

PROJECT ID: 7040-00-60
WITH: N/A

COUNTY: MARATHON

ORDER OF SHEETS

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

TOTAL SHEETS = 106

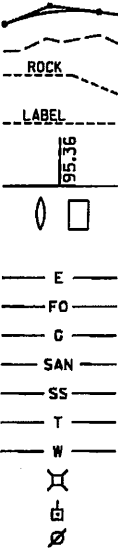


DESIGN	DESIGNATION		STH 98
A.A.D.T.	2013	=	2,800 - 5,400
A.A.D.T.	2033	=	3,500 - 6,600
D.H.V.		=	UNKNOWN
D.D.		=	62/38
T.		=	6.4%
DESIGN SPEED		=	30-50 MPH
ESALS		=	766,500

CONVENTIONAL SYMBOLS

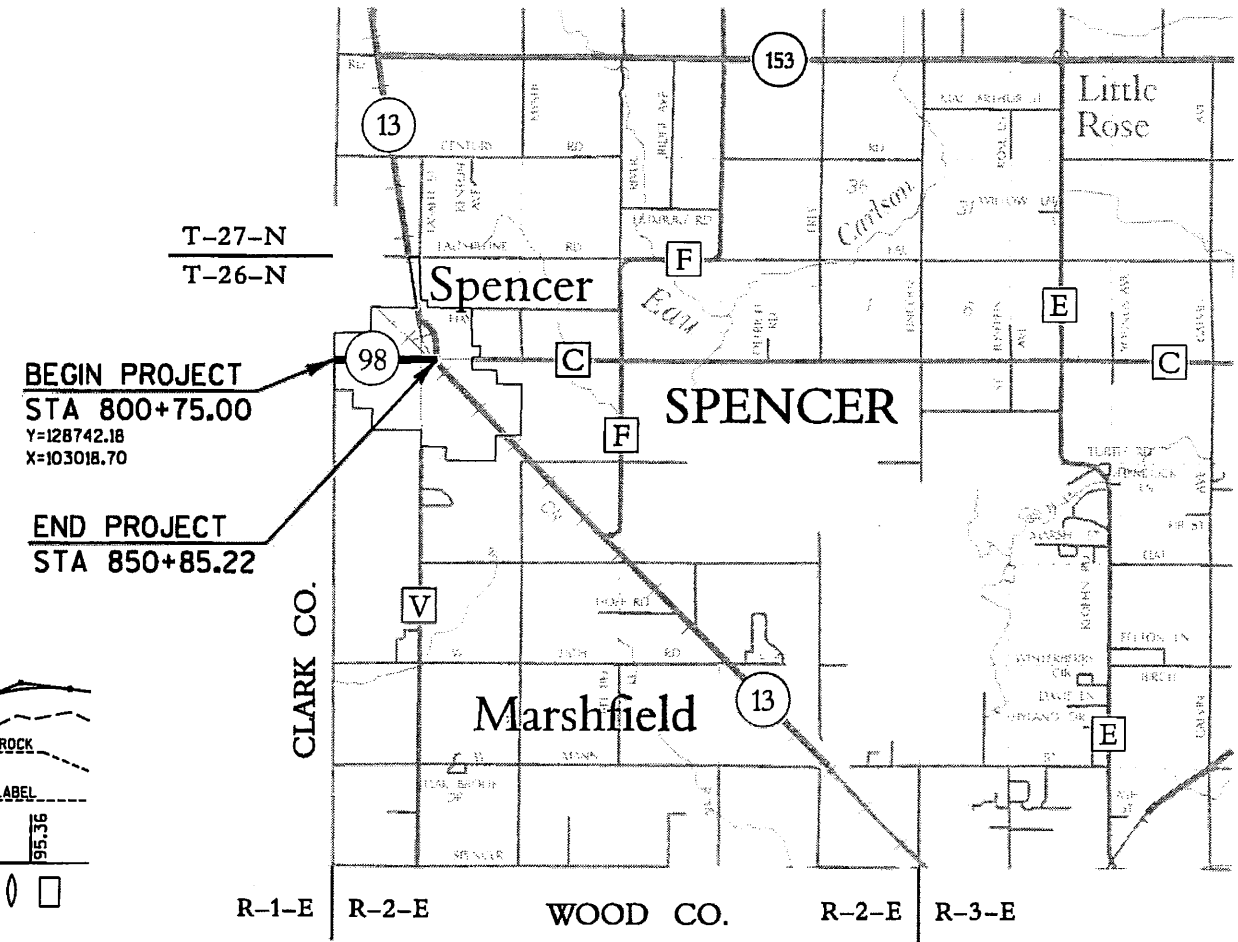
PLAN	
CORPORATE LIMITS	////
PROPERTY LINE	---
LOT LINE	---
LIMITED HIGHWAY EASEMENT	---
EXISTING RIGHT OF WAY	---
PROPOSED OR NEW R/W LINE	---
SLOPE INTERCEPT	---
REFERENCE LINE	---
EXISTING CULVERT	---
PROPOSED CULVERT (Box or Pipe)	---
COMBUSTIBLE FLUIDS	CAUTION
MARSH AREA	---
WOODED OR SHRUB AREA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

PROFILE	
GRADE LINE	---
ORIGINAL GROUND	---
MARSH OR ROCK PROFILE (To be noted as such)	---
SPECIAL DITCH	---
GRADE ELEVATION	---
CULVERT (Profile View)	---
UTILITIES	
ELECTRIC	---
FIBER OPTIC	---
GAS	---
SANITARY SEWER	---
STORM SEWER	---
TELEPHONE	---
WATER	---
UTILITY PEDESTAL	---
POWER POLE	---
TELEPHONE POLE	---



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
SPENCER, CLARK STREET
COUNTY LINE ROAD - STH 13
STH 98
MARATHON COUNTY

STATE PROJECT NUMBER
7040-00-60



LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.949 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), MARATHON COUNTY, HORIZONTAL DATUM NAD 83 (91). ALL DISTANCES ARE GROUND. ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO VERTICAL DATUM NATIONAL GEODETIC VERTICAL DATUM 1929.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7040-00-60		

ORIGINAL PLANS PREPARED BY

EMCS

630 South 36th Avenue
Wausau, WI 54401
715.845.1081 FAX 715.845.1099



7/26/2012
(Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	EMCS, INC.
Designer	EMCS, INC.
Project Manager	RICHARD SIMON
Regional Examiner	CHERYL SIMON
Regional Supervisor	ROBIN STAFFORD
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 7/31/12 (Signature)

E

GENERAL NOTES

NO TREES OR SHRUBS SHALL BE REMOVED WITHOUT APPROVAL OF THE ENGINEER

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

EXISTING RIGHT-OF-WAY IS APPROXIMATE BASED ON EXISTING AS BUILT

PLACE HMA PAVEMENT LAYERS WITH THE FOLLOWING THICKNESSES AND NOMINAL SIZES

HMA PAVEMENT TYPE E-1, 2-INCH
MAINLINE UPPER LAYER THICKNESS= 2-INCH (12.5MM) PG 64-22

HMA PAVEMENT TYPE E-1, 3.5-INCH
SHOULDER UPPER LAYER THICKNESS= 3.5-INCH (12.5MM) PG 64-22

HMA PAVEMENT TYPE E-1, 4.25-INCH
RAILROAD CROSSING UPPER LAYER THICKNESS= 2-INCH (12.5MM) PG 64-22
RAILROAD CROSSING LOWER LAYER THICKNESS= 2.25-INCH (19MM) PG 64-22

ORDER OF SECTION 2 SHEETS

- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- PAVING DETAILS
- PERMANENT SIGNING & PAVEMENT MARKING
- TRAFFIC CONTROL DETOUR

DNR LIAISON
MARC HERSHFELD
473 GRIFFITH AVE
WISCONSIN RAPIDS WI, 54494
(715) 421-7867
MARC.HERSHFIELD@WISCONSIN.GOV

UTILITIES

CHARTER COMMUNICATIONS
(COMMUNICATIONS)
SCOTT OLSON
853 MCINTOSH STREET
WAUSAU, WI 54402
(715) 301-4079 (OFFICE)
(715) 302-1348 (MOBILE)
SCOTT.OLSON@CHARTERCOM.COM

PACKERLAND BROADBAND
(COMMUNICATIONS)
RANDY SIMMS
PO BOX 885
IRON MOUNTAIN, MI 49801
(906) 282-3802
RANDY.SIMMS@CCISYSTEMS.COM

WE ENERGIES
(GAS)
SEND ALL WE ENERGIES
CORRESPONDENCE TO:
DAN SANDE
333 W EVERETT STREET, A299
MILWAUKEE, WI 53203
(414) 221-2336
DAN.SANDE@WE-ENERGIES.COM

WE ENERGIES PROJECT
CONSTRUCTION FIELD CONTACT:

THOMAS J KROSTAG
1920 8TH STREET SOUTH
WISCONSIN RAPIDS, WI 54494
(715) 421-7268 (OFFICE)
(715) 459-1772 (MOBILE)
THOMAS.KROSTAG@WE-ENERGIES.COM

FRONTIER COMMUNICATIONS
(COMMUNICATIONS)
BOB SCHROETER
1851 N 14TH AVENUE
WAUSAU, WI 54401
PHONE: (715) 847-1685
MOBILE: (715) 781-5700
BOB.SCHROETER@FTR.COM

VILLAGE OF SPENCER
(SEWER - WATER)
THADDEUS KUBISIAK
105 PARK STREET
SPENCER, WI 54479
(715) 659-5423
CLERK@VIL.SPENCER.WI.US

XCEL ENERGY
(ELECTRIC)
DAVID PEPPER
500 N 5TH STREET
ABBOTSFORD, WI 54405
(715) 737-2678
DAVE.PEPPER@XCELENERGY.COM

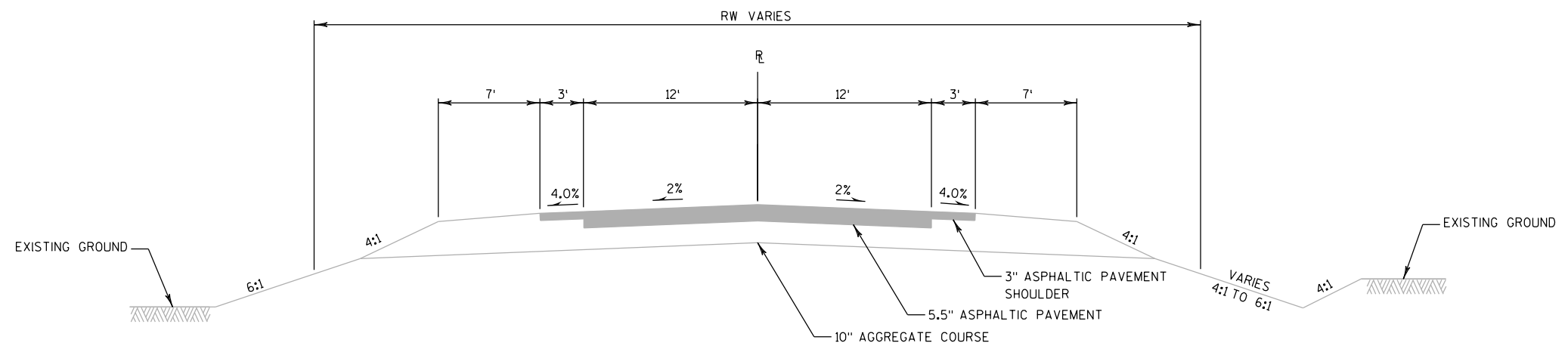


Call 811 3 Work Days Before You Dig
or Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

TO OBTAIN LOCATION OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

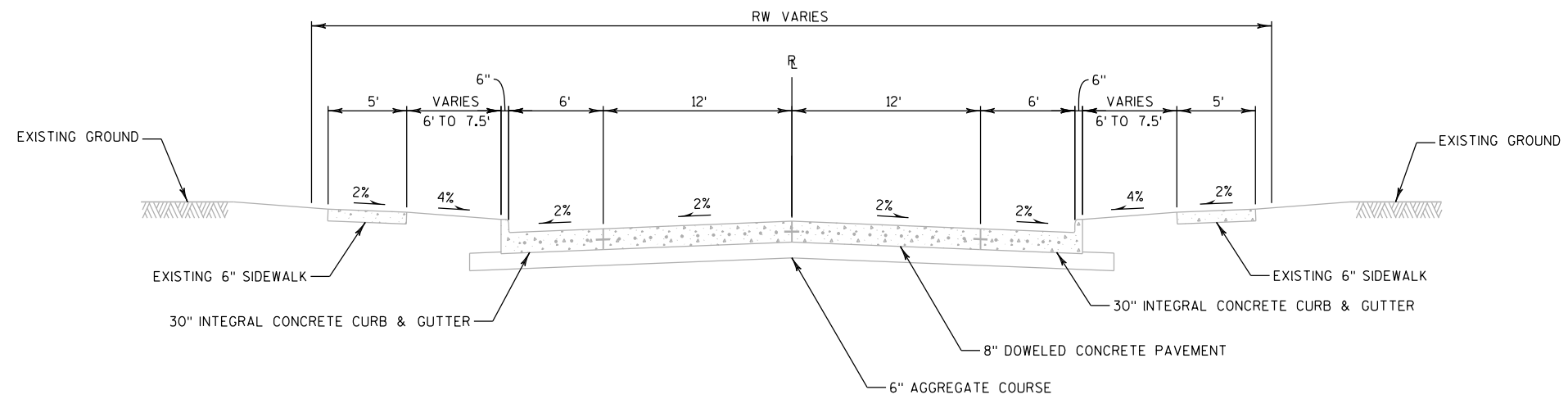
WISCONSIN STATUTE 182.0175 (1974) REQUIRES MINIMUM OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.





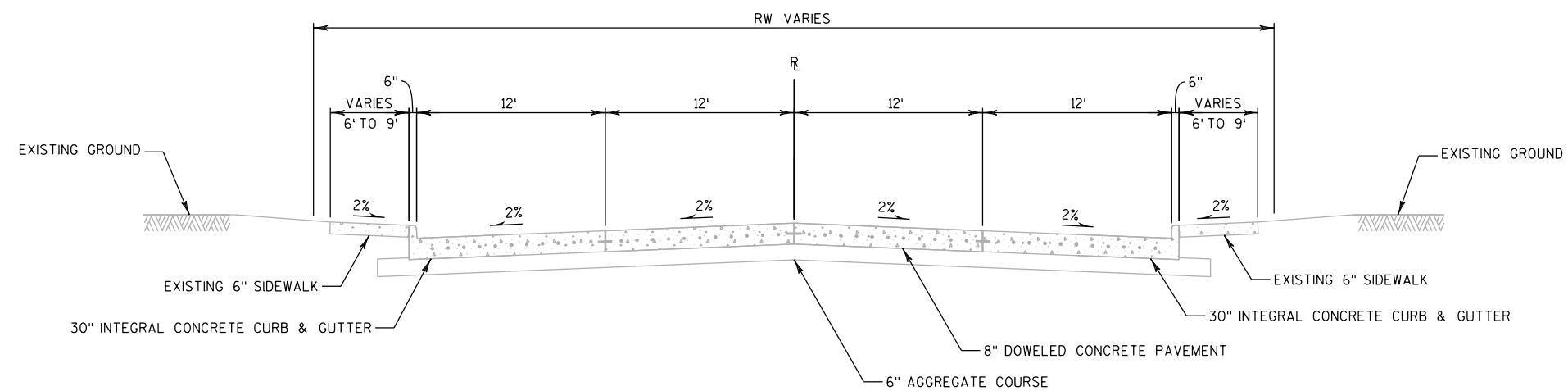
TYPICAL EXISTING SECTION

STH 98
STA 800+75 - STA 815+98



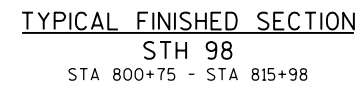
TYPICAL EXISTING SECTION

STH 98
STA 815+98 - STA 837+84

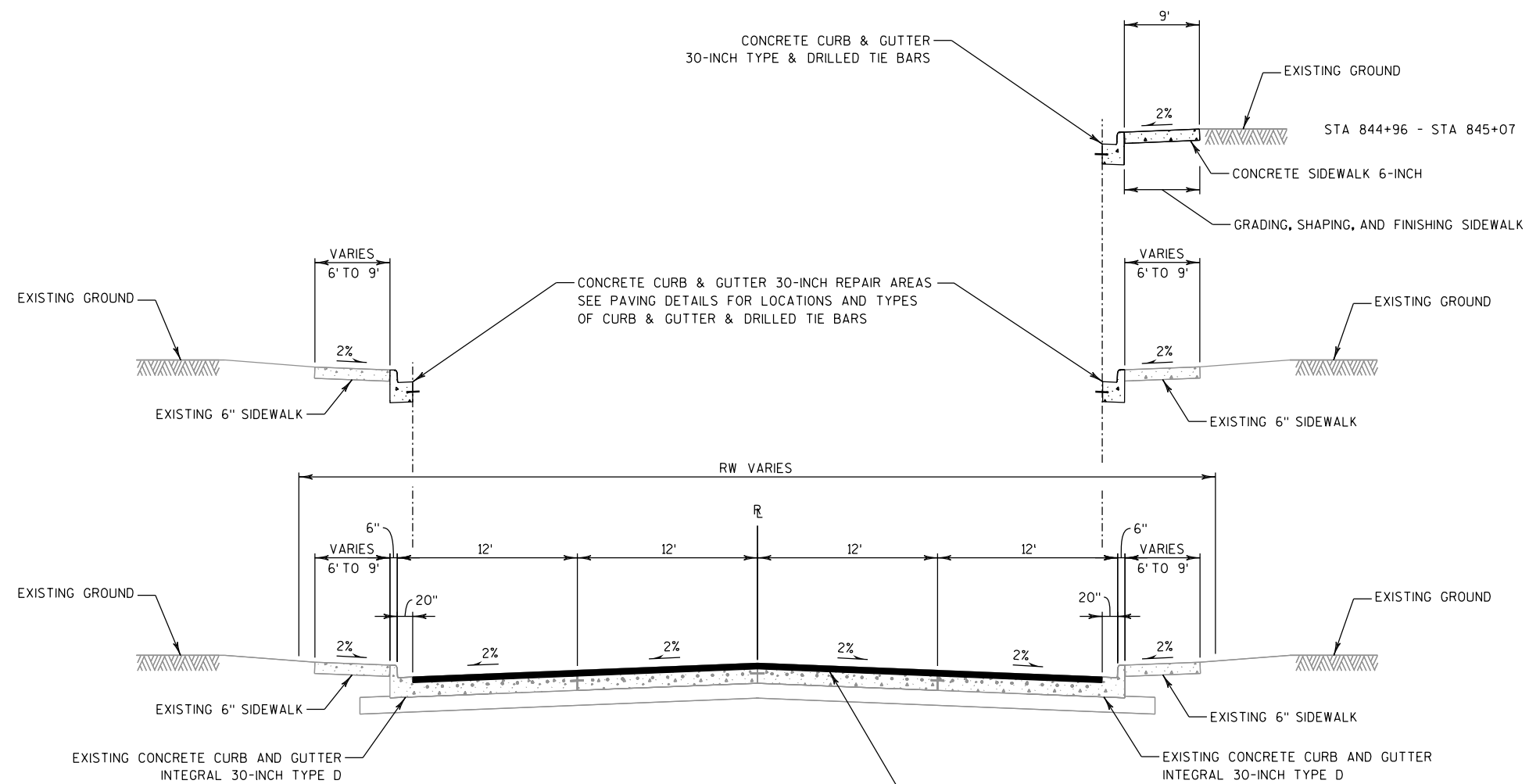


TYPICAL EXISTING SECTION
STH 98
STA 837+84 - STA 850+85

2



TOPSOIL, SEEDING MIXTURE NO. 40, AND FERTILIZER TYPE B ARE INCIDENTAL TO GRADING, SHAPING, AND FINISHING SIDEWALK



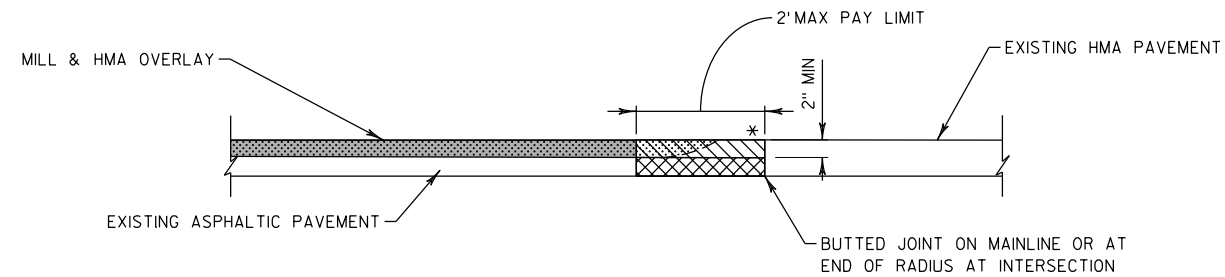
TYPICAL FINISHED SECTION

STH 98

STA 837+84 - STA 848+67
STA 849+80 - STA 850+85 (LT)
STA 849+94 - STA 850+85 (RT)

REMOVING CONCRETE SURFACE PARTIAL DEPTH, 2 INCH
OVERLAY 2 INCH HMA PAVEMENT TYPE E-1,
(44' - 8" WIDTH TYP), PREPARE FOUNDATION FOR
ASPHALTIC PAVING & BASE PATCHING ASPHALTIC

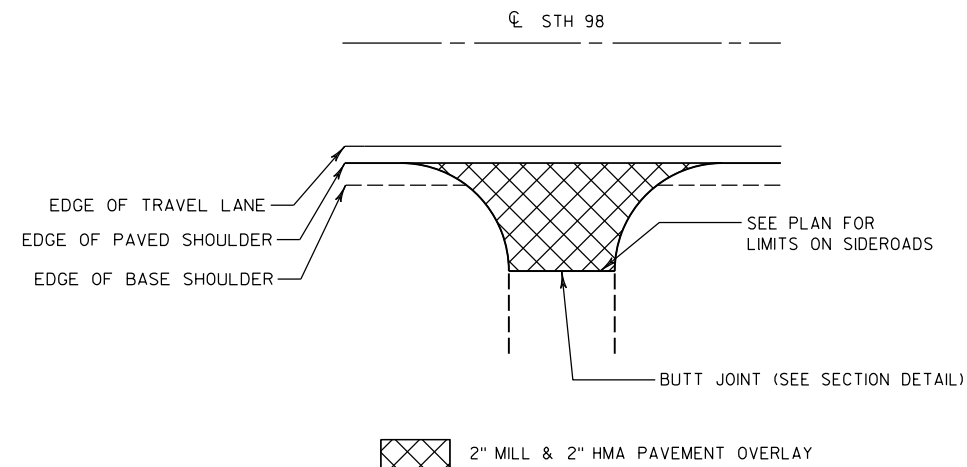
2



-  ASPHALTIC WEDGING
(FULL DEPTH REMOVAL OPTIONAL)
-  REMOVING ASPHALTIC SURFACE BUTT JOINTS
DO NOT REMOVE MATERIAL UNDER THIS ITEM UNTIL 24 HOURS BEFORE PAVING
-  REMOVING ASPHALTIC SURFACE MILLING
- * SAWCUT ROAD

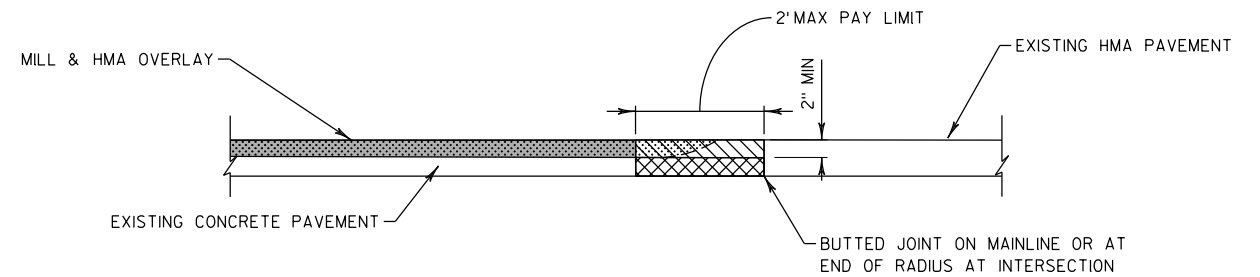
ASPHALTIC SURFACE BUTT JOINT DETAIL

BEGIN PROJECT (STA 800+75)
STH 98 / WASHINGTON STREET INTERSECTION



PLAN VIEW OF MILL & OVERLAY AT ASPHALT INTERSECTIONS DETAIL

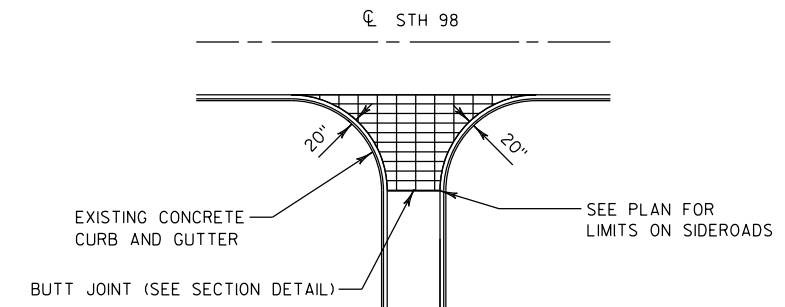
STH 98 / WASHINGTON STREET INTERSECTION



-  ASPHALTIC WEDGING
(FULL DEPTH REMOVAL OPTIONAL)
-  REMOVING PAVEMENT BUTT JOINTS
DO NOT REMOVE MATERIAL UNDER THIS ITEM UNTIL 24 HOURS BEFORE PAVING
-  REMOVING CONCRETE SURFACE PARTIAL DEPTH

PAVEMENT BUTT JOINT DETAIL

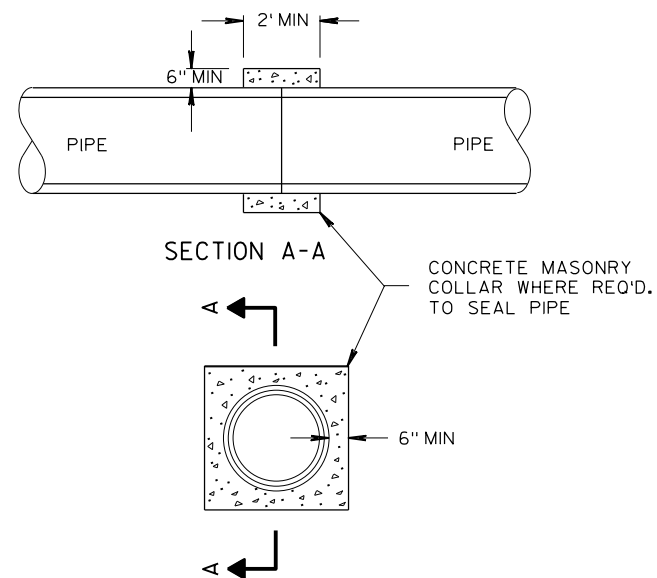
JULIA ST / STH 98 INTERSECTION
OAK ST / STH 98 INTERSECTION
MADISON ST / STH 98 INTERSECTION
CHESTNUT ST / STH 98 INTERSECTION
SPRING ST / STH 98 INTERSECTION
PEARL ST / STH 98 INTERSECTION
CTH V / LASALLE ST / STH 98 INTERSECTION
WISCONSIN ST / STH 98 INTERSECTION
END OF PROJECT (STA 850+85.22)



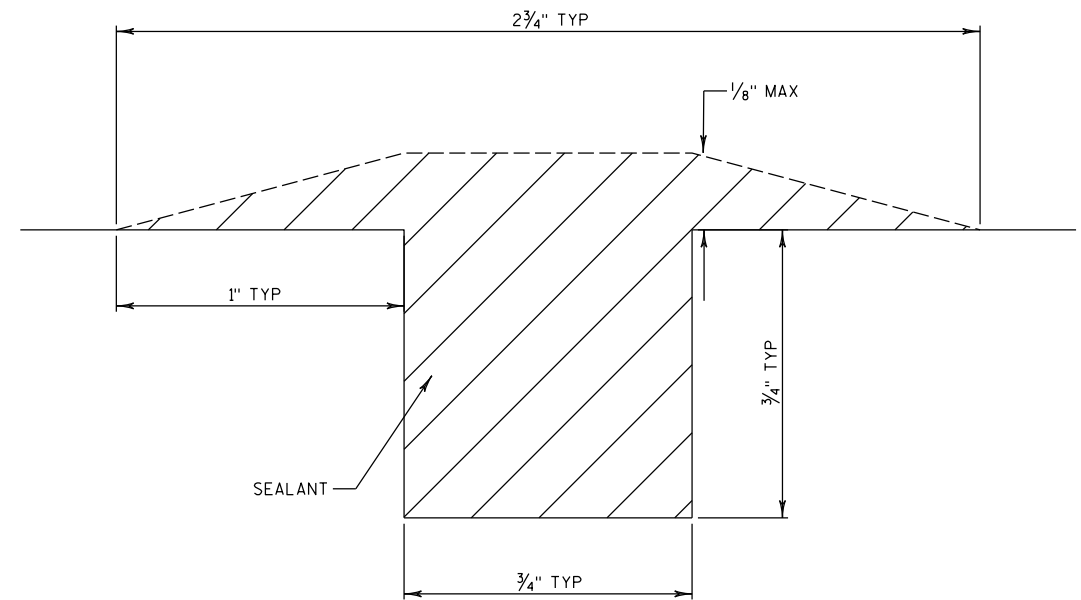
-  2" REMOVING CONCRETE SURFACE PARTIAL DEPTH & 2" HMA PAVEMENT OVERLAY
- PLACE ALL CONCRETE PAVEMENT 8-INCH, CONCRETE PAVEMENT SHES 8-INCH AND CONCRETE CURB & GUTTER PRIOR TO REMOVING CONCRETE SURFACE PARTIAL DEPTH

PLAN VIEW OF INTERSECTIONS WITH CONCRETE CURB & GUTTER DETAIL

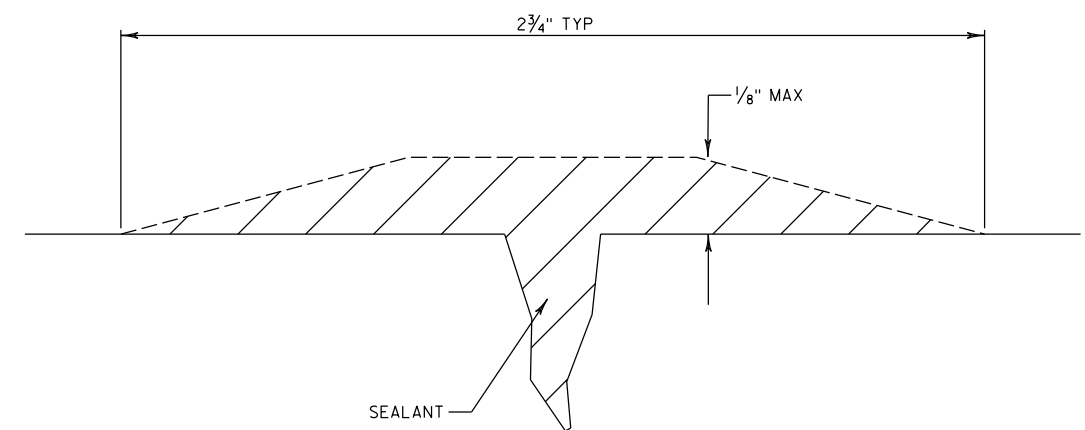
JULIA ST / STH 98 INTERSECTION
OAK ST / STH 98 INTERSECTION
MADISON ST / STH 98 INTERSECTION
CHESTNUT ST / STH 98 INTERSECTION
SPRING ST / STH 98 INTERSECTION
PEARL ST / STH 98 INTERSECTION
CTH V / LASALLE ST / STH 98 INTERSECTION
WISCONSIN ST / STH 98 INTERSECTION



CONCRETE COLLAR DETAIL
STA 832+95 LT & RT

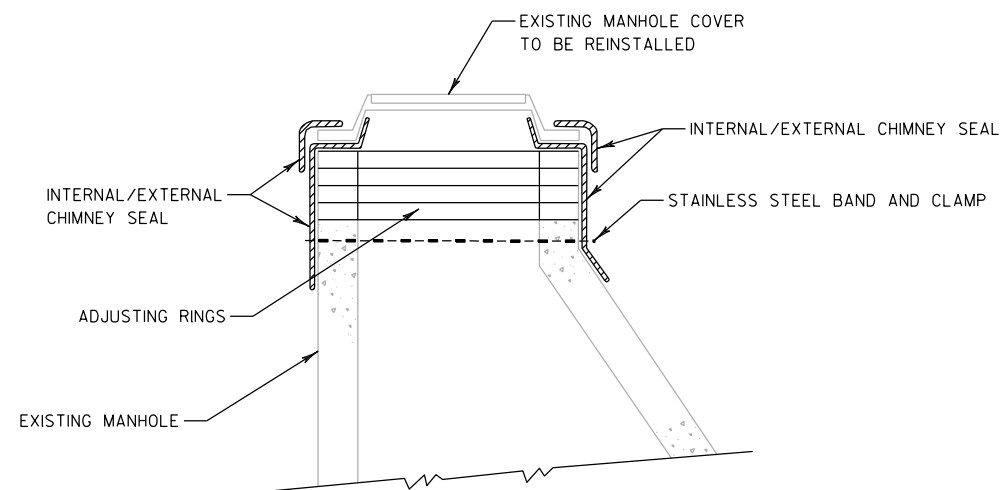
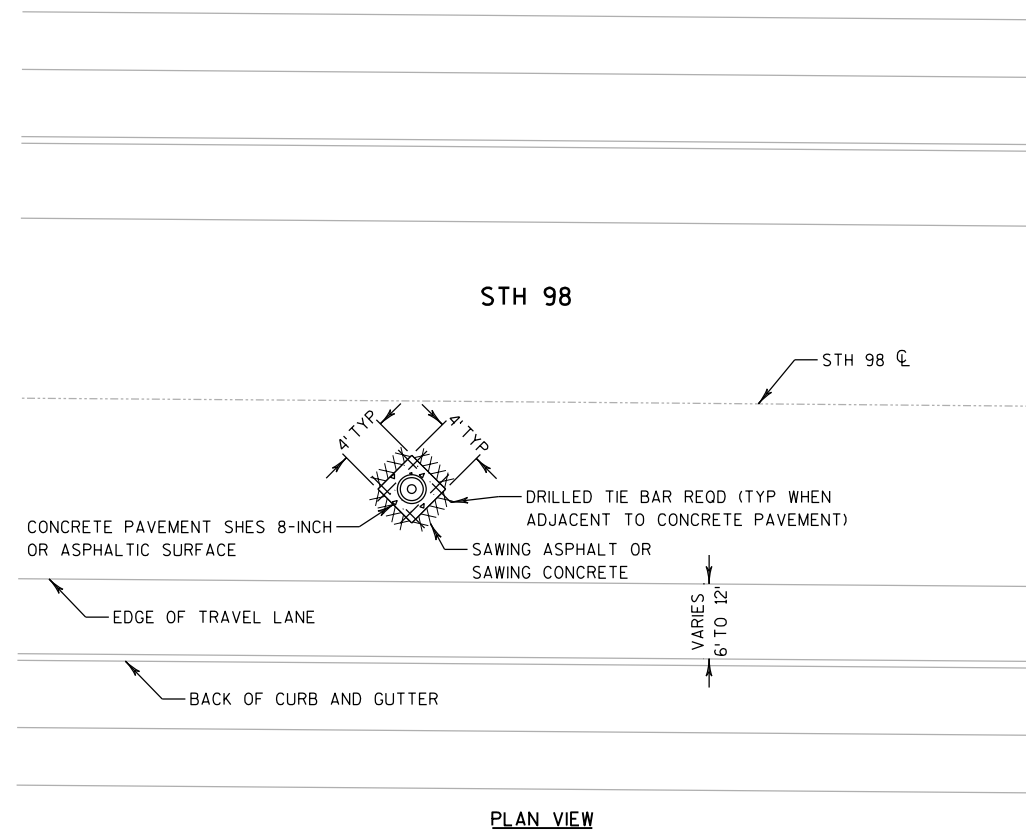


SECTION FOR ROUT AND SEAL DETAIL



SECTION FOR CLEAN AND SEAL DETAIL

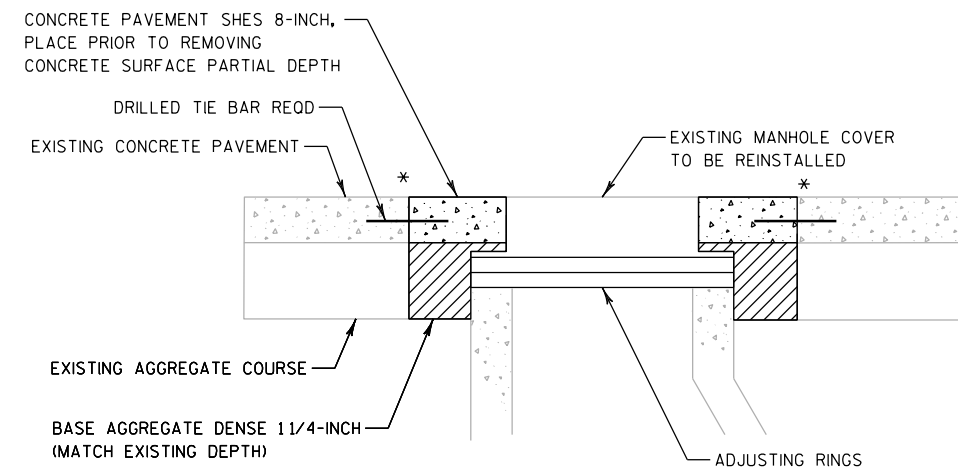
SEALING ASPHALTIC PAVEMENT CRACKS DETAIL



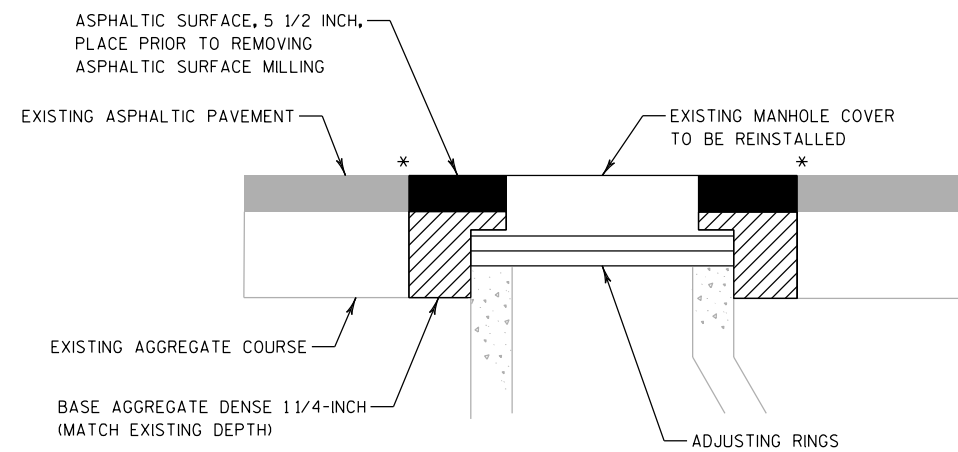
INTERNAL/EXTERNAL CHIMNEY SEAL DETAIL FOR SANITARY SEWER MANHOLES

ADJUSTING MANHOLE COVERS AND ADJUSTING SANITARY SEWER MANHOLE COVERS DETAIL

SEE PAVING DETAILS FOR LOCATIONS
STORM SEWER AND SANITARY SEWER MANHOLES



ADJUSTING MANHOLE COVERS AND ADJUSTING SANITARY SEWER MANHOLE COVERS IN CONCRETE PAVEMENT



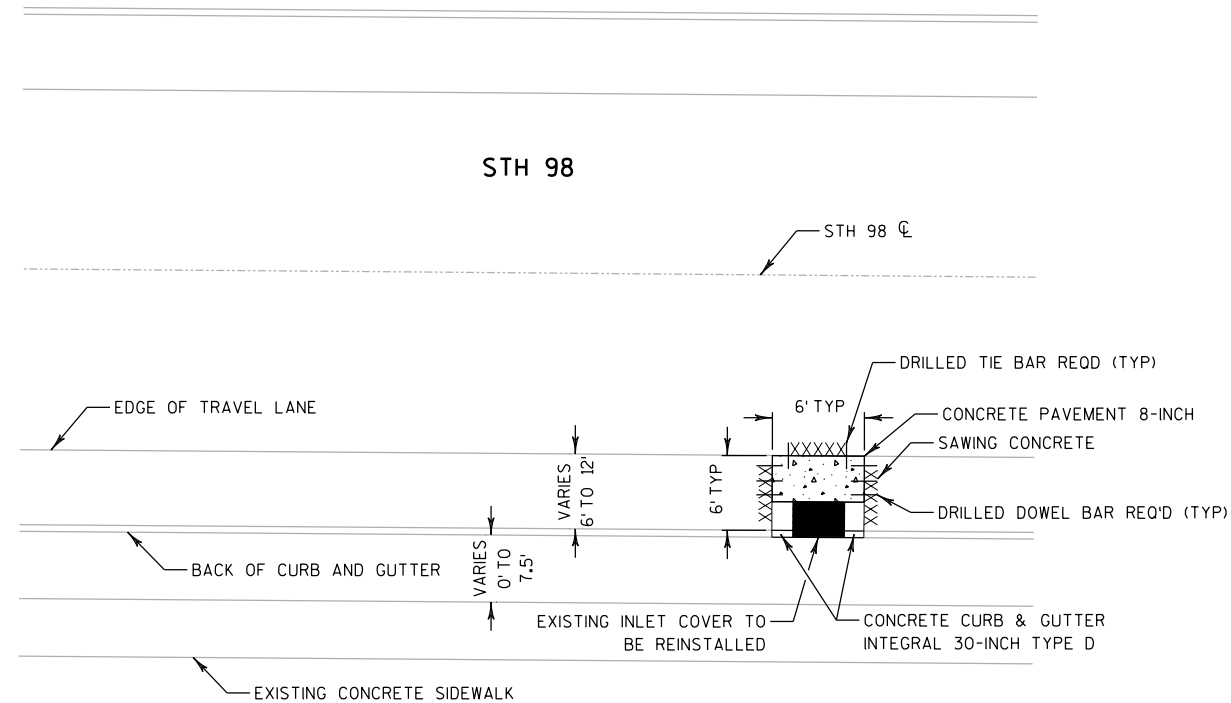
ADJUSTING SANITARY SEWER MANHOLE COVERS IN ASPHALTIC PAVEMENT

LEGEND

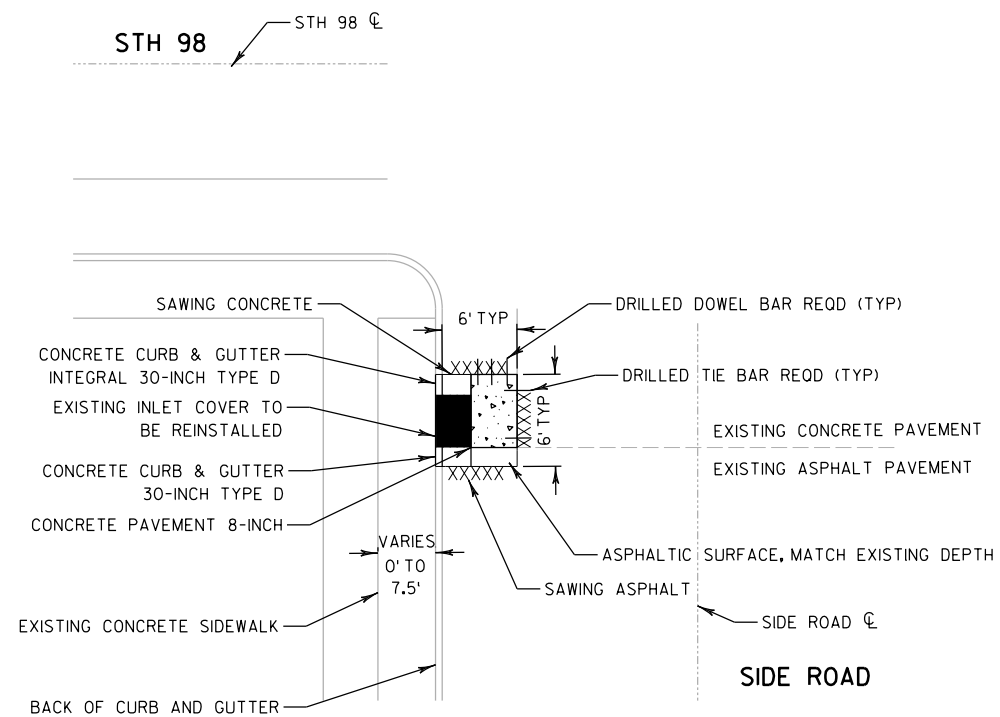
* SAWCUT REOD

NOTE

MAINTAIN SANITARY SEWER MANHOLES LOCATED IN ASPHALTIC PAVEMENT WITH BASE AGGREGATE DENSE 3/4-INCH WHILE OPEN TO TRAFFIC UNTIL IT CAN BE PAVED WITH ASPHALT



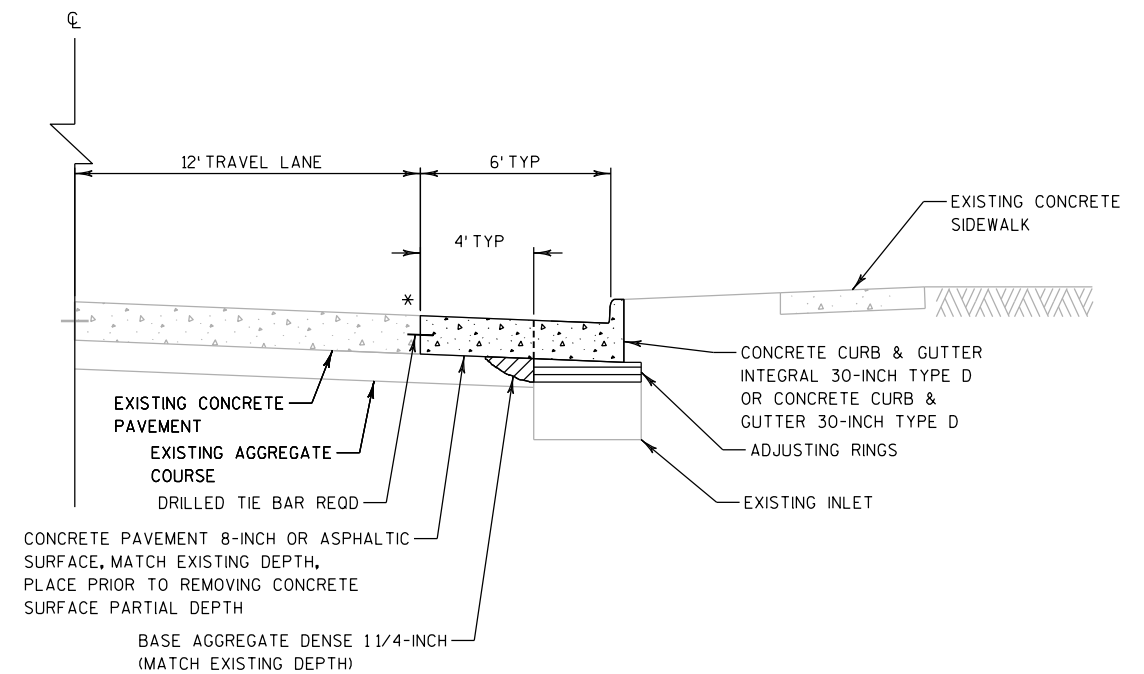
PLAN VIEW OF ADJUSTING INLET ON STH 98



PLAN VIEW OF ADJUSTING INLET ON SIDE ROAD

ADJUSTING INLET COVERS DETAIL

SEE PAVING DETAILS FOR LOCATIONS

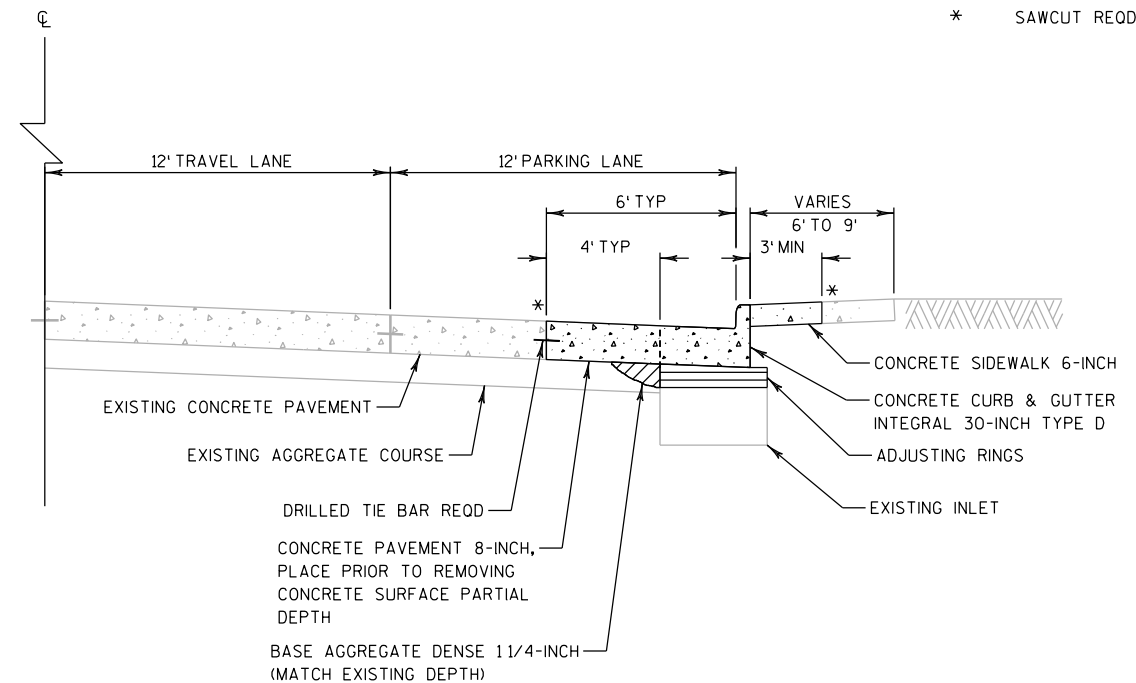


CROSS SECTION VIEW

STA 815+98 - STA 837+84
AND ALL SIDE ROADS

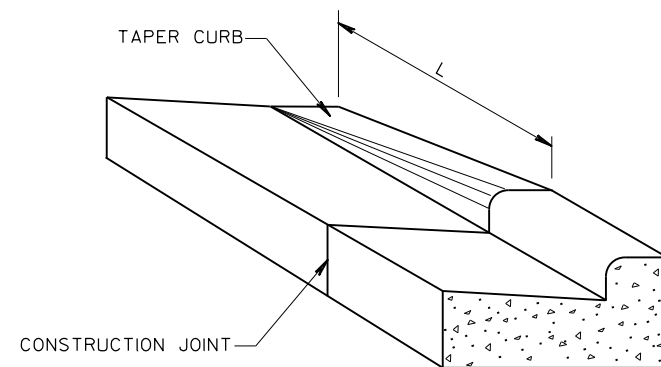
LEGEND

* SAWCUT REQ'D



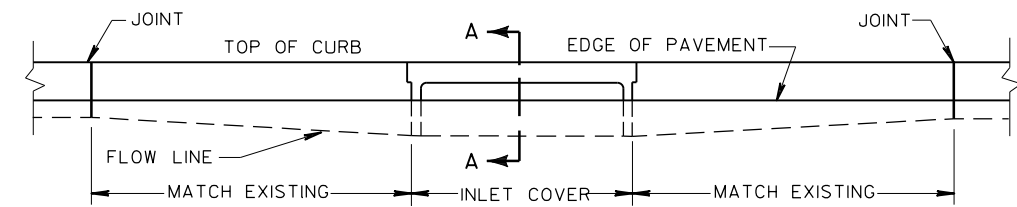
CROSS SECTION VIEW

STA 837+84 - STA 850+85

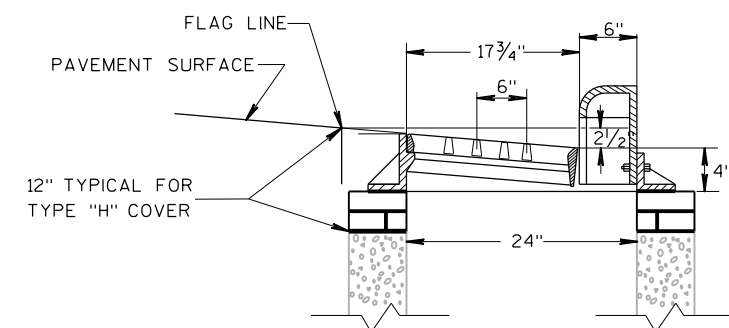
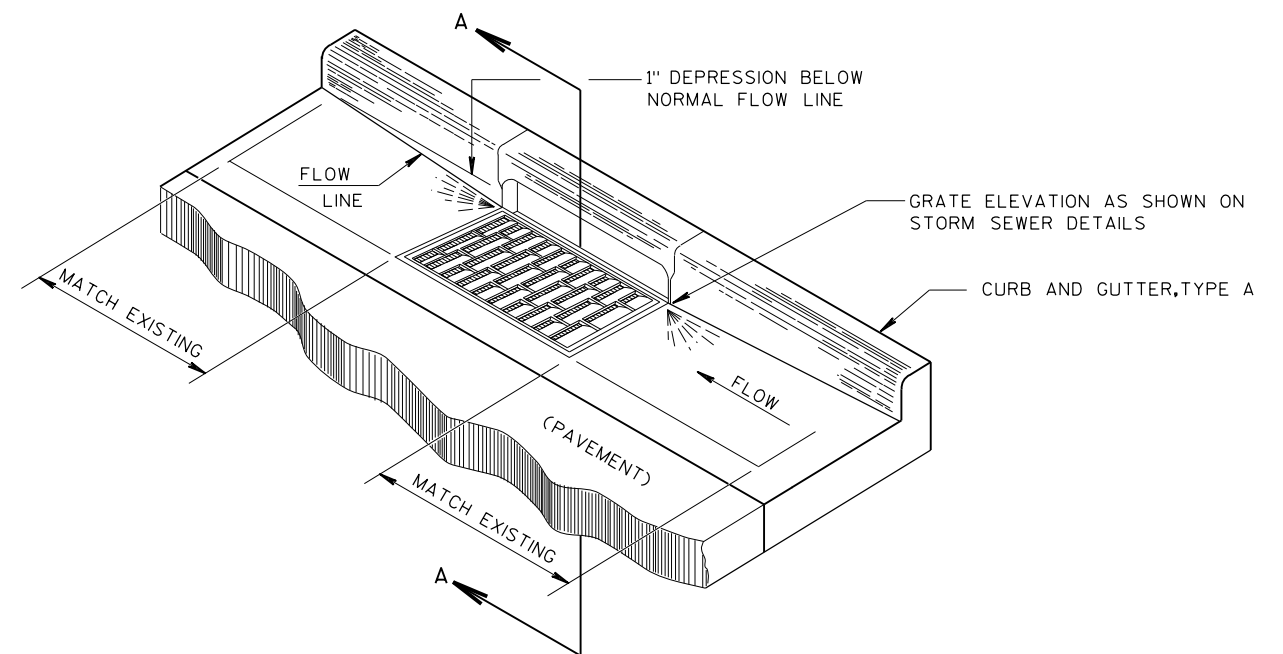


CURB & GUTTER TERMINI DETAIL

STA 848+66 - STA 848+76 LT, L=10'
STA 849+88 - STA 849+94 RT, L=6'



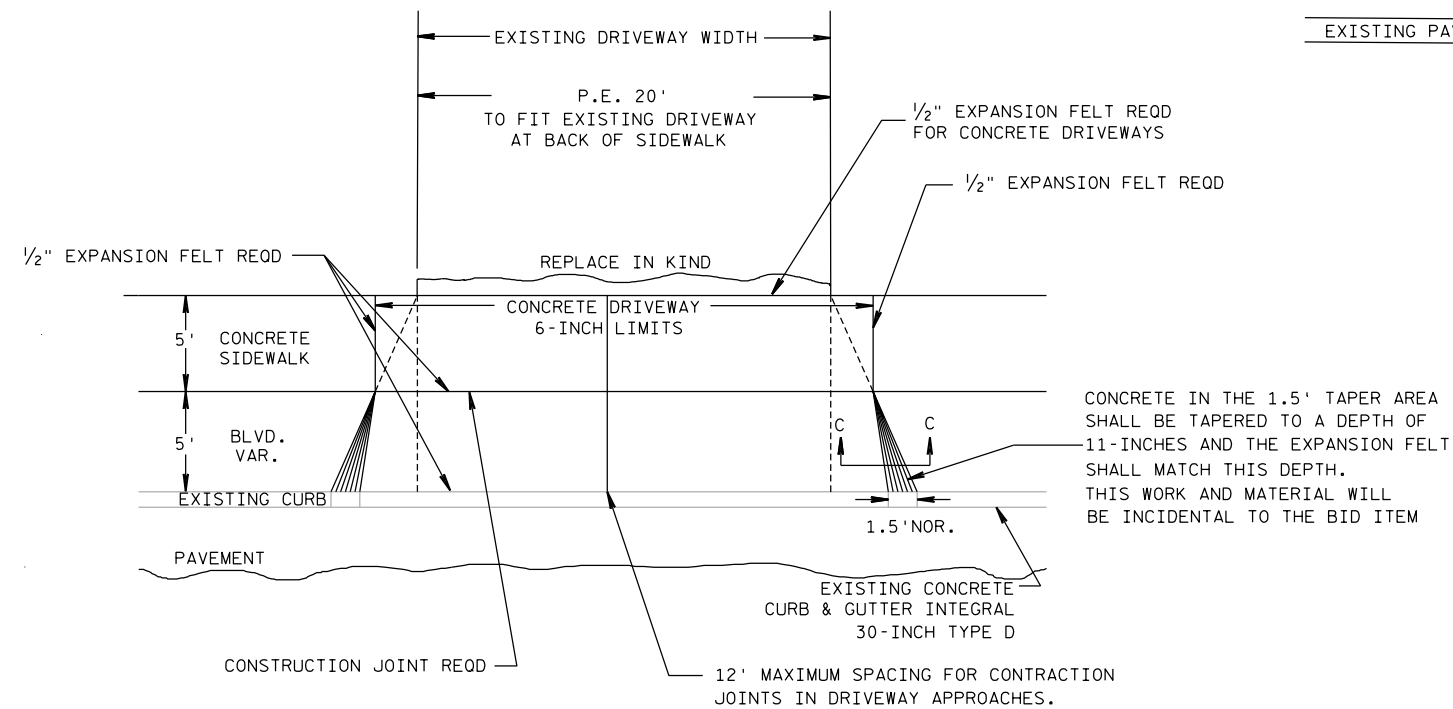
ELEVATION



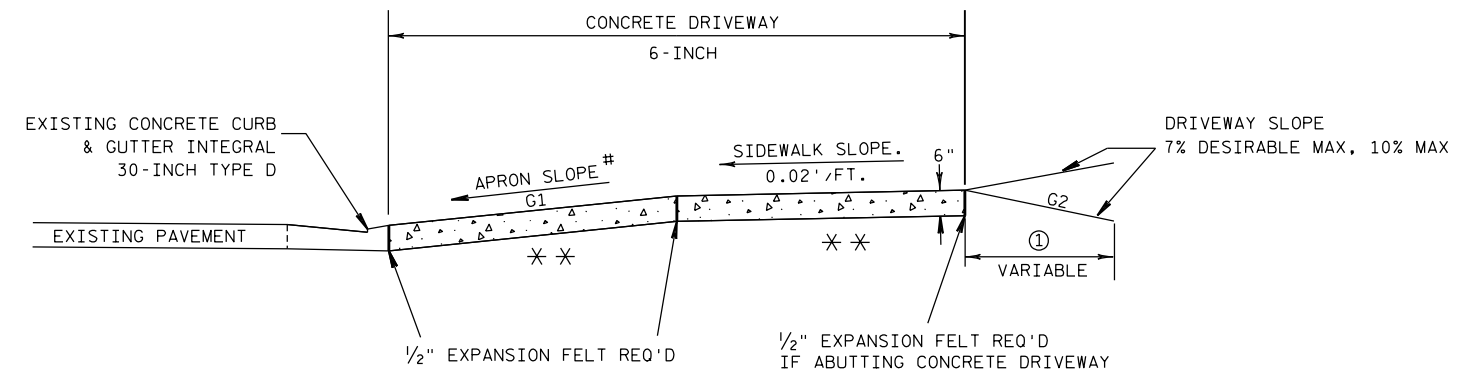
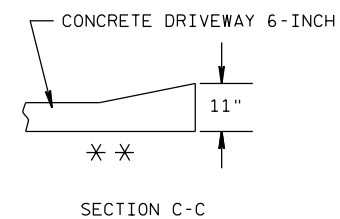
SECTION A-A

CURB AND GUTTER AT INLETS DETAIL

(TYPE 3-H INLET SHOWN)
AT ADJUSTING INLET COVER LOCATIONS



PLAN VIEW



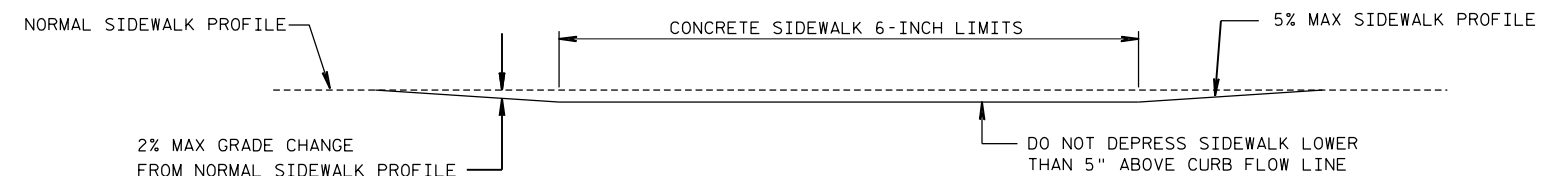
TYPICAL SIDEWALK SECTION

- ① 6" BASE AGG. DENSE 1 1/4-INCH
- * * 6" BASE AGG. DENSE 1 1/4-INCH REQ'D UNDER CONCRETE DRWY

TERRACE WIDTH	APRON SLOPE (G1)		
	MIN %	DESIRABLE %	MAX %
3 FT	7.0	8.5	9.0
4 FT	5.0	7.0	9.0
5 FT	4.0	7.0	9.0
6 FT	4.0	7.0	9.0
7 FT	3.5	7.0	9.0
8 FT	3.0	7.0	9.0

NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE



DEPRESSED SIDEWALK PROFILE DETAIL

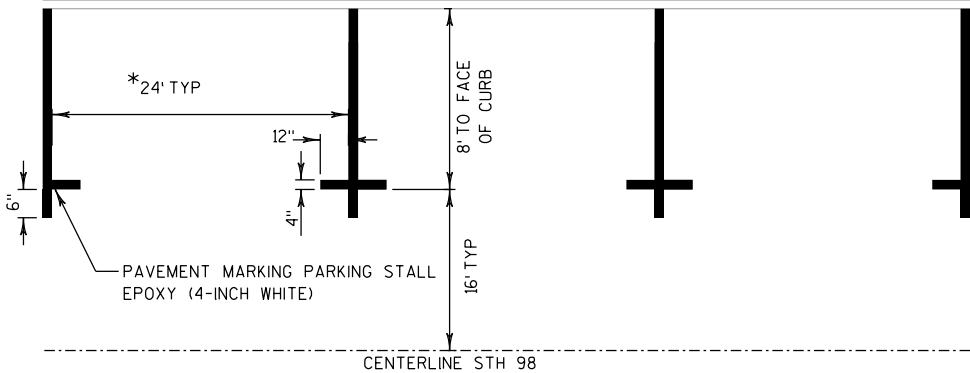
DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER

STA 816+16

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIP-TURF	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPE-TURF			.25			.27			.28			.30
			.32			.34			.36			.38
PAVEMENT:												
ASPHALT						.70 - .95						
CONCRETE						.80 - .95						
BRICK						.70 - .80						
DRIVES, WALKS						.75 - .85						
ROOFS						.75 - .95						
GRAVEL ROADS, SHOULDERS						.40 - .60						

TOTAL PROJECT AREA = 11 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 4.5 ACRES



PAVEMENT MARKING PARKING STALL DETAIL
STA 838+40 - STA 848+55

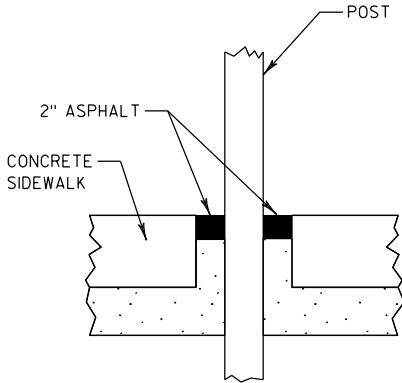
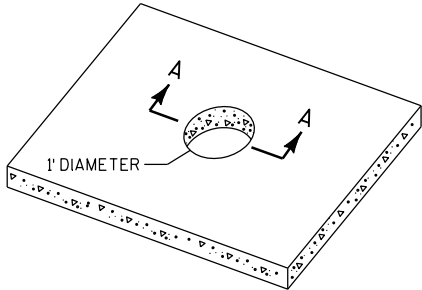
NOTE

* SEE PERMANENT SIGNING & PAVEMENT MARKING
PLAN SHEETS FOR LOCATIONS AND DIMENSIONS

NOTES

FILL VOID WITH 2 INCHES OF ASPHALT AFTER SIGN
INSTALLATION. THE WORK TO CONSTRUCT THE BLOCK OUT,
INCLUDING THE ASPHALT, SHALL BE PAID FOR AS SIGN POST
BLOCK OUT

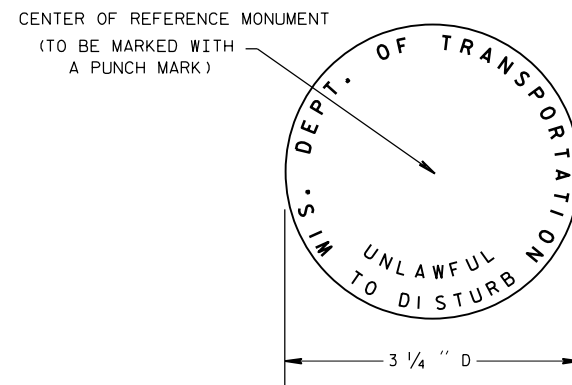
WHERE BLOCK OUT IS PLACED IN PROPOSED CONCRETE
SIDEWALK AT STA 844+40 RT, SIGN NO. 8-7, THE WORK TO
CONSTRUCT THE BLOCK OUT SHALL BE CONSIDERED INCIDENTAL
TO THE CONCRETE SIDEWALK AND THE ASPHALT INCIDENTAL TO
THE SIGN POST



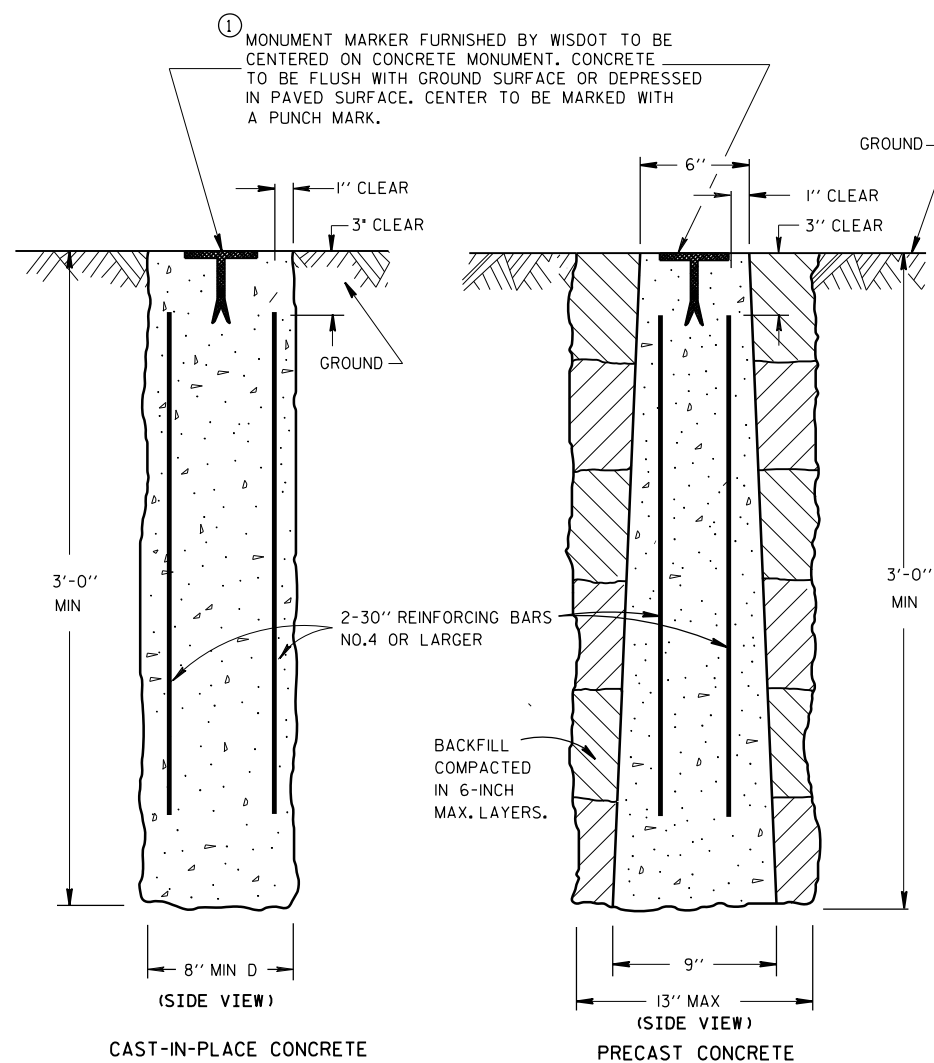
SECTION A-A

BLOCK OUT FOR SIGNS DETAIL

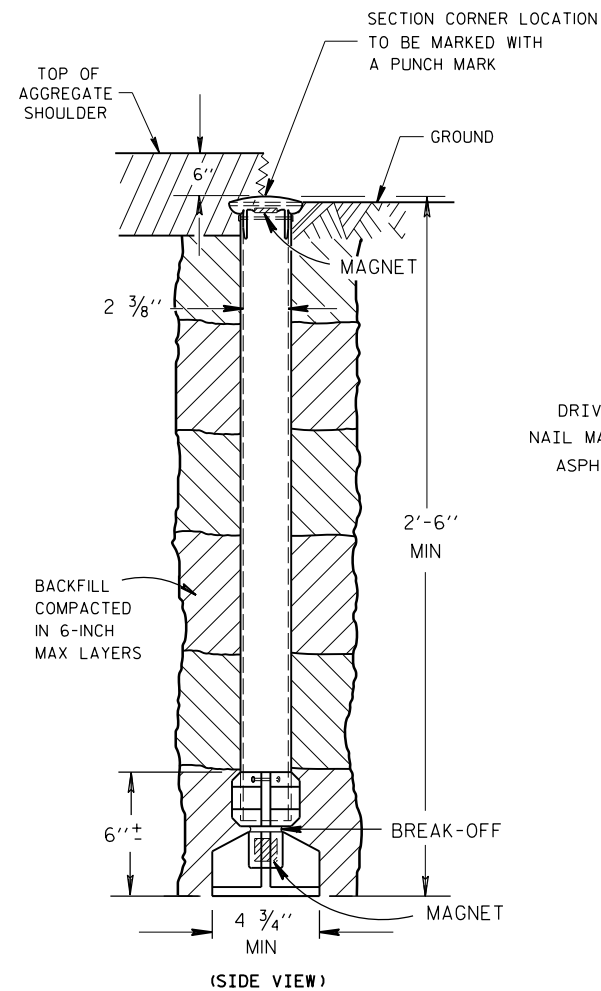
SEE PERMANENT SIGNING AND
MARKING PLANS AND MISCELLANEOUS
QUANTITIES FOR LOCATIONS



① WIS DOT MONUMENT MARKER LOGO



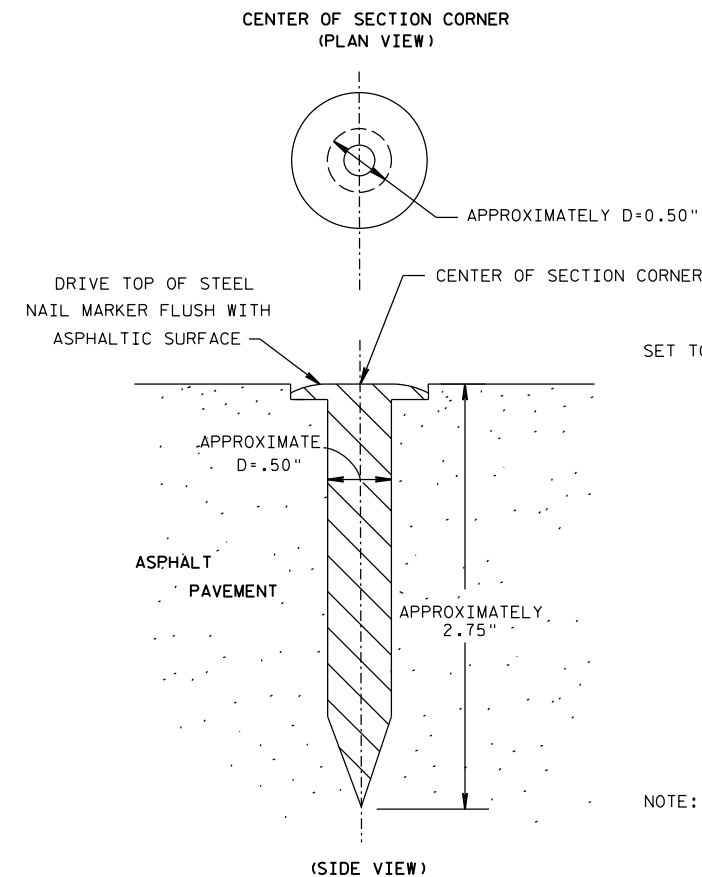
LANDMARK REFERENCE MONUMENTS (TIES ONLY)



(SIDE VIEW)

OUTSIDE OF PAVEMENT

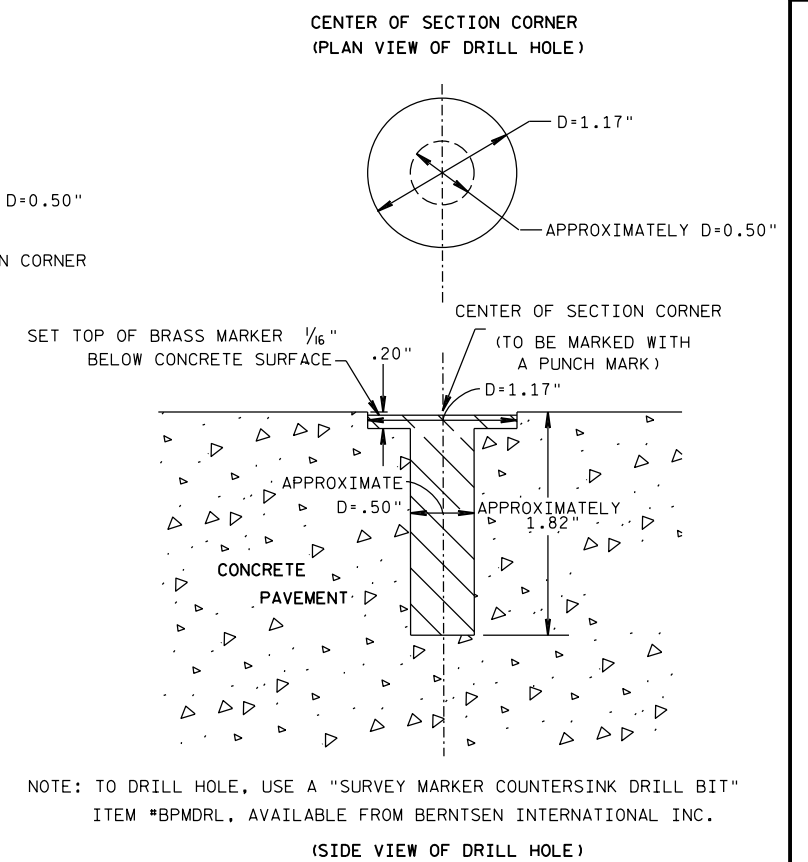
① BERNSTEN A1BR30 ALUMINUM BREAK-OFF MONUMENT



(SIDE VIEW)

IN ASPHALTIC PAVEMENT

① BERNSTEN SNM1 STEEL NAIL MARKER



(SIDE VIEW OF DRILL HOLE)

IN CONCRETE PAVEMENT

① BERNSTEN BP -1 BRASS MARKER WITH ANCHOR PLUG

SECTION CORNER MONUMENTS

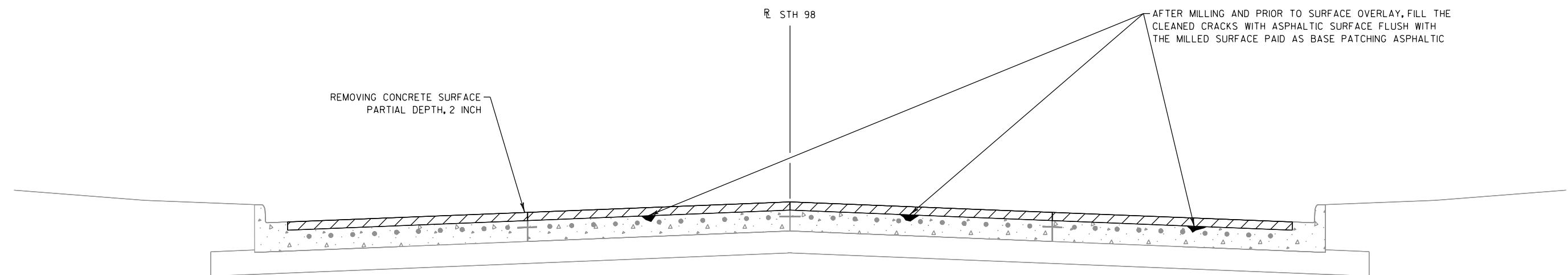
GENERAL NOTES

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

LOCATE LANDMARK REFERENCE MONUMENTS OUTSIDE THE CONSTRUCTION LIMITS AND WITHIN WISDOT RIGHT OF WAY. LOCATION TO BE APPROVED BY THE ENGINEER

① THE REGION SURVEY COORDINATOR WILL SUPPLY

SECTION CORNER MONUMENT AND LANDMARK REFERENCE MONUMENT DETAIL

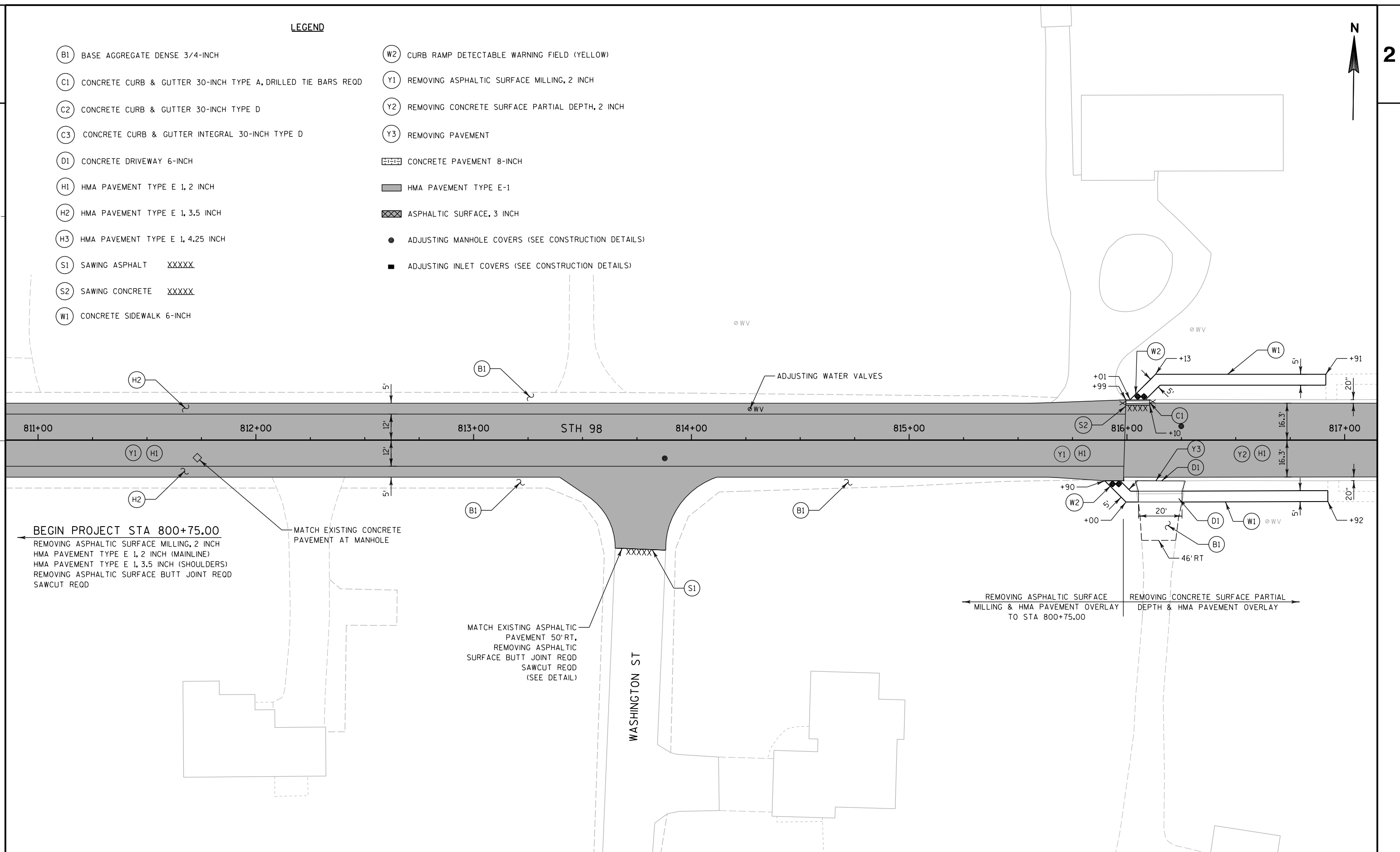


PREPARE FOUNDATION FOR ASPHALTIC PAVING
AND BASE PATCHING ASPHALTIC DETAIL

STA 815+98 - STA 848+67
STA 849+80 - STA 850+85 (LT)
STA 849+94 - STA 850+85 (RT)

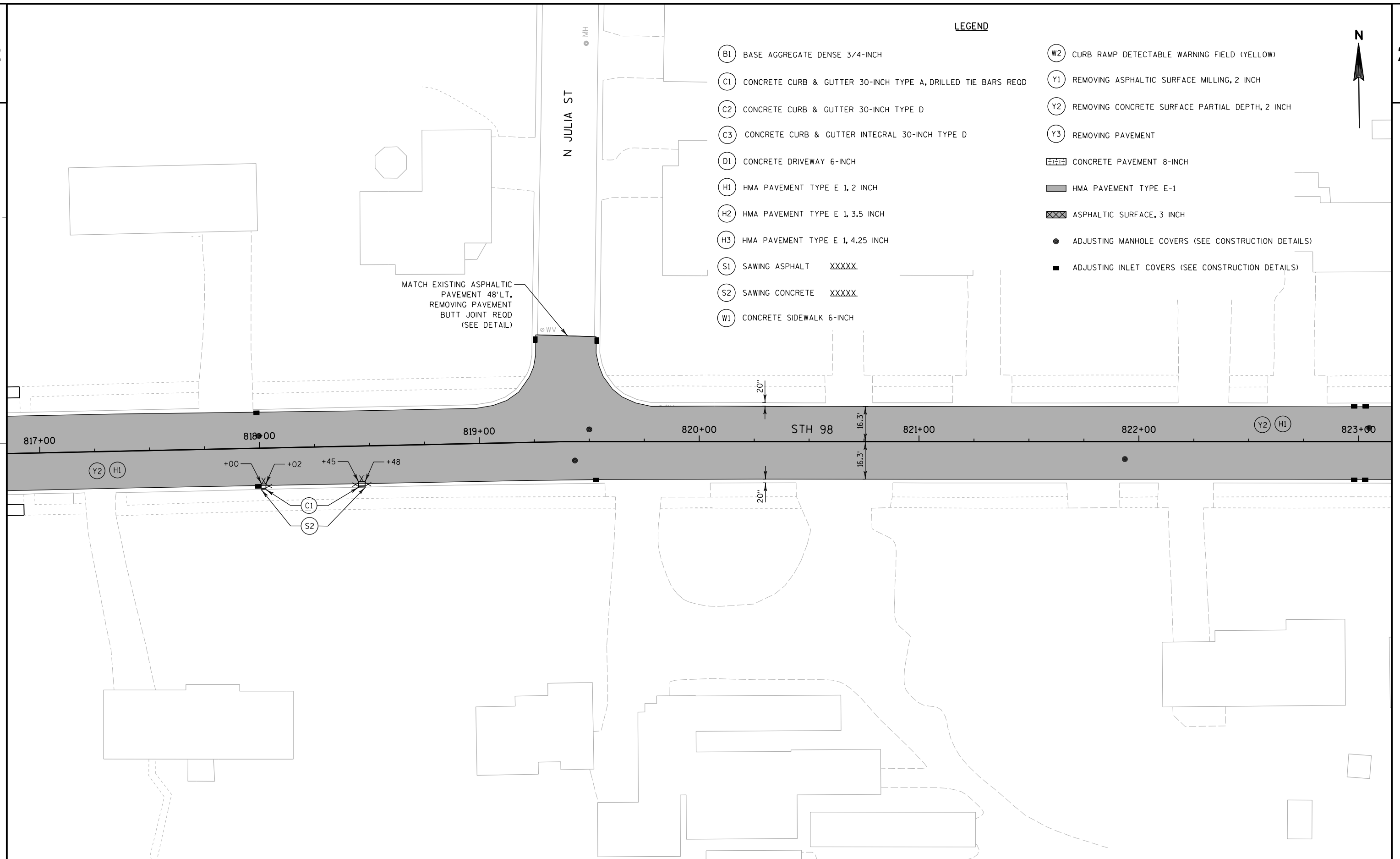
LEGEND

- | | |
|---|---|
| (B1) BASE AGGREGATE DENSE 3/4-INCH | (W2) CURB RAMP DETECTABLE WARNING FIELD (YELLOW) |
| (C1) CONCRETE CURB & GUTTER 30-INCH TYPE A, DRILLED TIE BARS REOD | (Y1) REMOVING ASPHALTIC SURFACE MILLING, 2 INCH |
| (C2) CONCRETE CURB & GUTTER 30-INCH TYPE D | (Y2) REMOVING CONCRETE SURFACE PARTIAL DEPTH, 2 INCH |
| (C3) CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D | (Y3) REMOVING PAVEMENT |
| (D1) CONCRETE DRIVEWAY 6-INCH | [---] CONCRETE PAVEMENT 8-INCH |
| (H1) HMA PAVEMENT TYPE E 1, 2 INCH | [---] HMA PAVEMENT TYPE E-1 |
| (H2) HMA PAVEMENT TYPE E 1, 3.5 INCH | [---] ASPHALTIC SURFACE, 3 INCH |
| (H3) HMA PAVEMENT TYPE E 1, 4.25 INCH | ● ADJUSTING MANHOLE COVERS (SEE CONSTRUCTION DETAILS) |
| (S1) SAWING ASPHALT XXXXX | ■ ADJUSTING INLET COVERS (SEE CONSTRUCTION DETAILS) |
| (S2) SAWING CONCRETE XXXXX | |
| (W1) CONCRETE SIDEWALK 6-INCH | |



2

2



LEGEND

- | | |
|---|---|
| (B1) BASE AGGREGATE DENSE 3/4-INCH | (W2) CURB RAMP DETECTABLE WARNING FIELD (YELLOW) |
| (C1) CONCRETE CURB & GUTTER 30-INCH TYPE A, DRILLED TIE BARS REQD | (Y1) REMOVING ASPHALTIC SURFACE MILLING, 2 INCH |
| (C2) CONCRETE CURB & GUTTER 30-INCH TYPE D | (Y2) REMOVING CONCRETE SURFACE PARTIAL DEPTH, 2 INCH |
| (C3) CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D | (Y3) REMOVING PAVEMENT |
| (D1) CONCRETE DRIVEWAY 6-INCH | (H1-H3) CONCRETE PAVEMENT 8-INCH |
| (H1) HMA PAVEMENT TYPE E 1, 2 INCH | (HMA) HMA PAVEMENT TYPE E-1 |
| (H2) HMA PAVEMENT TYPE E 1, 3.5 INCH | (X) ASPHALTIC SURFACE, 3 INCH |
| (H3) HMA PAVEMENT TYPE E 1, 4.25 INCH | (●) ADJUSTING MANHOLE COVERS (SEE CONSTRUCTION DETAILS) |
| (S1) SAWING ASPHALT XXXXX | (■) ADJUSTING INLET COVERS (SEE CONSTRUCTION DETAILS) |
| (S2) SAWING CONCRETE XXXXX | |
| (W1) CONCRETE SIDEWALK 6-INCH | |

NOTES

RADIUS DIMENSIONS ARE SHOWN TO
FLANGELINE 2' FROM FACE OF CURB
MATCH EXISTING RADIUS AND GRADES

DATA TABLE

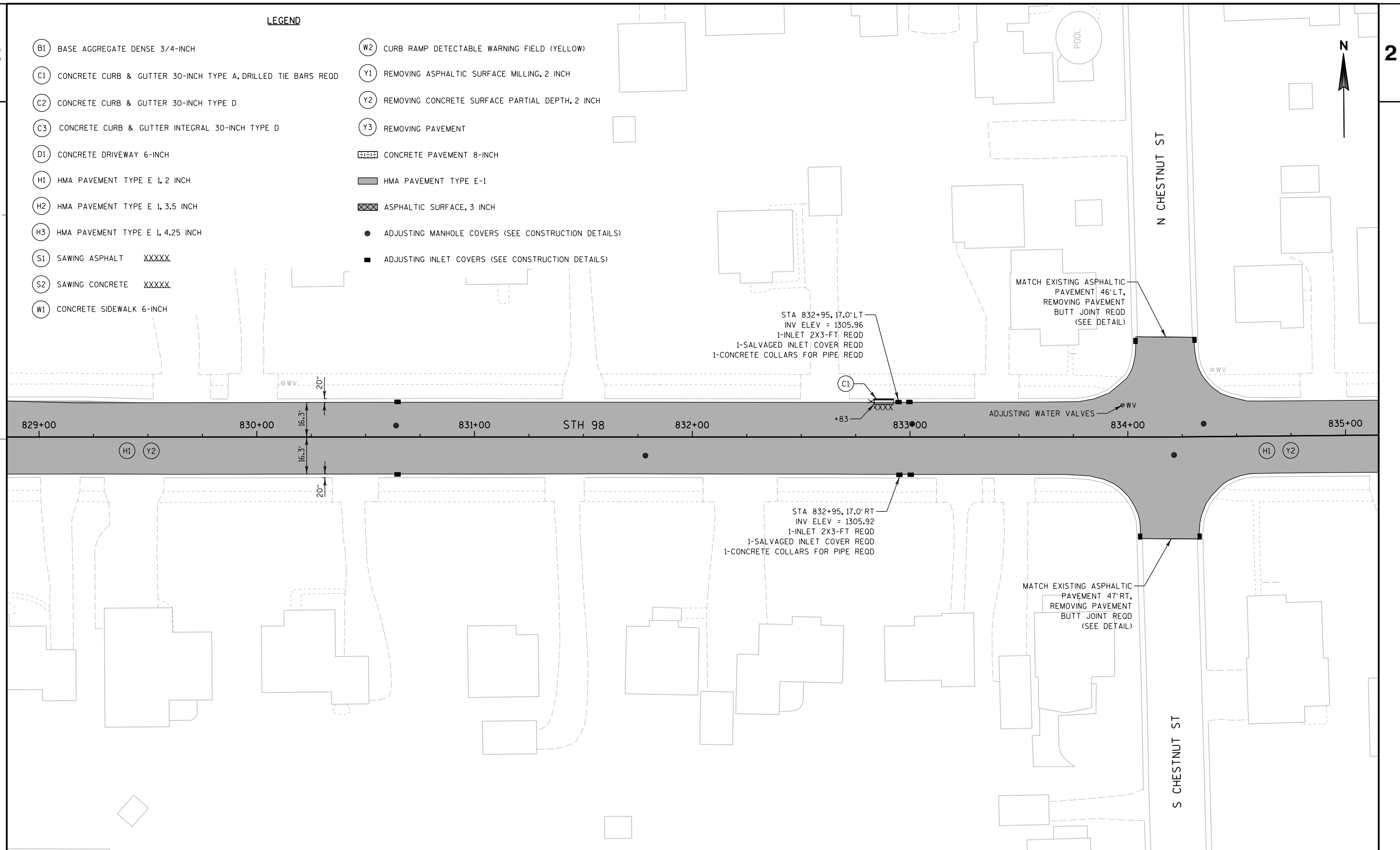
POINT NO.	STATION	OFFSET	RADIUS
10	827+89.14	43.95' RT	28' R
11	827+89.96	42.40' LT	26' R
12	828+68.54	42.07' LT	26' R
13	828+69.50	42.22' RT	26' R

N



LEGEND

- | | |
|---|---|
| (B1) BASE AGGREGATE DENSE 3/4-INCH | (W2) CURB RAMP DETECTABLE WARNING FIELD (YELLOW) |
| (C1) CONCRETE CURB & GUTTER 30-INCH TYPE A, DRILLED TIE BARS REQD | (Y1) REMOVING ASPHALTIC SURFACE MILLING, 2 INCH |
| (C2) CONCRETE CURB & GUTTER 30-INCH TYPE D | (Y2) REMOVING CONCRETE SURFACE PARTIAL DEPTH, 2 INCH |
| (C3) CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D | (Y3) REMOVING PAVEMENT |
| (D1) CONCRETE DRIVEWAY 6-INCH |  CONCRETE PAVEMENT 8-INCH |
| (H1) HMA PAVEMENT TYPE E 1, 2 INCH |  HMA PAVEMENT TYPE E-1 |
| (H2) HMA PAVEMENT TYPE E 1, 3.5 INCH |  ASPHALTIC SURFACE, 3 INCH |
| (H3) HMA PAVEMENT TYPE E 1, 4.25 INCH | ● ADJUSTING MANHOLE COVERS (SEE CONSTRUCTION DETAILS) |
| (S1) SAWING ASPHALT XXXXX | ■ ADJUSTING INLET COVERS (SEE CONSTRUCTION DETAILS) |
| (S2) SAWING CONCRETE XXXXX | |
| (W1) CONCRETE SIDEWALK 6-INCH | |

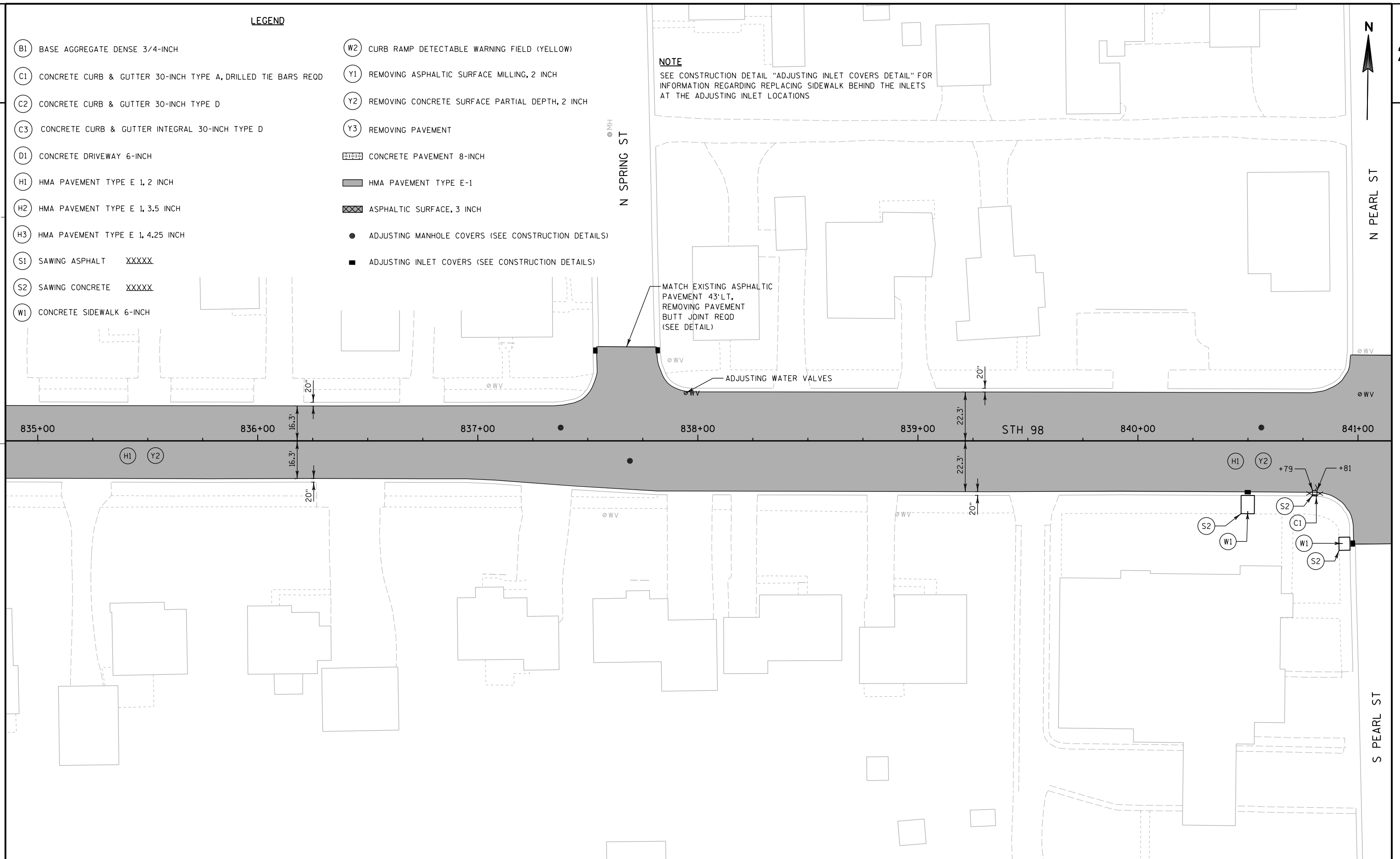


LEGEND

- | | |
|---|---|
| (B1) BASE AGGREGATE DENSE 3/4-INCH | (W2) CURB RAMP DETECTABLE WARNING FIELD (YELLOW) |
| (C1) CONCRETE CURB & GUTTER 30-INCH TYPE A, DRILLED TIE BARS REQD | (Y1) REMOVING ASPHALTIC SURFACE MILLING, 2 INCH |
| (C2) CONCRETE CURB & GUTTER 30-INCH TYPE D | (Y2) REMOVING CONCRETE SURFACE PARTIAL DEPTH, 2 INCH |
| (C3) CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D | (Y3) REMOVING PAVEMENT |
| (D1) CONCRETE DRIVEWAY 6-INCH | [H-H] CONCRETE PAVEMENT 8-INCH |
| (H1) HMA PAVEMENT TYPE E 1, 2 INCH | [■] HMA PAVEMENT TYPE E-1 |
| (H2) HMA PAVEMENT TYPE E 1, 3.5 INCH | [X-X] ASPHALTIC SURFACE, 3 INCH |
| (H3) HMA PAVEMENT TYPE E 1, 4.25 INCH | ● ADJUSTING MANHOLE COVERS (SEE CONSTRUCTION DETAILS) |
| (S1) SAWING ASPHALT XXXXX | ■ ADJUSTING INLET COVERS (SEE CONSTRUCTION DETAILS) |
| (S2) SAWING CONCRETE XXXXX | |
| (W1) CONCRETE SIDEWALK 6-INCH | |

NOTE

SEE CONSTRUCTION DETAIL "ADJUSTING INLET COVERS DETAIL" FOR INFORMATION REGARDING REPLACING SIDEWALK BEHIND THE INLETS AT THE ADJUSTING INLET LOCATIONS



LEGEND

- (B1) BASE AGGREGATE DENSE 3/4-INCH
(C1) CONCRETE CURB & GUTTER 30-INCH TYPE A, DRILLED TIE BARS REQD
(C2) CONCRETE CURB & GUTTER 30-INCH TYPE D
(C3) CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D
(D1) CONCRETE DRIVEWAY 6-INCH
(H1) HMA PAVEMENT TYPE E 1, 2 INCH
(H2) HMA PAVEMENT TYPE E 1, 3.5 INCH
(H3) HMA PAVEMENT TYPE E 1, 4.25 INCH
(S1) SAWING ASPHALT XXXXX
(S2) SAWING CONCRETE XXXXX
- (W1) CONCRETE SIDEWALK 6-INCH
(W2) CURB RAMP DETECTABLE WARNING FIELD (YELLOW)
(Y1) REMOVING ASPHALTIC SURFACE MILLING, 2 INCH
(Y2) REMOVING CONCRETE SURFACE PARTIAL DEPTH, 2 INCH
(Y3) REMOVING PAVEMENT
- CONCRETE PAVEMENT 8-INCH
HMA PAVEMENT TYPE E-1
ASPHALTIC SURFACE, 3 INCH
- ADJUSTING MANHOLE COVERS (SEE CONSTRUCTION DETAILS)
ADJUSTING INLET COVERS (SEE CONSTRUCTION DETAILS)

DATA TABLE

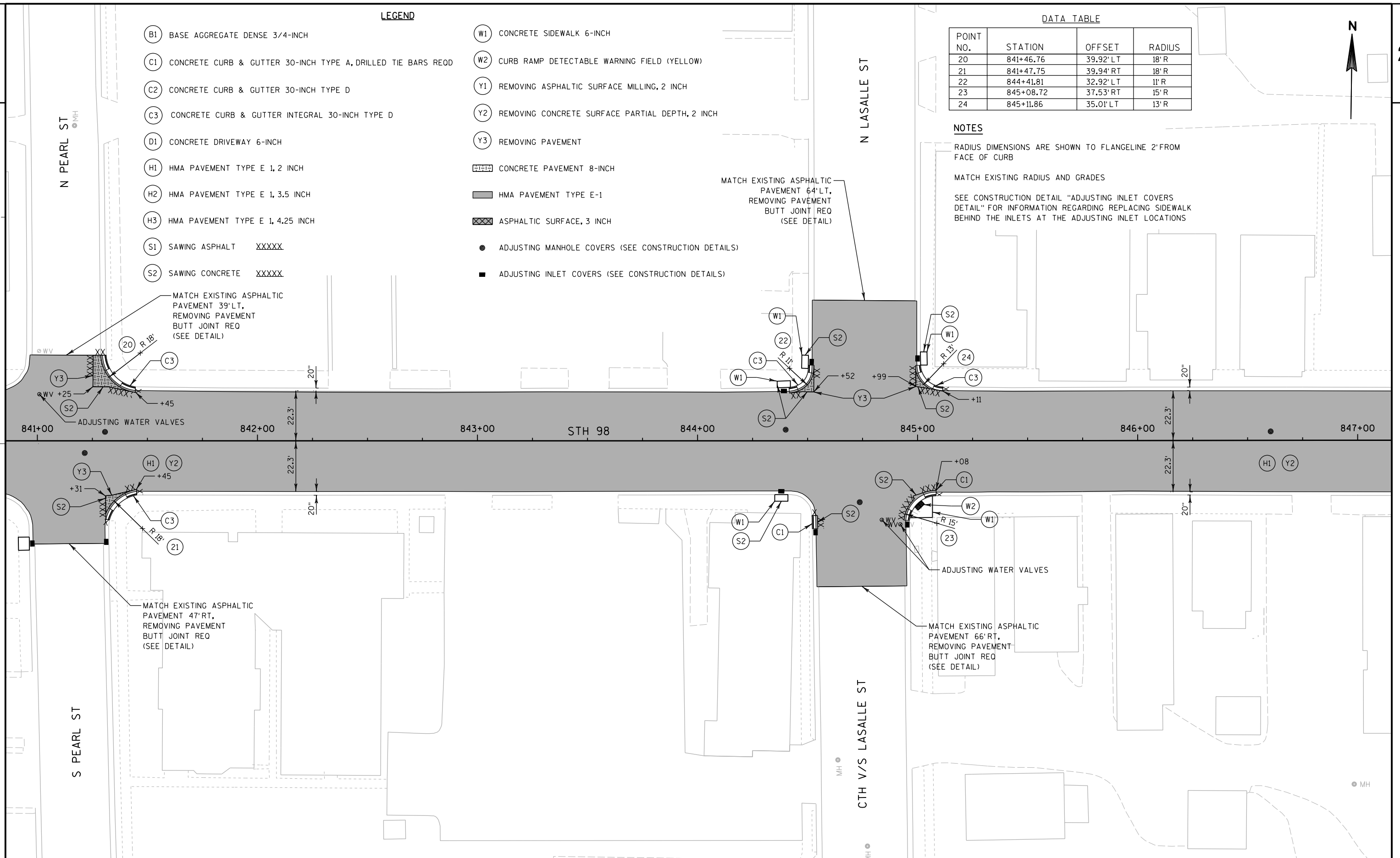
POINT NO.	STATION	OFFSET	RADIUS
20	841+46.76	39.92' LT	18' R
21	841+47.75	39.94' RT	18' R
22	844+41.81	32.92' LT	11' R
23	845+08.72	37.53' RT	15' R
24	845+11.86	35.01' LT	13' R

NOTES

RADIUS DIMENSIONS ARE SHOWN TO FLANGELINE 2' FROM FACE OF CURB

MATCH EXISTING RADIUS AND GRADES

SEE CONSTRUCTION DETAIL "ADJUSTING INLET COVERS DETAIL" FOR INFORMATION REGARDING REPLACING SIDEWALK BEHIND THE INLETS AT THE ADJUSTING INLET LOCATIONS



DATA TABLE

POINT NO.	STATION	OFFSET	RADIUS	ELEV
30	849+50.75	36.39' LT	15' R	--
31	848+76.38	21.72' LT	--	1311.12
32	849+29.26	45.14' RT	--	1311.25
33	849+58.91	23.80' LT	--	1311.04
34	849+87.57	22.91' RT	--	1311.14

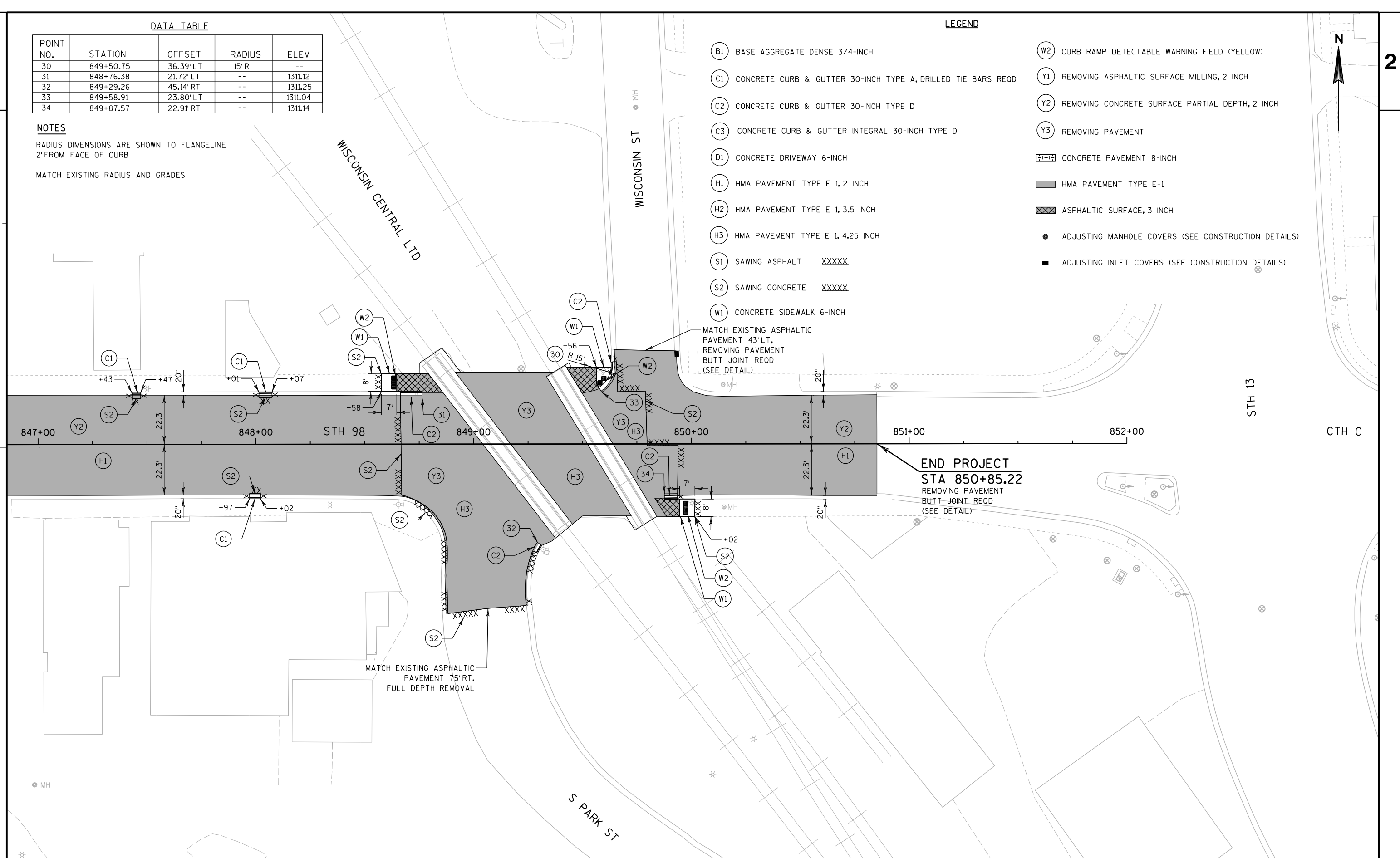
NOTES

RADIUS DIMENSIONS ARE SHOWN TO FLANGELINE
2' FROM FACE OF CURB

MATCH EXISTING RADIUS AND GRADES

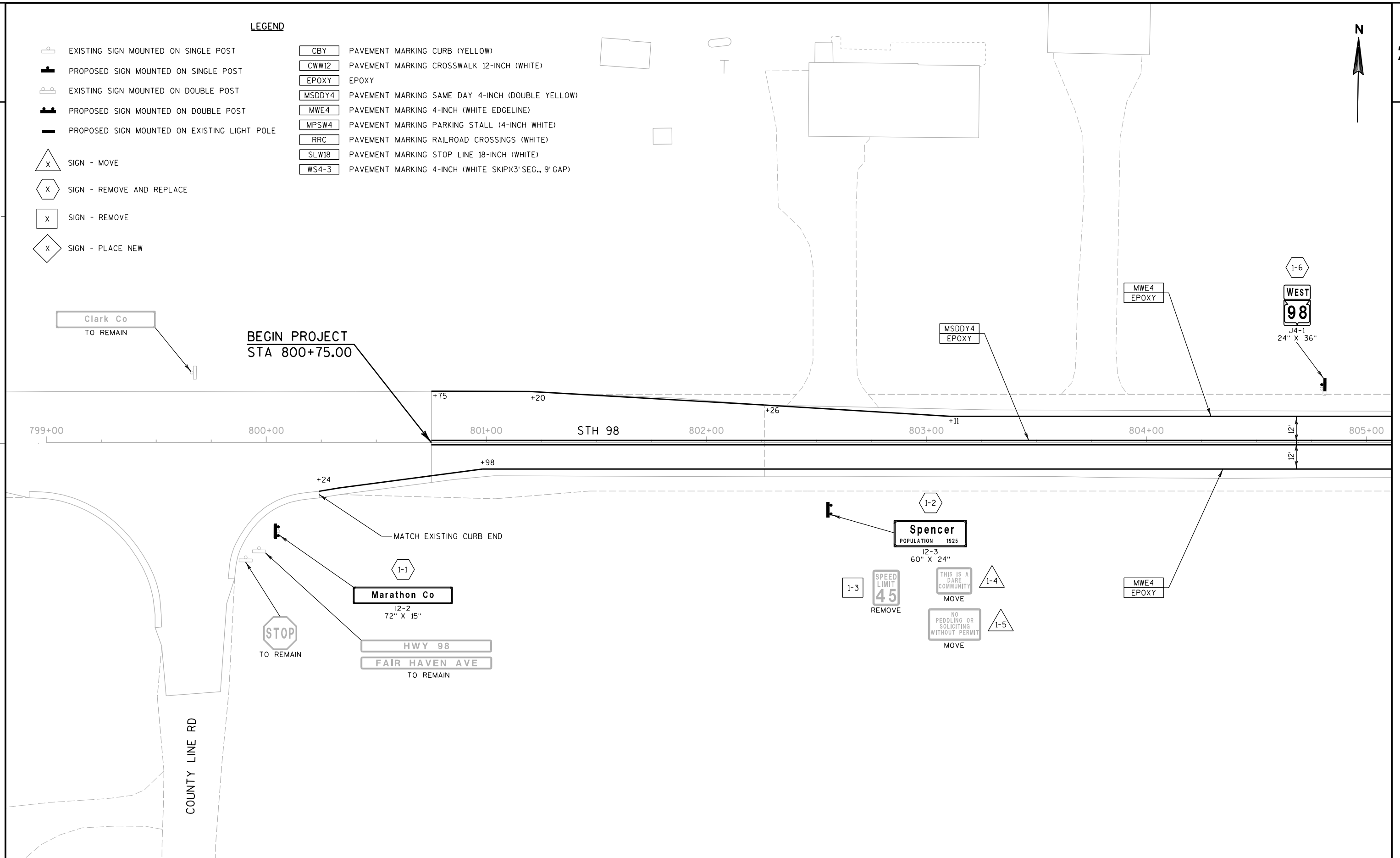
LEGEND

- | | |
|---|---|
| (B1) BASE AGGREGATE DENSE 3/4-INCH | (W2) CURB RAMP DETECTABLE WARNING FIELD (YELLOW) |
| (C1) CONCRETE CURB & GUTTER 30-INCH TYPE A, DRILLED TIE BARS REQD | (Y1) REMOVING ASPHALTIC SURFACE MILLING, 2 INCH |
| (C2) CONCRETE CURB & GUTTER 30-INCH TYPE D | (Y2) REMOVING CONCRETE SURFACE PARTIAL DEPTH, 2 INCH |
| (C3) CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D | (Y3) REMOVING PAVEMENT |
| (D1) CONCRETE DRIVEWAY 6-INCH | (XXXX) CONCRETE PAVEMENT 8-INCH |
| (H1) HMA PAVEMENT TYPE E 1, 2 INCH | (HMA) HMA PAVEMENT TYPE E-1 |
| (H2) HMA PAVEMENT TYPE E 1, 3.5 INCH | (XXXXX) ASPHALTIC SURFACE, 3 INCH |
| (H3) HMA PAVEMENT TYPE E 1, 4.25 INCH | ● ADJUSTING MANHOLE COVERS (SEE CONSTRUCTION DETAILS) |
| (S1) SAWING ASPHALT XXXXX | ■ ADJUSTING INLET COVERS (SEE CONSTRUCTION DETAILS) |
| (S2) SAWING CONCRETE XXXXX | |
| (W1) CONCRETE SIDEWALK 6-INCH | |



LEGEND

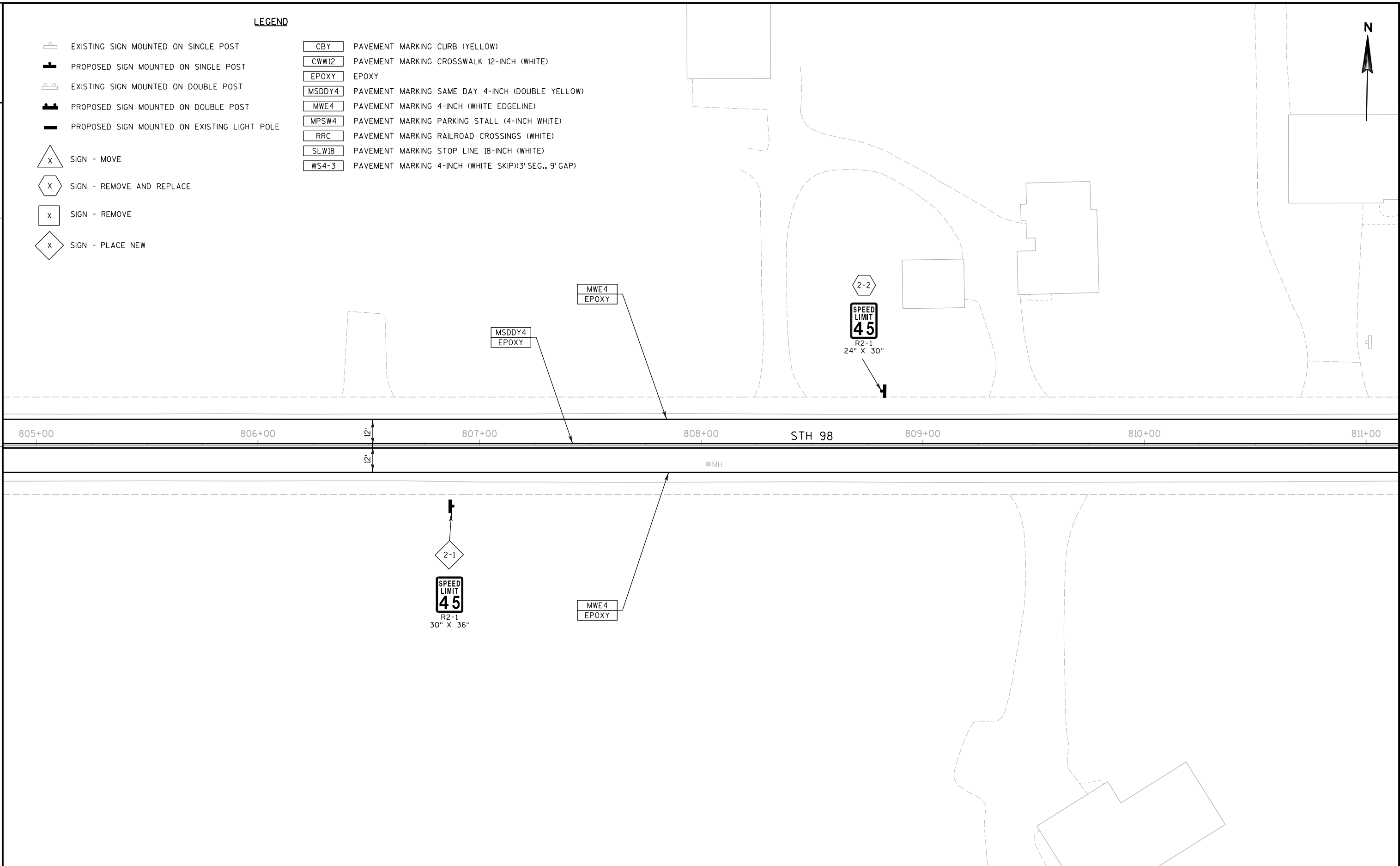
	EXISTING SIGN MOUNTED ON SINGLE POST		PAVEMENT MARKING CURB (YELLOW)
	PROPOSED SIGN MOUNTED ON SINGLE POST		PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
	EXISTING SIGN MOUNTED ON DOUBLE POST		EPOXY
	PROPOSED SIGN MOUNTED ON DOUBLE POST		PAVEMENT MARKING SAME DAY 4-INCH (DOUBLE YELLOW)
	PROPOSED SIGN MOUNTED ON EXISTING LIGHT POLE		PAVEMENT MARKING 4-INCH (WHITE EDGELINE)
	SIGN - MOVE		PAVEMENT MARKING PARKING STALL (4-INCH WHITE)
	SIGN - REMOVE AND REPLACE		PAVEMENT MARKING RAILROAD CROSSINGS (WHITE)
	SIGN - REMOVE		PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
	SIGN - PLACE NEW		PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)

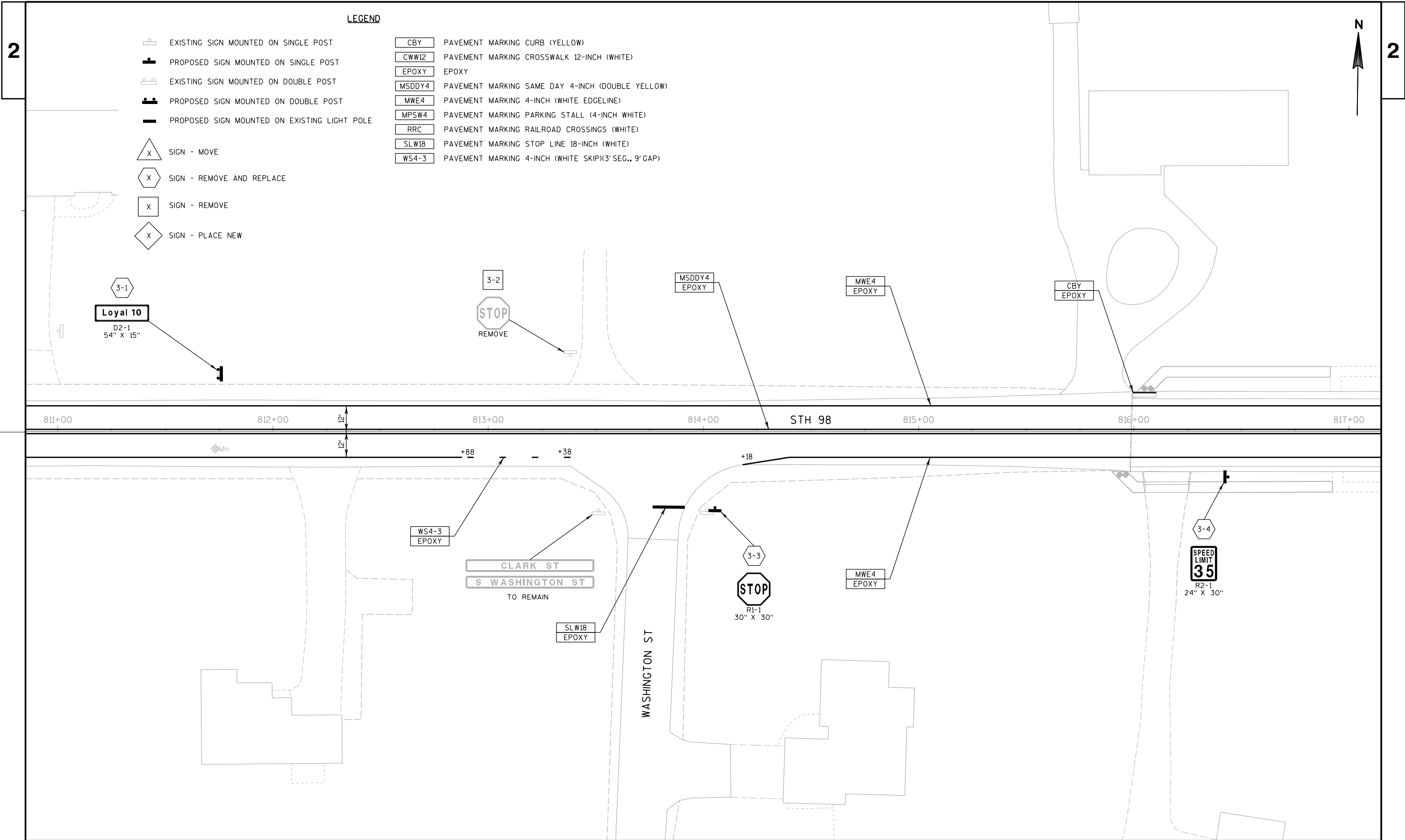


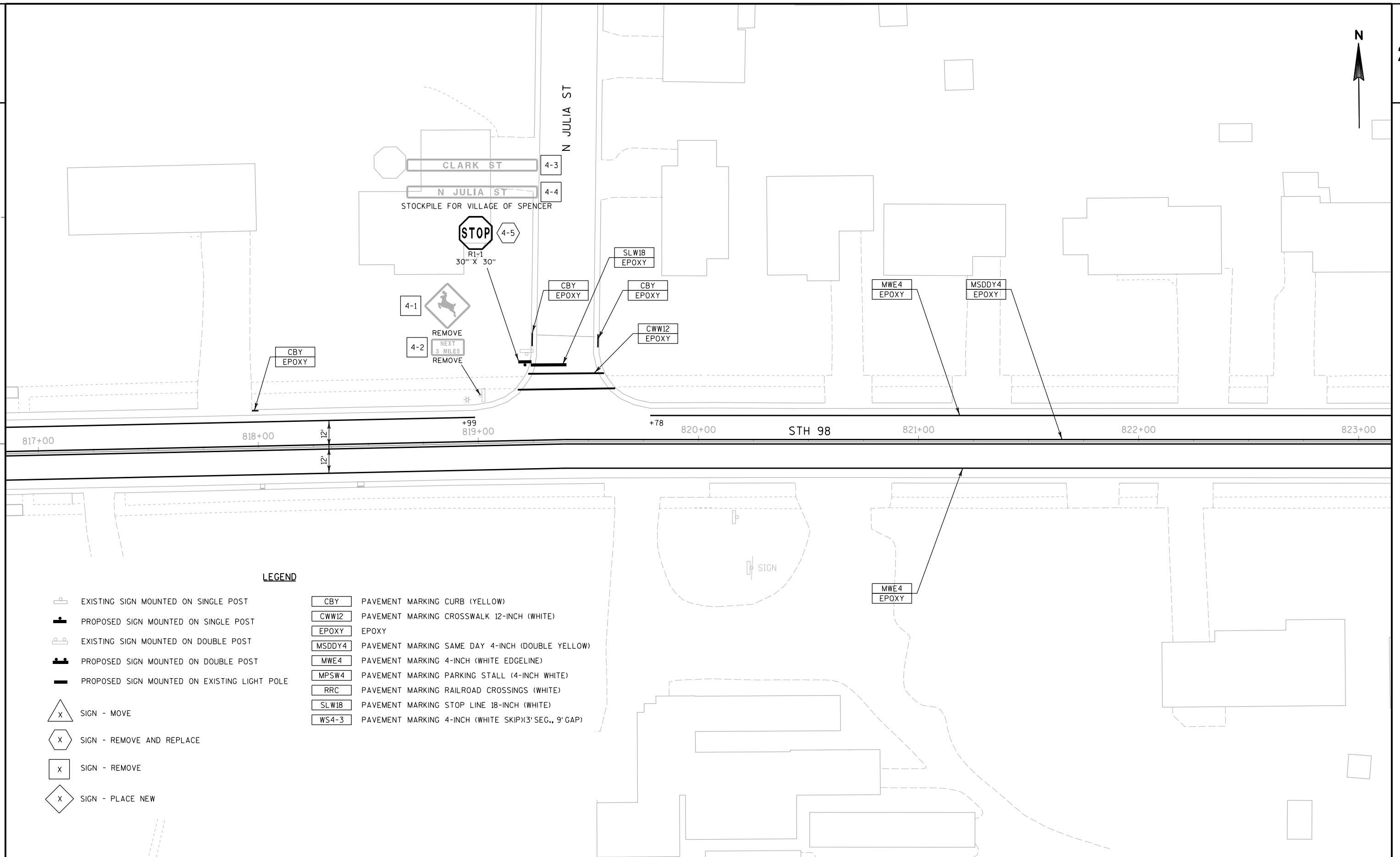
LEGEND

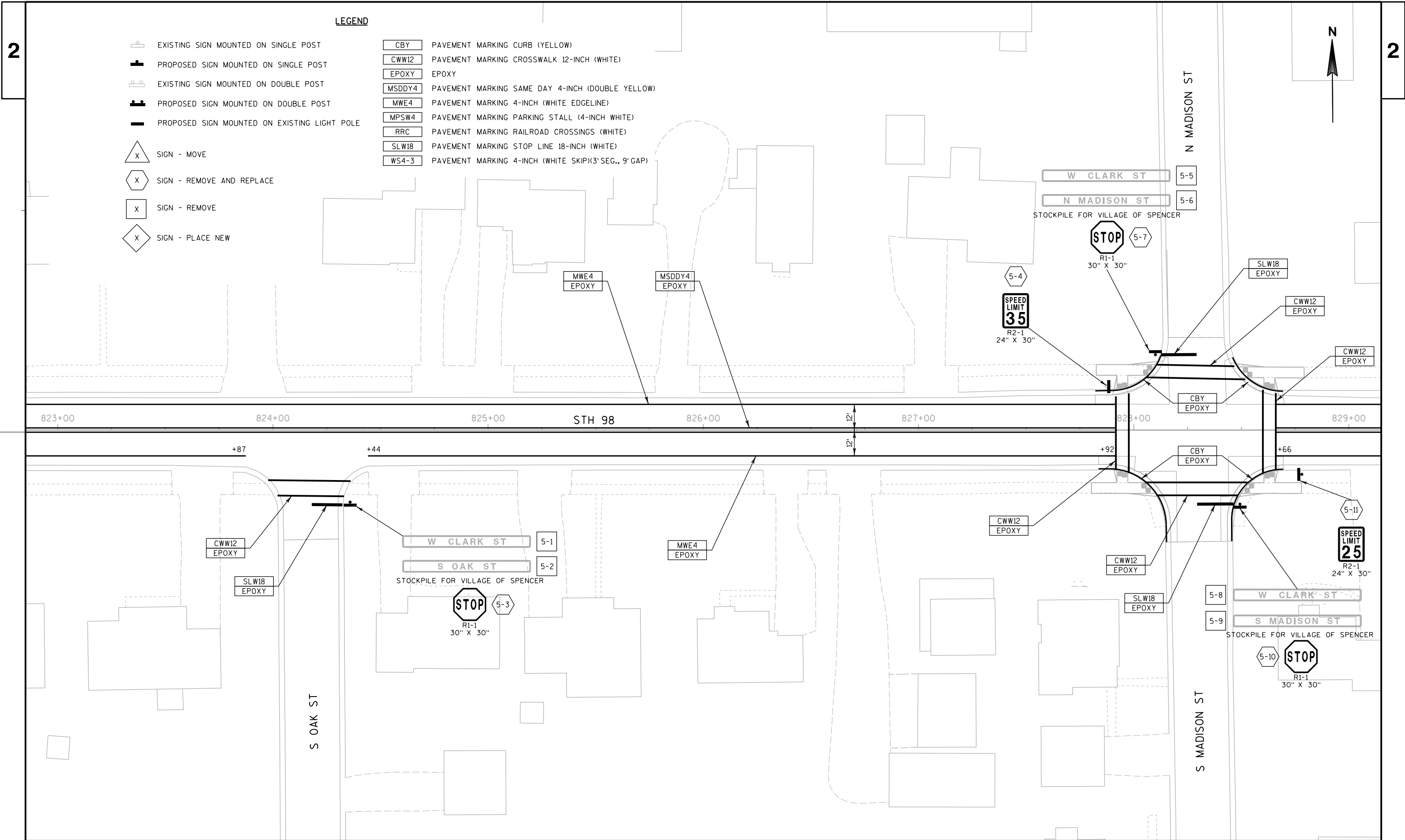
-  EXISTING SIGN MOUNTED ON SINGLE POST
-  PROPOSED SIGN MOUNTED ON SINGLE POST
-  EXISTING SIGN MOUNTED ON DOUBLE POST
-  PROPOSED SIGN MOUNTED ON DOUBLE POST
-  PROPOSED SIGN MOUNTED ON EXISTING LIGHT POLE
-  SIGN - MOVE
-  SIGN - REMOVE AND REPLACE
-  SIGN - REMOVE
-  SIGN - PLACE NEW

-  PAVEMENT MARKING CURB (YELLOW)
-  PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
-  EPOXY
-  PAVEMENT MARKING SAME DAY 4-INCH (DOUBLE YELLOW)
-  PAVEMENT MARKING 4-INCH (WHITE EDGELINE)
-  PAVEMENT MARKING PARKING STALL (4-INCH WHITE)
-  PAVEMENT MARKING RAILROAD CROSSINGS (WHITE)
-  PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
-  PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)



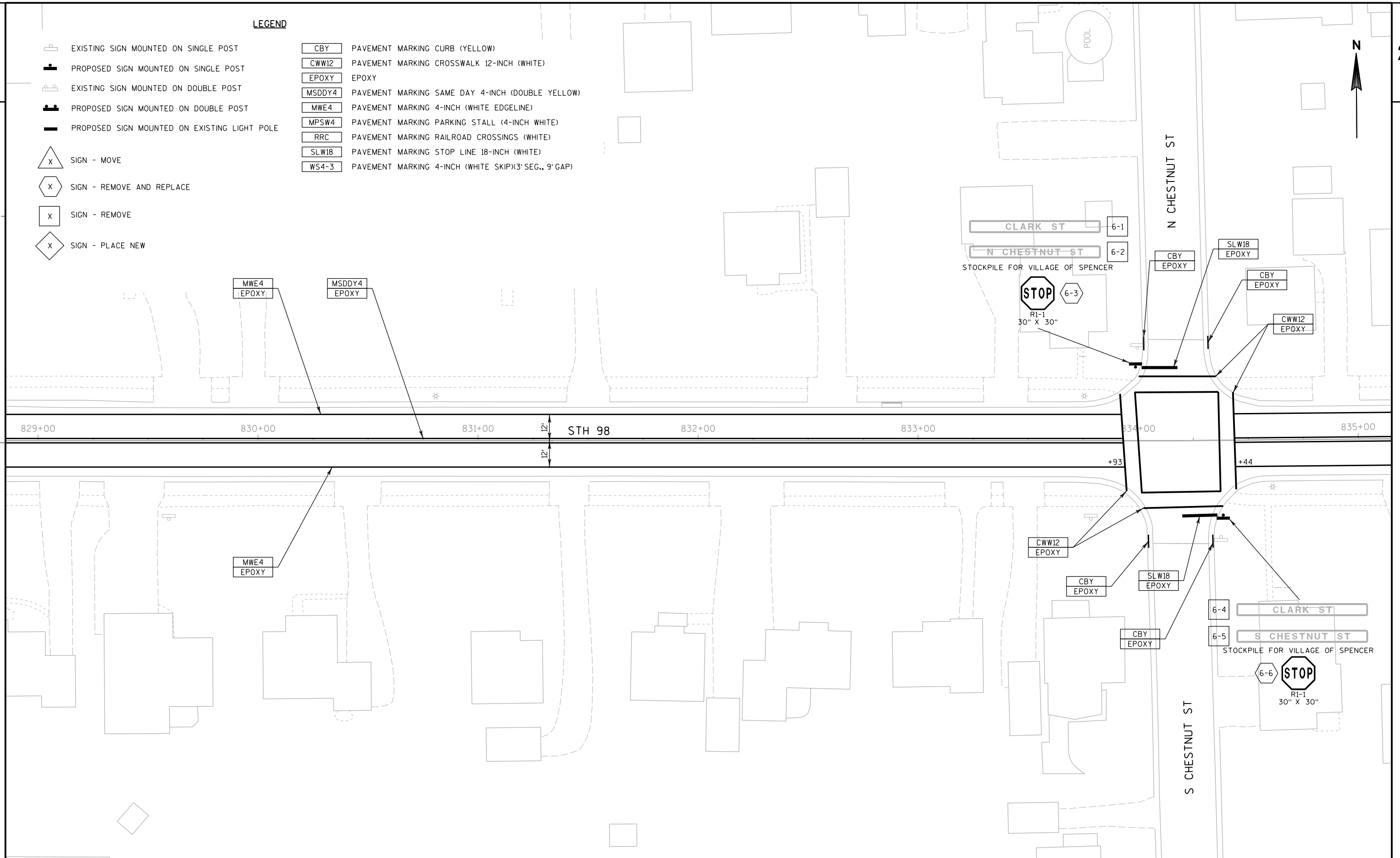


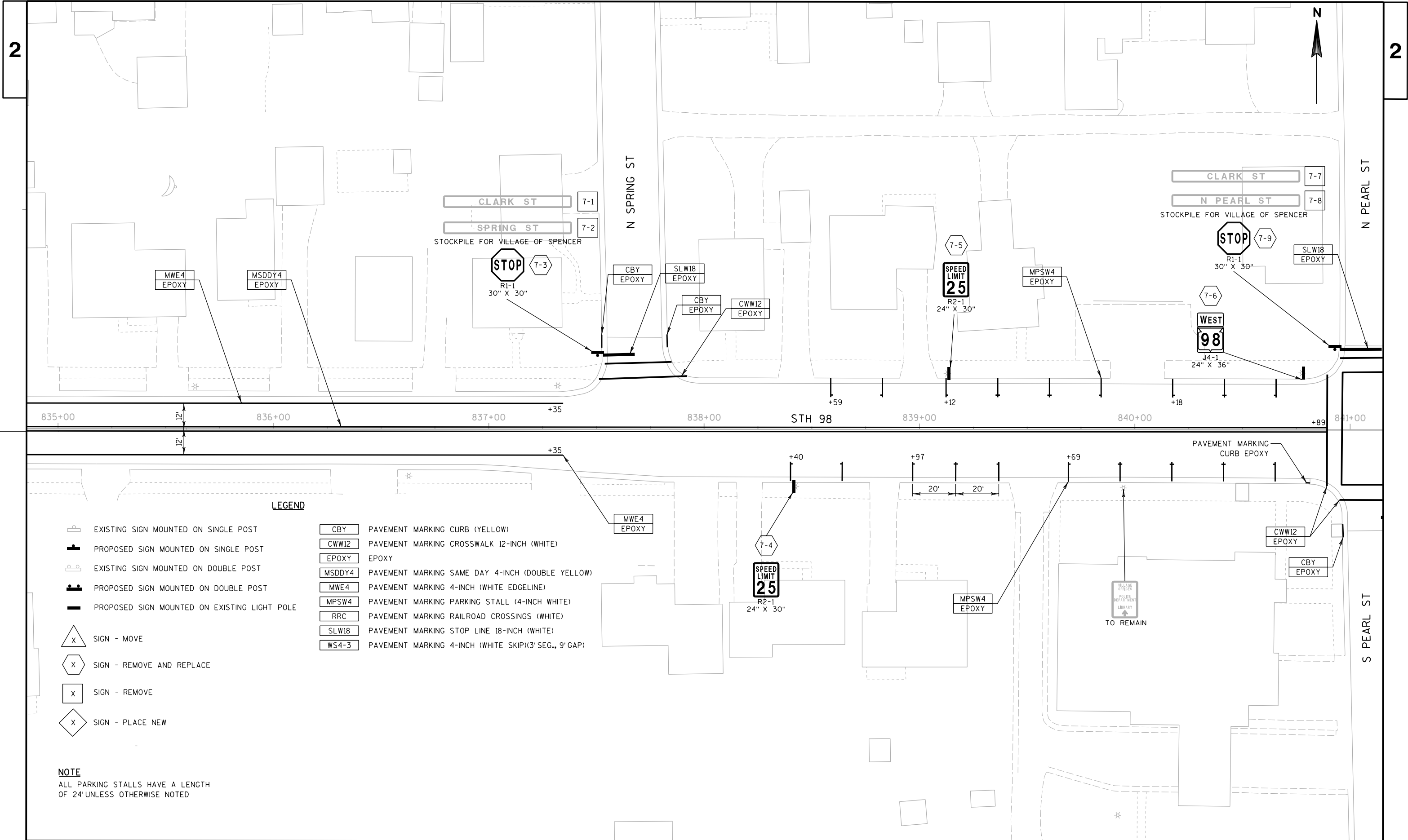




LEGEND

	EXISTING SIGN MOUNTED ON SINGLE POST		PAVEMENT MARKING CURB (YELLOW)
	PROPOSED SIGN MOUNTED ON SINGLE POST		PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
	EXISTING SIGN MOUNTED ON DOUBLE POST		EPOXY
	PROPOSED SIGN MOUNTED ON DOUBLE POST		PAVEMENT MARKING SAME DAY 4-INCH (DOUBLE YELLOW)
	PROPOSED SIGN MOUNTED ON EXISTING LIGHT POLE		PAVEMENT MARKING 4-INCH (WHITE EDGELINE)
	SIGN - MOVE		PAVEMENT MARKING PARKING STALL (4-INCH WHITE)
	SIGN - REMOVE AND REPLACE		PAVEMENT MARKING RAILROAD CROSSINGS (WHITE)
	SIGN - REMOVE		PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
	SIGN - PLACE NEW		PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)



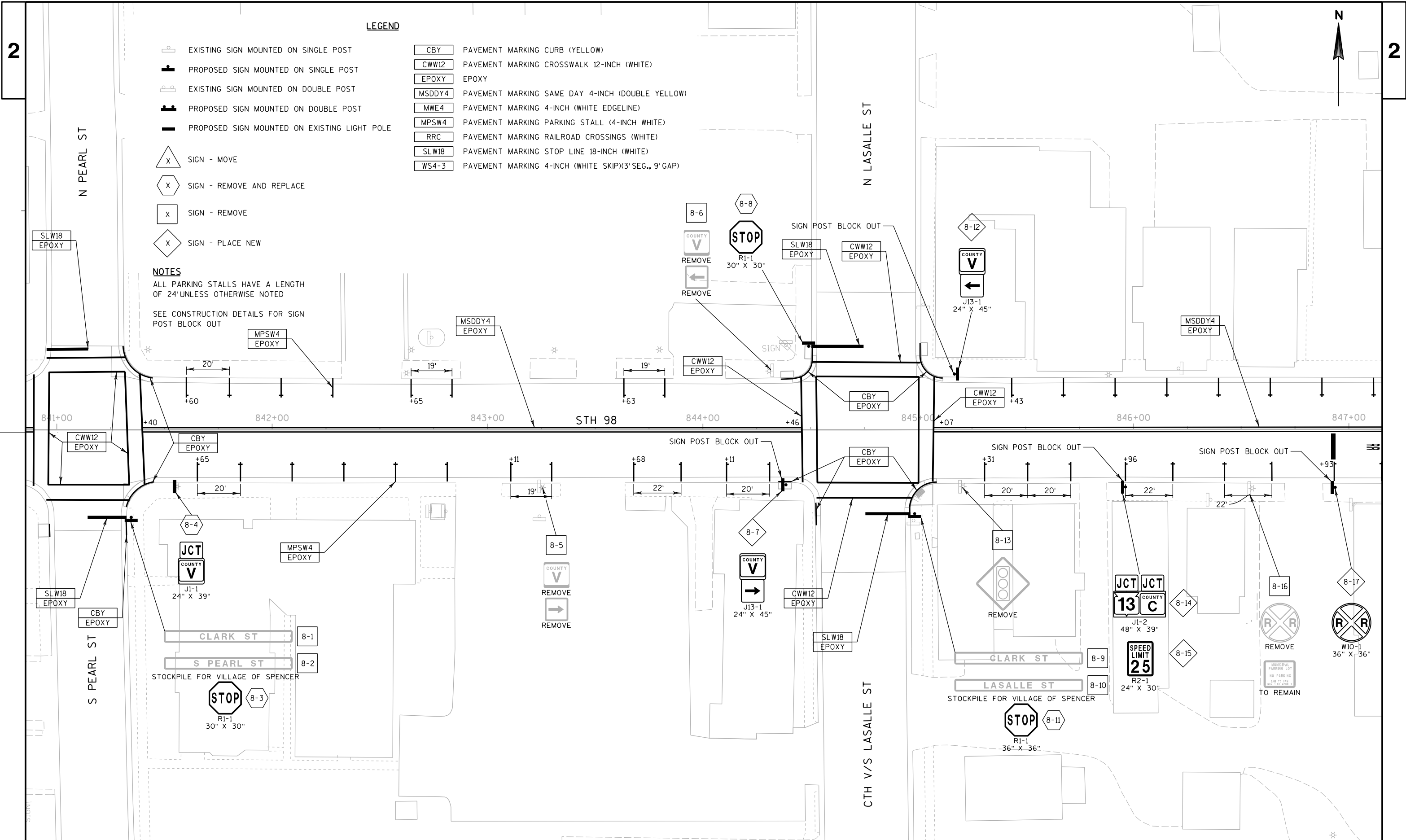


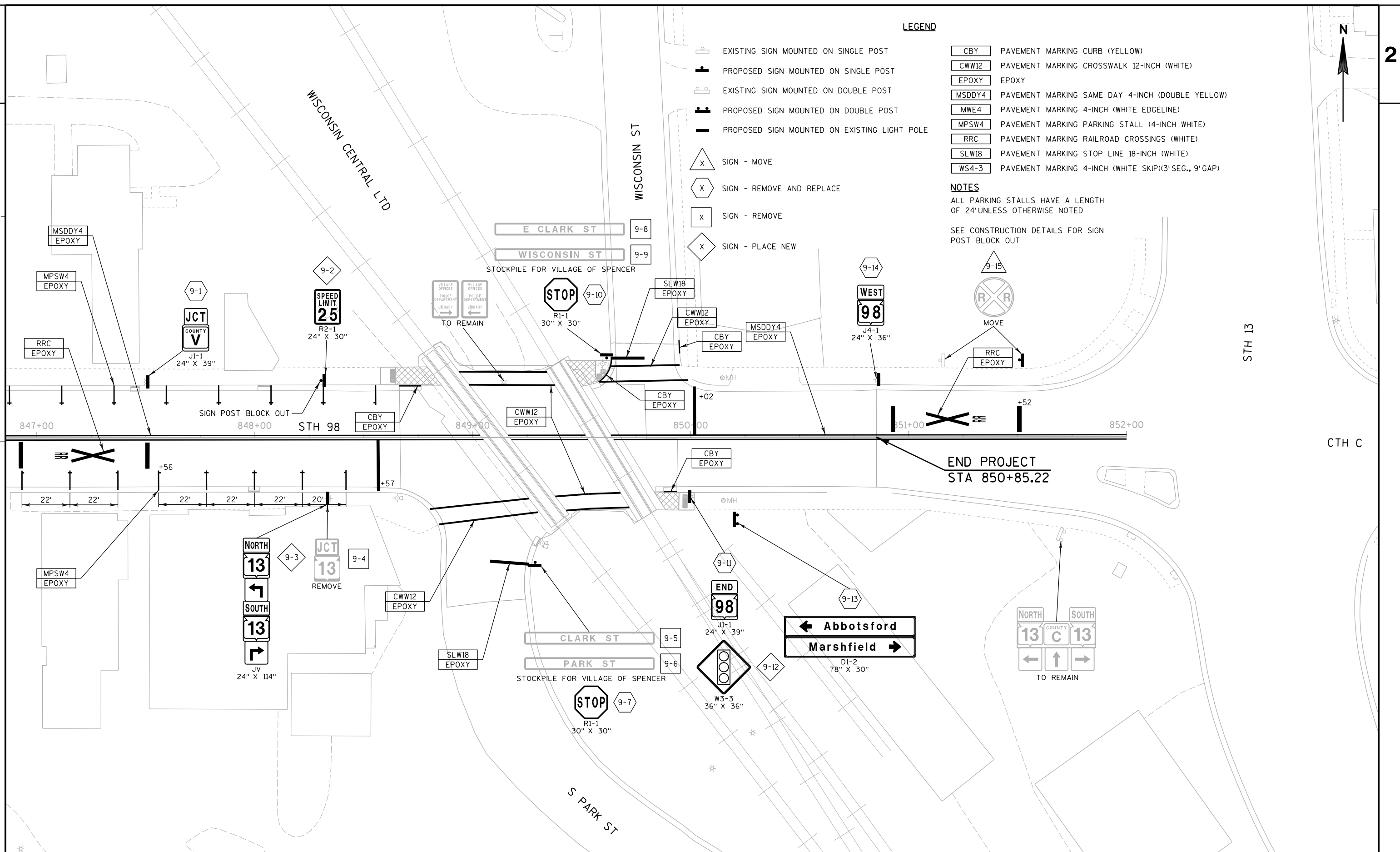
LEGEND

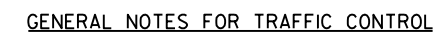
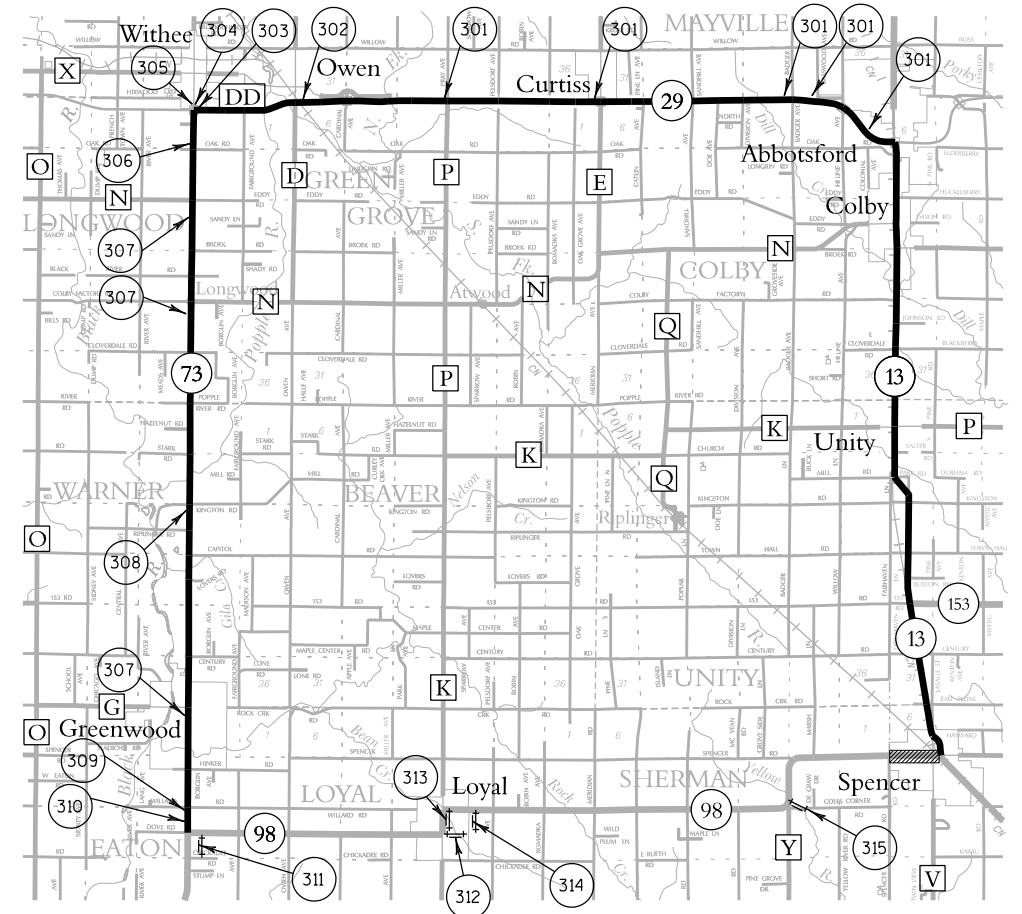
- EXISTING SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POST
- EXISTING SIGN MOUNTED ON DOUBLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POST
- PROPOSED SIGN MOUNTED ON EXISTING LIGHT POLE
- SIGN - MOVE
- SIGN - REMOVE AND REPLACE
- SIGN - REMOVE
- SIGN - PLACE NEW

- PAVEMENT MARKING CURB (YELLOW)
- PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
- EPOXY
- PAVEMENT MARKING SAME DAY 4-INCH (DOUBLE YELLOW)
- PAVEMENT MARKING 4-INCH (WHITE EDGELINE)
- PAVEMENT MARKING PARKING STALL (4-INCH WHITE)
- PAVEMENT MARKING RAILROAD CROSSINGS (WHITE)
- PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
- PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)

NOTE
ALL PARKING STALLS HAVE A LENGTH
OF 24' UNLESS OTHERWISE NOTED







1. CONFLICTING TRAFFIC SIGNS SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER. EXISTING SIGNS COVERED BY A PROPOSED TRAFFIC CONTROL SIGN OR TRAFFIC CONTROL DETOUR SIGN ARE PAID FOR AS TRAFFIC CONTROL SIGNS OR TRAFFIC CONTROL DETOUR SIGNS
2. ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED
3. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE
4. ALL TYPE III BARRICADES SHALL BE 8' WIDE, UNLESS OTHERWISE NOTED. EQUIP WITH TYPE "A" (LOW INTENSITY FLASHING) LIGHTS PER SDDS
5. TRAFFIC CONTROL DEVICES NOT IN USE SHALL BE LAID DOWN OR REMOVED, TURNING OF DEVICES TO OBSTRUCT THE MESSAGE WILL NOT BE ALLOWED
6. SEE CONTRACT SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS
7. FOR TRAFFIC CONTROL SIGNS WITHIN THE STH 98 WORK ZONE SEE THE MISCELLANEOUS QUANTITIES AND THE FOLLOWING SDDS FOR ADDITIONAL INFORMATION:

- A. BARRICADES AND SIGNS FOR MAINLINE CLOSURES
- B. DETOUR SIGNING FOR MAINLINE CLOSURES
- C. BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
- D. TRAFFIC CONTROL, ADVANCED WARNING SIGNS 45 MPH OR GRATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
- E. TRAFFIC CONTROL, ADVANCED WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
- F. TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
- G. TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
- H. TRAFFIC CONTROL, SIDEWALK CLOSURE

LEGEND

Diagram showing a traffic control barricade with a sign. The sign is rectangular and contains the text "TRAFFIC CONTROL BARRICADE WITH SIGN".

 WORK AREA

DATE 14FEB13		E S T I M A T E O F Q U A N T I T I E S			
LINE		7040-00-60			
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	201.0120	CLEARING	ID	24.000	24.000
0020	201.0220	GRUBBING	ID	24.000	24.000
0030	204.0100	REMOVING PAVEMENT	SY	950.000	950.000
0040	204.0105	REMOVING PAVEMENT BUTT JOINTS	SY	92.000	92.000
0050	204.0109.S	REMOVING CONCRETE SURFACE PARTIAL DEPTH	SF	136,550.000	136,550.000
0060	204.0110	REMOVING ASPHALTIC SURFACE	SY	3.000	3.000
0070	204.0115	REMOVING ASPHALTIC SURFACE BUTT JOINTS	SY	16.000	16.000
0080	204.0120	REMOVING ASPHALTIC SURFACE MILLING	SY	5,470.000	5,470.000
0090	204.0150	REMOVING CURB & GUTTER	LF	67.000	67.000
0100	204.0155	REMOVING CONCRETE SIDEWALK	SY	145.000	145.000
0110	204.0220	REMOVING INLETS	EACH	2.000	2.000
0120	211.0100	PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) 01. 7040-00-60	LS	1.000	1.000
0130	211.0400	PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS	STA	32.000	32.000
0140	213.0100	FINISHING ROADWAY (PROJECT) 01. 7040-00-60	EACH	1.000	1.000
0150	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	110.000	110.000
0160	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	350.000	350.000
0170	390.0201	BASE PATCHING ASPHALTIC	TON	10.000	10.000
0180	415.0080	CONCRETE PAVEMENT 8-INCH	SY	220.000	220.000
0190	416.0160	CONCRETE DRIVEWAY 6-INCH	SY	25.000	25.000
0200	416.0610	DRILLED TIE BARS	EACH	409.000	409.000
0210	416.0620	DRILLED DOWEL BARS	EACH	96.000	96.000
0220	455.0115	ASPHALTIC MATERIAL PG64-22	TON	160.000	160.000
0230	455.0605	TACK COAT	GAL	525.000	525.000
0240	460.1101	HMA PAVEMENT TYPE E-1	TON	2,700.000	2,700.000
0250	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	1,730.000	1,730.000
0260	465.0105	ASPHALTIC SURFACE	TON	8.000	8.000
0270	465.0110	ASPHALTIC SURFACE PATCHING	TON	25.000	25.000
0280	520.8000	CONCRETE COLLARS FOR PIPE	EACH	2.000	2.000
0290	601.0409	CONCRETE CURB & GUTTER 30-INCH TYPE A	LF	70.000	70.000
0300	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	50.000	50.000
0310	601.0452	CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D	LF	335.000	335.000
0320	602.0415	CONCRETE SIDEWALK 6-INCH	SF	1,900.000	1,900.000
0330	602.0505	CURB RAMP DETECTABLE WARNING FIELD YELLOW	SF	120.000	120.000
0340	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	10.000	10.000
0350	611.3230	INLETS 2X3-FT	EACH	2.000	2.000
0360	611.8110	ADJUSTING MANHOLE COVERS	EACH	15.000	15.000
0370	611.8115	ADJUSTING INLET COVERS	EACH	33.000	33.000
0380	611.9710	SALVAGED INLET COVERS	EACH	2.000	2.000
0390	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 7040-00-60	EACH	1.000	1.000
0400	619.1000	MOBILIZATION	EACH	1.000	1.000
0410	621.0100	LANDMARK REFERENCE MONUMENTS	EACH	4.000	4.000
0420	628.1504	SILT FENCE	LF	170.000	170.000
0430	628.1520	SILT FENCE MAINTENANCE	LF	170.000	170.000
0440	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	3.000	3.000
0450	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	2.000	2.000
0460	628.2006	EROSION MAT URBAN CLASS I TYPE A	SY	330.000	330.000
0470	628.7015	INLET PROTECTION TYPE C	EACH	28.000	28.000
0480	628.7020	INLET PROTECTION TYPE D	EACH	18.000	18.000

DATE 14FEB13		E S T I M A T E O F Q U A N T I T I E S			
LINE				7040-00-60	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0490	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	23.000	23.000
0500	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	9.000	9.000
0510	637.0202	SIGNS REFLECTIVE TYPE II	SF	262.250	262.250
0520	638.2102	MOVING SIGNS TYPE II	EACH	3.000	3.000
0530	638.2602	REMOVING SIGNS TYPE II	EACH	69.000	69.000
0540	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	27.000	27.000
0550	638.4000	MOVING SMALL SIGN SUPPORTS	EACH	1.000	1.000
0560	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000
0570	643.0100	TRAFFIC CONTROL (PROJECT) 01. 7040-00-60	EACH	1.000	1.000
0580	643.0300	TRAFFIC CONTROL DRUMS	DAY	2,185.000	2,185.000
0590	643.0410	TRAFFIC CONTROL BARRICADES TYPE II	DAY	241.000	241.000
0600	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	225.000	225.000
0610	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	320.000	320.000
0620	643.0900	TRAFFIC CONTROL SIGNS	DAY	2,445.000	2,445.000
0630	643.0920	TRAFFIC CONTROL COVERING SIGNS TYPE II	EACH	5.000	5.000
0640	643.1000	TRAFFIC CONTROL SIGNS FIXED MESSAGE	SF	68.750	68.750
0650	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	21.000	21.000
0660	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 01. 7040-00-60	EACH	1.000	1.000
0670	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAY	1,160.000	1,160.000
0680	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	7,400.000	7,400.000
0690	646.0406	PAVEMENT MARKING SAME DAY EPOXY 4-INCH	LF	9,730.000	9,730.000
0700	647.0110	PAVEMENT MARKING RAILROAD CROSSINGS EPOXY	EACH	2.000	2.000
0710	647.0456	PAVEMENT MARKING CURB EPOXY	LF	400.000	400.000
0720	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	240.000	240.000
0730	647.0656	PAVEMENT MARKING PARKING STALL EPOXY	LF	710.000	710.000
0740	647.0776	PAVEMENT MARKING CROSSWALK EPOXY 12-INCH	LF	1,910.000	1,910.000
0750	649.0200	TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH	LF	9,500.000	9,500.000
0760	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	2.000	2.000
0770	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	324.000	324.000
0780	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	5,011.000	5,011.000
0790	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 7040-00-60	LS	1.000	1.000
0800	690.0150	SAWING ASPHALT	LF	170.000	170.000
0810	690.0250	SAWING CONCRETE	LF	1,710.000	1,710.000
0820	715.0415	INCENTIVE STRENGTH CONCRETE PAVEMENT	DOL	500.000	500.000
0830	SPV.0060	SPECIAL 01. SIGN POST BLOCK OUT	EACH	4.000	4.000
0840	SPV.0060	SPECIAL 02. REESTABLISH SECTION CORNER MONUMENTS	EACH	1.000	1.000
0850	SPV.0060	SPECIAL 03. ADJUSTING WATER VALVES	EACH	8.000	8.000
0860	SPV.0060	SPECIAL 04. ADJUSTING SANITARY SEWER MANHOLE COVERS	EACH	10.000	10.000
0870	SPV.0090	SPECIAL 01. SEALING ASPHALTIC PAVEMENT CRACKS	LF	5,250.000	5,250.000
0880	SPV.0105	SPECIAL 01. GRADING, SHAPING, AND FINISHING SIDEWALK	LS	1.000	1.000
0890	SPV.0105	SPECIAL 02. GRADING, SHAPING, AND FINISHING RAILROAD CROSSING	LS	1.000	1.000
0900	SPV.0180	SPECIAL 01. CONCRETE PAVEMENT SHES 8-INCH	SY	35.000	35.000

3

CLEARING AND GRUBBING ITEMS

		201.0120	201.0220
STATION	LOCATION	CLEARING ID	GRUBBING ID
CAT 0010			
816+55	33'RT	24	24
TOTALS		24	24

REMOVING INLETS

STATION	LOCATION	204.0220 EACH
CAT 0010		
832+95	LT&RT	2
TOTAL		2

REMOVING ASPHALTIC SURFACE ITEMS

		204.0110	204.0115	204.0120	
STATION - STATION	LOCATION	SURFACE	BUTT JOINTS	MILLING	COMMENTS
CAT 0010					
800+75 - 815+98	LT&RT	3	--	5,470	ADJUSTING MANHOLE LOCATIONS
800+75	LT&RT	--	10	--	BEGIN PROJECT
813+77	RT	--	6	--	WASHINGTON ST
TOTALS		3	16	5,470	

BASE AGGREGATE DENSE ITEMS

		305.0110	305.0120
		3/4-INCH	1 1/4-INCH
STATION - STATION	LOCATION	TON	TON
CAT 0010			
800+75 - 815+98	LT&RT	100	--
848+67 - 849+04	LT&RT	--	95
849+17 - 849+52	LT&RT	--	190
849+64 - 849+94	LT&RT	--	30
ADJUSTING MANHOLE & INLET LOCATIONS		10	25
UNDISTRIBUTED		--	10
TOTALS		110	350

NOTE: BASE AGGREGATE DENSE 3/4-INCH FOR ADJUSTING MANHOLE & INLET LOCATIONS IS USED FOR TEMPORARY MAINTENANCE OF TRAFFIC AT ADJUSTING SANITARY SEWER MANHOLE COVERS LOCATED IN ASPHALTIC PAVEMENT

CONCRETE PAVEMENT ITEMS

STATION - STATION	LOCATION	415.0080	416.0160	416.0610 *	416.0620	SPV.0180.01	COMMENTS
		CONCRETE PAVEMENT 8-INCH SY	CONCRETE DRIVEWAY 6-INCH SY	DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT SHES 8-INCH SY	
CAT 0010							
815+98 - 850+85	LT&RT	70	--	66	96	--	ADJUSTING INLET LOCATIONS
815+98 - 850+85	LT&RT	--	--	184	--	35	ADJUSTING MANHOLE LOCATIONS
816+04 - 816+27	RT	--	25	--	--	--	
827+82 - 828+70	LT&RT	130	--	96	--	--	
841+25 - 841+45	LT&RT	15	--	22	--	--	
844+42 - 845+11	LT	5	--	17	--	--	
TOTALS		220	25	385	96	35	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

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E

REMOVING PAVEMENT ITEMS

STATION - STATION	LOCATION	204.0100	204.0105	204.0109.S	204.0150	204.0155	COMMENTS
		REMOVING PAVEMENT	REMOVING PAVEMENT BUTT JOINTS	REMOVING CONCRETE SURFACE PARTIAL DEPTH	REMOVING CURB & GUTTER	REMOVING CONCRETE SIDEWALK	
		SY	SY	SF	LF	SY	
CAT 0010							
815+98 - 837+84	LT&RT	--	--	78,050	--	--	
837+84 - 850+85	LT&RT	--	--	45,540	--	--	
815+99 - 816+10	LT	--	--	--	11	--	
816+03 - 816+27	RT	15	--	--	--	--	
818+00 - 818+02	RT	--	--	--	2	--	
818+45 - 818+48	RT	--	--	--	3	--	
827+82 - 828+80	LT&RT	180	--	--	--	80	
832+83 - 832+92	LT	--	--	--	9	--	
840+79 - 840+81	RT	--	--	--	2	--	
841+25 - 841+45	LT&RT	25	--	--	--	--	
844+42 - 845+11	LT	15	--	--	--	--	
844+52 - 845+08	RT	--	--	--	25	10	
847+43 - 847+47	LT	--	--	--	4	--	
847+97 - 848+02	RT	--	--	--	5	--	
848+01 - 848+07	LT	--	--	--	6	--	
848+67 - 849+04	LT&RT	440	--	--	--	20	
849+64 - 849+94	LT&RT	130	--	--	--	20	
819+41	LT	--	6	1,125	--	--	N JULIA ST
824+18	RT	--	6	970	--	--	S OAK ST
828+28	LT	--	6	1,020	--	--	N MADISON ST
828+30	RT	--	6	1,175	--	--	S MADISON ST
834+17	LT	--	6	1,000	--	--	N CHESTNUT ST
834+20	RT	--	6	1,045	--	--	S CHESTNUT ST
837+68	LT	--	6	700	--	--	N SPRING ST
841+15	LT	--	7	675	--	--	N PEARL ST
841+15	RT	--	7	900	--	--	S PEARL ST
844+75	RT	--	10	1,800	--	--	CTH V / S LASALLE ST
844+76	LT	--	10	2,000	--	--	N LASALLE ST
849+79	LT	--	6	550	--	--	WISCONSIN ST
850+85	LT&RT	--	10	--	--	--	END PROJECT
ADJUSTING MANHOLE LOCATIONS		35	--	--	--	--	PROJECT
ADJUSTING INLET LOCATIONS		110	--	--	--	15	PROJECT
TOTALS		950	92	136,550	67	145	

HMA AND ASPHALTIC PAVEMENT ITEMS

		211.0100	211.0400	390.0201	455.0115	455.0605	460.1101	465.0105	465.0110	
		PREPARE FOUNDATION	PREPARE FOUNDATION	BASE PATCHING	ASPHALTIC	TACK	HMA PAVEMENT	ASPHALTIC	ASPHALTIC	
		FOR ASPHALTIC PAVING	FOR ASPHALTIC SHOULDERS	ASPHALTIC	MATERIAL	COAT	TYPE E-1	SURFACE	SURFACE	
STATION - STATION	LOCATION	LS	STA	TON	PG64-22	GAL	TON	TON	TON	COMMENTS
CAT 0010										
800+75 - 815+98	LT&RT	--	--	--	27	110	470	1	--	MAINLINE
800+75 - 815+98	LT&RT	--	32	--	17	--	300	--	--	SHOULDERS
815+98 - 850+85	LT&RT	--	--	10	--	--	--	2	--	ADJUSTING INLET LOCATIONS AND CRACK FILLING
815+98 - 837+84	LT&RT	--	--	--	50	200	875	--	--	
837+84 - 848+67	LT&RT	--	--	--	33	130	593	--	--	
848+67 - 849+94	LT&RT	--	--	--	12	25	200	5	--	RAILROAD CROSSING (INCLUDES PARK ST INTERSECTION)
849+94 - 850+85	LT&RT	--	--	--	5	15	60	--	--	
813+77	RT	--	--	--	2	5	20	--	--	WASHINGTON ST
819+41	LT	--	--	--	1	4	15	--	--	N JULIA ST
824+18	RT	--	--	--	1	3	14	--	--	S OAK ST
828+28	LT	--	--	--	1	3	14	--	--	N MADISON ST
828+30	RT	--	--	--	1	4	15	--	--	S MADISON ST
834+17	LT	--	--	--	1	3	14	--	--	N CHESTNUT ST
834+20	RT	--	--	--	1	3	14	--	--	S CHESTNUT ST
837+68	LT	--	--	--	1	2	10	--	--	N SPRING ST
841+15	LT	--	--	--	1	2	10	--	--	N PEARL ST
841+15	RT	--	--	--	1	2	14	--	--	S PEARL ST
844+75	RT	--	--	--	2	6	26	--	--	CTH V / S LASALLE ST
844+76	LT	--	--	--	2	6	26	--	--	N LASALLE ST
849+79	LT	--	--	--	1	2	10	--	--	WISCONSIN ST
UNDISTRIBUTED	--	--	--	--	--	--	--	--	25	
PROJECT	--	1	--	--	--	--	--	--	--	
TOTALS		1	32	10	160	525	2,700	8	25	

CONCRETE CURB & GUTTER ITEMS

STATION - STATION	LOCATION	416.0610 *	601.0409	601.0411	601.0452	650.5500	COMMENTS
		DRILLED	CONCRETE	CONCRETE	CONCRETE	CONSTRUCTION	
		TIE BARS	CURB & GUTTER	CURB & GUTTER	CURB & GUTTER	STAKING	
		EACH	30-INCH TYPE A	30-INCH TYPE D	30-INCH TYPE D	CURB GUTTER AND CURB & GUTTER	
		LF	LF	LF	LF	LF	
CAT 0010							
815+98 - 850+85	LT&RT	--	--	15	85	--	ADJUSTING INLET LOCATIONS
815+98 - 816+09	LT	4	11	--	--	11	
818+00 - 818+02	RT	1	2	--	--	--	
818+45 - 818+48	RT	1	3	--	--	--	
827+82 - 828+70	LT&RT	--	--	--	168	168	
832+83 - 832+92	LT	3	9	--	--	--	
840+79 - 840+81	RT	1	2	--	--	--	
841+30 - 841+45	LT&RT	--	--	--	46	46	
844+42 - 845+11	LT&RT	9	28	--	36	64	
847+43 - 847+47	LT	1	4	--	--	--	
847+97 - 848+07	LT&RT	4	11	--	--	--	
848+66 - 848+76	LT	--	--	10	--	10	
849+29 - 849+31	RT	--	--	4	--	4	
849+58 - 849+66	LT	--	--	15	--	15	
849+88 - 849+94	RT	--	--	6	--	6	
TOTALS		24	70	50	335	324	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

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CONCRETE SIDEWALK ITEMS

		602.0415	602.0505	
		CONCRETE SIDEWALK	CURB RAMP DETECTABLE	
		6-INCH	WARNING FIELD YELLOW	
STATION - STATION	LOCATION	SF	SF	COMMENTS
CAT 0010				
827+80 - 828+80	LT&RT	695	64	ADJUSTING INLET LOCATIONS
844+96 - 845+07	LT	75	8	
840+45 - 845+05	LT&RT	108	--	
848+58 - 848+65	LT	57	12	
849+56 - 849+63	LT	48	8	
849+95 - 850+02	RT	57	12	
CAT 0010 SUBTOTALS		1,040	104	
CAT 0020				
815+90 - 816+92	RT	860	16	
CAT 0020 SUBTOTALS		860	16	
TOTALS		1,900	120	

STORM SEWER ITEMS

STATION	LOCATION	520.8000	608.0312	611.3230	650.4000
		CONCRETE COLLARS	STORM SEWER PIPE	INLETS	CONSTRUCTION
		FOR PIPE	REINFORCED CONCRETE	2X3-FT	STAKING
		EACH	CLASS III 12-INCH	EACH	STORM SEWER
			LF		EACH
CAT 0010					
832+95	LT&RT	2	10	2	2
TOTALS		2	10	2	2

3

ADJUSTING ITEMS

		611.8110	611.8115	611.9710
		ADJUSTING	ADJUSTING	SALVAGED
		MANHOLE COVERS	INLET COVERS	INLET COVERS
STATION	LOCATION	EACH	EACH	EACH
CAT 0010				
816+25	LT	1	--	--
817+99	LT&RT	--	2	--
818+00	LT	1	--	--
819+26	LT	--	1	--
819+50	LT	1	--	--
819+53	LT&RT	--	2	--
822+98	LT&RT	--	2	--
823+03	LT&RT	--	2	--
823+05	LT	1	--	--
824+35	LT	1	--	--
827+82	LT	1	--	--
827+85	LT&RT	--	2	--
828+16	RT	--	1	--
828+45	RT	--	1	--
830+64	LT	1	--	--
830+65	LT&RT	--	2	--
832+95	LT&RT	--	--	2
833+00	LT&RT	--	2	--
833+01	LT	1	--	--
834+05	LT&RT	--	2	--
834+32	LT&RT	--	2	--
834+35	LT	1	--	--
837+38	LT	1	--	--
837+53	LT	--	1	--
837+82	LT	--	1	--
840+50	RT	--	1	--
840+56	LT	1	--	--
840+98	RT	--	1	--
841+31	LT	1	--	--
841+31	RT	--	1	--
844+38	LT&RT	--	2	--
844+40	LT	1	--	--
844+53	LT&RT	--	2	--
844+74	RT	1	--	--
844+95	RT	--	1	--
845+00	LT	--	1	--
846+60	LT	1	--	--
849+93	LT	--	1	--
TOTALS		15	33	2

MONUMENT ITEMS

621.0100 LANDMARK REFERENCE MONUMENTS		SPV.0060.02 REESTABLISH SECTION CORNER MONUMENTS		COMMENTS
LOCATION	EACH	LOCATION	EACH	
CAT 0010				
NORTHWEST OF SEC 8, T26N, R2E	4		1	BERNSTEN SNM1 STEEL NAIL MARKER
TOTALS	4		1	

MOBILIZATIONS EROSION CONTROL

628.1905 EROSION CONTROL		628.1910 EMERGENCY EROSION CONTROL	
LOCATION	EACH	LOCATION	EACH
CAT 0010			
PROJECT	3		2
TOTALS	3		2

EROSION CONTROL ITEMS

628.1504 SILT FENCE		628.1520 SILT FENCE MAINTENANCE		628.2006 EROSION MAT URBAN CLASS 1 TYPE A		628.7015 INLET PROTECTION TYPE C		628.7020 INLET PROTECTION TYPE D	
STATION - STATION	LOCATION	LF	LF	SY	SY	EACH	EACH	EACH	EACH
CAT 0010									
815+90 - 816+92	LT&RT	130	130		170	--	--	--	--
827+80 - 828+80	LT&RT	--	--		70	--	--	--	--
848+67 - 849+94	LT&RT	--	--		20	--	--	--	--
PROJECT	--	--	--		--	28	--	18	--
UNDISTRIBUTED	--	40	40		70	--	--	--	--
TOTALS		170	170		330	28	--	18	--

TYPE II SIGNS AND SUPPORTS

				637.0202 SIGNS REFLECTIVE	634.0614 POSTS WOOD	634.0616 POSTS WOOD	638.2102 MOVING SIGNS	638.2602 MOVING SIGNS	638.3000 REMOVING SMALL SIGN SUPPORTS	638.4000 MOVING SMALL SIGN SUPPORTS	SPV.0060.01 SIGN POST BLOCKOUT		
SIGN NO.	SIGN CODE	W	X	H	TYPE II SF	4x6 14-FT EACH	4x6 16-FT EACH	TYPE II EACH	TYPE II EACH	EACH	EACH	EACH	COMMENTS
CAT 0010													
1-1	I2-2	72	X	15	7.50	2	--	--	1	2	--	--	MARATHON CO
1-2	I2-3	60	X	24	10.00	--	2	--	1	2	--	--	SPENCER POPULATION 1925
1-3	--	--	X	--	--	--	--	--	1	--	--	--	REPLACED BY SIGN 2-1
1-4	--	--	X	--	--	--	--	1	--	--	--	--	DARE COMMUNITY, ON SAME POST AS 1-2
1-5	--	--	X	--	--	--	--	1	--	--	--	--	NO PEDDLING/SOLICITING, ON SAME POST AS 1-2
1-6	J4-1	24	X	36	6.00	--	1	--	2	1	--	--	REPLACING SIGN 1-3 IN NEW LOCATION
2-1	R2-1	30	X	36	7.50	--	1	--	--	--	--	--	
2-2	R2-1	24	X	30	5.00	--	1	--	1	1	--	--	
3-1	D2-1	54	X	15	5.63	2	--	--	1	1	--	--	
3-2	--	--	X	--	--	--	--	--	1	1	--	--	LOYAL 10 STOP SIGN
3-3	R1-1	30	X	30	5.18	1	--	--	1	1	--	--	DEER CROSSING NEXT 3 MILES CLARK ST
3-4	R2-1	24	X	30	5.00	1	--	--	1	1	--	--	
4-1	--	--	X	--	--	--	--	--	1	1	--	--	
4-2	--	--	X	--	--	--	--	--	1	--	--	--	
4-3	--	--	X	--	--	--	--	--	1	1	--	--	
SUBTOTALS					51.81	6	5	2	13	12	0	0	

TYPE II SIGNS AND SUPPORTS (CONTINUED)													
SIGN NO.	SIGN CODE	W	X	H	637.0202	634.0614	634.0616	638.2102	638.2602	638.3000	638.4000	SPV.0060.01	COMMENTS
					SIGNS	POSTS	POSTS	MOVING	REMOVING	REMOVING	MOVING	SIGN POST	
					REFLECTIVE TYPE II	WOOD 4x6 14-FT	WOOD 4x6 16-FT	SIGNS TYPE II	SIGNS TYPE II	SMALL SIGN SUPPORTS	SMALL SIGN SUPPORTS	BLOCKOUT	
CAT 0010													
4-4	--	--	X	--	--	--	--	--	1	--	--	--	JULIA ST
4-5	R1-1	30	X	30	5.18	1	--	--	1	--	--	--	
5-1	--	--	X	--	--	--	--	--	1	1	--	--	CLARK ST
5-2	--	--	X	--	--	--	--	--	1	--	--	--	OAK ST
5-3	R1-1	30	X	30	5.18	1	--	--	1	--	--	--	
5-4	R2-1	24	X	30	5.00	--	--	--	1	--	--	--	ON EXISTING LIGHT POLE
5-5	--	--	X	--	--	--	--	--	1	1	--	--	CLARK ST
5-6	--	--	X	--	--	--	--	--	1	--	--	--	MADISON ST
5-7	R1-1	30	X	30	5.18	1	--	--	1	--	--	--	
5-8	--	--	X	--	--	--	--	--	1	1	--	--	CLARK ST
5-9	--	--	X	--	--	--	--	--	1	--	--	--	MADISON ST
5-10	R1-1	30	X	30	5.18	1	--	--	1	--	--	--	
5-11	R2-1	24	X	30	5.00	1	--	--	1	1	--	--	
6-1	--	--	X	--	--	--	--	--	1	1	--	--	CLARK ST
6-2	--	--	X	--	--	--	--	--	1	--	--	--	CHESTNUT ST
6-3	R1-1	30	X	30	5.18	1	--	--	1	--	--	--	
6-4	--	--	X	--	--	--	--	--	1	1	--	--	CLARK ST
6-5	--	--	X	--	--	--	--	--	1	--	--	--	CHESTNUT ST
6-6	R1-1	30	X	30	5.18	1	--	--	1	--	--	--	
7-1	--	--	X	--	--	--	--	--	1	1	--	--	CLARK ST
7-2	--	--	X	--	--	--	--	--	1	--	--	--	SPRING ST
7-3	R1-1	30	X	30	5.18	1	--	--	1	--	--	--	
7-4	R2-1	24	X	30	5.00	--	--	--	1	--	--	--	ON EXISTING LIGHT POLE
7-5	R2-1	24	X	30	5.00	--	--	--	1	--	--	--	ON EXISTING LIGHT POLE
7-6	J4-1	24	X	36	6.00	--	--	--	1	--	--	--	ON EXISTING LIGHT POLE
7-7	--	--	X	--	--	--	--	--	1	1	--	--	CLARK ST
7-8	--	--	X	--	--	--	--	--	1	--	--	--	PEARL ST
7-9	R1-1	30	X	30	5.18	1	--	--	1	--	--	--	
8-1	--	--	X	--	--	--	--	--	1	1	--	--	CLARK ST
8-2	--	--	X	--	--	--	--	--	1	--	--	--	PEARL ST
8-3	R1-1	30	X	30	5.18	1	--	--	1	--	--	--	
8-4	J1-1	24	X	39	6.50	--	--	--	2	--	--	--	ON EXISTING LIGHT POLE
8-5	--	--	X	--	--	--	--	--	2	--	--	--	ON EXISTING LIGHT POLE, REPLACED BY SIGN 8-7
8-6	--	--	X	--	--	--	--	--	2	--	--	--	ON EXISTING LIGHT POLE, REPLACED BY SIGN 8-12
8-7	J13-1	24	X	45	7.50	--	1	--	--	--	--	--	REPLACING SIGN 8-5
8-8	R1-1	30	X	30	5.18	1	--	--	1	1	--	--	
8-9	--	--	X	--	--	--	--	--	1	1	--	--	CLARK ST
8-10	--	--	X	--	--	--	--	--	1	--	--	--	LASALLE ST
8-11	R1-1	36	X	36	7.46	1	--	--	1	--	--	--	
8-12	J13-1	24	X	45	7.50	--	1	--	--	--	--	1	REPLACING SIGN 8-6
8-13	--	--	X	--	--	--	--	--	1	--	--	--	ON EXISTING LIGHT POLE, REPLACING SIGN 9-12
8-14	J1-2	48	X	39	13.00	--	1	--	--	--	--	1	REPLACING SIGN 9-4
8-15	R2-1	24	X	30	5.00	--	--	--	--	--	--	--	ON SAME POST AS SIGN 8-14
8-16	--	--	X	--	--	--	--	--	1	--	--	--	REPLACED BY 8-17
8-17	W10-1	36	X	36	7.07	--	1	--	--	--	--	1	REPLACING SIGN 8-16
9-1	J1-1	24	X	39	6.50	--	--	--	2	--	--	--	ON EXISTING LIGHT POLE
9-2	R2-1	24	X	30	5.00	1	--	--	--	--	--	1	
9-3	JV	24	X	114	19.00	--	--	--	--	--	--	--	ON EXISTING LIGHT POLE
9-4	--	--	X	--	--	--	--	--	2	--	--	--	ON EXISTING LIGHT POLE
9-5	--	--	X	--	--	--	--	--	1	1	--	--	CLARK ST
SUBTOTALS					162.33	13	4	0	48	12	0	4	

3

TYPE II SIGNS AND SUPPORTS (CONTINUED)

SIGN NO.	SIGN CODE	W	X	H	637.0202 SIGNS REFLECTIVE TYPE II SF	634.0614 POSTS WOOD 4x6 14-FT EACH	634.0616 POSTS WOOD 4x6 16-FT EACH	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	SPV.0060.01 SIGN POST BLOCKOUT EACH	COMMENTS
CAT 0010													
9-6	--	--	X	--	--	--	--	--	1	--	--	--	PARK ST
9-7	R1-1	30	X	30	5.18	1	--	--	1	--	--	--	
9-8	--	--	X	--	--	--	--	--	1	1	--	--	CLARK ST
9-9	--	--	X	--	--	--	--	--	1	--	--	--	WISCONSIN ST
9-10	R1-1	30	X	30	5.18	1	--	--	1	--	--	--	
9-11	J1-1	24	X	39	6.50	--	--	--	1	--	--	--	ON EXISTING LIGHT POLE
9-12	W3-3	36	X	36	9.00	--	--	--	--	--	--	--	ON EXISTING LIGHT POLE, REPLACING SIGN 8-13
9-13	D1-2	78	X	30	16.25	2	--	--	1	2	--	--	ABBOTSFORD/MARSHFIELD DIRECTIONAL SIGN
9-14	J4-1	24	X	36	6.00	--	--	--	1	--	--	--	ON EXISTING LIGHT POLE
9-15	--	--	X	--	--	--	--	1	--	--	1	--	
SUBTOTALS					48.11	4	0	1	8	3	1	0	
TOTALS					262.25	23	9	3	69	27	1	4	

3

TRAFFIC CONTROL ITEMS

LOCATION	DAYS	643.0300		643.0410		643.0420*		643.0705*		643.0900		643.1050	
		DRUMS		BARRICADES TYPE II		BARRICADES TYPE III		WARNING LIGHTS TYPE A		SIGNS		SIGNS PCMS	
		NO.	DAYS	NO.	DAYS	NO.	DAYS	NO.	DAYS	NO.	DAYS	DAYS	
CAT 0010													
PROJECT TRAFFIC CONTROL (ADV SIGNING & SIDE ROADS)	66	--	--	--	--	--	--	--	--	26	1,716	--	
PRARKING LANE CLOSURES	42	20	840	--	--	--	--	--	--	12	504	--	
ROAD CLOSURE (RAILROAD CROSSING RECONSTRUCTION)	5	--	--	13	65	26	130	34	170	15	75	21	
SIDEWALK CLOSURES	8	--	--	22	176	--	--	--	--	10	80	--	
SIDE ROAD CLOSURES (MADISON STREET)	10	8	80	--	--	7	70	10	100	3	30	--	
SHOULDER CLOSURE (INLET REPAIRS)	10	104	1,040	--	--	--	--	--	--	4	40	--	
UNDISTRIBUTED (ADJUSTING MANHOLES/CURB & GUTTER REPAIRS)	--	225		--		--		--		--		--	
TOTALS		2,185		241		200		270		2,445		21	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

TRAFFIC CONTROL DETOUR ITEMS

LOCATION	DAYS	643.0420*		643.0705*		643.0920	643.1000	643.3000	
		TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL	TRAFFIC CONTROL	TRAFFIC CONTROL	
		BARRICADES TYPE III		WARNING LIGHTS TYPE A		COVERING SIGNS TYPE II	SIGNS FIXED MESSAGE	DETOUR SIGNS	
		NO.	DAYS	NO.	DAYS	EACH	SF	NO.	DAYS
CAT 0010									
PROJECT	5	5	25	10	50	5	68.75	232	1,160
TOTALS			25		50	5	68.75		1,160

NOTE: COVER TYPE II SIGNS ONCE FOR THE DURATION OF THE STH 98 DETOUR
* ADDITIONAL QUANTITIES LISTED ELSEWHERE

PAVEMENT MARKING EPOXY ITEMS

STATION - STATION	LOCATION	646.0106		646.0406	647.0656
		EPOXY 4-INCH		SAME DAY	PARKING STALL
		(WHITE)	(YELLOW)	EPOXY 4-INCH	EPOXY
		LF	LF	(YELLOW)	(WHITE)
CAT 0010					
800+75 - 815+98	LT&RT	2,970	--	3,046	--
815+98 - 837+84	LT&RT	3,890	--	4,124	--
837+84 - 852+00	LT&RT	--	--	2,560	710
UNDISTRIBUTED	--	140	400	--	--
TOTALS		7,000	400	9,730	710

NOTES:
PAVEMENT MARKING PARKING STALL EPOXY IS 4-INCH
UNDISTRIBUTED QTY PLACED IN LOCATIONS WHERE SEALING ASPHALTIC PAVEMENT CRACKS COVER THE EXISTING EPOXY 4-INCH

PAVEMENT MARKING RAILROAD CROSSING EPOXY

STATION - STATION	LOCATION	647.0110
		EACH
CAT 0010		
846+93 - 847+52	RT	1
850+92 - 851+52	LT	1
TOTAL		2

3

PAVEMENT MARKING CURB EPOXY

		647.0456 (YELLOW)		
STATION - STATION		LOCATION	LF	COMMENTS
CAT 0010				
815+98 - 850+85		LT&RT	90	ADJUSTING INLET LOCATIONS
815+98 - 816+09		LT&RT	11	
827+80 - 828+79		LT&RT	169	
841+30 - 841+45		LT&RT	40	
840+79 - 840+81		RT	2	
844+42 - 845+11		LT&RT	58	
848+66 - 848+76		LT	10	
849+58 - 849+66		LT	14	
849+88 - 849+94		RT	6	
TOTAL			400	

PAVEMENT MARKING STOP LINE EPOXY 18-INCH

		647.0566 (WHITE)		
STATION - STATION	LOCATION	LF	COMMENTS	
CAT 0010				
813+76 - 813+91	RT	15	WASHINGTON ST	
819+24 - 819+40	LT	16	N JULIA ST	
824+18 - 819+32	RT	14	S OAK ST	
828+13 - 828+29	LT	17	N MADISON ST	
828+29 - 828+46	RT	17	S MADISON ST	
834+01 - 834+18	LT	16	N CHESTNUT ST	
834+20 - 834+36	RT	16	S CHESTNUT ST	
837+53 - 837+68	LT	15	N SPRING ST	
840+95 - 841+15	LT	19	N PEARL ST	
841+15 - 841+32	RT	18	S PEARL ST	
844+50 - 844+75	LT	24	N LASALLE ST	
844+75 - 844+96	RT	20	CTH V / S LASALLE ST	
849+08 - 849+26	RT	18	PARK ST	
849+64 - 849+79	LT	15	WISCONSIN ST	
TOTAL		240		

3

PAVEMENT MARKING CROSSWALK EPOXY 12-INCH

		647.0776 (WHITE)		
STATION - STATION	LOCATION	LF	COMMENTS	
CAT 0010				
819+18 - 819+63	LT	80	N JULIA ST	
823+98 - 819+36	RT	70	S OAK ST	
827+92 - 828+66	LT&RT	315	STH 98 AND MADISON ST	
833+92 - 834+44	LT&RT	325	STH 98 AND CHESTNUT ST	
837+51 - 837+92	LT	74	N SPRING ST	
840+89 - 841+40	LT&RT	355	STH 98 AND PEARL ST	
844+46 - 845+07	LT&RT	385	STH 98 AND CTH V/LASALLE ST	
848+80 - 849+25	RT	92	PARK ST	
848+94 - 849+72	LT&RT	140	RAILROAD CROSSING	
849+54 - 849+99	LT	74	WISCONSIN ST	
TOTAL		1,910		

TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH

		649.0200 (YELLOW)
STATION - STATION	LOCATION	LF
CAT 0010		
800+75 - 815+98	LT&RT	3,046
815+98 - 837+84	LT&RT	4,124
837+84 - 850+85	LT&RT	2,330
TOTAL		9,500

NOTE: TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH TO BE PLACED ON STH 98 CENTERLINE AFTER MILLING AND REMOVING CONCRETE SURFACE PARTIAL DEPTH

CONSTRUCTION STAKING ITEMS

		650.8000 RESURFACING REFERENCE LF	650.9910 SUPPLEMENTAL CONTROL (7040-00-60) LS
STATION - STATION	LOCATION		
CAT 0010			
PROJECT	--	5,011	1
TOTALS		5,011	1

NOTE: CONSTRUCTION STAKING STORM SEWER AND CONSTRUCTION STAKING CURB
GUTTER AND CURB & GUTTER SHOWN ELSEWHERE

SAWING ITEMS

		690.0150	690.0250	
		ASPHALT	CONCRETE	
STATION - STATION	LOCATION	LF	LF	COMMENTS
CAT 0010				
800+75	LT&RT	42	--	BEGIN PROJECT
813+65 - 813+88	RT	23	--	WASHINGTON ST
815+98 - 850+85	LT&RT	70	530	ADJUSTING INLET LOCATIONS *
815+98 - 850+85	LT&RT	35	370	ADJUSTING MANHOLE LOCATIONS
815+98 - 816+09	LT	--	17	
818+45 - 818+48	RT	--	8	
827+80 - 828+79	LT&RT	--	295	
832+83 - 832+92	LT	--	12	
840+79 - 840+81	RT	--	7	
841+25 - 841+45	LT&RT	--	75	
844+42 - 845+11	LT&RT	--	85	
847+43 - 847+47	LT	--	10	
847+97 - 848+07	LT&RT	--	21	
848+67 - 849+94	LT&RT	--	280	RR CROSSING AREA
TOTALS		170	1,710	

* NOTE: INCLUDES SAWING OF CONCRETE ON ROADWAY, CURB AND GUTTER AND SIDEWALK FOR INLET ADJUSTMENTS

SEALING ASPHALTIC PAVEMENT CRACKS

		SPV.0090.01
STATION - STATION	LOCATION	LF
CAT 0010		
815+98 - 850+85	LT&RT	5,250
TOTAL		5,250

GRADING, SHAPING, AND FINISHING SIDEWALK

LOCATION	SPV.0105.01 LS	**EXCAVATION COMMON		**TOPSOIL SY	**FERTILIZER TYPE B CWT	**SEEDING MIX NO. 40 LBS
		CUT CY	UNEXPANDED FILL CY			
CAT 0010						
PROJECT	1	40	0	235	0.3	5
UNDISTRIBUTED	--	--	--	55	0.1	1
TOTALS	1	40	0	290	0.4	6

** ITEMS AND QUANTITIES LISTED FOR INFORMATION ONLY; NON-BID ITEMS
NOTE: SALVAGED TOPSOIL MAY BE USED IN PLACE OF TOPSOIL

GRADING, SHAPING, AND FINISHING RAILROAD CROSSING

LOCATION	SPV.0105.02 LS	**EXCAVATION COMMON		**TOPSOIL SY	**FERTILIZER TYPE B CWT	**SEEDING MIX NO. 40 LBS
		CUT CY	UNEXPANDED FILL CY			
CAT 0010						
PROJECT	1	115	0	20	0.1	1
UNDISTRIBUTED	--	--	--	5	--	--
TOTALS	1	115	0	25	0.1	1

** ITEMS AND QUANTITIES LISTED FOR INFORMATION ONLY; NON-BID ITEMS
NOTE: SALVAGED TOPSOIL MAY BE USED IN PLACE OF TOPSOIL

ADJUSTING SANITARY MANHOLE AND WATER VALVES

STATION	LOCATION	SPV.0060.03 ADJUSTING WATER VALVES EACH	SPV.0060.04 ADJUSTING SANITARY SEWER MANHOLE COVERS EACH
CAT 0030			
808+03	RT	--	1
813+88	RT	--	1
814+27	LT	1	--
819+43	RT	--	1
821+94	RT	--	1
823+93	LT	1	--
824+20	RT	--	1
827+88	LT	1	--
828+18	RT	--	1
831+78	RT	--	1
833+98	LT	1	--
834+21	RT	--	1
837+69	RT	--	1
837+95	LT	1	--
841+01	LT	1	--
841+21	RT	--	1
844+84	RT	1	--
844+92	RT	1	--
TOTALS		8	10

PROPOSED WORK
STA 800+75 - STA 805+00
REMOVING ASPHALTIC
SURFACE MILLING AND
HMA PAVEMENT TYPE E-1

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
1	799+66, 28' LT	CHISELED X ON LIGHT POLE BASE	1318.92

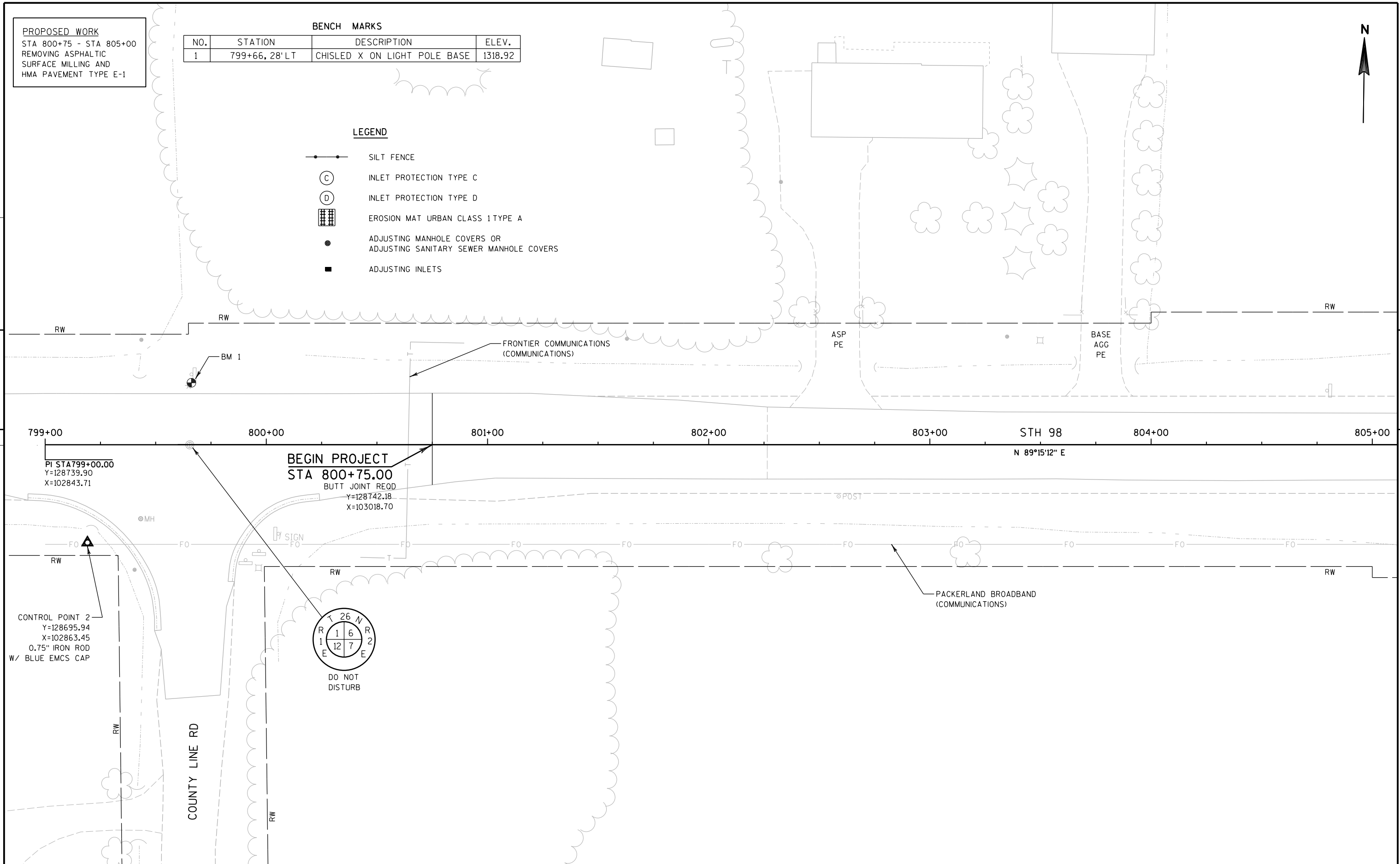
LEGEND

- SILT FENCE
- INLET PROTECTION TYPE C
- INLET PROTECTION TYPE D
- EROSION MAT URBAN CLASS 1 TYPE A
- ADJUSTING MANHOLE COVERS OR
ADJUSTING SANITARY SEWER MANHOLE COVERS
- ADJUSTING INLETS



5

5



PROJECT NO: 7040-00-60	HWY: STH 98	COUNTY: MARATHON	PLAN	SHEET	E
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PROPOSED WORK
STA 805+00 - STA 811+00
REMOVING ASPHALTIC SURFACE
MILLING AND HMA PAVEMENT,
TYPE E-1

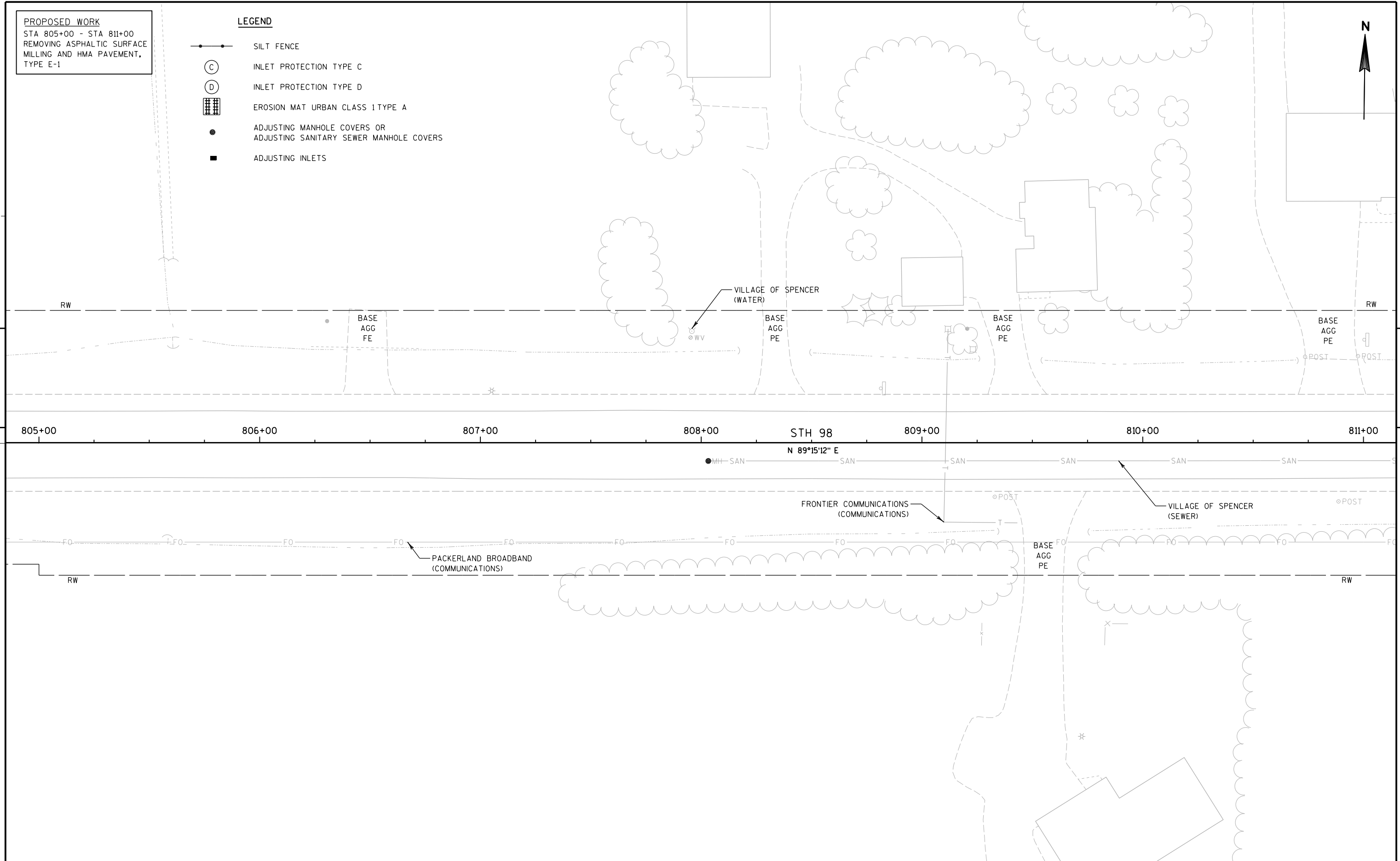
LEGEND

- SILT FENCE
- INLET PROTECTION TYPE C
- INLET PROTECTION TYPE D
- EROSION MAT URBAN CLASS 1 TYPE A
- ADJUSTING MANHOLE COVERS OR
ADJUSTING SANITARY SEWER MANHOLE COVERS
- ADJUSTING INLETS

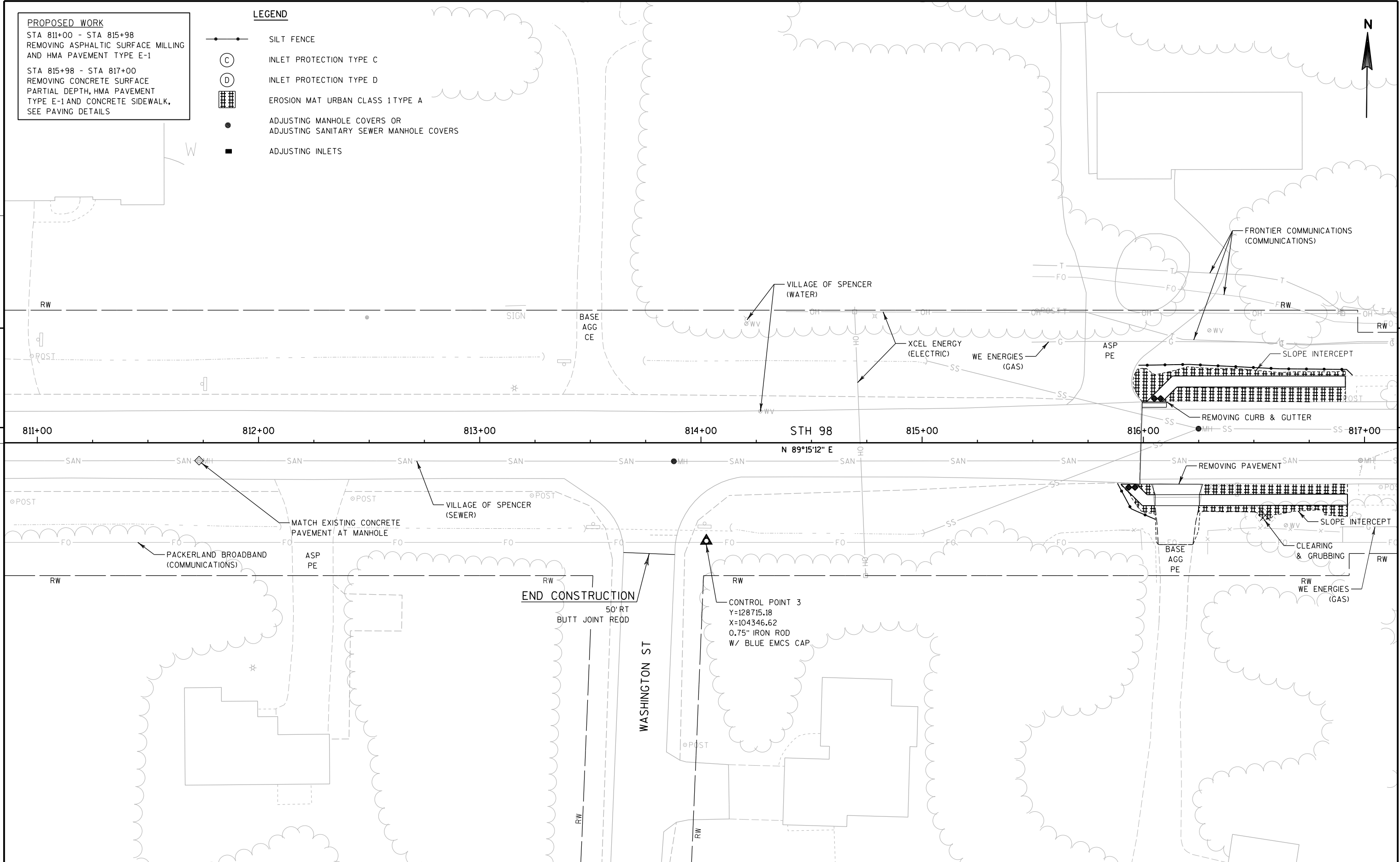


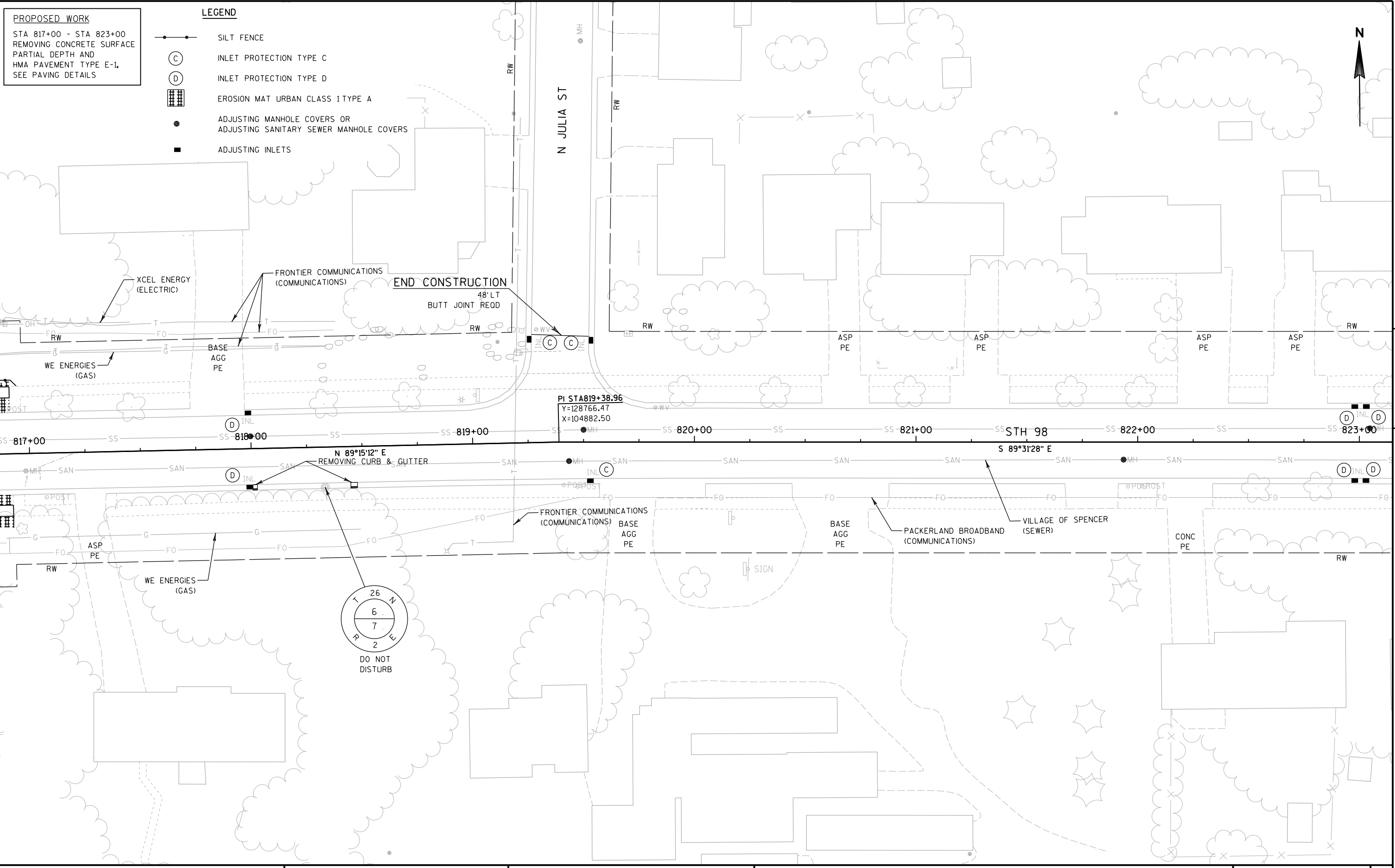
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PROJECT NO: 7040-00-60	HWY: STH 98	COUNTY: MARATHON	PLAN	SHEET	E
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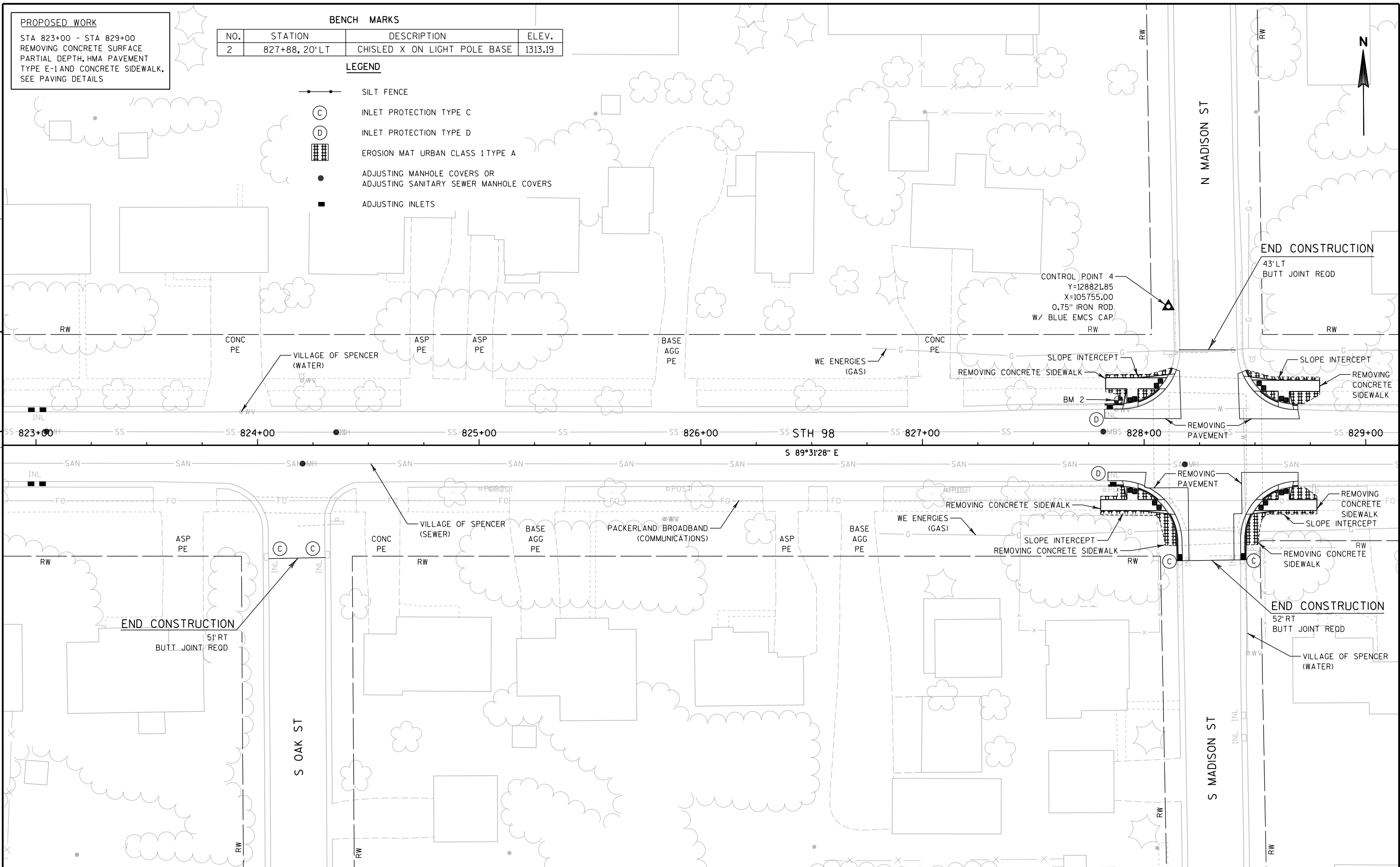
PROPOSED WORK
STA 823+00 - STA 829+00
REMOVING CONCRETE SURFACE
PARTIAL DEPTH, HMA PAVEMENT
TYPE E-1 AND CONCRETE SIDEWALK,
SEE PAVING DETAILS

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
2	827+88, 20' LT	CHISELED X ON LIGHT POLE BASE	1313.19

LEGEND

- SILT FENCE
- INLET PROTECTION TYPE C
- INLET PROTECTION TYPE D
- EROSION MAT URBAN CLASS 1 TYPE A
- ADJUSTING MANHOLE COVERS OR
ADJUSTING SANITARY SEWER MANHOLE COVERS
- ADJUSTING INLETS



PROJECT NO: 7040-00-60

HWY: STH 98

COUNTY: MARATHON

PLAN

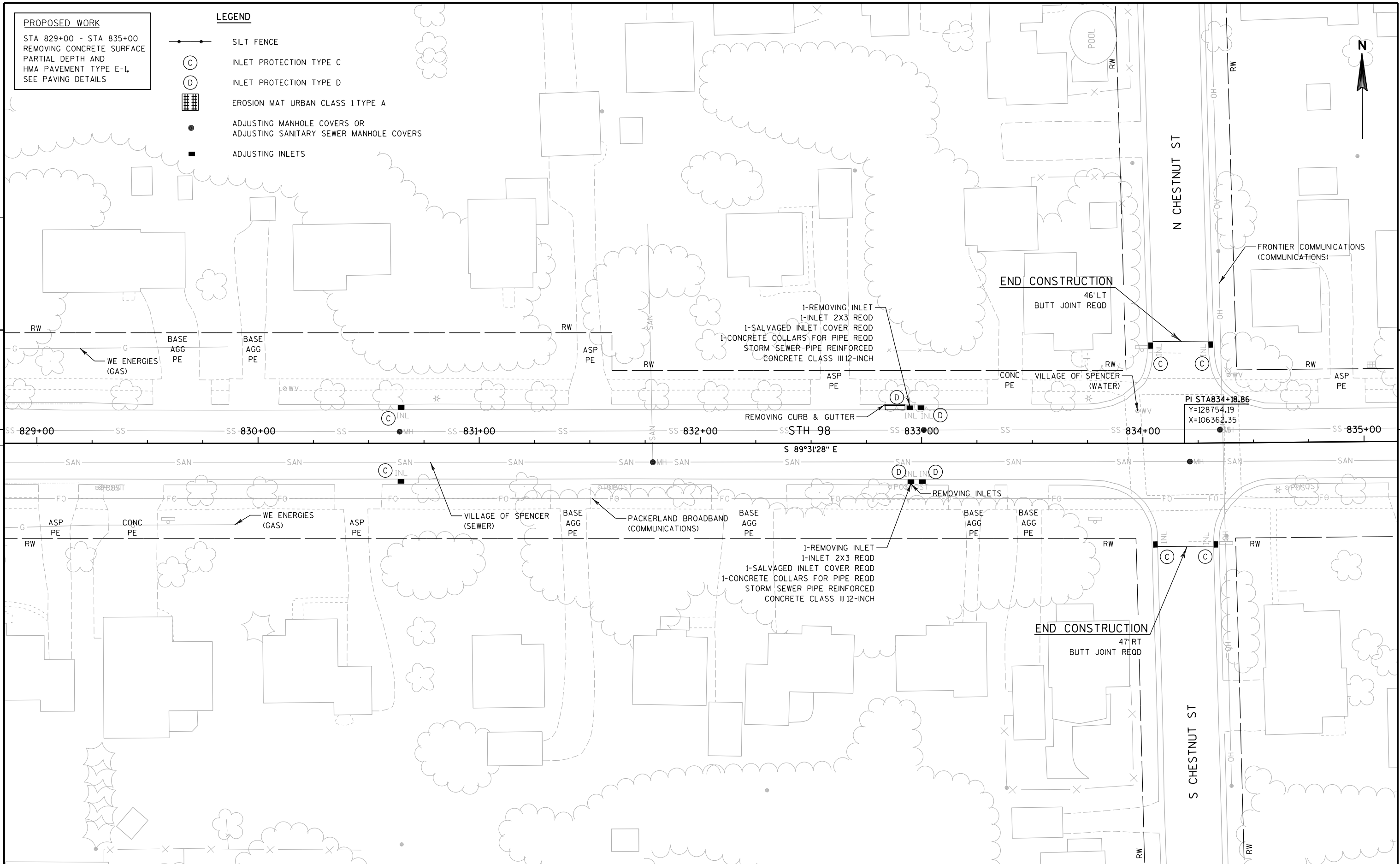
SHEET

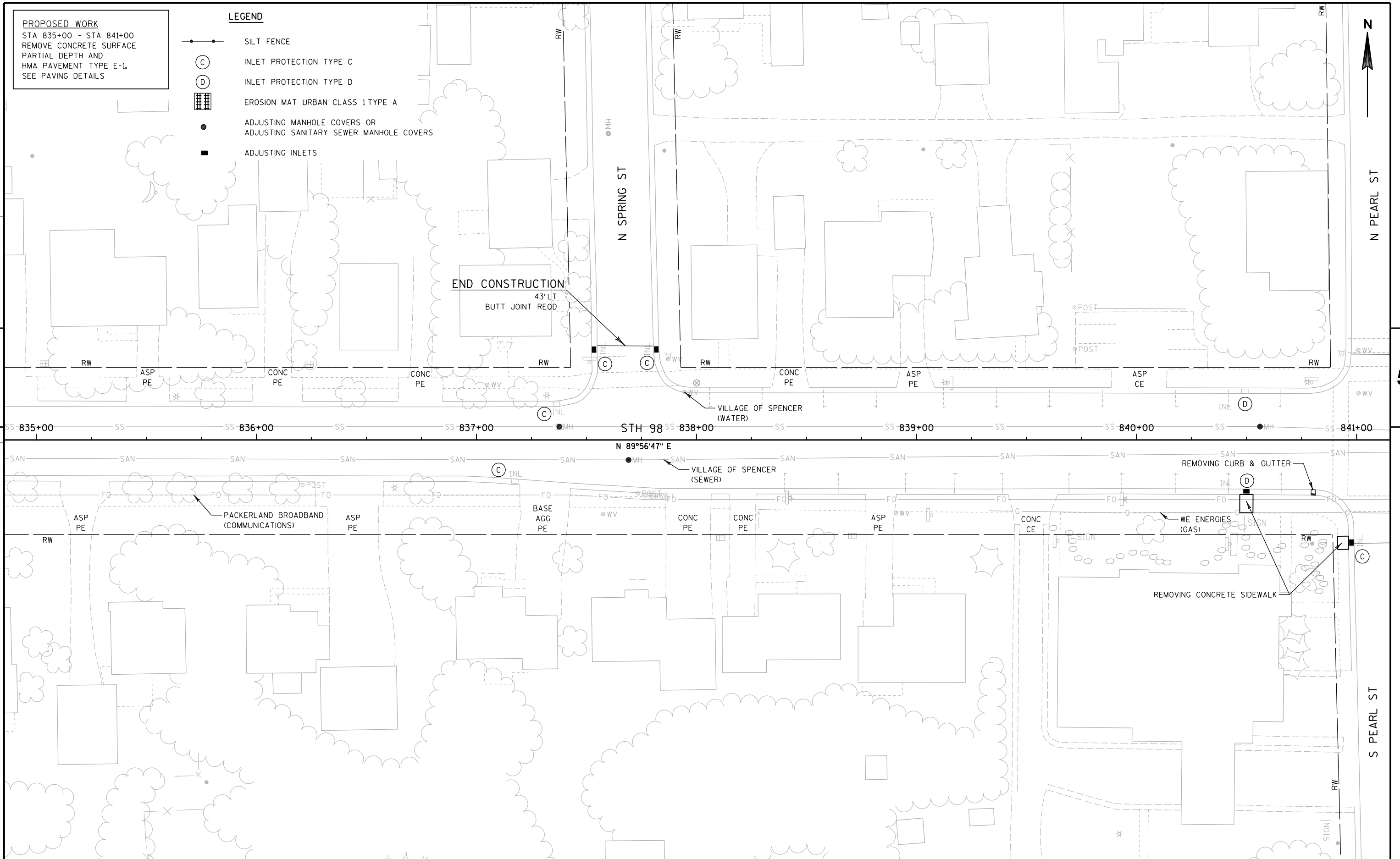
E

PROPOSED WORK
STA 829+00 - STA 835+00
REMOVING CONCRETE SURFACE
PARTIAL DEPTH AND
HMA PAVEMENT TYPE E-1,
SEE PAVING DETAILS

LEGEND

- SILT FENCE
- INLET PROTECTION TYPE C
- INLET PROTECTION TYPE D
- EROSION MAT URBAN CLASS 1 TYPE A
- ADJUSTING MANHOLE COVERS OR
ADJUSTING SANITARY SEWER MANHOLE COVERS
- ADJUSTING INLETS





PROPOSED WORK
STA 841+00 - STA 847+00
REMOVE CONCRETE SURFACE
PARTIAL DEPTH AND HMA
PAVEMENT TYPE E-1, SEE
PAVING DETAILS

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
3	841+56, 26' RT	CHISLED X ON LIGHT POLE BASE	1308.35

LEGEND

- SILT FENCE
- INLET PROTECTION TYPE C
- INLET PROTECTION TYPE D
- EROSION MAT URBAN CLASS 1 TYPE A
- ADJUSTING MANHOLE COVERS OR
ADJUSTING SANITARY SEWER MANHOLE COVERS
- ADJUSTING INLETS
- CLOSED REMEDIATION SITE CONTAINING CONTAMINATED SOIL
- CLOSED REMEDIATION SITE CONTAINING CONTAMINATED
GROUNDWATER AT A DEPTH OF APPROXIMATELY 10' BELOW
THE EXISTING SURFACE

END CONSTRUCTION

39' LT
BUTT JOINT REOD

END CONSTRUCTION

64' LT
BUTT JOINT REOD

XCEL ENERGY
(ELECTRIC)

REMOVING CONCRETE SIDEWALK

REMOVING PAVEMENT

PI STA 844+75.88
Y=128755.19
X=107419.37

END CONSTRUCTION

66' RT
BUTT JOINT REOD

END CONSTRUCTION

47' RT
BUTT JOINT REOD

VILLAGE OF SPENCER
(SEWER)

CONTROL POINT 5
Y=128697.71
X=107078.44
0.75" IRON ROD
W/ BLUE EMCS CAP

PACKERLAND BROADBAND
(COMMUNICATIONS)

REMOVING
CONCRETE
SIDEWALK

BASE
AGG
PE

WE ENERGIES
(GAS)

LANDMARK
REFERENCE
MONUMENT

WE ENERGIES
(GAS)

REMOVING
CURB &
GUTTER

REMOVING CONCRETE SIDEWALK

BASE
AGG
CE

ASP
CE

PROJECT NO: 7040-00-60

HWY: STH 98

COUNTY: MARATHON

PLAN

SHEET

E

PROPOSED WORK
STA 847+00 - STA 484+67 & 849+94 - STA 850+85.22
REMOVE CONCRETE SURFACE PARTIAL DEPTH AND HMA
PAVEMENT TYPE E-1, SEE PAVING DETIALS
STA 848+67 - 849+94 RECONSTRUCT RR CROSSING

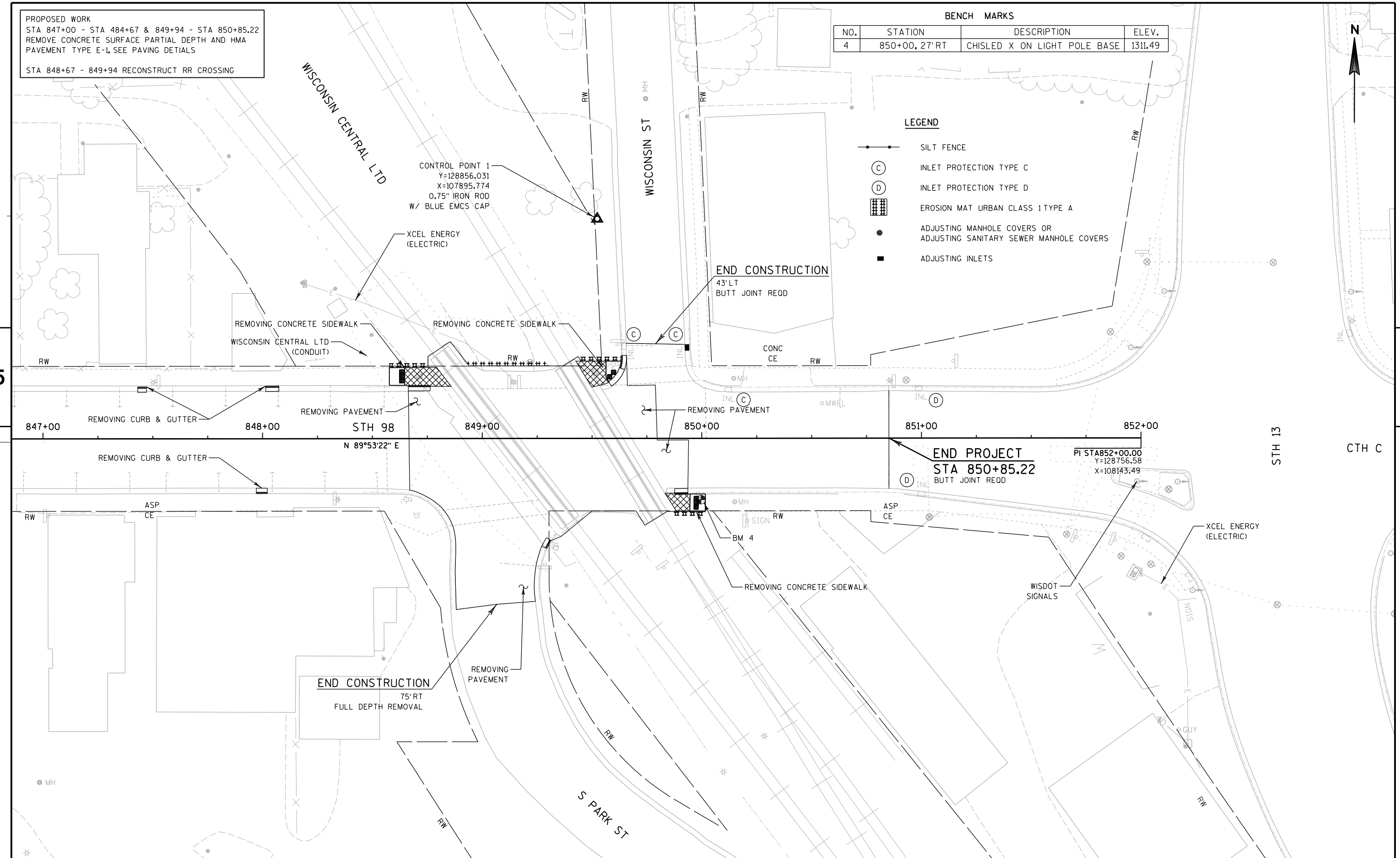
BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
4	850+00, 27' RT	CHISLED X ON LIGHT POLE BASE	1311.49

LEGEND

- SILT FENCE
- INLET PROTECTION TYPE C
- INLET PROTECTION TYPE D
- EROSION MAT URBAN CLASS 1 TYPE A
- ADJUSTING MANHOLE COVERS OR
ADJUSTING SANITARY SEWER MANHOLE COVERS
- ADJUSTING INLETS

5

5



PROJECT NO: 7040-00-60

HWY: STH 98

COUNTY: MARATHON

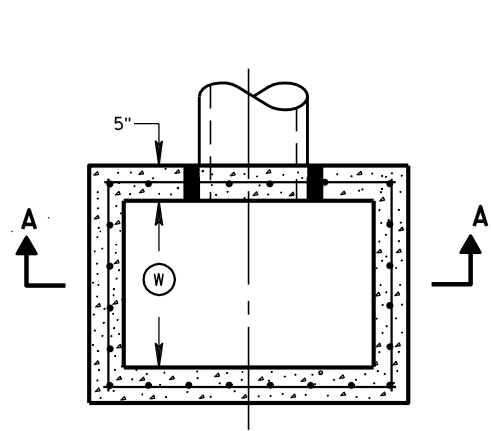
PLAN

SHEET

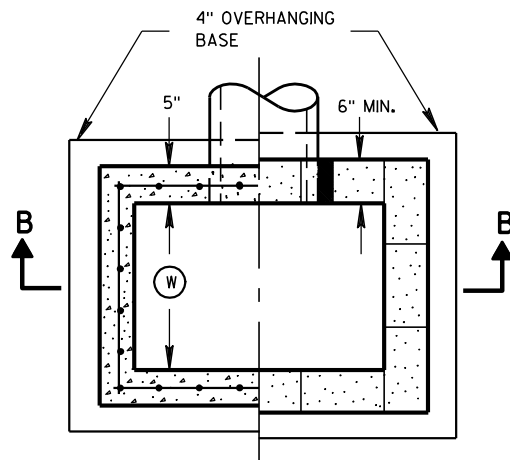
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Standard Detail Drawing List

08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-14A	CURB RAMPS TYPES 1 AND 1-A
08D05-14B	CURB RAMPS TYPES 2 AND 3
08D05-14C	CURB RAMPS TYPE 4A
08D05-14D	CURB RAMPS TYPE 4B
08D05-14E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
13B01-10	PAVEMENT DETAILS FOR RAILROAD APPROACH
13C01-15	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
15C02-04A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-01	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C08-15A	PAVEMENT MARKING (MAINLINE)
15C08-15B	PAVEMENT MARKING (INTERSECTIONS)
15C08-15F	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15C12-03	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15D28-01	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE
16A01-06	LANDMARK REFERENCE MONUMENTS AND COVERS

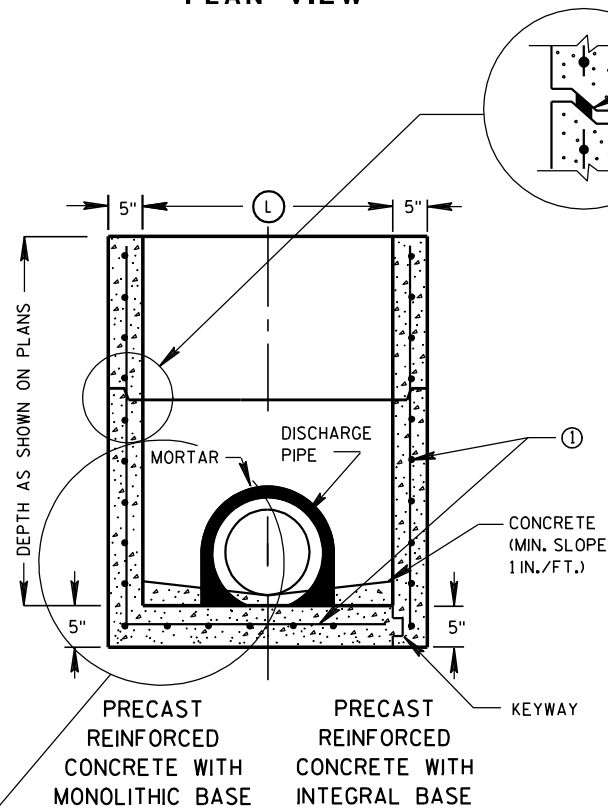


PLAN VIEW

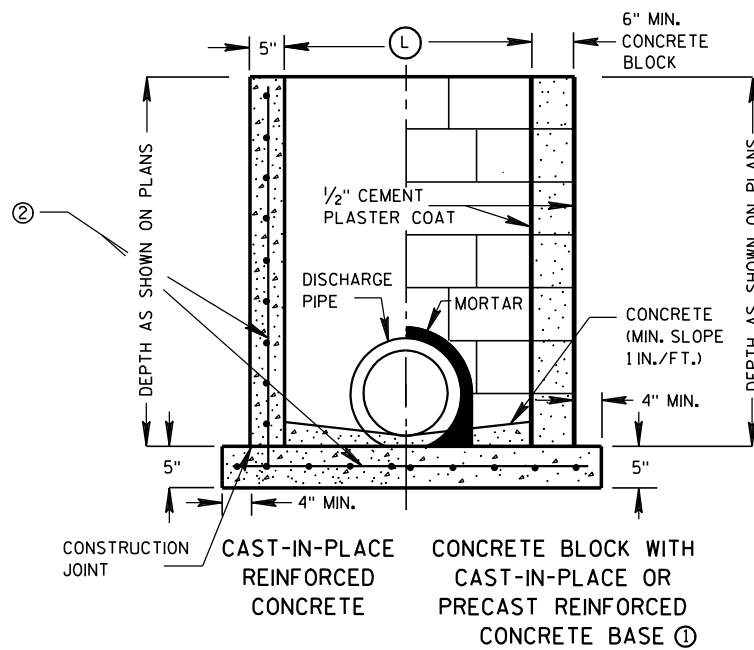


PLAN VIEW

RISER JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



SECTION A-A



SECTION B-B

SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

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

GENERAL NOTES

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

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

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

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

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

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

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

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPERATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

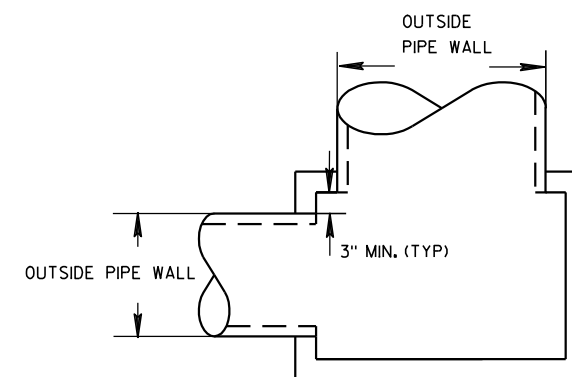
- FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
- CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

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

PIPE MATRIX

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



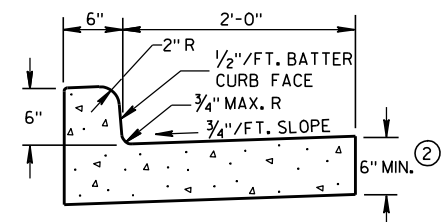
DETAIL "A"

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

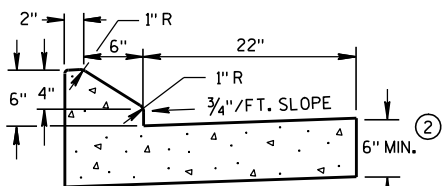
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012
DATE
FHWA

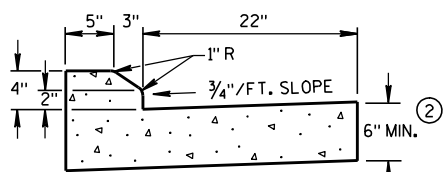
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



TYPES A & D ①



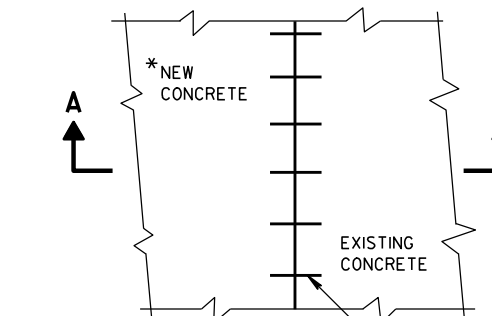
6" SLOPED CURB TYPES G & J ①



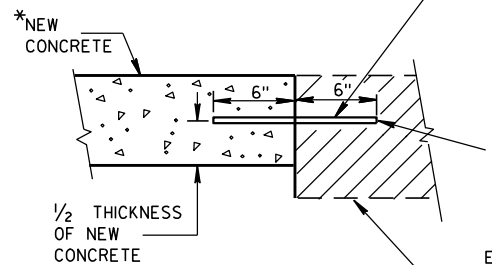
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

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



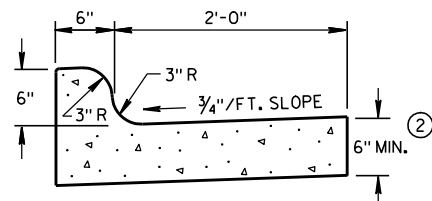
PLAN VIEW

SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

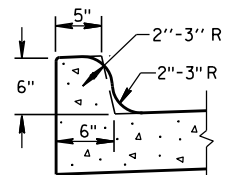
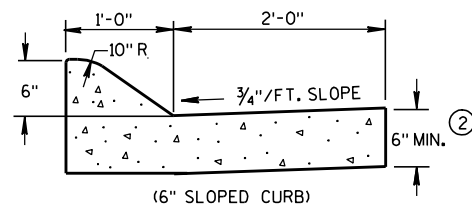
NO. 6 TIE BARS SPACED 2'-6" C-C,
INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT.

MAXIMUM DRILL HOLE
SIZE IS 1/8" GREATER
THAN TIE BAR DIAMETER

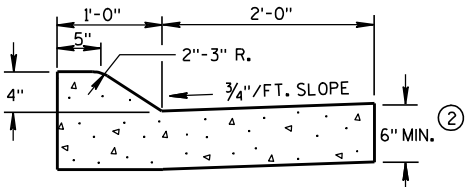
EXISTING
CONCRETE



TYPES K & L ①

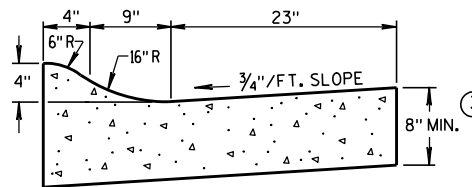
OPTIONAL CURB SHAPE
FOR TYPES K & L ①

(6" SLOPED CURB)



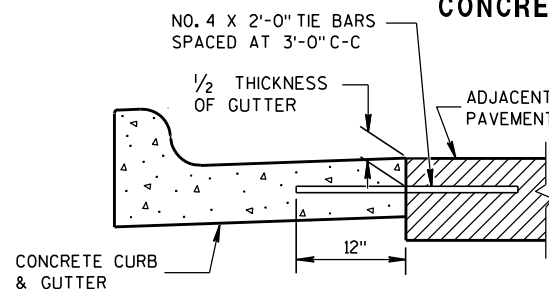
(4" SLOPED CURB)

TYPES A & D ①

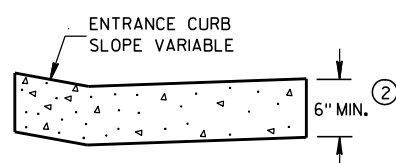


4" SLOPED CURB TYPES R & T ① ④

CONCRETE CURB & GUTTER 36"

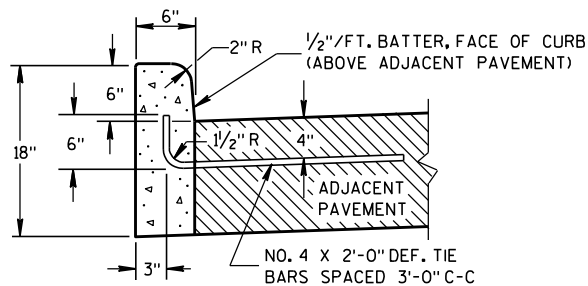


TYPICAL TIE BAR LOCATION ①



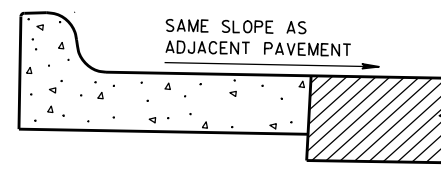
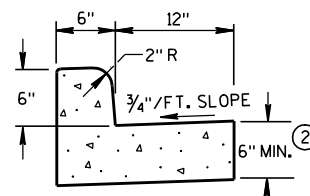
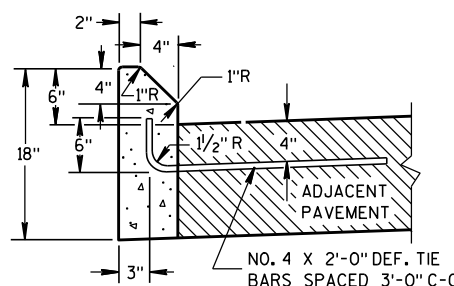
DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)



TYPES A & D ①

CONCRETE CURB

REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)TYPES A & D
CONCRETE CURB & GUTTER 18"

TYPES G & J ①

GENERAL NOTES

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

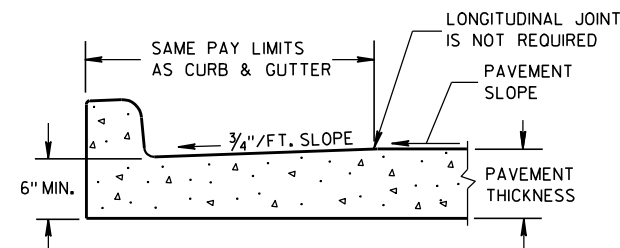
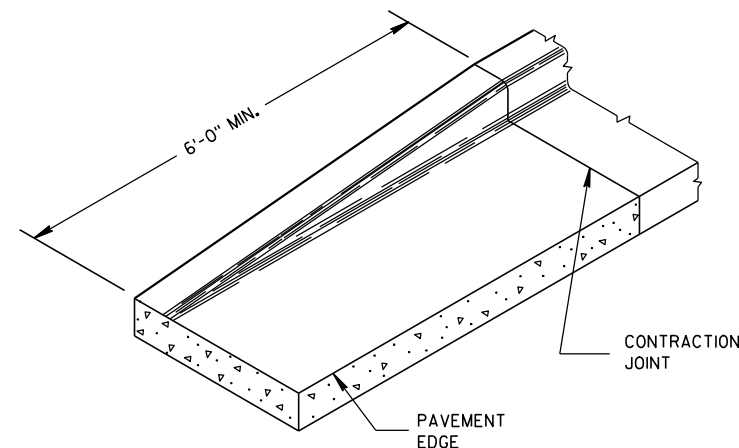
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

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

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

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER

END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

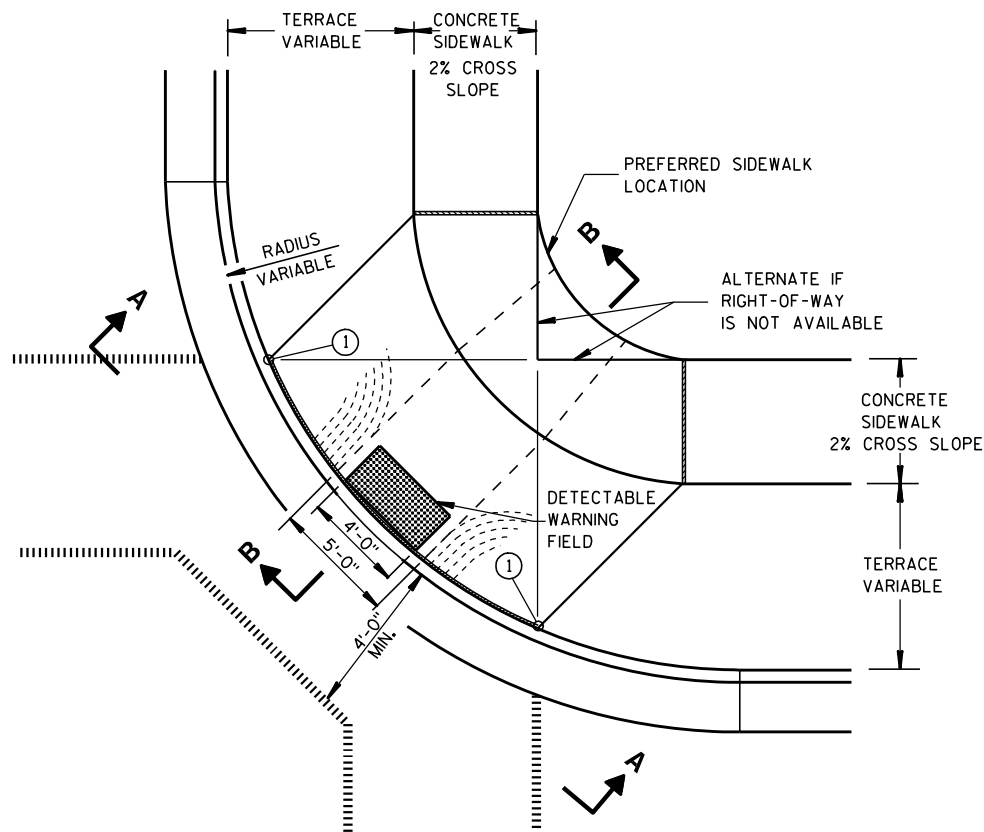
APPROVED

9/4/08

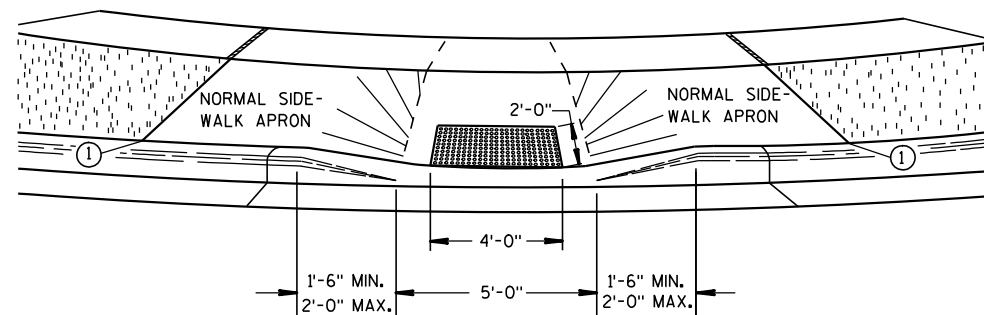
DATE

FHWA

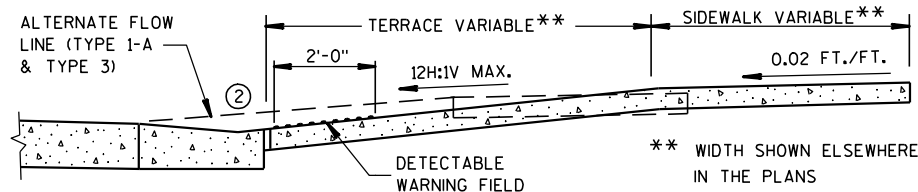
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



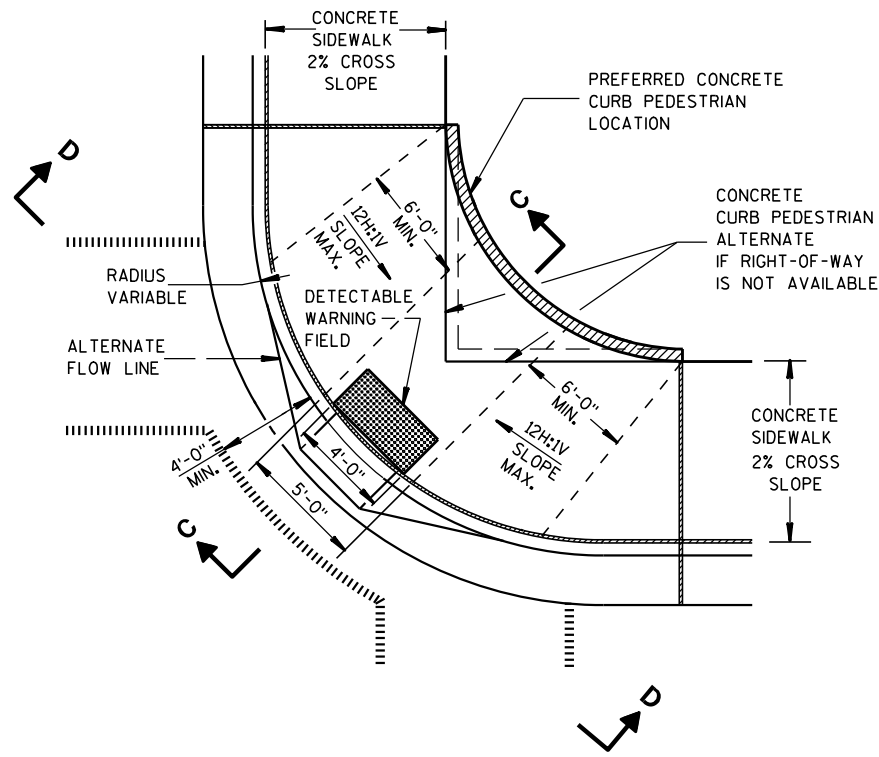
PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)



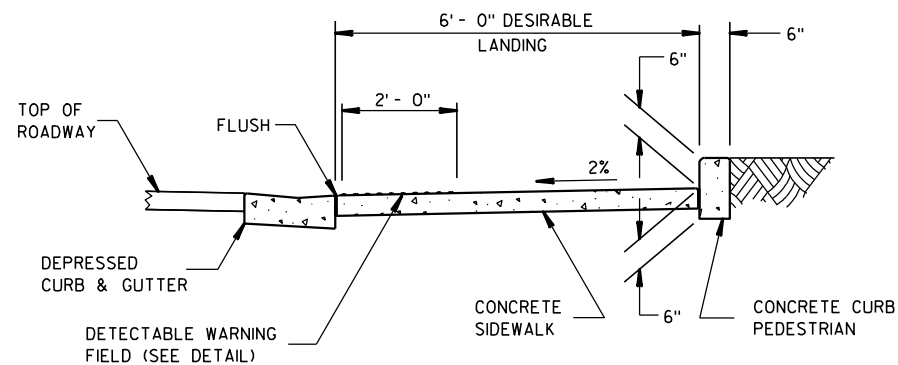
VIEW A-A



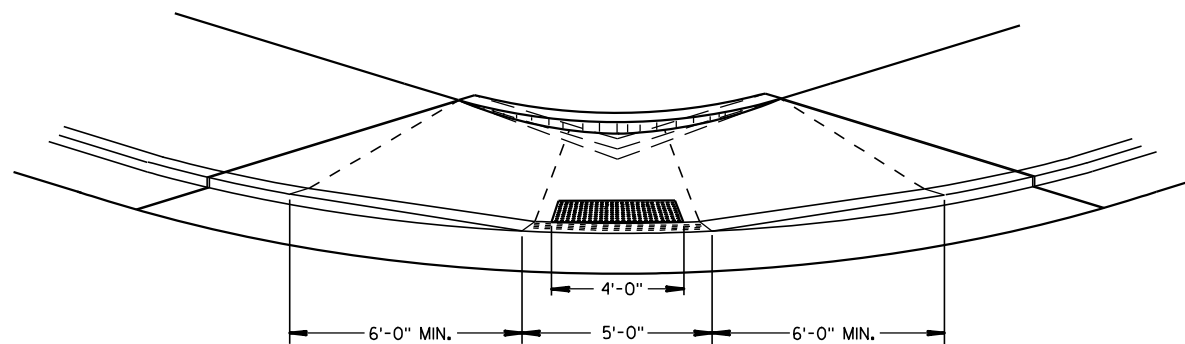
SECTION B-B



PLAN VIEW
TYPE 1-A RAMP
(NO TERRACE)



SECTION C-C



VIEW D-D

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.

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

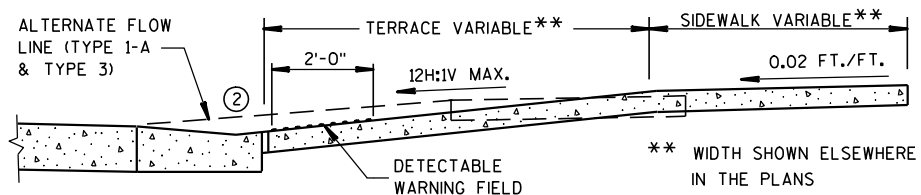
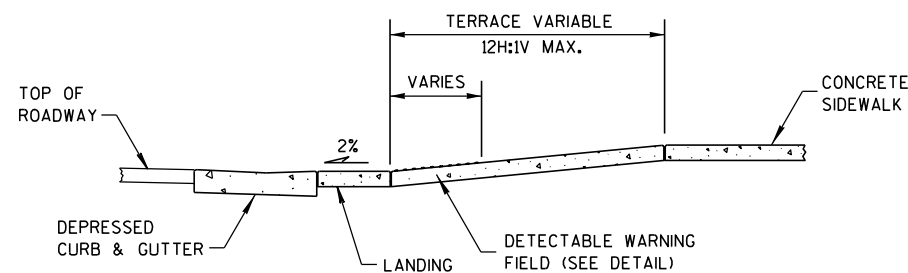
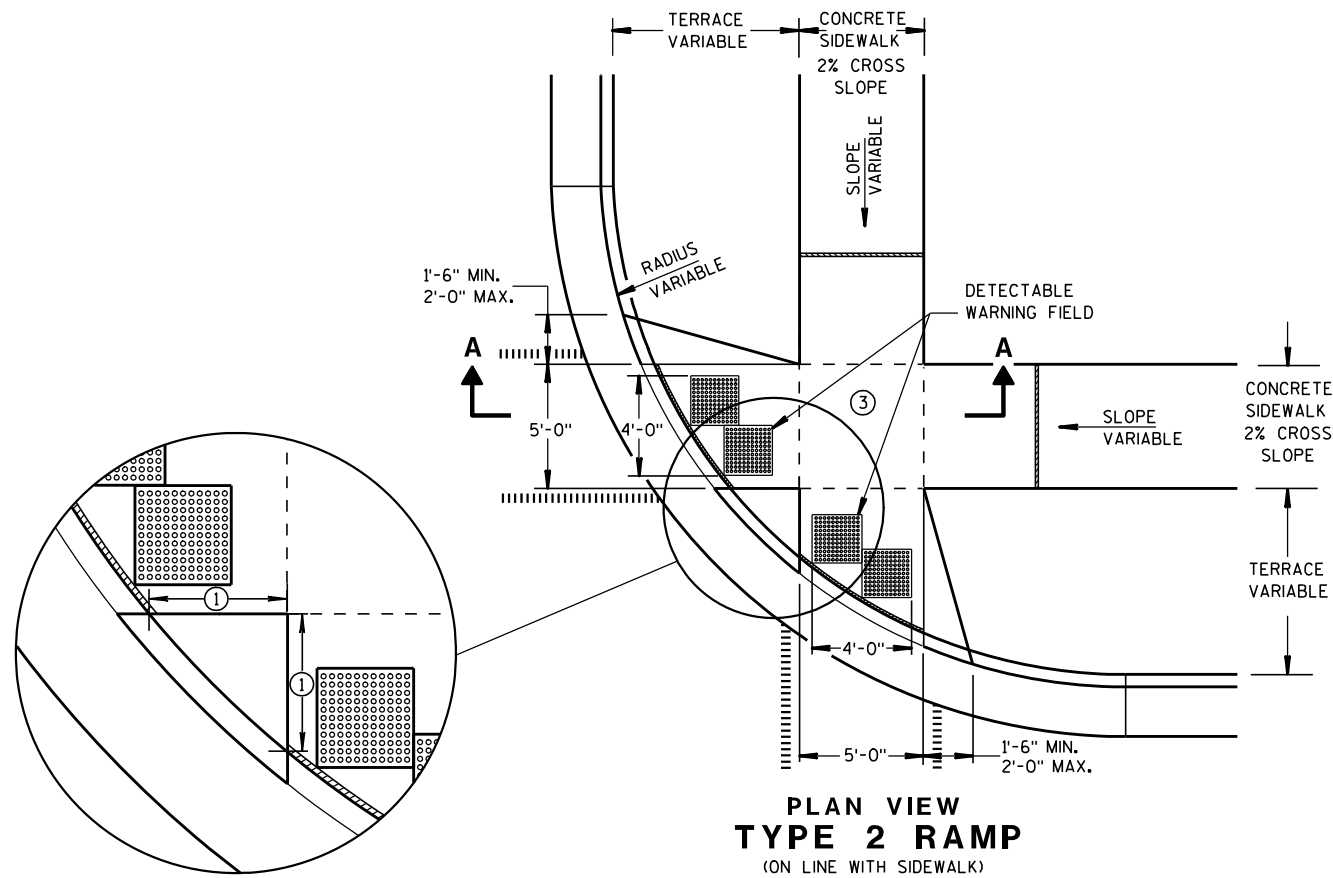
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS
TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



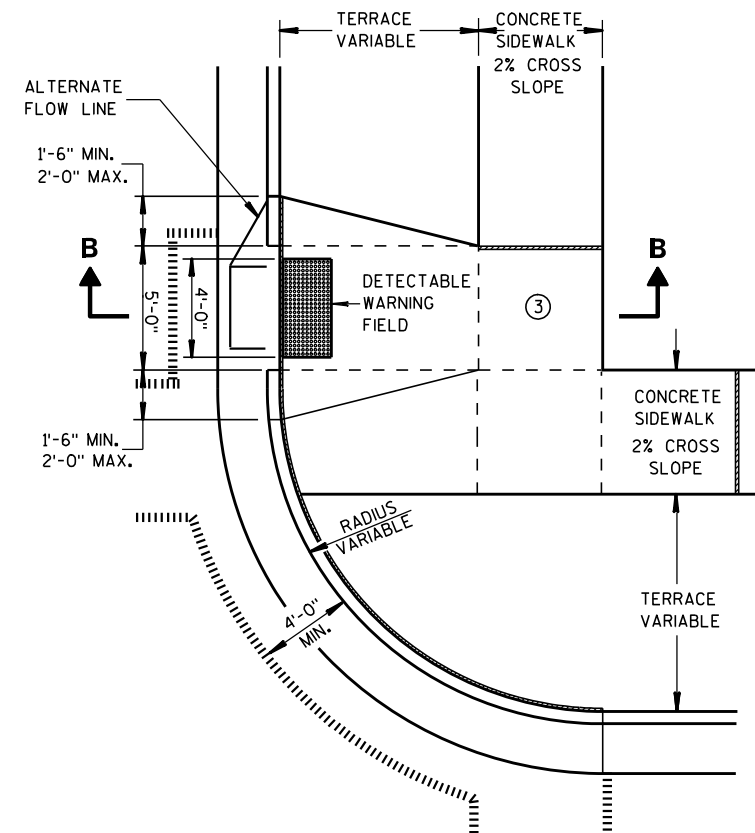
GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

- ① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP, REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③ PROVIDE LANDING AT TOP OF RAMP WITH NO MORE THAN 2% SLOPE IN ANY DIRECTION.

LEGEND

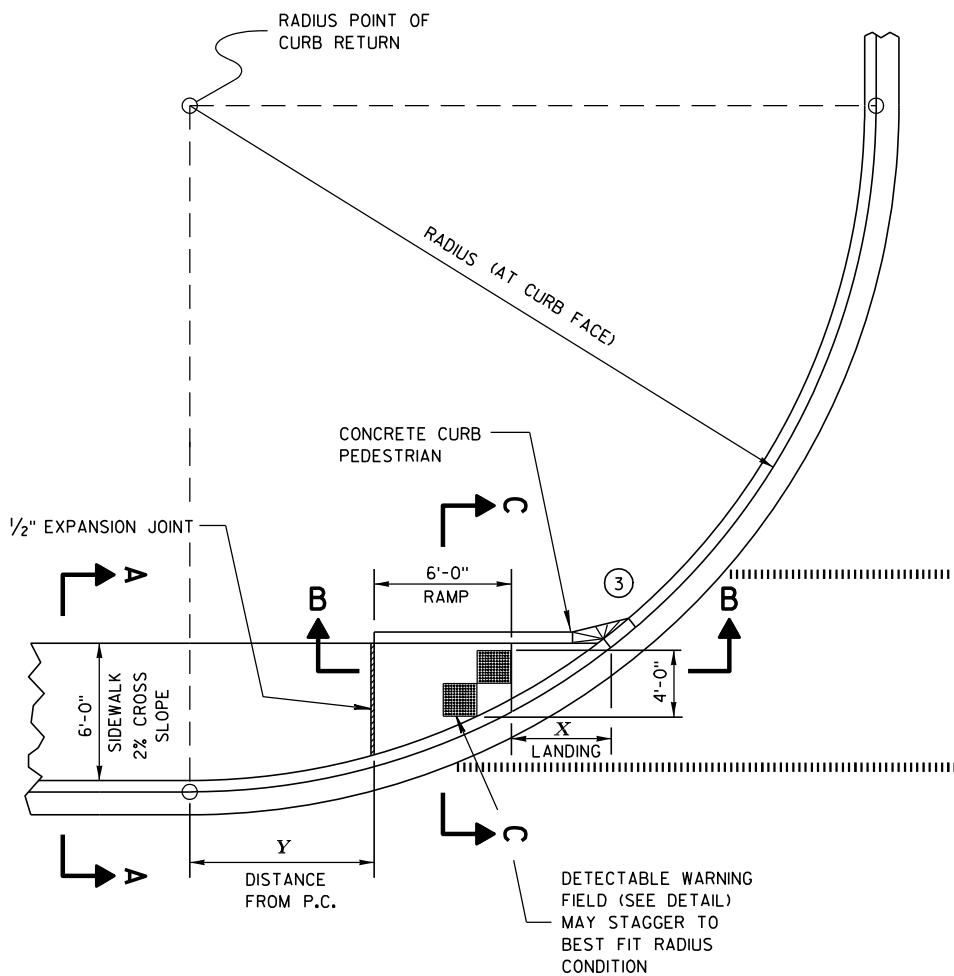
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



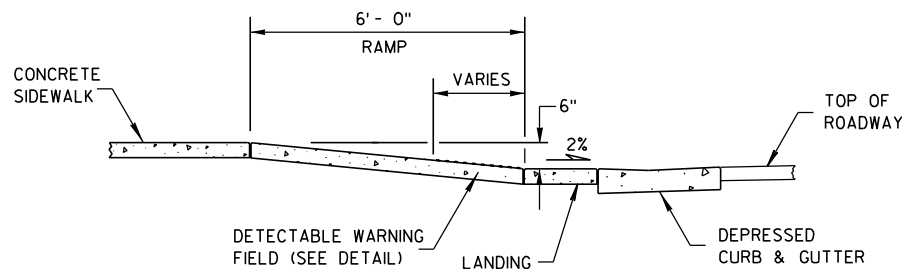
**PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)**

**CURB RAMPS
TYPES 2 AND 3**

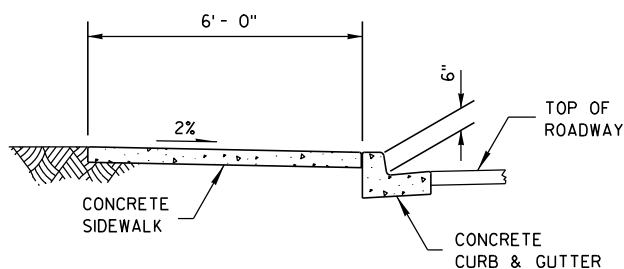
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



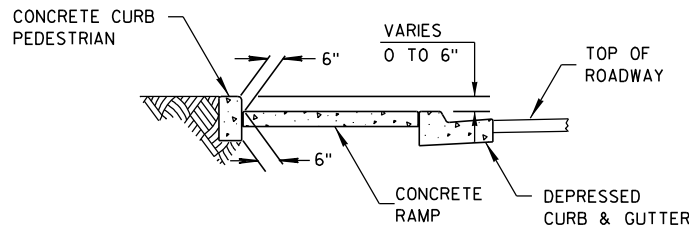
CURB RAMP TYPE 4A
PLAN VIEW



SECTION B-B



SECTION A-A



SECTION C-C

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1 ³ / ₄ "	2'-7 ¹ / ₄ "
30 FEET	7'-11 ³ / ₄ "	4'-8 ¹ / ₄ "
40 FEET	9'-5 ¹ / ₄ "	6'-5"
50 FEET	10'-8 ³ / ₄ "	7'-11 ¹ / ₄ "
60 FEET	11'-10 ¹ / ₄ "	9'-3 ¹ / ₂ "

INTERMEDIATE RADII CAN BE INTERPOLATED

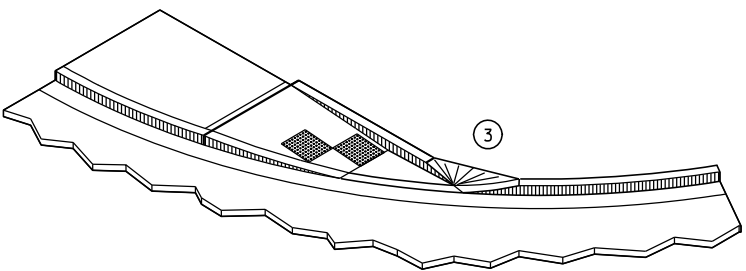
GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.)
DO NOT MARK TRANSITION NOSE.



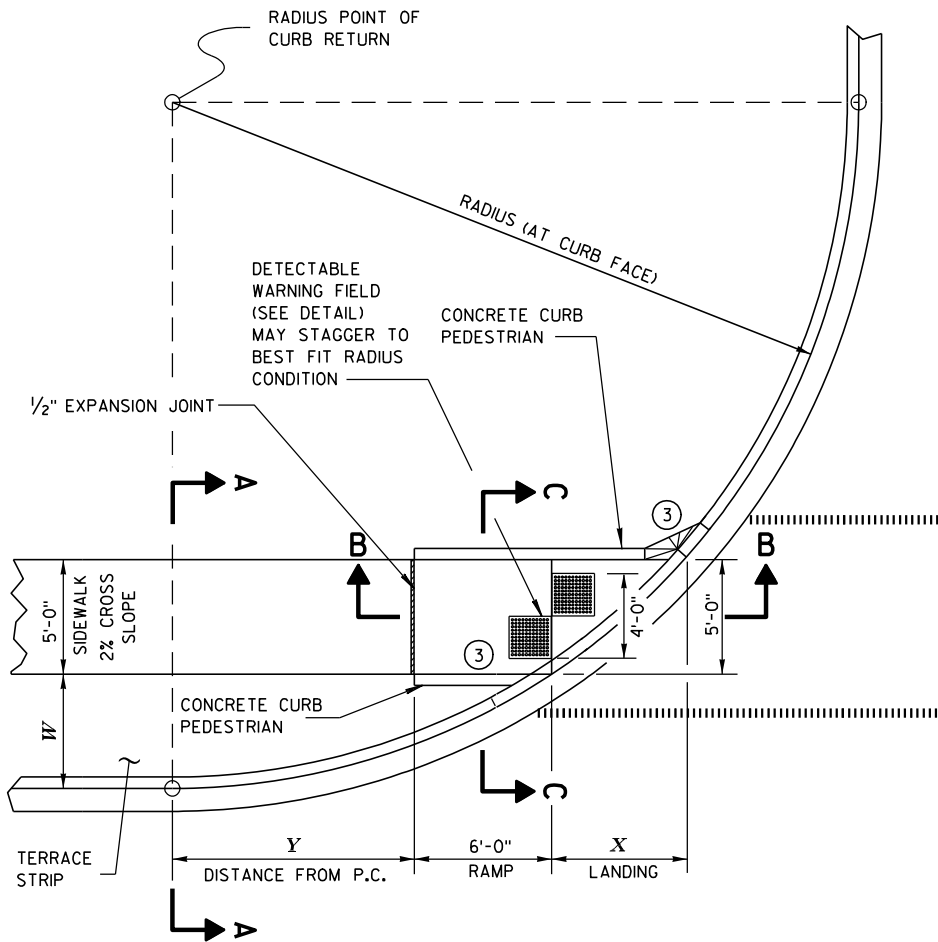
ISOMETRIC VIEW

LEGEND

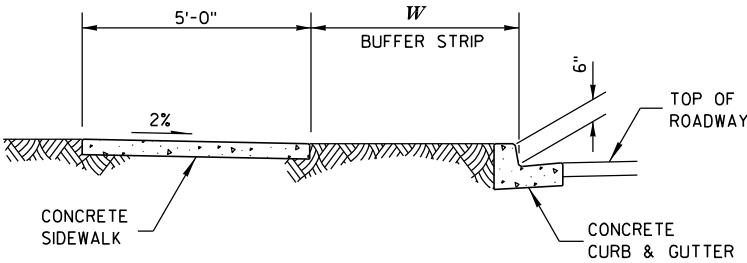
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 4A

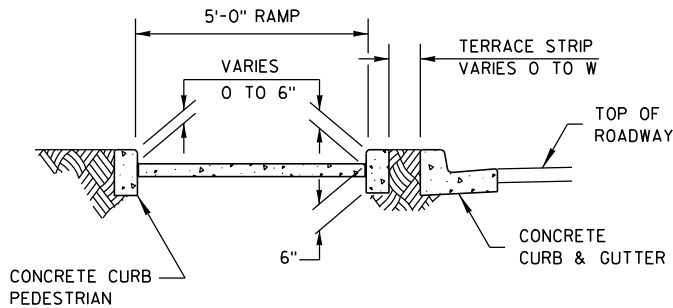
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



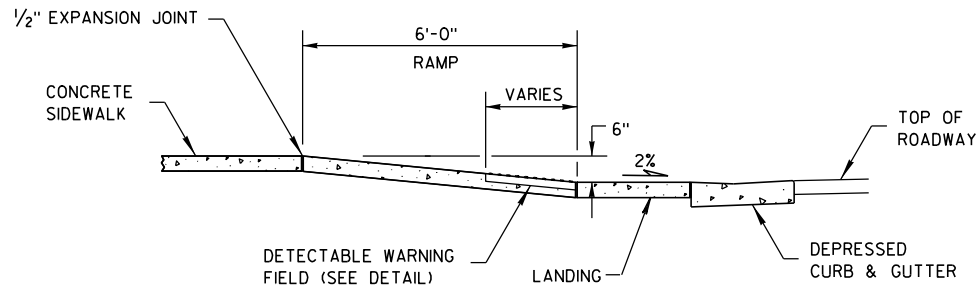
CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A



SECTION C-C



SECTION B-B

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

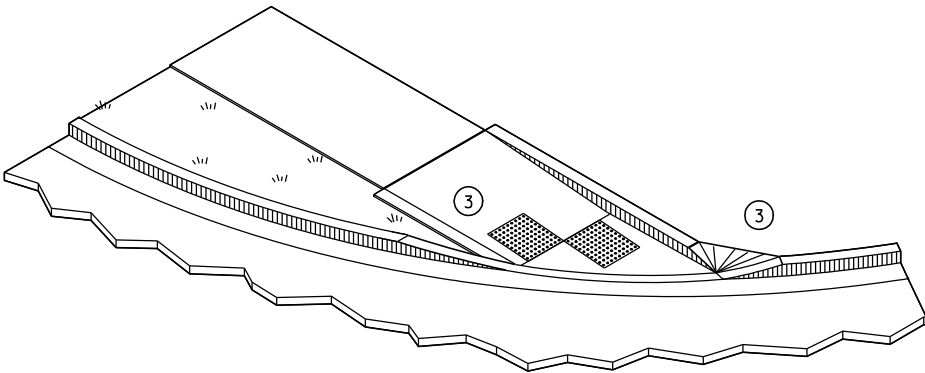
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.)
DO NOT MARK TRANSITION NOSE.

RADIUS (AT CURB FACE)	W = 3'- 0"		W = 4'- 0"		W = 5'- 0"		W = 6'- 0"		W = 7'- 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5 1/2"	4'-6 1/2"	4'-8 1/2"	6'-0"	4'-1"	7'-2 3/4"	3'-7"	8'-3 1/2"	3'-1 1/2"	9'-2 1/2"
30 FEET	7'-3 3/4"	7'-1"	6'-5 1/2"	8'-11 1/2"	5'-9 1/4"	10'-7"	5'-2 1/2"	12'-0"	4'-8 3/4"	13'-3 1/4"
40 FEET	8'-9 1/2"	9'-2 1/2"	7'-10"	11'-5 1/4"	7'-1"	13'-4 1/2"	6'-5 3/4"	15'-3 1/4"	5'-11 1/2"	16'-7 1/4"
50 FEET	10'-3 1/4"	11'-3 1/4"	9'-1 1/4"	13'-7 1/4"	8'-2 1/2"	15'-9 1/2"	7'-6 1/2"	17'-9"	6'-11 3/4"	19'-6 1/4"
60 FEET	11'-2 1/2"	12'-8 3/4"	10'-3 1/4"	15'-6 1/2"	9'-2 1/4"	17'-11 3/4"	8'-5 3/4"	20'-1 3/4"	7'-10 1/2"	22'-1 1/2"
70 FEET	12'-2 3/4"	14'-3 1/4"	11'-1 1/4"	17'-4"	10'-1"	19'-11 3/4"	9'-3 3/4"	22'-4 1/4"	8'-8 1/4"	24'-6 1/4"
80 FEET	13'-2"	15'-8 1/2"	11'-10 1/2"	18'-11 3/4"	10'-10 3/4"	21'-10"	10'-1"	24'-4 3/4"	9'-5"	26'-8 3/4"
90 FEET	14'-1 1/2"	17'-1 1/2"	12'-8 1/4"	20'-6 1/2"	11'-7 3/4"	23'-7"	10'-9 3/4"	26'-3 3/4"	10'-1 1/4"	28'-9 1/2"
100 FEET	14'-10 1/2"	18'-3 3/4"	13'-5 1/2"	22'-0"	12'-4 1/4"	25'-2 3/4"	11'-5 3/4"	28'-1 1/2"	10'-9"	30'-9"

INTERMEDIATE RADII CAN BE INTERPOLATED



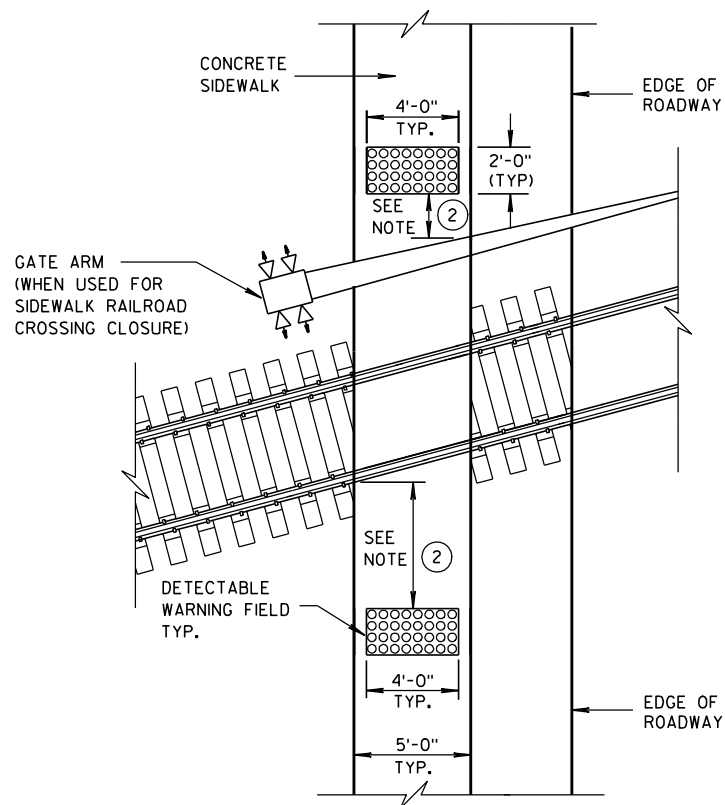
ISOMETRIC VIEW

LEGEND

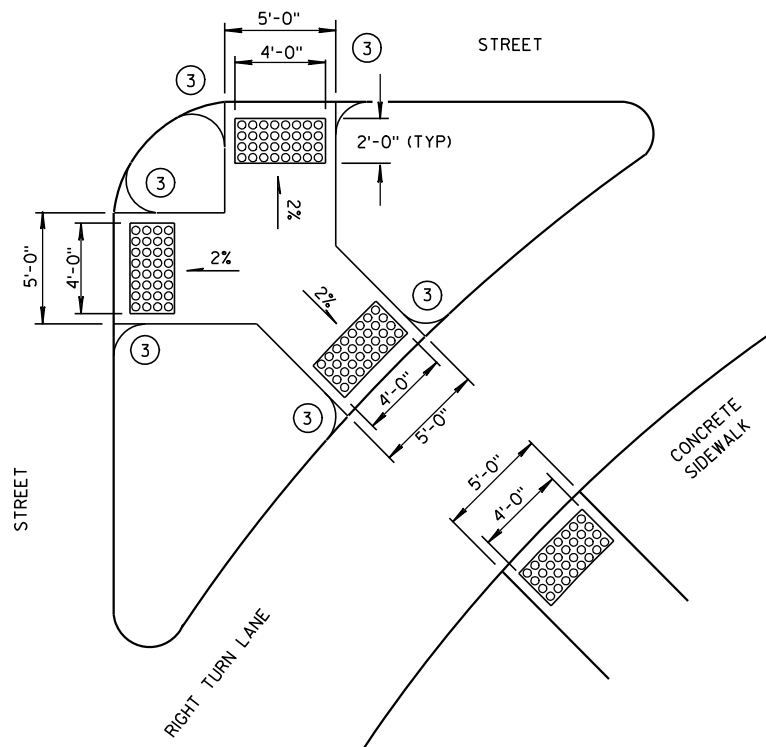
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 4B

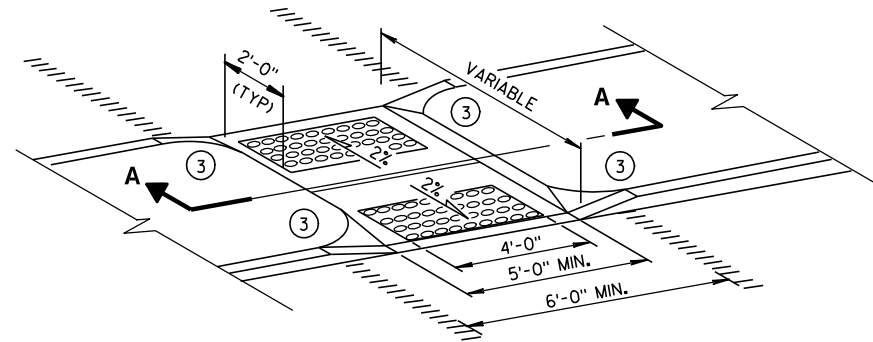
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



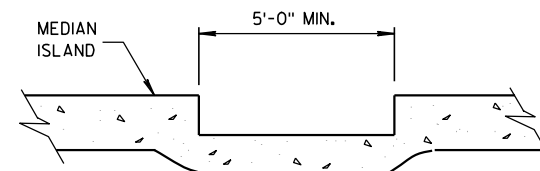
TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING



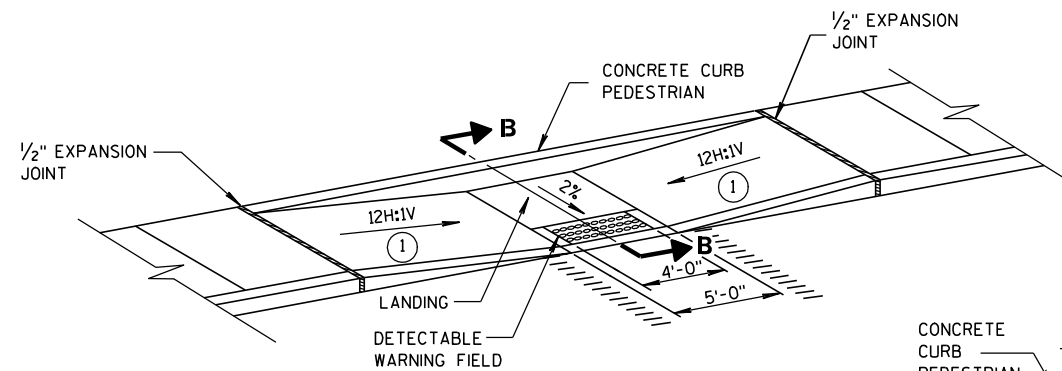
TYPE 6
DETECTABLE WARNING AT ISLANDS



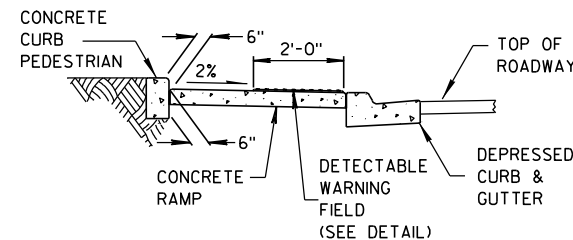
MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



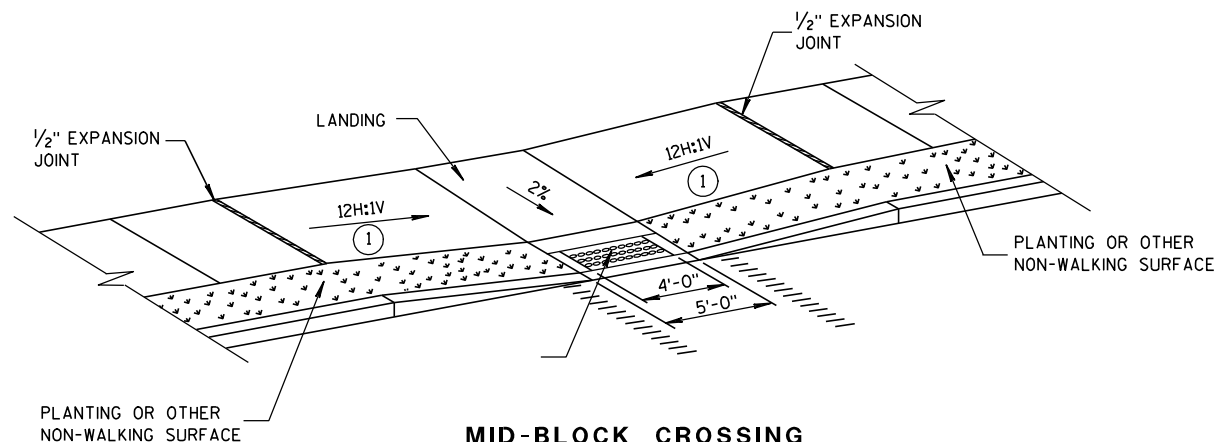
SECTION A-A



MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS
MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

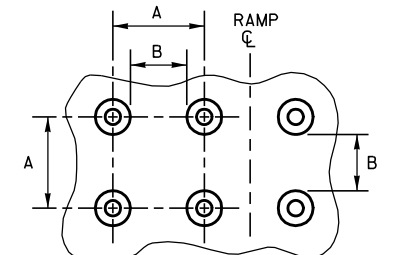
GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- 1 SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- 2 THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET $\pm$ 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- 3 INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

LEGEND

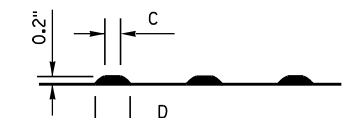
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



PLAN VIEW

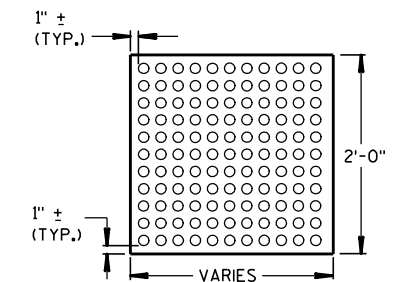
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING
PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING
FIELD (TYPICAL)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

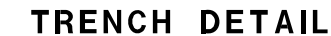
2-9-10
DATE

FHWA

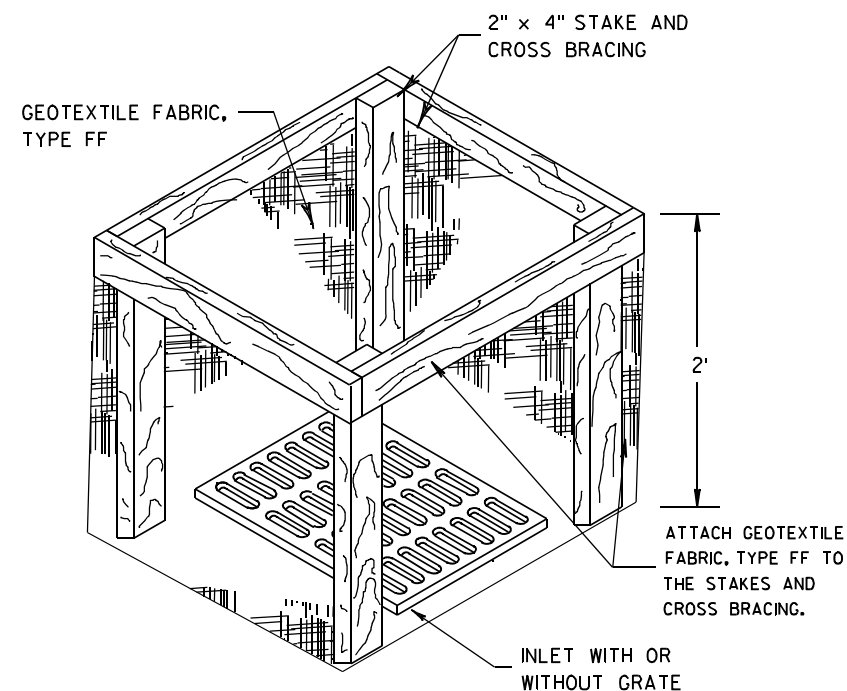
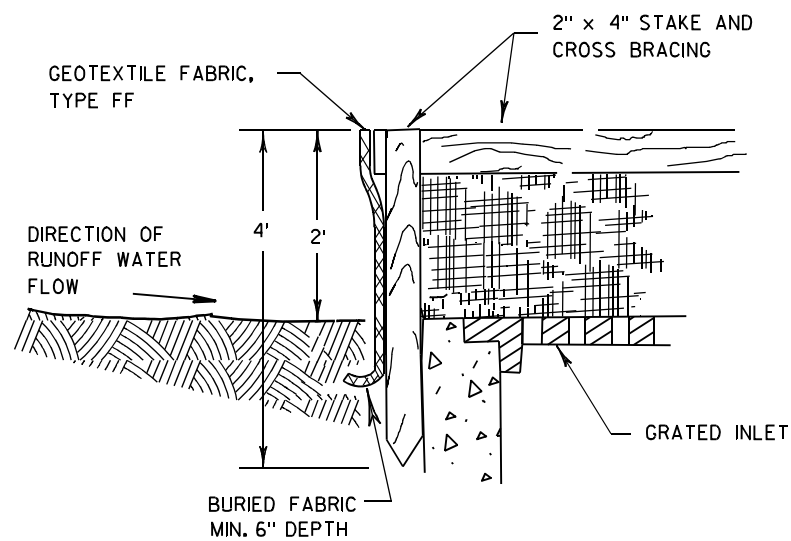
/s/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1½" X 1½" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 DATE	/S/ <u>Beth Cannestra</u> CHIEF ROADWAY DEVELOPMENT ENGINEER



INLET PROTECTION, TYPE A

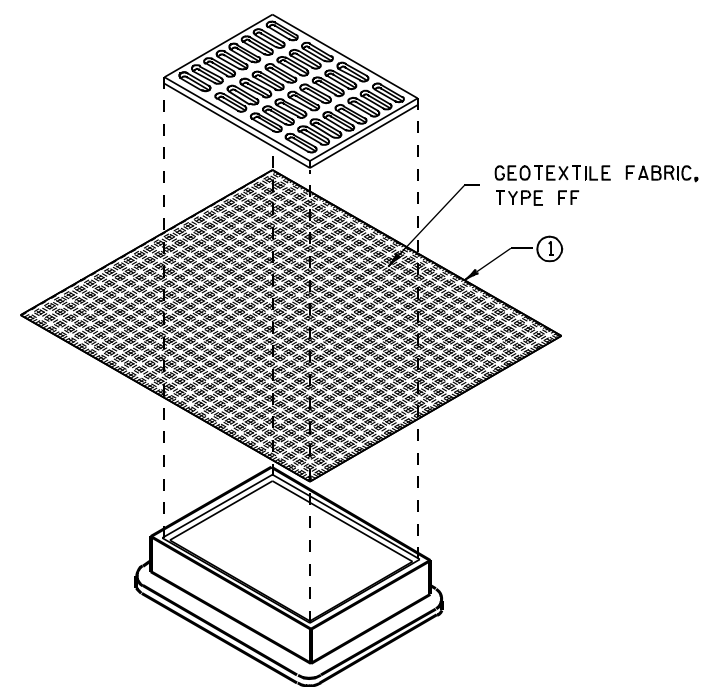
GENERAL NOTES

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

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

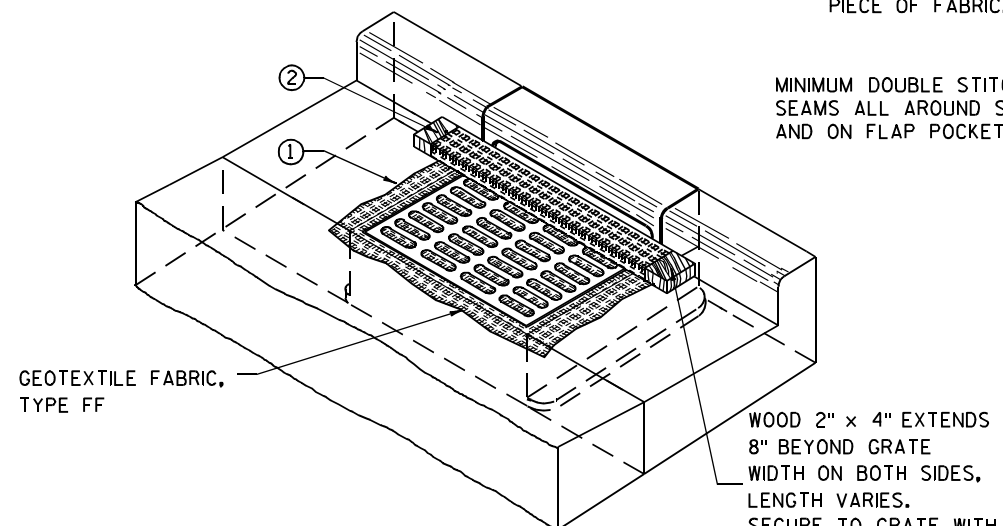
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- ① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- ③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

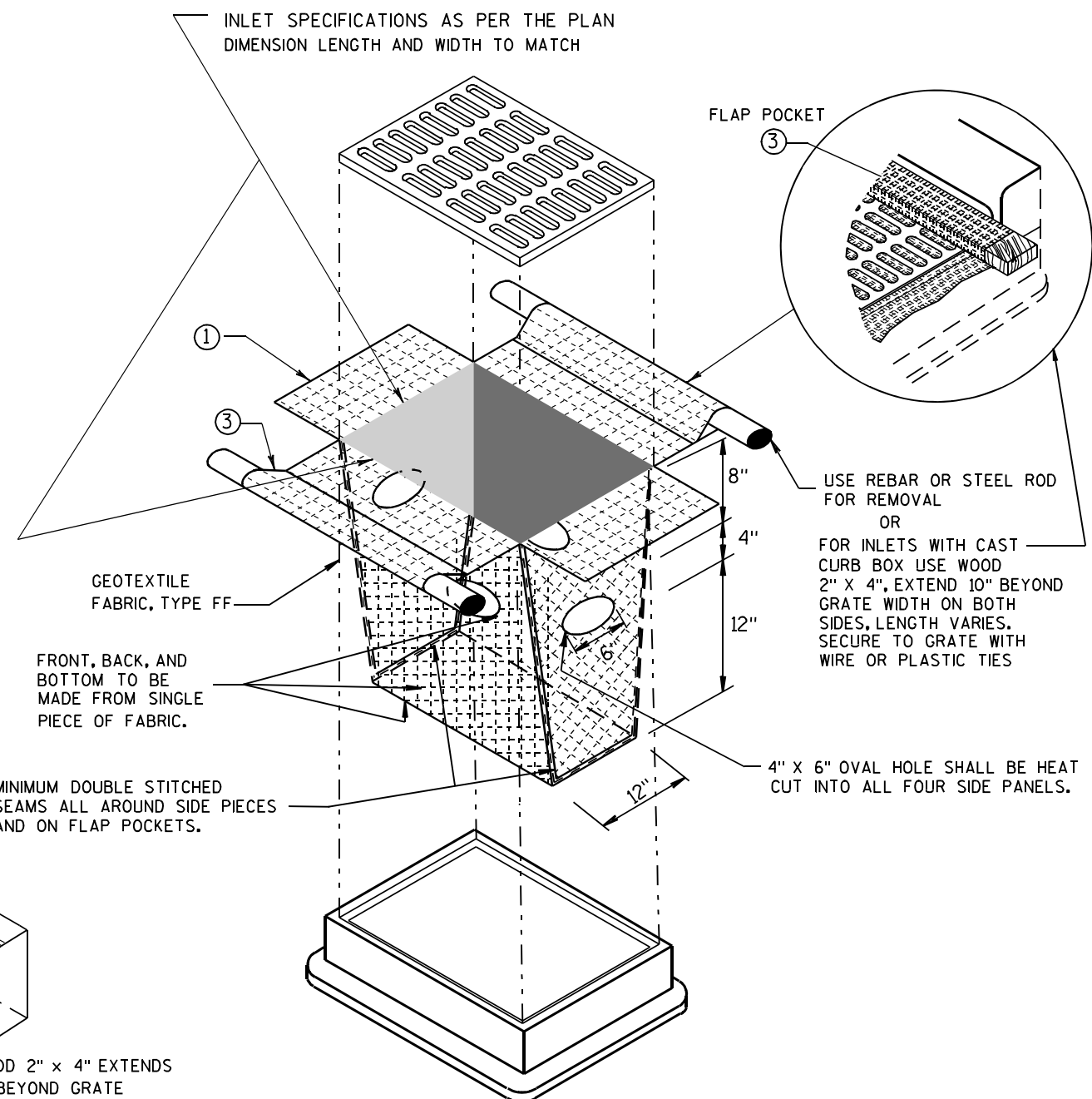
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

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

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

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



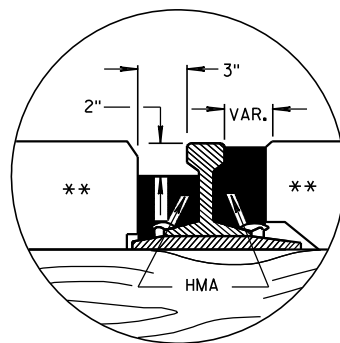
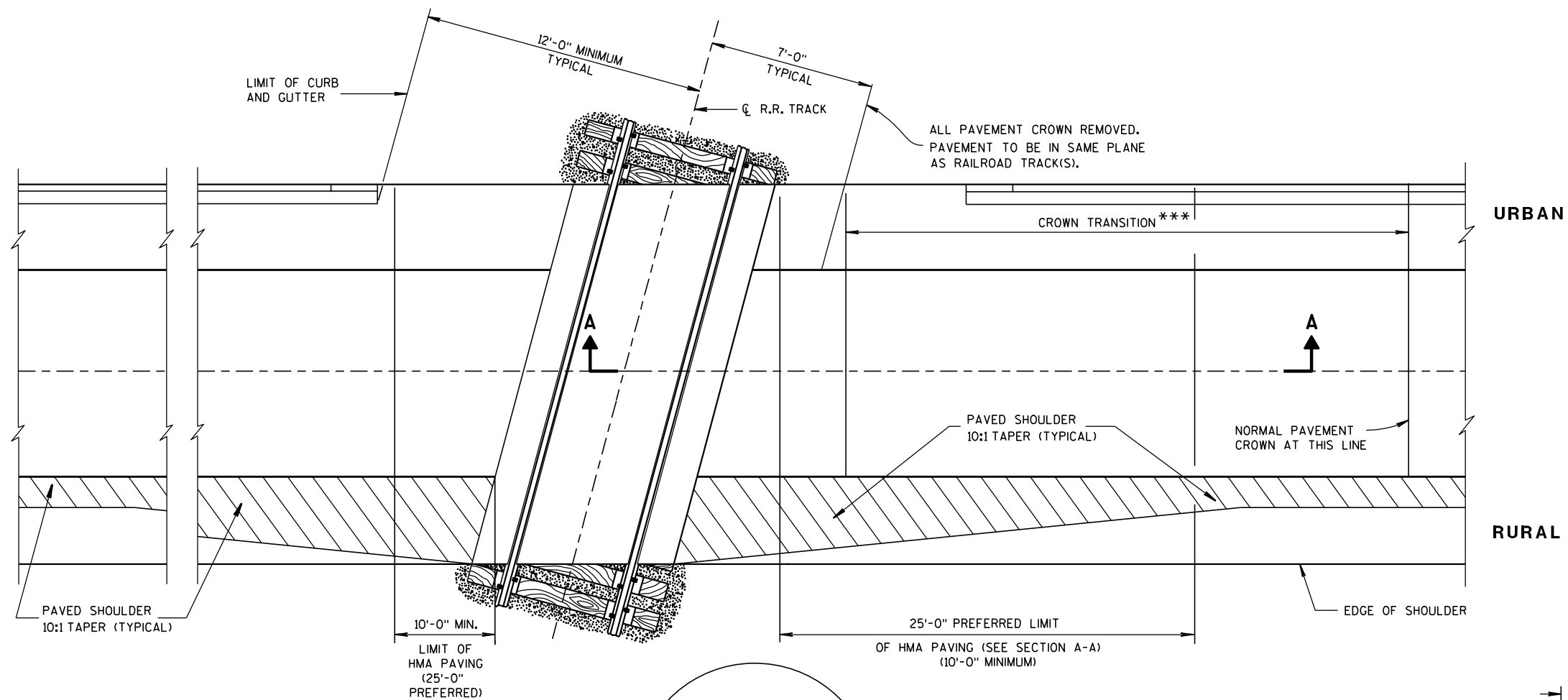
INLET PROTECTION, TYPE D

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

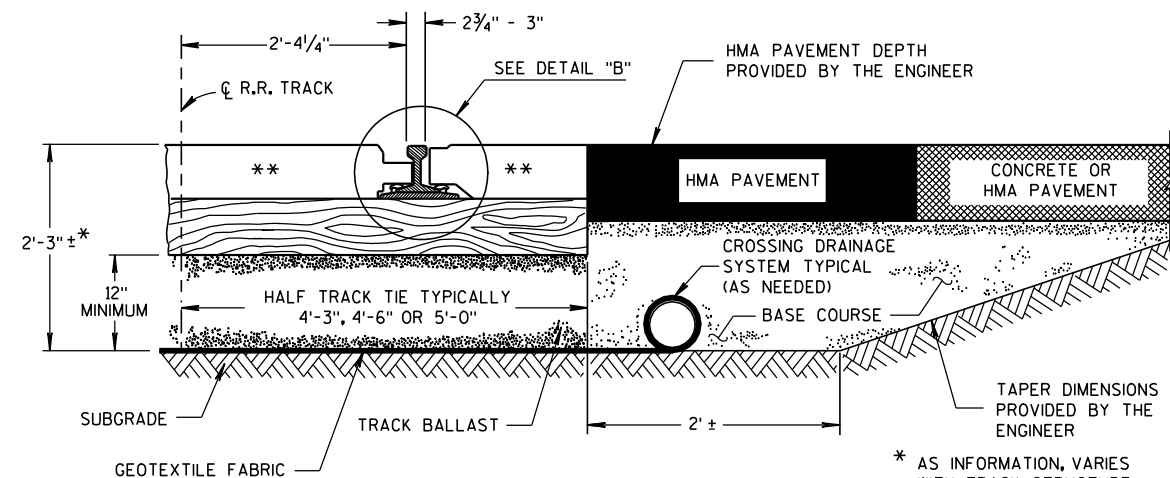
**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Cannestra
DATE
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER

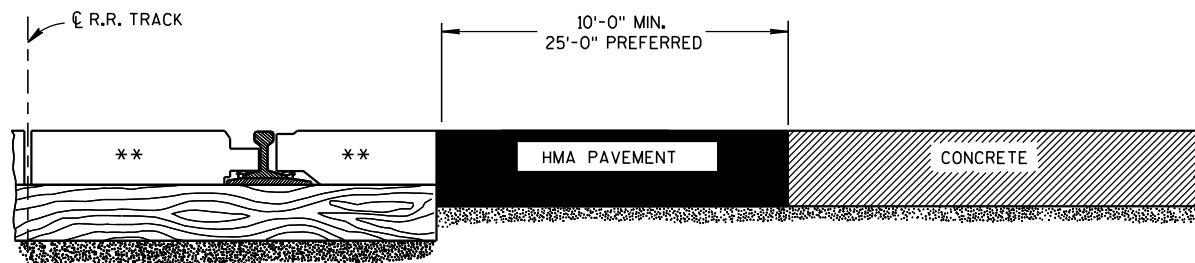


DETAIL B
HMA FLANGEWAY
AND FIELD FILLERS



TYPICAL HALF SECTION

* AS INFORMATION, VARIES WITH TRACK STRUCTURE AND SOIL CONDITIONS



SECTION A-A
CONCRETE PAVEMENT APPROACH



SECTION A-A
HMA PAVEMENT APPROACH

EXAMPLES OF PAVEMENT APPROACHES

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.

TIMBER, CONCRETE OR RUBBER CROSSING SURFACE MATERIAL, RAILS, TIES, BALLAST, GEOTEXTILE FABRIC AND CROSSING DRAINAGE SYSTEM BY OTHERS UNLESS OTHERWISE PROVIDED.

HMA PAVEMENT APPROACHES AND HMA PAVEMENT CROSSING SURFACES TO BE PLACED BY CONTRACTOR UNLESS OTHERWISE PROVIDED.

HMA FLANGEWAY AND FIELD FILLERS TO BE PLACED AND THOROUGHLY HAND COMPACTED BY THE CONTRACTOR WHEN NOT PROVIDED BY OTHERS. SEE DETAIL B. HMA FILLERS NOT REQUIRED WHEN RUBBER FILLERS ARE PROVIDED.

HMA PAVEMENT SHALL BE ROLLED PARALLEL TO THE TRACK.

** CROSSING SURFACE MAY BE TIMBER, RUBBER, CONCRETE, HMA PAVEMENT OR A COMBINATION OF SUCH MATERIALS.

*** CROWN TRANSITION LENGTH SHOWN ELSEWHERE IN THE PLAN.

PAVEMENT DETAILS FOR RAILROAD APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

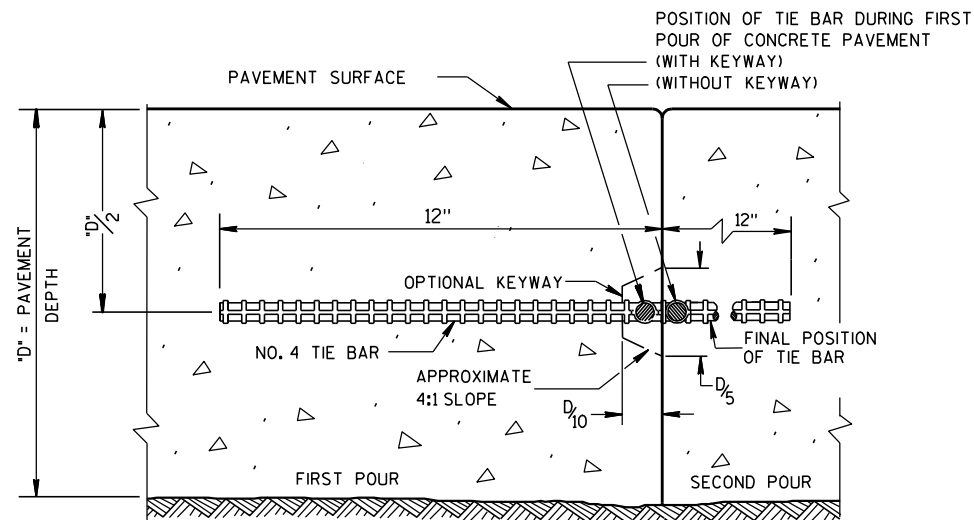
8-28-09

DATE

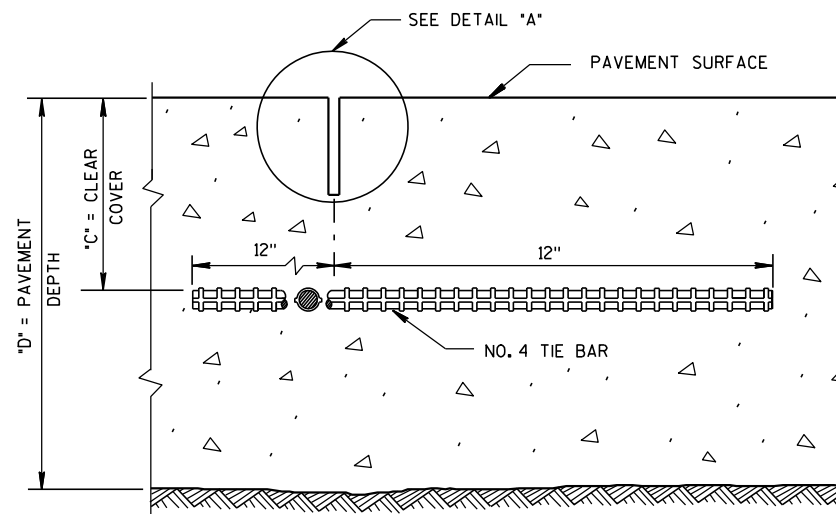
FHWA

/S/ Ronald E. Adams

CHIEF, RAILROADS & HARBORS SECTION



CONSTRUCTION JOINT



SAWED JOINT

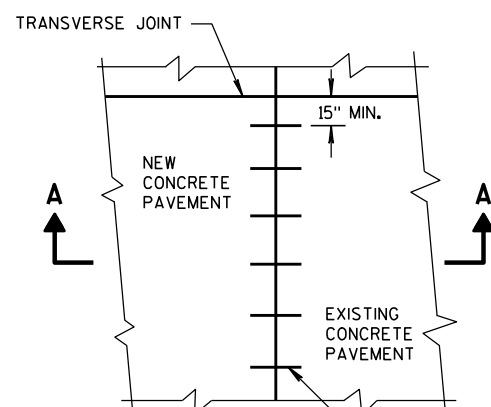
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

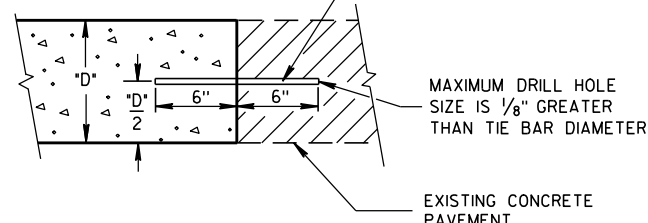
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

① ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

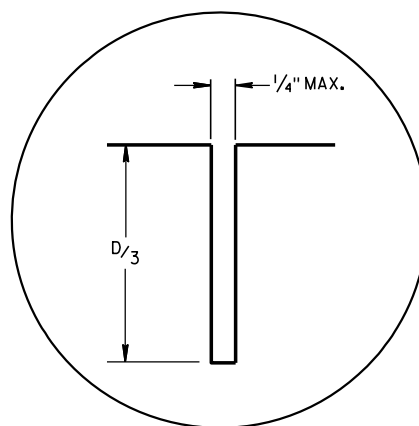


PLAN VIEW

NO. 6 TIE BARS SPACED 2'-6" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT. ①

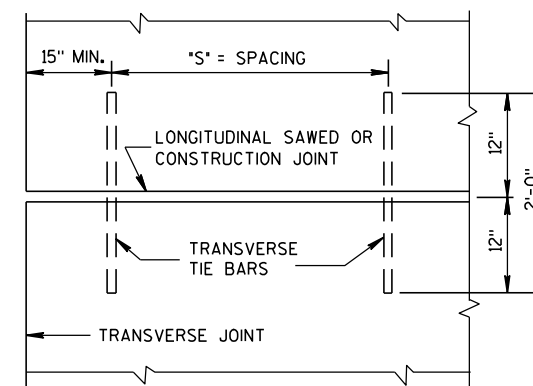


**SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT**



DETAIL "A"

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING "S"	
		PAVEMENT WIDTH 24' OR 26'	≥ 30'
6, 6 1/2"	3" ± 1/2"	48"	42"
7, 7 1/2"	3 1/4" ± 1"	45"	36"
8, 8 1/2"	3 3/4" ± 1"	39"	30"
9, 9 1/2"	4 1/4" ± 1"	33"	27"
10, 10 1/2"	4 3/4" ± 1"	30"	24"
11, 11 1/2"	5 1/4" ± 1"	27"	21"
12"	5 3/4" ± 1"	24"	21"



**PLAN VIEW
SHOWING LOCATION OF TIE BARS**

**CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES**

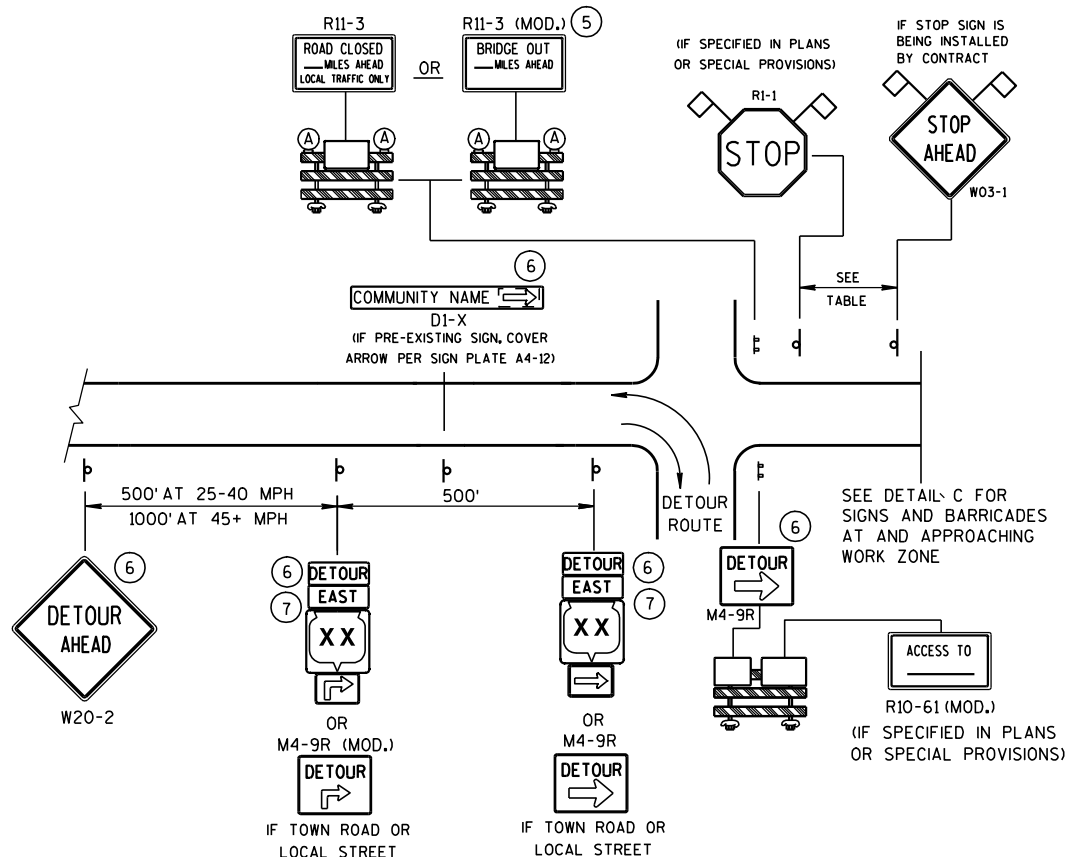
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10-5-2010
DATE

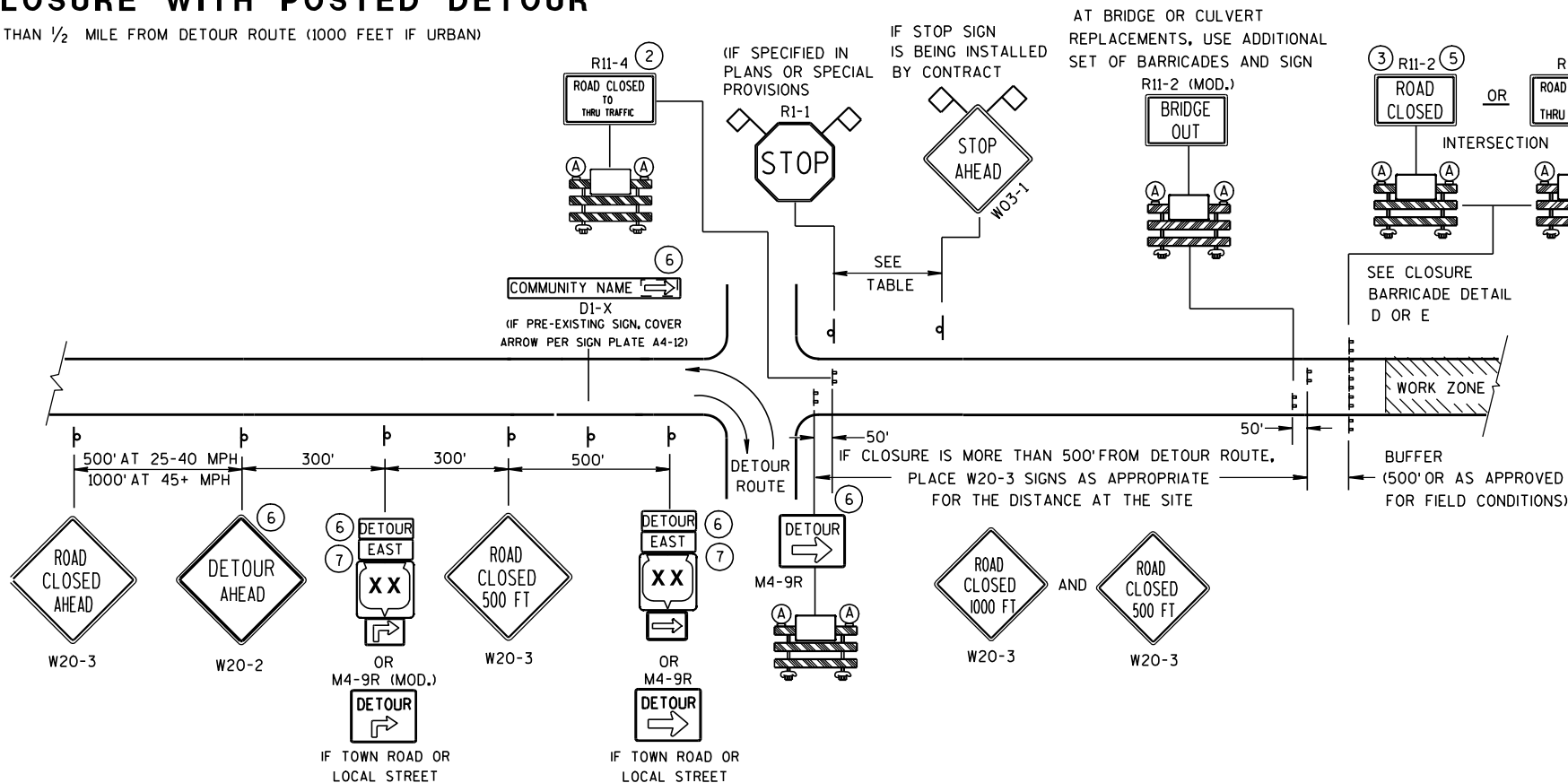
FHWA

/S/ Deb Bischoff
PAVEMENT POLICY & DESIGN ENGINEER



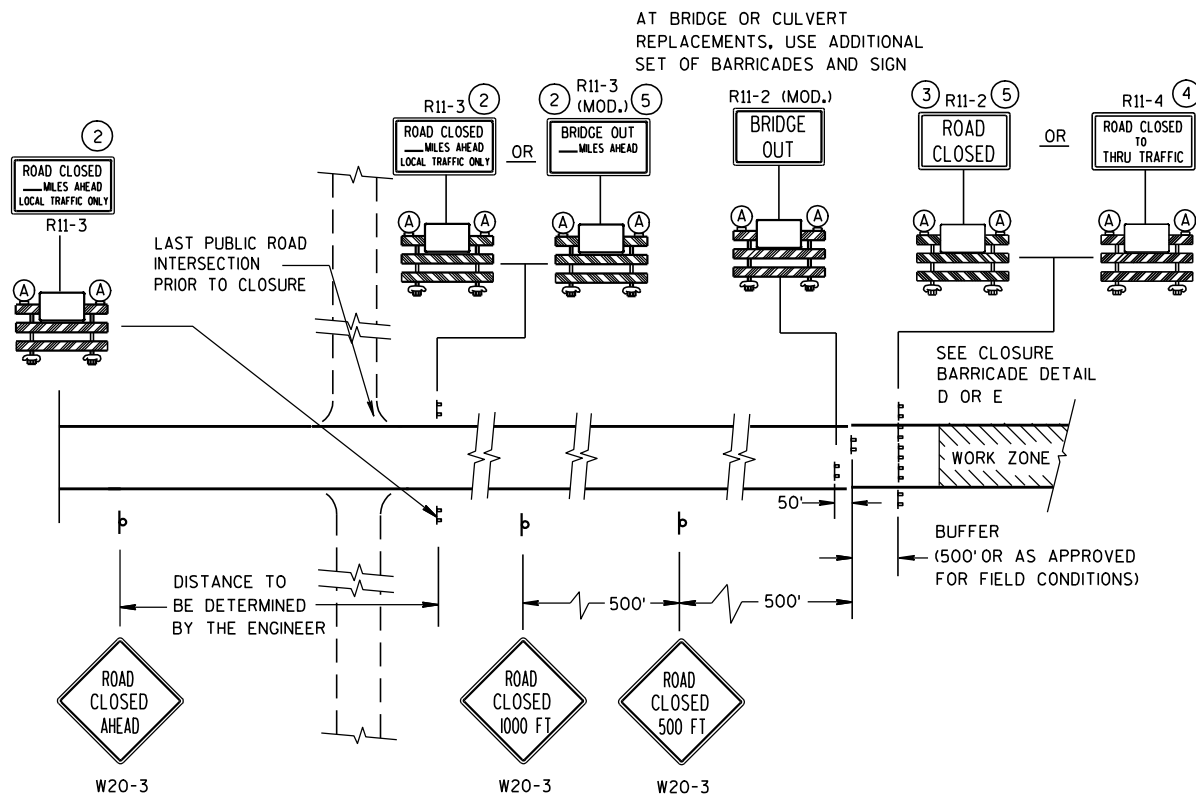
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

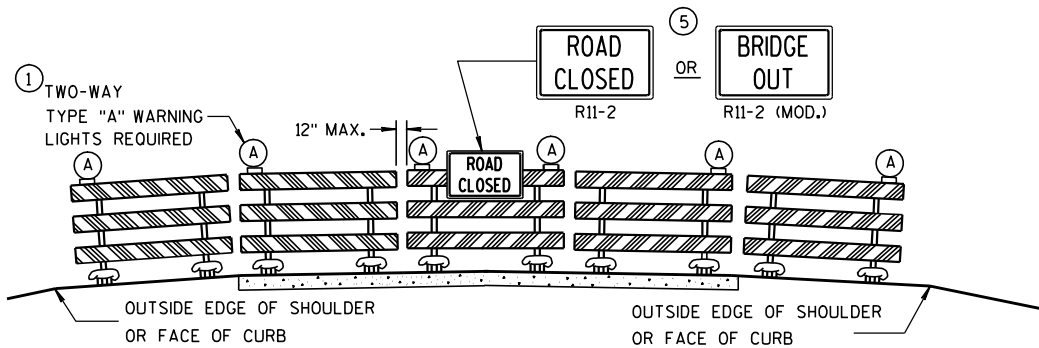
SEE SDD 15C2-4b
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

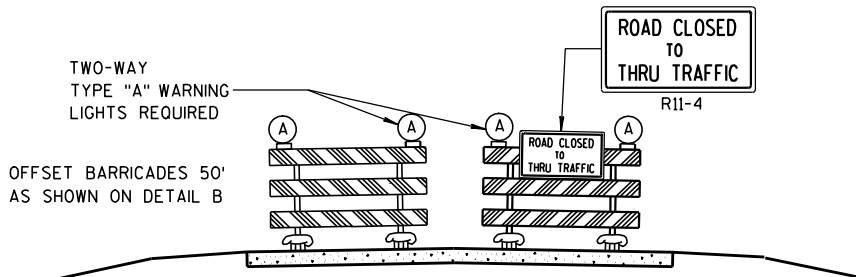
- POST MOUNTED SIGN
- TYPE III BARRICADES
- TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK ZONE
- DETOUR EAST M4-8 M3-X
- MI-4 OR MI-5A OR MI-6
- MO5-1 OR MO6-1
- FLAGS, 16" X 16" MIN., (ORANGE)

**BARRICADES AND SIGNS
FOR
MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-4a FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

THE REFLECTIVE SHEETING USED ON R11-2, R11-3, R11-4, R10-61 AND R1-1 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

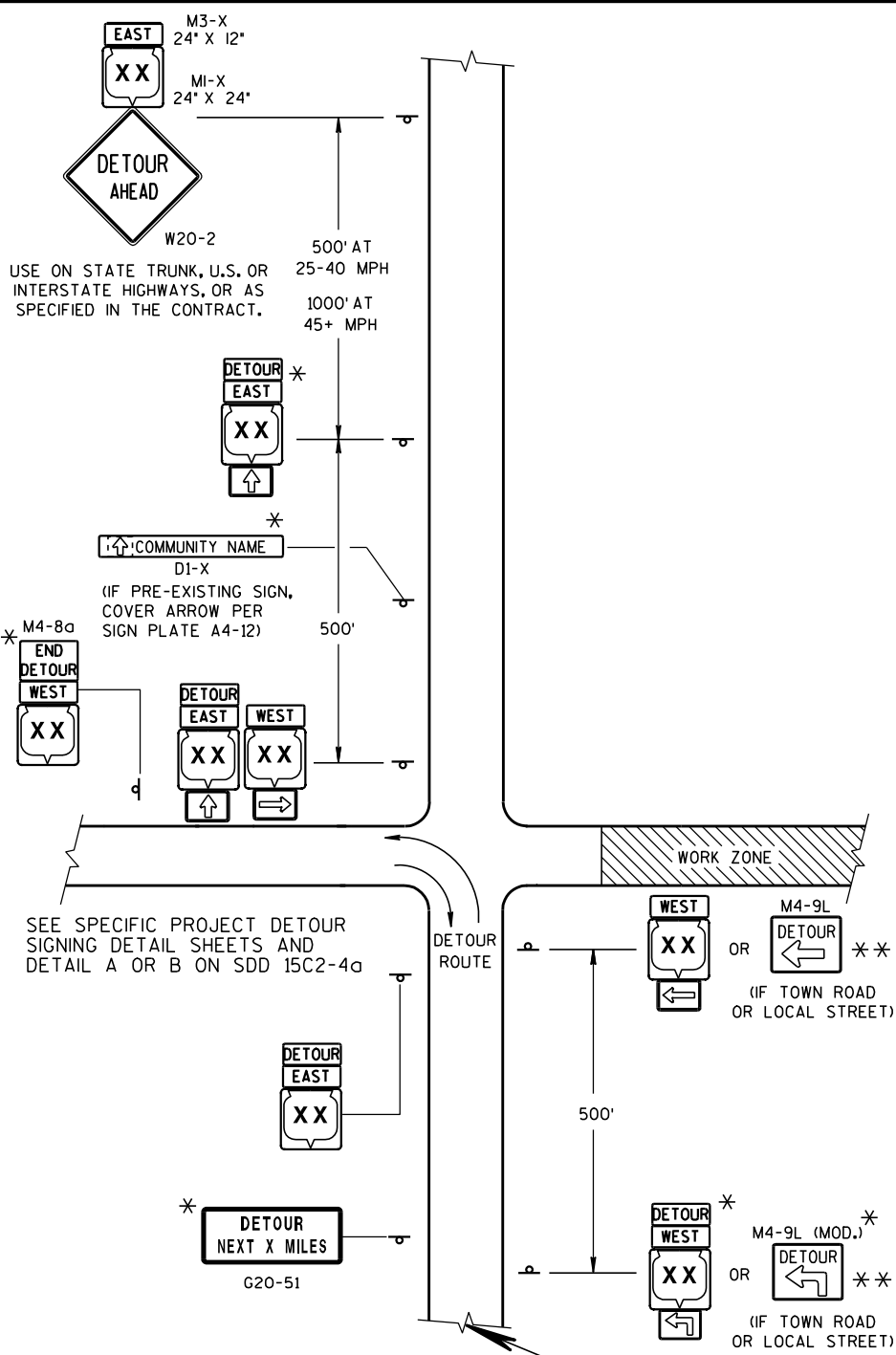
"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
9/16/03 DATE	/S/ Thomas N. Notbohm CHIEF SIGNS AND MARKING ENGINEER
FHWA	



LEGEND

POST MOUNTED SIGN

WORK ZONE

DETOUR EAST M4-8 M3-X

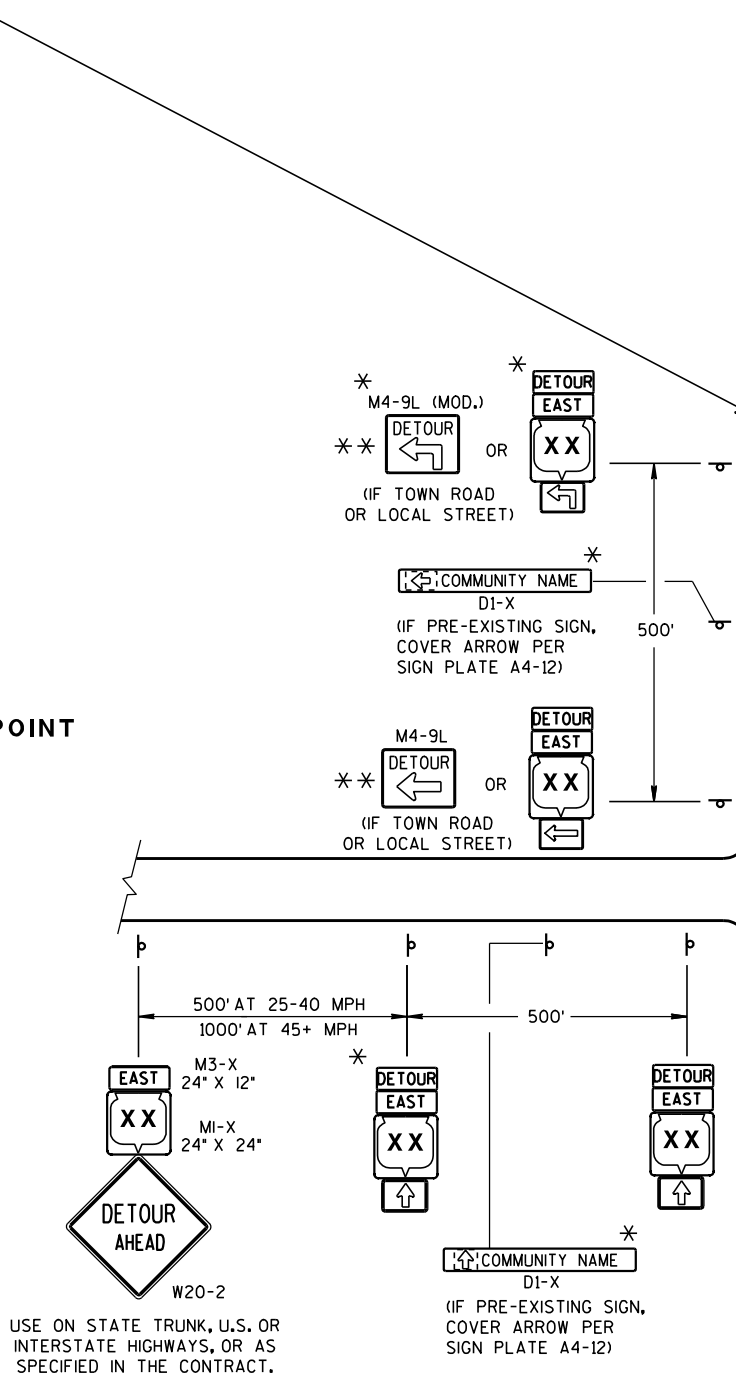
M1-4 OR COUNTY M1-5A OR M1-6

M05-1 OR M06-1 OR M06-1

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

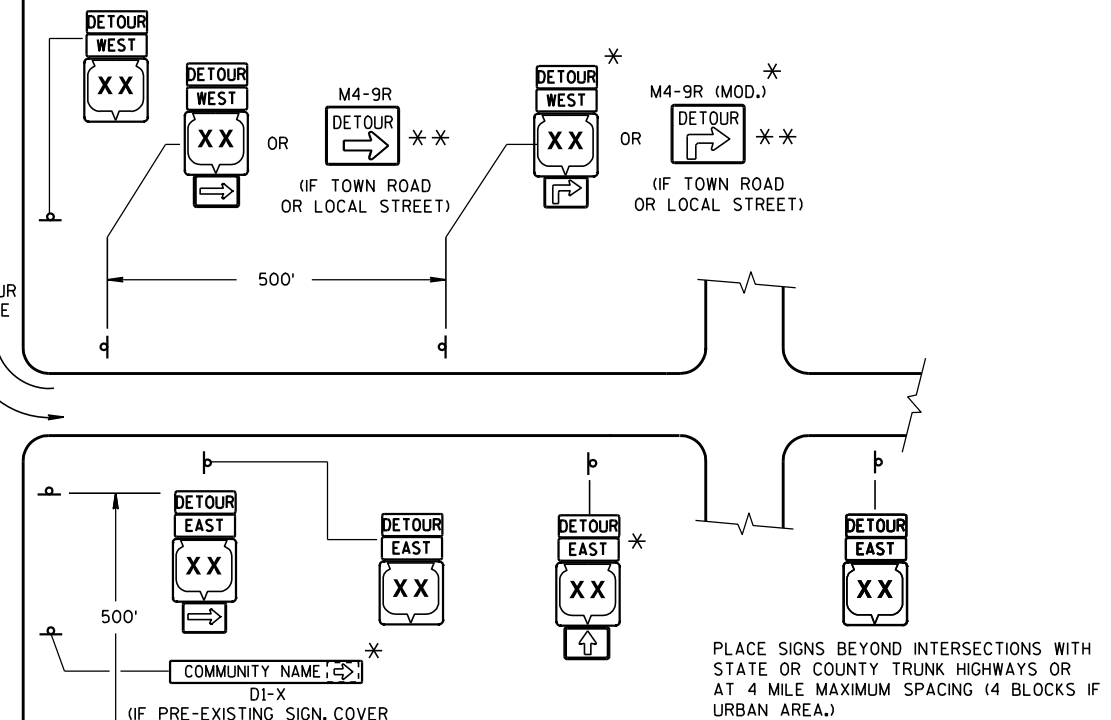
MATCH POINT

DETAIL F
DETOUR SIGNING



GENERAL NOTES

- THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.
- THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.
- 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.
- SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- SIGN SIZES SHALL BE AS FOLLOWS:
- M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
 - M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
 - M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
 - M4-9 SHALL BE 30" X 24".
 - M4-8a SHALL BE 24" X 18".
 - G20-51 SHALL BE 60" X 24".
 - W20-2 SHALL BE 48" X 48".
 - D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- * OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.
- ** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

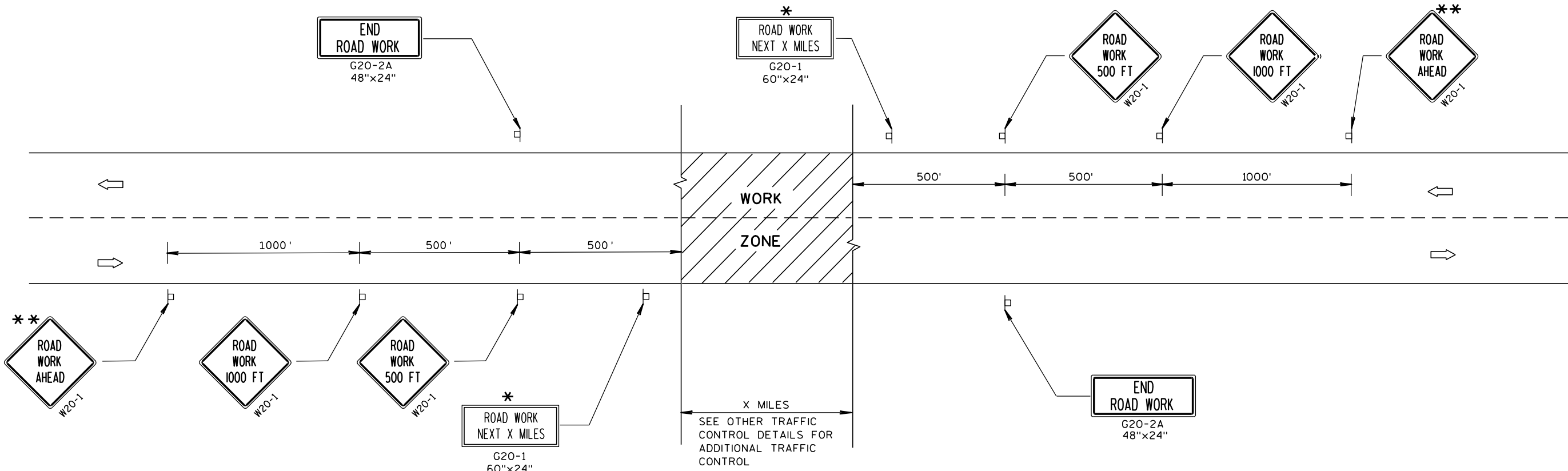
APPROVED
9-16-03 /S/ Thomas N. Notbohm
DATE CHIEF SIGNS AND MARKING ENGINEER
FHWA



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

 WORK AREA

S.D.D. 15 C 3-1



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

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

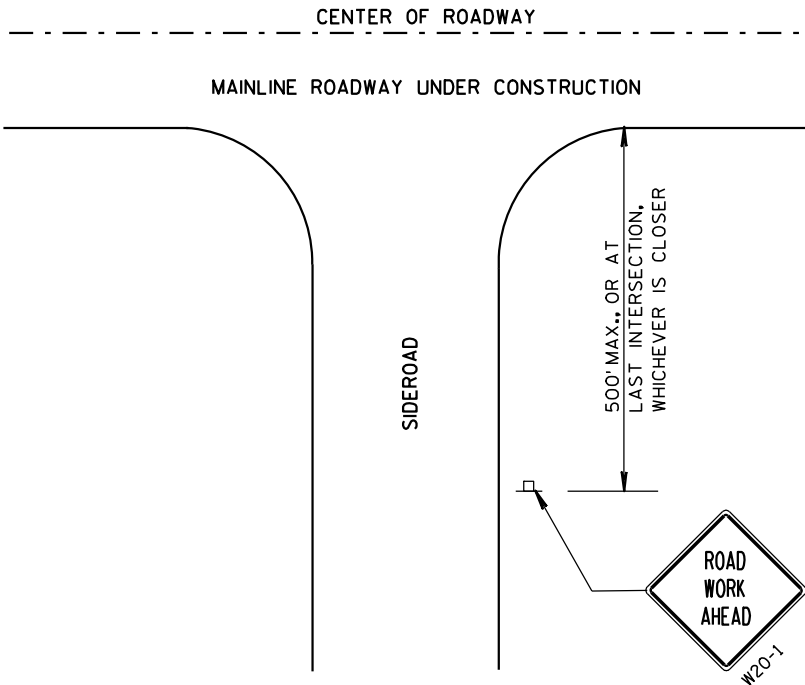
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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



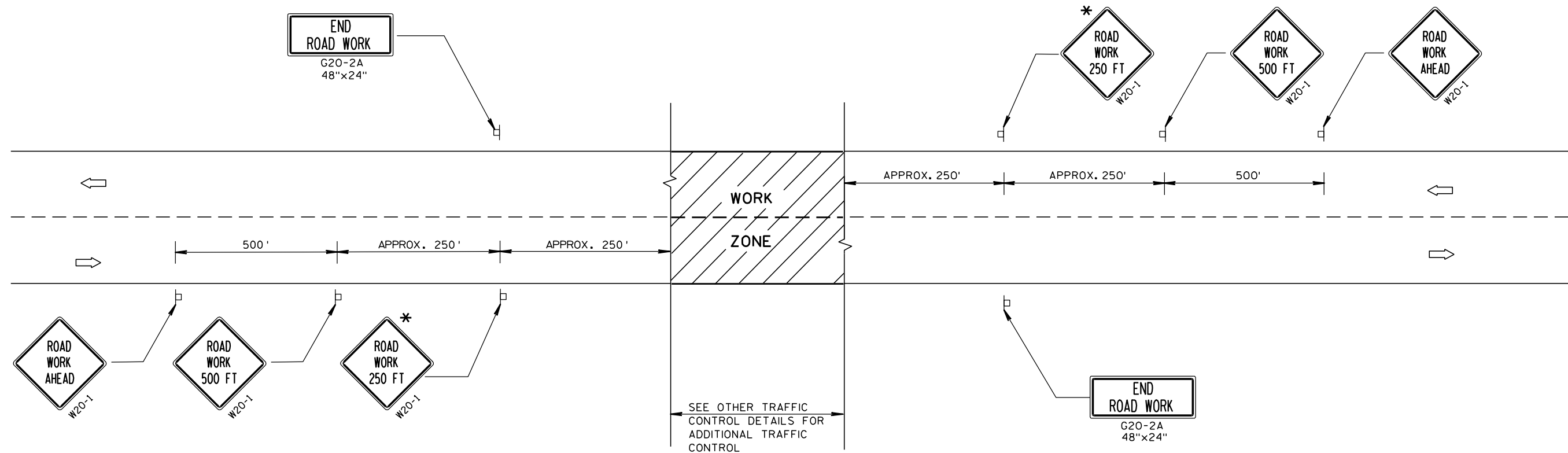
LEGEND

- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 /S/ Chester J. Spang
DATE CHIEF SIGNS AND MARKING ENGINEER
FHWA



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

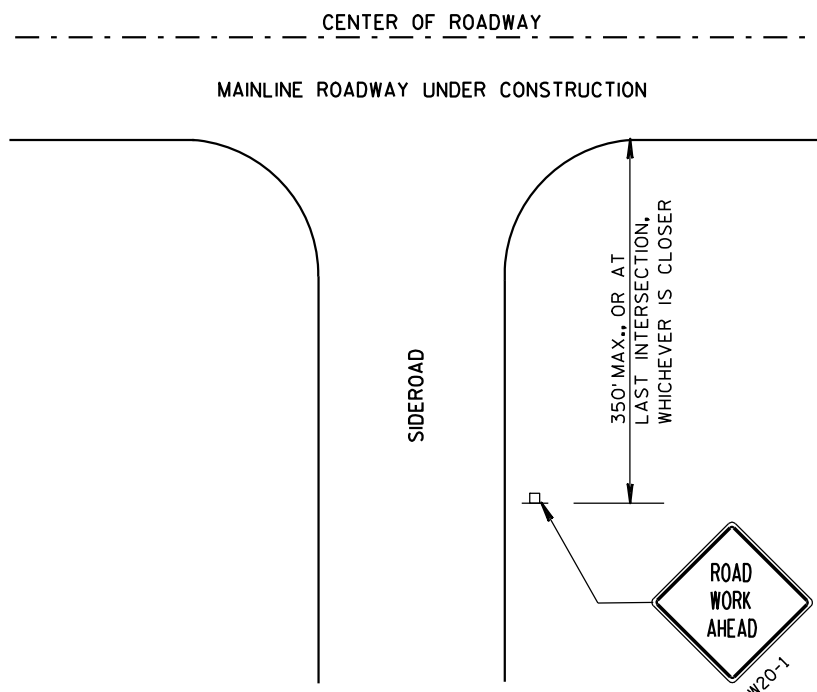
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

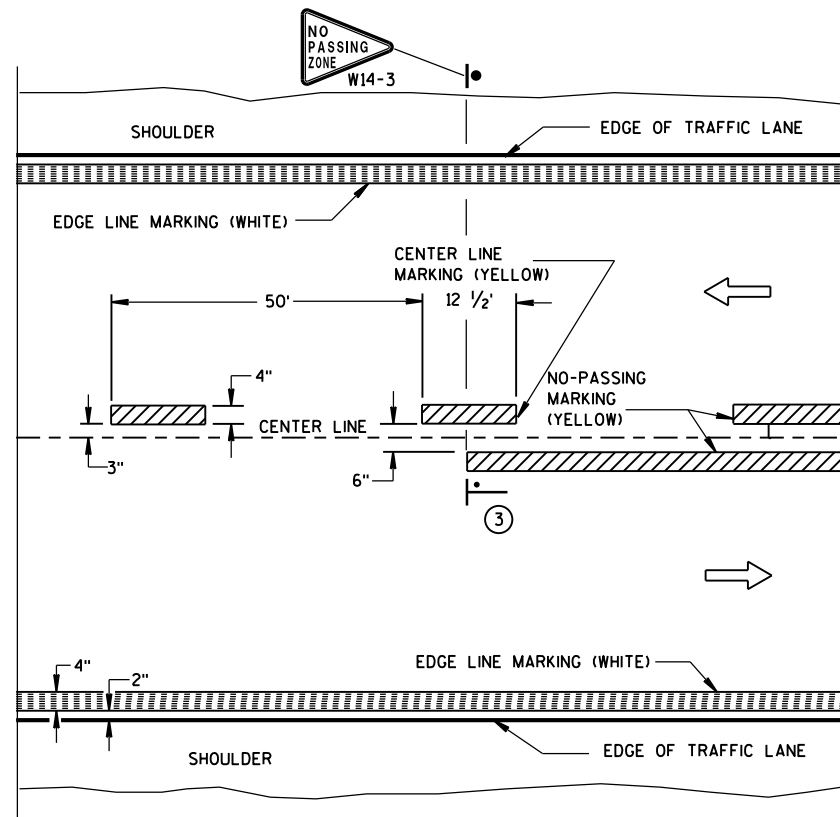
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



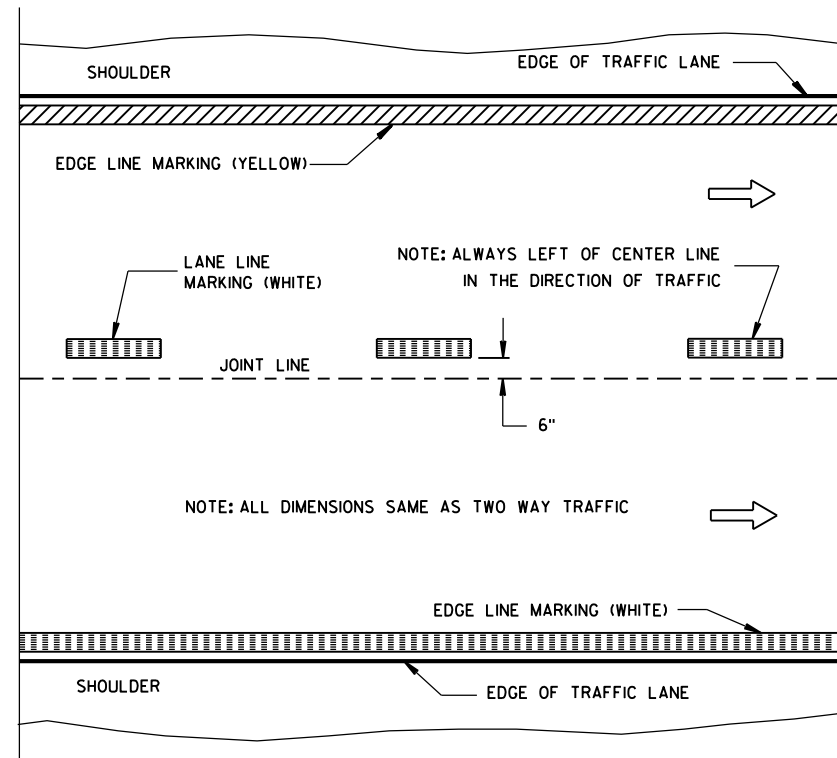
LEGEND

- POST MOUNTED SIGN
- ➡ DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/23/00 DATE	/S/ Chester J. Spang CHIEF SIGNS AND MARKING ENGINEER
FHWA	

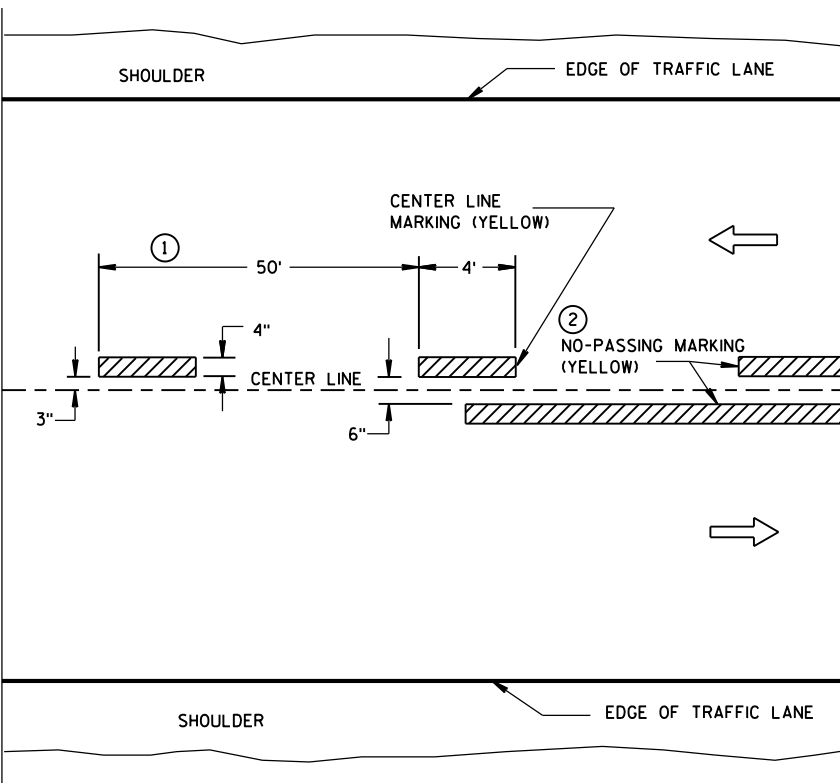


TWO WAY TRAFFIC

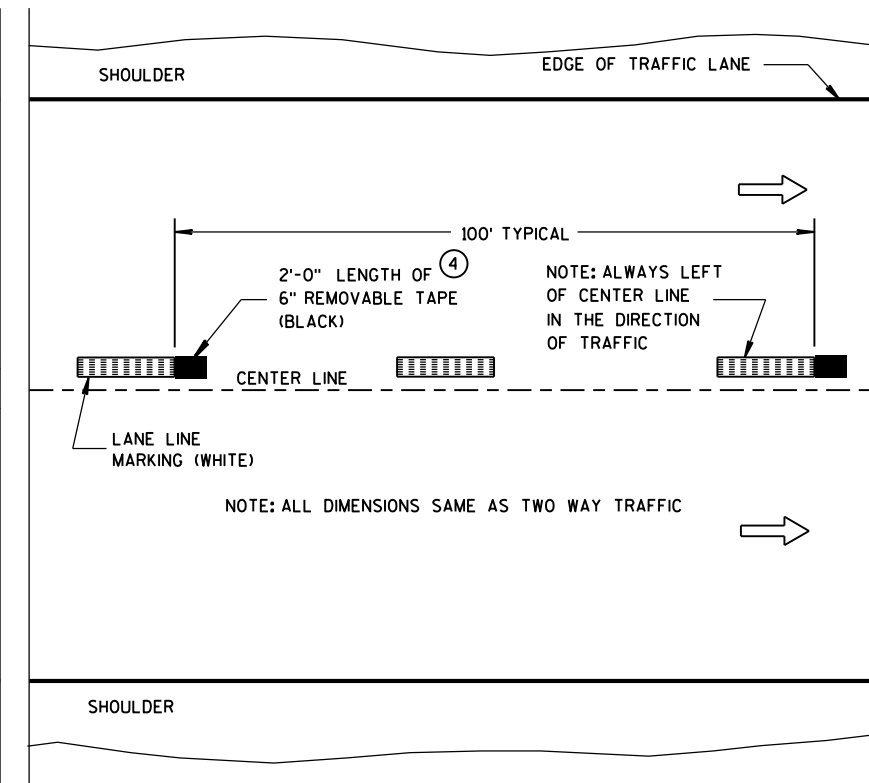


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

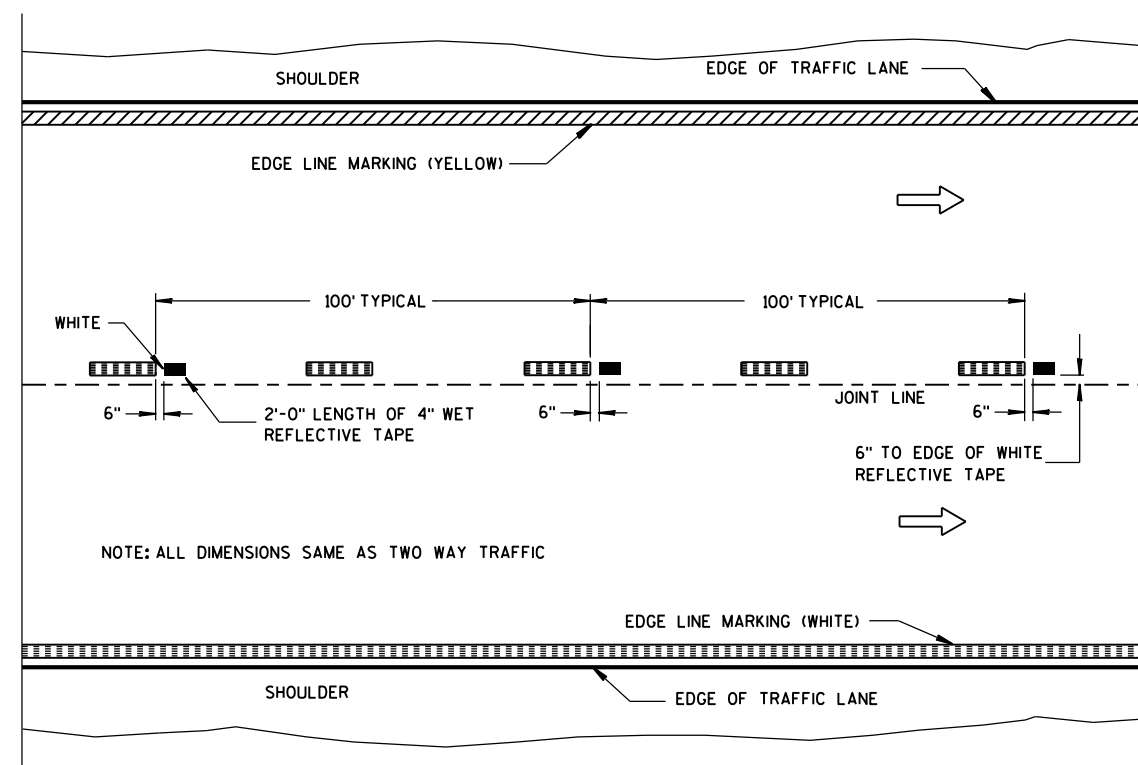
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



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

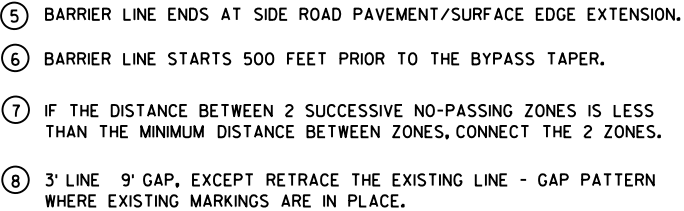
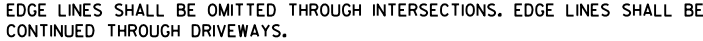
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

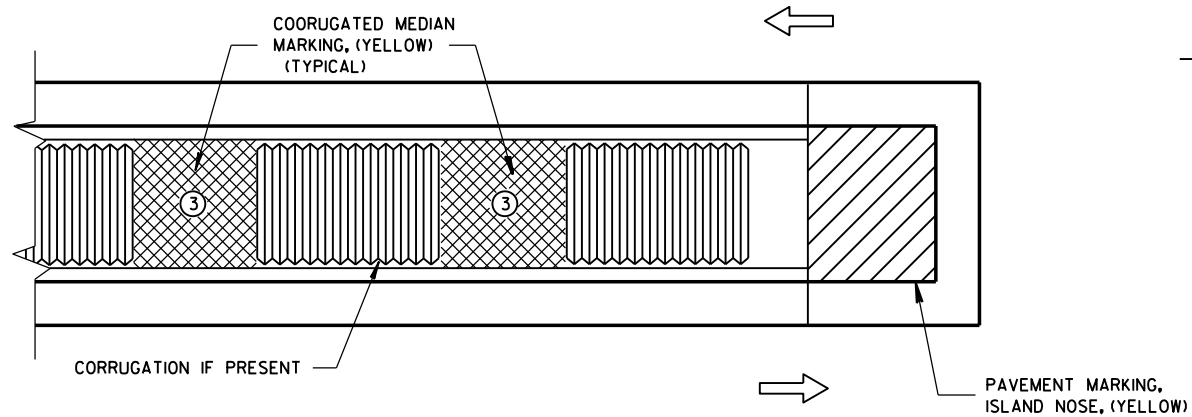
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10-1-2012 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA

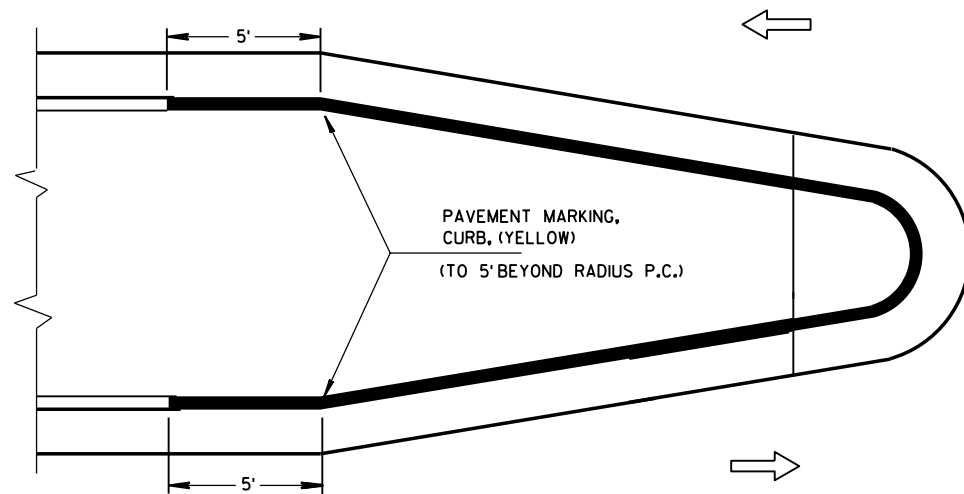


PAVEMENT MARKING (INTERSECTIONS)

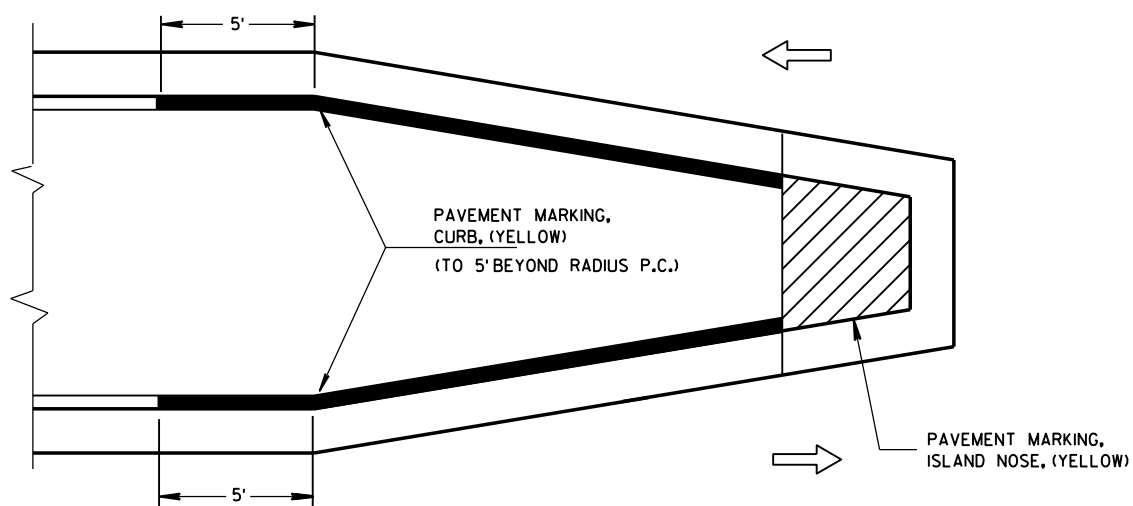
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

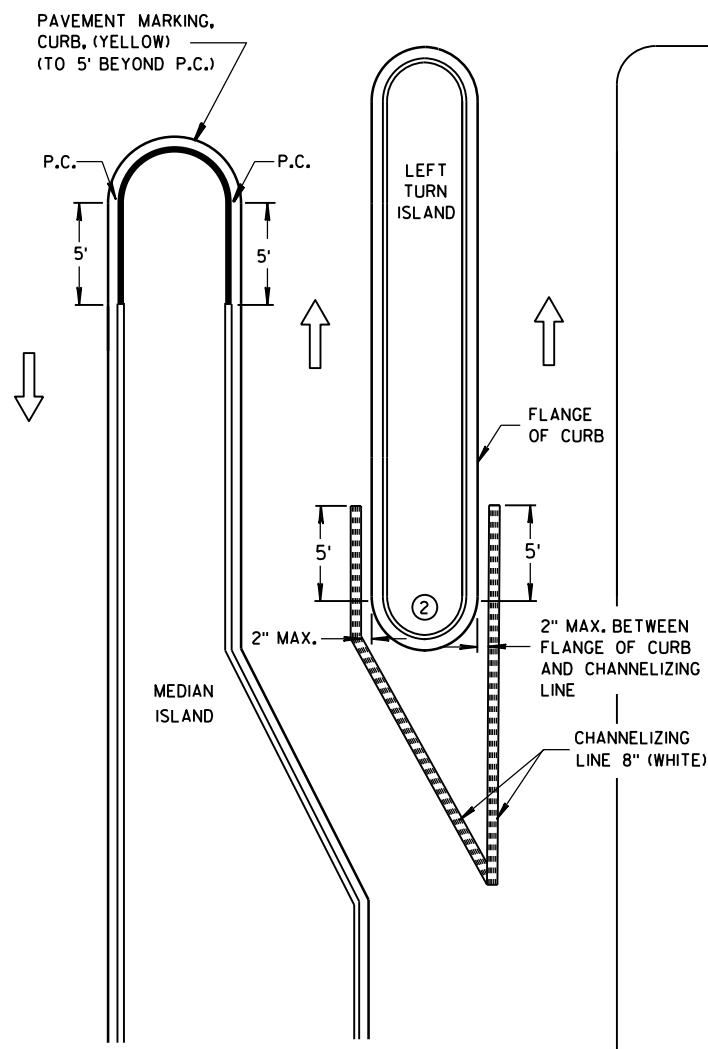


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

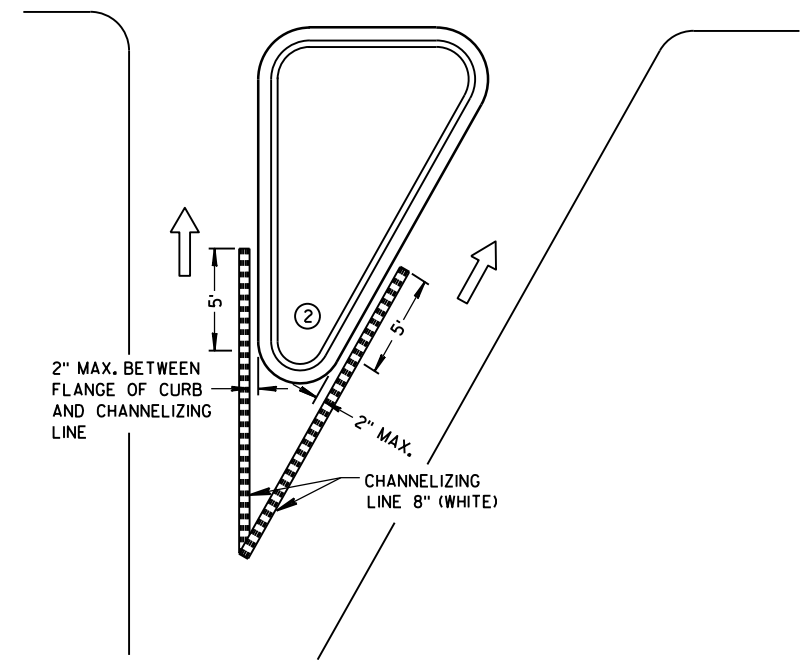
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

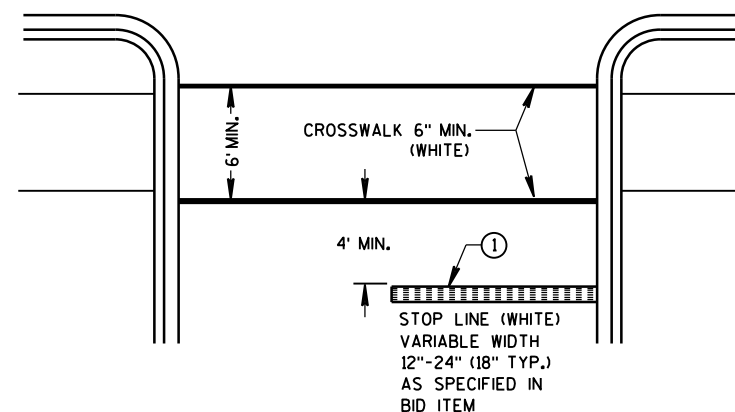
- 1 STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- 2 DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
- 3 WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN, THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

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



STOP LINE AND CROSSWALK

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TWO-LANE ROADWAY

SYMBOLS



WORK AREA



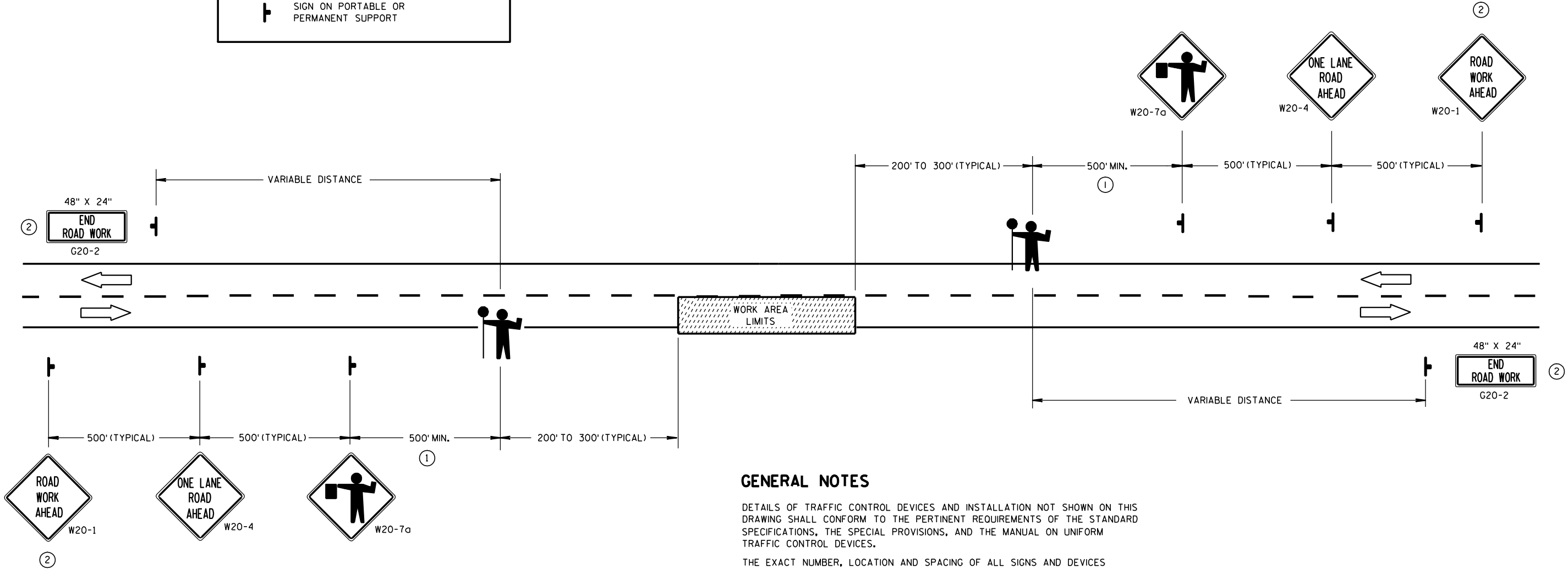
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



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 APPROVED BY THE ENGINEER.

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

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

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

- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/5/06 /S/ Thomas N. Notbohm
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA

GENERAL NOTES

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

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

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

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

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

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

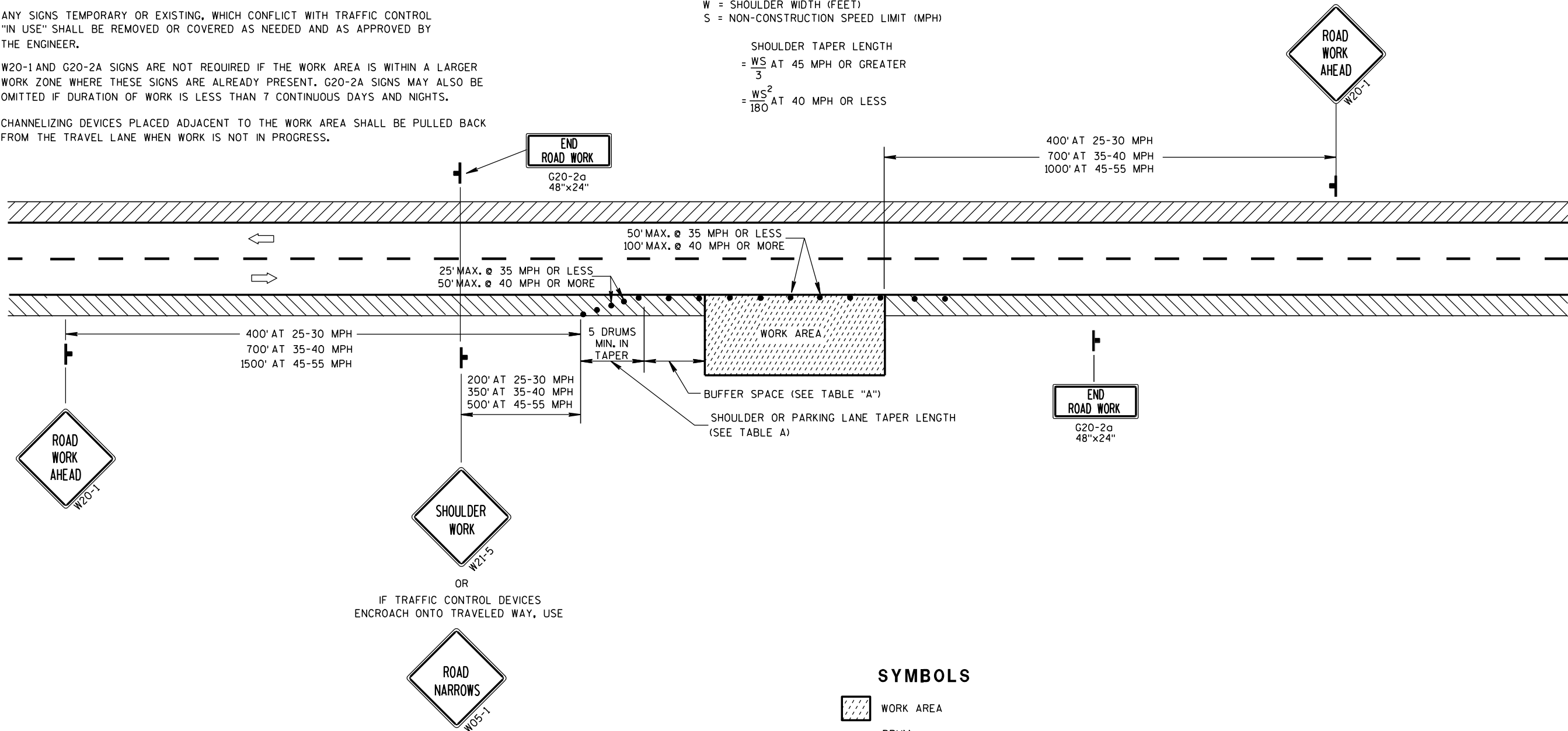
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

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

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

SHOULDER TAPER LENGTH
= $\frac{WS}{3}$ AT 45 MPH OR GREATER
= $\frac{WS^2}{180}$ AT 40 MPH OR LESS



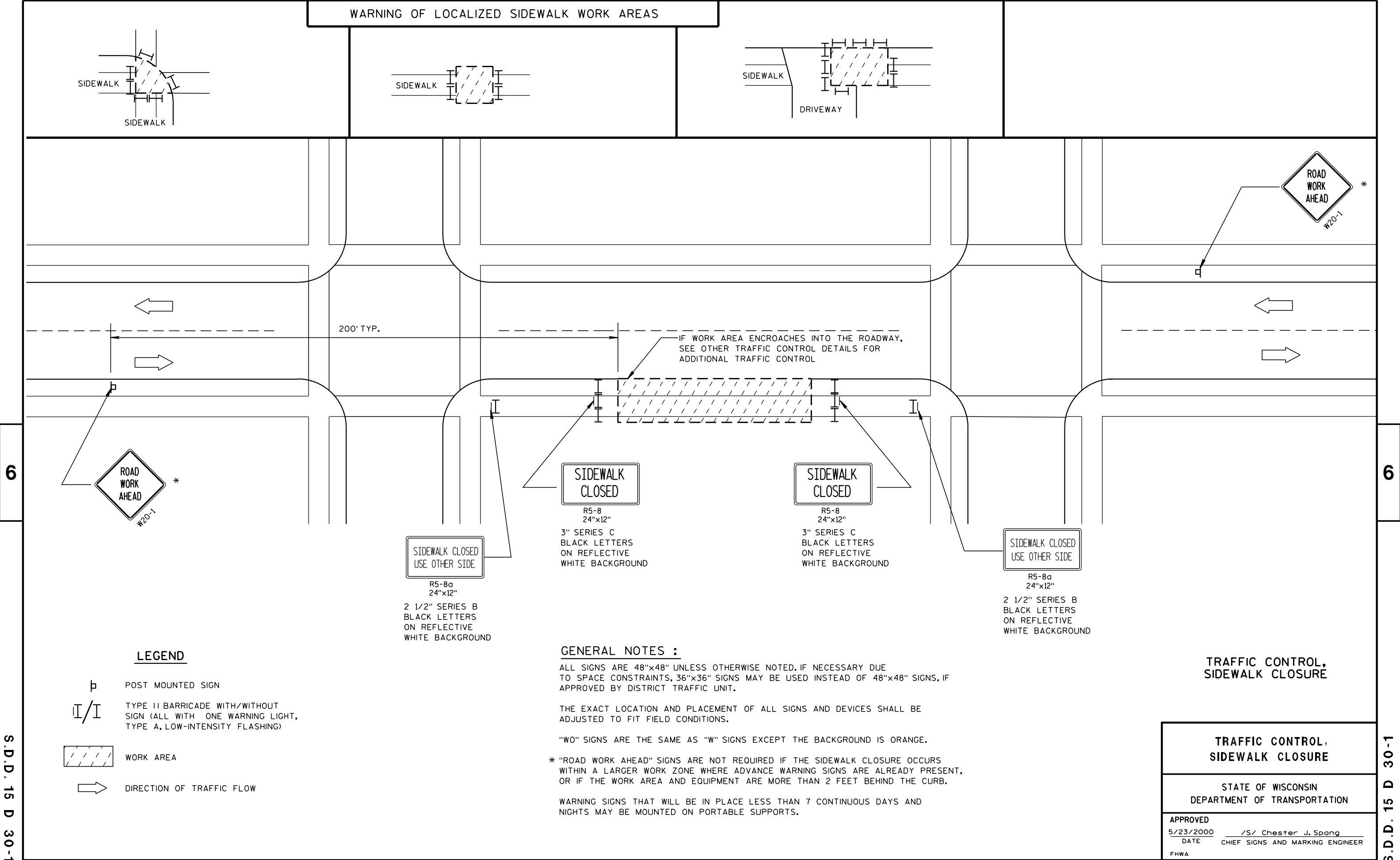
SYMBOLS

- WORK AREA
- DRUM
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 /S/ Chester J. Spang
DATE CHIEF SIGNS AND MARKING ENGINEER
FHWA



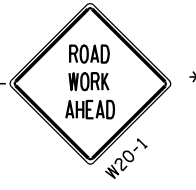
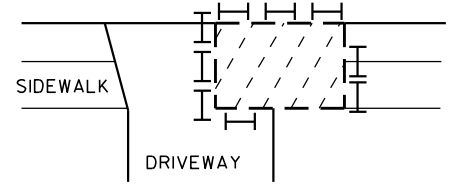
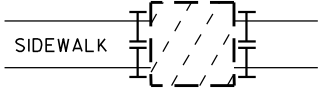
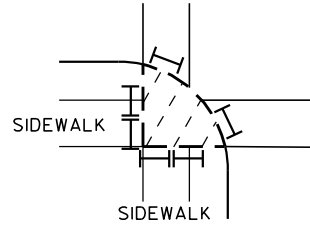
6

6

S.D.D. 15 D 30-1

S.D.D. 15 D 30-1

WARNING OF LOCALIZED SIDEWALK WORK AREAS



LEGEND

- POST MOUNTED SIGN
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- WORK AREA
- DIRECTION OF TRAFFIC FLOW

GENERAL NOTES :

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

* "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

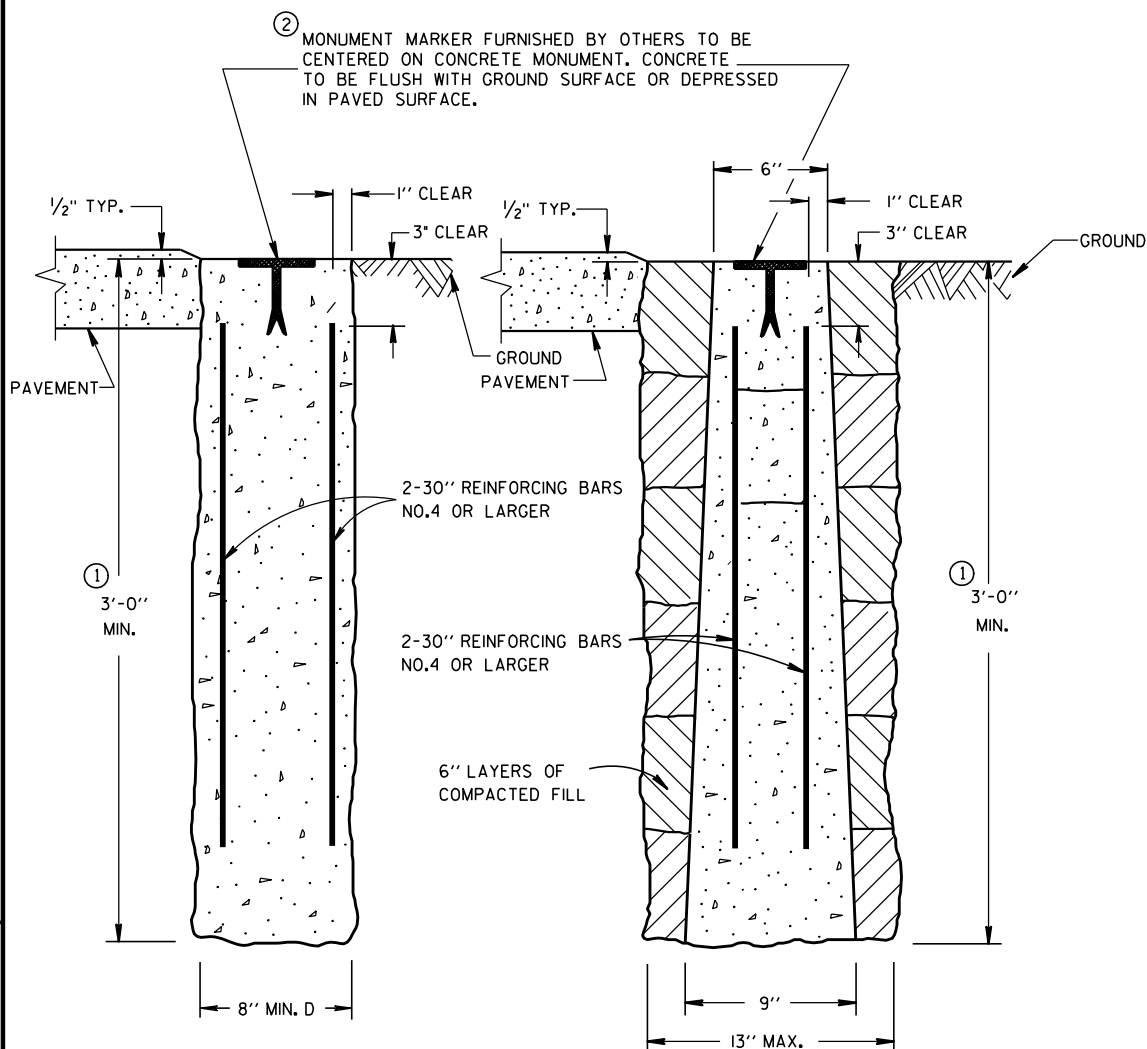
WARNING SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

TRAFFIC CONTROL, SIDEWALK CLOSURE

TRAFFIC CONTROL, SIDEWALK CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/2000 /S/ Chester J. Spang
DATE CHIEF SIGNS AND MARKING ENGINEER
FHWA

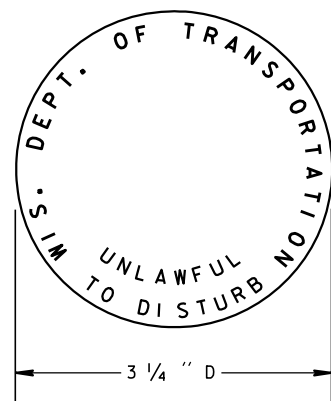


CAST-IN-PLACE

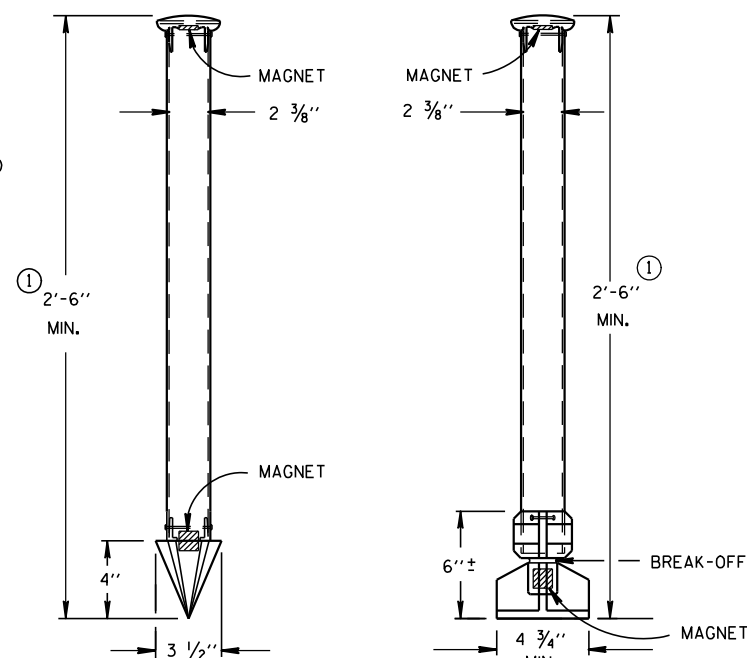
PRECAST

CONCRETE MONUMENTS

TYPE A



② WIS DOT MONUMENT MARKER LOGO
FOR TYPES "A", "C" & "D"



TYPE C

TYPE D

DRIVE-IN MONUMENT

BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

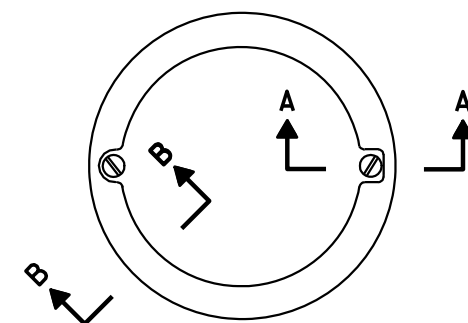
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

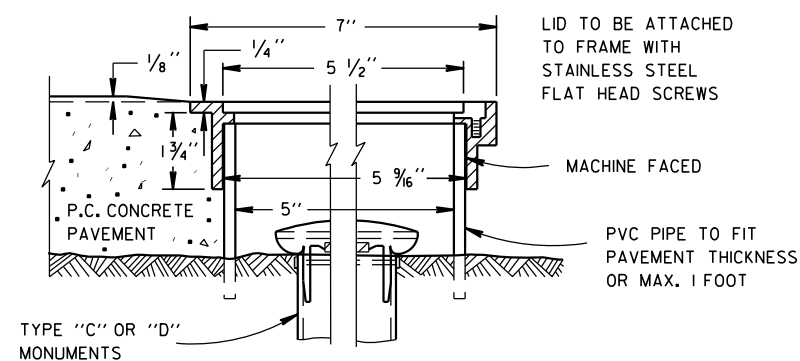
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

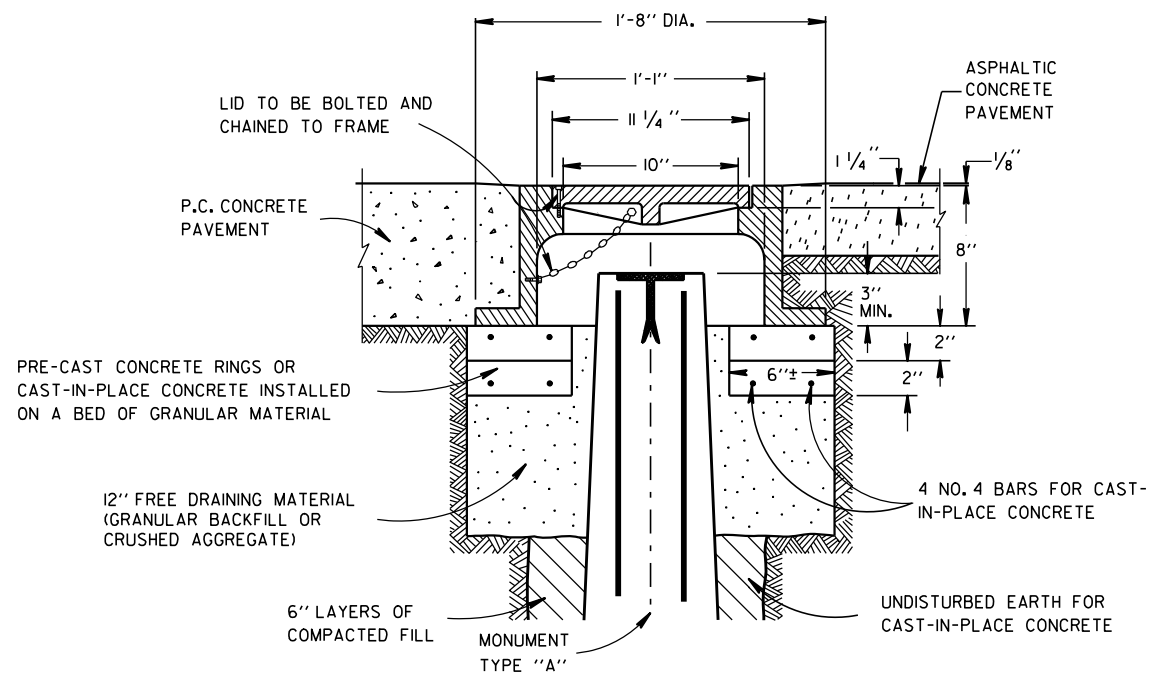
② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



TOP VIEW

SECTION B-B SECTION A-A
ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)

LANDMARK REFERENCE
MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/22/1999

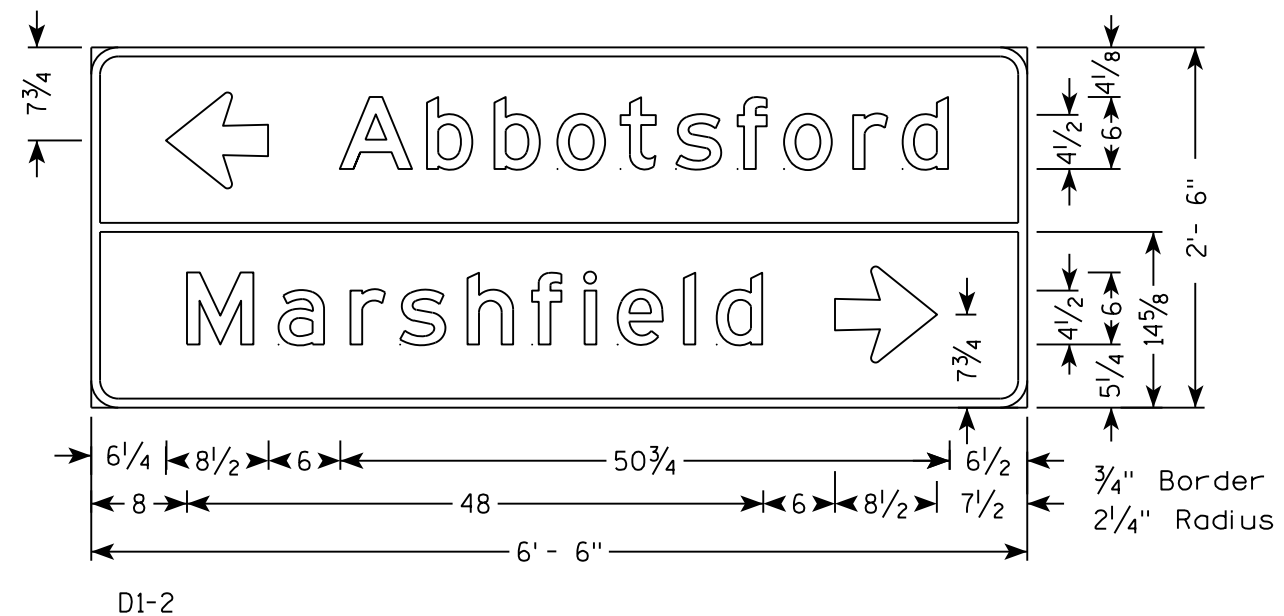
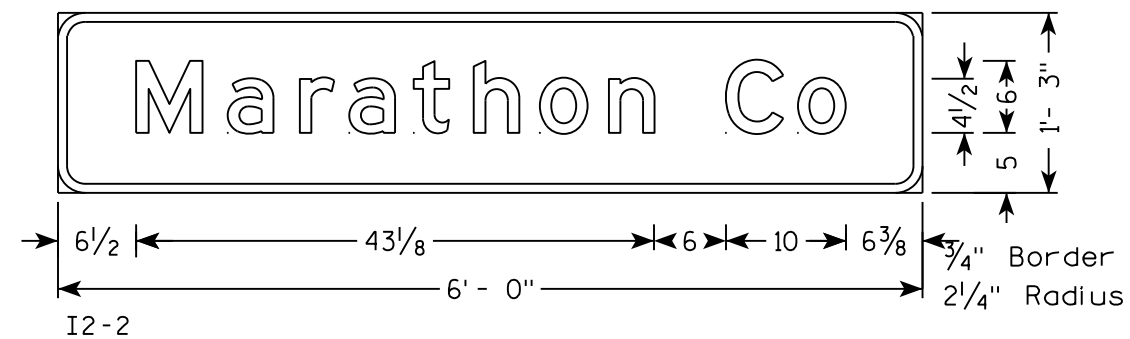
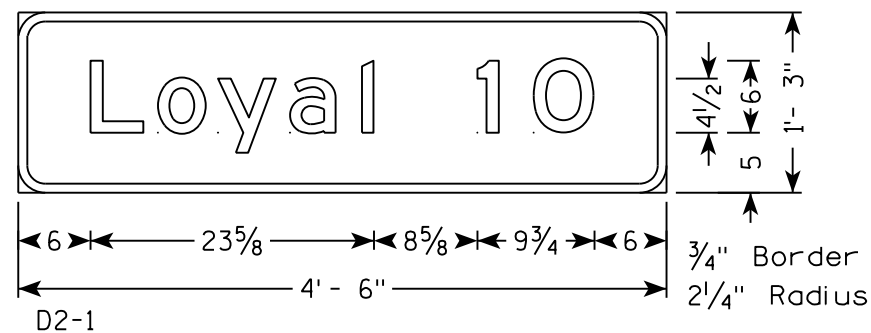
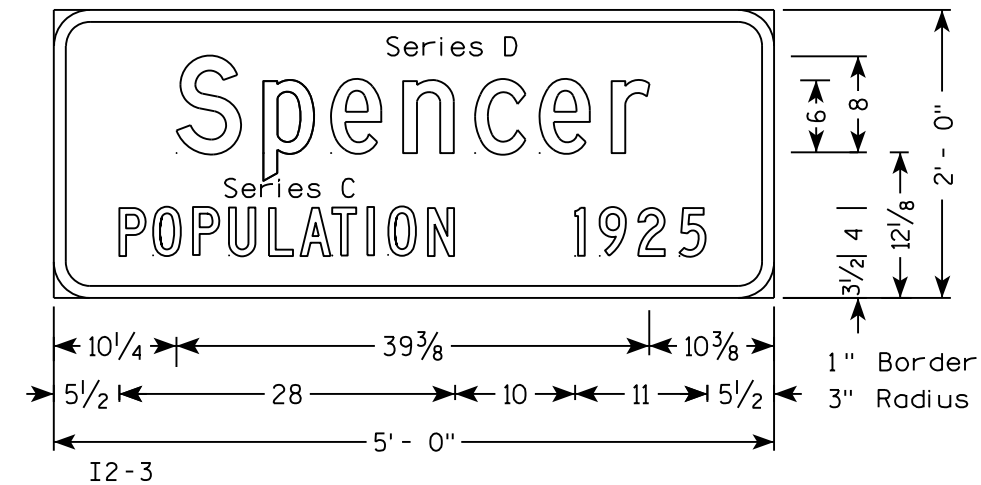
DATE

FHWA

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

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
Message - WHITE
3. Message Series - E except as Shown



HWY 98 CLOSED AT HWY 13
ROAD OPEN TO SPENCER

5 17 1/4 5 9 5/8 6 32 3/8 5 9 1/8 6 17 1/4 6 7 1/8 6 1/4
11 1/2 21 1/2 6 21 1/2 6 9 1/8 6 38 3/4 11 5/8
11' - 0"

4 1/2 6 4 1/2 3 6 13 1/2 24
1/2" Border
3/8" Margin
1/8" Radius

NOTES

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

18
SPLIT
48
HWY 98 CLOSED
AT HWY 13
ROAD OPEN
TO SPENCER

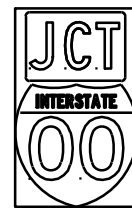
6 1/2 22 1/4 6 12 3/4 7 40 7/8 6 5/8
22 12 3/8 7 22 1/4 7 9 1/4 22 1/8
19 1/2 28 3/8 7 27 1/2 19 5/8
17 11 3/4 7 49 1/8 17 1/8
8' - 6"

8 8 8 6 8 6 8 6 8 30 8 30 5' - 6"
3/4" Margin
1" Border
2 1/4" Radius

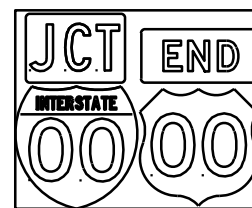
7

7

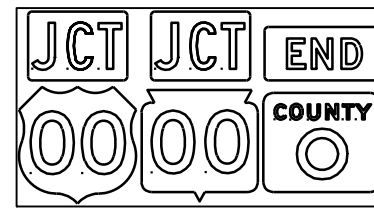
TYPICAL ASSEMBLIES



J1-1



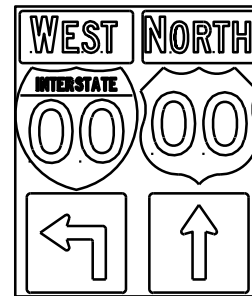
J1-2



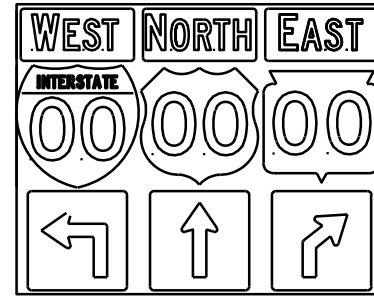
J1-3



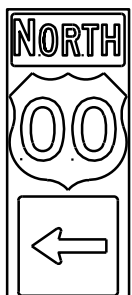
J2-1



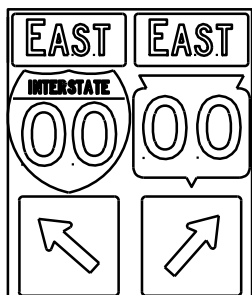
J2-2



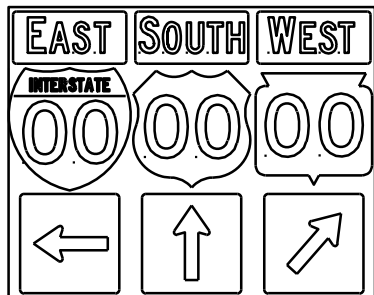
J2-3



J3-1



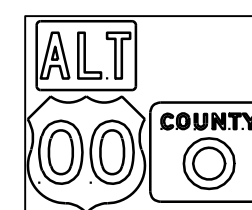
J3-2



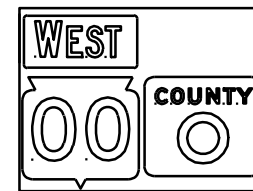
J3-3



J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1



J22-1

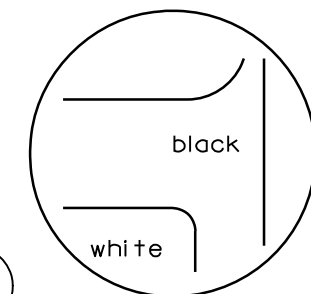
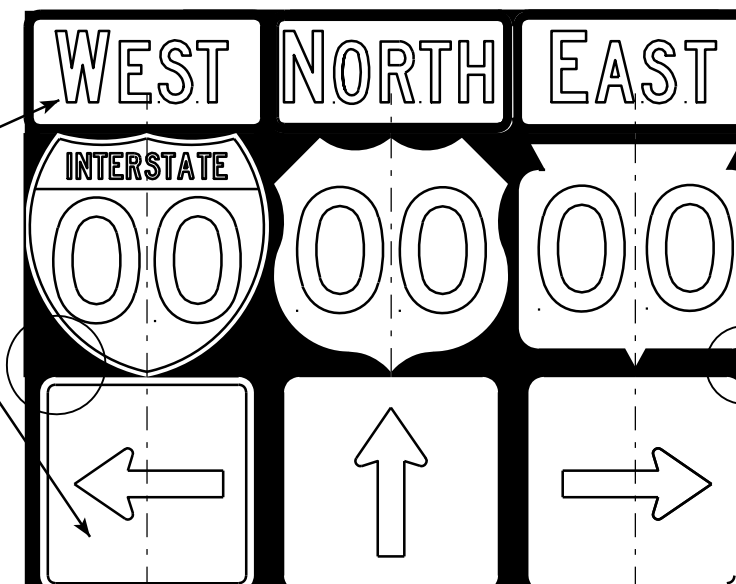
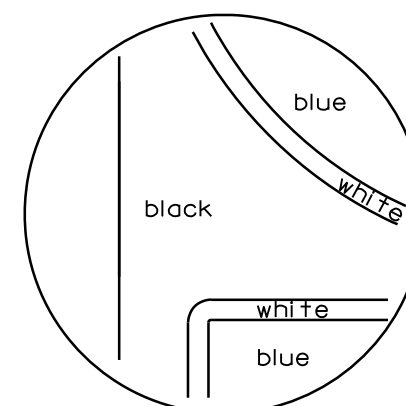


JV

NOTES

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

[blue background with interstate]



[black background]

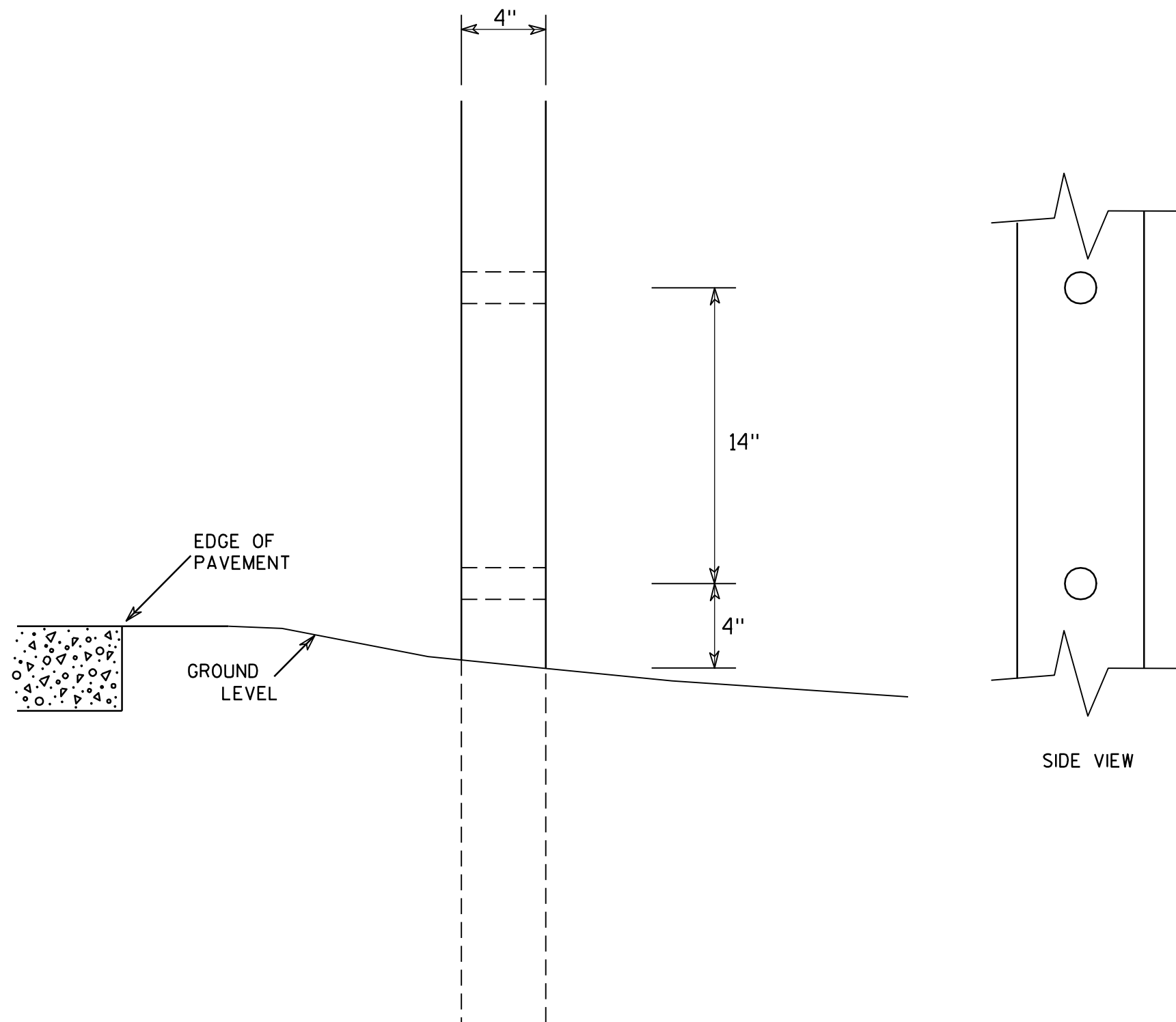
ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 10/21/09	PLATE NO. A2-1S.6

PROJECT NO:

SHEET NO:

E

7

GENERAL NOTES

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

7

**4 X 6 WOOD POST
MODIFICATIONS**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

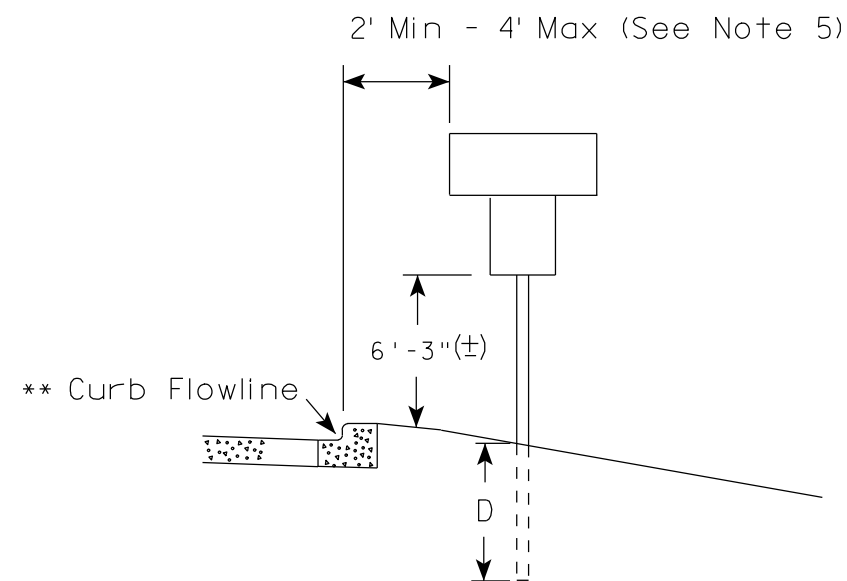
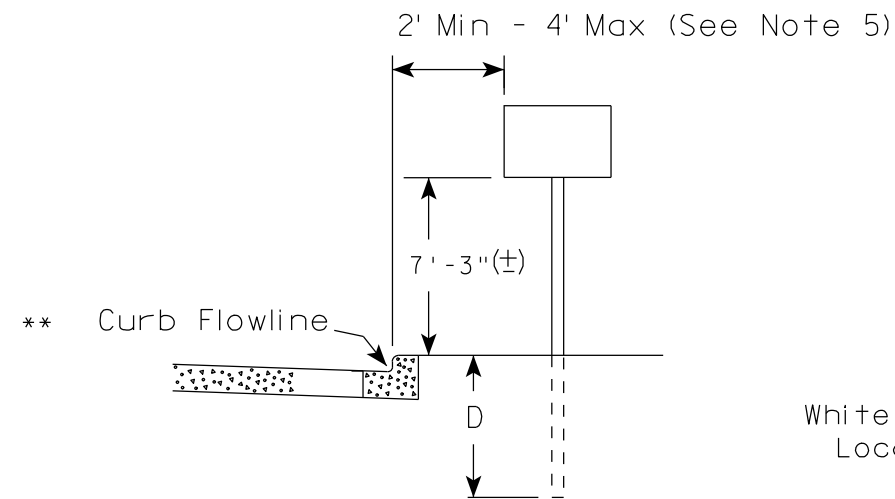
HWY:

COUNTY:

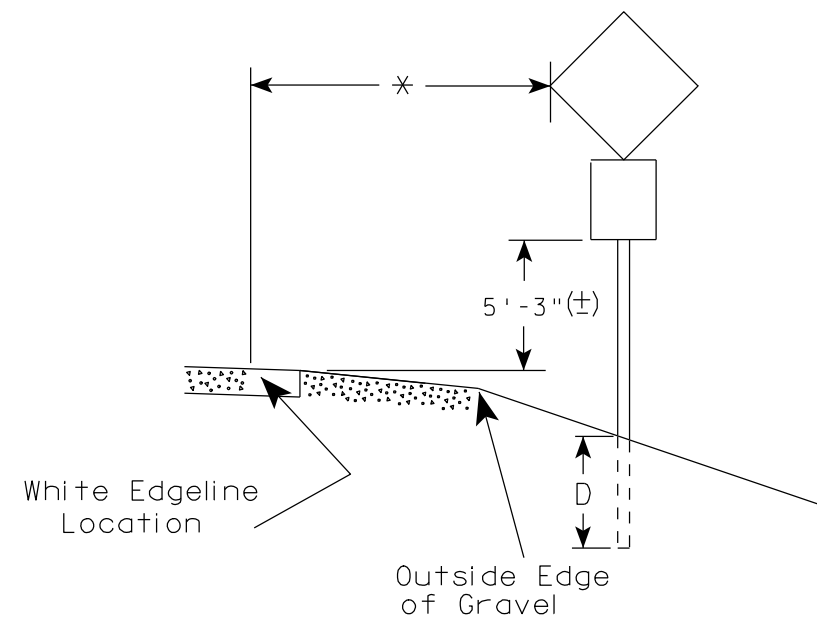
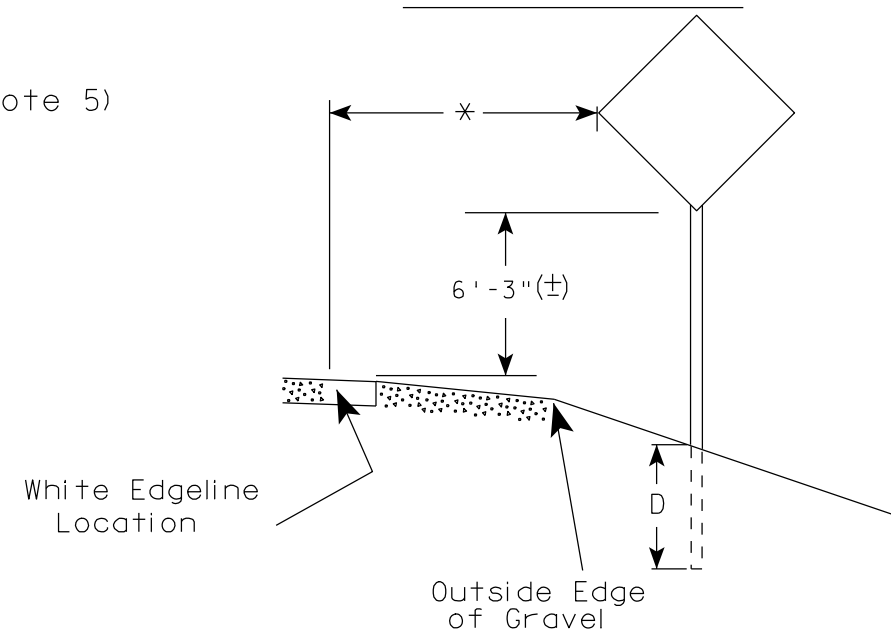
SHEET NO:

E

URBAN AREA



RURAL AREA (See Note 2)



POST EMBEDMENT DEPTH

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

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

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

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

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/21/2011 PLATE NO. A4-3.16

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

GENERAL NOTES

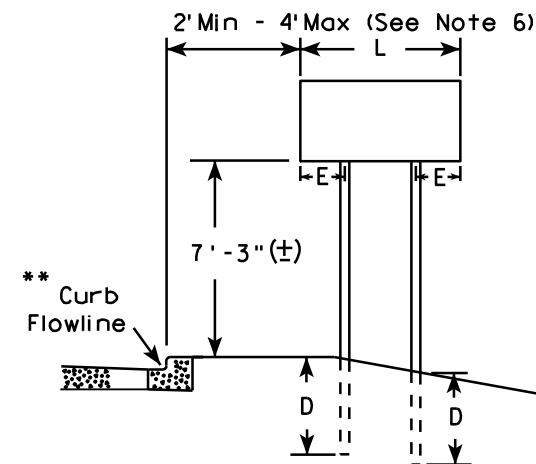
- For multiple post installations, individual post spacing shall be greater than 3'-6".
- See tables below for required number of posts.
- For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
- The (±) tolerance for mounting height is 3 inches.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

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

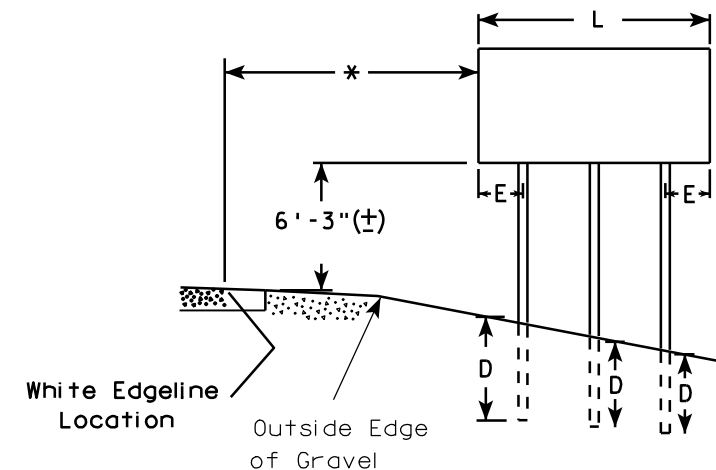
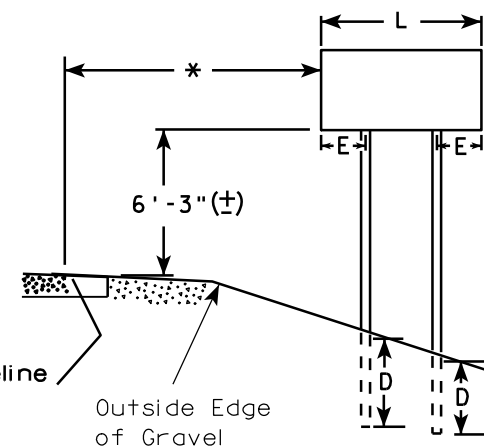
** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs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

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

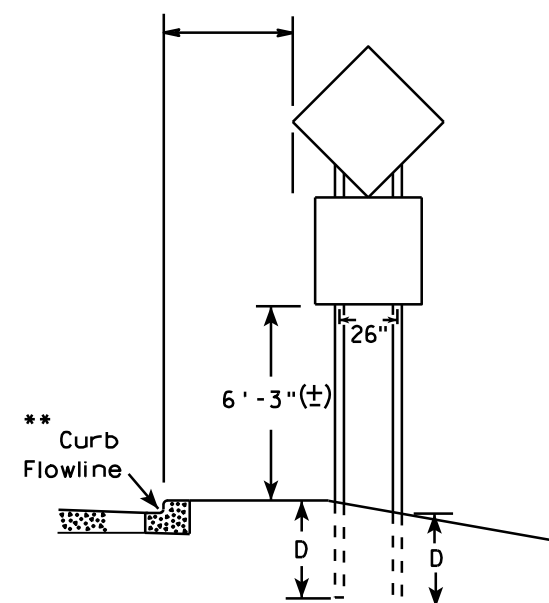
URBAN AREA



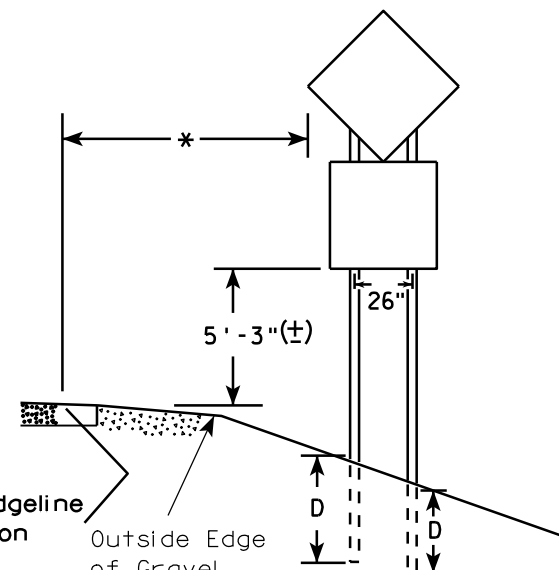
RURAL AREA (See Note 3)



2' Min - 4' Max (See Note 6)



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

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

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 9/21/2011 PLATE NO. A4-4.11

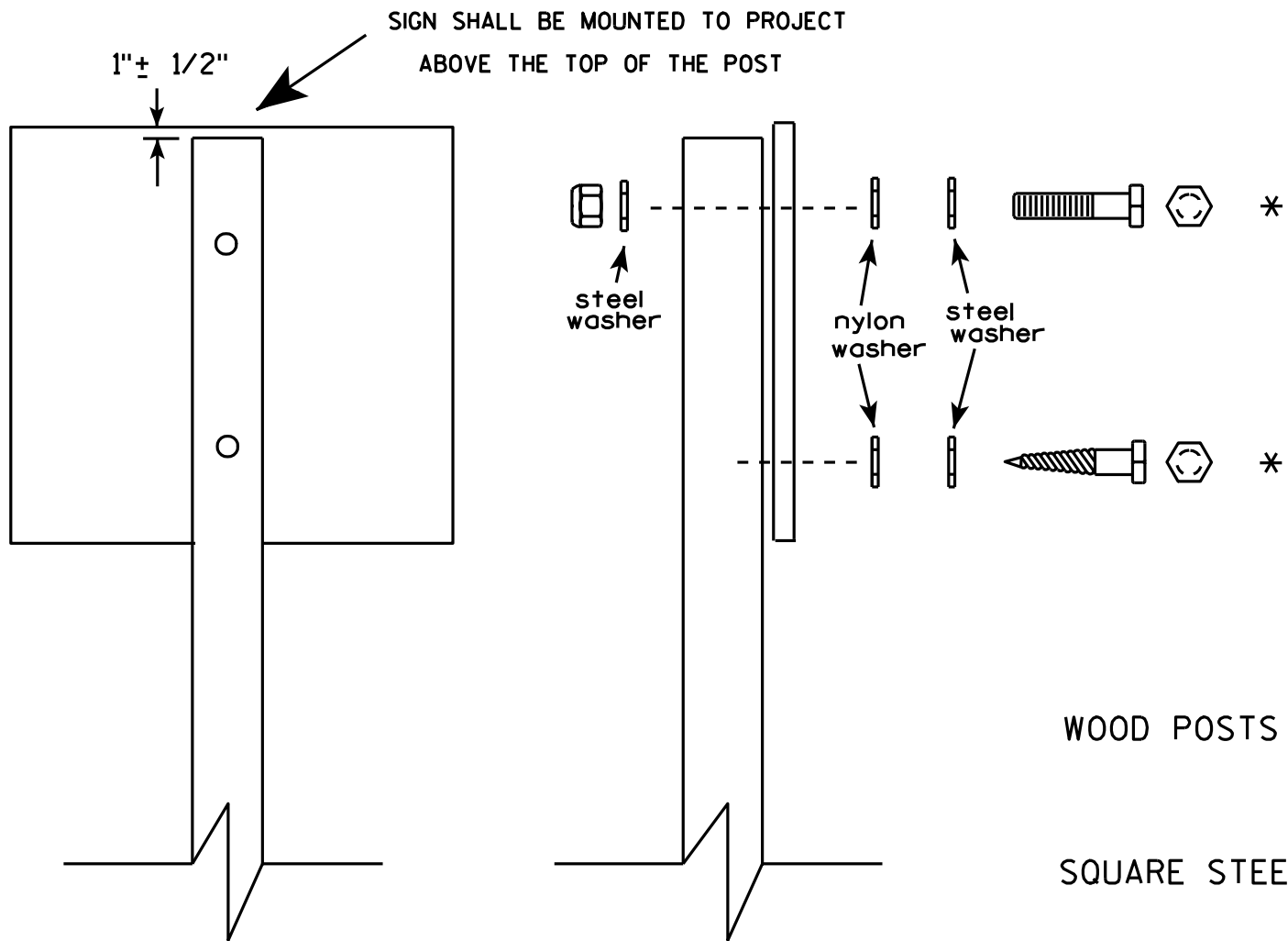
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



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

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

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

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")

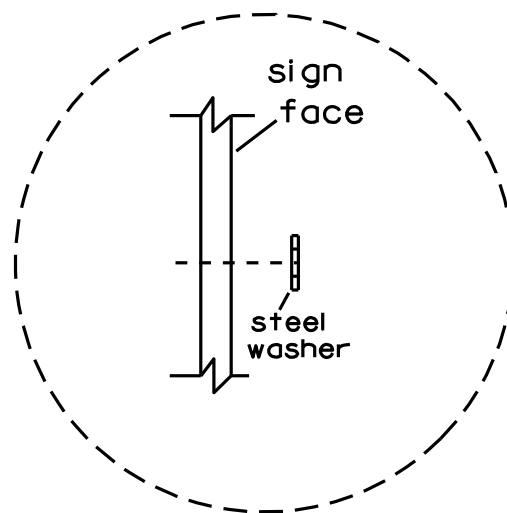
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



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

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

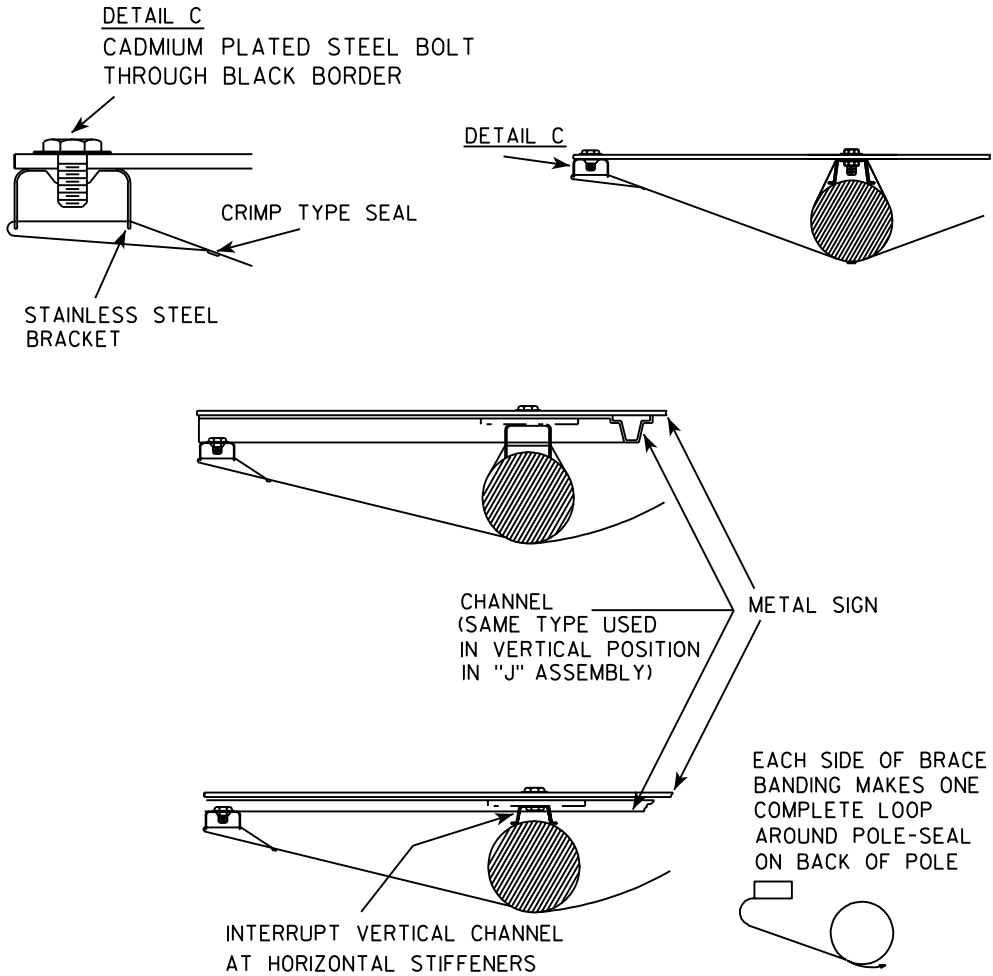
DATE 3/23/10 PLATE NO. A4-8.7

PROJECT NO:

SHEET NO:

E

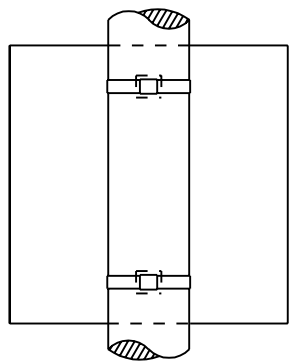
BRACE BANDING



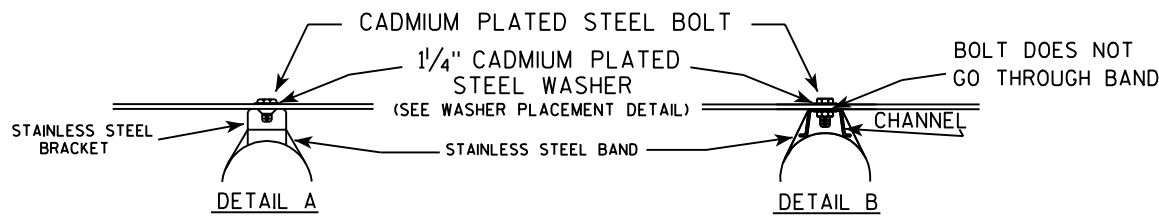
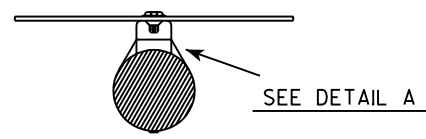
BRACE BANDING

BRACE BANDING SHALL BE TIGHTENED FIRMLY
BUT NOT SO TIGHT AS TO APPRECIABLY
CURVE FACE OF SIGN.

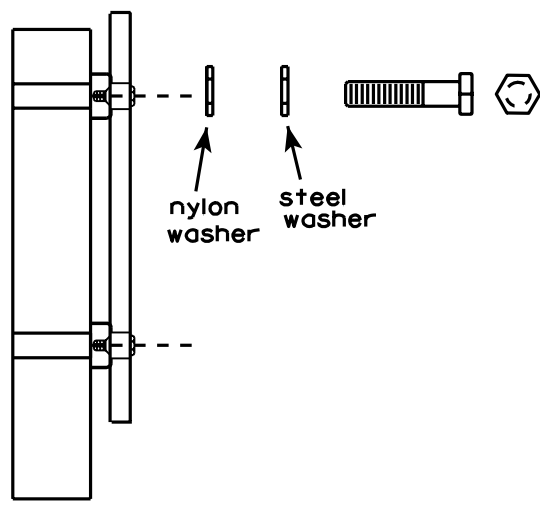
SINGLE SIGN



BRACKET BANDING

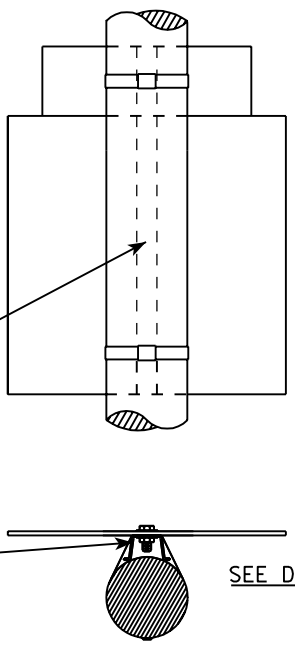


WASHER PLACEMENT



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

"J" ASSEMBLY



SEE DETAIL B

GENERAL NOTES

1. Signs 4' or greater in width shall have one brace band installed at the center of the sign.
2. Signs 3' or greater in height shall have three bracket bands installed. Signs less than 3' in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

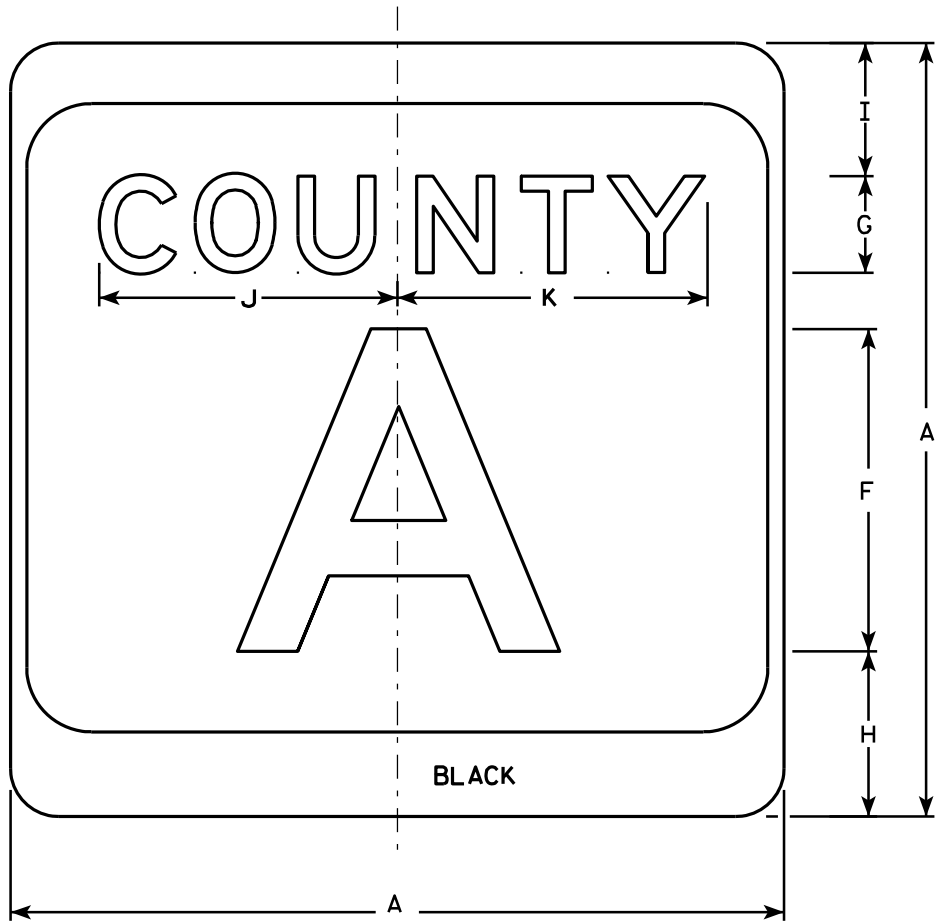
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

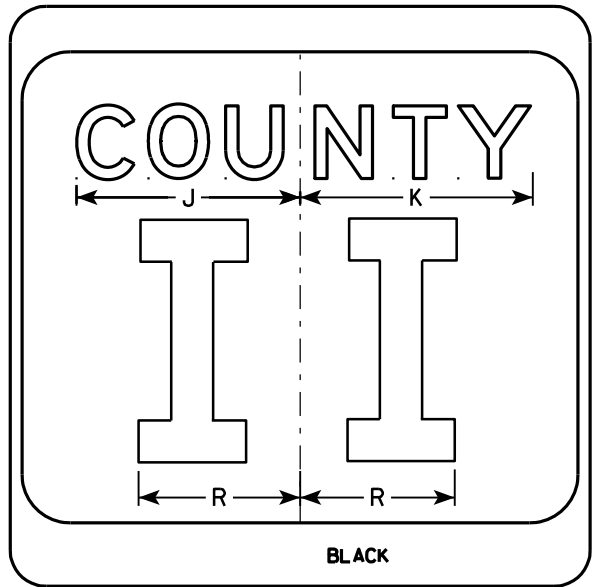
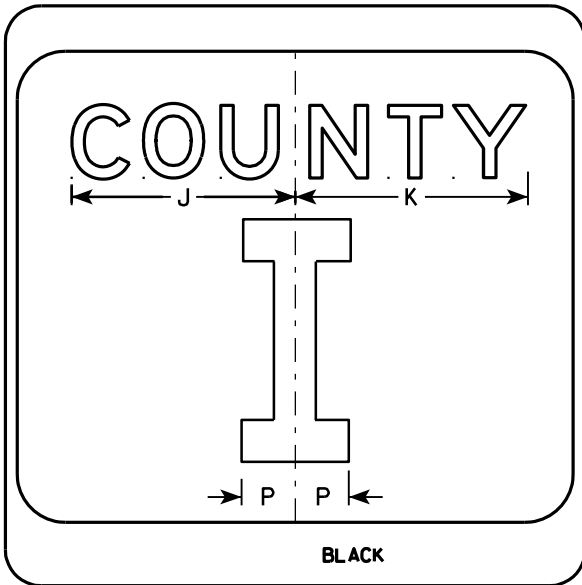
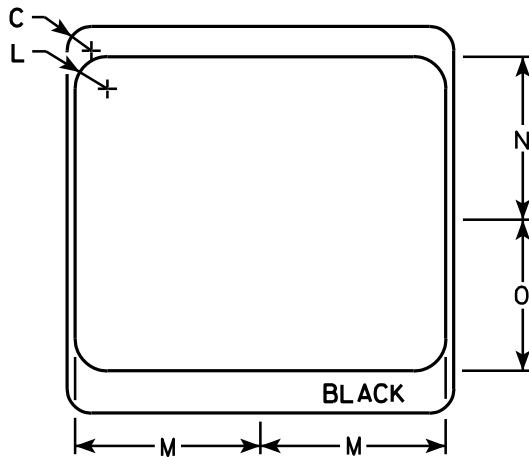
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 11/08/05 PLATE NO. A5-9.2

7



M1-5A



NOTES

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

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

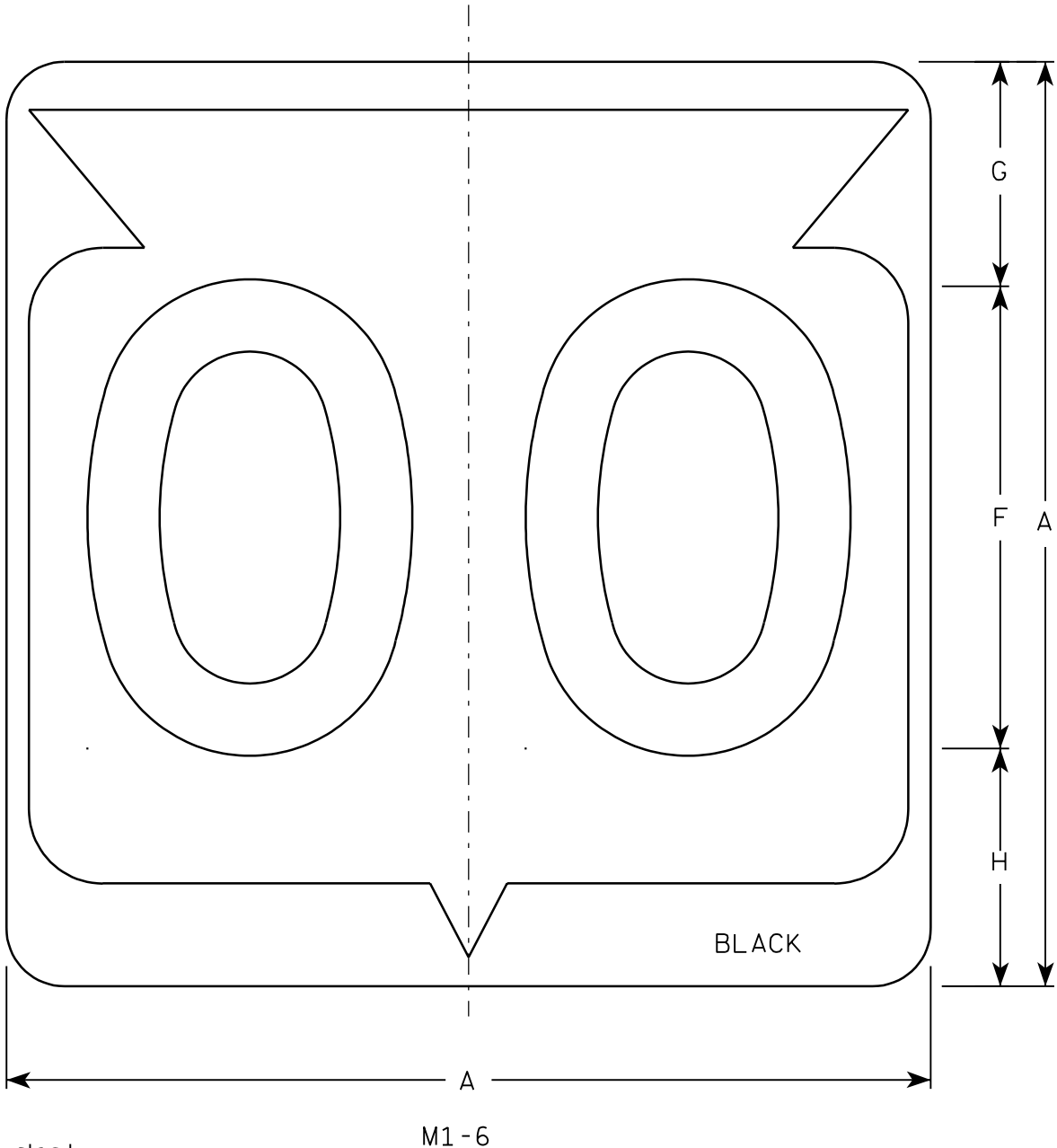
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
For State Traffic Engineer

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

7



Metric equivalent
for this sign is:

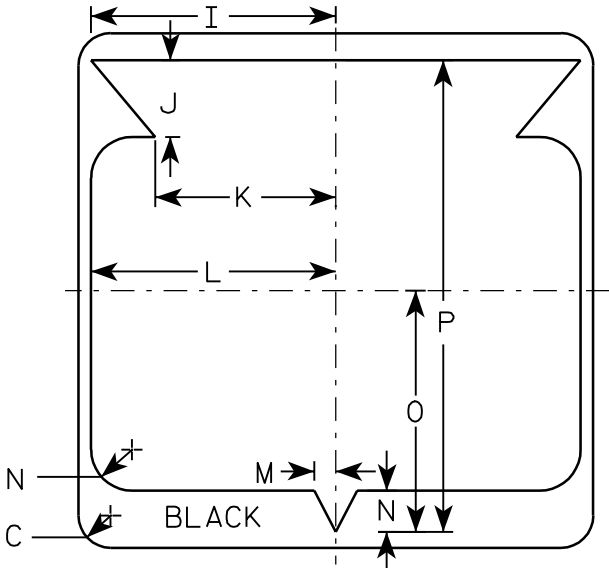
SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

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

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



STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

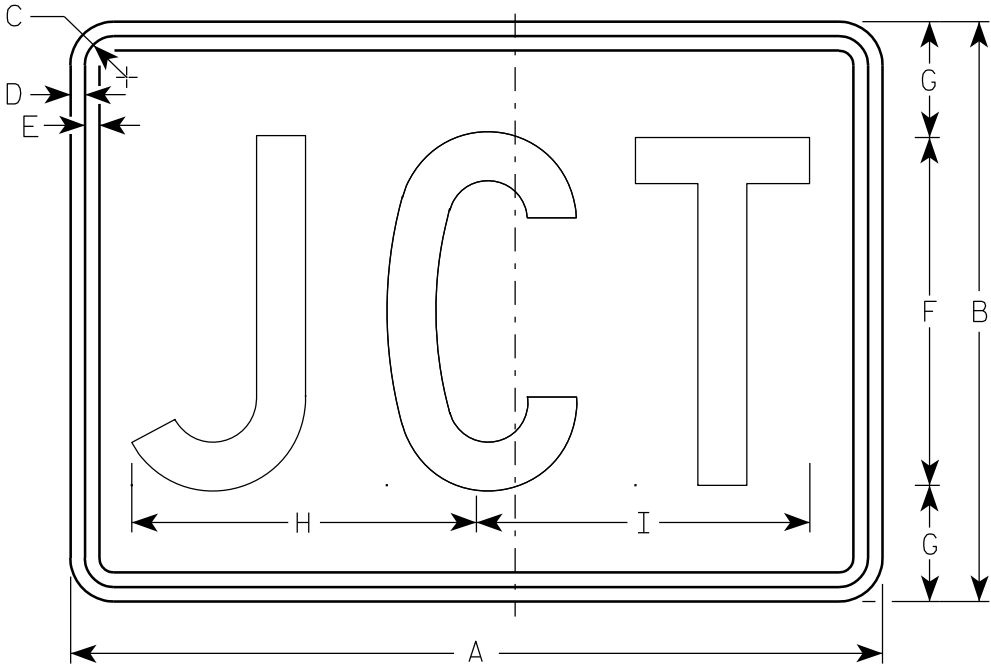
APPROVED 
for State Traffic Engineer

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

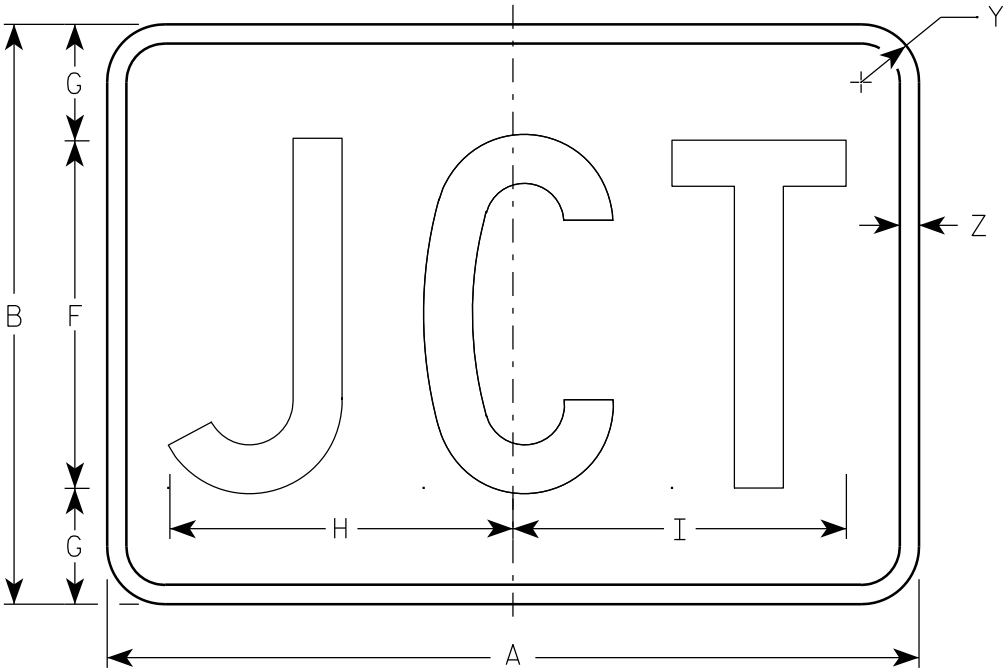
7

NOTES

1. Sign is Type II - See Note 5 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
5. M2-1 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB2-1 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG2-1 Background - Green
Message - White - Type H Reflective
MK2-1 Background - Green
Message - White - Type H Reflective
MM2-1 Background - White - Type H Reflective
Message - Green
MN2-1 Background - Brown
Message - White - Type H Reflective
MR2-1 Background - Brown
Message - Yellow - Type H Reflective



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



MB2-1
MG2-1
MN2-1

Metric equivalent
for this sign is:

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

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

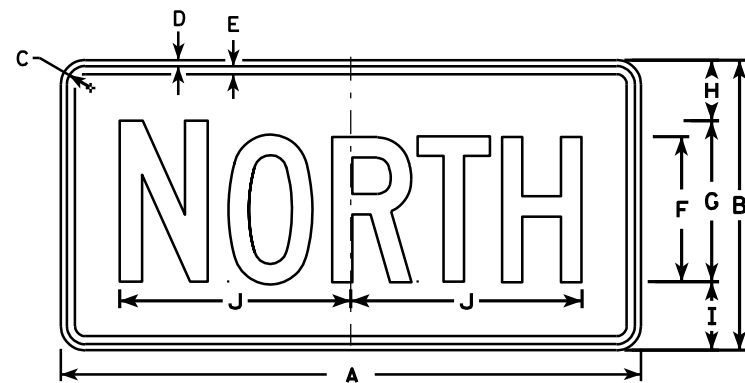
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

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

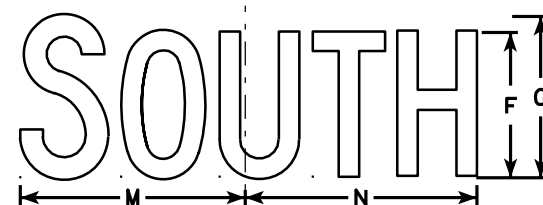
PROJECT NO: HWY: COUNTY: SHEET NO: E



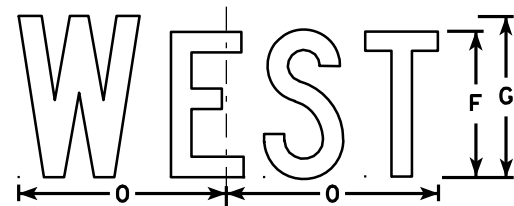
M3-1
MK3-1
M03-1



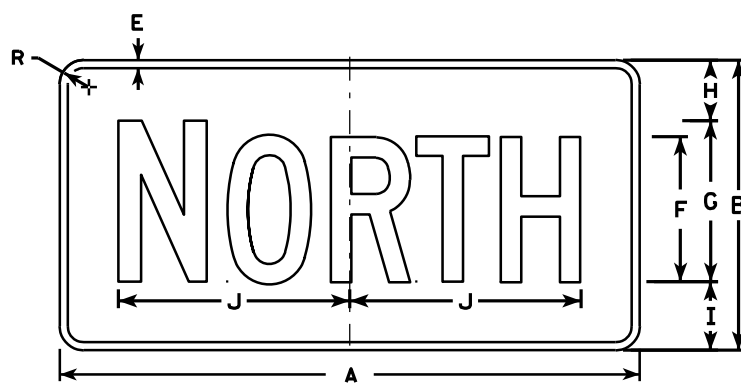
M3-2
MK3-2
M03-2



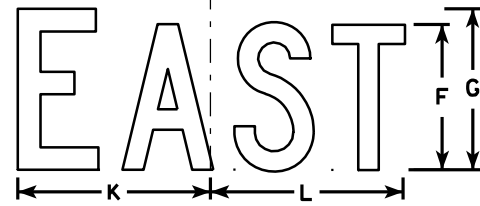
M3-3
MK3-3
M03-3



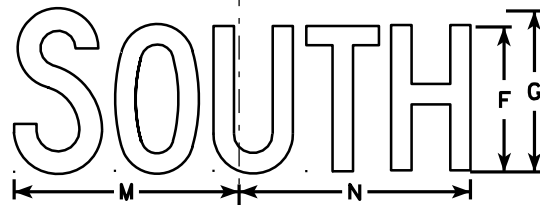
M3-4
MK3-4
M03-4



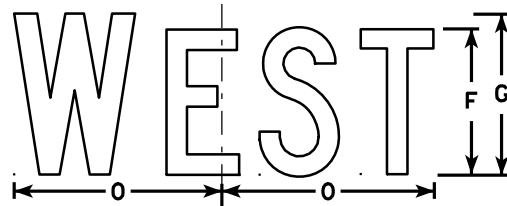
MB3-1
MG3-1
MM3-1
MN3-1



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



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



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

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White - Type H Reflective (Detour or temporary signs - Reflective)
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White - Type H Reflective (Detour or temporary signs - Reflective)
MG3-1 thru MG3-4 Background - Green
Message - White - Type H Reflective
MK3-1 thru MK3-4 Background - Green
Message - White - Type H Reflective
MM3-1 thru MM3-4 Background - White - Type H Reflective
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White - Type H Reflective
M03-1 thru M03-4 Background - Orange - Reflective
Message - Black
6. Note the first letter of each direction is larger than the remainder of the message.

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

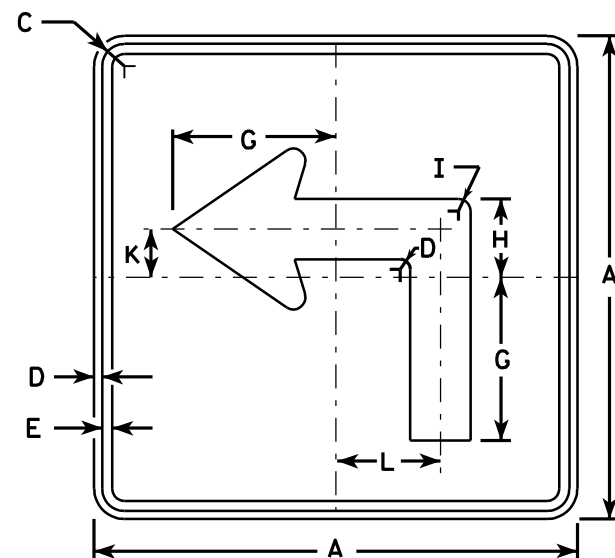
PROJECT NO: HWY: COUNTY: SHEET NO: E

STANDARD SIGNS M3-1 thru M3-4 SERIES

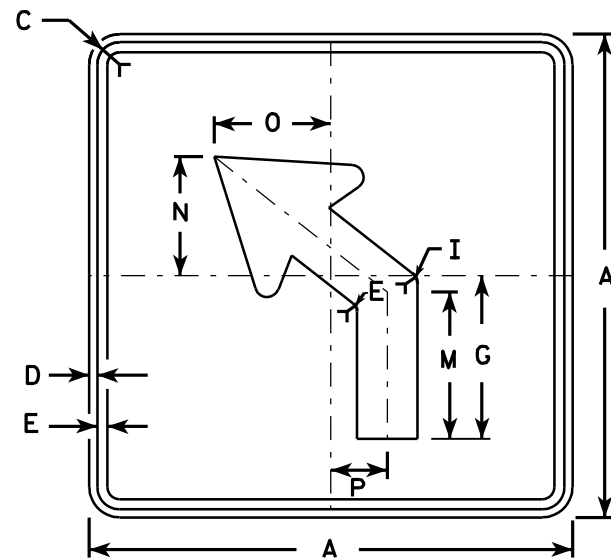
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

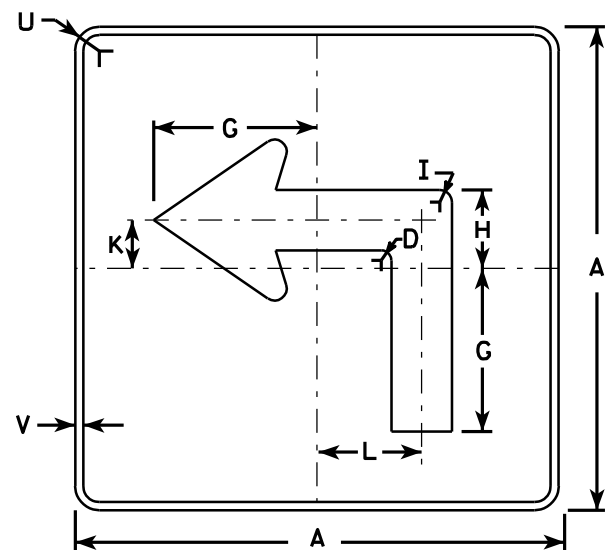
DATE 11/10/10 PLATE NO. M3-1.12



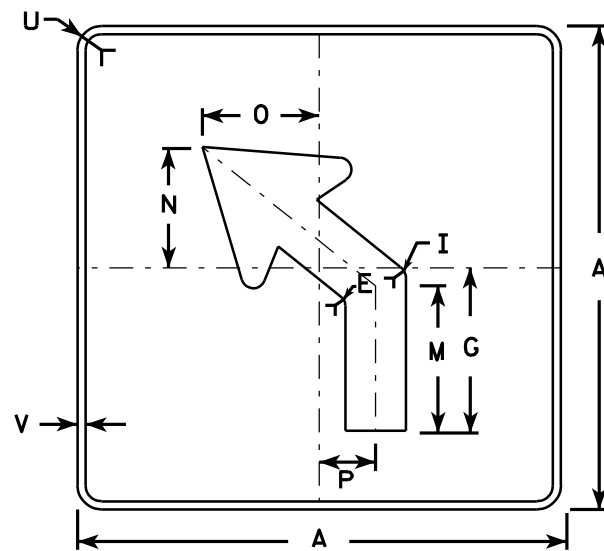
M5-1L
MK5-1L
MM5-1L
MO5-1L
MR5-1L



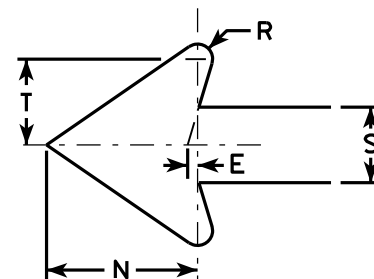
M5-2L
MK5-2L
MM5-2L
MO5-2L
MR5-2L



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



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



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.
- M5-1 and M5-2 Background - White - Type H Reflective (Detour or temporary Signs - Reflective)
Message - Black
MB5-1 and MB5-2 Background - Blue
Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
MG5-1 and MG5-2 Background - Green
Message - White - Type H Reflective
MK5-1 and MK5-2 Background - Green
Message - White Type H Reflective
MM5-1 and MM5-2 Background - White - Type H Reflective
Message - Green
MN5-1 and MN5-2 Background - Brown
Message - White - Type H Reflective
MO5-1 and MO5-2 Background - Orange - Reflective
Message - Black
MR5-1 and MR5-2 Background - Brown
Message - Yellow - Type H Reflective
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

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	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56

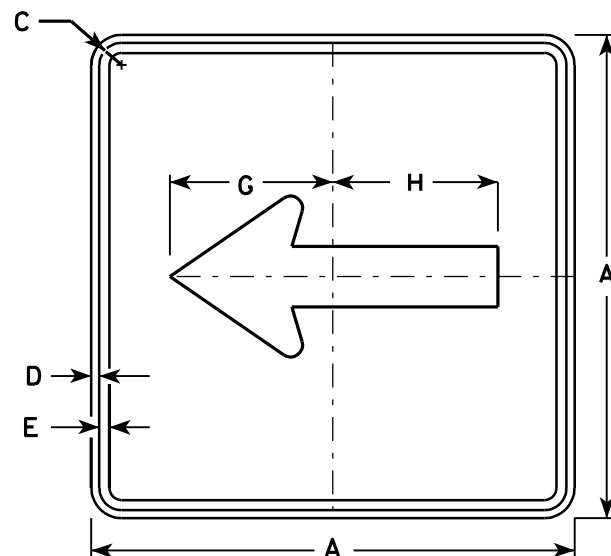
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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STANDARD SIGN
M5-1 & M5-2

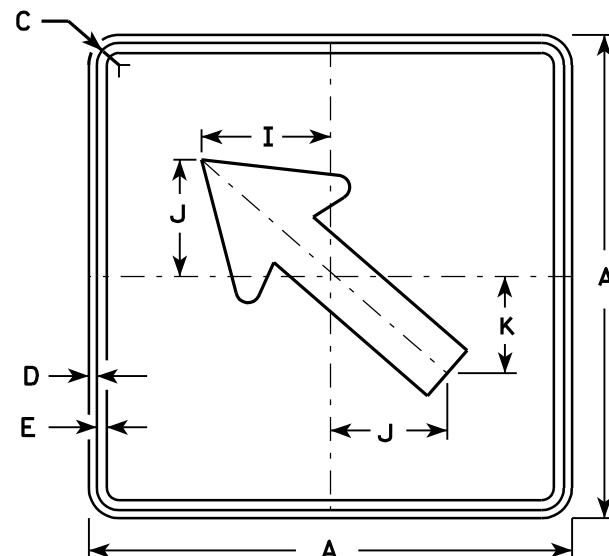
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

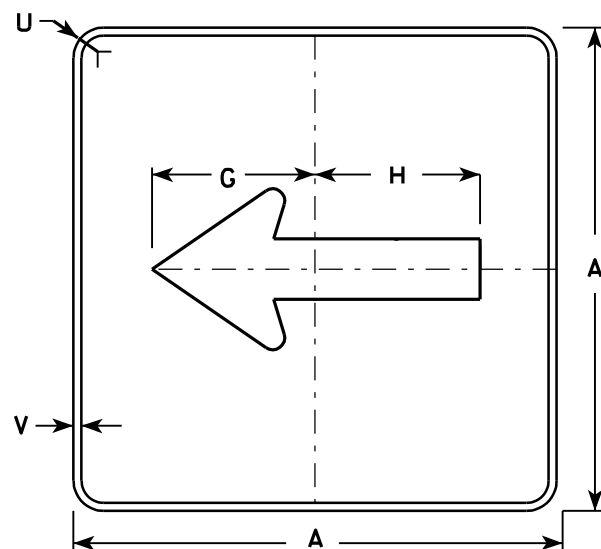
DATE 3/16/10 PLATE NO. M5-1.11



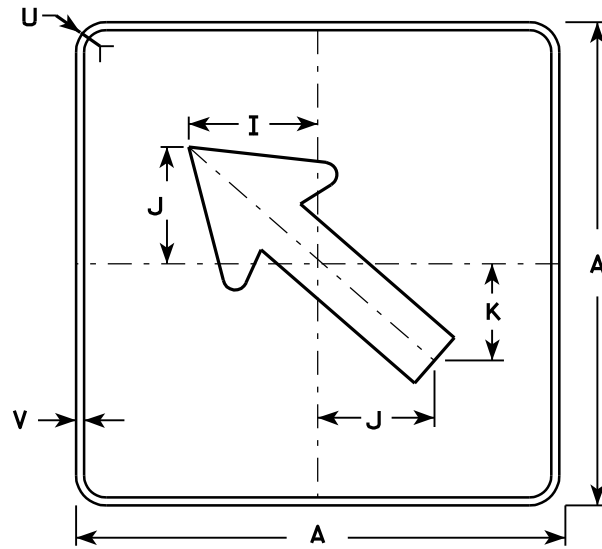
M6-1
MK6-1
MM6-1
MO6-1
MR6-1



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



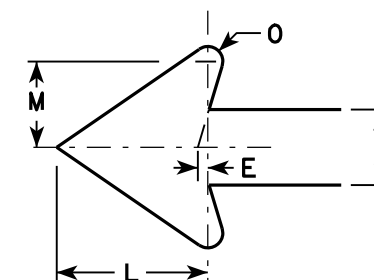
MB6-1
MG6-1
MN6-1



MB6-2
MG6-2
MN6-2

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
MO6-1 and MO6-2 Background - Orange - Reflective
Message - Black
MR6-1 and MR6-2 Background - Brown
Message - Yellow - Type H Reflective



Metric equivalent
for this sign is:

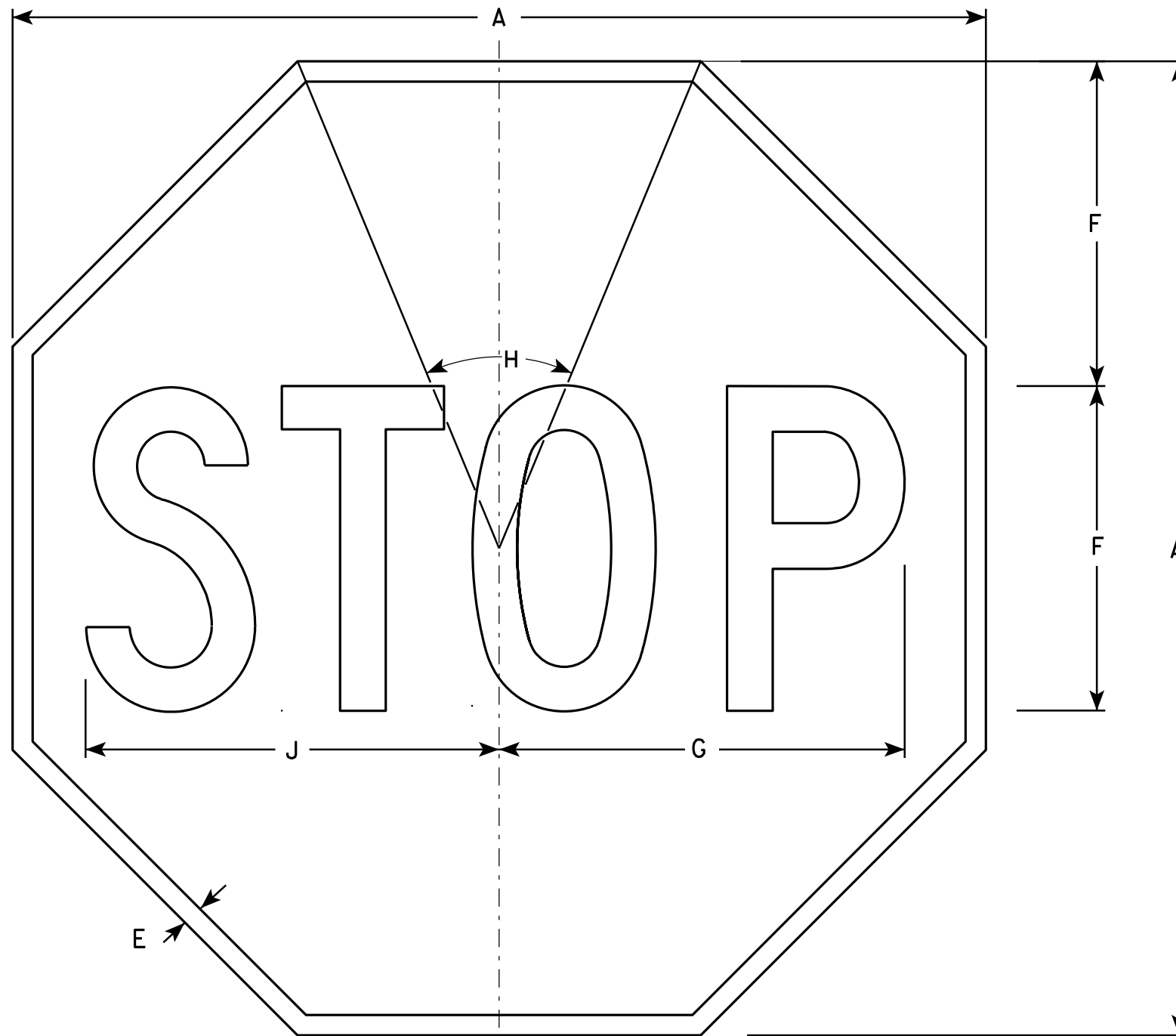
SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

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 m2
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

PROJECT NO: HWY: COUNTY: SHEET NO: E

STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 3/16/10 PLATE NO. M6-1.12



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

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.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

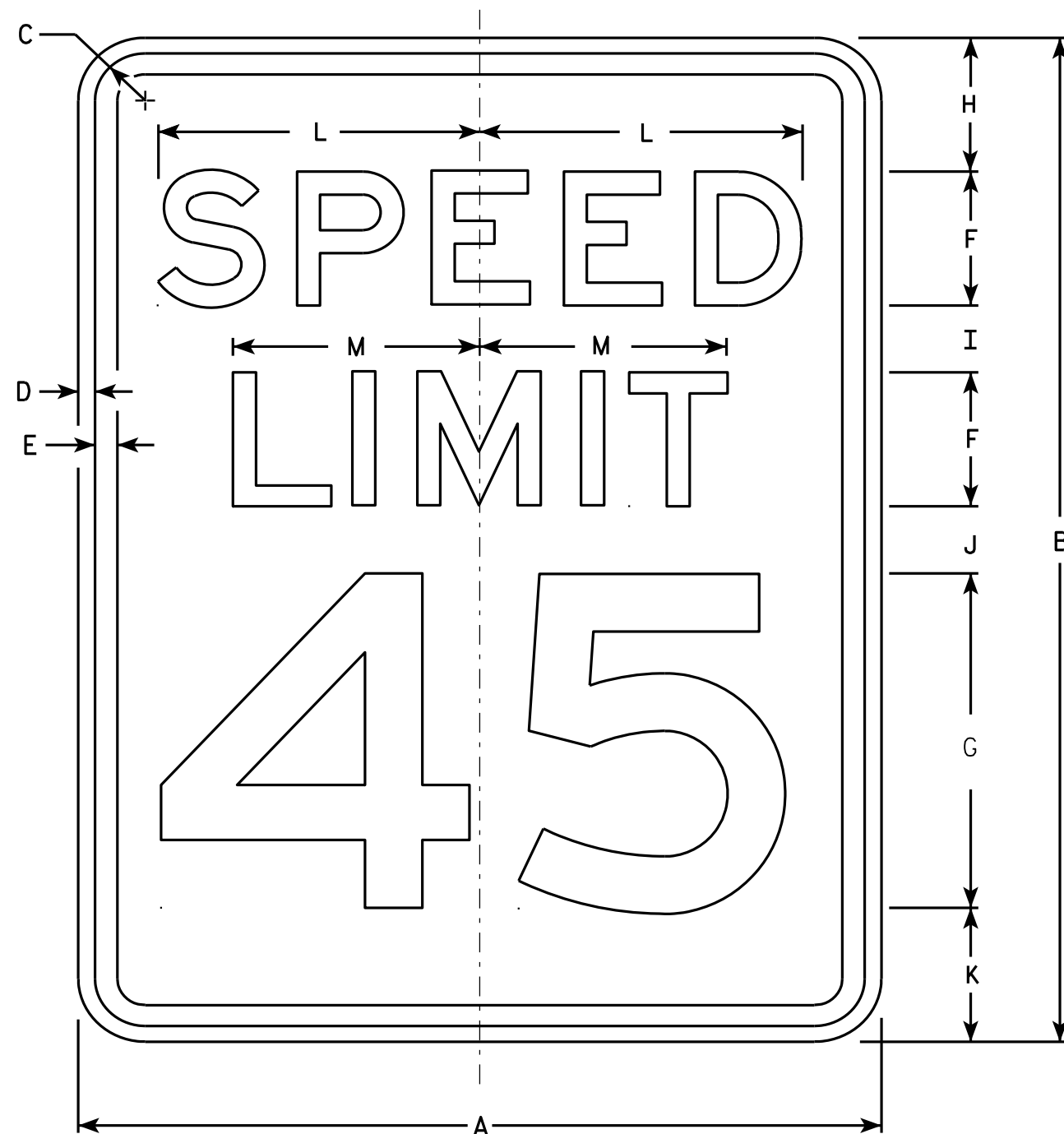
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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R2-1

NOTES

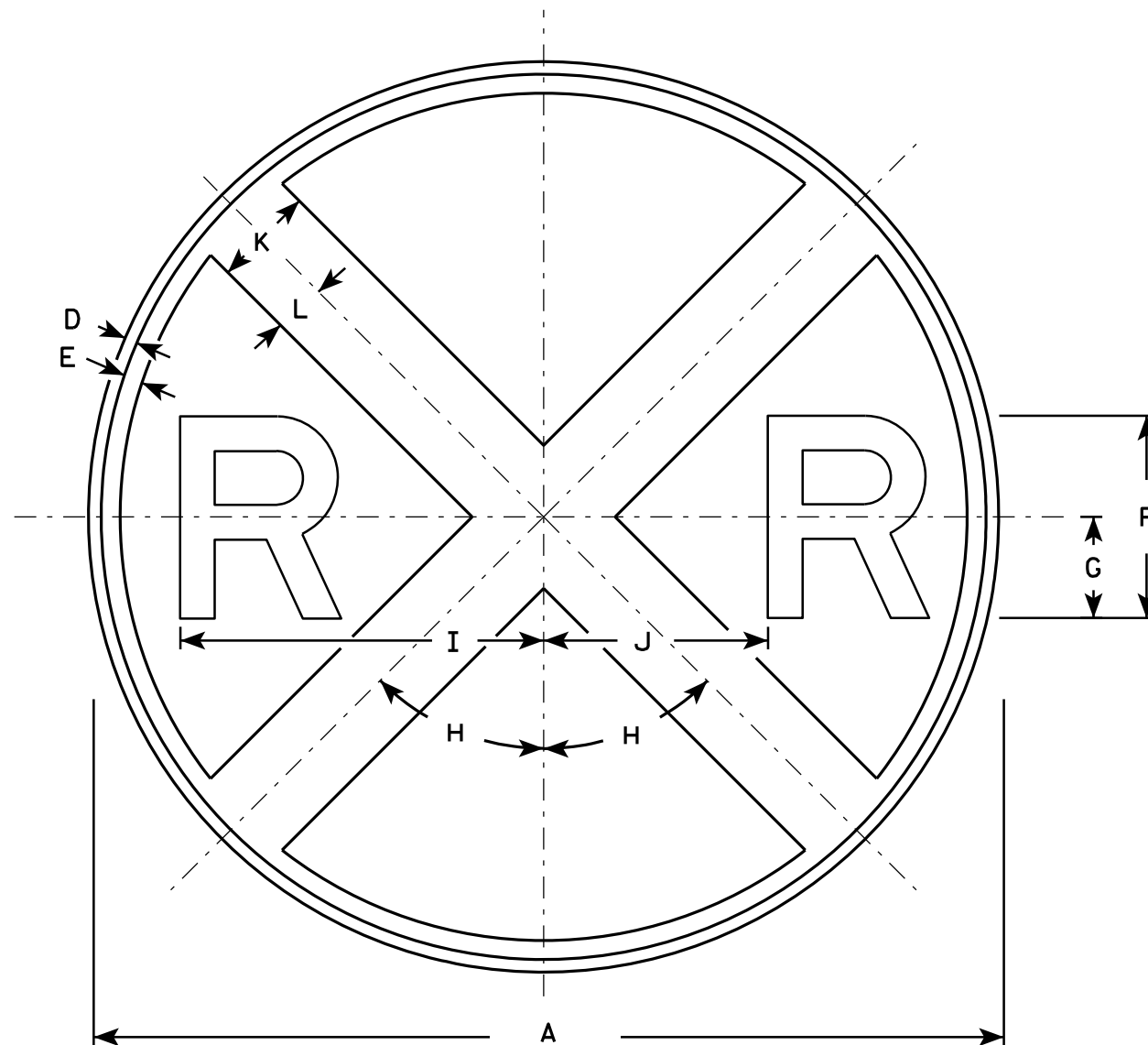
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as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

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

STANDARD SIGN R2-1

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

PROJECT NO: HWY: COUNTY: SHEET NO: E



W10-1

NOTES

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

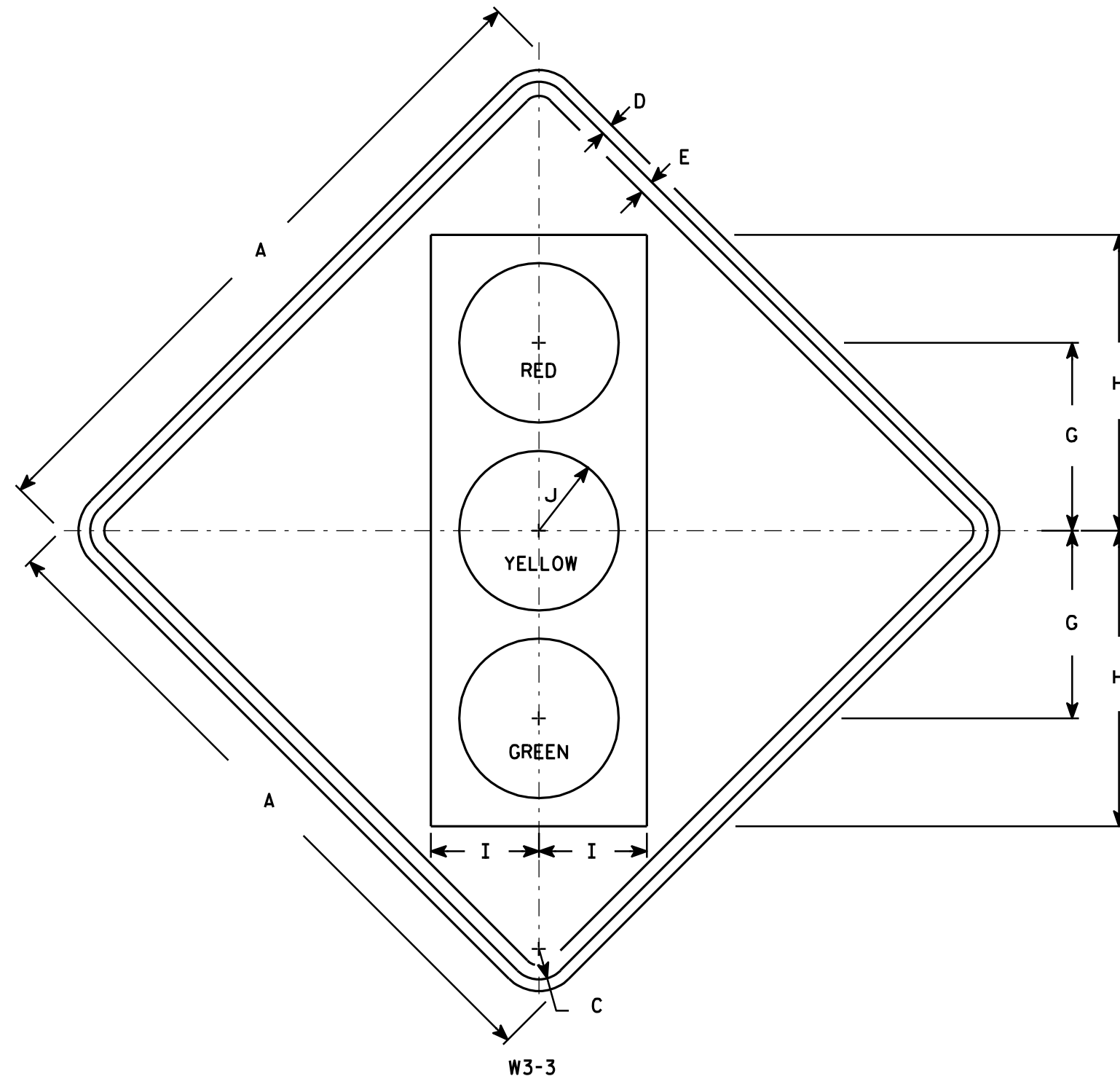
7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30			3⁄8	5⁄8	7	3 1⁄2	45°	12 3⁄8	7 1⁄8	3	1 1⁄2															4.91
2S	36			5⁄8	3⁄4	8	4	45°	14 3⁄8	8 5⁄8	4	2															7.07
2M	36			5⁄8	3⁄4	8	4	45°	14 3⁄8	8 5⁄8	4	2															7.07
3																											
4	48			3⁄4	1 1⁄4	10	5	45°	18 3⁄8	11 5⁄8	5	2 1⁄2															12.57
5																											

STANDARD SIGN	
W10-1	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i>
DATE 3/15/11	for State Traffic Engineer PLATE NO. W10-1.7

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

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Yellow
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.
- Symbol and border are non-reflective black.
Top circle - Type H Reflectorized Red
Center circle - Same as background
Bottom circle - Type H Reflectorized Green

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

STANDARD SIGN W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 6/7/10

PLATE NO. W3-3.11

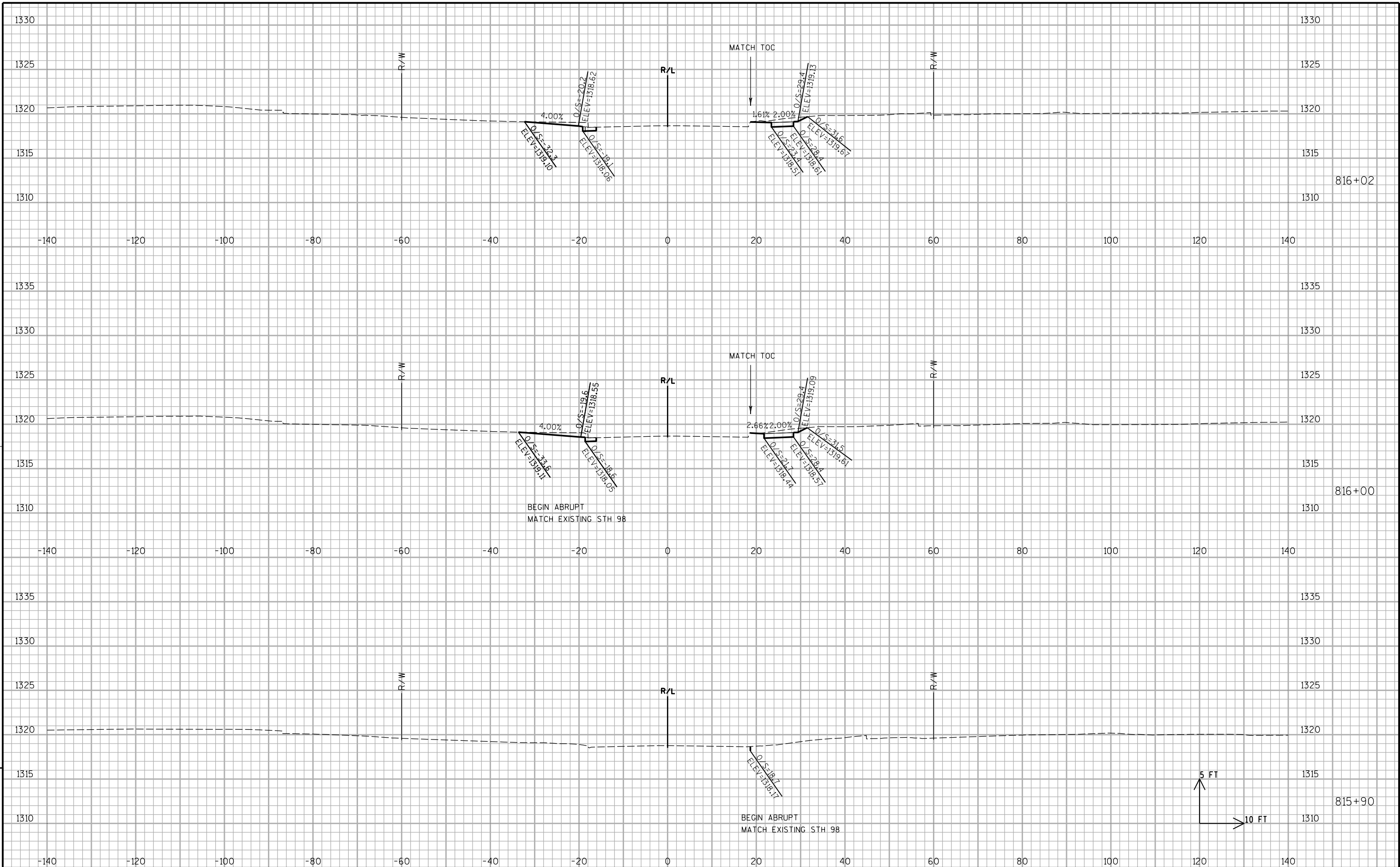
PROJECT NO:

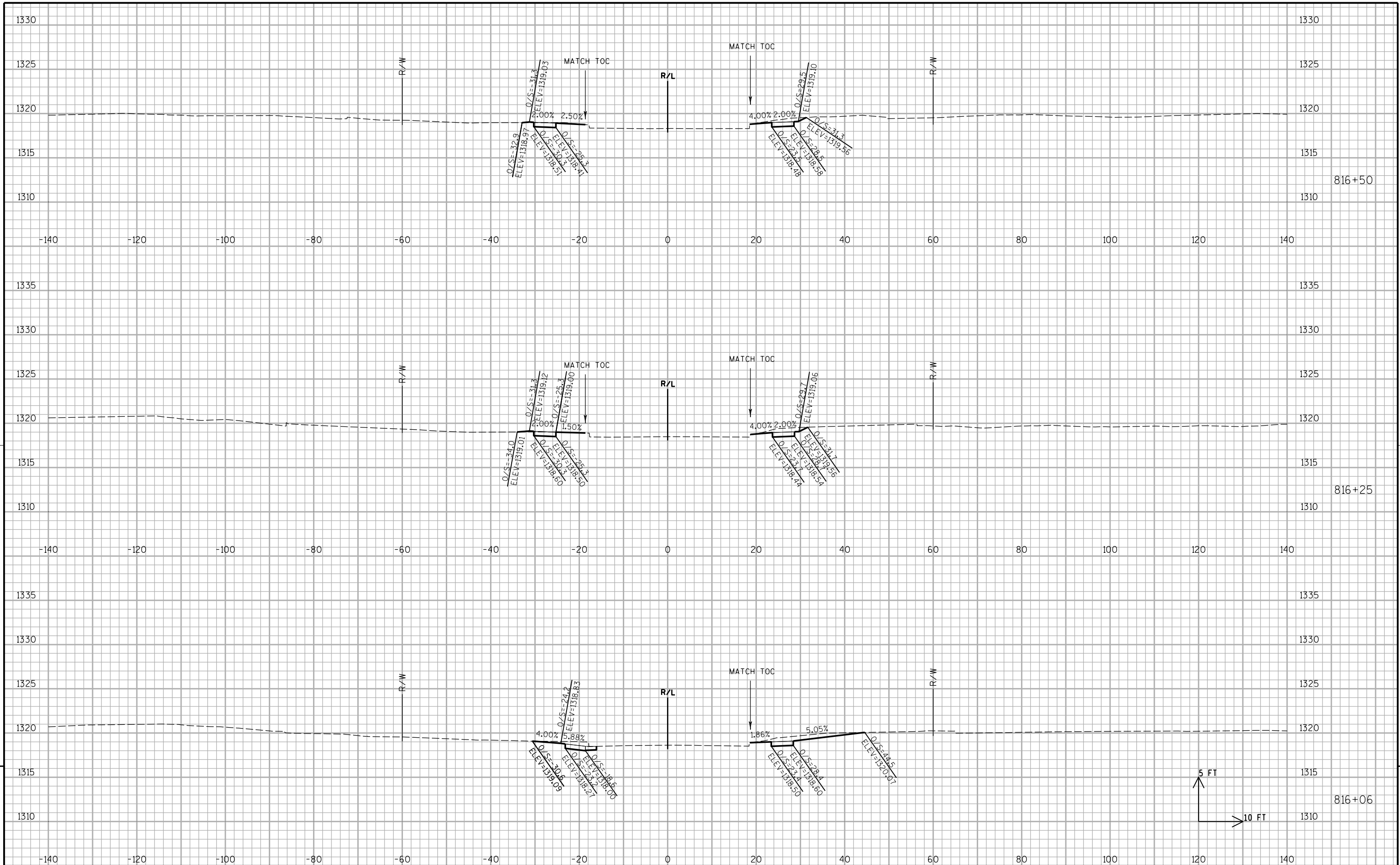
HWY:

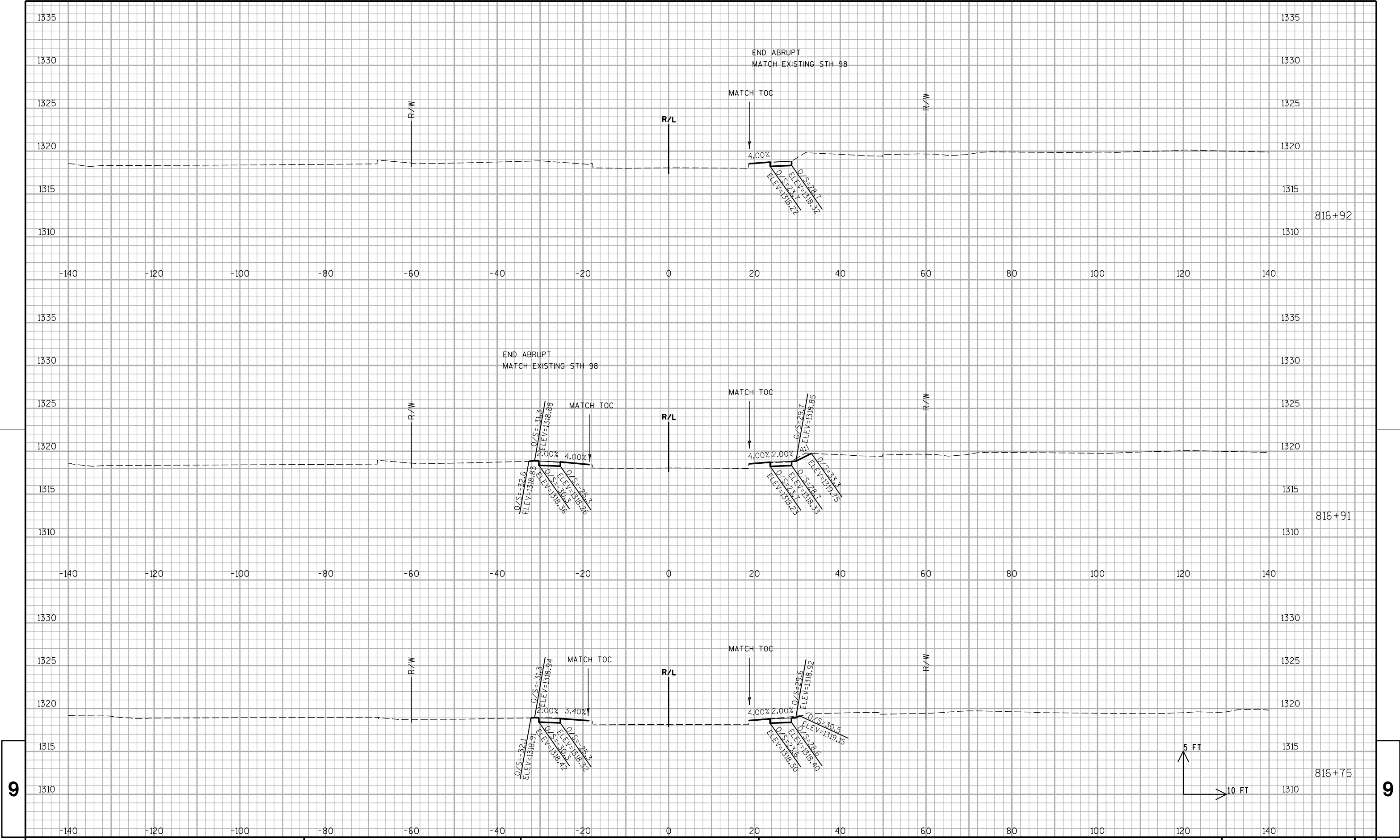
COUNTY:

SHEET NO:

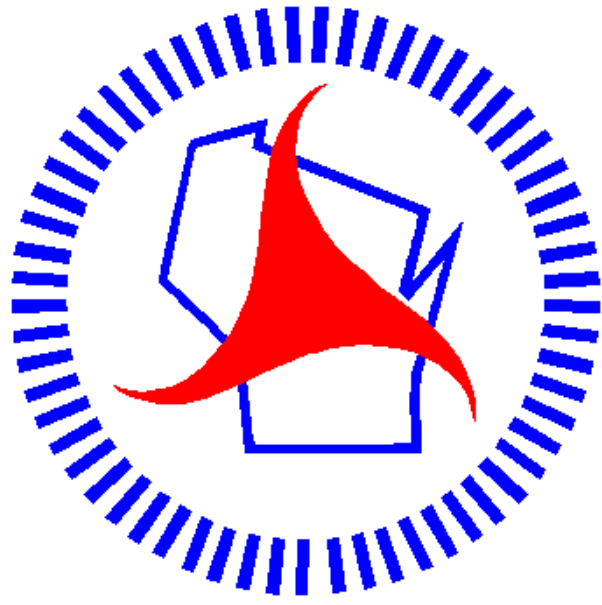
E







Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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