

ORDER OF SHEETS

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

TOTAL SHEETS = 76



DESIGN DESIGNATION

A.A.D.T.	=	N/A
A.A.D.T.	=	N/A
D.H.V.	=	N/A
D.D.	=	N/A
T.	=	N/A
DESIGN SPEED	=	N/A
ESALS	=	N/A

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	
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

WAUPACA COUNTY BRIDGE REPAIRS

B-68-71, 100, 101, 117, 124, 130

VAR HWY

WAUPACA

STATE PROJECT NUMBER
6220-00-61

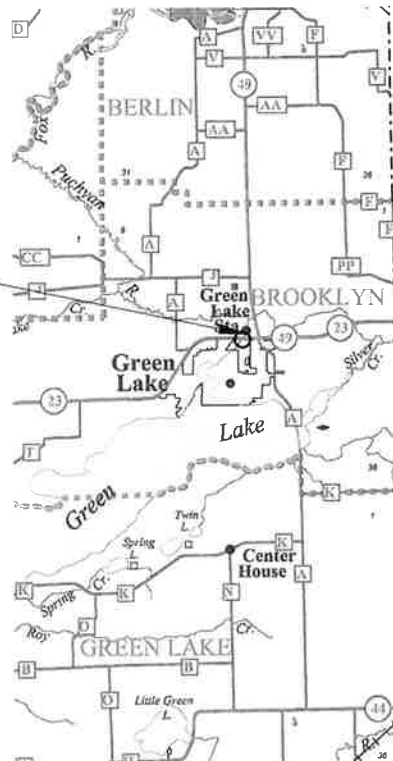
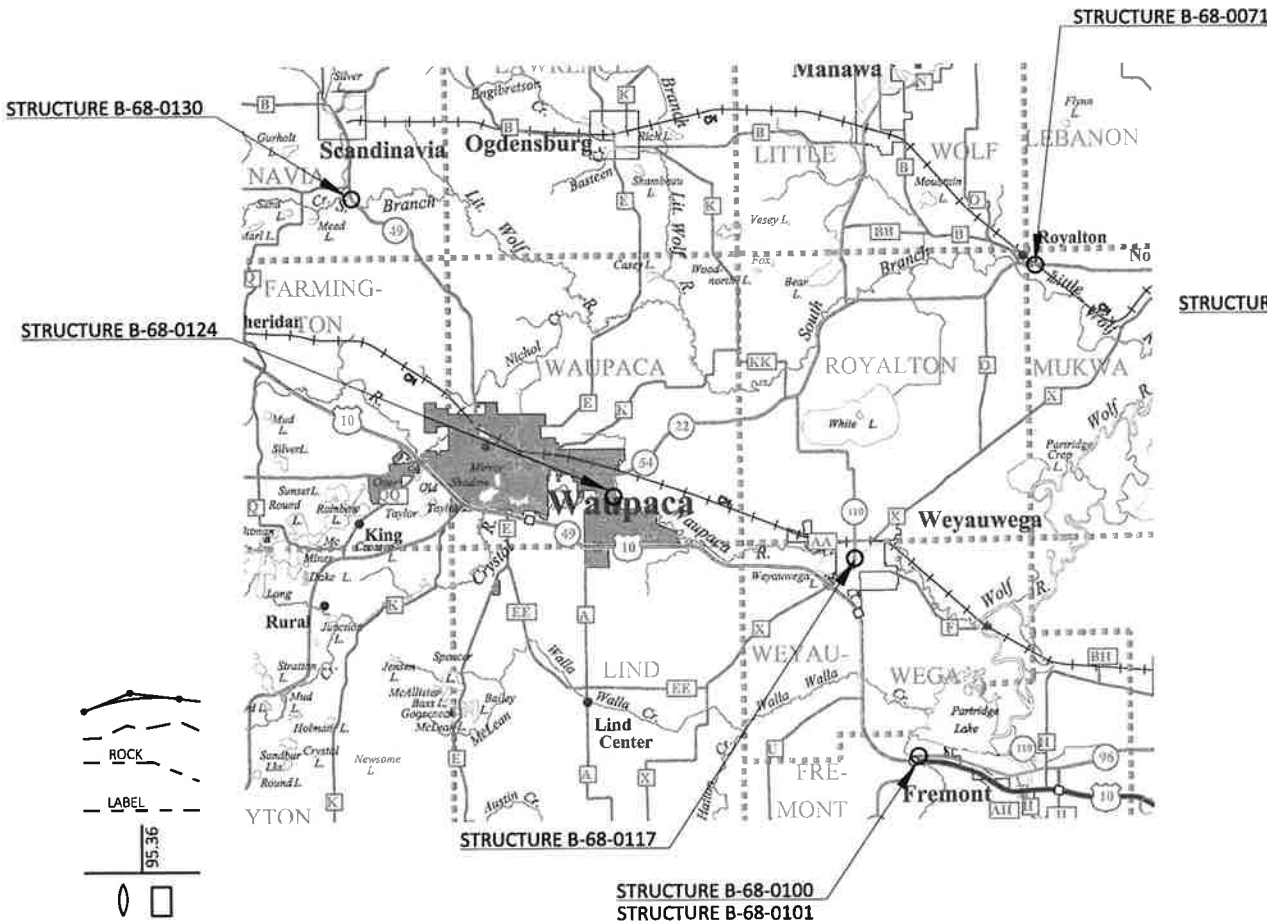
PRINCETON - RIPON

PUCHYAN RIVER BRIDGE B-24-9

STH 23

GREEN LAKE

STATE PROJECT NUMBER
1430-00-66



TOTAL NET LENGTH OF CENTERLINE = N/A

ORIGINAL PLANS PREPARED BY

Gräef

1150 Springhurst Drive,
Suite 201
Green Bay, WI 54304-5950
920 / 592 9440
920 / 592 9445 fax
www.graef-usa.com



04/29/2020

(Date)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	SURVEYOR
Designer	GRAEF
Project Manager	Wendy Arneson
Regional Examiner	Cheryl Simon
Regional Supervisor	Mike Kretschmer

APPROVED FOR THE DEPARTMENT

DATE: 4/29/2020

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GENERAL NOTES

THE CONTRACTOR IS TO WORK WITH UTMOST CARE AND PROTECT ALL SURVEY MARKERS. REMOVAL OF ANY SURVEY MARKER IS TO BE WITH THE APPROVAL OF THE ENGINEER.

THE LOCATION OF EXISTING UTILITY FACILITIES LOCATED WITHIN THE PROJECT ARE NOT SHOWN ON THE PLANS.

DNR CONTACT:
CASEY JONES
473 GRIFFITH AVENUE
WISCONSIN RAPIDS, WI 54494
PHONE: (715) 213-6571 MOBILE
E-MAIL: casey.jones@wisconsin.gov



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

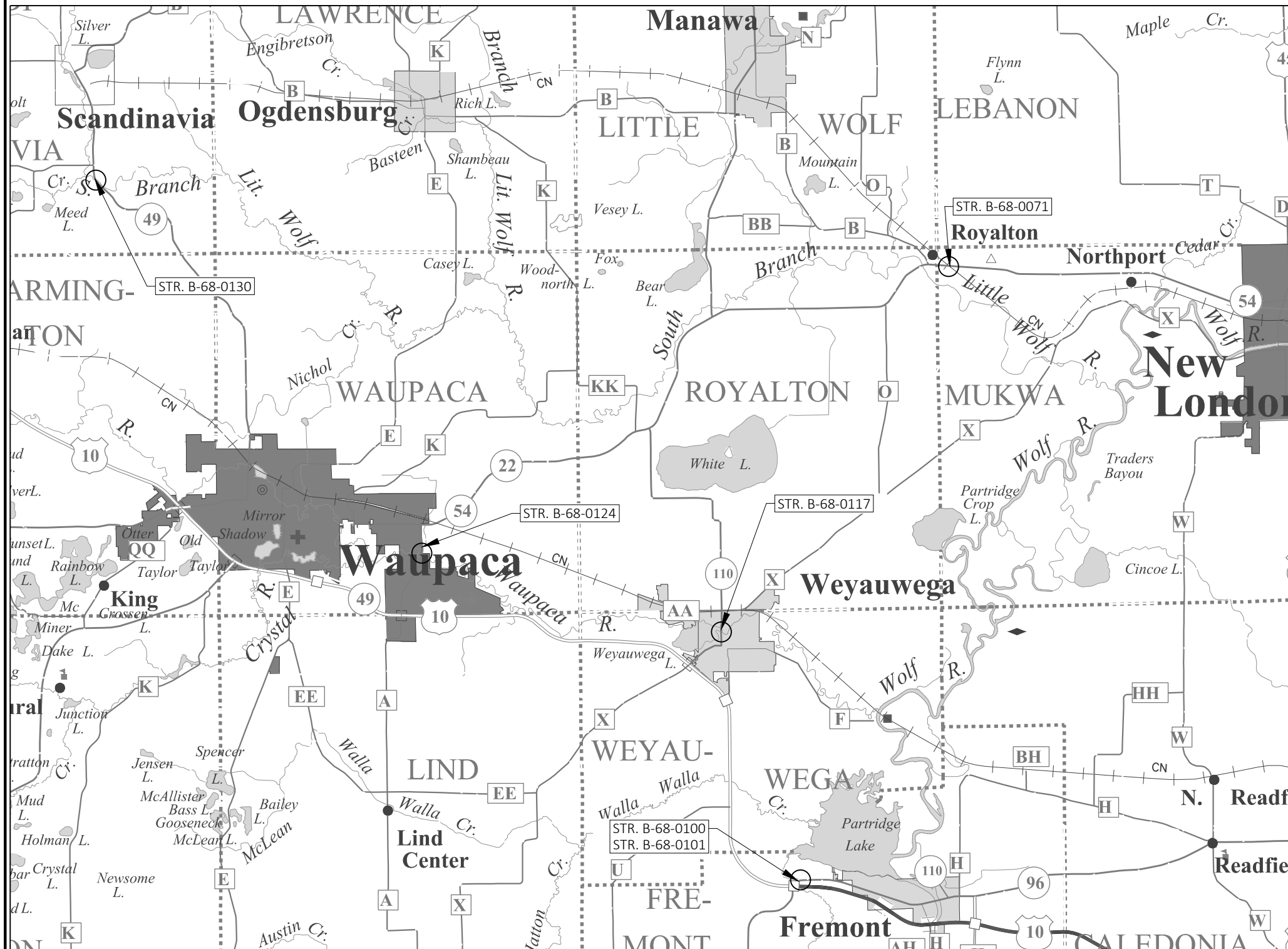
RUNOFF COEFFICIENT TABLE

	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						

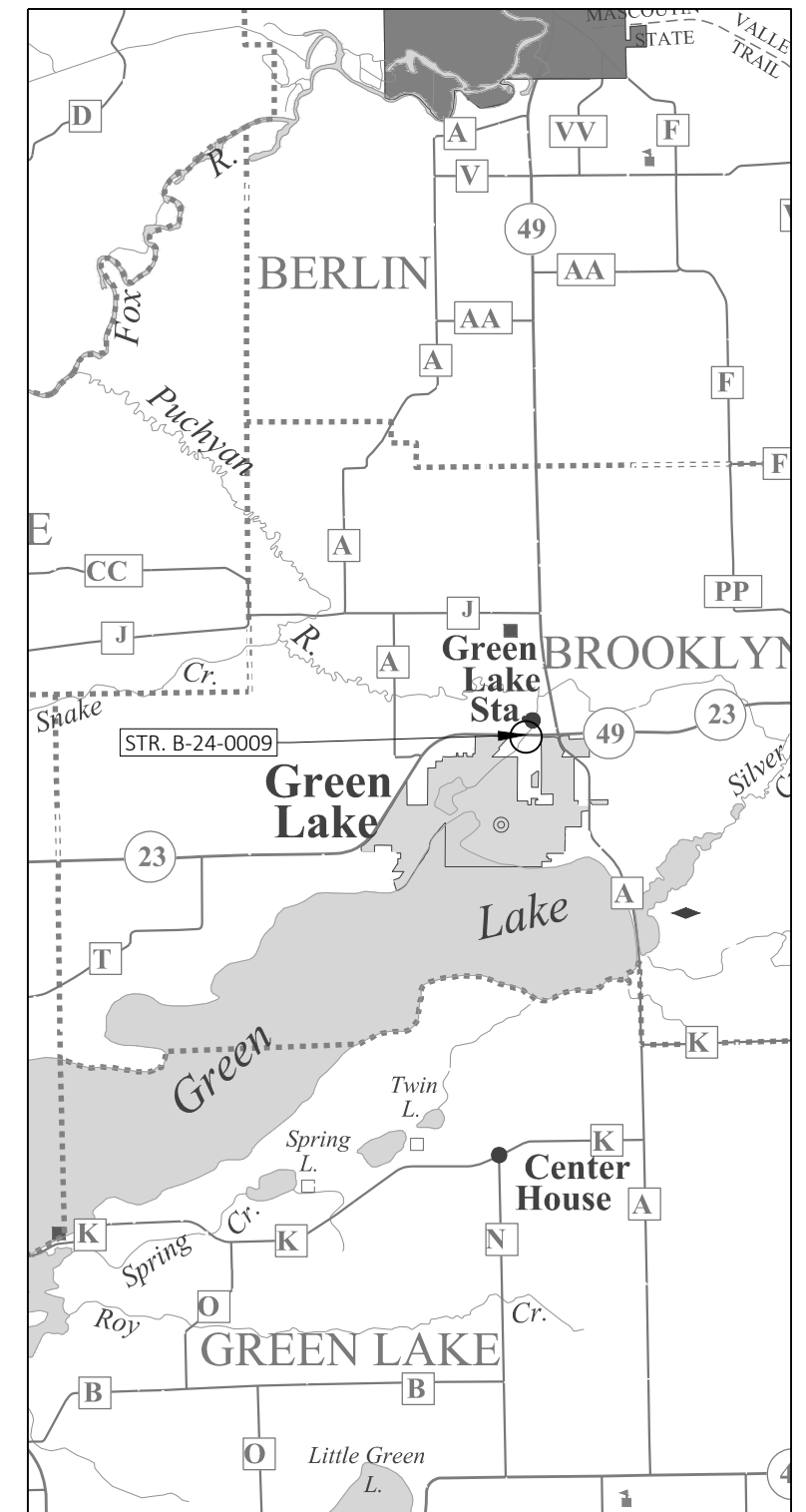
TOTAL PROJECT AREA = 0.01 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.01 ACRES



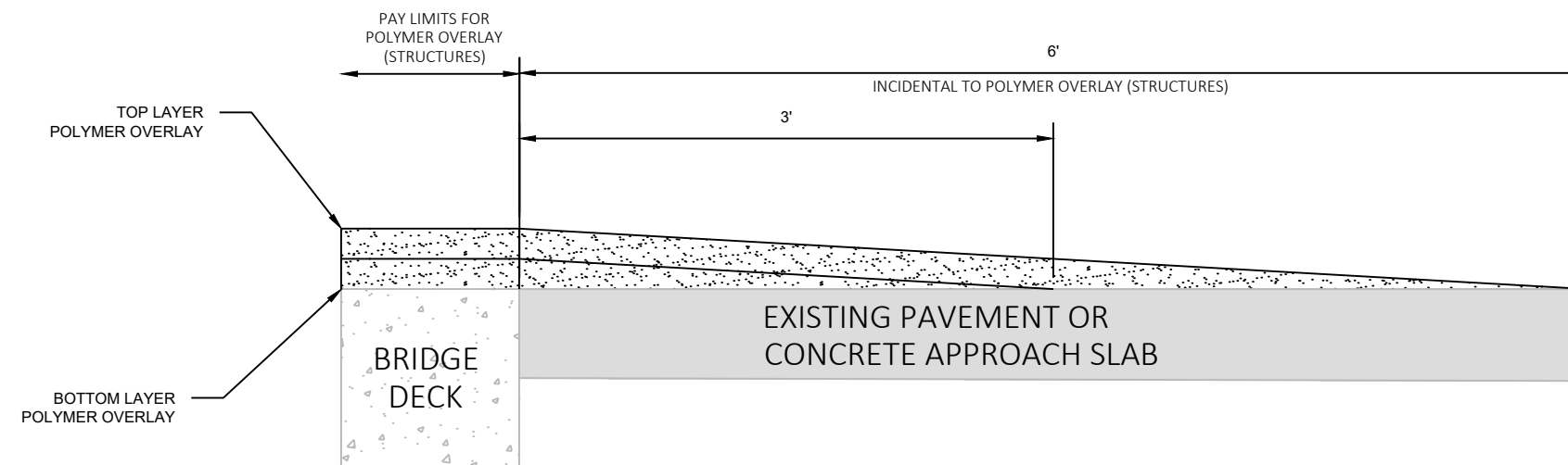
WAUPACA COUNTY



GREEN LAKE COUNTY



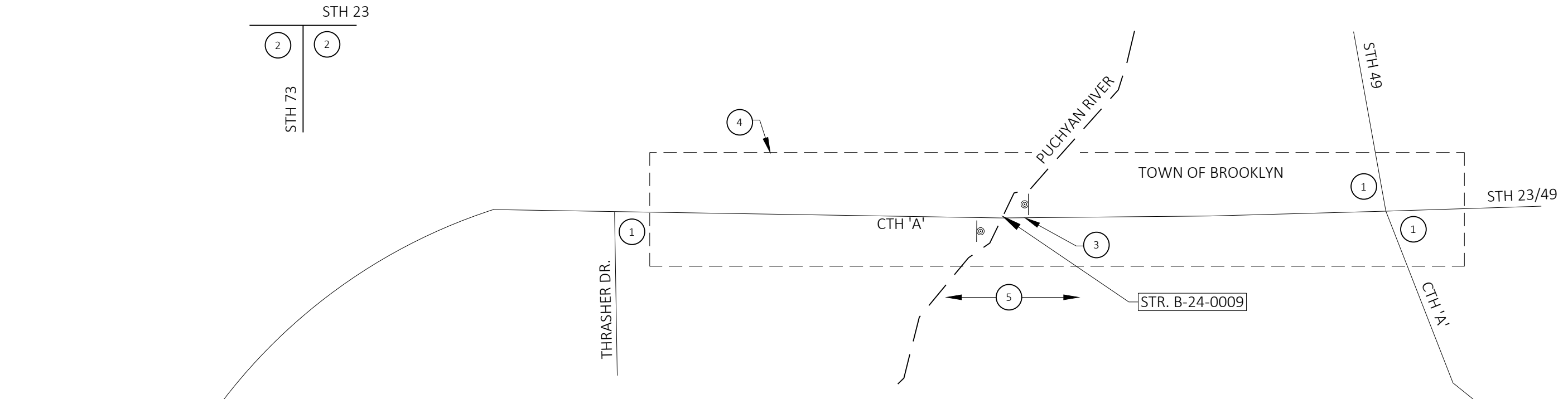
PROJECT NO: 1430-00-66 & 6220-00-31	HWY: VARIOUS	COUNTY: GREEN LAKE/WAUPACA	PROJECT OVERVIEW	SHEET	E
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POLYMER OVERLAY TRANSITIONAL AREA

NOTES:

- 1) POLYMER OVERLAY TO BE PLACED FULL WIDTH COVERING PAVEMENT AND SHOULDERS.
- 2) MASK OFF EXISTING END JOINT AS DIRECTED BY THE ENGINEER.

**GENERAL NOTES**

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

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

'WO' IS THE SAME AS 'W' EXCEPT THE BACKGROUND IS ORANGE.







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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.







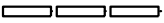




REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

NOTE: INSTALL G20-57B "BRIDGE WORK BEGINS" (72"x36") FIXED MESSAGE SIGNS SEVEN CALENDAR DAYS PRIOR TO THE START OF CONSTRUCTION. REMOVE SIGNS WHEN CONSTRUCTION BEGINS.

LEGEND

-  G20-57B "BRIDGE WORK BEGINS" (72"x36") FIXED MESSAGE SIGN
-  REFER TO SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" (TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL).
-  REFER TO SDD "ADVANCED WIDTH RESTRICTION SIGNING", 12 FT MAX.
-  REFER TO SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR PLACEMENT OF TEMPORARY ASPHALT SHOULDER TO BE COMPLETED PRIOR TO TRAFFIC CONTROL STAGE 2 SHIFT.
-  SEE "TRAFFIC CONTROL STAGE 1 SHEETS" AND "TRAFFIC CONTROL STAGE 2 SHEETS" FOR ADDITIONAL TRAFFIC CONTROL INFORMATION.
-  REFER TO SDD "TEMPORARY TRAFFIC CONTROL SIGN MOUNTING", "ATTACHMENT OF SIGNS TO POST".

LEGEND

-  TYPE III BARRICADE
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  TRAFFIC CONTROL DRUM
-  TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
-  SIGN ON PERMANENT SUPPORT
-  TYPE A WARNING LIGHT (FLASHING)
-  CONCRETE BARRIER TEMPORARY PRECAST
-  WORK AREA
-  DIRECTION OF TRAFFIC
-  PAVEMENT MARKING REMOVAL
-  TEMPORARY ASPHALT

PROJECT NO: 1430-00-66

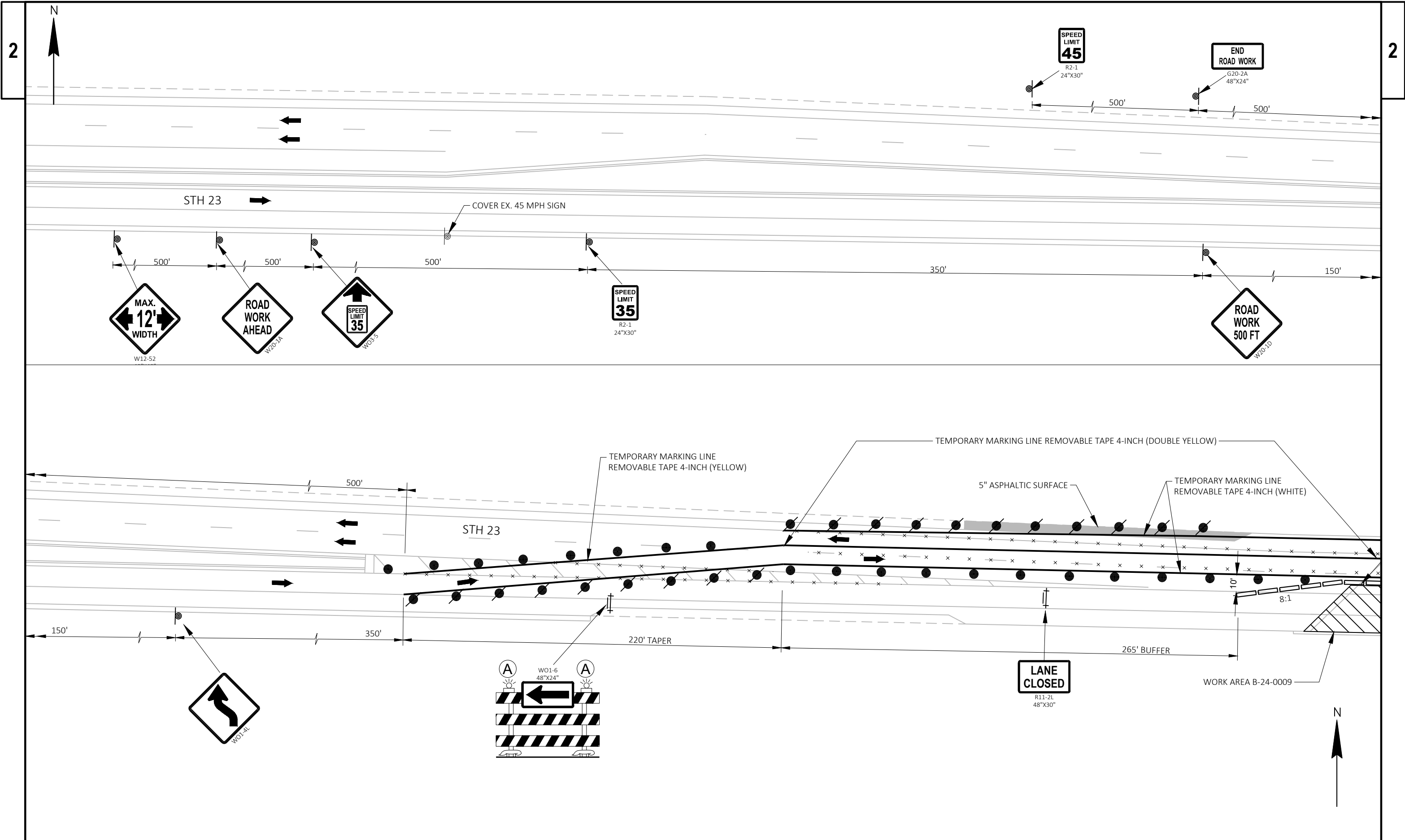
HWY: STH 23

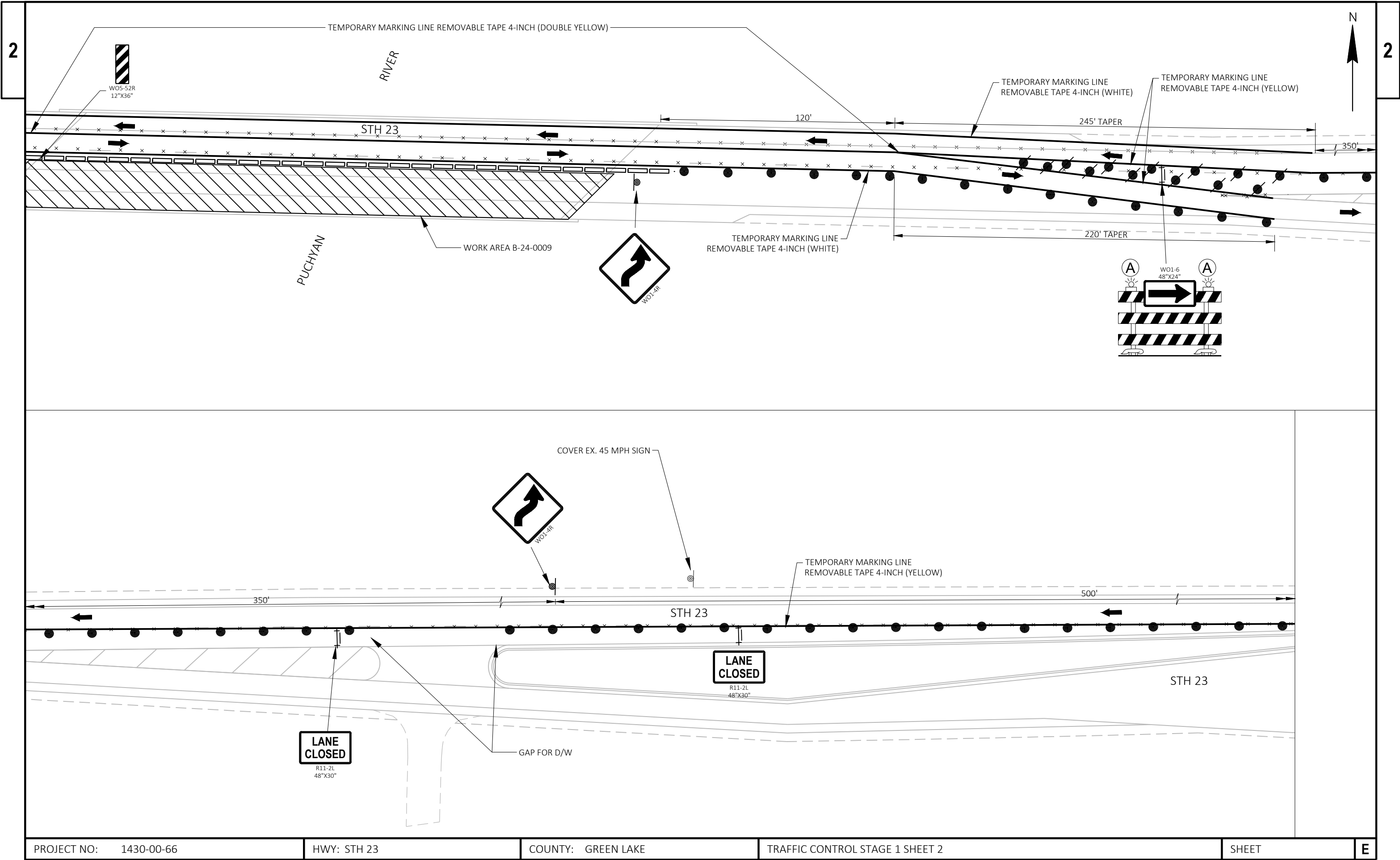
COUNTY: GREEN LAKE

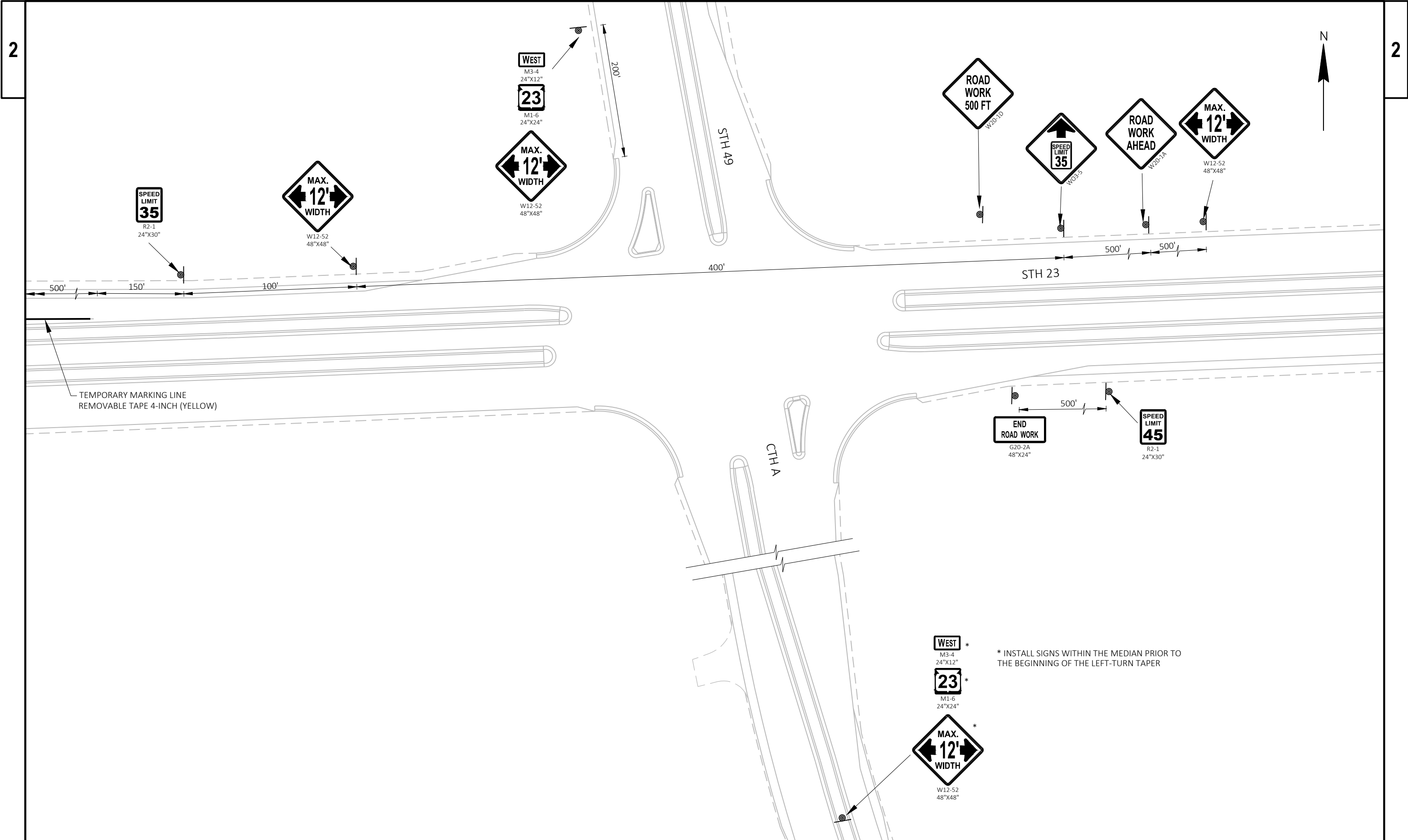
TRAFFIC CONTROL OVERVIEW

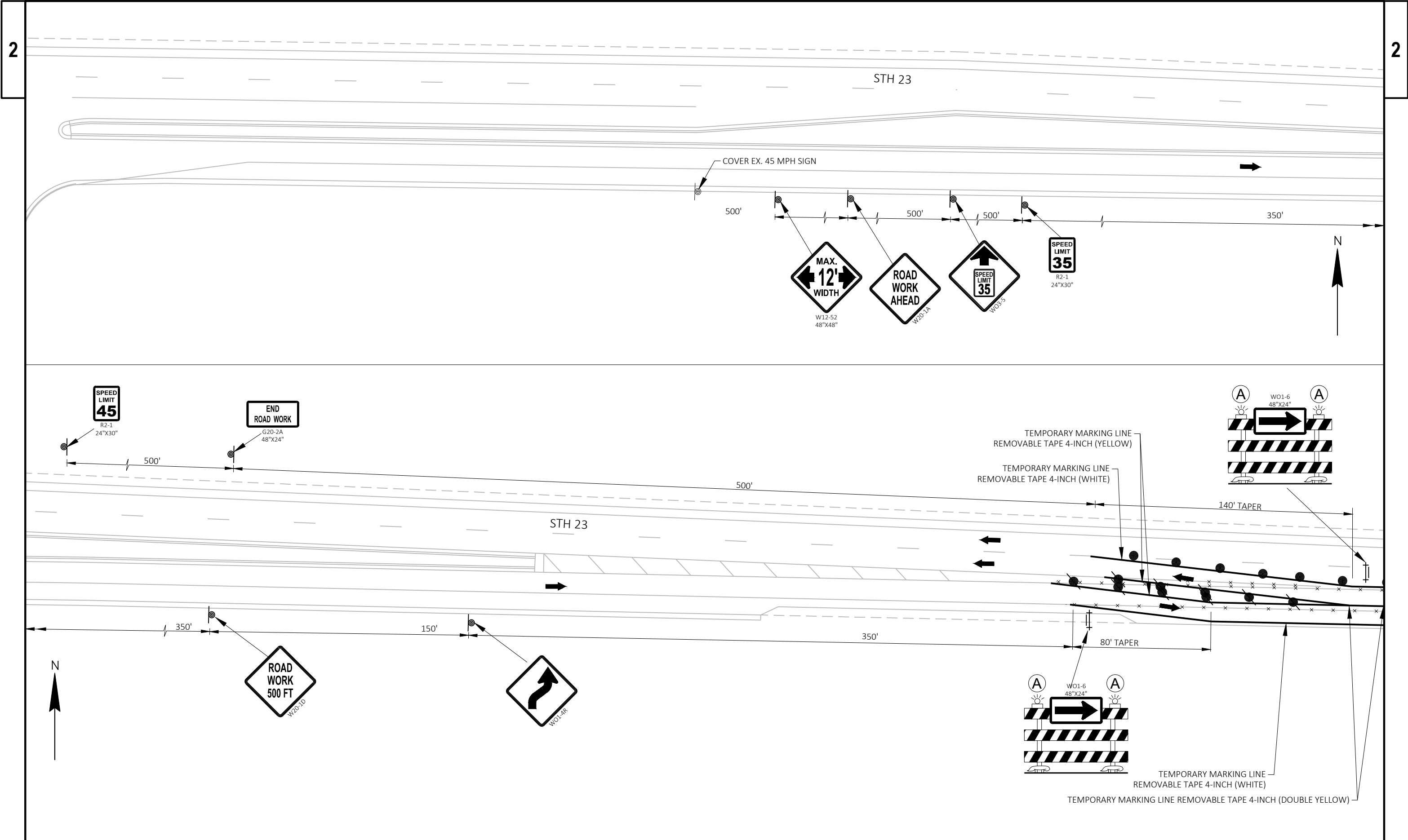
SHEET

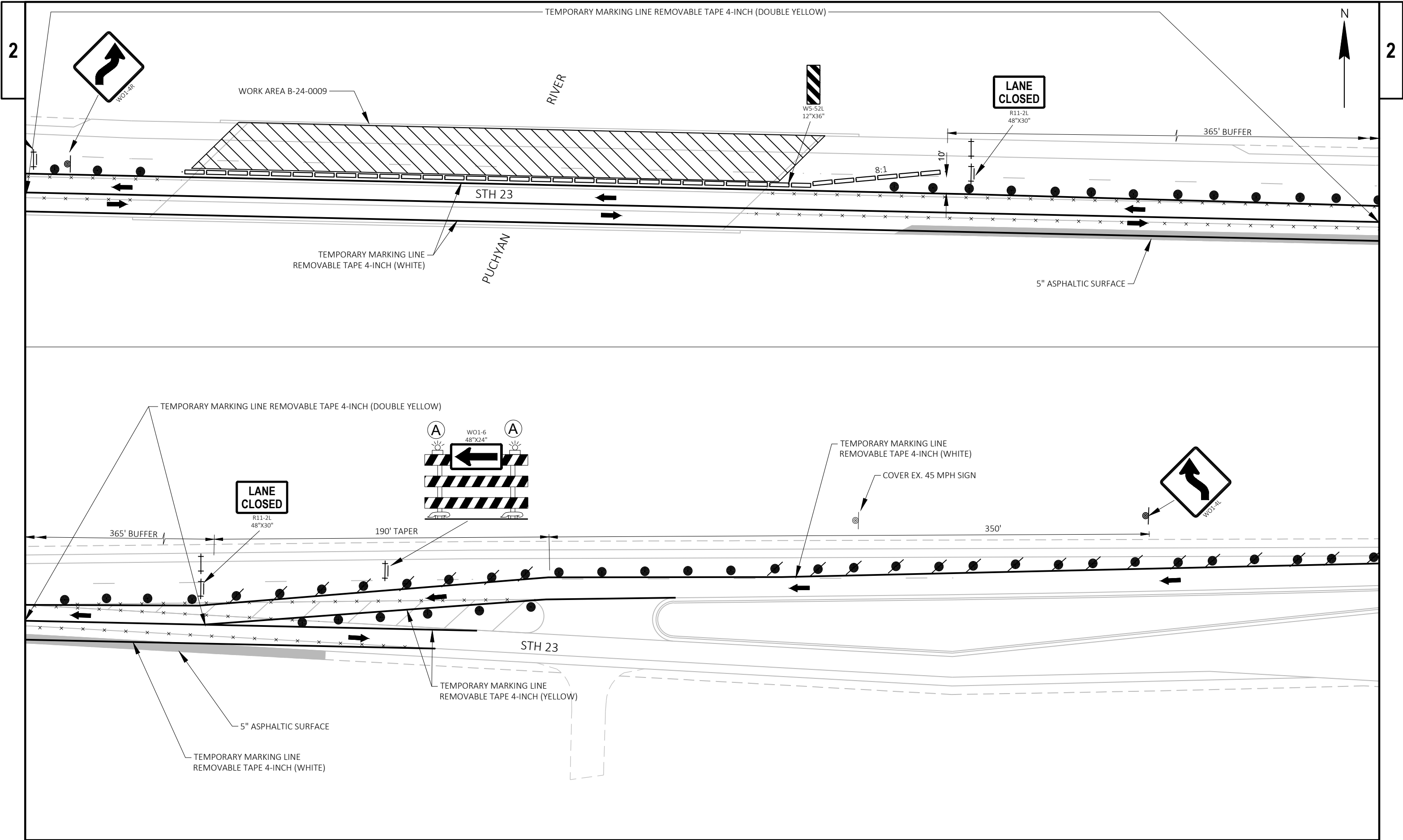
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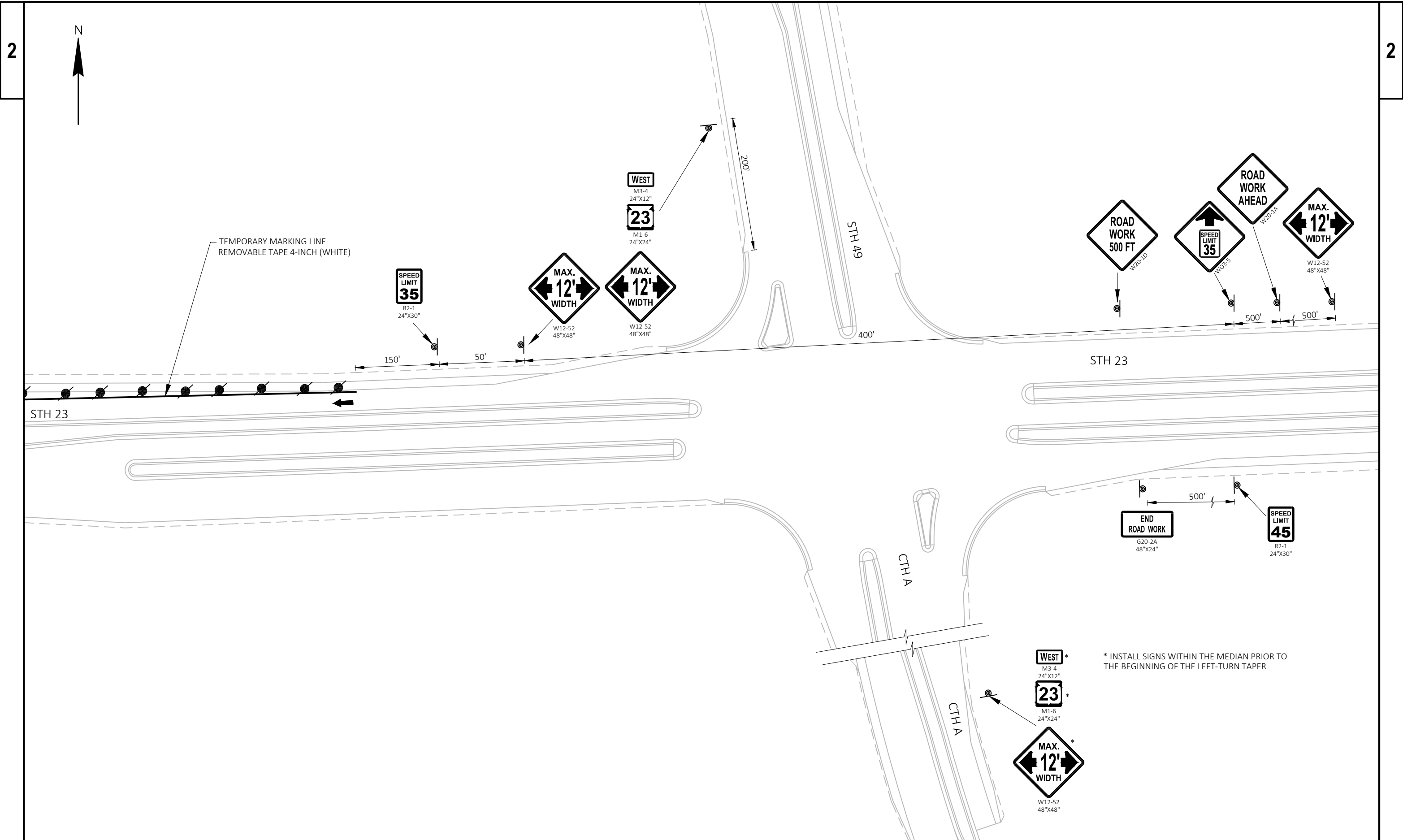


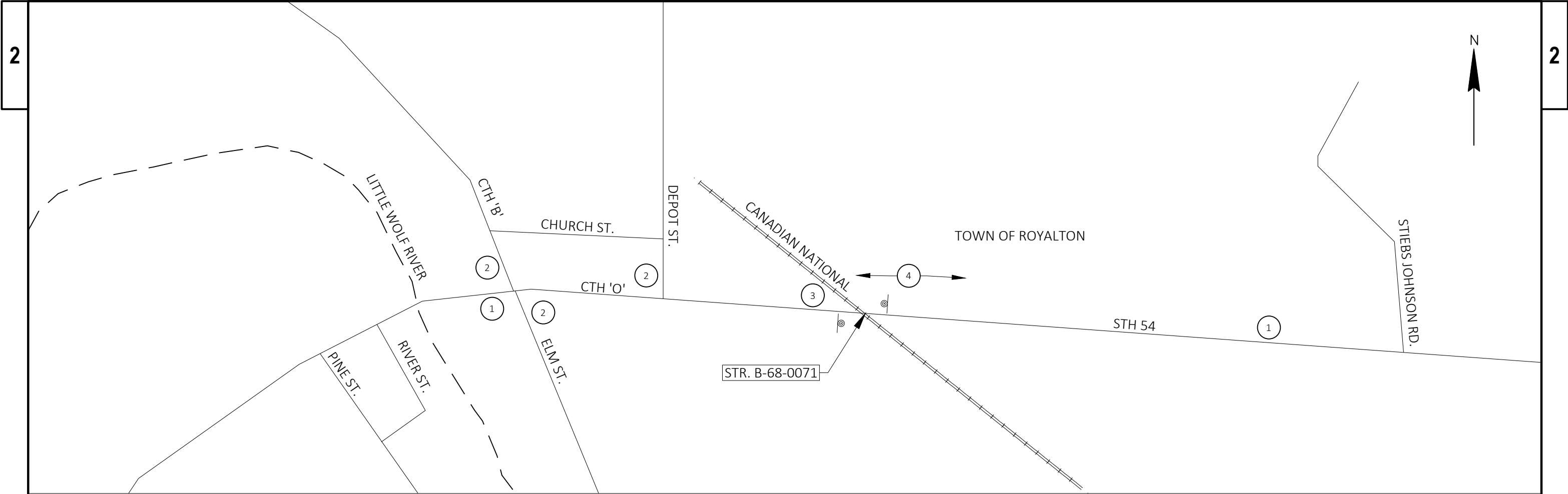












GENERAL NOTES

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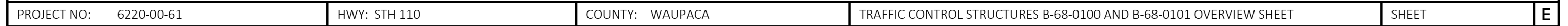
FOR LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

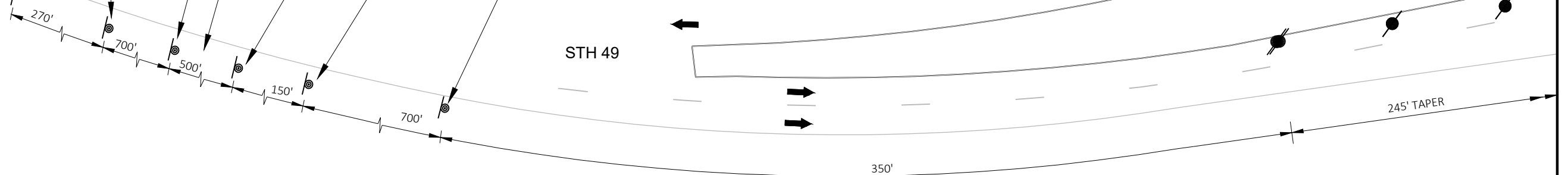
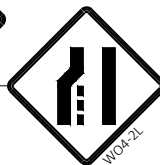
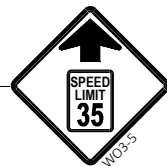
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

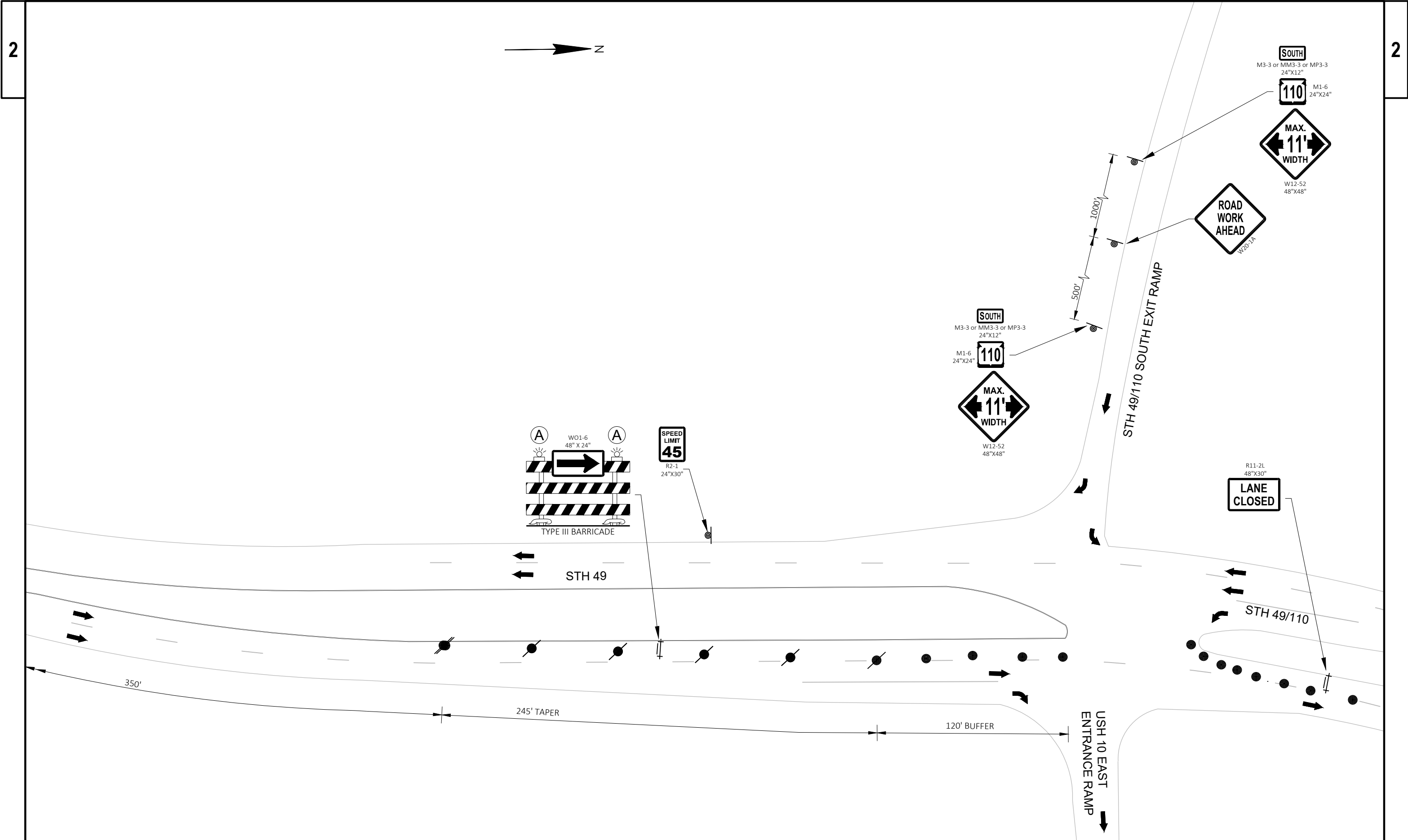
NOTE: INSTALL G20-57B "BRIDGE WORK BEGINS" (72"x36") FIXED MESSAGE SIGNS SEVEN CALENDAR DAYS PRIOR TO THE START OF CONSTRUCTION. REMOVE SIGNS WHEN CONSTRUCTION BEGINS.

LEGEND

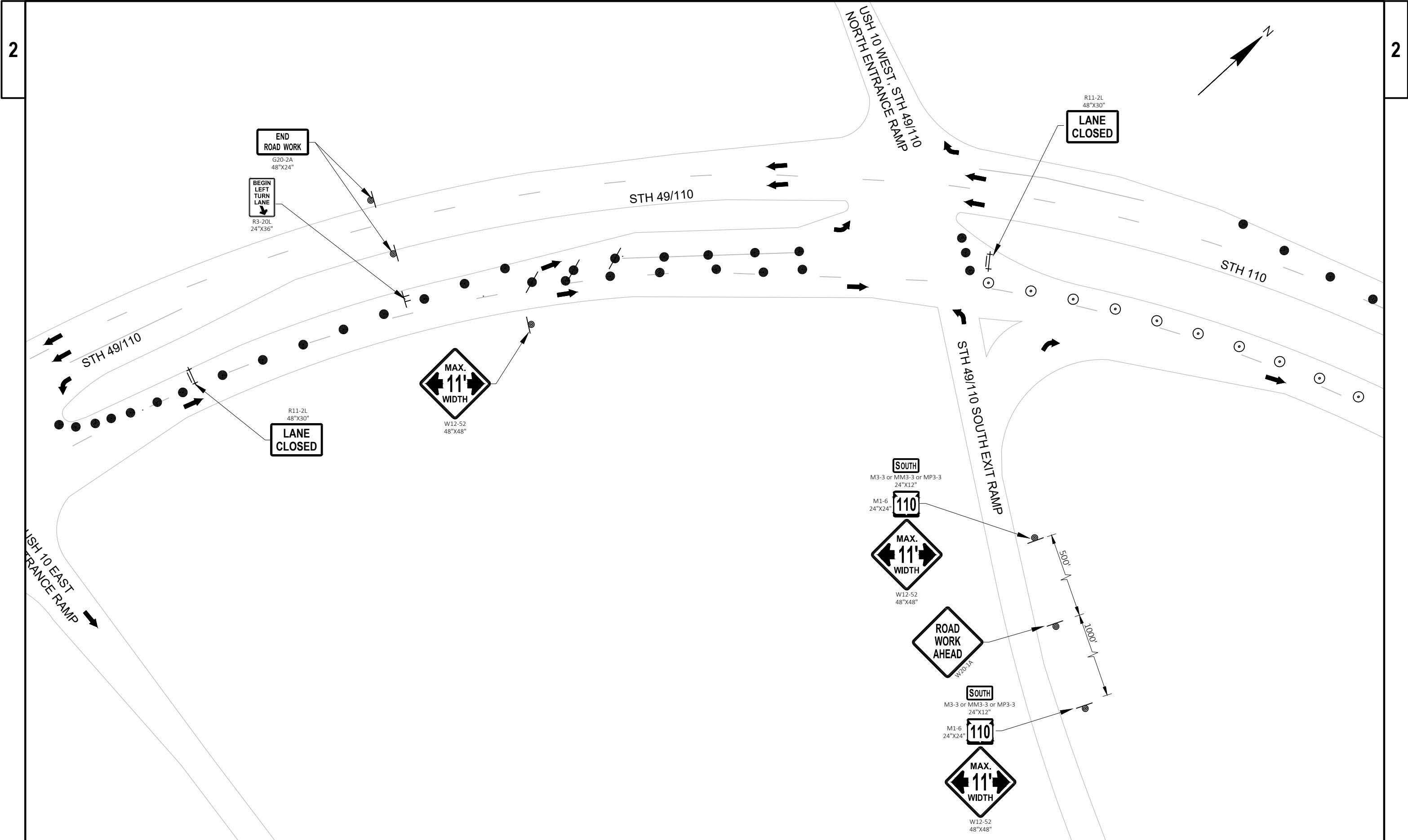
- G20-57B " BRIDGE WORK BEGINS" (72"x36") FIXED MESSAGE SIGN
- 1 REFER TO SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC".
- 2 REFER TO SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" (TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL).
- 3 REFER TO SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" AND SDD "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION",
- 4 REFER TO SDD "TEMPORARY TRAFFIC CONTROL SIGN MOUNTING", "ATTACHMENT OF SIGNS TO POST".

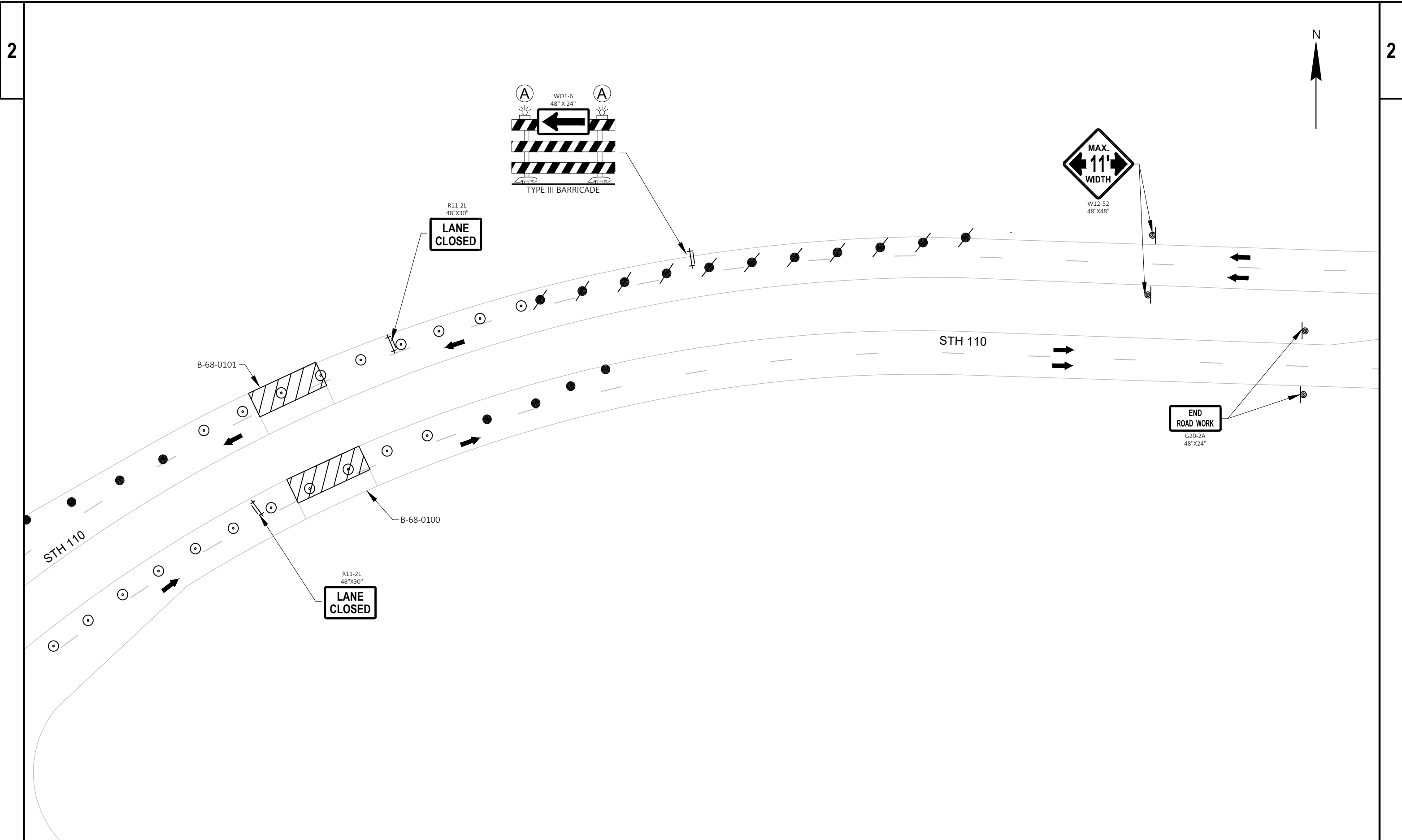


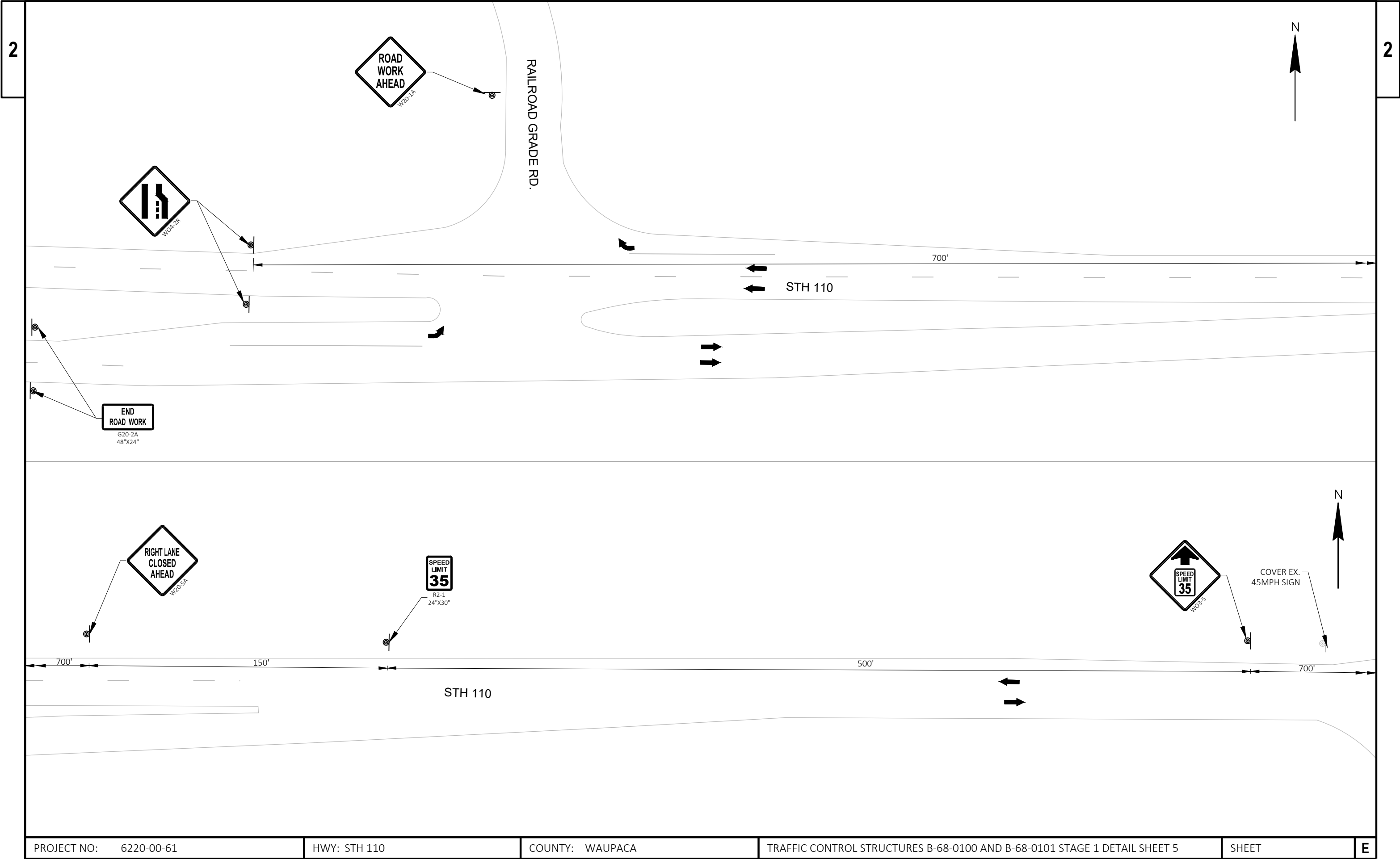


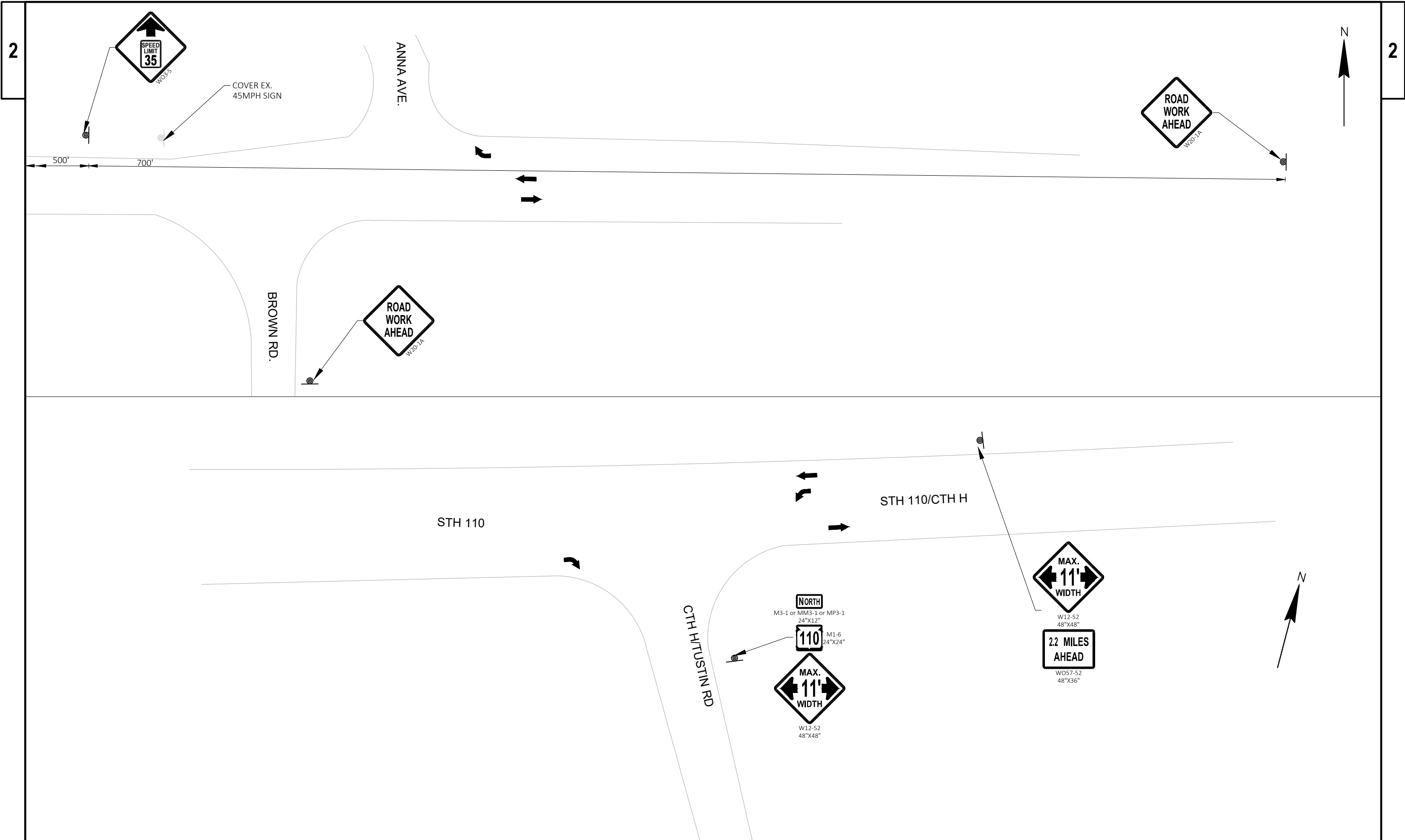


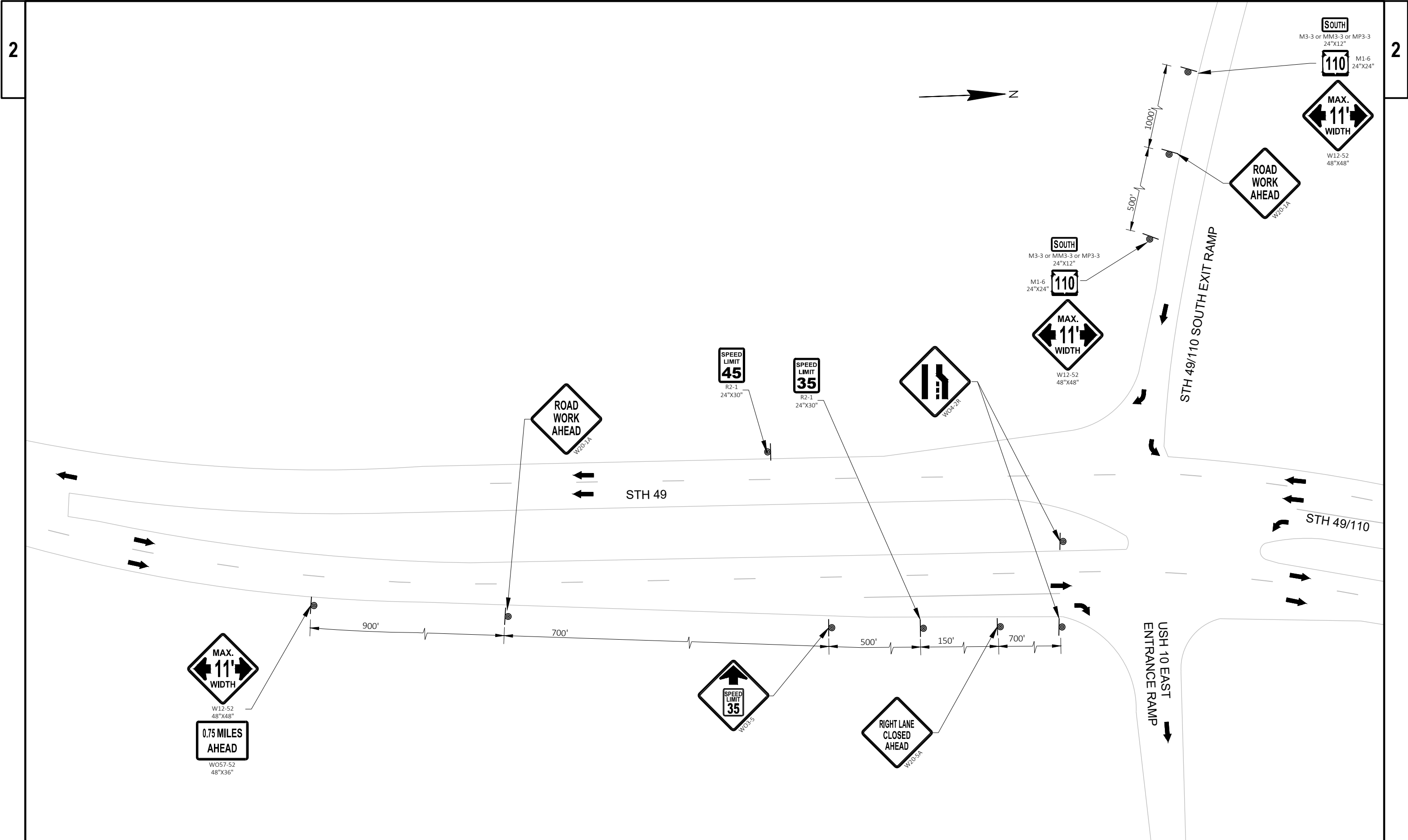
PROJECT NO: 6220-00-61	HWY: STH 110	COUNTY: WAUPACA	TRAFFIC CONTROL STRUCTURES B-68-0100 AND B-68-0101 STAGE 1 DETAL SHEET 2	SHEET	E
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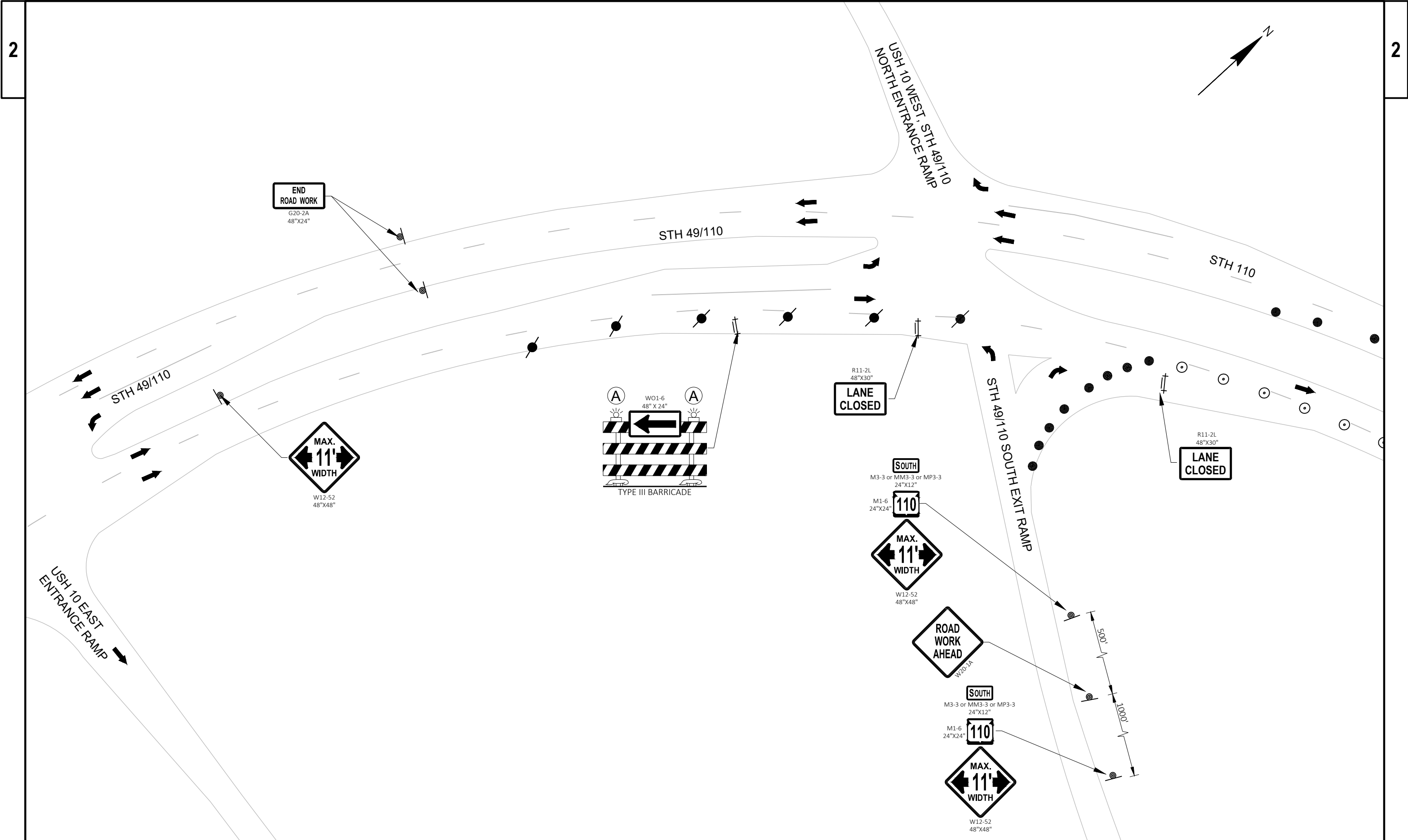


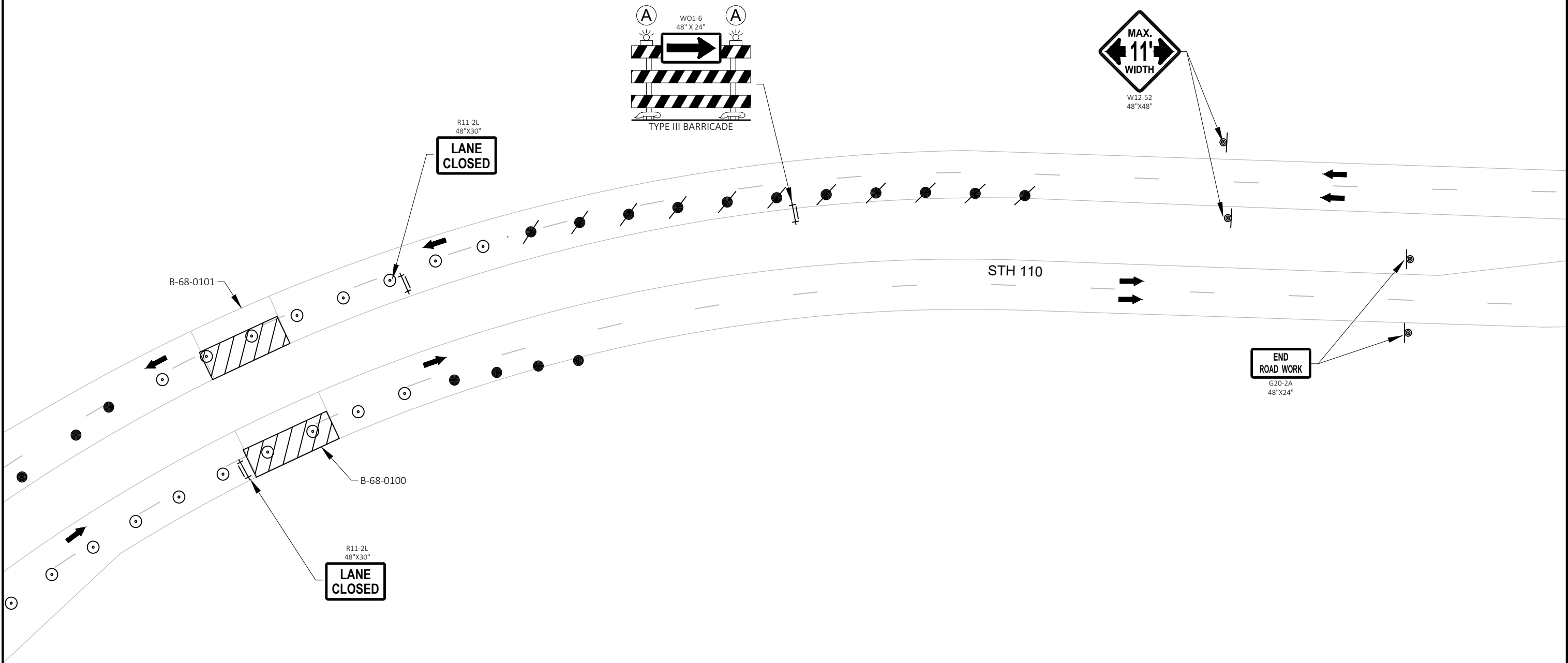


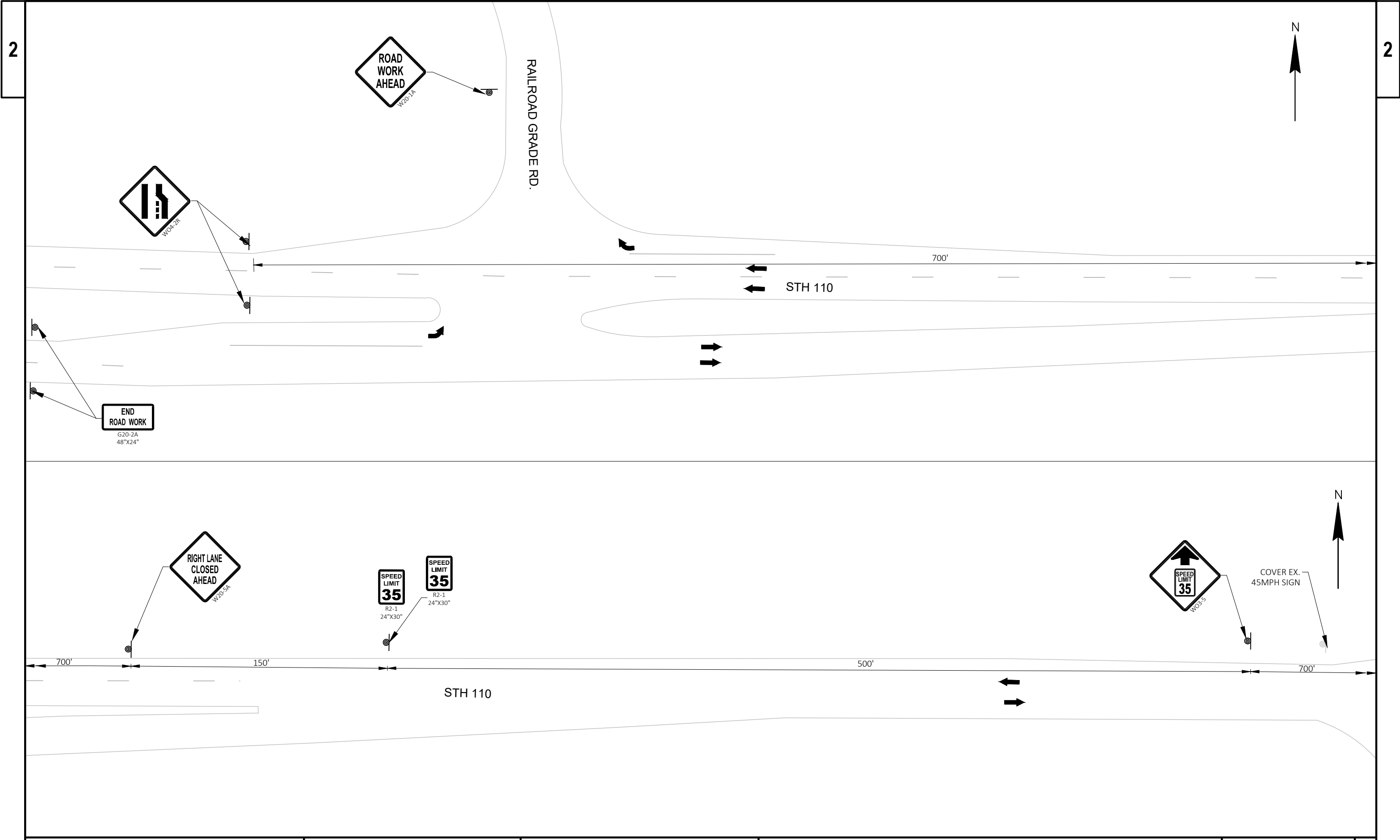


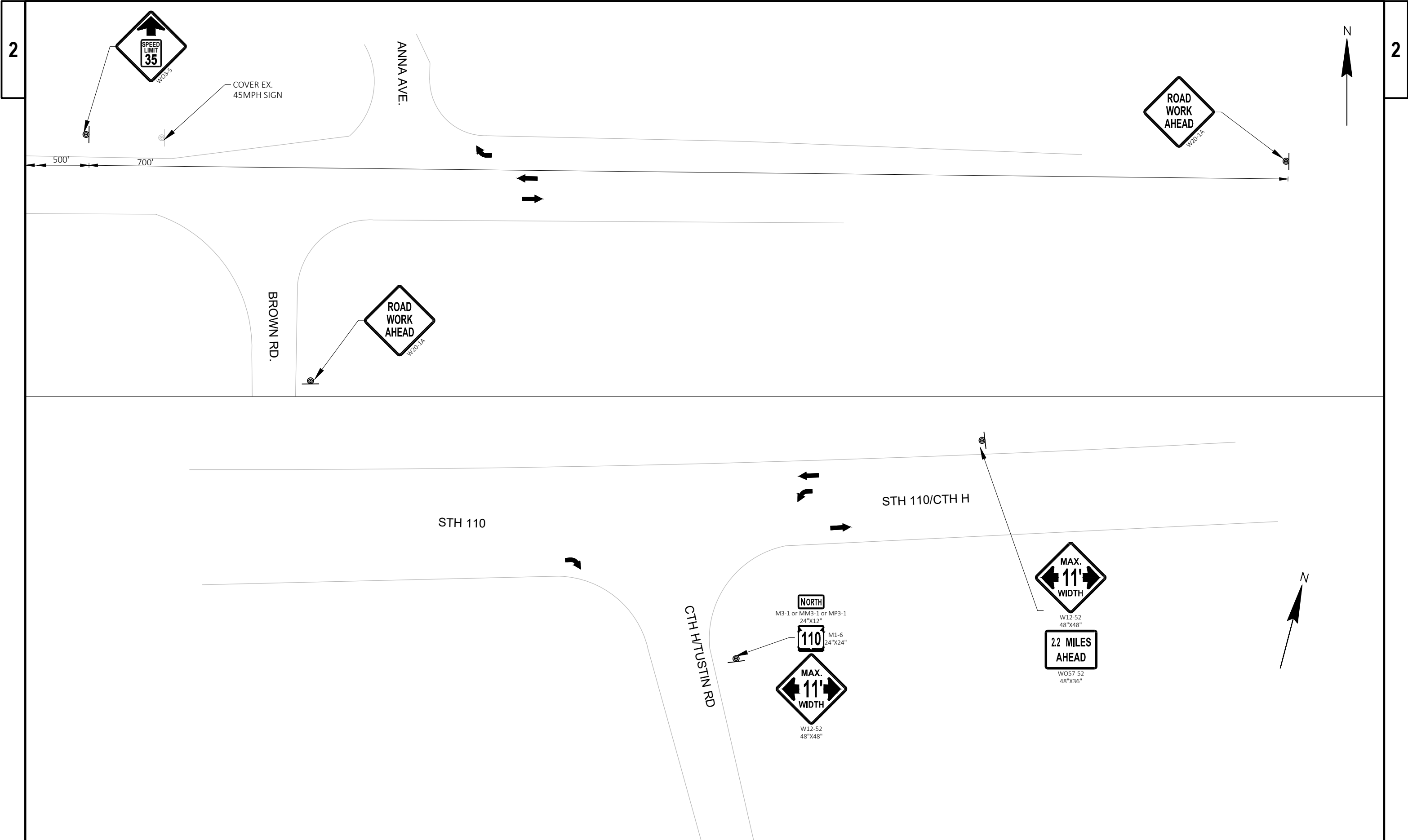


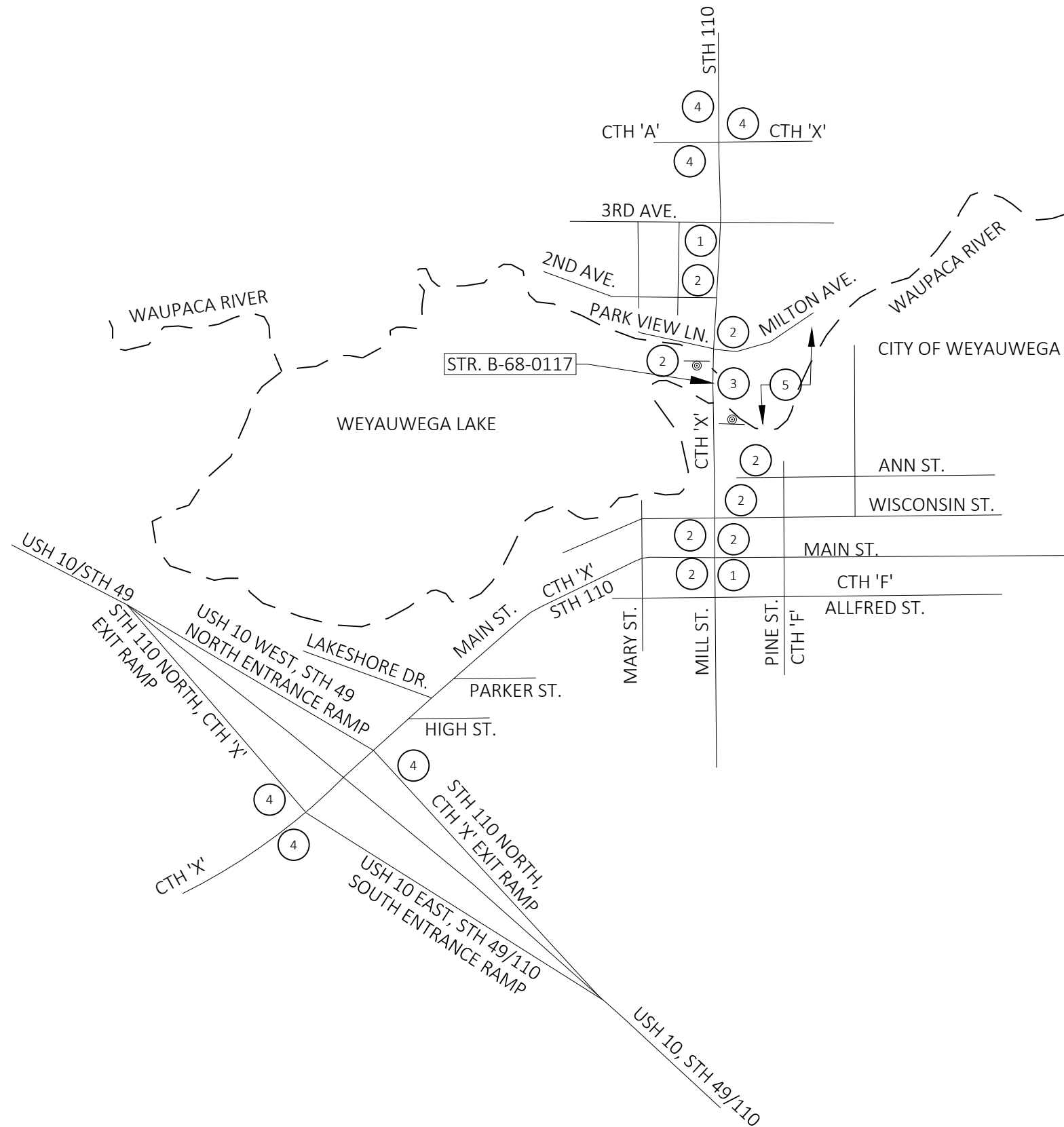






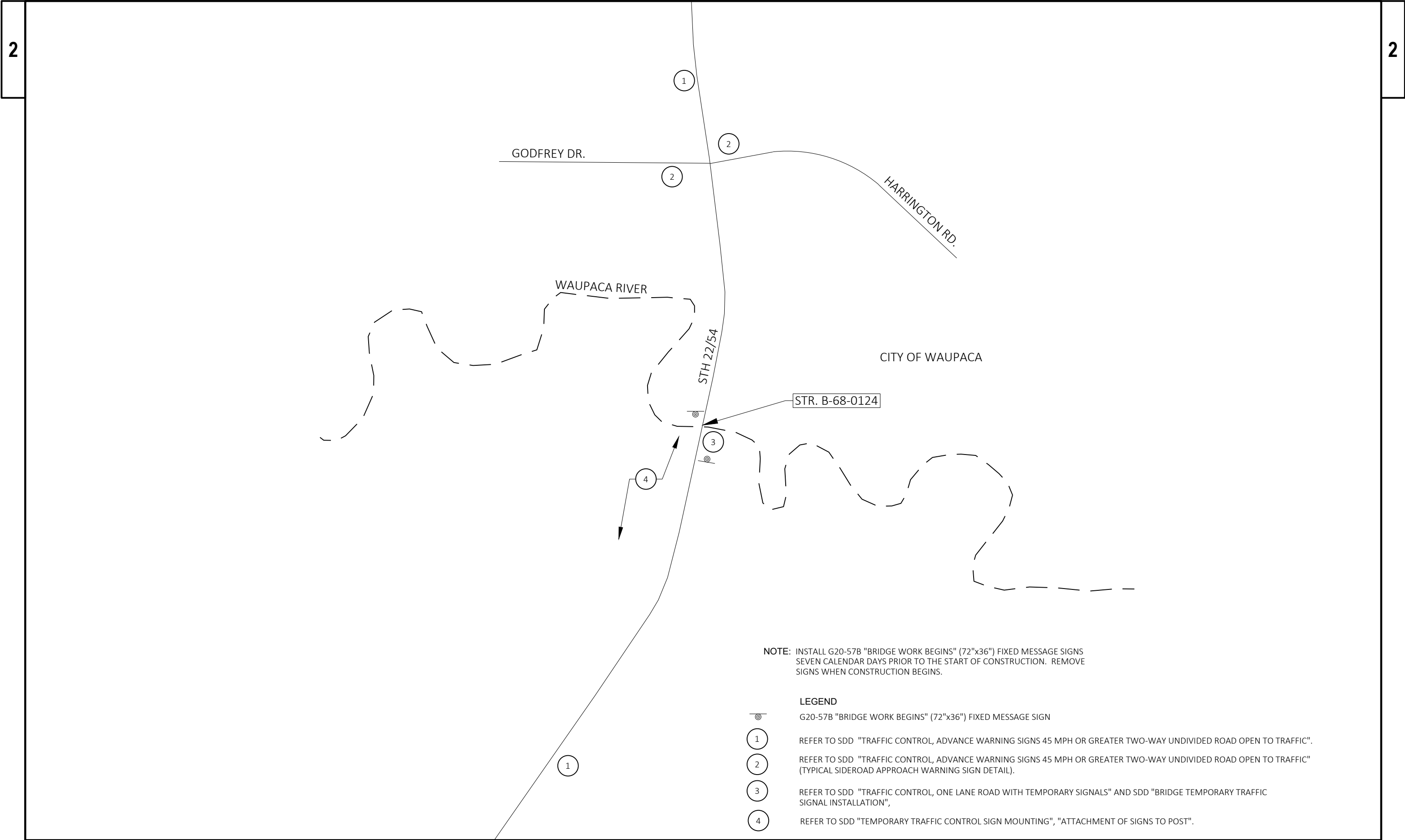






NOTE: INSTALL G20-57B "BRIDGE WORK BEGINS" (72"x36") FIXED MESSAGE SIGNS SEVEN CALENDAR DAYS PRIOR TO THE START OF CONSTRUCTION. REMOVE SIGNS WHEN CONSTRUCTION BEGINS.






- LEGEND**
- G20-57B "BRIDGE WORK BEGINS" (72"x36")FIXED MESSAGE SIGN
 - REFER TO SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC".
 - REFER TO SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC (TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL)".
 - REFER TO SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" AND SDD "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION",
 - REFER TO SDD "ADVANCED WIDTH RESTRICTION SIGNING", 13 FT MAX.
 - REFER TO SDD "TEMPORARY TRAFFIC CONTROL SIGN MOUNTING", "ATTACHMENT OF SIGNS TO POST".





NOTE: INSTALL G20-57B "BRIDGE WORK BEGINS" (72"x36") FIXED MESSAGE SIGNS SEVEN CALENDAR DAYS PRIOR TO THE START OF CONSTRUCTION. REMOVE SIGNS WHEN CONSTRUCTION BEGINS.

LEGEND

-  G20-57B "BRIDGE WORK BEGINS" (72"x36") FIXED MESSAGE SIGN
-  REFER TO SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC".
-  REFER TO SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" (TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL).
-  REFER TO SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" AND SDD "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION",
-  REFER TO SDD "TEMPORARY TRAFFIC CONTROL SIGN MOUNTING", "ATTACHMENT OF SIGNS TO POST".



6220-00-31 (B-68-71)
STH 54
Waupaca County

Note: Stop bar placement at 735 ft spacing 55 mph posted speed limit
Construction Year (2018) AADT: 6100 vpd

Temporary Signal Timing # 1 6:00am to 8:00pm

INTERVAL	EB	WB	SECONDS
1	G	R	31
2	Y	R	5
3	R	R	23
4	R	G	31
5	R	Y	5
6	R	R	23

Total cycle length

	G	Y	R
EB (s)	31	5	23
WB (s)	31	5	23
Total (s)	62	10	46
=	118 s		

Temporary Signal Timing # 2 8:00pm to 6:00am

INTERVAL	EB	WB	SECONDS
1	G	R	25
2	Y	R	5
3	R	R	23
4	R	G	25
5	R	Y	5
6	R	R	23

Total cycle length

	G	Y	R
EB (s)	25	5	23
WB (s)	25	5	23
Total (s)	50	10	46
=	106 s		

6220-00-31 (B-68-117)
STH 110
Waupaca County

Note: Stop bar placement at 671 ft spacing 25 mph posted speed limit
Construction Year (2018) AADT: 5600 vpd

Temporary Signal Timing # 1 6:00am to 8:00pm

INTERVAL	NB	SB	SECONDS
1	G	R	26
2	Y	R	3
3	R	R	22
4	R	G	26
5	R	Y	3
6	R	R	22

Total cycle length

	G	Y	R
NB (s)	26	3	22
SB (s)	26	3	22
Total (s)	52	6	44
=	102 s		

Temporary Signal Timing # 2 8:00pm to 6:00am

INTERVAL	NB	SB	SECONDS
1	G	R	21
2	Y	R	3
3	R	R	22
4	R	G	21
5	R	Y	3
6	R	R	22

Total cycle length

	G	Y	R
NB (s)	21	3	22
SB (s)	21	3	22
Total (s)	42	6	44
=	92 s		

6220-00-31 (B-68-124)
STH 22/54
Waupaca County

Note: Stop bar placement at 793 ft spacing 45 mph posted speed limit
Construction Year (2018) AADT: 5300 vpd

Temporary Signal Timing # 1 6:00am to 8:00pm

INTERVAL	NB	SB	SECONDS
1	G	R	29
2	Y	R	4.5
3	R	R	25
4	R	G	29
5	R	Y	4.5
6	R	R	25

Total cycle length

	G	Y	R
NB (s)	29	4.5	25
SB (s)	29	4.5	25
Total (s)	58	9	50
=	117 s		

Temporary Signal Timing # 2 8:00pm to 6:00am

INTERVAL	NB	SB	SECONDS
1	G	R	24
2	Y	R	4.5
3	R	R	25
4	R	G	24
5	R	Y	4.5
6	R	R	25

Total cycle length

	G	Y	R
NB (s)	24	4.5	25
SB (s)	24	4.5	25
Total (s)	48	9	50
=	107 s		

6220-00-31 (B-68-130)
STH 49
Waupaca County

Note: Stop bar placement at 583 ft spacing 55 mph posted speed limit
Construction Year (2018) AADT: 2400 vpd

Temporary Signal Timing # 1 6:00am to 8:00pm

INTERVAL	NB	SB	SECONDS
1	G	R	16
2	Y	R	5
3	R	R	20
4	R	G	16
5	R	Y	5
6	R	R	20

Total cycle length

	G	Y	R
NB (s)	16	5	20
SB (s)	16	5	20
Total (s)	32	10	40
=	82 s		

Temporary Signal Timing # 2 8:00pm to 6:00am

INTERVAL	NB	SB	SECONDS
1	G	R	13
2	Y	R	5
3	R	R	20
4	R	G	13
5	R	Y	5
6	R	R	20

Total cycle length

	G	Y	R
NB (s)	13	5	20
SB (s)	13	5	20
Total (s)	26	10	40
=	76 s		

Estimate Of Quantities

		1430-00-66		6220-00-61		
Line	Item	Item Description	Unit	Total	Qty	Qty
0002	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	7.000	7.000	
0004	213.0100	Finishing Roadway (project) 01. 1430-00-66	EACH	1.000	1.000	
0006	213.0100	Finishing Roadway (project) 01. 6220-00-61	EACH	1.000		1.000
0008	465.0105	Asphaltic Surface	TON	100.000	100.000	
0010	509.0301	Preparation Decks Type 1	SY	11.000	1.000	10.000
0012	509.0302	Preparation Decks Type 2	SY	8.000	1.000	7.000
0014	509.0310.S	Sawing Pavement Deck Preparation Areas	LF	110.000	10.000	100.000
0016	509.1000	Joint Repair	SY	20.000	20.000	
0018	509.2100.S	Concrete Masonry Deck Repair	CY	9.000	3.000	6.000
0020	509.5100.S	Polymer Overlay	SY	6,432.000	2,072.000	4,360.000
0022	603.8000	Concrete Barrier Temporary Precast Delivered	LF	450.000	450.000	
0024	603.8125	Concrete Barrier Temporary Precast Installed	LF	900.000	900.000	
0026	619.1000	Mobilization	EACH	1.000	0.150	0.850
0028	628.7015	Inlet Protection Type C	EACH	8.000	1.000	7.000
0030	642.5001	Field Office Type B	EACH	1.000	1.000	
0032	643.0300	Traffic Control Drums	DAY	12,875.000	9,477.000	3,398.000
0034	643.0420	Traffic Control Barricades Type III	DAY	863.000	603.000	260.000
0036	643.0705	Traffic Control Warning Lights Type A	DAY	632.000	504.000	128.000
0038	643.0715	Traffic Control Warning Lights Type C	DAY	4,943.000	3,699.000	1,244.000
0040	643.0900	Traffic Control Signs	DAY	8,178.000	4,113.000	4,065.000
0042	643.0920	Traffic Control Covering Signs Type II	EACH	8.000	4.000	4.000
0044	643.1000	Traffic Control Signs Fixed Message	SF	216.000	36.000	180.000
0046	643.1070	Traffic Control Cones 42-Inch	DAY	416.000		416.000
0048	643.5000	Traffic Control	EACH	1.000	0.150	0.850
0050	646.1020	Marking Line Epoxy 4-Inch	LF	10,060.000	4,005.000	6,055.000
0052	646.9000	Marking Removal Line 4-Inch	LF	6,905.000	4,005.000	2,900.000
0054	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	14,845.000	9,655.000	5,190.000
0056	649.0850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	192.000		192.000
0058	661.0100	Temporary Traffic Signals for Bridges (structure) 01. B-68-0071	LS	1.000		1.000
0060	661.0100	Temporary Traffic Signals for Bridges (structure) 02. B-68-0117	LS	1.000		1.000
0062	661.0100	Temporary Traffic Signals for Bridges (structure) 03. B-68-0124	LS	1.000		1.000
0064	661.0100	Temporary Traffic Signals for Bridges (structure) 04. B-68-0130	LS	1.000		1.000
0066	SPV.0090	Special 01. Silicone Bridge Joint Sealant	LF	80.000	80.000	
0068	SPV.0105	Special 01. Shuttle Service	LS	1.000		1.000

NOTE: ALL ITEMS ON THIS
SHEET ARE CATEGORY 0010
UNLESS OTHERWISE NOTED.

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

		211.0400
PROJECT	LOCATION	(STA)
1430-00-66	B-24-0009 (WEST)	2
	B-24-0009 (EAST)	5
	PROJECT TOTAL	7

ASPHALTIC SURFACE

		465.0105
PROJECT	LOCATION	(TON)
1430-00-66	B-24-0009 (WEST)	26
	B-24-0009 (EAST)	74
	PROJECT TOTAL	100

CONCRETE BARRIER TEMPORARY PRECAST

		603.8000	603.8125
PROJECT	LOCATION	DELIVERED	INSTALLED
		(LF)	(LF)
1430-00-66	B-24-0009 STAGE 1	450	450
	B-24-0009 STAGE 2	---	450
	PROJECT TOTAL	450	900

EROSION CONTROL ITEMS

		628.7015
		INLET
		PROTECTION
		TYPE C
PROJECT	LOCATION	(EACH)
6220-00-61	B-68-0071	1
	B-60-0100	---
	B-68-0101	---
	B-68-0117	2
	B-68-0124	2
	B-68-0130	2
	B-24-0009	1
PROJECT 6220-00-61		7
PROJECT 1430-00-66		1
CONTRACT TOTAL		8

TRAFFIC CONTROL SUMMARY

		643.0300			643.0420		643.0705		643.0715		643.0900		643.0920*	643.1000	643.1070	
					BARRICADES		WARNING		WARNING				COVERING	SIGNS		
					TYPE III		LIGHTS		LIGHTS				SIGNS	FIXED	CONES	
							TYPE A		TYPE C				TYPE II	MESSAGE	42-INCH	
PROJECT	LOCATION	DAYS IN	DRUMS		(NO.)	(DAYS)	(NO.)	(DAYS)	(NO.)	(DAYS)	(NO.)	(DAYS)	(EACH)	(SF)	(NO.)	(DAYS)
6220-00-61	B-68-0071	17	23	391	1	17	---	---	10	170	20	340	---	36	---	---
	B-68-0100 STAGE 1	16	44	704	4	64	2	32	9	144	29	464	1	18	10	160
	B-68-0100 STAGE 2	16	17	272	4	64	2	32	5	80	29	464	1	---	6	96
	B-68-0101 STAGE 1	16	9	144	2	32	2	32	5	80	20	320	1	18	5	80
	B-68-0101 STAGE 2	16	9	144	2	32	2	32	5	80	20	320	1	---	5	80
	B-68-0117	33	25	825	1	33	---	---	10	330	43	1,419	---	36	---	---
	B-68-0124	18	28	504	1	18	---	---	10	180	20	360	---	36	---	---
	B-68-0130	18	23	414	1	---	---	---	10	180	21	378	---	36	---	---
1430-00-66	B-24-0009 STAGE 1	45	117	5,265	5	225	4	180	33	1,485	53	2,385	2	36	---	---
1430-00-66	B-24-0009 STAGE 2	54	78	4,212	7	378	6	324	41	2,214	32	1,728	2	---	---	---
PROJECT 6220-00-61			178	3,398	16	260	8	128	64	1,244	202	4,065	4	180	26	416
PROJECT 1430-00-66			195	9,477	12	603	10	504	74	3,699	85	4,113	4	36	---	---
CONTRACT TOTALS			373	12,875	28	863	18	632	138	4,943	287	8,178	8	216	26	416

* ONLY A SINGLE CYCLE REQUIRED FOR ALL COVERING SIGNS TYPE II

PROJECT NO: 1430-00-66 & 6220-00-61

HWY: VARIOUS

COUNTY: GREEN LAKE & WAUPACA

MISCELLANEOUS QUANTITIES

SHEET

E

NOTE: ALL ITEMS ON THIS
SHEET ARE CATEGORY 0010
UNLESS OTHERWISE NOTED.

3

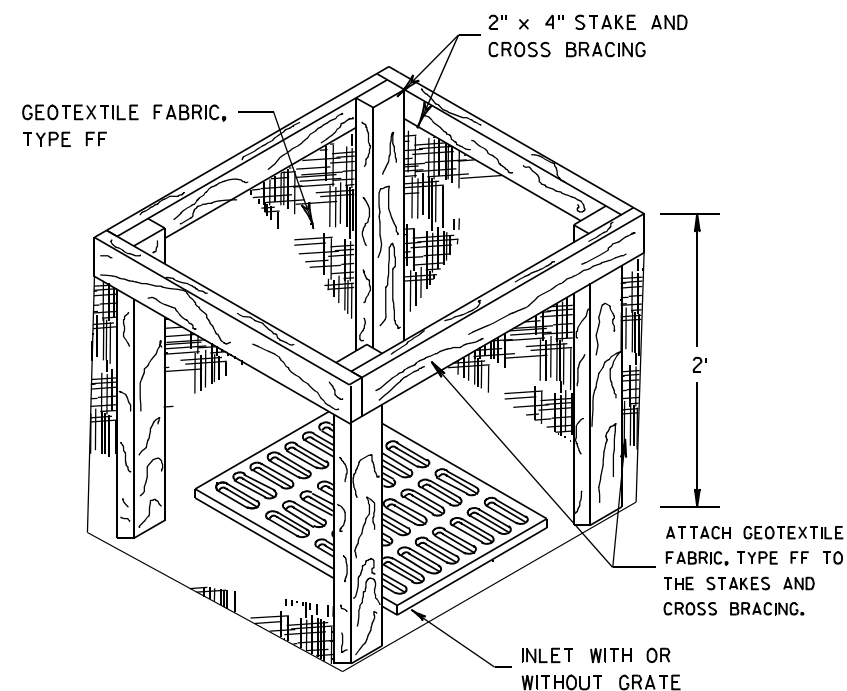
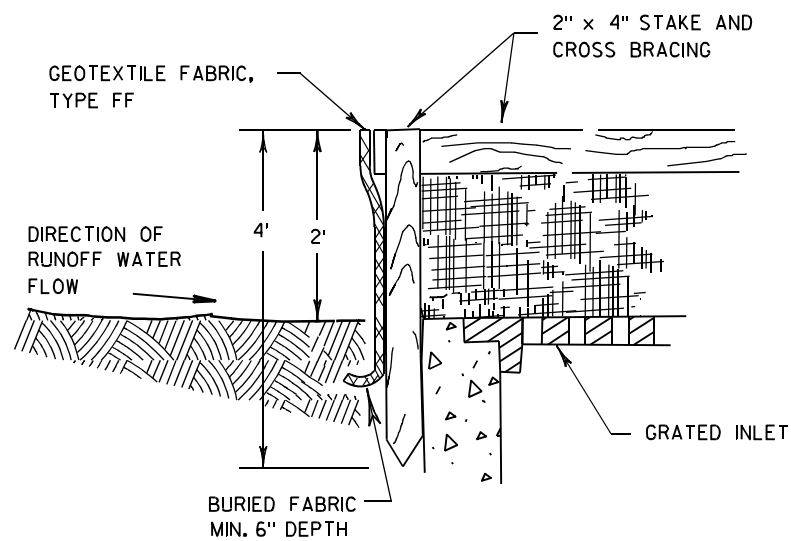
PAVEMENT MARKING									
		646.1020 MARKING LINE EPOXY 4-INCH				649.015 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH		649.0850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH	646.9000 MARKING REMOVAL LINE 4-INCH
		YELLOW SOLID	YELLOW SKIP/DASH 12.5X37.5	WHITE SOLID	WHITE SKIP/DASH 12.5X37.5	YELLOW SOLID	WHITE SOLID	WHITE SOLID	
PROJECT	LOCATION	(LF)	(LF)	(LF)	(LF)	(LF)	(LF)	(LF)	(LF)
6220-00-61	B-68-0071	930	87.5	474	---	700	880	48	650
	B-60-0100	---	---	44	12.5	---	---	---	---
	B-68-0101	---	---	44	12.5	---	---	---	---
	B-68-0117	942	50	342	---	700	748	48	650
	B-68-0124	1,388	---	586	---	---	992	48	800
	B-68-0130	964	12.5	166	---	700	470	48	800
1430-00-66	B-24-0009	1,630	465	1,910	---	4,175	5,480	---	4,005
PROJECT 6220-00-61		4,224	150	1,656	25	2,100	3,090	192	2,900
PROJECT 1430-00-66		1,630	465	1,910	---	4,175	5,480	---	4,005
CONTRACT TOTALS		5,854	615	3,566	25	6,275	8,570	192	6,905
		10,060				14,845			

3

TEMPORARY TRAFFIC SIGNAL FOR BRIDGES		
PROJECT	LOCATION	661.0100 (LS)
6220-00-61	B-68-0071	1
	B-60-0100	---
	B-68-0101	---
	B-68-0117	1
	B-68-0124	1
	B-68-0130	1
1430-00-66	B-24-0009	---
PROJECT 6220-00-61		4
PROJECT 1430-00-66		---
CONTRACT TOTAL		4

Standard Detail Drawing List

08E10-02	INLET PROTECTION TYPE A, B, C AND D
09G02-05A	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05B	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05C	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
14B07-15A	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-15B	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-15C	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-15D	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-15E	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-15F	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-15G	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-15H	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-15I	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
15C02-08F	ADVANCED WIDTH RESTRICTION SIGNING
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M. P. H. OR LESS
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15D20-04	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-06A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-06B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D33-06	TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS



INLET PROTECTION, TYPE A

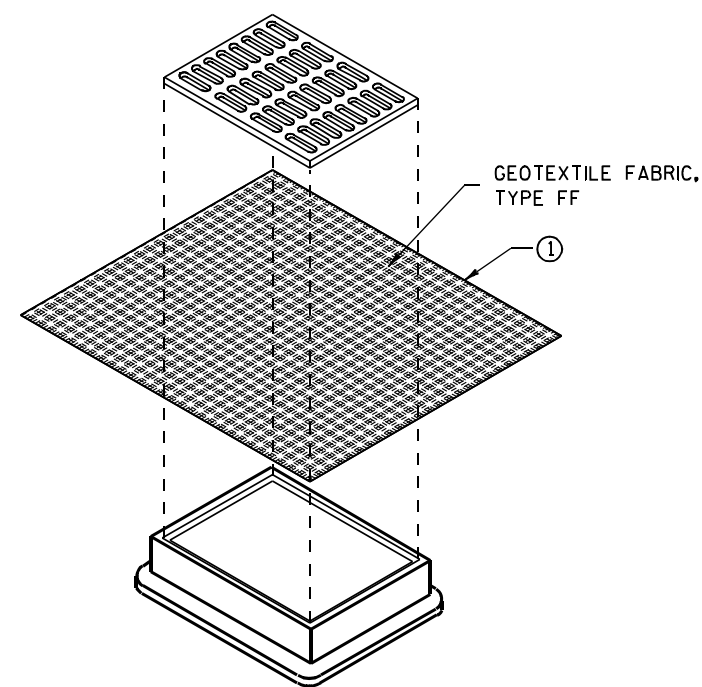
GENERAL NOTES

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.

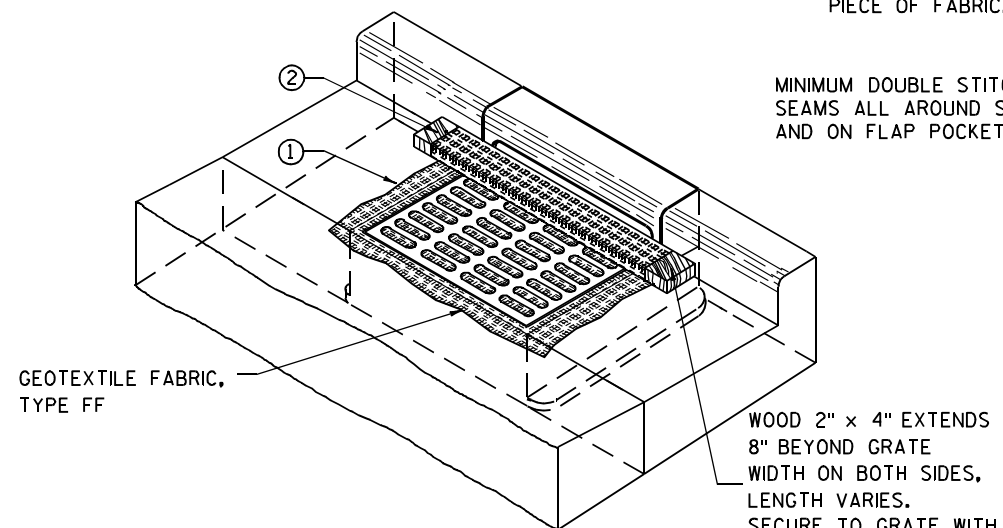
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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.

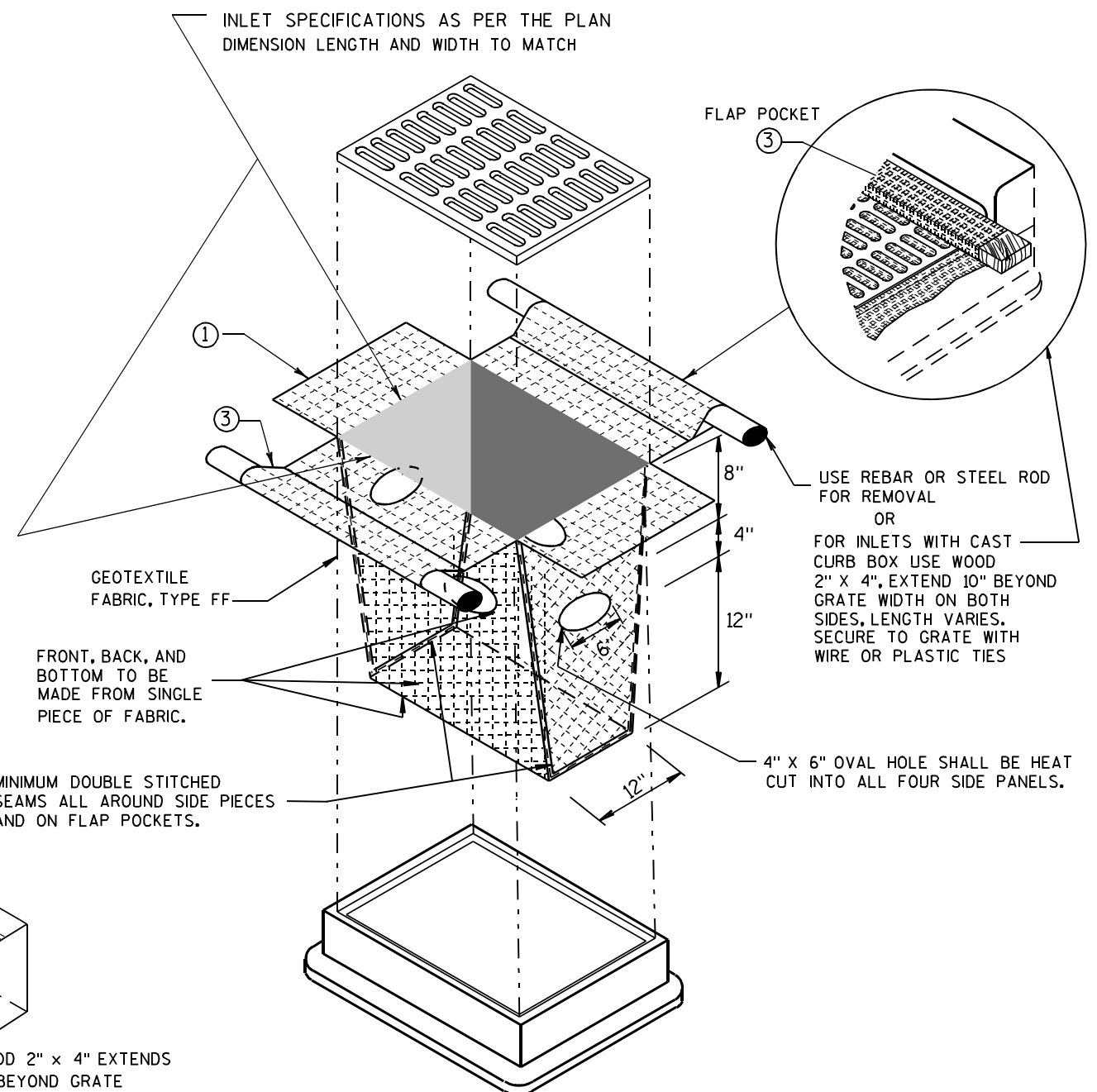
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

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.



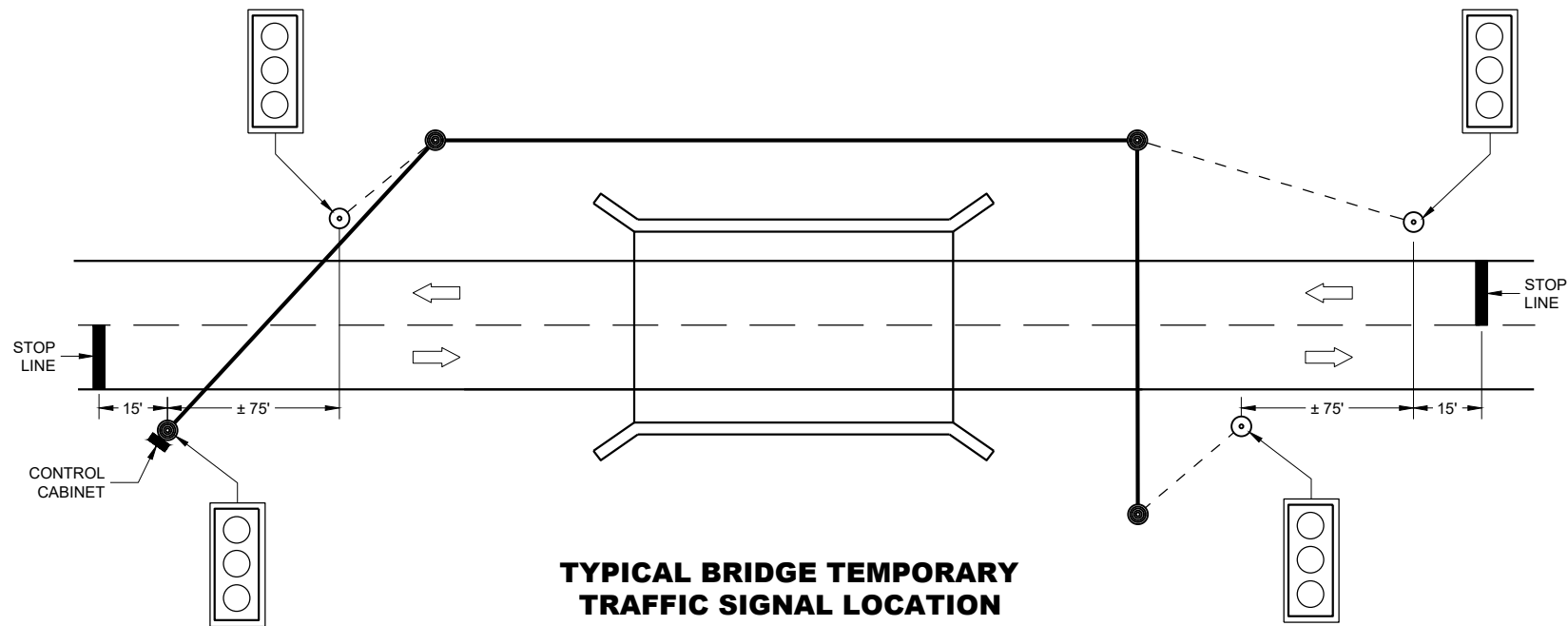
INLET PROTECTION, TYPE D

(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



TYPICAL BRIDGE TEMPORARY TRAFFIC SIGNAL LOCATION

LEGEND

- WOOD POLE (NON-BREAKAWAY)
- WOOD POST (BREAKAWAY)
- SIGNAL CABLE
- SIGNAL CABLE W/MESSENGER
- DIRECTION OF TRAFFIC
- LED TRAFFIC SIGNAL WITH BACKPLATE

GENERAL NOTES

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

POLE MOUNTED TRAFFIC SIGNAL CONTROL CABINET MAY BE MOUNTED ON THE SERVICE POLE IF THE ELECTRICAL UTILITY ALLOWS THE INSTALLATION.

WHEN UTILITY POLES ARE USED TO SPAN THE TEMPORARY OVERHEAD CABLE, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER OF THE POLES AND GIVEN TO THE PROJECT MANAGER. ALL PERTINENT UTILITY AND CODE CLEARANCES SHALL BE MAINTAINED.

WOOD POLES (NON-BREAKAWAY) SHALL BE NO CLOSER TO EDGE OF PAVEMENT THAN OFFSET DISTANCE CHART ALLOWS OR 4 FEET BEHIND PROTECTIVE BARRIER (BEAM GUARD, ETC.).

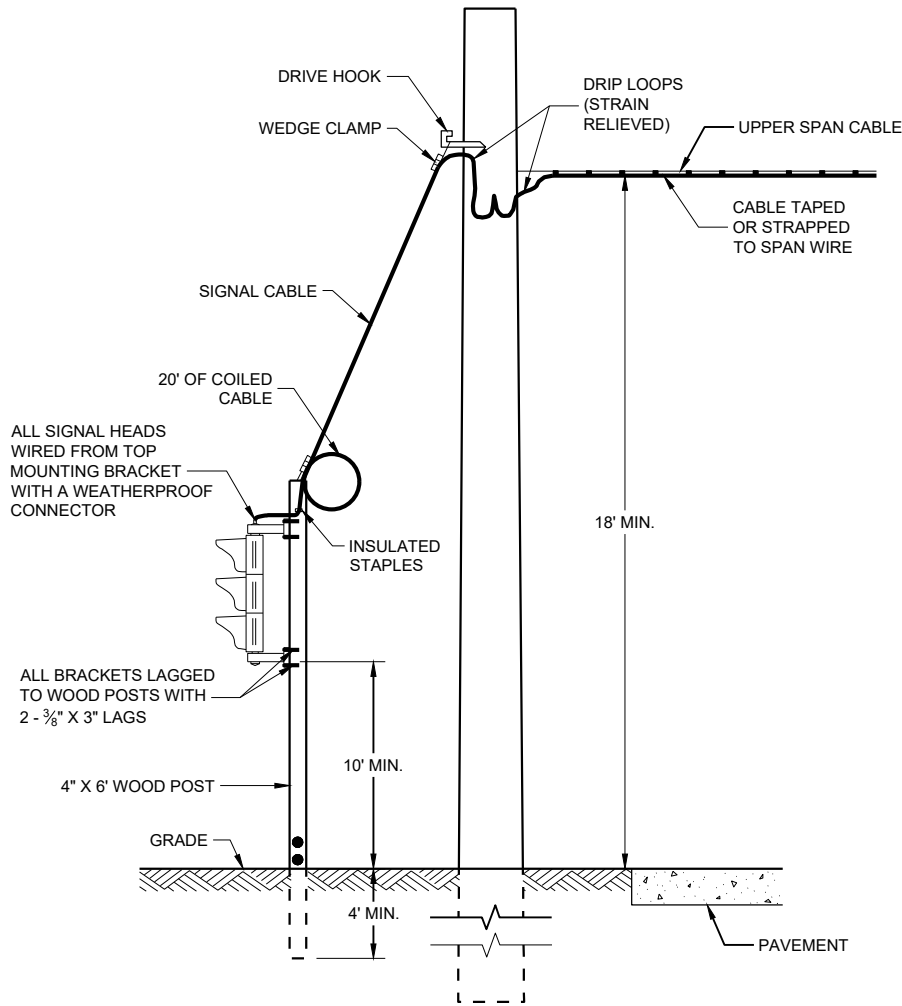
WOOD POSTS (BREAKAWAY) SHALL BE NO CLOSER THAN 2 FEET OUTSIDE OF SHOULDER.

VERTICAL CLEARANCE ETC. PER NEC.

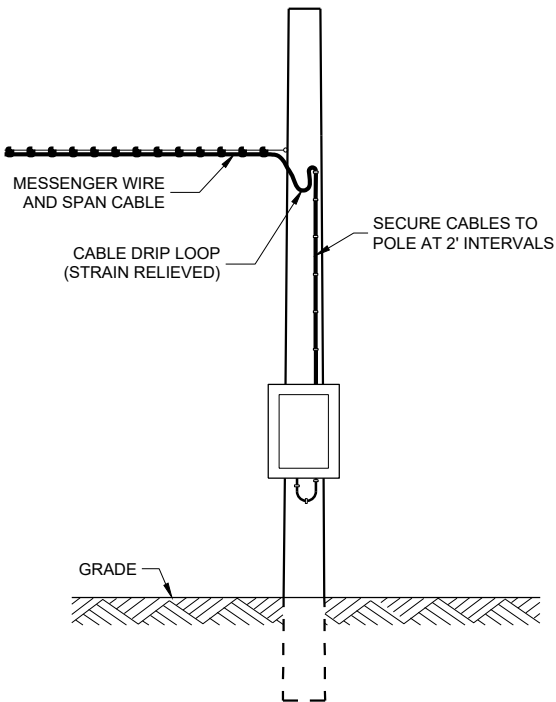
TRAFFIC SIGNAL FACES SHALL BE TYPICALLY PLACED 12 FEET FROM EDGE OF PAVEMENT.

EACH TRAFFIC SIGNAL SHALL HAVE A BACKPLATE.

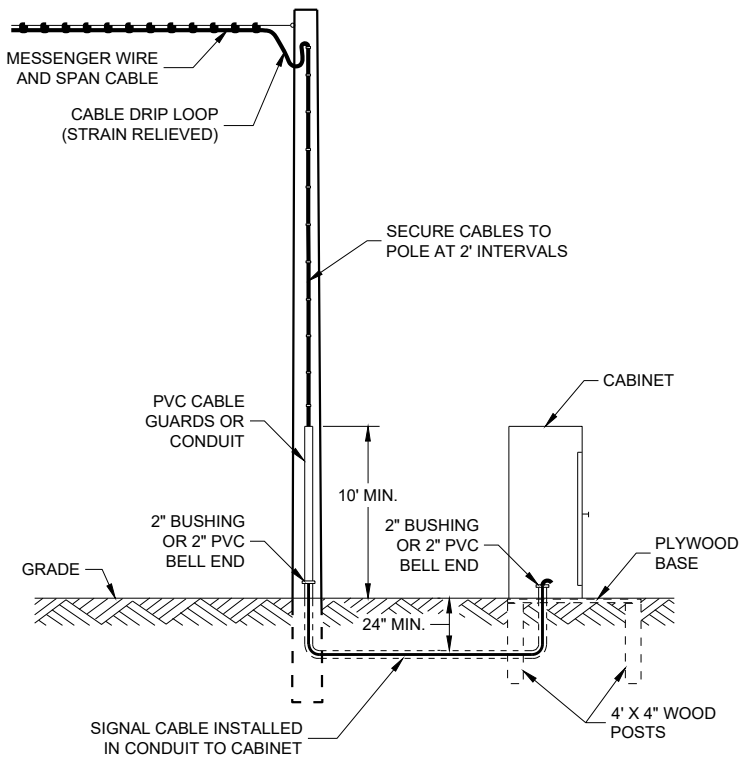
SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15D33.



TYPICAL DROP TO TRAFFIC SIGNAL FACE



POLE MOUNT CABINET INSTALLATION



GROUND MOUNT CABINET INSTALLATION

MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

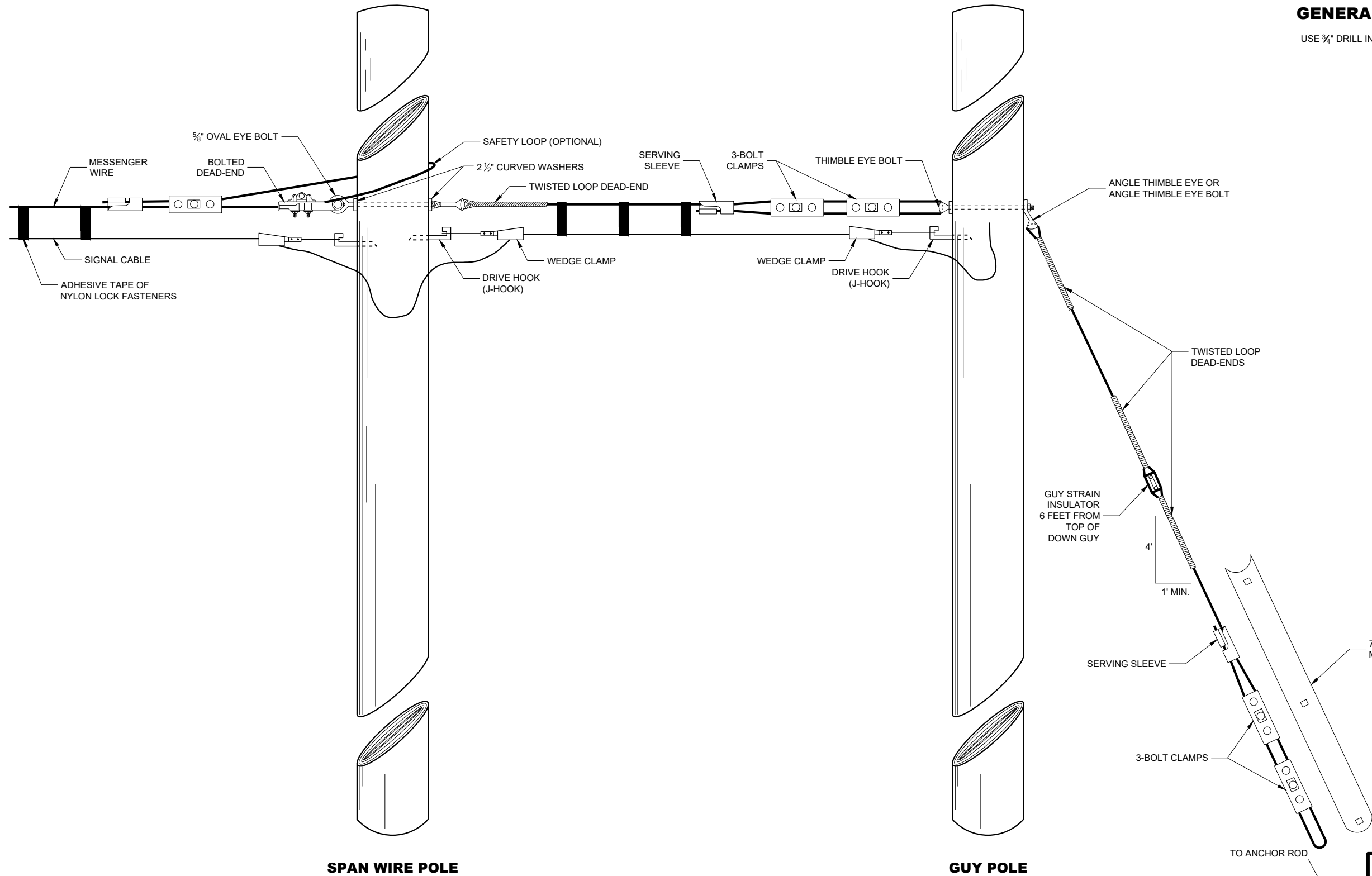
OFFSET DISTANCES FOR TEMPORARY NON-BREAKAWAY POLES	
SPEED LIMIT	OFFSET DISTANCE*
GREATER THAN 45 MPH	18 FT
45 MPH OR LESS	12 FT
45 MPH OR LESS W/CURBS	2 FT

* NOTE: OFFSET MEASURED FROM OUTER EDGE OF OUTSIDE THRU LANE.

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE /S/ Ahmet Demirbilek
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA



GENERAL NOTES

USE 3/4" DRILL IN WOOD POLE TO PROVIDE FOR 5/8" BOLTS.

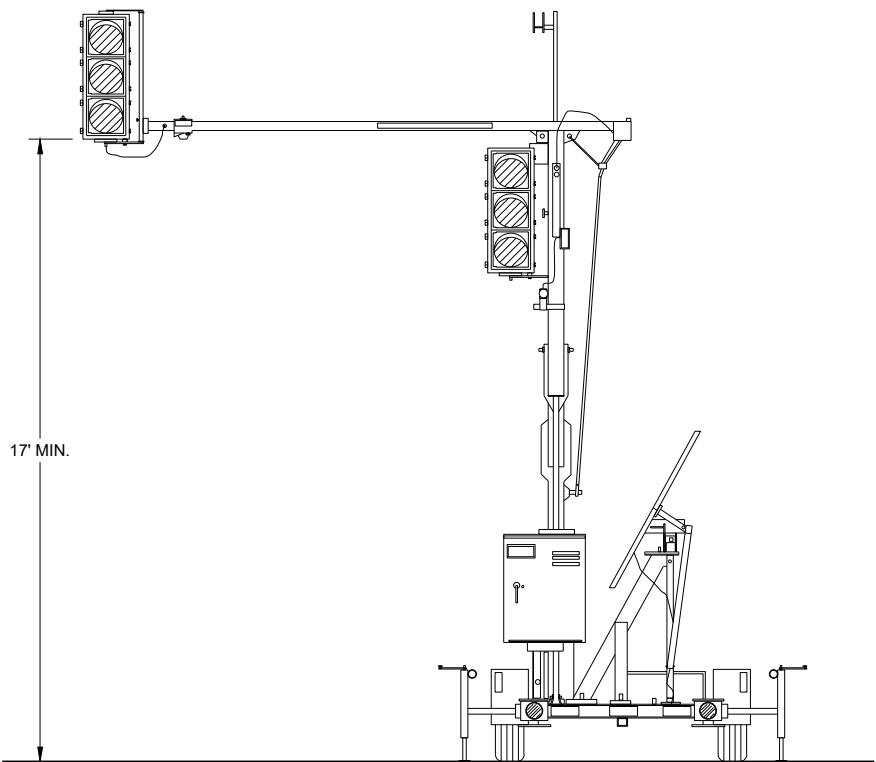
TYPICAL DEAD-ENDINGS OR GUYING

**BRIDGE TEMPORARY TRAFFIC
SIGNAL INSTALLATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015 DATE /S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

FHWA

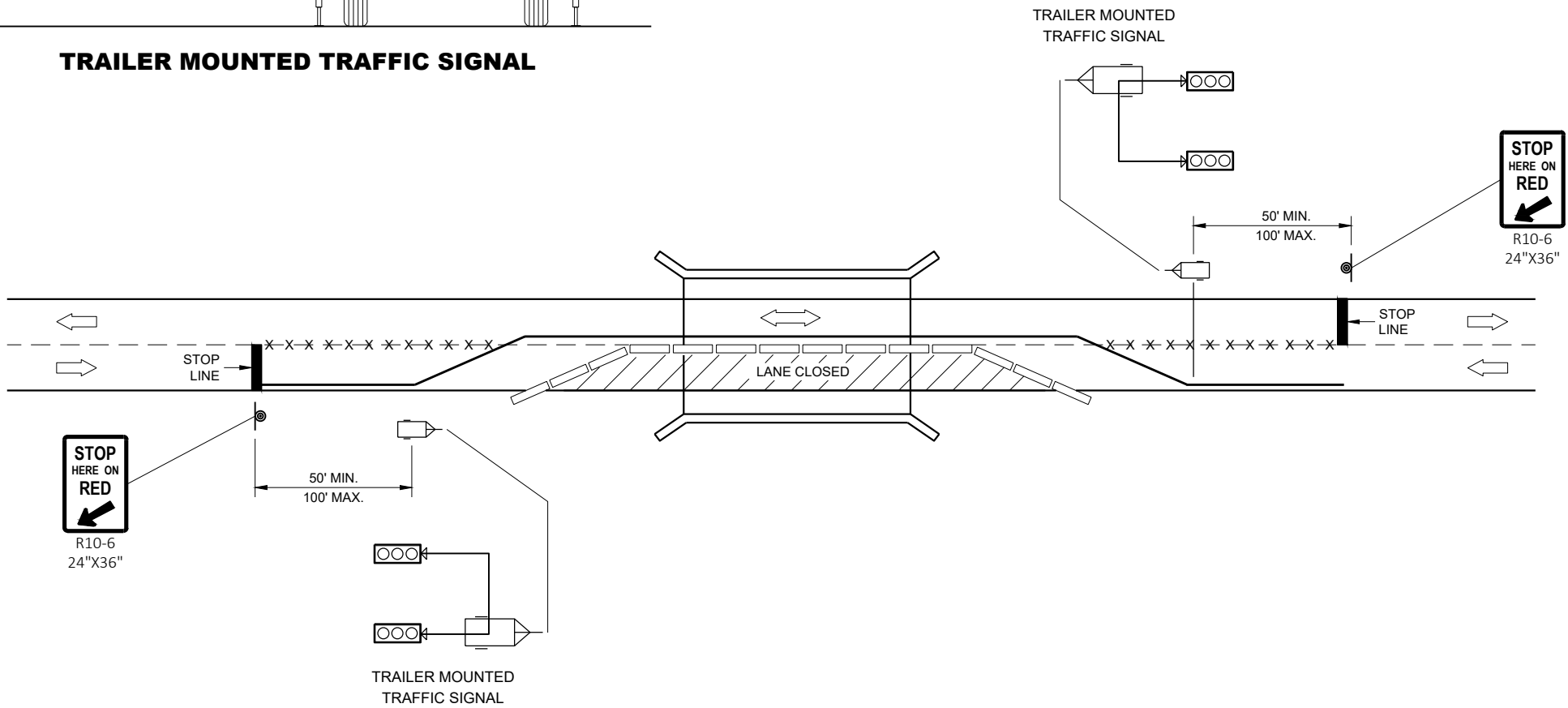


TRAILER MOUNTED TRAFFIC SIGNAL

GENERAL NOTES

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

SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15D33.



TYPICAL TRAILER MOUNTED TRAFFIC SIGNAL LOCATION

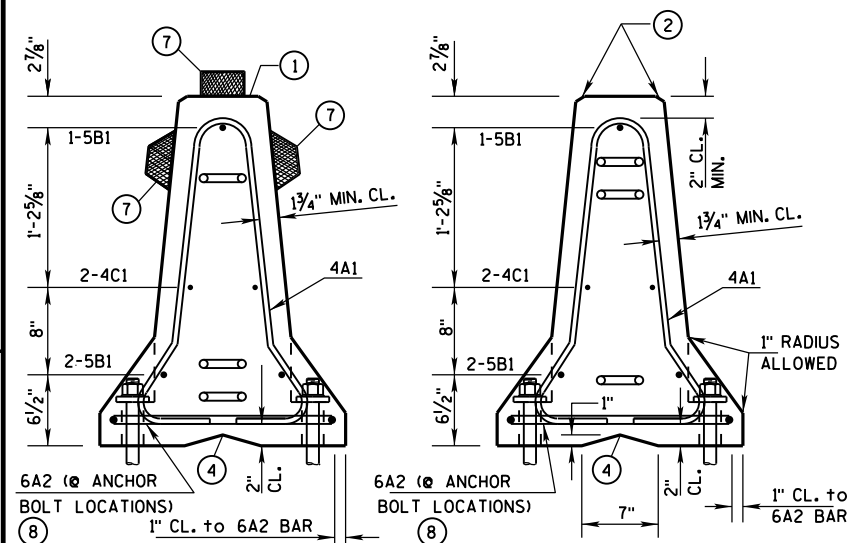
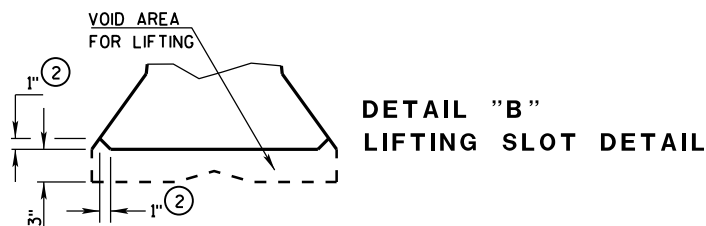
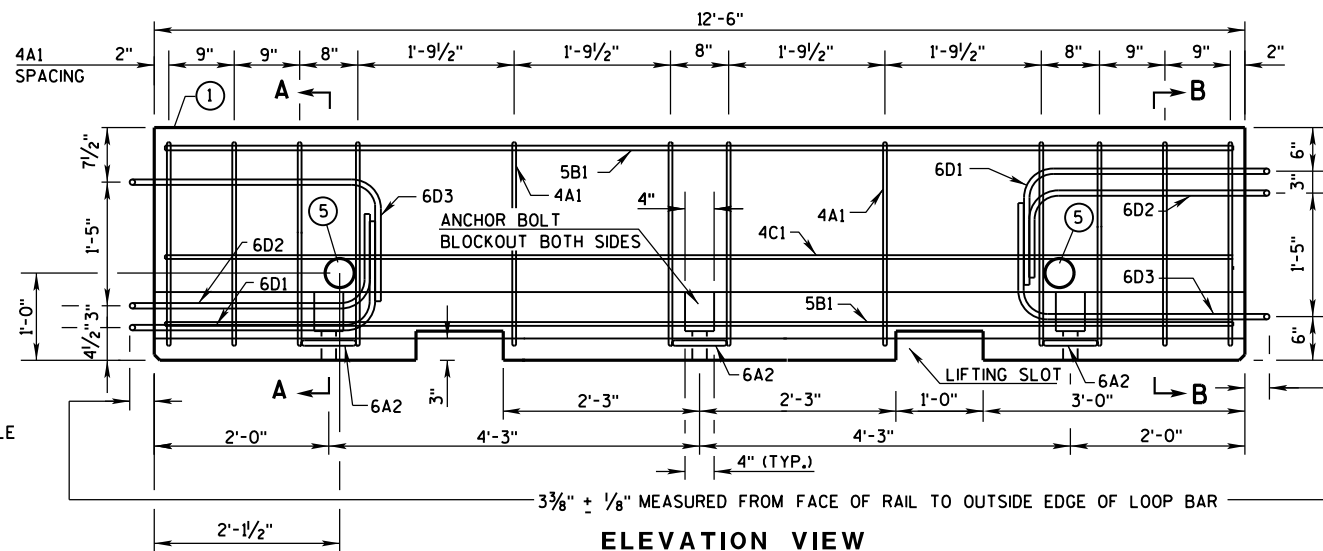
LEGEND

- POST MOUNTED SIGN
- TEMPORARY PRECAST CONCRETE BARRIER
- TRAILER MOUNTED TRAFFIC SIGNAL
- REMOVE PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

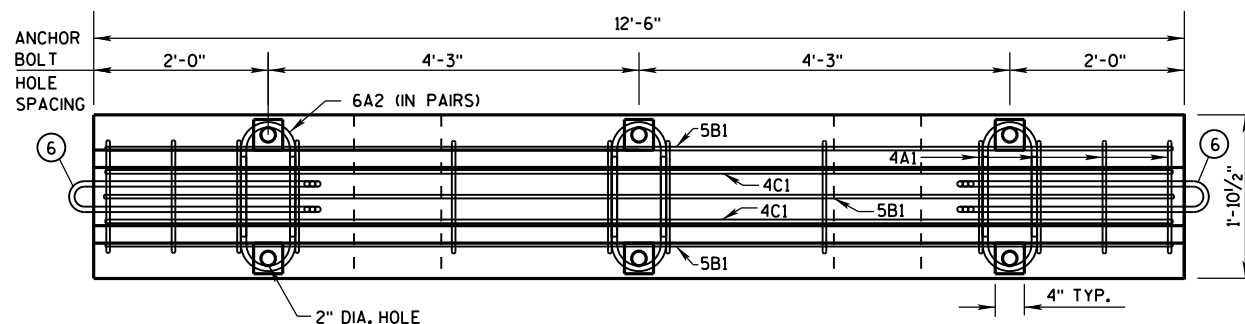
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE /S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



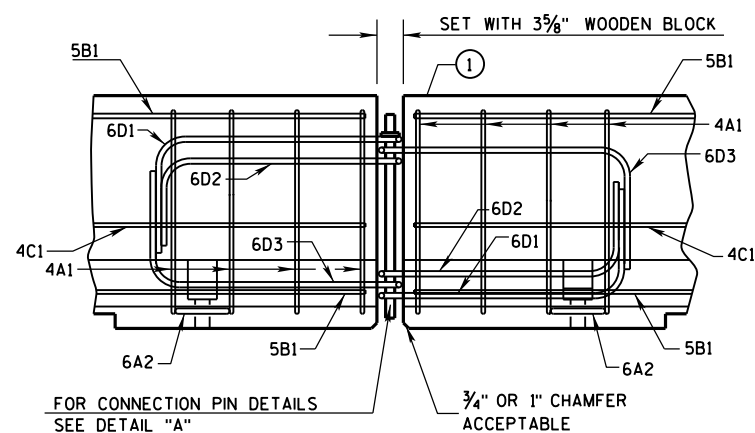
SECTION A-A
(STIRRUP PLACEMENT)

SECTION B-B
(STIRRUP PLACEMENT)

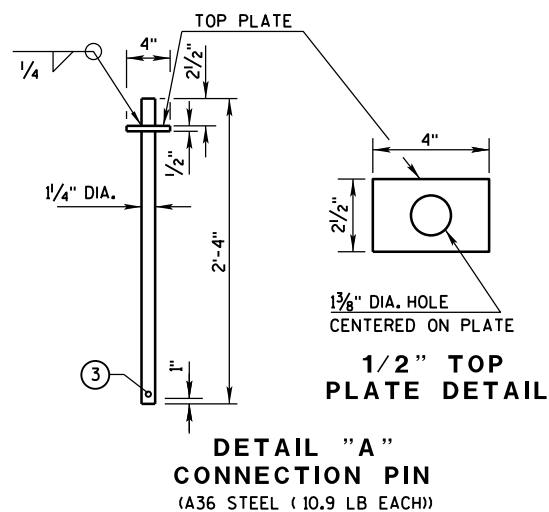


PLAN VIEW

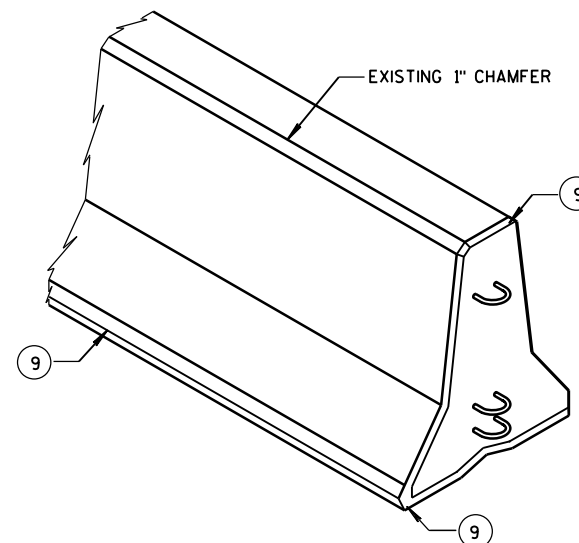
DETAILS OF BARRIER SECTION



DETAILS OF BARRIER CONNECTION



DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-15(d) THRU 14B7-15(i).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE $\frac{3}{4}$ " SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A $3\frac{1}{2}$ " PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN $\frac{1}{4}$ " OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

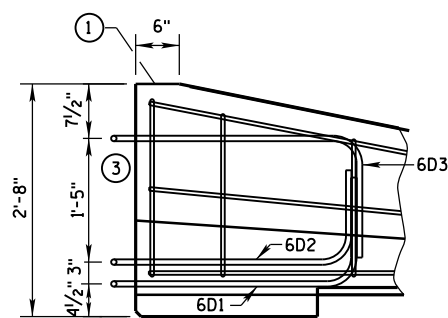
INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS.
PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

- ① MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
 - a. TYPE: WICBTP
 - b. MANUFACTURER
 - c. DATE MANUFACTURED (MONTH AND YEAR)
- ② 1" CHAMFER TO PREVENT SPALLING.
- ③ A $\frac{3}{8}$ " HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..
- ④ "V" NOTCH IS OPTIONAL.
- ⑤ THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).
- ⑥ NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.
- ⑦ USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.
- ⑧ SEE SHEET D FOR HOW TO ANCHOR BARRIER. SEE SHEET E FOR WHEN TO ANCHOR BARRIER.
- ⑨ 1" CHAMFER OPTIONAL.

 $f'_c = 4,000 \text{ psi}$

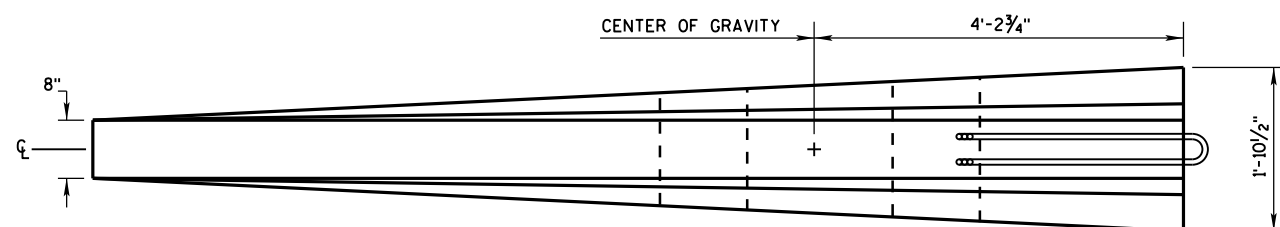
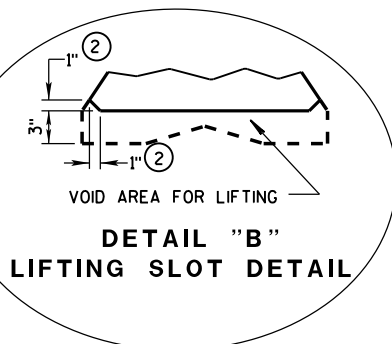
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

- ① MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
 - a. TYPE WICBTP
 - b. MANUFACTURER
 - c. DATE MANUFACTURED (MONTH AND YEAR)
- ② 1" CHAMFER TO PREVENT SPALLING.
- ③ NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



**CHAMFER
DETAIL**

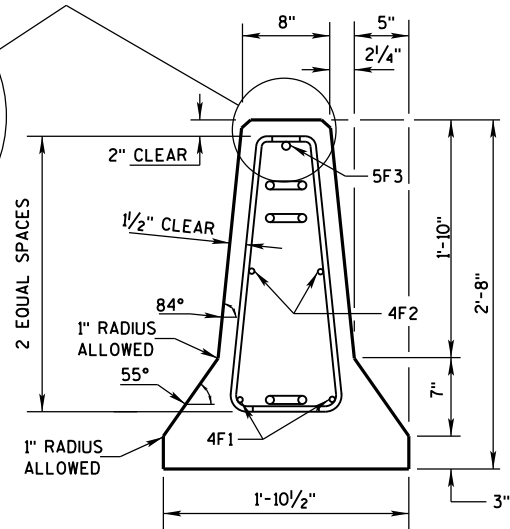


Diagram illustrating the barrier on a curve. The barrier is shown as a series of segments. The offset from the centerline is labeled as $10'' \pm$ OFFSET. The maximum offset is labeled as $5'' \pm$ MAX. The segments are labeled with lengths of $12'-6''$. The diagram is titled **BARRIER ON CURVE**. The **END SECTION** is indicated at the left end of the barrier.

FLARE AT BARRIER END

POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

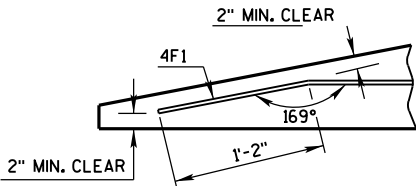
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

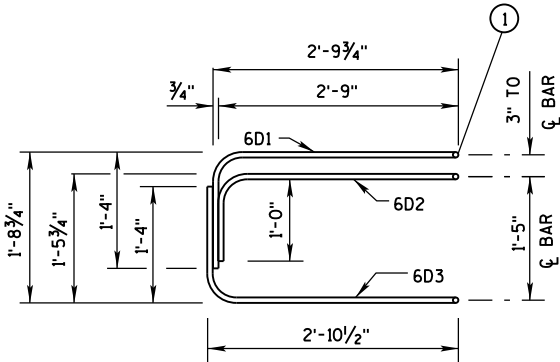
BARRIER TAPER SECTION
BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

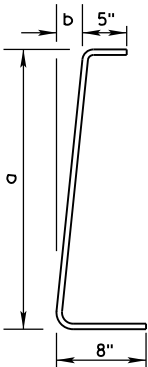
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



DETAIL "C"
BENT BAR DETAIL



ELEVATION
LOOP BAR ASSEMBLY



BAR	a	b
V1	10"	1"
V2	1'-1"	1 1/4"
V3	1'-5"	1 5/8"
V4	1'-8"	1 7/8"
V5	2'-0 1/2"	2 3/8"
V6	2'-3"	2 3/4"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

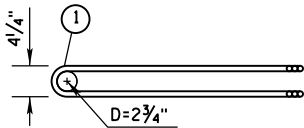
GENERAL NOTES

① NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

BARRIER SECTION
BILL OF MATERIALS

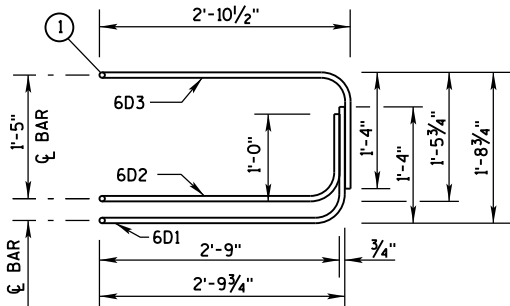
(PER 12'-6" BARRIER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"

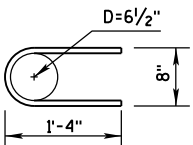


PLAN VIEW
LOOP BAR ASSEMBLY

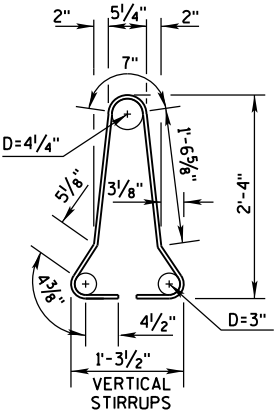
(MARKED END SHOWN, INVERT FOR OTHER END)



ELEVATION VIEW



6A2

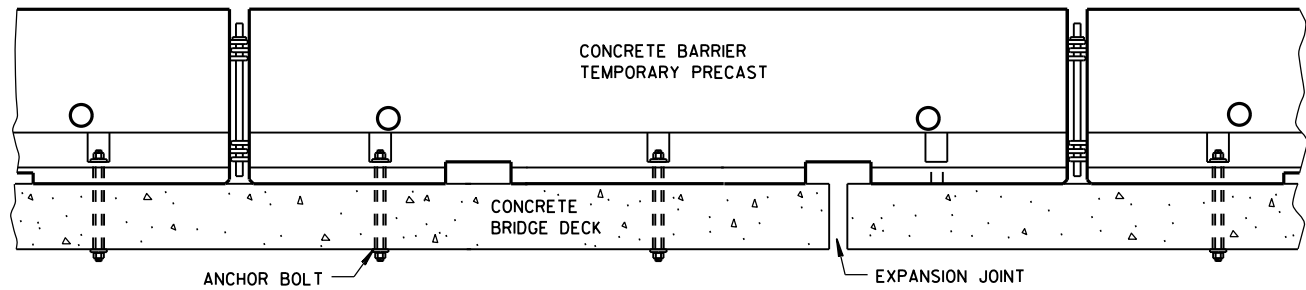
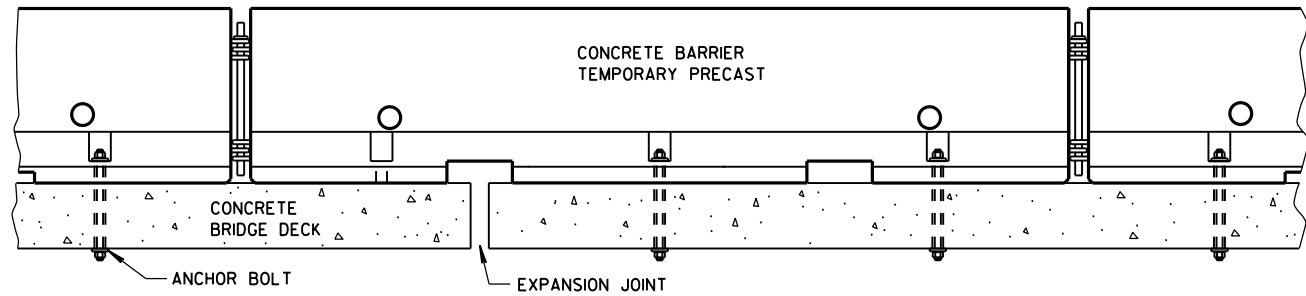


4A1

BARRIER SECTION

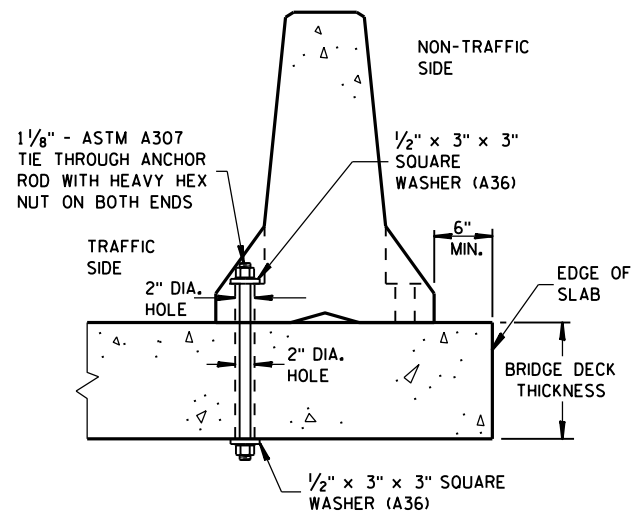
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



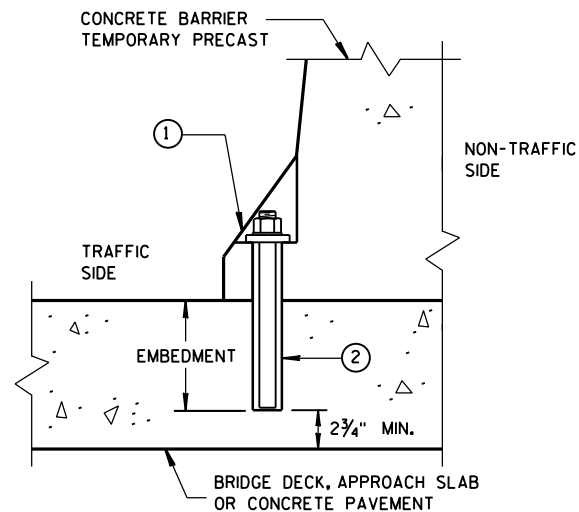
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



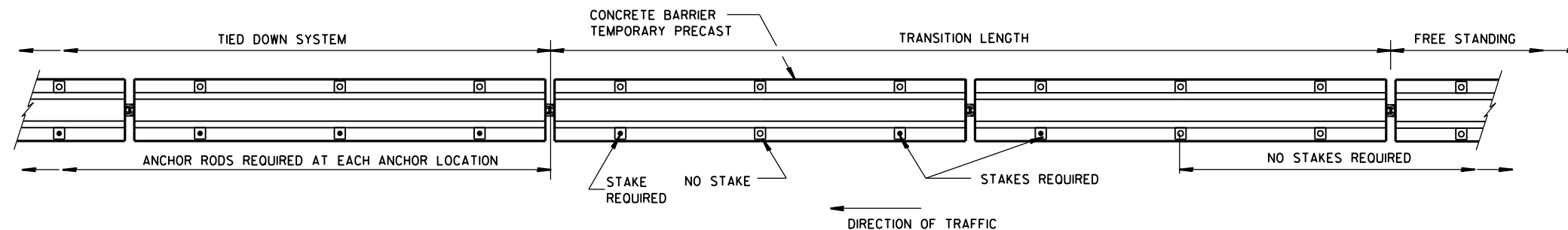
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



REMOVABLE ADHESIVE ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

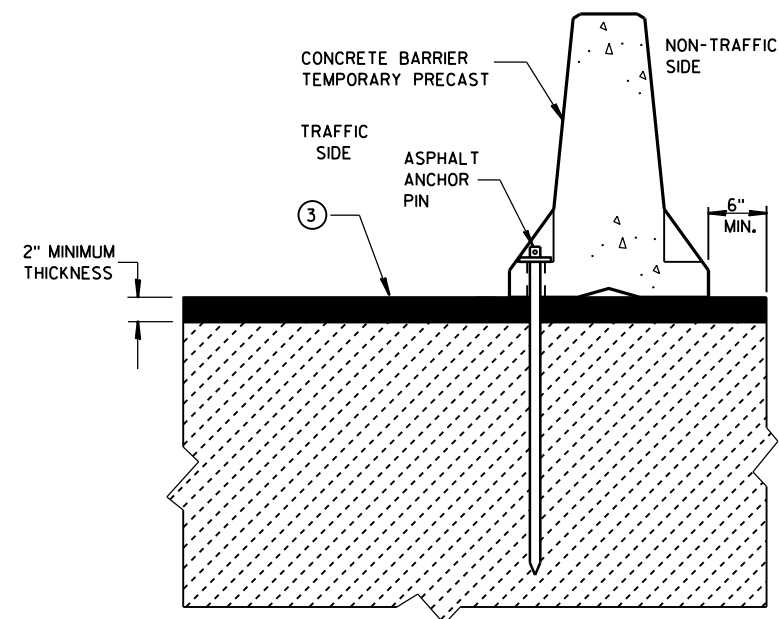
(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

GENERAL NOTES

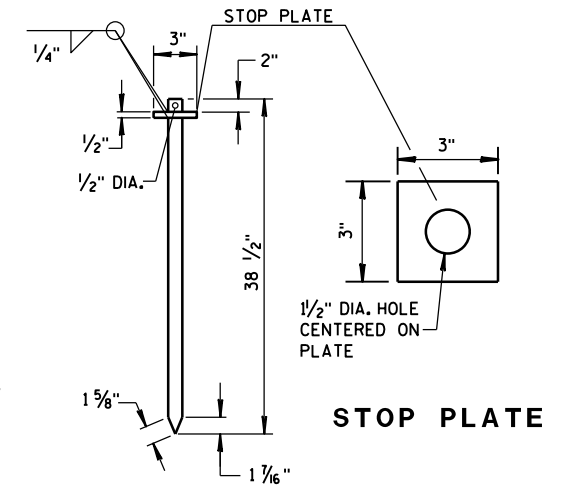
SEE SHEET E FOR WHEN TO ANCHOR. OTHER PARTS OF THE PLAN MAY SHOW ADDITIONAL LOCATIONS REQUIRING ANCHORING.

REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERCIAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

- ① 1/8" DIAMETER A307 THREADED ROD, 1/2" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL, ASTM A563A HEAVY HEX NUT.
- ② ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5/4" EMBEDMENT. SEE 603.2 AND 603.3.12 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.
- ③ ASPHALT SURFACE SHOWN. CONTRACTOR MAY DRILL THROUGH CONCRETE PAVEMENT AND THEN DRIVE ASPHALT ANCHOR PIN.



STAKE DOWN INSTALLATION FOR ASPHALTIC SURFACE

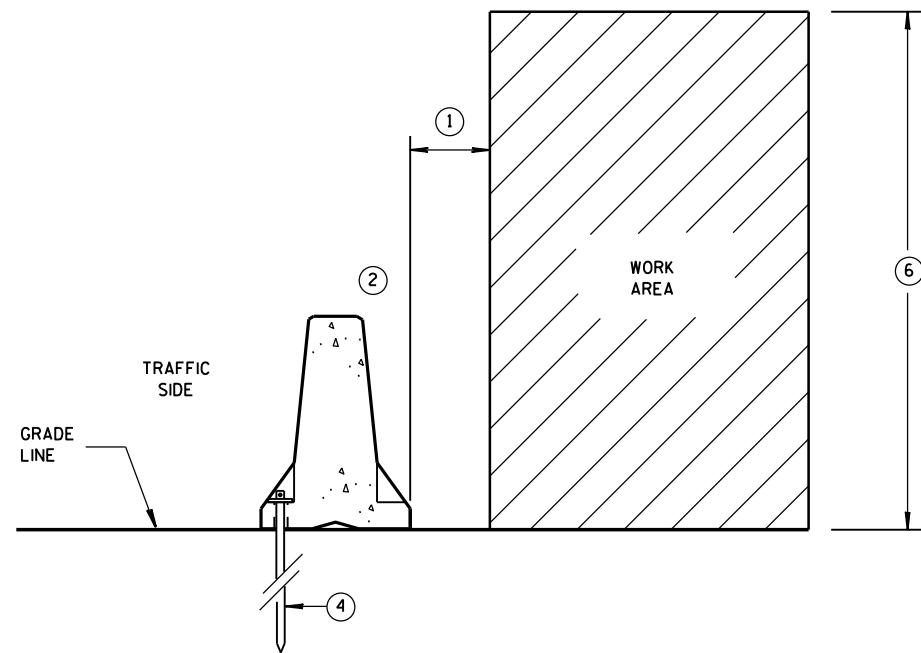


ASPHALT ANCHOR PIN

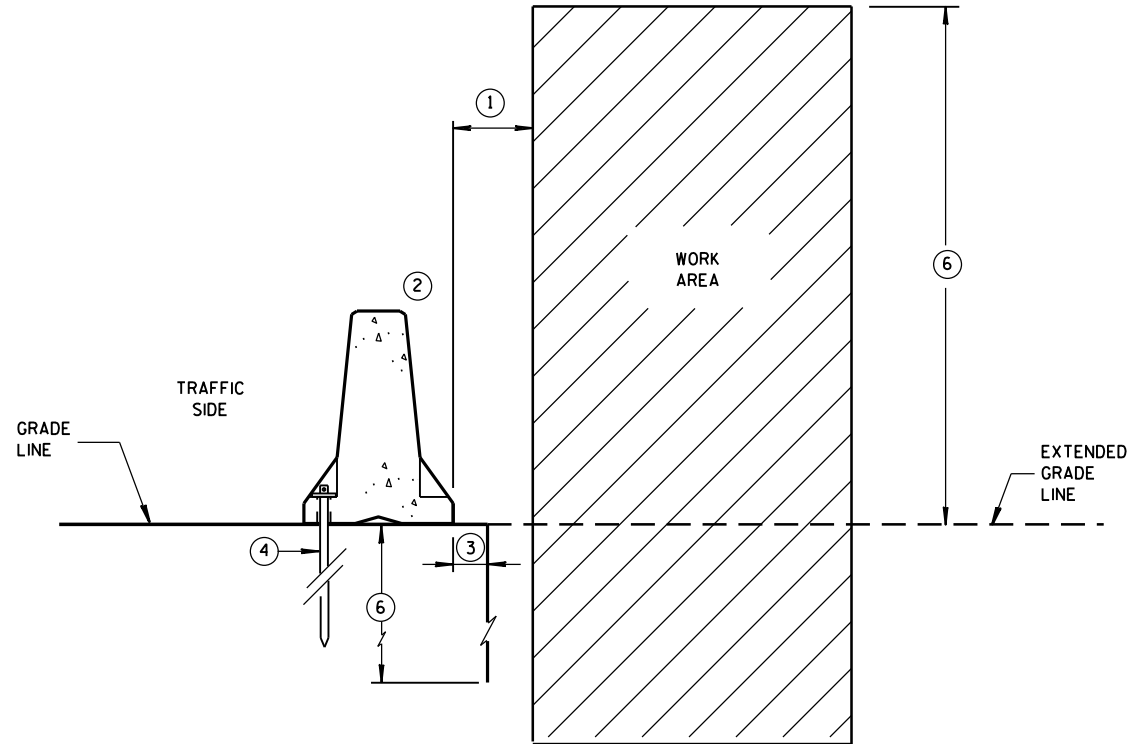
(ASTM A36 STEEL)

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**ANCHORED BARRIER SPACE REQUIREMENTS
FOR HAZARDS EXTENDED
ABOVE THE GRADE LINE**

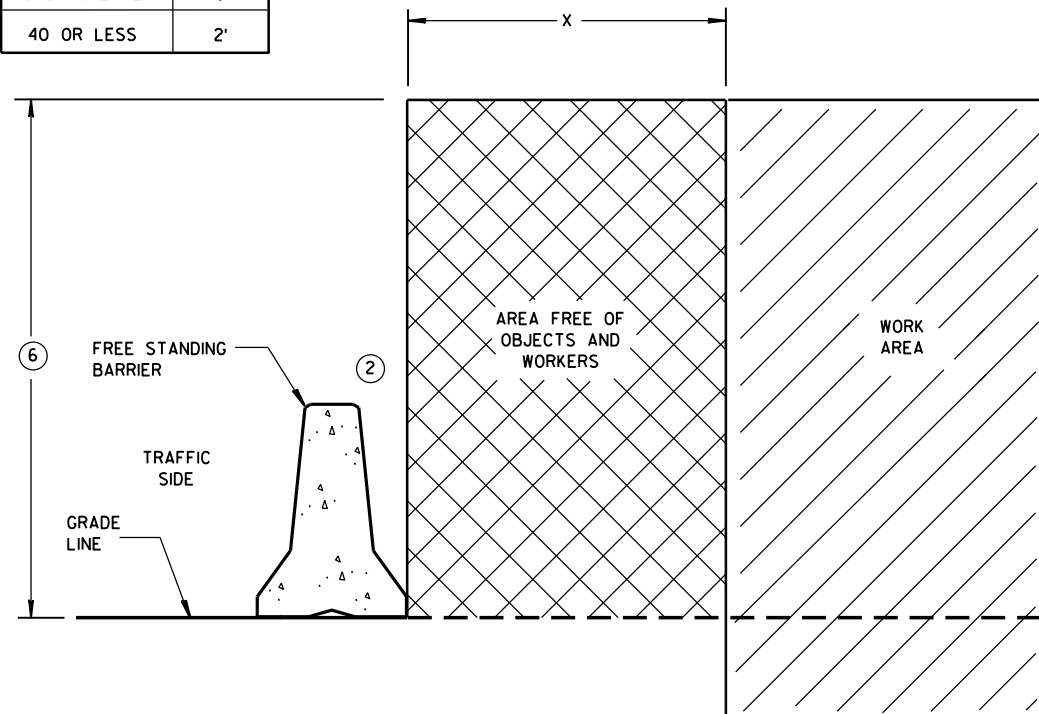


**ANCHORED BARRIER SPACE REQUIREMENTS
ON VERTICAL DROP OFFS**

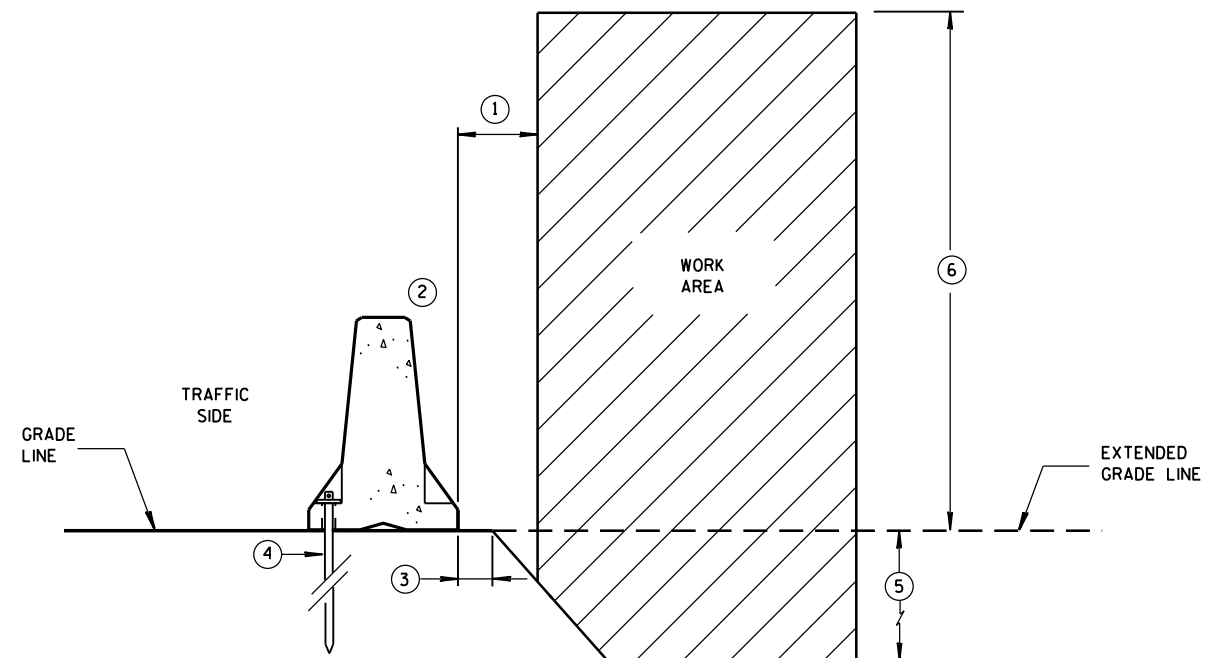
GENERAL NOTES

- ① WHEN OBJECTS EXTEND ABOVE THE GRADE, A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT. SEE OTHER DETAILS FOR FOR THE MINIMUM OFFSET FROM BACK OF BARRIER TO SLOPES OR VERTICAL DROPS.
- ② OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR LEANED AGAINST THE BARRIER WITHOUT PERMISSION OF THE PROJECT ENGINEER.
- ③ SEE OTHER DETAIL ON SHEET "D" FOR SPACE REQUIREMENTS.
- ④ SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR A STAKE DOWN FOR ASPHALTIC SURFACE TREATMENT DETAILS. ASPHALTIC ANCHOR SHOWN.
- ⑤ DEPTH OF 3 FEET OR MORE.
- ⑥ Y = 6'-6".

POSTED SPEED MPH	X
45 OR GREATER	4'
40 OR LESS	2'



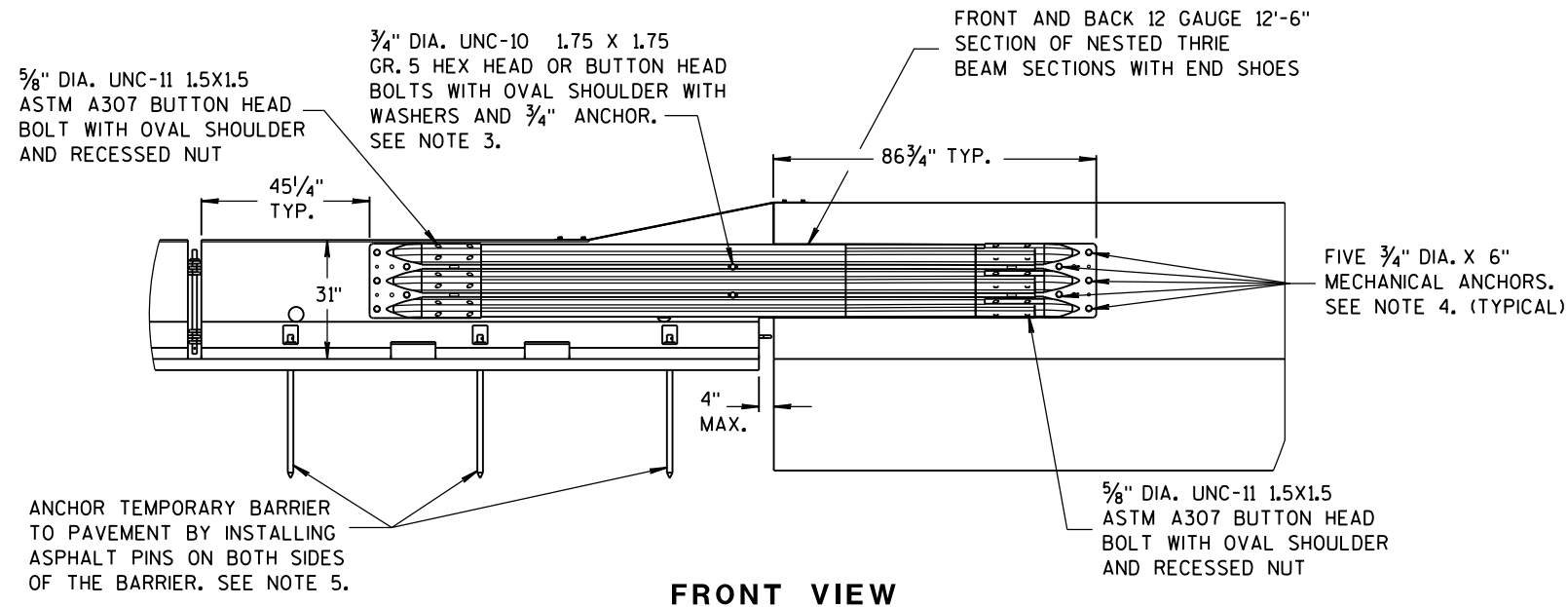
FREE STANDING BARRIER SPACE REQUIREMENTS



**ANCHORED BARRIER SPACE REQUIREMENTS
ON SLOPES**

**CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



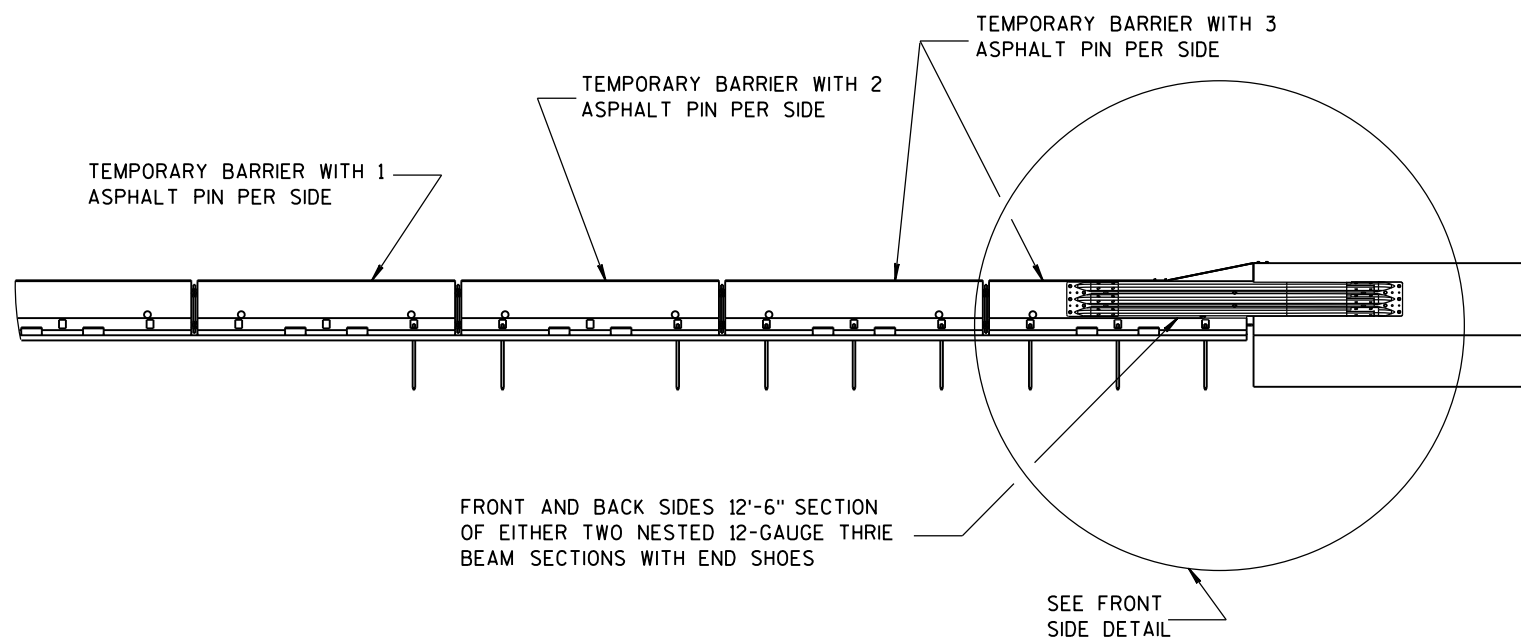
FRONT VIEW

NOTES

NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS REGARDLESS OF TRAFFIC.

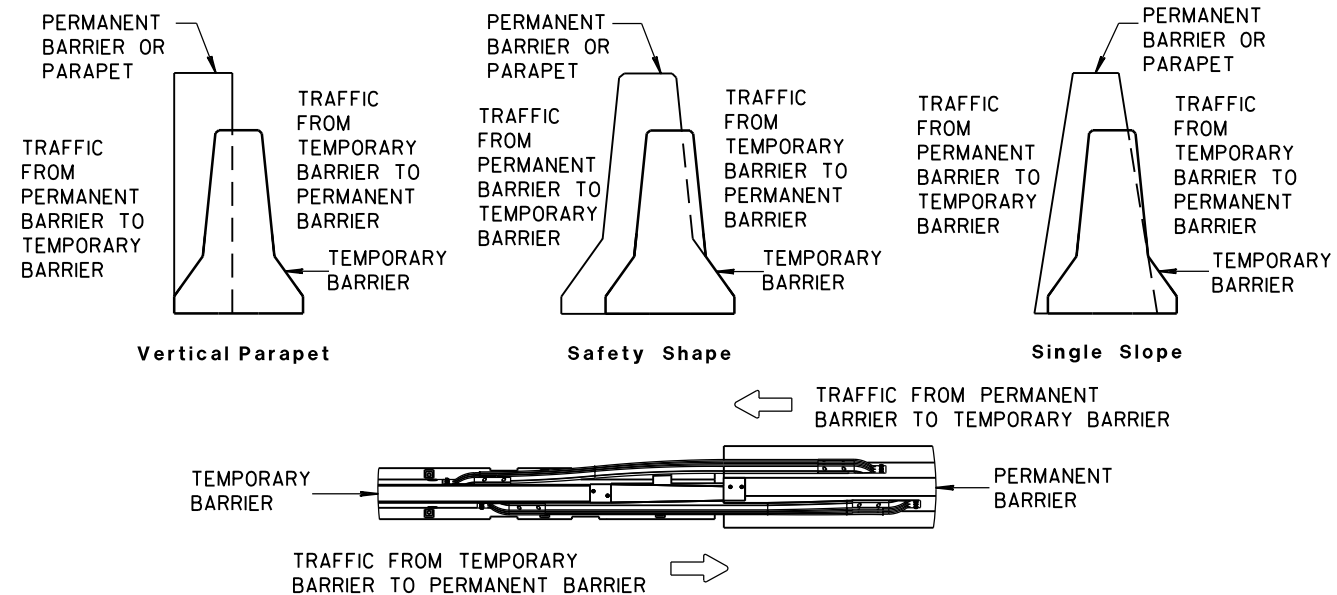
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.

4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.

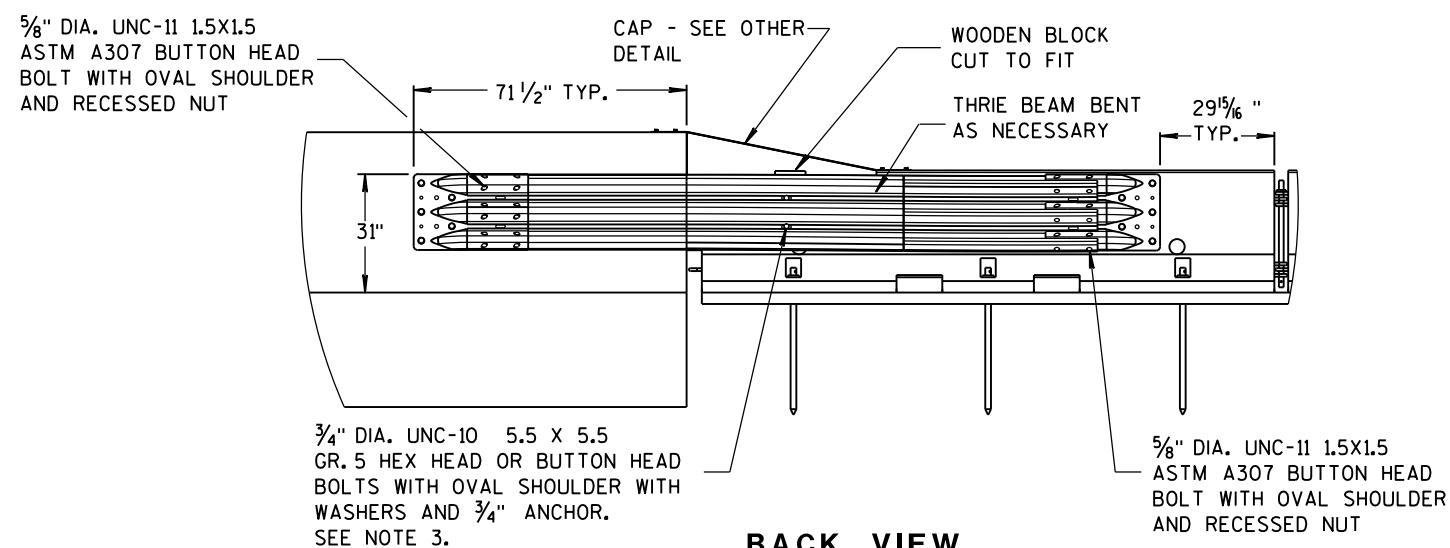


FRONT VIEW

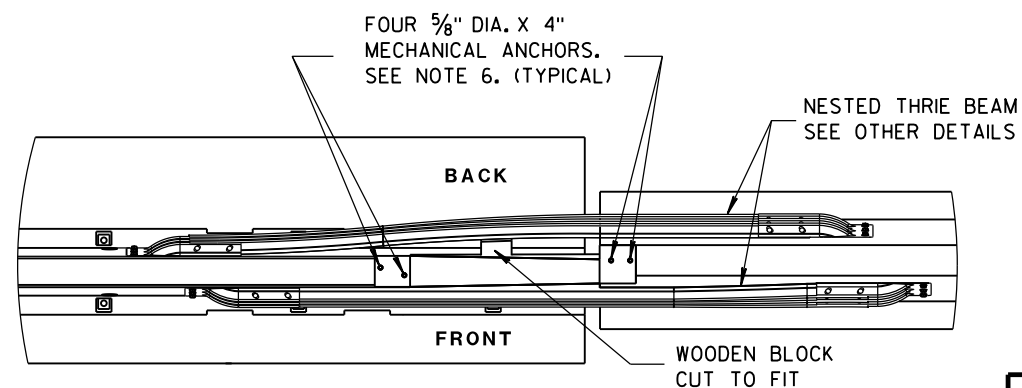
BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM



TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM



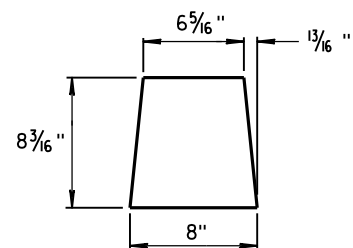
BACK VIEW



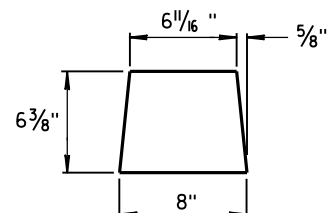
PLAN VIEW

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

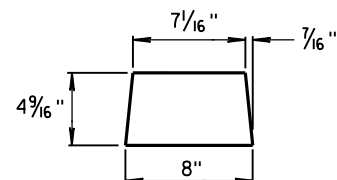
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



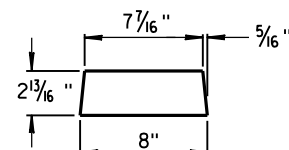
GUSSET 1



GUSSET 2

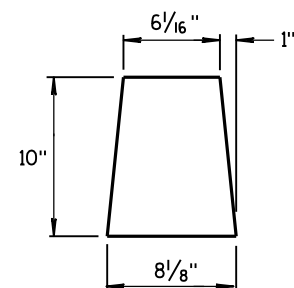


GUSSET 3

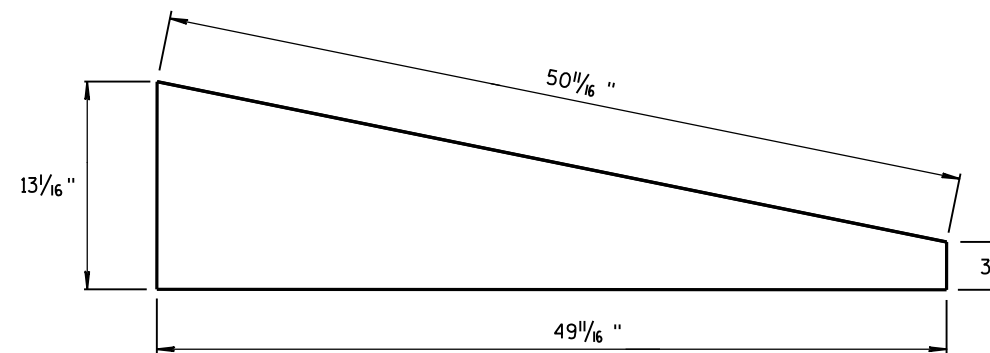


GUSSET 4

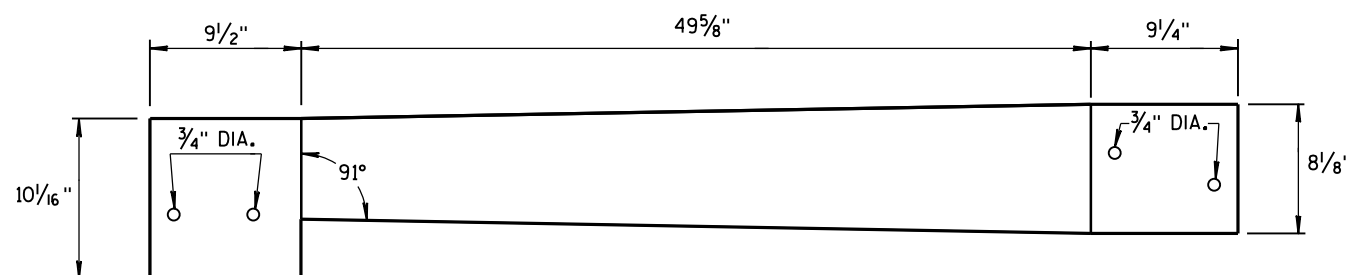
GUSSETS



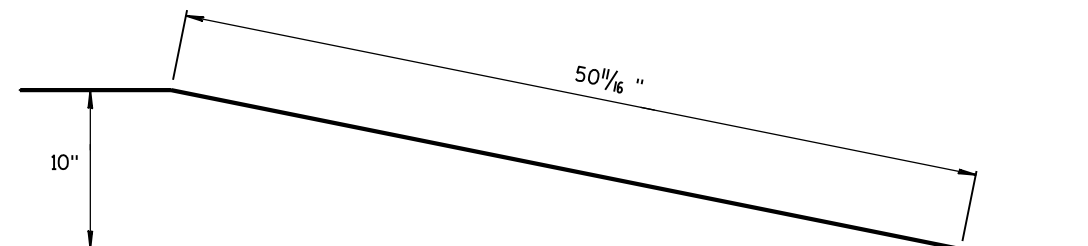
END PLATE



SIDE PLATE

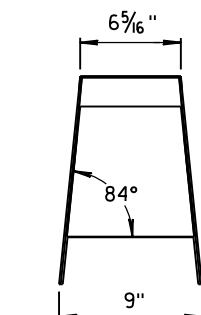
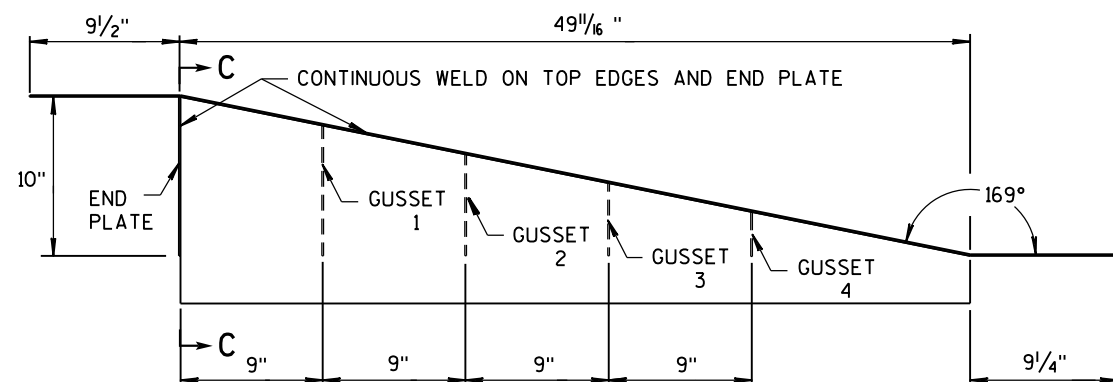
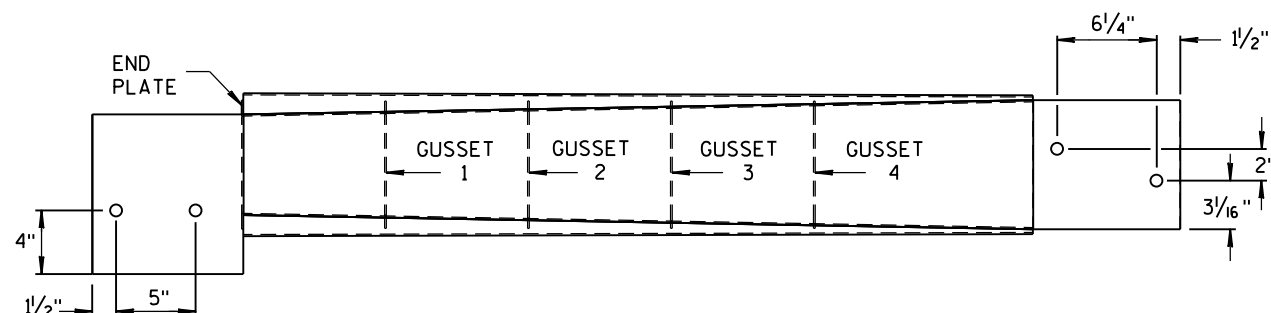


TOP PLATE



**SIDE, TOP AND END PLATES FOR CAP
FROM TEMPORARY CONCRETE BARRIER
TO 42" PERMANENT CONCRETE BARRIER**

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.



SECTION C-C

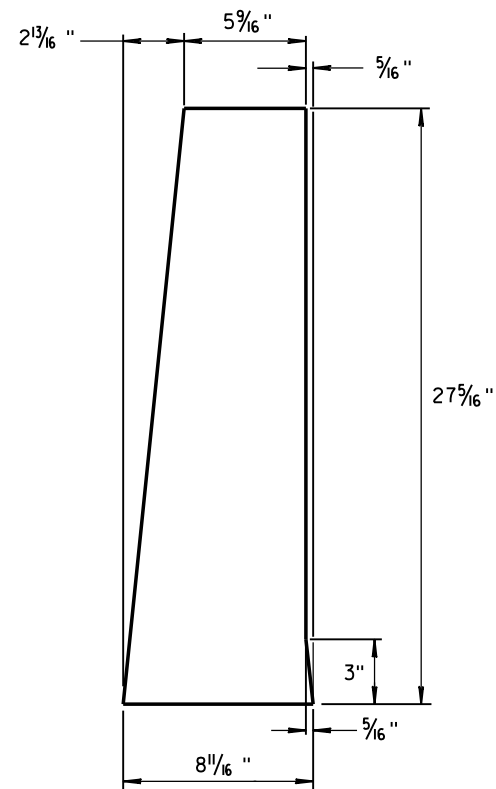
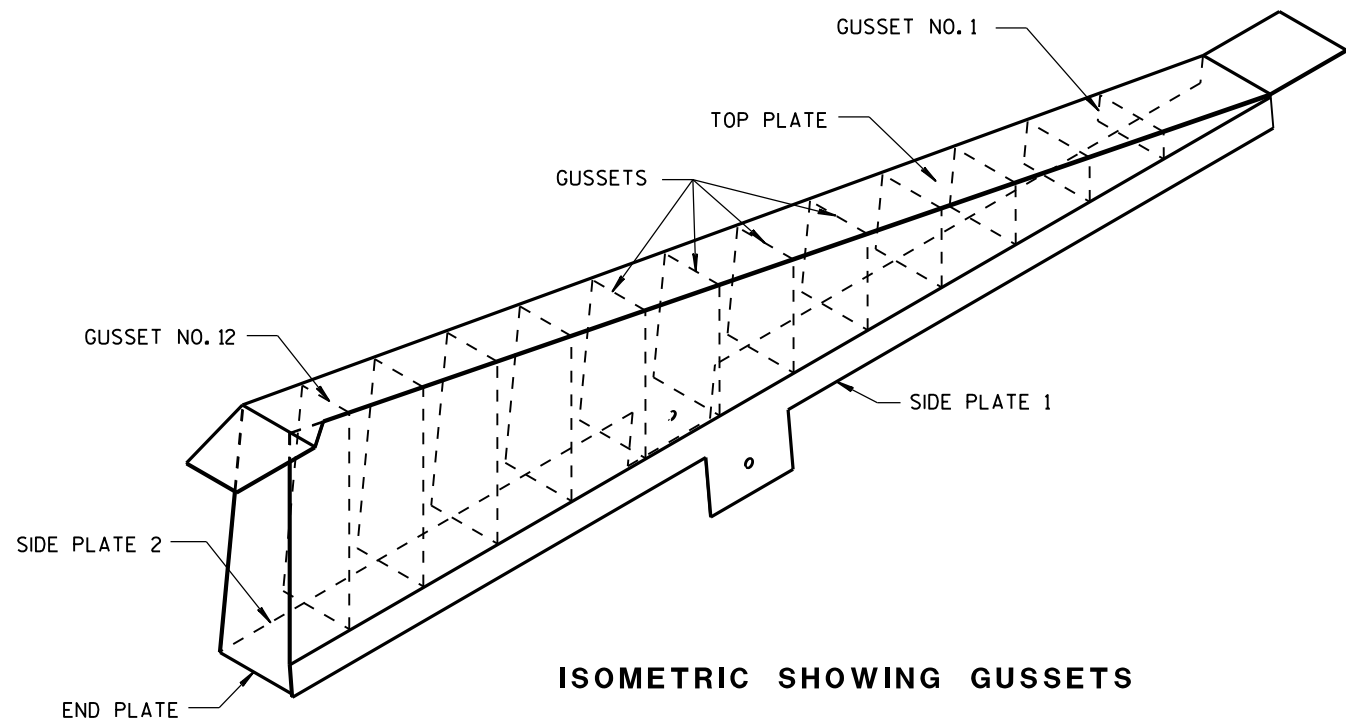
NOTES

1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

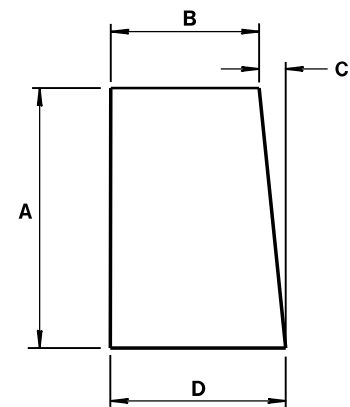
**CAP DETAILS FOR TEMPORARY CONCRETE
BARRIER TO 42" PERMANENT CONCRETE BARRIER**

**CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



1/8" STEEL PLATE

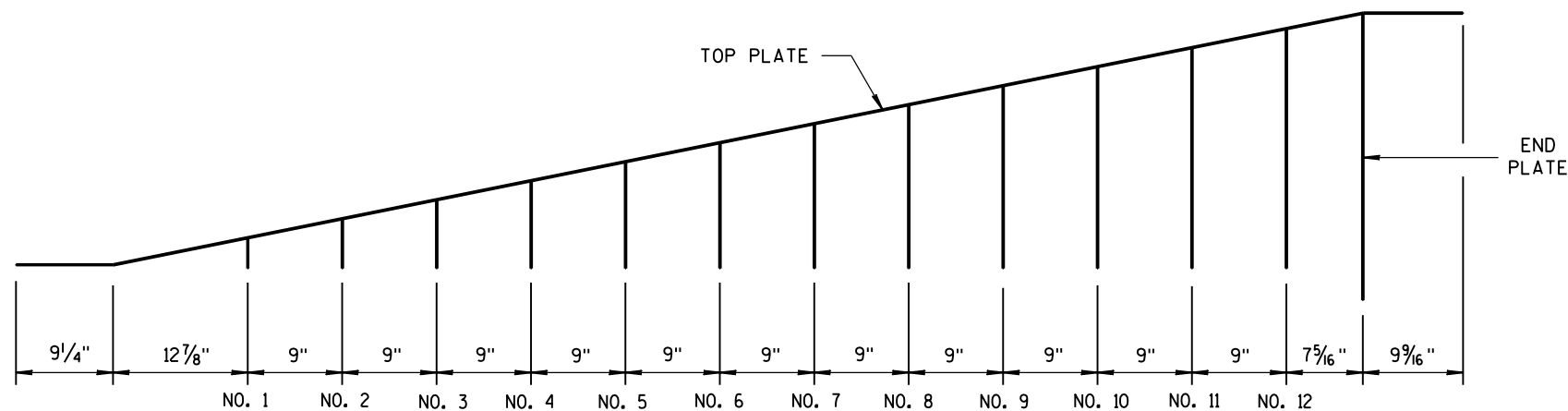


ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 1/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	1 1/16 "	8 1/16 "
4	8 5/16"	7 3/16"	7/8"	8 1/16"
5	10 1/8"	7"	1 1/16 "	8 1/16"
6	11 5/16 "	6 13/16 "	1 1/4"	8 1/16"
7	13 3/4"	6 5/8"	1 7/16"	8 1/16"
8	15 9/16"	6 7/16"	1 9/16"	8 1/16"
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16"
10	19 3/16"	6 1/16"	1 15/16 "	8 1/16"
11	21"	5 7/8"	2 3/16"	8 1/16"
12	22 13/16 "	5 11/16 "	2 5/16"	8 1/16"

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

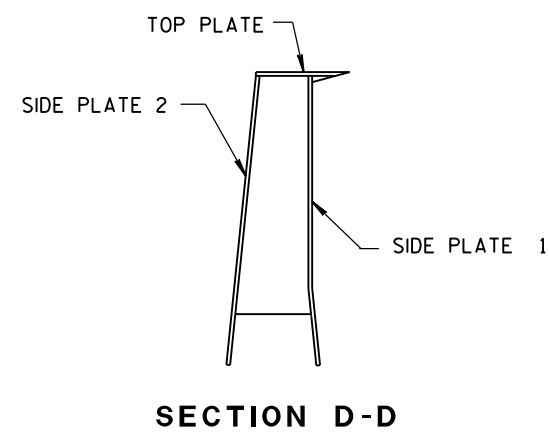
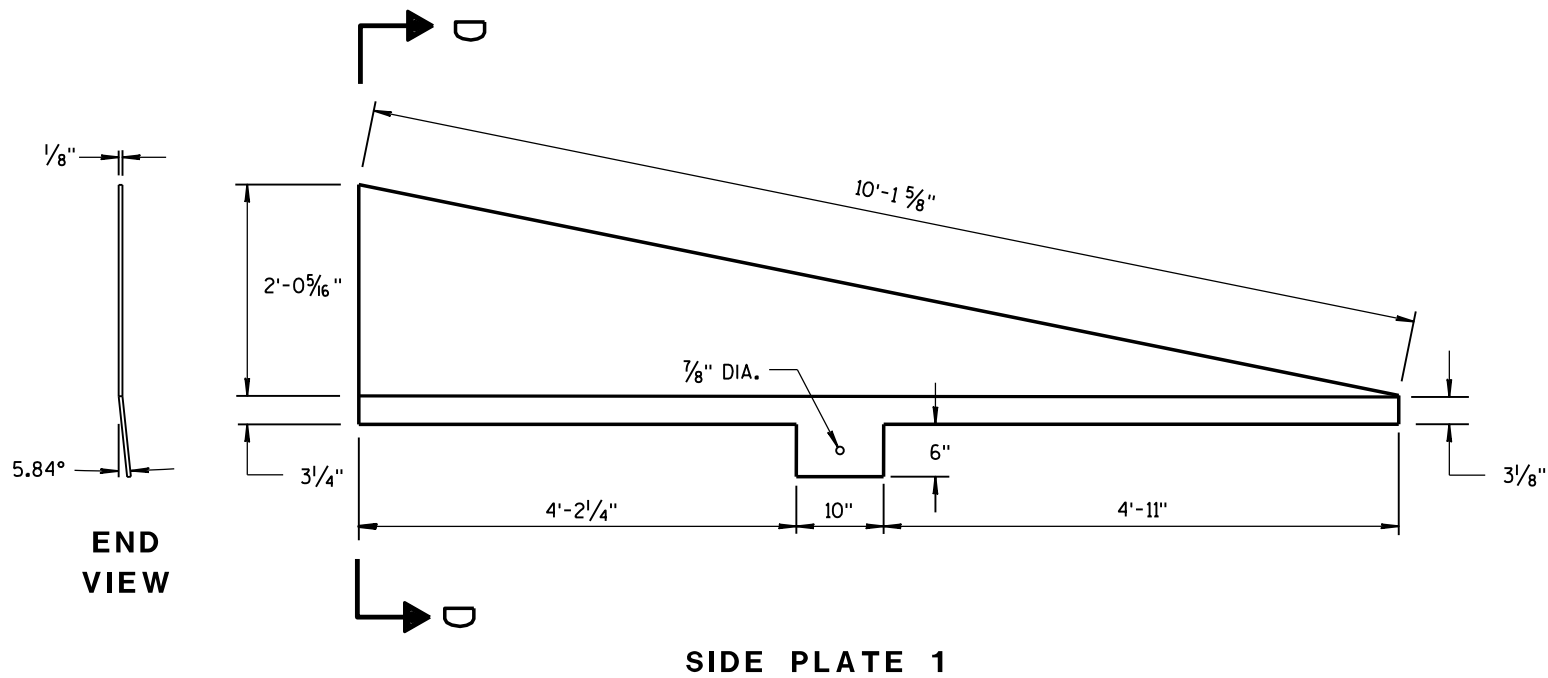
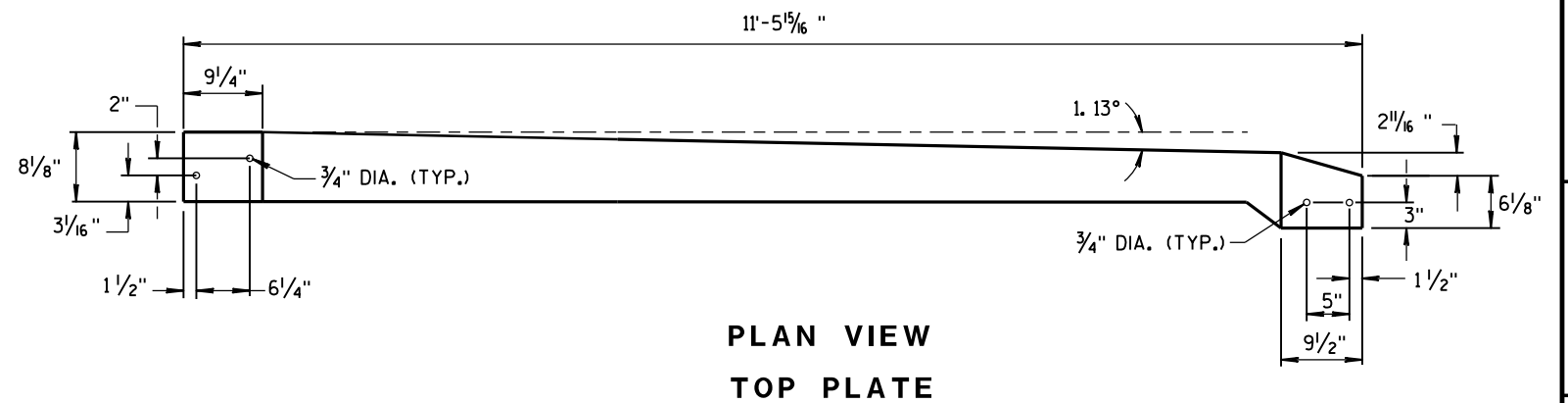
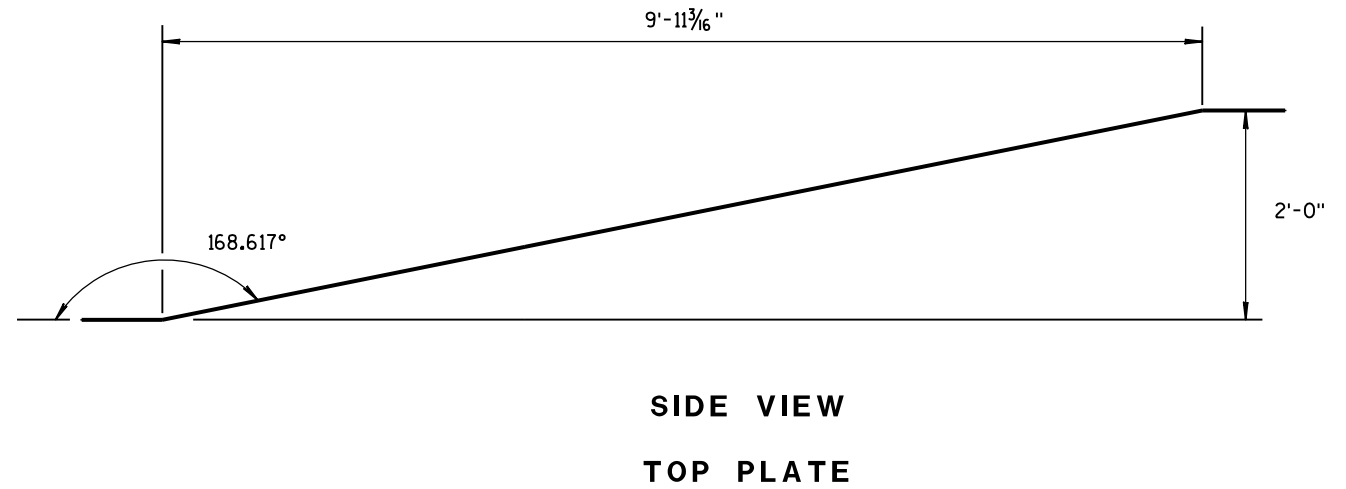
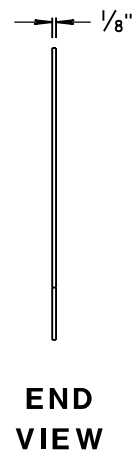
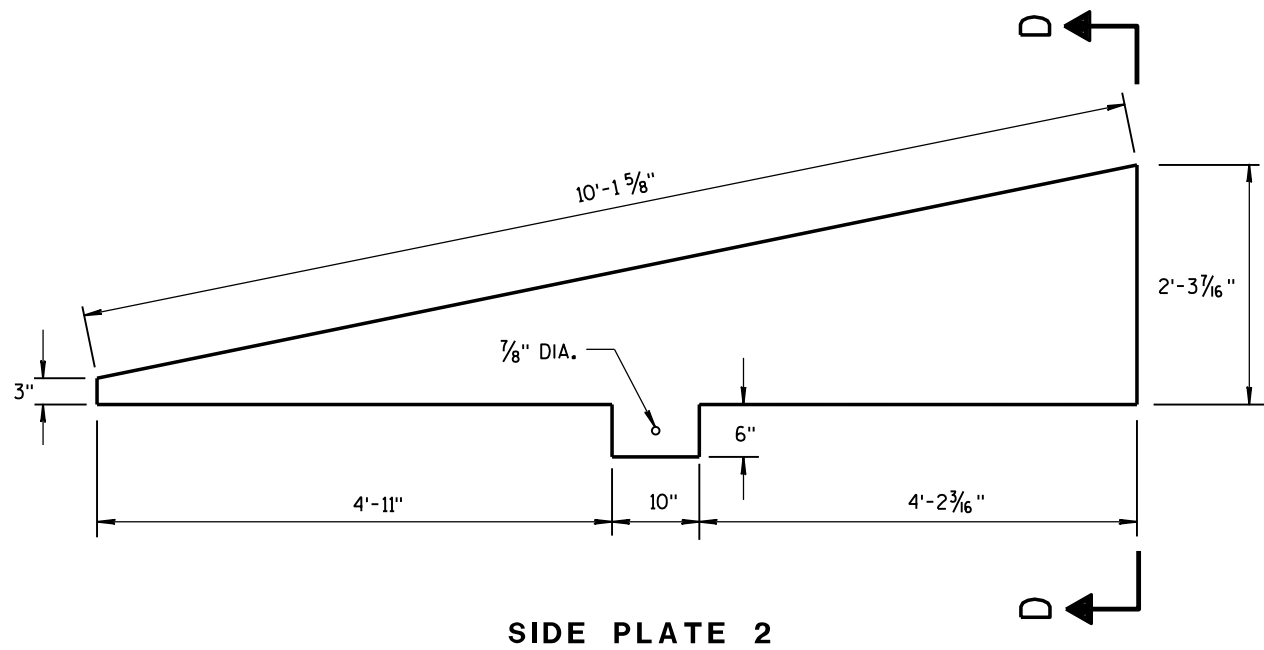
GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

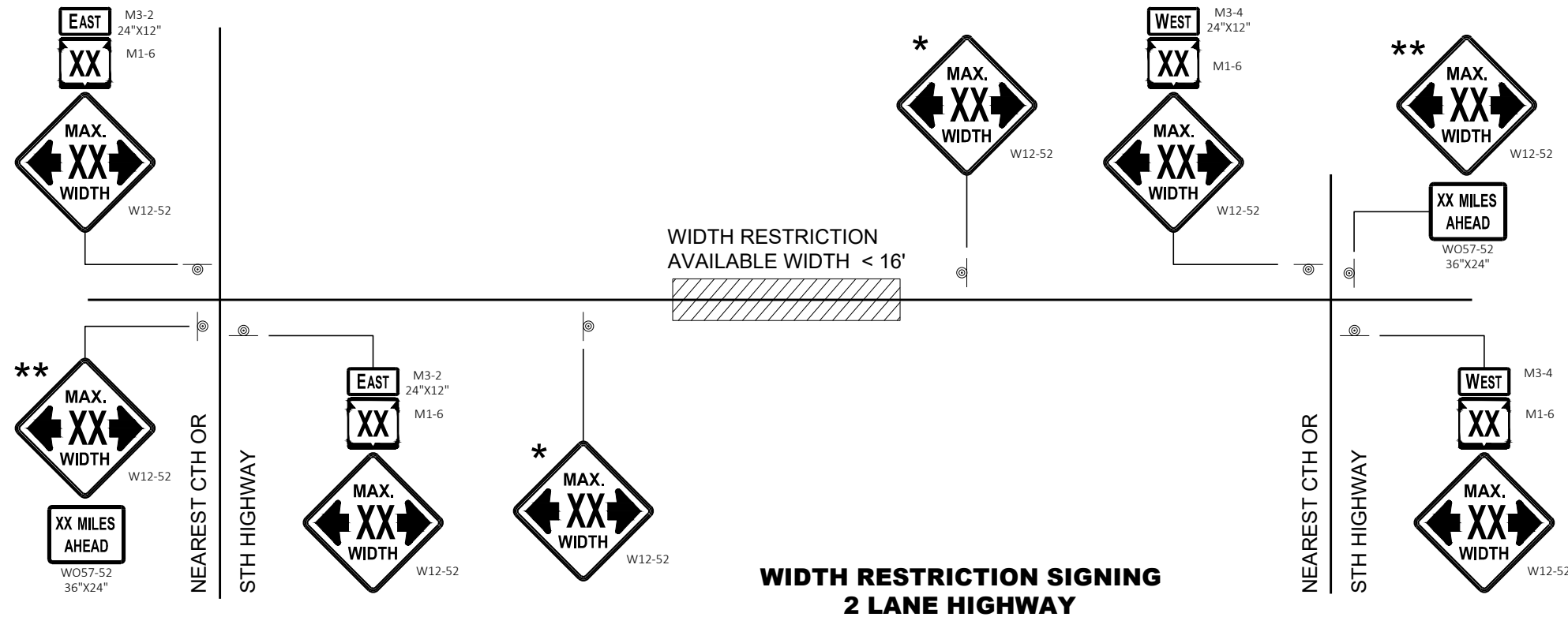
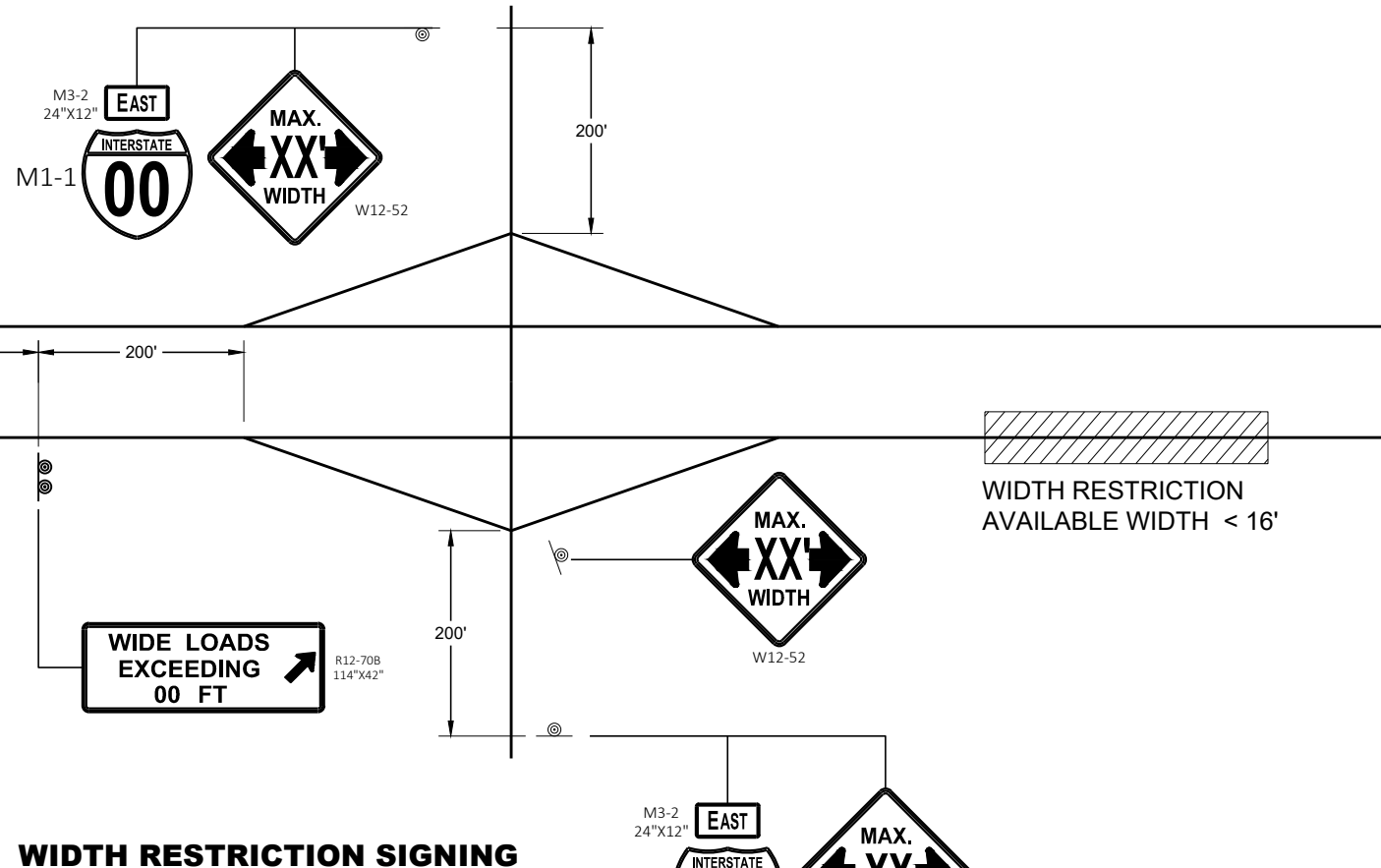
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**CAP DETAILS FOR TEMPORARY CONCRETE
BARRIER TO 56" PERMANENT CONCRETE BARRIER**

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Rodney Taylor ROADWAY STANDARD DEVELOPMENT UNIT SUPERVISOR
FHWA	



LEGEND

⊙ SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO 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.

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

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

WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

- * PLACE 500 FEET BEFORE THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.
- ** SIGN SHALL BE VISIBLE FROM ROADWAY.
- *** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.



ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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" X 48" UNLESS OTHERWISE NOTED.

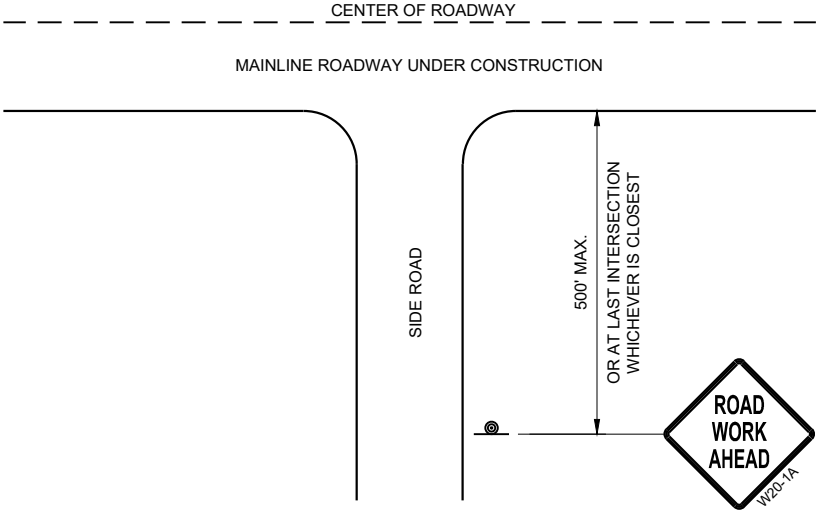
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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 REESTABLISHED.

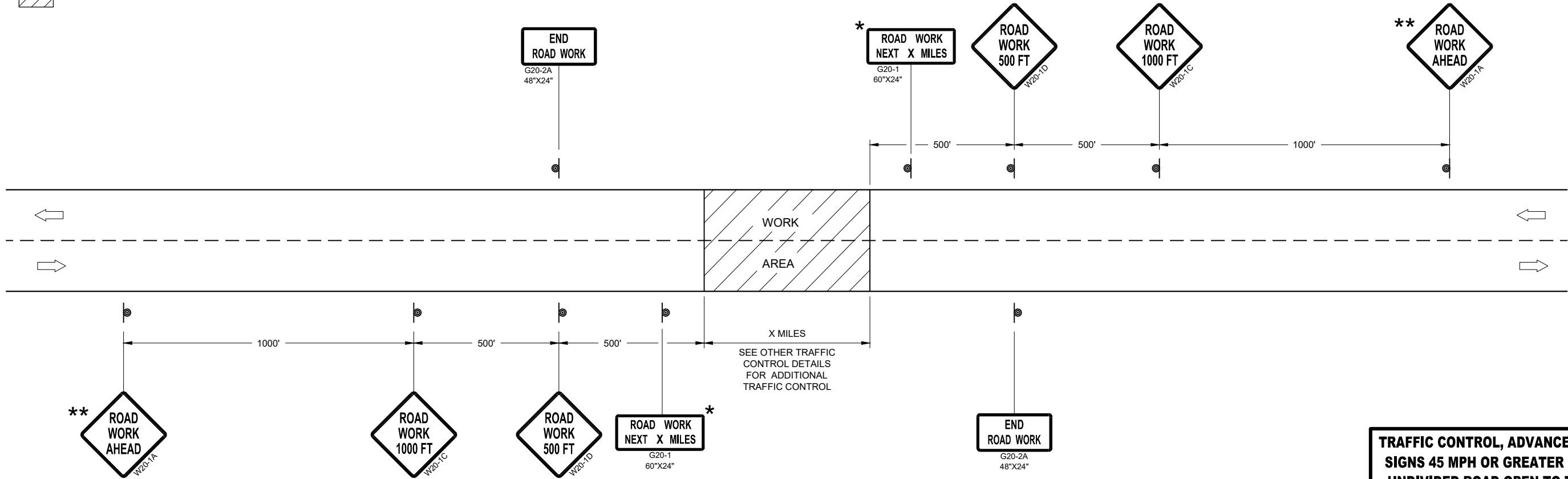
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

LEGEND

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



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING
SIGNS 45 MPH OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

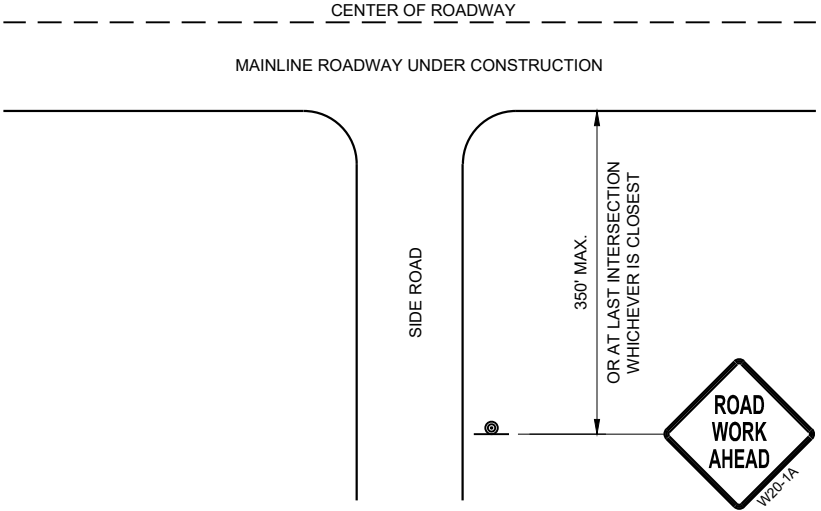
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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 REESTABLISHED.

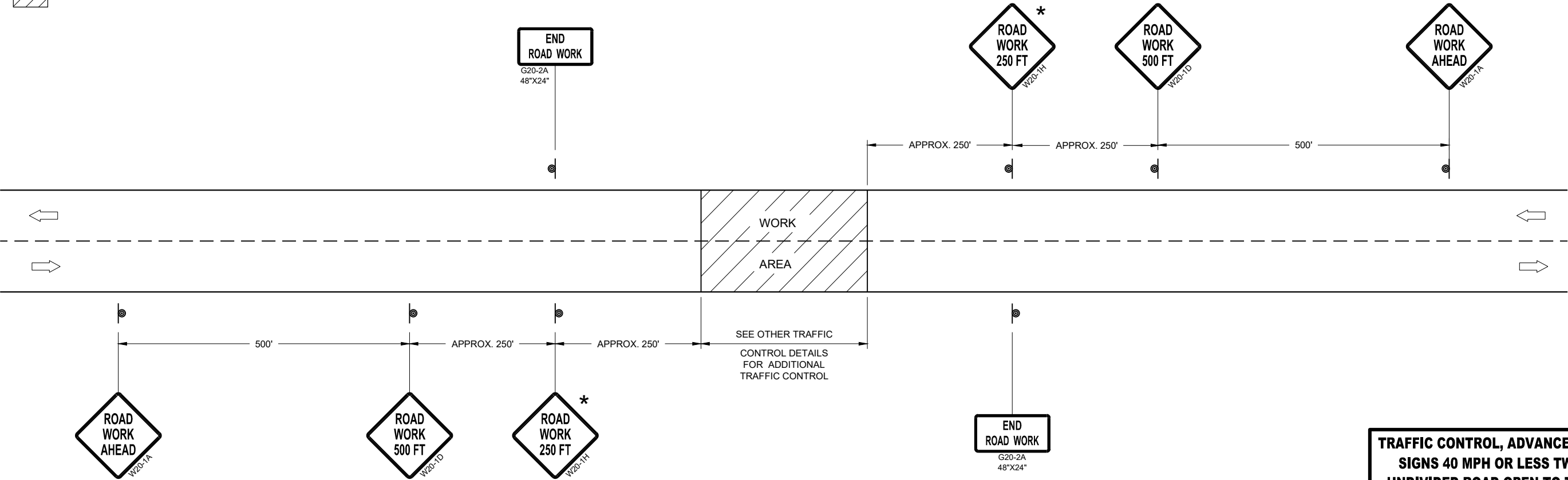
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

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



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL



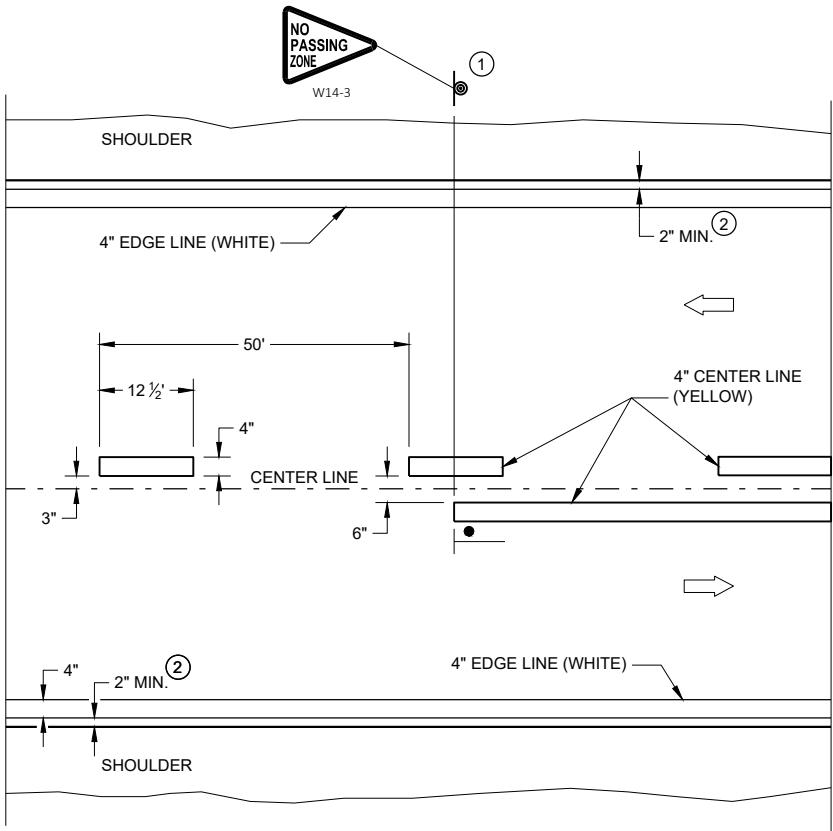
TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING
SIGNS 40 MPH OR LESS TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFICE

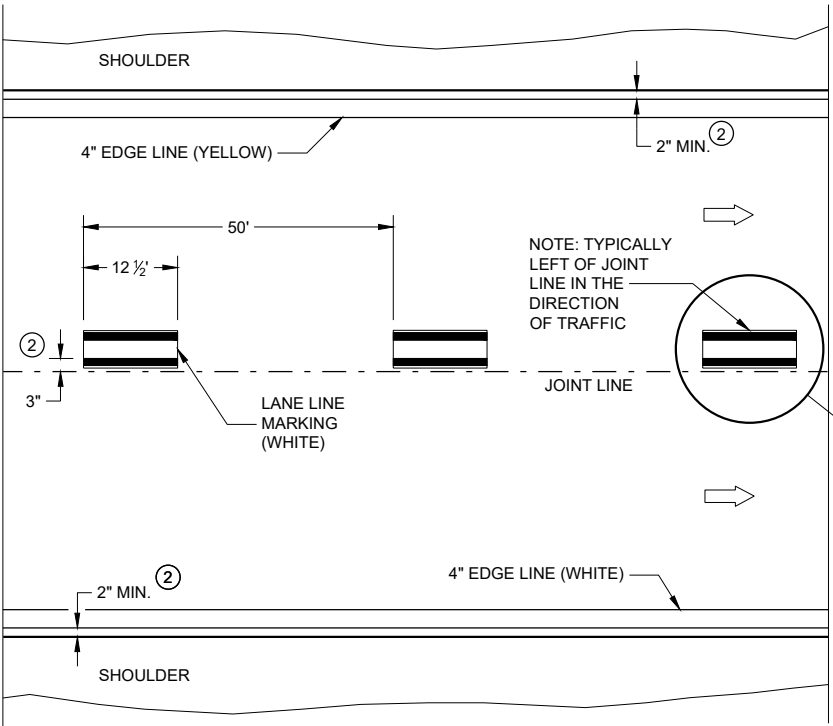
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

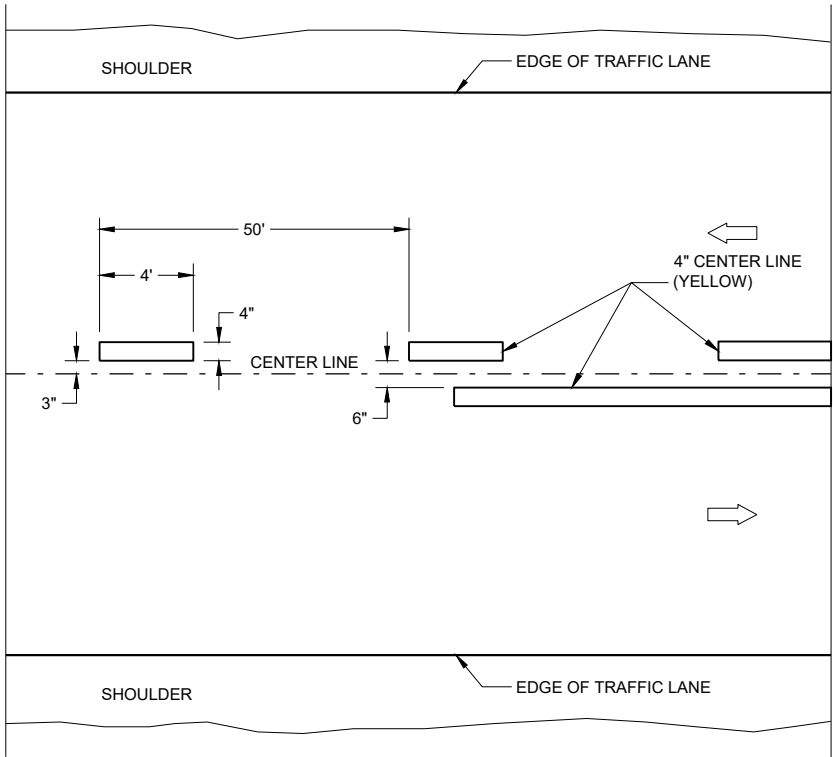


TWO WAY TRAFFIC

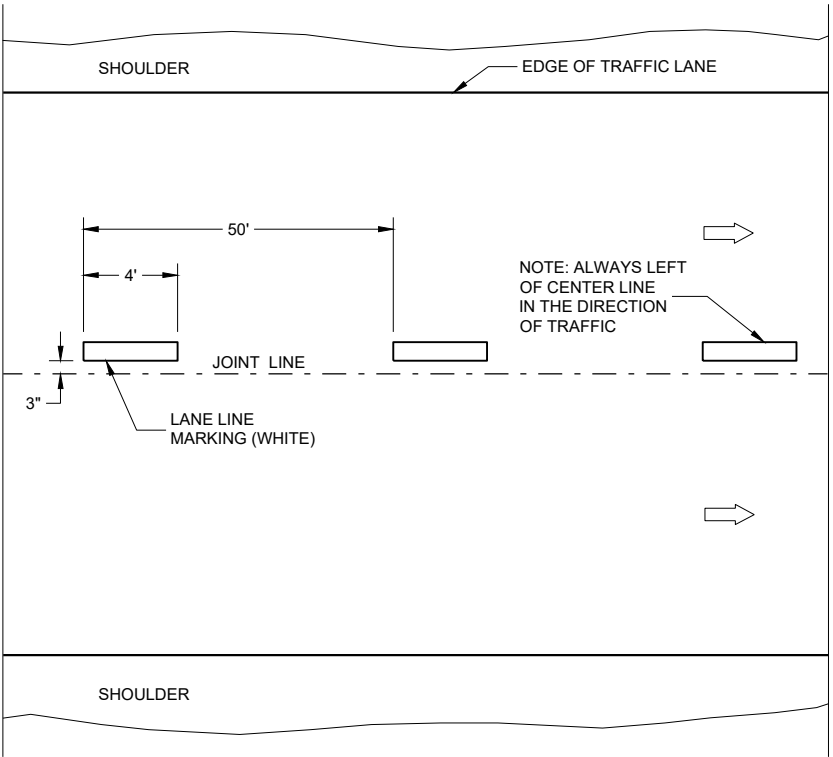


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

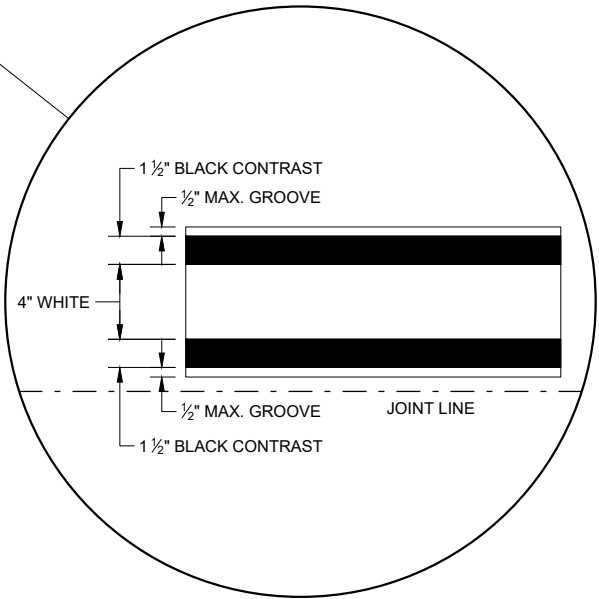
GENERAL NOTES

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

- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITH 50 FEET OF THE "T" MARKING
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

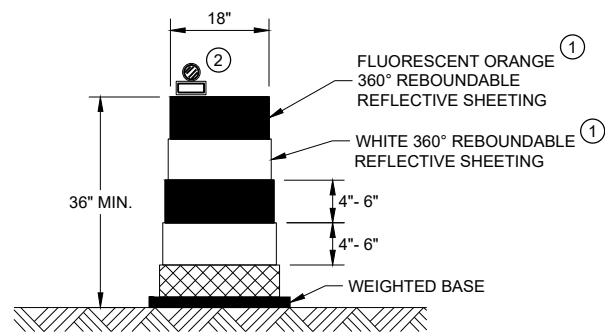
- "T" MARKING
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC



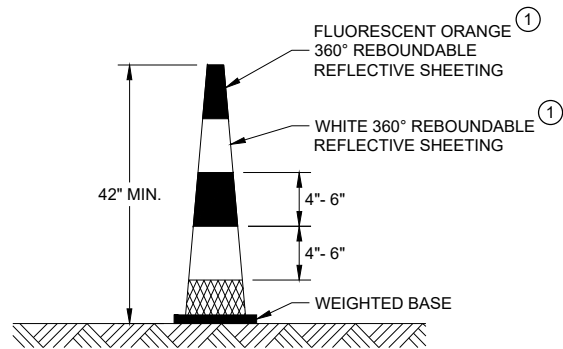
LONGITUDINAL MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND MARKING
ENGINEER
FHWA

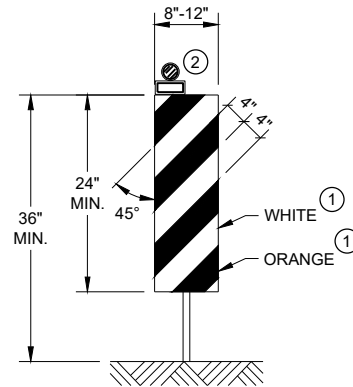


DRUM



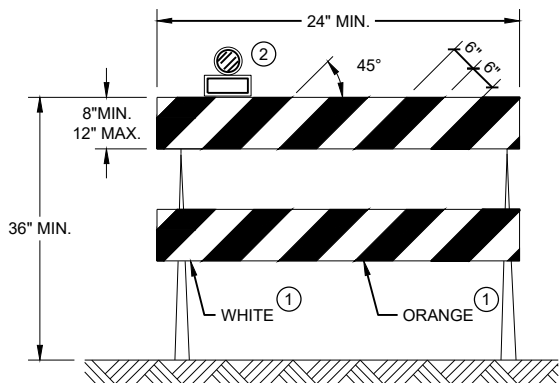
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



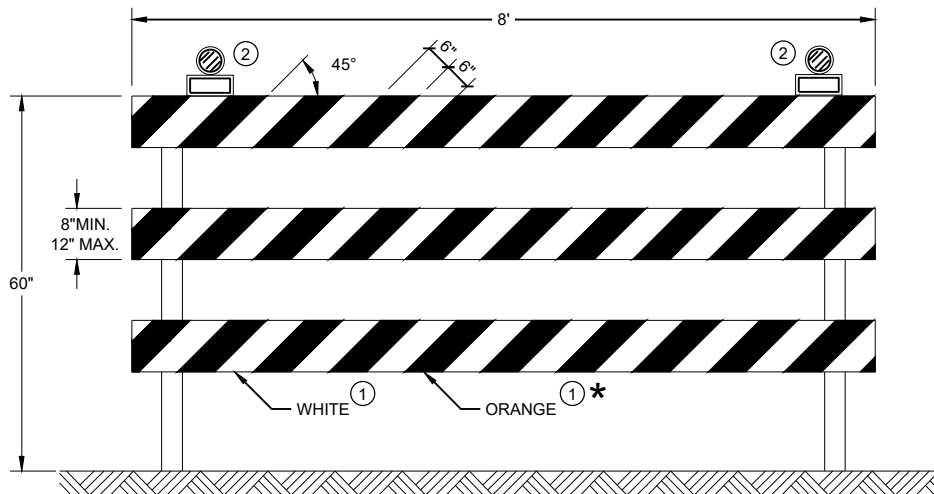
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

GENERAL NOTES

- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.






CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

LEGEND

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

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.

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

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

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND 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.

FLAGGING

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 REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

① FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' 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.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

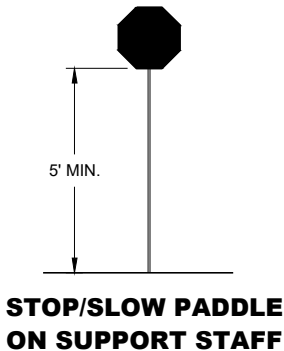
③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FOR THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

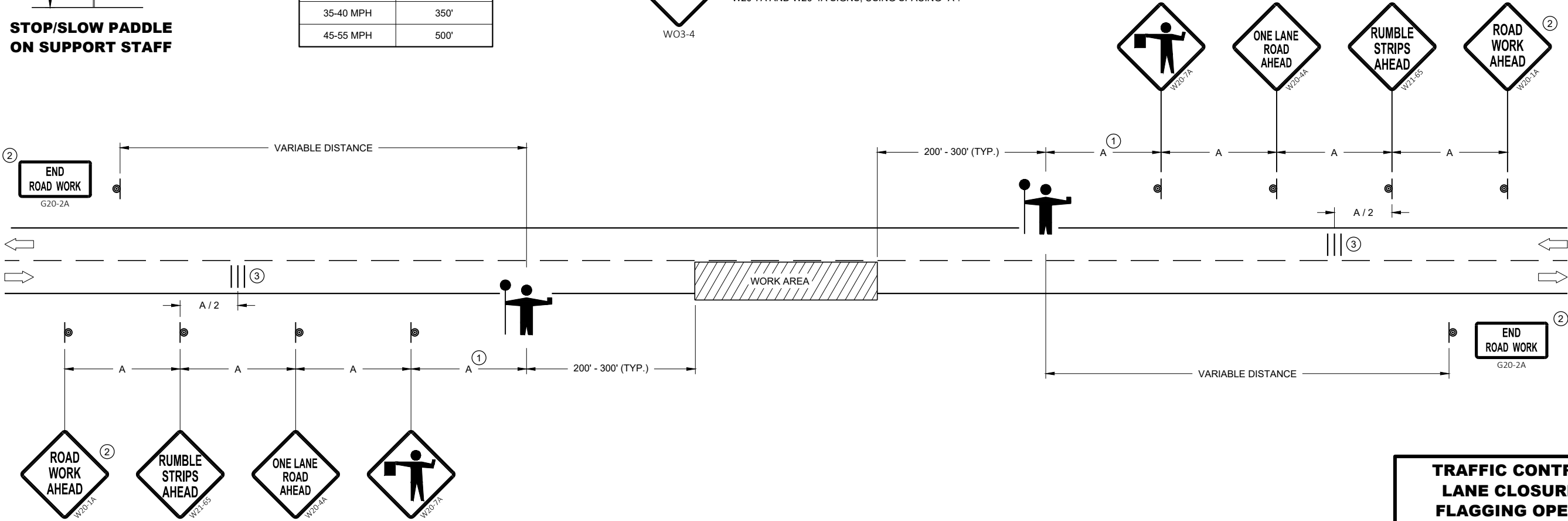


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



USE OF W03-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

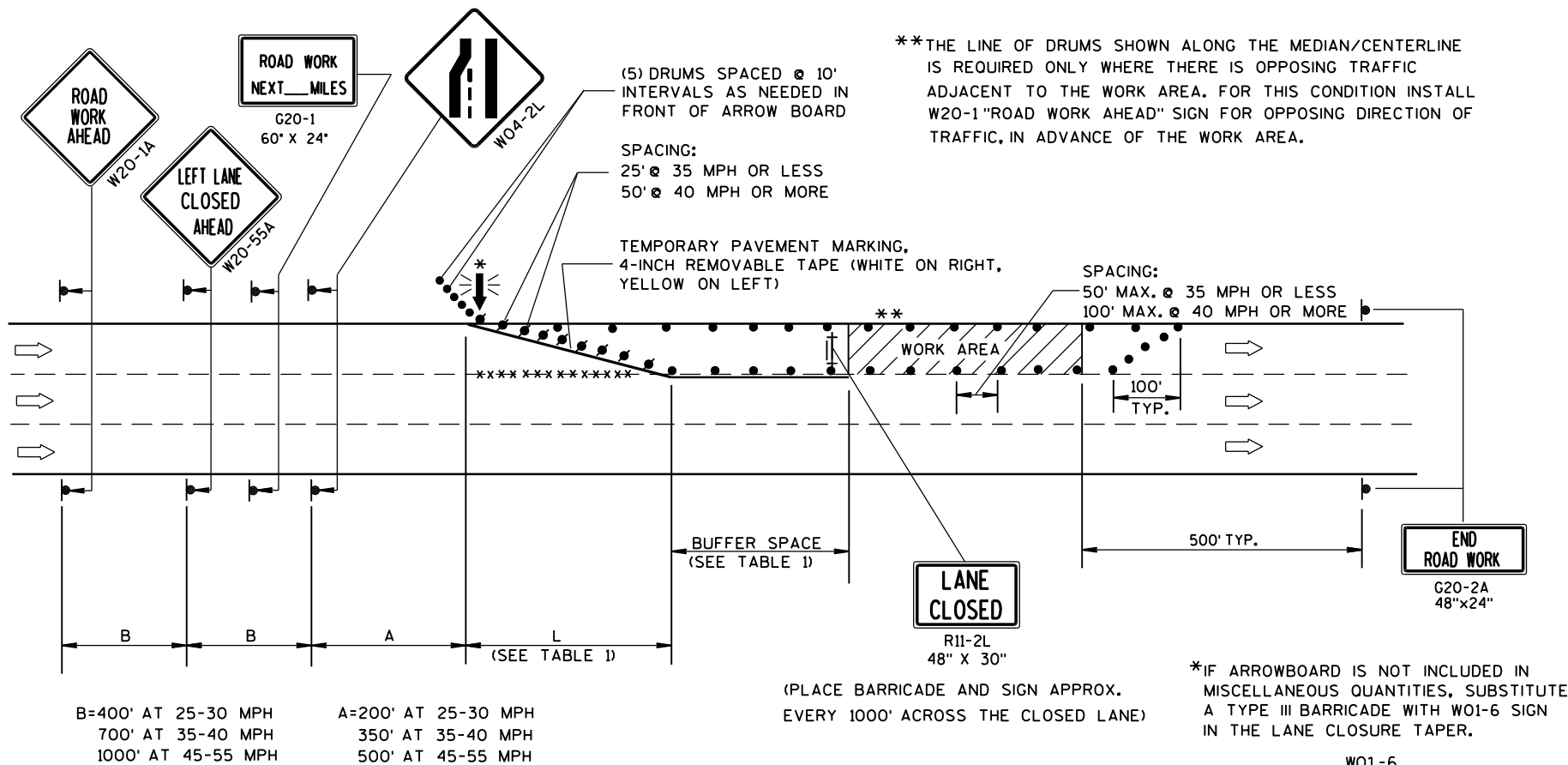
TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA



GENERAL NOTES

- THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.
- THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.
- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND 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 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, OR THAT WILL BE PLACED IN A CLOSED LANE, 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.
- REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.
- ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.
- W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.
- OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.
- CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.
- PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.
- CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.
- BARRICADES IN A CLOSED LANE 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.
- WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

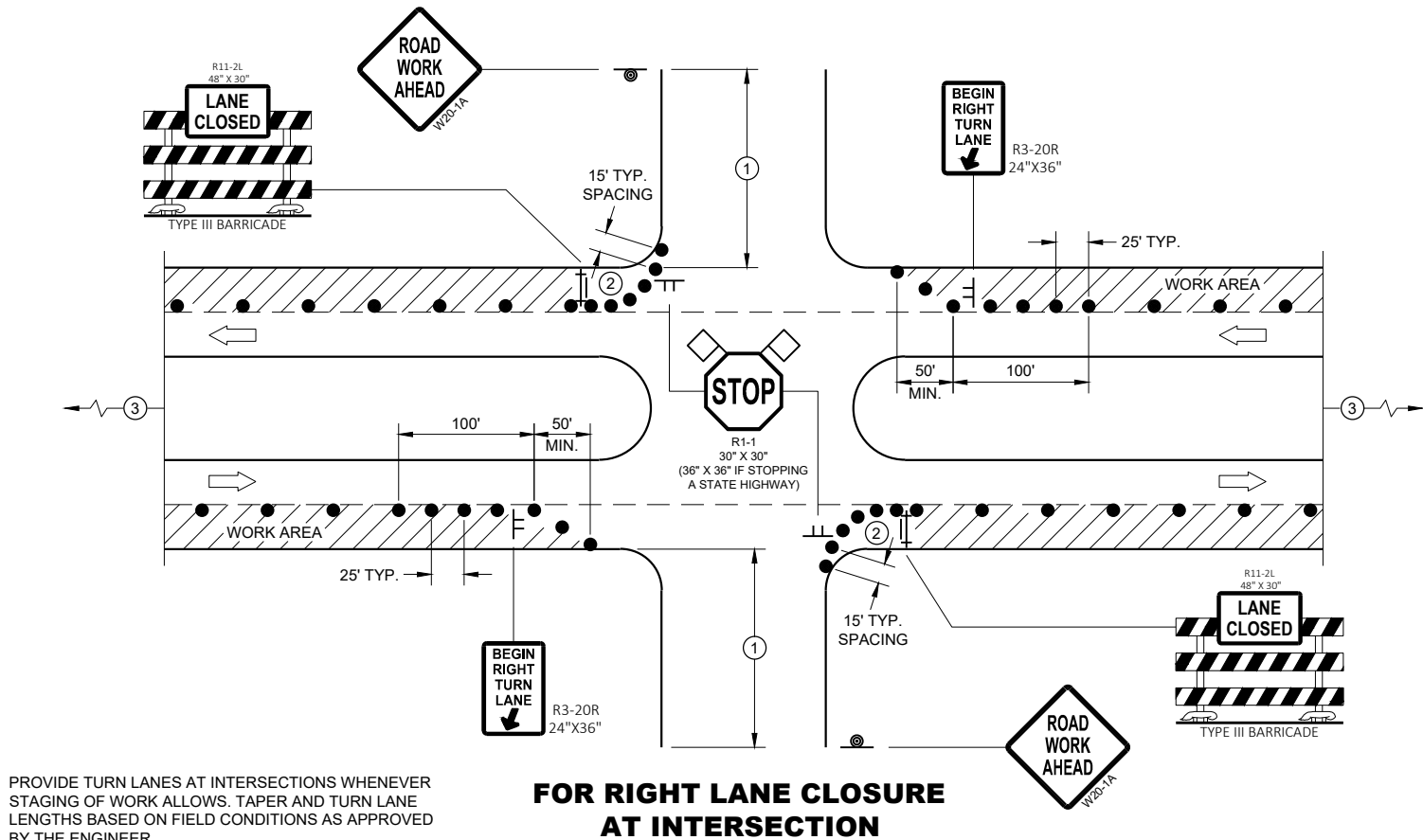
TABLE 1
TAPER AND BUFFER SPACE
FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

- L = WS AT 45 MPH OR GREATER
- L = $\frac{WS^2}{60}$ AT 40 MPH OR LESS
- L = TAPER LENGTH IN FEET
- S = NON-CONSTRUCTION SPEED LIMIT (MPH)
- W = WIDTH OF LANE CLOSURE

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2016 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	



GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

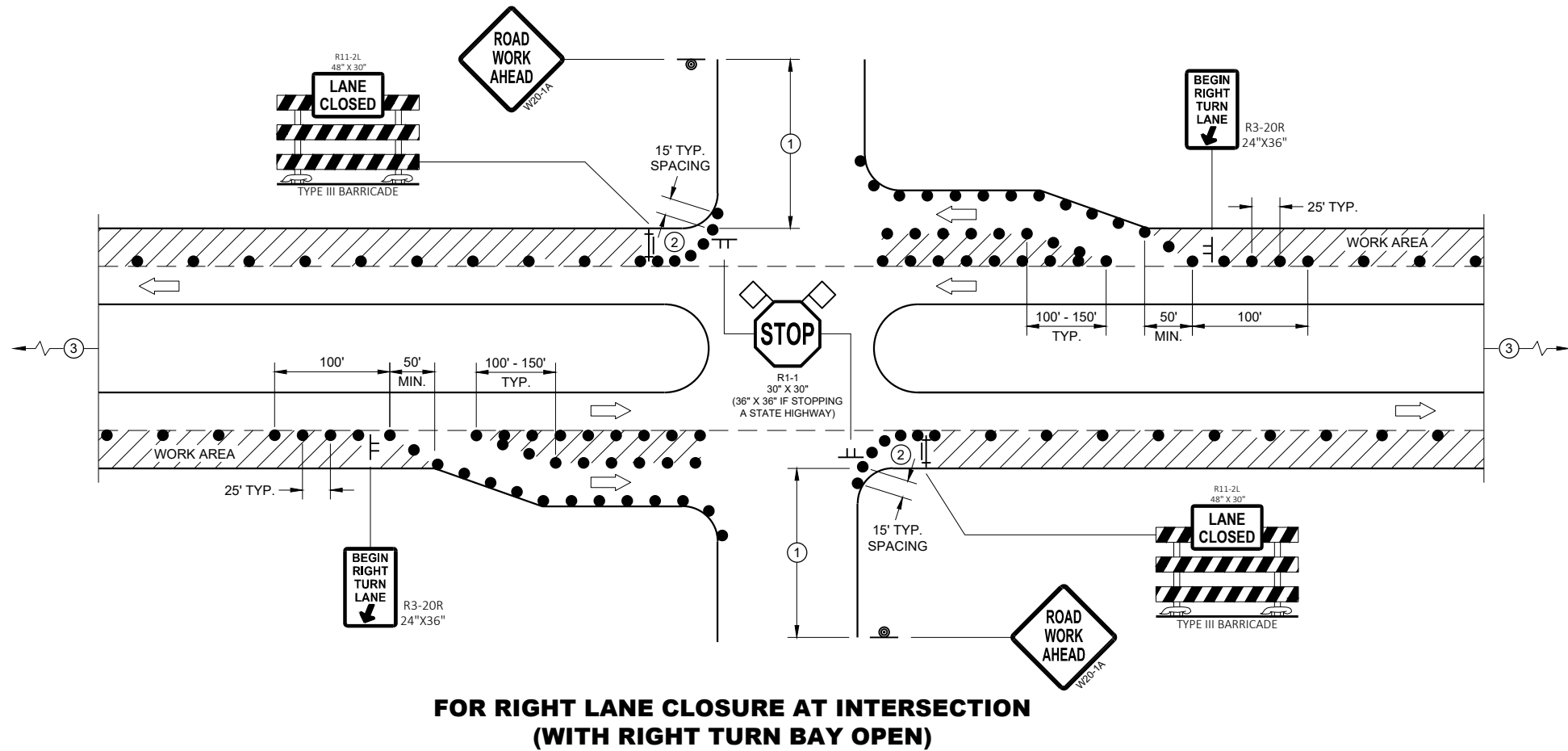
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

- ① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.
- ② ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS
- ③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

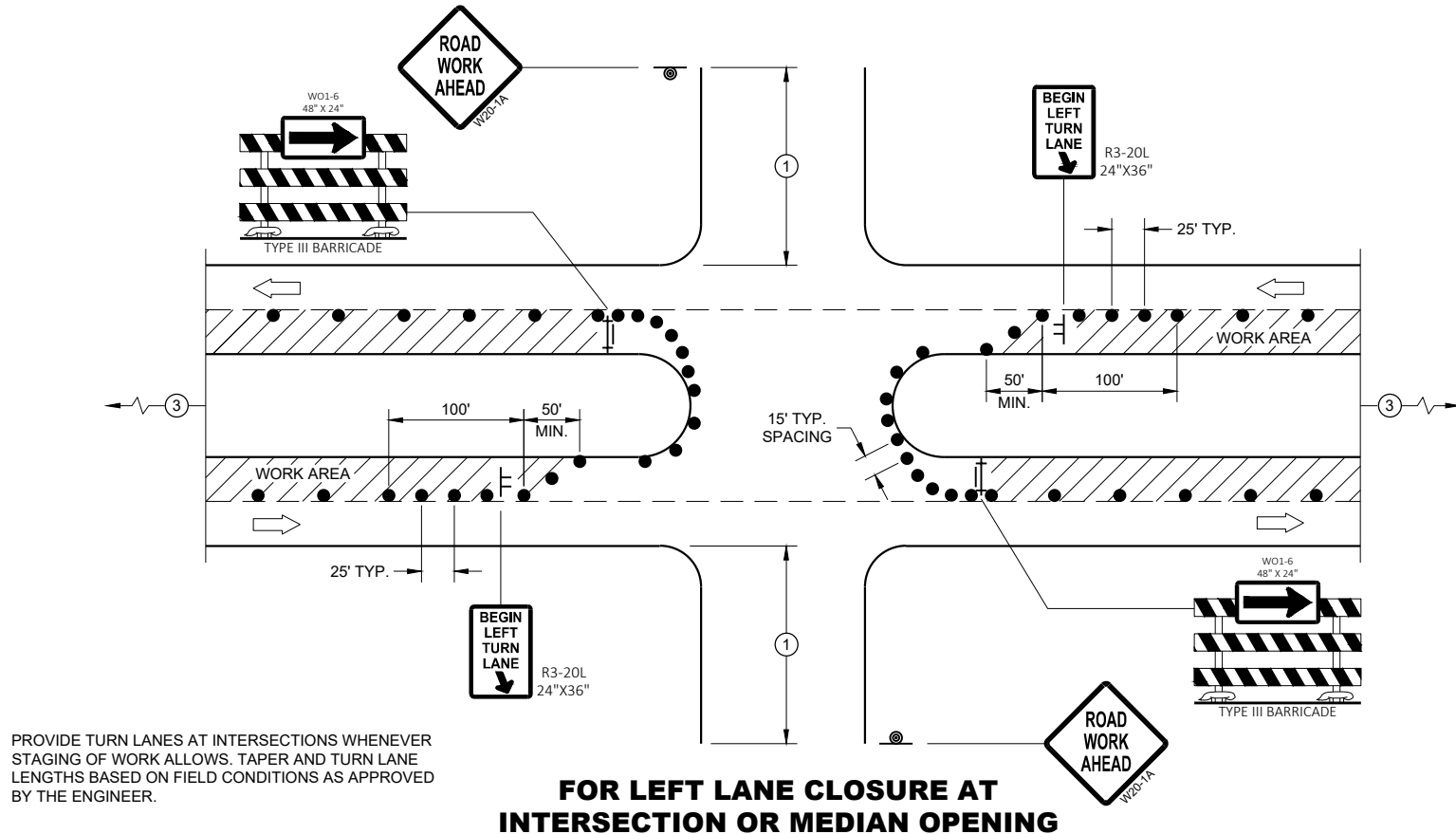
LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- ◇ FLAGS, 16" X 16" MIN., ORANGE
- ▨ WORK AREA



**TRAFFIC CONTROL,
INTERSECTION WITHIN SINGLE
RIGHT LANE CLOSURE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

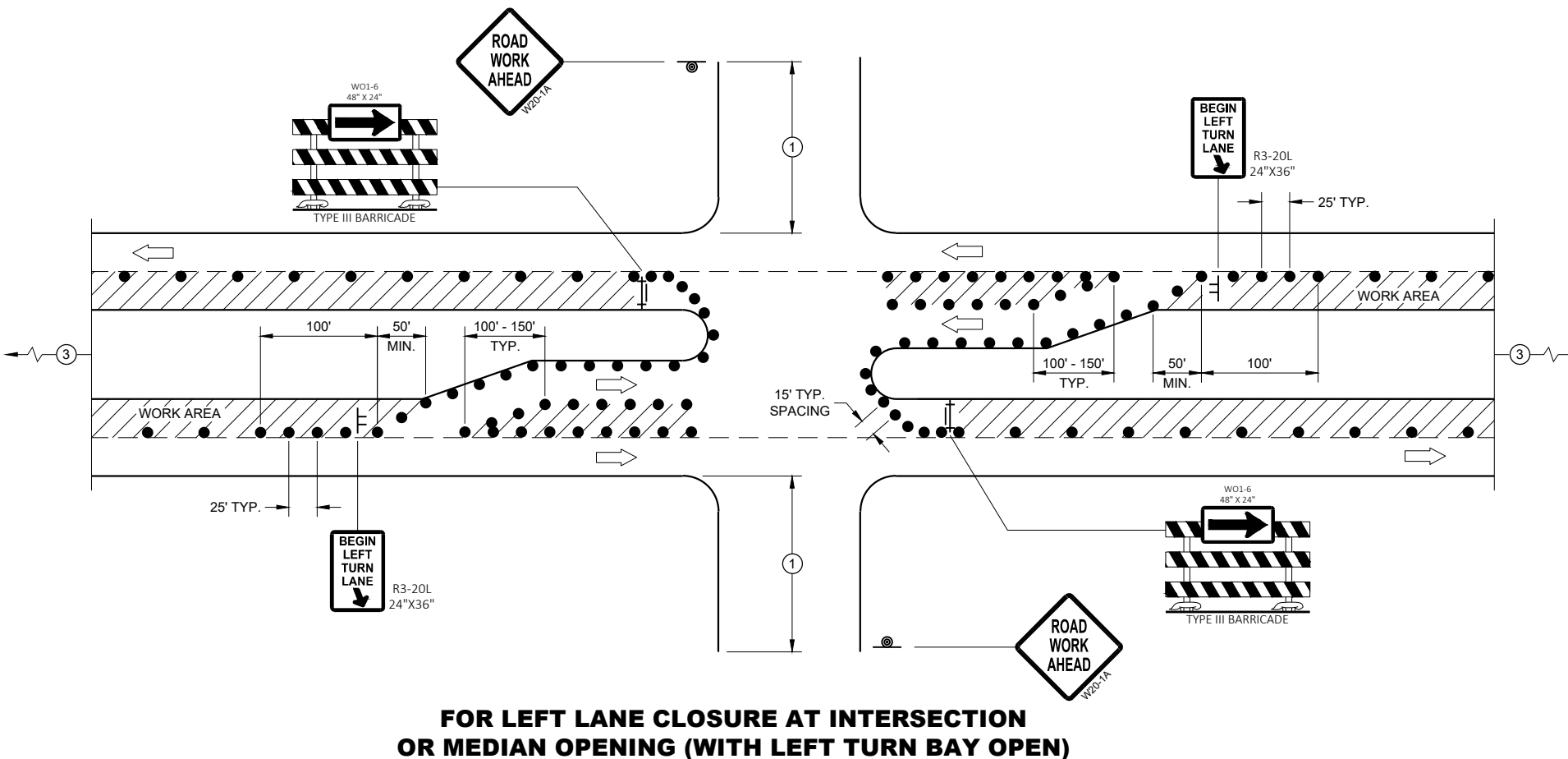
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

- ① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.
- ② ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS
- ③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- ◇ FLAGS, 16" X 16" MIN., ORANGE
- ▨ WORK AREA



TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED July 2018 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

LEGEND





-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  DIRECTION OF TRAFFIC
-  WORK ZONE

TABLE A

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

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

TAPER LENGTH

L= WS AT 45 MPH OR GREATER
L = WS² / 60 AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = 1/3L

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

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

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

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

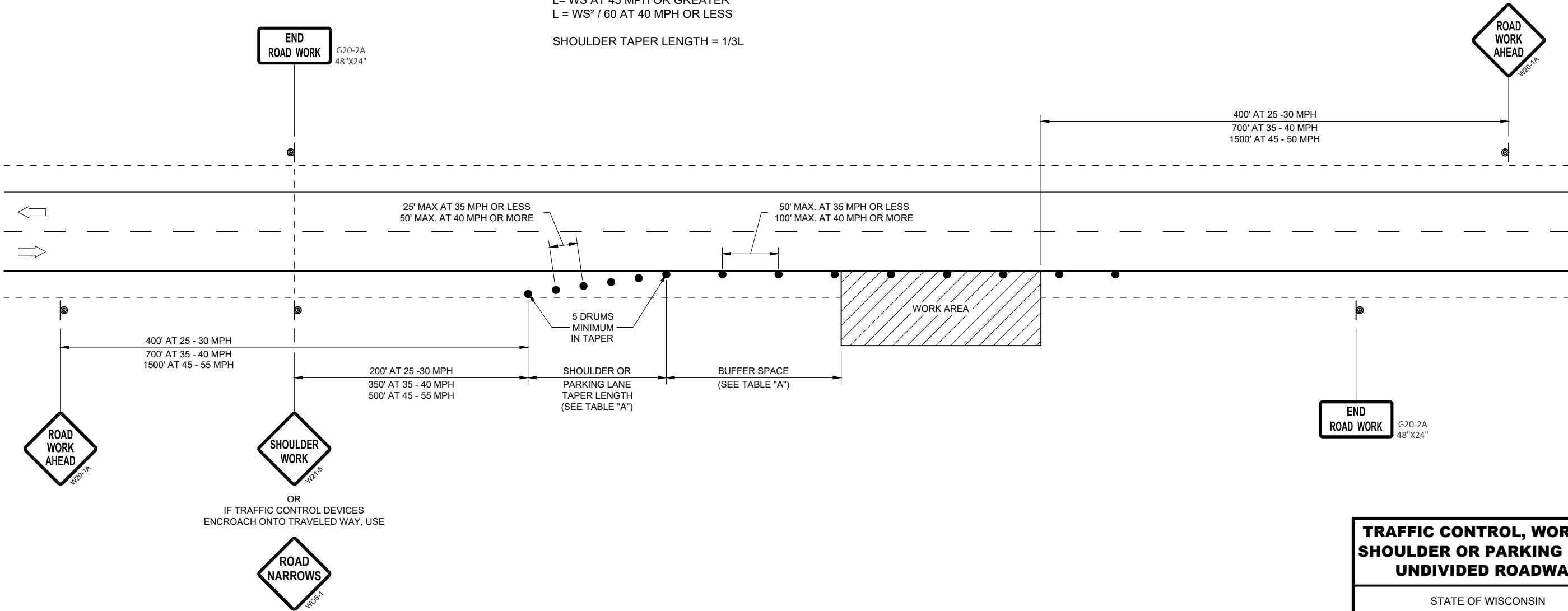
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

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

6

SDD 15D28 - 03



6











SDD 15D28 - 03

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

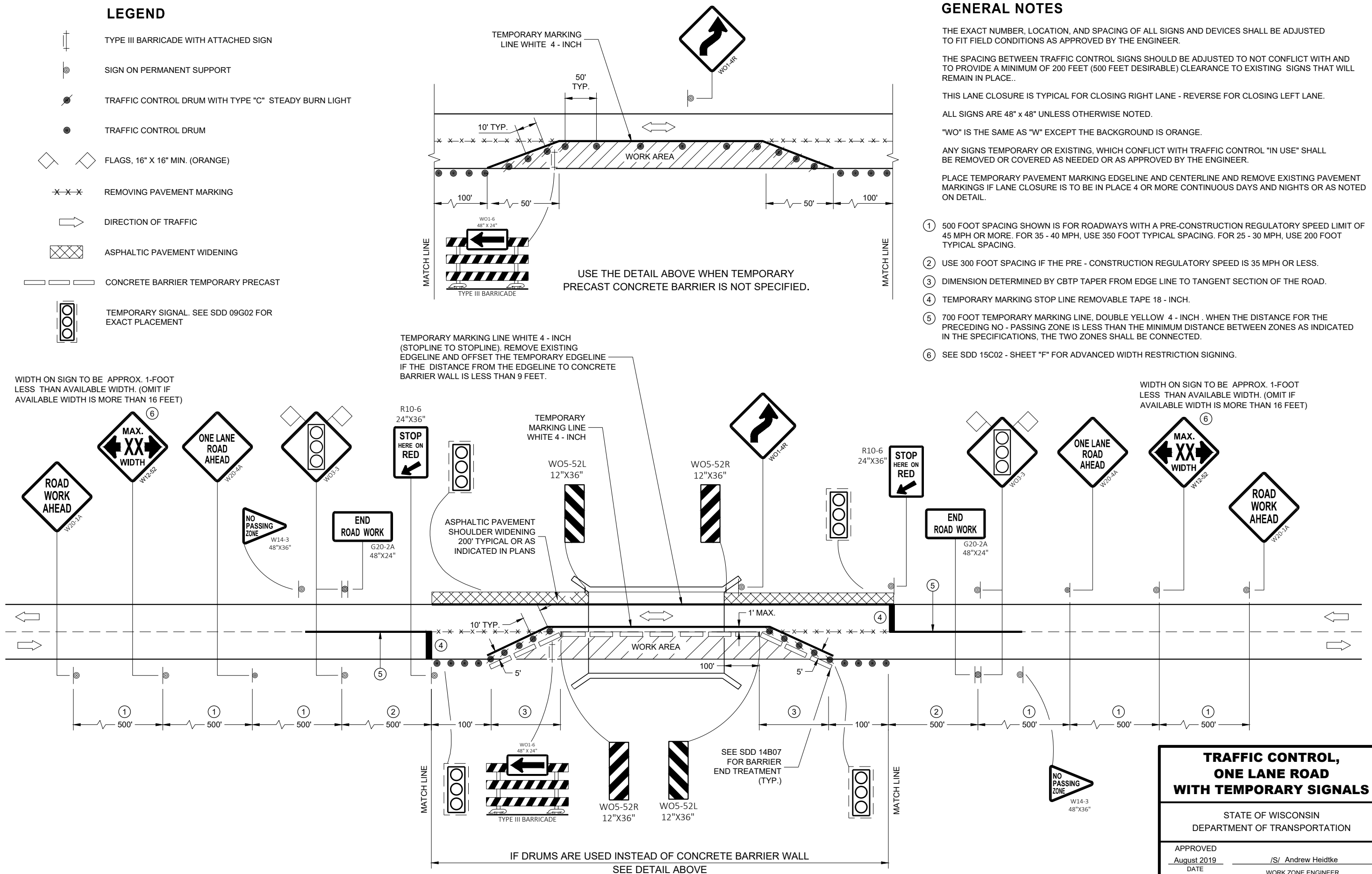
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019
DATE /S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER
FHWA

LEGEND

- | | |
|---|--|
|  | TYPE III BARRICADE WITH ATTACHED SIGN |
|  | SIGN ON PERMANENT SUPPORT |
|  | TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT |
|  | TRAFFIC CONTROL DRUM |
|  | FLAGS, 16" X 16" MIN. (ORANGE) |
|  | REMOVING PAVEMENT MARKING |
|  | DIRECTION OF TRAFFIC |
|  | ASPHALTIC PAVEMENT WIDENING |
|  | CONCRETE BARRIER TEMPORARY PRECAST |
|  | TEMPORARY SIGNAL. SEE SDD 09G02 FOR EXACT PLACEMENT |

WIDTH ON SIGN TO BE APPROX. 1-FOOT
LESS THAN AVAILABLE WIDTH. (OMIT IF
AVAILABLE WIDTH IS MORE THAN 16 FEET)



GENERAL NOTES

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

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

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

PLACE TEMPORARY PAVEMENT MARKING EDGETLINE AND CENTERLINE AND REMOVE EXISTING PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS OR AS NOTED ON DETAIL.

- ① 500 FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35 - 40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25 - 30 MPH, USE 200 FOOT TYPICAL SPACING.
- ② USE 300 FOOT SPACING IF THE PRE - CONSTRUCTION REGULATORY SPEED IS 35 MPH OR LESS.
- ③ DIMENSION DETERMINED BY CBTP TAPER FROM EDGE LINE TO TANGENT SECTION OF THE ROAD.
- ④ TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18 - INCH.
- ⑤ 700 FOOT TEMPORARY MARKING LINE, DOUBLE YELLOW 4 - INCH . WHEN THE DISTANCE FOR THE PRECEDING NO - PASSING ZONE IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES AS INDICATED IN THE SPECIFICATIONS, THE TWO ZONES SHALL BE CONNECTED.
- ⑥ SEE SDD 15C02 - SHEET "F" FOR ADVANCED WIDTH RESTRICTION SIGNING.

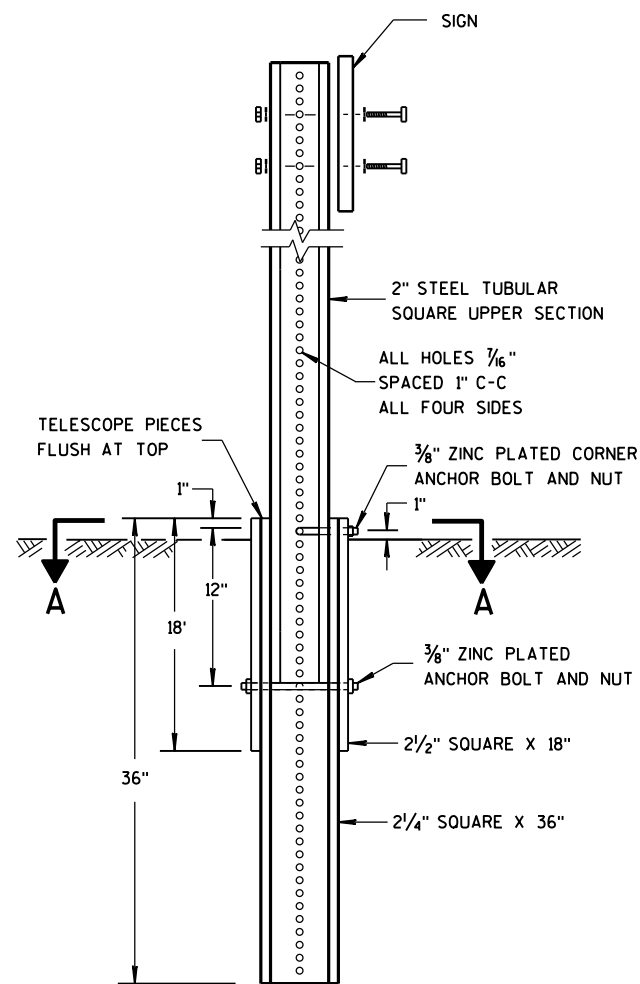
WIDTH ON SIGN TO BE APPROX. 1-FOOT
LESS THAN AVAILABLE WIDTH. (OMIT IF
AVAILABLE WIDTH IS MORE THAN 16 FEET)

**TRAFFIC CONTROL,
ONE LANE ROAD
WITH TEMPORARY SIGNALS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER



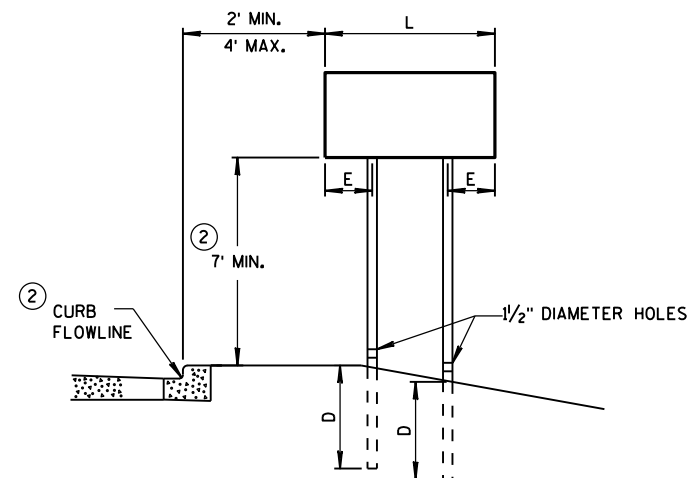
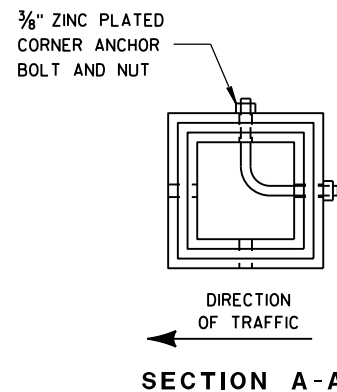
DETAIL OF TUBULAR STEEL SIGN POST

TUBULAR STEEL POSTS

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

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

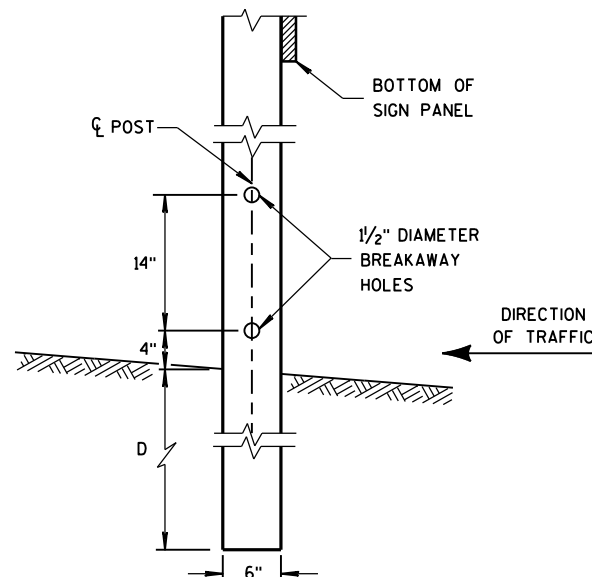


URBAN AREA

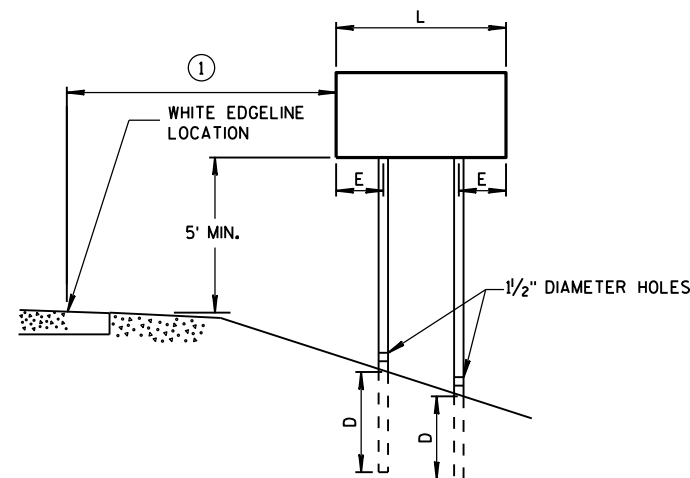
POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST EMBEDMENT DEPTH

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



4" x 6" WOOD POST MODIFICATION



RURAL AREA

4" X 6" WOOD POST

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

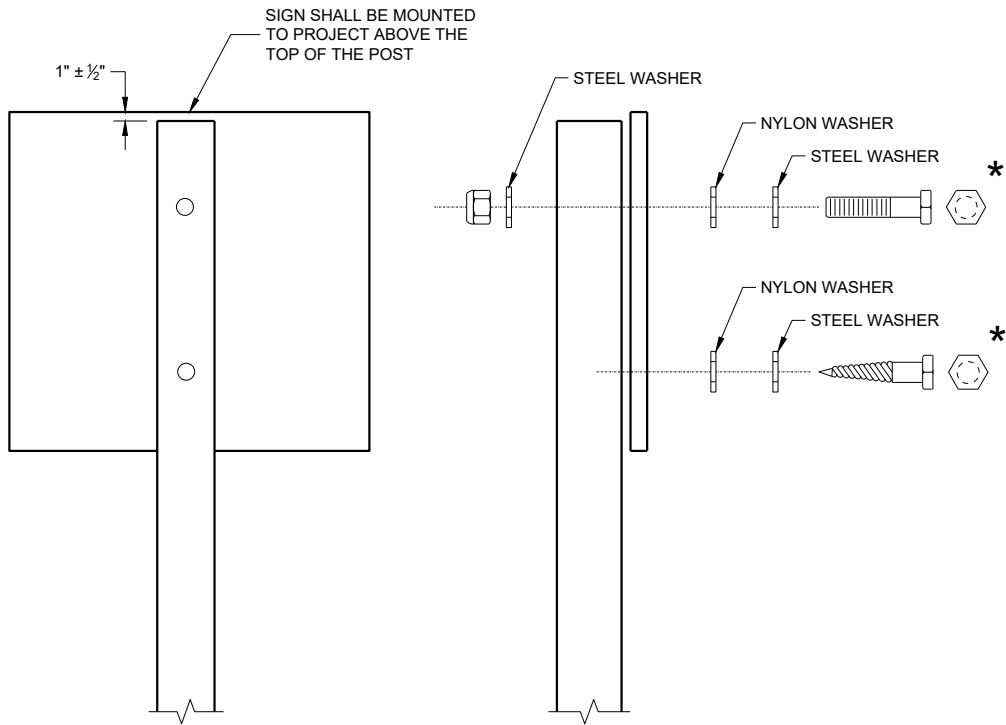
SEE NOTE ③

GENERAL NOTES

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

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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 POST (4" x 6")
LAG SCREWS - 3/8" x 3"
MACHINE BOLTS - 5/16" x 6 1/2" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - 3/8" x 3 1/4" LENGTH W/NUTS
RIVETS - 3/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM
BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH,
GRIP RANGE 0.042 - 0.375 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 0.080 NYLON

* 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER
THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

ATTACHMENT OF SIGNS
TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

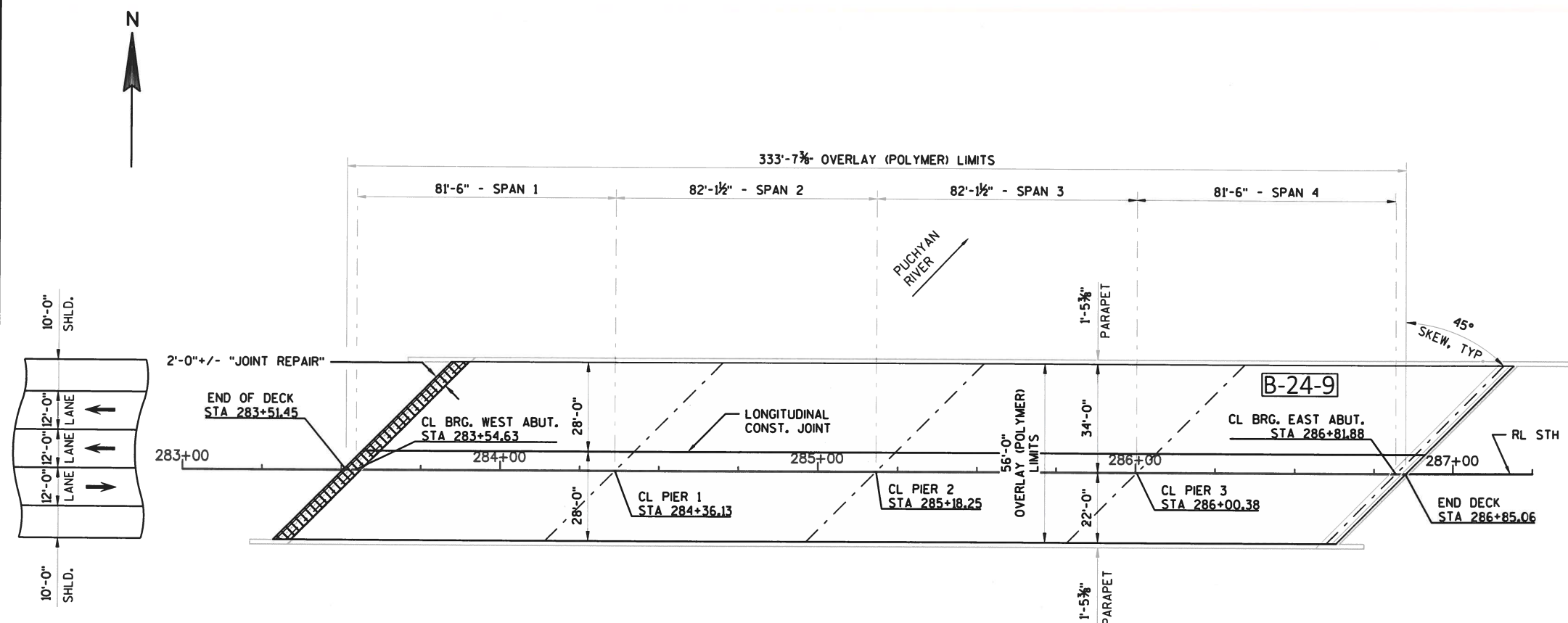
DESIGN LOADING: HS-20
INVENTORY RATING: HS-16
OPERATING RATING: HS-27
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 190 KIPS
MATERIAL PROPERTIES:
CONCRETE MASONRY-DECK PATCHING.....f'c=4,000 P.S.I.

STH 23
ADT = 8,700 (2017)
RDS = 50 MPH

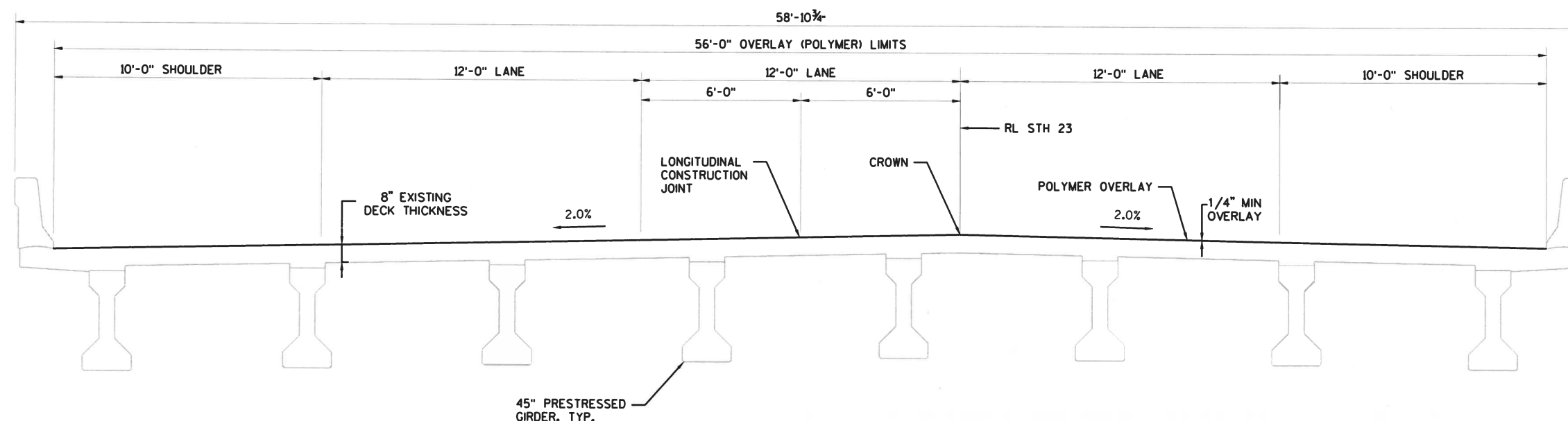
1. JOINT REPAIR
2. CLEAN & PREPARE DECK AS DIRECTED BY ENGINEER IN THE FIELD
3. PLACE POLYMER OVERLAY ON DECK

509.0301 PREPARATION DECKS TYPE 1.....	1 SY
509.0302 PREPARATION DECKS TYPE 2.....	1 SY
509.0310.S SAWING PAVEMENT DECK PREPARATION AREAS....	10 LF
509.1000 JOINT REPAIR.....	20 SY
509.2100.S CONCRETE MASONRY DECK REPAIR.....	3 CY
509.5100.S POLYMER OVERLAY.....	2,072 SY
SPV.0090.01 SILICONE BRIDGE JOINT SEALANT.....	80 LF

1. POLYMER OVERLAY
2. CONSTRUCTION STAGING
3. JOINT REPAIR



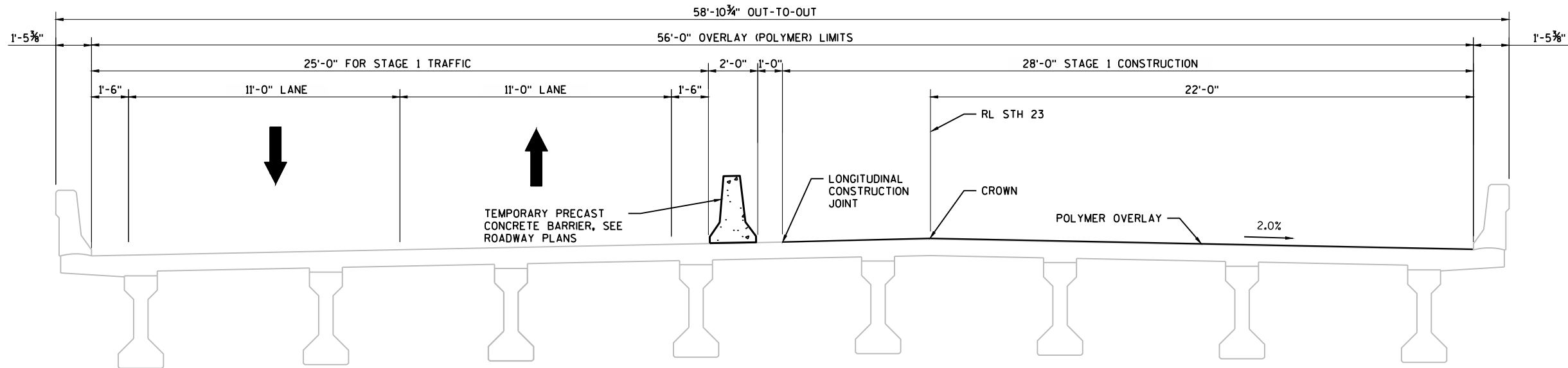
PLAN
POLYMER OVERLAY
4 SPAN - 45" PRESTRESSED CONCRETE GIRDERS



CROSS SECTION THRU BRIDGE
LOOKING EAST

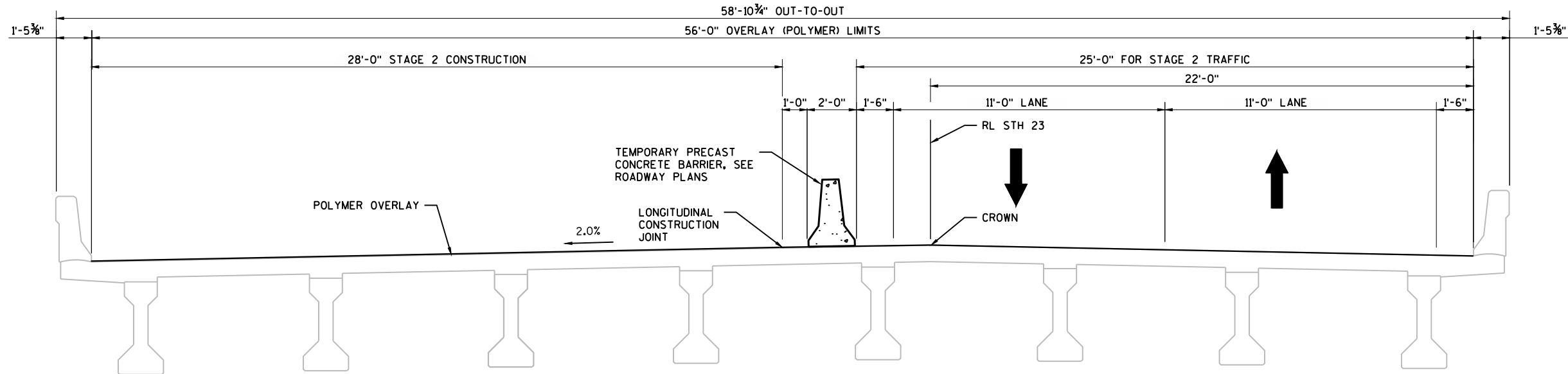
CONSULTANT CONTACT:
KEVIN WOOD (414) 259-1500

[illegible]



STAGE 1 CONSTRUCTION

LOOKING EAST



STAGE 2 CONSTRUCTION

LOOKING EAST

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE EXISTING ORIGINAL STRUCTURE PLANS.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM 'POLYMER OVERLAY'.

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAW CUT.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION SHALL BE FILLED WITH "CONCRETE MASONRY DECK REPAIR".

ALL STATIONS ARE IN FEET.

STRUCTURE STATIONING PROPOSED IS BASED ON ORIGINAL STRUCTURE PLAN DIMENSIONS.

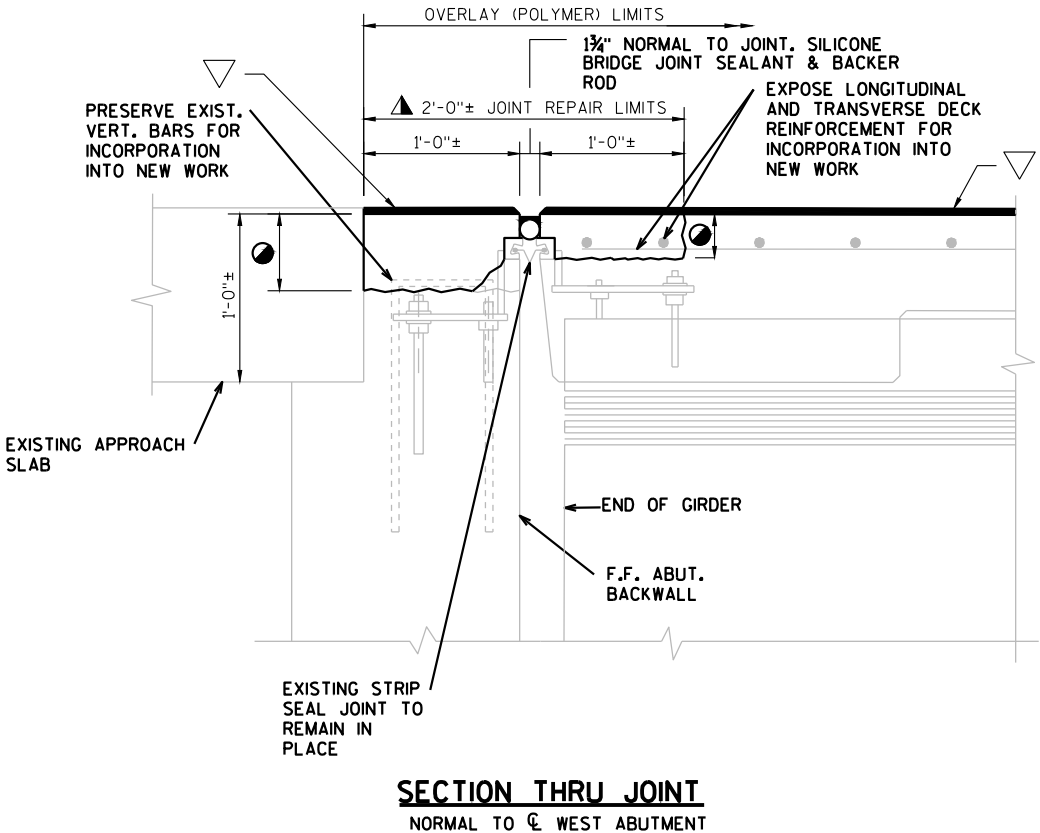
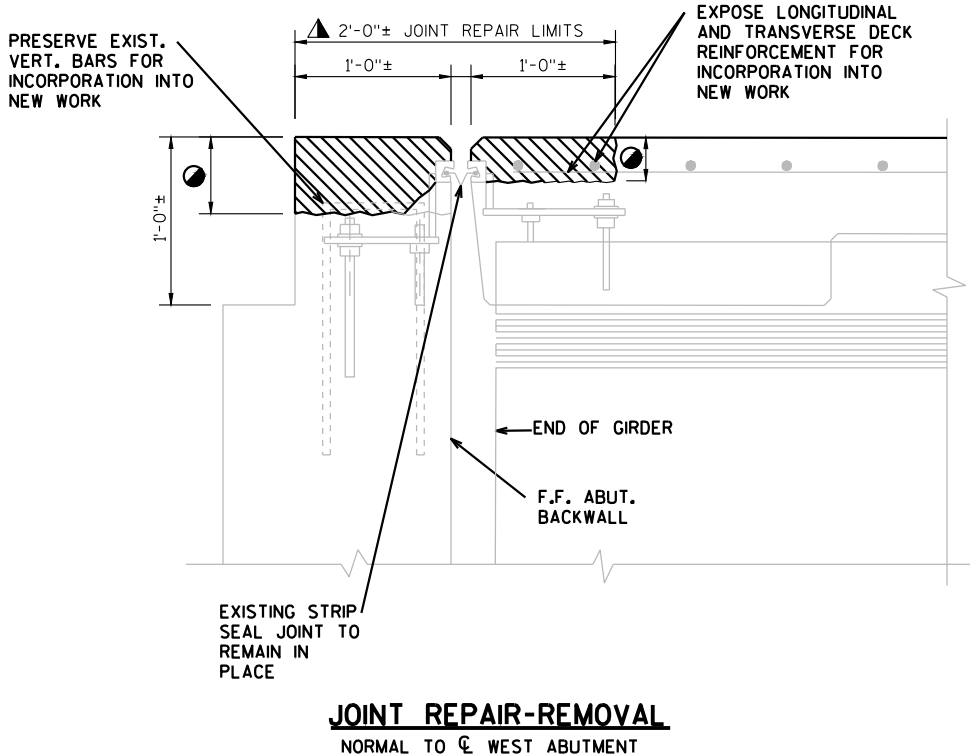
THE EXISTING STRUCTURE, B-24-9, IS A 4-SPAN PRESTRESSED CONCRETE GIRDER BRIDGE WITH AN OVERALL WIDTH OF 58'-10 3/4" AND AN OVERALL LENGTH OF 333'-7 3/8". THE ENTIRE DECK SURFACE IS TO BE PREPARED FOR A NEW POLYMER OVERLAY.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-24-9			
DRAWN BY WAR		PLANS CK'D. KWG	
CONSTRUCTION STAGING		SHEET 2 OF 3	

I.D.

DATE:

SCALE =



NOTES

- ANY DAMAGE TO THE EXISTING STRIP SEAL EXPANSION JOINT STEEL EXTRUSION DURING CONCRETE REMOVAL SHALL BE REPAIRED AT THE DIRECTION OF THE ENGINEER AND SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "JOINT REPAIR".
- CONTRACTOR TO SELECT APPROPRIATE SIZED "SILICONE BRIDGE JOINT SEALANT" SYSTEM BASED ON THE SELECTED PRODUCT SPECIFICATION. JOINT MATERIAL SIZE SHALL BE APPROVED BY THE ENGINEER.

LEGEND

- REMOVE AND REPLACE EXISTING CONCRETE TO A DEPTH OF 1" BELOW THE TOP MAT OF STEEL.
- ▽ 1/4" MIN. THIN POLYMER OVERLAY
- ▨ EXISTING CONCRETE REMOVAL LIMITS
- ▲ DIMENSIONS ARE GIVEN NORMAL TO CL OF SUBSTRUCTURE UNIT.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-24-9			
DRAWN BY WAR		PLANS CK'D. KWG	
JOINT REPAIR		SHEET 3 OF 3	

DESIGN DATA

LIVE LOAD:
DESIGN LOADING: HS-20
INVENTORY RATING: HS-22
OPERATING RATING: HS-37
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 220 KIPS
MATERIAL PROPERTIES:
CONCRETE MASONRY-DECK PATCHING.....f'c=4,000 P.S.I.

TRAFFIC DATA

STH 54
ADT = 6,100 (2020)
RDS = 50 MPH

SCOPE OF WORK B-68-71

- CLEAN & PREPARE DECK AS DIRECTED BY THE FIELD ENGINEER.
- PLACE POLYMER OVERLAY ON DECK

TOTAL ESTIMATED QUANTITIES

509.0301 PREPARATION DECKS TYPE 1 1 SY
509.0302 PREPARATION DECKS TYPE 2 1 SY
509.0310.S SAWING PAVEMENT DECK PREPARATION AREAS 10 LF
509.2100.S CONCRETE MASONRY DECK REPAIR 1 CY
509.5100.S POLYMER OVERLAY..... 1,146 SY

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DIMENSIONS SHOWN ARE BASED ON THE EXISTING ORIGINAL STRUCTURE PLANS.
DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM 'POLYMER OVERLAY'.
AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAW CUT.
PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION SHALL BE FILLED WITH "CONCRETE MASONRY DECK REPAIR".
ALL STATIONS ARE IN FEET.
STRUCTURE STATIONING PROPOSED IS BASED ON ORIGINAL STRUCTURE PLAN DIMENSIONS.
THE EXISTING STRUCTURE, B-68-71, IS A 3-SPAN PRESTRESSED CONCRETE GIRDER BRIDGE WITH AN OVERALL WIDTH OF 46'-10³/₄" AND AN OVERALL LENGTH OF 234'-4¹/₄". THE ENTIRE DECK SURFACE IS TO BE PREPARED FOR A NEW POLYMER OVERLAY.

LIST OF DRAWINGS

- POLYMER OVERLAY
- CONSTRUCTION STAGING

NO.	DATE	REVISION	BY
GRāEF 1150 Springhurst Drive Suite 201 Green Bay, WI 54304-5947 920 / 592 9440 920 / 592 9445 fax www.graef-usa.com			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED	<i>[Signature]</i>	SDR	05/29/20
CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-68-71			
STH 54 OVER GBW RR			
COUNTY	WAUPACA	TOWN/VILLAGE	ROYALTON
DESIGN SPEC.	REHABILITATION	N/A	
DESIGNED BY	WAR	DESIGN CK'D.	KGW
DRAWN BY	FMT	PLANS CK'D.	KGW
POLYMER OVERLAY			SHEET 1 OF 2

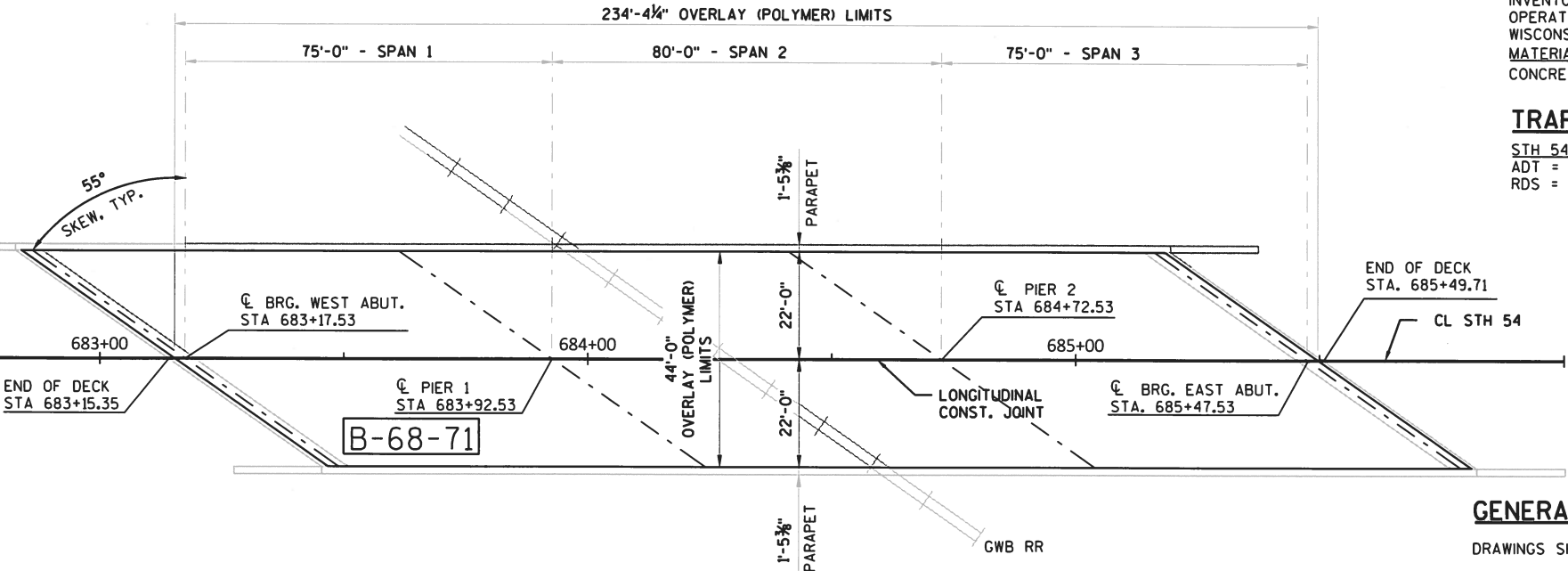
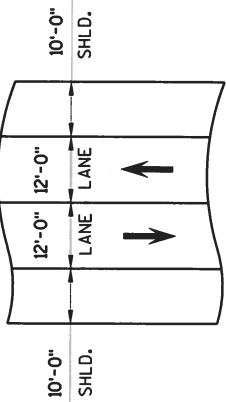
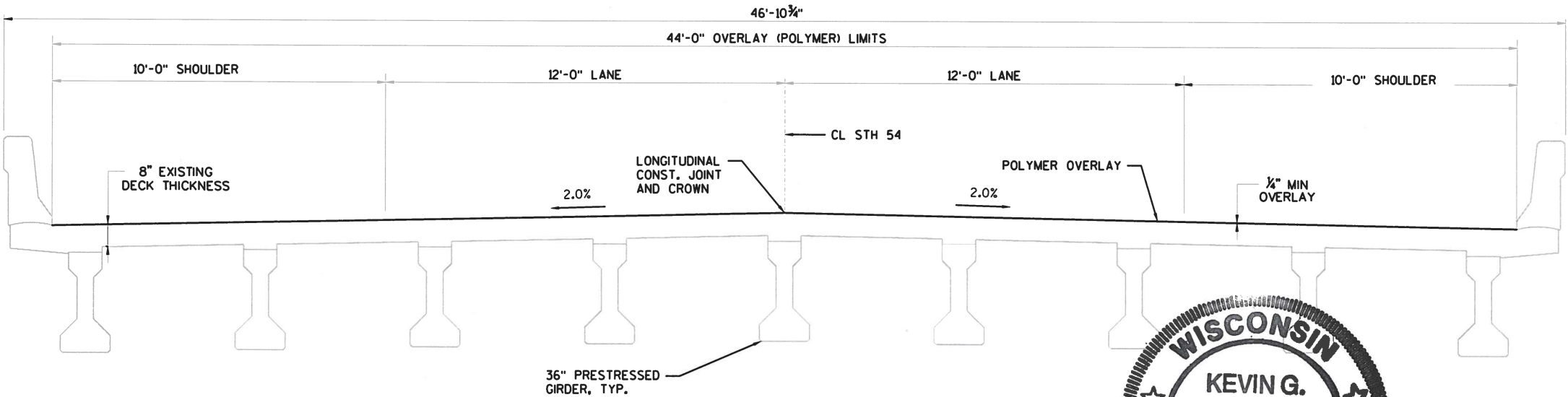
BUREAU OF STRUCTURES CONTACT:
AARON BONK (608) 261-0261
CONSULTANT CONTACT:
KEVIN WOOD (414) 259-1500

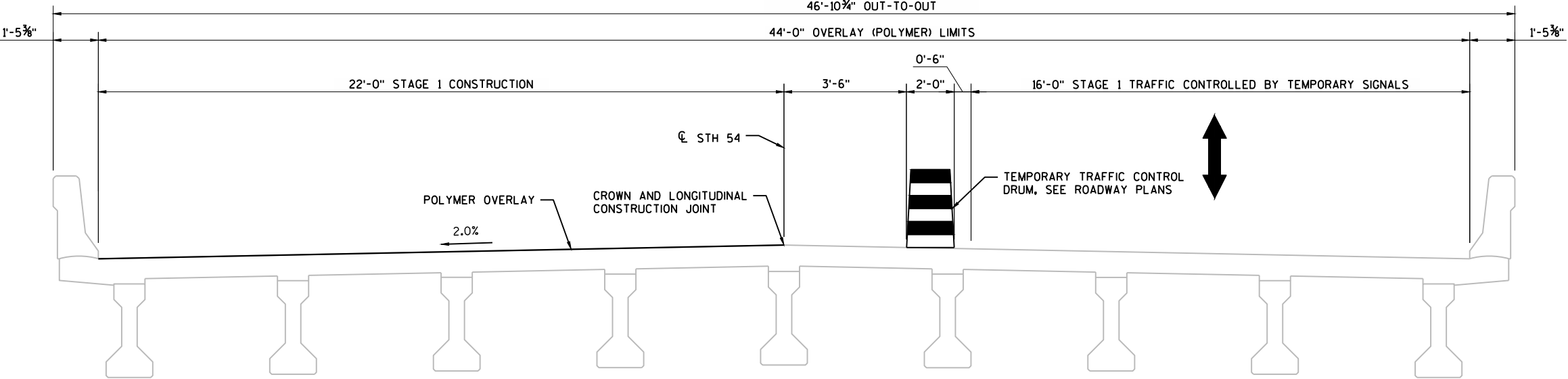


PLAN

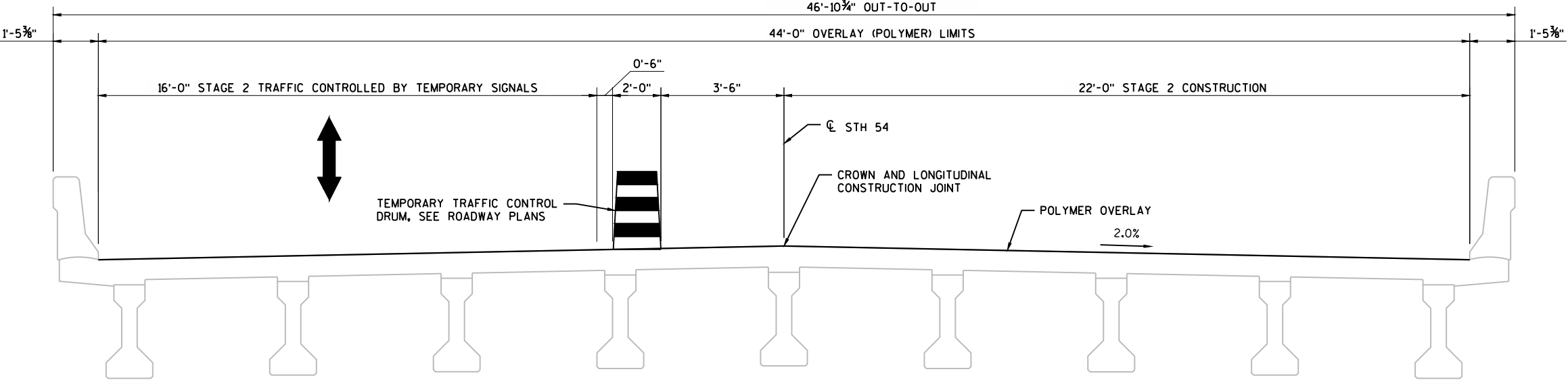
POLYMER OVERLAY
3 SPAN - 36" PRESTRESSED CONCRETE GIRDERS

CROSS SECTION THRU BRIDGE
LOOKING EAST





STAGE 1 CONSTRUCTION
LOOKING EAST



STAGE 2 CONSTRUCTION
LOOKING EAST

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-68-71			
DRAWN BY EMT		PLANS CK'D. KWG	
CONSTRUCTION STAGING		SHEET 2 OF 2	

I.D.

DATE:

SCALE =

##

DESIGN DATA

LIVE LOAD:
DESIGN LOADING: HS-20
INVENTORY RATING: HS-26
OPERATING RATING: HS-44
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 KIPS
MATERIAL PROPERTIES:
CONCRETE MASONRY-DECK PATCHING.....f'c=4,000 P.S.I.

TRAFFIC DATA

STH 110
ADT = 1,800 (2009)
RDS = 50 MPH

SCOPE OF WORK B-68-100

- CLEAN & PREPARE DECK AS DIRECTED BY THE FIELD ENGINEER
- POLYMER OVERLAY ON DECK

TOTAL ESTIMATED QUANTITIES

509.0301 PREPARATION DECKS TYPE 1 1 SY
509.0302 PREPARATION DECKS TYPE 2 1 SY
509.0310.S SAWING PAVEMENT DECK PREPARATION AREAS 10 LF
509.2100.S CONCRETE MASONRY DECK REPAIR 1 CY
509.5100.S POLYMER OVERLAY..... 145 SY

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DIMENSIONS SHOWN ARE BASED ON THE EXISTING ORIGINAL (METRIC) STRUCTURE PLANS.
DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM 'POLYMER OVERLAY'.
AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAW CUT.
PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION SHALL BE FILLED WITH "CONCRETE MASONRY DECK REPAIR".
ALL STATIONS ARE IN FEET.
STRUCTURE STATIONING PROPOSED IS BASED ON ORIGINAL STRUCTURE PLAN DIMENSIONS.
THE EXISTING STRUCTURE, B-68-100, IS A 1-SPAN FLAT SLAB BRIDGE WITH AN OVERALL WIDTH OF 32'-5"± AND AN OVERALL LENGTH OF 43'-11 1/2". THE ENTIRE SLAB SURFACE IS TO BE PREPARED FOR A NEW POLYMER OVERLAY.

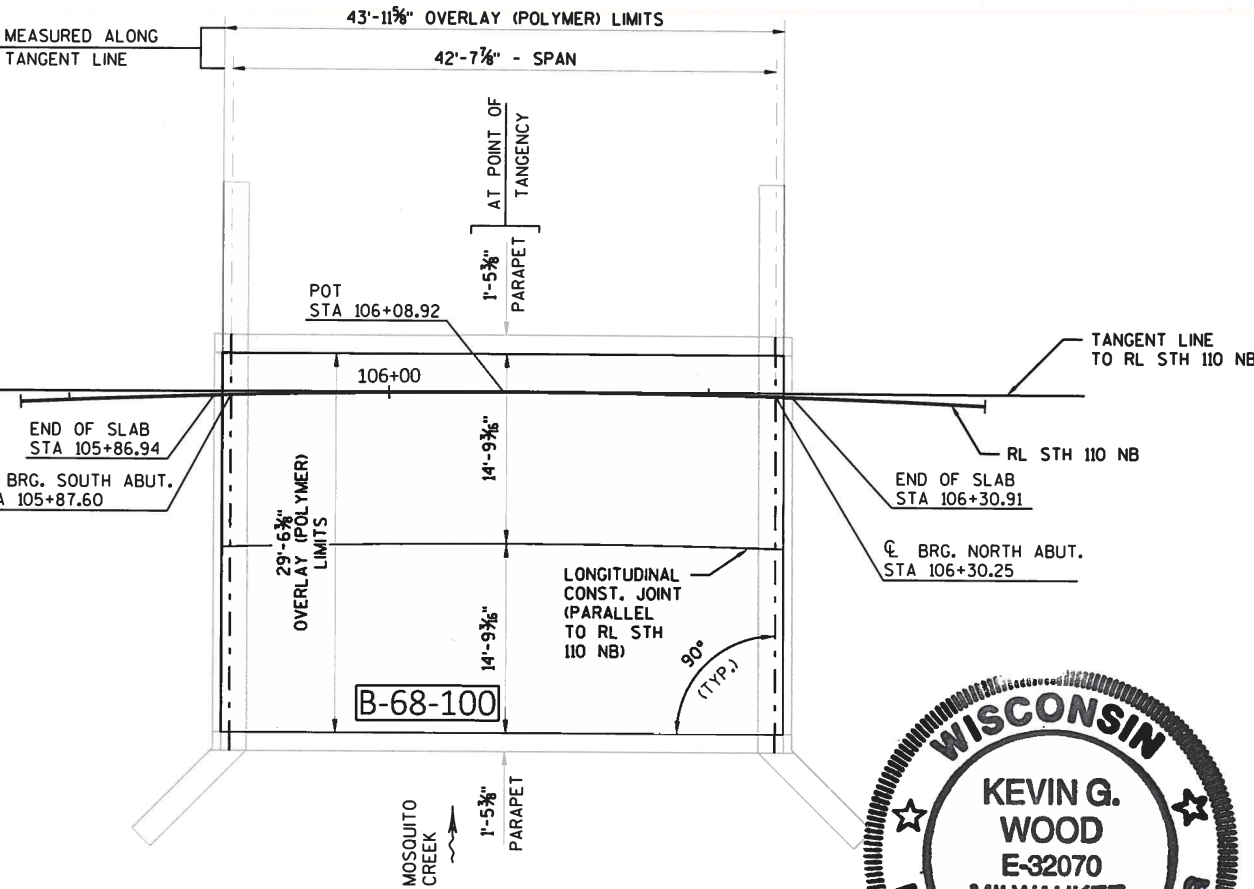
LIST OF DRAWINGS

- POLYMER OVERLAY
- CONSTRUCTION STAGING

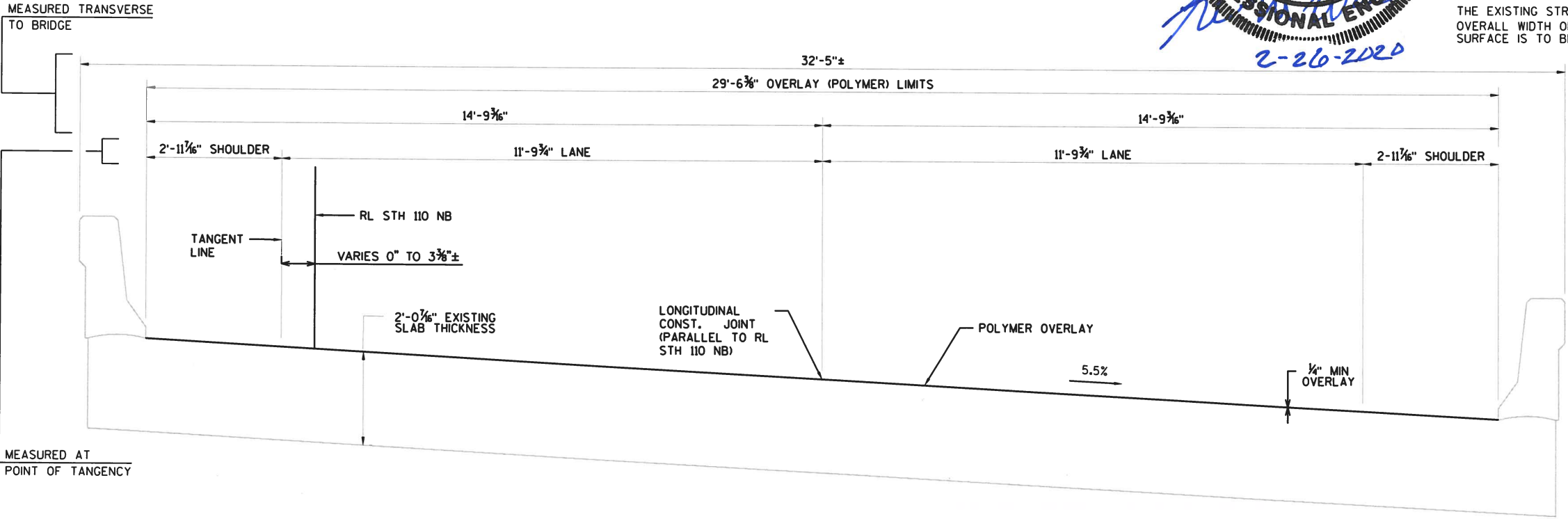
NO.	DATE	REVISION	BY
Gräef 1150 Springhurst Drive Suite 201 Green Bay, WI 54304-5947 920 / 592 9440 920 / 592 9445 fax www.graef-usa.com			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED	<i>[Signature]</i>	SDR	05/29/20
CHIEF STRUCTURES DESIGN ENGINEER		DATE	
STRUCTURE B-68-100			
STH 110 NB OVER MOSQUITO CREEK			
COUNTY	WAUPACA	TOWN/CITY/VILLAGE	FREMONT
DESIGN SPEC.	REHABILITATION	N/A	
DESIGNED BY	WAR	DESIGN CK'D.	KGW
DRAWN BY	FMT	PLANS CK'D.	KGW
POLYMER OVERLAY			SHEET 1 OF 2

BUREAU OF STRUCTURES CONTACT:
AARON BONK (608) 261-0261

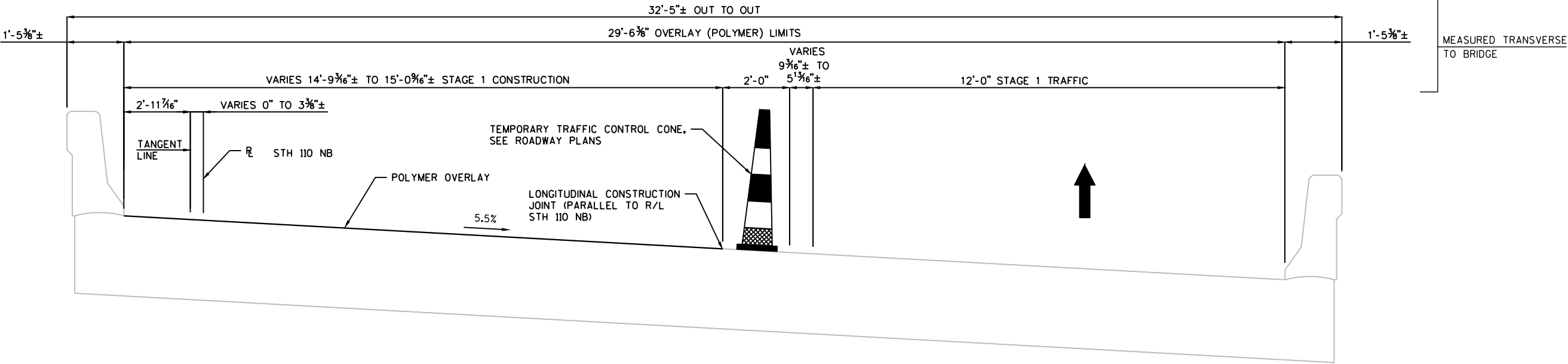
CONSULTANT CONTACT:
KEVIN WOOD (414) 259-1500



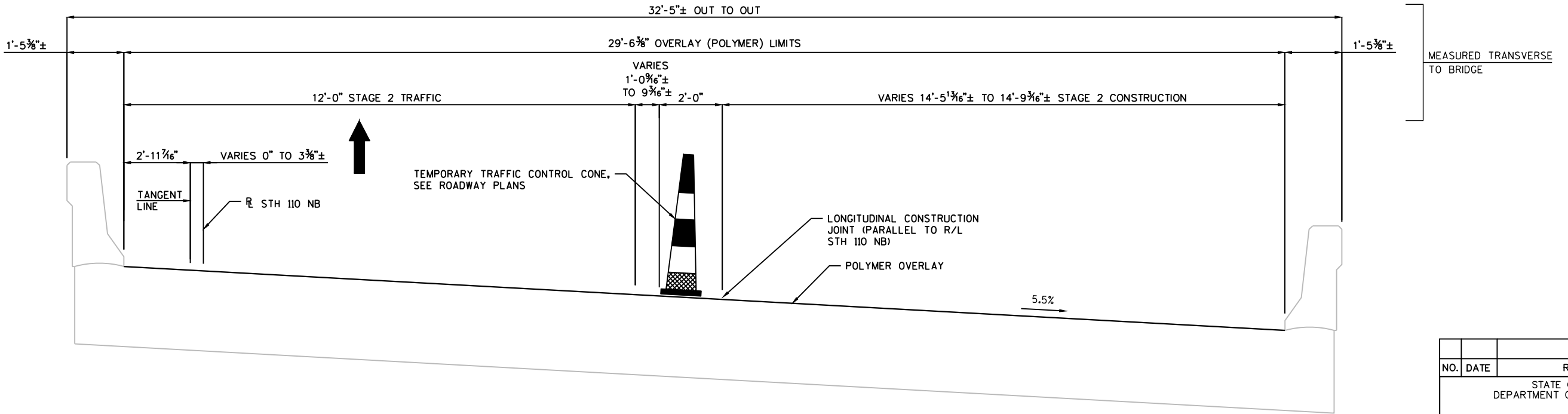
PLAN
POLYMER OVERLAY
SINGLE SPAN - CONCRETE SLAB



CROSS SECTION THRU BRIDGE
LOOKING NORTH



STAGE 1 CONSTRUCTION
LOOKING NORTH



STAGE 2 CONSTRUCTION
LOOKING NORTH

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-68-100			
DRAWN BY EMT		PLANS CK'D. KWG	
CONSTRUCTION STAGING		SHEET 2 OF 2	

I.D.

DATE:

SCALE =

##

MEASURED ALONG
TANGENT LINE

43'-11 5/8" OVERLAY (POLYMER) LIMITS

42'-7 1/2" - SPAN

STATE PROJECT NUMBER

6220-00-61

DESIGN DATA

LIVE LOAD:
DESIGN LOADING: HS-20
INVENTORY RATING: HS-26
OPERATING RATING: HS-44
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 KIPS

MATERIAL PROPERTIES:
CONCRETE MASONRY-DECK PATCHING.....f'c=4,000 P.S.I.

TRAFFIC DATA

STH 110
ADT = 1,800 (2009)
RDS = 50 MPH

SCOPE OF WORK B-68-101

- CLEAN & PREPARE DECK AS DIRECTED BY THE FIELD ENGINEER
- POLYMER OVERLAY ON DECK

TOTAL ESTIMATED QUANTITIES

509.0301 PREPARATION DECKS TYPE 1 1 SY
509.0302 PREPARATION DECKS TYPE 2 1 SY
509.0310.S SAWING PAVEMENT DECK PREPARATION AREAS 10 LF
509.2100.S CONCRETE MASONRY DECK REPAIR 1 CY
509.5100.S POLYMER OVERLAY..... 145 SY

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE EXISTING ORIGINAL (METRIC) STRUCTURE PLANS.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM 'POLYMER OVERLAY'.

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAW CUT.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION SHALL BE FILLED WITH "CONCRETE MASONRY DECK REPAIR".

ALL STATIONS ARE IN FEET.

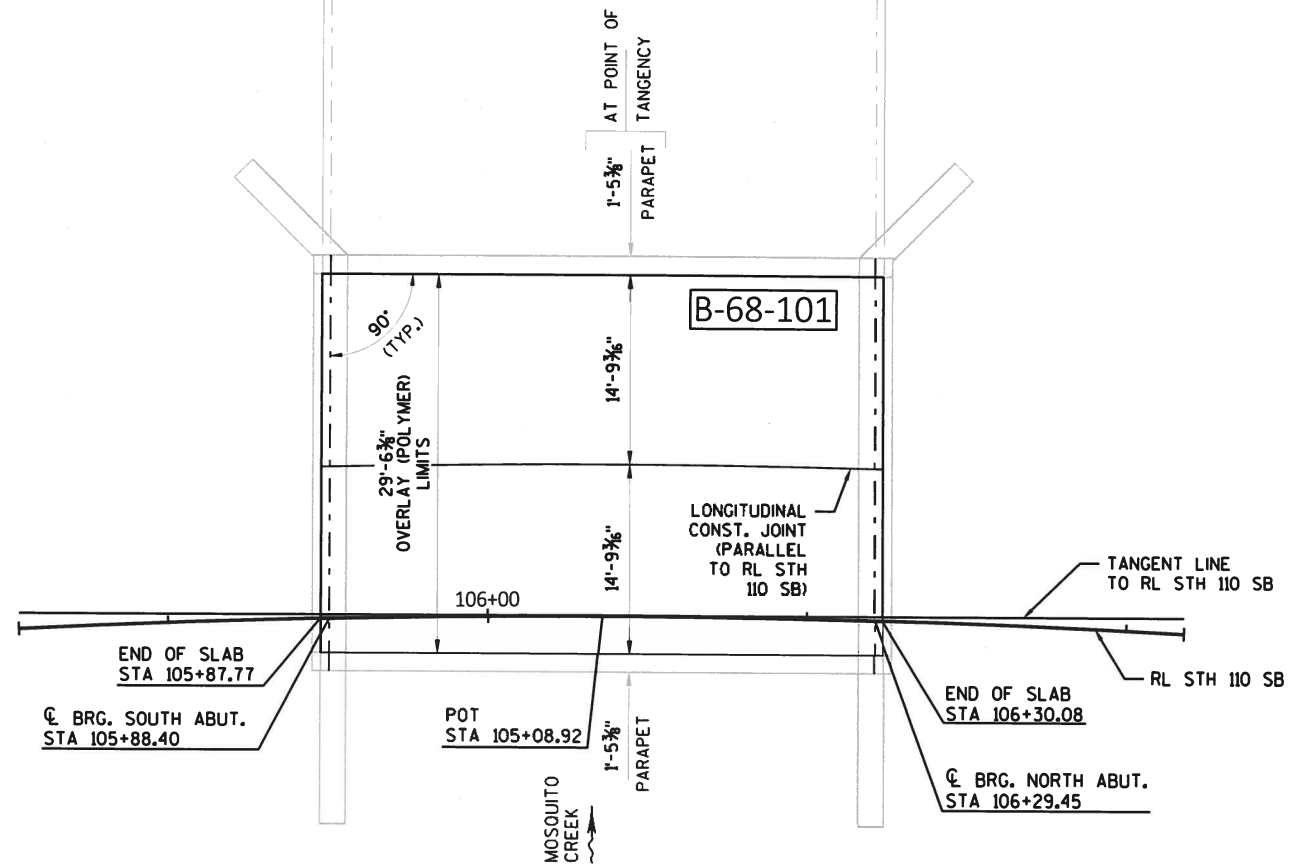
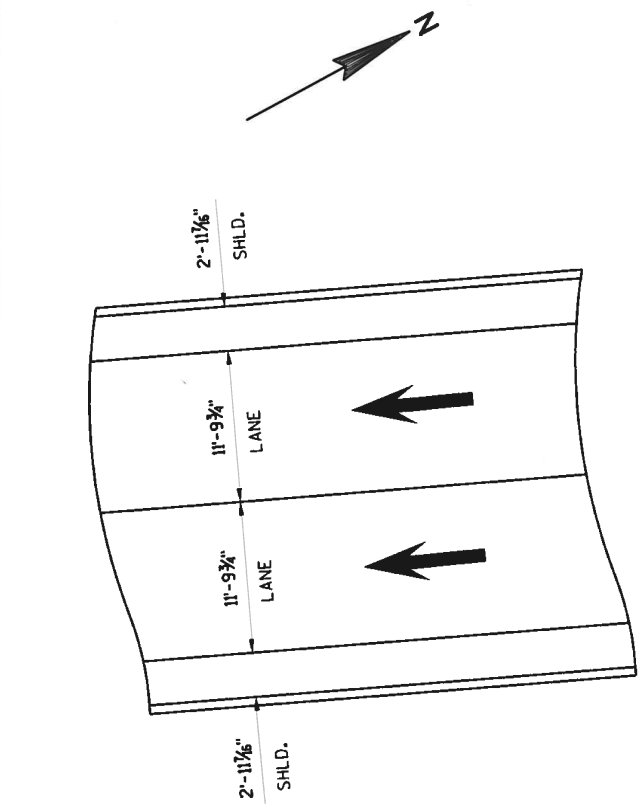
STRUCTURE STATIONING PROPOSED IS BASED ON ORIGINAL STRUCTURE PLAN DIMENSIONS.

THE EXISTING STRUCTURE, B-68-101, IS A 1-SPAN FLAT SLAB BRIDGE WITH AN OVERALL WIDTH OF 32'-5"± AND AN OVERALL LENGTH OF 43'-11 5/8". THE ENTIRE SLAB SURFACE IS TO BE PREPARED FOR A NEW POLYMER OVERLAY.

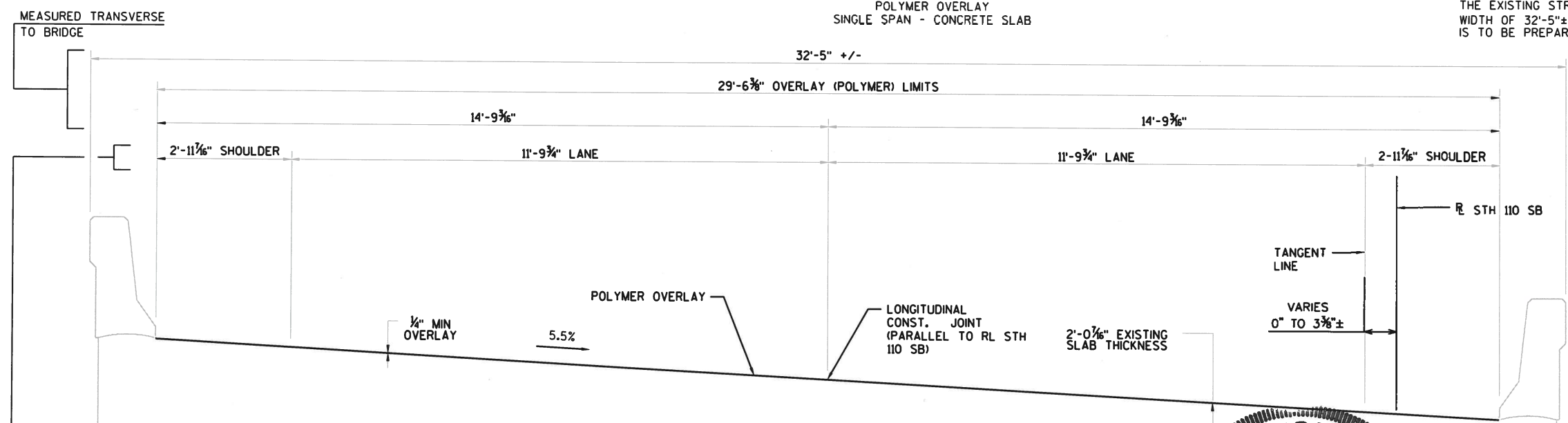
LIST OF DRAWINGS

- POLYMER OVERLAY
- CONSTRUCTION STAGING

NO.	DATE	REVISION	BY
GRāEF 1150 Springhurst Drive Suite 201 Green Bay, WI 54304-5947 920 / 552 9440 920 / 552 9445 fax www.graef-usa.com			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED	<i>[Signature]</i>	SDR	05/29/20
CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-68-101			
STH 110 SB OVER MOSQUITO CREEK			
COUNTY	WAUPACA	TOWN/CITY/VILLAGE	FREMONT
DESIGN SPEC.	REHABILITATION	N/A	
DESIGNED BY	WAR	DESIGN CK'D.	KGW
DRAWN BY	FMT	PLANS CK'D.	KGW
POLYMER OVERLAY			SHEET 1 OF 2



PLAN
POLYMER OVERLAY
SINGLE SPAN - CONCRETE SLAB

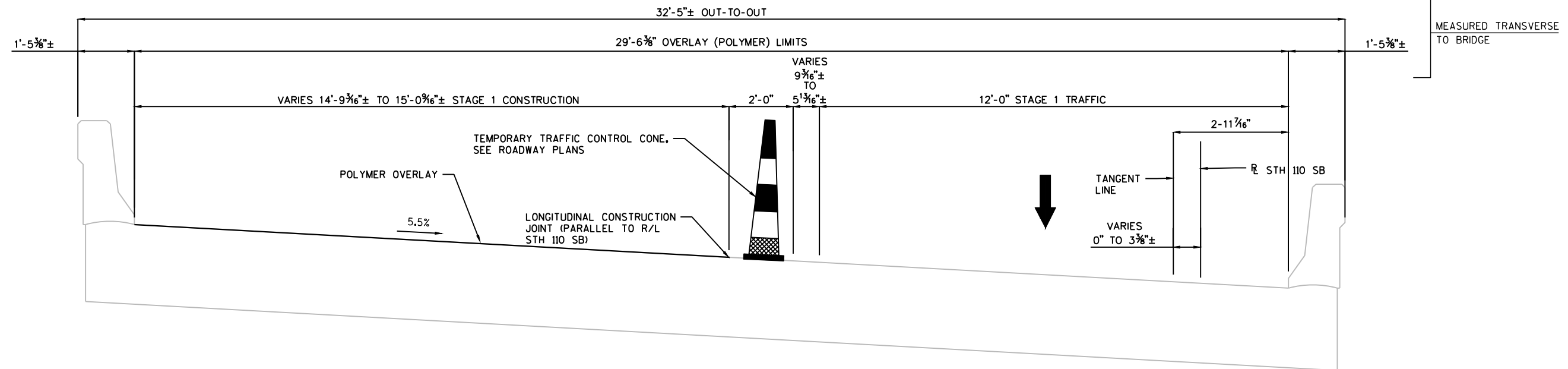


CROSS SECTION THRU BRIDGE
LOOKING NORTH

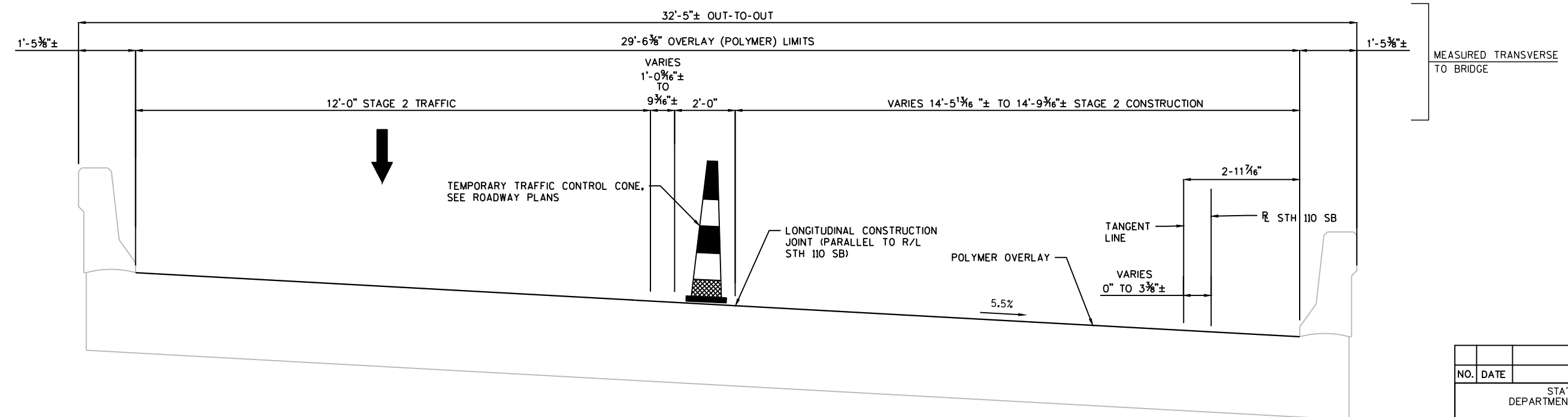


BUREAU OF STRUCTURES CONTACT:
AARON BONK (608) 261-0261

CONSULTANT CONTACT:
KEVIN WOOD (414) 259-1500



STAGE 1 CONSTRUCTION
LOOKING NORTH



STAGE 2 CONSTRUCTION
LOOKING NORTH

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-68-101			
		DRAWN BY EMT	PLANS CK'D. KWG
CONSTRUCTION STAGING		SHEET 2 OF 2	

I.D.

DATE: _____

```
SCALE =
```

DESIGN DATA

LIVE LOAD:
 DESIGN LOADING: HS-20
 INVENTORY RATING: HS-23
 OPERATING RATING: HS-39
 WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 KIPS
 MATERIAL PROPERTIES:
 CONCRETE MASONRY-DECK PATCHING.....f'c=4,000 P.S.I.

TRAFFIC DATA

STH 110
 ADT = 5,600 (2018)
 RDS = 30 MPH

SCOPE OF WORK B-68-117

1. CLEAN & PREPARE DECK AS DIRECTED BY THE FIELD ENGINEER.
2. POLYMER OVERLAY ON DECK

TOTAL ESTIMATED QUANTITIES

509.0301 PREPARATION DECKS TYPE 1 5 SY
 509.0302 PREPARATION DECKS TYPE 2 2 SY
 509.0310.S SAWING PAVEMENT DECK PREPARATION AREAS 50 LF
 509.2100.S CONCRETE MASONRY DECK REPAIR 1 CY
 509.5100.S POLYMER OVERLAY..... 685 SY

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE EXISTING ORIGINAL STRUCTURE PLANS.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM 'POLYMER OVERLAY'.

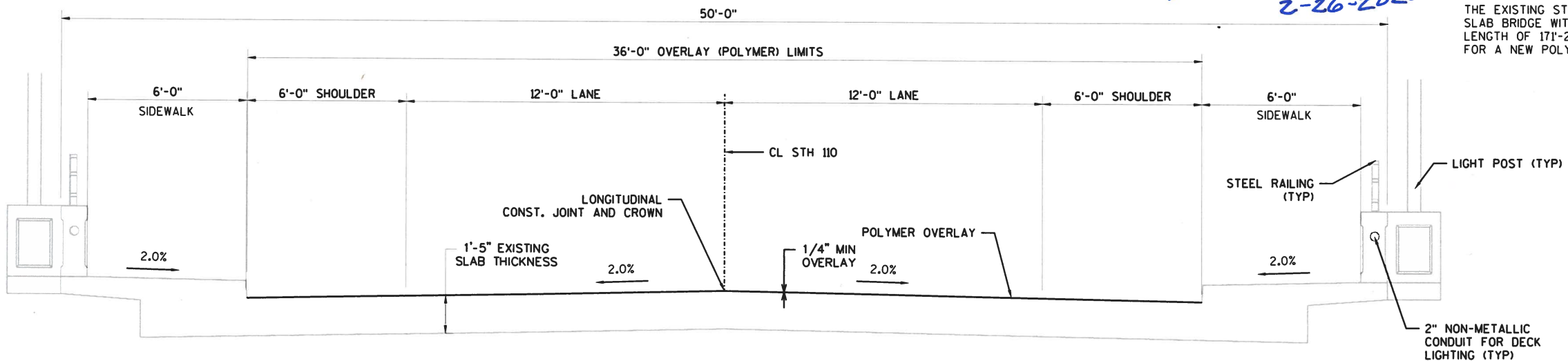
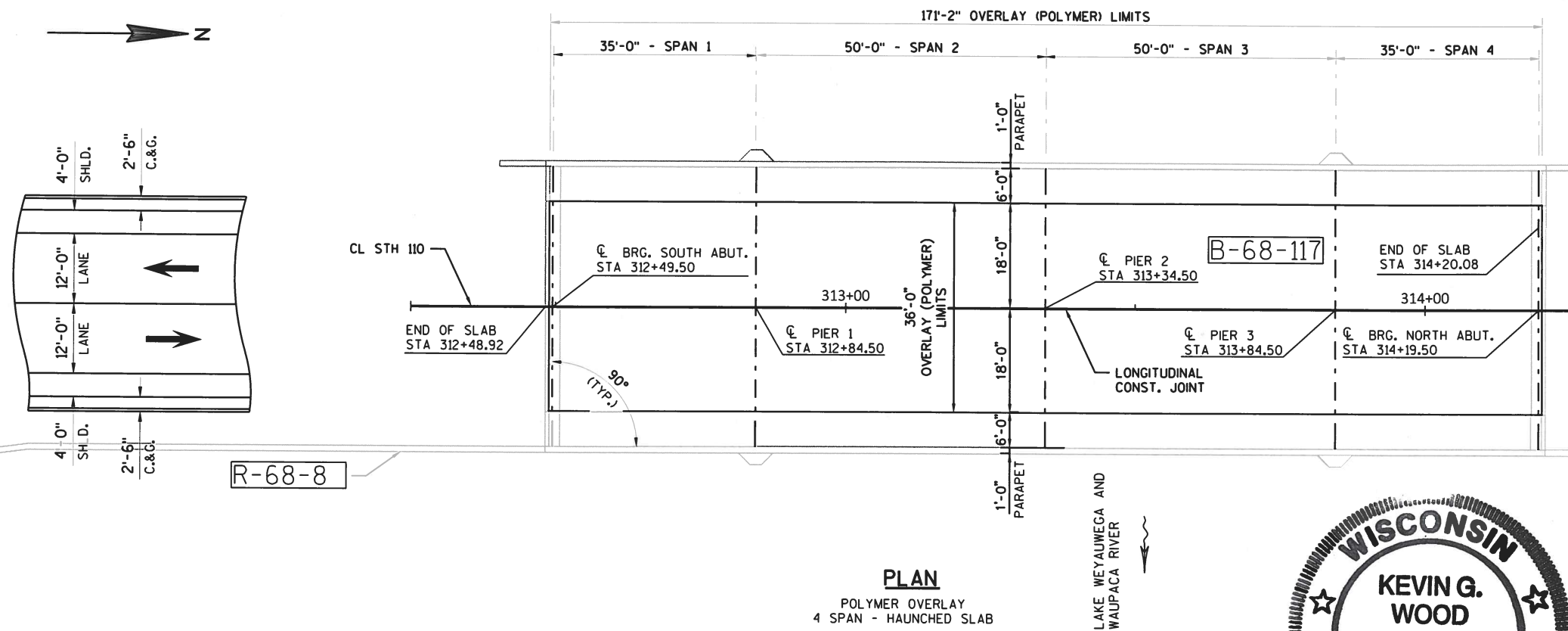
AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAW CUT.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION SHALL BE FILLED WITH "CONCRETE MASONRY DECK REPAIR".

ALL STATIONS ARE IN FEET.

STRUCTURE STATIONING PROPOSED IS BASED ON ORIGINAL STRUCTURE PLAN DIMENSIONS.

THE EXISTING STRUCTURE, B-68-117, IS A 4-SPAN CONCRETE HAUNCHED SLAB BRIDGE WITH AN OVERALL WIDTH OF 50'-0" AND AN OVERALL LENGTH OF 171'-2". THE ENTIRE DECK SURFACE IS TO BE PREPARED FOR A NEW POLYMER OVERLAY.

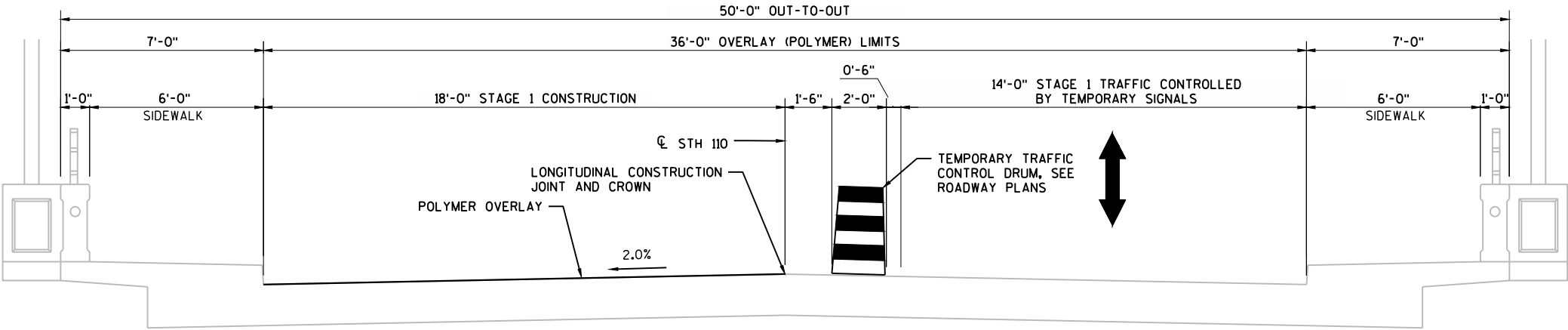
**LIST OF DRAWINGS**

1. POLYMER OVERLAY
2. CONSTRUCTION STAGING

BUREAU OF STRUCTURES CONTACT:
 AARON BONK (608) 261-0261

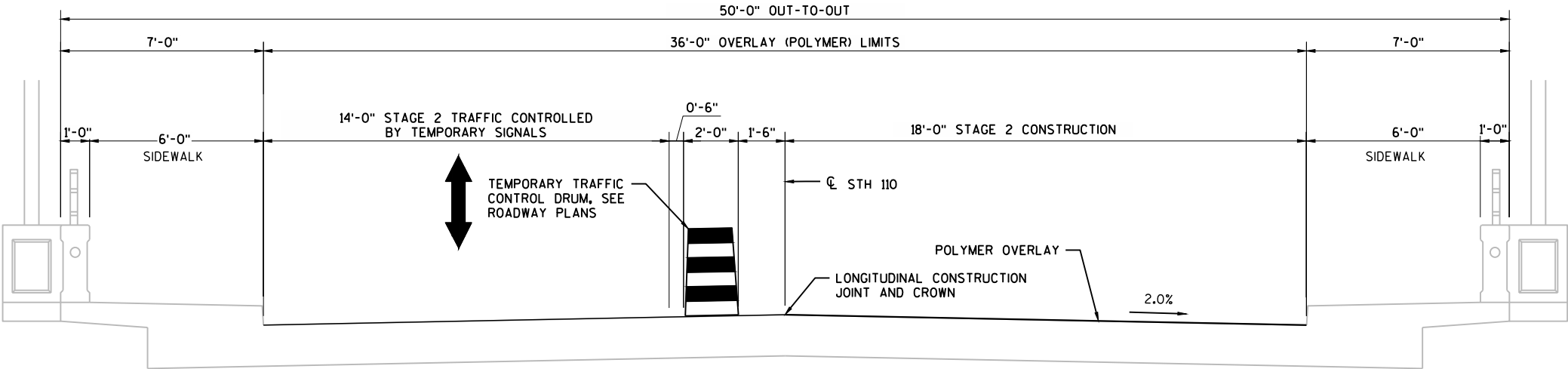
CONSULTANT CONTACT:
 KEVIN WOOD (414) 259-1500

NO.	DATE	REVISION	BY
1150 Springhurst Drive Suite 201 Green Bay, WI 54304-5947 920 / 592 9440 920 / 592 9445 fax www.graef-usa.com			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED		SDR	05/29/20
CHIEF STRUCTURES DESIGN ENGINEER		DATE	
STRUCTURE B-68-117			
STH 110-MILLS ST OVER WAUPACA RIVER			
COUNTY	WAUPACA	TOWN/CITY/VILLAGE	WEYAUWEGA
DESIGN SPEC.	REHABILITATION	N/A	
DESIGNED BY	WAR	DESIGN CK'D.	KGW
DRAWN BY	FMT	PLANS CK'D.	KGW
POLYMER OVERLAY			SHEET 1 OF 2



STAGE 1 CONSTRUCTION

LOOKING NORTH



STAGE 2 CONSTRUCTION

LOOKING NORTH

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-68-117			
DRAWN BY EMT		PLANS CK'D. KWG	
CONSTRUCTION STAGING		SHEET 2 OF 2	

I.D.

DATE:

SCALE =

DESIGN DATA

LIVE LOAD:
DESIGN LOADING: HS-20
INVENTORY RATING: HS-24
OPERATING RATING: HS-41
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 KIPS
MATERIAL PROPERTIES:
CONCRETE MASONRY-DECK PATCHING.....f'c=4,000 P.S.I.

TRAFFIC DATA

STH 22/54
ADT = 5,300 (2018)
RDS = 60 MPH

TOTAL ESTIMATED QUANTITIES

509.0301 PREPARATION DECKS TYPE 1 1 SY
509.0302 PREPARATION DECKS TYPE 2 1 SY
509.0310.S SAWING PAVEMENT DECK PREPARATION AREAS 10 LF
509.2100.S CONCRETE MASONRY DECK REPAIR 1 CY
509.5100.S POLYMER OVERLAY..... 1,827 SY

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DIMENSIONS SHOWN ARE BASED ON THE EXISTING ORIGINAL STRUCTURE PLANS.
DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM 'POLYMER OVERLAY'.
AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAW CUT.
PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION SHALL BE FILLED WITH "CONCRETE MASONRY DECK REPAIR".
ALL STATIONS ARE IN FEET.
STRUCTURE STATIONING PROPOSED IS BASED ON ORIGINAL STRUCTURE PLAN DIMENSIONS.
THE EXISTING STRUCTURE, B-68-124, IS A 2-SPAN PRESTRESSED CONCRETE GIRDER BRIDGE WITH AN OVERALL WIDTH OF 59'-11 1/8" AND AN OVERALL LENGTH OF 292'-6". THE ENTIRE DECK SURFACE IS TO BE PREPARED FOR A NEW POLYMER OVERLAY.

LIST OF DRAWINGS

1. POLYMER OVERLAY
2. CONSTRUCTION STAGING

NO.	DATE	REVISION	BY
GRAEF 1150 Springhurst Drive Suite 201 Green Bay, WI 54304-5947 920 / 592 9440 920 / 592 9445 fax www.graef-usa.com			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED	<i>[Signature]</i>	SDR	05/29/20
CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-68-124			
STH 22/54 OVER WAUPACA RIVER			
COUNTY	WAUPACA	TOWN/CITY/VILLAGE	WAUPACA
DESIGN SPEC.	REHABILITATION	N/A	
DESIGNED BY	WAR	DESIGN CK'D.	KGW
DRAWN BY	FMT	PLANS CK'D.	KGW
POLYMER OVERLAY			SHEET 1 OF 2

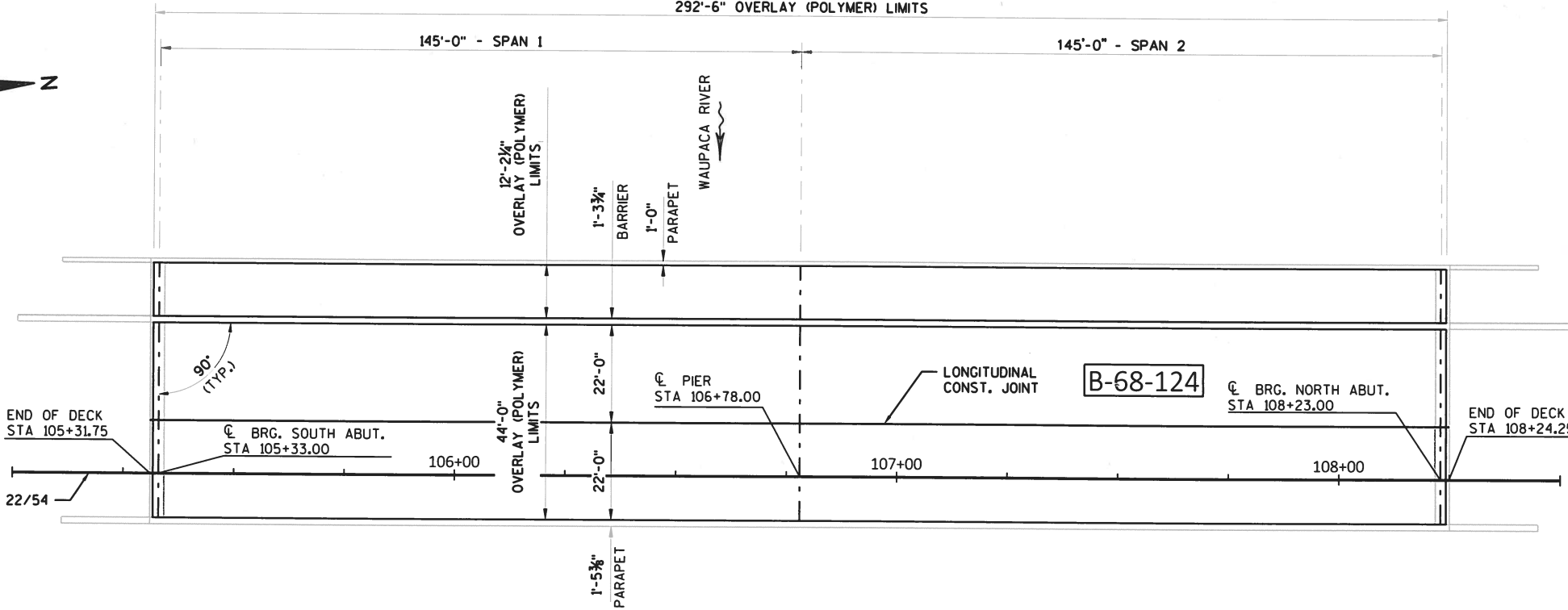
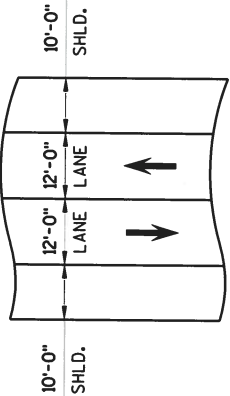
BUREAU OF STRUCTURES CONTACT:
AARON BONK (608) 261-0261
CONSULTANT CONTACT:
KEVIN WOOD (414) 259-1500



292'-6" OVERLAY (POLYMER) LIMITS

145'-0" - SPAN 1

145'-0" - SPAN 2

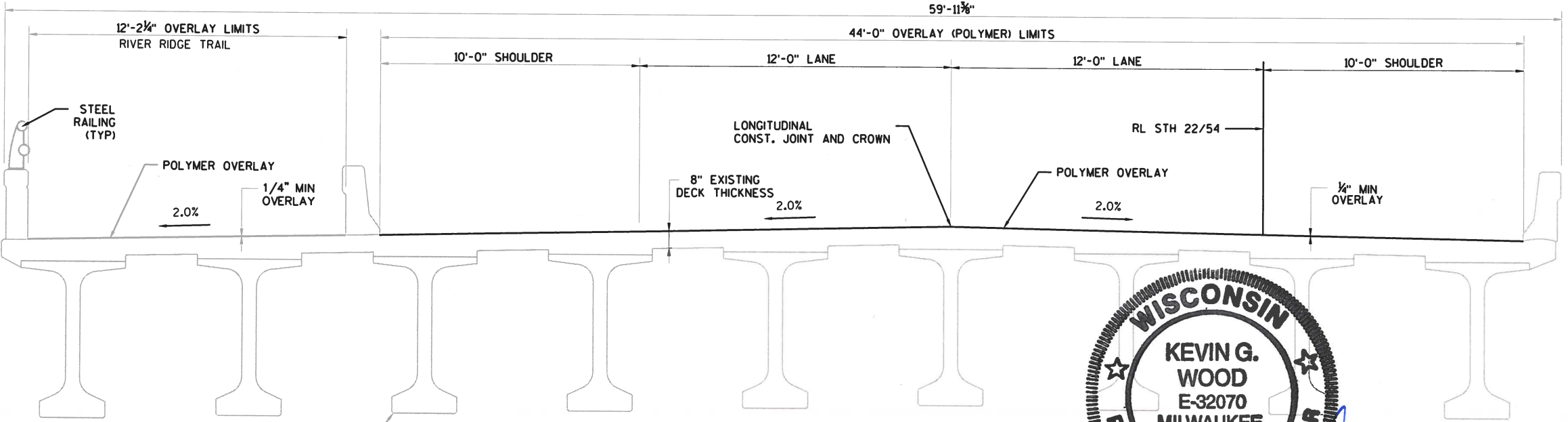


PLAN

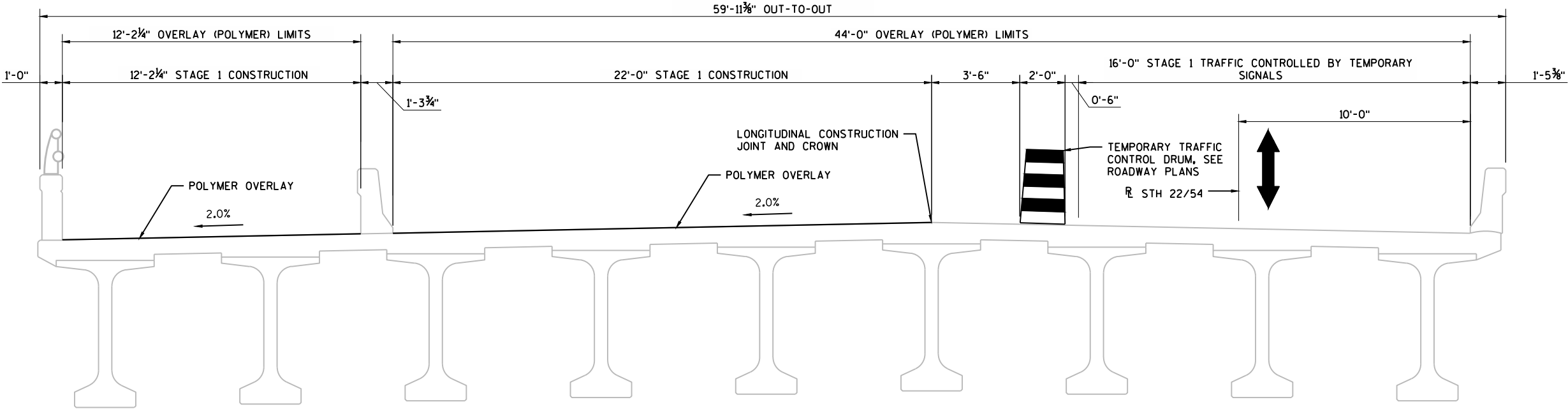
POLYMER OVERLAY
2 SPAN - 72W" PRESTRESSED CONCRETE GIRDERS

SCOPE OF WORK B-68-124

1. CLEAN & PREPARE DECK AS DIRECTED BY THE FIELD ENGINEER
2. POLYMER OVERLAY ON DECK

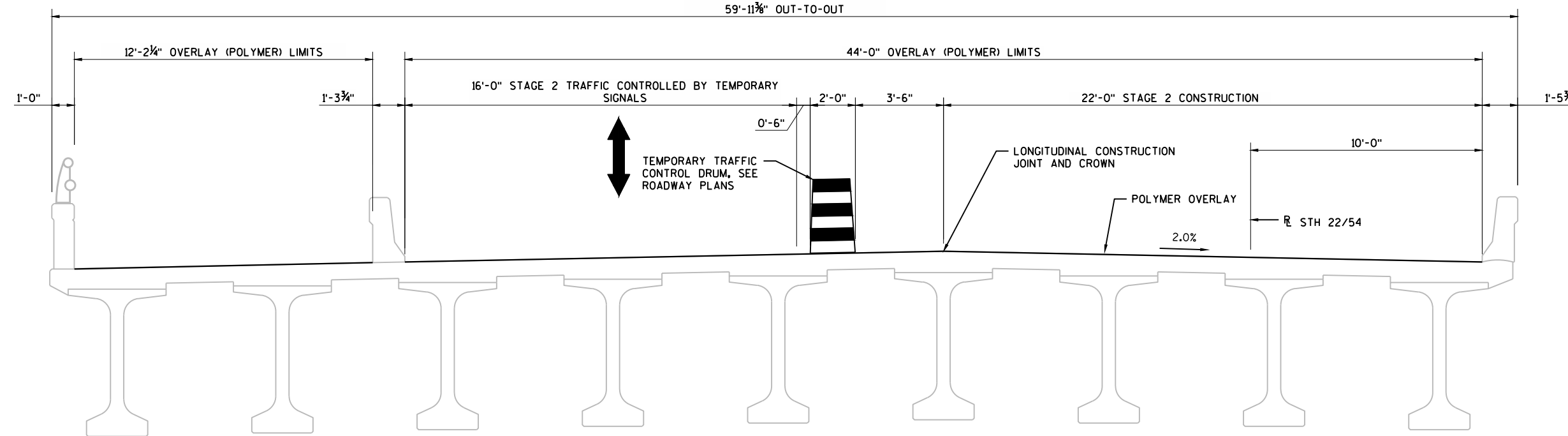


CROSS SECTION THRU BRIDGE
LOOKING NORTH



STAGE 1 CONSTRUCTION

LOOKING NORTH



STAGE 2 CONSTRUCTION

LOOKING NORTH

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-68-124			
DRAWN BY EMT		PLANS CK'D. KWG	
CONSTRUCTION STAGING		SHEET 2 OF 2	

I.D.

DATE:

DESIGN DATA

LIVE LOAD:
DESIGN LOADING: HL-93
INVENTORY RATING: RF=1.00
OPERATING RATING: RF=1.71
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 KIPS
MATERIAL PROPERTIES:
CONCRETE MASONRY-DECK PATCHING.....f'c=4,000 P.S.I.

STATE PROJECT NUMBER

6220-00-61

TRAFFIC DATA

STH 49
ADT = 2,400 (2015)
RDS = 60 MPH

SCOPE OF WORK B-68-130

- CLEAN & PREPARE DECK AS DIRECTED BY THE FIELD ENGINEER
- POLYMER OVERLAY ON DECK

TOTAL ESTIMATED QUANTITIES

509.0301 PREPARATION DECKS TYPE 1 1 SY
509.0302 PREPARATION DECKS TYPE 2 1 SY
509.0310.S SAWING PAVEMENT DECK PREPARATION AREAS 10 LF
509.2100.S CONCRETE MASONRY DECK REPAIR 1 CY
509.5100.S POLYMER OVERLAY..... 412 SY

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE EXISTING ORIGINAL STRUCTURE PLANS.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM 'POLYMER OVERLAY'.

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAW CUT.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION SHALL BE FILLED WITH "CONCRETE MASONRY DECK REPAIR".

ALL STATIONS ARE IN FEET.

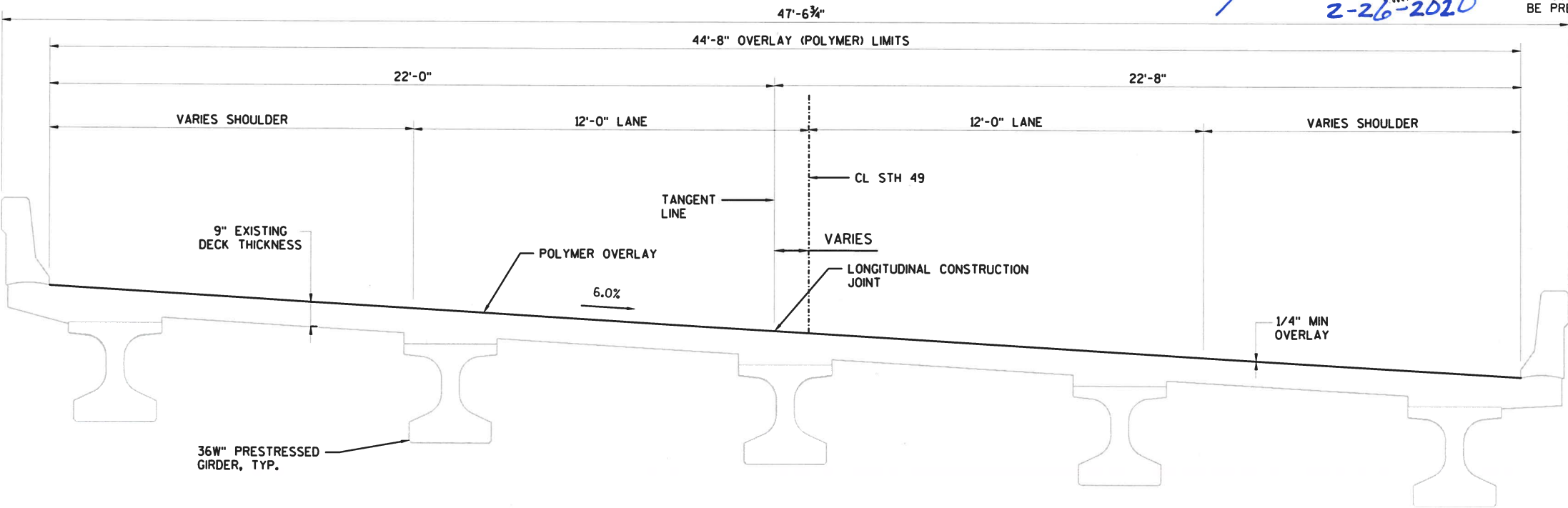
STRUCTURE STATIONING PROPOSED IS BASED ON ORIGINAL STRUCTURE PLAN DIMENSIONS.

THE EXISTING STRUCTURE, B-68-130, IS A 1-SPAN PRESTRESSED CONCRETE GIRDER BRIDGE WITH AN OVERALL WIDTH OF 47'-6 3/4" AND AN OVERALL LENGTH OF 82'-10 3/4". THE ENTIRE DECK SURFACE IS TO BE PREPARED FOR A NEW POLYMER OVERLAY.



PLAN

POLYMER OVERLAY
SINGLE SPAN - 36W" PRESTRESSED CONCRETE GIRDERS



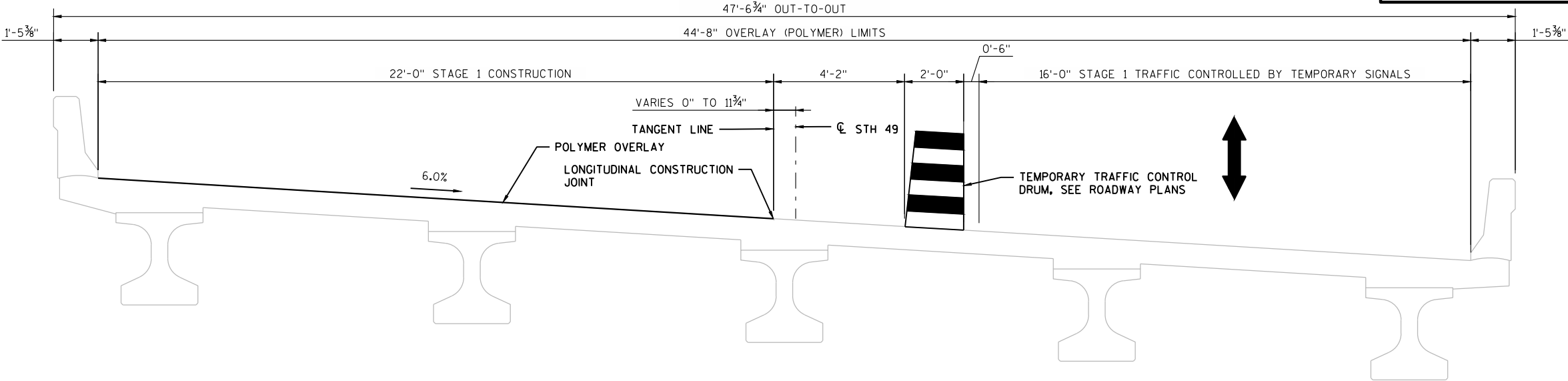
CROSS SECTION THRU BRIDGE
LOOKING NORTH

LIST OF DRAWINGS

- POLYMER OVERLAY
- CONSTRUCTION STAGING

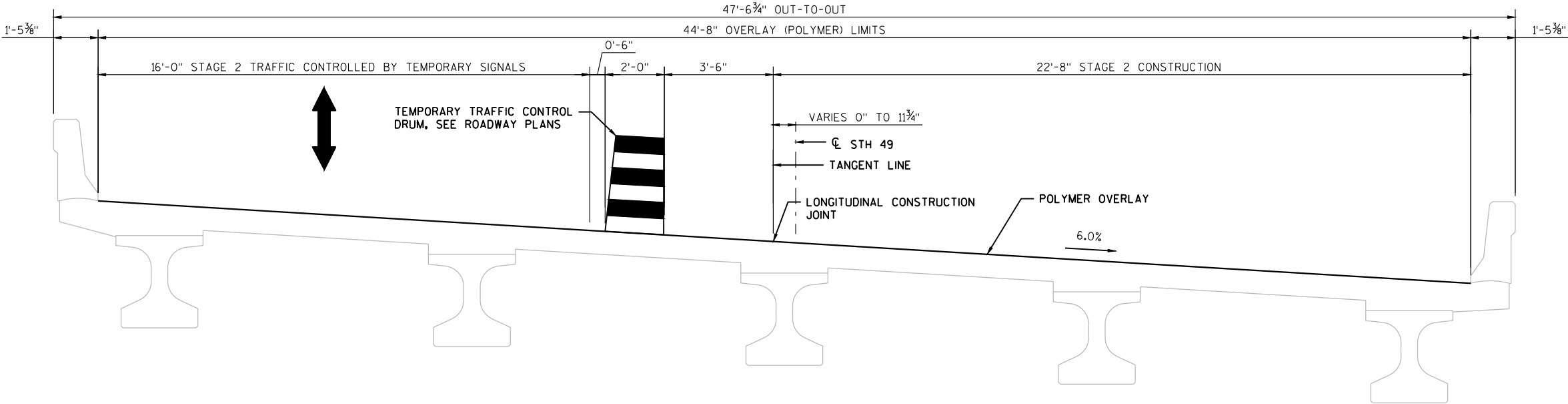
BUREAU OF STRUCTURES CONTACT:
AARON BONK (608) 261-0261
CONSULTANT CONTACT:
KEVIN WOOD (414) 259-1500

NO.	DATE	REVISION	BY
GrāEF 1150 Springhurst Drive Suite 201 Green Bay, WI 54304-5947 920 / 592 9440 920 / 592 9445 fax www.graef-usa.com			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED <i>[Signature]</i> SDR 05/29/20 CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-68-130			
STH 49 OVER S. BRANCH LITTLE WOLF RIVER			
COUNTY WAUPACA		TOWN OF SCANDINAVIA	
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY WAR	DESIGN CK'D. KGW	DRAWN BY FMT	PLANS CK'D. KGW
POLYMER OVERLAY			SHEET 1 OF 2



STAGE 1 CONSTRUCTION

LOOKING NORTH



STAGE 2 CONSTRUCTION

LOOKING NORTH

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-68-130			
DRAWN BY EMT		PLANS CK'D. KWG	
CONSTRUCTION STAGING		SHEET 2 OF 2	

I.D.

DATE:

Notes



Wisconsin Department of Transportation

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through innovation and exceptional service.

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