE.COM

DESIGN CONTACT:

NGUYEN LY
WISDOT PROJECT MANAGER
141 NW BARSTOW STREET
WAUKESHA, WI 53187
PHONE: (262) 548-8739
NGUYEN.LY@DOT.WI.GOV

DNR CONTACT:

CRAIG WEBSTER
141 NW BARSTOW ST.RM:180
WAUKESHA,WI 53188
PHONE: (262) 574-2141
CRAIG.WEBSTER@WISCONSIN.GOV

VILLAGE COTNACT:

ROBERT DOUGLAS
VILLAGE ADMINISTRATOR
31275 W HIGHWAY K
CHENEQUA, WI 53029
PHONE: (262) 367-2239 EXT 103
CHIEF@CHENEQUA.ORG

DIGGERS



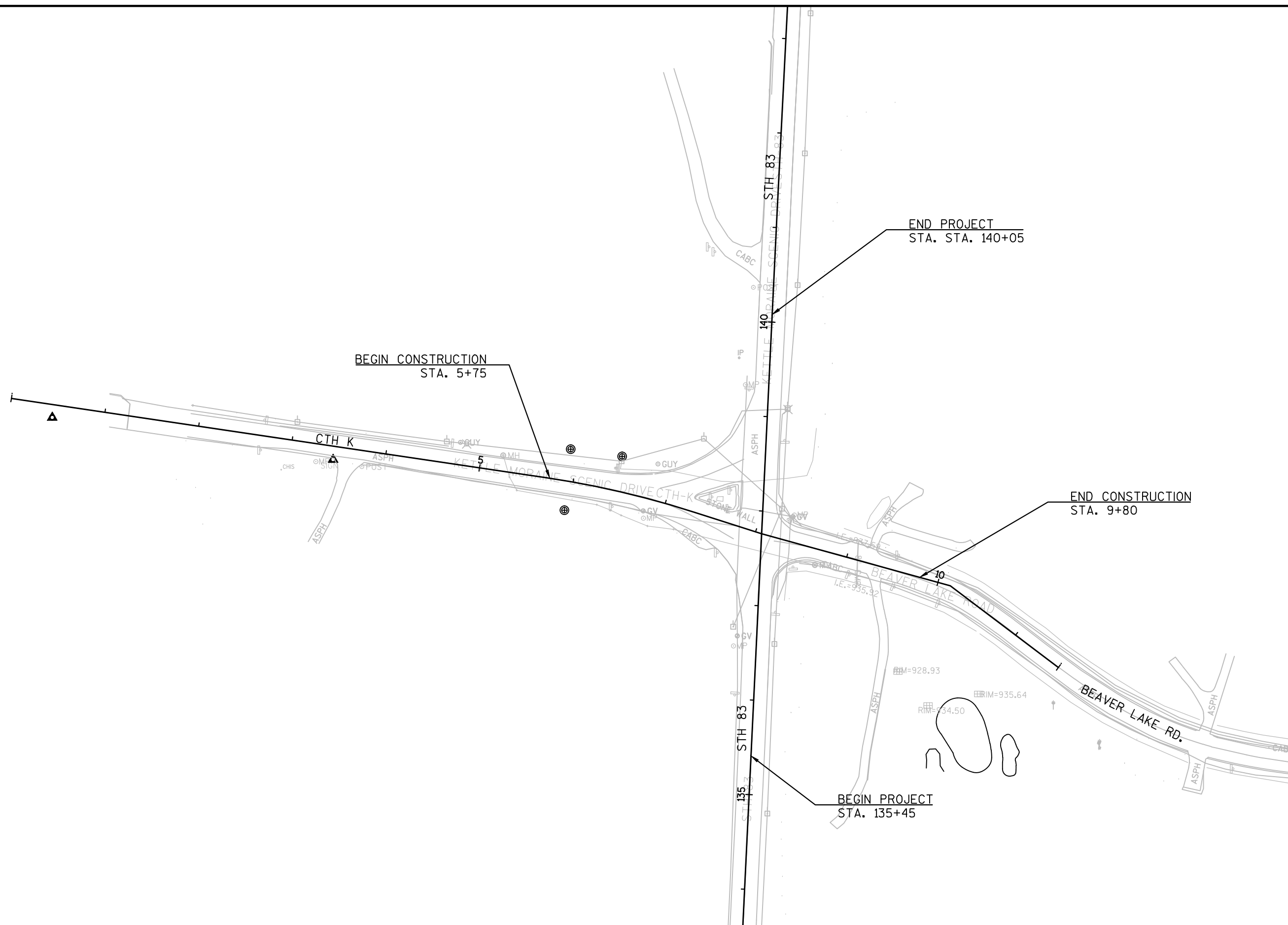
HOTLINE

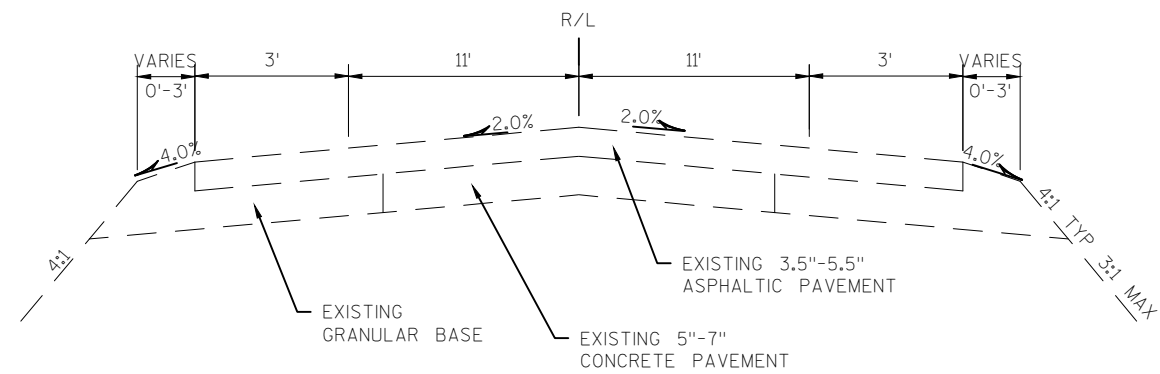
Dial

811

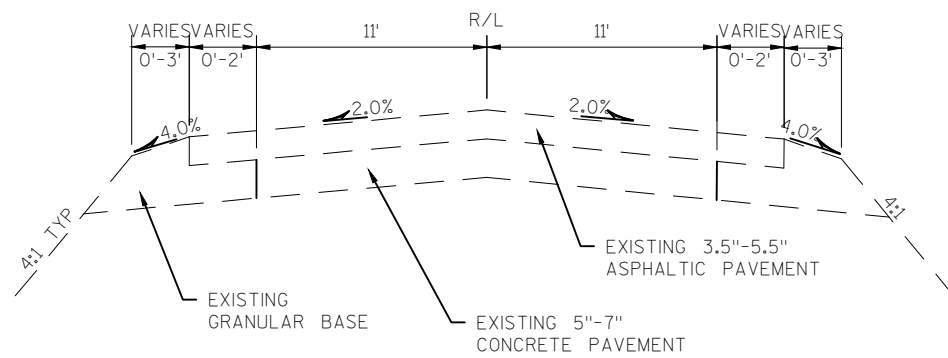
or (800) 242-8511

www.DiggersHotline.com

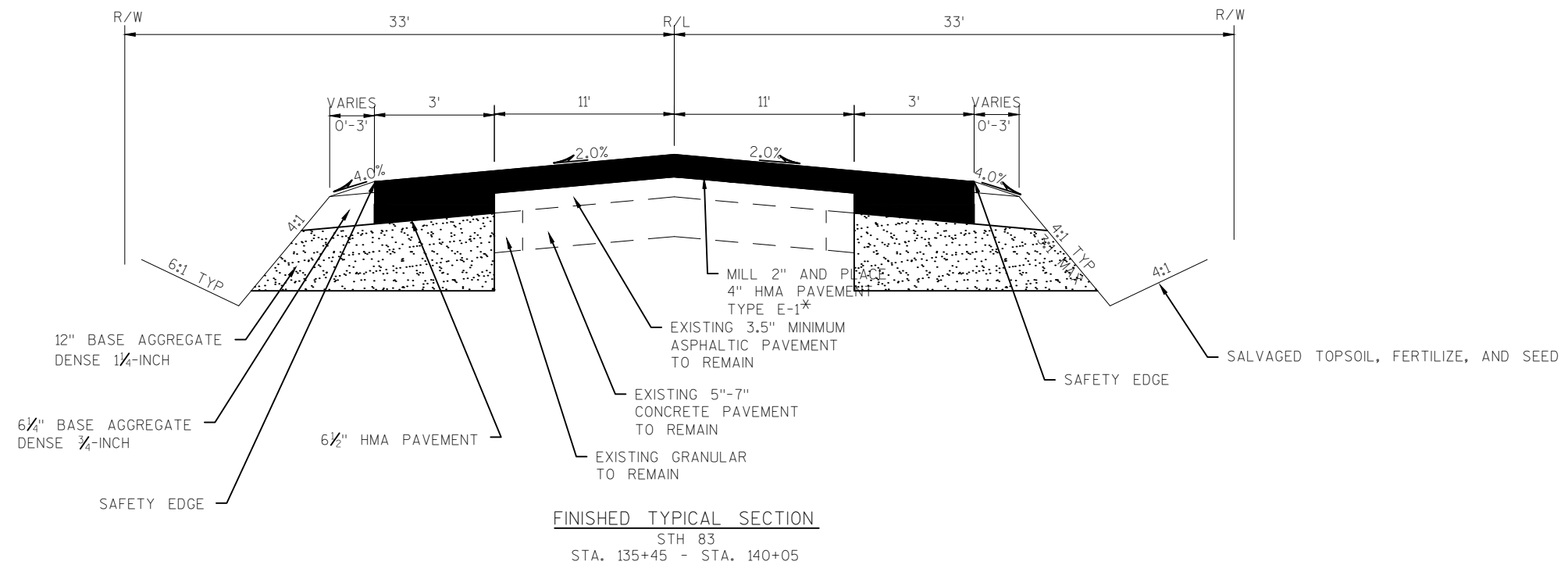




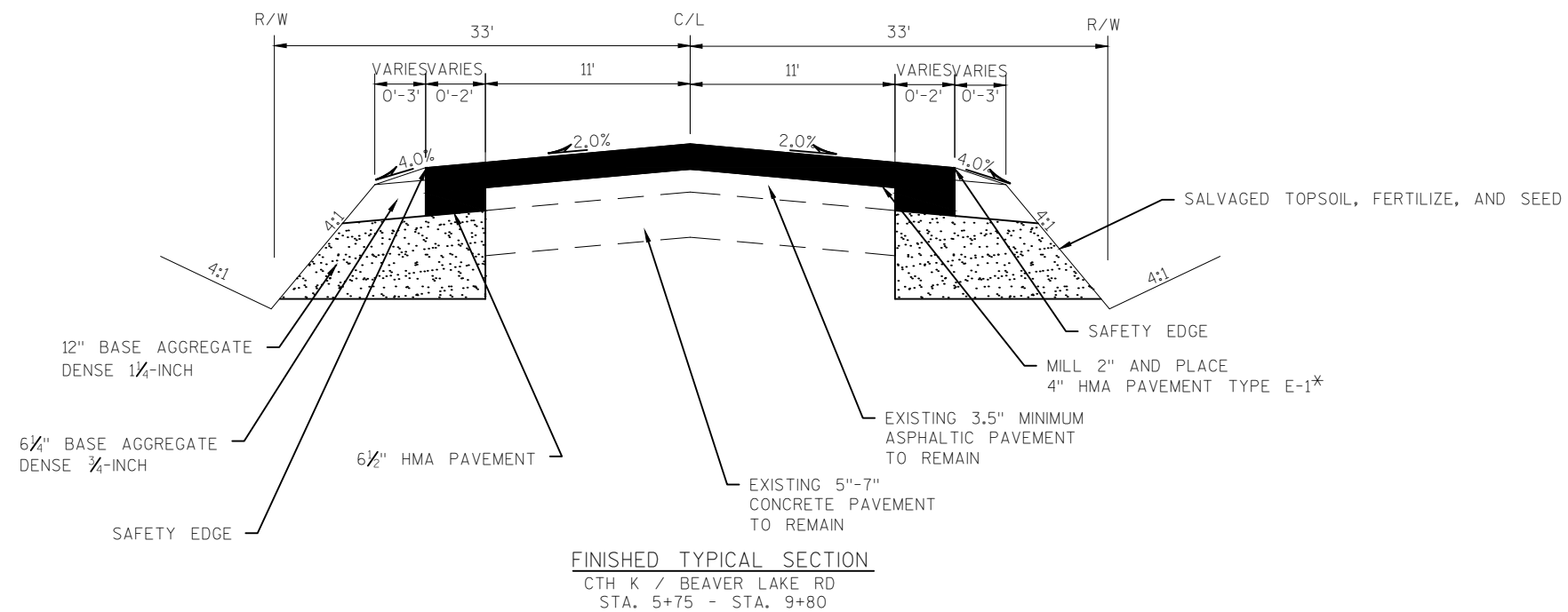
EXISTING TYPICAL SECTION
STH 83
STA. 135+45 - STA. 140+05

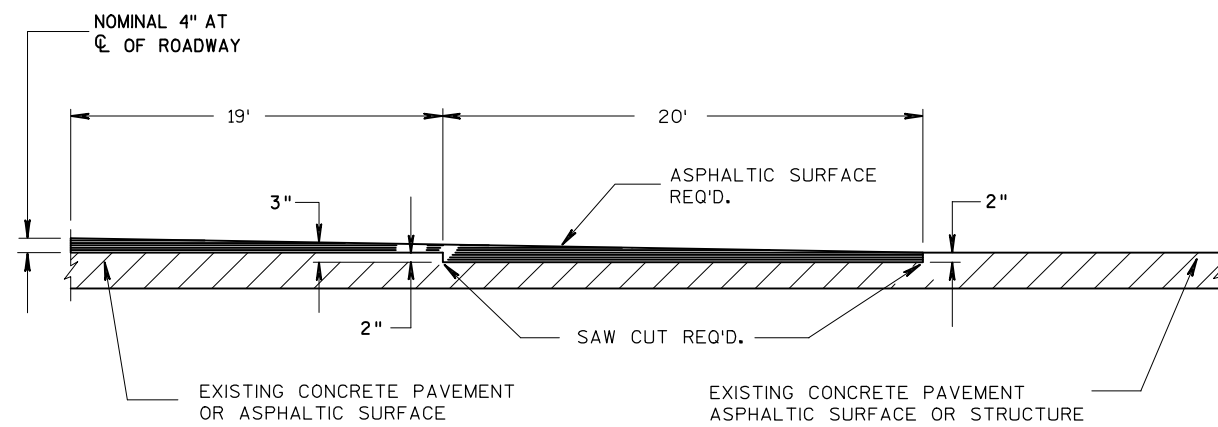


EXISTING TYPICAL SECTION
CTH K / BEAVER LAKE RD
STA. 5+75 - STA. 9+80



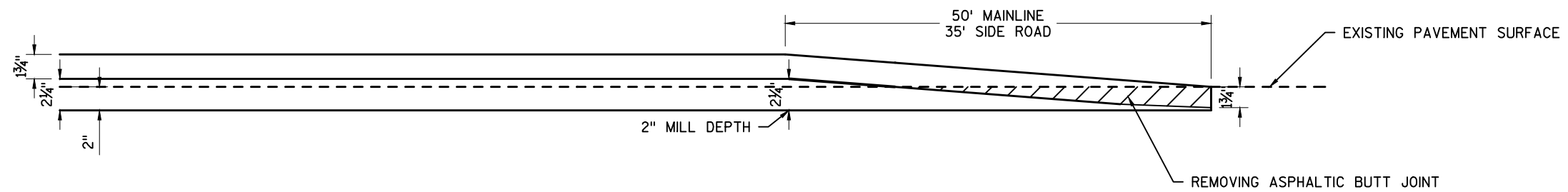
*
 FOR PAVEMENT WIDENING AND NEW
 PAVED SHOULDER PLACE 12-INCHES
 OF BASE AGGREGATE DENSE 1 $\frac{1}{4}$ -INCHES
 BENEATH 6 $\frac{1}{2}$ -INCHES OF HMA PAVEMENT





DETAIL OF BUTTED JOINT

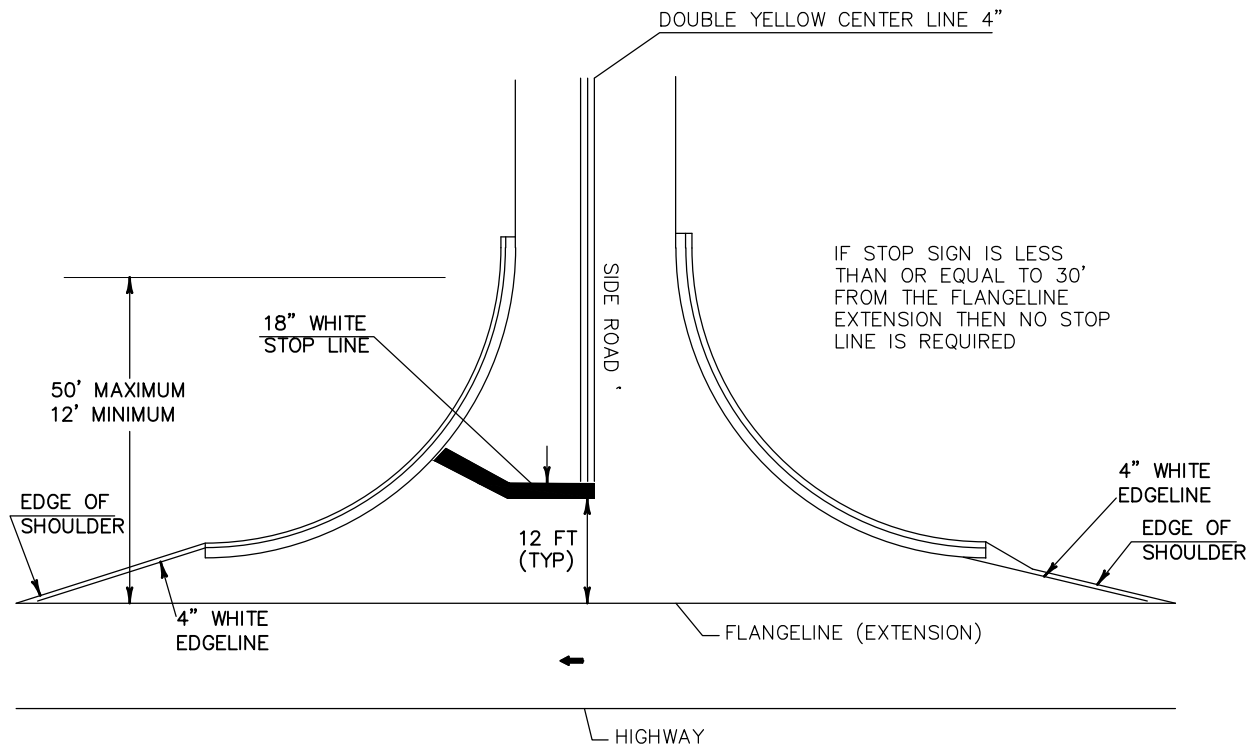
* EXACT DIMENSIONS TO BE DETERMINED
BY ENGINEER IN THE FIELD.



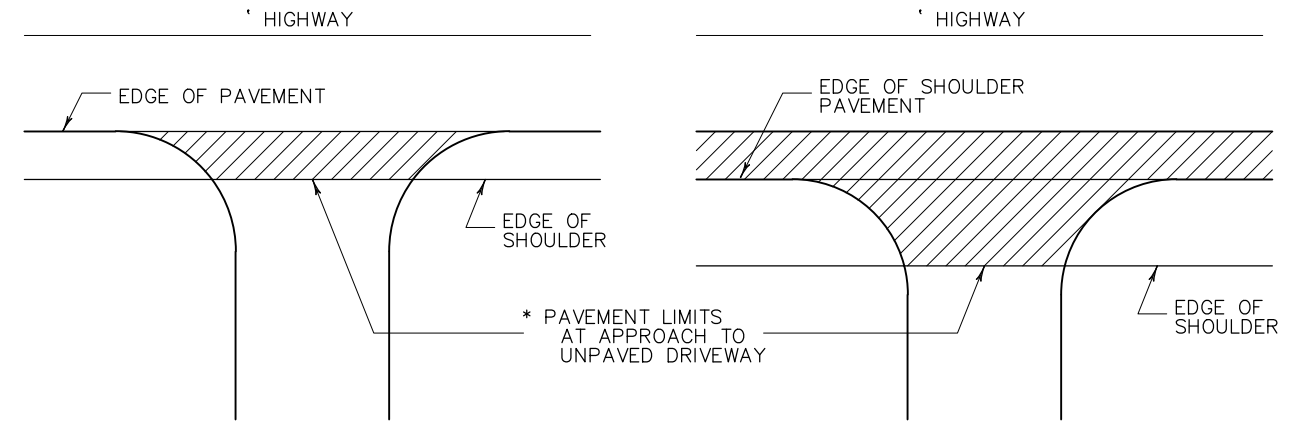
REMOVING ASPHALTIC SURFACE BUTT JOINT

BUTT JOINT DETAIL

MATCH EXISTING PAVEMENT AT THE FOLLOWING LOCATIONS:
MAINLINE STA. 137+45 AND 140+05
CTH K AND BEAVER LAKE STA. 5+75 AND 9+80



TYPICAL PAVEMENT MARKING FOR SIDEROADS

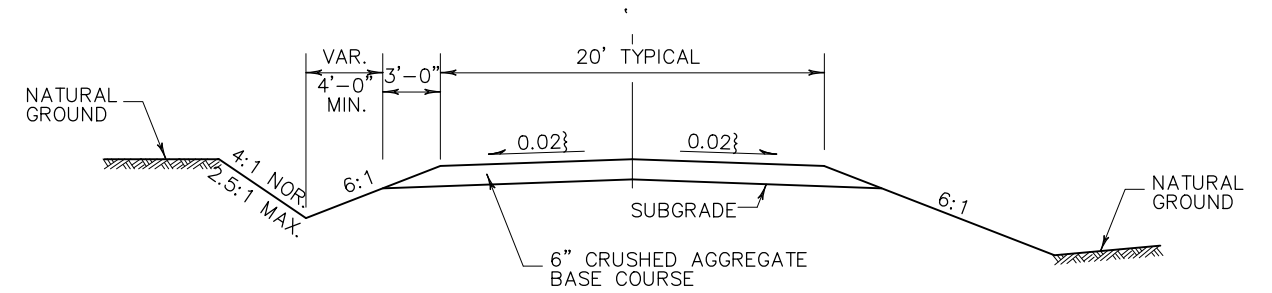


* WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT.

PLAN VIEW

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

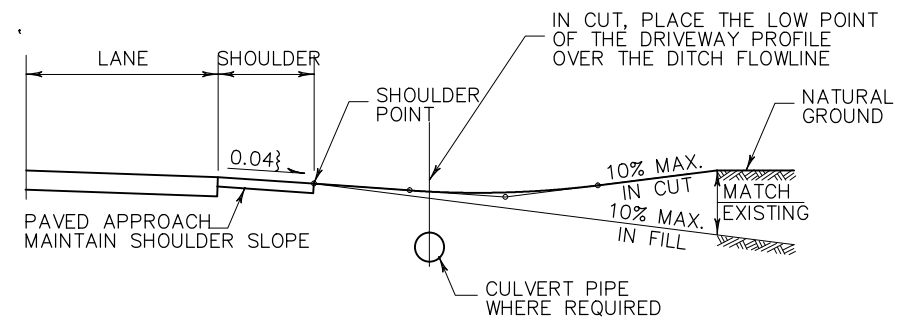
RURAL DRIVEWAY INTERSECTION DETAIL



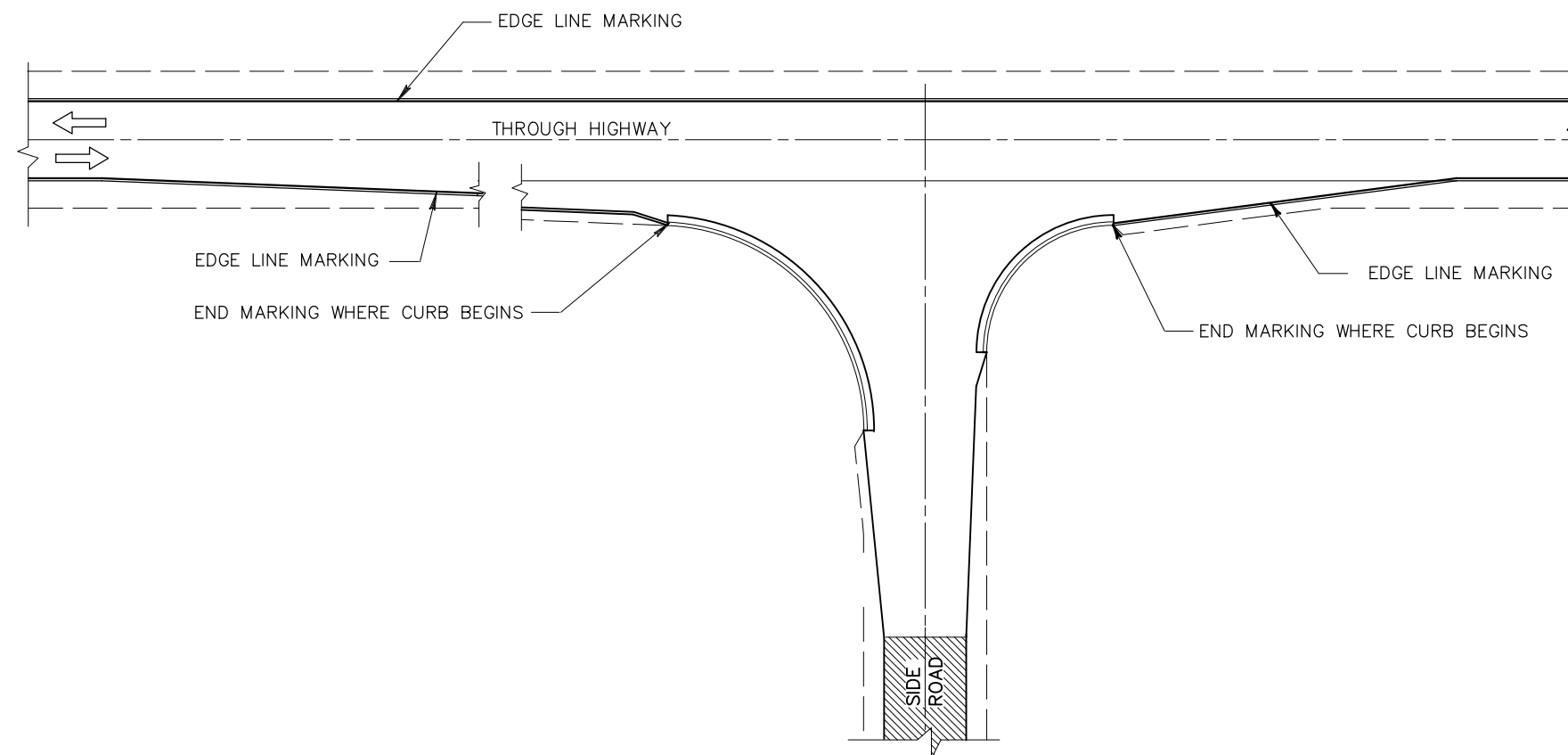
IN CUT IN FILL

TYPICAL CROSS SECTION FOR PRIVATE

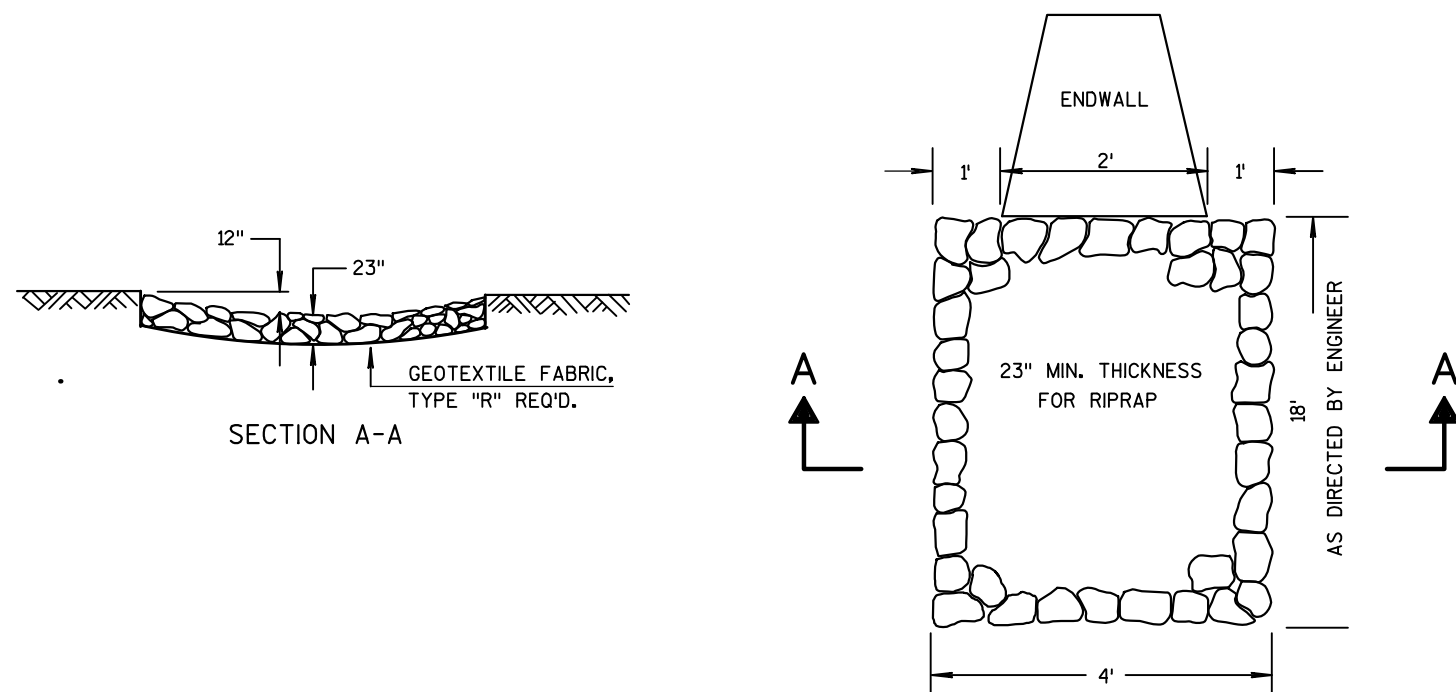
DRIVE OR FIELD ENTRANCE



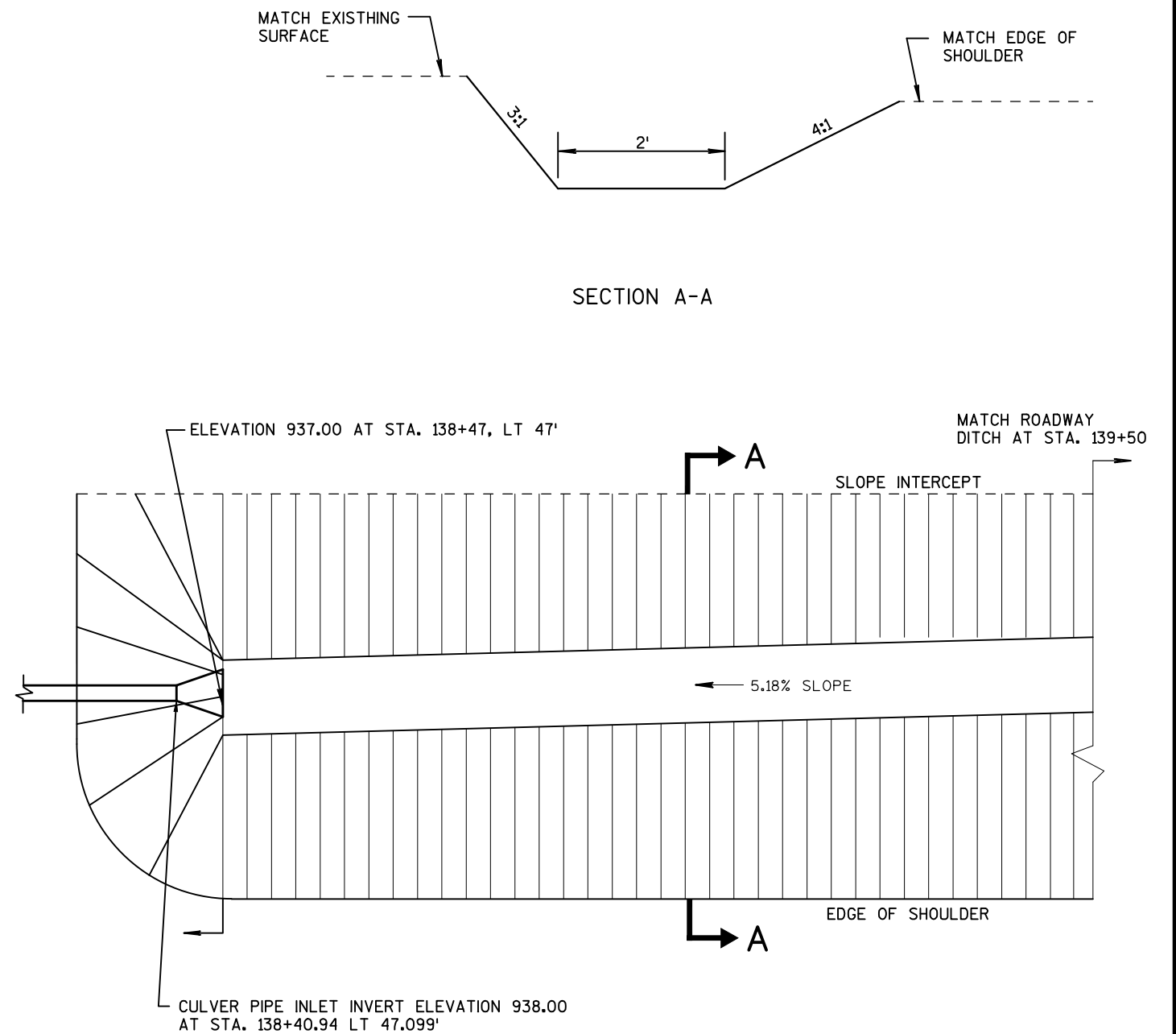
TYPICAL DRIVEWAY PROFILES



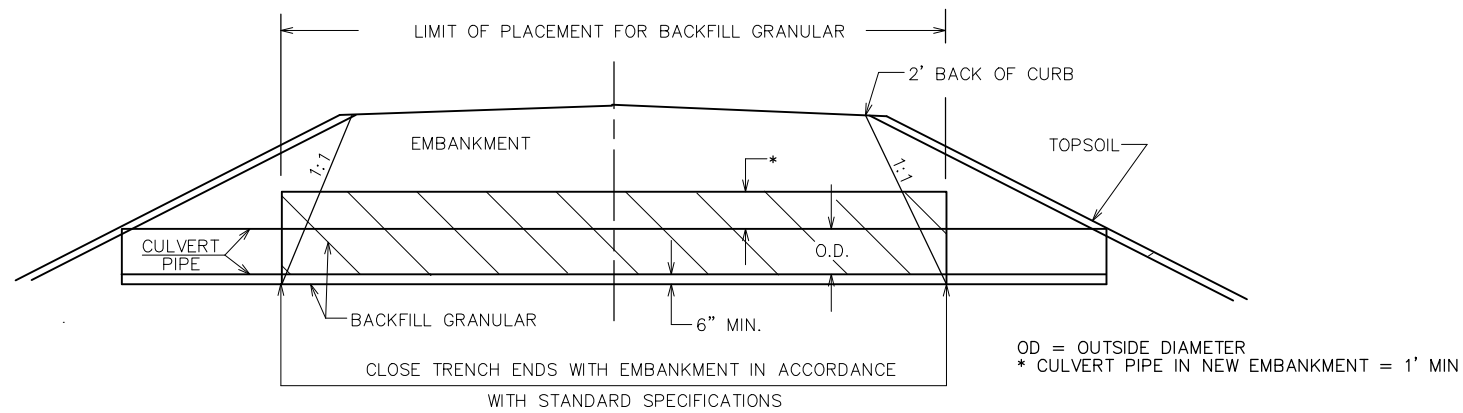
MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



RIPRAP TREATMENT AT CULVERTS



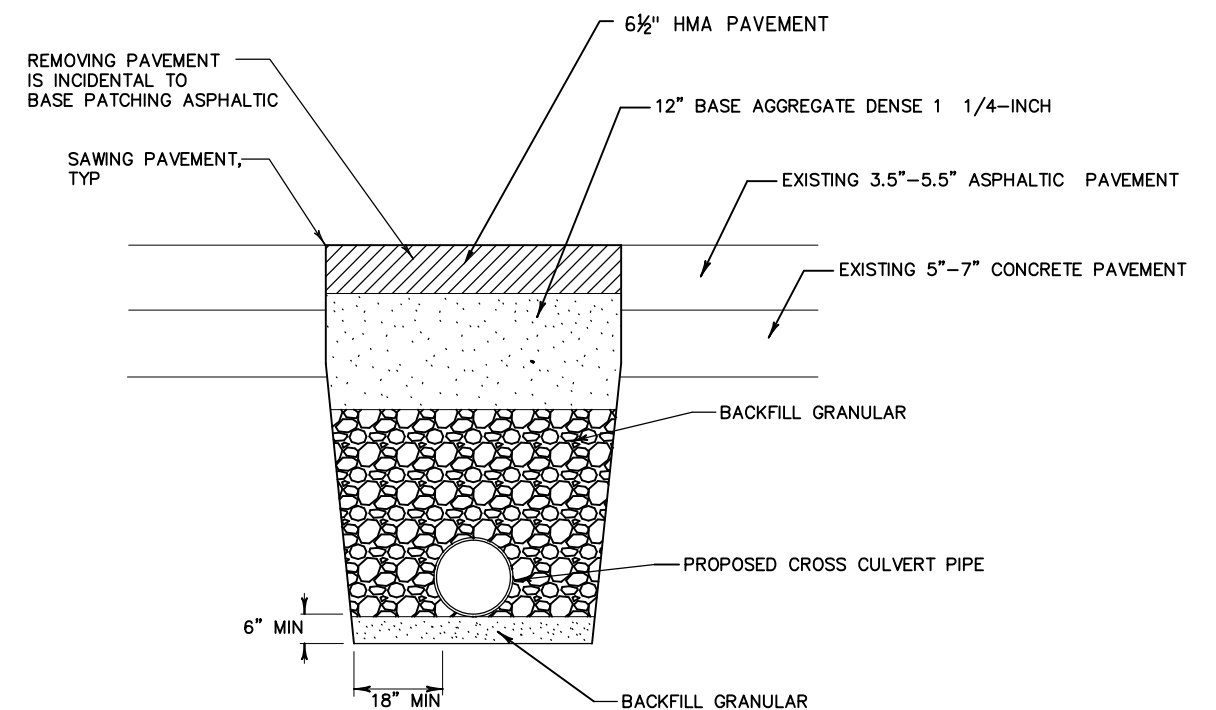
FLAT BOTTOM DITCH DETAIL



CULVERT BACKFILL DETAIL

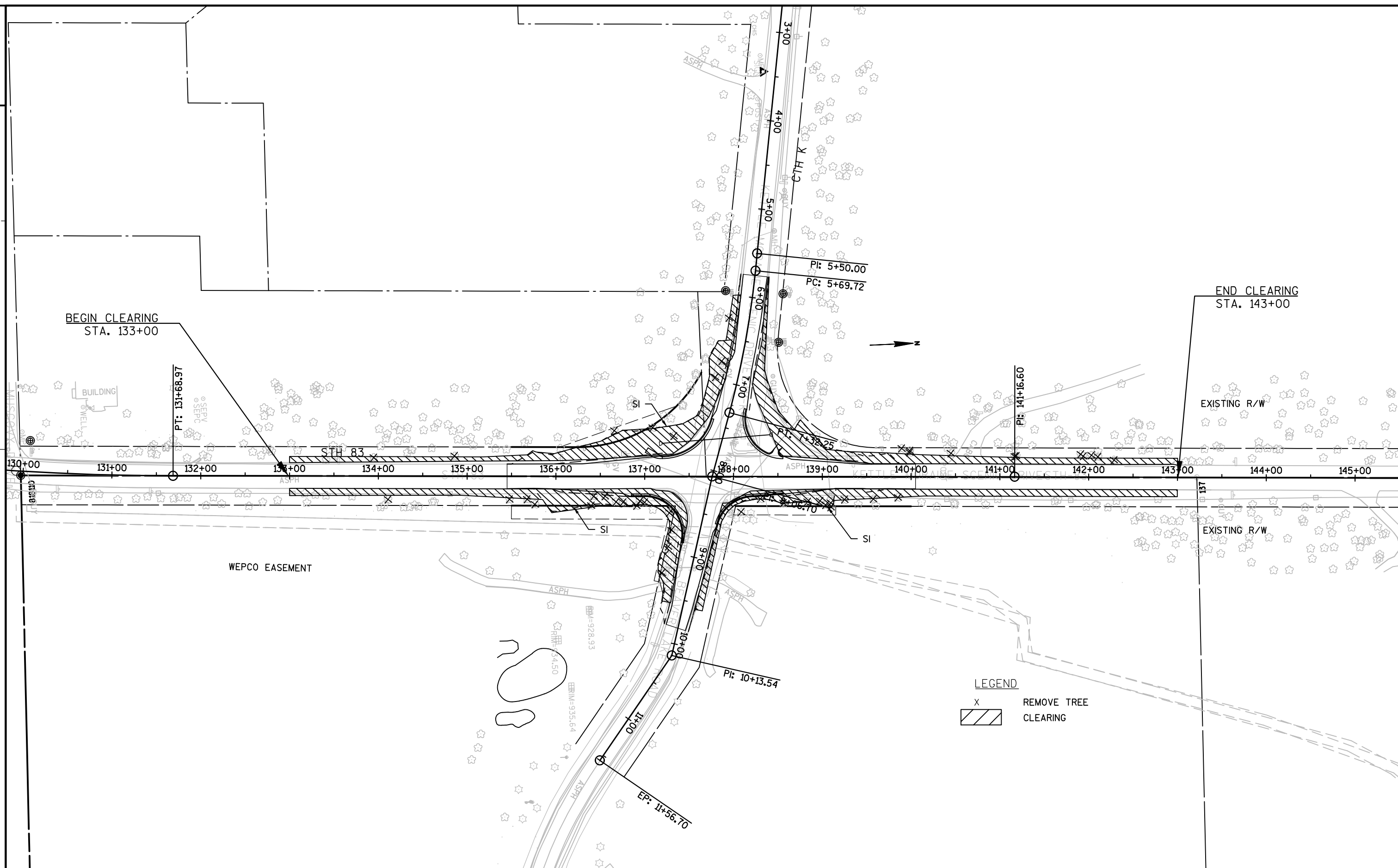
STA. 7+60

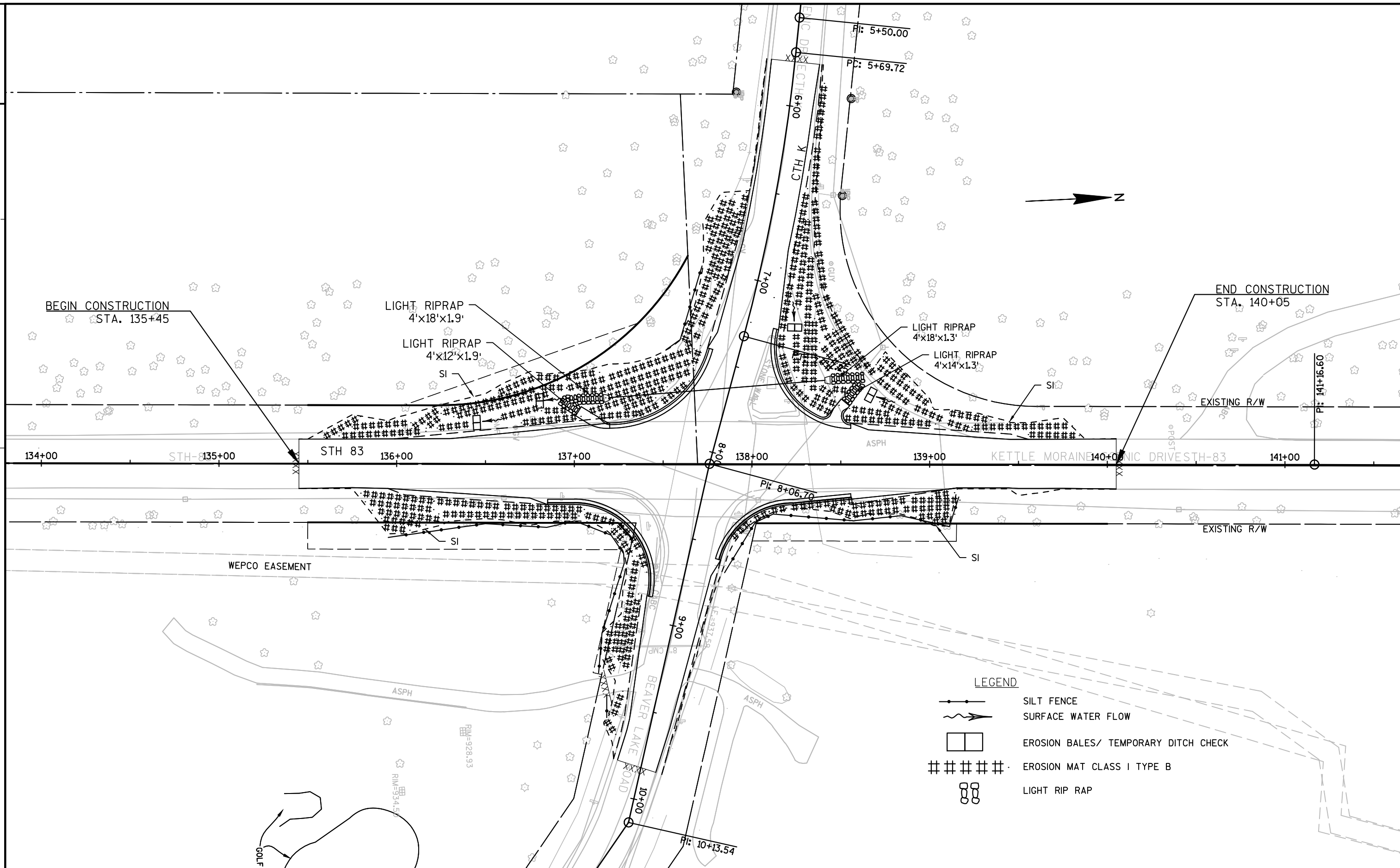
1. SEE CONSTRUCTION DETAILS "DETAIL FOR INSTALLATION OF CROSS CULVERT PIPES THROUGH EXISTING ROADWAY EMBANKMENT" FOR ADDITION INFORMATION.



DETAIL FOR INSTALLATION OF CROSS CULVERT PIPES

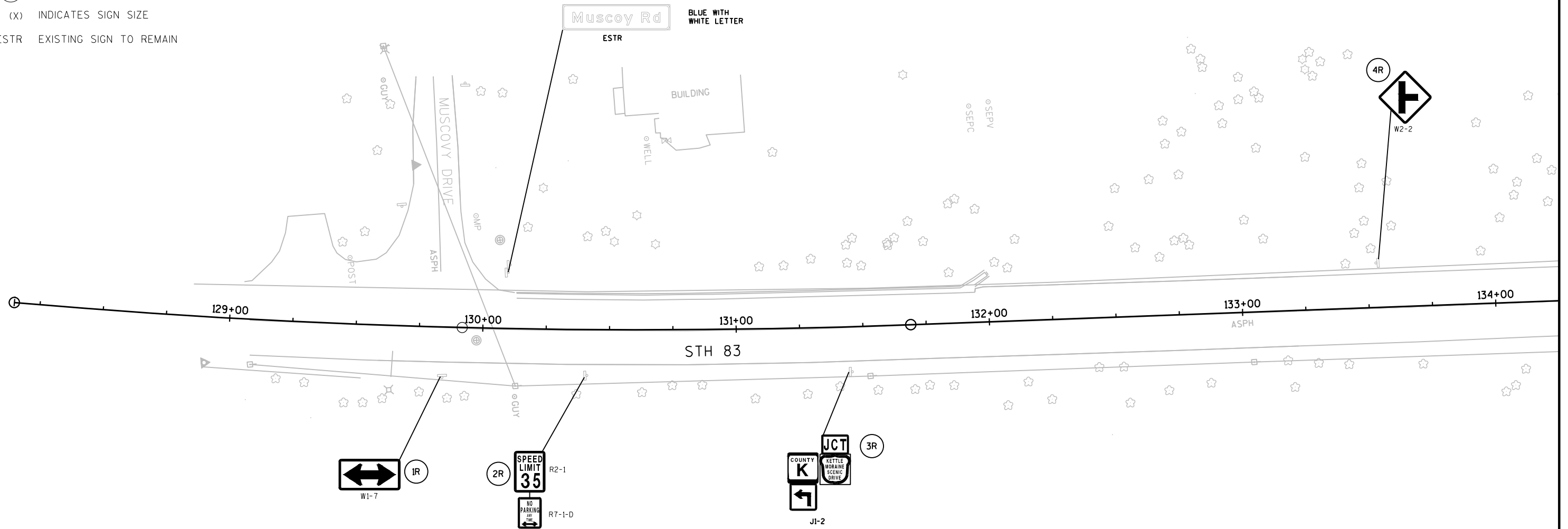
THROUGH EXISTING ROADWAY EMBANKMENT
STA. 7+60





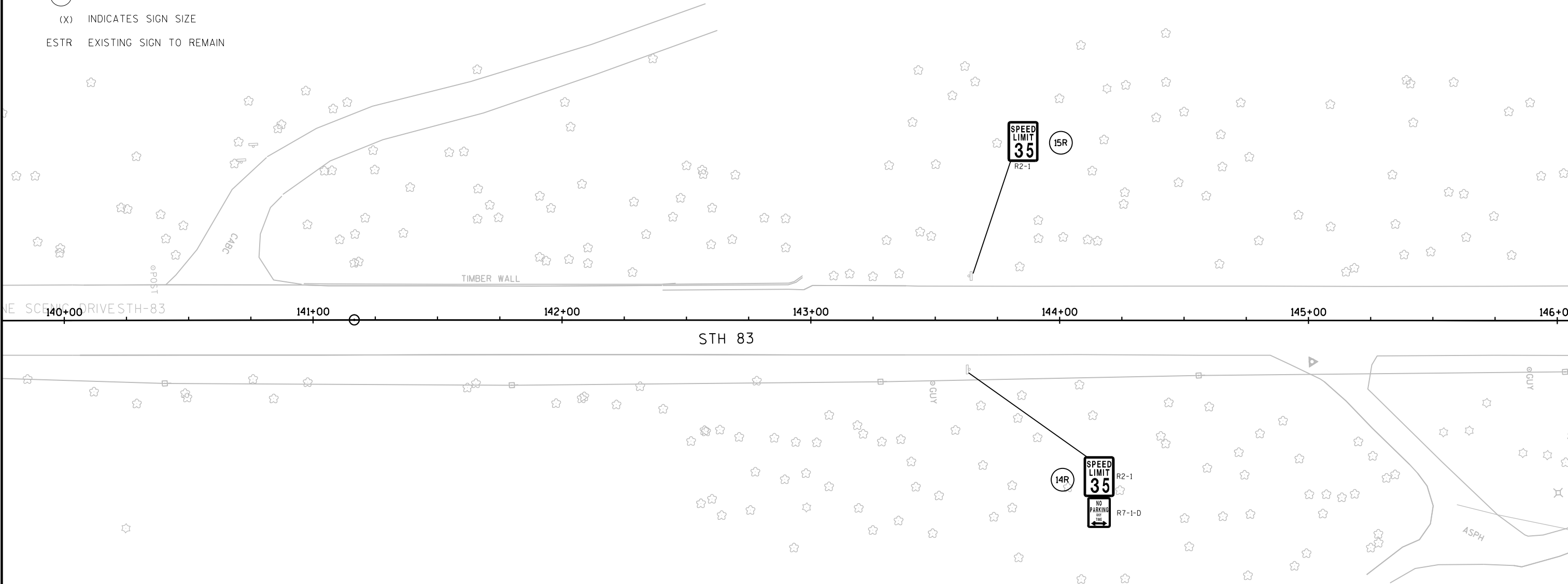
LEGEND

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- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XR) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



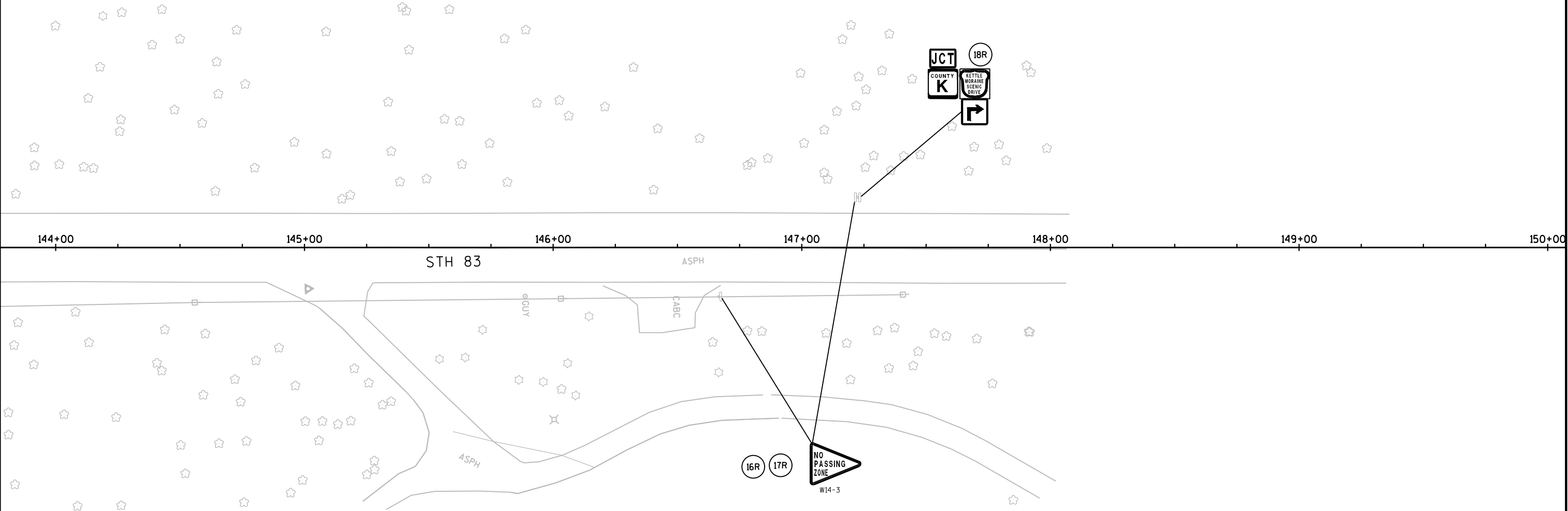
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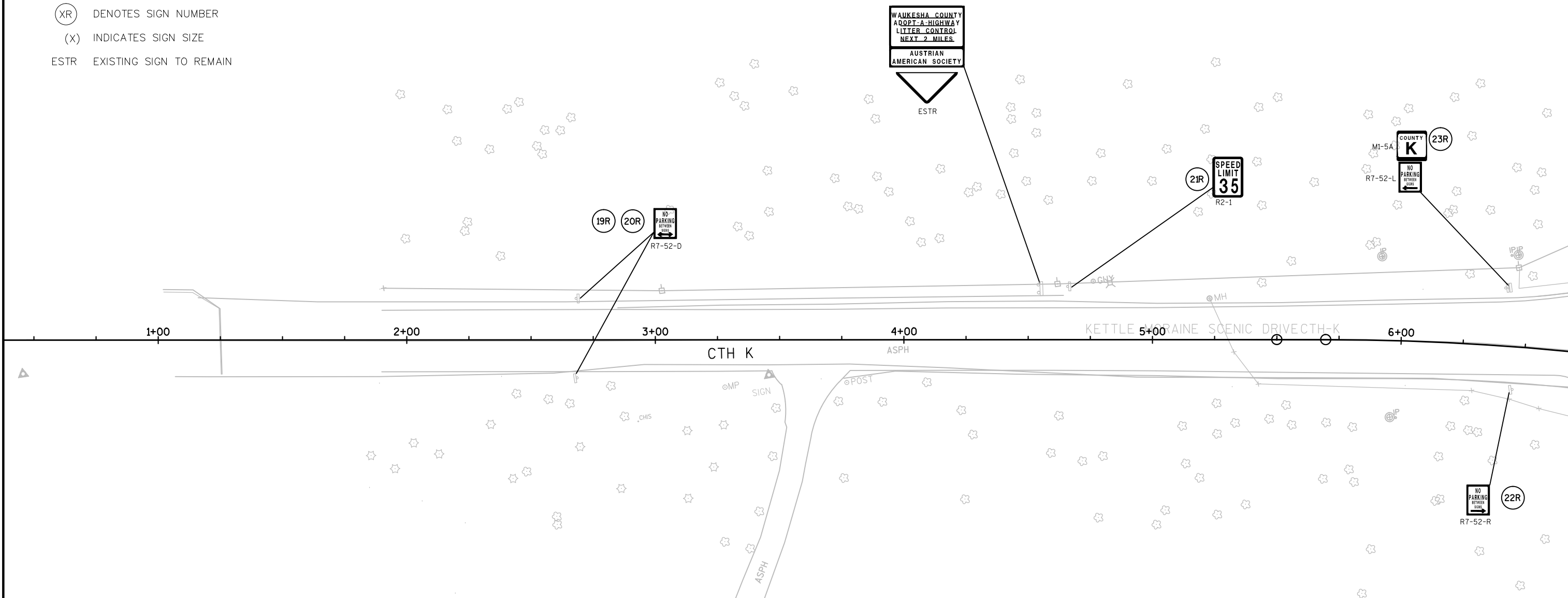
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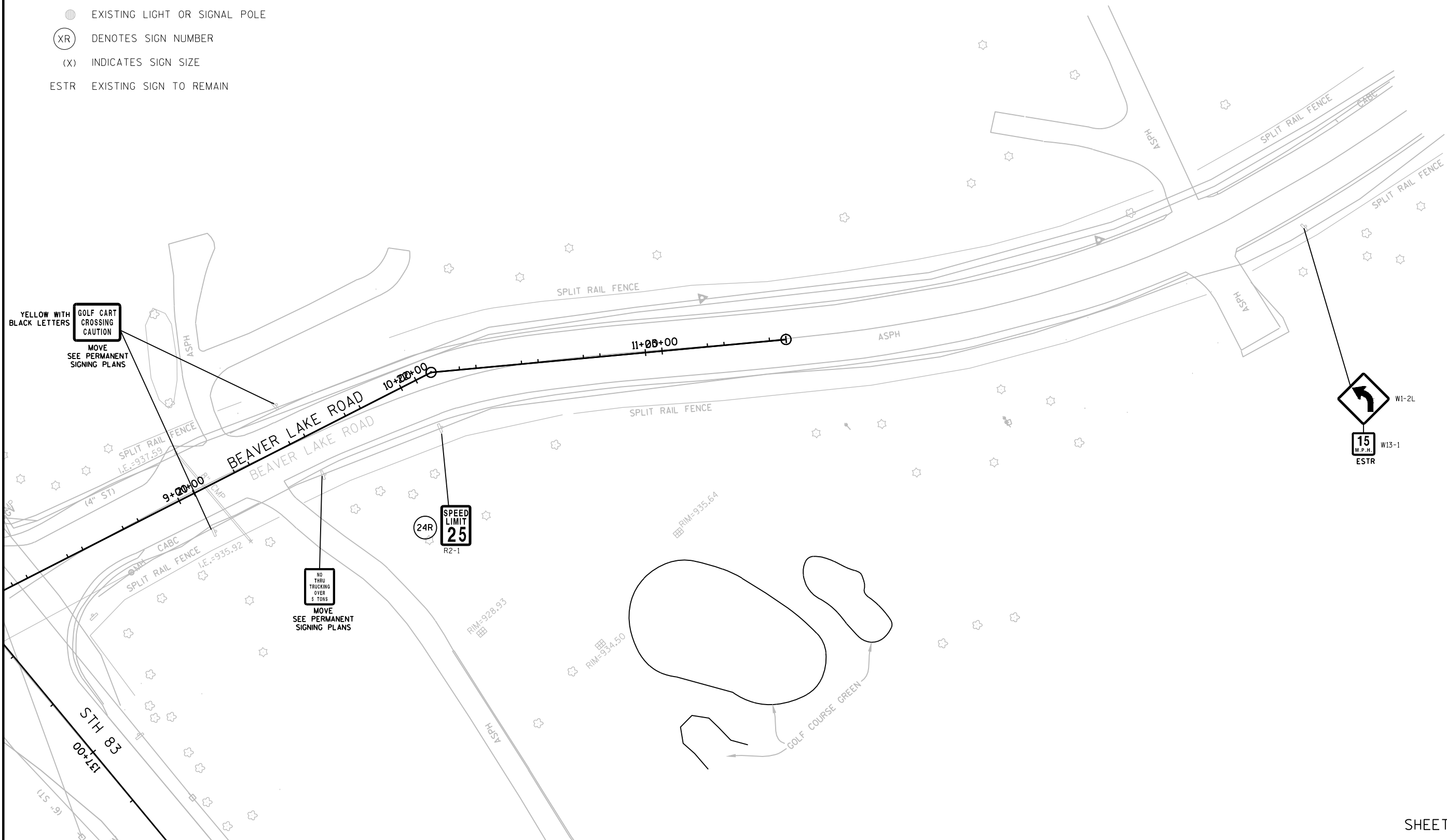
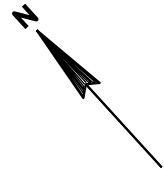
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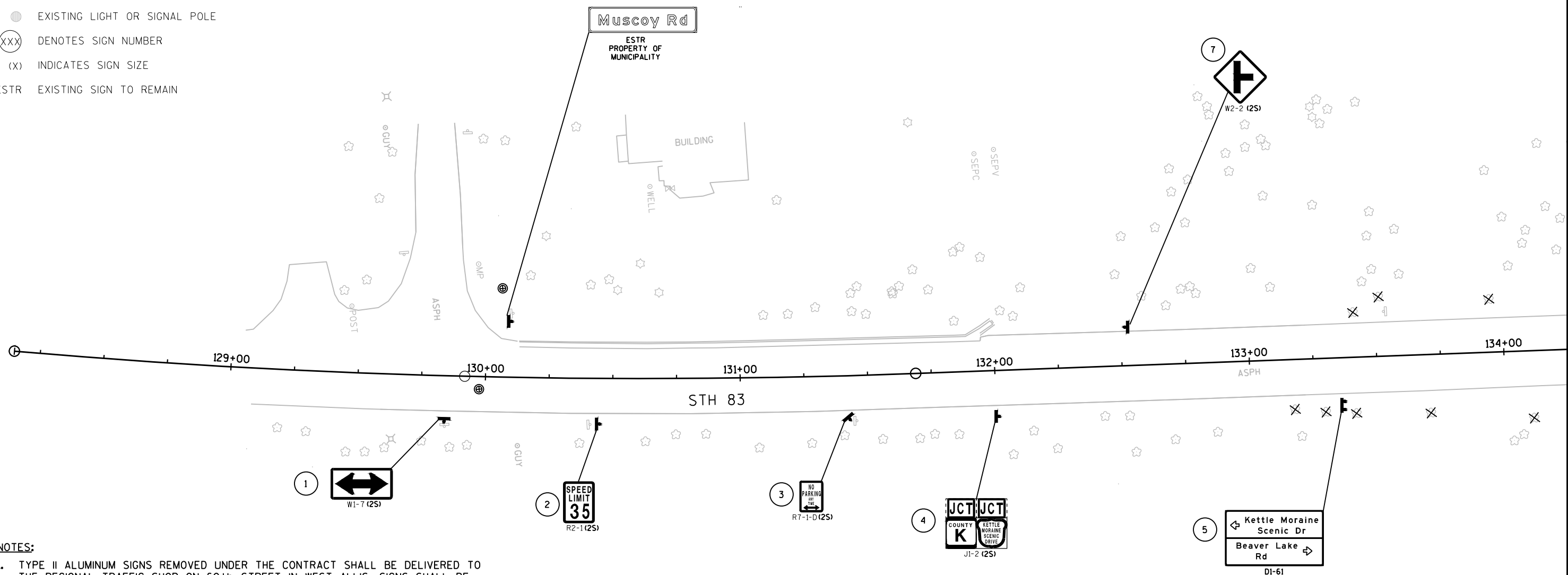
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ESTR EXISTING SIGN TO REMAIN



NOTES:

1. TYPE II ALUMINUM SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC SHOP ON 60TH STREET IN WEST ALLIS. SIGNS SHALL BE CAREFULLY REMOVED FROM SIGN SUPPORTS. THE SIGNS SHALL BE PALLETIZED FOR HANDLING WITH A FORKLIFT (SEE SPECIAL PROVISION 638.3.4) THE REGIONAL SIGN SHOP (414-266-1165) SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF THE SIGNS .
2. WHEN AN EXISTING STOP SIGN SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED, THE REMOVAL SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.
3. WOOD POST SIZES, FOR TYPE II SIGNS ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.
4. STREET NAME SIGNS ARE PROPERTY OF THE MUNICIPALITY (VILLAGE OF CHENEQUA). THE MUNICIPALITY SHALL BE CONTACTED TO REMOVE THEIR STREET NAME SIGNS PRIOR TO CONSTRUCTION AND IT IS THEIR RESPONSIBILITY TO REINSTALL THE OLD SIGNS OR REPLACE THEM FOLLOWING CONSTRUCTION. WISDOT DOES NOT FURNISH OR INSTALL STREET NAME SIGNS. THE STREET NAME SIGNS SHALL NOT BE PLACED ON TOP OF THE STOP SIGNS.

SHEET 1 OF 6

PROJECT NO:1330-01-72

HWY:STH 83

COUNTY:WAUKESHA

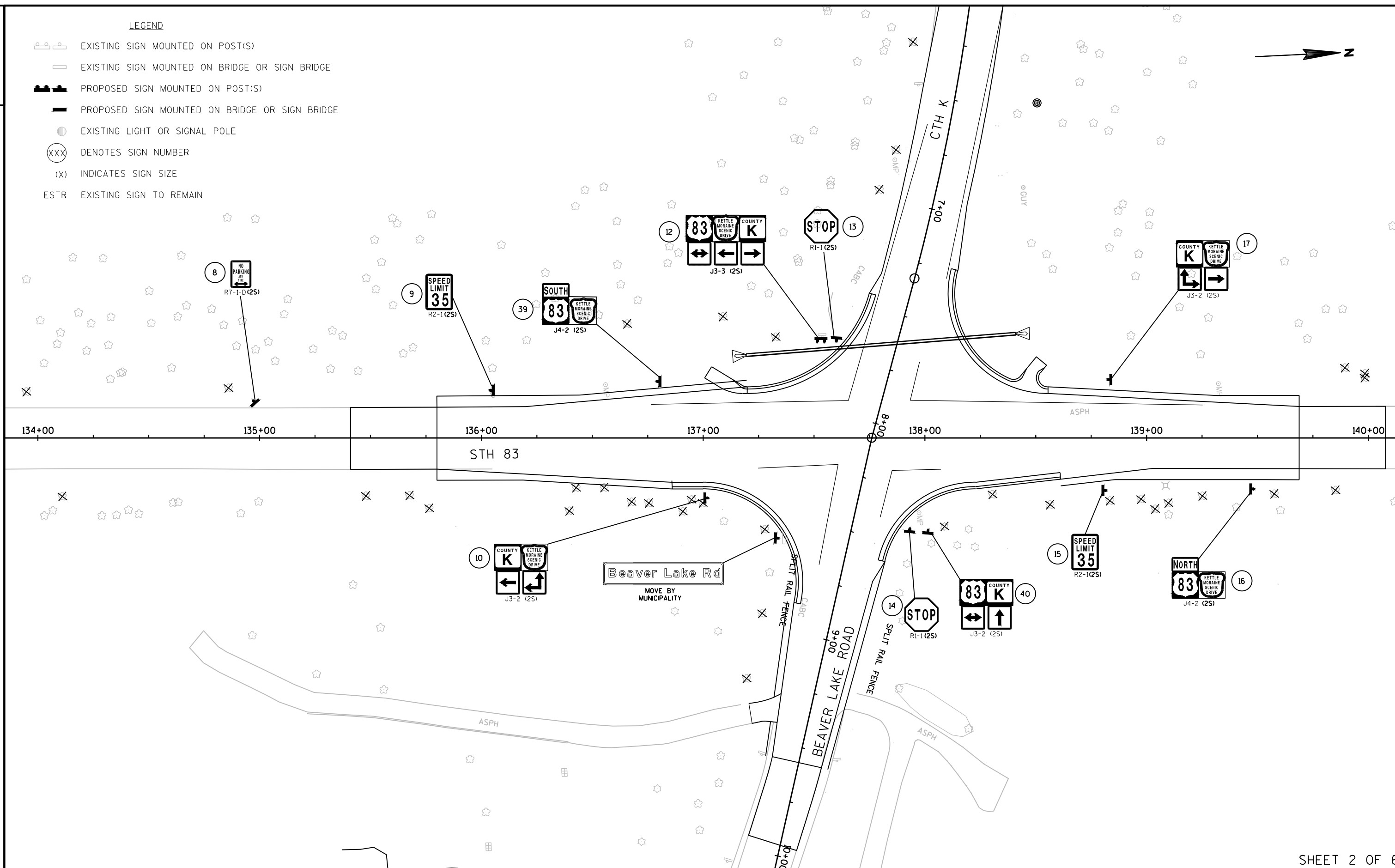
PERMANENT SIGNING

SHEET

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LEGEND

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SHEET 2 OF 6

PROJECT NO:1330-01-72

HWY:STH 83

COUNTY:WAUKESHA

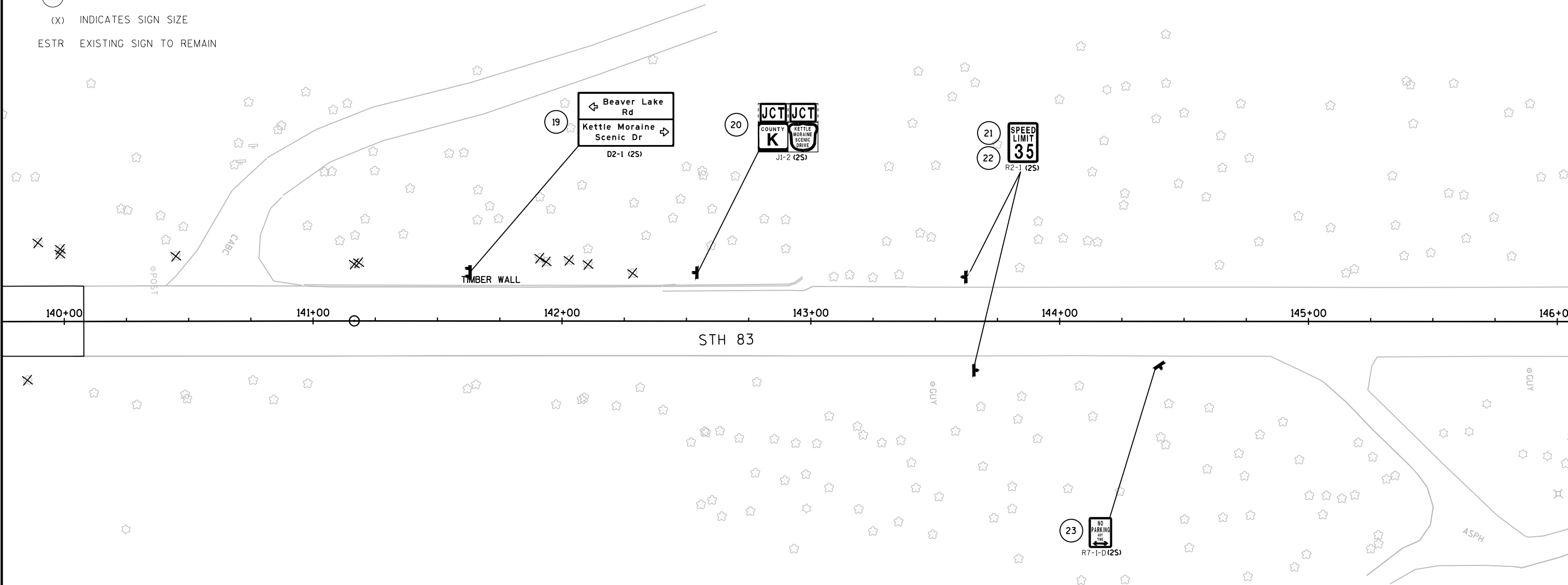
PERMANENT SIGNING

SHEET









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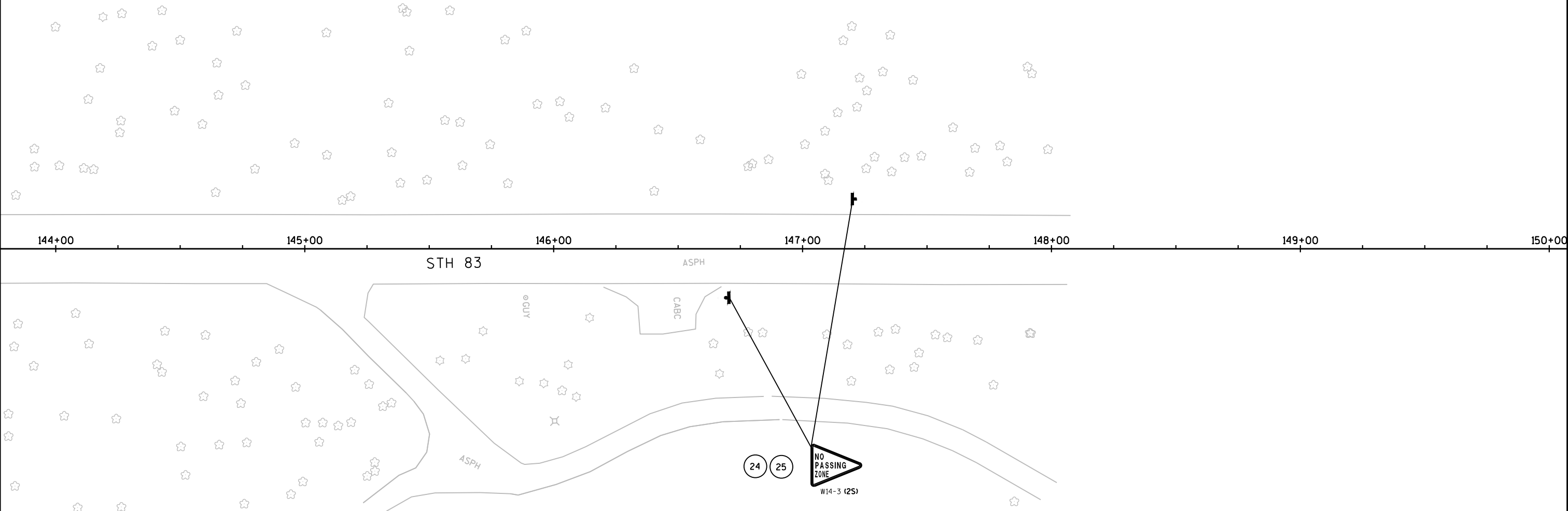


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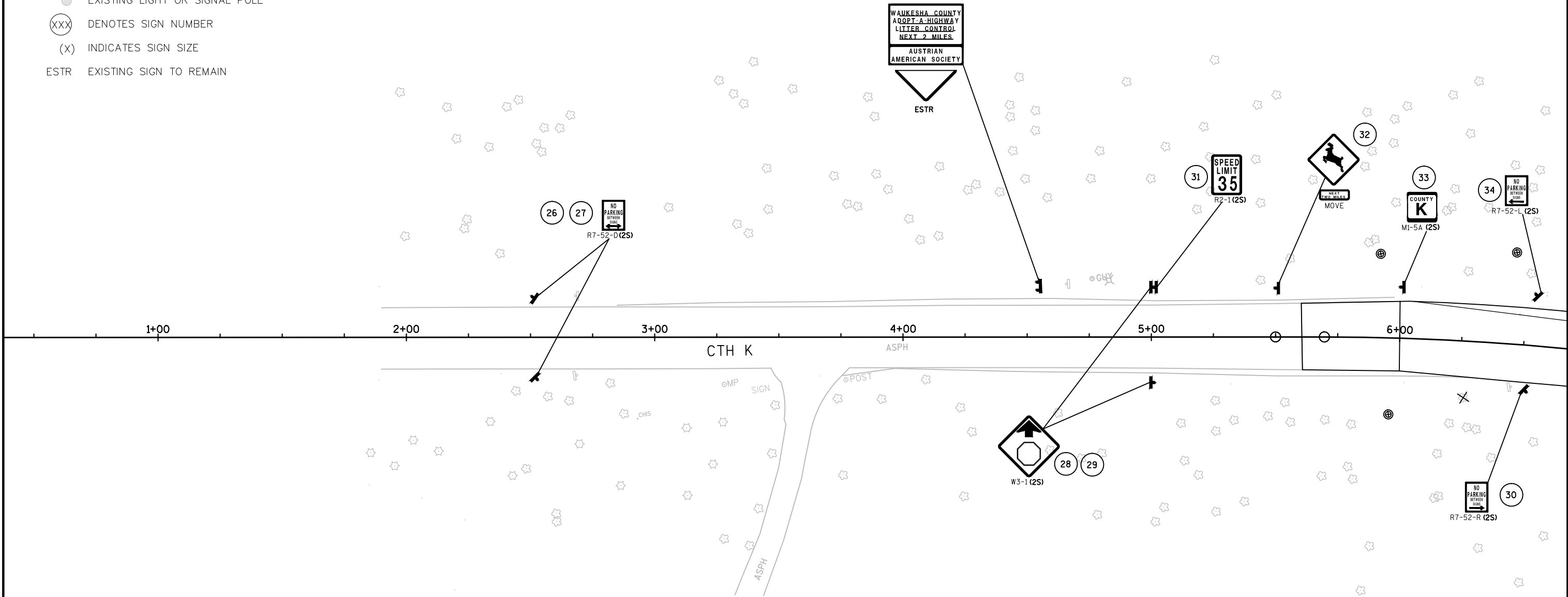


NOTE:
NO PASSING ZONES PERMANENT SIGNS
SHALL BE LOCATED AFTER PASSING
ZONES HAVE BEEN ESTABLISHED.



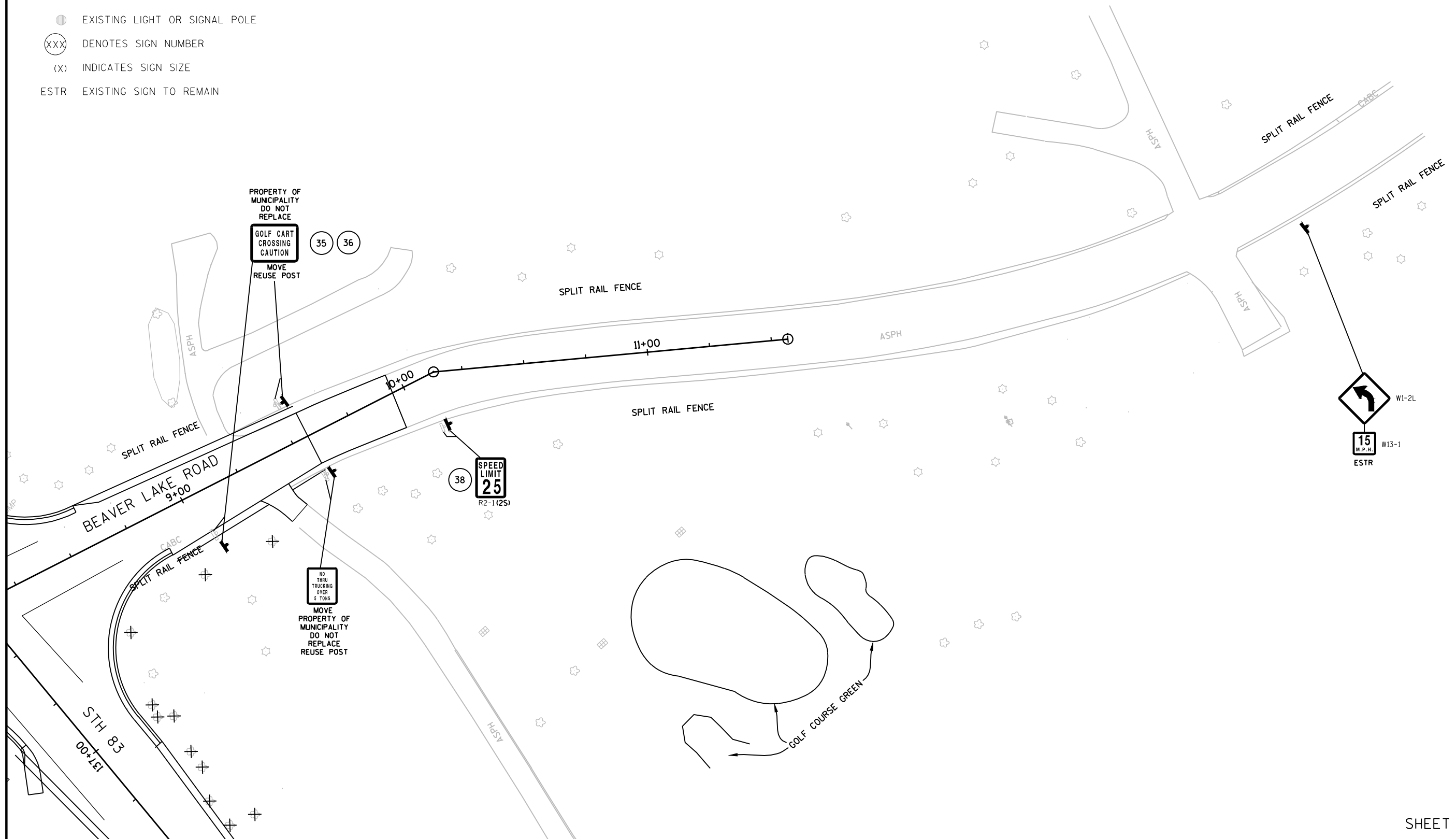
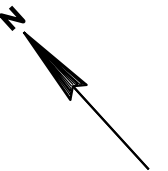
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SHEET 6 OF 6

PROJECT NO:1330-01-72

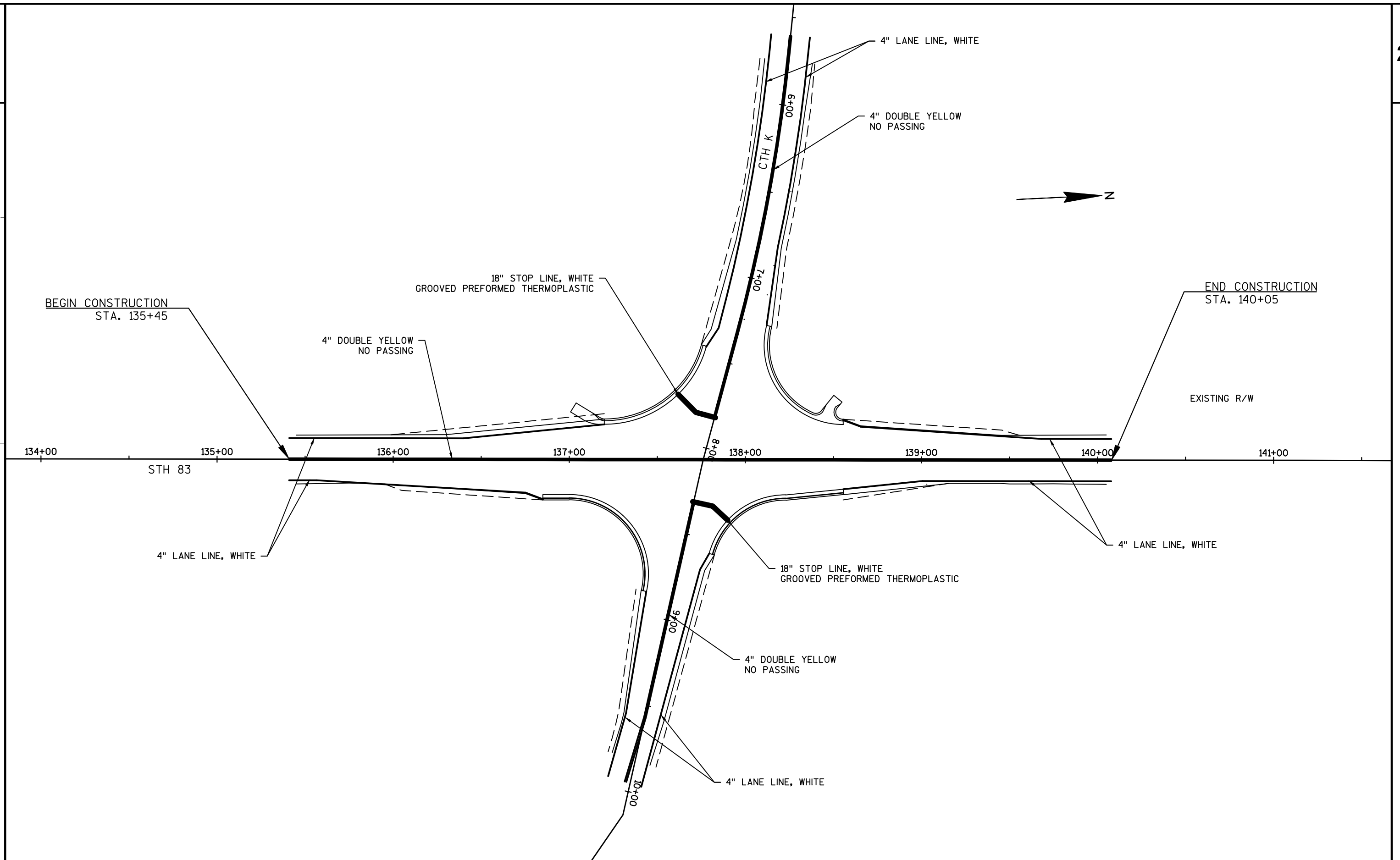
HWY:STH 83

COUNTY:WAUKESHA

PERMANENT SIGNING

SHEET

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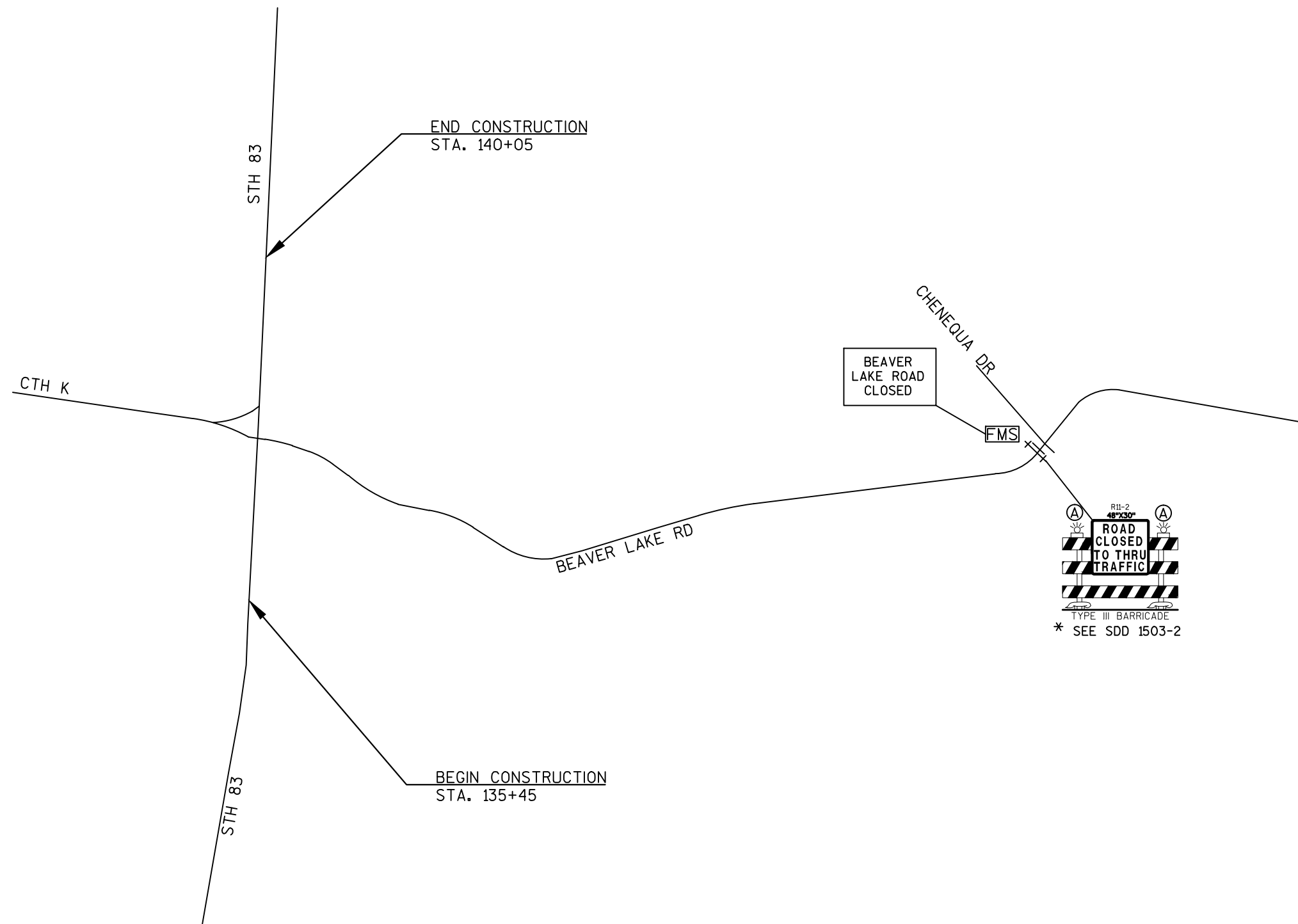


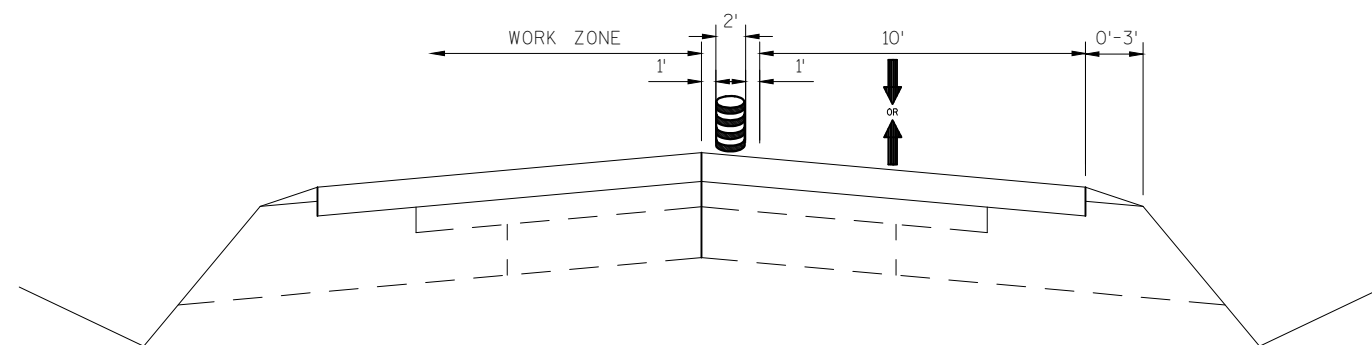
PROJECT NO:1330-01-72	HWY:STH 83	COUNTY:WAUKESHA	PAVEMENT MARKING	SHEET	E
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NOTES:

BARRICADE TO BE PLACED ON BEAVER LAKE RD
AT THE INTERSECTION OF CHENEQUA DRIVE

BARRICADE TO BE USED IN STAGE 1,2, AND 3

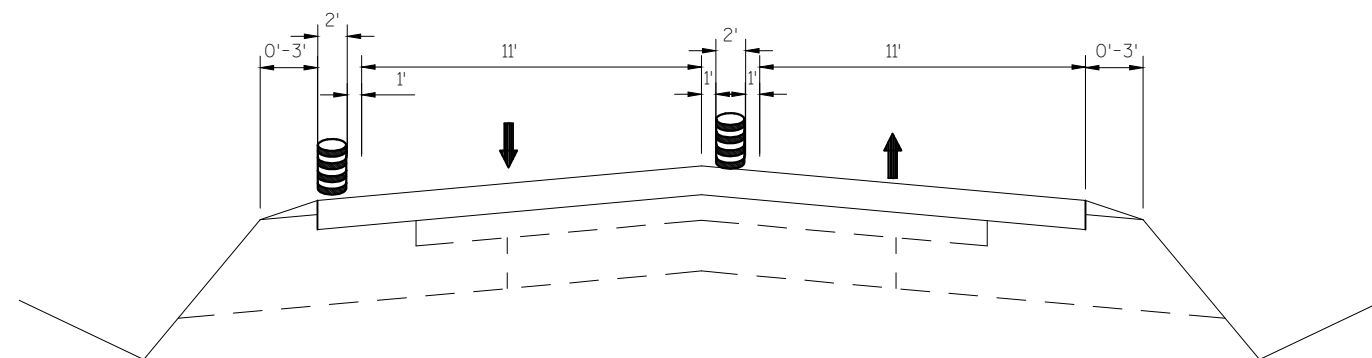




TYPICAL SECTION DURING WORK HOURS
STH 83
STA. 135+45 - STA. 140+05

NOTES:

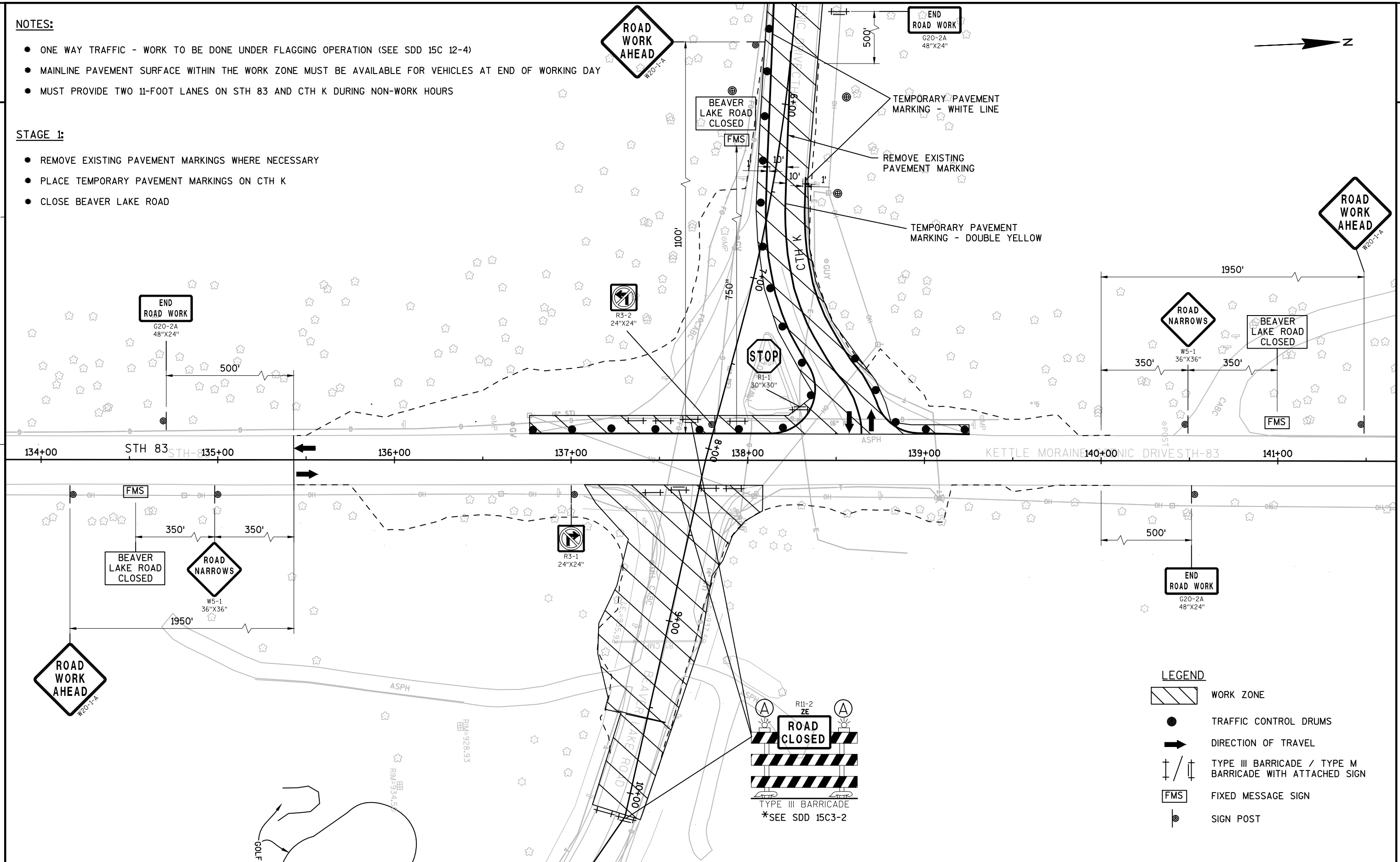
- NB WORK ZONE SHOWN, SB IS MIRROR
- ONE WAY TRAFFIC - WORK TO BE DONE UNDER FLAGGING OPERATION
- MAINLINE PAVEMENT SURFACE WITHIN THE WORK ZONE MUST BE AVAILABLE FOR VEHICLES AT END OF WORKING DAY
- ANY DIFFERENCE IN PAVEMENT ELEVATION EXCEEDING 4-INCHES MUST BE WEDGED (FOR NO WORK HOURS)
- BARREL WITHIN SHOULDER DURING NON-WORK HOURS REQUIRED



TYPICAL SECTION DURING NON-WORK HOURS
STH 83
STA. 135+45 - STA. 140+05

- ONE WAY TRAFFIC - WORK TO BE DONE UNDER FLAGGING OPERATION (SEE SDD 15C 12-4)
- MAINLINE PAVEMENT SURFACE WITHIN THE WORK ZONE MUST BE AVAILABLE FOR VEHICLES AT END OF WORKING DAY
- MUST PROVIDE TWO 11-FOOT LANES ON STH 83 AND CTH K DURING NON-WORK HOURS

- REMOVE EXISTING PAVEMENT MARKINGS WHERE NECESSARY
- PLACE TEMPORARY PAVEMENT MARKINGS ON CTH K
- CLOSE BEAVER LAKE ROAD

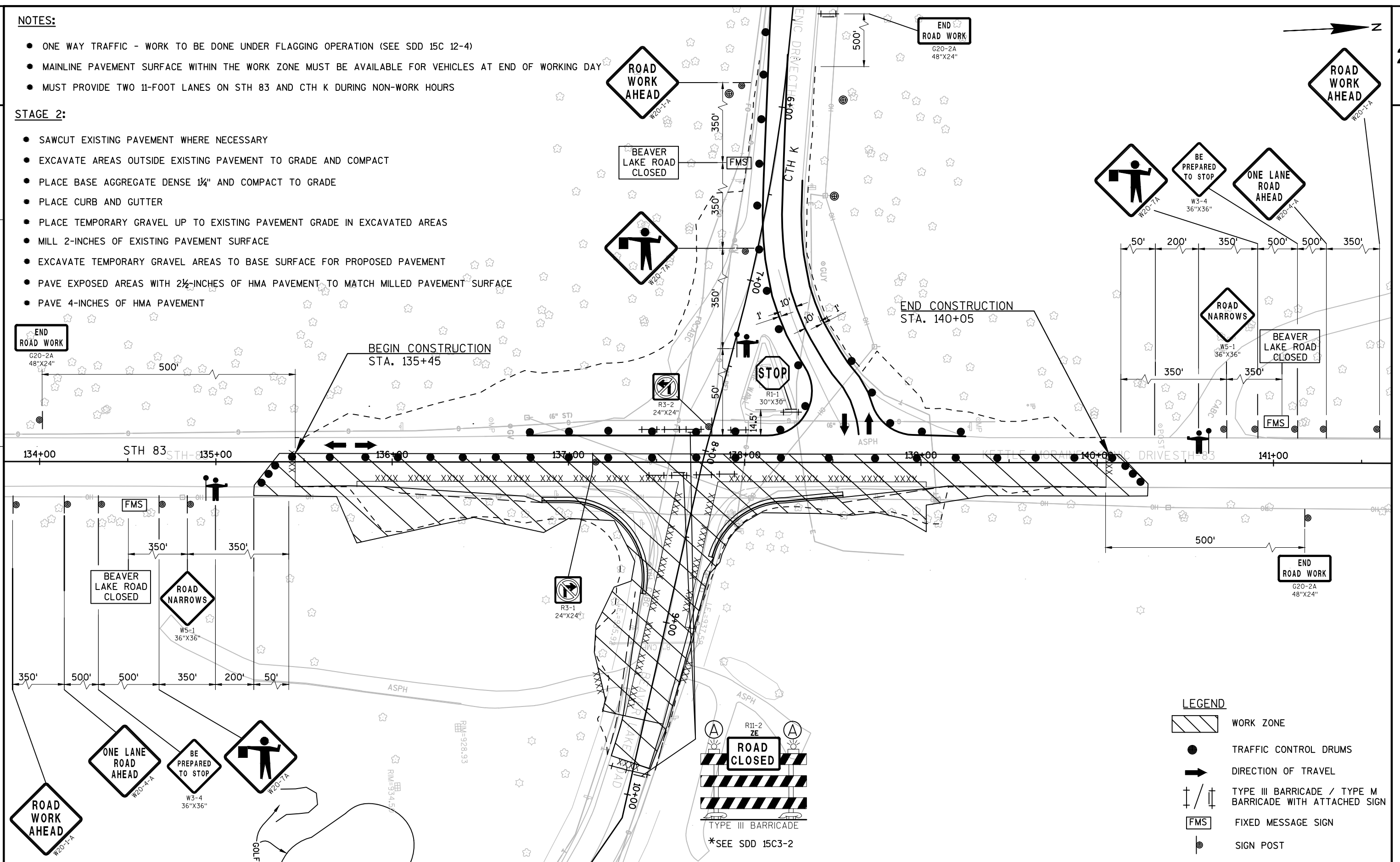


NOTES:

- ONE WAY TRAFFIC - WORK TO BE DONE UNDER FLAGGING OPERATION (SEE SDD 15C 12-4)
- MAINLINE PAVEMENT SURFACE WITHIN THE WORK ZONE MUST BE AVAILABLE FOR VEHICLES AT END OF WORKING DAY
- MUST PROVIDE TWO 11-FOOT LANES ON STH 83 AND CTH K DURING NON-WORK HOURS

STAGE 2:

- SAWCUT EXISTING PAVEMENT WHERE NECESSARY
- EXCAVATE AREAS OUTSIDE EXISTING PAVEMENT TO GRADE AND COMPACT
- PLACE BASE AGGREGATE DENSE 1½" AND COMPACT TO GRADE
- PLACE CURB AND GUTTER
- PLACE TEMPORARY GRAVEL UP TO EXISTING PAVEMENT GRADE IN EXCAVATED AREAS
- MILL 2-INCHES OF EXISTING PAVEMENT SURFACE
- EXCAVATE TEMPORARY GRAVEL AREAS TO BASE SURFACE FOR PROPOSED PAVEMENT
- PAVE EXPOSED AREAS WITH 2½-INCHES OF HMA PAVEMENT TO MATCH MILLED PAVEMENT SURFACE
- PAVE 4-INCHES OF HMA PAVEMENT

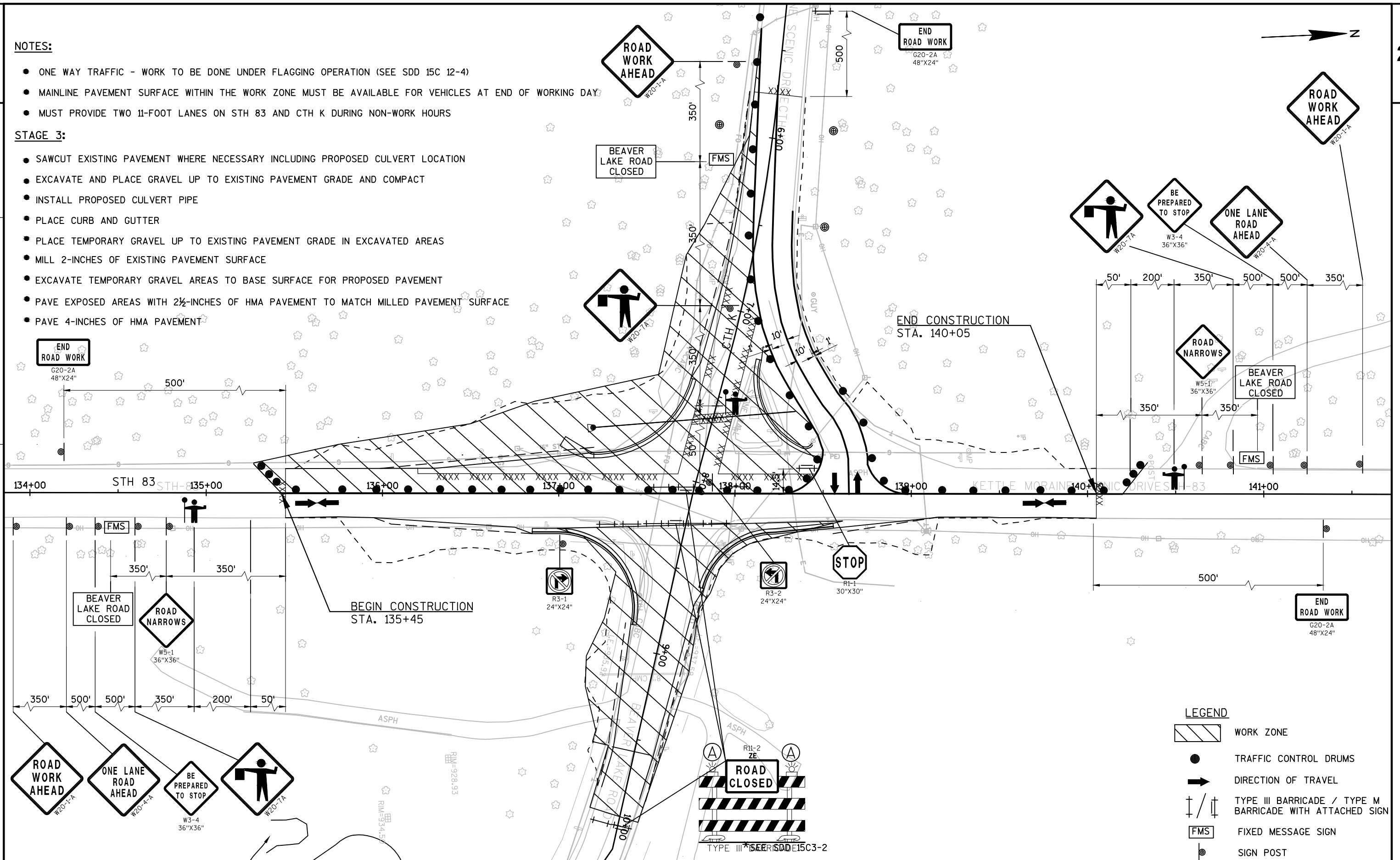


NOTES:

- ONE WAY TRAFFIC - WORK TO BE DONE UNDER FLAGGING OPERATION (SEE SDD 15C 12-4)
- MAINLINE PAVEMENT SURFACE WITHIN THE WORK ZONE MUST BE AVAILABLE FOR VEHICLES AT END OF WORKING DAY
- MUST PROVIDE TWO 11-FOOT LANES ON STH 83 AND CTH K DURING NON-WORK HOURS

STAGE 3:

- SAWCUT EXISTING PAVEMENT WHERE NECESSARY INCLUDING PROPOSED CULVERT LOCATION
- EXCAVATE AND PLACE GRAVEL UP TO EXISTING PAVEMENT GRADE AND COMPACT
- INSTALL PROPOSED CULVERT PIPE
- PLACE CURB AND GUTTER
- PLACE TEMPORARY GRAVEL UP TO EXISTING PAVEMENT GRADE IN EXCAVATED AREAS
- MILL 2-INCHES OF EXISTING PAVEMENT SURFACE
- EXCAVATE TEMPORARY GRAVEL AREAS TO BASE SURFACE FOR PROPOSED PAVEMENT
- PAVE EXPOSED AREAS WITH 2½-INCHES OF HMA PAVEMENT TO MATCH MILLED PAVEMENT SURFACE
- PAVE 4-INCHES OF HMA PAVEMENT

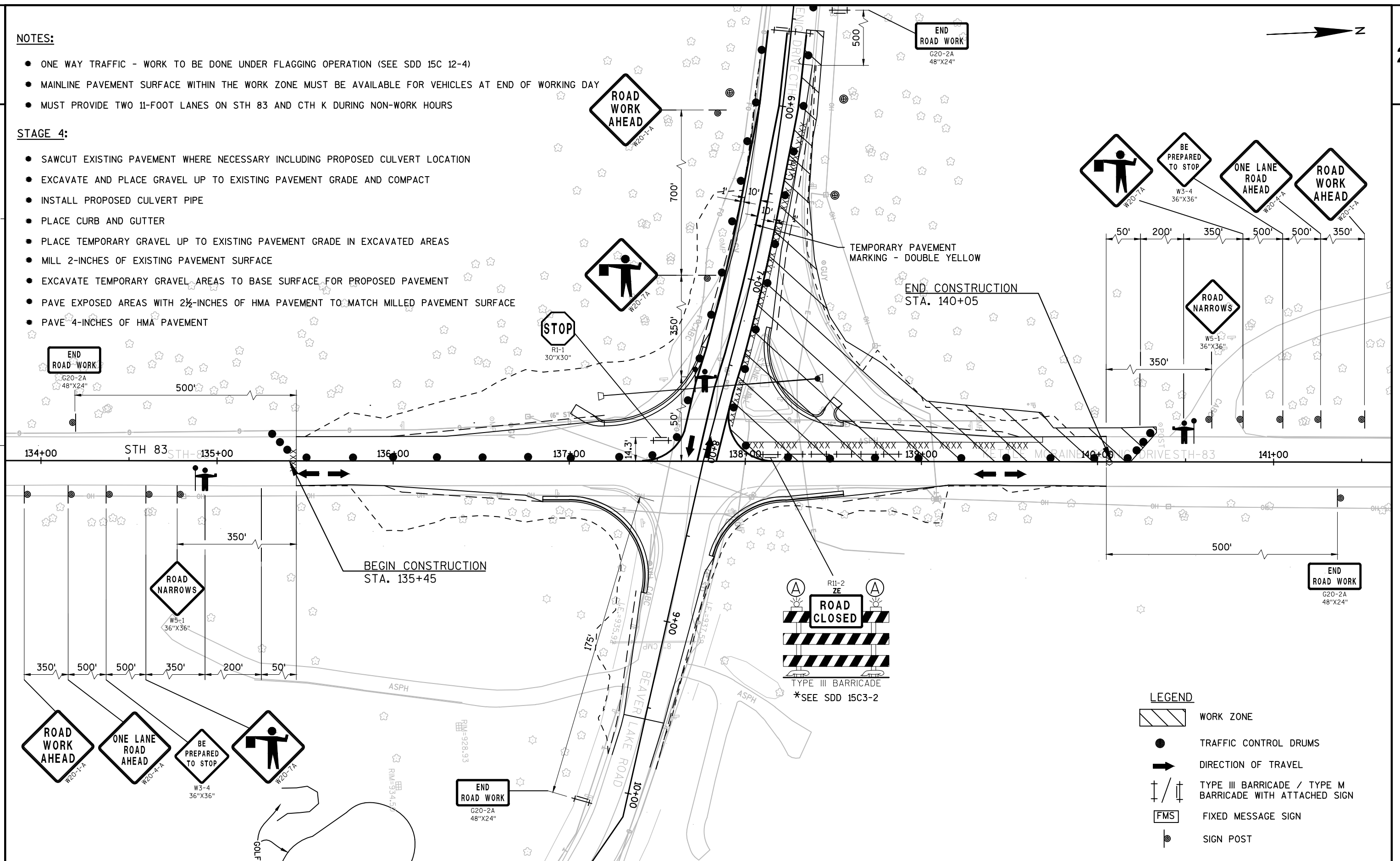


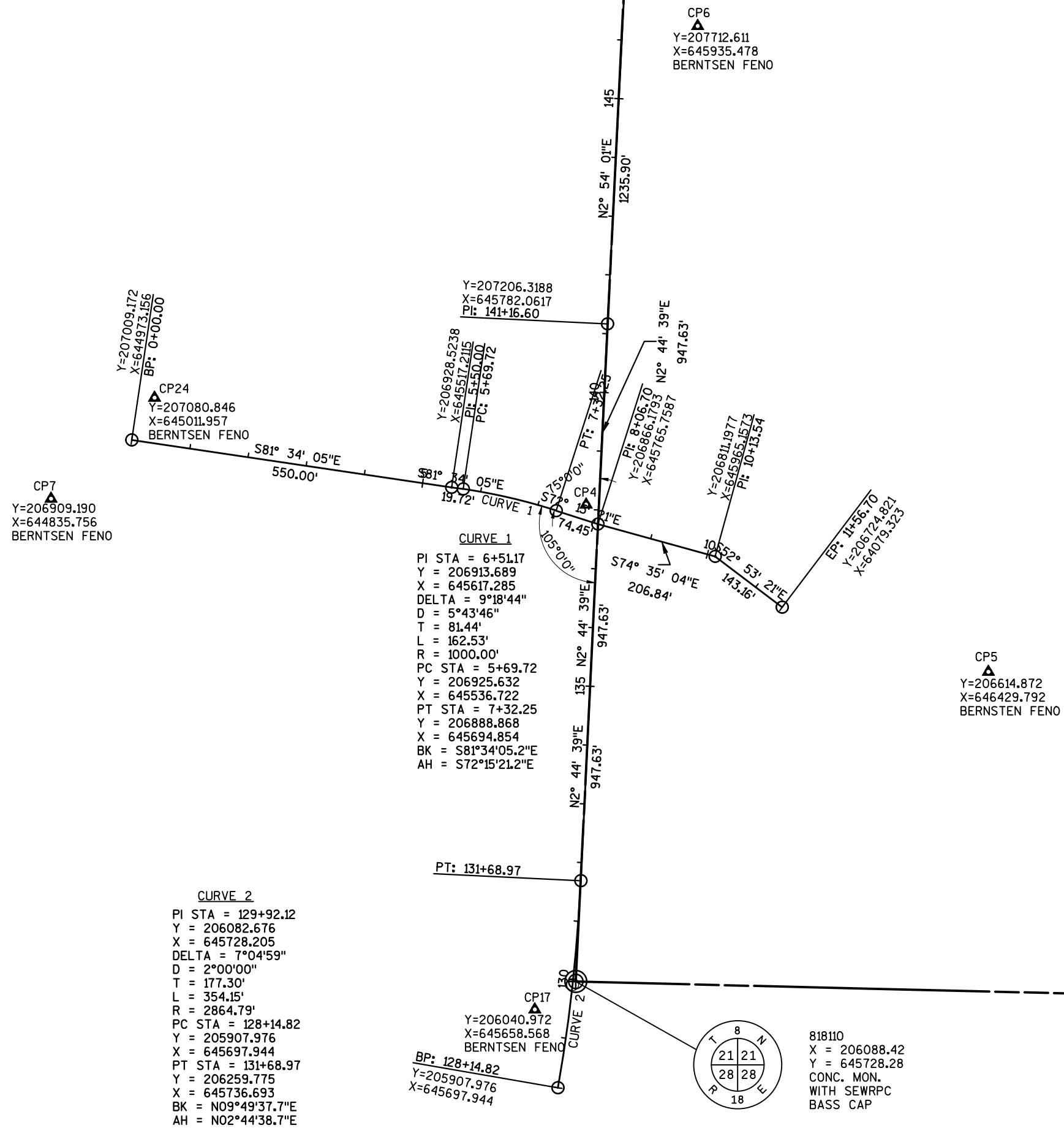
NOTES:

- ONE WAY TRAFFIC - WORK TO BE DONE UNDER FLAGGING OPERATION (SEE SDD 15C 12-4)
- MAINLINE PAVEMENT SURFACE WITHIN THE WORK ZONE MUST BE AVAILABLE FOR VEHICLES AT END OF WORKING DAY
- MUST PROVIDE TWO 11-FOOT LANES ON STH 83 AND CTH K DURING NON-WORK HOURS

STAGE 4:

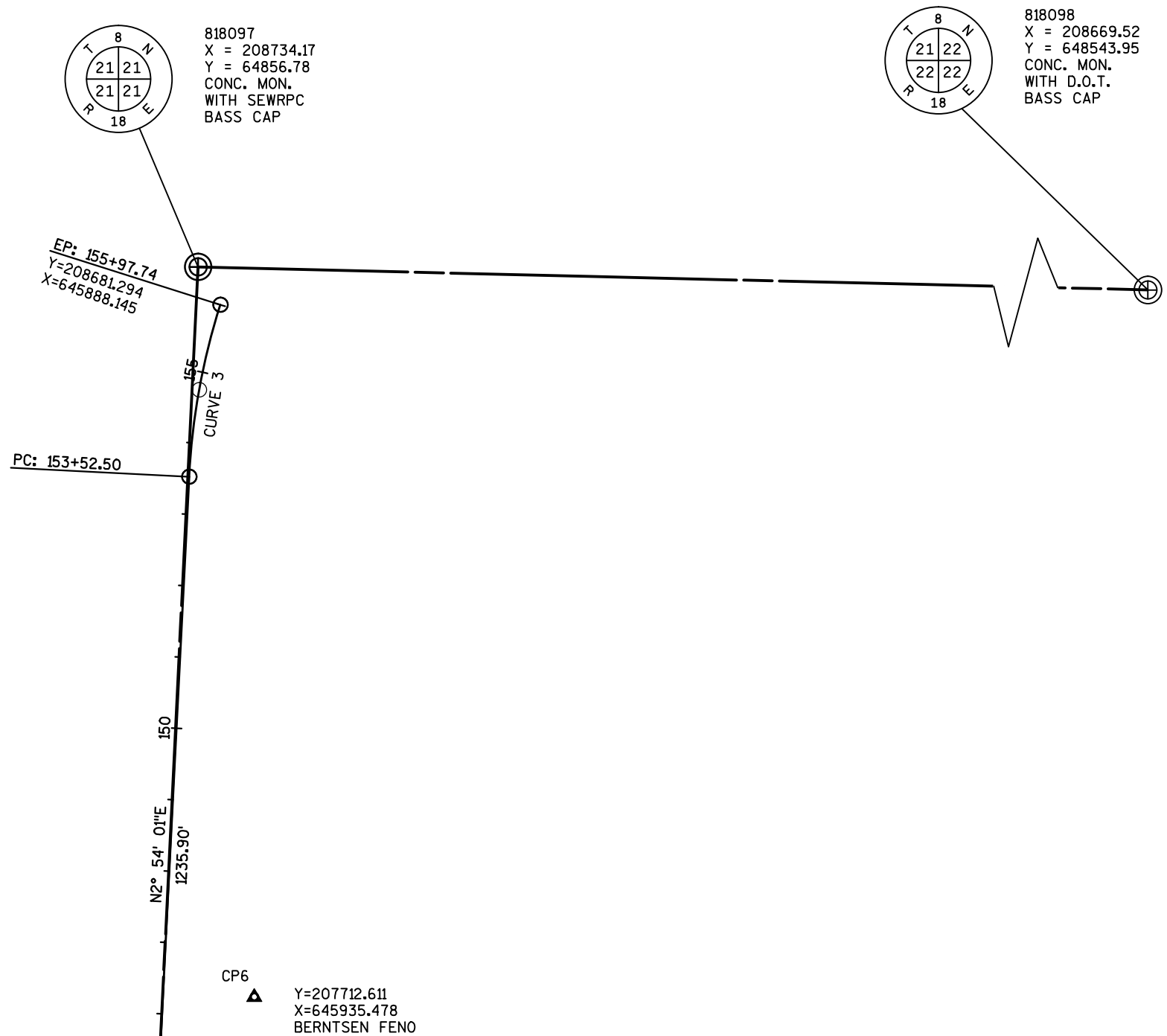
- SAWCUT EXISTING PAVEMENT WHERE NECESSARY INCLUDING PROPOSED CULVERT LOCATION
- EXCAVATE AND PLACE GRAVEL UP TO EXISTING PAVEMENT GRADE AND COMPACT
- INSTALL PROPOSED CULVERT PIPE
- PLACE CURB AND GUTTER
- PLACE TEMPORARY GRAVEL UP TO EXISTING PAVEMENT GRADE IN EXCAVATED AREAS
- MILL 2-INCHES OF EXISTING PAVEMENT SURFACE
- EXCAVATE TEMPORARY GRAVEL AREAS TO BASE SURFACE FOR PROPOSED PAVEMENT
- PAVE EXPOSED AREAS WITH 2½-INCHES OF HMA PAVEMENT TO MATCH MILLED PAVEMENT SURFACE
- PAVE 4-INCHES OF HMA PAVEMENT

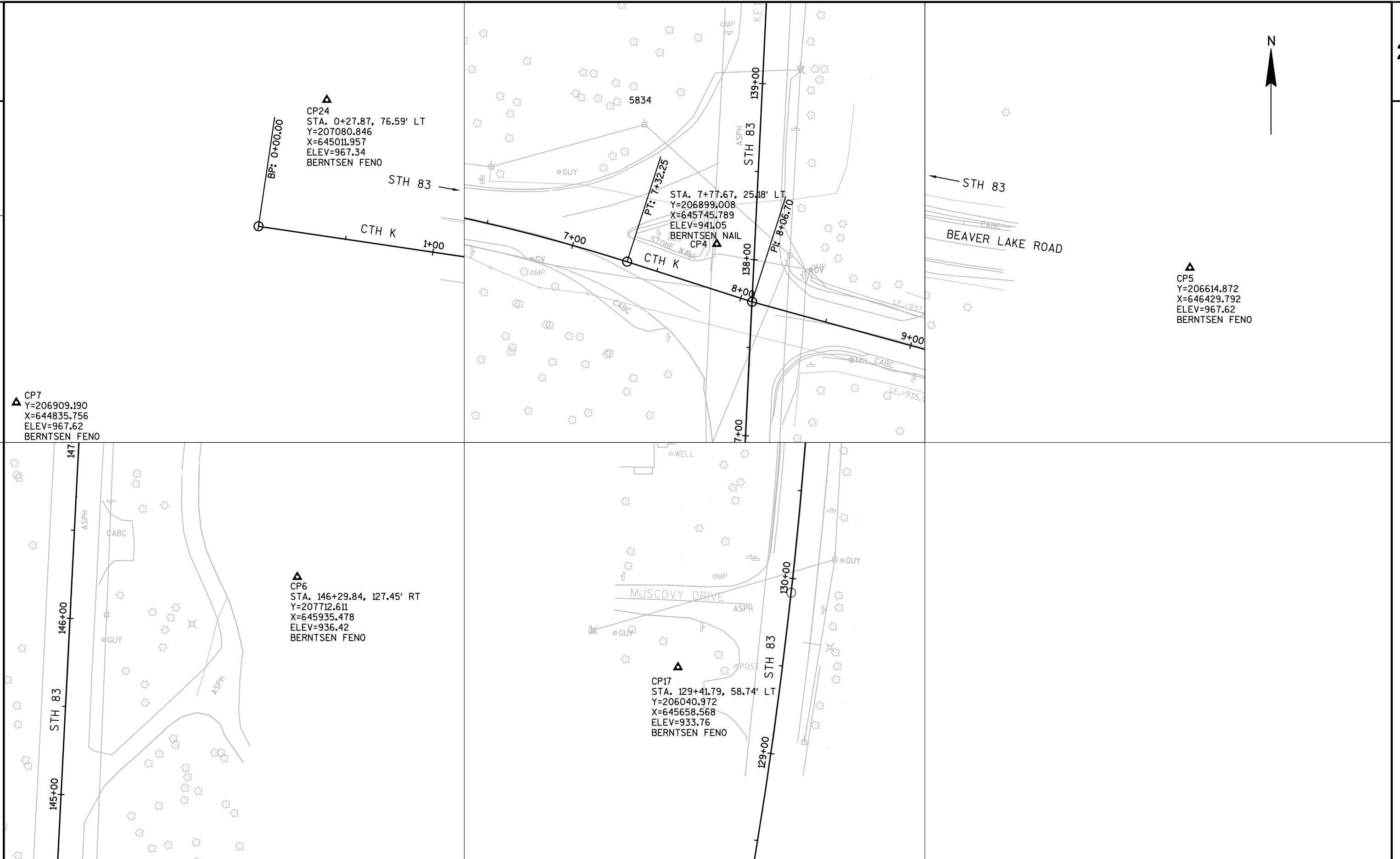






CURVE 3
PI STA = 154+75.80
Y = 208563.776
X = 645850.833
DELTA = 14°42'52"
D = 6°00'00"
T = 123.30'
L = 245.24'
R = 954.93'
PC STA = 153+52.50
Y = 208440.636
X = 645844.595
PT STA = 155+97.74
Y = 208681.294
X = 645888.145
BK = N02°54'00.8"E
AH = N17°36'52.8"E





PROJECT NO:1330-01-72

HWY:STH 83

COUNTY:WAUKESHA

ALIGNMENT CONTROL POINTS

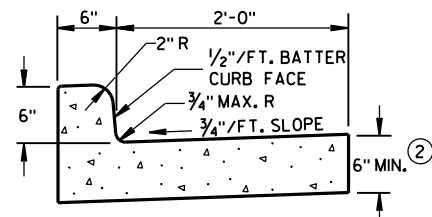
SHEET

E

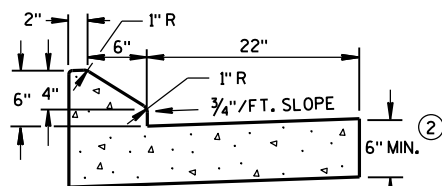
DATE 17MAR16		E S T I M A T E O F Q U A N T I T I E S			
LINE					1330-01-72
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	201.0105	Clearing	STA	14.000	14.000
0020	201.0220	Grubbing	ID	513.000	513.000
0030	204.0125	Removing Asphaltic Surface Milling	TON	207.000	207.000
0040	205.0100	Excavation Common	CY	1,202.160	1,202.160
0050	209.0100	Backfill Granular	CY	25.000	25.000
0060	213.0100	Finishing Roadway (project) 01. 1330-01-72	EACH	1.000	1.000
0070	305.0110	Base Aggregate Dense 3/4-Inch	TON	104.000	104.000
0080	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	564.000	564.000
0090	416.1010	Concrete Surface Drains	CY	8.000	8.000
0100	455.0605	Tack Coat	GAL	428.000	428.000
0110	460.2000	Incentive Density HMA Pavement	DOL	570.000	570.000
0120	460.5223	HMA Pavement 3 LT 58-28 S	TON	567.000	567.000
0130	460.5224	HMA Pavement 4 LT 58-28 S	TON	309.000	309.000
0140	522.0312	Culvert Pipe Reinforced Concrete Class IV 12-Inch	LF	122.000	122.000
0150	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	2.000	2.000
0160	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	350.000	350.000
0170	606.0100	Riprap Light	CY	15.000	15.000
0180	619.1000	Mobilization	EACH	1.000	1.000
0190	624.0100	Water	MGAL	35.000	35.000
0200	625.0500	Salvaged Topsoil	SY	472.000	472.000
0210	628.1104	Erosion Bales	EACH	4.000	4.000
0220	628.1504	Silt Fence	LF	426.000	426.000
0230	628.1520	Silt Fence Maintenance	LF	426.000	426.000
0240	628.2004	Erosion Mat Class I Type B	SY	472.000	472.000
0250	628.7555	Culvert Pipe Checks	EACH	1.000	1.000
0260	629.0205	Fertilizer Type A	CWT	0.300	0.300
0270	630.0130	Seeding Mixture No. 30	LB	7.000	7.000
0280	630.0140	Seeding Mixture No. 40	LB	15.000	15.000
0290	630.0200	Seeding Temporary	LB	7.000	7.000
0300	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	35.000	35.000
0310	634.0816	Posts Tubular Steel 2x2-Inch X 16-FT	EACH	1.000	1.000
0320	637.2210	Signs Type II Reflective H	SF	259.860	259.860
0330	637.2230	Signs Type II Reflective F	SF	44.250	44.250
0340	638.2102	Moving Signs Type II	EACH	4.000	4.000
0350	638.2602	Removing Signs Type II	EACH	24.000	24.000
0360	638.3000	Removing Small Sign Supports	EACH	24.000	24.000
0370	642.5001	Field Office Type B	EACH	1.000	1.000
0380	643.0200	Traffic Control Surveillance and Maintenance (project) 01. 1330-01-72	DAY	44.000	44.000
0390	643.0300	Traffic Control Drums	DAY	2,420.000	2,420.000
0400	643.0420	Traffic Control Barricades Type III	DAY	516.000	516.000
0410	643.0705	Traffic Control Warning Lights Type A	DAY	176.000	176.000
0420	643.1000	Traffic Control Signs Fixed Message	SF	60.000	60.000
0430	643.1050	Traffic Control Signs PCMS	DAY	10.000	10.000
0440	645.0130	Geotextile Fabric Type R	SY	15.000	15.000
0450	646.0600	Removing Pavement Markings	LF	445.000	445.000
0460	646.2304.S	Pavement Marking Grooved Wet Reflective Epoxy 4-Inch	LF	2,922.000	2,922.000
0470	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	1,650.000	1,650.000
0480	650.5000	Construction Staking Base	LF	1,100.000	1,100.000

Standard Detail Drawing List

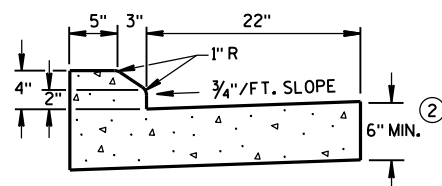
08D01-18	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
14B29-01	SAFETY EDGE
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-01A	TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS



TYPES A & D ①

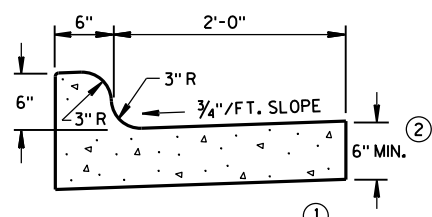


6" SLOPED CURB TYPES G & J ①



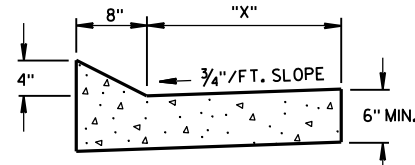
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"



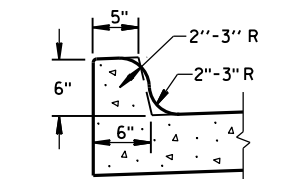
TYPES K & L ①

CONCRETE CURB & GUTTER 30"

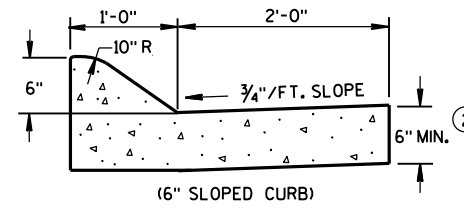


TYPES TBT & TBT ①
CONCRETE CURB & GUTTER

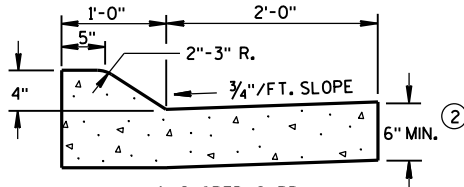
TBT & TBT	"X"
30"	22"
36"	28"



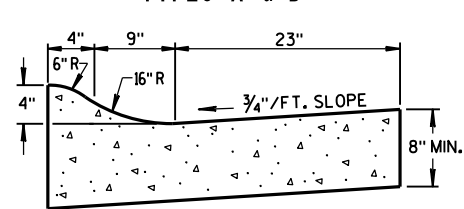
OPTIONAL CURB SHAPE
FOR TYPES K & L ①



(6" SLOPED CURB)

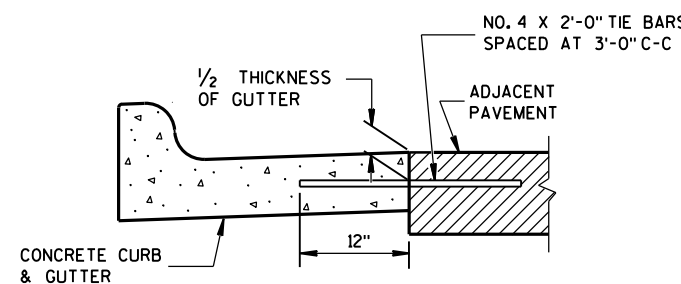


(4" SLOPED CURB)
TYPES A & D ①

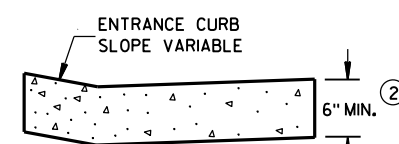


4" SLOPED CURB TYPES R & T ① ④

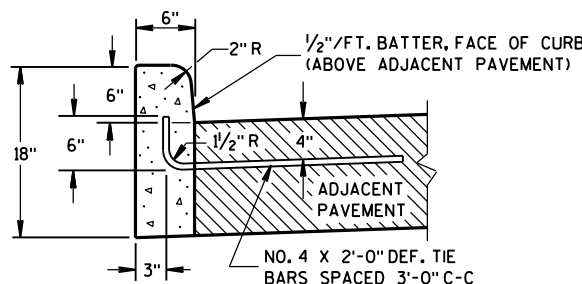
CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION ①

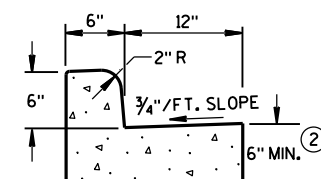


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

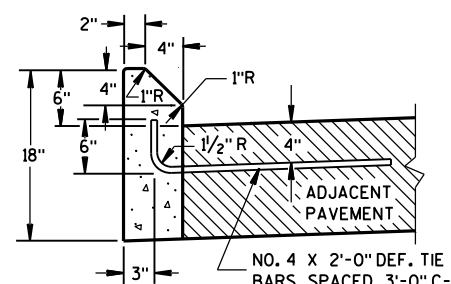


TYPES A & D ①

CONCRETE CURB



TYPES A & D
CONCRETE CURB & GUTTER 18"



TYPES G & J ①

GENERAL NOTES

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

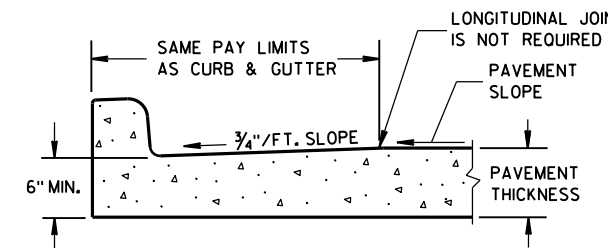
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

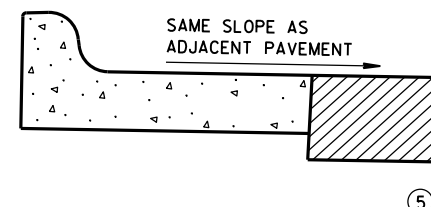
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

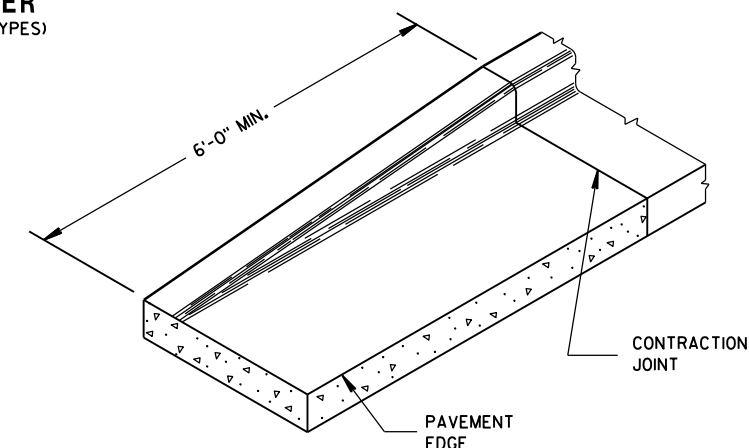
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED 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.



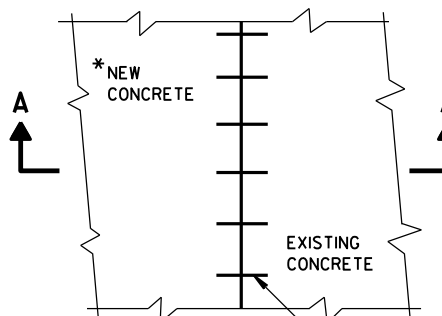
PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



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



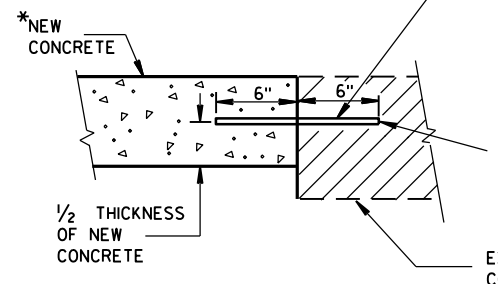
END SECTION CURB & GUTTER



PLAN VIEW

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

NO. 6 TIE BARS SPACED 2'-6" C-C,
INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT.



SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

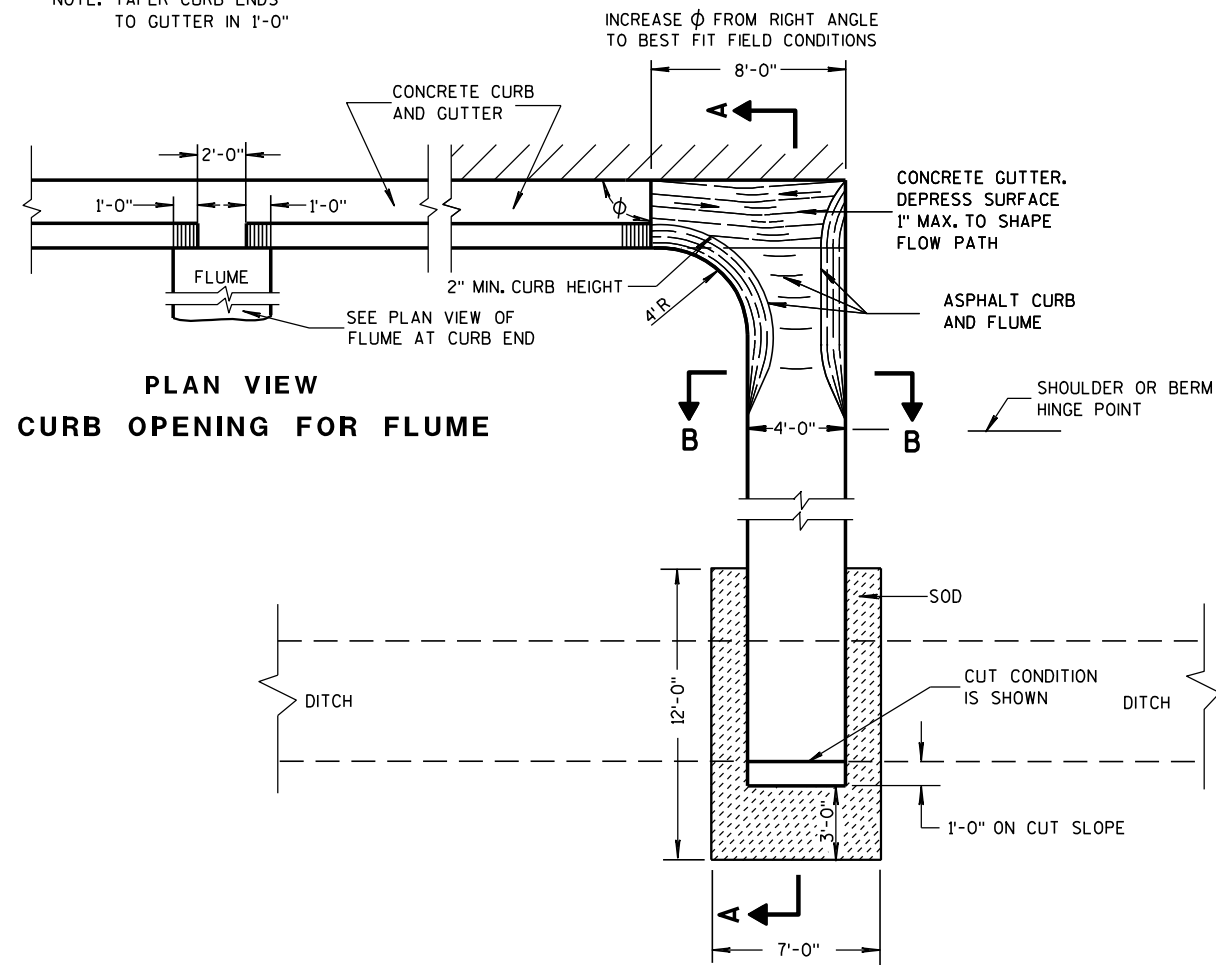
CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

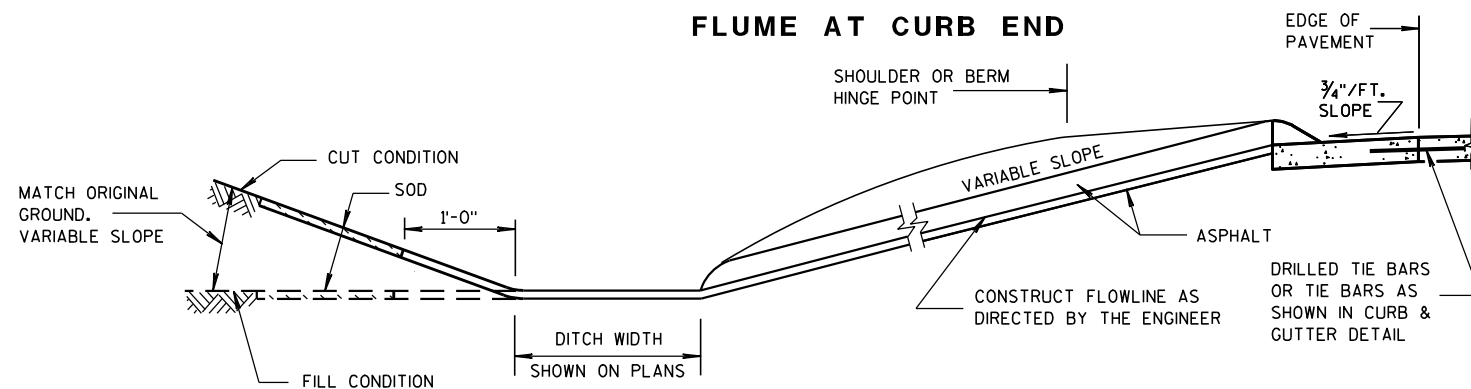
ASPHALTIC FLUME

NOTE: TAPER CURB ENDS
TO GUTTER IN 1'-0"

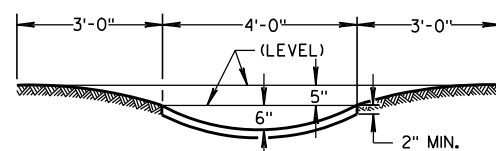


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

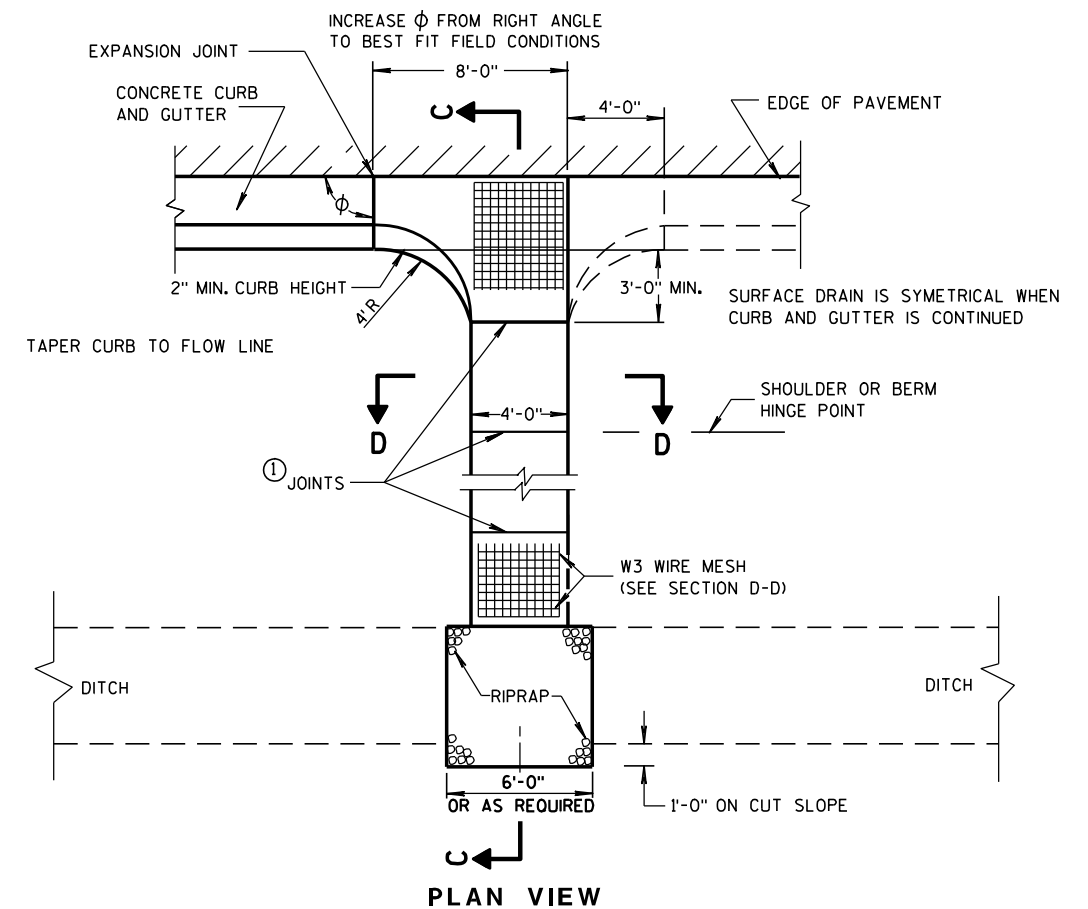
GENERAL NOTES

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

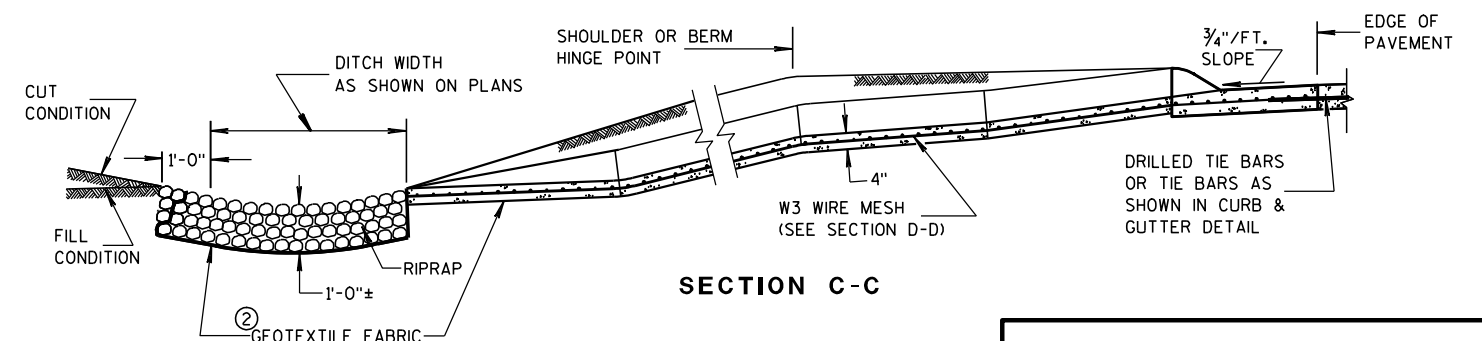
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

- ① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
- ② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
- ③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

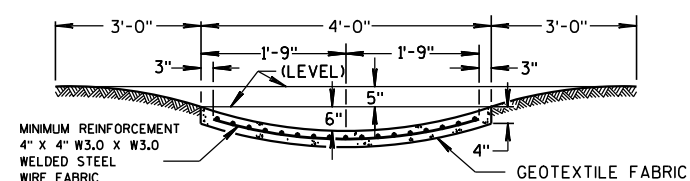
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

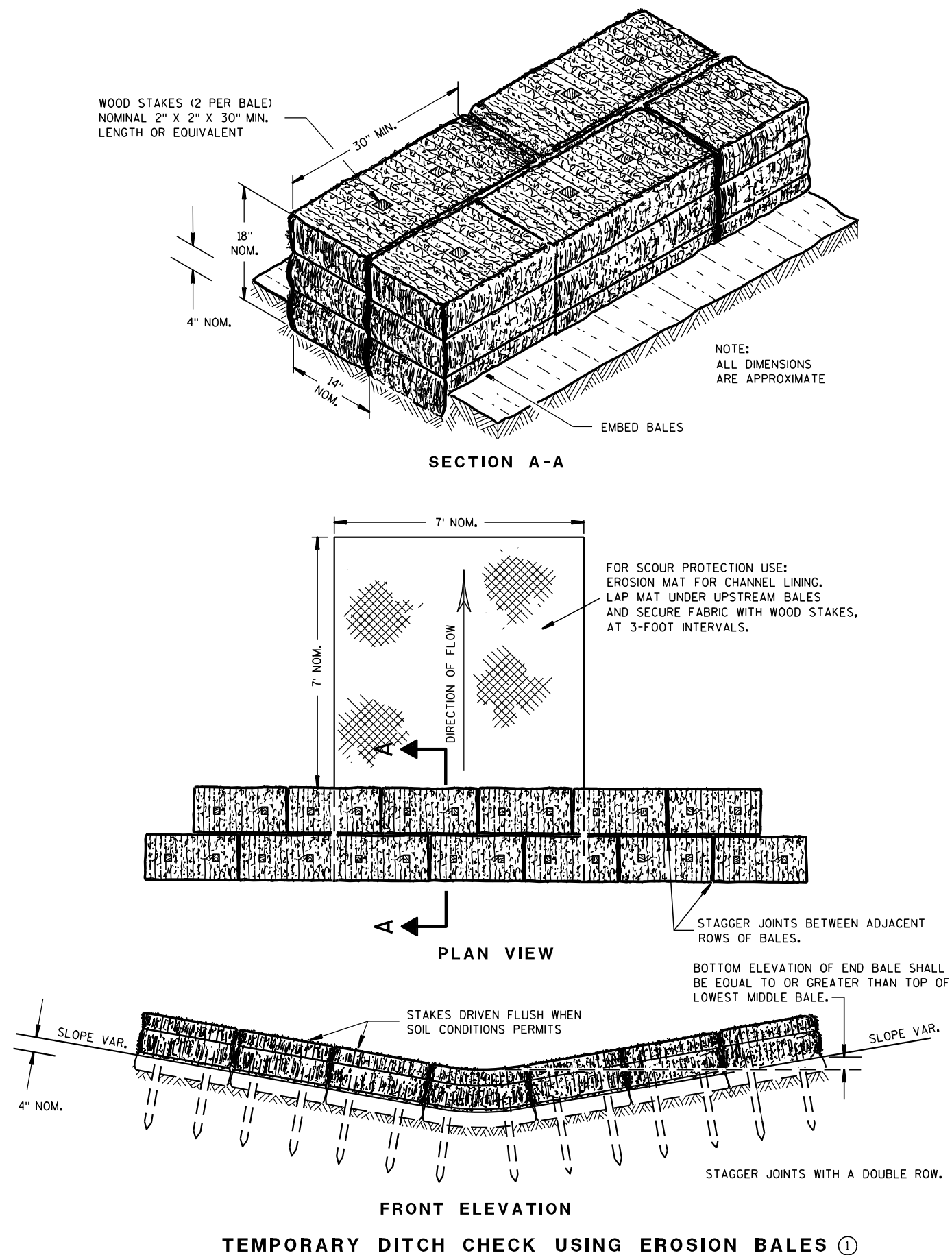
APPROVED

9-4-08

DATE

FHWA

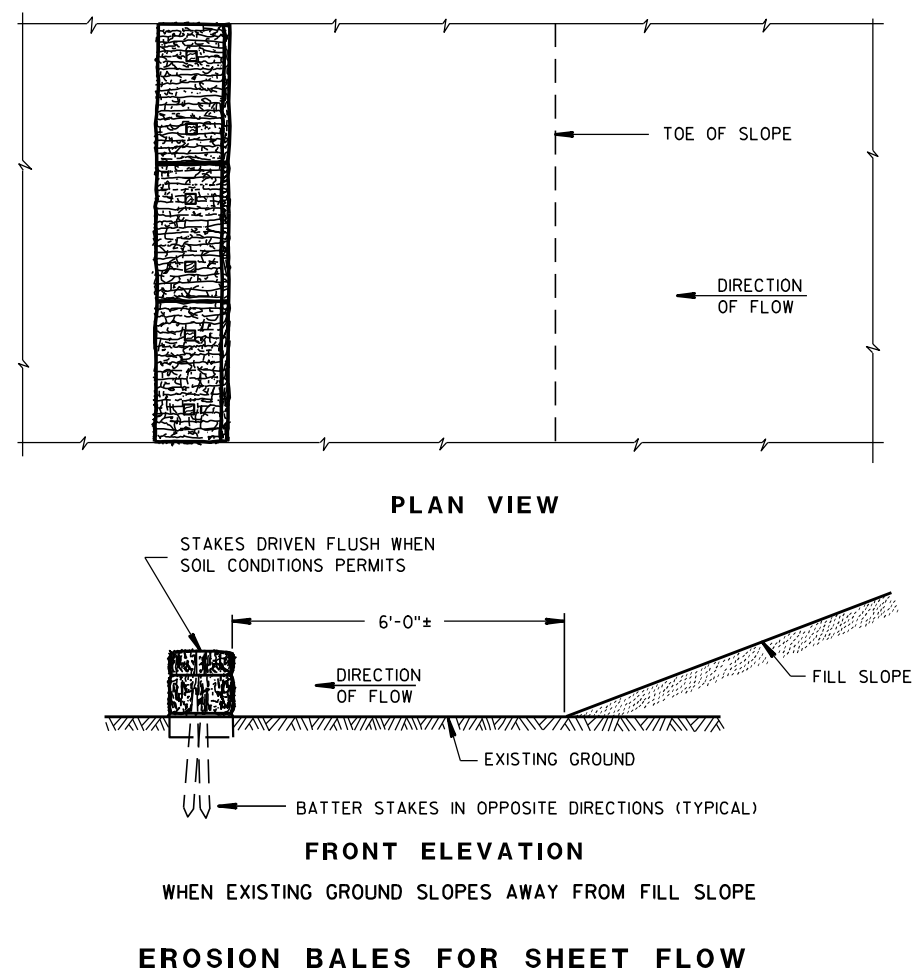
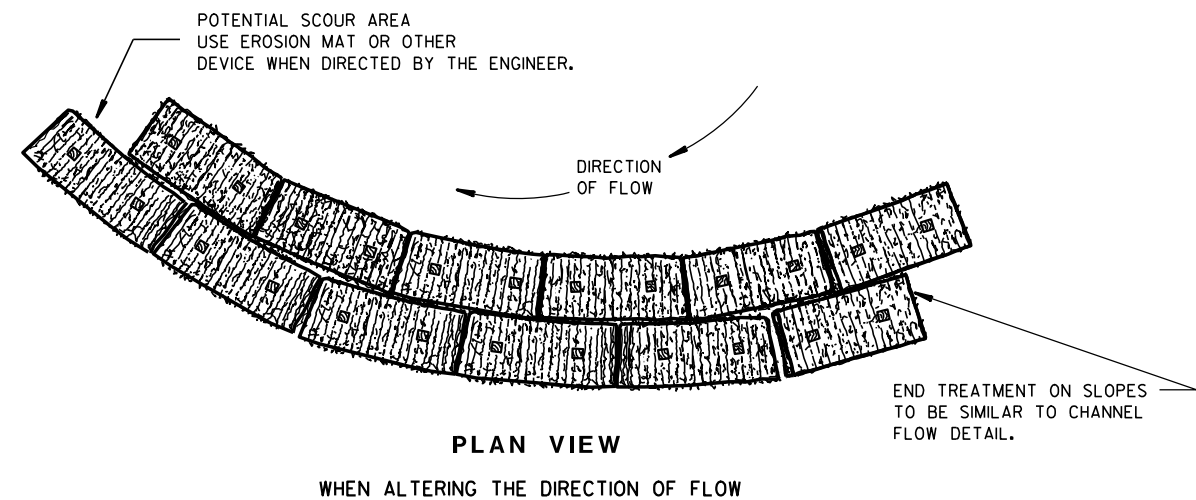
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



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.



TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02
DATE

FHWA

/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



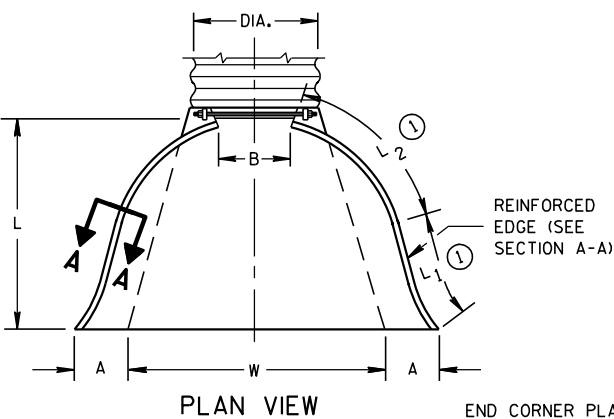
- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" 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.



<div style="text-align: center;">SILT FENCE</div>	
<div style="text-align: center;">STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</div>	
<div>APPROVED</div> <div><u>4-29-05</u></div> <div><u>DATE</u></div>	<div><u>/S/ Beth Canestra</u></div> <div>CHIEF ROADWAY DEVELOPMENT ENGINEER</div>

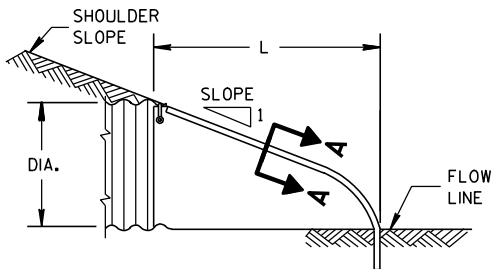
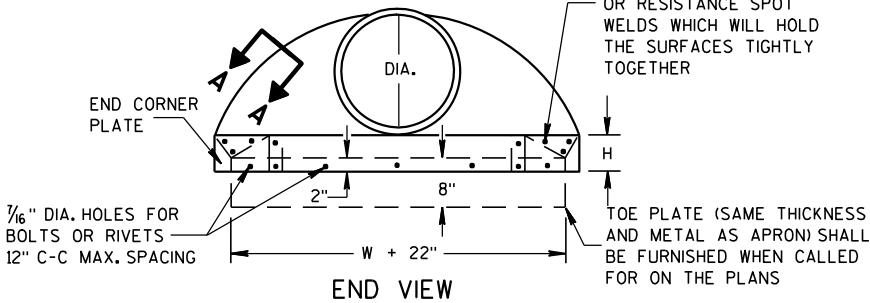
METAL APRON ENDWALLS												
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY	
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L ₁ ①	L ₂ ①	W (±2")			
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.	
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.	
18	.064	.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	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3 Pc.	
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3 Pc.	
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3 Pc.	
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.	
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.	
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.	
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.	

* EXCEPT CENTER PANEL
SEE GENERAL NOTES



END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

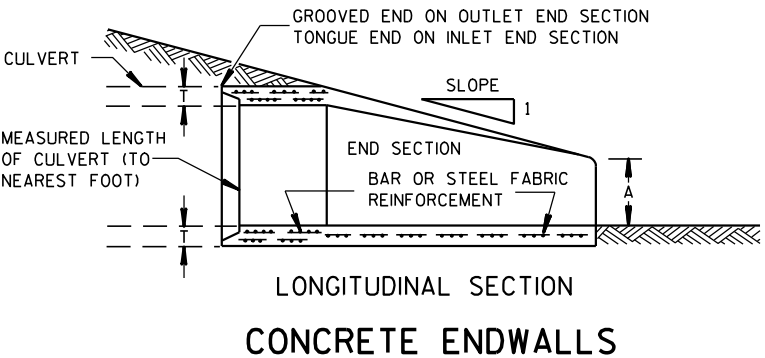
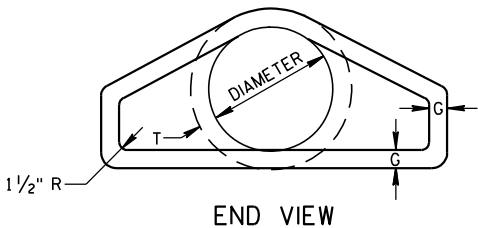
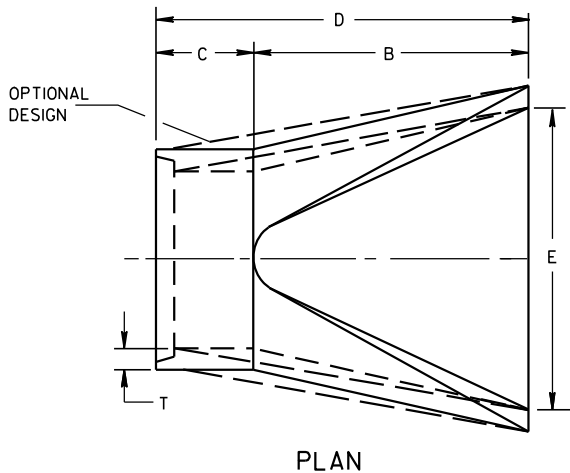
TOE PLATE (SAME THICKNESS AND METAL AS APRON) SHALL BE FURNISHED WHEN CALLED FOR ON THE PLANS



SIDE ELEVATION
METAL ENDWALLS

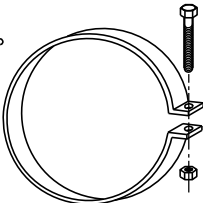
REINFORCED CONCRETE APRON ENDWALLS								
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE
	T	A	B	C	D	E	G	
12	2	4	24	48 ⁷ / ₈	72 ⁷ / ₈	24	2	3 to 1
15	2 ¹ / ₄	6	27	46	73	30	2 ¹ / ₄	3 to 1
18	2 ¹ / ₂	9	27	46	73	36	2 ¹ / ₂	3 to 1
21	2 ³ / ₄	9	36	37 ¹ / ₂	73 ¹ / ₂	42	2 ³ / ₄	3 to 1
24	3	9 ¹ / ₂	43 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

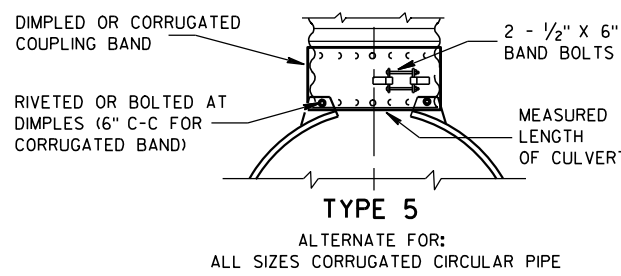
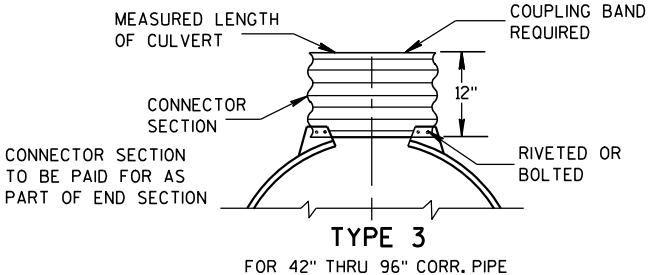
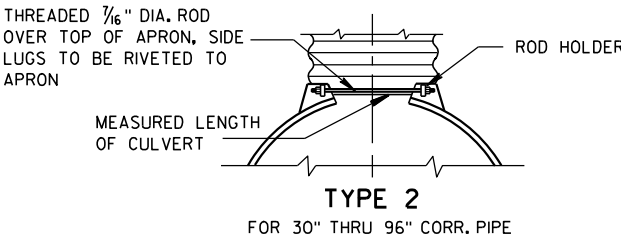
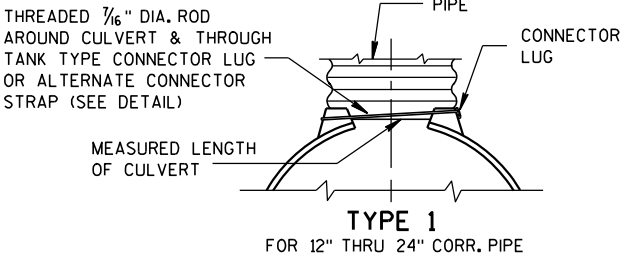


LONGITUDINAL SECTION
CONCRETE ENDWALLS

1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



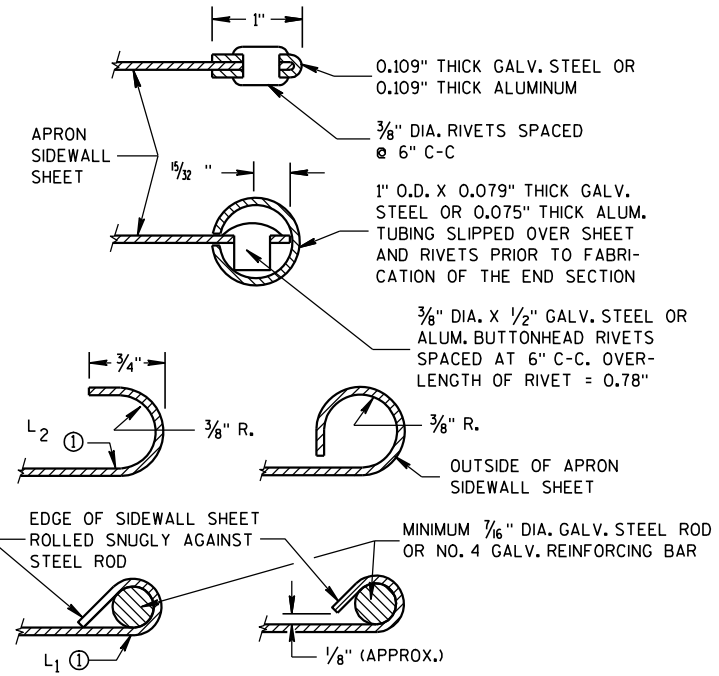
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

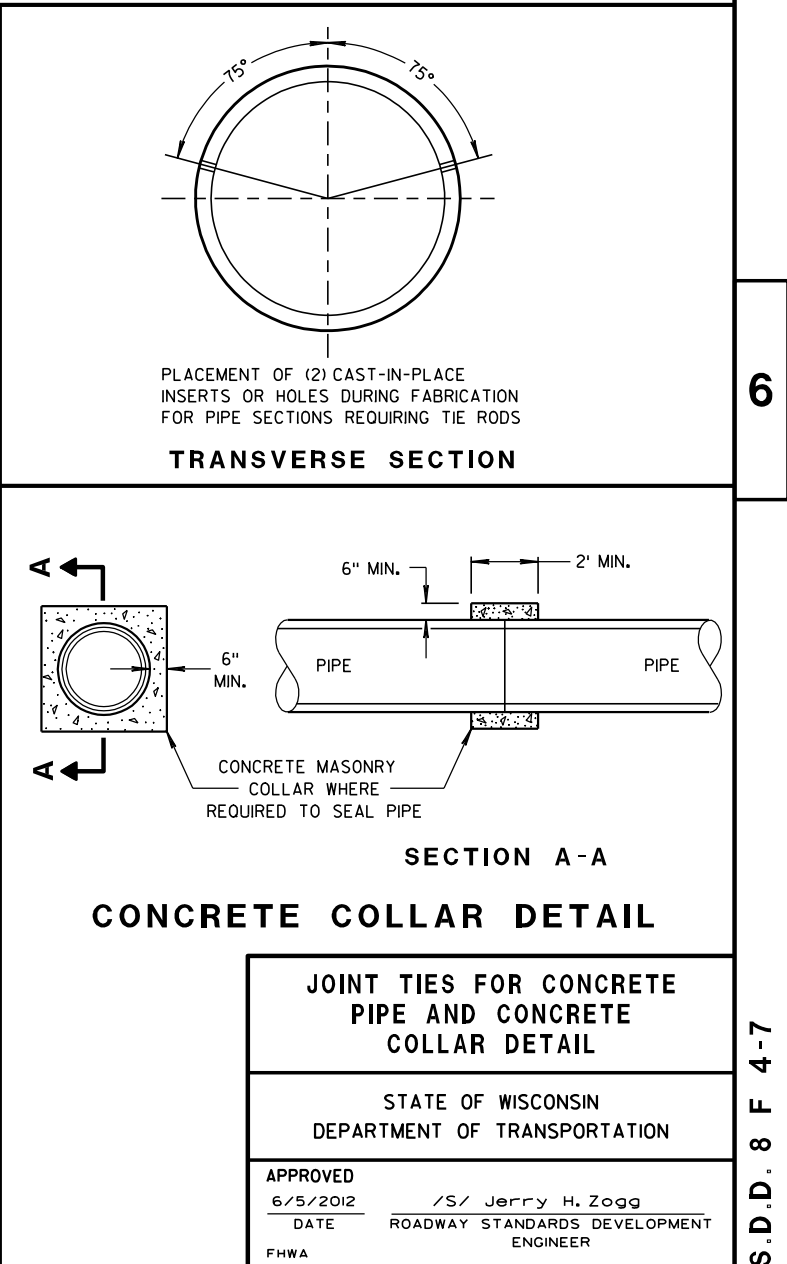
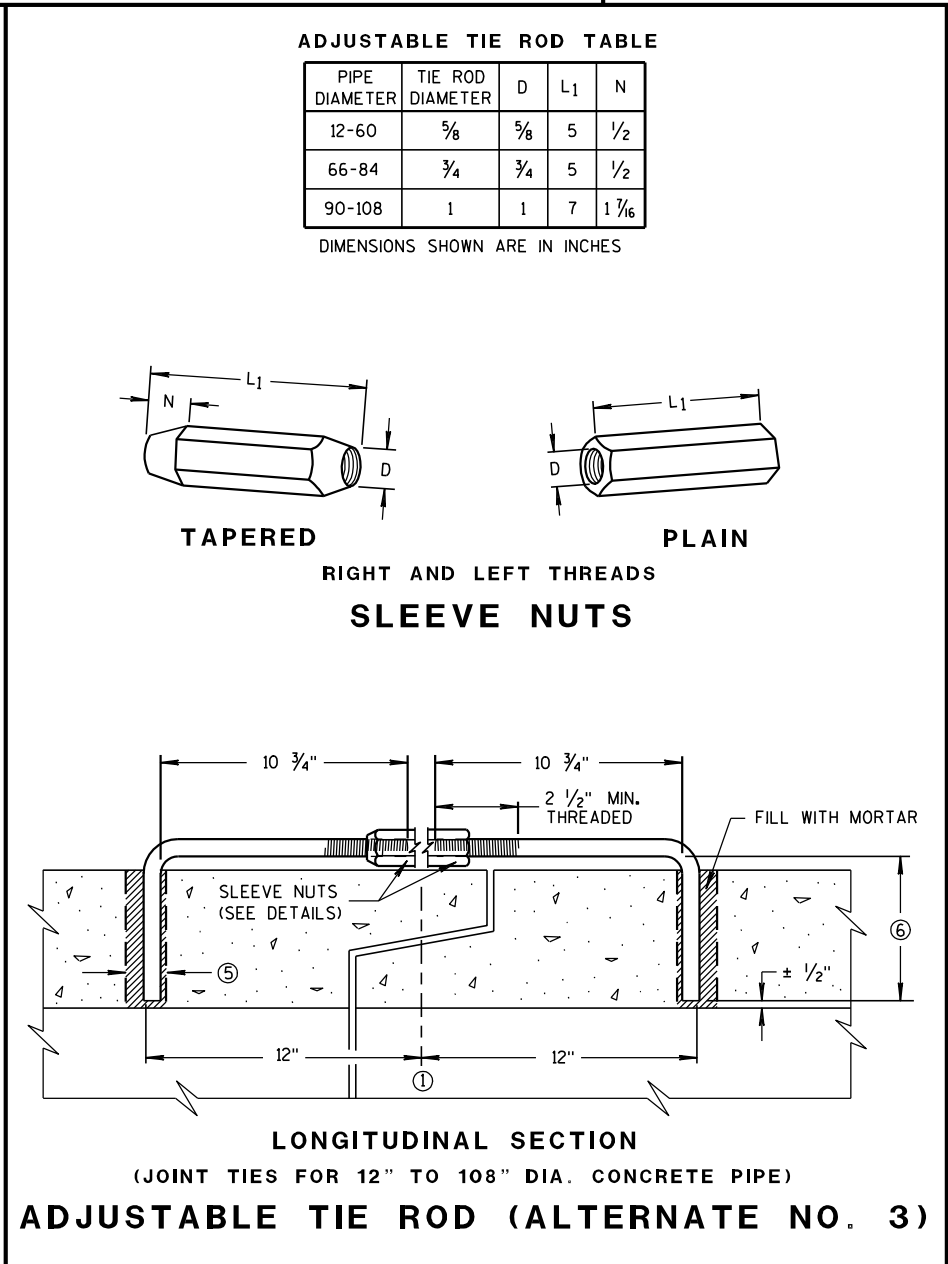
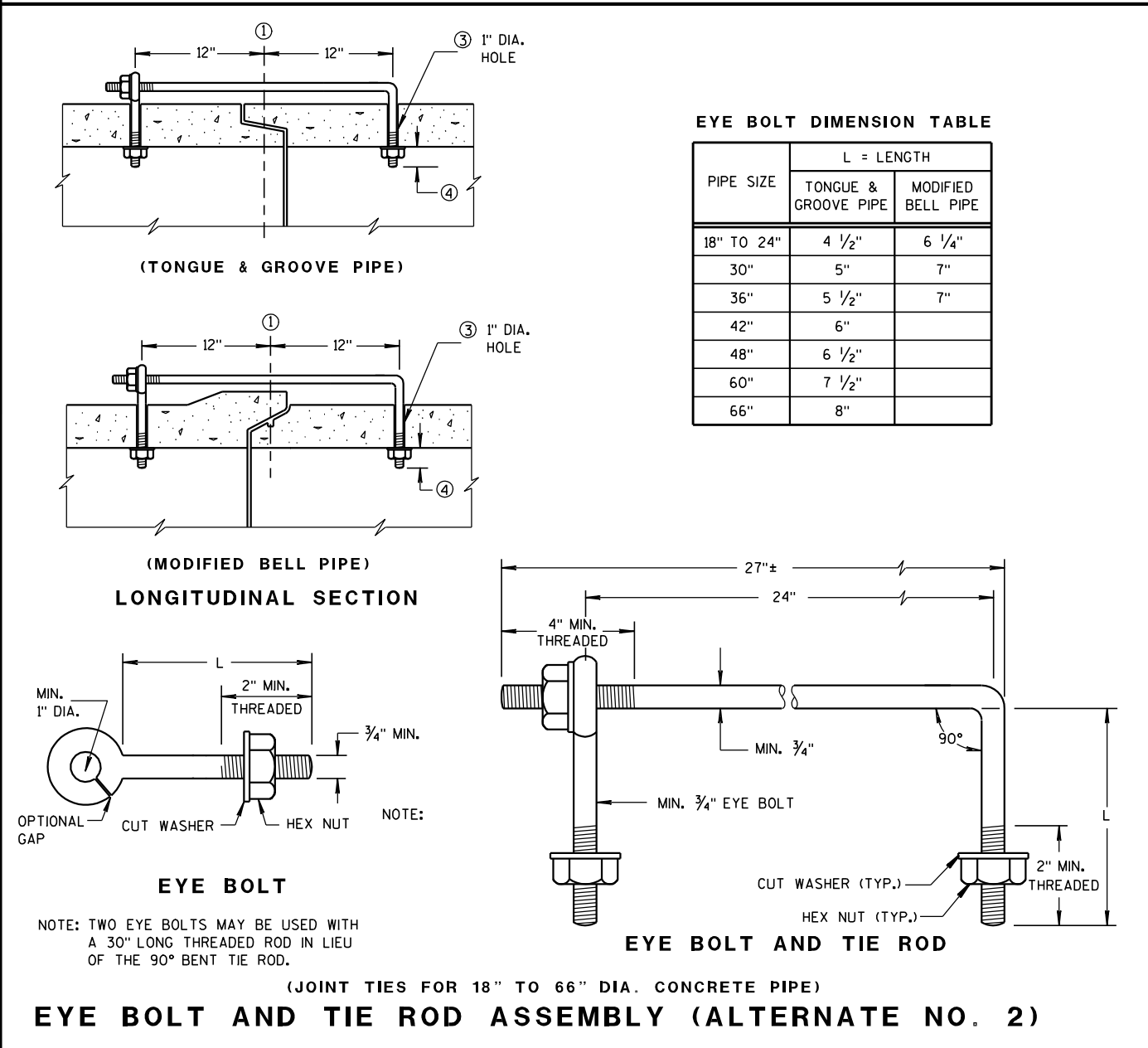
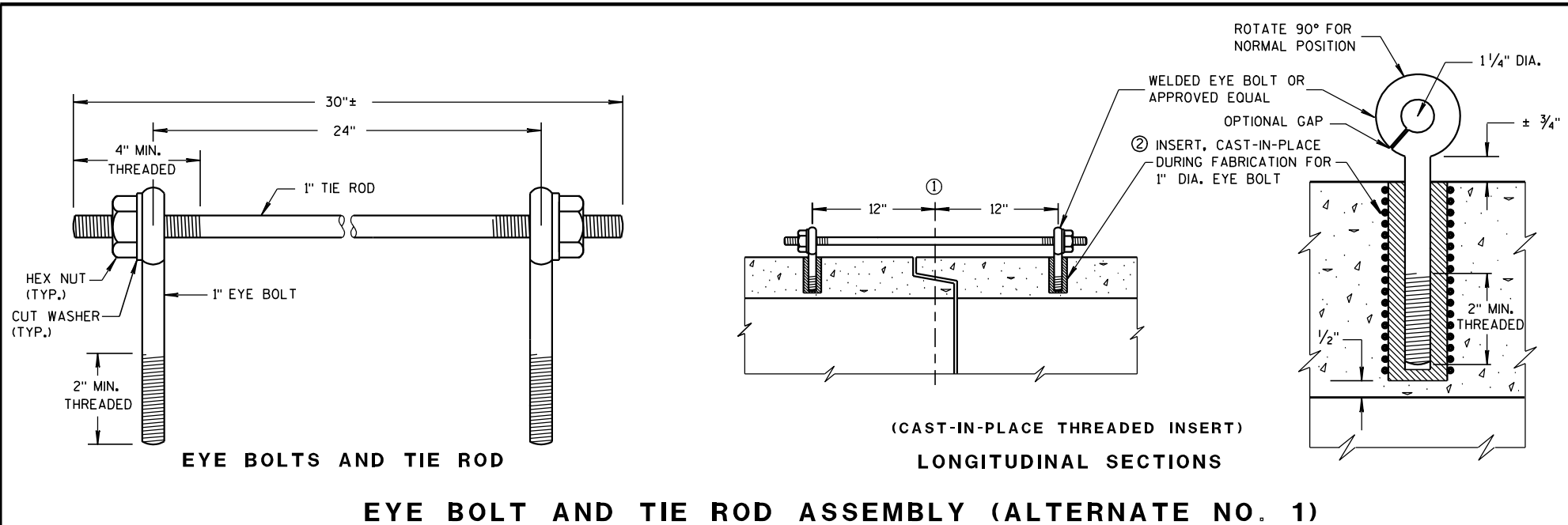
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

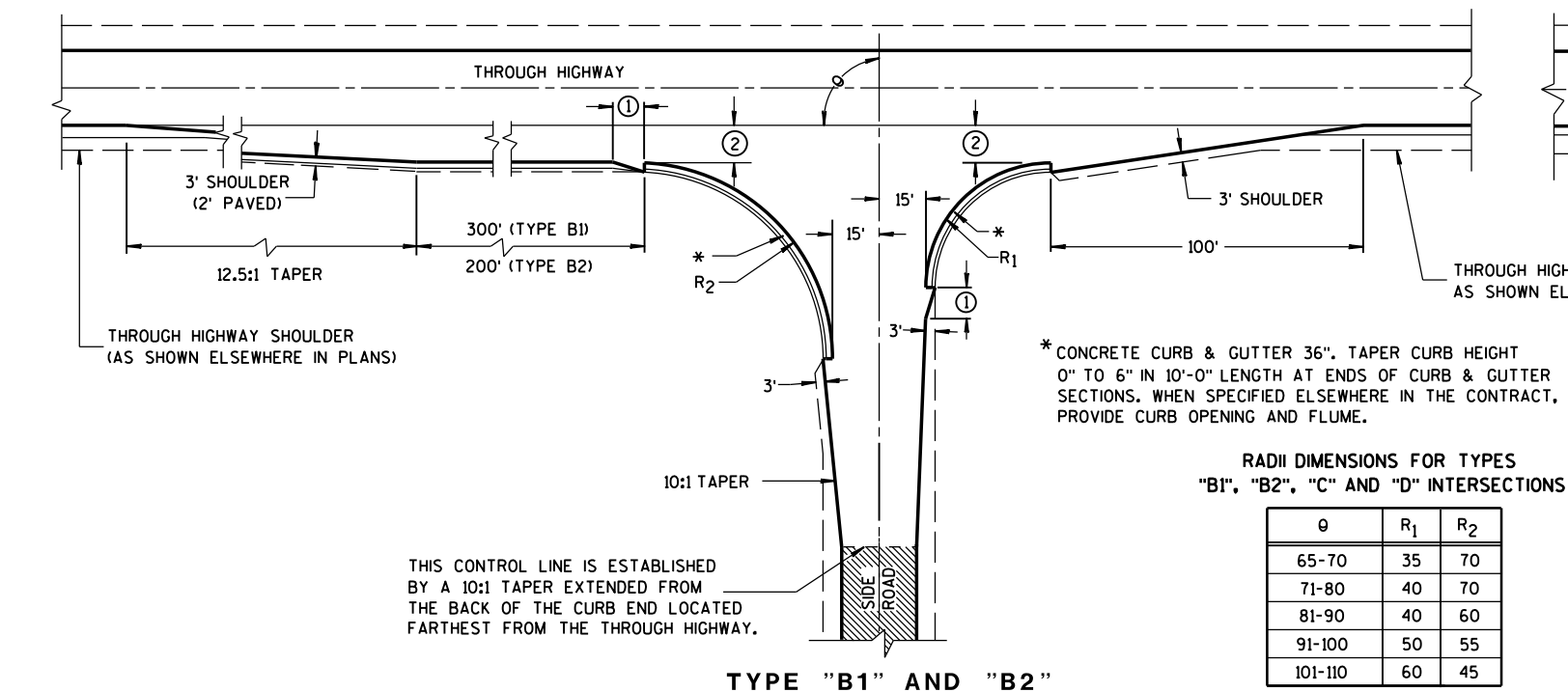
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

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





GENERAL NOTES

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

SIDE ROAD SURFACING NOTE

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

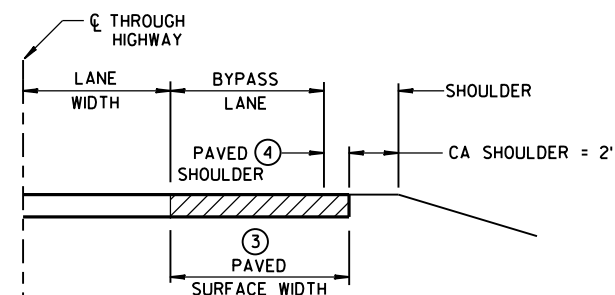
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

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

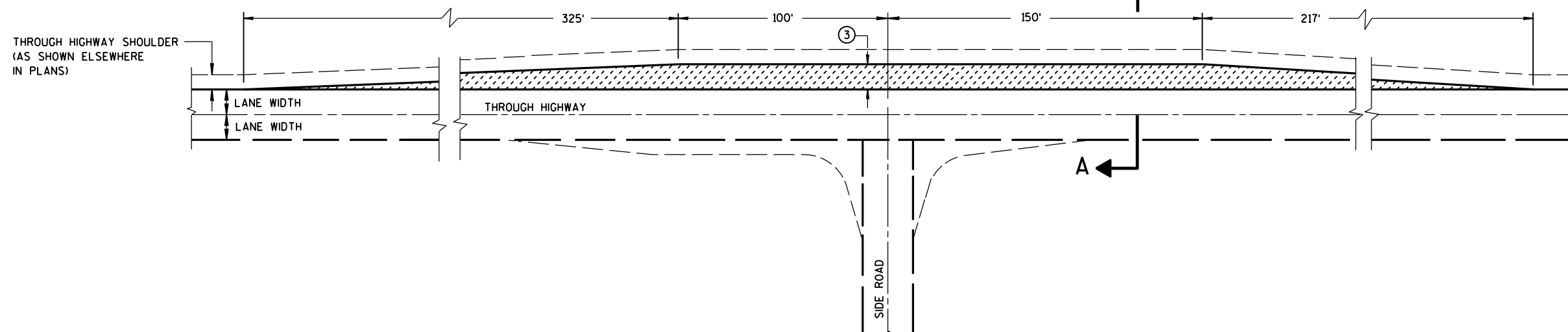
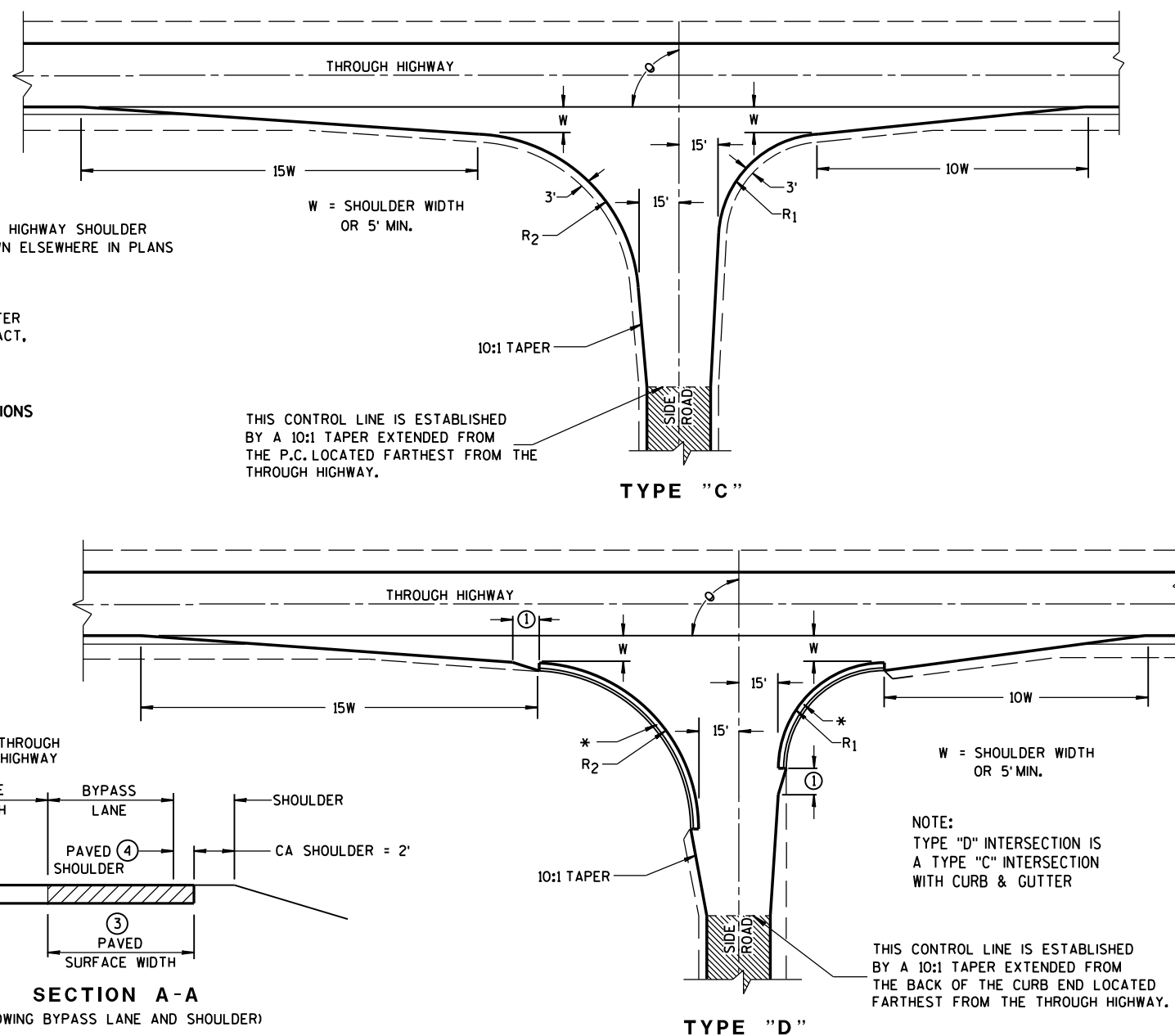
EXISTING PAVED SURFACE

BYPASS LANE

- ① 10-FT TYPICAL.
- ② 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.
- **10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.
- ③ BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CONCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.
- ④ BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



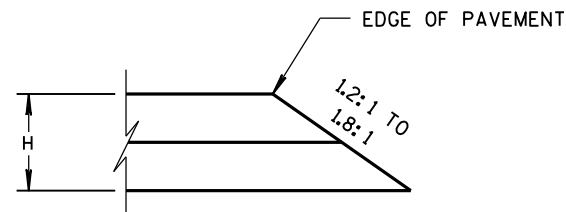
SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



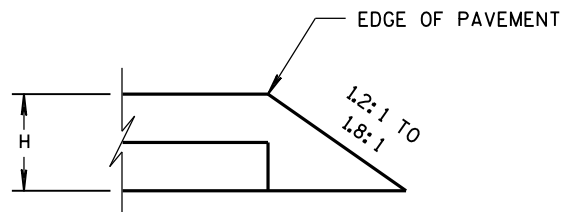
TEE INTERSECTION BYPASS LANE DETAIL

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

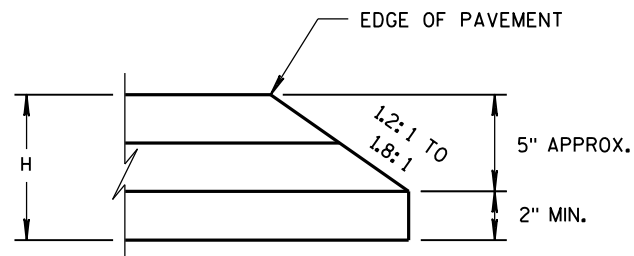
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



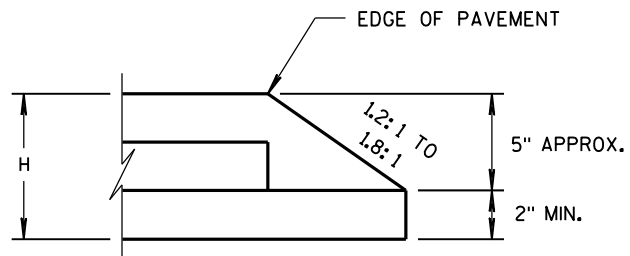
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

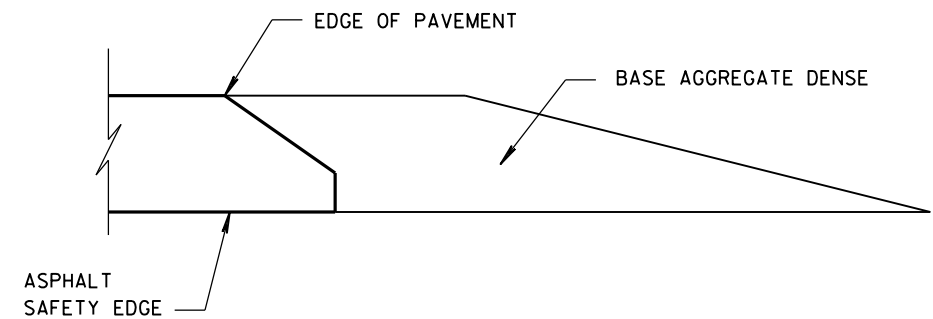


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



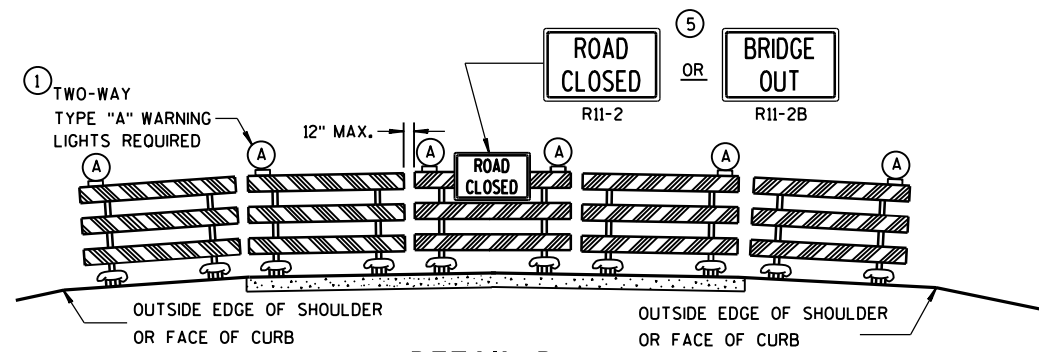
FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE_{SM}

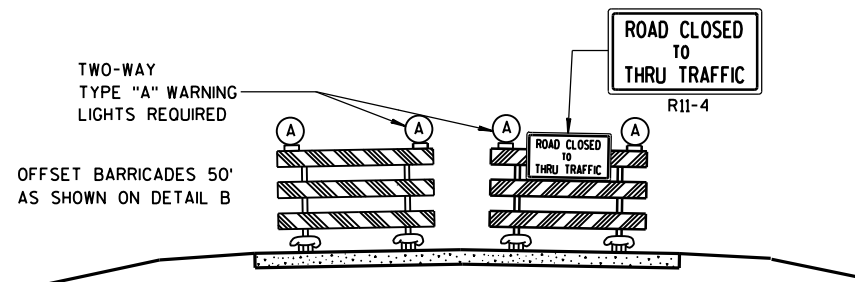
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/2012
DATE
FHWA

/s/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30".

R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".

M4-9 SHALL BE 30" X 24".

M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)

M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)

M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)

M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)

D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

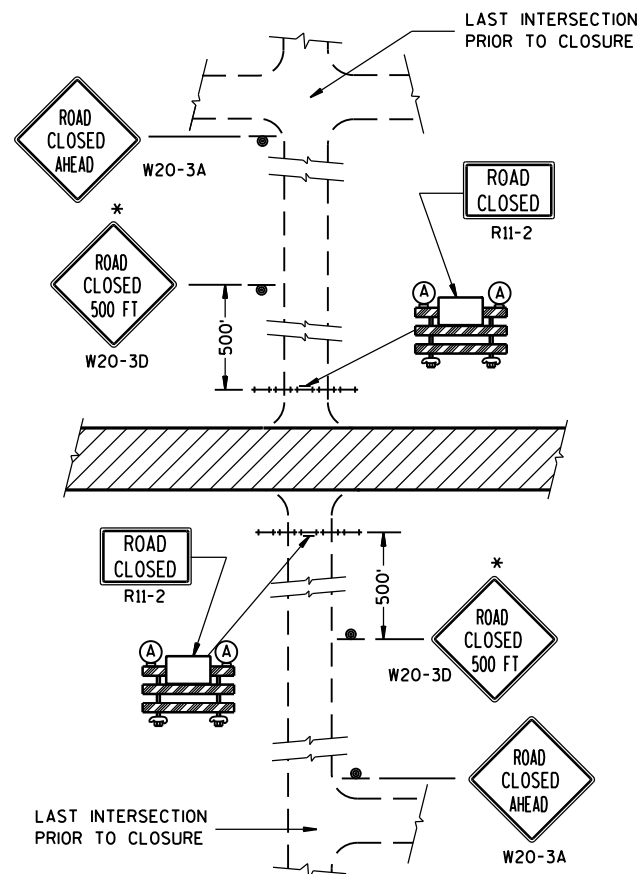
R1-1 SHALL BE 36" X 36".

- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- ③ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- ④ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- ⑤ FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- ⑥ INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- ⑦ "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

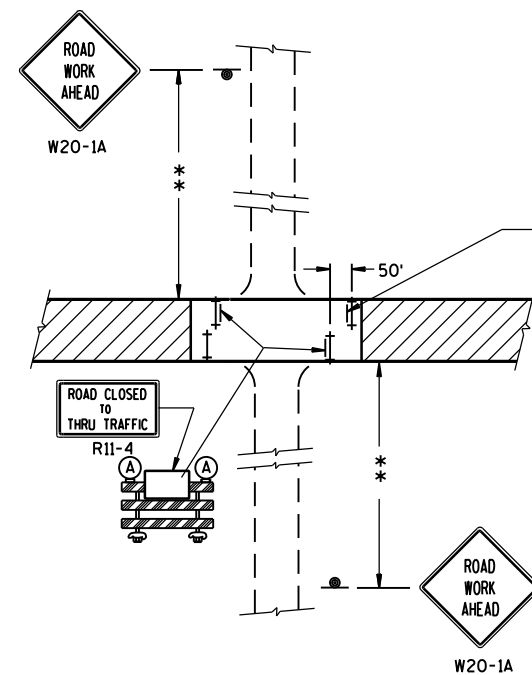
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

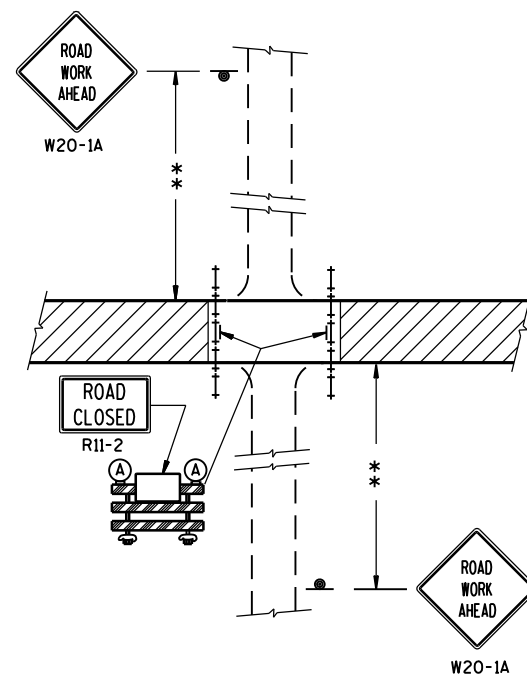
8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



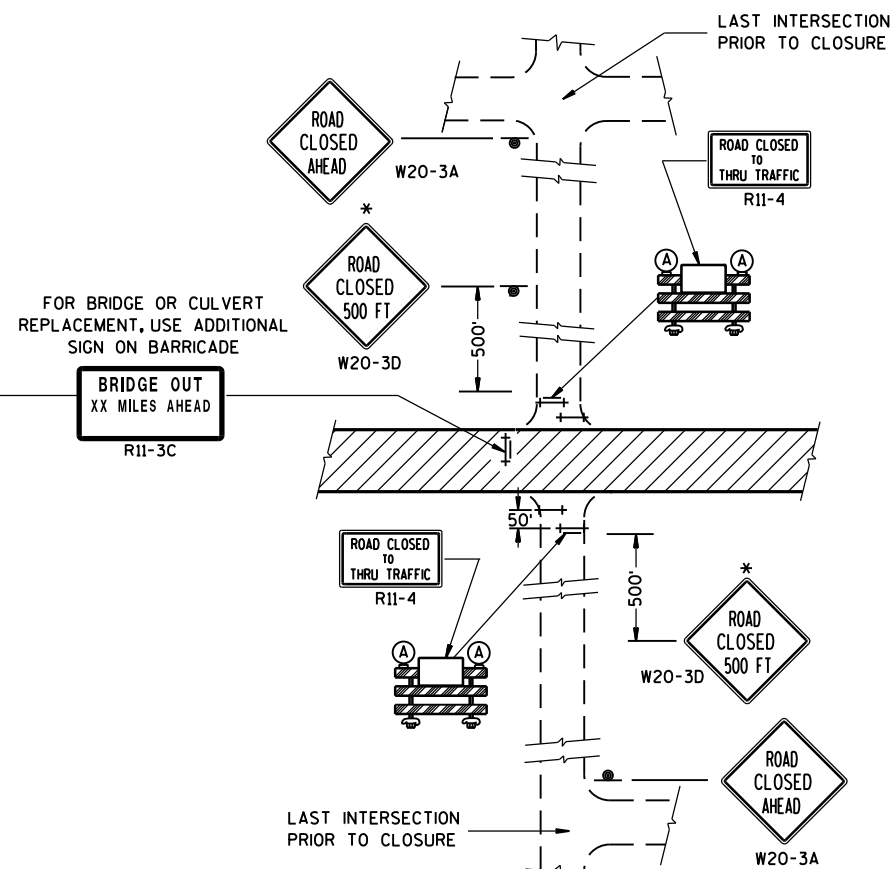
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT).



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30".

R11-4 AND R11-3 SHALL BE 60" X 30".

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

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

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

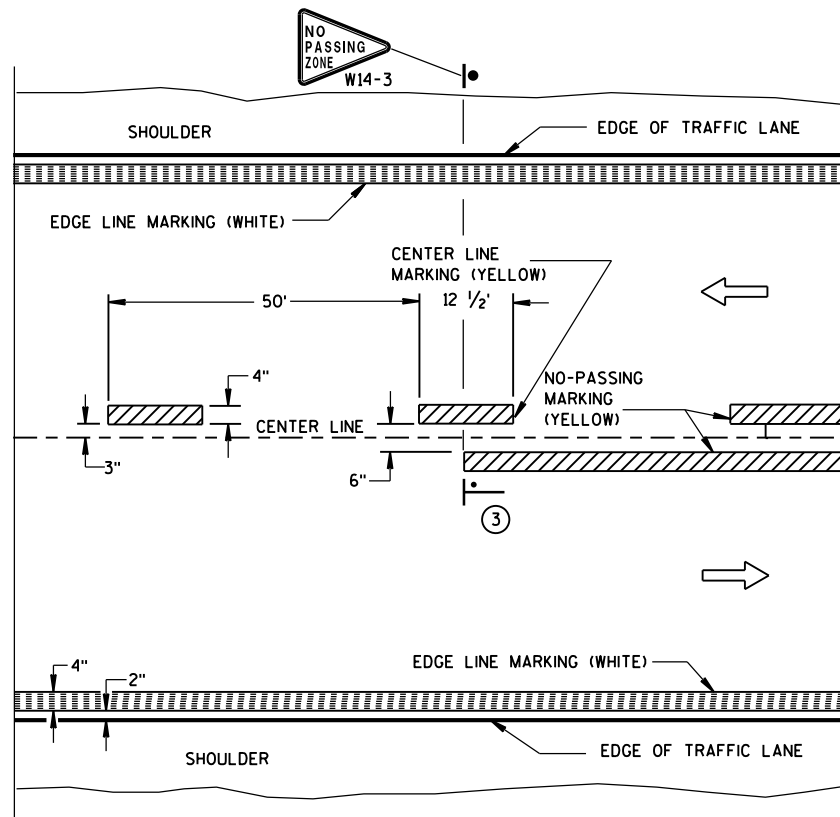
APPROVED

Sept. 2015

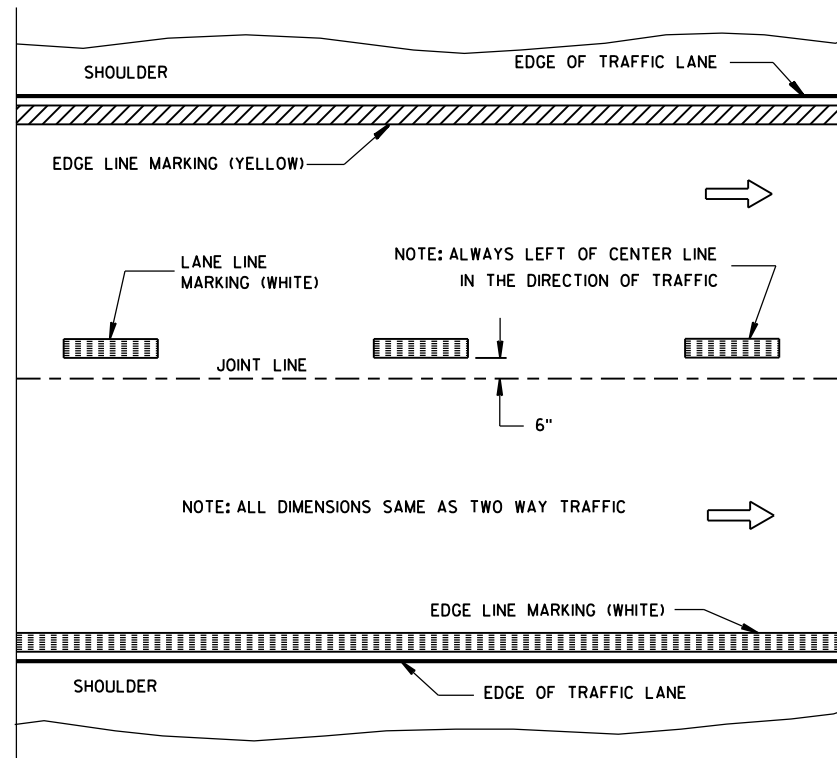
DATE

FHWA

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

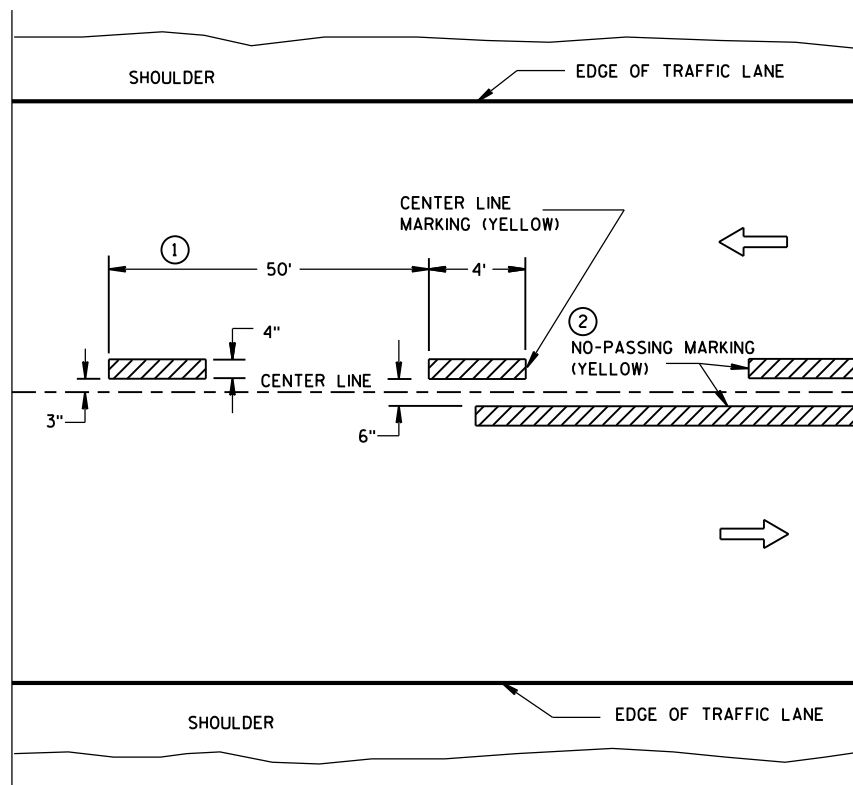


TWO WAY TRAFFIC

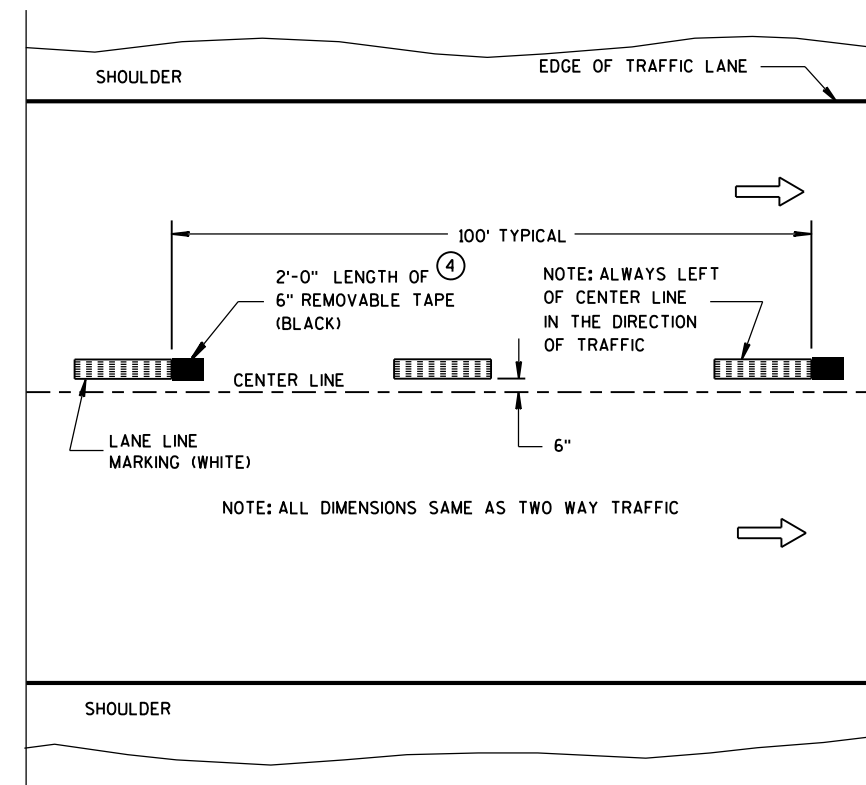


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

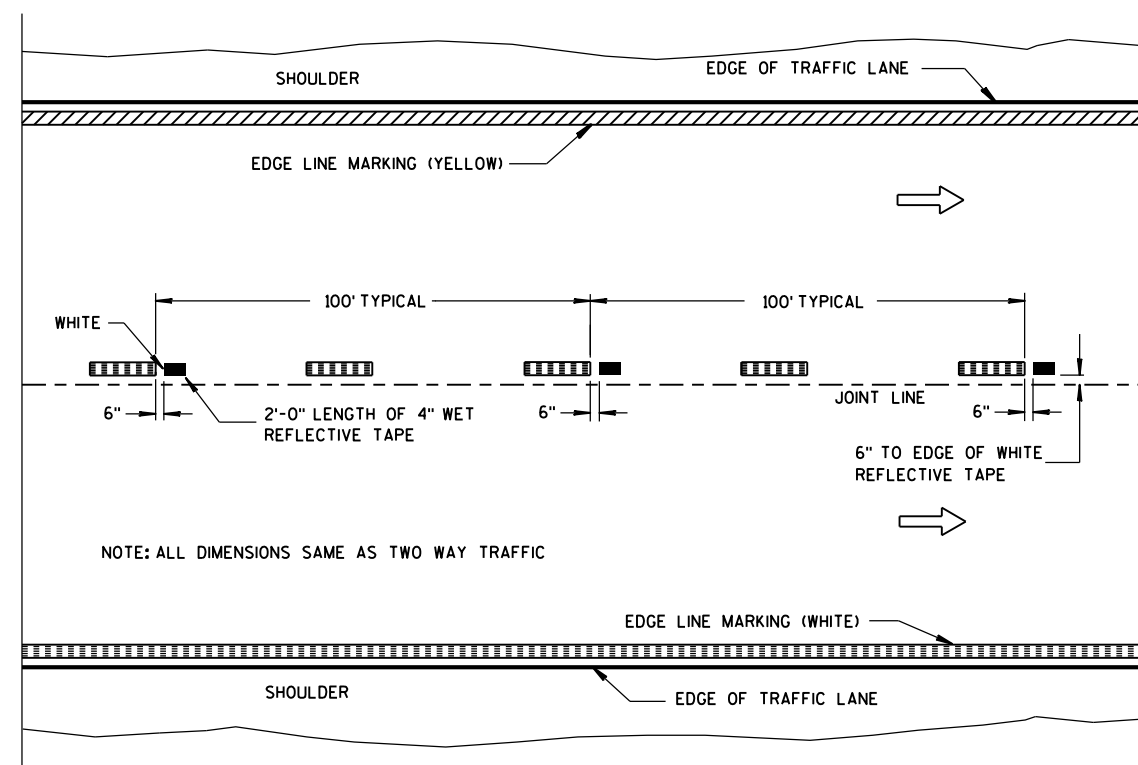
GENERAL NOTES

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

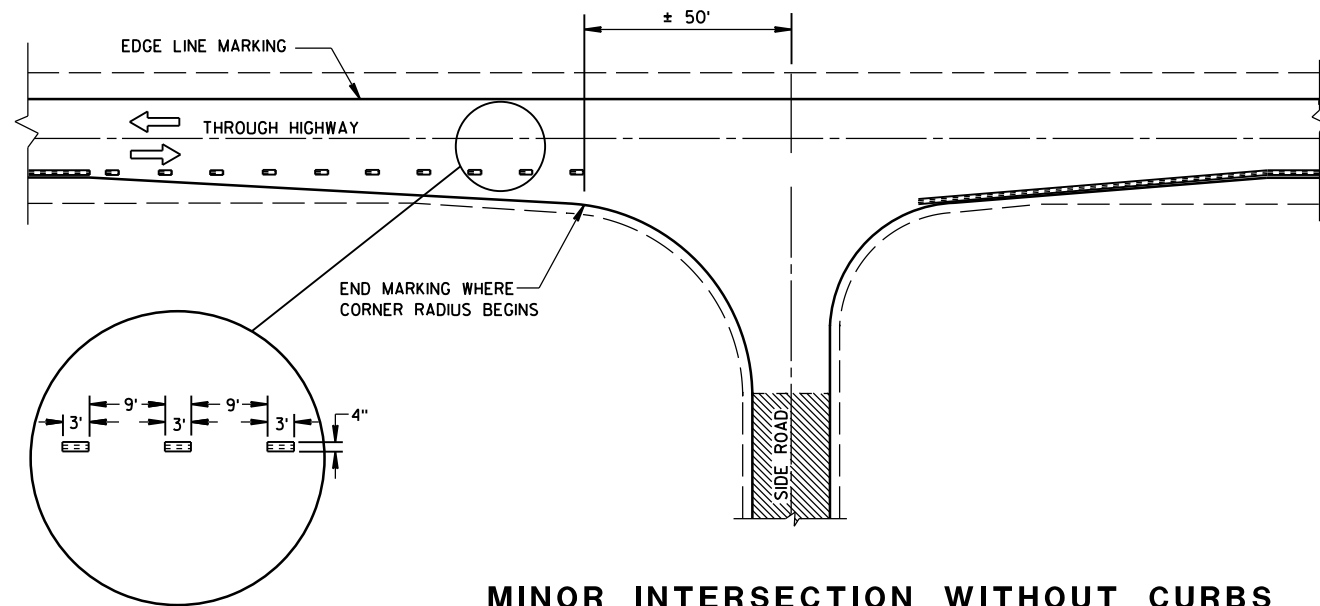
- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013
DATE
FHWA

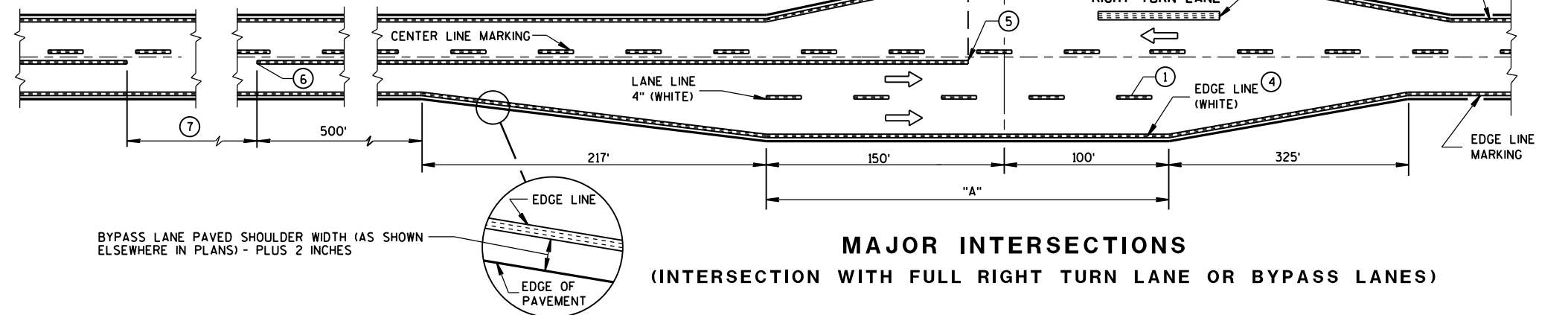
/S/ Travis Feltes
STATE TRAFFIC ENGINEER



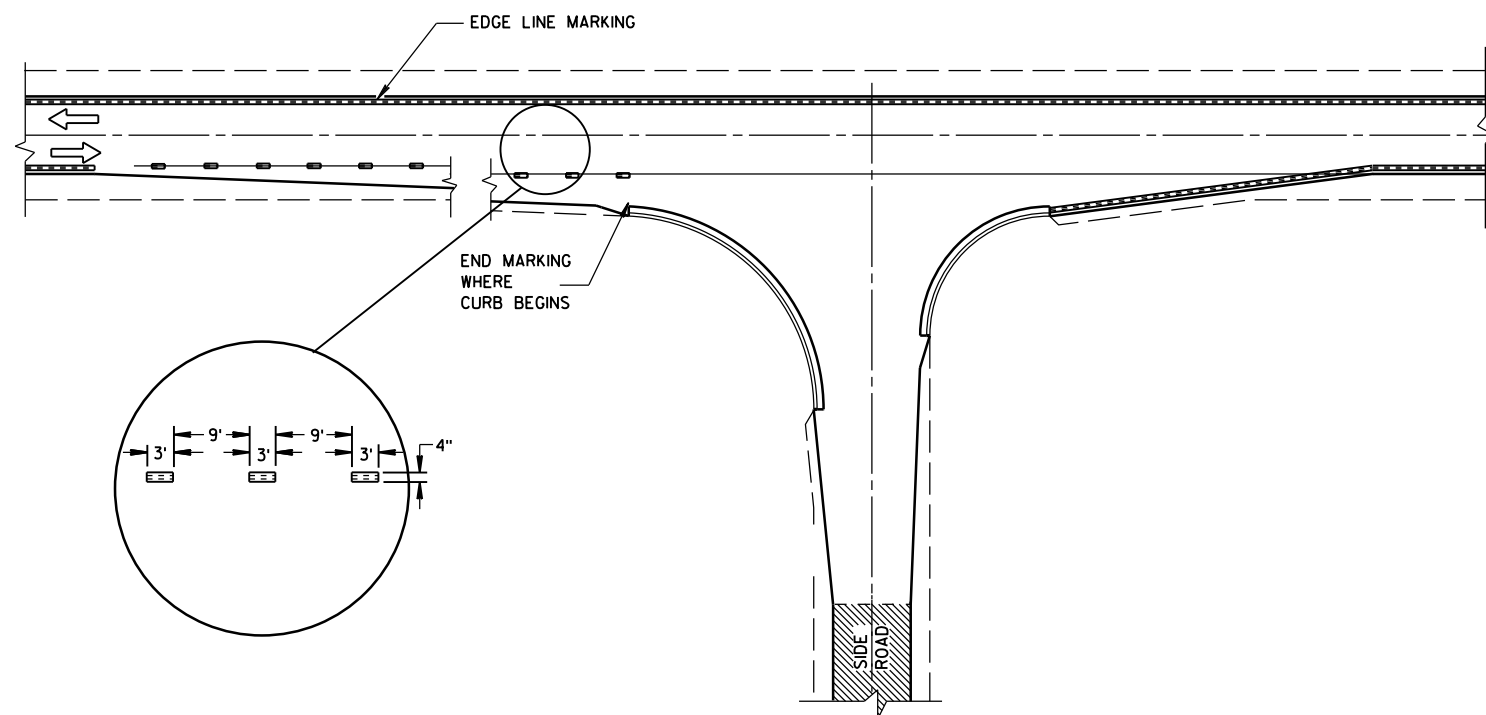
MINOR INTERSECTION WITHOUT CURBS

⑦

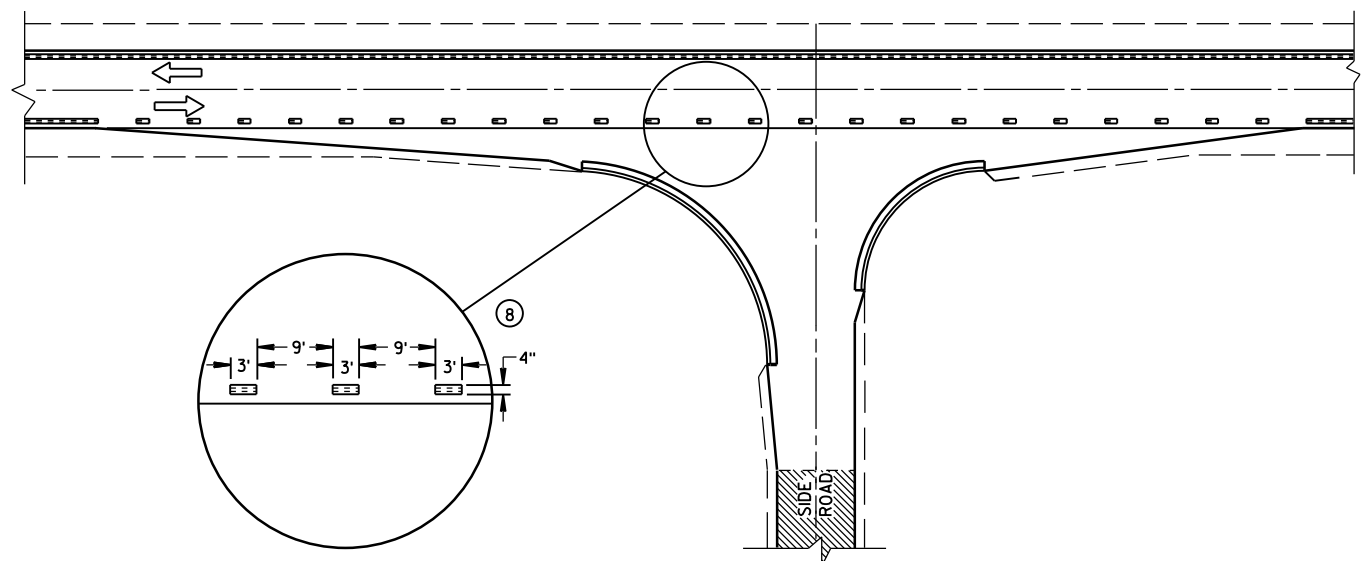
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



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)

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

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

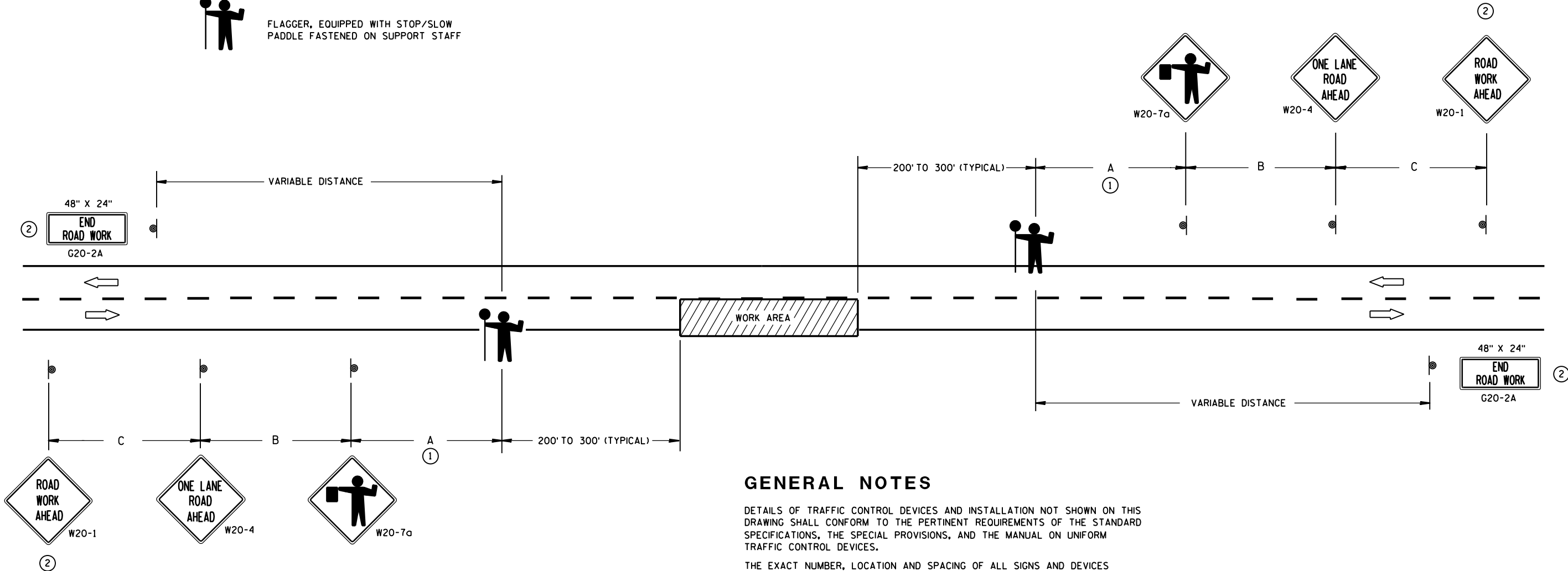
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

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



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.



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.

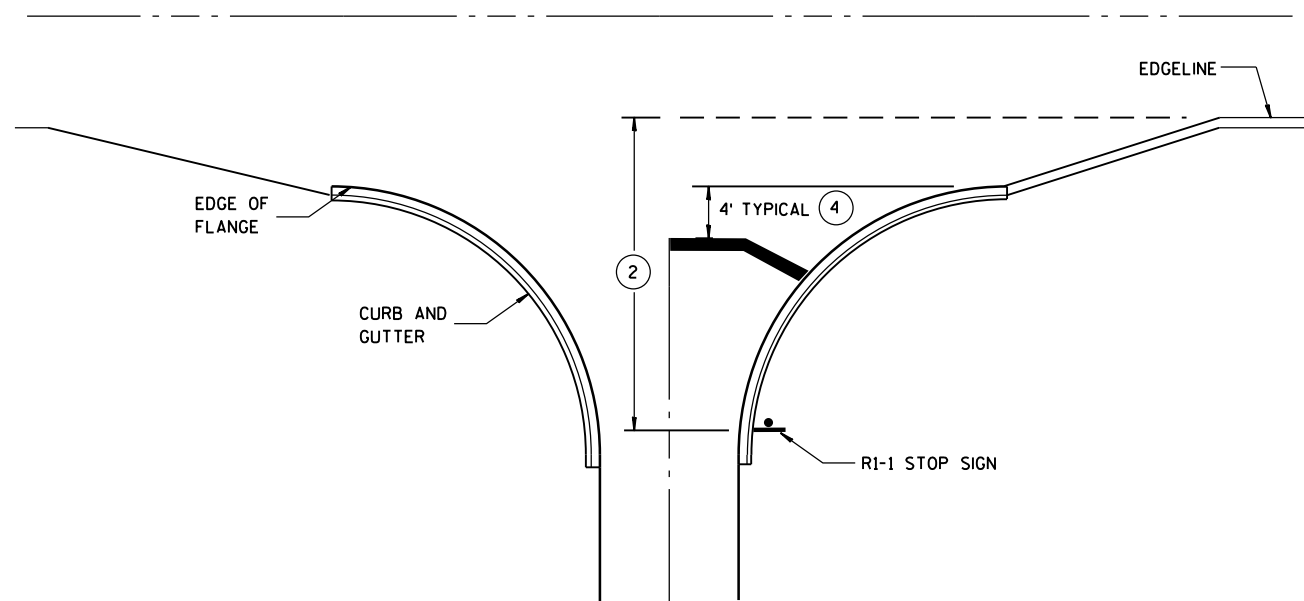
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

- 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.

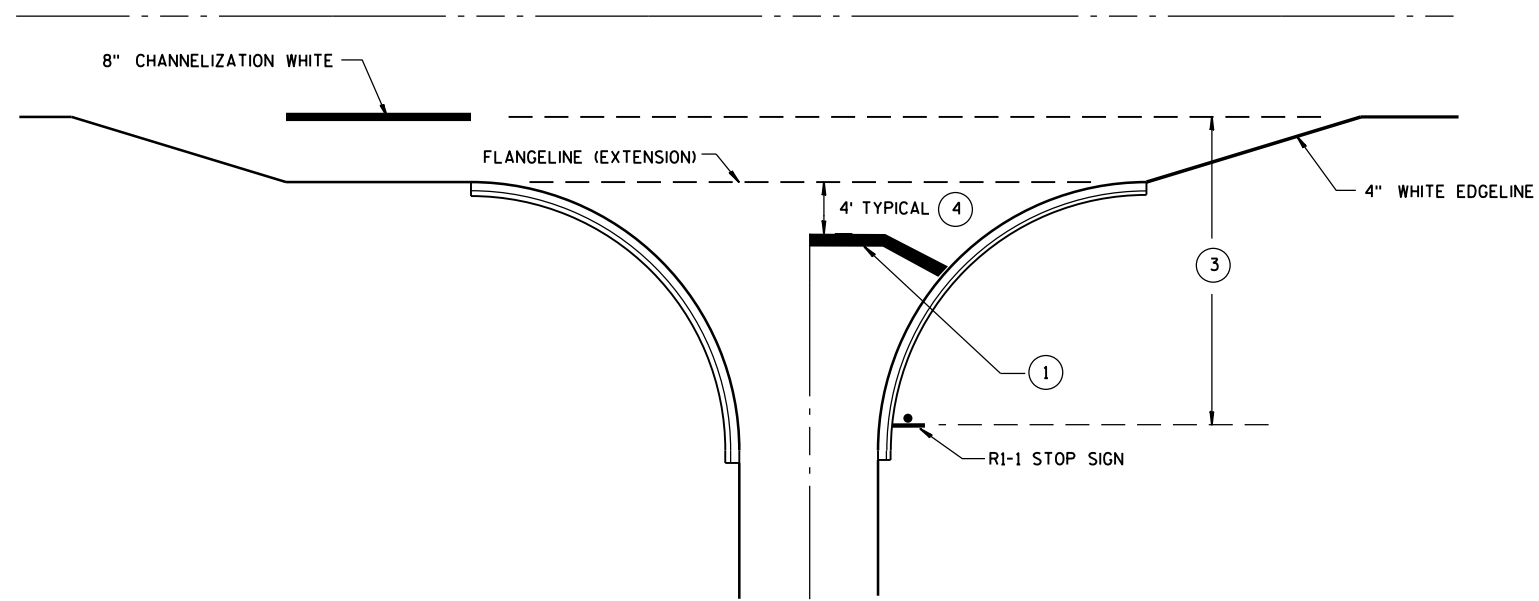
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

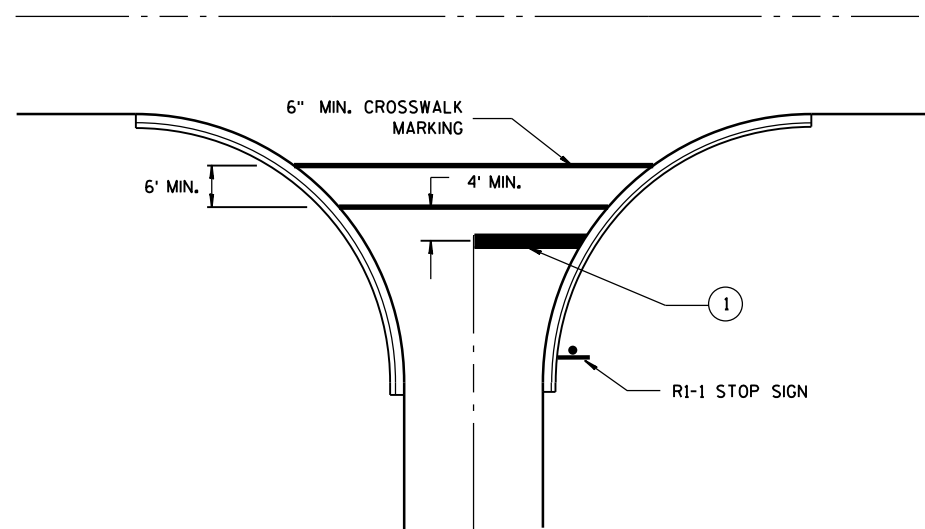
APPROVED
8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



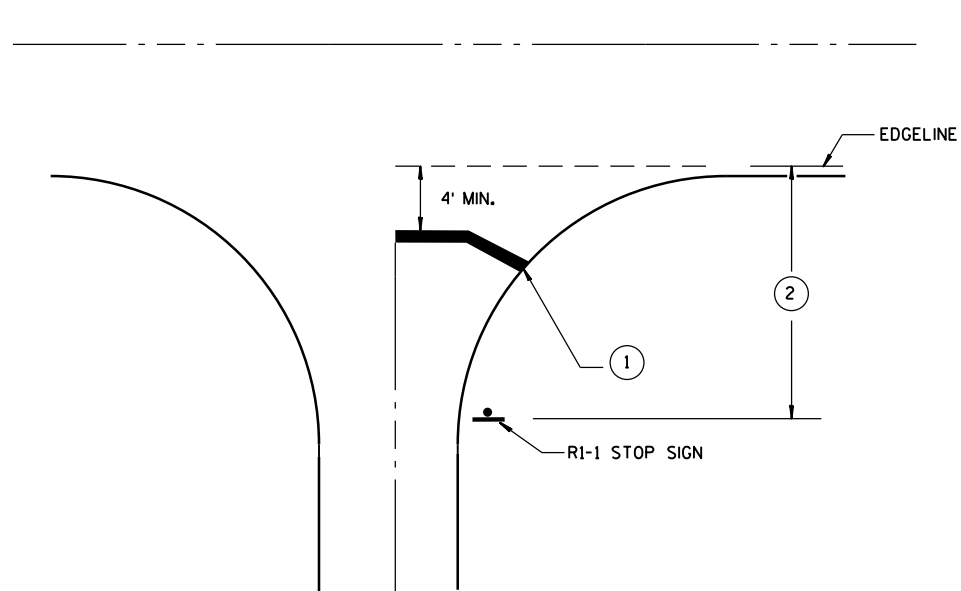
**TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER**



**TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE**



**TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH CROSSWALK MARKING**



**TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER**

GENERAL NOTES

- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE THAN NO STOP LINE IS REQUIRED.
- ③ IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- ④ MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/30/2013
DATE

/S/ Travis Feltz
STATE TRAFFIC ENGINEER

FHWA

GENERAL NOTES

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

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

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

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

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

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

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

TABLE A

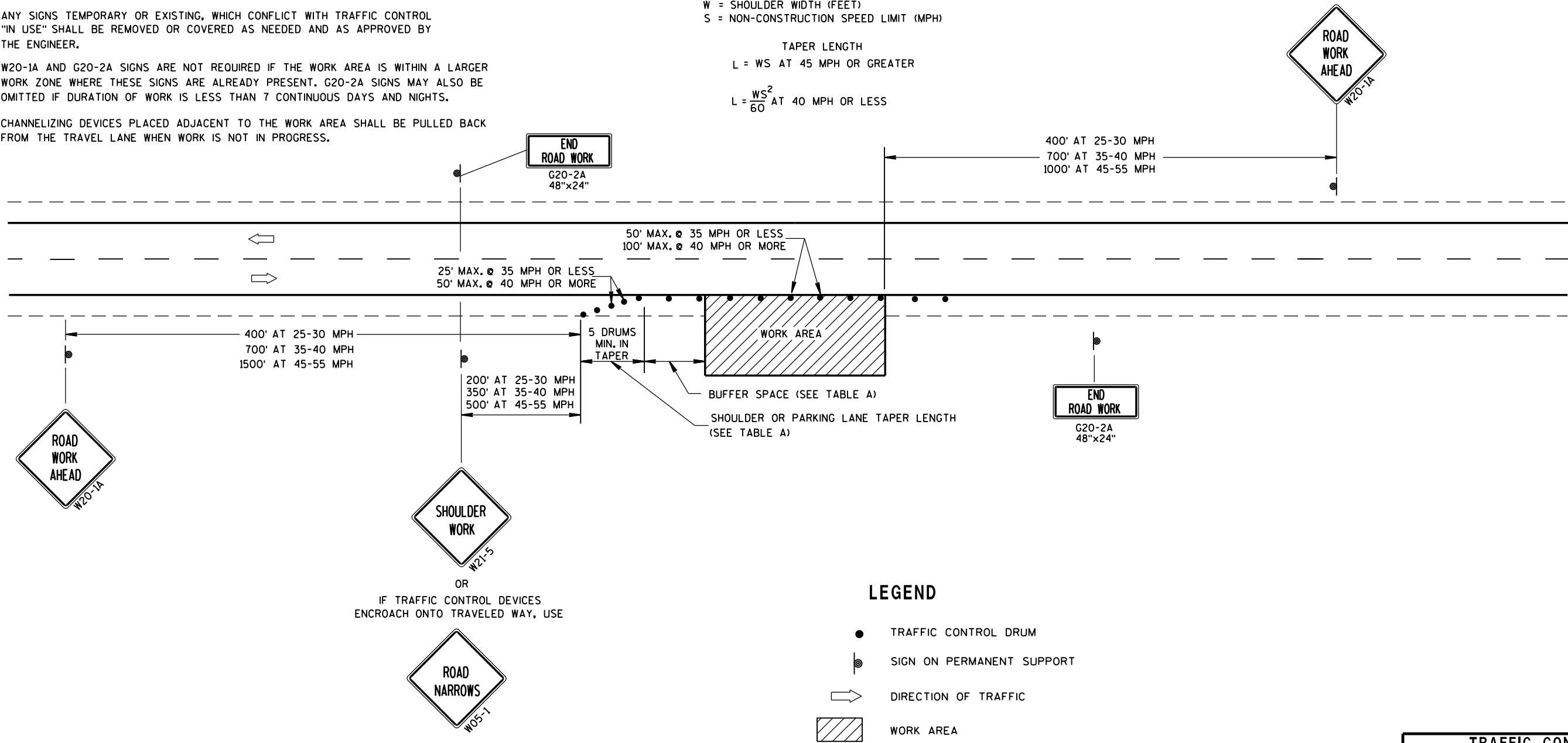
SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

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

TAPER LENGTH
L = WS AT 45 MPH OR GREATER

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

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



LEGEND

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

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED July 14, 2015 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

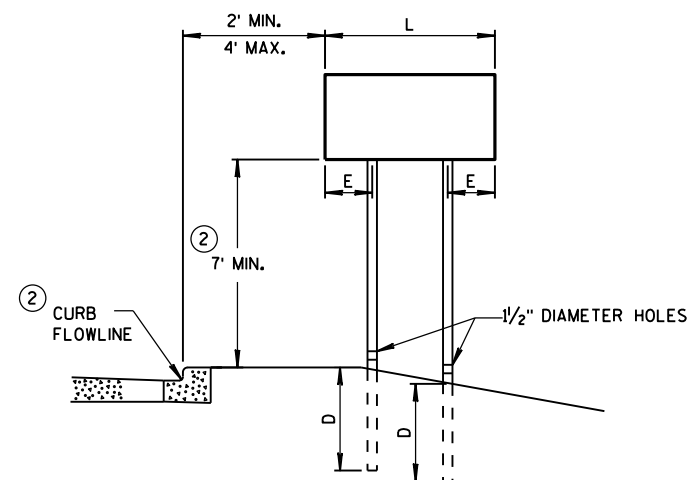
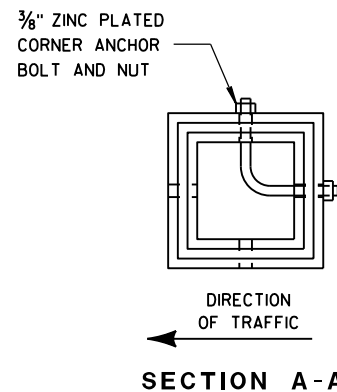


DETAIL OF TUBULAR STEEL SIGN POST

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

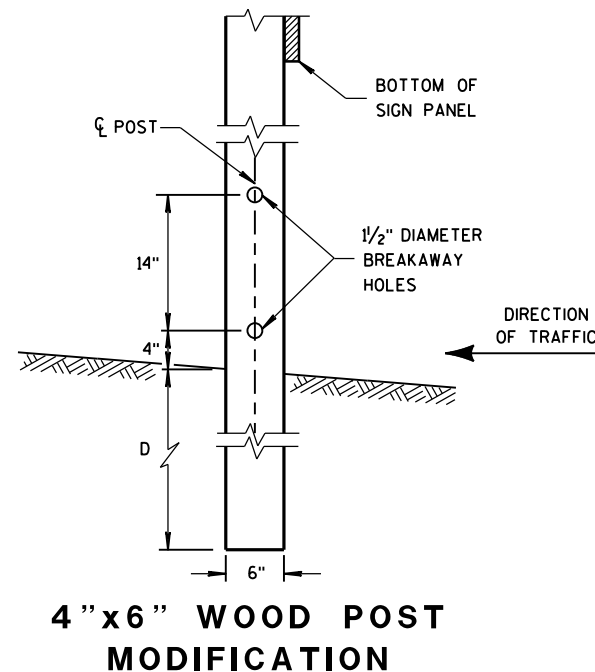
SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).
SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.



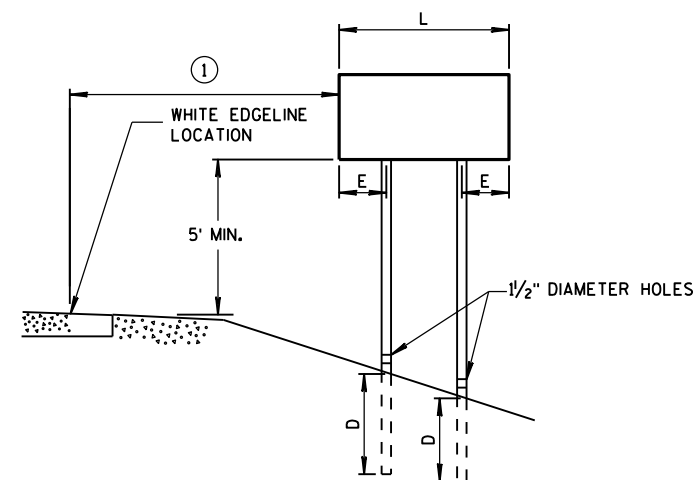
URBAN AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST EMBEDMENT DEPTH	
AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'



4" x 6" WOOD POST MODIFICATION



RURAL AREA

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE ③

GENERAL NOTES

- ① 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
- ② THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
- ③ FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.

TEMPORARY TRAFFIC CONTROL
FIXED MESSAGE SIGNS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

DATE 17MAR16		E S T I M A T E O F Q U A N T I T I E S			
LINE					1330-01-72
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0490	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	350.000	350.000
0500	650.6000	Construction Staking Pipe Culverts	EACH	1.000	1.000
0510	650.9910	Construction Staking Supplemental Control (project) 01. 1330-01-72	LS	1.000	1.000
0520	650.9920	Construction Staking Slope Stakes	LF	1,100.000	1,100.000
0530	690.0150	Sawing Asphalt	LF	1,274.000	1,274.000
0540	690.0250	Sawing Concrete	LF	48.000	48.000
0550	SPV.0060	Special 01. Furnish and Deliver Trees Spruce, 6-FT HT, Black Hills, B&B	EACH	8.000	8.000
0560	SPV.0060	Special 02. Furnish and Deliver Trees Spruce, 6-FT HT, Norway, B&B	EACH	8.000	8.000
0570	SPV.0060	Special 03. Furnish and Deliver Trees Spruce, 6-FT HT. White, B&B	EACH	9.000	9.000
0580	SPV.0090	Special 01 Pavement Marking Grooved Preformed Thermoplastic Stop Line 18-Inch	LF	48.000	48.000

Division	From/To Station	Location	Common Excavation (1)	(item # 205.0100)	Salvaged/Unusable Pavement Material (4)	Available Material (5)	Unexpanded Fill	Expanded Fill (13)	Mass Ordinate +/- (14)	Waste	Comment:
			Cut (2)	EBS Excavation (3)				Factor 1.25			
Division 1											
CTH K	06+00/09+57		508	0	0	508	8	9	499	499	
Division 1 Subtotal			508	0	0	508	8	9	499	499	
Division 2											
STH 83	06+00/139+87.37		694	0	0	694	84	105	589	589	
Division 2 Subtotal			694	0	0	694	84	105	589	589	
Grand Total			1,202.16	0.00	0.00	1,202.16	91.76	114.70	1,087.45	1,087.45	
Total Common Exc			1,202.16								

1) Salvaged/Unsuable Pavement Material is included in Cut.
4) Salvaged/Unusable Pavement Material is to be wasted
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
13) Expanded Fill. Factor = 1.2
14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

CLEARING AND GRUBBING				
ROADWAY	STATION	STATION	201.0105 CLEARING (STA)	201.0220 GRUBBING (ID)
STH 83	133+00	143+00	10	459
CTH K & BEAVER LAKE RD	6+00	10+00	4	54
TOTAL			14	513

REMOVALS			
ROADWAY	STATION	STATION	204.0125 REMOVING ASPHALTIC SURFACE MILLING (TON)
STH 83	135+45	140+05	117
CTH K & BEAVER LAKE RD	5+75	9+80	90
TOTAL			207

BASE AGGREGATE ITEMS				
ROADWAY	STATION	STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON)
STH 83	135+45	140+05	63	278
CTH K & BEAVER LAKE RD	5+75	9+80	41	286
TOTAL			104	564

MISC CONCRETE ITEMS				
ROADWAY	STATION	STATION	OFFSET	416.1010 CONCRETE SURFACE DRAINS (CY)
STH 83	137+00	137+20	20' LT	3
	138+40	138+55	20' LT	5
				--
TOTAL				8

PAVEMENT ITEMS

ROADWAY	STATION	STATION	455.0605 TACK COAT (GAL)	460.5223 HMA PAVEMENT 3 LT 58-28 S (TON)	460.5224 HMA PAVEMENT 4 LT 58-28 S (TON)
STH 83	135+45	140+05	298	433	215
CTH K AND BEAVER LAKE RD.	5+75	9+80	130	134	94
TOTAL			428	567	309

CURB AND GUTTER

ROADWAY	STATION	STATION	601.0557 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D (LF)
STH 83	136+85 RT	137+43.9 RT	96
	137+19.9 LT	137+77.9 LT	79
	137+77.9 RT	138+55.6 RT	92
	138+12 LT	138+55.6 LT	83
TOTAL			350

RESTORATION AND EROSION CONTROL ITEMS

ROADWAY	STATION	STATION	606.0100 RIPRAP LIGHT (CY)	624.0100 WATER (MGAL)	628.1104 EROSION BALES (EACH)	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)	625.0500 SALVAGED TOPSOIL (SY)	628.2004 EROSION MAT CLASS I TYPE B (SY)	628.7555 CULVERT PIPE CHECKS (EACH)	629.0205 FERTILIZER TYPE A (CWT)	630.0140 SEEDING MIXTURE No. 40 (LB)	630.0130 SEEDING MIXTURE NO. 30 (LB) UNDISTRIBUTED	630.0200 SEEDING TEMPORARY (LB) UNDISTRIBUTED	SPV.0060.01 FURNISH & DELIVER TREES SPRUCE, 6FT HT, BLACK HILLS, B&B (EACH)	SPV.0060.02 FURNISH & DELIVER TREES SPRUCE, 6FT HT, NORWAY, B&B (EACH)	SPV.0060.03 FURNISH & DELIVER TREES SPRUCE, 6FT HT, WHITE, B&B (EACH)	645.0130 GEOTEXTILE FABRIC TYPE R (SY)
STH 83	135+45	140+05	9	20	4	372	372	122	122	1	0.08	5	2	2	8	8	9	15
CTH K & BEAVER LAKE RD	5+75	9+80	6	15		54	54	350	350		0.22	10	5	5				
TOTAL			15	35	4	426	426	472	472	1	0.30	15	7	7	8	8	9	15

TRAFFIC CONTROL

ROADWAY	643.1050 TRAFFIC CONTROL SIGNS PCMS (DAY) UNDISTRIBUTED	643.0200 TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (1330-01-72) (DAY)	643.0300 TRAFFIC CONTROL DRUMS (DAY)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III (DAY)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A (DAY)	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE (SF)	646.0600 REMOVING PAVEMENT MARKING (LF)	649.0400 TEMPRORARY PAVEMENT MARKING REMOVABLE TAPE 4- INCH (WHITE) (LF)	649.0400 TEMPRORARY PAVEMENT MARKING REMOVABLE TAPE 4- INCH (YELLOW) (LF)
STH 83			1672	252	176	30			
BEAVER LAKE RD			748	264		30	445	650	1000
ENTIRE PROJECT		10	44						
TOTAL		10	44	2420	516	176	60	445	650

PROJECT NO: 1330-01-72

HWY: STH 83

COUNTY: WAUKESHA

MISCELLANEOUS QUANTITIES

SHEET:

E

PERMANENT PAVEMENT MARKING

ROADWAY	STATION	STATION	646.2304.S	646.2304.S	SPV.0090.01 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOP LINE 18-INCH (LF)
			PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW) (LF)	PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) (LF)	
STH 83	134+45	140+05	932	--	--
	134+45 LT	136+85 LT	--	146	--
	134+45 RT	137+20 RT	--	179	--
	138+55 LT	140+05 LT	--	153	--
	138+55 RT	140+05 RT	--	152	--
CTH K & BEAVER LAKE RD	5+60	7+82	442	--	--
	8+31	9+95	326	--	--
	5+60 LT	7+24 LT	--	165	--
	5+60 RT	7+44 RT	--	182	--
	8+58 LT	9+95 LT	--	138	--
	8+87 RT	9+95 RT	--	107	--
	7+75 LT	7+82 RT	--	--	25
	8+31 RT	8+37 LT	--	--	23
TOTAL			1700	1222	48
			ITEM # 646.2304S	TOTAL =	2922

CONSTRUCTION STAKING ITEMS

ROADWAY	STATION	STATION	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (1330-01-72) (LS)				650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER (LF)		650.6000 CONSTRUCTION STAKING PIPE CULVERTS (EACH)		650.9920 CONSTRUCTION STAKING SLOPE STAKES (LF)	
			650.5000 CONSTRUCTION STAKING BASE (LF)									
STH 83	135+45	140+05	750				350		1		750	
CTH K & BEAVER LAKE RD	5+75	9+80	350								350	
ENTIRE PROJECT					1							
TOTAL			1100		1		350		1		1100	

SAWING PAVEMENT

ROADWAY	STATION	OFFSET	STATION	OFFSET	690.0150 SAWING ASPHALT (LF)		690.0250 SAWING CONCRETE (LF)	
STH 83	135+45	13.7' LT	134+45	14.1' RT	28			
	135+80	10.7' RT	137+62	11.0' RT	182			
	136+20	11.0'LT	137+68	11.3'LT	150			
	137+85	11.0'RT	139+03	11.0'RT	117			
	137+91	11.5'LT	139+69	11.0'LT	178			
	140+04	14.0'LT	140+05	13.8'LT	28			
CTH K & BEAVER LAKE RD	5+75	13.2' RT	5+75	13.9' LT	28			
	6+05	15.0' LT	7+91	13.0' RT	190			
	8+15	11.0' LT	9+00	12.0' LT	83			
	6+88'	10.0' RT	7+97	10.4'LT	110			
	8+20	11.0'RT	9+57	12.3' RT	137			
	9+20	15.7'LT	9+29	15.5'LT	9			
	9+37	30.5' RT	9+45	26.5' RT	10			
	9+81	13.7' RT	9+83	8.7' LT	24			
	7+56	12' RT	7+69	12' LT			24	
	7+61	12' RT	7+69	12'LT			24	
TOTAL					1274		48	

CULVERT PIPE

ROADWAY	STRUCTURE NUMBER	STATION	OFFSET FT	FROM STR	TO STR	INLET INVERT ELEV	DISCH INVERT ELEV	SLOPE	522.0312 CULVERT PIPE REINFORCED CONCRETE CLASS IV		522.1012 APRON ENDWALLS FOR CULVERT IPE REINFORCE CONCRETE		209.0100 BACKFILL GRANULAR	
									12-INCH LF		12-INCH EACH		CY	
STH 83	1	137+19.49	37.178 LT	2	1	938.00	935.50	2.05%	122		1			
	2	138+40.94	47.099 LT						--		1		25	
TOTALS									122		2		25	

NOTES

- 1) JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL CONCRETE APRON ENDWALLS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCIDENTAL TO THE COST OF THE PIPE.
- 2) STATIONS AND OFFSETS ARE TO THE CENTER OF STRUCTURES OR TO THE APRON END OF ENDWALLS.
- 3) PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURES.

3

TYPE I&II PERMANENT SIGNING -

1330-01-72 STH 83

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	638.2102 MOVING SIGNS TYPE II [EA]	634.0618 WOOD POSTS 4" X 6" X 18' [EA]	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
1	W1-7 (2S)	NIGHT ARROW DOUBLE	48 X 24		8.000				1			
2	R2-1 (2S)	SPEED LIMIT 35	24 X 30	5.000					1			
3	R7-1D (2S)	NO PARKING ANY TIME DOUBL	18 X 24	3.000					1			
4	J1-2 (2S)		48 X 39	13.000					1			
	M2-1	JUNCTION	21 X 15									
	M1-5A	CTH K	24 X 24									
	MK2-1	JUNCTION - GREEN	21 X 15									
	M1-97	KETTLE MORaine SCENIC DRN	24 X 24									
5	D1-61	[A] KETTLE MORaine SCENIC DR	96 X 54	36.000					2			
		BEAVER LAKE [A] RD										
6	NOT USED											
7	W2-2 (2S)	SIDE ROAD (90 DEGREE)	30 X 30		6.250				1			
8	R7-1D (2S)	NO PARKING ANY TIME DOUBL	18 X 24	3.000					1			
9	R2-1 (2S)	SPEED LIMIT 35	24 X 30	5.000					1			
10	J3-2 (2S)		48 X 45	15.000					1			
	M1-5A	CTH K	24 X 24									
	M6-1	ARROW LEFT	21 X 21									
	M1-97	KETTLE MORaine SCENIC DRN	24 X 24									
	MK6-6	ARROW LEFT/ARROW UP - GR	21 X 21									
11	NOT USED											
12	J3-3 (2S)		72 X 45	22.500					2			
	M1-6	STH 83	24 X 24									
	M6-4	ARROWS LEFT & RIGHT	21 X 21									
	M1-97	KETTLE MORaine SCENIC DRN	24 X 24									
	MK6-1	ARROW LEFT - GREEN	21 X 21									
	M1-5A	CTH K	24 X 24									
	M6-1	ARROW RIGHT	21 X 21									

3

3

TYPE I&II PERMANENT SIGNING -

1330-01-72 STH 83

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]			637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	638.2102 MOVING SIGNS TYPE II [EA]	634.0618 WOOD POSTS 4" X 6" X 18' [EA]	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
13	R1-1 (2S)	STOP	30	X	30	5.180					1			
14	R1-1 (2S)	STOP	30	X	30	5.180					1			
15	R2-1 (2S)	SPEED LIMIT 35	24	X	30	5.000					1			
16	J4-2 (2S)		48	X	36	12.000					1			
	M3-1	NORTH	24	X	12									
	M1-6	STH 83	24	X	24									
	M1-97	KETTLE MORaine SCENIC DRN	24	X	24									
17	J3-2 (2S)		48	X	45	15.000					1			
	M1-5A	CTH K	24	X	24									
	M6-1	ARROW UP/ARROW RIGHT	21	X	21									
	M1-97	KETTLE MORaine SCENIC DRN	24	X	24									
	MK6-6	ARROW RIGHT - GREEN	21	X	21									
18	NOT USED													
19	D1-61	[A] BEAVER LAKE RD	96	X	54	36.000					2			
		KETTLE MORaine [A] SCENIC DR												
20	J1-2 (2S)		48	X	39	13.000					1			
	M2-1	JUNCTION	21	X	15									
	M1-5A	CTH K	24	X	24									
	MK2-1	JUNCTION - GREEN	21	X	15									
	M1-97	KETTLE MORaine SCENIC DRN	24	X	24									
21	R2-1 (2S)	SPEED LIMIT 35	24	X	30	5.000					1			
22	R2-1 (2S)	SPEED LIMIT 35	24	X	30	5.000					1			
23	R7-1D (2S)	NO PARKING ANY TIME DOUBL	18	X	24	3.000					1			
24	W14-3 (2S)	NO PASSING ZONE	48	X	36		6.000				1			
25	W14-3 (2S)	NO PASSING ZONE	48	X	36		6.000				1			

3

TYPE I&II PERMANENT SIGNING -

1330-01-72 STH 83

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGN TYPE II REFLECTIVE H [SF]	637.2230 SIGN TYPE II RELFECTIVE F [SF]	638.2602 REM SIGN TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	638.2102 MOVING SIGN TYPE II [EA]	634.0618 WOOD POSTS 4" X 6" X 18' [EA]	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
26	R7-52D (2S)	NO PARKING BETWEEN SIGNS	18 X 24	3.000					1			
27	R7-52D (2S)	NO PARKING BETWEEN SIGNS	18 X 24	3.000					1			
28	W3-1 (2S)	STOP AHEAD	36 X 36		9.000				1			
29	W3-1 (2S)	STOP AHEAD	36 X 36		9.000				1			
30	R7-52R (2S)	NO PARKING BETWEEN SIGNS	18 X 24	3.000					1			
31	R2-1 (2S)	SPEED LIMIT 35	24 X 30	5.000							28	
32	W11-3	DEER CROSSING						1	1			MOVE THE W57-52 ALSO
33	M1-5A (2S)	CTH K	24 X 24	4.000					1			
34	R7-52L (2S)	NO PARKING BETWEEN SIGNS	18 X 24	3.000					1			
35	W11-11 (MOD)	GOLF CART CROSSING CAUTION						1				REUSE STEEL POST
36	W11-11 (MOD)	GOLF CART CROSSING CAUTION						1				REUSE STEEL POST
37		NO THRU TRUCKING OVER 5 TONS						1				REUSE STEEL POST
38	R2-1 (2S)	SPEED LIMIT 25	24 X 30	5.000						1		
39	J4-2 (2S)		48 X 36	12.000					1			
	M3-3	SOUTH	24 X 12									
	M1-6	STH 83	24 X 24									
	M1-97	KETTLE MORaine SCENIC DRIV	24 X 24									
40	J3-2 (2S)		48 X 45	15.000					1			
	M1-6	STH 83	24 X 24									
	M6-4	ARROWS LEFT & RIGHT	21 X 21									
	M1-5A	CTH K	24 X 24									
	M6-1	ARROW UP	21 X 21									
UNDISTRIBUTED				--							--	--
TOTALS				259.860	44.250	0	0	4	35	1	--	--

3

TYPE II SIGN REMOVAL

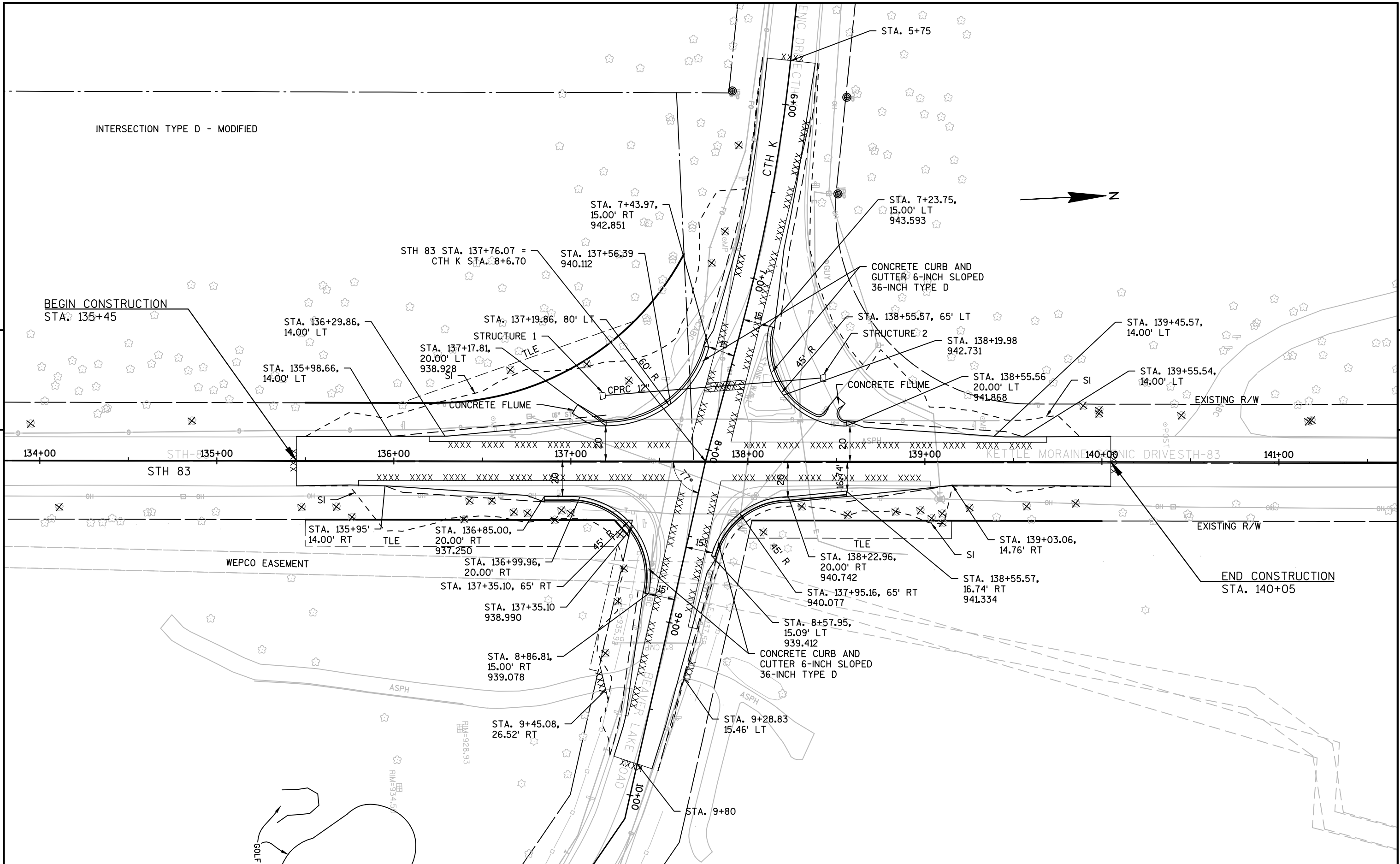
STH 83 1330-01-72

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	REMARKS / NEW SIGN LOCATION
1R	W1-7	--	1	1	--
2R	R2-1	--	1	1	REMOVE THE R7-1D ALSO
3R	J1-2	--	1	1	--
4R	W2-2	--	1	1	--
5R	R2-1	--	1	1	REMOVE THE R7-1D ALSO
6R	J3-2	--	1	1	--
7R	R1-1	--	1	1	--
8R	R1-1	--	1	1	--
9R	R1-1	--	1	1	--
10R	R1-1	--	1	1	--
11R	J3-3	--	1	1	--
12R	R2-1	--	1	1	REMOVE THE M1-97 ALSO
13R	J3-2	--	1	1	--
14R	R2-1	--	1	1	REMOVE THE R7-1D ALSO
15R	R2-1	--	1	1	--
16R	W14-3	--	1	1	--
17R	W14-3	--	1	1	--
18R	J1-2	--	1	1	--
19R	R7-52D	--	1	1	--
20R	R7-52D	--	1	1	--
21R	R2-1	--	1	1	--
22R	R7-52R	--	1	1	--
23R	M1-5A	--	1	1	REMOVE THE R7-52L ALSO
24R	R2-1	--	1	1	--
TOTALS			24	24	

3

4

4



FIXED MESSAGE SIGNS (DETAILS SHEETS)

FOR PLAN SHEETS

GENERAL NOTES:






- 1. ALL SIGNS TO HAVE FLUORESCENT REFLECTIVE SHEETING – REFERENCE: "WISDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," LATEST EDITION.
- 2. AFTER SIGNS HAVE BEEN LOCATED IN THE FIELD, BUT BEFORE INSTALLATION, THE PROJECT ENGINEER SHALL VERIFY EACH SIGN LOCATION.
- 3. ALL SIGNS TO BE MOUNTED ON WOODEN POST SUPPORTS (4"x6") (FREEWAY) OR TUBULAR STEEL POSTS OR 4X6 WOOD POSTS (NON FREEWAY). THE NUMBER OF POSTS REQUIRED FOR EACH LAYOUT IS SHOWN.
- 4. SIGNS ON THIS SHEET TO BE PAID UNDER THE ITEM "FIXED MESSAGE SIGNS."
- 5. SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON ORANGE FLUORESCENT REFLECTIVE BACKGROUND PER SPEC 643 & 637.
- 6. ALL SIGNS SHALL HAVE CAPITAL LETTERS AND NUMERALS:
12" CAPS SHALL BE SERIES "D"
6" CAPS SHALL BE SERIES "C" – UNLESS OTHERWISE SHOWN
- 7. ALL SIGNS SHALL HAVE BORDER & RADIUS OF BORDERS AS FOLLOWS:

SIGN AREA	WIDTH OF BORDER
GREATER THAN 150 SQ FT	3"
60-150 SQ FT	2"
LESS THAN 60 SQ FT	1"

RADIUS	CORNER RADIUS
SMALLEST OUTSIDE DIMENSION	
> 8 FT	12"
≥ 6 FT	9"
≥ 4 FT	6"
LESS THAN 4 FT	3"
- 8. BEGIN XXX XX SIGNS SHALL BE SEPARATE PANELS, BUT SHALL BE CONSIDERED AS PART OF THE SIGN AND SHOULD BE REMOVED OR COVERED AFTER THEIR EFFECTIVE DATE. THE MONTH AND DAY SHALL BE AS DIRECTED BY THE ENGINEER IN THE FIELD.
- 9. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW PRIOR TO MANUFACTURING.
- 10. SIGN BASE MATERIAL SHALL BE ACCORDING TO SECTION 643 & 637.
- 11. SIGNS TO BE IN PLACE 10 DAYS PRIOR TO CONSTRUCTION.

(X) = SIGN NUMBER

LEGEND: FIXED MESSAGE SIGNS

-  EXISTING GUIDE SIGN TO BE COVERED
-  FIXED MESSAGE SIGN(S) ON WOOD POST SUPPORTS OR TUBULAR STEEL POSTS
-  FIXED MESSAGE SIGN NUMBER
-  CONTRACTOR SHALL COVER AS DIRECTED BY THE ENGINEER ALL ROUTE MARKINGS PERTAINING TO THE PROJECT. INCIDENTAL TO WORK ZONE TRAFFIC CONTROL SIGNING.
-  CHANGEABLE MESSAGE SIGN

NOTES: FIXED MESSAGE SIGNS

- 1. CONTRACTOR SHOULD LOCATE FIXED MESSAGE SIGNS A MINIMUM OF 400' FROM ANY EXISTING TYPE "I" SIGN.
- 2. ALL FIXED MESSAGE SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON ORANGE FLORESCENT REFLECTIVE BACKGROUND PER SPEC 643 & 637.
- 3. SEE FIXED MESSAGE SIGNS AND SPECIAL MESSAGE SIGNS LAYOUT SHEETS FOR MORE INFORMATION.
- 4. COVER DETOUR SIGNING WHEN NOT IN USE. INCIDENTAL TO WORK ZONE TRAFFIC CONTROL SIGNING.
- 5. SIGNS TO BE PLACED 10 DAYS PRIOR TO CONSTRUCTION.

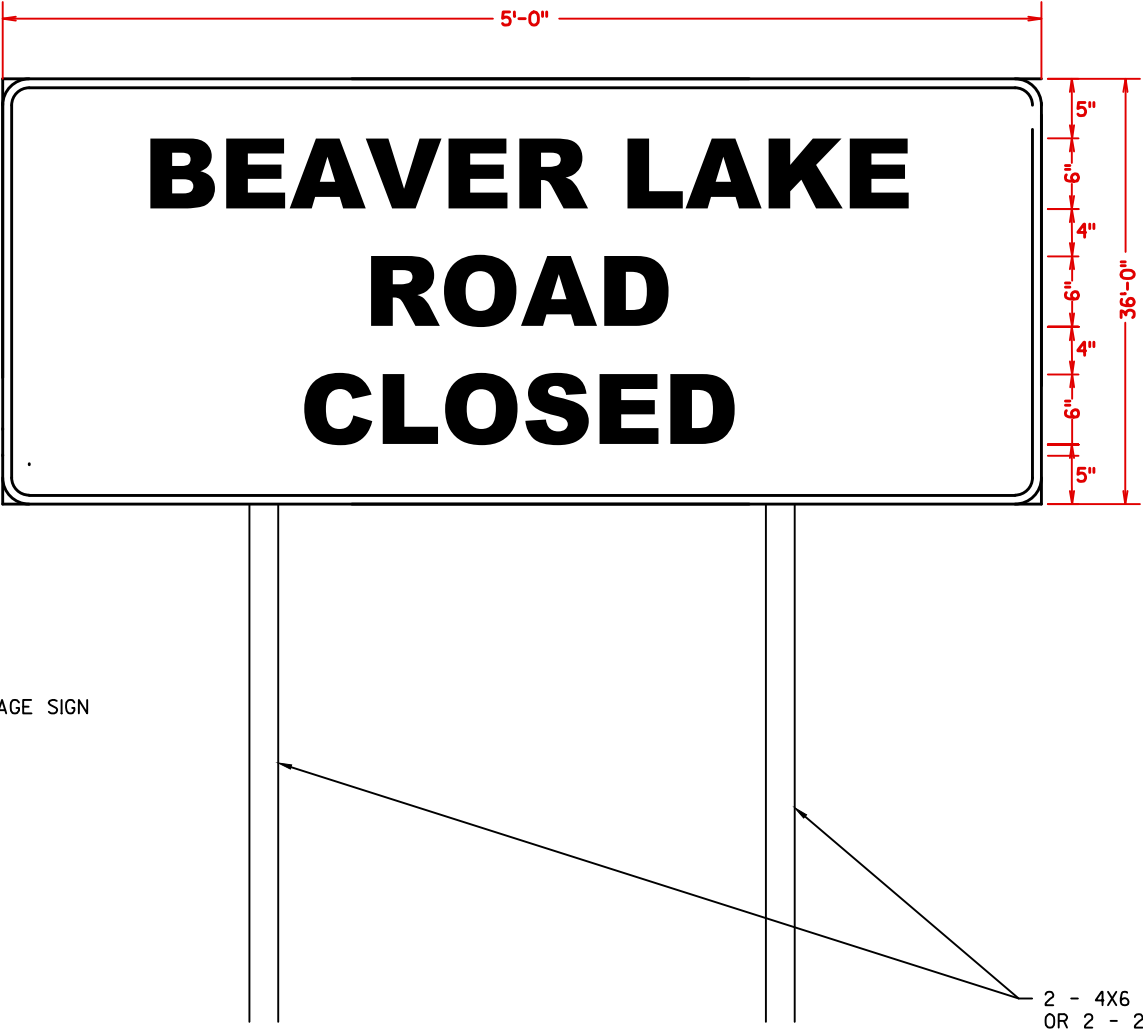
FIXED MESSAGE SIGNS

GENERAL NOTES:

1. ALL SIGNS TO HAVE FLUORESCENT REFLECTIVE SHEETING – REFERENCE: "WISDOT
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," LATEST
EDITION.
2. AFTER SIGNS HAVE BEEN LOCATED IN THE FIELD, BUT BEFORE INSTALLATION, THE
PROJECT ENGINEER SHALL VERIFY EACH SIGN LOCATION.
3. ALL SIGNS TO BE MOUNTED ON WOODEN POST SUPPORTS (4"x6") OR TUBULAR
STEEL POSTS. THE NUMBER OF POSTS REQUIRED FOR EACH LAYOUT IS SHOWN.
4. SIGNS ON THIS SHEET TO BE PAID UNDER THE ITEM "FIXED MESSAGE SIGNS."
5. SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON ORANGE FLUORESCENT REFLECTIVE
BACKGROUND PER SPEC 643 & 637.
6. ALL SIGNS SHALL HAVE CAPITAL LETTERS AND NUMERALS:
12" CAPS SHALL BE SERIES "D"
6" CAPS SHALL BE SERIES "C" – UNLESS OTHERWISE SHOWN
7. ALL SIGNS SHALL HAVE BORDER & RADIUS OF BORDERS AS FOLLOWS:

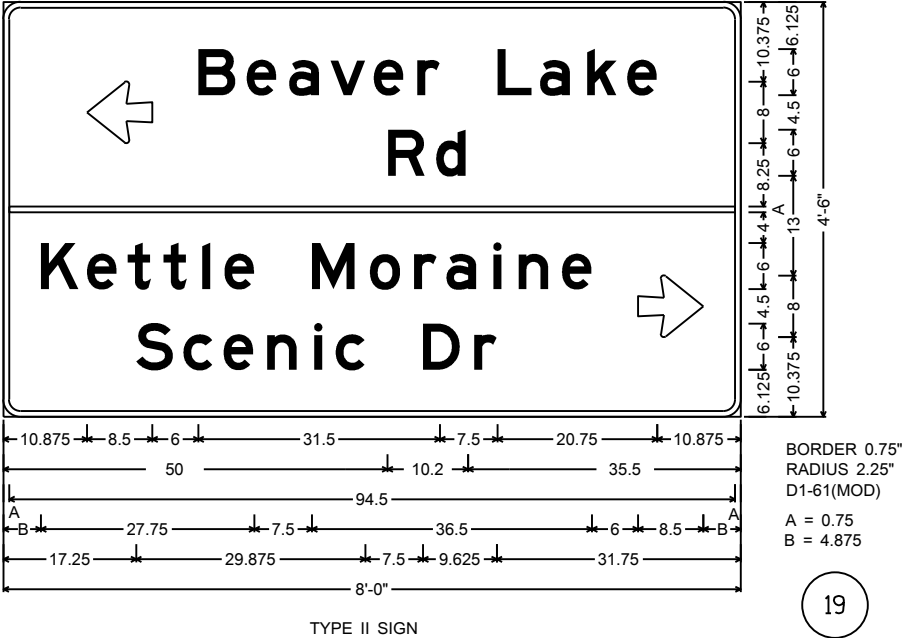
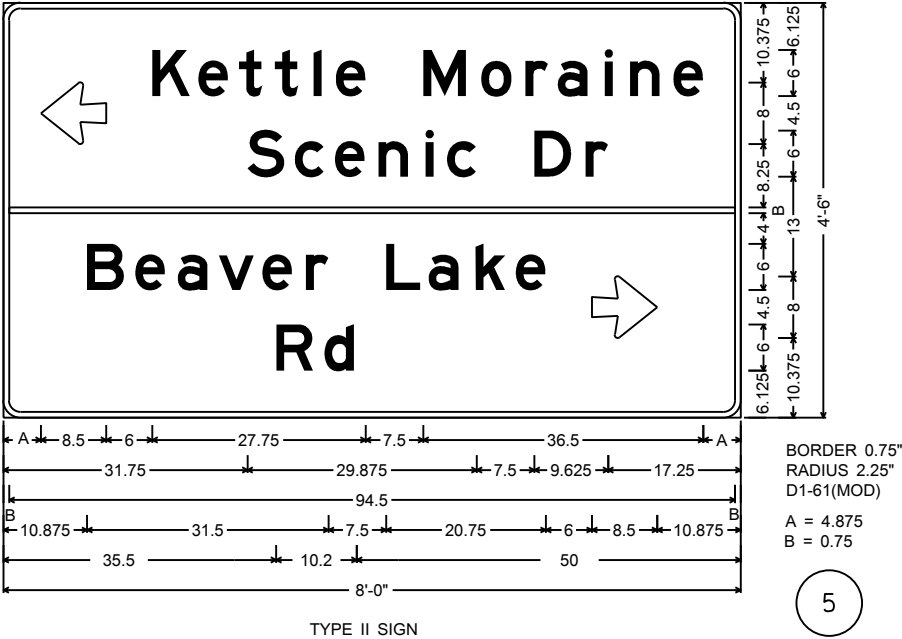
SIGN AREA	WIDTH OF BORDER
GREATER THAN 150 SQ FT	3"
60-150 SQ FT	2"
LESS THAN 60 SQ FT	1"

RADIUS	CORNER RADIUS
SMALLEST OUTSIDE DIMENSION	
> 8 FT	12"
≥ 6 FT	9"
≥ 4 FT	6"
LESS THAN 4 FT	3"
8. CONTRACTOR SHALL SUBMIT SHOP DRAWNGS TO ENGINEER FOR REVIEW PRIOR TO MANUFACTURING.
9. SIGN BASE MATERIAL SHALL BE ACCORDING TO SECTION 643 & 637.
10. SIGNS TO BE IN PLACE 14 DAYS PRIOR TO CONSTRUCTION.



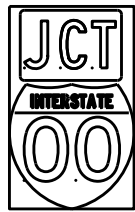
7

- GENERAL NOTES:**
1. DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE PLANS.
 2. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET ARE "SIGNS, TYPE II".
 3. UNLESS OTHERWISE NOTED, TYPE II SIGNS ON THIS SHEET SHALL HAVE "TYPE H REFLECTIVE SHEETING" AND "TYPE H MESSAGE MATERIAL". TYPE I SIGNS SHALL HAVE "TYPE SH REFLECTIVE SHEETING".
 4. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE A GREEN BACKGROUND AND WHITE MESSAGE.
 5. TYPE II SIGNS ALL UPPERCASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE "SERIES E". ALL LOWERCASE MESSAGE WITH AN INITIAL UPPERCASE LETTER SHALL BE "SERIES E".
 6. TYPE I SIGNS ALL UPPERCASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE "SERIES E MODIFIED". ALL LOWER CASE MESSAGE WITH AN INITIAL UPPERCASE LETTER SHALL BE "SERIES E MODIFIED". ALL CAP WORDS ARE "SERIES E".
 7. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE "TYPE A" OR "TYPE C" ARROWS AS SHOWN. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS.
 8. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS ON ROUTE MARKER SHIELDS.
 9. THE SIGN NUMBER IS DENOTED IN THE CIRCLE NEAR EACH DETAIL.
 10. NUMBER FRACTIONS FOR INTERCHANGE SEQUENCE SIGNS SHALL BE "SERIES E" PER PLATES A11-7 AND A11-10.
 11. DO NOT SCALE.

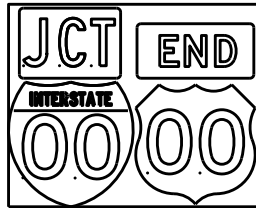


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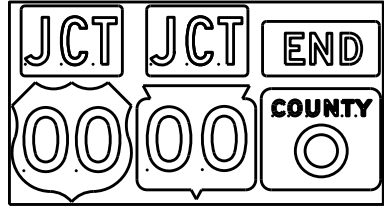
TYPICAL ASSEMBLIES



J1-1



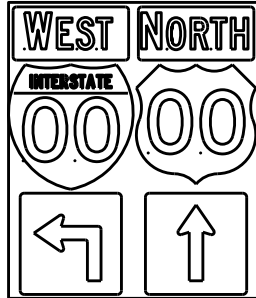
J1-2



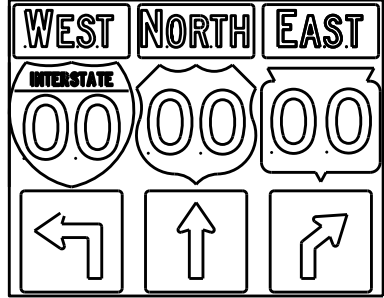
J1-3



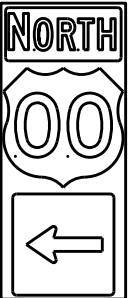
J2-1



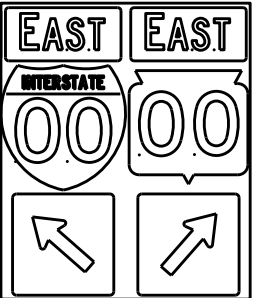
J2-2



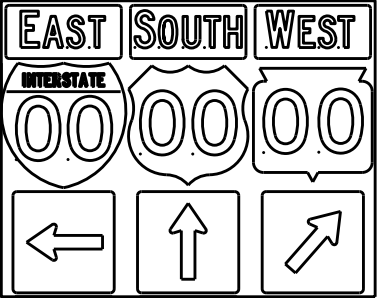
J2-3



J3-1



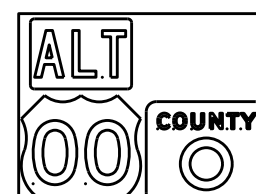
J3-2



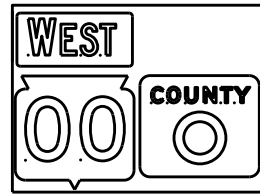
J3-3



J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1

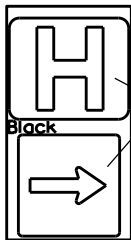


J22-1



JV

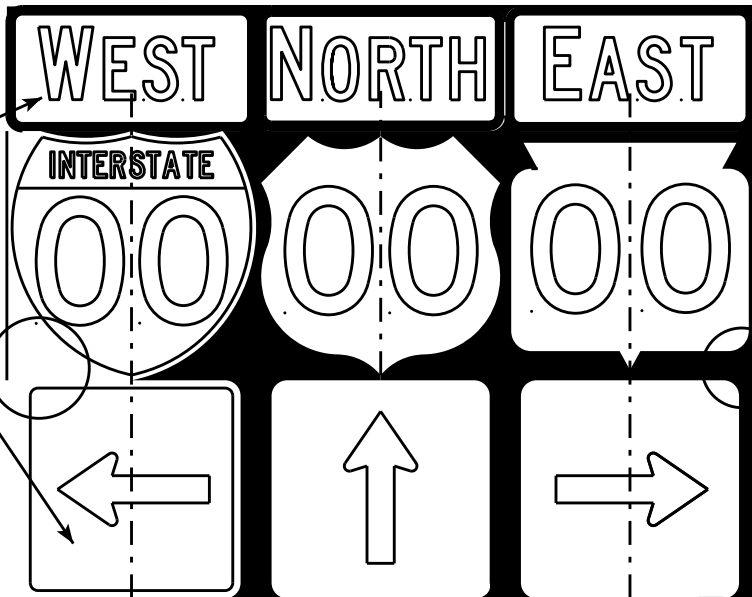
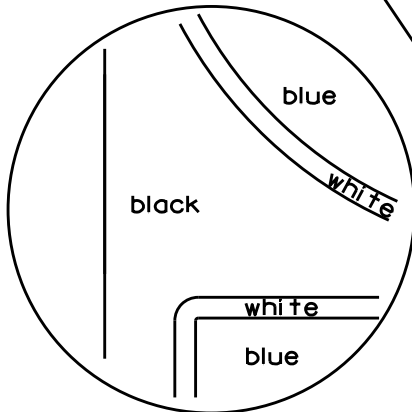
(Typical Vertical J-Assembly
See Note 10 and 11)



JH-1

Blue Background

[blue background
with interstate]



[black background]

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/06/14 PLATE NO. A2-1S.8

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 inches (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.

PROJECT NO:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN

PLOT DATE : 06-FEB-2014 14:10

PLOT BY : mscs.ja

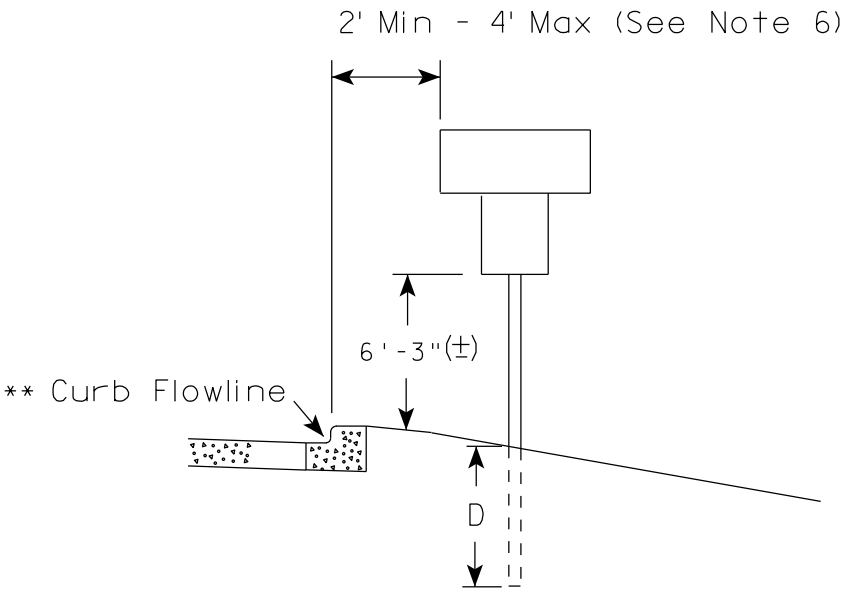
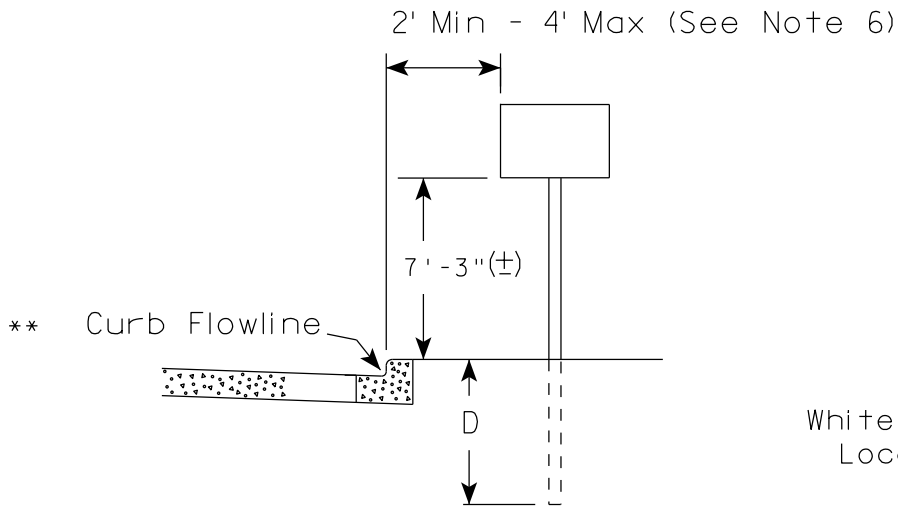
PLOT NAME :

SHEET NO:

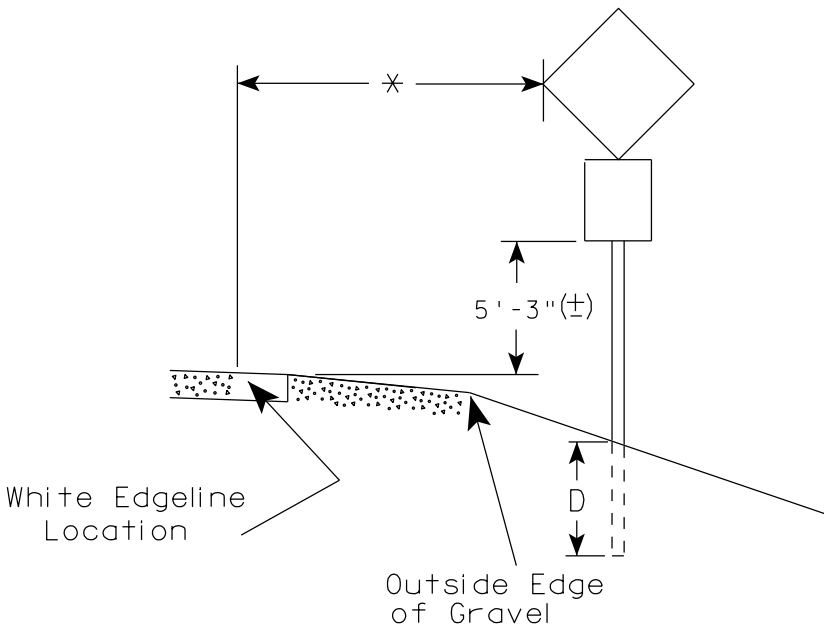
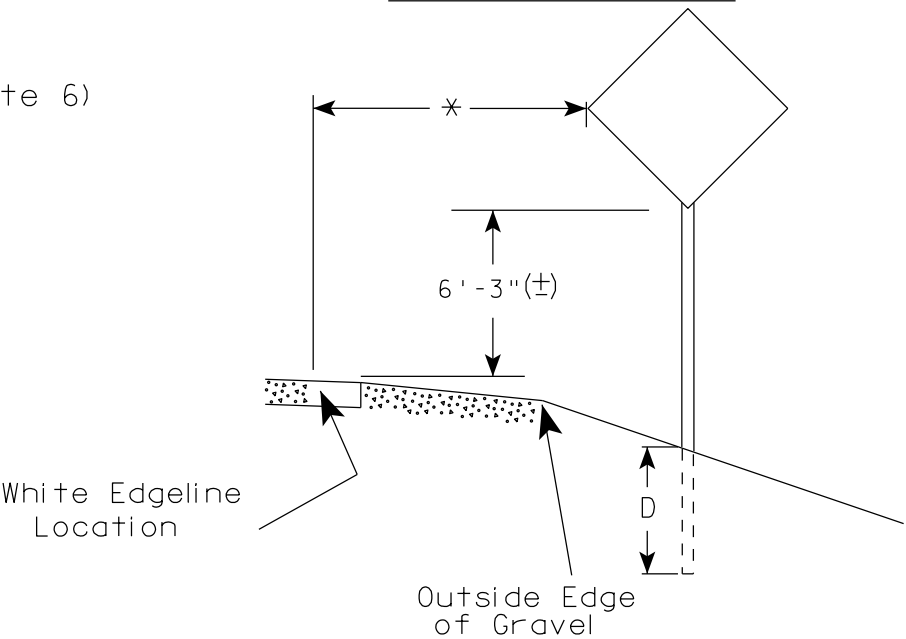
E

WISDOT/CADDs SHEET 42

URBAN AREA



RURAL AREA (See Note 2)



GENERAL NOTES

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

POST EMBEDMENT DEPTH

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

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

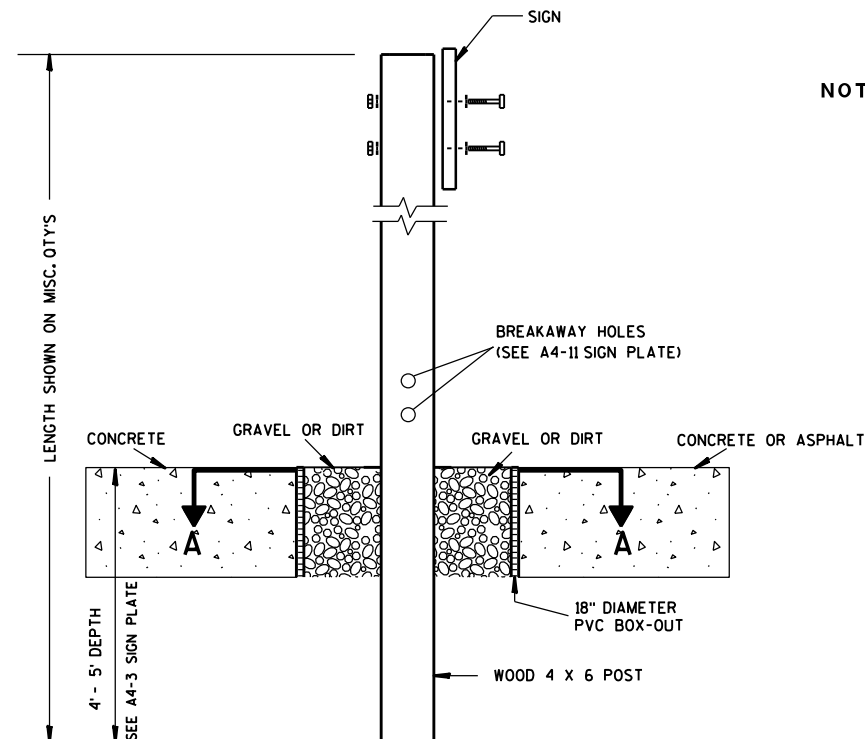
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

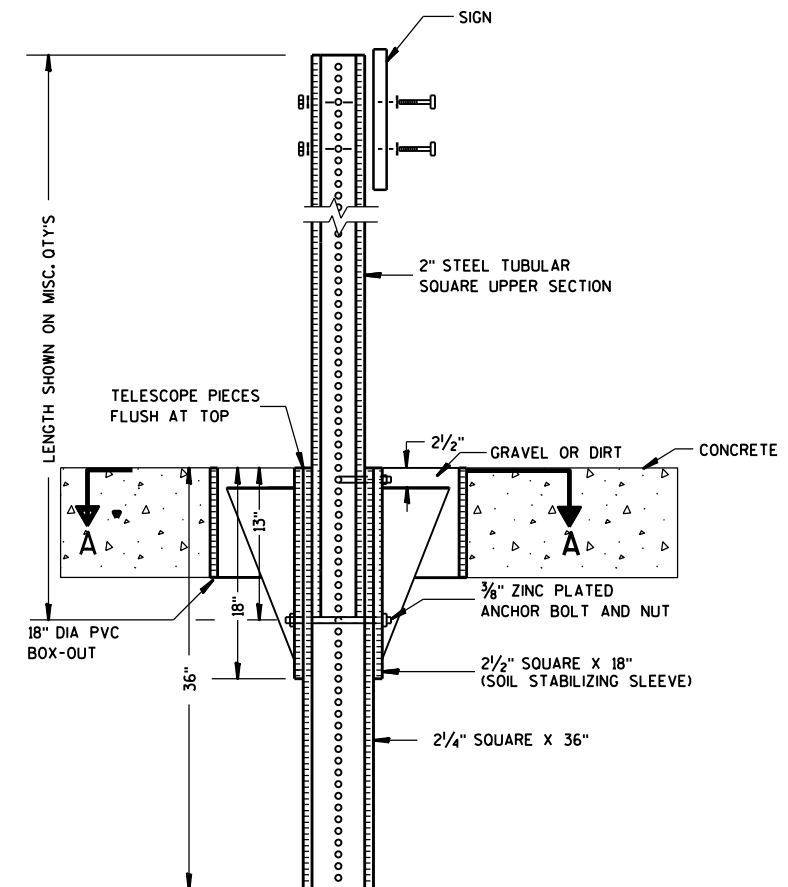
DATE 7/23/15 PLATE NO. A4-3.20



ELEVATION VIEW

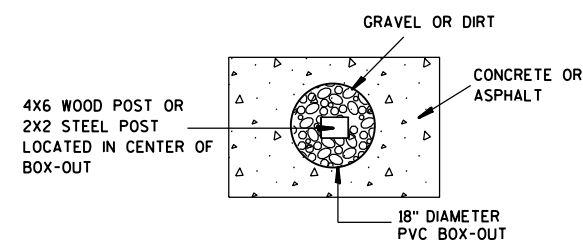
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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

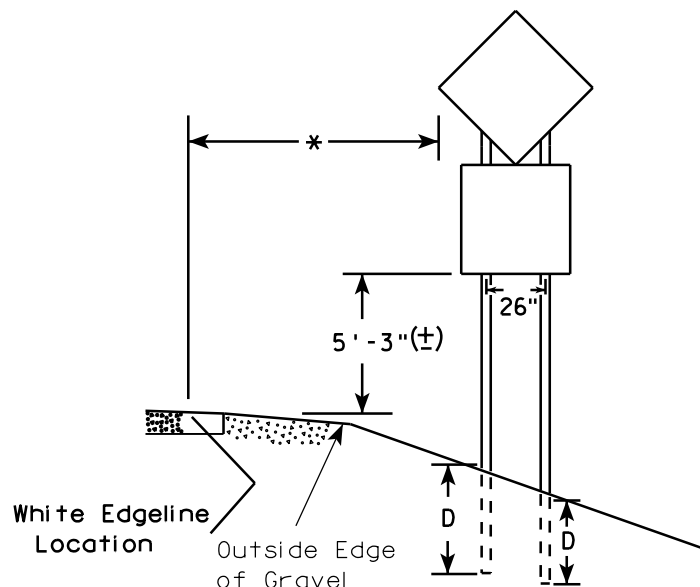
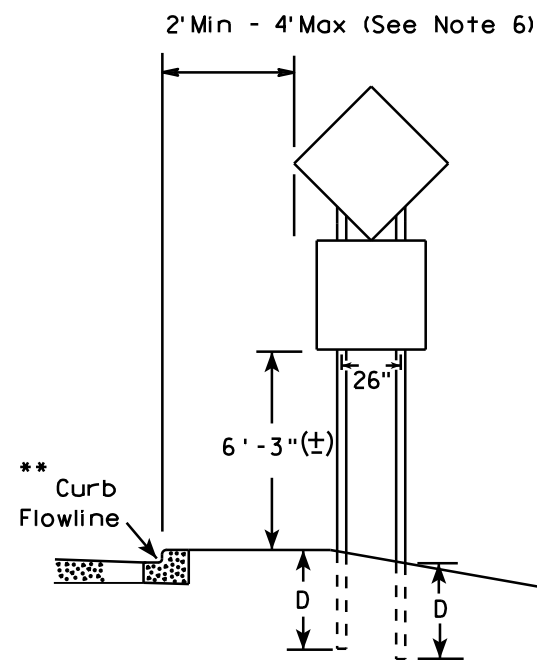
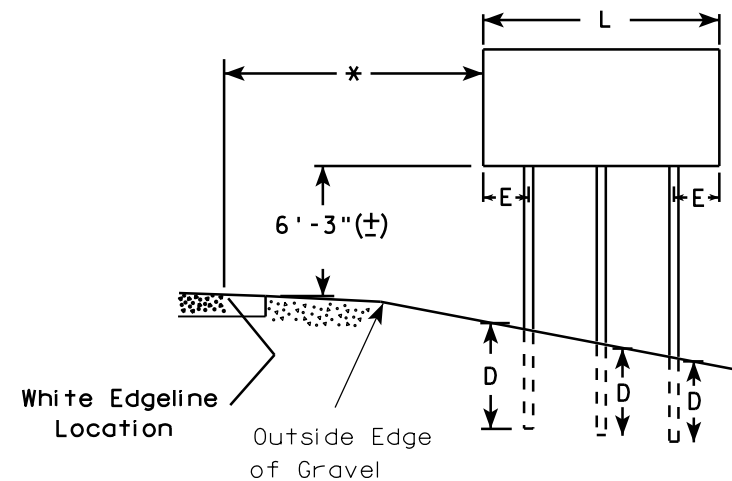
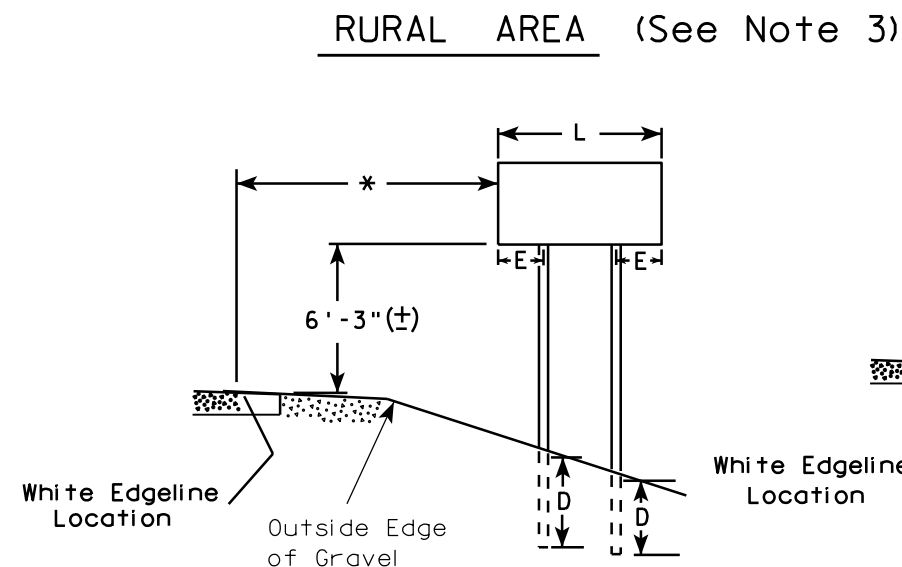
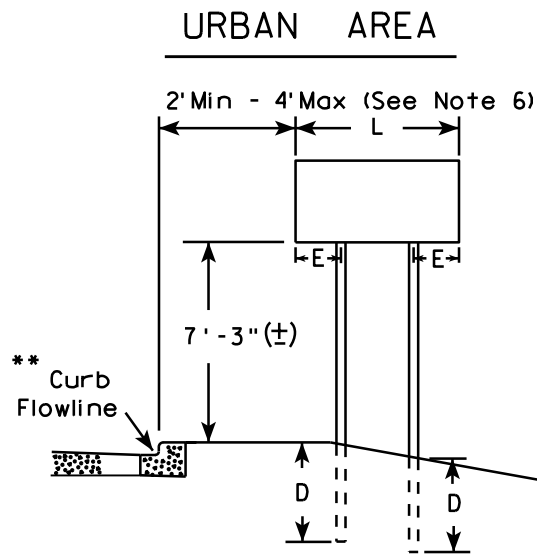
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



48" DIAMOND WARNING SIGN

48" DIAMOND WARNING SIGN

- GENERAL NOTES**
1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
 2. See tables below for required number of posts.
 3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
 4. The (±) tolerance for mounting height is 3 inches.
 5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
 6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
 7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
 8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

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

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

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

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

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

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

POST EMBEDMENT DEPTH

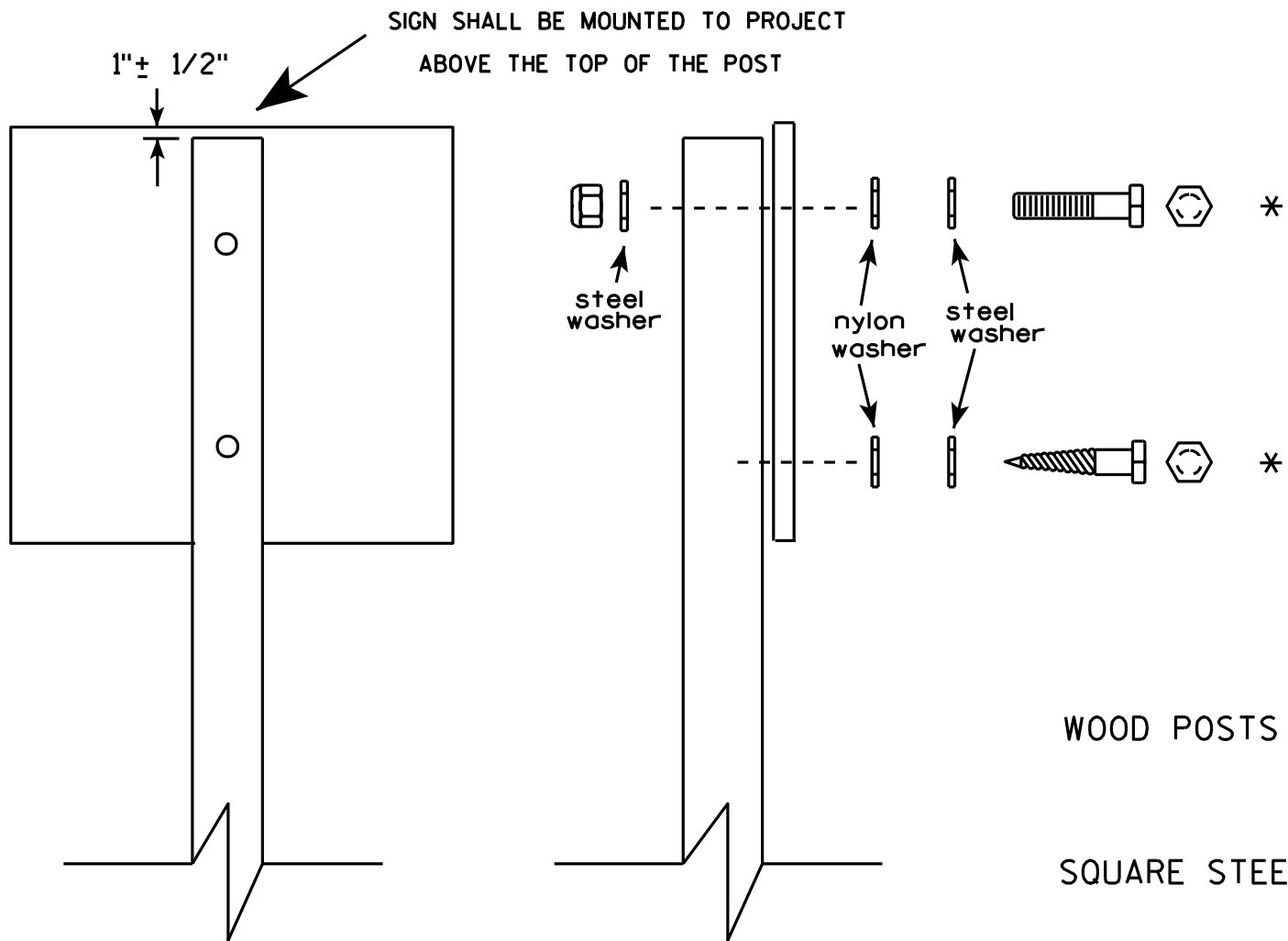
Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4.14

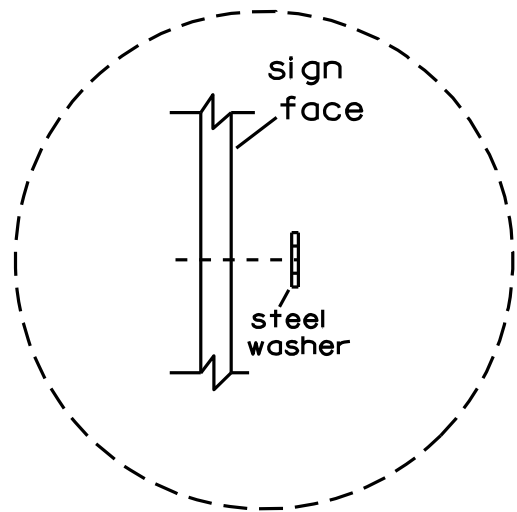


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- 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

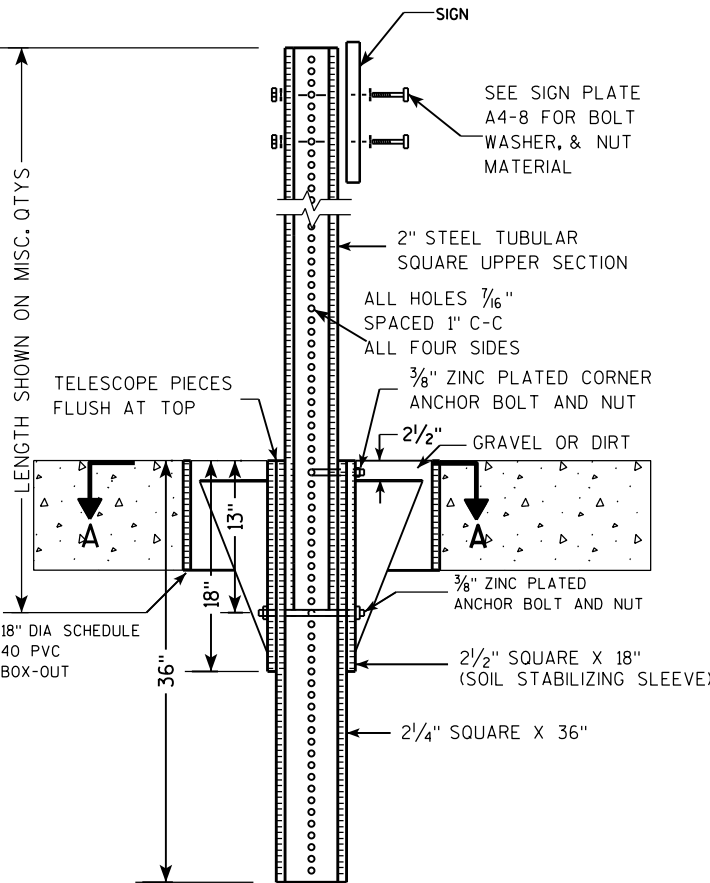
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/23/10	PLATE NO. A4-8.7

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



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



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



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

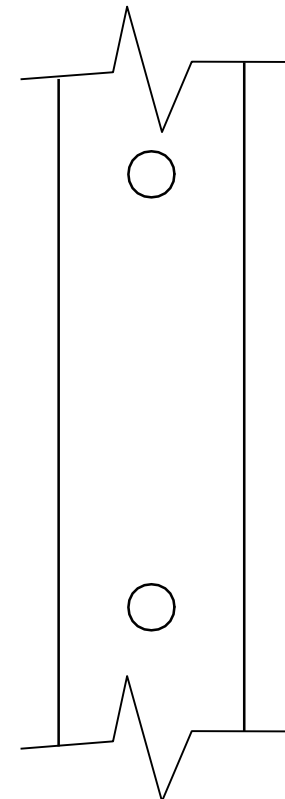
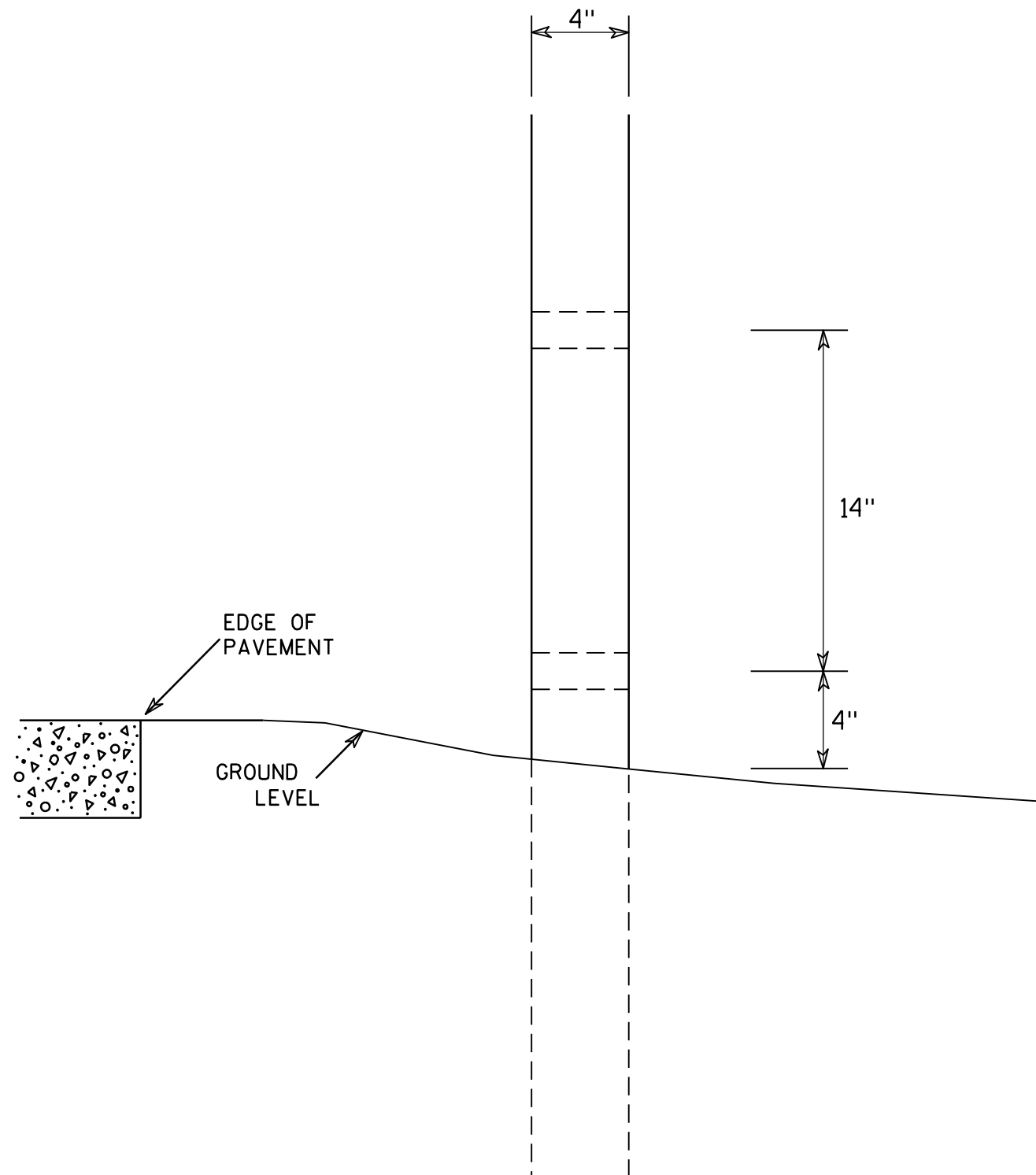
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1 1/2" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

HWY:

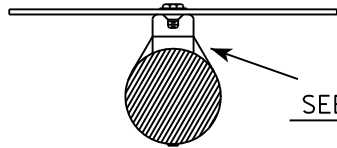
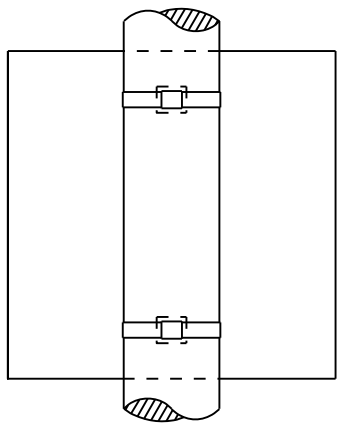
COUNTY:

SHEET NO:

E

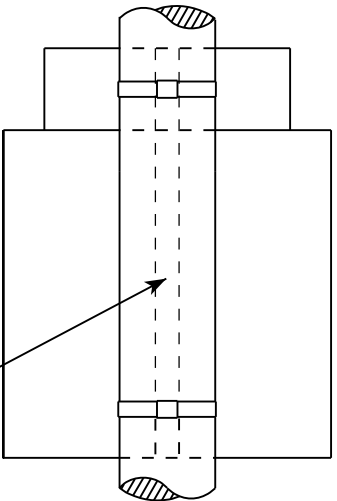
BANDING

SINGLE SIGN

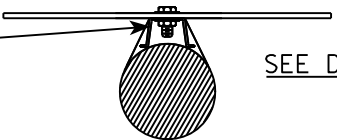


SEE DETAIL A

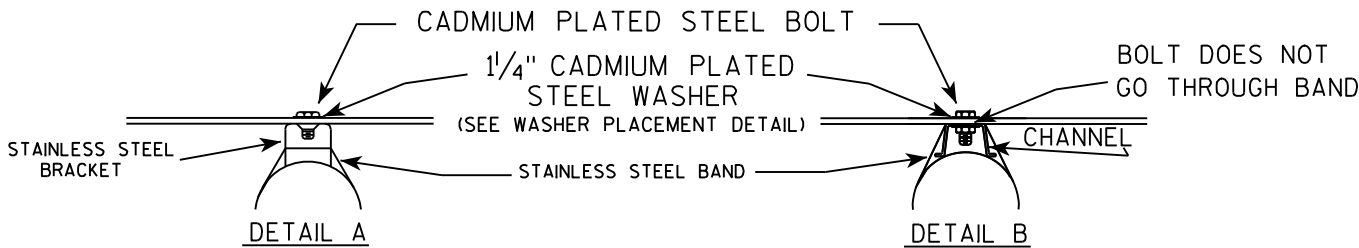
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



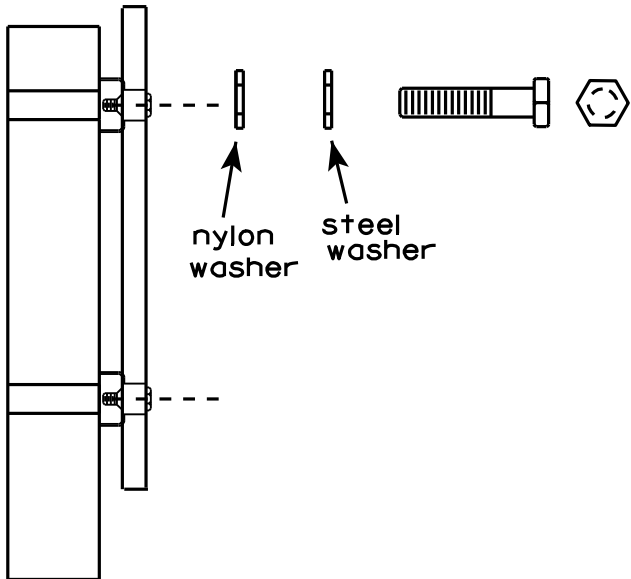
SEE DETAIL B



GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be $\frac{3}{4}$ " in width and 0.025" thickness.

WASHER PLACEMENT



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

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 8/16/13

PLATE NO. A5-9.3

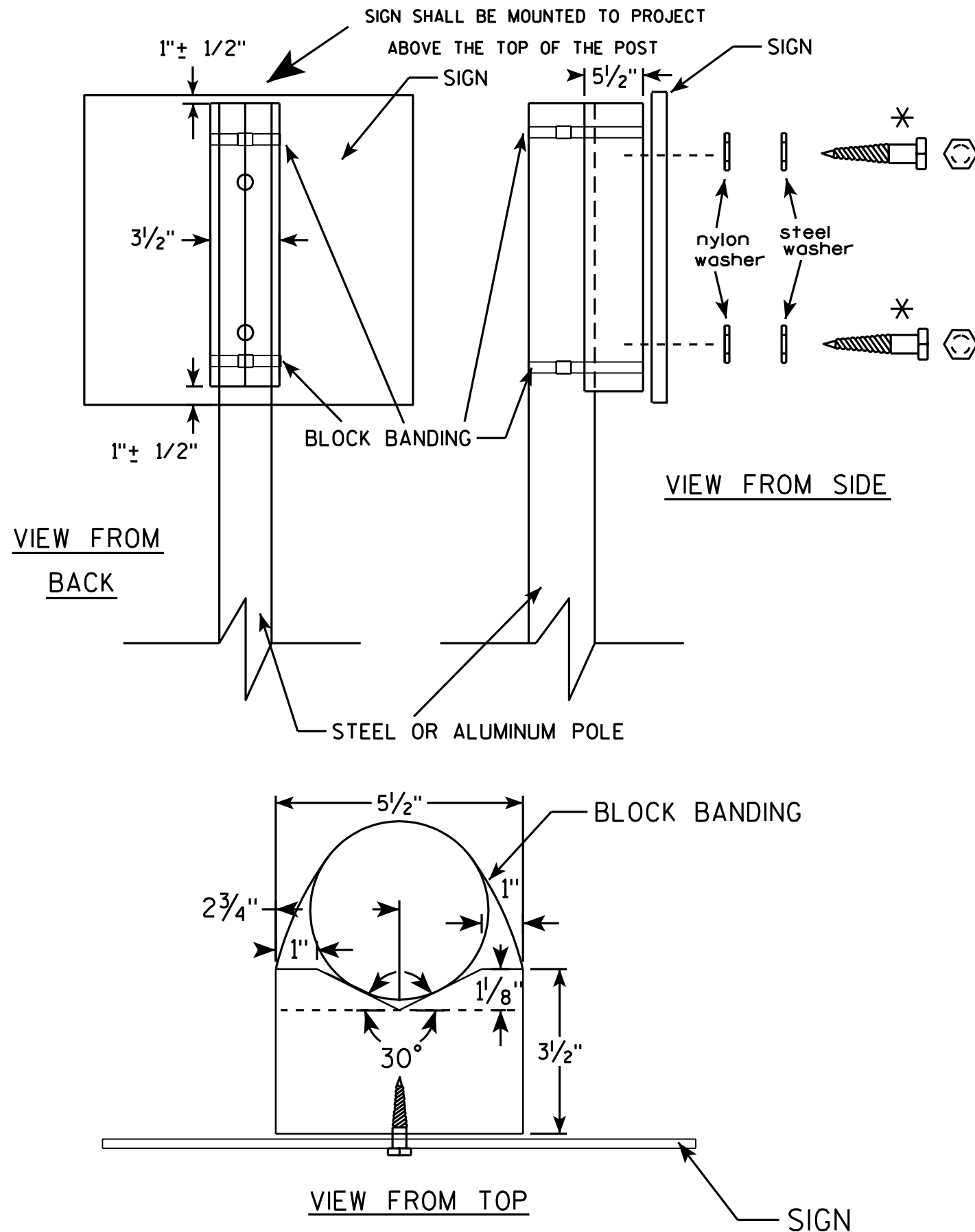
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



GENERAL NOTES

1. WOOD 4"x6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WISDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, 3/4" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORMALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
 - b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
 - c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1 1/4" O.D. X 3/8" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1 1/4" O.D. X 3/8" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✱ LAG BOLTS SHALL BE 3/8" X 2 1/2"

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

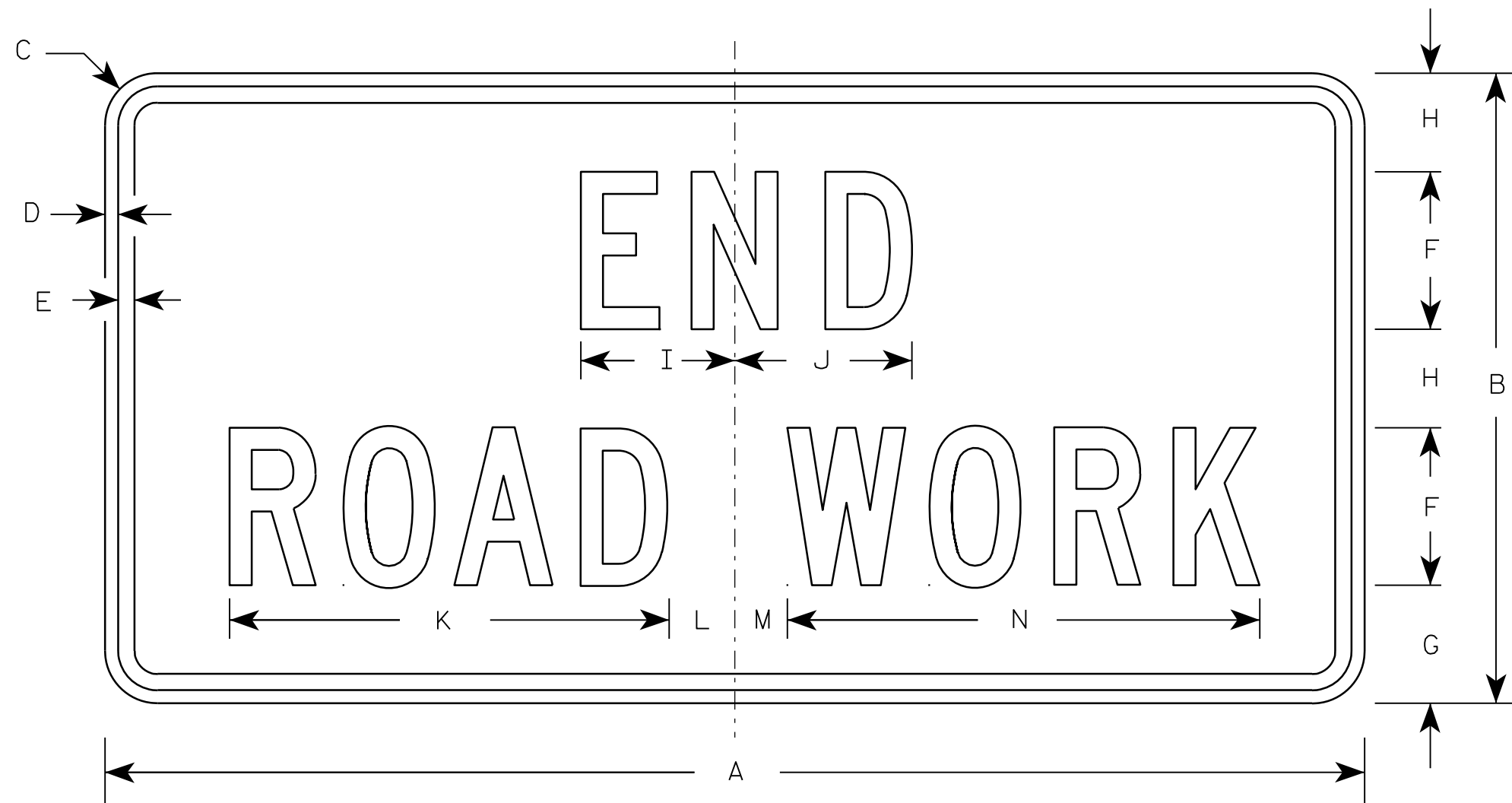
DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO:

E

7



G20-2A

Metric equivalent
for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 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 sq. m.
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Orange
Message - Black
- Message Series - C
- 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.

7

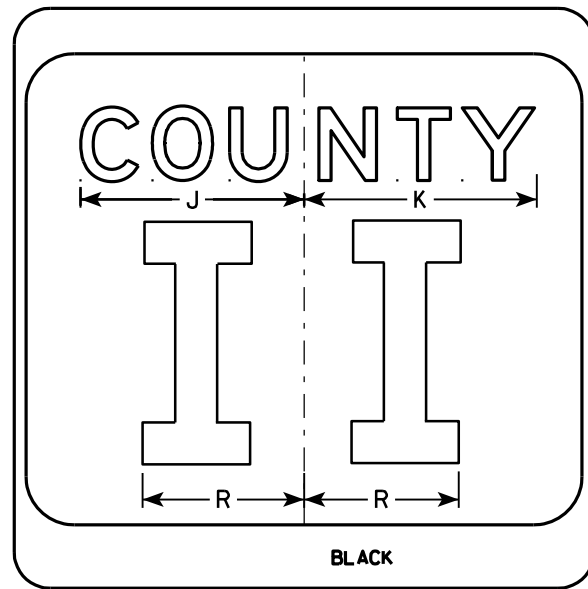
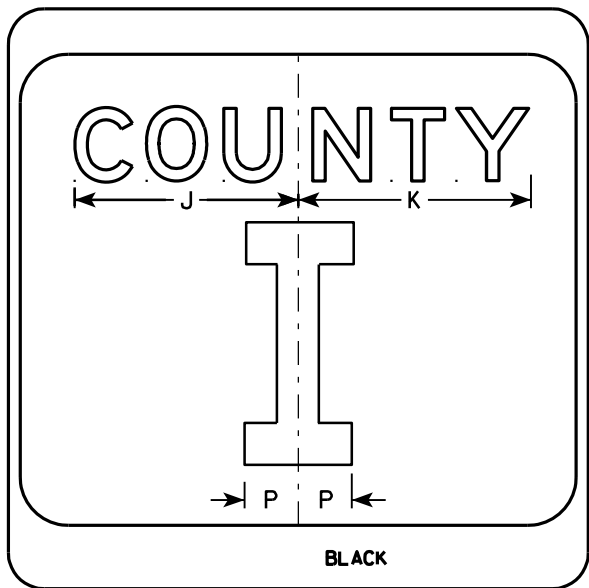
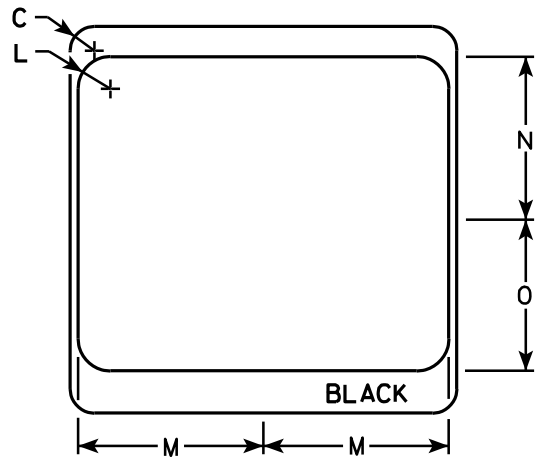
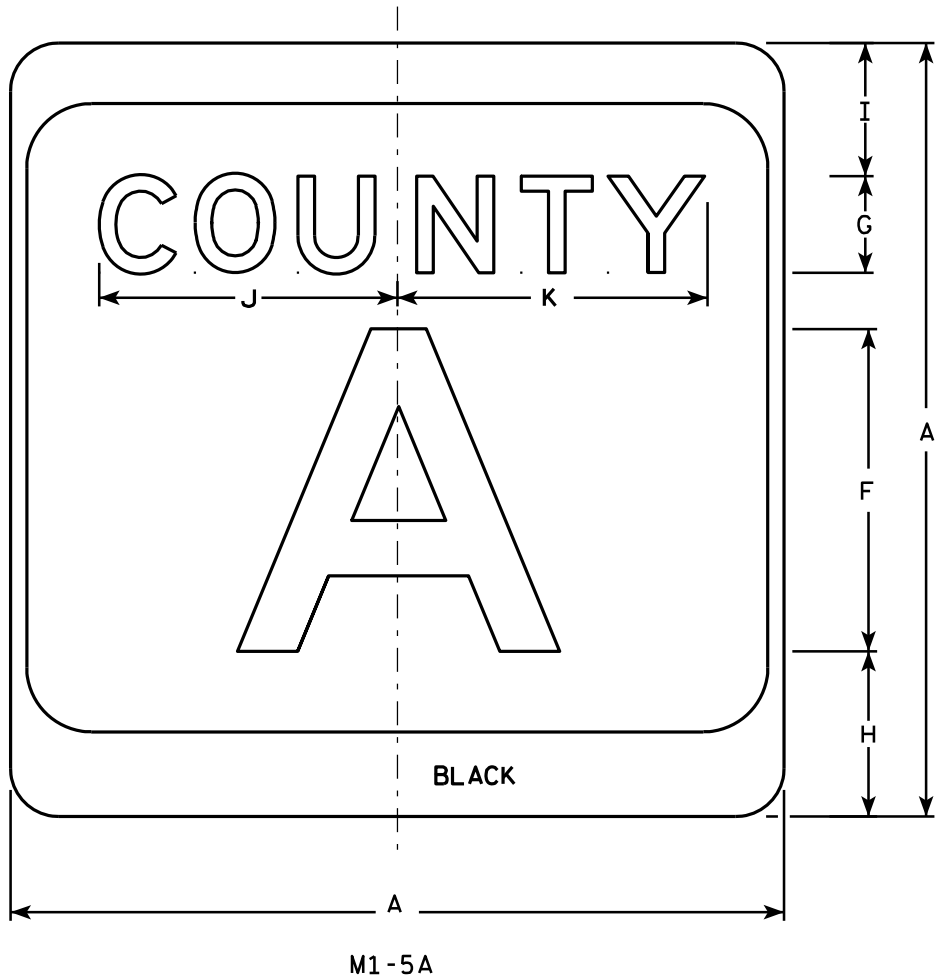
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



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

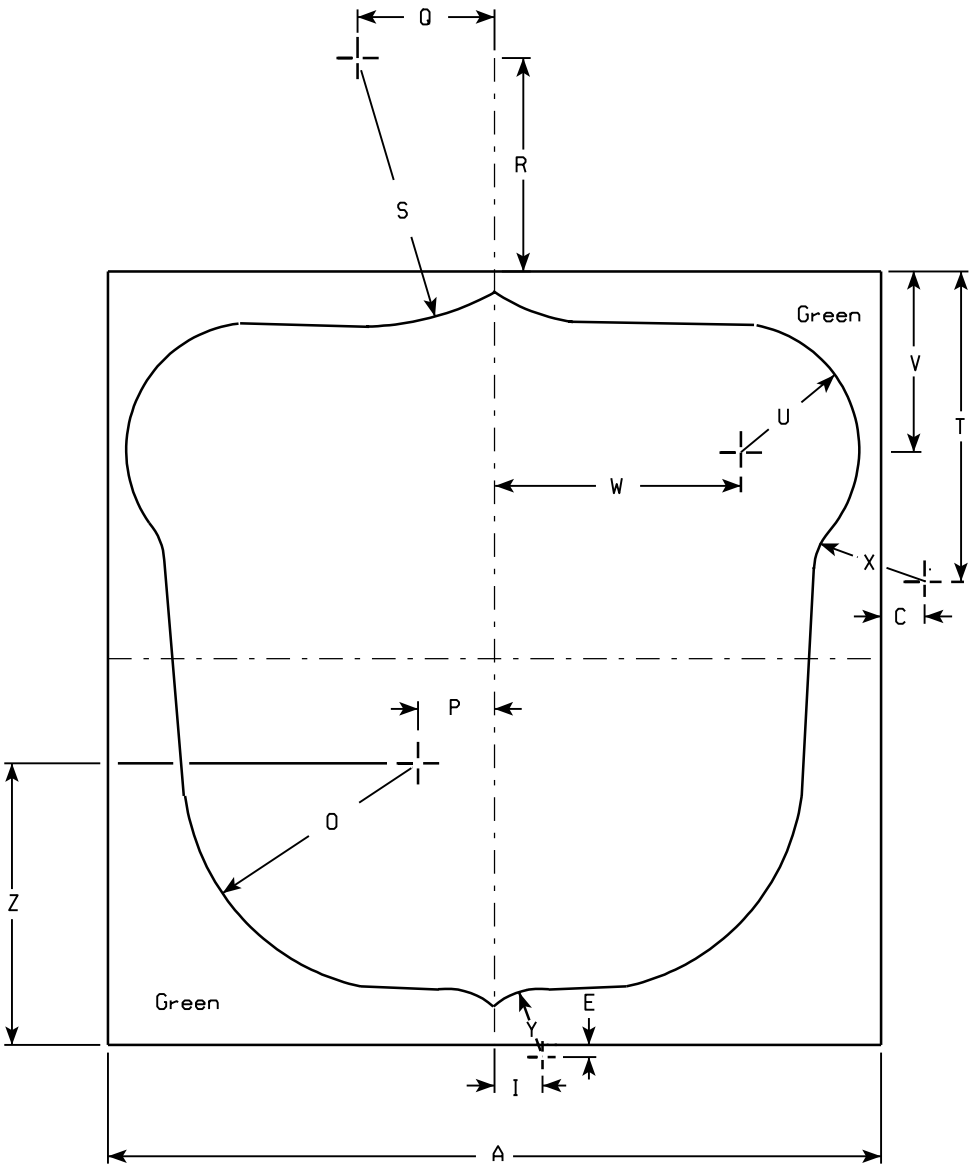
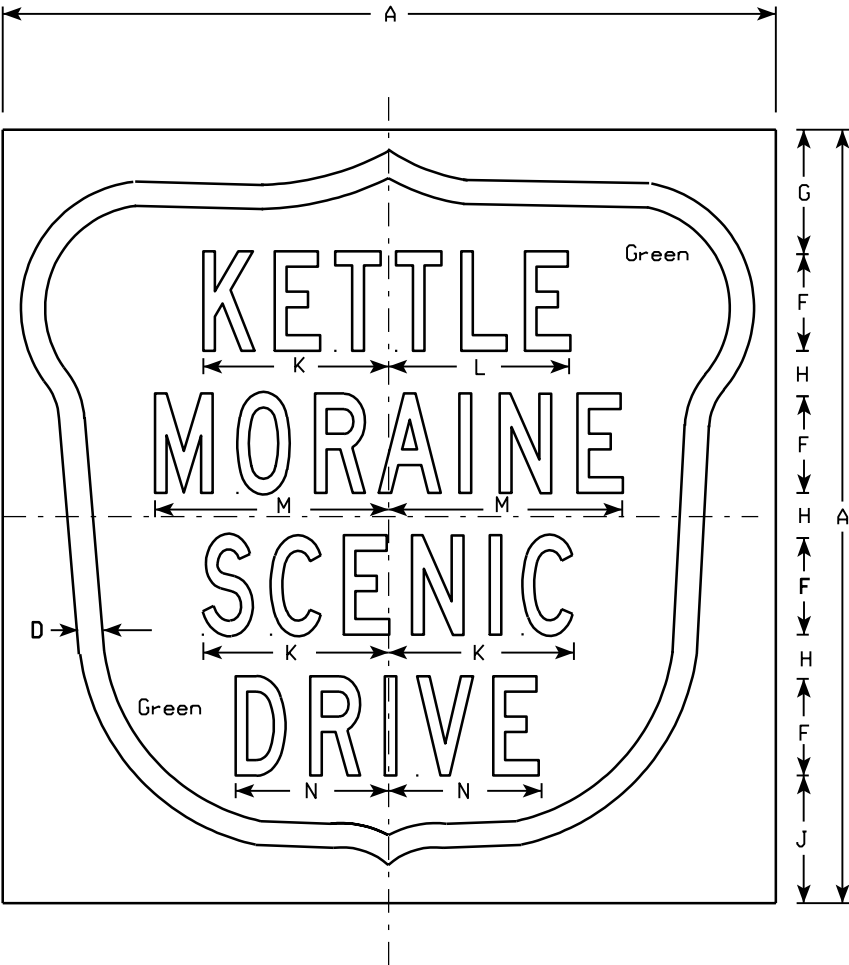
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 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	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 9/27/11	PLATE NO. M1-5A.8

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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NOTES

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



Metric equivalent
for this sign is:

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

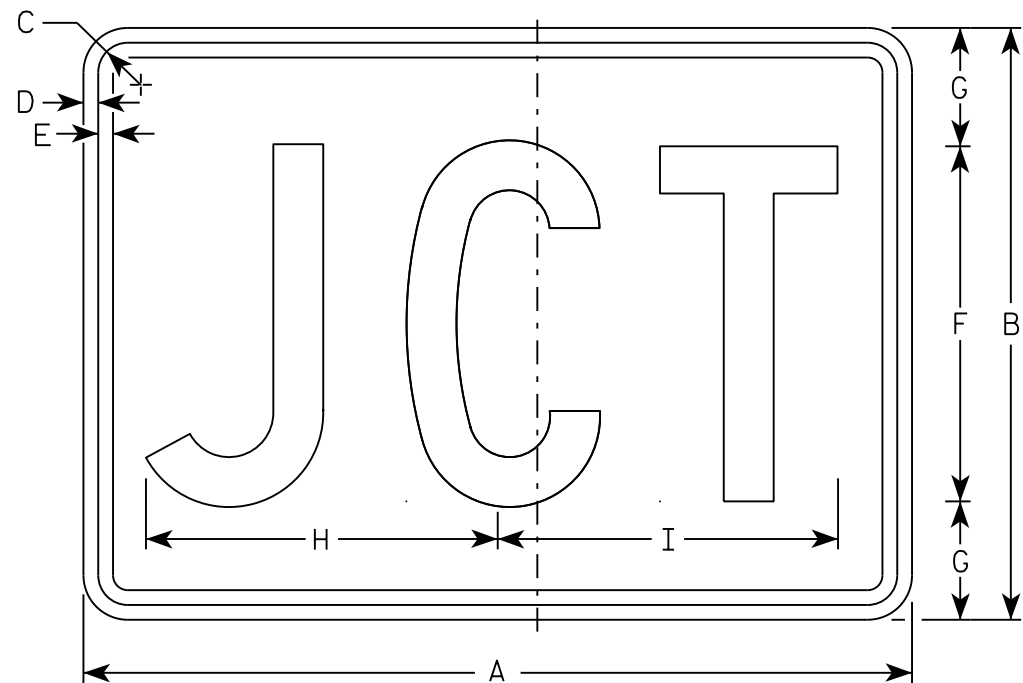
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24		1 3⁄8	3⁄4	3⁄8	3	3 7⁄8	1 3⁄8	1 1⁄2	4	5 3⁄4	5 5⁄8	7 1⁄4	4 3⁄4	7 1⁄4	2 3⁄8	4 1⁄4	6 5⁄8	8 1⁄2	9 5⁄8	3 7⁄8	5 5⁄8	7 5⁄8	3 1⁄2	2 1⁄8	8 3⁄4	4.00	0.36
3																												
4	36		1 1⁄2	1 1⁄8	3⁄4	5	5 1⁄4	1 5⁄8	2 1⁄4	5 7⁄8	9 1⁄8	9	11 3⁄4	7 3⁄8	10 3⁄4	3 5⁄8	6 3⁄8	9 7⁄8	14 1⁄8	14 3⁄8	5 3⁄4	8 3⁄8	11 3⁄8	5 1⁄8	3 1⁄2	13 1⁄8	9.00	0.81
5																												

STANDARD SIGN
M1-97

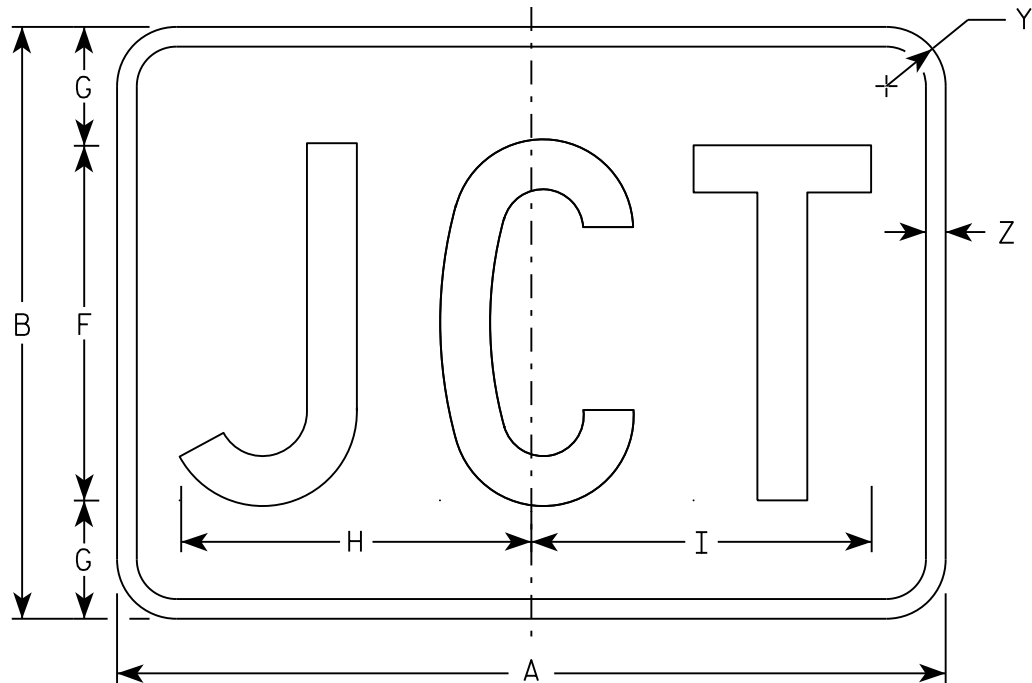
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Chetan J. Spang
for State Traffic Engineer

DATE 1/30/02 PLATE NO. M1-97.2



M2-1
MM2-1
MP2-1



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

NOTES

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

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

STANDARD SIGN

M2 - 1

WISCONSIN DEPT OF TRANSPORTATION

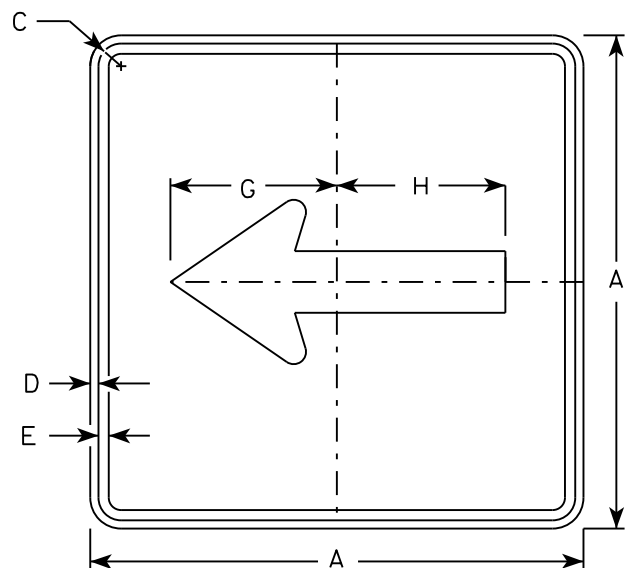
APPROVED

Matthew R. Rauch

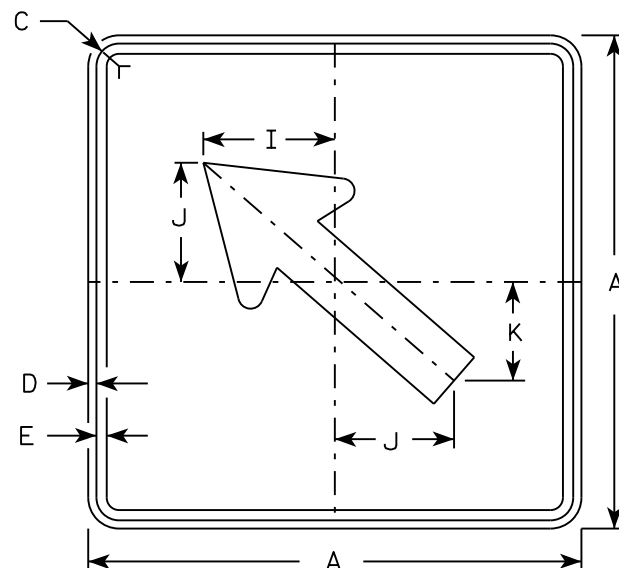
For State Traffic Engineer

DATE 10/15/15

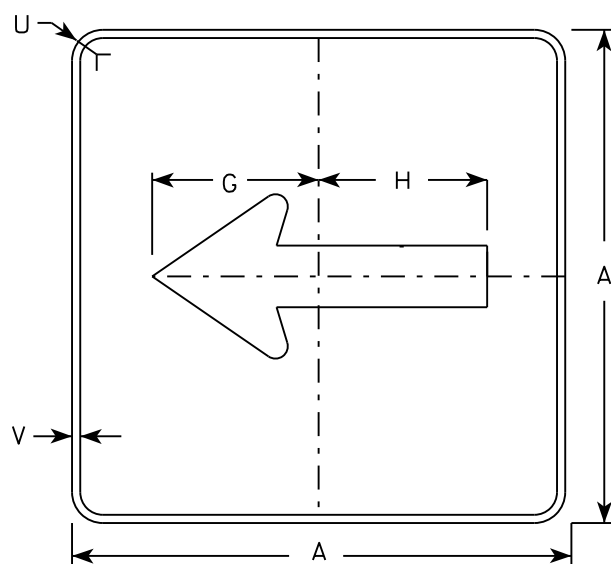
PLATE NO. M2-1.12



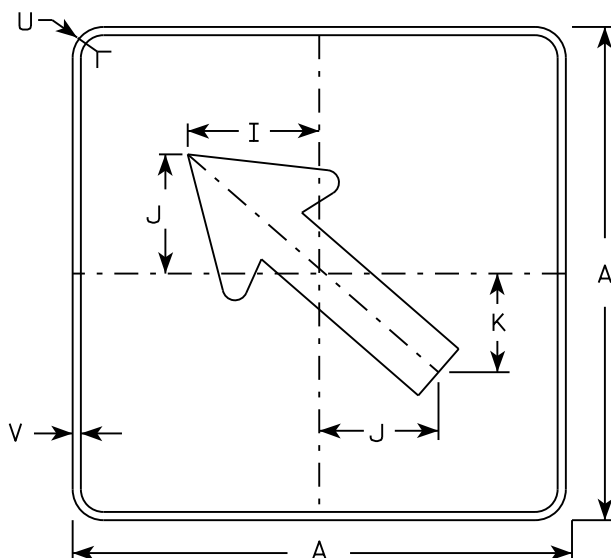
M6 - 1
MM6 - 1
M06 - 1
MP6 - 1



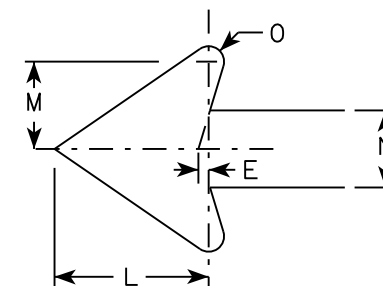
M6 - 2
MM6 - 2
M06 - 2
MP6 - 2



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



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



NOTES

- Signs are Type II - Type H except as Shown
- Color:
Background - See note 4
Message - See note 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.
- M6-1 and M6-2 Background - White
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White
MK6-1 and MK6-2 Background - Green
Message - White
MM6-1 and MM6-2 Background - White
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White
M06-1 and M06-2 Background - Orange - Type F Reflective
Message - Black
MP6-1 and MP6-2 Background - White
Message - Blue
MR6-1 and MR6-2 Background - Brown
Message - Yellow

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

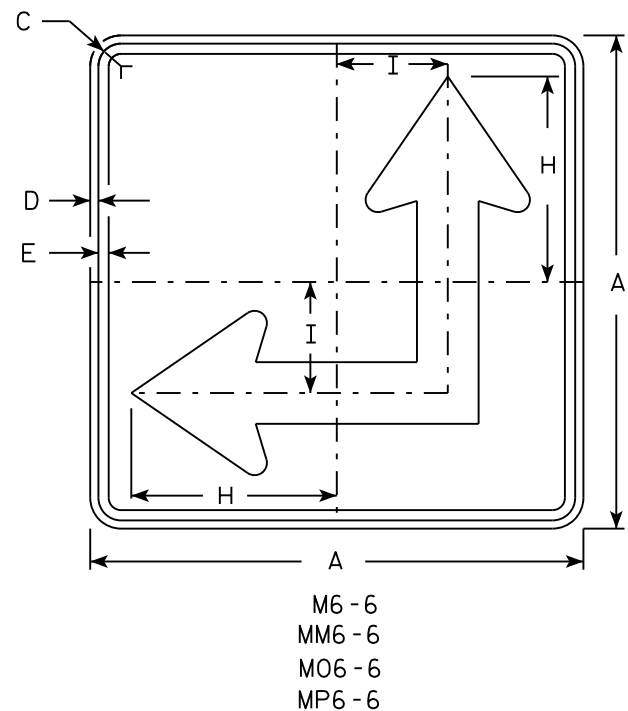
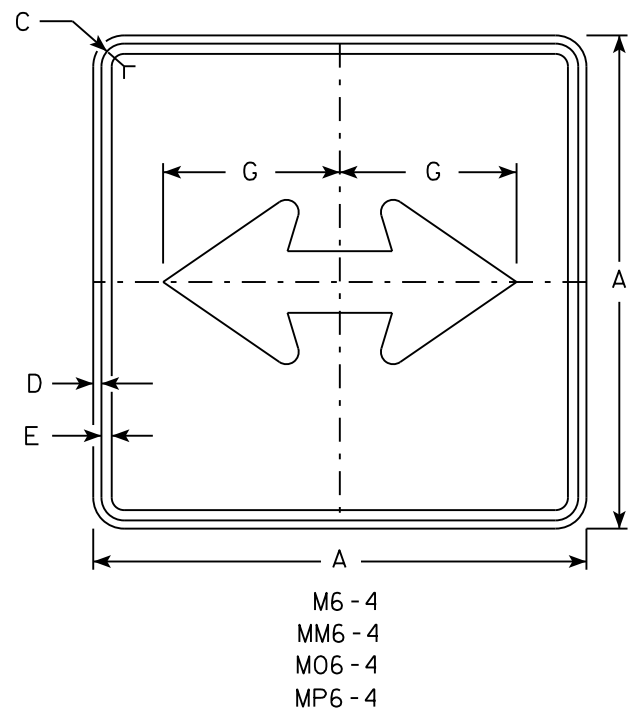
E

STANDARD SIGN
M6 - 1 & M6 - 2
SERIES

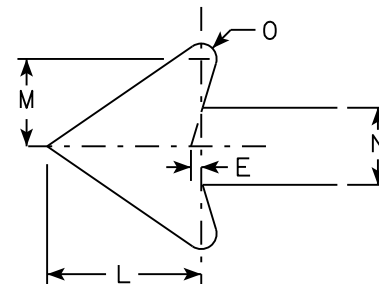
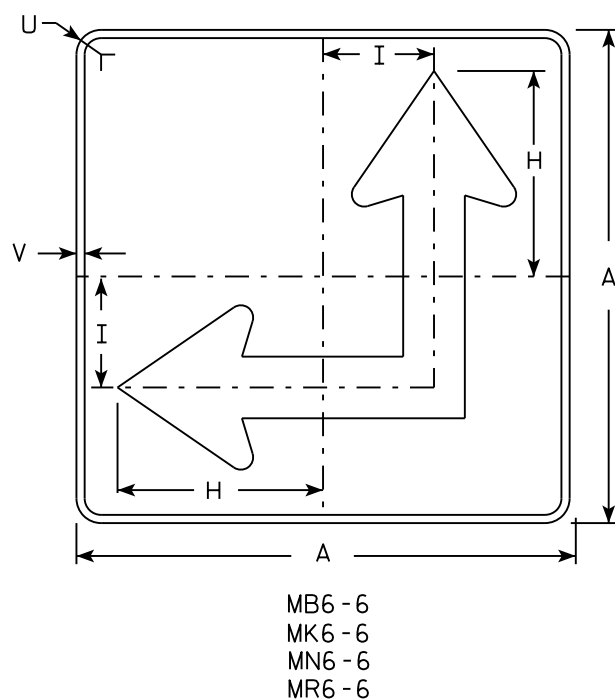
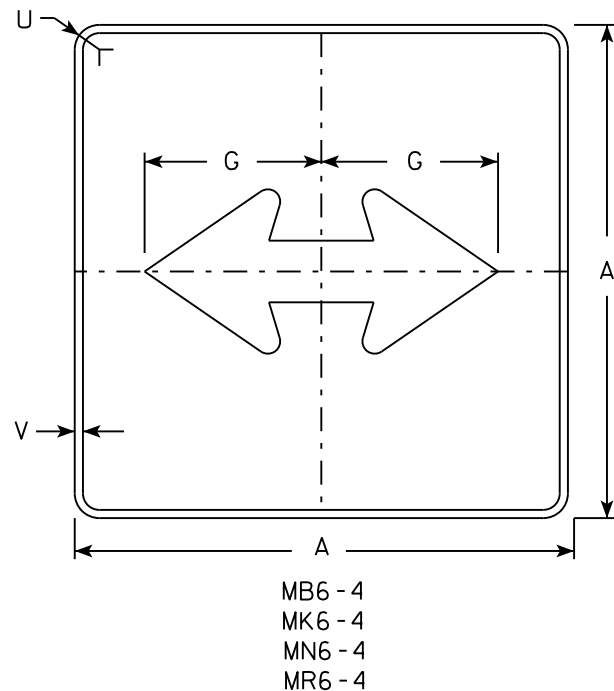
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-1.15



- NOTES
- Signs are Type II - Type H except as Shown
 - Color:
Background - See Note 4
Message - See Note 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.
 - M6-4 and M6-6 Background - White
Message - Black
MB6-4 and MB6-6 Background - Blue
Message - White
MK6-4 and MK6-6 Background - Green
Message - White
MM6-4 and MM6-6 Background - White
Message - Green
MN6-4 and MN6-6 Background - Brown
Message - White
M06-4 and M06-6 Background - Orange - Type F Reflective
Message - Black
MP6-4 and MP6-6 Background - White
Message - Blue
MR6-4 and MR6-6 Background - Brown
Message - Yellow
 - 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

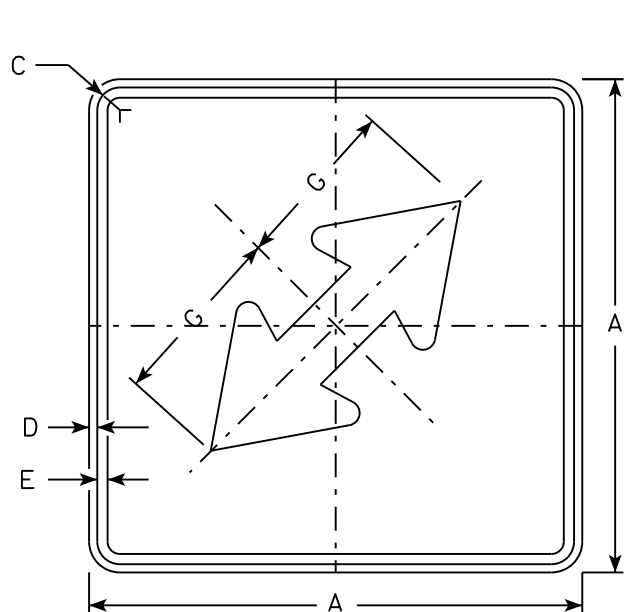
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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STANDARD SIGN
M6 - 4 & M6 - 6
SERIES

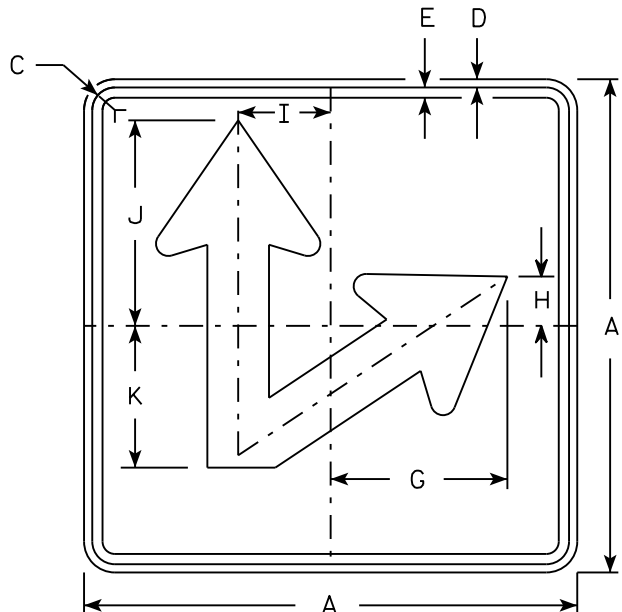
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

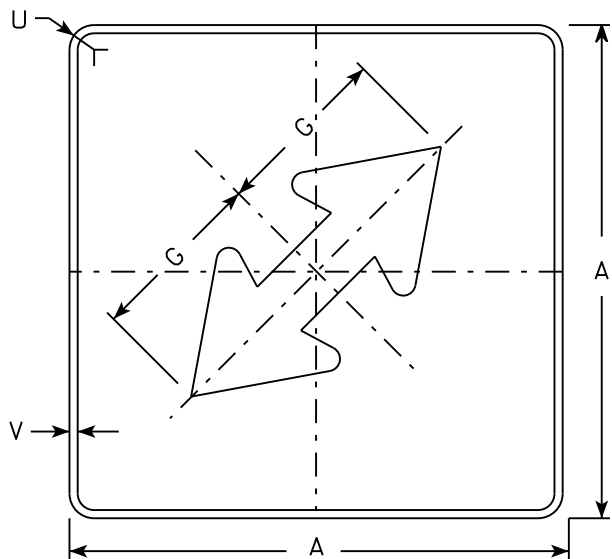
DATE 10/15/15 PLATE NO. M6-4.10



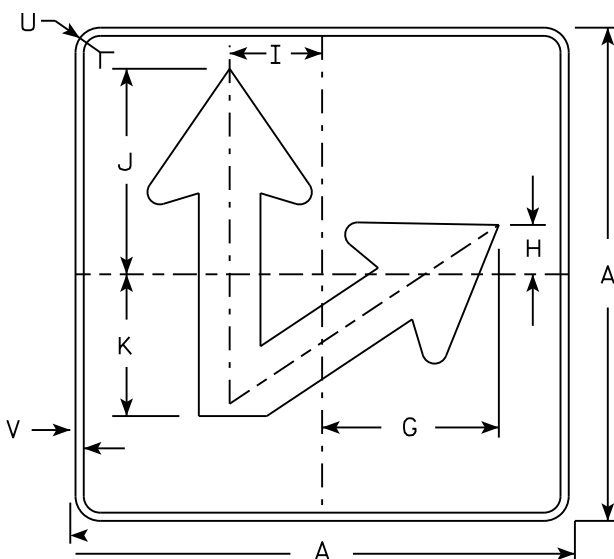
M6-5
MM6-5
M06-5
MP6-5



M6-7R
MM6-7R
M06-7R
MP6-7R



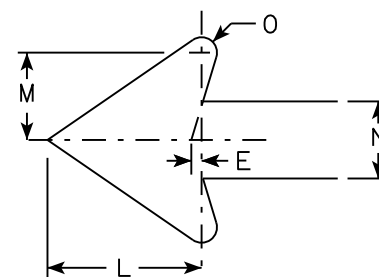
MB6-5
MK6-5
MN6-5
MR6-5



MB6-7R
MK6-7R
MN6-7R
MR6-7R

NOTES

- Sign is Type II - Type H except as Shown
- Color:
Background - See note 4
Message - See note 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.
- M6-5 and M6-7 Background - White
Message - Black
MB6-5 and MB6-7 Background - Blue
Message - White
MK6-5 and MK6-7 Background - Green
Message - White
MM6-5 and MM6-7 Background - White
Message - Green
MN6-5 and MN6-7 Background - Brown
Message - White
M06-5 and M06-7 Background - Orange - Type F Reflective
Message - Black
MP6-5 and MP6-7 Background - White
Message - Blue
MR6-5 and MR6-7 Background - Brown
Message - Yellow
- M6-7L same as M6-7R except arrow points ahead and left.



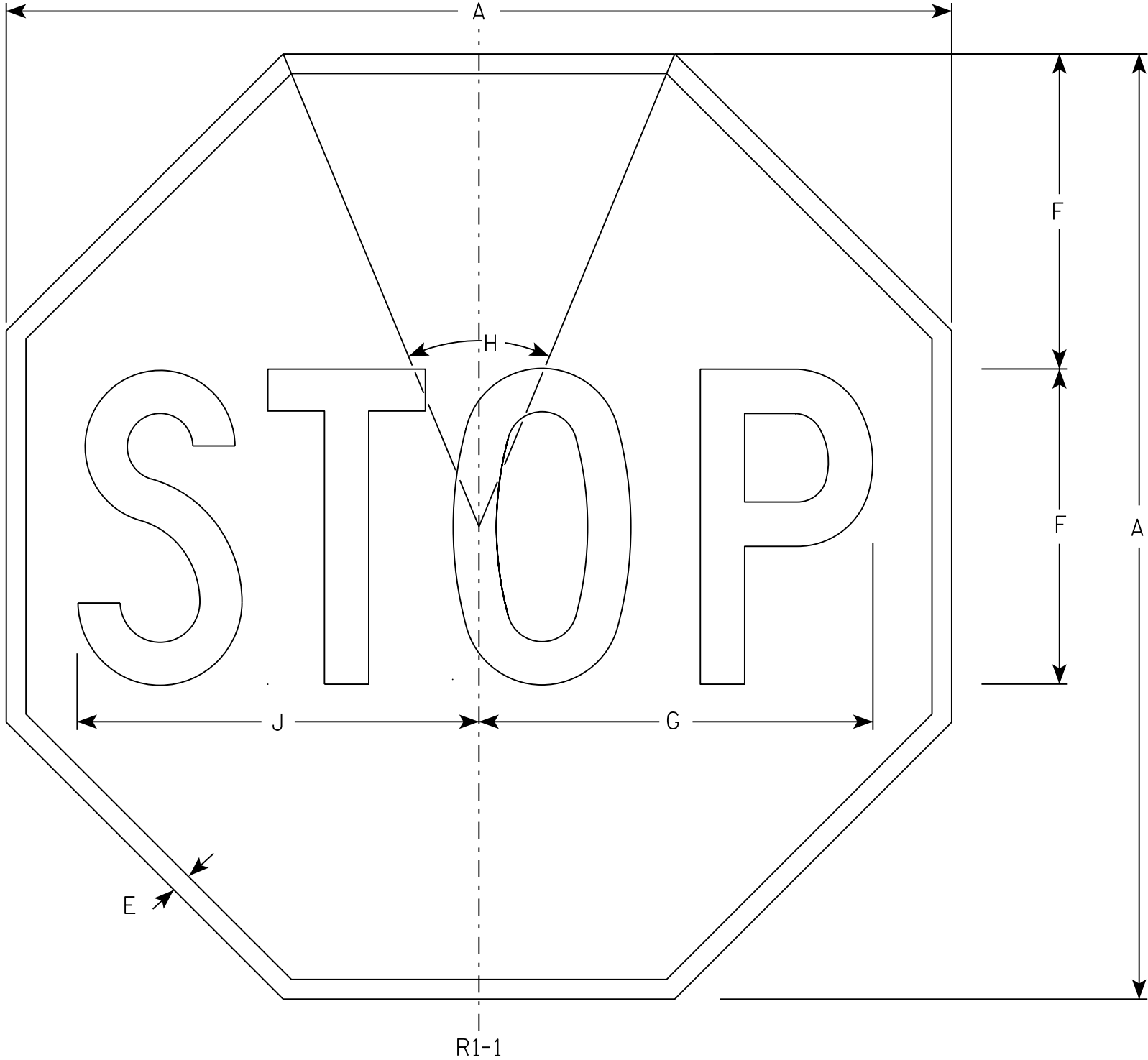
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	2 1/8	4 1/4	8 3/4	6	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	3	6 3/4	12 1/2	8 5/8	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8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

STANDARD SIGN
M6-5 & M6-7
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-7.9



NOTES

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

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

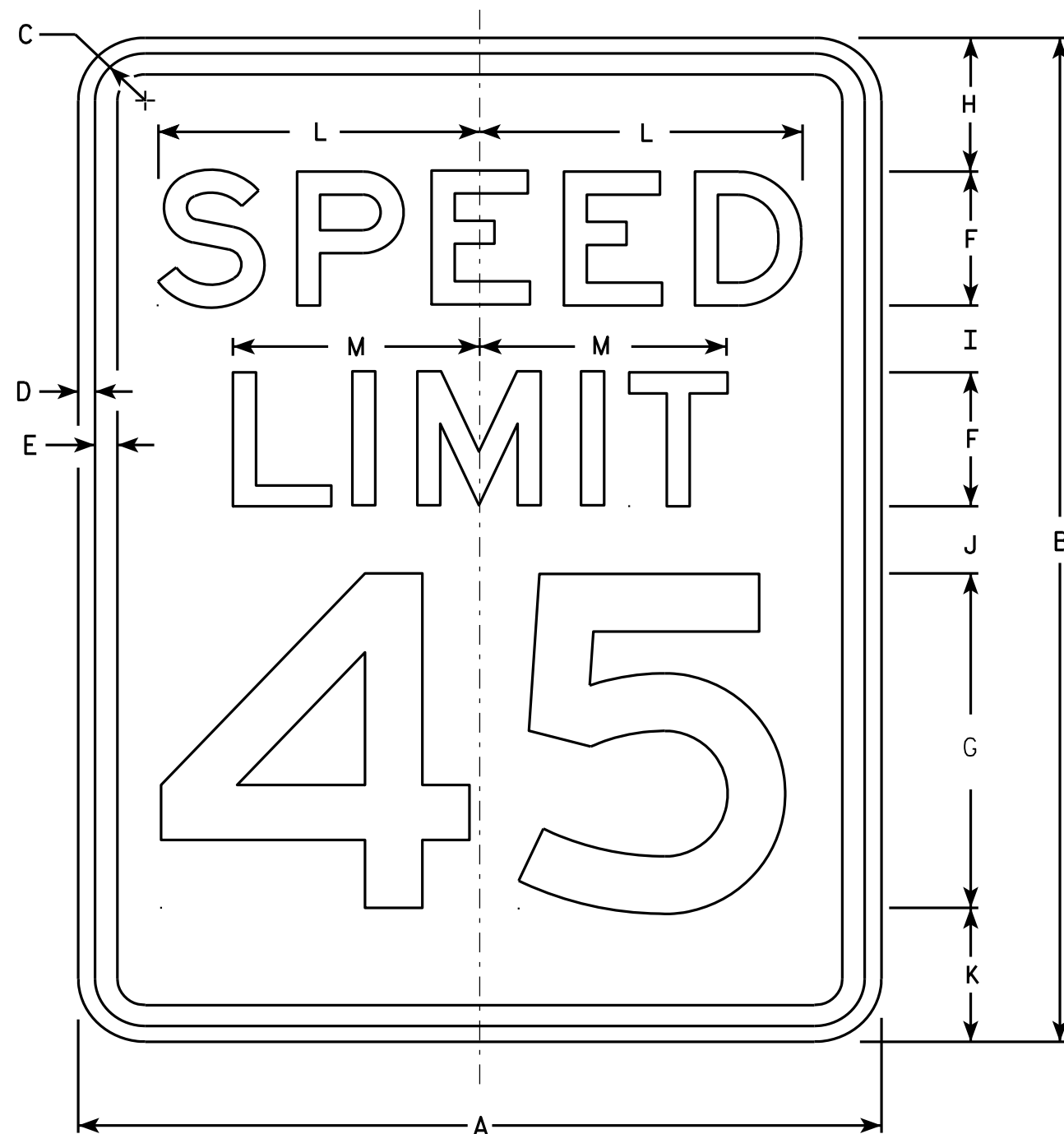
STANDARD SIGN

R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13



R2-1

NOTES

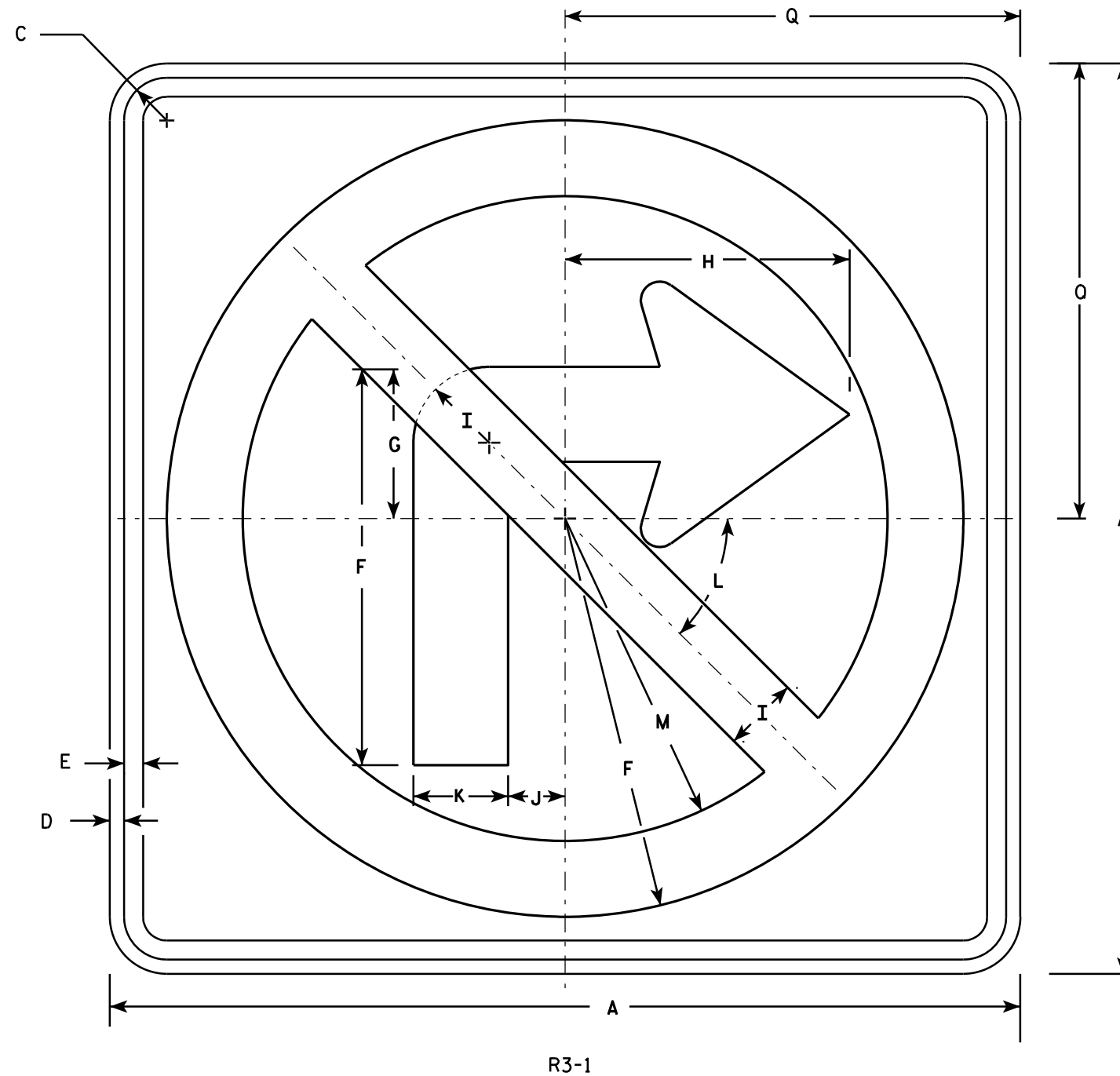
- Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - White
Message - Black
- Message Series - E
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown.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

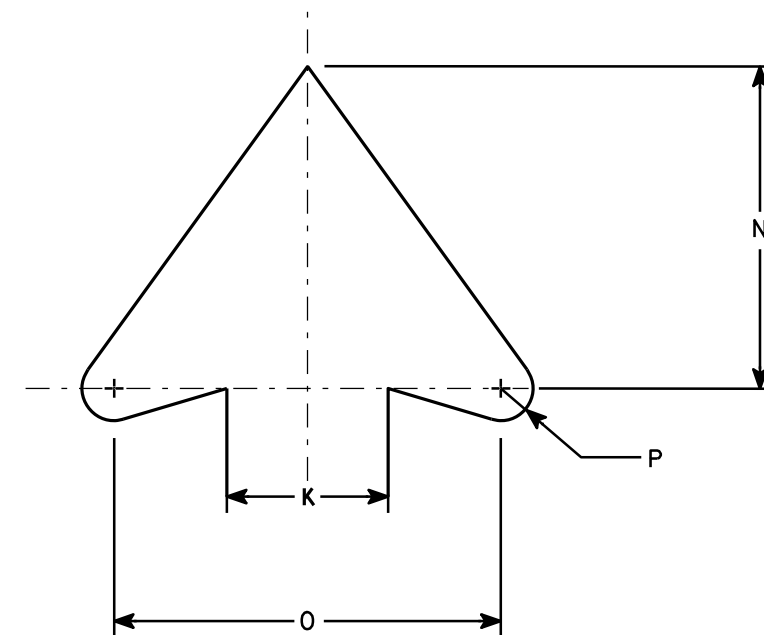
WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: HWY: COUNTY: SHEET NO: E



NOTES

- Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - White
Message - See note 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.
- Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

STANDARD SIGN

R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

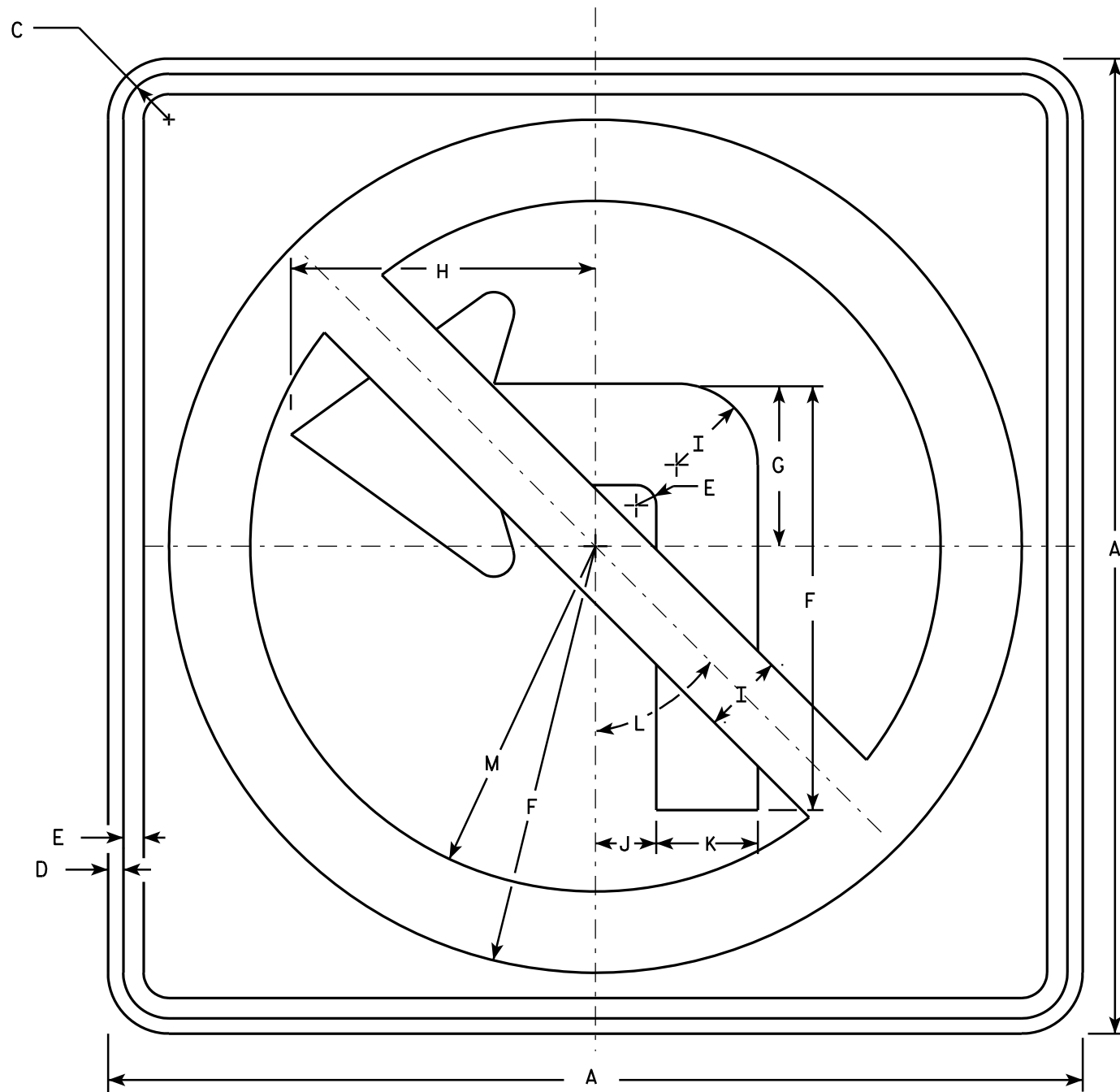
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

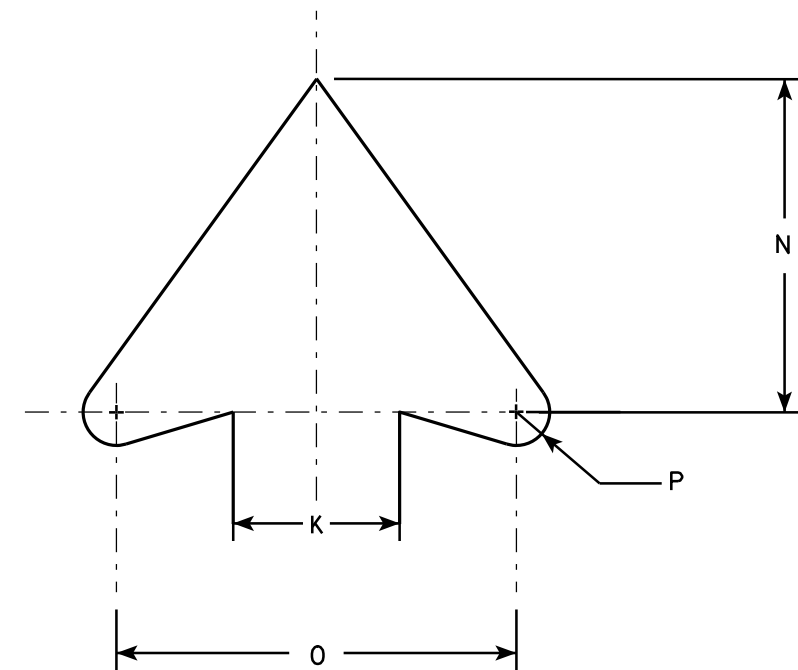
E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

STANDARD SIGN R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

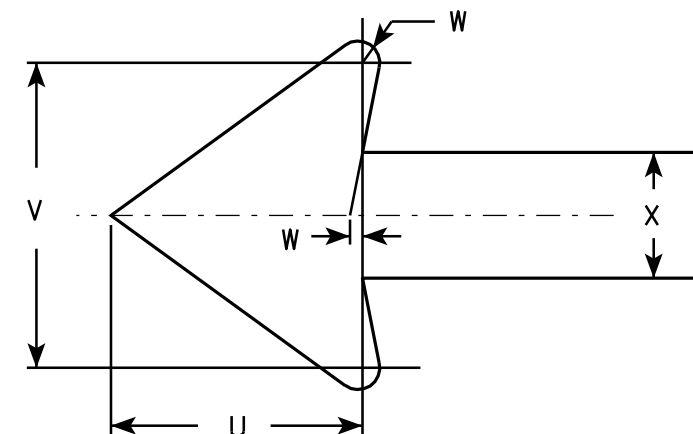
E



R7-1

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 - Red
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. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
R7-1L (left arrow)
R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

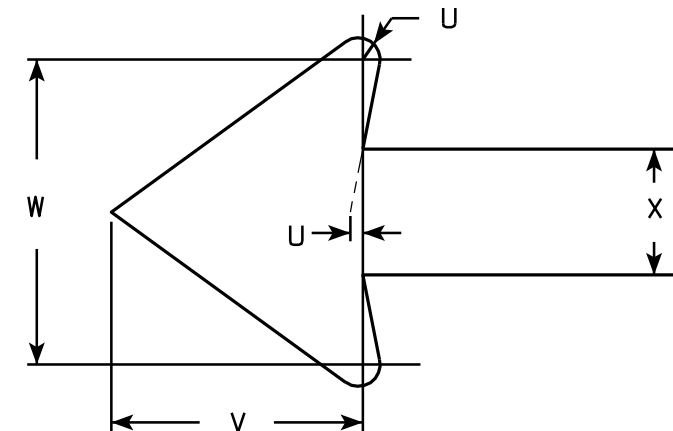
PROJECT NO: HWY: COUNTY: SHEET NO: E



R7-52

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 - Red
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. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-52D (double arrow)
R7-52L (left arrow)
R7-52R (right arrow)



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	12	18	1 1/8	3/8	3/8	3	1 7/8	1 1/2	7/8	7/8	2	2 1/2	2	2	4 7/8	4 7/8	5 1/8	5	3 1/8	3 7/8	1/8	1 1/2	1 3/4	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	6 3/8	6 1/4	3 7/8	5 7/8	1/4	2 1/4	2 5/8	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 5/8	7 5/8	4 3/4	7 3/4	1/4	3	3 1/2	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 5/8	7 5/8	4 3/4	7 3/4	1/4	3	3 1/2	1 1/2			5.0
4																											
5																											

STANDARD SIGN R7-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-52.6

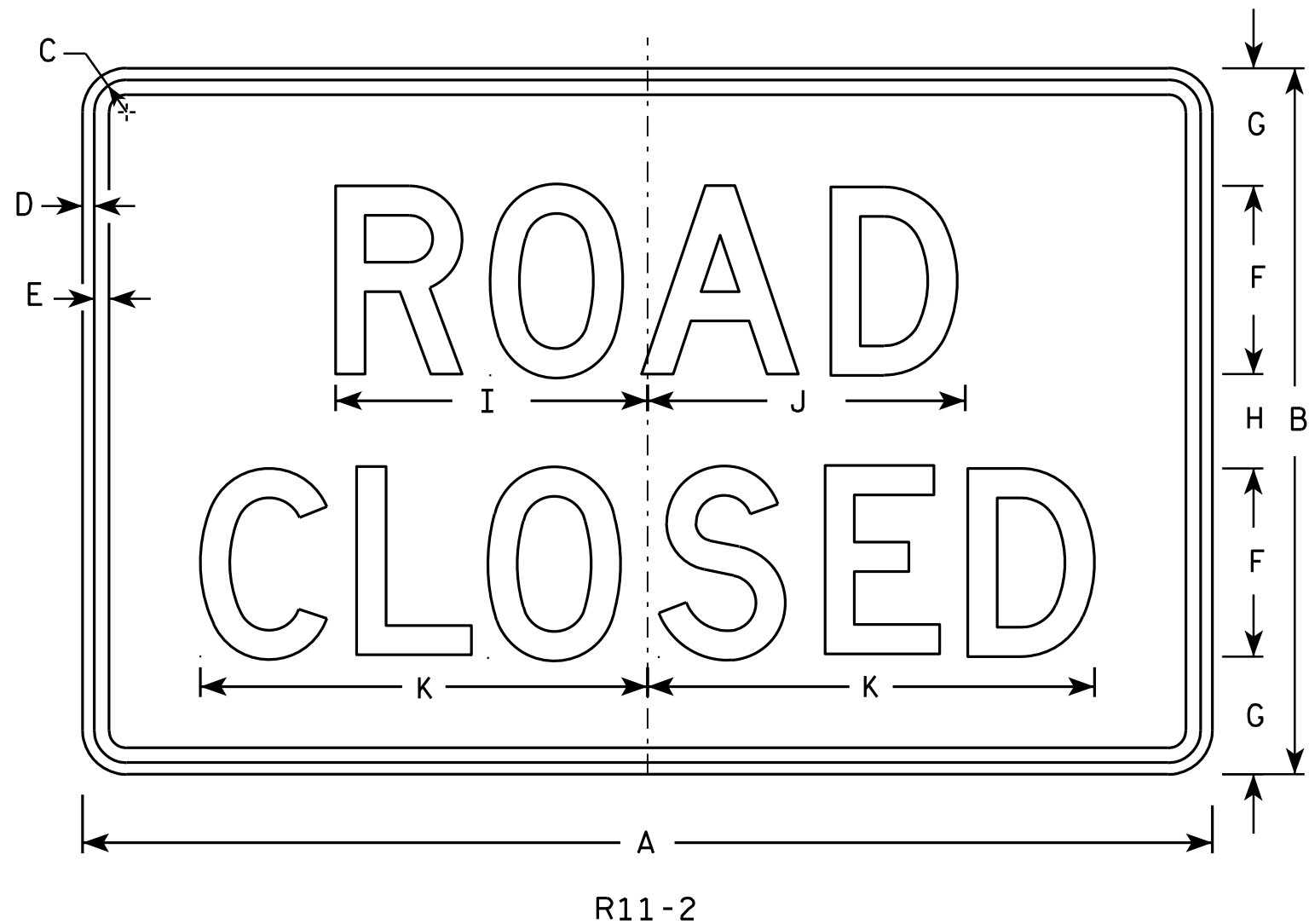
PROJECT NO:

HWY:

COUNTY:

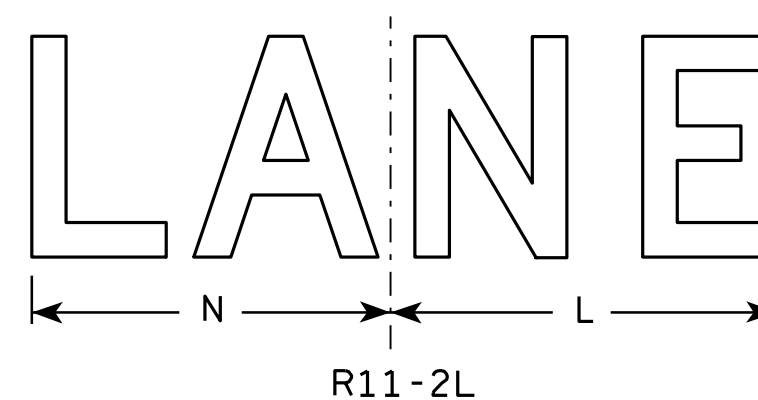
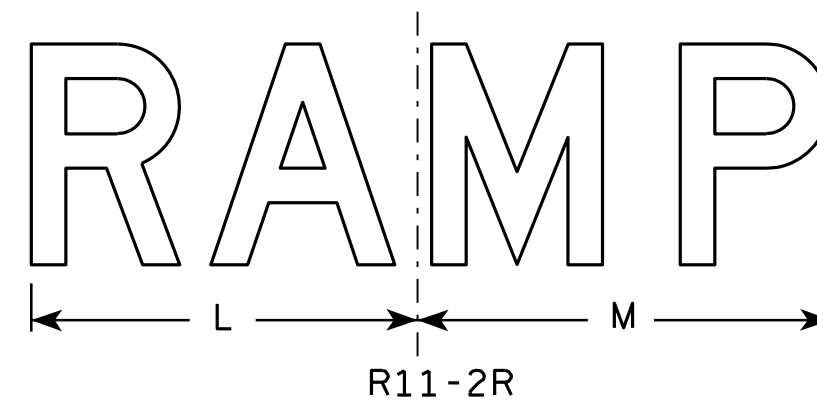
SHEET NO:

E



NOTES

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



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	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
2M	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
3	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
4	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
5	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0

STANDARD SIGN R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

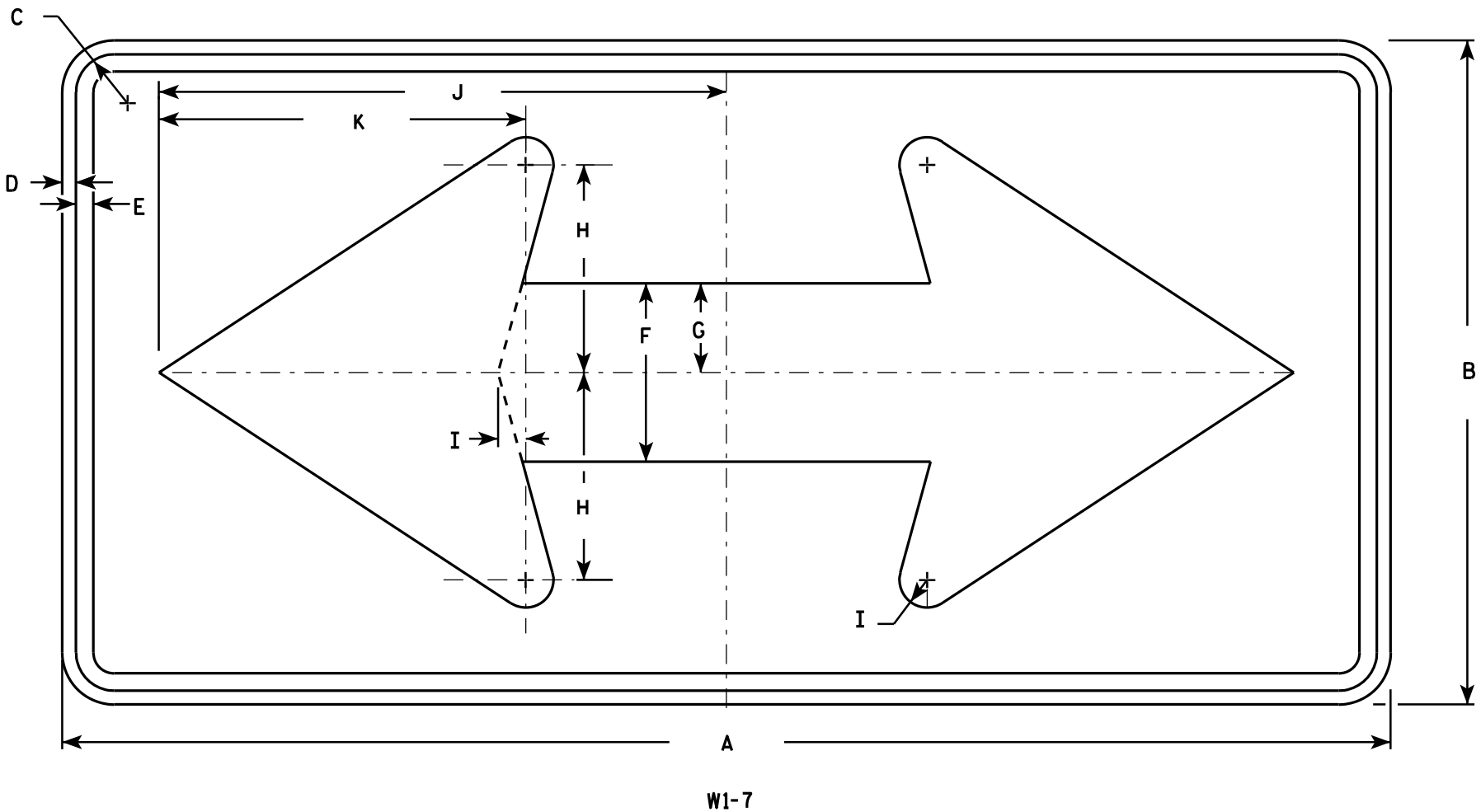
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

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.

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

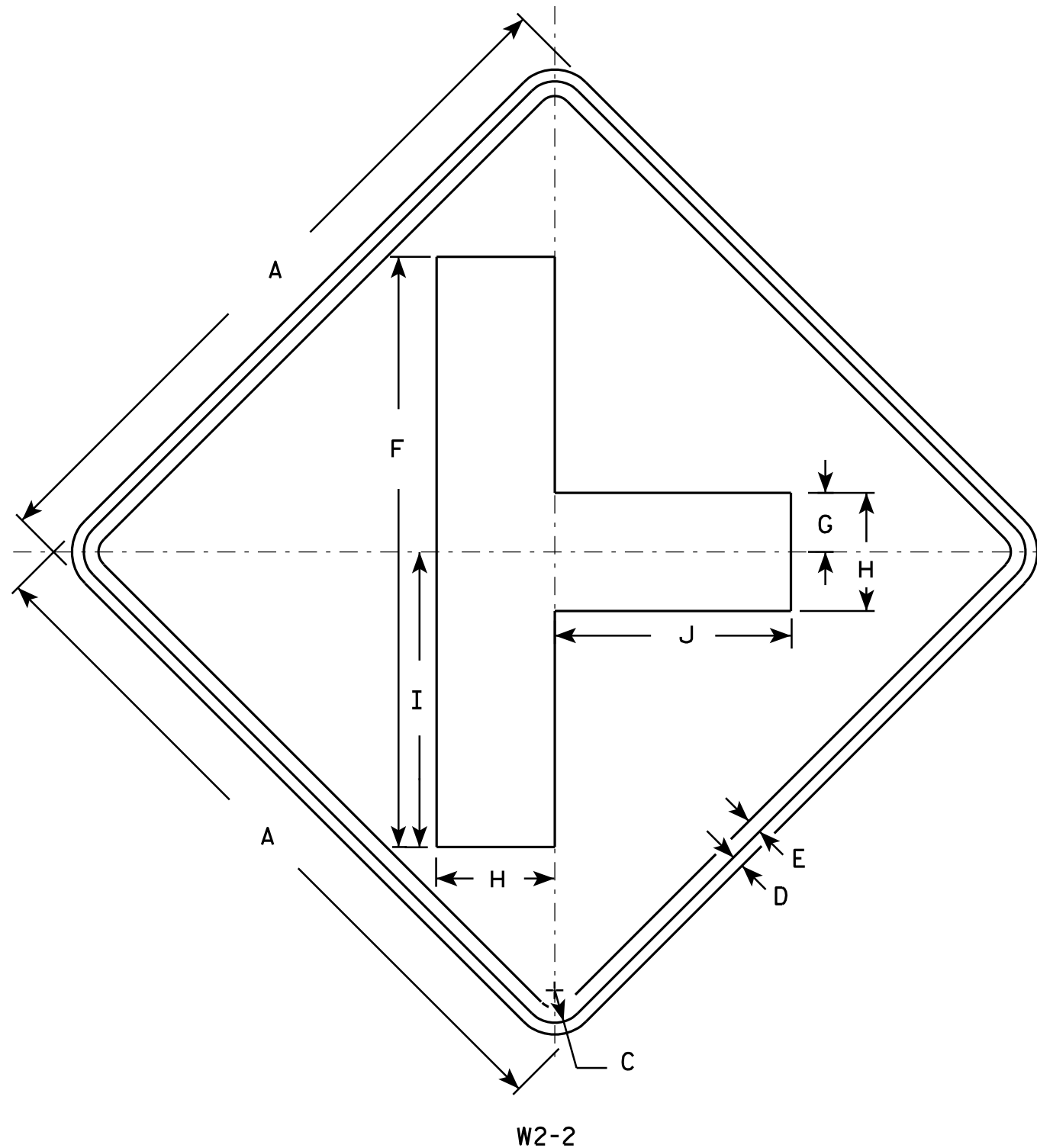
STANDARD SIGN

W1 - 7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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



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.

[illegible]

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

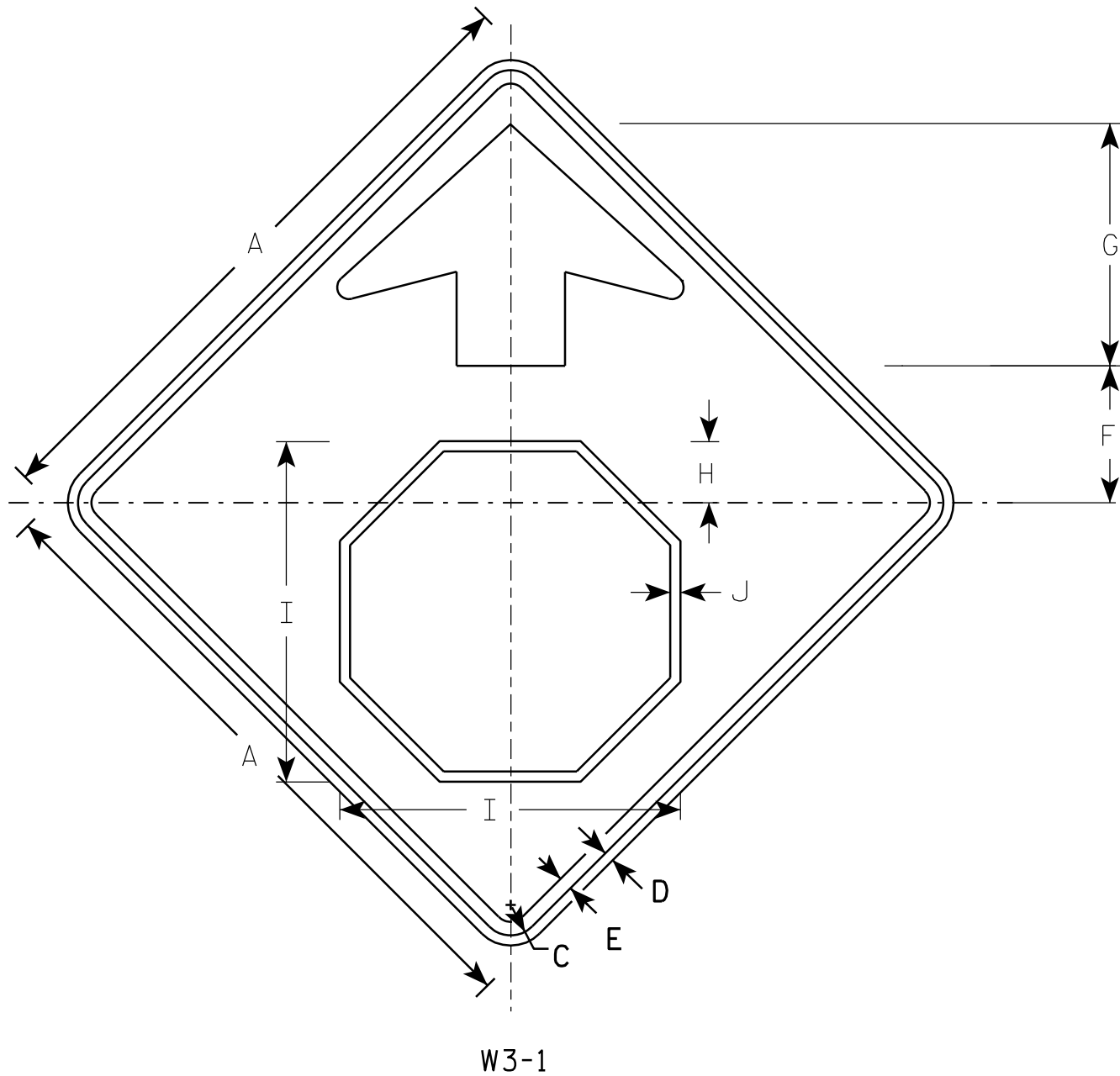
PROJECT NO:

HWY:

COUNTY:

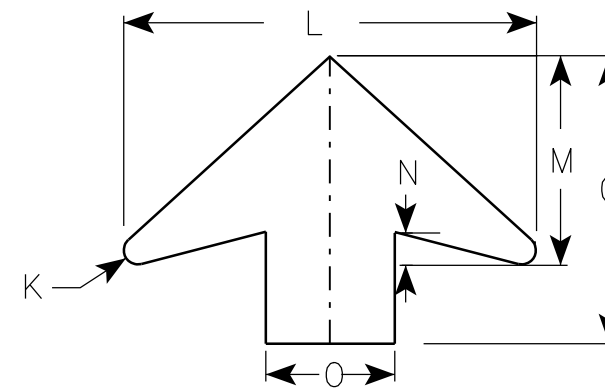
SHEET NO:

E



NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - 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

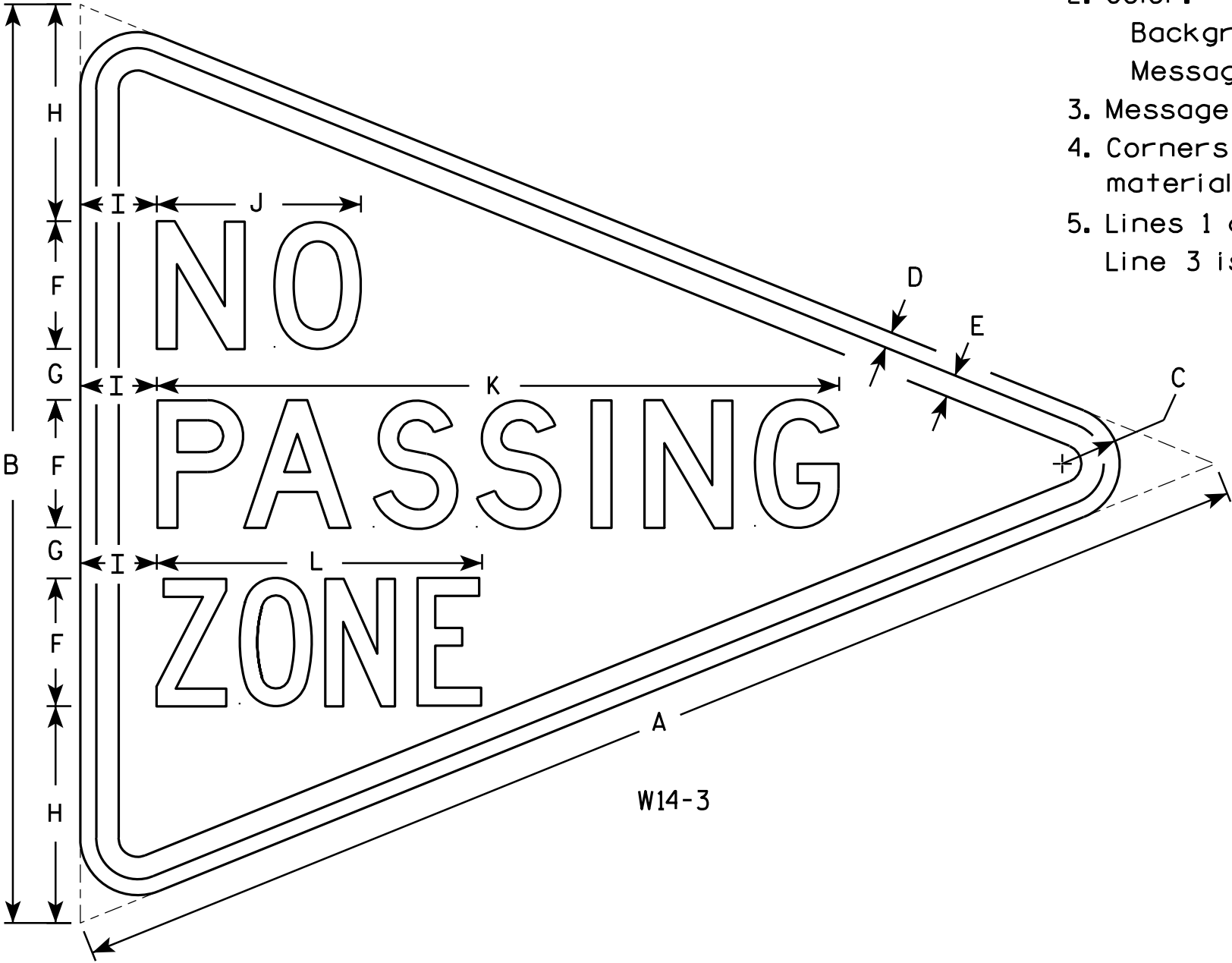
PROJECT NO:

SHEET NO:

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.



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

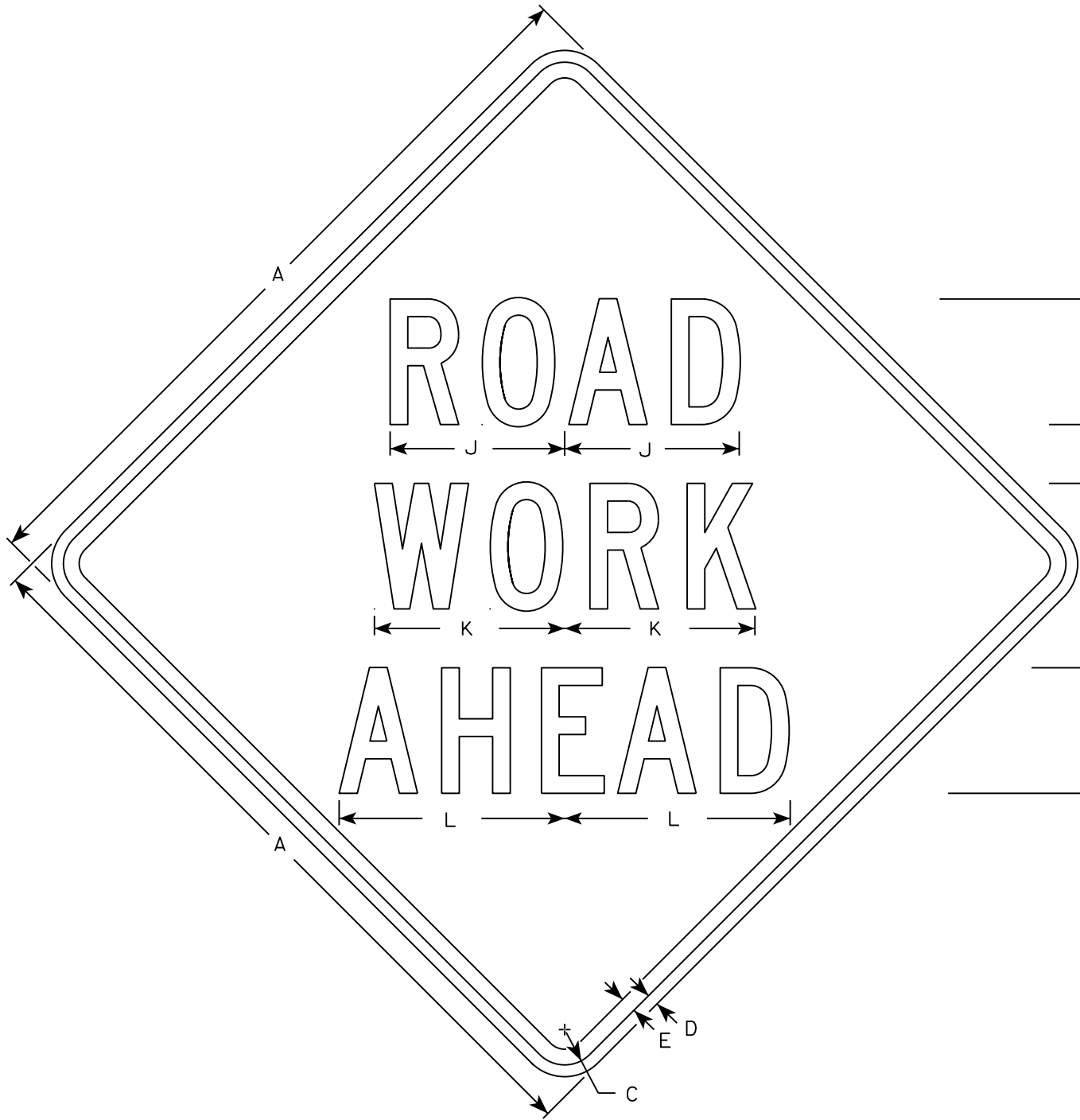
PROJECT NO:

HWY:

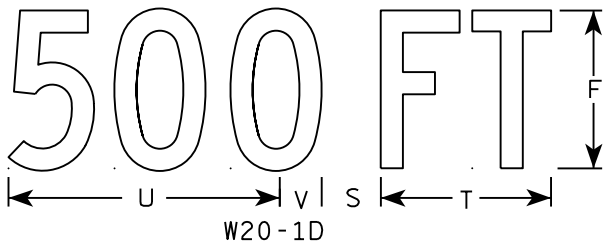
COUNTY:

SHEET NO:

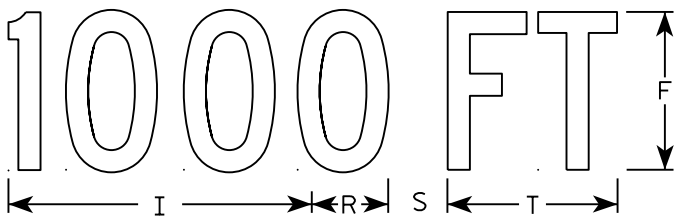
E



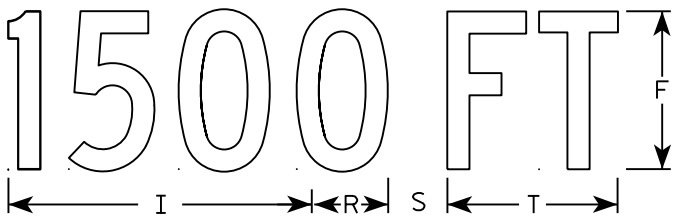
W20-1A



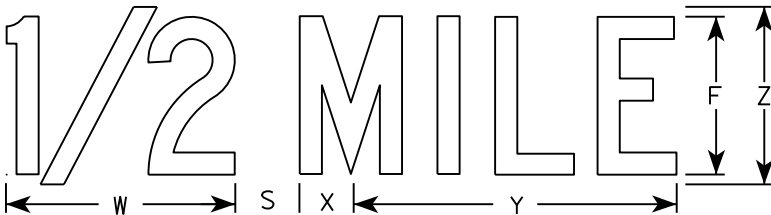
W20-1D



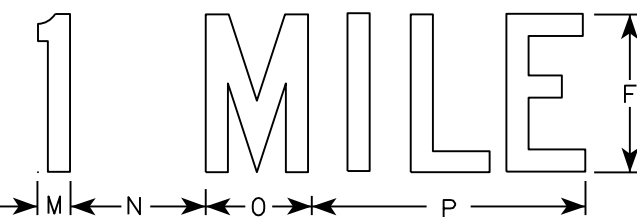
W20-1C



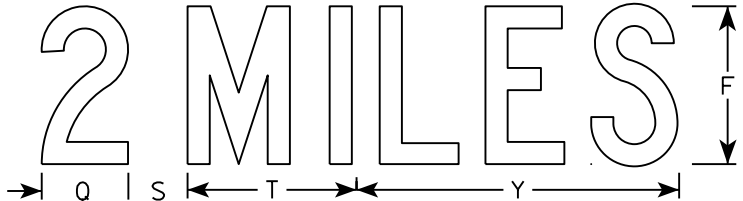
W20-1B



W20-1G



W20-1F

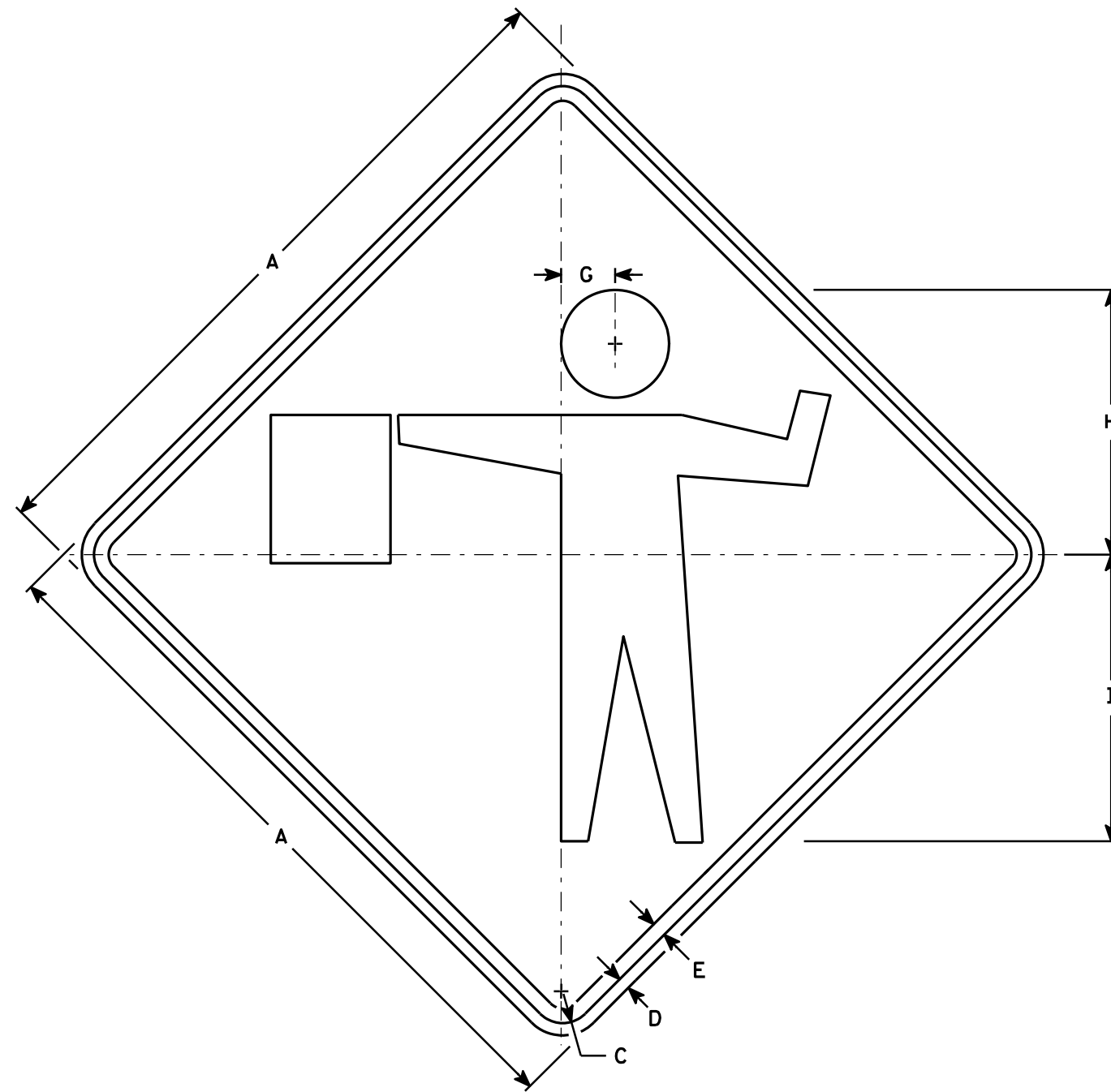


W20-1E

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Orange
 - Message - Black
- 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.

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		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0



W20-7A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
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		1 5/8	5/8	3/4		2 3/4	13 1/2	14 5/8																		9.00
2S	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
2M	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
3	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
4	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
5	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00

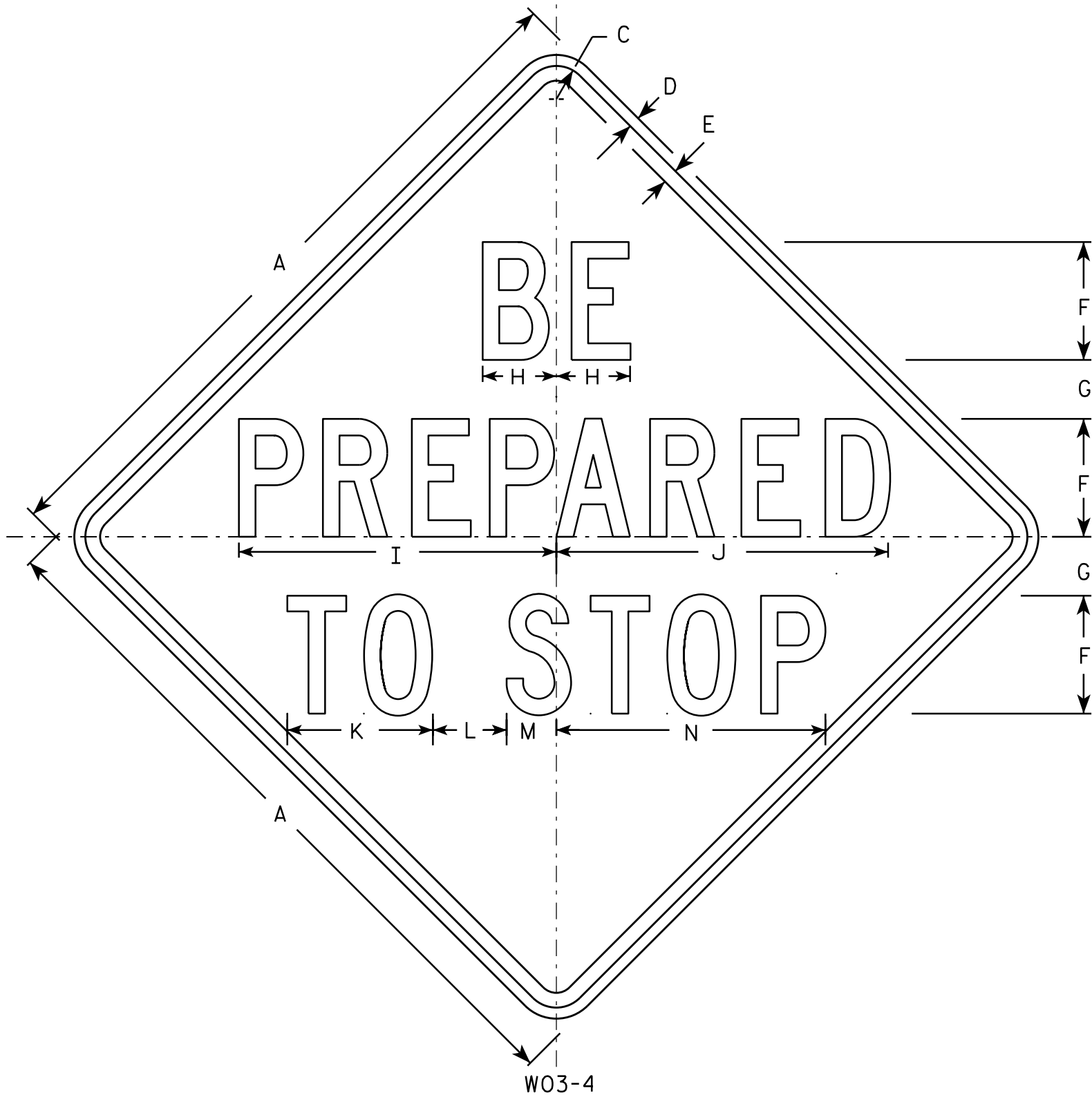
STANDARD SIGN
W20-7A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-7A.5

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - C
4. 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		1 3/8	1/2	5/8	6	2 1/2	3 3/4	15 7/8	16 7/8	7 3/8	4	2 3/8	13 3/4													9.0
2S	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0
2M	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0
3	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0
4	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0
5	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0

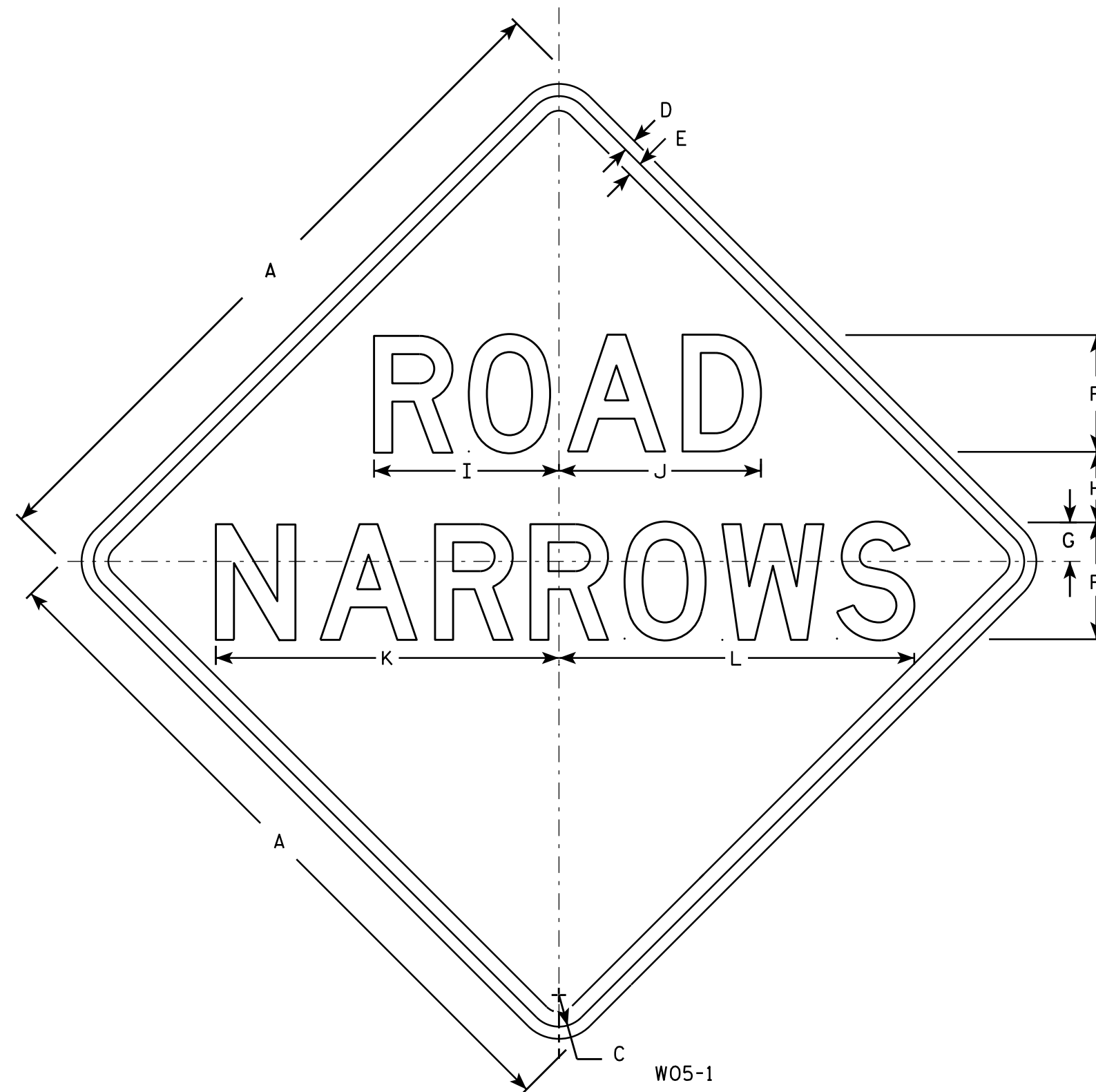
STANDARD SIGN W03-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/02/13 PLATE NO. W03-4.1

PROJECT NO: HWY: COUNTY: SHEET NO: E



W05-1

NOTES

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

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		1 5/8	5/8	3/4	6	2	3 1/2	9 1/2	10 3/8	17 5/8	18 1/4															9.0
2S	48		2 1/4	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
2M	48		2 1/4	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
3	48		2 1/4	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
4	48		2 1/4	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
5	48		2 1/4	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0

STANDARD SIGN
W05-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 11/20/13

PLATE NO. W05-1.1

PROJECT NO:

HWY:

COUNTY:

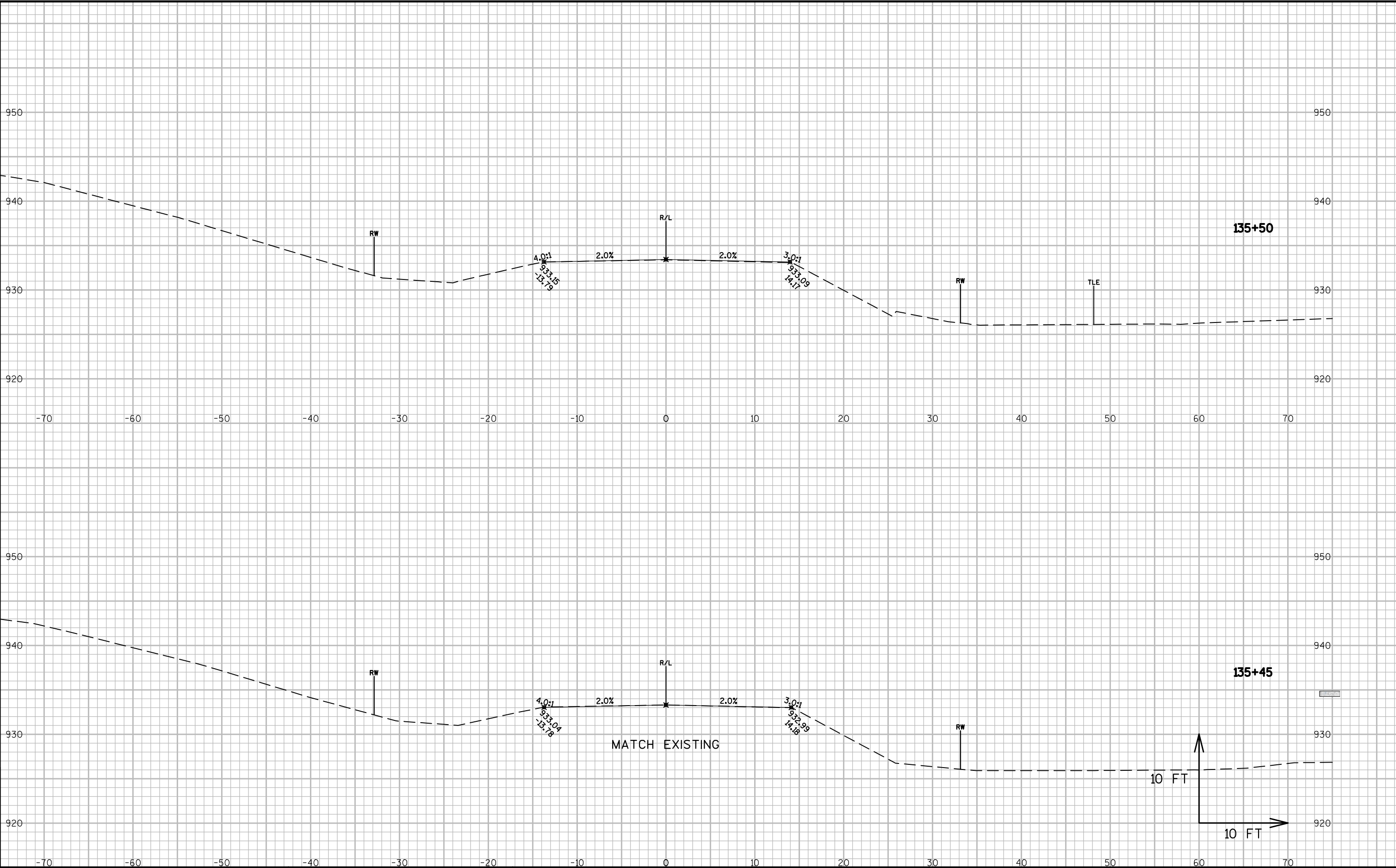
SHEET NO:

E

STATION	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)					Cumulative Vol (CY)					Expanded Marsh		Expanded EBS		Reduced Marsh		Reduced EBS		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Expanded Fill	Backfill	Expanded Rock	Backfill	in Fill	In Fill		
																						Note 1	
135+45	13595.00	0.00	13.29	0.00	38.30	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00		
136+00	13600.00	5.00	17.69	0.00	42.34	0.00	0.00	0.00	3	0	7	0	0	0	3	9	0	0	0.00	0.00	-6.47		
136+04.91	13604.91	4.91	20.42	0.00	45.15	0.00	0.00	0.00	3	0	8	0	0	0	6	19	0	0	0.00	0.00	-12.94		
136+25	13625.00	20.09	29.83	0.00	17.93	0.00	0.00	0.00	19	0	23	0	0	0	25	49	0	0	0.00	0.00	-23.58		
136+29.86	13629.86	4.86	32.56	0.00	10.52	0.00	0.00	0.00	6	0	3	0	0	0	31	52	0	0	0.00	0.00	-21.17		
136+50	13650.00	20.14	39.81	0.00	8.02	0.00	0.00	0.00	27	0	7	0	0	0	58	60	0	0	0.00	0.00	-2.83		
136+59.86	13659.86	9.86	50.32	0.00	8.68	0.00	0.00	0.00	16	0	3	0	0	0	74	64	0	0	0.00	0.00	9.82		
136+75	13675.00	15.14	69.61	0.00	8.06	0.00	0.00	0.00	34	0	5	0	0	0	108	70	0	0	0.00	0.00	37.58		
136+85	13685.00	10.00	71.56	0.00	5.70	0.00	0.00	0.00	26	0	3	0	0	0	134	73	0	0	0.00	0.00	60.53		
136+99.96	13699.96	14.96	85.82	0.00	0.04	0.00	0.00	0.00	44	0	2	0	0	0	177	75	0	0	0.00	0.00	102.15		
137+00	13700.00	0.04	85.92	0.00	0.03	0.00	0.00	0.00	0	0	0	0	0	0	178	75	0	0	0.00	0.00	102.27		
137+05	13705.00	5.00	92.01	0.00	0.05	0.00	0.00	0.00	16	0	0	0	0	0	194	75	0	0	0.00	0.00	118.74		
137+10	13710.00	5.00	96.71	0.00	0.00	0.00	0.00	0.00	17	0	0	0	0	0	212	75	0	0	0.00	0.00	136.21		
137+15	13715.00	5.00	106.48	0.00	0.00	0.00	0.00	0.00	19	0	0	0	0	0	230	75	0	0	0.00	0.00	155.02		
137+19.86	13719.86	4.86	114.45	0.00	0.48	0.00	0.00	0.00	20	0	0	0	0	0	250	75	0	0	0.00	0.00	174.85		
137+20	13720.00	0.14	114.86	0.00	0.48	0.00	0.00	0.00	1	0	0	0	0	0	251	75	0	0	0.00	0.00	175.44		
137+25	13725.00	5.00	126.45	0.00	0.44	0.00	0.00	0.00	22	0	0	0	0	0	273	75	0	0	0.00	0.00	197.68		
137+30	13730.00	5.00	133.08	0.00	0.33	0.00	0.00	0.00	24	0	0	0	0	0	297	76	0	0	0.00	0.00	221.62		
137+35	13735.00	5.00	118.35	0.00	0.19	0.00	0.00	0.00	23	0	0	0	0	0	320	76	0	0	0.00	0.00	244.84		
137+40	13740.00	5.00	96.53	0.00	0.08	0.00	0.00	0.00	20	0	0	0	0	0	340	76	0	0	0.00	0.00	264.71		
137+45	13745.00	5.00	66.62	0.00	0.01	0.00	0.00	0.00	15	0	0	0	0	0	355	76	0	0	0.00	0.00	279.80		
137+50	13750.00	5.00	51.18	0.00	0.00	0.00	0.00	0.00	11	0	0	0	0	0	366	76	0	0	0.00	0.00	290.71		
137+55	13755.00	5.00	37.16	0.00	0.00	0.00	0.00	0.00	8	0	0	0	0	0	375	76	0	0	0.00	0.00	298.89		
137+60	13760.00	5.00	20.47	0.00	0.00	0.00	0.00	0.00	5	0	0	0	0	0	380	76	0	0	0.00	0.00	304.23		
137+65	13765.00	5.00	6.60	0.00	0.00	0.00	0.00	0.00	3	0	0	0	0	0	382	76	0	0	0.00	0.00	306.73		
137+85	13785.00	20.00	1.90	0.00	0.00	0.00	0.00	0.00	3	0	0	0	0	0	386	76	0	0	0.00	0.00	309.88		
137+90	13790.00	5.00	11.47	0.00	0.00	0.00	0.00	0.00	1	0	0	0	0	0	387	76	0	0	0.00	0.00	311.12		
137+95	13795.00	5.00	26.98	0.00	0.00	0.00	0.00	0.00	4	0	0	0	0	0	390	76	0	0	0.00	0.00	314.68		
138+00	13800.00	5.00	42.51	0.00	0.00	0.00	0.00	0.00	6	0	0	0	0	0	397	76	0	0	0.00	0.00	321.11		
138+05	13805.00	5.00	43.12	0.00	0.00	0.00	0.00	0.00	8	0	0	0	0	0	405	76	0	0	0.00	0.00	329.04		
138+10	13810.00	5.00	46.35	0.00	0.00	0.00	0.00	0.00	8	0	0	0	0	0	413	76	0	0	0.00	0.00	337.32		
138+15	13815.00	5.00	51.12	0.00	0.00	0.00	0.00	0.00	9	0	0	0	0	0	422	76	0	0	0.00	0.00	346.35		
138+20	13820.00	5.00	54.92	0.00	0.00	0.00	0.00	0.00	10	0	0	0	0	0	432	76	0	0	0.00	0.00	356.17		
138+23.11	13823.11	3.11	57.88	0.00	0.01	0.00	0.00	0.00	6	0	0	0	0	0	438	76	0	0	0.00	0.00	362.65		
138+25	13825.00	1.89	56.22	0.00	0.15	0.00	0.00	0.00	4	0	0	0	0	0	442	76	0	0	0.00	0.00	366.65		
138+30	13830.00	5.00	48.71	0.00	0.60	0.00	0.00	0.00	10	0	0	0	0	0	452	76	0	0	0.00	0.00	376.28		
138+35	13835.00	5.00	62.85	0.00	1.04	0.00	0.00	0.00	10	0	0	0	0	0	462	76	0	0	0.00	0.00	386.42		
138+40	13840.00	5.00	89.13	0.00	1.53	0.00	0.00	0.00	14	0	0	0	0	0	476	76	0	0	0.00	0.00	400.19		
138+45	13845.00	5.00	105.45	0.00	2.45	0.00	0.00	0.00	18	0	0	0	0	0	494	77	0	0	0.00	0.00	417.75		
138+50	13850.00	5.00	101.85	0.00	3.66	0.00	0.00	0.00	19	0	1	0	0	0	514	77	0	0	0.00	0.00	436.24		
138+55	13855.00	5.00	97.14	0.00	5.15	0.00	0.00	0.00	18	0	1	0	0	0	532	78	0	0	0.00	0.00	453.64		
138+55.57	13855.57	0.57	96.85	0.00	5.31	0.00	0.00	0.00	2	0	0	0	0	0	534	79	0	0	0.00	0.00	455.54		
138+55.57	13855.57	0.00	96.84	0.00	5.10	0.00	0.00	0.00	0	0	0	0	0	0	534	79	0	0	0.00	0.00	455.55		
138+75	13875.00	19.43	82.34	0.00	1.76	0.00	0.00	0.00	64	0	2	0	0	0	599	82	0	0	0.00	0.00	516.94		
139+00	13900.00	25.00	33.10	0.00	14.03	0.00	0.00	0.00	53	0	7	0	0	0	652	91	0	0	0.00	0.00	561.25		
139+10.39	13910.39	10.39	27.79	0.00	17.83	0.00	0.00	0.00	12	0	6	0	0	0	664	98	0	0	0.00	0.00	565.30		
139+15.57	13915.57	5.18	23.56	0.00	5.53	0.00	0.00	0.00	5	0	2	0	0	0	669	101	0	0	0.00	0.00	567.43		
139+25	13925.00	9.43	18.27	0.00	0.00	0.00	0.00	0.00	7	0	1	0	0	0	676	1							

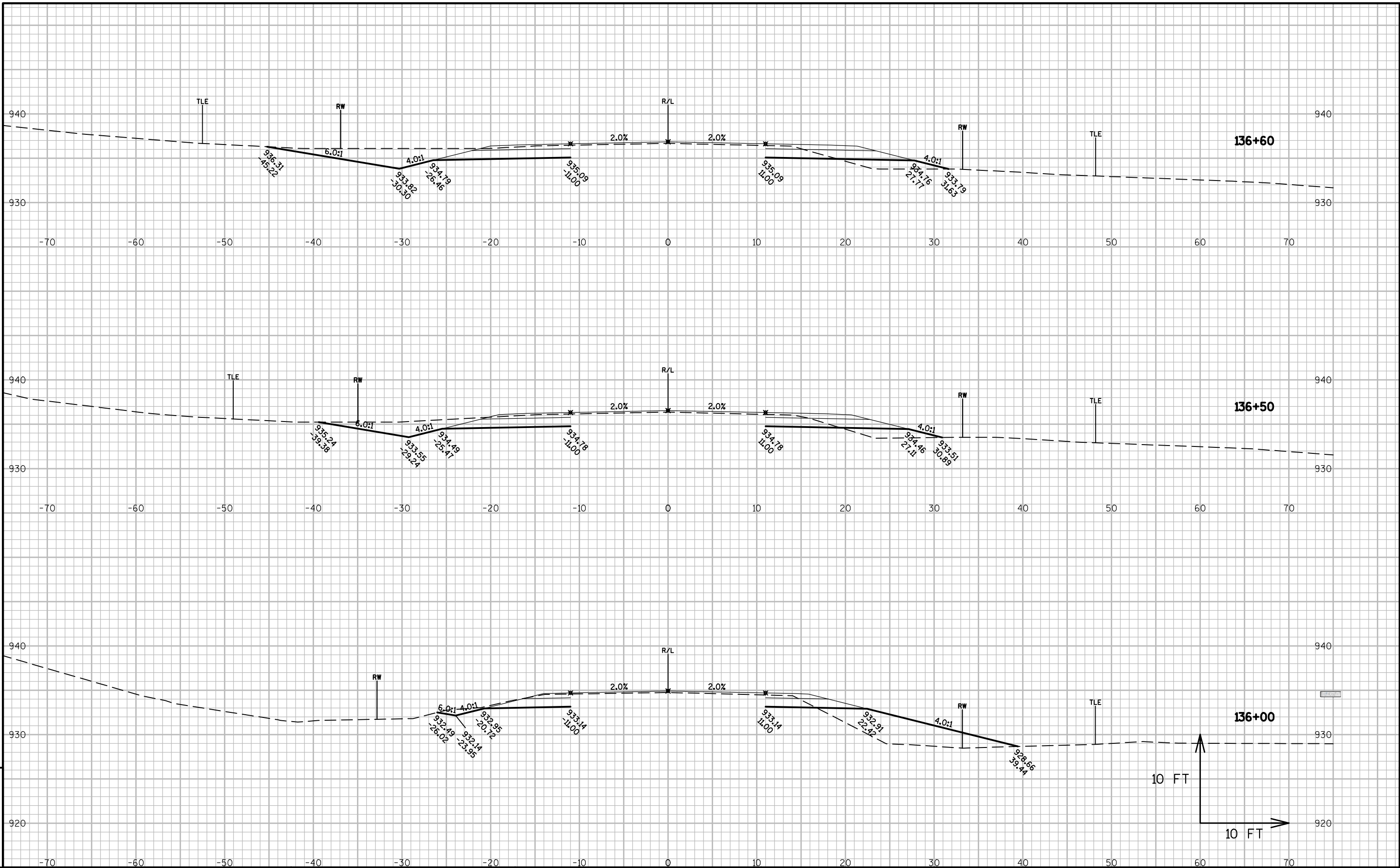
			AREA (SF)						Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)								
	Real Station		Cut	Salvaged/Unusable	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable	Fill	Marsh Exc	Rock Exc	EBS	Cut	Expanded Fill	Expanded Marsh		Expanded EBS	Reduced Marsh	Reduced EBS		
STATION		Distance		Pavement Material						Pavement Material					1.00	1.25	1.50	1.10	1.30	0.60	0.80	Mass Ordinate	
									Note 1	Note 2	Note 3				Note 1		Note 4		Note 5	Note 6	Note 7	Note 8	
05+75	600.00	0.00	11.34	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	
06+10	610.00	10.00	10.80	0.00	0.00	0.00	0.00	0.00	4	0	0	0	0	0	4	0	0	0	0	0.00	0.00	4.10	
06+25	625.00	15.00	10.53	0.00	0.00	0.00	0.00	0.00	6	0	0	0	0	0	10	0	0	0	0	0.00	0.00	10.03	
06+50	650.00	25.00	9.88	0.00	0.00	0.00	0.00	0.00	9	0	0	0	0	0	19	0	0	0	0	0.00	0.00	19.47	
06+50.99	650.99	0.99	9.83	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	20	0	0	0	0	0.00	0.00	19.83	
06+75	675.00	24.01	74.53	0.00	0.00	0.00	0.00	0.00	38	0	0	0	0	0	57	0	0	0	0	0.00	0.00	57.35	
07+00	700.00	25.00	55.62	0.00	0.00	0.00	0.00	0.00	60	0	0	0	0	0	118	0	0	0	0	0.00	0.00	117.60	
07+23.84	723.84	23.84	86.38	0.00	0.00	0.00	0.00	0.00	63	0	0	0	0	0	180	0	0	0	0	0.00	0.00	180.30	
07+25	725.00	1.16	88.66	0.00	0.00	0.00	0.00	0.00	4	0	0	0	0	0	184	0	0	0	0	0.00	0.00	184.05	
07+30	730.00	5.00	101.29	0.00	0.00	0.00	0.00	0.00	18	0	0	0	0	0	202	0	0	0	0	0.00	0.00	201.64	
07+32.25	732.25	2.25	106.91	0.00	0.00	0.00	0.00	0.00	9	0	0	0	0	0	210	0	0	0	0	0.00	0.00	210.32	
07+35	735.00	2.75	109.73	0.00	0.00	0.00	0.00	0.00	11	0	0	0	0	0	221	0	0	0	0	0.00	0.00	221.35	
07+40	740.00	5.00	98.78	0.00	0.00	0.00	0.00	0.00	19	0	0	0	0	0	241	0	0	0	0	0.00	0.00	240.65	
07+43.97	743.97	3.97	83.36	0.00	0.00	0.00	0.00	0.00	13	0	0	0	0	0	254	0	0	0	0	0.00	0.00	254.05	
07+45	745.00	1.03	78.62	0.00	0.00	0.00	0.00	0.00	3	0	0	0	0	0	257	0	0	0	0	0.00	0.00	257.14	
07+50	750.00	5.00	70.83	0.00	0.96	0.00	0.00	0.00	14	0	0	0	0	0	271	0	0	0	0	0.00	0.00	270.86	
07+55	755.00	5.00	80.15	0.00	0.96	0.00	0.00	0.00	14	0	0	0	0	0	285	0	0	0	0	0.00	0.00	284.62	
07+60	760.00	5.00	89.09	0.00	0.35	0.00	0.00	0.00	16	0	0	0	0	0	301	0	0	0	0	0.00	0.00	300.14	
07+65	765.00	5.00	100.02	0.00	0.00	0.00	0.00	0.00	18	0	0	0	0	0	318	1	0	0	0	0.00	0.00	317.61	
07+70	770.00	5.00	87.53	0.00	0.00	0.00	0.00	0.00	17	0	0	0	0	0	335	1	0	0	0	0.00	0.00	334.97	
07+75	775.00	5.00	55.91	0.00	0.00	0.00	0.00	0.00	13	0	0	0	0	0	349	1	0	0	0	0.00	0.00	348.25	
07+80	780.00	5.00	44.98	0.00	0.00	0.00	0.00	0.00	9	0	0	0	0	0	358	1	0	0	0	0.00	0.00	357.59	
07+85	785.00	5.00	28.06	0.00	0.00	0.00	0.00	0.00	7	0	0	0	0	0	365	1	0	0	0	0.00	0.00	364.36	
07+90	790.00	5.00	13.79	0.00	0.00	0.00	0.00	0.00	4	0	0	0	0	0	369	1	0	0	0	0.00	0.00	368.23	
07+95	795.00	5.00	4.11	0.00	0.00	0.00	0.00	0.00	2	0	0	0	0	0	370	1	0	0	0	0.00	0.00	369.89	
08+20	820.00	25.00	5.66	0.00	0.00	0.00	0.00	0.00	5	0	0	0	0	0	375	1	0	0	0	0.00	0.00	374.41	
08+25	825.00	5.00	17.63	0.00	0.00	0.00	0.00	0.00	2	0	0	0	0	0	377	1	0	0	0	0.00	0.00	376.56	
08+30	830.00	5.00	31.26	0.00	0.00	0.00	0.00	0.00	5	0	0	0	0	0	382	1	0	0	0	0.00	0.00	381.09	
08+35	835.00	5.00	40.91	0.00	0.00	0.00	0.00	0.00	7	0	0	0	0	0	388	1	0	0	0	0.00	0.00	387.77	
08+40	840.00	5.00	38.72	0.00	0.11	0.00	0.00	0.00	7	0	0	0	0	0	396	1	0	0	0	0.00	0.00	395.13	
08+45	845.00	5.00	44.75	0.00	0.12	0.00	0.00	0.00	8	0	0	0	0	0	403	1	0	0	0	0.00	0.00	402.84	
08+50	850.00	5.00	55.17	0.00	0.10	0.00	0.00	0.00	9	0	0	0	0	0	413	1	0	0	0	0.00	0.00	412.06	
08+55	855.00	5.00	65.12	0.00	0.06	0.00	0.00	0.00	11	0	0	0	0	0	424	1	0	0	0	0.00	0.00	423.18	
08+57.95	857.95	2.95	50.52	0.00	0.04	0.00	0.00	0.00	6	0	0	0	0	0	430	1	0	0	0	0.00	0.00	429.48	
08+58.1	858.10	0.15	55.30	0.00	0.05	0.00	0.00	0.00	0	0	0	0	0	0	430	1	0	0	0	0.00	0.00	429.78	
08+60	860.00	1.90	51.01	0.00	0.00	0.00	0.00	0.00	4	0	0	0	0	0	434	1	0	0	0	0.00	0.00	433.52	
08+65	865.00	5.00	43.00	0.00	0.00	0.00	0.00	0.00	9	0	0	0	0	0	443	1	0	0	0	0.00	0.00	442.23	
08+70	870.00	5.00	37.78	0.00	0.00	0.00	0.00	0.00	7	0	0	0	0	0	450	1	0	0	0	0.00	0.00	449.71	
08+75	875.00	5.00	33.83	0.00	0.00	0.00	0.00	0.00	7	0	0	0	0	0	457	1	0	0	0	0.00	0.00	456.34	
08+80	880.00	5.00	30.26	0.00	0.04	0.00	0.00	0.00	6	0	0	0	0	0	463	1	0	0	0	0.00	0.00	462.27	
08+85	885.00	5.00	25.59	0.00	0.50	0.00	0.00	0.00	5	0	0	0	0	0	468	1	0	0	0	0.00	0.00	467.38	
08+86.81	886.81	1.81	23.85	0.00	1.06	0.00	0.00	0.00	2	0	0	0	0	0	470	1	0	0	0	0.00	0.00	468.97	
09+00	900.00	13.19	17.25	0.00	0.71	0.00	0.00	0.00	10	0	0	0	0	0	480	1	0	0	0	0.00	0.00	478.47	
09+25	925.00	25.00	13.81	0.00	6.71	0.00	0.00	0.00	14	0	3	0	0	0	494	6	0	0	0	0.00	0.00	488.55	
09+50	950.00	25.00	12.55	0.00	0.01	0.00	0.00	0.00	12	0	3	0	0	0	506	9	0	0	0	0.00	0.00	496.87	
09+56.61	956.61	6.61	2.96	0.00	0.00	0.00	0.00	0.00	2	0	0	0	0	0	508	9	0	0	0	0.00	0.00	498.76	
09+80	957.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	508	9	0	0	0	0.00	0.00	498.78	

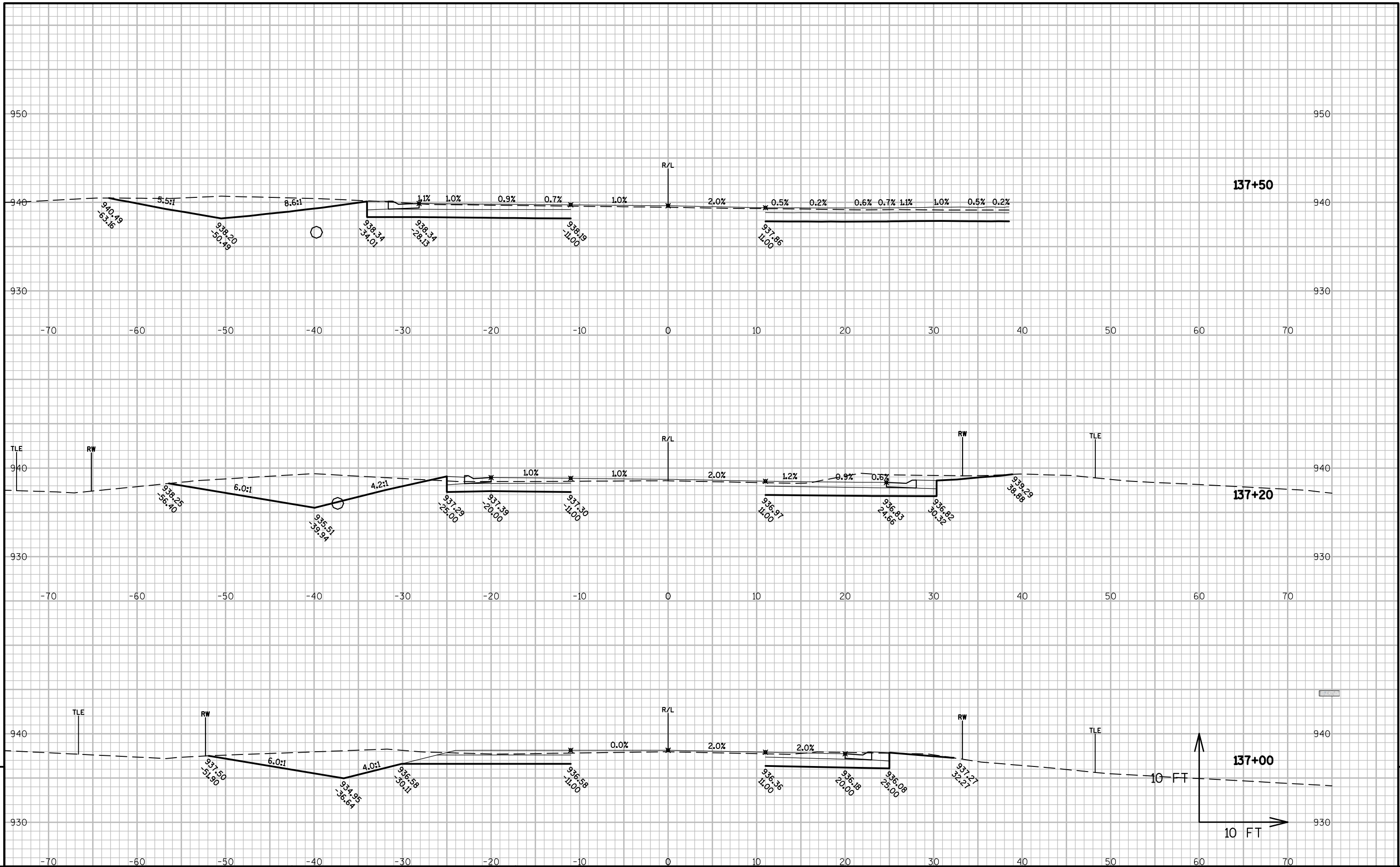
1) Salvaged/Unsuable Pavement Material is included in Cut.
2) Salvaged/Unusable Pavement Material is to be wasted
3) Available Material = Cut - Salvaged/Unusuable Pavement Material
4) Expanded Fill. Factor = 1.2
5) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

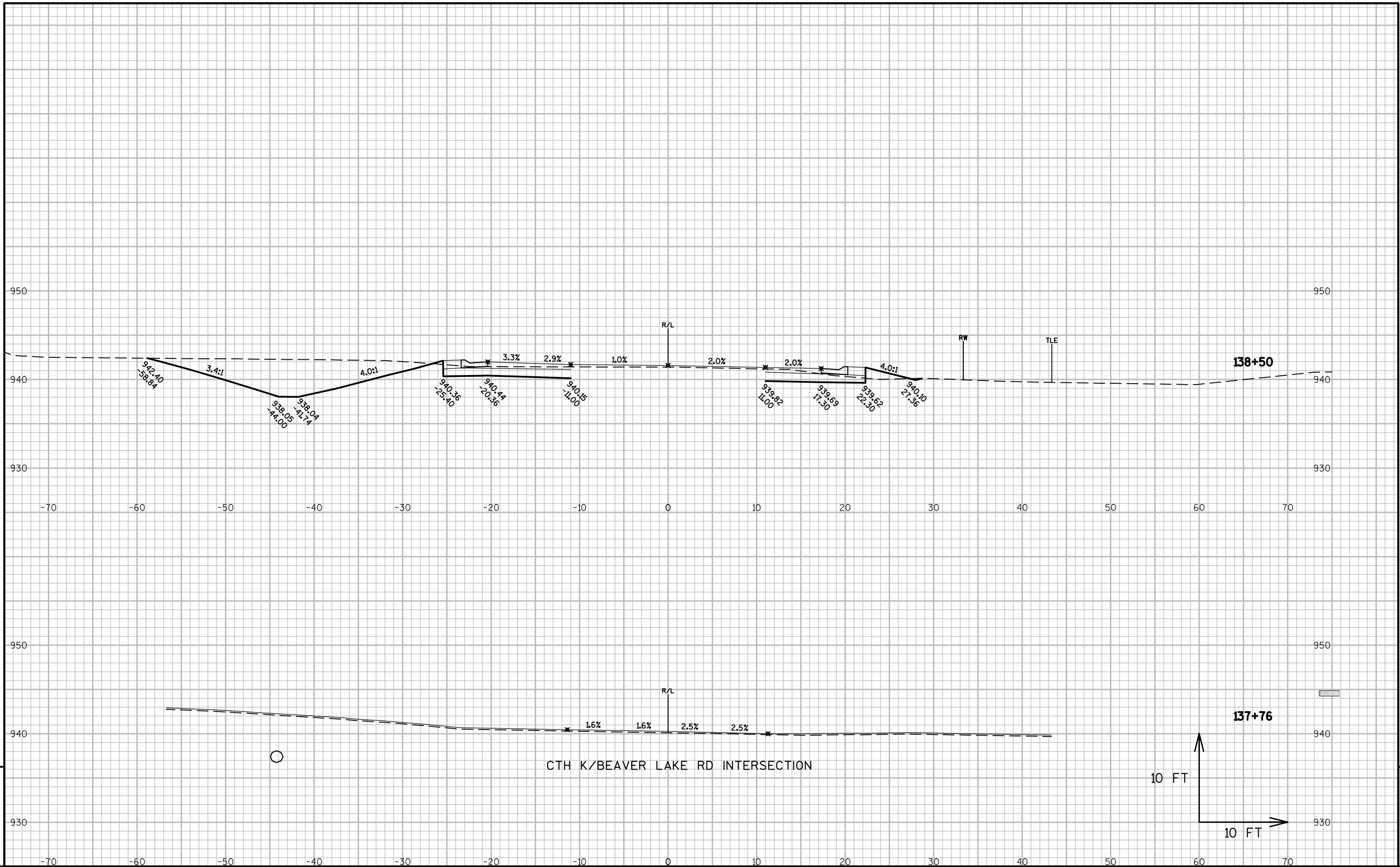


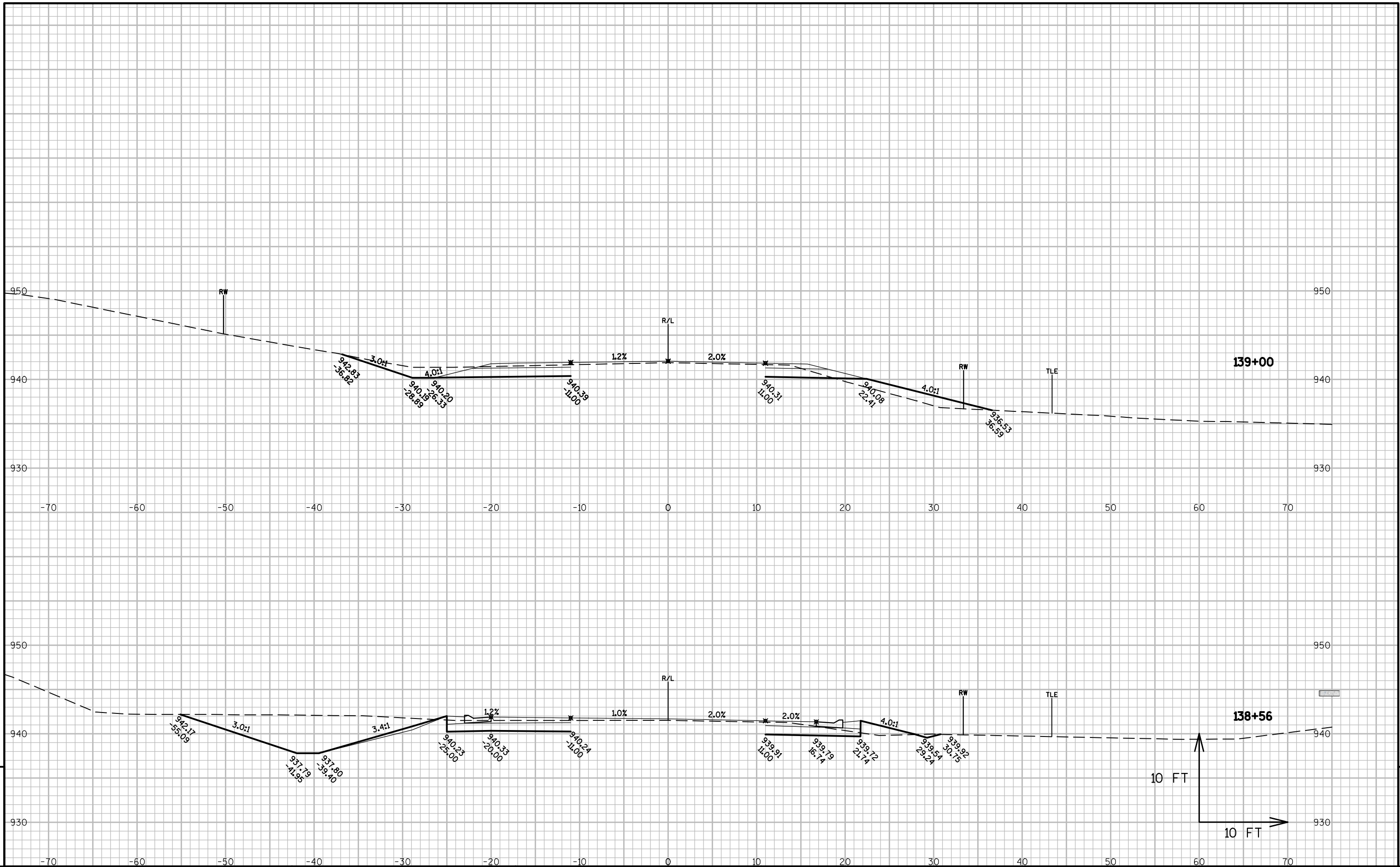
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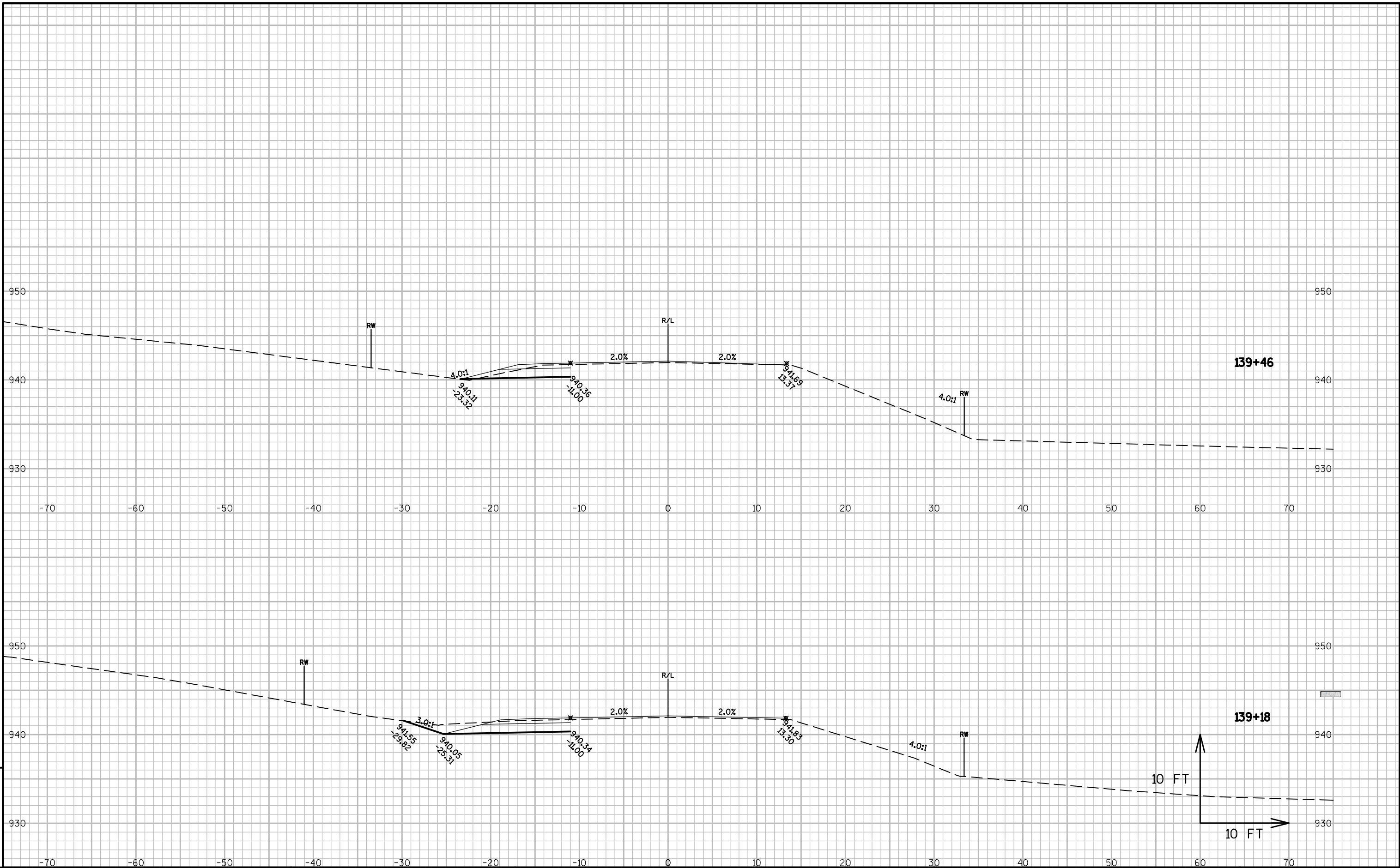
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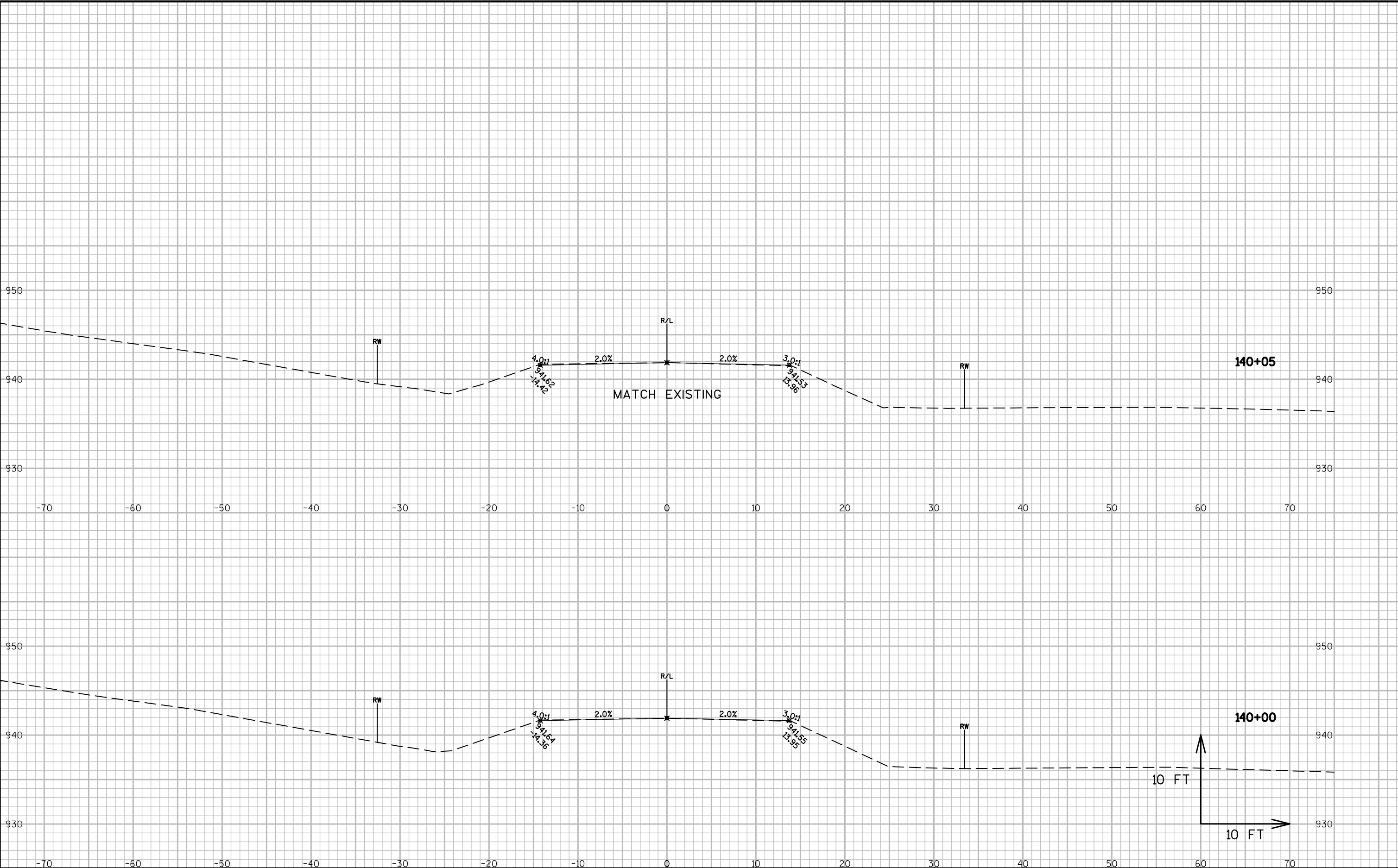


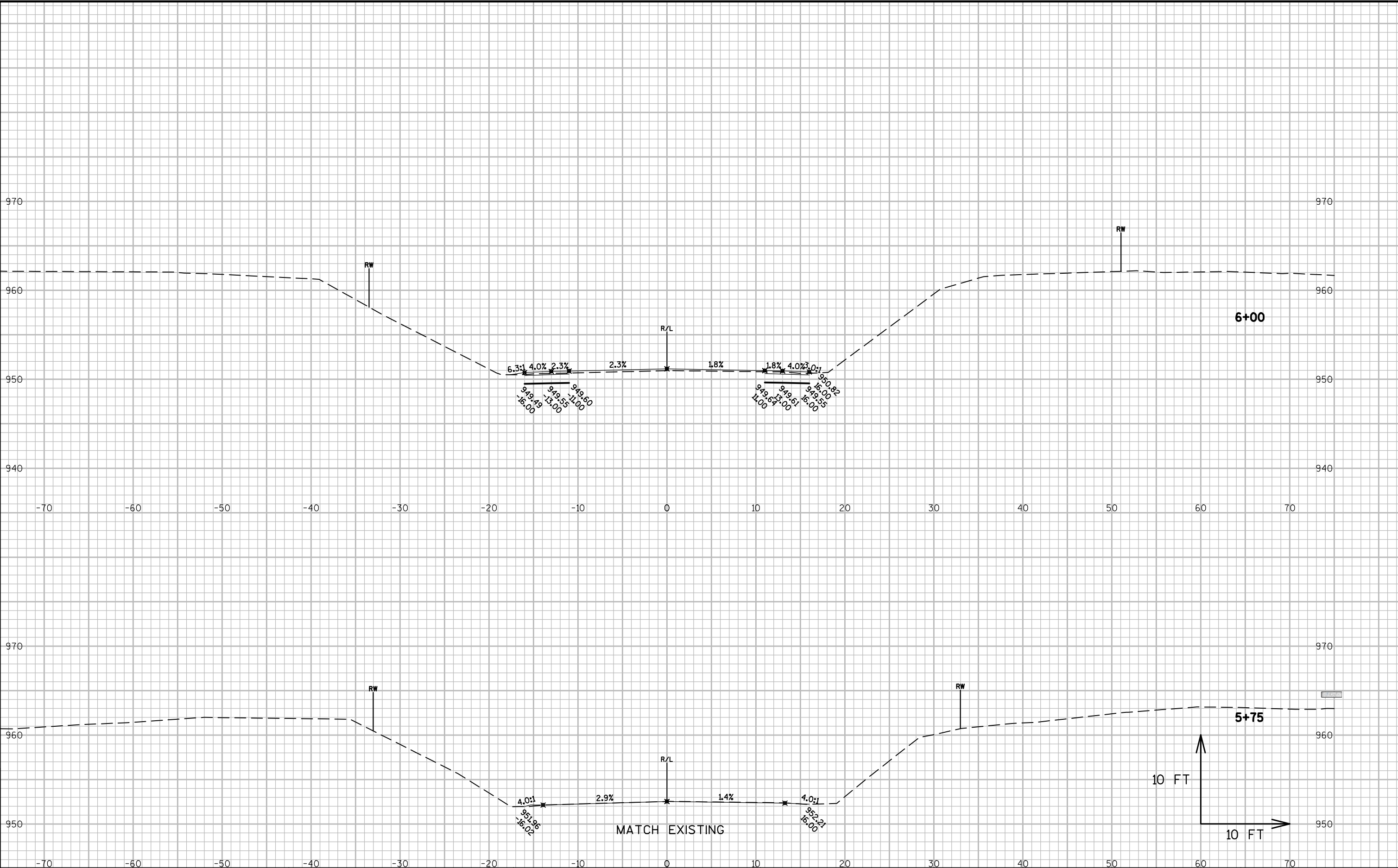


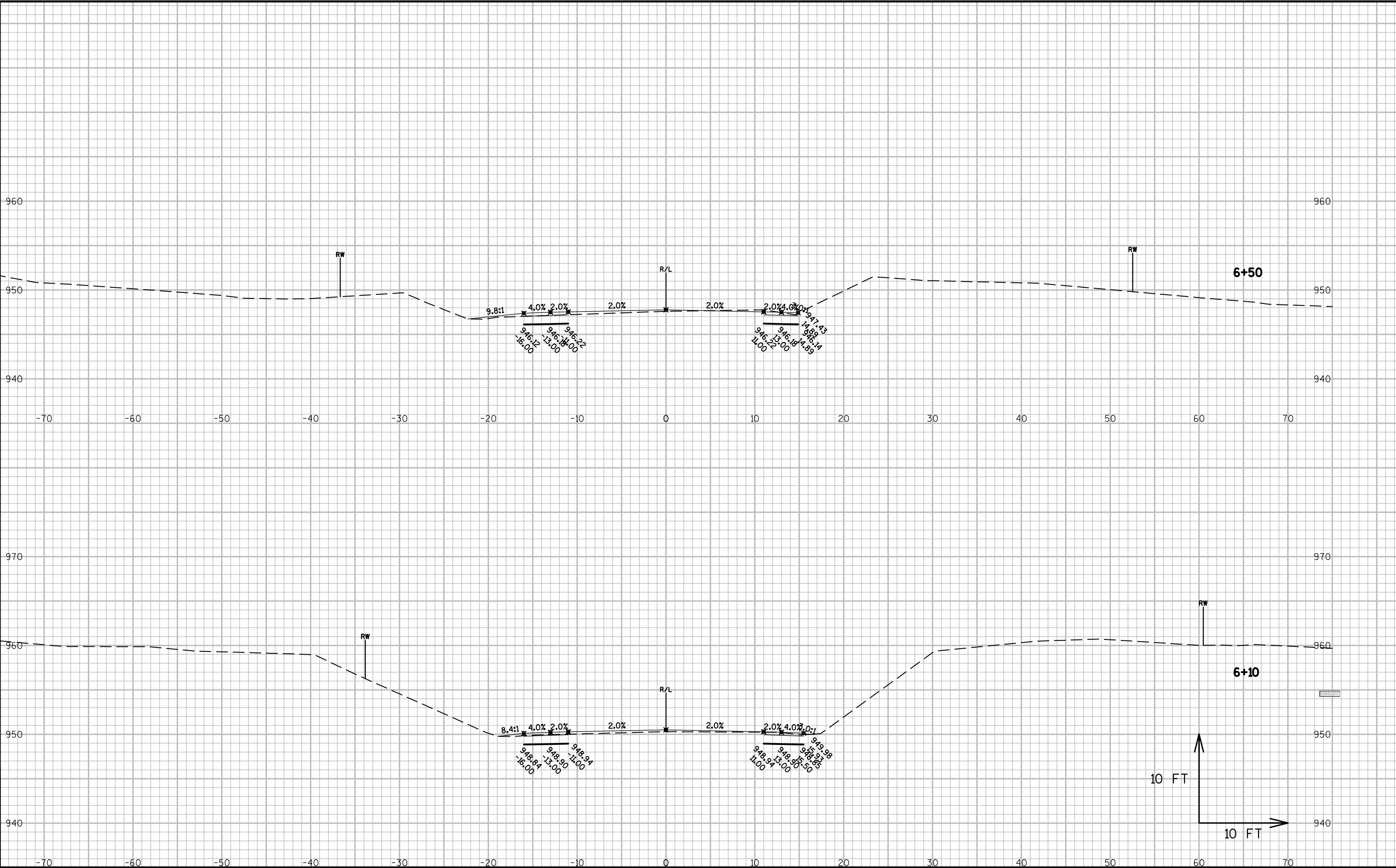


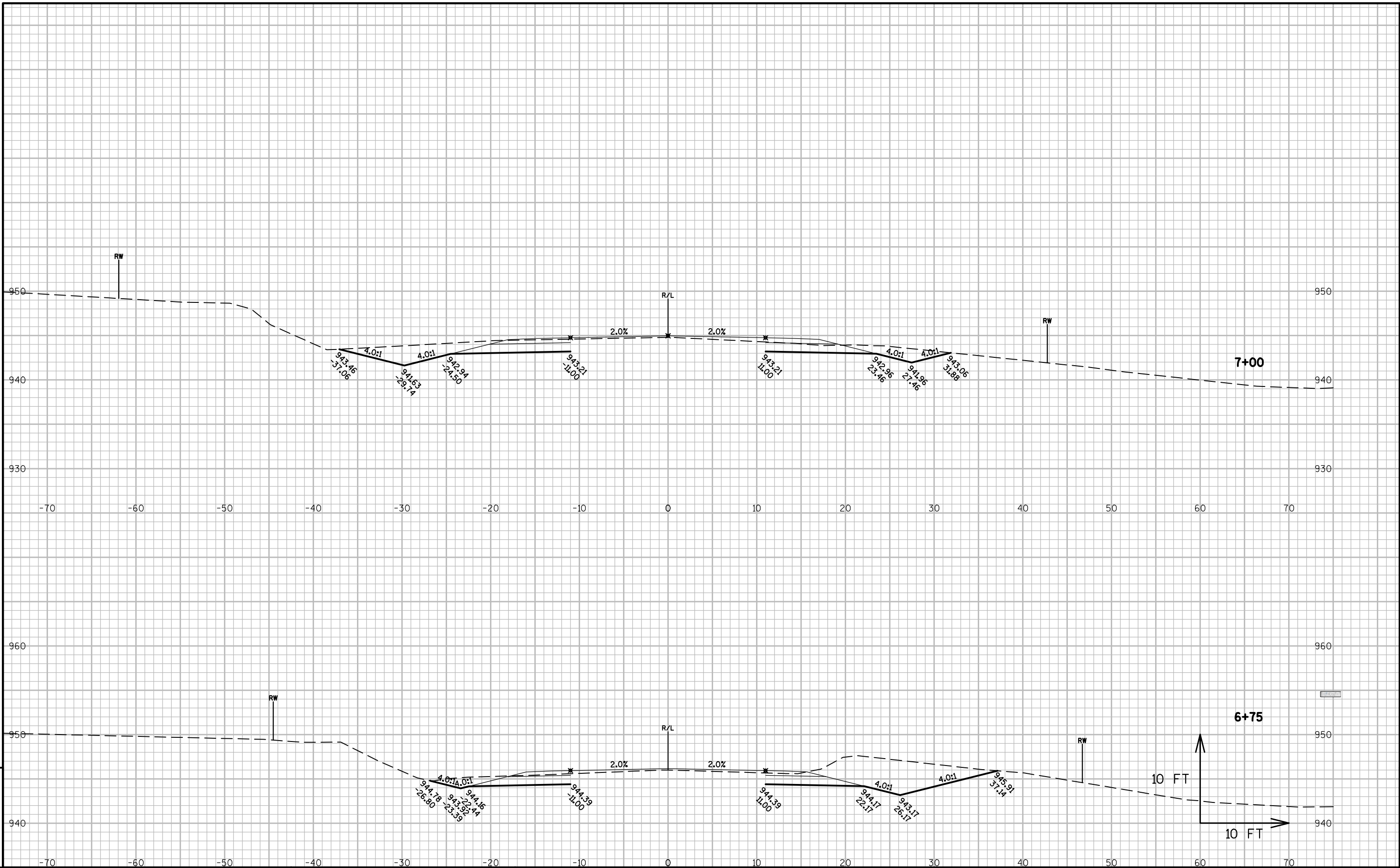


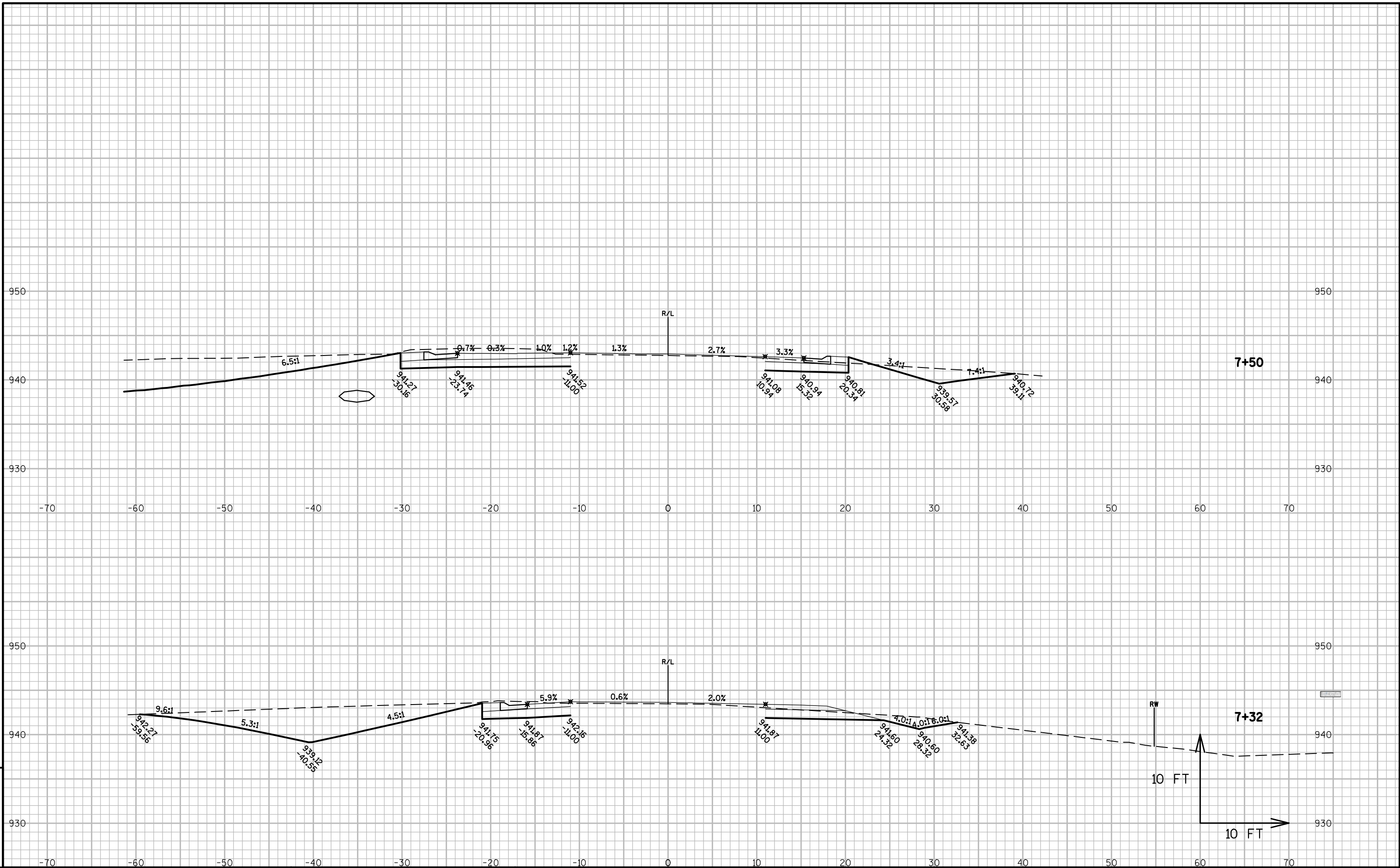


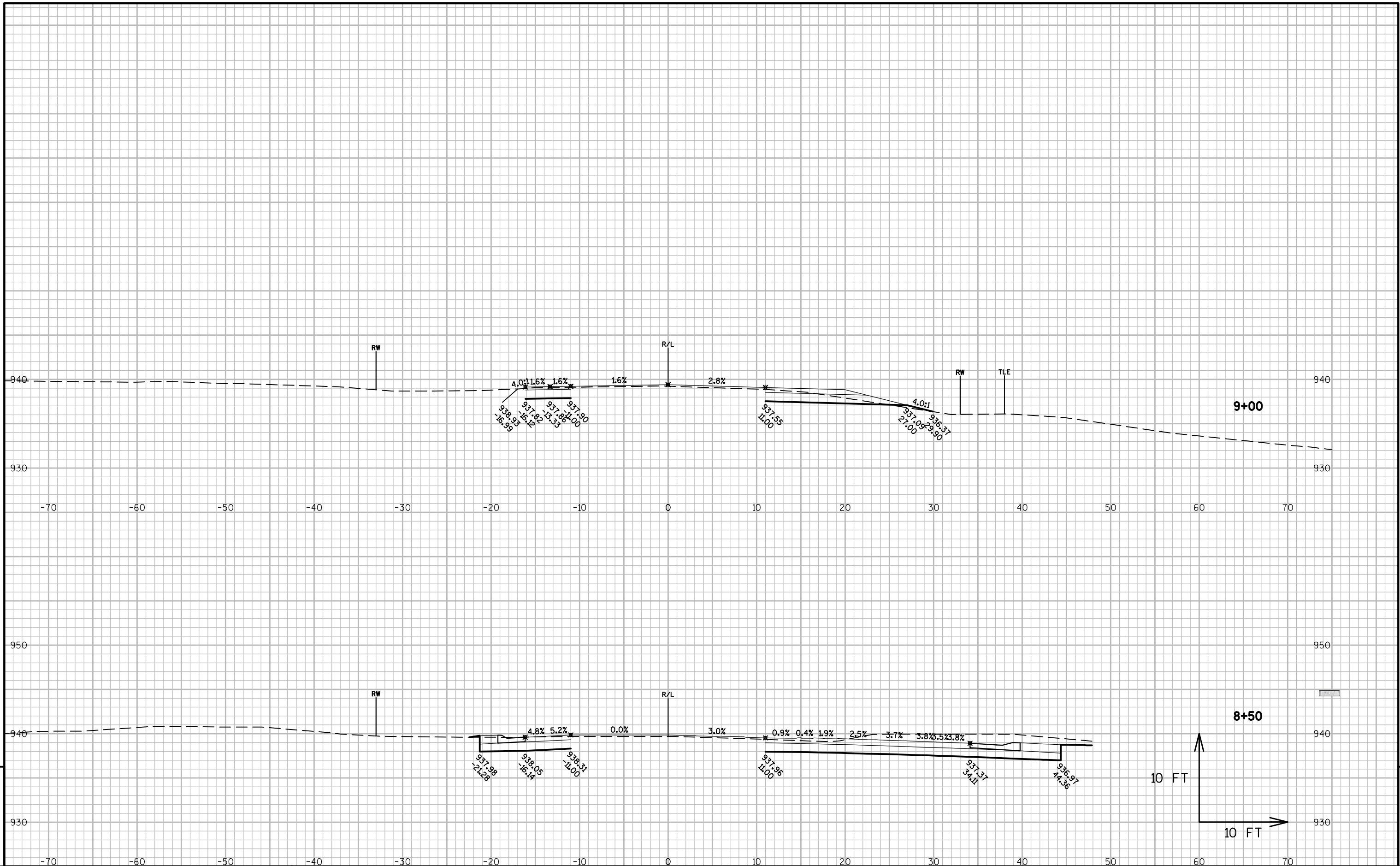


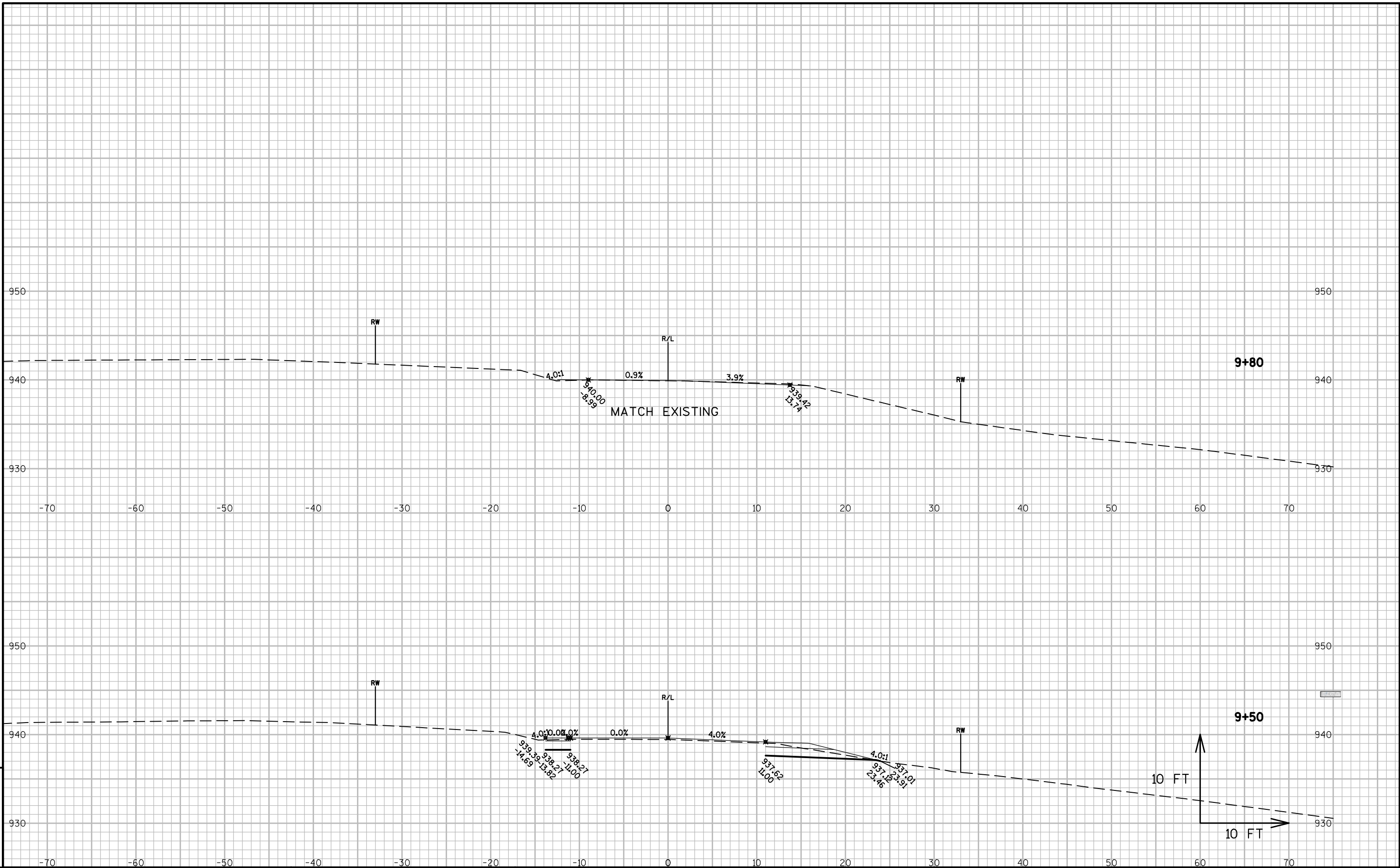












Notes



Wisconsin Department of Transportation

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through innovation and exceptional service.

<http://www.dot.wisconsin.gov>