

LAX
PROJECT ID: 5339-00-73
WITH:

COUNTY: CRAWFORD

NOVEMBER 2022

ORDER OF SHEETS

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

TOTAL SHEETS = 20



DESIGN DESIGNATION

A.A.D.T. (2022)	=	100
A.A.D.T. (2042)	=	105
D.H.V.	=	24
D.D.	=	60/40
T.	=	6%
DESIGN SPEED	=	25 mph
ESALS	=	47,000

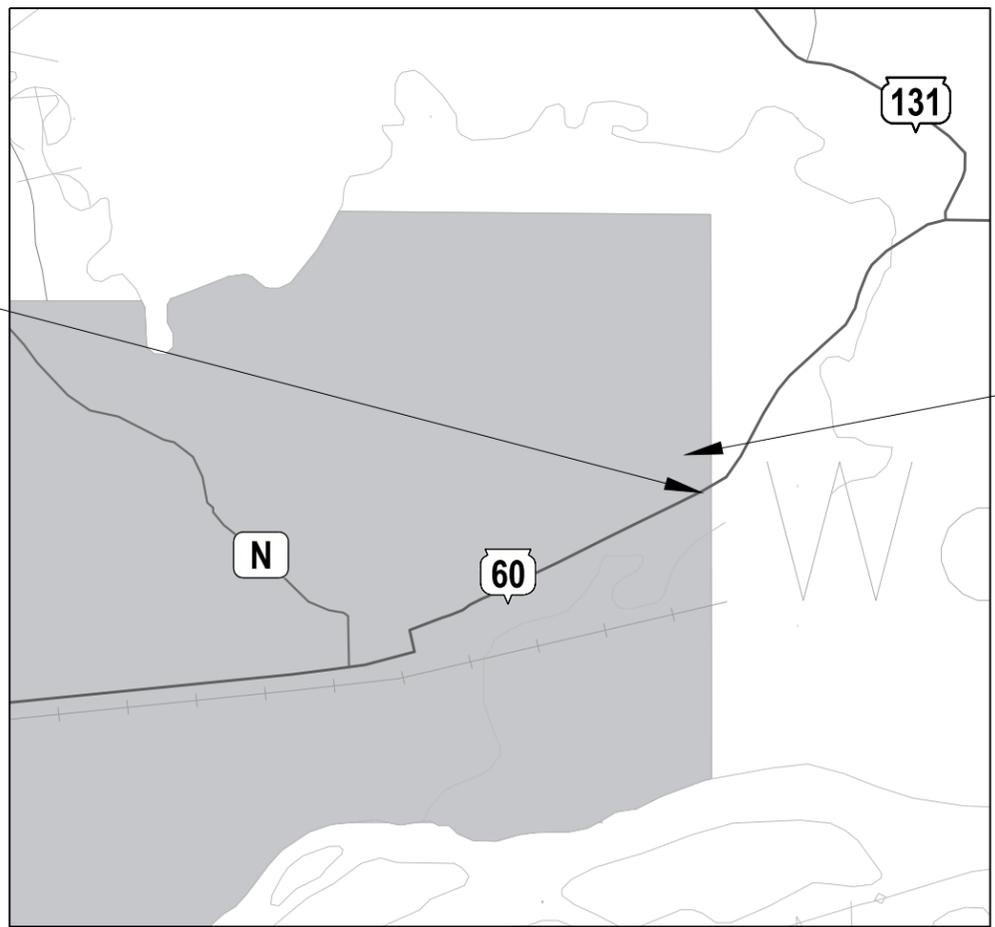
CONVENTIONAL SYMBOLS

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT

VILLAGE OF WAUZEKA, N. TIMBER STREET
STH 60 TO TERMINI
LOC STR
CRAWFORD

STATE PROJECT NUMBER
5339-00-73



BEGIN PROJECT
STA 10+39.24
N = 136,104.634
E = 391,637.876

END PROJECT
STA 13+80.86
N = 136,419.910
E = 391,510.310



TOTAL NET LENGTH OF CENTERLINE = 0.07 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), CRAWFORD COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5339-00-73	WISC 2023017	1

ACCEPTED FOR
VILLAGE OF WAUZEKA
Date: 7-21-22
[Signature]
(Signature and Title of Official)

ORIGINAL PLANS PREPARED BY
WISCONSIN PROFESSIONAL ENGINEER
JEREMY F. KRACHEY
E-37258
WAUZEKA, WI
DATE: 7/21/22
(Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor: TEAM ENGINEERING
Designer: TEAM ENGINEERING
Project Manager: BRANDAN BURGER, PE
Regional Examiner: SW REGION
Regional Supervisor: KYLE HEMP, PE

APPROVED FOR THE DEPARTMENT
DATE: 7/25/2022
Brandan Burger
(Signature)

E

LIST OF STANDARD ABBREVIATIONS

ABUT.	Abutment	JT	Joint	SEC	Section
AC	Acre	JCT	Junction	SHLDR	Shoulder
AGG.	Aggregate	LHF	Left-Hand Forward	SHR	Shrinkage
AH	Ahead	L	Length of Curve	SW	Sidewalk
<	Angle	LIN FT OR LF	Linear Foot	S	South
ASPH	Asphaltic	LC	Long Chord of Curve	SQ	Square
AVG.	Average	MH	Manhole	SF OR SQ FT	Square feet
A.D.T.	Average Daily Traffic	MB	Mailbox	SY OR SQ YD	Square Yard
BAD	Base Aggregate Dense	ML OR M/L	Match Line	STD	Standard
BK	Back	N	North	SDD	Standard Detail Drawings
BF	Back Face	Y	North Grid Coordinate	STH	Station
B.M	Bench Mark	OAL	Overall Length	STA	State Trunk Highways
BR	Bridge	OD	Outside Diameter	SS	Station
C/L	Center Line	PLE	Permanent Limited Easement	SG	Storm Sewer
CC	Center to Center	PT	Point	SE	Subgrade
CTH	County Trunk Highway	PC	Point of Curvature	SL OR S/L	Superelevation
CR	Creek	PI	Point of Intersection	SV	Survey Line
CY OR CU YD	Crushed	PRC	Point of Reverse Curvature	T	Septic Vent
CP	Cubic Yard	PT	Point of Tangency	TEL	Tangent
C & G	Culvert Pipe	POC	Point on curve	TEMP	Telephone
D	Curb and Gutter	POT	Point on Tangent	TI	Temporary
DHV	Degree of Curve	PVC	Polyvinyl Chloride	TLE	Temporary Interest
DIA	Design Hour Volume	PCC	Portland Cement Concrete	t	Temporary Limited Easement
E	Diameter	LB	Pound	T OR TN	Ton
ELEC	East	PSI	Pounds Per Square Inch	TRANS	Town
EL OR ELEV	East Grid Coordinate	PE	Private Entrance	TL OR T/L	Transition
ESALS	Electric	RR	Radius	T	Transit Line
EBS	Elevation	RR	Railroad	TYP	Trucks (percent of)
FF	Equivalent Single Axle Loads	RL OR R/L	Reference Line	UNCL	Typical
FE	Excavation Below Subgrade	RP	Reference Point	UG	Unclassified
F	Face to Face	RCCP	Reinforced Concrete Culvert Pipe	USH	Underground Cable
FG	Field Entrance	REQD	Required	VAR	United States Highway
FL OR F/L	Fill	RES	Residence or Residential	V	Variable
FT	Finished Grade	RW	Retaining Wall	VERT	Velocity or Design Speed
FTG	Flow Line	RT	Right	VC	Vertical
GN	Foot	RHF	Right-Hand Forward	VOL	Vertical Curve
HT	Footing	R/W	Right-of-Way	WM	Volume
CWT	Grid North	R	River	WV	Water Main
HYD	Height	RD	Road	W	Water Valve
INL	Hundredweight	RDWY	Roadway	WB	West
ID	Hydrant	SALV	Salvaged	YD	Westbound
INV	Inlet	SAN S	Sanitary Sewer		Yard
IP	Inside Diameter				
IRS	Invert				
	Iron Pipe or Pin				
	Iron Rod Set				

GENERAL NOTES

DO NOT REMOVE ANY TREES OR SHRUBS WITHOUT APPROVAL OF THE ENGINEER.

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. COORDINATE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGER'S HOTLINE AND/OR A CALL TO THE UTILITIES THAT HAVE INSTALLATIONS WITHIN THE PROJECT AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGER'S HOTLINE.

RIGHT OF WAY LINES SHOWN ON THE CROSS SECTIONS ARE APPROXIMATE.

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

CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN PIPE-LAYING OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAY SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER PIPE IN DRIVEWAY AREA IS INSTALLED. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.

SAWCUT EXISTING ASPHALT PAVEMENT AT THE MATCHLINE AS INDICATED ON THE PLAN OR AS DIRECTED BY THE ENGINEER.

CONSTRUCTION LIMITS ON SIDE ROADS AND PRIVATE ENTRANCES SHALL BE DETERMINED BY THE ENGINEER AND SHALL BE RESTORED IN KIND.

THE CONTRACTORS PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT ASPHALTIC SURFACE LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, BIKE OR PARKING LANE.

ASPHALTIC SURFACE WEIGHT CALCULATIONS ARE BASED ON 112/LB/SY/IN.

APPLY TACK COAT BETWEEN LAYERS OF PAVEMENT AND TO MILLED SURFACES. THE APPLICATION RATE IS 0.07 GALLONS PER SQUARE YARD BETWEEN THE MILLED SURFACE, 0.05 GALLONS PER SQUARE YARD BETWEEN NEW ASPHALTIC SURFACE LAYERS, OR AS DIRECTED BY THE ENGINEER.

THE EXACT LOCATIONS AND LIMITS OF PRIVATE ENTRANCES, COMMERCIAL, AND FIELD ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ALL LAYOUT DATA IS REFERENCED TO THE C/L UNLESS OTHERWISE NOTED.

ASPHALTIC SURFACE SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYERS AND GRADATION:

UTILITIES

<p>ALLIANT ENERGY AL MUMM 4902 NORTH BILTMORE LN. MADISON, WI 53713 PHONE: (608) 732-7925 EMAIL: allanmumm@alliantenergy.com ELECTRIC</p>	<p>CENTURYLINK DOUG MCGOWAN 130 4TH STREET BARABOO, WI 53913 PHONE: (608) 482-5377 EMAIL: doug.mcgowan@lumen.com COMMUNICATION</p>
<p>MADISON GAS AND ELECTRIC COMPANY JANE ROSSING P.O. BOX 1231 MADISON, WI 53701 PHONE: (608) 252-7099 EMAIL: workplans@mge.com GAS</p>	<p>WAUZKEA MUNICIPAL WATER UTILITY GARY GUNDLACH P.O. BOX 344 WAUZKEA, WI 53826 PHONE: (608) 875-5281 EMAIL: villageofwauzeka@centurytel.net WATER/SANITARY SEWER</p>
<p>WICONNECT WIRELESS DAVE BANGERT 2670F E MAIN ST REEDSBURG, WI 53959 PHONE: (608) 524-1579 EMAIL: support@wicw.net COMMUNICATION</p>	

DESIGNER

TEAM ENGINEERING, INC.
210 GUARD STREET
WAUZKEA, WI 53826
ATTN: JEREMY KRACHEY, P.E.
PH: (608) 875-5075
jkrachey@teamenginc.com

DNR CONTACT

DEPARTMENT OF NATURAL RESOURCES
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
ATTN: KAREN KALVELAGE
ENVIRONMENTAL ANALYSIS & REVIEW SPECIALIST
PH: (608) 785-9115
karen.kalvelage@wisconsin.gov

WISDOT CONTACT

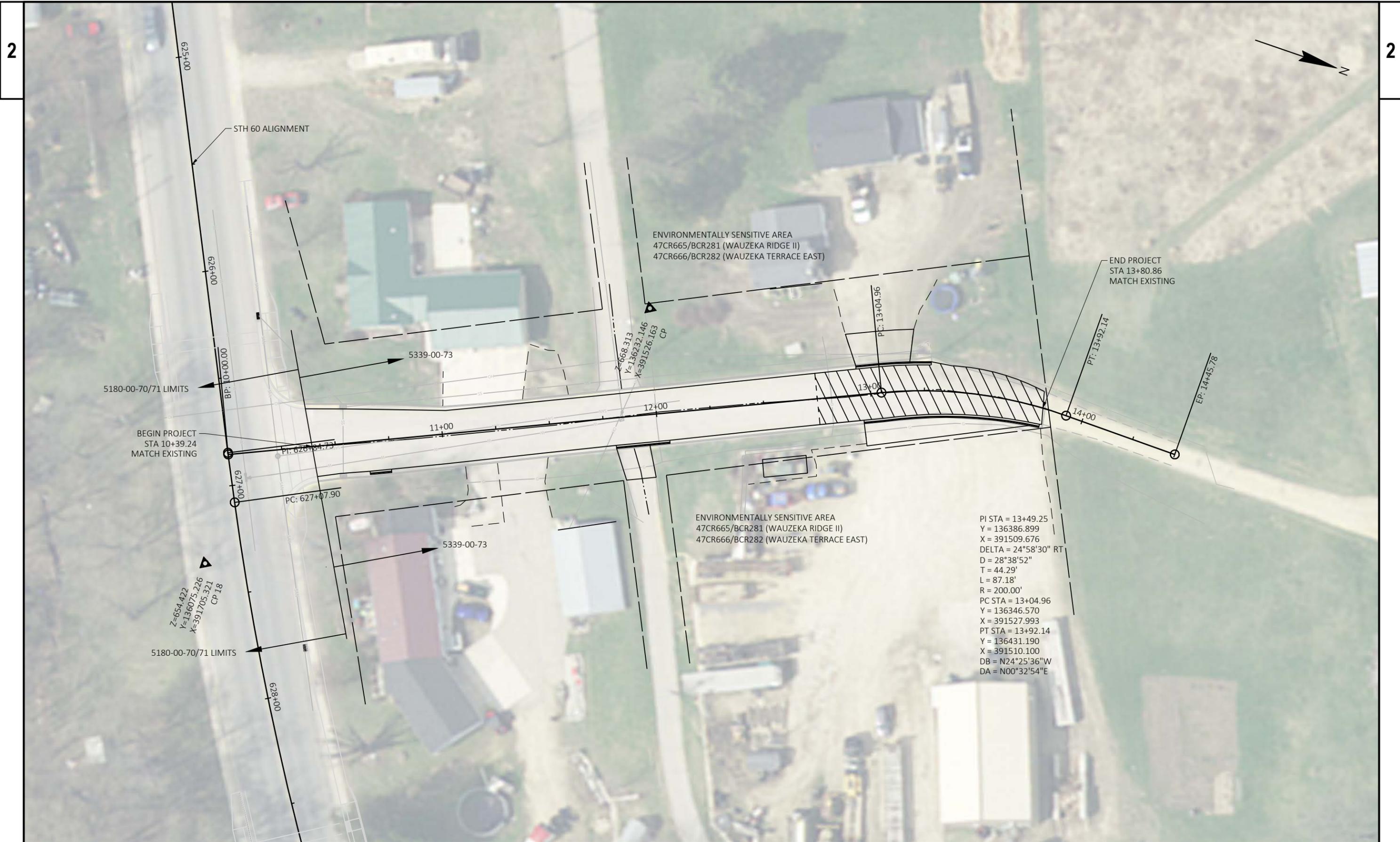
ATTENTION: BRANDAN BURGER, P.E.
LOCAL PROGRAM PROJECT MANAGER
WISDOT - SW REGION
2101 WRIGHT STREET
MADISON, WI 53704
WORK: (608)-267-4019
EMAIL: BRANDAN.BURGER@DOT.WI.GOV



Dial **811** or (800)242-8511

www.DiggersHotline.com

HMA PAVEMENT			
LOCATION	HMA	LOWER LAYER	UPPER LAYER
TIMBER ST.	ASPHALTIC SURFACE	2.00 "	2.50"



PROJECT NO: 5339-00-73

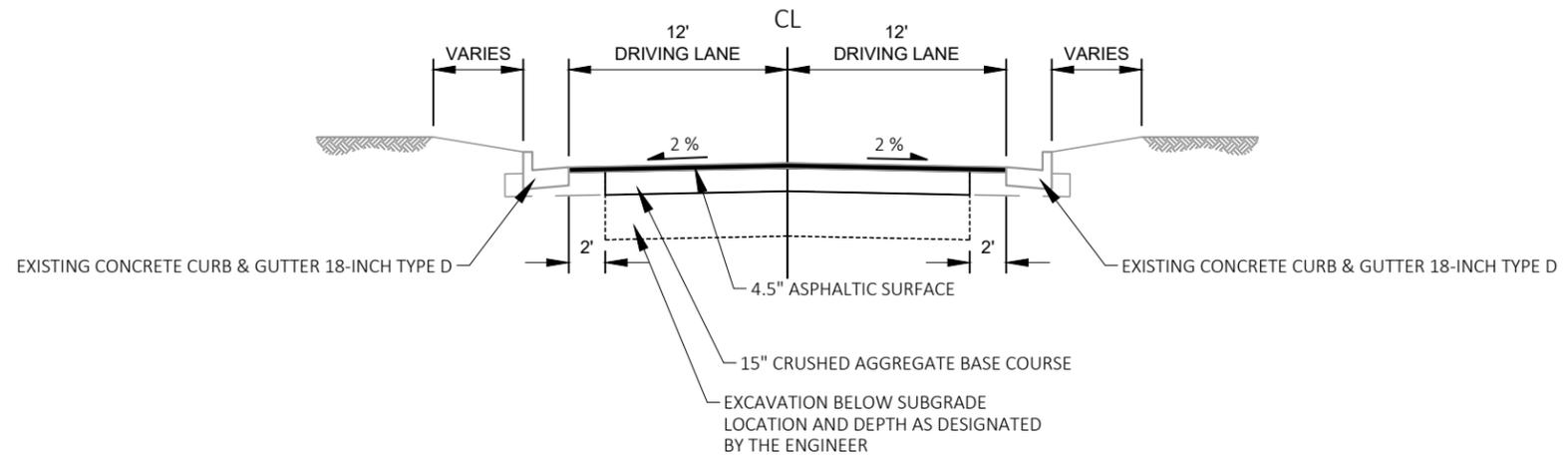
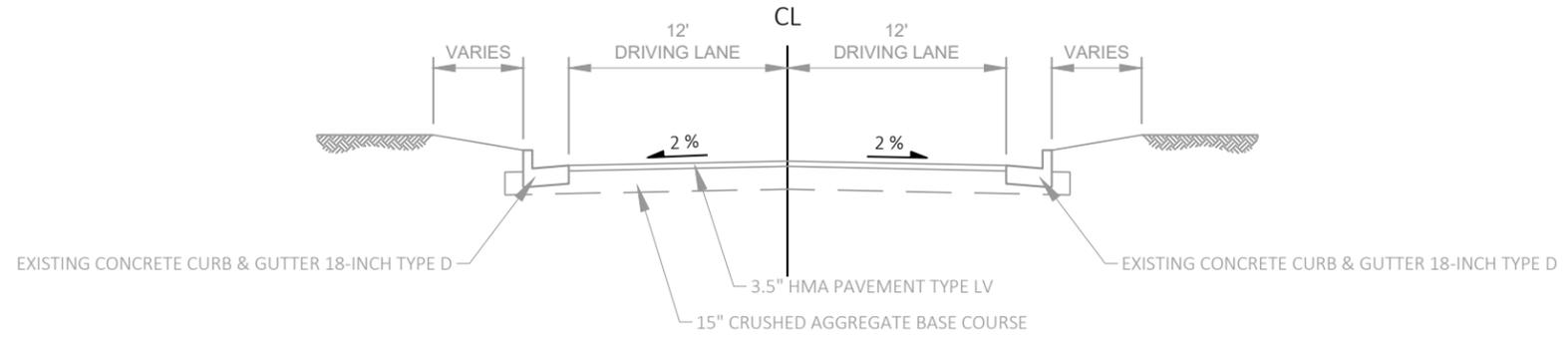
HWY: TIMBER ST

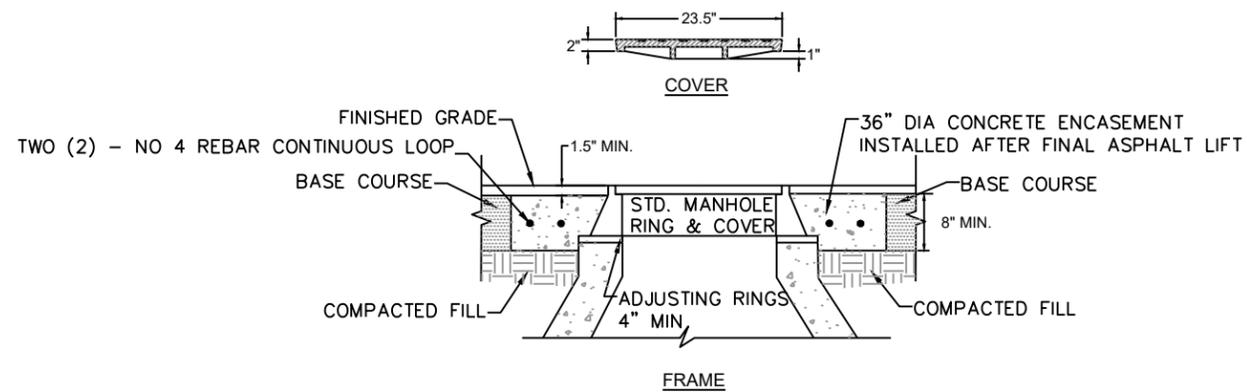
COUNTY: CRAWFORD

PROJECT OVERVIEW

SHEET

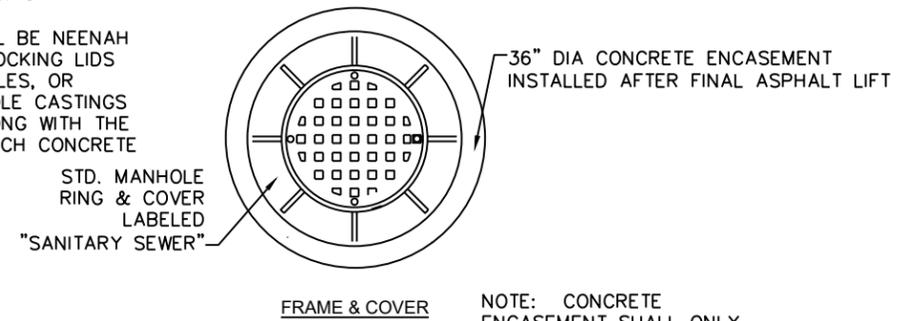
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STANDARD MANHOLE FRAME & COVER
NOT TO SCALE

- 1) EXTERNAL JOINT SEALS SHALL BE ATOR WRAP BY INFI-SHIELD, INC. OR APPROVED EQUAL
- 2) MANHOLE CASTINGS SHALL BE NEENAH R-1642, LM WITH NON-ROCKING LIDS AND CONCEALED PICK HOLES, OR APPROVED EQUAL. MANHOLE CASTINGS SHALL BE FURNISHED ALONG WITH THE PROPER AMOUNT OF 2-INCH CONCRETE ADJUSTMENT RINGS.



FRAME & COVER

NOTE: CONCRETE ENCASEMENT SHALL ONLY BE USED IN AREAS WHERE COVER IS TO BE FLUSH WITH PAVEMENT OR CONCRETE. CONCRETE ENCASEMENT SHALL NOT BE USED IN NON-TRAFFIC AREAS.

Estimate Of Quantities

5339-00-73

Line	Item	Item Description	Unit	Total	Qty
0002	204.0110	Removing Asphaltic Surface	SY	950.000	950.000
0004	204.0150	Removing Curb & Gutter	LF	156.000	156.000
0006	205.0100	Excavation Common	CY	250.000	250.000
0008	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 5339-00-73	EACH	1.000	1.000
0010	213.0100	Finishing Roadway (project) 01. 5339-00-73	EACH	1.000	1.000
0012	305.0110	Base Aggregate Dense 3/4-Inch	TON	30.000	30.000
0014	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	240.000	240.000
0016	311.0110	Breaker Run	TON	200.000	200.000
0018	416.0180	Concrete Driveway 8-Inch	SY	70.000	70.000
0020	455.0605	Tack Coat	GAL	60.000	60.000
0022	465.0105	Asphaltic Surface	TON	280.000	280.000
0024	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	156.000	156.000
0026	611.0535	Manhole Covers Type J-Special	EACH	1.000	1.000
0028	611.8120.S	Cover Plates Temporary	EACH	1.000	1.000
0030	618.0100	Maintenance And Repair of Haul Roads (project) 01. 5339-00-73	EACH	1.000	1.000
0032	619.1000	Mobilization	EACH	1.000	1.000
0034	624.0100	Water	MGAL	15.000	15.000
0036	625.0105	Topsoil	CY	24.000	24.000
0038	628.1905	Mobilizations Erosion Control	EACH	1.000	1.000
0040	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0042	628.2006	Erosion Mat Urban Class I Type A	SY	100.000	100.000
0044	629.0210	Fertilizer Type B	CWT	1.000	1.000
0046	630.0140	Seeding Mixture No. 40	LB	16.000	16.000
0048	630.0200	Seeding Temporary	LB	16.000	16.000
0050	630.0500	Seed Water	MGAL	4.000	4.000
0052	642.5001	Field Office Type B	EACH	1.000	1.000
0054	643.0300	Traffic Control Drums	DAY	200.000	200.000
0056	643.0420	Traffic Control Barricades Type III	DAY	60.000	60.000
0058	643.0900	Traffic Control Signs	DAY	135.000	135.000
0060	643.5000	Traffic Control	EACH	1.000	1.000
0062	650.5000	Construction Staking Base	LF	339.000	339.000
0064	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	156.000	156.000
0066	650.9911	Construction Staking Supplemental Control (project) 01. 5339-00-73	EACH	1.000	1.000
0068	690.0150	Sawing Asphalt	LF	14.000	14.000
0070	690.0250	Sawing Concrete	LF	18.000	18.000
0072	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	200.000	200.000
0074	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	100.000	100.000
0076	SPV.0060	Special 01. Adjust Water Valve	EACH	1.000	1.000

MISC ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	213.0100.01	618.0100.01	619.1000	REMARKS
					FINISHING ROADWAY (5339-00-73) EACH	MAINTENANCE AND REPAIR OF HAUL ROADS (5339-00-73) EACH	MOBILIZATION EACH	
0010	10+39	-	13+78	CL	1	-	1	
				TOTAL 0010	1	0	1	
0020	10+39	-	13+78	CL	-	1	-	
				TOTAL 0020	0	1	0	
				PROJECT TOTAL	1	1	1	

EXCAVATION BASE AGGREGATE

CATEGORY	STATION	TO	STATION	LOCATION	205.0100	305.0110	305.0120	311.0110	624.0100	REMARKS
					EXCAVATION COMMON CY	BASE AGGREGATE DENSE 3/4-INCH TON	BASE AGGREGATE DENSE 1 1/4-INCH TON	BREAKER RUN TON	WATER MGAL	
0010	10+39	-	12+75	CL	35	-	40	-	-	EXCESS ROADWAY MATERIAL
0010	12+75	-	13+78	CL	215	-	200	200	15	EBS AREA
0010	12+90	-	13+83	LT/RT	-	30	-	-	-	PRIVATE ENTRANCES
				TOTAL 0010	250	30	240	200	15	

CONCRETE ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	204.0150	416.0180	601.0407	650.5500	690.0250	REMARKS
					REMOVING CURB & GUTTER LF	CONCRETE DRIVEWAY 8-INCH SY	CONCRETE CURB & GUTTER 18-INCH TYPE D LF	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	SAWING CONCRETE LF	
0010	10+65	-	10+75	RT	10	-	10	10	6	
0010	11+80	-	12+05	RT	25	-	25	25	6	
0010	12+96	-	13+83	RT	87	-	87	87	3	
0010	12+94	-	13+28	LT	34	-	34	34	3	
0010	13+25	-	-	RT	-	70	-	-	-	PRIVATE ENTRANCE
				TOTAL 0010	156	70	156	156	18	

MANHOLE ITEMS

CATEGORY	STATION	LOCATION	611.0535 MANHOLE COVERS TYPE J- SPECIAL EACH	611.8120.S COVER PLATES TEMPORARY EACH	SPV.0060.01 SPECIAL (01. ADJUST WATER VALVE) EACH	REMARKS
0010	12+12	5' LT	1	1	-	
		TOTAL 0010	1	1	0	
0020	11+83	2' LT	-	-	1	
		TOTAL 0020	0	0	1	
		PROJECT TOTAL	1	1	1	

ASPHALT ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	204.0110 REMOVING ASPHALTIC SURFACE SY	211.0101.01 PREPARE FOUNDATION FOR ASPHALTIC PAVING (5339-00-73) EACH	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON	690.0150 SAWING ASPHALT LF	REMARKS
0010	10+39	-	13+78	CL	924	1	50	255	-	
0010	11+85	-	-	RT	26	-	5	10	14	PRIVATE ENTRANCE
0010	13+05	-	-	LT	-	-	5	15	-	PRIVATE ENTRANCE
				TOTAL 0010	950	1	60	280	14	

TRAFFIC CONTROL ITEMS

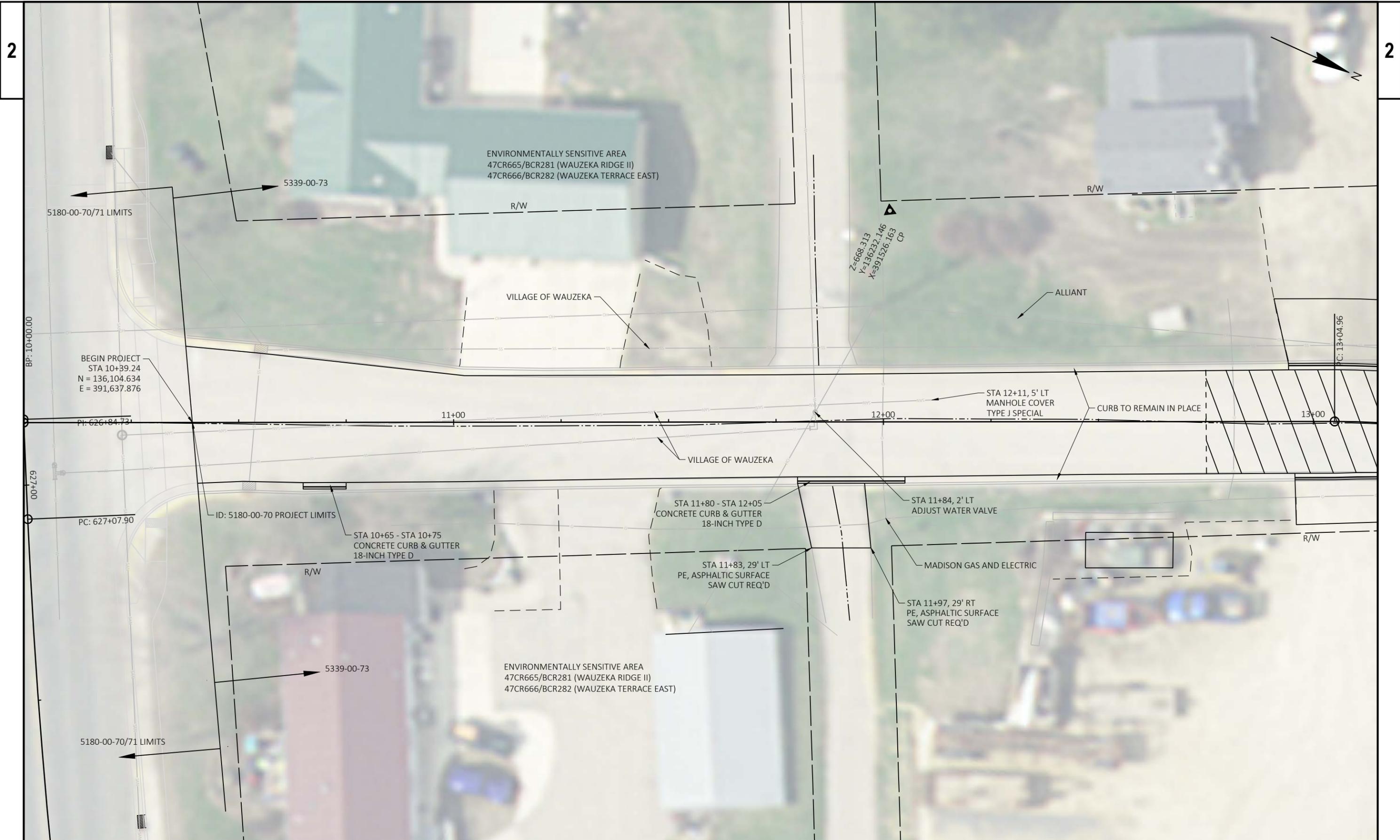
CATEGORY	STATION	LOCATION	NUMBER	DAYS	643.0300 TRAFFIC CONTROL DRUMS DAY	NUMBER	DAYS	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	NUMBER	DAYS	643.0900 TRAFFIC CONTROL SIGNS DAY	643.5000 TRAFFIC CONTROL EACH	REMARKS
0010	10+39	BOP	10	10	100	2	15	30	7	15	105	1	
0010	11+85	ALLEY	10	10	100	1	15	15	1	15	15	-	
0010	13+83	EOP				1	15	15	1	15	15	-	
0010		TOTAL 0010			200			60			135	1	

EROSION CONTROL ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	625.0105	628.1905	628.1910	628.2006	629.0210	630.0140	630.0200	630.0500	REMARKS
					TOPSOIL CY	MOBILIZATIONS EROSION CONTROL EACH	MOBILIZATIONS EROSION CONTROL EACH	EROSION MAT URBAN CLASS I TYPE A SY	FERTILIZER TYPE B CWT	SEEDING MIXTURE NO. 40 LB	SEEDING TEMPORARY LB	SEED WATER MGAL	
0010	10+65	-	10+87	RT	5	-	-	20	0.2	3	3	1	
0010	11+76	-	12+00	RT	5	-	-	20	0.2	3	3	1	
0010	12+81	-	13+83	RT	7	-	-	30	0.3	5	5	1	
0010	12+94	-	13+28	LT	7	-	-	30	0.3	5	5	1	
0010	10+39	-	13+78	CL	-	1	1	-	-	-	-	-	
TOTAL 0010					24	1	1	100	1	16	16	4	

CONSTRUCTION STAKING

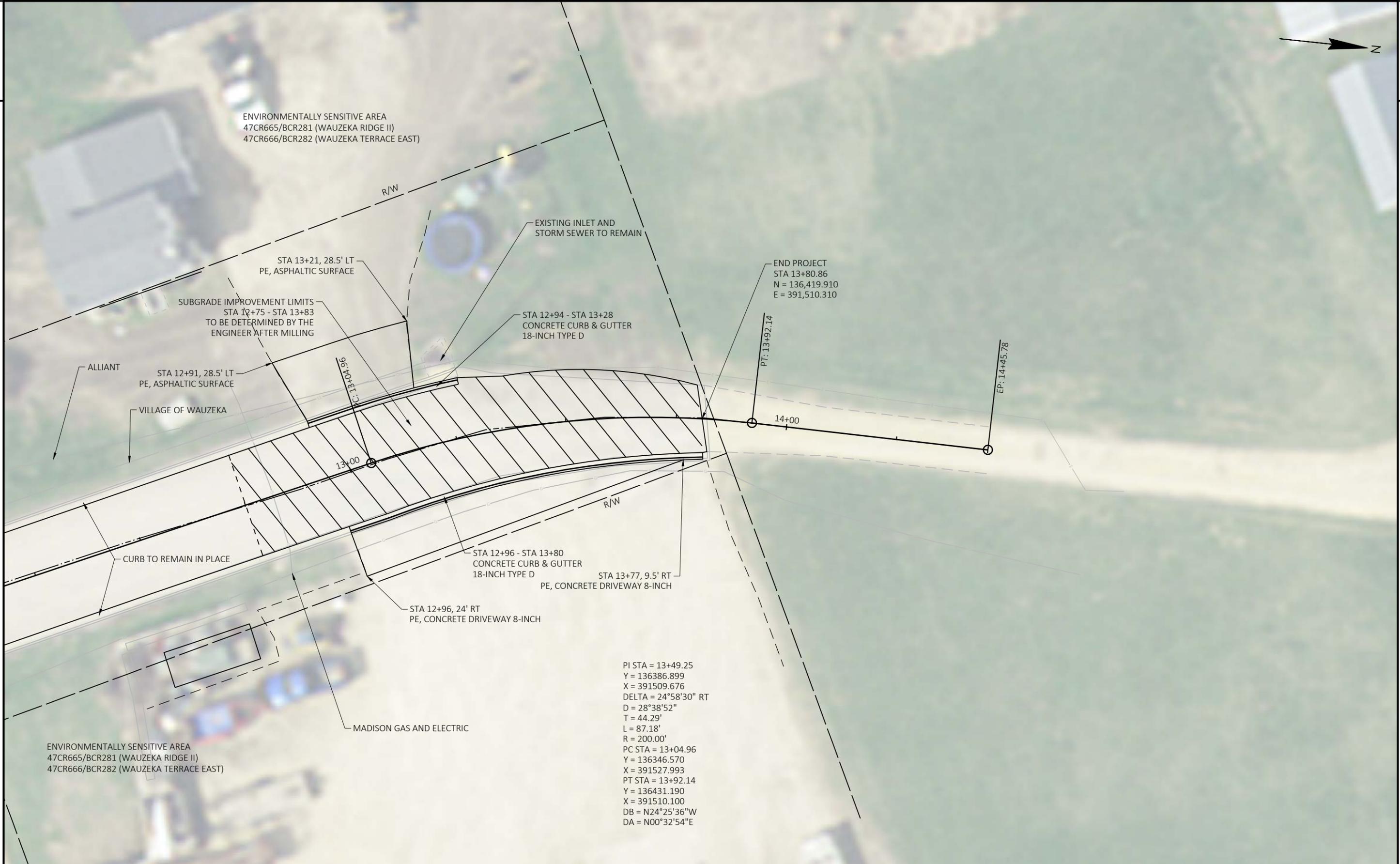
CATEGORY	STATION	TO	STATION	LOCATION	650.5000	650.9911.01	REMARKS
					CONSTRUCTION STAKING BASE LF	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (5339-00-73) EACH	
0010	10+39	-	13+78	CL	339	1	
TOTAL 0010					339	1	



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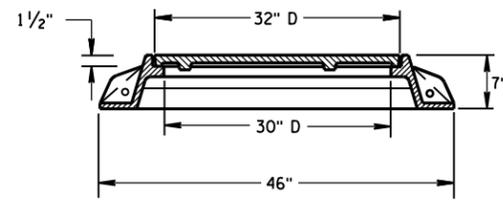
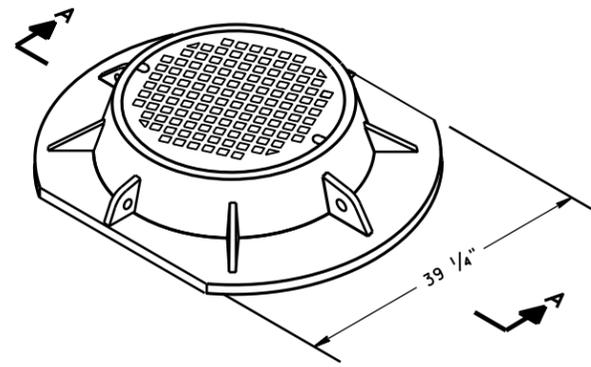
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PROJECT NO: 5339-00-73	HWY: TIMBER ST	COUNTY: CRAWFORD	PLAN SHEETS	SHEET	E
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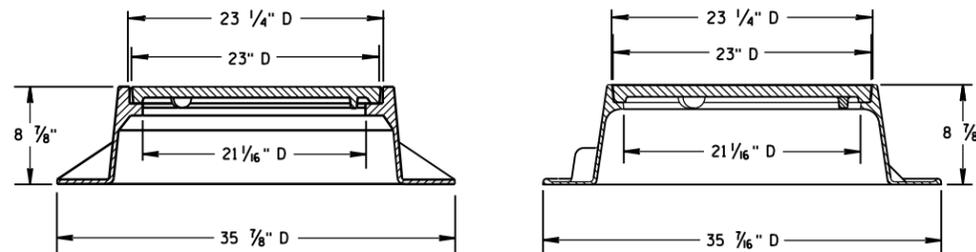
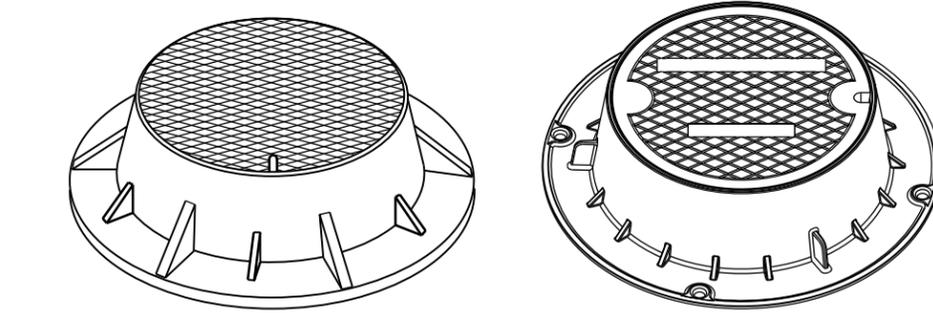


Standard Detail Drawing List

08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D18-03	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES



SECTION A-A
TYPE "K"



TYPE "J"

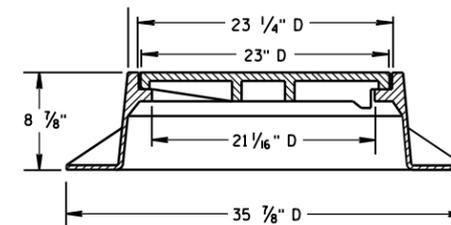
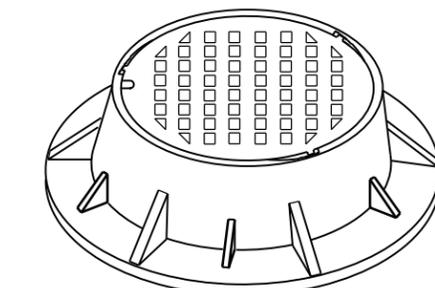
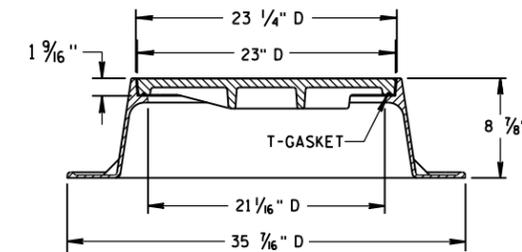
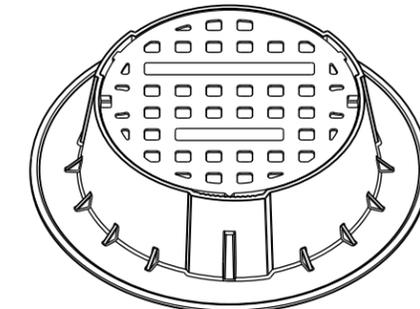
NOTE: EITHER CASTING IS ACCEPTABLE

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.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



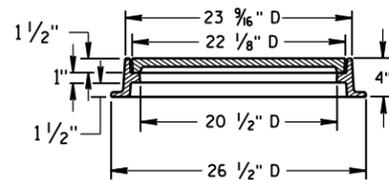
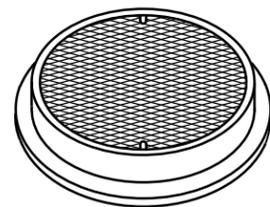
TYPE "J" SPECIAL

TYPE "B" NON-ROCKING SELF-SEAL LID

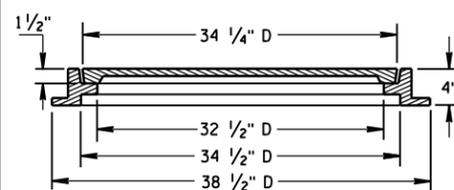
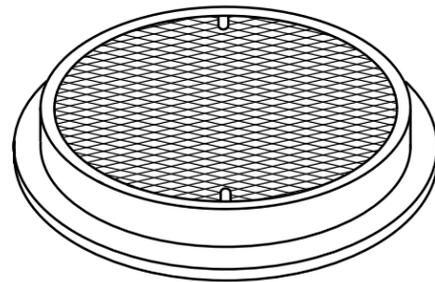
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

NOTE: EITHER CASTING IS ACCEPTABLE

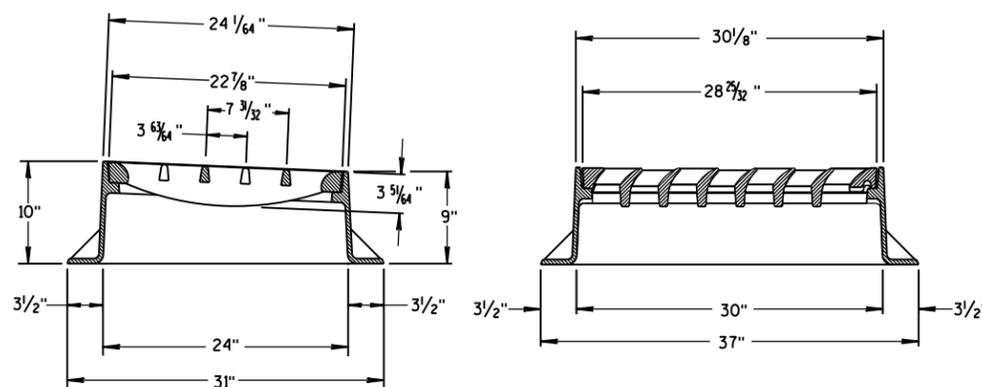
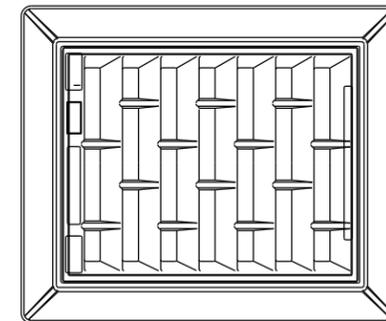
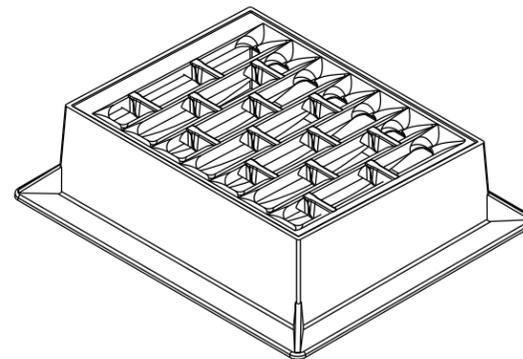
6



TYPE "L"



TYPE "M"



INLET COVER TYPE "BW"

6

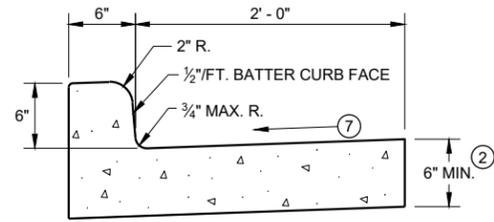
S.D.D. 8 A 5-19d

S.D.D. 8 A 5-19d

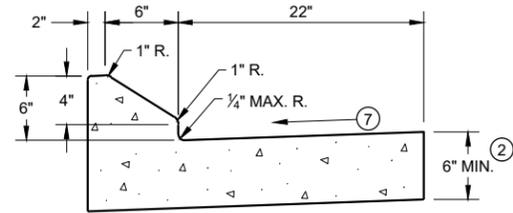
INLET COVER TYPE BW
MANHOLE COVERS, TYPE K,
J, J-S, L & M

STATE OF WISCONSIN
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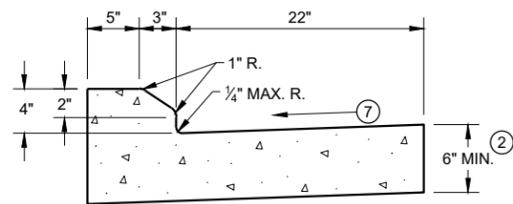
APPROVED
11/27/2013 DATE /S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



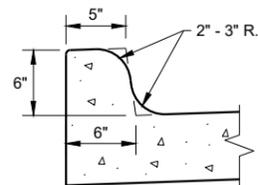
TYPES A^① & D



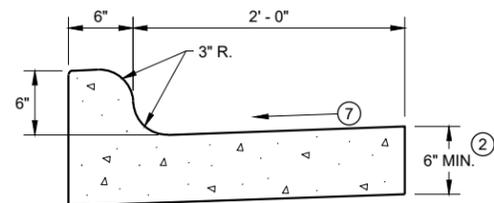
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

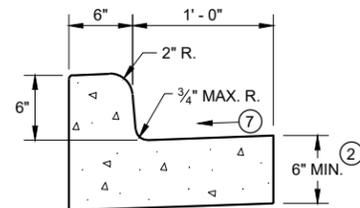


TYPES K^① & L
(OPTIONAL CURB SHAPE)



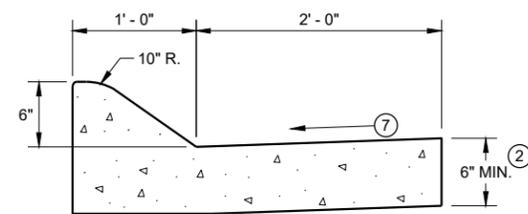
TYPES K^① & L

CONCRETE CURB AND GUTTER 30"

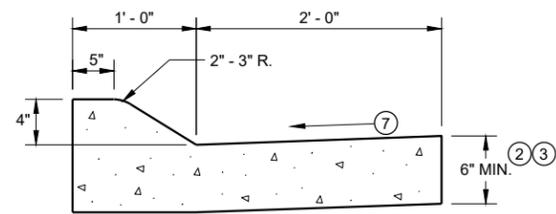


TYPES A^① & D

CONCRETE CURB AND GUTTER 18"

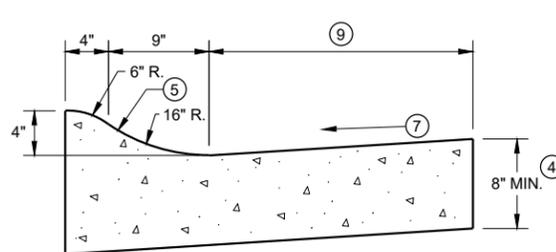


6" SLOPED CURB TYPES A^① & D



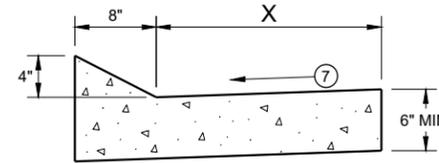
4" SLOPED CURB TYPES A^① & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R^① & T

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

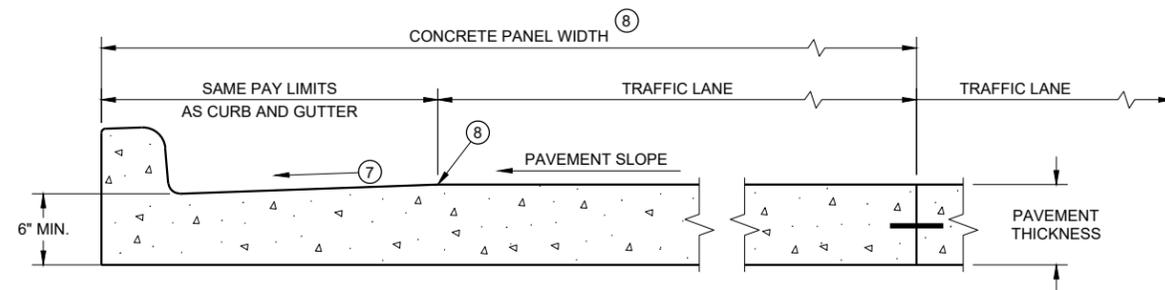


TYPES TBT & TBTT^①

CONCRETE CURB AND GUTTER

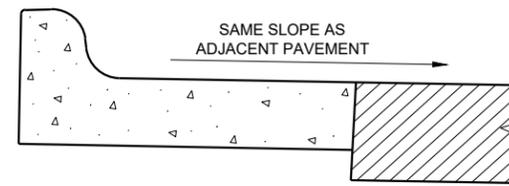
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER^⑥
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

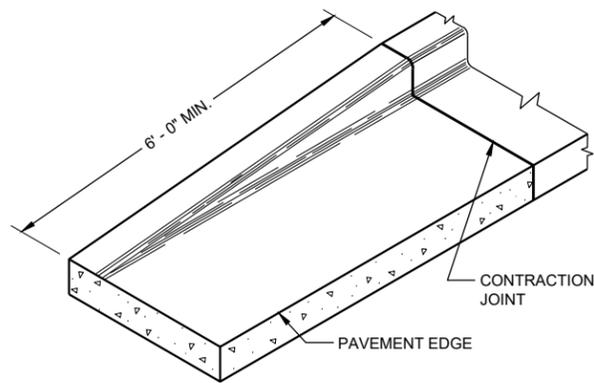
DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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

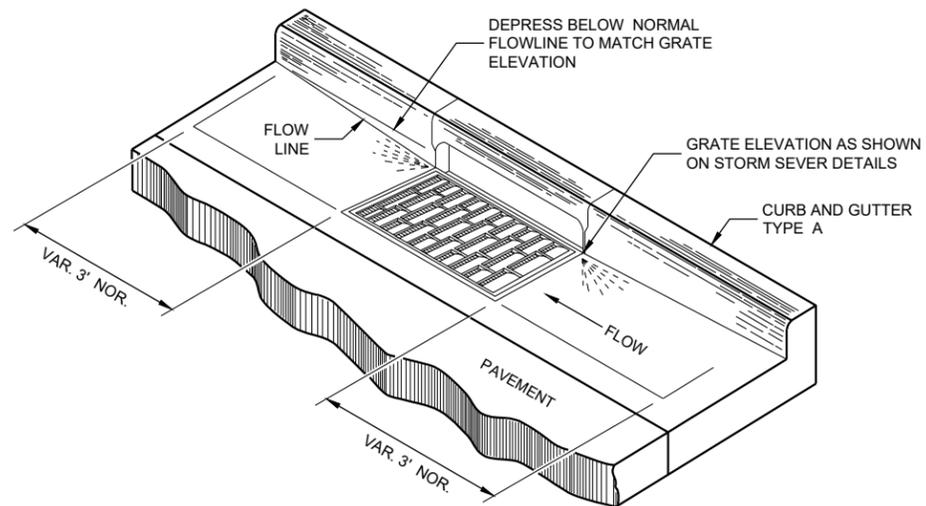
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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 GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- ④ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑤ UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
- ⑦ USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
- ⑧ INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.
- ⑨ CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS
(TYPICAL H INLET COVER SHOWN)

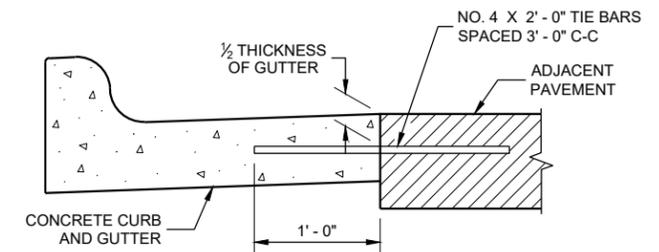
GENERAL NOTES

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

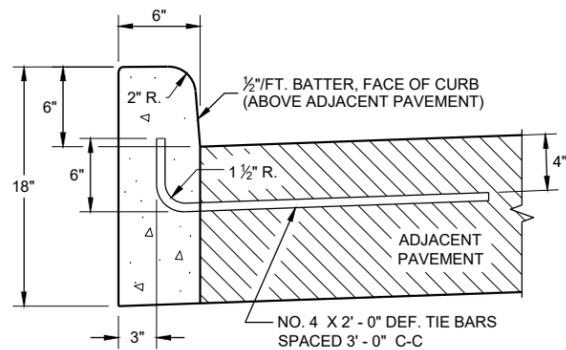
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

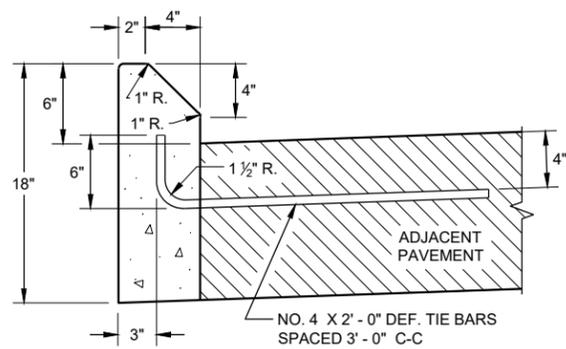
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑨ REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION ①

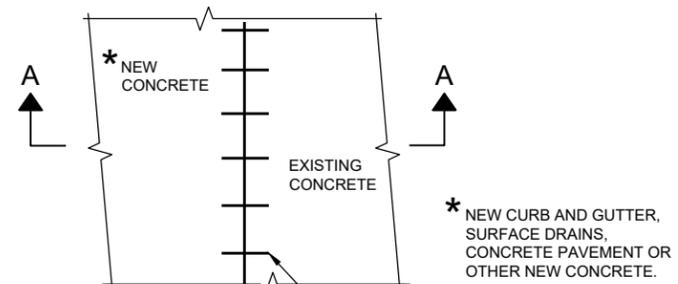


TYPES A ① & D

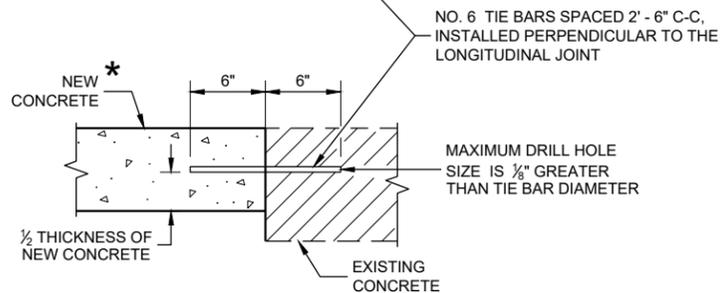


TYPES G ① & J

CONCRETE CURB

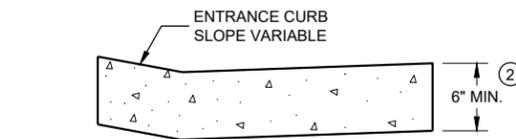


PLAN VIEW



SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



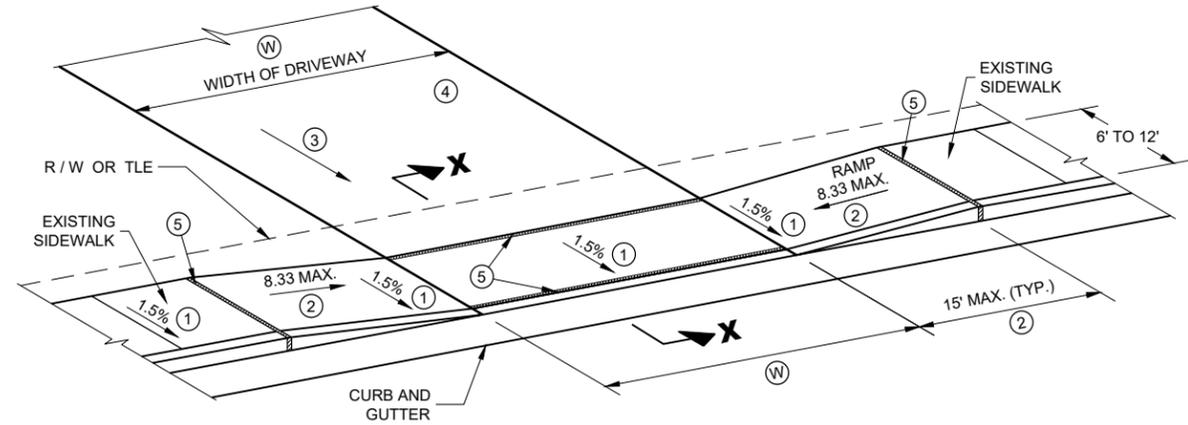
DRIVEWAY ENTRANCE CURB ⑨
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

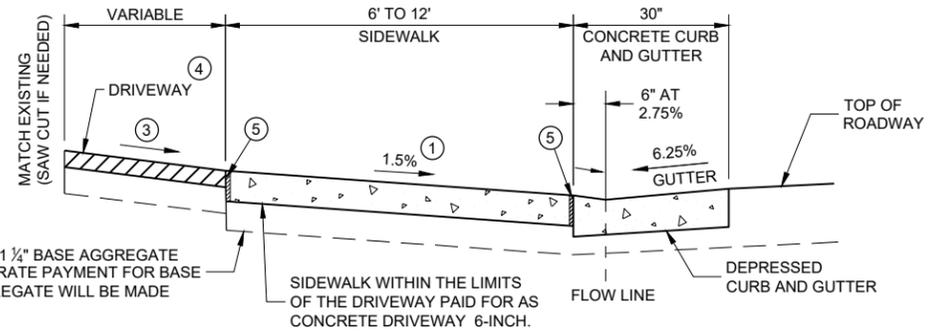
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER

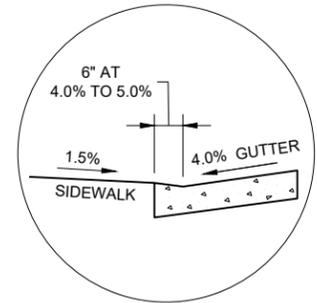
FHWA



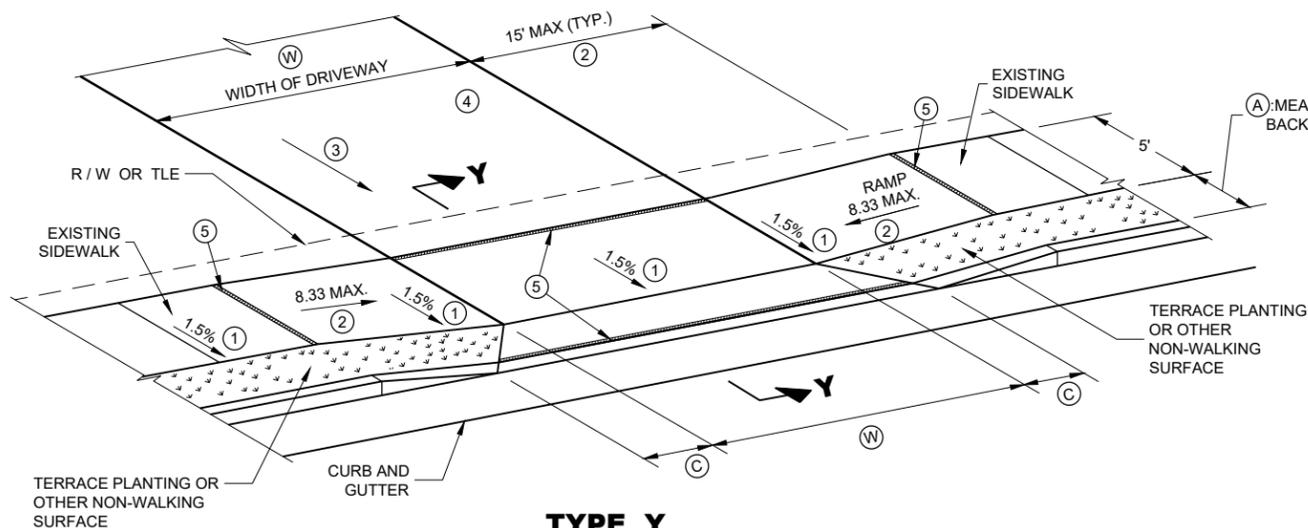
TYPE X
SIDEWALK ABUTS CURB AND GUTTER
TERRACE VARIES 0 TO 3 FEET



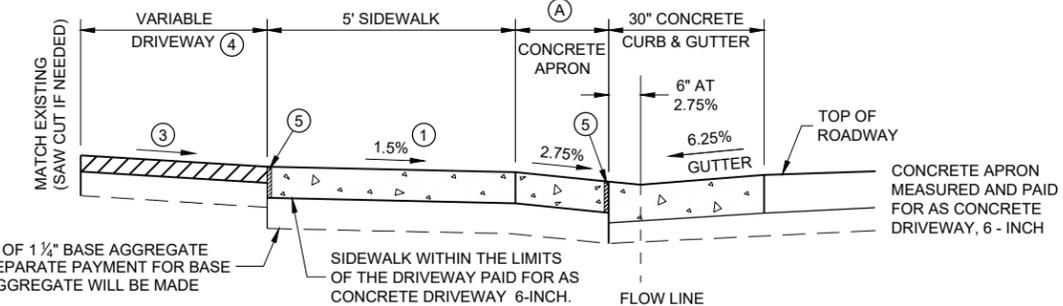
SECTION X - X



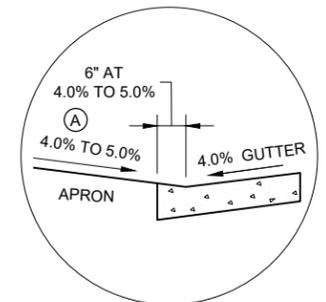
SECTION X - X
4% GUTTER SLOPE



TYPE Y
SIDEWALK WITH NARROWER TERRACE
TERRACE VARIES 4 TO 6 FEET



SECTION Y - Y
DRIVEWAY DETAIL WITH CONCRETE
CURB AND GUTTER
(URBAN AND SUBURBAN)



SECTION Y - Y
4% GUTTER SLOPE

(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)
 16' MIN. - 35' MAX. COMMERCIAL (CE)

TABLE Y

(A) FEET	(C) FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'

(A): MEASURE FROM BACK OF CURB

NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

- ① CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
- ② THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

- ③ **DRIVEWAY SLOPES: DESIRABLE MAXIMUM**
 10.5% UP AWAY FROM SIDEWALK (SAG)
 8.5% DOWN AWAY FROM SIDEWALK (CREST)
 ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

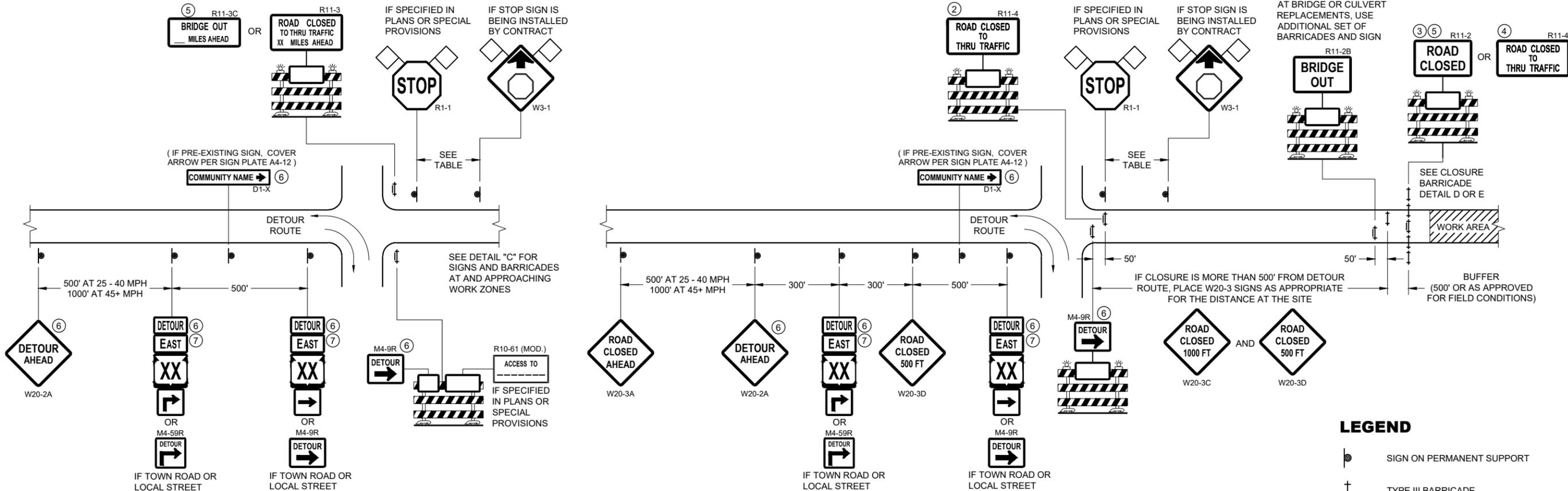
- ④ **DRIVEWAY TYPES**
 • 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
 • 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
 • 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

- ⑤ ½" EXPANSION JOINT FILLER

DRIVEWAY AND
SIDEWALK RAMPS
TYPES X AND Y

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED
 February 2022 /S/ Rodney Taylor
 DATE ROADWAY STANDARDS DEVELOPMENT
 ENGINEER



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO 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)

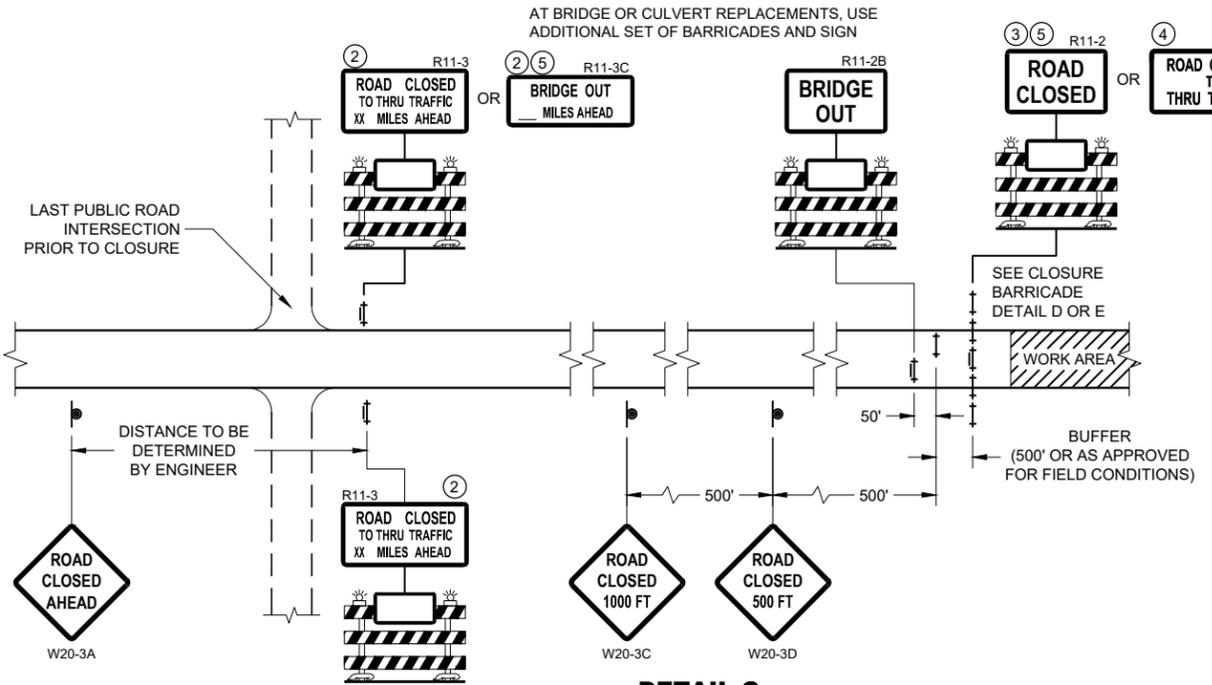
LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

M4 - 8
 M3 - X
 OR OR M1 - 4 M1 - 6 M1 - 5A
 OR M05 - 1 M06 - 1

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-SHEET "b"
 FOR GENERAL NOTES
 AND FOOTNOTES ① THROUGH ⑦

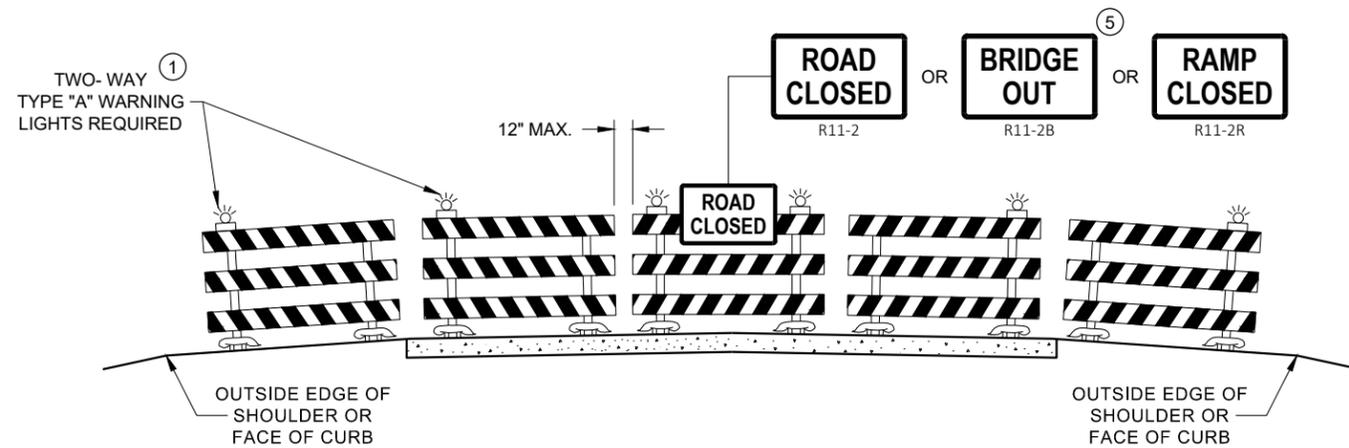


DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

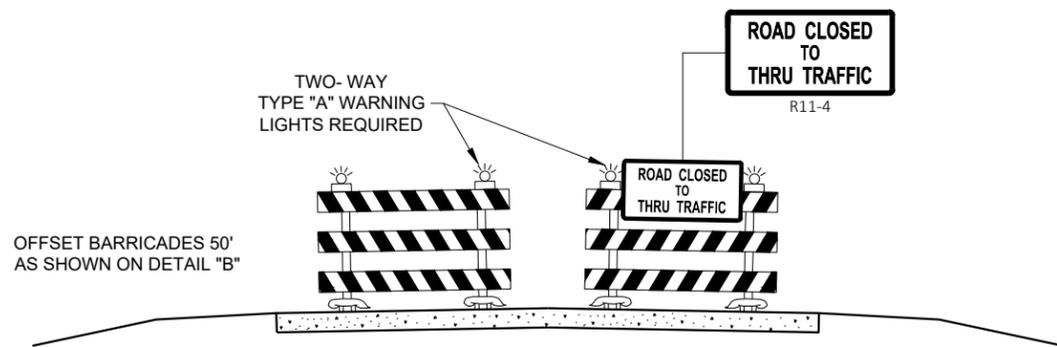
**BARRICADES AND SIGNS
 FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED
 February 2020 /S/ Andrew Heidtke
 DATE DATE WORK ZONE ENGINEER
 FHWA



**DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW**



**DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW**

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

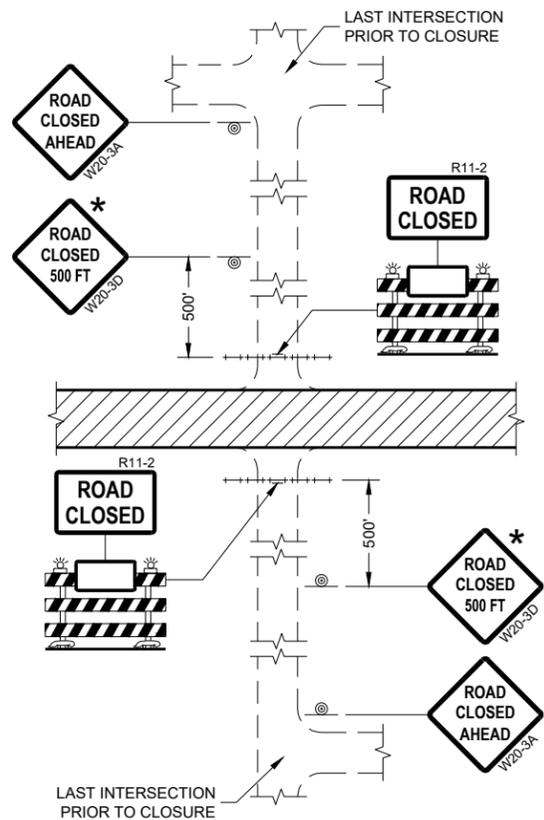
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60" X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 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 AN 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 ROAD 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.

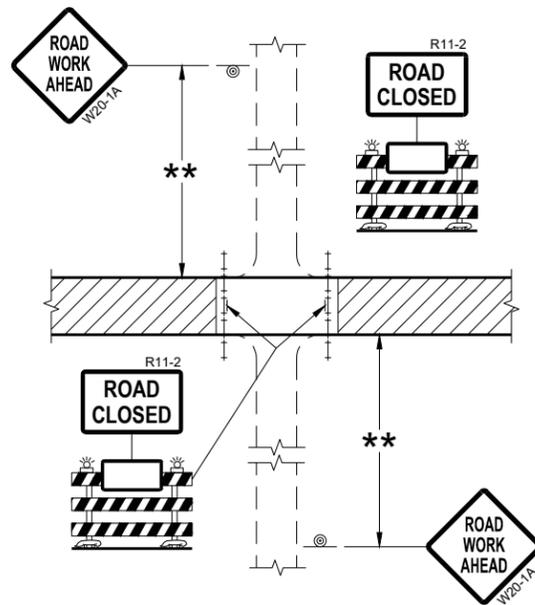
**BARRICADES AND SIGNS
FOR
VARIOUS CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

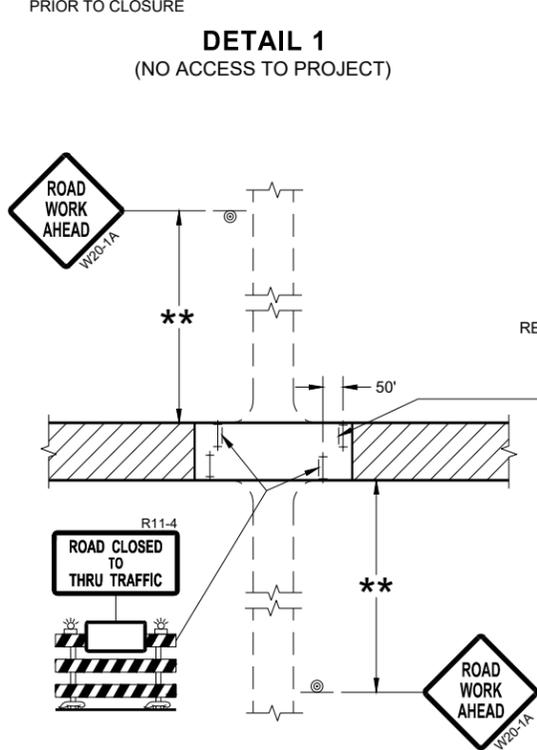
APPROVED
February 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



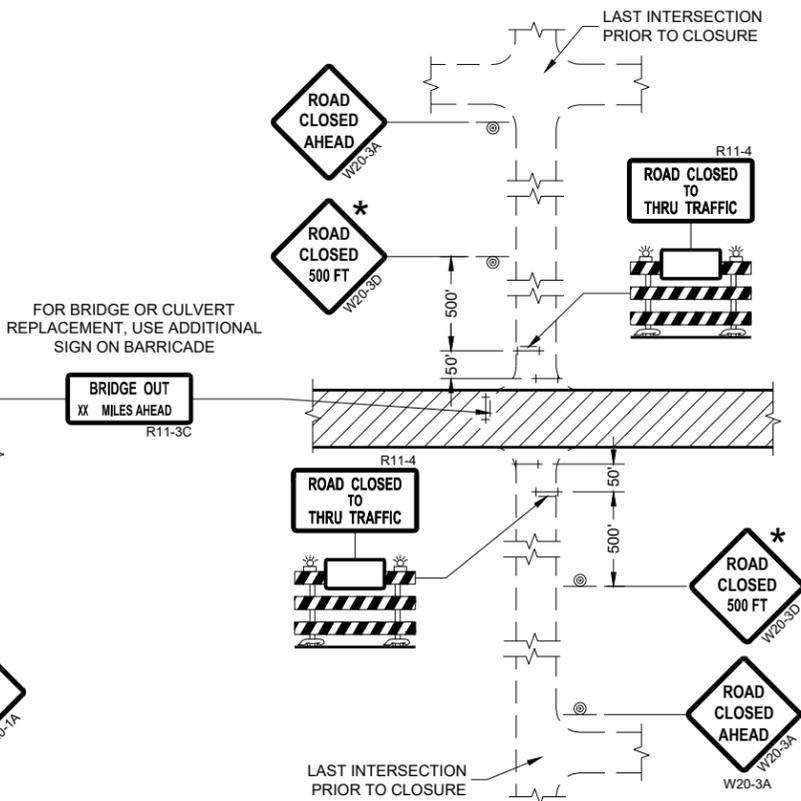
DETAIL 1
(NO ACCESS TO PROJECT)



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



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



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

- * OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.
- ** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

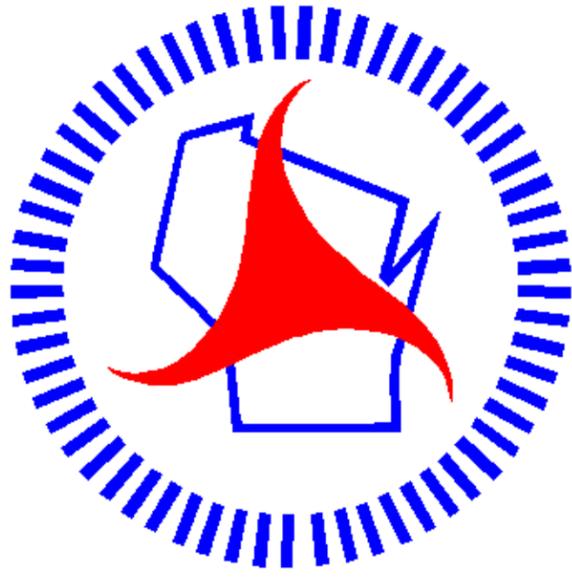
- ⊙ SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- ⚡ TYPE "A" WARNING LIGHT (FLASHING)
- ▨ WORK AREA

**BARRICADES AND SIGNS
FOR
SIDEROAD CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA



Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

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