

Sept. 03

MARA.051.187

AS BUILT

PROJECT 1170-00-73

COUNTY: MARATHON COUNTY

14

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 = 136



DESIGN DESIGNATION

A.D.T.	2003	=	4800
A.O.T.	2023	=	6600
D.H.V.		=	785
D.		=	62-38
T.	% ADT	=	8.9
DESIGN SPEED		=	60 MPH
ESALS		=	1,810,400

CONVENTIONAL SYMBOLS

COUNTY LINE		COMBUSTIBLE FLUIDS	
CORPORATE LIMITS		UNDERGROUND UTILITIES	
PROPERTY LINE		GAS	
LOT LINE		ELECTRIC	
LIMITED EASEMENT		TELEPHONE OR TELEGRAPH	
EXISTING RIGHT OF WAY		COMMUNICATIONS LINE	
PROPOSED OR NEW R/W LINE		SERVICE PEDESTAL	
SURVEY LINE		POWER POLE	
SLOPE INTERCEPT		TELEPHONE POLE	
ORIGINAL GROUND		RAILROAD	
MARSH OR ROCK PROFILE (To be noted as such)		SANITARY SEWER	
MARSH AREA		STORM SEWER	
WOODED OR SHRUB AREA		WATER	
		EXISTING CULVERT	
		PROPOSED CULVERT (Box or Pipe)	
		CULVERT (Profile View)	

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION
 PLAN OF PROPOSED IMPROVEMENT
CTH 'WW' INTERCHANGE
 N 32nd AVE. - WISCONSIN RIVER
 USH 51
 MARATHON COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1170-00-73	STP 2003662	1

AS BUILT PLAN

SUPERVISOR: DAN HOLLOWAY

PROJECT MANAGER: AMY PARK
EMCS DESIGN GROUP

CONTRACTOR: AMERICAN ASPHALT

DATE STARTED: 5-10-04

DATE COMPLETED: _____

CONSTRUCTION STAFF
(NAME/RESPONSIBILITIES)

AMY PARK - PROJECT LEADER

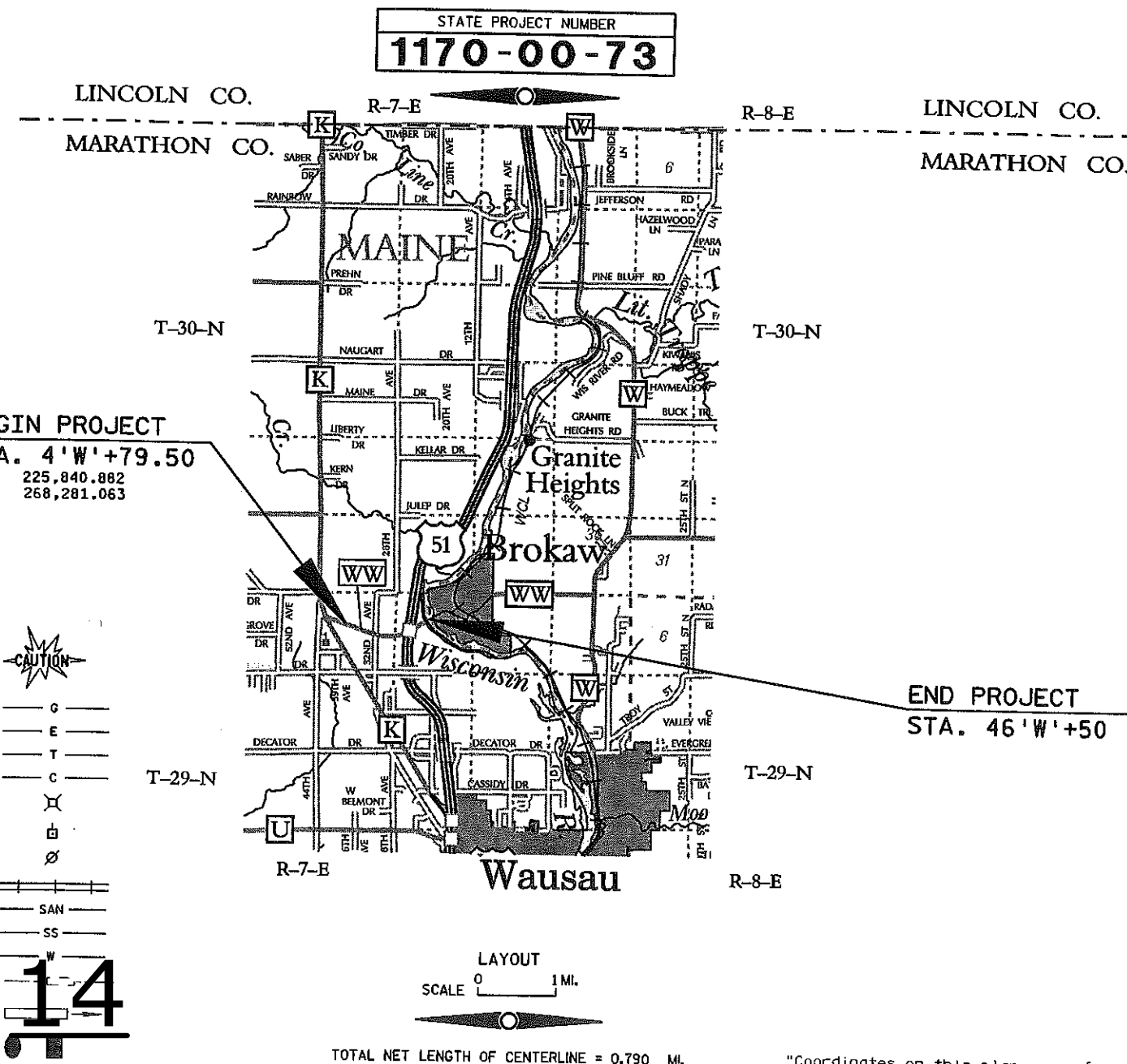
BRIAN CUTLER - INSPECTOR

DAVE JILSON - INSPECTOR

MIKE PARESKI - INSPECTOR

BEGIN PROJECT
STA. 4+W+79.50
Y = 225,840.882
X = 268,281.063

END PROJECT
STA. 46+W+50



TOTAL NET LENGTH OF CENTERLINE = 0.790 MI.

"Coordinates on this plan are referenced to the Wisconsin County Coordinate System (WCCS), 'Marathon' County."

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	Surveyor <u>Dale Voss & Gene Werner</u>
Designer	<u>MIKE KRETSCHMER</u>
District Examiner	<u>GU. LAYTON</u>
District Supervisor	<u>RONALD HETT</u>
Proj. Dev. Engineer	<u>Gene E. Engstrom</u>
C.O. Examiner	<u>Gene E. Engstrom</u>
APPROVED FOR DISTRICT OFFICE	<u>C.P. [Signature]</u> (Signature)
DATE: 4-01-2003	1

GENERAL NOTES

CURVE DATA IS BASED ON THE ARC DEFINITION.

THE OUTSIDE EDGE OF THE PAVEMENT IS THE R (REFERENCE LINE) ON ALL RAMPS.

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT THAT ARE NOT SHOWN.

WHEN THE QUANTITY OF THE ITEMS OF BASE, SUBBASE OR SURFACE COURSE IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE COURSES SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

SECTIONS AS SHOWN ON THE CROSS SECTION SHEETS INCLUDE THE THICKNESS OF SALVAGED TOPSOIL OR TOPSOIL.

THE QUANTITY OF THE ITEMS FOR EROSION PROTECTION INCLUDES AN UNDISTRIBUTED AMOUNT FOR THE PROTECTION, CONTROL AND ABATEMENT OF WATER POLLUTION RESULTING FROM SOIL EROSION. THE DISTRIBUTION AND LOCATION OF THESE MATERIALS ARE TO BE DETERMINED BY THE ENGINEER.

THE CONTRACTOR WILL BE RESPONSIBLE FOR SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATIONS OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

THE GENERAL PUBLIC SHALL NOT BE PERMITTED TO DRIVE ON THE RUBBLIZED CONCRETE SURFACE AT ANY TIME.

AREAS TO BE PAVED WITH ASPHALTIC CONCRETE PAVEMENT, TYPE E-3 THAT ARE DISTURBED BY THE REMOVAL OF EXISTING CONCRETE CURB SHALL BE SHAPED AND COMPACTED WITH C.A.B.C. TO MATCH ADJACENT RUBBLIZED CONCRETE.

ASPHALTIC CONCRETE PAVEMENT, TYPE E-3, SHALL BE PLACED IN TWO LAYERS. THE LOWER LAYER SHALL CONSIST OF A 19mm (3/4 INCH) NOMINAL MAXIMUM SIZE MIXTURE, AND THE UPPER LAYER SHALL CONSIST OF A 12.5 mm (1/2 INCH) NOMINAL MAXIMUM SIZE MIXTURE.

STANDARD DETAIL DRAWINGS

8D1-13	Concrete Curb, Concrete Curb and Gutter and Pavement Ties
8D15-3a	Edgedrain Outlet and Outfall Markers
8E8-3	Typical Installations of Erosion Bales/Temporary Ditch Dhedks
8E9-5	Silt Fence
8F6-4	Reinforced Concrete Apron Endwall for Pipe Underdrain
9A1-11b	At-Grade Side Road Intersection, Type "A"
14B15-4a&b	Class 'A' Steel Plate Beam Guard, Installation & Elements
14B16-3a&b	Class 'A' Steel Plate Beam Guard End Treatment with Anchorage Type 2
14B18-4a	Class 'A' Steel Plate Beam Guard (at Bridges, Obstacles and Sideroads/Driveways)
14B20-5a	Steel Thrie Beam Structure Approach
14B20-5b	Steel Thrie Beam Structure Approach, Connection to squared End and Vertical Faced Parapets
14B24-3a,b,&c	Steel Plate Beam Guard Energy Absorbing Terminal
15C2-3	Barricades and Signs for Road Closures
15C7-5a	Pavement Marking Symbols
15C8-9a	Pavement Marking (Mainline)
15C8-9b	Pavement Marking (Intersections)
15C8-9c	Pavement Marking (Climbing Lane & Passing Lane)
15C8-10e	Pavement Marking (Islands, Stop Line & Cross Walk)
15C10-6b	Raised Pavement Markers (Ramps & Arrows)
15C10-6d	Raised Pavement Markers, Two Way (Casting & Sawcut Details)
15C11-5	Flexible Tubular Marker Post, Anchor & bases
15C12-2	Traffic Control for Lane Closure (Suitable for Moving Operations)

UTILITIES

VILLAGE OF BROKAW
311 THIRD P.O. BOX 108
BROKAW, WI. 54417

ATTN: WAYNE UTECHT
PH: 715-675-3059

VERIZON
521 FOURTH STREET
WAUSAU WI. 54403-4869

ATTN: DENNIS BATES
PH: 715-847-1500

CHARTER COMMUNICATIONS
BOX 1818
WAUSAU WI. 54402-1818

ATTN: KEN ZALEWSKI
PH: 715-845-4223

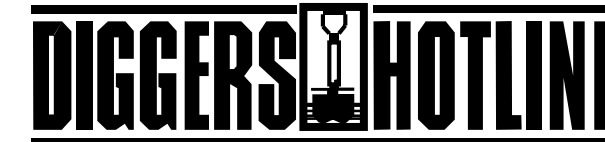
WISCONSIN PUBLIC SERVICE CORPORATION
700 NORTH ADAMS STREET, PO BOX 19001
GREEN BAY, WIS. 54307-9001

ATTN: LORI BUTRY
PH: 920-433-1043

LOCAL CONTACT - ELECTRIC: CLAY VIRCKS
PH: 715-848-7317

DNR PROJECT LIAISON

CAMERON BUMP
WISCONSIN DEPT. OF NATURAL RESOURCES
473 GRIFFITH AVE.
WISCONSIN RAPIDS, WI. 54494
PH: 715-421-7867

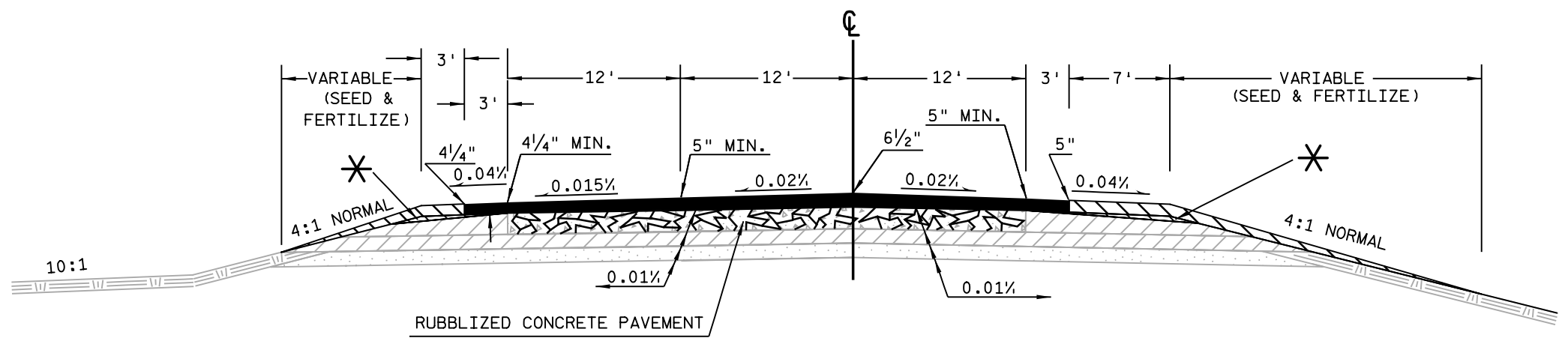


Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

LIST OF STANDARD ABBREVIATIONS

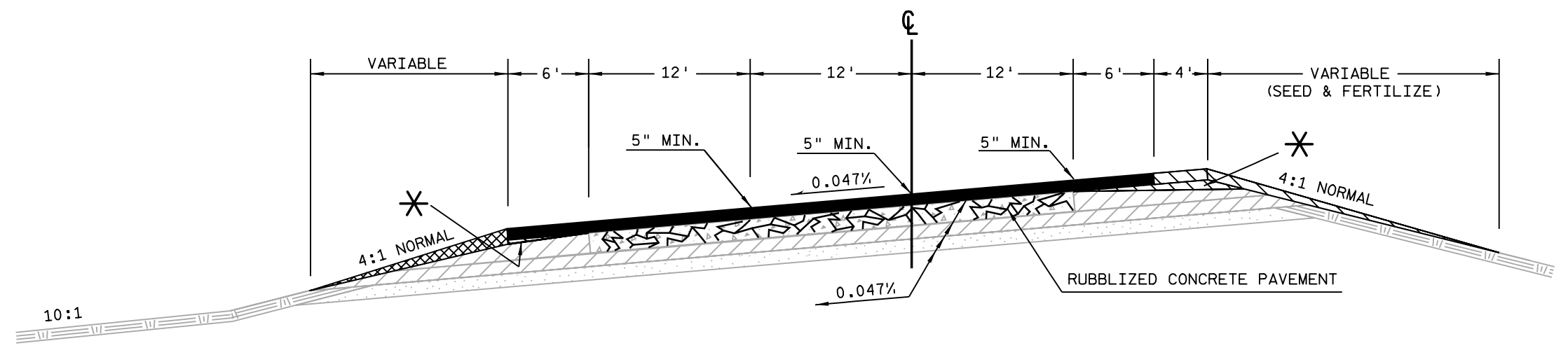
A.C.	ASPHALT CEMENT	NORM., NOR.	NORMAL
ASPH.	ASPHALTIC	Y	NORTH GRID COORDINATE
AVE.	AVENUE	X	EAST GRID COORDINATE
AVG.	AVERAGE	N.B.	NORTHBOUND
A.D.T.	AVERAGE DAILY TRAFFIC	PAV'T	PAVEMENT
B.M., BM.	BENCH MARK	P.C.	POINT OF CURVATURE
BIT.	BITUMINOUS	P.I.	POINT OF INTERSECTION
CL, C/L	CENTER LINE	P.T.	POINT OF TANGENCY
C.C.	CENTER TO CENTER	LB.	POUND
C.E.	COMMERCIAL ENTRANCE	P.E.	PRIVATE ENTRANCE
C.A.C.P.	CORRUGATED ALUMINUM CULVERT PIPE	P.L.	PROPERTY LINE
C.M.C.P.	CORRUGATED METAL CULVERT PIPE	PROJ.	PROJECT
C.M.P.C.P.	CORRUGATED METAL PIPE CATTLE PASS	QUAN./QTY.	QUANTITY (IES)
C.P.C.P.	CORRUGATED POLYETHYLENE CULVERT PIPE	R	RADIUS OR RANGE
C.S.C.P.	CORRUGATED STEEL CULVERT PIPE	RR, R.R.	RAILROAD
C.S.P.A.	CORRUGATED STEEL PIPE ARCH	RL, R/L	REFERENCE LINE
CO.	COUNTY	R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE
C.T.H.	COUNTY TRUNK HIGHWAY	R.C.P.A.	REINFORCED CONCRETE PIPE ARCH
CR.	CREEK	R.C.P.C.P.	REINFORCED CONCRETE PIPE CATTLE PASS
C.A.B.C.	CRUSHED AGGREGATE BASE COURSE	RT.	RIGHT
C.Y., CU.YD.	CUBIC YARD	REQ'D	REQUIRED
CULT.	CULTIVATED	R.H.F.	RIGHT HAND FORWARD
C.P.	CULVERT PIPE	R/W	RIGHT OF WAY
D	DEGREE OF CURVE	RD.	ROAD
D.H.V.	DESIGN HOUR VOLUME	SHLD.	SHOULDER (S)
DIA.	DIAMETER	S.B.	SOUTHBOUND
EA.	EACH	SPEC'S	SPECIFICATIONS
E.B.	EASTBOUND	ST.	STREET
ELEC., E	ELECTRIC (AL), ELEC. CABLE	S.F., SQ.FT.	SQUARE FEET (FOOT)
EL., ELEV.	ELEVATION	S.Y., SQ.YD.	SQUARE YARD (S)
FERT.	FERTILIZER	STD.	STANDARD
F.E.	FIELD ENTRANCE	S.D.D., SDD	STANDARD DETAIL DRAWING (S)
F.L., F/L	FLOW LINE	S.T.H.	STATE TRUNK HIGHWAY
FT.	FOOT, FEET	STA.	STATION
'/', FT./FT.	FOOT PER FOOT	STR.	STRUCTURE, STRUCTURAL
G	GAS MAIN (LINE)	S.E.	SUPERELEVATION
CWT.	HUNDRED WEIGHT	SURF.	SURFACE
IN. DIA.	INCH DIAMETER	T	TANGENT
LT.	LEFT	TEL., T	TELEPHONE (LINE)
L.H.F.	LEFT HAND FORWARD	TEMP.	TEMPORARY
L.F.	LINEAR FOOT (FEET)	T.	(TRUCKS) PERCENT OF
LC.	LONG CHORD	TYP.	TYPICAL
L.S.	LUMP SUM	UNCL.	UNCLASSIFIED
MAX.	MAXIMUM	U.S.H.	U.S. HIGHWAY
M.P.H.	MILES PER HOUR	VAR.	VARIABLE
MIN.	MINIMUM	V.	VELOCITY/DESIGN SPEED
MIS., MISC.	MISCELLANEOUS	W.B.	WESTBOUND
MON.	MONUMENT		
NOM.	NOMINAL		

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



EXISTING/PROPOSED TYPICAL TANGENT SECTION WITH CLIMBING LANE

STA. 2'W'+29.50 - STA. 12'W'+19.13



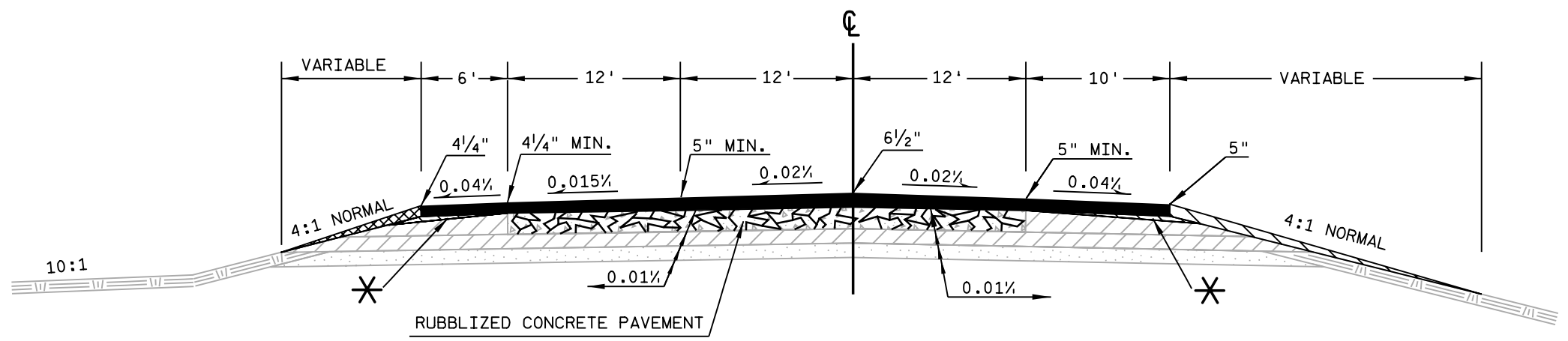
EXISTING/PROPOSED SUPERELEVATED SECTION WITH CLIMBING LANE

STA. 12'W'+19.13 - STA. 30'W'+00

LEGEND

- | | | |
|---|---|--|
| * PREPARATION OF FOUNDATION FOR ASPHALTIC SHOULDERS | PROPOSED | EXISTING |
| | <ul style="list-style-type: none"> ASPHALTIC CONCRETE PAVEMENT, TYPE E-3 CRUSHED AGGREGATE BASE COURSE SALVAGED ASPHALTIC PAVEMENT, BASE COURSE | <ul style="list-style-type: none"> 9" PORTLAND CEMENT CONCRETE PAVEMENT 6" CRUSHED AGGREGATE BASE COURSE 6" GRANULAR SUBBASE |

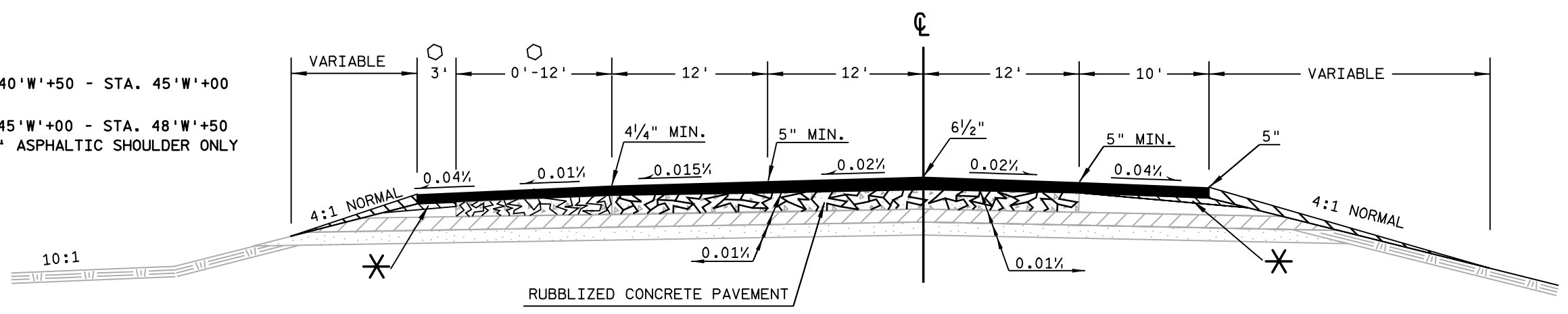
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EXISTING/PROPOSED TYPICAL TANGENT SECTION WITH CLIMBING LANE

STA. 30'W'+00- STA. 40'W'+50

○ STA. 40'W'+50 - STA. 45'W'+00
 STA. 45'W'+00 - STA. 48'W'+50
 HAS 6' ASPHALTIC SHOULDER ONLY



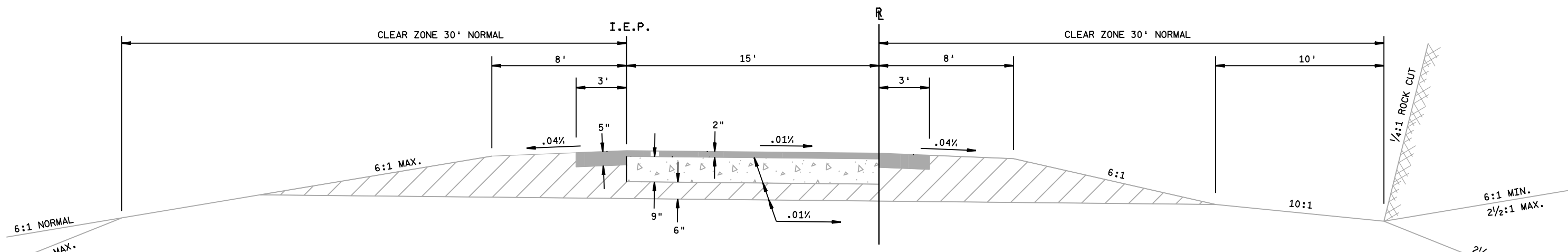
EXISTING/PROPOSED TYPICAL TANGENT SECTION WITH CLIMBING LANE

STA. 40'W'+50- STA. 48'W'+50

LEGEND

- | | | |
|---|---|--|
| * PREPARATION OF FOUNDATION FOR ASPHALTIC SHOULDERS | PROPOSED | EXISTING |
| | <ul style="list-style-type: none"> ASPHALTIC CONCRETE PAVEMENT, TYPE E-3 CRUSHED AGGREGATE BASE COURSE SALVAGED ASPHALTIC PAVEMENT, BASE COURSE | <ul style="list-style-type: none"> 9" PORTLAND CEMENT CONCRETE PAVEMENT 6" CRUSHED AGGREGATE BASE COURSE 6" GRANULAR SUBBASE |

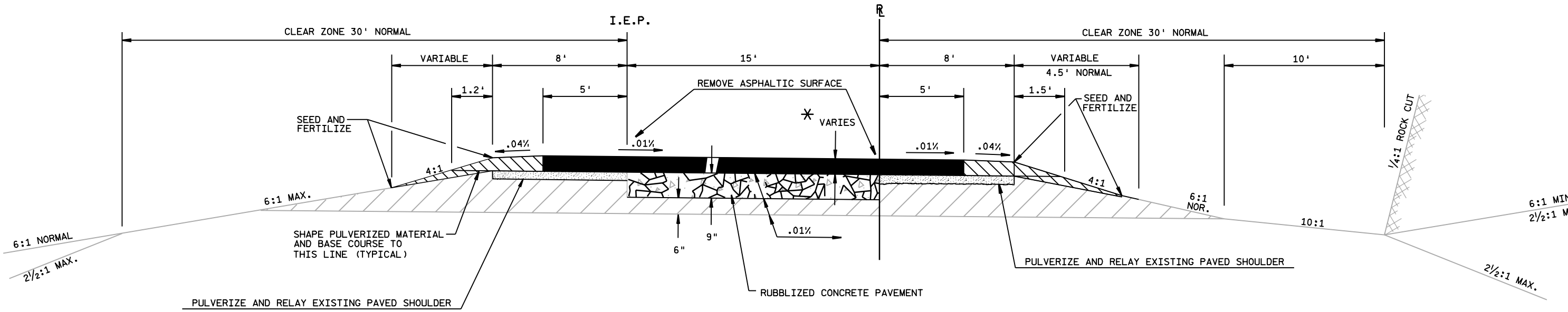
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EXISTING TYPICAL TANGENT RAMP SECTION

STA.5'WA'+64 - STA.8'WA'+25
 STA.102'WB'+55 - STA.105'WB'+25
 STA.98'WC'+50 - STA.100'WC'+36
 * STA.98'WD'+45 - STA.101'WD'+72

* NO ASPHALT OVERLAY



PROPOSED TYPICAL TANGENT RAMP SECTION

STA.7'WA'+48 - STA.8'WA'+25
 STA.102'WB'+55 - STA.105'WB'+25
 STA.98'WC'+50 - STA.99'WC'+88
 STA. 98'WD'+45 - STA.101'WD'+72

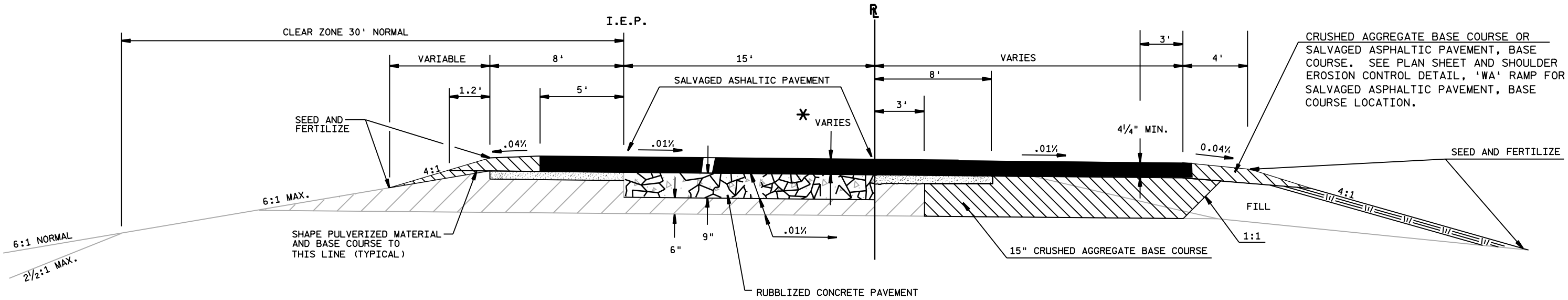
NOTE: SALVAGED ASPHALTIC PAVEMENT REQUIRED PRIOR TO RUBBLIZING.

* THICKNESS VARIES, SEE DETAILS OF TYPICAL RAMP SALVAGED ASPHALTIC PAVEMENT AND ASPHALTIC PAVING DETAIL, IN THIS PLAN.

LEGEND

- | | |
|---|-------------------------------|
| PROPOSED | EXISTING |
| ASPHALTIC CONCRETE PAVEMENT, TYPE E-3 | P.C. CONCRETE PAVEMENT |
| CRUSHED AGGREGATE BASE COURSE | CRUSHED AGGREGATE BASE COURSE |
| PULVERIZED ASPHALTIC PAVEMENT AND CRUSHED AGGREGATE BASE COURSE | ASPHALTIC CONCRETE PAVEMENT |

LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



NOTE: SALVAGED ASPHALTIC PAVEMENT REQUIRED PRIOR TO RUBBLIZING.
 GRADING AND PLACING 15" CABG TO BE DONE PRIOR TO
 PULVERIZING EXISTING ASPHALTIC PAVEMENT.

EXISTING/PROPOSED TYPICAL SECTION 'WA'/'WC' RAMP

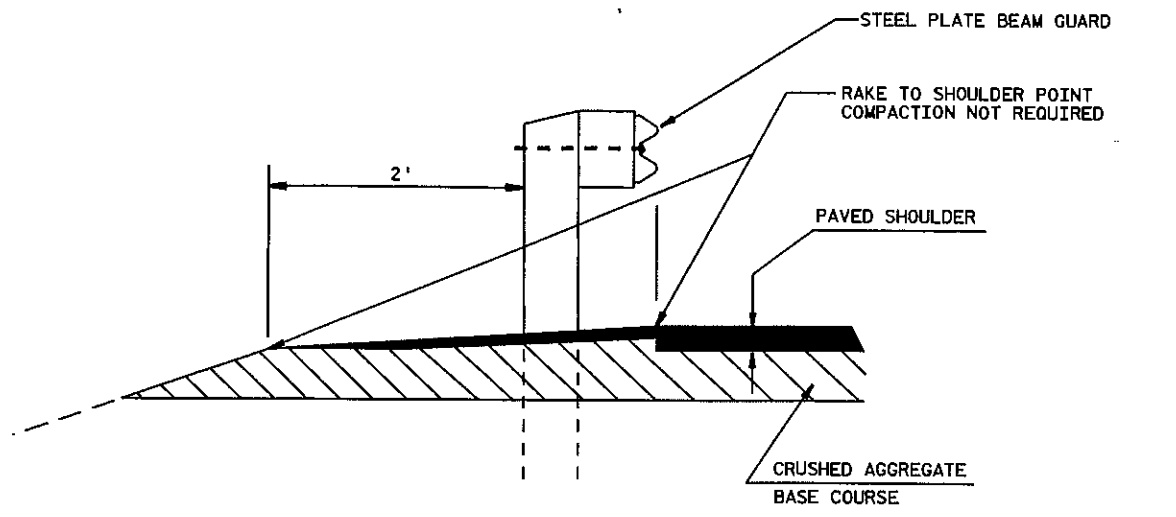
STA. 5'WA'+64 - STA. 7'WA'+48
 STA. 99'WC'+88 - STA. 100'WC'+36

* THICKNESS VARIES, SEE 'TYPICAL RAMP SALVAGED ASPHALTIC PAVEMENT AND PAVING DETAIL'

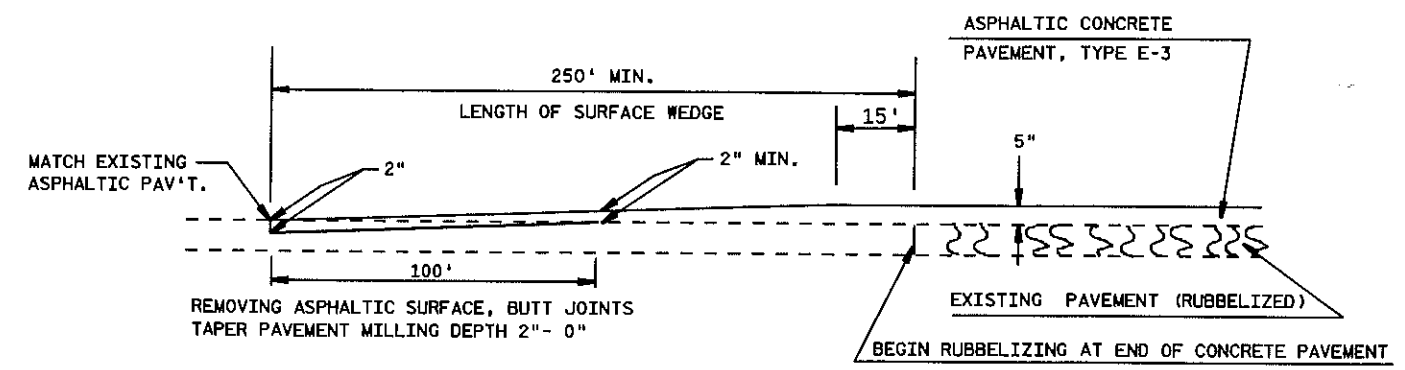
LEGEND

PROPOSED	EXISTING
ASPHALTIC CONCRETE PAVEMENT, TYPE E-3	P.C. CONCRETE PAVEMENT
CRUSHED AGGREGATE BASE COURSE	CRUSHED AGGREGATE BASE COURSE
PULVERIZED ASPHALTIC PAVEMENT AND CRUSHED AGGREGATE BASE COURSE	ASPHALTIC CONCRETE PAVEMENT
4" TOPSOIL OR SALVAGED TOPSOIL	

LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



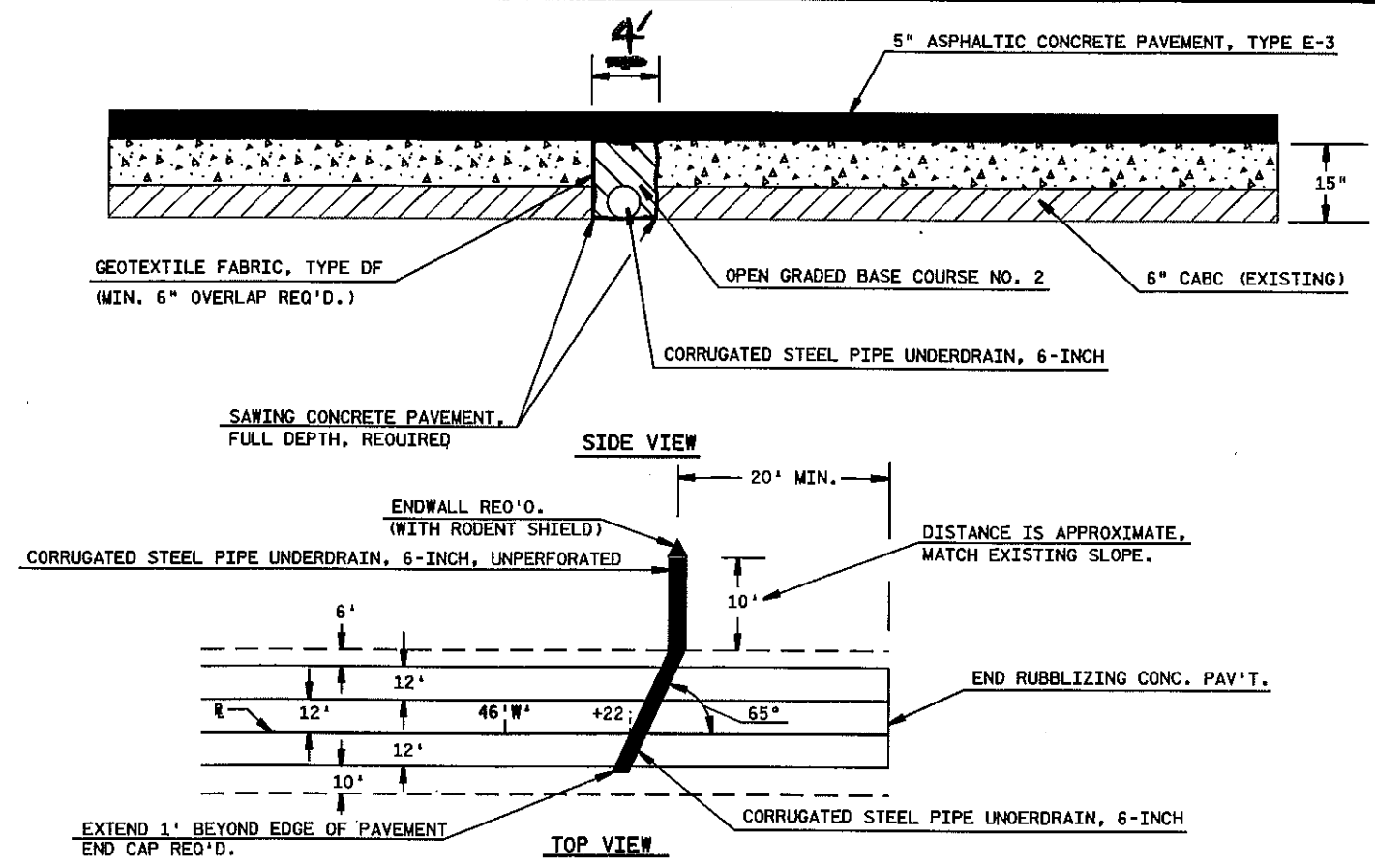
ASPHALTIC SHOULDER DETAIL AT STEEL PLATE BEAM GUARD



MAINLINE BUTT JOINT DETAIL

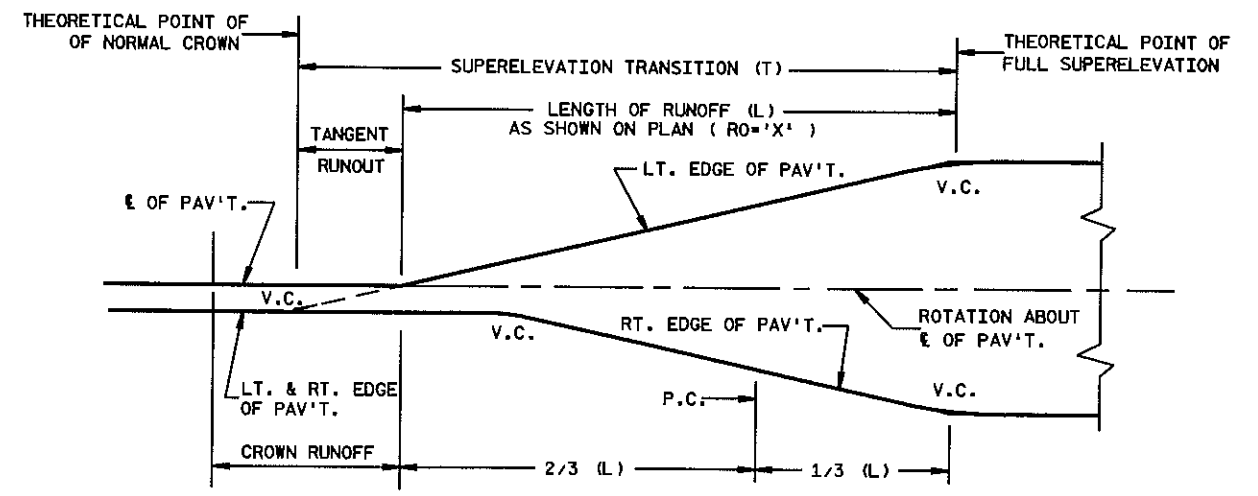
* STA. 2'W'+29.50

* STATION INDICATES MATCH LOCATION



INTERCEPT DRAIN DETAIL

STA. 46'W'+22

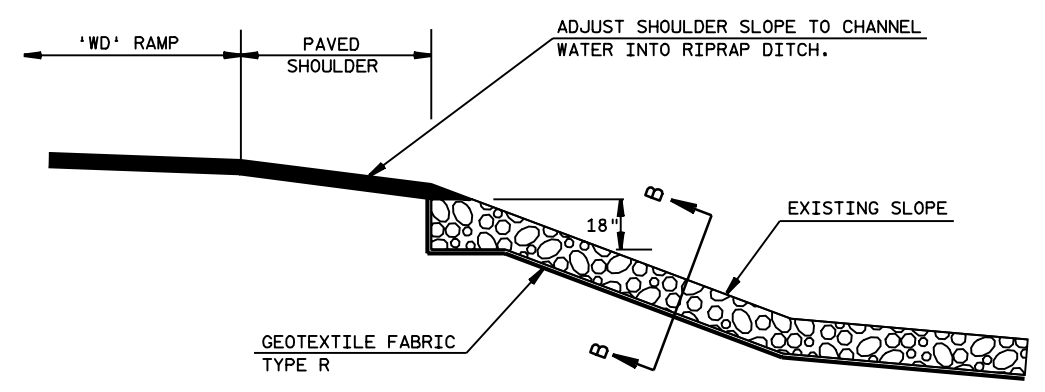


V.C. = VERTICAL CURVE
P.C. = BEGINNING OF HORIZONTAL CURVE

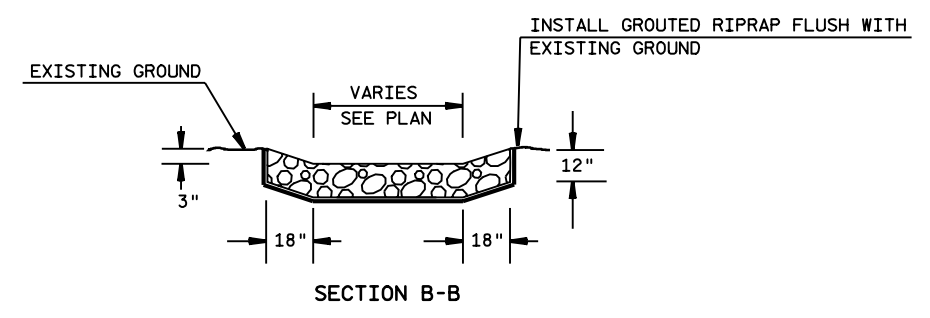
TYPICAL SUPERELEVATION TRANSITION COMPUTATION MODEL

PROFILE OF CURVE TO RIGHT

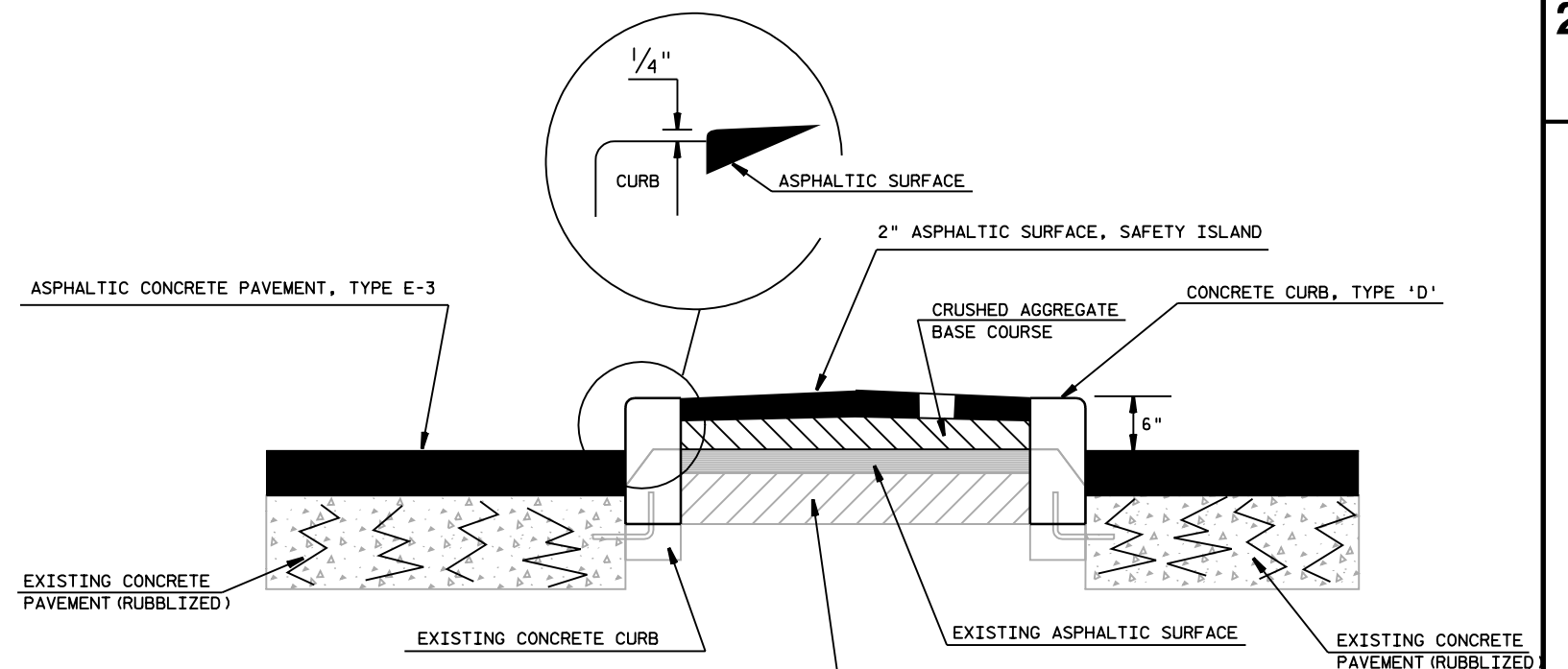
LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



NOTE: EXISTING ASPHALTIC FLUME TO BE REMOVED



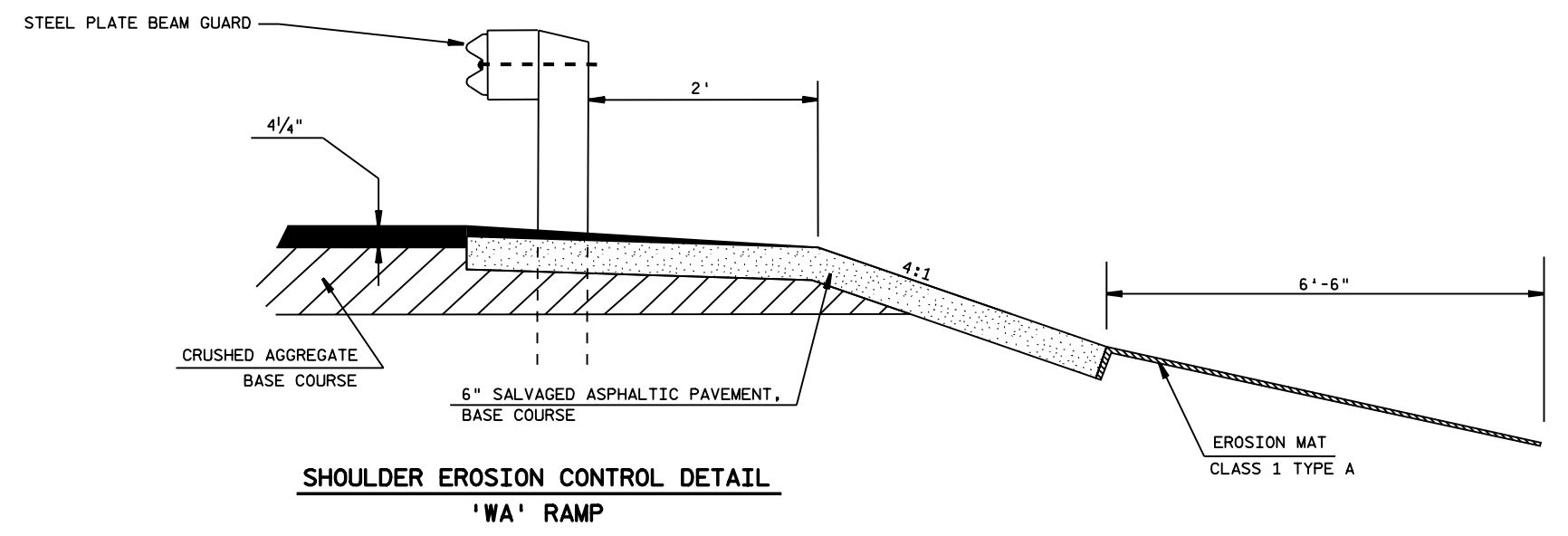
GROUDED RIPRAP DETAIL
'WD' RAMP



NOTE: REMOVE EXISTING CURB AND ASPHALTIC SURFACE GRADE AND SHAPE WITH CRUSHED AGGREGATE BASE COURSE. REMOVAL TO TAKE PLACE AFTER RUBBLIZING EXISTING CONCRETE PAVEMENT.
SEE PLAN SHEET FOR LAYOUT INFORMATION.

TYPICAL RAISED ISLAND SECTION
WITH CONCRETE CURB

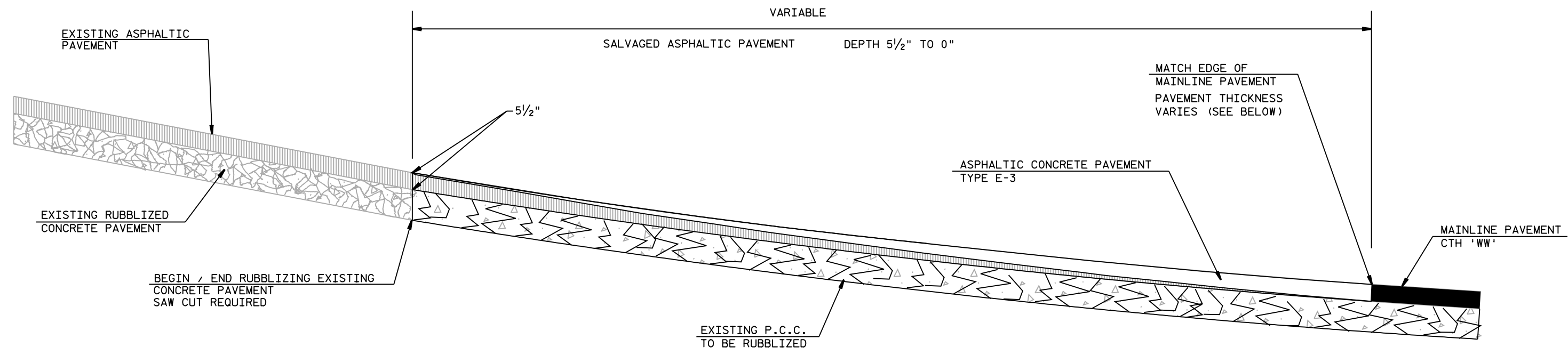
N. 32ND. AVE.
'WB' RAMP
'WD' RAMP



SHOULDER EROSION CONTROL DETAIL
'WA' RAMP

LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63

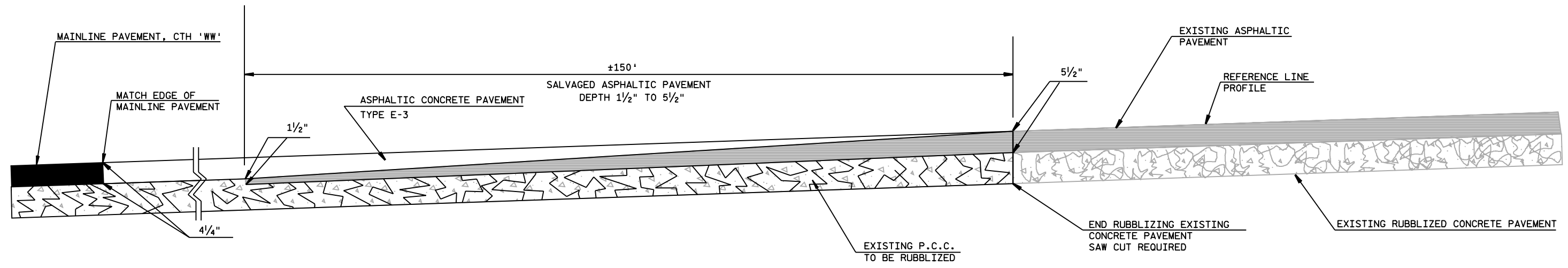


TYPICAL RAMP SALVAGED ASPHALTIC PAVEMENT AND ASPHALTIC PAVING DETAIL

STA. 8'WA'+25
 STA. 102'WB'+55
 STA. 98'WC'+50

PAVEMENT THICKNESS

RAMP	TAPER	STATION RANGE
'WA' RAMP	TAPER 5 1/2" TO 4 1/4"	STA. 8'WA'+25 - STA. 5'WA'+64
'WB' RAMP	TAPER 5 1/2" TO 5"	STA. 102'WB'+55 - STA. 103'WB'+55
'WC' RAMP	TAPER 5 1/2" TO 5"	STA. 98'WC'+50 - STA. 99'WC'+50

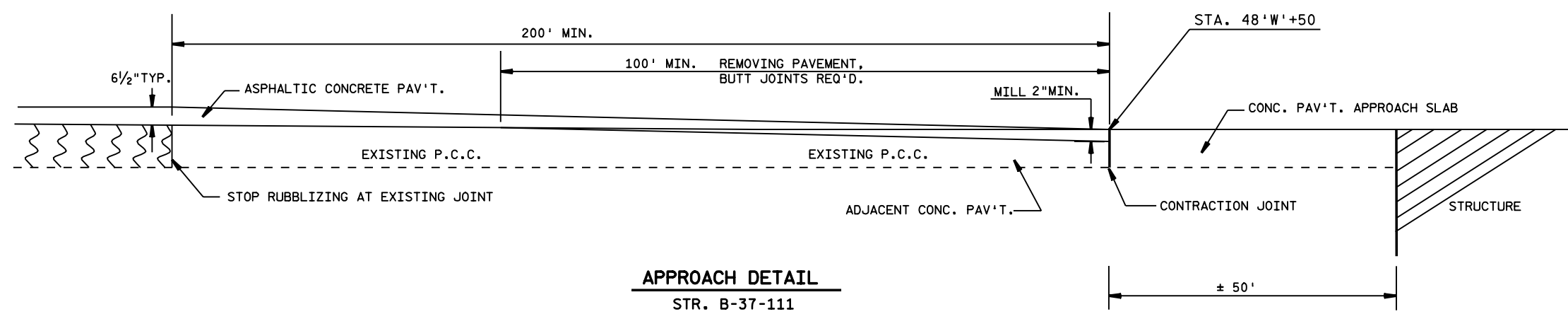


TYPICAL RAMP SALVAGED ASPHALTIC PAVEMENT AND ASPHALTIC PAVING DETAIL

STA. 101'WD'+72

PAVEMENT THICKNESS

'WD' RAMP
TAPER 5 1/2" TO 4 1/4" STA. 101'WD'+72 - STA. 99'WD'+22

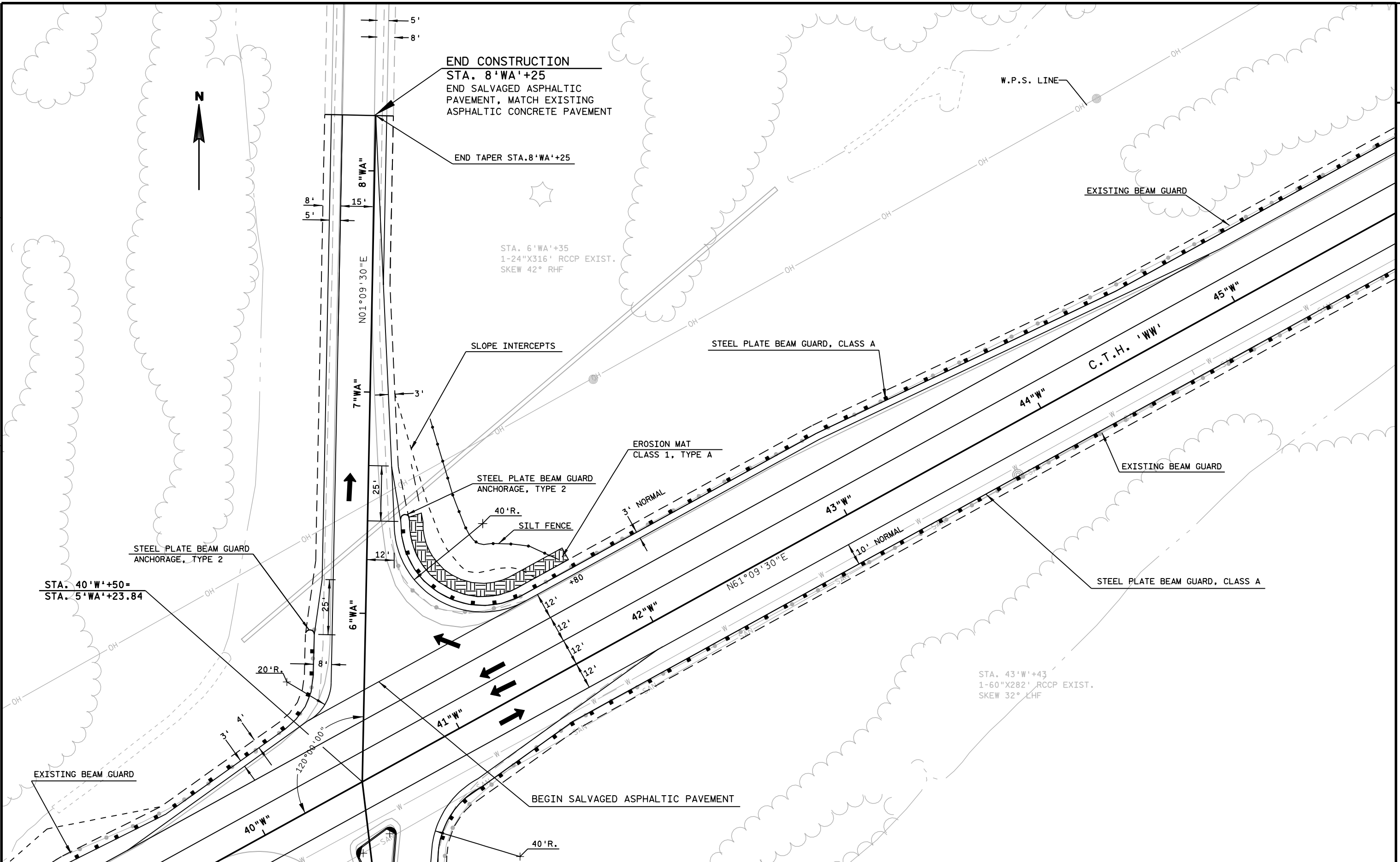


APPROACH DETAIL

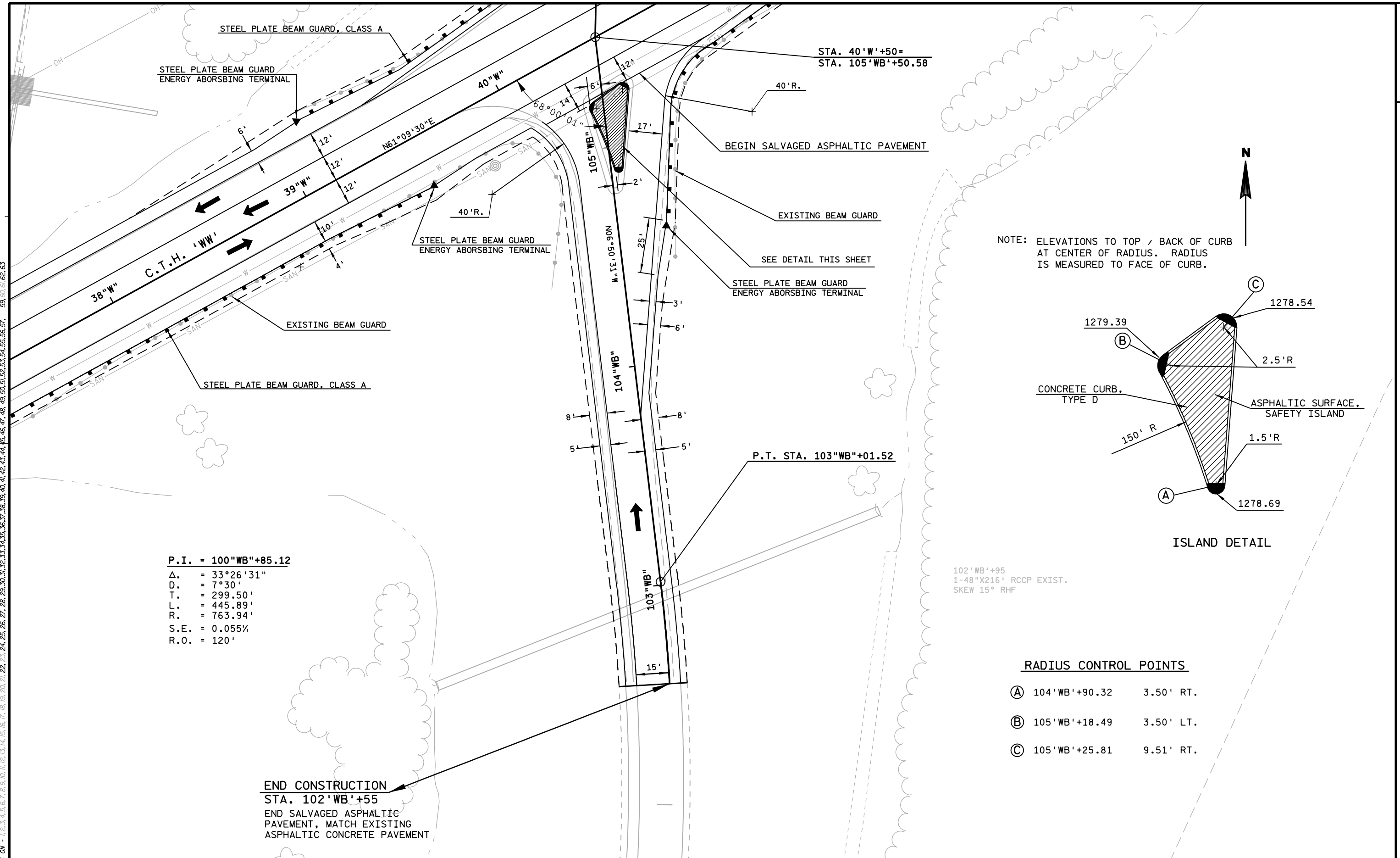
STR. B-37-111

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



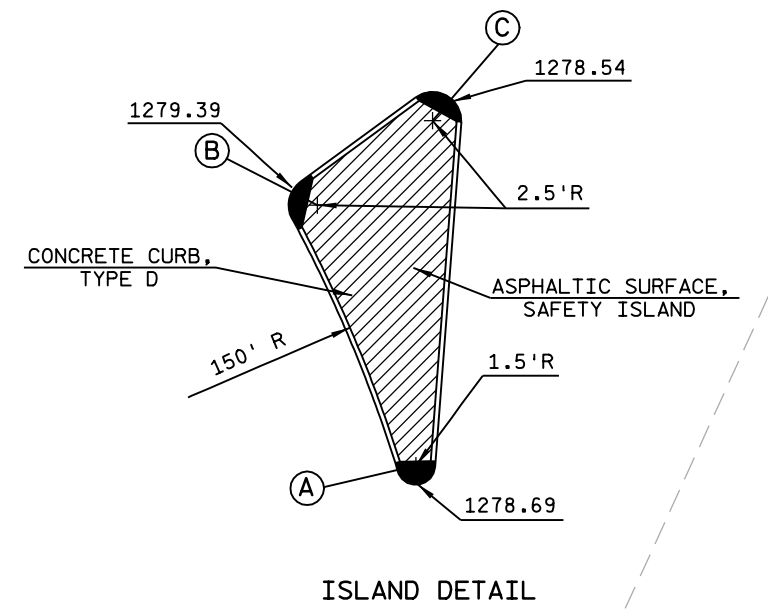
STATE PROJECT NUMBER: 1170-00-73	HWY: C.T.H. 'WW'	COUNTY: MARATHON	'WA' RAMP DETAILS	SCALE, FEET	SHEET NO:	E
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P.I. = 100"WB"+85.12
 Δ = 33°26'31"
 D = 7°30'
 T = 299.50'
 L = 445.89'
 R = 763.94'
 S.E. = 0.055%
 R.O. = 120'

END CONSTRUCTION
 STA. 102'WB'+55
 END SALVAGED ASPHALTIC
 PAVEMENT, MATCH EXISTING
 ASPHALTIC CONCRETE PAVEMENT

NOTE: ELEVATIONS TO TOP / BACK OF CURB
 AT CENTER OF RADIUS. RADIUS
 IS MEASURED TO FACE OF CURB.

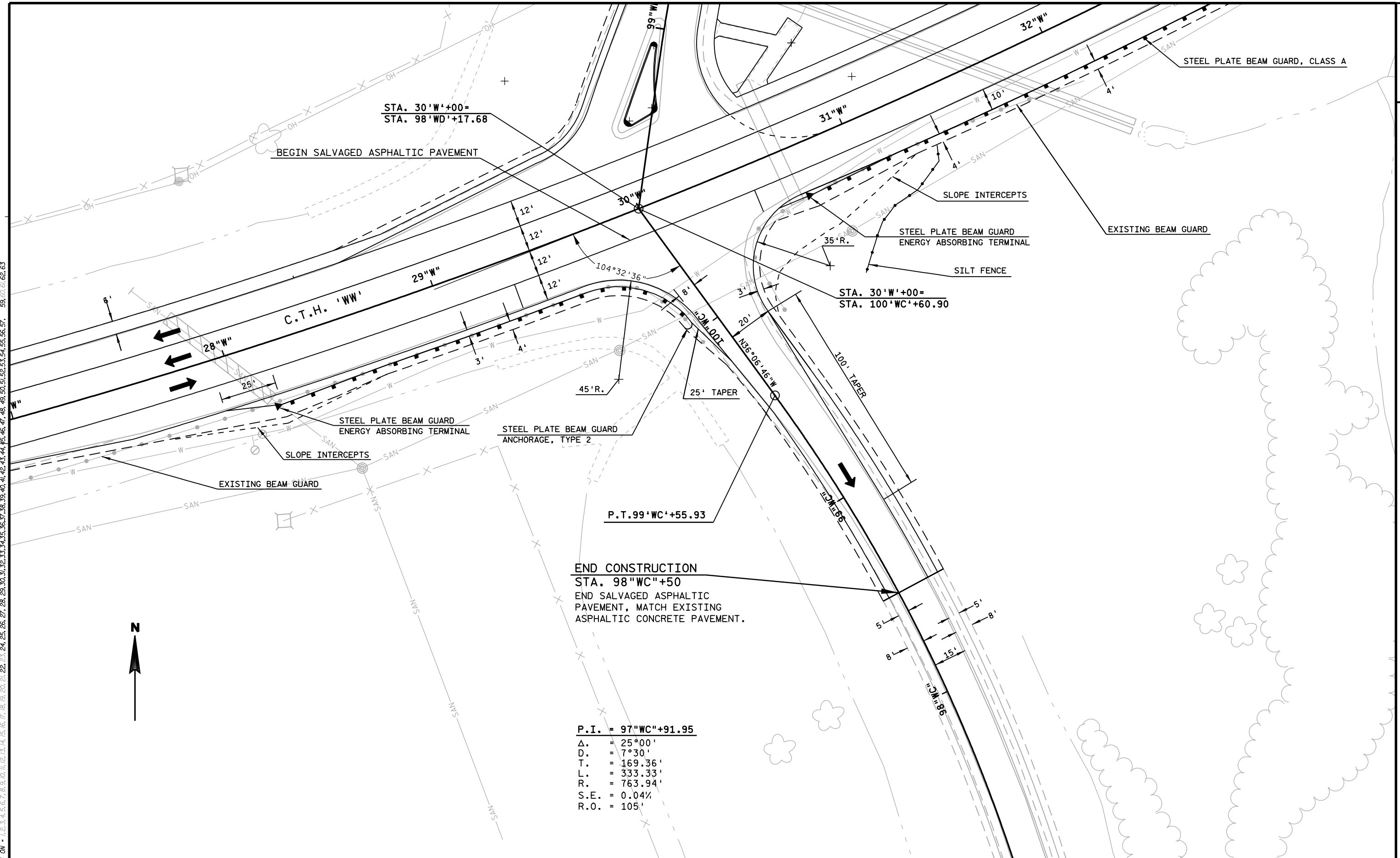


102'WB'+95
 1-48"X216' RCCP EXIST.
 SKEW 15° RHF

RADIUS CONTROL POINTS

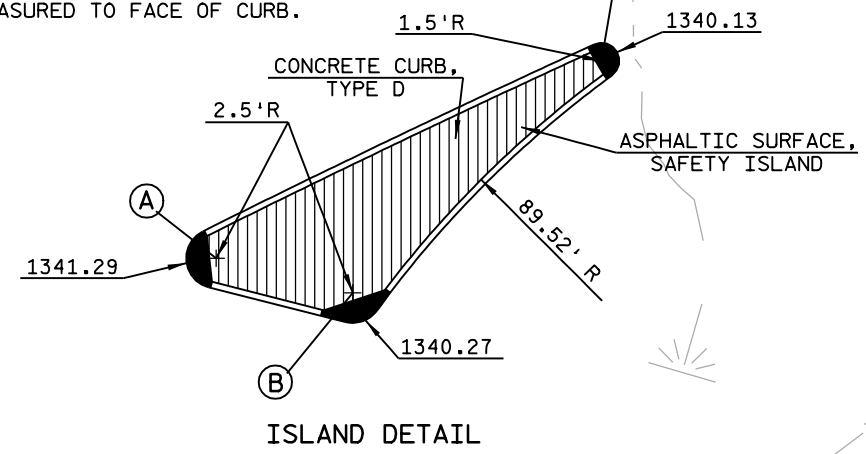
(A)	104'WB'+90.32	3.50' RT.
(B)	105'WB'+18.49	3.50' LT.
(C)	105'WB'+25.81	9.51' RT.

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



P.I. = 97'WC'+91.95
 Δ. = 25°00'
 D. = 7°30'
 T. = 169.36'
 L. = 333.33'
 R. = 763.94'
 S.E. = 0.04%
 R.O. = 105'

NOTE: ELEVATIONS TO TOP / BACK OF CURB AT CENTER OF RADIUS. RADIUS IS MEASURED TO FACE OF CURB.



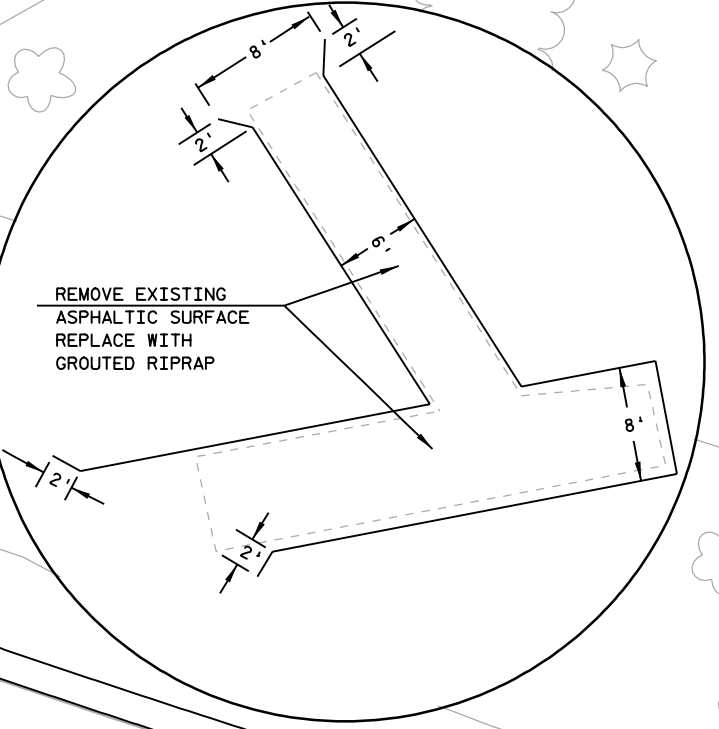
P.I. = 101"WD"+33.69
 Δ. = 38°10'09"
 D. = 8°00'
 T. = 247.79'
 L. = 477.12'
 R. = 716.20'
 S.E. = 0.05%
 R.O. = 86.36' AT P.C.

STA. 99"WD"+25
 2-36"X112' CMCP EXIST.
 SKEW 9° LHF
 CONNECTED TO EXISTING PIPES UNDER CTH "WW"
 RECEIVED POLY LINER IN 1990'S

SMOOTH PAVEMENT AND SHOULDER EDGELINES WITH A 500' RADIUS CURVE. CURVE LENGTH IS APPROXIMATELY 35'.

END CONSTRUCTION STA. 101"WD"+72
 END SALVAGED ASPHALTIC PAVEMENT, MATCH EXISTING ASPHALTIC CONCRETE PAVEMENT.

BEGIN SALVAGED ASPHALTIC PAVEMENT STA. 100"WD"+22



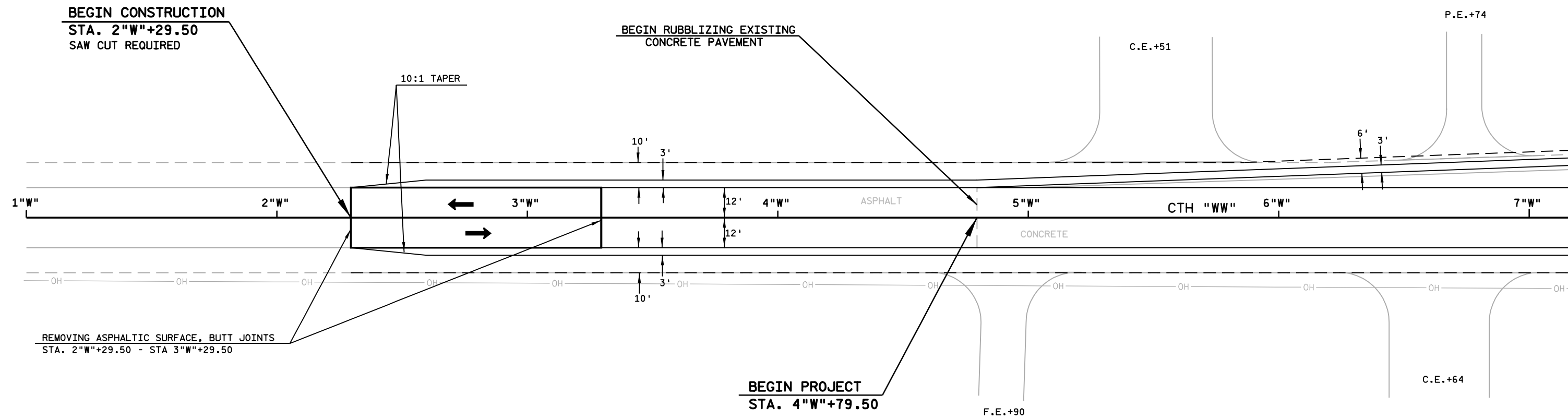
RADIUS CONTROL POINTS

Ⓐ	98'WD'+56.48	9.68' LT.
Ⓑ	98'WD'+63.81	0.50' LT.
Ⓒ	98'WD'+91.98	3.50' LT.

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

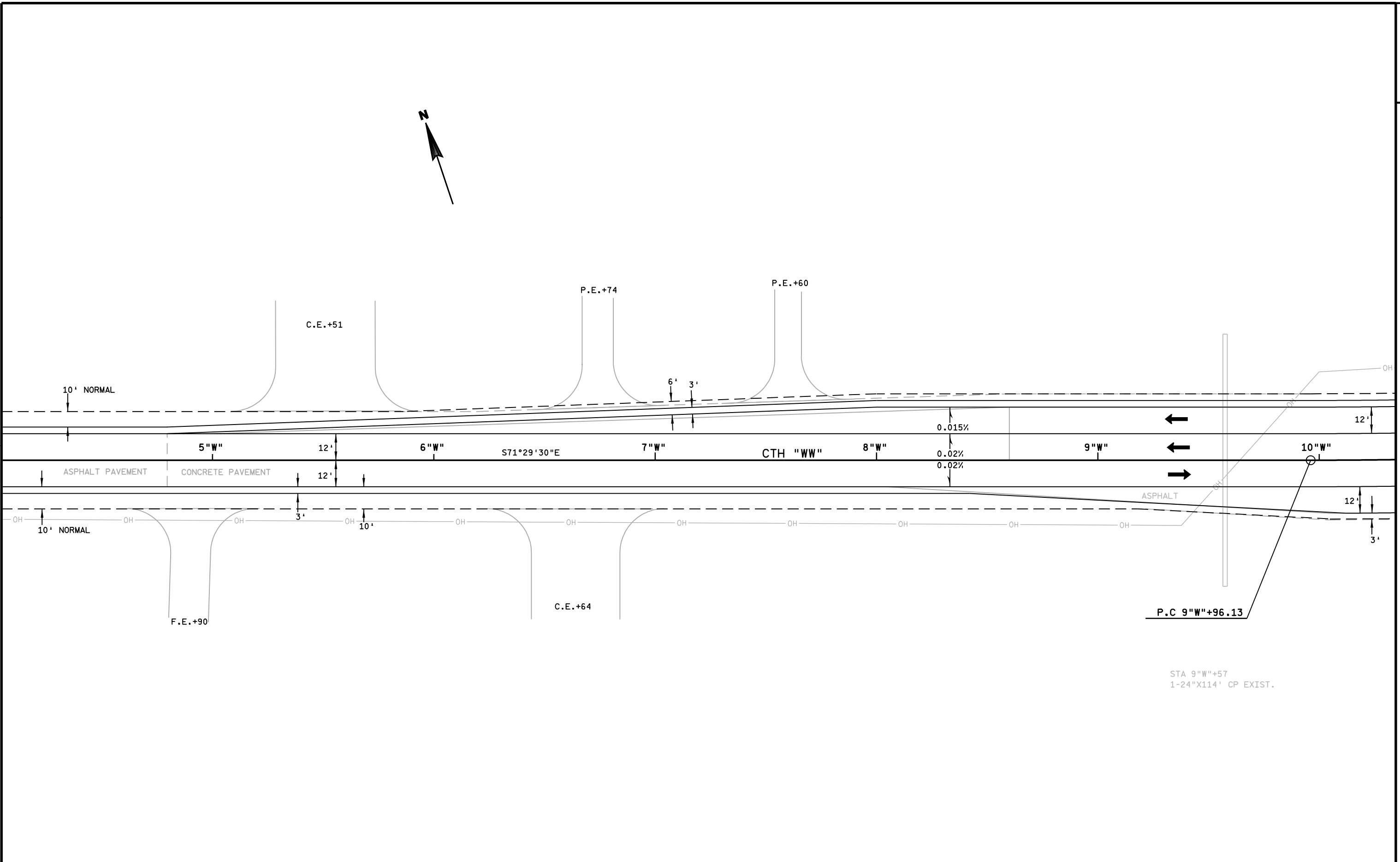


LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63

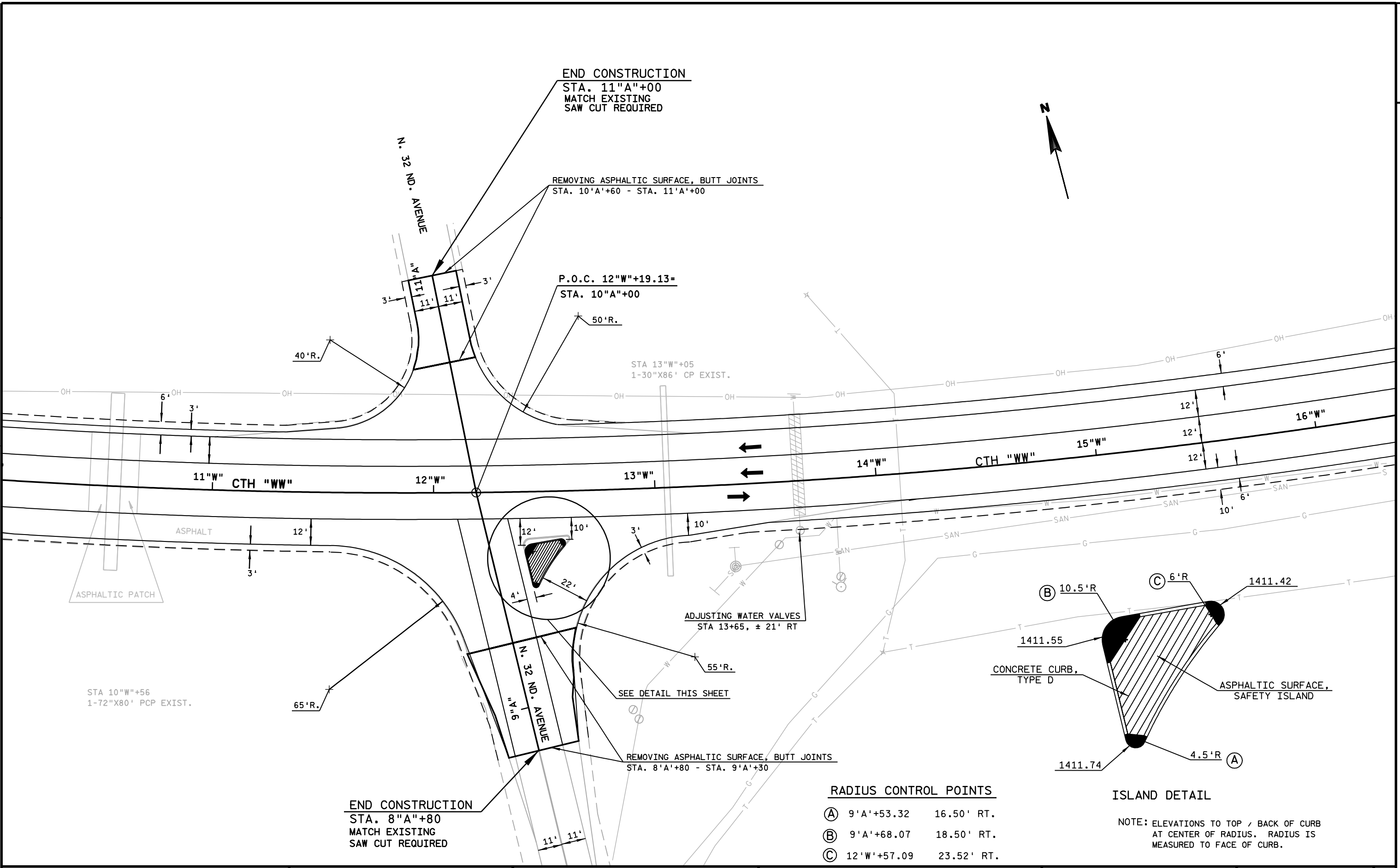




LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



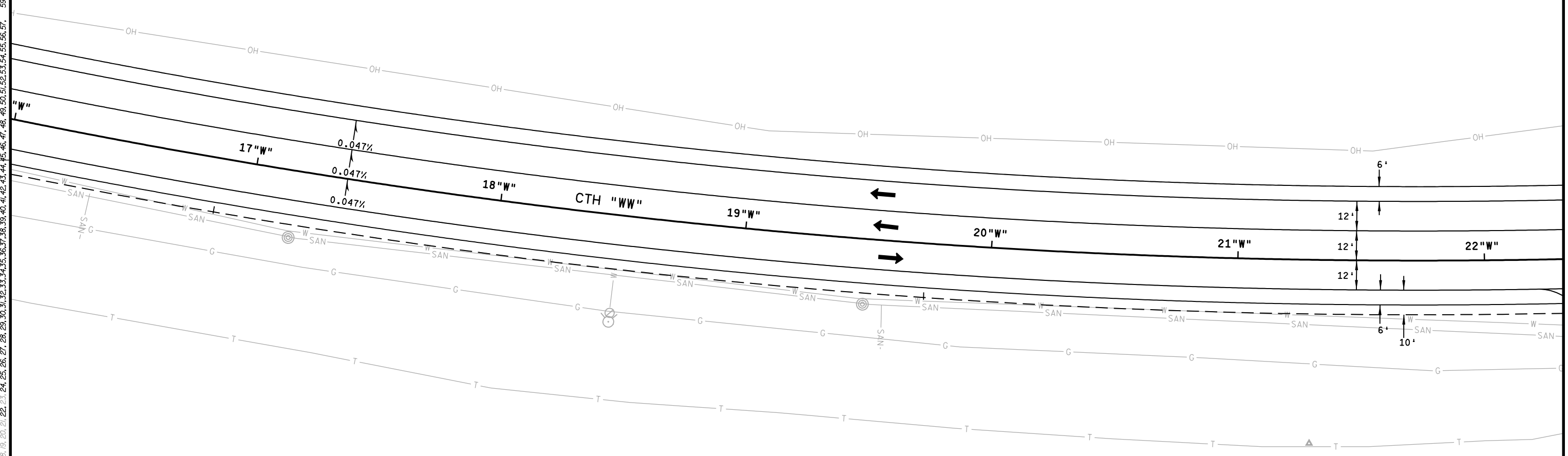
RADIUS CONTROL POINTS

(A)	9'A'+53.32	16.50' RT.
(B)	9'A'+68.07	18.50' RT.
(C)	12'W'+57.09	23.52' RT.

ISLAND DETAIL

NOTE: ELEVATIONS TO TOP / BACK OF CURB AT CENTER OF RADIUS. RADIUS IS MEASURED TO FACE OF CURB.

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



STATE PROJECT NUMBER: 1170-00-73	HWY: CTH 'WW'	COUNTY: MARATHON	PLAN SHEET - C.T.H. 'WW'	SCALE, FEET	SHEET NO:	E
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LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

STA. 22"W"+70.50=
STA. 10"B"+00

F.E.+86

ADJUSTING WATER VALVES (3)
STA 22+89, ± 29' RT

22"W"

23"W"

24"W"

25"W"

CTH "WW"

26"W"

27"W"

28"W"

N. 28TH AVE

ADJUSTING M.H. COVERS
STA 22+59, ± 33' RT

REMOVING ASPHALTIC SURFACE, BUTT JOINTS
STA. 9"B"+00 - STA. 9"B"+50

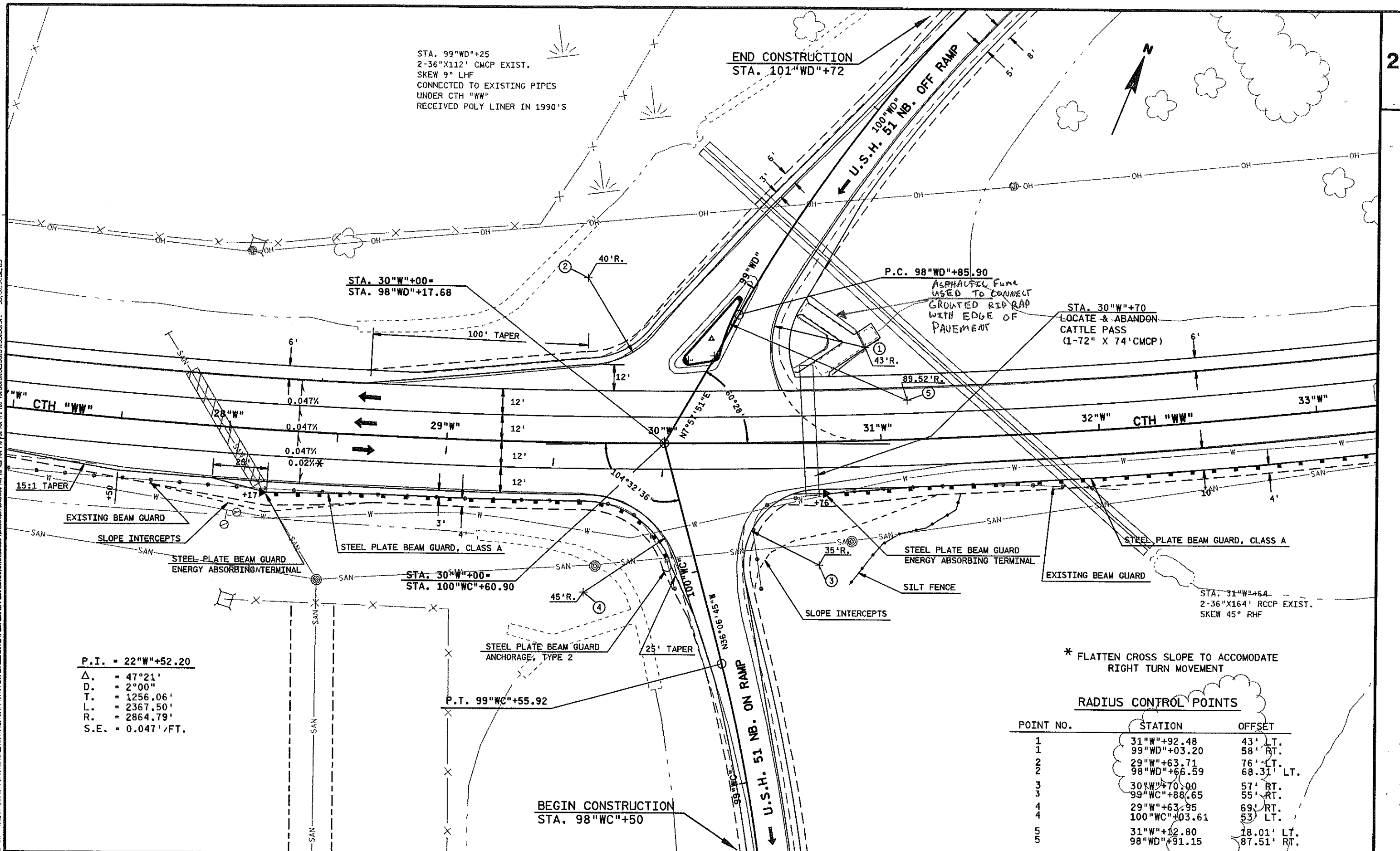
END CONSTRUCTION
STA. 9"B"+00
MATCH EXISTING
SAW CUT REQUIRED

SIGN

EXISTING BEAM GUARD

STA. 9"B"+61.5
1-24"X60' CMCP EXIST.

LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



* FLATTEN CROSS SLOPE TO ACCOMODATE RIGHT TURN MOVEMENT

RADIUS CONTROL POINTS

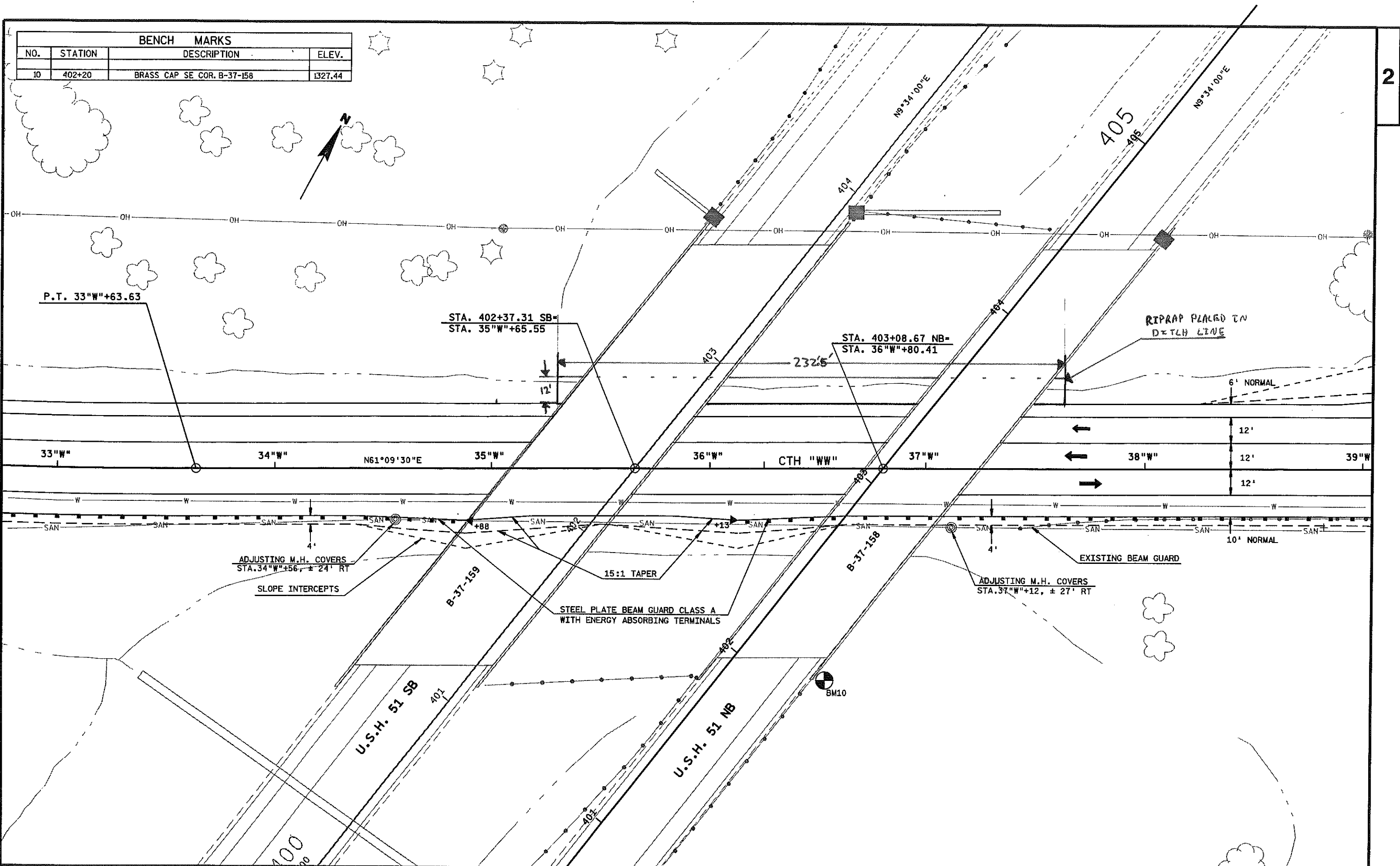
POINT NO.	STATION	OFFSET
1	31"W"+92.48	43' LT.
1	99"WD"+03.20	58' RT.
2	29"W"+63.71	76' LT.
2	98"WD"+66.59	68.31' LT.
3	30"W"+70.00	57' RT.
3	99"WC"+88.65	55' RT.
4	29"W"+63.95	69' RT.
4	100"WC"+03.61	53' LT.
5	31"W"+62.80	18.01' LT.
5	98"WD"+91.15	87.51' RT.

P.I. = 22"W"+52.20
 Δ = 47°21'
 D. = 2°00'
 T. = 1256.06'
 L. = 2367.50'
 R. = 2864.79'
 S.E. = 0.047' / FT.

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
10	402+20	BRASS CAP SE COR. B-37-158	1327.44

2

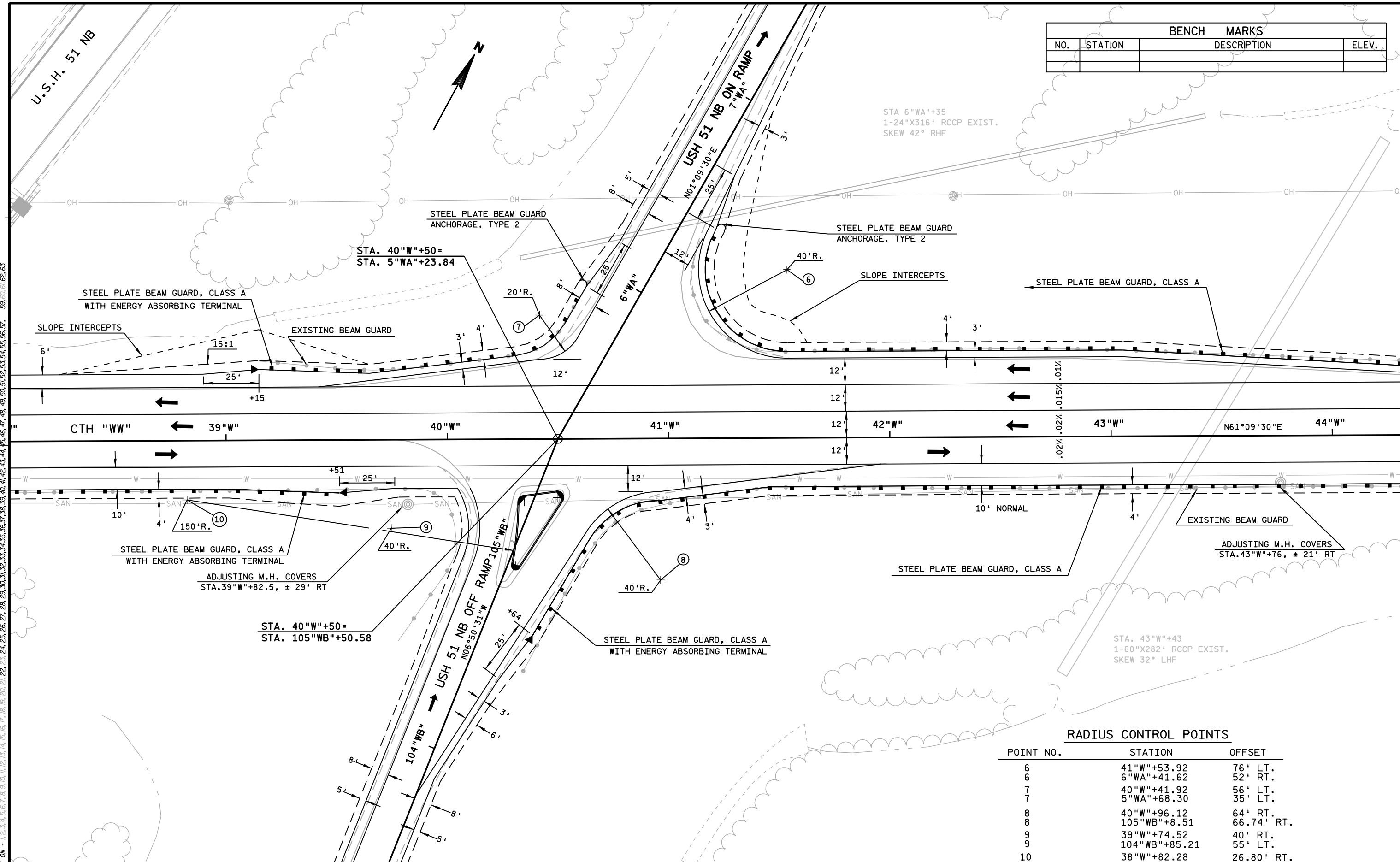
LEVELS ON = 1.2 3.4 5.6 7.8 9.0 11.12 13.14 15.16 17.18 19.20 21.22 23.24 25.26 27.28 29.30 31.32 33.34 35.36 37.38 39.40 41.42 43.44 45.46 47.48 49.50 51.52 53.54 55.56 57.58 59.60 61.62 63



STATE PROJECT NUMBER: 1170-00-73 | HWY: CTH 'WW' | COUNTY: MARATHON | PLAN SHEET - C.T.H. 'WW' | SCALE, FEET 0 | SHEET NO: 21 | E

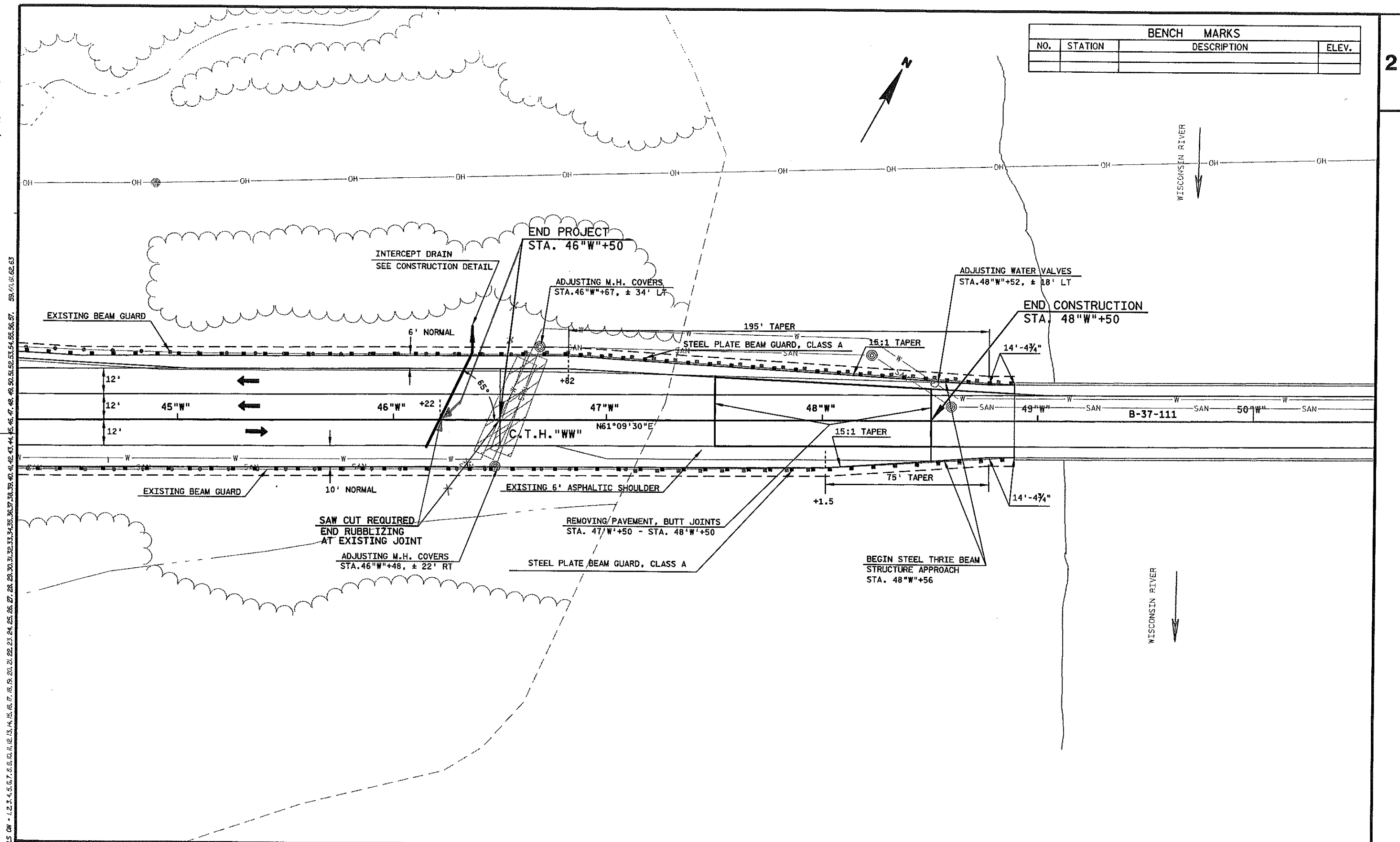
FILE NAME : P:\projects\d4_11700003ed\021211_pd.dgn | PLOT DATE : 11-JUL-2003 08:51 | PLOT BY : DDTTHM | PLOT NAME : 021211pd | ORG DATE : 5-27-99 | Originator : DAVID NOVACEK | PLOT SCALE : 40.000104:1.000000 | WISDOT/CADD SHEET 42

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.



LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

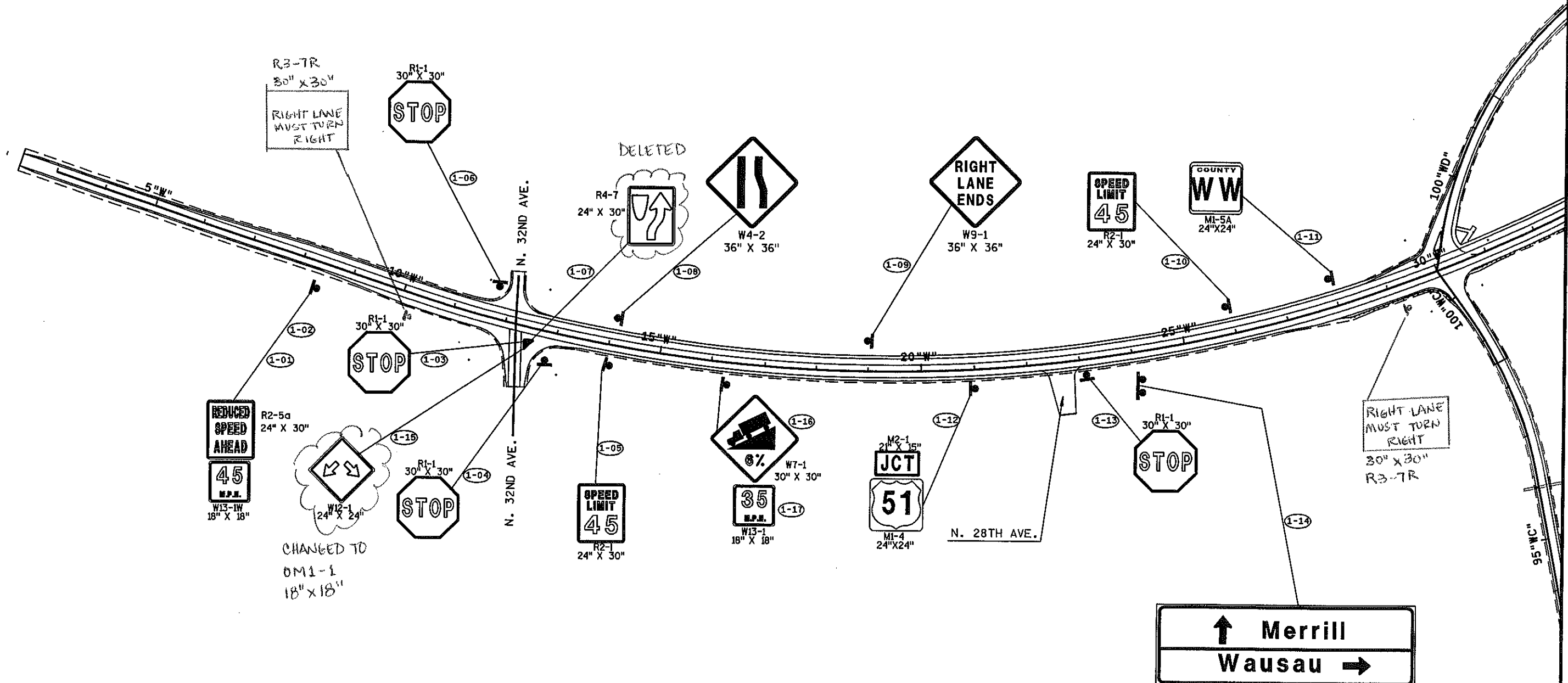
BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.



LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

N

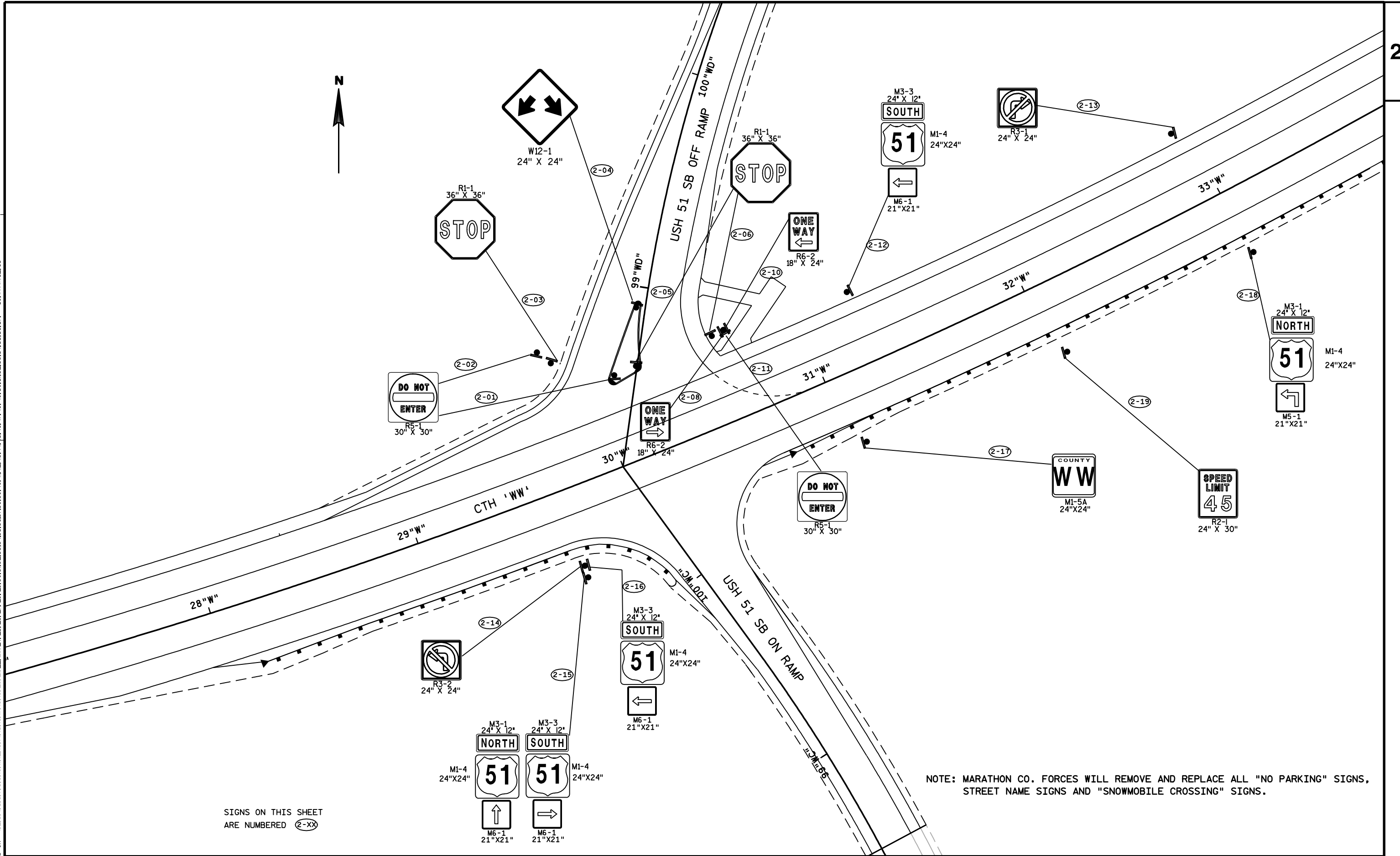
LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



NOTE: MARATHON CO. FORCES WILL REMOVE AND REPLACE ALL "NO PARKING" SIGNS, STREET NAME SIGNS, AND "SNOWMOBILE CROSSING" SIGNS.

SIGNS ON THIS SHEET ARE NUMBERED (1-X)

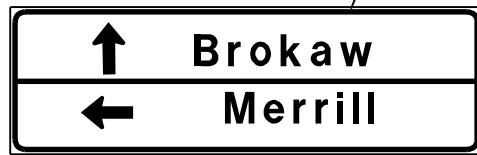
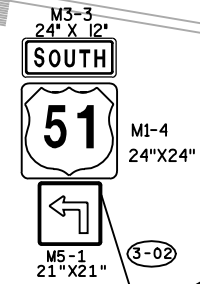
LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



SIGNS ON THIS SHEET ARE NUMBERED (2-XX)

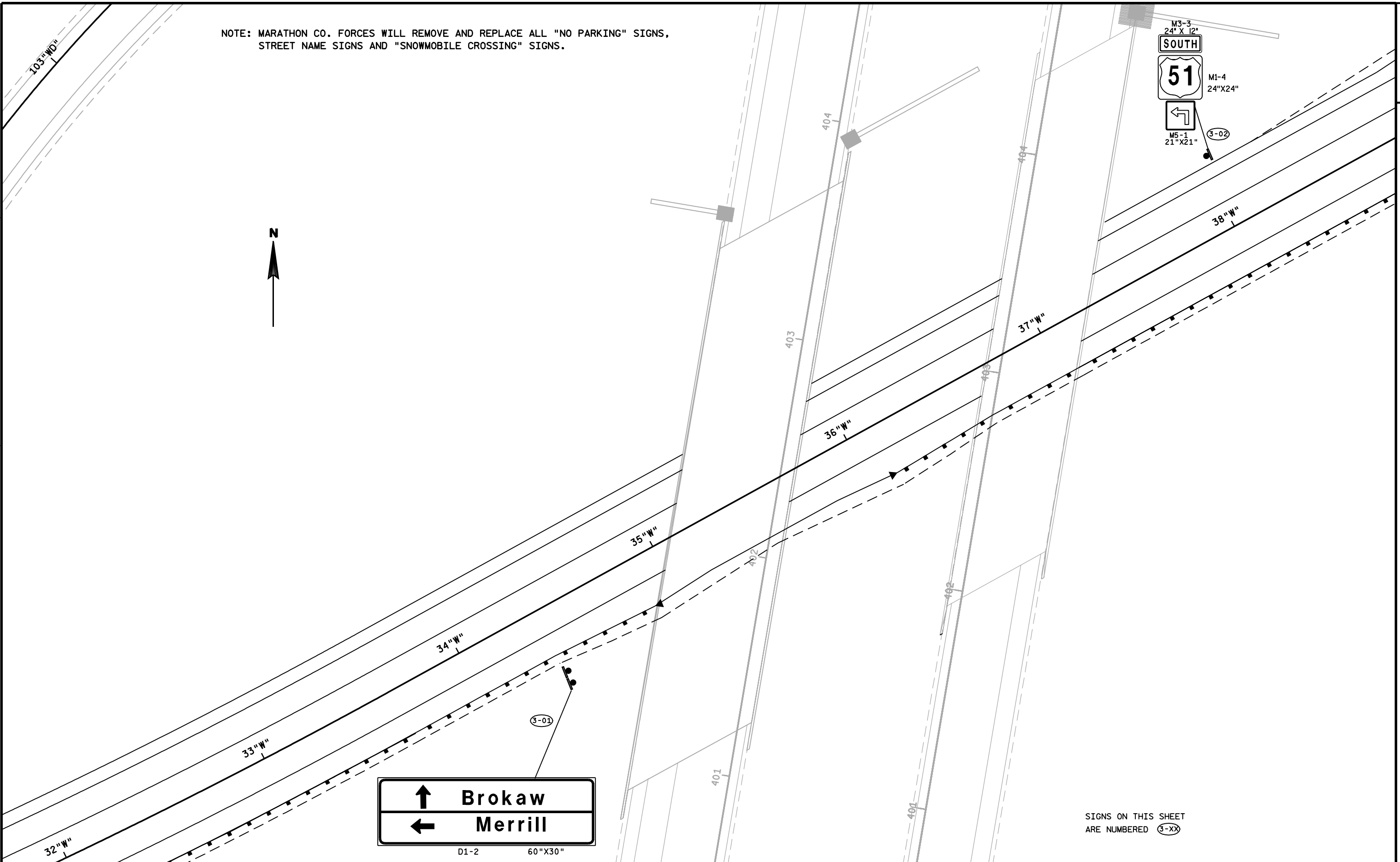
NOTE: MARATHON CO. FORCES WILL REMOVE AND REPLACE ALL "NO PARKING" SIGNS, STREET NAME SIGNS AND "SNOWMOBILE CROSSING" SIGNS.

NOTE: MARATHON CO. FORCES WILL REMOVE AND REPLACE ALL "NO PARKING" SIGNS, STREET NAME SIGNS AND "SNOWMOBILE CROSSING" SIGNS.

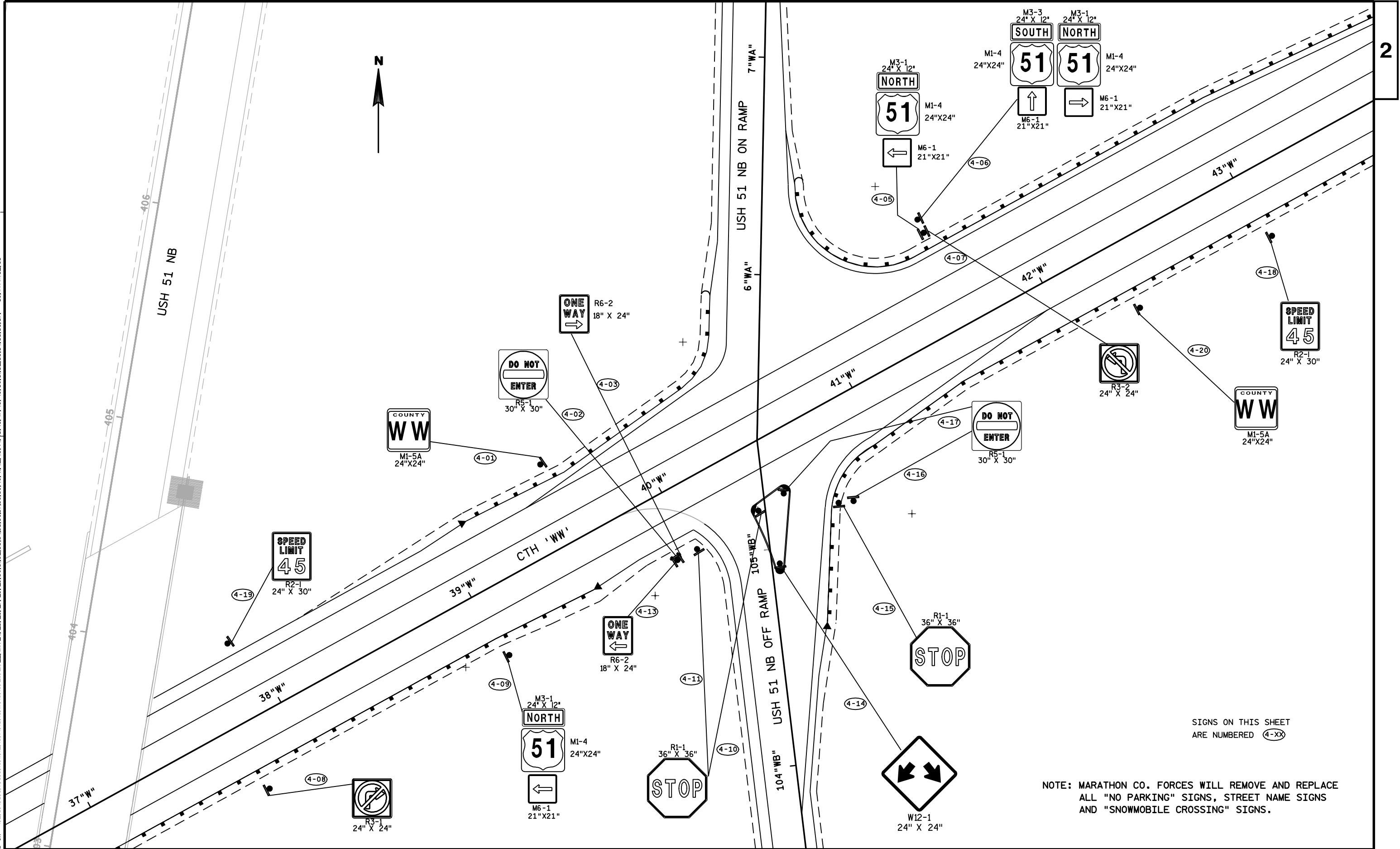


SIGNS ON THIS SHEET ARE NUMBERED (3-XX)

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63



LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63



SIGNS ON THIS SHEET ARE NUMBERED (4-XX)

NOTE: MARATHON CO. FORCES WILL REMOVE AND REPLACE ALL "NO PARKING" SIGNS, STREET NAME SIGNS AND "SNOWMOBILE CROSSING" SIGNS.

STATE PROJECT NUMBER:1170-00-73	HWY:CTH 'WW'	COUNTY:MARATHON	PERMANENT SIGNING	SCALE, FEET	SHEET NO:	E
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FILE NAME : P:\projects\d4_11700003ed\023204_ps.dgn PLOT DATE : 11-JUL-2003 08:51 PLOT BY : DOTTHM PLOT NAME : 023204 psd ORG DATE : 7-21-2000 Originator : DAVID NOVACEK PLOT SCALE : 40.000000:1.000000 WISDOT/CADD SHEET 42

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



↑ **Wausau**
Merrill →

D1-2 60" X 30"

M2-1
 21" X 15"
JCT
51
 M1-4
 24" X 24"

5-02

SLOWER TRAFFIC KEEP RIGHT
 R4-3
 24" X 30"

5-03

W5-52L
 12" X 36"

5-07

49" W"

48" W"

W5-52R
 12" X 36"

5-04

W1-1R
 36" X 36"

5-06

5-05

25
 M.P.H.

W13-1
 18" X 18"

WISCONSIN RIVER
 I3-1 90" X 15"

NOTE: INSTALL WITHIN THE FIRST 100' EAST OF THE BRIDGE.

NOTE: MARATHON CO. FORCES WILL REMOVE AND REPLACE ALL "NO PARKING" SIGNS, STREET NAME SIGNS AND "SNOWMOBILE CROSSING" SIGNS.

SIGNS ON THIS SHEET ARE NUMBERED 5-XX

2

TRAFFIC CONTROL SCHEDULE

(ESTIMATED QUANTITIES ONLY)

TRAFFIC CONTROL, DETOUR, SIGNS

TRAFFIC CONTROL SIGNS

	NUMBER REQ'D.	DAYS NEEDED	DAYS
'WA' RAMP DETOUR			
M4-8	10	13	130
M03-1	8	13	104
M1-4	8	13	104
M05-1	2	13	26
M06-1	7	13	91
M4-6	1	13	13
W20-2	1	13	13
W20-3 (MOD)	1	13	13
A4-12	1	13	13

TOTAL 507

	NUMBER REQ'D.	DAYS NEEDED	DAYS
'WB' RAMP DETOUR			
M4-5	6	13	78
M1-5A	6	13	78
M05-2	1	13	13
M06-2	1	13	13
M06-1	3	13	39
M05-1	1	13	13
W20-3 (MOD)	1	13	26
W20-3 (MOD)	1	13	13
W9-1	1	13	13
W04-2	1	13	13
R11-51	1	7	7
R11-2-MOD	2	13	26

TOTAL 319

	NUMBER REQ'D.	DAYS NEEDED	DAYS
'WC' RAMP DETOUR			
M04-6	1	13	13
M4-8	6	13	78
M1-4	5	13	65
M03-3	4	13	52
M06-1	4	13	52
M05-1	1	13	13
W20-2	1	13	13
W20-3 (MOD)	1	13	13

TOTAL 299

	NUMBER REQ'D.	DAYS NEEDED	DAYS
'WD' RAMP DETOUR			
M4-5	7	13	91
M1-5A	7	13	91
M05-1	2	13	26
M06-1	3	13	39
M05-2	1	13	13
M06-2	1	13	13
R55-58A	2	13	26
W20-3 (MOD)	1	13	26
W20-3 (MOD)	1	13	26
R11-2-MOD	2	13	26
R11-51	1	7	7

TOTAL 358

GRAND TOTAL 1483

TRAFFIC CONTROL WARNING LIGHTS, TYPE 'C'

LOCATION	STAGE	NUMBER REQ'D.	DAYS NEEDED	DAYS
STA. 44'W'+75 - STA. 48'W'+00	2	14	1	14
STA. 5'W'+00 - STA. 9'W'+00	3	17	12	204

TOTAL 218

SIGN CODE	SIGN MESSAGE	NUMBER REQ'D.	DAYS NEEDED	DAYS	REMARKS
G20-2A	END ROAD WORK	2	54	108	
G20-2A	END ROAD WORK	2	42	84	'WA' & 'WC' RAMPS
W20-1	ROAD WORK AHEAD	5	54	270	MAINLINE AND SIDE ROADS
W20-1	ROAD WORK AHEAD	2	42	84	'WB' & 'WD' RAMPS
W20-1	ROAD WORK 1500 FT.	1	54	54	
W20-1	ROAD WORK 1000 FT.	1	42	42	
W20-1	ROAD WORK 500 FT.	2	54	108	
W13-1W	45 MPH	2	54	108	
R11-2-MOD	LANE CLOSED	2	12	24	STAGE 1
R11-2-MOD	LANE CLOSED	4	1	4	STAGE 2
R11-2-MOD	LANE CLOSED	2	12	24	STAGE 3
R11-2-MOD	RAMP CLOSED	2	12	24	STAGE 1
R11-2-MOD	RAMP CLOSED	8	1	8	STAGE 2
R11-2-MOD	RAMP CLOSED	3	12	36	STAGE 3
W06-1	DIVIDED HIGHWAY AHEAD	2	1	2	STAGE 2
W06-2	DIVIDED HIGHWAY ENDS	2	1	2	STAGE 2
W06-3	TWO WAY TRAFFIC	2	1	2	STAGE 2
W01-4L	LEFT REVERSE CURVE	2	12	24	STAGE 3
W01-4R	RIGHT REVERSE CURVE	2	12	24	STAGE 3

TOTAL 1032

TRAFFIC CONTROL BARRICADES, TYPE III

LOCATION	NUMBER REQ'D.	DAYS NEEDED	DAYS	REMARKS
STAGE 1	7	12	84	
STAGE 2	14	1	14	
STAGE 2	1	1	1	4' LONG
STAGE 3	10	12	120	
STAGE 3	1	12	12	4' LONG

TOTAL 231

TRAFFIC CONTROL WARNING LIGHTS, TYPE 'A'

LOCATION	NUMBER REQ'D.	DAYS NEEDED	DAYS
STAGE 1	14	12	168
STAGE 2	28	1	28
STAGE 3	16	12	192

TOTAL 388

TRAFFIC CONTROL DRUMS

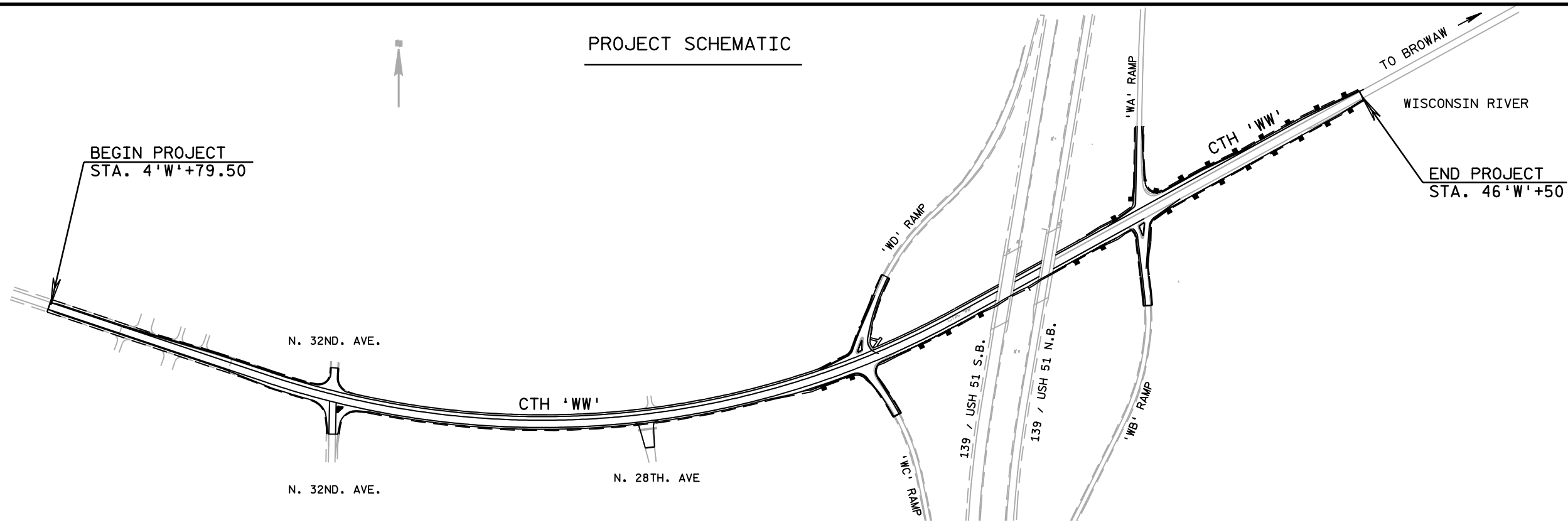
LOCATION	NUMBER REQ'D.	DAYS NEEDED	DAYS
STAGE 1	83	12	996
STAGE 2	148	1	148
STAGE 3	73	12	876
UNDISTRIBUTED	50	20	1000

TOTAL 3020

TRAFFIC CONTROL SHEET 2 OF 35

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63

PROJECT SCHEMATIC



GENERAL NOTES FOR TRAFFIC CONTROL

The exact number, location, and spacing of all signs and devices shall be adjusted to fit field conditions as approved by the engineer.

The spacing between signs should be adjusted to not conflict with and to provided a minimum of 200 feet, (500 feet desirable) distance to existing signs.

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.

All signs are 48" X 48" unless otherwise noted.

'W0' signs are 'W' series signs with orange background.

For a lane closure that is in place less than 7 continuous days and nights, the advanced warning signs may be mounted on portable supports.

All traffic control signing shall conform to: Part VI of the Manual On Uniform Traffic Control Devices, 2000 Edition, December, 2000.

The Uneven Lanes sign assembly will be installed on an emergency basis only as directed by the engineer.

TRAFFIC CONTROL SCHEDULE

(ESTIMATED QUANTITIES ONLY)



UNEVEN LANES

WB-20P
48" X 24"

TEMPORARY PAVEMENT MARKING, 4-INCH

LOCATION	STAGE	STATION - STATION	DESCRIPTION	L.F.
LT. & RT.	3	5'W'+00 - 49'W'+00	WHITE EDGELINE	8800
CENTERLINE	3	5'W'+00 - 49'W'+00	DOUBLE YELLOW CENTERLINE	8800
LT. & RT.	4	2'W'+29.50 - 48'W'+50	WHITE EDGELINE	9241
CENTERLINE	4	2'W'+29.50 - 48'W'+50	DOUBLE YELLOW CENTERLINE	9241
CLIMBING LANE	4	8'W'+00 - 46'W'+82	4' SKIP LINE	310

TOTAL 36392

REMOVING PAVEMENT MARKINGS

LOCATION	STAGE	STATION - STATION	DESCRIPTION	L.F.
CENTERLINE	3	5'W'+00 - 9'W'+00	DOUBLE YELLOW	800
LEFT EDGELINE	3	5'W'+00 - 9'W'+00	WHITE EDGELINE	400
CENTERLINE	3	45'W'+00 - 48'W'+00	DOUBLE YELLOW	600
LEFT EDGELINE	3	45'W'+00 - 48'W'+00	WHITE EDGELINE	300

TOTAL 2100

TRAFFIC CONTROL, SIGNS, FIXED MESSAGE

MESSAGE	NUMBER REQ'D.	S.F. EACH	S.F.	REMARKS
HWY. 'WW' RAMP TO BROKAW ECT.	2	48	96	'WB' RAMP CLOSURE
BROKAW (ARROW)	5	6.25	31.25	'WB' RAMP CLOSURE
WAUSAU (ARROW)	2	6.25	12.50	'WC' RAMP CLOSURE
BROKAW (ARROW)	5	6.25	31.25	'WD' RAMP CLOSURE
HWY. 'WW' RAMP TO BROKAW ECT.	2	48	96	'WD' RAMP CLOSURE

TOTAL 267.00

FLEXIBLE TUBULAR DELINEATOR & BASE (WHITE)

STATION	STAGE	NUMBER REQ'D.	EACH
44'W'+00 - 49'W'+00	3	21	21

TOTAL 21

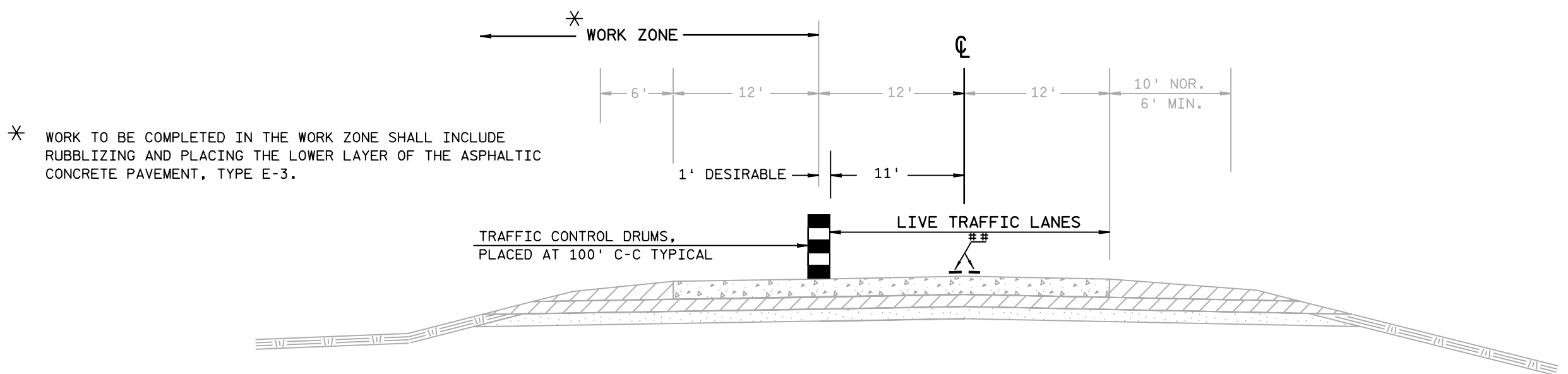
TRAFFIC CONTROL, COVER SIGNS

COVER MESSAGE	LOCATION	REMARKS	EACH
CTH 'WW' BROKAW 1 MILE	USH 51	COVER '1 MILE' WITH 'CLOSED' SIGN (R5-55-58A), 'WB' RAMP CLOSURE	1
EXIT 197	USH 51 ('WB' RAMP GORE)	COVER ENTIRE GORE EXIT SIGN	1
CTH 'WW' BROKAW EXIT ONLY	USH 51	COVER 'EXIT ONLY' WITH 'CLOSED' SIGN (R5-55-58A), 'WB' RAMP CLOSURE	1
EXIT 197	USH 51 ('WD' RAMP GORE)	COVER ENTIRE GORE EXIT SIGN	1

TOTAL 4

TRAFFIC CONTROL SHEET 1 OF 35

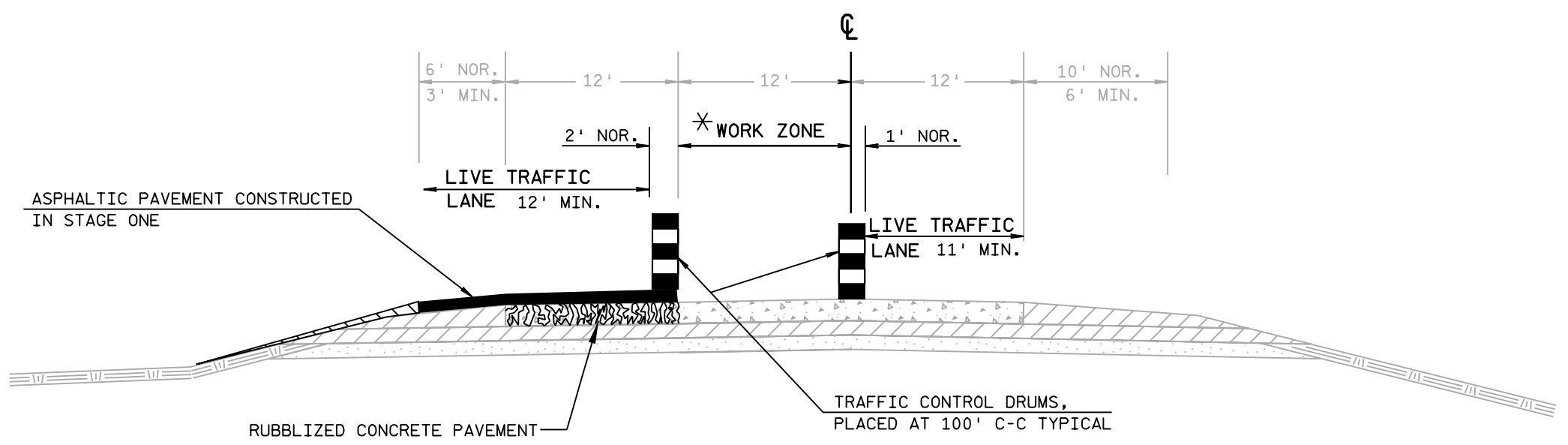
LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



* WORK TO BE COMPLETED IN THE WORK ZONE SHALL INCLUDE RUBBLIZING AND PLACING THE LOWER LAYER OF THE ASPHALTIC CONCRETE PAVEMENT, TYPE E-3.

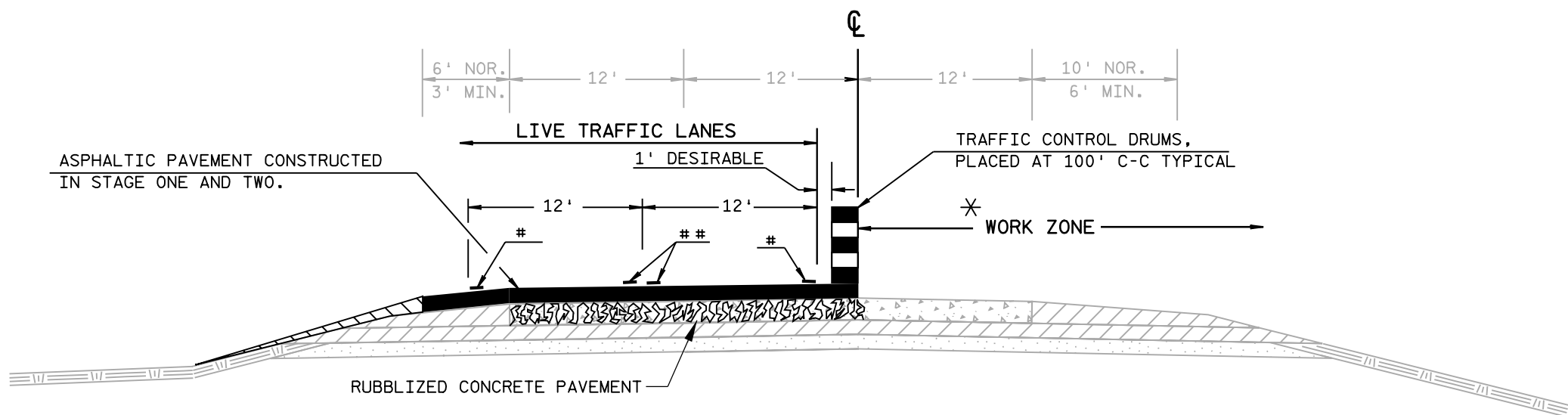
** EXISTING PAVEMENT MARKING, DOUBLE YELLOW, NO PASSING ZONE

WORK ZONE TRAFFIC CONTROL LAYOUT (STAGE ONE)
STA. 8'W'+00 - STA. 46'W'+82



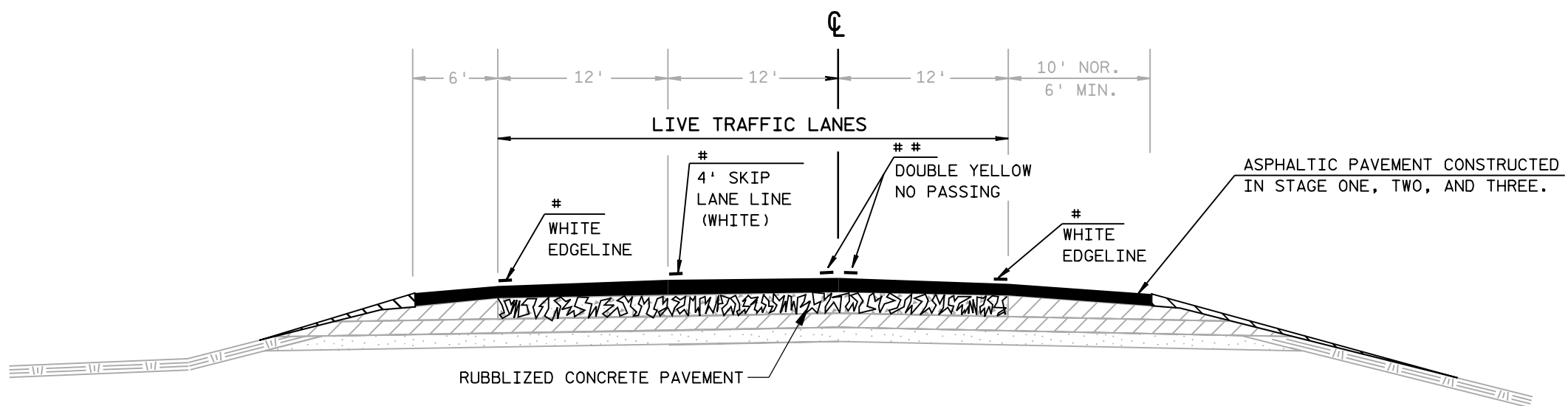
WORK ZONE TRAFFIC CONTROL LAYOUT (STAGE TWO)
STA. 8'W'+00 - STA. 46'W'+82

LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



WORK ZONE TRAFFIC CONTROL LAYOUT (STAGE THREE)
STA. 8'W'+00 - STA. 46'W'+82

- # TEMPORARY PAVEMENT MARKING, 4-INCH (WHITE)
- ## TEMPORARY PAVEMENT MARKING, 4-INCH (YELLOW)
DOUBLE YELLOW, NO PASSING ZONE.
- * WORK TO BE COMPLETED IN THE WORK ZONE SHALL INCLUDE RUBBLIZING AND PLACING THE LOWER LAYER OF THE ASPHALTIC CONCRETE PAVEMENT, TYPE E-3.



WORK ZONE TRAFFIC CONTROL LAYOUT (STAGE FOUR)
STA. 8'W'+00 - STA. 46'W'+82

NOTE: EXISTING TEMPORARY PAVEMENT MARKINGS FROM STAGE THREE, SHALL BE REMOVED AND REPLACED IMMEDIATELY WITH THOSE AS SHOWN IF THE UPPER LAYER IS NOT STARTED IMMEDIATELY. ANY PAINT LINES THAT CONFLICT WITH ACTUAL TRAFFIC LANES SHALL BE REMOVED AND REPLACED AS APPROPRIATE.

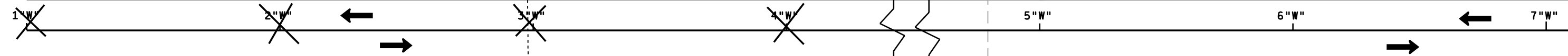
LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



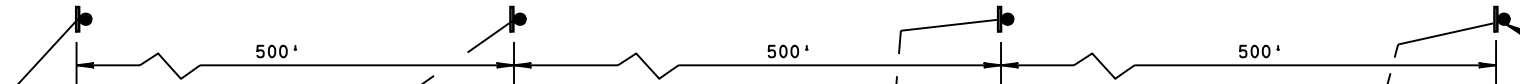
END ROAD WORK

G20-2A
48" X 24"

(PLACE ACROSS FROM
'ROAD WORK 1000 FT.')

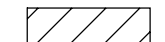


THE "ROAD WORK 500 FT." SHALL BE INSTALLED
500' PRIOR TO STA. 2'W'+29.50.



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
- ⊣ TRAFFIC CONTROL SIGN AND POST
- ⊣ TYPE III BARRICADE
- ⊣ TYPE III BARRICADE WITH SIGN

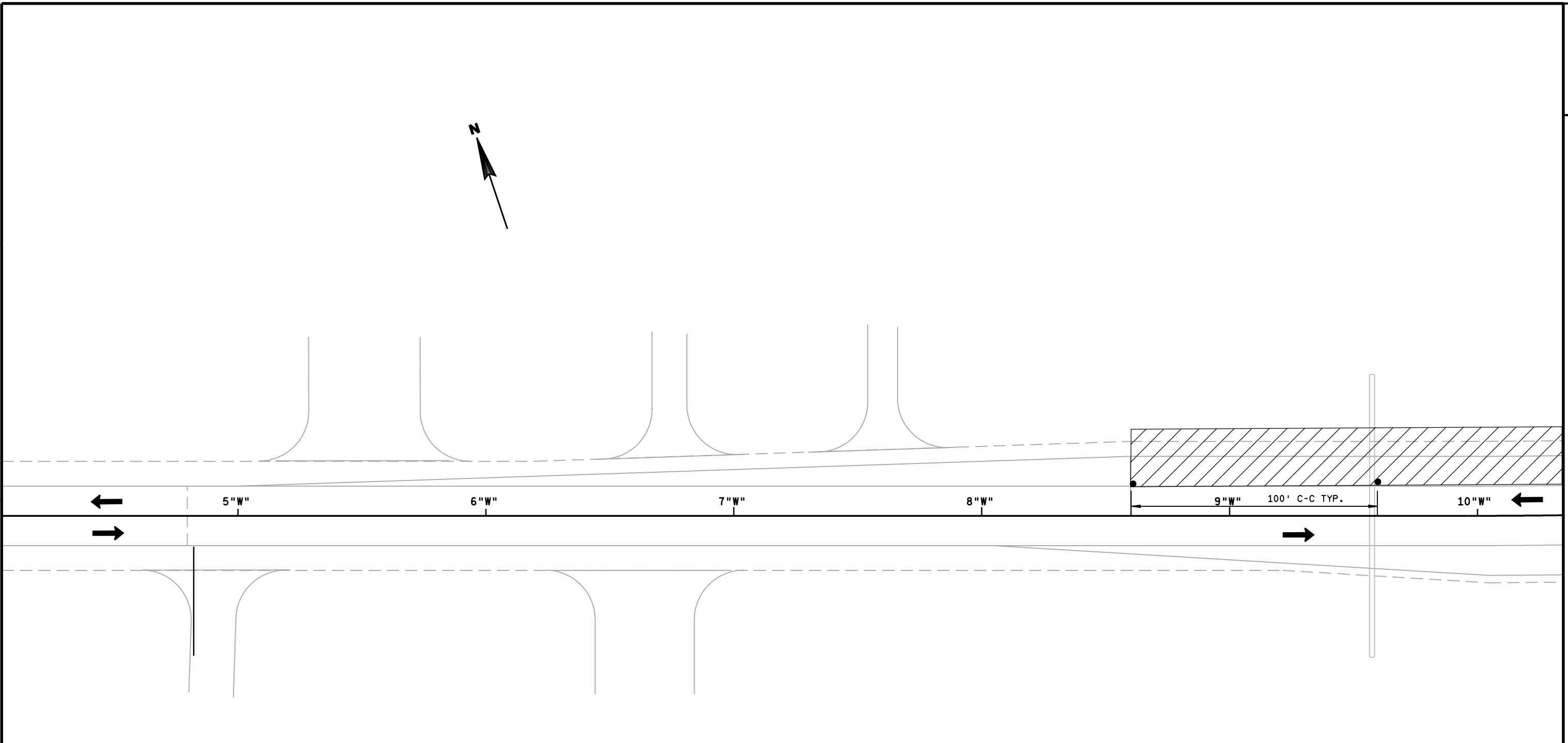


WORK ZONE

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63



- LEGEND**
- TRAFFIC CONTROL DRUM
 - TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
 - ⊥ TRAFFIC CONTROL SIGN AND POST
 - ⊥ TYPE III BARRICADE
 - ⊥ TYPE III BARRICADE WITH SIGN
 - ▨ WORK ZONE

TRAFFIC CONTROL SHEET 6 OF 35



W20-1

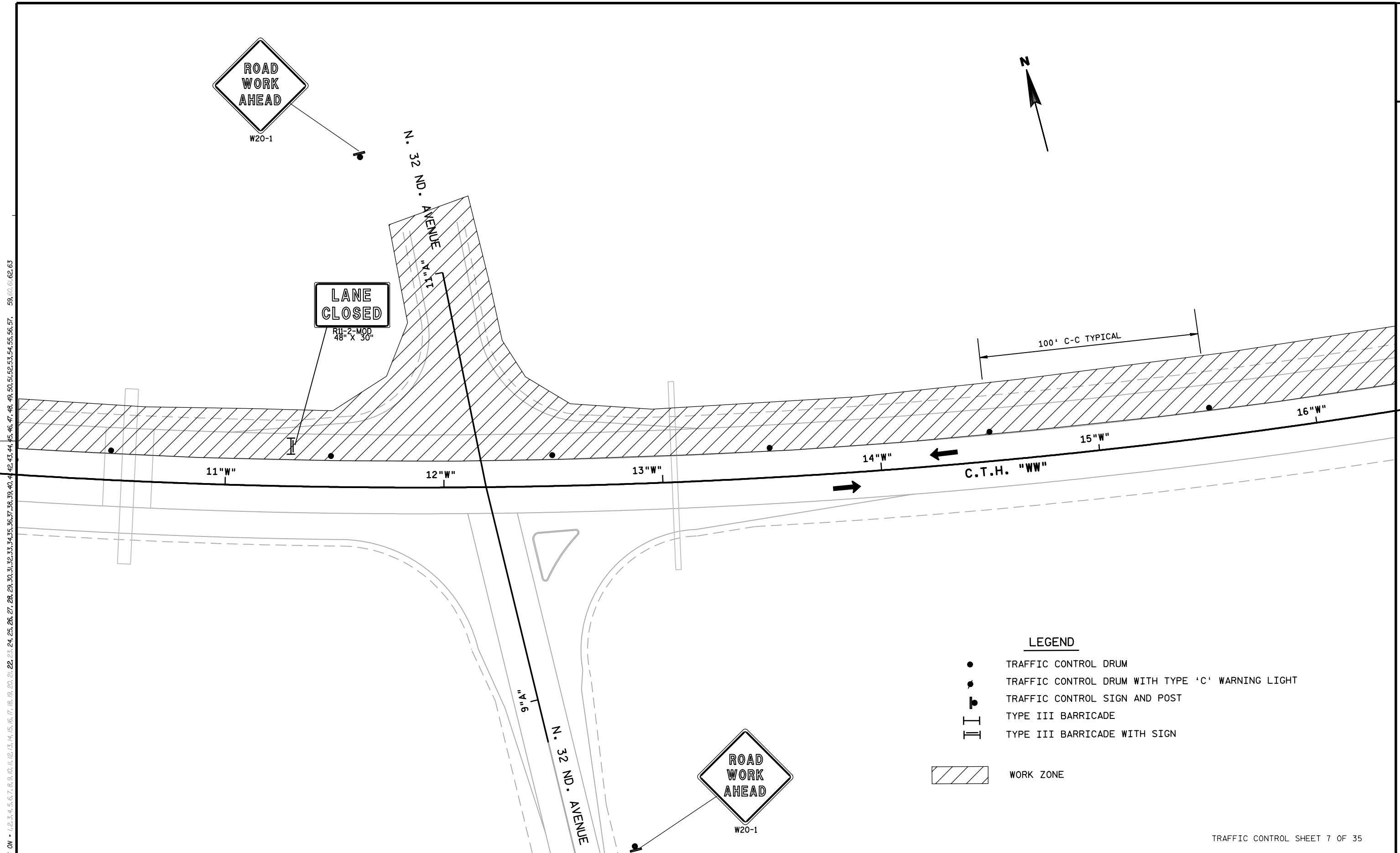


RII-2-MOD
48" X 30"



N. 32 ND. AVENUE
"A" "T"

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63



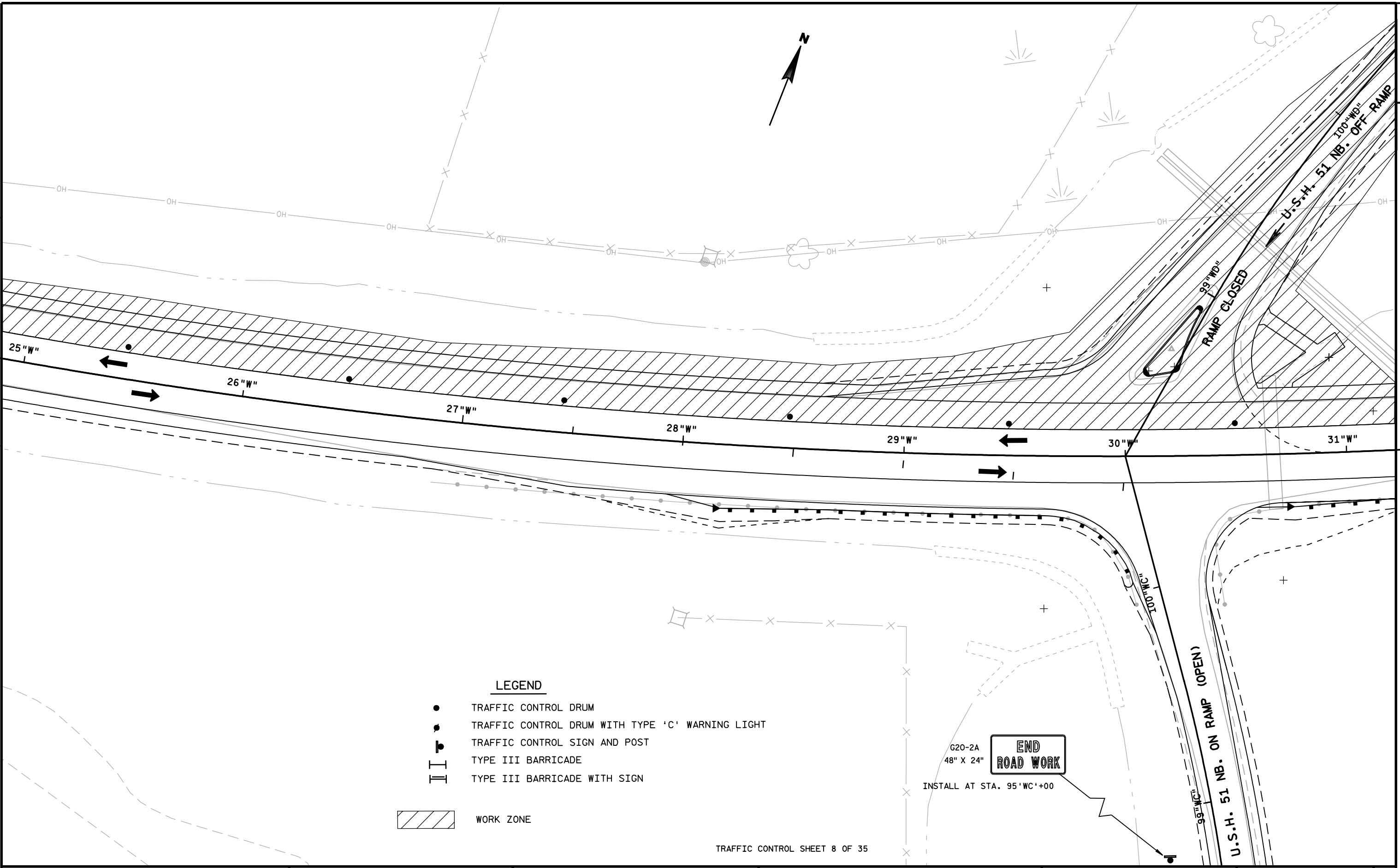
- LEGEND**
- TRAFFIC CONTROL DRUM
 - TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
 - ⊣ TRAFFIC CONTROL SIGN AND POST
 - || TYPE III BARRICADE
 - || TYPE III BARRICADE WITH SIGN
 - ▨ WORK ZONE



W20-1

TRAFFIC CONTROL SHEET 7 OF 35

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



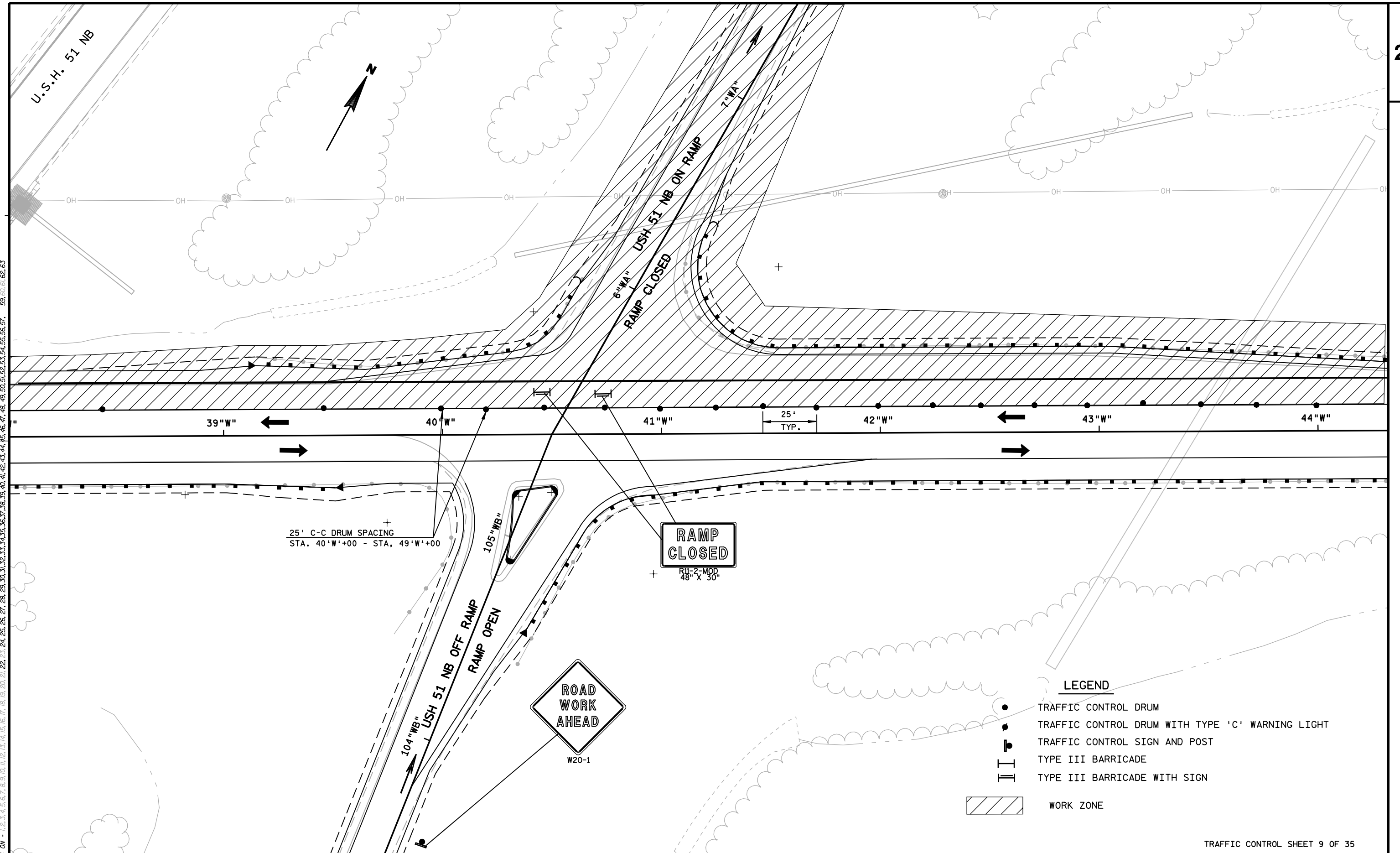
LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
- ⊣ TRAFFIC CONTROL SIGN AND POST
- ⊣ TYPE III BARRICADE
- ⊣ TYPE III BARRICADE WITH SIGN



TRAFFIC CONTROL SHEET 8 OF 35

STATE PROJECT NUMBER:1170-00-73	HWY: CTH 'WW'	COUNTY: MARATHON	TRAFFIC CONTROL, STAGE ONE	SCALE, FEET	SHEET NO:	E
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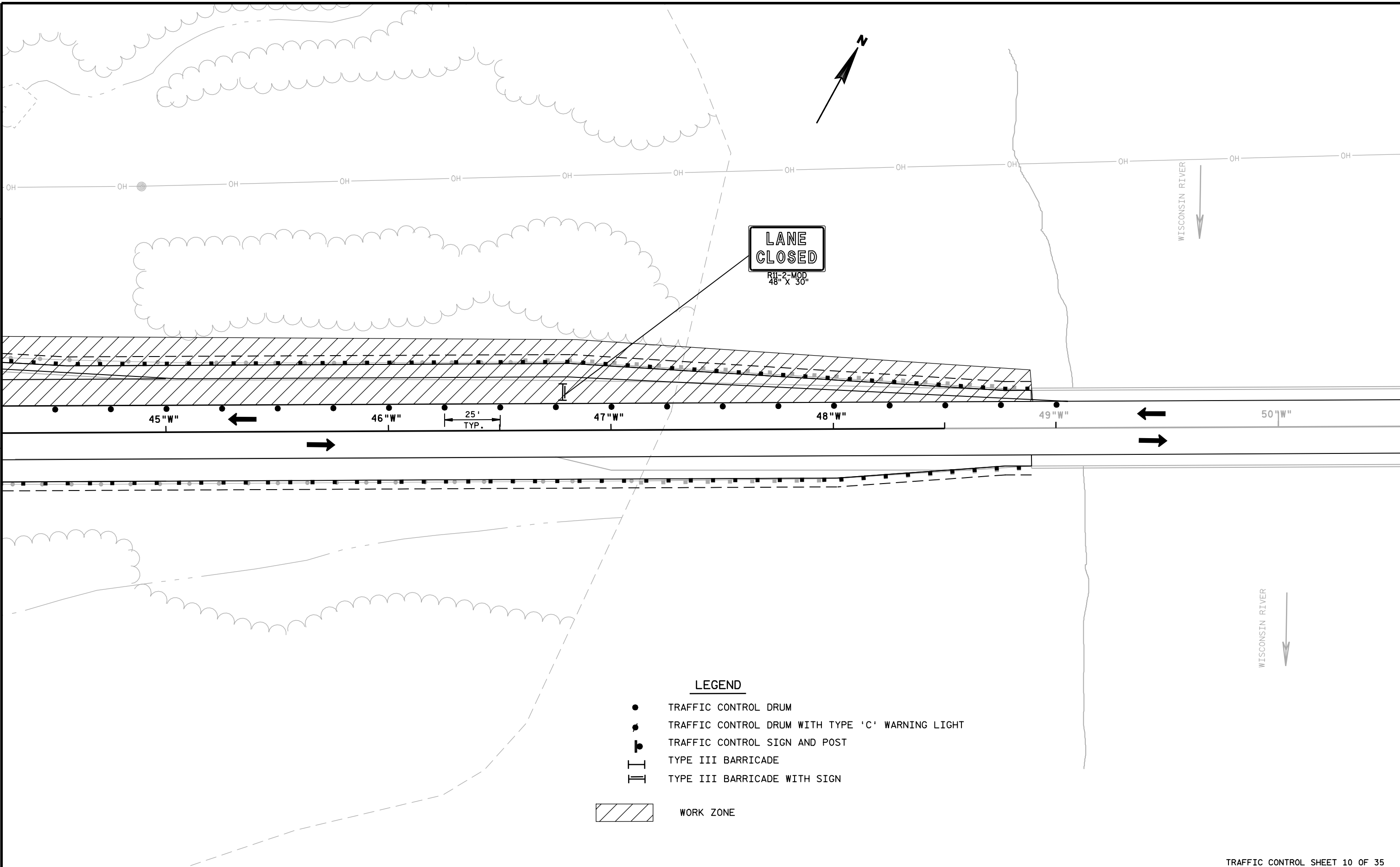


LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

- LEGEND**
- TRAFFIC CONTROL DRUM
 - TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
 - ⊣ TRAFFIC CONTROL SIGN AND POST
 - ⊣ TRAFFIC CONTROL SIGN AND POST
 - ⊣ TYPE III BARRICADE
 - ⊣ TYPE III BARRICADE WITH SIGN
 - ▨ WORK ZONE

TRAFFIC CONTROL SHEET 9 OF 35

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



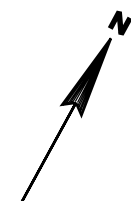
LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
- TRAFFIC CONTROL SIGN AND POST
- || TYPE III BARRICADE
- || TYPE III BARRICADE WITH SIGN
- ▨ WORK ZONE

TRAFFIC CONTROL SHEET 10 OF 35

STATE PROJECT NUMBER: 1170-00-73	HWY: CTH 'WW'	COUNTY: MARATHON	TRAFFIC CONTROL, STAGE ONE	SCALE, FEET	SHEET NO: E
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LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63



OH OH OH

WISCONSIN RIVER

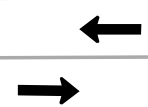
WISCONSIN RIVER

51 "W"

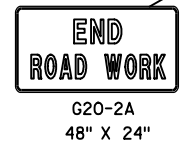
52 "W"

53 "W"

54 "W"



500'



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
- ⊣ TRAFFIC CONTROL SIGN AND POST
- ⊣ TYPE III BARRICADE
- ⊣ TYPE III BARRICADE WITH SIGN



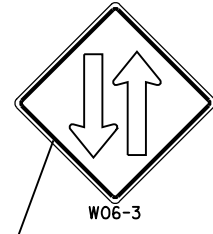
TRAFFIC CONTROL SHEET 11 OF 35



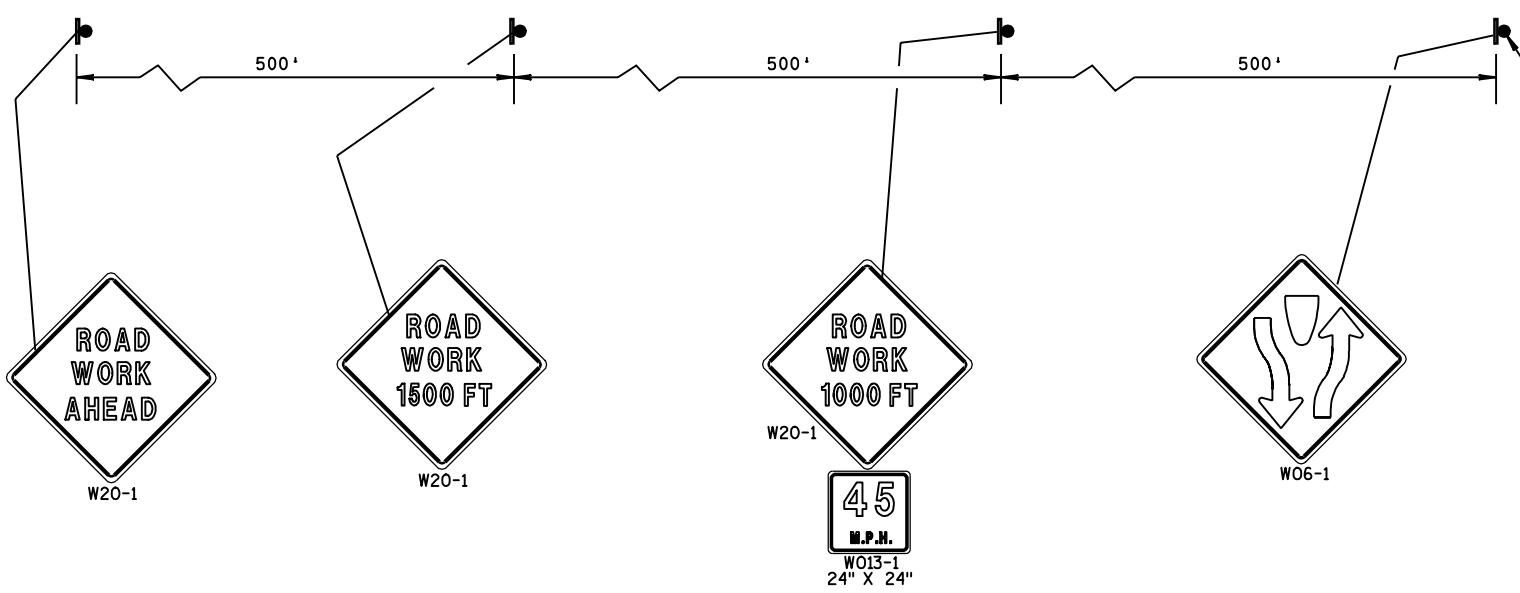
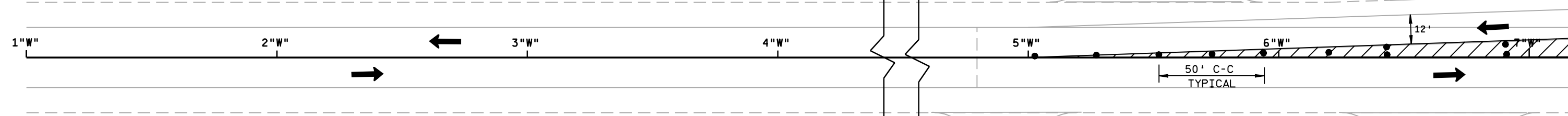
END ROAD WORK

G20-2A
48" X 24"

(PLACE ACROSS FROM
'ROAD WORK 1000 FT.')



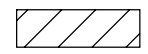
W06-3



THE "W06-1" SIGN SHALL BE INSTALLED
500' PRIOR TO STA. 2'W'+29.50.
THIS SIGN SHALL REPLACE THE "ROAD
WORK 500 FT." FOR STAGE TWO.

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
- ⊣ TRAFFIC CONTROL SIGN AND POST
- ⊣ TYPE III BARRICADE
- ⊣ TYPE III BARRICADE WITH SIGN

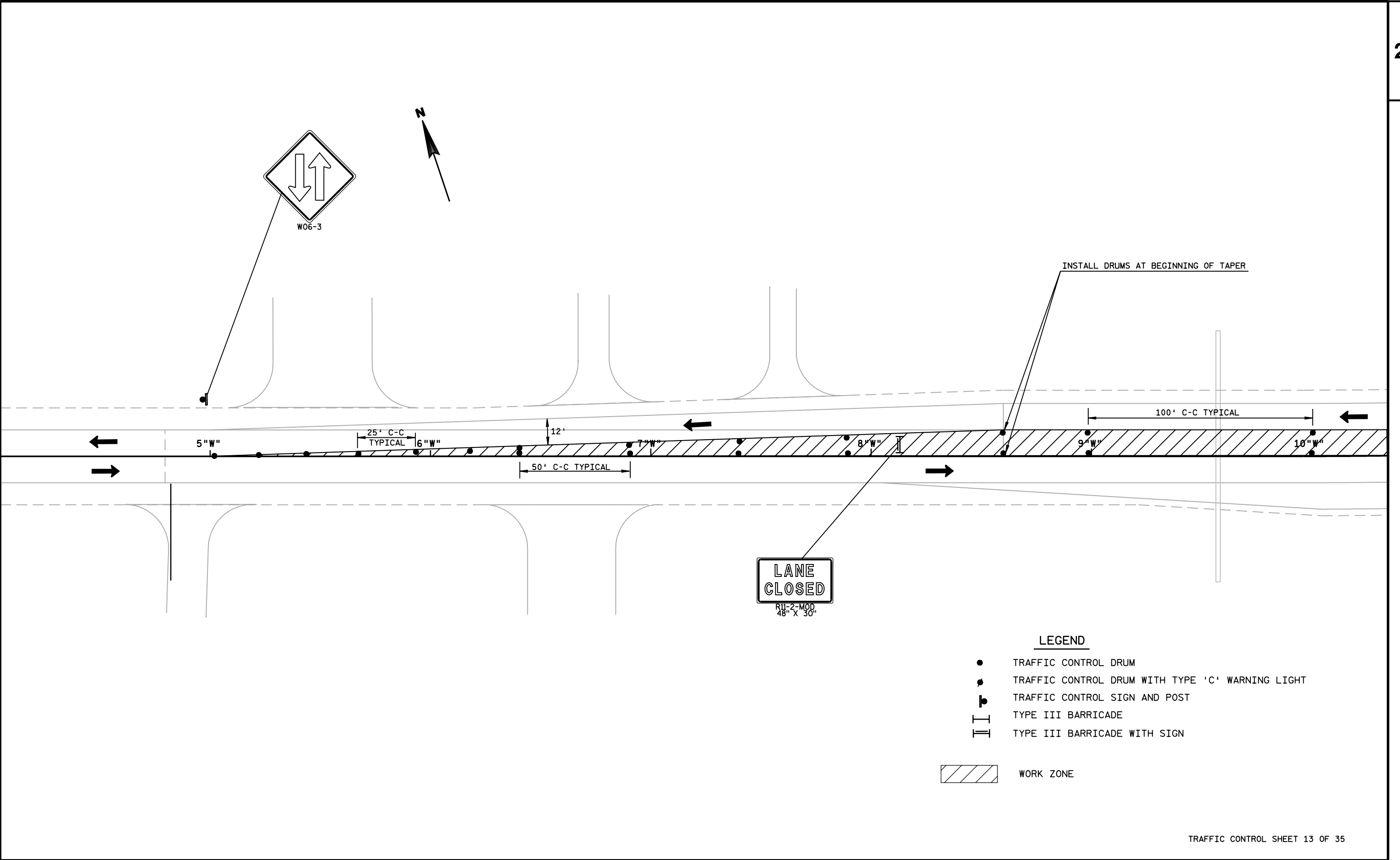


WORK ZONE

TRAFFIC CONTROL SHEET 12 OF 35

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



LEGEND

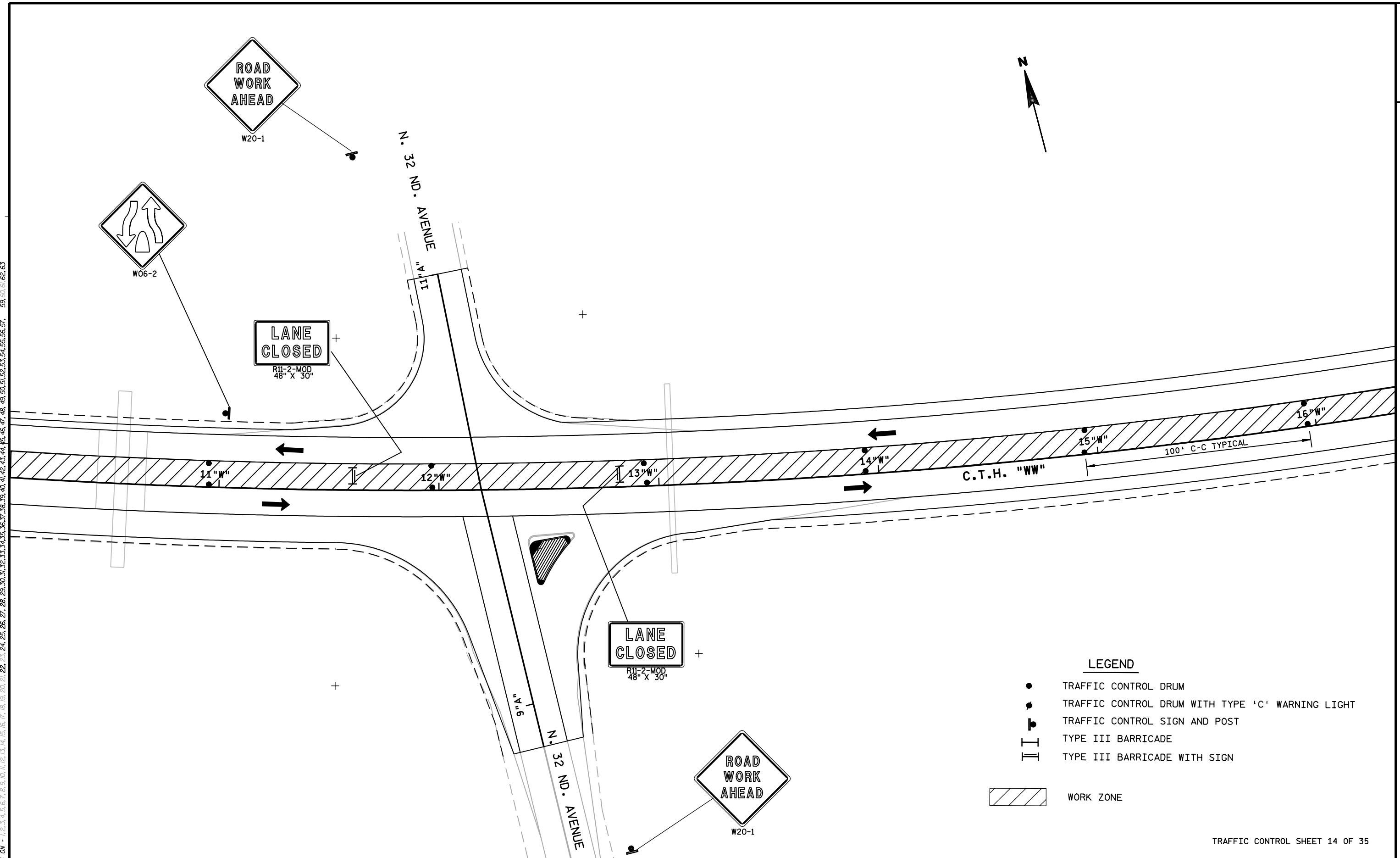
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
- ⊕ TRAFFIC CONTROL SIGN AND POST
- ⊥ TYPE III BARRICADE
- ⊥ TYPE III BARRICADE WITH SIGN

WORK ZONE

TRAFFIC CONTROL SHEET 13 OF 35

STATE PROJECT NUMBER: 1170-00-73	HWY: CTH 'WW'	COUNTY: MARATHON	TRAFFIC CONTROL, STAGE TWO	SCALE, FEET	SHEET NO: E
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LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

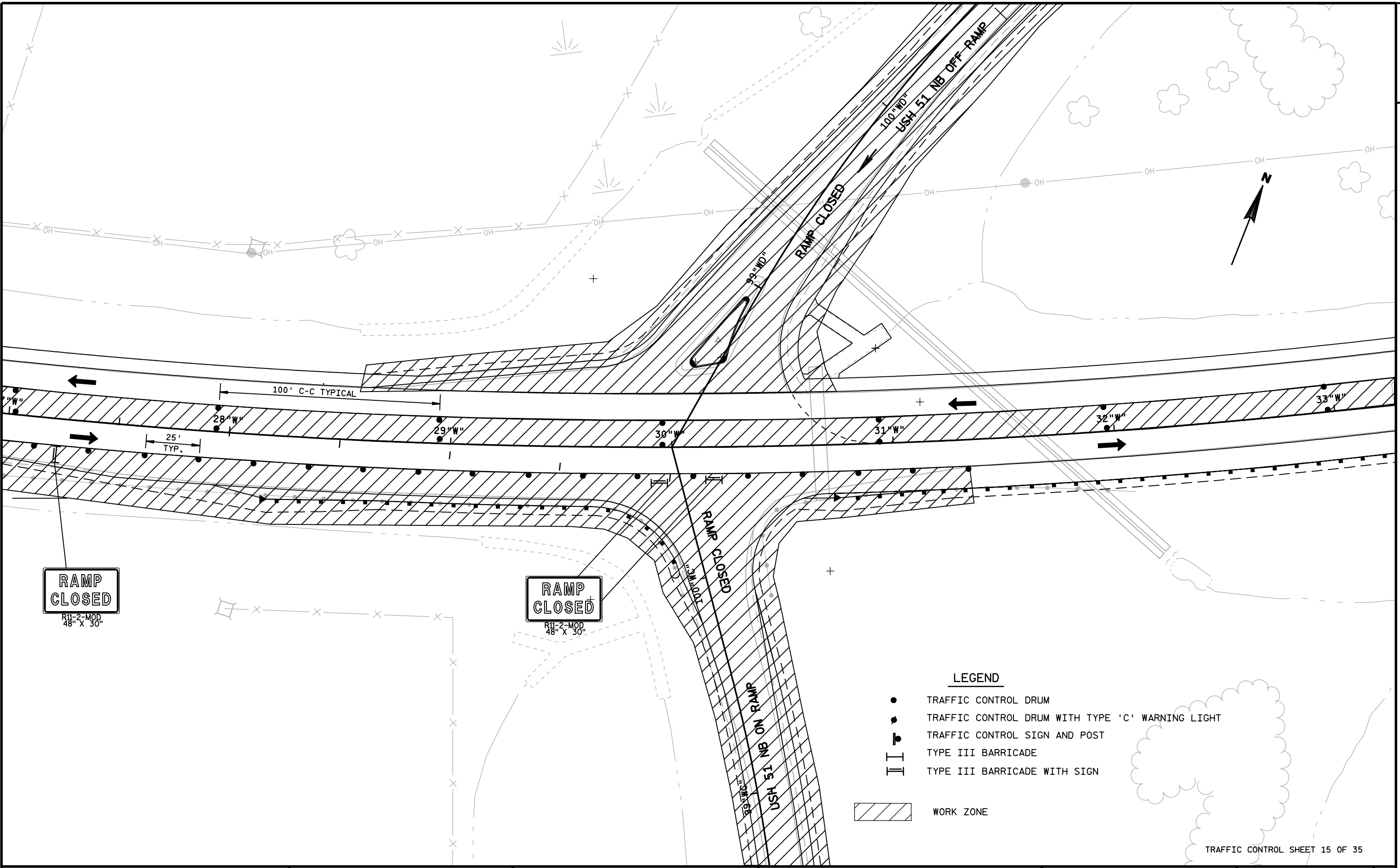


LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
- ⊙ TRAFFIC CONTROL SIGN AND POST
- ⊥ TYPE III BARRICADE
- ⊥ TYPE III BARRICADE WITH SIGN
- ▨ WORK ZONE

TRAFFIC CONTROL SHEET 14 OF 35

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



RAMP CLOSED
R11-2-MOD
48" X 30"

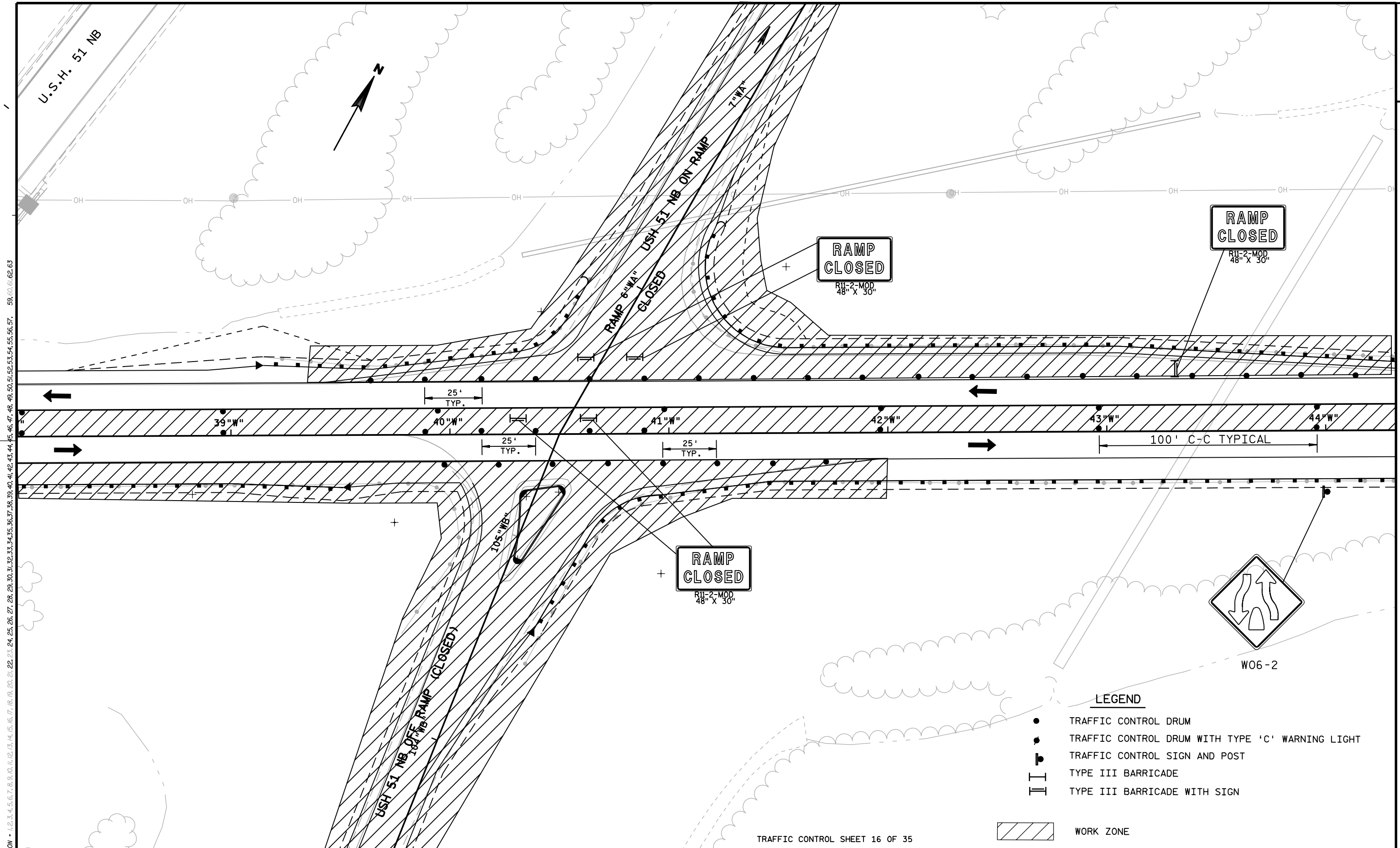
RAMP CLOSED
R11-2-MOD
48" X 30"

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
- ▲ TRAFFIC CONTROL SIGN AND POST
- || TYPE III BARRICADE
- || TYPE III BARRICADE WITH SIGN

WORK ZONE

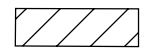
TRAFFIC CONTROL SHEET 15 OF 35



LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
- ⊕ TRAFFIC CONTROL SIGN AND POST
- ⊥ TYPE III BARRICADE
- ⊥ TRAFFIC CONTROL SIGN AND POST TYPE III BARRICADE WITH SIGN



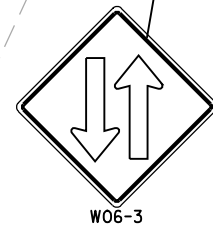
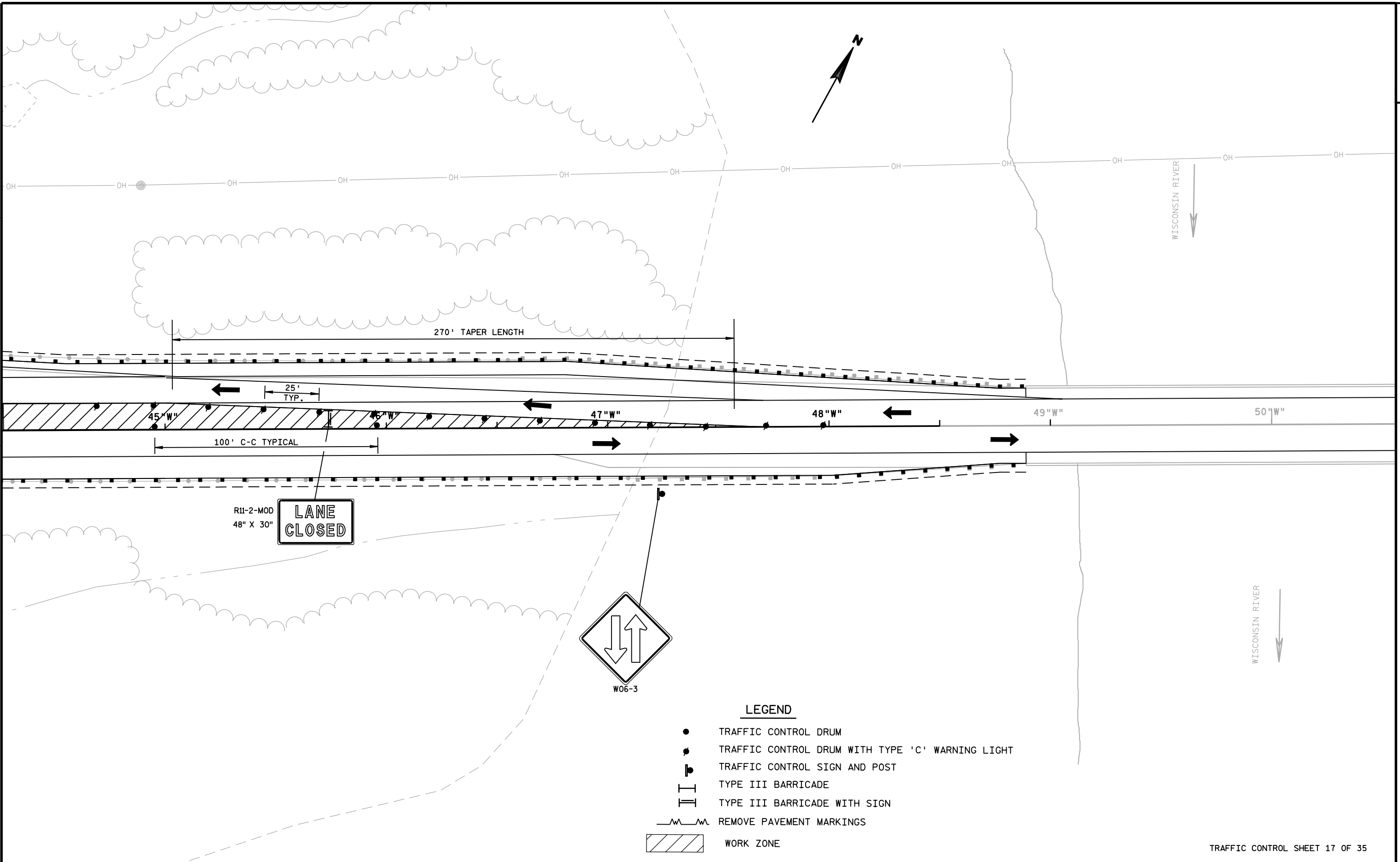
WORK ZONE



W06-2

TRAFFIC CONTROL SHEET 16 OF 35

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

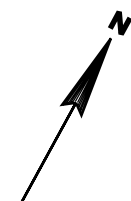


LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
- ⊣ TRAFFIC CONTROL SIGN AND POST
- ⊣ TYPE III BARRICADE
- ⊣ TYPE III BARRICADE WITH SIGN
- — — REMOVE PAVEMENT MARKINGS
- ▨ WORK ZONE

TRAFFIC CONTROL SHEET 17 OF 35

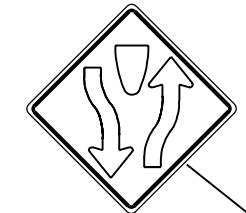
LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



WISCONSIN RIVER
↓

WISCONSIN RIVER
↓

OH OH OH



W06-1

MOUNT ON TYPE III BARRICADE 4' LONG

4.5'

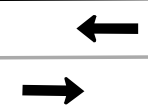
51"W"

52"W"

53"W"

54"W"

500'



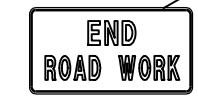
W20-1



W013-1
24" X 24"



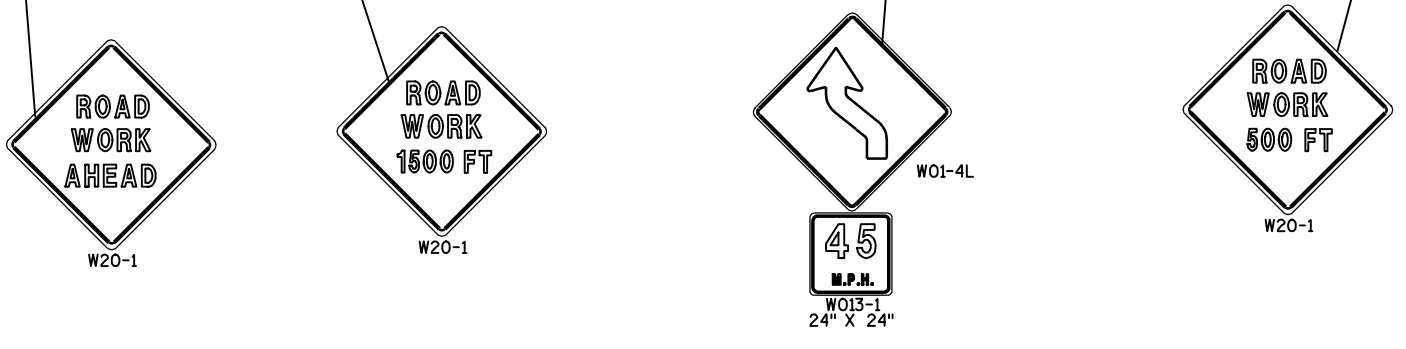
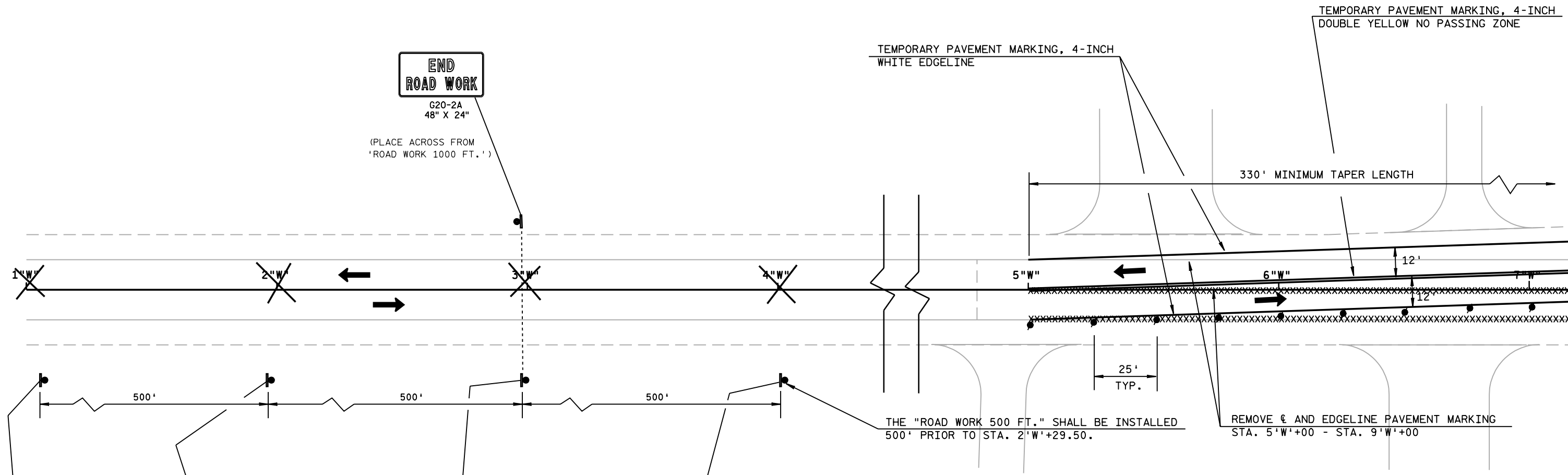
W20-1



G20-2A
48" X 24"

TRAFFIC CONTROL SHEET 18 OF 35

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



- LEGEND**
- TRAFFIC CONTROL DRUM
 - TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
 - ⊣ TRAFFIC CONTROL SIGN AND POST
 - ⊣ TYPE III BARRICADE
 - ⊣ TYPE III BARRICADE WITH SIGN
 - REMOVE PAVEMENT MARKINGS
 - ▨ WORK ZONE

TRAFFIC CONTROL SHEET 19 OF 35



TEMPORARY PAVEMENT MARKING, 4-INCH
WHITE EDGELINE

TEMPORARY PAVEMENT MARKING, 4-INCH
DOUBLE YELLOW NO PASSING ZONE

330' MINIMUM TAPER LENGTH

100' C-C TYPICAL

5" W"

6" W"

8" W"

9" W"

10" W"

25'
TYP.

REMOVE ϕ AND EDGELINE PAVEMENT MARKING
STA. 5' W' +00 - STA. 9' W' +00

LANE
CLOSED

R11-2-MOD
48" X 30"

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
- ⊕ TRAFFIC CONTROL SIGN AND POST
- ⊏ TYPE III BARRICADE
- ⊏ TYPE III BARRICADE WITH SIGN
- REMOVE PAVEMENT MARKINGS
- ▨ WORK ZONE

TRAFFIC CONTROL SHEET 20 OF 35

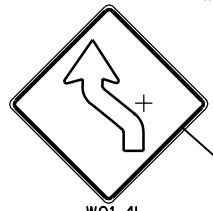
LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW NO PASSING ZONE

N. 32 ND. AVENUE



TEMPORARY PAVEMENT MARKING, 4-INCH WHITE EDGELINE



11"W"

12"W"

13"W"

14"W"

100' C-C TYPICAL

15"W"

16"W"

CTH "WW"



RII-2-MOD 48" X 30"



RII-2-MOD 48" X 30"

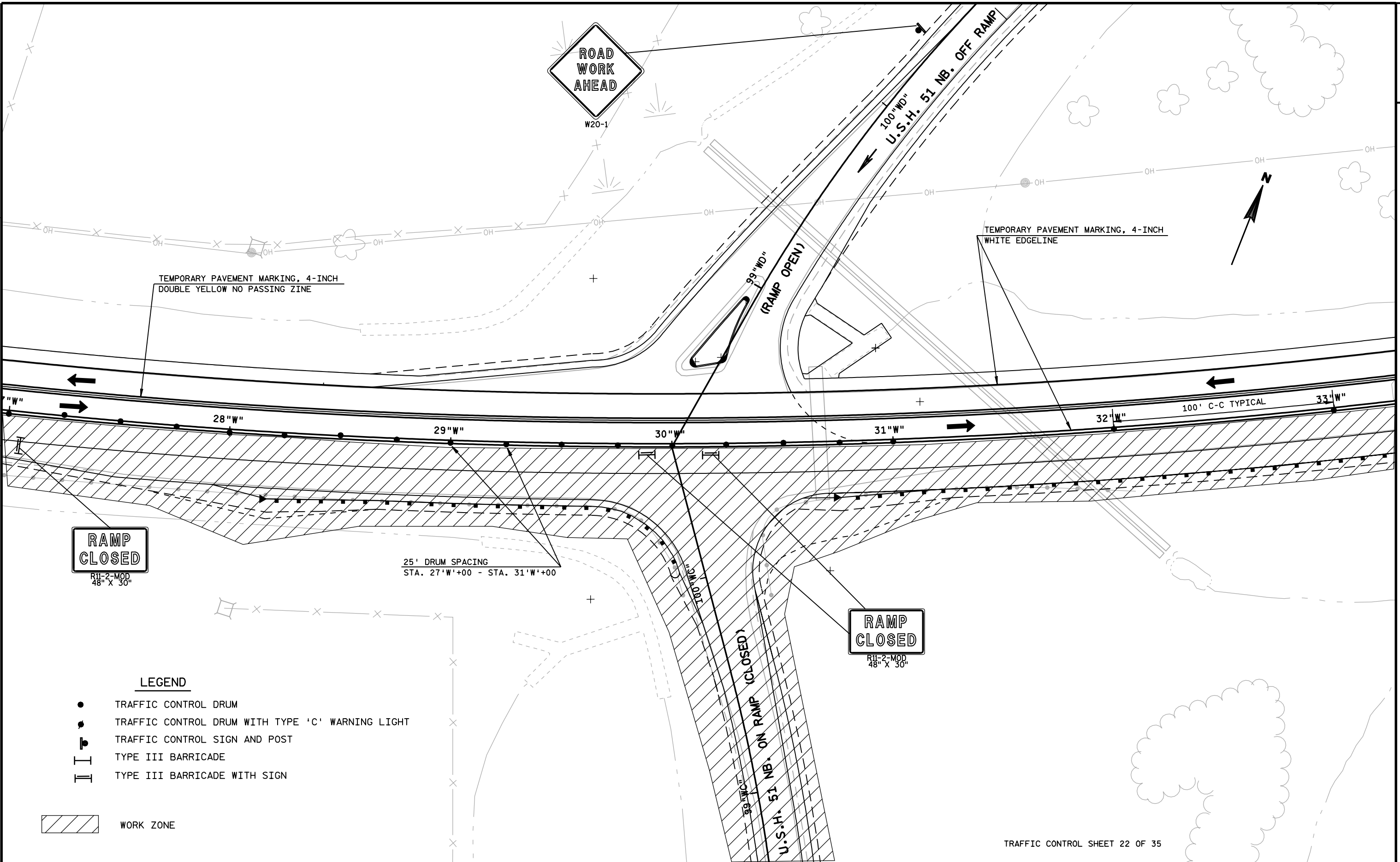


LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
- ⊕ TRAFFIC CONTROL SIGN AND POST
- || TYPE III BARRICADE
- || TYPE III BARRICADE WITH SIGN
- ▨ WORK ZONE

TRAFFIC CONTROL SHEET 21 OF 35

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



**RAMP
CLOSED**
R11-2-MOD
48" X 30"

**RAMP
CLOSED**
R11-2-MOD
48" X 30"

LEGEND

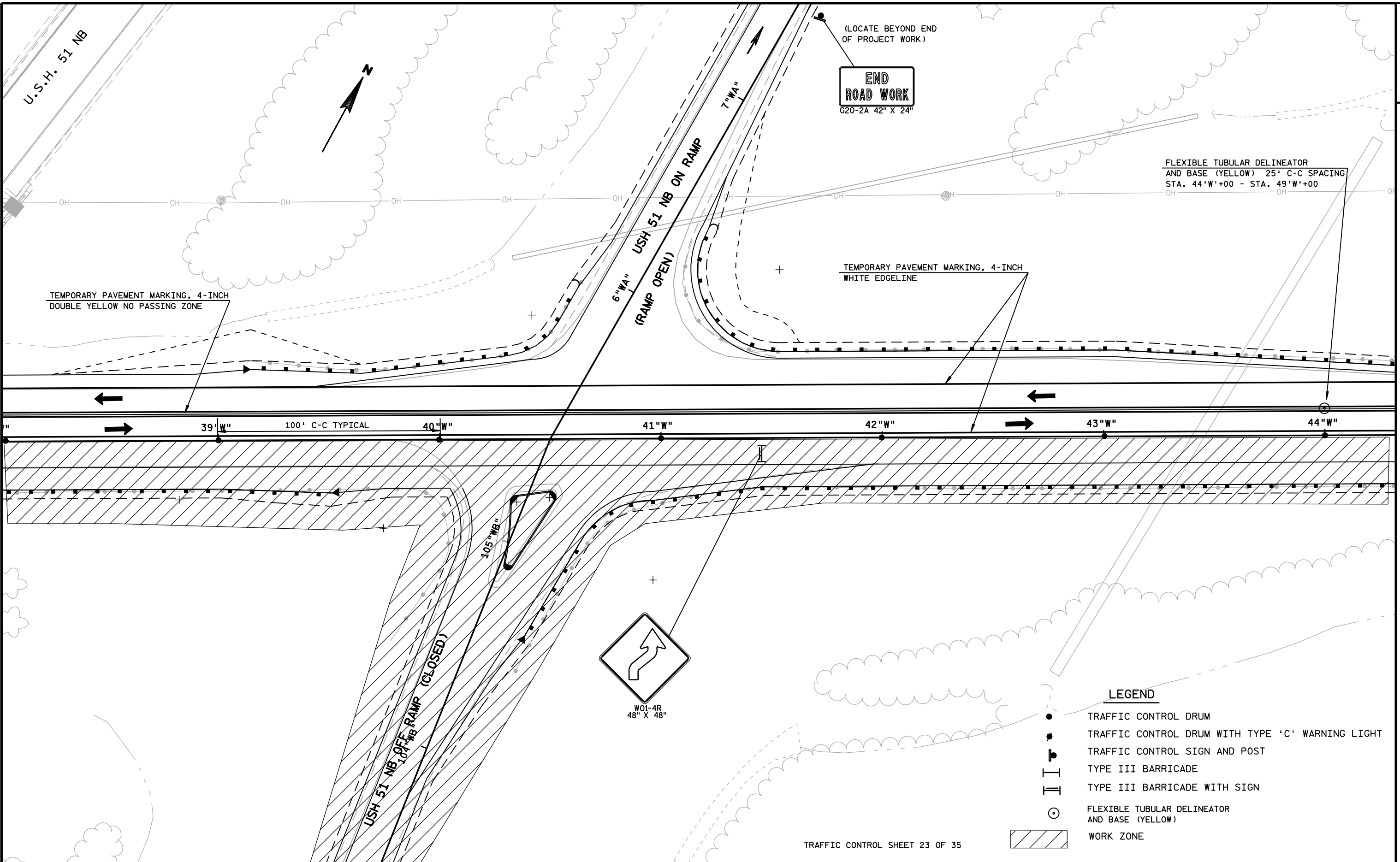
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
- ⊕ TRAFFIC CONTROL SIGN AND POST
- || TYPE III BARRICADE
- || TYPE III BARRICADE WITH SIGN

WORK ZONE

TRAFFIC CONTROL SHEET 22 OF 35

STATE PROJECT NUMBER:1170-00-73	HWY: CTH 'WW'	COUNTY: MARATHON	TRAFFIC CONTROL, STAGE THREE	SCALE, FEET	SHEET NO:	E
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LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

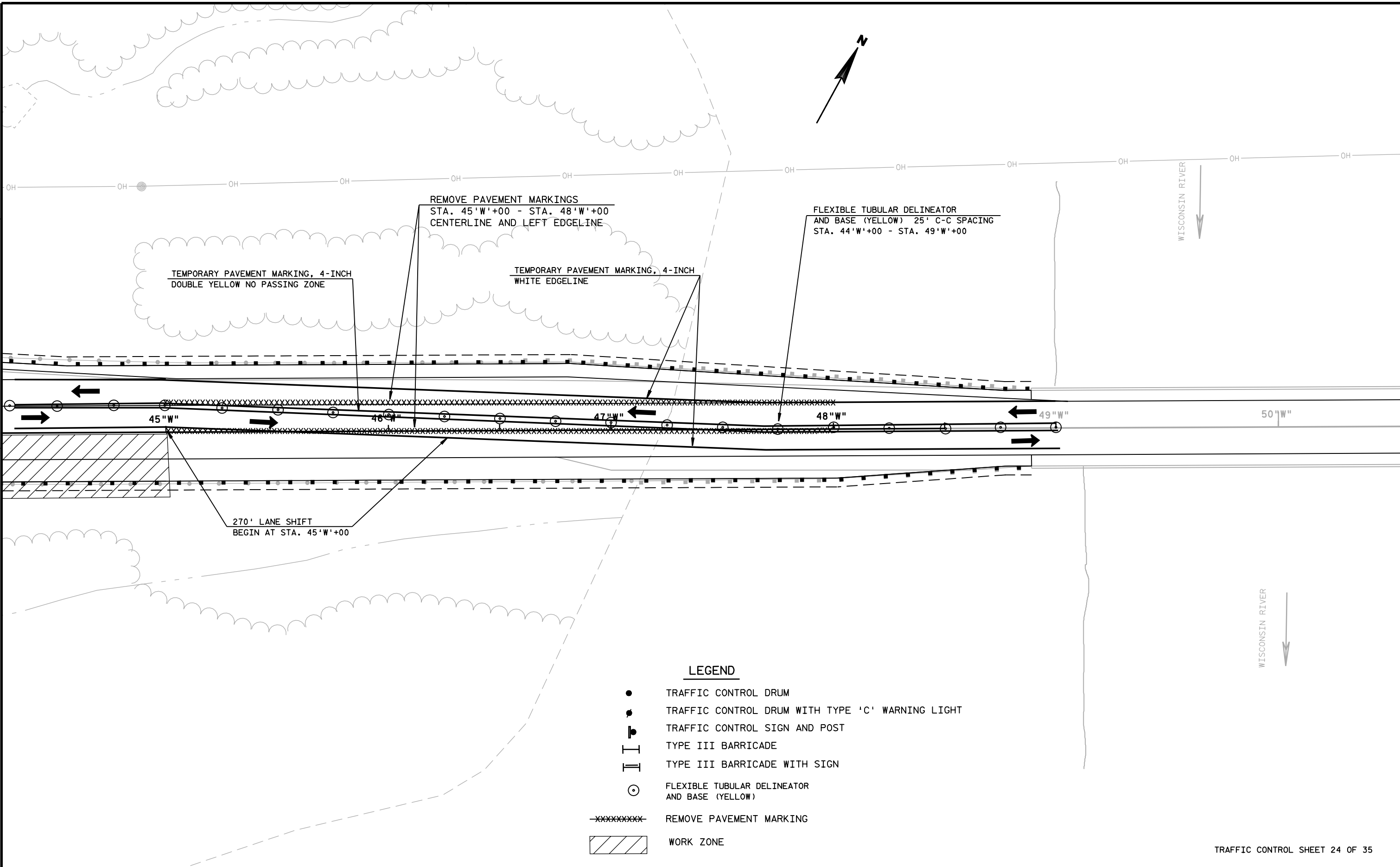


TRAFFIC CONTROL SHEET 23 OF 35

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
- ⊣ TRAFFIC CONTROL SIGN AND POST
- ⊥ TYPE III BARRICADE
- ⊥ TYPE III BARRICADE WITH SIGN
- FLEXIBLE TUBULAR DELINEATOR AND BASE (YELLOW)
- ▨ WORK ZONE

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

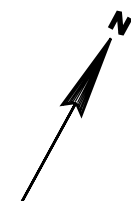


LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE 'C' WARNING LIGHT
- ⊕ TRAFFIC CONTROL SIGN AND POST
- || TYPE III BARRICADE
- || TYPE III BARRICADE WITH SIGN
- ⊙ FLEXIBLE TUBULAR DELINEATOR AND BASE (YELLOW)
- xxxxxxx- REMOVE PAVEMENT MARKING
- ▨ WORK ZONE

TRAFFIC CONTROL SHEET 24 OF 35

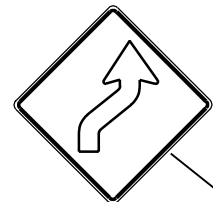
LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



WISCONSIN RIVER

WISCONSIN RIVER

OH OH OH



W01-4R

MOUNT ON TYPE III BARRICADE 4' LONG

4.5'

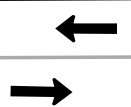
51"W"

52"W"

53"W"

54"W"

500'



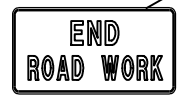
W20-1



W013-1
24" X 24"





W20-1



G20-2A
48" X 24"



LEGEND

-  TRAFFIC CONTROL SIGN AND POST
-  TYPE III BARRICADE WITH SIGN

TRAFFIC CONTROL SHEET 25 OF 35

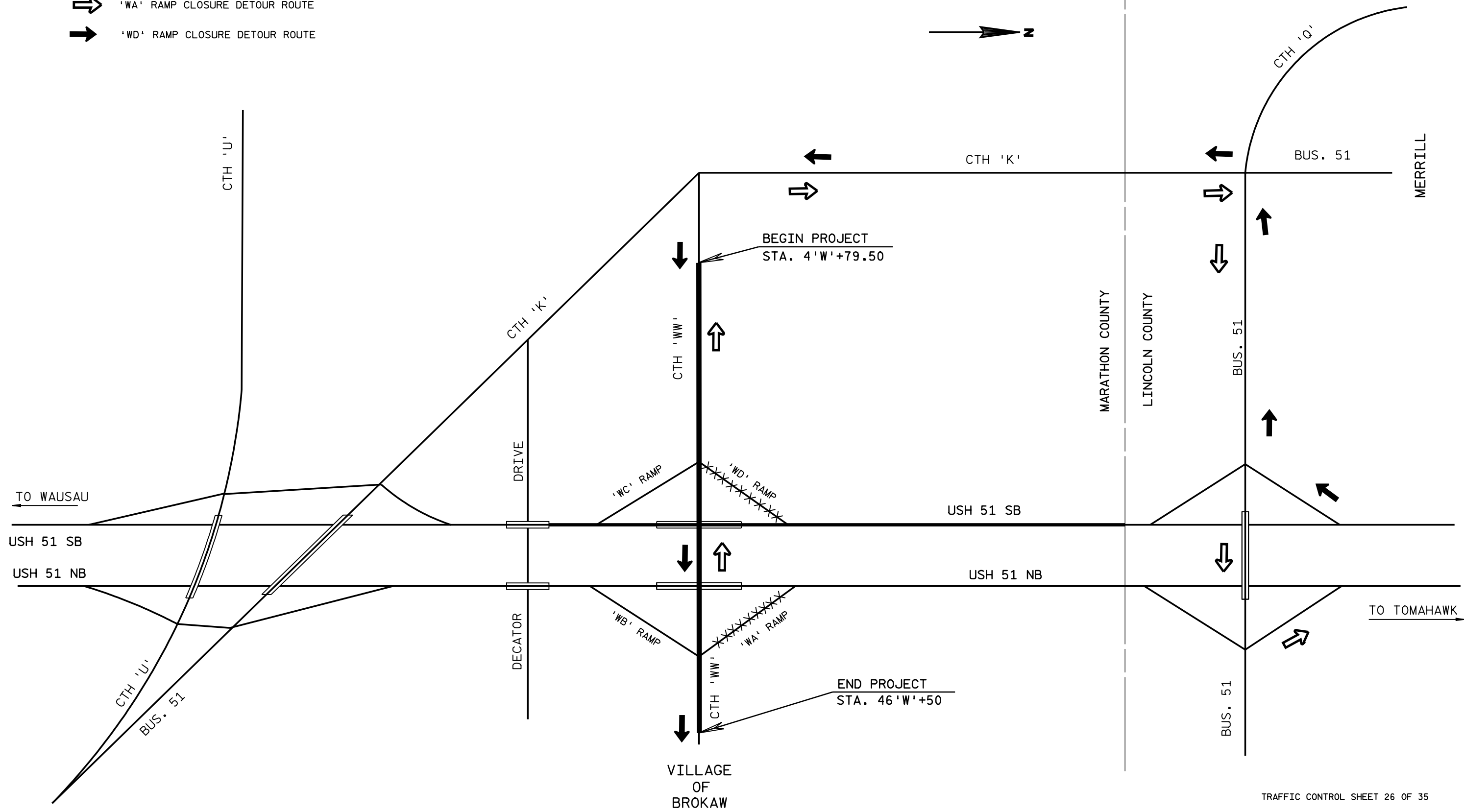
RAMP CLOSURE DETOUR ROUTES


LEGEND

-  'WA' RAMP CLOSURE DETOUR ROUTE
-  'WD' RAMP CLOSURE DETOUR ROUTE



LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63



STATE PROJECT NUMBER: 1170-00-73	HWY: CTH 'WW'	COUNTY: MARATHON	DETOUR OVERVIEW	SCALE, FEET 	SHEET NO:	E
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TRAFFIC CONTROL SHEET 26 OF 35

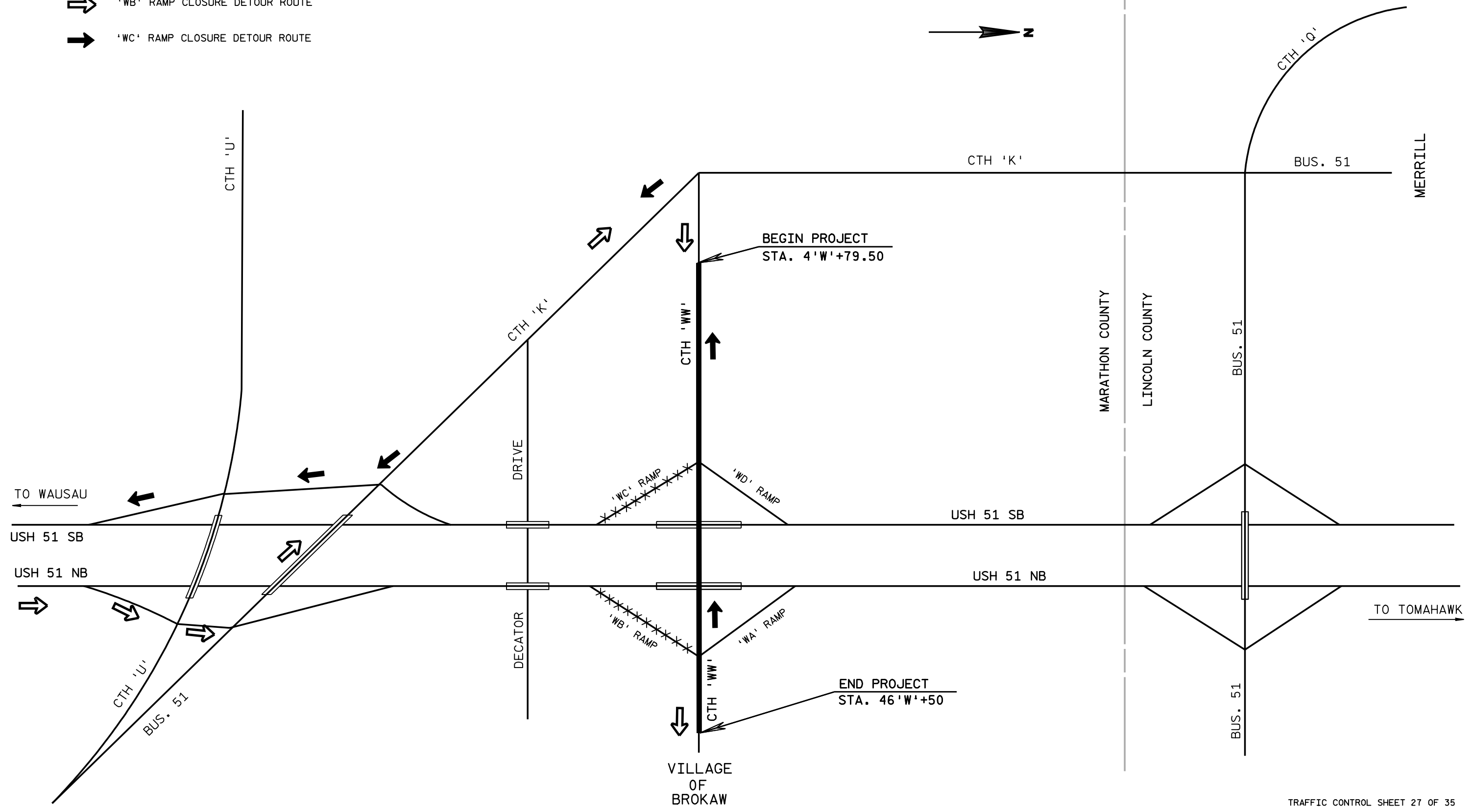
RAMP CLOSURE DETOUR ROUTES

LEGEND

- ⇨ 'WB' RAMP CLOSURE DETOUR ROUTE
- ➔ 'WC' RAMP CLOSURE DETOUR ROUTE



LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



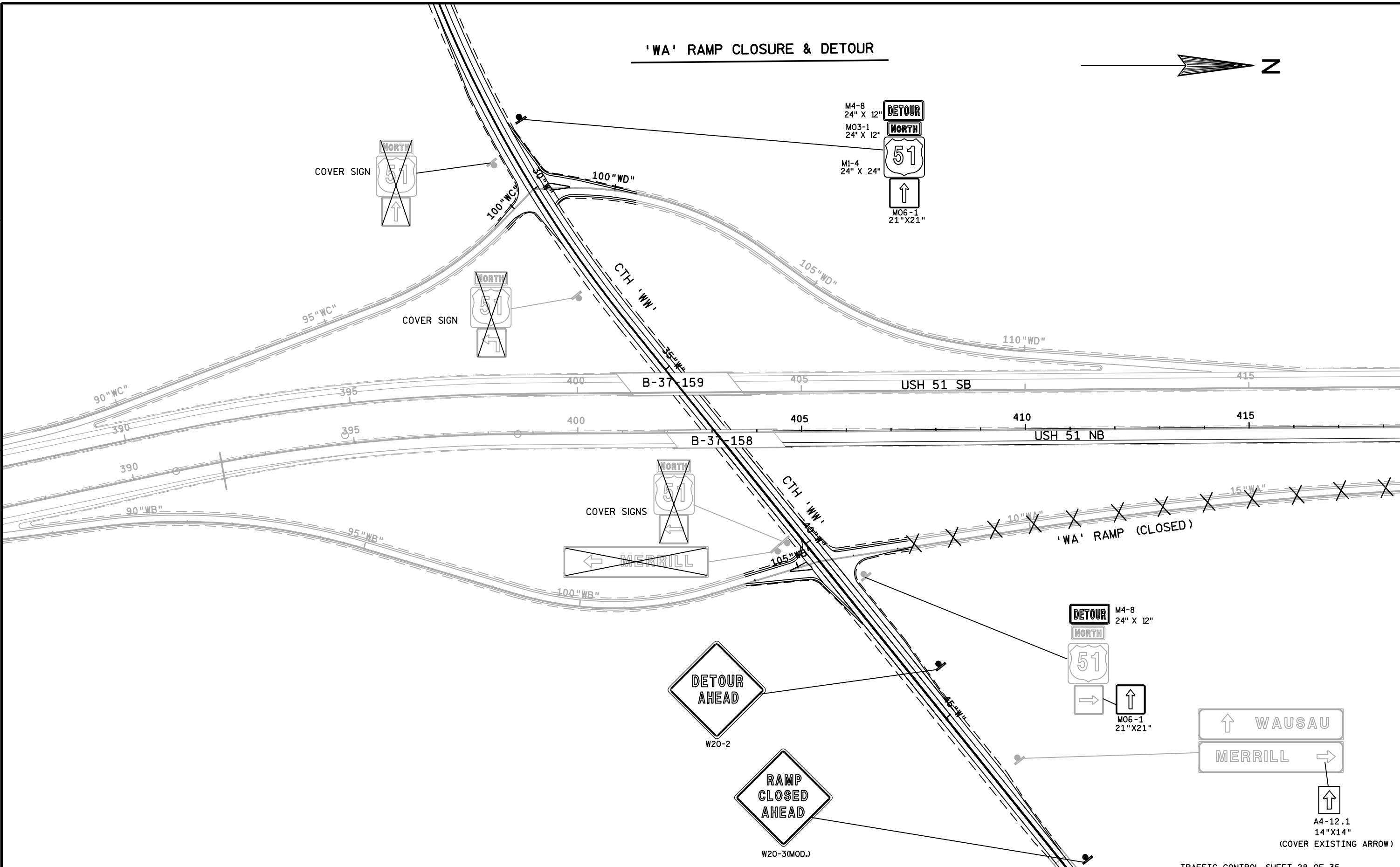
TRAFFIC CONTROL SHEET 27 OF 35

STATE PROJECT NUMBER:1170-00-73	HWY:CTH 'WW'	COUNTY:MARATHON	DETOUR OVERVIEW	SCALE, FEET	SHEET NO:	E
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'WA' RAMP CLOSURE & DETOUR



LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63

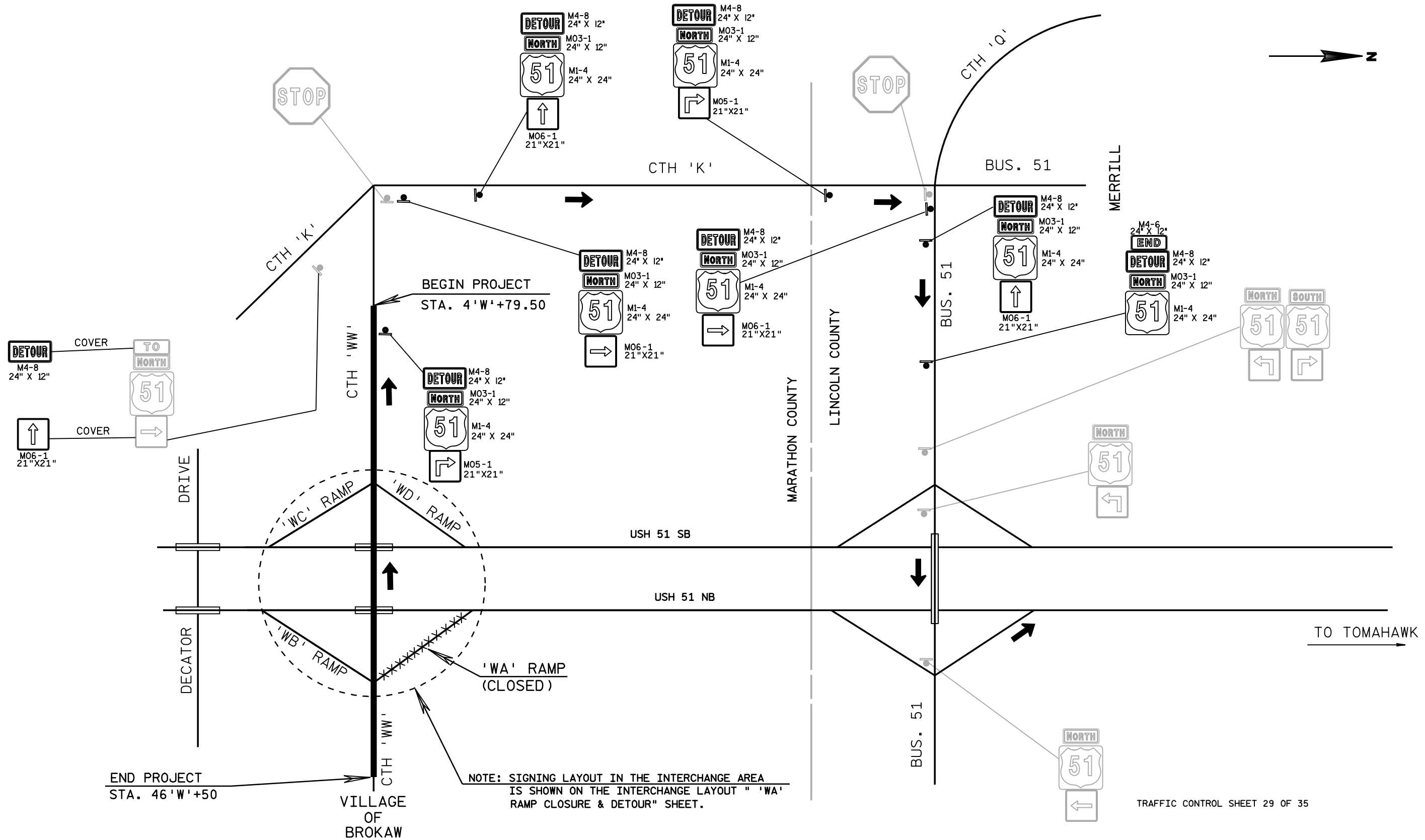


STATE PROJECT NUMBER: 1170-00-73	HWY: CTH 'WW'	COUNTY: MARATHON	'WA' RAMP CLOSURE & DETOUR	SCALE, FEET	SHEET NO: E
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TRAFFIC CONTROL SHEET 28 OF 35

A4-12.1
14"X14"
(COVER EXISTING ARROW)

'WA' RAMP CLOSURE DETOUR SIGNING



LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

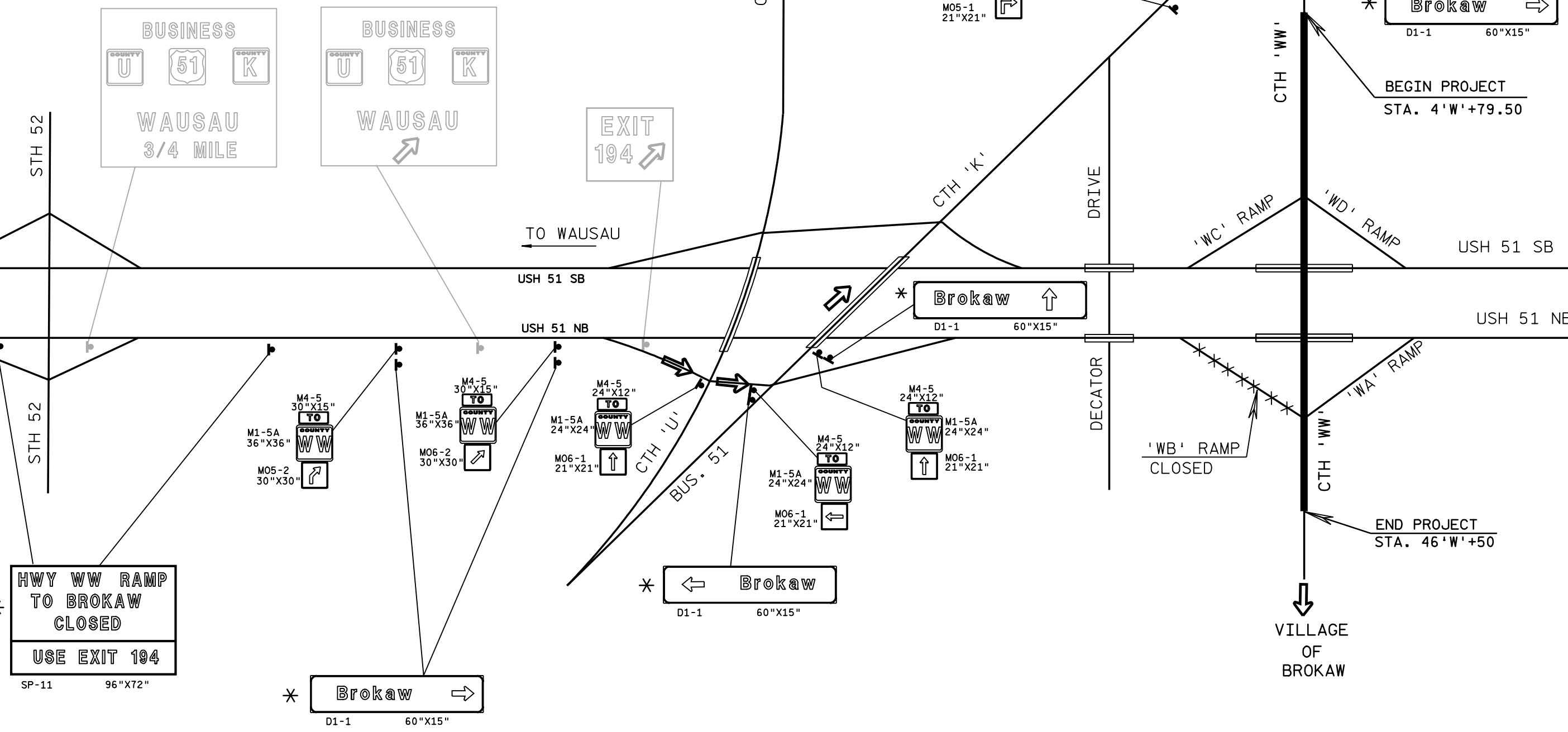
'WB' RAMP CLOSURE DETOUR SIGNING

LEGEND

- ➔ 'WB' RAMP CLOSURE DETOUR ROUTE
- ▬ EXISTING SIGN AND POST
- ⬮ TRAFFIC CONTROL SIGN



LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



* TO BE PAID FOR AS 'TRAFFIC CONTROL. SIGNS, FIXED MESSAGE

TRAFFIC CONTROL, 'WB' RAMP CLOSURE

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.

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

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






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

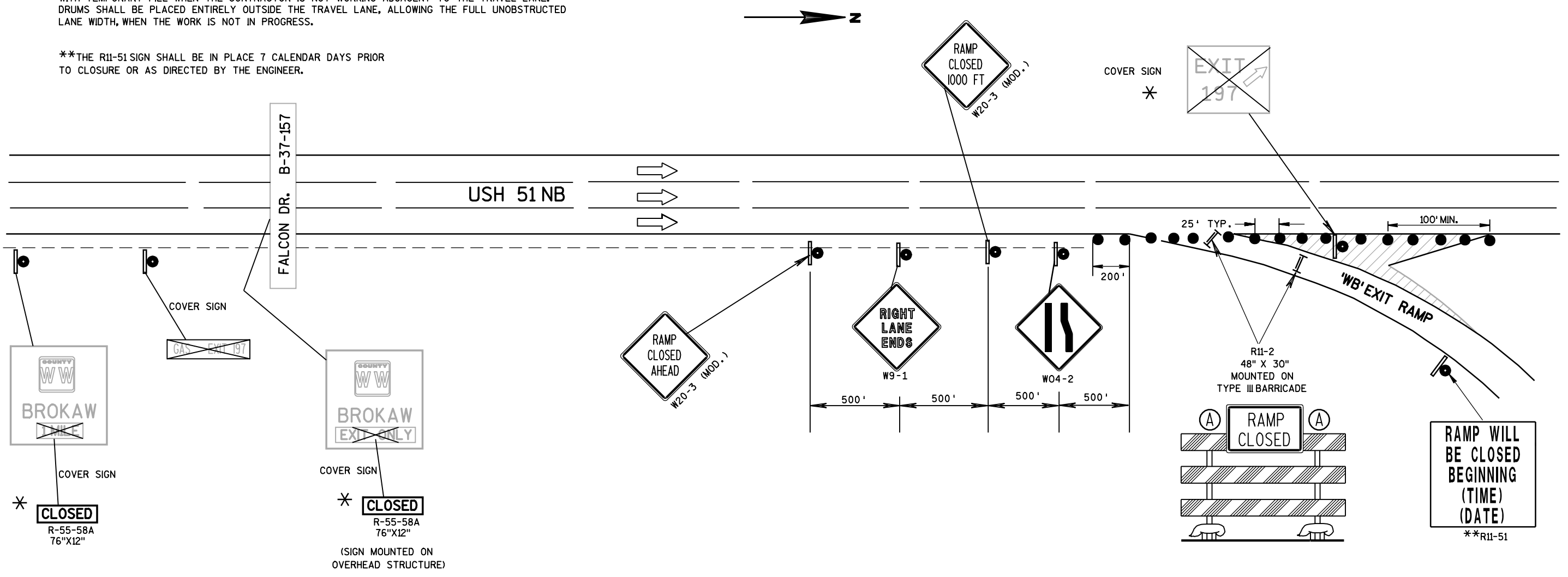
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

WORK AREAS WITH A DROPOFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN THE WORK IS NOT IN PROGRESS.

**THE R11-51 SIGN SHALL BE IN PLACE 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER.

SYMBOLS

-  TYPE III BARRICADE (8' LONG) WITH ATTACHED SIGN
-  TRAFFIC CONTROL DRUM
-  POST MOUNTED SIGN
-  WARNING LIGHT, TYPE A
-  DIRECTION OF TRAFFIC



* THESE SIGNS WILL BE PAID FOR BY THE ITEM:
'TRAFFIC CONTROL, COVER SIGNS'.

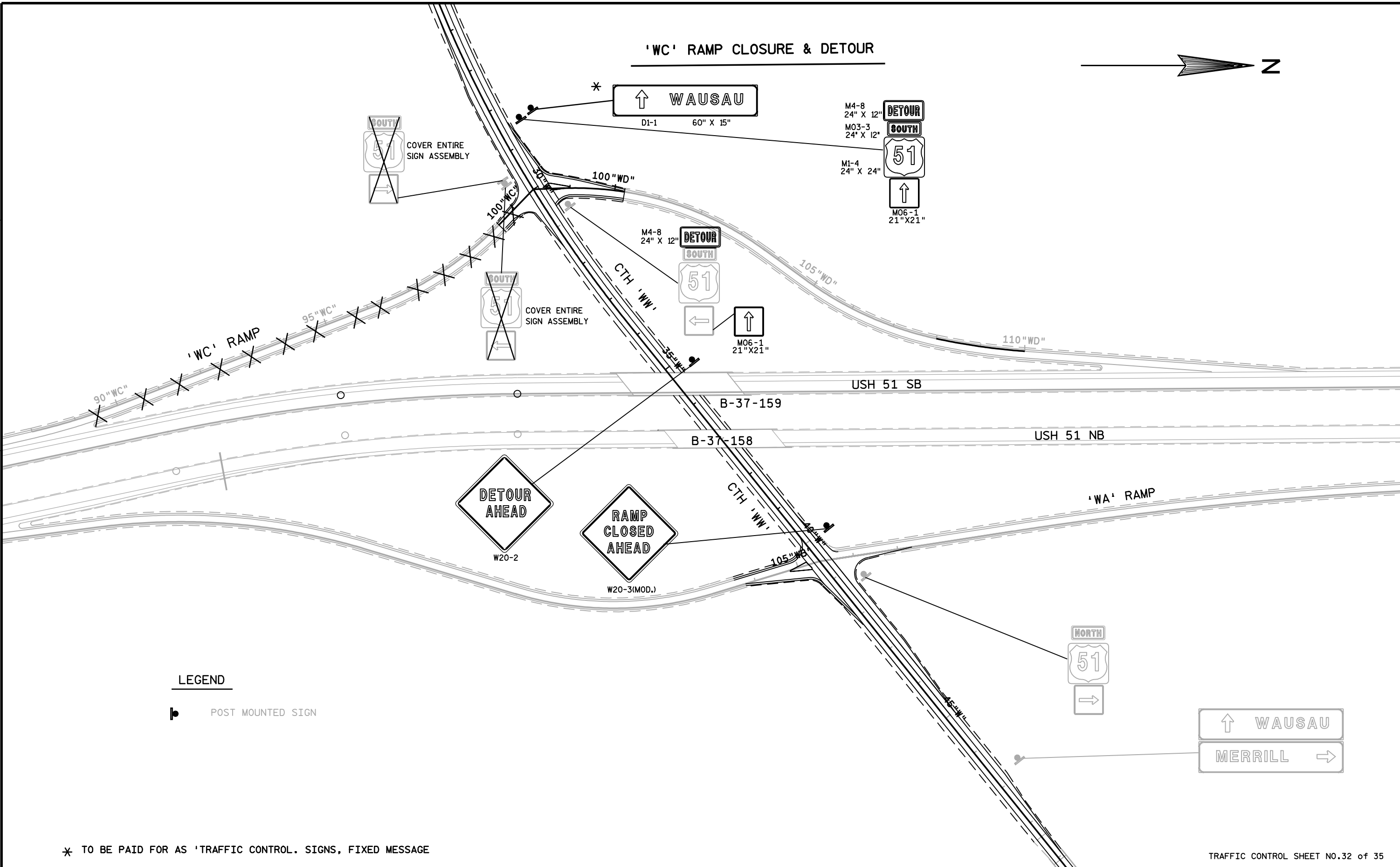
TRAFFIC CONTROL SHEET 31 OF 35

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

'WC' RAMP CLOSURE & DETOUR



LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63



LEGEND

POST MOUNTED SIGN

* TO BE PAID FOR AS 'TRAFFIC CONTROL. SIGNS, FIXED MESSAGE

TRAFFIC CONTROL SHEET NO.32 of 35

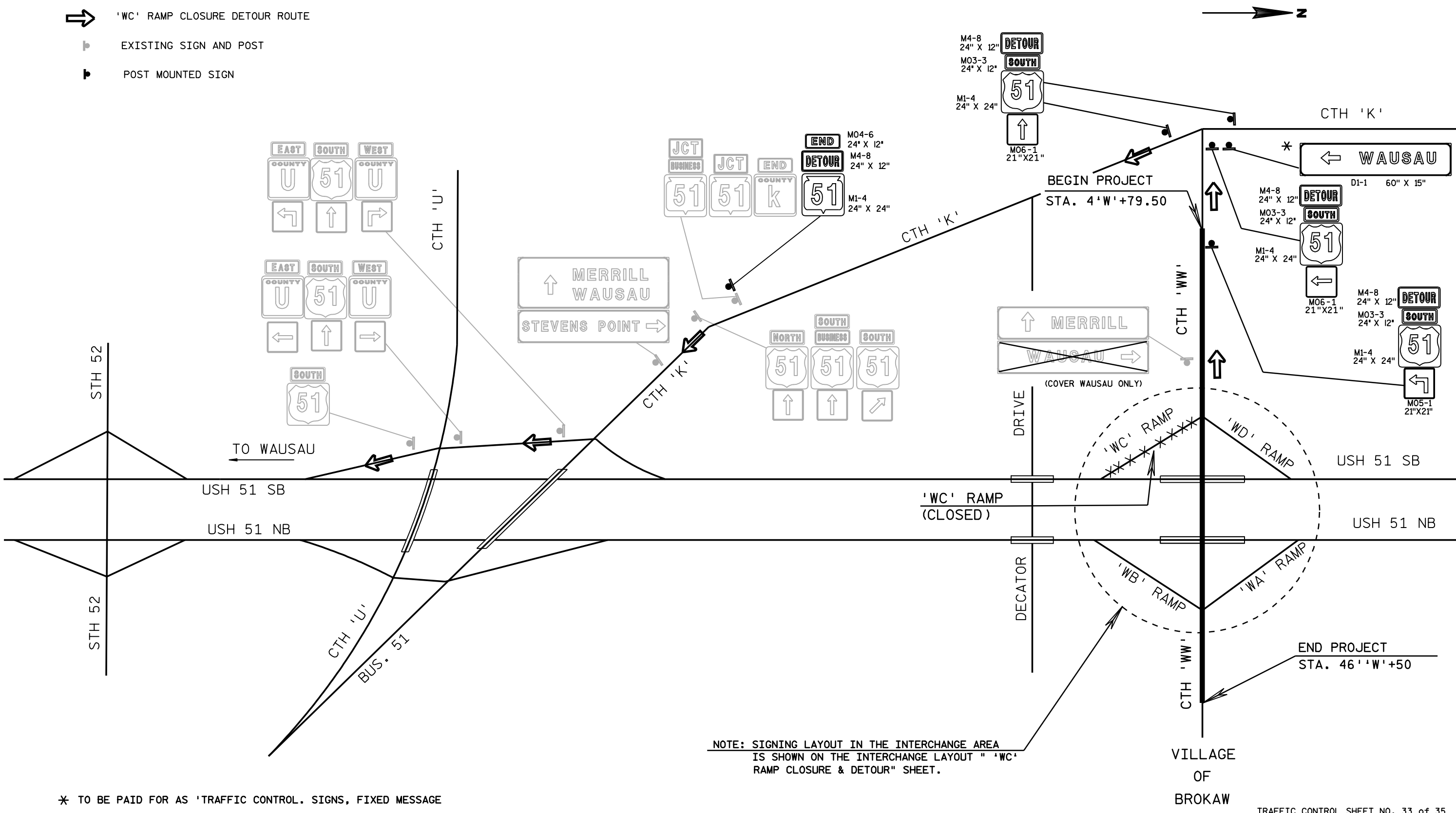
STATE PROJECT NUMBER:1170-00-73	HWY:CTH 'WW'	COUNTY:MARATHON	'WC' RAMP CLOSURE & DETOUR	SCALE, FEET	SHEET NO:	E
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'WC' RAMP CLOSURE DETOUR SIGNING

LEGEND

- ➔ 'WC' RAMP CLOSURE DETOUR ROUTE
- EXISTING SIGN AND POST
- POST MOUNTED SIGN

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



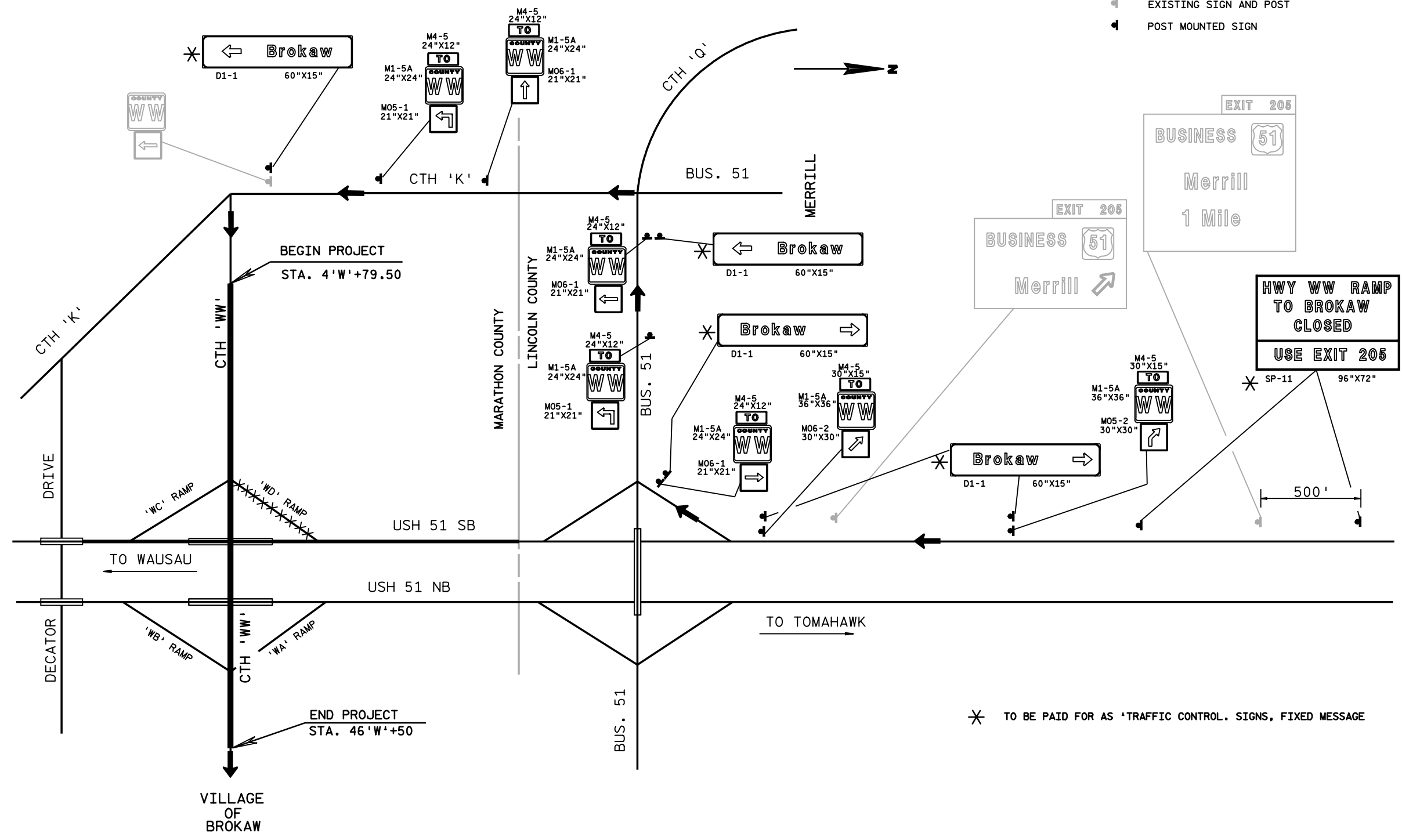
* TO BE PAID FOR AS 'TRAFFIC CONTROL. SIGNS, FIXED MESSAGE

TRAFFIC CONTROL SHEET NO. 33 of 35

'WD' RAMP CLOSURE DETOUR SIGNING

LEGEND

- ➔ 'WD' RAMP CLOSURE DETOUR ROUTE
- ⬆ EXISTING SIGN AND POST
- ⬆ POST MOUNTED SIGN



* TO BE PAID FOR AS 'TRAFFIC CONTROL' SIGNS, FIXED MESSAGE

TRAFFIC CONTROL SHEET NO. 34 of 35

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

TRAFFIC CONTROL, 'WD' RAMP CLOSURE

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP.

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

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






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

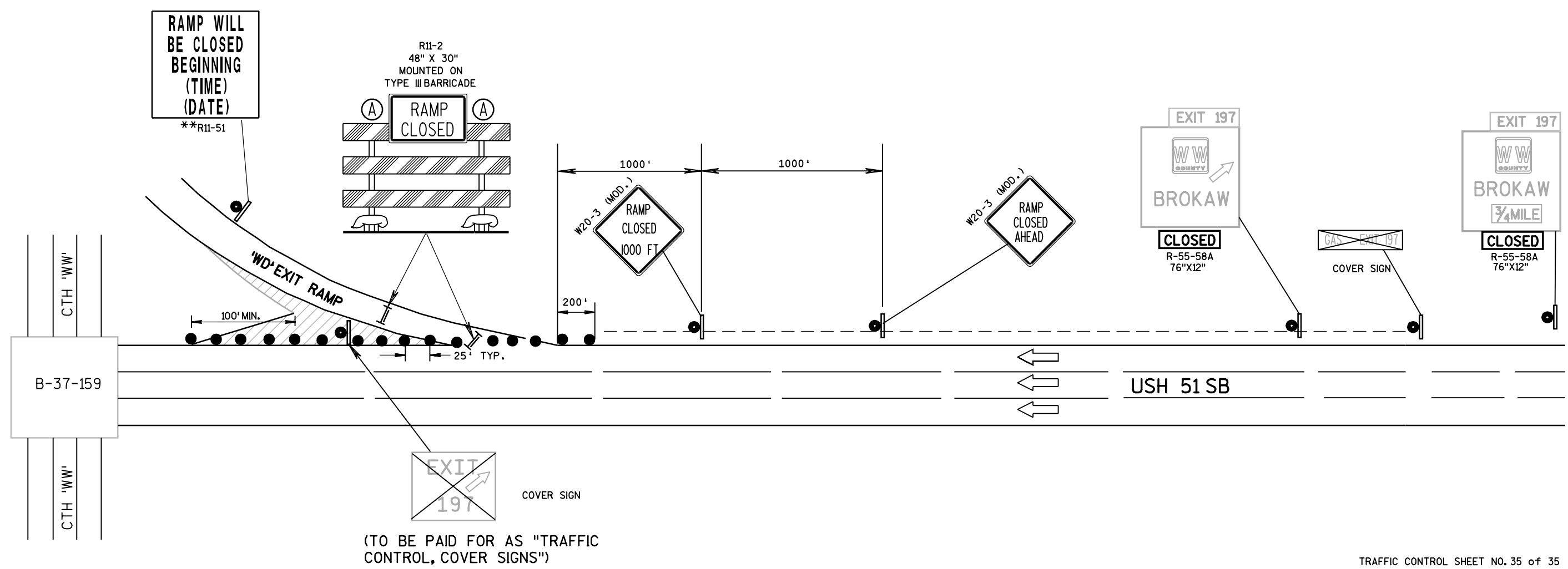
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

**THE R11-51 SIGN SHALL BE IN PLACE 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER.

SYMBOLS

-  TYPE III BARRICADE (8' LONG) WITH ATTACHED SIGN
-  TRAFFIC CONTROL DRUM
-  POST MOUNTED SIGN
-  WARNING LIGHT, TYPE A
-  DIRECTION OF TRAFFIC



(TO BE PAID FOR AS "TRAFFIC CONTROL, COVER SIGNS")

TRAFFIC CONTROL SHEET NO. 35 of 35

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

DATE 10JUL03

ESTIMATE OF QUANTITIES

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	20402	REMOVING ASPHALTIC SURFACE	S. Y.	40.000	40.000
0020	20403	REMOVING CURB	L. F.	325.000	325.000
0030	20411	REMOVING GUARDRAIL	L. F.	2,760.000	2,760.000
0040	20418	REMOVING PAVEMENT, BUTT JOINTS	S. Y.	330.000	330.000
0050	20419	REMOVING ASPHALTIC SURFACE, BUTT JOINTS	S. Y.	785.000	785.000
0060	21131	PREPARATION OF FOUNDATION FOR ASPHALTIC SHOULDERS	STA.	79.500	79.500
0070	21301	FINISHING ROADWAY	LS	1.000	1.000
0080	30404	CRUSHED AGGREGATE BASE COURSE	TON	3,430.000	3,430.000
0090	30419	CRUSHED AGGREGATE BASE COURSE, OPEN GRADED, NUMBER 2	C. Y.	2.500	2.500
0100	30424	SALVAGED ASPHALTIC PAVEMENT, BASE COURSE	TON	440.000	440.000
0110	40203	ASPHALTIC MATERIAL FOR TACK COAT	TON	3.500	3.500
0120	40301	OMP, ASPHALTIC MIXTURE	TON	8,945.000	8,945.000
0130	40501	ASPHALTIC MATERIAL FOR PLANT MIXES	TON	520.000	520.000
0140	40723	ASPHALTIC CONCRETE PAVEMENT, TYPE E-3	TON	8,945.000	8,945.000
0150	40728	DENSITY INCENTIVE, ASPHALTIC CONCRETE PAVEMENT	DOL	5,725.000	5,725.000
0160	41011	SALVAGED ASPHALTIC PAVEMENT	S. Y.	2,270.000	2,270.000
0170	41104	ASPHALTIC SURFACE, SAFETY ISLANDS	TON	13.000	13.000
0180	60102	CONCRETE CURB, TYPE D	L. F.	250.000	250.000
0190	60603	GROUTED RIPRAP	C. Y.	18.000	18.000
0200	61182	ADJUSTING MANHOLE COVERS	EACH	7.000	7.000
0210	61201	PIPE UNDERDRAIN, 6-INCH	L. F.	48.000	48.000
0220	61211	PIPE UNDERDRAIN, UNPERFORATED, 6-INCH	L. F.	10.000	10.000
0230	61254	REINFORCED CONCRETE APRON ENDWALLS FOR UNDERDRAIN, 6-INCH	EACH	1.000	1.000
0240	61407	STEEL THREE BEAM STRUCTURE APPROACH	L. F.	66.000	66.000
0250	61408	STEEL PLATE BEAM GUARD, CLASS A	L. F.	2,400.000	2,400.000
0260	61413	ANCHORAGES FOR STEEL PLATE BEAM GUARD, TYPE 2	EACH	3.000	3.000
0270	61435	STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL	EACH	7.000	7.000
0280	61801	MAINTENANCE AND REPAIR OF HAUL ROADS	LS	1.000	1.000
0290	61910	MOBILIZATION	LS	1.000	1.000
0300	62702	MULCHING	S. Y.	430.000	430.000
0310	62811	EROSION BALES, DELIVERED	EACH	10.000	10.000
0320	62812	EROSION BALES, INSTALLED	EACH	10.000	10.000
0330	62815	SILT FENCE, DELIVERED	L. F.	240.000	240.000
0340	62816	SILT FENCE, INSTALLED	L. F.	240.000	240.000
0350	62817	SILT FENCE MAINTENANCE	L. F.	240.000	240.000
0360	62819	MOBILIZATIONS, EROSION CONTROL	EACH	1.000	1.000
0370	62821	MOBILIZATIONS, EMERGENCY EROSION CONTROL	EACH	1.000	1.000
0380	62822	EROSION MAT, DELIVERED, CLASS I, TYPE A	S. Y.	80.000	80.000
0390	62823	EROSION MAT, INSTALLED, CLASS I, TYPE A	S. Y.	80.000	80.000
0400	62880	CULVERT PIPE DITCH CHECKS	EACH	5.000	5.000
0410	62905	FERTILIZER, TYPE B	CWT.	3.500	3.500
0420	63003	SEEDING, TEMPORARY	LB.	10.000	10.000
0430	63009	SEEDING, MIXTURE NO. 20	LB.	150.000	150.000
0440	63401	WOOD POSTS, 4X4-INCH X 10-FT.	EACH	3.000	3.000
0450	63403	WOOD POSTS, 4X4-INCH X 14-FT.	EACH	2.000	2.000
0460	63410	WOOD POSTS, 4X6-INCH X 12-FT.	EACH	12.000	12.000
0470	63411	WOOD POSTS, 4X6-INCH X 14-FT.	EACH	24.000	24.000
0480	63412	WOOD POSTS, 4X6-INCH X 16-FT.	EACH	15.000	15.000
0490	63413	WOOD POSTS, 4X6-INCH X 18-FT.	EACH	1.000	1.000

DATE 10JUL03

ESTIMATE OF QUANTITIES

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1170-00-73 QUANTITY
0500	63702	SIGNS, TYPE II, REFLECTIVE	S.F.	394.830	394.830
0510	63827	REMOVING SIGNS, TYPE II	EACH	70.000	70.000
0520	63830	REMOVING SMALL SIGN SUPPORTS	EACH	45.000	45.000
0530	64202	FIELD OFFICE, TYPE B	LS	1.000	1.000
0540	64301	TRAFFIC CONTROL	LS	1.000	1.000
0550	64313	TRAFFIC CONTROL, DRUMS	DAYS	3,020.000	3,020.000
0560	64318	TRAFFIC CONTROL, BARRICADES, TYPE III	DAYS	231.000	231.000
0570	64321	TRAFFIC CONTROL, WARNING LIGHTS, TYPE A	DAYS	388.000	388.000
0580	64323	TRAFFIC CONTROL, WARNING LIGHTS, TYPE C	DAYS	218.000	218.000
0590	64326	TRAFFIC CONTROL, SIGNS	DAYS	1,032.000	1,032.000
0600	64327	TRAFFIC CONTROL, SIGNS, FIXED MESSAGE	S.F.	267.000	267.000
0610	64334	TRAFFIC CONTROL, DETOUR	LS	1.000	1.000
0620	64343	TRAFFIC CONTROL, DETOUR, SIGNS	DAYS	1,483.000	1,483.000
0630	64503	GEOTEXTILE FABRIC, TYPE DF	S.Y.	27.000	27.000
0640	64505	GEOTEXTILE FABRIC, TYPE R	S.Y.	65.000	65.000
0650	64602	PAVEMENT MARKING, 4-INCH, EPOXY	L.F.	19,898.000	19,898.000
0660	64618	PAVEMENT MARKING, CHANNELIZING, 8-INCH, EPOXY	L.F.	494.000	494.000
0670	64635	PAVEMENT MARKING, RAISED MARKERS	EACH	8.000	8.000
0680	64642	REMOVING PAVEMENT MARKINGS	L.F.	2,100.000	2,100.000
0690	64742	PAVEMENT MARKING, ARROWS, TYPE 4, EPOXY	EACH	1.000	1.000
0700	64901	TEMPORARY PAVEMENT MARKING, 4-INCH	L.F.	36,392.000	36,392.000
0710	66501	SAWING EXISTING PAVEMENT	L.F.	215.000	215.000
0720	66502	SAWING CONCRETE PAVEMENT, FULL DEPTH	L.F.	115.000	115.000
0730	90004	MISC 90004A GRADING, SHAPING, AND TOPSOILING INTERSECTION, 'WA' RAMP	LS	1.000	1.000
0740	90004	MISC 90004B GRADING, SHAPING, AND TOPSOILING INTERSECTION, 'WC' RAMP	LS	1.000	1.000
0750	90005	MISC 90005A GRADING, SHAPING, AND TOPSOILING FOR BEAM GUARD ANCHORAGES	EACH	7.000	7.000
0760	90005	MISC 90005B FLEXIBLE TUBULAR DELINEATOR AND BASE	EACH	21.000	21.000
0770	90005	MISC 90005C ABANDONING CATTLE PASS	EACH	1.000	1.000
0780	90005	MISC 90005D LOCATING CATTLE PASS	EACH	1.000	1.000
0790	90005	MISC 90005E ADJUSTING WATER VALVES	EACH	5.000	5.000
0800	90037	MISC 90037A PULVERIZE AND RELAY EXISTING PAVED SHOULDER	STA.	22.000	22.000
0810	90405	RUBBLIZING CONCRETE PAVEMENT	S.Y.	20,640.000	20,640.000
0820	90712	TRAFFIC CONTROL, COVERING SIGNS	EACH	4.000	4.000
0830	90778	PAVEMENT MARKING, OUTFALL MARKERS	EACH	1.000	1.000
0835	62501	TOPSOIL	S.Y.	1,792.000	} 803.00
0840	20501	COMMON EXCAVATION	C.Y.	750.000	
0845	62832	EROSION MAT, DELIVERED, CLASS II, TYPE B	S.Y.	595.000	
0850	62833	EROSION MAT, INSTALLED, CLASS II, TYPE B	S.Y.	595.000	
0855	62824	EROSION MAT, DELIVERED, CLASS I, TYPE B	S.Y.	800.000	
0860	62825	EROSION MAT, INSTALLED, CLASS I, TYPE B	S.Y.	800.000	
0865	61910	MOBILIZATION TSM	LS	1.000	
0870	62821	MOBILIZATIONS, EMERGENCY EROSION CONTROL Change Order	EACH	1.000	
0875	62702	MULCHING Change Order	S.Y.	1,792.000	
0880	62905	FERTILIZER, TYPE B Change Order	CWT.	1.160	
0885	30404	CRUSHED AGGREGATE BASE COURSE Change Order	TON	2,790.000	
0890	40203	ASPHALTIC MATERIAL FOR TACK COAT Change Order	TON	0.300	
0895	40301	QMP, ASPHALTIC MIXTURE Change Order	TON	765.000	
0900	40501	ASPHALTIC MATERIAL FOR PLANT MIXES Change Order	TON	44.000	
0905	40723	ASPHALTIC CONCRETE PAVEMENT, TYPE E-3 Change Order	TON	765.000	
0910	40728	DENSITY INCENTIVE, ASPHALTIC CONC. PVMT. Change Order	DOL	498.000	
0915	63009	SEEDING, MIXTURE NO. 20 Change Order	LB.	50.000	
0920	61910	MOBILIZATION Centerline Paint	LS	1.000	
0925	64734	PAVEMENT MARKING, ARROWS, TYPE 2, EPOXY Change Order	EACH	0.000	

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REMOVING CURB

LOCATION	20403 L. F.	REMARKS
CATEGORY 0010		
N. 32ND. AVE. ISLAND	70	
CATEGORY 0010 TOTAL	70	
CATEGORY 0020		
'WD' RAMP ISLAND	128	*
'WB' RAMP ISLAND	127	*
CATEGORY 0020 TOTAL	255	
PROJECT TOTAL	325	

* REMOVAL OF CURB SHALL BE PERFORMED IN A MANNER THAT WILL MINIMIZE THE DISPLACEMENT OF ADJACENT RUBBLIZED CONCRETE PAVEMENT.

**REMOVING ASPHALTIC SURFACE,
REMOVING PAVEMENT, BUTT JOINTS AND
REMOVING ASPHALTIC SURFACE, BUTT JOINTS**

STATION	LOCATION	20402 REMOVING ASPHALTIC SURFACE S. Y.	20418 REMOVING PAVEMENT BUTT JOINTS S. Y.	20419 REMOVING ASPHALTIC SURFACE BUTT JOINTS S. Y.
CATEGORY 0010				
2' W' +29.50	MAINLINE	---	---	268
N. 32ND. AVE.	LT.	---	---	102
N. 32ND. AVE.	RT.	---	---	220
N. 28TH. AVE.	RT.	---	---	195
CATEGORY 0010 TOTAL		0	0	785
CATEGORY 0020				
30' W' +80	ASPHALT FLUME	40		
48' W' +50	MAINLINE	---	330	---
CATEGORY 0020 TOTAL	TOTAL	40	330	0
PROJECT TOTAL		40	330	785

ADJUSTING MANHOLE COVERS AND WATER VALVES

STATION	DESCRIPTION	OFFSET	61182 EACH	90005E EACH	REMARKS
CATEGORY 0030					
13' W' +65	VALVE	21' RT	---	1.0	
22' W' +89	VALVE(S)	+/- 29' RT	---	3.0	GROUP OF 3 WATER VALVES
48' W' +52	VALVE	18' LT	---	1.0	
22' W' +59	SANTITARY M. H.	33' RT	1.0	---	
34' W' +56	SANTITARY M. H.	24' RT	1.0	---	
37' W' +12	SANTITARY M. H.	27' RT	1.0	---	
39' W' +82.5	SANTITARY M. H.	29' RT	1.0	---	
43' W' +76	SANTITARY M. H.	21' RT	1.0	---	
46' W' +48	SANTITARY M. H.	22' RT	1.0	---	
46' W' +67	SANTITARY M. H.	34' LT	1.0	---	
TOTALS			7.0	5.0	

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CONCRETE CURB, TYPE D

STATION - STATION	LOCATION	60102 L. F.	REMARKS
CATEGORY 0010			
N. 32ND. AVE.	RT.	65	ISLAND
CATEGORY 0010 TOTAL		65	
CATEGORY 0020			
104' WB' +79 - 105' WB' +32	'WB' RAMP	96	ISLAND
98' WD' +50 - 99' WD' +02	'WD' RAMP	89	ISLAND
CATEGORY 0020 TOTAL		185	
PROJECT TOTAL		250	

**PREPARATION OF FOUNDATION
FOR ASPHALTIC SHOULDERS**

STATION - STATION	LOCATION	21131 STATIONS
CATEGORY 0010		
2' W' +29.50 - 11' W' +50	LEFT	9.2
12' W' +60 - 25' W' +35	LEFT	12.8
2' W' +29.50 - 8' W' +50	RIGHT	6.2
13' W' +40 - 25' W' +35	RIGHT	12.0
CATEGORY 0010 TOTAL		40.2
CATEGORY 0020		
25' W' +35 - 29' W' +00	LEFT	3.7
30' W' +60 - 39' W' +60	LEFT	9.0
41' W' +30 - 48' W' +90	LEFT	7.6
25' W' +35 - 26' W' +80	RIGHT	1.5
30' W' +50 - 40' W' +00	RIGHT	9.5
40' W' +90 - 48' W' +90	RIGHT	8.0
CATEGORY 0020 TOTAL		39.3
PROJECT TOTAL		79.5

REMOVING GUARDRAIL

STATION - STATION	LOCATION	20411 L. F.
CATEGORY 0020		
26' W' +80 - 30' W' +00	RT.	342
30' W' +40 - 32' W' +00	RT.	205
37' W' +30 - 40' W' +00	RT.	332
39' W' +15 - 40' W' +60	LT.	170
40' W' +40 - 48' W' +80	RT.	896
41' W' +10 - 48' W' +80	LT.	815
TOTAL		2760

STATE PROJECT NO: 1170-03-73

HWY: CTH 'WW'

COUNTY: MARATHON

MISCELLANEOUS QUANTITIES

SHEET NO:

E

**CRUSHED AGGREGATE BASE COURSE,
CRUSHED AGGREGATE BASE COURSE OPEN GRADED NO. 2, AND
SALVAGED ASPHALTIC PAVEMENT, BASE COURSE**

STATION - STATION	LOCATION	30404 CABC TONS	30419 OPEN GRADED NO. 2 C. Y.	30424 SALVAGED ASPHALTIC PAVEMENT BASE COURSE TONS	REMARKS
CATEGORY 0010					
2' W' +29.5 - 25' W' +35	RT.	1047	---	---	#
2' W' +29.5 - 25' W' +35	LT.	575	---	210	#
UNDISTRIBUTED		68	---	---	##
CATEGORY 0010 TOTAL		1690	0	210	
CATEGORY 0020					
25' W' +35 - 48' W' +85	RT.	832	---	---	#
25' W' +35 - 48' W' +85	LT.	212	---	207	#
45' W' +22		---	2.5	---	
'WA' RAMP		114	---	13	
'WB' RAMP		48	---	---	
'WC' RAMP		50	---	---	
'WD' RAMP		54	---	10	
UNDISTRIBUTED		430	---	---	###
CATEGORY 0020 TOTAL		1740	2.5	230	
PROJECT TOTAL		3430	2.5	#### 440	

INCLUDES AGGREGATE FOR PREPARATION OF FOUNDATION
INCLUDES SIDEROADS, DRIVEWAYS AND ISLAND
INCLUDES ISLANDS AND BEAM GUARD LOCATIONS
QUANTITY AVAILABLE FROM THIS PROJECT IS ESTIMATED AT 270 TONS

ASPHALTIC SURFACE, SAFETY ISLANDS

STATION	LOCATION	41104 TON
CATEGORY 0010		
N. 32ND. AVE.	RIGHT	3.00
CATEGORY 0010 TOTAL		3.00
CATEGORY 0020		
'WB' RAMP		6.00
'WD' RAMP		4.00
CATEGORY 0020 TOTAL		10.00
PROJECT TOTAL		13.00

**ASPHALTIC CONCRETE PAVEMENT, TYPE E-3
ASPHALTIC MATERIAL FOR PLANT MIXES
ASPHALTIC MATERIAL FOR TACK COAT**

STATION - STATION	LOCATION	40203 ASPH. MATERIAL FOR TACK COAT TON	40723 ASPH. CONC. PAVEMENT TYPE E-3 TON	40501 ASPH. MATERIAL FOR PLANT MIX @ 5.8% TON	REMARKS
CATEGORY 0010					
2' W' +29.5 - 25' W' +35	MAINLINE	0.6	2181	127.5	
2' W' +29.5 - 25' W' +35	LT.	0.3	671	38.9	CLIMBING LANE
2' W' +29.5 - 25' W' +35	LT./RT.	0.3	550	31.9	SHOULDERS
N. 32ND. AVE	RT.	0.1	226	13.1	INCLUDES TURNING LANE
N. 32ND. AVE	LT.	0.1	62	3.6	
N. 28TH. AVE	RT.	0.1	85	5.0	
CATEGORY 0010 TOTAL		1.5	3775	220.0	
CATEGORY 0020					
25' W' +35 - 48' W' +50	MAINLINE	0.8	2200	127.9	
25' W' +35 - 48' W' +50	LT.	0.4	800	46.4	CLIMBING LANE
25' W' +35 - 48' W' +50	LT./RT.	0.4	914	52.9	SHOULDERS
'WA' RAMP		0.1	352	20.4	INCLUDES TURNING LANE
'WA' RAMP	LT./RT.	---	56	3.2	SHOULDERS
'WB' RAMP		0.1	248	14.4	INCLUDES TURNING LANE
'WB' RAMP	LT./RT.	---	100	5.8	SHOULDERS
'WC' RAMP		0.1	145	8.4	INCLUDES TURNING LANE
'WC' RAMP	LT./RT.	---	40	2.3	SHOULDERS
'WD' RAMP		0.1	221	12.8	INCLUDES TURNING LANE
'WD' RAMP	LT./RT.	---	94	5.5	
CATEGORY 0020 TOTAL		2.0	5170	300.0	
PROJECT TOTAL		3.5	8945	520.0	

SALVAGED ASPHALTIC PAVEMENT

LOCATION	41011 S. Y.	REMARKS
CATEGORY 0020		
'WA' RAMP	676	**
'WB' RAMP	897	**
'WC' RAMP	448	**
'WD' RAMP	249	**
TOTAL		2270
** DOES NOT INCLUDE SHOULDERS		

ROUTED RI PRAP

STATION	LOCATION	60603 ROUTED RI PRAP C. Y.	64505 GEOTEXTILE FABRIC TYPE 'R' S. Y.
CATEGORY 0020			
30' W' +80	LT.	18	65
TOTAL		18	65

INTERCEPT DRAIN ITEMS

STATION	61201 PIPE UNDERDRAIN 6-INCH L. F.	61211 PIPE UNDERDRAIN UNPERFORATED 6-INCH L. F.	61254 REINFORCED CONC. APRON ENDWALLS FOR UNDERDRAIN 6-INCH L. F.	64503 GEOTEXTILE FABRIC TYPE DF S. Y.
CATEGORY 0020				
46' W' +22	48	10	1	27
TOTALS	48	10	1	27

STEEL PLATE BEAM GUARD, CLASS A

STATION - STATION	LOCATION	61407 STEEL THRIE BEAM STRUCTURE APPROACH L. F.	61408 STEEL PLATE BEAM GUARD CLASS A L. F.	61413 ANCHORAGES FOR S. P. B. G. TYPE 2 EACH	61435 S. P. B. G. ENERGY ABSORBING TERMI NAL EACH
CATEGORY 0020					
28' W' +17 - 100' WC' +05	RT.	---	150.0	1	1
30' W' +76 - 34' W' +88	RT.	---	312.5	---	2
36' W' +13 - 39' W' +51	RT.	---	237.5	---	2
39' W' +15 - 6' WA' +00	LT.	---	112.5	1	1
104' WB' +64 - 48' W' +56	RT.	---	800.0	---	1
6' WA' +43 - 48' W' +56	LT.	---	787.5	1	---
48' W' +56 - 48' W' +89	RT.	33	---	---	---
48' W' +56 - 48' W' +89	LT.	33	---	---	---
TOTALS		66	2400.0	3	7

**REMOVING PAVEMENT MARKING AND
TEMPORARY PAVEMENT MARKING**

CATEGORY 0020	64642 REMOVING PAVEMENT MARKING L.F.	64901 TEMPORARY PAVEMENT MARKING 4-INCH L.F.
	2100	36392
TOTAL	2100	36392

SEEDING AND FERTILIZER

STATION	LOCATION	62905 FERTILIZER TYPE B CWT.	63003 SEEDING, TEMPORARY LB.	63009 SEEDING MIXTURE NO. 20 LB.	REMARKS
CATEGORY 0010					
2' W' +29.5 - 11' W' +50	LT.	0.35	---	15.3	SHOULDERS
2' W' +29.5 - 11' W' +50	RT.	0.35	---	15.3	SHOULDERS
13' W' +00 - 25' W' +35	RT.	0.40	---	18.2	SHOULDERS
UNDISTRIBUTED		---	---	1.2	
CATEGORY 0010 TOTAL		1.10	0.0	50.0	
CATEGORY 0020					
28' W' +17	RT.	0.02	0.2	0.5	GRADING & SHAPING
30' W' +76	RT.	0.07	1.4	2.8	GRADING & SHAPING
34' W' +88	RT.	0.03	0.6	1.1	GRADING & SHAPING
36' W' +13	RT.	0.03	0.6	1.1	GRADING & SHAPING
39' W' +15	LT.	0.07	1.6	2.9	GRADING & SHAPING
41' W' +25	LT.	0.07	1.6	1.6	GRADING & SHAPING
25' W' +35 - 48' W' +90	RT.	0.80	---	34.5	SHOULDERS
41' W' +80 - 48' W' +90	LT.	0.28	---	11.7	SHOULDERS
' WA' RAMP		0.10	---	4.2	SHOULDERS
' WB' RAMP		0.10	---	4.5	SHOULDERS
' WC' RAMP		0.07	---	3.0	SHOULDERS
' WD' RAMP		0.10	---	4.3	SHOULDERS
UNDISTRIBUTED		0.66	4.0	27.8	
CATEGORY 0020 TOTAL		2.40	10.0	100.0	
PROJECT TOTAL		3.50	10.0	150.0	

TRAFFIC CONTROL

LOCATION	64313 DRUM DAYS	64318 TYPE III BARRICADE DAYS	64321 TYPE A WARNING LIGHT DAYS	64323 TYPE C WARNING LIGHT DAYS	64326 SIGN DAYS	64327 SIGNS FIXED MESSAGE S. F.	64343 DETOUR SIGNS DAYS	90005B FLEXIBLE TUBULAR & BASE EACH	90712 COVER SIGNS EACH
CATERGORY 0020									
PROJECT	3020	231	388	218	1032	267	1483	21	4
TOTALS	3020	231	388	218	1032	267	1483	21	4

STATE PROJECT NO: 1170-03-73

HWY: CTH 'WW'

COUNTY: MARATHON

MISCELLANEOUS QUANTITIES

SHEET NO:

3

EROSION CONTROL QUANTITIES

STATION	LOCATION	62702	62811	62812	62815	62816	62817	62822	62823	62880
		MULCHING S.Y.	EROSION BALES DELIVERED EACH	EROSION BALES INSTALLED EACH	SILT FENCE DELIVERED L.F.	SILT FENCE INSTALLED L.F.	SILT FENCE MAINTENANCE L.F.	EROSION MAT CLASS 1, TYPE A DELIVERED S.Y.	EROSION MAT CLASS 1, TYPE A INSTALLED S.Y.	CULVERT PIPE DITCH CHECK EACH
CATEGORY 0020										
13'W+05	RT.	---	---	---	---	---	---	---	---	1
28'W+17	RT.	17	---	---	---	---	---	---	---	---
30'W+76	RT.	105	---	---	60	60	60	---	---	---
34'W+88	RT.	42	---	---	---	---	---	---	---	---
36'W+13	RT.	42	---	---	---	---	---	---	---	---
39'W+15	LT.	109	---	---	---	---	---	---	---	---
41'W+50	LT.	115	---	---	140	140	140	80	80	---
9'B+61.5	LT.	---	---	---	---	---	---	---	---	1
6'WA+35	LT.	---	---	---	---	---	---	---	---	1
UNDISTRIBUTED		---	10	10	40	40	40	---	---	2
TOTALS		430	10	10	240	240	240	80	80	5

3

SAWING PAVEMENT

STATION	LOCATION	66501	66502
		SAWING EXISTING PAVEMENT L.F.	SAWING CONCRETE PAVEMENT FULL DEPTH L.F.
CATEGORY 0010			
2'W+29.50		24	---
8'A+80	N. 32ND AVE. RT.	32	---
11'A+00	N. 32ND AVE. LT.	22	---
9'B+00	N. 28TH AVE. RT.	31	---
TOTAL		109	0
CATEGORY 0020			
46'W+22	INTERCEPT DRAIN	---	80
46'W+50		---	35
48'W+50	RT. SHOULDER	6	---
8'WA+25	'WA' RAMP	25	---
102'WB+55	'WB' RAMP	25	---
98'WC+50	'WC' RAMP	25	---
101'WD+72	'WD' RAMP	25	---
TOTAL		106	115
PROJECT TOTAL		215	115

**PULVERIZE AND RELAY
EXISTING PAVED SHOULDER**

STATION - STATION	LOCATION	90037A PULVERIZE AND RELAY EXISTING PAVED SHOULDER STA.
CATEGORY 0020		
5' WA' +64 - 8' WA' +25	'WA' RAMP LT.	2.6
6' WA' +42 - 8' WA' +25	'WA' RAMP RT.	1.8
102' WB' +55 - 105' WB' +25	'WB' RAMP LT.	2.7
102' WB' +55 - 105' WB' +25	'WB' RAMP RT.	2.8
98' WC' +50 - 100' WB' +35	'WC' RAMP LT.	1.9
98' WC' +50 - 100' WB' +35	'WC' RAMP RT.	1.9
98' WD' +60 - 101' WD' +72	'WD' RAMP LT.	3.2
98' WD' +60 - 101' WD' +72	'WD' RAMP RT.	3.3
46' W' +75 - 48' W' +50	RT. SHOULDER	1.8
TOTAL		22.0

RUBBLIZING EXISTING CONCRETE PAVEMENT

STATION - STATION	LOCATION	90405 RUBBLIZING EXISTING CONCRETE PAVEMENT S. Y.
CATEGORY 0010		
4' W' +79.50 - 25' W' +35	MAINLINE	5455
4' W' +79.50 - 25' W' +35	CLIMBING LANE	2460
TOTAL		7915
CATEGORY 0020		
25' W' +35 - 46' W' +50	MAINLINE	5666
25' W' +35 - 46' W' +50	CLIMBING LANE	2833
39' W' +40 - 45' W' +00	TURNING LANE, 'WA'	550
40' W' +10 - 42' W' +00	TURNING LANE, 'WB'	173
25' W' +35 - 30' W' +40	TURNING LANE, 'WC'	510
29' W' +65 - 30' W' +55	TURNING LANE, 'WD'	187
'WA' RAMP		676
'WB' RAMP		897
'WC' RAMP		448
'WD' RAMP		785
TOTAL		12725
PROJECT TOTAL		20640

STATE PROJECT NO: 1170-03-73

HWY: CTH 'WW'

COUNTY: MARATHON

MISCELLANEOUS QUANTITIES

SHEET NO:

E

**GRADING, SHAPING AND TOPSOILING
FOR INTERSECTIONS**

STATION-STATION	LOCATION	90004A,B GRADING, SHAPING AND TOPSOILING FOR INTERSECTIONS RAMPS, 'WA' & 'WC' EACH	TOPSOIL S. Y.
CATEGORY 0020			
7'WA'+48 - 41'WA'+65	'WA' RAMP RT.	1	130
	TOTAL	<u>1</u>	
31'WC'+30 - 99'WC'+88	'WC' RAMP RT	1	110
	TOTAL	<u>1</u>	

* FOR INFORMATION ONLY. PAVEMENT IS INCLUDED IN THE ITEM:
GRADING, SHAPING, AND TOPSOILING FOR INTERSECTIONS.

SEE EARTHWORK TABLE FOR ESTIMATED GRADING QUANTITIES.

**GRADING, SHAPING AND TOPSOILING
FOR BEAM GUARD ANCHORAGES**

STATION	LOCATION	90005A GRADING, SHAPING AND TOPSOILING FOR BEAM GUARD ANCHORAGES EACH	* TOPSOIL S. Y.
CATEGORY 0020			
28'W'+17	RT.	1	40
30'W'+76	RT.	1	---
34'W'+88	RT.	1	75
36'W'+13	RT.	1	75
39'W'+15	LT.	1	110
39'W'+51	RT.	1	---
104'WB'+64	RT.	1	---
	TOTAL	<u>7</u>	

* FOR INFORMATION ONLY. PAVEMENT IS INCLUDED IN THE ITEM:
GRADING, SHAPING, AND TOPSOILING FOR BEAN GUARD ANCHORS.

SEE EARTHWORK TABLE FOR ESTIMATED GRADING QUANTITIES.

3

ABANDONING CATTLE PASS

STATION	LOCATION	90005C ABANDONING CATTLE PASS EACH	90005D LOCATING CATTLE PASS EACH	REMARKS
CATEGORY 0020				
30' W' +70	RT. /LT.	1	1	*
	TOTAL	<u>1</u>	<u>1</u>	

* -STATION LOCATION IS APPROXIMATE.
-APPROXIMATE DEPTH TO TOP OF CATTLE PASS = 3'
FROM EXISTING SHOULDERS.
-ESTIMATED QUANTITY OF CONTROLLED LOW STRENGTH
BACKFILL IS 75 C. Y.

**REMOVING SIGNS &
SMALL SIGN SUPPORTS**

STATION	LOCATION	63827 TYPE II EACH	63830 SUPPORT EACH	REMARKS
CATEGORY 0020				
8' W' +00	RIGHT	2	1	REDUCED SPEED AHEAD, 45 MPH
12' W' +50	RIGHT	1	1	STOP
12' W' +50	RIGHT	1	1	DOUBLE DOWN ARROWS
12' W' +50	RIGHT	1	1	KEEP RIGHT
13' W' +00	RIGHT	1	1	STOP
15' W' +00	RIGHT	1	1	45 MPH
17' W' +00	RIGHT	3	1	HILL 35 MPH
19' W' +00	RIGHT	2	1	JCT 51
24' W' +50	RIGHT	1	2	MERRILL/WAUSAU
29' W' +80	LEFT	1	1	DO NOT ENTER
29' W' +80	LEFT	1	1	STOP
29' W' +80	LEFT	1	1	DO NOT ENTER
30' W' +10	LEFT	1	1	DOUBLE DOWN ARROWS
30' W' +15	LEFT	1	1	DO NOT ENTER
30' W' +15	LEFT	1	1	STOP
30' W' +15	LEFT	2	---	ONE WAY
30' W' +80	LEFT	1	1	STOP
30' W' +80	LEFT	3	1	NORTH 51 ARROW
30' W' +80	LEFT	1	---	NO LEFT TURN
30' W' +85	LEFT	1	1	NO RIGHT TURN
29' W' +60	RIGHT	3	1	SOUTH 51 AROW
29' W' +60	RIGHT	3	1	SOUTH 51 AROW
29' W' +60	RIGHT	1	---	NO LEFT TURN
33' W' +00	RIGHT	3	1	NORTH 51 ARROW
36' W' +00	RIGHT	1	2	MERRILL ARROW
38' W' +00	LEFT	3	1	SOUTH 51 AROW
39' W' +80	RIGHT	3	1	NORTH 51 ARROW
39' W' +80	RIGHT	1	1	NO RIGHT TURN
39' W' +80	RIGHT	1	---	NO LEFT TURN
40' W' +00	RIGHT	1	1	STOP
40' W' +00	RIGHT	1	1	DO NOT ENTER
40' W' +30	RIGHT	1	1	STOP
40' W' +30	RIGHT	1	1	DO NOT ENTER
40' W' +30	RIGHT	1	1	DOUBLE DOWN ARROWS
40' W' +30	RIGHT	2	---	ONE WAY
40' W' +80	RIGHT	1	1	STOP
40' W' +80	RIGHT	1	1	DO NOT ENTER
41' W' +80	LEFT	3	1	NORTH 51 ARROW
41' W' +80	LEFT	1	1	NO LEFT TURN
43' W' +00	RIGHT	2	1	EAST COUNTY ' WW'
43' W' +50	LEFT	1	2	WAUSAU/MERRILL
47' W' +00	RIGHT	2	1	RIGHT TURN 25 MPH
47' W' +00	LEFT	2	1	RIGHT TURN 25 MPH
48' W' +00	LEFT	1	1	SLOWER TRAFFIC KEEP RIGHT
48' W' +80	LEFT	1	1	CLEARANCE STRIPER
48' W' +80	RIGHT	1	1	CLEARANCE STRIPER
48' W' +80	RIGHT	1	1	WISCONSIN RIVER
TOTAL		70	45	

**PAVEMENT MARKING, EPOXY
& RAISED PAVEMENT MARKERS**

STATION -	STATION	LOCATION	64602 4-1 INCH EDGE LINE L.F.	64602 NO PASSING DOUBLE YELLOW L.F.	64618 CHANNELIZING 8-INCH WHITE L.F.	64742 ARROWS TYPE 4 EACH	64635 RAISED MARKERS TWO-WAY EACH	90778 OUTFALL MARKERS EACH
CATEGORY 0010	2' W' +29.50-25' W' +35		4368	4612	---	---	---	---
	32ND. AVE		---	---	30	---	---	---
	8' W' +00-25' W' +35	CLIMBING LN	434	---	---	---	---	---
CATEGORY 0010 TOTAL			4802	4612	30	0	0	0
CATEGORY 0020	25' W' +35-48' W' +50		3635	4129	---	---	---	---
	25' W' +35-46' W' +82	CLIMBING LN.	536	---	---	---	---	---
	' WA' RAMP		546	---	---	---	---	---
	' WB RAMP		563	---	46	---	---	---
	' WC' RAMP		417	---	---	---	---	---
	' WD' RAMP		658	---	48	1	8	---
	27' W' +50-29' W' +65	RT. TURN LN	---	---	215	---	---	---
	41' W' +50-43' W' +05	RT. TURN LN	---	---	155	---	---	---
	46' W' +37		---	---	---	---	---	1
CATEGORY 0020 TOTAL			6355	4129	464	1	8	1
GRAND TOTAL			11157	8741	494	1	8	1

STATE PROJECT NO:

HWY:

COUNTY:

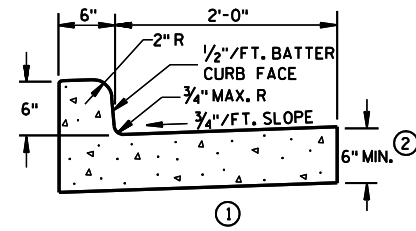
MISCELLANEOUS QUANTITIES

SHEET NO:

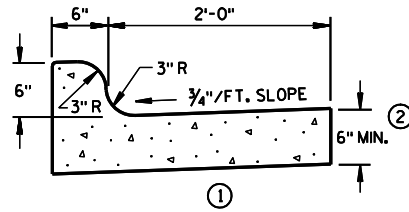
E

Standard Detail Drawing List

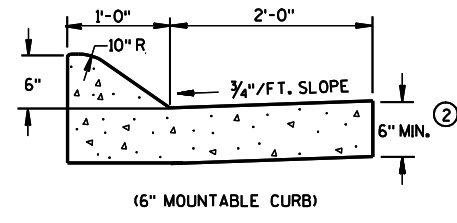
08D1-13	CONCRETE CURB, CONCRETE CURB AND GUTTER & PAVEMENT TIES
08D15-3A	EDGEDRAIN OUTLET AND OUTFALL MARKERS
08E8-3	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E9-5	SILT FENCE
08F6-4	REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN
09A1-11B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A"
14B15-4A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-4B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B16-3A	CLASS "A" STEEL PLATE BEAM GUARD END TREATMENT WITH ANCHORAGE, TYPE 2
14B16-3B	CLASS "A" STEEL PLATE BEAM GUARD END TREATMENT WITH ANCHORAGE, TYPE 2
14B18-4A	STEEL PLATE BEAM GUARD, CLASS "A" (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS)
14B20-5A	STEEL THRIE BEAM STRUCTURE APPROACH
14B20-5B	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END AND VERTICAL FACED PARAPETS
14B24-3A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-3B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-3C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
15C2-3	BARRICADES AND SIGNS FOR ROAD CLOSURES
15C7-5A	PAVEMENT MARKING SYMBOLS
15C8-9A	PAVEMENT MARKING (MAINLINE)
15C8-9B	PAVEMENT MARKING (INTERSECTIONS)
15C8-9C	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C8-10E	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15C10-6B	RAISED PAVEMENT MARKERS (RAMPS & ARROWS)
15C10-6D	TWO WAY RAISED PAVEMENT MARKERS (CASTING & SAWCUT DETAILS)
15C11-5	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15C12-2	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)



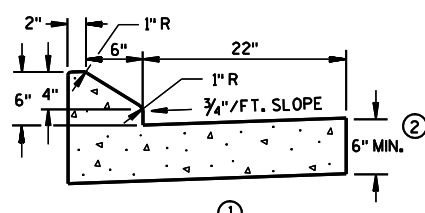
TYPES A & D



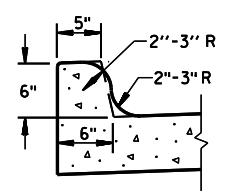
TYPES K & L



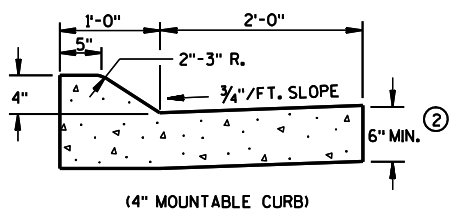
(6" MOUNTABLE CURB)



TYPES G & J



OPTIONAL CURB SHAPE FOR TYPES K & L



(4" MOUNTABLE CURB)

TYPES A & D
CONCRETE CURB & GUTTER 36"

CONCRETE CURB & GUTTER 30"

GENERAL NOTES

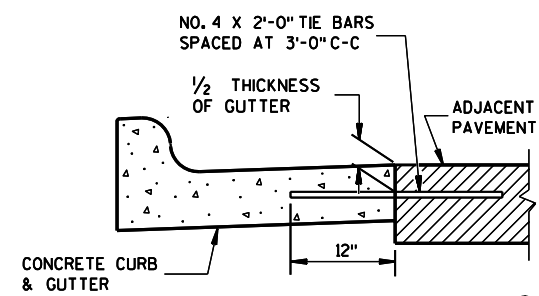
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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

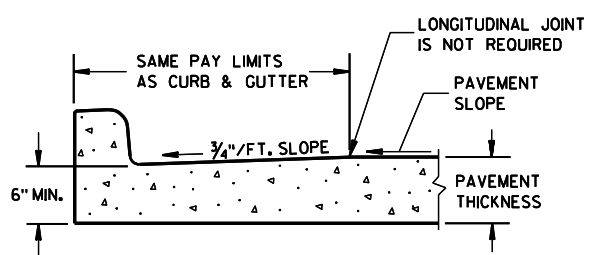
INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

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

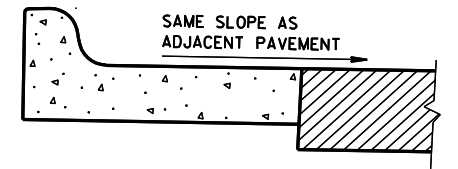
- UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G AND K.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



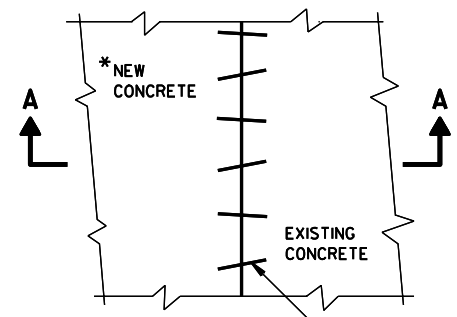
TYPICAL TIE BAR LOCATION



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER

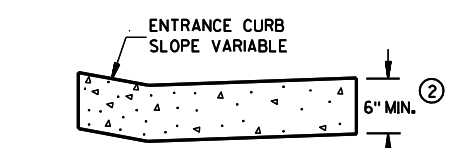


REVERSE SLOPE GUTTER (TYPICAL FOR ALL CURB & GUTTER TYPES)

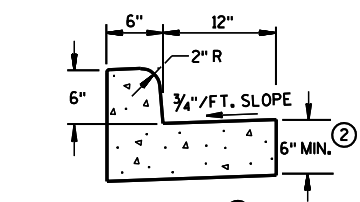


PLAN VIEW

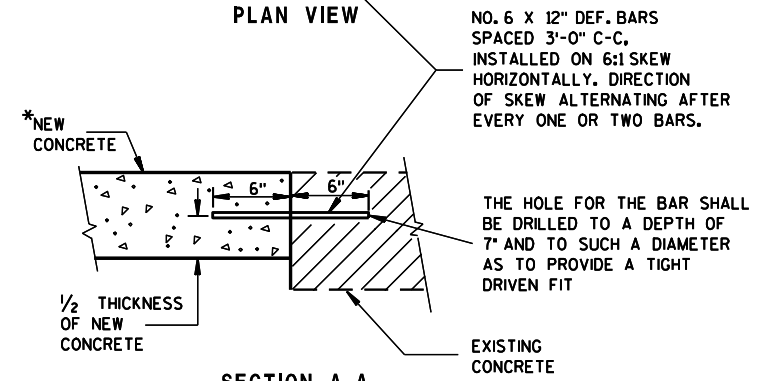
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.



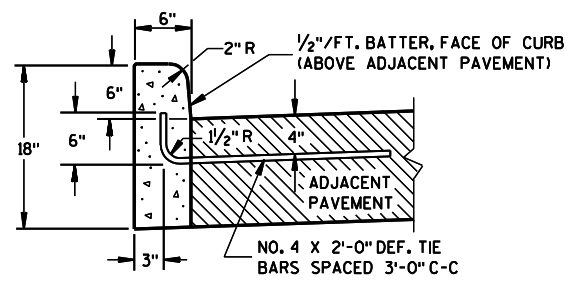
DRIVEWAY ENTRANCE CURB (WHEN DIRECTED BY THE ENGINEER)



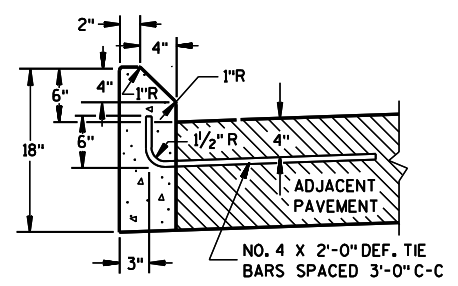
TYPES A & D
CONCRETE CURB & GUTTER 18"



SECTION A-A
PAVEMENT TIES



TYPES A & D



TYPES G & J

CONCRETE CURB

CONCRETE CURB, CONCRETE CURB & GUTTER AND PAVEMENT TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/16/99
DATE

[Signature]
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

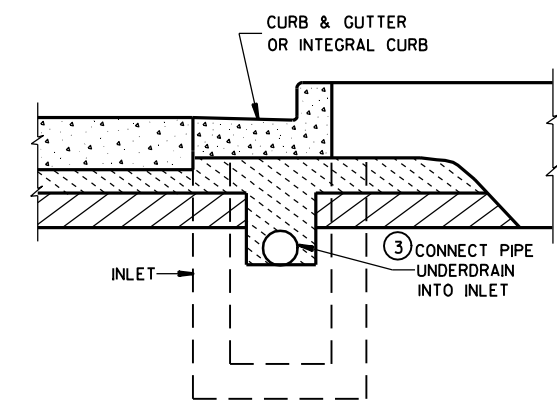
S.D.D. 8 D 1-13

S.D.D. 8 D 1-13

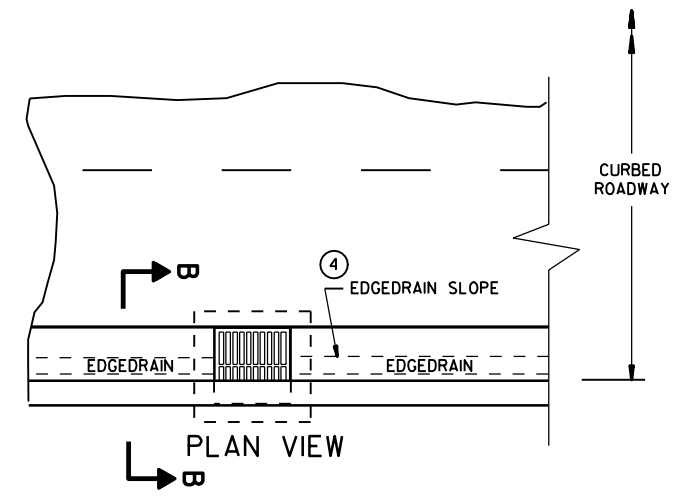
GENERAL NOTES

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.

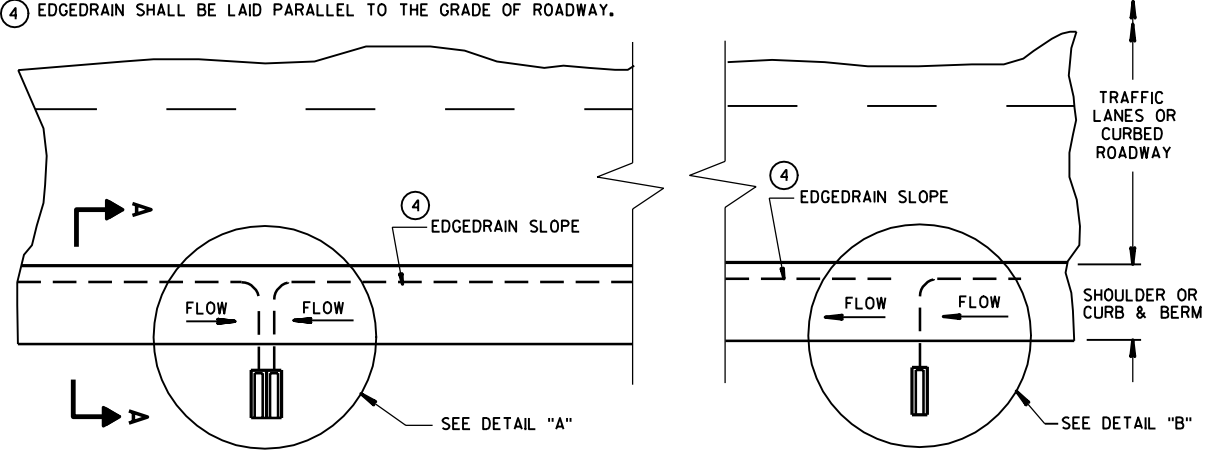
- ① UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:
 POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.
 TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.
- ② MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 250 FEET UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.
- ③ EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.
- ④ EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



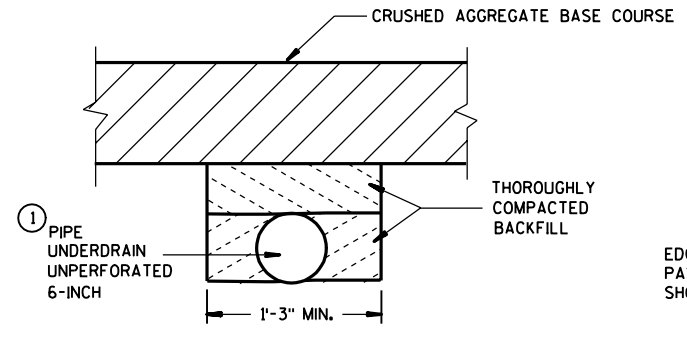
SECTION B-B
URBAN CROSS SECTION



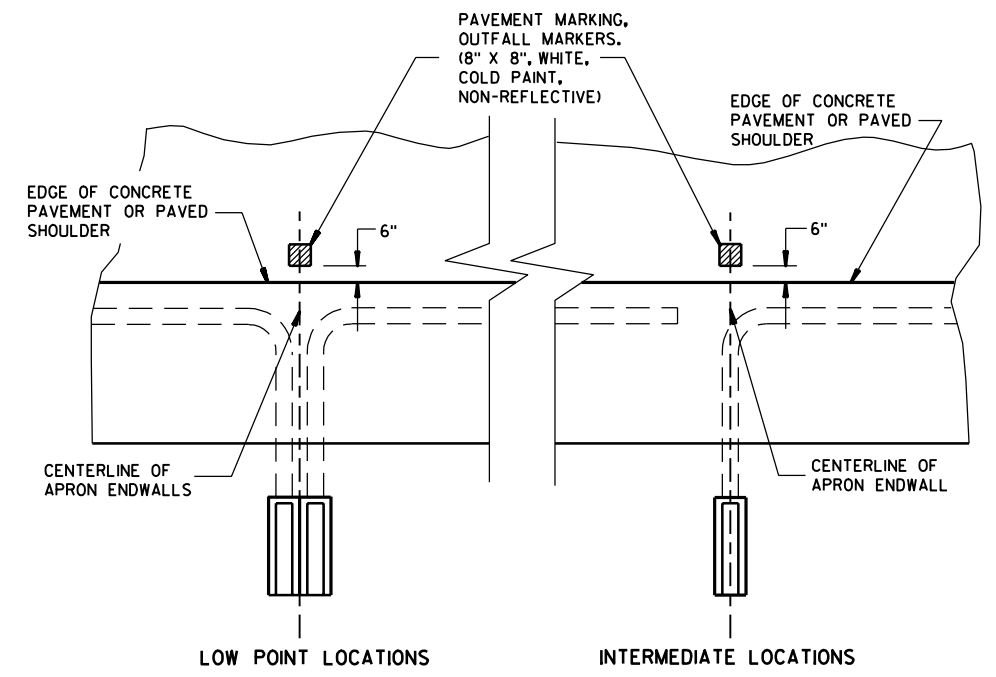
ROADWAY WITH CURBS
(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)



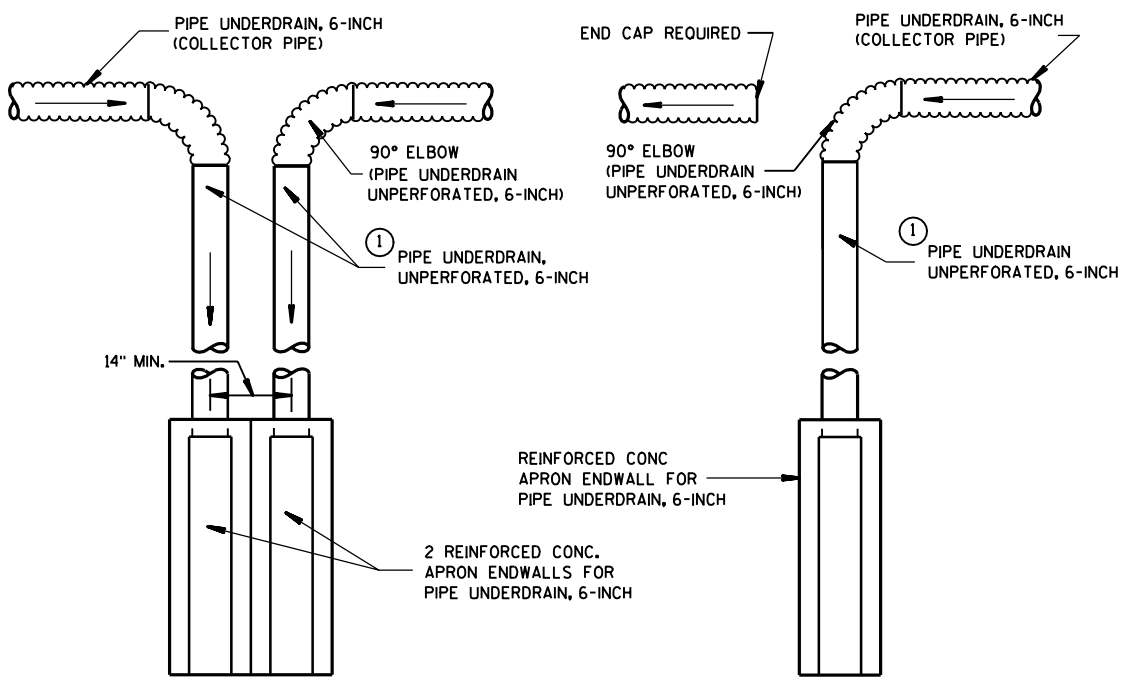
PLAN VIEW
ROADWAY WITH SHOULDERS OR CURBS
(EDGEDRAIN OUTLETS TO ROADSIDE) ②



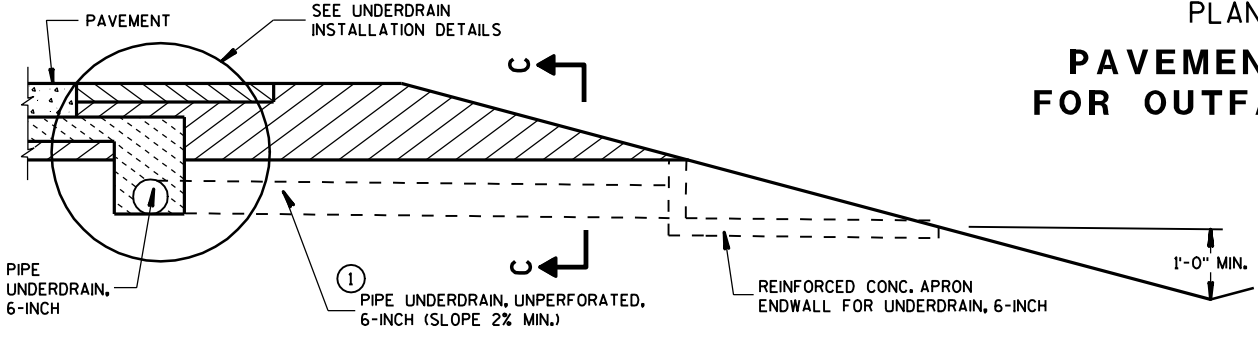
SECTION C-C
(TRENCH FOR OUTFALL PIPE)



PAVEMENT MARKING
FOR OUTFALL MARKERS



TYPICAL DRAIN OUT DETAILS



SECTION A-A
RURAL CROSS SECTION

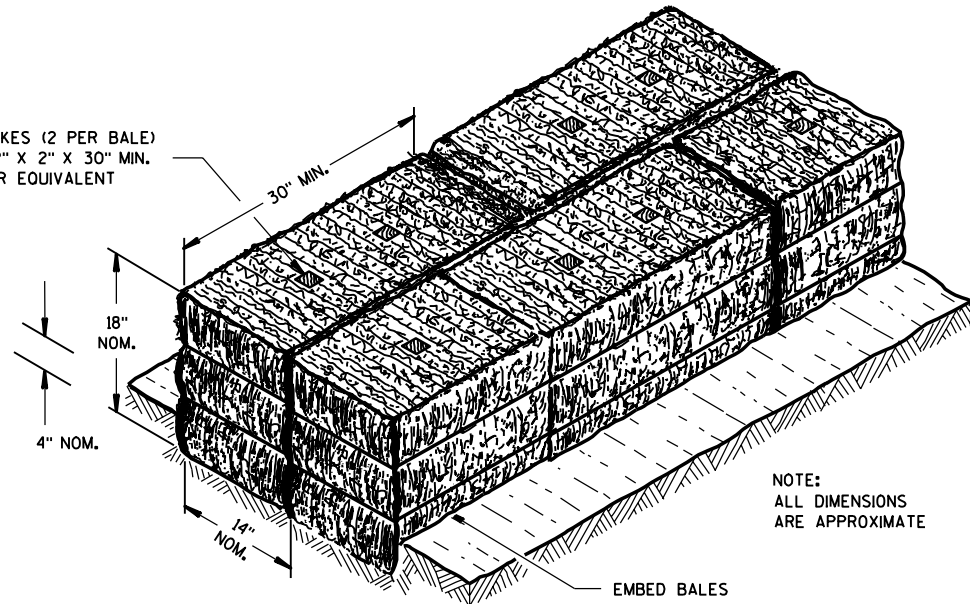
EDGEDRAIN OUTLET
AND OUTFALL MARKERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

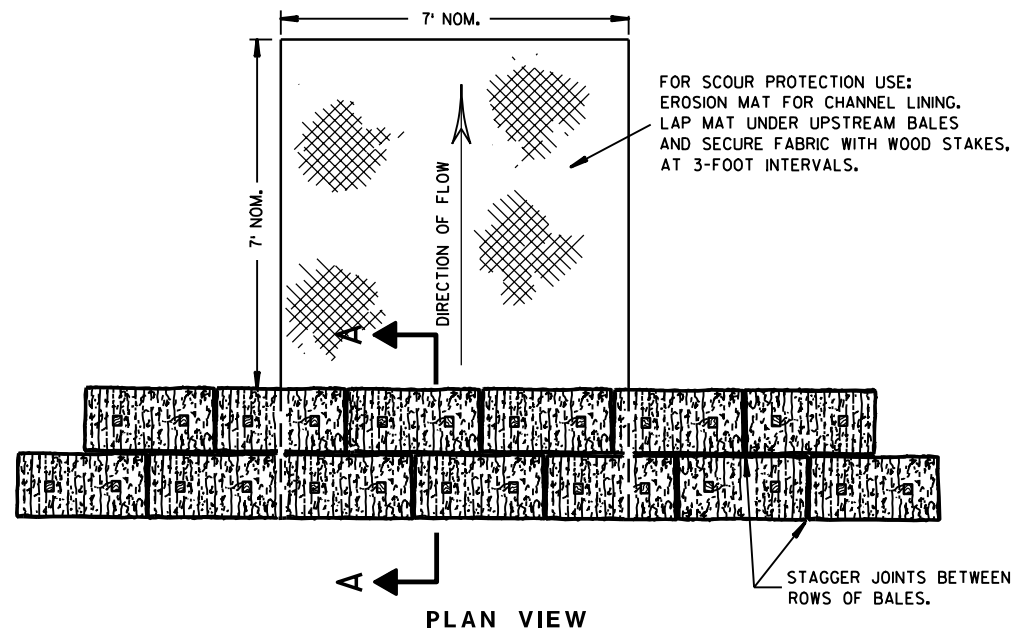
S.D.D. 8 D 15-30

S.D.D. 8 D 15-30

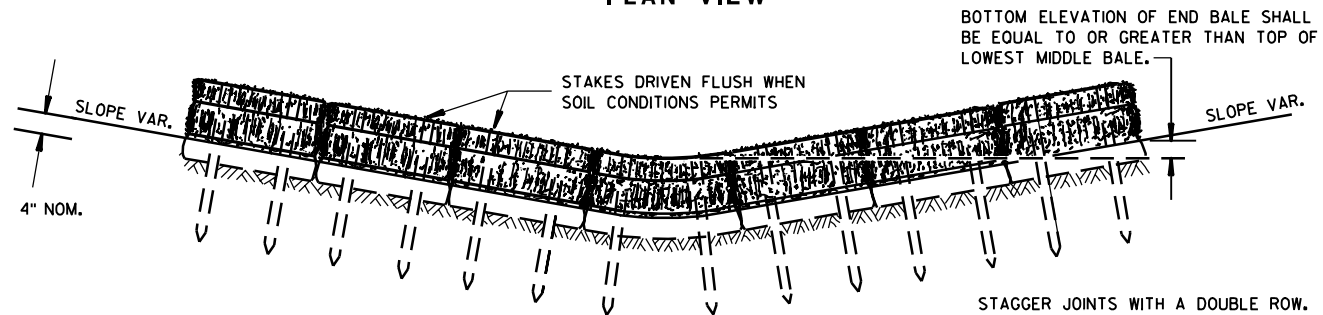
WOOD STAKES (2 PER BALE)
NOMINAL 2" X 2" X 30" MIN.
LENGTH OR EQUIVALENT



SECTION A-A



PLAN VIEW



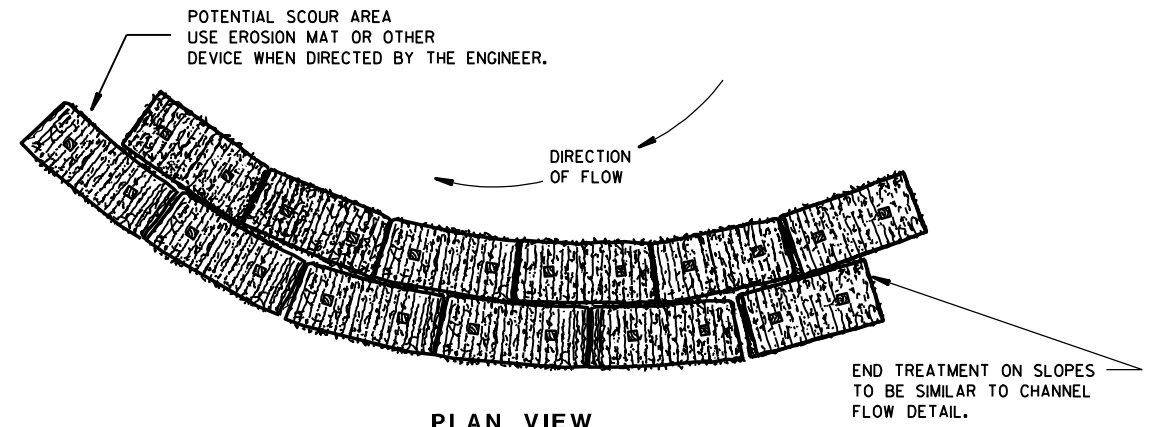
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

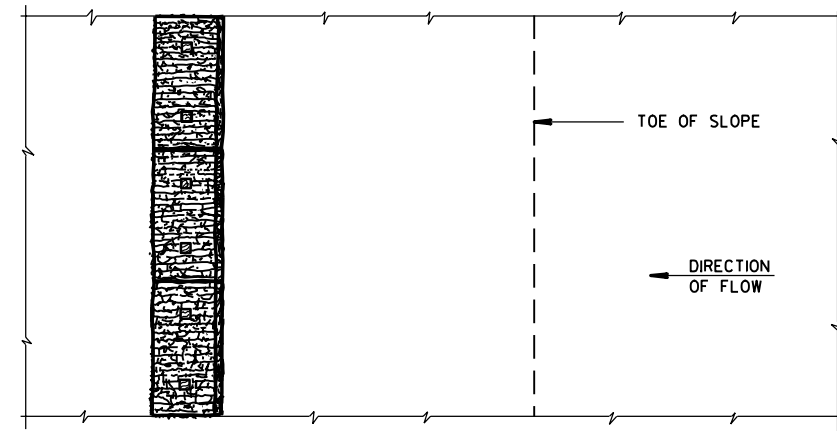
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

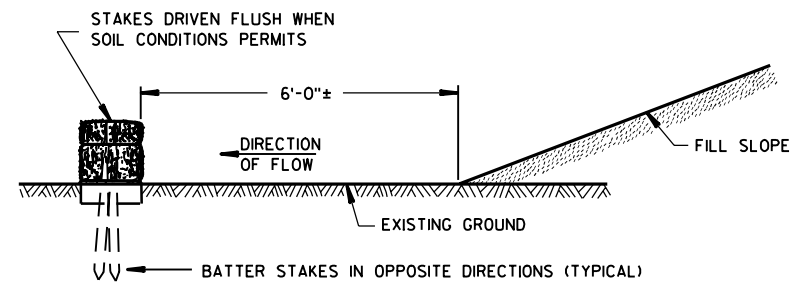


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

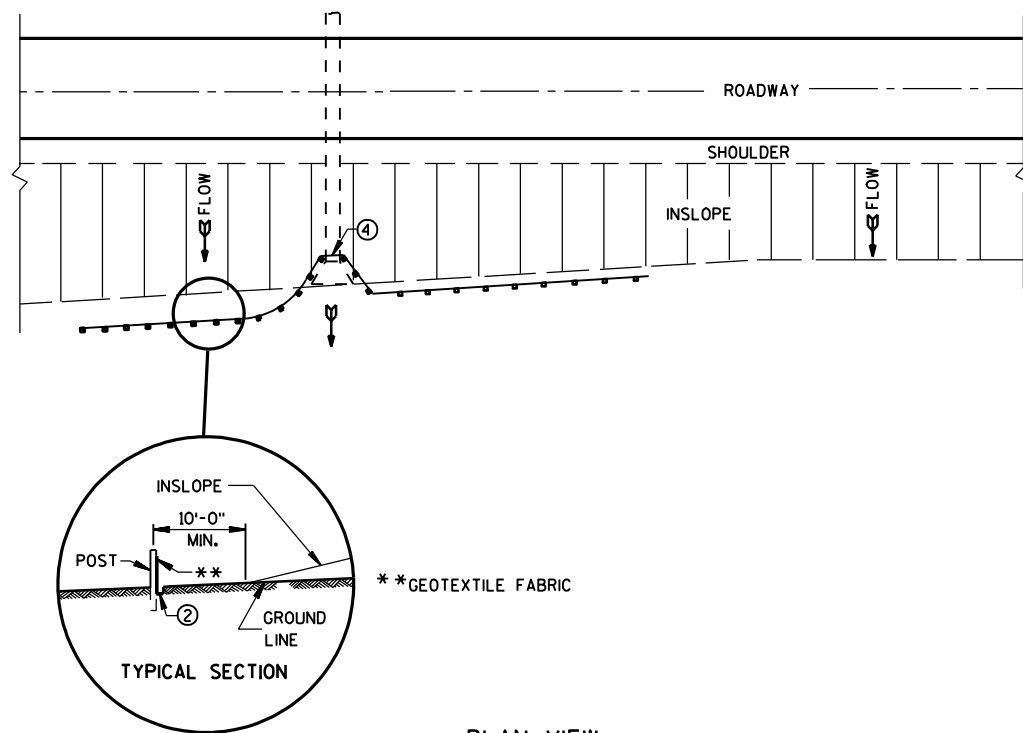
EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

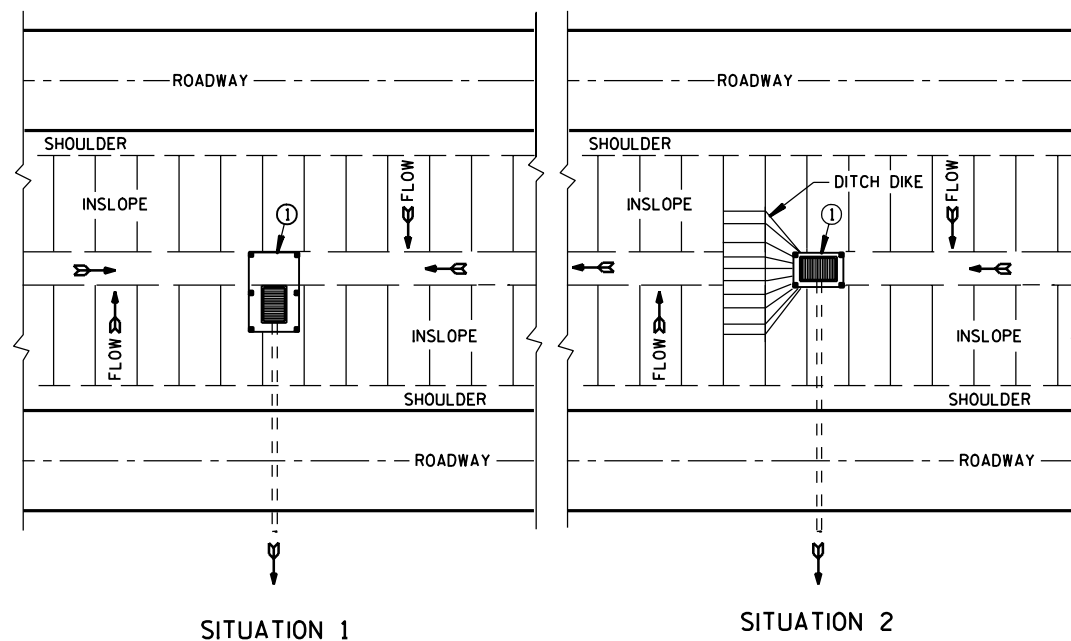
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/04/02
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE

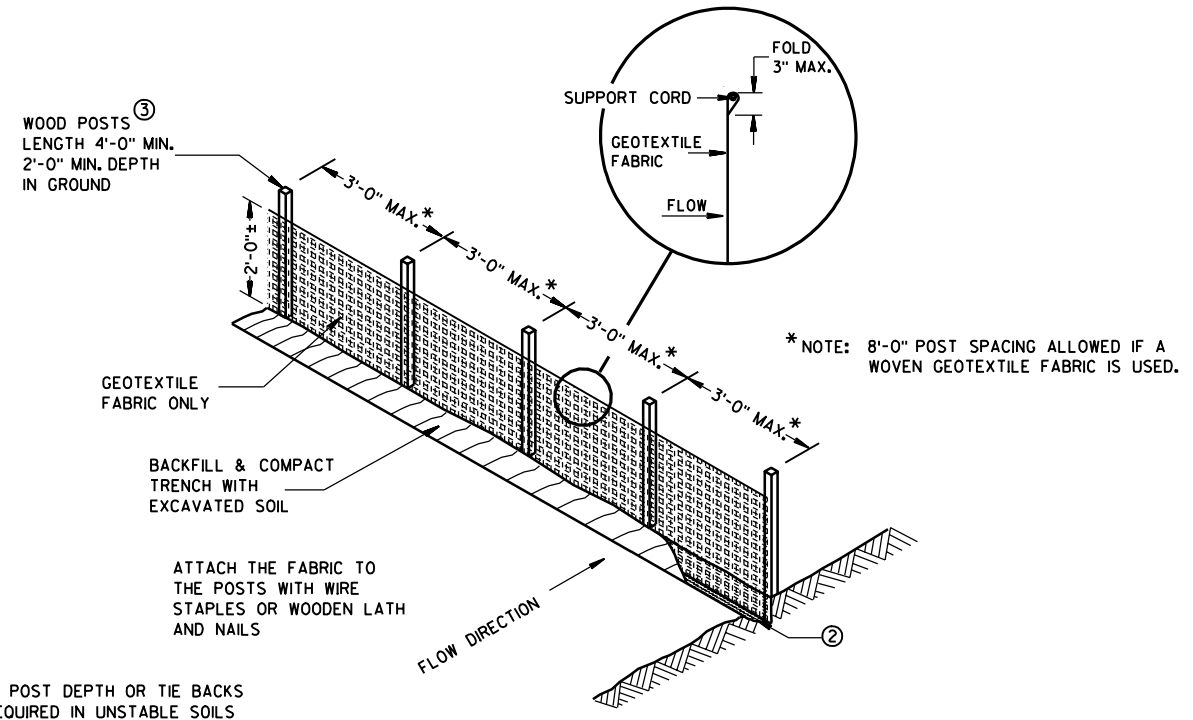


PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

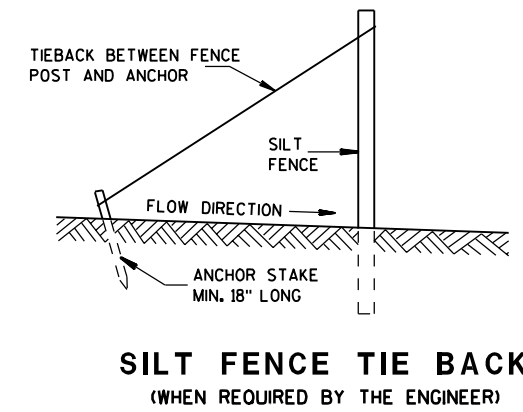
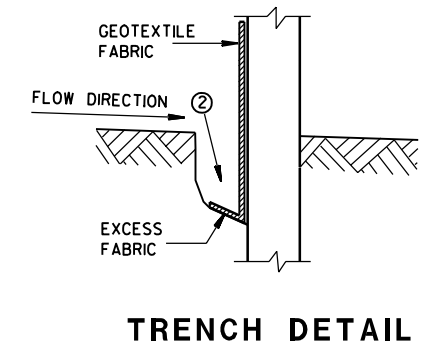
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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



SILT FENCE

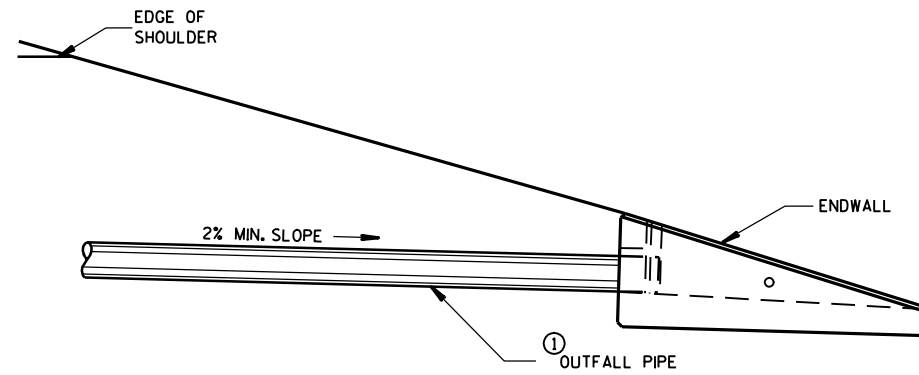
NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS



SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3/6/00 DATE	 CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	Z
**4	6	12	5 1/4	9	8	32	36	11	2 3/8	6 1/2	4
6	8	14	7 1/4	11	10	42	44	13	3 5/8	8 1/2	6

** APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION DETAIL

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.

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

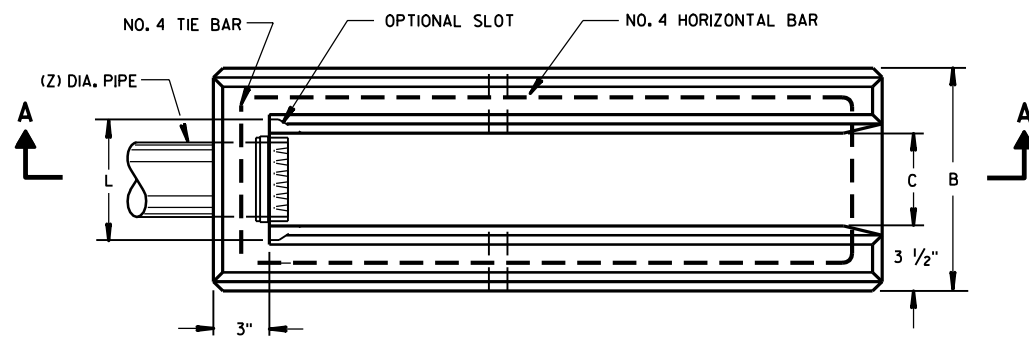
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

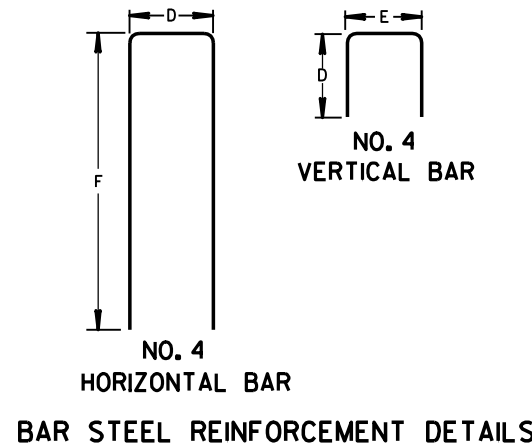
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

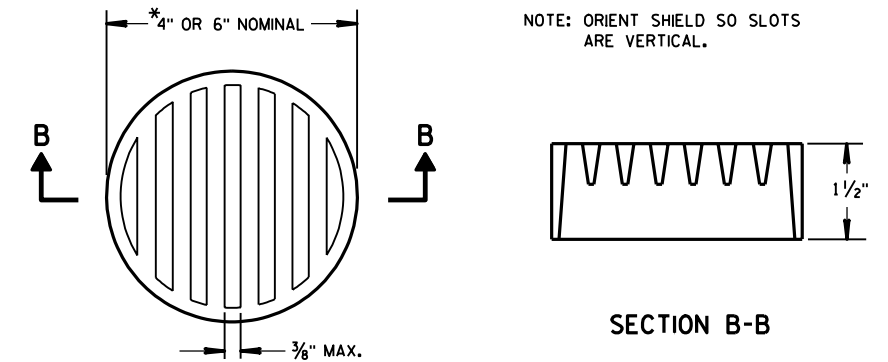
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



PLAN VIEW

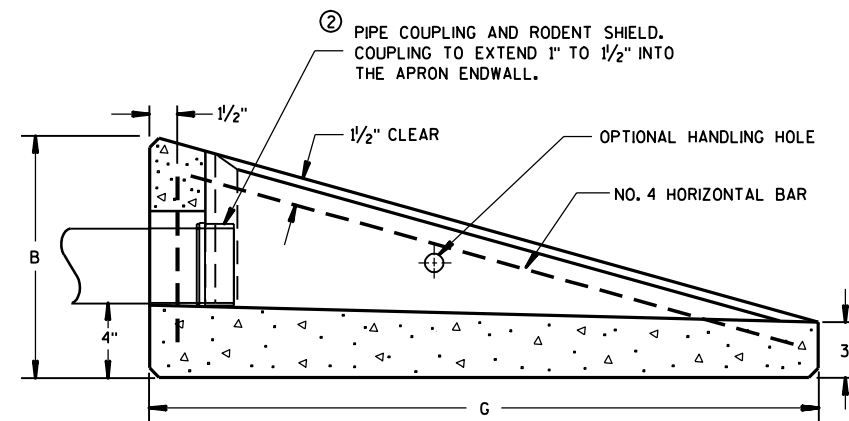


BAR STEEL REINFORCEMENT DETAILS

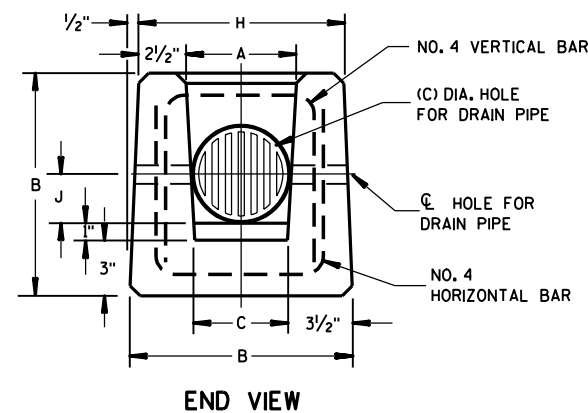


② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.



SECTION A-A
CONCRETE APRON ENDWALL FOR UNDERDRAIN



END VIEW

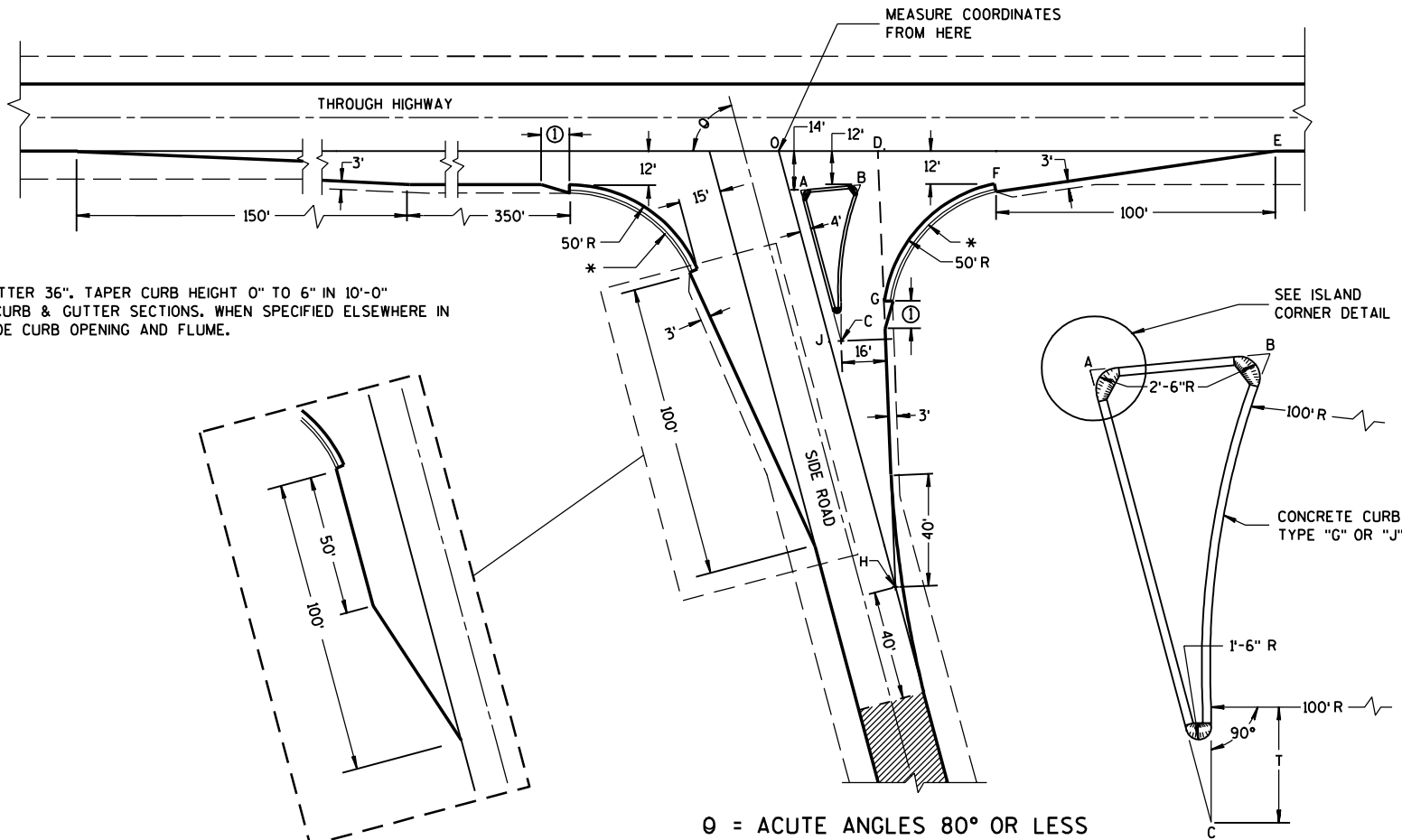
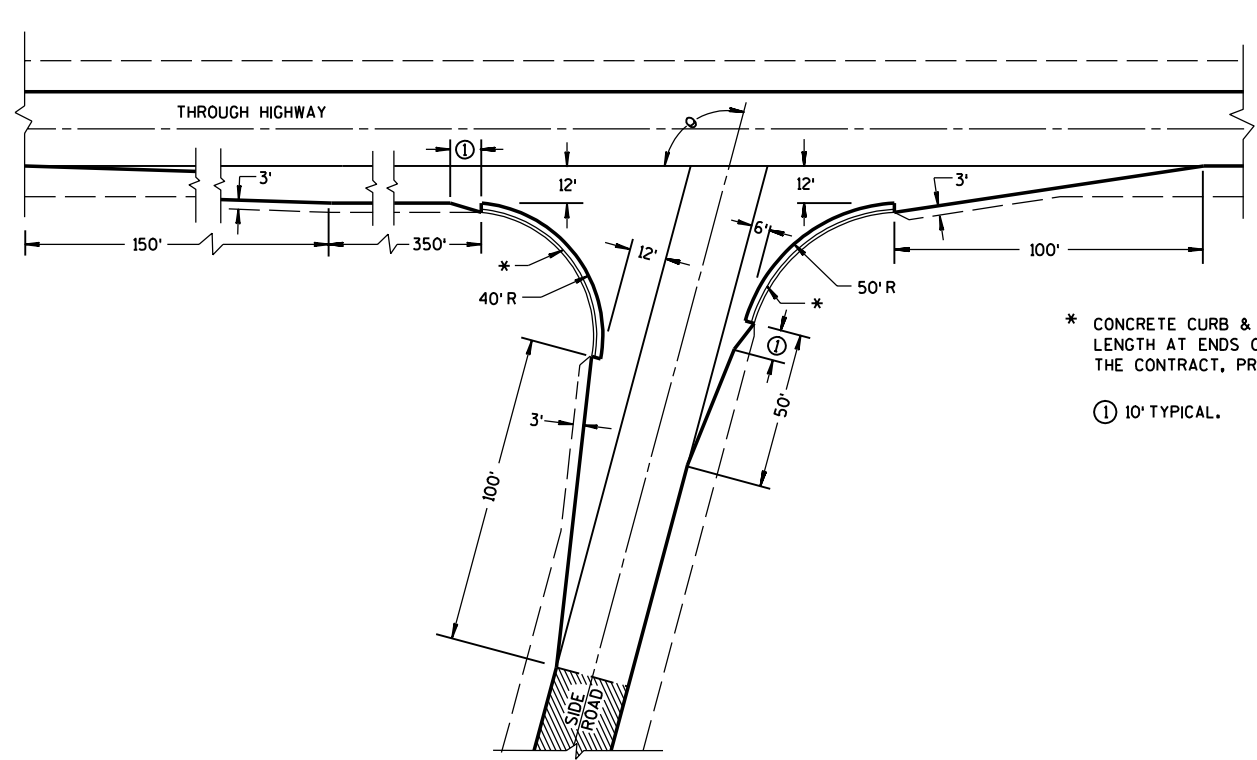
**REINFORCED
CONCRETE APRON ENDWALL
FOR PIPE UNDERDRAIN**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/10/98
DATE

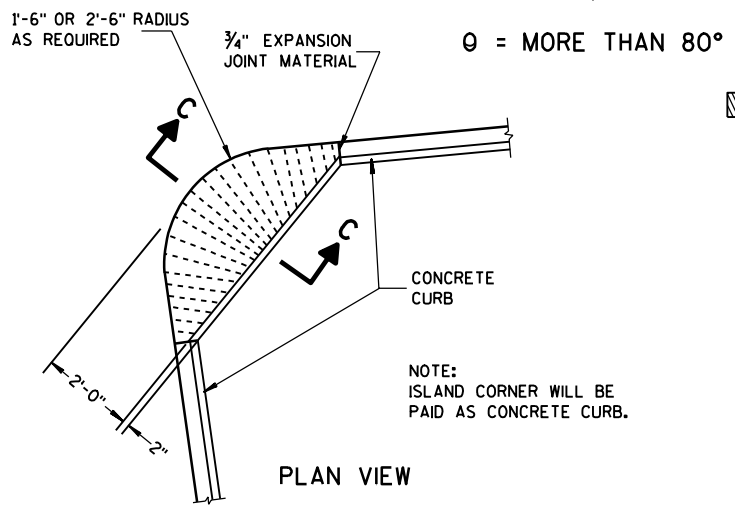
[Signature]
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



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

⑩ 10' TYPICAL.

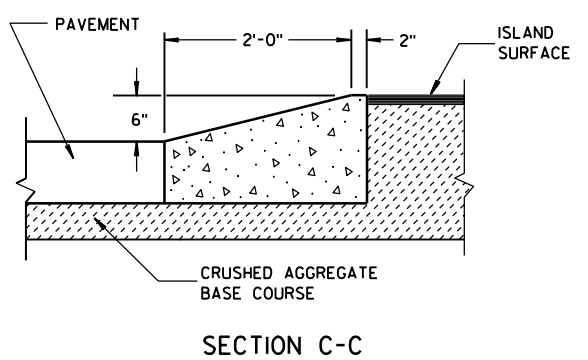


EXISTING SURFACE

SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
 $\theta =$ ACUTE ANGLES 70° OR LESS

TABLE OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES
 (INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O")								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7	44.9	46.4	41.9	205.0	104.6	64.0	85.0	32.3	67.4	4.9	85.9	169.9
	-14.0	-12.0	-72.4	0.0	0.0	-12.0	-75.5	-147.1					
65	10.9	39.0	37.8	39.4	196.1	95.7	54.1	70.5	28.2	63.6	8.5	80.9	166.9
	-14.0	-12.0	-71.6	0.0	0.0	-12.0	-71.5	-151.3					
70	9.4	33.9	29.8	37.4	188.3	87.8	45.6	56.1	24.6	59.7	11.5	76.1	164.1
	-14.0	-12.0	-70.1	0.0	0.0	-12.0	-67.5	-154.2					
75	7.9	29.3	22.3	35.7	181.2	80.7	38.2	41.8	21.5	55.8	13.8	71.4	161.4
	-14.0	-12.0	-67.9	0.0	0.0	-12.0	-63.4	-155.9					
80	6.5	25.4	15.6	34.4	174.8	74.4	31.8	27.6	18.9	52.0	15.6	66.9	158.9
	-14.0	-12.0	-65.2	0.0	0.0	-12.0	-59.3	-156.5					



SECTION C-C

ISLAND CORNER DETAIL
 (TO BE CONSTRUCTED AT ALL ISLAND CORNERS)

TYPE "A" SIDE ROAD INTERSECTION DETAILS

AT-GRADE SIDE ROAD INTERSECTION, TYPE "A"

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED
 4/3/98
 DATE

[Signature]
 CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

S.D.D. 9 A 1-11b

S.D.D. 9 A 1-11b

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.

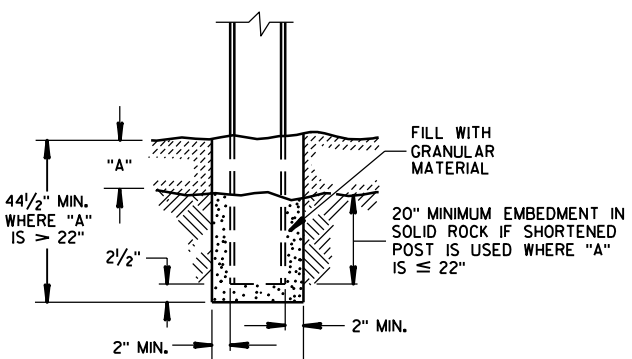
- ① W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.
- ② USE STRUCTURAL STEEL POSTS CONFORMING TO AASHTO M183. GALVANIZE ACCORDING TO AASHTO M 11L EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.
- ③ INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ④ USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.
- ⑤ WHEN SPECIFIED IN THE PLANS, THE 2-FOOT MINIMUM TO HINGE POINT MAY BE REDUCED OR ELIMINATED IF EXISTING CONDITIONS DO NOT PERMIT THE DESIRABLE EARTHWORK.

INCREASE POST LENGTH TO PROVIDE A MINIMUM EMBEDMENT OF 3'-6" IF THE SHOULDER HINGE POINT IS LOCATED IN FRONT OF THE POST.

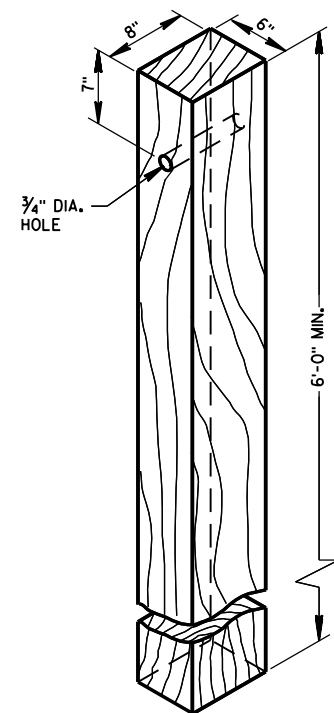
- ⑥ IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2 INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN THE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATELY.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.

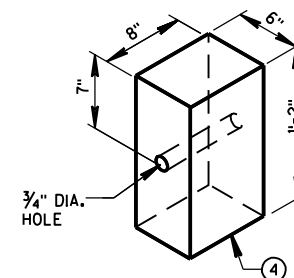
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



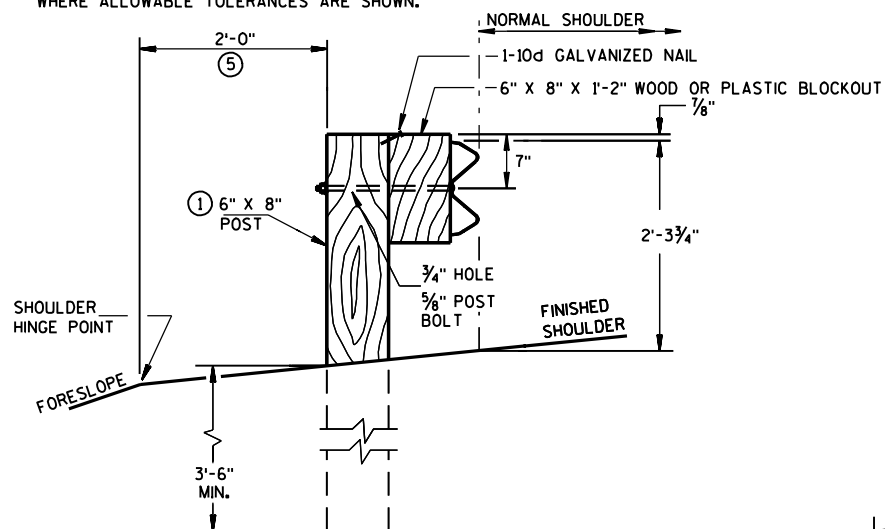
END VIEW SETTING STEEL OR WOOD POST IN ROCK ⑥



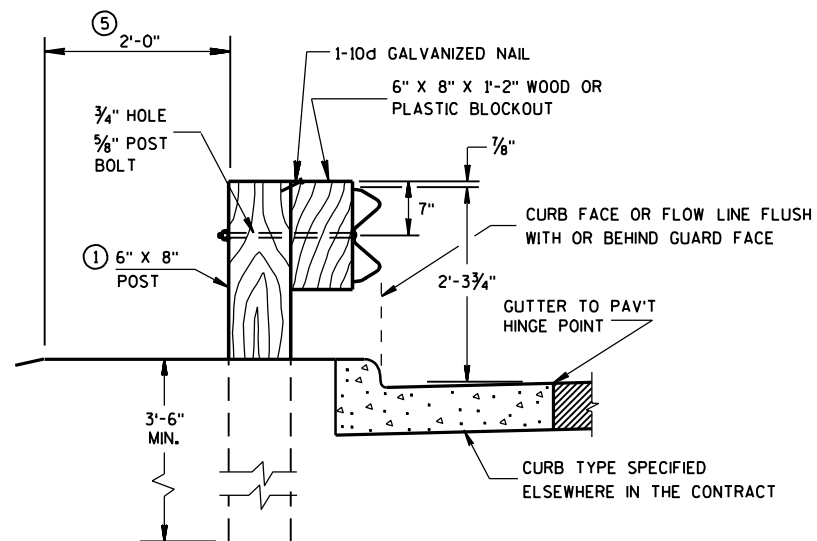
WOOD POST (6" X 8") NOMINAL



WOOD OR PLASTIC BLOCKOUT FOR WOOD POSTS

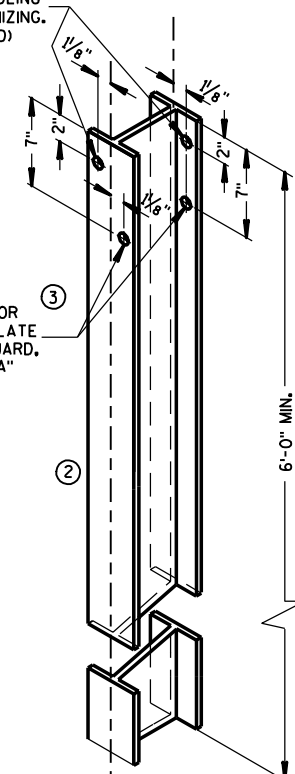


END VIEW LOCATED ALONG A ROADWAY SHOULDER



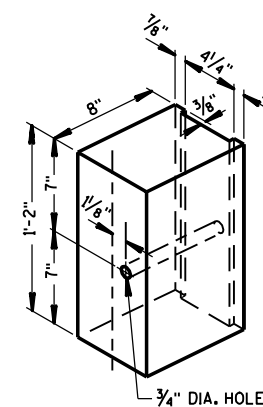
END VIEW LOCATED ALONG A CURBED ROADWAY

OPTIONAL 1 3/8" DIA. HOLE FOR HANDLING DURING GALVANIZING. (ONE PERMITTED)

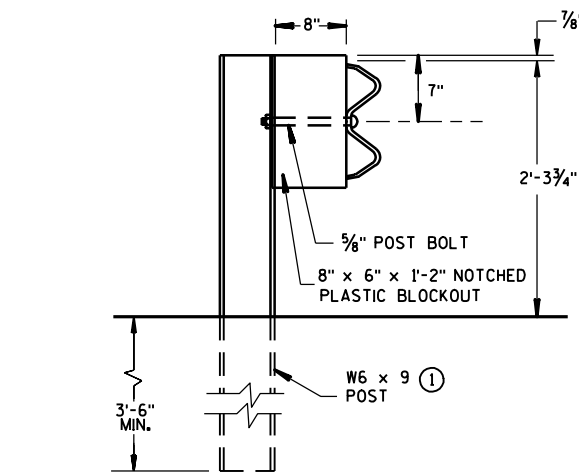


STEEL POST & HOLE PUNCHING DETAIL (W6 X 9) ①

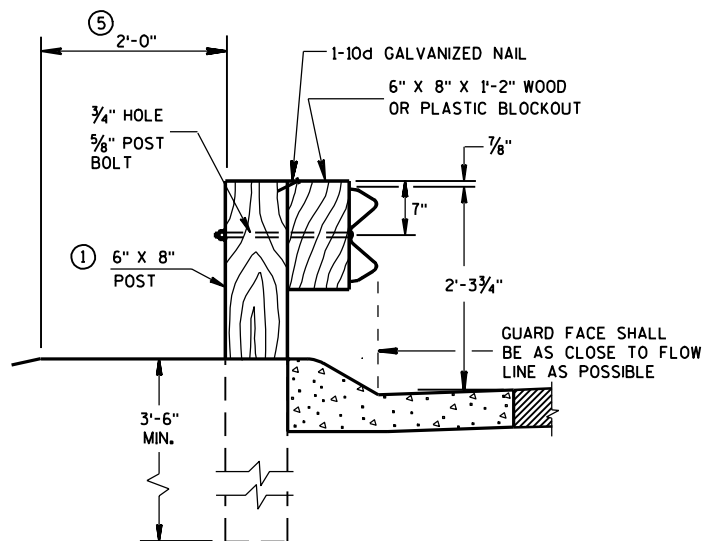
ALL HOLES 1/8" DIAMETER EXCEPT AS NOTED



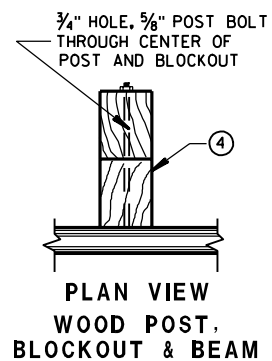
NOTCHED PLASTIC BLOCKOUT FOR STEEL POSTS



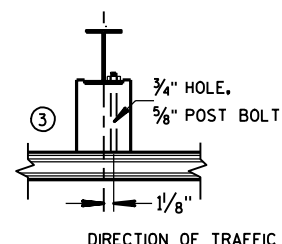
END VIEW STEEL POST & NOTCHED PLASTIC BLOCKOUT ALTERNATIVE



END VIEW LOCATED ALONG A MOUNTABLE CURBED ROADWAY



PLAN VIEW WOOD POST, BLOCKOUT & BEAM

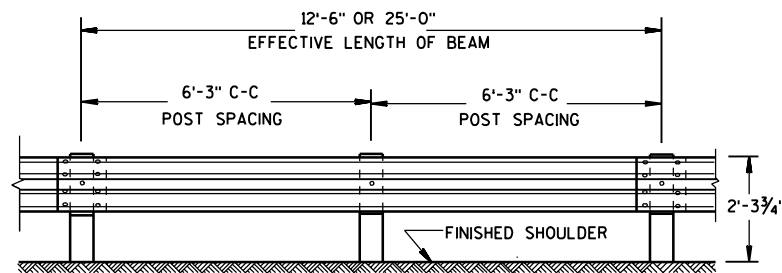


PLAN VIEW STEEL POST, NOTCHED PLASTIC BLOCKOUT & BEAM

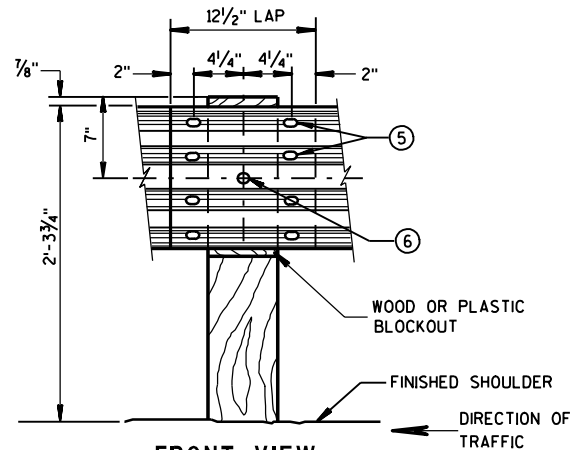
STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

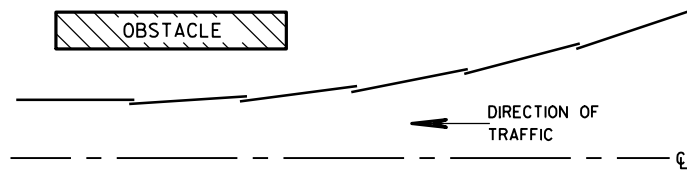
TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD



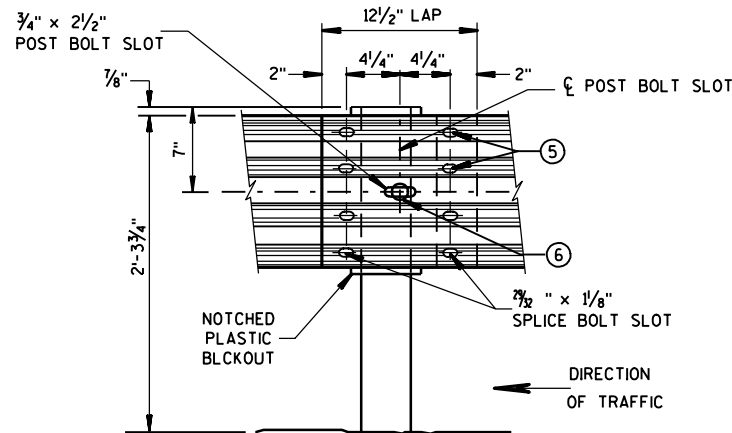
FRONT VIEW



FRONT VIEW
BEAM SPLICE AT WOOD POST
AND POST MOUNTING DETAIL



PLAN VIEW
BEAM LAPPING DETAIL

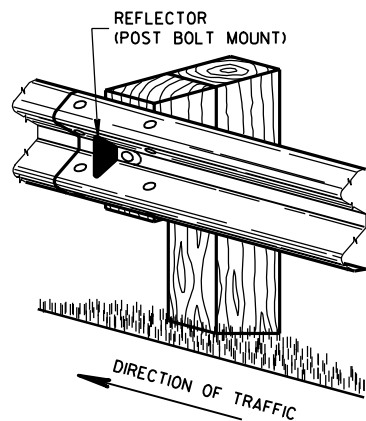


FRONT VIEW
BEAM SPLICE AT STEEL POST

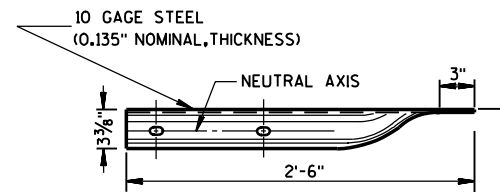
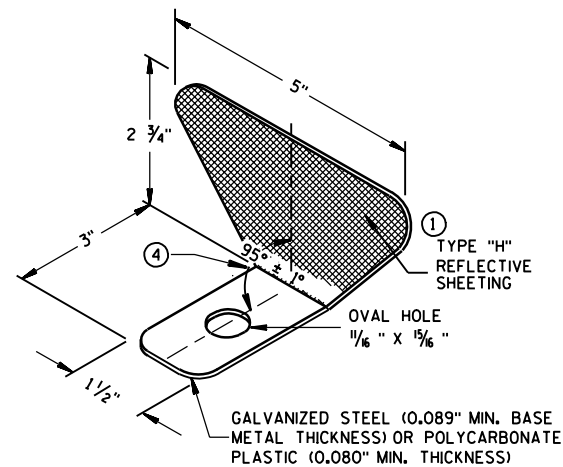
TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

REFLECTOR SPACING ②

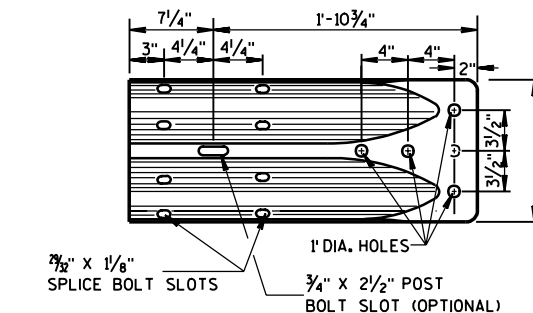
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	3
TWO WAY TRAFFIC	< 200'	25' C-C	1 ③	6
	> 200'	50' C-C	1	6
TWO WAY TRAFFIC	< 200'	50' C-C	2 ④	3
	> 200'	100' C-C	2	3



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION ①



PLAN VIEW



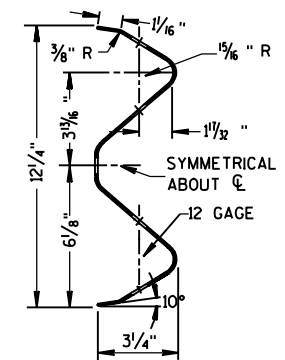
FRONT VIEW

W BEAM TERMINAL CONNECTOR

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

- ① PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
- ② DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
- ③ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
- ④ PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
- ⑤ 8 - 5/8" φ X 1 1/4" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
- ⑥ 5/8" φ X 1'-6" BUTTON HEAD BOLT AND AND RECESS NUT WITH ROUND WASHER UNDER NUT.

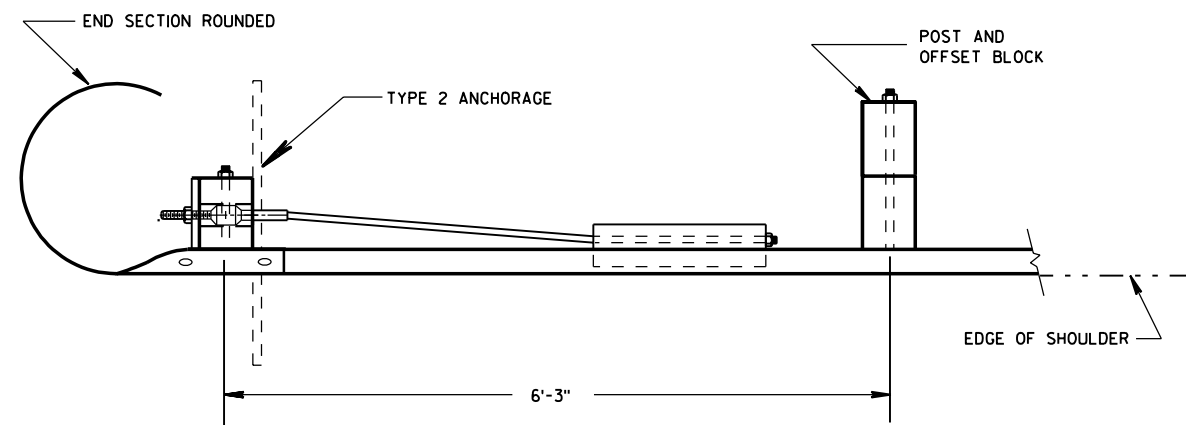


SECTION THRU W BEAM

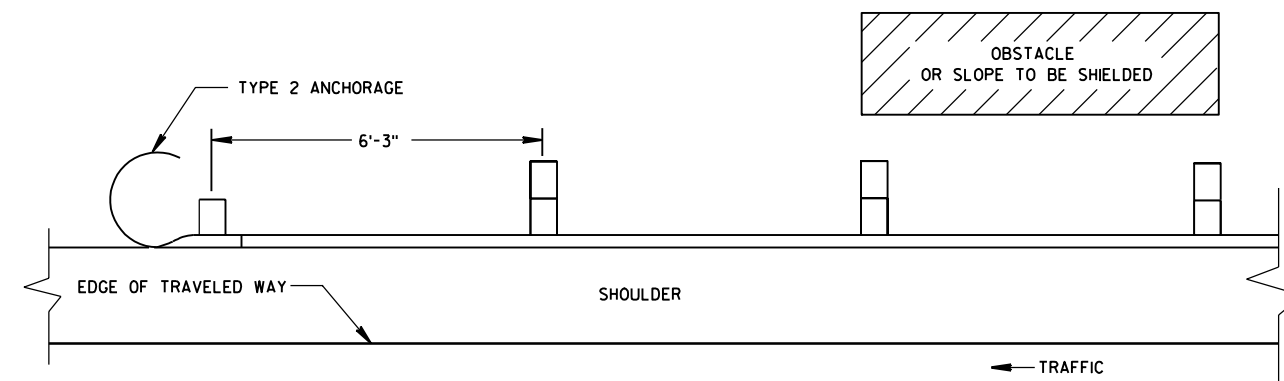
STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/8/00
DATE
John Havelberg
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

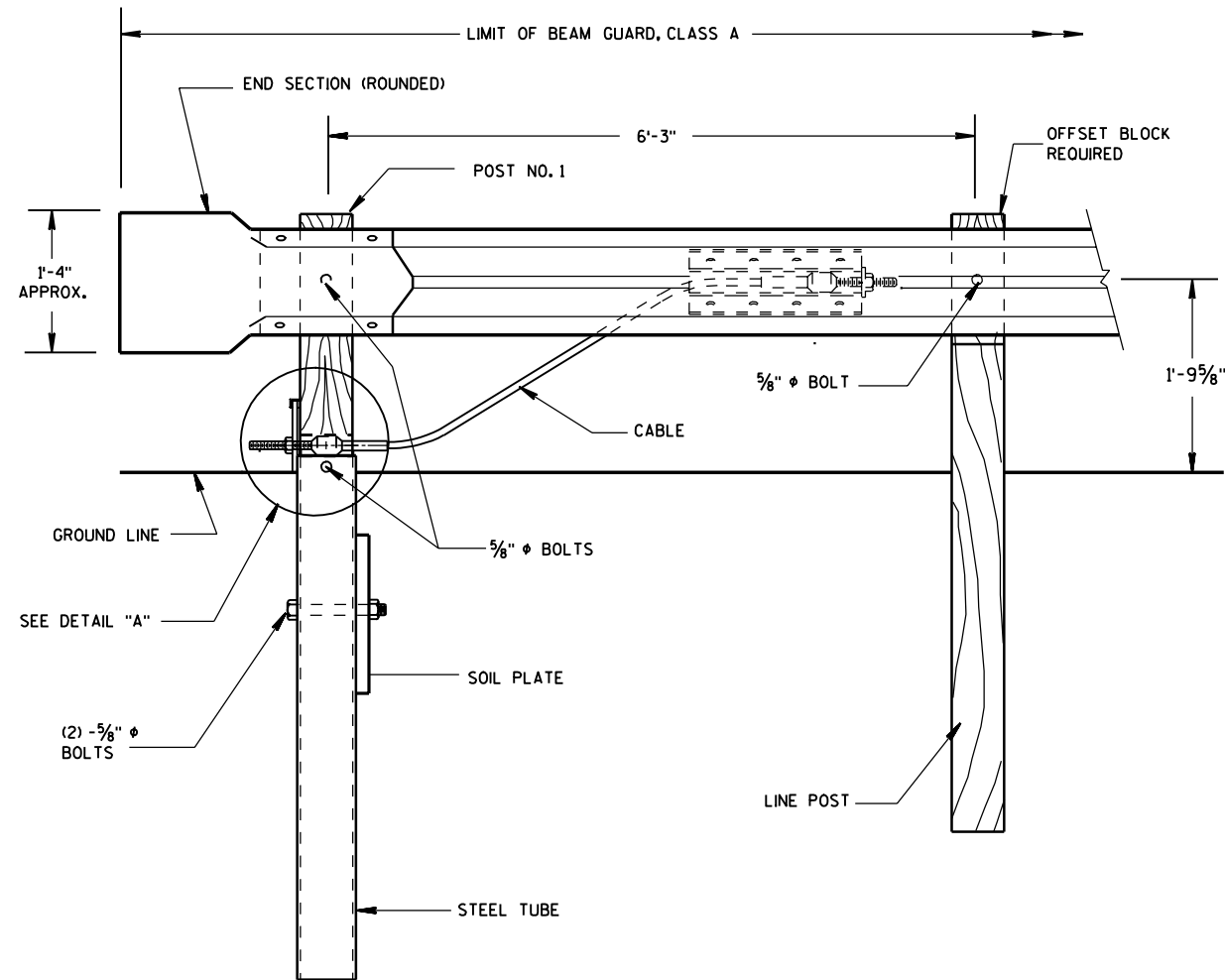


PLAN VIEW



PLAN VIEW

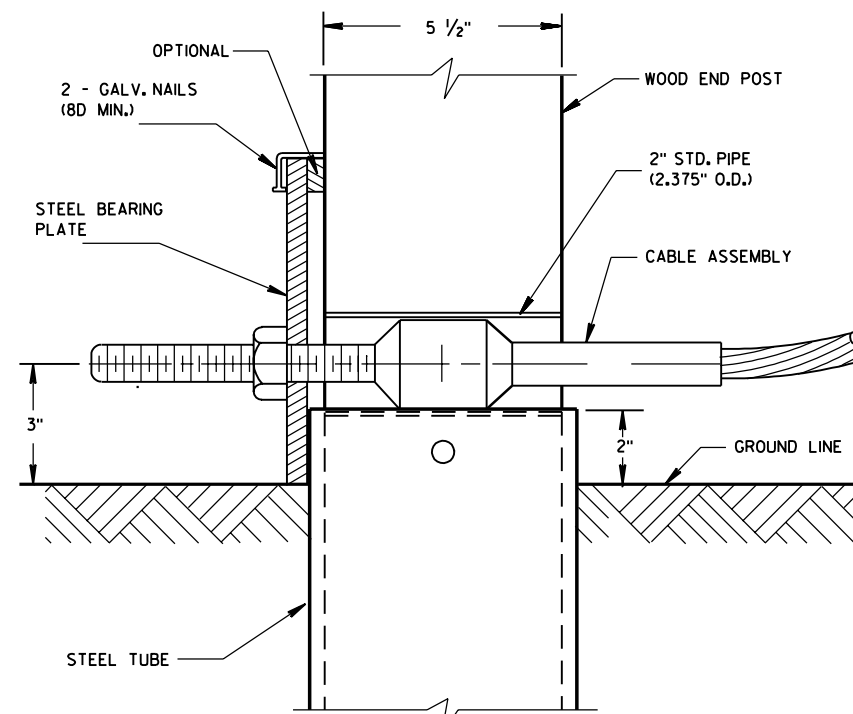
BEAM GUARD WITH TYPE 2 ANCHORAGE
EXIT END - ONE WAY TRAFFIC



FRONT VIEW

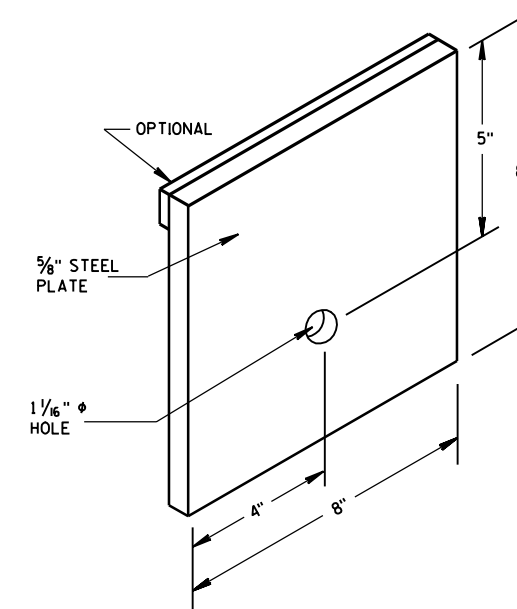
END TREATMENT WITH TYPE 2 ANCHORAGE

(USE ON ONE-WAY ROADWAYS ONLY - DEPARTING END)



DETAIL "A"

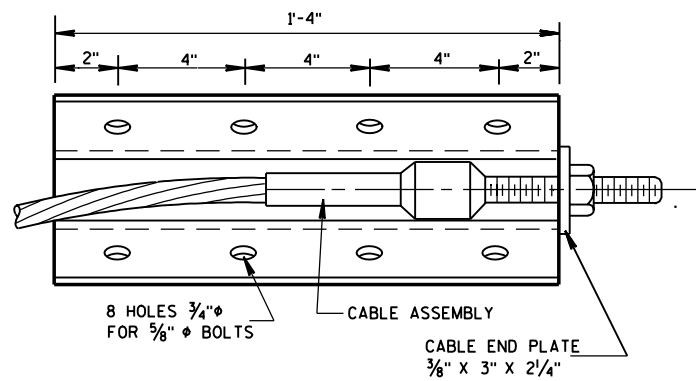
POST NO. 1



STEEL BEARING PLATE

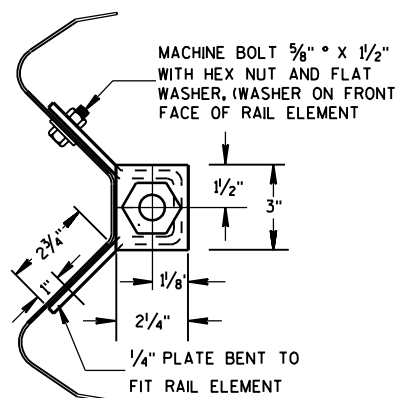
CLASS "A" STEEL PLATE BEAM GUARD
END TREATMENT WITH ANCHORAGE,
TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

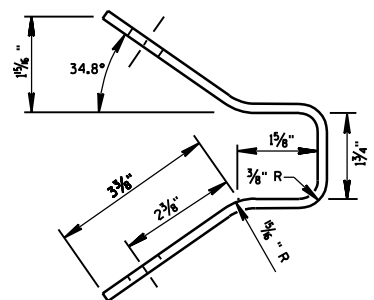


FRONT VIEW

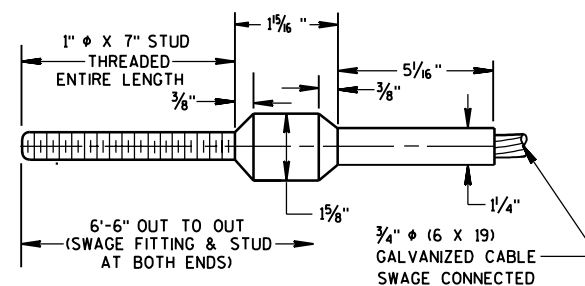
ANCHOR PLATE DETAIL



END VIEW



END VIEW OF BRACKET



CABLE ASSEMBLY

CABLE, SWAGE FITTING, STUD AND NUT SHALL DEVELOP A MINIMUM BREAKING STRENGTH OF 40,000 LB (TIGHTEN UNTIL TAUT)

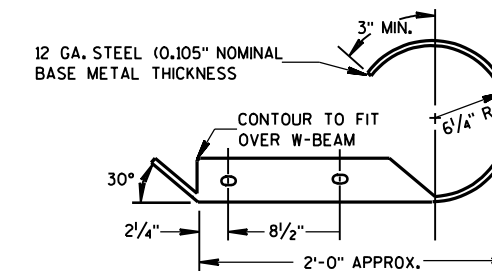
GENERAL NOTES

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.

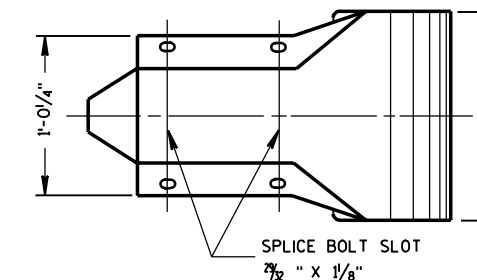
STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-500 GRADE B OR ASTM A-501.

POST NO. 1 SHALL BE WOOD BREAKAWAY POST INSERTED AND BOLTED INTO STEEL TUBE.

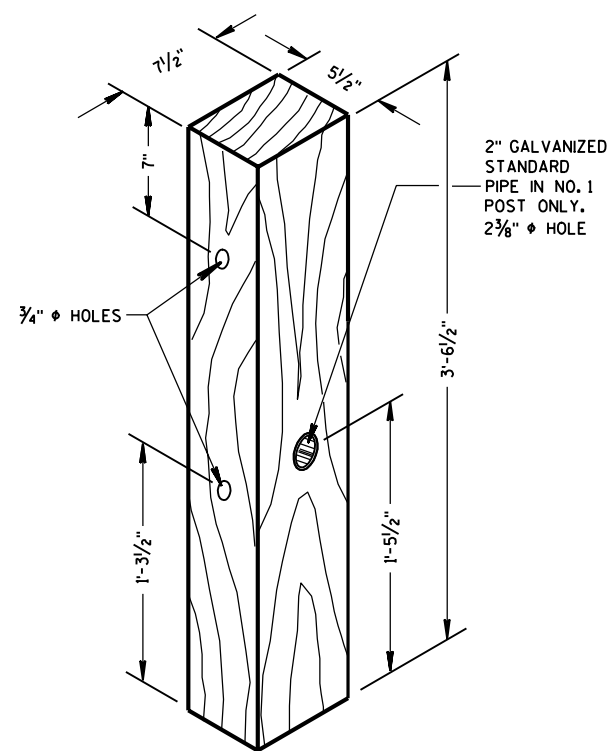
TYPE 2 ANCHORAGE SHALL CONSIST OF A STEEL TUBE, SOIL PLATE, WOOD BREAKAWAY POST, BEARING PLATE, ANCHOR PLATE, CABLE ASSEMBLY AND ALL ASSOCIATED HARDWARE. ALL STEEL PARTS SHALL BE GALVANIZED.



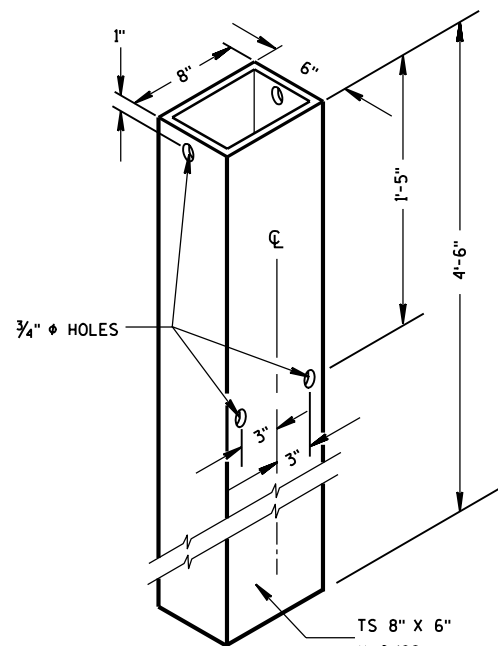
PLAN VIEW



FRONT VIEW W BEAM END SECTION ROUNDED

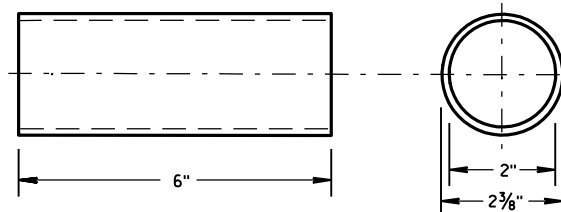


WOOD BREAKAWAY POST



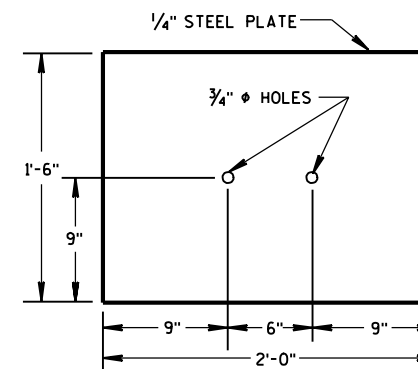
STEEL TUBE

STEEL TUBE SHALL CONFORM TO REQUIREMENTS OF ASTM A500



BREAKAWAY TERMINAL POST SLEEVE

GALVANIZED STANDARD STRENGTH STEEL PIPE, ASTM 53 GRADE "B"

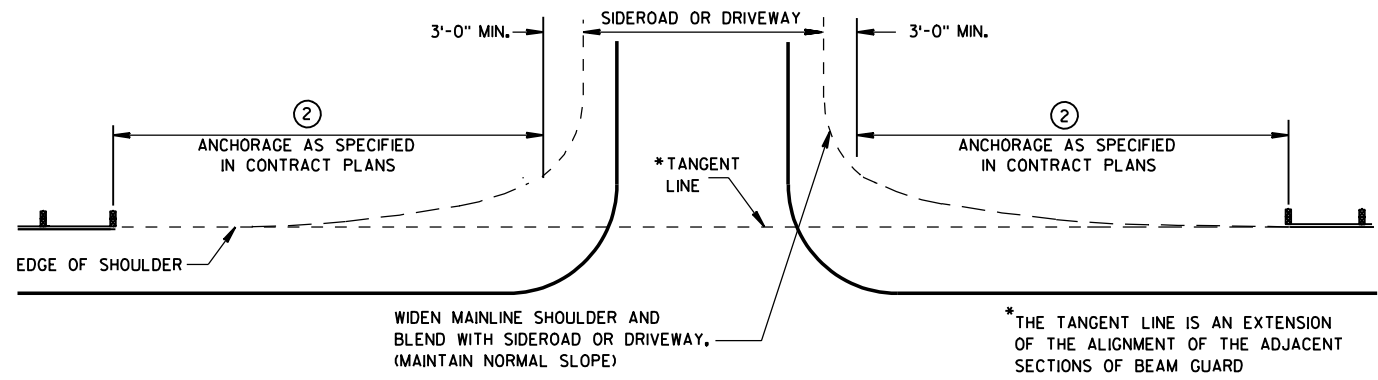


SOIL PLATE

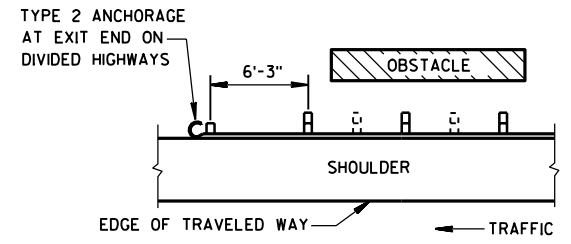
CLASS "A" STEEL PLATE BEAM GUARD END TREATMENT WITH ANCHORAGE, TYPE 2

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED 2/19/99 DATE *[Signature]* CHIEF ROADWAY DEVELOPMENT ENGINEER FHWA



BEAM GUARD AT SIDEROADS OR DRIVEWAYS



**BEAM GUARD AT OBSTACLES
EXIT END - ONE WAY TRAFFIC**

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.

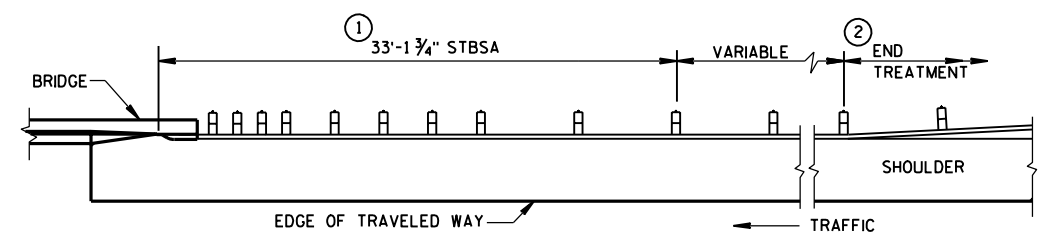
W6 X 9 OR W6 X 8.5 STEEL POSTS WITH NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

THE LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.

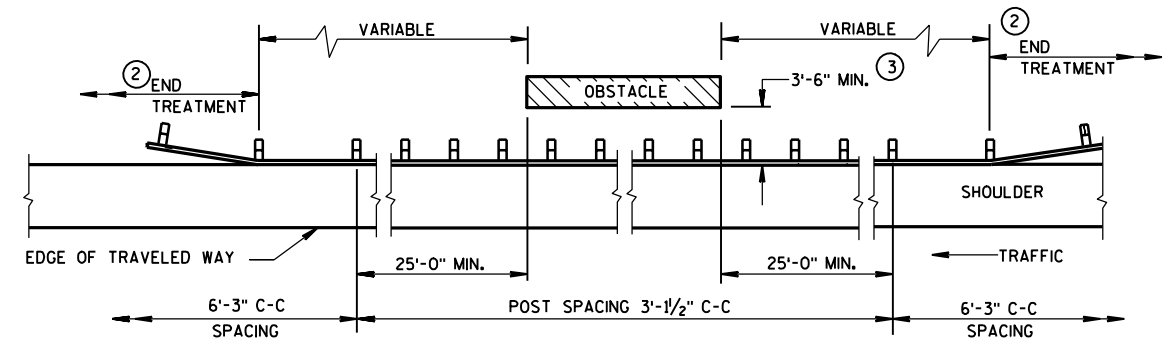
- ① USE STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA).
- ② USE AN APPROVED END TREATMENT FOR THE TRAFFIC APPROACH SIDE OF BRIDGE/OBSTACLES. USE TYPE 2 ANCHORAGE ONLY AT THE DOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.

**③ DESIGN DEFLECTION OF
W-BEAM BARRIER SYSTEM**

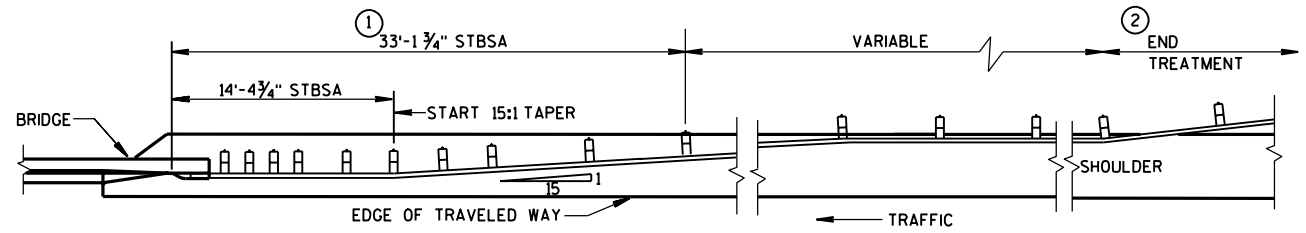
LATERAL DISTANCE TO FIXED OBJECT	POST SPACING
3'-6" TO 4'-6"	3' - 1/2"
4'-6" AND OVER	6' - 3"



BEAM GUARD AT FULL WIDTH BRIDGES



BEAM GUARD AT OSBSTACLES - TWO WAY TRAFFIC
(RAIL TO OBSTACLE CLEARANCE 3'-6" TO 4'-6")



BEAM GUARD AT NARROW BRIDGES
(FLARED TO SHOULDER EDGE, THEN PARALLEL TO ROADWAY)

S.D.D. 14 B 18-40

S.D.D. 14 B 18-40

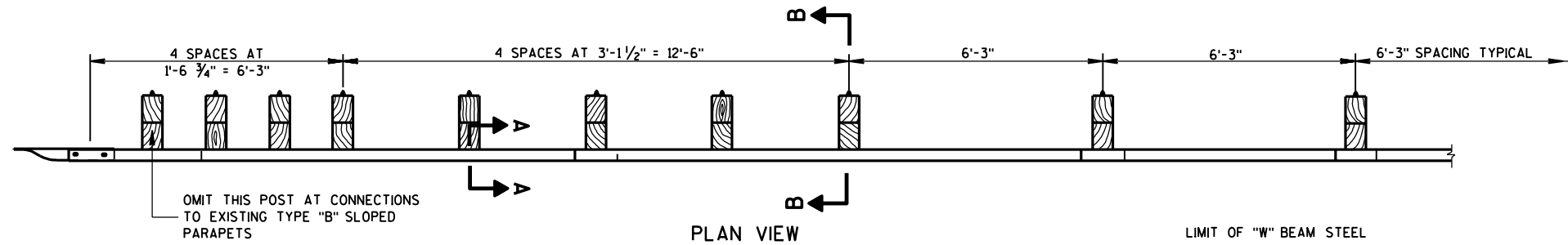
**STEEL PLATE BEAM GUARD,
CLASS "A"
(AT BRIDGES, OBSTACLES
AND SIDEROADS/DRIVEWAYS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/8/00
DATE

John Havelberg
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



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.

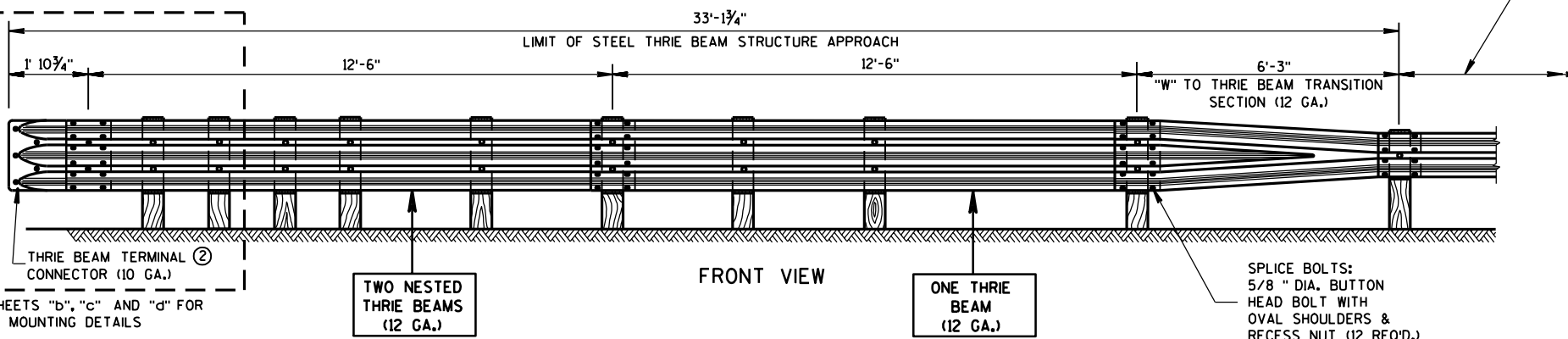
FURNISH AND CONSTRUCT THRIE BEAM STRUCTURAL APPROACH ACCORDING TO THE REQUIREMENTS OF SECTION 614 OF THE STANDARD SPECIFICATIONS. THRIE BEAM SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M180, CLASS "A", TYPE 2.

BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3".

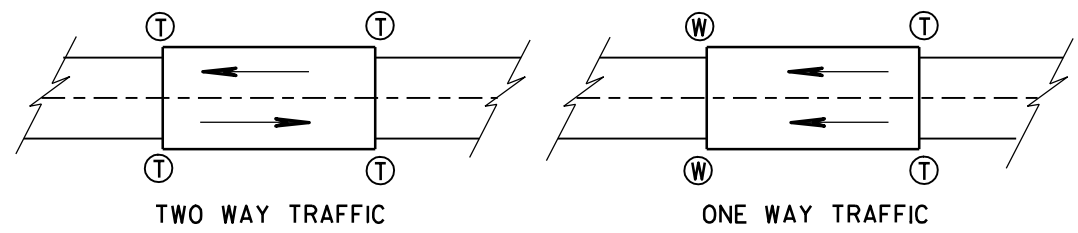
DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2 INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN THE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATELY.

- ① INCREASE POST LENGTH TO PROVIDE A MINIMUM EMBEDMENT OF 4'-0" IF THE SHOULDER HINGE POINT IS LOCATED IN FRONT OF THE POST.
- ② BRIDGE RAILING TYPE "W" DO NOT REQUIRE A TERMINAL CONNECTOR.
- ③ WHEN SPECIFIED IN THE PLANS, THE CONTRACTOR MAY REDUCE OR ELIMINATE THE 2 FOOT MINIMUM TO HINGE POINT IF EXISTING CONDITIONS DO NOT PERMIT THE DESIRABLE EARTHWORK.

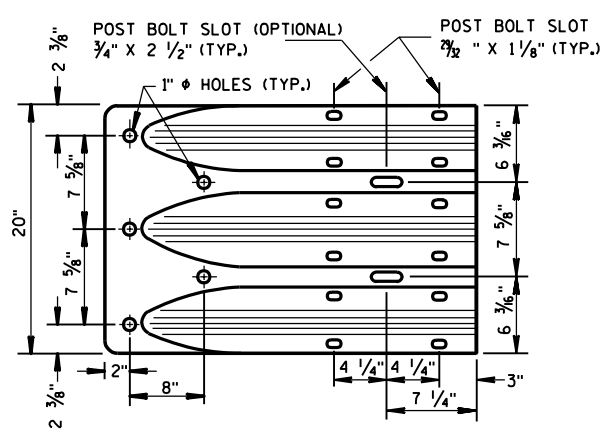
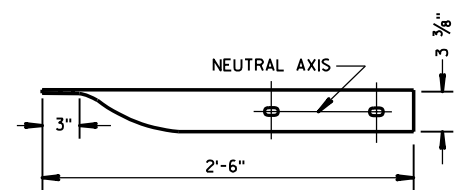


SEE SHEETS "b", "c" AND "d" FOR BRIDGE MOUNTING DETAILS

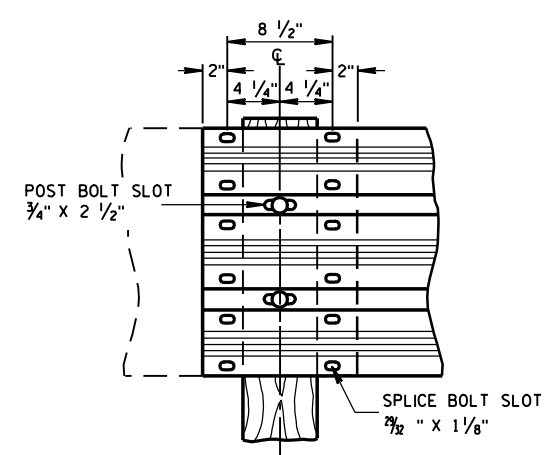


Ⓣ THRIE BEAM CONNECTION
 Ⓜ W-BEAM CONNECTION WHEN REQUIRED

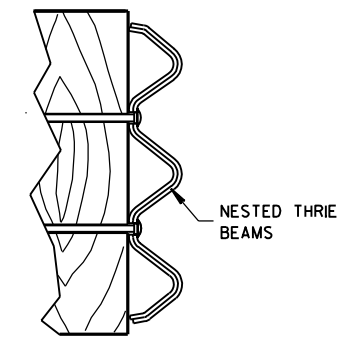
TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE



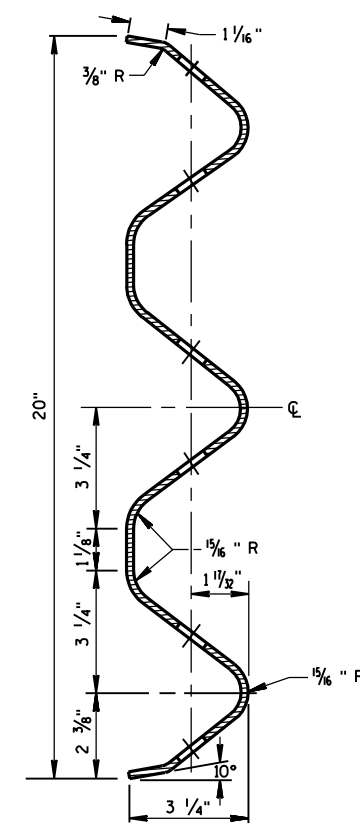
THRIE BEAM TERMINAL CONNECTOR



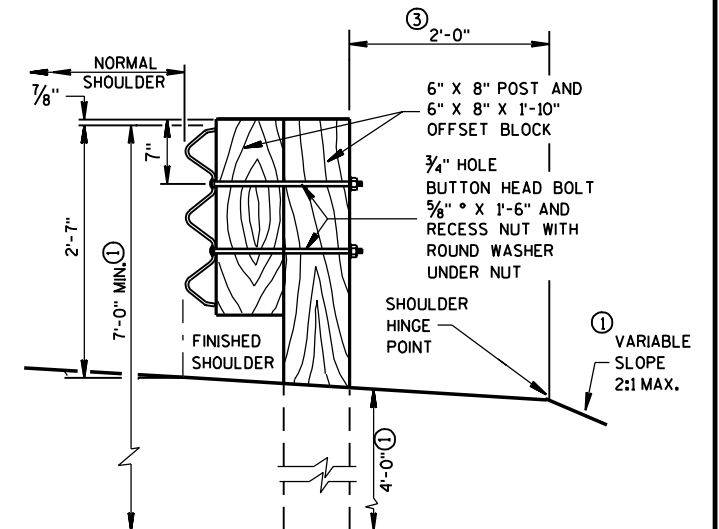
THRIE BEAM SPLICE



PARTIAL SECTION A-A



SECTION THRU THRIE BEAM RAIL ELEMENT

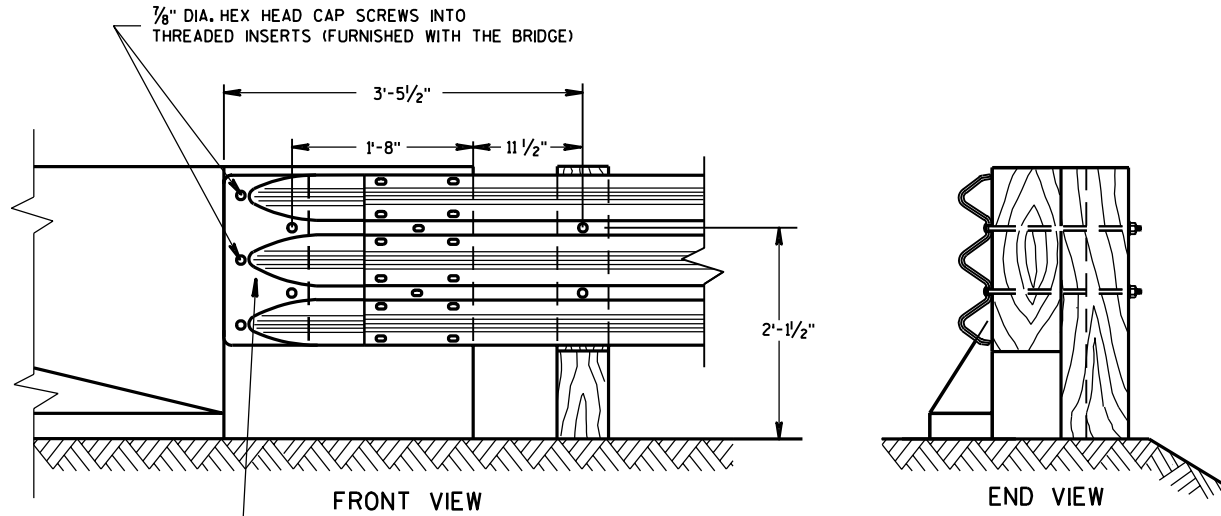


SECTION B-B

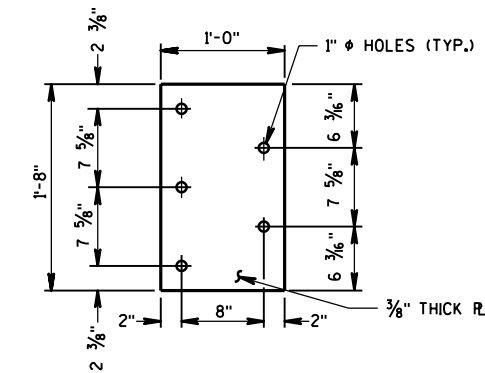
STEEL THRIE BEAM STRUCTURE APPROACH
 STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 20-50

S.D.D. 14 B 20-50



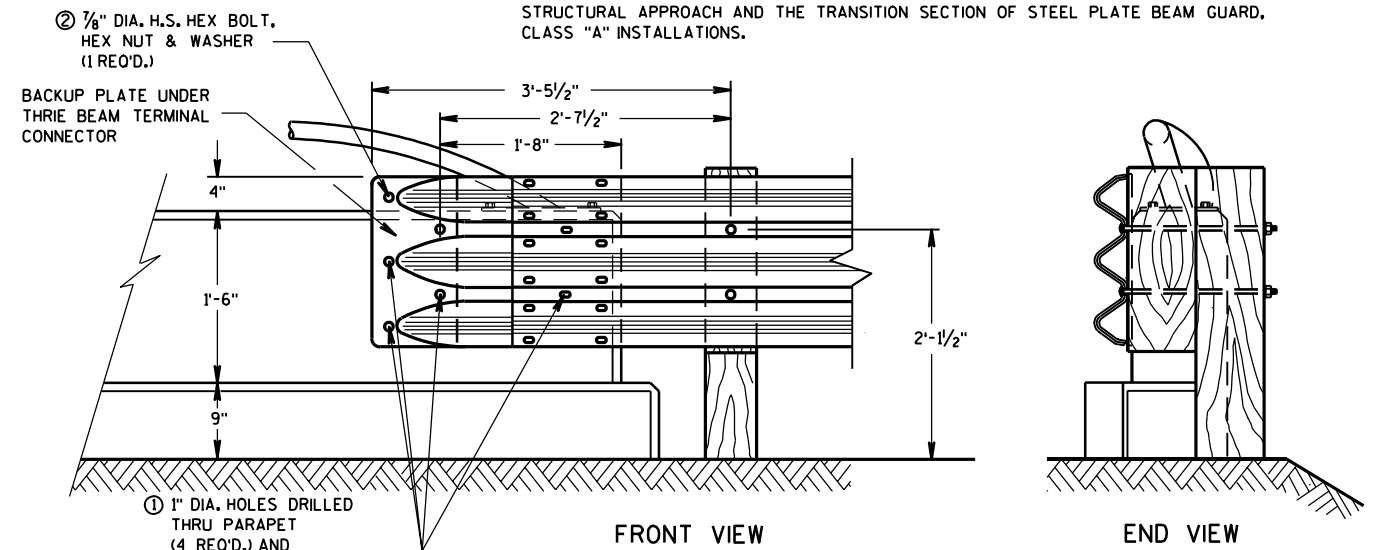
THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



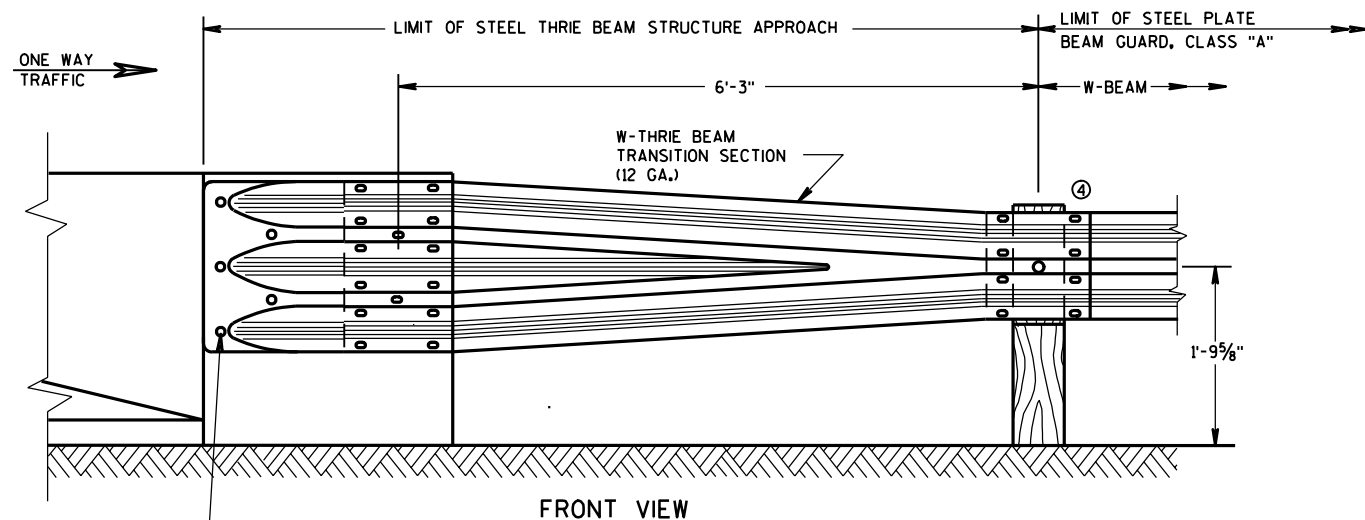
BACKUP PLATE DETAIL

GENERAL NOTES

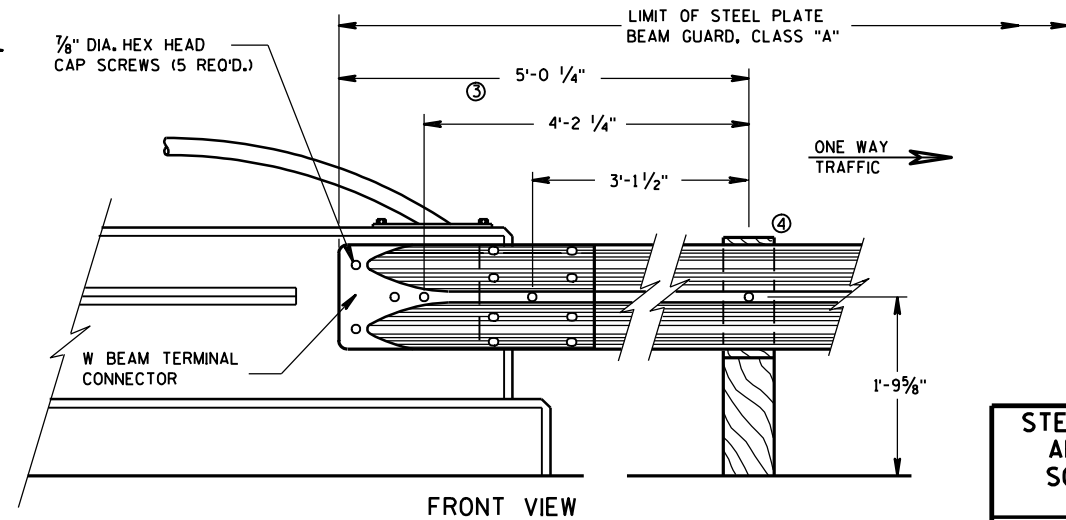
- THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.
- BOLTS, PLATES, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A 325, AND BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.
- INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND THE BACKUP PLATE AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".
 - EACH BOLT AT THE BACK FACE OF THE PARAPET REQUIRES A HARDENED ROUND STEEL WASHER WITH A 2 1/4" O.D. X 5/32" THICK.
 - THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".
 - W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.



THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS (USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



W BEAM CONNECTION TO VERTICAL FACE PARAPET (USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

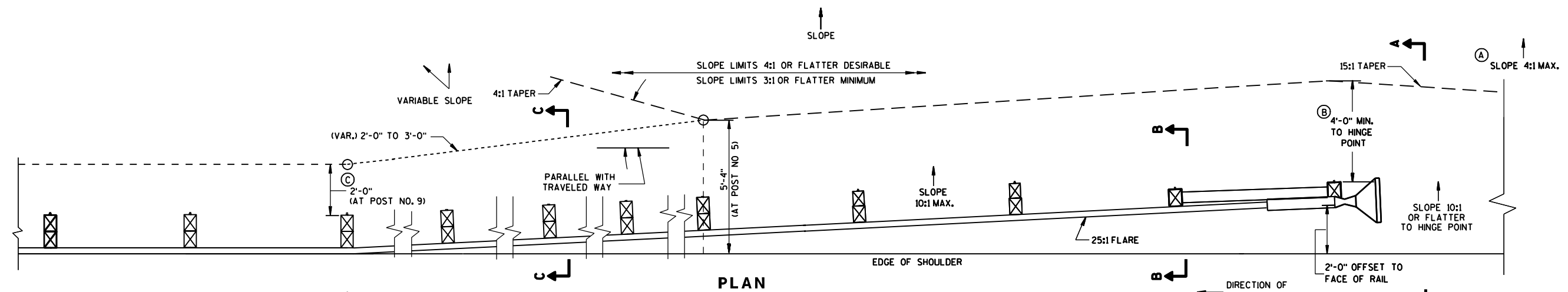
STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END AND VERTICAL FACED PARAPETS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/8/00
DATE

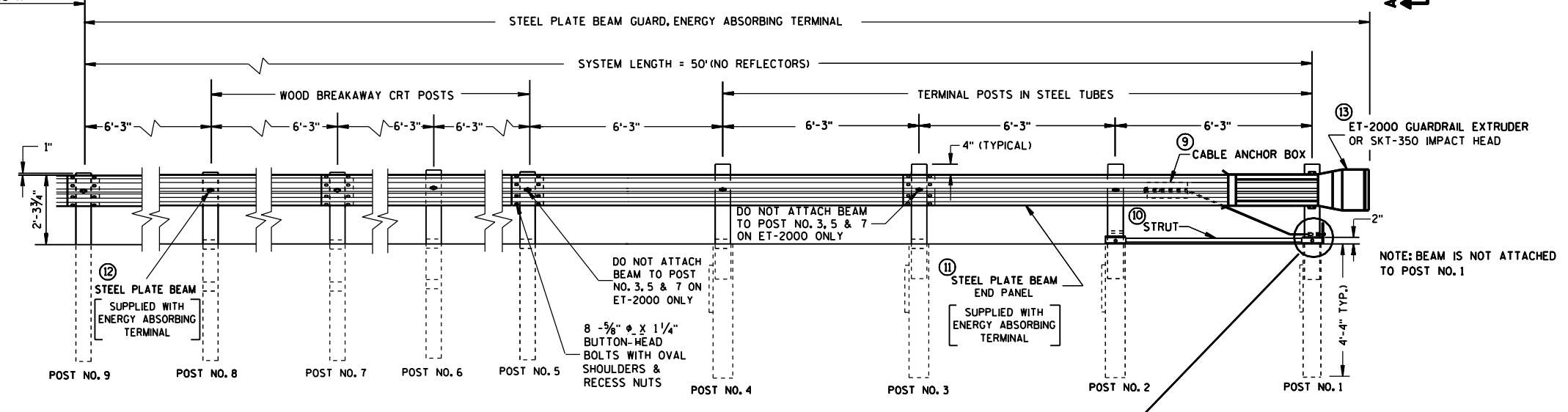
John Havelberg
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

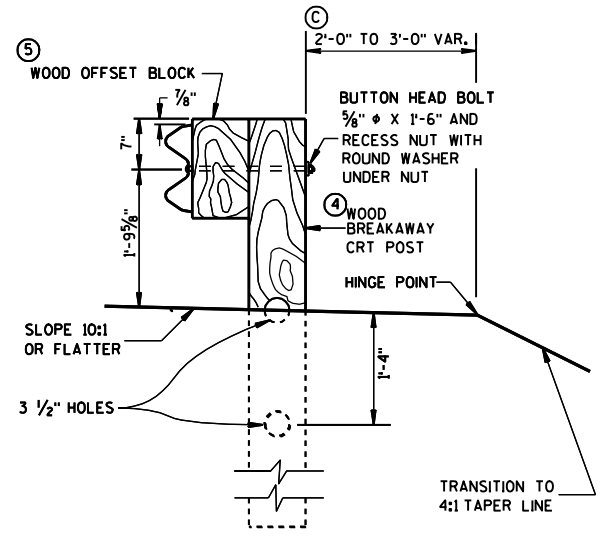


BILL OF MATERIALS

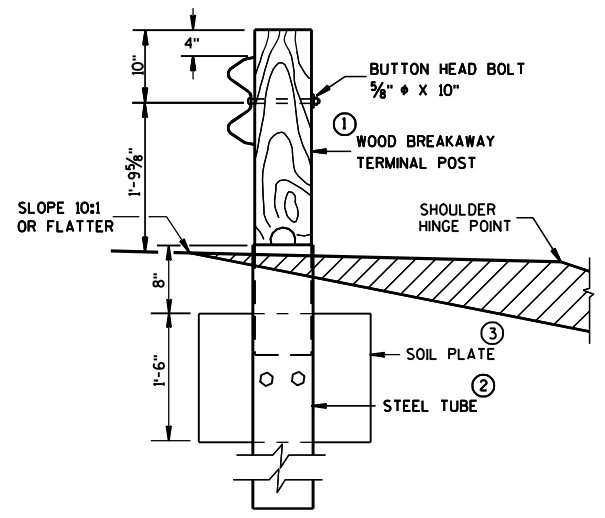
NOTE NO.	QTY.	DESCRIPTION
①	4	WOOD BREAKAWAY TERMINAL POST: 5 1/2" X 7 1/2" X 3'-9"
②	4	STEEL TUBE: TS 8" X 6" X 0.188", 4'-6" LONG
③	4	SOIL PLATE: 2'-0" X 1'-6" X 1/4"
④	4	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	6	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	1	PIPE SLEEVE: 2" X 5 1/2" STANDARD PIPE
⑦	1	BEARING PLATE
⑧	1	BCT CABLE ASSEMBLY
⑨	1	CABLE ANCHOR BOX
⑩	1	STRUT & YOKE
⑪	1	STEEL PLATE BEAM, END PANEL 12 GA. 13'-6 1/2" LONG FOR SKT-350 & ET-2000
⑫	3	STEEL PLATE BEAM: 12 GA. 13'-6 1/2"
⑬	1	ET-2000 GUARDRAIL EXTRUDER OR SKT-350 IMPACT HEAD: AS FURNISHED BY MANUFACTURER
⑭	1	REFLECTIVE SHEETING: 18" X 18"



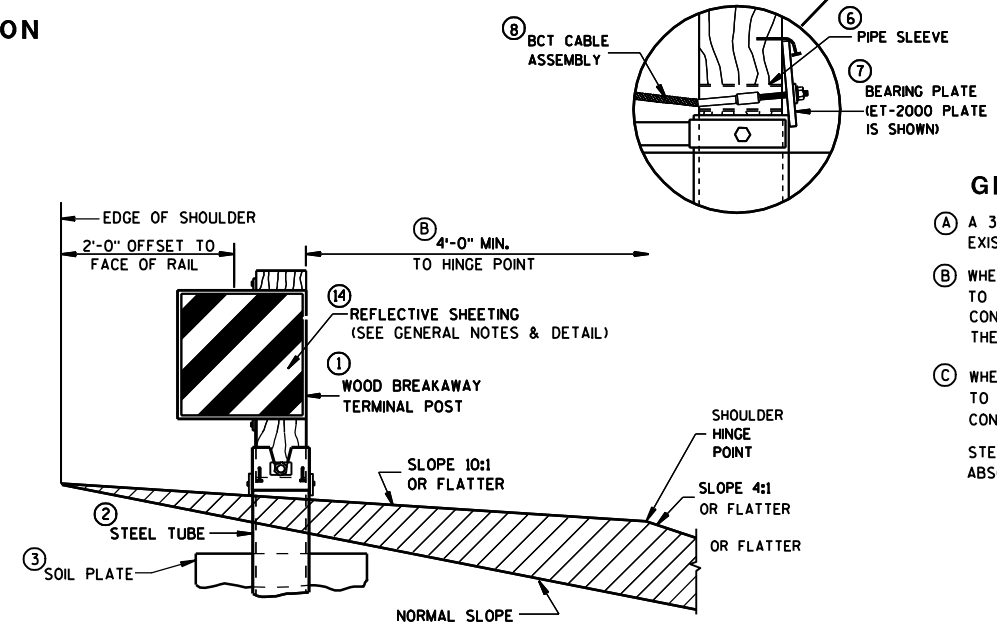
ELEVATION



SECTION C-C
TYPICAL AT POST NOS. 5-8 INC.



SECTION B-B
TYPICAL AT POST NO. 2
(ADD WOOD OFFSET BLOCK AT POST 3 & 4)



SECTION A-A
TYPICAL AT POST NO. 1

GENERAL NOTES

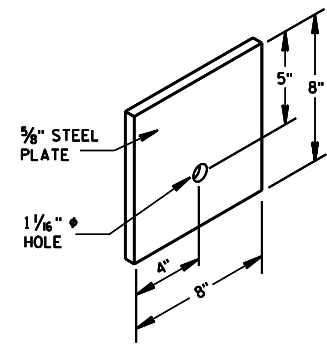
- (A) A 3:1 OR FLATTER SLOPE MAY BE USED FOR INSTALLATION ON EXISTING HIGHWAYS.
- (B) WHEN SPECIFIED ELSEWHERE IN THE CONTRACT THE 4-FOOT MINIMUM TO HINGE POINT, MAY BE REDUCED OR ELIMINATED WHERE EXISTING CONDITIONS WILL NOT PERMIT THE DESIRABLE EARTHWORK. SIMILARLY THE 15:1 TAPER MAY BE REDUCED TO 4:1.
- (C) WHEN SPECIFIED ELSEWHERE IN THE CONTRACT THE 2-FOOT MINIMUM TO HINGE POINT, MAY BE REDUCED OR ELIMINATED WHERE EXISTING CONDITIONS WILL NOT PERMIT THE DESIRABLE EARTHWORK. STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

**STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL**

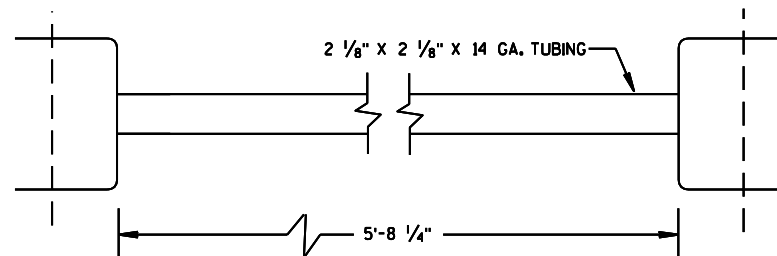
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 24-30

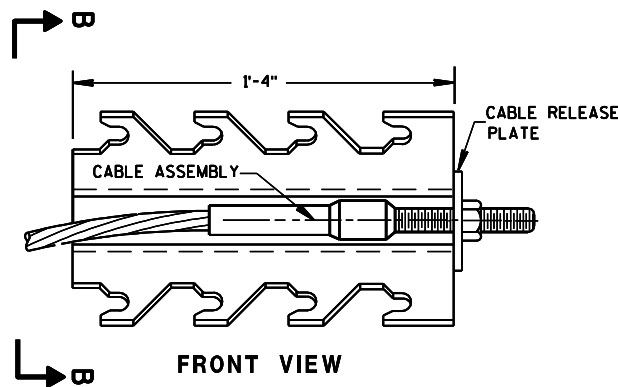
S.D.D. 14 B 24-30



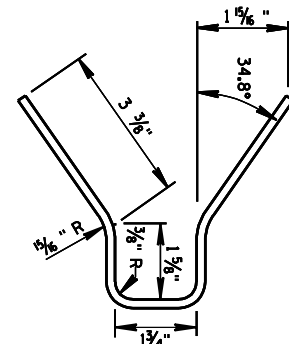
STEEL BEARING PLATE (SKT-350)



STRUT DETAIL (SKT-350)



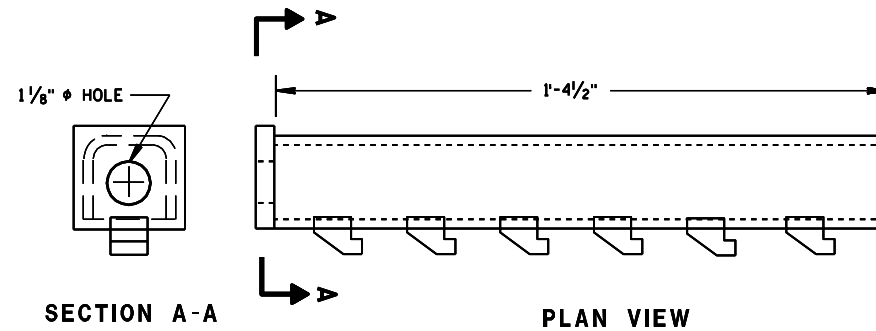
FRONT VIEW



SECTION B-B

CABLE ANCHOR BOX (SKT-350)

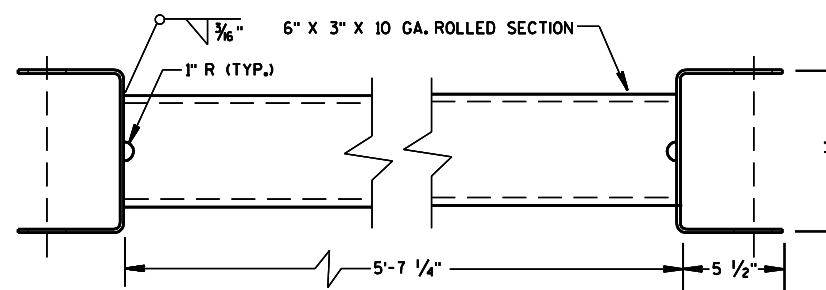
(SKT-350)



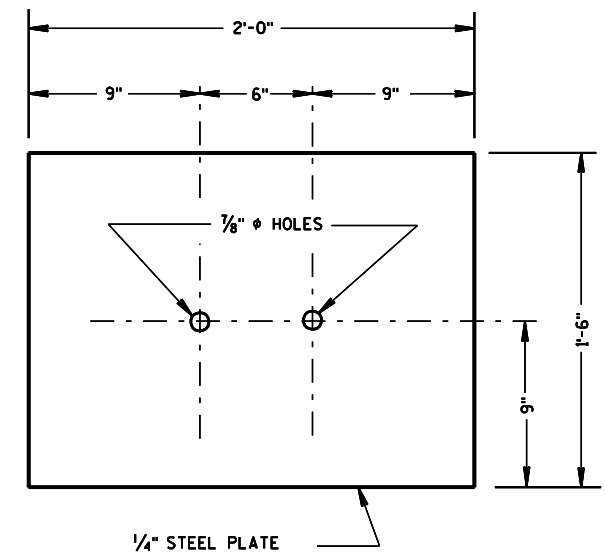
SECTION A-A

PLAN VIEW

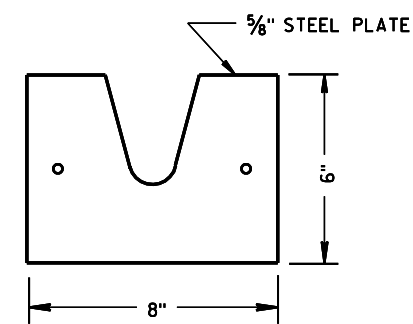
CABLE ANCHOR BOX (ET-2000)



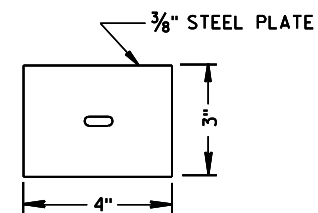
STRUT DETAIL (ET-2000)



SOIL PLATE (SKT-350 & ET-2000)



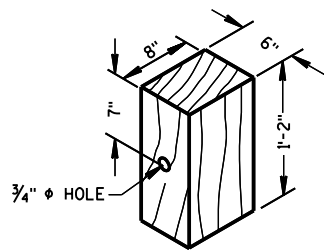
STEEL BEARING PLATE (ET-2000)



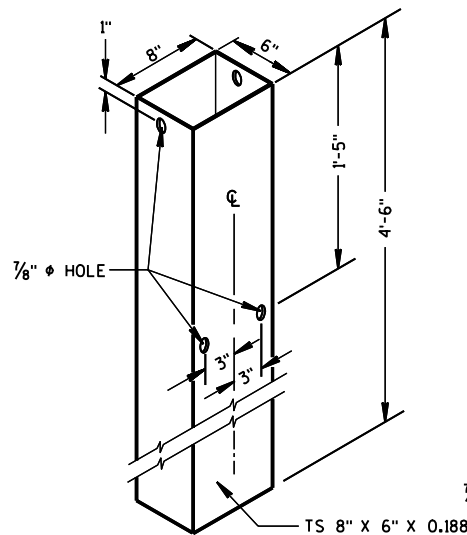
BEARING PLATE WASHER (ET-2000)

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

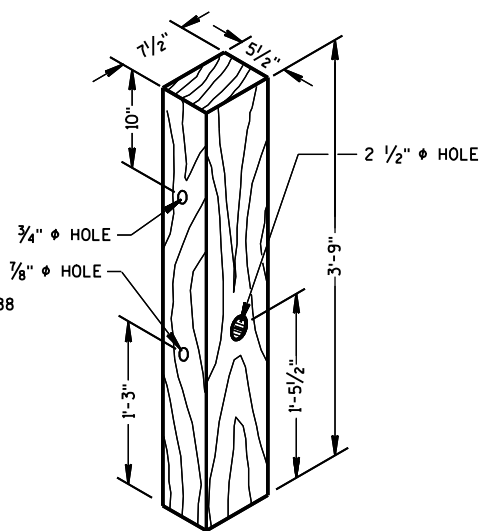
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



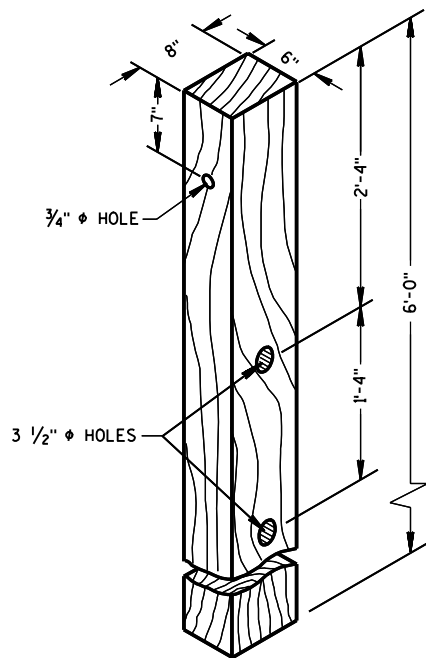
WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



STEEL TUBE
(POSTS NO. 1-4)
THE STEEL TUBE SHALL CONFORM
TO REQUIREMENTS OF ASTM A500



TERMINAL POST
(POSTS NO. 1-4)



CRT POST
(POSTS NO'S 5-8)

WOOD BREAKAWAY POSTS

GENERAL NOTES

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

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL SHALL BE EITHER THE EXTRUDER TERMINAL (ET-2000), OR THE SEQUENTIAL KINKING TERMINAL (SKT-350). THE CONTRACTOR SHALL NOT INTERMIX PROPRIETARY PRODUCT MATERIALS.

THE "ET-2000" IS AVAILABLE FROM SYRO, INC., 2524 N. STEMMONS FREEWAY, DALLAS TEXAS 75207. TELEPHONE 1-800-835-6086 OR 1-800-644-7976

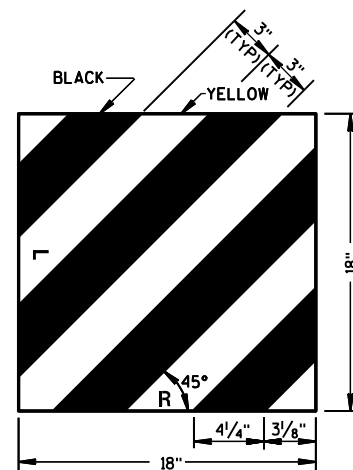
THE "SKT-350" IS AVAILABLE FROM ROAD SYSTEMS, INC., 7631 NEW CASTLE DRIVE, FRANKFORT, ILLINOIS 60423. TELEPHONE (815) 464-5917

THE ET-2000, AND SKT-350 END TERMINALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH, WHICH SHALL INCLUDE HARDWARE, STEEL PLATE BEAM GUARD, POSTS, REFLECTIVE SHEETING AND INSTALLATION AS SHOWN.

REFLECTIVE SHEETING - SHALL CONFORM TO ASTM SPECIFICATION D4956-93b, REFLECTIVE SHEETING TYPE III, BACKING CLASS 4, PERFORMANCE REQUIREMENT TYPE III. THE MESSAGE AND LINES SHALL BE APPLIED TO THE SIGNS BY THE SILK SCREEN STENCIL PROCESS USING A BLACK OR DARK STENCIL PASTE AS A TYPE APPROVED BY THE MANUFACTURER OF THE FACE MATERIAL TO WHICH IT IS TO BE APPLIED. MESSAGE UNITS CUT FROM NONREFLECTIVE SHEETING AND APPLIED TO THE SIGN FACE ARE NOT ACCEPTABLE. AFTER THE APPROACH END OF THE STEEL PLATE BEAM GUARD INSTALLATION IS COMPLETE, CLEAN THE AREA WHERE THE REFLECTIVE SHEETING WILL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATION. ONCE CLEAN, APPLY REFLECTIVE SHEETING DIRECTLY TO THE STEEL PLATE BEAM GUARD AS SHOWN. THE CONTRACTOR SHALL TURN OVER THE MANUFACTURERS WARRANTY FOR THE REFLECTIVE SHEETING TO THE DEPARTMENT FOR POTENTIAL DEALING WITH THE MANUFACTURER. PAYMENT OF REFLECTIVE SHEETING IS INCIDENTAL TO STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL.

WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.



REFLECTIVE SHEETING DETAIL

**STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL**

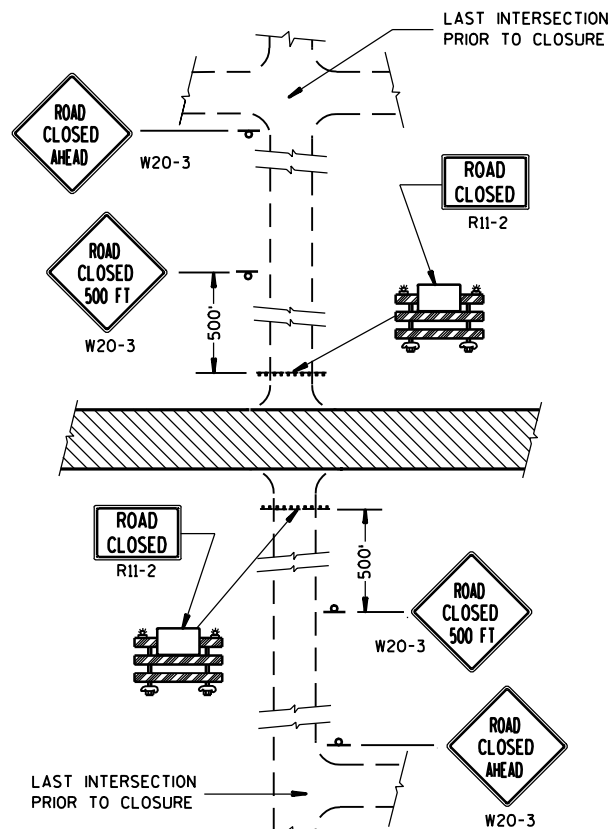
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

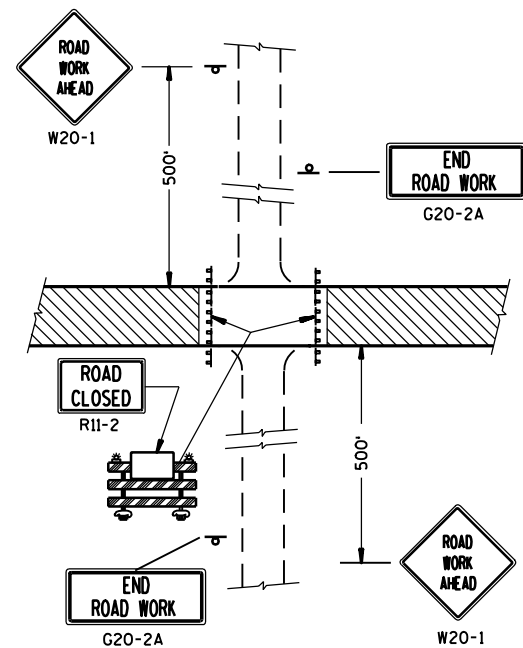
12/8/00
DATE

FHWA

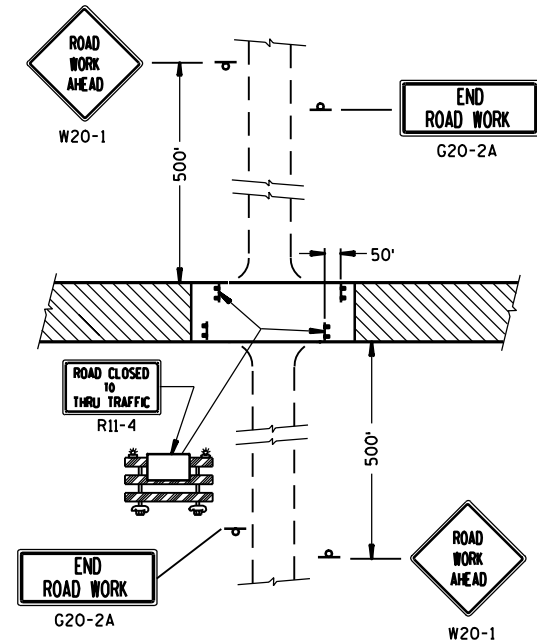
John Havelberg
CHIEF ROADWAY DEVELOPMENT ENGINEER



DETAIL 1
(NO ACCESS TO PROJECT)



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



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

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND THEIR LOCATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN MANUAL OF TRAFFIC CONTROL DEVICES, THE PLANS, SPECIFICATIONS AND CONTRACT.

SIGN AND BARRICADE LOCATIONS MAY BE ADJUSTED IN THE FIELD AS DIRECTED BY THE ENGINEER. ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS WORK SHALL BE COVERED AS DIRECTED BY THE ENGINEER. ALL "STOP" OR OTHER REGULATORY SIGNS ON THE SIDE ROADS SHALL NOT BE DISTURBED, EXCEPT WHEN NECESSARY TO COMPLETE THE WORK. THE SIGNS MUST THEN BE IMMEDIATELY REESTABLISHED.

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 FOR FULL ROAD CLOSURES. TYPE "A" LOW INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

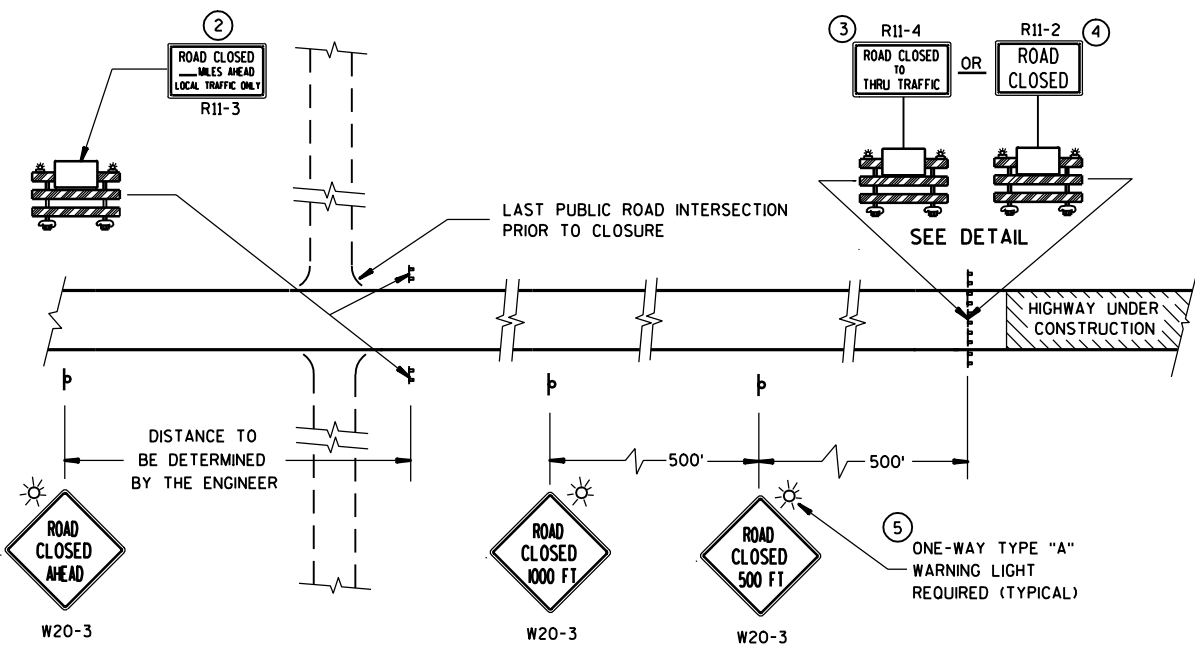
THE ROAD CLOSED SIGN (R11-2), ROAD CLOSED _____ MILES AHEAD SIGN (R11-3) AND THE ROAD CLOSED TO THRU TRAFFIC SIGN (R11-4) SHALL BE ATTACHED ONLY TO THE TOP RAIL OF THE TYPE III BARRICADE. THE SIGNS SHALL NOT COVER MIDDLE RAIL.

TYPE "H" REFLECTIVE SHEETING SHALL BE USED ON ALL BARRICADES, TYPE I, II AND III, AND ON ALL R11-2, R11-3 AND R11-4 SIGNS.

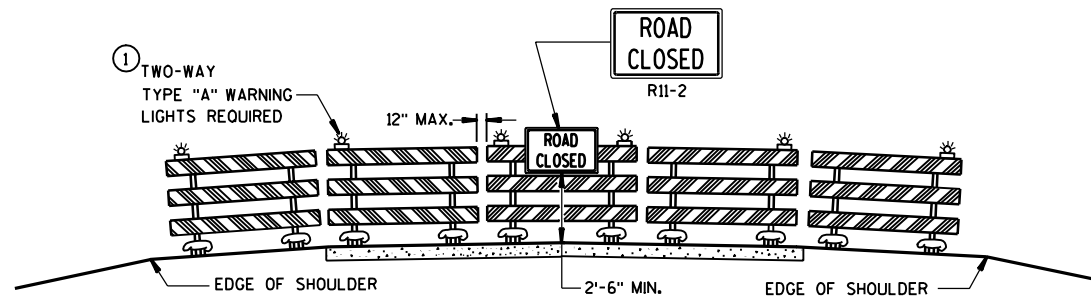
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2, "ROAD CLOSED" SIGNS SHALL BE 48" X 30".
R11-3, AND R11-4 SIGNS SHALL BE 60" X 30".
G20-2A SIGNS SHALL BE 48" X 24".

- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND AT LEAST 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.
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- ③ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT. SEE LANE CLOSURE BARRICADE DETAIL
- ④ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT. SEE ROAD CLOSURE BARRICADE DETAIL.
- ⑤ ONE-WAY LIGHTS SHALL BE PROVIDED ON ALL ADVANCE WARNING SIGNS. THE UNIT SHALL BE POSITIONED SUCH THAT THE LIGHT SOURCE IS OUTSIDE THE SIGN FACE AND AT THE TOP OF THE SIGN.

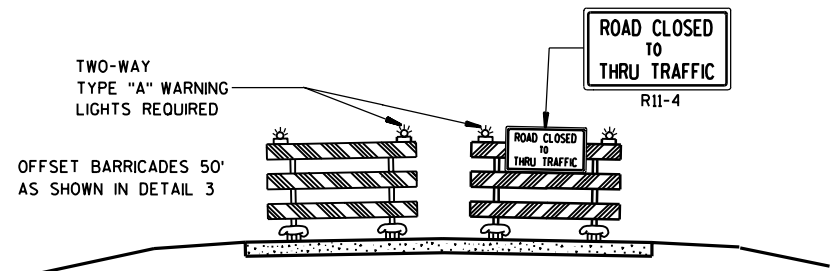
SIDEROAD CLOSURES



MAINLINE CLOSURE



ROAD CLOSURE BARRICADE DETAIL



LANE CLOSURE BARRICADE DETAIL

- LEGEND**
- ⊥ POST MOUNTED WARNING SIGN
 - ⊥ TYPE III BARRICADES WITH TYPE "H" REFLECTIVE SHEETING
 - ☀ TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
 - ▨ WORK AREA

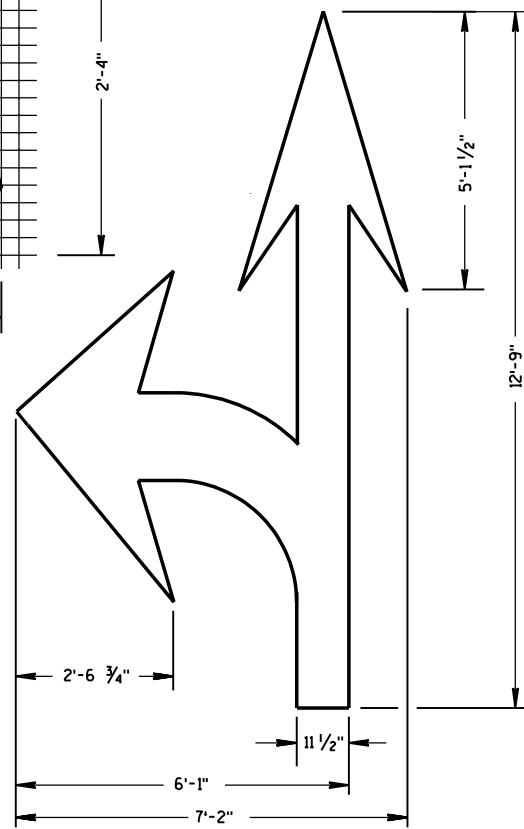
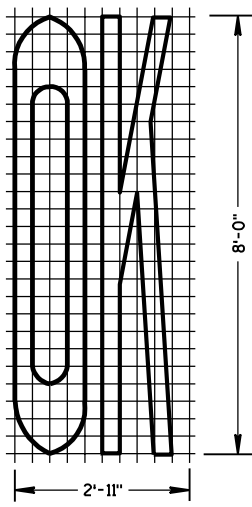
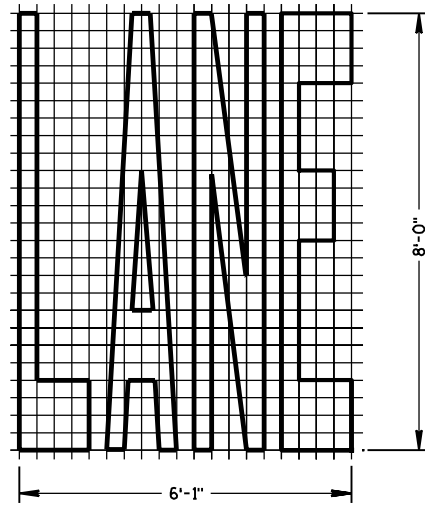
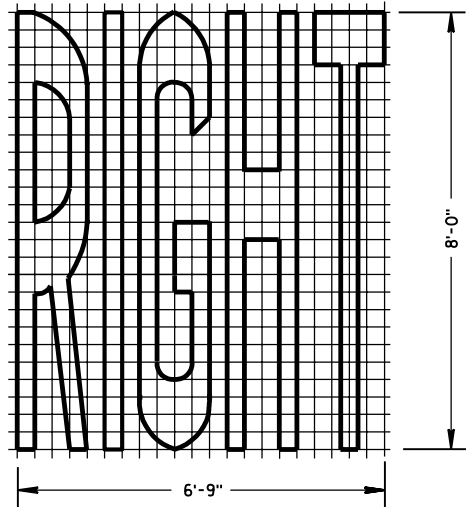
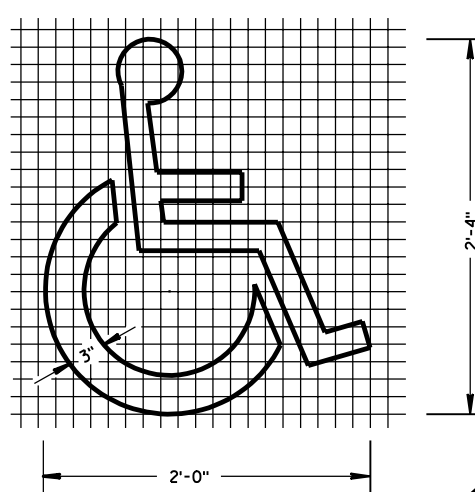
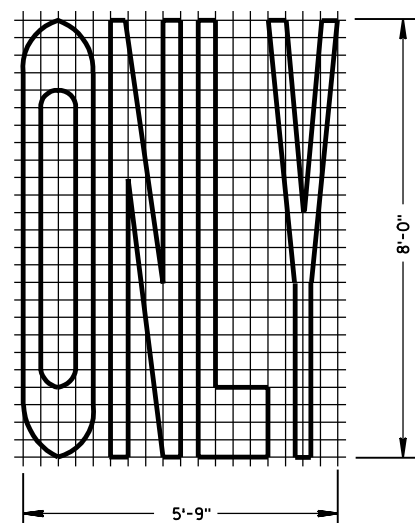
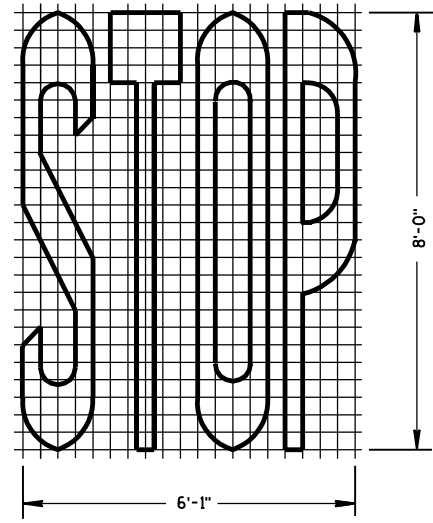
BARRICADES AND SIGNS FOR ROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

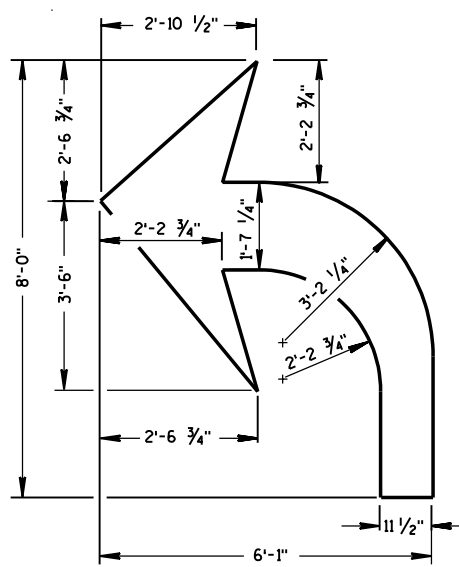
APPROVED
8/10/95
DATE

Charles J. Spang
DIRECTOR, OFFICE OF TRAFFIC

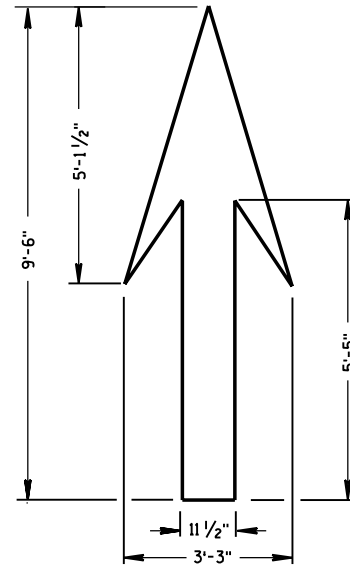
FHWA



TYPE 3



TYPE 2



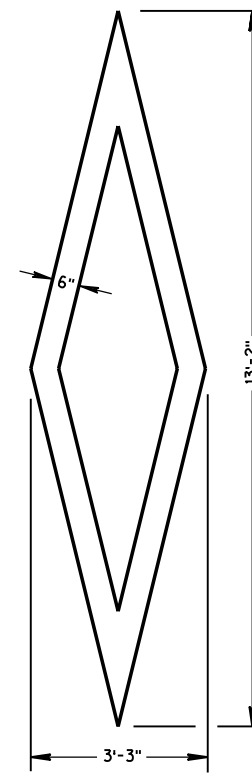
TYPE 1

GENERAL NOTES

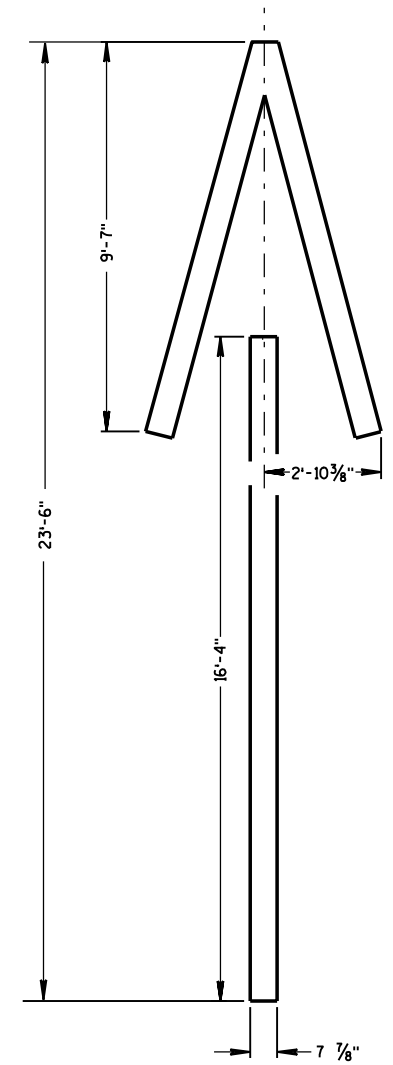
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

ALL LETTERS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED.

A DETAILED DRAWING OF THE HANDICAPPED PARKING SYMBOL IS ILLUSTRATED IN THE "STANDARD HIGHWAY SIGNS MANUAL" BY THE FEDERAL HIGHWAY ADMINISTRATION.



PREFERENTIAL LANE SYMBOL



TYPE 4

PAVEMENT MARKING SYMBOLS

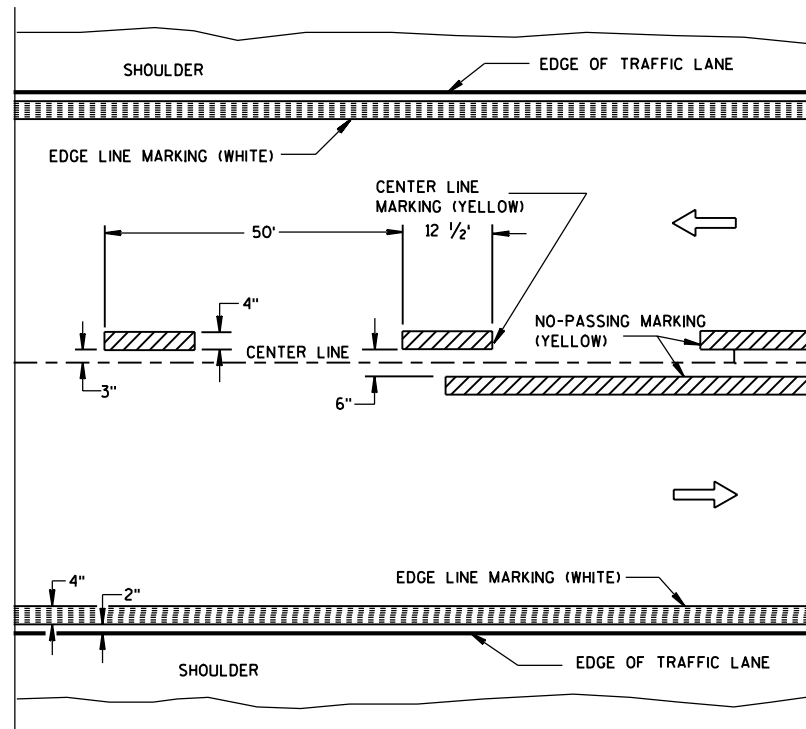
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

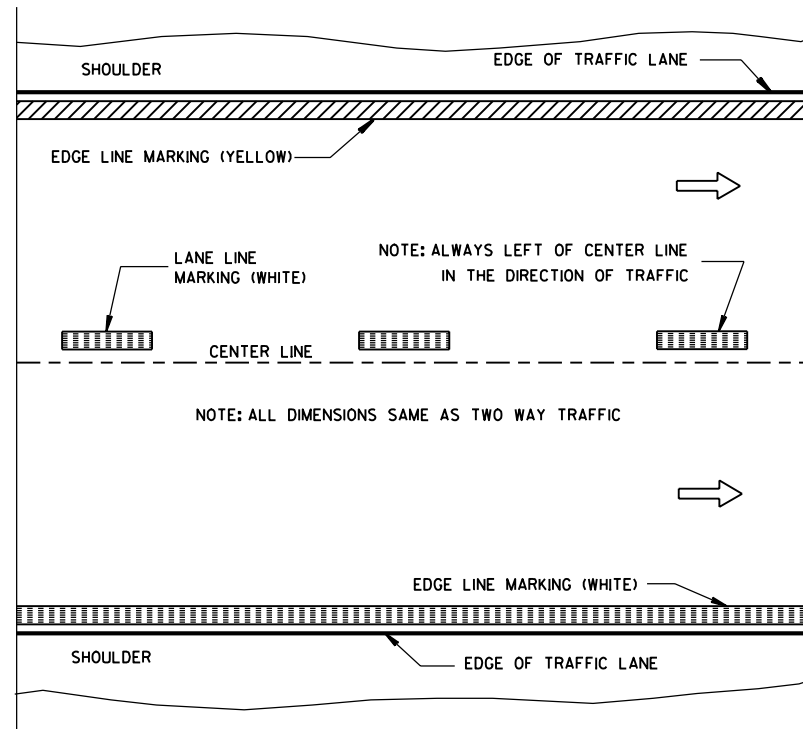
7/28/95
DATE

FHWA

Charles J. Spang
DIRECTOR, OFFICE OF TRAFFIC

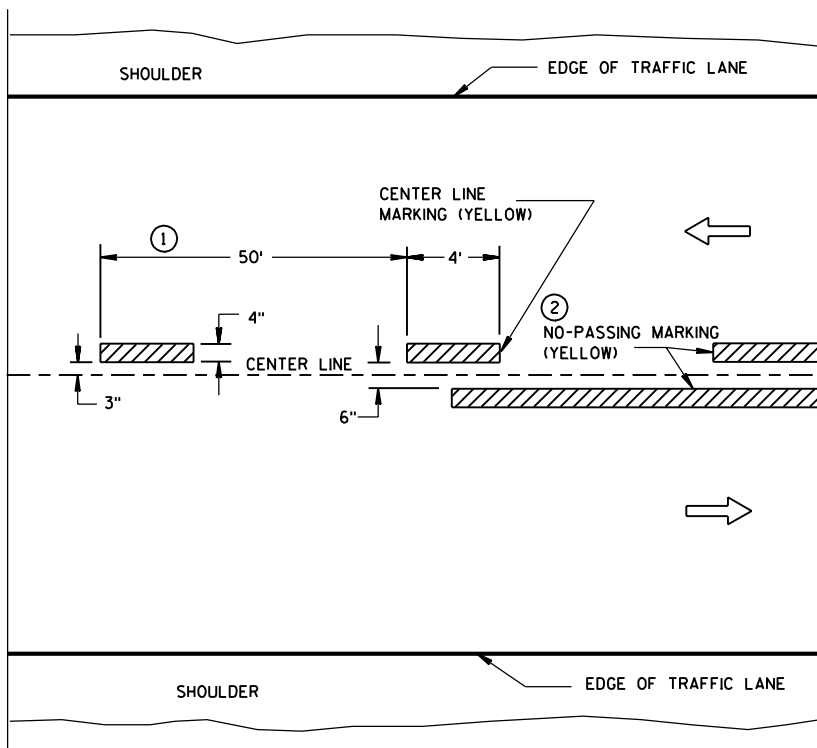


TWO WAY TRAFFIC

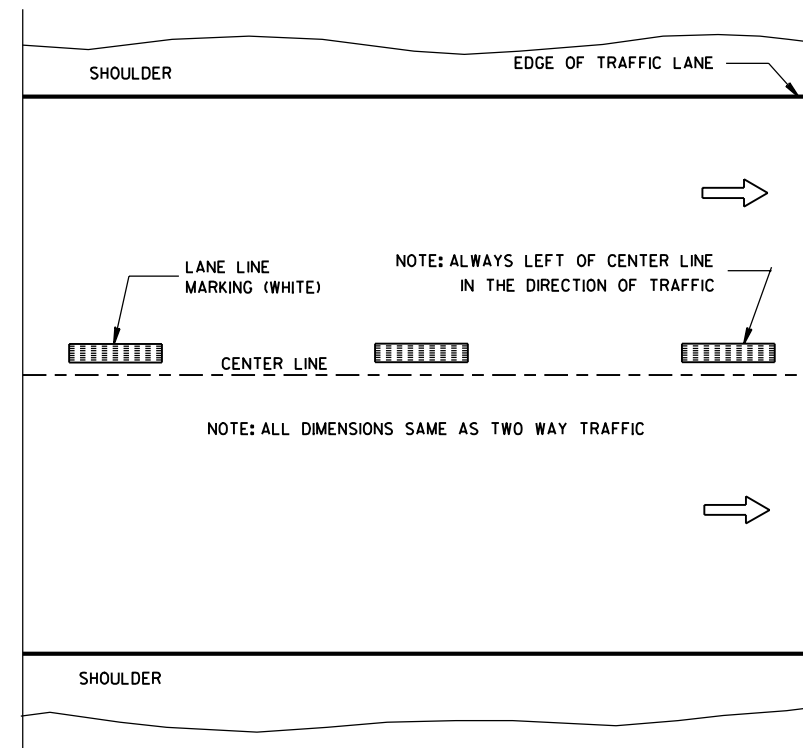


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

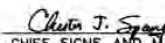
GENERAL NOTES

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.

NOTE

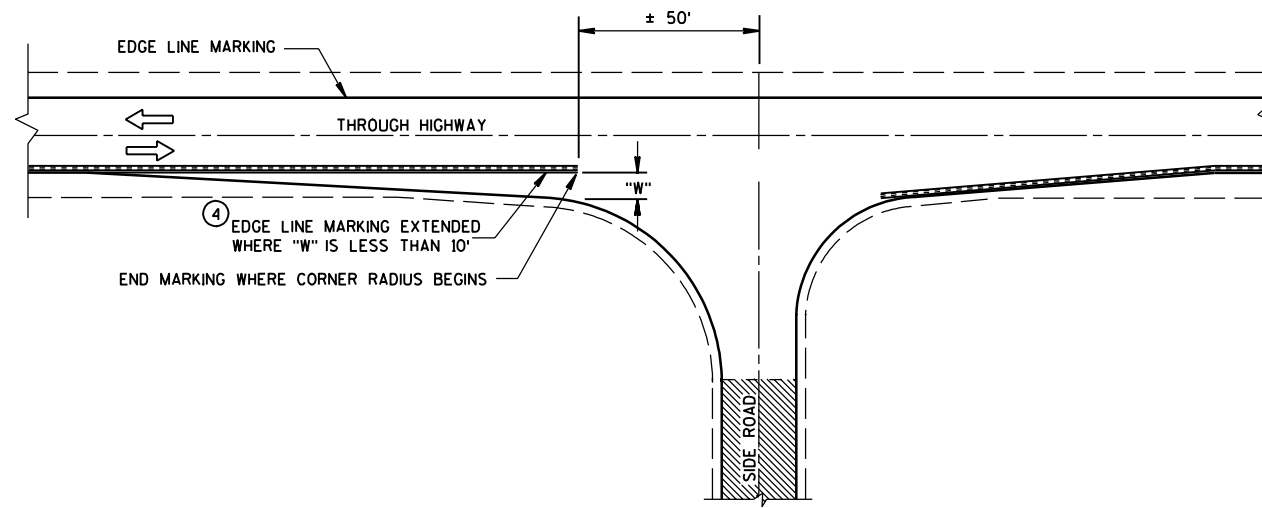
ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING (MAINLINE)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3/6/00 DATE	 CHESTER J. SPANG CHIEF SIGNS AND MARKING ENGINEER
FHWA	

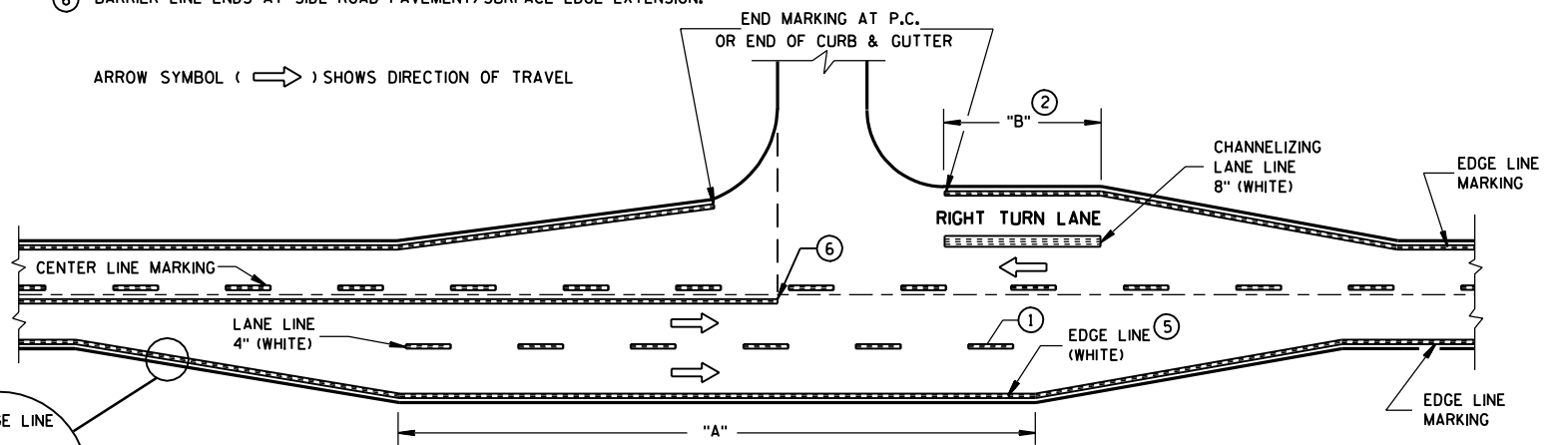
NOTES

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

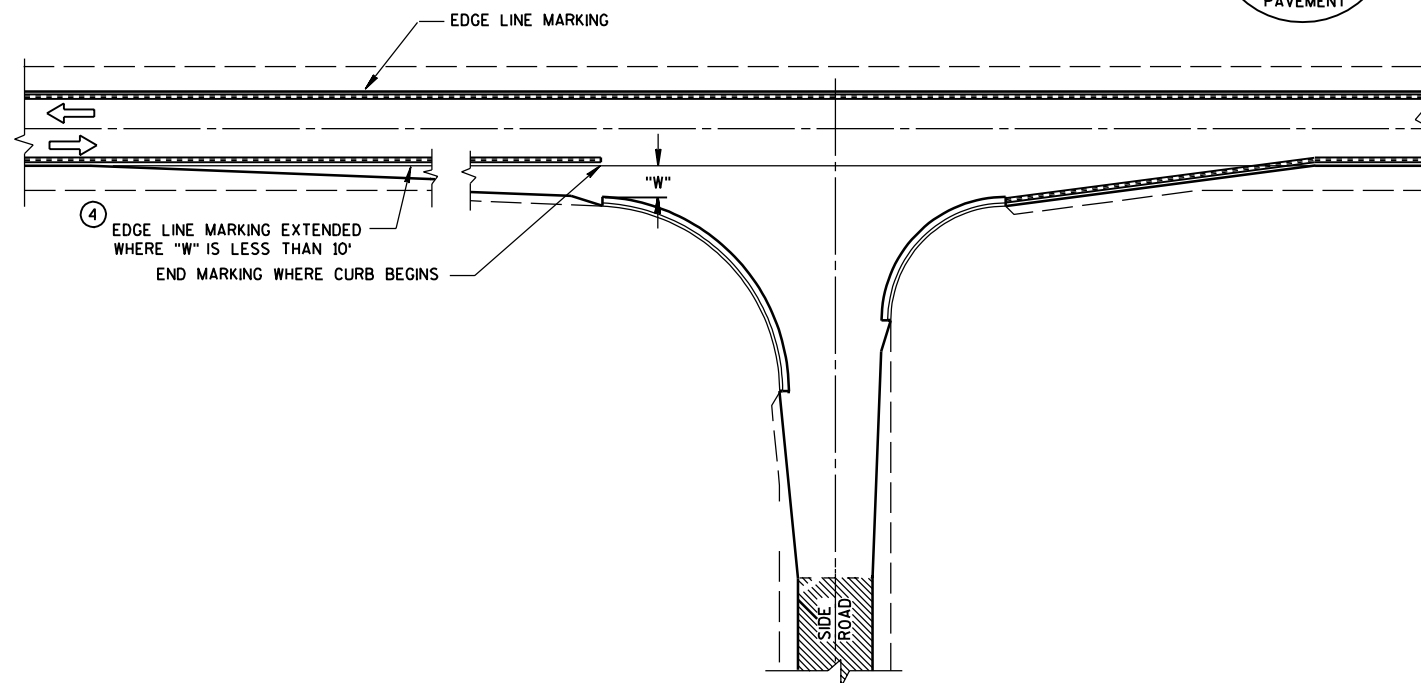
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP 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 LOCATE THE EDGE LINE ALONG THE TAPER WHERE "W" IS 10' OR MORE.
- ⑤ 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.
- ⑥ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.



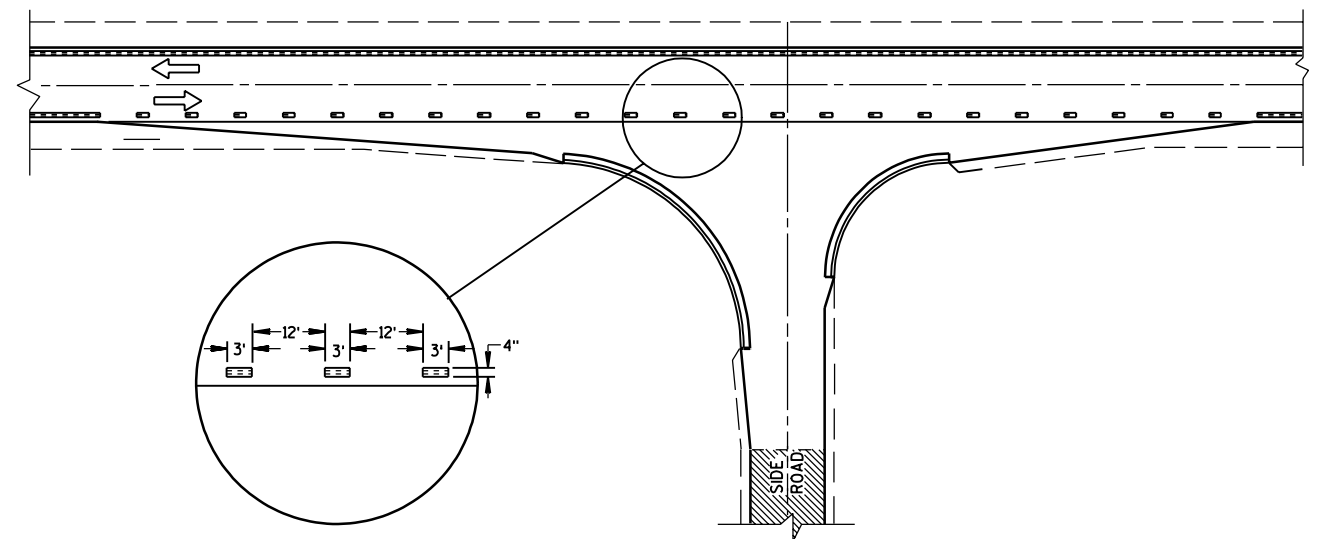
MINOR INTERSECTION WITHOUT CURBS



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

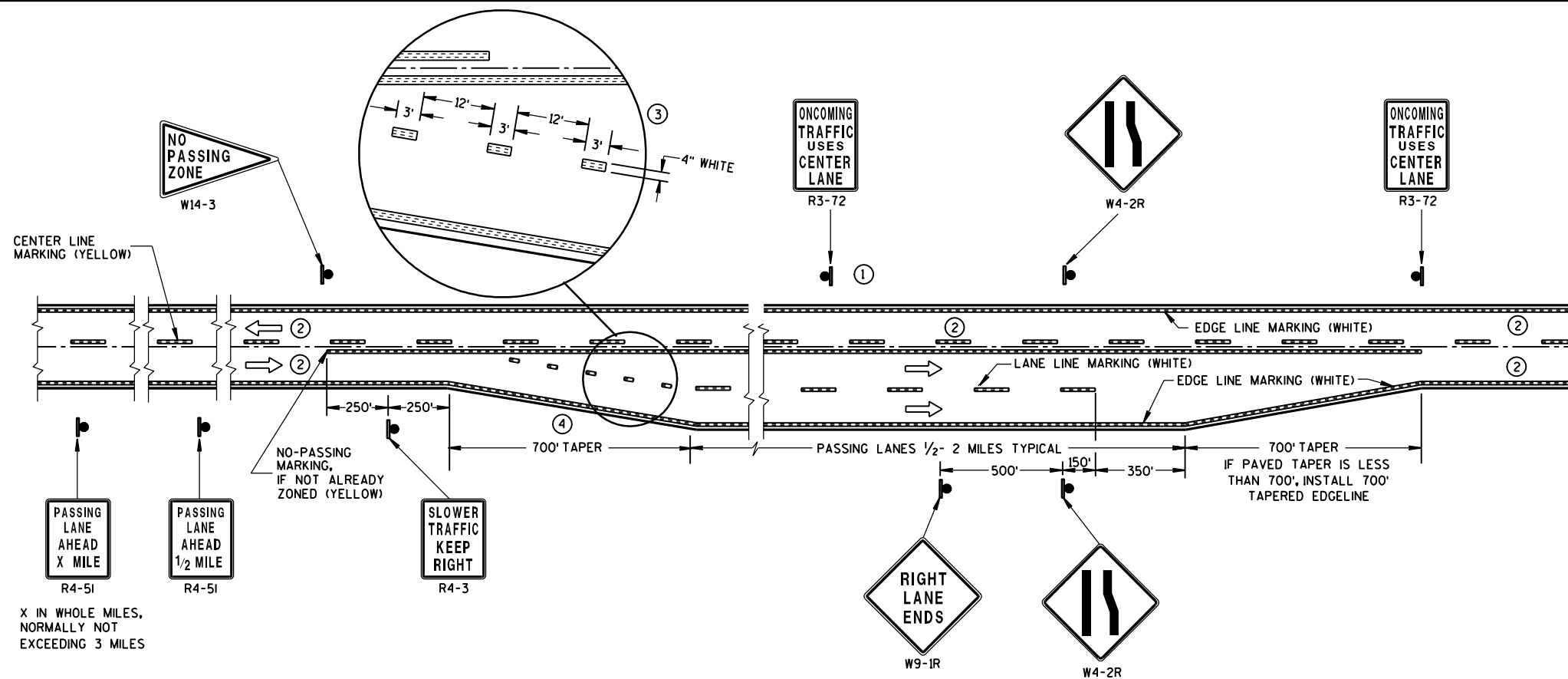
PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

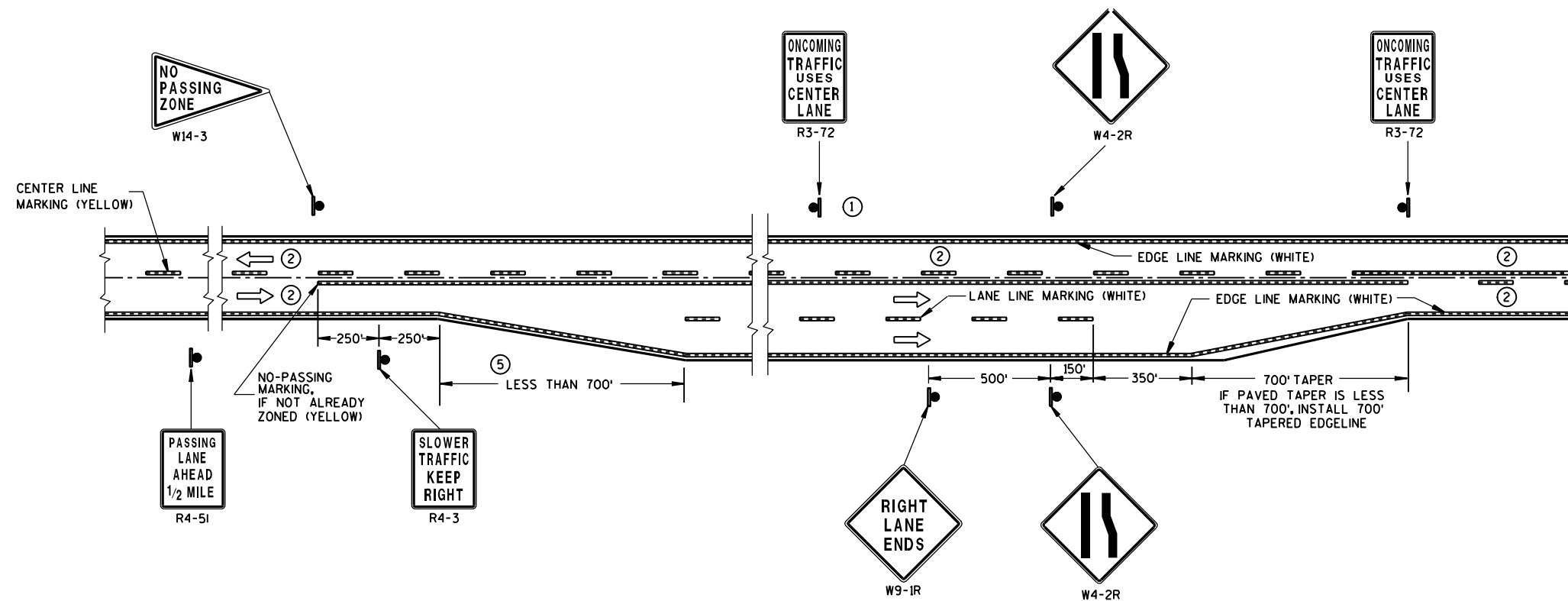
GENERAL NOTES

- ① SIGN R3-72 SHALL BE REPEATED AT 1/2 MILE INCREMENTS WHERE THE ADDED LANE IS LONGER THAN 1/2 MILE. (NOT NECESSARY IF MARKED NO-PASSING)
- ② THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
- ③ THE TAPER LENGTH OF THE PAVEMENT MARKING SHALL BE 700 FEET.
- ④ WHEN THE SHOULDER WIDTH IN THE PASSING LANE OR CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT GUIDE TRAFFIC TO THE RIGHT IN THE ENTRANCE TAPER AREA WITH SKIP-DASH PAVEMENT MARKING.
- ⑤ WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT GUIDE TRAFFIC TO THE RIGHT IN THE ENTRANCE TAPER AREA WITH SKIP-DASH PAVEMENT MARKING.

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



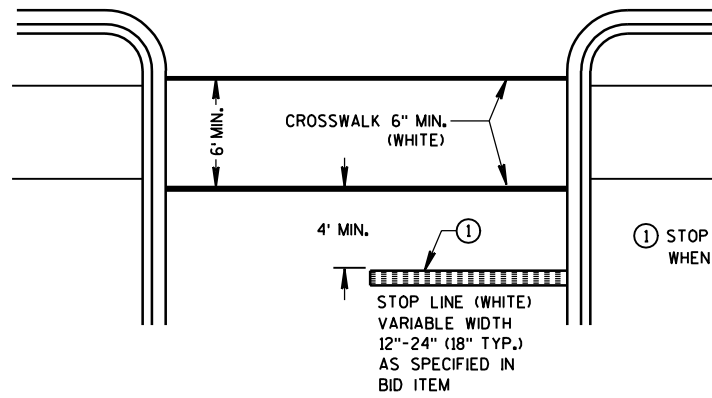
PASSING LANE & CLIMBING LANE



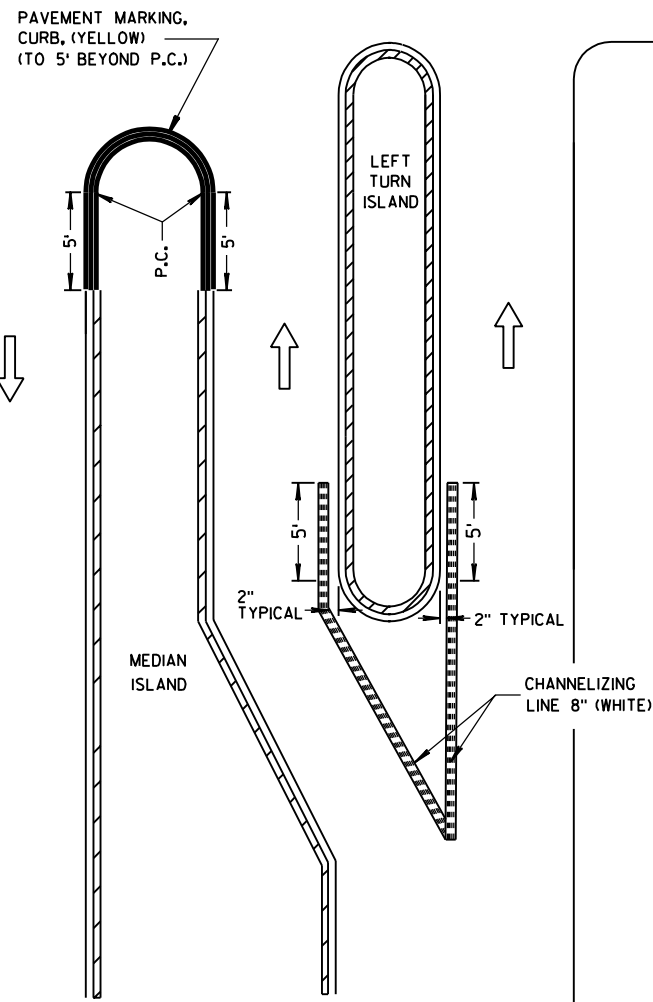
CLIMBING LANE (SHORT ENTRANCE TAPER)

PAVEMENT MARKING
(CLIMBING LANE &
PASSING LANE)

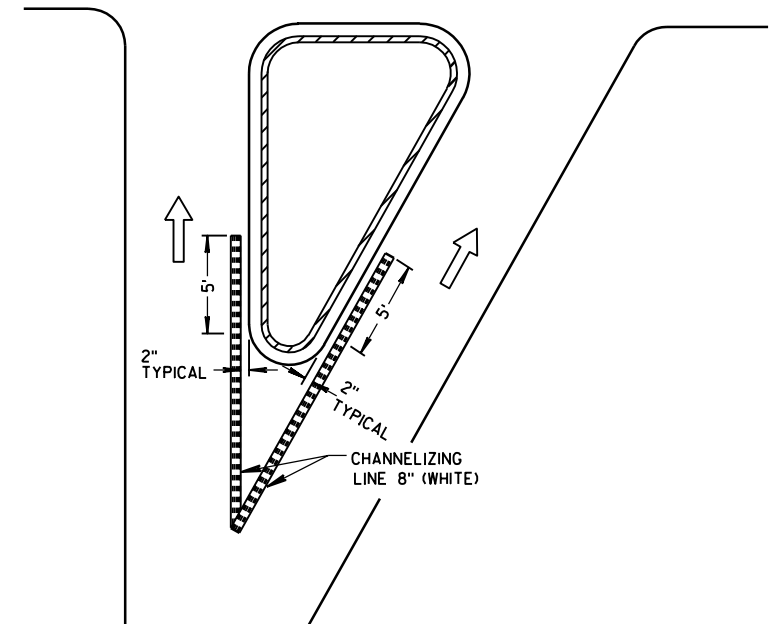
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



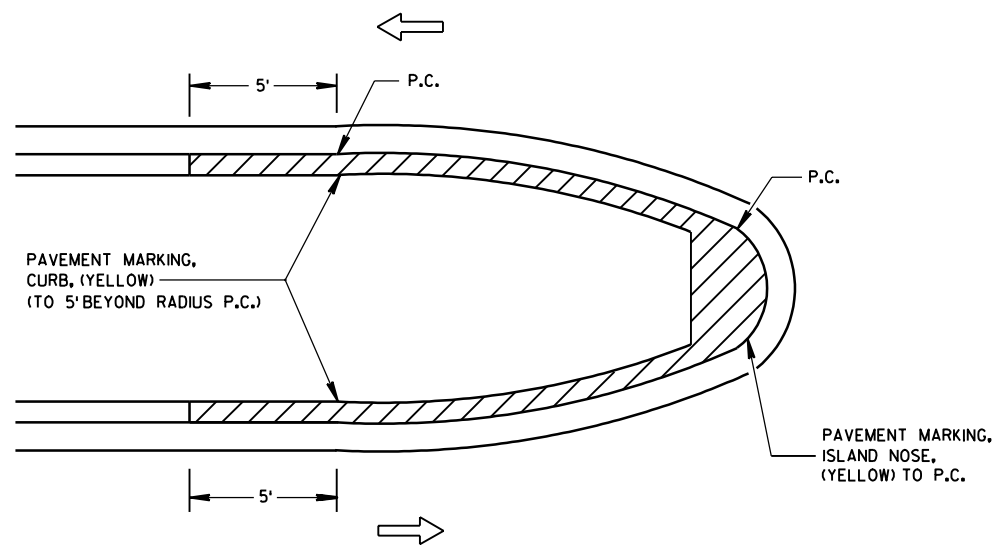
STOP LINE AND CROSSWALK



LEFT TURN & MEDIAN ISLAND



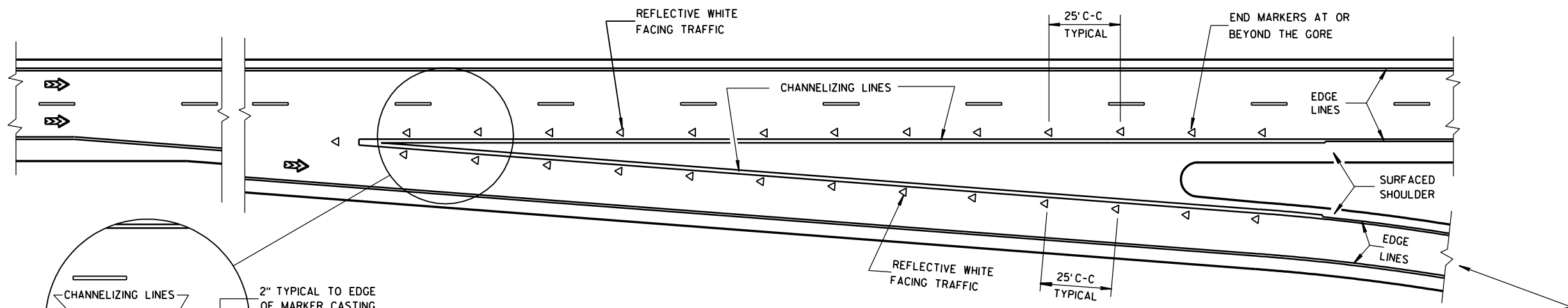
RIGHT TURN ISLAND



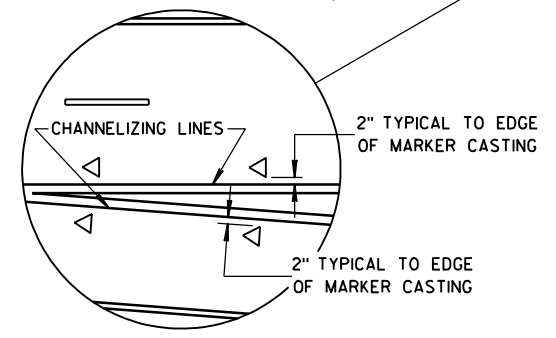
MEDIAN ISLAND WITH SLOPED NOSE

NOTE:
ARROW SYMBOL (⇒)
SHOWS DIRECTION OF TRAVEL

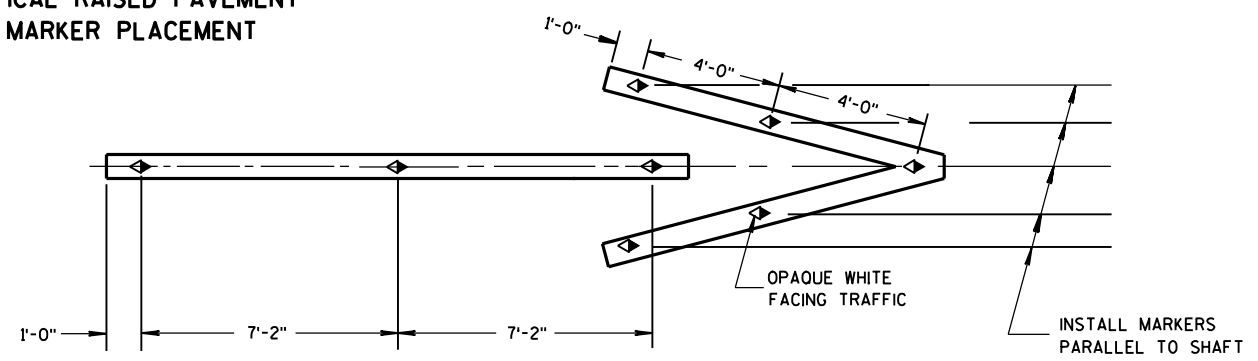
PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 1-16-03 DATE	<i>Deborah R. Kozel</i> CHIEF SIGNS AND MARKING ENGINEER
FHWA	



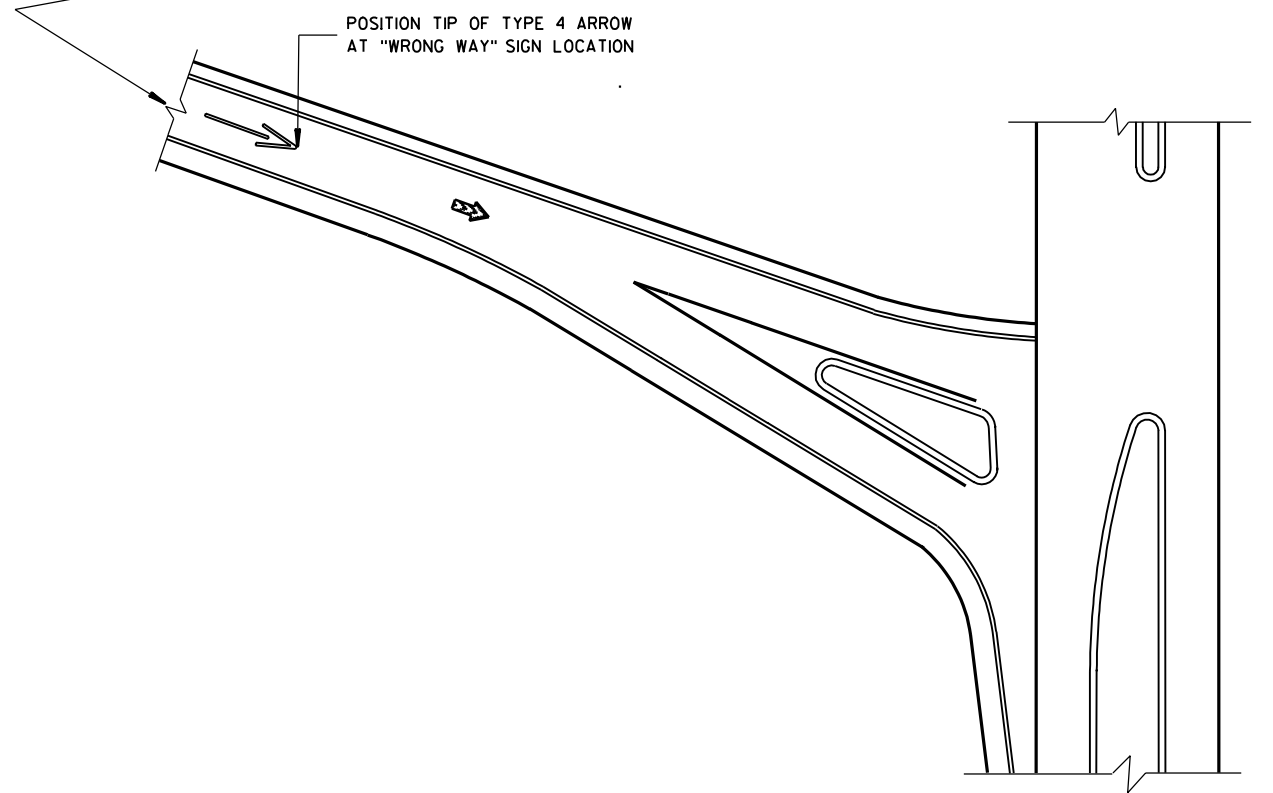
PLAN VIEW
EXIT RAMP



TYPICAL RAISED PAVEMENT
MARKER PLACEMENT



* TYPE 4 ARROW



GENERAL NOTES

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

MARKER REFLECTORS INSTALLED IN TYPE 4 ARROWS BEFORE APPLICATION OF THE ARROW MARKING MATERIAL SHALL BE MASKED TO PREVENT COATING.

LONGITUDINALLY RELOCATE A DISTANCE UP TO 10% OF THE TYPICAL SPACING TO AVOID DETERIORATED PAVEMENT OR TRANSVERSE JOINTS.

* WHEN SPECIFIED UNDER THE CONTRACT, REFER TO DESIGN NOTES.

LEGEND

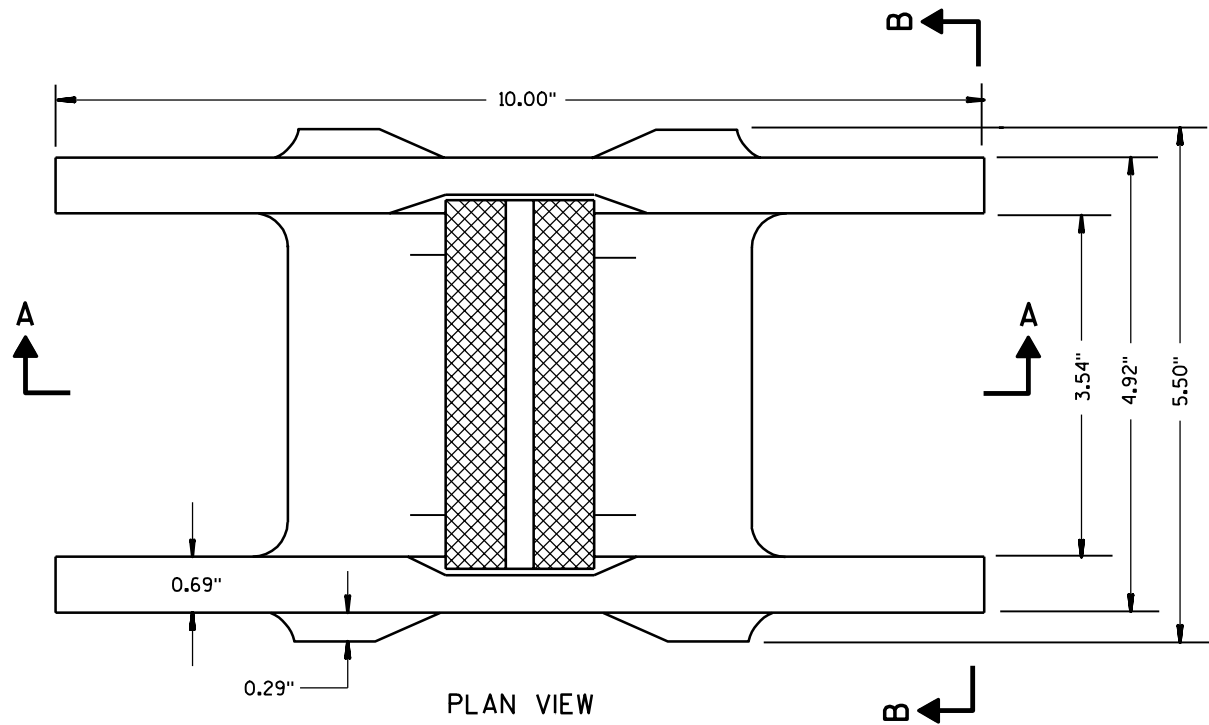
- ◁ ONE WAY MARKER WITH REFLECTIVE WHITE
- ◊ TWO WAY MARKER OPAQUE WHITE/REFLECTIVE RED REFLECTOR
- ↔ DIRECTION OF TRAFFIC

**RAISED PAVEMENT MARKERS
(RAMPS & ARROWS)**

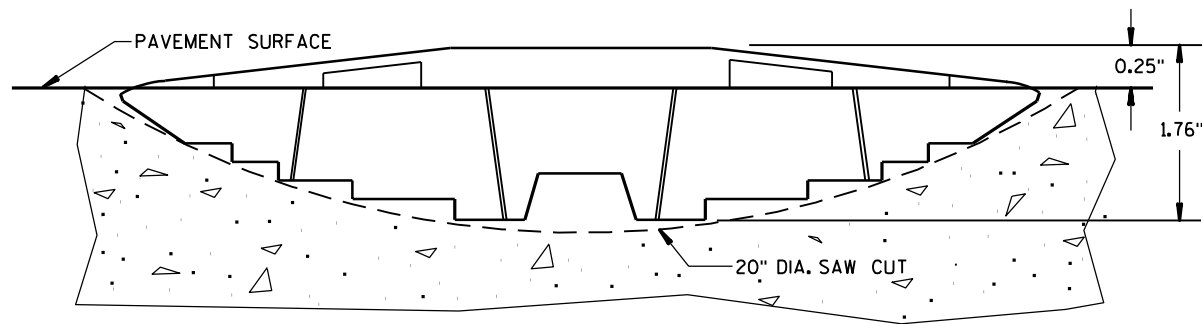
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/19/00 DATE
Chetan J. Spang
CHIEF SIGNS AND MARKING ENGINEER

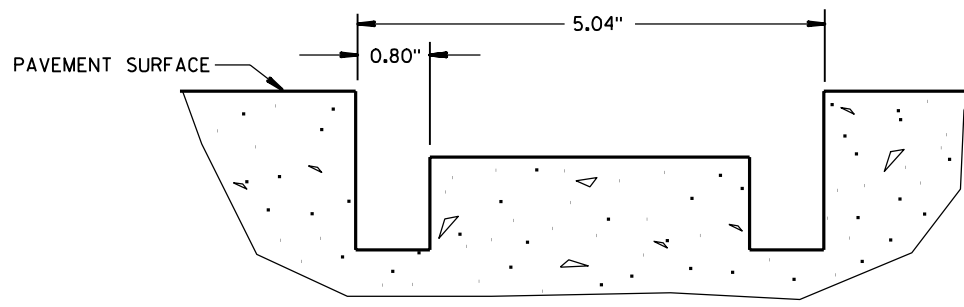
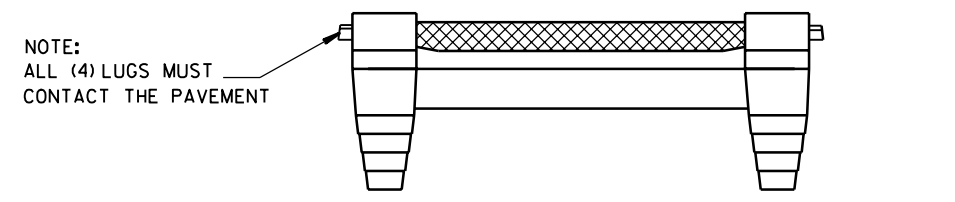
FHWA



PLAN VIEW
RAISED MARKER
INSTALLED IN PAVEMENT



SECTION A-A



SECTION B-B

GENERAL NOTES

THE PAVEMENT SHALL BE SAW CUT TO THE DIMENSIONS SHOWN ON THIS DRAWING.

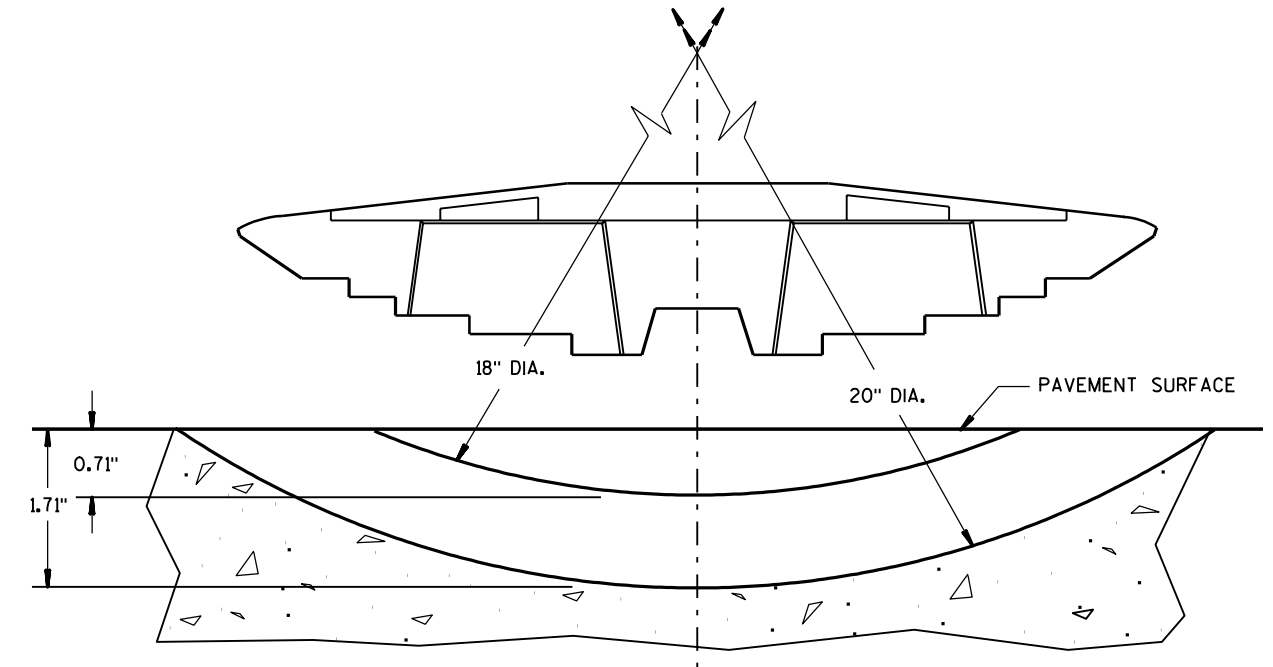
THE CONCRETE SAW SHALL BE FITTED WITH A GANG OF 18 INCH DIAMETER CONCRETE BLADES, BORDERED BY 20 INCH DIAMETER BLADES AT EACH END.

FOR PROPER FIT OF THE MARKER THE CASTING SHOULD HAVE APPROXIMATELY 1/8 INCH CLEARANCE (SIDE TO SIDE MOVEMENT) WHEN INSERTED AT EACH END, ALL FOUR LEVELING LUGS MUST CONTACT THE PAVEMENT, AND THE LEADING EDGES OF THE CASTING MUST LIE BELOW THE PAVEMENT SURFACE.

THE SAW CUT AREA MUST BE DRY AND FREE OF DUST, DIRT OR ANY MATERIAL WHICH WILL ADVERSELY AFFECT THE BOND OF THE ADHESIVE.

THE CASTING, WHERE IT WILL BE IN CONTACT WITH THE EPOXY, SHALL BE FREE OF SCALE, RUST, DIRT, OIL, GREASE, OR OTHER CONTAMINANT THAT MAY REDUCE THE BOND.

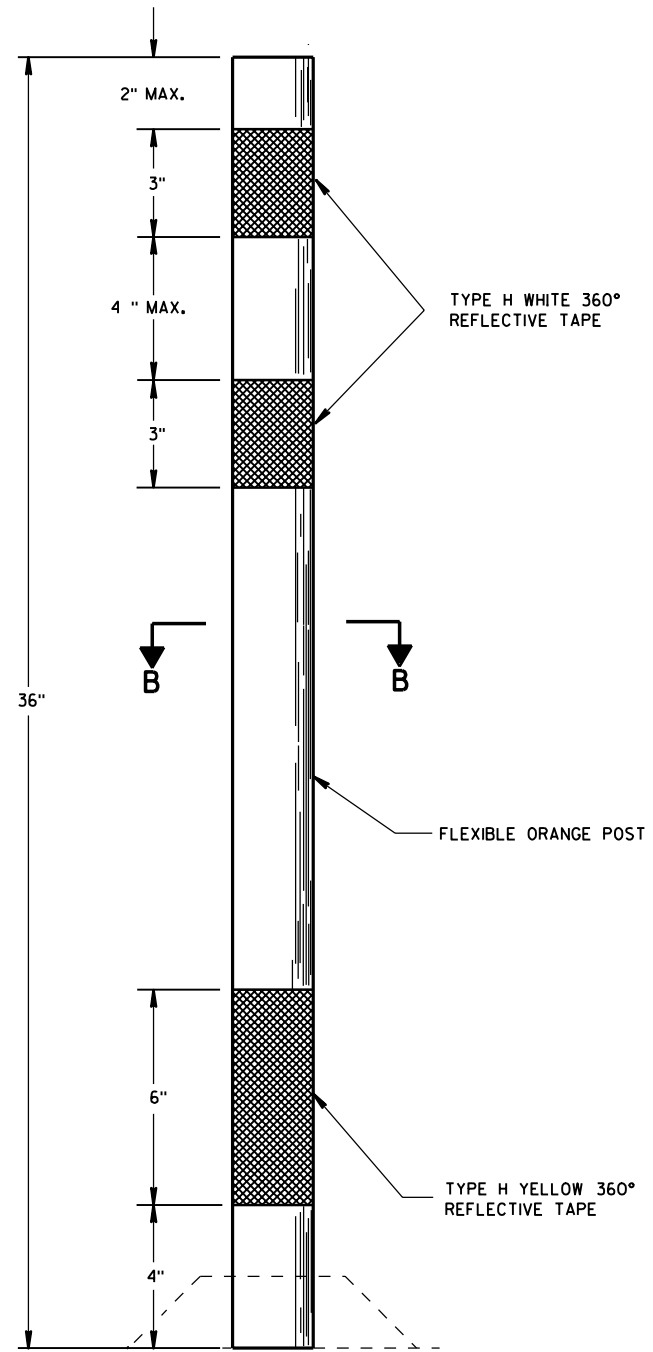
INSTALL THE MARKER WITH AN APPROVED TWO COMPONENT EPOXY ADHESIVE, BY FIRST FILLING THE SAW CUT TO WITHIN APPROXIMATELY 3/8 INCH OF PAVEMENT SURFACE AND THEN PLACING THE MARKER BY HAND INTO THE EPOXY FILLED SAW CUT. AFTER PLACEMENT OF MARKER, EPOXY SHOULD BE FLUSH WITH THE PAVEMENT SURFACE. EPOXY SHOULD NOT BE ALLOWED TO BUILD UP IN FRONT OF THE MARKER LENS, COVER THE MARKER LENS OR ADJACENT PAVEMENT MARKING. ANY DEBRIS OR RESIDUE CAUSED BY THE PAVEMENT SAWING, CUTTING AND MARKER INSTALLATION SHALL BE REMOVED FROM THE PAVEMENT MARKINGS.



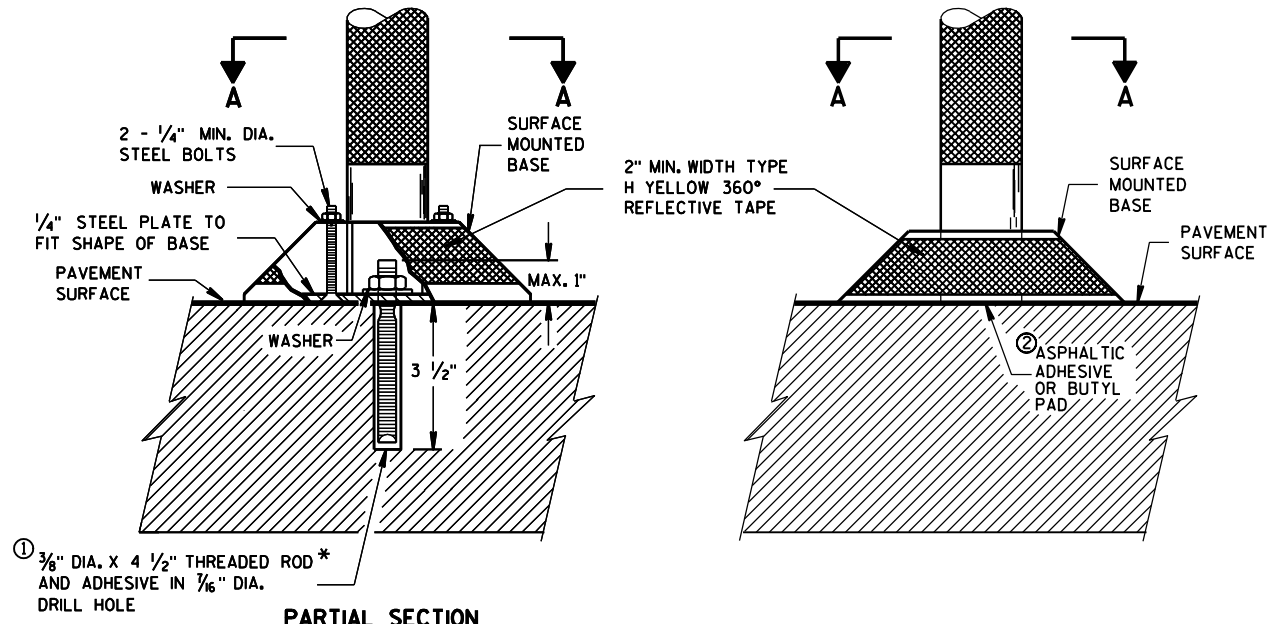
SAW CUT DETAIL

S.D.D. 15 C 10-6D

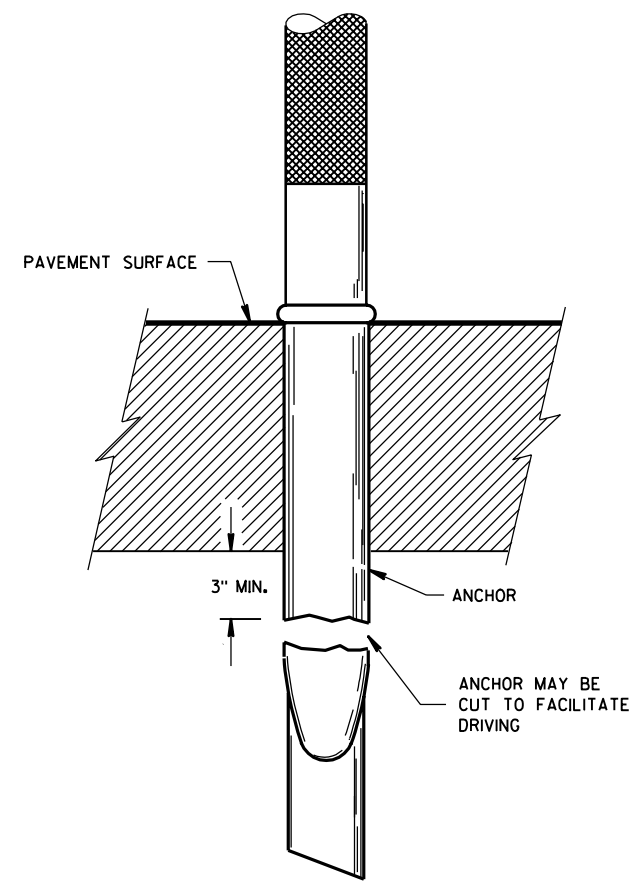
TWO WAY RAISED PAVEMENT MARKERS (CASTING & SAWCUT DETAILS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/19/00 DATE	<i>Chetan J. Spang</i> CHIEF SIGNS AND MARKING ENGINEER
FHWA	



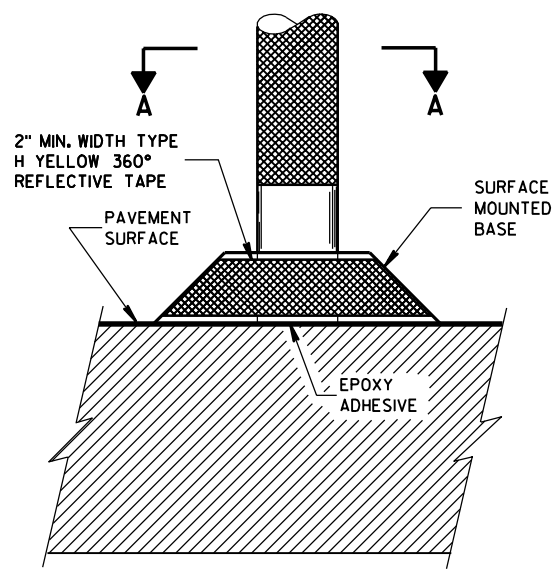
FLEXIBLE TUBULAR MARKER POST



PARTIAL SECTION TO SHOW BOLTS
POST BASES ON NEW OR EXISTING PAVEMENT

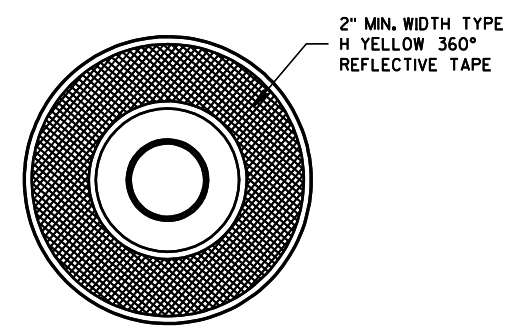


POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED

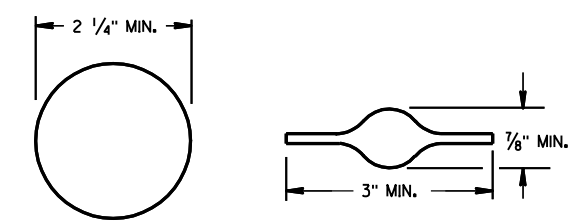


GENERAL NOTES

- DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.
- SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.
- ① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1/4 INCHES FROM THE TOP.
 - ② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



SECTION A-A
SURFACE MOUNTED BASE



SECTION B-B
ALTERNATIVE SHAPES

FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2/17/94 DATE	<i>Scott F. Busch</i> STATE TRAFFIC ENGINEER FOR HWYS
FHWA	

S.D.D. 15 C 11-5

S.D.D. 15 C 11-5

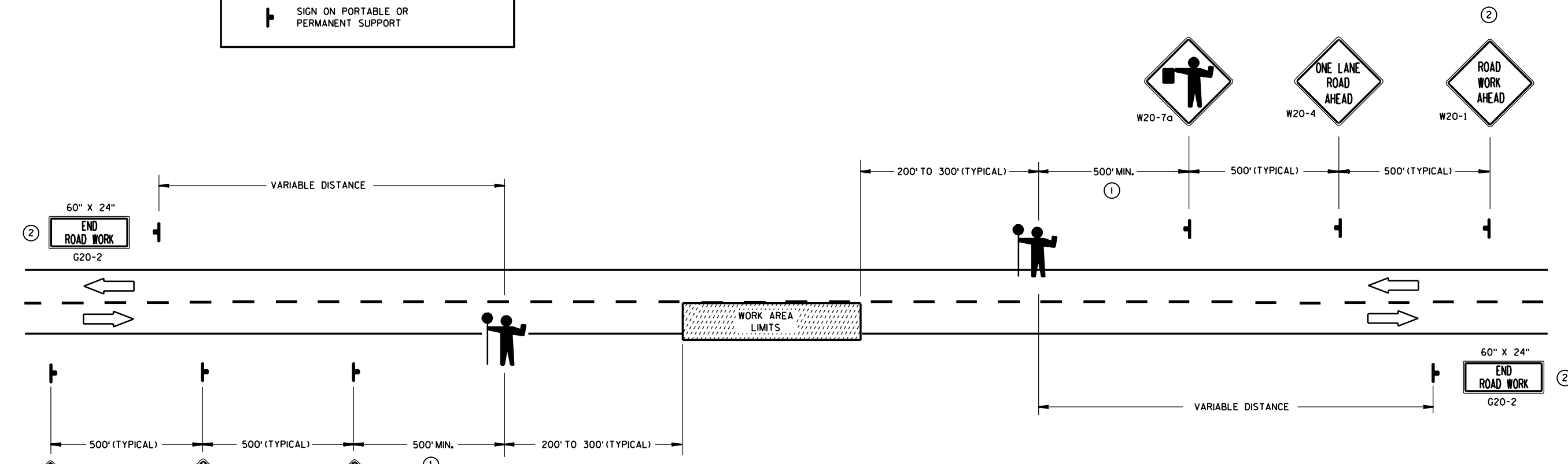
TWO-LANE ROADWAY

SYMBOLS

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



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 DIRECTED 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 DIRECTED 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, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

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

DESIGN NOTE: (WILL NOT APPEAR ON CONTRACT PLANS)
 DROP OFFS OR OPEN TRENCHES ADJACENT TO ONE LANE TRAFFIC OPERATIONS SHOULD BE MARKED WITH CONES OR DRUMS. PROVIDE APPROPRIATE DETAILS AND/OR SPECIAL PROVISIONS WHEN THIS CONDITION IS EXPECTED.
 THIS DETAIL IS APPROPRIATE FOR RURAL HIGH SPEED CONDITIONS. URBAN LOWER SPEED CONDITIONS REQUIRE A CLOSER SIGN SPACING.

- 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 DIRECTED 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

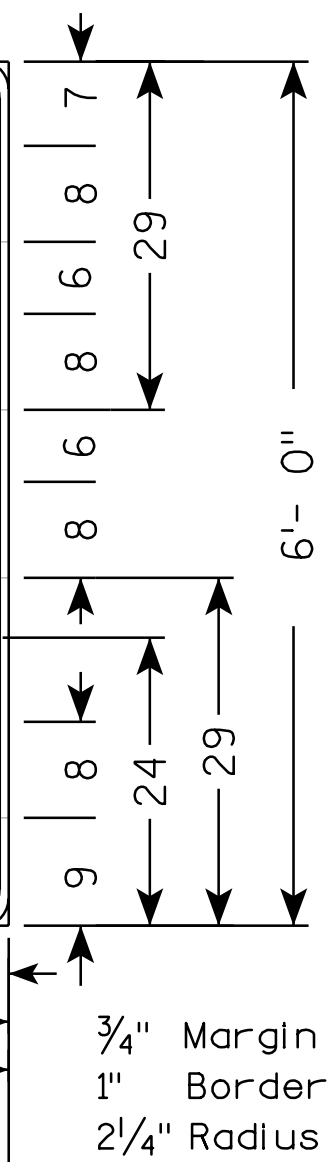
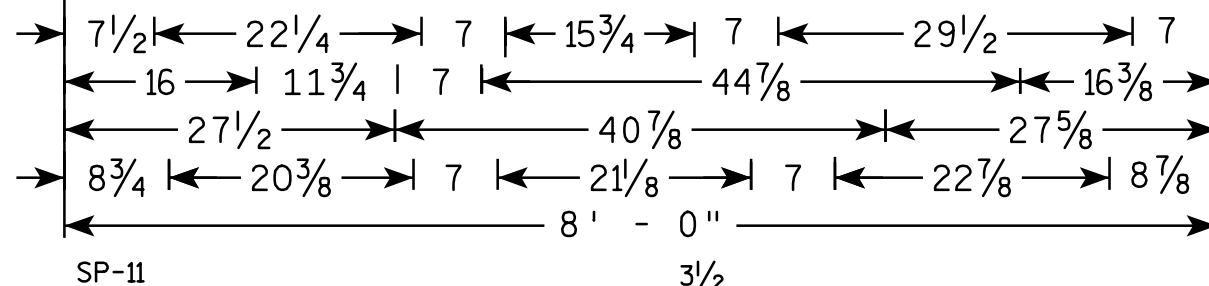
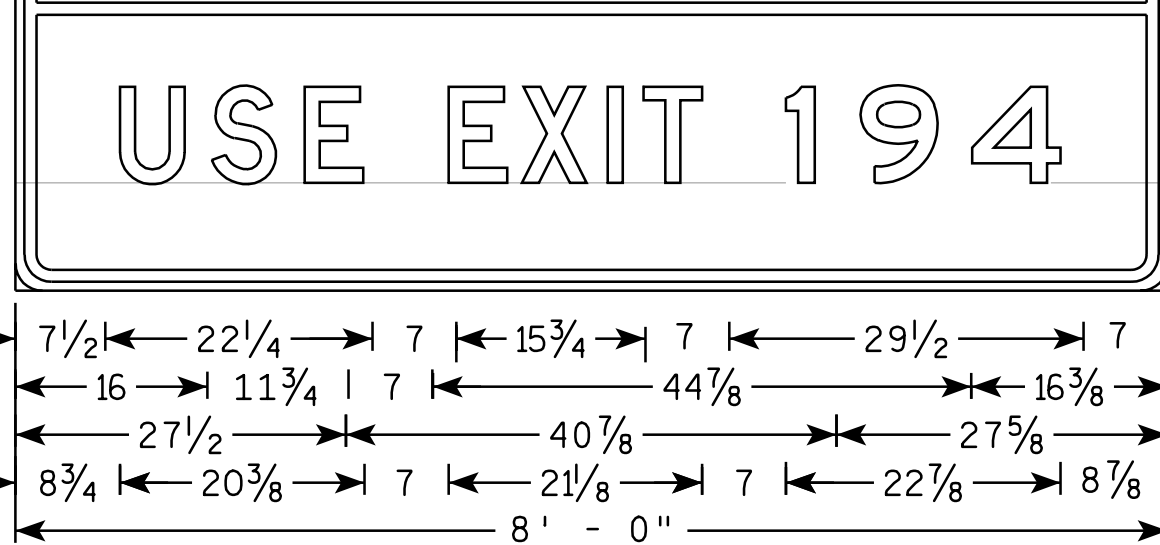
APPROVED
 2/17/94
 DATE
 FHWA

John J. Busch
 STATE TRAFFIC ENGINEER FOR HWYS

Engineer Grade
 Orange Background
 Black Letters
 Message Series D

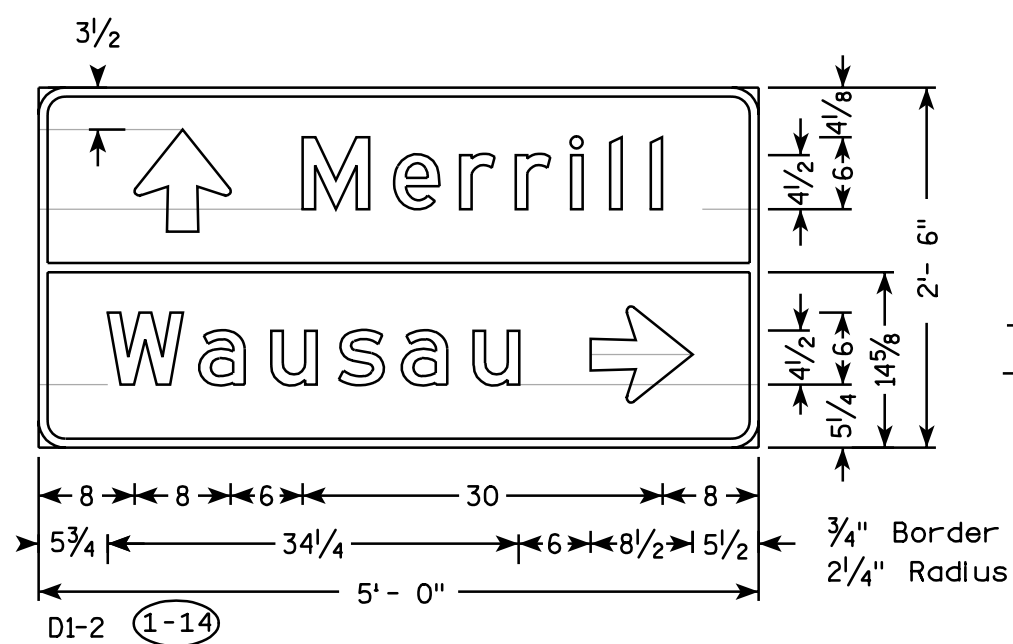
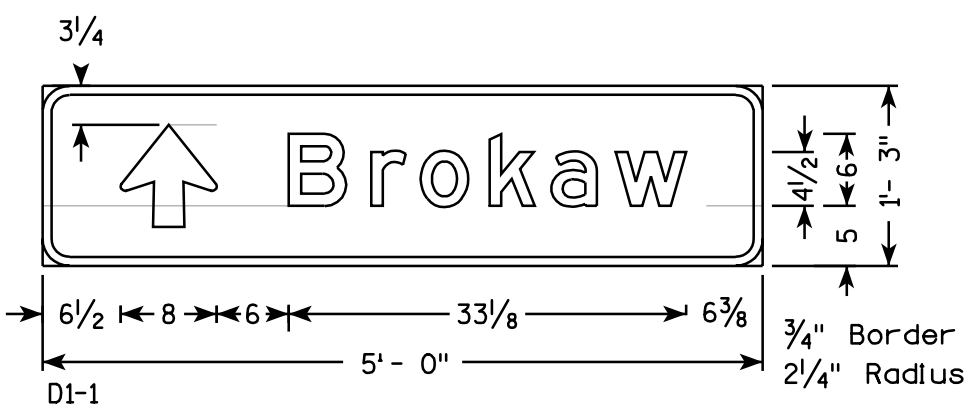
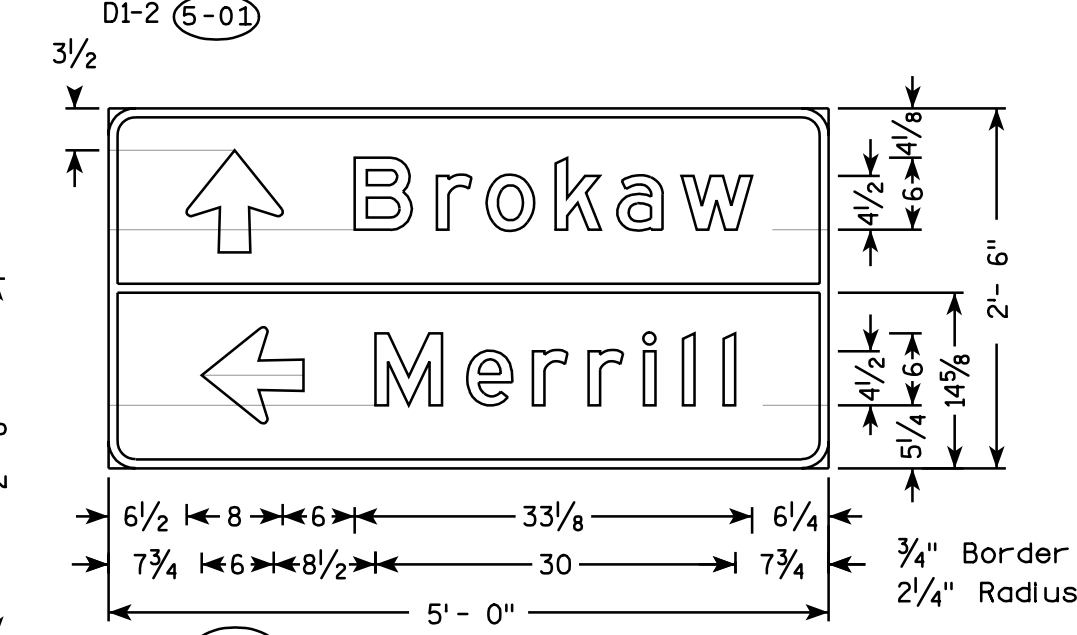
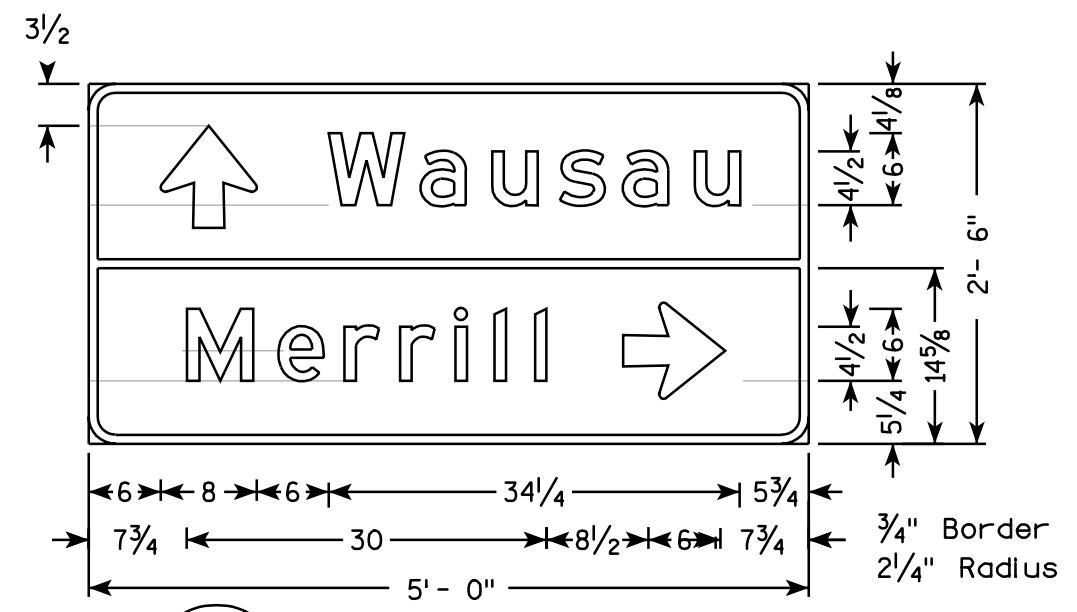


Engineer Grade
 White Background
 Black Letters
 Message Series E



NOTES

1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
 Background - Green except as noted
 Message - White Type H Reflective except as noted
3. Message Series - E except as noted



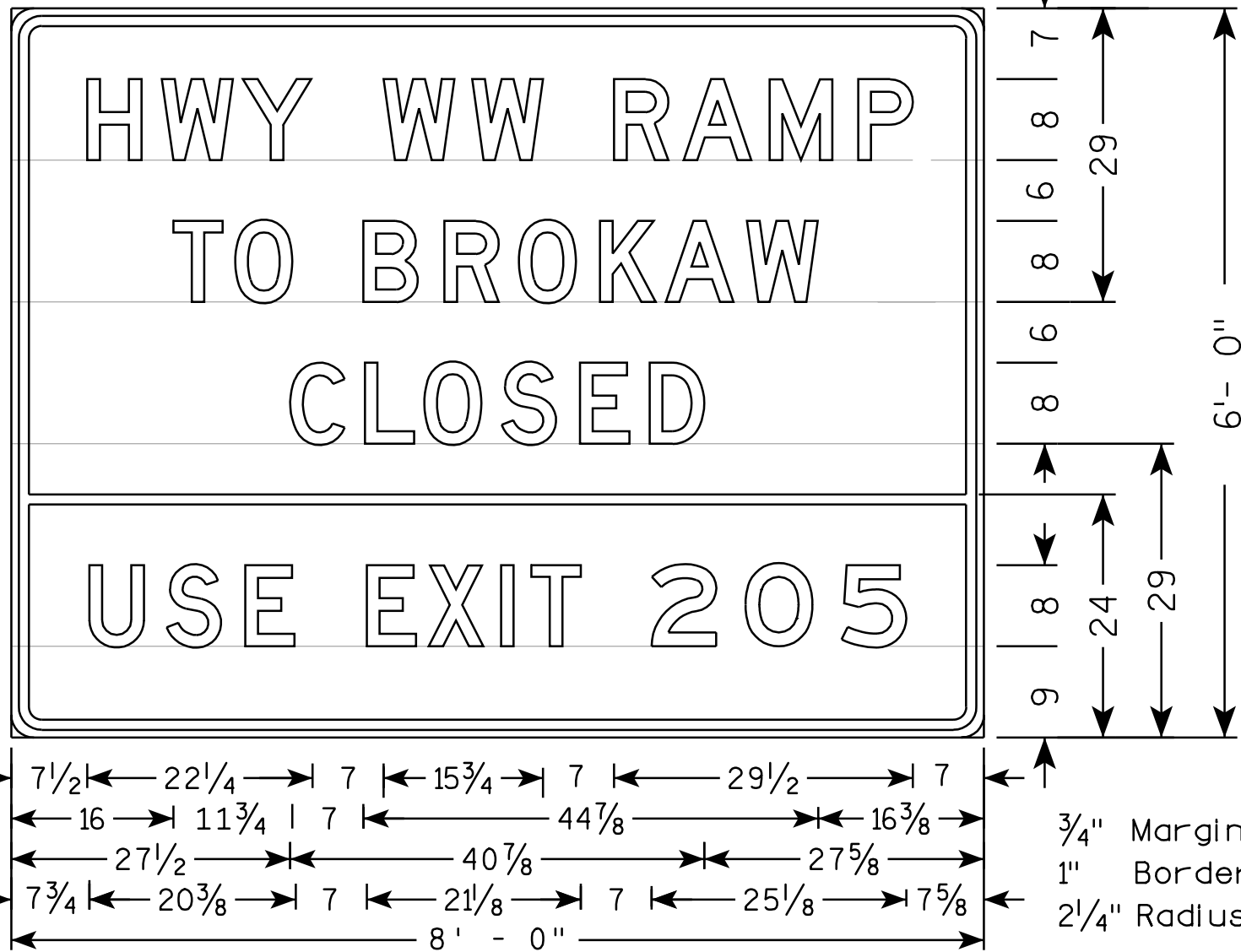
7

LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63

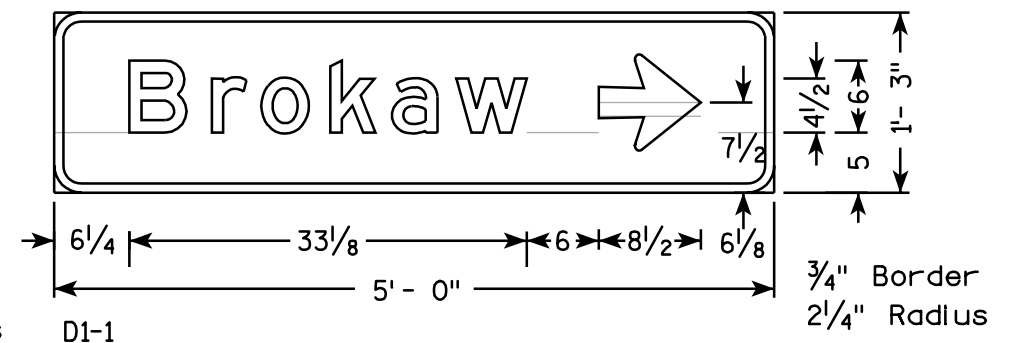
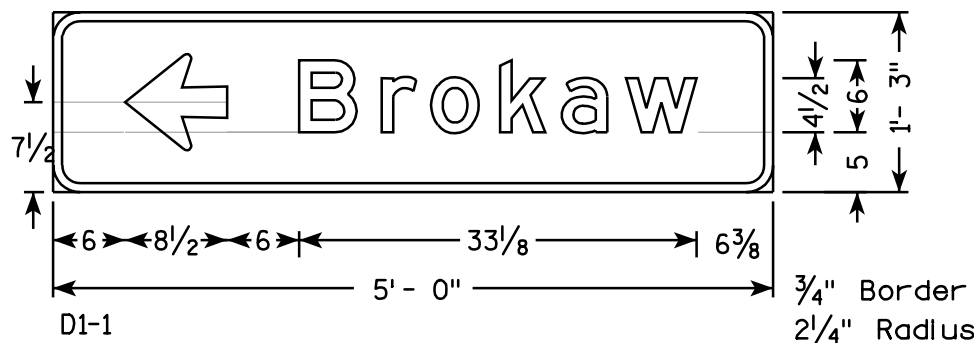
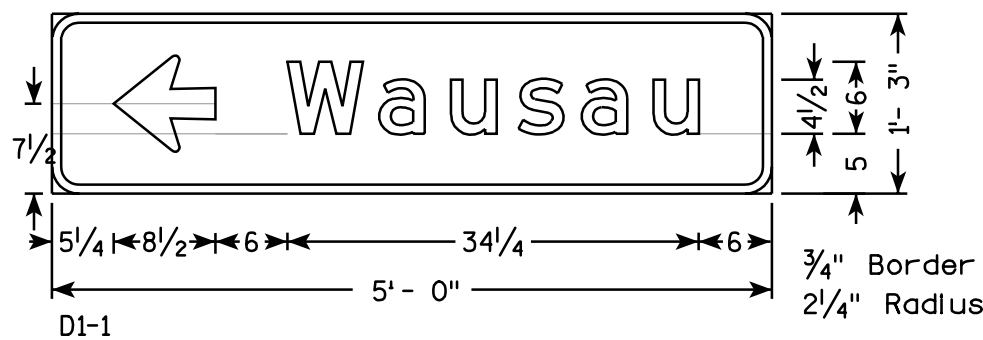
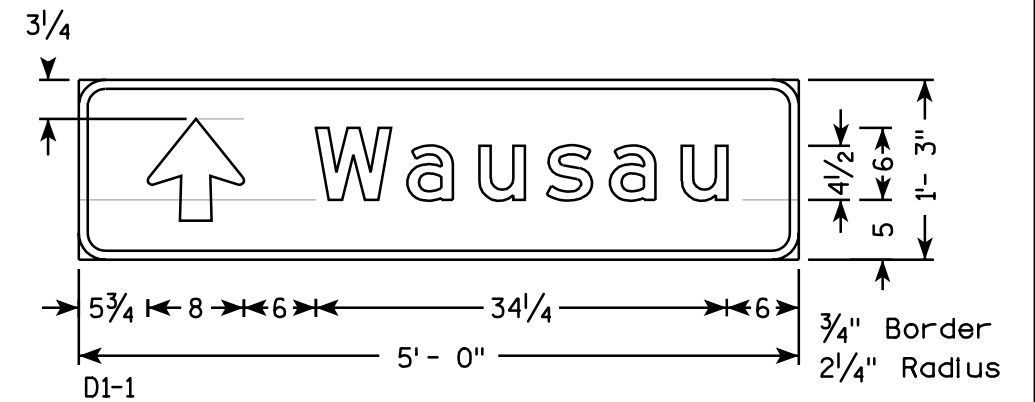
Engineer Grade
Orange Background
Black Letters
Message Series D

Engineer Grade
White Background
Black Letters
Message Series E



NOTES

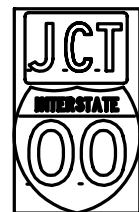
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green except as noted
Message - White Type H Reflective except as noted
3. Message Series - E except as noted



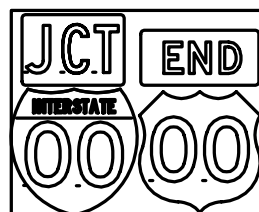
TYPICAL ASSEMBLIES

NOTES

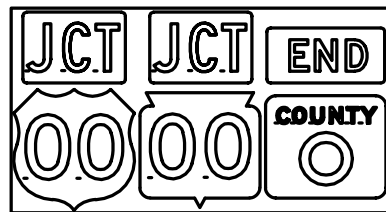
1. Signs are Type II - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Black Non-reflective
Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square since base material is plywood.
5. The colors 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 MI-1 Interstate marker shall be blue.



J1-1



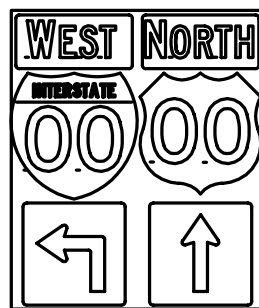
J1-2



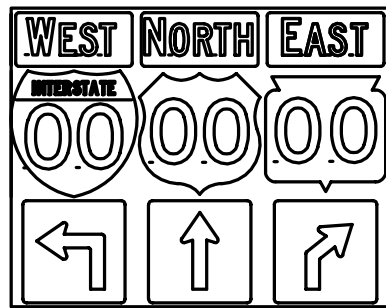
J1-3



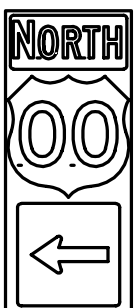
J2-1



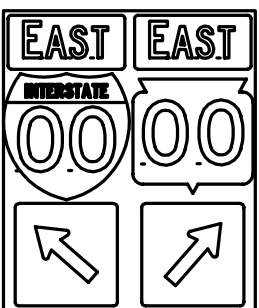
J2-2



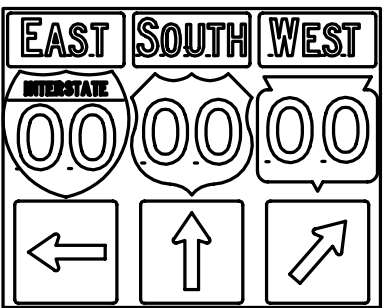
J2-3



J3-1



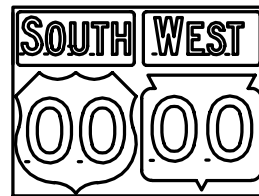
J3-2



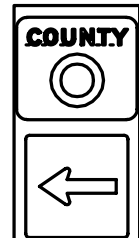
J3-3



J4-1



J4-2



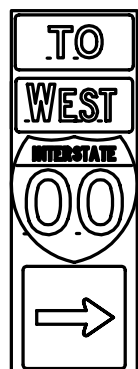
J13-1



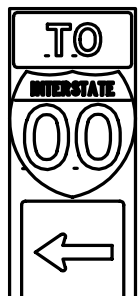
J12-1



J32-1



J33-1

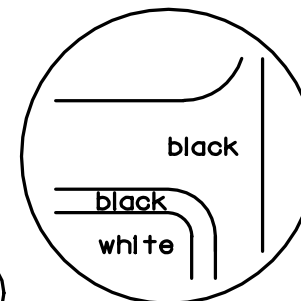
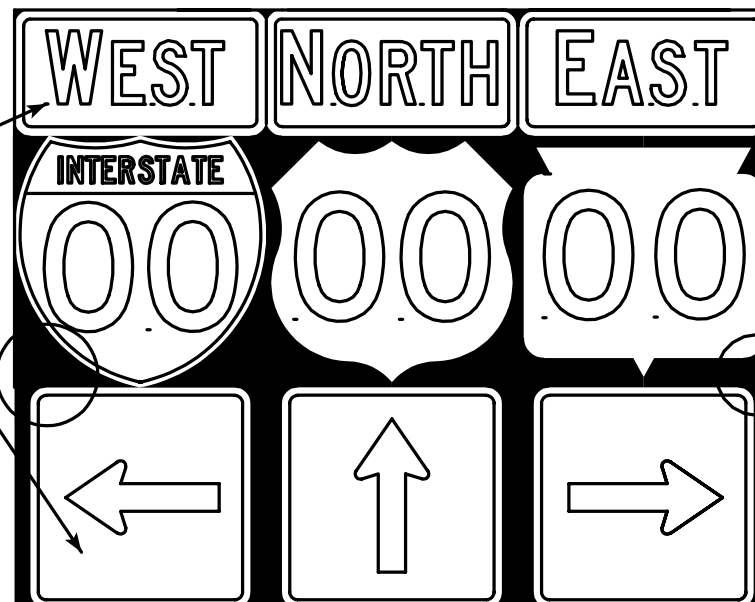
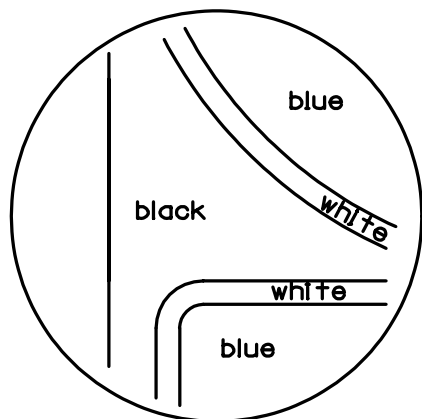


J23-1



J22-1

[blue background with Interstate]



[black background]

ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Christa J. Spay
for State Traffic Engineer

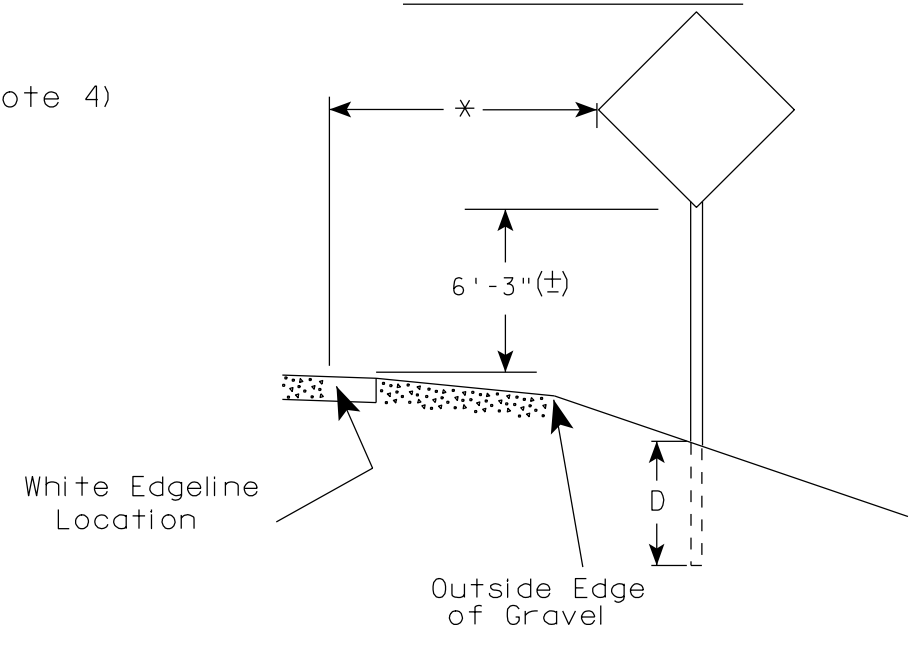
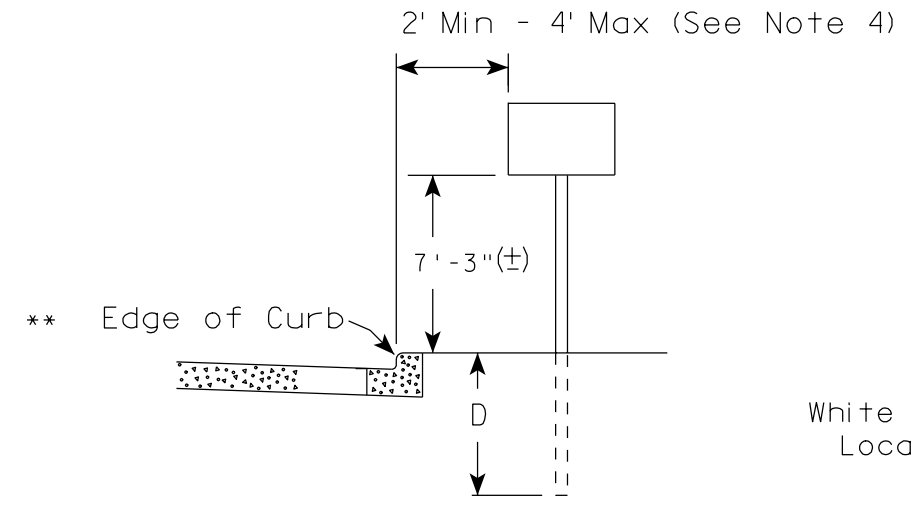
DATE 3/30/99

PLATE NO. A2-1S.1

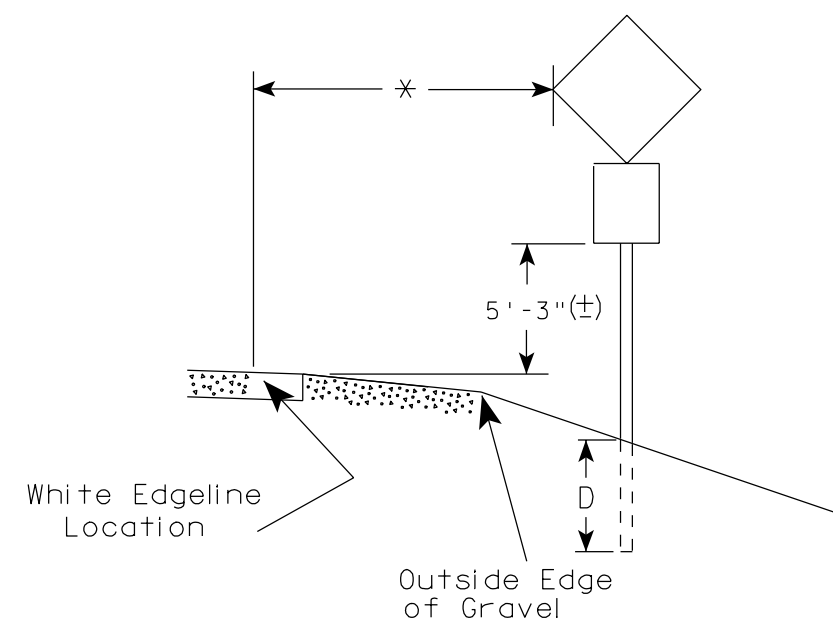
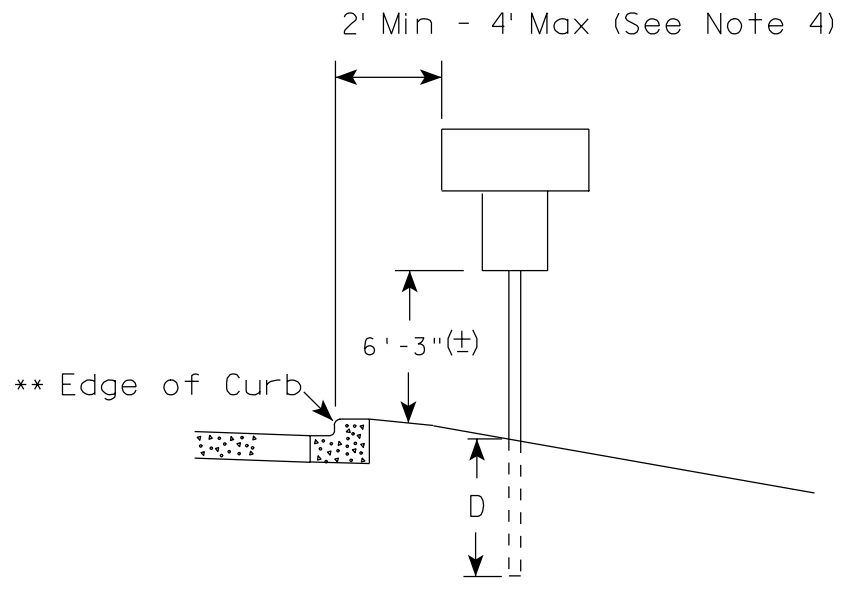
URBAN AREA

RURAL AREA (See Note 2)

GENERAL NOTES



1. Signs wider than 4 feet or larger than 20 sq. ft. shall be mounted on multiple posts. Refer to plate A4-4.
2. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
3. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.



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 where there is sidewalk adjacent to the roadway or parking is permitted. This same criteria applies to mountable curb as well and measurement shall be taken from 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 2/20/03 PLATE NO. A4-3.12

LEVELS ON - 2, 5.6, 10, 11, 12, 13, 14, 15, 16, 50, 57, 58, 59, 60, 61, 62, 63

GENERAL NOTES

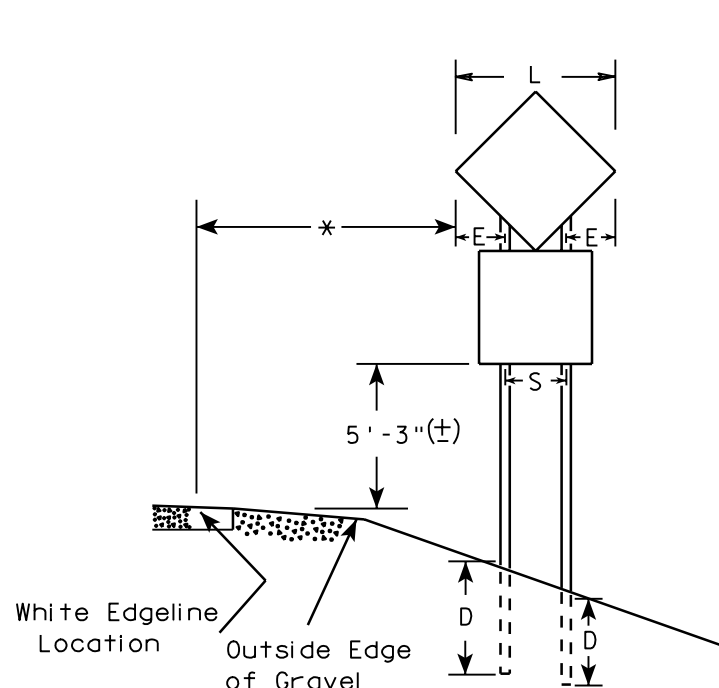
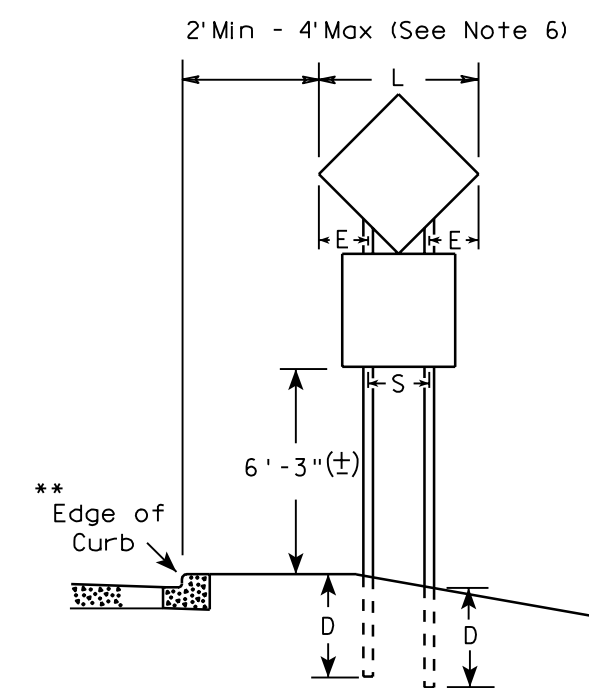
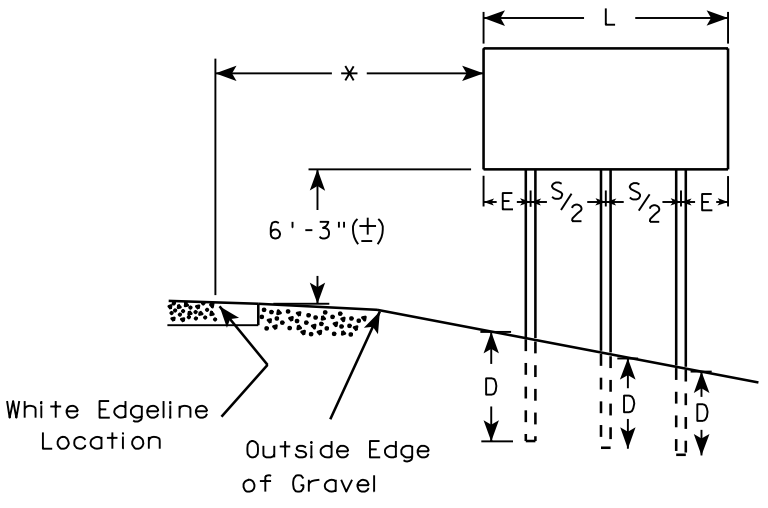
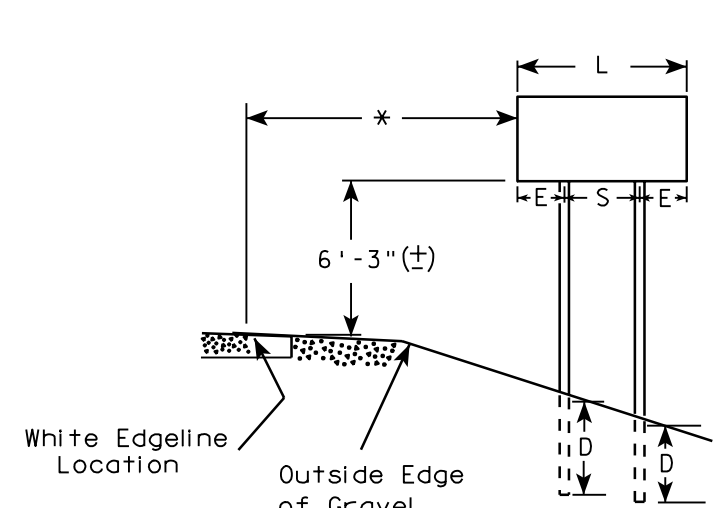
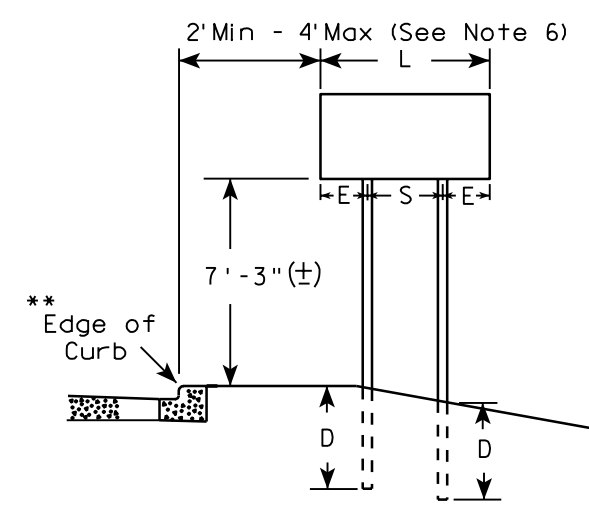
1. For 3 post installations, spacing is $S/2$ and S must be greater than 7'-0".
2. For 4 post installations, spacing is $S/3$ and S must be greater than 10'-6".
3. For expressways and freeways, mounting height is 7'-3" (\pm) or 6'-3" (\pm) depending upon existence of sub-sign.
4. The (\pm) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A4-5) is 7'-3" (\pm) or 6'-3" (\pm) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.

* 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 where there is sidewalk adjacent to the roadway or parking is permitted. This same criteria applies to mountable curb as well and measurement shall be from the flow line.

URBAN AREA

RURAL AREA (See Note 3)



DIAMOND SHAPED SIGNS

L	S	E
Less than 60"	20"	L/2 - 10
60"--72"	32"	L/2 - 16
Greater than 72"	3 L/5	L/5

SIGN SHAPE OTHER THAN DIAMOND (Two Post Installations)

L	S	E
Less than 60"	L-24"	12"
60" or more	3 L/5	L/5

POST EMBEDMENT DEPTH

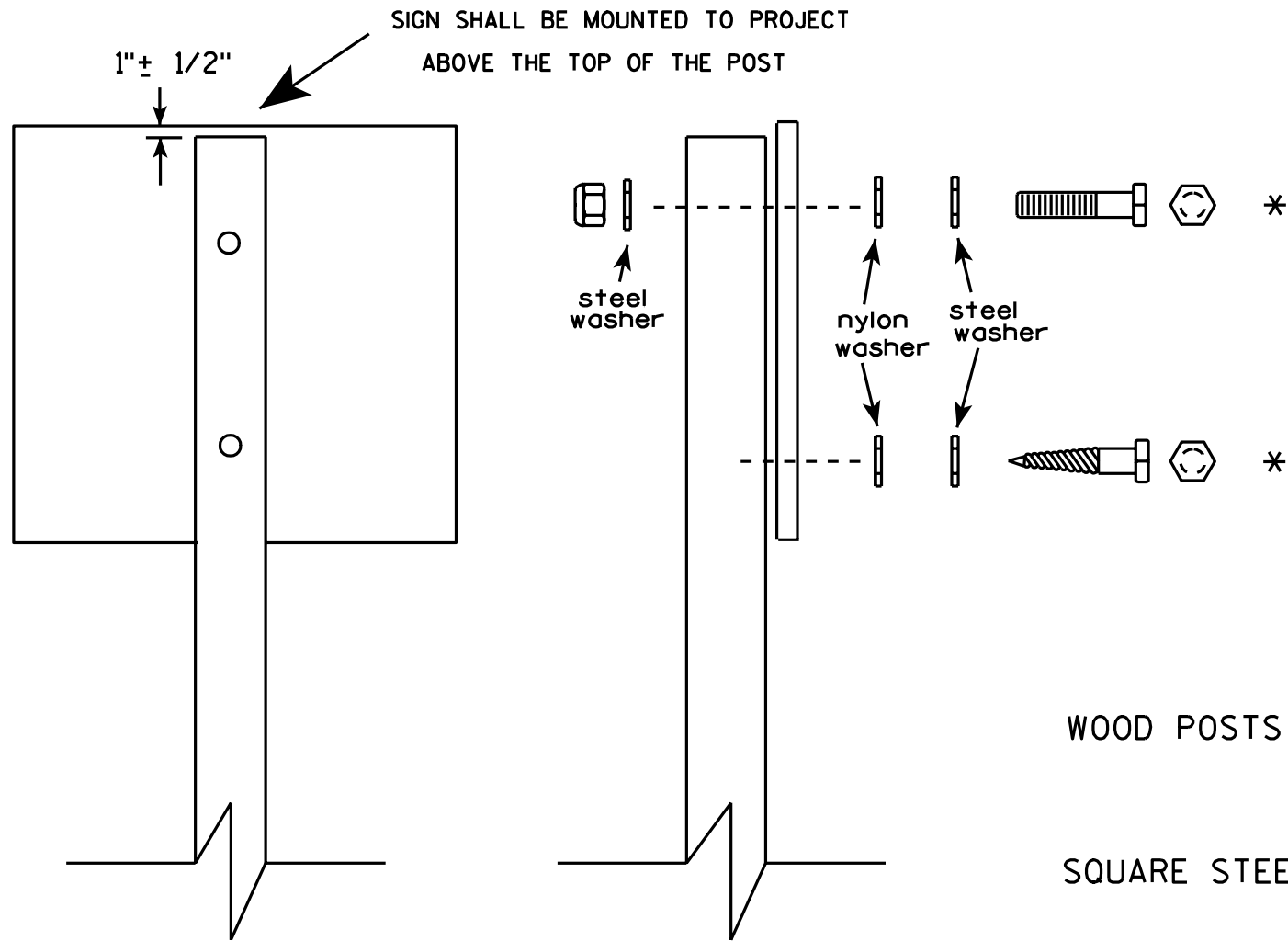
Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION
 APPROVED *Matthew R. Rauch*
 For State Traffic Engineer
 DATE 2/20/03 PLATE NO. A4-4.7

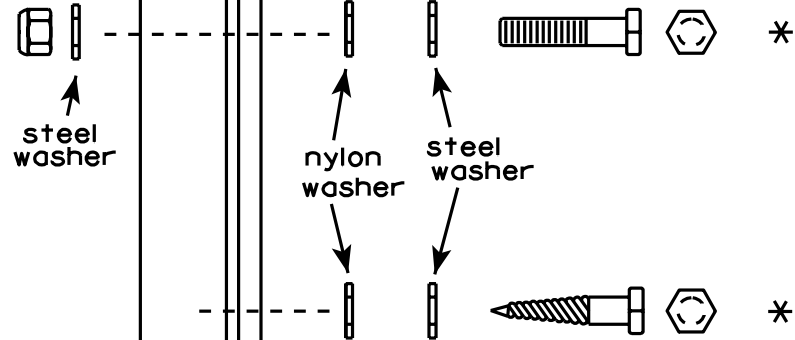
LEVELS ON - 1, 2, 3, 5, 6, 10, 63, 57, 58, 59, 60, 61, 62, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

58-59,60,61, 63



SIGN SHALL BE MOUNTED TO PROJECT ABOVE THE TOP OF THE POST

1" ± 1/2"



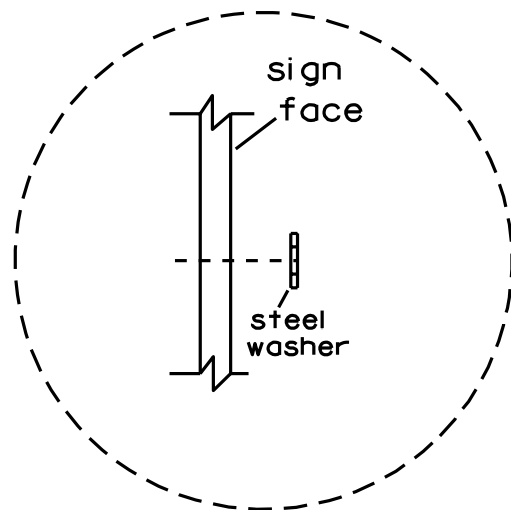
Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
- Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
- 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

- 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

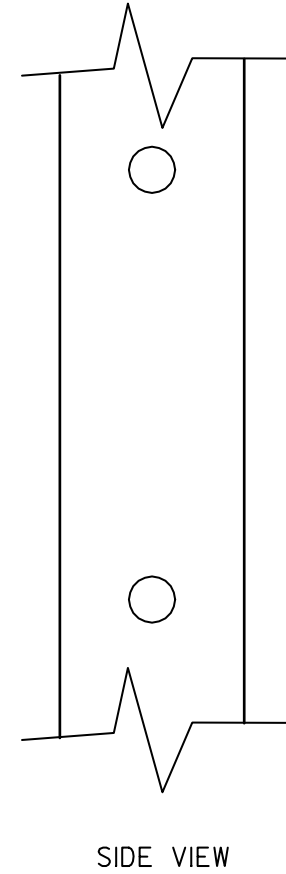
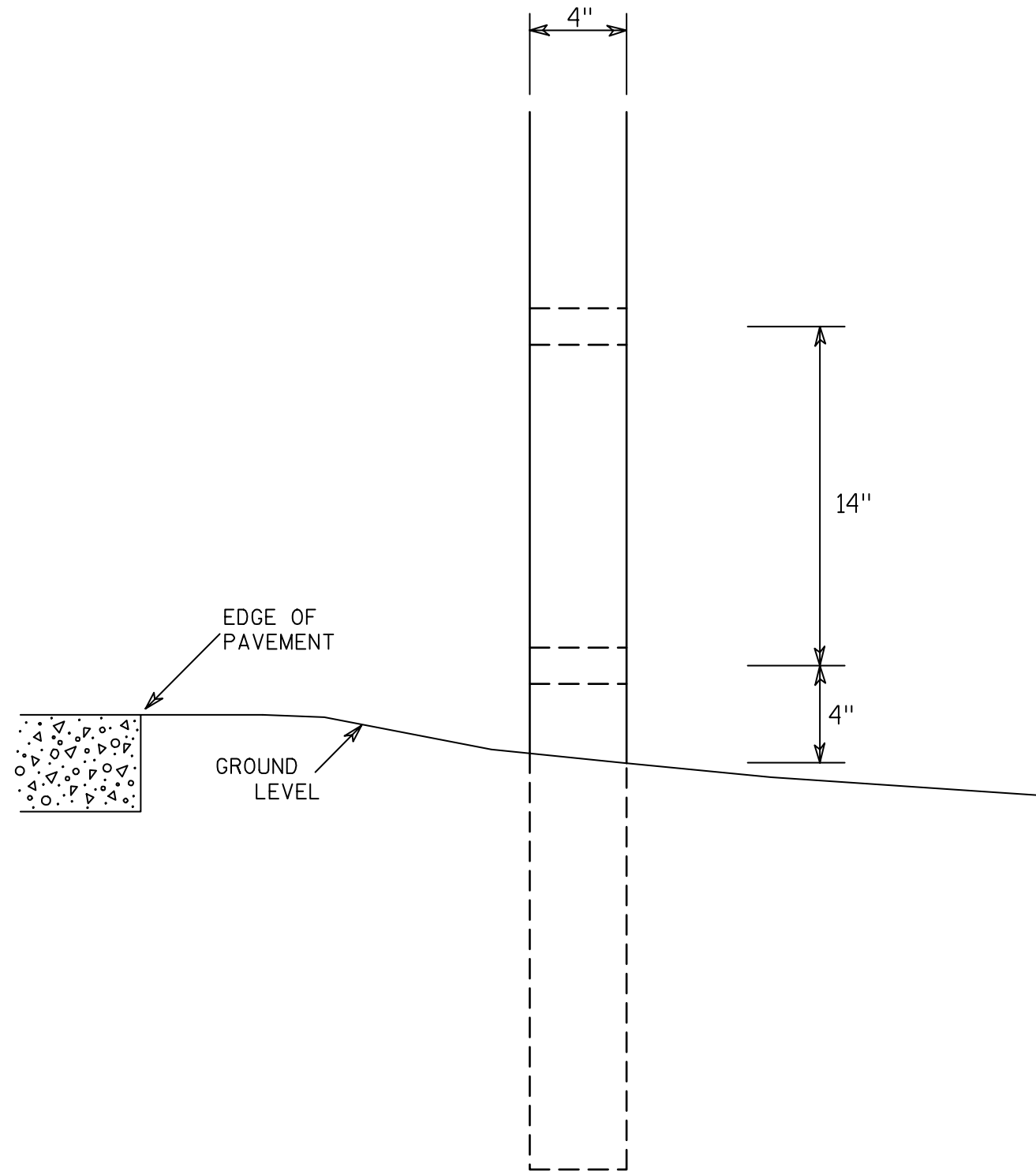
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs 9 sq. ft. or larger require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

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Chester J Spang</i> for State Traffic Engineer
DATE 4/03/02	PLATE NO. A4-8.5

LEVELS ON - 2, 5, 10,

58.59 62.63

LEVELS ON - 2.3, 5.6, 10.



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.

7

4 X 6 WOOD POST
MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

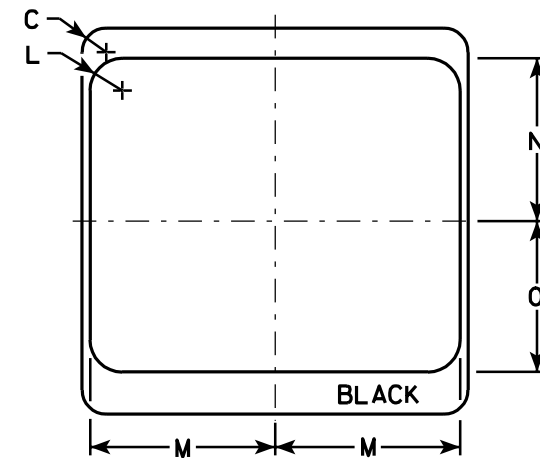
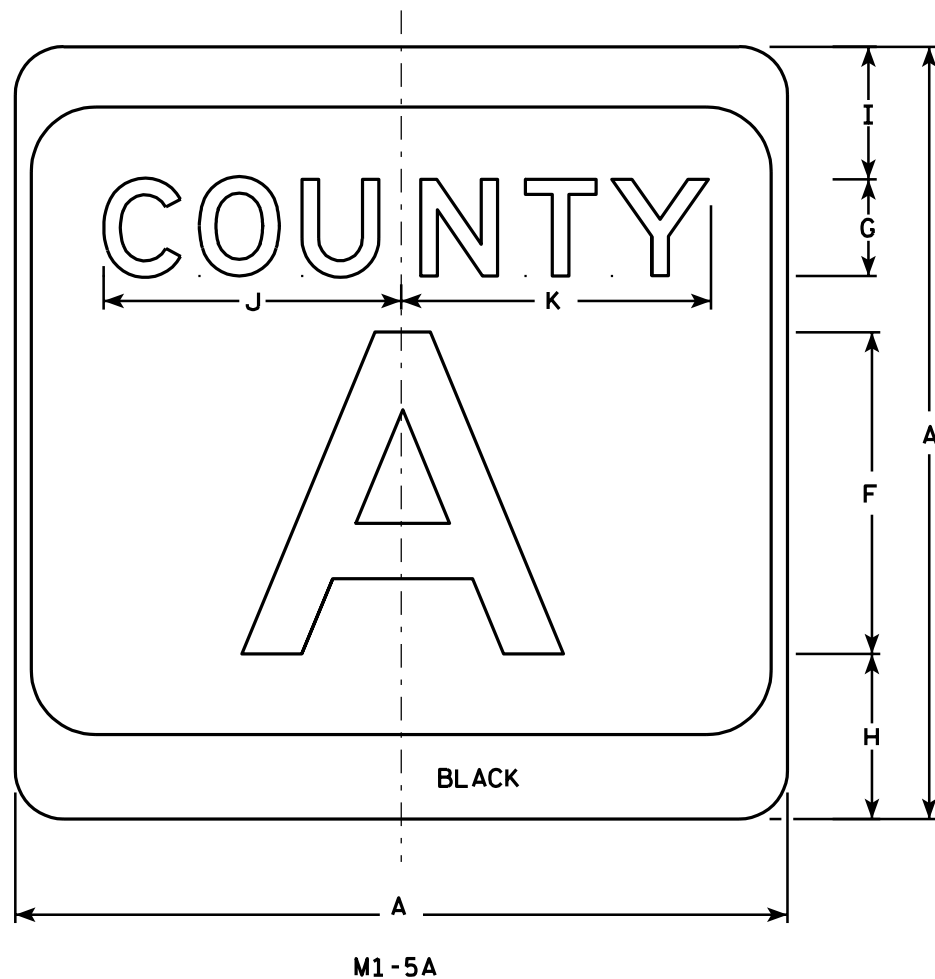
DATE 3/27/97

PLATE NO. A4-11.2

SHEET NO:

E

58-59,60,61,62,63



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 adjust spacing to achieve proper balance.
7. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective

Metric equivalent for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
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												4.0	.36
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												9.0	.81
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												9.0	.81
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												9.0	.81

CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Chester J. Spang*
for State Traffic Engineer

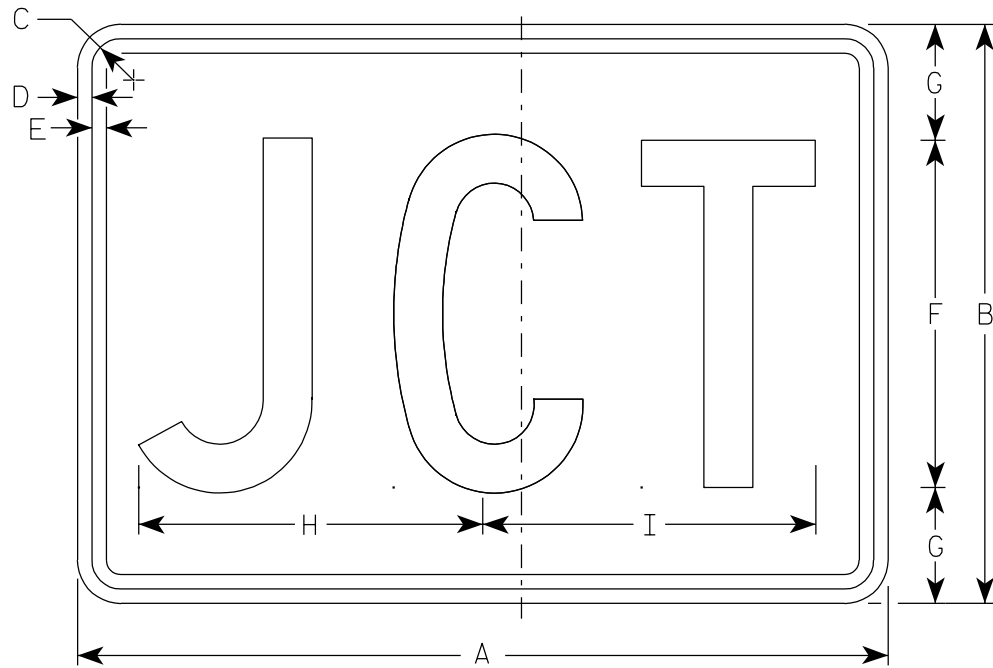
DATE 3/20/02 PLATE NO. MI-5A.7

STATE PROJECT NUMBER:

SHEET NO: **E**

LEVELS 01 - 2, 3, 5, 6, 10.

58-59, 60, 61, 62, 63

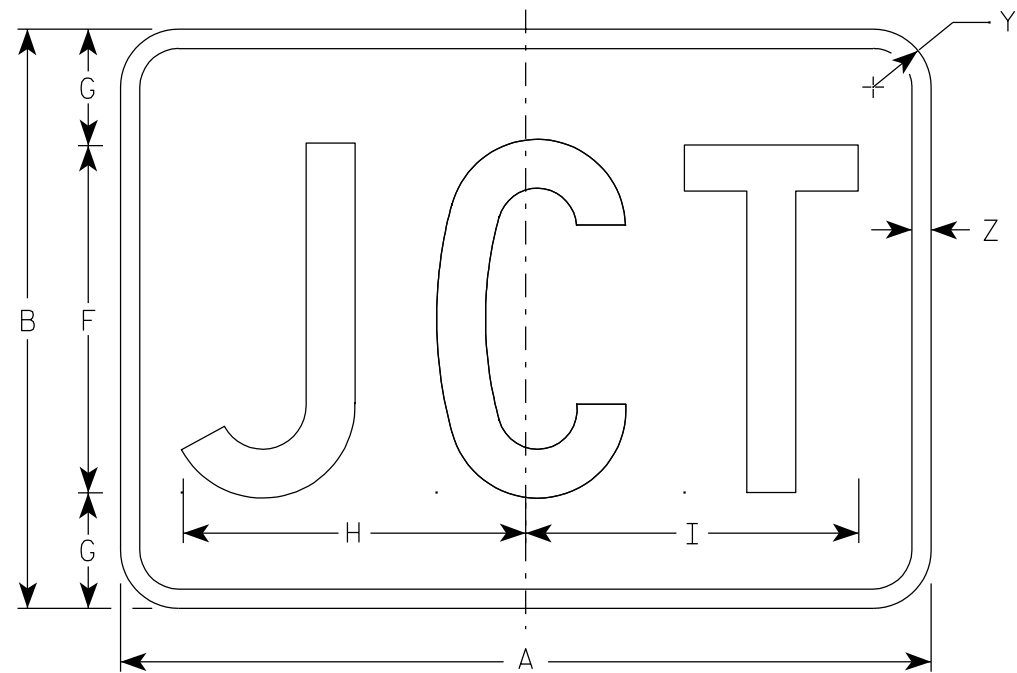


M2-1
MK2-1
MM2-1*
MR2-1

*See Note 6

Metric equivalent
for this sign is:

SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 mm



MB2-1
MG2-1
MN2-1

NOTES

- Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See note 5
Message - See note 5
- 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.
- M2-1 Background - White - Type H Reflective (Detour or temporary Signs - Reflective)
Message - Black
MB2-1 Background - Blue
Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
MG2-1 Background - Green
Message - White - Type H Reflective
MK2-1 Background - Green
Message - White - Type H Reflective
MM2-1 Background - White - Type H Reflective
Message - Green
MN2-1 Background - Brown
Message - White - Type H Reflective
MR2-1 Background - Brown
Message - Yellow - Type H Reflective
- Border shall be omitted on MM2-1.

LEVELS ON - 2, 3, 5, 6

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20	0.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20

STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Chester J Spang
for State Traffic Engineer
DATE 3/20/02 PLATE NO. M2-1.9

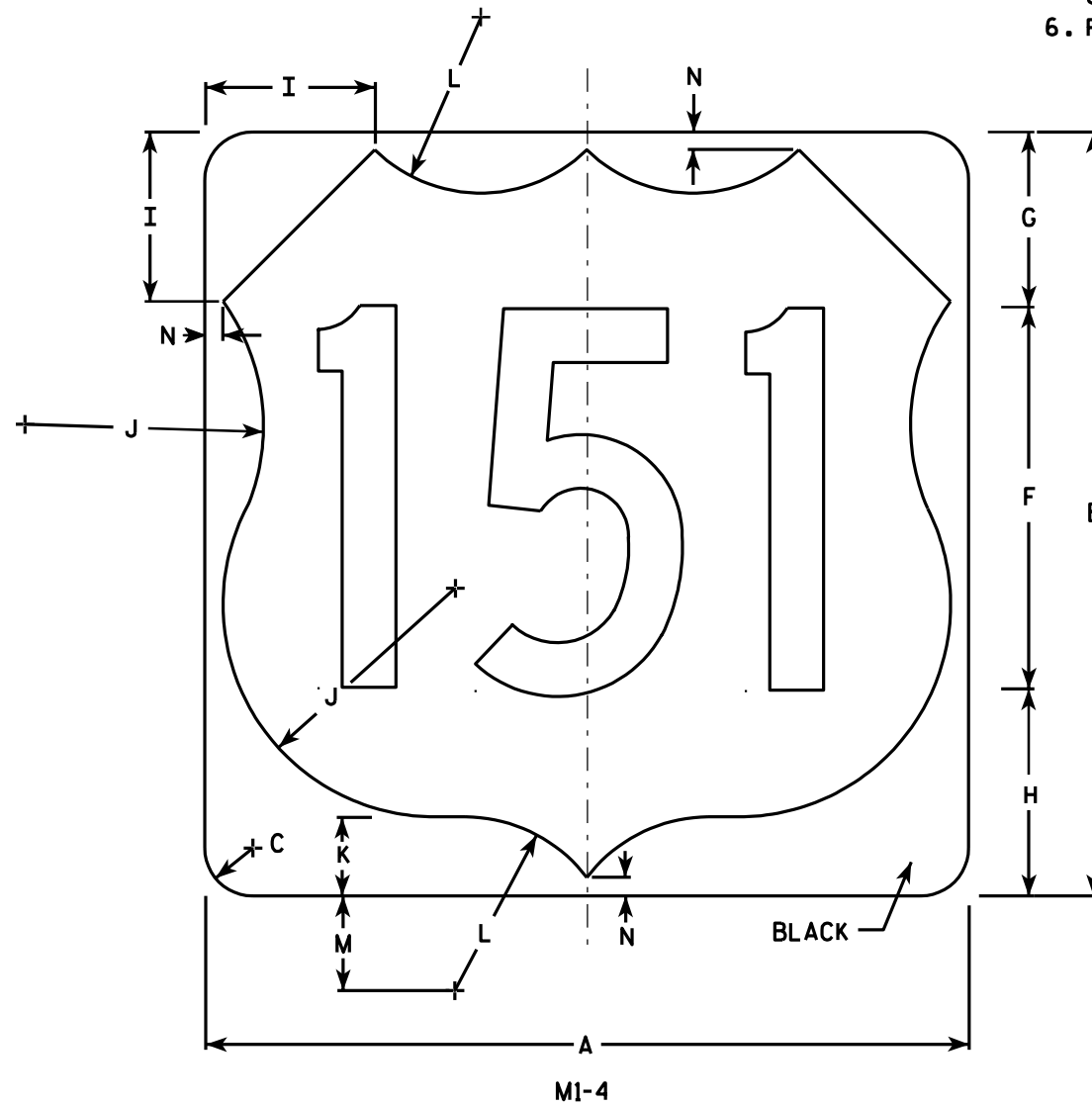
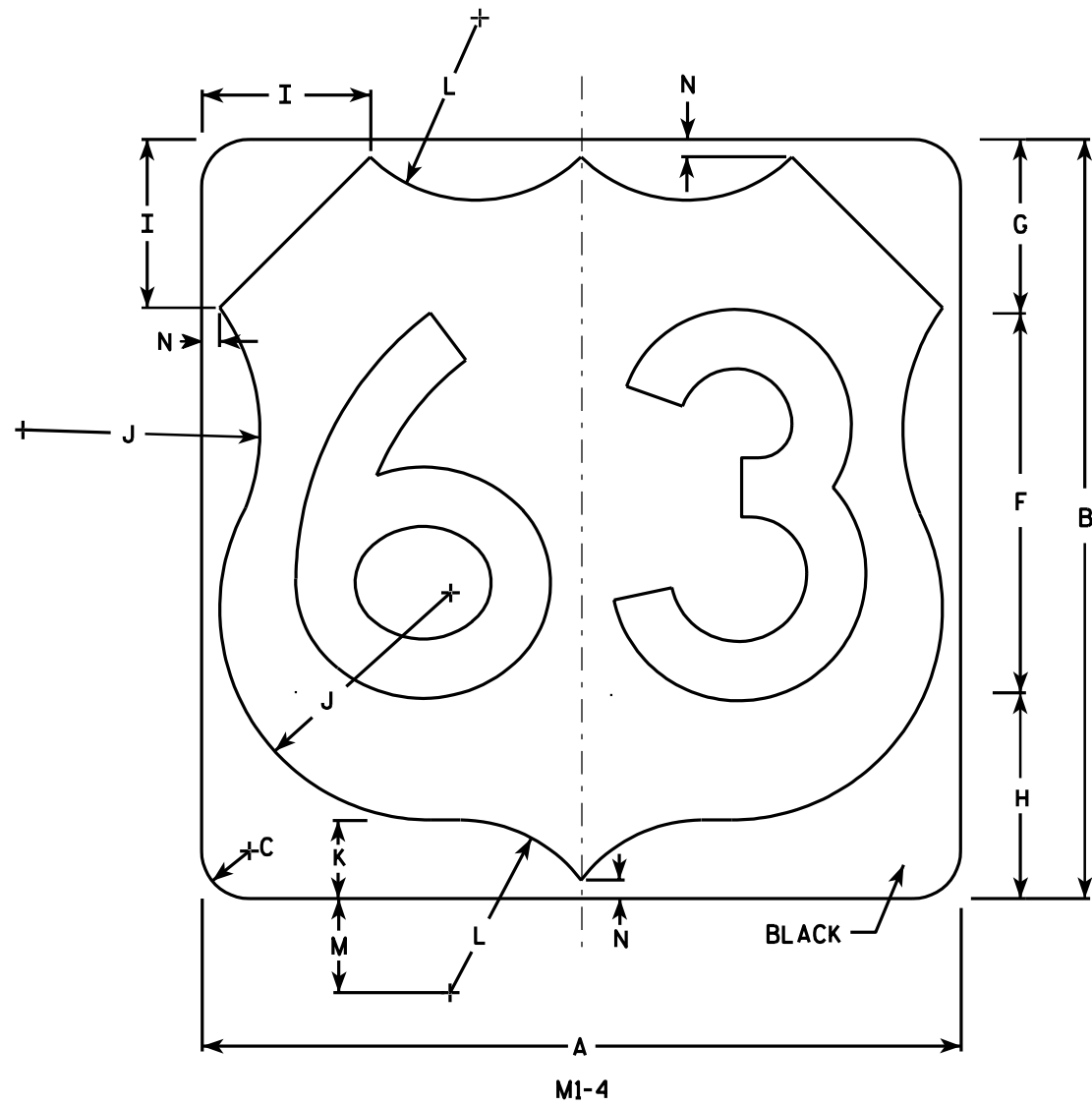
STATE PROJECT NUMBER:

SHEET NO:

E

NOTES

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



Metric equivalent for this sign is:

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

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

USH MARKER
M1-4 FOR ASSEMBLIES

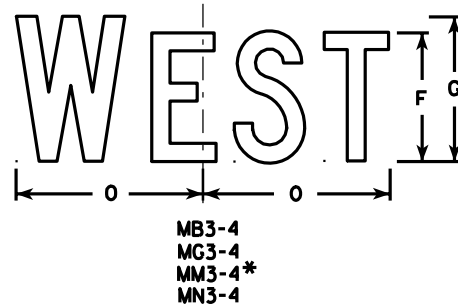
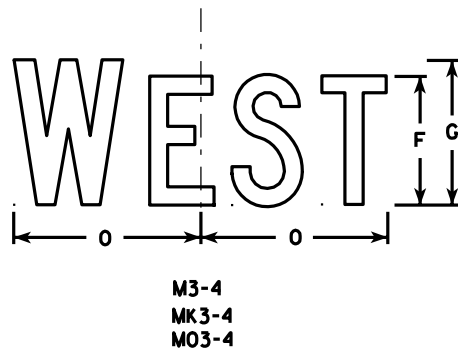
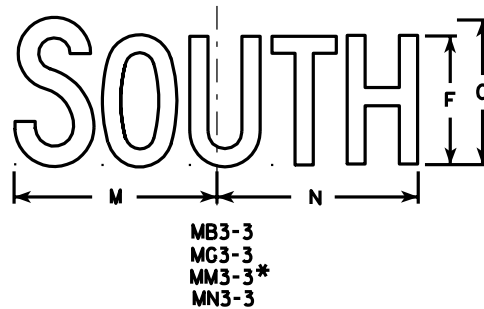
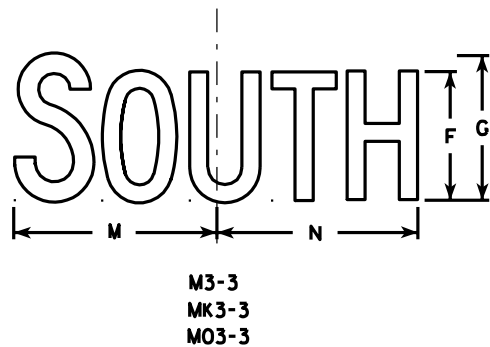
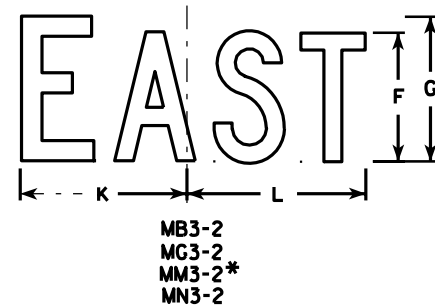
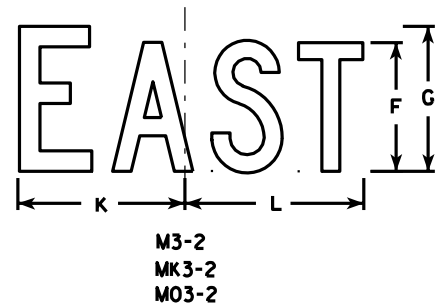
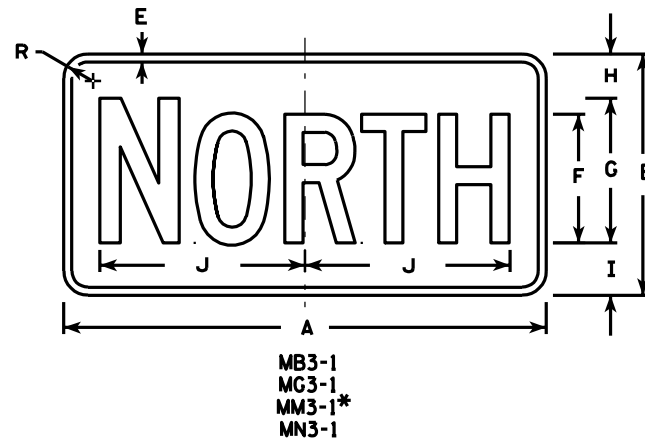
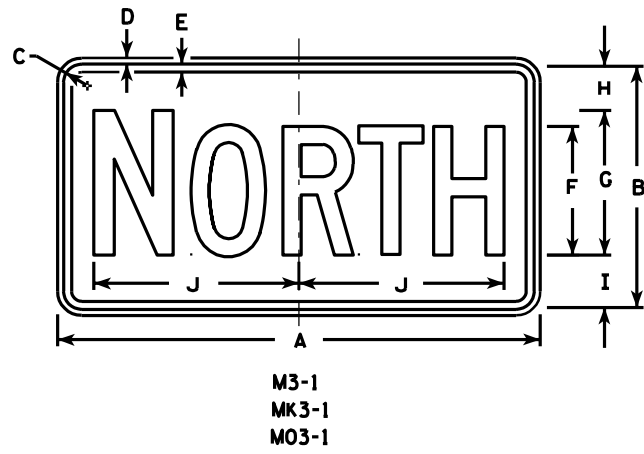
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Chester J Spang*
for State Traffic Engineer

DATE 3/19/02 PLATE NO. MI-4.8

LEVELS 01 - 2, 3, 5, 6. 56-59, 60, 61, 62.

58-59,60,61,62,63



NOTES

- All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
 - Background - See note 5
 - Message - See note 5
- 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.
- M3-1 thru M3-4 Background - White - Type H Reflective (Detour or temporary signs - Reflective) Message - Black
 - MB3-1 thru MB3-4 Background - Blue Message - White - Type H Reflective (Detour or temporary signs - Reflective)
 - MG3-1 thru MG3-4 Background - Green Message - White - Type H Reflective
 - MK3-1 thru MK3-4 Background - Green Message - White - Type H Reflective
 - MM3-1 thru MM3-4 Background - White - Type H Reflective Message - Green
 - MN3-1 thru MN3-4 Background - Brown Message - White - Type H Reflective
 - M03-1 thru M03-4 Background - Orange - Reflective Message - Black
- Border shall be omitted on MM series.
- Note the first letter of each direction is larger than the remainder of the message.

* See Note 6

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 300 mm
3	750 mm X 375 mm
4	750 mm X 375 mm
5	750 mm X 375 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 m ²
1																												
2	24	12	1 1/8	3/8	1/2	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00	0.18
3	30	15	1 1/8	3/8	1/2	8	9	2 3/4	3 1/4	12 3/4	10 3/8	11 1/8	12 5/8	12 1/2	11 5/8			1 1/2									3.13	0.28
4	30	15	1 1/8	3/8	1/2	8	9	2 3/4	3 1/4	12 3/4	10 3/8	11 1/8	12 5/8	12 1/2	11 5/8			1 1/2									3.13	0.28
5	30	15	1 1/8	3/8	1/2	8	9	2 3/4	3 1/4	12 3/4	10 3/8	11 1/8	12 5/8	12 1/2	11 5/8			1 1/2									3.13	0.28

STATE PROJECT NUMBER:

STANDARD SIGNS
M3-1 thru M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/20/02

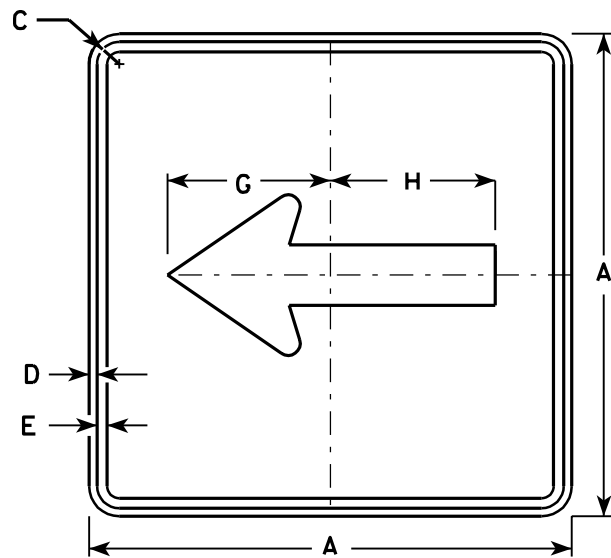
PLATE NO. M3-1.10

SHEET NO:

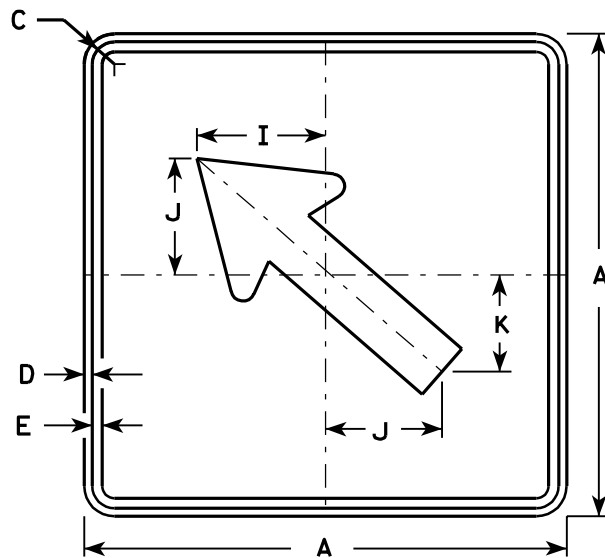
E

LEVELS ON - 2, 3, 5, 6, 10.

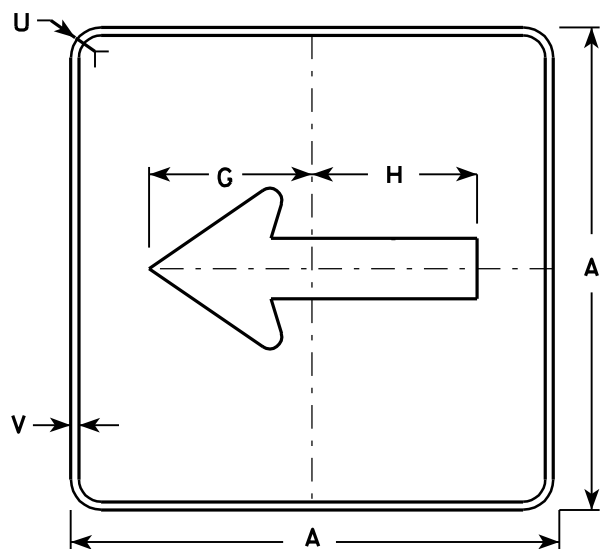
58-59,60,61,62,63



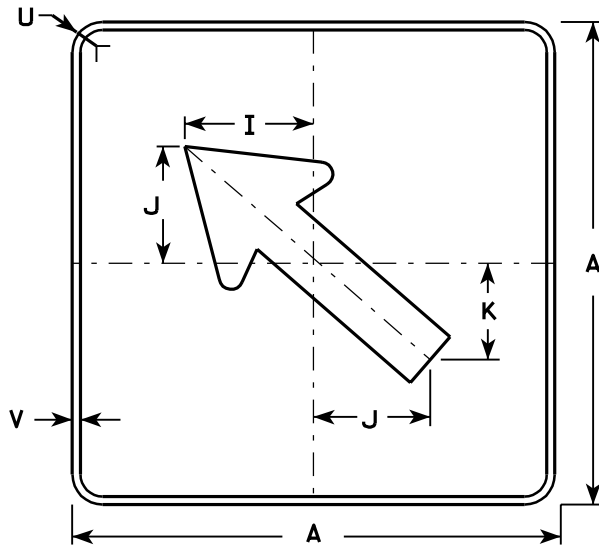
M6-1
MK6-1
MM6-1 (See Note 5)
M06-1
MR6-1



M6-2
MK6-2
MM6-2 (See Note 5)
M06-2
MR6-2



MB6-1
MG6-1
MN6-1

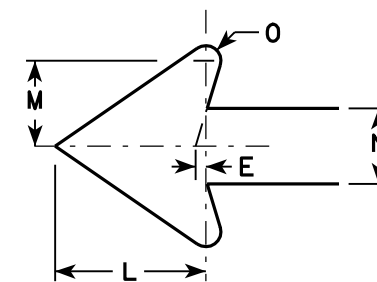


MB6-2
MG6-2
MN6-2

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 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 m ²
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	0.28
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	0.56
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	0.56
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	0.56



NOTES

- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 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 - Type H Reflective (Detour or temporary Signs - Reflective) Message - Black
MB6-1 and MB6-2 Background - Blue Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
MG6-1 and MG6-2 Background - Green Message - White - Type H Reflective
MK6-1 and MK6-2 Background - Green Message - White - Type H Reflective
MM6-1 and MM6-2 Background - White - Type H Reflective Message - Green
MN6-1 and MN6-2 Background - Brown Message - White - Type H Reflective
M06-1 and M06-2 Background - Orange - Reflective Message - Black
MR6-1 and MR6-2 Background - Brown Message - Yellow - Type H Reflective
- Border shall be omitted on MM series.

LEVELS 01 - 2,3, 5,6, 10.

STATE PROJECT NUMBER:

FILE NAME : d:\Users\Projects\tr_std\plate\M61.DGN

PLOT DATE : 03-APR-2002 09:20

ORG DATE : 1980

Originator : Sandy Anderson

STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J Spang
for State Traffic Engineer

DATE 3/20/02

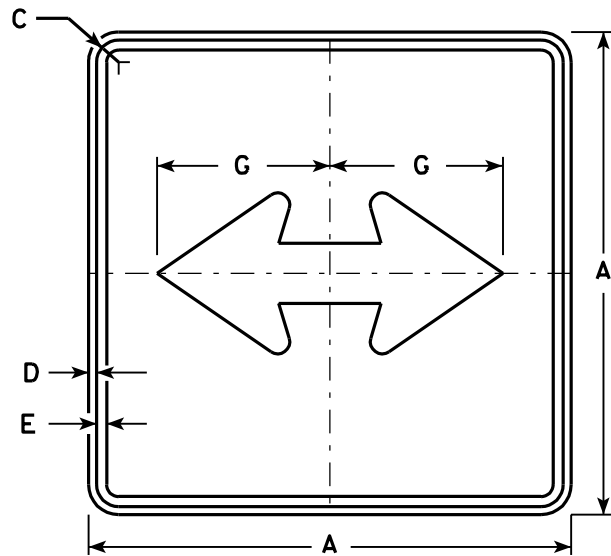
PLATE NO. M6-1.11

SHEET NO:

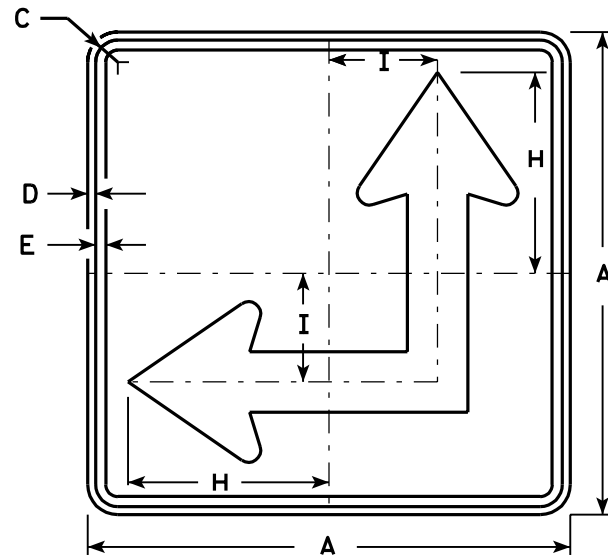
E

WISDOT/CADDS SHEET 42

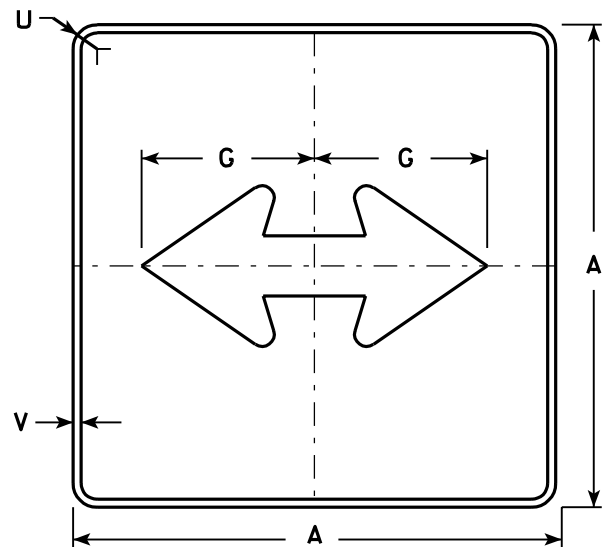
58-59, 60, 61, 62, 63



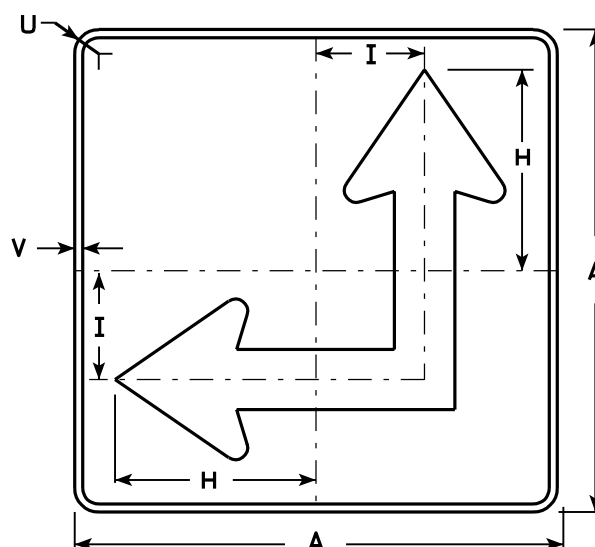
M6-4
MK6-4
MM6-4 (See Note 5)
MO6-4
MR6-4



M6-6
MK6-6
MM6-6 (See Note 5)
MO6-6
MR6-6



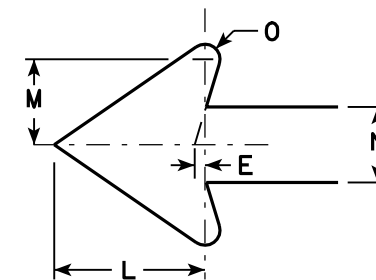
MB6-4
MG6-4
MN6-4



MB6-6
MG6-6
MN6-6

NOTES

- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 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 - Type H Reflective (Detour or temporary Signs - Reflective)
Message - Black
MB6-4 and MB6-6 Background - Blue
Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
MG6-4 and MG6-6 Background - Green
Message - White - Type H Reflective
MK6-4 and MK6-6 Background - Green
Message - White - Type H Reflective
MM6-4 and MM6-6 Background - White - Type H Reflective
Message - Green
MN6-4 and MN6-6 Background - Brown
Message - White - Type H Reflective
MO6-4 and MO6-6 Background - Orange - Reflective
Message - Black
MR6-4 and MR6-6 Background - Brown
Message - Yellow - Type H Reflective
- M6-6R same as M6-6L except arrow points ahead and right.
- Border shall be omitted on MM series.



Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 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 m ²
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	0.28
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	0.56
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	0.56
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	0.56

LEVELS 01 - 2, 3, 5, 6, 10.

STATE PROJECT NUMBER:

FILE NAME : d:\Users\Projects\tr_std\late\M64.DGN

PLOT DATE : 03-APR-2002 09:21

ORG DATE : 1980

Originator : Sandy Anderson

STANDARD SIGN
M6-4 & M6-6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/20/02

PLATE NO. M6-4.6

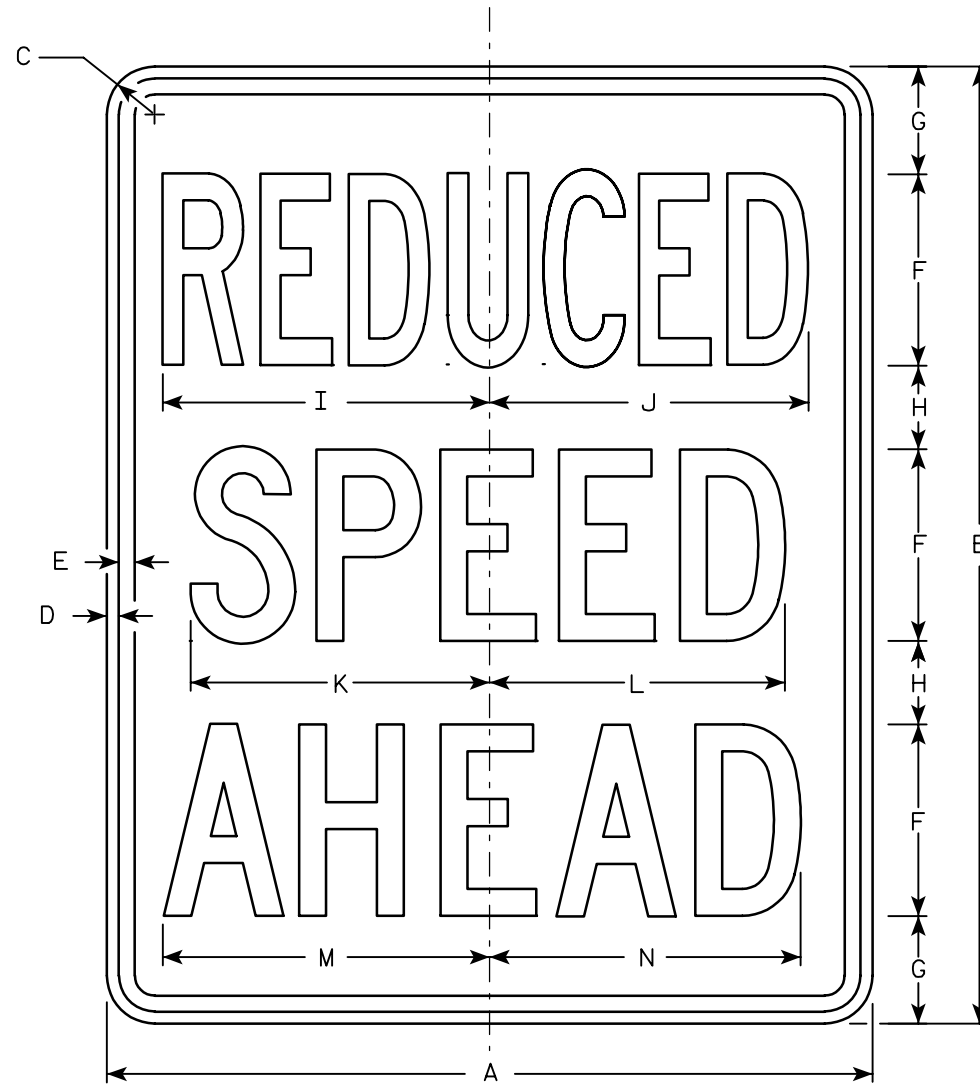
SHEET NO:

E

WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - Line 1 is B, Lines 2 & 3 are 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.



R2-5A

Metric equivalent for this sign is:

SIZE	
1	450 mm X 600 mm
2	600 mm X 750 mm
3	900 mm X 1200 mm
4	900 mm X 1200 mm
5	1200 mm X 1500 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 eq. ft.	Area m ²		
1	18	24	1 1/2	3/8	1/2	4	3 1/2	2 1/2	6 7/8	7	6 1/4	6 1/4	6 3/4	6 1/2													3.0	0.27		
2	24	30	1 1/2	3/8	1/2	6	3 3/8	2 5/8	10 1/4	10 1/2	9 3/8	9 1/4	10 1/8	9 3/4														5.0	0.45	
3	36	48	1 7/8	1/2	5/8	8	7 1/4	4 3/4	14 1/4	14 3/4	12 3/8	10 5/8	12 5/8	12 1/4															12.0	1.08
4	36	48	1 7/8	1/2	5/8	8	7 1/4	4 3/4	14 1/4	14 3/4	12 3/8	10 5/8	12 5/8	12 1/4															12.0	1.08
5	48	60	3	3/4	1	10	8 1/2	6 1/2	17 3/4	18 1/2	15 3/8	13 1/4	15 3/4	15 1/4															20.0	1.80

STANDARD SIGN
R2-5A

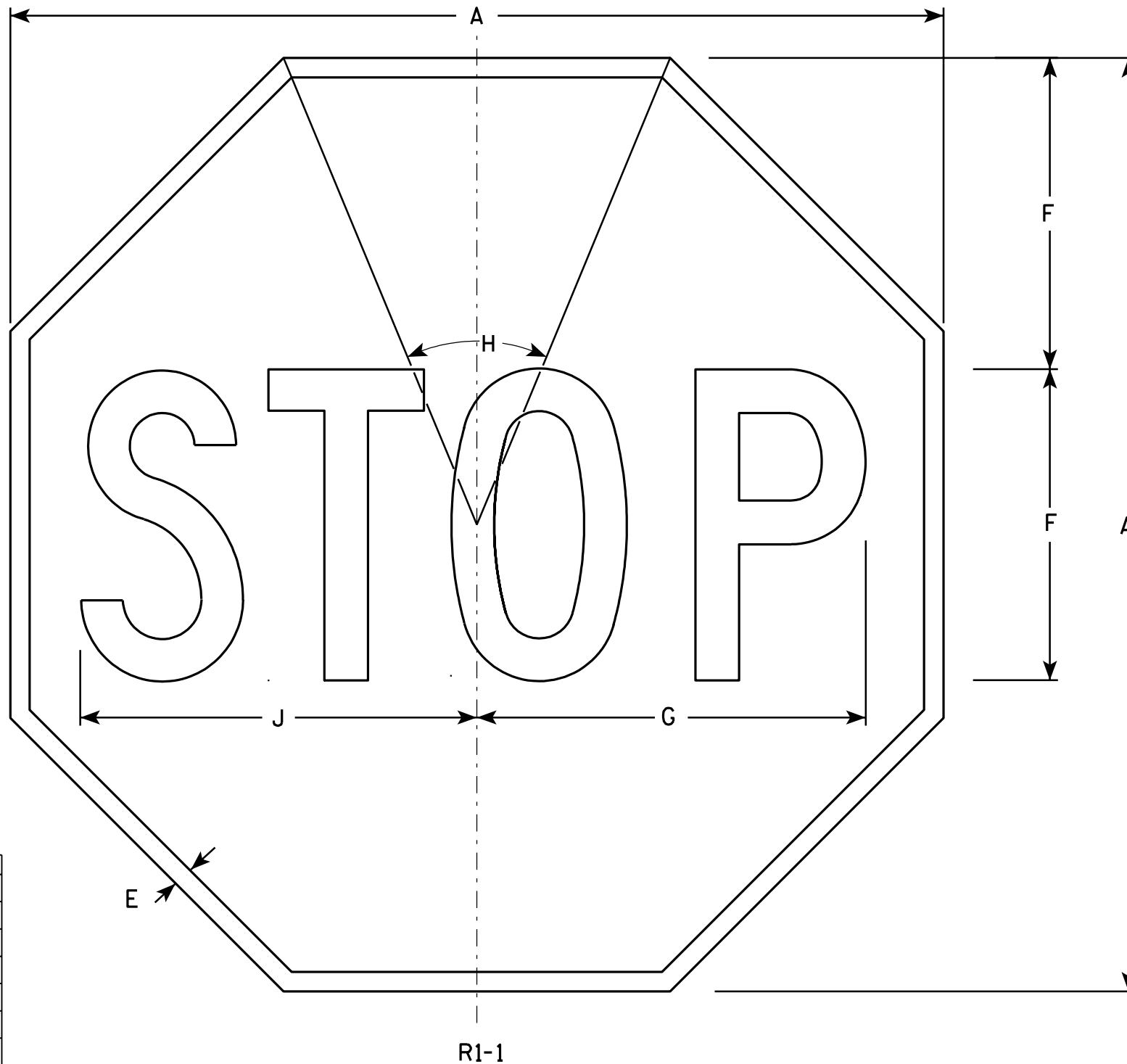
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Chester J Spang*
for State Traffic Engineer

DATE 2/01/02 PLATE NO. R2-5A.5

LEVELS ON - 2, 3, 5, 6

7



NOTES

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

Metric equivalent for this sign is:

SIZE	
1	600 mm X 600 mm
2	750 mm X 750 mm
3	900 mm X 900 mm
4	1200 mm X 1200 mm
5	1200 mm X 1200 mm
6	450 mm X 450 mm
7	300 mm X 300 mm

R1-1

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 m ²
1	24				3/8	8	10	45°		10 1/4																	3.31	0.31
2	30				5/8	10	12 1/2	45°		12 3/4																	5.18	0.48
3	36				3/4	12	15	45°		15 3/8																	7.46	0.69
4	48				1	16	20	45°		20 1/2																	13.25	1.23
5	48				1	16	20	45°		20 1/2																	13.25	1.23
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86	0.17
7	12				1/4	4	5	45°		5 1/8																	0.78	0.07

STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J Spang
for State Traffic Engineer

DATE 10/15/98

PLATE NO. R1-1.11

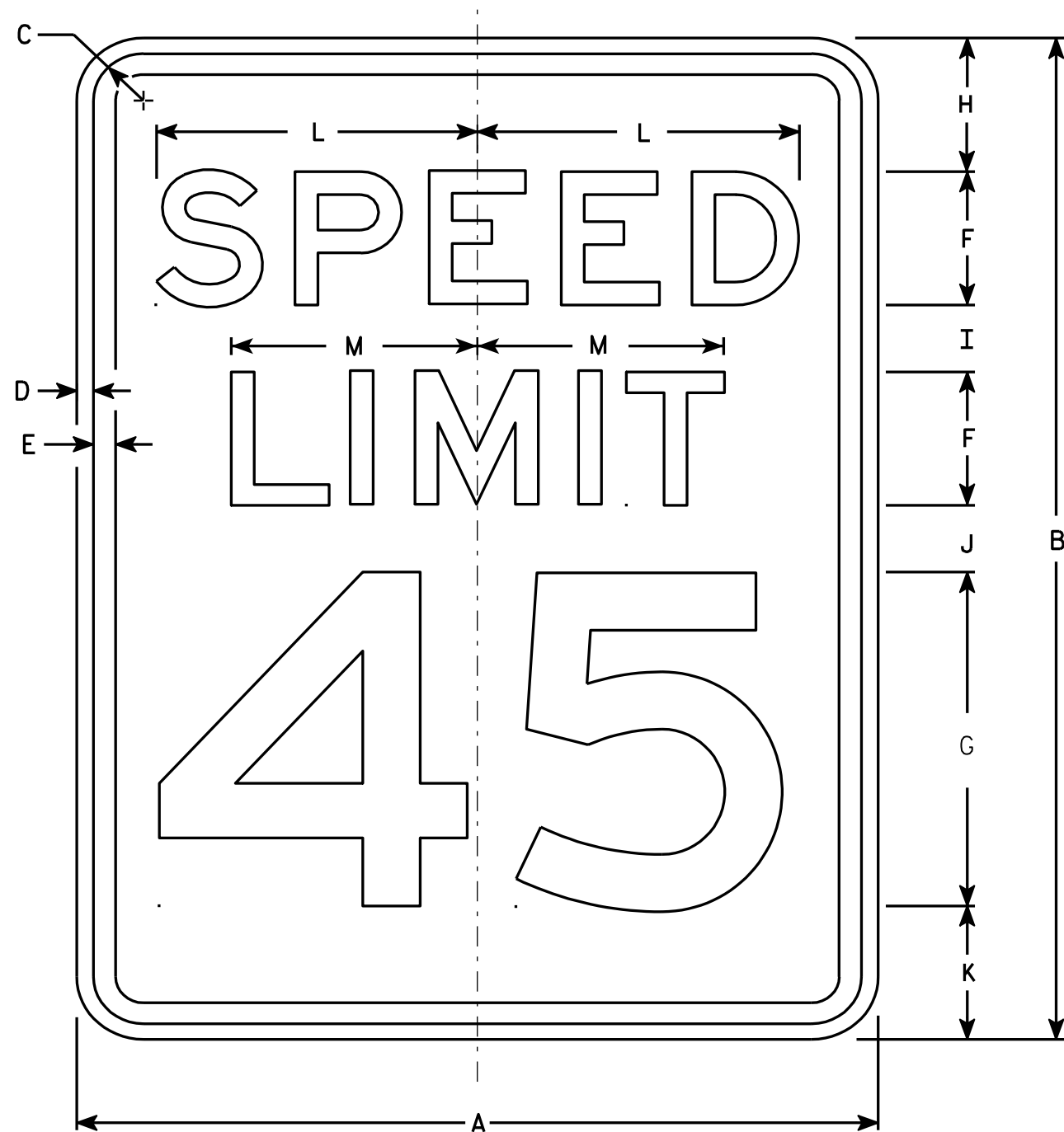
STATE PROJECT NUMBER:

HWY:

COUNTY:

SHEET NO:

E



NOTES

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

Metric equivalent for this sign is:

SIZE	
1	450 mm X 600 mm
2	600 mm X 750 mm
3	900 mm X 1200 mm
4	900 mm X 1200 mm
5	1200 mm X 1500 mm

R2-1

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 m ²
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0	.28
2	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	.46
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0	1.11
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0	1.11
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	1.86

**STANDARD SIGN
R2-1**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Christa J. Spang
for State Traffic Engineer

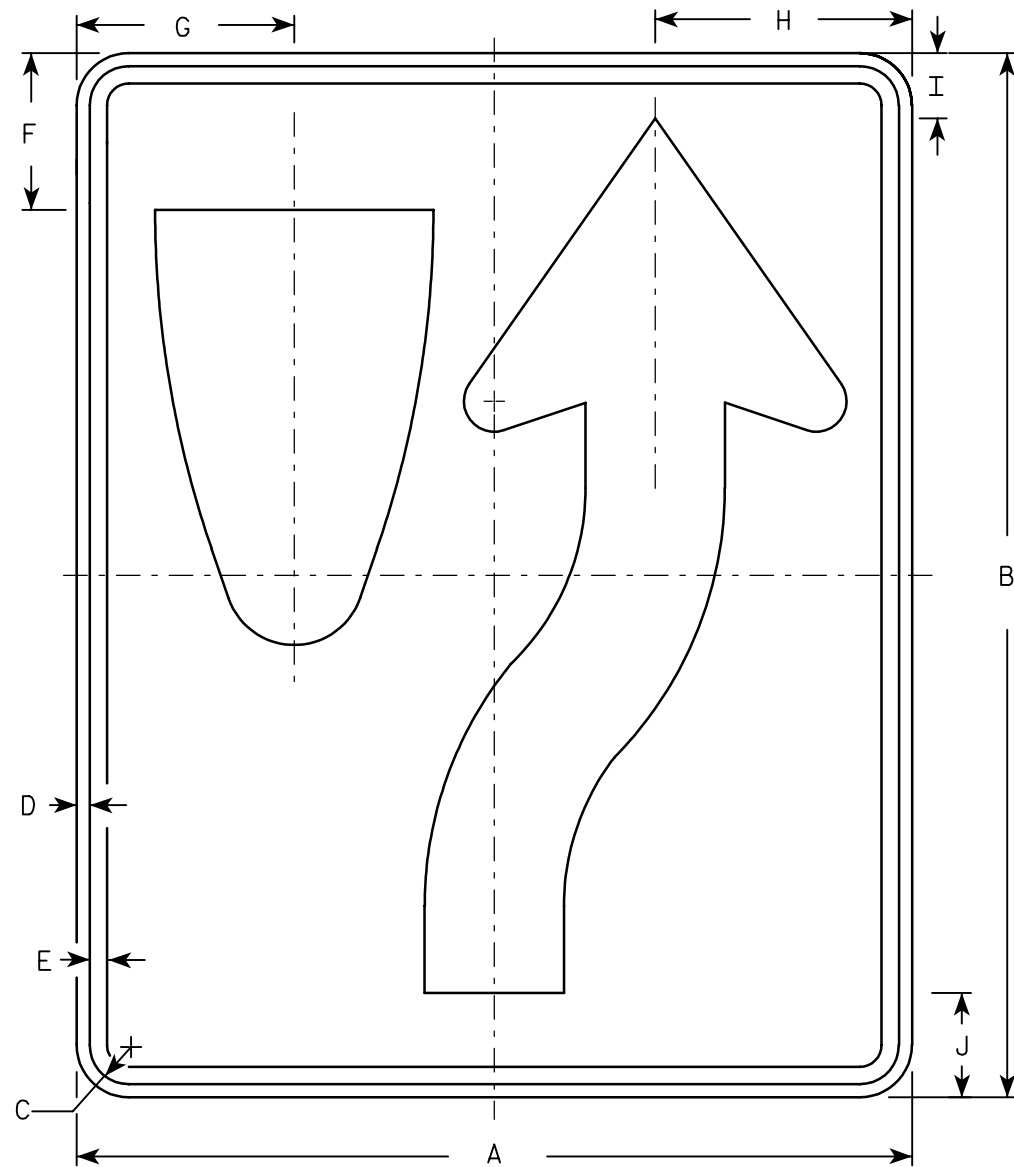
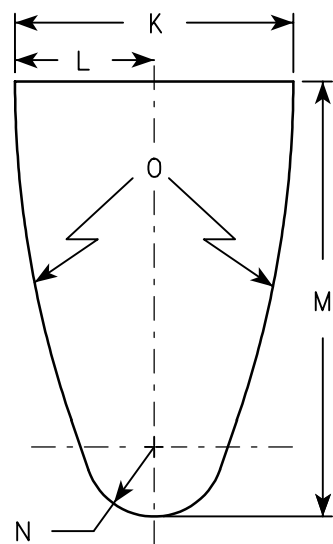
DATE 6/4/97

PLATE NO. R2-1.10

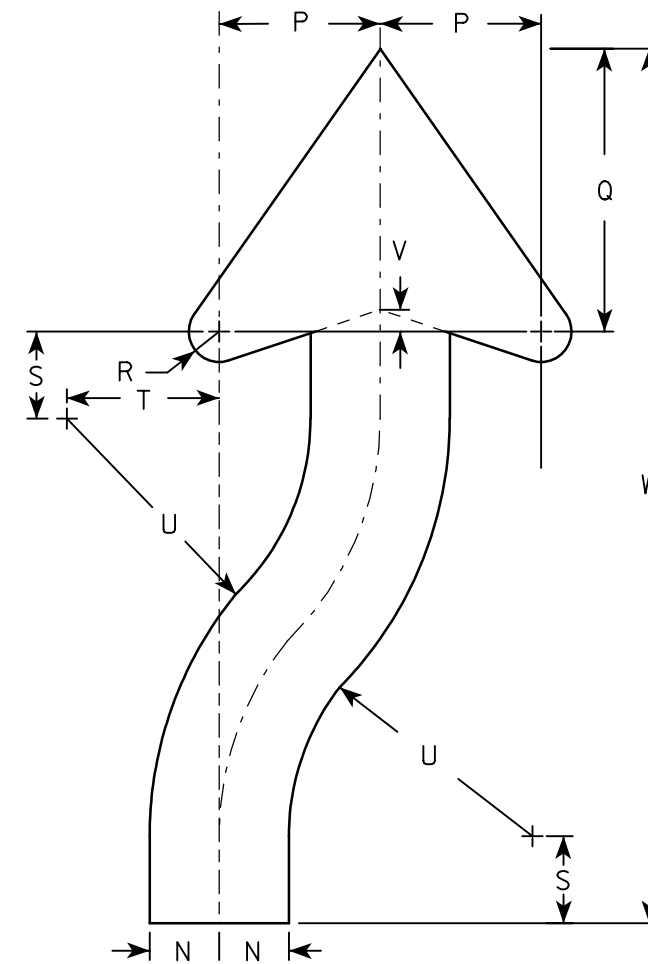
SHEET NO:

E

58,59,60,61,62,63



R4-7



ARROW DETAIL

NOTES

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

Metric equivalent for this sign is:

SIZE	
1	450 mm X 600 mm
2	600 mm X 750 mm
3	900 mm X 1200 mm
4	900 mm X 1200 mm
5	900 mm X 1200 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 eq. ft.	Area m ²
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0	.27
2	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0	.45
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0	1.08
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0	1.08
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0	1.08

STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Christa J Spang*
for State Traffic Engineer
DATE 2/6/02 PLATE NO. R4-7.7

STATE PROJECT NUMBER:

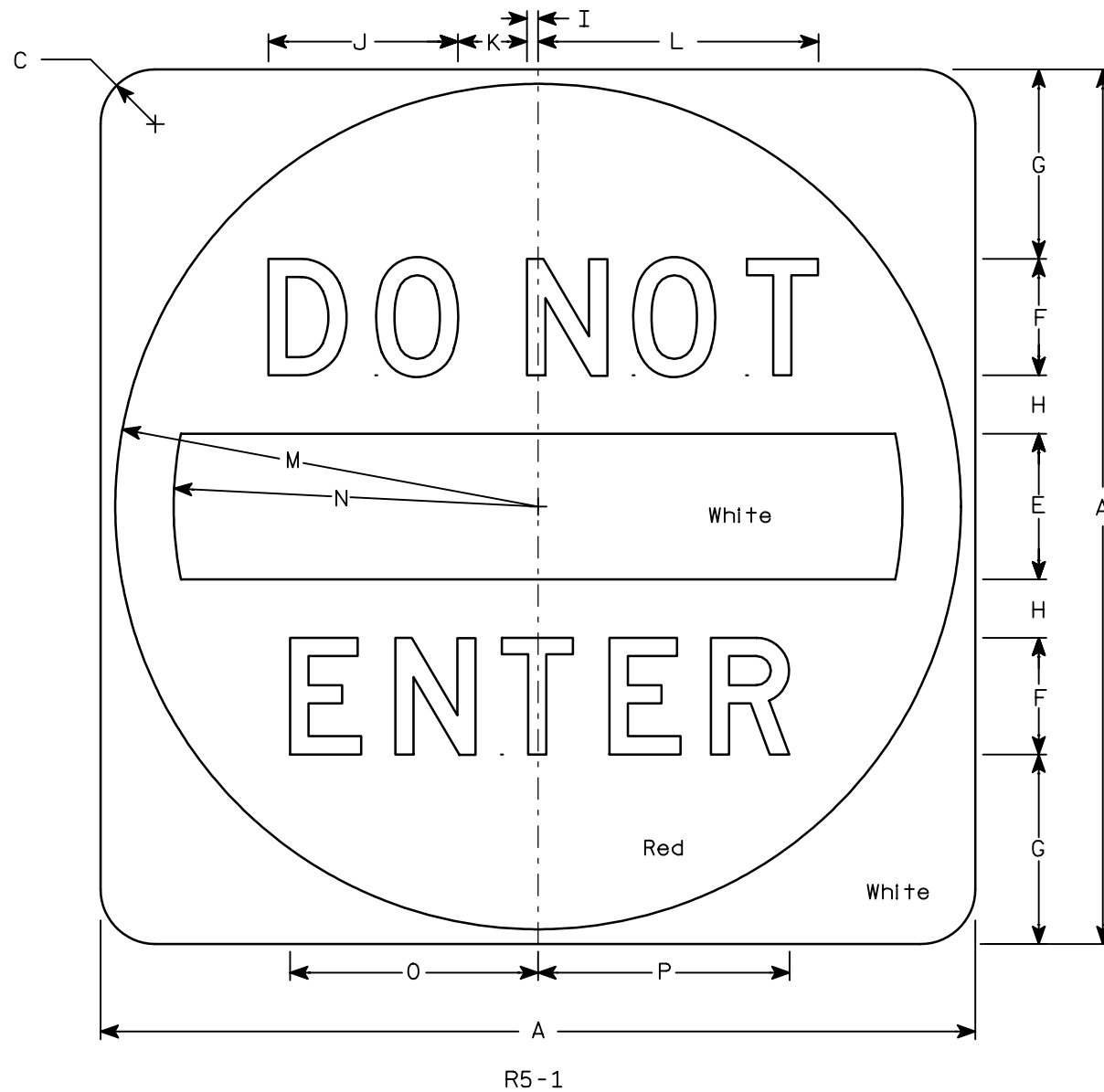
SHEET NO:

LEVELS ON - 2, 3, 5, 6

58,59,60,61,62,63

NOTES

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



Metric equivalent for this sign is:

SIZE	
1	
2	750 mm X 750 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	1200 mm X 1200 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 eq. ft.	Area m ²
1																												
2	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26	0.56
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0	0.81
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0	0.81
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0	1.44

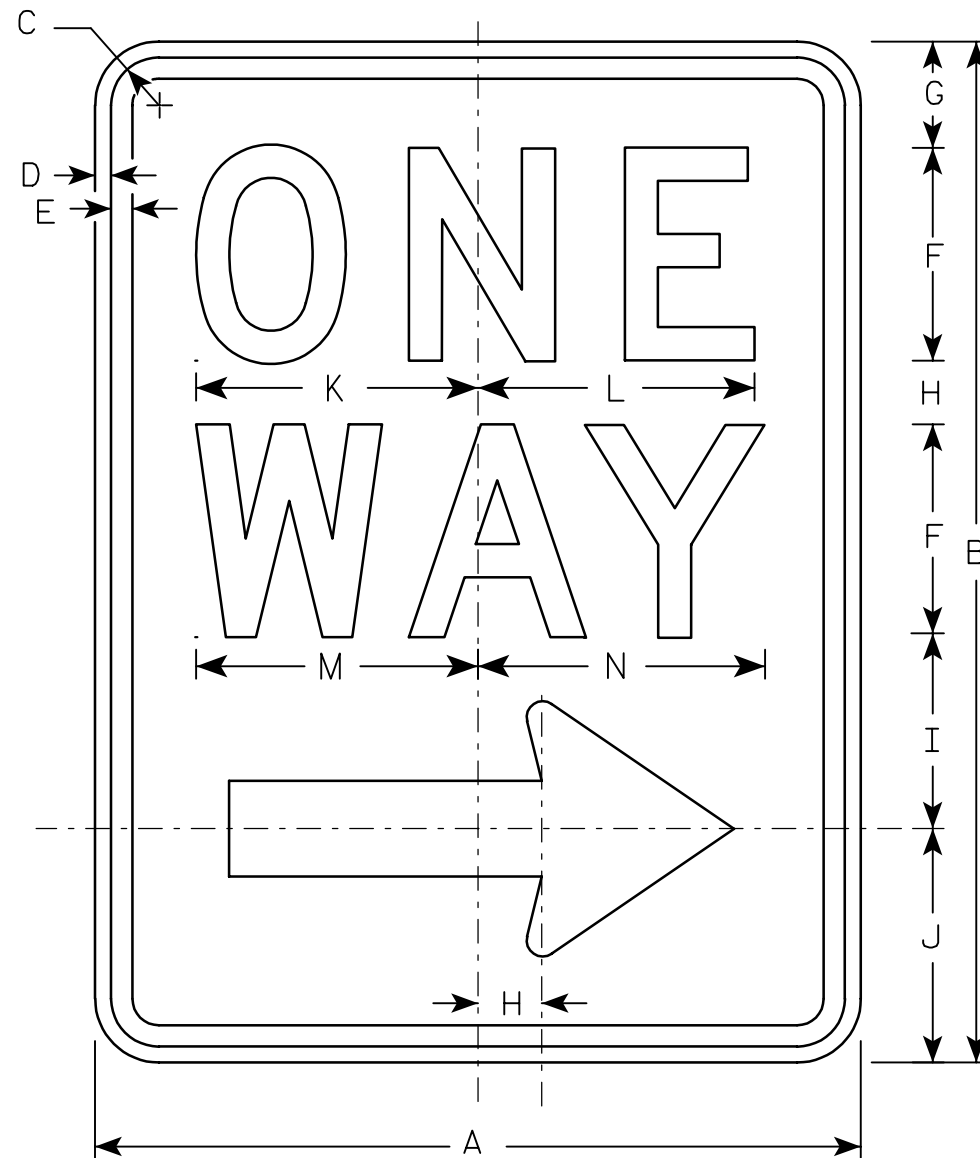
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Chester J. Spang*
for State Traffic Engineer

DATE 2/6/02 PLATE NO. R5-1.13

58,59,60,61,62,63



R6-2R

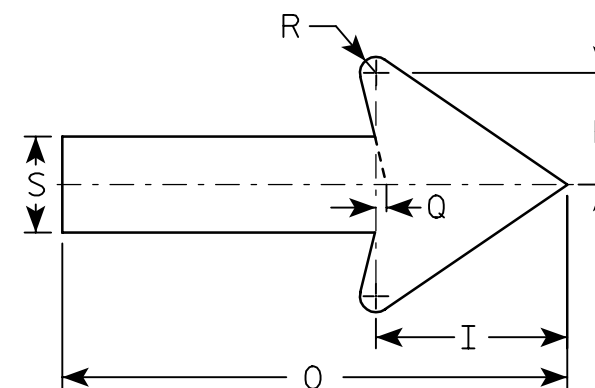
Metric equivalent for this sign is:

SIZE	
1	
2	450 mm X 600 mm
3	600 mm X 750 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4							3.0	0.27	
3	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	5 1/2	6 1/2	8 1/8	8 1/8	8 1/2	8 3/8	15 3/4	3 1/4	3/8	1/2	2 3/4							5.0	0.45	
4																												
5																												

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



LEVELS ON - 2, 3, 5, 6

STATE PROJECT NUMBER:

STANDARD SIGN
R6-2R&L

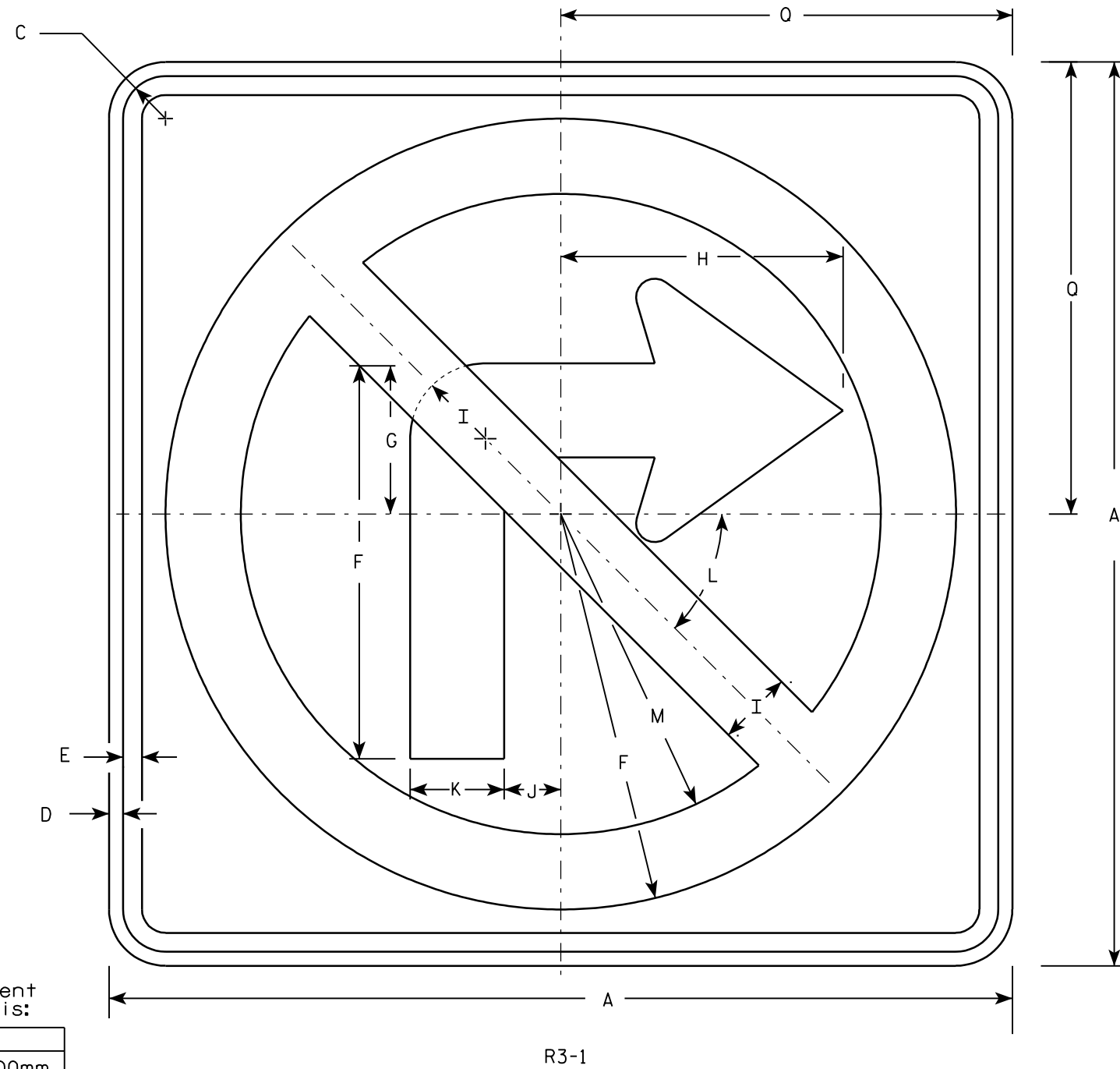
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Christa J Spang
for State Traffic Engineer
DATE 2/7/02 PLATE NO. R6-2.5

SHEET NO:

E

57.58.59.60.61.62.63



R3-1

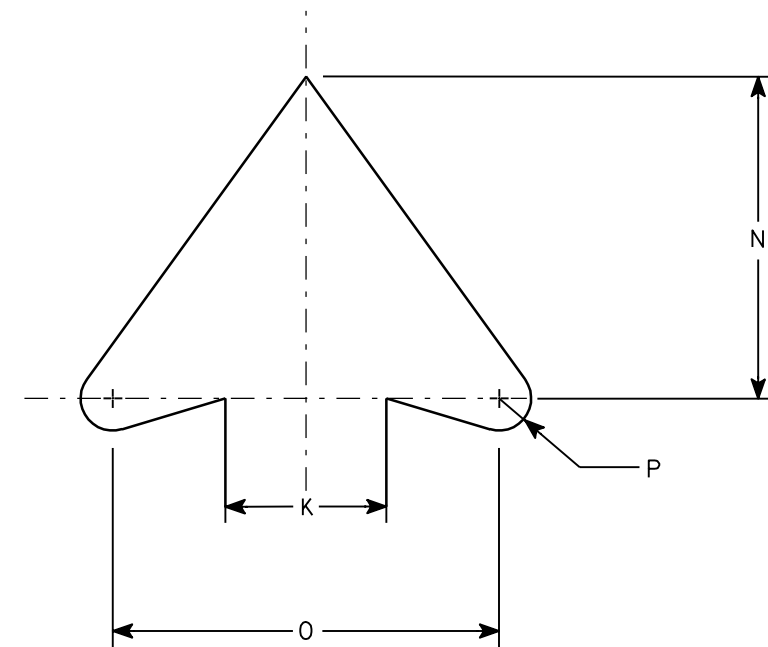
Metric equivalent for this sign is:

SIZE	
1	600mm X 600mm
2	600mm X 600mm
3	750mm X 750mm
4	900mm X 900mm
5	1200mm X 1200mm

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.
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	0.36
2	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	0.36
3	30		1 3/8	1/2	5/8	13 1/8	5	9 1/2	2 1/2	1 7/8	3 1/8	45°	10 5/8	6 1/4	7 1/2	5/8	15										6.25	0.56
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	0.81
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0	1.44

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

STANDARD SIGN

R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 2/01/02

PLATE NO. R3-1.4

STATE PROJECT NUMBER:

HWY:

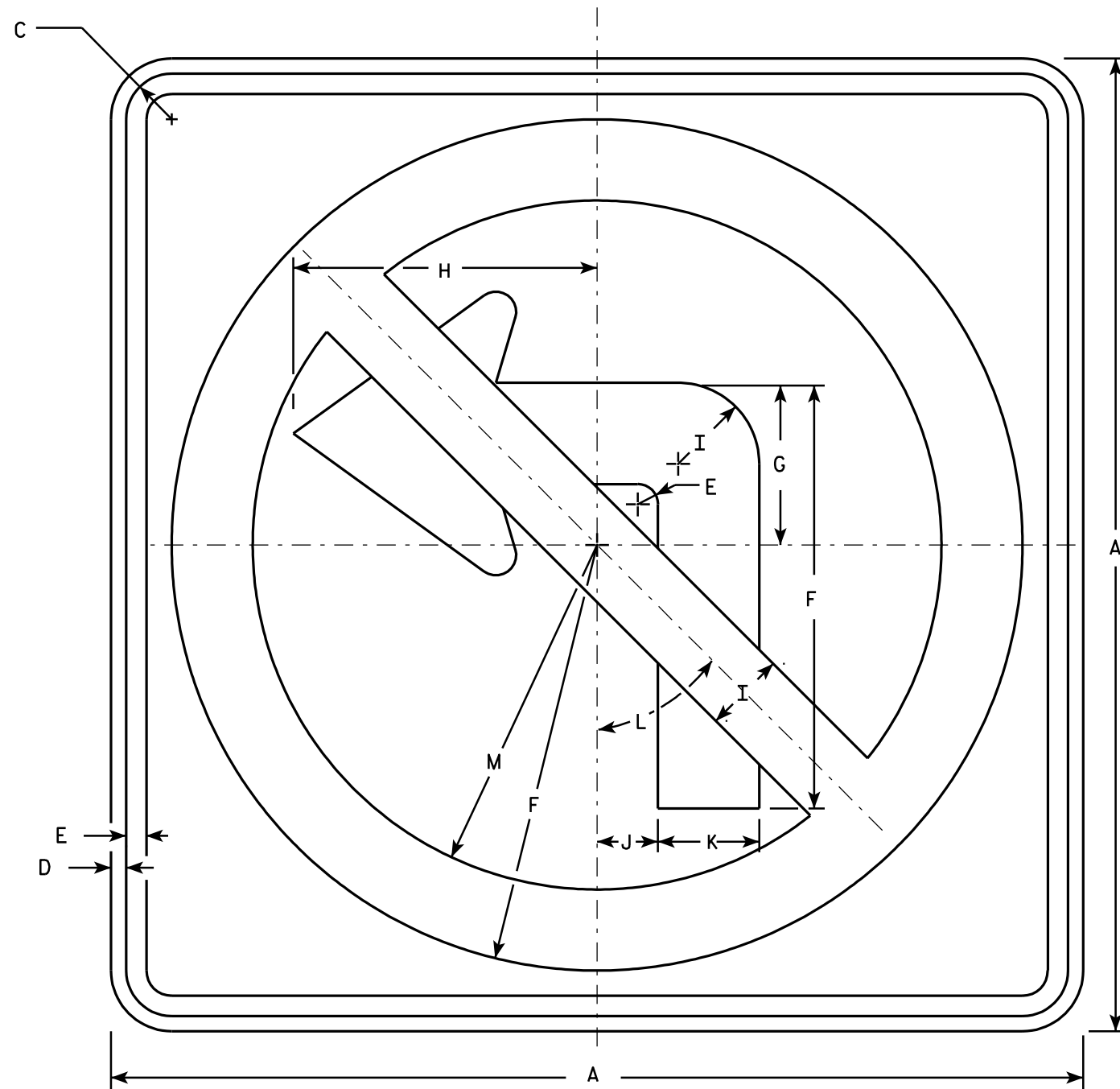
COUNTY:

SHEET NO:

E

LEVELS ON - 2, 3, 5, 6

58-59,60,61,62,63



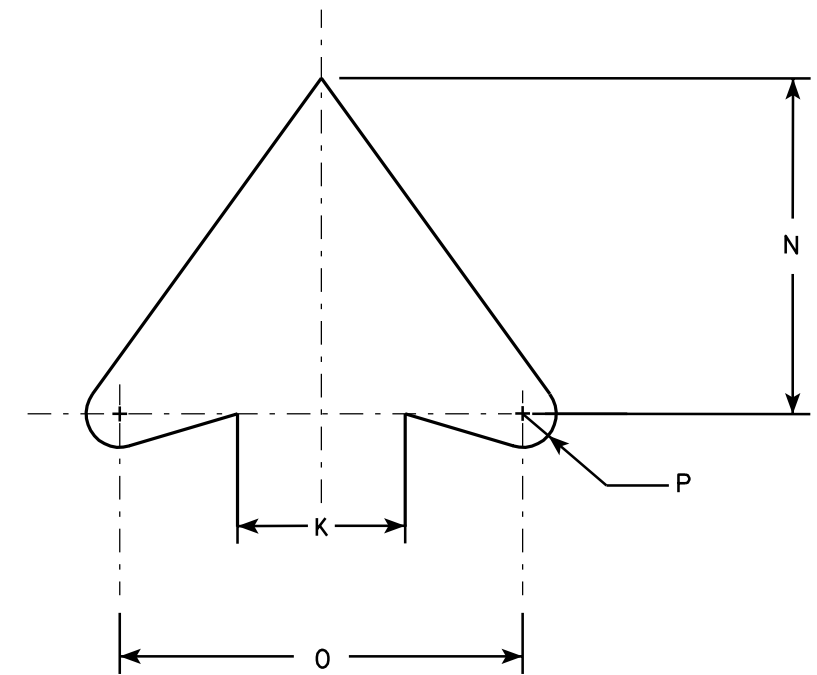
Metric equivalent for this sign is:

SIZE	
1	600 mm X 600 mm
2	600 mm X 600 mm
3	750 mm X 750 mm
4	900 mm X 900 mm
5	1200 mm X 1200 mm

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.	Area sq. m.
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	0.36
2	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	0.36
3	30		1 3/8	1/2	5/8	13 1/8	5	9 1/2	2 1/2	1 7/8	3 1/8	45°	10 5/8	6 1/4	7 1/2	5/8											6.25	0.56
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	0.81
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0	1.44

STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Chester J Spang*
for State Traffic Engineer

DATE 2/01/02 PLATE NO. R3-2.9

STATE PROJECT NUMBER:

SHEET NO:

E

LEVELS 01 - 2, 3, 5, 6, 10.

58,59,60,61,62,63



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.

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 750 mm
3	900 mm X 1200 mm
4	900 mm X 1200 mm
5	1200 mm X 1500 mm

R4-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	24	30	1 1/8	3/8	1/2	4	3 5/8	2 1/4	9 3/4	10	6 1/4	6 3/4	7 1/8	7 5/8												5.0	0.45	
3	36	48	1 5/8	5/8	3/4	6	6	4	14 5/8	15	9 3/8	10	10 3/4	11 3/8												12.0	1.08	
4	36	48	1 5/8	5/8	3/4	6	6	4	14 5/8	15	9 3/8	10	10 3/4	11 3/8												12.0	1.08	
5	48	60	2 1/4	3/4	1	8	7 1/4	4 1/2	19 1/2	20	12 1/2	13 1/2	14 1/4	15 1/4												20.0	1.80	

STANDARD SIGN
R4-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 2/6/02 PLATE NO. R4-3.6

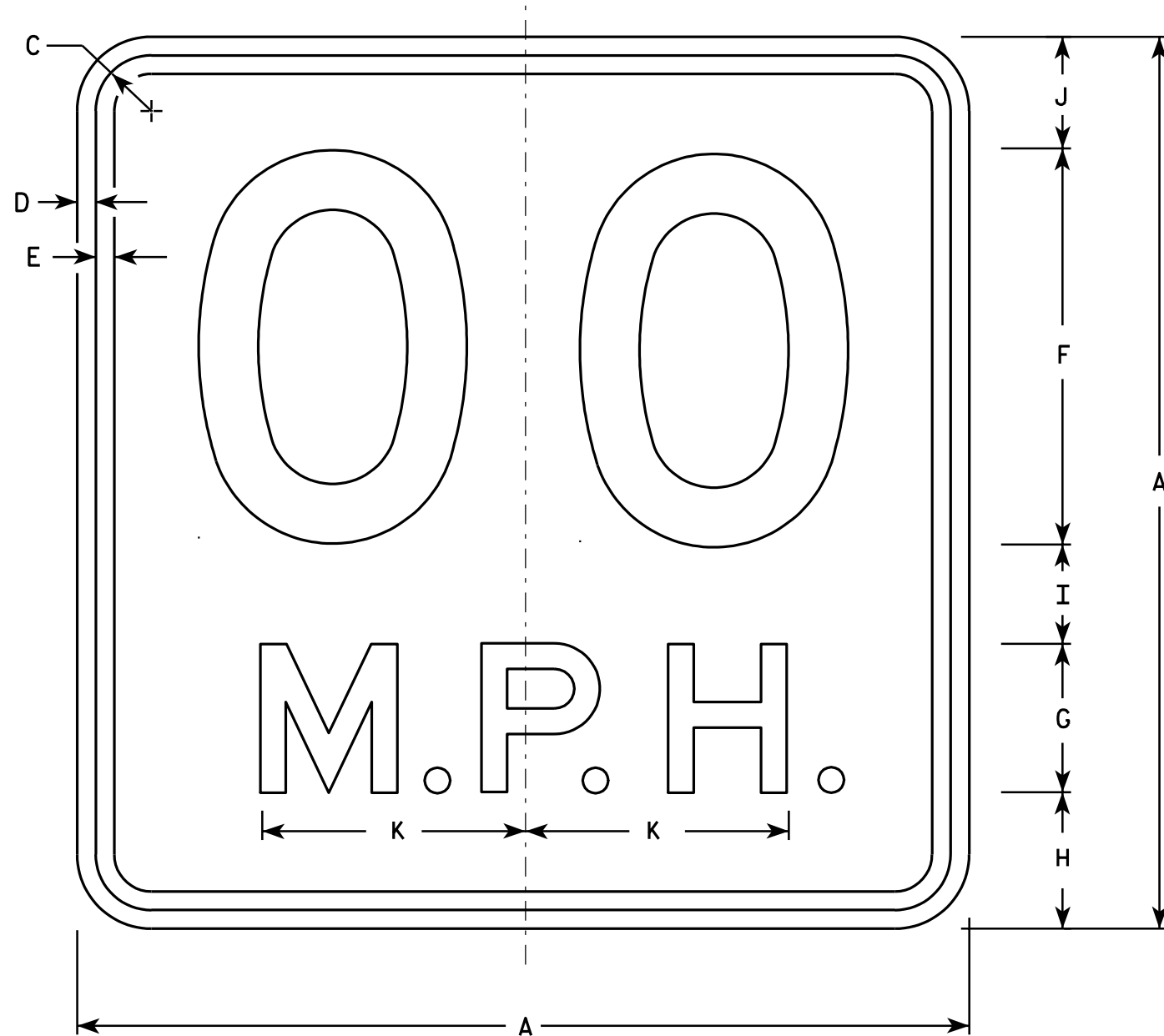
STATE PROJECT NUMBER:

SHEET NO:

E

LEVELS ON - 1, 2, 3, 5, 6

LEVELS 01 - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - See Note 7
Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
Line 2 is Series E
7. W13-1 has a yellow background while W13-1W has a white background.

Metric equivalent for this sign is:

SIZE	
1	450 mm X 450 mm
2	450 mm X 450 mm
3	600 mm X 600 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

W13-1 & W13-1W

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 m ²
1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25	0.20
2	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25	0.20
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00	0.36
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00	0.81
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00	0.81

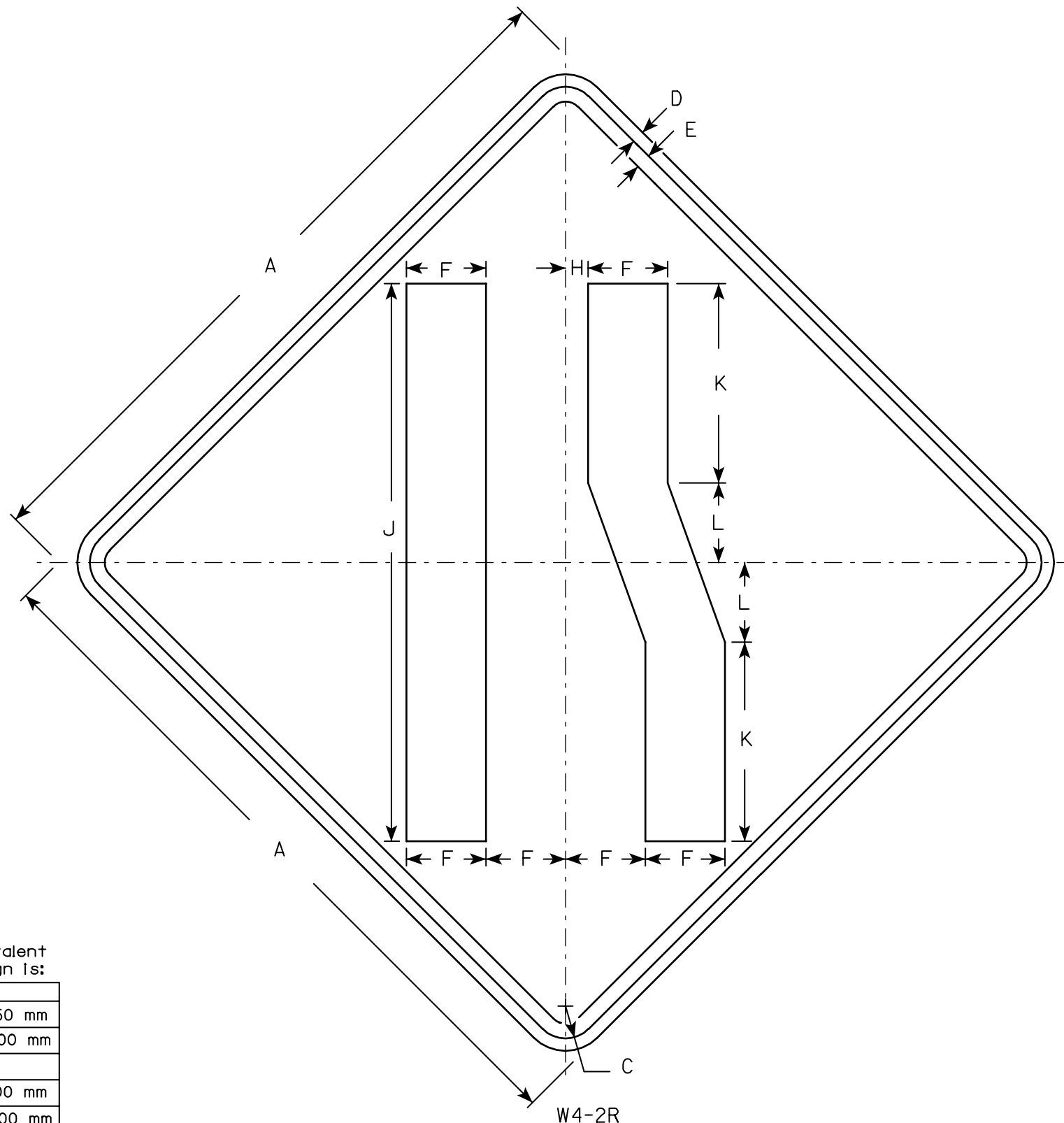
STANDARD SIGN
W13-1 & W13-1W

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Christa J. Spang*
for State Traffic Engineer

DATE 01/22/02 PLATE NO. W13-1.11

STATE PROJECT NUMBER: _____ HWY: _____ COUNTY: _____ SHEET NO: **E**



Metric equivalent for this sign is:

SIZE	
1	750 mm X 750 mm
2	900 mm X 900 mm
3	
4	900 mm X 900 mm
5	1200 mm X 1200 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	30		1 3/8	1/2	5/8	3		7/8		23	8 1/4	3 1/4																6.25	0.56
2	36		1 5/8	5/8	3/4	4		1 1/8		28	10	4																9.0	0.81
3																													
4	36		1 5/8	5/8	3/4	4		1 1/8		28	10	4																9.0	0.81
5	48		2 1/4	3/4	1	5		1 1/2		37	13 1/4	5 1/4																16.0	1.44

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the arrow is reversed along the vertical centerline.

STANDARD SIGN
W4-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

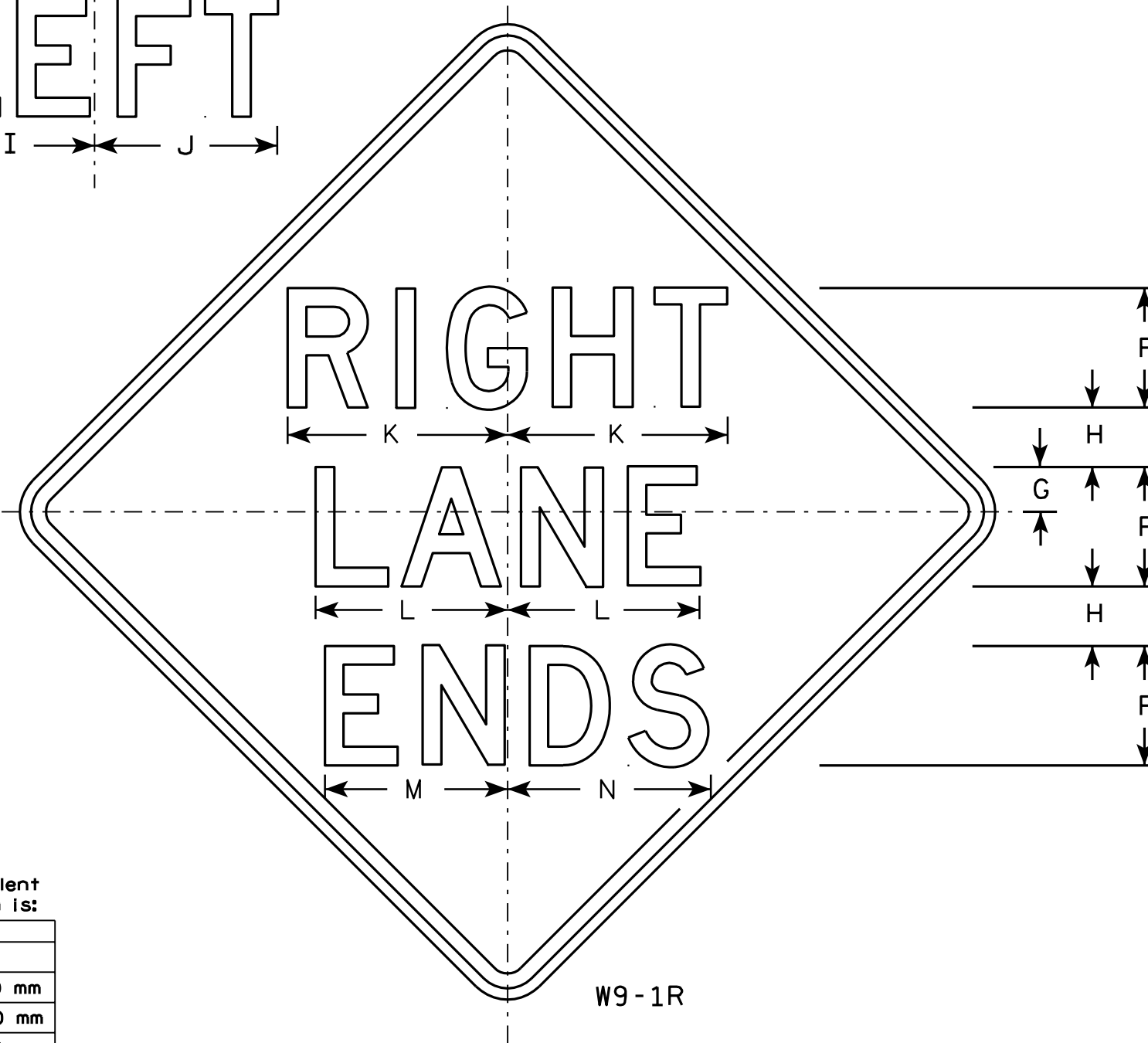
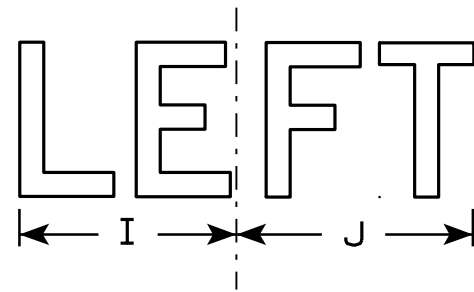
Chester J. Spang
for State Traffic Engineer

DATE 7/7/97 PLATE NO. W4-2.9

SHEET NO:

E

LEVELS 01 - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



W9-1R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
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. W9-1L same as W9-1R except the word Left replaces Right.

Metric equivalent for this sign is:

SIZE	
1	
2	750 mm X 750 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	1200 mm X 1200 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																												
2	30		1 3/8	1/2	5/8	5	1 1/2	2 1/2	7 1/8	7 5/8	9 1/4	8 1/8	7 5/8	8 5/8													6.25	0.56
3	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0	0.81
4	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0	0.81
5	48		2 1/4	3/4	1	8	3	4	11 1/4	12 1/4	14 3/4	12 7/8	12 1/4	13 5/8													16.0	1.44

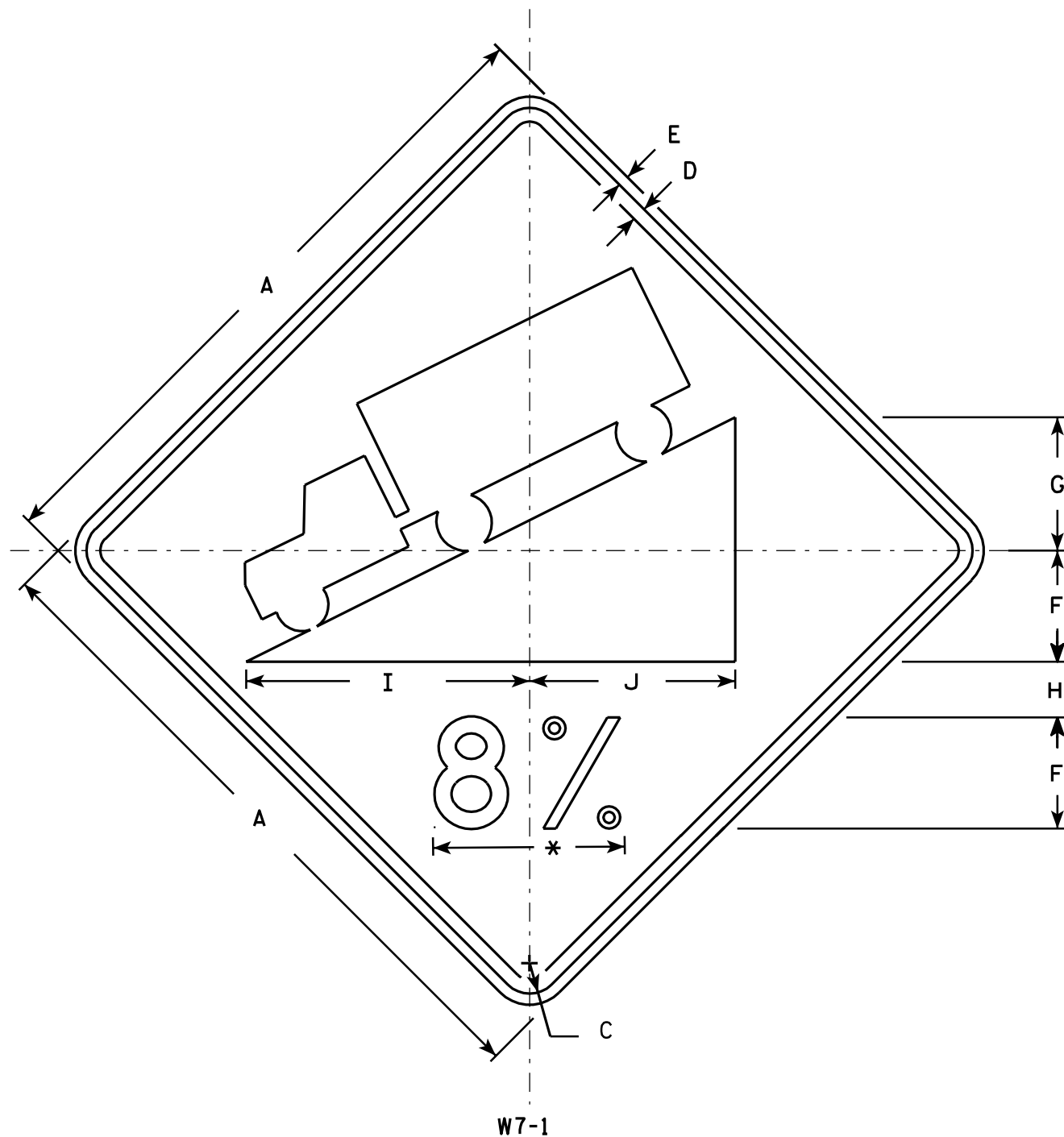
STANDARD SIGN
W9-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Chester J. Spang*
State Traffic Engineer

DATE 01/16/02 PLATE NO. W9-1.6

STATE PROJECT NUMBER: _____ 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 - Yellow
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. Substitute appropriate numeral and optically adjust spacing to achieve proper balance.

* See note 5

Metric equivalent for this sign is:

SIZE	
1	600 mm X 600 mm
2	750 mm X 750 mm
3	
4	900 mm X 900 mm
5	1200 mm X 1200 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	24		1 1/8	3/8	3/8	4	4 3/4	2	10 1/4	7 3/8																	4.0	0.36
2	30		1 3/8	1/2	5/8	5	6	2 1/2	12 3/4	9 1/4																	6.25	0.56
3																												
4	36		1 5/8	5/8	3/4	6	7 1/4	3	15 1/4	11 1/8																	9.0	0.81
5	48		2 1/4	3/4	1	8	9 5/8	4	20 3/8	14 3/4																	16.0	1.44

STANDARD SIGN
W7-1

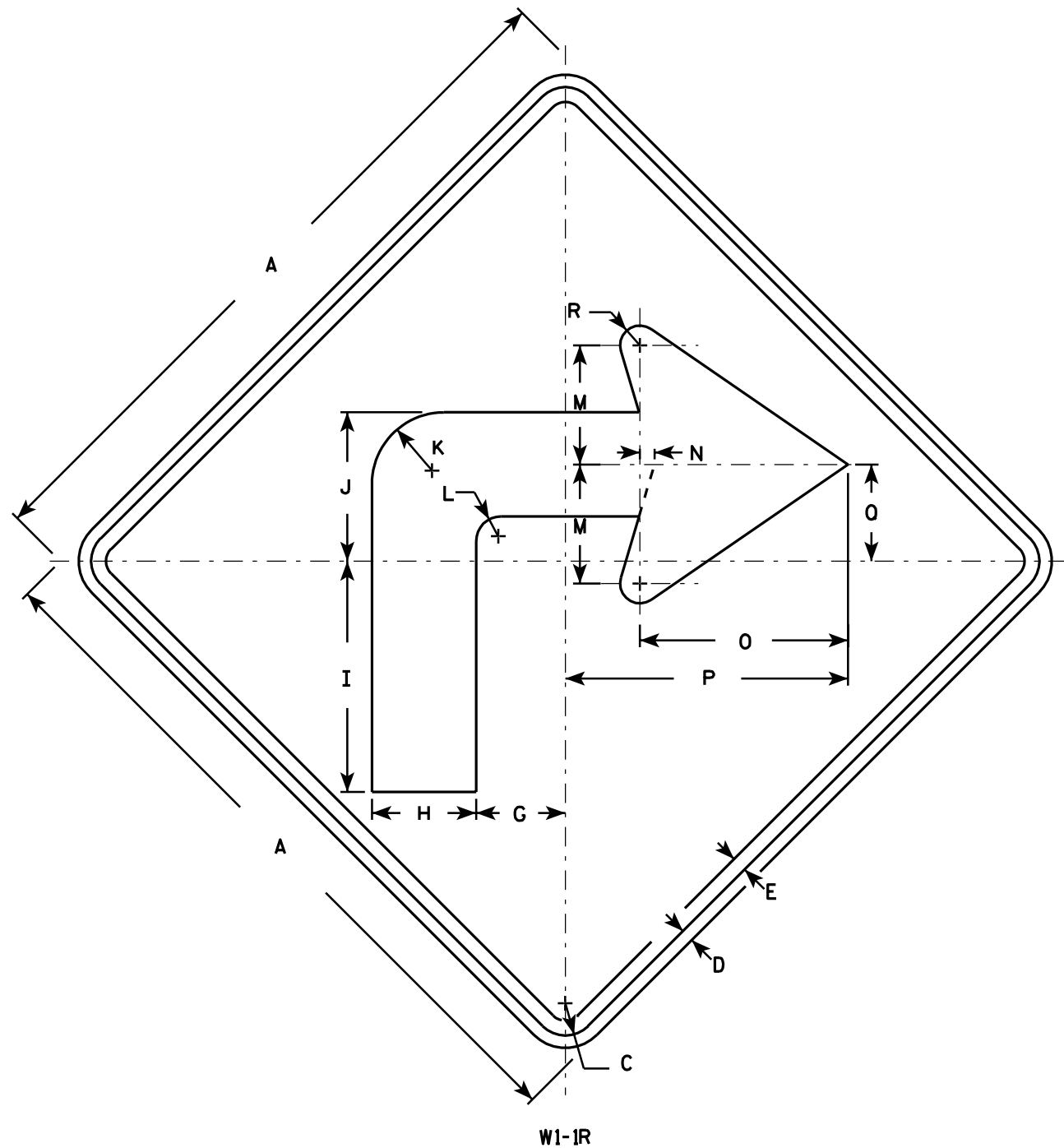
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Chester J Spang*
for State Traffic Engineer

DATE 2/22/02 PLATE NO. W7-1.10

STATE PROJECT NUMBER: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ **E**

LEVELS 01 - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



Metric equivalent for this sign is:

SIZE	
1	600 mm X 600 mm
2	900 mm X 900 mm
3	900 mm X 900 mm
4	1200 mm X 1200 mm
5	1200 mm X 1200 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 m ²
1	24		1 1/8	3/8	1/2		3	3 1/2	7 3/4	5	2 1/2	7/8	4	1/2	7	9 1/2	3 1/4	5/8									4.0	0.36
2	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4	4 7/8	1									9.0	0.81
3	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4	4 7/8	1									9.0	0.81
4	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19	6 1/2	1 1/4									16.0	1.44
5	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19	6 1/2	1 1/4									16.0	1.44

NOTES

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

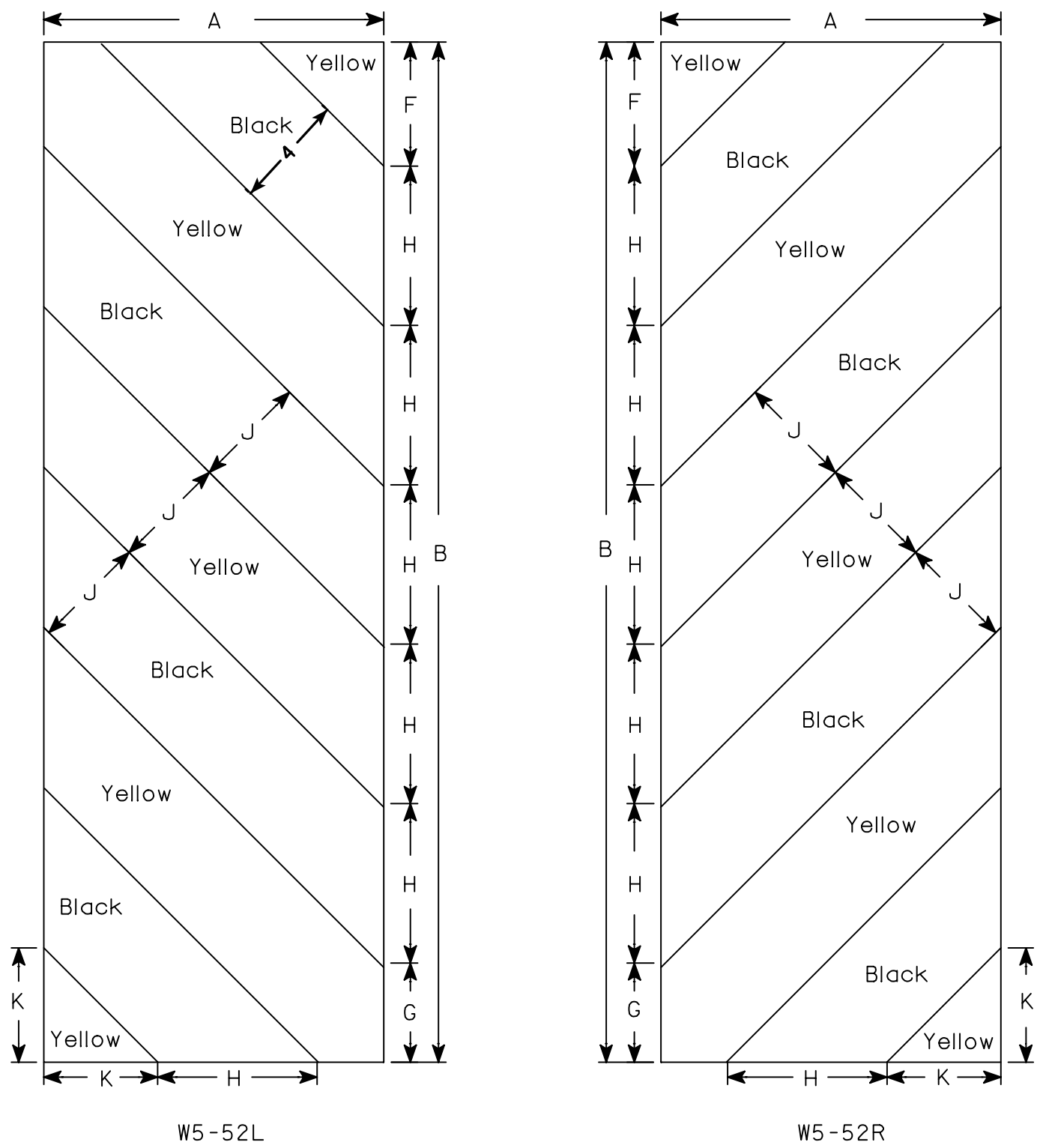
STANDARD SIGN
W1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Chester J. Spang*
for State Traffic Engineer

DATE 1/14/02 PLATE NO. W1-1.8

STATE PROJECT NUMBER: _____ 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 - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Alternate colors of stripes as shown.

Metric equivalent for this sign is:

SIZE	
1	
2	300 mm X 900 mm
3	450 mm X 1350 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0	0.27
3	18	54				6	5 1/2	8 1/2	45°	6	6 5/16																6.75	0.61
4																												
5																												

STANDARD SIGN
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Chester J. Spang*
for State Traffic Engineer

DATE 8/13/97 PLATE NO. W5-52.7

LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63

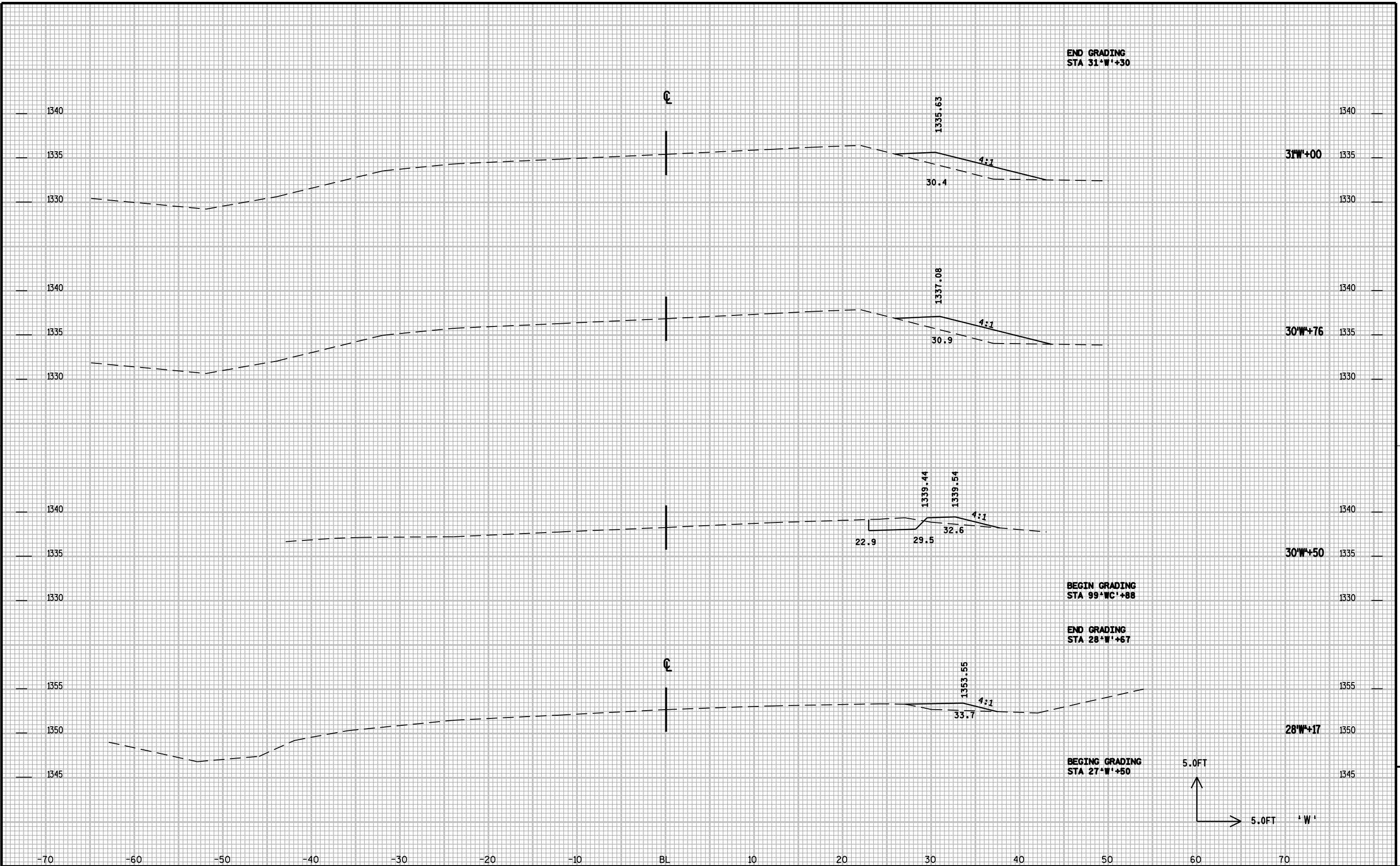
EARTHWORK TABLE

STATION	VOLUME		FACTORS		MASS HAUL C.Y.
	CUT C.Y.	FILL C.Y.	CUT	FILL	
* 7'WA'+48 RT. - 41'W'+65 RT.	48.8	18.7	1.0	1.3	24.5
** 31'W'+30 RT. - 99'WC'+88 RT.	8.4	30.0	1.0	1.3	-6.1
*** 28'W'+17 RT.	---	11.7	1.0	1.3	-21.3
*** 34'W'+88 RT.	---	4.9	1.0	1.3	-27.7
*** 36'W'+13 RT.	---	3.9	1.0	1.3	-32.8
*** 39'W'+15 LT.	---	13.9	1.0	1.3	-50.8
TOTAL UNADJUSTED	57.2	83.1			
TOTAL ADJUSTED	57.2	108.0			

GRADING QUANTITIES ARE FOR INFORMATION ONLY.
PAYMENT IS INCLUDED IN THE FOLLOWING ITEMS:

- * ALL GRADING QUANTITIES INCLUDED IN THE ITEM: GRADING, SHAPING, AND TOPSOILING INTERSECTION, "WA".
- ** ALL GRADING QUANTITIES INCLUDED IN THE ITEM: GRADING SHAPING, AND TOPSOILING INTERSECTION, "WC".
- *** ALL GRADING QUANTITIES INCLUDED IN THE ITEM: GRADINGSHAPING, AND TOPSOILING FOR BEAM GUARD ANCHORAGES.

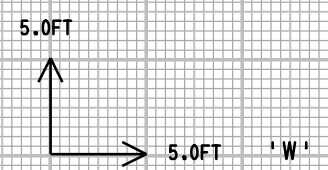
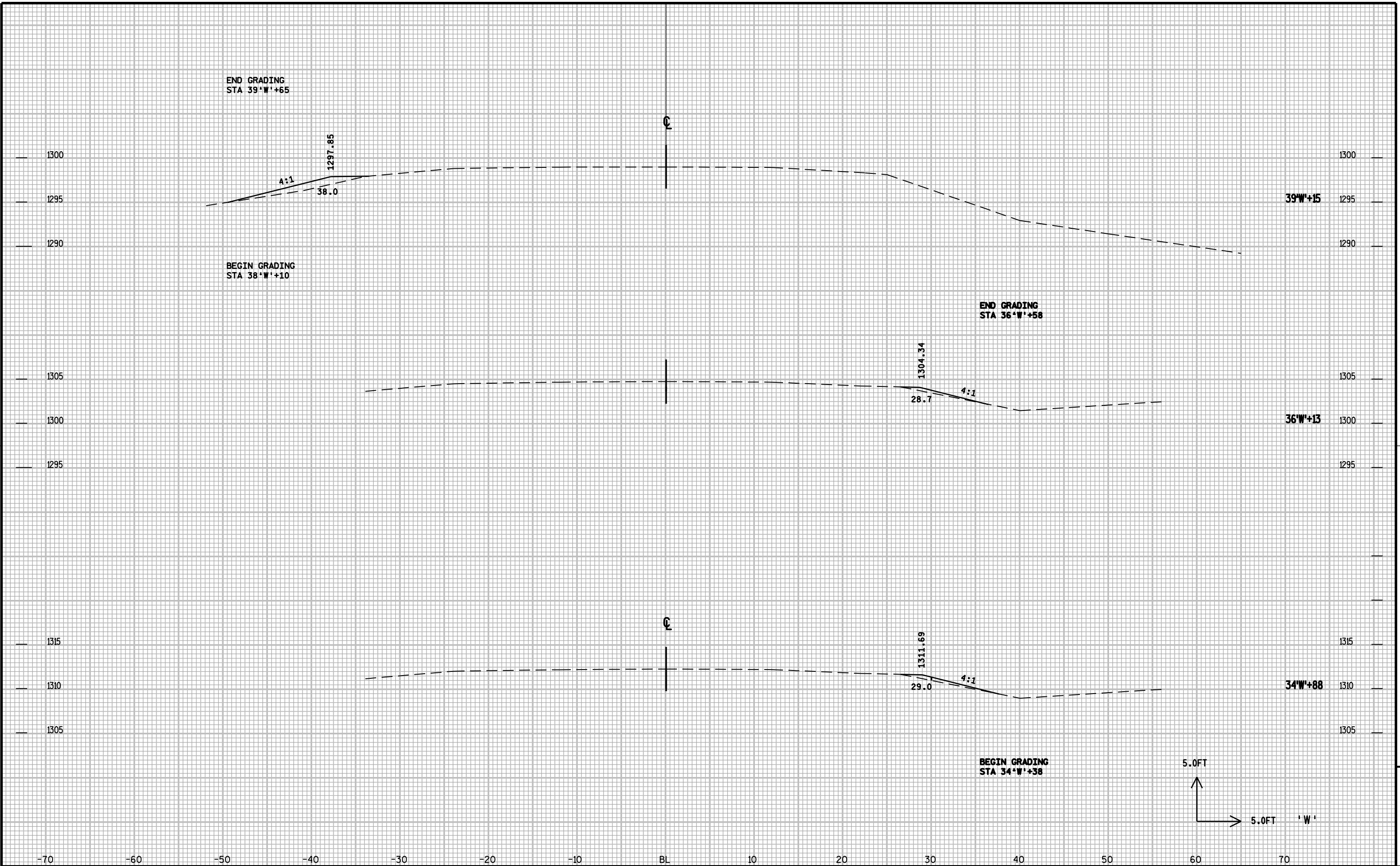
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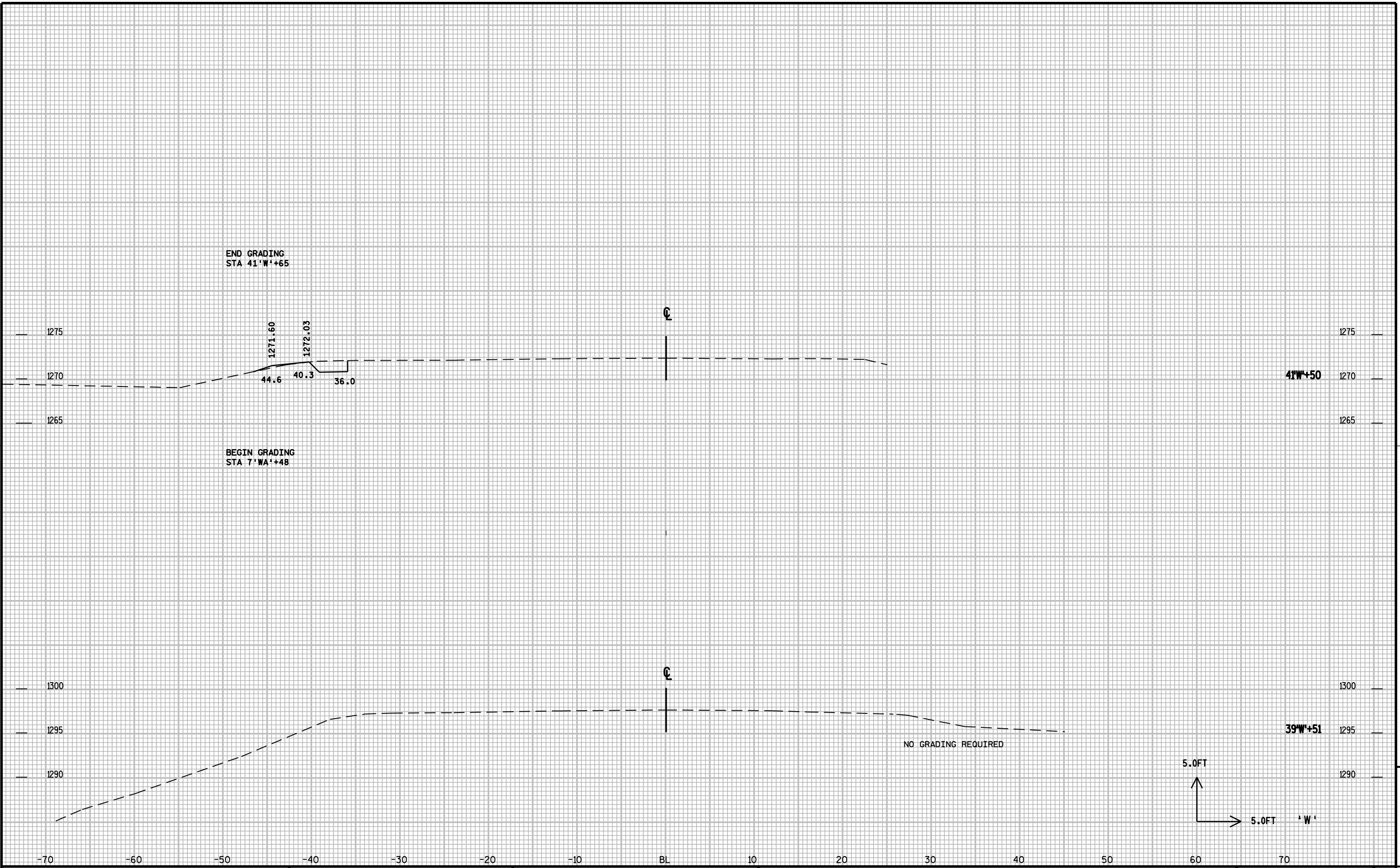
STATE PROJECT NUMBER: 1170-00-73	HWY: CTH WW	COUNTY: MARATHON	CROSS SECTIONS: CTH WW	SHEET NO: 9
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FILE NAME : P:\projects\d4_11700003ed\090201_xs.dgn PLOT DATE : 11-JUL-2003 08:53 PLOT BY : DOTTHM PLOT NAME : 090201_xsd1 ORG DATE : Originator : Dist PLOT SCALE : 200.000000:1.000000 WISDOT/CADD SHEET 21

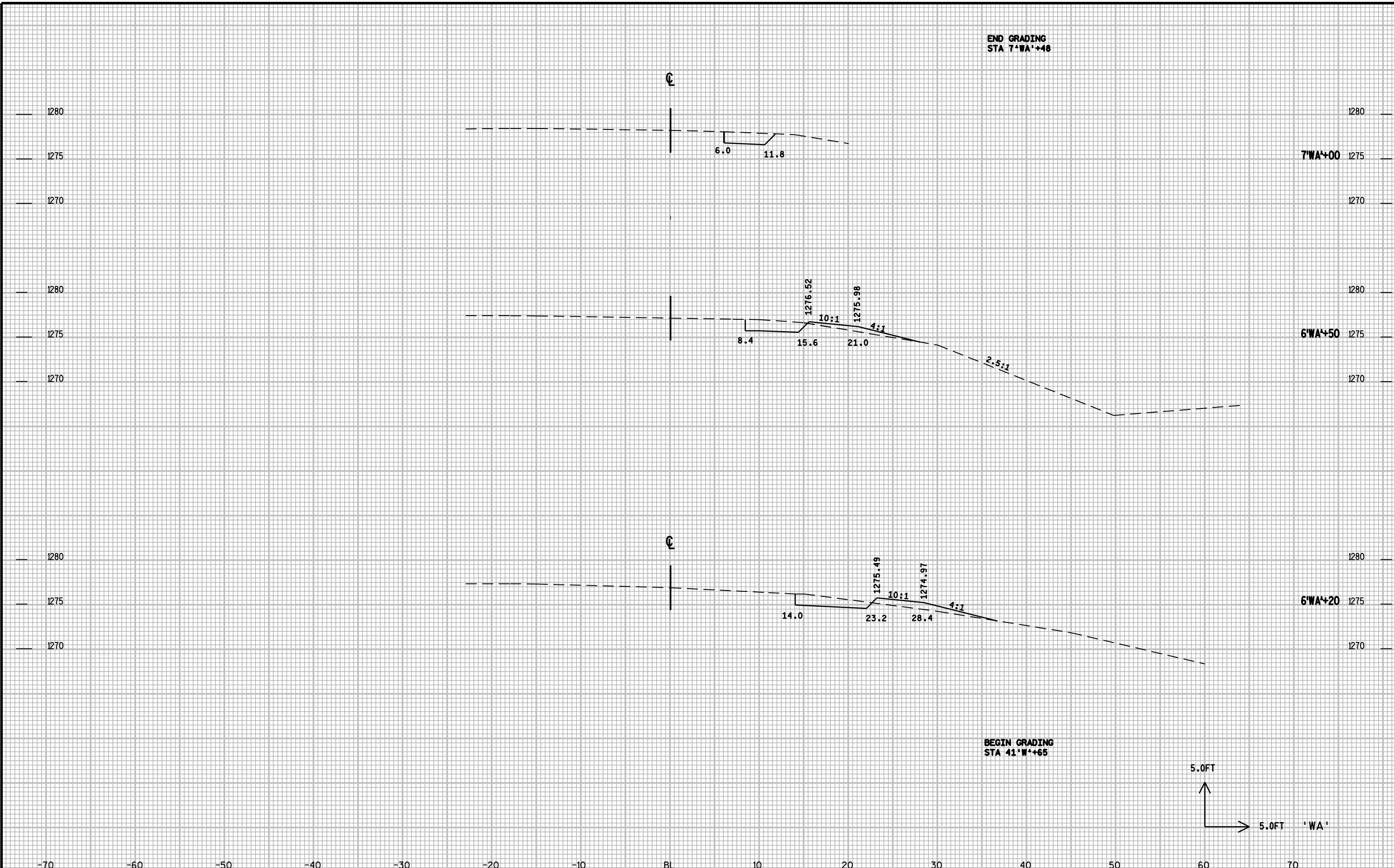
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LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63



LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63



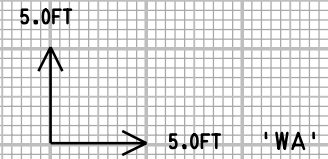
END GRADING
STA 7'WA'+48

7'WA+00

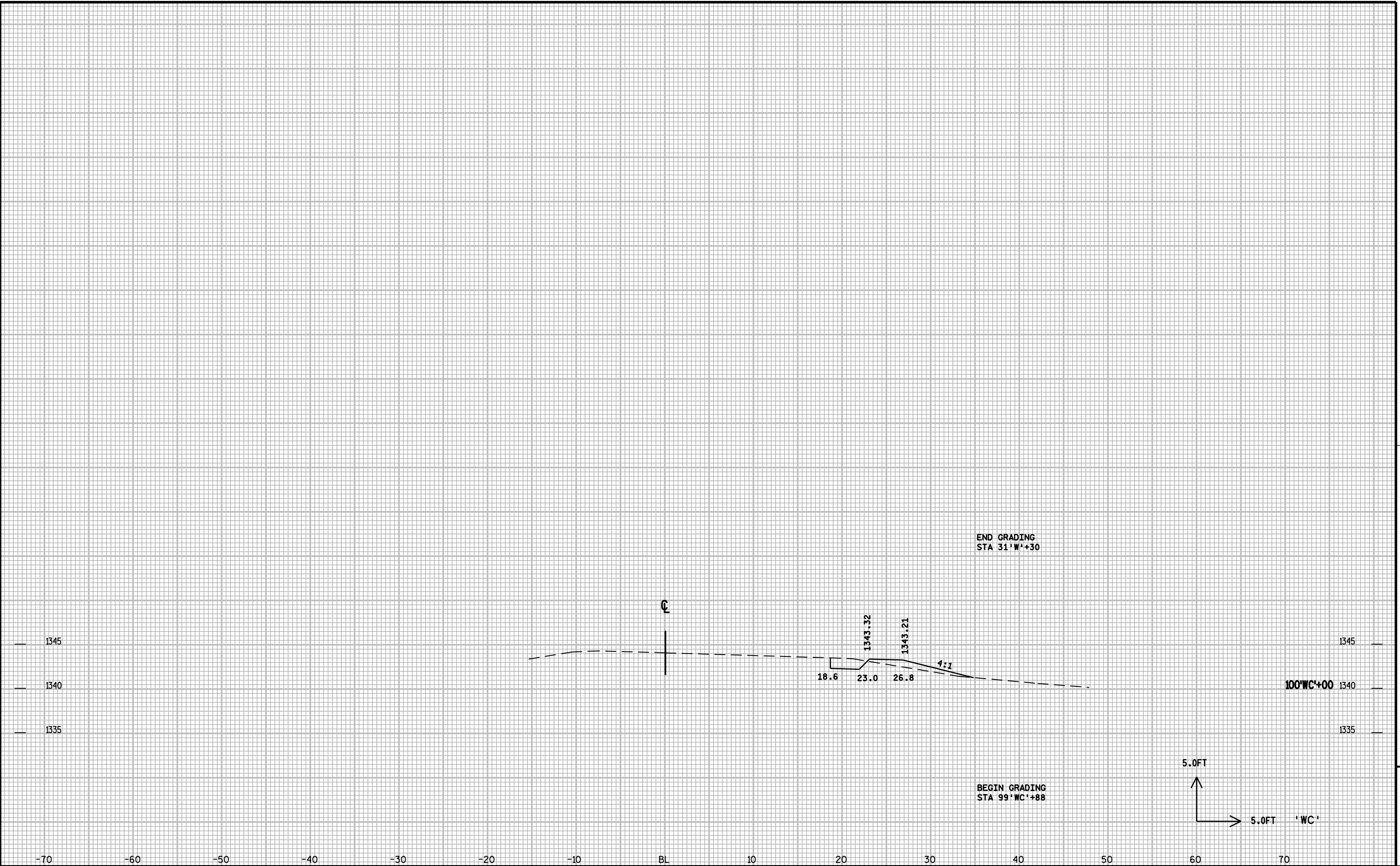
6'WA+50

6'WA+20

BEGIN GRADING
STA 41'W'+65



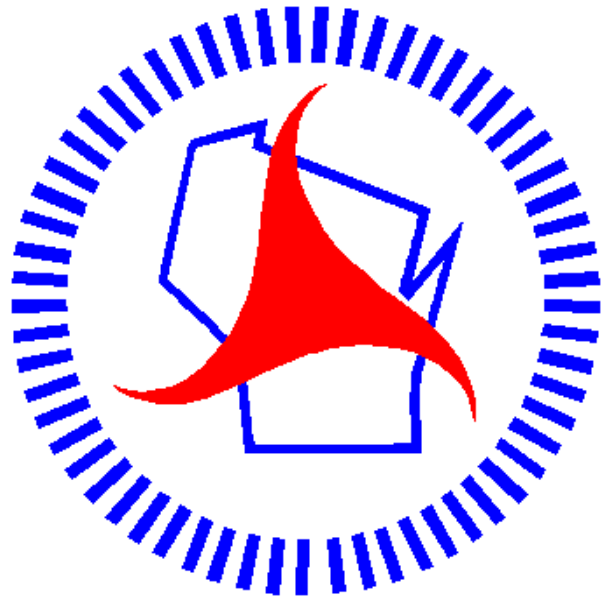
LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63



STATE PROJECT NUMBER: 1170-03-73	HWY: CTH WW	COUNTY: MATRATHON	CROSS SECTIONS: CTH WW	SHEET NO: 9
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FILE NAME : P:\projects\d4_11700003ed\090203_xs.dgn PLOT DATE : 11-JUL-2003 08:53 PLOT BY : DOTTHM PLOT NAME : 090203 xsd ORG DATE : Originator : Dist PLOT SCALE : 200.000000:1.000000 WISDOT/CADD SHEET 21

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

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